

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat. #: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Quantity: \_\_\_\_\_

LED

# RCL LED Channel Retrofit Kit

### Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings
- Saves on installation cost, material cost, and waste

### Applications:

Suitable for most commercial, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

### Ambient Operating Temp:

- -30°C to 40°C

### Predicted L70 Lifetime:

- ≥120,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

### Construction:

- Precision brake formed from heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

### Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

### Warranty:

- 5 year limited system warranty
- see [www.LumenFocus.com](http://www.LumenFocus.com) for complete warranty terms and conditions
- 10 year extended warranty available on specific models  
*(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)*



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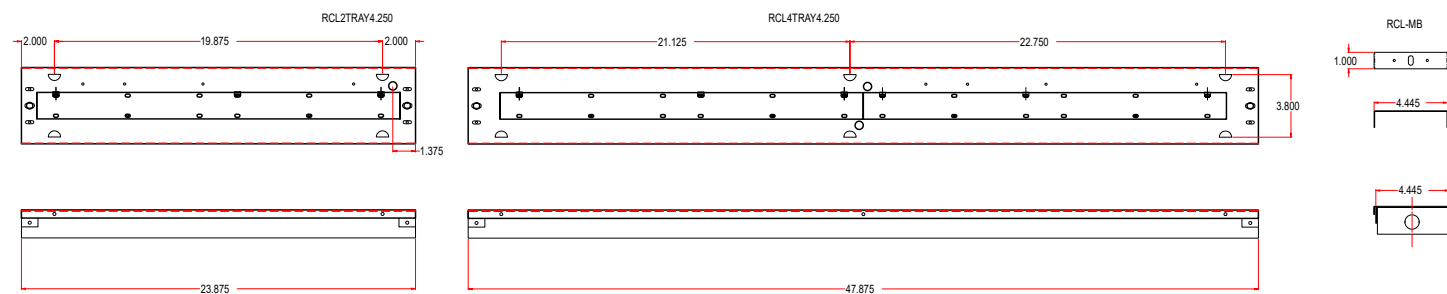
## Ordering Guide:

example: RCL 8 MH UV 840-4.25"-EM1

Series	Length	Output	Voltage	Shielding	CRI/CCT	Channel Width	Options
RCL						-	-
RCL	2 3 4 6 8	LW ML MD MD HE MH HI VH	UV 34	Blank FR	835 840 850	X.XX" VAR	EXT10 OSM EM1 EM2 SDT(480V) CC BAA

<b>Length:</b>	2' 2' 3' 3' 4' 4' 6' 6' 8' 8'	<b>Shielding:</b>	Blank FR None Frosted Acrylic
<b>Lumen Output:</b>	LW Low ML Medium Low (8' model only) MD Medium MD HE Medium-High Efficiency (8' model only) MH Medium High (4' & 8' model only) HI High (not available in 3' model) VH Very High (not available in 3' model)	<b>CRI/CCT:</b>	835 80 CRI / 3500K 840 80 CRI / 4000K 850 80 CRI / 5000K
<b>Voltage:</b>	UV 120-277V 34 347V	<b>Channel Width:</b>	X.XX" VAR Specify Channel Width (in Inches) Variable - adjusts to fit channel widths 4.00" to 5.00"
		<b>Options:</b>	EXT10 10 yr extended warranty (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.) OSM Microwave Occupancy Sensor EM1 Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient) EM2 Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient) SDT(480V) 480V to 277V Step Down Transformer CC Conformal Coating BAA Buy American Act Compliant

## Schematic:



## Performance Chart:

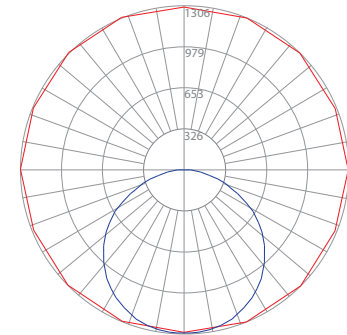
Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
RCL 2 LW UV 835	837	8	104.7	RCL 2 LW UV 840	863	8	107.9	RCL 2 LW UV 850	889	8	111.1
RCL 2 MD UV 835	1950	17.5	111.4	RCL 2 MD UV 840	2011	17.5	114.9	RCL 2 MD UV 850	2071	17.5	118.3
RCL 2 HI UV 835	3085	23	134.1	RCL 2 HI UV 840	3180	23	138.3	RCL 2 HI UV 850	3275	23	142.4
RCL 2 VH UV 835	3963	32	123.9	RCL 2 VH UV 840	4086	32	127.7	RCL 2 VH UV 850	4208	32	131.5
RCL 3 LW UV 835	1241	11	112.8	RCL 3 LW UV 840	1279	11	116.3	RCL 3 LW UV 850	1318	11	119.8
RCL 3 MD UV 835	3183	23	138.4	RCL 3 MD UV 840	3282	23	142.7	RCL 3 MD UV 850	3380	23	147.0
RCL 4 LW UV 835	2305	18	128.0	RCL 4 LW UV 840	2376	18	132.0	RCL 4 LW UV 850	2447	18	136.0
RCL 4 MD UV 835	3832	32	119.7	RCL 4 MD UV 840	3950	32	123.4	RCL 4 MD UV 850	4069	32	127.1
RCL 4 MH UV 835	4829	36	134.1	RCL 4 MH UV 840	4978	36	138.3	RCL 4 MH UV 850	5128	36	142.4
RCL 4 HI UV 835	6705	46	145.8	RCL 4 HI UV 840	6913	46	150.3	RCL 4 HI UV 850	7120	46	154.8
RCL 4 VH UV 835	8901	68	130.9	RCL 4 VH UV 840	9177	68	134.9	RCL 4 VH UV 850	9452	68	139.0
RCL 6 LW UV 835	3119	22	141.8	RCL 6 LW UV 840	3216	22	146.2	RCL 6 LW UV 850	3312	22	150.5
RCL 6 MD UV 835	6482	54	120.0	RCL 6 MD UV 840	6682	54	123.7	RCL 6 MD UV 850	6883	54	127.5
RCL 6 HI UV 835	9854	70	140.8	RCL 6 HI UV 840	10159	70	145.1	RCL 6 HI UV 850	10463	70	149.5
RCL 6 VH UV 835	12423	95	130.8	RCL 6 VH UV 840	12807	95	134.8	RCL 6 VH UV 850	13192	95	138.9
RCL 8 LW UV 835	4240	30	141.3	RCL 8 LW UV 840	4371	30	145.7	RCL 8 LW UV 850	4503	30	150.1
RCL 8 ML UV 835	6125	44	139.2	RCL 8 ML UV 840	6314	44	143.5	RCL 8 ML UV 850	6504	44	147.8
RCL 8 MD UV 835	8033	64	125.5	RCL 8 MD UV 840	8281	64	129.4	RCL 8 MD UV 850	8530	64	133.3
RCL 8 MD HE UV 835	8050	56	143.0	RCL 8 MD HE UV 840	8299	56	147.4	RCL 8 MD HE UV 850	8548	56	151.9
RCL 8 MH UV 835	10765	78	138.0	RCL 8 MH UV 840	11098	78	142.3	RCL 8 MH UV 850	11431	78	146.5
RCL 8 HI UV 835	12988	92	141.2	RCL 8 HI UV 840	13389	92	145.5	RCL 8 HI UV 850	13791	92	149.9
RCL 8 VH UV 835	17316	135	128.3	RCL 8 VH UV 840	17852	135	132.2	RCL 8 VH UV 850	18388	135	136.2
RCL 2 LW UV FR 835	804	8	100.5	RCL 2 LW UV FR 840	828	8	103.6	RCL 2 LW UV FR 850	853	8	106.7
RCL 2 MD UV FR 835	1852	17.5	105.8	RCL 2 MD UV FR 840	1910	17.5	109.1	RCL 2 MD UV FR 850	1967	17.5	112.4
RCL 2 HI UV FR 835	2960	23	128.7	RCL 2 HI UV FR 840	3052	23	132.7	RCL 2 HI UV FR 850	3143	23	136.7
RCL 2 VH UV FR 835	3804	32	118.9	RCL 2 VH UV FR 840	3921	32	122.5	RCL 2 VH UV FR 850	4039	32	126.2
RCL 3 LW UV FR 835	1191	11	108.3	RCL 3 LW UV FR 840	1228	11	111.6	RCL 3 LW UV FR 850	1265	11	115.0
RCL 3 MD UV FR 835	3055	23	132.8	RCL 3 MD UV FR 840	3150	23	136.9	RCL 3 MD UV FR 850	3244	23	141.1
RCL 4 LW UV FR 835	2212	18	122.9	RCL 4 LW UV FR 840	2280	18	126.7	RCL 4 LW UV FR 850	2349	18	130.5
RCL 4 MD UV FR 835	3640	32	115.5	RCL 4 MD UV FR 840	3752	32	119.1	RCL 4 MD UV FR 850	3865	32	122.7
RCL 4 MH UV FR 835	4635	36	128.7	RCL 4 MH UV FR 840	4778	36	132.7	RCL 4 MH UV FR 850	4921	36	136.7
RCL 4 HI UV FR 835	6436	46	139.9	RCL 4 HI UV FR 840	6635	46	144.2	RCL 4 HI UV FR 850	6834	46	148.6
RCL 4 VH UV FR 835	8543	68	125.6	RCL 4 VH UV FR 840	8807	68	129.5	RCL 4 VH UV FR 850	9071	68	133.4
RCL 6 LW UV FR 835	2994	22	136.1	RCL 6 LW UV FR 840	3086	22	140.3	RCL 6 LW UV FR 850	3179	22	144.5
RCL 6 MD UV FR 835	6221	54	115.2	RCL 6 MD UV FR 840	6413	54	118.8	RCL 6 MD UV FR 850	6606	54	122.3
RCL 6 HI UV FR 835	9457	70	135.1	RCL 6 HI UV FR 840	9750	70	139.3	RCL 6 HI UV FR 850	10042	70	143.5
RCL 6 VH UV FR 835	11923	95	125.5	RCL 6 VH UV FR 840	12292	95	129.4	RCL 6 VH UV FR 850	12660	95	133.3
RCL 8 LW UV FR 835	4070	30	135.7	RCL 8 LW UV FR 840	4195	30	139.8	RCL 8 LW UV FR 850	4321	30	144.0
RCL 8 ML UV FR 835	5878	44	133.6	RCL 8 ML UV FR 840	6060	44	137.7	RCL 8 ML UV FR 850	6242	44	141.9
RCL 8 MD UV FR 835	7709	64	120.5	RCL 8 MD UV FR 840	7948	64	124.2	RCL 8 MD UV FR 850	8186	64	127.9
RCL 8 MD HE UV FR 835	7726	56	137.3	RCL 8 MD HE UV FR 840	7965	56	141.5	RCL 8 MD HE UV FR 850	8204	56	145.7
RCL 8 MH UV FR 835	10331	78	132.5	RCL 8 MH UV FR 840	10651	78	136.6	RCL 8 MH UV FR 850	10971	78	140.6
RCL 8 HI UV FR 835	12465	92	135.5	RCL 8 HI UV FR 840	12850	92	139.7	RCL 8 HI UV FR 850	13236	92	143.9
RCL 8 VH UV FR 835	16619	135	123.1	RCL 8 VH UV FR 840	17133	135	126.9	RCL 8 VH UV FR 850	17647	135	130.7

## Photometric Data:

### RCL 4 MD UV 835

**Test No.:** LLIA000584-016  
**Luminaire Lumens:** 3,832 lm  
**Luminaire Watts:** 32.0W  
**Efficacy:** 119.7 LPW  
**Spacing Criterion (0-180):** 1.30  
**Spacing Criterion (90-270):** 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9235	9059	8867
55	8996	8731	8490
65	8454	8006	7741
75	7075	6525	6317
85	3661	3475	3231



— Vert. Plane  
— Horiz. Cone

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0		119	119	119	119	116	116	116	116	111	111	111	106	106	106	
1		109	104	100	96	106	102	98	94	97	94	91	93	91	88	
2		99	90	83	78	96	88	82	77	85	80	75	82	77	73	
3		90	79	71	64	87	78	70	64	75	68	63	72	66	62	
4		82	70	61	54	80	69	60	54	66	59	53	64	58	52	
5		75	62	53	47	73	61	53	46	59	52	46	57	51	45	
6		70	56	47	41	68	55	47	40	53	46	40	52	45	40	
7		65	51	42	36	63	50	42	36	48	41	35	47	40	35	
8		60	46	38	32	58	46	37	32	44	37	32	43	36	31	
9		56	42	34	29	55	42	34	29	41	33	28	40	33	28	
10		53	39	31	26	51	39	31	26	38	31	26	37	30	26	

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

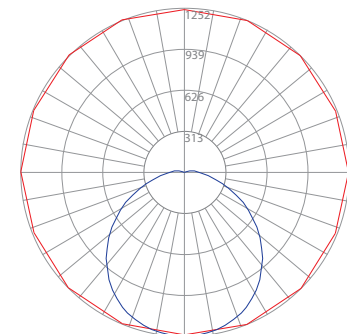
### Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	477.46	12.50
0-30	1019.39	26.60
0-40	1681.25	43.90
0-60	3014.67	78.70
0-80	3768.32	98.30
0-90	3831.59	100.00
90-120	0.41	0.00
90-130	0.41	0.00
90-150	0.41	0.00
90-180	0.41	0.00
0-180	3832.00	100.00

### RCL 4 MD UV FR 835

**Test No.:** LLIA000614-009  
**Luminaire Lumens:** 3,683 lm  
**Luminaire Watts:** 31.5W  
**Efficacy:** 116.9 LPW  
**Spacing Criterion (0-180):** 1.26  
**Spacing Criterion (90-270):** 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7819	7539	7456
55	6856	6841	6847
65	5573	5936	6015
75	4180	5033	4992
85	3378	4593	4238



— Vert. Plane  
— Horiz. Cone

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0		119	119	119	119	116	116	116	116	110	110	110	105	105	105	
1		108	103	98	94	105	100	96	92	95	92	89	91	88	86	
2		98	89	82	76	95	87	81	75	83	78	73	80	75	71	
3		89	78	70	63	86	77	69	63	73	67	61	70	65	60	
4		82	69	60	54	79	68	60	53	65	58	52	62	56	51	
5		75	62	53	46	73	61	52	46	58	51	45	56	50	44	
6		69	56	47	40	67	55	46	40	53	45	39	51	44	39	
7		64	51	42	36	62	50	41	35	48	40	35	46	40	35	
8		60	46	38	32	58	45	37	31	44	36	31	42	36	31	
9		56	42	34	28	54	42	34	28	40	33	28	39	33	28	
10		52	39	31	26	51	38	31	26	37	30	25	36	30	25	

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

### Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	457.01	12.40
0-30	972.24	26.40
0-40	1591.93	43.20
0-60	2792.60	75.80
0-80	3480.09	94.50
0-90	3611.53	98.10
90-120	71.49	1.90
90-130	71.50	1.90
90-150	71.50	1.90
90-180	71.50	1.90
0-180	3683.03	100.00