

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: P296271

Luminaire Tested: **24RLN-LD5-67-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-67-RDP-UNV-L93050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5187.0 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

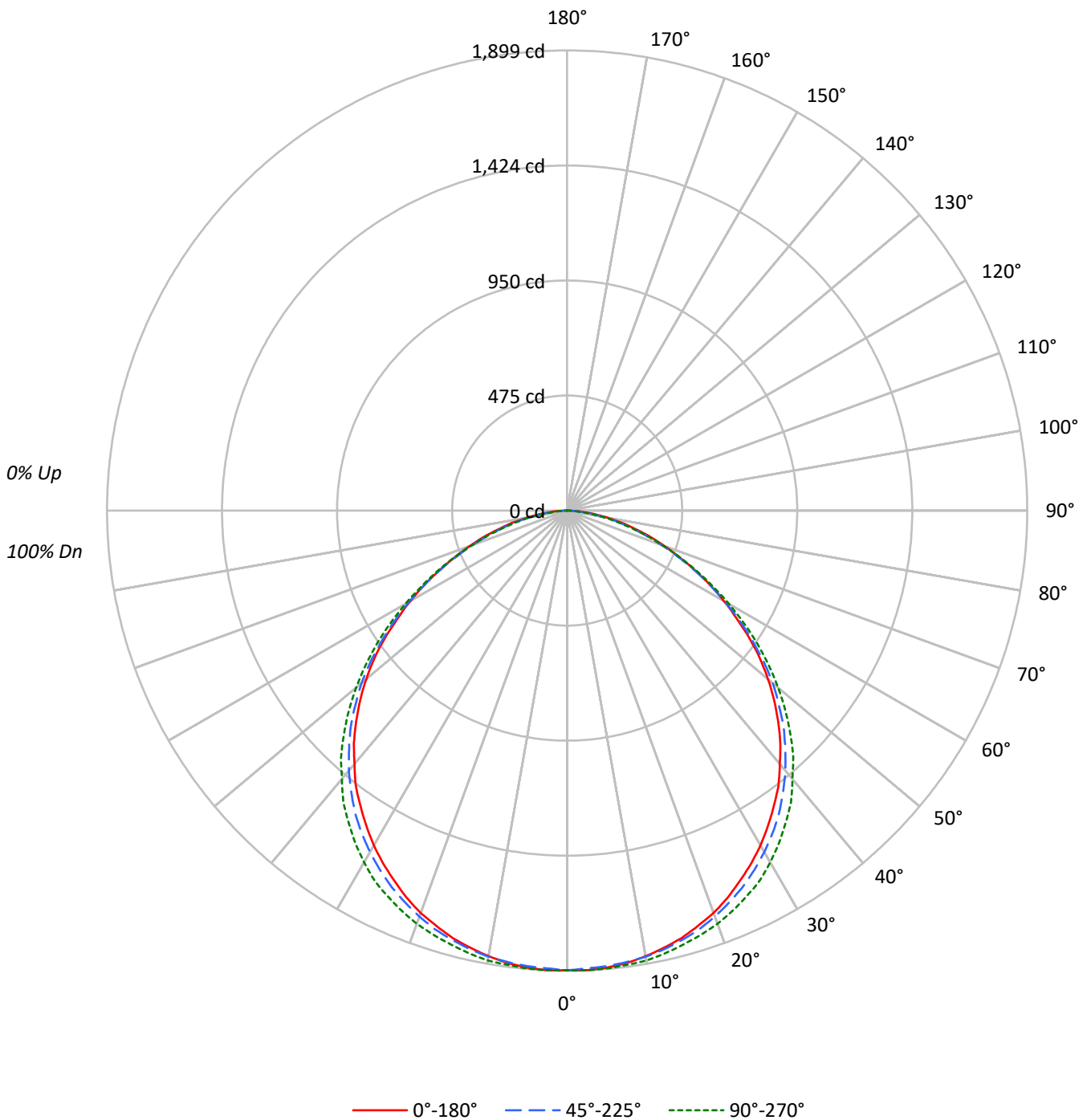
Input Watts (W): 50.685  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	2552	2552	2552
5°	2557	2549	2562
10°	2551	2554	2576
15°	2544	2555	2582
20°	2530	2553	2598
25°	2504	2544	2606
30°	2479	2528	2605
35°	2443	2505	2582
40°	2399	2461	2540
45°	2344	2404	2479
50°	2265	2319	2381
55°	2156	2183	2248
60°	2012	2023	2076
65°	1848	1835	1879
70°	1680	1633	1641
75°	1494	1411	1402
80°	1296	1158	1128
85°	1064	820	638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.9	3.5
10°-20°	518.6	10.0
20°-30°	791.6	15.3
30°-40°	954.4	18.4
40°-50°	973.2	18.8
50°-60°	832.9	16.1
60°-70°	573.7	11.1
70°-80°	294.1	5.7
80°-90°	68.5	1.3
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°	1490.2	28.7
0°-40°	2444.5	47.1
0°-60°	4250.7	81.9
0°-90°	5187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5187.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1897	1897	1897	1897	1897	
5°	1893	1889	1887	1893	1897	180
15°	1826	1824	1834	1848	1854	515
25°	1686	1692	1714	1743	1755	778
35°	1488	1494	1525	1558	1572	931
45°	1232	1234	1263	1295	1303	949
55°	919	913	931	950	958	820
65°	580	567	576	580	590	577
75°	287	276	272	272	270	310
85°	69	61	53	47	41	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1896.9	1896.9	1896.9	1896.9	1896.9
2.5°	1898.9	1894.9	1891.0	1894.9	1898.9
5°	1893.0	1889.0	1887.1	1893.0	1896.9
7.5°	1883.1	1879.2	1879.2	1887.1	1891.0
10°	1867.4	1865.4	1869.4	1877.2	1885.1
12.5°	1847.7	1847.7	1853.6	1863.5	1871.3
15°	1826.1	1824.1	1833.9	1847.7	1853.6
17.5°	1796.6	1798.5	1812.3	1828.0	1835.9
20°	1767.0	1769.0	1782.8	1804.4	1814.3
22.5°	1729.6	1733.6	1749.3	1776.9	1786.7
25°	1686.4	1692.3	1713.9	1743.4	1755.2
27.5°	1643.1	1649.0	1672.6	1706.0	1721.8
30°	1595.8	1603.7	1627.3	1662.7	1676.5
32.5°	1542.7	1548.6	1578.1	1613.6	1627.3
35°	1487.6	1493.5	1525.0	1558.5	1572.2
37.5°	1432.5	1432.5	1464.0	1503.4	1517.1
40°	1365.6	1367.6	1401.0	1438.4	1446.3
42.5°	1302.6	1302.6	1332.2	1367.6	1381.4
45°	1231.8	1233.8	1263.3	1294.8	1302.6
47.5°	1159.0	1159.0	1184.6	1214.1	1222.0
50°	1082.3	1078.3	1107.8	1131.5	1137.4
52.5°	1003.5	997.6	1021.3	1040.9	1048.8
55°	918.9	913.0	930.7	950.4	958.3
57.5°	830.4	822.5	842.2	859.9	863.8
60°	747.7	735.9	751.7	761.5	771.4
62.5°	665.1	651.3	663.1	669.0	676.9
65°	580.5	566.7	576.5	580.5	590.3
67.5°	499.8	490.0	491.9	497.8	501.8
70°	427.0	415.2	415.2	415.2	417.2
72.5°	360.1	342.4	340.4	342.4	342.4
75°	287.3	275.5	271.5	271.5	269.6
77.5°	230.2	214.5	212.5	208.6	204.6
80°	167.3	153.5	149.5	147.6	145.6
82.5°	116.1	104.3	100.4	96.4	90.5
85°	68.9	61.0	53.1	47.2	41.3
87.5°	25.6	23.6	19.7	17.7	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)