

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: P293148

Luminaire Tested: **24GR-LD5-72-F1-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293148  
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-L92765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6683.0 lumens  
Efficiency: N/A  
Efficacy: 124.3 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

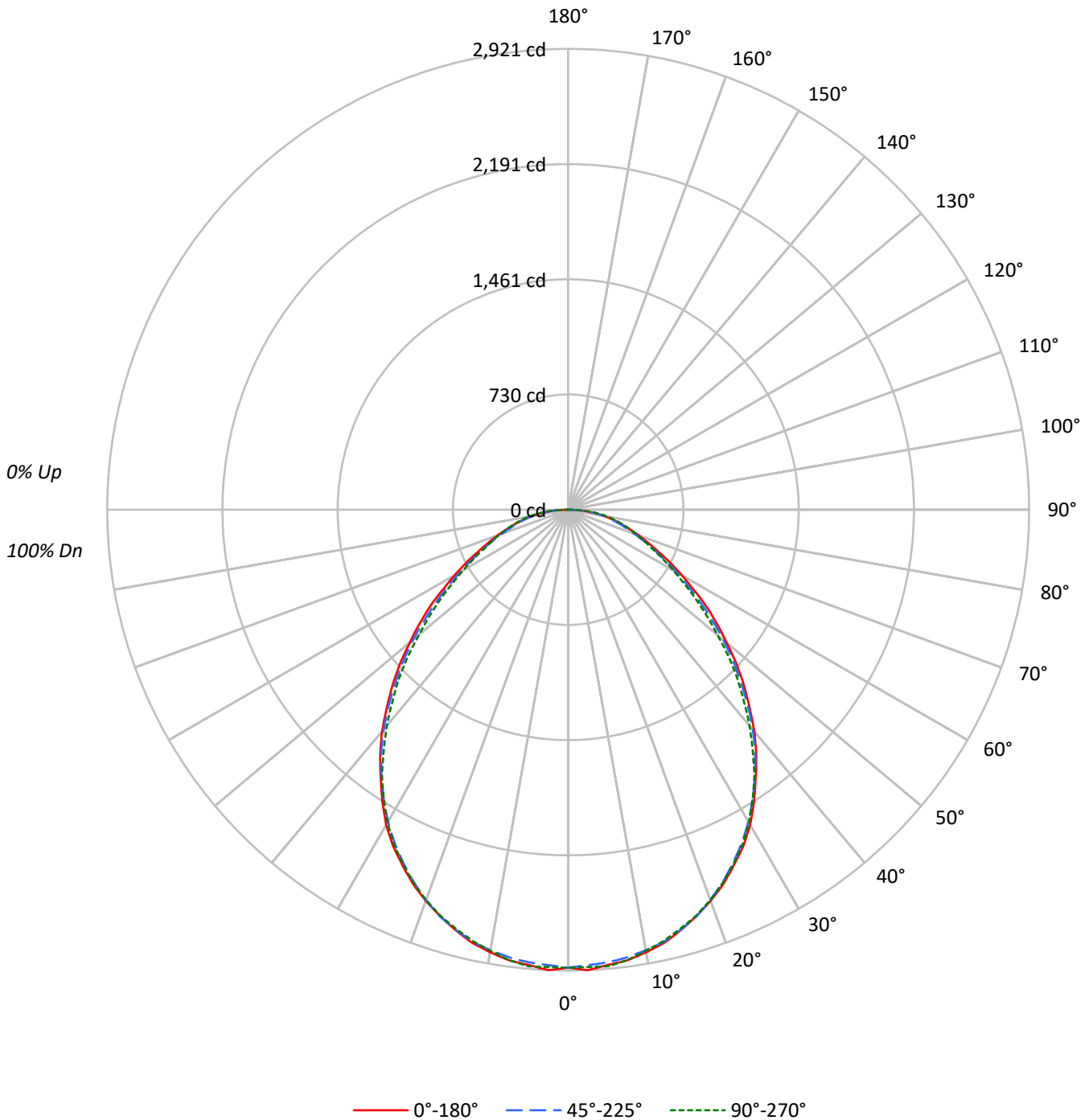
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3906	3906	3906
5°	3911	3889	3923
10°	3891	3874	3878
15°	3842	3838	3829
20°	3778	3770	3770
25°	3690	3669	3677
30°	3583	3546	3557
35°	3403	3387	3378
40°	3222	3193	3138
45°	2995	2943	2885
50°	2744	2683	2582
55°	2506	2393	2312
60°	2233	2125	2070
65°	2010	1904	1878
70°	1865	1751	1822
75°	1784	1706	1849
80°	1784	1784	1976
85°	1851	1873	2086



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.2	4.1
10°-20°	775.8	11.6
20°-30°	1138.6	17.0
30°-40°	1287.3	19.3
40°-50°	1189.7	17.8
50°-60°	916.6	13.7
60°-70°	607.0	9.1
70°-80°	361.3	5.4
80°-90°	132.4	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°	2188.6	32.7
0°-40°	3475.9	52.0
0°-60°	5582.3	83.5
0°-90°	6683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6683.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2903	2903	2903	2903	2903	
5°	2896	2896	2880	2881	2904	275
15°	2758	2753	2755	2754	2749	777
25°	2485	2478	2472	2469	2477	1144
35°	2072	2069	2062	2052	2057	1296
45°	1574	1563	1547	1519	1516	1213
55°	1068	1046	1020	992	986	953
65°	631	622	598	593	590	633
75°	343	335	328	343	356	366
85°	120	113	121	134	135	127
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2902.9	2902.9	2902.9	2902.9	2902.9
2.5°	2920.9	2905.7	2889.2	2889.2	2901.6
5°	2896.0	2896.0	2879.5	2880.9	2904.3
7.5°	2880.9	2872.6	2861.6	2861.6	2879.5
10°	2847.8	2840.9	2835.4	2832.6	2838.2
12.5°	2812.0	2800.9	2805.1	2800.9	2799.6
15°	2758.2	2752.7	2755.4	2754.1	2748.6
17.5°	2700.3	2697.6	2703.1	2693.4	2697.6
20°	2638.3	2630.0	2632.8	2627.3	2632.8
22.5°	2568.0	2562.5	2555.6	2548.7	2559.7
25°	2485.3	2478.4	2471.5	2468.7	2477.0
27.5°	2402.6	2391.5	2381.9	2379.1	2391.5
30°	2306.1	2293.7	2282.7	2279.9	2289.5
32.5°	2191.7	2188.9	2175.1	2169.6	2173.8
35°	2071.8	2069.0	2062.1	2052.5	2056.6
37.5°	1957.3	1956.0	1946.3	1929.8	1918.8
40°	1834.7	1825.0	1818.1	1794.7	1786.4
42.5°	1699.6	1696.8	1684.4	1658.2	1648.6
45°	1574.1	1563.1	1546.6	1519.0	1516.3
47.5°	1444.6	1429.4	1414.3	1379.8	1378.4
50°	1310.9	1299.8	1281.9	1247.5	1233.7
52.5°	1186.8	1171.7	1146.8	1113.8	1106.9
55°	1068.3	1046.2	1020.0	992.5	985.6
57.5°	941.5	931.8	900.1	878.0	869.8
60°	829.8	821.5	789.8	769.2	769.2
62.5°	729.2	716.8	689.2	675.4	675.4
65°	631.3	621.7	598.2	592.7	590.0
67.5°	547.2	534.8	518.3	516.9	523.8
70°	474.2	459.0	445.2	459.0	463.1
72.5°	405.3	395.6	383.2	401.1	409.4
75°	343.2	335.0	328.1	343.2	355.6
77.5°	286.7	278.4	278.4	295.0	306.0
80°	230.2	224.7	230.2	244.0	255.0
82.5°	176.4	172.3	179.2	193.0	199.9
85°	119.9	113.0	121.3	133.7	135.1
87.5°	56.5	55.1	60.7	68.9	67.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)