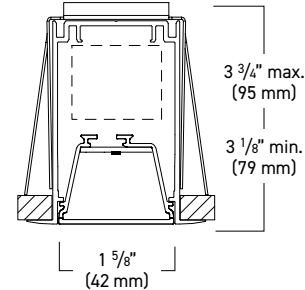
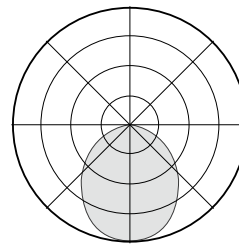


## REGO 1 RF1 Direct

## Recessed Flange / Flush Lens Integral Driver



RF1 (Flush Frosted Lens)  
100% Downlight



### Light Output and Energy Consumption\*

Light Level	lm/ft	Watts/ft	Efficacy
03	274.5	2.6	106.0
05	526.5	4.8	110.0
08	750.3	7.1	106.0

Lumen output may vary. 3500K / 80 CRI used for above results.  
Multipliers for 80CRI: 3000K(.97) & 4000K(1.03)  
Multipliers for 90CRI: 3000K(.81), 3500K(.84) & 4000K(.86)

- Micro-scale functional recessed luminaire that provides unlimited lighting possibilities for creative design.
- Precision cut extruded aluminum housing. Housing standard finish is electrostatically applied textured white powder coat paint. Optional silver, black, or custom color paint finishes.
- Distributed LED array in a variety of lumen output packages. LED color is available in 3000K, 3500K or 4000K with a CRI of 80 or 90. Custom outputs are available. Module is replaceable. L90≥100,000 hrs. Tunable white utilizes 50% 2700K and 50% 6500K diodes with a CRI of 90
- Innovative high reflective acrylic lens assembly reduces internal components and utilizes a metal core PCBA that snaps into place. Removable for maintenance. Optimizes thermal management.

### ORDERING INFORMATION / Example: RF1-08-H30-U-D-21-FF-SV-8

RF1					
SERIES	LUMEN PACKAGE <sup>1</sup>	CRI/ CCT	VOLTAGE	DRIVER	
RF1 - Rego 1.625" Wide, 3.125" Tall Integral Recessed Flange	03 - 250 lm/ft 05 - 500 lm/ft 08 - 750 lm/ft XX <sup>2</sup>	L30 - 80 CRI, 3000K L35 - 80 CRI, 3500K L40 - 80 CRI, 4000K H30 <sup>3</sup> - 90 CRI, 3000K H35 <sup>3</sup> - 90 CRI, 3500K H40 <sup>3</sup> - 90 CRI, 4000K TW - Tunable White 90 CRI, 2700-6000K	U - Universal 1 - 120 volt 2 - 277 volt	Dimming 0-10V D - Dim to 1% (Standard) D0 <sup>4</sup> - Dim to 1%, Fade to Off D02 - Eldoed Solodrive, Dim to 0% TW10 - Tunable White LUTRON - See options on page 2	DALI Dimming ELE - Eldoed Ecodrive, Dim to 1% ELS - Eldoed Solodrive, Dim to 0% TWDA - DALI Tunable White

#### Notes:

- Nominal lumen output for 3500K and 80 CRI
- Consult factory for custom lumen packages.
- Efficacy reduction with 90CRI, see Light Output & Energy Consumption table above.
- Consult factory for specifications and manufacturer.
- Multiple power and control circuits can be accommodated. In Direct fixtures, the power and control circuits will be left to right within a fixture/row. Consult factory if the sum of the two numerals exceeds 4 (i.e. 22). Unable to accommodate left-right zoning in fixtures 5' or less.
- The EM Option will illuminate only the direct lighting of a 4' section in fixtures 6' or greater and illuminate the entire fixture in a 5' fixture or less.
- Integral Battery Pack not available in fixtures 3' or less.

CIRCUITING <sup>5</sup> / EMERGENCY OPTIONS <sup>6</sup>			SHIELDING	FIXTURE FINISH	LENGTH	OPTIONS
<u>Qty of Power Circuits</u> 1 - 1 Circuit 2 - 2 Circuits	<u>Qty of Control Circuits</u> 1 - 1 Circuit 2 - 2 Circuits	<u>Options</u> B10 <sup>7</sup> - 10 Watt Battery Pack (CEC Compliant) B15 <sup>7</sup> - 15 Watt Battery Pack (CEC Compliant) EM - Dedicated Emergency Circuit GTD - Generator Transfer Device	FF - Frosted Flush Lens FRL - Frosted Dropped Lens (Luminous Ends)	WH - White Painted Finish BK - Black Painted Finish SV - Silver Painted Finish	2 - 24" 3 - 36" 4 - 48" 5 - 60" 6 - 72" 7 - 84" 8 - 96" XX - Specify fixture lengths in 6" increments	FLEX - 6' of Flex, 5-Wire GLR - Fusing OSDS - Combined Occupancy & Daylight Sensor

## PHOTOMETRICS

### RF1 FLUSH LENS

#### DIRECT DISTRIBUTION

Cat # RF1-05L35-U-D-11-FF-W-4

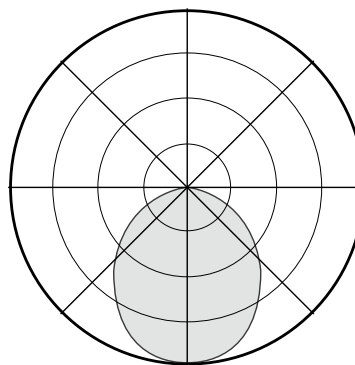
ITL Test #: ITL91006

Total Delivered Lumens: 2106

Input Watts: 19.1

Efficacy: 110.3 lm/W

100% Downlight



#### Luminance Data (CD/SQ.M)

Angle in Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14727	14085	13327
55	13374	12763	11972
65	11759	11320	10588
75	9640	9401	8844
85	5678	6625	6625

#### Zonal Lumen Summary

Zone	Lumens	%Fixt
0-30	651	31
0-40	1032	49
0-60	1720	82
0-90	2106	100
0-180	2106	100

## LIGHTING CONTROL

Nulite provides flexibility in meeting the needs of each project by easily integrating with several manufacturers for lighting control options.

**0-10V:** A non-directional dimming system. The control system tells the LED driver what to do and it adjusts according to the voltage on the control circuit.

**DALI:** Digitable Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. It allows LED drivers to be controlled independently from lighting control circuits.

**TUNABLE WHITE:** Aims to create lighting environments that are optimal for visual, mental, and biological health by being able to tune the color temperature of a light source. Utilizes a number of controllable channels to adjust the color temperature of the luminaire's white light output with precise varying of color temperature from a warm tone to a cool tone.

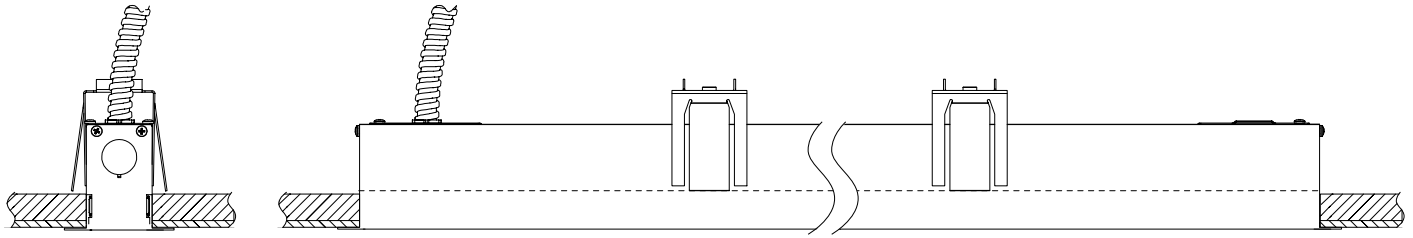
NULITE CAT#	DRIVER MANUFACTURER / SERIES	DIMMING / CONTROL PROTOCOL	DIM RANGE	NOTES/ DESCRIPTION
<b>D</b>	Signify Xitanium, Osram OTI	0-10v	100% -1%	Standard Nulite driver, reflects base fixture price
<b>D0</b>	Signify Xitanium, Osram OTI	0-10v	100%- 1% (Steps from 1% to 0% or OFF)	Standard Nulite driver, reflects base fixture price
<b>D02</b>	Eldoled Solodrive	0-10v	100% - 0%	Able to choose from 4 dimming curve options
<b>L11</b>	Lutron Hi-Lume Premier (PEQOE) Max lumen package 03	0-10v	100% - 0.1%	Hi-lume Premier 0.1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
<b>L15</b>	Lutron Hi-Lume Series (LDE1)	0-10v	100% - 1%	Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
<b>L16</b>	Lutron 5 Series (LDE5)	0-10v	100% - 5%	5 Series EcoSystem LED Driver
<b>ELE</b>	Eldoled Ecodrive	DALI	100% - 1%	
<b>ELS</b>	Eldoled Solodrive	DALI	100% -1%	Able to choose from 2 dimming curve options
<b>TW10</b>	Eldoled Dual Drive combined with Dual 0-10v DALI Translator	Tunable White, 0-10v	100% - 0%	2 channel tunable white system mixes 2700K and 6000K LEDs on the same Nulite LED PCB to create any CCT between 2700K and 6000K. Two channel drivers will be programmed for constant lumen output throughout the CCT range.
<b>TWDA</b>	Eldoled Dual Drive	Tunable White, DALI	100% - 0%	

## RECESSED FLANGE INSTALLATION DETAILS

### CEILING

Power Feed

Non-Power Feed



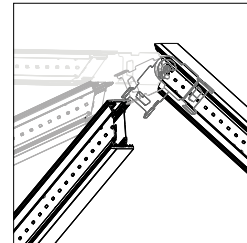
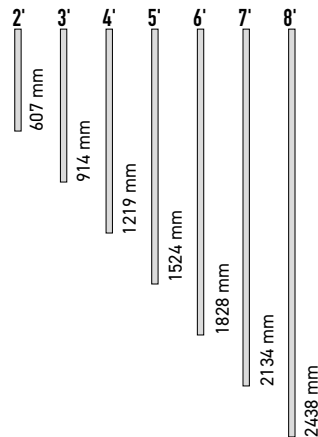
### STANDARD LENGTHS

#### ORDERING EXAMPLE FOR STANDARD LENGTH

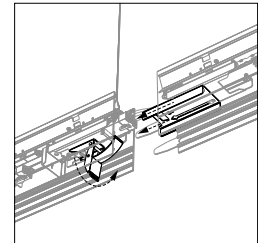
RF1-05L35-U-D-11-FF-W-4

#### Lines

For linear individuals and continuous linear runs, specify run lengths to the nearest 6" for standard configurations. Nulite can achieve lengths to the nearest 1/8" if necessary, custom drawings and lead times may apply.



Flexible Joining Design



Toolless Continuous Joining

### CONTINUOUS ROW LENGTHS

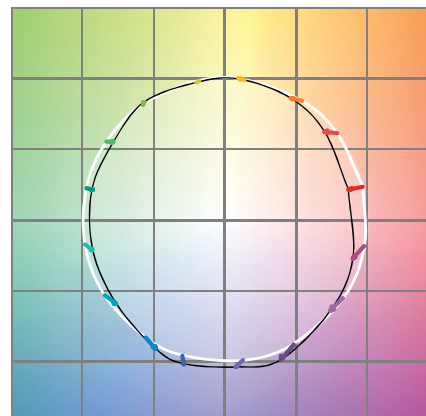
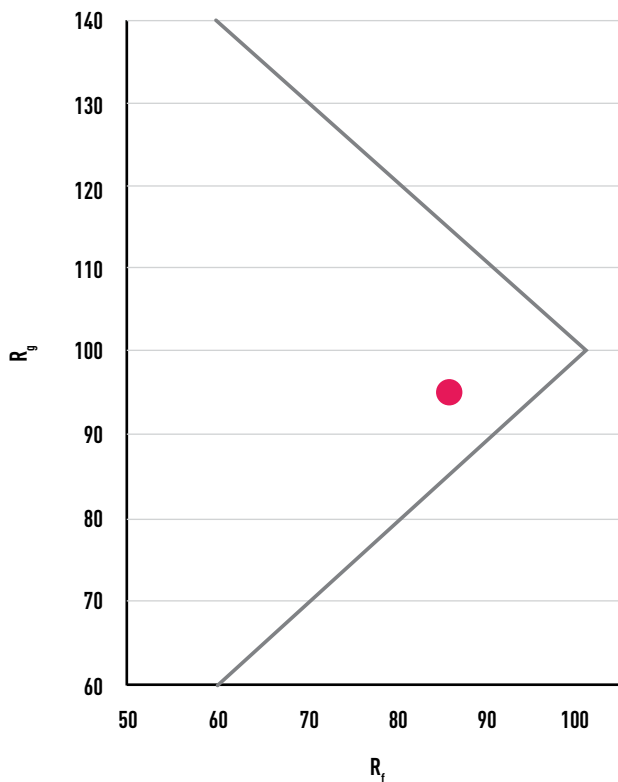
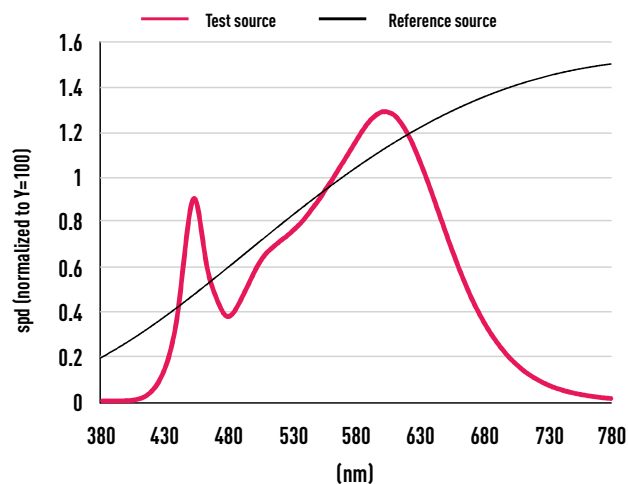
Run Length

Number of Housings		2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	37'	38'	39'	40'	41'	42'	43'	44'				
	2'	1																																														
	3'		1																																													
	4'			1					1	1	1	1						1	1	1	1					1	1	1						1	1						1	1	1	1				
	5'				1				1				1					1				1				1			1					1			1											
	6'					1				1				1				1					1			1					1				1				1									
	7'						1				1				1				1				1				1				1				1				1				1					
	8'							1					1	1	1	1	2	1	1	1	2	2	2	2	3	2	2	2	2	3	3	3	3	4	3	3	3	4	4	4	4	5	4	4	4	5		

# TM-30 DATA

Cat # RF1-05L35-UNV-D-11-FF-W-4

$R_f$	86	CCT (K)	3449
$R_g$	96	$D_{uv}$	-0.0006
		$u'$	0.2373
LER	323	$v'$	0.5115



Color Vector Graphic



Color Distortion Graphic

HUE BIN	$R_f$	GRAPHIC SHIFTS (%)
		HUE
1	80	0%
2	83	5%
3	81	8%
4	91	4%
5	93	2%
6	95	-2%
7	90	-3%
8	92	1%
9	88	5%
10	82	10%
11	82	10%
12	85	2%
13	88	-6%
14	80	-14%
15	80	-13%
16	78	-10%

## PRODUCT DETAILS

**LIGHT SOURCE** LED custom linear array is mounted with quick-connect wiring to facilitate service. Three lumen packages are available (03, 05, and 08). All luminaire configurations tested in accordance with IESNA LM-79. Diodes tested in accordance with IESNA LM-80.

**DRIVER** Standard constant current integral electronic driver with 0-10V dimming input standard; dimming range from 100% down to 1%. Dims to 0%, DALI, and Tunable white available. Universal (U), 120 volt (1), and 277 volt (2).

**OPTIONAL TUNABLE WHITE** Aims to create lighting environments that are optimal for visual, mental, and biological health by being able to tune the color temperature of a light source. Utilizes a number of controllable channels to adjust the color temperature of the luminaire's white light output with precise varying of color temperatures from a warm tone to a cool tone.

**OPTIONAL DALI** Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. DALI enables dimmable drivers, transformers, relay modules, emergency fittings, and controllers from different manufacturers to be mixed and matched into a single control system, allowing LED Drivers to be controlled independently from lighting control circuits.

**OPTIONAL BATTERY AND EMERGENCY OPTIONS** Recyclable Ni-Cad battery pack, battery run time is 90 minutes. Recharge time of 24 hours. 6W or 10W battery packs are available. Total output is determined by exact efficacy of specific configuration multiplied by battery wattage (i.e. RF1-FF-05L35-1C-U-D-W-4 with a 10W battery pack is a 1103 battery lumen output). Battery option not available in less than 4' lengths. Entire direct fixture housing is on battery for lengths up to 5'. Half of direct fixture is on battery for 6' - 8' housing lengths. Emergency or night light circuit available.

**SECURE TOOL-FREE JOINING DESIGN** A dynamic mechanism that ensures stable positioning, no light leak, and speeds up installation for continuous rows. Constructed with spring steel over center draw latch, 22 gauge thick.

**FLEXIBLE JOINING DESIGN** Mitered corners in 45-degree, 60-degree, 90-degree, 120-degree, and 135-degree for ultimate design capabilities. Constructed with spring steel over center draw latch, 22 gauge thick. Utilizes tool-free joining design. Consult factory for custom angles.

**MOUNTING** Inaccessible ceiling types. IC rated. Individual mount or continuous runs. Refer to installation instructions for appropriate mounting detail.

**WARRANTY** 5-year limited warranty on LED and driver from date of shipment. Refer to the full warranty details on [www.nulite-lighting.com/products/184](http://www.nulite-lighting.com/products/184).

**LUMINAIRE LENGTH** Any length, 2-foot minimum, in increments down to 6". 8-foot maximum section length. 50-foot maximum continuous run length per circuit.

**WEIGHT** ~1.5 lbs/ft.

**APPROVALS** ETL listed, conforms to UL Standard 1598 / 8750 and CSA Standard C22.2, indoor dry/damp locations.

### INDEPENDENT TESTING

IESNA LM79 - Testing method for the Electrical and Photometric Measurements of Solid State Lighting on the complete system, such as luminous flux, electrical power, luminous intensity distribution, and various properties of chromaticity.

IESNA LM80 - Testing method for measuring lumen maintenance of LED light sources, applies to the LED package, array or module alone, not the complete system.

IES TM-30-15 - Testing method for effectively evaluating and communicating a light source's color rendering properties