

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: P293189

Luminaire Tested: **24GR-LD5-56-F125-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293189  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-F125-UNV-L83050-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 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): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

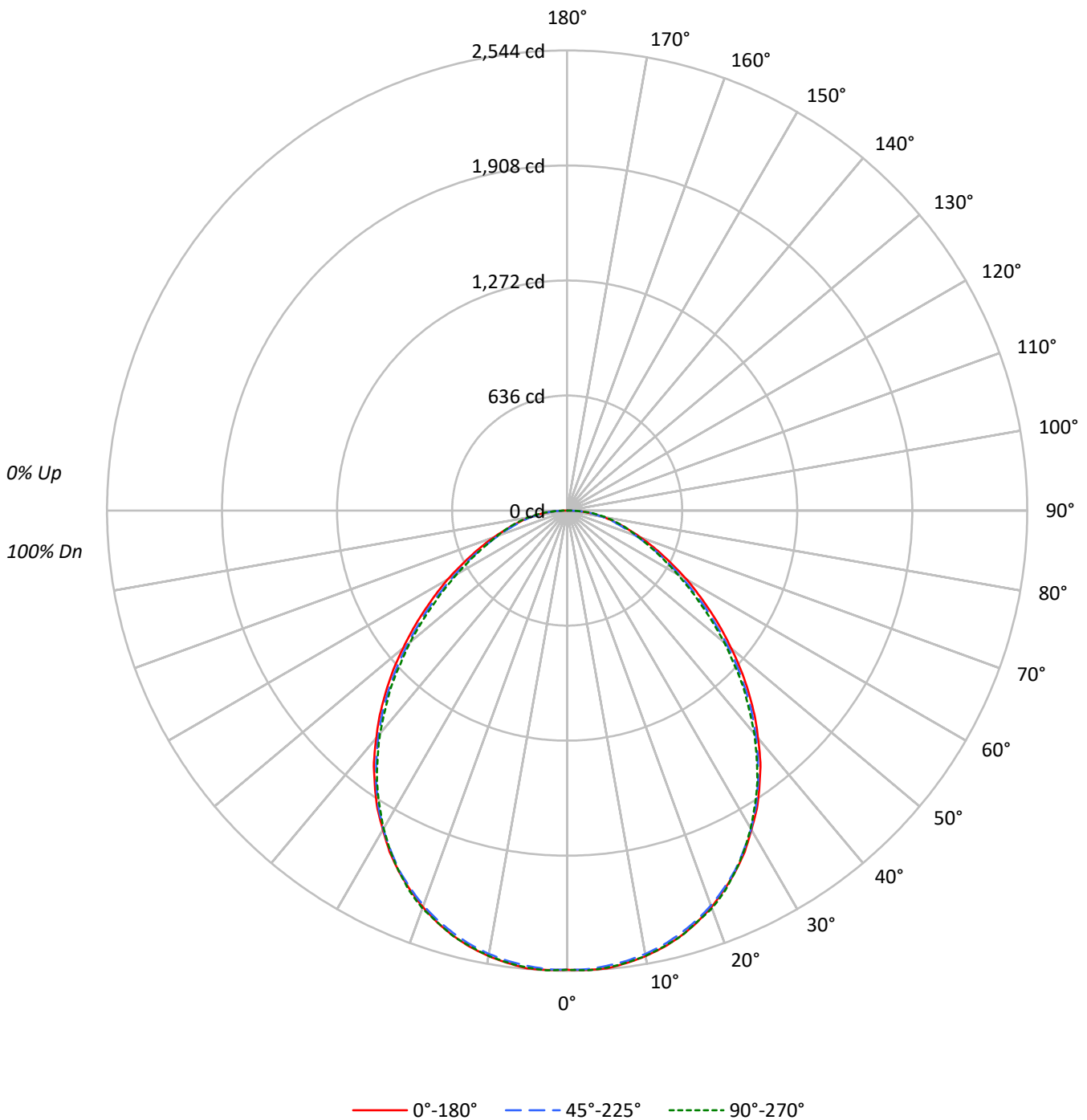
Input Watts (W): 40.92  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	3416	3416	3416
5°	3431	3412	3426
10°	3417	3401	3416
15°	3390	3372	3393
20°	3341	3327	3351
25°	3268	3260	3267
30°	3165	3159	3152
35°	3046	3023	3010
40°	2883	2850	2827
45°	2697	2647	2615
50°	2478	2412	2371
55°	2260	2177	2113
60°	2053	1942	1892
65°	1849	1745	1715
70°	1693	1583	1627
75°	1582	1510	1621
80°	1570	1541	1693
85°	1599	1615	1845



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.2	4.0
10°-20°	683.0	11.4
20°-30°	1009.0	16.9
30°-40°	1147.2	19.2
40°-50°	1071.3	17.9
50°-60°	833.1	13.9
60°-70°	552.8	9.3
70°-80°	319.9	5.4
80°-90°	116.3	1.9
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°	1932.3	32.4
0°-40°	3079.5	51.6
0°-60°	4984.0	83.4
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°	2538	2538	2538	2538	2538	
5°	2540	2527	2526	2531	2537	241
15°	2434	2422	2421	2420	2436	686
25°	2202	2192	2196	2191	2201	1012
35°	1854	1845	1840	1827	1833	1158
45°	1417	1406	1391	1373	1374	1092
55°	964	950	928	904	901	864
65°	581	563	548	538	539	580
75°	304	297	290	303	312	326
85°	104	102	105	119	120	113
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2538.5	2538.5	2538.5	2538.5	2538.5
2.5°	2542.3	2534.8	2538.5	2535.7	2544.1
5°	2540.4	2527.3	2526.4	2531.1	2536.7
7.5°	2522.7	2508.6	2511.4	2511.4	2520.8
10°	2501.2	2487.2	2489.0	2490.0	2500.2
12.5°	2472.2	2458.2	2459.2	2458.2	2468.5
15°	2434.0	2421.8	2420.9	2420.0	2435.8
17.5°	2387.3	2370.5	2376.1	2377.0	2385.4
20°	2333.1	2320.1	2323.8	2322.9	2340.6
22.5°	2268.7	2259.4	2262.2	2260.3	2277.1
25°	2201.5	2192.1	2195.9	2191.2	2200.6
27.5°	2125.9	2119.3	2115.6	2112.8	2119.3
30°	2037.2	2033.4	2033.4	2021.3	2028.8
32.5°	1953.1	1941.0	1941.0	1936.3	1931.7
35°	1854.2	1844.8	1840.2	1827.1	1832.7
37.5°	1755.2	1733.7	1731.9	1721.6	1721.6
40°	1641.3	1629.2	1622.6	1611.4	1609.6
42.5°	1533.0	1520.9	1509.7	1491.0	1487.3
45°	1417.2	1406.0	1391.1	1373.4	1374.3
47.5°	1302.4	1286.5	1272.5	1251.1	1248.3
50°	1183.8	1172.6	1152.1	1133.4	1132.5
52.5°	1072.7	1055.0	1036.3	1013.9	1013.9
55°	963.5	949.5	928.0	903.7	900.9
57.5°	858.9	845.9	821.6	803.9	799.2
60°	762.8	744.1	721.7	706.8	703.0
62.5°	666.6	649.8	633.0	618.1	617.1
65°	580.7	563.0	548.0	537.8	538.7
67.5°	503.2	488.3	471.5	468.7	469.6
70°	430.4	414.5	402.4	408.9	413.6
72.5°	361.3	352.9	344.5	353.8	360.4
75°	304.4	296.9	290.4	303.4	311.8
77.5°	252.1	246.5	245.5	256.7	264.2
80°	202.6	196.1	198.9	211.9	218.5
82.5°	154.0	149.4	150.3	166.2	170.9
85°	103.6	101.8	104.6	118.6	119.5
87.5°	55.1	55.1	57.0	65.4	62.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)