

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: P293440

Luminaire Tested: **24GR-LD5-56-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293440  
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-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5986.0 lumens  
Efficiency: N/A  
Efficacy: 150.0 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

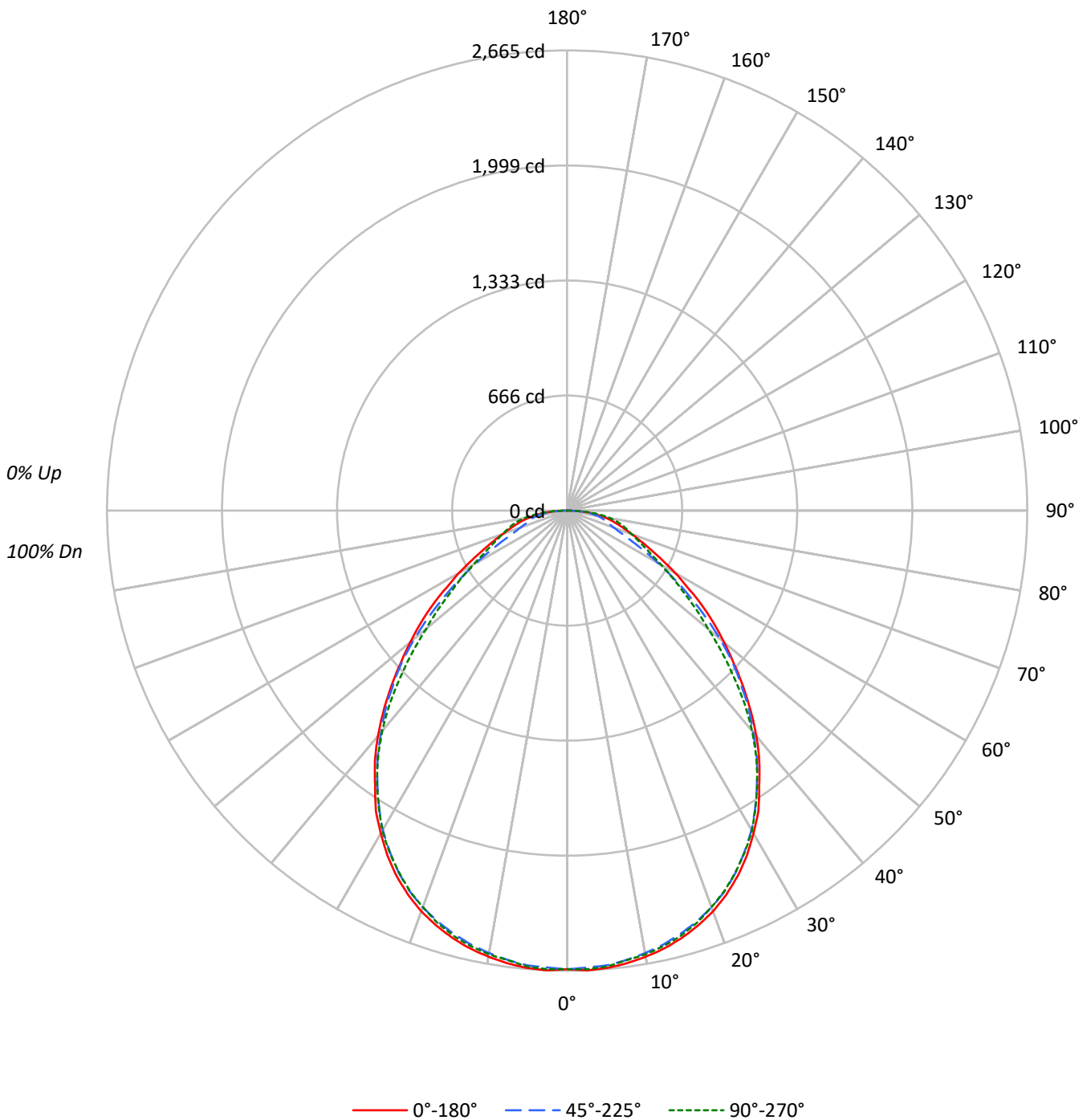
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3573	3573	3573
5°	3591	3571	3580
10°	3584	3555	3565
15°	3571	3535	3550
20°	3537	3501	3500
25°	3468	3431	3428
30°	3353	3319	3326
35°	3185	3149	3153
40°	2995	2943	2925
45°	2745	2708	2601
50°	2482	2414	2232
55°	2228	2028	1924
60°	1951	1632	1692
65°	1702	1284	1557
70°	1557	1120	1557
75°	1557	1192	1716
80°	1691	1405	1956
85°	1856	1584	2098



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.5	4.2
10°-20°	717.8	12.0
20°-30°	1064.3	17.8
30°-40°	1200.6	20.1
40°-50°	1087.4	18.2
50°-60°	784.5	13.1
60°-70°	468.4	7.8
70°-80°	289.5	4.8
80°-90°	122.0	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°	2033.5	34.0
0°-40°	3234.2	54.0
0°-60°	5106.1	85.3
0°-90°	5986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5986.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2656	2656	2656	2656	2656	
5°	2659	2655	2644	2641	2650	253
15°	2563	2548	2538	2538	2549	723
25°	2336	2323	2311	2303	2309	1073
35°	1939	1936	1917	1918	1920	1213
45°	1443	1433	1423	1388	1367	1112
55°	950	920	865	822	820	848
65°	534	471	403	458	489	538
75°	300	260	229	286	330	320
85°	120	105	103	134	136	126
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2655.9	2655.9	2655.9	2655.9	2655.9
2.5°	2665.2	2657.8	2648.5	2654.1	2658.7
5°	2658.7	2655.0	2643.9	2641.1	2650.4
7.5°	2644.8	2635.6	2625.4	2630.0	2626.3
10°	2623.6	2615.2	2602.3	2603.2	2609.7
12.5°	2597.7	2587.5	2573.6	2577.3	2582.9
15°	2563.4	2547.7	2537.5	2538.5	2548.6
17.5°	2520.0	2508.0	2495.0	2497.8	2502.4
20°	2470.0	2463.6	2445.1	2439.5	2444.1
22.5°	2407.2	2395.1	2385.0	2382.2	2383.1
25°	2336.0	2323.0	2311.0	2302.7	2309.1
27.5°	2252.7	2241.6	2225.9	2223.1	2228.7
30°	2158.4	2150.1	2136.2	2132.5	2140.8
32.5°	2062.2	2048.3	2028.9	2028.9	2030.8
35°	1939.2	1936.5	1917.0	1918.0	1919.8
37.5°	1828.3	1815.3	1804.2	1793.1	1798.7
40°	1705.3	1690.5	1675.7	1668.3	1665.5
42.5°	1573.0	1561.9	1555.5	1528.6	1522.2
45°	1442.6	1433.4	1423.2	1388.1	1366.8
47.5°	1309.5	1307.6	1299.3	1237.3	1216.1
50°	1185.5	1182.8	1153.2	1087.5	1066.3
52.5°	1068.1	1049.6	1010.8	946.0	942.3
55°	949.7	920.1	864.7	822.1	820.3
57.5°	824.9	789.7	733.3	710.2	722.2
60°	725.0	671.4	606.6	609.4	628.8
62.5°	621.4	561.3	497.5	525.3	548.4
65°	534.5	470.7	403.2	457.8	489.2
67.5°	458.7	399.5	334.8	407.8	438.3
70°	395.8	347.7	284.8	361.6	395.8
72.5°	345.9	301.5	252.5	324.6	364.4
75°	299.6	259.9	229.3	285.8	330.1
77.5°	259.9	221.0	207.1	252.5	295.9
80°	218.2	183.1	181.3	220.1	252.5
82.5°	170.2	146.1	146.1	184.0	203.4
85°	120.2	105.4	102.6	134.1	135.9
87.5°	62.0	59.2	53.6	70.3	70.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)