

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P295990

Luminaire Tested: **24RLN-LD5-67-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295990  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-67-UNV-L93050-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6148.0 lumens  
Efficiency: N/A  
Efficacy: 123.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

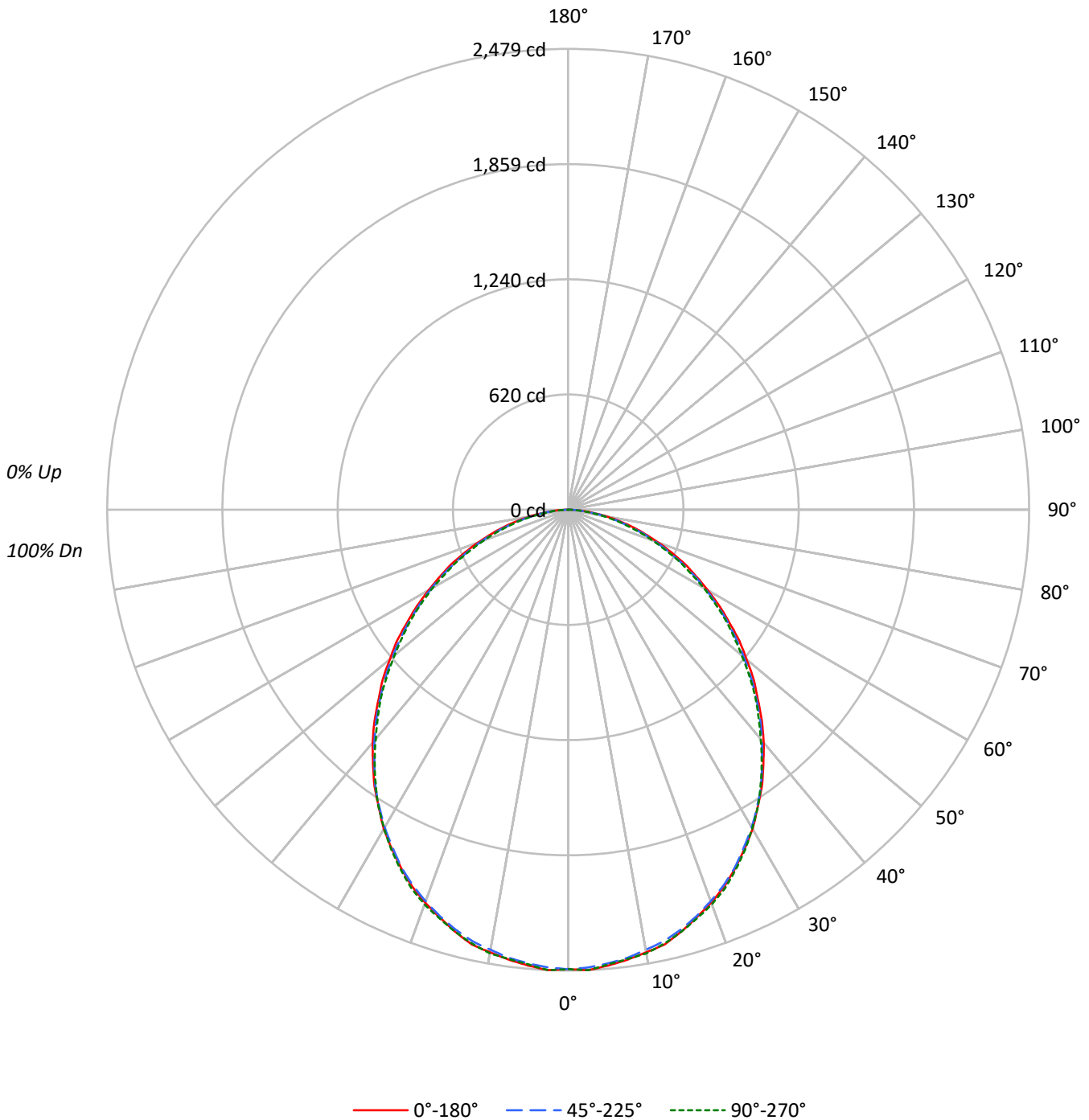
Input Watts (W): 49.941  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295990

CATALOG NUMBER: 24RLN-LD5-67-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295990

CATALOG NUMBER: 24RLN-LD5-67-UNV-L93050-W2A1-U-4000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3325	3325	3325
5°	3324	3308	3316
10°	3303	3284	3311
15°	3274	3257	3274
20°	3220	3209	3235
25°	3157	3151	3168
30°	3081	3066	3075
35°	2984	2971	2965
40°	2874	2846	2829
45°	2744	2717	2706
50°	2620	2578	2549
55°	2480	2443	2419
60°	2332	2290	2263
65°	2204	2122	2103
70°	2021	1943	1904
75°	1856	1743	1670
80°	1629	1522	1430
85°	1317	1224	1041



TEST NUMBER: P295990

CATALOG NUMBER: 24RLN-LD5-67-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.2	3.8
10°-20°	661.0	10.8
20°-30°	977.8	15.9
30°-40°	1128.5	18.4
40°-50°	1102.2	17.9
50°-60°	930.7	15.1
60°-70°	662.9	10.8
70°-80°	359.0	5.8
80°-90°	92.6	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1872.0	30.4
0°-40°	3000.5	48.8
0°-60°	5033.5	81.9
0°-90°	6148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6148.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2471	2471	2471	2471	2471	
5°	2461	2461	2450	2456	2456	234
15°	2350	2340	2338	2348	2350	662
25°	2126	2114	2122	2130	2134	979
35°	1817	1803	1809	1803	1805	1134
45°	1442	1430	1428	1422	1422	1115
55°	1057	1043	1041	1031	1031	948
65°	692	678	666	658	660	682
75°	357	345	335	327	321	378
85°	85	83	79	69	67	100
90°	0	0	0	0	0	



TEST NUMBER: P295990

CATALOG NUMBER: 24RLN-LD5-67-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2471.3	2471.3	2471.3	2471.3	2471.3
2.5°	2479.3	2469.3	2465.4	2467.4	2479.3
5°	2461.4	2461.4	2449.5	2455.5	2455.5
7.5°	2441.6	2443.6	2431.7	2441.6	2437.6
10°	2417.8	2411.8	2403.9	2419.8	2423.7
12.5°	2396.0	2382.1	2378.1	2388.0	2390.0
15°	2350.3	2340.4	2338.4	2348.3	2350.3
17.5°	2298.8	2300.7	2292.8	2306.7	2304.7
20°	2249.2	2245.2	2241.2	2257.1	2259.1
22.5°	2193.6	2181.7	2185.7	2199.6	2203.6
25°	2126.2	2114.3	2122.2	2130.2	2134.1
27.5°	2054.8	2048.9	2046.9	2056.8	2060.8
30°	1983.4	1973.5	1973.5	1985.4	1979.4
32.5°	1896.1	1888.2	1892.2	1896.1	1898.1
35°	1816.8	1802.9	1808.9	1802.9	1804.9
37.5°	1723.6	1713.7	1711.7	1709.7	1709.7
40°	1636.3	1628.4	1620.4	1620.4	1610.5
42.5°	1541.1	1531.2	1527.2	1521.3	1515.3
45°	1441.9	1430.0	1428.1	1422.1	1422.1
47.5°	1352.7	1334.8	1332.8	1320.9	1320.9
50°	1251.5	1239.6	1231.7	1223.8	1217.8
52.5°	1160.3	1148.4	1136.5	1128.6	1122.6
55°	1057.2	1043.3	1041.3	1031.4	1031.4
57.5°	963.9	952.0	944.1	932.2	934.2
60°	866.7	854.8	850.9	841.0	841.0
62.5°	775.5	765.6	759.6	749.7	741.8
65°	692.2	678.3	666.4	658.5	660.5
67.5°	601.0	585.1	579.2	571.2	565.3
70°	513.7	503.8	493.9	484.0	484.0
72.5°	432.4	422.5	416.5	404.6	400.6
75°	357.0	345.1	335.2	327.3	321.3
77.5°	281.6	269.7	263.8	253.9	253.9
80°	210.2	202.3	196.4	192.4	184.5
82.5°	144.8	140.8	134.9	128.9	123.0
85°	85.3	83.3	79.3	69.4	67.4
87.5°	33.7	33.7	29.8	27.8	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)