

TUNGSRAM™

Innovation is our heritage
EST. 1896

LED Indoor Product Catalogue





Bright Smart Future

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LED Agritech

Tungsram is shaping the future of urban living providing technology-driven, smart, sustainable solutions for large metropolitan areas using lighting as a platform.

LED there be light

The future will be lit by LED. Traditional lighting solutions are set to be fully replaced by LEDs and our aim at Tungsram is to smooth the transition for our customers. Our colleagues have been dedicating their efforts and expertise to the development and installation of LED technologies for nearly two decades. Our retrofit and retrofittype indoor and outdoor product families make it possible for our clients to enjoy the advantages of this new technology without extra investment. From future-proof modular solutions to innovative new formats, we deliver high quality LED indoor and outdoor solutions at an affordable price. The latest LED lighting solutions provide an ideal upgrade path for public bodies looking to reduce energy costs and environmental impact while attaining striking aesthetic improvements to landscapes and cityscapes.



Tungsram, an iconic name, returned to the global market in 2018 as a premium innovative European technology brand following the acquisition of GE Lighting's general lighting business in Europe, Middle East, Africa and Turkey as well as GE's global automotive operation.

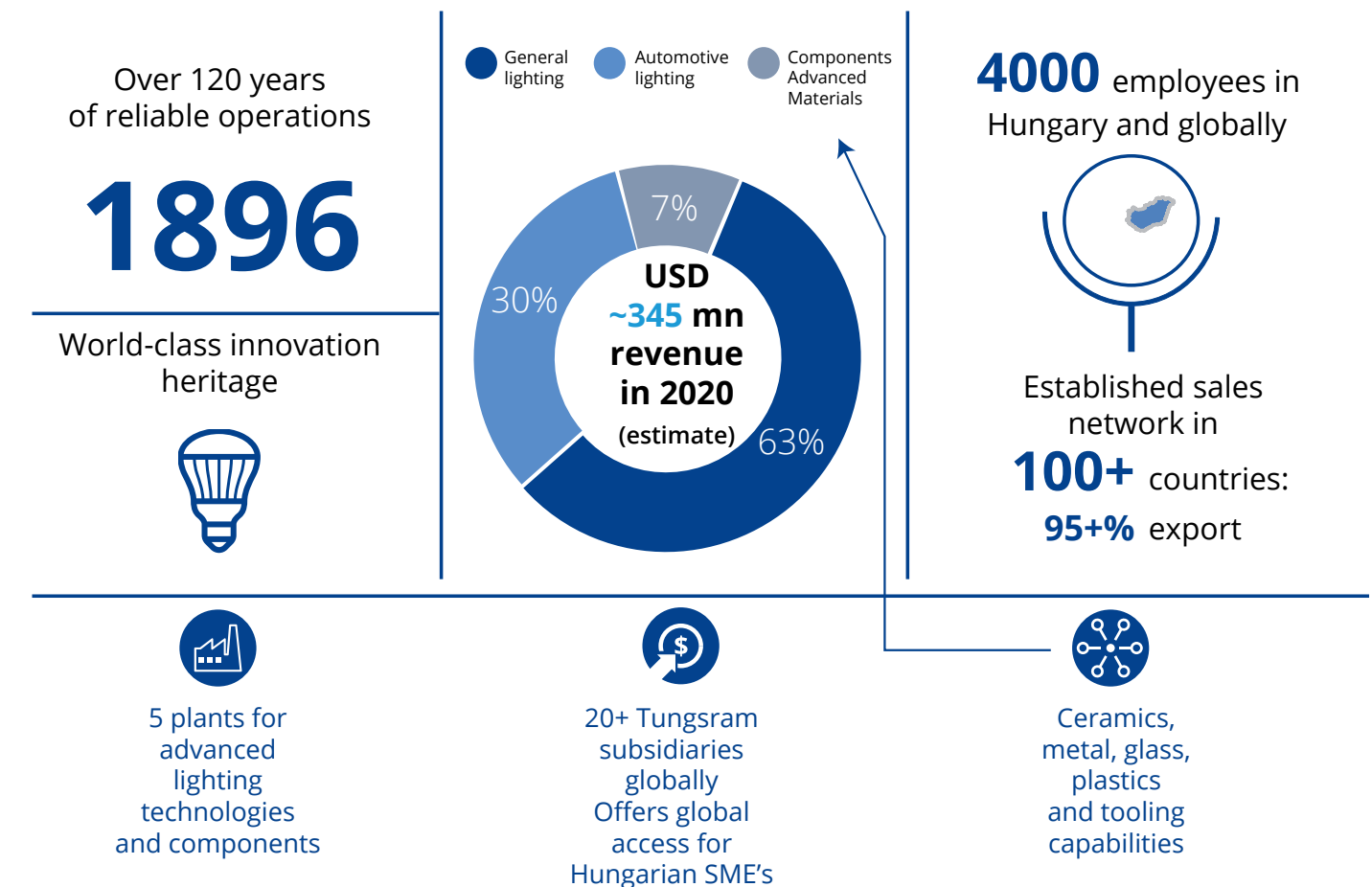
Innovation is our heritage. Originally established in 1896, the company is a brainchild of the 2nd industrial revolution that gave rise to the electrification of the world. From its earliest beginnings through GE's acquisition of the brand in 1989 and to the present day, Tungsram has systematically created new solutions, primarily around its core lighting and telephone technology businesses, as well as medical and radio tubes and television, often leading to exponential sales growth. Today,

faced with the opportunities and challenges of the 4th industrial revolution, Tungsram Group invests into future-safe technologies and dynamically growing global market segments such as smart solutions, smart cities and indoor farming while still strengthening its core lighting business. Every member of the Tungsram team works to create affordable, sustainable technology-based solutions for the continuously urbanizing world with the strategic goal of eventually creating happiness. A smart, bright future - see how we are seeing it.



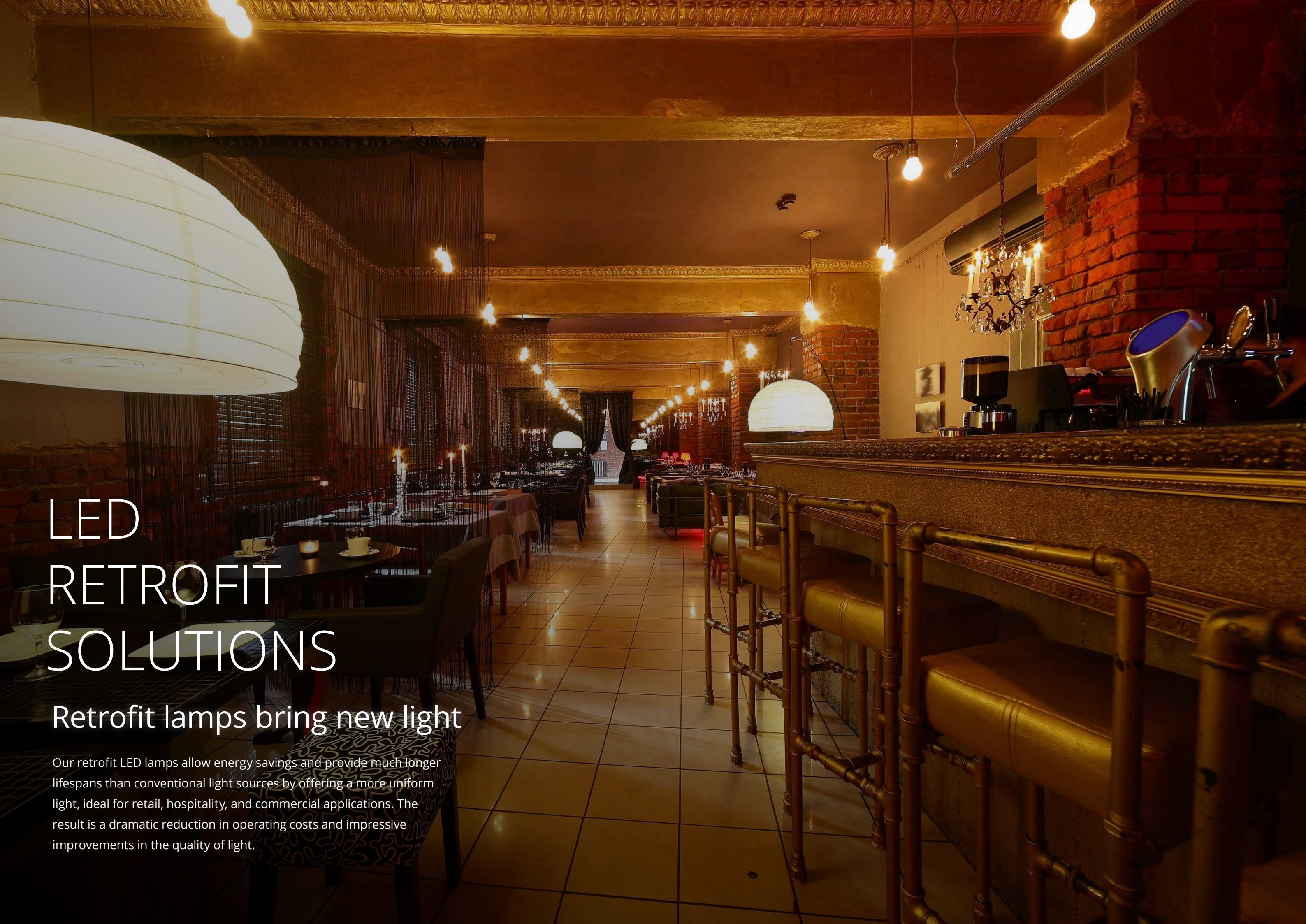
Jörg Bauer
Chairman-CEO

Tungsram has a 120-year-long track record and unique assets and capabilities



Our vision for a brighter tomorrow

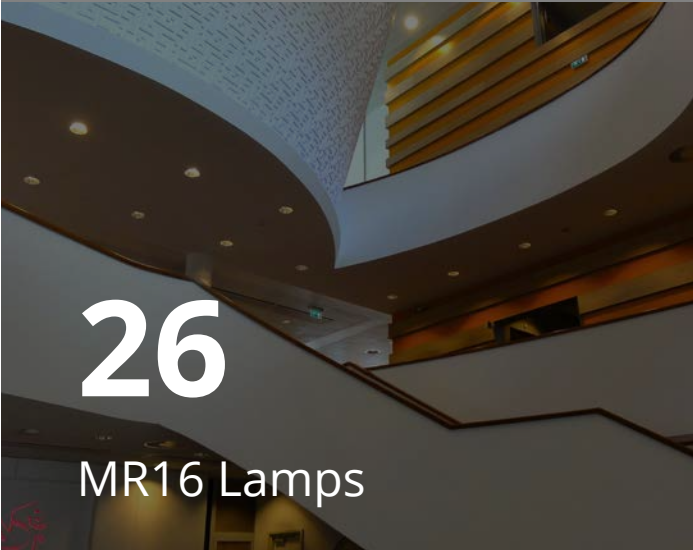
Powered by a lighting-industry track record spanning more than 120 years, Tungsram has consciously developed new solutions in its core area of lighting technology since its foundation in 1896. We compete on the world market as a premium European brand, which designs, develops and manufactures products for the needs of today and tomorrow. The lighting product portfolio covers all areas of indoor and outdoor lighting, from private homes to schools, public and office buildings, gas stations, sports arenas, highways and car parks. We offer a comprehensive range of light sources from traditional technologies such as HID, LFL, CFL, Halogen and specialty lamps both for indoor and outdoor installation. From traditional technologies to state-of-the-art LED products, we incorporate energy optimization and system intelligence into our portfolio.



LED RETROFIT SOLUTIONS

Retrofit lamps bring new light

Our retrofit LED lamps allow energy savings and provide much longer lifespans than conventional light sources by offering a more uniform light, ideal for retail, hospitality, and commercial applications. The result is a dramatic reduction in operating costs and impressive improvements in the quality of light.



LED RETROFIT SOLUTIONS

GLS

Functional

Innovative

Distinctive



ECO Snowcone

Cap: E27, B22
Wattage: 6W, 9W, 11.5W, 13.5W
Voltage: 220 - 240V
Rated life: 10 000 h



Energy Smart™ Omni Dimmable

Cap: E27, B22
Wattage: 7W, 9W, 12W, 15W
Voltage: 220 - 240V
Rated life: 15 000 h



A55

Cap: E27, B22
Wattage: 8W, 10W
Voltage: 220 - 240V
Rated life: 10 000 h



Bright Stik™

Cap: E27, B22
Wattage: 6W, 9W, 12W, 15W
Voltage: 220 - 240V
Rated life: 15 000 h



DimStik

Cap: E27, B22
Wattage: 9W, 14W
Voltage: 220 - 240V
Rated life: 15 000 h



LED Filament GLS A60 (Clear, frosted)

Cap: E27, B22
Wattage: 4.5W, 7W, 8.5W, 10W
Voltage: 220 - 240V
Rated life: 15 000 h



High Lumen

Cap: E27
Wattage: 21W, 27W, 42W
Voltage: 220 - 240V
Rated life: 10 000 h



LED RETROFIT SOLUTIONS

GLS Lamps



LED Retrofit

Wattage (W)	Watt Replacement	Cap	Product Description	Tungfram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
Start - ECO Snowcone															
6	40	B22	LED ECO A60 6W 827 B22	93104728	470	2700	160	220-240	80	10k	A+	60	107	6.00	12
6	40	E27	LED ECO A60 6W 827 E27	93104784	470	2700	160	220-240	80	10k	A+	60	109	6.00	12
6	40	B22	LED ECO A60 6W 840 B22	93107032	500	4000	160	220-240	80	10k	A+	60	107	6.00	12
6	40	E27	LED ECO A60 6W 840 E27	93107035	500	4000	160	220-240	80	10k	A+	60	109	6.00	12
6	40	B22	LED ECO A60 6W 865 B22	93104730	500	6500	160	220-240	80	10k	A+	60	107	6.00	12
6	40	E27	LED ECO A60 6W 865 E27	93104786	500	6500	160	220-240	80	10k	A+	60	109	6.00	12
9	60	B22	LED ECO A60 9W 827 B22	93104732	810	2700	160	220-240	80	10k	A+	60	107	9.00	12
9	60	E27	LED ECO A60 9W 827 E27	93104788	810	2700	160	220-240	80	10k	A+	60	109	9.00	12
9	60	B22	LED ECO A60 9W 840 B22	93107044	850	4000	160	220-240	80	10k	A+	60	107	9.00	12
9	60	E27	LED ECO A60 9W 840 E27	93107047	850	4000	160	220-240	80	10k	A+	60	109	9.00	12
9	60	B22	LED ECO A60 9W 865 B22	93104734	850	6500	160	220-240	80	10k	A+	60	107	9.00	12
9	60	E27	LED ECO A60 9W 865 E27	93104790	850	6500	160	220-240	80	10k	A+	60	109	9.00	12
11.5	75	B22	LED ECO A60 11.5W 827 B22	93104776	1 055	2700	160	220-240	80	10k	A+	60	107	11.50	12
11.5	75	E27	LED ECO A60 11.5W 827 E27	93104792	1 055	2700	160	220-240	80	10k	A+	60	109	11.50	12
11.5	75	B22	LED ECO A60 11.5W 840 B22	93106280	1 150	4000	160	220-240	80	10k	A+	60	107	11.50	12
11.5	75	E27	LED ECO A60 11.5W 840 E27	93106283	1 150	4000	160	220-240	80	10k	A+	60	109	11.50	12
11.5	80	B22	LED ECO A60 11.5W 865 B22	93104778	1 150	6500	160	220-240	80	10k	A+	60	107	11.50	12
11.5	80	E27	LED ECO A60 11.5W 865 E27	93104794	1 150	6500	160	220-240	80	10k	A+	60	109	11.50	12
13.5	100	B22	LED ECO A60 13.5W 827 B22	93104780	1 521	2700	160	220-240	80	10k	A+	60	139	13.50	12
13.5	100	E27	LED ECO A60 13.5W 827 E27	93104796	1 521	2700	160	220-240	80	10k	A+	60	141	13.50	12
13.5	100	B22	LED ECO A60 13.5W 840 B22	93107021	1 600	4000	160	220-240	80	10k	A++	60	107	13.50	12
13.5	100	E27	LED ECO A60 13.5W 840 E27	93107024	1 600	4000	160	220-240	80	10k	A++	60	109	13.50	12
13.5	100	B22	LED ECO A60 13.5W 865 B22	93104782	1 600	6500	160	220-240	80	10k	A++	60	107	13.50	12
13.5	100	E27	LED ECO A60 13.5W 865 E27	93104798	1 600	6500	160	220-240	80	10k	A++	60	109	13.50	12

Wattage (W)	Watt Replacement	Cap	Product Description	Tungfram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
Bright Stik™															
Single pack															
6	40	B22	LED 6/STIK/830/220-240V/B22	93095930	470	3000	240	220-240	80	15k	A+	38	113.5	6.00	15
6	40	E27	LED 6/STIK/830/220-240V/E27	93064050	470	3000	240	220-240	80	15k	A+	38	115.5	6.00	15
6	42	B22	LED 6/STIK/840/220-240V/B22	93110204	500	4000	240	220-240	80	15k	A+	38	113.5	6.00	15
6	42	E27	LED 6/STIK/840/220-240V/E27	93110184	500	4000	240	220-240	80	15k	A+	38	115.5	6.00	15
6	42	B22	LED 6/STIK/865/220-240V/B22	93095931	500	6500	240	220-240	80	15k	A+	38	113.5	6.00	15
6	44	E27	LED 6/STIK/865/220-240V/E27	93064051	500	6500	240	220-240	80	15k	A+	38	115.5	9.00	15
9	60	B22	LED 9/STIK/830/220-240V/B22	93095932	810	3000	240	220-240	80	15k	A+	38	113.5	9.00	15
9	60	E27	LED 9/STIK/830/220-240V/E27	93064052	810	3000	240	220-240	80	15k	A+	38	115.5	9.00	15
9	63	B22	LED 9/STIK/840/220-240V/B22	93110205	850	4000	240	220-240	80	15k	A+	38	113.5	9.00	15
9	63	E27	LED 9/STIK/840/220-240V/E27	93110185	850	4000	240	220-240	80	15k	A+	38	115.5	9.00	15
9	63	B22	LED 9/STIK/865/220-240V/B22	93095933	850	6500	240	220-240	80	15k	A+	38	113.5	9.00	15
9	63	E27	LED 9/STIK/865/220-240V/E27	93064053	850	6500	240	220-240	80	15k	A+	38	115.5	12.00	15
12	75	B22	LED12/STIK/830/220-240V/B22	93095934	1 055	3000	240	220-240	80	15k	A+	45	135.5	12.00	15
12	75	E27	LED12/STIK/830/220-240V/E27	93064054	1 055	3000	240	220-240	80	15k	A+	45	137.5	12.00	15
12	80	B22	LED12/STIK/840/220-240V/B22	93110206	1 150	4000	240	220-240	80	15k	A+	45	135.5	12.00	15
12	80	E27	LED12/STIK/840/220-240V/E27	93110186	1 150	4000	240	220-240	80	15k	A+	45	137.5	12.00	15
12	80	B22	LED12/STIK/865/220-240V/B22	93095935	1 150	6500	240	220-240	80	15k	A+	45	135.5	12.00	15
12	80	E27	LED12/STIK/865/220-240V/E27	93064055	1 150	6500	240	220-240	80	15k	A+	45	137.5	15.00	15
15	100	B22	LED15/STIK/830/220-240V/B22	93096456	1 521	3000	240	220-240	80	15k	A+	45	135.5	15.00	15
15	100	E27	LED15/STIK/830/220-240V/E27	93064056	1 521	3000	240	220-240	80	15k	A+	45	137.5	15.00	15
15	104	B22	LED15/STIK/840/220-240V/B22	93110207	1 600	4000	240	220-240	80	15k	A+	45	135.5	15.00	15
15	104	E27	LED15/STIK/840/220-240V/E27	93110187	1 600	4000	240	220-240	80	15k	A+	45	137.5	15.00	15
15	104	B22	LED15/STIK/865/220-240V/B22	93096457	1 600	6500	240	220-240	80	15k	A+	45	135.5	15.00	15
15	104	E27	LED15/STIK/865/220-240V/E27	93064057	1 600	6500	240	220-240	80	15k	A+	45	137.5	15.00	15
Multi-pack															
6	40	E27	LED 6/STIK/830/220-240V/E27/F 3/15	93110192	470	3000	240	220-240	80	15k	A+	38	115.5	6.00	15
6	42	E27	LED 6/STIK/840/220-240V/E27/F 3/15	93110193	500	4000	240	220-240	80	15k	A+	38	115.5	6.00	15
6	44	E27	LED 6/STIK/865/220-240V/E27/F 3/15	93110194	500	6500	240	220-240	80	15k	A+	38	115.5	6.00	15
9	60	B22	LED 9/STIK/830/220-240/B22/F 3/15	93110191	810	3000	240	220-240	80	15k	A+	38	113.5	9.00	15
9	60	E27	LED 9/STIK/830/220-240/E27/F 3/15	93110189	810	3000	240	220-240	80	15k	A+	38	115.5	9.00	15
9	63	E27	LED 9/STIK/840/220-240/E27/F 3/15	93110190	850	4000	240	220-240	80	15k	A+	38	115.5	9.00	15
9	60	E27	LED 9/STIK/865/220-240V/E27/F 3/15	93110195	850	6500	240	220-240	80	15k	A+	38	115.5	9.00	15
12	75	E27	LED12/STIK/830/220-240V/E27/F 2/10	93110196	1 055	3000	240	220-240	80	15k	A+	45	137.5	12.00	10
12	80	E27	LED12/STIK/840/220-240V/E27/F 2/10	93110197	1 150	4000	240	220-240	80	15k	A+	45	137.5	12.00	10
12	80	E27	LED12/STIK/865/220-240V/E27/F 2/10	93110198	1 150	6500	240	220-240	80	15k	A+	45	137.5	12.00	10
15	100	E27	LED15/STIK/830/220-240V/E27/F 2/10	93110199	1 521	3000	240	220-240	80	15k	A+	45	137.5	15.00	10
15	104	E27	LED15/STIK/840/220-240V/E27/F 2/10	93110200	1 600	4000	240	220-240	80	15k	A+	45	137.5	15.00	10
15	104	E27	LED15/STIK/865/220-240V/E27/F 2/10	93110201	1 600	6500	240	220-240	80	15k	A+	45	137.5	15.00	10

EXPLANATION

Product Description

LED ECO

Identifies Lamp wattage

A60

Identifies the lamp type

6W

Wattages

827

CCT

B22

Identifies the cap type

Cap / Base



B15



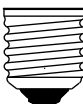
B22



E14



E27



E40



LED RETROFIT SOLUTIONS

GLS Lamps



	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
LED Filament - GLS A60 Clear and Frosted																
1	4.5	40	B22	LED Fil A60 4.5W 827 B22 CL	93115476	470	2700	300	220-240	80	15k	A++	60	102	4.50	10
3	4.5	40	B22	LED Fil A60 4.5W 827 B22 FR	93115478	470	2700	300	220-240	80	15k	A++	60	102	4.50	10
1	4.5	40	E27	LED Fil A60 4.5W 827 E27 CL	93115395	470	2700	300	220-240	80	15k	A++	60	104	4.50	10
	4.5	40	E27	LED Fil A60 4.5W 827 E27 FR	93115477	470	2700	300	220-240	80	15k	A++	60	104	4.50	10
3	4.5	40	B22	LED Fil A60 4.5W 840 B22 FR	93115480	470	4000	300	220-240	80	15k	A++	60	102	4.50	10
	4.5	40	E27	LED Fil A60 4.5W 840 E27 FR	93115479	470	4000	300	220-240	80	15k	A++	60	104	4.50	10
1	7	60	B22	LED Fil A60 7W 827 B22 CL	93115482	806	2700	300	220-240	80	15k	A++	60	102	7.00	10
3	7	60	B22	LED Fil A60 7W 827 B22 FR	93115484	806	2700	300	220-240	80	15k	A++	60	102	7.00	10
1	7	60	E27	LED Fil A60 7W 827 E27 CL	93115481	806	2700	300	220-240	80	15k	A++	60	104	7.00	10
	7	60	E27	LED Fil A60 7W 827 E27 FR	93115483	806	2700	300	220-240	80	15k	A++	60	104	7.00	10
	7	60	B22	LED Fil A60 7W 840 B22 FR	93115486	806	4000	300	220-240	80	15k	A++	60	102	7.00	10
3	7	60	E27	LED Fil A60 7W 840 E27 FR	93115485	806	4000	300	220-240	80	15k	A++	60	104	7.00	10
	7	60	B22	LED Fil A60 7W 865 B22 FR	93115488	806	6500	300	220-240	80	15k	A++	60	102	7.00	10
	7	60	E27	LED Fil A60 7W 865 E27 FR	93115487	806	6500	300	220-240	80	15k	A++	60	104	7.00	10
2	8.5	75	E27	LED Fil A60 8.5W 827 E27 CL	93115938	1 055	2700	300	220-240	80	15k	A++	60	104	8.50	10
	8.5	75	B22	LED Fil A60 8.5W 827 B22 CL	93115939	1 055	2700	300	220-240	80	15k	A++	60	102	8.50	10
	8.5	75	E27	LED Fil A60 8.5W 827 E27 FR	93115940	1 055	2700	300	220-240	80	15k	A++	60	104	8.50	10
3	8.5	75	B22	LED Fil A60 8.5W 827 B22 FR	93115941	1 055	2700	300	220-240	80	15k	A++	60	102	8.50	10
	8.5	75	E27	LED Fil A60 8.5W 840 E27 FR	93115942	1 055	4000	300	220-240	80	15k	A++	60	104	8.50	10
	8.5	75	B22	LED Fil A60 8.5W 840 B22 FR	93115943	1 055	4000	300	220-240	80	15k	A++	60	102	8.50	10
	10	91	E27	LED Fil A60 10W 827 E27 CL	93115944	1 350	2700	300	220-240	80	15k	A++	60	104	10.00	10
2	10	91	B22	LED Fil A60 10W 827 B22 CL	93115945	1 350	2700	300	220-240	80	15k	A++	60	102	10.00	10
	10	91	E27	LED Fil A60 10W 827 E27 FR	93115946	1 350	2700	300	220-240	80	15k	A++	60	104	10.00	10
	10	91	B22	LED Fil A60 10W 827 B22 FR	93115947	1 350	2700	300	220-240	80	15k	A++	60	102	10.00	10
3	10	96	E27	LED Fil A60 10W 840 E27 FR	93115948	1 450	4000	300	220-240	80	15k	A++	60	104	10.00	10
	10	96	B22	LED Fil A60 10W 840 B22 FR	93115949	1 450	4000	300	220-240	80	15k	A++	60	102	10.00	10
	10	96	E27	LED Fil A60 10W 865 E27 FR	93115950	1 450	6500	300	220-240	80	15k	A++	60	104	10.00	10
	10	96	B22	LED Fil A60 10W 865 B22 FR	93115951	1 450	6500	300	220-240	80	15k	A++	60	102	10.00	10

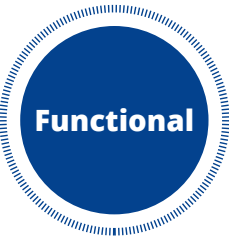


	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
Energy Smart™ - GLS OMNI Dimmable																
	7	40	B22	LED ESmart A60 7W(40)Dim 827 B22	93096484	470	2700	240	220-240	80	15k	A+	58	108	7.00	6
4	7	40	E27	LED ESmart A60 7W(40)Dim 827 E27	93096485	470	2700	240	220-240	80	15k	A+	58	109	7.00	6
	9	60	B22	LED ESmart A60 9W(60)Dim 827 B22	93096486	810	2700	240	220-240	80	15k	A+	58	108	9.00	6
	9	60	E27	LED ESmart A60 9W(60)Dim 827 E27	93096487	810	2700	240	220-240	80	15k	A+	58	109	9.00	6
	12	75	B22	LED ESmart A67 12W(75)Dim 827 B22	93096488	1 055	2700	240	220-240	80	15k	A+	70	133	12.00	6
5	12	75	E27	LED ESmart A67 12W(75)Dim 827 E27	93096489	1 055	2700	240	220-240	80	15k	A+	70	134	12.00	6
	15	100	B22	LED ESmart A67 15W(100)Dim 827 B22	93096490	1 521	2700	240	220-240	80	15k	A+	70	133	15.00	6
	15	100	E27	LED ESmart A67 15W(100)Dim 827 E27	93096491	1 521	2700	240	220-240	80	15k	A+	70	134	15.00	6
LED DimStik - Dimmable Bright Stik																
	9	60	B22	LED DimSTIK 9(60) 830 B22	93104350	806	3000	240	220-240	80	15k	A+	38	114	9.00	15
	9	60	E27	LED DimSTIK 9(60) 830 E27	93104352	806	3000	240	220-240	80	15k	A+	38	116	9.00	15
	9	60	B22	LED DimSTIK 9(60)840 B22	93104354	806	4000	240	220-240	80	15k	A+	38	114	9.00	15
	9	60	E27	LED DimSTIK 9(60)840 E27	93104356	806	4000	240	220-240	80	15k	A+	38	116	9.00	15
	9	60	B22	LED DimSTIK 9(60)865 B22	93104358	806	6500	240	220-240	80	15k	A+	38	114	9.00	15
6	9	60	E27	LED DimSTIK 9(60)865 E27	93104360	806	6500	240	220-240	80	15k	A+	38	116	9.00	15
	14	100	B22	LED DimSTIK 14(100)830 B22	93104208	1 521	3000	240	220-240	80	15k	A+	45	136	14.00	15
	14	100	E27	LED DimSTIK 14(100)830 E27	93104210	1 521	3000	240	220-240	80	15k	A+	45	138	14.00	15
	14	100	B22	LED DimSTIK 14(100)840 B22	93104212	1 521	4000	240	220-240	80	15k	A+	45	136	14.00	15
	14	100	E27	LED DimSTIK 14(100)840 E27	93104214	1 521	4000	240	220-240	80	15k	A+	45	138	14.00	15
	14	100	B22	LED DimSTIK 14(100)865 B22	93104346	1 521	6500	240	220-240	80	15k	A+	45	136	14.00	15
	14	100	E27	LED DimSTIK 14(100)865 E27	93104348	1 521	6500	240	220-240	80	15k	A+	45	138	14.00	15
LED A55																
	8	55	B22	LED ECO A55 8W(55) 830 B22	93093866	720	3000	180	220-240	80	10k	A+	57	101	8.00	6
	8	55	E27	LED ECO A55 8W(55) 830 E27	93093867	720	3000	180	220-240	80	10k	A+	57	103	8.00	6
	8	58	B22	LED ECO A55 8W(58) 865 B22	93093868	770	6500	180	220-240	80	10k	A+	57	101	8.00	6
7	8	58	E27	LED ECO A55 8W(58) 865 E27	93093869	770	6500	180	220-240	80	10k	A+	57	103	8.00	6
	10	64	B22	LED ECO A55 10W(64) 830 B22	93093870	870	3000	180	220-240	80	10k	A+	57	101	10.00	6
	10	64	E27	LED ECO A55 10W(64) 830 E27	93093871	870	3000	180	220-240	80	10k	A+	57	103	10.00	6
	10	70	B22	LED ECO A55 10W(70) 865 B22	93093872	970	6500	180	220-240	80	10k	A+	57	101	10.00	6
	10	70	E27	LED ECO A55 10W(70) 865 E27	93093873	970	6500	180	220-240	80	10k	A+	57	103	10.00	6
LED HighLumen																
8	21	120	E27	LED HighLumen T80 21W(120) 830 E27	93083678	1 900	3000	200	220-240	80	10k	A+	81	149	21.00	6
	21	125	E27	LED HighLumen T80 21W(125) 865 E27	93083679	2 000	6500	200	220-240	80	10k	A+	81	149	21.00	6
9	27	169	E27	LED HighLumen T100 27W(169) 830 E27	93083680	2 800	3000	200	220-240	80	10k	A+	101	189	27.00	4
	27	179	E27	LED HighLumen T100 27W(179) 865 E27	93083681	3 000	6500	200	220-240	80	10k	A+	101	189	27.00	4
	42	217	E27	LED HighLumen T120 42W(217) 830 E27	93083682	3 700	3000	200	220-240	80	10k	A+	119	219	42.00	4
10	42	233	E27	LED HighLumen T120 42W(233) 865 E27	93083683	4 000	6500	200	220-240	80	10k	A+	119	219	42.00	4



LED RETROFIT SOLUTIONS

Decorative



**Spherical
(Clear, forsted)**

Cap: E27, B22, E14, B15
Wattage: 2.5W, 4.5W, 7W
Voltage: 220 - 240V
Rated life: 15 000 h



**Energy Smart™ -
Warm Dimming
Deco Golf**

Cap: E14, E27, B15, B22
Wattage: 5W
Voltage: 220 - 240V
Rated life: 15 000 h



**LED Filament
Globe
G95, G120**

Cap: E27, B22
Wattage: 4.5W, 7W, 8.5W, 10W
Voltage: 220 - 240V
Rated life: 15 000 h



**LED Candle
(Clear, forsted)**

Cap: E27, B22, E14, B15
Wattage: 2.5W, 4.5W, 7W
Voltage: 220 - 240V
Rated life: 15 000 h



**Energy Smart™ -
Warm Dimming
Deco Candle**

Cap: E14, E27, B15, B22
Wattage: 5W
Voltage: 220 - 240V
Rated life: 15 000 h



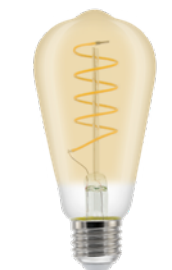
**LED Filament
ST64**

Cap: E27, B22
Wattage: 4.5W, 7W, 8.5W, 10W
Voltage: 220 - 240V
Rated life: 15 000 h



**Candle
(Clear, Gold)**

Cap: E14, B22
Wattage: 3.5W
Voltage: 220 - 240V
Rated life: 15 000 h



**Heliix Dimmable
Pear (Clear, Gold)**

Cap: E27, B22
Wattage: 5.5W
Voltage: 220 - 240V
Rated life: 15 000 h



Bright Stik™ - E14

Cap: E14
Wattage: 7W
Voltage: 220 - 240V
Rated life: 10 000 h



**Heliix Dimmable
Globe 80, 95, 200**

Cap: E27, B22
Wattage: 5.5W, 6W
Voltage: 220 - 240V
Rated life: 15 000 h



**Heliix Dimmable
GLS 160**

Cap: E27, B22
Wattage: 6W
Voltage: 220 - 240V
Rated life: 15 000 h



LED RETROFIT SOLUTIONS

Decorative Lamps



LED Retrofit

	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Energy Consumption (kWh/1000h)	Length (mm)	Pack Qty
LED Filament - Spherical Clear and Frosted																
1	2.5	25	B22	LED Fil Golf 2.5W 827 B22 CL TU	93115544	250	2700	300	220-240	80	15k	A++	45	2.50	77	10
3	2.5	25	B22	LED Fil Golf 2.5W 827 B22 FR TU	93115547	250	2700	300	220-240	80	15k	A++	45	2.50	77	10
1	2.5	25	E14	LED Fil Golf 2.5W 827 E14 CL TU	93115542	250	2700	300	220-240	80	15k	A++	45	2.50	79	10
3	2.5	25	E14	LED Fil Golf 2.5W 827 E14 FR TU	93115545	250	2700	300	220-240	80	15k	A++	45	2.50	79	10
1	2.5	25	E27	LED Fil Golf 2.5W 827 E27 CL TU	93115543	250	2700	300	220-240	80	15k	A++	45	2.50	79	10
3	2.5	25	E27	LED Fil Golf 2.5W 827 E27 FR TU	93115546	250	2700	300	220-240	80	15k	A++	45	2.50	79	10
1	2.5	25	B15	LED Fil Golf 2.5W 827 B15 CL TU	93115983	250	2700	300	220-240	80	15k	A++	45	2.50	78	10
	2.5	25	B15	LED Fil Golf 2.5W 827 B15 FR TU	93115984	250	2700	300	220-240	80	15k	A++	45	2.50	78	10
	2.5	25	B22	LED Fil Golf 2.5W 840 B22 FR TU	93115550	250	4000	300	220-240	80	15k	A++	45	2.50	77	10
	2.5	25	E14	LED Fil Golf 2.5W 840 E14 FR TU	93115548	250	4000	300	220-240	80	15k	A++	45	2.50	79	10
	2.5	25	E27	LED Fil Golf 2.5W 840 E27 FR TU	93115549	250	4000	300	220-240	80	15k	A++	45	2.50	79	10
3	2.5	25	B15	LED Fil Golf 2.5W 840 B15 FR TU	93115985	250	4000	300	220-240	80	15k	A++	45	2.50	78	10
	2.5	25	B22	LED Fil Golf 2.5W 865 B22 FR TU	93115553	250	6500	300	220-240	80	15k	A++	45	2.50	77	10
	2.5	25	E14	LED Fil Golf 2.5W 865 E14 FR TU	93115551	250	6500	300	220-240	80	15k	A++	45	2.50	79	10
	2.5	25	E27	LED Fil Golf 2.5W 865 E27 FR TU	93115552	250	6500	300	220-240	80	15k	A++	45	2.50	79	10
	2.5	25	B15	LED Fil Golf 2.5W 865 B15 FR TU	93115986	250	6500	300	220-240	80	15k	A++	45	2.50	78	10
2	4.5	40	B22	LED Fil Golf 4.5W 827 B22 CL TU	93115556	470	2700	300	220-240	80	15k	A++	45	4.50	77	10
3	4.5	40	B22	LED Fil Golf 4.5W 827 B22 FR TU	93115559	470	2700	300	220-240	80	15k	A++	45	4.50	77	10
2	4.5	40	E14	LED Fil Golf 4.5W 827 E14 CL TU	93115554	470	2700	300	220-240	80	15k	A++	45	4.50	79	10
3	4.5	40	E14	LED Fil Golf 4.5W 827 E14 FR TU	93115557	470	2700	300	220-240	80	15k	A++	45	4.50	79	10
2	4.5	40	E27	LED Fil Golf 4.5W 827 E27 CL TU	93115555	470	2700	300	220-240	80	15k	A++	45	4.50	79	10
3	4.5	40	E27	LED Fil Golf 4.5W 827 E27 FR TU	93115558	470	2700	300	220-240	80	15k	A++	45	4.50	79	10
2	4.5	40	B15	LED Fil Golf 4.5W 827 B15 CL TU	93115987	470	2700	300	220-240	80	15k	A++	45	4.50	78	10
	4.5	40	B15	LED Fil Golf 4.5W 827 B15 FR TU	93115988	470	2700	300	220-240	80	15k	A++	45	4.50	78	10
	4.5	40	B22	LED Fil Golf 4.5W 840 B22 FR TU	93115562	470	4000	300	220-240	80	15k	A++	45	4.50	77	10
	4.5	40	E14	LED Fil Golf 4.5W 840 E14 FR TU	93115560	470	4000	300	220-240	80	15k	A++	45	4.50	79	10
	4.5	40	E27	LED Fil Golf 4.5W 840 E27 FR TU	93115561	470	4000	300	220-240	80	15k	A++	45	4.50	79	10
3	4.5	40	B15	LED Fil Golf 4.5W 840 B15 FR TU	93115989	470	4000	300	220-240	80	15k	A++	45	4.50	78	10
	4.5	40	B22	LED Fil Golf 4.5W 865 B22 FR TU	93115565	470	6500	300	220-240	80	15k	A++	45	4.50	77	10
	4.5	40	E14	LED Fil Golf 4.5W 865 E14 FR TU	93115563	470	6500	300	220-240	80	15k	A++	45	4.50	79	10
	4.5	40	E27	LED Fil Golf 4.5W 865 E27 FR TU	93115564	470	6500	300	220-240	80	15k	A++	45	4.50	79	10
	4.5	40	B15	LED Fil Golf 4.5W 865 B15 FR TU	93115990	470	6500	300	220-240	80	15k	A++	45	4.50	78	10
2	7	60	B22	LED Fil Golf 7W 827 B22 CL TU	93115568	806	2700	300	220-240	80	15k	A++	45	7.00	77	10
3	7	60	B22	LED Fil Golf 7W 827 B22 FR TU	93115571	806	2700	300	220-240	80	15k	A++	45	7.00	77	10
2	7	60	E14	LED Fil Golf 7W 827 E14 CL TU	93115566	806	2700	300	220-240	80	15k	A++	45	7.00	79	10
3	7	60	E14	LED Fil Golf 7W 827 E14 FR TU	93115569	806	2700	300	220-240	80	15k	A++	45	7.00	79	10
2	7	60	E27	LED Fil Golf 7W 827 E27 CL TU	93115567	806	2700	300	220-240	80	15k	A++	45	7.00	79	10
3	7	60	E27	LED Fil Golf 7W 827 E27 FR TU	93115570	806	2700	300	220-240	80	15k	A++	45	7.00	79	10
2	7	60	B15	LED Fil Golf 7W 827 B15 CL TU	93115991	806	2700	300	220-240	80	15k	A++	45	7.00	78	10
	7	60	B15	LED Fil Golf 7W 827 B15 FR TU	93115992	806	2700	300	220-240	80	15k	A++	45	7.00	78	10
3	7	60	B22	LED Fil Golf 7W 840 B22 FR TU	93115574	806	4000	300	220-240	80	15k	A++	45	7.00	77	10
	7	60	E14	LED Fil Golf 7W 840 E14 FR TU	93115572	806	4000	300	220-240	80	15k	A++	45	7.00	79	10
	7	60	E27	LED Fil Golf 7W 840 E27 FR TU	93115573	806	4000	300	220-240	80	15k	A++	45	7.00	79	10
	7	60	B15	LED Fil Golf 7W 840 B15 FR TU	93115993	806	4000	300	220-240	80	15k	A++	45	7.00	78	10



	Wattage (W)	Watt Replacement	Cap	Product Description	Tungsum Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
LED Filament - Candle Clear and Frosted																
4	2.5	25	B22	LED Fil Candle 2.5W 827 B22 CL	93115511	250	2700	300	220-240	80	15k	A++	35	93	2.50	10
6	2.5	25	B22	LED Fil Candle 2.5W 827 B22 FR	93115514	250	2700	300	220-240	80	15k	A++	35	93	2.50	10
4	2.5	25	E14	LED Fil Candle 2.5W 827 E14 CL	93115509	250	2700	300	220-240	80	15k	A++	35	97	2.50	10
6	2.5	25	E14	LED Fil Candle 2.5W 827 E14 FR	93115512	250	2700	300	220-240	80	15k	A++	35	97	2.50	10
4	2.5	25	E27	LED Fil Candle 2.5W 827 E27 CL	93115510	250	2700	300	220-240	80	15k	A++	35	95	2.50	10
6	2.5	25	E27	LED Fil Candle 2.5W 827 E27 FR	93115513	250	2700	300	220-240	80	15k	A++	35	95	2.50	10
4	2.5	25	B15	LED Fil Candle 2.5W 827 B15 CL	93115972	250	2700	300	220-240	80	15k	A++	35	96	2.50	10
	2.5	25	B15	LED Fil Candle 2.5W 827 B15 FR	93115973	250	2700	300	220-240	80	15k	A++	35	96	2.50	10
	2.5	25	B22	LED Fil Candle 2.5W 840 B22 FR	93115517	250	4000	300	220-240	80	15k	A++	35	93	2.50	10
	2.5	25	E14	LED Fil Candle 2.5W 840 E14 FR	93115515	250	4000	300	220-240	80	15k	A++	35	97	2.50	10
6	2.5	25	E27	LED Fil Candle 2.5W 840 E27 FR	93115516	250	4000	300	220-240	80	15k	A++	35	95	2.50	10
	2.5	25	B15	LED Fil Candle 2.5W 840 B15 FR	93115974	250	4000	300	220-240	80	15k	A++	35	96	2.50	10
	2.5	25	B22	LED Fil Candle 2.5W 865 B22 FR	93115520	250	6500	300	220-240	80	15k	A++	35	93	2.50	10
	2.5	25	E14	LED Fil Candle 2.5W 865 E14 FR	93115518	250	6500	300	220-240	80	15k	A++	35	97	2.50	10
	2.5	25	E27	LED Fil Candle 2.5W 865 E27 FR	93115519	250	6500	300	220-240	80	15k	A++	35	95	2.50	10
	2.5	25	B15	LED Fil Candle 2.5W 865 B15 FR	93115975	250	6500	300	220-240	80	15k	A++	35	96	2.50	10
5	4.5	40	B22	LED Fil Candle 4.5W 827 B22 CL	93115523	470	2700	300	220-240	80	15k	A++	35	93	4.50	10
6	4.5	40	B22	LED Fil Candle 4.5W 827 B22 FR	93115526	470	2700	300	220-240	80	15k	A++	35	93	4.50	10
5	4.5	40	E14	LED Fil Candle 4.5W 827 E14 CL	93115521	470	2700	300	220-240	80	15k	A++	35	97	4.50	10
6	4.5	40	E14	LED Fil Candle 4.5W 827 E14 FR	93115524	470	2700	300	220-240	80	15k	A++	35	97	4.50	10
5	4.5	40	E27	LED Fil Candle 4.5W 827 E27 CL	93115522	470	2700	300	220-240	80	15k	A++	35	95	4.50	10
6	4.5	40	E27	LED Fil Candle 4.5W 827 E27 FR	93115525	470	2700	300	220-240	80	15k	A++	35	95	4.50	10
5	4.5	40	B15	LED Fil Candle 4.5W 827 B15 CL	93115976	470	2700	300	220-240	80	15k	A++	35	96	4.50	10
	4.5	40	B15	LED Fil Candle 4.5W 827 B15 FR	93115977	470	2700	300	220-240	80	15k	A++	35	96	4.50	10
	4.5	40	B22	LED Fil Candle 4.5W 840 B22 FR	93115529	470	4000	300	220-240	80	15k	A++	35	93	4.50	10
	4.5	40	E14	LED Fil Candle 4.5W 840 E14 FR	93115527	470	4000	300	220-240	80	15k	A++	35	97	4.50	10
3	4.5	40	E27	LED Fil Candle 4.5W 840 E27 FR	93115528	470	4000	300	220-240	80	15k	A++	35	95	4.50	10
	4.5	40	B15	LED Fil Candle 4.5W 840 B15 FR	93115978	470	4000	300	220-240	80	15k	A++	35	96	4.50	10
	4.5	40	B22	LED Fil Candle 4.5W 865 B22 FR	93115532	470	6500	300	220-240	80	15k	A++	35	93	4.50	10
	4.5	40	E14	LED Fil Candle 4.5W 865 E14 FR	93115530	470	6500	300	220-240	80	15k	A++	35	97	4.50	10
	4.5	40	E27	LED Fil Candle 4.5W 865 E27 FR	93115531	470	6500	300	220-240	80	15k	A++	35	95	4.50	10
	4.5	40	B15	LED Fil Candle 4.5W 865 B15 FR	93115979	470	6500	300	220-240	80	15k	A++	35	96	4.50	10
5	7	60	B22	LED Fil Candle 7W 827 B22 CL	93115535	806	2700	300	220-240	80	15k	A++	35	93	7.00	10
6	7	60	B22	LED Fil Candle 7W 827 B22 FR	93115538	806	2700	300	220-240	80	15k	A++	35	93	7.00	10
5	7	60	E14	LED Fil Candle 7W 827 E14 CL	93115533	806	2700	300	220-240	80	15k	A++	35	97	7.00	10
6	7	60	E14	LED Fil Candle 7W 827 E14 FR	93115536	806	2700	300	220-240	80	15k	A++	35	97	7.00	10
5	7	60	E27	LED Fil Candle 7W 827 E27 CL	93115534	806	2700	300	220-240	80	15k	A++	35	95	7.00	10
6	7	60	E27	LED Fil Candle 7W 827 E27 FR	93115537	806	2700	300	220-240	80	15k	A++	35	95	7.00	10
5	7	60	B15	LED Fil Candle 7W 827 B15 CL	93115980	806	2700	300	220-240	80	15k	A++	35	96	7.00	10
	7	60	B15	LED Fil Candle 7W 827 B15 FR	93115981	806	2700	300	220-240	80	15k	A++	35	96	7.00	10
6	7	60	B22	LED Fil Candle 7W 840 B22 FR	93115541	806	4000	300	220-240	80	15k	A++	35	93	7.00	10
	7	60	E14	LED Fil Candle 7W 840 E14 FR	93115539	806	4000	300	220-240	80	15k	A++	35	97	7.00	10
	7	60	E27	LED Fil Candle 7W 840 E27 FR	93115540	806	4000	300	220-240	80	15k	A++	35	95	7.00	10
	7	60	B15	LED Fil Candle 7W 840 B15 FR	93115982	806	4000	300	220-240	80	15k	A++	35	96	7.00	10

LED RETROFIT SOLUTIONS

Decorative Lamps



	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Previous Generation Product Code*	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
LED Filament Heliac - Candle Dimmable																	
1	3.5	36	B22	LED Fil Heliac Candle 3.5W Dim 820 B22	93096492	93078666	125	2000	310	220-240	80	15k	A	35	97	3.50	10
	3.5	36	E14	LED Fil Heliac Candle 3.5W Dim 820 E14	93096493	93078636	125	2000	310	220-240	80	15k	A	35	97	3.50	10
	3.5	36	B22	LED Fil Heliac Candle 3.5W Dim 822 B22	93096494	93078667	125	2200	310	220-240	80	15k	A	35	97	3.50	10
	3.5	36	E14	LED Fil Heliac Candle 3.5W Dim 822 E14	93096495	93078637	125	2200	310	220-240	80	15k	A	35	97	3.50	10
Bright Stik™ - E14																	
Single pack																	
2	7	45	E14	LED 7/STIK/830/100-240/E14/F 1/15	93110797	-	550	3000	240	100-240	80	10k	A+	32	103	7.00	15
	7	48	E14	LED 7/STIK/840/100-240/E14/F 1/15	93109514	-	600	4000	240	100-240	80	10k	A+	32	103	7.00	15
	7	48	E14	LED 7/STIK/865/100-240/E14/F 1/15	93110796	-	600	6500	240	100-240	80	10k	A+	32	103	7.00	15
	Multi pack																
3	7	45	E14	LED 7/STIK/830/100-240/E14/F 3/15	93109512	-	550	3000	240	100-240	80	10k	A+	32	103	7.00	15
	7	48	E14	LED 7/STIK/840/100-240/E14/F 3/15	93109513	-	600	4000	240	100-240	80	10k	A+	32	103	7.00	15
	7	48	E14	LED 7/STIK/865/100-240/E14/F 3/15	93109515	-	600	6500	240	100-240	80	10k	A+	32	103	7.00	15
Energy Smart™ - WarmDimming Deco Golf																	
3	5	40	E14	LED Golf WarmDim 5W 820-827 E14	93117660	-	470	2000-2700	160	220-240	80	15k	-	45	80	5.00	6
	5	40	E27	LED Golf WarmDim 5W 820-827 E27	93117661	-	470		160	220-240	80	15k	-	45	74	5.00	6
	5	40	B22	LED Golf WarmDim 5W 820-827 B22	93117662	-	470		160	220-240	80	15k	-	45	73	5.00	6
	5	40	B15	LED Golf WarmDim 5W 820-827 B15	93117663	-	470		160	220-240	80	15k	-	45	78	5.00	6
Energy Smart™ - WarmDimming Deco Candle																	
4	5	40	E14	LED Candle WarmDim 5W 820-827 E14	93117664	-	470	2000-2700	160	220-240	80	15k	-	35	97	5.00	6
	5	40	E27	LED Candle WarmDim 5W 820-827 E27	93117665	-	470		160	220-240	80	15k	-	35	95	5.00	6
	5	40	B22	LED Candle WarmDim 5W 820-827 B22	93117666	-	470		160	220-240	80	15k	-	35	94	5.00	6
	5	40	B15	LED Candle WarmDim 5W 820-827 B15	93117667	-	470		160	220-240	80	15k	-	35	95	5.00	6

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.



	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
LED Filament - Globes G95 Clear																
5	4.5	40	B22	LED Fil G95 4.5W 827 B22 CL	93115494	470	2700	300	220-240	80	15k	A++	95	136	4.50	4
	4.5	40	E27	LED Fil G95 4.5W 827 E27 CL	93115493	470	2700	300	220-240	80	15k	A++	95	138	4.50	4
	7	60	B22	LED Fil G95 7W 827 B22 CL	93115496	806	2700	300	220-240	80	15k	A++	95	136	7.00	4
	7	60	E27	LED Fil G95 7W 827 E27 CL	93115495	806	2700	300	220-240	80	15k	A++	95	138	7.00	4
6	7	60	B22	LED Fil G95 7W 840 B22 CL	93115498	806	4000	300	220-240	80	15k	A++	95	136	7.00	4
	7	60	E27	LED Fil G95 7W 840 E27 CL	93115497	806	4000	300	220-240	80	15k	A++	95	138	7.00	4
	7	60	B22	LED Fil G95 7W 865 B22 CL	93115500	806	6500	300	220-240	80	15k	A++	95	136	7.00	4
	7	60	E27	LED Fil G95 7W 865 E27 CL	93115499	806	6500	300	220-240	80	15k	A++	95	138	7.00	4
7	8.5	75	E27	LED Fil G95 8.5W 827 E27 CL	93115956	1 055	2700	300	220-240	80	15k	A++	95	138	8.50	4
	8.5	75	B22	LED Fil G95 8.5W 827 B22 CL	93115957	1 055	2700	300	220-240	80	15k	A++	95	136	8.50	4
	10	91	E27	LED Fil G95 10W 827 E27 CL	93115958	1 350	2700	300	220-240	80	15k	A++	95	138	10.00	4
	10	91	B22	LED Fil G95 10W 827 B22 CL	93115959	1 350	2700	300	220-240	80	15k	A++	95	136	10.00	4
8	10	96	E27	LED Fil G95 10W 840 E27 CL	93115960	1 450	4000	300	220-240	80	15k	A++	95	138	10.00	4
	10	96	B22	LED Fil G95 10W 840 B22 CL	93115961	1 450	4000	300	220-240	80	15k	A++	95	136	10.00	4
	10	96	E27	LED Fil G95 10W 865 E27 CL	93115962	1 450	6500	300	220-240	80	15k	A++	95	138	10.00	4
	10	96	B22	LED Fil G95 10W 865 B22 CL	93115963	1 450	6500	300	220-240	80	15k	A++	95	136	10.00	4
LED Filament - Globe G120 Clear																
6	4.5	40	B22	LED Fil G120 4.5W 827 B22 CL	93115502	470	2700	300	220-240	80	15k	A++	124	170	4.50	4
	4.5	40	E27	LED Fil G120 4.5W 827 E27 CL	93115501	470	2700	300	220-240	80	15k	A++	124	172	4.50	4
	7	60	B22	LED Fil G120 7W 827 B22 CL	93115504	806	2700	300	220-240	80	15k	A++	124	170	7.00	4
	7	60	E27	LED Fil G120 7W 827 E27 CL	93115503	806	2700	300	220-240	80	15k	A++	124	172	7.00	4
7	7	60	B22	LED Fil G120 7W 840 B22 CL	93115506	806	4000	300	220-240	80	15k	A++	124	170	7.00	4
	7	60	E27	LED Fil G120 7W 840 E27 CL	93115505	806	4000	300	220-240	80	15k	A++	124	172	7.00	4
	7	60	B22	LED Fil G120 7W 865 B22 CL	93115508	806	6500	300	220-240	80	15k	A++	124	170	7.00	4
	7	60	E27	LED Fil G120 7W 865 E27 CL	93115507	806	6500	300	220-240	80	15k	A++	124	172	7.00	4
8	8.5	75	E27	LED Fil G120 8.5W 827 E27 CL	93115964	1 055	2700	300	220-240	80	15k	A++	124	172	8.50	4
	8.5	75	B22	LED Fil G120 8.5W 827 B22 CL	93115965	1 055	2700	300	220-240	80	15k	A++	124	170	8.50	4
	10	91	E27	LED Fil G120 10W 827 E27 CL	93115966	1 350	2700	300	220-240	80	15k	A++	124	172	10.00	4
	10	91	B22	LED Fil G120 10W 827 B22 CL	93115967	1 350	2700	300	220-240	80	15k	A++	124	170	10.00	4
9	10	96	E27	LED Fil G120 10W 840 E27 CL	93115968	1 450	4000	300	220-240	80	15k	A++	124	172	10.00	4
	10	96	B22	LED Fil G120 10W 840 B22 CL	93115969	1 450	4000	300	220-240	80	15k	A++	124	170	10.00	4
	10	96	E27	LED Fil G120 10W 865 E27 CL	93115970	1 450	6500	300	220-240	80	15k	A++	124	172	10.00	4
	10	96	B22	LED Fil G120 10W 865 B22 CL	93115971	1 450	6500	300	220-240	80	15k	A++	124	170	10.00	4
LED Filament - ST64 Clear																
7	4.5	40	B22	LED Fil ST64 4.5W 827 B22 CL	93115490	470	2700	300	220-240	80	15k	A++	64	138	4.50	10
	4.5	40	E27	LED Fil ST64 4.5W 827 E27 CL	93115489	470	2700	300	220-240	80	15k	A++	64	140	4.50	10
	7	60	B22	LED Fil ST64 7W 827 B22 CL	93115492	806	2700	300	220-240	80	15k	A++	64	138	7.00	10
	7	60	E27	LED Fil ST64 7W 827 E27 CL	93115491	806	2700	300	220-240	80	15k	A++	64	140	7.00	10
8	8.5	75	E27	LED Fil ST64 8.5W 827 E27 CL	93115952	1 055	2700	300	220-240	80	15k	A++	64	140	8.50	10
	8.5	75	B22	LED Fil ST64 8.5W 827 B22 CL	93115953	1 055	2700	300	220-240	80	15k	A++	64	138	8.50	10
	10	91	E27	LED Fil ST64 10W 827 E27 CL	93115954	1 350	2700	300	220-240	80	15k	A++	64	140	10.00	10
	10	91	B22	LED Fil ST64 10W 827 B22 CL	93115955	1 350	2700	300	220-240	80	15k	A++	64	138	10.00	10



LED RETROFIT SOLUTIONS

Decorative Lamps

	Wattage (W)	Watt Replacement Cap	Product Description	Tungram Product Code	Previous Generation Product Code #	Lumen (lm)	CCT (K)	Beam Angle (°)	Voltage (V)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Diameter (mm)	Length (mm)	Energy Consumption (kWh/1000h)	Pack Qty
LED Filament Heliac - Dimmable																
1	5.5	45	B22 LED Fil Heliac Pear 5.5W Dim 820 B22	93096496	93078648	250	2000	310	220-240	80	15k	A	64	138	5.50	6
	5.5	45	E27 LED Fil Heliac Pear 5.5W Dim 820 E27	93096497	93078646	250	2000	310	220-240	80	15k	A	64	140	5.50	6
	5.5	45	B22 LED Fil Heliac Pear 5.5W Dim 822 B22	93096498	93078649	250	2200	310	220-240	80	15k	A	64	138	5.50	6
	5.5	45	E27 LED Fil Heliac Pear 5.5W Dim 822 E27	93096499	93078647	250	2200	310	220-240	80	15k	A	64	140	5.50	6
2	5.5	45	B22 LED Fil Heliac Globe80 5.5W Dim 820 B22	93096500	93078642	250	2000	310	220-240	80	15k	A	80	120	5.50	4
	5.5	45	E27 LED Fil Heliac Globe80 5.5W Dim 820 E27	93096501	93078643	250	2000	310	220-240	80	15k	A	80	122	5.50	4
	5.5	45	B22 LED Fil Heliac Globe95 5.5W Dim 820 B22	93096502	93078644	250	2000	310	220-240	80	15k	A	95	138	5.50	4
	5.5	45	E27 LED Fil Heliac Globe95 5.5W Dim 820 E27	93096503	93078645	250	2000	310	220-240	80	15k	A	95	140	5.50	4
3	6	50	B22 LED Fil Heliac Globe200 6W Dim 820 B22	93096504	93078638	300	2000	310	220-240	80	15k	A	200	281	6.00	1
	6	50	E27 LED Fil Heliac Globe200 6W Dim 820 E27	93096505	93078639	300	2000	310	220-240	80	15k	A	200	283	6.00	1
4	6	50	B22 LED Fil Heliac GLS160 6W Dim 820 B22	93096506	93078640	300	2000	310	220-240	80	15k	A	160	288	6.00	1
	6	50	E27 LED Fil Heliac GLS160 6W Dim 820 E27	93096507	93078641	300	2000	310	220-240	80	15k	A	160	290	6.00	1

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.

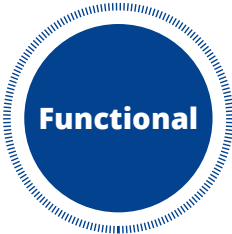


LED RETROFIT SOLUTIONS

GU10 Lamps



LED Retrofit



Start GU10

Cap: GU10
Wattage: 3.5W, 5W
Voltage: 220 - 240V
Beam angle: 35°
Rated life: 15 000 h



Energy Smart™ GU10 Dimmable

Cap: GU10
Wattage: 5W
Voltage: 220 - 240V
Beam angle: 35°
Rated life: 25 000 h



Precise™ GU10 Dimmable

Cap: GU10
Wattage: 6W
Voltage: 220 - 240V
Beam angle: 20°, 35°
Rated life: 50 000 h



Energy Smart™ GU10 High Lumen Dimmable

Cap: GU10
Wattage: 6W
Voltage: 220 - 240V
Beam angle: 35°, 60°
Rated life: 25 000 h



Energy Smart™ GU10 Warm Dimming

Cap: GU10
Wattage: 5W
Voltage: 220 - 240V
Beam angle: 35°
Rated life: 25 000 h

	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Energy Consumption (kWh/1000h)	Voltage (V)	Diameter (mm)	Length (mm)	Pack Qty
Start - GU10																
	3.5	35	GU10	LED Start GU10 3.5W(35) 827 35°	93067831	230	2700	35	80	15k	A+	3.50	220-240	50	53	8
	3.5	35	GU10	LED Start GU10 3.5W(35) 830 35°	93094480	240	3000	35	80	15k	A+	3.50	220-240	50	53	8
	3.5	35	GU10	LED Start GU10 3.5W(35) 840 35°	93094482	250	4000	35	80	15k	A++	3.50	220-240	50	53	8
1	3.5	35	GU10	LED Start GU10 3.5W(35) 865 35°	93094484	240	6500	35	80	15k	A+	3.50	220-240	50	53	8
	5	50	GU10	LED Start GU10 5W(50) 827 35°	93067832	345	2700	35	80	15k	A+	5.00	220-240	50	53	8
	5	50	GU10	LED Start GU10 5W(50) 830 35°	93094487	360	3000	35	80	15k	A+	5.00	220-240	50	53	8
	5	50	GU10	LED Start GU10 5W(50) 840 35°	93094489	360	4000	35	80	15k	A+	5.00	220-240	50	53	8
	5	50	GU10	LED Start GU10 5W(50) 865 35°	93094491	360	6500	35	80	15k	A+	5.00	220-240	50	53	8
Energy Smart™ - GU10 - Dimmable																
	5	50	GU10	LED ESmart GU10 5W(50)Dim 827 35°	93094493	360	2700	35	80	25k	A+	5.00	220-240	50	54	8
2	5	50	GU10	LED ESmart GU10 5W(50)Dim 830 35°	93094495	380	3000	35	80	25k	A+	5.00	220-240	50	54	8
	5	50	GU10	LED ESmart GU10 5W(50)Dim 840 35°	93094497	400	4000	35	80	25k	A+	5.00	220-240	50	54	8
Energy Smart™ - GU10 High Lumen - Dimmable																
	6	70	GU10	LED ESmart GU10 6W(70)Dim 830 35°	93094499	500	3000	35	80	25k	A+	6.00	220-240	50	54	8
2	6	75	GU10	LED ESmart GU10 6W(75)Dim 830 60°	93094501	540	3000	60	80	25k	A+	6.00	220-240	50	54	8
	6	70	GU10	LED ESmart GU10 6W(70)Dim 840 35°	93094503	500	4000	35	80	25k	A+	6.00	220-240	50	54	8
	6	75	GU10	LED ESmart GU10 6W(75)Dim 840 60°	93094505	540	4000	60	80	25k	A+	6.00	220-240	50	54	8
Energy Smart™ - GU10 Warm Dimming																
3	5	50	GU10	LED WarmDim GU10 5W(50) 820-827 35°	93067834	350	2000-2700	35	80	25k	A+	5.00	220-240	50	54	8
Precise™ - GU10 Dimmable																
	6	50	GU10	LED Precise GU10 6W(50)Dim 927 20°	93094507	350	2700	20	95	50k	A+	6.00	220-240	50	53	10
	6	50	GU10	LED Precise GU10 6W(50)Dim 927 35°	93094508	350	2700	35	95	50k	A+	6.00	220-240	50	53	10
	6	50	GU10	LED Precise GU10 6W(50)Dim 930 20°	93094509	370	3000	20	95	50k	A+	6.00	220-240	50	53	10
4	6	50	GU10	LED Precise GU10 6W(50)Dim 930 35°	93094510	370	3000	35	95	50k	A+	6.00	220-240	50	53	10
	6	50	GU10	LED Precise GU10 6W(50)Dim 940 20°	93094511	400	4000	20	95	50k	A+	6.00	220-240	50	53	10
	6	50	GU10	LED Precise GU10 6W(50)Dim 940 35°	93094512	400	4000	35	95	50k	A+	6.00	220-240	50	53	10

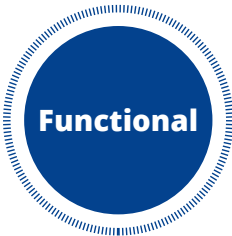


LED RETROFIT SOLUTIONS

MR16 Lamps



LED Retrofit



Start MR16

Cap: GU5.3
Wattage: 5W, 7W
Voltage: 12V
Beam angle: 35°
Rated life: 15 000 h



Energy Smart™ MR16 High Lumen

Cap: GU5.3
Wattage: 8W
Voltage: 12V
Beam angle: 35°
Rated life: 25 000 h



Precise™ MR16 Dimmable

Cap: GU5.3
Wattage: 8W
Voltage: 12V
Beam angle: 15°, 35°
Rated life: 25 000 h



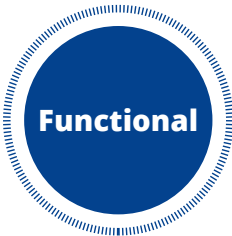
Precise™ - MR16 - Dimmable - High CRI High Lumen

Cap: GU5.3
Wattage: 8W
Voltage: 12V
Beam angle: 35°
Rated life: 25 000 h

	Wattage (W)	Watt Replacement	Cap	Product Description	Tungram Product Code	Previous Generation Product Code *	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Energy Consumption (kWh/1000h)	Voltage (V)	Diameter (mm)	Length (mm)	Pack Qty
Start - MR16																	
1	5	35	GU5.3	LED Start MR16 5W(35) 827 35°	93094225	-	350	2700	35	80	15k	A+	5.50	12	50	45	8
	5	35	GU5.3	LED Start MR16 5W(35) 830 35°	93094457	-	350	3000	35	80	15k	A+	5.50	12	50	45	8
	5	35	GU5.3	LED Start MR16 5W(35) 840 35°	93094459	-	360	4000	35	80	15k	A+	5.50	12	50	45	8
2	7	50	GU5.3	LED Start MR16 7W(50) 827 35°	93094467	-	621	2700	35	80	15k	A+	7.70	12	50	45	8
	7	50	GU5.3	LED Start MR16 7W(50) 830 35°	93094469	-	630	3000	35	80	15k	A+	7.70	12	50	45	8
	7	50	GU5.3	LED Start MR16 7W(50) 840 35°	93094471	-	621	4000	35	80	15k	A+	7.70	12	50	45	8
Energy Smart™ - MR16 High Lumen Dimmable																	
3	8	50	GU5.3	LED ESmart MR16 8W(50)Dim 827 35°	93094473	-	621	2700	35	80	25k	A+	8.80	12	50	46	8
	8	50	GU5.3	LED ESmart MR16 8W(50)Dim 830 35°	93094475	-	621	3000	35	80	25k	A+	8.80	12	50	46	8
	8	50	GU5.3	LED ESmart MR16 8W(50)Dim 840 35°	93094477	-	630	4000	35	80	25k	A+	8.80	12	50	46	8
Precise™ - MR16 Dimmable																	
4	8	35	GU5.3	LED Precise MR16 8W(35)Dim 927 15°	-	93074773	380	2700	15	90	25k	A	8.80	12	50	46	8
	8	35	GU5.3	LED Precise MR16 8W(35)Dim 927 35°	-	93074774	380	2700	35	90	25k	A	8.80	12	50	46	8
	8	35	GU5.3	LED Precise MR16 8W(35)Dim 930 15°	-	93061062	380	3000	15	90	25k	A	8.80	12	50	48	8
	8	35	GU5.3	LED Precise MR16 8W(35)Dim 930 35°	-	93061063	380	3000	35	90	25k	A	8.80	12	50	46	8
	8	35	GU5.3	LED Precise MR16 8W(35)Dim 940 15°	-	93061064	400	4000	15	90	25k	A	8.80	12	50	46	8
	8	35	GU5.3	LED Precise MR16 8W(35)Dim 940 35°	-	93061065	400	4000	35	90	25k	A	8.80	12	50	48	8
Precise™ - MR16 - Dimmable - High CRI High Lumen																	
5	8	50	GU5.3	LED Precise MR16 8W(50)Dim 927 35°	93111228	-	621	2700	35	90	25k	A+	8.80	12	50	46	8
	8	50	GU5.3	LED Precise MR16 8W(50)Dim 930 35°	93111154	-	621	3000	35	90	25k	A+	8.80	12	50	46	8
	8	50	GU5.3	LED Precise MR16 8W(50)Dim 940 35°	93111226	-	621	4000	35	90	25k	A+	8.80	12	50	46	8

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.





Reflectors
R50/R63/R80

Cap: E14, E27
Wattage: 6W, 8W, 10W
Voltage: 220 - 240V
Beam angle: 120°
Rated life: 15 000 h



Precise™
PAR30
Dimmable

Cap: E27
Wattage: 11W
Voltage: 220 - 240V
Beam angle: 35°
Rated life: 25 000 h



Specialty
PAR56

Cap: Screw
Terminal
Wattage: 16W
Voltage: 12V
Beam angle: 90°
Rated life: 25 000 h



Energy Smart™
Capsule G4

Cap: G4
Wattage: 1.6W
Voltage: 12V
Rated life: 15 000 h



Energy Smart™
PAR38 Dimmable

Cap: E27
Wattage: 15W
Voltage: 220 - 240V
Beam angle: 40°
Rated life: 25 000 h



Energy Smart™
Capsule G9

Cap: G9
Wattage: 2.5W
Voltage: 100 - 240V
Rated life: 15 000 h



Precise™
R111 Dimmable

Cap: G53
Wattage: 10.5W
Voltage: 12V
Beam angle: 25/40°
Rated life: 40 000 h



Energy Smart™
Pygmy

Cap: E14
Wattage: 1.6W
Voltage: 100 - 240V
Rated life: 15 000 h

	Wattage (W)	Watt Replacement	Cap	Product Description	Tungstam Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	EEC	Energy Consumption (kWh/1000h)	Voltage (V)	Diameter (mm)	Length (mm)	Pack Qty
Precise™ - R111 Dimmable																
1	10,5	71	G53	LED Precise R111 10.5W(70)Dim 927 25°	93117326	695	2700	25	90	40k	A	11.55	12	111	56	10
	10,5	72	G53	LED Precise R111 10.5W(70)Dim 927 40°	93117327	700	2700	40	90	40k	A	11.55	12	111	56	10
	10,5	72	G53	LED Precise R111 10.5W(70)Dim 930 25°	93117328	700	3000	25	90	40k	A	11.55	12	111	56	10
	10,5	72	G53	LED Precise R111 10.5W(70)Dim 930 40°	93117329	700	3000	40	90	40k	A	11.55	12	111	56	10
	10,5	72	G53	LED Precise R111 10.5W(70)Dim 940 25°	93117330	700	4000	25	90	40k	A	11.55	12	111	56	10
	10,5	72	G53	LED Precise R111 10.5W(70)Dim 940 40°	93117331	700	4000	40	90	40k	A	11.55	12	111	56	10
Energy Smart™ - PAR38 Dimmable																
2	15	140	E27	LED Esmart PAR38 15W(140) 830 E27 40°	93111229	1 200	3000	40	81	25k	A+	15.00	220-240	122	131	6
LED Specialty PAR56 - Pool Lamp																
3	16	300	Screw Terminal	LED Specialty PAR56 16W(300) 730 90°	93104930	1 350	3000	90	70	25k	A+	16.96	12	178	110	1
	16	300		LED Specialty PAR56 16W(300) 765 90°	93077313	1 500	6500	90	70	25k	A+	16.96	12	178	110	1
LED Specialty PAR30 - Dimmable																
4	11	85	E27	LED Precise PAR30 11W (85) Dim 930 35 E27	93104932	720	3000	35	90	25k	A	11.00	220-240	96	95	6
	11	85	E27	LED Precise PAR30 11W (85) Dim 940 35 E27	93104933	720	4000	35	90	25k	A	11.00	220-240	96	95	6
Reflector R50 & R63 & R80																
5	6	42	E14	LED6/R50/830/220-240V/120/E14	93083837	500	3000	120	80	15k	A+	6.00	220-240	50	86	6
	6	45	E14	LED6/R50/865/220-240V/120/E14	93083838	550	6500	120	80	15k	A+	6.00	220-240	50	86	6
6	8	48	E27	LED8/R63/830/220-240V/120/E27	93110807	600	3000	120	80	15k	A+	8.00	220-240	63	100	6
	8	54	E27	LED8/R63/865/220-240V/120/E27	93110808	700	6500	120	80	15k	A+	8.00	220-240	63	100	6
7	10	60	E27	LED10/R80/830/220-240V/120/E27	93110809	800	3000	120	80	15k	A+	10.00	220-240	80	110	6
	10	66	E27	LED10/R80/865/220-240V/120/E27	93110810	900	6500	120	80	15k	A+	10.00	220-240	80	110	6
EnergySmart™ - Capsules																
8	1.6	15	G4	LED1.6/G4/827/12V/BL 1/10	93110793	150	2700	240	80	15k	A+	1.76	12	14	38	10
	2.5	20	G9	LED2.5/G9/827/220-240V/BL 1/10	93110794	200	2700	240	80	15k	A+	2.50	220-240	18	52	10
EnergySmart™ - Pygmy																
9	1.6	15	E14	LED1.6/T25/827/100-240V/E14/F TWBL 2/10	93110792	140	2700	-	80	15k	A+	1.60	100-240	59	1,60	10
	1.6	15	E14	LED1.6/T25/865/100-240V/E14/F BL 1/10	93110795	150	6500	-	80	15k	A+	1.60	100-240	59	1,60	10



LED RETROFIT SOLUTIONS

Tubes and Plugs



T8 Plastic High Frequency (ECG)

Cap: G13
Wattage: 9W, 18W, 25W
Op. Fr.: 25 000-85 000Hz
Rated life: 50 000 h



T8 Ultra Glass (CCG/Mains)

Cap: G13
Wattage: 8W, 15W, 23.5W
Voltage: 220 - 240V
Op. Fr.: 50/60 Hz
Rated life: 50 000 h



T8 Start Glass (CCG/Mains)

Cap: G13
Wattage: 8W, 16W, 20W
Voltage: 220 - 240V
Op. Fr.: 50/60 Hz
Rated life: 15 000 h



T8 Premium Plastic Rotatable (CCG/Mains)

Cap: G13 ROT
Wattage: 8W, 18W, 25W
Voltage: 100 - 240V
Op. Fr.: 50/60 Hz
Rated life: 50 000 h



T8 Value Glass (CCG/Mains)

Cap: G13
Wattage: 8W, 14W, 17W, 26.5W, 30W
Voltage: 100 - 240V
Op. Fr.: 50/60 Hz
Rated life: 50 000 h and 40 000 h



T5 Glass

Cap: G5
Wattage: 7.5W, 16W, 26W, 34W
Voltage: 220 - 240V
Op. Fr.: 50 Hz
Rated life: 50 000 h

LED T8 & T5 Tube



LED 2D*

Cap: GR8, GR10q
Wattage: 6.5W, 12.5W
Rated life: 40 000 h
Position: Universal



LED 4 pin Plug-in Gen2*

Cap: G24q-2, G24q-3
Wattage: 7.5W, 10W
Rated life: 50 000 h
Position: Horizontal



LED 2 pin Plug-in

Cap: G24d
Wattage: 10.5W
Rated life: 50 000 h
Position: Horizontal

* LED 2D ECG and 4 pin Plug-in lamps can't be operated directly from Mains voltage, a CFL ballast is needed

LED Plug-in



LED Mercury

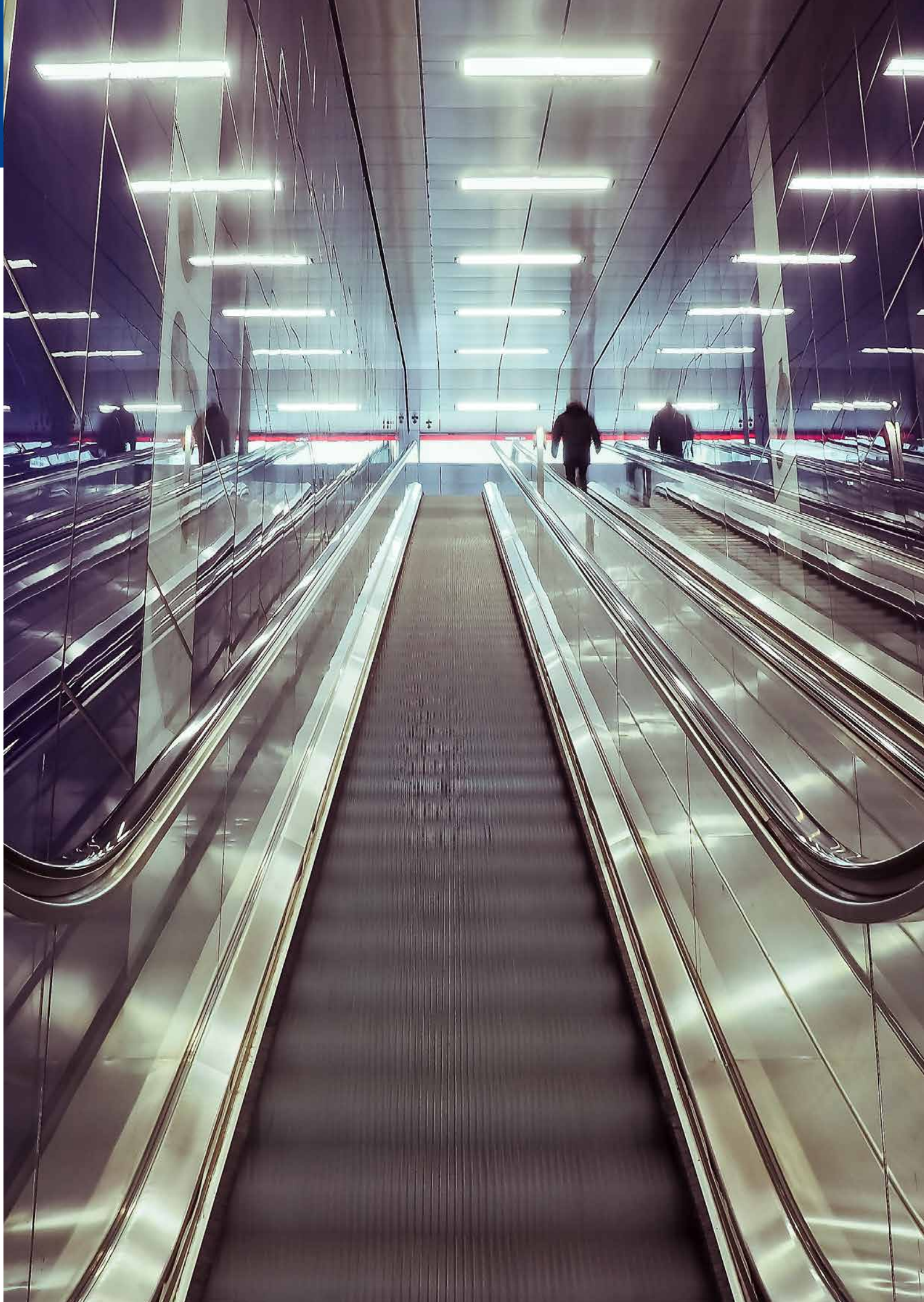
Cap: E27
Wattage: 35W
Rated life: 40 000 h
Position: Universal



LED HID

Cap: E40
Wattage: 80W, 150W
Rated life: 50 000 h
Position: Universal

LED Mercury & HID replacement





Product Description	Tungsram Product Code	Previous Generation Product Code *	Wattage (W)	Length (mm)	Voltage (V)	Cap	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Diameter (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty
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LED T8 Plastic - High Frequency (ECG)															
LED 9/T8 PHF 2ft/840	-	93041503	9	600	50-110V	G13	1 200	4000	150	80<	50k	28	11	A+	10
LED 18/T8 PHF 4ft/830*	-	93041505	18	1200	50-110V	G13	2 100	3000	150	80<	50k	28	22	A+	10
1 LED 18/T8 PHF 4ft/840	-	93041836	18	1200	50-110V	G13	2 300	4000	150	80<	50k	28	21	A+	10
LED 18/T8 PHF 4ft/865*	-	93041837	18	1200	50-110V	G13	2 300	6500	150	80<	50k	28	21	A+	10
LED 25/T8 PHF 5ft/840	-	93041839	25	1500	50-110V	G13	3 400	4000	150	80<	50k	28	29	A+	10

LED T8 Premium Plastic - Rotatable (CCG/Mains)															
LED10/T8 PPR 2ft/830/100-240V BX1/10	-	93038456	10	600	100-240V	G13 Rot	1 080	3000	150	80<	50k	28	10	A+	10
LED 8/T8 PPR 2ft/840	-	93072627	8	600	100-240V	G13 Rot	1 200	4000	170	80<	50k	28	8	A++	10
2 LED 8/T8 PPR 2ft/865	-	93072628	8	600	100-240V	G13 Rot	1 200	6500	170	80<	50k	28	8	A++	10
LED 18/T8 PPR 4ft/830	-	93072629	18	1200	100-240V	G13 Rot	2 300	3000	170	80<	50k	28	18	A++	10
LED 18/T8 PPR 4ft/865	-	93072631	18	1200	100-240V	G13 Rot	2 500	6500	170	80<	50k	28	18	A++	10
LED 27/T8 PPR 5ft/830/100-240V BX1/10	-	93038472	27	1500	100-240V	G13 Rot	3 100	3000	150	80<	50k	28	27	A+	10
LED 25/T8 PPR 5ft/840	-	93072633	25	1500	100-240V	G13 Rot	3 600	4000	170	80<	50k	28	25	A++	10

LED T8 Ultra Glass (CCG/Mains)															
LEDT8 UG 0.6m 8W 830	93098368	-	8	600	220-240V	G13	1050	3000	200	80<	50k	28	8	A++	10
LEDT8 UG 0.6m 8W 840	93098369	-	8	600	220-240V	G13	1150	4000	200	80<	50k	28	8	A++	10
LEDT8 UG 0.6m 8W 865	93098370	-	8	600	220-240V	G13	1150	6500	200	80<	50k	28	8	A++	10
3 LEDT8 UG 1.2m 15W 830	93098371	-	15	1200	220-240V	G13	2150	3000	200	80<	50k	28	15	A++	10
LEDT8 UG 1.2m 15W 840	93098372	-	15	1200	220-240V	G13	2385	4000	200	80<	50k	28	15	A++	10
LEDT8 UG 1.2m 15W 865	93098373	-	15	1200	220-240V	G13	2385	6500	200	80<	50k	28	15	A++	10
LEDT8 UG 1,5m 23,5W 840	93098375	-	23,5	1500	220-240V	G13	3650	4000	200	80<	50k	28	24	A++	10
LEDT8 UG 1,5m 23,5W 865	93098376	-	23,5	1500	220-240V	G13	3650	6500	200	80<	50k	28	24	A++	10

LED T8 Value Glass (CCG/Mains)															
LED 8/T8VG 0,6m/830	93112599	93076819	8	600	100-240	G13	950	3000	200	80<	50k	28	8	A+	15
LED 8/T8VG 0,6m/840	93112600	93076820	8	600	100-240	G13	1 000	4000	200	80<	50k	28	8	A+	15
LED 8/T8VG 0,6m/865	93112601	93076821	8	600	100-240	G13	1 000	6500	200	80<	50k	28	8	A+	15
LED 14/T8VG 1,2m/840	93112602	93076822	14	1200	100-240	G13	1 750	4000	200	80<	50k	28	14	A+	15
LED 14/T8VG 1,2m/865	93112603	93076823	14	1200	100-240	G13	1 750	6500	200	80<	50k	28	14	A+	15
LED 17/T8VG 1,2m/830	93112604	93076824	17	1200	100-240	G13	2 000	3000	200	80<	50k	28	17	A+	15
LED 17/T8VG 1,2m/840	93112605	93076825	17	1200	100-240	G13	2 100	4000	200	80<	50k	28	17	A+	15
LED 17/T8VG 1,2m/865	93112866	93076926	17	1200	100-240	G13	2 100	6500	200	80<	50k	28	17	A+	15
3 LED 27/T8 VG 5ft/830	-	93013234	27	1500	100-240	G13	2500	3000	200	80<	50k	28	27	A+	10
LED 26,5/T8VG 1,5m/840	-	93080090	26,5	1500	100-240	G13	3 100	4000	200	80<	50k	28	26.5	A+	10
LED 26,5/T8VG 1,5m/865	-	93080091	26,5	1500	100-240	G13	3 100	6500	200	80<	50k	28	26.5	A+	10
LEDT8 VG 1.5m 24W 830	93114776	-	24	1500	100-240	G13	3 000	3000	200	80<	50k	28	24	A+	10
LEDT8 VG 1.5m 24W 840	93114777	-	24	1500	100-240	G13	3 100	4000	200	80<	50k	28	24	A+	10
LEDT8 VG 1.5m 24W 865	93114778	-	24	1500	100-240	G13	3 100	6500	200	80<	50k	28	24	A+	10
LED 30/T8 VG 6ft/830	-	93040746	30	1800	220-240	G13	3 300	3000	200	80<	40k	28	30	A+	10
LED 30/T8 VG 6ft/840	-	93040747	30	1800	220-240	G13	3 600	4000	200	80<	40k	28	30	A+	10
LED 30/T8 VG 6ft/865	-	93040748	30	1800	220-240	G13	3 600	6500	200	80<	40k	28	30	A+	10
LEDT8 VG 1.8m 26.5W 830	-	-	30	1500	100-240	G13	3 300	3000	200	80<	50k	28	26.5	A+	10
LEDT8 VG 1.8m 26.5W 840	-	-	30	1500	100-240	G13	3 600	4000	200	80<	50k	28	26.5	A+	10
LEDT8 VG 1.8m 26.5W 865	-	-	30	1500	100-240	G13	3 600	6500	200	80<	50k	28	26.5	A+	10

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.

Product Description	Tungsram Product Code	Previous Generation Product Code *	Wattage (W)	Length (mm)	Voltage (V)	Cap	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Diameter (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty
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LED T8 Start Glass (AC Mains connection only, no Starter)															
LED 8/T8SG 15k 0.6m/830	-	93088826	8	600	220-240	G13	750	3000	200	80<	15k	28	8	A+	15
LED 8/T8 SGM 2ft/840*	-	93068755	8	600	220-240	G13	800	4000	200	80<	15k	28	8	A+	15
LED 8/T8SG 15k 0.6m/840	93092510	93088827	8	1200	220-240	G13	800	4000	200	80<	15k	28	8	A+	15
LED 8/T8SG 15k 0.6m/865	93092511	93088828	8	1500	220-240	G13	800	6500	200	80<	15k	28	8	A+	15
3 LED 16/T8SG 15k 1.2m/830	-	93088829	16	1500	220-240	G13	1550	3000	200	80<	15k	28	16	A+	15
LED 16/T8SG 15k 1.2m/840	93092513	93088830	16	1200	220-240	G13	1600	4000	200	80<	15k	28	16	A+	15
LED 16/T8SG 15k 1.2m/865	93092514	93088831	16	1200	220-240	G13	1600	6500	200	80<	15k	28	16	A+	15
LED 20/T8SG 15k 1.5m/830	-	93088832	20	1500	220-240	G13	2000	3000	200	80<	15k	28	20	A+	15
LED 20/T8SG 15k 1.5m/840	93092516	93088833	20	1500	220-240	G13	2050	4000	200	80<	15k	28	20	A+	15
LED 20/T8SG 15k 1.5m/865	93092517	93088834	20	1500	220-240	G13	2050	6500	200	80<	15k	28	20	A+	15

LED T8 Dummy Starter															
4 LED T8 StartFIX	93094704	93094701	25/100												

LED T5 Glass (AC Mains connection only)															
LEDT5 0.6m 7.5W 840 AC	93115376	-	7.5	549	220-240	G5	1100	4000	165	80+	50k	18	8	A++	10
LEDT5 0.6m 7.5W 865 AC	93115377	-	7.5	549	220-240	G5	1100	6500	165	80+	50k	18	8	A++	10
LEDT5 1.2m 16W 840 AC	93114766	-	16	1149	220-240	G5	2400	4000	165	80+	50k	18	16	A++	10
LEDT5 1.2m 16W 865 AC	93114767	-	16	1149	220-240	G5	2400	6500	165	80+	50k	18	16	A++	10
LEDT5 1.2m 26W 830 AC	93114768	-	26	1149	220-240	G5	3900	3000	165	80+	50k	18	26	A++	10
5 LEDT5 1.2m 26W 840 AC	93114769	-	26	1149	220-240	G5	3900	4000	165	80+	50k	18	26	A++	10
LEDT5 1.2m 26W 865 AC	93114770	-	26	1149	220-240	G5	3900	6500	165	80+	50k	18	26	A++	10
LEDT5 1.5m 26W 830 AC	93114771	-	26	1449	220-240	G5	3900	3000	165	80+	50k	18	26	A++	10
LEDT5 1.5m 26W 840 AC	93114772	-	26	1449	220-240	G5	3900	4000	165	80+	50k	18	26	A++	10
LEDT5 1.5m 26W 865 AC	93114773	-	26	1449	220-240	G5	3900	6500	165	80+	50k	18	26	A++	10
LEDT5 1.5m 34W 840 AC	93114774	-	34	1449	220-240	G5	5100	4000	165	80+	50k	18	34	A++	10
LEDT5 1.5m 34W 865 AC	93114775	-	34	1449	220-240	G5	5100	6500	165	80+	50k	18	34	A++	10

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.

Quick guide: How to replace existing Fluorescent tubes with LED T8 tubes:

Fluorescent T8 on High Frequency Electronic Control Gear (ECG) - No Fluorescent Starter is used > replace with LED T8 Plastic HF

Fluorescent T8 on Electromagnetic Conventional Control Gear (CCG/Mains) - Fluorescent Starter is present >

- Option 1. Replace with LED Starter & LED T8 PPR/UG/VG/SG
- Option 2. Remove Fluorescent Starter and refit LED T8 with direct connection to Mains (no live connection at open end on LED T8!)



LED RETROFIT SOLUTIONS

Plug-in & HID Replacement Lamps



LED Retrofit

	Wattage (W)	Ballast Compatibility	Cap	Product Description	Tungsrø Product Code	Previous Generation Product Code *	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Size (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty	Replacement for
LED 2D																
1	6.5	magnetic	GR8	LED 2D2P 6.5W/CCG/827/GR8 TU BX1/10	93110758	93039469	750	2700	120 x 130	80+	40k	136 x 132	6.5	A+	10	16W CFL 2D
	6.5	magnetic	GR8	LED 2D2P 6.5W/CCG/830/GR8 TU BX1/10	93110759	93039470	770	3000	120 x 130	80+	40k	136 x 132	6.5	A+	10	
	6.5	magnetic	GR8	LED 2D2P 6.5W/CCG/835/GR8 TU BX1/10	93110760	93039471	800	3500	120 x 130	80+	40k	136 x 132	6.5	A+	10	
	6.5	magnetic	GR8	LED 2D2P 6.5W/CCG/840/GR8 TU BX1/10	93110764	93039475	830	4000	120 x 130	80+	40k	136 x 132	6.5	A+	10	
2	12.5	electronic	GR10q	LED 2D4P 12.5W/ECG/827/GR10q TU BX1/10	93110767	93039478	1 400	2700	120 x 130	80+	40k	201 x 188	12.5	A+	10	28W CFL 2D
	12.5	electronic	GR10q	LED 2D4P 12.5W/ECG/835/GR10q TU BX1/10	93110766	93039477	1 500	3500	120 x 130	80+	40k	201 x 188	12.5	A+	10	
	12.5	electronic	GR10q	LED 2D4P 12.5W/ECG/840/GR10q TU BX1/10	93110765	93039476	1 550	4000	120 x 130	80+	40k	201 x 188	12.5	A+	10	
	12.5	magnetic	GR10q	LED 2D4P 12.5W/CCG/827/GR10q TU BX1/10	93110762	93039473	1 400	2700	120 x 130	80+	40k	201 x 188	12.5	A+	10	
	12.5	magnetic	GR10q	LED 2D4P 12.5W/CCG/835/GR10q TU BX1/10	93110761	93039472	1 500	3500	120 x 130	80+	40k	201 x 188	12.5	A+	10	
	12.5	magnetic	GR10q	LED 2D4P 12.5W/CCG/840/GR10q TU BX1/10	93110763	93039474	1 550	4000	120 x 130	80+	40k	201 x 188	12.5	A+	10	
	12.5	magnetic	GR10q	LED 2D4P 12.5W/CCG/840/GR10q TU BX1/10	93110763	93039474	1 550	4000	120 x 130	80+	40k	201 x 188	12.5	A+	10	

For a list of ballasts tested and approved for compatibility, access: tungsrø.com/LEDPlugIn-compatibility

	Wattage (W)	Burning Position	Cap	Product Description	Tungsrø Product Code	Previous Generation Product Code *	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Width / Diameter (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty	Replacement for
LED 4-Pin Plug-In																	
3	12.5	Horizontal	G24q-3	LED 12.5/G24q-3/4P/H/827 GE BX1/6	-	93019485	1 250	2700	100 x 75	80+	50k	132	35	12.5	A+	6	26/32W CFL
	12.5	Horizontal	G24q-3	LED 12.5/G24q-3/4P/H/830 GE BX1/6	-	93019486	1 290	3000	100 x 75	80+	50k	132	35	12.5	A+	6	
4	12.5	Vertical	G24q-3	LED 12.5/G24q-3/4P/V/827 GE BX1/6	-	93024415	1 250	2700	87	80+	50k	144	94	12.5	A+	6	
	12.5	Vertical	G24q-3	LED 12.5/G24q-3/4P/V/830 GE BX1/6	-	93024294	1 290	3000	87	80+	50k	144	94	12.5	A+	6	
	12.5	Vertical	G24q-3	LED 12.5/G24q-3/4P/V/840 GE BX1/6	-	93024110	1 300	4000	87	80+	50k	144	94	12.5	A+	6	
	12.5	Vertical	G24q-3	LED 12.5/G24q-3/4P/V/865 GE BX1/6	-	93024109	1 350	6500	87	80+	50k	144	94	12.5	A+	6	

For a list of ballasts tested and approved for compatibility, access: tungsrø.com/LEDPlugIn-compatibility

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	Wattage (W)	Burning Position	Cap	Product Description	Tungsrø Product Code *	Previous Generation Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Width / Diameter (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty	Replacement for
LED 4-Pin Plug-in Gen2																	
5	7.5	Horizontal	G24q-2	LED 7.5/G2/G24q-2/4P/H/830 TU BX1/6	93110774	93060370	850	3000	110 x 120	80+	50k	132	34.5	7.5	A+	6	18W CFL
	7.5	Horizontal	G24q-2	LED 7.5/G2/G24q-2/4P/H/840 TU BX1/6	93110775	93060371	880	4000	110 x 120	80+	50k	132	34.5	7.5	A+	6	
	7.5	Horizontal	G24q-2	LED 7.5/G2/G24q-2/4P/H/865 TU BX1/6	93110776	93060372	900	6500	110 x 120	80+	50k	132	34.5	7.5	A+	6	26/32W CFL
	10	Horizontal	G24q-3	LED 10/G2/G24q-3/4P/H/830 TU BX1/6	93110771	93060367	1 150	3000	110 x 120	80+	50k	132	34.5	10	A+	6	
	10	Horizontal	G24q-3	LED 10/G2/G24q-3/4P/H/840 TU BX1/6	93110772	93060368	1 170	4000	110 x 120	80+	50k	132	34.5	10	A+	6	
	10	Horizontal	G24q-3	LED 10/G2/G24q-3/4P/H/865 TU BX1/6	93110773	-	1 200	6500	110 x 120	80+	50k	132	34.5	10	A+	6	

For a list of ballasts tested and approved for compatibility, access: tungsrø.com/LEDPlugIn-compatibility

	Wattage (W)	Burning Position	Cap	Product Description	Tungsrø Product Code	Previous Generation Product Code *	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Diameter (mm)	Energy Consumption (kWh/1000h)	EEC	Pack Qty	Replacement for
LED 2-Pin Plug-in																	
6	10.5	Horizontal	G24d	LED 10.5/G24d/2P/H/830 TU BX1/6	93110768	93051476	1 050	3000	110 x 120	80+	50k	165	34.5	10.5	A+	6	13/18/26W CFL
	10.5	Horizontal	G24d	LED 10.5/G24d/2P/H/840 TU BX1/6	93110769	93051477	1 050	4000	110 x 120	80+	50k	165	34.5	10.5	A+	6	
	10.5	Horizontal	G24d	LED 10.5/G24d/2P/H/865 TU BX1/6	93110770	93051521	1 050	6500	110 x 120	80+	50k	165	34.5	10.5	A+	6	

Wattage (W)	Burning Position	Cap	Product Description	Tungsrø Product Code	Previous Generation Product Code *	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Diameter (mm)	EEC	Replacement for	Pack Qty
LED HID															
35	Universal	E27	LED 35W/Mercury/730/E27 GE BX1/6	-	93038710	4 750	3000	360	70+	40k	175	76	A+	80/125W HID Mercury	6
35	Universal	E27	LED 35W/Mercury/740/E27 GE BX1/6	-	93038711	4 800	4000	360	70+	40k	175	76	A++		6
80	Universal	E40	LED 80W/HID/740/E40 GE	-	93067075	12 000	4000	360	70+	50k	203	92.2	A++	250W	1
80	Universal	E40	LED 80W/HID/750/E40 GE	-	93067246	12 000	5000	360	70+	50k	203	92.2	A++	QMH	1
150	Universal	E40	LED 150W/HID/740/E40 TU	93094721	-	23 000	4000	360	70+	50k	211	103.9	-	250W	1
150	Universal	E40	LED 150W/HID/750/E40 TU	93094722	-	23 000	5000	360	70+	50k	211	103.9	-	CMH	1

* Please note that products with Previous Generation Product Code codes are continue to be marketed until inventory is exhausted. For these products shipment is not available after 30 June, 2020.



A modern office interior featuring a large room with wood-paneled walls. In the center, there is a dark leather sofa and a matching armchair. A low, dark coffee table sits in front of the sofa. To the left, a long glass-walled corridor is visible. On the right, there is a desk area with a computer monitor and a potted plant. The ceiling is equipped with recessed LED lighting fixtures. The floor is covered with a patterned carpet.

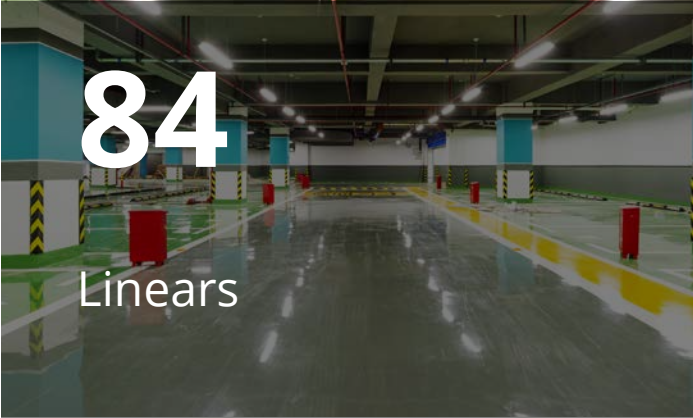
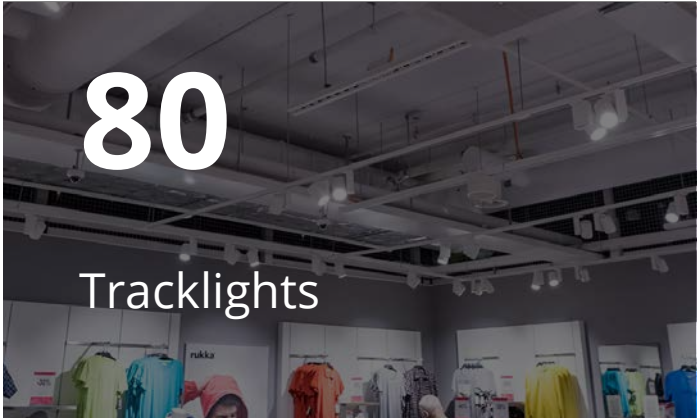
LED INDOOR SOLUTIONS

New range of fixtures

From future-proof modular solutions to innovative new formats, we deliver high quality LED solutions at an affordable price for vertical market areas such as offices, commercial units, hospitality facilities and industrial sites. Our LED Fixtures portfolio is a comprehensive range of economic indoor lighting products for any application, across all market sectors, offering a highly attractive combination of light quality, color reproduction, reliability and efficiency.

LED INDOOR SOLUTION

Content



LED INDOOR SOLUTION

Product overview - Indoor fixtures

Edgelit Premium Panel



Edgelit ECO/Standard Panel



Backlit Panel



Recessed Spotlight 5W



Recessed Spotlight 6W



Fireproof Downlight



Start Downlight G2



Slim Downlight Premium



Slim Downlight Start



Diffuser Downlight IP20



Diffuser Downlight IP44



COB Downlight UGR<19 IP54



COB Downlight Multigimbal



COB Downlight Adjustable / Scoop



Surface mount downlighter



Tudolio



Pendant



Trackspot ADV

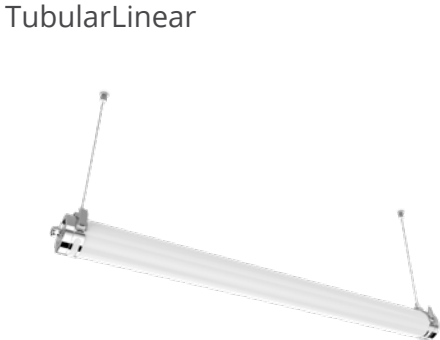


Trackspot LUX



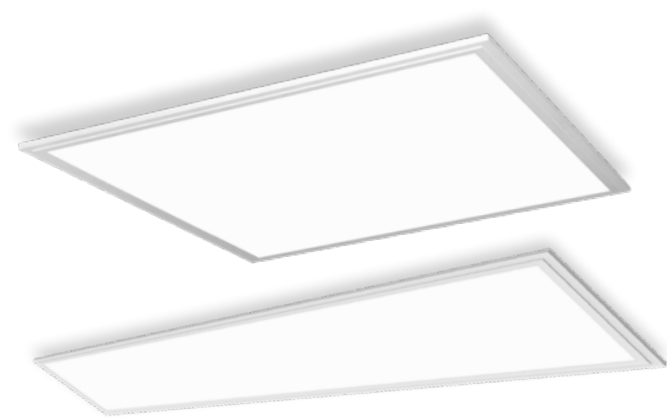
LED INDOOR SOLUTION

Product overview - Indoor fixtures



Edgelit Panel Premium / ECO G2

Tungram LED luminaires transform ambient lighting into an exquisite balance of refined appearance and superior efficiency. When illuminated, the panels deliver exceptional uniform light to the space and while off they appear completely free of a visible light source. Panels are designed to replace fluorescent fixtures in suspended T-grid ceilings.



Benefits

- Energy efficient (up to 120 lm/W delivered at 4000K & 6500K)
- Available with static or Dali driver
- No pollution for the environment
- No visible diodes or glare
- Superior performance
- RoHS compliant
- Mercury free; no IR or UV radiation
- Two types of Unified Glare Rating (UGR) as per different applications' requirements UGR <19 & UGR 21

Edgelit Panel Premium / ECO G2

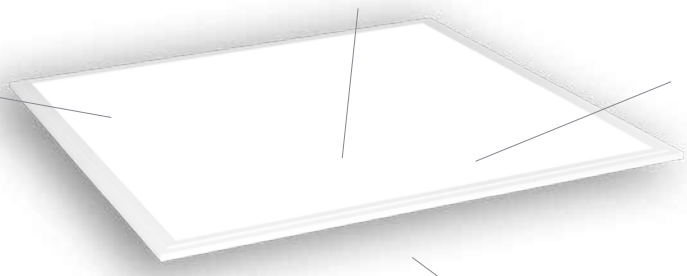
High-powered white LEDs provide high CRI and energy efficient lighting.

Ceilings have a non-disruptive aesthetic, appearing free of a visible light source - even when the light is on.

Diffused lens gives an evenly illuminated appearance.

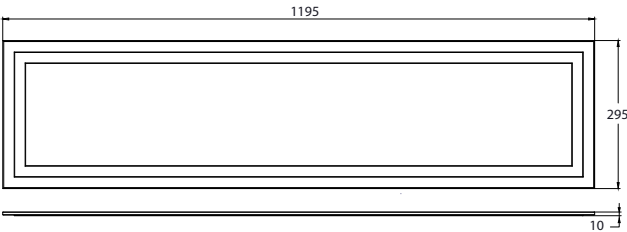
Ultra-thin trim (10mm) allows installation in very shallow ceiling plenums.

Easy to install in the most common T-bar ceiling grids.

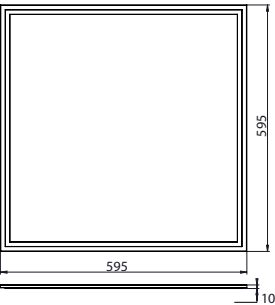


SLIM PROFILE

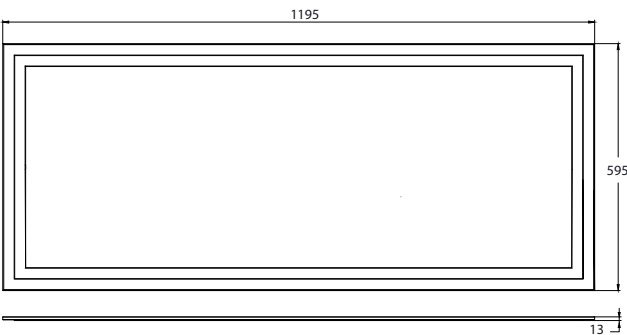
Panel 1x4



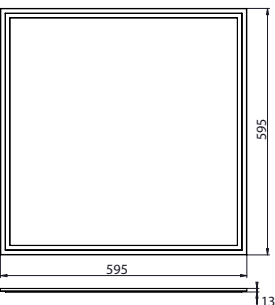
Panel 2x2



Panel 2x4



Panel 2x2 IP54



Easy to install into 15mm or 24mm exposed T-grid ceilings





Healthcare



General
lighting



Education



Retail



Office

Edgelit Panel Premium / ECO G2

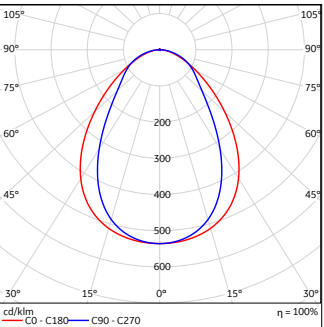
Edgelit Panel Premium /
ECO G2



LED Indoor

Edgelit Panel Premium - 4000K

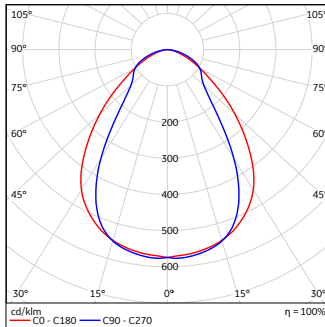
2x2 panel - Static



2x2 UGR19

2x2 UGR21

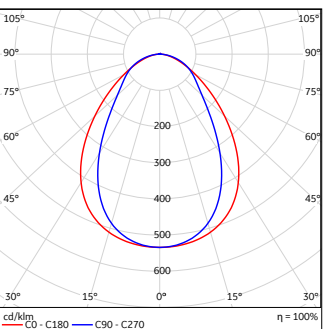
1x4 panel - Static



1x4 UGR19

1x4 UGR21

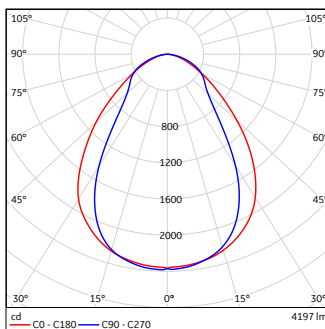
2x2 panel - DALI



2x2 UGR19

2x2 UGR21

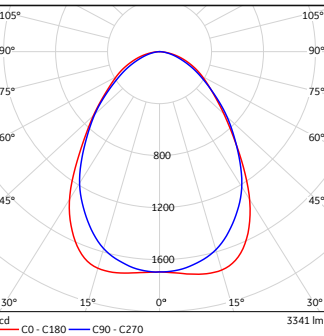
1x4 panel - DALI



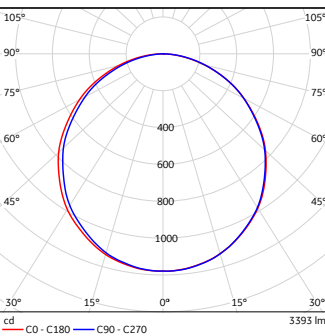
1x4 UGR19

1x4 UGR21

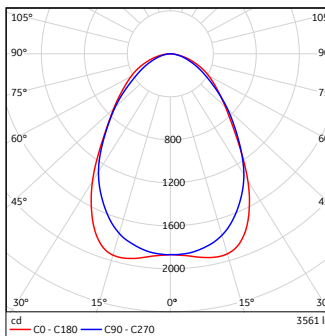
Edgelit Panel ECO G2



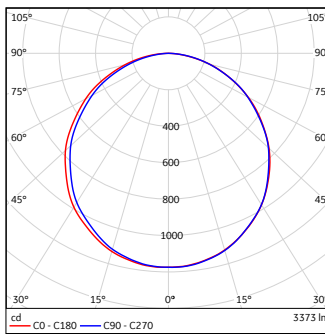
595x595 3000K UGR19



595x595 3000K UGR21



595x595 4000K UGR19



595x595 4000K UGR21

Product Description	Tungsr Product Code	Wattage (W)	Lumen (lm)	CCT (K)	UGR	IP	Beam angle (°)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Edgelit Panel Premium (50 000hrs L80) - Static driver											
LED Panel P1 TU 2x2 S 30W 830 21	93101657	30	3 400	3000	21	20	110	113	595x595x10	3,4	1
LED Panel P1 TU 2x2 S 30W 830 19	93101659	30	3 200	3000	<19	20	80	105	595x595x10	3,4	1
LED Panel P1 TU 2x2 S 30W 840 21	93101658	30	3 600	4000	21	20	110	120	595x595x10	3,4	1
LED Panel P1 TU 2x2 S 30W 840 19	93101660	30	3 600	4000	<19	20	80	120	595x595x10	3,4	1
LED Panel P1 TU 2x2 S 30W 865 21	93107537	30	3 600	6500	21	20	110	120	595x595x10	3,4	1
LED Panel P1 TU 2x2 S 30W 862 19	93107539	30	3 600	6200	<19	20	80	120	595x595x10	3,4	1
LED Panel P1 TU 1x4 S 30W 830 21	93108083	30	3 300	3000	21	20	110	110	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 30W 830 19	93101675	30	3 300	3000	<19	20	80	110	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 30W 840 21	93107525	30	3 600	4000	21	20	110	120	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 30W 840 19	93107526	30	3 600	4000	<19	20	80	120	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 30W 865 21	93107538	30	3 600	6500	21	20	110	120	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 30W 865 19	93107540	30	3 600	6500	<19	20	80	120	295x1195x10	3,3	1
LED Panel P1 TU 1x4 S 59W 840 21 HO	93104956	59	6 300	4000	21	40/20	110	107	295x1195x10	2,8	1
LED Panel P1 TU 1x4 S 59W 840 19 HO	93104957	59	5 900	4000	<19	40/20	80	100	295x1195x10	2,8	1
LED Panel P1 TU 2x4 S 59W 840 21/2	93104958	59	6 300	4000	21	40/20	110	107	595x1195x13	6,5	2
LED Panel P1 TU 2x4 S 59W 840 19/2	93104959	59	5 900	4000	<19	40/20	80	100	595x1195x13	6,5	2
LED Panel P1 TU 2x2 S 30W 840 21 IP54	93104960	30	3 400	4000	21	54/20	110	113	595x595x13	3,6	1
LED Panel P1 TU 2x2 S 30W 840 19 IP54	93104961	30	3 300	4000	<19	54/20	80	110	595x595x13	3,6	1
Edgelit Panel Premium (50 000hrs L80) - DALI driver											
LED Panel P1 TU 2x2 D 40W 830 21	93101669	40	4 200	3000	21	20	110	105	595x595x10	3,4	1
LED Panel P1 TU 2x2 D 40W 830 19	93101670	40	4 200	3000	<19	20	80	105	595x595x10	3,4	1
LED Panel P1 TU 2x2 D 40W 840 21	93101671	40	4 400	4000	21	20	110	110	595x595x10	3,4	1
LED Panel P1 TU 2x2 D 40W 840 19	93101672	40	4 400	4000	<19	20	80	110	595x595x10	3,4	1
LED Panel P1 TU 2x2 D 40W 865 21	93108092	40	4 800	6500	21	20	110	120	595x595x10	3,4	1
LED Panel P1 TU 2x2 D 40W 862 19	93108093	40	4 800	6200	<19	20	80	120	595x595x10	3,4	1
LED Panel P1 TU 1x4 D 40W 830 21	93108080	40	4 200	3000	21	20	110	105	295x1195x10	3,3	1
LED Panel P1 TU 1x4 D 40W 830 19	93101674	40	4 000	3000	<19	20	80	100	295x1195x10	3,3	1
LED Panel P1 TU 1x4 D 40W 840 21	93108081	40	4 500	4000	21	20	110	113	295x1195x10	3,3	1
LED Panel P1 TU 1x4 D 40W 840 19	93108082	40	4 000	4000	<19	20	80	100	295x1195x10	3,3	1
LED Panel P1 TU 1x4 D 40W 865 21	93108094	40	4 200	6500	21	20	110	105	295x1195x10	3,3	1
LED Panel P1 TU 1x4 D 40W 865 19	93108095	40	4 200	6500	<19	20	80	105	295x1195x10	3,3	1
Edgelit Panel Eco G2 (30 000hrs L70/B50) - Static driver											
LED Panel S2 TU 2x2 S 36W 830 21 EU/2	93101347	36	3 300	3000	21	20	110	92	595x595x10	2,2	2
LED Panel S2 TU 2x2 S 36W 830 19 EU/2	93101350	36	3 300	3000	<19	20	80	92	595x595x10	2,2	2
LED Panel S2 TU 2x2 S 36W 840 21 EU/2	93101348	36	3 500	4000	21	20	110	97	595x595x10	2,2	2
LED Panel S2 TU 2x2 S 36W 840 19 EU/2	93101351	36	3 500	4000	<19	20	80	97	595x595x10	2,2	2
LED Panel S2 TU 2x2 S 36W 865 21 EU/2	93101349	36	3 500	6500	21	20	110	97	595x595x10	2,2	2
LED Panel S2 TU 2x2 S 36W 865 19 EU/2	93101352	36	3 400	6500	<19	20	80	94	595x595x10	2,2	2
Edgelit Panel Accessories											
Surface mounting KIT Edgelit 2x2 R9003	93104262	-	-	-	-	-	-	-	-	-	1
Surface mounting KIT Edgelit 1x4 R9003	93104264	-	-	-	-	-	-	-	-	-	1
SUSPENSION KIT 2X2 LED PANEL	93107527	-	-	-	-	-	-	-	-	-	1
SUSPENSION KIT 1X4 LED PANEL	93107541	-	-	-	-	-	-	-	-	-	1
Plasterboard Mount KIT for Edgelit	93107567	-	-	-	-	-	-	-	-	-	-
Edgelit LED Panel Safety Kit	93107547	-	-	-	-	-	-	-	-	-	-

Panel Standard

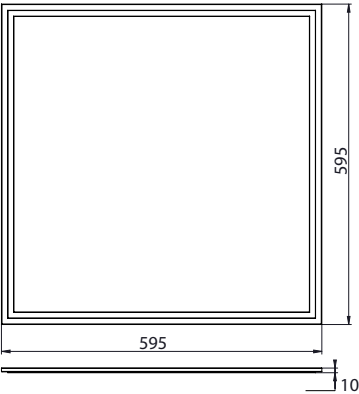
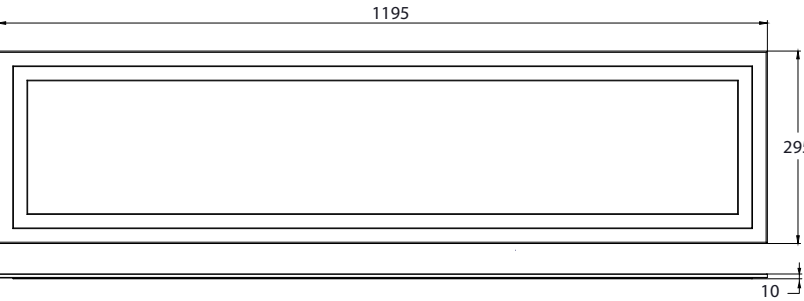
Our new edgelit panel range is ultrathin and very light, so it is very easy to store and install. The diffuser structure creates an even better light distribution at a low glare level. Our multipack packaging helps you to reduce logistics cost and lower our carbon footprint by reducing the packaging significantly.



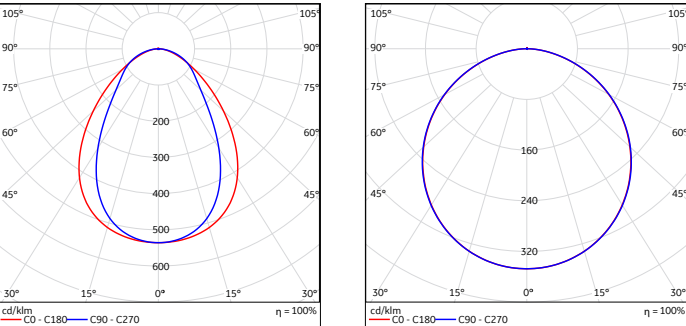
Benefits

- Even light distribution
- Easy installation
- Reliable Samsung chips
- Light weight
- Optimized packaging

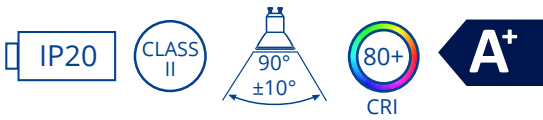
Dimensions (mm)



Photometric data



Panel Standard



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	UGR	System Efficiency (lm/W)	Rated life L70 (h) @ 25°C	Dimensions (mm)	Weight (kg)	Pack Qty
Panel Standard - Static driver										
Tung Panel S 2x2 S 30W 830 19	93117497	30	3150	3000	<19	105	50k	595*595*9	2	1
Tung Panel S 2x2 S 30W 840 19	93117498	30	3300	4000	<19	110	50k	595*595*9	2	1
Tung Panel S 2x2 S 30W 865 19	93117499	30	3300	6500	<19	110	50k	595*595*9	2	1
Tung Panel S 1x4 S 30W 830 19	93117501	30	3150	3000	<19	105	50k	295*1195*9	2	1
Tung Panel S 1x4 S 30W 840 19	93117502	30	3300	4000	<19	110	50k	295*1195*9	2	1
Tung Panel S 1x4 S 30W 865 19	93117503	30	3300	6500	<19	110	50k	295*1195*9	2	1
Tung Panel S 2x2 S 30W 830 19/5	93117506	30	3150	3000	<19	105	50k	595*595*9	2	5
Tung Panel S 2x2 S 30W 840 19/5	93117507	30	3300	4000	<19	110	50k	595*595*9	2	5
Tung Panel S 2x2 S 40W 830 19	93117509	40	4200	3000	<19	105	50k	595*595*9	2	5
Tung Panel S 2x2 S 40W 840 19	93117510	40	4400	4000	<19	110	50k	595*595*9	2	5
Tung Panel S 2x2 S 40W 865 19	93117511	40	4400	6500	<19	110	50k	595*595*9	2	5
Tung Panel S 2x2 S 40W 865 19 DS	93117512	40	4400	6500	<19	110	50k	595*595*9	2	5
Tung Panel S 1x4 S 40W 830 19	93117513	40	4200	3000	<19	105	50k	295*1195*9	2	5
Tung Panel S 1x4 S 40W 840 19	93117514	40	4400	4000	<19	110	50k	295*1195*9	2	5
Tung Panel S 1x4 S 40W 865 19	93117515	40	4400	6500	<19	110	50k	295*1195*9	2	5
Tung Panel S 1x4 S 40W 865 19 DS	93117516	40	4400	6500	<19	110	50k	295*1195*9	2	5
Tung Panel HL 2x2 S 48W 830 19	93117519	48	5040	3000	<19	105	50k	595*595*9	2	5
Tung Panel HL 2x2 S 48W 840 19	93117520	48	5280	4000	<19	110	50k	595*595*9	2	5
Tung Panel HL 2x2 S 48W 865 19 DS	93117521	48	5280	6500	<19	110	50k	595*595*9	2	5

Available from June 2020.



Backlit Panel

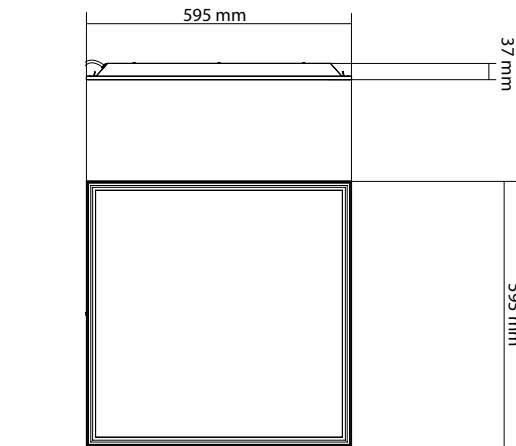
The Tungsram Backlit Panel luminaire is a commercial luminaire utilising a LED optical system to achieve superior performance. It provides high uniformity, excellent efficiency and reduced glare in T-grid ceiling applications.



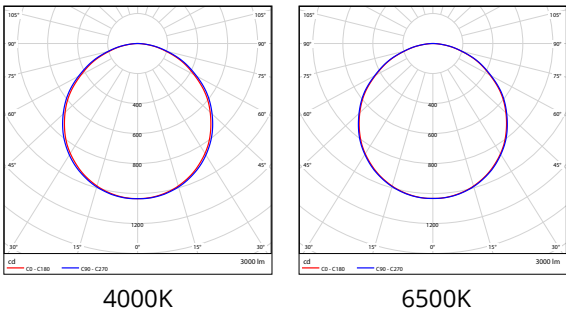
Benefits

- High optical grade diffuser providing good efficiency and impact resistance
- Uniform illuminating surface: no LED “dots”
- Durable and reliable
- Thermal overload protection
- Compliant to photo biological safety standard
- No IR or UV radiation
- Remote non-flickering static driver

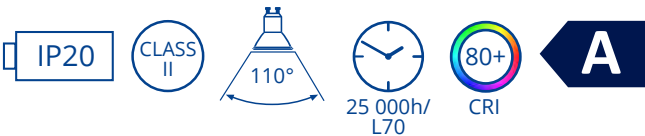
FOR EASY PLASTERBOARD MOUNTING,
THE FIXTURE HAS METAL CLIPS
INSTALLED



Wattage	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
35W	595	595	37	1.8



Backlit Panel



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	UGR	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Backlit Panel - Static driver									
LED Panel B1 TU S 2x2 S 35W 840 21	93115060	35	3 000	4000	21	86	595x595x37	1.80	1
LED Panel B1 TU S 2x2 S 35W 865 21	93115061	35	3 000	6500	21	86	595x595x37	1.80	1



LED INDOOR SOLUTION

Downlighters



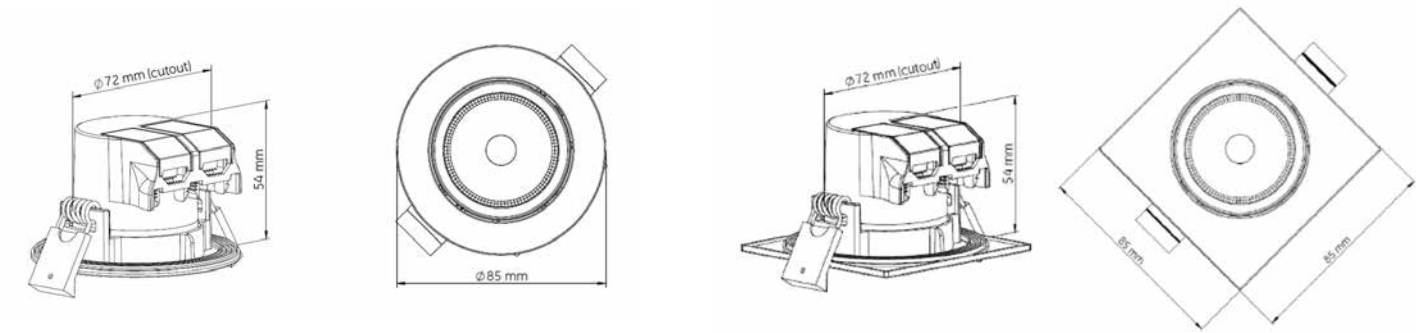
Recessed Spotlight 5W

The Tungsram Recessed Spotlight G1 5W range has a functional and minimalistic design with fixed and adjustable versions. These LED Spotlights are ideal for small areas to make your ceilings seem higher, or when you are looking for directional lighting. Never have the installations easier and quicker with these products. The Recessed Spotlight G1 5W range offers all the benefits of LED lighting to our customers - fresh light quality, reduced energy consumption, and less maintenance.

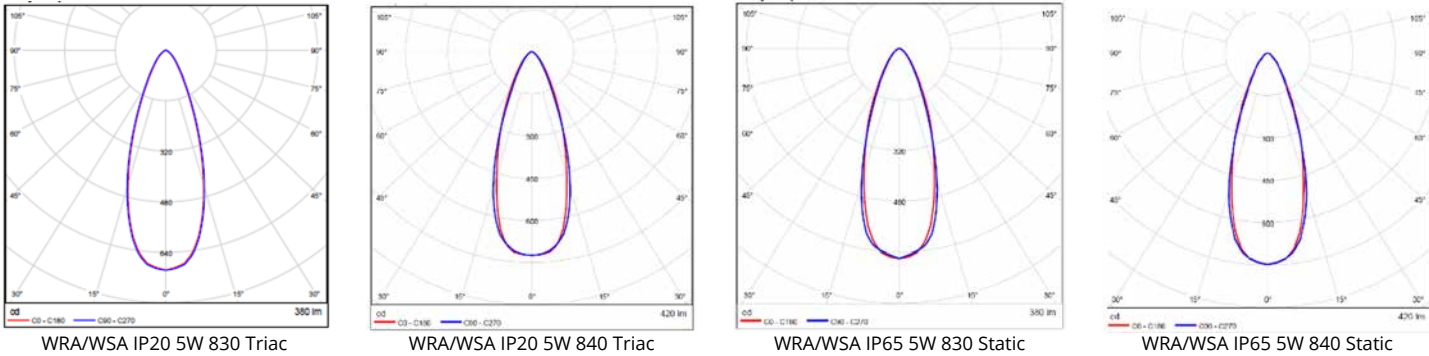


Benefits

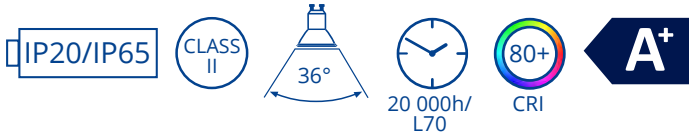
- Ideal replacement for Halogen spotlights
- High luminous efficacy
- 75% energy saving compared to 35W Halogen MR16
- Tilting head to adjust light beam where needed +/-13°
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy - UV-free & IR-free



Type	Shape	Fix / Adjustable	Size	Outer size (mm)	Height (mm)	Cut-out hole (mm)	Weight (kg) with driver
xxxWRAxxx	Round	Adjustable	Ø85*54 mm	Ø85mm	54mm	72mm	0.117
xxxWRFxxx	Round	Fix	Ø85*54 mm	Ø85mm	54mm	72mm	0.110
xxxWSAxxx	Square	Adjustable	85*85*54 mm	85*85mm	54mm	72mm	0.126
xxxWSFxxx	Square	Fix	85*85*54 mm	85*85mm	54mm	72mm	0.118



Recessed Spotlight 5W



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Recessed Spotlight G1 5W - Static driver									
LED Spotlight G1 TU WRA IP20 5W 830 S	93100364	5	380	3000	20	76	Ø85x54	0.117	1
LED Spotlight G1 TU WRA IP20 5W 840 S	93100526	5	420	4000	20	84	Ø85x54	0.117	1
LED Spotlight G1 TU WRF IP65 5W 830 S	93100528	5	380	3000	65	76	Ø85x54	0.11	1
LED Spotlight G1 TU WRF IP65 5W 840 S	93100530	5	420	4000	65	84	Ø85x54	0.11	1
LED Spotlight G1 TU WSA IP20 5W 830 S	93100532	5	380	3000	20	76	85x85x54	0.126	1
LED Spotlight G1 TU WSA IP20 5W 840 S	93100534	5	420	4000	20	84	85x85x54	0.126	1
LED Spotlight G1 TU WSF IP65 5W 830 S	93100536	5	380	3000	65	76	85x85x54	0.118	1
LED Spotlight G1 TU WSF IP65 5W 840 S	93100538	5	420	4000	65	84	85x85x54	0.118	1
Recessed Spotlight G1 5W - Triac driver									
LED Spotlight G1 TU WRA IP20 5W 830 T	93100365	5	380	3000	20	76	Ø85x54	0.117	1
LED Spotlight G1 TU WRA IP20 5W 840 T	93100527	5	420	4000	20	84	Ø85x54	0.117	1
LED Spotlight G1 TU WRF IP65 5W 830 T	93100529	5	380	3000	65	76	Ø85x54	0.11	1
LED Spotlight G1 TU WRF IP65 5W 840 T	93100531	5	420	4000	65	84	Ø85x54	0.11	1
LED Spotlight G1 TU WSA IP20 5W 830 T	93100533	5	380	3000	20	76	85x85x54	0.126	1
LED Spotlight G1 TU WSA IP20 5W 840 T	93100535	5	420	4000	20	84	85x85x54	0.126	1
LED Spotlight G1 TU WSF IP65 5W 830 T	93100537	5	380	3000	65	76	85x85x54	0.118	1
LED Spotlight G1 TU WSF IP65 5W 840 T	93100539	5	420	4000	65	84	85x85x54	0.118	1



LED INDOOR SOLUTION

Downlighters



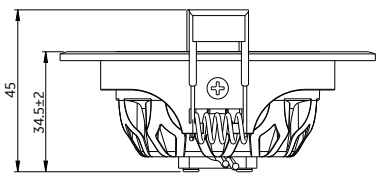
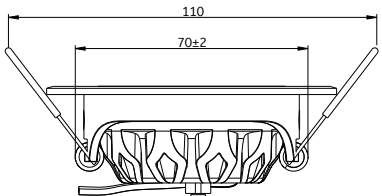
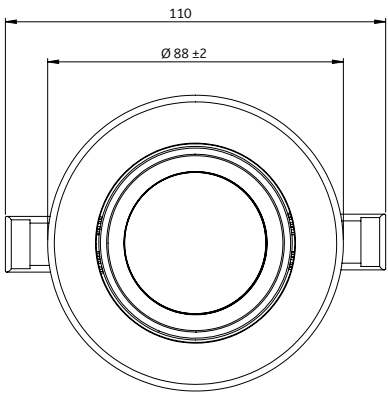
Recessed Spotlight 6W

The Tungsram Recessed Spotlight G1 6W range is ideal for small areas or when you are looking for directional lighting. These LED fixtures are designed to offer a quick replacement option for standard halogen spots.

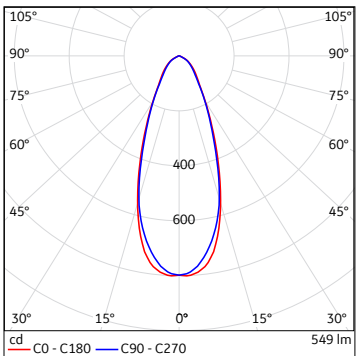


Benefits

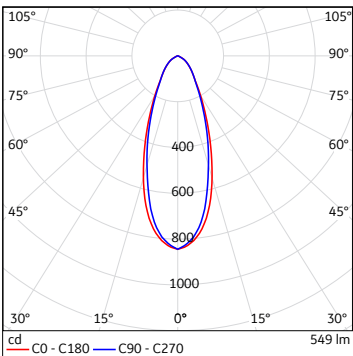
- Ideal replacement for Halogen spotlights
- 88% energy saving compared to 50W Halogen MR16
- Tilting head to adjust light beam where needed
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy - UV-free & IR-free
- Colour rendering index: CRI 80+



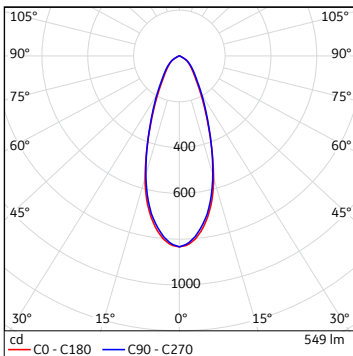
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (kg) (with driver)	Weight (kg) (without driver)
Ø88.*34.5	88 +/- 2	34.5 +/- 2	70 +/- 2	0,17	0,13



6W 3000K

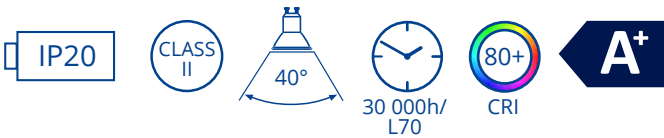


6W 4000K

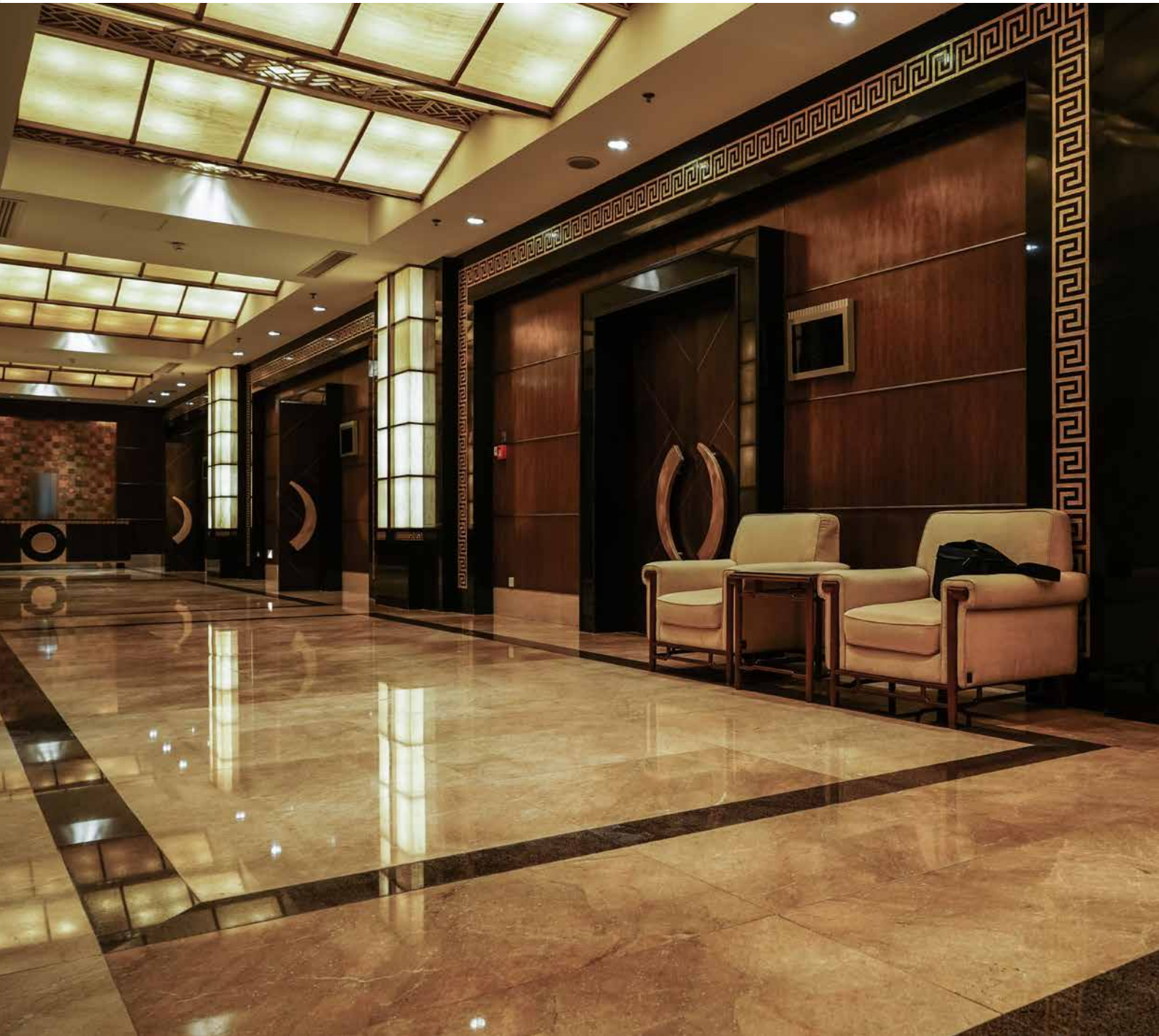


6W 6500K

Recessed Spotlight 6W



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Recessed Spotlight G1 6W - Static driver								
LED Spotlight G1 TU WRA IP20 6W 827 S	TBD	6	480	2700	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 830 S	93107544	6	550	3000	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 840 S	93107545	6	550	4000	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 865 S	93107546	6	550	6500	90	Ø88x34.5	0.17	1



LED INDOOR SOLUTION

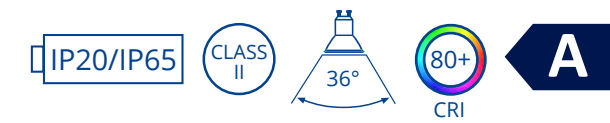
Downlighters



Fireproof Downlight

Tungsram introduces a new range of Fireproof Downlight. The fit of our Fireproof Downlight is almost flush with the ceiling, making the downlight look more aesthetically-pleasing, whilst we offer three different color of bezels, making the luminaire more discreet in your interior surface. Special fire-rated downlights have a rating up to IP65, making them both water and dust resistant. This range offers all the benefits of LED lighting to the customers - fresh light quality, longer service lifetime, reduced energy consumption, and less maintenance.

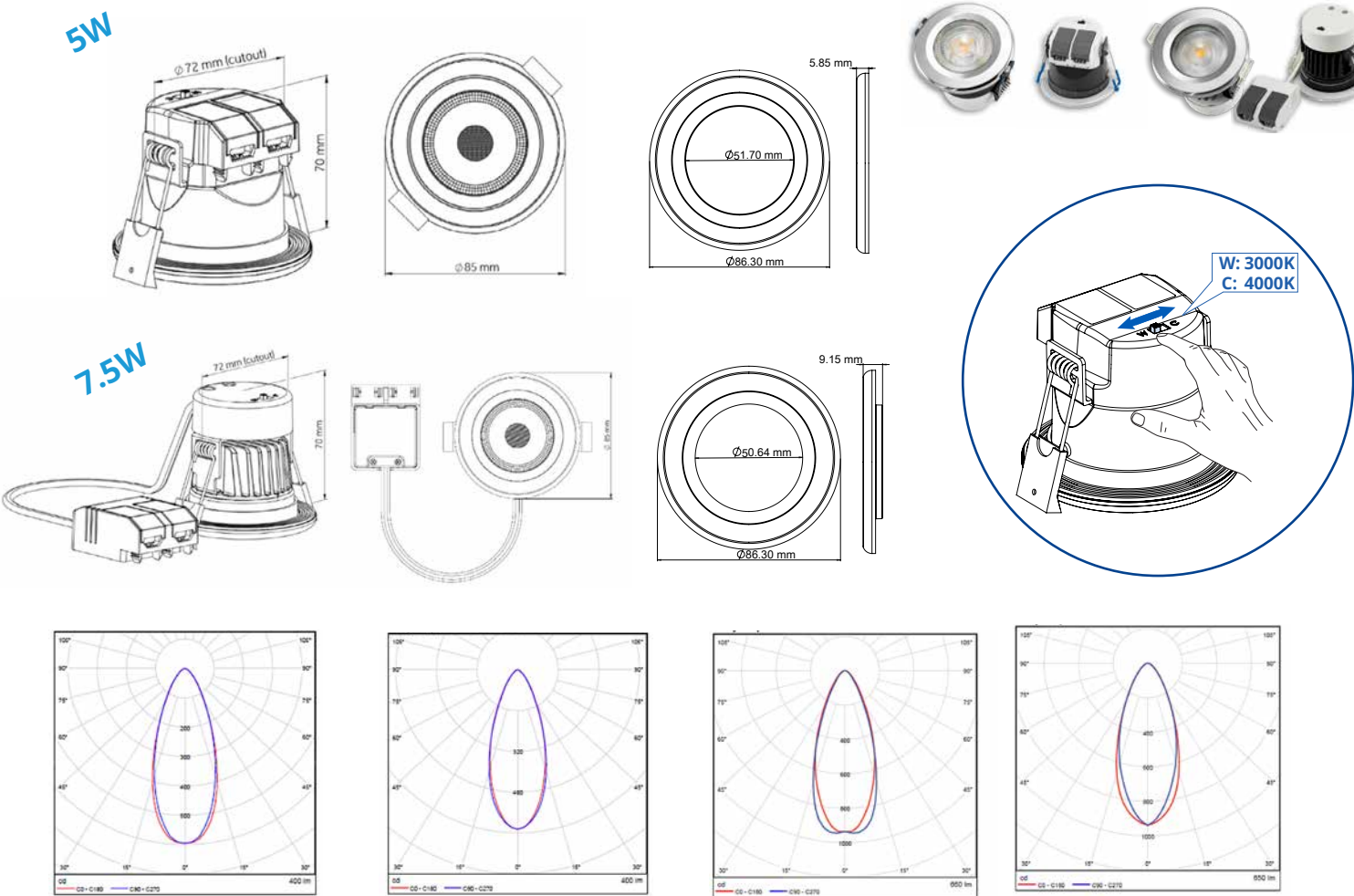
Fireproof Downlight



Benefits

- Up to 80% energy saving compared to Halogen solutions
- Ideal replacement for Halogen spotlights
- High luminous efficacy up to 85 lm/w
- Tilting head to adjust light beam where needed +/- 13°
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy - UV-free & IR-free

Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Fireproof Downlight - Triac driver									
Fireproof Downlight G1 TU IP65 5W F W	93108712	5	400	3000	65	80	Ø85 x 70	0.176	1
Fireproof Downlight G1 TU IP20 5W R W	93108714	5	400	& 4000	20	80	Ø85 x 70	0.176	1
Fireproof Downlight G1 TU IP65 7.5W F W	93108736	7.5	650	4000	65	86	Ø85 x 80	0.296	1
Fireproof Downlight Accessories									
Bezel for Fireproof DLR IP20 Chrome 10PC	93113204								
Bezel for Fireproof DLR IP20 Nickel 10PC	93113205								
Bezel for Fireproof DLR IP65 Chrome 10PC	93113206								
Bezel for Fireproof DLR IP65 Nickel 10PC	93113207								



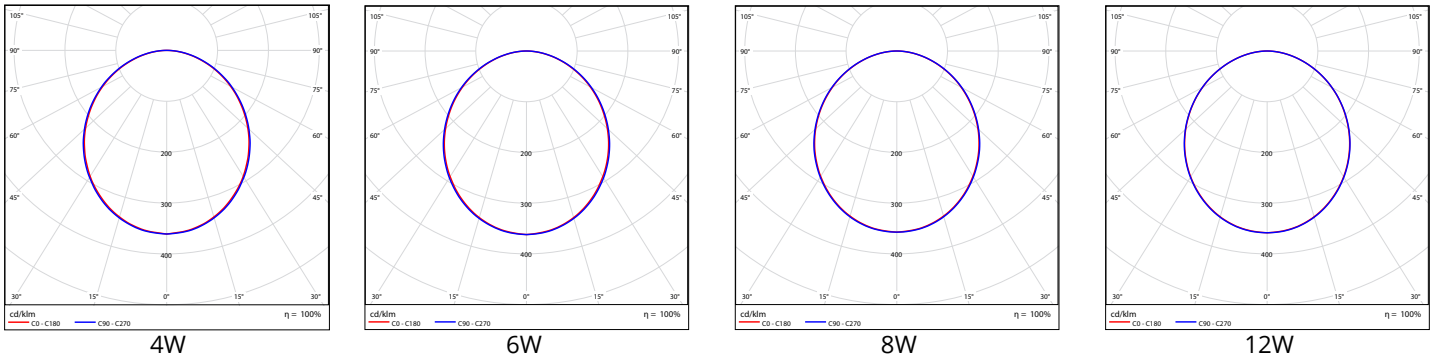
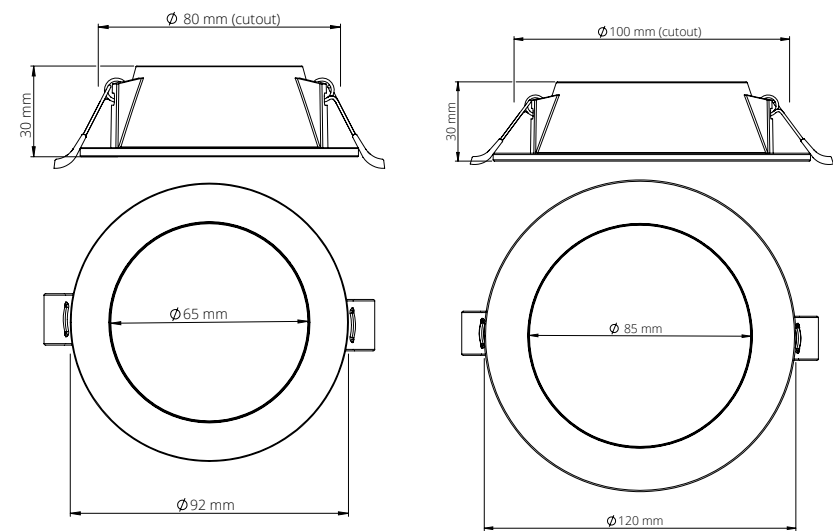
Start Downlight G2

Tungsram introduces the range of Start Downlight Gen2. A selection of sizes and colour temperature options will meet customer requirements. The discrete pattern fits in every indoor environment while lightweight design allows quick and easy installation into new construction.



Benefits

- Ultimate weight max 0.10 kg
- Colour temperatures: 4000 and 6500K
- Colour rendering index: CRI 80+
- IP20 ingress protection
- Available in more lumen versions up to 900 lm
- Simple recessed mounting in the ceiling
- Luminaire storage: -40°C to +60°C



Start Downlight G2

IP20

CLASS II

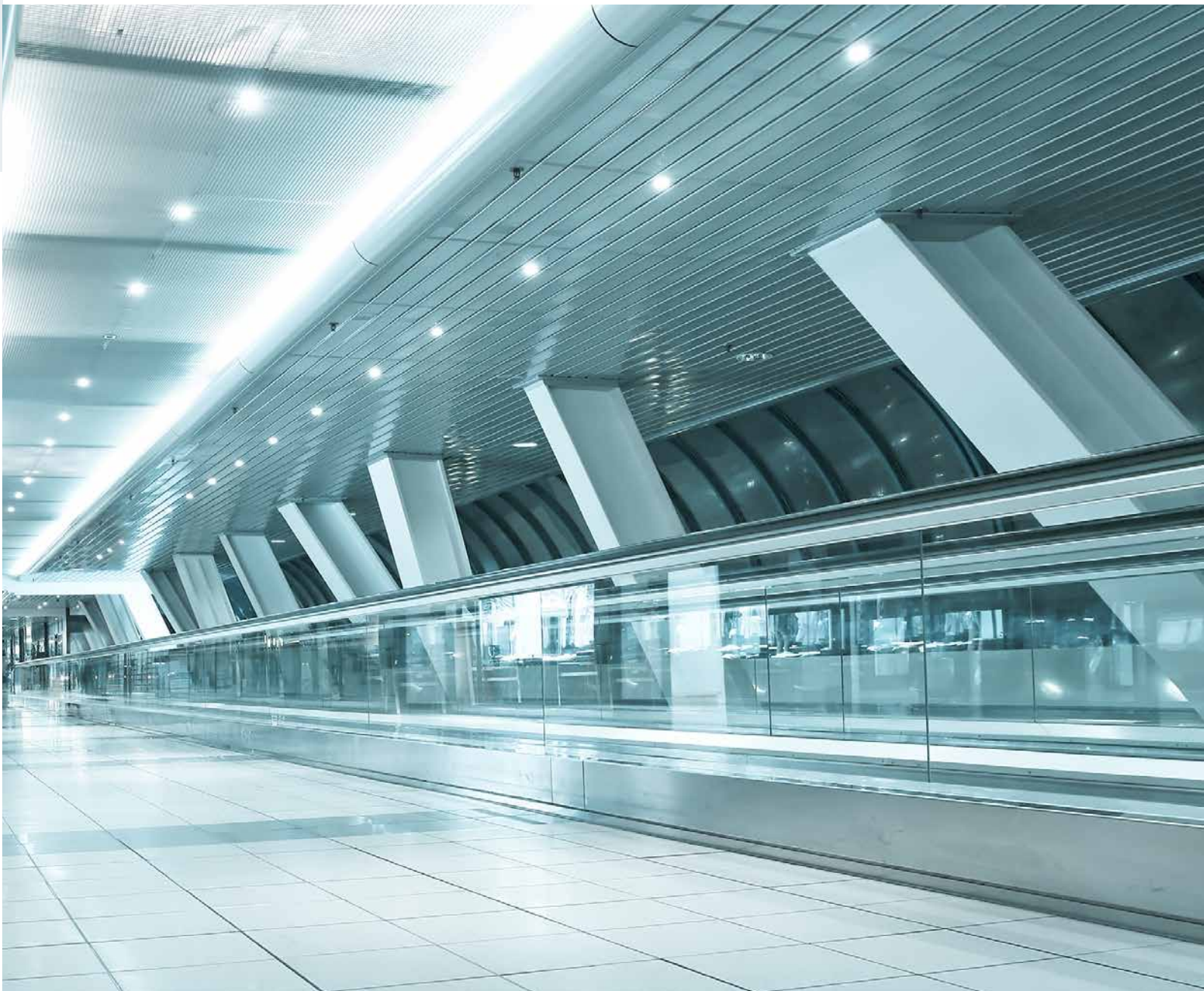
110°

25 000h/
L70

80+
CRI

A+

Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Start Downlight G2 - Static driver								
LED Downlight Start TU G2 3" 4W 840	93110642	4	320	4000	80	Ø92x30	0.06	1
LED Downlight Start TU G2 3" 4W 865	93110627	4	320	6500	80	Ø92x30	0.06	1
LED Downlight Start TU G2 3" 6W 840	93110628	6	450	4000	75	Ø92x30	0.067	1
LED Downlight Start TU G2 3" 6W 865	93110629	6	450	6500	75	Ø92x30	0.067	1
LED Downlight Start TU G2 4" 8W 840	93110630	8	640	4000	80	Ø120x30	0.087	1
LED Downlight Start TU G2 4" 8W 865	93110631	8	640	6500	80	Ø120x30	0.087	1
LED Downlight Start TU G2 4" 12W 840	93110632	12	900	4000	75	Ø120x30	0.098	1
LED Downlight Start TU G2 4" 12W 865	93110633	12	900	6500	75	Ø120x30	0.098	1

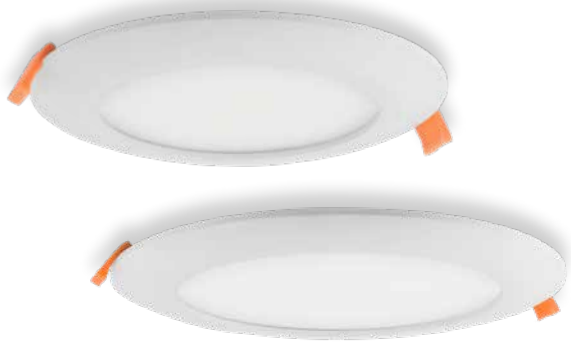


LED INDOOR SOLUTION
Downlighters



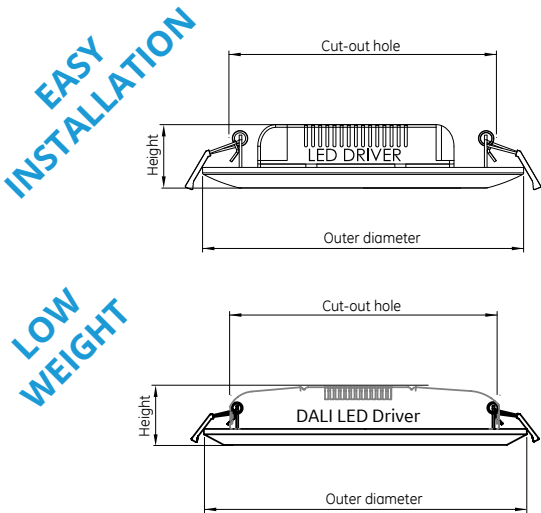
Slim Downlight Premium

Tungsram Slim Downlight Premium products are ultra-thin, recessed luminaires, designed to directly replace CFL lamps. Available in different sizes and colour-temperature options. With this extra slim range, lighting can be easily upgraded in offices, commercial buildings or retail outlets. An excellent choice for switching to LED and benefiting from their energy saving and long lifetime.



Benefits

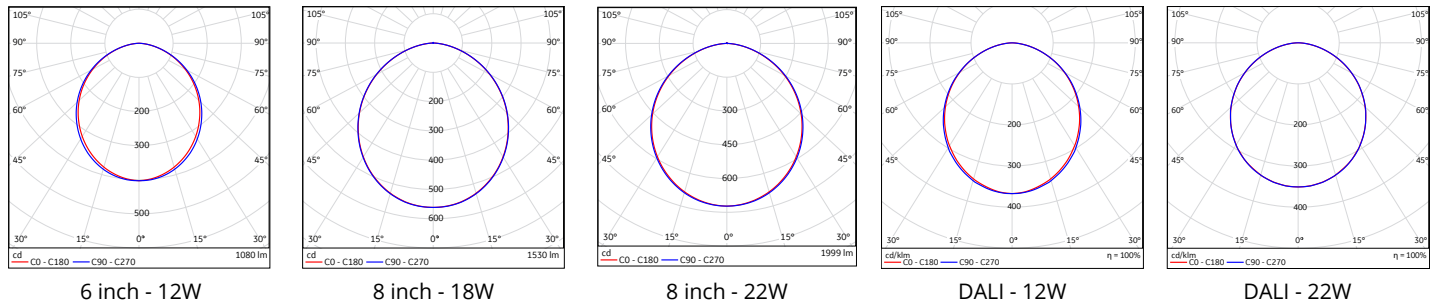
- Direct replacement for compact fluorescent lamp downlights
- Up to 54% energy saving compared to CFL lamps
- Affordable solution for retrofit or new installations
- Easy installation
- UV-free & IR-free
- Product height with driver (36mm) fits more ceiling types



Type	Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g) (with driver)	Weight (g) (without driver)
Static	6"/148 mm	180+/-2	36	150+/-2	310	240
Static	8"/200 mm	240+/-2	36	200+/-2	520	430

Type	Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g) (with driver)	Weight (g) (without driver)
DALI	6"/148 mm	180+/-2	43	150+/-2	440	240
DALI	8"/200 mm	240+/-2	43	200+/-2	630	430

Up to 2000lm



Slim Downlight Premium



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Slim Downlight Premium - Static driver									
LED DLR SLIM P1 TU6 IP40 12W 830 SST	93108085	12	1 080	3000	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU6 IP40 12W 840 SST	93108086	12	1 080	4000	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU6 IP40 12W 865 SST	TBD	12	1 080	6500	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU8 IP40 18W 830 SST	93108087	18	1 530	3000	20	85	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 18W 840 SST	93108088	18	1 620	4000	20	90	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 18W 865 SST	TBD	18	1 620	6500	20	90	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 830 SST	93108090	22	2 000	3000	20	91	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 840 SST	93108091	22	2 000	4000	20	91	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 865 SST	TBD	22	2 000	6500	20	91	Ø240x36	0.52	1
Slim Downlight Premium - DALI driver									
LED DLR SLIM P1 TU6 IP40 12W 830 DST	93108096	12	1 080	3000	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU6 IP40 12W 840 DST	93108097	12	1 080	4000	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU6 IP40 12W 865 DST	TBD	12	1 080	6500	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU8 IP40 22W 830 DST	93108098	22	2 000	3000	40/20	91	Ø240x43	0.63	1
LED DLR SLIM P1 TU8 IP40 22W 840 DST	93108099	22	2 000	4000	40/20	91	Ø240x43	0.63	1
LED DLR SLIM P1 TU8 IP40 22W 865 DST	TBD	22	2 000	6500	40/20	91	Ø240x43	0.63	1



LED INDOOR SOLUTION

Downlighters



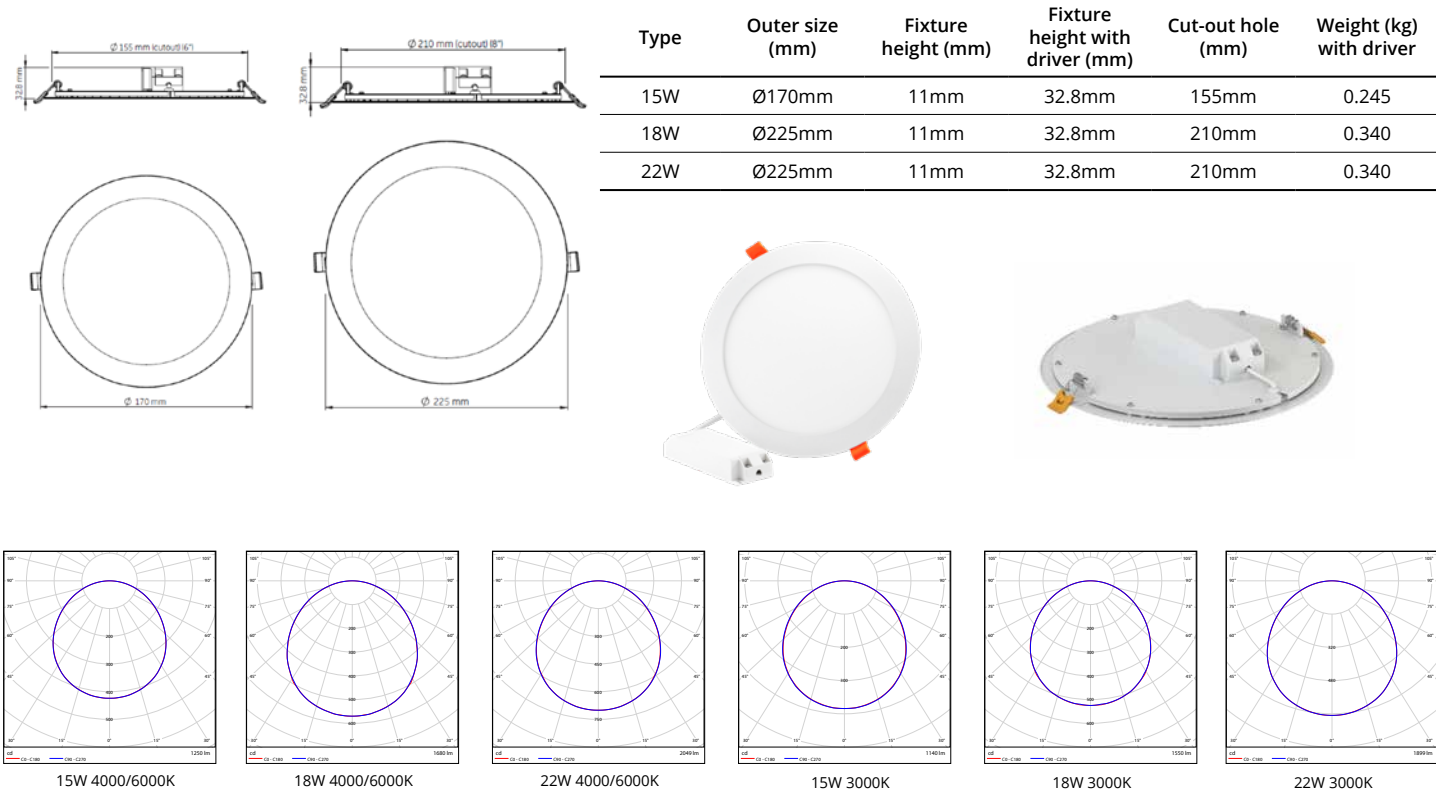
Slim Downlight Start

The Slim Downlight Start range of recessed luminaires designed to replace traditional CFL downlighters directly and affordably. The products' slim design fits in narrow spaces but can be used in any location where 6 inch or 8 inch downlighters are needed.

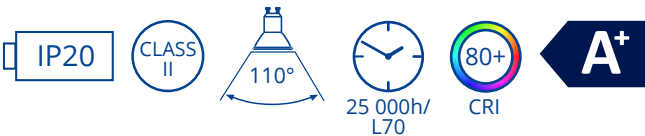


Benefits

- Functional design
- One-to-one replacement for conventional luminaires
- Up to 60% energy saving compared to CFL solutions
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Shallow installation depth
- Wire spring leaf for secure installation



Slim Downlight Start



Product Description	Tungsum Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Slim Downlight Start - Static driver								
LED DLR Slim S1 TU6 IP20 15W 830 SST	93109204	15	1 140	3000	76	Ø170x11	0.25	1
LED DLR Slim S1 TU6 IP20 15W 840 SST	93109205	15	1 250	4000	83	Ø170x11	0.25	1
LED DLR Slim S1 TU8 IP20 18W 830 SST	93109208	18	1 550	3000	86	Ø225x11	0.34	1
LED DLR Slim S1 TU8 IP20 18W 840 SST	93109209	18	1 680	4000	93	Ø225x11	0.34	1
LED DLR Slim S1 TU8 IP20 22W 830 SST	93109212	22	1 900	3000	86	Ø225x11	0.34	1
LED DLR Slim S1 TU8 IP20 22W 840 SST	93109213	22	2 050	4000	93	Ø225x11	0.34	1



LED INDOOR SOLUTION

Downlighters



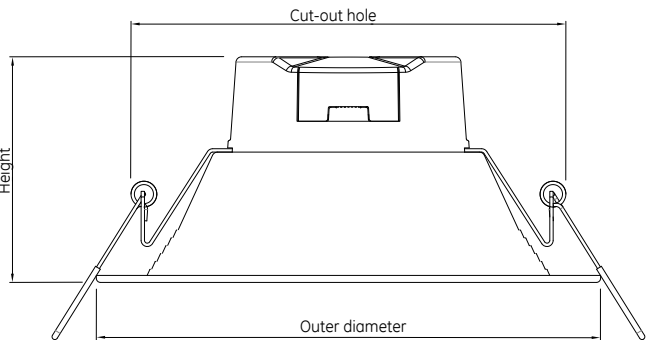
Diffuser Downlight IP20

Tungsram introduces the new standard range of LED Diffuser Downlighters. A selection of sizes and colour temperature options will meet customer requirements. With this new range, lighting can be upgraded in key environments such as offices, commercial buildings, retail, and hospitality.

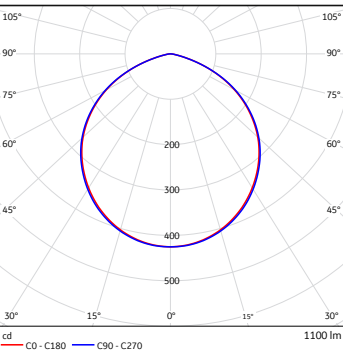


Benefits

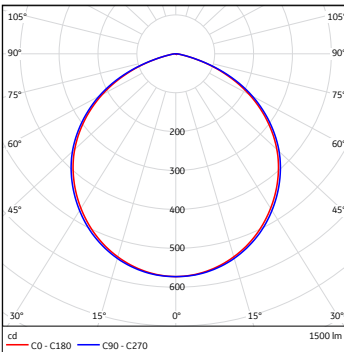
- Direct replacement for compact fluorescent lamp downlights
- Over 55%+ energy saving compared to luminaires that use CFL PL lamps
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Easy installation with fast connection
- Healthy - UV-free & IR-free



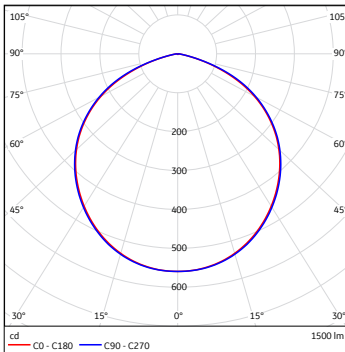
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g)
6"/148 mm	180+/- 2	81	155-160	320
6" accessory ring	210		150-190	
8" /200 mm	240+/-2	93	200-205	480



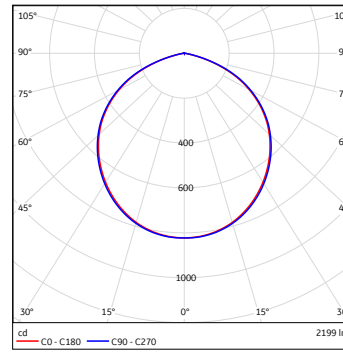
6 inch - 11W



6 inch - 15W

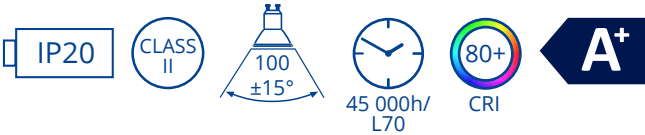


8 inch - 15W



8 inch - 22W

Diffuser Downlight IP20



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Diffuser Downlight IP20 - Static driver								
LED DLR Diff P1 TU6 IP20 11W 830 SST	93108076	11	1 100	3000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 11W 840 SST	93107533	11	1 100	4000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 11W 865 SST	TBD	11	1 100	6500	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 830 SST	93108077	15	1 500	3000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 840 SST	93107534	15	1 500	4000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 865 SST	TBD	15	1 500	6500	100	Ø180x81	0.32	1
LED DLR Diff P1 TU8 IP20 15W 830 SST	93108078	15	1 500	3000	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 15W 840 SST	93107535	15	1 500	4000	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 15W 865 SST	TBD	15	1 500	6500	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 22W 830 SST	93108079	22	2 200	3000	100	Ø240x93	0.5	1
LED DLR Diff P1 TU8 IP20 22W 840 SST	93107536	22	2 200	4000	100	Ø240x93	0.5	1
LED DLR Diff P1 TU8 IP20 22W 865 SST	TBD	22	2 200	6500	100	Ø240x93	0.5	1



LED INDOOR SOLUTION

Downlighters



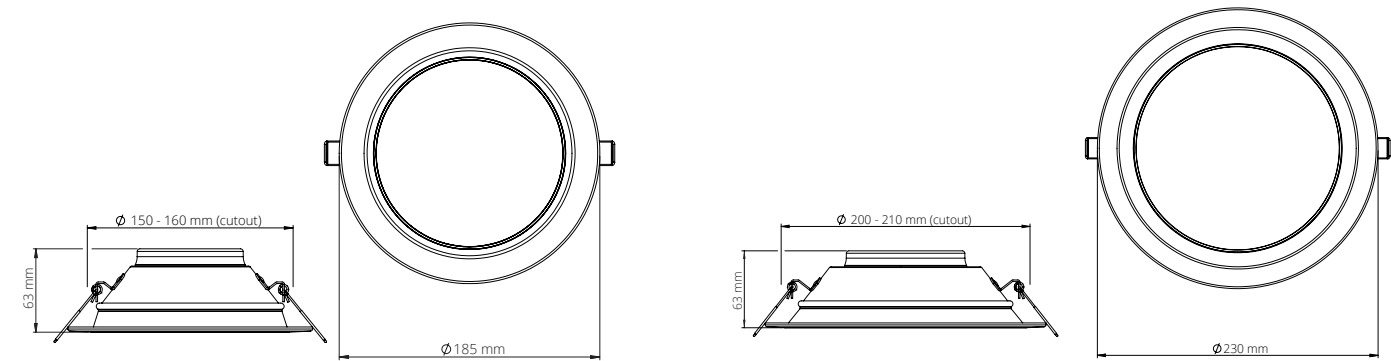
Diffuser Downlight IP44

Tungsram introduces the IP44 LED Diffuser Downlighters. A selection of sizes and colour temperature options will meet customer requirements. With this new range, lighting can be upgraded in key environments such as offices, commercial buildings, retail, and hospitality.

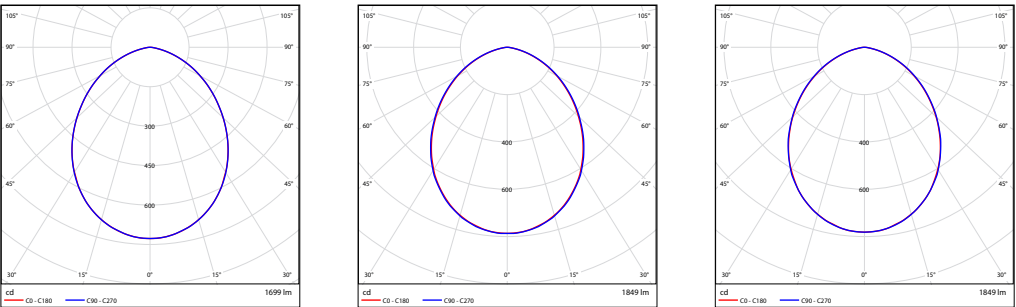


Benefits

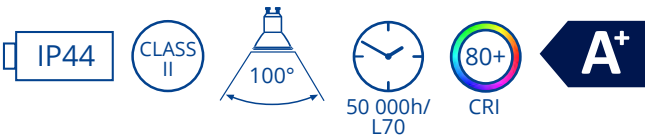
- Direct replacement for compact fluorescent lamp downlights
- Over 60%+ energy saving compared to luminaires that use CFL PI lamps
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Easy installation with fast connection
- Healthy - UV-free & IR-free



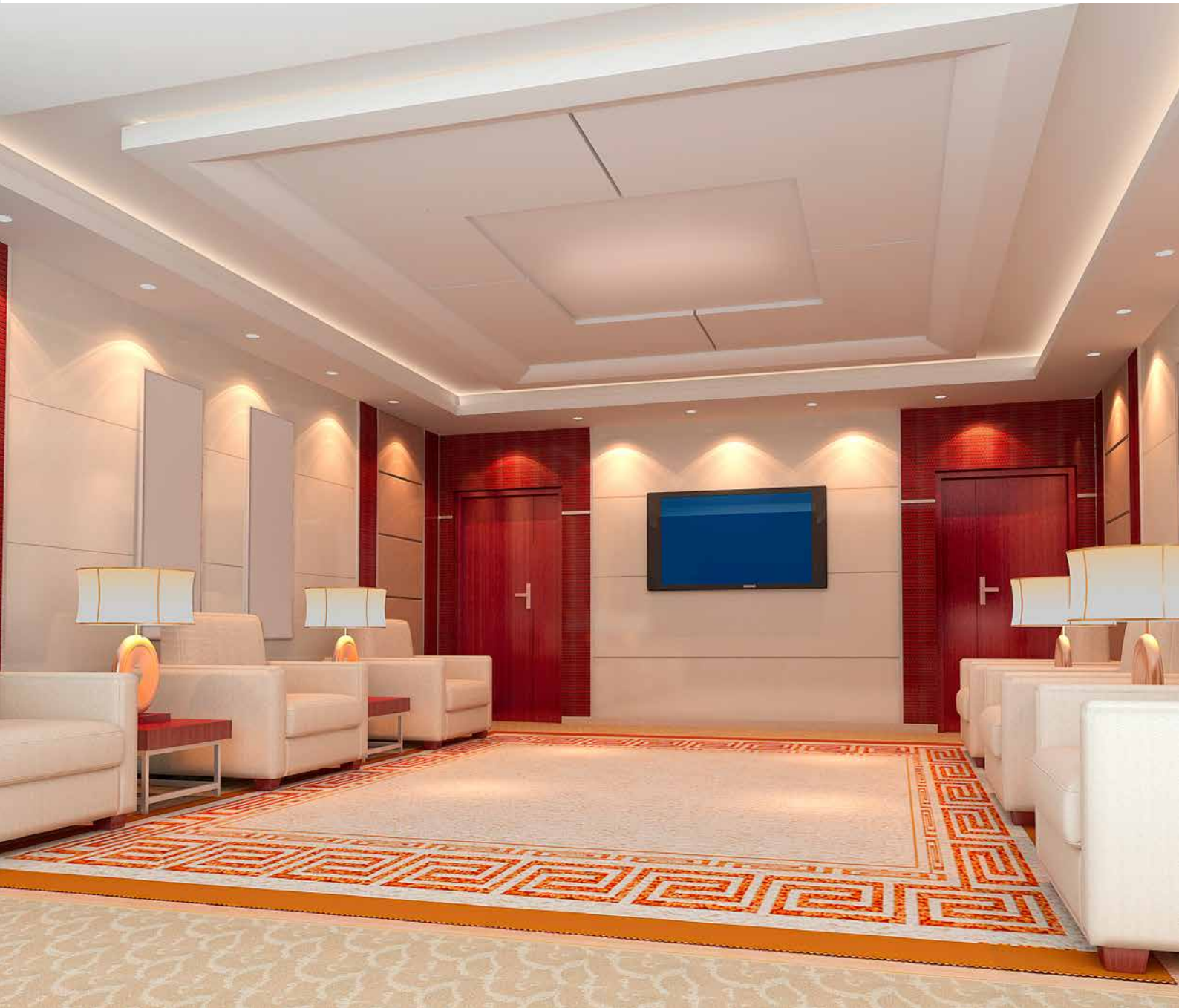
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g)
6"/150-160mm	185	63	150-160	250
8"/200-210mm	230	63	200-210	340



Diffuser Downlight IP44



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Diffuser Downlight IP44 - Static driver								
LED Downlight D1 TU 6 IP44 18W 830 S	93109216	18	1 700	3000	94	Ø185x63	0.25	1
LED Downlight D1 TU 6 IP44 18W 840 S	93109217	18	1 850	4000	103	Ø185x63	0.25	1
LED Downlight D1 TU 6 IP44 18W 860 S	93109218	18	1 850	6000	103	Ø185x63	0.25	1
LED Downlight D1 TU 8 IP44 25W 830 S	93109220	25	2 500	3000	100	Ø230x63	0.38	1
LED Downlight D1 TU 8 IP44 25W 840 S	93109221	25	2 800	4000	112	Ø230x63	0.38	1
LED Downlight D1 TU 8 IP44 25W 860 S	93109222	25	2800	6000	112	Ø230x63	0.38	1



LED INDOOR SOLUTION

Downlighters



COB Downlight UGR<19 IP54

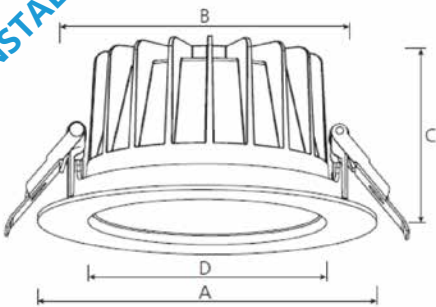
The new Tungsram IP54 Downlight range with traditional deep reflector (UGR<19) provides the perfect combination of high-efficiency, comfortable lighting and design, without compromising on light performance. Due to the interchangeable optics (24°, 36°, 55° beam angle) it offers a wide choice of options for creating the desired ambience. IP54 range is designed for general lighting applications in offices, supermarkets, shops, schools, hotels, etc. It is also widely used for public areas, such as stairways, lobbies, and receptions.



Benefits

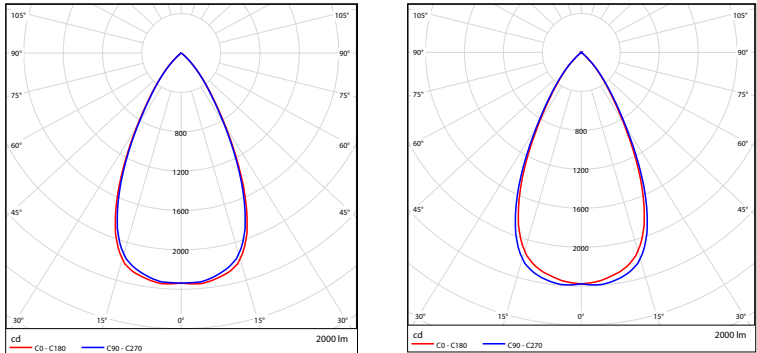
- High luminous efficiency
- High energy savings up to 70% when compared with conventional CFL fixtures
- Easy installation and maintenance
- Affordable solution for retrofit or new installations
- Low glare rate, UGR<19
- 80 CRI+ (90 CRI optional)

EASY
INSTALLATION

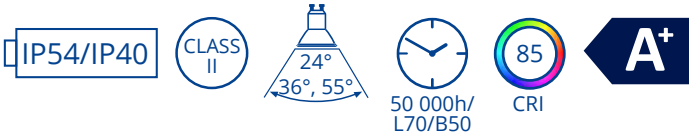


Description	A	B	C	D	Size (mm)	Weight (kg)
LED DLR G1 18Wxxx	172	145	90	127	Ø172x90	0.840
LED DLR G1 23Wxxx	172	145	90	127	Ø172x90	0.840
LED DLR G1 33Wxxx	228	195	99	176	Ø228x99	1.305

Up to 3400lm



COB Downlight UGR<19 IP54



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
COB Downlight UGR<19 IP54 - Static driver									
LED DLR G1 18W 830 S 55D W	93113196	18	2 000	3000	54/40	111	Ø172x90	0.84	12
LED DLR G1 18W 840 S 55D W	93113197	18	2 000	4000	54/40	111	Ø172x90	0.84	12
LED DLR G1 23W 830 S 55D W	93113198	23	2 500	3000	54/40	109	Ø172x90	0.84	12
LED DLR G1 23W 840 S 55D W	93113199	23	2 500	4000	54/40	109	Ø172x90	0.84	12
LED DLR G1 33W 830 S 55D W	93113200	33	3 400	3000	54/40	103	Ø228x99	1.135	12
LED DLR G1 33W 840 S 55D W	93113201	33	3 400	4000	54/40	103	Ø228x99	1.135	12
COB Downlight UGR<19 IP54 Accessories									
DLR Lens 18W/23W 24D 10PC	93114811	-	-	-	-	-	-	-	6
DLR Lens 18W/23W 36D 10PC	93114812	-	-	-	-	-	-	-	6
DLR Lens 18W/23W 55D 10PC	93114813	-	-	-	-	-	-	-	6
DLR Lens 33W 24D 10PC	93114814	-	-	-	-	-	-	-	6
DLR Lens 33W 36D 10PC	93114815	-	-	-	-	-	-	-	6
DLR Lens 33W 55D 10PC	93114986	-	-	-	-	-	-	-	6
DLR Reflector 18W/23W specular	93114987	-	-	-	-	-	-	-	6
DLR Reflector 33W specular	93114988	-	-	-	-	-	-	-	4



LED INDOOR SOLUTION

Downlighters



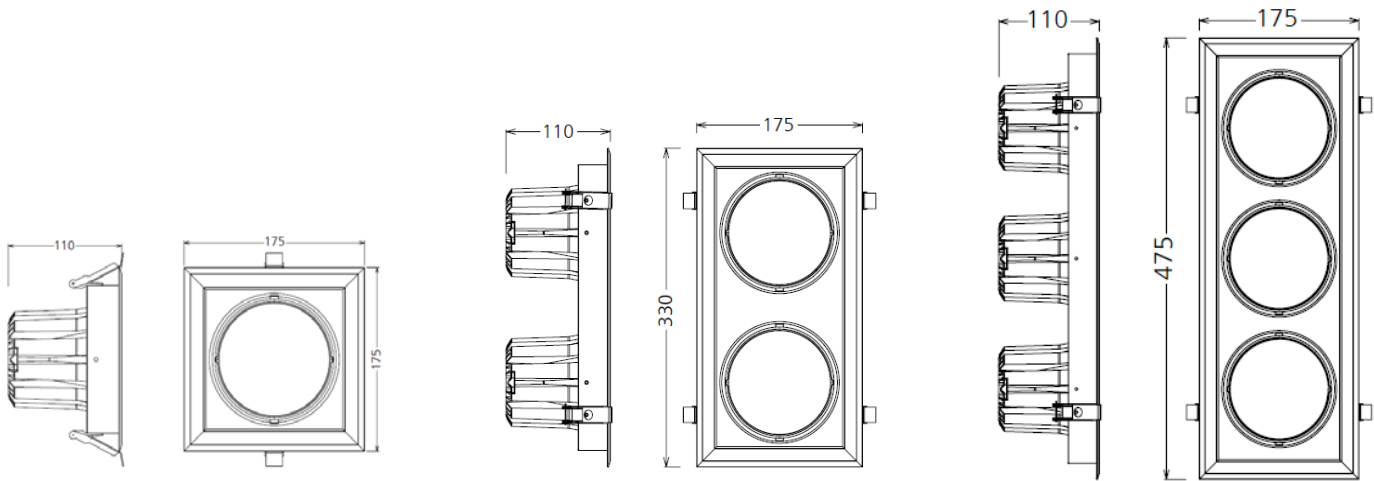
COB Downlight Multigimbal

The Multigimbal luminaire is the ideal choice for commercial or retail applications. The luminaire offers a mixture of functionality and performance. The unique modular design allows for easy replacement of the module and therefore offers a low maintenance solution. Available in different colour-temperatures and beam angles. The 340°rotational angle allows you to tailor the light to where you need it, with the options to create general lighting or accent lighting.

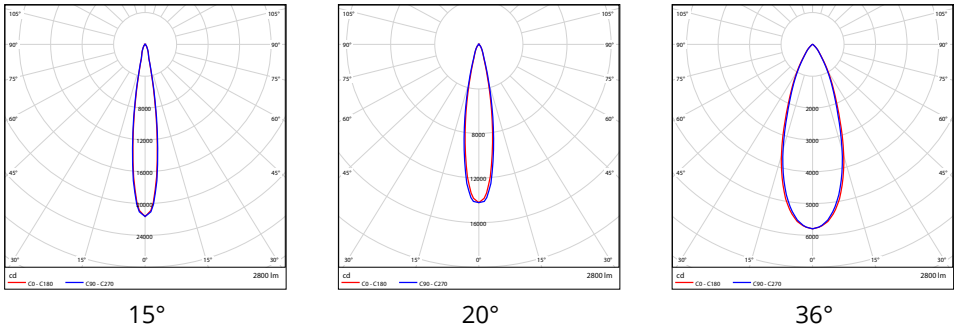


Benefits

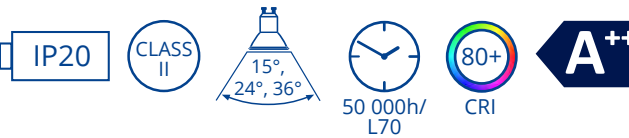
- Up to 70% energy saving compared to standard CMH
- Adjustable and rotary
- No UV/IR light
- Static remote driver (1 per light engine/head)
- Aluminium housing
- Precise light distribution
- Replaceable light engine / head
- Environmentally friendly, without Mercury or any other hazardous substances



Up to 8400lm



COB Downlight Multigimbal



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Beam angle (°)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
COB Downlight Multigimbal - Static driver									
LED Gimbal 1x30W 830 S 15D	93113178	30	2 800	3000	15	93	175*175*110	1,25	1
LED Gimbal 1x30W 830 S 20D	93113179	30	2800	3000	15	93	175*175*110	1,25	1
LED Gimbal 1x30W 830 S 36D	93113180	30	2800	3000	15	93	175*175*110	1,25	1
LED Gimbal 1x30W 840 S 15D	93113181	30	2800	4000	15	93	175*175*110	1,25	1
LED Gimbal 1x30W 840 S 20D	93113182	30	2800	4000	15	93	175*175*110	1,25	1
LED Gimbal 1x30W 840 S 36D	93113183	30	2800	4000	15	93	175*175*110	1,25	1
LED Gimbal 2x30W 830 S 15D	93113184	60	5600	3000	24	93	330*175*110	2,25	1
LED Gimbal 2x30W 830 S 20D	93113185	60	5600	3000	24	93	330*175*110	2,25	1
LED Gimbal 2x30W 830 S 36D	93113186	60	5600	3000	24	93	330*175*110	2,25	1
LED Gimbal 2x30W 840 S 15D	93113187	60	5600	4000	24	93	330*175*110	2,25	1
LED Gimbal 2x30W 840 S 20D	93113188	60	5600	4000	24	93	330*175*110	2,25	1
LED Gimbal 2x30W 840 S 36D	93113189	60	5600	4000	24	93	330*175*110	2,25	1
LED Gimbal 3x30W 830 S 15D	93113190	90	8400	3000	36	93	475*175*110	3,2	1
LED Gimbal 3x30W 830 S 20D	93113191	90	8400	3000	36	93	475*175*110	3,2	1
LED Gimbal 3x30W 830 S 36D	93113192	90	8400	3000	36	93	475*175*110	3,2	1
LED Gimbal 3x30W 840 S 15D	93113193	90	8400	4000	36	93	475*175*110	3,2	1
LED Gimbal 3x30W 840 S 20D	93113194	90	8400	4000	36	93	475*175*110	3,2	1
LED Gimbal 3x30W 840 S 36D	93113195	90	8400	4000	36	93	475*175*110	3,2	1



LED INDOOR SOLUTION

Downlighters



Education



Residential



Offices /
Banks



Art-galleries



Retail



Hospitality

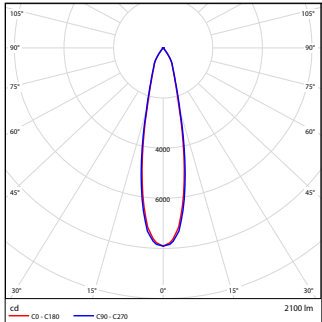
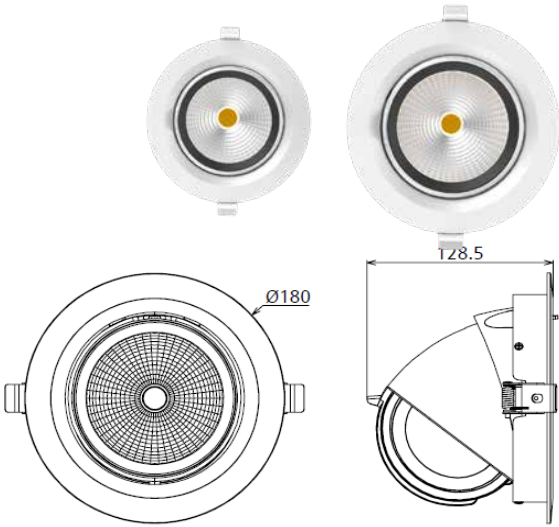
COB Downlight Adjustable / Scoop

Tungsram COB downlighter is uniquely designed with reflector and Citizen high power LED chip. The die-cast aluminium profile provides excellent thermal dissipation. With the wide angle of the adjustable lighting direction, you can create all possible lighting effects.

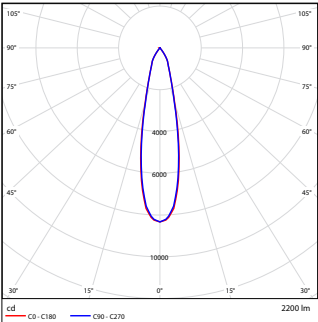


Benefits

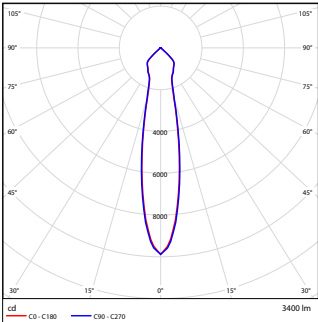
- Up to 50% energy saving compared to standard HID
- Non-dimmable remote driver with plug and play connection
- No UV/IR light
- White finishing
- Adjustable tilt angle from -15° to 35°
- Die-cast aluminium body and heatsink for good thermal management
- LED lifespan L70B50 50.000 hours at 25°C



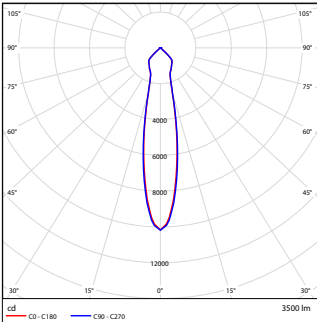
20W 3000K



20W 4000K



33W 3000K



33W 4000K

COB Downlight Adjustable / Scoop



LED Indoor

Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Beam angle (°)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
COB Downlight Adjustable / Scoop - Static driver									
LED Scoop 20W 830 S 20D	93114876	20	2 100	3000	24	105	Ø145x102	1.07	1
LED Scoop 20W 830 S 40D	93114877	20	2 100	3000	40	105	Ø145x102	1.07	1
LED Scoop 20W 830 S 50D	93114878	20	2 100	3000	50	105	Ø145x102	1.07	1
LED Scoop 20W 840 S 20D	93114879	20	2 200	4000	24	110	Ø145x102	1.07	1
LED Scoop 20W 840 S 40D	93114880	20	2 200	4000	40	110	Ø145x102	1.07	1
LED Scoop 20W 840 S 50D	93114881	20	2 200	4000	50	110	Ø145x102	1.07	1
LED Scoop 33W 830 S 20D	93114426	33	3 400	3000	24	103	Ø180x125	1.07	1
LED Scoop 33W 830 S 40D	93114427	33	3 400	3000	40	103	Ø180x125	1.07	1
LED Scoop 33W 830 S 50D	93114428	33	3 400	3000	50	103	Ø180x125	1.07	1
LED Scoop 33W 840 S 20D	93114429	33	3 500	4000	24	106	Ø180x125	1.07	1
LED Scoop 33W 840 S 40D	93114430	33	3 500	4000	40	106	Ø180x125	1.07	1
LED Scoop 33W 840 S 50D	93114431	33	3500	4000	50	106	Ø180x125	1.07	1



LED INDOOR SOLUTION

Downlighters



TUDOLIO

Tungsram Tudolio range offers flexible options to design the right lighting for the given indoor space. Beyond the basic options, the designer has the opportunity to adjust almost all the parameters, like the colour temperature, colour rendering or control system. Create your space with 21 century lighting fixtures.



Benefits

- Excellent color reproduction with CRI92
- Selectable color temperature: 3000K, 4000K, 5700K
- Long lifetime, 50.000 hours
- Esthetical design
- Versatile mounting options, pendant, recessed, surface mount
- High efficiency, up to 122 lm/W

Recessed



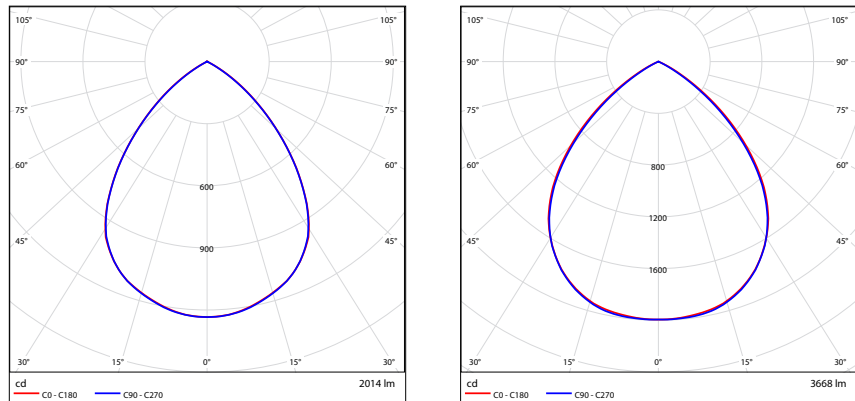
Surface mount



Pendant



Photometric data



TUDOLIO



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	System Efficiency (lm/W)	Dimensions (mm)	Control	Weight (kg)	CRI (Ra)	EEC	Diffuser Type	Application	Pack Qty
TUDOLIO - Static and DALI driver *												
TUD 13W 80 S 100 WH RE SP S85	93117439	13	1340	103	Ø 124 x 84	static	0,6	80+	A++	Specular	Recessed	1
TUD 13W 80 D 100 WH RE SP S85	93117440	13	1340	103	Ø 124 x 84	DALI	0,6	80+	A++	Specular	Recessed	1
TUD 30W 80 S 200 WH RE SP S85	93117441	30	3400	113	Ø 221 x 109	static	1,3	80+	A++	Specular	Recessed	1
TUD 30W 80 D 200 WH RE SP S85	93117442	30	3400	113	Ø 221 x 109	DALI	1,2	80+	A++	Specular	Recessed	1
TUD 37W 80 S 300 WH RE SP S85	93117443	37	4500	122	Ø 320 x 113	static	1,8	80+	A++	Specular	Recessed	1
TUD 37W 80 D 300 WH RE SP S85	93117444	37	4500	122	Ø 320 x 113	DALI	1,7	80+	A++	Specular	Recessed	1
TUD 13W 80 S 100 WH SM SP S85	93117445	13	1340	103	Ø 106 x 152	static	0,9	80+	A++	Specular	Surface mount	1
TUD 13W 80 S 100 BL SM SP S85	93117456	13	1340	103	Ø 106 x 152	static	0,9	80+	A++	Specular	Surface mount	1
TUD 30W 80 S 200 WH SM SP S85	93117457	30	3400	113	Ø 203 x 173	static	2,4	80+	A++	Specular	Surface mount	1
TUD 30W 80 D 200 WH SM SP S85	93117458	30	3400	113	Ø 203 x 173	DALI	2,4	80+	A++	Specular	Surface mount	1
TUD 13W 80 S 100 WH PE SP S85	93117459	13	1340	103	Ø 114 x 413.9	static	1,3	80+	A++	Specular	Pendant	1
TUD 13W 80 S 100 BL PE SP S85	93117460	13	1340	103	Ø 114 x 413.9	static	1,3	80+	A++	Specular	Pendant	1
TUD 30W 80 S 200 WH PE SP S85	93117461	30	3400	113	Ø 203 x 436	static	2,7	80+	A++	Specular	Pendant	1
TUD 30W 80 D 200 WH PE SP S85	93117462	30	3400	113	Ø 203 x 436	static	2,7	80+	A++	Specular	Pendant	1
TUD 13W 90 S 100 WH RE SP S85	93117463	13	1100	85	Ø 124 x 84	static	0,6	92	A	Specular	Recessed	1
TUD 13W 90 D 100 WH RE SP S85	93117464	13	1100	85	Ø 124 x 84	static	0,6	92	A	Specular	Recessed	1
TUD 30W 90 S 200 WH RE SP S85	93117465	30	2800	92	Ø 221 x 109	static	1,3	92	A	Specular	Recessed	1
TUD 30W 90 D 200 WH RE SP S85	93117466	30	2800	92	Ø 221 x 109	static	1,2	92	A	Specular	Recessed	1
TUD 37W 90 S 300 WH RE SP S85	93117467	37	3650	99	Ø 320 x 113	static	1,8	92	A	Specular	Recessed	1
TUD 37W 90 D 300 WH RE SP S85	93117468	37	3650	99	Ø 320 x 113	static	1,7	92	A	Specular	Recessed	1
TUD 13W 90 S 100 WH SM SP S85	93117469	13	1100	85	Ø 106 x 152	static	0,9	92	A	Specular	Surface mount	1
TUD 13W 90 S 100 BL SM SP S85	93117470	13	1100	85	Ø 106 x 152	static	0,9	92	A	Specular	Surface mount	1
TUD 30W 90 S 200 WH SM SP S85	93117471	30	2800	93	Ø 203 x 173	static	2,4	92	A	Specular	Surface mount	1
TUD 30W 90 D 200 WH SM SP S85	93117472	30	2800	93	Ø 203 x 173	static	2,4	92	A	Specular	Surface mount	1
TUD 13W 90 S 100 WH PE SP S85	93117473	13	1100	85	Ø 114 x 413.9	static	1,3	92	A	Specular	Pendant	1
TUD 13W 90 S 100 BL PE SP S85	93117474	13	1100	85	Ø 114 x 413.9	static	1,3	92	A	Specular	Pendant	1
TUD 30W 90 S 200 WH PE SP S85	93117475	30	2800	93	Ø 203 x 436	static	2,7	92	A	Specular	Pendant	1
TUD 30W 90 D 200 WH PE SP S85	93117476	30	2800	93	Ø 203 x 436	DALI	2,7	92	A	Specular	Pendant	1

All the products have selectable colour temperatures - 3000K, 4000K, 5700K
Available from May 2020.



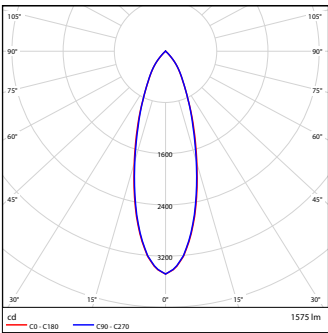
Surface mount downlighter
IP54

The Tungsram Surface mount downlighter is a decorative solution for indoor spaces from offices to public buildings. The IP 54 rating makes the lamps suitable for any areas including the kitchens and lavatories. The products are available in 3 sizes with the relevant performances from 15W to 35W.

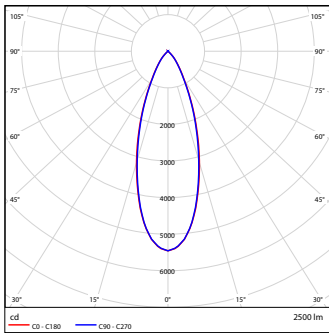


Benefits

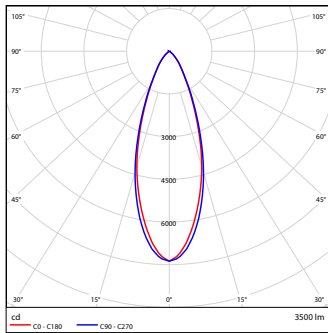
- Esthetical design
- High protection level suitable for lavatories and kitchens,
- IP54
- Very low glare rate creates pleasant visual environment.
- UGR ≤ 16
- Up to 105 lm/W efficiency
- 50k hours lifetime



15W



25W



35W

Surface mount downlighter IP54



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	UGR	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Additional feature	Pack Qty
Surface mount downlighter IP54 - Static driver										
LED Downlight SM 15W D100 830 ST 36D W	93116550	15	1500	3000	<16	100	100x134	0,65	White, RAL9016	1
LED Downlight SM 15W D100 840 ST 36D W	93116551	15	1575	4000	<16	105	100x134	0,65		1
LED Downlight SM 25W D120 830 ST 36D W	93116552	25	2500	3000	<16	100	120x144	0,84		1
LED Downlight SM 25W D120 840 ST 36D W	93116553	25	2500	4000	<16	100	120x144	0,84		1
LED Downlight SM 35W D170 830 ST 36D W	93116554	35	3320	3000	<16	95	170x159	1,45	Black, RAL9005	1
LED Downlight SM 35W D170 840 ST 36D W	93116555	35	3500	4000	<16	100	170x159	1,45		1
LED Downlight SM 15W D100 830 ST 36D B	93116556	15	1500	3000	<16	100	100x134	0,65		1
LED Downlight SM 15W D100 840 ST 36D B	93116557	15	1575	4000	<16	105	100x134	0,65		1
LED Downlight SM 25W D120 830 ST 36D B	93116558	25	2500	3000	<16	100	120x144	0,84	Black, RAL9005	1
LED Downlight SM 25W D120 840 ST 36D B	93116559	25	2500	4000	<16	100	120x144	0,84		1
LED Downlight SM 35W D170 830 ST 36D B	93116560	35	3320	3000	<16	95	170x159	1,45		1
LED Downlight SM 35W D170 840 ST 36D B	93116561	35	3500	4000	<16	100	170x159	1,45		1

Available from May 2020.



LED INDOOR SOLUTION

Downlighters



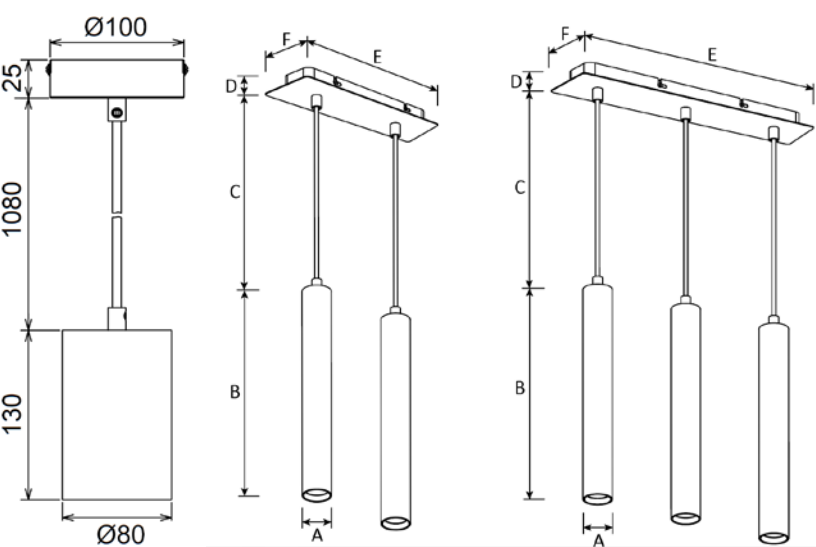
Pendant

The new Tungsram Pendant Downlight range adopts straightforward design with stylish appearance, easy to install, simple and generous, paying more attention to leisure and comfort. It gives space a clear and lively feelings, provides perfect combination of high-efficient and comfortable lighting and design, without compromising on light performance (color rendering and color uniformity).



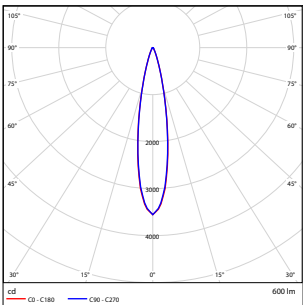
Benefits

- High luminous efficiency (up to 120lm/W)
- High energy savings up to 70% comparing to conventional CFL fixtures
- Easy installation and maintenance
- Affordable solution for retrofit or new installations

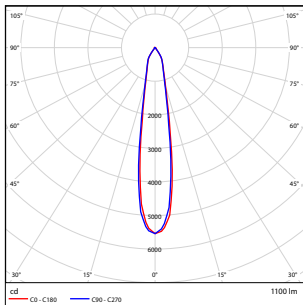


300mm version	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Weight (kg)
1 head	39	300	1080	25	Ø100	-	0.51
2 heads	39	300	1080	25	250	80	1.20
3 heads	39	300	1080	25	370	80	1.80

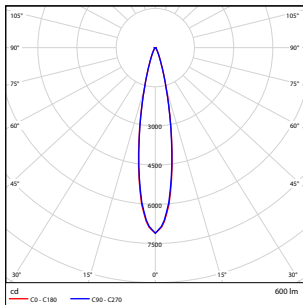
130mm version	Diameter (mm)	Length (mm)	Cable length (mm)	Base size (mm)	Weight (kg)
1 head	80	130	1080	Ø100x25	0.67



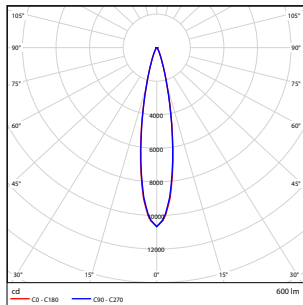
1x5W



1x10W

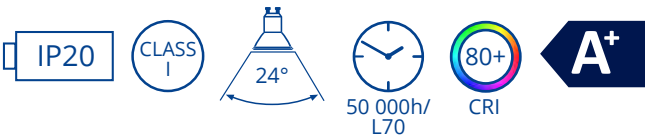


2x5W



3x5W

Pendant



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	UGR	Dimensions (mm)	Weight (kg)	Pack Qty
Pendant - Static driver									
LED Pendant TU 1x10W 830 24D SW 130MM	93115921	10	1 100	3000	110	<19	Ø80x130	0.67	1
LED Pendant TU 1x10W 830 24D SB 130MM	93115922	10	1 100	3000	110	<19	(Ø100x1255)	0.67	1
LED Pendant TU 1x5W 830 24D SW 300MM	93116065	5	600	3000	120	<19	Ø39x300x1	0.51	1
LED Pendant TU 1x5W 830 24D SB 300MM	93116076	5	600	3000	120	<19	(Ø100x1255)	0.51	1
LED Pendant TU 2x5W 830 24D SW 300MM	93116077	10	1 200	3000	120	<19	Ø39x300x2	1.20	1
LED Pendant TU 2x5W 830 24D SB 300MM	93116078	10	1 200	3000	120	<19	(80x250x1255)	1.20	1
LED Pendant TU 3x5W 830 24D SW 300MM	93116079	15	1 800	3000	120	<19	Ø39x300x3	1.80	1
LED Pendant TU 3x5W 830 24D SB 300MM	93116080	15	1 800	3000	120	<19	(80x370x1255)	1.80	1



LED INDOOR SOLUTION

Tracklights



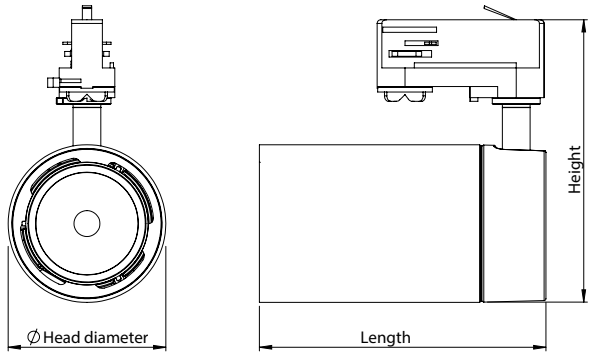
Trackspot ADV

The Tungsram LED Track Light ADV range provides the perfect replacement for Halogen and Ceramic Metal Halide track lights. Offering up to 105lm/W energy efficiency and an advanced optic design, this solution tenders a desired quality of light with great savings and long-life benefits. Available in a modular design with removable and interchangeable lighting components that facilitate easy access to customization; combined with easy replacement, this product offers a diverse track lighting solution for your needs.



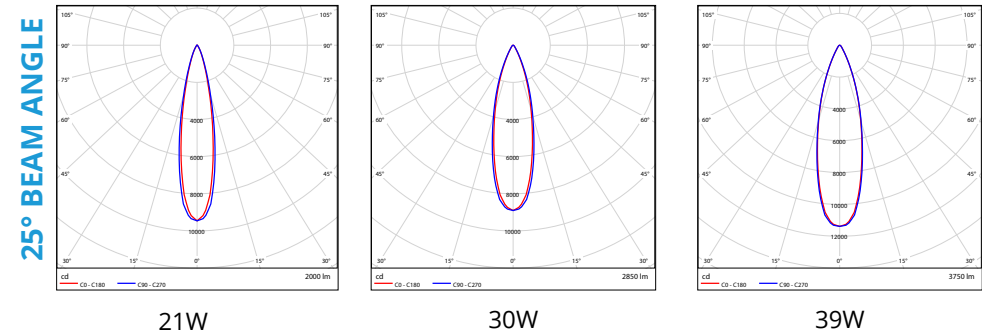
Benefits

- Macadam 3 SDCM
- Ultraviolet (UV) + Infrared (IR) free light
- Modular Design
- Passive cooling system without fans
- Anti-Glare lens optic
- Black and White finishing
- Available up to 39W and up to 4000lm with 3 power levels
- Available with CRI 90+ and 2 CCTs: 3000 / 4000K

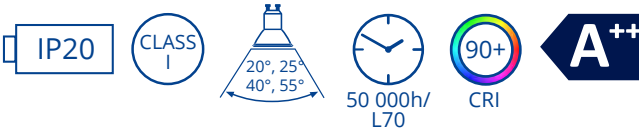


Wattage	Head diameter (mm)	Length (mm)	Height (mm)	Weight (kg)
21W	85	154.5	150	0.735
30W	100	173.3	165	1.300
39W	100	189	165	1.300

Up to 4000lm



Trackspot ADV



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Trackspot ADV - Static driver								
LED Track Spot ADV 930 21W S 25D WT	93113018	21	2 000	3000	95	85x154x150	0.735	1
LED Track Spot ADV 930 21W S 25D BK	93113019	21	2 000	3000	95	85x154x150	0.735	1
LED Track Spot ADV 940 21W S 25D WT	93113020	21	2 200	4000	105	85x154x150	0.735	1
LED Track Spot ADV 940 21W S 25D BK	93113021	21	2 200	4000	105	85x154x150	0.735	1
LED Track Spot ADV 930 30W S 25D WT	93113022	30	2 850	3000	95	100x173x165	1.300	1
LED Track Spot ADV 930 30W S 25D BK	93113023	30	2 850	3000	95	100x173x165	1.300	1
LED Track Spot ADV 940 30W S 25D WT	93113024	30	2 900	4000	97	100x173x165	1.300	1
LED Track Spot ADV 940 30W S 25D BK	93113025	30	2 900	4000	97	100x173x165	1.300	1
LED Track Spot ADV 930 39W S 25D WT	93114997	39	3 750	3000	96	100x189x165	1.300	1
LED Track Spot ADV 930 39W S 25D BK	93114998	39	3 750	3000	96	100x189x165	1.300	1
LED Track Spot ADV 940 39W S 25D WT	93114999	39	4 000	4000	102	100x189x165	1.300	1
LED Track Spot ADV 940 39W S 25D BK	93115000	39	4 000	4000	102	100x189x165	1.300	1
Trackspot ADV Accessories								
LED Track Lens ADV/LUX M 20D 10PC	93114888							10
LED Track Lens ADV/LUX M 25D 10PC	93114889							10
LED Track Lens ADV/LUX M 40D 10PC	93114890							10
LED Track Lens ADV/LUX M 55D 10PC	93114891							10
LED Track Lens ADV L 20D 10PC	93114892							10
LED Track Lens ADV L 25D 10PC	93114893							10
LED Track Lens ADV L 40D 10PC	93114894							10
LED Track Lens ADV L 55D 10PC	93114895							10
LED Track ADV Trackmount pendant M WT	93114899							1
LED Track ADV Trackmount pendant M BK	93114797							1
LED Track ADV Surface mount spot M WT	93114900							1
LED Track ADV Surface mount spot M BK	93114798							1
LED Track ADV Surface mount pendant M WT	93114901							1
LED Track ADV Surface mount pendant M BK	93114799							1



LED INDOOR SOLUTION

Tracklights



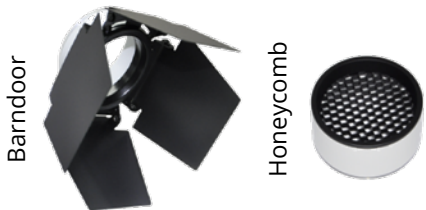
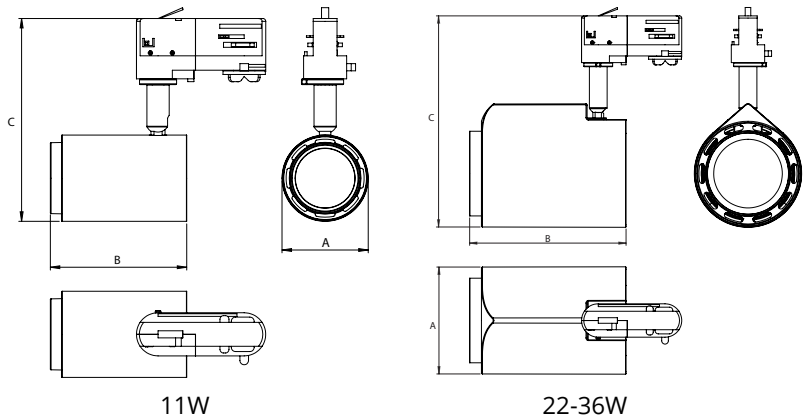
Trackspot LUX

Precise accent lighting designed for retail applications, art galleries, and museums. The Lux range track spot has a unique patented design, self-cleaning lens and sleek appearance making it an attractive proposition for any project. Over 50% energy saving compared to Ceramic Metal Halide thanks to the high efficacy up to 100lm/W. This CR90 option with three-step MacAdam ellipses offers high-quality lighting for high-end applications. The wide range of accessories and interchangeable lens options makes this a flexible and highly attractive option.

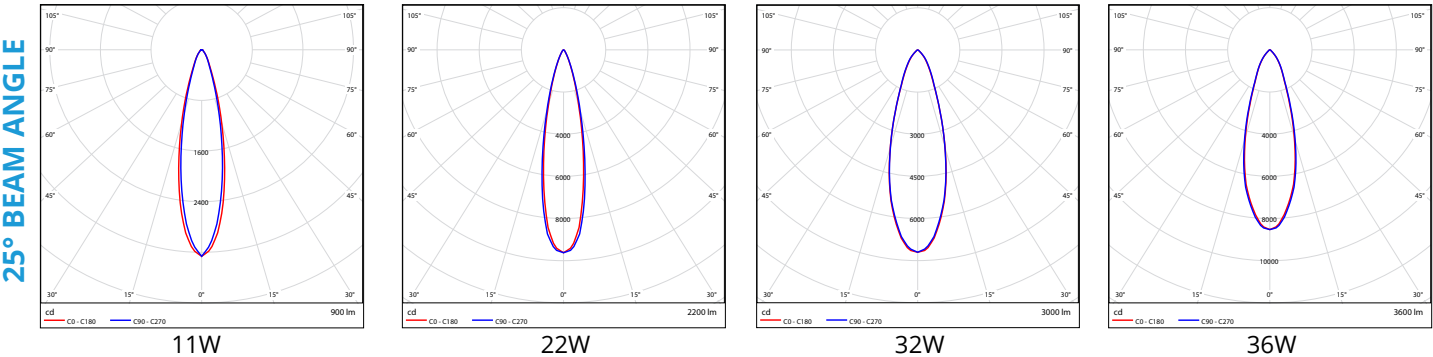


Benefits

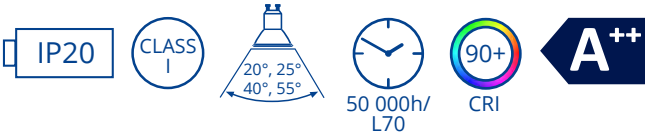
- Die casting aluminum housing
- Precise light distribution
- Macadam 3 SDCM
- Up to 110lm/W efficacy
- Ultraviolet (UV) + Infrared (IR) free light
- Passive cooling system without fans
- Anti-Glare lens optic
- Water-drop design with Self-Cleaning Function



Wattage	A / Head diameter (mm)	B / Length (mm)	C / Height (mm)	Weight (kg)
11W	60	95	143	0.370
22W	85	108	175.5	0.700
32W	96	140	182	1.090
36W	96	140	182	1.090



Trackspot LUX



Product Description	Tungsrø Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Trackspot LUX - Static driver								
LED Track Spot LUX 930 11W S 25D WT	93113166	11	850	3000	77	60x95x143	0.37	1
LED Track Spot LUX 930 11W S 25D BK	93113167	11	850	3000	77	60x95x143	0.37	1
LED Track Spot LUX 940 11W S 25D WT	93113168	11	900	4000	82	60x95x143	0.37	1
LED Track Spot LUX 940 11W S 25D BK	93113169	11	900	4000	82	60x95x143	0.37	1
LED Track Spot LUX 930 22W S 25D WT	93113170	22	2 200	3000	100	85x108x175	0.7	1
LED Track Spot LUX 930 22W S 25D BK	93113171	22	2 200	3000	100	85x108x175	0.7	1
LED Track Spot LUX 940 22W S 25D WT	93113172	22	2 400	4000	109	85x108x175	0.7	1
LED Track Spot LUX 940 22W S 25D BK	93113173	22	2 400	4000	109	85x108x175	0.7	1
LED Track Spot LUX 930 32W S 25D WT	93113174	32	3 000	3000	94	96x141x182	1.09	1
LED Track Spot LUX 930 32W S 25D BK	93113175	32	3 000	3000	94	96x141x182	1.09	1
LED Track Spot LUX 940 32W S 25D WT	93113176	32	3 100	4000	97	96x141x182	1.09	1
LED Track Spot LUX 940 32W S 25D BK	93113177	32	3 100	4000	97	96x141x182	1.09	1
LED Track Spot LUX 930 36W S 25D WT	93115001	36	3 600	3000	100	96x141x182	1.09	1
LED Track Spot LUX 930 36W S 25D BK	93115002	36	3 600	3000	100	96x141x182	1.09	1
LED Track Spot LUX 940 36W S 25D WT	93115003	36	3 900	4000	108	96x141x182	1.09	1
LED Track Spot LUX 940 36W S 25D BK	93115004	36	3 900	4000	108	96x141x182	1.09	1
Trackspot LUX Accessories								
LED Track Lens ADV/LUX M 20D 10PC	93114888							10
LED Track Lens ADV/LUX M 25D 10PC	93114889							10
LED Track Lens ADV/LUX M 40D 10PC	93114890							10
LED Track Lens ADV/LUX M 55D 10PC	93114891							10
LED Track Lens LUX L 25D 10PC	93114896							10
LED Track Lens LUX L 40D 10PC	93114897							10
LED Track Lens LUX L 55D 10PC	93114898							10
LED Track LUX Honeycomb M WT 10PC	93114902							10
LED Track LUX Honeycomb M BK 10PC	93114800							10
LED Track LUX Honeycomb L WT 10PC	93114903							10
LED Track LUX Honeycomb L BK 10PC	93114801							10
LED Track LUX Barndoor M WT 10PC	93114904							10
LED Track LUX Barndoor M BK 10PC	93114802							10
LED Track LUX Barndoor L WT 10PC	93114905							10
LED Track LUX Barndoor L BK 10PC	93114803							10



LED INDOOR SOLUTION

Linears



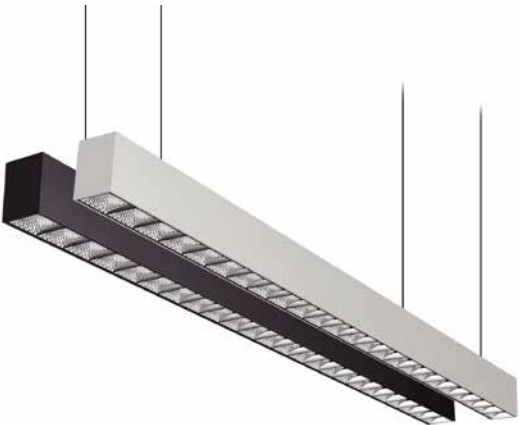
Retail / Hotel
Restaurant



Commercial
lighting /
Office /
Showrooms

TOROFI

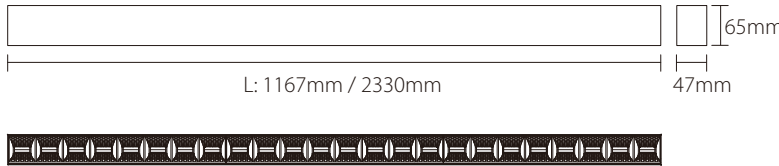
Tungsram Torofi range is ideal for commercial or office lighting due to its high visual comfort and flexible mounting options. It's modern design is highly esthetical and can upgrade the appearance of the space it has been installed.



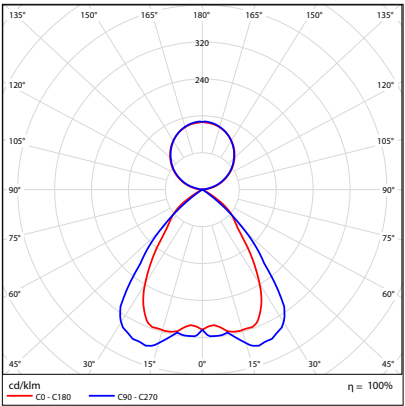
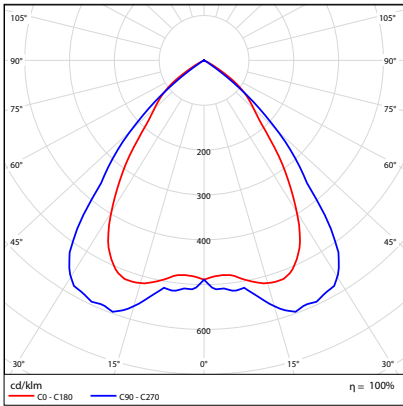
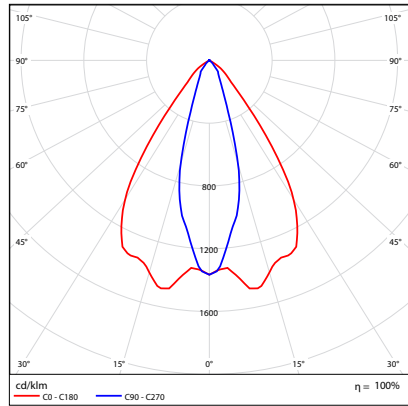
Benefits

- Up to 128 lm/W efficiency
- Direct and direct-indirect versions
- Very low UGR versions - UGR 14
- Seamless continuous design
- Surface mount, pendant and track mount options

Dimensions (mm)



Photometric data



TOROFI



Product Description

Tungsram Product Code Wattage (W) Lumen (lm) CCT (K) System Efficiency (lm/W) Dim. (mm) UGR Beam angle (°) Weight (kg) Colour Light distribution Pack Qty

Torofi - Static

Torofi P 29W 1200 830 S 085 B 10	93115825	29	2700	3000	93	47x1167x6	18	85°x85°	1,9	Black	Direct	1
Torofi P 29W 1200 830 S 085 B 73	93115826	29	3050	3000	105	47x1167x6	14	85°x85°	1,9	Black	Direct-Indirect	1
Torofi P 29W 1200 830 S 030 B 10	93115827	29	2600	3000	90	47x1167x6	18	30°x70°	1,9	Black	Direct	1
Torofi P 29W 1200 840 S 085 B 10	93115828	29	2900	4000	100	47x1167x6	18	85°x85°	1,9	Black	Direct	1
Torofi P 29W 1200 840 S 085 B 73	93115829	29	3250	4000	112	47x1167x6	14	85°x85°	1,9	Black	Direct-Indirect	1
Torofi P 29W 1200 840 S 030 B 10	93115830	29	2700	4000	93	47x1167x6	19	30°x70°	1,9	Black	Direct	1
Torofi P 45W 1200 830 S 085 B 10	93115831	45	4650	3000	103	47x1167x6	20	85°x85°	1,9	Black	Direct	1
Torofi P 45W 1200 830 S 085 B 73	93115832	45	5350	3000	119	47x1167x6	15	85°x85°	1,9	Black	Direct-Indirect	1
Torofi P 45W 1200 830 S 030 B 10	93115833	45	4450	3000	99	47x1167x6	20	30°x70°	1,9	Black	Direct	1
Torofi P 45W 1200 840 S 085 B 10	93115834	45	5000	4000	111	47x1167x6	21	85°x85°	1,9	Black	Direct	1
Torofi P 45W 1200 840 S 085 B 73	93115835	45	5750	4000	128	47x1167x6	16	85°x85°	1,9	Black	Direct-Indirect	1
Torofi P 45W 1200 840 S 030 B 10	93115836	45	4600	4000	102	47x1167x6	20	30°x70°	1,9	Black	Direct	1
Torofi P 29W 1200 830 S 085 Wh 10	93115357	29	2700	3000	93	47x1167x6	18	85°x85°	3,4	White	Direct	1
Torofi P 29W 1200 840 S 085 Wh 10	93117107	29	2900	4000	100	47x1167x6	18	85°x85°	3,4	White	Direct	1
Torofi P 45W 2400 830 S 085 Wh 10	93115358	45	4650	3000	103	47x2330x68	18	85°x85°	3,4	White	Direct	1
Torofi P 45W 2400 840 S 085 Wh 10	93117108	45	5000	4000	111	47x2330x68	18	85°x85°	3,4	White	Direct	1

Accessories for different mounting options

Torofi I connector	93115359
Torofi L connector White	93115360
Torofi T connector White	93115361
Torofi X connector White	93115362
Torofi Endcap White	93115845
Torofi Track Kit White	93115843
Torofi L Connector Black	93115837
Torofi T Connector Black	93115838
Torofi X Connector Black	93115839
Torofi Pendant Canopy Kit Black	93115840
Torofi Track Kit Black	93115844
Torofi Endcap Black	93115846
Torofi Continuous kit Static 1200mm	93115365
Torofi Continuous kit Static 2400mm	93115366
Torofi Continuous Kit DALI 1200mm	93115841
Torofi Continuous Kit DALI 2400mm	93115842
Torofi Pendant Canopy kit 3-Pin White	93115363
Torofi Pendant kit	93115364
Torofi Surface mount kit 3PCS	93115367

Available from May 2020.

Connectors



Mounting types



Pendant

Surface

Track Mounted

LED INDOOR SOLUTION

Linears



Linear Indirect

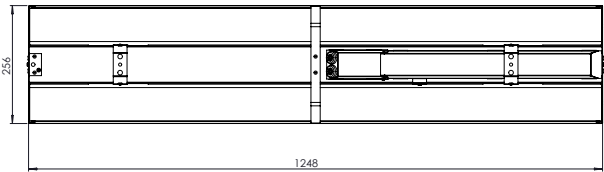
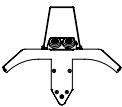
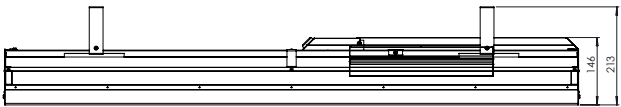


The new Tungsram Linear Indirect range is designed to deliver efficient lighting for commercial and education applications. These efficient lighting fixtures have a long life and deliver a remarkable efficacy (up to 135lm/W), allowing for lower maintenance and operating costs.

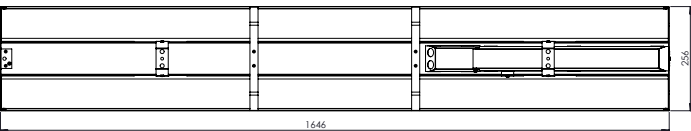
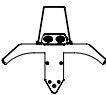
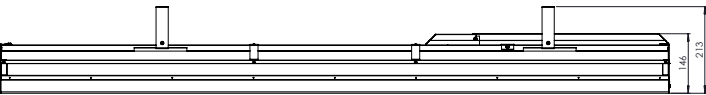


Benefits

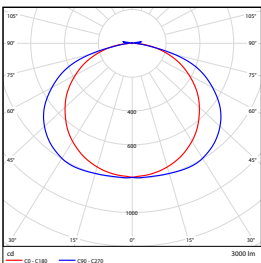
- Visually appealing illumination with CRI 80+
- High-luminous efficiency with minimal glare (<UGR19) due to indirect reflector solution
- Provides strong horizontal and vertical illuminance
- Available in two lengths: 1250 and 1650 mm
- Optional DALI or static control
- Energy efficient replacement for traditional LFL solutions
- Assembled with Nichia LED chips and Tridonic static or BAG DALI driver



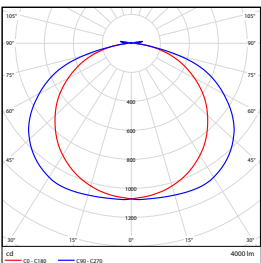
WATTAGE: 22W, 30W, 38W
WEIGHT: 4.8KG



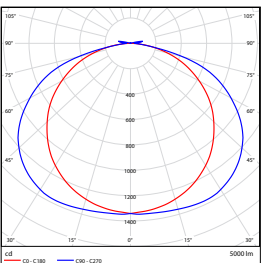
WATTAGE: 40W, 50W
WEIGHT: 5.9KG



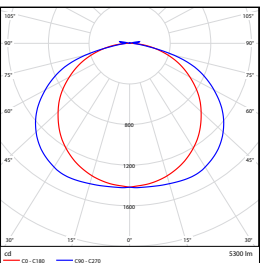
22W - 3000lm



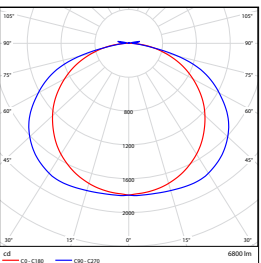
30W - 4000lm



38W - 5000lm

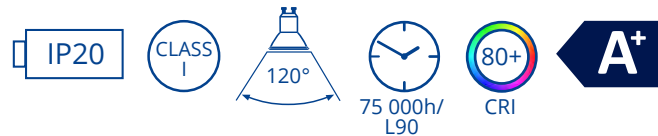


40W - 5300lm

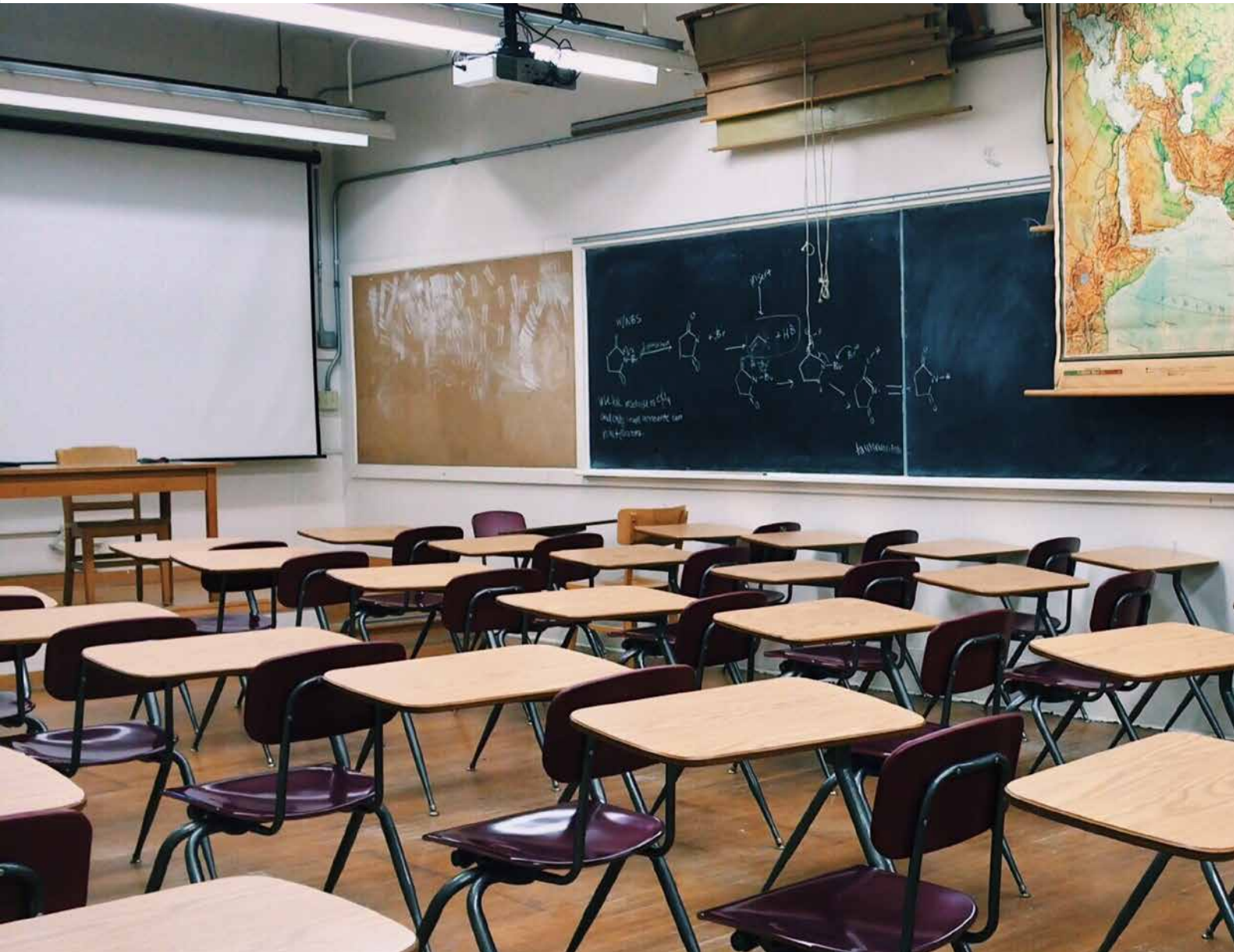


50W - 6800lm

Linear Indirect



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	UGR	Dimensions (mm)	Weight (kg)	Pack Qty
Linear Indirect - Static driver									
TU LINEAR INDIRECT 22W 12 830 S11 ST	TBD	22	3 000	3000	136	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 30W 12 830 S11 ST	93114760	30	4 000	3000	133	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 38W 12 830 S11 ST	93114762	38	5 000	3000	132	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 40W 16 830 S11 ST	93114764	40	5 300	3000	133	<19	1652x256.5x146.5	5.90	1
TU LINEAR INDIRECT 50W 16 830 S11 ST	93115046	50	6 800	3000	136	<19	1652x256.5x146.5	5.90	1
Linear Indirect - DALI driver									
TU LINEAR INDIRECT 22W 12 830 D11 ST	TBD	22	3 000	3000	136	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 30W 12 830 D11 ST	93114761	30	4 000	3000	133	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 38W 12 830 D11 ST	93114763	38	5 000	3000	132	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 40W 16 830 D11 ST	93114765	40	5 300	3000	133	<19	1652x256.5x146.5	5.90	1
TU LINEAR INDIRECT 50W 16 830 D11 ST	93115047	50	6 800	3000	136	<19	1652x256.5x146.5	5.90	1





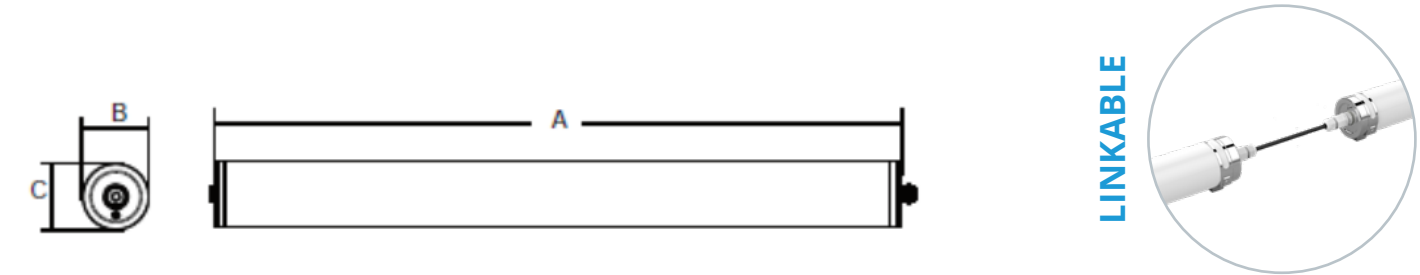
Tubular IP67/69K

The high performance IP67/ IP69K weatherproof Tungsram Tubular luminaire range has many advantages. Matching an outstanding design and performance, the product offers an impressive efficacy up to 150 lm/W. The LED Tubular range carries high protection ratings (IK10 & IP67/IP69K) to make this a durable solution for dusty or damp environments such as carparks, railway stations, airports, warehouses, etc, and the thin tubular shape allows easy architectural integration. With high efficiency and pleasing aesthetics, this product ensures a sustainable investment due to low energy consumption and reduced maintenance costs.

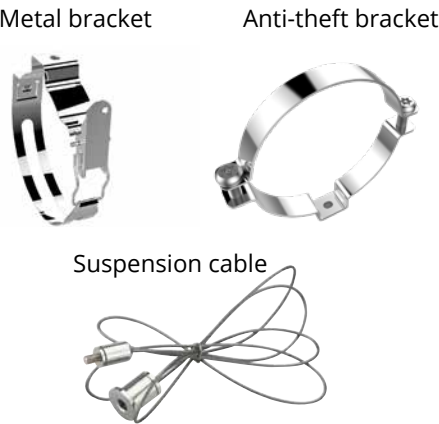
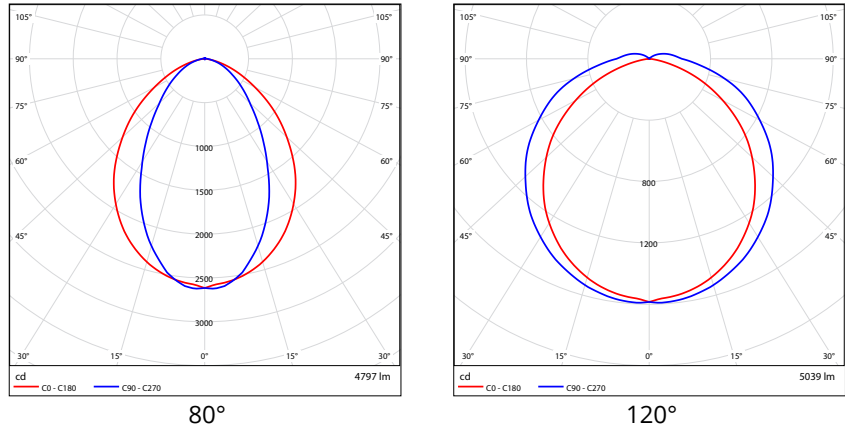


Benefits

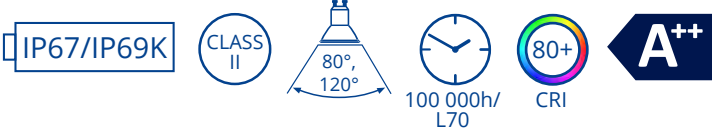
- Evenly distributed light
- High energy savings of up to 60% compared to conventional LFL luminaires
- Easy installation as mounting brackets can be positioned freely on the luminaire
- Suitable to use in dusty and damp locations thanks to high IP rating



Description	Wattage	A (mm)	B (mm)	C (mm)	Weight (kg) - PC/PMMA	Weight (kg) - Glass
LED Tubular TU-x-LS36-xxxx	36W	1200	70	70	1.70	3.62
LED Tubular TU-x-LS48-xxxx	48W	1500	70	70	2.00	4.32



Tubular IP67/69K



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Tubular IP67/69K - Static driver								
LED Tubular TU-S-LS36-1200C40-80°	93113213	36	4800	4000	133	Ø70x1200	1.7	1
LED Tubular TU-S-LS36-1200F40-120°	93113214	36	5220	4000	145	Ø70x1200	1.7	1
LED Tubular TU-S-LS48-1500C40-80°	93113216	48	6400	4000	133	Ø70x1500	2	1
LED Tubular TU-S-LS48-1500F40-120°	93113217	48	6960	4000	145	Ø70x1500	2	1
LED Tubular TU-S-SM36-1200F40-120°	93113224 *	36	5040	4000	140	Ø70x1200	1.7	1
LED Tubular TU-S-SM48-1500F40-120°	93113225 *	48	6720	4000	140	Ø70x1500	1.7	1
Tubular IP67/69K - DALI driver								
LED Tubular TU-S-LD36-1200C40-80°	93113219	36	4350	4000	121	Ø70x1200	1.7	1
LED Tubular TU-S-LD36-1200F40-120°	93113220	36	4680	4000	130	Ø70x1200	1.7	1
LED Tubular TU-S-LD45-1500C40-80°	93113222	45	5850	4000	130	Ø70x1500	2	1
LED Tubular TU-S-LD45-1500F40-120°	93113223	45	6300	4000	140	Ø70x1500	2	1
LED Tubular TU-S-LD45-1500F30-120°	93115396	45	5850	3000	130	Ø70x1500	2	1
Tubular IP67/69K Food - Static driver								
LED Tubular TU-F-LS36-1200F40-120°	93113208	36	5220	4000	145	Ø70x1200	1.7	1
LED Tubular TU-F-LS48-1500F40-120°	93113209	48	6950	4000	145	Ø70x1500	2	1
LED Tubular TU-F-LS36-1200F30-120°	93113210	36	4800	3000	133	Ø70x1200	1.7	1
LED Tubular TU-F-LS48-1500F30-120°	93113211	48	6400	3000	133	Ø70x1500	2	1
Tubular IP67/69K Farm, ammonium resistant - Static driver								
LED Tubular TU-M-LS36-1200F40-120°	93113226	36	5400	4000	150	Ø70x1200	1.7	1
LED Tubular TU-M-LS48-1500F40-120°	93113227	48	7200	4000	150	Ø70x1500	2	1
Tubular IP67/69K Anti-corrosion - Static driver								
LED Tubular TU-G-LS36-1200C40-120°	93113228	36	5040	4000	140	Ø70x1200	3.62	1
LED Tubular TU-G-LS48-1500C40-120°	93113229	48	6720	4000	140	Ø70x1500	4.32	1

* With Microwave Motion and daylight sensor



LED INDOOR SOLUTION

Mariners



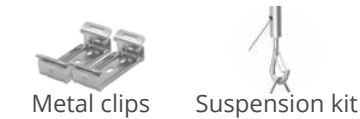
Waterproof Mariner Integrated Premium

This fixture has an attractive, neutral aesthetics that makes it suitable for applications in commercial, residential- and industrial environments. It is an energy-efficient, low-maintenance alternative to traditional fluorescent waterproof fixtures. The integrated mariner offers customers the best mix of value and performance. It has a compact size with high lumen output and is a completely integrable lighting solution for applications with high requirements for luminous intensity and resistance.

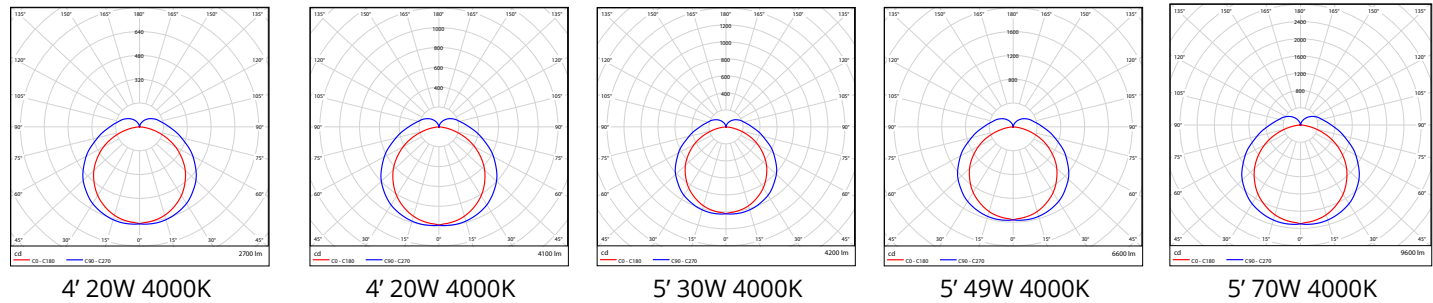
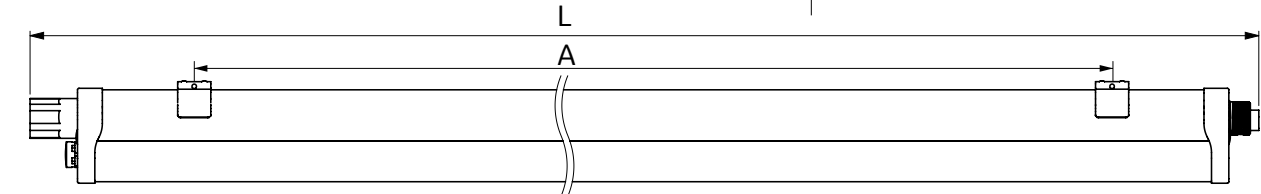
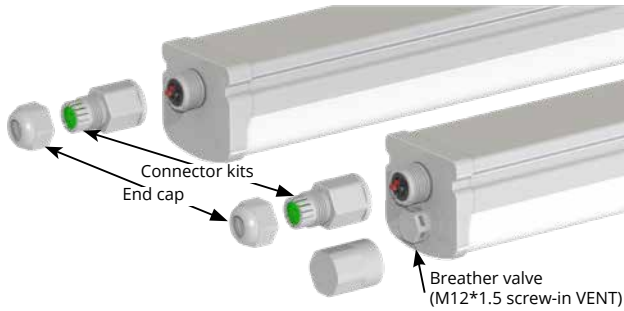


Benefits

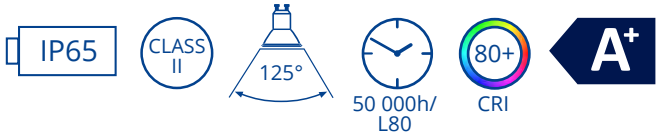
- Energy savings of up to 70% (compared to luminaires that use fluorescent lamps)
- Convenient, continuous connection for both sizes of 1200mm and 1500mm, simple and easy installation
- High resistance against ambient air with humidity and high-particle loads
- Simple refurbishment solution thanks to use of existing installation points with freely positionable mounting clips
- Fast and simple installation due to quick connector design



Type	L (mm)	W (mm)	H (mm)
LED Mariner PR G1 TU 4' xxx	1170	66	63
LED Mariner PR G1 TU 5' xxx	1470	66	63



Waterproof Mariner Integrated Premium



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Additional feature	Pack Qty
Waterproof Mariner Integrated Premium - Static driver									
LED Mariner PR G1 TU 4' 20W 840 SST	93101662	20	2 700	4000	135	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 20W 865 SST	93107528	20	2 700	6500	135	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 30W 840 SST	93101663	30	4 100	4000	137	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 30W 865 SST	93107529	30	4 100	6500	137	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 5' 30W 840 SST	93107530	30	4 200	4000	140	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 30W 865 SST	93107531	30	4 200	6500	140	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 49W 840 SST	93101668	49	6 600	4000	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 49W 865 SST	93107532	49	6 600	6500	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 840 SST	93101687	70	9 600	4000	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 865 SST	93107568	70	9 600	6500	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 4' 23W 840 SEM	TBD	23	2 700	4000	117	66x1197x63	1.35	3 hours emergency	1
LED Mariner PR G1 TU 4' 23W 865 SEM	TBD	23	2 700	6500	117	66x1197x63	1.35		1
LED Mariner PR G1 TU 4' 34W 840 SEM	93108072	34	4 100	4000	121	66x1197x63	1.35		1
LED Mariner PR G1 TU 4' 34W 865 SEM	93108073	34	4 100	6500	121	66x1497x63	1.57		1
LED Mariner PR G1 TU 5' 33W 840 SEM	TBD	33	4 200	4000	127	66x1497x63	1.57		1
LED Mariner PR G1 TU 5' 33W 865 SEM	TBD	33	4 200	6500	127	66x1497x63	1.6		1
LED Mariner PR G1 TU 5' 52W 840 SEM	93108074	52	6 600	4000	127	66x1497x63	1.6		1
LED Mariner PR G1 TU 5' 52W 865 SEM	93108075	52	6 600	6500	127	66x1497x63	1.6		1
Waterproof Mariner Integrated Premium - DALI driver									
LED Mariner PR G1 TU 4' 30W 840 DST	93101691	30	3 800	4000	127	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 5' 49W 840 DST	93101696	49	6 200	4000	127	66x1470x63	1.12	-	1
Waterproof Mariner Integrated Premium Accessories									
Metal clips for Integrated Mariner	93094134								
Mariner Suspension Kit	93093387								



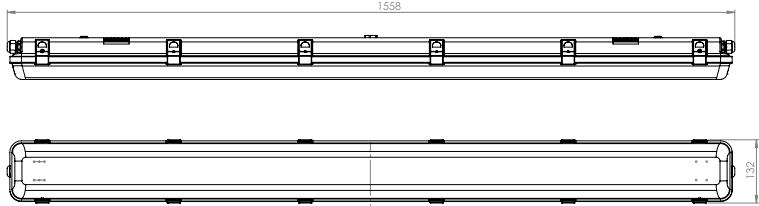
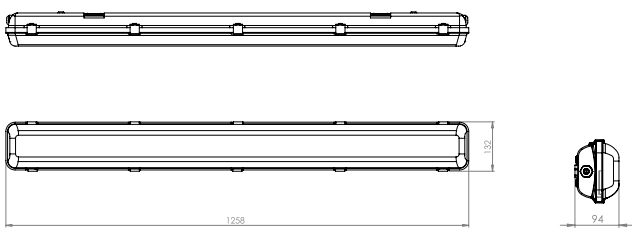
LED INDOOR SOLUTION

Mariners



Waterproof Mariner Integrated UK

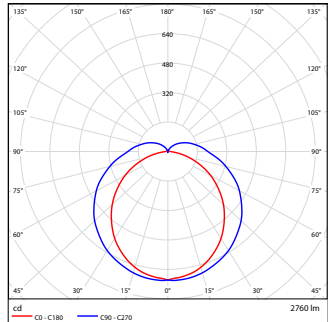
The Tungsram Integrated Mariner UK range is a standard simple LED solution for replacement of conventional LFL T8 luminaires. IP65 rated, where effective protection against contamination from water or accidental damage are major considerations for the end-user. Neutral aesthetics render the product suitable for applications in industrial, commercial and residential environments.



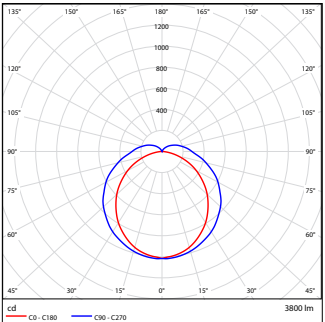
Benefits

- Direct replacement for single/twin LFL T8 fixtures
- High energy savings up to 50% compared to luminaires that use fluorescent lamps
- Functional design with easy, flexible installation
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs

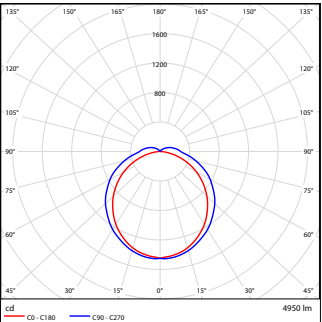
Model	Fixture LxWxH (incl driver)	Weight incl driver (kg)	Driver (LxWxH)	Driver weight (g)
LED Mariner UK G1 TU 4' 24W 840 S	1258x83x86mm	1.205	280x30x21mm	166
LED Mariner UK G1 TU 4' 43W 840 S	1258x132x94mm	2.290	280x30x21mm	195
LED Mariner UK G1 TU 5' 33W 840 S	1558x83x86mm	1.925	280x30x21mm	166
LED Mariner UK G1 TU 5' 67W 840 S	1558x132x94mm	2.855	360x30x21mm	261



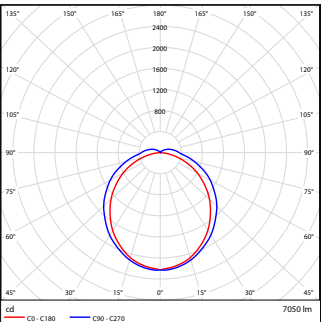
24W 4000K



33W 4000K

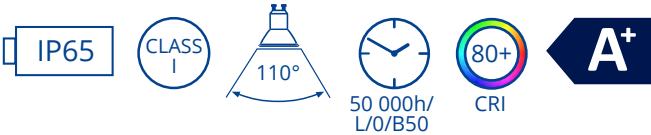


43W 4000K



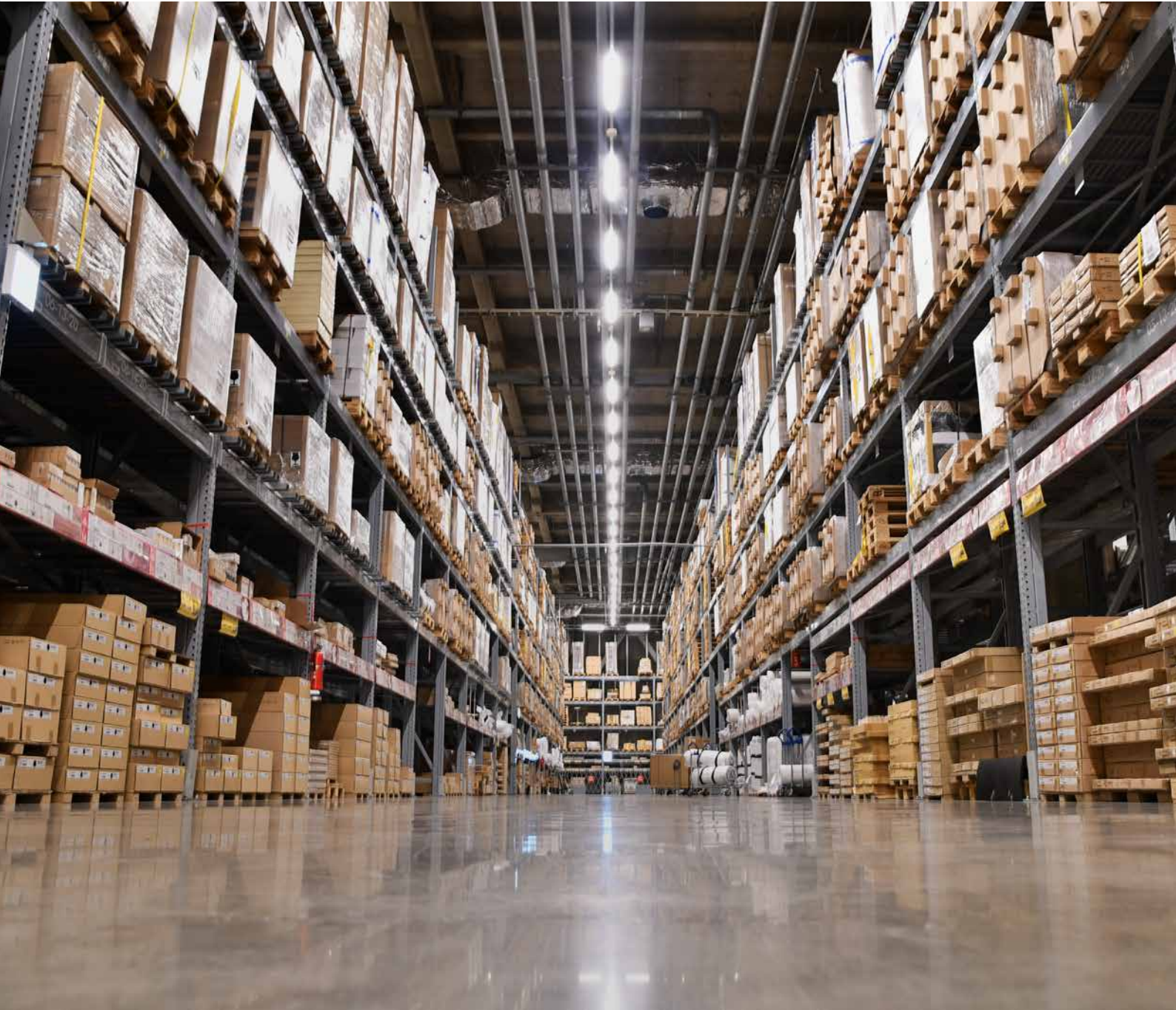
67W 4000K

Waterproof Mariner Integrated UK



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Additional feature	Pack Qty
Waterproof Mariner UK - Static driver									
LED Mariner UK G1 TU 4' 24W 840 S	93110381	24	2 760	4000	115	1258x83x86	1.21	1	1
LED Mariner UK G1 TU 4' 43W 840 S	93110382	43	4 950	4000	115	1258x132x94	2.29	1	1
LED Mariner UK G1 TU 5' 33W 840 S	93110383	33	3 800	4000	115	1558x83x86	1.93	1	1
LED Mariner UK G1 TU 5' 67W 840 S	93110384	67	7 050	4000	105	1558x132x94	2.86	1	1

The fixture is manufactured with PC (polycarbonate) materials, which can be sensitive to certain corrosive materials (like oil or different chemicals), therefore we recommend to consult with our sales representative or customer care team the right fixture, prior to purchase and installation.



Waterproof Mariner
Integrated Start

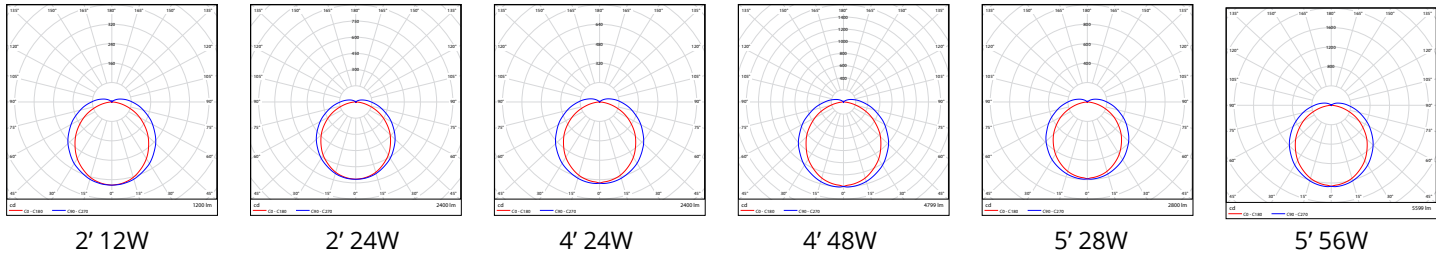
This fixture has an attractive, neutral aesthetics that makes it suitable for applications in commercial, residential, and industrial environments. It is an energy-efficient, low maintenance alternative to traditional fluorescent waterproof fixtures.



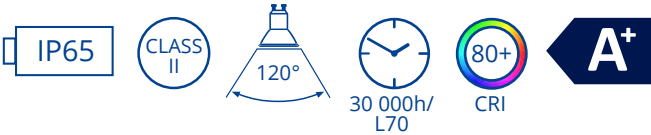
Benefits

- Uniform light
- Convenient, continuous connection for sizes of 600mm, 1200mm and 1500mm, simple and easy installation options
- High resistance against ambient air with humidity and high-particle loads
- Fast and simple installation due to easy connection design

Length	Lumen package	Width (mm)	Length (mm)	Height (mm)
2ft = 600mm	low - 1200lm	72	600	58
2ft = 600mm	high - 2400lm	92	600	60
4ft = 1200mm	low - 2400lm	72	1200	58
4ft = 1200mm	high - 4800lm	92	1200	60
5ft =1500mm	low - 2800lm	72	1500	58
5ft =1500mm	high - 5600lm	92	1500	60



Waterproof Mariner
Integrated Start



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Waterproof Mariner Integrated Start - Static driver								
LED MARINER ST G1 TU 2' 12W 840 S EU	93096947	12	1 200	4000	100	72x600x58	0.7	1
LED MARINER ST G1 TU 2' 12W 865 S EU	93096949	12	1 200	6500	100	72x600x58	0.7	1
LED MARINER ST G1 TU 2' 24W 840 S EU	93096950	24	2 400	4000	100	92x600x60	0.8	1
LED MARINER ST G1 TU 2' 24W 865 S EU	93096952	24	2 400	6500	100	92x600x60	0.8	1
LED MARINER ST G1 TU 4' 24W 840 S EU	93096955	24	2 400	4000	100	72x1200x58	1.3	1
LED MARINER ST G1 TU 4' 24W 865 S EU	93096957	24	2 400	6500	100	72x1200x58	1.3	1
LED MARINER ST G1 TU 5' 28W 840 S EU	93096959	28	2 800	4000	100	72x1500x58	1.7	1
LED MARINER ST G1 TU 5' 28W 865 S EU	93096961	28	2 800	6500	100	72x1500x58	1.7	1
LED MARINER ST G1 TU 4' 48W 840 S EU	93096962	48	4 800	4000	100	92x1200x60	1.7	1
LED MARINER ST G1 TU 4' 48W 865 S EU	93096965	48	4 800	6500	100	92x1200x60	1.7	1
LED MARINER ST G1 TU 5' 56W 840 S EU	93096968	56	5 600	4000	100	92x1500x60	2	1
LED MARINER ST G1 TU 5' 56W 865 S EU	93096971	56	5 600	6500	100	92x1500x60	2	1

The fixture is manufactured with PC (polycarbonate) materials, which can be sensitive to certain corrosive materials (like oil or different chemicals), therefore we recommend to consult with our sales representative or customer care team the right fixture, prior to purchase and installation.



Waterproof Mariner Empty Body

Standard surface mounted / suspended waterproof fittings created for use with GE/Tungsrām T8 LED tubes. Slim profile luminaire, supplied in single and twin lamp versions. IP65 rated, where effective protection against contamination from water or accidental damage are major considerations for the end-user. Neutral aesthetics render the product suitable for applications in both commercial and residential environments as well as industrial environments.

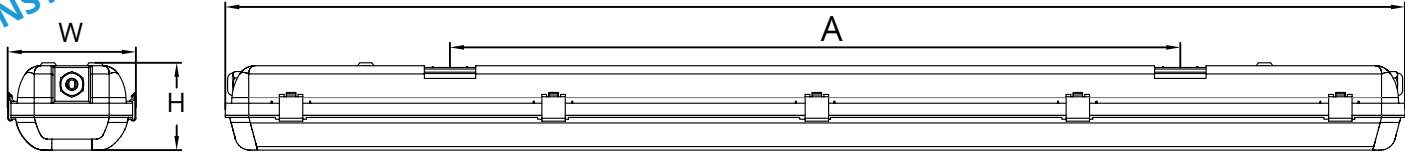


Benefits

- Prewired for easy installation of AC T8 LED lamps
- Luminous flux and light-colour adjustable based on selected lamps
- High protection rating (IP65) and IK08
- Suitable for operation in ambient temperature of -20°C to +40°C
- Integrated through-wiring (3x1.5mm²) for continuous connection
- High (650°C) Glow wire temperature

- Body: impact-resistant, self-extinguishing polycarbonate cover
- Colour: grey
- Sealing material between the shell and cover in PU (polyurethane), which offers the lamp-excellent waterproof ability
- Waterproof plastic wiring connector with rubber gasket on one side of the fitting
- Convenient assembly bracket for ceiling mount
- Reflector in white painted steel, connected to the shell by two anti-loss plastic devices
- Small shape and lightweight

EASY
INSTALLATION



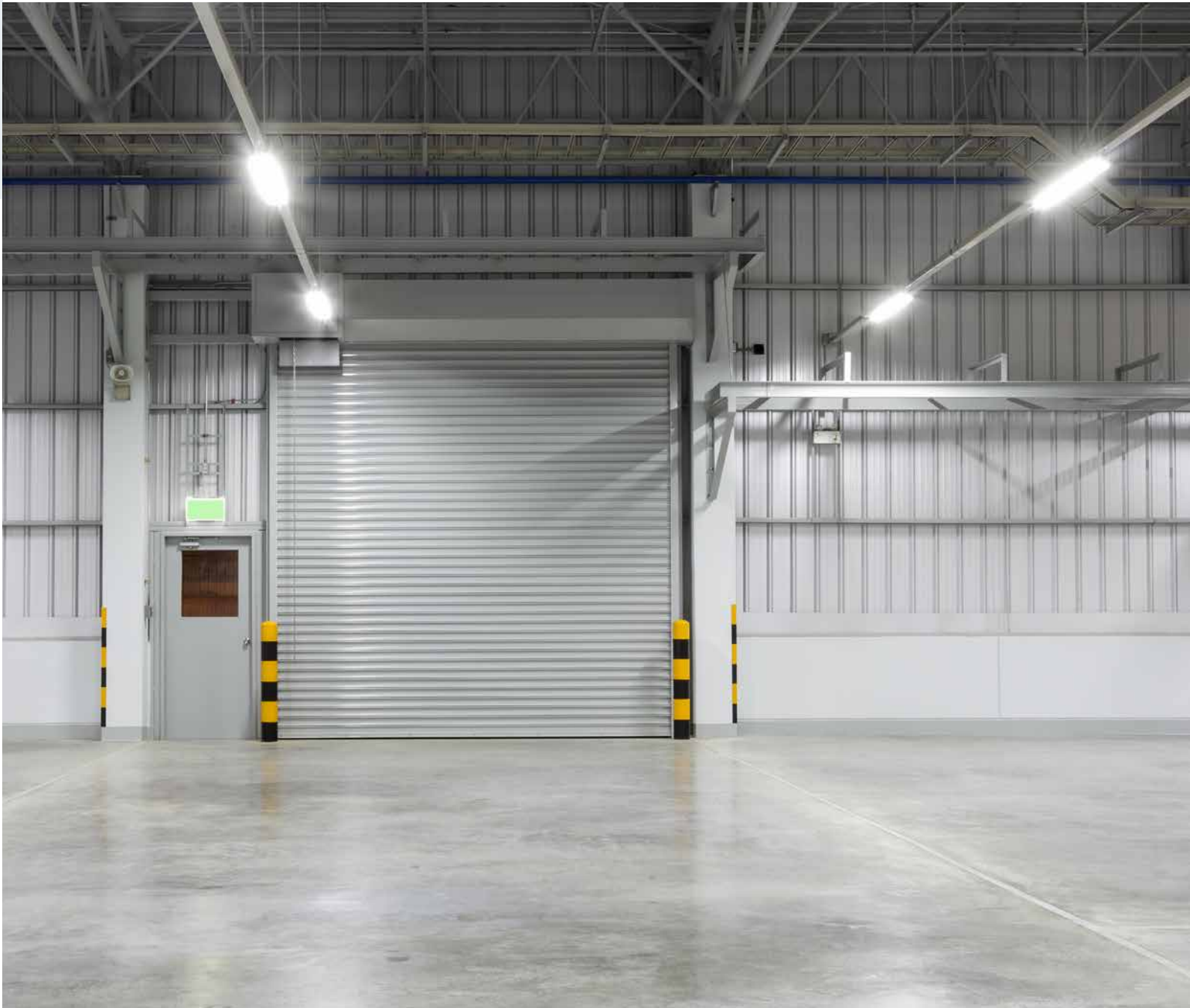
Type	L (mm)	W (mm)	H (mm)	A (mm)
1x1200mm	1270	65	70	900 +/- 36
2x1200mm	1270	102	70	900 +/- 36
1x1500mm	1570	65	70	1200 +/-36
2x1500mm	1570	103	70	1200 +/-36

Waterproof Mariner Empty Body

IP65

Product Description	Tungsrām Product Code	Wattage (W)	Dimensions (mm)	Pack Qty
Waterproof Mariner Empty Body				
LED MARINER BODY TU T8 SINGLE 1200MM	93107517	max 18W	1270x65x70	1
LED MARINER BODY TU T8 TWIN 1200MM	93107518	max 2x18W	1270x102x70	1
LED MARINER BODY TU T8 SINGLE 1500MM	93107519	max 27W	1570x65x70	1
LED MARINER BODY TU T8 TWIN 1500MM	93107520	max 2x27W	1570x102x70	1

The fixture is manufactured with PC (polycarbonate) materials, which can be sensitive to certain corrosive materials (like oil or different chemicals), therefore we recommend to consult with our sales representative or customer care team the right fixture, prior to purchase and installation.



LED INDOOR SOLUTION

Battens



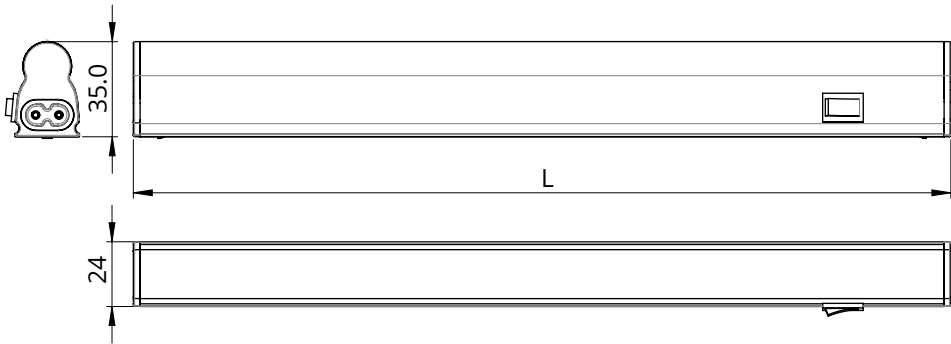
T5 Switch Batten

The LED T5 Batten designed to be a direct replacement for conventional battens, with energy savings. It offers multiple installation methods to ease your worries and bring the customer a brand new experience of soft lighting. The luminaire is fitted with an on/off switch for individual operation. The best choice for smooth linear lighting. We offer this range of 8 luminaires in 4 wattages.



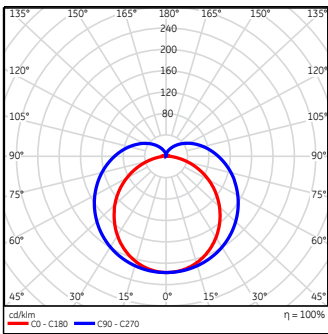
Benefits

- Long life: lifetime 50 000hrs @L70
- High color rendering: CRI>80
- High efficiency: up to 110lm/w
- Environmental: save up to 60% energy
- Beam angle: 150°
- Class: II
- IP20
- IK03

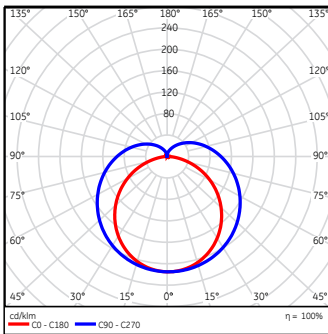


Body material: Polycarbonate (PC)

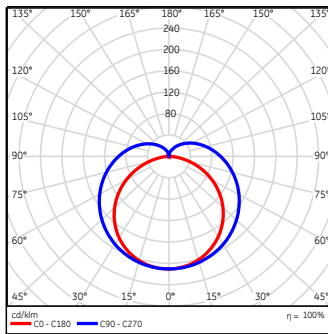
Product colour: White



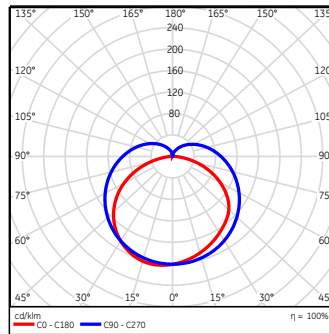
5W



8W

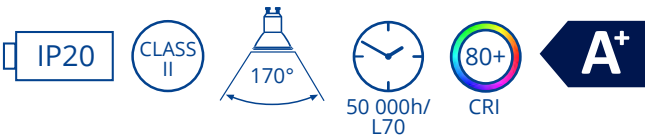


12W



16W

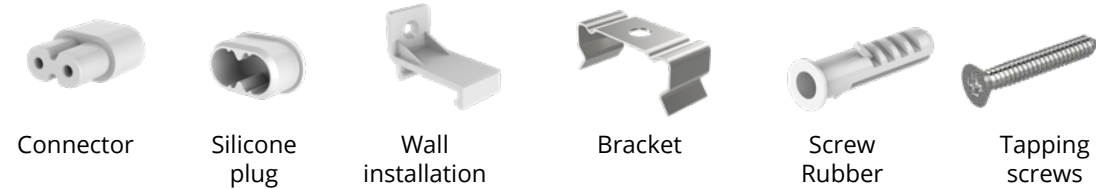
T5 Switch Batten



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
T5 Switch Batten - Static driver								
LED Batten G1 TU IP20 5W 1ft 830 S	93107521	5	550	3000	110	24x302	0,07	1
LED Batten G1 TU IP20 5W 1ft 840 S	93108068	5	550	4000	110	x35	0,07	1
LED Batten G1 TU IP20 8W 2ft 830 S	93107522	8	900	3000	110	24x602	0,115	1
LED Batten G1 TU IP20 8W 2ft 840 S	93108069	8	900	4000	110	x35	0,115	1
LED Batten G1 TU IP20 12W 3ft 830 S	93107523	12	1350	3000	110	24x902	0,16	1
LED Batten G1 TU IP20 12W 3ft 840 S	93108070	12	1350	4000	110	x35	0,16	1
LED Batten G1 TU IP20 16W 4ft 830 S	93107524	16	1800	3000	110	24x1184	0,2	1
LED Batten G1 TU IP20 16W 4ft 840 S	93108071	16	1800	4000	110	x35	0,2	1

Accessories	
Connecting cable(wire 200mm)	93107516
Power cable 1m with EU plug	93108089
Power cord without plug	93107515

The below accessories are included in the product.



Available from May 2020.



LED INDOOR SOLUTION

Battens

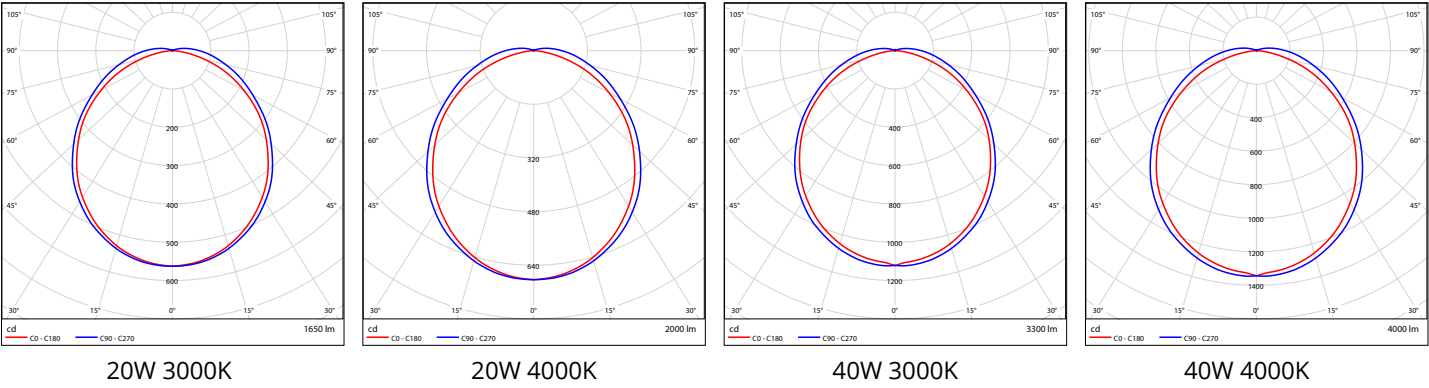
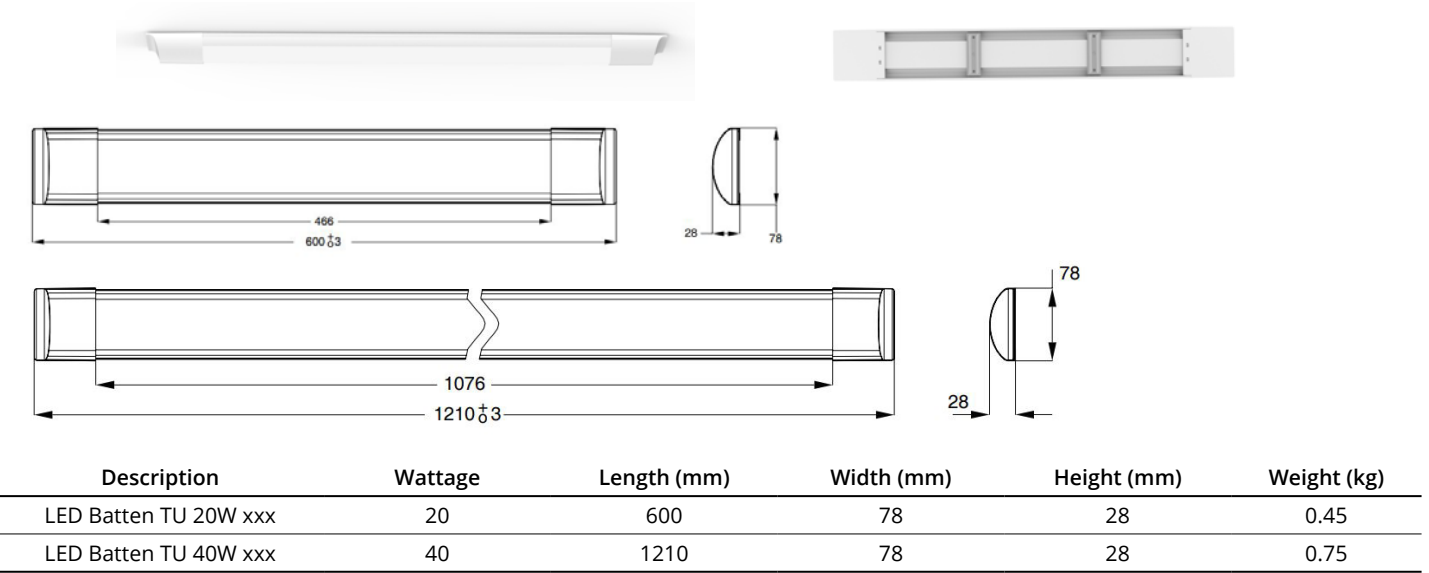


Batten IP65

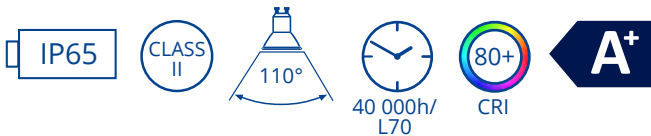
We designed the LED IP65 Batten to be a direct replacement for conventional battens while providing energy savings. Your best choice for smooth linear lighting; the available range is in 20W & 40W with the sizes of 600mm and 1200mm. Featuring high grade polycarbonate diffuser and housing, they are suitable for commercial and industrial use where moisture or dust is prevalent. The Weatherproof Batten range offers cost effective reliability and weatherproof resistance.

Benefits

- Easy to install, requires small space due to compact size
- Seamless linear lighting without dark spots
- Healthy - UV-free & IR-free
- Environmental: save up to 60% energy
- High color rendering: CRI>80
- High efficiency: up to 100lm/w



Batten IP65



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Batten IP65 - Static driver								
LED Batten TU 20W 600mm 3000K IP65	93114855	20	1650	3000	83	600x28x78	0.45	1
LED Batten TU 20W 600mm 4000K IP65	93114856	20	2000	4000	100	600x28x78	0.45	1
LED Batten TU 40W 1200mm 3000K IP65	93114857	40	3300	3000	83	1210x28x78	0.75	1
LED Batten TU 40W 1200mm 4000K IP65	93114858	40	4000	4000	100	1210x28x78	0.75	1



LED INDOOR SOLUTION

Bulkheads



Outdoor



General lighting



Retail



Education



Office

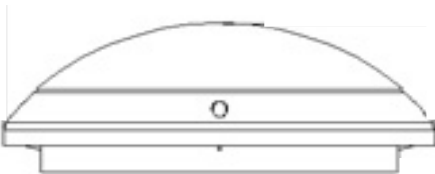
Integrated Bulkhead

A simple and elegant light fitting, designed with Integrated LED Light Module and dedicated optic, Integrated Bulkhead is for both interior and exterior applications, offering a comprehensive choice of versions including two sizes, opal diffuser, and an optional sensor function. It is a wall and ceiling LED luminaire easily utilised in versatile application ranges, including damp environments, entrance halls, receptions, stairwells, corridors, circulation routes, rest areas, and outside walls of buildings

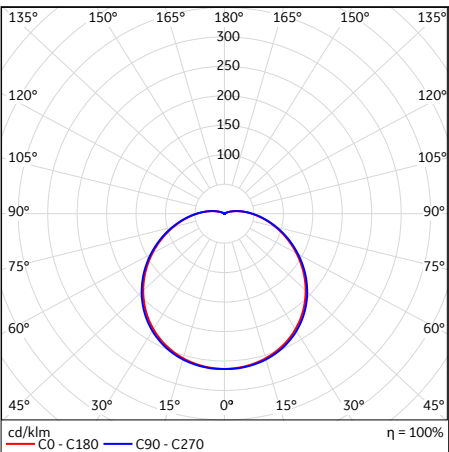


Benefits

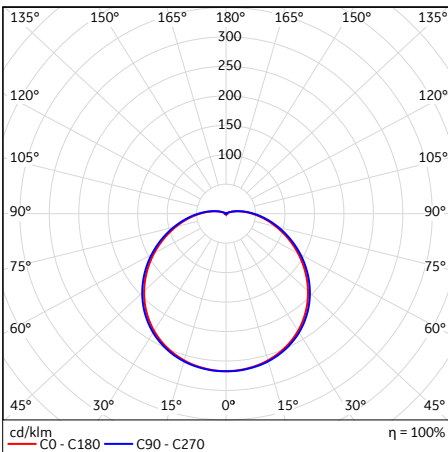
- Energy savings of up to 60% (compared to luminaires that use 2D fluorescent lamps)
- Integrated light module with optic
- Uniform light
- Fast, simple, and easy installation options
- Lasts ~4x longer than typical CFL bulkhead fixture
- High-protection rating (IP65) and high-impact resistance (IK10) make integrated LED bulkhead the ideal solution in challenging ambient conditions



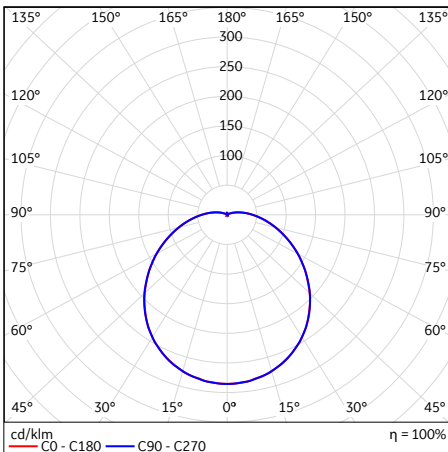
Range	Diameter	Height
D25	ø250mm	102mm
D30	ø300mm	109mm
D33	ø330mm	109mm



Ø250 9W

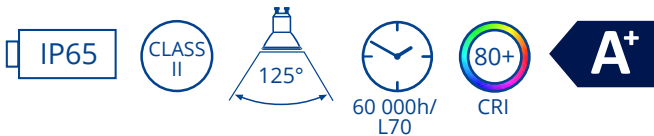


Ø250 17W



Ø300 25W

Integrated Bulkhead



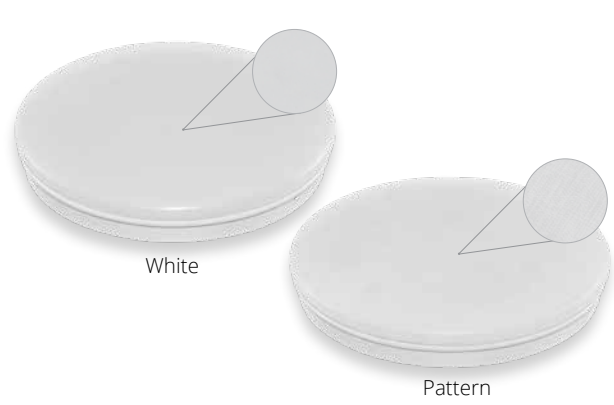
Product Description	Tungsum Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Additional feature	Pack Qty
Integrated Bulkhead - Static driver									
LED Bulkhead G1 TU D25 9W 830 S NNN	93107549	9	855	3000	95	Ø250 x 102	0.69		1
LED Bulkhead G1 TU D25 9W 840 S NNN	93107551	9	855	4000	95	Ø250 x 102	0.69		1
LED Bulkhead G1 TU D33 9W 840 S NNN	93100223	9	950	4000	106	Ø330 x 109	1.03		1
LED Bulkhead G1 TU D25 17W 830 S NNN	93107553	17	1 600	3000	94	Ø250 x 102	0.7		1
LED Bulkhead G1 TU D25 17W 840 S NNN	93107555	17	1 600	4000	94	Ø250 x 102	0.7		1
LED Bulkhead G1 TU D33 17W 840 S NNN	93100222	17	1 800	4000	106	Ø330 x 109	1.03		1
LED Bulkhead G1 TU D30 25W 830 S NNN	93107557	25	2 400	3000	96	Ø300 x 109	1		1
LED Bulkhead G1 TU D30 25W 840 S NNN	93107558	25	2 400	4000	96	Ø300 x 109	1		1
LED Bulkhead G1 TU D25 9W 830 S NNM	93107550	9	855	3000	95	Ø250 x 102	0.74		1
LED Bulkhead G1 TU D25 9W 840 S NNM	93107552	9	855	4000	95	Ø250 x 102	0.74		1
LED Bulkhead G1 TU D33 9W 840 S NNM	93100225	9	950	4000	106	Ø330 x 109	1.08		1
LED Bulkhead G1 TU D25 17W 830 S NNM	93107554	17	1 600	3000	94	Ø250 x 102	0.75		1
LED Bulkhead G1 TU D25 17W 840 S NNM	93107556	17	1 600	4000	94	Ø250 x 102	0.75		1
LED Bulkhead G1 TU D33 17W 840 S NNM	93100224	17	1 800	4000	106	Ø330 x 109	1.08		1
LED Bulkhead G1 TU D30 25W 830 S NNM	93107559	25	2 400	3000	96	Ø300 x 109	1.05		1
LED Bulkhead G1 TU D30 25W 840 S NNM	93107560	25	2 400	4000	96	Ø300 x 109	1.05		1
LED Bulkhead G1 TU D33 11W 840 S EMN	93102254	11	950	4000	86	Ø330 x 109	1.2		1
LED Bulkhead G1 TU D33 19W 840 S EMN	93102253	19	1 800	4000	95	Ø330 x 109	1.2		1
LED Bulkhead G1 TU D30 24W 830 S EMN	93108100	24	2 150	3000	90	Ø300 x 109	1.2		1
LED Bulkhead G1 TU D30 24W 840 S EMN	93108101	24	2 150	4000	90	Ø300 x 109	1.2		1
LED Bulkhead G1 TU D33 12W 840 S EMM	93102256	12	950	4000	79	Ø330 x 109	1.25		1
LED Bulkhead G1 TU D33 20W 840 S EMM	93102255	20	1 800	4000	90	Ø330 x 109	1.25		1
LED Bulkhead G1 TU D30 24W 830 S EMM	93108102	24	2 150	3000	90	Ø300 x 109	1.25		1
LED Bulkhead G1 TU D30 24W 840 S EMM	93108103	24	2 150	4000	90	Ø300 x 109	1.25		1

Please note that microwave sensors have specific sensitivity, therefore we recommend to consult the right choice with our sales representative or customer care team.



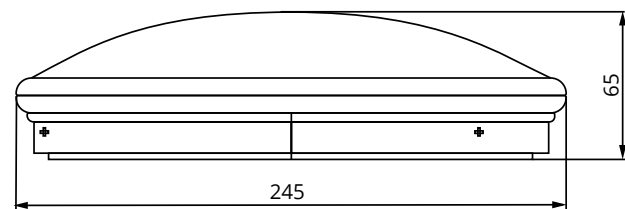
Bulkhead Ceiling Light

This is a simple and elegant light fitting, designed with Integrated LED Light Module for interior applications. A wall and ceiling LED luminaire, it can be utilised in versatile application ranges including entrance halls, receptions, stairwells, corridors, circulation routes, and rest areas of buildings.



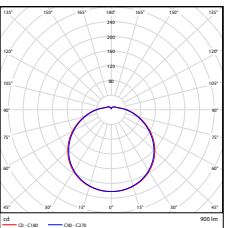
Benefits

- Light weight: up to 0.62kg
- Max ambient temperature: +25°C, „horizont light” category
- Lifespan 25 000 hours (L70)
- Fast, simple and easy installation options
- Colour rendering index: CRI 80+

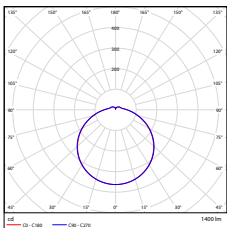


Wattage	D	H
12W	Ø245	65
18W	Ø315	65
24W	Ø365	65

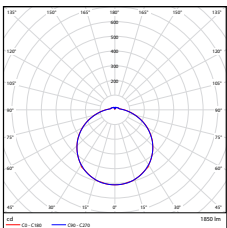
STANDARD COVER



12W 4000K

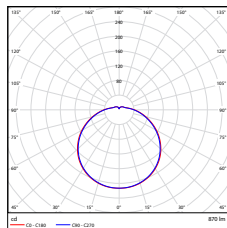


18W 4000K

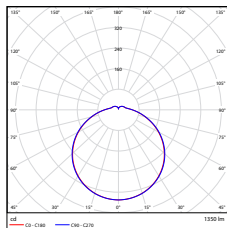


24W 4000K

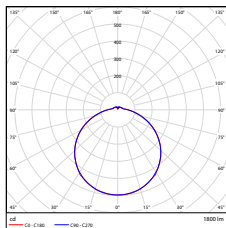
PATTERN COVER



12W 4000K

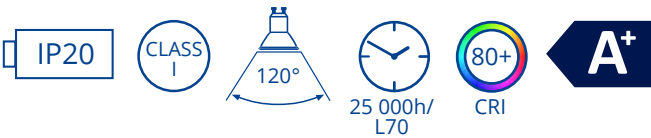


18W 4000K



24W 4000K

Bulkhead Ceiling Light



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Bulkhead Ceiling Light Standard Cover - Static driver								
LED Ceiling G1 TU SC 12W 830 SN IP20	93115048	12	900	3000	75	Ø245 x 65	0.35	1
LED Ceiling G1 TU SC 12W 840 SN IP20	93115049	12	900	4000	75	Ø245 x 65	0.35	1
LED Ceiling G1 TU SC 18W 830 SN IP20	93115050	18	1,400	3000	78	Ø315 x 65	0.55	1
LED Ceiling G1 TU SC 18W 840 SN IP20	93115051	18	1,400	4000	78	Ø315 x 65	0.55	1
LED Ceiling G1 TU SC 24W 830 SN IP20	93115052	22	1,850	3000	77	Ø365 x 65	0.62	1
LED Ceiling G1 TU SC 24W 840 SN IP20	93115053	22	1,850	4000	77	Ø365 x 65	0.62	1
Bulkhead Ceiling Light Standard Pattern - Static driver								
LED Ceiling G1 TU PC 12W 830 SN IP20	93115054	12	870	3000	73	Ø245 x 65	0.35	1
LED Ceiling G1 TU PC 12W 840 SN IP20	93115055	12	870	4000	73	Ø245 x 65	0.35	1
LED Ceiling G1 TU PC 18W 830 SN IP20	93115056	18	1,350	3000	75	Ø315 x 65	0.55	1
LED Ceiling G1 TU PC 18W 840 SN IP20	93115057	18	1,350	4000	75	Ø315 x 65	0.55	1
LED Ceiling G1 TU PC 24W 830 SN IP20	93115058	22	1,800	3000	75	Ø365 x 65	0.62	1
LED Ceiling G1 TU PC 24W 840 SN IP20	93115059	22	1,800	4000	75	Ø365 x 65	0.62	1



LED INDOOR SOLUTION

Floodlights



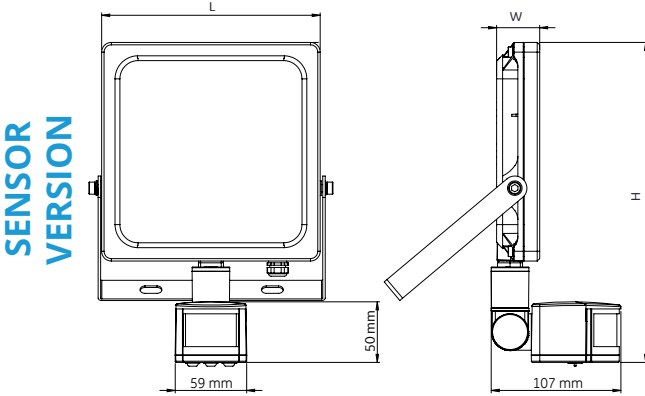
Floodlights

LED Floodlight is a universal, compact range of floodlights with six lumen output levels from 2.000 to 20.000lm and up to 130 LPW efficiency. The range is suitable for wall-mounted applications around building facades, ideal for the classic floodlighting of buildings, as well as lighting for gardens, paths near to buildings, garages or entrance ways. Tungsram LED Floodlight supplies immediate light without start-up or cooling-down times. Thanks to a robust aluminium housing and the safety glass cover, the floodlights are ideal for outdoor use.



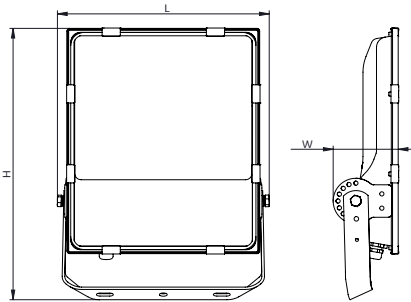
Benefits

- Replacement for floodlight luminaires with halogen lamps (up to 1500W)
- Energy savings up to 90% (compared to luminaires that use halogen)
- Homogenous light
- High-resistance against ambient air with humidity and high particle loads
- Static built-in driver
- 3000K, 4000K, 6500K versions



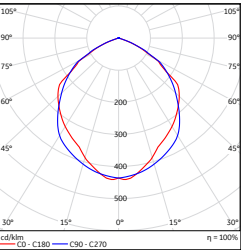
Type	L (mm)	W (mm)	H (mm)
LED Flood G1 TU S 20W...BM	263±1	36	163±1
LED Flood G1 TU S 30W...BM	303±1	36	202±1
LED Flood G1 TU S 50W...BM	323±1	36	216±1

STANDARD VERSION

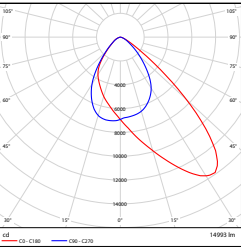


Type	L (mm)	W (mm)	H (mm)
LED Flood G1 TU S 20W...BN	163±1	36	163±1
LED Flood G1 TU S 30W...BN	203±1	36	202±1
LED Flood G1 TU S 50W...BN	223±1	36	216±1
LED Flood G1 TU S 75W...BN	286±1	91	368±1
LED Flood G1 TU S 115W...BN	337±1	91	419±1
LED Flood G1 TU S 150W...BN	373±1	91	450±1

Symmetric optic



Asymmetric optic



Up to 20000lm

Floodlights



LED Indoor

Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	IP	Rated life L70 (h)	Dimensions (mm)	Beam Angle (°)	Weight (kg)	Pack Qty
Floodlight Symmetrical - Static driver											
LED Flood G1 TU S 20W 830 SY ST BN	93115907	20	1800	3000	90	65	30k	163x36x163	100 without reflector	0,62	1
LED Flood G1 TU S 20W 840 SY ST BN	93101677	20	2 000	4000	100	65	30k	163x36x163		0,62	1
LED Flood G1 TU S 20W 865 SY ST BN	93107561	20	2 000	6500	100	65	30k	163x36x163		0,62	1
LED Flood G1 TU S 30W 830 SY ST BN	93115908	30	2800	3000	93	65	30k	203x36x202		0,97	1
LED Flood G1 TU S 30W 840 SY ST BN	93101678	30	3 000	4000	100	65	30k	203x36x202		0,97	1
LED Flood G1 TU S 30W 865 SY ST BN	93107562	30	3 000	6500	100	65	30k	203x36x202		0,97	1
LED Flood G1 TU S 50W 830 SY ST BN	93115909	50	5600	3000	110	65	30k	223x36x216	100 without reflector	1,14	1
LED Flood G1 TU S 50W 840 SY ST BN	93101679	50	6 000	4000	120	65	30k	223x36x216		1,14	1
LED Flood G1 TU S 50W 865 SY ST BN	93107563	50	6 000	6500	120	65	30k	223x36x216		1,14	1
LED Flood G1 TU S 75W 830 SY ST BN	93115910	75	9000	3000	120	66	50k	286x91x368		3,29	1
LED Flood G1 TU S 75W 840 SY ST BN	93101680	75	10 000	4000	133	66	50k	286x91x368		3,29	1
LED Flood G1 TU S 75W 865 SY ST BN	93107564	75	10 000	6500	133	66	50k	286x91x368		3,29	1
LED Flood G1 TU S 115W 830 SY ST BN	93115911	115	14000	3000	122	66	50k	337x91x419	120 without reflector	4,20	1
LED Flood G1 TU S 115W 840 SY ST BN	93101681	115	15 000	4000	130	66	50k	337x91x419		4,20	1
LED Flood G1 TU S 115W 865 SY ST BN	93107565	115	15 000	6500	130	66	50k	337x91x419		4,20	1
LED Flood G1 TU S 150W 830 SY ST BN	93115912	150	18500	3000	123	66	50k	373x91x450		5,33	1
LED Flood G1 TU S 150W 840 SY ST BN	93101683	150	20 000	4000	133	66	50k	373x91x450		5,33	1
LED Flood G1 TU S 150W 865 SY ST BN	93107566	150	20 000	6500	133	66	50k	373x91x450		5,33	1
LED Flood G1 TU S 20W 840 SY ST BM *	93107575	20	2 000	4000	100	65	30k	263x36x163	100 without reflector	0,62	1
LED Flood G1 TU S 20W 865 SY ST BM *	93107576	20	2 000	6500	100	65	30k	263x36x163		0,62	1
LED Flood G1 TU S 30W 840 SY ST BM *	93107577	30	3 000	4000	100	65	30k	303x36x202		0,97	1
LED Flood G1 TU S 30W 865 SY ST BM *	93107578	30	3 000	6500	100	65	30k	303x36x202		0,97	1
LED Flood G1 TU S 50W 840 SY ST BM *	93107579	50	6 000	4000	120	65	30k	323x36x216		1,14	1
LED Flood G1 TU S 50W 865 SY ST BM *	93107580	50	6 000	6500	120	65	30k	323x36x216		1,14	1
Floodlight Asymmetrical - Static driver											
LED Flood G1 TU S 115W 840 AS ST BN	93101682	115	14 375	4000	125	66	50k	373x91x450	45x85 asym.	5,33	
LED Flood G1 TU S 150W 840 AS ST BN	93101684	150	18 000	4000	120	66	50k	373x91x450		5,33	

* With Motion Sensor



LED INDOOR SOLUTION

Floodlights



Public
areas



Car park /
Garage



Industrial



Building
facades



Construction
areas

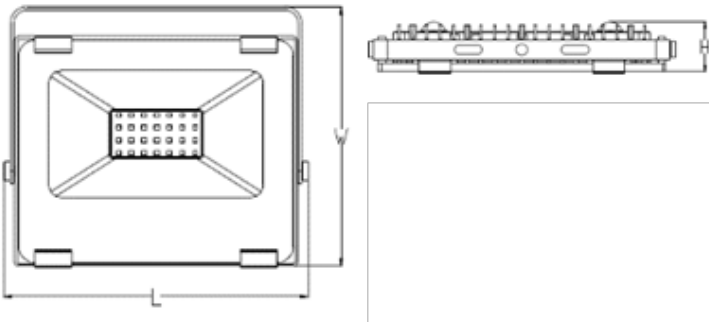
Floodlight Symmetrical ECO

LED Floodlight is a universal, compact range of floodlights with lumen output levels from 800 to 9000 lumen and up to 90 LPW efficiency. The range is suitable for various applications wall-mounted around building facades, ideal for the classic floodlighting of buildings as well as lighting for gardens, paths near to buildings, garages, entrance ways and drives. Compared to traditional floodlights, Tungsram LED Floodlight supplies immediate light without start-up or cooling-down times. Thanks to a robust aluminum housing with safety glass cover, the floodlights are ideal for outdoor use.

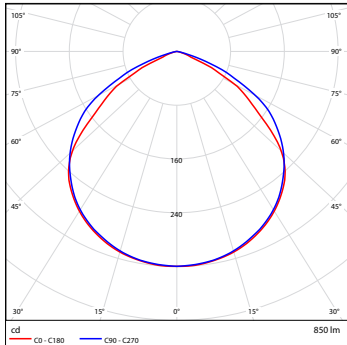


Benefits

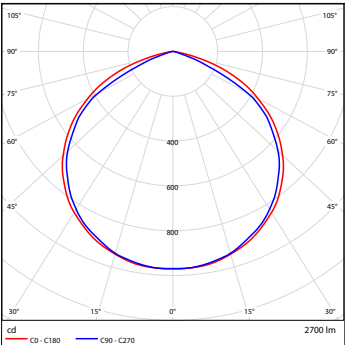
- Replace halogen lamps with floodlight luminaires (up to 750W)
- Energy savings up to 80% (compared to luminaires that use halogen)
- Homogenous light
- High resistance against ambient air with humidity and high particle loads (IP65)



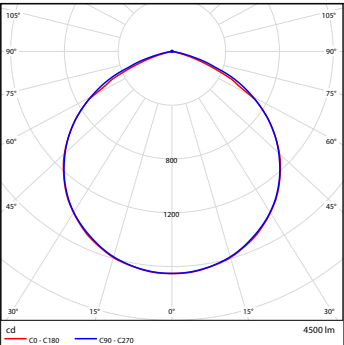
Wattage	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
10W	103	97	23.5	0.284
30W	242	190	41	1.085
50W	285	225	48	1.529
100W	340	262	48	2.223



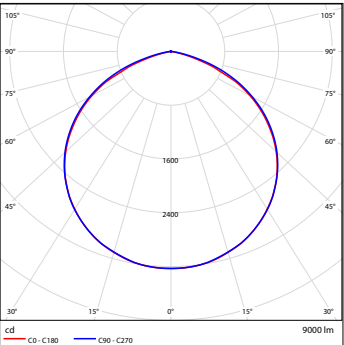
10W



30W



50W



100W

Floodlight Symmetrical ECO



Product Description

Tungsram
Product
Code

Wattage
(W)

Lumen
(lm)

CCT
(K)

System
Efficiency
(lm/W)

Dimensions
(mm)

Weight
(kg)

Pack
Qty

Floodlight Symmetrical ECO - Static driver

LED Flood G2 TU S 10W 830 SY ST GN	93115851	10	800	3000	80	106x108x27	0.28	1
LED Flood G2 TU S 10W 840 SY ST GN	93115847	10	850	4000	85	106x108x27	0.28	1
LED Flood G2 TU S 30W 830 SY ST GN	93115852	30	2 550	3000	85	250x173x42	1.09	1
LED Flood G2 TU S 30W 840 SY ST GN	93115848	30	2 700	4000	90	250x173x42	1.09	1
LED Flood G2 TU S 50W 830 SY ST GN	93115853	50	4 250	3000	85	290x213x46	1.53	1
LED Flood G2 TU S 50W 840 SY ST GN	93115849	50	4 500	4000	90	290x213x46	1.53	1
LED Flood G2 TU S 100W 830 SY ST GN	93115854	100	8 500	3000	85	345x250x48	2.22	1
LED Flood G2 TU S 100W 840 SY ST GN	93115850	100	9 000	4000	90	345x250x48	2.22	1





LED Emergency Converter Kit

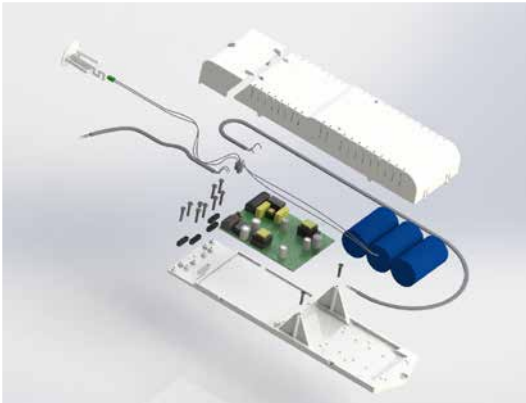
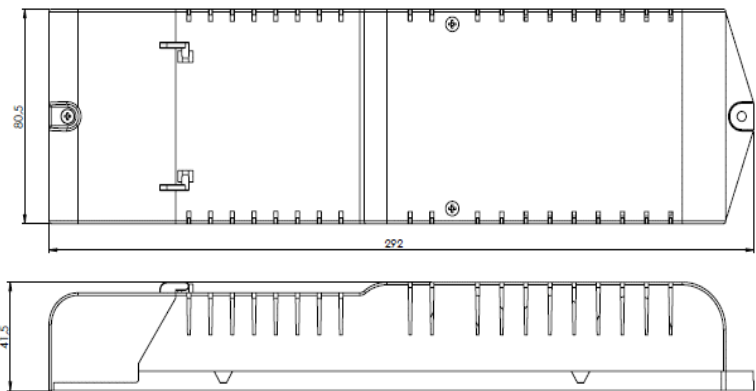
This emergency lighting unit is a conversion kit remote box for operating Tungsram LED luminaires in emergency mode. The conversion kit is suitable for converting existing light fittings to emergency operation. It provides a sensible solution when fitting dedicated emergency luminaires is not possible. It supports a variety of LED light sources offering standard, self-test, and DALI self-test. Compact polycarbonate case contains electronics and battery for external installation outside the luminaire for usage in protection class II luminaires.



Benefits

- Constant power output in emergency mode
- Ground connection for LED-driver and LED module on main terminal
- Suitable for escape route lighting, back-up lighting and particularly hazardous workplaces
- Deep discharge protection
- Premium Lithium batteries (LiFePO4) - compared to lead acid batteries

- Premium Lithium batteries (LiFePO4) - compared to lead acid batteries - offer significant advantages:
 - **Safety and stability:** In case of hazardous events, such as collision or short-circuiting, this type of battery does not explode or catch fire, significantly reducing any chance of harm. It can reach 350°C to 500°C.
 - **Environmental Impact:** The batteries are non-toxic, non-contaminating, and contain no rare-earth metals, making them an environmentally conscious choice. Lead acid and nickel oxide lithium batteries, by comparison, carry significant environmental risk.
 - **Light weight:** The dimension of a battery of the same size is 2/3 of the size of a lead acid battery, and a third of the weight of a lead acid battery.
 - **Performance:** The batteries perform well in several areas, especially life span. Service life is usually 'least five to six years. Energy density is typically lower than certain counterparts, such as cobalt and nickel oxide. Battery charging time is also considerably reduced, another convenient performance perk.
 - **Improved discharge efficiency:** Ability to deep cycle while maintaining performance. The minimal maintenance and infrequent replacement makes lithium a worthwhile investment and smart long-term solution.



LED Emergency Converter Kit



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Dimensions (mm)	Weight (kg)	Pack Qty
LED Emergency Converter Kit - Static driver							
Emergency Kit G1 TU 3 Li N	93100237	3	-	6000	292x81x41	0.415	1
Emergency Kit G1 TU 3 Li S	93100238	3	-	6000	292x81x41	0.415	1
LED Emergency Converter Kit - DALI driver							
Emergency Kit G1 TU 3 Li D	93100239	3	-	6000	292x81x41	0.415	1

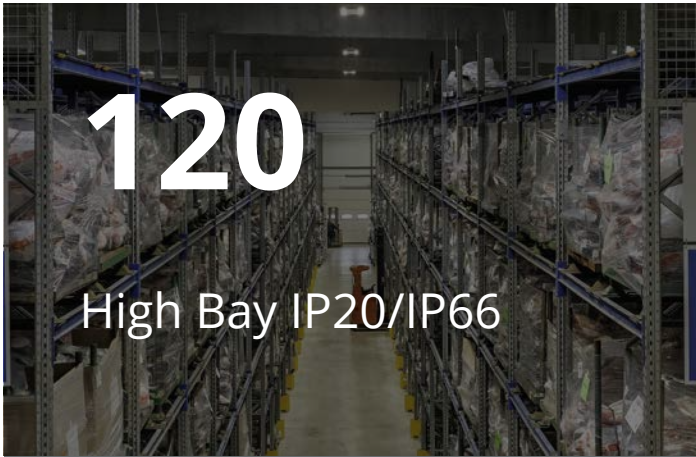
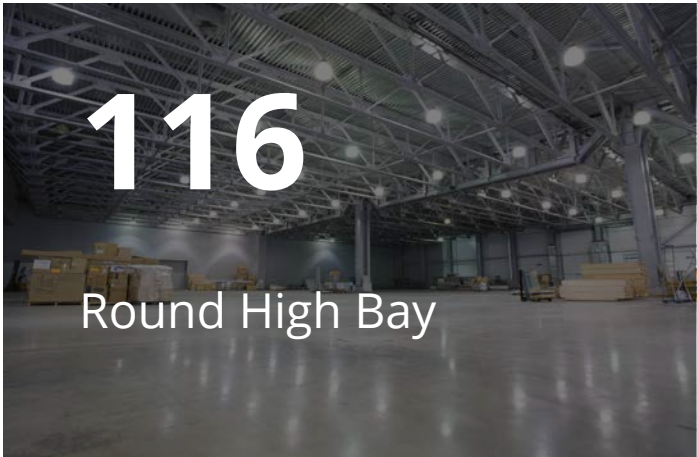




INDUSTRIAL SOLUTIONS

Light affects how we perform at work and how we perceive the professional environment around us. Selecting the optimal light for industrial facilities impacts not only trivial practicalities such as accident prevention but also our coworkers' psychological state.

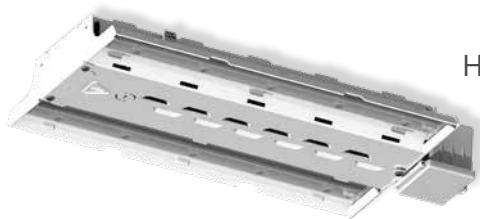
Our range of industrial products helps you take full advantage of the safety and cost-cutting opportunities presented by today's advanced LED lighting systems. In typical cases of facilities, 20% of all electric costs are due to their lighting. We offer an opportunity to reduce these costs significantly, with a marginal investment. Get to know more about lighting opportunities that can help you reconsider and reduce your costs while establishing a better place for quality work to happen.



Round
High-bay



Round
High-bay
with
HoneyComb



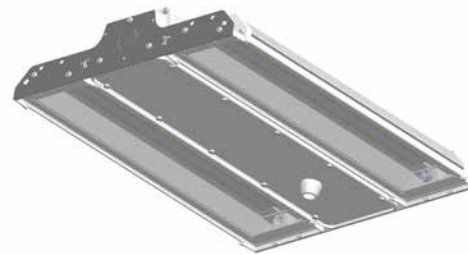
HB IP20



HB IP20
NEDAP Node



HB IP66



HB IP66
NEDAP Node



Linear High
Bay

LED INDOOR SOLUTION

Round High Bay



LED Round High Bay IP65 G1

The Tungsram Round High Bay G1 range has a massive industrial aesthetic that makes it suitable for applications in a facility that has high ceilings and requires illumination of six meter or more. It is designed as a simple point-to-point replacement for conventional high-bay luminaires with 250 and 400 W mercury vapor or metal halide lamps. The 4-5x longer lifetime vs HID lamps provides significant reduction in maintenance costs without the use of mercury and other hazardous materials. Its light flow can be dimmed from 0-10V or DALI, allowing us to adjust the brightness of the light emitted, in function with the needs of each moment.



Benefits

- The luminaire can be installed on the existing grid.
- Optimized weight and size due to compact design
- High resistance against ambient air with humidity and high-particle loads
- Simple refurbishment solution thanks to use of existing installation points with freely positionable mounting clips
- Fast and simple installation due to quick connector
- Aluminium body to optimize heat performance



High Bay Reflector 70°



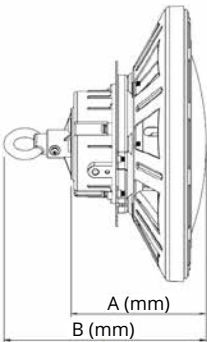
High Bay Reflector 90°



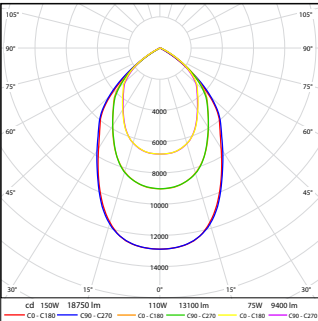
High Bay Surface Mount Kit



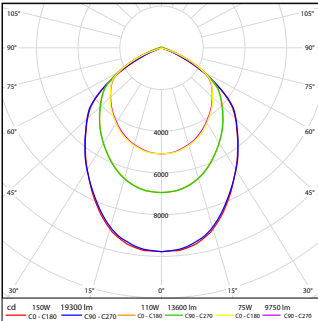
High Bay Chain



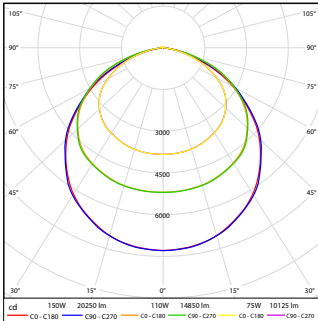
Product	Wattage	ø (mm)	A (mm)	B (mm)
High Bay TU Gen1 70W	70w	300	142	213
High Bay TU Gen1 75W	75w	300	142	213
High Bay TU Gen1 105W	105w	300	142	213
High Bay TU Gen1 110W	110w	300	142	213
High Bay TU Gen1 140W	140w	300	131	202
High Bay TU Gen1 150W	150w	300	131	202
High Bay TU Gen1 200W	200w	360	131	202



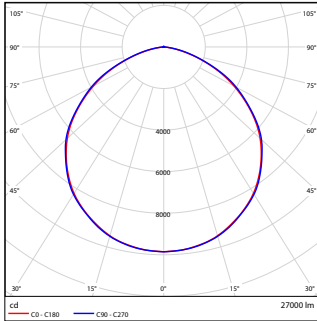
75-110-150W - 70°



75-110-150W - 90°

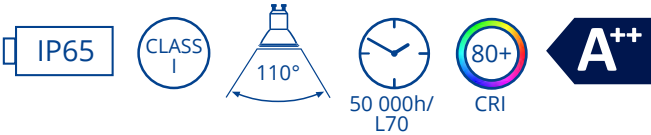


75-110-150W - 110°



200W - 110°

LED Round High Bay IP65 G1



Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Round High Bay IP65 Gen1 - 0-10V driver								
High Bay TU Gen1 70W 4000K 2A 110°	93115795	70	10 150	4000	145	Ø300x213	2.43	1
High Bay TU Gen1 70W 6500K 2A 110°	93115796	70	10 150	6500	145	Ø300x213	2.43	1
High Bay TU Gen1 75W 4000K 2A 110°	93103286	75	10 125	4000	135	Ø300x213	2.43	1
High Bay TU Gen1 105W 4000K 2A 110°	93115793	105	15 225	4000	145	Ø300x213	2.43	1
High Bay TU Gen1 105W 6500K 2A 110°	93115797	105	15 225	6500	145	Ø300x213	2.43	1
High Bay TU Gen1 110W 4000K 2A 110°	93101700	110	15 525	4000	135	Ø300x213	2.43	1
High Bay TU Gen1 140W 4000K 2A 110°	93115794	140	20 300	4000	145	Ø302x213	2.5	1
High Bay TU Gen1 140W 6500K 2A 110°	93115798	140	20 300	6500	145	Ø302x213	2.5	1
High Bay TU Gen1 200W 4000K 2A 110°	93101703	200	27 000	4000	135	Ø360x207	3.04	1
High Bay TU Gen1 200W 6500K 2A 110°	93103290	200	27 000	6500	135	Ø360x207	3.04	1
Round High Bay IP65 Gen1 - DALI driver								
High Bay TU Gen1 150W 4000K 2D 110°	93101702	150	20 250	4000	135	Ø302x213	2.5	1
High Bay TU Gen1 200W 4000K 2D 110°	93101704	200	27 000	4000	135	Ø360x207	3.04	1
LED Round High Bay IP65 Accessories								
High Bay Chain	93105658	-	-	-	-	-	-	-
High Bay Reflector 90°	93105659	-	-	-	-	-	-	-
High Bay Reflector 70°	93105660	-	-	-	-	-	-	-
High Bay Reflector 90° 200W	93111515	-	-	-	-	-	-	-
High Bay Reflector 70° 200W	93112596	-	-	-	-	-	-	-
High Bay Surface mount Kit	93105661	-	-	-	-	-	-	-



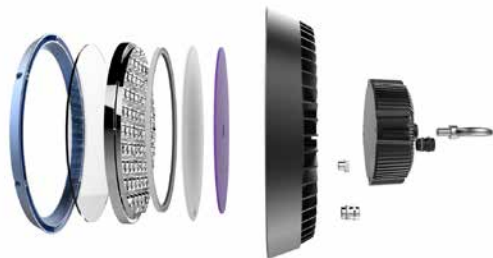
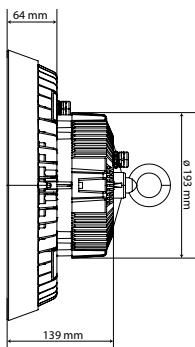
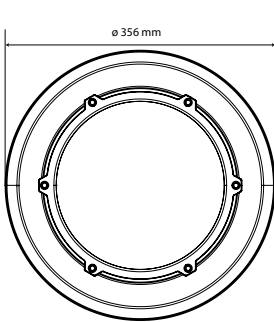
Round High Bay IP65 G2
HoneyComb

The IP65 Round High Bay with HoneyComb® optic is designed to replace traditional high ceiling fixture applications. The HoneyComb®, optic together with the specially designed housing frame, provides a dual anti-glare and more comfortable UGR level in all industrial areas (<UGR22, RG0). The lower glare means a more comfortable light for your working environment while the efficacy is above 135lm/W, which provides additional savings. The robust design offers a long lifetime solution for all applications.



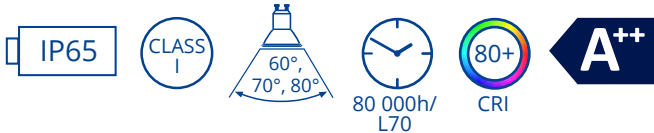
Benefits

- Designed for replacement of conventional high-bays with HID lamps up to 400W
- High luminous efficiency and energy savings up to 70% compared to conventional high bay fixtures
- An affordable solution for retrofit or new installations
- Different accessories for available for versatile installation: suspension chain or metal bracket
- Installation height is up to 20m



Model	Wattage	Fixture diameter (mm)	Fixture height incl driver and hook (mm)	Weight incl driver (kg)	Driver size (mm)	Control
High Bay TU Gen2 90Wxxx	90W	280	190	2.66	Ø132*71	DALI
High Bay TU Gen2 100Wxxx	100W	280	190	2.66	Ø132*71	Static/1-10V/Sensor
High Bay TU Gen2 140Wxxx	140W	360	210	3.08	Ø151*71	DALI
High Bay TU Gen2 150Wxxx	150W	360	210	3.08	Ø151*71	DALI
High Bay TU Gen2 190Wxxx	200W	360	210	5.50	Ø182*71	Static/1-10V/Sensor
High Bay TU Gen2 200Wxxx	230W	360	210	5.50	Ø182*71	DALI

Round High Bay IP65 G2
HoneyComb



Product Description	Tungsrø Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Beam angle (°)	UGR	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Round High Bay IP65 Gen2 HoneyComb - Static driver										
High Bay TU Gen2 100W-4000K-2S-70°	93114906	100	13 500	4000	70	<23.2	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-4000K-2M-70° *	93114908	100	13 500	4000	70	<22.7	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2S-70°	93114910	100	13 500	5000	70	<23	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2M-70° *	93114912	100	13 500	5000	70	<23.1	135	Ø280x190	2.66	1
High Bay TU Gen2 140W-4000K-2S-80°	93114914	140	18 900	4000	80	<25.2	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2S-60°	93114915	140	18 900	4000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2M-80° *	93114918	140	18 900	4000	80	<24.7	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2M-60° *	93114919	140	18 900	4000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2S-80°	93114922	140	18 900	5000	80	<24.8	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2S-60°	93114923	140	18 900	5000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2M-80° *	93114926	140	18 900	5000	80	<24.7	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2M-60° *	93114927	140	18 900	5000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 190W-4000K-2S-80°	93114930	190	24 700	4000	80	<25.6	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2S-60°	93114931	190	24 700	4000	60	<22.1	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2M-80° *	93114934	190	24 700	4000	80	<26	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2M-60° *	93114935	190	24 700	4000	60	<22.1	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2S-80°	93114938	190	24 700	5000	80	<25.6	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2S-60°	93114939	190	24 700	5000	60	<22.1	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2M-80° *	93114942	190	24 700	5000	80	<26	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2M-60° *	93114943	190	24 700	5000	60	<22.1	130	Ø360x210	5.50	1
Round High Bay IP65 Gen2 HoneyComb - 1-10V driver										
High Bay TU Gen2 100W-4000K-2A-70°	93114907	100	13 500	4000	70	<23.5	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2A-70°	93114911	100	13 500	5000	70	<23.5	135	Ø280x190	2.66	1
High Bay TU Gen2 140W-4000K-2A-80°	93114916	140	18 900	4000	80	<25.2	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2A-60°	93114917	140	18 900	4000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2A-80°	93114924	140	18 900	5000	80	<25.2	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2A-60°	93114925	140	18 900	5000	60	<21	135	Ø360x210	3.08	1
High Bay TU Gen2 190W-4000K-2A-80°	93114932	190	24 700	4000	80	<26	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2A-60°	93114933	190	24 700	4000	60	<22.1	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2A-80°	93114940	190	24 700	5000	80	<26	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2A-60°	93114941	190	24 700	5000	60	<22.1	130	Ø360x210	5.50	1
Round High Bay IP65 Gen2 HoneyComb - DALI driver										
High Bay TU Gen2 90W-4000K-2D-70°	93114909	90	12 150	4000	70	<22.5	135	Ø280x190	2.66	1
High Bay TU Gen2 90W-5000K-2D-70°	93114913	90	12 150	5000	70	<22.5	135	Ø280x190	2.66	1
High Bay TU Gen2 150W-4000K-2D-80°	93114920	150	19 500	4000	80	<25.2	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-4000K-2D-60°	93114921	150	19 500	4000	60	<21.2	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-5000K-2D-80°	93114928	150	19 500	5000	80	<25.2	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-5000K-2D-60°	93114929	150	19 500	5000	60	<21.1	130	Ø360x210	3.08	1
High Bay TU Gen2 230W-4000K-2D-80°	93114936	230	28 750	4000	80	<25.8	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-4000K-2D-60°	93114937	230	28 750	4000	60	<22.6	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-5000K-2D-80°	93114944	230	28 750	5000	80	<25.8	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-5000K-2D-60°	93114945	230	28 750	5000	60	<22.6	125	Ø360x210	5.50	1
Round High Bay IP65 Gen2 HoneyComb Accessories										
High Bay TU Gen2 Bracket for 280	93115197	-	-	-	-	-	-	-	-	1
High Bay TU Gen2 Bracket for 360	93115198	-	-	-	-	-	-	-	-	1
High Bay TU Gen2 Remote Control	93115198	-	-	-	-	-	-	-	-	1

* With Motion sensor

LED INDOOR SOLUTION

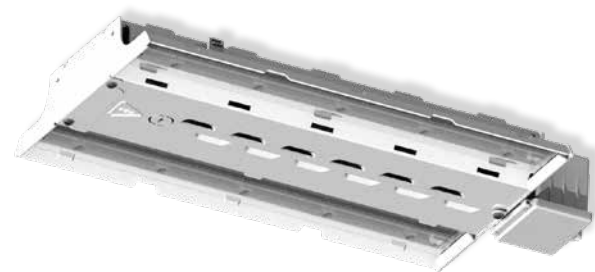
High Bay



High Bay



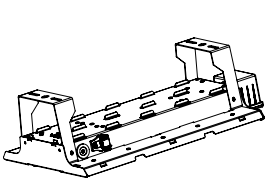
The new Tungsram High Bay LED luminaire is an exceptional mixture of value and performance. The product range has been upgraded to reach very high efficacy- up to 177 lm/w and cover lumen packages between 10,000 - 60,000 lumens. The range includes DALI and various sensor versions, such as the Nedap Luxon IoT Node, to enable internet connection and wireless control of the luminaire range. With the improved efficacy, wide range of control options, and higher lumen output, the HB IP20 is an ideal choice to replace high-watt HID and T5/T8 LFL fixtures in high bay and low bay applications, in industrial and commercial buildings.



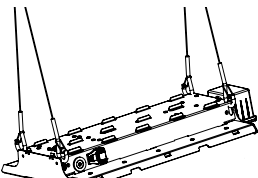
Benefits

- Combination of steel and aluminium housing
- HB IP20 Series' design accommodates 1 or 2 modules with 2 LED units per module
- Various mounting options: Cable or threaded rod kit.
- System power factor is >90% and THD <20%
- IP50 protection level for the optical compartment for all lenses - 30, 60 and 90 degree optics are dust protected.
- IK10 protection level for Fix output and DALI versions. IK 08 for sensor types, IK03 for Emergency version.
- TU HB Series optical system enables LEDs to provide optimized illumination for open floor and racked aisles with photometric distributions of 30, 60, 80, 90, 100 and 120 degrees.

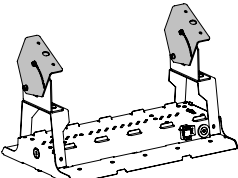
MOUNTING



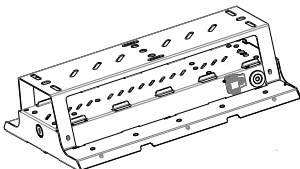
Rod Mount (optional)



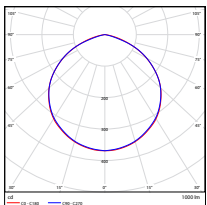
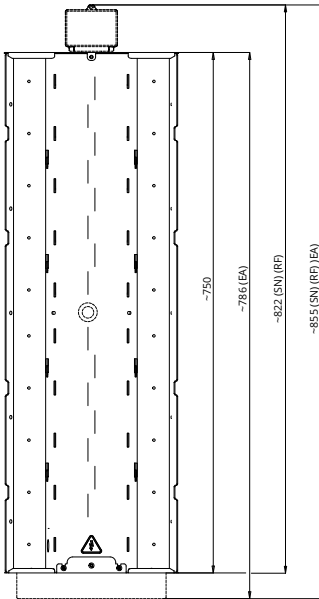
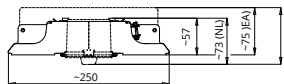
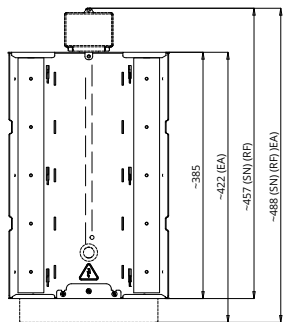
Y-Cable w/hook (optional)



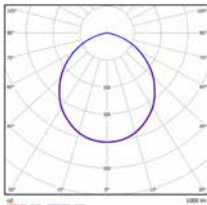
Tilted bracket kit



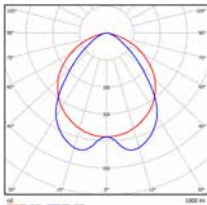
Busbar bracket kit (optional)



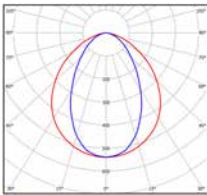
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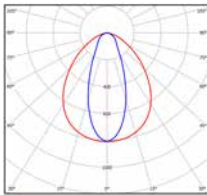
D1



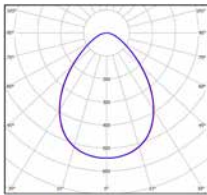
L9



L6



L3



U1

High Bay



Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Control	Options ¹
TU High bay - High efficiency					
TU HB IP20 G1	1H10 - 1M High 10klm		C1-120° Clear		
	1H15 - 1M High 15klm	4K-4000K 70 CRI70	D1-100° Diffuse		
	1H20 - 1M High 20klm	5K-5000K 70 CRI70	U1 - 80° Diffuse	DL-DALI	ST-Standard
	1H25 - 1M High 25klm	4K-4000K 80 CRI80	L9-90° Clear	RF-RF sensor (Motion and Lux)	EA-EM auto-test
	2H30 - 2M High 30klm	5K-5000K 80 CRI80	L6-60° Clear		
	2H45 - 2M High 45klm		L3-30° Clear		
TU High bay - Standard Efficiency					
TU HB IP20 G1	1S10 - 1M Std 10klm		C1-120° Clear	FX-Fix output	
	1S12 - 1M Std 12 klm	4K-4000K 70 CRI70	D1-100° Diffuse	DL-DALI	ST-Standard
	1S20 - 1M Std 20klm	5K-5000K 70 CRI70	L9-90° Clear	SN-Sensor (On/OFF)	EA-EM auto-test
	1S22 - 1M Std 22 klm	4K-4000K 80 CRI80	L6-60° Clear		
	1S30 - 1M Std 30klm	5K-5000K 80 CRI80	L3-30° Clear	RF-RF sensor (Motion and Lux)	
	2S60 - 2M Std 60klm ***				

Module / Efficiency / Lumen	5000K 70CRI Clear 120° Optics DALI Driver			
	Module	Power(W)**	Lumen	lm/W
1H10	1	56	9900	177
1H15	1	85	15000	176
1H20	1	116	19500	168
1H25*	1	155	25000	161
2H30*	2	170	29200	172
2H45	2	272	45200	166
1S10	1	67	9670	144
1S12	1	92	13500	147
1S20	1	141	19900	141
1S22*	1	162	23500	145
1S30*	1	199	29200	147
2S60	2	435	60000	138

CCT/CRI multipliers	
5K70	100%
5K80	96%
4K70	96%
4K80	95%

Optical multipliers	
C1	100%
D1	90%
U1	94%
L9	100%
L6	101%
L3	98%

Our products are in compliance with IEC 60598-2-1:1979+A1:1987 used in conjunction with IEC 60598-1:2014.

* 1H25, 2H30, 1S22 and 1S30 have two drivers and DALI versions have two DALI addresses.

** Fixed output and sensor versions could have slightly different values.

*** 2S60 is available at FX and SN version.

LED INDOOR SOLUTION

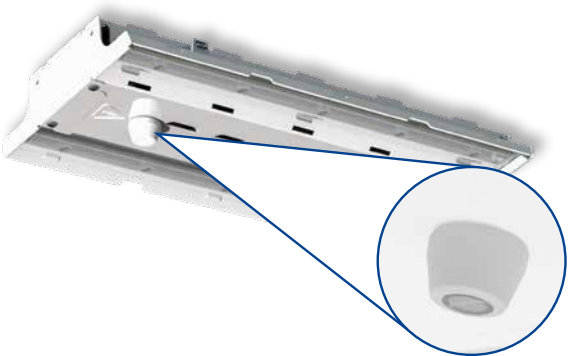
High Bay



High Bay IP20 - NEDAP Node



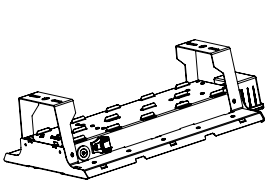
The high performing Tungsram High Bay industrial fixture range is equipped with a Nedap Luxon IoT Node to to allow wireless control of the luminare range. The TU HB range has been upgraded to reach a very high efficacy of 174 lm/w and cover lumen packages between 9.000 - 45.000 lumens. This new range is ideal to replace high-watt HID and T5/T8 LFL fixtures in high bay and low bay applications in industrial and commercial buildings.



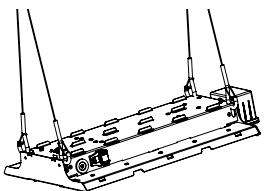
Benefits

- The NEDAP Luxon IoT allows you to have a wirelessly connected lighting system; this enables easy control locally or centrally using a cloud-based system.
- Equipped with Nedap Luxon IoT node and best-in-class Sensor Ready driver
- TU HB Series optical system enables LEDs to provide optimized illumination for open floor and racked aisles with photometric distributions of 30, 60, 80, 90, 100 and 120 degrees.
- IP50 protection level for the optical compartment for all lenses - 30, 60 and 90 degree optics are dust protected.

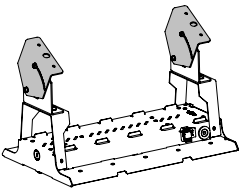
MOUNTING



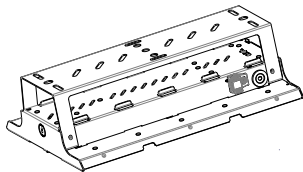
Rod Mount (optional)



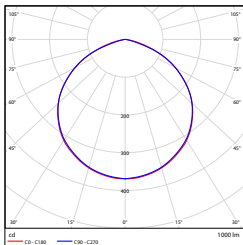
Y-Cable w/hook (optional)



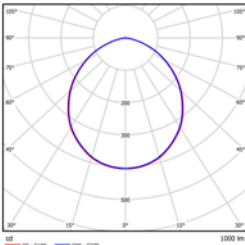
Tilted bracket kit



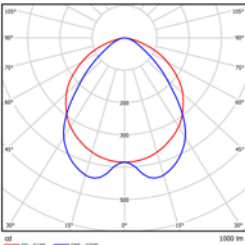
Busbar bracket kit (optional)



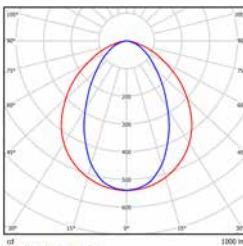
C1



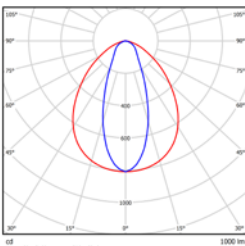
D1



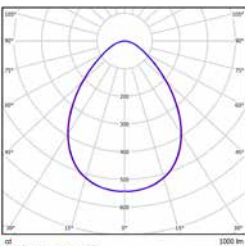
L9



L6



L3



U1

High Bay IP20 - NEDAP Node



LED Indoor

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Options 1	Options 2
TU High Bay IP20 - NEDAP IoT Node					
TU HB IP20 G1	1H10 - 1M High 10klm	4K-4000K 70 CRI70	C1-120° Clear	NL-Nedap Luxon	ST-Standard EA-EM auto-test *
	1H15 - 1M High 15klm		D1-100° Diffuse		
	1H20 - 1M High 20klm	5K-5000K 70 CRI70	U1 - 80° diffuse		
	1H25 - 1M High 25klm	4K-4000K 80 CRI80	L9-90° Clear		
	2H30 - 2M High 30klm	5K-5000K 80 CRI80	L6-60° Clear		
	2H45 - 2M High 40klm		L3-30° Clear		

Module / Efficiency / Lumen	5000K 70CRI Clear 120° Optics DALI Driver			
	Module	Power(W)	Lumen	lm/W
1H10	1	57	9900	174
1H15	1	82	15000	183
1H20	1	117	19500	167
1H25	1	150	25000	167
2H30	2	171	29200	171
2H45	2	273	45200	166

CCT/CRI multipliers	
5K70	100%
5K80	96%
4K70	96%
4K80	95%

Optical multipliers	
C1	100%
D1	90%
U1	94%
L9	100%
L6	101%
L3	98%

* IK 03 protection level for Emergency version



LED INDOOR SOLUTION

High Bay



High Bay IP66



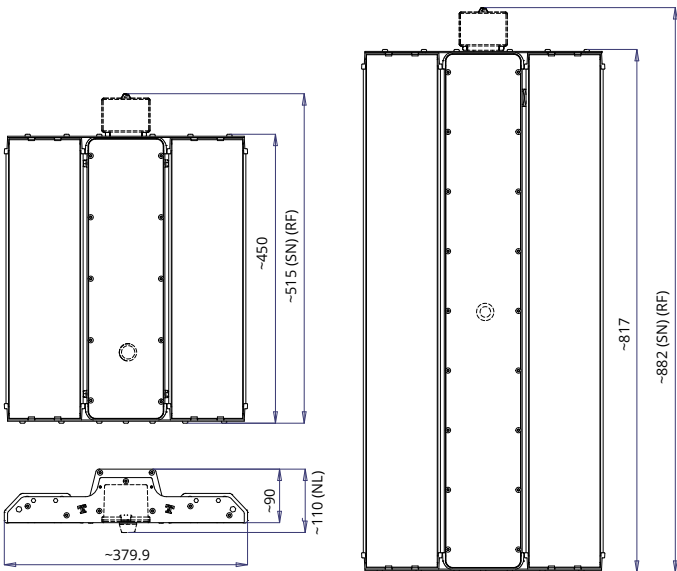
This IP66 rated LED fixture range offers an exceptional mixture of value and performance for high bay applications requiring water and dust resistance. This range has been upgraded to reach a very high efficacy- up to 182 lm/W with high lumen packages from 10,000lm to 45,000 lumens.

The range includes a wide variety of alternatives for color temperature, color rendering, beam angle and control systems, for to best optimized customer solutions. DALI, IoT and various sensor versions offer modern solutions for any lighting project. Designed to replace high-watt HID and T5/T8 LFL light sources.

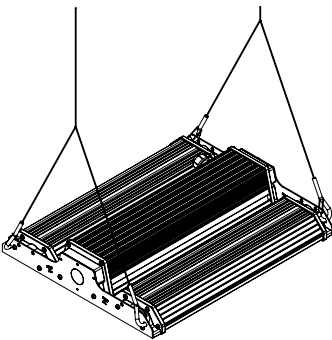


Benefits

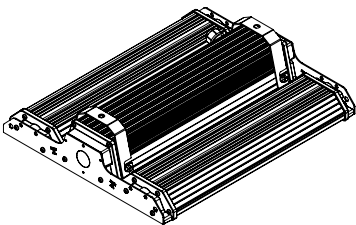
- Direct replacement for compact fluorescent lamp downlights
- Up to 70% energy savings compared to HID lamps
- Affordable solution for retrofit or new installations
- Easy installation
- UV-free & IR-free
- Product height with driver (90mm) fits more ceiling types



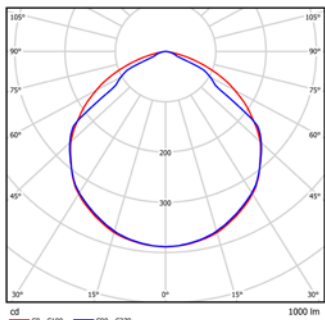
MOUNTING



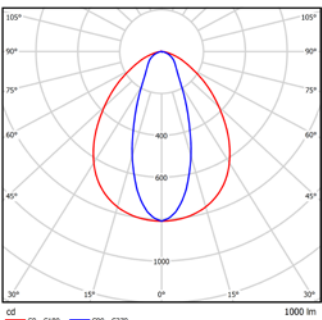
Suspension holder kit (optional)



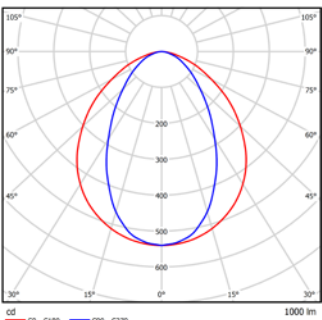
Bracket kit (optional)



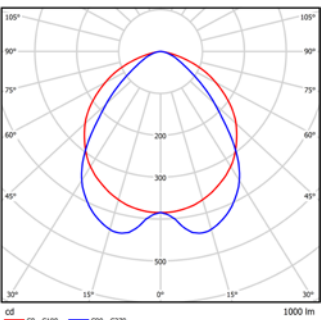
C1



L3



L6



L9

High Bay IP66



TU High B ay IP66 - Standard

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Sensor - Control	Options 1	Options 2
TU HB IP66 G1	1S10 - 1M Std 10klm	4K - 4000K 70 CRI70	C1-120° Clear	FX- Fix output DL- DALI	ST-Standard EA-EM auto-test *	PC- Pre-cabled QC- Quick Connect
	1S20 - 1M Std 20klm	5K - 5000K 70 CRI70	L9-90° Clear			
	1S30 - 1M Std 30klm	4K - 4000K 80 CRI80 5K - 5000K 80 CRI80	L6-60° Clear L3-30° Clear			

TU High Bay IP65 - Standard

TUHB IP65 G1	1S10 - 1M Std 10klm	4K - 4000K 70 CRI70	C1-120° Clear	SN- Sensor(ON/OFF) RF Sensor(Motion&Lux)	ST-Standard EA-EM auto-test *	PC- Pre-cabled QC- Quick Connect
	1S20 - 1M Std 20klm	5K - 5000K 70 CRI70	L9-90° Clear			
	1S30 - 1M Std 30klm	4K - 4000K 80 CRI80 5K - 5000K 80 CRI80	L6-60° Clear L3-30° Clear			

TU High Bay IP66 - High Efficiency

TUHB IP66 G1	1H10 - 1M High 10klm	4K - 4000K 70 CRI70	C1-120° Clear	DL- DALI	ST-Standard EA-EM auto-test *	PC- Pre-cabled QC- Quick Connect
	1H20 - 1M High 20klm	5K - 5000K 70 CRI70	L9-90° Clear			
	2H30 - 2M High 30klm 2H45 - 2M High 30klm	4K - 4000K 80 CRI80 5K - 5000K 80 CRI80	L6-60° Clear L3-30° Clear			

TU High Bay IP65 - High Efficiency

TUHB IP65 G1	1H10 - 1M High 10klm	4K - 4000K 70 CRI70	C1-120° Clear	RF Sensor(Mo- tion&Lux)	ST-Standard EA-EM auto-test *	PC- Pre-cabled QC- Quick Connect
	1H20 - 1M High 20klm	5K - 5000K 70 CRI70	L9-90° Clear			
	2H30 - 2M High 45klm 2H45 - 2M High 45klm	4K - 4000K 80 CRI80 5K - 5000K 80 CRI80	L6-60° Clear L3-30° Clear			

Module / Efficiency / Lumen	5000K 70 CRI Clear 120 optics Dali driver			
	Module	Power(W)**	Lumen	lm/W
1S10	1	67	10000	149
1S20	1	141	20500	145
1S30 ***	1	199	29200	151
1H10	1	56	10200	182
1H20	1	116	20100	173
2H30 ***	2	170	30100	177
2H45 ***	2	250	44100 *	170

CCT/CRI multipliers		Optical multipliers	
5K70	100%	C1	100%
5k80	96%	L9	93%
4K70	96%	L6	94%
4K80	95%	L3	90%



* IK03 protection level for Emergency version

** Fixed output and sensor versions could have slightly different values.

Our products are in compliance with IEC 60598-2-1:1979 + A1 1987 used in conjunction with IEC 60598-1:2014. Emergency version is expected in Q1 2020

*** 1S30, 2H30 and 2H45 has 2 drivers, DALI versions have 2 DALI addresses

LED INDOOR SOLUTION

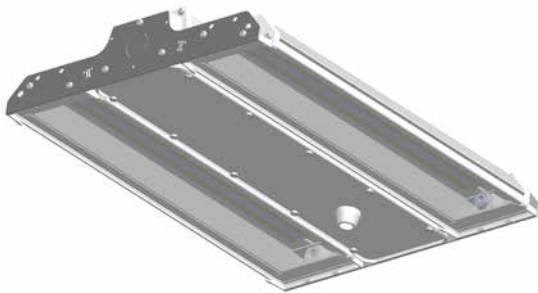
High Bay



High Bay IP66 - NEDAP Node



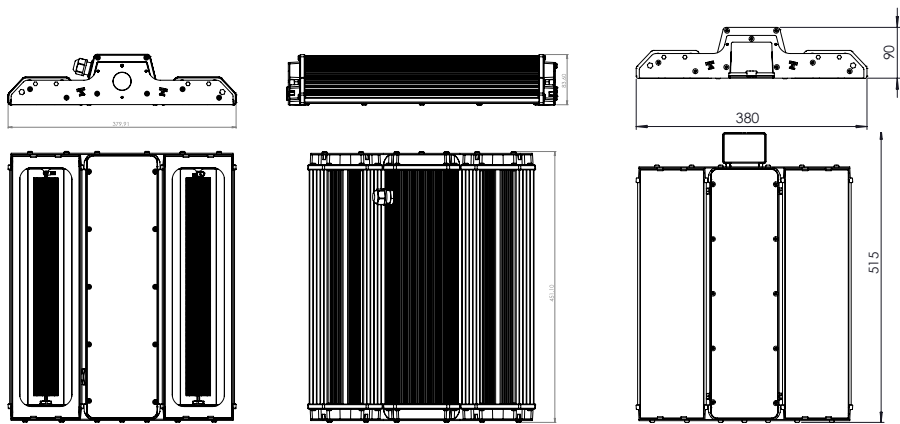
The high performing Tungsram High Bay industrial fixture range is now equipped with a Nedap Luxon IoT Node, to allow wireless control control of the luminaire range. The TU HB IP66 range has been upgraded to reach a very high efficacy of 182 lm/w and cover lumen packages between 10,200 - 45,000 lumens. This new range is ideal to replace high-watt HID and T5/T8 LFL fixtures in high bay and low bay applications in industrial and commercial buildings.



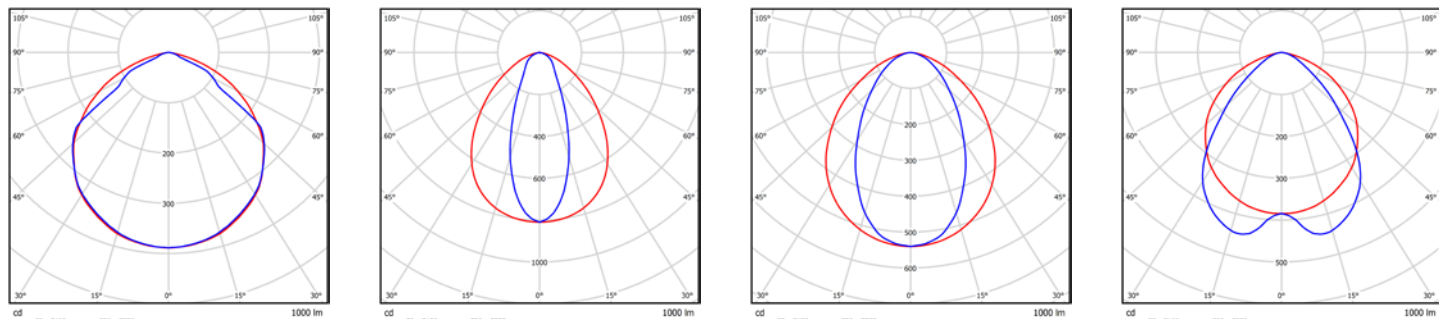
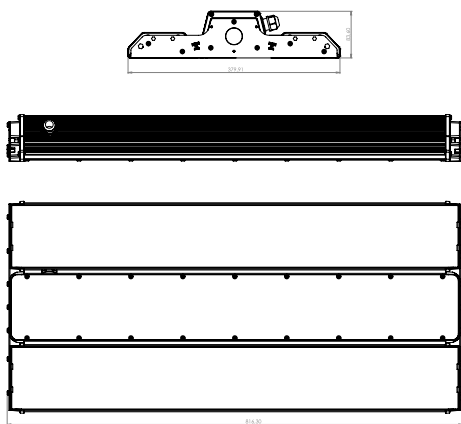
Benefits

- Robust extruded aluminum body with integrated cooling ribs and tempered glass window
- IP66 and IK08 rating
- Utilising the high performing NEW Tungsram optics system to provide optimised illumination for open floor and racked aisles with photometric distributions of 30, 60, 90 and 120 degrees
- Lumen packages up to 45 000 lumens
- 4000K & 5000K versions
- 70 & 80 CRI options

ONE MODULE



TWO MODULES



C1

L3

L6

L9

High Bay IP66 - NEDAP Node



LED Indoor

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Sensor - Control	Options 1	Options 2
TU High Bay IP66 - High Efficiency						
TUHB IP66 G1	1H10 - 1M High 10klm 1H20 - 1M High 20klm 2H30 - 2M High 30klm 2H45 - 2M High 45klm	4K - 4000K 70 CRI70 5K - 5000K 70 CRI70 4K - 4000K 80 CRI80 5K - 5000K 80 CRI80	C1-120° Clear L9-90° Clear L6-60° Clear L3-30° Clear	NL Nedap Luxon	ST-Standard	PC- Pre-cabled QC- Quick Connect

Module / Efficiency / Lumen	5000K 70 CRI Clear 120 optics Dali driver				CCT/CRI multipliers		Optical multipliers	
	Module	Power(W)*	Lumen	lm/W				
1H10	1	56	10200	182	5K70	100%	C1	100%
1H20	1	116	20100	173	5k80	96%	L9	93%
2H30	2	170	30100	177	4K70	96%	L6	94%
2H45	2	251	44100	176	4K80	95%	L3	90%

* 2H30 version is available from Q4.
** Additional lumen packs are under development.
Our products are in compliance with IEC 60598-2-1:1979 + A1 1987 used in conjunction with IEC 60598-1:2014.

Product Description	TU Product Code
IP20/IP66 Accessories	
TU HB FKIT M10 (45 degree)	93104725
TU HB IP20 Bracket kit	93108565
TU HB IP66 Bracket kit	93108565
TU HB IP20 bus bar kit	93116910
1.5m cable Y hook	93091603
3.0m cable Y hook	93091604
4.5m cable Y hook	93091605
6.0m cable Y hook	93091686
Remote controller	93110511



LED INDOOR SOLUTION

Linear High Bay



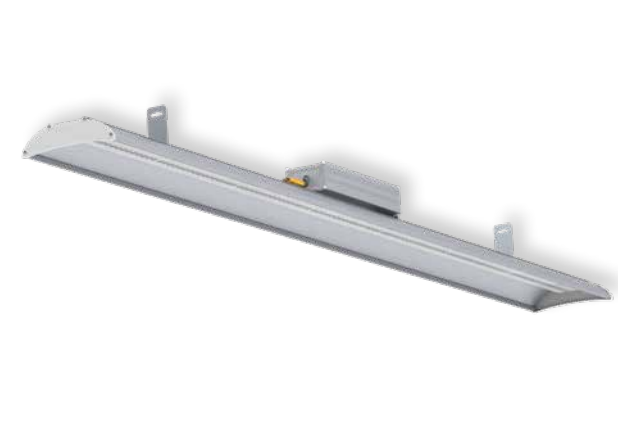
Sporthall/
Other high ceiling indoor
applications



Warehouse/
Distribution center/
Factory

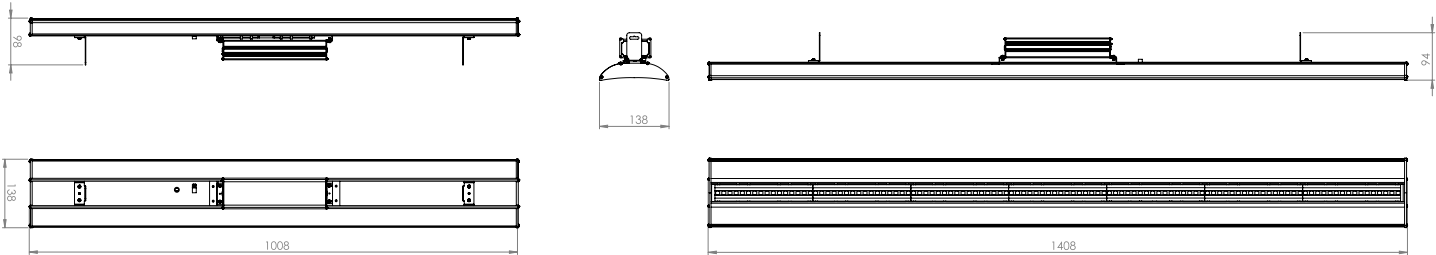
Linear High Bay

The Tungsram Linear High Bay is a simple LED solution that efficiently illuminates work areas by creating a brighter and better warehouse, retail, or manufacture environment. With its two-optical design and energy efficiency, this easy-to-install and low-maintenance lighting solution is suitable for a variety of applications.

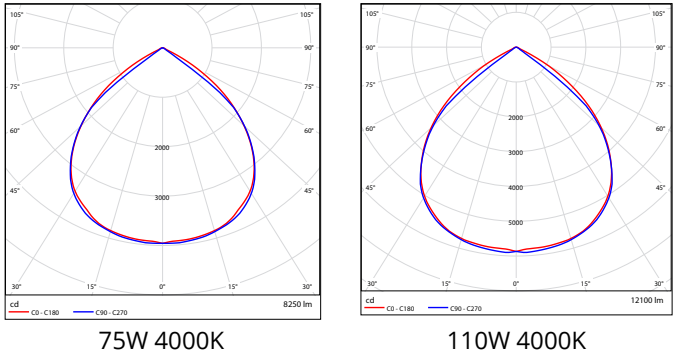


Benefits

- High energy savings up to 50% compared' to TL-5 Highbay
- Direct replacement of T5 Highbay
- Functional, linear design with flexible installation
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs



Model	Fixture (incl driver)	Driver	Weight incl driver (kg)
LED Linear Highbay G1 TU 4ft xxx	1008x138x98mm	210x65x40mm	2.0
LED Linear Highbay G1 TU 5ft xxx	1408x138x98mm	210x65x40mm	2.2



Linear High Bay



IP40/IP20



CLASS I



110°



50 000h/
L70



80+
CRI



A++

Product Description	Tungsram Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Linear High Bay - Static driver								
LED Linear HighBay G1 TU 4ft 75W 840	93110385	75	8 250	4000	110	1008x138x98	2.00	1
LED Linear HighBay G1 TU 5ft 110W 840	93110756	110	12 100	4000	110	1408x138x98	2.20	1
Linear High Bay Accessories								
LED Linear Highbay G1 TU 50°Lens 5 pcs	93113202	-	-	-	-	-	-	5pcs
LED Linear Highbay G1 TU 50°Lens 7 pcs	93113203	-	-	-	-	-	-	7pcs
LED Linear HighBay Duplicate Kit	93114138	-	-	-	-	-	-	1pair





LED AGRITECH

Modern horticulture has to deal with serious challenges such as climate change, scarce resources, and increasing needs of the fast-growing population. In order to meet these demands, the horticulture industry continuously seeks for new technologies in the case of key variables, such as lighting, to promote the growth of plants. The mission of Tungram Agritech is to apply its expertise - acquired over decades - in the field of LED lighting to serve sustainable plant cultivation.



Greenhouse Linear Toplight Single Module

Our Linear Toplight Single Module is the most preferred option by horticultural producers, due to its physical parameters, modularity, high 986 $\mu\text{mol/s}$ output, and long lifetime.

-  Slim design - minimal shadowing
-  High-system efficacy up to 3.67 $\mu\text{mol/J}$
-  Remote driver - better heat management



Greenhouse Linear Toplight Double Module

With its outstanding PPF reaching up to 1972 $\mu\text{mol/s}$, efficacy of 3.33 $\mu\text{mol/J}$, it is the ideal choice for the replacement of the traditional 1000 W High Pressure Sodium lamp. Similarity in their mounting and cabling options allow, smooth transition from the existing HPS lighting system into an LED-based solution.

-  1000W HPS replacement
-  43% energy saving compared to HPS
-  Low maintenance cost





Greenhouse Toplight
Research Module

This module allows users to experiment with a different mix of wavelengths and light intensity in order to define and finetune the most optimal light for given phenophases, thus enabling all kinds of autotroph organisms to achieve their growers targeted quantity and quality of both primary and secondary metabolites.

- Uniform light distribution
- Wireless control



Greenhouse Interlight

Interlight is supplementary light source in greenhouses to light the lower, shadowed parts of the canopy. Growers can choose from PPF 141-246 $\mu\text{mol/s}$ modules, supplying the high-wired plants' entire surface with the proper amount of light to maximize yields and ultimately improve taste and nutritional value of their horticultural produces.

- Extremely high system efficacy- up to 3.42 $\mu\text{mol/J}$
- Low energy cost
- Ease of installation and maintenance

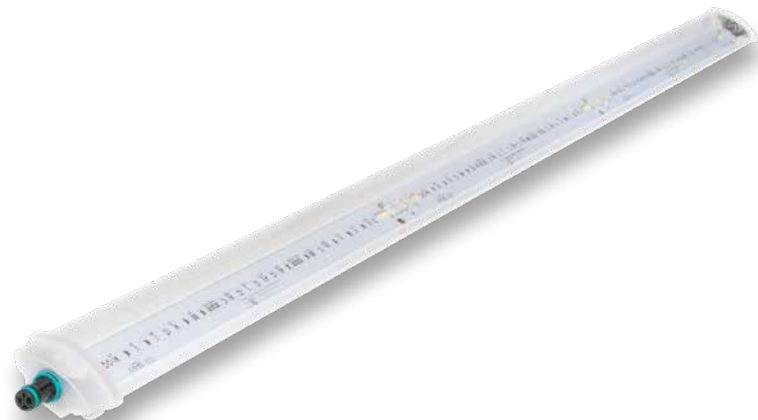




Vertical Farming
Lightbar - Production

The highly efficient modular system of the Tungsram LED VF lightbar can be flexibly adopted to the needs of any indoor multilayer growing facility. Our fixed spectrum lightbars can be customized in length, light output and color spectra, while the 4-channel version enables growers to apply a dynamic lighting strategy for the different phenophases, pre-harvest periods to achieve the desired goals.

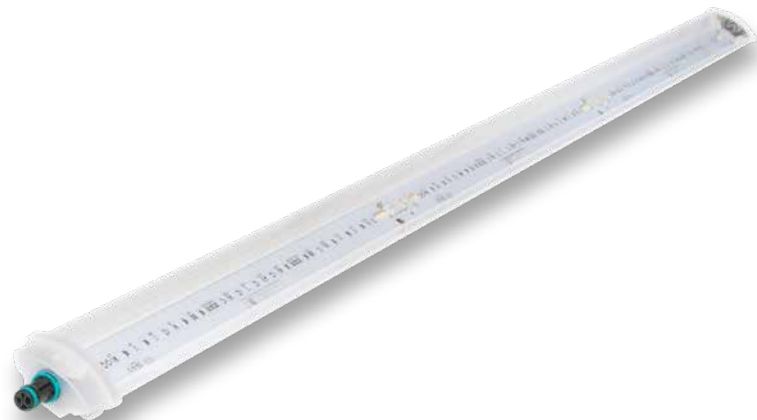
- High-system efficacy up to 3.03 $\mu\text{mol}/\text{J}$
- Remote driver – no heat radiation



Vertical Farming
Lightbar - Research

The 6 and 8-channel version of our Vertical Farming Lightbar modules have been specifically designed to allow horticultural R&D facilities to experiment with the most versatile spectral variations to finetune light recipes for any given crop.

- Remotely operated innovative control system
- 0-100% dimmability on each channel

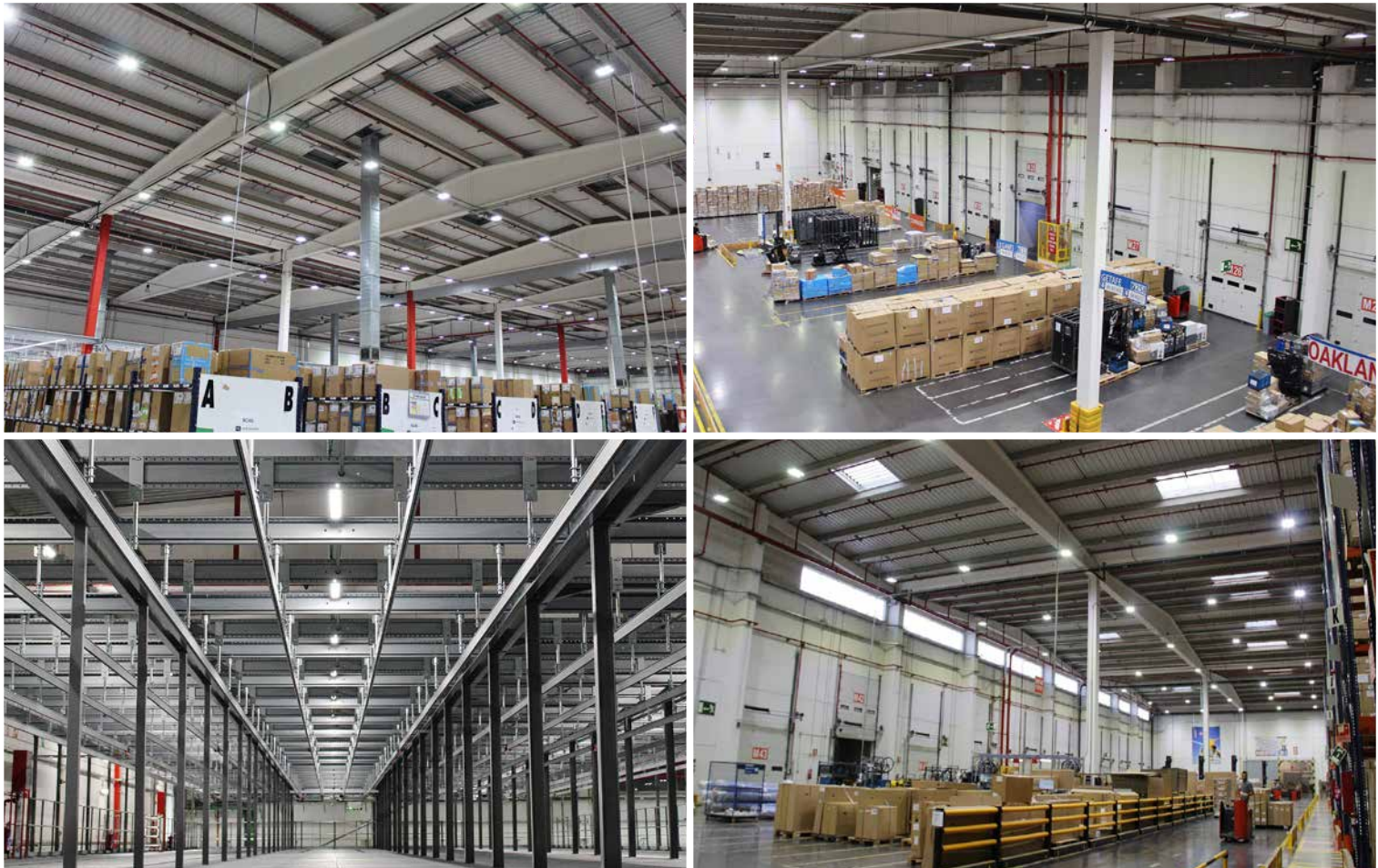


CASE STUDY

DECATHLON LOGISTICS CENTER

Decathlon is a French multinational created in 1976, dedicated to design, manufacturing and distribution of sport goods with a strong development based on their own brands and a very large offer related on more than 110 different sport activities. Their strong positioning is mainly based on a strong commitment of innovation in each part of value chain: from research to development until sales, including also design, manufacturing and logistics, with an environmental conscience. The French international group is now active in more than 54 countries, with more than 160 outlets in Spain.

For more information please visit:
<https://tungsram.com/en/case-studies/decathlon-logistics-center>



DISCOVER TUNGSRAM PORTFOLIO

From traditional technologies to state-of-the-art LED products, we incorporate energy optimization and system intelligence into our portfolio.



LED OUTDOOR CATALOGUE



TRADITIONAL LAMPS CATALOGUE



AUTOMOTIVE CATALOGUE



LED AGRITECH CATALOGUE



TUNGSRAM ARCHIFM CATALOGUE



INFRATRAINER CATALOGUE

TUNGSRAM™

We in Tungsram Operations Kft. are constantly developing and improving our products. For this reason, all product descriptions in this catalogue are intended as a general guide, and we may change specifications from time to time in the interest of product development, without prior notification or public announcement. All descriptions in this publication present only general particulars of the goods to which they refer and shall not form part of any contract. Data in this guide has been obtained in controlled experimental conditions. However, Tungsram cannot accept any liability arising from the reliance on such data to the extent permitted by law.

Indoor Product Catalogue March 2020