

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: P292939

Luminaire Tested: **24GR-LD5-64-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292939  
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-LD5-64-F1-UNV-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6047.0 lumens  
Efficiency: N/A  
Efficacy: 131.9 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

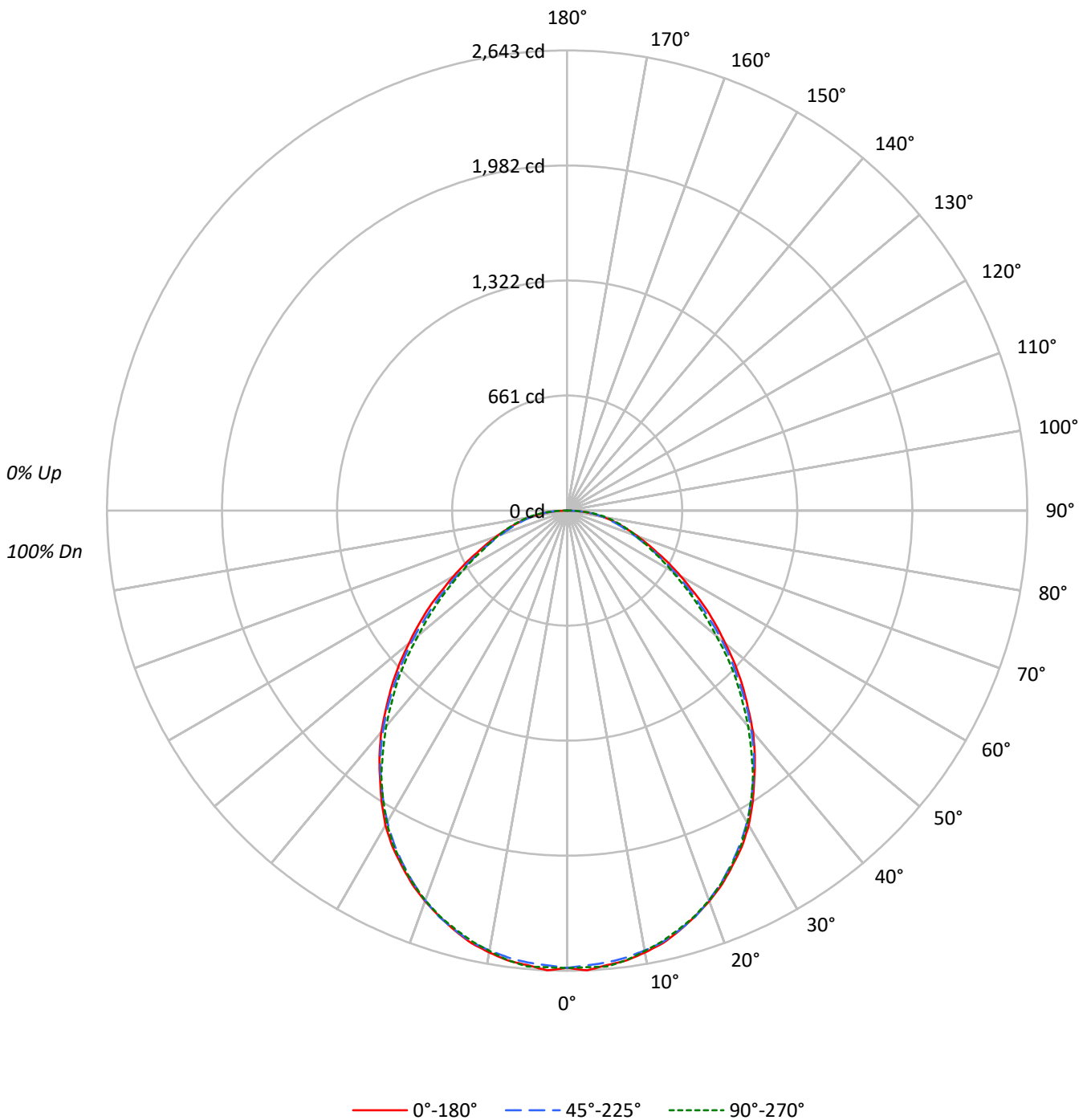
Input Watts (W): 45.849  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3534	3534	3534
5°	3539	3519	3549
10°	3521	3505	3509
15°	3476	3473	3464
20°	3418	3411	3411
25°	3339	3320	3327
30°	3242	3209	3219
35°	3079	3065	3057
40°	2916	2889	2839
45°	2710	2663	2611
50°	2483	2428	2337
55°	2267	2165	2092
60°	2020	1923	1873
65°	1819	1723	1699
70°	1688	1585	1649
75°	1615	1543	1673
80°	1614	1614	1788
85°	1675	1695	1886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.1	4.1
10°-20°	702.0	11.6
20°-30°	1030.3	17.0
30°-40°	1164.8	19.3
40°-50°	1076.5	17.8
50°-60°	829.4	13.7
60°-70°	549.2	9.1
70°-80°	326.9	5.4
80°-90°	119.8	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°	1980.3	32.7
0°-40°	3145.1	52.0
0°-60°	5051.1	83.5
0°-90°	6047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2627	2627	2627	2627	2627	
5°	2620	2620	2606	2607	2628	249
15°	2496	2491	2493	2492	2487	703
25°	2249	2242	2236	2234	2241	1035
35°	1875	1872	1866	1857	1861	1173
45°	1424	1414	1399	1374	1372	1097
55°	967	947	923	898	892	862
65°	571	562	541	536	534	573
75°	311	303	297	311	322	331
85°	108	102	110	121	122	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2626.7	2626.7	2626.7	2626.7	2626.7
2.5°	2642.9	2629.2	2614.2	2614.2	2625.4
5°	2620.4	2620.4	2605.5	2606.7	2627.9
7.5°	2606.7	2599.2	2589.3	2589.3	2605.5
10°	2576.8	2570.5	2565.6	2563.1	2568.1
12.5°	2544.4	2534.4	2538.1	2534.4	2533.1
15°	2495.7	2490.7	2493.2	2492.0	2487.0
17.5°	2443.3	2440.8	2445.8	2437.1	2440.8
20°	2387.2	2379.7	2382.2	2377.2	2382.2
22.5°	2323.6	2318.6	2312.4	2306.1	2316.1
25°	2248.8	2242.5	2236.3	2233.8	2241.3
27.5°	2173.9	2163.9	2155.2	2152.7	2163.9
30°	2086.6	2075.4	2065.4	2062.9	2071.7
32.5°	1983.1	1980.6	1968.1	1963.1	1966.9
35°	1874.6	1872.1	1865.9	1857.1	1860.9
37.5°	1771.1	1769.8	1761.1	1746.1	1736.1
40°	1660.1	1651.3	1645.1	1623.9	1616.4
42.5°	1537.8	1535.3	1524.1	1500.4	1491.7
45°	1424.3	1414.4	1399.4	1374.5	1372.0
47.5°	1307.1	1293.4	1279.7	1248.5	1247.2
50°	1186.1	1176.1	1159.9	1128.7	1116.3
52.5°	1073.9	1060.1	1037.7	1007.8	1001.5
55°	966.6	946.7	923.0	898.0	891.8
57.5°	851.9	843.1	814.4	794.5	787.0
60°	750.8	743.4	714.7	696.0	696.0
62.5°	659.8	648.6	623.6	611.1	611.1
65°	571.2	562.5	541.3	536.3	533.8
67.5°	495.2	483.9	469.0	467.7	473.9
70°	429.0	415.3	402.9	415.3	419.1
72.5°	366.7	358.0	346.7	362.9	370.4
75°	310.6	303.1	296.8	310.6	321.8
77.5°	259.4	251.9	251.9	266.9	276.9
80°	208.3	203.3	208.3	220.8	230.7
82.5°	159.6	155.9	162.1	174.6	180.8
85°	108.5	102.3	109.8	121.0	122.2
87.5°	51.1	49.9	54.9	62.4	61.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)