

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: P292937

Luminaire Tested: **24GR-LD5-56-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F1-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5973.0 lumens
Efficiency: N/A
Efficacy: 146.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

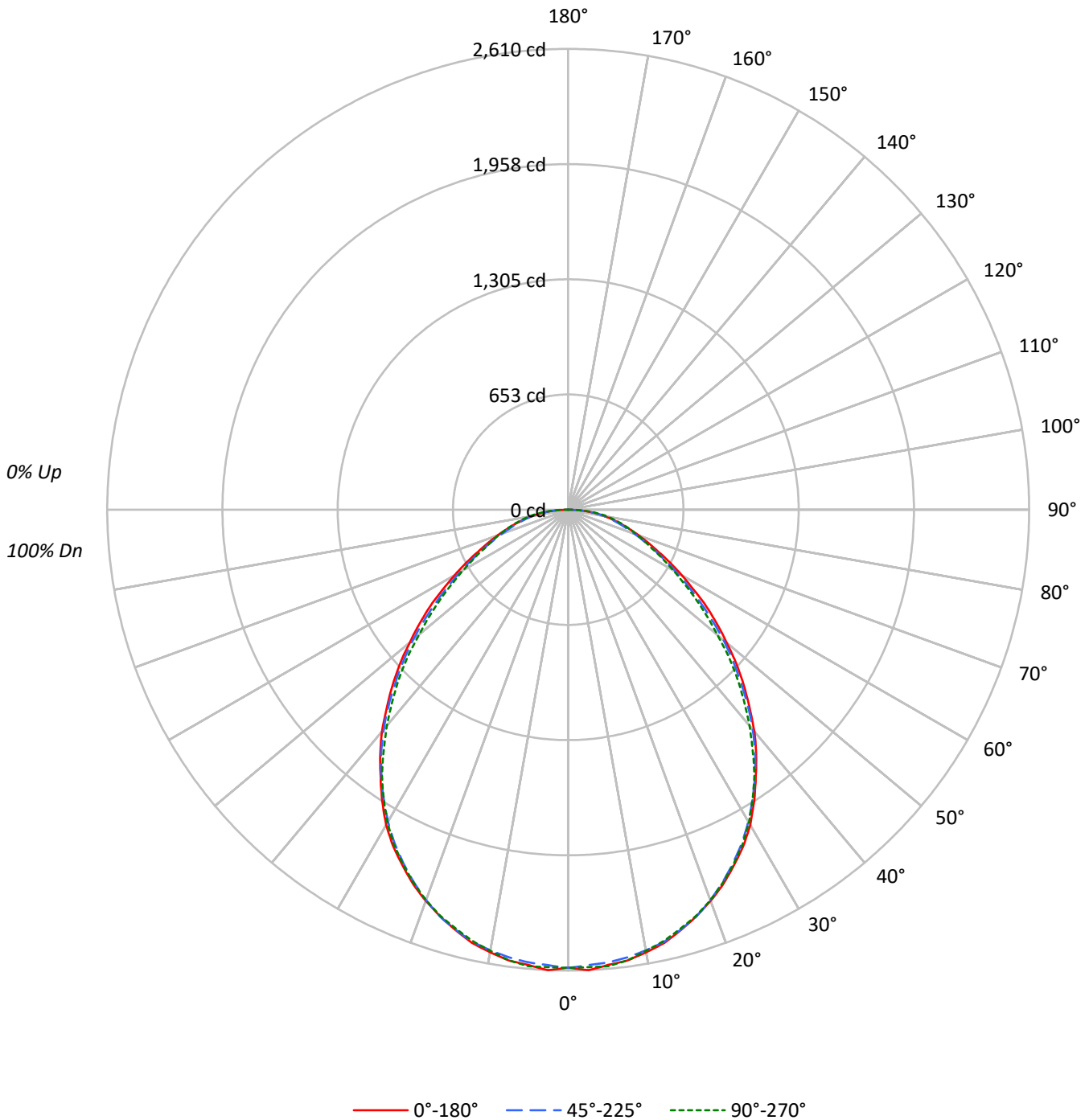
Input Watts (W): 40.92
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3491	3491	3491
5°	3496	3476	3506
10°	3478	3462	3466
15°	3434	3430	3422
20°	3376	3369	3369
25°	3298	3279	3287
30°	3202	3170	3179
35°	3041	3027	3019
40°	2880	2854	2804
45°	2677	2630	2579
50°	2452	2398	2308
55°	2240	2139	2066
60°	1996	1900	1850
65°	1796	1702	1679
70°	1667	1565	1628
75°	1595	1524	1652
80°	1594	1594	1766
85°	1655	1673	1863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	4.1
10°-20°	693.4	11.6
20°-30°	1017.7	17.0
30°-40°	1150.5	19.3
40°-50°	1063.3	17.8
50°-60°	819.3	13.7
60°-70°	542.5	9.1
70°-80°	322.9	5.4
80°-90°	118.3	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°	1956.1	32.7
0°-40°	3106.7	52.0
0°-60°	4989.3	83.5
0°-90°	5973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5973.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2594	2594	2594	2594	2594	
5°	2588	2588	2574	2575	2596	246
15°	2465	2460	2463	2462	2456	695
25°	2221	2215	2209	2206	2214	1023
35°	1852	1849	1843	1834	1838	1159
45°	1407	1397	1382	1358	1355	1084
55°	955	935	912	887	881	852
65°	564	556	535	530	527	566
75°	307	299	293	307	318	327
85°	107	101	108	120	121	114
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2594.5	2594.5	2594.5	2594.5	2594.5
2.5°	2610.5	2597.0	2582.2	2582.2	2593.3
5°	2588.4	2588.4	2573.6	2574.8	2595.8
7.5°	2574.8	2567.4	2557.6	2557.6	2573.6
10°	2545.3	2539.1	2534.2	2531.7	2536.6
12.5°	2513.2	2503.4	2507.1	2503.4	2502.1
15°	2465.2	2460.2	2462.7	2461.5	2456.5
17.5°	2413.4	2411.0	2415.9	2407.3	2411.0
20°	2358.0	2350.6	2353.1	2348.1	2353.1
22.5°	2295.2	2290.2	2284.1	2277.9	2287.8
25°	2221.2	2215.1	2208.9	2206.5	2213.9
27.5°	2147.3	2137.5	2128.8	2126.4	2137.5
30°	2061.1	2050.0	2040.1	2037.7	2046.3
32.5°	1958.8	1956.4	1944.0	1939.1	1942.8
35°	1851.7	1849.2	1843.0	1834.4	1838.1
37.5°	1749.4	1748.2	1739.5	1724.8	1714.9
40°	1639.8	1631.1	1625.0	1604.0	1596.6
42.5°	1519.0	1516.6	1505.5	1482.1	1473.4
45°	1406.9	1397.1	1382.3	1357.6	1355.2
47.5°	1291.1	1277.6	1264.0	1233.2	1232.0
50°	1171.6	1161.7	1145.7	1114.9	1102.6
52.5°	1060.7	1047.2	1025.0	995.4	989.3
55°	954.8	935.1	911.7	887.0	880.9
57.5°	841.4	832.8	804.5	784.8	777.4
60°	741.6	734.3	705.9	687.4	687.4
62.5°	651.7	640.6	616.0	603.7	603.7
65°	564.2	555.6	534.7	529.7	527.3
67.5°	489.1	478.0	463.2	462.0	468.1
70°	423.8	410.2	397.9	410.2	413.9
72.5°	362.2	353.6	342.5	358.5	365.9
75°	306.8	299.4	293.2	306.8	317.8
77.5°	256.2	248.9	248.9	263.6	273.5
80°	205.7	200.8	205.7	218.1	227.9
82.5°	157.7	154.0	160.2	172.5	178.6
85°	107.2	101.0	108.4	119.5	120.7
87.5°	50.5	49.3	54.2	61.6	60.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)