#### MODA MINI GRAZE® INTERIOR GLOWDIM



Client:				_ Project Name:				
MODA	Contact: _			E-Mail:				
Type: _						PO#:	 Quantity:	
Notes:								
	Pin (8)	pin B	Pin B		00 00 0			

#### Miniature Line Voltage Graze Fixture.

MODA MINI GRAZE GLOWDIM INTERIOR is an award winning, patented, miniature line voltage graze lighting system that combines the uniquely designed grazing optics of Mini Graze with the industry leading GLOWDIM technology. MODA GLOWDIM TECHNOLOGY enabled fixtures when wired to a 0-10V dimmer to transition at 100% from 2700K down to 1800K, or 3500K down to 2200K, when dimmed. Generally called "Dim to Warm" this feature strongly resembles incandescent illumination and transforms restaurants, bars and any hospitality location creating moods and warm environments. GLOWDIM utilizes MODA's high standard for perfect and precise illumination, with custom firmware programmed onto our microprocessors.

GLOWDIM is much more than "Dim to Warm". Fixtures that are called Dim to Warm all behave differently. Some can dim and turn orange. Some od not even dim much. Others you can see the transition steps. The majority just do a color adjustment and can only dim as low as 10%. This creates a flash effect when they are turned on. GLOWDIM does exactly what the name says. The MODA Microprocessor makes thousands of calculations so that the fixture gradually reduces its CCT and decreases its intensity creating a smooth dim from incandescent illumination down to true low intensity candle light. It is this reason we called this technology MODA GLOWDIM TECHNOLOGY and probably why it won the prestigious Product Innovation Award (PIA) 2017 for Components and Light Sources.

Unlike other fixtures which are much larger in physical size, MINI GRAZE utilizes the latest Advanced MODA Design and Electronic Engineering, ensuring fixtures are cool to the touch. This is achieved by designing a forward thinking fixture with intelligent driver technology and by under driving the most advanced LEDs in the World. Thus creating a fixture which is so cool it can be held after days of illumination. The L70 (longevity) of the fixture is extended and phosphor degradation kept to a minimum.

The Onboard American Microprocessor, programmed by our MODA Software Division with new Advanced Firmware ensures MINI GRAZE delivers smooth, no noise, flicker free and synchronized GLOWDIM dimming down to 0%. The actual dimming minimum value is dependent upon the dimmer selected. Unlike other fixtures in the marketplace there is no need to purchase additional adapters, convertors, dimming boxes or control modules, just use conventional 0-10V wiring direct from the dimmer to create a powerful and dynamic lighting system, saving time and money. Link any combination of 1ft or 4ft fixtures and every fixture will dim to warm together, smoothly, synchronized from 100% to 0%. With no minimum run lengths required, just one 1ft fixture will dim seamlessly.

Wall wash any indoor application with its integral linear optic of 30° x 100° for a perfect asymmetric beam pattern with no color over angle, no striations and no dark spots up to 20ft (6m). Achieve long single runs of up to 160 feet decreasing the number of wiring circuits required in an installation. Another step forward in this category of small sized fixtures is the Universal power input. We designed a small MODA Micro Driver specific for MINI GRAZE enabling it to accept 100-277V AC 50/60Hz, thus decreasing the number of SKU's needed to be held by any of our Worldwide distributors and giving the installer a choice of power inputs from one fixture.

With the ability to mix our own phosphors we are able to make a revolutionary new standard for MODA offering a High Color Rendering Index of 96-98 with LEDs centered on The Planckian Locus for superior illumination. R1-R15 tested to TM30-15 with values in excess of 90, creating beautiful graze illumination. Single binning means every fixture will have the same CCT - something that MODA has been doing since 2006. A specialized curved polymer optical lens combined with a cleverly designed Light Chamber delivers a light bending, smooth 200 degree beam pattern perfect for cove installations with no color over angle, no striations, inter locking fields of light and no dark spots.

The fixture incorporates an integral, patented, toolless self-locking bracket which slides into any position and turns 170 degrees. Built-in male & female connectors with thumb latch connections for fast installation time. Lightweight aluminum construction for durability and excellent thermal characteristics. Quality American Made electronic components. Available in 1ft and 4ft sections.

Tested by Intertek to UL1598 for use in USA & Canada. CE Approved. WEE. RoHS Compliant. TM-30-15 Tested. US Patent No. D787,112 and D783,890.

Product Innovation Award (PIA) 2017 for Components and Light Sources. Product Innovation Award (PIA) Winner 2016 for Best Luminaire. LFI Innovation Award 2017 Finalist for Dynamic Color, Theatrical, Cove, Strips and Tape. Lux Award Commended for Interior Product of the Year 2016. Darc Awards Finalist for Best Architectural Lighting Product - Interior Luminaires 2016. International Design Excellence Award for Innovative Product Design Finalist 2016.

Designed & Developed by MODA LIGHT in Las Vegas, USA.



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### **PHYSICAL**

Dimensions	L: 1ft 3/32in (307.46mm)W: 1 1/4in(38mm) L: 4ft 1/8in (1.22m) H: 1 11/32in(34.5mm)
Weights	1ft: 0.38 lbs (0.17kg) 4ft: 1.22 lbs (0.55 kg)
Applications	Graze, Accent & Indirect General Illumination
Construction	6063 Aluminum Body, Polycarbonate Self- Locking Mounting Bracket and Optical Lens
Ingress Protection	Dry/Damp Location IP52
Thermal Management	MODA Aluminum Heat Sink
Beam Angle	30° X 100°
Fixture Connections	Integral Male & Female Connectors
Operating Temperature	-4°F ~ 149°F (-20°C ~ 65°C)
Storage Temperature	-13°F ~ 158°F (-25°C ~ 70°C)
Humidity	20-70% Non Condensing

## OUTPUT

ССТ	2700K to 1800K 3500K to 2200K
SDCM	2 Step MacAdam Ellipse
Color Bin Tolerance	Zero Bin
CRI	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	0-10V
Power Factor	≥ 0.98

## MODA TECHNOLOGY

moda **software**™

moda hardware™

modadim™

modaled™

MOdamicro Driver™

moda**phosphor**™

moda zero bin™

MOCO THERMAL MANAGEMENT™

moda **Glowdim**™

moda **AIRFLOW™** 

moda color rendition™

moda**lock**™

MOdakwik connect™













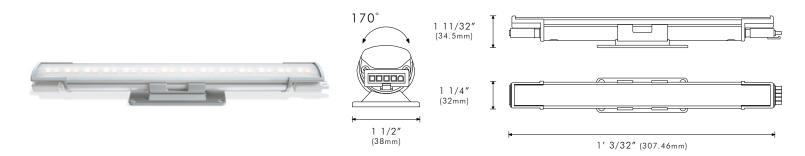
Certification

Tested to UL & CSA by Intertek For Use in USA & CANADA. Exceeds ANSI C78.377-2015, CE, CCC, C-Tick, RoHS, & WEEE Compliant.

Class

Warranty 5 Year Limited Warranty





## 0-10 V

Standard Output	Lumens	CRI	Efficacy (120V)	Efficacy (240V)	Efficacy (277V)	
2700K - 1800K	448.00	98	86.15	78.59	74.66	
3500K - 2200K	489.00	98	94.03	85.78	81.5	

### SO Power Consumption

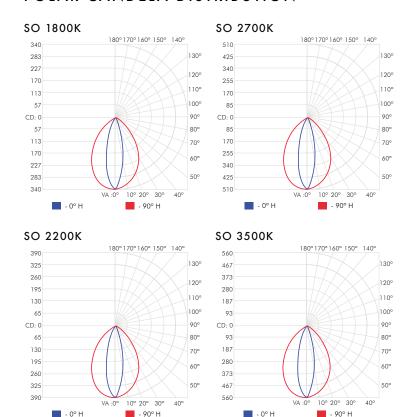
120V	5.2W
240V	5.7W
277V	6W

#### SO Max Continuous Run

120V AC	120 ft
240V AC	240 ft
277V AC	240 ft



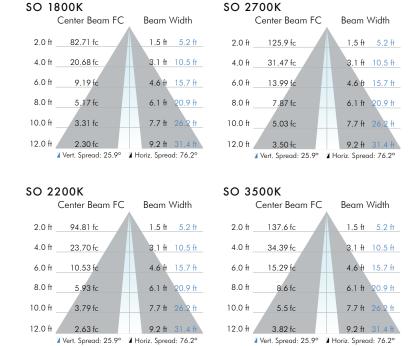
### POLAR CANDELA DISTRIBUTION



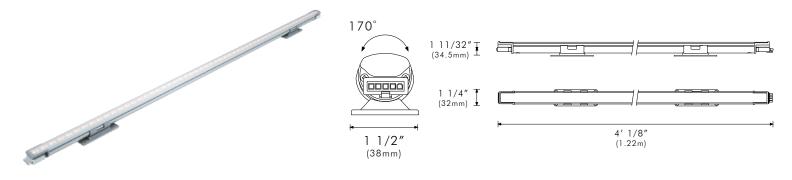
- 90° H

## ILLUMINANCE AT A DISTANCE

- 90° H







0-10 V

Standard Output	Lumens	CRI	Efficacy (120V)	Efficacy (240V)	Efficacy (277V)
2700K - 1800K	1779	98	97.21	93.63	92.17
3500K - 2200K	1891	98	103.33	99.52	97.97

### SO Power Consumption

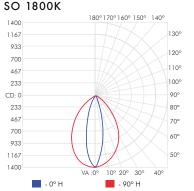
120V	18.3W
240V	19W
277V	19.3W

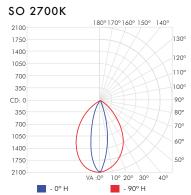
#### SO Max Continuous Run

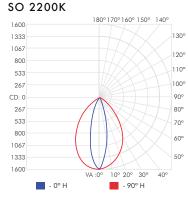
120V AC	120 ft
240V AC	240 ft
277V AC	240 ft

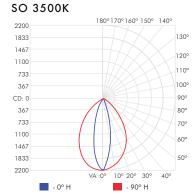


#### POLAR CANDELA DISTRIBUTION

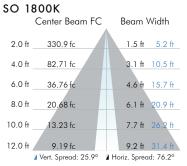


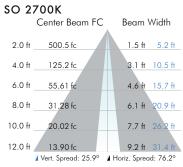




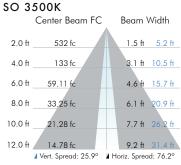


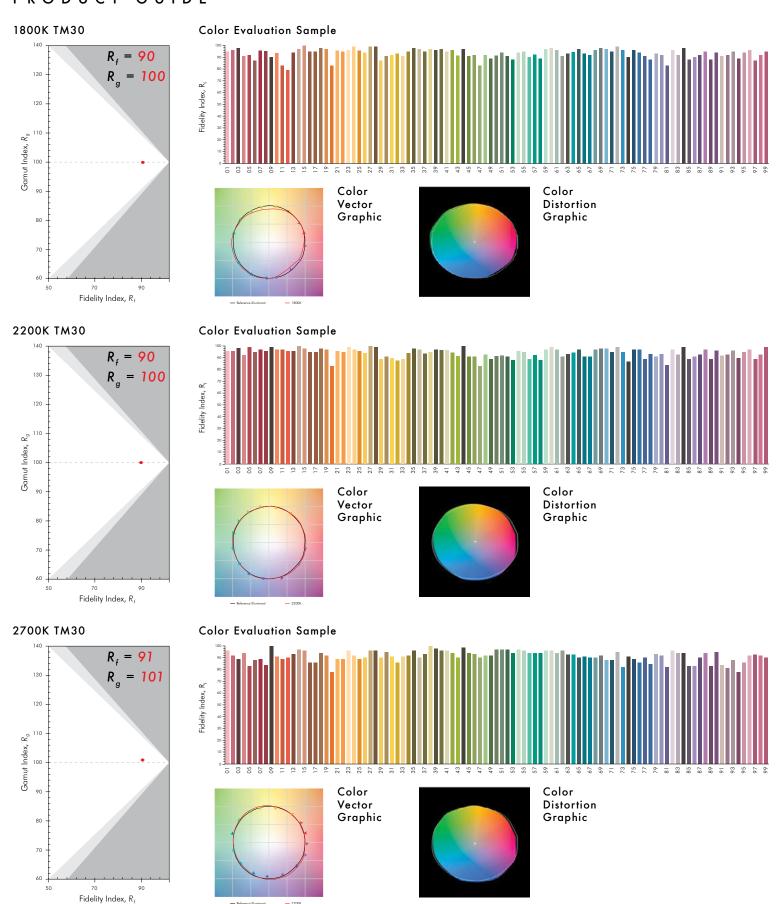
### 1 FOOT ILLUMINANCE AT A DISTANCE





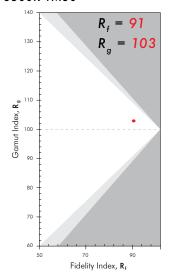




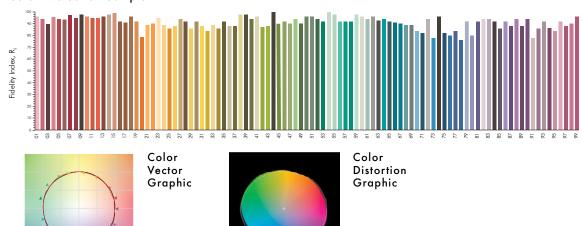




#### 3500K TM30



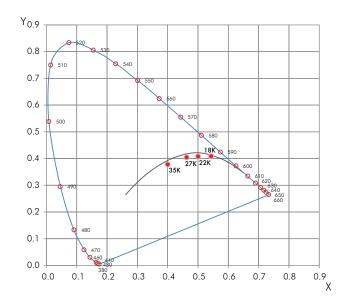
#### Color Evaluation Sample



## **R VALUES**

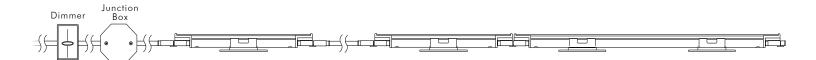
	1800K	2200K	2700K	3500K
R 1	98	97	99	99
R2	99	98	99	99
R3	97	97	97	97
R4	98	94	99	99
R5	96	96	99	99
R6	96	94	97	97
R <i>7</i>	95	97	97	97
R 8	94	97	95	95
R9	93	93	93	93
R10	97	98	98	98
R 11	97	90	97	97
R 12	88	92	87	87
R13	98	97	99	99
R 14	95	96	97	97
R15	97	99	98	98

### CIE 1931 CHROMATICITY DIAGRAM

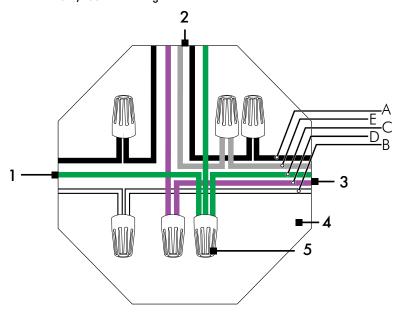


ССТ	Coordinates
1800K	x: 0.5426 y: 0.4092 u: 0.3012 v: 0.5428
2200K	x: 0.5043 y: 0.4090 u: 0.2924 v: 0.5353
2700K	x: 0.4563 y: 0.4048 u: 0.2628 v: 0.5246
3500K	x: 0.4085 y: 0.3875 u: 0.2391 v: 0.5104









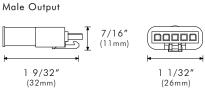
## Wiring Legend

1	Power 100-277V AC
2	0-10V Dimmer
3	5 Pin Leader Cable
4	Junction Box
5	Wiring Nuts

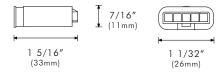
## 5 Pin Leader Cable

		UL/cUL	CE/CCC*
A	Live 100-277V	<b>■</b> Black	■ Brown
В	Neutral	— White	Blue
С	Ground	<b>G</b> reen	Green/ Yellow
D	Data Positive	- Purple	- Black
E	Data Negative	- Gray	Gray
			*Not illustrated

### 0-10V Connectors



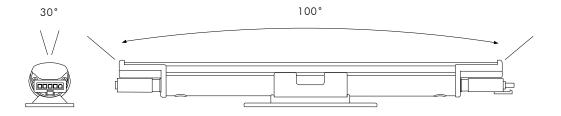
### Female Output



## Compatible Dimmers

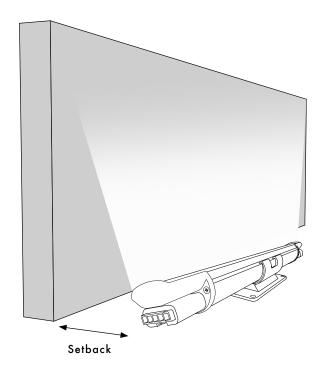
Grafik Eye QS with Grafik Eye GRX-TVI Legrand CD4FBLW Legrand LMRC-111 Leviton IP710-DL Lutron Skylark SLV-600P Angle Adjusment





#### Wallwash Optic.

Wall wash any indoor application with its integral linear optic of  $30^{\circ}$  x  $100^{\circ}$  for a precise beam pattern with no color over angle, no striations and no dark spots up to 20 ft (6m).

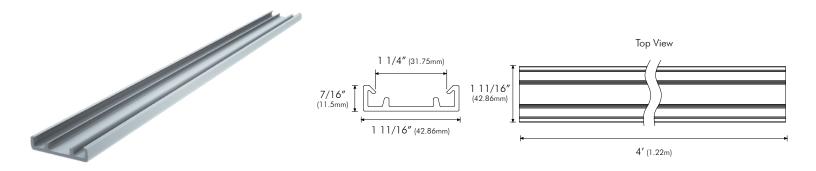


#### Setback Chart

10ft Wall 1ft

Recommended Setback from wall is 1/8 of wall height.





# MODA MINI GRAZE MOUNTING TRACK

#### Mounting Mini Graze.

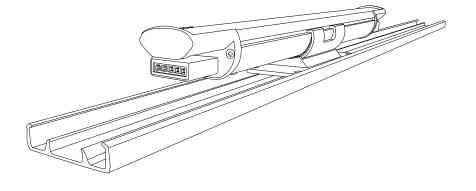
Allows users to install Moda Mini Graze fixtures in a continuous linear position. Moda Mini Graze Mounting Tracks come packaged in 5 pieces of 4ft sections to create a continuous run of 20ft.

### Options

Finish	G - Gray
Length	4ft - 4' Sections
Quantity	5 Pieces (20ft)

# Physical

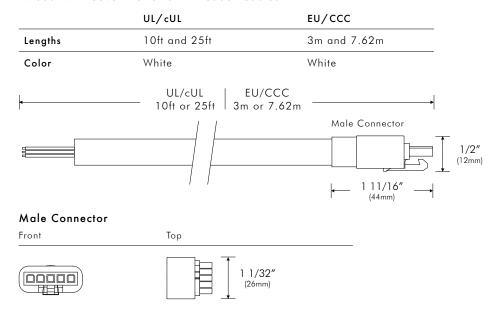
Applications	Graze, Accent
Construction	Polycarbonate





## 0-10V LEADER CABLES

### Moda Mini Cove Interior 5 Pin Leader Cables



### Pin Assignment



		UL/cUL	EU/CCC
1	Live 100-277V	Black	Brown
2	Neutral	White	Blue
3	Ground	Green	Green/ Yellow
4	Data Positive	Purple	Black
5	Data Negative	Gray	Gray

## 0-10V JUMPER CABLES

### Moda Mini Cove Interior 5 Pin Jumper Cables

	UL/	cUL	El	u/ccc	
Lengths	1ft d	and 4ft	3(	00mm and 1m	_
Color	Whi	te	W	/hite	<del></del>
-		UL/cUL 1ft or 4ft   30	EU/CCC 00mm or 1m =		<b>→</b>
Male Con	nector	1	1	Female Connector	
					1/2" (12mm)
1 3	31/32″ → <sub>50mm)</sub>	1		1 15/16" — (49mm)	<u>→</u>
Connecto	ors				
	Front	Тор			
Male			1 1/32" (26mm)		
Female			1 1/32" (26mm)		

#### Pin Assignment



		UL/cUL	EU/CCC
1	Live 100-277V	Black	Brown
2	Neutral	White	Blue
3	Ground	Green	Green/ Yellow
4	Data Positive	Purple	Black
5	Data Negative	Gray	Gray



Female

		UL/cUL	EU/CCC
1	Data Negative	Gray	Gray
2	Data Positive	Purple	Black
3	Ground	Green	Green/ Yellow
4	Neutral	White	Blue
5	Live 100-277V	Black	Brown



	FIXTURES	ORDERING NUMBER	PART NUMBER
0-10V 1FT	Moda Mini Graze Interior Glowdim Standard Output Silver 0-10V Dimming 2700K-1800K HCRI 1FT	MMGI-S-S-0-GD2718-1	137-1002
	Moda Mini Graze Interior Glowdim Standard Output Silver 0-10V Dimming 3500K-2200K HCRI 1FT	MMGI-S-S-0-GD3522-1	137-1025
0-10V	Moda Mini Graze Interior Glowdim Standard Output Silver 0-10V Dimming 2700K-1800K HCRI 4FT	MMGI-S-S-0-GD2718-4	137-3002
4FT	Moda Mini Graze Interior Glowdim Standard Output Silver 0-10V Dimming 3500K-2200K HCRI 4FT	MMGI-S-S-0-GD3522-4	137-3025

ACCESSORIES	DESCRIPTION	ORDERING NUMBER	SKU
Leader Cable US 5 Pin 10ft	Power to first fixture of run	MLCI-US-5PIN-W-10FT	299-0100
Leader Cable US 5 Pin 25ft	Power to first fixture of run	MLCI-US-5PIN-W-25FT	299-0102
Jumper Cable US 5 Pin 1ft	Connection between fixtures	MJCI-US-5PIN-W-1FT	299-1100
Jumper Cable US 5 Pin 4ft	Connection between fixtures	MJCI-US-5PIN-W-4FT	299-1102
Leader Cable EU 5 Pin 3m	Power to first fixture of run	MLCI-EU-5PIN-W-3M	299-0101
Leader Cable EU 5 Pin 7.62m	Power to first fixture of run	MLCI-EU-5PIN-W-7.62M	299-0103
Jumper Cable EU 5 Pin 300mm	Connection between fixtures	MJCI-EU-5PIN-W-300MM	299-1101
Jumper Cable EU 5 Pin 1m	Connection between fixtures	MJCI-EU-5PIN-W-1M	299-1103
Terminator 5 Pin	Must be fixed to last fixture for safety	MTI-5PIN-W	299-2100
Mounting Track	Allows user to install fixtures in a continuous linear position.  Packaged in 5 4ft sections in total of 20ft.	MMC-20-TRACK-1-\$1-G	299-3200