

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: P295854

Luminaire Tested: **24RLN-LD5-74-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295854  
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-L83050-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7434.0 lumens  
Efficiency: N/A  
Efficacy: 135.0 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

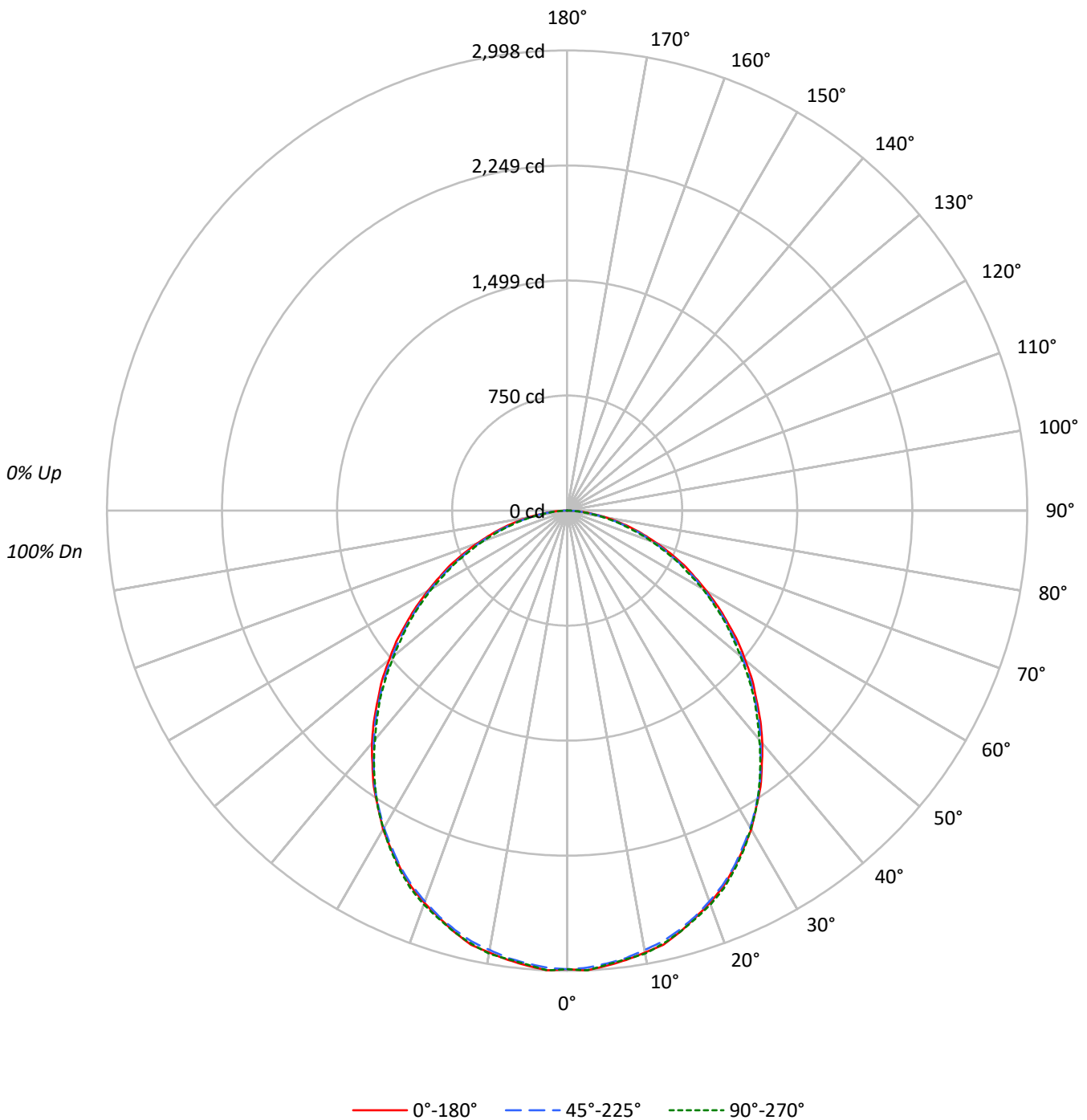
Input Watts (W): 55.056  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4021	4021	4021
5°	4020	4000	4010
10°	3994	3971	4004
15°	3959	3939	3959
20°	3894	3880	3911
25°	3817	3810	3831
30°	3726	3707	3719
35°	3608	3593	3585
40°	3475	3442	3420
45°	3318	3286	3272
50°	3168	3117	3082
55°	2999	2954	2925
60°	2820	2769	2736
65°	2665	2565	2543
70°	2444	2349	2302
75°	2244	2107	2020
80°	1970	1839	1728
85°	1592	1480	1258



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.0	3.8
10°-20°	799.3	10.8
20°-30°	1182.4	15.9
30°-40°	1364.6	18.4
40°-50°	1332.8	17.9
50°-60°	1125.4	15.1
60°-70°	801.6	10.8
70°-80°	434.0	5.8
80°-90°	112.0	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°	2263.6	30.4
0°-40°	3628.2	48.8
0°-60°	6086.4	81.9
0°-90°	7434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7434.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2988	2988	2988	2988	2988	
5°	2976	2976	2962	2969	2969	282
15°	2842	2830	2828	2840	2842	801
25°	2571	2557	2566	2576	2580	1184
35°	2197	2180	2187	2180	2182	1371
45°	1744	1729	1727	1720	1720	1348
55°	1278	1262	1259	1247	1247	1146
65°	837	820	806	796	799	825
75°	432	417	405	396	388	457
85°	103	101	96	84	82	121
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2988.3	2988.3	2988.3	2988.3	2988.3
2.5°	2997.8	2985.9	2981.1	2983.5	2997.8
5°	2976.3	2976.3	2961.9	2969.1	2969.1
7.5°	2952.3	2954.7	2940.3	2952.3	2947.5
10°	2923.5	2916.3	2906.7	2925.9	2930.7
12.5°	2897.1	2880.3	2875.5	2887.5	2889.9
15°	2842.0	2830.0	2827.6	2839.6	2842.0
17.5°	2779.6	2782.0	2772.4	2789.2	2786.8
20°	2719.6	2714.9	2710.1	2729.2	2731.6
22.5°	2652.5	2638.1	2642.9	2659.7	2664.5
25°	2571.0	2556.6	2566.2	2575.8	2580.5
27.5°	2484.6	2477.4	2475.0	2487.0	2491.8
30°	2398.3	2386.3	2386.3	2400.7	2393.5
32.5°	2292.8	2283.2	2288.0	2292.8	2295.2
35°	2196.8	2180.0	2187.2	2180.0	2182.4
37.5°	2084.1	2072.1	2069.7	2067.3	2067.3
40°	1978.6	1969.0	1959.4	1959.4	1947.4
42.5°	1863.5	1851.5	1846.7	1839.5	1832.3
45°	1743.5	1729.2	1726.8	1719.6	1719.6
47.5°	1635.6	1614.0	1611.6	1597.3	1597.3
50°	1513.3	1498.9	1489.3	1479.7	1472.5
52.5°	1403.0	1388.6	1374.2	1364.6	1357.4
55°	1278.3	1261.5	1259.1	1247.1	1247.1
57.5°	1165.6	1151.2	1141.6	1127.2	1129.6
60°	1048.0	1033.7	1028.9	1016.9	1016.9
62.5°	937.7	925.7	918.5	906.5	897.0
65°	837.0	820.2	805.8	796.2	798.6
67.5°	726.7	707.5	700.3	690.7	683.5
70°	621.2	609.2	597.2	585.2	585.2
72.5°	522.8	510.8	503.6	489.2	484.5
75°	431.7	417.3	405.3	395.7	388.5
77.5°	340.6	326.2	319.0	307.0	307.0
80°	254.2	244.6	237.4	232.6	223.0
82.5°	175.1	170.3	163.1	155.9	148.7
85°	103.1	100.7	95.9	83.9	81.5
87.5°	40.8	40.8	36.0	33.6	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)