

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: P293448

Luminaire Tested: **24GR-LD5-72-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293448  
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-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6912.0 lumens  
Efficiency: N/A  
Efficacy: 131.8 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

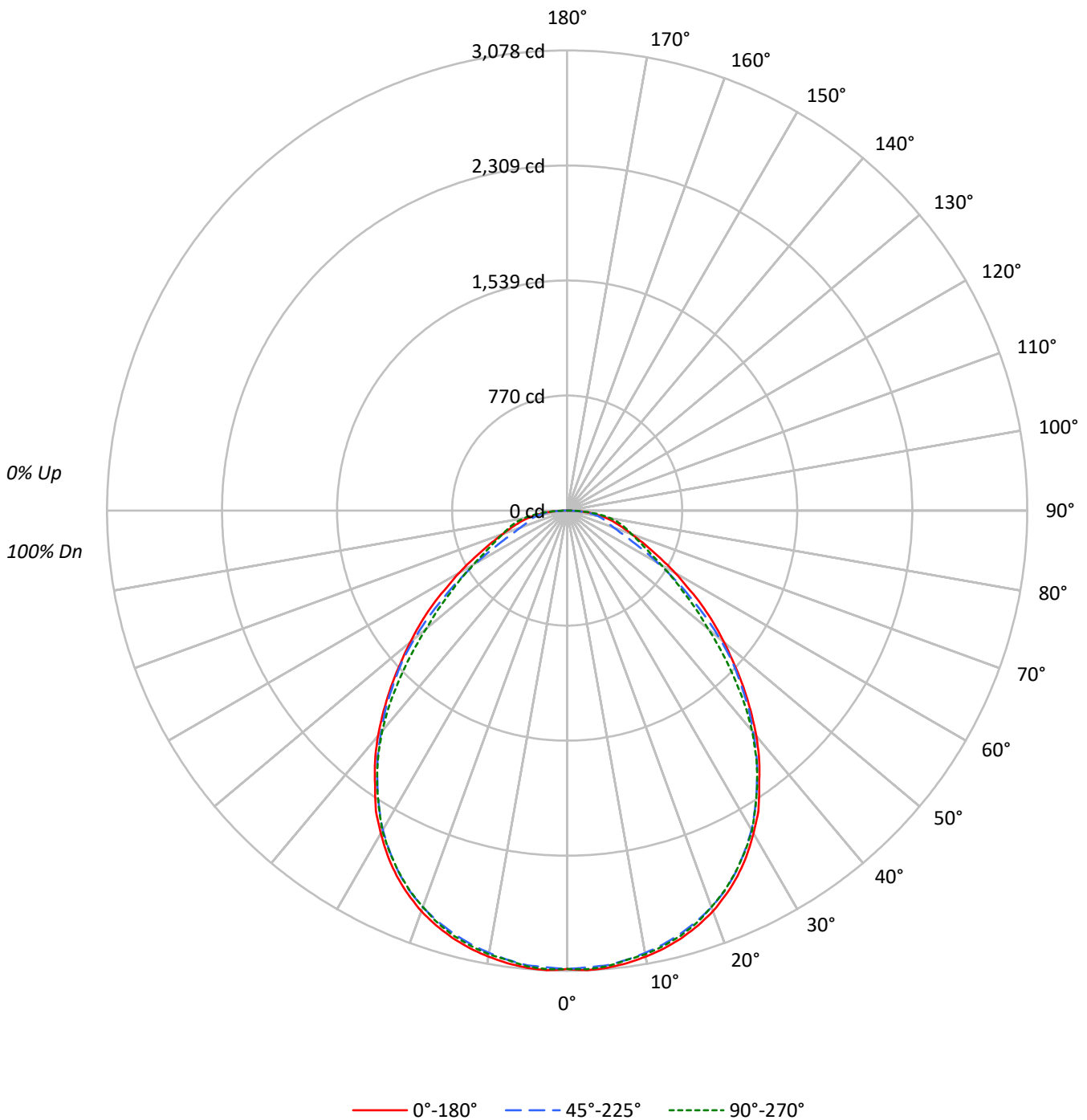
Input Watts (W): 52.452  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4126	4126	4126
5°	4146	4123	4133
10°	4139	4105	4117
15°	4123	4081	4099
20°	4084	4043	4041
25°	4004	3962	3958
30°	3872	3832	3841
35°	3678	3636	3641
40°	3459	3398	3378
45°	3170	3127	3003
50°	2865	2787	2577
55°	2572	2342	2222
60°	2253	1885	1954
65°	1965	1482	1798
70°	1798	1294	1798
75°	1799	1377	1982
80°	1953	1622	2259
85°	2143	1829	2424



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.4	4.2
10°-20°	828.8	12.0
20°-30°	1228.9	17.8
30°-40°	1386.4	20.1
40°-50°	1255.6	18.2
50°-60°	905.9	13.1
60°-70°	540.9	7.8
70°-80°	334.3	4.8
80°-90°	140.8	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°	2348.1	34.0
0°-40°	3734.5	54.0
0°-60°	5896.0	85.3
0°-90°	6912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6912.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3070	3066	3053	3050	3060	292
15°	2960	2942	2930	2931	2943	834
25°	2697	2682	2668	2659	2666	1239
35°	2239	2236	2214	2215	2217	1401
45°	1666	1655	1643	1603	1578	1284
55°	1097	1062	998	949	947	979
65°	617	544	466	529	565	621
75°	346	300	265	330	381	369
85°	139	122	118	155	157	145
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3066.8	3066.8	3066.8	3066.8	3066.8
2.5°	3077.5	3068.9	3058.2	3064.6	3070.0
5°	3070.0	3065.7	3052.9	3049.7	3060.4
7.5°	3054.0	3043.3	3031.5	3036.9	3032.6
10°	3029.4	3019.8	3004.8	3005.9	3013.4
12.5°	2999.5	2987.8	2971.7	2976.0	2982.4
15°	2960.0	2941.8	2930.1	2931.2	2942.9
17.5°	2909.8	2895.9	2881.0	2884.2	2889.5
20°	2852.1	2844.7	2823.3	2816.9	2822.2
22.5°	2779.5	2765.6	2753.9	2750.7	2751.8
25°	2697.3	2682.4	2668.5	2658.9	2666.3
27.5°	2601.2	2588.4	2570.2	2567.0	2573.4
30°	2492.3	2482.7	2466.7	2462.4	2472.0
32.5°	2381.2	2365.2	2342.8	2342.8	2344.9
35°	2239.2	2236.0	2213.6	2214.7	2216.8
37.5°	2111.1	2096.1	2083.3	2070.5	2076.9
40°	1969.1	1952.0	1934.9	1926.3	1923.1
42.5°	1816.4	1803.5	1796.1	1765.1	1757.6
45°	1665.8	1655.1	1643.4	1602.8	1578.2
47.5°	1512.0	1509.9	1500.3	1428.7	1404.2
50°	1368.9	1365.7	1331.6	1255.8	1231.2
52.5°	1233.3	1212.0	1167.1	1092.4	1088.1
55°	1096.6	1062.5	998.4	949.3	947.2
57.5°	952.5	911.9	846.8	820.1	834.0
60°	837.2	775.2	700.5	703.7	726.1
62.5°	717.6	648.2	574.5	606.5	633.2
65°	617.2	543.5	465.6	528.6	564.9
67.5°	529.6	461.3	386.6	470.9	506.1
70°	457.0	401.5	328.9	417.5	457.0
72.5°	399.4	348.1	291.5	374.8	420.7
75°	346.0	300.1	264.8	330.0	381.2
77.5°	300.1	255.2	239.2	291.5	341.7
80°	252.0	211.4	209.3	254.1	291.5
82.5°	196.5	168.7	168.7	212.5	234.9
85°	138.8	121.7	118.5	154.8	157.0
87.5°	71.5	68.3	61.9	81.2	81.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)