

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: P293441

Luminaire Tested: **24GR-LD5-56-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293441
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-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6043.0 lumens
Efficiency: N/A
Efficacy: 147.7 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

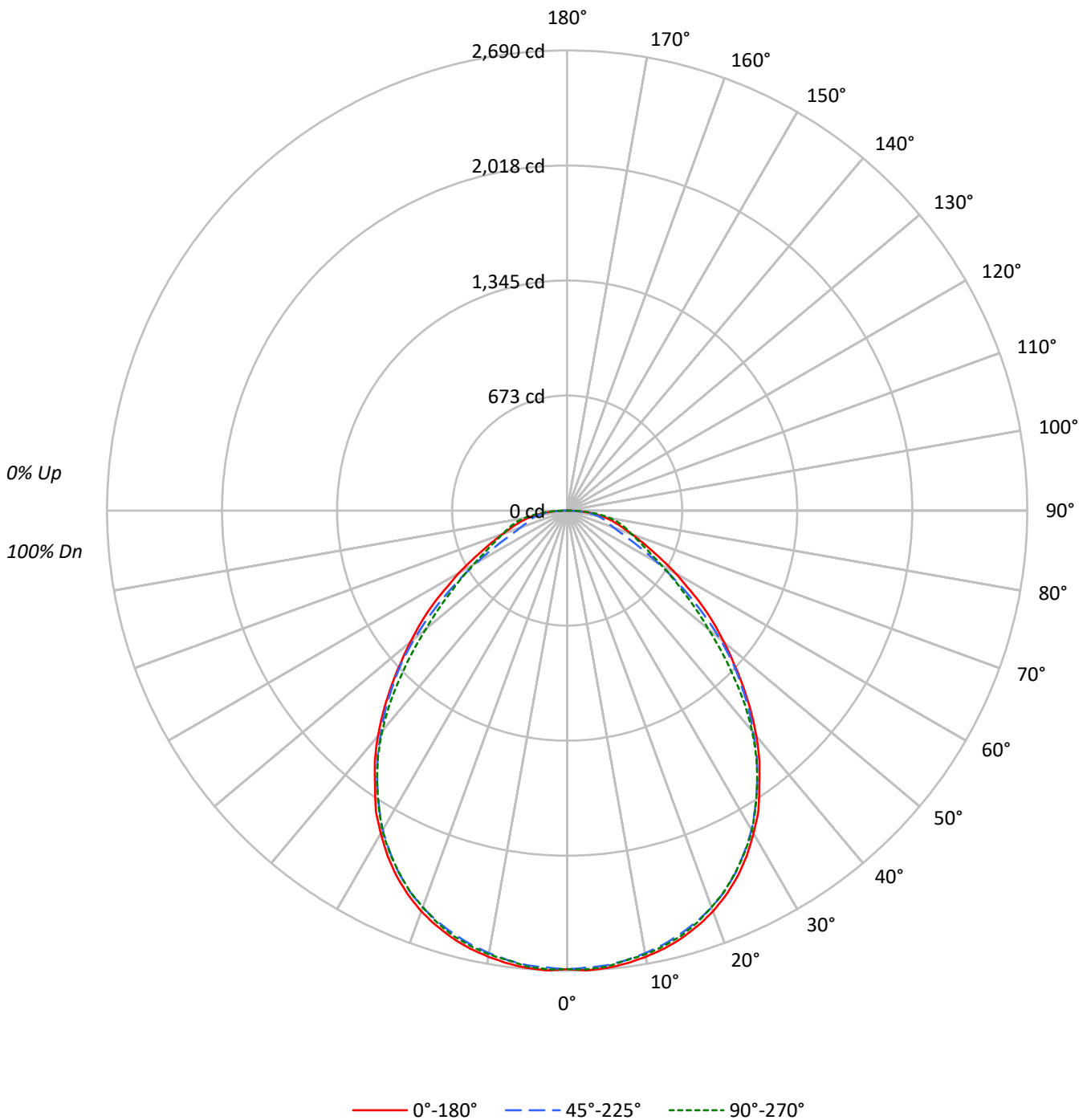
Input Watts (W): 40.92
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3608	3608	3608
5°	3625	3605	3614
10°	3619	3589	3599
15°	3605	3568	3584
20°	3570	3534	3533
25°	3501	3464	3461
30°	3385	3350	3358
35°	3216	3179	3183
40°	3024	2971	2953
45°	2771	2734	2625
50°	2505	2437	2253
55°	2249	2048	1943
60°	1970	1648	1708
65°	1718	1296	1572
70°	1572	1131	1572
75°	1573	1203	1733
80°	1707	1418	1975
85°	1874	1599	2118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.9	4.2
10°-20°	724.6	12.0
20°-30°	1074.4	17.8
30°-40°	1212.1	20.1
40°-50°	1097.8	18.2
50°-60°	792.0	13.1
60°-70°	472.9	7.8
70°-80°	292.3	4.8
80°-90°	123.1	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°	2052.9	34.0
0°-40°	3265.0	54.0
0°-60°	5154.7	85.3
0°-90°	6043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2681	2681	2681	2681	2681	
5°	2684	2680	2669	2666	2676	255
15°	2588	2572	2562	2563	2573	729
25°	2358	2345	2333	2325	2331	1083
35°	1958	1955	1935	1936	1938	1225
45°	1456	1447	1437	1401	1380	1122
55°	959	929	873	830	828	856
65°	540	475	407	462	494	543
75°	302	262	232	288	333	323
85°	121	106	104	135	137	127
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2681.2	2681.2	2681.2	2681.2	2681.2
2.5°	2690.5	2683.1	2673.7	2679.3	2684.0
5°	2684.0	2680.3	2669.1	2666.3	2675.6
7.5°	2670.0	2660.7	2650.4	2655.1	2651.3
10°	2648.5	2640.1	2627.1	2628.0	2634.5
12.5°	2622.4	2612.1	2598.1	2601.9	2607.5
15°	2587.9	2572.0	2561.7	2562.6	2572.9
17.5°	2544.0	2531.8	2518.8	2521.6	2526.2
20°	2493.6	2487.0	2468.4	2462.8	2467.4
22.5°	2430.1	2417.9	2407.7	2404.9	2405.8
25°	2358.2	2345.1	2333.0	2324.6	2331.1
27.5°	2274.2	2263.0	2247.1	2244.3	2249.9
30°	2178.9	2170.5	2156.5	2152.8	2161.2
32.5°	2081.9	2067.9	2048.2	2048.2	2050.1
35°	1957.7	1954.9	1935.3	1936.2	1938.1
37.5°	1845.7	1832.6	1821.4	1810.2	1815.8
40°	1721.5	1706.6	1691.6	1684.2	1681.4
42.5°	1588.0	1576.8	1570.3	1543.2	1536.7
45°	1456.4	1447.0	1436.8	1401.3	1379.8
47.5°	1321.9	1320.1	1311.7	1249.1	1227.6
50°	1196.8	1194.0	1164.2	1097.9	1076.4
52.5°	1078.3	1059.6	1020.4	955.0	951.3
55°	958.8	928.9	872.9	829.9	828.1
57.5°	832.7	797.3	740.3	717.0	729.1
60°	731.9	677.8	612.4	615.2	634.8
62.5°	627.4	566.7	502.3	530.3	553.6
65°	539.6	475.2	407.0	462.1	493.9
67.5°	463.1	403.3	338.0	411.7	442.5
70°	399.6	351.0	287.5	365.0	399.6
72.5°	349.2	304.3	254.9	327.7	367.8
75°	302.5	262.3	231.5	288.5	333.3
77.5°	262.3	223.1	209.1	254.9	298.7
80°	220.3	184.8	183.0	222.2	254.9
82.5°	171.8	147.5	147.5	185.8	205.4
85°	121.4	106.4	103.6	135.4	137.2
87.5°	62.5	59.7	54.1	71.0	71.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)