

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: P294337

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294337  
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-L93050-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: 6635.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 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

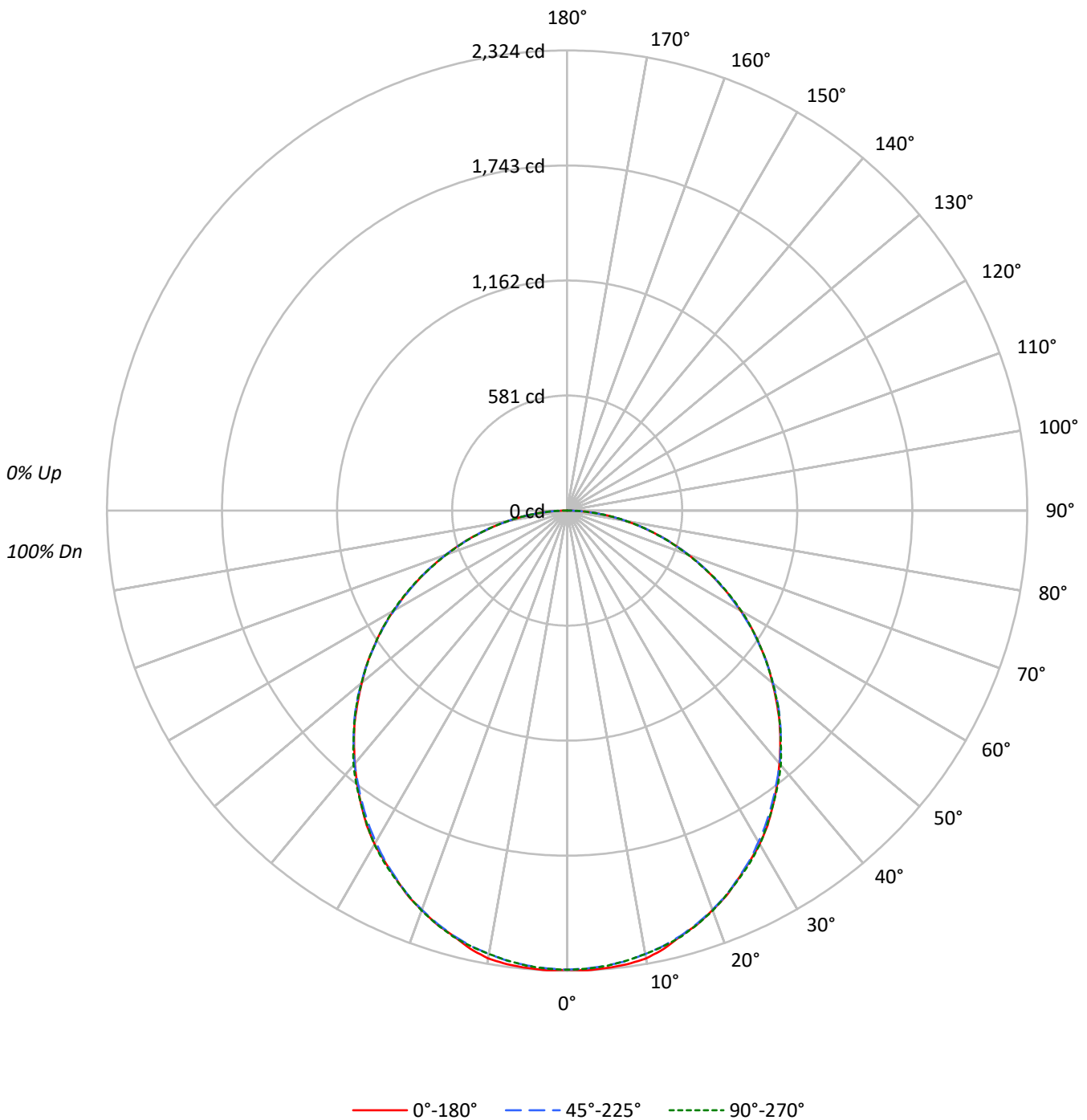
Input Watts (W): 64.025478  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3120	3120	3120
5°	3132	3115	3117
10°	3138	3106	3106
15°	3097	3095	3102
20°	3074	3072	3078
25°	3041	3038	3048
30°	3022	3002	3024
35°	2979	2963	2979
40°	2930	2933	2949
45°	2888	2897	2891
50°	2833	2843	2837
55°	2790	2782	2790
60°	2724	2716	2741
65°	2640	2650	2660
70°	2555	2567	2548
75°	2465	2465	2465
80°	2328	2328	2352
85°	2150	2174	2101



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.3	3.3
10°-20°	626.8	9.4
20°-30°	944.6	14.2
30°-40°	1131.4	17.1
40°-50°	1171.2	17.7
50°-60°	1061.9	16.0
60°-70°	823.3	12.4
70°-80°	500.7	7.5
80°-90°	155.8	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°	1790.8	27.0
0°-40°	2922.2	44.0
0°-60°	5155.3	77.7
0°-90°	6635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6635.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2319	2319	2319	2319	2319	
5°	2319	2305	2306	2303	2308	221
15°	2224	2225	2222	2214	2227	629
25°	2048	2048	2047	2053	2053	946
35°	1814	1801	1804	1812	1814	1135
45°	1518	1521	1522	1516	1519	1169
55°	1189	1183	1186	1191	1189	1063
65°	829	834	832	829	836	822
75°	474	473	474	473	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°	2319.0	2319.0	2319.0	2319.0	2319.0
2.5°	2323.7	2314.3	2314.3	2311.2	2315.9
5°	2319.0	2304.9	2306.5	2303.4	2308.1
7.5°	2311.2	2292.4	2294.0	2290.8	2292.4
10°	2297.1	2275.2	2273.6	2272.1	2273.6
12.5°	2265.8	2253.3	2251.7	2248.6	2253.3
15°	2223.6	2225.1	2222.0	2214.2	2226.7
17.5°	2190.7	2189.1	2186.0	2178.2	2190.7
20°	2146.9	2148.4	2145.3	2142.2	2150.0
22.5°	2104.6	2099.9	2101.5	2099.9	2101.5
25°	2048.3	2048.3	2046.7	2053.0	2053.0
27.5°	1996.7	1990.4	1993.5	1999.8	2002.9
30°	1945.0	1929.4	1932.5	1938.8	1946.6
32.5°	1884.0	1868.4	1871.5	1877.7	1880.9
35°	1813.6	1801.1	1804.2	1812.0	1813.6
37.5°	1741.6	1733.8	1736.9	1743.2	1747.9
40°	1668.1	1664.9	1669.6	1668.1	1679.0
42.5°	1592.9	1591.4	1596.1	1596.1	1597.6
45°	1517.8	1521.0	1522.5	1516.3	1519.4
47.5°	1434.9	1436.5	1442.7	1439.6	1441.2
50°	1353.5	1352.0	1358.2	1359.8	1355.1
52.5°	1275.3	1267.5	1273.7	1276.9	1273.7
55°	1189.2	1183.0	1186.1	1190.8	1189.2
57.5°	1104.7	1098.5	1100.0	1107.9	1104.7
60°	1012.4	1010.8	1009.3	1015.5	1018.7
62.5°	921.7	920.1	917.0	923.2	926.4
65°	829.3	834.0	832.5	829.3	835.6
67.5°	741.7	746.4	741.7	738.6	738.6
70°	649.4	654.1	652.5	649.4	647.8
72.5°	563.3	563.3	560.2	558.6	560.2
75°	474.1	472.6	474.1	472.6	474.1
77.5°	386.5	388.1	388.1	388.1	386.5
80°	300.4	300.4	300.4	302.0	303.6
82.5°	220.6	215.9	220.6	217.5	219.1
85°	139.3	137.7	140.8	139.3	136.1
87.5°	62.6	64.2	64.2	65.7	65.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)