

TUNGSRAM™

Innovation is our heritage
EST. 1896

LED Indoor Product Catalogue





We are here to shine

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LED Drivers

Product portfolio

We invest a substantial effort in the design and development in the range of light sources, from traditional technologies to state-of-the-art LED products, incorporating advanced solutions in areas such as human-centric light, energy optimization and system intelligence. By including two new themes in our portfolio –horticulture and smart solutions– Tungstram secures its position as a global force delivering smart light solutions across a variety of fields.

Innovation is the future

Tungstram is a proud, premium European brand with research, design and development conducted in its historic birthplace, Budapest, and with four facilities country-wide where optimized manufacturing takes place. We are committed to continuing and expanding our outreach, integrating further markets into our global sales portfolio. By investing intense research and development efforts in the field of LED solutions, and by making use of our fully automated production lines and certified quality assurance systems, we produce cutting edge products for all existing light applications, and ones even beyond it.



Claiming the global spotlight

Tungstram, the iconic lighting brand, seeks to serve its target markets with high-quality lighting solutions.

Up-to-date technology and certified quality assurance

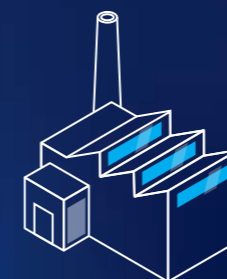


Highly skilled colleagues



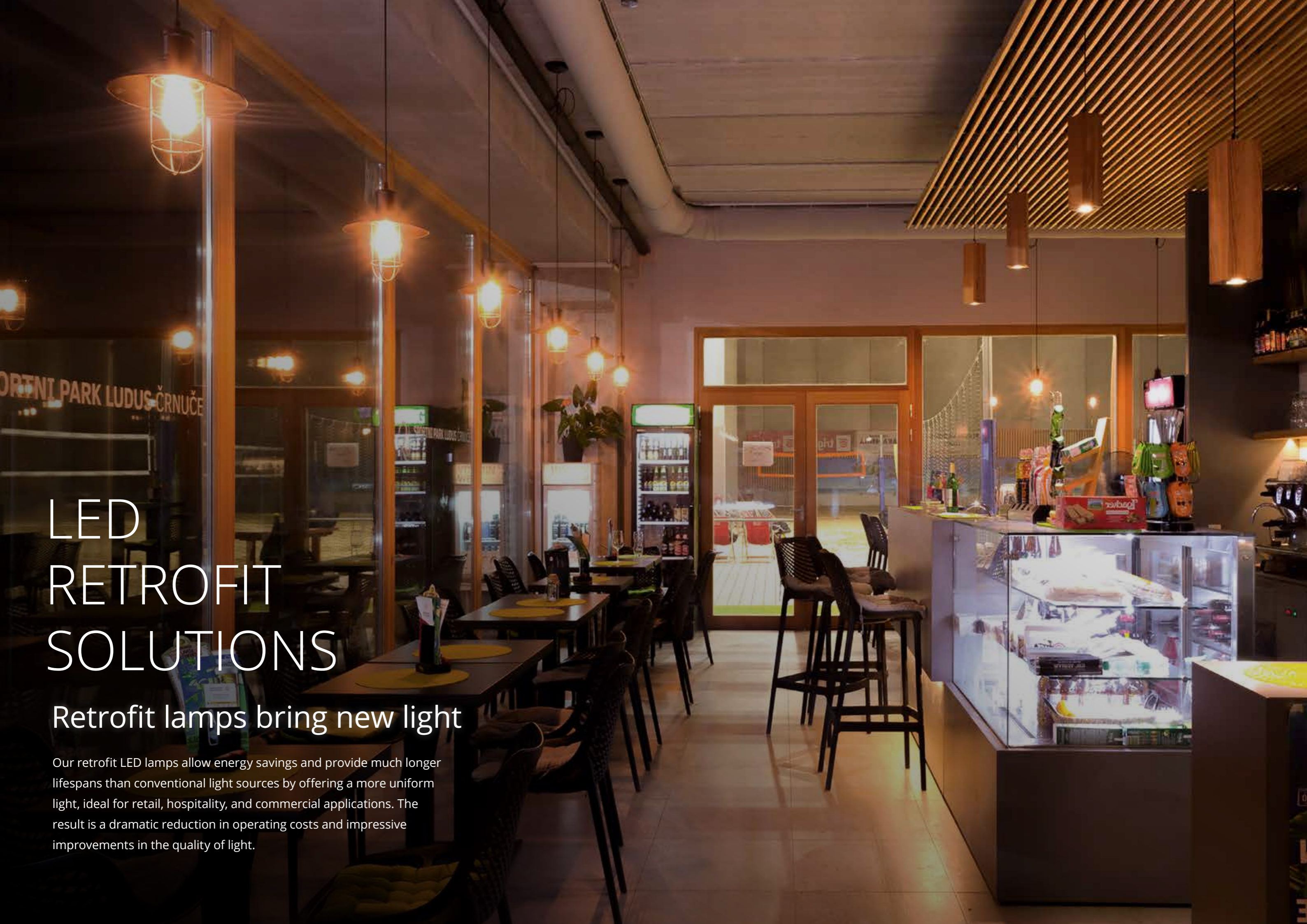
More than
4000
employees

Expertise in lighting



5 factories in Hungary





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

Product overview – Non-directional



ECO Snowcone
Cap: E27, B22
Wattage: 5W, 6W, 7W, 9W, 10W, 11W, 11.5W, 13.5W, 16W
Voltage: 220 - 240V
Rated life: 10 000 h



High Lumen
Cap: E27
Wattage: 21W, 27W, 42W,
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



Bright Stik™ and E14
Cap: E27, B22, E14
Wattage: 6W, 7W, 9W, 12W, 15W
Voltage: 220 - 240V
Rated life: 10 000 h (E14) and 15 000 h (E27, B22)



A55
Cap: E27, B22
Wattage: 8W, 10W
Voltage: 220 - 240V
Rated life: 10 000 h



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



LED Glass
Cap: E27, B22
Wattage: 4.5W, 8W, 10W, 13W
Voltage: 220 - 240V
Rated life: 10 000 h

LED GLS



Start Deco Candle
Cap: E14, E27, B22
Wattage: 3.5W, 5.5W
Voltage: 220 - 240V
Finish: White
Rated life: 10 000 h



Energy Smart™ Crown Deco Dimmable
Cap: E14, E27, B22
Wattage: 6W, 4W
Voltage: 220 - 240V
Rated life: 20 000 h



Energy Smart™ Crown Deco Dimmable
Cap: E14, E27, B22, B15
Wattage: 6W, 4W
Voltage: 220 - 240V
Rated life: 20 000 h

LED Candle



Start Deco Spherical
Cap: E14, E27, B22
Wattage: 3.5W, 5.5W
Voltage: 220 - 240V
Finish: White
Rated life: 10 000 h



Energy Smart™ Crown Deco Dimmable
Cap: E14, E27
Wattage: 6W, 4W
Voltage: 220 - 240V
Rated life: 20 000 h



Energy Smart™ Crown Deco Dimmable
Cap: E14, E27, B22
Wattage: 6W, 4W
Voltage: 220 - 240V
Rated life: 20 000 h

LED Spherical and Globe

Filament Dimmable



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



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



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



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



Globe 80
Cap: E27, B22
Wattage: 5.5W
Voltage: 220 - 240V
Rated life: 15 000 h



Globe 95
Cap: E27, B22
Wattage: 5.5W
Voltage: 220 - 240V
Rated life: 15 000 h



GLS 160
Cap: E27, B22
Wattage: 6W
Voltage: 220 - 240V
Rated life: 15 000 h



Globe 200
Cap: E27, B22
Wattage: 6W
Voltage: 220 - 240V
Rated life: 15 000 h

LED Filament Heliax

Filament Non-Dimmable



Filament GLS
Cap: E27
Wattage: 4W, 5W, 6.5W
Voltage: 220 - 240V
Rated life: 10 000 h



Filament Globe
Cap: E27
Wattage: 4W, 5W, 6.5W
Voltage: 220 - 240V
Rated life: 10 000 h



Filament Spherical
Cap: E27, B22, E14
Wattage: 2.5 - 4W
Voltage: 220 - 240V
Rated life: 10 000 h



Filament Candle
Cap: E27, B22, E14
Wattage: 2.5 - 4W
Voltage: 220 - 240V
Rated life: 10 000 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



LED Filament Globe G95, G120
Cap: E27, B22
Wattage: 4.5W, 7W, 8.5W, 10W
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



LED Candle and Spherical (Clear, frosted)
Cap: E27, B22, E14, B15
Wattage: 2.5W, 4.5W, 7W
Voltage: 220 - 240V
Rated life: 15 000 h

LED Filament



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



Energy Smart™ Capsule G4
Cap: G4
Wattage: 1.6W
Voltage: 12V
Rated life: 15 000 h



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

LED Pygmy, Capsules

LED RETROFIT SOLUTIONS

Product overview – Directional



**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



**Precise™
R111 Dimmable**

Cap: G53
Wattage: 15W
Voltage: 12V
Beam angle: 25/40°
Rated life: 25 000 h



**Energy Smart™
GU10 High Lumen**

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

LED GU10



**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

LED MR16



**Start
R50**

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



**Energy Smart™
PAR38**

Cap: E27
Wattage: 15W
Voltage: 90 - 240V
Beam angle: 40°
Rated life: 25 000 h



**Precise™
PAR30
Dimmable**

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



**Start
R63**

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



**Energy Smart™
PAR38 Dimmable**

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



**Start
R80**

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

LED PAR



**Specialty
PAR56**

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

LED Specialty PAR56

LED RETROFIT SOLUTIONS

Product overview – Tubes and Plugins



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: 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

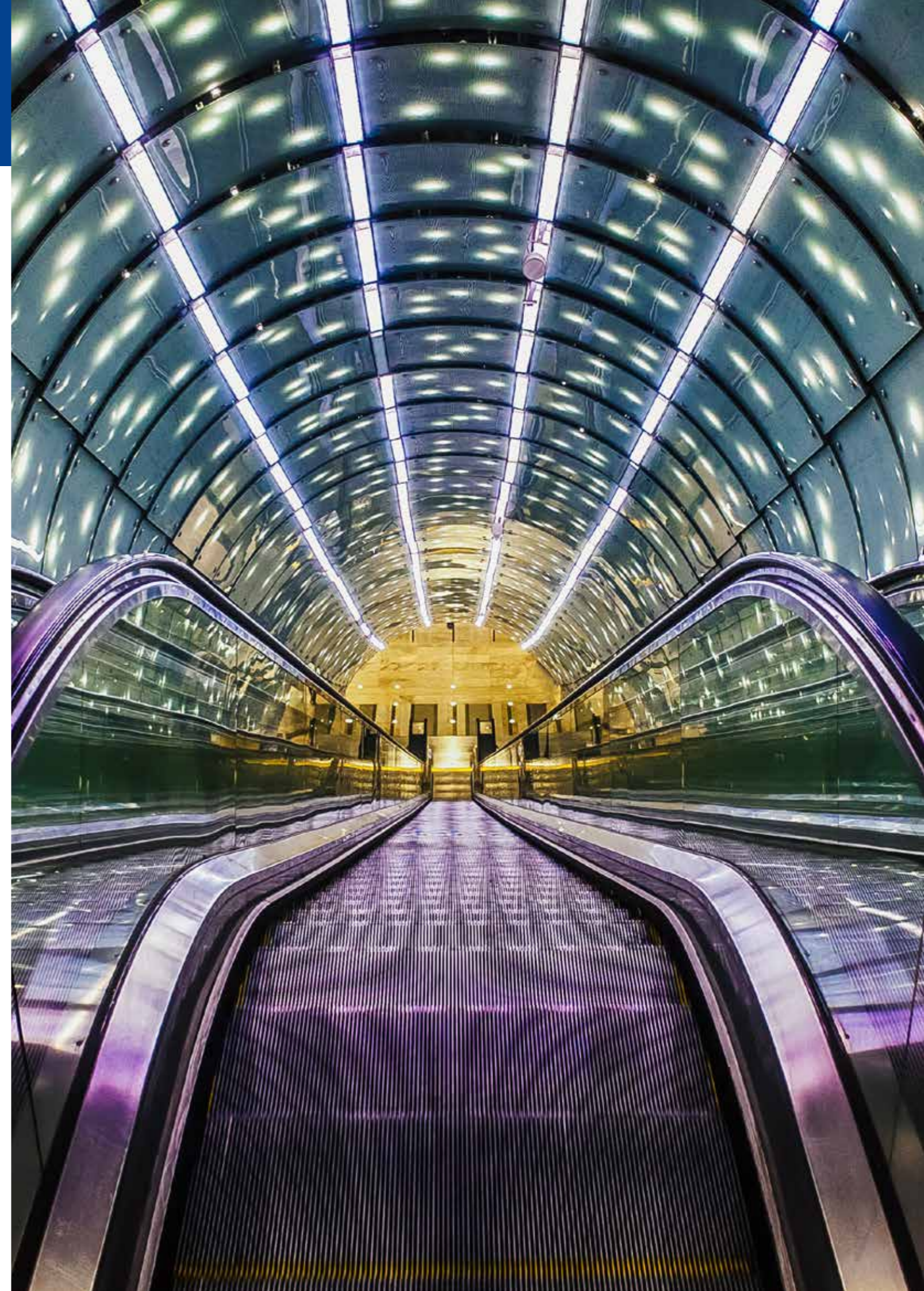
Cap: E27
Wattage: 35W
Rated life: 40 000 h
Position: Universal



LED HID

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

LED Mercury & HID replacement



LED LAMPS

Plug-in & HID Replacement



Wattage (W)	Ballast Compatibility	Cap	Product Description	Tungsramp Product Code	GE Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Size (mm)	Energy Consumption (kWh)	EEC	Pack Qty	Replacement for
LED 2D															
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	28W CFL 2D
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	
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	28W CFL 2D
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	28W CFL 2D
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: tungsramp.com/LEDPlugIn-compatibility

Wattage (W)	Burning Position	Cap	Product Description	Tungsramp Product Code	GE Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Width / Diameter (mm)	Energy Consumption (kWh)	EEC	Pack Qty	Replacement for
LED 4-Pin Plug-In*																
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	
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	26/32W CFL
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	

* Will be phased out without replacement in TU brand
 *** For a list of ballasts tested and approved for compatibility, access: tungsramp.com/LEDPlugIn-compatibility



Wattage (W)	Burning Position	Cap	Product Description	Tungsramp Product Code	GE Product Code	Lumen (lm)	CCT (K)	Beam Angle (°)	CRI (Ra)	Rated life L70/B50 (h)	Length (mm)	Width / Diameter (mm)	Energy Consumption (kWh)	EEC	Pack Qty	Replacement for
LED 4-Pin Plug-in Gen2 ***																
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	26/32W CFL
10	Horizontal	G24q-3	LED 10/G2/G24q-3/4P/H/865 TU BX1/6	93110773	93060369	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: tungsramp.com/LEDPlugIn-compatibility

Wattage (W)	Burning Position	Cap	Product Description	Tungsramp Product Code	GE 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++	80/125W HID Mercury	6
80	Universal	E40	LED 80W/HID/740/E40 GE	-	93067075	12 000	4000	360	70+	50k	203	92.2	A++	250W QMH	1
80	Universal	E40	LED 80W/HID/750/E40 GE	-	93067246	12 000	5000	360	70+	50k	203	92.2	A++	250W QMH	1
150	Universal	E40	LED 150W/HID/740/E40 TU	93094721	-	23 000	4000	360	70+	50k	211	103.9	-	250W CMH	1
150	Universal	E40	LED 150W/HID/750/E40 TU	93094722	-	23 000	5000	360	70+	50k	211	103.9	-	250W CMH	1





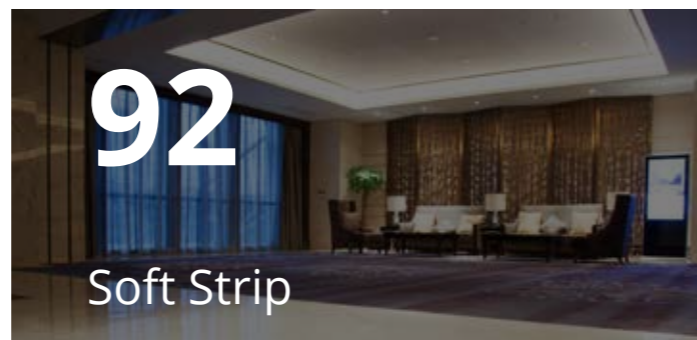
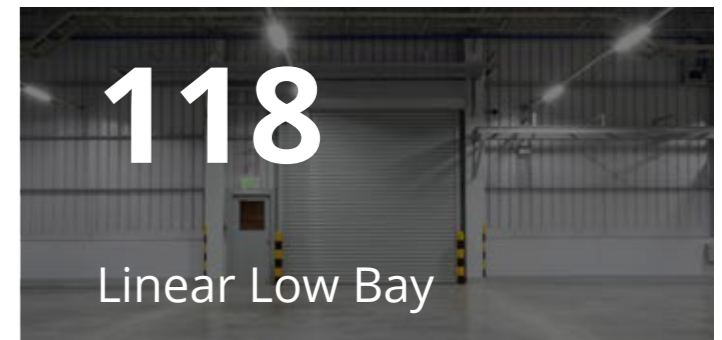
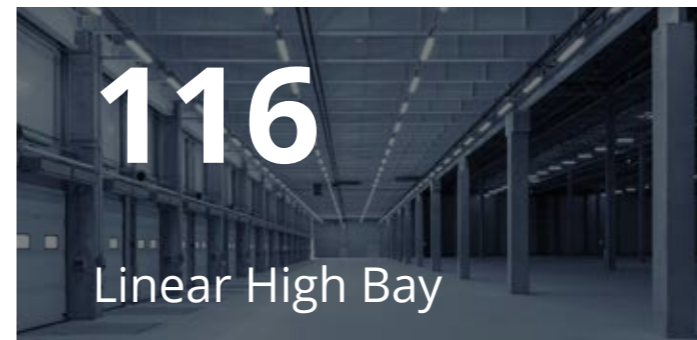
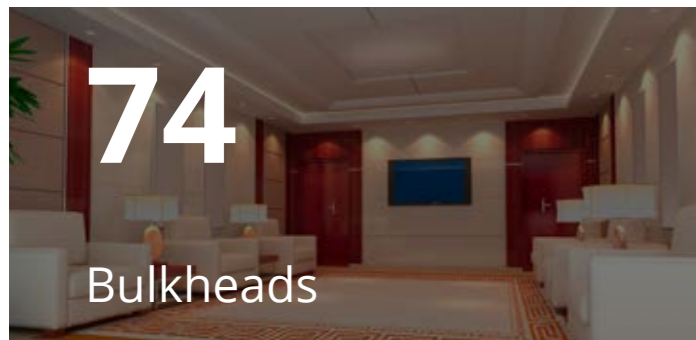
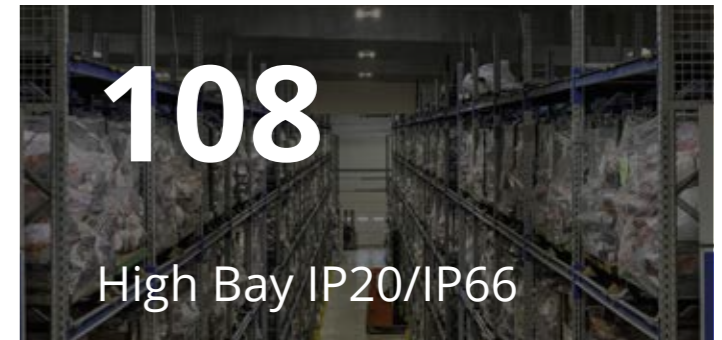
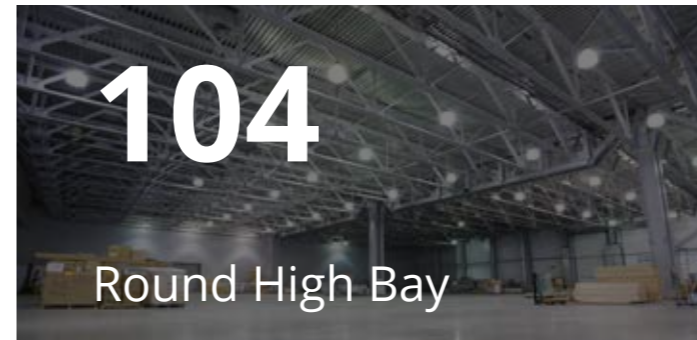
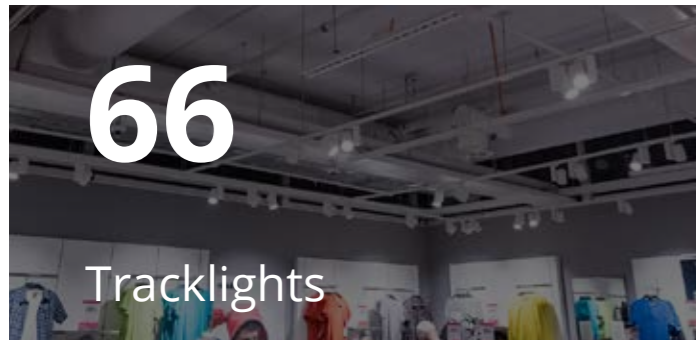
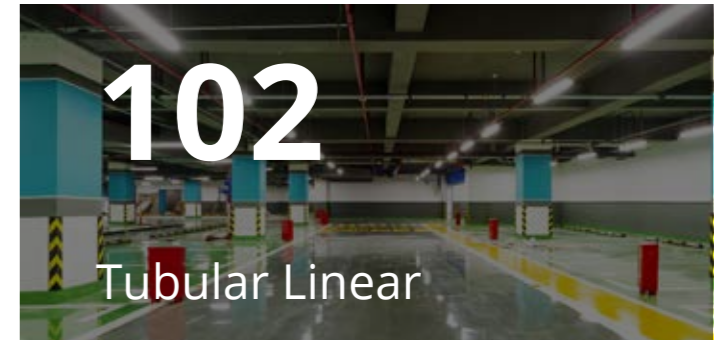
LED INDOOR SOLUTIONS

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 Panel



Backlit Panel



Trackspot ADV



Trackspot LUX



Floodlights



Diffuser Downlight IP20



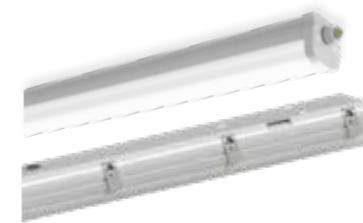
Diffuser Downlight IP44



Start Downlight G2



Waterproof Mariner Integrated Premium / UK



Waterproof Mariner Integrated Start



Waterproof Mariner Empty Body



COB Downlight UGR<19 IP54



COB Downlight Adjustable / Scoop



COB Downlight Multigimbal



2D Bulkhead



Integrated Bulkhead



Bulkhead Ceiling Light



Recessed Spotlight 5W



Recessed Spotlight 6W



Pendant



Batten IP65 / ECO / Switch



LED Soft Strip



LED Emergency Solutions



Slim Downlight Start



Slim Downlight Premium



Fireproof Downlight



LED INDOOR SOLUTION

Panels



Healthcare



General lighting



Education



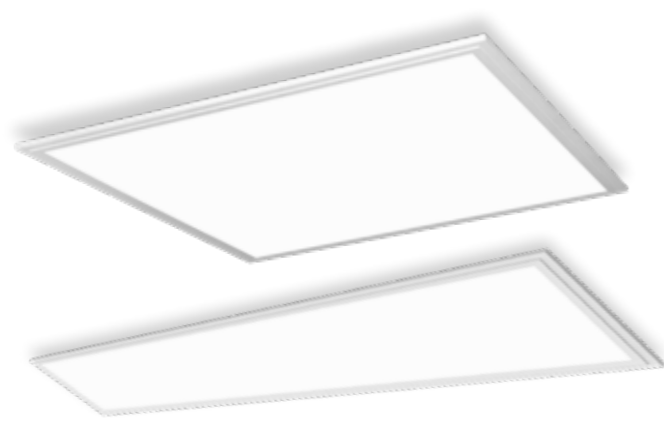
Retail



Office

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.

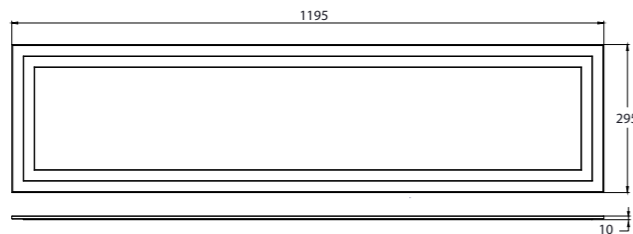
Diffused lens gives an evenly illuminated appearance.

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

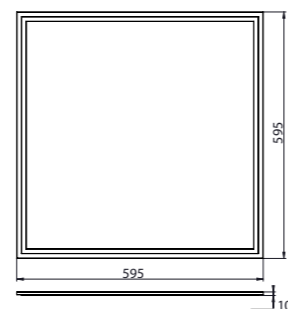
Easy to install in the most common T-bar ceiling grids.

SLIM PROFILE

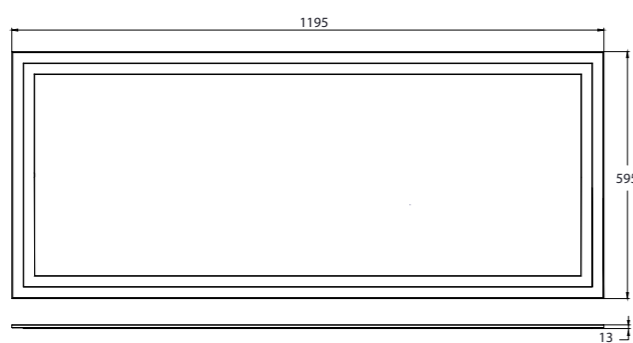
Panel 1x4



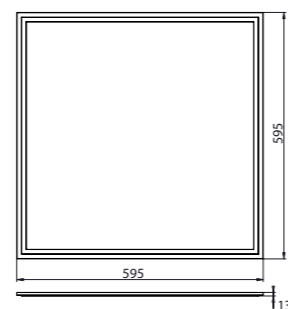
Panel 2x2



Panel 2x4



Panel 2x2 IP54



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



Backlit Panel

The Tungram 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.

Backlit Panel

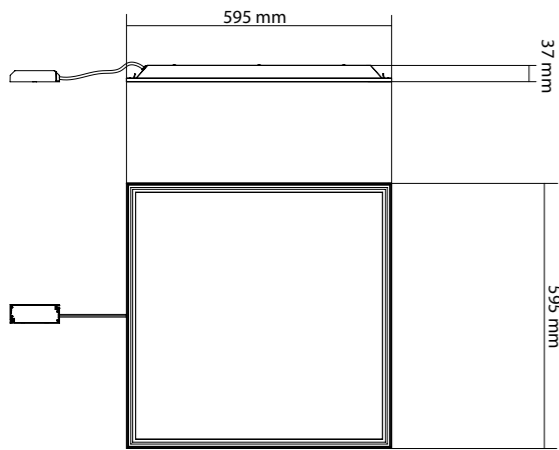
Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	UGR	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Backlit Panel – Static driver										
LED Panel B1 TU S 2x2 S 35W 840 21	93115060	-	35	3 000	4000	21	86	595x595x37	1.80	1
LED Panel B1 TU S 2x2 S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



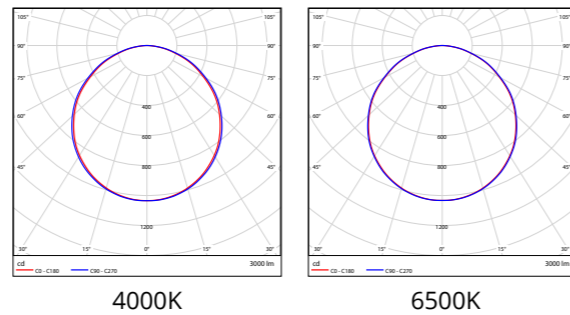
Benefits

- 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



LED INDOOR SOLUTION

Downlighters



General lighting / Residential



Retail



Hospitality



Office

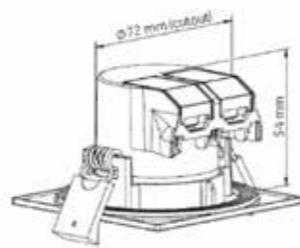
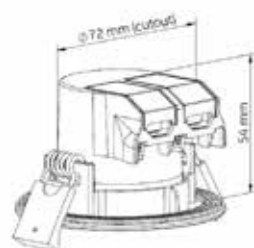
Recessed Spotlight 5W

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 7W range offers all the benefits of LED lighting to our customers – fresh light quality, reduced energy consumption, and less maintenance.

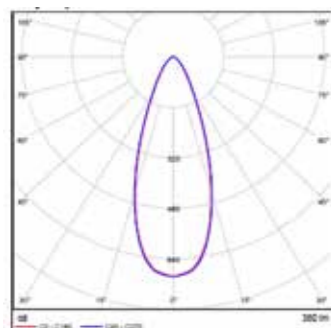


Benefits

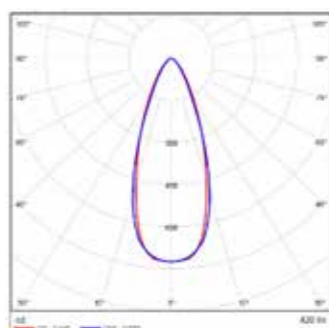
- Ideal replacement for Halogen spotlights
- High luminous efficacy
- 75% energy saving compared to 35W Halogen MR16
- Tilting head to adjust light beam where needed +/-13°
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy – UV-free & IR-free



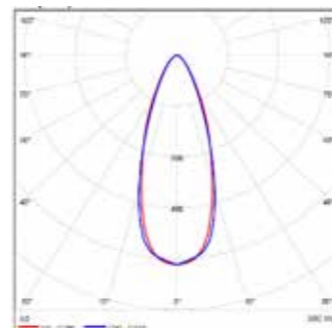
Type	Shape	Fix / Adjustable	Size	Outer size (mm)	Height (mm)	Cut-out hole (mm)	Weight (kg) with driver
xxxWRAxxx	Round	Adjustable	Ø85*54 mm	Ø85mm	54mm	72mm	0.117
xxxWRFxxx	Round	Fix	Ø85*54 mm	Ø85mm	54mm	72mm	0.110
xxxWSAxxx	Square	Adjustable	85*85*54 mm	85*85mm	54mm	72mm	0.126
xxxWSFxxx	Square	Fix	85*85*54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



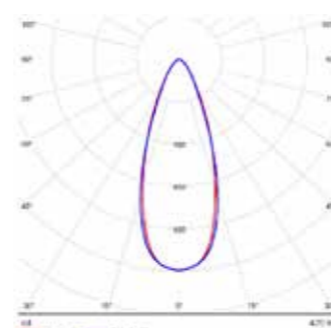
WRA/WSA IP20 5W 830 Triac



WRA/WSA IP20 5W 840 Triac



WRA/WSA IP65 5W 830 Static



WRA/WSA IP65 5W 840 Static

Recessed Spotlight 5W



LED Indoor

Product Description	Tungsram Product Code	GE 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



General lighting / Residential



Retail



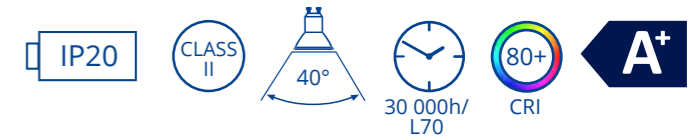
Hospitality



Office

Recessed Spotlight 6W

Recessed Spotlight 6W



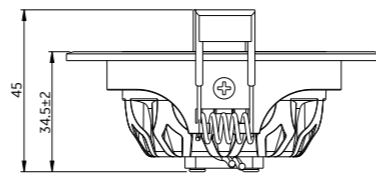
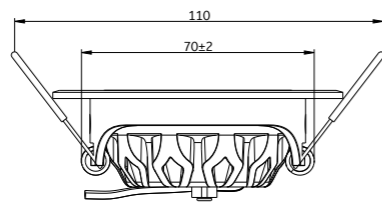
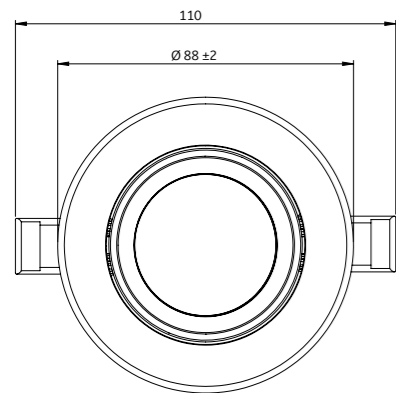
The Tungram Recessed Spotlight G1 6W range is ideal for small areas or when you are looking for directional lighting. These LED fixtures are designed to offer a quick replacement option for standard halogen spots.

Product Description	Tungram Product Code	GE 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	93082119	6	480	2700	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 830 S	93107544	93066765	6	550	3000	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 840 S	93107545	93066766	6	550	4000	90	Ø88x34.5	0.17	1
LED Spotlight G1 TU WRA IP20 6W 865 S	93107546	93066767	6	550	6500	90	Ø88x34.5	0.17	1

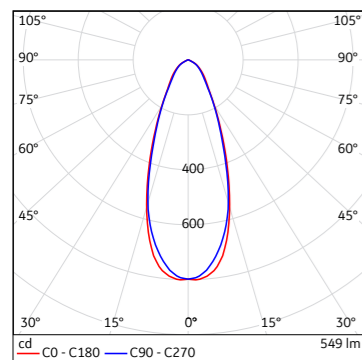


Benefits

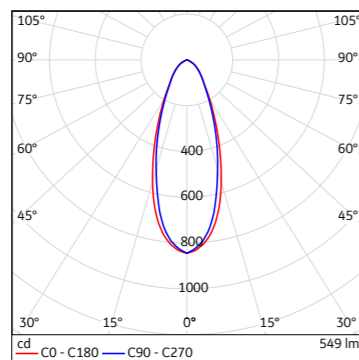
- Ideal replacement for Halogen spotlights
- 88% energy saving compared to 50W Halogen MR16
- Tilting head to adjust light beam where needed
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy – UV-free & IR-free
- Colour rendering index: CRI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



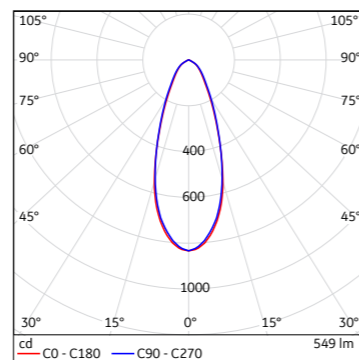
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (kg) (with driver)	Weight (kg) (without driver)
Ø88.*34.5	88 +/- 2	34.5 +/- 2	70 +/- 2	0,17	0,13



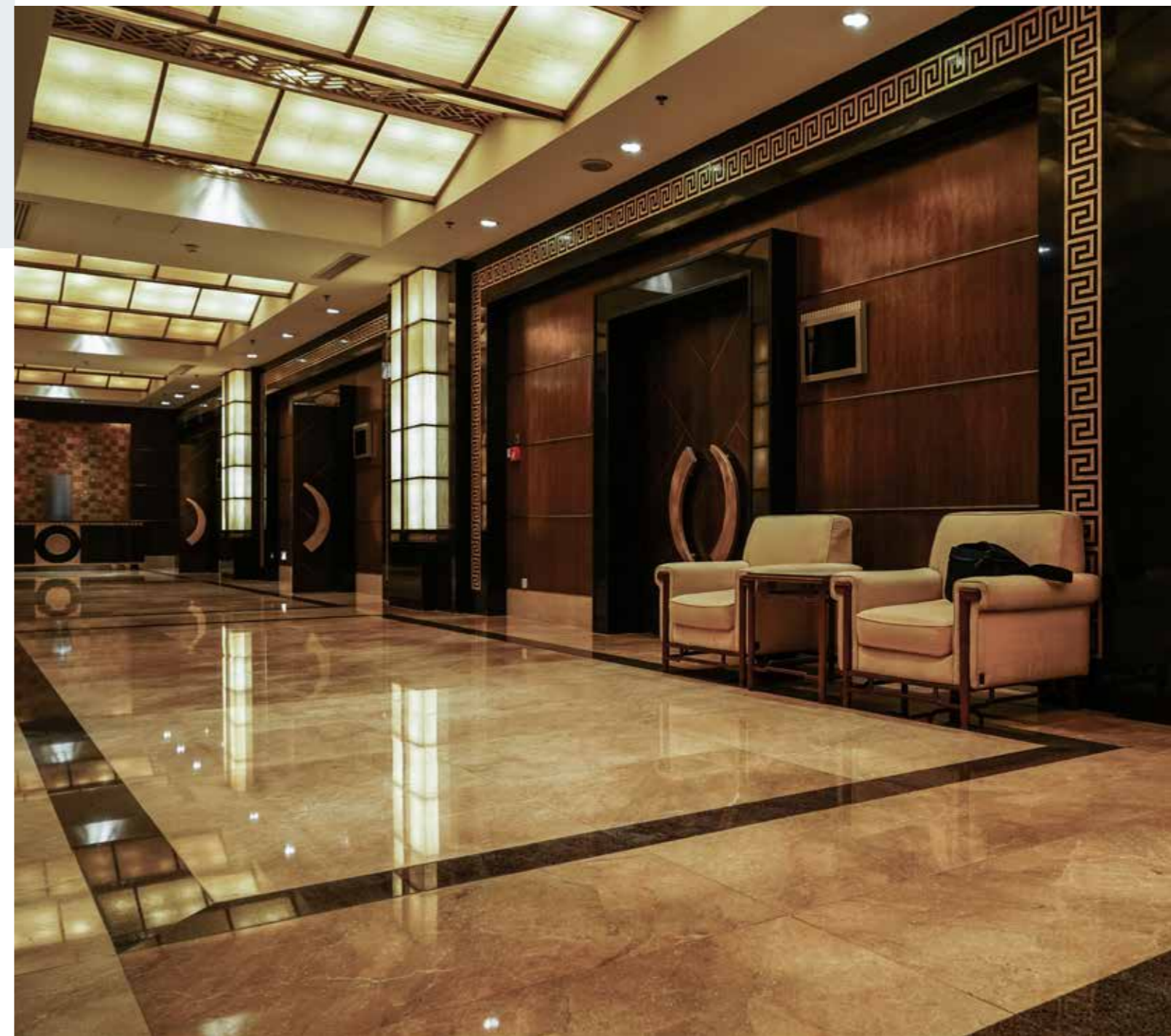
6W 3000K



6W 4000K



6W 6500K



LED INDOOR SOLUTION

Downlighters



Education



General lighting



Retail



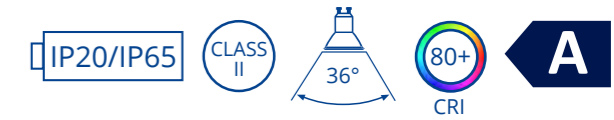
Hospitality



Office

Fireproof Downlight

Fireproof Downlight



Tungsum 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.

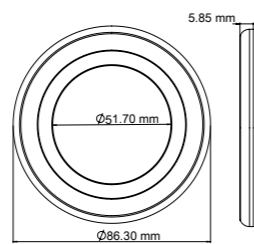
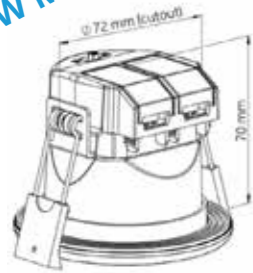
Product Description	Tungsum Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
Fireproof Downlight – Triac driver										
Fireproof Downlight G1 TU IP65 5W F W	93108712	-	5	400	3000	65	80	Ø85 x 70	0.176	1
Fireproof Downlight 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									

Benefits

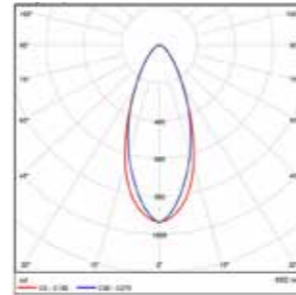
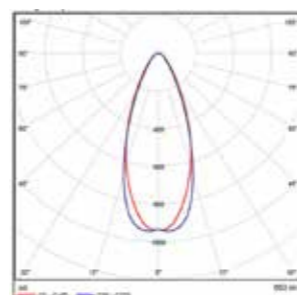
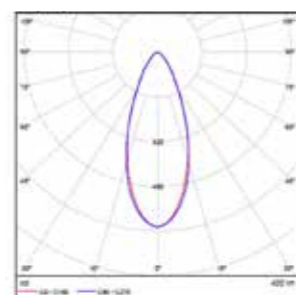
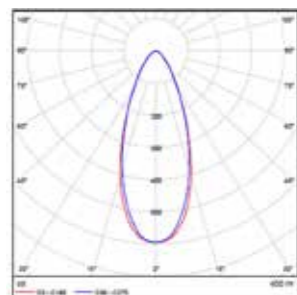
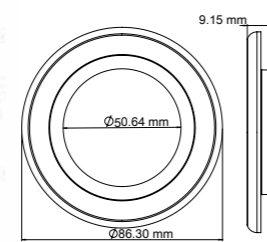
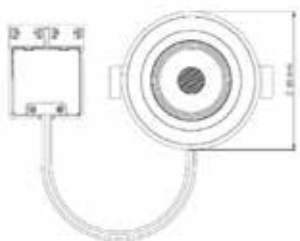
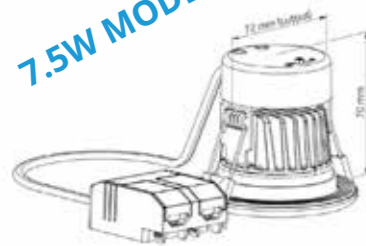
- Up to 80% energy saving compared to Halogen solutions
- Ideal replacement for Halogen spotlights
- High luminous efficacy up to 85 lm/w
- Tilting head to adjust light beam where needed +/- 13°
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Healthy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



5W MODE



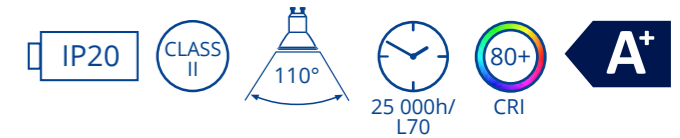
7.5W MODE





Start Downlight G2

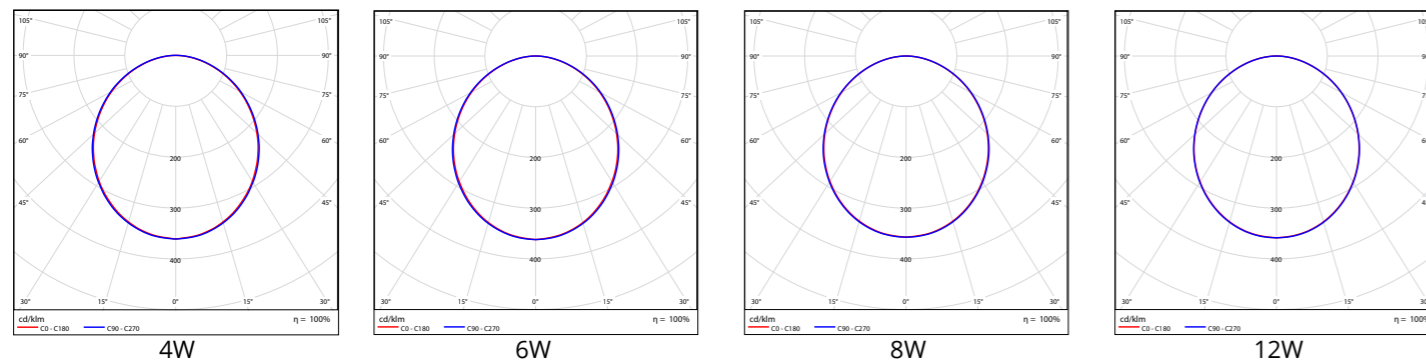
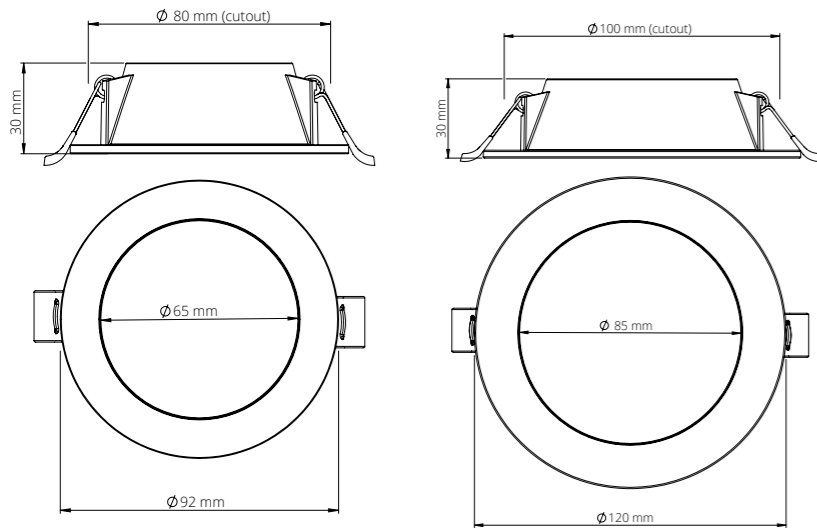
Start Downlight G2



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. Their long lifetime provides the best choice for brightening up your property

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



Product Description	Tungsram Product Code	GE 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



General lighting / Residential



Retail



Hospitality



Office

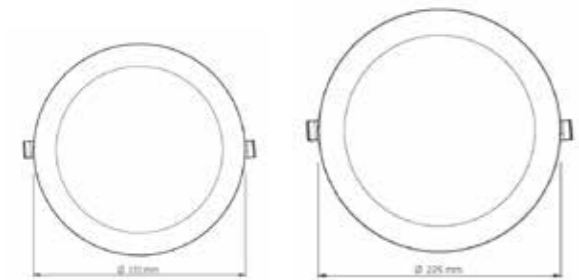
Slim Downlight Start

Tungram Slim Downlight Start is a range of recessed luminaires designed to replace downlight luminaires based on traditional CFL lamp technology. The Slim Start range delivers a homogenous light for use in general lighting applications.

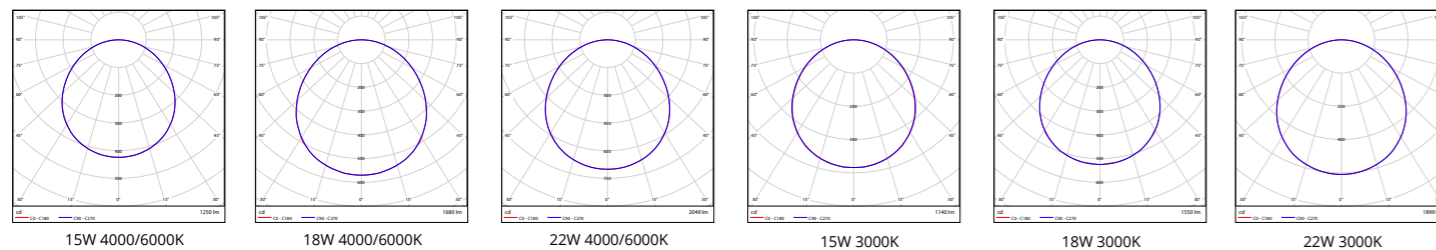


Benefits

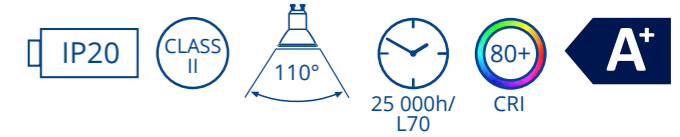
- Functional design
- One-to-one replacement for conventional luminaires
- Up to 60% energy saving compared to CFL solutions
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Shallow installation depth
- Wire spring leaf for secure installation



Type	Outer size (mm)	Fixture height (mm)	Fixture height with driver (mm)	Cut-out hole (mm)	Weight (kg) with driver
15W	Ø170mm	11mm	32.8mm	155mm	0.245
18W	Ø225mm	11mm	32.8mm	210mm	0.340
22W	Ø225mm	11mm	32.8mm	210mm	0.340



Slim Downlight Start



Product Description	Tungram Product Code	GE 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



Retail



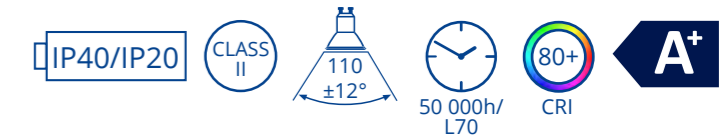
Hospitality



Office

Slim Downlight Premium

Slim Downlight Premium



Tungsum's Slim Downlight Premium range are an ultra-thin recessed luminaires designed to replace downlight luminaires based on CFL lamp technology. Available in different sizes and colour temperature options to meet customer requirements, this new extra slim range lighting can be upgraded in key segments such as office, commercial buildings, retail backoffice, and hospitality. The easy choice for switching to LED and benefitting from both their energy saving and long lifetime.

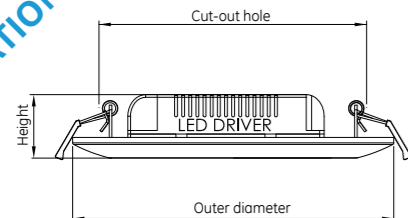


Benefits

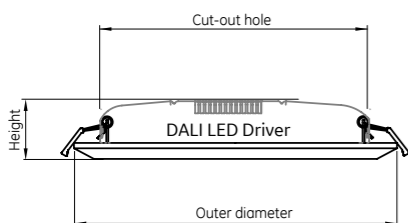
- Direct replacement for compact fluorescent lamp downlights
- Up to 54% energy saving compared to CFL lamps
- Affordable solution for retrofit or new installations
- Easy installation
- UV-free & IR-free
- Product height with driver (36mm) fits more ceiling types

Product Description	Tungsum Product Code	GE 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	93064747	12	1 080	3000	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU6 IP40 12W 840 SST	93108086	93064748	12	1 080	4000	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU6 IP40 12W 865 SST	TBD	93064749	12	1 080	6500	20	90	Ø180x36	0.31	1
LED DLR SLIM P1 TU8 IP40 18W 830 SST	93108087	93064753	18	1 530	3000	20	85	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 18W 840 SST	93108088	93064754	18	1 620	4000	20	90	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 18W 865 SST	TBD	93064755	18	1 620	6500	20	90	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 830 SST	93108090	93068480	22	2 000	3000	20	91	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 840 SST	93108091	93068481	22	2 000	4000	20	91	Ø240x36	0.52	1
LED DLR SLIM P1 TU8 IP40 22W 865 SST	TBD	93068482	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	93071362	12	1 080	3000	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU6 IP40 12W 840 DST	93108097	93071363	12	1 080	4000	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU6 IP40 12W 865 DST	TBD	93071364	12	1 080	6500	40/20	90	Ø180x43	0.44	1
LED DLR SLIM P1 TU8 IP40 22W 830 DST	93108098	93071365	22	2 000	3000	40/20	91	Ø240x43	0.63	1
LED DLR SLIM P1 TU8 IP40 22W 840 DST	93108099	93071396	22	2 000	4000	40/20	91	Ø240x43	0.63	1
LED DLR SLIM P1 TU8 IP40 22W 865 DST	TBD	93071397	22	2 000	6500	40/20	91	Ø240x43	0.63	1

EASY INSTALLATION



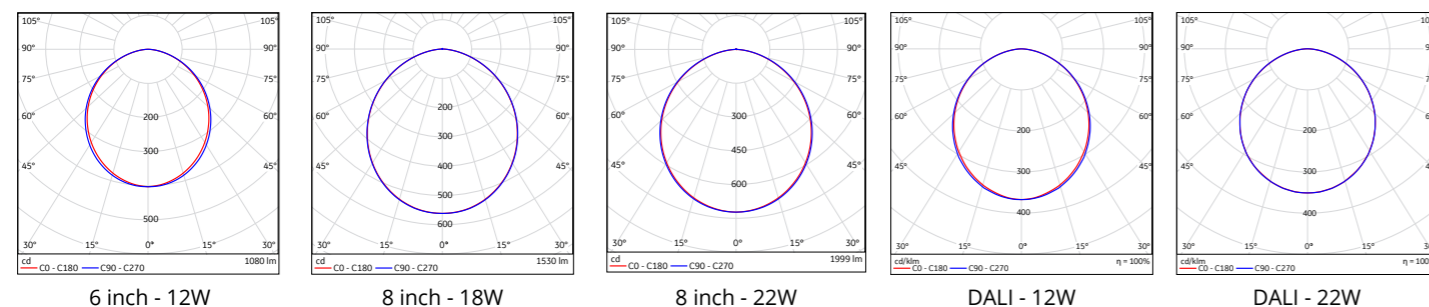
LOW WEIGHT



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



LED INDOOR SOLUTION

Downlighters



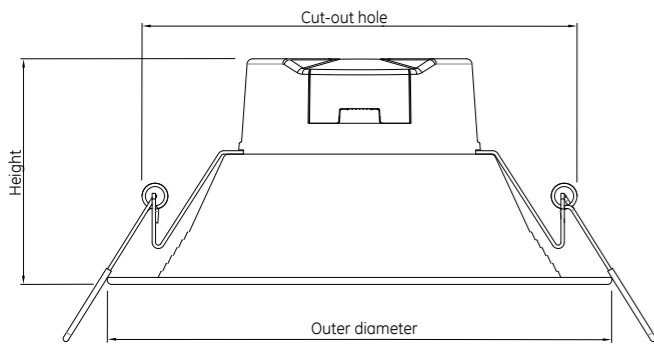
Diffuser Downlight IP20

Tungram 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.

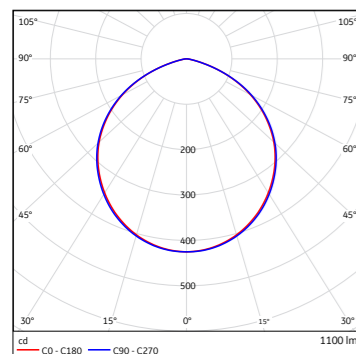


Benefits

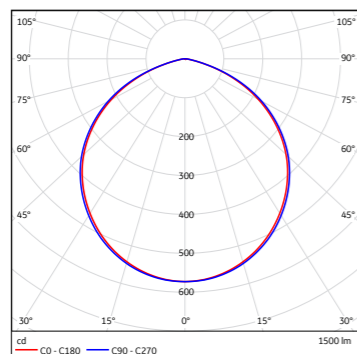
- Direct replacement for compact fluorescent lamp downlights
- Over 55%+ energy saving compared to luminaires that use CFL PI lamps
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Easy installation with fast connection
- Healthy - UV-free & IR-free



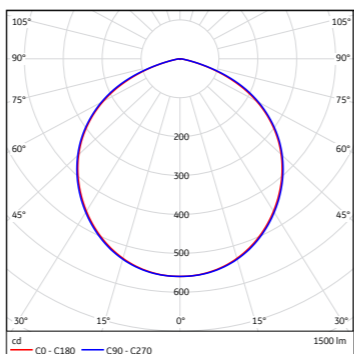
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g)
6"/148 mm	180+/- 2	81	155-160	320
6" accessory ring	210		150-190	
8" /200 mm	240+/-2	93	200-205	480



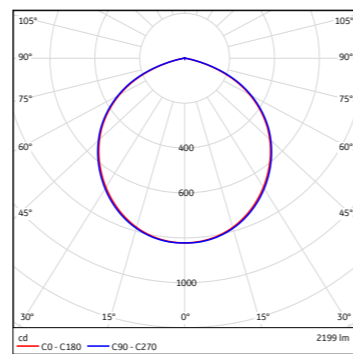
6 inch - 11W



6 inch - 15W

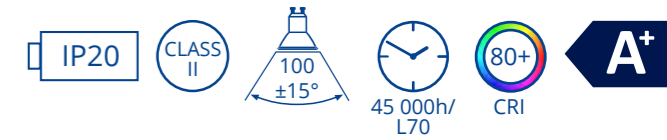


8 inch - 15W



8 inch - 22W

Diffuser Downlight IP20



Product Description	Tungram Product Code	GE 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	93057436	11	1 100	3000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 11W 840 SST	93107533	93057437	11	1 100	4000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 11W 865 SST	TBD	93057438	11	1 100	6500	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 830 SST	93108077	93057439	15	1 500	3000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 840 SST	93107534	93057440	15	1 500	4000	100	Ø180x81	0.32	1
LED DLR Diff P1 TU6 IP20 15W 865 SST	TBD	93057441	15	1 500	6500	100	Ø180x81	0.32	1
LED DLR Diff P1 TU8 IP20 15W 830 SST	93108078	93057442	15	1 500	3000	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 15W 840 SST	93107535	93057443	15	1 500	4000	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 15W 865 SST	TBD	93057444	15	1 500	6500	100	Ø240x93	0.48	1
LED DLR Diff P1 TU8 IP20 22W 830 SST	93108079	93057445	22	2 200	3000	100	Ø240x93	0.5	1
LED DLR Diff P1 TU8 IP20 22W 840 SST	93107536	93057446	22	2 200	4000	100	Ø240x93	0.5	1
LED DLR Diff P1 TU8 IP20 22W 865 SST	TBD	93057447	22	2 200	6500	100	Ø240x93	0.5	1



LED INDOOR SOLUTION

Downlighters



General illumination



Stairways, corridors



Retail



Hospitality



Office

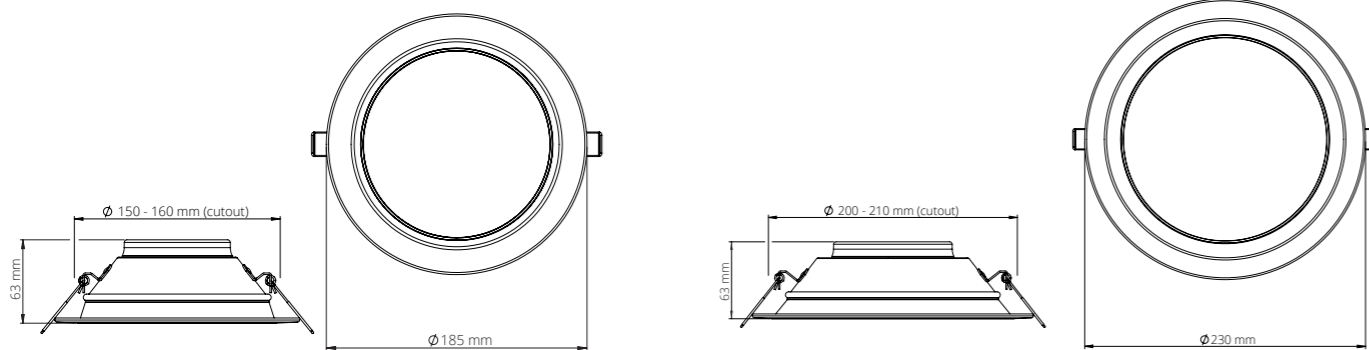
Diffuser Downlight IP44

Tungram 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.

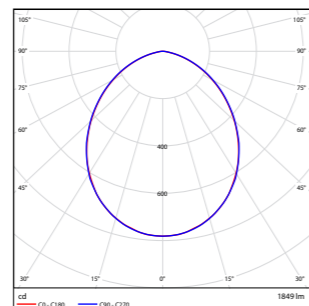
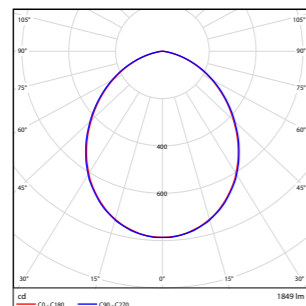
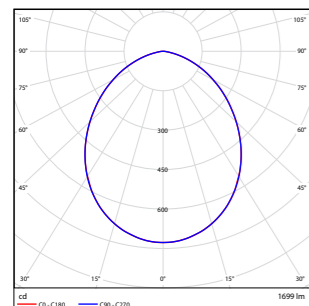


Benefits

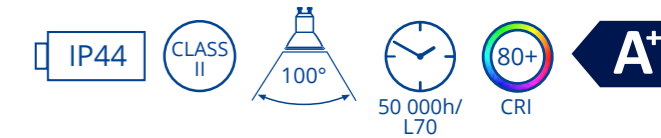
- Direct replacement for compact fluorescent lamp downlights
- Over 60%+ energy saving compared to luminaires that use CFL PI lamps
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs
- Easy installation with fast connection
- Healthy - UV-free & IR-free



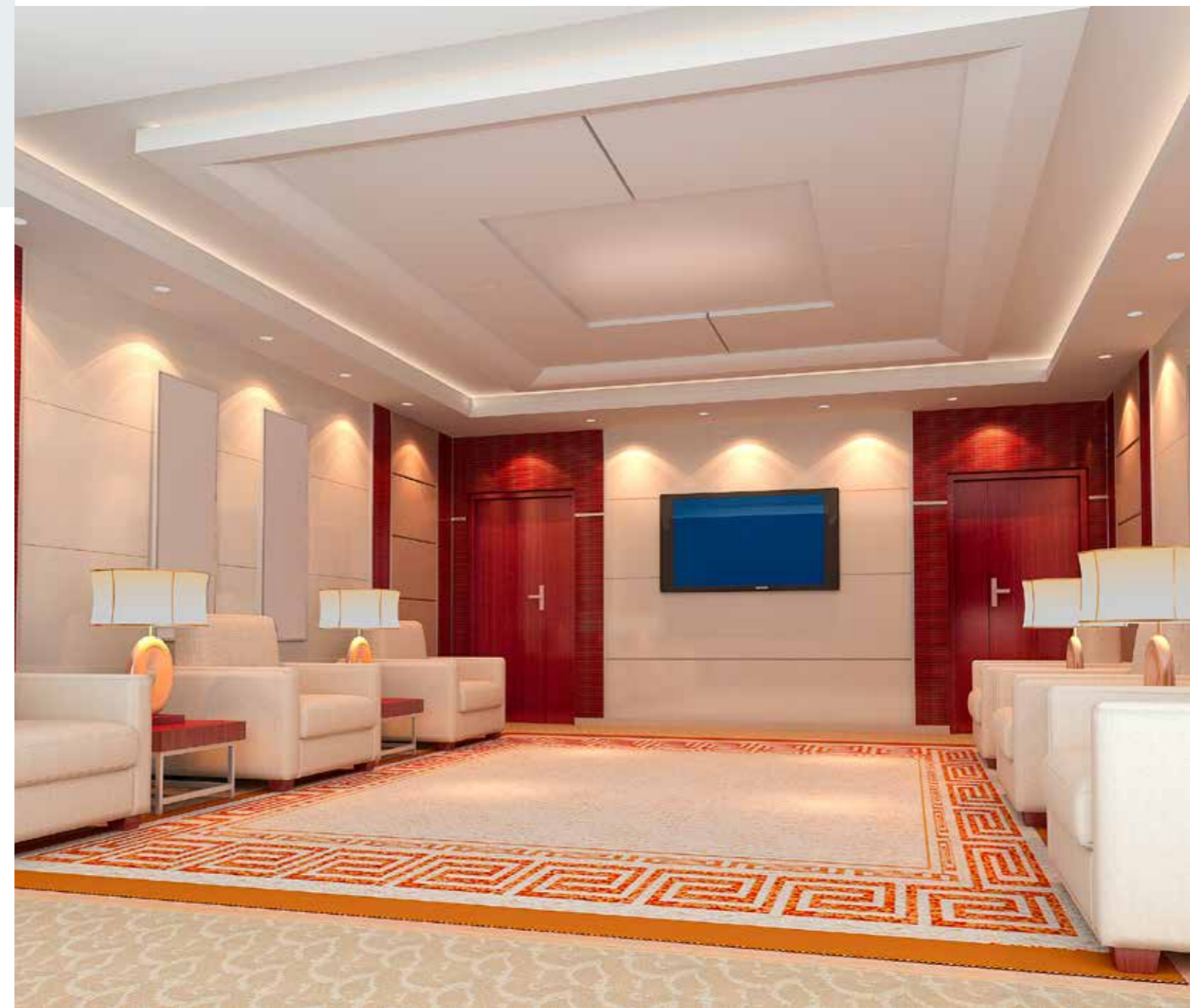
Size	Outer Diameter (mm)	Height (mm)	Cut-out hole (mm)	Weight (g)
6"/150-160mm	185	63	150-160	250
8"/200-210mm	230	63	200-210	340



Diffuser Downlight IP44



Product Description	Tungram Product Code	GE 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



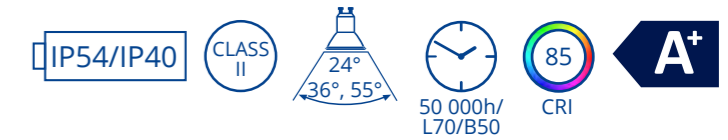
Shop /
Supermarket /
Hotel / Hospitality



General lighting /
Office

COB Downlight UGR<19 IP54

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.

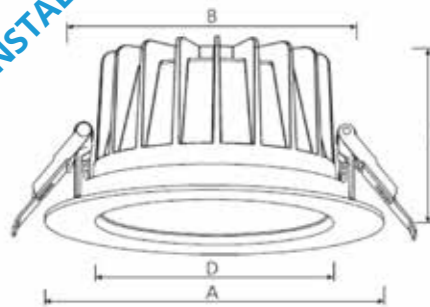
Product Description	Tungsram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	IP	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
COB Downlight UGR<19 IP54 – Static driver										
LED DLR G1 18W 830 S 55D W	93113196	-	18	2 000	3000	54/40	111	Ø172x90	0.84	12
LED DLR G1 18W 840 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

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)

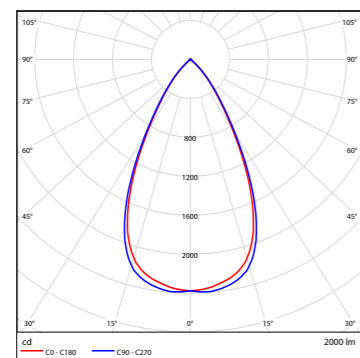
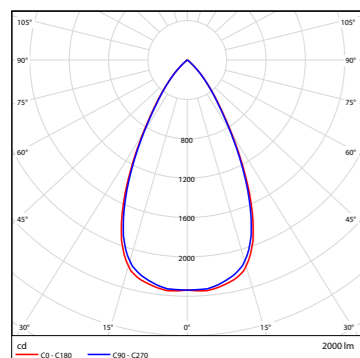


EASY
INSTALLATION



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



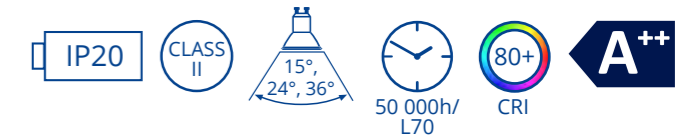
LED INDOOR SOLUTION

Downlighters



COB Downlight Multigimbal

COB Downlight Multigimbal



The new multigimbal luminaire is the ideal option for commercial and retail applications. The luminaire offers a mixture of functionality and performance replicating the characteristics of a traditional lamp fitting. 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 ability to create general lighting or accent lighting.

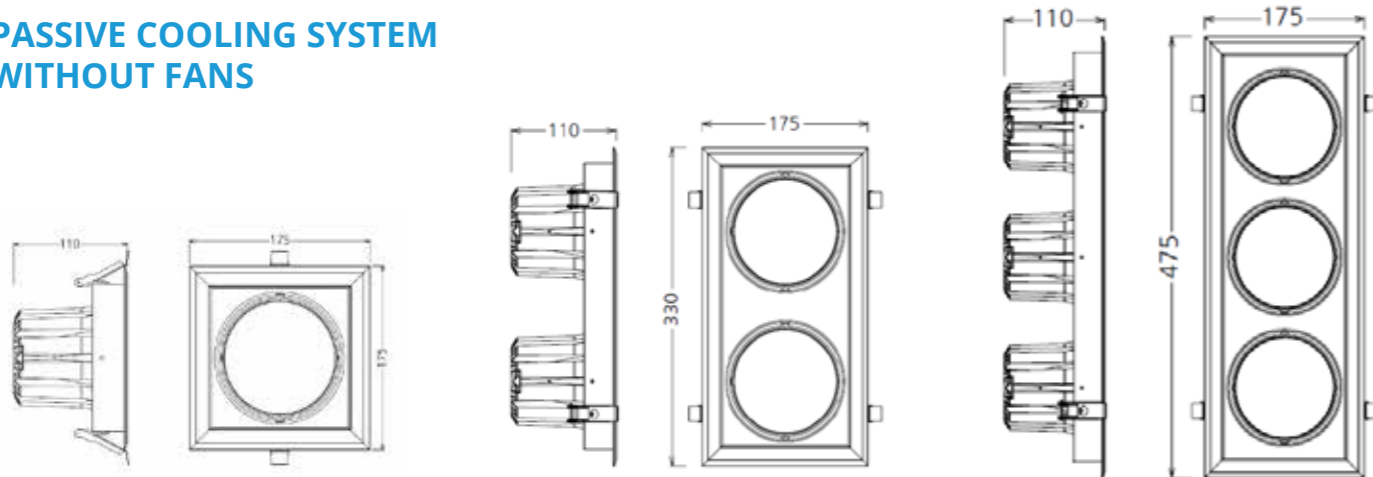


Benefits

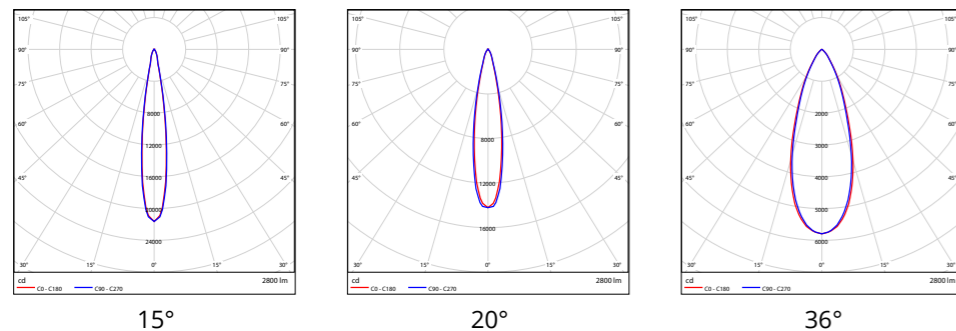
- Up to 70% energy saving compared to standard CMH
- Adjustable and rotary
- No UV/IR light
- Static remote driver (1 per light engine/head)
- Aluminium housing
- Precise light distribution
- Replaceable light engine / head
- Environmentally friendly, without Mercury or any other hazardous substances

Product Description	Tungsräm Product Code	GE 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	5 600	3000	15	93	330*175*110	2.25	1
LED Gimbal 1x30W 830 S 36D	93113180	-	30	8 400	3000	15	93	475*175*110	3.2	1
LED Gimbal 1x30W 840 S 15D	93113181	-	30	2 800	4000	15	93	175*175*110	1.25	1
LED Gimbal 1x30W 840 S 20D	93113182	-	30	5 600	4000	15	93	330*175*110	2.25	1
LED Gimbal 1x30W 840 S 36D	93113183	-	30	8 400	4000	15	93	475*175*110	3.2	1
LED Gimbal 2x30W 830 S 15D	93113184	-	60	2 800	3000	24	93	175*175*110	1.25	1
LED Gimbal 2x30W 830 S 20D	93113185	-	60	5 600	3000	24	93	330*175*110	2.25	1
LED Gimbal 2x30W 830 S 36D	93113186	-	60	8 400	3000	24	93	475*175*110	3.2	1
LED Gimbal 2x30W 840 S 15D	93113187	-	60	2 800	4000	24	93	175*175*110	1.25	1
LED Gimbal 2x30W 840 S 20D	93113188	-	60	5 600	4000	24	93	330*175*110	2.25	1
LED Gimbal 2x30W 840 S 36D	93113189	-	60	8 400	4000	24	93	475*175*110	3.2	1
LED Gimbal 3x30W 830 S 15D	93113190	-	90	2 800	3000	36	93	175*175*110	1.25	1
LED Gimbal 3x30W 830 S 20D	93113191	-	90	5 600	3000	36	93	330*175*110	2.25	1
LED Gimbal 3x30W 830 S 36D	93113192	-	90	8 400	3000	36	93	475*175*110	3.2	1
LED Gimbal 3x30W 840 S 15D	93113193	-	90	2 800	4000	36	93	175*175*110	1.25	1
LED Gimbal 3x30W 840 S 20D	93113194	-	90	5 600	4000	36	93	330*175*110	2.25	1
LED Gimbal 3x30W 840 S 36D	93113195	-	90	8 400	4000	36	93	475*175*110	3.2	1

PASSIVE COOLING SYSTEM WITHOUT FANS



Up to 8400lm



LED INDOOR SOLUTION

Downlighters



Education



Residential



Offices /
Banks



Art-galleries



Retail



Hospitality

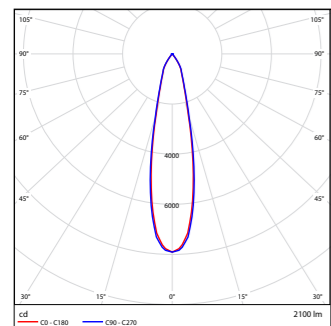
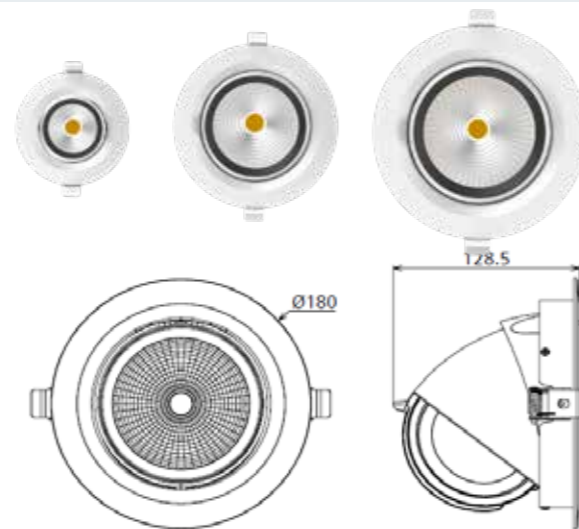
COB Downlight Adjustable / Scoop

Tungram COB downlight is uniquely designed with reflector and Citizen COB high power LED chip. The die-cast aluminium profile provides excellent thermal dissipation. Adjustable lighting direction provides all possible lighting effects. Isolated driver solution, available in non-dimmable version, achieves great dimming compatibility with world-wide brand dimmers.

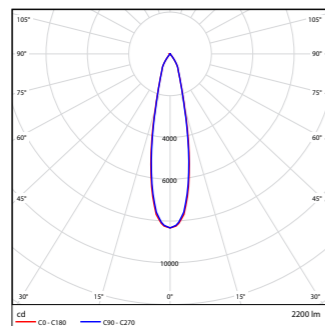


Benefits

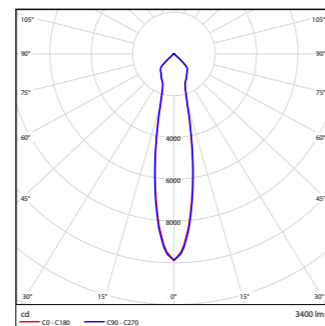
- Up to 50% energy saving compared to standard HID
- Non-dimmable remote driver with plug and play connection
- No UV/IR light
- White finishing
- Adjustable tilt angle from -15° to 35°
- Die-cast aluminium body and heatsink for good thermal management
- LED lifespan L70B50 50.000 hours at 25°C



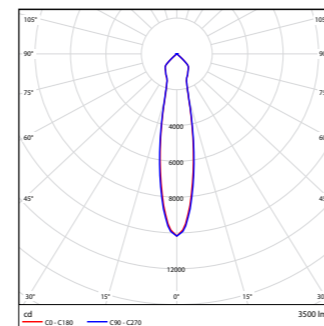
20W 3000K



20W 4000K



33W 3000K



33W 4000K

COB Downlight Adjustable / Scoop



Product Description	Tungram Product Code	GE 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	3 500	4000	50	106	Ø180x125	1.07	1



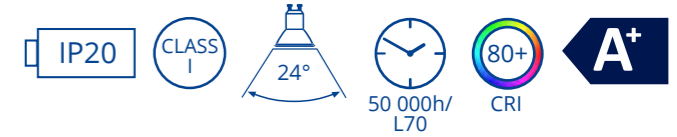
LED INDOOR SOLUTION

Downlighters



Pendant

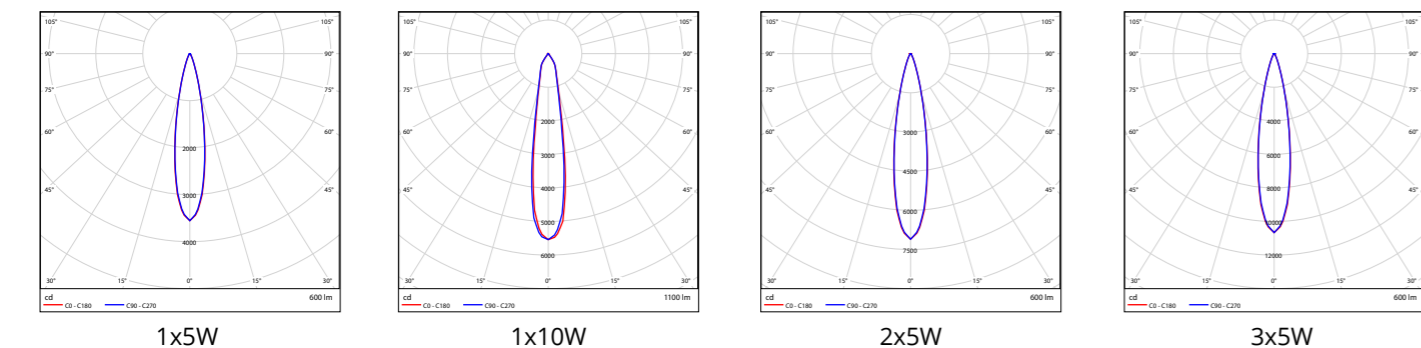
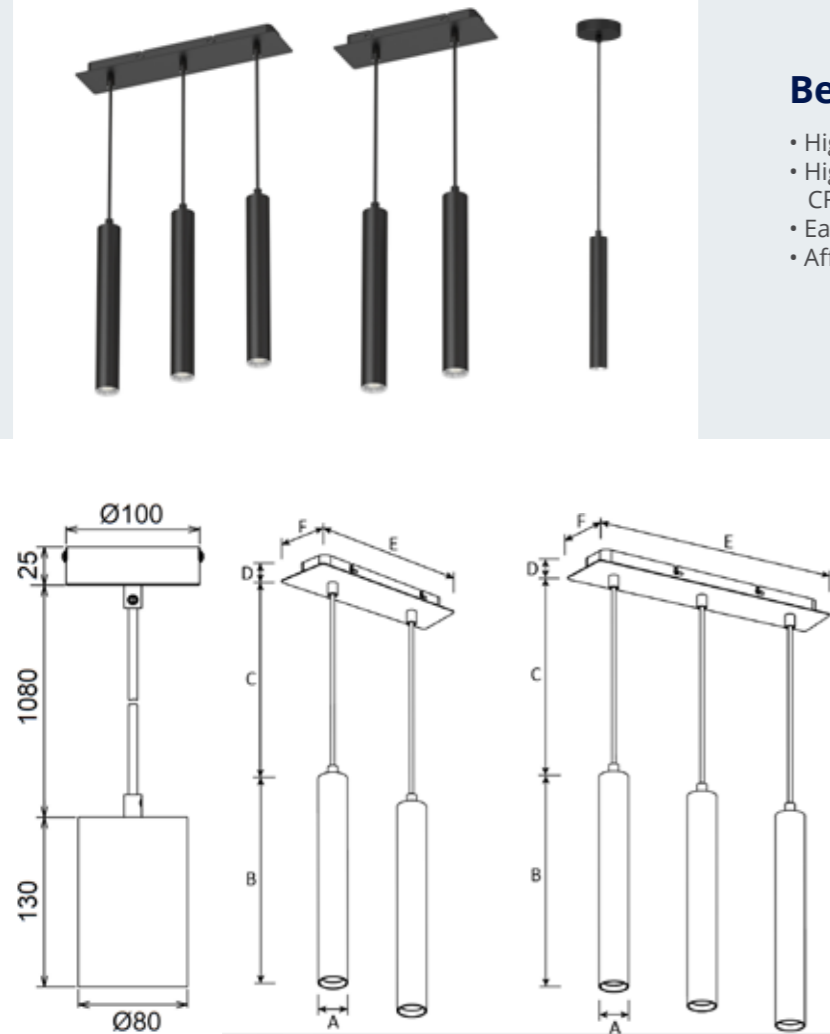
Pendant



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



Product Description	Tungsram Product Code	GE 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



Residential



Museums / Galleries



Education



Offices / Banks



Retail



Hospitality

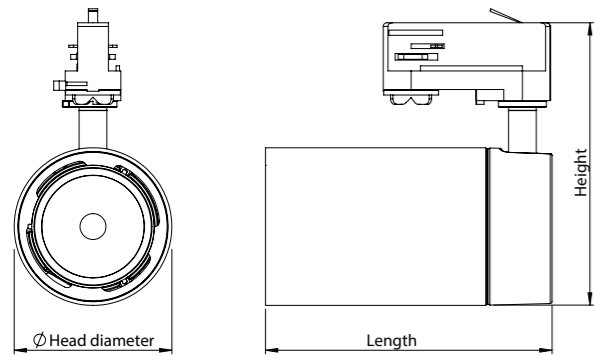
Trackspot ADV

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.



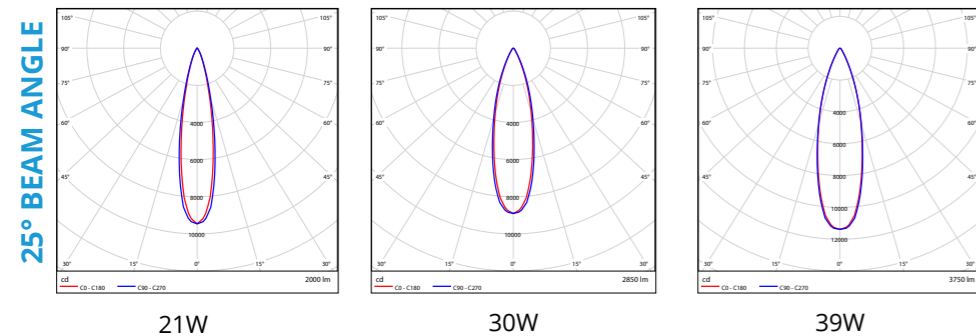
Benefits

- 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
- Static control and driver in house solution

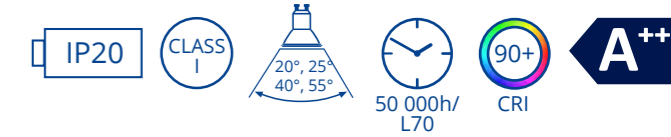


Wattage	Head diameter (mm)	Length (mm)	Height (mm)	Weight (kg)
21W	85	154.5	150	0.735
30W	100	173.3	165	1.300
39W	100	189	165	1.300

Up to 4000lm



Trackspot ADV



Product Description	Tungsram Product Code	GE 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



Residential



Museums / Galleries



Education



Offices / Banks



Retail



Hospitality

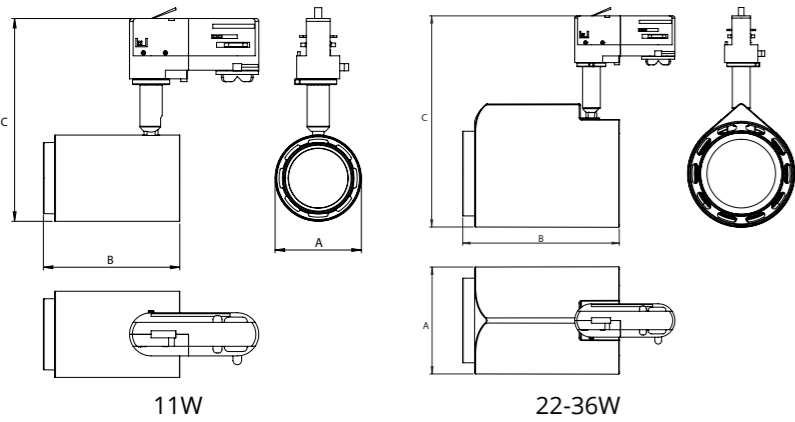
Trackspot LUX

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

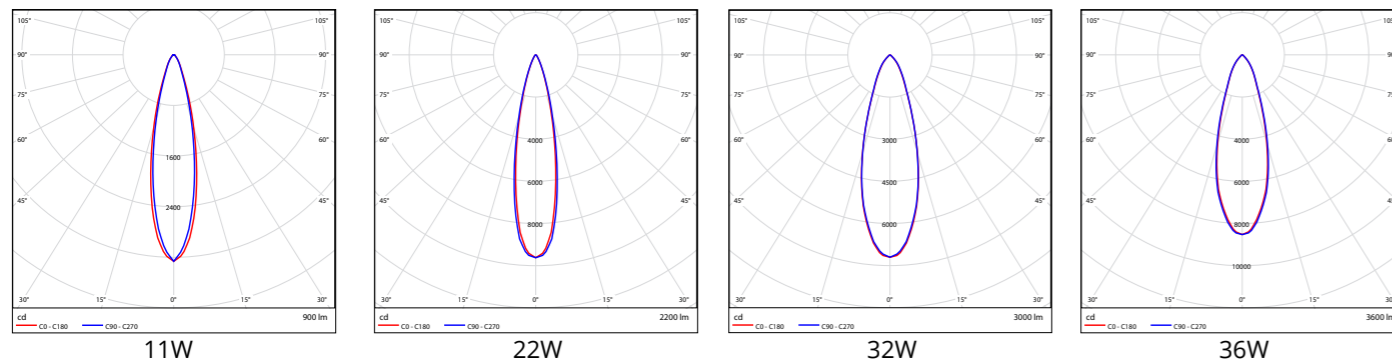
- Die casting aluminum housing
- Precise light distribution
- Macadam 3 SDCM
- Up to 110lm/W efficacy
- Ultraviolet (UV) + Infrared (IR) free light
- Passive cooling system without fans
- Anti-Glare lens optic
- Water-drop design with Self-Cleaning Function



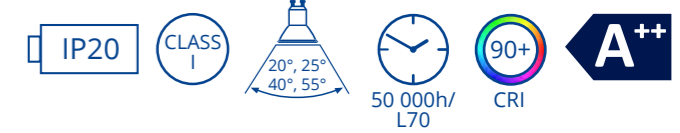
Wattage	A / Head diameter (mm)	B / Length (mm)	C / Height (mm)	Weight (kg)
11W	60	95	143	0.370
22W	85	108	175.5	0.700
32W	96	140	182	1.090
36W	96	140	182	1.090



25° BEAM ANGLE



Trackspot LUX



Product Description	Tungsrn Product Code	GE 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

T5 Battens



Indoor/
cove



Industrial



Retail



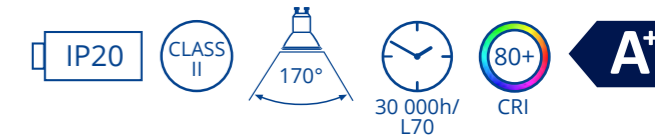
Hospitality



Office

Batten ECO / Switch

Batten ECO / Switch

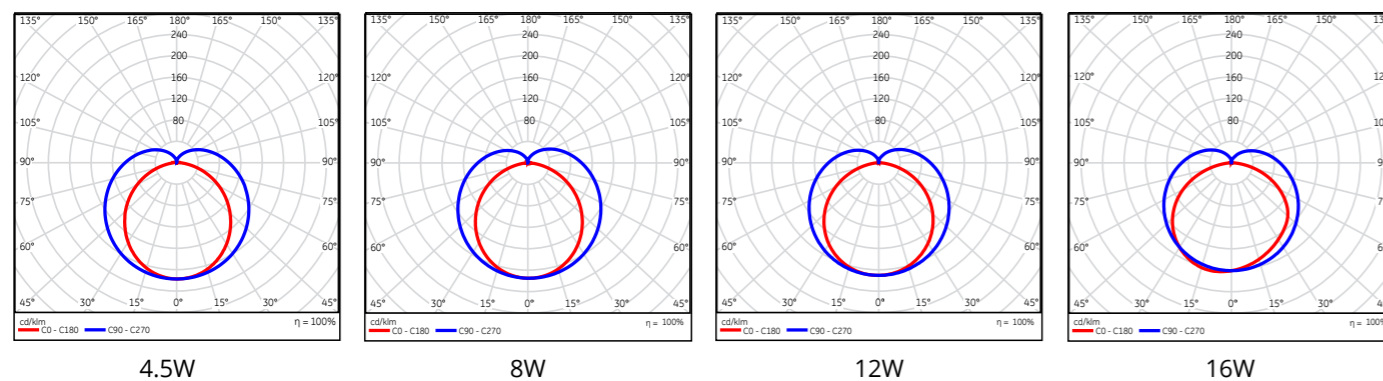
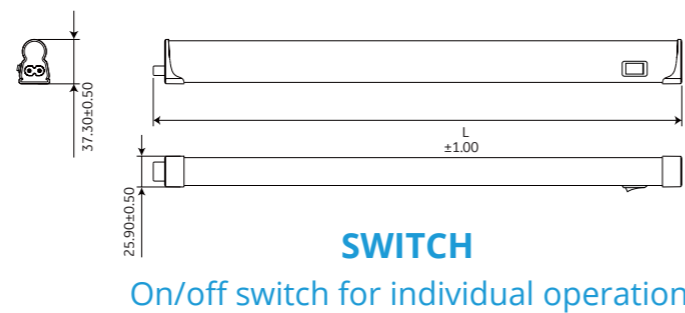
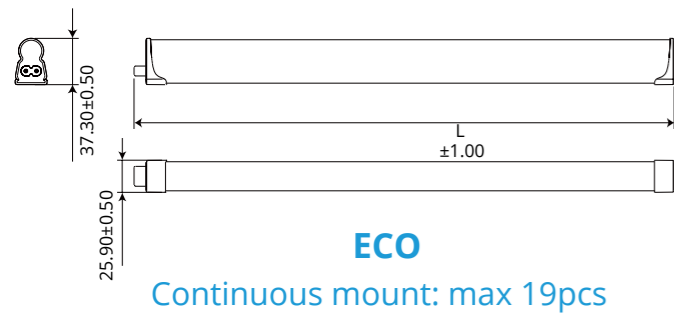


We designed the LED T5 Batten to be a direct replacement for conventional battens while providing energy savings. It offers multiple installation methods to ease your worries and bring the customer a brand new soft lighting experience of soft lighting. The best choice for smooth linear lighting. We offer this range of eight luminaires in four wattages



Benefits

- Easy to install requires small space due to compact size
- Installation methods: wall mount, stand-alone
- Seamless linear lighting without dark spots
- Healthy - UV-free & IR-free
- Cost-effective solution offers up to 50% energy-saving benefits especially with 4.5W and 8W when replacing 8W and 13W T5 tubes



Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
T5 Batten ECO – Static driver									
LBTE 4.5 NW 1ft ECO	-	93044235	4.5	400	4000	89	311.5x	0.07	6
LBTE 4.5 WW 1ft ECO	-	93044476	4.5	350	3000	78	25.9x37.3	0.07	6
LBTE 8 NW 2ft ECO	-	93044477	8	800	4000	100	581.5	0.11	6
LBTE 8 WW 2ft ECO	-	93044478	8	750	3000	94	x25.9x37.3	0.11	6
LBTE 12 NW 3ft ECO	-	93044479	12	1 200	4000	100	881.5	0.16	6
LBTE 12 WW 3ft ECO	-	93044480	12	1 100	3000	92	x25.9x37.3	0.16	6
LBTE 16 NW 4ft ECO	-	93044481	16	1 550	4000	97	1181.5	0.21	6
LBTE 16 WW 4ft ECO	-	93044482	16	1 450	3000	91	x25.9x37.3	0.21	6
T5 Batten Switch – Static driver									
LBTE 4.5 NW 1ft SWITCH	-	93053138	4.5	400	4000	89	311.5x	0.07	6
LBTE 4.5 WW 1ft SWITCH	-	93053139	4.5	350	3000	78	25.9x37.3	0.07	6
LBTE 8 NW 2ft SWITCH	-	93053140	8	800	4000	100	81.5	0.11	6
LBTE 8 WW 2ft SWITCH	-	93053141	8	750	3000	94	x25.9x37.3	0.11	6
LBTE 12 NW 3ft SWITCH	-	93053142	12	1 200	4000	100	881.5	0.16	6
LBTE 12 WW 3ft SWITCH	-	93053143	12	1 100	3000	92	x25.9x37.3	0.16	6
LBTE 16 NW 4ft SWITCH	-	93053144	16	1 550	4000	97	1181.5	0.21	6
LBTE 16 WW 4ft SWITCH	-	93053145	16	1 450	3000	91	x25.9x37.3	0.21	6
T5 Batten ECO Accessories									
Power cord without plug(wire 500mm)	-	93044483							1
Extend cable(wire 200mm)	-	93044484							1
Power cable 1m with EU plug	-	93066758							1
Power cable 1m with UK plug	-	93066759							1



LED INDOOR SOLUTION

T5 Battens



Indoor/
cove



Industrial



Retail



Hospitality



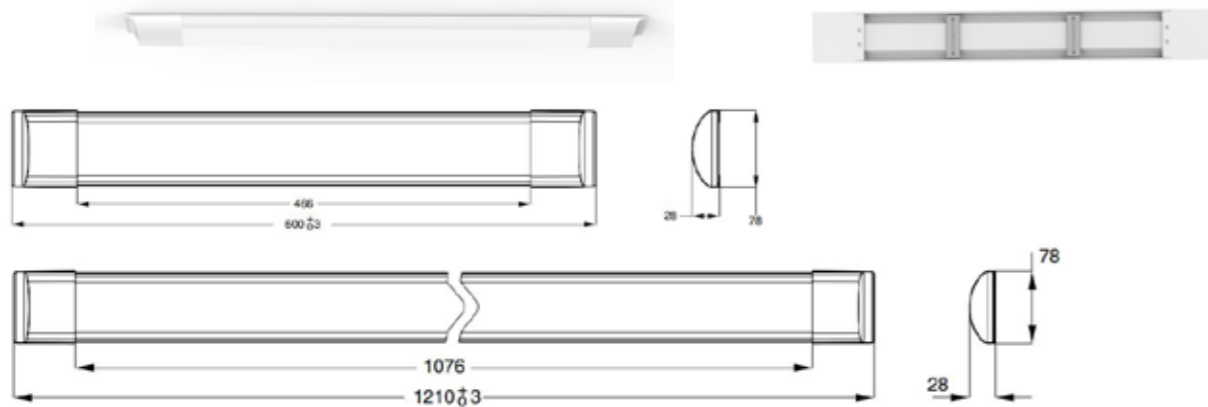
Office

Batten IP65

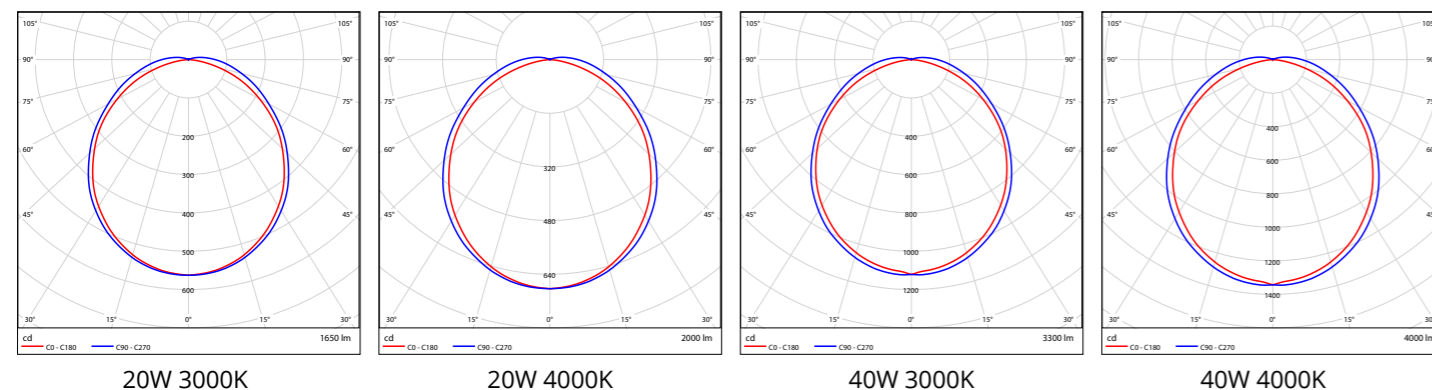
We designed the LED IP65 Batten to be a direct replacement for conventional battens while providing energy savings. Your best choice for smooth linear lighting; the available range is in 20W & 40W with the sizes of 600mm and 1200mm. Featuring high grade polycarbonate diffuser and housing, they are suitable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

Benefits

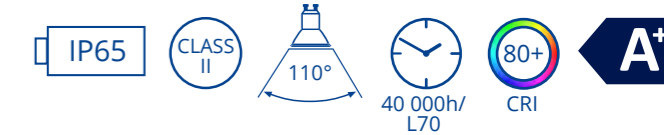
- Easy to install, requires small space due to compact size
- Seamless linear lighting without dark spots
- Healthy - UV-free & IR-free
- Environmental: save up to 60% energy
- High color rendering: CRI>80
- High efficiency: up to 100lm/w



Description	Wattage	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
LED Batten TU 20W xxx	20	600	78	28	0.45
LED Batten TU 40W xxx	40	1210	78	28	0.75



Batten IP65



Product Description	Tungram Product Code	GE 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



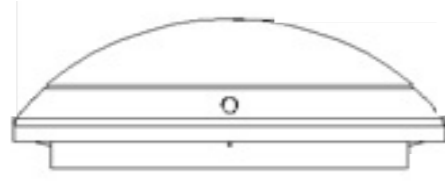
Integrated Bulkhead

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

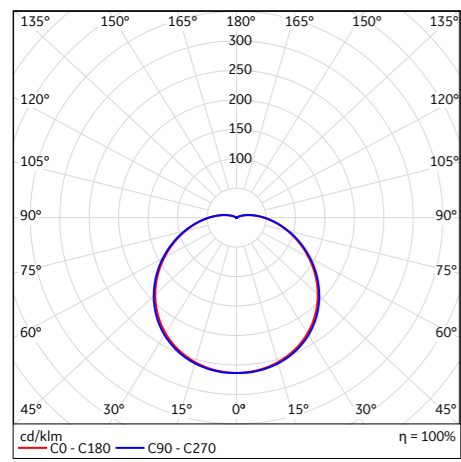


Benefits

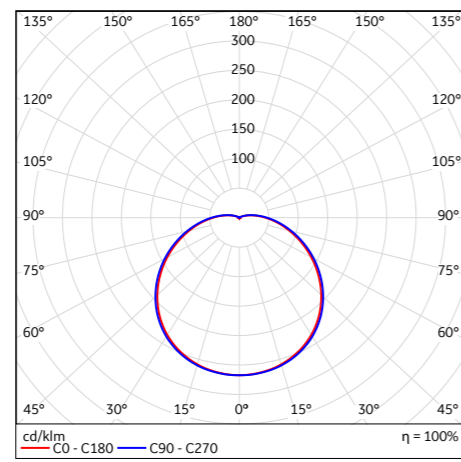
- Energy savings of up to 60% (compared to luminaires that use 2D fluorescent lamps)
- Integrated light module with optic
- Uniform light
- Fast, simple, and easy installation options
- Lasts ~4x longer than typical CFL bulkhead fixture
- High-protection rating (IP65) and high-impact resistance (IK10)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



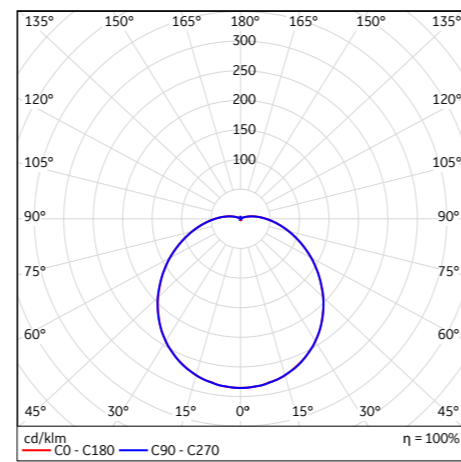
Range	Diameter	Height
D25	ø250mm	102mm
D30	ø300mm	109mm
D33	ø330mm	109mm



Ø250 9W

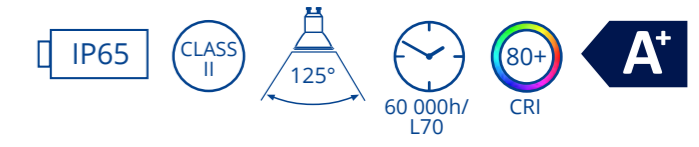


Ø250 17W



Ø300 25W

Integrated Bulkhead



Product Description	Tungram Product Code	GE 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	93072705	9	855	3000	95	Ø250 x 102	0.69		1
LED Bulkhead G1 TU D25 9W 840 S NNN	93107551	93073527	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	93073531	17	1 600	3000	94	Ø250 x 102	0.7		1
LED Bulkhead G1 TU D25 17W 840 S NNN	93107555	93073533	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	93073543	25	2 400	3000	96	Ø300 x 109	1		1
LED Bulkhead G1 TU D30 25W 840 S NNN	93107558	93073544	25	2 400	4000	96	Ø300 x 109	1		1
LED Bulkhead G1 TU D25 9W 830 S NNM	93107550	93073526	9	855	3000	95	Ø250 x 102	0.74		1
LED Bulkhead G1 TU D25 9W 840 S NNM	93107552	93073528	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	93073532	17	1 600	3000	94	Ø250 x 102	0.75	Motion and daylight sensor	1
LED Bulkhead G1 TU D25 17W 840 S NNM	93107556	93073534	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	93073546	25	2 400	3000	96	Ø300 x 109	1.05		1
LED Bulkhead G1 TU D30 25W 840 S NNM	93107560	93073547	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	93073537	24	2 150	3000	90	Ø300 x 109	1.2	3hrs EM	1
LED Bulkhead G1 TU D30 24W 840 S EMN	93108101	93073538	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	Motion and daylight sensor + 3hrs EM	1
LED Bulkhead G1 TU D30 24W 830 S EMM	93108102	93073540	24	2 150	3000	90	Ø300 x 109	1.25		1
LED Bulkhead G1 TU D30 24W 840 S EMM	93108103	93073541	24	2 150	4000	90	Ø300 x 109	1.25		1



LED INDOOR SOLUTION

Bulkheads



General lighting



Retail



Education



Office

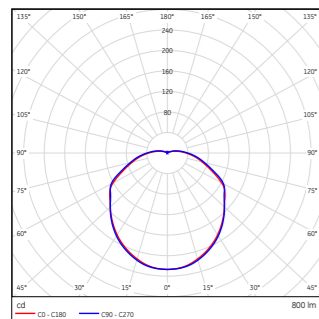
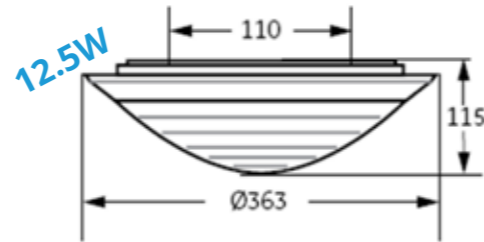
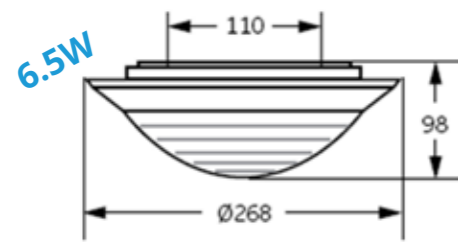
2D Bulkhead

A simple and elegant interior light fitting, designed to take a replaceable industry leading efficiency, is classic shaped LED 2D lamp. This is a unique solution that makes the fixture future proof, as only an LED 2D replacement lamp is needed, once product has reached its end-of-life, or when a customer wishes to switch to a different colour temperature. The LED 2D Bulkhead range offers a comprehensive choice of versions including two sizes, with clear or opal diffuser options.

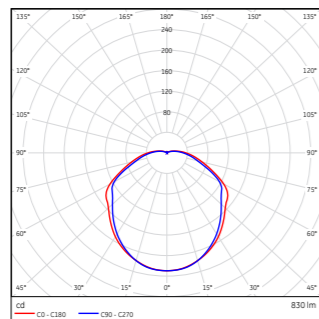


Benefits

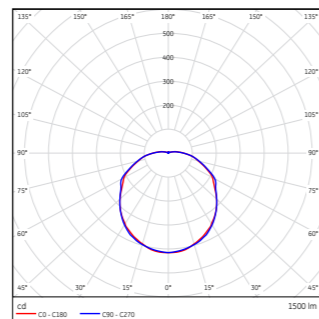
- Future proof, upgradeable design
- Replaceable LED 2D lamp included
- High efficiency up to 128 lm/W
- L70 40,000 hours
- Min 80 CRI
- Flickering index <1%
- Clear and Opal diffuser options



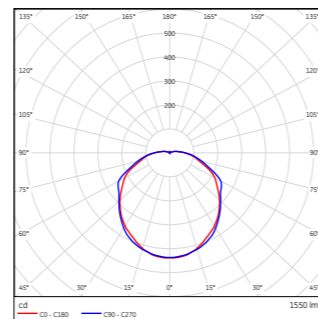
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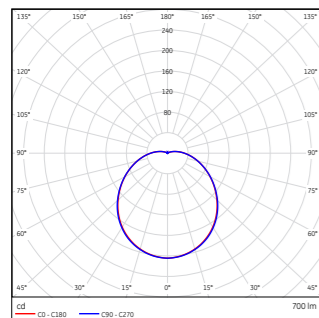
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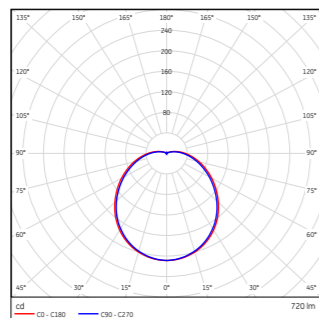
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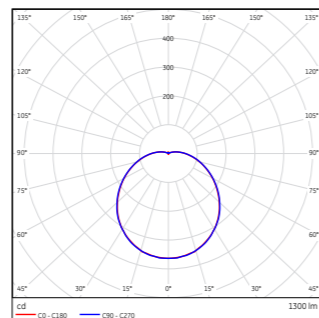
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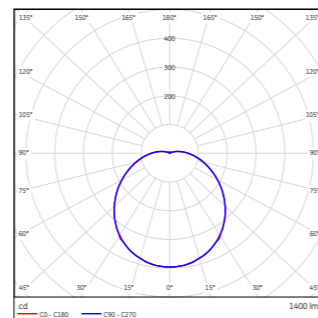
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93057383



93057384



93057385

2D Bulkhead



Product Description	Tungsum Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
2D Bulkhead – Static driver									
BH 2DC- D27-6,5/35-7S-ST	-	93055623	6.5	800	3500	123	Ø268 x 98	0.668	1
BH 2DC- D27-6,5/40-7S-ST	-	93055624	6.5	830	4000	128	Ø268 x 98	0.668	1
BH 2DC- D36-12,5/35-7S-ST	-	93055625	12.5	1 500	3500	120	Ø363 x 115	1.154	1
BH 2DC- D36-12,5/40-7S-ST	-	93056106	12.5	1 550	4000	124	Ø363 x 115	1.154	1
BH 2DO- D27-6,5/35-7S-ST	-	93057382	6.5	700	3500	108	Ø268 x 98	0.661	1
BH 2DO- D27-6,5/40-7S-ST	-	93057383	6.5	720	4000	111	Ø268 x 98	0.661	1
BH 2DO- D36-12,5/35-7S-ST	-	93057384	12.5	1 300	3500	104	Ø363 x 115	1.146	1
BH 2DO- D36-12,5/40-7S-ST	-	93057385	12.5	1 400	4000	112	Ø363 x 115	1.146	1





Retail



Hospitality



Office

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.



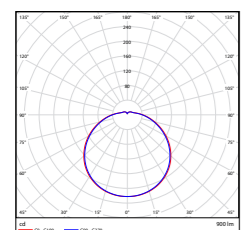
Benefits

- 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+

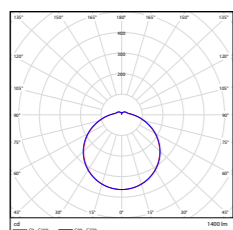


Wattage	D	H
12W	Ø245	65
18W	Ø315	65
24W	Ø365	65

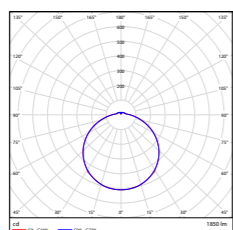
STANDARD COVER



12W 4000K

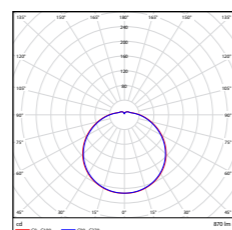


18W 4000K

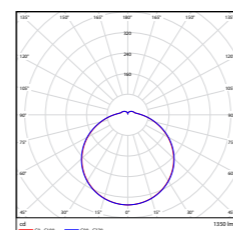


24W 4000K

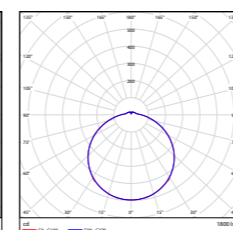
PATTERN COVER



12W 4000K



18W 4000K



24W 4000K

Bulkhead Ceiling Light



Product Description	Tungram Product Code	GE 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 pcs/single box, 10 pcs/carton
LED Ceiling G1 TU SC 12W 840 SN IP20	93115049	-	12	900	4000	75	Ø245 x 65	0.35	
LED Ceiling G1 TU SC 18W 830 SN IP20	93115050	-	18	1,400	3000	78	Ø315 x 65	0.55	
LED Ceiling G1 TU SC 18W 840 SN IP20	93115051	-	18	1,400	4000	78	Ø315 x 65	0.55	
LED Ceiling G1 TU SC 24W 830 SN IP20	93115052	-	22	1,850	3000	77	Ø365 x 65	0.62	
LED Ceiling G1 TU SC 24W 840 SN IP20	93115053	-	22	1,850	4000	77	Ø365 x 65	0.62	
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 pcs/single box, 10 pcs/carton
LED Ceiling G1 TU PC 12W 840 SN IP20	93115055	-	12	870	4000	73	Ø245 x 65	0.35	
LED Ceiling G1 TU PC 18W 830 SN IP20	93115056	-	18	1,350	3000	75	Ø315 x 65	0.55	
LED Ceiling G1 TU PC 18W 840 SN IP20	93115057	-	18	1,350	4000	75	Ø315 x 65	0.55	
LED Ceiling G1 TU PC 24W 830 SN IP20	93115058	-	22	1,800	3000	75	Ø365 x 65	0.62	
LED Ceiling G1 TU PC 24W 840 SN IP20	93115059	-	22	1,800	4000	75	Ø365 x 65	0.62	



LED INDOOR SOLUTION

Waterproof Mariners



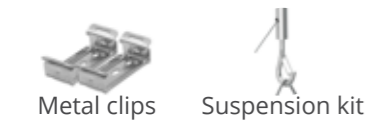
Waterproof Mariner Integrated Premium

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.

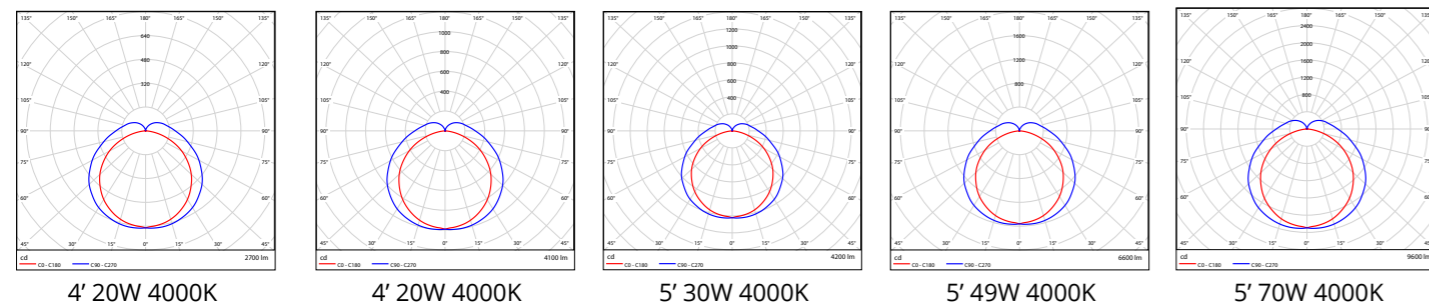
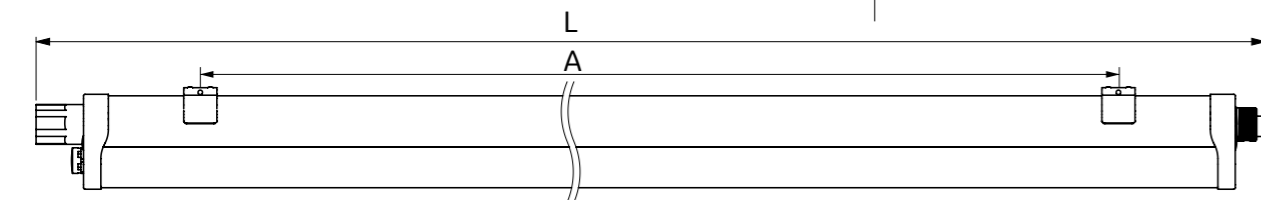
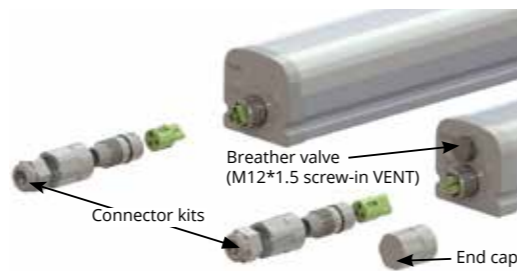


Benefits

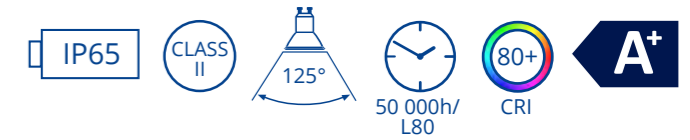
- Energy savings of up to 70% (compared to luminaires that use fluorescent lamps)
- Convenient, continuous connection for both sizes of 1200mm and 1500mm, simple and easy installation
- High resistance against ambient air with humidity and high-particle loads
- Simple refurbishment solution thanks to 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	Tungram Product Code	GE 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	93055991	20	2 700	4000	135	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 20W 865 SST	93107528	93055993	20	2 700	6500	135	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 30W 840 SST	93101663	93055995	30	4 100	4000	137	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 30W 865 SST	93107529	93055997	30	4 100	6500	137	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 5' 30W 840 SST	93107530	93055999	30	4 200	4000	140	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 30W 865 SST	93107531	93056001	30	4 200	6500	140	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 49W 840 SST	93101668	93056003	49	6 600	4000	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 49W 865 SST	93107532	93056005	49	6 600	6500	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 840 SST	93101687	93090173	70	9 600	4000	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 865 SST	93107568	93090174	70	9 600	6500	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 4' 21W 840 SMS	93101688	93090283	21	2 700	4000	129	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 21W 865 SMS	93107570	93092663	21	2 700	6500	129	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 31W 840 SMS	93101689	93090284	31	4 100	4000	132	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 4' 31W 865 SMS	93107571	93092664	31	4 100	6500	132	66x1170x63	0.87	-	1
LED Mariner PR G1 TU 5' 31W 840 SMS	93107569	93090285	31	4 200	4000	135	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 31W 865 SMS	93107572	93092665	31	4 200	6500	135	66x1470x63	1.07	-	1
LED Mariner PR G1 TU 5' 49W 840 SMS	93101690	93090316	49	6 600	4000	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 49W 865 SMS	93107573	93092676	49	6 600	6500	135	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 840 SMS	93101697	93092678	70	9 600	4000	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 5' 70W 865 SMS	93107574	93092677	70	9 600	6500	137	66x1470x63	1.12	-	1
LED Mariner PR G1 TU 4' 23W 840 SEM	TBD	93055992	23	2 700	4000	117	66x1197x63	1.35	-	1
LED Mariner PR G1 TU 4' 23W 865 SEM	TBD	93055994	23	2 700	6500	117	66x1197x63	1.35	-	1
LED Mariner PR G1 TU 4' 34W 840 SEM	93108072	93055996	34	4 100	4000	121	66x1197x63	1.35	-	1
LED Mariner PR G1 TU 4' 34W 865 SEM	93108073	93055998	34	4 100	6500	121	66x1497x63	1.57	-	1
LED Mariner PR G1 TU 5' 33W 840 SEM	TBD	93056000	33	4 200	4000	127	66x1497x63	1.57	-	1
LED Mariner PR G1 TU 5' 33W 865 SEM	TBD	93056002	33	4 200	6500	127	66x1497x63	1.6	-	1
LED Mariner PR G1 TU 5' 52W 840 SEM	93108074	93056004	52	6 600	4000	127	66x1497x63	1.6	-	1
LED Mariner PR G1 TU 5' 52W 865 SEM	93108075	93056006	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

Waterproof Mariners



Industrial/
Storage



Underpasses/
Workshops,
assembly lines



Car park

Waterproof Mariner Integrated UK

The Tungram 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.

Waterproof Mariner Integrated UK



50 000h/
L70/B50



80+
CRI



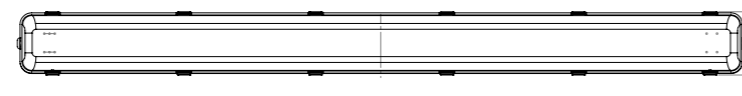
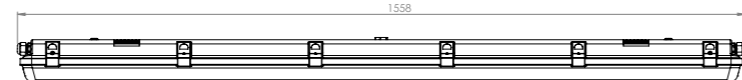
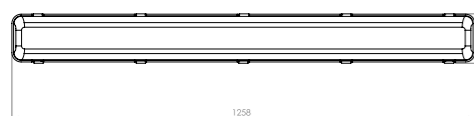
A+

LED Indoor

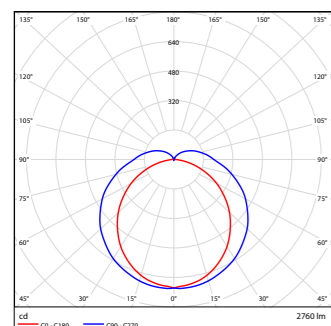
Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Additional feature	Pack Qty
Waterproof Mariner UK – Static driver										
LED Mariner UK G1 TU 4' 24W 840 S	93110381	-	24	2 760	4000	115	1258x83x86	1.21	1	1
LED 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

Benefits

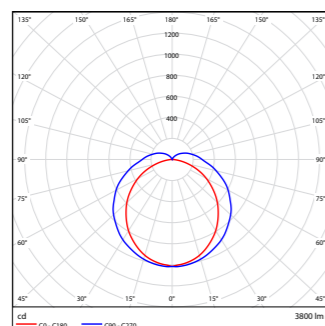
- Direct replacement for single/twin LFL T8 fixtures
- High energy savings up to 50% compared to luminaires that use fluorescent lamps
- Functional design with easy, flexible installation
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs



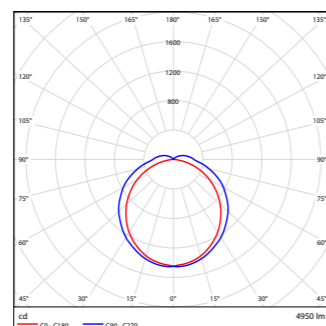
Model	Fixture LxWxH (incl driver)	Weight incl driver (kg)	Driver (LxWxH)	Driver weight (g)
LED Mariner UK G1 TU 4' 24W 840 S	1258x83x86mm	1.205	280x30x21mm	166
LED Mariner UK G1 TU 4' 43W 840 S	1258x132x94mm	2.290	280x30x21mm	195
LED Mariner UK G1 TU 5' 33W 840 S	1558x83x86mm	1.925	280x30x21mm	166
LED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



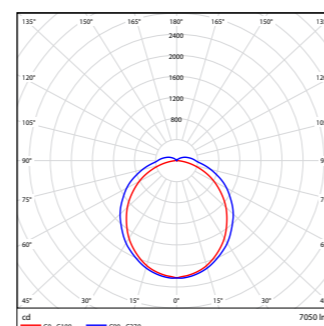
24W 4000K



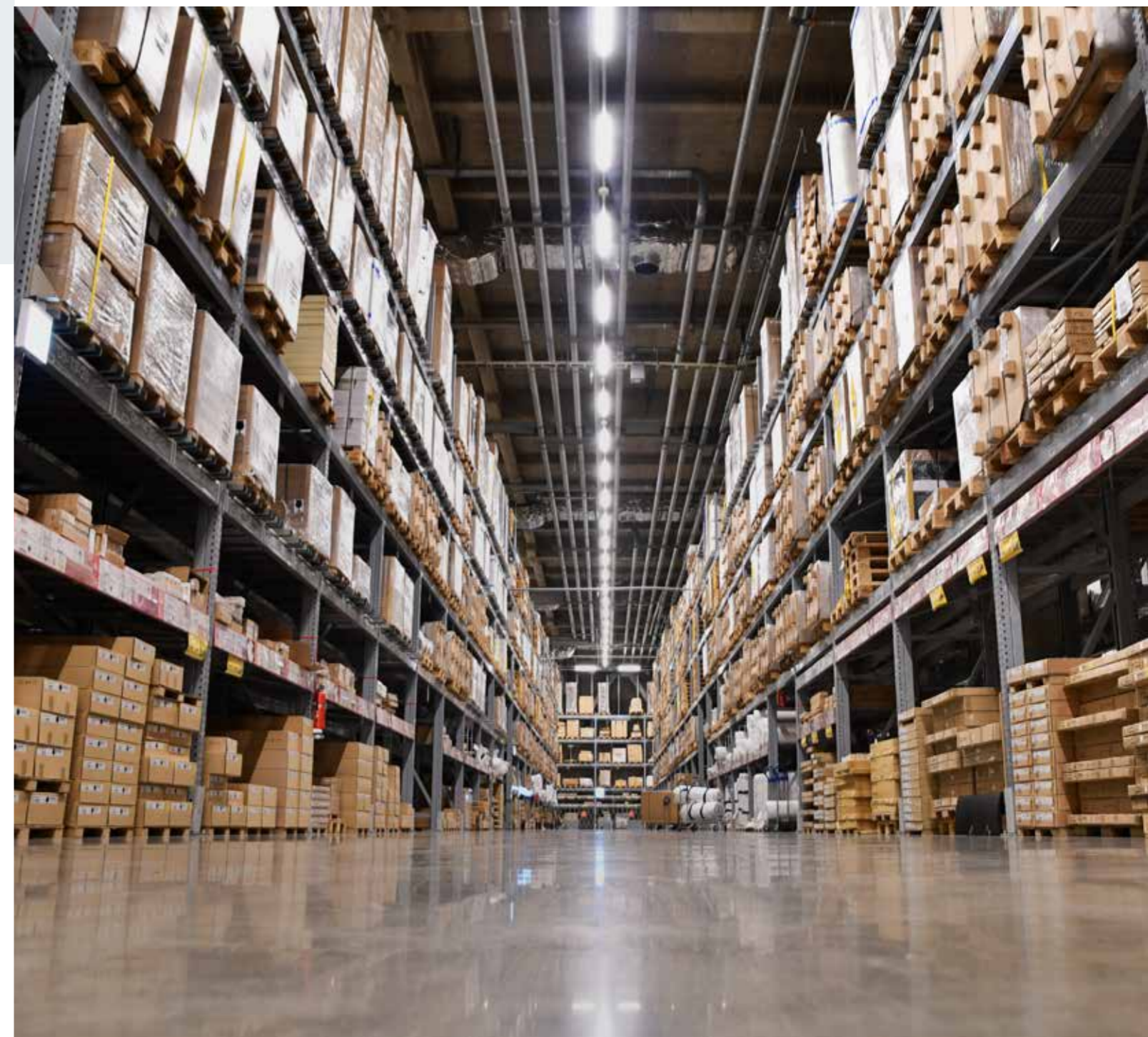
33W 4000K



43W 4000K



67W 4000K



LED INDOOR SOLUTION

Waterproof Mariners



Car park



Industrial



Retail

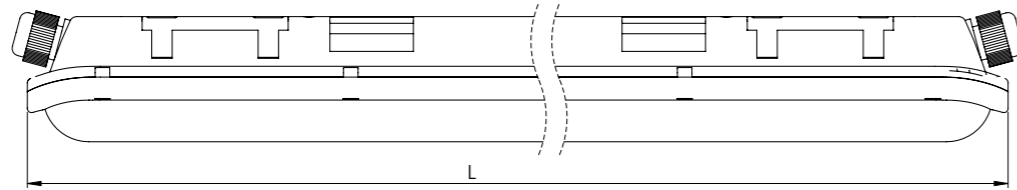
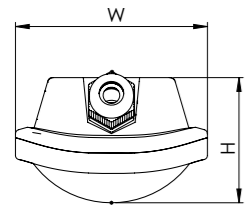
Waterproof Mariner Integrated Start

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.

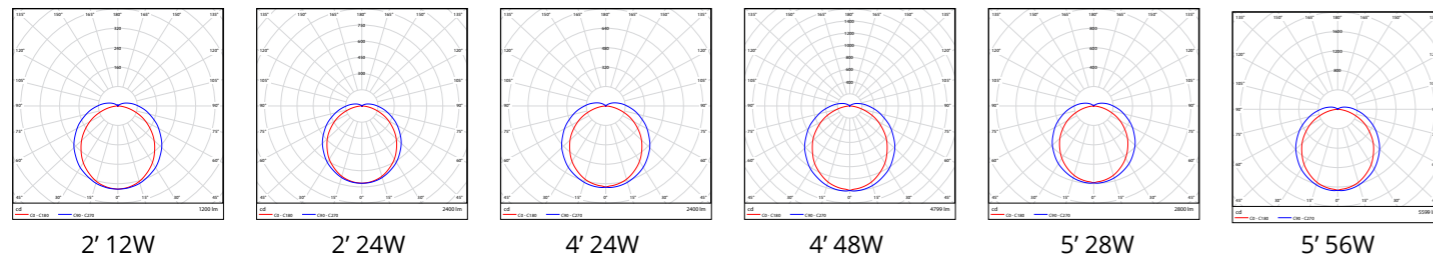


Benefits

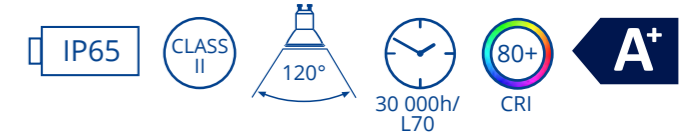
- Uniform light
- Convenient, continuous connection for sizes of 600mm, 1200mm and 1500mm, simple and easy installation options
- High resistance against ambient air with humidity and high-particle loads
- Fast and simple installation due to easy connection design



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	Tungsum Product Code	GE 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	93092699	12	1 200	4000	100	72x600x58	0.7	1
LED MARINER ST G1 TU 2' 12W 865 S EU	93096949	93092700	12	1 200	6500	100	72x600x58	0.7	1
LED MARINER ST G1 TU 2' 24W 840 S EU	93096950	93090163	24	2 400	4000	100	92x600x60	0.8	1
LED MARINER ST G1 TU 2' 24W 865 S EU	93096952	93090164	24	2 400	6500	100	92x600x60	0.8	1
LED MARINER ST G1 TU 4' 24W 840 S EU	93096955	93092701	24	2 400	4000	100	72x1200x58	1.3	1
LED MARINER ST G1 TU 4' 24W 865 S EU	93096957	93092702	24	2 400	6500	100	72x1200x58	1.3	1
LED MARINER ST G1 TU 5' 28W 840 S EU	93096959	93092703	28	2 800	4000	100	72x1500x58	1.7	1
LED MARINER ST G1 TU 5' 28W 865 S EU	93096961	93092704	28	2 800	6500	100	72x1500x58	1.7	1
LED MARINER ST G1 TU 4' 48W 840 S EU	93096962	93088134	48	4 800	4000	100	92x1200x60	1.7	1
LED MARINER ST G1 TU 4' 48W 865 S EU	93096965	93089020	48	4 800	6500	100	92x1200x60	1.7	1
LED MARINER ST G1 TU 5' 56W 840 S EU	93096968	93089017	56	5 600	4000	100	92x1500x60	2	1
LED MARINER ST G1 TU 5' 56W 865 S EU	93096971	93089023	56	5 600	6500	100	92x1500x60	2	1



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.

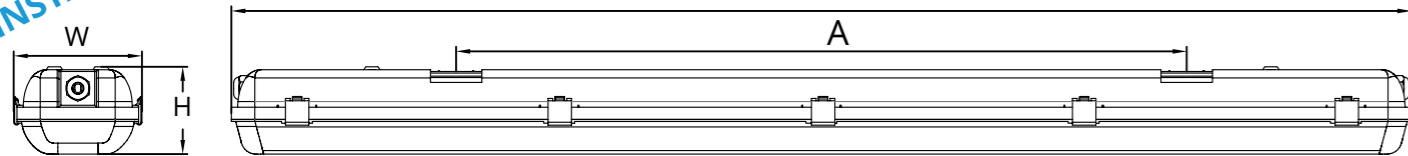


Benefits

- Prewired for easy installation of AC T8 LED lamps
- Luminous flux and light-colour adjustable based on selected lamps
- High protection rating (IP65) and K08
- 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**

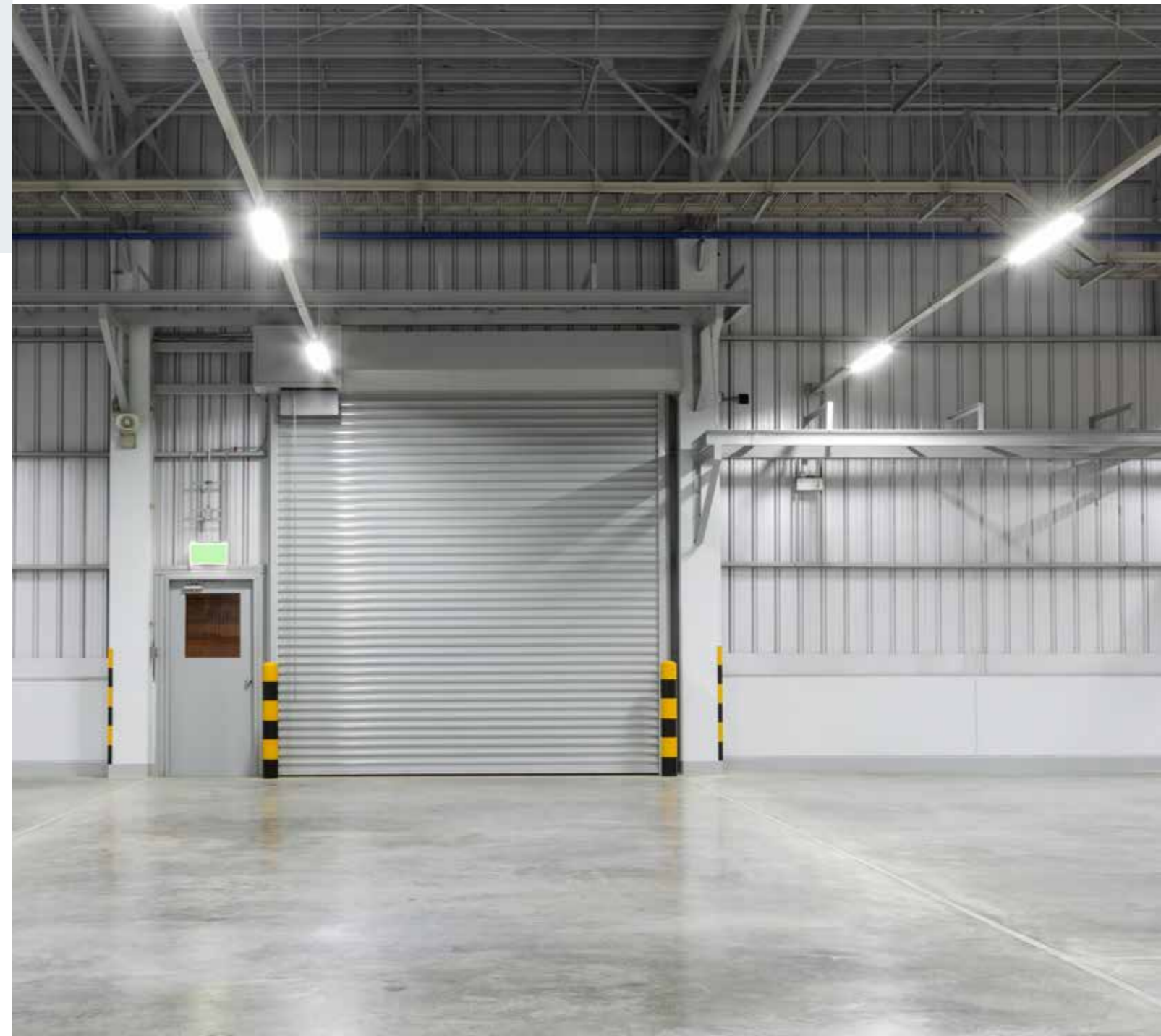


Type	L (mm)	W (mm)	H (mm)	A (mm)
1x1200mm	1270	65	70	900 +/- 36
2x1200mm	1270	102	70	900 +/- 36
1x1500mm	1570	65	70	1200 +/- 36
2x1500mm	1570	103	70	1200 +/- 36

Waterproof Mariner Empty Body

IP65

Product Description	Tungsrām Product Code	GE Product Code	Wattage (W)	Dimensions (mm)	Pack Qty
Waterproof Mariner Empty Body					
LED MARINER BODY TU T8 SINGLE 1200MM	93107517	93052188	max 18W	1270x65x70	1
LED MARINER BODY TU T8 TWIN 1200MM	93107518	93052189	max 2x18W	1270x102x70	1
LED MARINER BODY TU T8 SINGLE 1500MM	93107519	93052190	max 27W	1570x65x70	1
LED MARINER BODY TU T8 TWIN 1500MM	93107520	93052191	max 2x27W	1570x102x70	1



LED INDOOR SOLUTION

Emergency solutions



Healthcare



General lighting



Education



Retail



Office

LED Emergency Downlight Recessed

The Emergency Downlighter consists of an LED lamphead with integrated battery, status indicator LED, and an emergency lighting unit to operate the single LED in both maintained and non-maintained mode. The optically efficient lenses ensure optimum performance for corridor or open-area applications. The safety-compliant downlight emergency lighting is for recessed mounting and ensures emergency escape route lighting in buildings. The integrated self-test function corresponds the European standard.



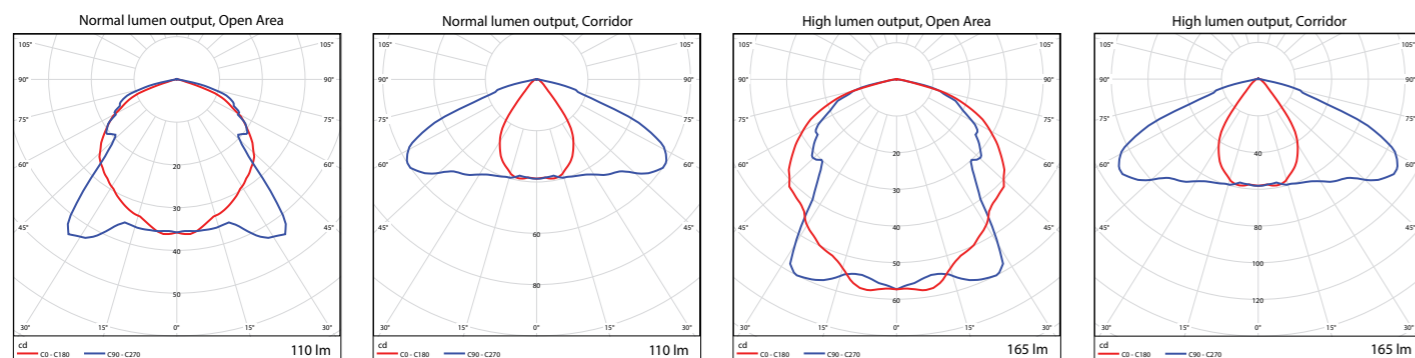
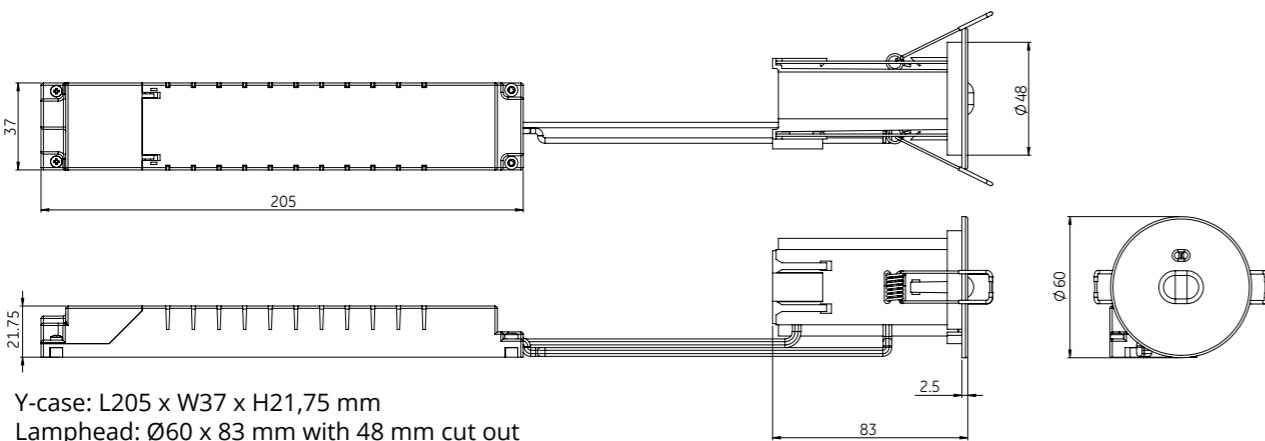
Benefits

- Constant power output in emergency mode
- Ground connection for LED-driver and LED module on main terminal
- Long lifetime, five-years warranty on fixture and three-years warranty on battery
- Deep discharge protection
- Premium Lithium batteries (LiFePO4) – compared to lead acid batteries

LED Emergency Downlight Recessed



Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Dimensions (mm)	Beam angle (°)	Weight (kg)	Pack Qty
LED Emergency Downlight Recessed – Static driver									
Emergency Downlight G1 TU 3 NL O Li N	93100226	-	3	110	6000	Ø60x83	100	0.185	1
Emergency Downlight G1 TU 3 NL C Li N	93100227	-	3	110	6000	Ø60x83	110	0.185	1
Emergency Downlight G1 TU 3 HL O Li N	93100228	-	3	165	6000	Ø60x83	100	0.233	1
Emergency Downlight G1 TU 3 HL C Li N	93100229	-	3	165	6000	Ø60x83	110	0.233	1
Emergency Downlight G1 TU 3 HL O Li S	93100230	-	3	165	6000	Ø60x83	100	0.233	1
Emergency Downlight G1 TU 3 HL C Li S	93100231	-	3	165	6000	Ø60x83	110	0.233	1
LED Emergency Downlight Recessed – DALI driver									
Emergency Downlight G1 TU 3 HL O Li D	93100232	-	3	165	6000	Ø60x83	100	0.233	1
Emergency Downlight G1 TU 3 HL C Li D	93100233	-	3	165	6000	Ø60x83	110	0.233	1





Healthcare



General lighting



Education



Retail



Office

LED Emergency Converter Kit

LED Emergency Converter Kit



LED Indoor

This emergency lighting unit is a conversion kit remote box for operating GE/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.

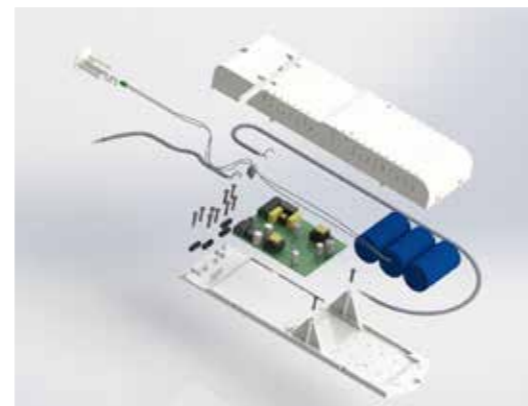
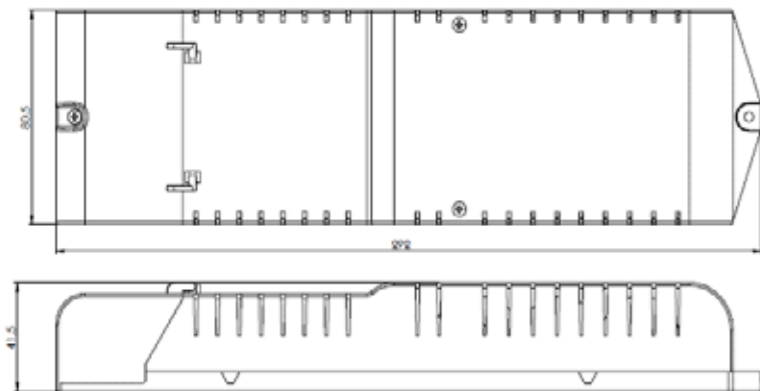
Product Description	Tungsrám Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Dimensions (mm)	Weight (kg)	Pack Qty
LED Emergency Converter Kit – Static driver								
Emergency Kit G1 TU 3 Li N	93100237	-	3	-	6000	292x81x41	0.415	1
Emergency Kit G1 TU 3 Li S	93100238	-	3	-	6000	292x81x41	0.415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



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 INDOOR SOLUTION

Soft Strip



LED Soft Strip

Tungram introduces a range of LED soft strip in a variety of lumen outputs and colour temperatures. This flexible LED solution can be used in a variety of applications, including hospitality, industrial, architectural and signage. This product's versatility of this product makes it suitable for almost any application where space may be limited.



Benefits

- 24VDC – low voltage
- Three colour temperature options – 2700K, 4000K & 5700K
- SDCM <4
- Low and high lumen options
- No damage from IR or UV
- 5 m lengths
- 50 cm minimum cut length
- Easy connection from tape to tape and tape to driver
- 3M adhesive tape mounting



LED Soft Strip

Product Description	Tungram Product Code	GE Product Code	Wattage (W/m)	Lumen (lm/m)	CCT (K)	Pack Qty
LED Soft Strip – for Indoor usage						
LSS04-24-27-60 TU	93088751	93011531	4.8	370	2700	10x5m rolls per box
LSS04-24-40-60 TU	93088752	93011532	4.8	470	4000	
LSS04-24-57-60 TU	93088753	93011533	4.8	470	5700	
LSS10-24-27-60 TU	93088754	93011535	10	750	2700	
LSS10-24-40-60 TU	93088755	93011536	10	850	4000	
LSS10-24-57-60 TU	93088926	93011537	10	900	5700	
LED Soft Strip – for Outdoor usage						
LSS04-24-27-60-IP65 TU	93088928	93011539	4.8	320	2700	10x5m rolls per box
LSS10-24-27-60-IP65 TU	93088927	93011541	10	700	2700	
LSS04-24-57-60-IP65 TU	93088929	93011538	4.8	400	5700	
LSS10-24-57-60-IP65 TU	93088930	93011540	10	800	5700	
LED Soft Strip – Accessories						
LSS Connector strip to driver	93011732	93011732	-	-	-	200
LSS Connector strip to strip	93011731	93011731	-	-	-	400
LED Soft Strip Drivers						
LED25CV24EP	-	97547	25			
LED25CV24EPS	-	97546	25			
LED60CV24EP	-	97507	60			
LED60CV24EPS	-	97506	60			
LED100CV24EMS	-	97393	100			
LED150CV24EMS	-	97759	150			
LED200CV24EMS	-	97745	200			



LED INDOOR SOLUTION

Floodlights



Public areas



Car park / Garage



Industrial



Building facades



Retail

Floodlights

Floodlights



30 000h/
50 000h/
L70



80+
CRI



LED Indoor

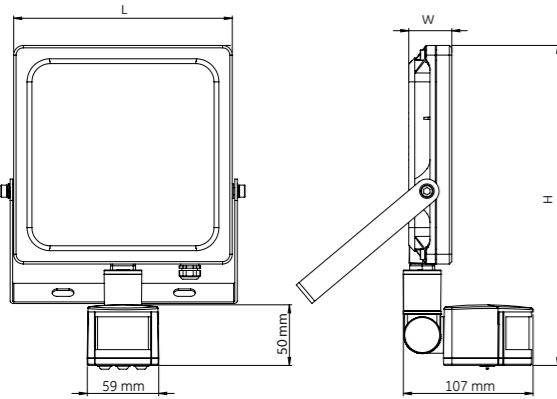
LED Floodlight is a universal, compact range of floodlights with six lumen output levels from 2.000 to 20.000lm and up to 130 LPW efficiency. The range is suitable for various applications wall-mounted around building facades, ideal for the classic floodlighting of buildings as well as lighting for gardens,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



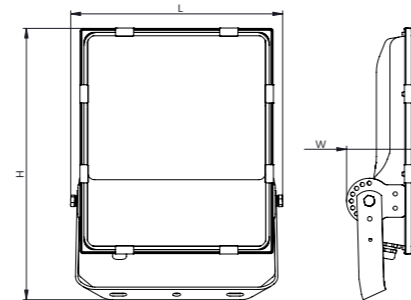
Benefits

- 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

SENSOR VERSION



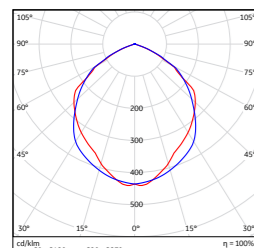
STANDARD VERSION



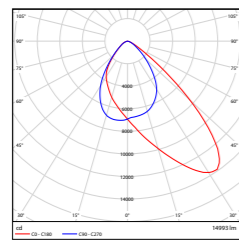
Type	L (mm)	W (mm)	H (mm)
LED Flood G1 TU S 20W...BM	224±1	35	163±1
LED Flood G1 TU S 30W...BM	264±1	35	202±1
LED Flood G1 TU S 50W...BM	284±1	35	216±1

Type	L (mm)	W (mm)	H (mm)
LED Flood G1 TU S 20W...BN	163±1	35	163±1
LED Flood G1 TU S 30W...BN	203±1	35	202±1
LED Flood G1 TU S 50W...BN	223±1	35	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

Product Description	Tungram Product Code	GE 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 840 SY ST BN	93101677	93081605	20	2 000	4000	100	65	30k	163x36x163	100 w/o reflector	0,62	1
LED Flood G1 TU S 20W 865 SY ST BN	93107561	93082101	20	2 000	6500	100	65	30k	163x36x163		0,62	1
LED Flood G1 TU S 30W 840 SY ST BN	93101678	93082096	30	3 000	4000	100	65	30k	203x36x202		0,97	1
LED Flood G1 TU S 30W 865 SY ST BN	93107562	93082102	30	3 000	6500	100	65	30k	203x36x202	0,97	1	
LED Flood G1 TU S 50W 840 SY ST BN	93101679	93082097	50	6 000	4000	120	65	30k	223x36x216	100 w/o reflector	1,14	1
LED Flood G1 TU S 50W 865 SY ST BN	93107563	93082103	50	6 000	6500	120	65	30k	223x36x216		1,14	1
LED Flood G1 TU S 75W 840 SY ST BN	93101680	93082098	75	10 000	4000	133	66	50k	286x91x368	120 w/o reflector	3,29	1
LED Flood G1 TU S 75W 865 SY ST BN	93107564	93082104	75	10 000	6500	133	66	50k	286x91x368		3,29	1
LED Flood G1 TU S 115W 840 SY ST BN	93101681	93082099	115	15 000	4000	130	66	50k	337x91x419	120 w/o reflector	4,20	1
LED Flood G1 TU S 115W 865 SY ST BN	93107565	93082105	115	15 000	6500	130	66	50k	337x91x419		4,20	1
LED Flood G1 TU S 150W 840 SY ST BN	93101683	93082100	150	20 000	4000	133	66	50k	373x91x450	120 w/o reflector	5,33	1
LED Flood G1 TU S 150W 865 SY ST BN	93107566	93082106	150	20 000	6500	133	66	50k	373x91x450		5,33	1
LED Flood G1 TU S 20W 840 SY ST BM *	93107575	93094146	20	2 000	4000	100	65	30k	263x36x163	100 w/o reflector	0,62	1
LED Flood G1 TU S 20W 865 SY ST BM *	93107576	93094147	20	2 000	6500	100	65	30k	263x36x163		0,62	1
LED Flood G1 TU S 30W 840 SY ST BM *	93107577	93094148	30	3 000	4000	100	65	30k	303x36x202		0,97	1
LED Flood G1 TU S 30W 865 SY ST BM *	93107578	93094149	30	3 000	6500	100	65	30k	303x36x202	0,97	1	
LED Flood G1 TU S 50W 840 SY ST BM *	93107579	93094150	50	6 000	4000	120	65	30k	323x36x216	100 w/o reflector	1,14	1
LED Flood G1 TU S 50W 865 SY ST BM *	93107580	93094151	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	45x85 asym.	5,33	

* With Motion Sensor



LED INDOOR SOLUTION

Floodlights



Public areas



Car park / Garage



Industrial



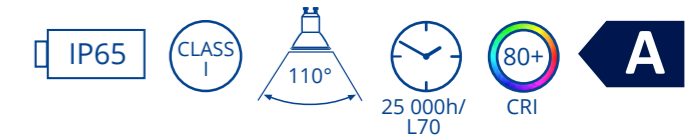
Building facades



Construction areas

Floodlight Symmetrical ECO

Floodlight Symmetrical ECO

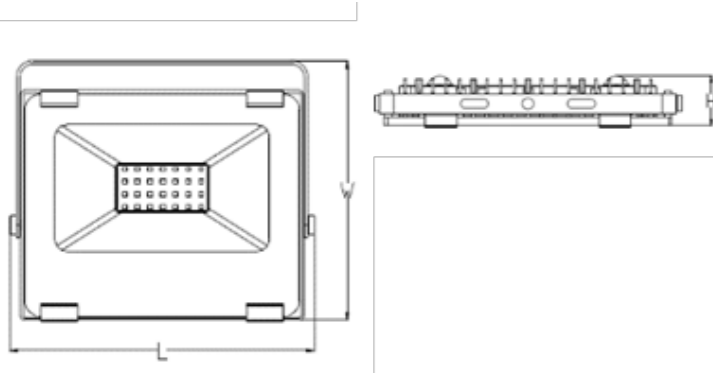


LED Floodlight is a universal, compact range of floodlights with lumen output levels from 800 to 9000 lumen and up to 90 LPW efficiency. The range is suitable for various applications wall-mounted around building facades, ideal for the classic floodlighting of buildings as well as lighting for gardens, 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.

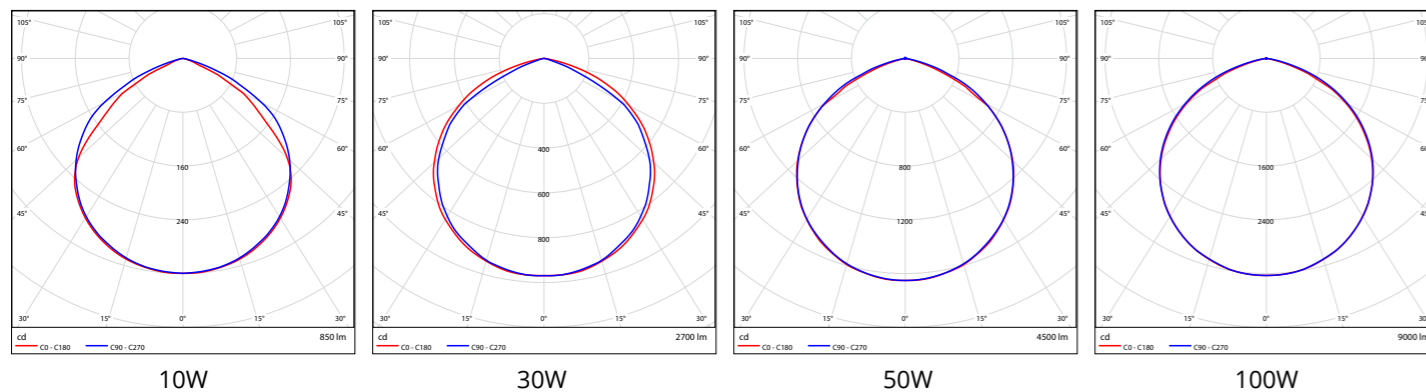


Benefits

- 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	106	108	27	0.284
30W	250	173	42	1.085
50W	290	213	46	1.529
100W	345	250	48	2.223



Product Description	Tungsram Product Code	GE 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





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.

LED INDOOR SOLUTION

Product overview – Industrial Fixtures



Round High-bay



Round High-bay with HoneyComb



Linear Indirect



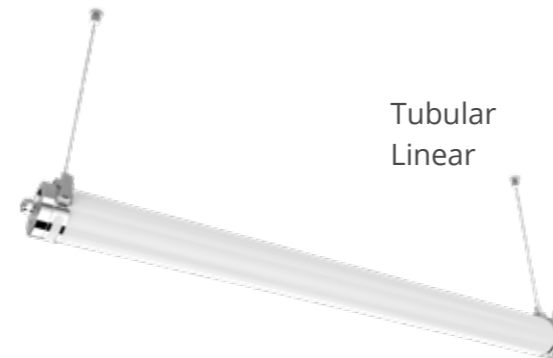
Linear High Bay



HB IP20



HB IP20 NEDAP Node



Tubular Linear



HB IP66



HB IP66 NEDAP Node

LED INDOOR SOLUTION

Tubular Linears



Car park /
Garage



Warehouse/
Distribution center/
Factory

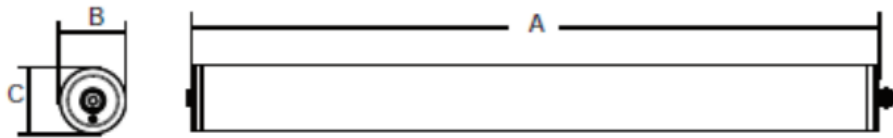
Tubular IP67/69K

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 car parks, 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

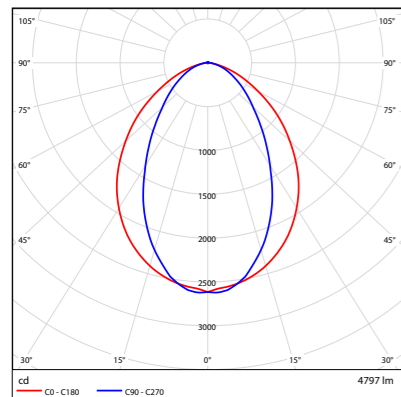
- Evenly distributed light
- High energy savings of up to 60% compared to conventional LFL luminaires
- Easy installation as mounting brackets can be positioned freely on the luminaire
- Suitable to use in dusty and damp locations thanks to high IP rating



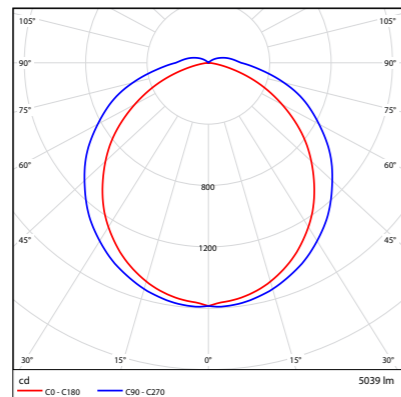
LINKABLE



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



80°



120°

Metal bracket



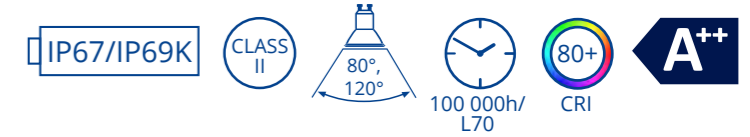
Anti-theft bracket



Suspension cable



Tubular IP67/69K



Product Description	Tungsram Product Code	GE 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 Motion and daylight sensor



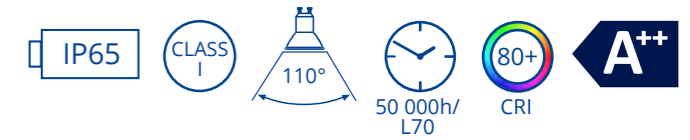
LED INDOOR SOLUTION

Round High Bay



LED Round High Bay IP65 G1

LED Round High Bay IP65 G1



The Tungram 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°



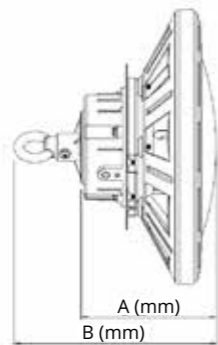
High Bay Surface Mount Kit



High Bay Chain

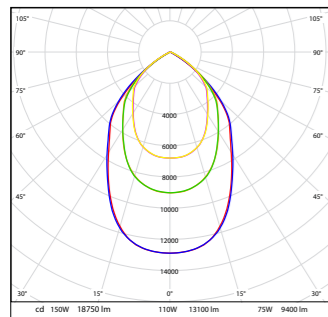


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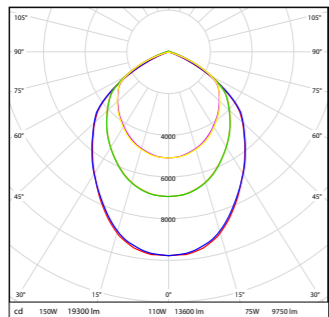


A (mm)
B (mm)

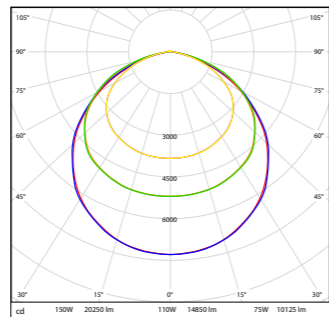
Product	Wattage	ø (mm)	A (mm)	B (mm)
High Bay TU Gen1 75W	75w	300	142	213
High Bay TU Gen1 110W	110w	300	142	213
High Bay TU Gen1 150W	150w	300	131	202
High Bay TU Gen1 200W	200w	360	131	202



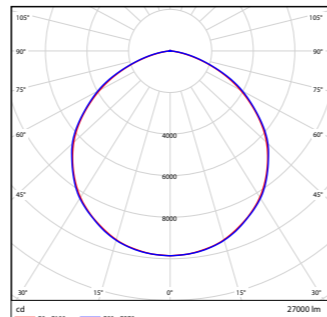
75-110-150W - 70°



75-110-150W - 90°



75-110-150W - 110°



200W - 110°

Product Description	Tungram Product Code	GE 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 75W 6500K 2A 110°	93103287	-	75	10 125	6500	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 110W 6500K 2A 110°	93103288	-	110	15 525	6500	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 150W 4000K 2A 110°	93101701	-	150	20 250	4000	135	Ø302x213	2.5	1
High Bay TU Gen1 150W 6500K 2A 110°	93103289	-	150	20 250	6500	135	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	-	-	-	-	-	-	-	-



LED INDOOR SOLUTION

Round High Bay



Warehouses



Retail

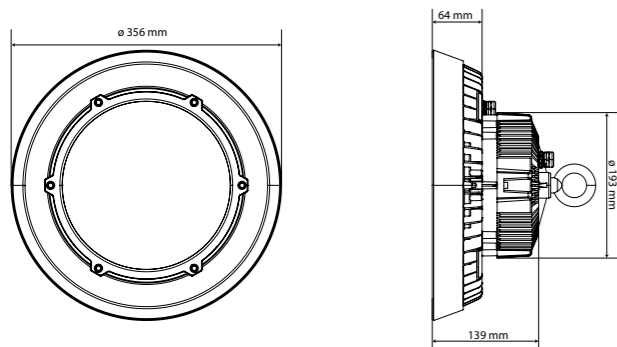
Round High Bay IP65 G2 HoneyComb

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.



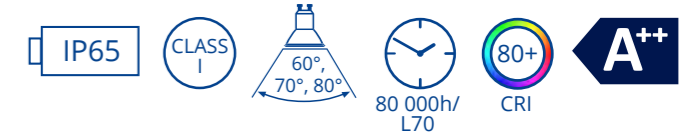
Benefits

- 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	Tungram Product Code	GE Product Code	Wattage (W)	Lumen (lm)	CCT (K)	Beam angle (°)	UGR	System Efficiency (lm/W)	Dimensions (mm)	Weight (kg)	Pack Qty
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Round High Bay IP65 Gen2 HoneyComb – Static driver

High Bay TU Gen2 100W-4000K-2S-70°	93114906	-	100	13 500	4000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-4000K-2M-70° *	93114908	-	100	13 500	4000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2S-70°	93114910	-	100	13 500	5000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2M-70° *	93114912	-	100	13 500	5000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 140W-4000K-2S-80°	93114914	-	140	18 900	4000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2S-60°	93114915	-	140	18 900	4000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2M-80° *	93114918	-	140	18 900	4000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2M-60° *	93114919	-	140	18 900	4000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2S-80°	93114922	-	140	18 900	5000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2S-60°	93114923	-	140	18 900	5000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2M-80° *	93114926	-	140	18 900	5000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2M-60° *	93114927	-	140	18 900	5000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 190W-4000K-2S-80°	93114930	-	190	24 700	4000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2S-60°	93114931	-	190	24 700	4000	60	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2M-80° *	93114934	-	190	24 700	4000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2M-60° *	93114935	-	190	24 700	4000	60	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2S-80°	93114938	-	190	24 700	5000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2S-60°	93114939	-	190	24 700	5000	60	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2M-80° *	93114942	-	190	24 700	5000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2M-60° *	93114943	-	190	24 700	5000	60	<25	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	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 100W-5000K-2A-70°	93114911	-	100	13 500	5000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 140W-4000K-2A-80°	93114916	-	140	18 900	4000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-4000K-2A-60°	93114917	-	140	18 900	4000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2A-80°	93114924	-	140	18 900	5000	80	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 140W-5000K-2A-60°	93114925	-	140	18 900	5000	60	<22	135	Ø360x210	3.08	1
High Bay TU Gen2 190W-4000K-2A-80°	93114932	-	190	24 700	4000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-4000K-2A-60°	93114933	-	190	24 700	4000	60	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2A-80°	93114940	-	190	24 700	5000	80	<25	130	Ø360x210	5.50	1
High Bay TU Gen2 190W-5000K-2A-60°	93114941	-	190	24 700	5000	60	<25	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	135	Ø280x190	2.66	1
High Bay TU Gen2 90W-5000K-2D-70°	93114913	-	90	12 150	5000	70	<22	135	Ø280x190	2.66	1
High Bay TU Gen2 150W-4000K-2D-80°	93114920	-	150	19 500	4000	80	<22	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-4000K-2D-60°	93114921	-	150	19 500	4000	60	<22	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-5000K-2D-80°	93114928	-	150	19 500	5000	80	<22	130	Ø360x210	3.08	1
High Bay TU Gen2 150W-5000K-2D-60°	93114929	-	150	19 500	5000	60	<22	130	Ø360x210	3.08	1
High Bay TU Gen2 230W-4000K-2D-80°	93114936	-	230	28 750	4000	80	<25	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-4000K-2D-60°	93114937	-	230	28 750	4000	60	<25	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-5000K-2D-80°	93114944	-	230	28 750	5000	80	<25	125	Ø360x210	5.50	1
High Bay TU Gen2 230W-5000K-2D-60°	93114945	-	230	28 750	5000	60	<25	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

* With Motion sensor

High Bay IP20



High Bay IP20



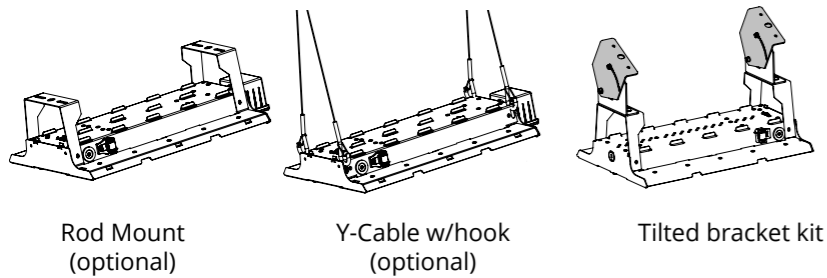
The new Tungsram High Bay LED luminaire is an exceptional mixture of value and performance. The product range has been upgraded to reach very high efficacy- up to 177 lm/w and cover lumen packages between 10,000 – 30,000 lumens. The range includes DALI and various sensor versions, such as the Nedap Luxon 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.
- 220-240V/50-60Hz
- System power factor is >90% and THD <20%

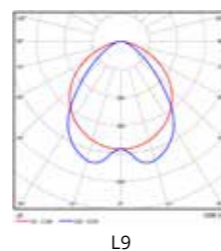
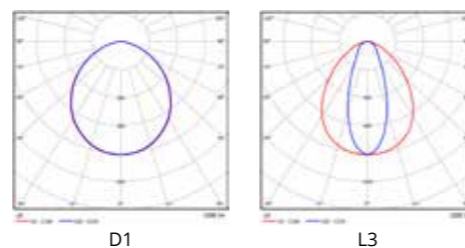
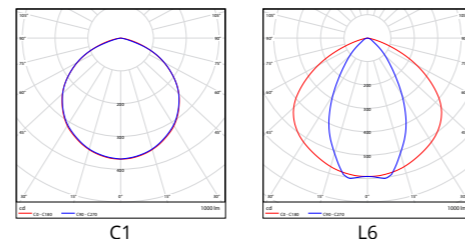
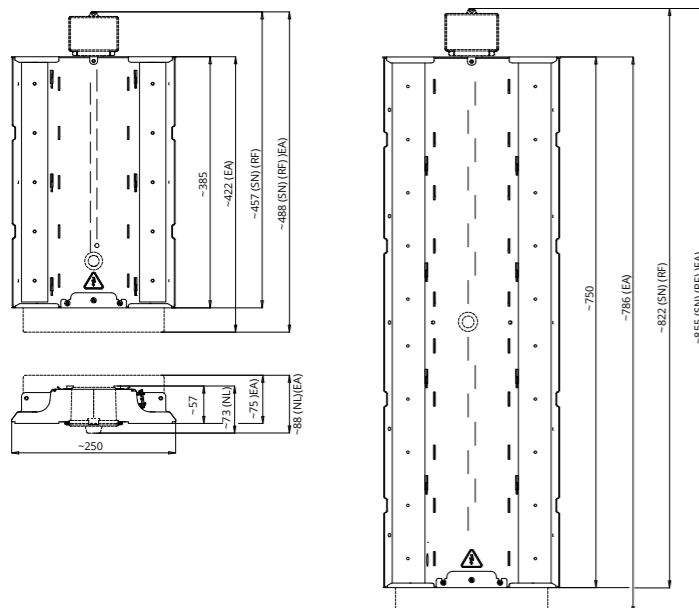
MOUNTING



Rod Mount (optional)

Y-Cable w/hook (optional)

Tilted bracket kit



Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Options1	Options2
TU High Bay IP20 – High efficiency					
TU HB IP20 G1	1H10 - 1M High 10klm	4K-4000K 70 CRI70 5K-5000K 70 CRI70 4K-4000K 80 CRI80 5K-5000K 80 CRI80	C1-120° Clear	DL-DALI RF-RF sensor (Motion and Lux)	ST-Standard EA-EM auto-test
	1H15 - 1M High 15klm		D1-100° Diffuse		
	1H20 - 1M High 20klm		L9-90° Clear		
	1H25 - 1M High 25klm		L6-60° Clear		
	2H30 - 2M High 30klm		L3-30° Clear		
TU High Bay IP20 – Standard efficiency					
TU HB IP20 G1	1S10 - 1M Std 10klm	4K-4000K 70 CRI70 5K-5000K 70 CRI70 4K-4000K 80 CRI80 5K-5000K 80 CRI80	C1-120° Clear	FX-Fix output DL-DALI SN-Sensor (ON/OFF) RF-RF sensor (Motion and Lux)	ST-Standard EA-EM auto-test
	1S12 - 1M Std 12 klm		D1-100° Diffuse		
	1S20 - 1M Std 20klm		L9-90° Clear		
	1S22 - 1M Std 22 klm		L6-60° Clear		
	1S30 - 1M Std 30klm		L3-30° Clear		

Module / Efficiency / Lumen	5000K 70CRI Clear 120° Optics DALI Driver				CCT/CRI multipliers		Optical multipliers	
	Module	Power(W)**	Lumen	lm/W				
1H10	1	56	9900	177	5K70	100%	C1	100%
1H15	1	81	15000	185	5K80	96%	D1	90%
1H20	1	116	19500	168	4K70	96%	L9	100%
1H25*	1	149	25000	168	4K80	95%	L6	101%
2H30*	2	170	29200	172			L3	98%
1S10	1	67	9670	144				
1S12	1	95	13500	142				
1S20	1	141	19900	141				
1S22*	1	167	23500	141				
1S30*	1	199	29200	147				

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 has two drivers and DALI versions have two DALI addresses.

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



LED INDOOR SOLUTION

High Bay



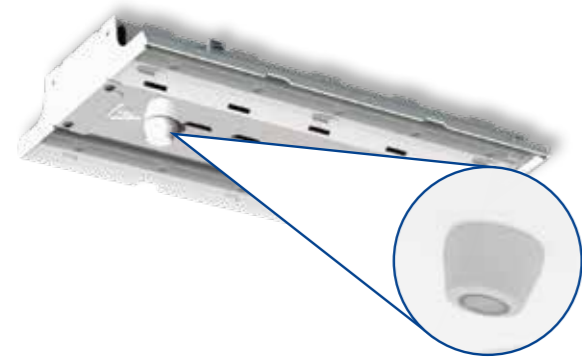
High Bay IP20 – NEDAP Node



High Bay IP20 – NEDAP Node



The high performing Tungsram High Bay industrial fixture range is equipped with a Nedap Luxon IoT Node to allow wireless control of the luminaire 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 – 29.200 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

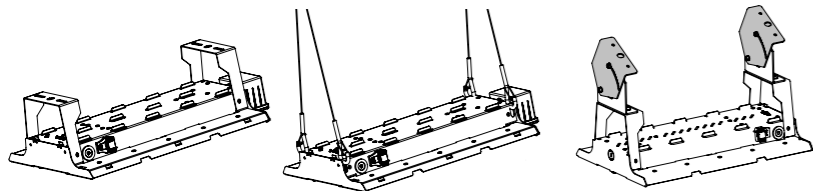
- The NEDAP Luxon IoT allows you to have a wirelessly connected lighting system; this enables easy control locally or centrally using a cloud-based system.
- Equipped with Nedap Luxon IoT node and best-in-class Sensor Ready driver
- TU HB Series optical system enables LEDs to provide optimized illumination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

TU High Bay IP20 – NEDAP IoT Node

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

Module / Efficiency / Lumen	5000K 70CRI Clear 120° Optics DALI Driver				CCT/CRI multipliers		Optical multipliers	
	Module	Power(W)	Lumen	lm/W				
1H10	1	576	9900	174	5K70	100%	C1	100%
1H15	1	82	15000	183	5K80	96%	D1	90%
1H20	1	117	19500	167	4K70	96%	L9	100%
1H25	1	150	25000	167	4K80	95%	L6	101%
2H30	2	171	29200	171			L3	98%

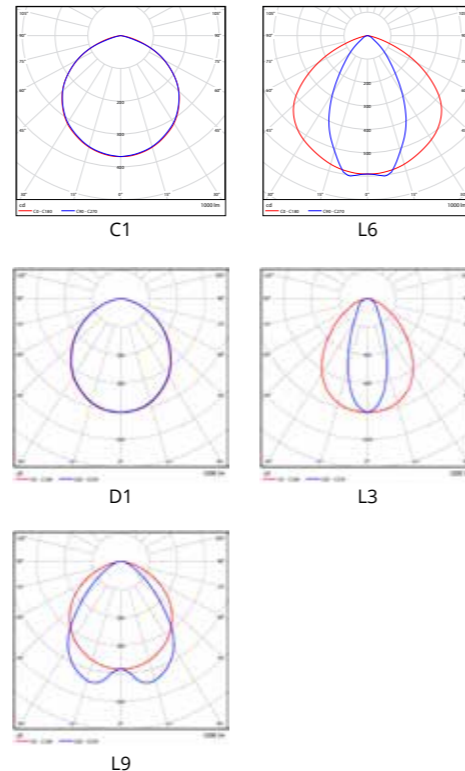
MOUNTING



Rod Mount (optional)

Y-Cable w/hook (optional)

Tilted bracket kit



High Bay IP66



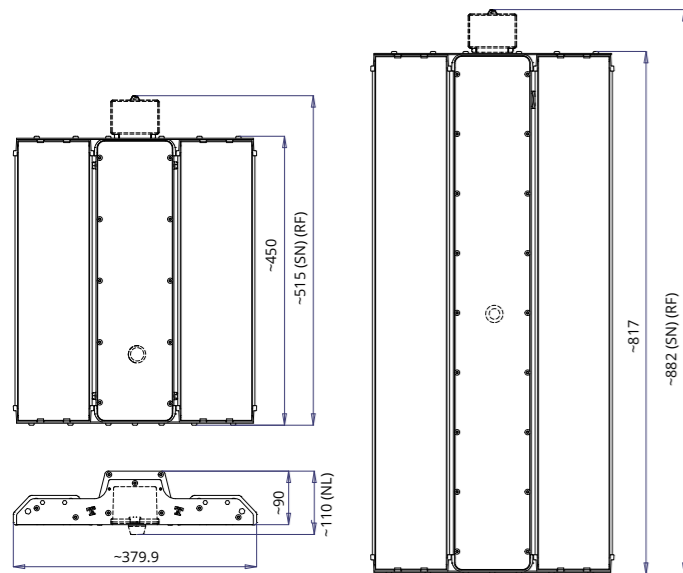
This IP66 rated LED fixture range offers an exceptional mixture of value and performance for high bay applications requiring water and dust resistance. This range has been upgraded to reach a very high efficacy- up to 182 lm/W with high lumen packages from 10,000lm to 30,000 lumens.

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.

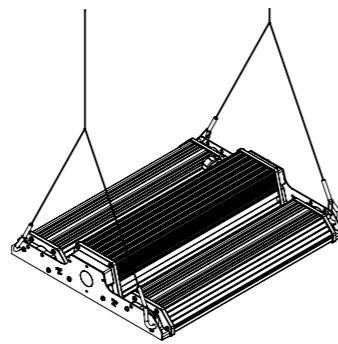


Benefits

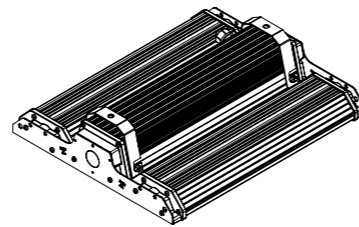
- Direct replacement for compact fluorescent lamp downlights
- Up to 54% energy savings compared to CFL lamps
- Affordable solution for retrofit or new installations
- Easy installation
- UV-free & IR-free
- Product height with driver (36mm) fits more ceiling types



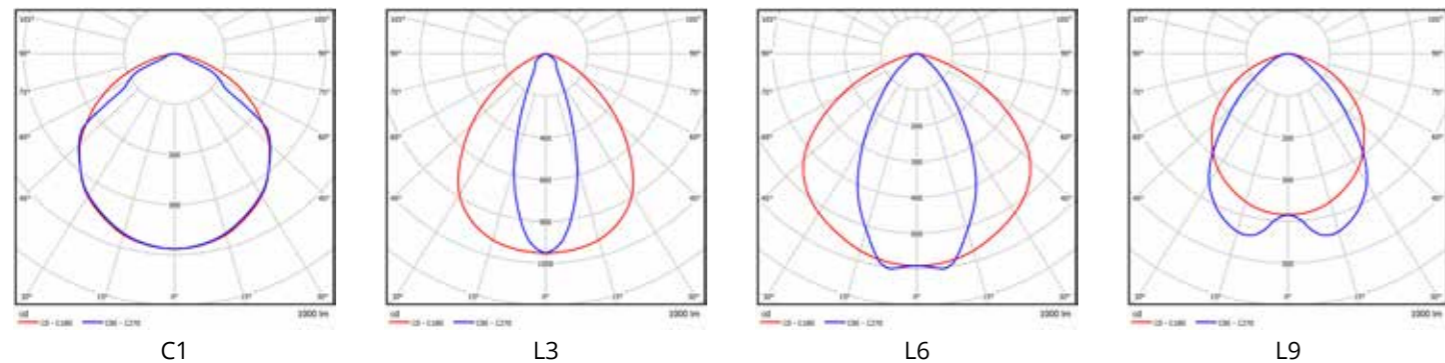
MOUNTING



Suspension holder kit (optional)



Bracket kit (optional)



High Bay IP66



Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Sensor - Control	Options 1	Options 2
TU High B ay IP66 – Standard						
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	4K - 4000K 80 CRI80	L6-60° Clear			
	2H45 - 2M High 30klm	5K - 5000K 80 CRI80	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	4K - 4000K 80 CRI80	L6-60° Clear			
	2H45 - 2M High 45klm	5K - 5000K 80 CRI80	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%



* 1S30, 2H30 and 2H45 has 2 drivers, DALI versions have 2 DALI addresses
 ** Fixed output and sensor versions could have slightly different values.
 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.
 Emergency version is expected in Q1 2020

LED INDOOR SOLUTION

High Bay



High Bay IP66 – NEDAP Node



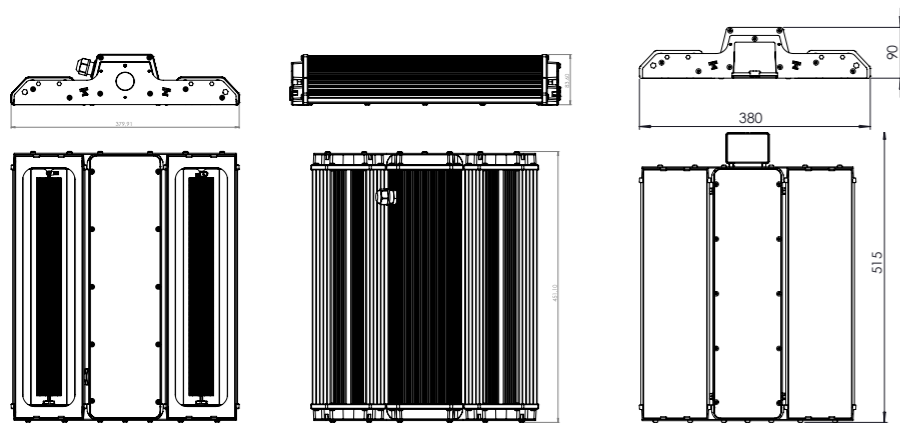
The high performing Tungsram High Bay industrial fixture range is now equipped with a Nedap Luxon IoT Node, to allow wireless control control of the luminaire range. The TU HB IP66 range has been upgraded to reach a very high efficacy of 182 lm/w and cover lumen packages between 10,200 – 30,100 lumens. 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.



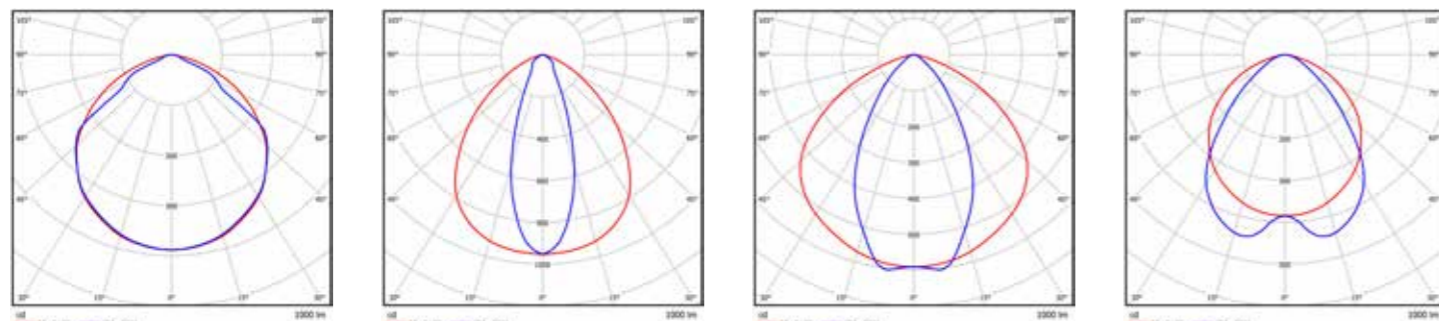
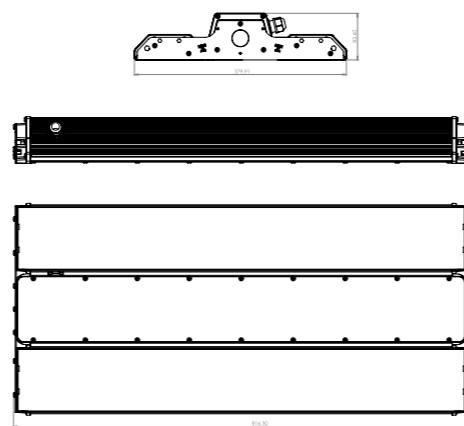
Benefits

- 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 30 200 lumens
- 4000K & 5000K versions
- 70 & 80 CRI options

ONE MODULE



TWO MODULES



C1

L3

L6

L9

High Bay IP66 – NEDAP Node



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	4K - 4000K 70 CRI70	C1-120° Clear	NL Nedap Luxon	ST-Standard	PC- Pre-cabled QC- Quick Connect
	1H20 - 1M High 20klm	5K - 5000K 70 CRI70	L9-90° Clear			
	2H30 - 2M High 30klm	4K - 4000K 80 CRI80	L6-60° Clear			
	2H45 - 2M High 45klm	5K - 5000K 80 CRI80	L3-30° Clear			

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	95%	L6	94%
2H45	2	251	44100	176	4K80	96%	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
1.5m cable Y hook	93091603
3.0m cable Y hook	93091604
4.5m cable Y hook	93091605
6.0m cable Y hook	93091686



LED INDOOR SOLUTION

Linear High Bay



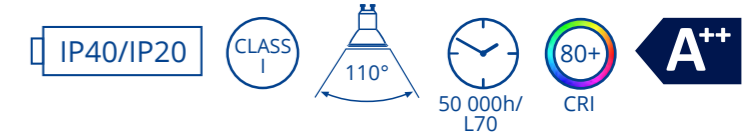
Sporthall/
Other high ceiling indoor
applications



Warehouse/
Distribution center/
Factory

Linear High Bay

Linear High Bay

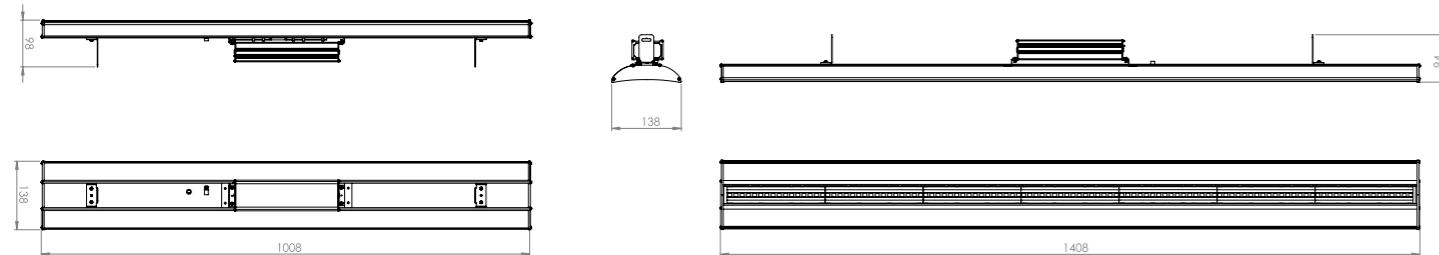


The Tungram Linear High Bay is a simple LED solution that efficiently illuminates work areas by creating a brighter and better warehouse, retail, or manufacture environment. With its two-optical design and energy efficiency, this easy-to-install and low-maintenance lighting solution is suitable for a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

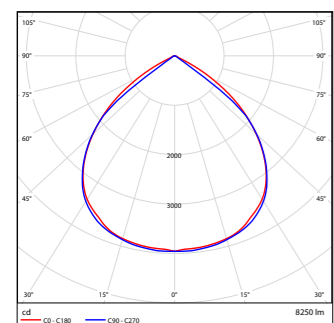


Benefits

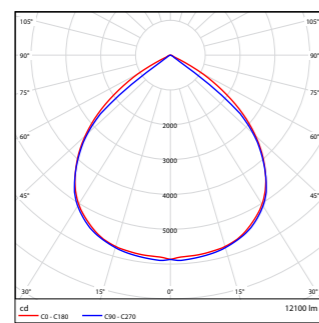
- High energy savings up to 50% compared* to TL-5 Highbay
- Direct replacement of T5 Highbay
- Functional, linear design with flexible installation
- Affordable solution for retrofit or new installations
- Reduced replacement and maintenance costs



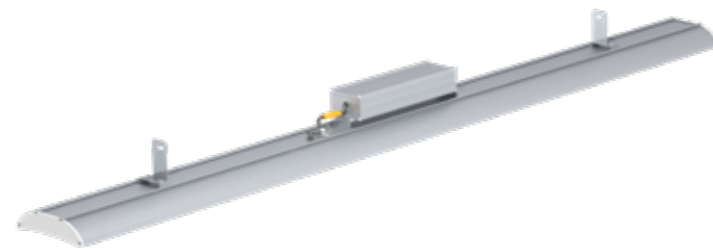
Model	Fixture (incl driver)	Driver	Weight incl driver (kg)
LED Linear Highbay G1 TU 4ft xxx	1008x138x98mm	210x65x40mm	2.0
LED Linear Highbay G1 TU 5ft xxx	1408x138x98mm	210x65x40mm	2.2



75W 4000K



110W 4000K



Product Description	Tungram Product Code	GE 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 INDOOR SOLUTION

Linear Low Bay



Low bay
open ceiling
applications



Industrial/
Warehouse



Commercial



Retail

Linear Indirect



Linear Indirect

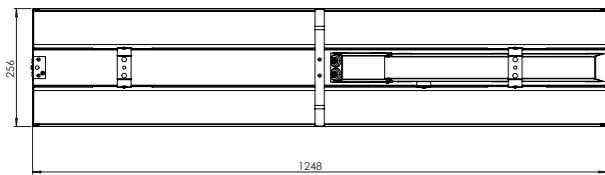
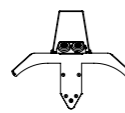
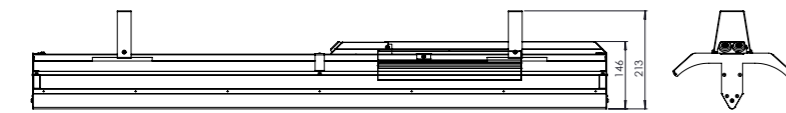


LED Indoor

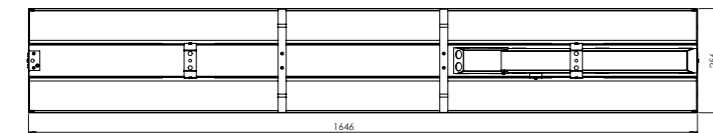
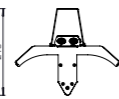
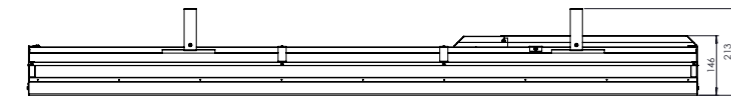
The new Tunsgam Linear Indirect range is designed to deliver efficient lighting for commercial and education applications. These efficient lighting fixtures have a long life and deliver a remarkable efficacy (up to 135lm/W), allowing for lower maintenance and operating costs.

Benefits

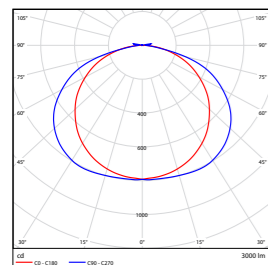
- Visually appealing illumination with CRI 80+
- High-luminous efficiency with minimal glare (<UGR19) due to indirect reflector solution
- Provides strong horizontal and vertical illuminance
- Available in two lengths: 1250 and 1650 mm
- Optional DALI or static control
- Energy efficient replacement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



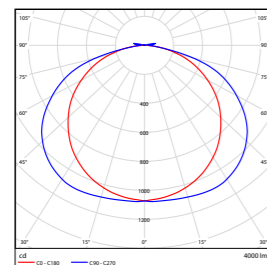
WATTAGE: 22W, 30W, 38W
WEIGHT: 4.8KG



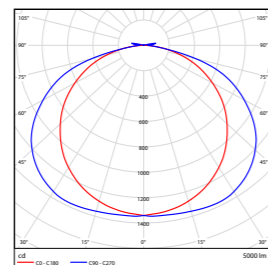
WATTAGE: 40W, 50W
WEIGHT: 5.9KG



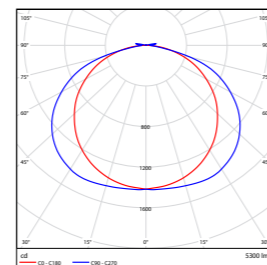
22W - 3000lm



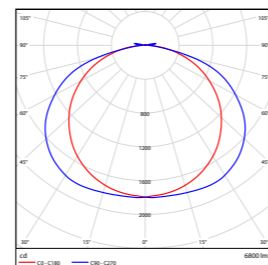
30W - 4000lm



38W - 5000lm



40W - 5300lm



50W - 6800lm

Product Description	Tungsgam Product Code	GE 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 12 835 S11 ST	TBD	-	22	3 000	3500	136	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 30W 12 835 S11 ST	93114760	-	30	4 000	3500	133	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 38W 12 835 S11 ST	93114762	-	38	5 000	3500	132	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 40W 16 835 S11 ST	93114764	-	40	5 300	3500	133	<19	1652x256.5x146.5	5.90	1
TU LINEAR INDIRECT 50W 16 835 S11 ST	93115046	-	50	6 800	3500	136	<19	1652x256.5x146.5	5.90	1
Linear Indirect – DALI driver										
TU LINEAR INDIRECT 22W 12 835 D11 ST	TBD	-	22	3 000	3500	136	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 30W 12 835 D11 ST	93114761	-	30	4 000	3500	133	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 38W 12 835 D11 ST	93114763	-	38	5 000	3500	132	<19	1254x256.5x146.5	4.80	1
TU LINEAR INDIRECT 40W 16 835 D11 ST	93114765	-	40	5 300	3500	133	<19	1652x256.5x146.5	5.90	1
TU LINEAR INDIRECT 50W 16 835 D11 ST	93115047	-	50	6 800	3500	136	<19	1652x256.5x146.5	5.90	1








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 Tungsum 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 910 $\mu\text{mol/s}$ output, and long lifetime.

-  Slim design – minimal shadowing
-  High-system efficacy up to 3.33 $\mu\text{mol/J}$
-  Remote driver – better heat management



Greenhouse Linear Toplight Double Module

With its outstanding PPF reaching up to 1820 $\mu\text{mol/s}$, efficacy of 3.03 $\mu\text{mol/J}$, 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
-  40% 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.

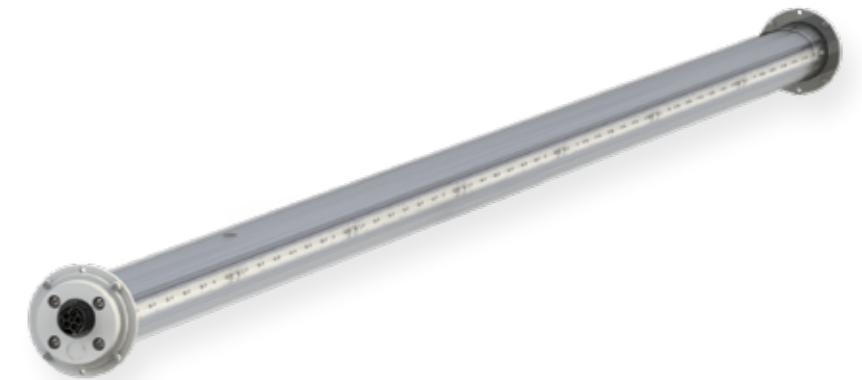
- Uniform light distribution
- Wireless control



Greenhouse Interlight

Interlight is supplementary light source in greenhouses to light the lower, shadowed parts of the canopy. Growers can choose from PPF 136-232 $\mu\text{mol/s}$ 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 3,12 $\mu\text{mol/J}$
- Low energy cost
- Ease of installation and maintenance





LED
DRIVERS



Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Output Voltage (V)	Output Current (A)	Input Voltage (V)	Inrush Current (A)	IP	Efficiency (at full load)	Power Factor	Dimming (down to %)	Max Case temperature (°C)	Dimensions (mm)	Pack qty
LIGHTECH Constant Voltage LED Drivers														
OT LED60CV12EPS	-	97508	60	12	5	220-240	7.4	66	85	0.98	No	80	182x44x40	20
OT LED60CV24EPS	-	97506	60	24	2.5	220-240	7.4	66	87	0.98	No	80	182x44x40	20
OT LED60CV12EP	-	97509	60	12	5	220-240	7.4	66	85	0.98	No	80	182x44x40	20
OT LED60CV24EP	-	97507	60	24	2.5	220-240	7.4	66	87	0.98	No	80	182x44x40	20
OT LED25CV12EMDS	-	97742	25	12	2.1	220-240	6.5	65	84	0.95	No	75	133x40x31	24
OT LED25CV24EPS	-	97526	25	24	1.1	220-240	6.5	65	86	0.96	No	75	133x40x31	24
OT LED25CV12EMD	-	97743	25	12	2.1	220-240	6.5	65	84	0.95	No	75	133x40x31	24
OT LED25CV24EP	-	97527	25	24	1.1	220-240	6.5	65	86	0.96	No	75	133x40x31	24
OT LED12CV24EP	-	97410	12	24	0.5	120-240	25.2	65	80	0.5	No	65	81x35x23	20
OT LED12CV24ET	-	97412	12	24	0.5	120-240	25.2	20	80	0.5	No	70	100x40x27	60

TUNGSRAM Constant Voltage LED Drivers														
LPS Sign 35/12 90-305V 67/B	93106751	-	35	12	0~2.90	90-305	<50	67	85%	0.95	No	85	199*42.5*34	15
LPS Sign 35/24 90-305V 67/B	93106750	-	35	24	0~1.46	90-305	<50	67	87%	0.95	No	85	199*42.5*34	15
LPS Sign 35/36 90-305V 67/B**	93110175	-	35	36	0~0.97	90-305	<50	67	87%	0.95	No	85	199*42.5*34	15
LPS Sign 35/48 90-305V 67/B**	93110174	-	35	48	0~0.73	90-305	<50	67	88%	0.95	No	85	199*42.5*34	15
LPS Sign 50/12 90-305V 67/B	93106749	-	50	12	0~4.17	90-305	<50	67	85%	0.95	No	85	199*42.5*34	15
LPS Sign 50/24 90-305V 67/B	93106748	-	50	24	0~2.08	90-305	<50	67	88%	0.95	No	85	199*42.5*34	15
LPS Sign 50/36 90-305V 67/B**	93110173	-	50	36	0~1.39	90-305	<50	67	89%	0.95	No	85	199*42.5*34	15
LPS Sign 50/48 90-305V 67/B**	93110172	-	50	48	0~1.04	90-305	<50	67	89%	0.95	No	85	199*42.5*34	15
LPS Sign 75/12 90-305V 67/B	93106747	-	75	12	0~6.25	90-305	<50	67	87%	0.95	No	85	164*68*39	10
LPS Sign 75/24 90-305V 67/B	93106746	-	75	24	0~3.13	90-305	<50	67	87%	0.95	No	85	164*68*39	10
LPS Sign 75/36 90-305V 67/B**	93110171	-	75	36	0~2.08	90-305	<50	67	87%	0.95	No	85	164*68*39	10
LPS Sign 75/48 90-305V 67/B**	93110170	-	75	48	0~1.56	90-305	<50	67	87%	0.95	No	85	164*68*39	10
LPS Sign 100/12 90-305V 67/B	93106664	-	100	12	0~8.33	90-305	<50	67	91%	0.95	No	85	178*68*39	10
LPS Sign 100/24 90-305V 67/B	93106665	-	100	24	0~4.17	90-305	<50	67	91%	0.95	No	85	178*68*39	10
LPS Sign 100/36 90-305V 67/B**	93110168	-	100	36	0~2.78	90-305	<50	67	92%	0.95	No	85	178*68*39	10
LPS Sign 100/48 90-305V 67/B**	93110169	-	100	48	0~2.08	90-305	<50	67	92%	0.95	No	85	178*68*39	10
LPS Sign 150/12 90-305V 67/B	93106755	-	150	12	0~12.5	90-305	<50	67	91%	0.95	No	85	207*68*39	10
LPS Sign 150/24 90-305V 67/B	93106754	-	150	24	0~6.25	90-305	<50	67	92%	0.95	No	85	207*68*39	10
LPS Sign 150/36 90-305V 67/B**	93110183	-	150	36	0~4.17	90-305	<50	67	92%	0.95	No	85	207*68*39	10
LPS Sign 150/48 90-305V 67/B**	93110182	-	150	48	0~3.13	90-305	<50	67	92%	0.95	No	85	207*68*39	10
LPS Sign 200/12 90-305V 67/B	93106753	-	200	12	0~16.67	90-305	<50	67	91%	0.95	No	85	232*68*43.5	10
LPS Sign 200/24 90-305V 67/B	93106752	-	200	24	0~8.33	90-305	<50	67	92%	0.95	No	85	232*68*43.5	10
LPS Sign 200/36 90-305V 67/B**	93110179	-	200	36	0~5.56	90-305	<50	67	92%	0.95	No	85	247*68*43.5	10
LPS Sign 200/48 90-305V 67/B**	93110176	-	200	48	0~4.17	90-305	<50	67	92%	0.95	No	85	247*68*43.5	10
LPS Sign 320/12 90-305V 67/B**	93110180	-	264	12	0~22.00	90-305	<150	67	91%	0.95	No	85	234*98*40	10
LPS Sign 320/24 90-305V 67/B**	93110177	-	320	24	0~13.33	90-305	<150	67	92%	0.95	No	85	234*98*40	10
LPS Sign 320/36 90-305V 67/B**	93110181	-	320	36	0~8.90	90-305	<150	67	92%	0.95	No	85	234*98*40	10
LPS Sign 320/48 90-305V 67/B**	93110178	-	320	48	0~6.67	90-305	<150	67	92%	0.95	No	85	234*98*40	10

* Phased out by end 2019
** Made To Order: minimum Lead Time of 12 weeks

Product Description	Tungram Product Code	GE Product Code	Wattage (W)	Output Voltage (V)	Output Current (A)	Input Voltage (V)	Inrush Current (A)	IP	Efficiency (at full load)	Power Factor	Dimming (down to %)	Max Case temperature (°C)	Dimensions (mm)	Pack qty
LIGHTECH Constant Current LED Drivers 1-10V Dimmable														
OT LED48CC1050EPDL	-	97514	48	12-46	1.05	220-240	6.7	65	89	0.92	0-10V (10%)	80	133x40x31	24
OT LED36CC700EPDL3	-	97520	36	12-48	0.7	220-240	6.7	65	89	0.97	0-10V (10%)	80	133x40x31	24
LIGHTECH Constant Current LED Drivers Triac/Phase Dimmable														
OT LED48CC1050EPD	-	97513	48	12 - 46	1.05	220-240		66	89	0.98	TE (25 %)	85	133x40x31	24
OT LED36CC1050EPD	-	97522	36	12-35	1.05	220-240		66	89	0.98	TE (25 %)	85	133x40x31	24
OT LED36CC700ETD	-	97516	36	12 - 52	0.7	220-240		20	89	0.97	TE (25 %)	85	133x40x31	20
OT LED36CC700EPD	-	97519	36	4 - 52	0.7	220-240		66	89	0.97	TE (25 %)	85	133x40x31	24
OT LED36CC700EPL	-	97518	36	4 - 52	0.7	220-240		66	89	0.97	TE (25 %)	85	133x40x31	24
OT LED18CC700EPD	-	97749	18	2 - 26	0.7	220-240	5.4	66	83	0.95	TE (25 %)	80	133x40x31	24
OT LED18CC350EPD	-	97756	18	4 - 52	0.35	220-240	5.4	66	85	0.96	TE (35 %)	80	133x40x31	24
LIGHTECH Constant Current LED Drivers Non-dimmable														
OT LED18CC700EPM	-	97750	18	2 - 30	0.7	220-240	No limiter	65	83	0.4	No	70	81x35x23	20
OT LED18CC350EPM	-	97753	18	3 - 55	0.35	220-240	No limiter	65	83	0.4	No	70	81x35x23	20
OT LED12CC700EP	-	97404	12	2.3 - 18	0.7	120-240	No limiter	65	79	0.5	No	65	81x35x23	20
OT LED12CC500EP	-	97402	12	2.3 - 26	0.5	120-240	No limiter	65	79	0.5	No	65	81x35x23	20
OT LED12CC350EP	-	97399	12	2.3 - 35	0.35	120-240	No limiter	65	80	0.5	No	65	81x35x23	20
OT LED12CC500ET	-	97403	12	2.3 - 26	0.5	120-240	No limiter	20	79	0.5	No	70	100x40x27	60
OT LED12CC350ET	-	97401	12	2.3 - 35	0.35	120-240	No limiter	20	80	0.5	No	70	100x40x27	60
OT LED6CC700EP	-	97435	6	2 - 9	0.7	120-240	No limiter	65	70	0.5	No	70	45x45x25	20
OT LED6CC500EP	-	97500	6	2 - 13	0.5	120-240	No limiter	65	70	0.5	No	75	45x45x25	20
OT LED6CC350EP	-	97504	6	2 - 17	0.35	120-240	No limiter	65	70	0.5	No	75	45x45x25	20
OT LED6CC350EPS	-	97502	6	2 - 17	0.35	120-240	No limiter	65	70	0.5	No	75	45x45x25	20



CASE STUDIES

Unique LED lighting in a sports hall at Kecskemét

This project has been requested by the KTE Kosárlabda Klub Ltd, an outstanding basketball club in Kecskemét, which is Hungary's eighth most populous city. The city owns an excellent sports facility, the Messzi István Sports Hall, It's a place for domestic and even international competitions and where the team plays their basketball games regularly. It has three standard courts that match IHF, EHF handball, FIBA basketball, and CEV, and FIVB volleyball court international classifications. The sports hall is suitable for television broadcasts and it has 1830 seats, 200 stands, and six VIP lodges. The investment was implemented by the KTE Kosárlabda Klub Ltd. within the framework of the TAO's sports development program, in cooperation with the owner of the sports hall, the County Municipality of Kecskemét.



Powerful LED lighting solutions for Slovenia's first sand sports park

The project has been requested by the owner of Ludus Črnuče Sport Park in Ljubljana. The modern recreational complex which was developed in a public-private partnership between the City of Ljubljana and the Ludus Company occupies 18,800 square meters and has several outdoor volleyball courts, a small football field, tennis and minifootball courts and a picnic area as well as the first hall for sand sports (i.e. beach volleyball, beach soccer beach handball and other recreational activities) in Slovenia. The owner found a reliable partner in Tungstam and asked us to propose and implement the best lighting solution for their indoor and outdoor volleyball courts. We proposed a modern and cost-effective high-performance LED lighting system.



Aman retail shops in Serbia

The Aman Company Ltd., a developing and growing enterprise, was founded in Belgrade in 1992. Since then its main occupation has been trading and providing services for customers. In 2008, it started expanding and increasing its number of retail stores in Belgrade and surrounding areas. Besides success, the company strongly focuses on the modernizing its lighting system in its shops and achieving energy savings. Aman places great importance on energy efficiency, which determined the aim of the innovation. As lighting technology develops, the performance of the fixtures becomes more significant. The great efficiency, photometry, and design of the LED products played a major role in the company's choice to change outdated fixtures in six retail shops across Serbia.



Ljubljana LED Residential Lighting

Javna razsvetljava d.d. is the largest Slovenian company engaged in outdoor lighting and traffic signs. The work of the company is focused on the maintenance of public lighting in Ljubljana and other parts of Slovenia. Since the main goal of the company is to maintain the high quality of the lighting system in the city, they found it necessary to upgrade the traditional fixtures to LED solutions. The sodium and CFL lamps had been in the city, but with the passing of time the previously installed fixtures became outdated. As an alternative new GE LED products have been chosen by the city in order to change the 10-15 years old fittings and reach better energy savings. The innovation of the lighting system has been realized with more than 10.000 LED SMBt and SLBt in Ljubljana and other Slovenian cities.



TUNGSRAM™

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