

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: P293438

Luminaire Tested: **24GR-LD5-56-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293438  
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-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5387.0 lumens  
Efficiency: N/A  
Efficacy: 138.6 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

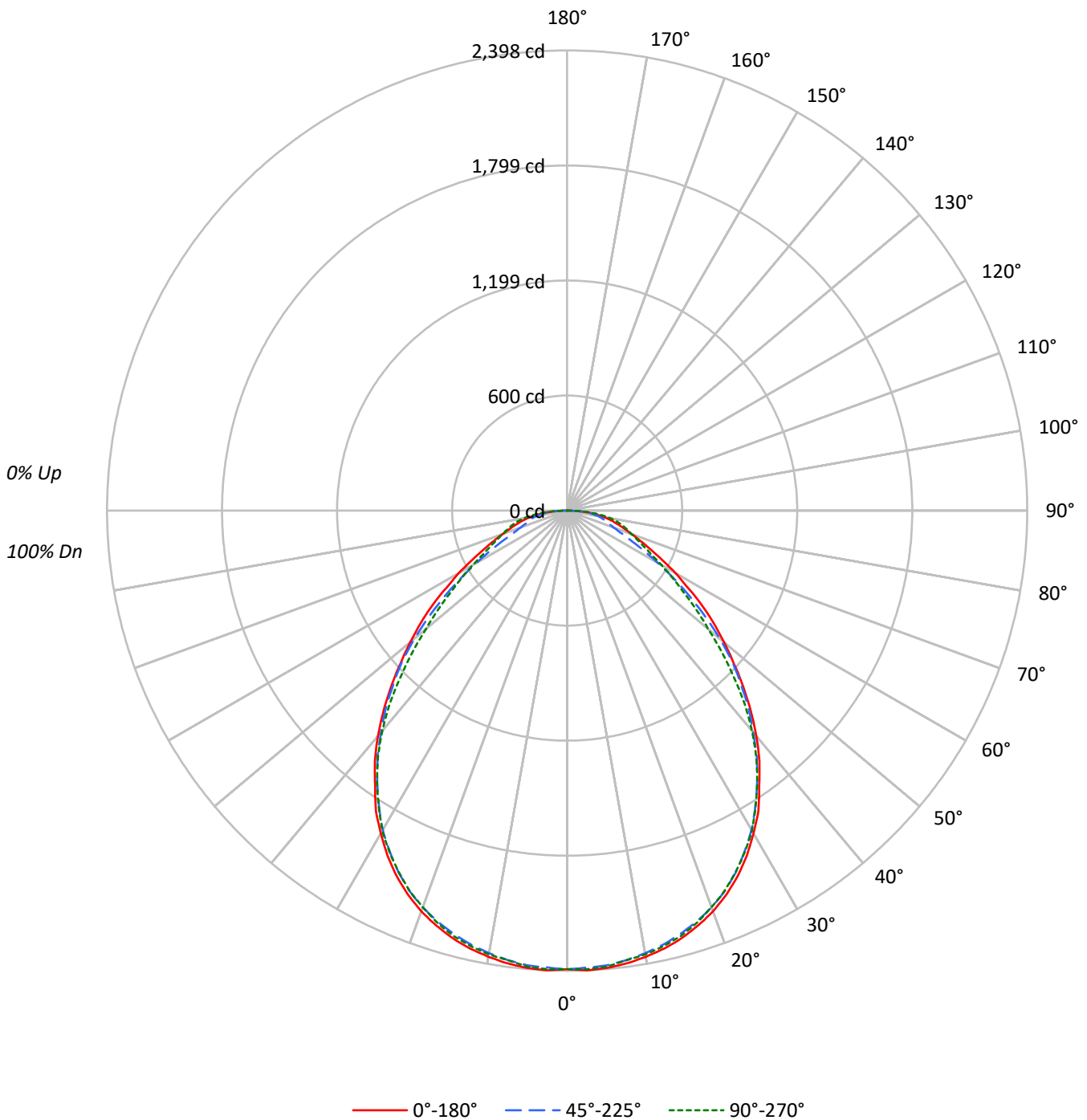
Input Watts (W): 38.874  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3216	3216	3216
5°	3232	3214	3222
10°	3226	3200	3209
15°	3213	3181	3195
20°	3183	3151	3149
25°	3121	3087	3085
30°	3018	2987	2993
35°	2867	2834	2838
40°	2695	2649	2633
45°	2470	2437	2340
50°	2233	2172	2009
55°	2005	1825	1732
60°	1756	1469	1523
65°	1531	1155	1401
70°	1401	1008	1401
75°	1402	1073	1544
80°	1522	1264	1760
85°	1670	1426	1888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.3	4.2
10°-20°	645.9	12.0
20°-30°	957.8	17.8
30°-40°	1080.5	20.1
40°-50°	978.6	18.2
50°-60°	706.0	13.1
60°-70°	421.5	7.8
70°-80°	260.5	4.8
80°-90°	109.8	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°	1830.0	34.0
0°-40°	2910.5	54.0
0°-60°	4595.1	85.3
0°-90°	5387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5387.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2390	2390	2390	2390	2390	
5°	2393	2389	2379	2377	2385	227
15°	2307	2293	2284	2284	2294	650
25°	2102	2090	2080	2072	2078	966
35°	1745	1743	1725	1726	1728	1092
45°	1298	1290	1281	1249	1230	1000
55°	855	828	778	740	738	763
65°	481	424	363	412	440	484
75°	270	234	206	257	297	288
85°	108	95	92	121	122	113
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2390.1	2390.1	2390.1	2390.1	2390.1
2.5°	2398.5	2391.8	2383.5	2388.5	2392.6
5°	2392.6	2389.3	2379.3	2376.8	2385.2
7.5°	2380.2	2371.8	2362.7	2366.8	2363.5
10°	2361.0	2353.5	2341.9	2342.7	2348.5
12.5°	2337.7	2328.6	2316.1	2319.4	2324.4
15°	2306.9	2292.8	2283.6	2284.5	2293.6
17.5°	2267.8	2257.0	2245.3	2247.8	2252.0
20°	2222.9	2217.0	2200.4	2195.4	2199.6
22.5°	2166.3	2155.5	2146.3	2143.8	2144.6
25°	2102.2	2090.5	2079.7	2072.2	2078.1
27.5°	2027.3	2017.3	2003.2	2000.7	2005.7
30°	1942.4	1934.9	1922.4	1919.1	1926.6
32.5°	1855.9	1843.4	1825.9	1825.9	1827.6
35°	1745.2	1742.7	1725.2	1726.0	1727.7
37.5°	1645.3	1633.7	1623.7	1613.7	1618.7
40°	1534.6	1521.3	1508.0	1501.3	1498.8
42.5°	1415.6	1405.6	1399.8	1375.7	1369.8
45°	1298.3	1289.9	1280.8	1249.2	1230.0
47.5°	1178.4	1176.8	1169.3	1113.5	1094.4
50°	1066.9	1064.4	1037.8	978.7	959.6
52.5°	961.2	944.6	909.6	851.4	848.0
55°	854.7	828.1	778.1	739.8	738.2
57.5°	742.3	710.7	660.0	639.1	650.0
60°	652.5	604.2	545.9	548.4	565.9
62.5°	559.3	505.2	447.7	472.7	493.5
65°	481.0	423.6	362.8	412.0	440.2
67.5°	412.8	359.5	301.3	367.0	394.5
70°	356.2	312.9	256.3	325.4	356.2
72.5°	311.3	271.3	227.2	292.1	327.9
75°	269.6	233.9	206.4	257.2	297.1
77.5°	233.9	198.9	186.4	227.2	266.3
80°	196.4	164.8	163.1	198.1	227.2
82.5°	153.1	131.5	131.5	165.6	183.1
85°	108.2	94.9	92.4	120.7	122.3
87.5°	55.8	53.3	48.3	63.2	63.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)