

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: P295912

Luminaire Tested: **24RLN-LD5-55-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295912  
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-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: 5637.0 lumens  
Efficiency: N/A  
Efficacy: 144.3 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

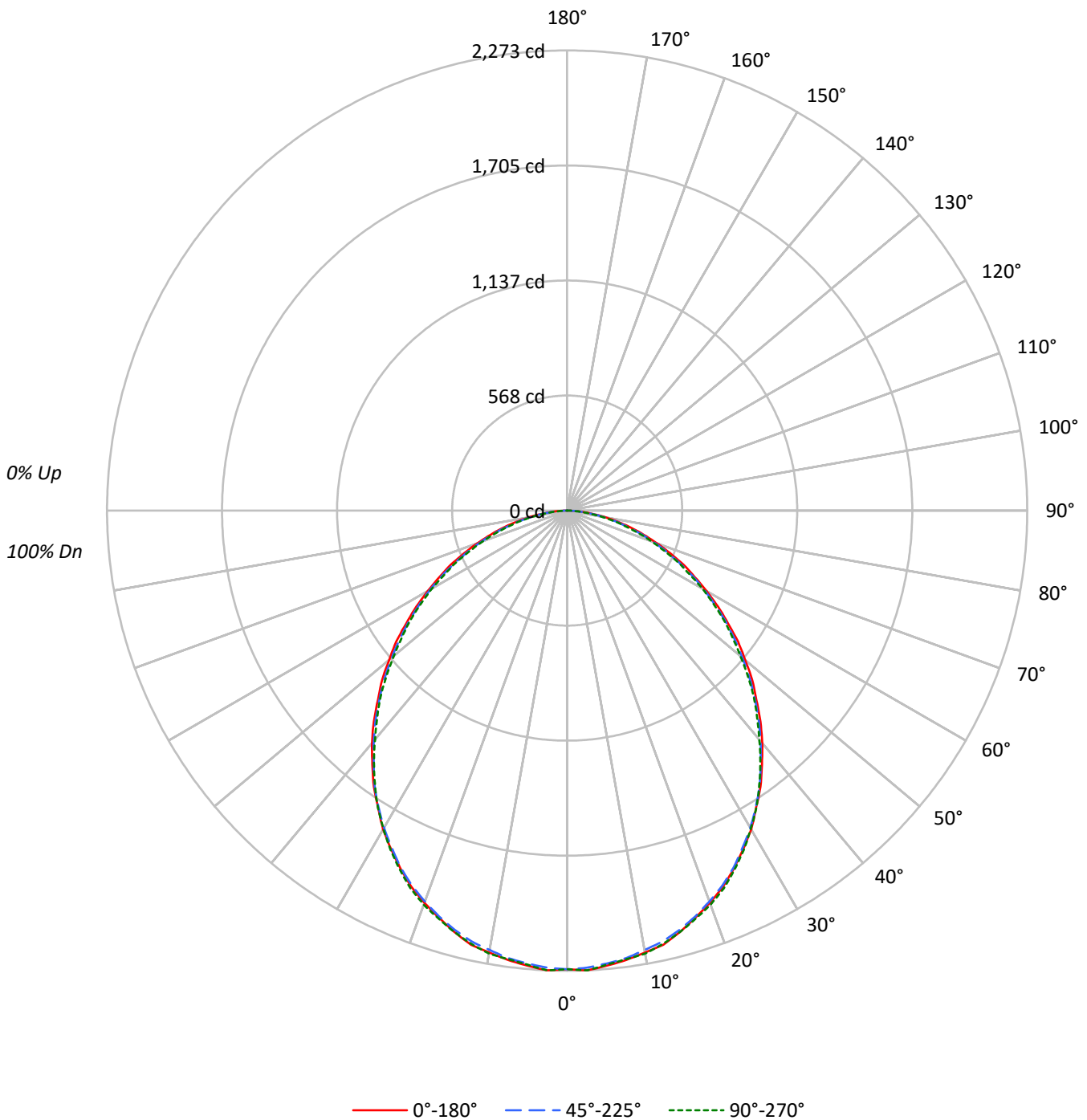
Input Watts (W): 39.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295912

CATALOG NUMBER: 24RLN-LD5-55-UNV-L82765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P295912

CATALOG NUMBER: 24RLN-LD5-55-UNV-L82765-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°	3049	3049	3049
5°	3048	3033	3041
10°	3029	3011	3036
15°	3002	2987	3002
20°	2953	2942	2966
25°	2894	2889	2905
30°	2825	2811	2820
35°	2736	2724	2718
40°	2635	2610	2594
45°	2516	2492	2481
50°	2402	2364	2337
55°	2274	2240	2218
60°	2139	2100	2075
65°	2021	1945	1928
70°	1853	1781	1745
75°	1701	1598	1531
80°	1494	1395	1310
85°	1207	1122	954



TEST NUMBER: P295912

CATALOG NUMBER: 24RLN-LD5-55-UNV-L82765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.8	3.8
10°-20°	606.1	10.8
20°-30°	896.5	15.9
30°-40°	1034.7	18.4
40°-50°	1010.6	17.9
50°-60°	853.4	15.1
60°-70°	607.8	10.8
70°-80°	329.1	5.8
80°-90°	84.9	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°	1716.4	30.4
0°-40°	2751.2	48.8
0°-60°	4615.1	81.9
0°-90°	5637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5637.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2266	2266	2266	2266	2266	
5°	2257	2257	2246	2251	2251	214
15°	2155	2146	2144	2153	2155	607
25°	1950	1939	1946	1953	1957	898
35°	1666	1653	1658	1653	1655	1040
45°	1322	1311	1309	1304	1304	1022
55°	969	957	955	946	946	869
65°	635	622	611	604	606	626
75°	327	316	307	300	295	346
85°	78	76	73	64	62	92
90°	0	0	0	0	0	



TEST NUMBER: P295912

CATALOG NUMBER: 24RLN-LD5-55-UNV-L82765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2265.9	2265.9	2265.9	2265.9	2265.9
2.5°	2273.2	2264.1	2260.5	2262.3	2273.2
5°	2256.8	2256.8	2245.9	2251.4	2251.4
7.5°	2238.6	2240.5	2229.5	2238.6	2235.0
10°	2216.8	2211.4	2204.1	2218.6	2222.3
12.5°	2196.8	2184.1	2180.4	2189.5	2191.4
15°	2155.0	2145.9	2144.1	2153.2	2155.0
17.5°	2107.7	2109.5	2102.2	2115.0	2113.2
20°	2062.2	2058.6	2055.0	2069.5	2071.3
22.5°	2011.3	2000.4	2004.0	2016.8	2020.4
25°	1949.5	1938.6	1945.8	1953.1	1956.8
27.5°	1884.0	1878.6	1876.7	1885.8	1889.5
30°	1818.6	1809.5	1809.5	1820.4	1814.9
32.5°	1738.5	1731.3	1734.9	1738.5	1740.4
35°	1665.8	1653.1	1658.5	1653.1	1654.9
37.5°	1580.3	1571.2	1569.4	1567.6	1567.6
40°	1500.3	1493.0	1485.8	1485.8	1476.7
42.5°	1413.0	1403.9	1400.3	1394.8	1389.4
45°	1322.1	1311.2	1309.4	1303.9	1303.9
47.5°	1240.3	1223.9	1222.1	1211.2	1211.2
50°	1147.5	1136.6	1129.3	1122.0	1116.6
52.5°	1063.9	1052.9	1042.0	1034.8	1029.3
55°	969.3	956.6	954.7	945.6	945.6
57.5°	883.8	872.9	865.6	854.7	856.5
60°	794.7	783.8	780.2	771.1	771.1
62.5°	711.1	702.0	696.5	687.4	680.1
65°	634.7	621.9	611.0	603.8	605.6
67.5°	551.0	536.5	531.0	523.7	518.3
70°	471.0	461.9	452.8	443.7	443.7
72.5°	396.4	387.4	381.9	371.0	367.3
75°	327.3	316.4	307.3	300.1	294.6
77.5°	258.2	247.3	241.9	232.8	232.8
80°	192.8	185.5	180.0	176.4	169.1
82.5°	132.8	129.1	123.7	118.2	112.8
85°	78.2	76.4	72.7	63.6	61.8
87.5°	30.9	30.9	27.3	25.5	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)