

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: P293651

Luminaire Tested: **24GR-LD5-72-A-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293651  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-A-UNV-L92765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6628.0 lumens  
Efficiency: N/A  
Efficacy: 123.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

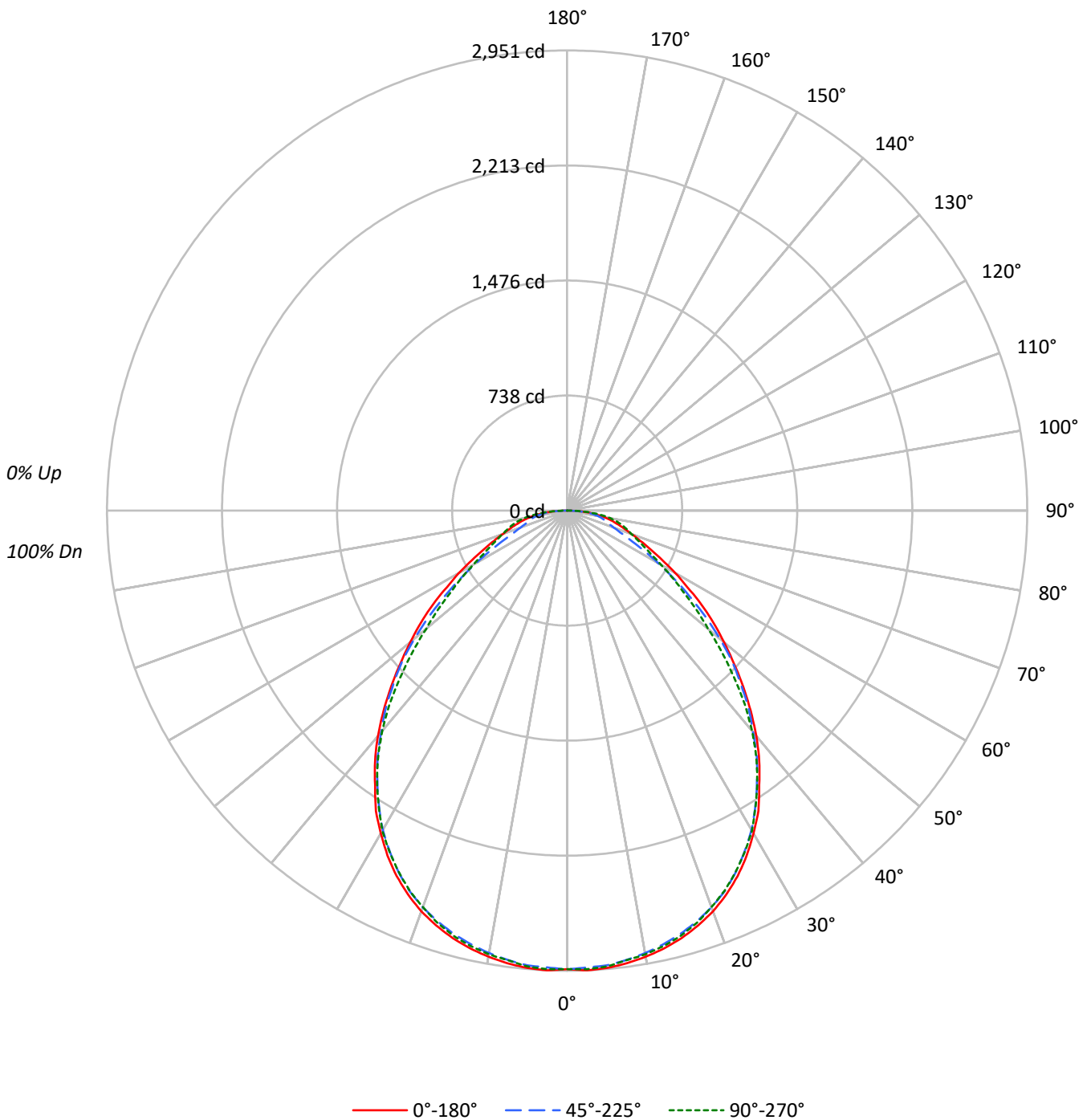
Input Watts (W): 53.568  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	3957	3957	3957
5°	3976	3954	3964
10°	3969	3937	3948
15°	3954	3914	3931
20°	3916	3876	3875
25°	3840	3799	3796
30°	3713	3675	3683
35°	3527	3486	3492
40°	3316	3259	3239
45°	3040	2998	2880
50°	2748	2673	2471
55°	2467	2246	2130
60°	2160	1808	1874
65°	1884	1421	1725
70°	1724	1241	1724
75°	1725	1320	1900
80°	1873	1555	2166
85°	2055	1755	2323



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.5	4.2
10°-20°	794.7	12.0
20°-30°	1178.4	17.8
30°-40°	1329.4	20.1
40°-50°	1204.0	18.2
50°-60°	868.7	13.1
60°-70°	518.7	7.8
70°-80°	320.6	4.8
80°-90°	135.0	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°	2251.6	34.0
0°-40°	3581.0	54.0
0°-60°	5653.7	85.3
0°-90°	6628.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6628.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2941	2941	2941	2941	2941	
5°	2944	2940	2928	2924	2935	280
15°	2838	2821	2810	2811	2822	800
25°	2586	2572	2559	2550	2557	1188
35°	2147	2144	2123	2124	2126	1343
45°	1597	1587	1576	1537	1513	1231
55°	1052	1019	957	910	908	939
65°	592	521	446	507	542	595
75°	332	288	254	316	366	354
85°	133	117	114	148	150	139
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2940.8	2940.8	2940.8	2940.8	2940.8
2.5°	2951.0	2942.8	2932.6	2938.7	2943.8
5°	2943.8	2939.7	2927.5	2924.4	2934.6
7.5°	2928.5	2918.2	2907.0	2912.1	2908.0
10°	2904.9	2895.7	2881.4	2882.4	2889.6
12.5°	2876.3	2865.0	2849.6	2853.7	2859.9
15°	2838.4	2821.0	2809.7	2810.7	2822.0
17.5°	2790.2	2776.9	2762.6	2765.7	2770.8
20°	2735.0	2727.8	2707.3	2701.2	2706.3
22.5°	2665.3	2652.0	2640.8	2637.7	2638.7
25°	2586.5	2572.1	2558.8	2549.6	2556.8
27.5°	2494.3	2482.0	2464.6	2461.6	2467.7
30°	2389.9	2380.7	2365.3	2361.2	2370.4
32.5°	2283.4	2268.0	2246.5	2246.5	2248.6
35°	2147.2	2144.1	2122.6	2123.7	2125.7
37.5°	2024.3	2010.0	1997.7	1985.4	1991.6
40°	1888.2	1871.8	1855.4	1847.2	1844.1
42.5°	1741.7	1729.4	1722.3	1692.6	1685.4
45°	1597.4	1587.1	1575.8	1536.9	1513.4
47.5°	1449.9	1447.9	1438.6	1370.0	1346.5
50°	1312.7	1309.6	1276.9	1204.2	1180.6
52.5°	1182.7	1162.2	1119.2	1047.5	1043.4
55°	1051.6	1018.8	957.4	910.3	908.2
57.5°	913.4	874.4	812.0	786.4	799.7
60°	802.8	743.4	671.7	674.8	696.3
62.5°	688.1	621.5	550.9	581.6	607.2
65°	591.8	521.2	446.4	506.9	541.7
67.5°	507.9	442.3	370.7	451.6	485.3
70°	438.2	385.0	315.4	400.4	438.2
72.5°	383.0	333.8	279.5	359.4	403.4
75°	331.8	287.7	253.9	316.4	365.5
77.5°	287.7	244.7	229.4	279.5	327.7
80°	241.7	202.7	200.7	243.7	279.5
82.5°	188.4	161.8	161.8	203.8	225.3
85°	133.1	116.7	113.7	148.5	150.5
87.5°	68.6	65.5	59.4	77.8	77.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)