

## 1PXL Board RGB

1PXL Board RGB features 16 ultra bright SMT LEDs on a 4 x 4 matrix with a 62.5mm pitch. A low profile and open beam angle ensure optimal integration behind a wide range of diffuser materials, creating low resolution screens for graphic animation and video replay.



### Product Specifications

<b>Light Source</b>	16 High intensity Nichia SMT RGB LEDs
<b>Color Range</b>	16.7 Million additive RGB colors
<b>Color Resolution</b>	3 x 14-bit (Gamma correction)
<b>Beam Angle</b>	120°
<b>Luminous Flux</b>	132.3 lm
<b>Efficacy</b>	17.8 lm/W
<b>LED Pitch</b>	62.5mm / 2.46"
<b>Dimensions (L x W x H)</b>	230 x 230 x 11.5mm 9.06" x 9.06" x 0.45"
<b>Weight</b>	200g / 0.4lbs
<b>Regulatory Listing &amp; Safety Approval</b>	CE, FCC, cETLus
<b>Operating Temperature</b>	0°C to 40°C / 32°F to 104°F
<b>Storage Temperature</b>	-20°C to +70°C / -4°F to +158°F
<b>Environment</b>	Indoor
<b>Humidity</b>	0 to 90% non-condensing

### Electrical Specifications

<b>Input Voltage</b>	24V DC
<b>Power Consumption</b>	9W max.

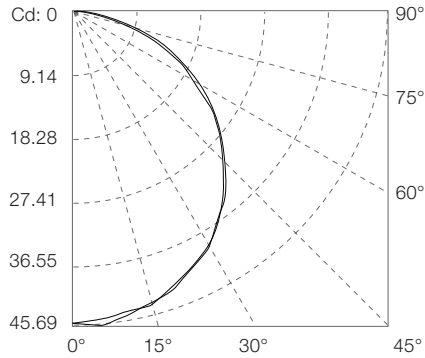
### System Specifications

<b>Power / Data Interface</b>	TX CONNECT Smart Indoor
<b>Control</b>	DMX512, 3 channels per pixel
<b>Power Supply</b>	LED Engine Smart 100W Indoor; LED Engine Smart 300W Indoor (see Ordering page for details)
<b>Addressing Options</b>	DMX Auto-Addressing ON/OFF (See Auto-Addressing Configuration for details)

**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.

### Candela Distribution



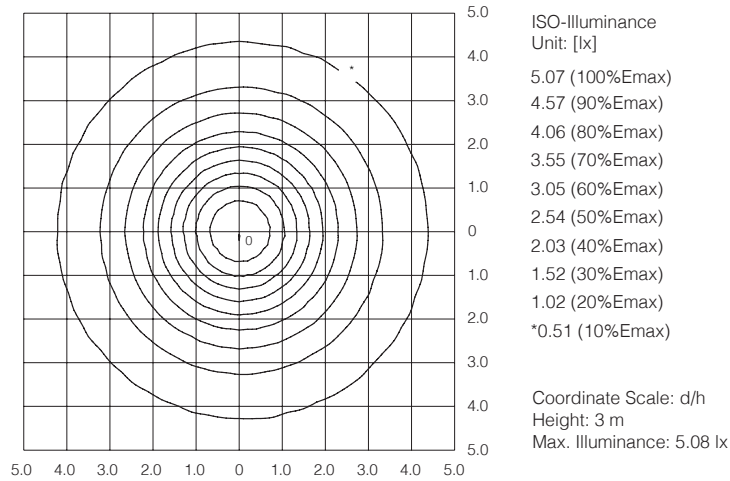
- Measured on: White
- Beam angle (50% Imax): 114°

### Illuminance

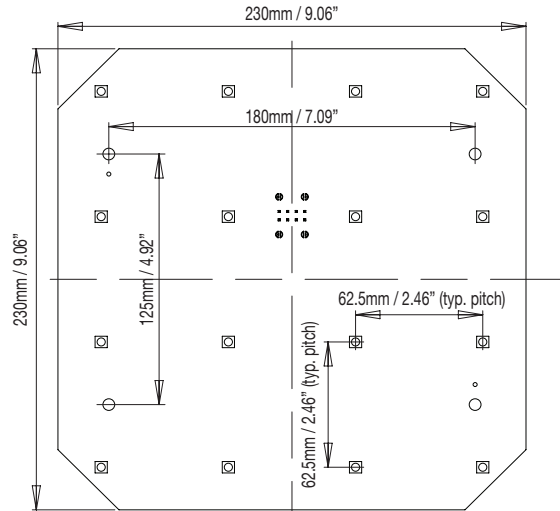
Distance	10cm/3.9"	25cm/9.8"	50cm/19.7"	72cm/29.5"	100cm/39.4"
Lux	4520	723	181	80	45
50% Imax (diameter)	31cm/ 12.20"	77cm/ 30.31"	154cm/ 60.62"	231cm/ 90.94"	308cm/ 121.25"

- Measured on: White

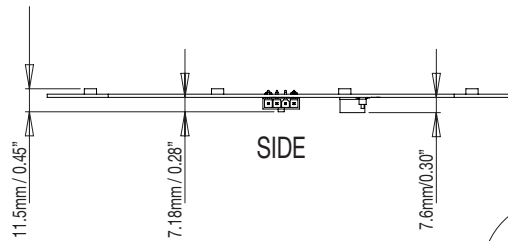
### Illuminance at a Distance



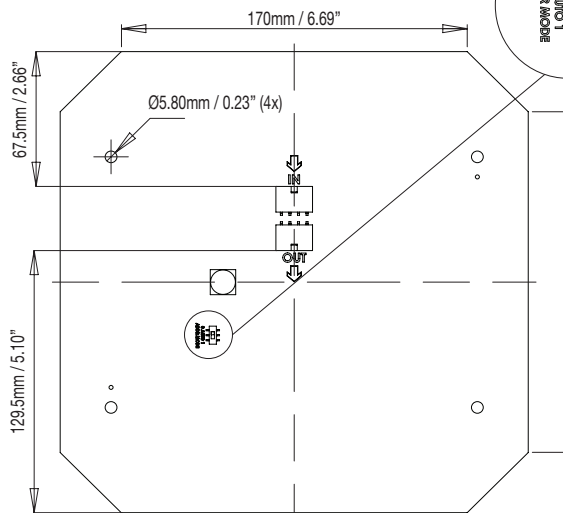
Photometric measurements are carried out by an independent laboratory.  
IES and LDT files are available for download from the Traxon website.



FRONT



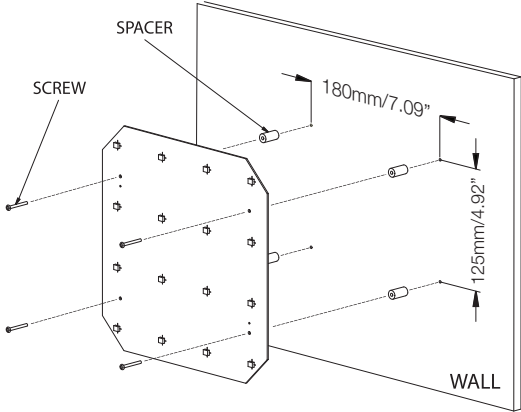
SIDE



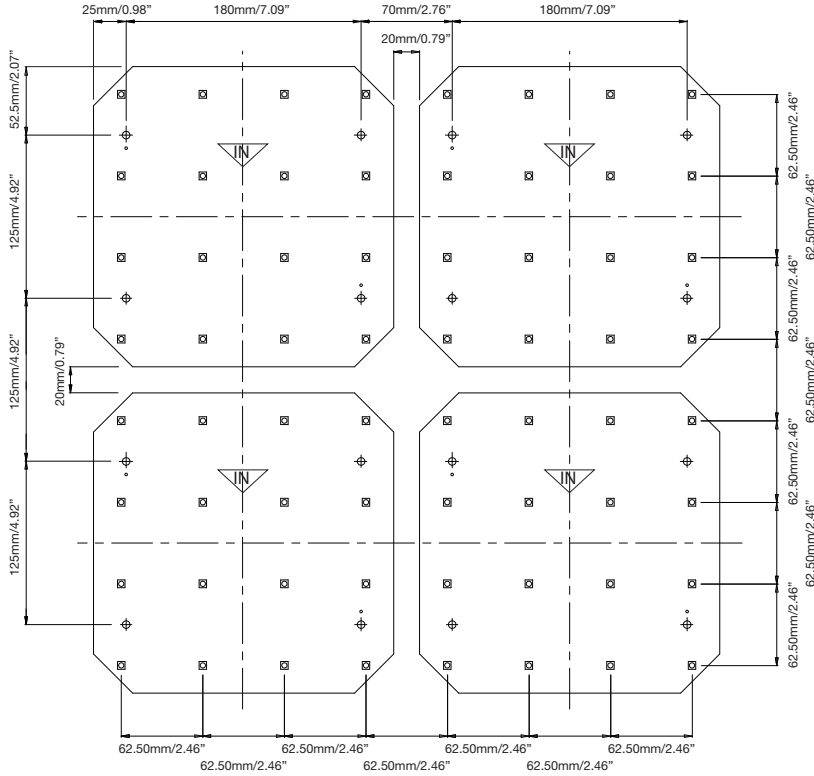
BACK

**AUTO-ADDRESSING CONFIGURATION:**  
 AUTO-ADDRESSING OFF  
 All boards work as a single pixel

**AUTO-ADDRESSING ON**  
 Each board can be independently controlled  
 (DEFAULT SETTING)



Multiple Board Mounting



**Mounting Accessories**

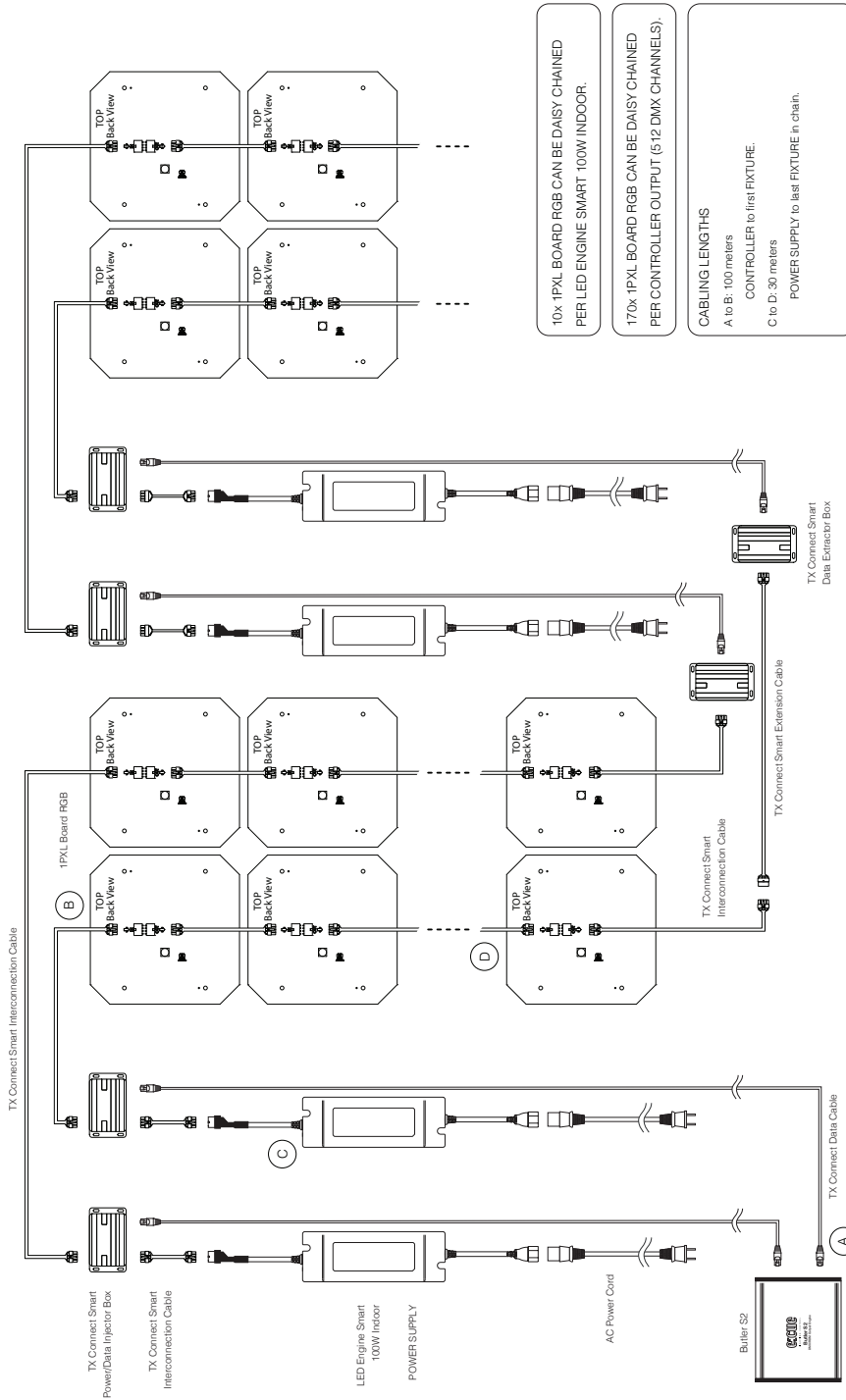
4 x Nylon Spacers      4 x 35mm Screws

**Nylon Spacer Dimensions**

[www.traxontechnologies.com](http://www.traxontechnologies.com)

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### System Diagram - Butler S2



10x 1PXL BOARD RGB CAN BE DAISY CHAINED PER LED ENGINE SMART 100W INDOOR.

170x 1PXL BOARD RGB CAN BE DAISY CHAINED PER CONTROLLER OUTPUT (512 DMX CHANNELS).

CABLING LENGTHS  
 A to B: 100 meters  
 CONTROLLER to first FIXTURE.  
 C to D: 30 meters  
 POWER SUPPLY to last FIXTURE in chain.

## 1PXL Board RGB

Ordering

### Fixtures

Model No.	Description	Item Code
MB.BO.5010000	1PXL Board RGB	A63344E0155

### Standard Accessories (included in delivery)

Model No.	Description	Item Code
TI.IC.0030000	TX CONNECT Smart Indoor Interconnection Cable, 30cm/11.82"	A63420F0055
N/A	1x Board Mounting Kit (4x Nylon Spacers, 4x Mounting Screws)	N/A

### Add-On Strip and Board

Model No.	Description	Item Code
MB.ST.5311000	4PXL Add-On Strip (62.5)	AA436770055
MB.BO.5315000	4PXL Add-On Board (62.5)	AA436760055

### TX Control

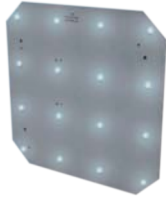
Model No.	Description	Item Code
EN.BU.0000001	Butler S2	AA624080072

### TX Connect

Model No.	Description	Item Code
TI.ZI.0000100	TX CONNECT Smart Power/Data Injector Box	A704836003J
TI.DO.0000100	TX CONNECT Smart Data Extractor Box	A704842003J
TI.EC.0050000	TX CONNECT Smart Indoor Extension Cable, 0.5m/1.64ft	AA556350055
TI.EC.0100000	TX CONNECT Smart Indoor Extension Cable, 1m/3.28ft	A6342330055
TI.EC.0300000	TX CONNECT Smart Indoor Extension Cable, 3m/9.84ft	A6342410055
TI.EC.0500000	TX CONNECT Smart Indoor Extension Cable, 5m/16.4ft	AA580410055
TI.EC.1000000	TX CONNECT Smart Indoor Extension Cable, 10m/32.8ft	A6342680055
DI.IC.0100000	TX CONNECT Data Cable, 1m/3.28ft	AA556130055

### TX Power

Model No.	Description	Item Code
PS.IA.0010000	LED Engine Smart 100W Indoor	AA624090055
PS.IB.7030000	LED Engine Smart 300W 24V Indoor	AA5571201HA
PS.AC.0000100	AC Power Cord, 2m/6.6ft (EU)	AA553860055
PS.AC.0000200	AC Power Cord, 2m/6.6ft (US)	AA556290055
PS.AC.0000300	AC Power Cord, 2m/6.6ft (UK)	AA556300155
PS.AC.0000400	AC Power Cord, 2m/6.6ft (AU)	AA556310055



## 1PXL Board CW/WW/DW

1PXL Board White offers crisp shades of cold/warm/dynamic white. The slim profile TX Connect™ LED board is designed for backlighting of walls, floors, ceilings, or any other flat surface that allows you to optimize the color temperature to changing ambients. Auto-addressing allows this board to maximize the number of fixtures controlled within a DMX universe.



### Product Specifications

Model	Cold White (CW)	Warm White (WW)	Dynamic White (DW)
<b>Light Source</b>	16 High intensity SMT LEDs	16 High intensity SMT LEDs	32 High intensity SMT LEDs (16 Cold White + 16 Warm White LEDs)
<b>Color Temperature</b>	6500K	2700K	2700K - 6500K
<b>Beam Angle</b>	120°		
<b>Luminous Flux</b>	269.7 lm	172.4 lm	445.4 lm
<b>Efficacy</b>	38.37 lm/W	23.9 lm/W	30.6 lm/W
<b>LED Pitch</b>	62.5mm / 2.46"		
<b>Dimensions (L x W x H)</b>	230 x 230 x 11.5mm 9.06" x 9.06" x 0.45"		
<b>Weight</b>	200g / 0.4lbs		
<b>Regulatory Listing &amp; Safety Approval</b>	CE, FCC		
<b>Operating Temperature</b>	0°C to 40°C / 32°F to 104°F		
<b>Storage Temperature</b>	-20°C to +70°C / -4°F to 158°F		
<b>Environment</b>	Indoor		
<b>Humidity</b>	0 to 90% non-condensing		

### Electrical Specifications

<b>Input Voltage</b>	24V DC		
<b>Power Consumption</b>	8W max.	8W max.	15W max.

### System Specifications

<b>Power / Data Interface</b>	TX CONNECT Smart Indoor		
<b>Control</b>	DMX512, 3 channels per pixel		
<b>Power Supply</b>	LED Engine Smart 100W Indoor		
<b>Addressing Options</b>	DMX Auto-Addressing ON/OFF (See Auto-Addressing Configuration for details)		

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.

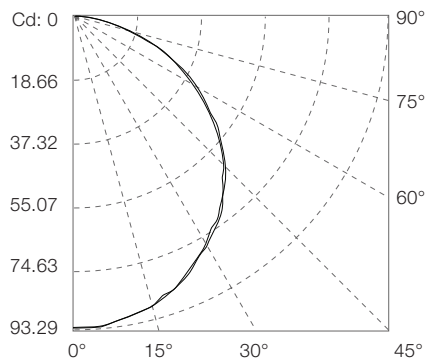
As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of 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.

### Source Specifications

Source	16 LEDs Cold white
Optics	120°
Distribution	Symmetric direct illumination
CCT	6500K
CRI	81.9

### Candela Distribution

### Light Output



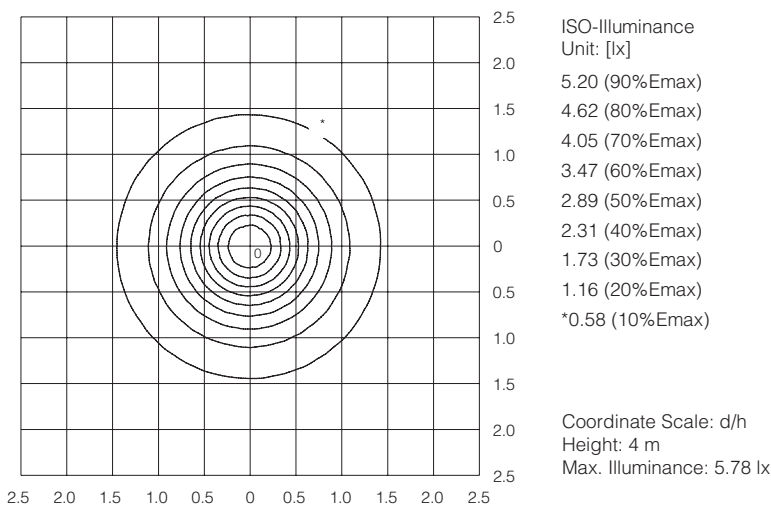
Luminous Flux (lm)	Power (Watts)	Efficacy (lm/W)
269.71	7.03	38.37

- Beam angle (50% I<sub>max</sub>): 114.4°

### Illuminance

Distance	10cm/3.9"	25cm/9.8"	50cm/19.7"	72cm/29.5"	100cm/39.4"
Lux	9236	1478	369	164	92
50% I <sub>max</sub> (diameter)	31cm/12.2"	78cm/30.5"	155cm/61.1"	233cm/91.6"	310cm/122.2"

### Illuminance at a Distance



Photometric measurements are carried out by an independent laboratory.  
IES and LDT files are available for download from the Traxon website.

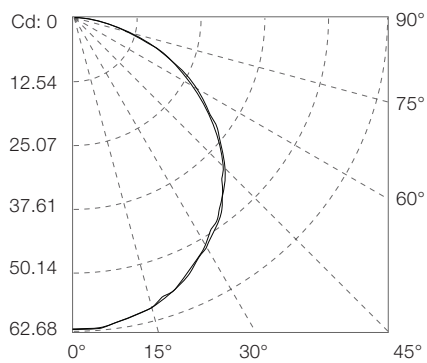


### Source Specifications

Source	16 LEDs Warm white
Optics	120°
Distribution	Symmetric direct illumination
CCT	2700K
CRI	71.6

### Candela Distribution

### Light Output



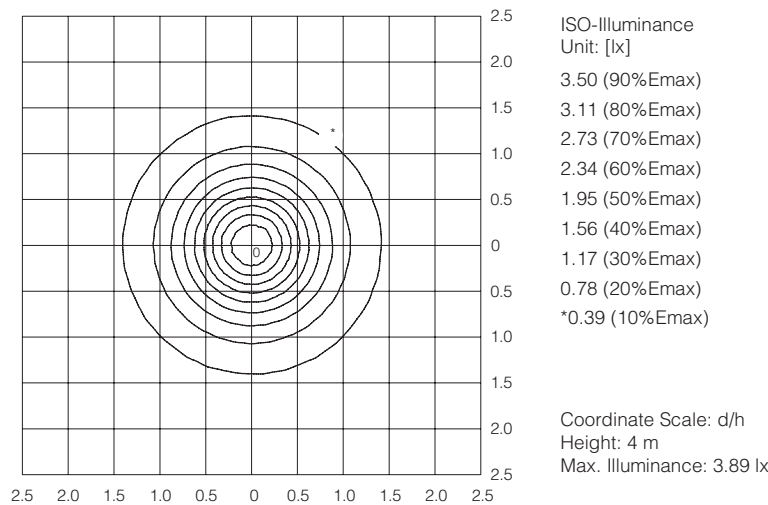
Luminous Flux (lm)	Power (Watts)	Efficacy (lm/W)
172.36	7.2	23.94

- Beam angle (50% I<sub>max</sub>): 110.5°

### Illuminance

Distance	10cm/3.9"	25cm/9.8"	50cm/19.7"	72cm/29.5"	100cm/39.4"
Lux	6191	990	248	110	62
50% I <sub>max</sub> (diameter)	29cm/11.4"	72cm/28.4"	144cm/56.8"	216cm/85.1"	288cm/113.5"

### Illuminance at a Distance



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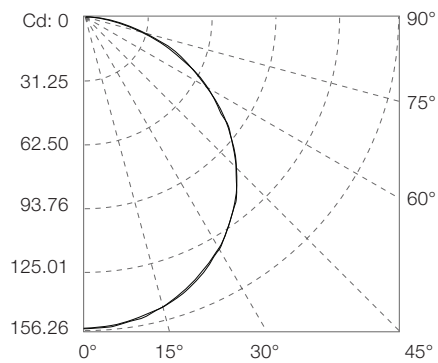
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### Source Specifications

Source	32 LEDs Dynamic white (16 WW, 16 CW)
Optics	120°
Distribution	Symmetric direct illumination
CCT	2700 K - 6500 K
CRI	78.5

### Candela Distribution

### Light Output



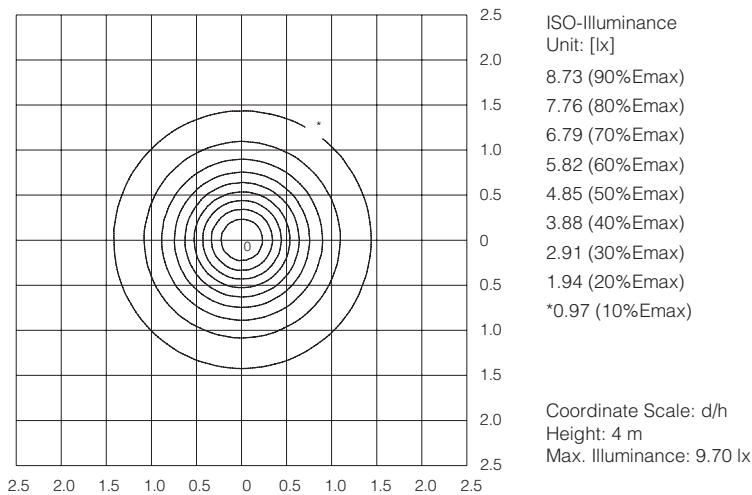
Luminous Flux (lm)	Power (Watts)	Efficacy (lm/W)
445.41	14.55	30.61

- Beam angle (50% I<sub>max</sub>): 113.1°

### Illuminance

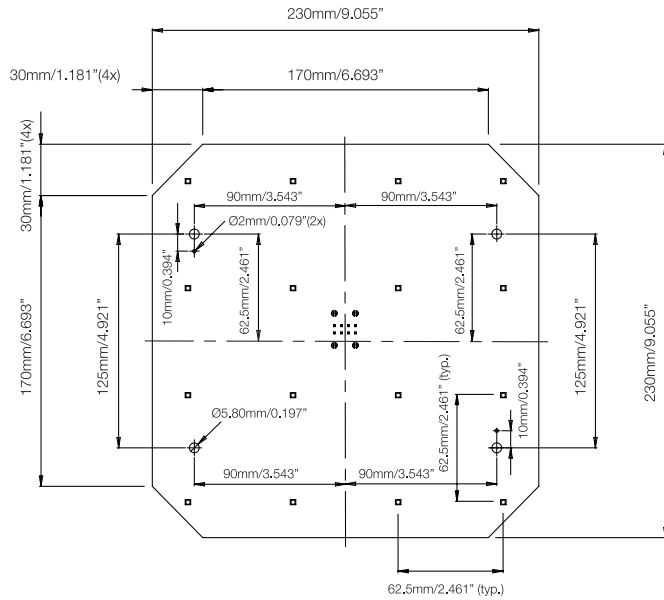
Distance	10cm/3.9"	25cm/9.8"	50cm/19.7"	72cm/29.5"	100cm/39.4"
Lux	15506	2481	620	276	155
50% I <sub>max</sub> (diameter)	30cm/11.9"	76cm/29.8"	151cm/59.6"	227cm/89.4"	303cm/119.2"

### Illuminance at a Distance

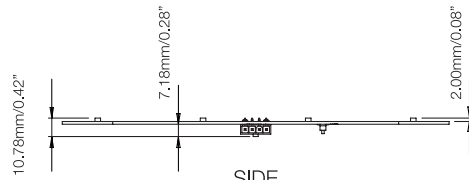


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1PXL Board CW / WW

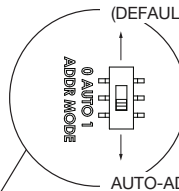


FRONT

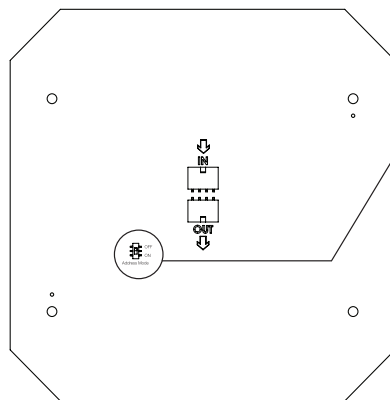


SIDE

**AUTO-ADDRESSING CONFIGURATION:**  
 AUTO-ADDRESSING OFF  
 All boards work as a single pixel  
 (DEFAULT SETTING)

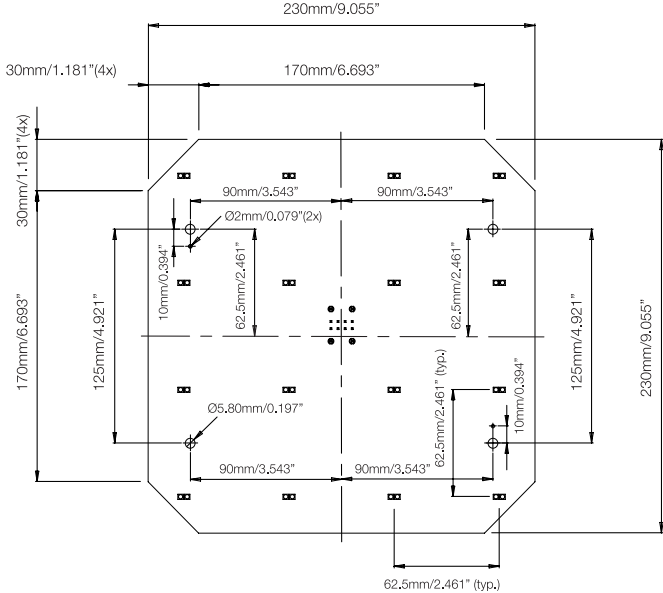


**AUTO-ADDRESSING ON**  
 Each board can be  
 independently controlled

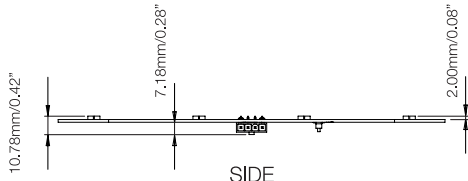


BACK

1PXL Board DW

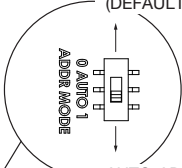


FRONT

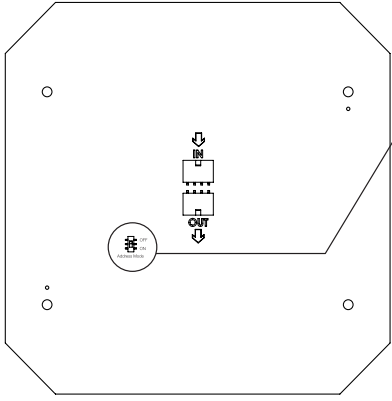


SIDE

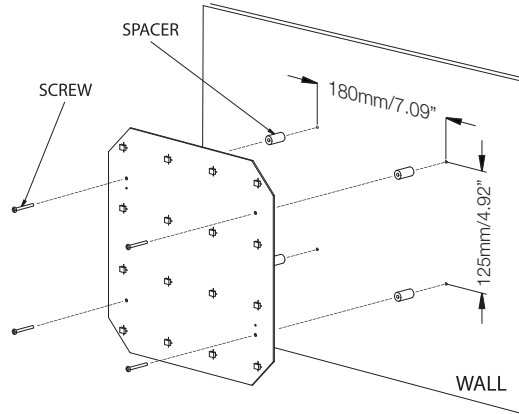
**AUTO-ADDRESSING CONFIGURATION:**  
 AUTO-ADDRESSING OFF  
 All boards work as a single pixel  
 (DEFAULT SETTING)



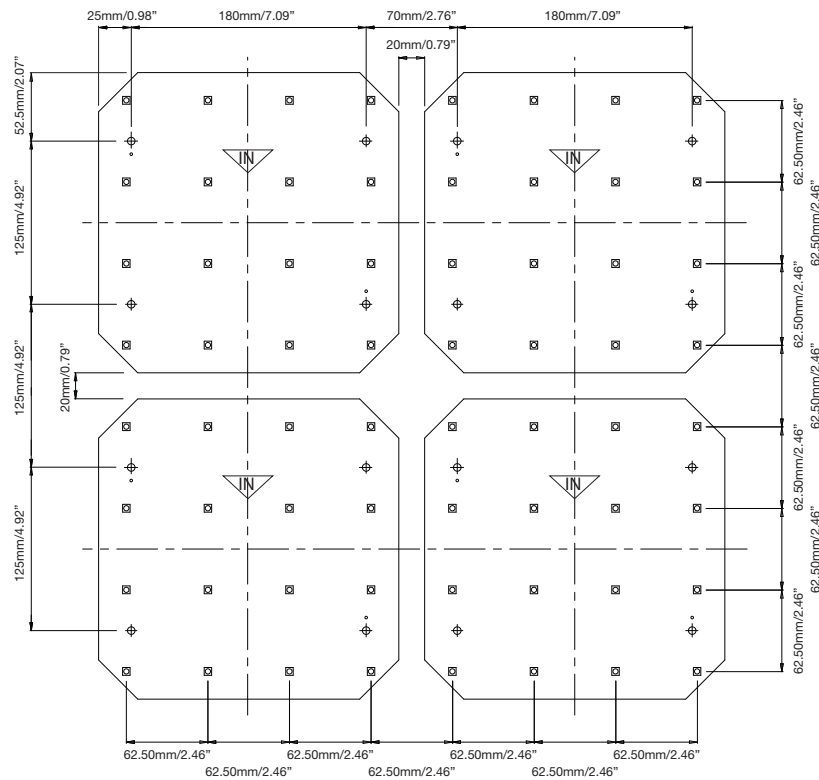
**AUTO-ADDRESSING ON**  
 Each board can be independently controlled



BACK



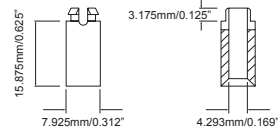
### Multiple Board Mounting



### Mounting Accessories

4 x Nylon Spacers

4 x 35mm Screws

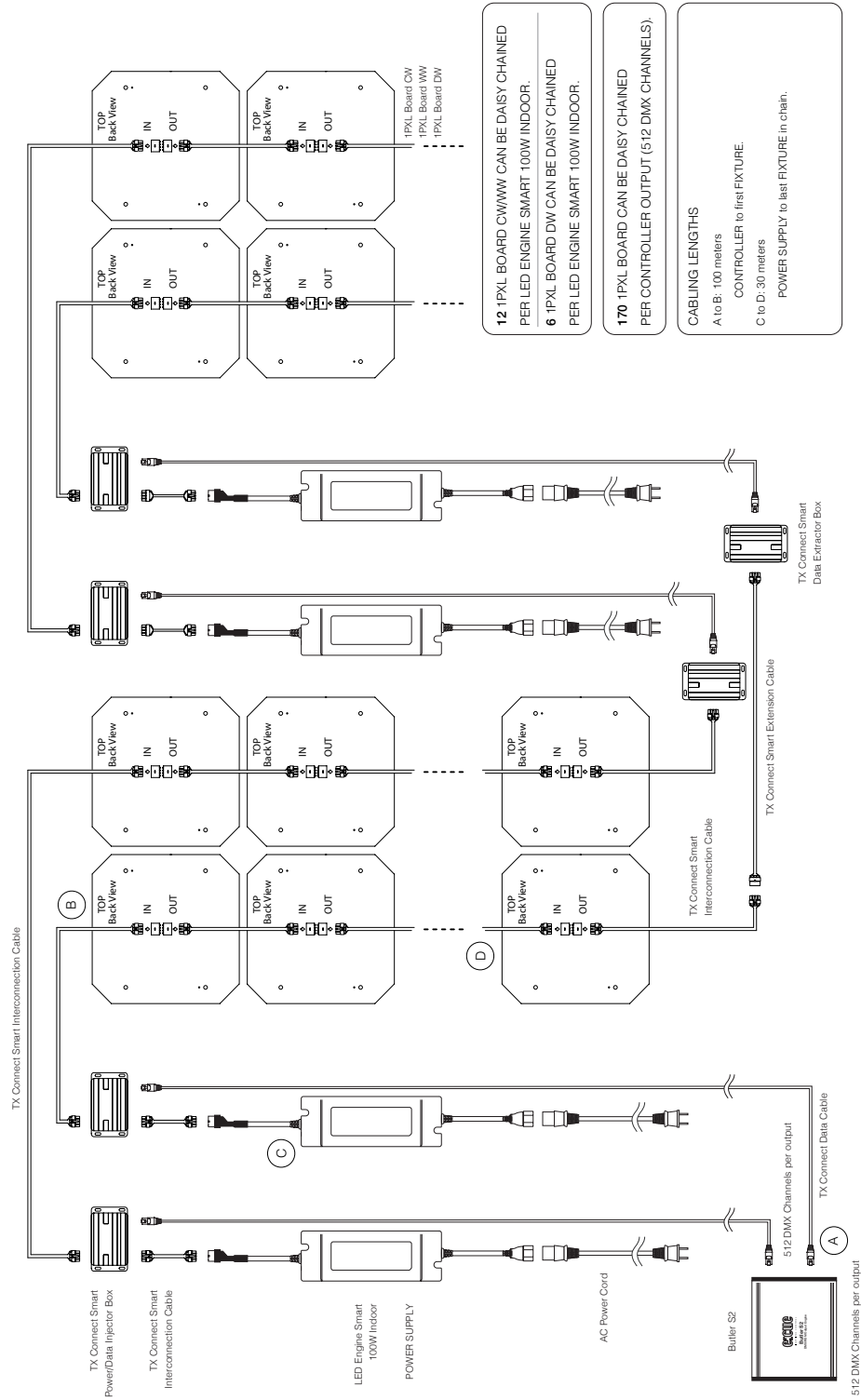


Nylon Spacer Dimensions

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### System Diagram - Butler S2



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## 1PXL Board CW/WW/DW

Ordering

### Fixtures

Model No.	Description	Item Code
MB.BO.5060003	1PXL Board CW	AA558590055
MB.BO.5070003	1PXL Board WW	AA558600055
MB.BO.5080003	1PXL Board DW	AA558620055

### Standard Accessories (included in delivery)

Model No.	Description	Item Code
TI.IC.0030000	TX CONNECT Smart Indoor Interconnection Cable, 30cm/11.82"	A63420F0055
N/A	1x Board Mounting Kit (4x Nylon Spacers, 4x Mounting Screws)	N/A

### TX Control

Model No.	Description	Item Code
EN.BU.0000001	Butler S2	AA624080072

### TX Connect

Model No.	Description	Item Code
TI.ZI.0000100	TX CONNECT Smart Power/Data Injector Box	A704836003J
TI.DO.0000100	TX CONNECT Smart Data Extractor Box	A704842003J
TI.EC.0050000	TX CONNECT Smart Indoor Extension Cable, 0.5m/1.64ft	AA556350055
TI.EC.0100000	TX CONNECT Smart Indoor Extension Cable, 1m/3.28ft	A6342330055
TI.EC.0300000	TX CONNECT Smart Indoor Extension Cable, 3m/9.84ft	A6342410055
TI.EC.0500000	TX CONNECT Smart Indoor Extension Cable, 5m/16.4ft	AA580410055
TI.EC.1000000	TX CONNECT Smart Indoor Extension Cable, 10m/32.8ft	A6342680055
DI.IC.0100000	TX CONNECT Data Cable, 1m/3.28ft	AA556130055

### TX Power

Model No.	Description	Item Code
PS.IA.0010000	LED Engine Smart 100W Indoor	AA624090055
PS.AC.0000100	AC Power Cord, 2m/6.6ft (EU)	AA553860055
PS.AC.0000300	AC Power Cord, 2m/6.6ft (UK)	AA556300155
PS.AC.0000400	AC Power Cord, 2m/6.6ft (AU)	AA556310055



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