

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: P296452

Luminaire Tested: **22RLN-LD5-44-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-44-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4454.0 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.23 / 1.3  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

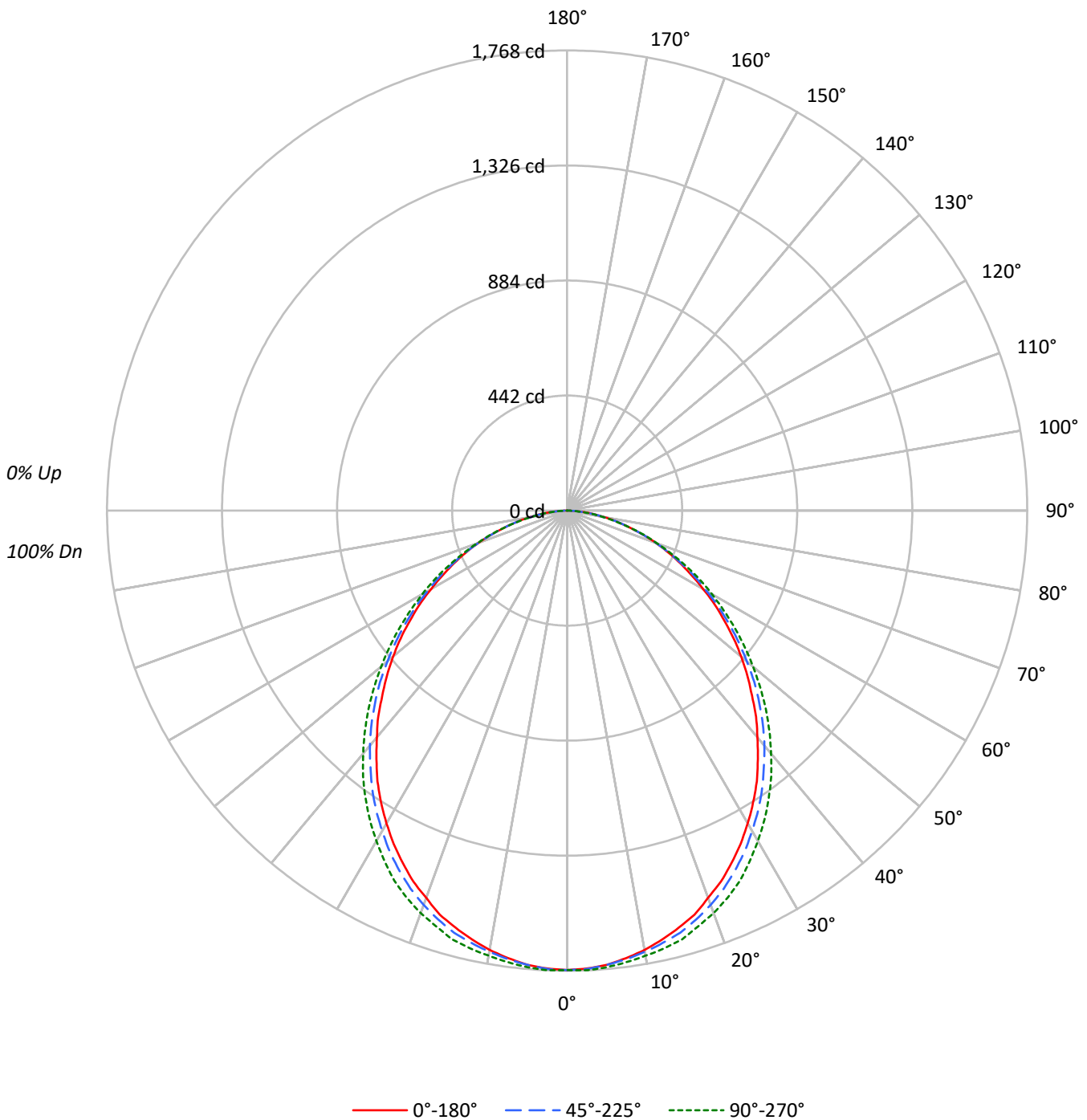
Input Watts (W): 36.27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4751	4751	4751
5°	4733	4733	4757
10°	4685	4703	4745
15°	4622	4677	4751
20°	4534	4617	4712
25°	4437	4530	4662
30°	4313	4416	4554
35°	4173	4290	4436
40°	3994	4142	4283
45°	3820	3972	4107
50°	3653	3774	3905
55°	3459	3563	3688
60°	3251	3335	3454
65°	3054	3111	3210
70°	2848	2848	2900
75°	2540	2540	2540
80°	2236	2168	2168
85°	1782	1714	1578



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.5	3.7
10°-20°	473.4	10.6
20°-30°	703.2	15.8
30°-40°	816.1	18.3
40°-50°	803.6	18.0
50°-60°	680.0	15.3
60°-70°	485.0	10.9
70°-80°	260.6	5.9
80°-90°	65.7	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°	1343.0	30.2
0°-40°	2159.1	48.5
0°-60°	3642.7	81.8
0°-90°	4454.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4454.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1752	1752	1752	1759	1761	166
15°	1659	1663	1679	1694	1706	468
25°	1494	1499	1526	1554	1570	688
35°	1270	1272	1306	1337	1350	793
45°	1004	1010	1044	1068	1079	776
55°	737	740	760	780	786	660
65°	480	480	489	497	504	476
75°	244	242	244	244	244	262
85°	58	56	56	51	51	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1765.5	1765.5	1765.5	1765.5	1765.5
2.5°	1761.0	1761.0	1763.2	1765.5	1767.7
5°	1752.1	1752.1	1752.1	1758.8	1761.0
7.5°	1734.4	1736.6	1738.8	1745.5	1749.9
10°	1714.4	1716.6	1721.1	1732.2	1736.6
12.5°	1687.7	1694.4	1701.1	1716.6	1723.3
15°	1658.9	1663.3	1678.9	1694.4	1705.5
17.5°	1627.8	1630.0	1647.8	1670.0	1674.4
20°	1583.4	1590.0	1612.2	1634.4	1645.5
22.5°	1543.4	1547.8	1572.3	1601.1	1610.0
25°	1494.5	1499.0	1525.6	1554.5	1570.0
27.5°	1443.5	1447.9	1476.8	1507.9	1519.0
30°	1387.9	1392.4	1421.3	1454.6	1465.7
32.5°	1330.2	1334.6	1365.7	1394.6	1410.2
35°	1270.2	1272.5	1305.8	1336.9	1350.2
37.5°	1203.6	1210.3	1241.4	1272.5	1288.0
40°	1137.0	1143.7	1179.2	1208.1	1219.2
42.5°	1074.8	1083.7	1112.6	1139.2	1150.3
45°	1003.8	1010.4	1043.7	1068.2	1079.3
47.5°	939.4	946.0	974.9	999.3	1006.0
50°	872.7	877.2	901.6	923.8	932.7
52.5°	806.1	808.3	830.5	852.8	859.4
55°	737.3	739.5	759.5	779.5	786.1
57.5°	672.9	672.9	690.6	706.2	712.8
60°	604.0	604.0	619.6	635.1	641.8
62.5°	539.6	539.6	555.2	566.3	575.2
65°	479.7	479.7	488.6	497.4	504.1
67.5°	421.9	415.3	424.2	435.3	433.0
70°	362.0	355.3	362.0	366.4	368.6
72.5°	302.0	297.6	302.0	304.2	308.7
75°	244.3	242.1	244.3	244.3	244.3
77.5°	195.4	188.8	193.2	191.0	188.8
80°	144.3	142.1	139.9	137.7	139.9
82.5°	99.9	97.7	97.7	93.3	93.3
85°	57.7	55.5	55.5	51.1	51.1
87.5°	22.2	22.2	20.0	20.0	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)