MODA GRAZE® EXTERIOR ELV



Client:	Project Name:		
MODA Contact:			
SKU:		PO#:	Quantity:
Notes:			



Specification Grade Premium Exterior Graze Fixture.

MODA GRAZE Exterior is a new patent pending cove lighting system designed for exterior applications. Utilizing MODA's latest software and dimming technology with its onboard dimming chipset and MODA firmware, this series can dim to 0% smoothly without any flicker or noise and simultaneously synchronize dim with every fixture. Electronic Low Voltage dimming has no minimum run lengths. With MODA's methods of precision and high standards of work, MODA achieves perfect illumination. Color Rendering Index is at a MODA standard of 94-98. R1 - R15 values are in excess of 90. No striations, no color over angle, and no dark spots.

Small in physical size, yet powerful with up to 1200 lm/ft. Wall wash any applications with a choice of 6°, 10°, 25°, 40°, 10°x40°, 30°x60° or forward throw asymmetric beam patterns for SO+ and HO or 30°x100° for LO, SO or HO+ Lumen packages. Standard color temperatures available are 2200K, 2700K, 3000K, 3500K, and 4000K. Other CCT are available by request. 100-277V AC, 50/60Hz power input allows these fixtures to be installed anywhere in the world. New patent pending locking bracket rotates 180° for a multitude of light directions. Rugged aluminum design. Protected from corrosion and harsh weather conditions by MODA GUARD—a tough seal which protects the fixture. Fast installation is achieved with MODA KWIK CONNECT plugs and install-integral thumb latch connectors. Choice of five lumen packages ranging from 200 lm/ft to 1200 lm/ft. Available in 1ft & 4ft sections. Series is designed for driver or light engine to be factory replaced at its end of life or recycled.

Designed and developed in Las Vegas, USA by MODA.



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PHYSICAL

Dimensions	L: 1ft 1 25/32in (349.69mm) L: 4ft 19/32in (1.23m)	W: 2 13/16in(71.81mm) H: 2 7/8in(73.42mm)				
Applications	Graze, Accent & Indirect G	Seneral Illumination				
Construction	,. ,	Pure Aluminum Body, Polycarbonate Mounting Bracket and Lens				
Ingress Protection	Wet Location IP66					
Thermal Management	MODA Aluminum Heat Sink					
Beam Angle	6°, 10°, 25°, 40°, 10°x40°, 30°x60°, forward throw asymmetric, or 30°x100° optic options					
Fixture Connections	Integral Male & Female Co	onnectors				
Operating Temperature	e-40°F ~ 122°F (-40°C ~ 3	50°C)				
Storage Temperature	-40°F ~ 176°F (-40°C ~ 8	80°C)				
Humidity	0-95% Non Condensing					

OUTPUT

CCT & SDCM	2200K, 2700K, 3000K, 3500K, 4000K 2 Step MacAdam Ellipse
Color Bin Tolerance	Single Bin
CRI	94 - 98
Lumen Maintenance	90,000 Hours L70 @ 25°C 70,000 Hours L70 @ 50°C
Testing Data	Light Data LM-79-08 & LM-80-08

ELECTRICAL

Input Voltage	100-277V AC 50Hz/60Hz
Control	Electronic Low Voltage Reverse Phase Trailing Edge
Power Factor	≥ 0.98

BEAM ANGLES

	LO	SO	SO+	НО	HO+
6°			•	•	
25°			•	•	
40°			•	•	
10°x40°			•	•	
30°x60°			•	•	
Forward Throw			_	_	
Asymmetric			•	•	
30°x100°	•	•			•

CCT

		LO	SO	SO+	НО	HO+
	22K	•	•			•
	27K	•	•	•	•	•
1 Foot	3K	•	•	•	•	•
	35K	•	•	•	•	•
	4 K	•	•	•	•	•
	22K	•	•			•
	27K	•	•	•	•	•
4 Foot	3K	•	•	•	•	•
	35K	•	•	•	•	•
	4 K	•	•	•	•	•

• Available

MODA TECHNOLOGY

BIN™

modo hardware™ MOCO THERMAL MANAGEMENT™

moda**phosphor**™ MOda AIRFLOW™

MOda HIGH CRI™ MOda **COMMUNICATE™**

moda driver™ modakwik connect™

moda**guard**™ modaseal™











Certification

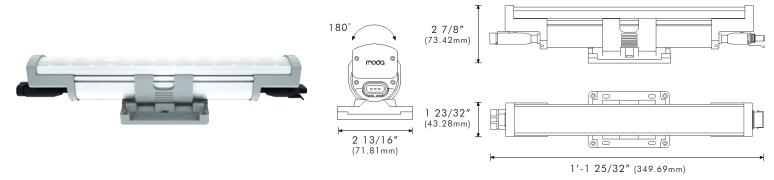
Tested to UL & CSA by Intertek For Use in USA & CANADA. Exceeds ANSI C78.377-2015, CE,

C-Tick, RoHS, & WEEE Compliant.

Class

Warranty 3 Year Limited Warranty





ELV

		6	0	1.	0°	2.5	5°	40	0°	10°>	×40°	30°	،60°
Output	ССТ	Lumens	Efficacy										
	27K	940.08	94.00	928.08	92.80	914.08	91.40	904.08	90.40	895.08	89.50	892.08	89.08
£0.+	3 K	942.05	94.20	930.05	93.00	916.05	91.60	906.05	90.60	897.05	89.70	894.50	89.40
\$O+ - -	35K	945.05	94.50	933.05	93.30	919.05	91.90	909.05	90.90	900.05	90.00	897.05	89.70
	4K	951.05	95.10	939.05	93.90	925.05	92.50	915.05	91.50	906.05	90.06	903.05	90.30
но -	27K	1190.26	119.02	1178.26	117.82	1164.26	116.42	1154.26	115.42	1145.26	114.52	1142.26	114.22
	3 K	1320.36	132.03	1298.36	129.83	1284.36	128.43	1322.10	132.21	1265.36	126.53	1262.36	126.23
	35K	1358.10	135.81	1346.10	134.61	1322.10	133.21	1322.10	132.21	1313.10	131.31	1310.10	131.01
	4K	1407.15	140.71	1395.15	139.51	1381.15	138.11	1371.15	137.11	1362.15	136.21	1359.15	135.91

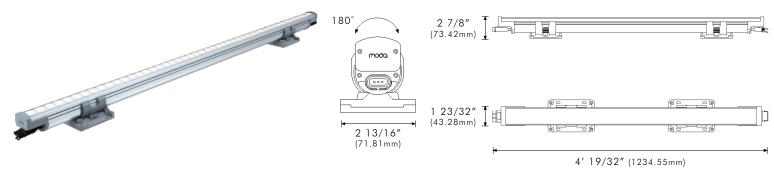
^{*2200}K not available for SO+ or HO

		Forward Throw			
		Asymmetric			
Output	CCT	Lumens	Efficacy		
	27K	890.08	89.00		
SO+	3 K	892.05	89.20		
	35K	895.05	89.50		
	4K	901.05	90.10		
но	27K	1140.26	114.02		
	3 K	1260.36	126.03		
	35K	1308.10	130.81		
	4K	1359.15	135.91		

		30°x100°				
Output	ССТ	Lumens	Efficacy			
	22K	250.50	62.00			
	27K	310.00	77.00			
LO	3 K	322.00	83.00			
	35K	344.00	86.00			
	4K	352.00	88.00			
	22K	339.80	67.96			
	27K	450.67	90.13			
so	3 K	490.25	98.05			
	35K	491.33	98.26			
	4K	493.84	98.76			
	22K	1085.20	108.52			
	27K	1219.74	121.97			
HO+	3 K	1223.56	122.35			
	35K	1236.09	123.60			
	4K	1240.01	124.00			

Output	Power Consumption	Max Run L	ength	
	100-277V AC	120V AC	277V AC	
LO	4 W	180 ft	360 ft	
so	5W	120 ft	240 ft	
SO+	10W	60 ft	120 ft	
НО	10W	60 ft	120 ft	
HO+	10W	60 ft	120 ft	





ELV

		6	0	10	0°	2.5	5°	40	0°	10°>	(40°	30°	60°
Output	ССТ	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy
	27K	3310.67	82.76	3298.67	82.46	3284.68	82.11	3274.68	81.86	32.65.68	81.64	3262.68	81.56
5 0+	3 K	3318.23	82.95	3306.23	82.65	3292.23	82.30	3282.23	82.05	3273.23	81.83	3270.23	81.75
\$O+	35K	3335.20	83.38	3323.20	83.08	3309.20	82.73	3299.10	82.48	3290.20	82.25	3287.20	82.18
	4K	3358.40	83.96	3346.40	83.66	3332.40	83.31	3322.40	83.06	3313.40	82.83	3310.40	82.76
но	27K	4314.02	107.85	4302.02	107.55	4288.02	107.20	4278.02	106.95	4269.02	106.72	4266.02	106.65
	3 K	4785.40	119.63	4773.40	119.34	4759.40	118.98	4749.40	118.73	4740.40	118.51	4737.40	118.43
	35K	4982.40	124.56	4956.40	123.91	4956.40	123.91	4946.40	123.66	4937.40	123.43	4934.40	123.36
	4K	5162.60	129.06	5150.60	128.77	6136.60	128.41	5126.60	128.16	5117.60	127.94	5114.60	127.86

*2200K not available for SO+ or HO

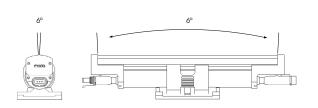
		Forward Throw		
		Asymmetric		
Output	ССТ	Lumens	Efficacy	
	27K	3260.68	81.51	
SO+	3 K	3292.23	82.30	
30+	35K	3285.20	82.13	
	4K	3308.40	32.71	
	27K	4264.02	106.60	
но	3 K	4735.40	118.38	
пО	35K	4932.40	123.31	
	4K	5112.60	127.81	

		30°x	100°
Output	ССТ	Lumens	Efficacy
	22K	1002.00	62.62
	27K	1234.00	77.00
LO	3 K	1316.00	82.00
	35K	1366.00	85.00
	4K	1406.00	87.00
	22K	1368.11	72.00
	27K	1783.10	93.84
SO	3 K	1820.18	95.79
	35K	1900.45	100.02
	4K	1975.36	103.96
	22K	4300.80	107.52
	27K	4587.96	114.69
HO+	3 K	4794.28	119.85
	35K	4844.63	121.11
	4K	4960.04	124.00

Output	Power Consumption	Max Run Length		
	100-277V AC	120V AC	277V AC	
LO	16W	180 ft	360 ft	
so	19W	120 ft	240 ft	
SO+	40W	60 ft	120 ft	
но	40W	60 ft	120 ft	
HO+	40W	60 ft	120 ft	



6° Beam Angle



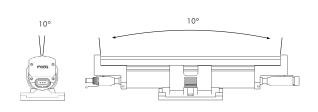
Polar Candela Distribution (HO 4000K)



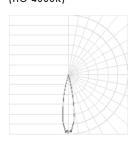
Illuminance at a Distance (HO 4000K)

	Center E	Beam FC	Beam Width	
	1 Foot	4 Foot		
2.0 ft	41.43 fc	152.02 fc	0.4 ft	0.3 ft
4.0 ft	10.35 fc	38.00 fc	0.8 ft	0.7 ft
6.0 ft	5.17 fc	19.00 fc	1.2 ft	1.1 ft
8.0 ft	2.58 fc	9.50 fc	1.6 ft	1.5 ft
10.0 ft	1.29 fc	4.75 fc	2.1 ft	2.0 ft
12.0 ft	1.03 fc	3.80 fc	2.5 ft	2.4 ft
	✓ Vert. Sp	read: 6°	✓ Horiz. Spread: 6°	

10° Beam Angle



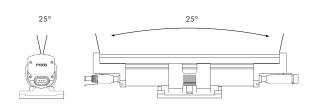
Polar Candela Distribution (HO 4000K)



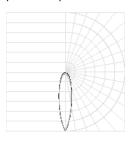
Illuminance at a Distance (HO 4000K)

	Center E	leam FC	Beam Width	
	1 Foot	4 Foot		
2.0 ft	60.76 fc	224.32 fc	0.4 ft	0.3 ft
4.0 ft	15.19 fc	56.08 fc	0.8 ft	0.7 ft
6.0 ft	7.59 fc	28.04 fc	1.2 ft	1.1 ft
400	2 70 (-	14.02 fc	1.6 ft	1.5 ft
8.U II	3.79 fc	14.U2 TC	1.0 π	1.5 π
10.04	1.89 fc	7.01 fc	2.1 ft	2.0 ft
10.011	1.0710	7.01 IC	2.111	2.0 11
12.0 ft	1.51 fc	5.60 fc	2.5 ft	2.4 ft
	✓ Vert. Sp	read: 10°		

25° Beam Angle



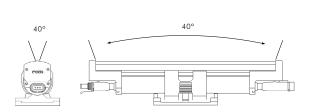
Polar Candela Distribution (HO 4000K)



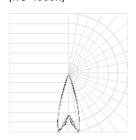
Illuminance at a Distance (HO 4000K)

	Center E	Beam FC	Beam Width	
	1 Foot	4 Foot		
2.0 ft	37.34 fc	224.32 fc	0.5 ft	0.5 ft
4.0 ft	9.33 fc	56.08 fc	1.0 ft	1.0 ft
6.0 ft	4.66 fc	28.04 fc	1.5 ft	1.6 ft
8.0 ft	2.33 fc	14.02 fc	2.0 ft	2.2 ft
10.0 ft	1.16 fc	7.01 fc	2.5 ft	2.7 ft
12.0 ft	0.93 fc	5.60 fc	3.0 ft	3.2 ft
	✓ Vert. Sp	read: 25°	✓ Horiz. Spread: 25°	

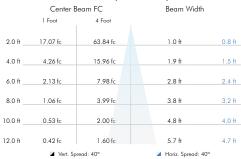
40° Beam Angle



Polar Candela Distribution (HO 4000K)

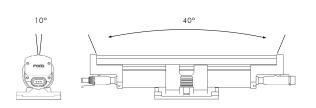


Illuminance at a Distance (HO 4000K)



MOCOLIGHT[®] PRODUCT GUIDE

10°X40° Beam Angle



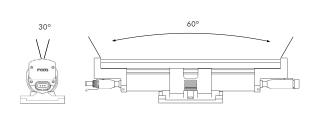
Polar Candela Distribution (HO 4000K)



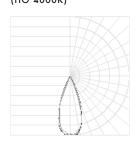
Illuminance at a Distance (HO 4000K)

	Center E	Beam FC	Beam Width	
	1 Foot	4 Foot		
2.0 ft	42.72 fc	160.52 fc	0.7 ft	0.5 ft
4.0 ft	10.68 fc	40.13 fc	1.5 ft	1.0 ft
6.0 ft	5.34 fc	20.06 fc	2.2 ft	1.4 ft
8.0 ft	2.67 fc	10.03 fc	3.0 ft	1.9 ft
10.0 ft	1.33 fc	5.01 fc	4.6 ft	2.4 ft
12.0 ft	1.06 fc	4.01 fc	4.4 ft	3.0 ft
	✓ Vert. Sp	read: 10°	✓ Horiz. Spread: 40°	

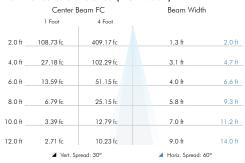
30°x60° Beam Angle



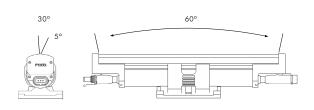
Polar Candela Distribution (HO 4000K)



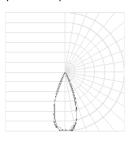
Illuminance at a Distance (HO 4000K)



30°x60°x5° Beam Angle



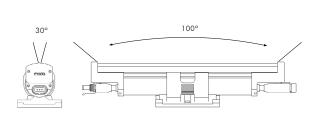
Polar Candela Distribution (HO 4000K)



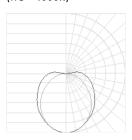
Illuminance at a Distance (HO 4000K)

	Center E	Beam FC	Beam Width
	1 Foot	4 Foot	
2.0 ft	37.34 fc	59.40 fc	0.5 ft 0.5 ft
4.0 ft	9.33 fc	14.85 fc	1.0 ft 1.0 ft
6.0 ft	4.66 fc	7.42 fc	1.5 ft 1.6 ft
8.0 ft	2.33 fc	3.71 fc	2.0 ft 2.2 ft
10.0 ft	1.16 fc	1.85 fc	2.5 ft 2.7 ft
12.0 ft	0.93 fc	1.48 fc	3.0 ft 3.2 ft
	✓ Vert. Sp	read: 30°	▲ Horiz. Spread: 60°

30°x100° Beam Angle

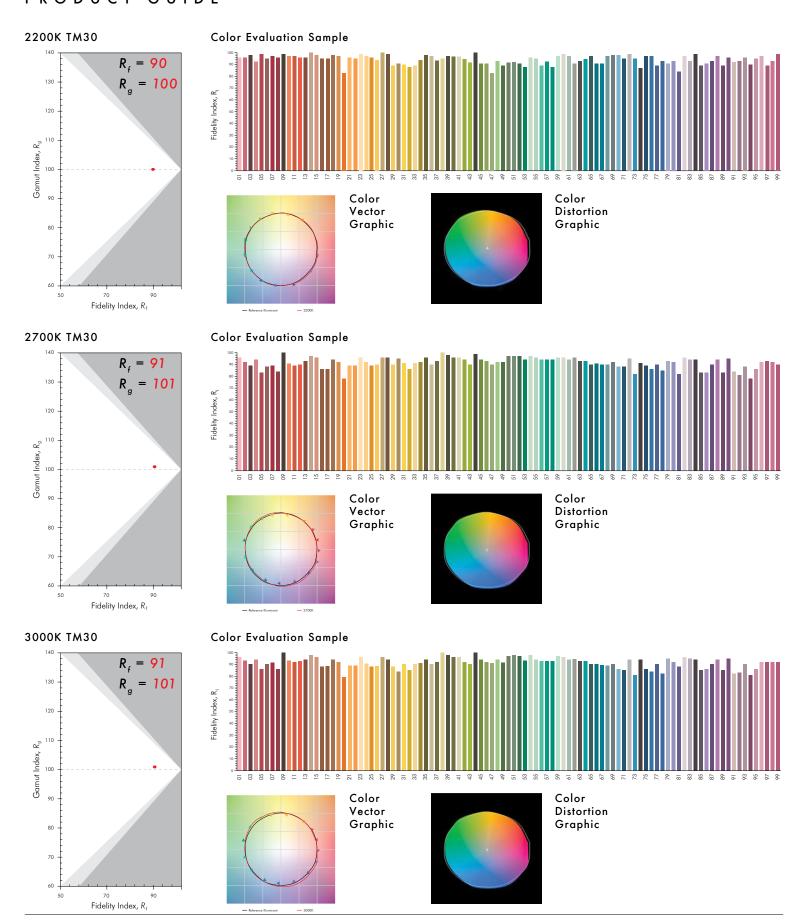


Polar Candela Distribution (HO+ 4000K)

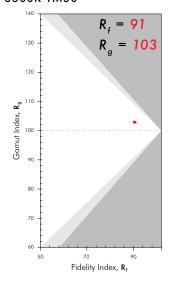


Illuminance at a Distance (HO+ 4000K)

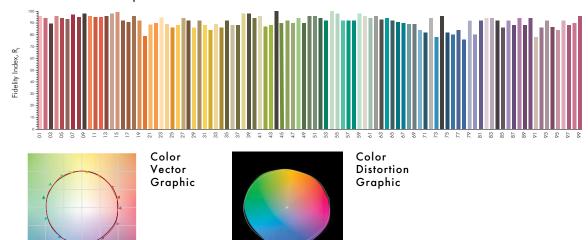
monimum de di di Bisianco (110 il 4000k)					
	Center	Beam FC	Beam Width		
	1 Foot	4 Foot			
2.0 ft	114.8 fc	459.20 fc	1.3 ft	2.0 ft	
4.0 ft	28.7 fc	114.80 fc	3.1 ft	4.2 ft	
6.0 ft	14.3 fc	57.40 fc	4.0 ft	6.6 ft	
8.0 ft	7.1 fc	28.7 fc	5.8 ft	9.3 ft	
10.0 ft	3.5 fc	14.30 fc	7.0 ft	11.2 ft	
12.0 ft	2.8 fc	11.40 fc	9.0 ft	14.0 ft	
	✓ Vert. S	pread: 30°	Horiz. Spread: 10	0°	



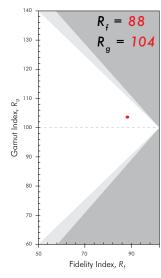




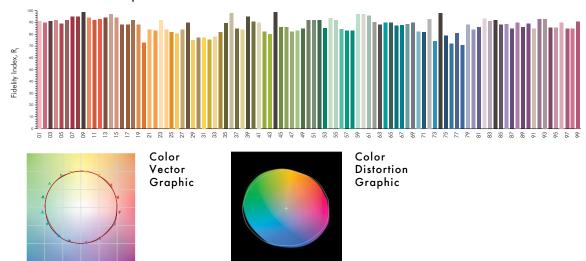
Color Evaluation Sample



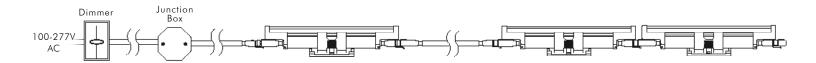
4000K TM30



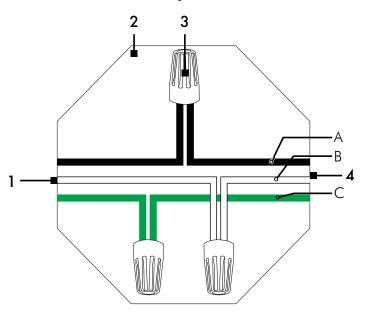
Color Evaluation Sample



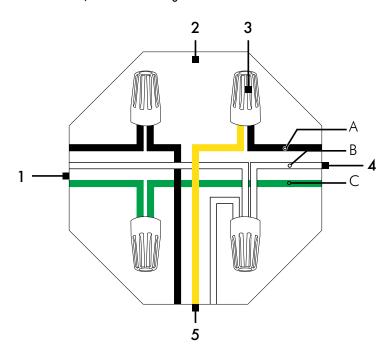




UL / cUL Non-dimming



UL / cUL ELV Dimming



Wiring Legend

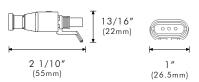
1	Power 100-277V AC
2	Junction Box
3	Wiring Nuts
4	3 Pin Leader Cable
5	ELV Dimmer

3 Pin Leader Cable

		UL/cUL	CE/CCC*
Α	Live 100-277V AC	■ Black	- Brown
В	Neutral	== White	- Blue
С	Ground	G reen	Green/ Yellow

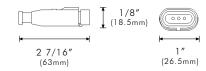
*Not illustrated

ELV Connectors

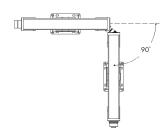


Male

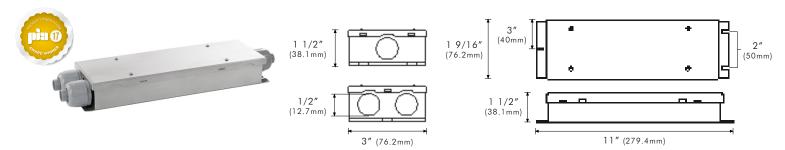
Female



Angle Adjustment



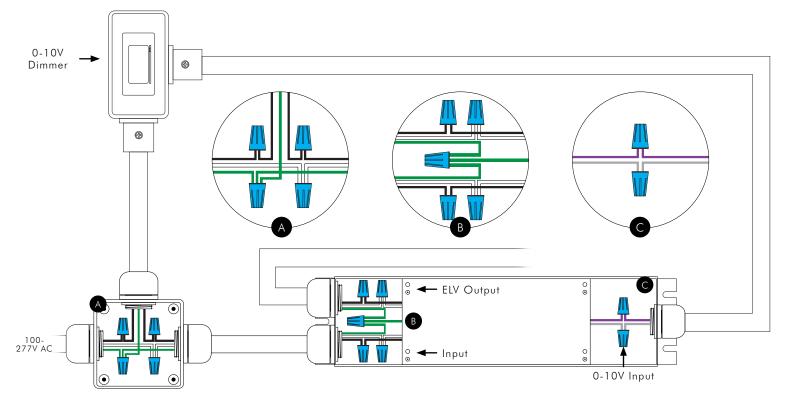




MODA BRIDGE 1

Converting 0-10V to ELV.

MODA BRIDGE 1 solves many installation issues. It accepts a standard 0-10V signal from most dimmers and dimming systems and internally converts this signal into a Electronic Low Voltage (ELV) signal. Thus enabling 0-10V control of an ELV fixture. It is optimized to perform precise smooth flicker free dimming down to 0%. Simple wiring with its integral 1/2" holes which accepts liquid tight or interior conduit connectors. Wire to any 100-277V 50/60 Hz feed. Power up to 840W of fixtures at 120V, 1600W at 230V, and 1900W at 277V. Fully potted enables the installer to mount this product virtually anywhere with its Wet Location IP65 rating. Fully protected from surge, short circuit, open circuit and over temperature. Power Input and data interface protected with High Grade Surge Protection. Designed and developed by MODA LIGHT, Las Vegas USA



Input				
	UL/cUI	L	CE/CC	C*
Live 100-277V AC	_	Black		Brown
Neutral	=	White	_	Blue
Ground		Green		Green/Yellow
0-10V / Data +		Purple		Purple
0-10V / Data -		Grey		Grey

	UL/cU	L	CE/CC	C*
Live 100-277V AC		Black		Brown
Neutral		White		Blue
Ground		Green		Green/Yellow
				*Not illustrated

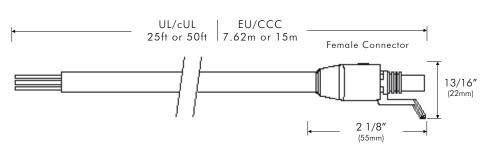
*Not illustrated



ELV Leader Cables

Moda Cove Exterior 3 Pin Leader Cables

	UL/cUL	EU/CCC
Lengths	25ft and 50ft	7.62m and 15m
Color	Black	Black



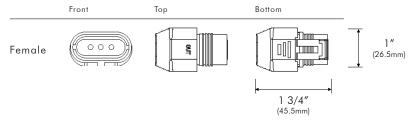
Pin Assignment



Female

		UL/cUL	EU/CCC
	Live 100-277V	Black	Brown
- 2	2 Ground	Green	Yellow/Green
	3 Neutral	White	Blue

Connectors



ELV Jumper Cables

Moda Cove Exterior 3 Pin Jumper Cables

	UL/cUL	EU/CCC	
Lengths	1ft and 4ft	300mm and 1m	
Color	Black	Black	
Male Connector 2" (52mm)	UL/cUL EU/CCC 1ft or 4ft 300m or 1m	Female Connector 2 1/8" (55mm)	13/16" (22mm)
Connectors			

Neutral	Whi
	3 ² 1

Live 100-277V

Ground

2

000 Male

Pin Assignment

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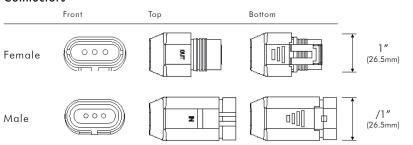
Female UL/cUL

Black

Green

		UL/cUL	EU/CCC
1	Live 100-277V	Black	Brown
2	Ground	Green	Yellow/Green
3	Neutral	White	Blue

Connectors



EU/CCC

Yellow/Green

Brown

Blue





COMPLETE SKU SAMPLE: MGE-HO-S1-S-22H-1-6

A - FIXTURE	&	LOCATION
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MGE	_	Moda Graze Exterior
B - LIGHT	OUTPUT	
LO	_	Low Output
SO	_	Standard Output
SO+	_	Standard Output Plus
НО	_	High Output
HO+	_	High Output Plus
C - SERIES	5 NUMBER	
S1	_	Series 1
D - PROD	uct finish	
S	-	Silver

E - FIXTURE & LOCATION

22H*	_	2200K
27H	_	2700K
3H	_	3000K
35H	_	3500K
4 H	_	4000K

^{*}Not available for SO+ and HO

F - LENGTH

1	_	1FT
4	_	4FT

G - OPTIC

6*	_	6° x 6°
10*	_	10° x 10°
25*	_	25° x 25°
40*	_	40° x 40°
140*	_	10° x 40°
360*	_	30° x 60°
365*	_	Forward Throw Asymmetric
310**	_	30° x 100°

^{*}Available only in SO+ and HO

^{**}Available only in LO, SO and HO+ $\,$

ACCESSORIES	DESCRIPTION	SKU
Leader Cable US 3 Pin 25ft	Power to first fixture of run	MLCE-US-3PIN-B-25FT
Leader Cable US 3 Pin 50ft	Power to first fixture of run	MLCE-US-3PIN-B-50FT
Jumper Cable US 3 Pin 1ft	Connection between fixtures	MJCE-US-3PIN-B-1FT
Jumper Cable US 3 Pin 4ft	Connection between fixtures	MJCE-US-3PIN-B-4FT
Leader Cable EU 3 Pin 7.62m	Power to first fixture of run	MLCE-EU-3PIN-B-7.62M
Leader Cable EU 3 Pin 15m	Power to first fixture of run	MLCE-EU-3PIN-B-15M
Jumper Cable EU 3 Pin 300mm	Connection between fixtures	MJCE-EU-3PIN-B-300MM
Jumper Cable EU 3 Pin 1m	Connection between fixtures	MJCE-EU-3PIN-B-1M
Terminator 3 Pin	Must be fixed to last fixture for safety	MTE-3PIN-B
Exterior Bracket Lock	Holds fixture in place for vertical installations	MCGE-BL-G

CONTROLS	DESCRIPTION	SKU
Bridge 1 US	Allows user to convert a 0-10V dimming signal into an ELV dimming signal. North American Model	250-0000