FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

Features

- Flexible 3D bending with 2.8in. RGBW addressing
- DMX512 and Remote Device Management (RDM) control options
- IP68 rated, ideal for outdoor uses, not for underwater project
- 3 years warranty

DMX 512 OPTION
- Precise brightness and color control
- Dynamic lighting effects and pixel control

DMX 512-RDM OPTION
- Bi-directional Communication & Device Management
- Remote DMX addressing and configuration

Applications

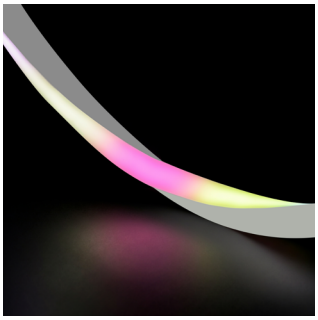
Architectural facades, building contours, landscape accents, bridges, walkways, transit hubs, staircases, and outdoor feature walls, etc.

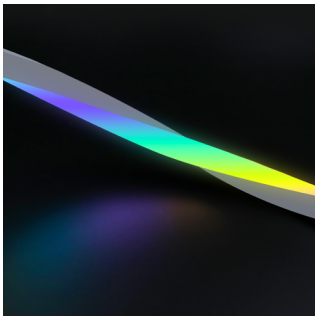
Date

Fixture type

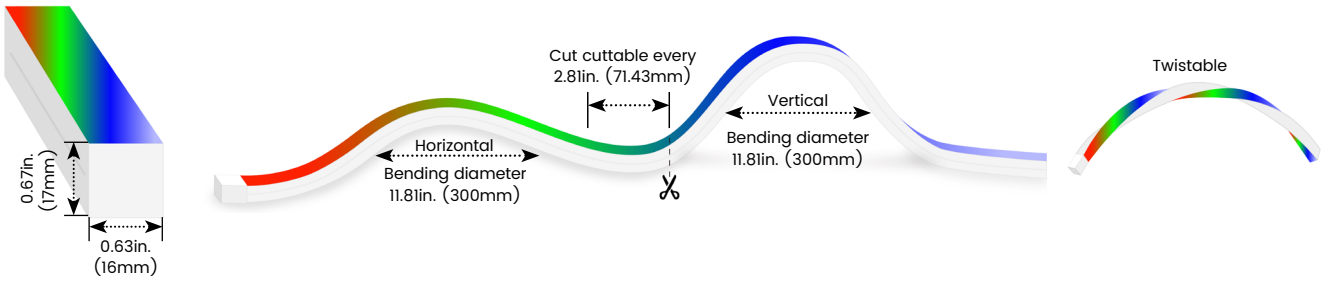
Project name

Project phase





Bending Directions & Diameters



Order Code

Model	Control	Environment	Voltage	CCT	Power	End Cap
F3DL	**DMX** **DMX-RDM**	**W8**-Wet (IP68)	**24V**-DC24V	**PRGBW27K**-Pixel RGBW27K **PRGBW30K**-Pixel RGBW30K **PRGBW35K**-Pixel RGBW35K **PRGBW40K**-Pixel RGBW40K	**4.6**-4.57W/ft	**FT** Flush Translucent **FO** Flush Opaque

***DMX:** DMX 512
***DMX-RDM:** DMX 512-RDM

Assembly Builder

Left Feed Entry	
F Front	**OW** Open wire 3.28ft (1m)
B Bottom	**OA** Open Wire with Anti-Wicking Ferrule
S Side	**MC** Male connector with 11.81in. (300mm) cable
C Closed	**FC** Female connector with 11.81in. (300mm)cable
	NA Only for Closed Feed Entry

Assembly Builder

Right Feed Entry			Length	
F	Front	**OW** Open wire 3.28ft (1m)	**Max. nominal**	26.2ft (8m)
B	Bottom	**OA** Open Wire with Anti-Wicking Ferrule	**Increment**	2.81in. (71.43mm)
S	Side	**MC** Male connector with 11.81in. (300mm) cable		
C	Closed	**FC** Female connector with 11.81in. (300mm)cable		
		NA Only for Closed Feed Entry		

*We will list the nearest actual manufacturing length on the quotation, based on your requested length.

Mounting Order Code

Product Code
Please select on the Mounting Options page

FORTE 3D LARGE PIXEL RGBW

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Lumen Output (lm/ft)

CCT	DMX 512	DMX 512-RDM
	4.57W/ft	4.57W/ft
R	9	9
G	32	34
B	7	7
W27K	23	28
W30K	25	30
W35K	26	31
W40K	26	31
PRGBW27K	71	80
PRGBW30K	73	81
PRGBW35K	74	83
PRGBW40K	74	83
Max. Run for Class 2*	17.5ft (5.3m)	17.5ft (5.3m)
Max. Run Supported Length	26.2ft (8m)	26.2ft (8m)

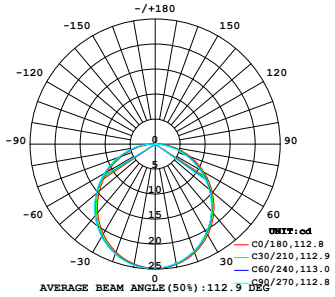
*Typically installations in USA and Canada comply with Class 2 requirements

Techinical Details

Parameter	DMX 512	DMX 512-RDM
Efficacy	16lm/W @RGBW30K 4.57W	18lm/W @RGBW30K 4.57W
CRI	Ra≥80	Ra≥80
Beam Angle	110°	110°
IK Rating	IK10 (with aluminium profile)	IK10 (with aluminium profile)
Average Life (L70B10)	>32,000 hours	>32,000 hours
IC Model	UCS 512CLN	GS8813
Pixel Size	2.8in./pixel (71mm/pixel)	2.8in./pixel (71mm/pixel)
Storage Temperature	-40°F~149°F (-40°C~ 65°C)	-40°F~149°F (-40°C~ 65°C)
Operating Temperature	-40°F~149°F (-40°C~ 65°C)	-40°F~149°F (-40°C~ 65°C)

Photometry

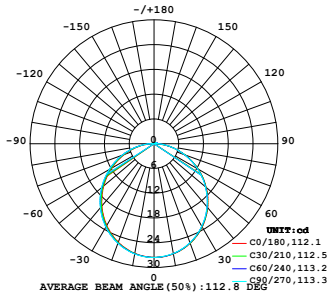
F3DL-DMX-W8-24V-PRGBW30K-4.6-FT-F-OW-F-OW
FORTE 3D LARGE PIXEL RGBW, DMX Option, 3D bend, PRGBW30K, 4.57W/ft



Zonal Lumen Summary

Zone	Lumen	% Fixture
0-30	19.2	26.2%
0-40	31.5	42.9%
0-60	55.7	76.0%
0-90	72.5	98.9%
0-180	73.3	100.0%

F3DL-DMX-RDM-W8-24V-PRGBW30K-4.6-FT-F-OW-F-OW
FORTE 3D LARGE PIXEL RGBW, DMX-RDM Option, 3D bend, PRGBW30K, 4.57W/ft



Zonal Lumen Summary

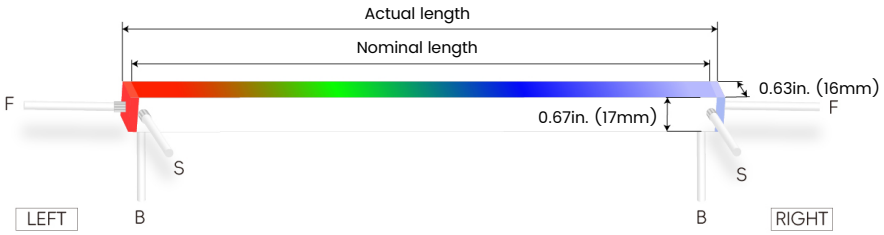
Zone	Lumen	% Fixture
0-30	21.3	26.1%
0-40	34.9	42.7%
0-60	61.8	75.6%
0-90	80.3	98.3%
0-180	81.7	100.0%

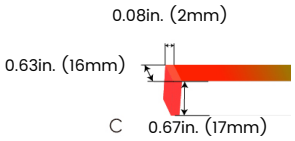
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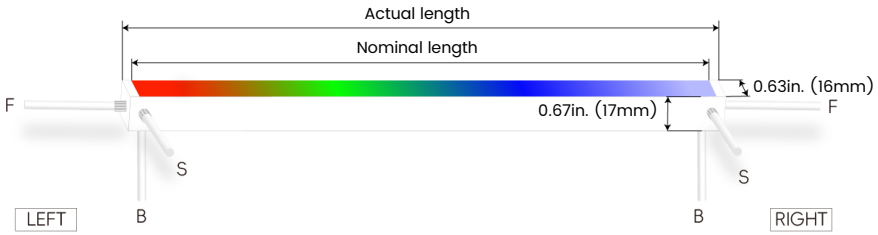
Feed Entry / End Cap Options

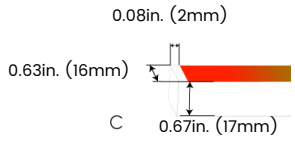
FT: Flush Translucent – IP68, factory-made only



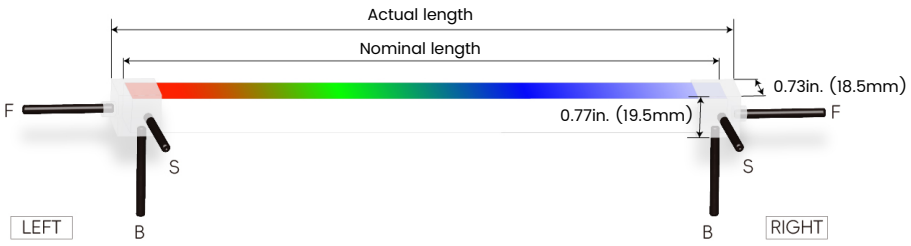


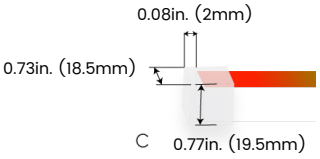
FO: Flush Opaque – IP68, factory-made only





Silicone end cap – IP67, for field cuttable only

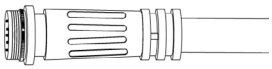




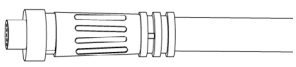
Connector Wire Options



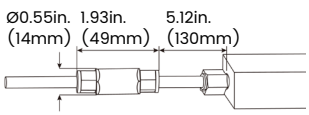
OW: Open wire, **Dry only**
Standard 3.28ft (1m),20 AWG,
wire length customizable



MC: Male connector, **Wet**
Standard 11.81in. (300mm), 22 AWG

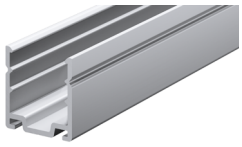
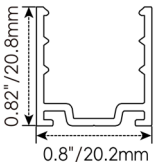


FC: Female connector, **Wet**
Standard 11.81in. (300mm), 22 AWG



OA: Open Wire with **Anti-Wicking Ferrule, Wet**
Standard 3.28ft (1m),20 AWG,
Protects against water ingress through the power cable

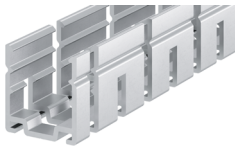
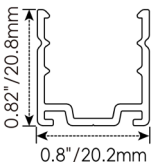
Mounting Options



F3DL-SC

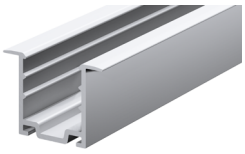
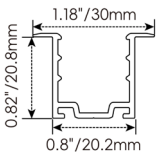
Name	Straight surface channel
Material	Aluminum
Standard Length	3.28ft (1M)




F3DL-BC

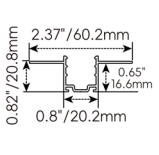
Name	Bendable surface channel
Material	Aluminum
Standard Length	3.28ft (1M)
Min. Bending Diameter	23.6in. (600mm)



F3DL-RC

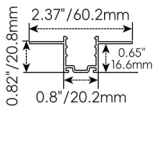
Name	Straight recessed channel
Material	Aluminum
Standard Length	3.28ft (1M)



F3DL-MC

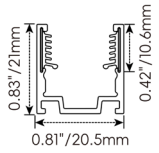
Name	Mud-in channel
Material	Aluminum
Standard Length	3.28ft (1M)




F3DL-BMC

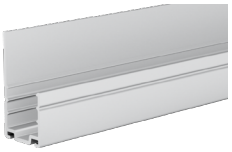
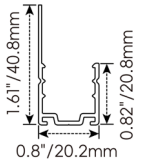
Name	Bendable mud-in channel
Material	Aluminum
Standard Length	3.28ft (1M)
Min. Top Bending Diameter	23.6in. (600mm)
Min. Side Bending Diameter	63in. (1600mm)



F3DL-SCS

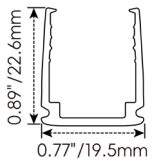
Name	Straight surface channel
Material	Aluminum with silicone groove
Standard Length	3.28ft (1M)



F3DL-LBC

Name	Light-block channel
Material	Aluminum
Standard Length	3.28ft (1M)

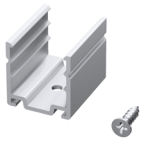


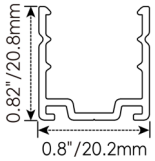
F3DL-PC

Name	PC channel
Material	Polycarbonate
Standard Length	3.28ft (1M)

FORTE 3D LARGE PIXEL RGBW

Mounting Options



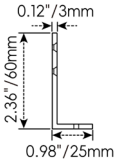




F3DL-CL

Name	Mounting clip
Material	Aluminum
Standard Length	0.98in. (25mm)







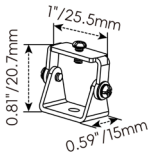


F3DL-LS

Name	L-shaped mounting bracket
Material	Aluminum
Standard Length	0.79in. (20mm)

* F3DL-LS must be installed with F3DL-SC







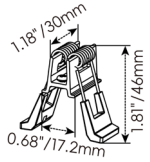


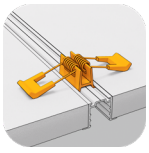
F3DL-AC

Name	Adjustable mounting clip
Material	Stainless steel
Standard Length	1 in. (25.5mm)

* F3DL-AC must be installed with F3DL-SC









F3DL-RC-SPC

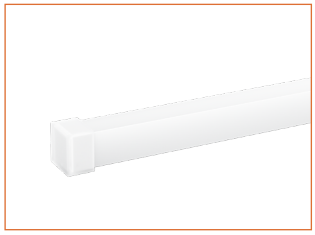
Name	Spring clip
Standard Pkg	1pcs

* F3DL-RC-SPC must be installed with F3DL-RC

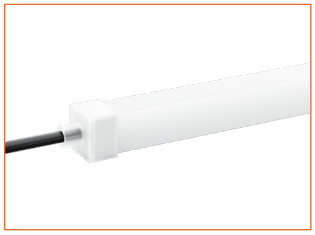
FORTE 3D LARGE PIXEL RGBW

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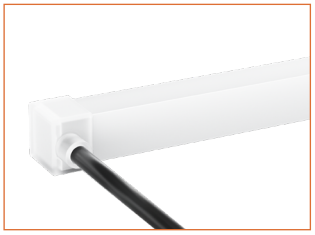
Silicone End Caps (Optional, purchase for extra)



F3DL-SEC-C
Silicone closed end cap



F3DL-SEC-F-5P
Silicone end cap front entry with
0.98ft (30cm) cable, 5 pin



F3DL-SEC-S-5P
Silicone end cap side entry with
0.98ft (30cm) cable, 5 pin



F3DL-SEC-B-5P
Silicone end cap bottom entry with
0.98ft (30cm) cable, 5 pin

Additional Accessories (Optional, purchase for extra)



MCW-5P-67
Male connector,
0.98ft (30cm) white cable,
5 pin, IP67, Wet, 22 AWG



FCW-5P-67
Female connector,
0.98ft (30cm) white cable,
5 pin, IP67, Wet, 22 AWG



MCB-5P-67
Male connector,
0.98ft (30cm) black cable,
5 pin, IP67, Wet, 22 AWG



FCB-5P-67
Female connector,
0.98ft (30cm) black cable,
5 pin, IP67, Wet, 22 AWG



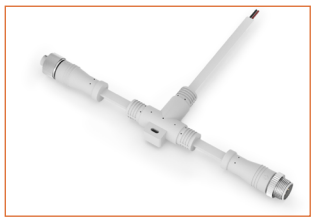
SW-3P-6
Shielded signal wire,
standard 20ft (6m), customizable
3 pin, 18AWG



SC-3P-6
XLR3 extension signal connector,
standard 20ft (6m), customizable
3 pin



NC-6
RJ45 extension network connector,
standard 20ft (6m), customizable



MFTCW-5P-67
Male and female T-shaped connector,
white cable,
5 pin, IP67, Wet

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Drivers

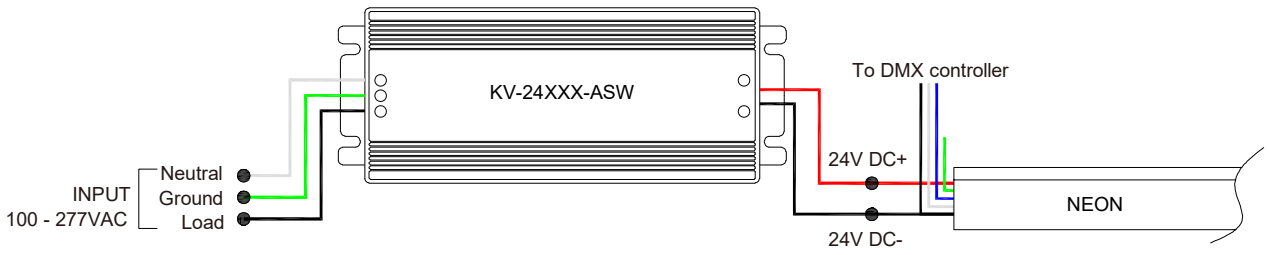
Non-dimmable

Code	Max Load	Input	Output	Class 2	With Junction Box	Environment	Size (L x W x H)
KV-24030-ASW	30W	100-277VAC	24V	Yes	No	Dry/Damp	6.1 x 2.1 x 0.8in. (15.5 x 5.4 x 2cm)
KV-24060-ASW	60W	100-277VAC	24V	Yes	No	Dry/Damp	7 x 2.4 x 0.9in. (17.8 x 6.1 x 2.4cm)
KV-24096-ASW	96W	100-277VAC	24V	Yes	No	Dry/Damp/Wet	9.1 x 2.8 x 1.7in. (23 x 7 x 4.3cm)

Controllers Options

Code	Description
DINA-DR micro	DMX 60 channels, DMX Stand Alone controller with 10 scenes, USB connectivity for programming
SLESA-U9	DMX 256 channels, USB connection, standalone mode with 1 area and 20 scenes
STICK-GA2	DMX 512 channels, ready to use (pre-loaded with 8 scenes and 170 RGB fixtures)
STICK-CW4	DMX 1024 channels, up to 36 scenes stored and directly recalled via 6 touch sensitive buttons

Wiring Diagram



FORTE 3D LARGE PIXEL RGBW

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24V Voltage Drop & Maximum Wire Length Chart

Based on 24V voltage with a 3% voltage drop allowance. Indicates the maximum wire length from the power supply to the start of the run.

Total load	8AWG	10AWG	12AWG	14AWG	16AWG	18AWG	20AWG	22AWG
10W / 0.4A	1588ft (484.0m)	999ft (304.5m)	628ft (191.4m)	395ft (120.4m)	248ft (75.5m)	156ft (47.5m)	98ft (29.8m)	61ft (18.5m)
20W / 0.8A	794ft (242.0m)	499ft (152.1m)	314ft (95.7m)	197ft (60.0m)	124ft (37.8m)	78ft (23.7m)	49ft (14.9m)	30ft (9.1m)
30W / 1.3A	529ft (161.2m)	333ft (101.5m)	209ft (63.7m)	131ft (39.9m)	82ft (24.9m)	52ft (15.8m)	32ft (9.7m)	20ft (6.1m)
40W / 1.7A	397ft (121.0m)	249ft (75.9m)	157ft (47.8m)	98ft (29.8m)	62ft (18.9m)	39ft (11.8m)	24ft (7.3m)	15ft (4.5m)
50W / 2.1A	317ft (96.6m)	199ft (60.6m)	125ft (38.1m)	79ft (24.0m)	49ft (14.9m)	31ft (9.4m)	19ft (5.7m)	12ft (3.6m)
60W / 2.5A	264ft (80.4m)	166ft (50.6m)	104ft (31.7m)	65ft (19.8m)	41ft (12.5m)	26ft (7.9m)	16ft (4.8m)	10ft (3.0m)
70W / 2.9A	226ft (68.8m)	142ft (43.2m)	89ft (27.1m)	56ft (17.0m)	35ft (10.6m)	22ft (6.7m)	14ft (4.2m)	8ft (2.4m)
80W / 3.3A	198ft (60.3m)	124ft (37.8m)	78ft (23.7m)	49ft (14.9m)	31ft (9.4m)	19ft (5.7m)	12ft (3.6m)	7ft (2.1m)
90W / 3.8A	176ft (53.6m)	111ft (33.8m)	69ft (21.0m)	43ft (13.1m)	27ft (8.2m)	17ft (5.1m)	10ft (3.0m)	6ft (1.8m)
100W / 4.2A	158ft (48.1m)	99ft (30.1m)	62ft (18.9m)	39ft (11.8m)	24ft (7.3m)	15ft (4.5m)	9ft (2.7m)	6ft (1.8m)
110W / 4.6A	144ft (43.8m)	90ft (27.4m)	57ft (17.3m)	35ft (10.6m)	22ft (6.7m)	14ft (4.2m)	9ft (2.7m)	5ft (1.5m)
120W / 5.0A	132ft (40.2m)	83ft (25.3m)	52ft (15.8m)	32ft (9.7m)	20ft (6.1m)	13ft (3.9m)	8ft (2.4m)	5ft (1.5m)
130W / 5.4A	122ft (37.1m)	76ft (23.1m)	48ft (14.6m)	30ft (9.1m)	19ft (5.7m)	12ft (3.6m)	7ft (2.1m)	4ft (1.2m)
140W / 5.8A	113ft (34.4m)	71ft (21.6m)	44ft (13.4m)	28ft (8.5m)	17ft (5.1m)	11ft (3.3m)	7ft (2.1m)	4ft (1.2m)
150W / 6.3A	105ft (32.0m)	66ft (20.1m)	41ft (12.5m)	26ft (7.9m)	16ft (4.8m)	10ft (3.0m)	6ft (1.8m)	4ft (1.2m)
160W / 6.7A	99ft (30.1m)	62ft (18.9m)	39ft (11.8m)	24ft (7.3m)	15ft (4.5m)	9ft (2.7m)	6ft (1.8m)	3ft (0.9m)
170W / 7.1A	93ft (28.3m)	58ft (17.6m)	36ft (10.9m)	23ft (7.0m)	14ft (4.2m)	9ft (2.7m)	5ft (1.5m)	3ft (0.9m)
180W / 7.5A	88ft (26.8m)	55ft (16.7m)	34ft (10.3m)	22ft (6.7m)	13ft (3.9m)	8ft (2.4m)	5ft (1.5m)	3ft (0.9m)
190W / 7.9A	83ft (25.3m)	52ft (15.8m)	33ft (10.0m)	20ft (6.0m)	13ft (3.9m)	8ft (2.4m)	5ft (1.5m)	3ft (0.9m)
200W / 8.3A	79ft (24.0m)	49ft (14.9m)	31ft (9.4m)	19ft (5.7m)	12ft (3.6m)	7ft (2.1m)	4ft (1.2m)	3ft (0.9m)
210W / 8.8A	75ft (22.8m)	47ft (14.3m)	29ft (8.8m)	18ft (5.4m)	11ft (3.3m)	7ft (2.1m)	4ft (1.2m)	2ft (0.6m)
220W / 9.2A	72ft (21.9m)	45ft (13.7m)	28ft (8.5m)	18ft (5.4m)	11ft (3.3m)	7ft (2.1m)	4ft (1.2m)	2ft (0.6m)
230W / 9.6A	69ft (21.0m)	43ft (13.1m)	27ft (8.2m)	17ft (5.1m)	10ft (3.0m)	6ft (1.8m)	4ft (1.2m)	2ft (0.6m)
240W / 10.0A	66ft (20.1m)	41ft (12.5m)	26ft (7.9m)	16ft (4.8m)	10ft (3.0m)	6ft (1.8m)	4ft (1.2m)	2ft (0.6m)
250W / 10.4A	63ft (19.2m)	40ft (12.1m)	25ft (7.6m)	15ft (4.5m)	9ft (2.7m)	6ft (1.8m)	3ft (0.9m)	2ft (0.6m)