



DATA SHEET

LUMINANCE

Photometer

GENERAL DESCRIPTION

The LCAM luminance photometer measures ambient luminance levels and communicates this data to the Tunnel Lighting Addressable Control System (TLACS) lighting controller, which ensures that lighting levels are being continuously maintained in a tunnel or underpass.

FEATURES

- Designed for measurement of luminance in control systems for tunnels, short tunnels and underpasses
- Measurement technology compliant with CIE and IES recommendations



SPECIFICATIONS

ELECTRICAL

Attribute	Value
Input voltage range (nominal)	120–480 VAC, 50/60 Hz
Power consumption	Without wiper/washer system: 321–370 W With wiper/washer system: 528–552 W
Attribute	Description
Protection	Surge protection device in junction box

INTERFACE

Attribute	Description
Supported interface connections	RS-485 RJ-45: 10/100 Mbit/s Fiber optics: single- or multi-mode fiber (SC connector) Power line communication
Network Controller integration	RS-485: internal diagnostics with Nyx Hemera's Network Controller (NWC or NWC2)

PERFORMANCE

Attribute	Value
Viewing aperture FWHM (full width at half maximum)	10–40°
Measurement range	0–10,000 cd/m ²
Accuracy	±3%
Attribute	Description
Detector	Silicon photodiode, V(λ)-filtered

ENVIRONMENTAL

(If applicable, use washer fluid that is effective within the operating temperature range.)

Attribute	Value	
	Min.	Max.
Photometer operating temperature	–40°F (–40 °C)	122°F (50 °C)
Junction box operating temperature	–13°F (–25 °C)	104°F (40 °C)
Storage temperature	–40°F (–40 °C)	122°F (50 °C)
Attribute	Description	
Operating humidity	Up to 100%	
Protection rating	Photometer enclosure: IP66 Junction box: NEMA 4X	



MECHANICAL

Photometer Enclosure

Attribute	Value
Photometer enclosure dimensions without wiper option (H x W x D)	4.843 in. × 6.378 in. × 18.228 in. (123 mm × 162 mm × 463 mm)
Photometer enclosure dimensions with wiper option (H x W x D)	7.244 in. × 6.378 in. × 18.228 in. (184 mm × 162 mm × 463 mm)
Photometer enclosure weight	Without wiper system: 12.125 lb. (5.5 kg) With wiper system: 13.889 lb. (6.3 kg)
Photometer enclosure Effective Projected Area (EPA)	0.839 sq. ft. (0.078 m ²)
Attribute	Description
Photometer enclosure material	Powder-coated stainless steel

Junction Box

(Dimensions: H x W x D. Definite dimensions of the junction box will be in engineering drawings.)

Attribute			Value
Option	Interface	Voltage	
No wiper / washer option	RS-485	120–240 VAC L-N	9.055 in. x 5.512 in. x 4.961 in. (230 mm x 140 mm x 126 mm)
		Other than 120–240 VAC L-N	10 in. x 7.992 in. x 5.984 in. (254 mm x 203 mm x 152 mm)
	RJ-45, fiber optics (SM/MM) or power line	Other than 120–240 VAC L-N	15.984 in. x 15.984 in. x 5.984 in. (406 mm x 406 mm x 152 mm)
Wiper / washer option	Any	Any	24.016 in. x 24.016 in. x 12.008 in. (610 mm x 610 mm x 305 mm)
Attribute		Description	
Junction box material		Stainless steel	

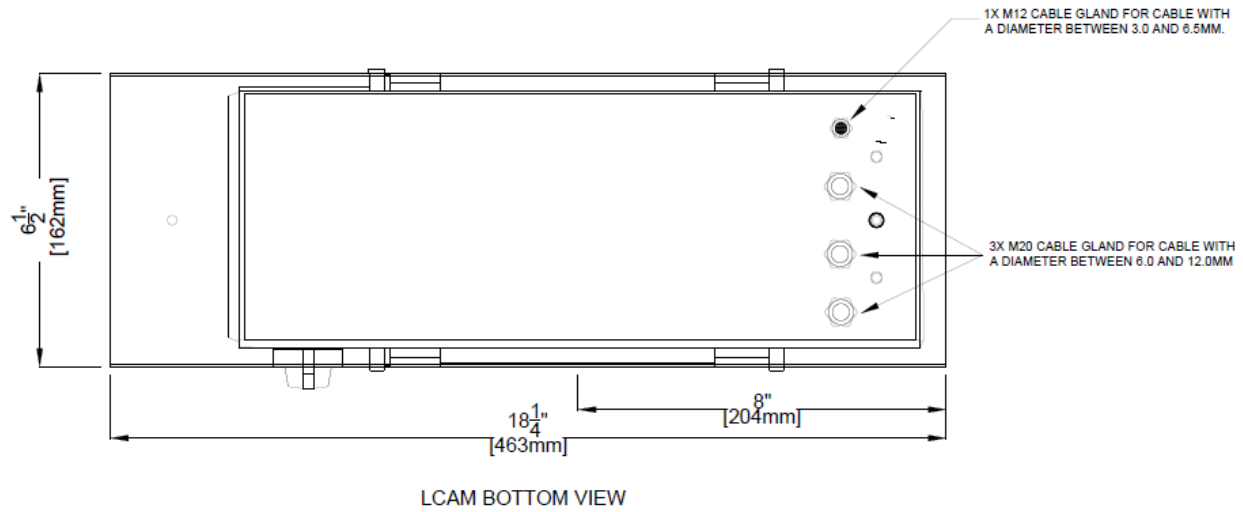
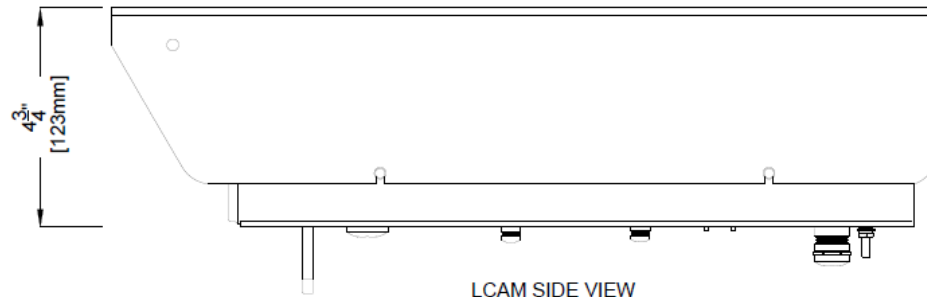
STANDARDS

Attribute	Description
EMC emissions	2014/30/EU (Electromagnetic Radiation)
Low voltage	2014/35/EU (Low Voltage)
Junction box safety	CSA C22.2 No. 286 UL 508A



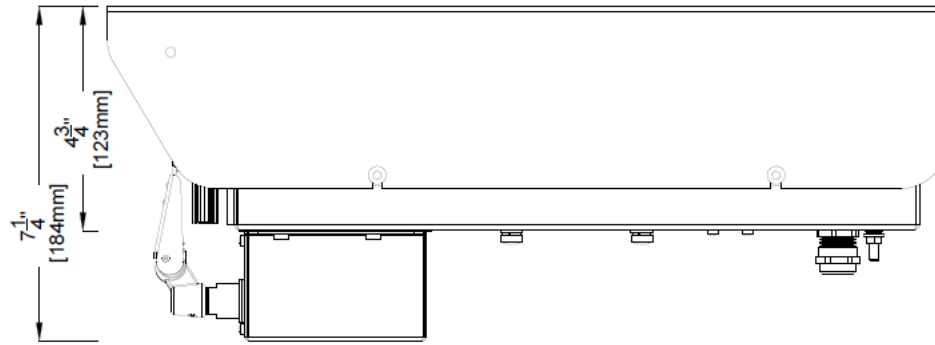
MECHANICAL DRAWINGS

WITHOUT WIPER/WASHER OPTION

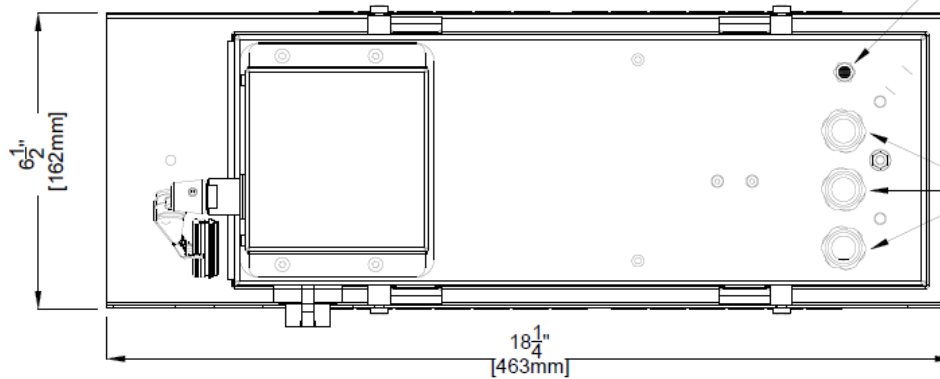




WITH WIPER/WASHER OPTION



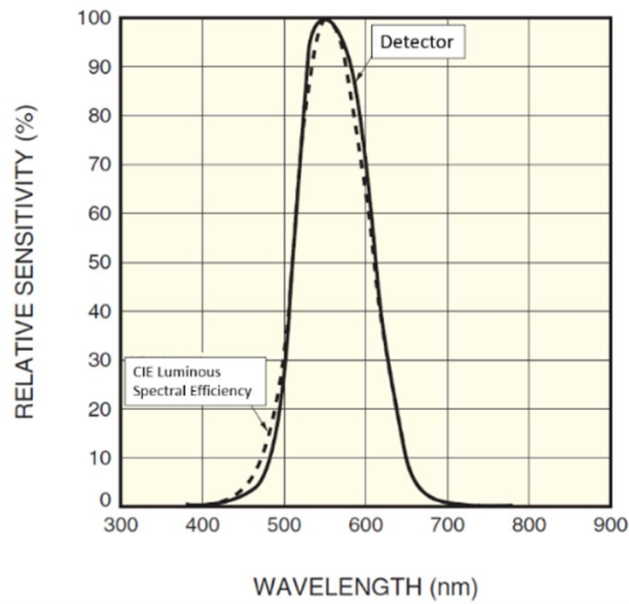
LCAM SIDE VIEW



LCAM BOTTOM VIEW



SPECTRAL EFFICIENCY



PRODUCT ORDERING INFORMATION

LCAM - P - 1 - - - -															
Model		Interface Option		Viewing Aperture		Mounting		Wiper and Washer		Input Voltage		Interface Connection			
LCAM	Luminance photometer	P	Photometer	20	Standard aperture of 20° Factory configuration: 10° to 40° (a value of 15 indicates a 15° viewing aperture)	1	Wall/pole mounting	N-N	No wiper or washer	1	120–240 VAC L-N	1	Ethernet (RJ-45)		
				[10–40]				W-N		2		277 VAC L-N		2	Fiber optics; SM, SC
								W-E		3		480 VAC L-L		3	Fiber optics; MM, SC
										4		347 VAC L-N		4	RS-485
										5		240 VAC L-L		5	Power line