



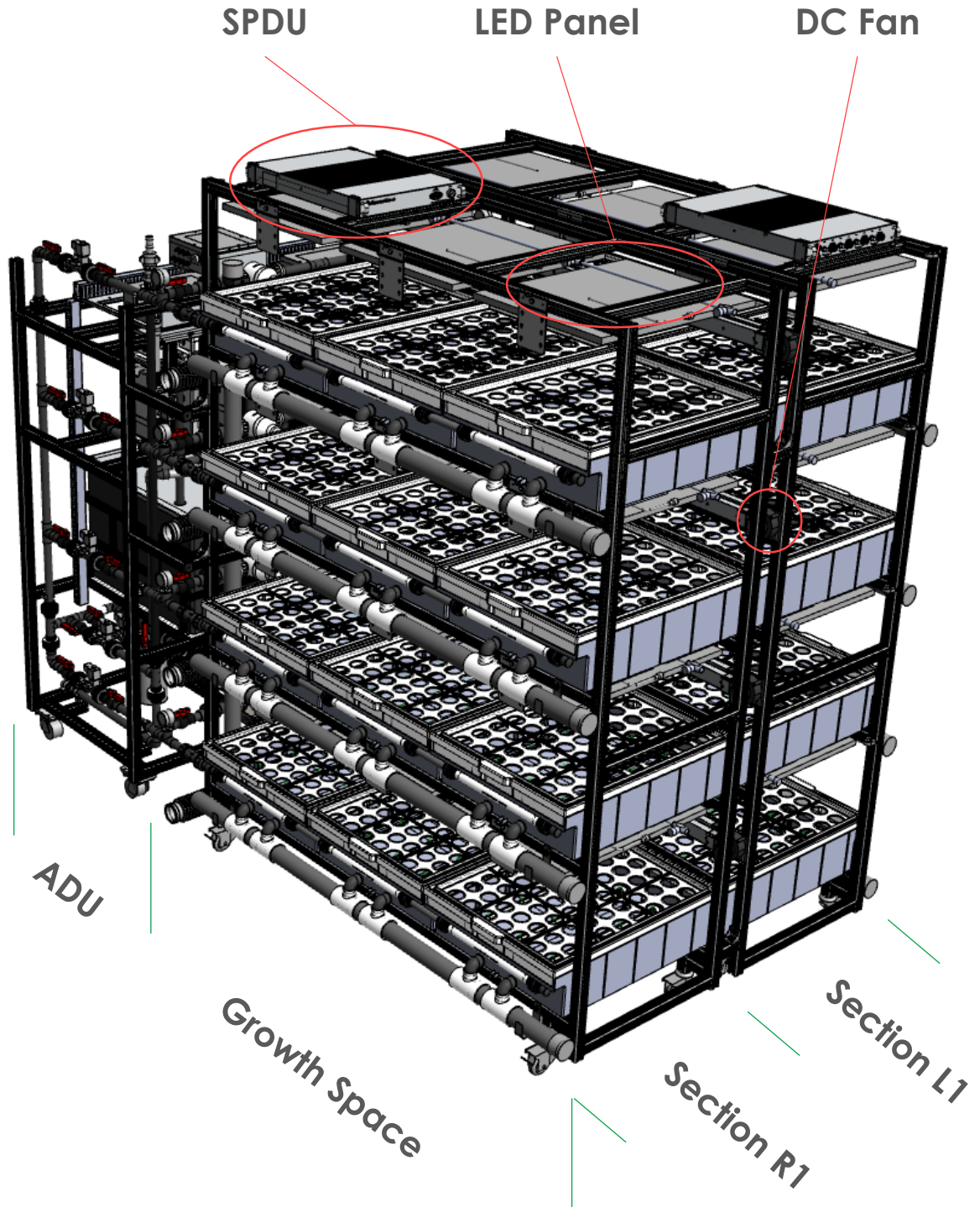
# SmartFarm LED Light

Aetrium-2.1 SmartFarm

## Data Sheet

## SmartFarm LED Lights in the Ætrium-2.1

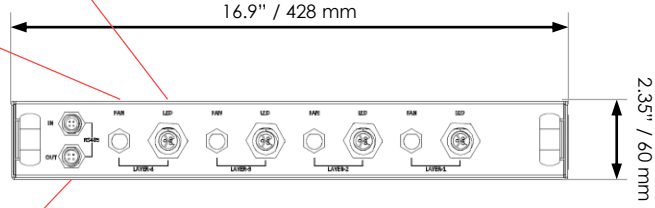
Each SmartFarm LED Light contains one Sectional Power Distribution Unit (**SPDU**) and 12 LED panels. The SPDUs are able to drive 24V DC fans. Each SmartFarm LED light serves one Ætrium-2.1 section.



24-tub Ætrium-2.1 SmartFarm

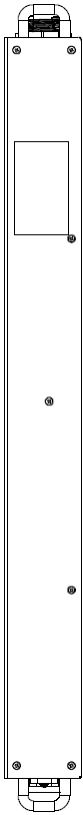
Fan channel connector

LED channel connector

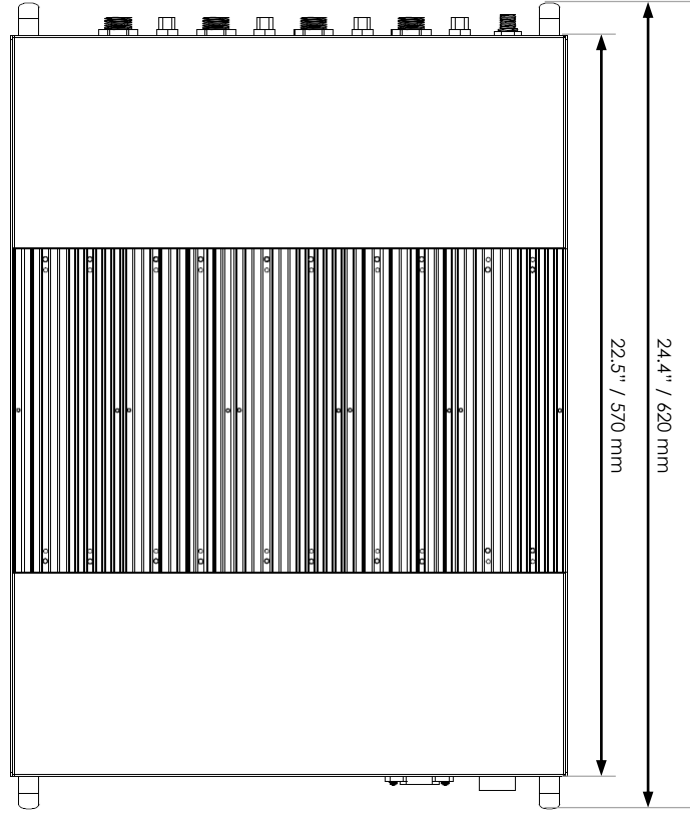


Rear View

AES Link connectors



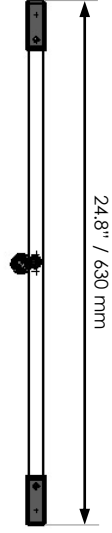
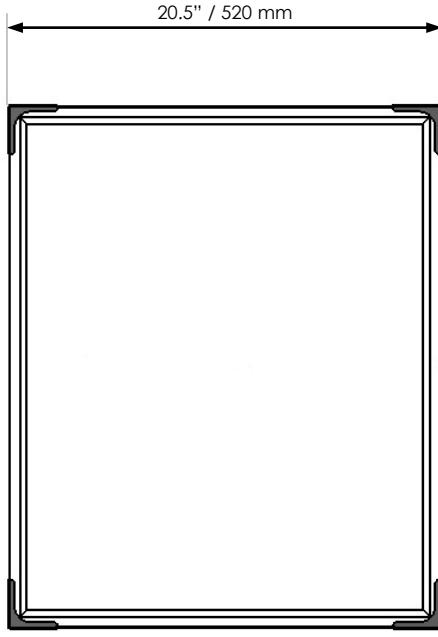
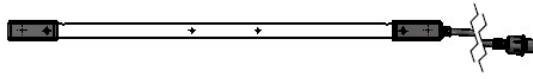
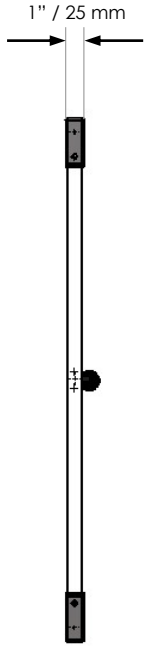
Side View



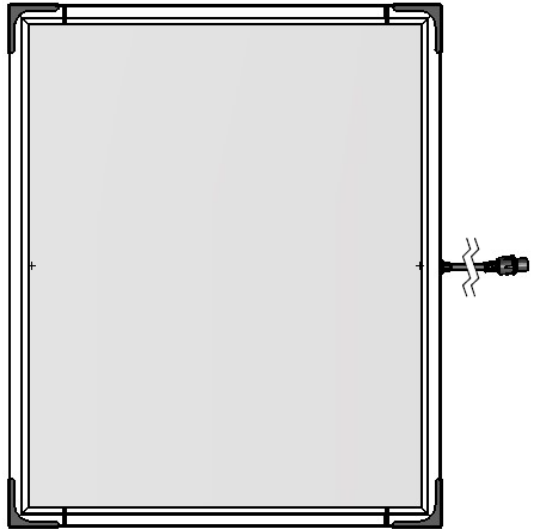
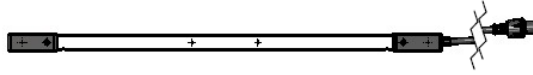
Top View



Front View



Bottom View



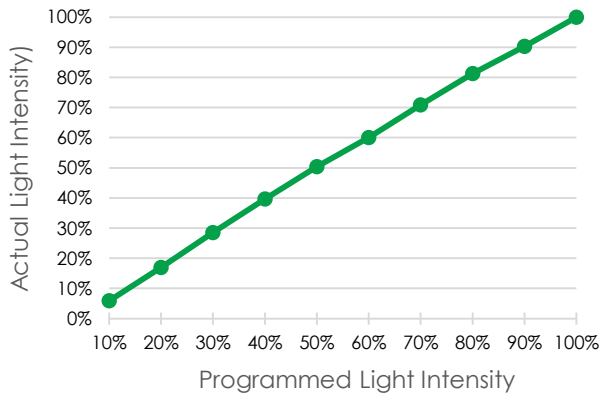
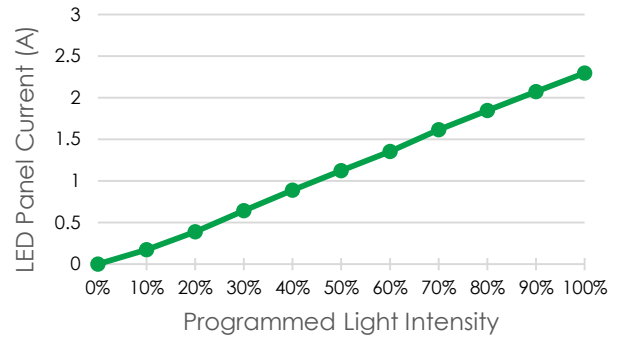
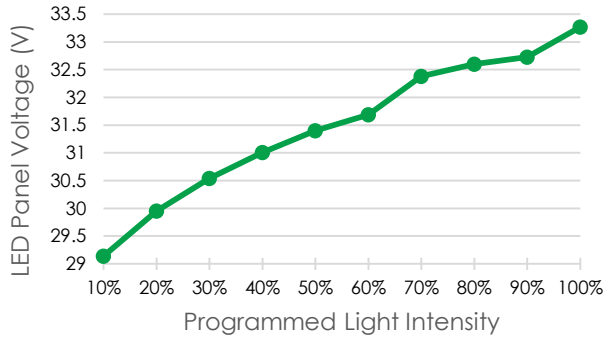
Top View

	Min	Typ	Max
SPDU input voltage	100 V <sub>AC</sub>	–	240 V <sub>AC</sub>
SPDU input frequency	47 Hz	–	63 Hz
AC current draw <sup>1</sup>	–	5.08 A <sup>2,3</sup>	6 A
AC power draw <sup>1</sup>	2 W	1,057 W <sup>2,3</sup>	1,252 W
LED channel voltage	–	33.3 V <sup>2</sup>	38.5 V
LED channel current	–	6.66 A <sup>2</sup>	6.7 A
LED panel voltage	–	33.3 V <sup>2</sup>	38.5 V
LED panel current	–	2.22 A <sup>2</sup>	2.23 A
LED Panel PPF	–	120 μmol/s <sup>2</sup>	–
Continuous dimming range	10%	–	100%
Fan channel voltage	–	24 V <sup>3</sup>	27 V
Fan channel current	–	0.4 A <sup>3</sup>	1 A
AES Link voltage	0 V <sub>DC</sub>	–	3.3 V <sub>DC</sub>
Operating temperature	34 °F (1 °C)	–	104 °F (40 °C)
Storage temperature	-22 °F (-30 °C)	–	176 °F (80 °C)

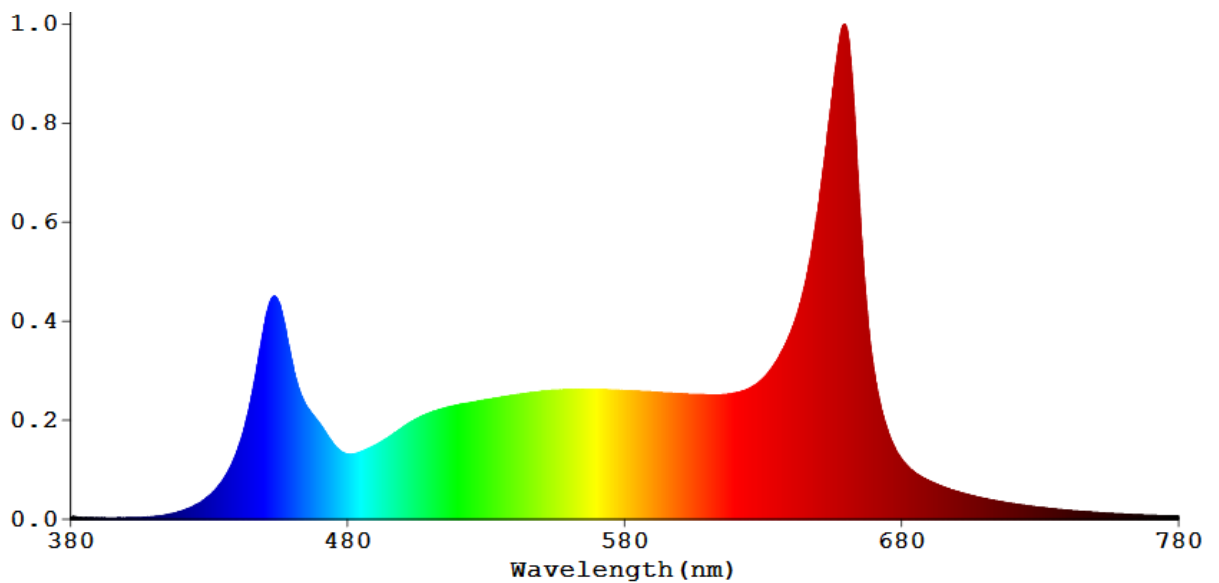
	Value
# of LED channels	4
LED channel connector	M19, 4 pins, female
# of LED panels / channel in the AETrium-2.1	3
# of fan channels	4
LED channel connector	M12, 4 pins, female
# of DC fans / channel in the AETrium-2.1	1
Comm. interface	AES Link <sup>4</sup>
Comm. connector	M12, 4 pins, female
SPDU dimensions (L x W x H)	24.4" x 16.9" x 2.4" (620 mm x 428 mm x 60 mm)
SPDU weight	23.2 lbs (10.5 kg)
LED Panel dimensions (L x W x H)	24.8" x 20.5" x 1" (630 mm x 520 mm x 25 mm)
LED Panel weight	9.8 lbs (4.4 kg)
SPDU input-output withstand voltage	3.75 kV <sub>AC</sub>
SPDU input-floating ground withstand voltage	2 kV <sub>AC</sub>
SPDU input-output withstand voltage	1.5 kV <sub>AC</sub>
SPDU isolation resistance <sup>5</sup>	100 MOhm

1. @ 208 V<sub>AC</sub>  
 2. @ 100% light intensity in the AETrium-2.1  
 3. With all fans running in the AETrium-2.1  
 4. Wired communication line based on RS-485  
 5. Input-Output, Input-Floating Ground, and Output-Floating Ground; 500VDC / 77°F (25°C) / 70% RH

## Dimming Characteristics <sup>1</sup>



## Spectrum



1. SmartFarm LED Light used in the Atrium-2.1

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