

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: P293571

Luminaire Tested: **24GR-LD5-64-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293571  
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-L93050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5943.0 lumens  
Efficiency: N/A  
Efficacy: 126.1 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

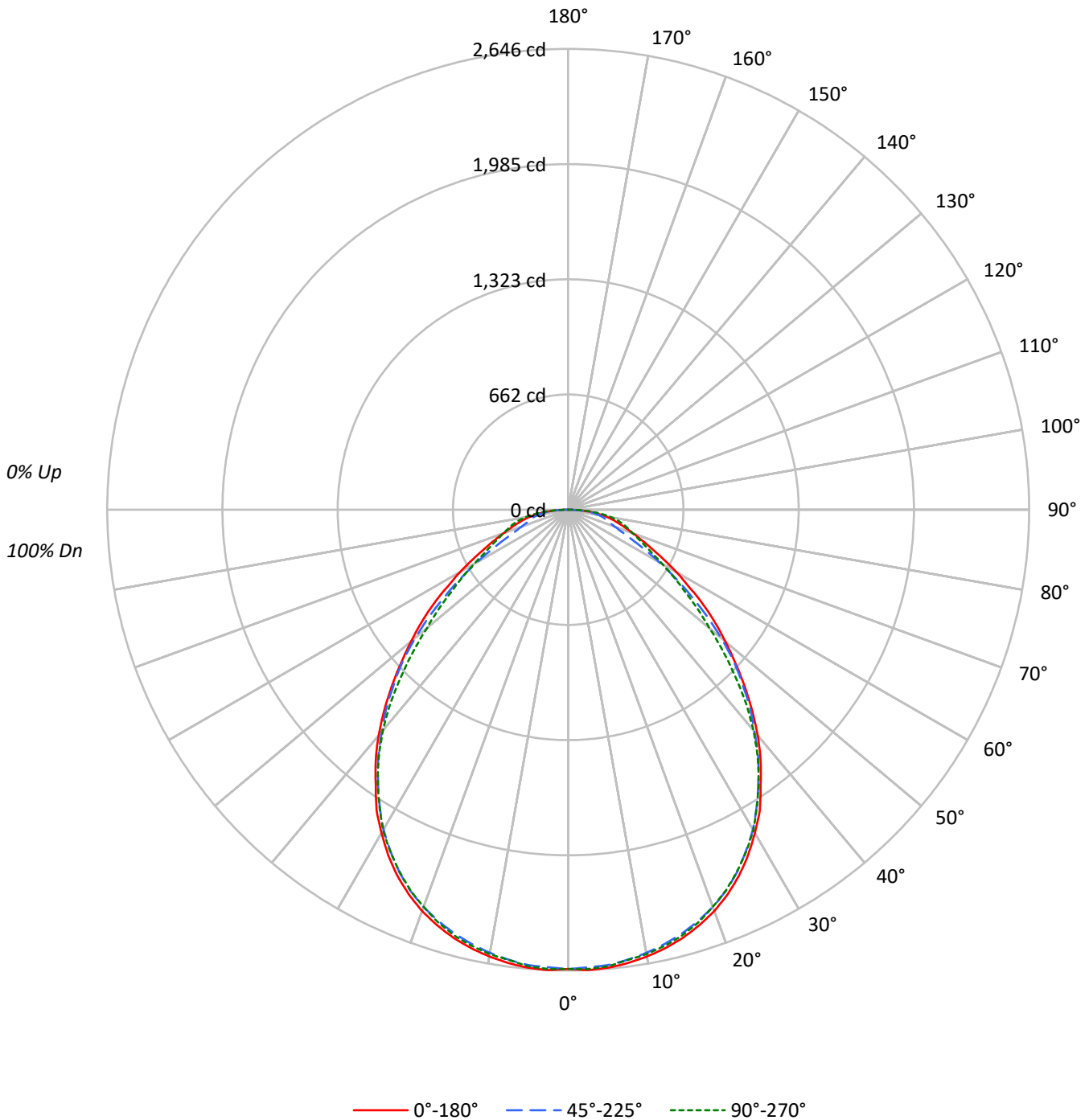
Input Watts (W): 47.136492  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3548	3548	3548
5°	3565	3545	3554
10°	3559	3530	3540
15°	3545	3509	3525
20°	3511	3476	3475
25°	3443	3406	3403
30°	3329	3295	3302
35°	3162	3126	3131
40°	2974	2922	2904
45°	2725	2689	2582
50°	2464	2397	2216
55°	2212	2014	1910
60°	1937	1621	1680
65°	1690	1274	1546
70°	1546	1113	1546
75°	1547	1184	1704
80°	1679	1395	1942
85°	1843	1573	2084



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.7	4.2
10°-20°	712.6	12.0
20°-30°	1056.6	17.8
30°-40°	1192.0	20.1
40°-50°	1079.6	18.2
50°-60°	778.9	13.1
60°-70°	465.1	7.8
70°-80°	287.4	4.8
80°-90°	121.1	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°	2018.9	34.0
0°-40°	3210.9	54.0
0°-60°	5069.4	85.3
0°-90°	5943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5943.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2637	2637	2637	2637	2637	
5°	2640	2636	2625	2622	2631	251
15°	2545	2529	2519	2520	2530	717
25°	2319	2306	2294	2286	2292	1065
35°	1925	1922	1903	1904	1906	1205
45°	1432	1423	1413	1378	1357	1104
55°	943	914	858	816	814	842
65°	531	467	400	454	486	534
75°	298	258	228	284	328	318
85°	119	105	102	133	135	125
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2636.8	2636.8	2636.8	2636.8	2636.8
2.5°	2646.0	2638.7	2629.5	2635.0	2639.6
5°	2639.6	2635.9	2624.9	2622.2	2631.3
7.5°	2625.8	2616.6	2606.5	2611.1	2607.5
10°	2604.7	2596.4	2583.6	2584.5	2590.9
12.5°	2579.0	2568.9	2555.1	2558.8	2564.3
15°	2545.0	2529.4	2519.3	2520.2	2530.3
17.5°	2501.9	2489.9	2477.1	2479.8	2484.4
20°	2452.3	2445.9	2427.5	2422.0	2426.6
22.5°	2389.9	2377.9	2367.8	2365.1	2366.0
25°	2319.2	2306.3	2294.4	2286.1	2292.5
27.5°	2236.5	2225.5	2209.9	2207.2	2212.7
30°	2142.9	2134.6	2120.9	2117.2	2125.4
32.5°	2047.4	2033.6	2014.4	2014.4	2016.2
35°	1925.3	1922.5	1903.3	1904.2	1906.0
37.5°	1815.1	1802.3	1791.3	1780.2	1785.7
40°	1693.0	1678.3	1663.6	1656.3	1653.5
42.5°	1561.7	1550.7	1544.3	1517.7	1511.2
45°	1432.3	1423.1	1413.0	1378.1	1357.0
47.5°	1300.1	1298.2	1290.0	1228.4	1207.3
50°	1177.0	1174.3	1144.9	1079.7	1058.6
52.5°	1060.4	1042.1	1003.5	939.2	935.6
55°	942.9	913.5	858.4	816.2	814.4
57.5°	819.0	784.1	728.1	705.1	717.1
60°	719.8	666.6	602.3	605.0	624.3
62.5°	617.0	557.3	493.9	521.5	544.4
65°	530.7	467.3	400.3	454.5	485.7
67.5°	455.4	396.6	332.4	404.9	435.2
70°	393.0	345.2	282.8	359.0	393.0
72.5°	343.4	299.3	250.6	322.3	361.7
75°	297.5	258.0	227.7	283.7	327.8
77.5°	258.0	219.4	205.7	250.6	293.8
80°	216.7	181.8	180.0	218.5	250.6
82.5°	168.9	145.1	145.1	182.7	202.0
85°	119.4	104.7	101.9	133.1	135.0
87.5°	61.5	58.8	53.3	69.8	69.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)