

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: P296041

Luminaire Tested: **24RLN-LD5-50-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296041  
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-L92765-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4270.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

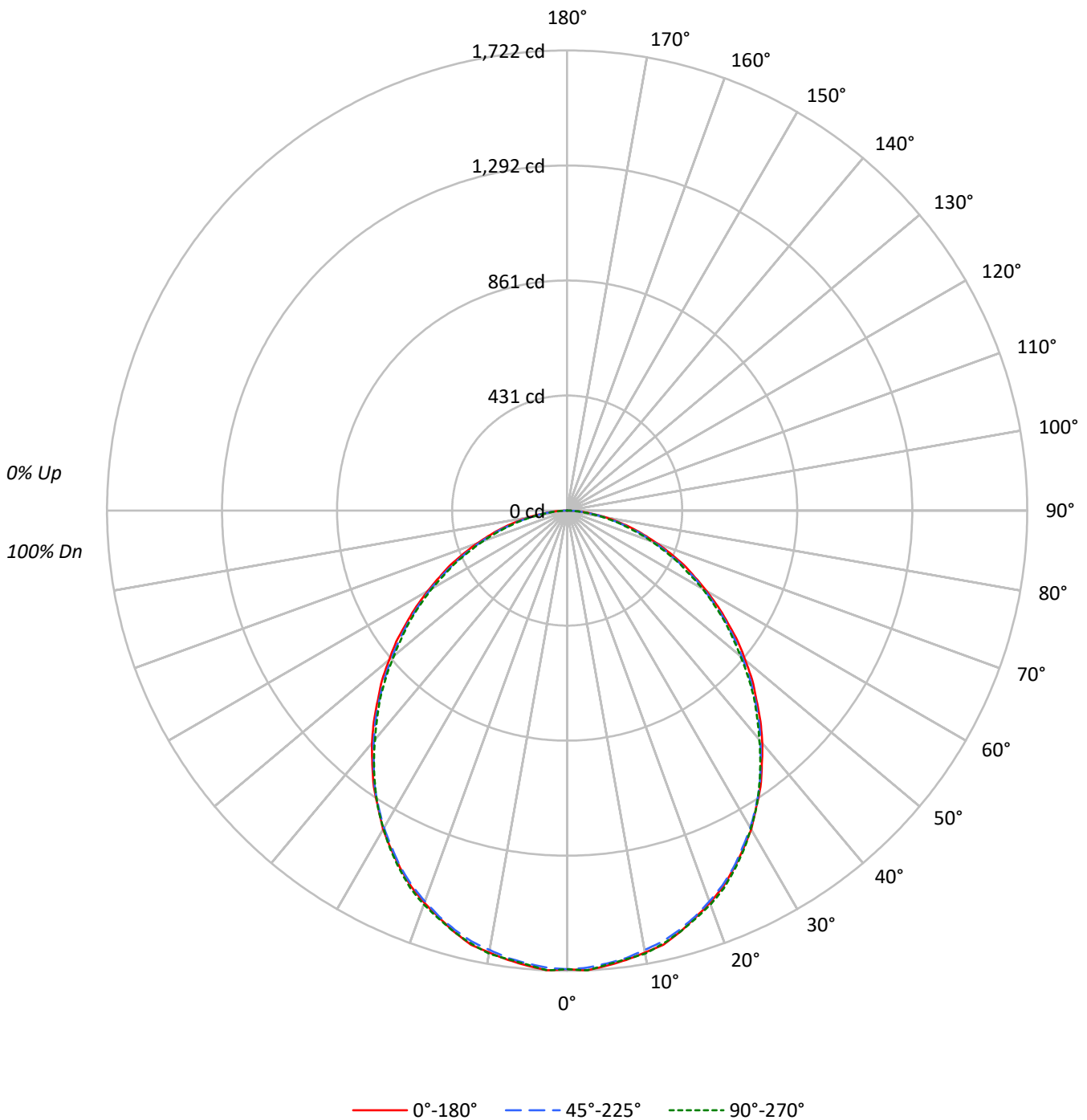
Input Watts (W): 35.061  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2309	2309	2309
5°	2309	2298	2303
10°	2294	2281	2300
15°	2274	2262	2274
20°	2237	2229	2247
25°	2192	2188	2200
30°	2140	2130	2136
35°	2073	2064	2059
40°	1996	1977	1965
45°	1906	1887	1879
50°	1819	1791	1770
55°	1722	1696	1680
60°	1620	1590	1572
65°	1531	1474	1460
70°	1404	1349	1322
75°	1289	1210	1160
80°	1131	1057	993
85°	914	851	722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.0	3.8
10°-20°	459.1	10.8
20°-30°	679.1	15.9
30°-40°	783.8	18.4
40°-50°	765.5	17.9
50°-60°	646.4	15.1
60°-70°	460.4	10.8
70°-80°	249.3	5.8
80°-90°	64.3	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°	1300.2	30.4
0°-40°	2084.0	48.8
0°-60°	3495.9	81.9
0°-90°	4270.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4270.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1710	1710	1701	1705	1705	162
15°	1632	1626	1624	1631	1632	460
25°	1477	1468	1474	1480	1482	680
35°	1262	1252	1256	1252	1254	787
45°	1002	993	992	988	988	774
55°	734	725	723	716	716	658
65°	481	471	463	457	459	474
75°	248	240	233	227	223	262
85°	59	58	55	48	47	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1716.4	1716.4	1716.4	1716.4	1716.4
2.5°	1721.9	1715.0	1712.3	1713.7	1721.9
5°	1709.5	1709.5	1701.3	1705.4	1705.4
7.5°	1695.8	1697.1	1688.9	1695.8	1693.0
10°	1679.2	1675.1	1669.6	1680.6	1683.4
12.5°	1664.1	1654.4	1651.7	1658.6	1659.9
15°	1632.4	1625.5	1624.1	1631.0	1632.4
17.5°	1596.6	1597.9	1592.4	1602.1	1600.7
20°	1562.1	1559.4	1556.6	1567.6	1569.0
22.5°	1523.6	1515.3	1518.1	1527.7	1530.5
25°	1476.7	1468.5	1474.0	1479.5	1482.2
27.5°	1427.1	1423.0	1421.6	1428.5	1431.3
30°	1377.5	1370.7	1370.7	1378.9	1374.8
32.5°	1316.9	1311.4	1314.2	1316.9	1318.3
35°	1261.8	1252.2	1256.3	1252.2	1253.6
37.5°	1197.1	1190.2	1188.8	1187.4	1187.4
40°	1136.5	1131.0	1125.5	1125.5	1118.6
42.5°	1070.4	1063.5	1060.7	1056.6	1052.4
45°	1001.5	993.2	991.8	987.7	987.7
47.5°	939.5	927.1	925.7	917.4	917.4
50°	869.2	861.0	855.5	849.9	845.8
52.5°	805.9	797.6	789.3	783.8	779.7
55°	734.2	724.6	723.2	716.3	716.3
57.5°	669.5	661.2	655.7	647.4	648.8
60°	602.0	593.7	591.0	584.1	584.1
62.5°	538.6	531.7	527.6	520.7	515.2
65°	480.8	471.1	462.9	457.3	458.7
67.5°	417.4	406.4	402.2	396.7	392.6
70°	356.8	349.9	343.0	336.1	336.1
72.5°	300.3	293.4	289.3	281.0	278.3
75°	248.0	239.7	232.8	227.3	223.2
77.5°	195.6	187.3	183.2	176.3	176.3
80°	146.0	140.5	136.4	133.6	128.1
82.5°	100.6	97.8	93.7	89.5	85.4
85°	59.2	57.9	55.1	48.2	46.8
87.5°	23.4	23.4	20.7	19.3	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)