

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: P295838

Luminaire Tested: **24RLN-LD5-55-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295838  
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-LD5-55-UNV-L83050-W2A1-U-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5244.0 lumens  
Efficiency: N/A  
Efficacy: 137.2 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

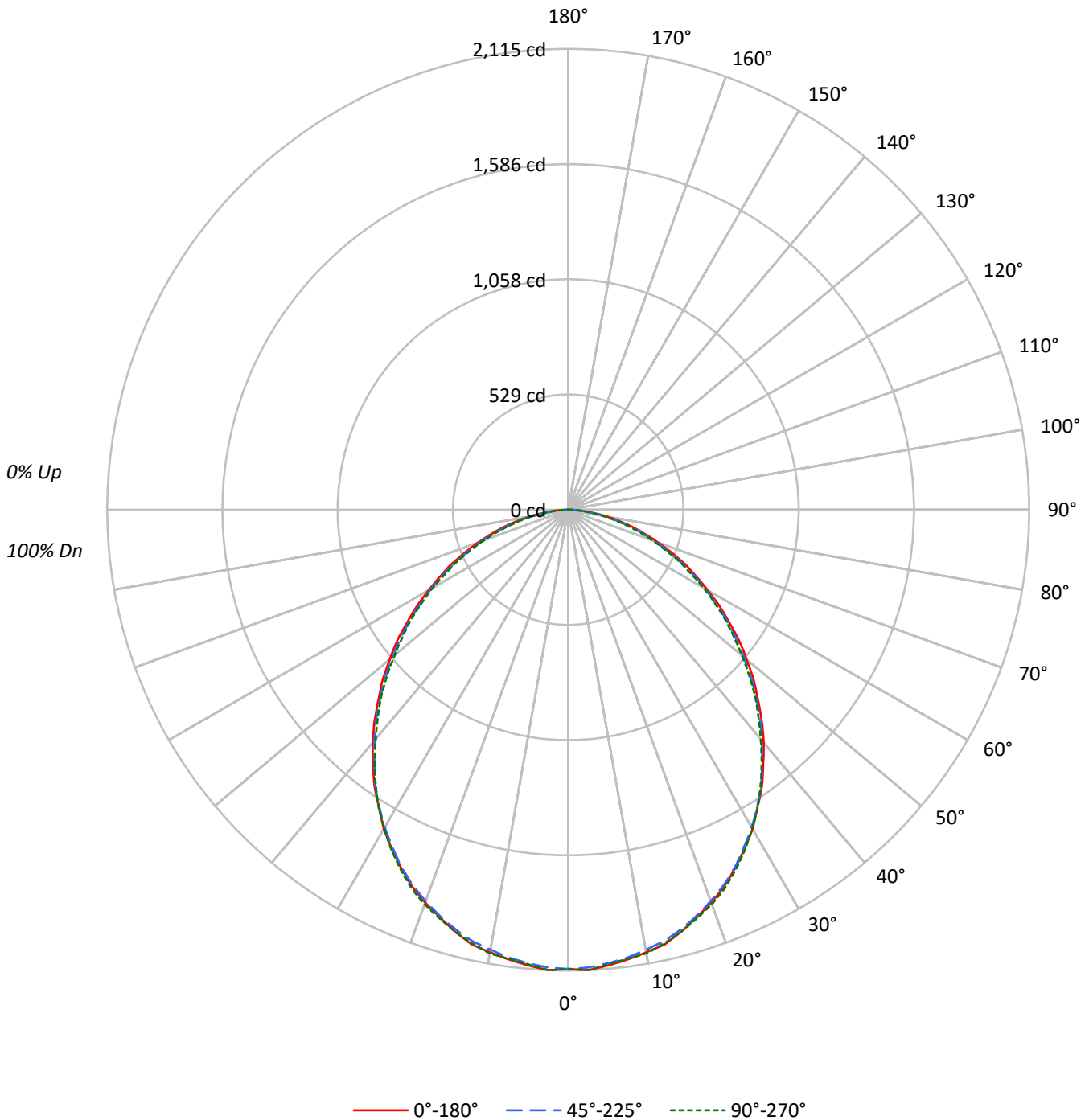
Input Watts (W): 38.223  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2836	2836	2836
5°	2836	2822	2829
10°	2818	2801	2824
15°	2792	2778	2792
20°	2747	2737	2759
25°	2692	2687	2702
30°	2628	2615	2623
35°	2545	2534	2529
40°	2451	2428	2413
45°	2340	2318	2308
50°	2235	2199	2174
55°	2115	2084	2064
60°	1989	1953	1930
65°	1880	1810	1794
70°	1724	1657	1624
75°	1583	1486	1425
80°	1389	1298	1219
85°	1122	1045	888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.9	3.8
10°-20°	563.8	10.8
20°-30°	834.0	15.9
30°-40°	962.6	18.4
40°-50°	940.1	17.9
50°-60°	793.9	15.1
60°-70°	565.5	10.8
70°-80°	306.2	5.8
80°-90°	79.0	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°	1596.8	30.4
0°-40°	2559.4	48.8
0°-60°	4293.4	81.9
0°-90°	5244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5244.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2100	2100	2089	2094	2094	199
15°	2005	1996	1995	2003	2005	565
25°	1814	1803	1810	1817	1820	835
35°	1550	1538	1543	1538	1540	967
45°	1230	1220	1218	1213	1213	951
55°	902	890	888	880	880	808
65°	590	579	568	562	563	582
75°	304	294	286	279	274	322
85°	73	71	68	59	58	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2107.9	2107.9	2107.9	2107.9	2107.9
2.5°	2114.7	2106.2	2102.9	2104.6	2114.7
5°	2099.5	2099.5	2089.3	2094.4	2094.4
7.5°	2082.6	2084.3	2074.1	2082.6	2079.2
10°	2062.3	2057.2	2050.4	2064.0	2067.3
12.5°	2043.7	2031.8	2028.4	2036.9	2038.6
15°	2004.7	1996.3	1994.6	2003.0	2004.7
17.5°	1960.8	1962.4	1955.7	1967.5	1965.8
20°	1918.5	1915.1	1911.7	1925.2	1926.9
22.5°	1871.1	1860.9	1864.3	1876.2	1879.6
25°	1813.6	1803.4	1810.2	1817.0	1820.3
27.5°	1752.7	1747.6	1745.9	1754.4	1757.7
30°	1691.8	1683.3	1683.3	1693.5	1688.4
32.5°	1617.3	1610.6	1613.9	1617.3	1619.0
35°	1549.7	1537.8	1542.9	1537.8	1539.5
37.5°	1470.1	1461.7	1460.0	1458.3	1458.3
40°	1395.7	1388.9	1382.2	1382.2	1373.7
42.5°	1314.5	1306.0	1302.7	1297.6	1292.5
45°	1229.9	1219.8	1218.1	1213.0	1213.0
47.5°	1153.8	1138.6	1136.9	1126.7	1126.7
50°	1067.5	1057.4	1050.6	1043.8	1038.7
52.5°	989.7	979.5	969.4	962.6	957.5
55°	901.7	889.9	888.2	879.7	879.7
57.5°	822.2	812.0	805.3	795.1	796.8
60°	739.3	729.2	725.8	717.3	717.3
62.5°	661.5	653.0	647.9	639.5	632.7
65°	590.4	578.6	568.4	561.7	563.4
67.5°	512.6	499.1	494.0	487.2	482.2
70°	438.2	429.7	421.2	412.8	412.8
72.5°	368.8	360.3	355.3	345.1	341.7
75°	304.5	294.4	285.9	279.1	274.1
77.5°	240.2	230.1	225.0	216.5	216.5
80°	179.3	172.6	167.5	164.1	157.3
82.5°	123.5	120.1	115.0	110.0	104.9
85°	72.7	71.1	67.7	59.2	57.5
87.5°	28.8	28.8	25.4	23.7	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)