

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: P293568

Luminaire Tested: **24GR-LD5-56-A-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293568  
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-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5325.0 lumens  
Efficiency: N/A  
Efficacy: 131.1 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

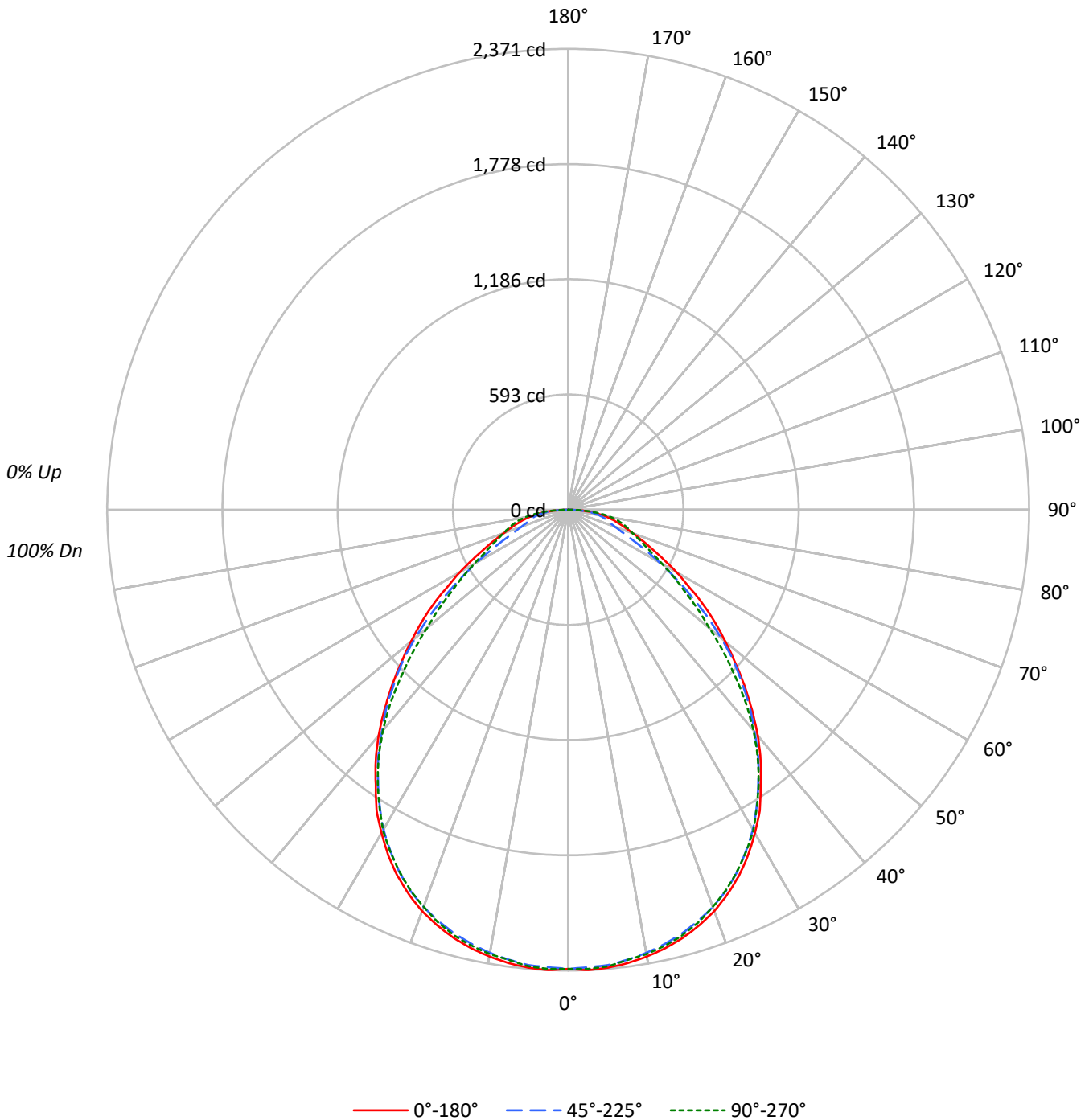
Input Watts (W): 40.603614  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3179	3179	3179
5°	3194	3177	3184
10°	3189	3163	3172
15°	3176	3144	3158
20°	3146	3114	3113
25°	3085	3052	3049
30°	2983	2952	2959
35°	2834	2801	2805
40°	2664	2618	2602
45°	2442	2409	2314
50°	2207	2147	1985
55°	1982	1804	1712
60°	1736	1452	1505
65°	1514	1142	1386
70°	1385	997	1385
75°	1385	1061	1527
80°	1504	1249	1740
85°	1650	1409	1866



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.7	4.2
10°-20°	638.5	12.0
20°-30°	946.8	17.8
30°-40°	1068.1	20.1
40°-50°	967.3	18.2
50°-60°	697.9	13.1
60°-70°	416.7	7.8
70°-80°	257.5	4.8
80°-90°	108.5	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°	1809.0	34.0
0°-40°	2877.0	54.0
0°-60°	4542.3	85.3
0°-90°	5325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2363	2363	2363	2363	2363	
5°	2365	2362	2352	2350	2358	225
15°	2280	2266	2257	2258	2267	643
25°	2078	2066	2056	2048	2054	955
35°	1725	1723	1705	1706	1708	1079
45°	1283	1275	1266	1235	1216	989
55°	845	818	769	731	730	754
65°	476	419	359	407	435	478
75°	266	231	204	254	294	285
85°	107	94	91	119	121	112
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2362.6	2362.6	2362.6	2362.6	2362.6
2.5°	2370.9	2364.3	2356.1	2361.0	2365.1
5°	2365.1	2361.8	2351.9	2349.5	2357.7
7.5°	2352.8	2344.5	2335.5	2339.6	2336.3
10°	2333.8	2326.4	2314.9	2315.7	2321.5
12.5°	2310.8	2301.8	2289.4	2292.7	2297.7
15°	2280.4	2266.4	2257.3	2258.2	2267.2
17.5°	2241.7	2231.0	2219.5	2222.0	2226.1
20°	2197.3	2191.5	2175.1	2170.1	2174.3
22.5°	2141.3	2130.7	2121.6	2119.1	2120.0
25°	2078.0	2066.5	2055.8	2048.4	2054.1
27.5°	2004.0	1994.1	1980.1	1977.6	1982.6
30°	1920.1	1912.7	1900.3	1897.0	1904.4
32.5°	1834.5	1822.2	1804.9	1804.9	1806.5
35°	1725.1	1722.6	1705.3	1706.2	1707.8
37.5°	1626.4	1614.9	1605.0	1595.1	1600.0
40°	1517.0	1503.8	1490.6	1484.1	1481.6
42.5°	1399.3	1389.4	1383.7	1359.8	1354.1
45°	1283.3	1275.1	1266.1	1234.8	1215.9
47.5°	1164.9	1163.2	1155.8	1100.7	1081.8
50°	1054.6	1052.2	1025.8	967.4	948.5
52.5°	950.2	933.7	899.2	841.6	838.3
55°	844.9	818.5	769.2	731.3	729.7
57.5°	733.8	702.5	652.4	631.8	642.5
60°	645.0	597.2	539.7	542.1	559.4
62.5°	552.8	499.3	442.6	467.3	487.8
65°	475.5	418.7	358.7	407.2	435.2
67.5°	408.0	355.4	297.8	362.8	389.9
70°	352.1	309.3	253.4	321.7	352.1
72.5°	307.7	268.2	224.6	288.7	324.1
75°	266.5	231.2	204.0	254.2	293.7
77.5°	231.2	196.6	184.3	224.6	263.2
80°	194.1	162.9	161.2	195.8	224.6
82.5°	151.4	130.0	130.0	163.7	181.0
85°	106.9	93.8	91.3	119.3	120.9
87.5°	55.1	52.6	47.7	62.5	62.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)