

**FEATURES**

The RL642 combines a remodel can and trim in one luminaire, eliminating the need for a housing, for quick and easy remodel and new construction applications. Integral driver and junction box come pre-assembled. Multi-lumen selector switch sits on top of the luminaire for easy field-adjustability. Just slide the switch to select desired intensity. Ideal for residential, hospitality, and commercial applications.

LUMENS	750/1100/1500
CCT	30K, 35K, 40K
CRI	90+
COLOR QUALITY	3 Step MacAdam Ellipses
TRIM	Aluminum die-cast body and trim
COLORS	WH (White)
LIFETIME	L70 at 50,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

**ON-SITE ADJUSTABLE LUMEN PACKAGE**

Simply adjust the desired lumen output on top of the fixture



**ADJUSTABLE HOUSING CLIPS**

Allow for installation in a different architectural housing apertures (6")

**OPTICS AND REFLECTOR**

Deeply regressed baffle produces even, glare-free illumination with a 45° cutoff. LEDs are individually covered with a special optic that disperses light in all directions for uniform distribution and zero pixilation.

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
1500	1749	20W
1100	1198	13W
700	638	14W

Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%



**OPTICS**

A regressed baffle and frosted lens provide glare-free, even illumination.

**FIELD-ADJUSTABLE LUMEN-SELECTABLE SWITCH**

Simply lower luminaire from opening and flip switch on top of the fixture to easily adjust the lumen output, allowing for precise control over the mood of any environment.

**ADJUSTABLE HOUSING CLIPS**

Allow for fast, easy installation and upgrading in a range of apertures for 8" (8" and 9") and 6" (6").

**THERMAL MANAGEMENT**

Die-cast system pulls heat from the LED module, prolonging overall lifetime.

**INSTALLATION**

No housing required. Junction box and whip come standard.

**DIMMING**

Non-dimmable.

**ELECTRICAL**

Powered by high-quality constant-current power LED drivers rated for 50 to 60Hz at 120-277V input, produce less than 20% THD, and have a power factor of .90 to 1.00.

**WARRANTY**

5-year warranty for parts and components. (Labor not included)

**LISTINGS**

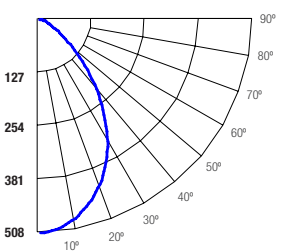
 Energy Star  
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 Damp Location

**EXAMPLE: RL642-750L/1100L/1500L-MVOLT-30K-90-W-WH**

TYPE	LUMEN	VOLTAGE	CCT	CRI	FINISH
RL642	750L/1100L/1500L	MVOLT	30K 35K 40K	90+	W-WH-White

\*COMPATIBLE WITH EMG-LED-25W-HV-FLEX-EMERGENCY LED DRIVER

**RL642-750L-1100L-1500L-DIMST-MVOLT-35K-90-W-WH-(750L)**

 INPUT WATTS: **14.5**    LUMENS: 638    CRI: **90**    EFFICACY: **44**    CCT: **3500K**    TEST NO.: **EL05072011**    SPACING CRITERIA: **0.98**
**Candle Power Distribution (Candelas)**

**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	177.95	27.9	27.9
0-30	348.27	54.6	54.6
0-40	487.25	76.4	76.4
0-60	612.01	96	96
0-80	636.84	99.9	99.9
0-90	636.86	99.9	99.9

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

Angle in Degrees	Average		
	0°	45°	90°
45	46778	46872	49092
55	25477	25928	27458
65	15527	15871	16620
75	4021	4219	3769
85	79	79	79

**Lumens Per Zone**

Zone	Lumens
0-10	47.49
10-20	130.46
20-30	170.32
30-40	138.98
40-50	82.25
50-60	42.51
60-70	20.49
70-80	4.34
80-90	0.02

**Candela Tabulation**

θ	
0	506.77
5	499.82
15	458.63
25	359.74
35	206.27
45	96.63
55	42.69
65	19.17
75	3.04
85	0.02
90	0.02

**Coefficients of Utilization - Zonal Cavity Method**  
 Effective Floor Cavity Reflection 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%	50%	30%	10%	0%		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91						
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82						
3	99	91	85	81	97	90	84	80	87	83	79	85	81	78	82	79	76	75						
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	73	69	68						
5	87	77	71	66	85	76	70	65	74	69	65	73	68	64	71	67	63	62						
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56						
7	77	66	60	55	76	66	59	54	64	58	54	63	58	54	62	57	54	52						
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48						
9	69	58	51	47	68	57	51	47	56	50	46	55	50	46	54	50	46	44						
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41						

RC - Ceiling Cavity Reflectance    RW - Wall Reflectance

Cone of Light			
(FT.) Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread
2	176	2.2	2.2
3	46.6	4.3	4.3
5	20.3	6.5	6.5
7	11.3	8.7	8.7
8	7.37	10.7	10.7
10	5.07	12.9	13.0

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

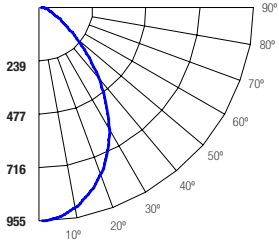
**RL642-750L-1100L-1500L-DIMST-MVOLT-35K-90-W-WH-(1100L)**

**TEST NO.: EL05072012**

INPUT WATTS: **13.3** LUMENS: 1198 CRI: **90** EFFICACY: 90 CCT: **3500K**

SPACING CRITERIA: **0.98**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	334.86	27.9	27.9
0-30	655.32	54.7	54.7
0-40	916.63	76.5	76.5
0-60	1150.4	96	96
0-80	1196.94	99.9	99.9
0-90	1196.96	99.9	99.9

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

Angle in Degrees	Average		
	0°	45°	90°
45	88560	87957	91648
55	48024	48704	51599
65	29232	29948	31427
75	7472	8048	7155
85	79	79	79

**Lumens Per Zone**

Zone	Lumens
0-10	89.34
10-20	245.52
20-30	320.46
30-40	261.31
40-50	154.08
50-60	79.69
60-70	38.42
70-80	8.12
80-90	0.02

**Candela Tabulation**

θ	0	5	15	25	35	45	55	65	75	85	90
0	953.13										
5	940.76										
15	863.22										
25	677.3										
35	388.72										
45	182.94										
55	80.47										
65	36.09										
75	5.65										
85	0.02										
90	0.02										

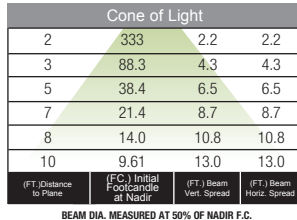
**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	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%	50%	30%	10%	0%		
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100		
1	112	109	106	104	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91	91	91	91	91		
2	106	100	95	91	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82	82	82	82	82		
3	99	91	86	81	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75	75	75	75	75		
4	93	84	77	72	72	91	83	77	72	80	75	71	78	74	70	76	73	69	68	68	68	68	68		
5	87	77	71	66	66	85	76	70	65	74	69	65	73	68	64	71	67	63	62	62	62	62	62		
6	82	72	65	60	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57	57	57	57	57		
7	77	66	60	55	55	76	66	59	55	64	58	54	63	58	54	62	57	54	52	52	52	52	52		
8	73	62	55	50	50	71	61	55	50	60	54	50	59	54	50	58	53	50	48	48	48	48	48		
9	69	58	51	47	47	68	57	51	47	56	50	46	55	50	46	54	50	46	44	44	44	44	44		
10	65	54	48	43	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41	41	41	41	41		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance



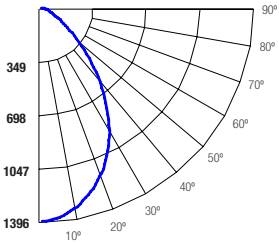
**RL642-750L-1100L-1500L-DIMST-MVOLT-35K-90-W-WH-(1500L)**

**TEST NO.: EL05072011**

INPUT WATTS: **20.8** LUMENS: 1749 CRI: **90** EFFICACY: 84 CCT: **3500K**

SPACING CRITERIA: **0.98**

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	489.73	28	28
0-30	958	54.8	54.8
0-40	1339.09	76.6	76.6
0-60	1679.36	96	96
0-80	1746.84	99.9	99.9
0-90	1746.87	99.9	99.9

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

Angle in Degrees	Average		
	0°	45°	90°
45	128759	127420	133590
55	69842	70854	75142
65	42555	43305	46006
75	10726	11453	10395
85	118	118	79

**Lumens Per Zone**

Zone	Lumens
0-10	130.67
10-20	359.06
20-30	468.27
30-40	381.1
40-50	224.42
50-60	115.84
60-70	55.8
70-80	11.68
80-90	0.03

**Candela Tabulation**

θ	0	5	15	25	35	45	55	65	75	85	90
0	1392.74										
5	1375.19										
15	1261.38										
25	988.62										
35	566.49										
45	265.98										
55	117.03										
65	52.54										
75	8.11										
85	0.03										
90	0.03										

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	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%	50%	30%	10%	0%		
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100		
1	112	109	106	104	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91	91	91	91	91		
2	106	100	95	91	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82	82	82	82	82		
3	99	91	86	81	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75	75	75	75	75		
4	93	84	77	73	73	91	83	77	72	81	75	71	78	74	70	76	73	69	68	68	68	68	68		
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6	82	72	65	60	60	80	71	64	60	69	63	59	68	63	59	66	62	58	57	57	57	57	57		
7	77	67	60	55	55	76	66	59	55	64	58	54	63	58	54	62	57	54	52	52	52	52	52		
8	73	62	55	50	50	72	61	55	50	60	54	50	59	54	50	58	53	50	48	48	48	48	48		
9	69	58	51	47	47	68	57	51	47	56	50	46	55	50	46	54	50	46	44	44	44	44	44		
10	65	54	48	43	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41	41	41	41	41		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

