

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: P295850

Luminaire Tested: **24RLN-LD5-67-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295850  
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-L83050-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7032.0 lumens  
Efficiency: N/A  
Efficacy: 141.3 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

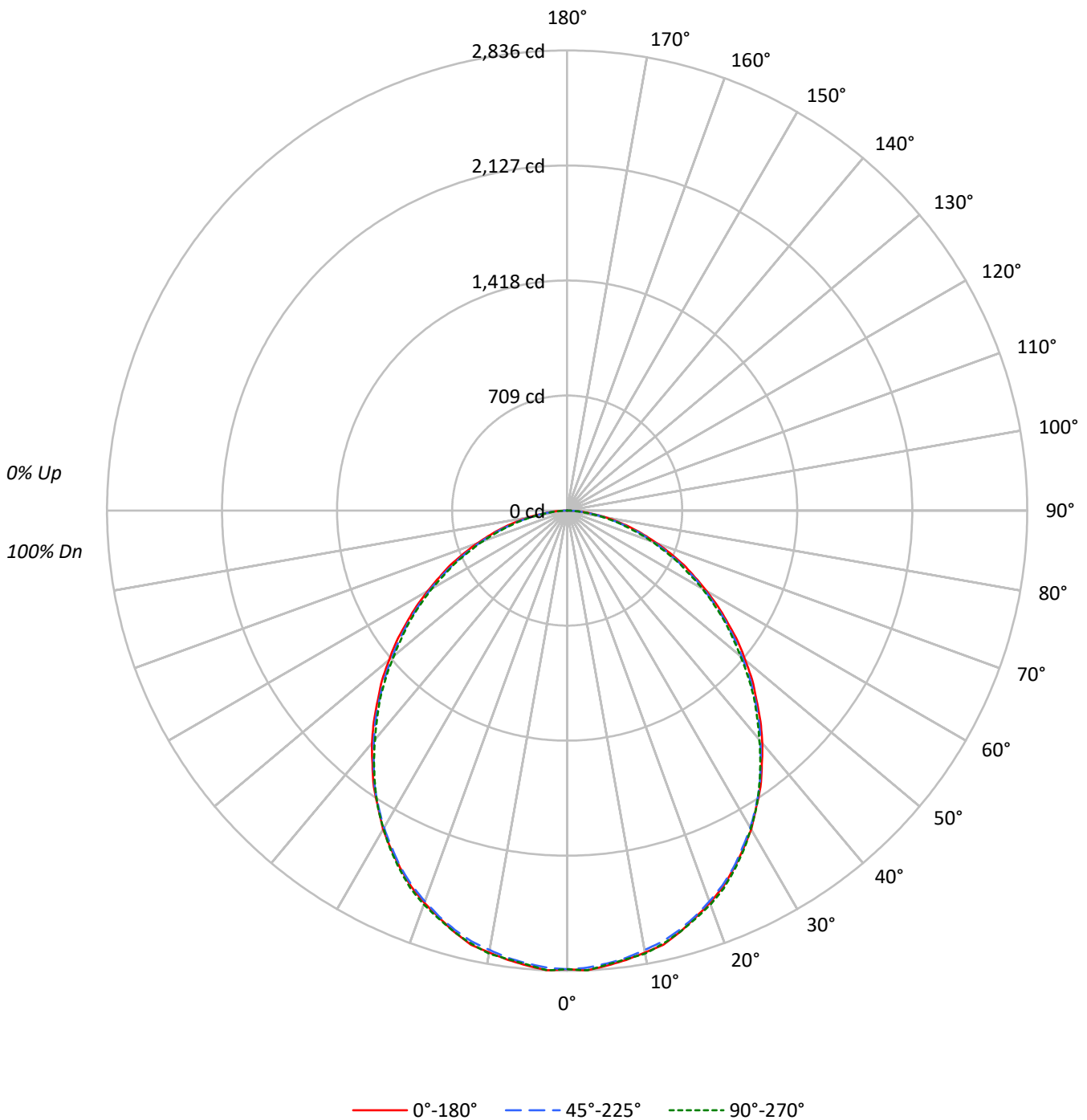
Input Watts (W): 49.755  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

	0°	45°	90°
0°	3803	3803	3803
5°	3802	3784	3793
10°	3778	3756	3788
15°	3745	3726	3745
20°	3684	3671	3700
25°	3610	3604	3624
30°	3525	3507	3518
35°	3413	3398	3391
40°	3287	3255	3235
45°	3138	3108	3095
50°	2996	2949	2916
55°	2837	2794	2767
60°	2668	2619	2588
65°	2521	2427	2405
70°	2312	2222	2177
75°	2123	1993	1910
80°	1863	1740	1635
85°	1505	1400	1190



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	266.7	3.8
10°-20°	756.1	10.8
20°-30°	1118.4	15.9
30°-40°	1290.8	18.4
40°-50°	1260.7	17.9
50°-60°	1064.6	15.1
60°-70°	758.3	10.8
70°-80°	410.6	5.8
80°-90°	105.9	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°	2141.2	30.4
0°-40°	3432.0	48.8
0°-60°	5757.2	81.9
0°-90°	7032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7032.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2827	2827	2827	2827	2827	
5°	2815	2815	2802	2808	2808	267
15°	2688	2677	2675	2686	2688	757
25°	2432	2418	2427	2436	2441	1120
35°	2078	2062	2069	2062	2064	1297
45°	1649	1636	1633	1627	1627	1275
55°	1209	1193	1191	1180	1180	1084
65°	792	776	762	753	755	781
75°	408	395	383	374	368	432
85°	98	95	91	79	77	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2826.7	2826.7	2826.7	2826.7	2826.7
2.5°	2835.7	2824.4	2819.9	2822.1	2835.7
5°	2815.3	2815.3	2801.7	2808.5	2808.5
7.5°	2792.6	2794.9	2781.3	2792.6	2788.1
10°	2765.4	2758.6	2749.5	2767.7	2772.2
12.5°	2740.5	2724.6	2720.0	2731.4	2733.7
15°	2688.3	2676.9	2674.7	2686.0	2688.3
17.5°	2629.3	2631.6	2622.5	2638.4	2636.1
20°	2572.6	2568.0	2563.5	2581.7	2583.9
22.5°	2509.1	2495.4	2500.0	2515.9	2520.4
25°	2431.9	2418.3	2427.4	2436.5	2441.0
27.5°	2350.3	2343.5	2341.2	2352.5	2357.1
30°	2268.6	2257.2	2257.2	2270.9	2264.1
32.5°	2168.8	2159.7	2164.2	2168.8	2171.0
35°	2078.0	2062.1	2069.0	2062.1	2064.4
37.5°	1971.4	1960.1	1957.8	1955.5	1955.5
40°	1871.6	1862.5	1853.4	1853.4	1842.1
42.5°	1762.7	1751.4	1746.8	1740.0	1733.2
45°	1649.3	1635.7	1633.4	1626.6	1626.6
47.5°	1547.2	1526.8	1524.5	1510.9	1510.9
50°	1431.5	1417.9	1408.8	1399.7	1392.9
52.5°	1327.1	1313.5	1299.9	1290.8	1284.0
55°	1209.2	1193.3	1191.0	1179.7	1179.7
57.5°	1102.5	1088.9	1079.8	1066.2	1068.5
60°	991.4	977.8	973.2	961.9	961.9
62.5°	887.0	875.7	868.9	857.5	848.5
65°	791.7	775.9	762.2	753.2	755.4
67.5°	687.4	669.2	662.4	653.4	646.5
70°	587.6	576.2	564.9	553.5	553.5
72.5°	494.6	483.2	476.4	462.8	458.3
75°	408.3	394.7	383.4	374.3	367.5
77.5°	322.1	308.5	301.7	290.4	290.4
80°	240.5	231.4	224.6	220.1	211.0
82.5°	165.6	161.1	154.3	147.5	140.7
85°	97.5	95.3	90.7	79.4	77.1
87.5°	38.6	38.6	34.0	31.8	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)