raye

Application

io Lighting's **raye** is designed for cove and wall slot applications. Two cross sectional profiles are available: 3"h x 3.6"w and 2"h x 6"w. **raye** is ideal for applications where spatial conditions are limited but functional light is required. This low voltage LED-based luminaire offers three luminous intensities for a variety of architectural lighting requirements. **raye**'s optical assembly has been designed to uniformly illuminate the interior surfaces of the cove for a clean appearance, while offering a very precise asymmetric beam projection. **raye** is perfect for delivering light at low angles for shallow cove and wall slot conditions. Individual units may be placed end to end without socket shadows, offering a uniform distribution of light along an architectural reveal. **io** ensures that each LED is provided thermal and electrical management properties in accordance with the LED manufacturers recommendations. Projected average rated life is 50,000 hours at 70% of lamp lumen output. **io** utilizes LEDs that have been tested in accordance with IES LM-80 Standards. To ensure proper performance, architectural details should allow for ventilation and air flow around the fixture. Ambient temperature surrounding the fixture shall not exceed 120˚F *(48.9˚C)*.

Light Output

raye is available with three lumen outputs for white light only. All values below are initial lumens per foot. IES LM-79 format files may be obtained from the factory or downloaded from **www.iolighting.com**. Consult factory for High CRI options and availability.

	Standard Output	High Output	Very High Output
2700K White:	253 lms/ft	372 lms/ft	557 lms/ft
3000K White:	253 lms/ft	372 lms/ft	557 lms/ft
5000K White:	317 lms/ft	464 lms/ft	697 lms/ft

Construction

Similar to a fluorescent strip light, **raye**'s wire way housing is die formed 20 gauge prime cold rolled steel. Wiring components, drivers and dimming module (optional) are mounted to one piece back housing, permitting removal of cover for maintenance. An anodized aluminum shroud mechanically fastens to the wire way housing allowing easy access. The aluminum shroud has been designed to house the LEDs and optical assembly as well as provide the required thermal management properties for the highest wattage solution available. All fixtures are shipped complete with integral drivers for ease of specification as well as installation.

Mounting Options

raye may be surface mounted within an architectural cove (indirect illumination) or in a perimeter wall slot (direct wall washing). Both conditions require that the architecture of the cove or wall slot be constructed of drywall, sheetrock or an equal material specified by an architect. **raye** is designed to be mechanically fastened either horizontally or vertically to drywall or sheetrock. For a uniform distribution (with no socket shadows) of light, for both coves and wall slots, fixtures should be mounted end-to-end. When installed in continuous rows, the housing forms a continuous wire way.

Electrical

All fixtures are pre-wired and pre-assembled for easy installation. Electronic drivers (power supplies) are integral within the sheet metal wire way housing for both the 18" and 72" units. For detailed information regarding power supplies and dimming options consult the **io** website, the **io** catalog (pages 98-100) or an **io** representative.

Power Consumption

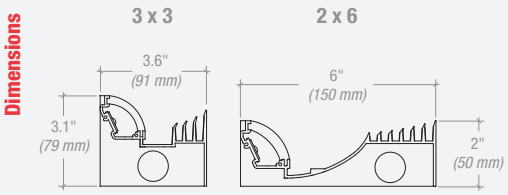
Standard Output: 5.04 w/ft High Output: 7.40 w/ft Very High Output: 11.10 w/ft

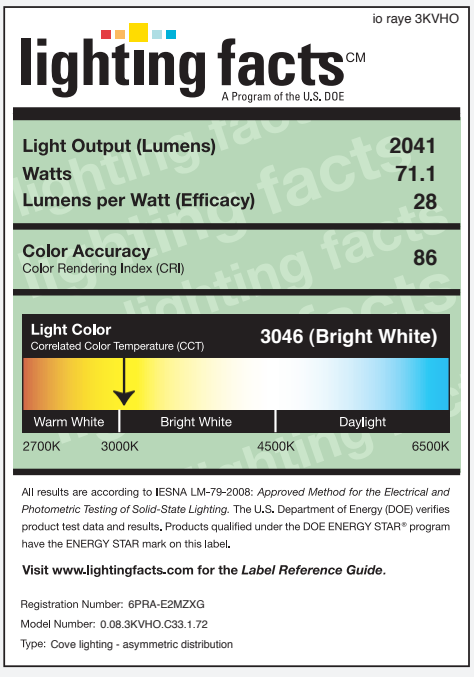
Power consumption does not include power supply losses.

Finish

Anodized aluminum finish is standard.

Dimensions

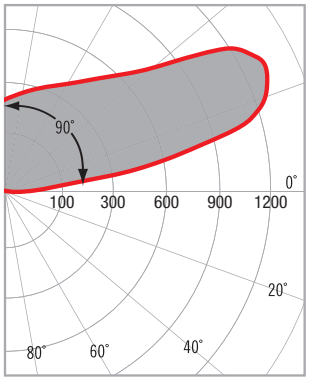


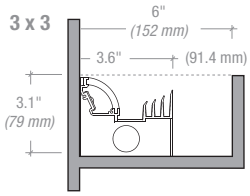


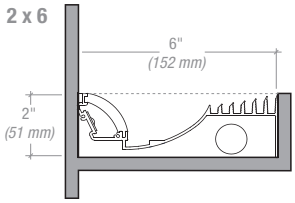
Label references 72" **raye** fixture in Very High Output 3000K. Lighting Facts for additional beam spreads and light output levels may be obtained from **io** Lighting.

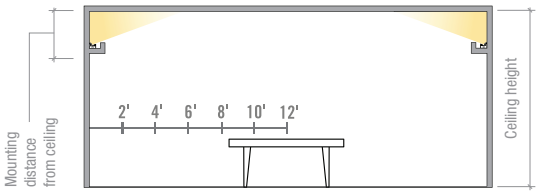
COVE LIGHTING

Candlepower Distribution Curve
3KVHO – 72"









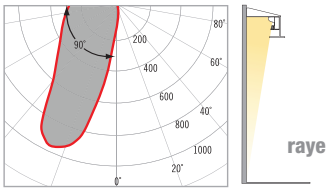
10" mounting distance

Ceiling Height	2'	4'	6'	8'	10'	12'
11'-6" *(3.51)*	17.5fc	17.3fc	15.7fc	13.9fc	12.4fc	11.9fc
10'-6" *(3.20m)*	19.1fc	18.4fc	16.1fc	13.5fc	11.8fc	11.2fc
9'-6" *(2.90m)*	21.4fc	20.1fc	16.6fc	13.2fc	11.1fc	10.5fc
8'-6" *(2.59m)*	23.7fc	21.3fc	16.3fc	12.2fc	10.0fc	9.3fc

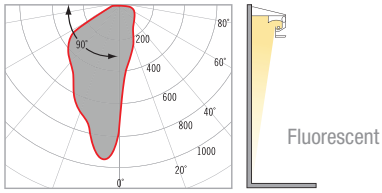
**Calculations based on 3KVHO LEDs.*

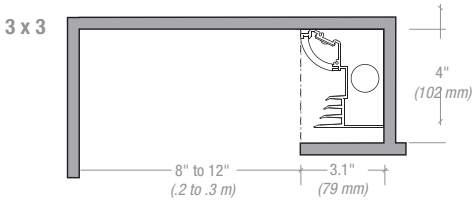
WALL SLOT COMPARISON

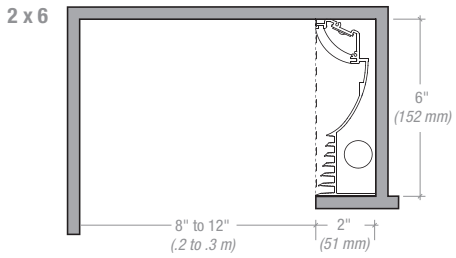
Candlepower Distribution Curve
raye 3KVHO – 72" (11.1 w/ft)



Candlepower Distribution Curve
Fluorescent 1 Lamp T5HO Wall Slot (15 w/ft)







Application Notes

- For wall slot and cove applications, there should not be more than 6" of lampless (fixtureless) space at the end of all run lengths.
- For wall slot and cove applications, **raye** luminaires shall be butted end to end to eliminate any opportunity for socket shadows.
- For ease of maintenance, the Printed Circuit Board (PCB) Assembly may be removed from the all **raye** housings via a quick disconnect and a removable extruded aluminum sliding tray (which contains the PCB). This can be accomplished without removing the wireway which is connected to line voltage.

LIGHT OUTPUT CONVERSION TABLE

White Light Output	3000K S.O.	3000K H.O.	3000K V.H.O.	5000K S.O.	5000K H.O.	5000K V.H.O.
Light Output Multiplier	0.45(1)	0.67(1)	1.0(1)	0.57(1)	0.83(1)	1.25(1)

Note: 2700K and 3000K have same light output.

Color Light Output	RED	GREEN	BLUE	AMBER
Light Output Multiplier	0.53(3)	0.51(2)	0.30(2)	0.51(2)

Note: Baseline is 3KVHO.

*IES format photometrics may be downloaded from **www.iolighting.com**.*

Order Code

0	.	08	.		.		.	1	.		.	
io		1		2		3		4		5		6

1. SERIES
08 raye

2. COLOR
27K White 2700K(1)
27KHO White 2700K(1)
27KVHO White 2700K(1)
3K White 3000K(1)
3KHO White 3000K(1)
3KVHO White 3000K(1)
5K White 5000K(1)
5KHO White 5000K(1)
5KVHO White 5000K(1)
R Red(3)
G Green(2)
B Blue(2)
A Amber(2)

3. MOUNTING
C33 Cove 3" x 3"
C26 Cove 2" x 6"
W33 Wall slot 3" x 3"
W26 Wall slot 2" x 6"

4. FINISH
1 Anodized aluminum

5. LENGTH
UNITS (ACTUAL)
18 18" (17.02")
72 72" (68.02")

FOR CONTINUOUS ROW
Specify length (e.g., 51'-0")
Note: Overall length must be multiples of 72" and 18" lengths.

6. VOLTAGE / DIMMING
1 120v
2 277v
3 120v w/dim
4 277v w/dim
5 Other

SSL Chromaticity Standard: ANSI C78.337		
Color	Nominal CCT	Target CCT & Tolerance (K)
White	2700K	2725 ±145
White	3000K	3045 ± 175
White	5000K	5028 ± 283

For Metric Conversion		
1"	1"	1'
25.4mm	2.54cm	0.3m

Footnotes

1. White light variance between LEDs within a single fixture will not exceed ANSI Binning Standards.
2. Green, Blue and Amber only available in 11.1 w/ft.
3. Red only available in 9.4 w/ft.