

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: P295892

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295892  
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-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4441.0 lumens  
Efficiency: N/A  
Efficacy: 140.0 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

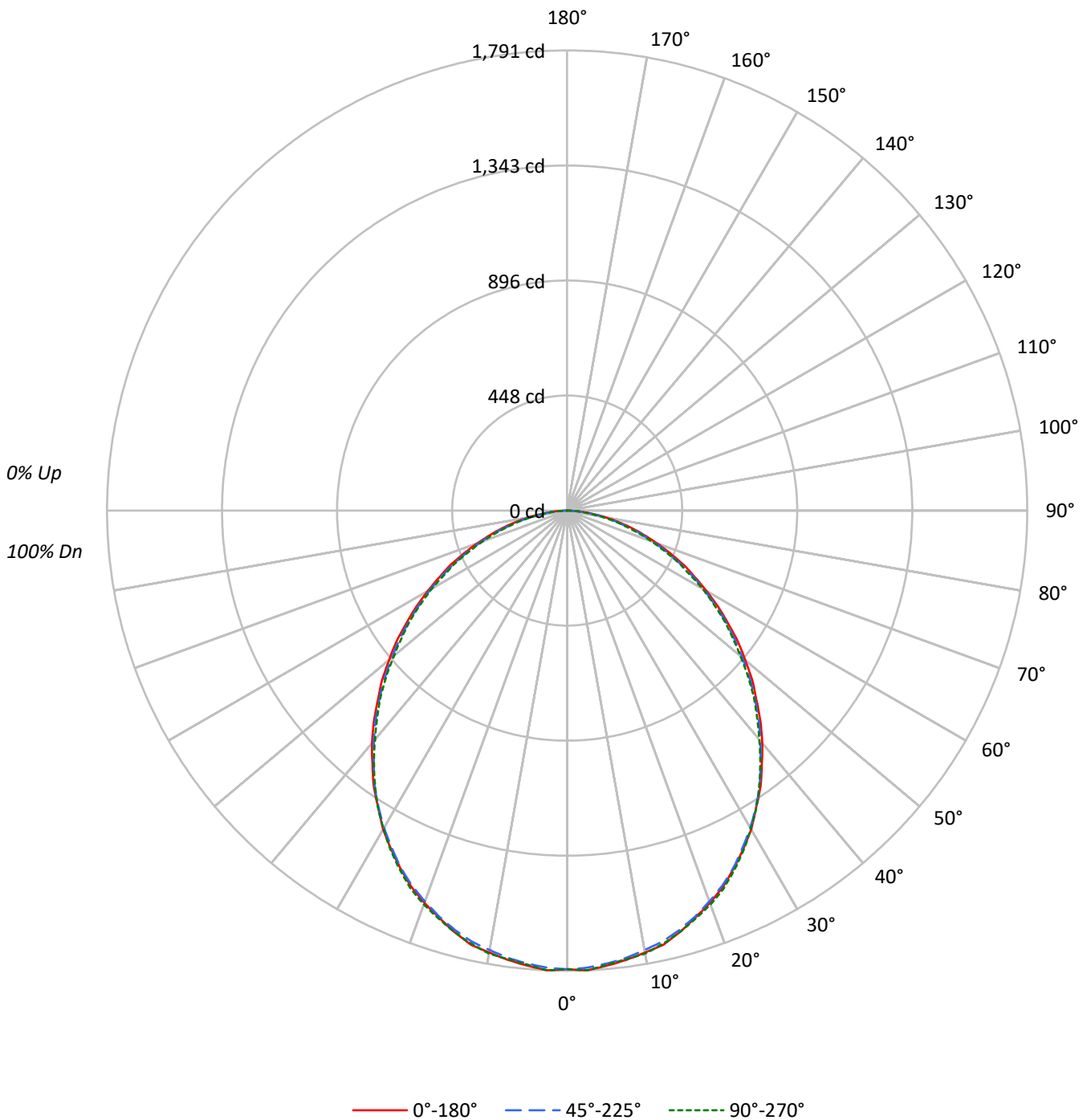
Input Watts (W): 31.713  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2402	2402	2402
5°	2401	2390	2396
10°	2386	2372	2392
15°	2365	2353	2365
20°	2326	2318	2337
25°	2280	2276	2289
30°	2226	2215	2221
35°	2156	2146	2142
40°	2076	2056	2043
45°	1982	1963	1955
50°	1892	1862	1841
55°	1791	1765	1748
60°	1685	1654	1635
65°	1592	1533	1519
70°	1460	1403	1375
75°	1341	1259	1207
80°	1177	1099	1032
85°	951	885	752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.4	3.8
10°-20°	477.5	10.8
20°-30°	706.3	15.9
30°-40°	815.2	18.4
40°-50°	796.2	17.9
50°-60°	672.3	15.1
60°-70°	478.9	10.8
70°-80°	259.3	5.8
80°-90°	66.9	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°	1352.3	30.4
0°-40°	2167.4	48.8
0°-60°	3635.9	81.9
0°-90°	4441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4441.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1778	1778	1769	1774	1774	169
15°	1698	1691	1689	1696	1698	478
25°	1536	1527	1533	1539	1542	707
35°	1312	1302	1307	1302	1304	819
45°	1042	1033	1032	1027	1027	805
55°	764	754	752	745	745	685
65°	500	490	481	476	477	493
75°	258	249	242	236	232	273
85°	62	60	57	50	49	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1785.2	1785.2	1785.2	1785.2	1785.2
2.5°	1790.9	1783.7	1780.9	1782.3	1790.9
5°	1778.0	1778.0	1769.4	1773.7	1773.7
7.5°	1763.7	1765.1	1756.5	1763.7	1760.8
10°	1746.5	1742.2	1736.4	1747.9	1750.8
12.5°	1730.7	1720.7	1717.8	1725.0	1726.4
15°	1697.8	1690.6	1689.2	1696.3	1697.8
17.5°	1660.5	1661.9	1656.2	1666.2	1664.8
20°	1624.7	1621.8	1619.0	1630.4	1631.9
22.5°	1584.6	1576.0	1578.8	1588.9	1591.7
25°	1535.9	1527.3	1533.0	1538.7	1541.6
27.5°	1484.3	1480.0	1478.6	1485.7	1488.6
30°	1432.7	1425.5	1425.5	1434.1	1429.8
32.5°	1369.7	1363.9	1366.8	1369.7	1371.1
35°	1312.4	1302.3	1306.6	1302.3	1303.8
37.5°	1245.0	1237.9	1236.4	1235.0	1235.0
40°	1182.0	1176.3	1170.5	1170.5	1163.4
42.5°	1113.2	1106.1	1103.2	1098.9	1094.6
45°	1041.6	1033.0	1031.6	1027.3	1027.3
47.5°	977.1	964.2	962.8	954.2	954.2
50°	904.0	895.4	889.7	884.0	879.7
52.5°	838.1	829.5	820.9	815.2	810.9
55°	763.6	753.6	752.2	745.0	745.0
57.5°	696.3	687.7	682.0	673.4	674.8
60°	626.1	617.5	614.6	607.5	607.5
62.5°	560.2	553.0	548.7	541.6	535.8
65°	500.0	490.0	481.4	475.7	477.1
67.5°	434.1	422.6	418.4	412.6	408.3
70°	371.1	363.9	356.7	349.6	349.6
72.5°	312.3	305.2	300.9	292.3	289.4
75°	257.9	249.3	242.1	236.4	232.1
77.5°	203.4	194.8	190.6	183.4	183.4
80°	151.9	146.1	141.8	139.0	133.2
82.5°	104.6	101.7	97.4	93.1	88.8
85°	61.6	60.2	57.3	50.1	48.7
87.5°	24.4	24.4	21.5	20.1	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)