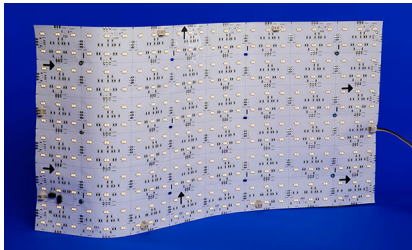




Q-SHEETS DW - TUNABLE APPLICATIONS

24VDC Dimmable Flexible Sheet



- Provide even illumination
- Easy to install and field modifiable
- Multiple color temperature options
- Dimmable with compatible QTL DC power supplies
- When controlled by DALI, DMX or power supply by others, max number of sheets per 96W circuit: 13W - 3 sheets; 23W - 2 sheets
- When using QTL QTM-eLED+TW, max number of sheets per 96W circuit: 13W - 7 sheets; 23W - 4 sheets
- 3 step MacAdam ellipse binning
- UL Listed
- When using DALI and DMX power supplies, LED wattage must be doubled

1 PRODUCT	2 WATTAGE	3 RATED	4 CCT	5 QUANTITY
QS24				

Sample Part Number: QS24-13W-DRY-20/30-2

1 PRODUCT	2 WATTAGE	3 RATED	4 CCT	5 QUANTITY
QS24 See last page for compatible power supplies. Using DALI, DMX or non QTL power supplies may double watts/ft.	13W 23W	DRY IP20 DMP IP54	20/30 2000K/3000K 22/65 2200K/6500K 27/40 2700K/4000K	Sold in individual sheets

Field modifications must comply with QTL's installation methods otherwise warranty is null & void | All data has +/- 10% tolerance | Warranty only valid with QTL power supplies | 3 year warranty



Q-SHEETS DW - TUNABLE APPLICATIONS

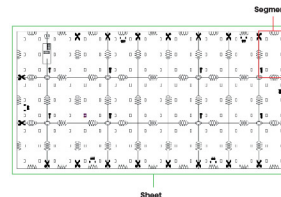
24VDC Dimmable Flexible Sheet

4 CCT – DELIVERED LUMENS

13W

[Calculated L70 = 54000 hrs]

CCT	Lm/Sheet	Lm/Segment	Lm/Sq. Ft	Luminous Efficacy	CRI Ra	Circuit Wattage/Sheet
2000K	959	35	773	71 Lm/W	96	13.51
2200K	1077	40	868	77 Lm/W	97	13.94
2700K	1237	46	997	96 Lm/W	96	12.89
3000K	1344	50	1084	96 Lm/W	98	13.94
4000K	1353	50	1091	106 Lm/W	98	12.77
6500K	1403	52	1131	100 Lm/W	96	14.02



23W

[Calculated L70 = 54000 hrs]

CCT	Lm/Sheet	Lm/Segment	Lm/Sq. Ft	Luminous Efficacy	CRI Ra	Circuit Wattage/Sheet
2000K	1546	32	773	64 Lm/W	96	24.07
2200K	1849	38	925	77 Lm/W	97	24
2700K	2253	47	1127	91 Lm/W	96	24.86
3000K	2293	48	1147	93 Lm/W	98	24.6
4000K	2436	51	1218	100 Lm/W	98	24.48
6500K	2526	53	1263	105 Lm/W	96	24

TEMPERATURE RATINGS

		13W		26W		23W		46W	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
		Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp	-4°F	125°F	-4°F	120°F	-4°F	120°F	-4°F	110°F
	Storage Temp	-4°F	140°F	-4°F	140°F	-4°F	140°F	-4°F	140°F
	Installation Temp	-50°F	100°F	-50°F	100°F	-50°F	100°F	-50°F	100°F
DMP	Ambient Operating Temp	-4°F	120°F	-4°F	115°F	-4°F	115°F	-4°F	105°F
	Storage Temp	-4°F	140°F	-4°F	140°F	-4°F	140°F	-4°F	140°F
	Installation Temp	-50°F	100°F	-50°F	100°F	-50°F	100°F	-50°F	100°F

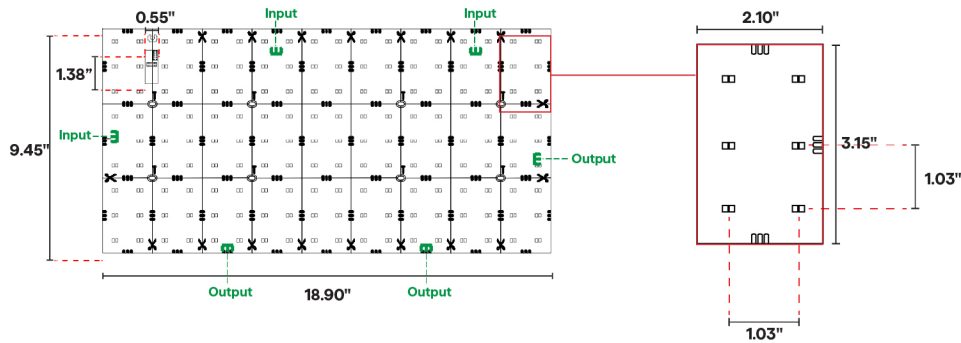


Q-SHEETS DW - TUNABLE APPLICATIONS

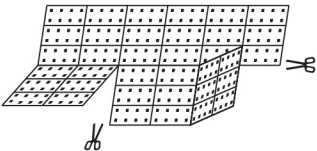
24VDC Dimmable Flexible Sheet

DIMENSIONS

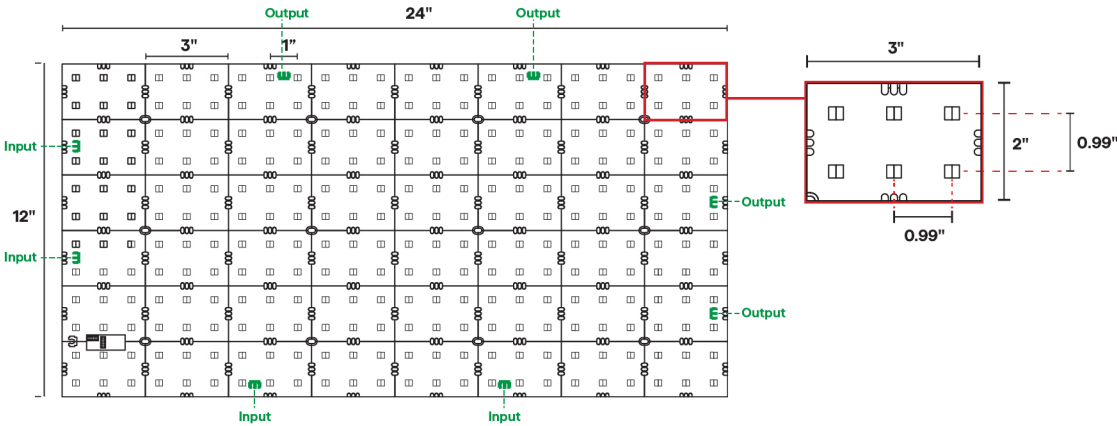
13W per sheet
0.48W per segment



NOTE:
Field cuttable at designated lines indicated on the LED sheet.



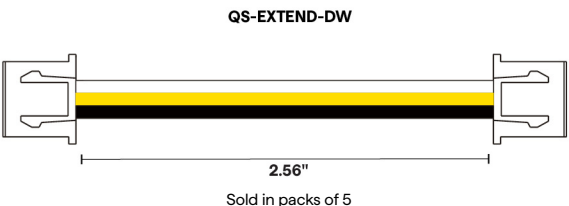
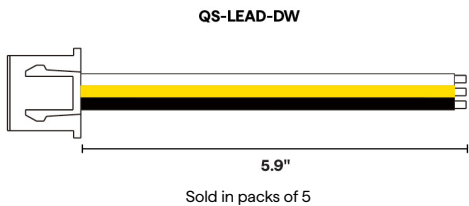
23W per sheet
0.48W per segment



Q-SHEET THICKNESS

PCB	LED CHIPS	CONNECTORS
0.0200"	0.0550"	0.2590"

CONNECTORS

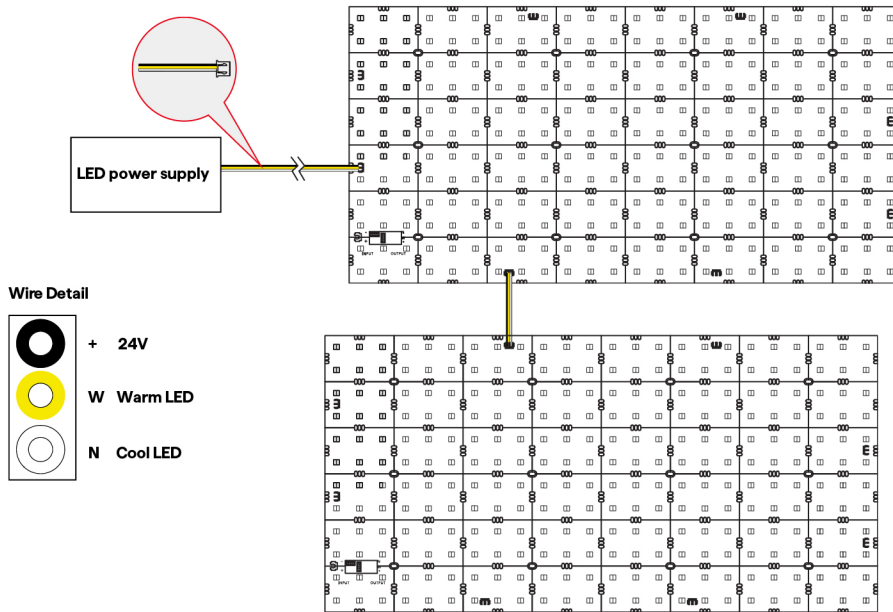




Q-SHEETS DW - TUNABLE APPLICATIONS

24VDC Dimmable Flexible Sheet

CONNECTION DIAGRAM



NOTE:

- Ensure the connection from power supply goes to a connection marked input
- When jumping to additional sheet, ensure sheets are in same orientation
- Ensure the jumper connection of initial sheet is on an output connector and the jumper connection of additional sheet is on input connector
- Ensure polarity is correct. If the sheets are not in the same orientation, positive terminals will not align between sheets and sheet will not function as intended



Q-SHEETS DW - TUNABLE APPLICATIONS

24VDC Dimmable Flexible Sheet

COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR
	Q-SHEETS DW Tunable Applications
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DMX QZ-DW
1%	QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle





DIMMING PROTOCOL	INDOOR
	Q-SHEETS DW Tunable Applications
Phase	QZ-DW
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN
DMX LED wattage must be doubled for DW-HE products	QZ-DMX
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6
DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle



Q-SHEETS DW - TUNABLE APPLICATIONS

24VDC Dimmable Flexible Sheet

COMPATIBLE ACCESSORIES

Q-mini-J5  2.80" 2.27" UL Listed, miniature junction box, DRY/DMP (WET rated with silicone)	SCENE APP DONGLE  1.36" 2.58" Wi-Fi or Bluetooth Connectivity	QS-LEAD-DW  Lead Connector	QS-EXTEND-DW  Jumper Connector
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COMPATIBLE APPS

NFC APP



Read and write DMX addresses and adjust voltage