

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: P296052

Luminaire Tested: **24RLN-LD5-55-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296052  
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-LD5-55-UNV-L92765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5028.0 lumens  
Efficiency: N/A  
Efficacy: 128.7 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

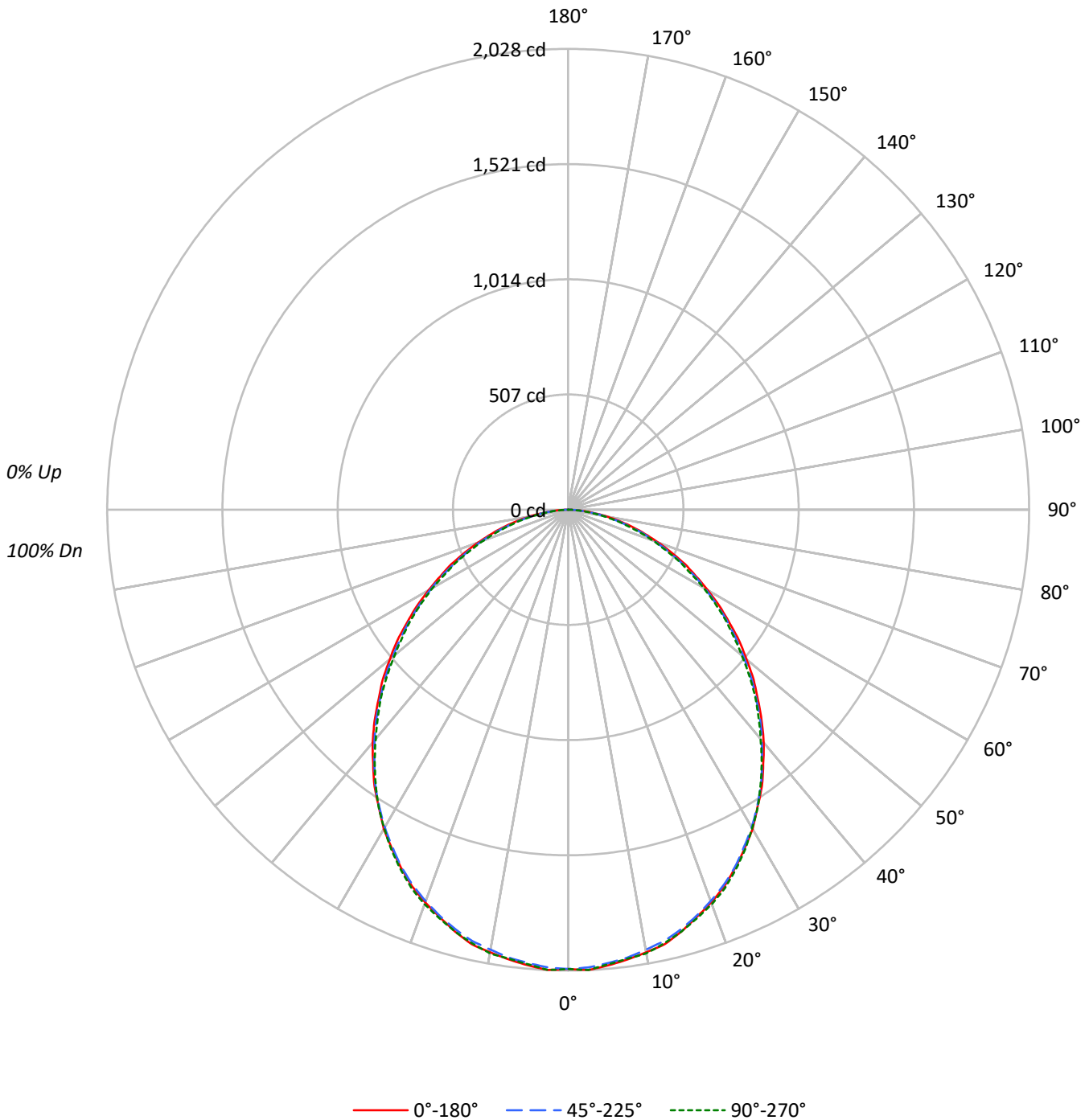
Input Watts (W): 39.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

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

	0°	45°	90°
0°	2719	2719	2719
5°	2719	2706	2712
10°	2701	2686	2708
15°	2678	2664	2678
20°	2634	2625	2645
25°	2582	2577	2591
30°	2520	2508	2515
35°	2440	2430	2425
40°	2350	2328	2313
45°	2244	2222	2213
50°	2142	2108	2085
55°	2028	1998	1979
60°	1907	1873	1851
65°	1802	1735	1720
70°	1653	1589	1557
75°	1518	1425	1366
80°	1332	1244	1169
85°	1076	1002	852



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.7	3.8
10°-20°	540.6	10.8
20°-30°	799.7	15.9
30°-40°	922.9	18.4
40°-50°	901.4	17.9
50°-60°	761.2	15.1
60°-70°	542.2	10.8
70°-80°	293.5	5.8
80°-90°	75.7	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°	1531.0	30.4
0°-40°	2453.9	48.8
0°-60°	4116.5	81.9
0°-90°	5028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5028.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2021	2021	2021	2021	2021	
5°	2013	2013	2003	2008	2008	191
15°	1922	1914	1912	1920	1922	541
25°	1739	1729	1736	1742	1745	801
35°	1486	1474	1479	1474	1476	927
45°	1179	1170	1168	1163	1163	912
55°	865	853	852	844	844	775
65°	566	555	545	538	540	558
75°	292	282	274	268	263	309
85°	70	68	65	57	55	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2021.1	2021.1	2021.1	2021.1	2021.1
2.5°	2027.6	2019.5	2016.2	2017.9	2027.6
5°	2013.0	2013.0	2003.3	2008.1	2008.1
7.5°	1996.8	1998.4	1988.7	1996.8	1993.5
10°	1977.3	1972.5	1966.0	1978.9	1982.2
12.5°	1959.5	1948.1	1944.9	1953.0	1954.6
15°	1922.2	1914.1	1912.4	1920.5	1922.2
17.5°	1880.0	1881.6	1875.1	1886.5	1884.9
20°	1839.4	1836.2	1833.0	1845.9	1847.6
22.5°	1794.0	1784.3	1787.5	1798.9	1802.1
25°	1738.9	1729.1	1735.6	1742.1	1745.4
27.5°	1680.5	1675.6	1674.0	1682.1	1685.3
30°	1622.1	1614.0	1614.0	1623.7	1618.8
32.5°	1550.7	1544.2	1547.5	1550.7	1552.3
35°	1485.8	1474.5	1479.3	1474.5	1476.1
37.5°	1409.6	1401.5	1399.9	1398.2	1398.2
40°	1338.2	1331.7	1325.2	1325.2	1317.1
42.5°	1260.4	1252.2	1249.0	1244.1	1239.3
45°	1179.3	1169.5	1167.9	1163.0	1163.0
47.5°	1106.3	1091.7	1090.0	1080.3	1080.3
50°	1023.5	1013.8	1007.3	1000.8	996.0
52.5°	948.9	939.2	929.5	923.0	918.1
55°	864.6	853.2	851.6	843.5	843.5
57.5°	788.3	778.6	772.1	762.4	764.0
60°	708.8	699.1	695.9	687.8	687.8
62.5°	634.2	626.1	621.3	613.1	606.7
65°	566.1	554.8	545.0	538.5	540.2
67.5°	491.5	478.5	473.6	467.2	462.3
70°	420.1	412.0	403.9	395.8	395.8
72.5°	353.6	345.5	340.6	330.9	327.7
75°	292.0	282.2	274.1	267.6	262.8
77.5°	230.3	220.6	215.7	207.6	207.6
80°	171.9	165.5	160.6	157.3	150.9
82.5°	118.4	115.2	110.3	105.4	100.6
85°	69.7	68.1	64.9	56.8	55.2
87.5°	27.6	27.6	24.3	22.7	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)