

Troffers with Emergency Lighting option



Elegantly designed and brilliantly efficient, Fotentec's troffers are the pride and joy of our engineering team; casting beautiful even lighting on desk-tops where it is needed and minimising glare with lenticular diffusers that meets Australian building standards. The Vela, with a UGR < 16 complies with WELL V2.

The troffers have a CRI with $R_a > 95$ and a red content $R_9 > 78$, together with their circadian tunable options are quantum leaps ahead of the nearest competitor. Furthermore, a Fotentec 20W LED troffer can typically replace a twin T5/T8 (56W/72W) fitting. A significant energy saving.

Based on IES LM-80-08, the lamp section has an expected lifespan greater than 180,000 hrs at 45°C (36 yrs@5,000 hrs/yr) at L70, which implies less than 1% lumen depreciation per annum. By

renewing drivers every 5 years the life span can be extended in quantum of 5 years for 20 years.

The lamp reflectors are enclosed, and the flat emission surface is easy to clean. This combination will help maintain the Light Loss Factor (LLF) of the luminaire through time.

Significant cost savings can be made with the plug-n-play luminaires that utilises wireless LoRa. A single Gateway can monitor/control up to 64,000 devices and zoning is a simple point-n-click.

Emergency lighting is an option and together with LoRa and its application software, i3t, is a formidable smart building system that incorporates emergency testing and reports.

TROFFERS



Customisation: Nonstandard ceiling frames and air-vents to fit air conditioner booth are our specialty and we can deliver them as quickly as our standard troffers.

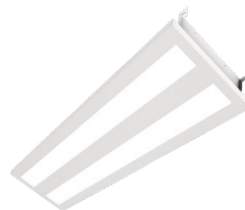
Emergency Option: Installations are greatly simplified by our commonsense approach in doubling-up the troffer LEDs as emergency light. It will reduce cost and waste.

Human Centric Lighting: Our troffers unique mechanics and selection of materials enhance their efficiency, exhibit very low glare, and have an excellent red content ($R9 > 78$) that is suitable for use in hospitals. Tunable lighting is an option.

Long Life: At 1% per annum LED depreciation on continuous use, the lamp should last 20 years at L80. The lamp driver has a lifespan of more than 5 years on continuous use.

Warranty & Warranty Options: The standard warranty is 5 years for the luminaire's driver and 10 years for the LED lamp section. Customers can replace the drivers every 5 years to extend the luminaires life to 10 years or we can provide and option to extend the luminaire life by auto-switching 2 drivers.

Futuristic: Internet of Things (IoT) is the future for smart-building application. LoRa (short for Long Range) has become the IoT standard for control systems because it has a 5 km range in metropolitan built-up areas. Fotenic i3t building management is our application software on smart devices that communicates to LoRa through a gateway.



VELA

- ◇ Ultra-low glare UGR < 16
- ◇ Comply with WELL V2



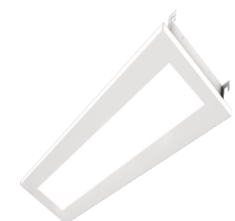
EPSILON

- ◇ Very low glare UGR < 19



QUASAR

- ◇ Very low glare UGR < 19
- ◇ Lower Costs



ASTRA

- ◇ Customised

1 for 1 twin T8/T5 replacement with only 20W

with LoRa Wireless & emergency light options

Standard Specification

Input power range:	20W*
Efficacy:	116 lm/W @ 20W
Beam angles:	
Vela:	67°(H), 79°(V)
Quasar:	92°(H), 100°(V)
Epsilon:	85°(H), 90°(V)
Astra:	90°(H), 100°(V)
CRI:	Ra > 95 , R9 > 78
Colour temperature:	Cool white, 5000K Neutral white, 4000K Warm white, 3000K Tunable option
UGR:	
Vela:	<16
Quasar:	<19
Epsilon:	<19
Astra:	NA
SCDM:	3
LLD(Av):	2.21% @ 12,000 hrs
Diffuser:	Polycarbonate
Chromaticity shift (Av):	0.0012 @ 12,000 hrs
Fitting Material:	Zinc coated steel
Fitting colour:	USA white
IP rating:	IP40
Input Voltage:	180-264Vac
Power factor:	>0.96@20W
Operating temperature:	-20°C to 45°C
Approved standards:	SAA, C-Tick

Life expectancy (L70):	>180,000 hrs (Calc) >60000 hrs (Reported)
Warranty :	5 years
Warranty (option):	8 years (option)
Weight:	2.5Kg

Options

Lighting control system:	DALI (dimmable) LoRa i3t
--------------------------	-----------------------------

LoRa i3t Lighting control:

64,000 Lamp and device Nodes
Easy setup:
Simple point-n-click zoning
with multi-level grouping
0-100% zone or group dimming
Ambient light correction
Room correction factor
Occupancy sensing

Tunable White:	2700-5500K **
OEM integration:	BacNet, KNX, Modbus, S-Mode, Desigo,
Custom colour:	Yes
Custom Dimensions:	Yes

* Half size troffer input power: 12W
Other wattages available
** 5 year warranty

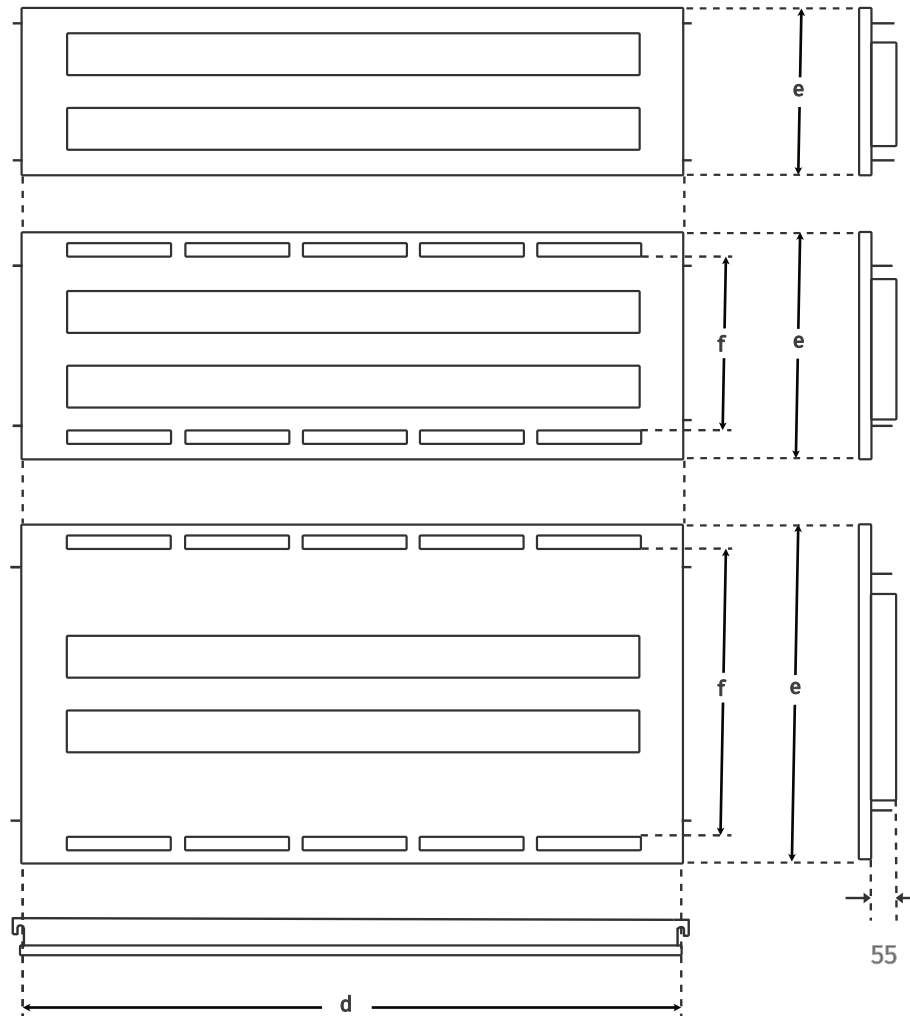
Ordering Information

VELA:	TRVab-cdef-gh-i	e:	1 (300mm), 2 (400mm), 3 (600mm)
QUASAR:	TRQab-cdef-gh-i		6 (450mm), 7 (485mm), 0 Custom size
EPSILON:	TREab-cdef-gh-i	f:	Air-vent distance
ASTRA:	TRAab-cdef-gh-i		1 (320mm), 2 (520mm)
			3 (240mm), 0 Custom
a:	watts e.g. TRV20... = 20W	g:	Lora i3t, Blank (no LoRa)
b:	DALI-2 driver, Standard driver, Y8 8 yrs drivers,	h:	PIR,
c:	Cool white, Neutral white, Warm white, Tunable white		Microwave,
d:	1 (600mm), 2 (1200mm)		Combined PIR & Ambient sensor
	6 (1350mm), 8 (1400mm), 9 (1575mm)		Blank (no sensor)
	0 Custom size	i:	Emergency



Dimensions:

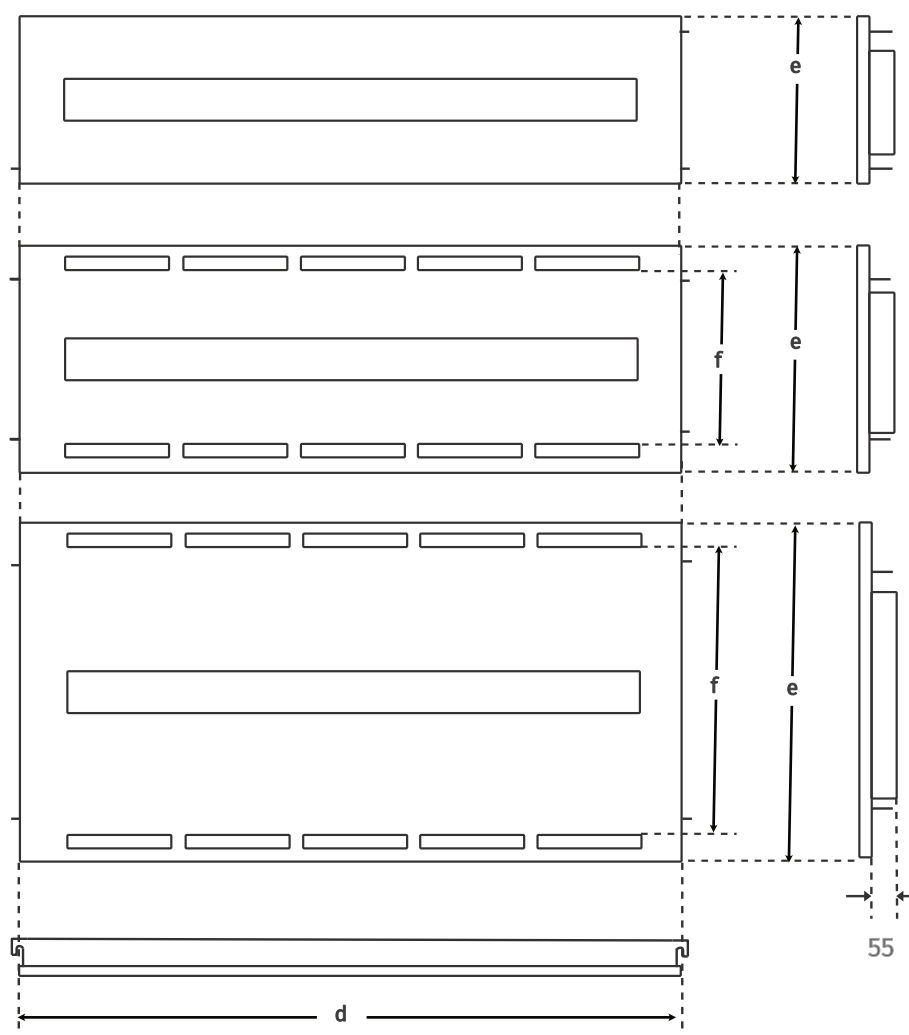
VELA



All dimensions in mm.
Custom dimensions available on request

Dimensions:

QUASAR

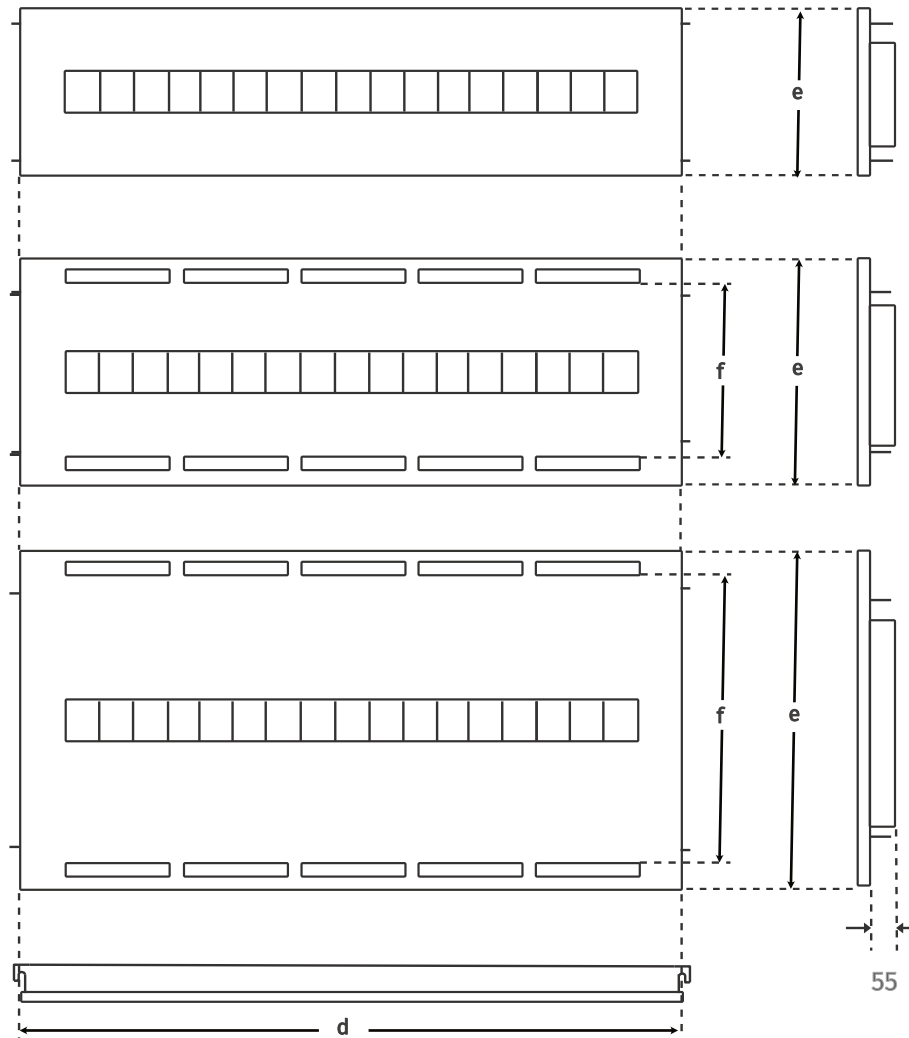


All dimensions in mm.

Custom dimensions available on request

Dimensions:

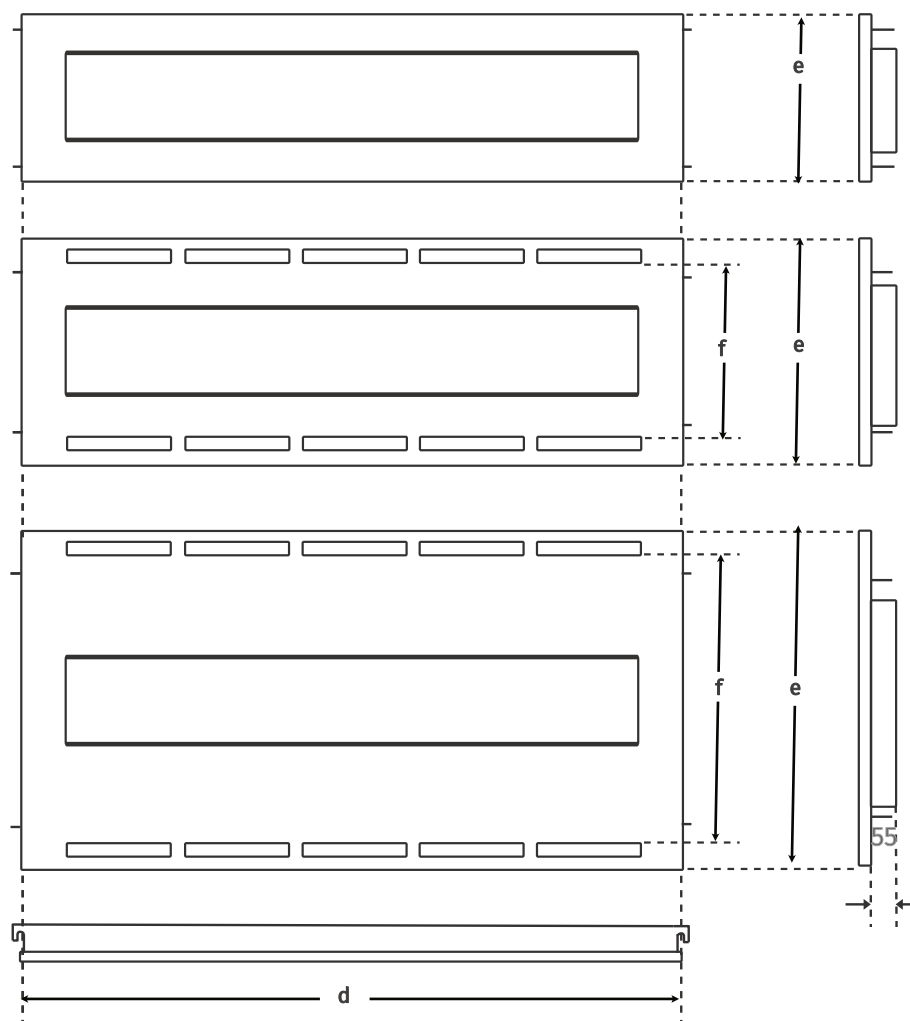
EPSILON



All dimensions in mm.
Custom dimensions available on request

Dimensions:

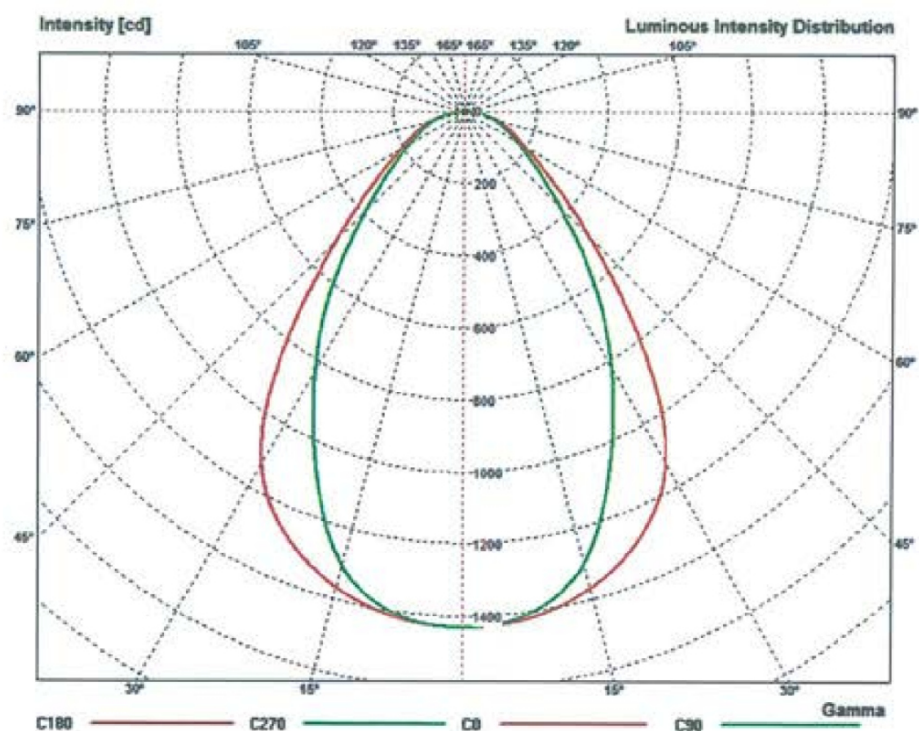
ASTRA



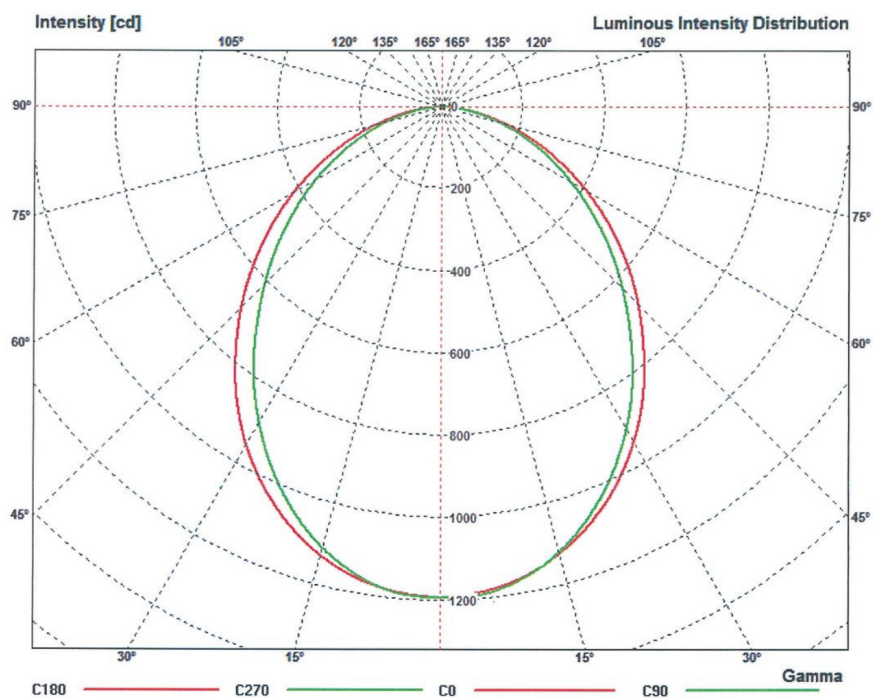
All dimensions in mm.

Custom dimensions available on request

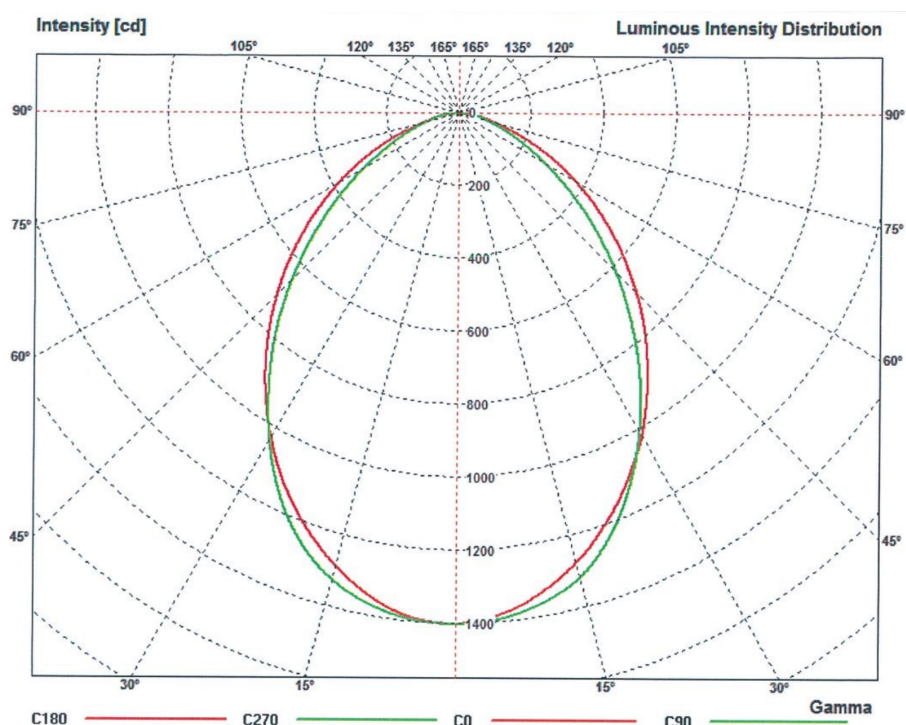
VELA Photometric Chart



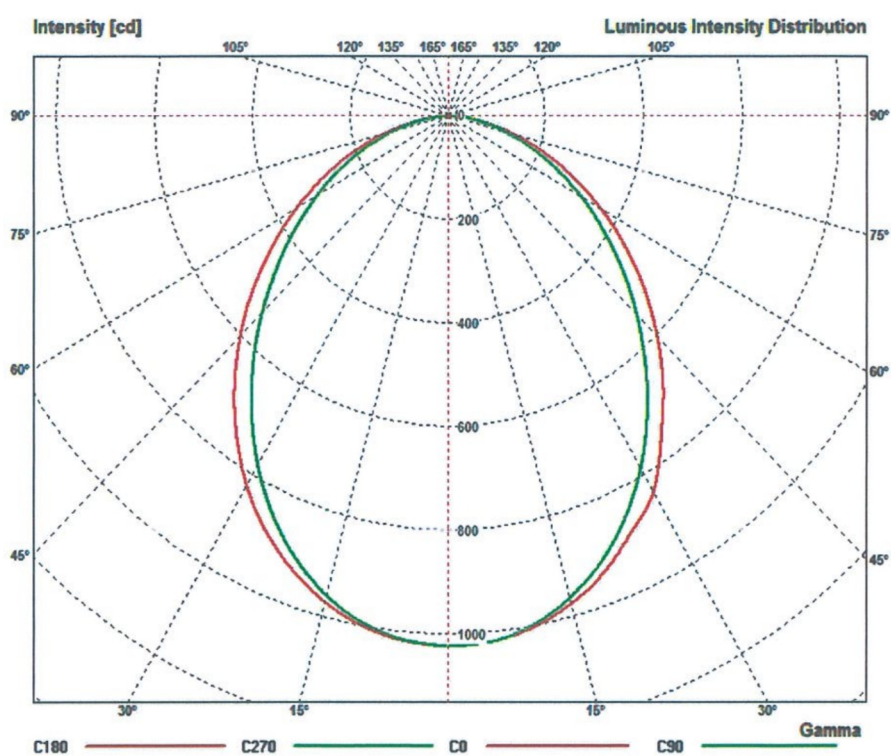
QUASAR Photometric Chart



EPSILON Photometric Chart



ASTRA Photometric Chart



Cabling

