

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: P293025

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293025  
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-LD5-72-F1-UNV-L82765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7557.0 lumens  
Efficiency: N/A  
Efficacy: 137.7 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

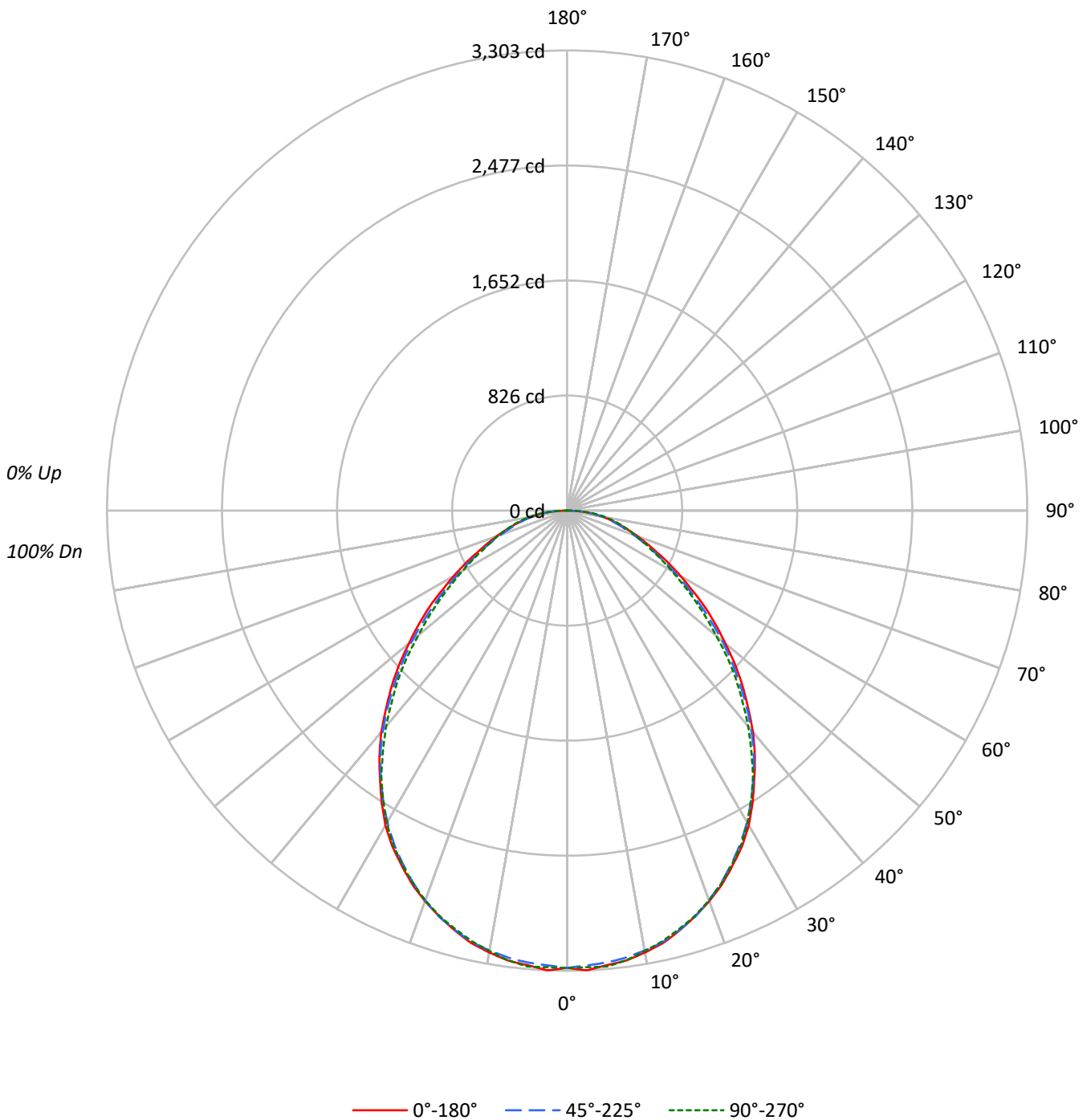
Input Watts (W): 54.87  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4417	4417	4417
5°	4423	4398	4436
10°	4400	4380	4385
15°	4344	4340	4329
20°	4272	4263	4263
25°	4172	4149	4158
30°	4051	4010	4022
35°	3848	3830	3820
40°	3644	3611	3548
45°	3387	3328	3262
50°	3103	3034	2920
55°	2834	2706	2614
60°	2525	2403	2340
65°	2273	2154	2124
70°	2109	1981	2060
75°	2018	1929	2090
80°	2017	2017	2235
85°	2093	2118	2359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.0	4.1
10°-20°	877.3	11.6
20°-30°	1287.6	17.0
30°-40°	1455.7	19.3
40°-50°	1345.3	17.8
50°-60°	1036.5	13.7
60°-70°	686.4	9.1
70°-80°	408.6	5.4
80°-90°	149.7	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°	2474.8	32.7
0°-40°	3930.5	52.0
0°-60°	6312.4	83.5
0°-90°	7557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3283	3283	3283	3283	3283	
5°	3275	3275	3256	3258	3284	311
15°	3119	3113	3116	3114	3108	879
25°	2810	2802	2795	2792	2801	1294
35°	2343	2340	2332	2321	2326	1466
45°	1780	1768	1749	1718	1714	1371
55°	1208	1183	1153	1122	1114	1077
65°	714	703	676	670	667	716
75°	388	379	371	388	402	414
85°	136	128	137	151	153	144
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3282.6	3282.6	3282.6	3282.6	3282.6
2.5°	3302.8	3285.7	3267.0	3267.0	3281.0
5°	3274.8	3274.8	3256.1	3257.6	3284.1
7.5°	3257.6	3248.3	3235.8	3235.8	3256.1
10°	3220.2	3212.4	3206.2	3203.1	3209.3
12.5°	3179.7	3167.2	3171.9	3167.2	3165.7
15°	3118.9	3112.7	3115.8	3114.2	3108.0
17.5°	3053.5	3050.3	3056.6	3045.7	3050.3
20°	2983.3	2974.0	2977.1	2970.8	2977.1
22.5°	2903.8	2897.6	2889.8	2882.0	2894.5
25°	2810.3	2802.5	2794.7	2791.6	2800.9
27.5°	2716.8	2704.3	2693.4	2690.3	2704.3
30°	2607.7	2593.6	2581.2	2578.1	2589.0
32.5°	2478.3	2475.2	2459.6	2453.4	2458.0
35°	2342.7	2339.6	2331.8	2320.9	2325.6
37.5°	2213.3	2211.8	2200.9	2182.2	2169.7
40°	2074.6	2063.7	2055.9	2029.4	2020.1
42.5°	1921.9	1918.7	1904.7	1875.1	1864.2
45°	1780.0	1767.5	1748.8	1717.7	1714.5
47.5°	1633.5	1616.4	1599.2	1560.2	1558.7
50°	1482.3	1469.8	1449.6	1410.6	1395.0
52.5°	1342.0	1324.9	1296.8	1259.4	1251.6
55°	1208.0	1183.0	1153.4	1122.3	1114.5
57.5°	1064.6	1053.7	1017.8	992.9	983.5
60°	938.3	929.0	893.1	869.7	869.7
62.5°	824.5	810.5	779.3	763.8	763.8
65°	713.9	703.0	676.5	670.2	667.1
67.5°	618.8	604.8	586.1	584.5	592.3
70°	536.2	519.0	503.5	519.0	523.7
72.5°	458.3	447.3	433.3	453.6	462.9
75°	388.1	378.8	371.0	388.1	402.1
77.5°	324.2	314.9	314.9	333.6	346.0
80°	260.3	254.1	260.3	275.9	288.4
82.5°	199.5	194.8	202.6	218.2	226.0
85°	135.6	127.8	137.2	151.2	152.8
87.5°	63.9	62.3	68.6	77.9	76.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)