# FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

Date

Fixture type

Project name

Project phase

## Features

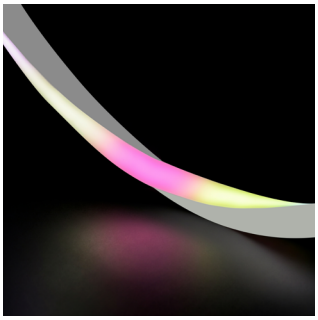
- Flexible 3D bending with 71mm RGBW addressing
- DMX512 and Remote Device Management (RDM) control options
- IP68 rated, ideal for outdoor uses, not for underwater project
- 3 years warranty

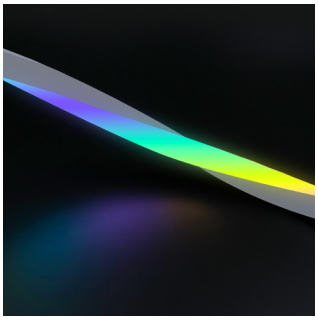
**DMX 512 OPTION**
- Precise brightness and color control
- Dynamic lighting effects and pixel control

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

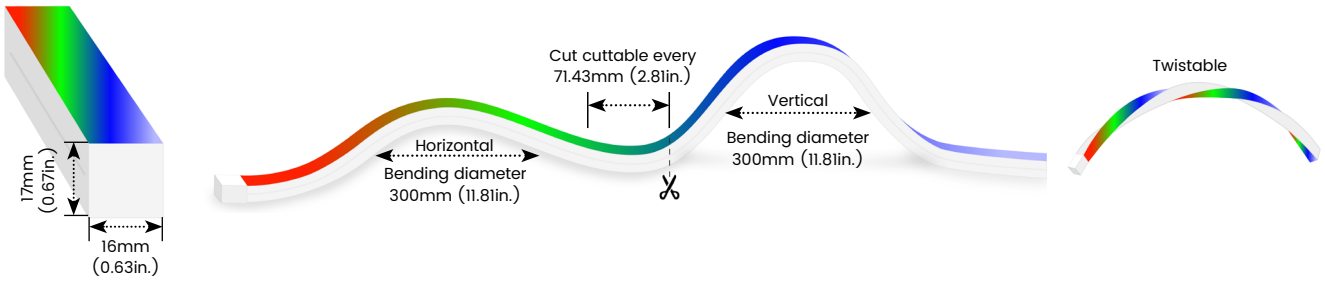
## Applications

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





## Bending Directions & Diameters




## Order Code

| Model | Control | Environment | Voltage | CCT | Power | End Cap |
|---|---|---|---|---|---|---|
| **F3DL** | **DMX** | **W8**-Wet (IP68) | **24V**-DC24V | **PRGBW27K**-Pixel RGBW27K | **150**-15W/M | **FT** Flush Translucent |
| | **DMX-RDM** | | | **PRGBW30K**-Pixel RGBW30K | | **FO** Flush Opaque |
| | | | | **PRGBW35K**-Pixel RGBW35K | | |
| | | | | **PRGBW40K**-Pixel RGBW40K | | |

## Assembly Builder

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

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

## Assembly Builder

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

Outdoor · 3D Bending · Pixel RGBW

## Lumen Output (lm/m)

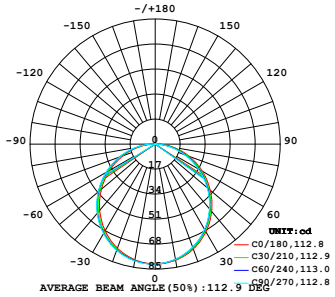
| CCT | DMX 512 | DMX 512-RDM |
|---|---|---|
| | 15W/M | 15W/M |
| R | 29 | 30 |
| G | 105 | 113 |
| B | 24 | 23 |
| W27K | 77 | 92 |
| W30K | 83 | 97 |
| W35K | 86 | 101 |
| W40K | 86 | 101 |
| PRGBW27K | 234 | 262 |
| PRGBW30K | 240 | 267 |
| PRGBW35K | 243 | 271 |
| PRGBW40K | 243 | 271 |
| Max. Run Length | 8m | 8m |

## Techinical Details

| Parameter | DMX 512 | DMX 512-RDM |
|---|---|---|
| Efficacy | 16lm/W @RGBW30K 15W | 18lm/W @RGBW30K 15W |
| 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/M | 14 | 14 |
| Pixel Size | 71mm/pixel | 71mm/pixel |
| Storage Temperature | -40°C~ 65°C | -40°C~ 65°C |
| Operating Temperature | -40°C~ 65°C | -40°C~ 65°C |

## Photometry

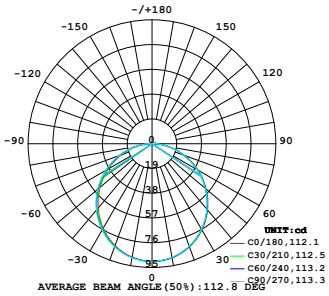
F3DL-DMX-W8-24V-PRGBW30K-150-FT-F-OW-F-OW
FORTE 3D LARGE PIXEL RGBW, DMX Option, 3D bend, PRGBW30K, 15W/M




Zonal Lumen Summary

| Zone | Lumen | % Fixture |
|---|---|---|
| 0-30 | 63.1 | 26.2% |
| 0-40 | 103.3 | 42.9% |
| 0-60 | 182.8 | 76.0% |
| 0-90 | 237.9 | 98.9% |
| 0-180 | 240.6 | 100.0% |

F3DL-DMX-RDM-W8-24V-PRGBW30K-150-FT-F-OW-F-OW
FORTE 3D LARGE PIXEL RGBW, DMX-RDM Option, 3D bend, PRGBW30K, 15W/M




Zonal Lumen Summary

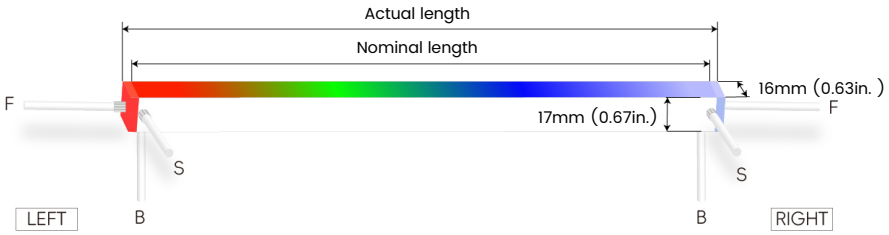
| Zone | Lumen | % Fixture |
|---|---|---|
| 0-30 | 69.9 | 26.1% |
| 0-40 | 114.4 | 42.7% |
| 0-60 | 202.4 | 75.6% |
| 0-90 | 263.2 | 98.3% |
| 0-180 | 267.8 | 100.0% |

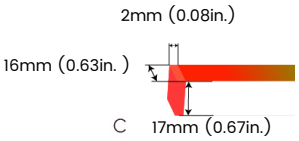
# FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

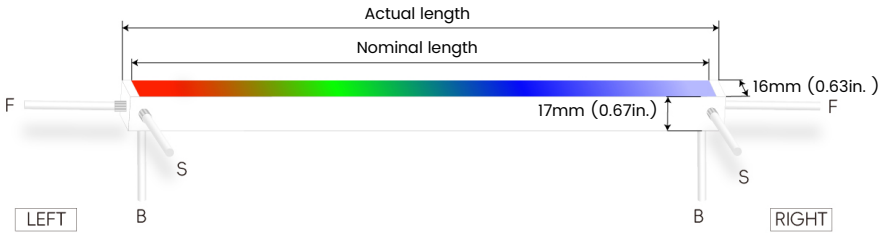
## Feed Entry / End Cap Options

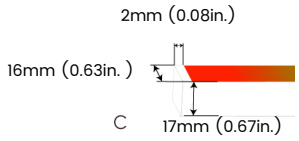
**FT: Flush Translucent – IP68, factory-made only**



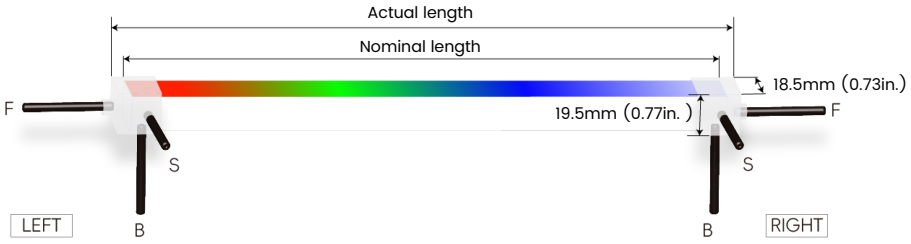



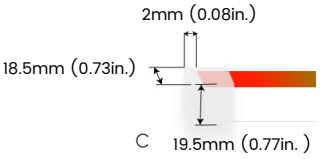

**FO: Flush Opaque – IP68, factory-made only**




**Silicone end cap – IP67, for field cuttable only**

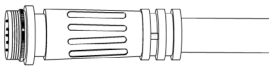


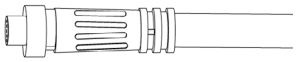

## Connector Wire Options



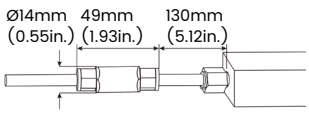
**OW:** Open wire, **Dry only**
Standard 300mm (11.81in.),20 AWG,
wire length customizable



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

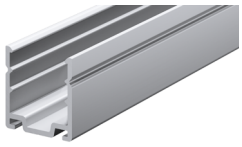
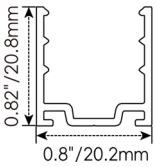


**FC:** Female connector, **Wet**
Standard 300mm (11.81in.), 22 AWG




**OA:** Open Wire with **Anti-Wicking Ferrule, Wet**
Standard 300mm (11.81in.),20 AWG,
Protects against water ingress through the power cable

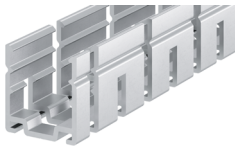
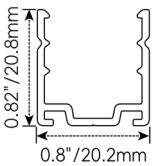
## Mounting Options



**NF1617-SC**

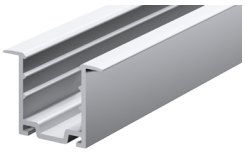
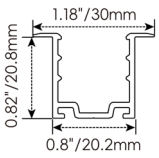
| | |
|---|---|
| Name | Straight surface channel |
| Material | Aluminum |
| Standard Length | 1m (3.28ft) |




**NF1617-BC**

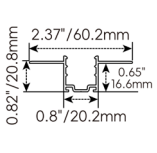
| | |
|---|---|
| Name | Bendable surface channel |
| Material | Aluminum |
| Standard Length | 1m (3.28ft) |
| Min. Bending Diameter | 600mm(23.6in.) |



**NF1617-RC**

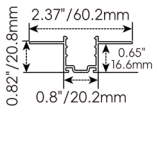
| | |
|---|---|
| Name | Straight recessed channel |
| Material | Aluminum |
| Standard Length | 1m (3.28ft) |



**NF1617-MC**

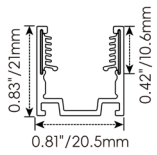
| | |
|---|---|
| Name | Mud-in channel |
| Material | Aluminum |
| Standard Length | 1m (3.28ft) |




**NF1617-BMC**

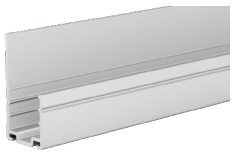
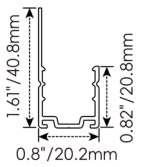
| | |
|---|---|
| Name | Bendable mud-in channel |
| Material | Aluminum |
| Standard Length | 1m (3.28ft) |
| Min. Top Bending Diameter | 600mm(23.6in.) |
| Min. Side Bending Diameter | 1600mm(63in.) |



**NF1617-SCS**

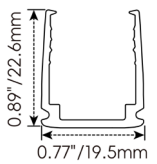
| | |
|---|---|
| Name | Straight surface channel |
| Material | Aluminum with silicone groove |
| Standard Length | 1m (3.28ft) |



**NF1617-LBC**

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



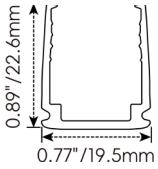
**NF1617-PC**

| | |
|---|---|
| Name | PC channel |
| Material | Polycarbonate |
| Standard Length | 1m (3.28ft) |

# FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

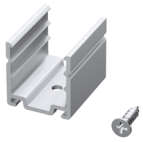
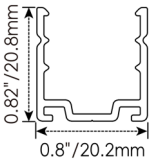
## Mounting Options



**NF1617-BPC**

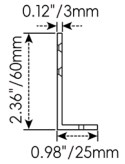
| Name | Bendable surface channel |
|---|---|
| Material | Polycarbonate |
| Standard Length | 1m (3.28ft) |
| Min. Bending Radius | 150mm (5.91in.) |



**NF1617-CL**

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

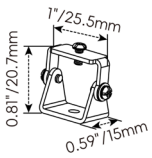






**NF1617-LS**

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

* NF1617-LS must be installed with NF1617-SC

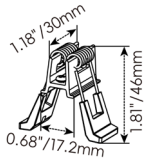



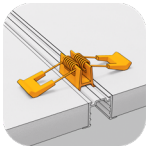



**NF1617-AC**

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

* NF1617-AC must be installed with NF1617-SC




**NF1617-RC-SPC**

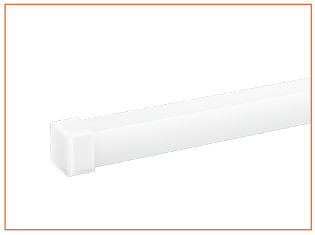
| Name | Spring clip |
|---|---|
| Standard Pkg | 1pcs |

* NF1617-RC-SPC must be installed with NF1617-RC

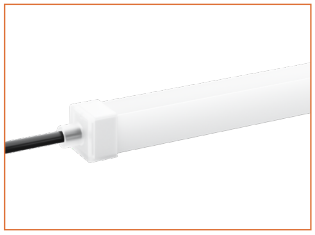
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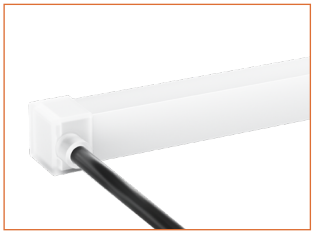
## Silicone End Caps (Optional, purchase for extra )



**NF1617-SEC-C**
Silicone closed end cap



**NF1617-SEC-F-5P**
Silicone end cap front entry with 300mm (11.81in.) cable, 5 pin



**NF1617-SEC-S-5P**
Silicone end cap side entry with 300mm (11.81in.) cable, 5 pin



**NF1617-SEC-B-5P**
Silicone end cap bottom entry with 300mm (11.81in.) cable, 5 pin

## Additional Accessories (Optional, purchase for extra)



**MCW-5P-67**
Male connector,
300mm (11.81in.) white cable,
5 pin, IP67, Wet, 22 AWG



**FCW-5P-67**
Female connector,
300mm (11.81in.) white cable,
5 pin, IP67, Wet, 22 AWG



**MCB-5P-67**
Male connector,
300mm (11.81in.) black cable,
5 pin, IP67, Wet, 22 AWG



**FCB-5P-67**
Female connector,
300mm (11.81in.) black cable,
5 pin, IP67, Wet, 22 AWG



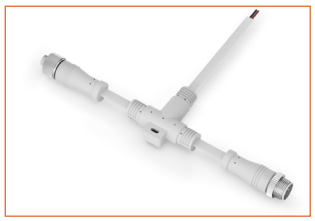
**SW-3P-6**
Shielded signal wire,
standard 6m(20ft), customizable
3 pin, 18AWG



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



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



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

# FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

## Drivers

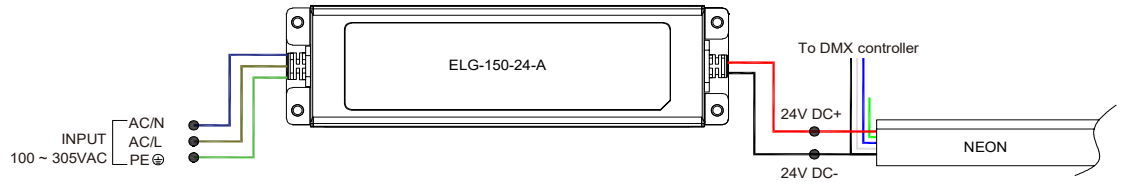
### Non-dimmable

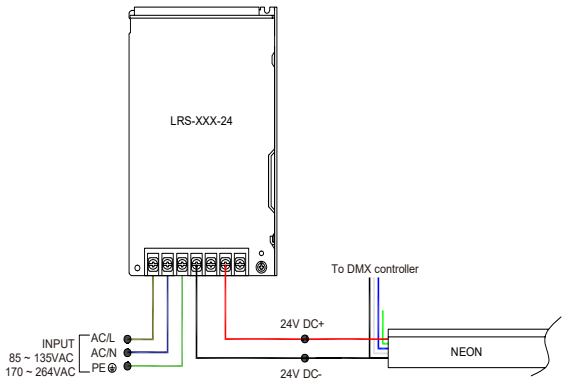
| Code | Max Load | Input | Output | Environment | Size (L x W x H) |
|---|---|---|---|---|---|
| ELG-150-24A-3Y | 150W | 100-305VAC | 24V | Dry/Damp/IP67 | 219 * 63 * 35.5 mm |
| LRS-150-24 | 150W | 85-132VAC / 170-264VAC | 24V | Dry | 159 * 97 * 30 mm |

### DMX-Decoders & Controllers Options

| Type | Code | Description | Environment | Size (L x W x H) |
|---|---|---|---|---|
| Controllers | CW4 | 1024 DMX channels, 6 scene buttons and a color wheel, ideal for hotels, homes and public | Indoor | 145 * 107 * 10 mm |
| Controllers | Artnet-DMX-8 | 8 DMX universes, Artnet- to-DMX512 converter with RJ45 port, ideal for lighting control | Indoor | 483 * 200 * 44 mm |
| Controllers | WT-DMX-M | WiFi & RF 3-in-1 DMX512 controller for RGB/RGBW/RGBCCT lighting | Indoor | 120 * 43 * 27 mm |

## Wiring Diagram



# FORTE 3D LARGE PIXEL RGBW

Outdoor · 3D Bending · Pixel RGBW

## 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 | 484.0m | 304.5m | 191.4m | 120.4m | 75.5m | 47.5m | 29.8m | 18.5m |
| 20W / 0.8A | 242.0m | 152.1m | 95.7m | 60.0m | 37.8m | 23.7m | 14.9m | 9.1m |
| 30W / 1.3A | 161.2m | 101.5m | 63.7m | 39.9m | 24.9m | 15.8m | 9.7m | 6.1m |
| 40W / 1.7A | 121.0m | 75.9m | 47.8m | 29.8m | 18.9m | 11.8m | 7.3m | 4.5m |
| 50W / 2.1A | 96.6m | 60.6m | 38.1m | 24.0m | 14.9m | 9.4m | 5.7m | 3.6m |
| 60W / 2.5A | 80.4m | 50.6m | 31.7m | 19.8m | 12.5m | 7.9m | 4.8m | 3.0m |
| 70W / 2.9A | 68.8m | 43.2m | 27.1m | 17.0m | 10.6m | 6.7m | 4.2m | 2.4m |
| 80W / 3.3A | 60.3m | 37.8m | 23.7m | 14.9m | 9.4m | 5.7m | 3.6m | 2.1m |
| 90W / 3.8A | 53.6m | 33.8m | 21.0m | 13.1m | 8.2m | 5.1m | 3.0m | 1.8m |
| 100W / 4.2A | 48.1m | 30.1m | 18.9m | 11.8m | 7.3m | 4.5m | 2.7m | 1.8m |
| 110W / 4.6A | 43.8m | 27.4m | 17.3m | 10.6m | 6.7m | 4.2m | 2.7m | 1.5m |
| 120W / 5.0A | 40.2m | 25.3m | 15.8m | 9.7m | 6.1m | 3.9m | 2.4m | 1.5m |
| 130W / 5.4A | 37.1m | 23.1m | 14.6m | 9.1m | 5.7m | 3.6m | 2.1m | 1.2m |
| 140W / 5.8A | 34.4m | 21.6m | 13.4m | 8.5m | 5.1m | 3.3m | 2.1m | 1.2m |
| 150W / 6.3A | 32.0m | 20.1m | 12.5m | 7.9m | 4.8m | 3.0m | 1.8m | 1.2m |
| 160W / 6.7A | 30.1m | 18.9m | 11.8m | 7.3m | 4.5m | 2.7m | 1.8m | 0.9m |
| 170W / 7.1A | 28.3m | 17.6m | 10.9m | 7.0m | 4.2m | 2.7m | 1.5m | 0.9m |
| 180W / 7.5A | 26.8m | 16.7m | 10.3m | 6.7m | 3.9m | 2.4m | 1.5m | 0.9m |
| 190W / 7.9A | 25.3m | 15.8m | 10.0m | 6.0m | 3.9m | 2.4m | 1.5m | 0.9m |
| 200W / 8.3A | 24.0m | 14.9m | 9.4m | 5.7m | 3.6m | 2.1m | 1.2m | 0.9m |
| 210W / 8.8A | 22.8m | 14.3m | 8.8m | 5.4m | 3.3m | 2.1m | 1.2m | 0.6m |
| 220W / 9.2A | 21.9m | 13.7m | 8.5m | 5.4m | 3.3m | 2.1m | 1.2m | 0.6m |
| 230W / 9.6A | 21.0m | 13.1m | 8.2m | 5.1m | 3.0m | 1.8m | 1.2m | 0.6m |
| 240W / 10.0A | 20.1m | 12.5m | 7.9m | 4.8m | 3.0m | 1.8m | 1.2m | 0.6m |
| 250W / 10.4A | 19.2m | 12.1m | 7.6m | 4.5m | 2.7m | 1.8m | 0.9m | 0.6m |