



Vividly illuminate your sign with our new ULTRA 650 COLOR modules. With a sleek design and higher lumen output, ULTRA 650 COLOR modules are brighter and cover a broader depth range suitable for channel letters, light boxes and other applications.



**Applications:**

- Channel letters
- Box signs
- Cove lighting

**ORDERING GUIDE**

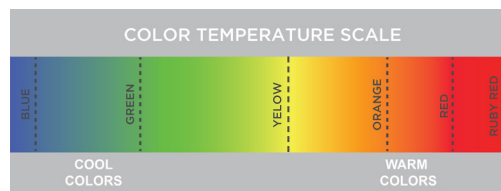
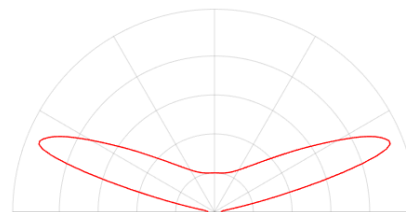
Part Number	Wavelength	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)		
			Per Foot	Per Meter	Per Module	Per Foot	Per Meter
LS-U650-RED-B150-A	625 nm	150	2	6.7	25	50	167.5
LS-U650-BLU-B150-B	471 nm	150	2	6.7	14.5	29	97.15
LS-U650-GRN-B150-A	525 nm	150	2	6.7	55	110	368.5
LS-U650-RRD-B150-A	633 nm	150	2	6.7	20	40	134
LS-U650-ORG-B150-A	606 nm	150	2	6.7	30	60	201
LS-U650-YLW-B150-A	589 nm	150	2	6.7	12.5	25	83.8
LS-U650-RED-B200-A	625 nm	200	1.5	5	25	37.5	125
LS-U650-BLU-B200-B	471 nm	200	1.5	5	14.5	21.75	72.5
LS-U650-GRN-B200-A	525 nm	200	1.5	5	55	82.5	275
LS-U650-RRD-B200-A	633 nm	200	1.5	5	20	30	100
LS-U650-ORG-B200-A	606 nm	200	1.5	5	30	45	150
LS-U650-YLW-B200-A	589 nm	200	1.5	5	12.5	18.8	62.5

**PRODUCT RATINGS**

Luminous Efficacy RED	32.1 lm/W
Luminous Efficacy BLUE	18.6 lm/W
Luminous Efficacy GREEN	70.5 lm/W
Luminous Efficacy RUBY RED	25.6 lm/W
Luminous Efficacy ORANGE	38.5 lm/W
Luminous Efficacy YELLOW	16 lm/W
Wattage per Module	0.78 W Nominal
Input Voltage	12 V DC
Input Current	0.065 A/ module
Power Supply Loading	70 modules per 60 W
Ingress Protection	IP68
Operating Temperature	-40° — +140° F (-40° — +60° C)
Warranty	9 Year Standard Warranty

**LUMINOUS INTENSITY DISTRIBUTION**

Batwing Beam Pattern



12V DC



9 YEAR WARRANTY



VERSALENZ<sup>®</sup> ADVANCED OPTICS



CAPZUL<sup>®</sup> WATERPROOF



CONSTANT CURRENT



UV RESISTANT



**IP68 LM-79**



**RoHS**



## MODULE DIMENSIONS

Part Number	Length (in/mm)	Width (in/mm)	Height (in/mm)
LS-U650-xxx-Bxxx-A	1.89/48	0.47/12.0	0.35/8.8

## POWER SUPPLY LOADING

Power Supply	Max. # of Modules Per Continuous String	Total # of Modules Per Power Supply	Modules Per Foot 150mm	Modules Per Meter 150mm	Modules Per Foot 200mm	Modules Per Meter 200mm
UL CLASS 2	12 W	14	14	6.9	2.1	9.2
	15 W	17	17	8.5	2.6	11.2
	35 W	40	41	20.3	6.2	26.9
	60 W	67	70	34.4	10.5	45.9
	180 W*	67	210	103.3	31.5	137.8
UL CLASS 1	100 W	67	115	56.8	17.3	75.5
	150 W	67	173	85.3	26	113.5
	180 W	67	207	102	31.1	135.8
	220 W	67	253	124.7	38	166

Note: The number of modules in each of the parallel strings should not exceed the specified maximum.  
\* Three 60 Watt Channels

## LAYOUT GUIDE

LS-U650-xxx-B150-A					
Single Row Channel Depth (in.   mm)	Red*	Blue**	Green**	RR/OR	YLW
	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)
3   75	7.5   190	6   150	8   200	***	6   150
4   100	8   200	8   200	10   250	***	10   250
5   125	9   230	10   250	12   300	8   200	12   300
6   50	11   280	12   300	12   300	9   225	12   300
7   180	10   250	12   300	11   275	10   250	12   300

LS-U650-xxx-B150-A					
Multiple Row Channel Depth (in. / mm)	Red*	Blue**	Green**	RR/OR	YLW
	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)
3 / 75	6 / 150	5 / 125	6 / 150	***	6   150
4 / 100	7 / 175	8 / 200	8 / 200	***	9   225
5 / 125	8 / 200	10 / 250	10 / 250	8 / 200	11   275
6 / 150	12 / 300	12 / 300	12 / 300	9 / 225	12   300
7 / 180	11 / 275	14 / 350	12 / 300	10 / 250	12   300

\* 2793 Plex \*\* 7328 Plex \*\*\*Contact sales associate

Note: Other face materials may vary the module and row spacing to achieve the same face light, uniformity and brightness.



LS-U650-xxx-B200-A					
Single Row Channel Depth (in.   mm)	Red*	Blue**	Green**	RR/OR	YLW
	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)
3   75	6   150	6.5   165	8   200	6   150	6   150
4   100	8   200	12   300	12   300	10   250	10   250
5   25	12   300	14   350	14   350	12   300	12   300
6   150	11   275	16   400	16   400	14   350	12   300
7   180	10   250	18   450	18   450	18   450	10   250

LS-U650-xxx-B200-A					
Multiple Row Channel Depth (in. / mm)	Red*	Blue**	Green**	RR/OR	YLW
	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)	Max. Stroke (in   mm)
3 / 75	8 / 200	5 / 125	6 / 150	6 / 150	6   150
4 / 100	10 / 250	8 / 200	10 / 250	10 / 250	9   225
5 / 125	12 / 300	10 / 250	12 / 300	12 / 300	11   275
6 / 150	14 / 350	12 / 300	15 / 375	14 / 350	12   300
7 / 180	16 / 400	14 / 350	16 / 400	16 / 400	12   300

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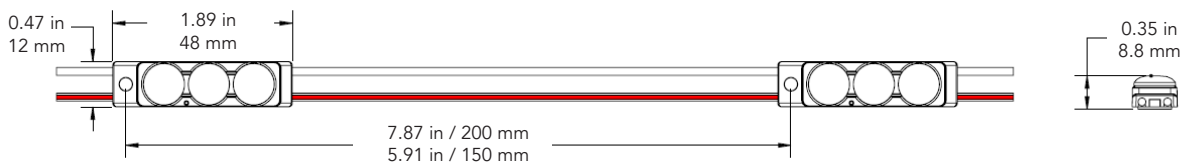
Note: Other face materials may vary the module and row spacing to achieve the same face light, uniformity and brightness.

**SHIPPING INFORMATION**

Module Type	Specs	Packaging Quantity			Carton Weight	Box Dimensions			Carton Dimensions										
		Per Bag	Per Box	Per Carton		W	D	H	W	D	H								
LS-U650-xxx-B200-A	Modules	100	500	2000	46.1 lb 20.9 kg	22.1	10.6	4.5	31.0	23.1	9.9	inch							
	Feet	65.6	328.1	1312.3									560	270	115	788	588	252	mm
	Meters	20	100	400															

Module Type	Specs	Packaging Quantity			Carton Weight	Box Dimensions			Carton Dimensions										
		Per Bag	Per Box	Per Carton		W	D	H	W	D	H								
LS-U650-xxx-B150-A	Modules	100	500	2000	46.1 lb 20.9 kg	22.1	10.6	4.5	31.0	23.1	9.9	inch							
	Feet	49.2	246.1	984.3									560	270	115	788	588	252	mm
	Meters	15	75	300															

**DIMENSION DRAWING**



1. UL ONLY - These products are only suitable for connection to a UL rated Class 2 power source rated 12 Volt or less.
2. UL ONLY - These products are intended for use only when connected to a power source that complies with UL rated Class 2 voltage and energy limited circuit.
3. UL ONLY -When these units are connected to a UL rated Class 2 circuit, they are not to draw a total wattage of greater than the secondary or output rating of the UL rated Class 2 power supply.
4. These products may be secured in place in the end product by any means available.
5. These products are suitable for use in dry, damp, and wet locations. Not suitable for submersed applications.