

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: P295977

Luminaire Tested: **24RLN-LD5-50-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295977  
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-LD5-50-UNV-L93050-W2A1-U-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4662.0 lumens  
Efficiency: N/A  
Efficacy: 127.9 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

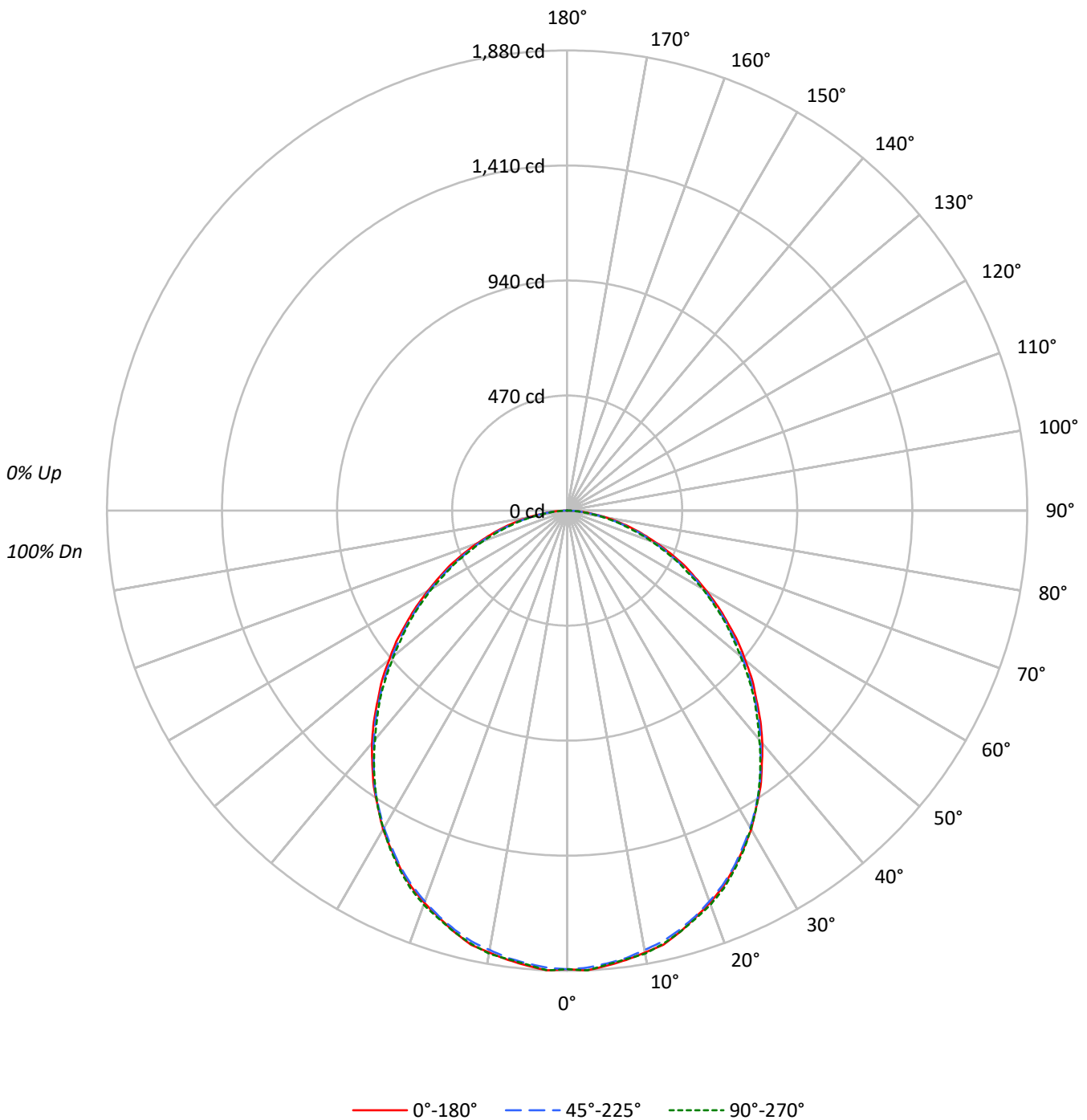
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2521	2521	2521
5°	2521	2509	2515
10°	2505	2491	2511
15°	2483	2470	2483
20°	2442	2433	2453
25°	2394	2389	2403
30°	2337	2325	2332
35°	2263	2253	2248
40°	2179	2158	2145
45°	2081	2061	2052
50°	1986	1955	1933
55°	1880	1852	1835
60°	1769	1736	1716
65°	1671	1609	1594
70°	1532	1473	1444
75°	1407	1321	1266
80°	1235	1154	1084
85°	999	929	789



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.8	3.8
10°-20°	501.3	10.8
20°-30°	741.5	15.9
30°-40°	855.7	18.4
40°-50°	835.8	17.9
50°-60°	705.8	15.1
60°-70°	502.7	10.8
70°-80°	272.2	5.8
80°-90°	70.2	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°	1419.6	30.4
0°-40°	2275.3	48.8
0°-60°	3816.9	81.9
0°-90°	4662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4662.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1866	1866	1857	1862	1862	177
15°	1782	1775	1773	1781	1782	502
25°	1612	1603	1609	1615	1618	742
35°	1378	1367	1372	1367	1369	860
45°	1093	1084	1083	1078	1078	845
55°	802	791	790	782	782	719
65°	525	514	505	499	501	517
75°	271	262	254	248	244	287
85°	65	63	60	53	51	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1874.0	1874.0	1874.0	1874.0	1874.0
2.5°	1880.0	1872.5	1869.5	1871.0	1880.0
5°	1866.5	1866.5	1857.4	1862.0	1862.0
7.5°	1851.4	1852.9	1843.9	1851.4	1848.4
10°	1833.4	1828.9	1822.9	1834.9	1837.9
12.5°	1816.8	1806.3	1803.3	1810.8	1812.3
15°	1782.2	1774.7	1773.2	1780.7	1782.2
17.5°	1743.1	1744.6	1738.6	1749.2	1747.7
20°	1705.5	1702.5	1699.5	1711.6	1713.1
22.5°	1663.4	1654.4	1657.4	1667.9	1671.0
25°	1612.3	1603.3	1609.3	1615.3	1618.3
27.5°	1558.2	1553.6	1552.1	1559.7	1562.7
30°	1504.0	1496.5	1496.5	1505.5	1501.0
32.5°	1437.8	1431.8	1434.8	1437.8	1439.3
35°	1377.7	1367.1	1371.7	1367.1	1368.6
37.5°	1307.0	1299.5	1298.0	1296.5	1296.5
40°	1240.8	1234.8	1228.8	1228.8	1221.3
42.5°	1168.6	1161.1	1158.1	1153.6	1149.1
45°	1093.4	1084.4	1082.9	1078.4	1078.4
47.5°	1025.7	1012.2	1010.7	1001.7	1001.7
50°	949.0	940.0	934.0	928.0	923.5
52.5°	879.8	870.8	861.8	855.8	851.3
55°	801.6	791.1	789.6	782.1	782.1
57.5°	730.9	721.9	715.9	706.9	708.4
60°	657.3	648.2	645.2	637.7	637.7
62.5°	588.1	580.5	576.0	568.5	562.5
65°	524.9	514.4	505.3	499.3	500.8
67.5°	455.7	443.7	439.2	433.2	428.6
70°	389.5	382.0	374.5	367.0	367.0
72.5°	327.9	320.4	315.8	306.8	303.8
75°	270.7	261.7	254.2	248.2	243.6
77.5°	213.6	204.5	200.0	192.5	192.5
80°	159.4	153.4	148.9	145.9	139.9
82.5°	109.8	106.8	102.3	97.8	93.2
85°	64.7	63.2	60.2	52.6	51.1
87.5°	25.6	25.6	22.6	21.1	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)