

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: P293565

Luminaire Tested: **24GR-LD5-56-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293565  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-A-UNV-L93050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4846.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

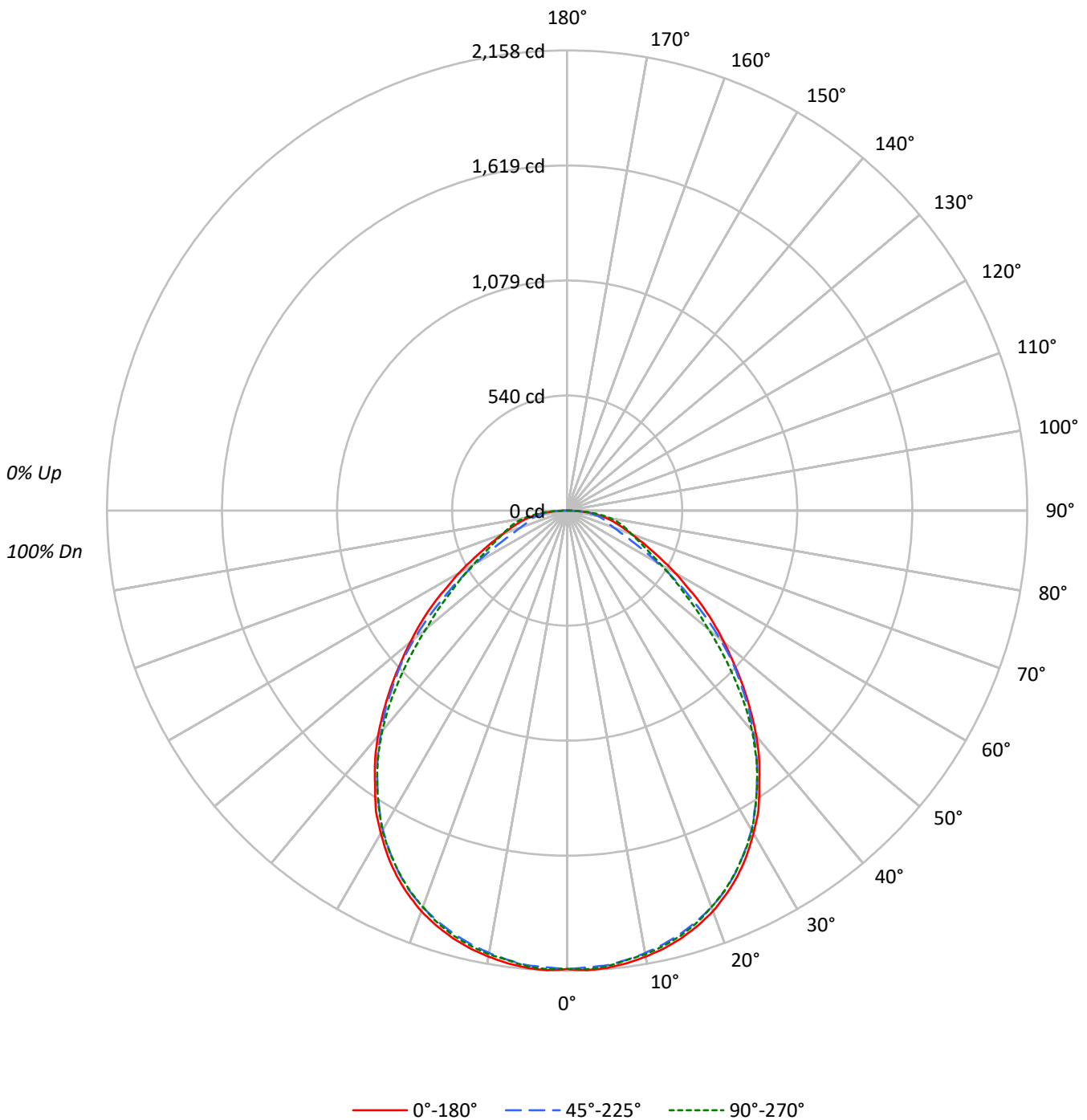
Input Watts (W): 39.707373  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43																												
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35																												
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32																												
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29																												

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

	0°	45°	90°
0°	2893	2893	2893
5°	2907	2891	2898
10°	2902	2878	2886
15°	2891	2862	2874
20°	2863	2834	2833
25°	2807	2778	2775
30°	2715	2687	2693
35°	2579	2549	2553
40°	2425	2383	2368
45°	2222	2192	2105
50°	2009	1954	1807
55°	1804	1642	1558
60°	1579	1322	1370
65°	1378	1039	1261
70°	1260	907	1260
75°	1261	965	1390
80°	1369	1137	1584
85°	1502	1283	1700



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.6	4.2
10°-20°	581.1	12.0
20°-30°	861.6	17.8
30°-40°	972.0	20.1
40°-50°	880.3	18.2
50°-60°	635.1	13.1
60°-70°	379.2	7.8
70°-80°	234.4	4.8
80°-90°	98.7	2.0
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°	1646.3	34.0
0°-40°	2618.2	54.0
0°-60°	4133.7	85.3
0°-90°	4846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2150	2150	2150	2150	2150	
5°	2152	2149	2140	2138	2146	205
15°	2075	2062	2054	2055	2063	585
25°	1891	1881	1871	1864	1869	869
35°	1570	1568	1552	1553	1554	982
45°	1168	1160	1152	1124	1106	900
55°	769	745	700	666	664	686
65°	433	381	326	371	396	435
75°	243	210	186	231	267	259
85°	97	85	83	109	110	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2150.1	2150.1	2150.1	2150.1	2150.1
2.5°	2157.6	2151.6	2144.1	2148.6	2152.4
5°	2152.4	2149.4	2140.4	2138.1	2145.6
7.5°	2141.1	2133.6	2125.4	2129.2	2126.2
10°	2123.9	2117.2	2106.7	2107.4	2112.7
12.5°	2102.9	2094.7	2083.5	2086.5	2091.0
15°	2075.2	2062.5	2054.3	2055.0	2063.3
17.5°	2040.1	2030.3	2019.8	2022.1	2025.8
20°	1999.6	1994.4	1979.4	1974.9	1978.7
22.5°	1948.7	1939.0	1930.8	1928.5	1929.3
25°	1891.1	1880.6	1870.9	1864.1	1869.4
27.5°	1823.7	1814.7	1802.0	1799.7	1804.2
30°	1747.3	1740.6	1729.4	1726.4	1733.1
32.5°	1669.5	1658.3	1642.5	1642.5	1644.0
35°	1569.9	1567.7	1551.9	1552.7	1554.2
37.5°	1480.1	1469.6	1460.6	1451.6	1456.1
40°	1380.5	1368.5	1356.5	1350.6	1348.3
42.5°	1273.4	1264.5	1259.2	1237.5	1232.3
45°	1167.9	1160.4	1152.2	1123.7	1106.5
47.5°	1060.1	1058.6	1051.8	1001.7	984.5
50°	959.8	957.5	933.6	880.4	863.2
52.5°	864.7	849.7	818.3	765.9	762.9
55°	768.9	744.9	700.0	665.5	664.0
57.5°	667.8	639.3	593.7	575.0	584.7
60°	586.9	543.5	491.1	493.4	509.1
62.5°	503.1	454.4	402.8	425.2	443.9
65°	432.7	381.1	326.4	370.6	396.0
67.5°	371.3	323.4	271.0	330.2	354.9
70°	320.4	281.5	230.6	292.7	320.4
72.5°	280.0	244.1	204.4	262.8	295.0
75°	242.6	210.4	185.7	231.3	267.3
77.5°	210.4	178.9	167.7	204.4	239.6
80°	176.7	148.2	146.7	178.2	204.4
82.5°	137.8	118.3	118.3	149.0	164.7
85°	97.3	85.3	83.1	108.6	110.1
87.5°	50.2	47.9	43.4	56.9	56.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)