

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: P295939

Luminaire Tested: **24RLN-LD5-74-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295939  
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-LD5-74-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7552.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 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

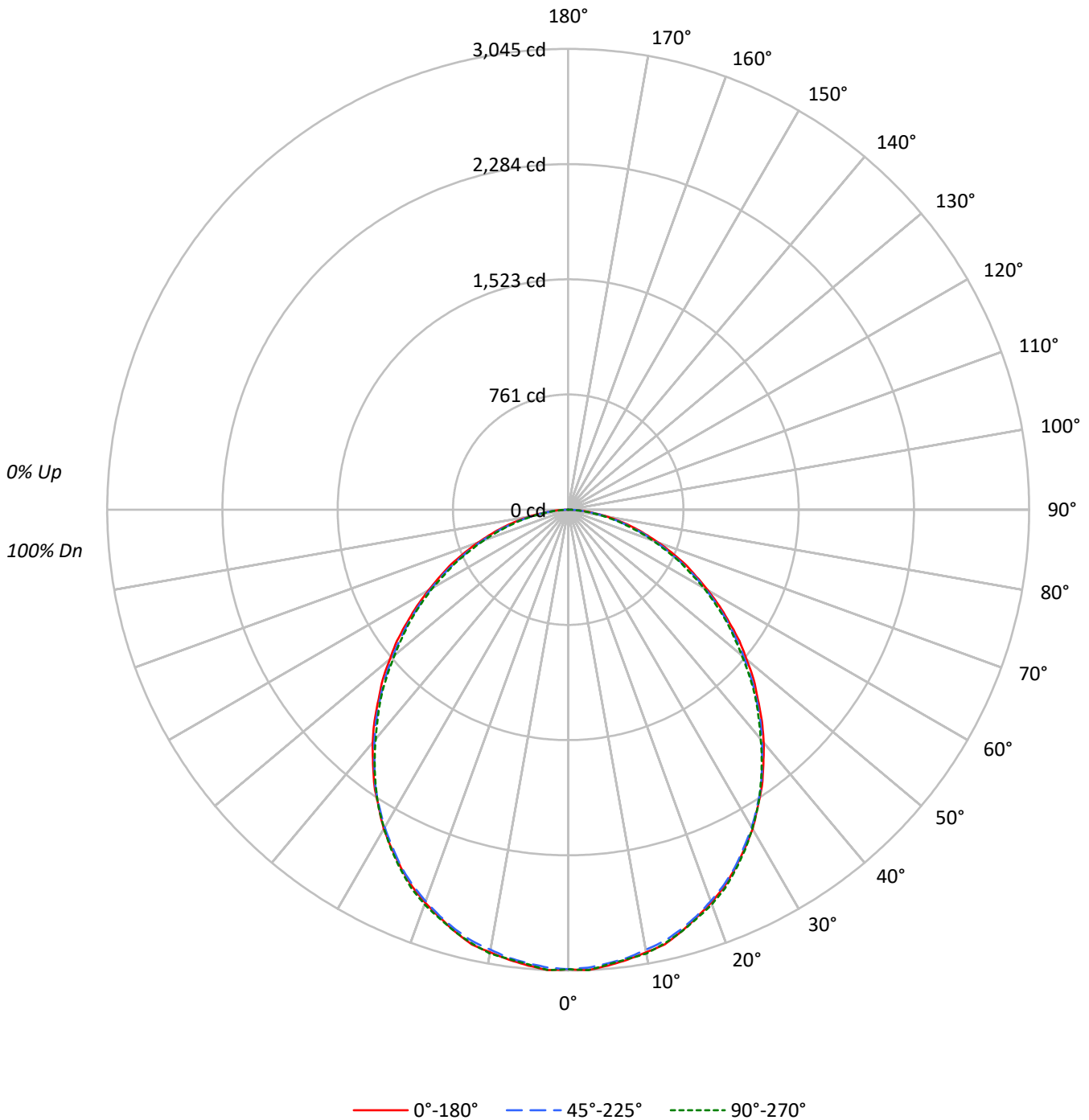
Input Watts (W): 56.079  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4085	4085	4085
5°	4084	4064	4074
10°	4058	4034	4068
15°	4022	4001	4022
20°	3956	3942	3973
25°	3877	3870	3892
30°	3785	3766	3778
35°	3666	3650	3642
40°	3530	3496	3475
45°	3370	3338	3324
50°	3218	3167	3131
55°	3046	3000	2972
60°	2865	2813	2780
65°	2707	2606	2583
70°	2482	2387	2339
75°	2280	2140	2052
80°	2001	1869	1756
85°	1618	1505	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.4	3.8
10°-20°	812.0	10.8
20°-30°	1201.1	15.9
30°-40°	1386.2	18.4
40°-50°	1353.9	17.9
50°-60°	1143.3	15.1
60°-70°	814.3	10.8
70°-80°	440.9	5.8
80°-90°	113.8	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°	2299.6	30.4
0°-40°	3685.8	48.8
0°-60°	6183.0	81.9
0°-90°	7552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3036	3036	3036	3036	3036	
5°	3024	3024	3009	3016	3016	287
15°	2887	2875	2872	2885	2887	813
25°	2612	2597	2607	2617	2622	1202
35°	2232	2215	2222	2215	2217	1393
45°	1771	1757	1754	1747	1747	1370
55°	1299	1282	1279	1267	1267	1164
65°	850	833	819	809	811	838
75°	438	424	412	402	395	464
85°	105	102	98	85	83	123
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3035.7	3035.7	3035.7	3035.7	3035.7
2.5°	3045.4	3033.3	3028.4	3030.8	3045.4
5°	3023.5	3023.5	3008.9	3016.2	3016.2
7.5°	2999.1	3001.6	2987.0	2999.1	2994.3
10°	2969.9	2962.6	2952.9	2972.3	2977.2
12.5°	2943.1	2926.1	2921.2	2933.4	2935.8
15°	2887.1	2874.9	2872.5	2884.6	2887.1
17.5°	2823.7	2826.2	2816.4	2833.5	2831.0
20°	2762.8	2757.9	2753.1	2772.6	2775.0
22.5°	2694.6	2680.0	2684.9	2701.9	2706.8
25°	2611.8	2597.1	2606.9	2616.6	2621.5
27.5°	2524.1	2516.7	2514.3	2526.5	2531.4
30°	2436.3	2424.2	2424.2	2438.8	2431.5
32.5°	2329.1	2319.4	2324.3	2329.1	2331.6
35°	2231.7	2214.6	2221.9	2214.6	2217.1
37.5°	2117.2	2105.0	2102.6	2100.1	2100.1
40°	2010.0	2000.2	1990.5	1990.5	1978.3
42.5°	1893.0	1880.9	1876.0	1868.7	1861.4
45°	1771.2	1756.6	1754.2	1746.9	1746.9
47.5°	1661.6	1639.7	1637.2	1622.6	1622.6
50°	1537.3	1522.7	1513.0	1503.2	1495.9
52.5°	1425.3	1410.6	1396.0	1386.3	1379.0
55°	1298.6	1281.5	1279.1	1266.9	1266.9
57.5°	1184.1	1169.4	1159.7	1145.1	1147.5
60°	1064.7	1050.1	1045.2	1033.0	1033.0
62.5°	952.6	940.4	933.1	920.9	911.2
65°	850.3	833.2	818.6	808.9	811.3
67.5°	738.2	718.7	711.4	701.7	694.4
70°	631.0	618.8	606.7	594.5	594.5
72.5°	531.1	518.9	511.6	497.0	492.1
75°	438.5	423.9	411.7	402.0	394.7
77.5°	346.0	331.3	324.0	311.9	311.9
80°	258.3	248.5	241.2	236.3	226.6
82.5°	177.9	173.0	165.7	158.4	151.1
85°	104.8	102.3	97.5	85.3	82.8
87.5°	41.4	41.4	36.5	34.1	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)