

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: P293444

Luminaire Tested: **24GR-LD5-64-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293444  
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-LD5-64-A-UNV-L83050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6474.0 lumens  
Efficiency: N/A  
Efficacy: 140.9 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

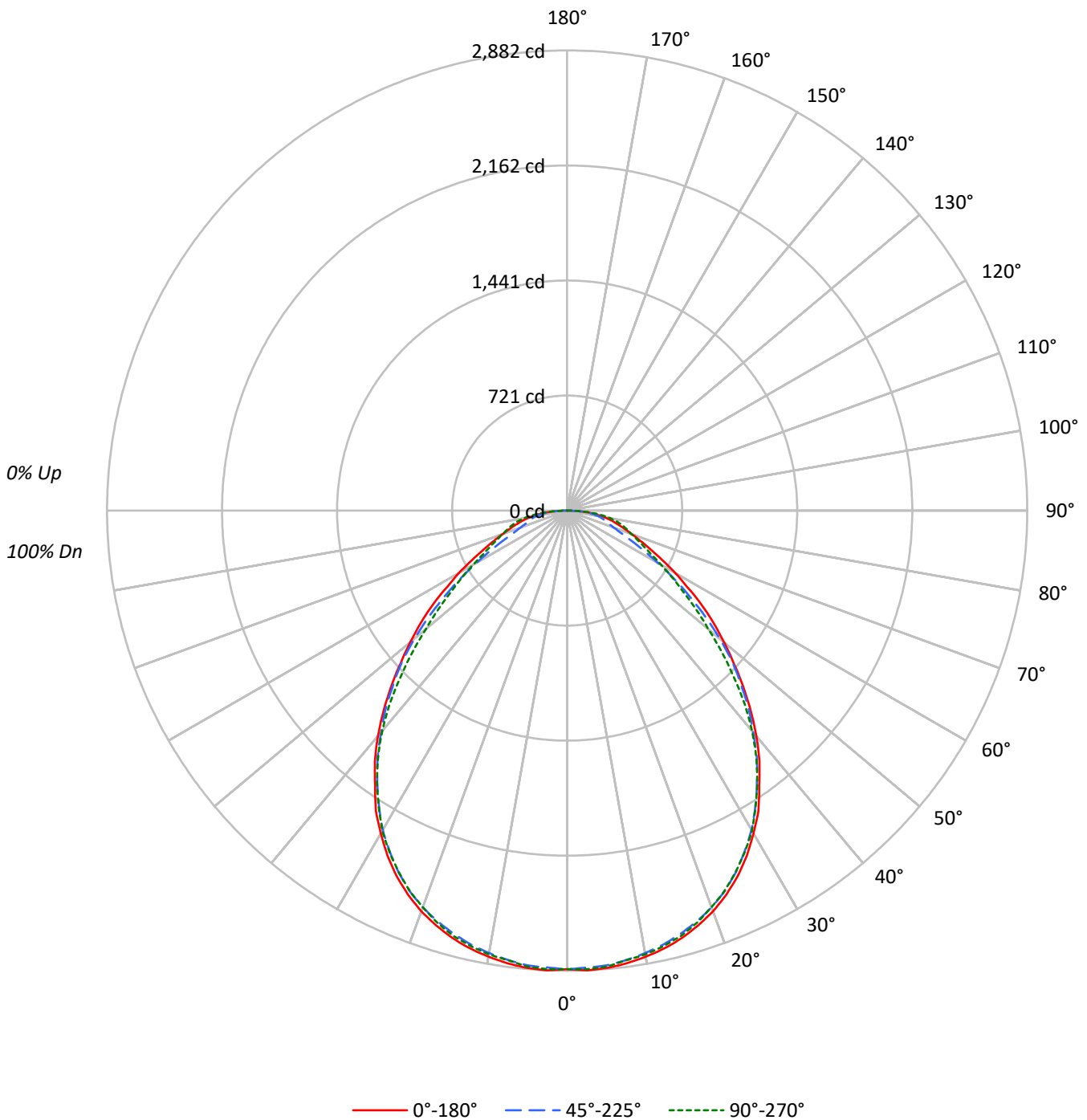
Input Watts (W): 45.942  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3865	3865	3865
5°	3884	3862	3871
10°	3877	3845	3856
15°	3862	3823	3840
20°	3825	3786	3785
25°	3751	3711	3708
30°	3627	3590	3597
35°	3445	3405	3410
40°	3239	3183	3164
45°	2969	2929	2813
50°	2684	2611	2414
55°	2410	2194	2081
60°	2110	1766	1830
65°	1840	1388	1684
70°	1684	1212	1684
75°	1684	1289	1856
80°	1829	1519	2115
85°	2007	1714	2269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.0	4.2
10°-20°	776.3	12.0
20°-30°	1151.1	17.8
30°-40°	1298.5	20.1
40°-50°	1176.1	18.2
50°-60°	848.5	13.1
60°-70°	506.6	7.8
70°-80°	313.1	4.8
80°-90°	131.9	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°	2199.3	34.0
0°-40°	3497.8	54.0
0°-60°	5522.4	85.3
0°-90°	6474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6474.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2872	2872	2872	2872	2872	
5°	2875	2871	2859	2856	2866	273
15°	2772	2755	2744	2745	2756	781
25°	2526	2512	2499	2490	2497	1161
35°	2097	2094	2073	2074	2076	1312
45°	1560	1550	1539	1501	1478	1202
55°	1027	995	935	889	887	917
65°	578	509	436	495	529	582
75°	324	281	248	309	357	346
85°	130	114	111	145	147	136
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2872.4	2872.4	2872.4	2872.4	2872.4
2.5°	2882.4	2874.4	2864.4	2870.4	2875.4
5°	2875.4	2871.4	2859.4	2856.4	2866.4
7.5°	2860.4	2850.4	2839.4	2844.4	2840.4
10°	2837.4	2828.4	2814.4	2815.4	2822.4
12.5°	2809.4	2798.4	2783.4	2787.4	2793.4
15°	2772.4	2755.4	2744.4	2745.4	2756.4
17.5°	2725.4	2712.4	2698.4	2701.4	2706.4
20°	2671.4	2664.4	2644.4	2638.4	2643.4
22.5°	2603.4	2590.4	2579.4	2576.4	2577.4
25°	2526.4	2512.4	2499.4	2490.4	2497.4
27.5°	2436.4	2424.4	2407.4	2404.4	2410.4
30°	2334.4	2325.4	2310.4	2306.4	2315.4
32.5°	2230.3	2215.3	2194.3	2194.3	2196.3
35°	2097.3	2094.3	2073.3	2074.3	2076.3
37.5°	1977.3	1963.3	1951.3	1939.3	1945.3
40°	1844.3	1828.3	1812.3	1804.3	1801.3
42.5°	1701.3	1689.3	1682.3	1653.3	1646.3
45°	1560.2	1550.2	1539.2	1501.2	1478.2
47.5°	1416.2	1414.2	1405.2	1338.2	1315.2
50°	1282.2	1279.2	1247.2	1176.2	1153.2
52.5°	1155.2	1135.2	1093.2	1023.2	1019.2
55°	1027.2	995.2	935.1	889.1	887.1
57.5°	892.1	854.1	793.1	768.1	781.1
60°	784.1	726.1	656.1	659.1	680.1
62.5°	672.1	607.1	538.1	568.1	593.1
65°	578.1	509.1	436.1	495.1	529.1
67.5°	496.1	432.1	362.1	441.1	474.1
70°	428.1	376.1	308.0	391.1	428.1
72.5°	374.1	326.0	273.0	351.1	394.1
75°	324.0	281.0	248.0	309.0	357.1
77.5°	281.0	239.0	224.0	273.0	320.0
80°	236.0	198.0	196.0	238.0	273.0
82.5°	184.0	158.0	158.0	199.0	220.0
85°	130.0	114.0	111.0	145.0	147.0
87.5°	67.0	64.0	58.0	76.0	76.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)