

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: P295893

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295893  
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-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4539.0 lumens  
Efficiency: N/A  
Efficacy: 142.3 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

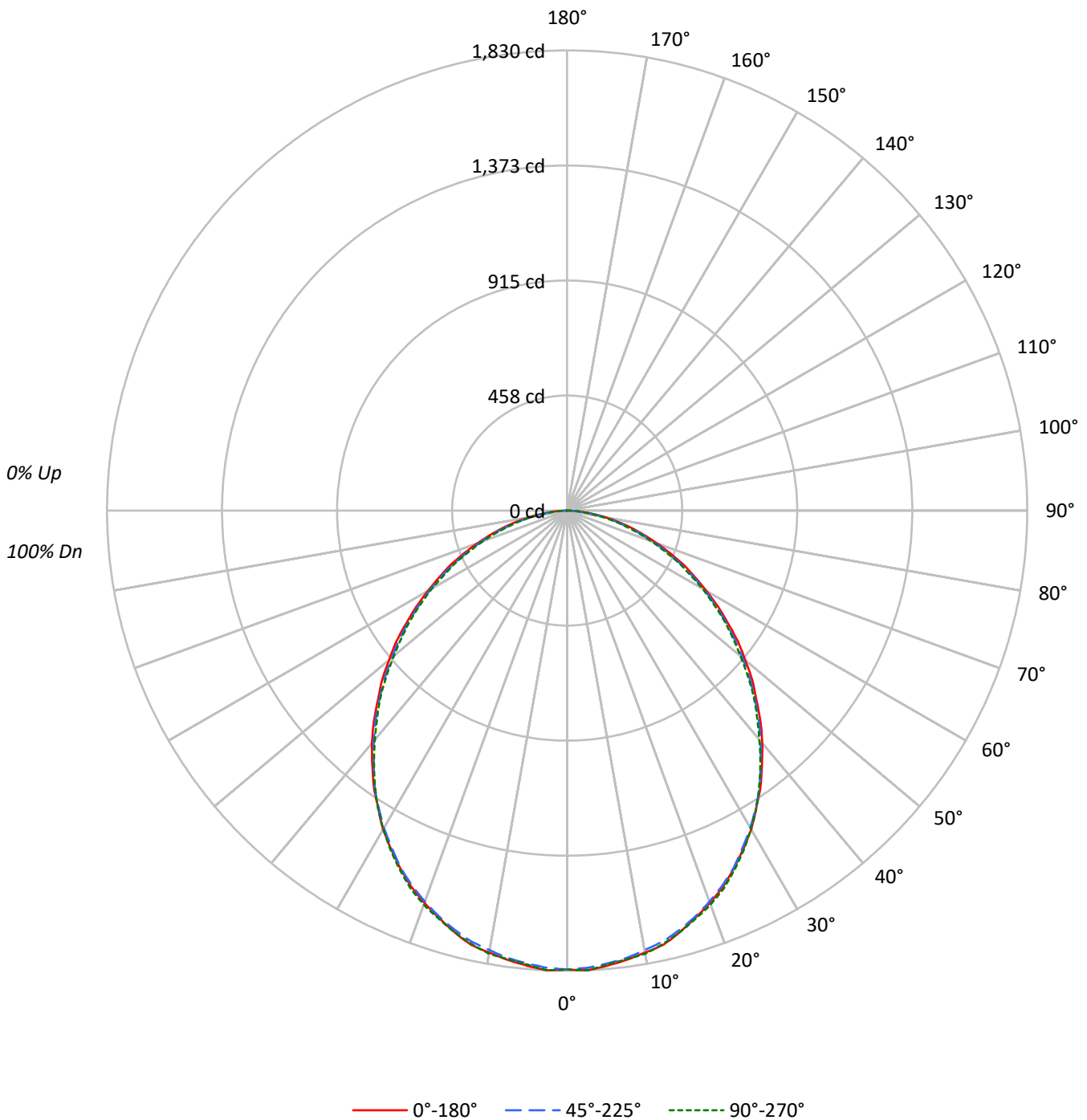
Input Watts (W): 31.899  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2455	2455	2455
5°	2454	2442	2448
10°	2439	2425	2445
15°	2417	2405	2417
20°	2378	2369	2388
25°	2330	2326	2339
30°	2275	2264	2270
35°	2203	2194	2189
40°	2122	2101	2088
45°	2026	2006	1998
50°	1934	1903	1882
55°	1831	1803	1786
60°	1722	1690	1671
65°	1627	1566	1552
70°	1492	1434	1406
75°	1370	1287	1233
80°	1203	1124	1055
85°	973	905	769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.2	3.8
10°-20°	488.0	10.8
20°-30°	721.9	15.9
30°-40°	833.2	18.4
40°-50°	813.7	17.9
50°-60°	687.1	15.1
60°-70°	489.4	10.8
70°-80°	265.0	5.8
80°-90°	68.4	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°	1382.1	30.4
0°-40°	2215.3	48.8
0°-60°	3716.2	81.9
0°-90°	4539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4539.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1824	1824	1824	1824	1824	
5°	1817	1817	1808	1813	1813	172
15°	1735	1728	1726	1734	1735	489
25°	1570	1561	1567	1573	1576	723
35°	1341	1331	1336	1331	1332	837
45°	1065	1056	1054	1050	1050	823
55°	780	770	769	761	761	700
65°	511	501	492	486	488	504
75°	264	255	248	242	237	279
85°	63	62	59	51	50	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1824.5	1824.5	1824.5	1824.5	1824.5
2.5°	1830.4	1823.1	1820.2	1821.6	1830.4
5°	1817.2	1817.2	1808.4	1812.8	1812.8
7.5°	1802.6	1804.0	1795.3	1802.6	1799.7
10°	1785.0	1780.6	1774.8	1786.5	1789.4
12.5°	1768.9	1758.7	1755.7	1763.0	1764.5
15°	1735.2	1727.9	1726.4	1733.8	1735.2
17.5°	1697.2	1698.6	1692.8	1703.0	1701.5
20°	1660.5	1657.6	1654.7	1666.4	1667.9
22.5°	1619.5	1610.8	1613.7	1623.9	1626.9
25°	1569.8	1561.0	1566.8	1572.7	1575.6
27.5°	1517.0	1512.6	1511.2	1518.5	1521.4
30°	1464.3	1457.0	1457.0	1465.8	1461.4
32.5°	1399.9	1394.0	1397.0	1399.9	1401.4
35°	1341.3	1331.1	1335.5	1331.1	1332.5
37.5°	1272.5	1265.2	1263.7	1262.2	1262.2
40°	1208.1	1202.2	1196.4	1196.4	1189.0
42.5°	1137.8	1130.5	1127.5	1123.1	1118.7
45°	1064.6	1055.8	1054.3	1049.9	1049.9
47.5°	998.7	985.5	984.0	975.2	975.2
50°	924.0	915.2	909.3	903.5	899.1
52.5°	856.6	847.8	839.1	833.2	828.8
55°	780.5	770.2	768.8	761.4	761.4
57.5°	711.7	702.9	697.0	688.2	689.7
60°	639.9	631.1	628.2	620.9	620.9
62.5°	572.6	565.2	560.8	553.5	547.7
65°	511.0	500.8	492.0	486.2	487.6
67.5°	443.7	432.0	427.6	421.7	417.3
70°	379.3	371.9	364.6	357.3	357.3
72.5°	319.2	311.9	307.5	298.7	295.8
75°	263.6	254.8	247.5	241.6	237.2
77.5°	207.9	199.1	194.8	187.4	187.4
80°	155.2	149.4	145.0	142.0	136.2
82.5°	106.9	104.0	99.6	95.2	90.8
85°	63.0	61.5	58.6	51.3	49.8
87.5°	24.9	24.9	22.0	20.5	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)