

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: P296048

Luminaire Tested: **24RLN-LD5-55-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296048  
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-L92765-W2A1-U-2700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4348.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

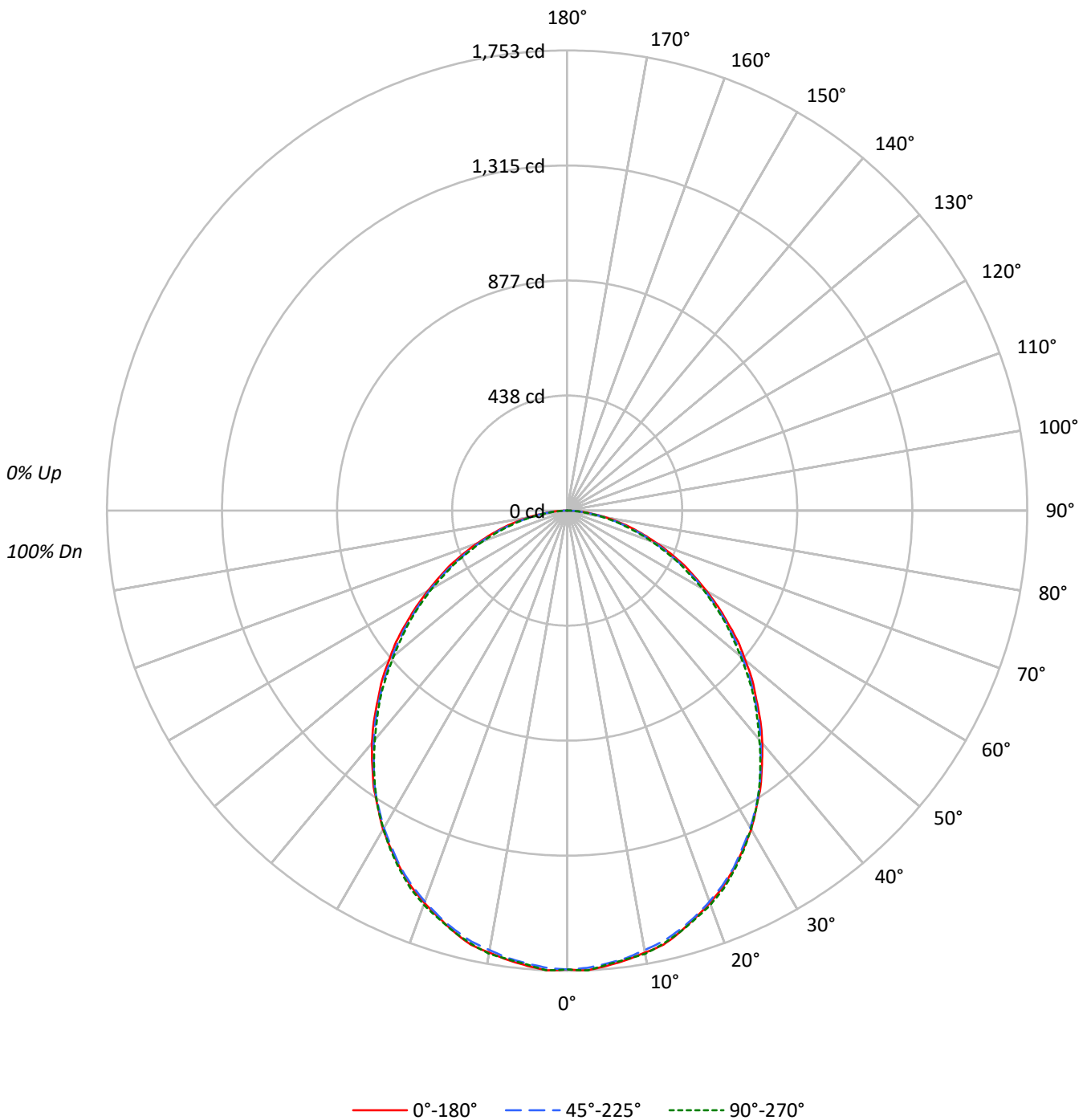
Input Watts (W): 38.223  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2352	2352	2352
5°	2351	2340	2346
10°	2336	2323	2342
15°	2315	2304	2315
20°	2278	2270	2288
25°	2232	2228	2241
30°	2179	2168	2175
35°	2110	2101	2097
40°	2033	2013	2001
45°	1940	1922	1914
50°	1853	1823	1803
55°	1754	1727	1711
60°	1650	1619	1600
65°	1558	1500	1487
70°	1429	1374	1347
75°	1313	1233	1181
80°	1152	1076	1011
85°	931	866	736



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.9	3.8
10°-20°	467.5	10.8
20°-30°	691.5	15.9
30°-40°	798.1	18.4
40°-50°	779.5	17.9
50°-60°	658.2	15.1
60°-70°	468.8	10.8
70°-80°	253.9	5.8
80°-90°	65.5	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°	1324.0	30.4
0°-40°	2122.1	48.8
0°-60°	3559.8	81.9
0°-90°	4348.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4348.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1748	1748	1748	1748	1748	
5°	1741	1741	1732	1737	1737	165
15°	1662	1655	1654	1661	1662	468
25°	1504	1495	1501	1506	1509	692
35°	1285	1275	1279	1275	1276	802
45°	1020	1011	1010	1006	1006	789
55°	748	738	736	729	729	670
65°	490	480	471	466	467	483
75°	252	244	237	231	227	267
85°	60	59	56	49	48	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1747.8	1747.8	1747.8	1747.8	1747.8
2.5°	1753.4	1746.4	1743.6	1745.0	1753.4
5°	1740.8	1740.8	1732.3	1736.6	1736.6
7.5°	1726.7	1728.1	1719.7	1726.7	1723.9
10°	1709.9	1705.7	1700.1	1711.3	1714.1
12.5°	1694.5	1684.7	1681.8	1688.9	1690.3
15°	1662.2	1655.2	1653.8	1660.8	1662.2
17.5°	1625.7	1627.1	1621.5	1631.3	1629.9
20°	1590.7	1587.9	1585.1	1596.3	1597.7
22.5°	1551.4	1543.0	1545.8	1555.6	1558.4
25°	1503.7	1495.3	1500.9	1506.5	1509.3
27.5°	1453.2	1449.0	1447.6	1454.6	1457.4
30°	1402.7	1395.7	1395.7	1404.1	1399.9
32.5°	1341.0	1335.4	1338.2	1341.0	1342.4
35°	1284.9	1275.1	1279.3	1275.1	1276.5
37.5°	1219.0	1211.9	1210.5	1209.1	1209.1
40°	1157.2	1151.6	1146.0	1146.0	1139.0
42.5°	1089.9	1082.9	1080.1	1075.9	1071.7
45°	1019.8	1011.4	1009.9	1005.7	1005.7
47.5°	956.6	944.0	942.6	934.2	934.2
50°	885.1	876.7	871.1	865.5	861.3
52.5°	820.6	812.2	803.8	798.1	793.9
55°	747.6	737.8	736.4	729.4	729.4
57.5°	681.7	673.3	667.7	659.3	660.7
60°	613.0	604.6	601.8	594.7	594.7
62.5°	548.5	541.4	537.2	530.2	524.6
65°	489.5	479.7	471.3	465.7	467.1
67.5°	425.0	413.8	409.6	404.0	399.8
70°	363.3	356.3	349.3	342.3	342.3
72.5°	305.8	298.8	294.6	286.2	283.3
75°	252.5	244.1	237.1	231.4	227.2
77.5°	199.2	190.8	186.6	179.5	179.5
80°	148.7	143.1	138.9	136.1	130.5
82.5°	102.4	99.6	95.4	91.2	87.0
85°	60.3	58.9	56.1	49.1	47.7
87.5°	23.8	23.8	21.0	19.6	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)