

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: P294415

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6383.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

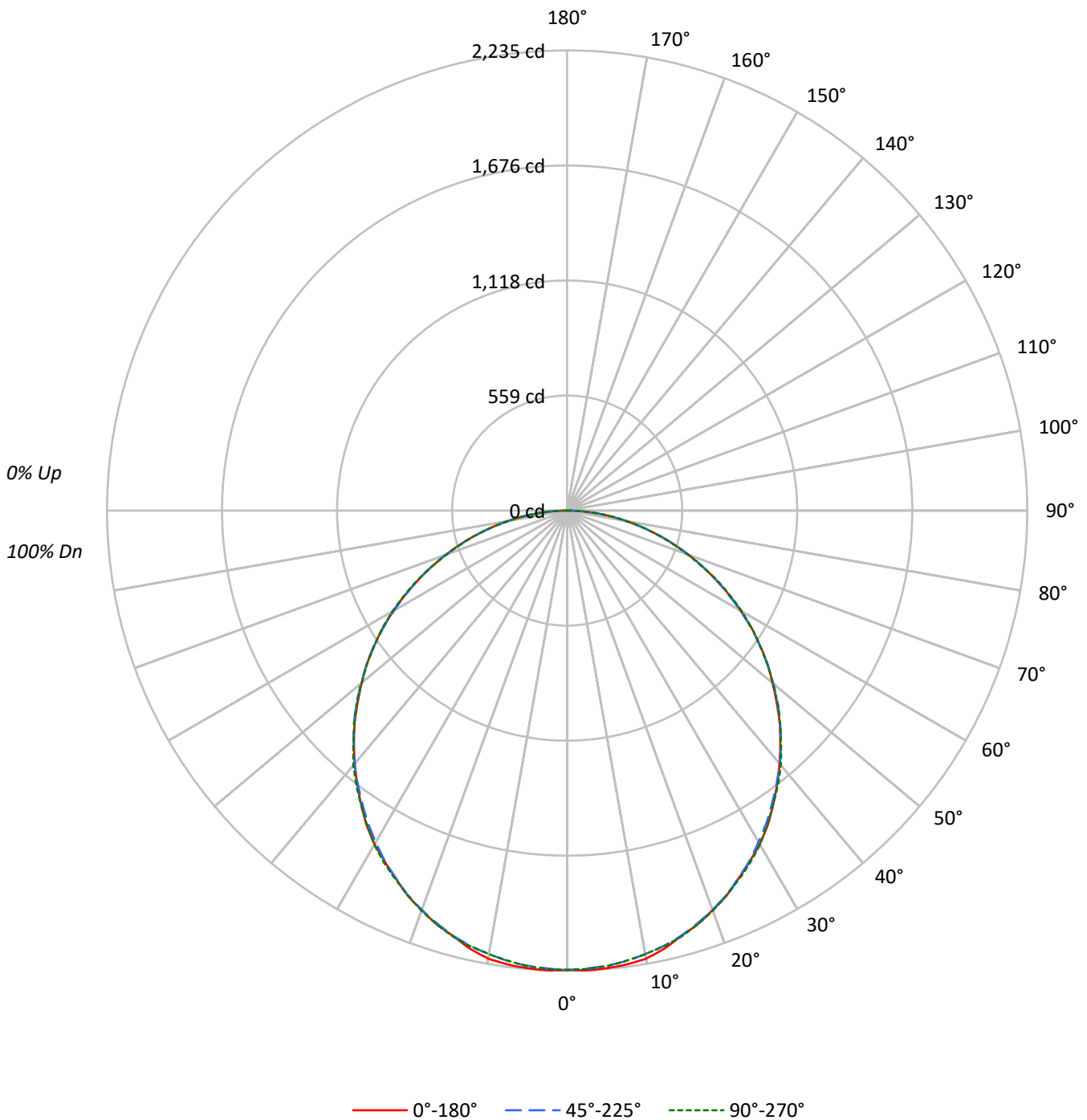
Input Watts (W): 63.147  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

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

	0°	45°	90°
0°	3002	3002	3002
5°	3013	2997	2999
10°	3019	2988	2988
15°	2980	2978	2984
20°	2957	2955	2962
25°	2925	2923	2932
30°	2907	2888	2909
35°	2866	2851	2866
40°	2819	2821	2837
45°	2778	2787	2781
50°	2726	2735	2729
55°	2684	2677	2684
60°	2621	2613	2637
65°	2540	2550	2559
70°	2458	2469	2452
75°	2371	2371	2371
80°	2239	2239	2263
85°	2069	2092	2022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.9	3.3
10°-20°	603.0	9.4
20°-30°	908.8	14.2
30°-40°	1088.5	17.1
40°-50°	1126.7	17.7
50°-60°	1021.6	16.0
60°-70°	792.0	12.4
70°-80°	481.6	7.5
80°-90°	149.8	2.3
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°	1722.7	27.0
0°-40°	2811.2	44.0
0°-60°	4959.5	77.7
0°-90°	6383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6383.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2231	2231	2231	2231	2231	
5°	2231	2217	2219	2216	2220	212
15°	2139	2141	2138	2130	2142	605
25°	1970	1970	1969	1975	1975	910
35°	1745	1733	1736	1743	1745	1091
45°	1460	1463	1465	1459	1462	1125
55°	1144	1138	1141	1146	1144	1023
65°	798	802	801	798	804	791
75°	456	455	456	455	456	482
85°	134	132	136	134	131	150
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2230.9	2230.9	2230.9	2230.9	2230.9
2.5°	2235.4	2226.4	2226.4	2223.4	2227.9
5°	2230.9	2217.4	2218.9	2215.9	2220.4
7.5°	2223.4	2205.3	2206.8	2203.8	2205.3
10°	2209.9	2188.8	2187.3	2185.8	2187.3
12.5°	2179.7	2167.7	2166.2	2163.2	2167.7
15°	2139.1	2140.6	2137.6	2130.1	2142.1
17.5°	2107.5	2106.0	2103.0	2095.5	2107.5
20°	2065.3	2066.8	2063.8	2060.8	2068.4
22.5°	2024.7	2020.2	2021.7	2020.2	2021.7
25°	1970.5	1970.5	1969.0	1975.0	1975.0
27.5°	1920.8	1914.8	1917.8	1923.8	1926.9
30°	1871.2	1856.1	1859.1	1865.1	1872.7
32.5°	1812.4	1797.4	1800.4	1806.4	1809.4
35°	1744.7	1732.7	1735.7	1743.2	1744.7
37.5°	1675.5	1667.9	1670.9	1677.0	1681.5
40°	1604.7	1601.7	1606.2	1604.7	1615.2
42.5°	1532.4	1530.9	1535.5	1535.5	1537.0
45°	1460.2	1463.2	1464.7	1458.7	1461.7
47.5°	1380.4	1381.9	1387.9	1384.9	1386.4
50°	1302.1	1300.6	1306.6	1308.2	1303.6
52.5°	1226.9	1219.3	1225.4	1228.4	1225.4
55°	1144.1	1138.0	1141.1	1145.6	1144.1
57.5°	1062.8	1056.8	1058.3	1065.8	1062.8
60°	974.0	972.5	971.0	977.0	980.0
62.5°	886.7	885.1	882.1	888.2	891.2
65°	797.8	802.4	800.8	797.8	803.9
67.5°	713.5	718.1	713.5	710.5	710.5
70°	624.7	629.2	627.7	624.7	623.2
72.5°	541.9	541.9	538.9	537.4	538.9
75°	456.1	454.6	456.1	454.6	456.1
77.5°	371.8	373.3	373.3	373.3	371.8
80°	289.0	289.0	289.0	290.5	292.0
82.5°	212.3	207.7	212.3	209.2	210.7
85°	134.0	132.5	135.5	134.0	131.0
87.5°	60.2	61.7	61.7	63.2	63.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)