

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: P295831

Luminaire Tested: **24RLN-LD5-45-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295831  
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-LD5-45-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: 4820.0 lumens  
Efficiency: N/A  
Efficacy: 145.6 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

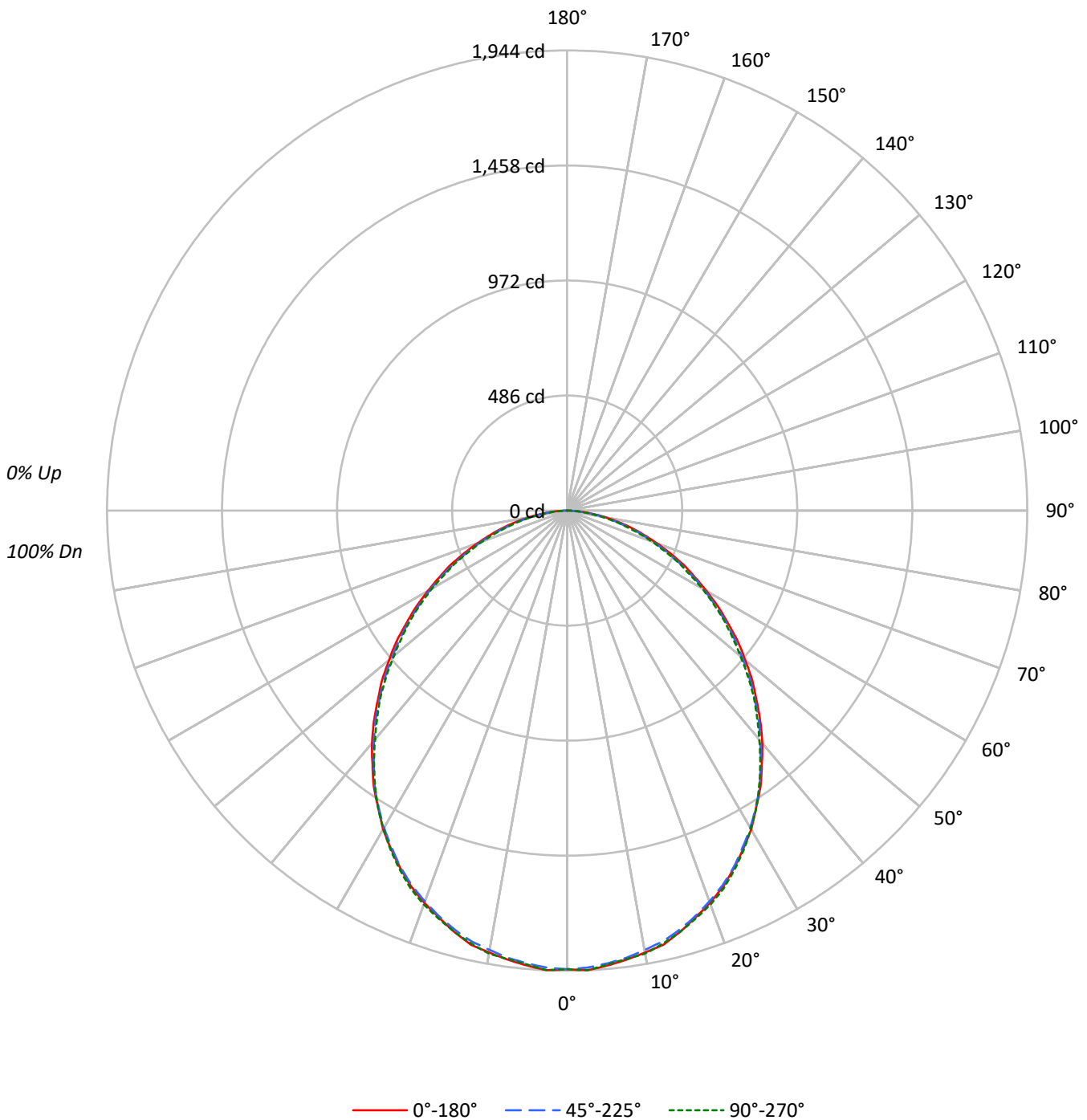
Input Watts (W): 33.108  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2607	2607	2607
5°	2606	2594	2600
10°	2590	2575	2596
15°	2567	2554	2567
20°	2525	2516	2536
25°	2475	2470	2484
30°	2416	2404	2411
35°	2340	2329	2324
40°	2253	2231	2218
45°	2151	2130	2121
50°	2054	2021	1999
55°	1944	1915	1897
60°	1829	1795	1774
65°	1728	1663	1649
70°	1584	1523	1493
75°	1455	1366	1310
80°	1277	1192	1120
85°	1033	960	817



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.8	3.8
10°-20°	518.3	10.8
20°-30°	766.6	15.9
30°-40°	884.7	18.4
40°-50°	864.1	17.9
50°-60°	729.7	15.1
60°-70°	519.8	10.8
70°-80°	281.4	5.8
80°-90°	72.6	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°	1467.7	30.4
0°-40°	2352.4	48.8
0°-60°	3946.2	81.9
0°-90°	4820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4820.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1938	1938	1938	1938	1938	
5°	1930	1930	1920	1925	1925	183
15°	1843	1835	1833	1841	1843	519
25°	1667	1658	1664	1670	1673	767
35°	1424	1414	1418	1414	1415	889
45°	1130	1121	1120	1115	1115	874
55°	829	818	816	809	809	743
65°	543	532	522	516	518	535
75°	280	271	263	257	252	296
85°	67	65	62	54	53	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1937.5	1937.5	1937.5	1937.5	1937.5
2.5°	1943.7	1935.9	1932.8	1934.4	1943.7
5°	1929.7	1929.7	1920.4	1925.1	1925.1
7.5°	1914.2	1915.7	1906.4	1914.2	1911.1
10°	1895.5	1890.9	1884.6	1897.1	1900.2
12.5°	1878.4	1867.5	1864.4	1872.2	1873.7
15°	1842.6	1834.9	1833.3	1841.1	1842.6
17.5°	1802.2	1803.8	1797.6	1808.4	1806.9
20°	1763.3	1760.2	1757.1	1769.6	1771.1
22.5°	1719.8	1710.5	1713.6	1724.5	1727.6
25°	1666.9	1657.6	1663.8	1670.0	1673.2
27.5°	1611.0	1606.3	1604.7	1612.5	1615.6
30°	1555.0	1547.2	1547.2	1556.5	1551.9
32.5°	1486.6	1480.3	1483.4	1486.6	1488.1
35°	1424.4	1413.5	1418.1	1413.5	1415.0
37.5°	1351.3	1343.5	1341.9	1340.4	1340.4
40°	1282.9	1276.6	1270.4	1270.4	1262.6
42.5°	1208.2	1200.4	1197.3	1192.7	1188.0
45°	1130.5	1121.1	1119.6	1114.9	1114.9
47.5°	1060.5	1046.5	1044.9	1035.6	1035.6
50°	981.2	971.9	965.6	959.4	954.8
52.5°	909.7	900.3	891.0	884.8	880.1
55°	828.8	817.9	816.4	808.6	808.6
57.5°	755.7	746.4	740.2	730.8	732.4
60°	679.5	670.2	667.1	659.3	659.3
62.5°	608.0	600.2	595.6	587.8	581.6
65°	542.7	531.8	522.5	516.3	517.8
67.5°	471.2	458.7	454.1	447.8	443.2
70°	402.7	395.0	387.2	379.4	379.4
72.5°	339.0	331.2	326.5	317.2	314.1
75°	279.9	270.6	262.8	256.6	251.9
77.5°	220.8	211.5	206.8	199.0	199.0
80°	164.8	158.6	153.9	150.8	144.6
82.5°	113.5	110.4	105.7	101.1	96.4
85°	66.9	65.3	62.2	54.4	52.9
87.5°	26.4	26.4	23.3	21.8	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)