

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: P295841

Luminaire Tested: **24RLN-LD5-55-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295841  
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-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: 5882.0 lumens  
Efficiency: N/A  
Efficacy: 146.4 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

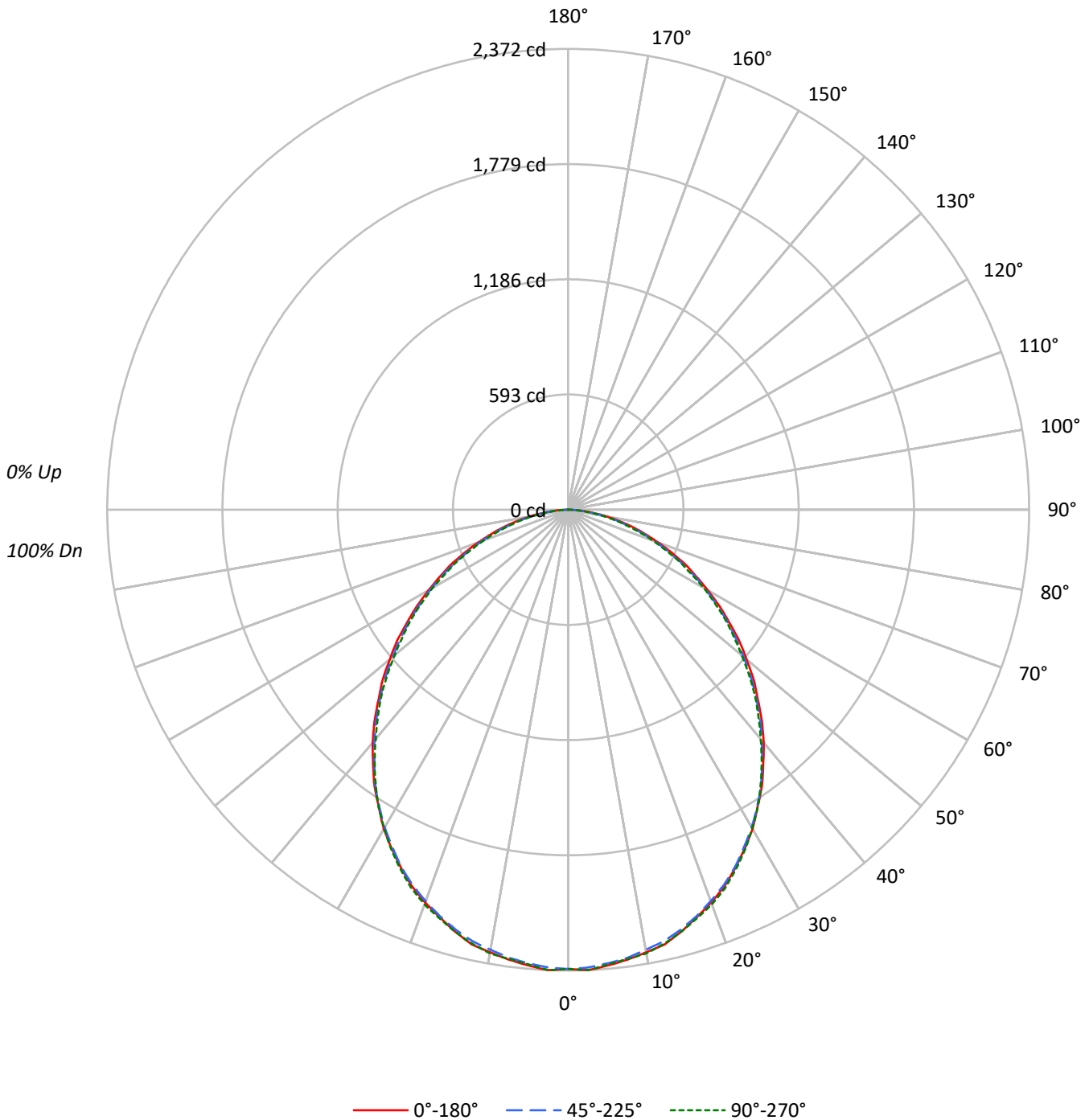
Input Watts (W): 40.176  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295841

CATALOG NUMBER: 24RLN-LD5-55-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P295841

CATALOG NUMBER: 24RLN-LD5-55-UNV-L83050-W2A1-U-4500K

**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°	3181	3181	3181
5°	3181	3165	3173
10°	3160	3142	3168
15°	3132	3116	3132
20°	3081	3070	3095
25°	3020	3014	3031
30°	2948	2933	2942
35°	2855	2843	2836
40°	2750	2723	2706
45°	2625	2600	2589
50°	2506	2467	2439
55°	2373	2337	2315
60°	2231	2191	2165
65°	2109	2030	2012
70°	1934	1859	1821
75°	1776	1667	1598
80°	1558	1456	1368
85°	1260	1172	996



TEST NUMBER: P295841

CATALOG NUMBER: 24RLN-LD5-55-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.1	3.8
10°-20°	632.4	10.8
20°-30°	935.5	15.9
30°-40°	1079.7	18.4
40°-50°	1054.5	17.9
50°-60°	890.5	15.1
60°-70°	634.3	10.8
70°-80°	343.4	5.8
80°-90°	88.6	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°	1791.0	30.4
0°-40°	2870.7	48.8
0°-60°	4815.7	81.9
0°-90°	5882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5882.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2364	2364	2364	2364	2364	
5°	2355	2355	2344	2349	2349	223
15°	2249	2239	2237	2247	2249	633
25°	2034	2023	2030	2038	2042	937
35°	1738	1725	1731	1725	1727	1085
45°	1380	1368	1366	1361	1361	1067
55°	1011	998	996	987	987	907
65°	662	649	638	630	632	653
75°	342	330	321	313	307	362
85°	82	80	76	66	64	96
90°	0	0	0	0	0	



TEST NUMBER: P295841

CATALOG NUMBER: 24RLN-LD5-55-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2364.4	2364.4	2364.4	2364.4	2364.4
2.5°	2372.0	2362.5	2358.7	2360.6	2372.0
5°	2354.9	2354.9	2343.5	2349.2	2349.2
7.5°	2335.9	2337.8	2326.4	2335.9	2332.1
10°	2313.2	2307.5	2299.9	2315.1	2318.9
12.5°	2292.3	2279.0	2275.2	2284.7	2286.6
15°	2248.6	2239.2	2237.3	2246.7	2248.6
17.5°	2199.3	2201.2	2193.6	2206.9	2205.0
20°	2151.9	2148.1	2144.3	2159.5	2161.4
22.5°	2098.7	2087.3	2091.1	2104.4	2108.2
25°	2034.2	2022.8	2030.4	2038.0	2041.8
27.5°	1965.9	1960.2	1958.3	1967.8	1971.6
30°	1897.6	1888.1	1888.1	1899.5	1893.8
32.5°	1814.1	1806.5	1810.3	1814.1	1816.0
35°	1738.2	1724.9	1730.6	1724.9	1726.8
37.5°	1649.0	1639.5	1637.6	1635.7	1635.7
40°	1565.5	1557.9	1550.3	1550.3	1540.8
42.5°	1474.4	1464.9	1461.1	1455.5	1449.8
45°	1379.5	1368.2	1366.3	1360.6	1360.6
47.5°	1294.2	1277.1	1275.2	1263.8	1263.8
50°	1197.4	1186.0	1178.4	1170.8	1165.1
52.5°	1110.1	1098.7	1087.3	1079.7	1074.0
55°	1011.4	998.1	996.2	986.7	986.7
57.5°	922.2	910.8	903.3	891.9	893.8
60°	829.2	817.9	814.1	804.6	804.6
62.5°	742.0	732.5	726.8	717.3	709.7
65°	662.3	649.0	637.6	630.0	631.9
67.5°	575.0	559.8	554.1	546.5	540.8
70°	491.5	482.0	472.5	463.0	463.0
72.5°	413.7	404.2	398.5	387.1	383.3
75°	341.6	330.2	320.7	313.1	307.4
77.5°	269.5	258.1	252.4	242.9	242.9
80°	201.1	193.6	187.9	184.1	176.5
82.5°	138.5	134.7	129.0	123.3	117.7
85°	81.6	79.7	75.9	66.4	64.5
87.5°	32.3	32.3	28.5	26.6	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)