

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: P294286

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294286  
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-L82765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6632.0 lumens  
Efficiency: N/A  
Efficacy: 106.3 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

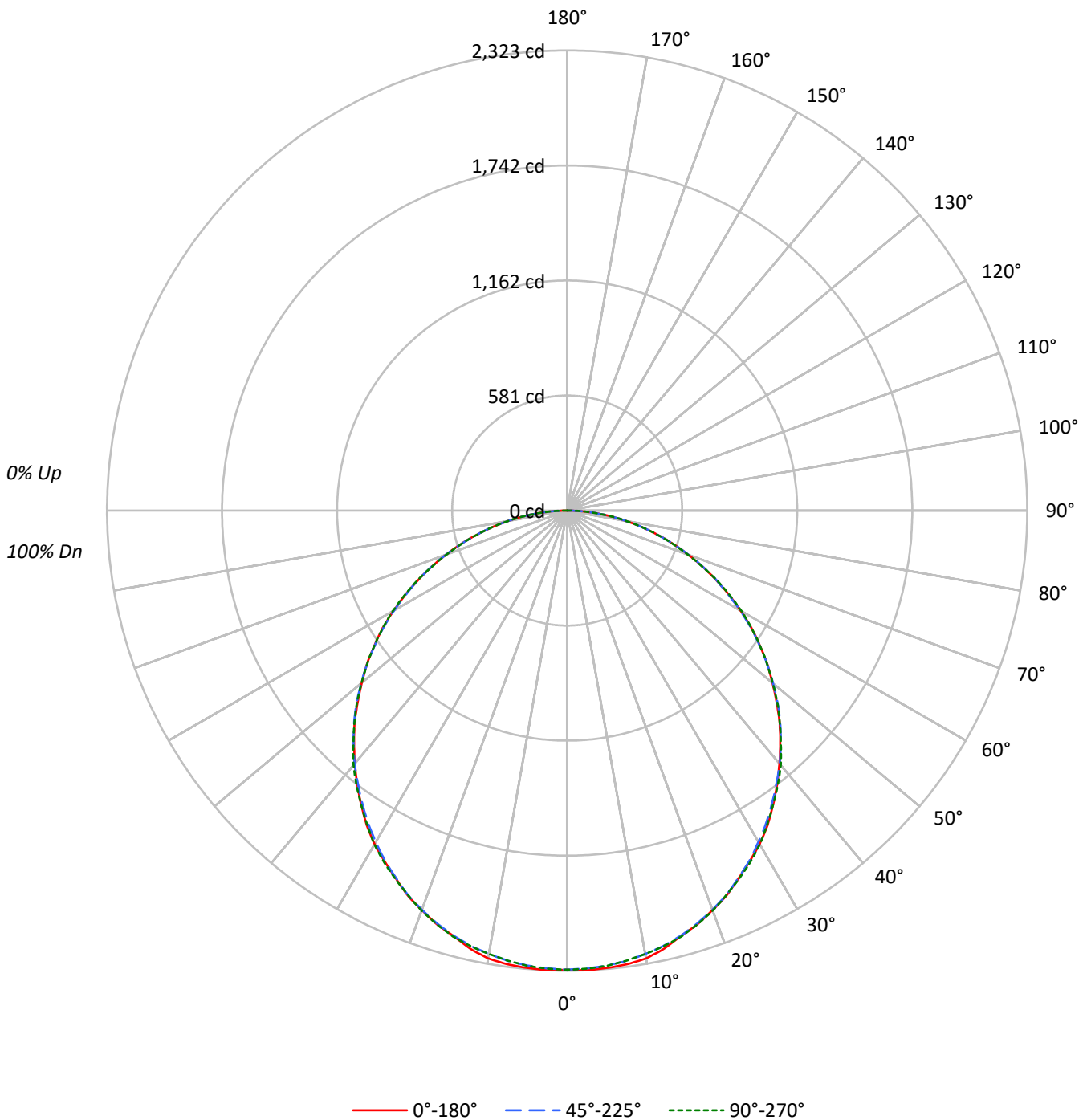
Input Watts (W): 62.403  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3119	3119	3119
5°	3131	3114	3116
10°	3137	3105	3105
15°	3096	3094	3100
20°	3073	3070	3077
25°	3040	3037	3047
30°	3020	3001	3023
35°	2978	2962	2978
40°	2928	2931	2948
45°	2887	2896	2890
50°	2832	2842	2835
55°	2788	2781	2788
60°	2723	2715	2740
65°	2639	2649	2659
70°	2554	2566	2547
75°	2464	2464	2464
80°	2327	2327	2351
85°	2149	2174	2101



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.2	3.3
10°-20°	626.6	9.4
20°-30°	944.2	14.2
30°-40°	1130.9	17.1
40°-50°	1170.6	17.7
50°-60°	1061.4	16.0
60°-70°	822.9	12.4
70°-80°	500.5	7.5
80°-90°	155.7	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°	1790.0	27.0
0°-40°	2920.9	44.0
0°-60°	5153.0	77.7
0°-90°	6632.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6632.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2318	2318	2318	2318	2318	
5°	2318	2304	2305	2302	2307	221
15°	2223	2224	2221	2213	2226	628
25°	2047	2047	2046	2052	2052	945
35°	1813	1800	1803	1811	1813	1134
45°	1517	1520	1522	1516	1519	1169
55°	1189	1182	1186	1190	1189	1062
65°	829	834	832	829	835	822
75°	474	472	474	472	474	501
85°	139	138	141	139	136	156
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2318.0	2318.0	2318.0	2318.0	2318.0
2.5°	2322.7	2313.3	2313.3	2310.1	2314.8
5°	2318.0	2303.9	2305.4	2302.3	2307.0
7.5°	2310.1	2291.4	2292.9	2289.8	2291.4
10°	2296.1	2274.2	2272.6	2271.0	2272.6
12.5°	2264.8	2252.3	2250.7	2247.6	2252.3
15°	2222.6	2224.1	2221.0	2213.2	2225.7
17.5°	2189.7	2188.1	2185.0	2177.2	2189.7
20°	2145.9	2147.5	2144.3	2141.2	2149.0
22.5°	2103.7	2099.0	2100.6	2099.0	2100.6
25°	2047.4	2047.4	2045.8	2052.1	2052.1
27.5°	1995.8	1989.5	1992.6	1998.9	2002.0
30°	1944.1	1928.5	1931.6	1937.9	1945.7
32.5°	1883.1	1867.5	1870.6	1876.9	1880.0
35°	1812.8	1800.3	1803.4	1811.2	1812.8
37.5°	1740.8	1733.0	1736.1	1742.4	1747.1
40°	1667.3	1664.2	1668.9	1667.3	1678.3
42.5°	1592.2	1590.7	1595.4	1595.4	1596.9
45°	1517.2	1520.3	1521.8	1515.6	1518.7
47.5°	1434.3	1435.8	1442.1	1438.9	1440.5
50°	1352.9	1351.4	1357.6	1359.2	1354.5
52.5°	1274.7	1266.9	1273.2	1276.3	1273.2
55°	1188.7	1182.4	1185.6	1190.3	1188.7
57.5°	1104.2	1098.0	1099.5	1107.4	1104.2
60°	1012.0	1010.4	1008.8	1015.1	1018.2
62.5°	921.2	919.7	916.5	922.8	925.9
65°	829.0	833.7	832.1	829.0	835.2
67.5°	741.4	746.1	741.4	738.2	738.2
70°	649.1	653.8	652.2	649.1	647.5
72.5°	563.1	563.1	559.9	558.4	559.9
75°	473.9	472.4	473.9	472.4	473.9
77.5°	386.3	387.9	387.9	387.9	386.3
80°	300.3	300.3	300.3	301.9	303.4
82.5°	220.5	215.8	220.5	217.4	219.0
85°	139.2	137.6	140.8	139.2	136.1
87.5°	62.6	64.1	64.1	65.7	65.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)