

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: P293198

Luminaire Tested: **24GR-LD5-72-F125-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293198  
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-LD5-72-F125-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7592.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 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

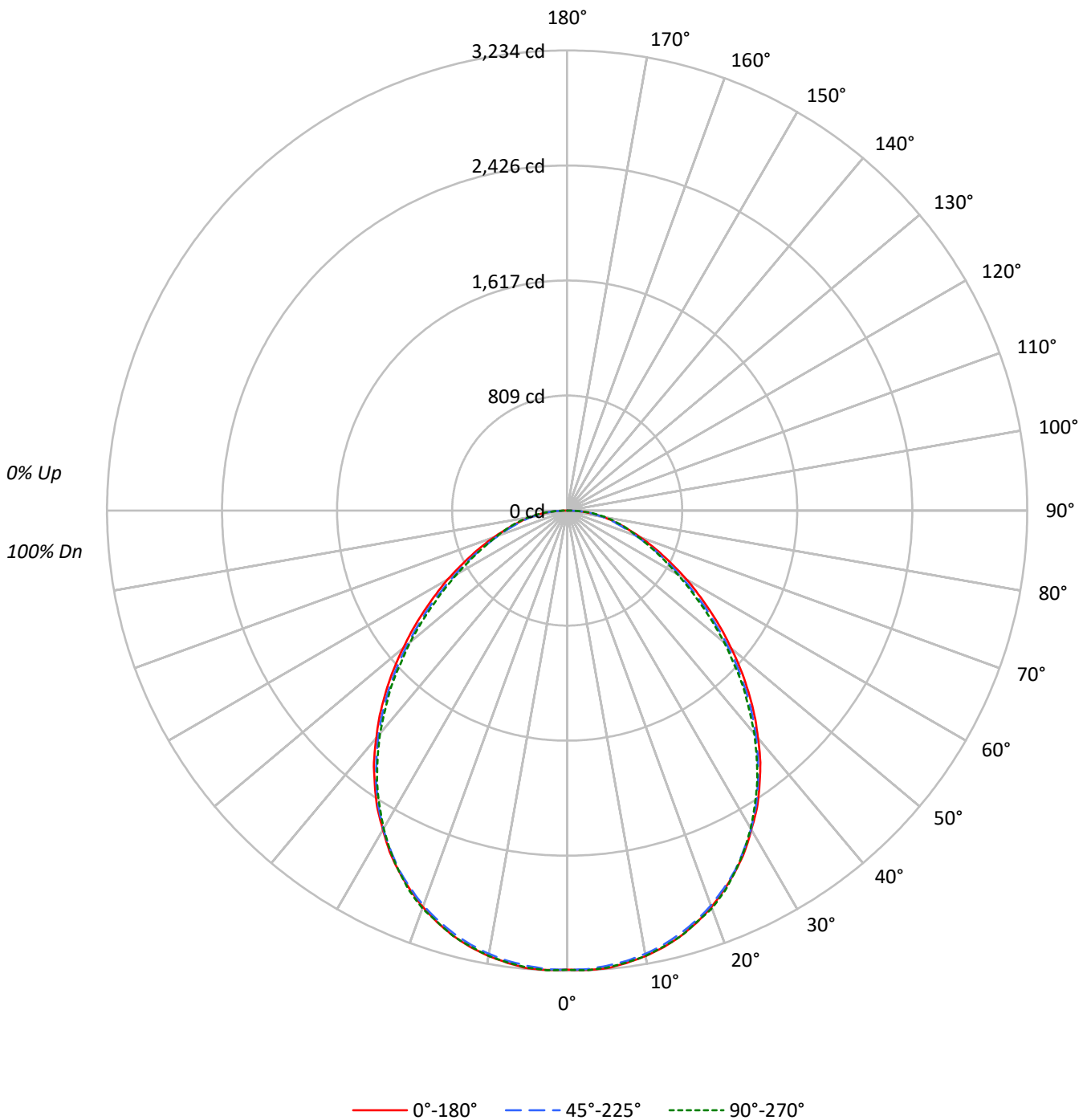
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	4341	4341	4341
5°	4361	4337	4355
10°	4343	4322	4342
15°	4309	4286	4313
20°	4246	4229	4260
25°	4154	4144	4152
30°	4023	4016	4006
35°	3871	3842	3826
40°	3664	3623	3593
45°	3428	3365	3324
50°	3150	3065	3013
55°	2873	2767	2686
60°	2609	2468	2405
65°	2350	2218	2180
70°	2152	2012	2068
75°	2011	1919	2061
80°	1995	1959	2152
85°	2033	2052	2345



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.4	4.0
10°-20°	868.2	11.4
20°-30°	1282.6	16.9
30°-40°	1458.1	19.2
40°-50°	1361.7	17.9
50°-60°	1059.0	13.9
60°-70°	702.6	9.3
70°-80°	406.6	5.4
80°-90°	147.9	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°	2456.1	32.4
0°-40°	3914.2	51.6
0°-60°	6334.9	83.4
0°-90°	7592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3227	3227	3227	3227	3227	
5°	3229	3212	3211	3217	3224	306
15°	3094	3078	3077	3076	3096	872
25°	2798	2786	2791	2785	2797	1287
35°	2357	2345	2339	2322	2330	1471
45°	1801	1787	1768	1746	1747	1388
55°	1225	1207	1180	1149	1145	1098
65°	738	716	697	684	685	738
75°	387	377	369	386	396	414
85°	132	129	133	151	152	143
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3226.6	3226.6	3226.6	3226.6	3226.6
2.5°	3231.3	3221.9	3226.6	3223.0	3233.7
5°	3229.0	3212.4	3211.2	3217.1	3224.2
7.5°	3206.4	3188.6	3192.2	3192.2	3204.1
10°	3179.1	3161.3	3163.7	3164.9	3177.9
12.5°	3142.3	3124.5	3125.7	3124.5	3137.6
15°	3093.7	3078.3	3077.1	3075.9	3096.1
17.5°	3034.4	3013.0	3020.1	3021.3	3032.0
20°	2965.5	2948.9	2953.7	2952.5	2975.0
22.5°	2883.6	2871.8	2875.3	2873.0	2894.3
25°	2798.2	2786.3	2791.1	2785.2	2797.0
27.5°	2702.1	2693.8	2689.0	2685.5	2693.8
30°	2589.3	2584.6	2584.6	2569.2	2578.7
32.5°	2482.5	2467.1	2467.1	2461.2	2455.3
35°	2356.8	2344.9	2339.0	2322.3	2329.5
37.5°	2231.0	2203.7	2201.3	2188.2	2188.2
40°	2086.2	2070.8	2062.5	2048.2	2045.8
42.5°	1948.5	1933.1	1918.9	1895.1	1890.4
45°	1801.4	1787.1	1768.2	1745.6	1746.8
47.5°	1655.4	1635.3	1617.5	1590.2	1586.6
50°	1504.7	1490.5	1464.4	1440.6	1439.5
52.5°	1363.5	1341.0	1317.2	1288.7	1288.7
55°	1224.7	1206.9	1179.6	1148.7	1145.2
57.5°	1091.8	1075.1	1044.3	1021.7	1015.8
60°	969.5	945.8	917.3	898.3	893.6
62.5°	847.3	825.9	804.6	785.6	784.4
65°	738.1	715.6	696.6	683.5	684.7
67.5°	639.6	620.6	599.3	595.7	596.9
70°	547.1	526.9	511.5	519.8	525.7
72.5°	459.2	448.6	437.9	449.8	458.1
75°	386.9	377.4	369.1	385.7	396.4
77.5°	320.4	313.3	312.1	326.3	335.8
80°	257.5	249.2	252.8	269.4	277.7
82.5°	195.8	189.9	191.1	211.2	217.2
85°	131.7	129.3	132.9	150.7	151.9
87.5°	70.0	70.0	72.4	83.1	79.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)