LITESPHERE2.0

Project: _____ TYPE: _____

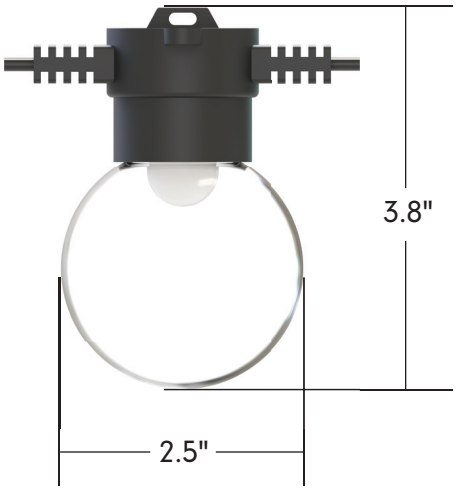
Product Features

- Tivoli's next evolution of Litesphere delivers a robust specification-grade strand with factory molded standard spacing for consistent quality from start to finish
- Litesphere 2.0 design provides optional suspended mounting or a twist-off cap for surface applications
- 12V DC Low voltage system for long runs
- IP67
- cULus
- 3 Year warranty

PENDING PATENTED PENDING

c UL us LISTED

Dimensions



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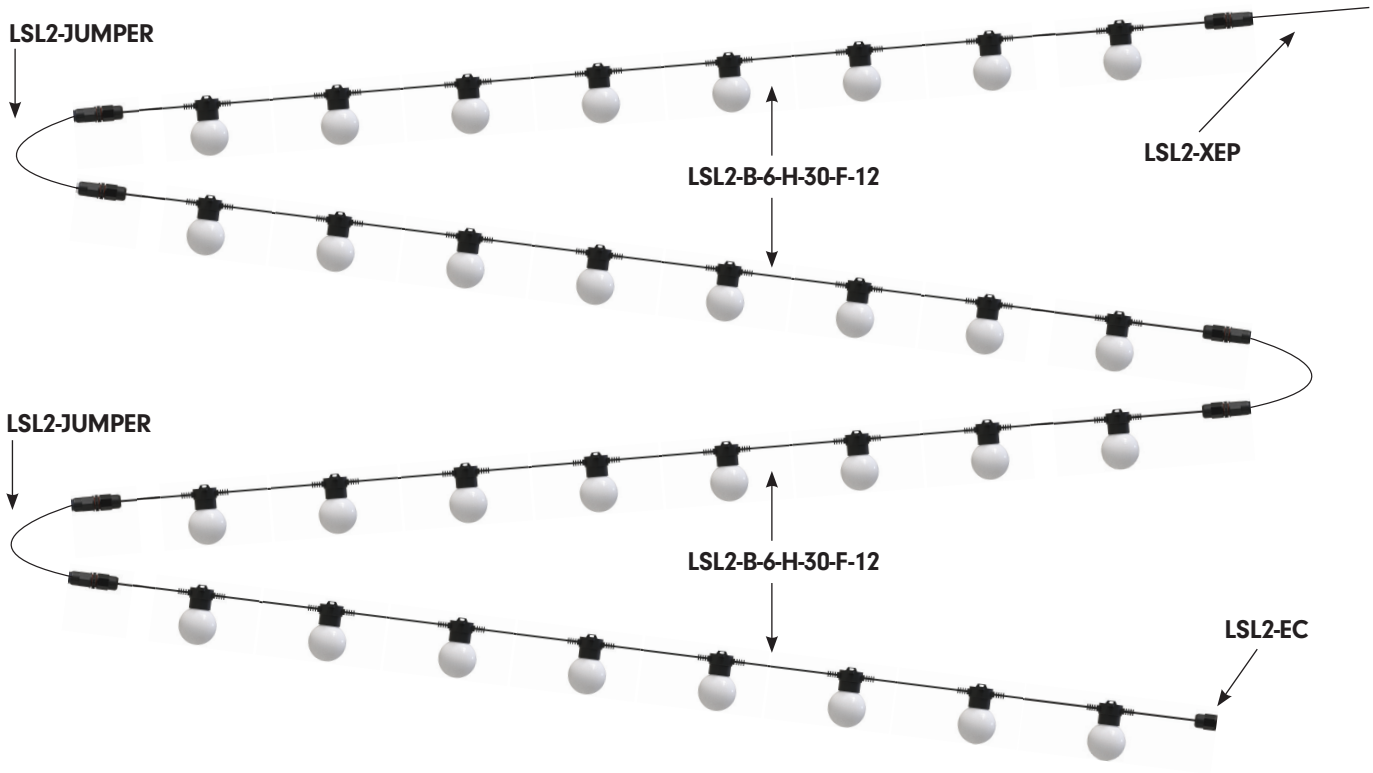
System Configuration Example



Strand Order Guide

Note: For suspension application, a catenary cable is required for proper installation. Please contact Tivoli for recommendations on unique mounting applications.

Product	Wire	Spacing	LED Type	LED Color	Globe	Voltage
LSL2						
Litesphere 2.0	**B** Black	**06** 6″ OC	**V** Very High Output	**19** 1900K	**C** Clear	**12** 12V DC
	W White	**12** 12″ OC	**H** High Output	**27** 2700K	**F** Frosted	
		18 18″ OC	**S** Standard Output	**30** 3000K	**O** Opal	
		24 24″ OC		**35** 3500K		
		36 36" OC		**40** 4000K		
		48 48" OC		**50** 5000K*		
				AM Amber*		
				RB Royal Blue*		
				RD Red*		
				GN Green*		
				YL Yellow*		

*Available in VHO LED only

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Power Lead Order Guide

Figure A - All Litesphere 2.0 are evenly cut between globes according to specified spacing.
Figure B - Power leads are added to the end cut, extending the total length of the power lead.

LSL2-XEP-X-XX
X = B (Black), W (White)
XX = 05 (5'), 10 (10'), 15 (15'), 20 (20'), 25 (25')
For custom length consult factory

Figure A

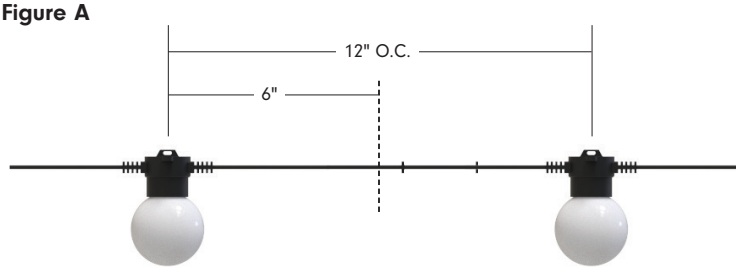
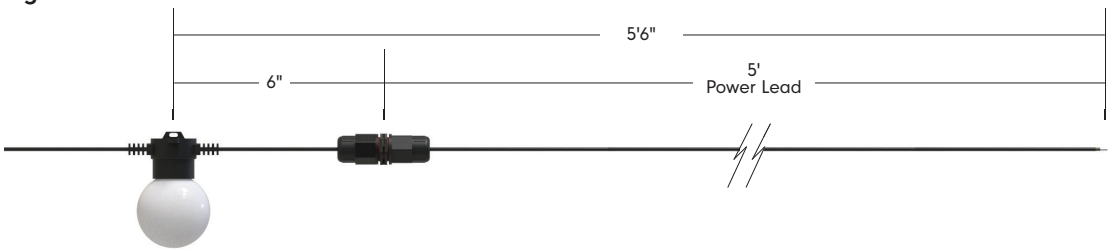


Figure B



Jumper Order Guide

Figure A - All Litesphere 2.0 are evenly cut between globes according to specified spacing.
Figure B - Jumpers are added between the cuts, extending the total length of wire between globes.

LSL2-JUMPER-X-XX
X = B (Black), W (White)
XX = 05 (5'), 10 (10')
For custom length, consult factory

Figure A

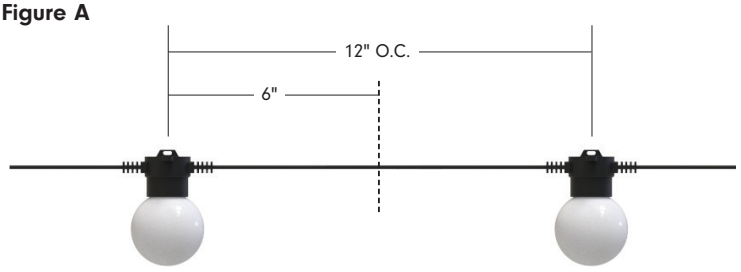
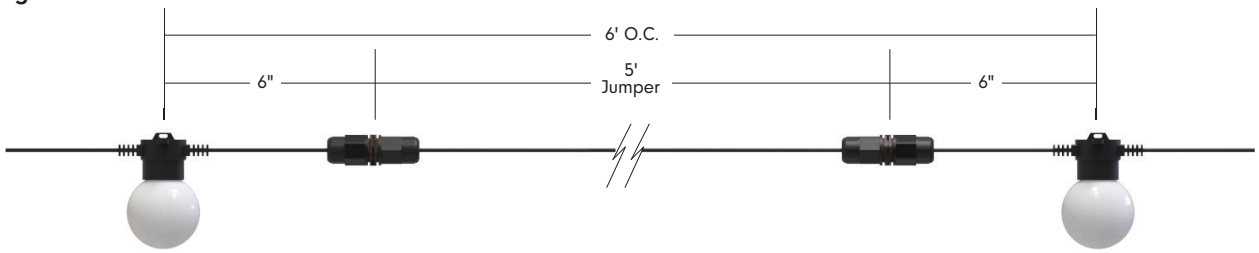


Figure B



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Specifications

Output - Standard Brightness						
On-Center Spacing	6"	12"	18"	24"	36"	48"
Lumens/ft	11	6	4	3	2	N/A
Watts/ft	0.17	0.09	0.06	0.04	0.03	0.02
Maximun Electrical Run	130'	180'	230'	250'	275'	275'

Output - High Output						
On-Center Spacing	6"	12"	18"	24"	36"	48"
Lumens/ft	29.9	15	10	7	5	N/A
Watts/ft	0.46	0.23	0.15	0.12	0.08	0.05
Maximun Electrical Run	80'	110'	130'	150'	175'	200'

Output - Very High Output						
On-Center Spacing	6"	12"	18"	24"	36"	48"
Lumens/ft	180	90.2	60	45	30	N/A
Watts/ft	1.92	0.96	0.64	0.48	0.32	0.24
Maximun Electrical Run	30'	55'	70'	80'	90	100'

Weights						
On-Center Spacing	6"	12"	18"	24"	36"	48"
lb/ft	0.33	0.28	0.24	0.20	0.17	0.13
lb/ft with catenary cable	0.35	0.30	0.26	0.22	0.19	0.15

Output - Based on 3000K Clear Globe	
Efficacy	Standard Brightness (40), High Output (46), Very High Output (94)
Electrical	
Input Voltage	12V DC
Power Consumption (W/LED)	Standard Brightness (.09), High Output (.23), Very High Output (.96)
Control	
Control System	0-10V, ELV, MLV, DMX 512 (Dim to 1% with an Infinity power supply and a 0-10V Lutron Diva dimmer)
Physical	
Dimensions	2.5"W x 3.8"H
Socket Housing	PVC
American Wire Gauge	14 AWG
Globe	PE
Mounting	Surface Mount, Suspended
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Certification and Testing	
Certification	cULus
Environment	Wet Location
Lumen Maintenance (L70) Hours	70,000
IP Rating	IP67
Warranty	3 Years

Mounting Options

SURFACE/FLUSH

For surface mount applications, remove the top suspension-plate by turning counter-clockwise until off. Place socket flush against the desired surface and mount using proper screws according to substrate.

SUSPENDED

Suspended mounting will use a combination of LS-Cable, LS-Locks with LS-UVZP. Tension the cable wire with our LS-TT (Tension Tool) for desired sag (Please adhere to local city code for suspended application).

Note: For suspension application, a catenary cable is required for proper installation.
Please contact Tivoli for recommendations on unique mounting applications.

Mounting Accessories

LS-CABLE-60 Catenary Cable Kit - 60'
(1/8" galvanized cable includes 2 cable locks for use with loads up to 200lbs)

LS-CABLE-110 Catenary Cable Kit - 110'
(1/8" galvanized cable includes 2 cable locks for use with loads up to 200lbs)

LS-CABLE-500 Catenary Cable Kit - 500'
(1/8" galvanized cable for use with loads up to 200lbs)

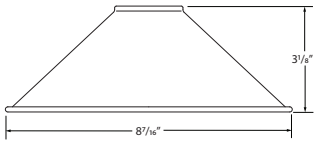
LS-LOCK-X Cable Lock
X = **2** (2 Locks), **4** (4 locks) Includes (1) cable release key. Cable Lock for 1/8th inch cable, Heavy-duty lockable fasteners support loads up to 200 lbs. Can be easily adjusted without the use of tools.

LS-TT
Catenary Cable Tensioning Tool up to 880lbs with minimal effort due to the 6:1 gear drive mechanism. Integral torque gauge controls the load applied to the wire, giving consistent tension every time and optimizing the life of the wire.

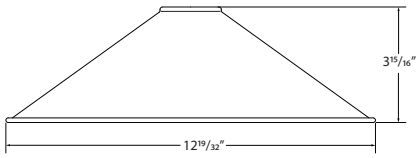
LS-UVZP-BK-XX
XX = 30 (30pcs), 50 (50pcs)
Black UV resistant, heavy duty ties.
Maximum weight up to 100 lbs./per tie.

Light Shades

HAT



SHADE-HT-BK-BK-8
Light Shade - HAT
8.3" Black Top, Black Bottom
Weight: 0.38 lb

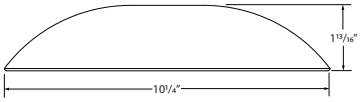


SHADE-HT-BK-BK-13*
Light Shade - HAT
12.6" Black Top, Black Bottom
Weight: 1.06 lb

SHADE-HT-BK-CO-13 *
Light Shade - HAT
12.6" Black Top, Copper Bottom
Weight: 1.06 lb

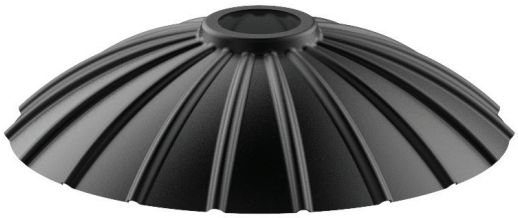
*Consult factory for lead time and MOQ

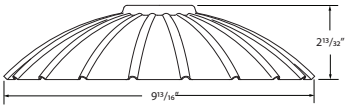
DISH



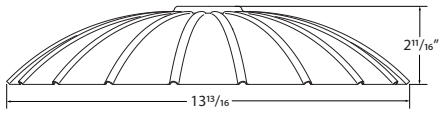
SHADE-DS-BK-BK-10
Light Shade - DISH
10.2" Black Top, Black Bottom
Weight: 0.72 lb

FLOWER



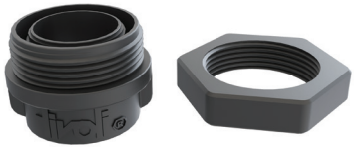


SHADE-FL-BK-BK-10
Light Shade - FLOWER
9.8" Light Shade , Black Top, Black Bottom
Weight: 0.54 lb



SHADE-FL-BK-BK-13
Light Shade - FLOWER
13.8" Light Shade, Black Top, Black Bottom
Weight: 1.1 lb

Accessories



SHADE-ADP-LSL2-XX-01 2.0 Light Shade Adapter
X = BK (Black), WH (White)
PVC Black Adapter - Sold individually.

SHADE-ADP-LSL2-XX-25 2.0 Light Shade Adapter
X = BK (Black), WH (White)
PVC Black Adapter Kit - Sold in packs of 25

SHADE-ADP-LSL2-XX-50 2.0 Light Shade Adapter
X = BK (Black), WH (White)
PVC Black Adapter Kit - Sold in packs of 50

Replacement Parts

Very High Output

Standard & High Output

LSL-19-V-12
12V Wedge base
1900K
LSL-27-V-12
12V Wedge base
2700K
LSL-30-V-12
12V Wedge base
3000K
LSL-35-V-12
12V Wedge base
3500K
LSL-40-V-12
12V Wedge base
4000K
LSL-50-V-12
12V Wedge base
5000K

LSL-AM-V-12
12V Wedge base
Amber
LSL-RD-V-12
12V Wedge base
Red
LSL-RB-V-12
12V Wedge base
Royal Blue
LSL-GN-V-12
12V Wedge base
Green
LSL-YL-V-12
12V Wedge base
Yellow

STANDARD
LSL-19-S-12
12V Wedge base
1900K
LSL-27-S-12
12V Wedge base
2700K
LSL-30-S-12
12V Wedge base
3000K
LSL-35-S-12
12V Wedge base
3500K
LSL-40-S-12
12V Wedge base
4000K

HIGH OUTPUT
LSL-19-H-12
12V Wedge base
1900K
LSL-27-H-12
12V Wedge base
2700K
LSL-30-H-12
12V Wedge base
3000K
LSL-35-H-12
12V Wedge base
3500K
LSL-40-H-12
12V Wedge base
4000K

LST-CG
Litesphere 2.0
Clear globe
sold each

LST-OG
Litesphere 2.0
Opal globe
sold each

LST-FG
Litesphere 2.0
Frosted globe
sold each

LSL2-EC-X
X = B (black), W (white)
Litesphere 2.0 End-Cap
Weight: 0.0375 lb
sold each

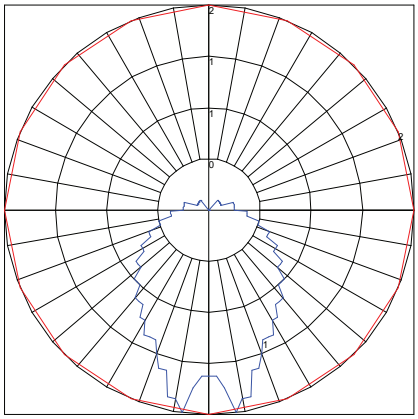
Photometrics

Frosted Globe - Based on 3000K LED

Standard Brightness

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
1.6	0	7.5

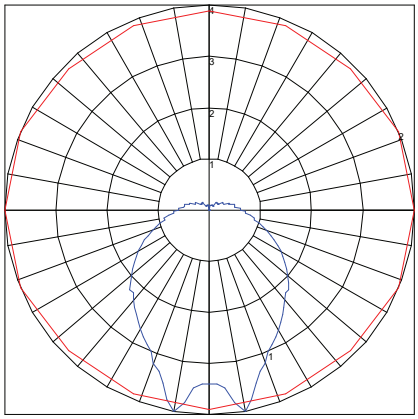


Maximum Candela = 1.6 Located At Horizontal Angle = 0, Vertical Angle = 7.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (7.5) (Through Max. Cd.)

High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
4	0	10

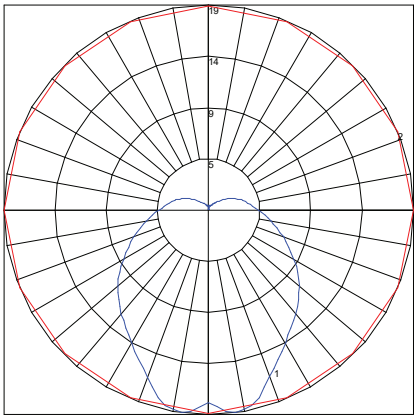


Maximum Candela = 4 Located At Horizontal Angle = 0, Vertical Angle = 10
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)

Very High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
18.5	0	7.5



Maximum Candela = 18.5 Located At Horizontal Angle = 0, Vertical Angle = 7.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (7.5) (Through Max. Cd.)

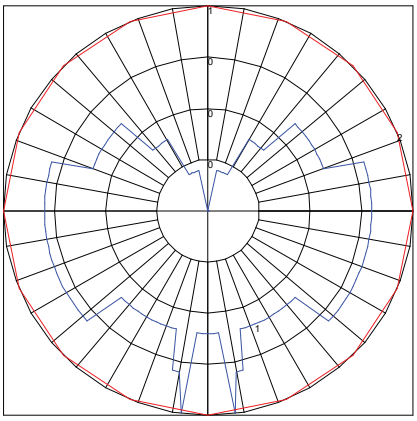
Photometrics

Opal Globe - Based on 3000K LED

Standard Brightness

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
0.5	0	7.5

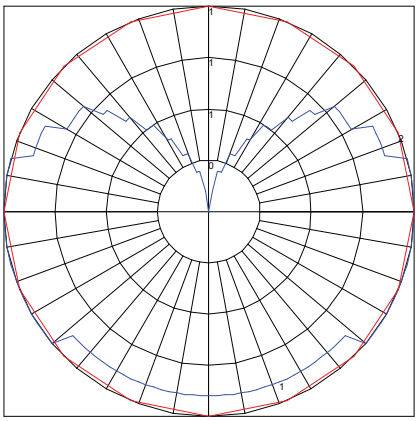


Maximum Candela = .5 Located At Horizontal Angle = 0, Vertical Angle = 7.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (7.5) (Through Max. Cd.)

High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
1	0	50

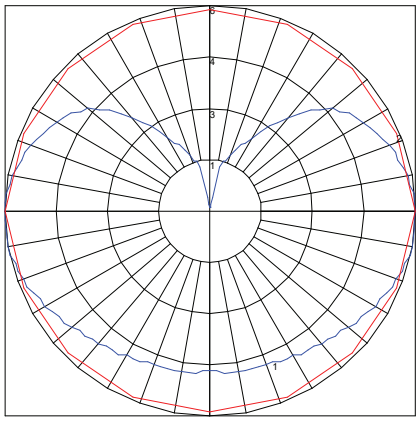


Maximum Candela = 1 Located At Horizontal Angle = 0, Vertical Angle = 50
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (50) (Through Max. Cd.)

Very High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
5.9	0	77.5



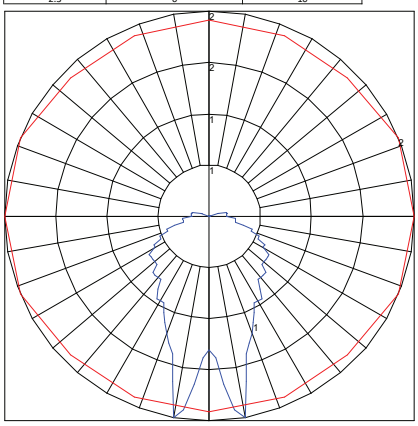
Maximum Candela = 5.9 Located At Horizontal Angle = 0, Vertical Angle = 77.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (77.5) (Through Max. Cd.)

Clear Globe - Based on 3000K LED

Standard Brightness

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
2.3	0	10

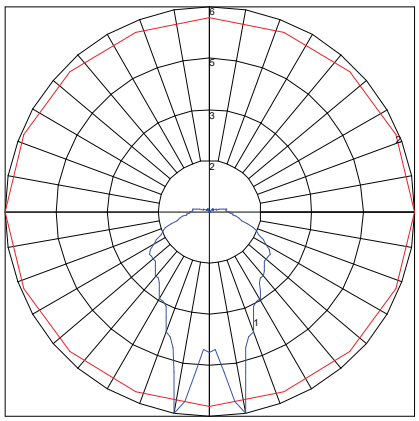


Maximum Candela = 2.3 Located At Horizontal Angle = 0, Vertical Angle = 10
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)

High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
6.1	0	10

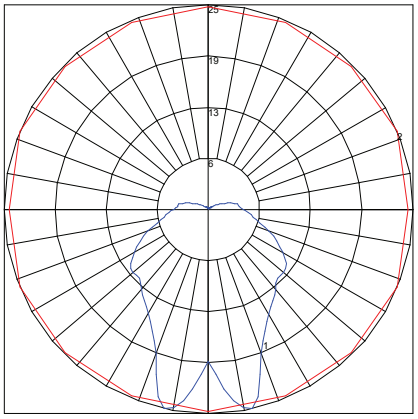


Maximum Candela = 6.1 Located At Horizontal Angle = 0, Vertical Angle = 10
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)

Very High Output

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

POLAR GRAPH AND MAXIMUM CANDELA INTENSITY		
Maximum Candela	Location - Horizontal Angle	Location - Vertical Angle
25.3	22.5	12.5



Maximum Candela = 25.3 Located At Horizontal Angle = 22.5, Vertical Angle = 12.5
1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (12.5) (Through Max. Cd.)

Power Supplies

ADNM - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-60-1-5-12-D	Indoor / Outdoor	100-277V AC 50/60 HZ	12V DC	1	60W	5A
	ADNM-80-1-5-12-D				1	60W	5A
	ADNM-150-2-5-12-D				2	2x60W	2x5A
	ADNM-240-3-5-12-D				3	3x60W	3x5A
	ADNM-320-4-5-12-D				4	4x60W	4x5A

ADNM - 0-10V DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-60-1-5-12-DOT	Indoor / Outdoor	100-277V AC 50/60 HZ	12V DC	1	60W	5A
	ADNM-80-1-5-12-DOT				1	60W	5A
	ADNM-150-2-5-12-DOT				2	2x60W	2x5A
	ADNM-240-3-5-12-DOT				3	3x60W	3x5A
	ADNM-320-4-5-12-DOT				4	4x60W	4x5A

ADNM - DMX SINGLE ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-60-1-5-12-DIN	Indoor / Outdoor	100-277V AC 50/60 HZ	12V DC	1	60W	5A
	ADNM-80-1-5-12-DIN				1	60W	5A
	ADNM-150-2-5-12-DIN				2	2x60W	2x5A
	ADNM-240-3-5-12-DIN				3	3x60W	3x5A
	ADNM-320-4-5-12-DIN				4	4x60W	4x5A

ADNM - DMX MULTI ADDRESS

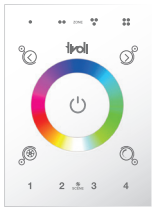
DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-150-2-5-12-DIN-2	Indoor / Damp	100-277V AC 5o//60 Hz	12V DC	2	2x60W	5A
	ADNM-240-3-5-12-din-3				3	3x60W	3x5A

INFINITY - MLV / ELV / 0-10V / PWM / TRIAC

Dim to 1% with a 0-10V Lutron Diva dimmer (by others)

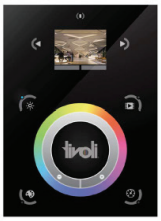
DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY
Infinity Series Class 2 Transformer	INF-J-30-1-2.5-12	Indoor / Outdoor	100 - 277V AC	12V DC	1	30W	3W	2.5A
	INF-J-60-1-5-12				1	60W	6W	5A
	INF-J-180-3-5-12				3	3x60W	3x6W	3x5A
	INF-J-300-5-5-12				5	5x60W	5x6W	5x5A

Controls



Touchscreen

TVOQ-1-WH
White
512 DMX channel, 16 scene,
4 zone, glass touch screen



Touchscreen

TVOQ-10-XX-7
XX = BK (Black), WH (White)
1024 DMX channel, 500 scene,
10 zone, glass touch screen

Touchscreen

TVOQ-2-BK
Black
512 DMX channel, 99 scene,
1 zone, glass touch screen