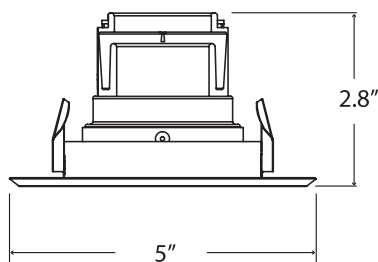


# RL481

## 4" SQUARE ADJUSTABLE LED RETROFIT MODULE



### DIMENSION



### INSTALLATION

Ez connector to use with special High efficacy housing or Edison base adapter for retrofitting into existing 4" incandescent housings.

- Utilizes industry standard friction blades, installs in most 4" incandescent down lights. Insert friction blades into can and press trim to ceiling.



### CERTIFICATIONS

- ETL Listed
- RoHS
- IECC
- New York state
- California Title 24
- Washington state
- LM79/LM80

### ENGINEERED FOR VERSATILITY AND PERFORMANCE

The Elite RL481 has been engineered for New Construction, Remodel and Retrofit applications for 4 inch downlights. Dedicated housings install the same way as our standard incandescent downlights.

Over 650 usable lumens are directed from the luminaire to the work surface. Lighting is smooth and comfortable, all while using 75% less energy than the equivalent 50W BR20 and 25% less than the common 18W CFL. Plus the Elite RL481 features 50,000hrs of life, and California Title-24 compliance.

INPUT VOLT.	INPUT FREQ.	THD	POWER FACTOR	INPUT POWER	LUMENS
120V	50/60Hz	<20%	>0.9	10W(+/-5%)	650

### FEATURES

Greater light output than an 18W CFL or a 50W BR20 while consuming less than 10W of power. Fits in most 4 inch downlight housings.

### OPTICS

The Elite-Engineered LED Module system is much more than just a simple LED retrofit. The Elite LED system is a highly engineered work of design and optical science which produces over 650 lumens! Our meticulously crafted optics gather the light scattered by the LED chip and shape it into a functional beam with uniform light distribution.

### DURABILITY

Die-cast aluminum housing and heat management system are engineered for extremely long life and service period. Without proper heat management, any LED luminaire will fail. Our die-cast system pulls the heat from the LED chip, allowing the continued cool operation for years. Life tests have shown the Elite RL481 light output will be maintained at 70% of initial at 50,000 hours of operation. Our LED driver is rated for 50 to 60 Hz at 120V input, produces less than 20% THD, has a power factor between 0.90 and 1.00 and is thermal protected for additional safety.

### REPEATABLE

Repeatability means quality. From our chip selection process, to our driver, to the thermal management, the Elite RL481 Module is engineered for quality. All Elite LED luminaires are rated at 85+ and 90+ CRI, also rated and tested to LM-79 and LM-80 standards by a certified laboratory, and meets the California Title-24 compliance standards. Elite's highly selective LED chips produce zero ultraviolet and virtually no infrared light.

### DIMMABLE

The Elite RL481 lighting system is dimmable down to 10% by using an approved incandescent dimmer or select electronic low voltage dimmers when ordered with DIMTR-120 option.

### INTERCHANGEABLE

The Elite RL481 LED system works in our dedicated (LD4IC-AT, LD4RIC-AT) housings and our existing 4" incandescent housings (B4IC-AT, B4RIC-AT) but is also suitable for use in most 4" recessed downlight housings.

### ADAPTABLE

All Elite RL481 luminaires are shipped standard with our custom engineered Edison adapter. This adapter assembly allows the luminaires to install directly into existing Elite 4" downlight housings and most other 4" downlight housings. GU24 style socket base adapters also available upon request.

### OUR WORD

The Elite LED lighting system carries a five-year carefree warranty for parts and components. (Labor not included)

LED

4"

4 INCH LED RETROFIT MODULE

Example: **RL481-650L-DIMTR-120-30K-90-WH**

TYPE	650L SERIES	CCT	CRI	FINISH	OPTION
RL481 (SQUARE ADJUSTABLE)	<input type="checkbox"/> 650L-DIMTR-120	<input type="checkbox"/> 27K <input type="checkbox"/> 30K <input type="checkbox"/> 40K	<input type="checkbox"/> 90+	<input type="checkbox"/> W-WH <input type="checkbox"/> SN-SN	<input type="checkbox"/> BK-BK <input type="checkbox"/> BZ-BZ  <input type="checkbox"/> GU24SA- GU24 SOCKET ADAPTER

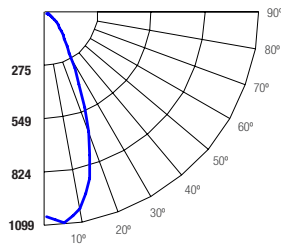
## Ordering Guide for Compatible Housing

IC - New Construction	Non-IC New Construction	IC - For Remodel	Non-IC For Remodel
LD4IC-AT	LD4-AT	LD4RIC-AT	LD4R-AT
HLD4IC-AT	HLD4-AT		HLD4R-AT
B4IC-AT	B4-AT		B4R-AT

## RL481-650L-DIMTR-120-27K-90-W-WH

TEST NO.: **EL111741**INPUT WATTS: **9.8**LUMENS: **669**CRI: **90**EFFICACY: **68**CCT: **2700K**SPACING CRITERIA: **0.68**

## Candle Power Distribution (Candelas)



Cone of Light		
4.0	66.4 fc	3.1 ft
8.0	16.6 fc	6.3 ft
12.0	7.38 fc	9.4 ft
16.0	4.15 fc	12.6 ft
20.0	2.66 fc	15.7 ft
24.0	1.84 fc	18.8 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

## Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	297.26	44.20	44.40
0-30	469.16	69.70	70.10
0-40	566.64	84.20	84.70
0-60	651.34	96.80	97.40
0-80	668.22	99.30	99.90
0-90	668.98	99.40	100.00

Luminance (Average candela/M<sup>2</sup>)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	12340	12799	14956
55	7205	5140	6427
65	3457	3284	3180
75	2745	2813	2886
85	0	0	2683

## Lumens Per Zone

Zone	Lumens
0-10	91.80
10-20	205.46
20-30	171.90
30-40	97.48
40-50	57.75
50-60	26.95
60-70	11.16
70-80	5.72
80-90	0.76

## Candela Tabulation

Q	
0	1062.25
5	995.46
15	813.45
25	406.98
35	158.96
45	69.40
55	32.87
65	11.62
75	5.65
85	0.00
90	0.00

## Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%			10%			0%
		RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	118	118	118	118	118	116	116	116	116	110	110	110	106	106	106	101	101	101	99
	1	113	110	107	105	110	110	108	105	103	104	102	100	100	98	97	96	95	94	92
	2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	
	3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	
	4	96	88	83	78	94	87	82	78	85	81	77	83	79	76	81	78	75	74	
	5	91	83	77	73	90	82	76	72	80	75	72	79	74	71	77	73	70	69	
	6	87	78	72	67	85	77	71	67	76	71	67	74	70	66	73	69	66	64	
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	61	
	8	79	69	63	59	78	69	63	59	68	63	59	67	62	59	66	62	58	57	
	9	75	66	60	56	74	65	60	56	64	59	56	63	59	55	63	58	55	54	
10	72	62	57	53	71	62	57	53	61	56	53	60	56	53	60	56	52	51		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

LED

4"

4 INCH LED RETROFIT MODULE