















Matrix XD™

Part# 432000

Job Information Fill out project deitails for this product below				
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 Matrix XD™ a great choice for your lighting projects.

Cuttable for small areas as low as 8 LFD.

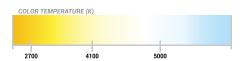


# **APPLICATIONS**

- 3" Backlit lightboxes
- Ceilings

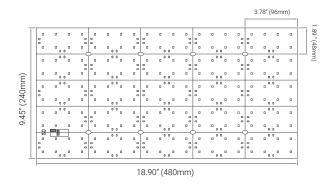
- Curved walls
- · Backlit Graphics

# LIGHT TEMPERATURE



### **OVERVIEW**

#### **FRONT VIEW**



#### **MINIMUM CUTTABLE SIZE**

















Part# 432000

# **SPECIFICATIONS**

PHYSICAL SPECIFICATIONS	
Part Number	
Model #	432000
CRI	90+
LED / Sheet	200 pieces (MCADAM)
Color Temperature	2700 K • 4100K • 5000K
Lumen Maintenance	LM 80 @ 50,000/hrs
Lumens	2430 lm / Sheet
Operating Temperature	-20 °C (-4 °F) ~ +60 °C (+140 °F)
Environment	Dry location only (indoor)
Mounting	Mounted with screws, 3M adhesive backing
Size of Sheet	9 7/16" (240 mm) (L) X 18 7/8" (480 mm) (W)
Minimum Size	Minimum cuttable size of 3.78" x 1.89"
Maximum Size	Maximum tiling up to 4 sheets (based on a 96W driver)
Accessories	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**

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

#### **ACCESSORIES PACK**

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



- 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.













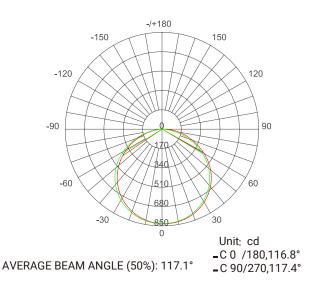


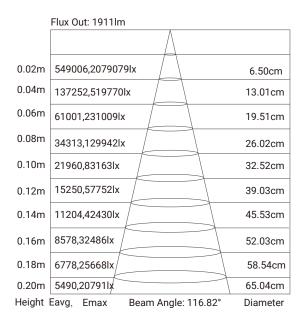


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# **LUMINOUS INTENSITY DISTRIBUTION DIAGRAM**

# **AVERAGE ILLUMINATION**





# INSTALLATION



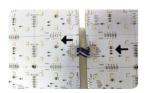
Step 1: Perform a visual inspection to make sure there are no damages to the sheet.



Step 4: Make sure all the contacts are firm.



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



Step 5: Follow the arrow for wiring direction.





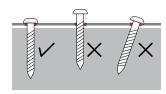
Step 6: Plug one end of the wire into the connector



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





- 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















Matrix XD™

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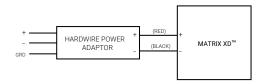
## WIRING

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			

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

Plug-In (Class 2)

# 5 in 1 Dimming Driver

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

# **CONTROLLER OPTIONS**



Inline Dimmer with Remote		Inline Plug and Play Dimmer		LED Dimming Module				
970007	24V	144W	970014	24V	96W	970001	24V	98W

#### **Rotary Style Dimmer** 970002 192W 24V

**CONNECTOR ACCESSORIES** 

#### **MOUNTING OPTIONS**

Connection Wires 2-pin male plug		Option 1	Screws (4 pcs. included)	
Hardwire Cables	2-pin male plug	Option 2	3M Adhesive Back	

<sup>\*</sup> Other power options available on request

<sup>\*</sup> Other controller options available on request

















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#### **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.