

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: P295898

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295898  
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-L82765-W2A1-U-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4753.0 lumens  
Efficiency: N/A  
Efficacy: 144.4 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

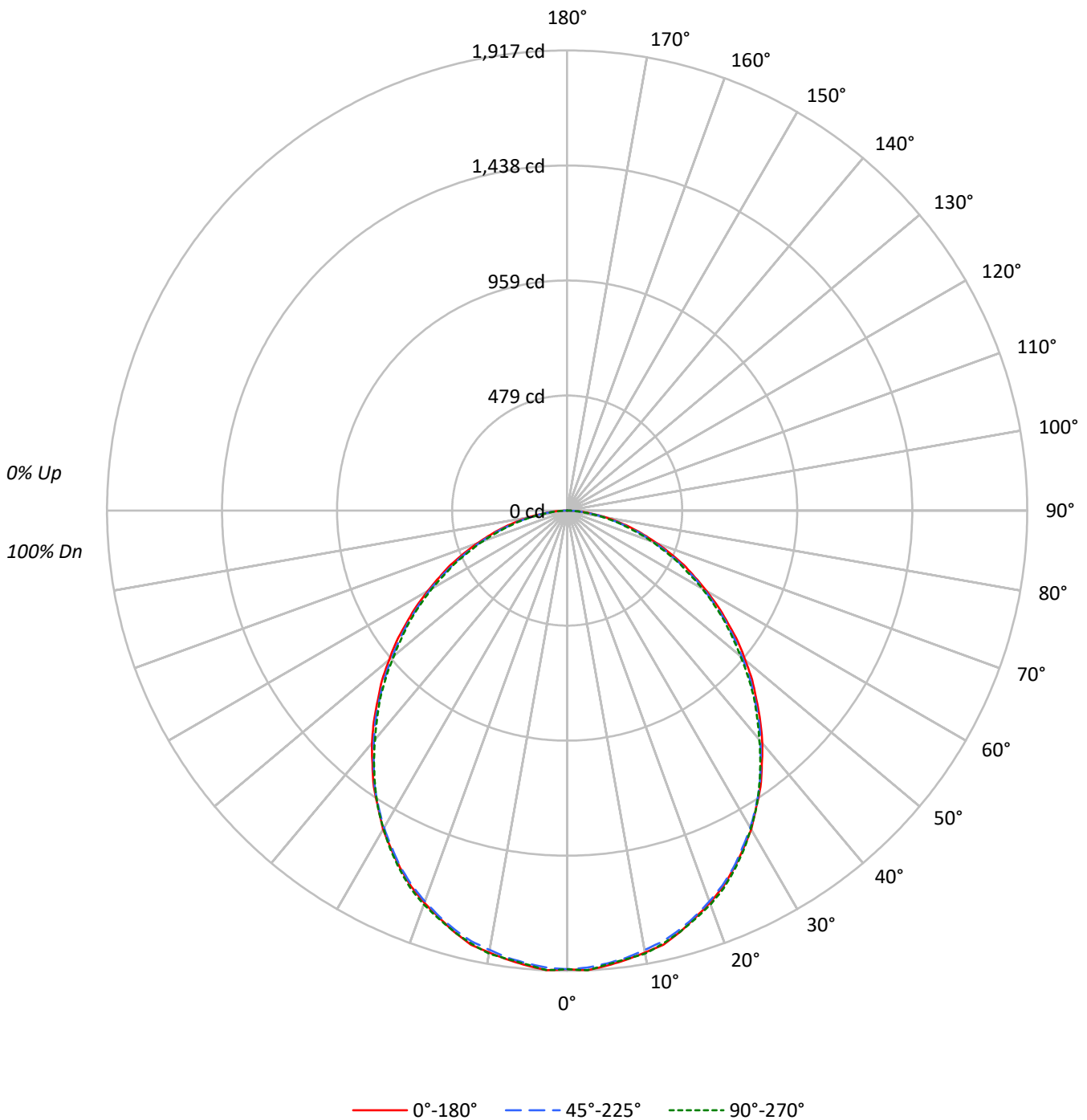
Input Watts (W): 32.922  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2571	2571	2571
5°	2570	2558	2564
10°	2554	2539	2560
15°	2531	2518	2531
20°	2490	2481	2501
25°	2440	2436	2449
30°	2382	2370	2378
35°	2307	2297	2292
40°	2222	2200	2187
45°	2121	2101	2092
50°	2025	1993	1971
55°	1917	1888	1870
60°	1803	1770	1749
65°	1704	1640	1626
70°	1562	1502	1472
75°	1435	1347	1291
80°	1259	1176	1105
85°	1017	946	804



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.3	3.8
10°-20°	511.1	10.8
20°-30°	756.0	15.9
30°-40°	872.4	18.4
40°-50°	852.1	17.9
50°-60°	719.5	15.1
60°-70°	512.5	10.8
70°-80°	277.5	5.8
80°-90°	71.6	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°	1447.3	30.4
0°-40°	2319.7	48.8
0°-60°	3891.4	81.9
0°-90°	4753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4753.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1911	1911	1911	1911	1911	
5°	1903	1903	1894	1898	1898	181
15°	1817	1809	1808	1816	1817	512
25°	1644	1635	1641	1647	1650	757
35°	1405	1394	1398	1394	1395	877
45°	1115	1106	1104	1099	1099	862
55°	817	806	805	797	797	733
65°	535	524	515	509	511	528
75°	276	267	259	253	248	292
85°	66	64	61	54	52	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1910.6	1910.6	1910.6	1910.6	1910.6
2.5°	1916.7	1909.0	1906.0	1907.5	1916.7
5°	1902.9	1902.9	1893.7	1898.3	1898.3
7.5°	1887.6	1889.1	1879.9	1887.6	1884.5
10°	1869.2	1864.6	1858.4	1870.7	1873.8
12.5°	1852.3	1841.6	1838.5	1846.2	1847.7
15°	1817.0	1809.4	1807.8	1815.5	1817.0
17.5°	1777.2	1778.7	1772.6	1783.3	1781.8
20°	1738.8	1735.8	1732.7	1745.0	1746.5
22.5°	1695.9	1686.7	1689.8	1700.5	1703.6
25°	1643.8	1634.6	1640.7	1646.8	1649.9
27.5°	1588.6	1584.0	1582.4	1590.1	1593.2
30°	1533.4	1525.7	1525.7	1534.9	1530.3
32.5°	1465.9	1459.8	1462.8	1465.9	1467.4
35°	1404.6	1393.8	1398.4	1393.8	1395.4
37.5°	1332.5	1324.8	1323.3	1321.8	1321.8
40°	1265.0	1258.9	1252.8	1252.8	1245.1
42.5°	1191.4	1183.8	1180.7	1176.1	1171.5
45°	1114.8	1105.6	1104.0	1099.4	1099.4
47.5°	1045.8	1032.0	1030.4	1021.2	1021.2
50°	967.6	958.4	952.2	946.1	941.5
52.5°	897.0	887.8	878.6	872.5	867.9
55°	817.3	806.5	805.0	797.3	797.3
57.5°	745.2	736.0	729.9	720.7	722.2
60°	670.1	660.9	657.8	650.1	650.1
62.5°	599.5	591.9	587.3	579.6	573.5
65°	535.1	524.4	515.2	509.1	510.6
67.5°	464.6	452.3	447.7	441.6	437.0
70°	397.1	389.5	381.8	374.1	374.1
72.5°	334.3	326.6	322.0	312.8	309.7
75°	276.0	266.8	259.1	253.0	248.4
77.5°	217.7	208.5	203.9	196.3	196.3
80°	162.5	156.4	151.8	148.7	142.6
82.5°	111.9	108.9	104.3	99.7	95.1
85°	65.9	64.4	61.3	53.7	52.1
87.5°	26.1	26.1	23.0	21.5	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)