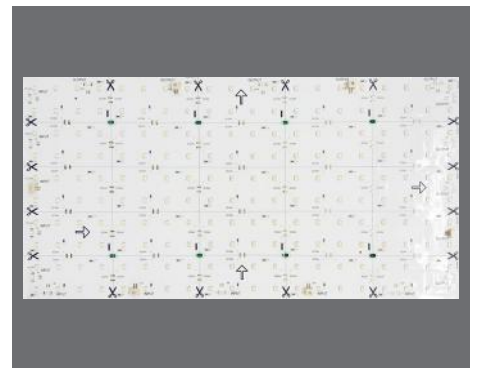


Job Information <i>Fill out project details for this product below</i>			
<b>Project</b>		<b>Location</b>	
<b>Contact</b>		<b>Date</b>	
<b>Product Number</b>		<b>Fixture Type</b>	

The Matrix XD LED light sheet is a IP22, low cost solution for backlighting lightboxes, signage, and ceiling lights.

The 3" depth for ceilings/walls application, easy installation, 3M tape, and daisy chain makes Matrix XD™ a great choice for your lighting projects.

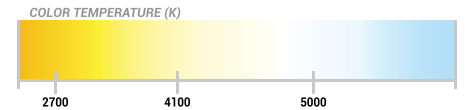
Cutable for small areas as low as 8 LED.



## APPLICATIONS

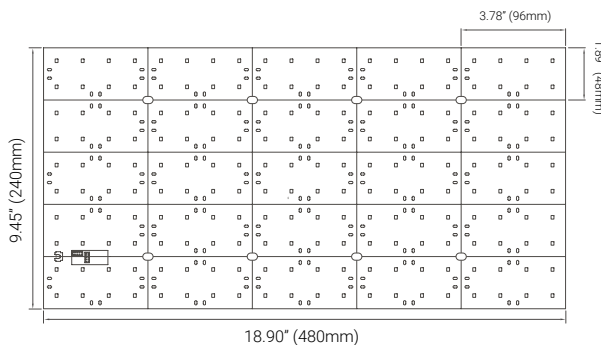
- 3" Backlit lightboxes
- Ceilings
- Curved walls
- Backlit Graphics

## LIGHT TEMPERATURE

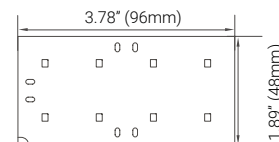


## OVERVIEW

### FRONT VIEW



### MINIMUM CUTTABLE SIZE



## SPECIFICATIONS

### PHYSICAL SPECIFICATIONS

<b>Part Number</b>	
<b>Model #</b>	432000
<b>CRI</b>	90+
<b>LED / Sheet</b>	200 pieces (MCADAM)
<b>Color Temperature</b>	2700 K • 4100K • 5000K
<b>Lumen Maintenance</b>	LM 80 @ 50,000/hrs
<b>Lumens</b>	2430 lm / Sheet
<b>Operating Temperature</b>	-20 °C (-4 °F) ~ +60 °C (+140 °F)
<b>Environment</b>	Dry location only (indoor)
<b>Mounting</b>	Mounted with screws, 3M adhesive backing
<b>Size of Sheet</b>	9 7/16" (240 mm) (L) X 18 7/8" (480 mm) (W)
<b>Minimum Size</b>	Minimum cuttable size of 3.78" x 1.89"
<b>Maximum Size</b>	Maximum tiling up to 4 sheets (based on a 96W driver)
<b>Accessories</b>	Includes connection wires and hardwire cables with 2-pin connector male plug and a plug-in adaptor cable with 2.1mm/5.5mm female barrel connector

### ELECTRICAL SPECIFICATIONS

<b>Input Voltage</b>	24V DC
<b>Power Consumption (W/pcs)</b>	Max 18W/Sheet
<b>Wire Size</b>	Connector: 2-pin connector wire, 88mm, 20AWG Power Cable: 2-pin power connector wire, 160mm, 20AWG
<b>Wiring</b>	20 AWG cable with 2 pin connectors and 2.1/5.5 mm DC barrel connector
<b>Connector</b>	2-pin connector blocks
<b>Certification</b>	UL listed (E346146), ROHS, CE

### ACCESSORIES PACK

<b>980180</b>	Connector cable Matrix XD Accessory, 2-pin connector wire, 88mm, 20AWG	1pc
<b>980181</b>	Power cable Matrix XD Accessory, 2-pin connector wire, 160mm, 20AWG	1pc
<b>Included</b>	4 Screws per sheet	

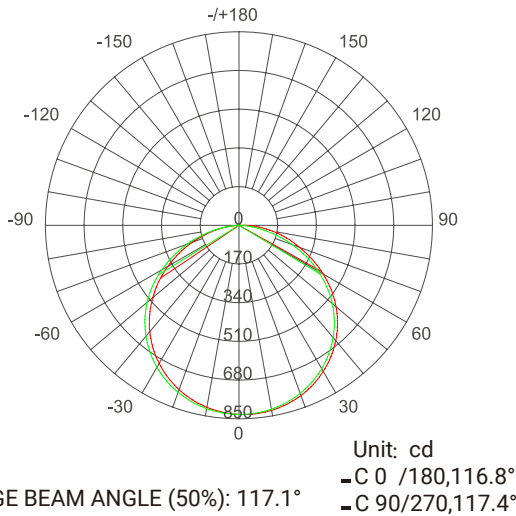


#### Note:

1. UL max run refers to operating length at UL class II @96W.24V.
2. Lumen values were measured accordance to IES LM-80-08. LED chips with range tolerance of +/- 10%.
3. Each maximum-run requires a dedicated power feed from the driver. Do not extend exceed the recommended maximum run length. Max run may exceed Class 2 limits.
4. Actual wattage may be different from the calculated wattage due to voltage drop while using.
5. Do not install products in the conditions that exceed the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, luminous intensity output, and/or adversely impact color consistency.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

## AVERAGE ILLUMINATION



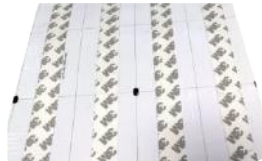
Flux Out: 1911lm

Height	Eavg, Emax	Beam Angle: 116.82°	Diameter
0.02m	549006,2079079lx		6.50cm
0.04m	137252,519770lx		13.01cm
0.06m	61001,231009lx		19.51cm
0.08m	34313,129942lx		26.02cm
0.10m	21960,83163lx		32.52cm
0.12m	15250,57752lx		39.03cm
0.14m	11204,42430lx		45.53cm
0.16m	8578,32486lx		52.03cm
0.18m	6778,25668lx		58.54cm
0.20m	5490,20791lx		65.04cm

## INSTALLATION



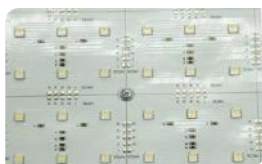
**Step 1:** Perform a visual inspection to make sure there are no damages to the sheet.



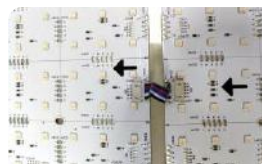
**Step 2:** Flip the sheet and peel off the 3M tapes.



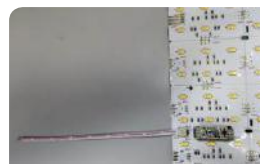
**Step 3:** Mount the sheet in the installation area to adhere to the installation surface. (Use screws in designated holes for extra support if needed)



**Step 4:** Make sure all the contacts are firm.



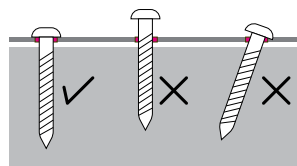
**Step 5:** Follow the arrow for wiring direction.



**Step 6:** Plug one end of the wire into the connector



**Step 7:** Connect the other end of the wire to the power driver.



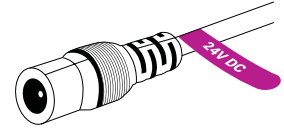
Flexible panel  
 Lightbox bottom

1. Prepare products, glue, syringes and other materials.
2. Apply the glue on the terminal, the glue amount should be full and uniform, and all the terminals should be covered, and there should be no bubbles and gaps; note that the glue should not cover the lamp beads, resistors and other devices.
3. When the glue is completely solidified, power on and light it up



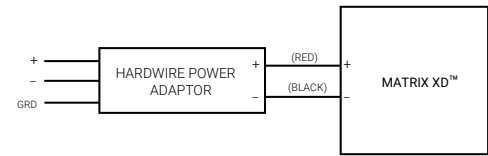
## WIRING

Determine your system components, including a power driver as optional dimmer and controller. Use only UL Certified power drivers, as well with the power output that coordinates with your input voltage. Do not apply AC voltage directly to Matrix XD sheet, as within seconds the result may be burned LEDs or fire. Look for our 24VDC voltage tags at the end of the power cord.



### WIRING WITH HARDWIRE POWER DRIVERS:

1. Turn off power to your system at the main breaker.
2. Install your system components. Refer to wiring guidelines for each component to build your system.
3. Check connections and turn on power at the main breaker.



## ACCESSORIES AND OPTIONS

### POWER ADAPTORS OPTIONS

#### Hardwire

951012	24V	60W
950037	24V	60W
950038	24V	96W
950039	24V	150W

#### Plug-In (Class 2)

950021	24V	24W
950024	24V	90W
950025	24V	96W
950035	24V	96W
950036	24V	60W

#### 5 in 1 Dimming Driver

951004-24-096	24V	96W
951006-24-192	24V	2x96W

\* Other power options available on request

### CONTROLLER OPTIONS

#### Inline Dimmer with Remote

970007	24V	144W
--------	-----	------

#### Inline Plug and Play Dimmer

970014	24V	96W
--------	-----	-----

#### LED Dimming Module

970001	24V	98W
--------	-----	-----

#### Rotary Style Dimmer

970002	24V	192W
--------	-----	------

\* Other controller options available on request

### CONNECTOR ACCESSORIES

Connection Wires	2-pin male plug
Hardwire Cables	2-pin male plug

### MOUNTING OPTIONS

Option 1	Screws (4 pcs. included)
Option 2	3M Adhesive Back



## ORDER INFORMATION

Product #	Color Temperature	Voltage	Wattage
432000	270-2700K 410-4100K 500-5000K	24-24V DC	18-18W/Sheet

## EXAMPLE

**432000-270-24-18**

The specification number immediately above can be deconstructed as follows:

- Matrix XD Sheet; Color-Temperature-2700K; Voltage-24V; Wattage-18W/Sheet.

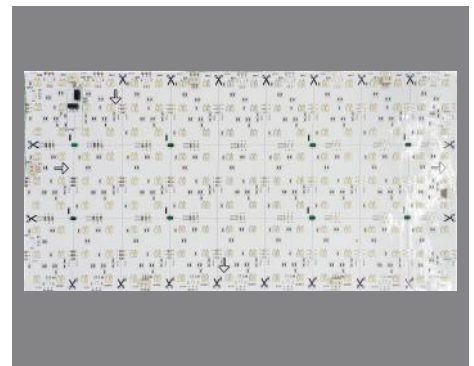


Job Information <i>Fill out project details for this product below</i>			
<b>Project</b>		<b>Location</b>	
<b>Contact</b>		<b>Date</b>	
<b>Product Number</b>		<b>Fixture Type</b>	

The Matrix XD™ Tunable LED light sheet is a IP22, low cost solution for backlighting lightboxes, signage, and ceiling lights.

The 3" depth for ceilings/walls application, easy installation, 3M tape, and daisy chain makes Matrix XD™ tunable a great choice for your lighting projects.

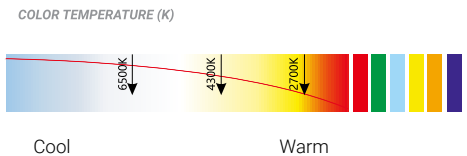
CCT Tunable 2200K to 6500K



## APPLICATIONS

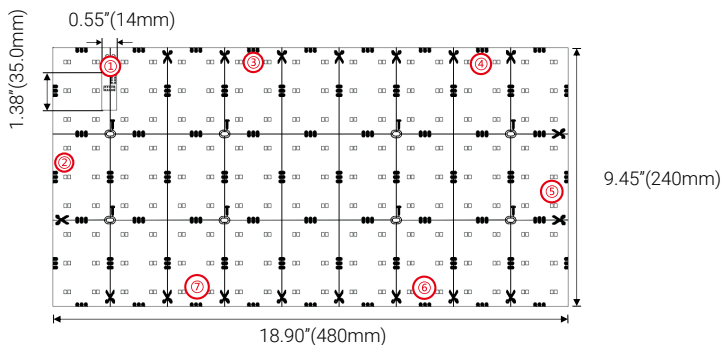
- Backlighting
- Ceiling Backlighting
- Feature Wall
- Backlit Graphics

## LIGHT TEMPERATURE

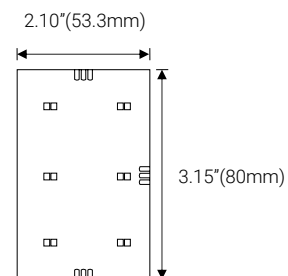


## OVERVIEW

### FRONT VIEW



### MINIMUM CUTTABLE SIZE



## SPECIFICATIONS

### PHYSICAL

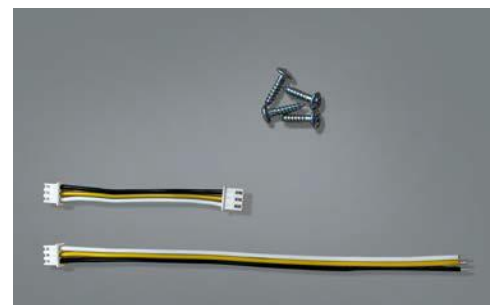
<b>Part Number</b>	
<b>Model #</b>	432100
<b>CRI</b>	80+ (90 CRI available on request)
<b>Color Temperature</b>	Warm Color (2200K) • Cool Color (6500K)
<b>Lumens</b>	Warm 1231 lm/sheet • Cool 2200 lm/sheet • Warm + Cool 3800 lm/sheet
<b>LED / Sheet</b>	324 pieces
<b>Operating Temperature</b>	-20 °C (-4 °F) ~ +60 °C (+140 °F)
<b>Environment</b>	Dry location only (indoor)
<b>Mounting</b>	Prefix by 3M self adhesive tape and screws
<b>Size of sheet</b>	9 7/16" (240 mm) (L) x 18 7/8" (480 mm) (W)
<b>Minimum Size</b>	Minimum cuttable size of 3.15" x 2.1"
<b>Maximum Size</b>	Maximum tiling up to 3 sheets (based on 96W Driver)
<b>Lumen Maintenance</b>	LM80 @ 50,000/hrs
<b>Lumen Maintenance Accessories</b>	Power Cable • Joint Cable • Self-tapping Screw

### ELECTRICAL

<b>Input Voltage</b>	24V DC
<b>Power Consumption</b>	Max 25.92 W/Sheet
<b>Wire Size</b>	Connector: 3-pin connector wire, 88mm, 20AWG Power Cable: 3-pin connector wire, 160mm, 20AWG
<b>Connector</b>	3-pin connector blocks
<b>Certification</b>	UL listed (E346146)

### ACCESSORIES PACK

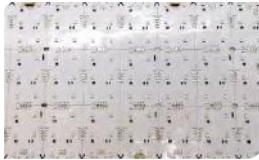
<b>980182</b>	Connector cable Matrix XD Tunable Accessory, 3-pin connector wire, 88mm, 20AWG	1pc
<b>980183</b>	Power cable Matrix XD Tunable Accessory, 3-pin connector wire, 160mm, 20AWG	1pc
<b>Included</b>	4 Screws per sheet	



#### Note:

1. UL max run refers to operating length at UL class II @96W.24V.
2. Lumen values were measured accordance to IES LM-80-08. LED chips with range tolerance of +/- 10%.
3. Each maximum-run requires a dedicated power feed from the driver. Do not extend exceed the recommended maximum run length. Max run may exceed Class 2 limits.
4. Actual wattage may be different from the calculated wattage due to voltage drop while using.
5. Do not install products in the conditions that exceed the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, luminous intensity output, and/or adversely impact color consistency.

## INSTALLATION



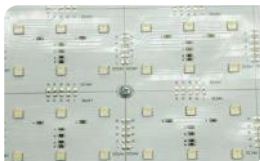
**Step 1:** Perform a visual inspection to make sure there are no damages to the sheet.



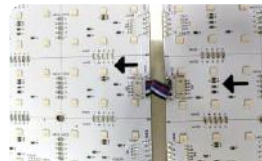
**Step 2:** Flip the sheet and peel off the 3M tapes.



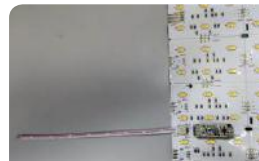
**Step 3:** Mount the sheet in the installation area to adhere to the installation surface. (Use screws in designated holes for extra support if needed)



**Step 4:** Make sure all the contacts are firm.



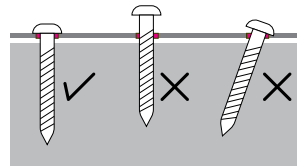
**Step 5:** Follow the arrow for wiring direction.



**Step 6:** Plug one end of the wire into the connector



**Step 7:** Connect the other end of the wire to the power driver.



Flexible panel

Lightbox bottom

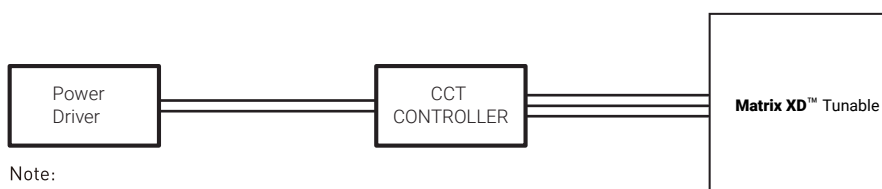
## WIRING

Determine your system components, including a power driver as optional dimmer and controller. Use only UL Certified power drivers, as well with the power output that coordinates with your input voltage. Do not apply AC voltage directly to Matrix XD Tunable sheet, as within seconds the result may be burned LEDs or fire. Look for our 24VDC voltage tags at the end of the power cord.

### WIRING MATRIX XD TUNABLE

1. Turn off power to your system at the main breaker;
2. Install your system components. Refer to wiring guidelines for each component to build your system;
3. Check connections and turn on power at the main breaker.

### WIRING MATRIX XD TUNABLE



Note:

“+” for white and red wire.

The above diagram is only for installation, not the physical drawing.





## ACCESSORIES AND OPTIONS

### POWER ADAPTORS OPTIONS

#### Hardwire

951012	24V	60W
950037	24V	60W
950038	24V	96W
950039	24V	150W

#### 5 in 1 Dimming Driver

951004-24-096	24V	96W
951006-24-192	24V	192W

#### Plug-In (Class 2)

950025	24V	96W
950032	24V	60W
950033	24V	36W
950035	24V	96W
950036	24V	60W

\* Other power options available on request

### CONTROLLER OPTIONS

#### DMX Decoder

970032	24V	Max. 96W
970033	24V	Max. 96W

#### Power Repeater

970037	12-36V
--------	--------

#### DMX Wall Controller

970041	CCT Tunable	12-24VDC
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#### RF CCT Driver

951029	24V	90W
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#### RF CCT Wall Controller

970043	12-24VDC
--------	----------

\* Other controller options available on request

### CONNECTOR ACCESSORIES

Connection Wires	3-pin male plug
Hardwire Cables	3-pin male plug

### MOUNTING OPTIONS

Option 1	Screws (4 pcs. included)
Option 2	3M Adhesive Back



# Matrix XD™ Tunable



LED LIGHT SHEET  
Part# 432100

## ORDER INFORMATION

Product #	Color Temperature	Voltage	Wattage
432100	003-CCT Tunable 2200K to 6500K	24-24V DC	25-25 W/Sheet

## EXAMPLE

**432100-003-24-25**

The specification number immediately above can be deconstructed as follows:

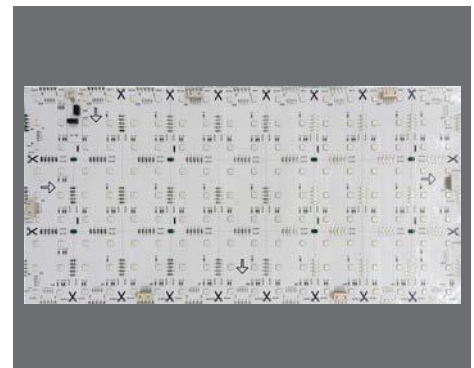
- Matrix XD Tunable Sheet; Color-Temperature-tunable 2200K-6500K; Voltage-24V; Wattage-25W/Sheet.

Job Information <i>Fill out project details for this product below</i>			
Project		Location	
Contact		Date	
Product Number		Fixture Type	

The Matrix XD LED light sheet is a IP22, low cost solution for backlighting lightboxes, signage, and ceiling lights.

The 3" depth for ceilings/walls application, easy installation, 3M tape, and daisy chain makes it a great choice for your lighting projects.

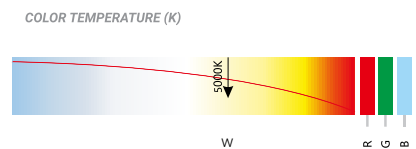
- Cuttable for small areas as low as 6 LED.
- 4 in 1 with colors of red, green, blue and warm white
- Flexible and cuttable every 80.0\*53.3mm
- Long lifespan with great lumen maintenance
- Create rich color changing effect via controller



## APPLICATIONS

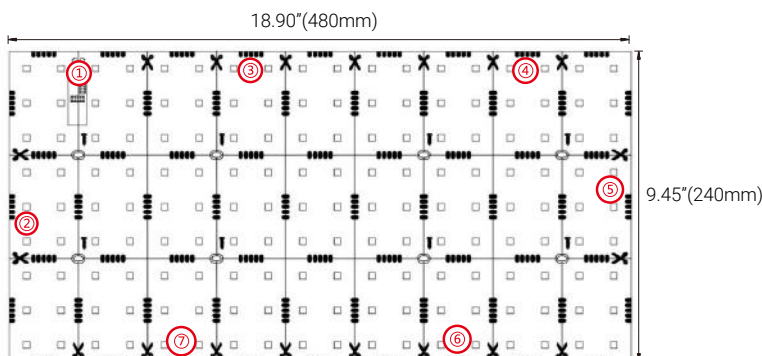
- Backlit lightboxes
- Backlit Ceiling
- Curved Wall
- Backlit Graphics

## LIGHT TEMPERATURE

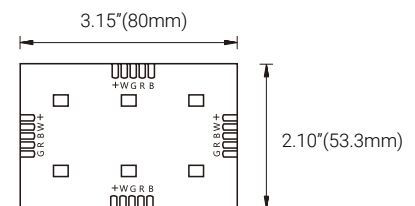


## OVERVIEW

### FRONT VIEW



### MINIMUM CUTTABLE SIZE



## SPECIFICATIONS

### PHYSICAL SPECIFICATIONS

<b>Part Number</b>	432200
<b>CRI</b>	Up to 90
<b>LED / Sheet</b>	162 pieces
<b>Light Color</b>	Red, Green, Blue (5000K)
<b>Lumen Maintenance</b>	LM80 @ 50,000/hrs
<b>Lumens</b>	<b>Red</b> 169 lm/sheet • <b>Green</b> 557 lm/sheet • <b>Blue</b> 113 lm/sheet • <b>White</b> 583 lm/sheet
<b>Operating Temperature</b>	-20 °C (-4 °F) ~ +60 °C (+140 °F)
<b>Environment</b>	Dry location only (indoor)
<b>Mounting</b>	3M self adhesive tape and screws
<b>Size of sheet</b>	9 7/16"(240 mm) (L) x 18 7/8" (480 mm) (W)
<b>Minimum Size</b>	Minimum cuttable size of 3.15" x 2.1"
<b>Maximum Size</b>	Maximum tiling up to 3 Sheets (Based on 96W Driver)
<b>Accessories</b>	Power Cable • Joint Cable • Self-tapping screw

### ELECTRICAL SPECIFICATIONS

<b>Input Voltage</b>	24V DC
<b>Power Consumption (W/pcs)</b>	Max 25.92W/Sheet
<b>Wire Size</b>	Connector: 5-pin connector wire, 88mm, 20AWG Power Cable: 5-pin connector wire, 160mm, 20AWG
<b>Connector</b>	5-pin connector blocks
<b>Certification</b>	UL listed (E346146)

### ACCESSORIES PACK

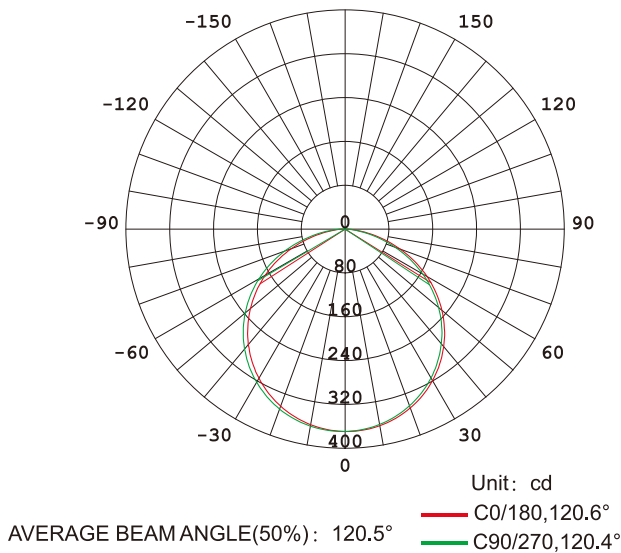
<b>980184</b>	Connector Cable Matrix XD RGBW Accessory, 5-pin connector wire, 88mm, 20AWG	1 pc
<b>980185</b>	Power Cable Matrix XD RGBW Accessory, 5-pin connector wire, 160mm, 20AWG	1 pc
<b>Included</b>	4 Screws per sheet	



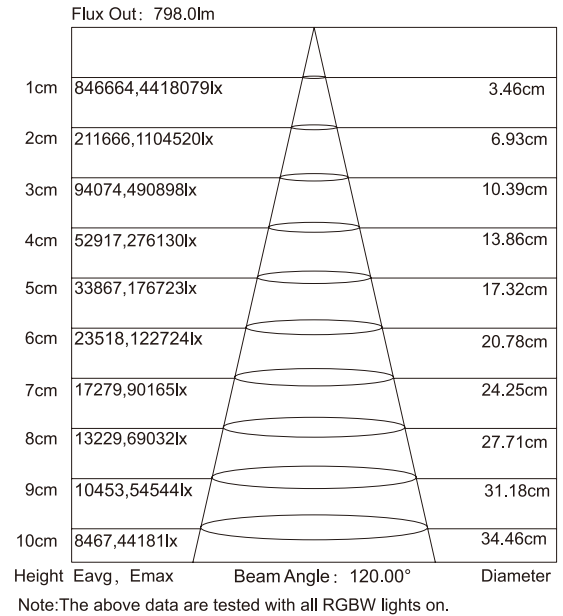
#### Note:

1. UL max run refers to operating length at UL class II @96W.24V.
2. Lumen values were measured accordance to IES LM-80-08. LED chips with range tolerance of +/- 10%.
3. Each maximum-run requires a dedicated power feed from the driver. Do not extend exceed the recommended maximum run length. Max run may exceed Class 2 limits.
4. Actual wattage may be different from the calculated wattage due to voltage drop while using.
5. Do not install products in the conditions that exceed the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, luminous intensity output, and/or adversely impact color consistency.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



## AVERAGE ILLUMINATION



## INSTALLATION



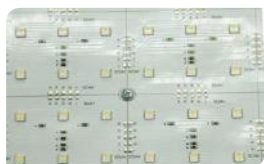
**Step 1:** Perform a visual inspection to make sure there are no damages to the sheet.



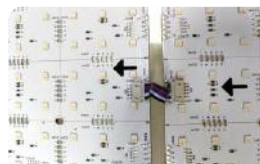
**Step 2:** Flip the sheet and peel off the 3M tapes.



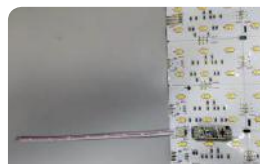
**Step 3:** Mount the sheet in the installation area to adhere to the installation surface. (Use screws in designated holes for extra support if needed)



**Step 4:** Make sure all the contacts are firm.



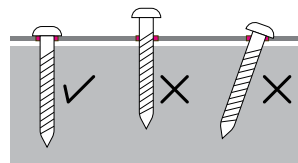
**Step 5:** Follow the arrow for wiring direction.



**Step 6:** Plug one end of the wire into the connector



**Step 7:** Connect the other end of the wire to the power driver.



Flexible panel  
Lightbox bottom

**Note:**

"+" for black wire.

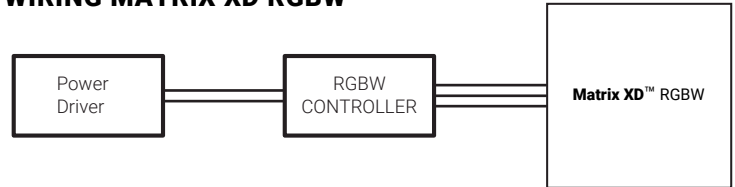
## WIRING

Determine your system components, including a power driver as optional dimmer and controller. Use only UL Certified power drivers, as well with the power output that coordinates with your input voltage. Do not apply AC voltage directly to Matrix XD RGBW sheet, as within seconds the result may be burned LEDs or fire. Look for our 24VDC voltage tags at the end of the power cord.

### WIRING MATRIX XD RGBW

1. Turn off power to your system at the main breaker;
2. Install your system components. Refer to wiring guidelines for each component to build your system;
3. Check connections and turn on power at the main breaker.

### WIRING MATRIX XD RGBW



## ACCESSORIES AND OPTIONS

### POWER ADAPTORS OPTIONS



#### Hardwire

951012	24V	60W
950037	24V	60W
950038	24V	96W
950039	24V	150W

#### Plug-In (Class 2)

950025	24V	96W
950032	24V	60W
950033	24V	36W
950035	24V	96W
950036	24V	60W

\* Other power options available on request

### CONTROLLER OPTIONS



#### RGBW DMX 12V/24V x3CH

970032	24V	Max. 96W
970033	24V	Max. 96W

#### DMX Wall Controller

970042	RGBW	12-24VDC
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#### Power Repeater

970037	12-36V
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#### RGBW Dimmable Driver

970035	RF RGBW Dimmable Driver	24VDC
970036	RF RGBW Remote Control	

\* Other controller options available on request

### CONNECTOR ACCESSORIES

Connection Wires	5-pin male plug
Hardwire Cables	5-pin male plug

### MOUNTING OPTIONS

Option 1	Screws (4 pcs. included)
Option 2	3M Adhesive Back



# Matrix XD™ RGBW



LED LIGHT SHEET

Part# 432200

## ORDER INFORMATION

Product #	Color Temperature	Voltage	Wattage
432200	950-RGBW 5000K	24-24V DC	25-25 W/Sheet

## EXAMPLE

**432200-950-24-25**

The specification number immediately above can be deconstructed as follows:

- Matrix XD RGBW Sheet; Color-Temperature-RGBW5000K; Voltage-24V; Wattage-25W/Sheet.