

# LINEAR SERIES



DATE PROJECT

COMMENTS

CERTIFICATIONS



## 2R RECESSED DIRECT

AN EXTENSION OF OUR 2-INCH LINEAR FAMILY SERIES

### FEATURES

#### HOUSING

- 1. MINIMAL RECESSED HEIGHT**  
Shallow 3.5" Housing provides maximum plenum clearance.
- 2. ONE-PIECE EXTRUDED ALUMINUM HOUSING**  
Ensures straighter rows and consistent lens retention.
- 3. MULTIPLE CEILING SYSTEMS**  
Engineered to be installed within multiple ceiling applications; see options below for available mounting types.

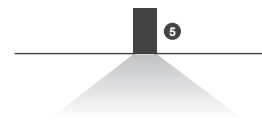
#### 5. VERSATILE LIGHT ENGINE

Multiple lumen intensities provide the correct level of illumination within each space.

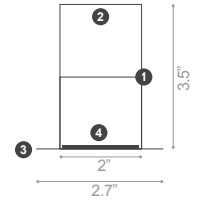
#### ELECTRICAL

- 6. OPTIONAL INTEGRAL EMERGENCY BATTERY PACK**  
UL Listed 924 emergency system has been engineered to exceed UL minimum safety standards.
- 7. 0-10 VOLT DIMMING STANDARD**  
120/277VAC 0-10V dimming to 1% standard.

LIGHT DISTRIBUTION



CROSS-SECTION



#### OPTICAL SYSTEM

- 4. EVENLY ILLUMINATED ARCHITECTURAL LENS**  
Architectural grade diffuser is utilized to establish optimal aesthetic value without sacrificing high efficiency light output.

### ORDERING

SERIES	LENGTH	OUTPUT		CCT	VOLTAGE	MOUNTING		FINISH							
2R	XXX FT	VHD	1250 LM/FT	LD	500 LM/FT	30	3000K	UNV	120-277V	T1	1" T-Grid	SC	Screw Slot Grid	WH	White
	2' Increments EX: 20' = 20	HD	1000 LM/FT	VLD	250 LM/FT	35	3500K	347 <sup>1</sup>	347V	T9	9/16" T-Grid	OF	Overlapping Flange	BLK	Black
		MD	750 LM/FT	CD	Custom	40	4000K			TG	1" T-Teg Grid	SF	Spackle Flange	S	Silver
ORDERING NOTES											TG9	9/16" T-Teg Grid	GR	CHARCOAL Gray	

1 EM not available with 347V.  
2 EM not available with 2' fixtures.

### OPTIONS

CRI	INTEGRATED CONTROLS	RATING	FOR INDIVIDUALS	FOR LINEAR RUNS <sup>3,4</sup>
BLANK = 80 CRI	OS Occupancy Sensor	CP Chicago Plenum	EM <sup>2</sup> Emergency Battery	EM EMERGENCY BATTERY PACK
C90 90 CRI	DOS Daylight Occupancy Sensor		EC Emergency Circuit	EC EMERGENCY CIRCUIT

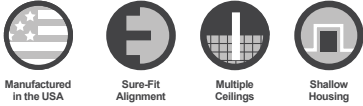
#### EMERGENCY OPTION NOTES

3 EM and EC Quantity is not to exceed number of discrete fixture sections in a row.  
4 EM and EC position refers to which fixture in the run that will be powered by the EM/EC circuit.  
Position options: S=Starter, J=Joiner, E=Enders  
Ex: 2R-24-HD-35-UNV-T1-WH-EM2SJ

ooo STARTER ooo JOINER ooo ENDER ooo

# 2R RECESSED

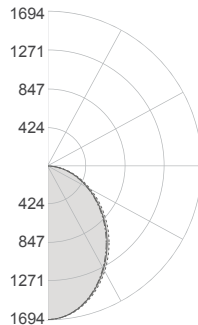
## DIRECT



### PHOTOMETRICS & ENERGY CHARTS

#### 2R-04-HD-35-UNV-XX-X

Total Lumens: 4,148  
 Ratio: 0% Up & 100% Down  
 Wattage: 38.8  
 Efficacy: 106.9 LM/W  
 Fixture Length: Four Feet



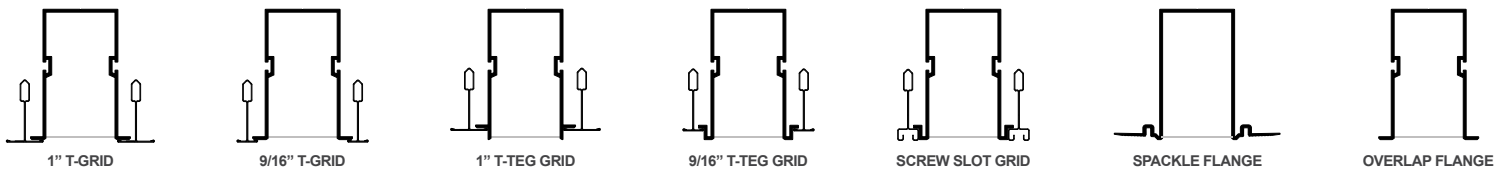
#### Zonal Lumen Summary

Zone	Lumens	% Fixt
0 - 30	1245.1	30.0
0 - 40	1982.2	47.8
0 - 60	3339.1	80.5
0 - 90	4147.4	100.0
90 - 180	0.8	0.0
0 - 180	4148.1	100.0

#### Direct (Lambertian) Light

	VHD:1250	HD:1000	MD:750	LD:500	VLD:250
Watts/ft	11.6	9.7	7.2	4.8	2.4
Lumens/ft	1194	1037	762	515	253
LPW	102.6	106.9	105.5	107.2	104.3

### MOUNTING OPTIONS



### SPECIFICATIONS

## MECHANICAL

### Housing Construction:

Extruded Aluminum 6063-T5 alloy outer housing and LED tray with die-formed steel internal components for strength, alignment and mounting attachment. Our high-quality die-cast end caps are engineered to conceal all fasteners and to retain the sealing gaskets on the inside of the fixture while completing the clean and minimalistic look of this luminaire.

### Alignment/Assembly:

The alignment system employs a four-point alignment and attachment method, designed to create straighter rows and minimize seams between sections (field assembled). Four alignment pins ensure the outer extruded aluminum rails are aligned, while a draw-screw secures housing-to-housing attachment.

### Lengths:

The 2R is available in a minimum 2-foot (nominal) length with additional 2-foot increments available. Longer fixture rows are available and will be configured per Lumato factory specifications; typical rows are configured with 4-foot, 6-foot and 8-foot fixtures. Maximum run length on one power feed is 72'. Continuous runs over 72' will require a second feed.

### Mounting Method/Hardware:

The 2R is designed for lay-in grid ceilings or "Hard" sheet rock construction. Hard ceiling installations can be supplied for overlapping flange or "Trimless" spackle flange types.

### Exterior Finish:

The 2R is available in White polyester powder coat finish to ensure durability.

### Integrated Controls:

The 2R is available with optional integrated controls. Sensors are conveniently designed to mount in aperture and are located at the power feed end of each fixture. For runs, each fixture section will be supplied with a discrete sensor that will control that specific section.

## OPERATION

### Light Engine:

The 2R is available in 3000K, 3500K and 4000K CCT all within a 3-Step MacAdam Ellipse and has a standard CRI of 80+. Optional 90+ CRI available.

### Optics:

The back-lit extruded acrylic lens ensures high efficiency light output, in a minimal form factor for a clean, evenly illuminated lower surface with minimal glare.

### Electrical:

Class 2 programmable (factory pre-set) premium power supply, 120-277VAC input. Power factor >0.9. THD <15%. Integral Surge Protection to 2KV.

### Dimming:

The 2R comes standard with 0-10V dimming down to 1%.

### Emergency Battery Pack:

UL Listed 924 Emergency System has been engineered to exceed UL Minimum Safety Standards. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. For 8' VHD, 10' HD and VHD, and 12' MD, HD, and VHD, only the first portion of the fixture will be illuminated by the EM battery pack. "Quantity per Run" refers to the number of fixtures in the run that will be supplied with an emergency battery pack. "Position in Run" refers to which fixture in the run that will contain the battery. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run needing two emergency battery packs, one in the starter and one in the joiner, would be ordered as EM2SJ. When a joiner is selected, battery packs are always supplied in 8' fixtures before 6' fixtures in that run.

### Emergency Circuit:

Emergency Circuit fixtures are engineered so that the entire fixture is wired to the emergency circuit. "Quantity per Run" refers to the number of fixtures in the run that are wired to the emergency circuit. "Position in Run" refers to which fixture in the run that will be powered by the Emergency Circuit. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run with needing two emergency sections, one in the starter and one in the joiner, would be ordered as EC2SJ. When a joiner is selected, Emergency Circuits are always supplied in 8' fixtures before 6' fixtures in that run.

## GENERAL

### Warranty:

Five (5) Year limited warranty from date of shipment.

### Lumen Maintenance:

Rated for 85% initial lumen output at 85,000 Hours of operation, operated at 25°C ambient temperature; per TM-21 Guidelines published by the Illuminating Engineering Society (IES).

### Certifications:

All Luminaires are UL/cUL Listed to UL 1598 Standards and approved for Indoor use in Dry/Damp Locations.

### Shipping:

2-Week lead time for orders up to 1000 Linear Feet. Lead time for orders greater and 1,000' will be determined at time of order.

### Manufactured in the USA:

All Lumato Luminaires and Components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA.