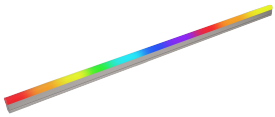
TRAXON

Project: _____

Type: _____

Allegro Media Tube® Lite RGBW



Allegro Media Tube® Lite fits into any wall, façade or media lighting application with tight installation requirements, while the wide beam angle output and 10-pixels-per-meter ensures a smooth illumination experience. Featuring auto addressing and quick lock connectivity, this greatly simplifies the lighting installation for building façades, media applications, bridges and more.
This product is intended for use in high-quality colored light applications.

IP66

Product Specifications

	Direct View			Diffused View		
	300mm	500mm	1000mm	300mm	500mm	1000mm
Light Source	18 RGBW 4 in 1	30 RGBW 4 in 1	60 RGBW 4 in 1	18 RGB + 18 White	30 RGB + 30 White	60 RGB + 60 White
Color Range	16.7 Million additive RGB colors; White 6500K					
Beam Angle	90°			115°x170°		
Luminous Flux	137 lm	224 lm	432 lm	144 lm	258 lm	513 lm
Efficacy	30.9 lm/W			36.6 lm/W		
Pixel Pitch	100mm					
Pixel Configuration	6 RGBW LEDs per pixel			6 RGB LEDs + 6 White LEDs per pixel		
Number of Pixel	3 pixels	5 pixels	10 pixels	3 pixels	5 pixels	10 pixels
Housing	Extruded Aluminum					
Cover Lens	Clear Glass			PC		
Adjustment Options	Fixed, non-adjustable					
Dimensions (W x H)	24 x 26mm, 32.6 x 54mm (mounting bracket included)			24 x 40mm, 32.6 x 68mm (mounting bracket included)		
Dimensions (L)	300mm	500mm	1000mm	300mm	500mm	1000mm
Weight	0.35kg	0.52kg	0.85kg	0.35kg	0.52kg	0.85kg
Regulatory Listing & Safety Approval	CE					
Operating Temperature	–40°C to +50°C / –40°F to +122°F					
Storage Temperature	–40°C to +70°C / –40°F to +158°F					
Environment	Outdoor, IP66, IK08 (Diffused View)					
Humidity	10-90%, non-condensing					

Electrical Specifications

Operating Voltage	48V DC
Power Consumption	4.2W / 7W / 14W

System Specifications

Control	DMX512
Power Supply	LED Engine 48V Outdoor
Addressing Options	Auto-addressing per daisy-chain
Fixture Interconnection	12 meters

LED CHARACTERISTICS Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature for example). If allowed working under optimal operating temperature range and with good ventilation, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

This product contains a light source of energy efficiency class G to Regulation (EU) No 2019/2015.
Lumen measurement compiles with LM-79-08 standard.
Lumen maintenance is calculated based on LM-80 compliant measurement.

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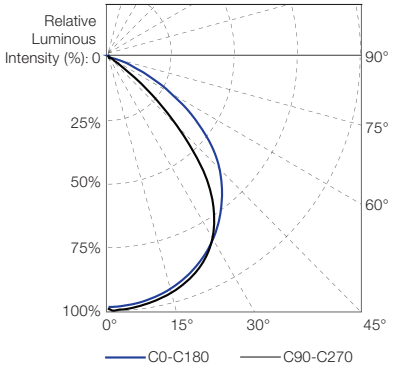
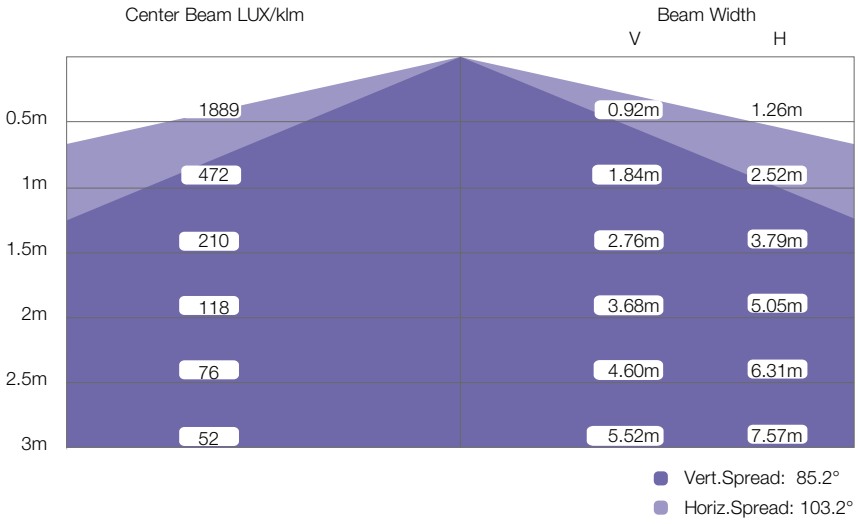
Candela Distribution (Direct View)



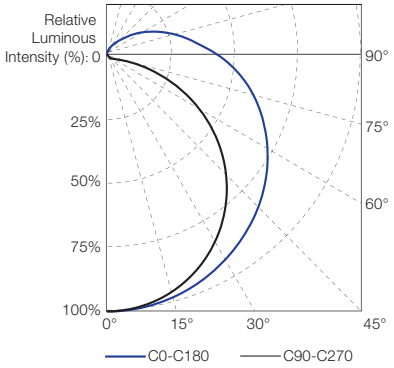
Light Output

Color	Luminous Flux (lm)
300	
RGBW (full-on)	137 lm
RGB	65.7 lm
Red	22.2 lm
Green	44.2 lm
Blue	7.2 lm
White (RGB off)	76.1 lm
500	
RGBW (full-on)	224 lm
RGB	103.4 lm
Red	32.4 lm
Green	62.7 lm
Blue	10 lm
White (RGB off)	124.6 lm
1000	
RGBW (full-on)	432 lm
RGB	197.6 lm
Red	67.6 lm
Green	121.1 lm
Blue	24.6 lm
White (RGB off)	244.8 lm

Illuminance at a Distance



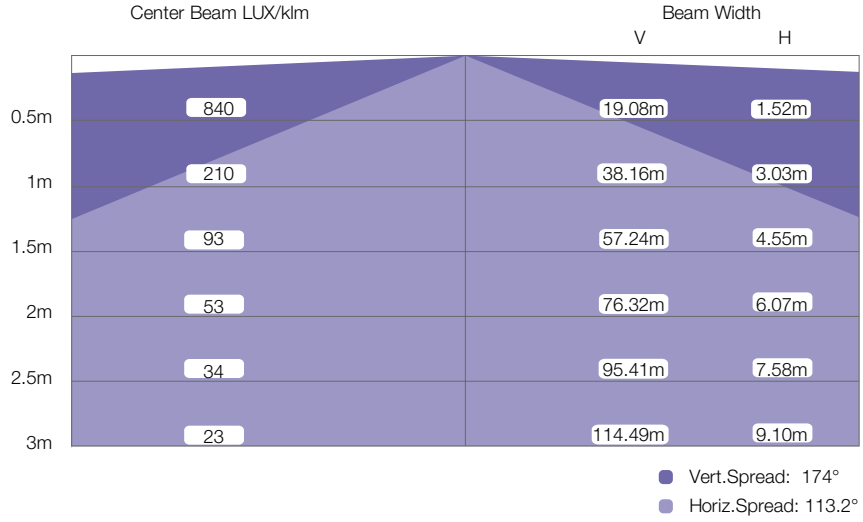
Candela Distribution (Diffused View)



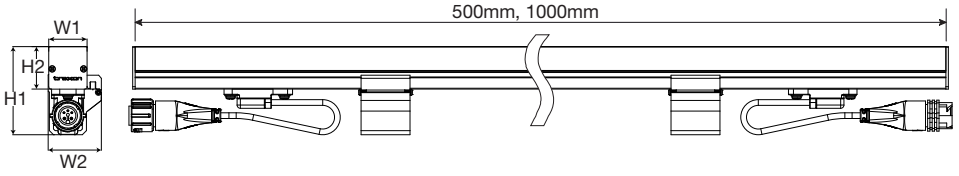
Light Output

Color	Luminous Flux (lm)
300	
RGBW (full-on)	144 lm
RGB	65.2 lm
Red	26.5 lm
Green	41.3 lm
Blue	11.5 lm
White (RGB off)	81 lm
500	
RGBW (full-on)	258 lm
RGB	110.1 lm
Red	33.7 lm
Green	71.3 lm
Blue	10.1 lm
White (RGB off)	146.5 lm
1000	
RGBW (full-on)	513 lm
RGB	219.4 lm
Red	60.9 lm
Green	141.2 lm
Blue	20.7 lm
White (RGB off)	295.8 lm

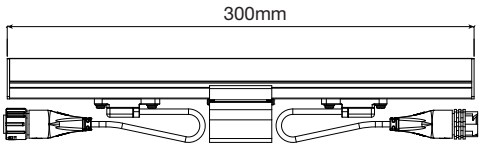
Illuminance at a Distance



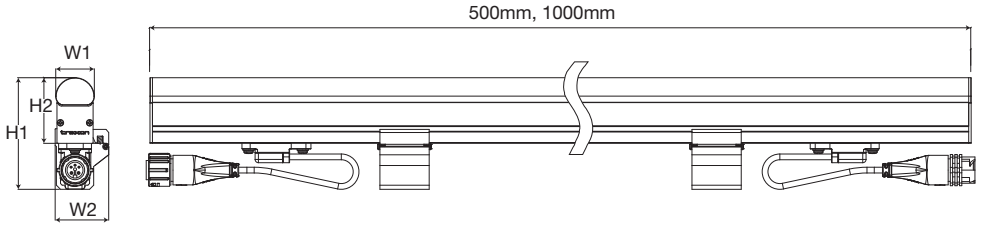
Fixture Dimensions (Direct View)



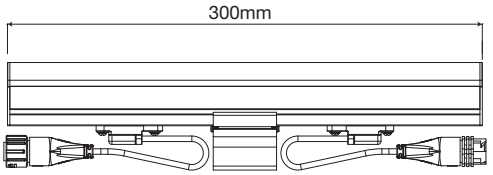
	W1	W2	H1	H2
1000mm	24mm	32.6mm	54mm	26mm
500mm	24mm	32.6mm	54mm	26mm
300mm	24mm	32.6mm	54mm	26mm



Fixture Dimensions (Diffused View)

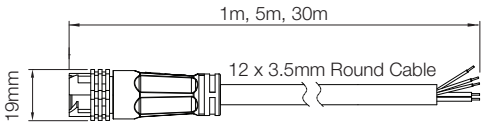


	W1	W2	H1	H2
1000mm	24mm	32.6mm	68mm	40mm
500mm	24mm	32.6mm	68mm	40mm
300mm	24mm	32.6mm	68mm	40mm

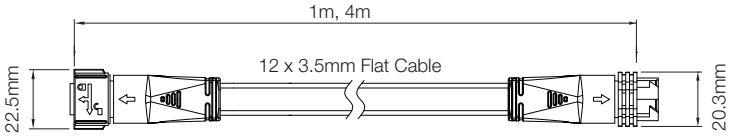


Accessories Dimensions

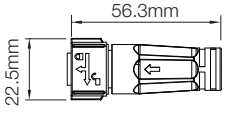
Starter Cable



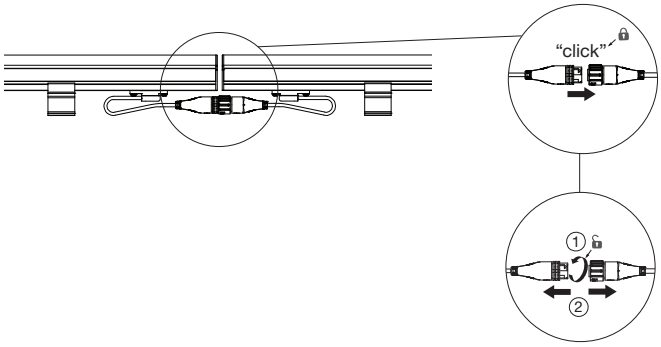
Interconnection Cable



End Cap with 120 Ohm Terminator

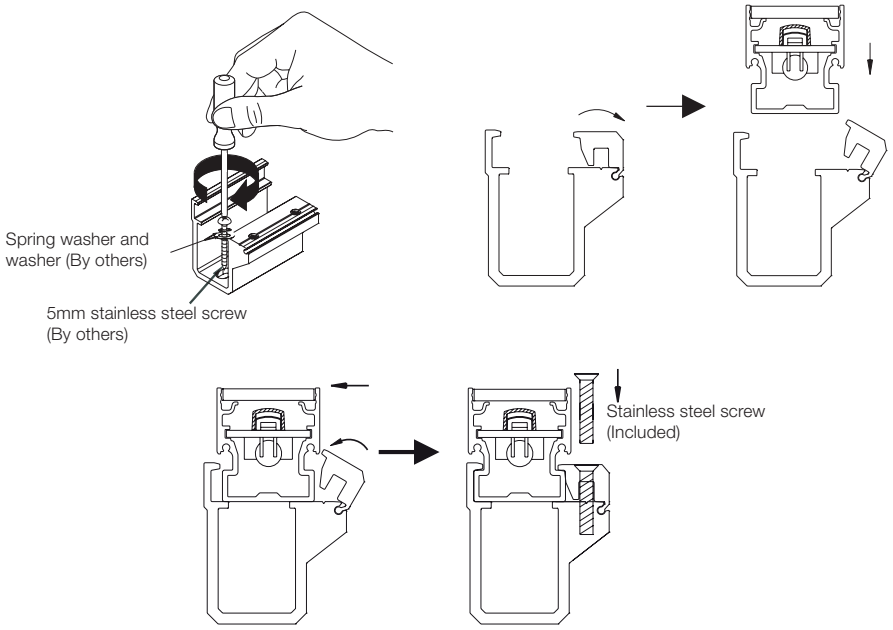


Cable Connection



If you do not hear "click", rotate the spring loaded lock nut manually (in opposite direction to loosening to ensure that the connectors are properly mated and tightened.

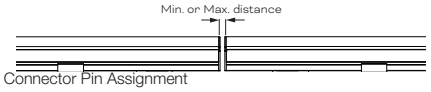
Bracket Mounting



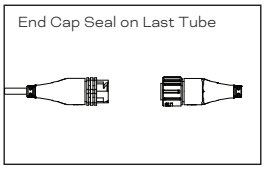
Tube-to-Tube Clearance

To maintain consistent LED pitch and to allow for thermal expansion for Tubes:

The minimum distance depends on the temperature difference.
Normally, it is 1.5mm/0.06" (direct view) or 4mm/0.16" (diffused view).
When the temperature difference is greater than 35°C/95°F, 5mm/0.2" is needed.
Max. distance: 100mm/3.94"

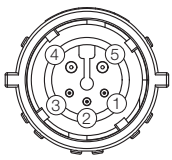


End Cap Seal on Last Tube



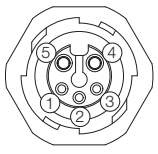
Connector Pin Assignment

Input



Wire#	Description	Color
1	DMX+	Green
2	Address	Yellow
3	DMX–	Blue
4	DC48V–	Black
5	DC48V+	Red

Output



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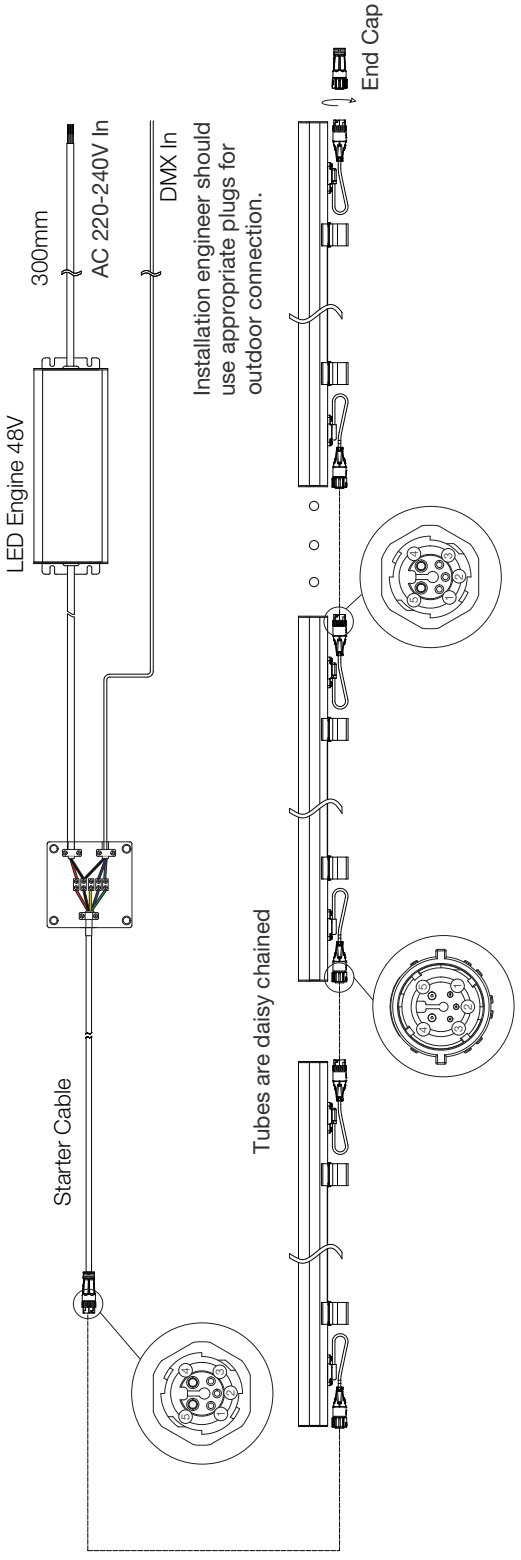
System Diagram



Pin#	Signal	Wire Size	Color	Connection
5	DC48V+	1.0mm²	Red	DC48V+
4	DC48V–	1.0mm²	Black	D€48V– and GND
1	DMX+	0.3mm²	Green	DMX+
3	DMX–	0.3mm²	Blue	DMX–
2	Address	0.3mm²	Yellow	Do not connect

Color Type	Max. Daisy Chain	PSU Power
RGBW	12m	240W
RGB	17m	320W
DW	20m	320W

The Address wire only need to be connected during address configuration, it is not needed during operation.
This wiring diagram shows only typical connections. Actual wiring depends on LED Tube configuration and installation. Actual no. vary according to cable lengths and signal source. Please consult your local Traxon office for aid.

Fixtures

Model No.	Description	Item Code
TU.AL.3110400	AL MT LT RGBW 1000 10PXL DF R CE	AM424650055
TU.AL.2105400	AL MT LT RGBW 500 5PXL DF R CE	AM424660055
TU.AL.1103400	AL MT LT RGBW 300 3PXL DF R CE	AM424670055
TU.AL.3410300	AL MT LT RGBW 1000 10PXL CR CE	AM424830055
TU.AL.2405300	AL MT LT RGBW 500 5PXL CR CE	AM424840055
TU.AL.1403300	AL MT LT RGBW 300 3PXL CR CE	AM424850055

TX Connect

Model No.	Description	Item Code
TU.AC.1200100	AL MT LT STARTER CABLE, 5-WIRE, 1M	AM410720055
TU.AC.1200200	AL MT LT STARTER CABLE, 5-WIRE, 5M	AM410730055
TU.AC.1200300	AL MT LT STARTER CABLE, 5-WIRE, 30M	AM410740055
TU.AC.1200500	AL MT LT INTER CABLE, 5-WIRE, 1M	AM410770055
TU.AC.1200600	AL MT LT INTER CABLE, 5-WIRE, 4M	AM410780055
TU.AC.1200400	AL MT LT END CAP WITH 120Ω TERMINATOR	AM410750055

TX Control

Model No.	Description	Item Code
	LED ENGINE 240W 48V OUTDOOR	AM089330055
PS.CU.0000008	LED ENGINE 100W 48V OUTDOOR	AA766150055