

TUNGSRAM™

Innovation is our heritage
EST. 1896



INLUMINO

Smart road lighting family

tungshram.com





Only two hand-tools required for installing the fixture



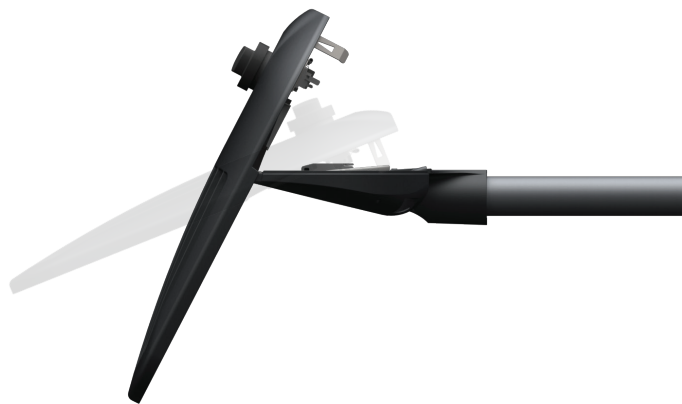
Coupler can be adjusted by 5°
-15°, -10°, -5°, 0°, 5°, 10°, 15°

TOOL-LESS MAINTENANCE

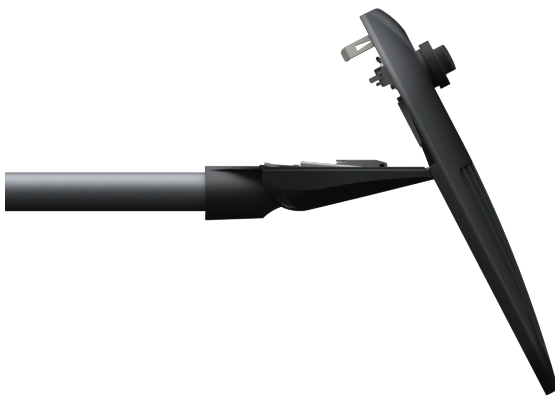


Press here to open the fixture

"click and flip"
"twist and lock"



Tool-less hinged opening and lift-off head with automatic electrical disconnect



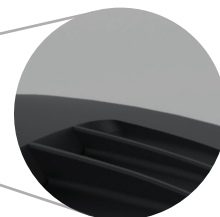
SMART READY



Smart ready luminaire with an option form NEMA socket



Airgap for optimized cooling and long lifetime



Inlumino

size M Gen 2



Product information

The new Tungsram luminaire, with its innovative and unique solutions, is an excellent choice for road and street applications. The key aspects of the lamp development are the simple and fast installation, the tool-free repair options and the diverse usage. The luminaire meets the expectations of the 21st century with its higher lumen package, higher efficacy, longer life time, more dimming options, higher colour rendering, more CCT options. Further with its sleek and aerodynamic design adds to its aesthetic look. Inlumino is also suitable for a variety of applications, as it can be installed as a light source or easily upgraded to an IoT data point. Take advantage of the innovation from Tungsram and optimize your outdoor lighting with the new range of Inlumino luminaires.

Application areas



Roadways
and Highways



Pedestrian street

Driver features

- Electronic, dimmable driver
- Controls: 1-10V Analog, Dali, Autonomous dimming, CLO
- Thermal Protection

Structures and materials

- Housing material: die-cast aluminium body and coupler, with stainless steel screws.
- Optic material: Optical-grade polycarbonate
- Optical cover: Tempered glass
- Colour: RAL7021
- Impact Strength: IK08 (glass) / IK09 (housing) / IK08 (Shorting Cap)

Electrical

Input voltage and frequency: 220-240V, 50-60Hz
IEC protection class: Class I, Class II
Driver immunity: 10kV
Rated input power: 147W – 214W

Installation and maintenance

Mounting options:

- Side mounting coupler for 30-76mm diameters and -15°, -10°, -5°, 0°, +5°, +10°, +15° tilt options
- Post top mounting coupler for 30-76mm diameters and -15°, -10°, -5°, 0°, +5°, +10°, +15° tilt options
- Weight: 9 kg
- Recommended mounting height: 6-25 m
- Only two hand-tools required for installing the fixture
- Tool-less maintenance, click and flip, twist and lock
- Tool-less hinged opening and lift-off head with automatic electrical disconnect
- Storage temperature from -40°C to +85°C
- Ambient temperature from -40°C to +50°C

Optics

441 different optic combinations would be available which are suitable for pedestrian streets to high traffic roads.

Rated colour rendering index >70 or >80

Rated correlated colour temperatures: 2200K (available in CRI70 only), 2700K, 3000K, 4000K, 5000K
ULOR: 0

Rated initial chromaticity co-ordinate values (3SDCM only available in CRI70):

- 2200K: CIE(x=0.5020, y=0.4156) 5SDCM, 3SDCM on request (available in CRI70 only)
- 2700K: CIE(x=0.4577, y=0.4098) 5SDCM, 3SDCM on request
- 3000K: CIE(x=0.4339, y=0.4032) 5SDCM, 3SDCM on request
- 4000K: CIE(x=0.3818, y=0.3796) 5SDCM, 3SDCM on request
- 5000K: CIE(x=0.3446, y=0.3551) 5SDCM, 3SDCM on request

Performance

- Rated luminous flux range: From 22 000-30 000lm
- Rated luminaire efficacy: 103-150lm/W (140-150lm/W @740)
- Rated median useful life and the associated rated LM factor: L90B50 > 331.000 hours *
- Rated useful life and the associated rated LM factor: L90B10 > 324.000 hours *
- Rated abrupt failure value: < 10% at 100.000 hours
- Rated ambient temperature (tq) related to performance for a luminaire: 25°C
- Photometric code: 722/559, 727/559, 730/559, 740/559, 750/559, 827/559, 830/559, 840/559, 850/559
- Lumen maintenance code: 9
- Definitions and tolerances according to IEC62722-2-1:2014

* Lifetime calculated for maximum lumen value

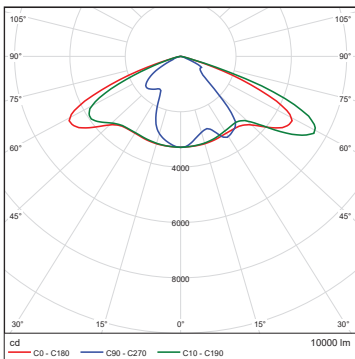
Standards and regulation

CE, Directive 2014/30/EU, 2014/35/EU, 2019/2020/EU, 2011/65/EC, EN60598-1, EN60598-2-3, EN 62471, EN 55015, EN61000-3-2, EN61000-3-3, EN 62493, EN 61547

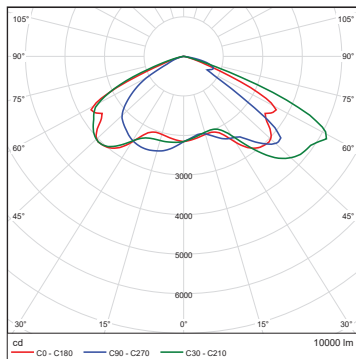
Other options available

- Extra surge protection device (10kV/5kA)
- NEMA socket with shorting cap
- Toolless removable geartray
- Fuse
- Delux version

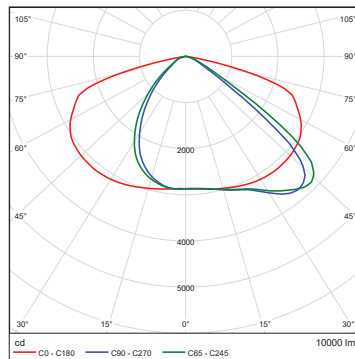
Typical photometric features



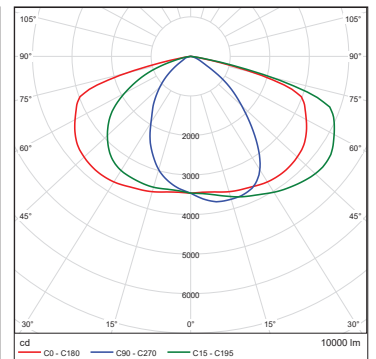
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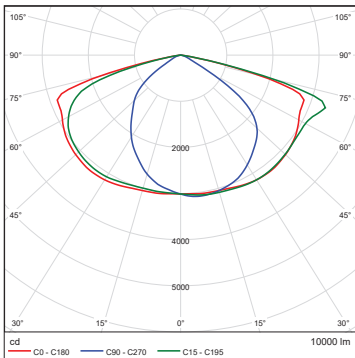
BBB



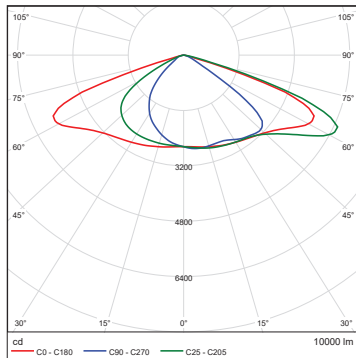
CCC



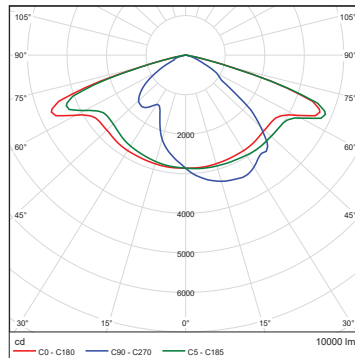
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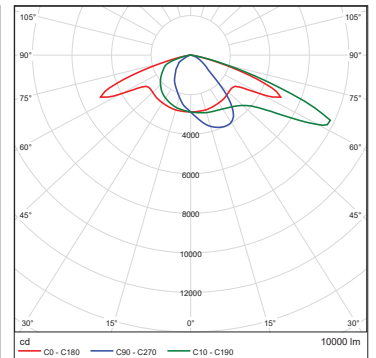
EEE



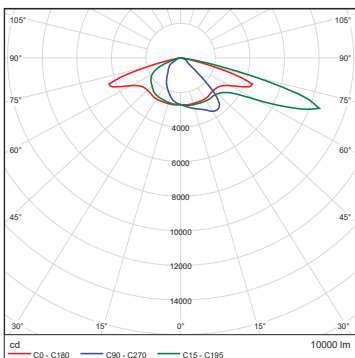
FFF



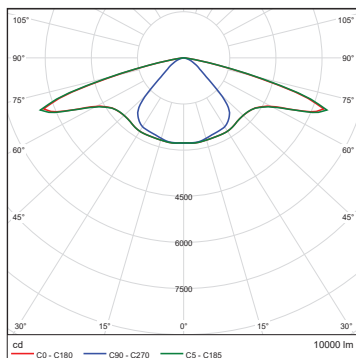
GGG



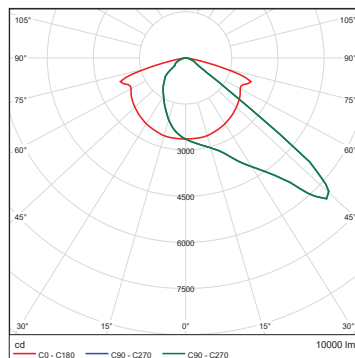
JJJ



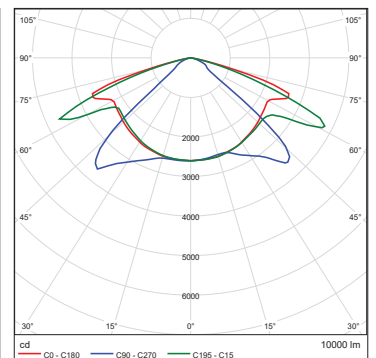
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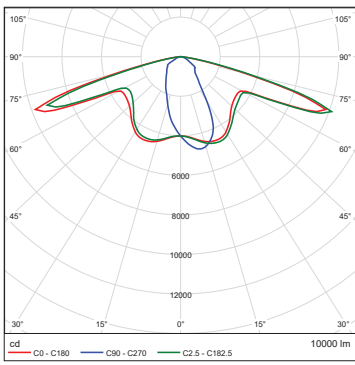
LLL



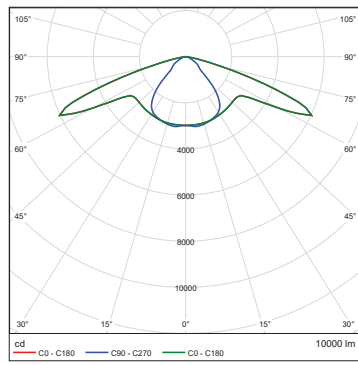
MMM



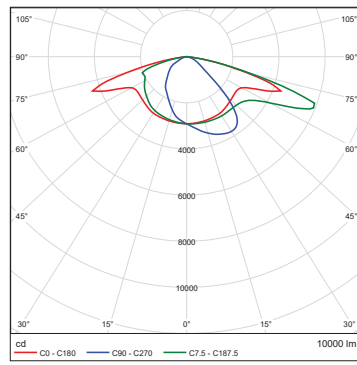
NNN



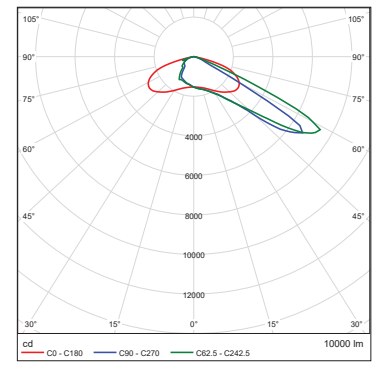
OOO



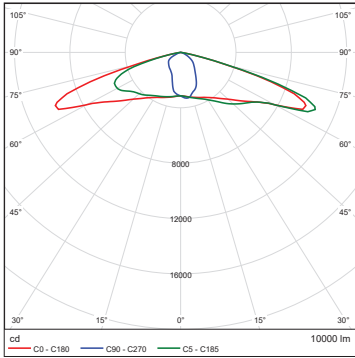
PPP



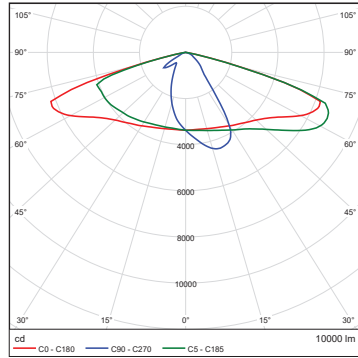
QQQ



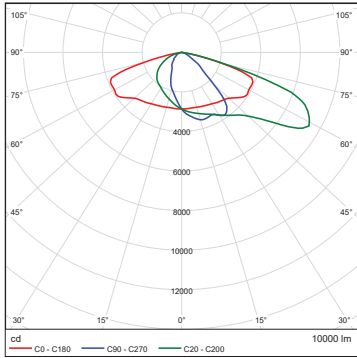
SSS



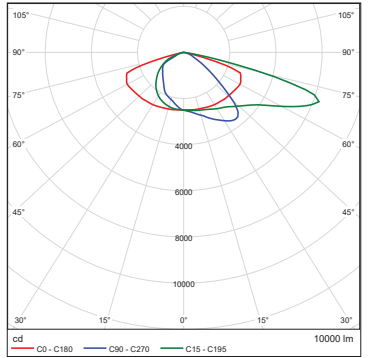
UUU



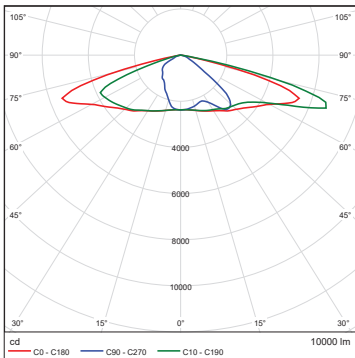
VVV



WWW



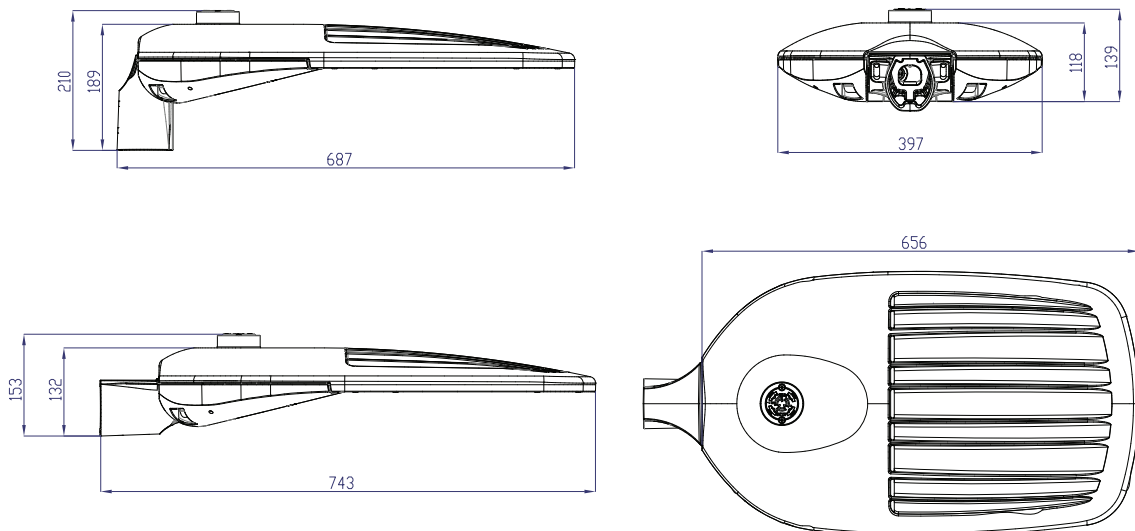
XXX



YYY

Remaining valid photometric distributions can be found in the online E-catalogue

Dimensions (mm)



Order logic

Name	Gen.	Nominal lumen (lm) ^[1]	Optics ^[2]	CCT (K) ^[3]	Option list ^[4]	Accessories	Control	IEC Protection Classes	P-Supply cord	Mounting	Color ^[8]
INM	2	22000-30000	AAA BBB CCC DDD EEE FFF GGG JJJ KKK LLL MMM NNN OOO PPP SSS QQQ UUU VVV WWW XXX YYY xxx	722 - 2200K 70 CRI 727 - 2700K 70 CRI 730 - 3000K 70 CRI 740 - 4000K 70 CRI 750 - 5000K 70 CRI 827 - 2700K 80 CRI 830 - 3000K 80 CRI 840 - 4000K 80 CRI 850 - 5000K 80 CRI	ST - Standard NE - NEMA DS - Deluxe Standard DN - Deluxe NEMA	NO - No Accessory FU - Fuse SP - Enhanced surge protection FS - Fuse + extra surge protection	N - No control A - 1-10V Analog D - DALI external Yx - Autonomous Dimming ^[5] NLx - Constant Light ^[5] DLx - DALI+CLO ^[5] YLx - Autonomous Dimming+CLO	C1 - Class I C2 - Class II ^[6]	N - No supply cord Pxx - Supply cord ^[7]	U48 - Universal 30-48mm U60 - Universal 42-60mm U76 - Universal 60-76mm	R7021

Example: INM2-30000-AAA-722DSNONC1P1U60R7021

IP/IK rating: ST (Standard), DS (Deluxe Standard) are IP66 / IK09. NE (NEMA) and DN(Deluxe NEMA) types are IP66 / IK08.

^[1] Nominal lumen

Lumen output of the Luminaire can be programmed by the manufacturer in 500lm steps within the marked range

^[2] Optics

: xxx is alphanumeric which can contains letters A-Z and numbers 0-9. Examples: Z01....Z99 or 101-999

All symmetric lens combinations are valid. Eg ABA, ACA, AAA. Non symmetric combinations are invalid Eg, ABC is not a valid combination.

^[3] CCT (K)

Maximum Nominal lumen in case of:

722: 22000 lm, 727: 26000 lm, 730: 28000lm, 740: 30000lm, 750: 30000lm

827: 22000 lm, 830: 24000 lm, 840: 26000lm, 850: 26000lm

^[4] Option list

ST - Standard option. All accessory combinations are valid with this option.

NE - NEMA socket option. Only the fuse (FS) can be chosen from the accessory list for this option.

DS - Deluxe Standard option. This version comes with the secondary reflector . All accessory combinations are valid with this option.

DN - Deluxe NEMA socket option. This version comes with the secondary reflector. Only the fuse (FS) can be chosen from the accessory list for this option.

^[5] x can be up to 3 characters

^[6] IEC Protection Classes

Class II is not valid with Analog control

^[7] Supply cord

Maximum supply cord length is 15m

^[8] Color

Leave it blank if it is RAL7021. Other RAL colors available on request

Nominal lumens tables

CRI70

2200K			2700K			3000K			4000K			5000K		
Lm	W	LPW	Lm	W	LPW	Lm	W	LPW	Lm	W	LPW	Lm	W	LPW
22000	214	103	22000	177	124	22000	163	134	22000	147	150	22000	147	150
24000	-	-	24000	197	122	24000	181	133	24000	163	147	24000	163	147
26000	-	-	26000	208	123	26000	200	130	26000	178	146	26000	178	146
28000	-	-	28000	-	-	28000	214	128	28000	197	143	28000	197	143
30000	-	-	30000	-	-	30000	-	-	30000	214	140	30000	214	140

CRI80

22000	-	-	22000	203	108	22000	186	119	22000	169	130	22000	169	130
24000	-	-	24000	-	-	24000	202	118	24000	188	128	24000	188	128
26000	-	-	26000	-	-	26000	-	-	26000	211	124	26000	211	124
28000	-	-	28000	-	-	28000	-	-	28000	-	-	28000	-	-
30000	-	-	30000	-	-	30000	-	-	30000	-	-	30000	-	-

