

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: P294417

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294417  
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-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6681.0 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

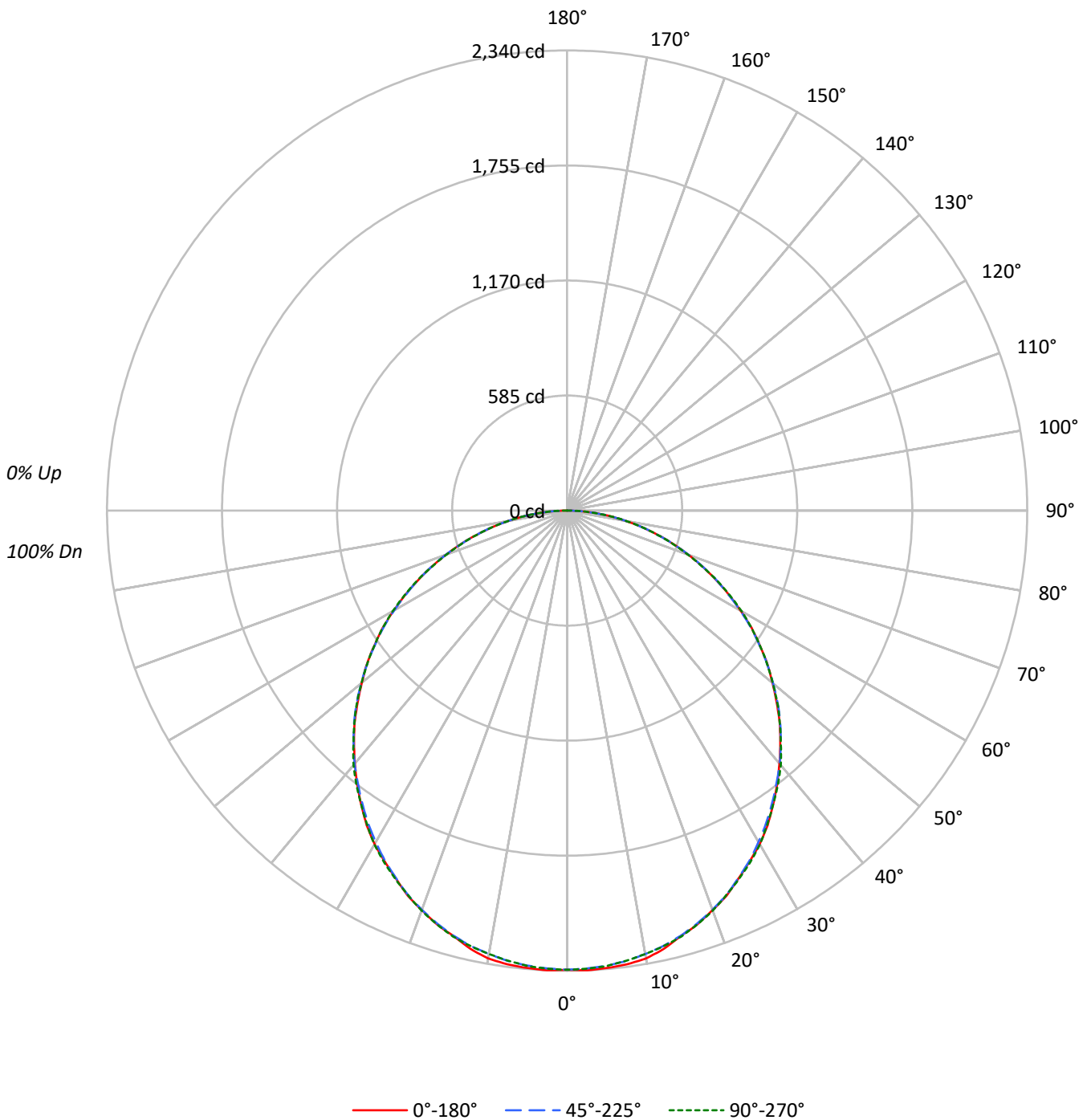
Input Watts (W): 63.891  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3142	3142	3142
5°	3154	3137	3139
10°	3160	3128	3128
15°	3119	3117	3123
20°	3095	3093	3100
25°	3062	3060	3069
30°	3043	3023	3045
35°	3000	2984	3000
40°	2950	2953	2970
45°	2908	2917	2911
50°	2853	2863	2856
55°	2809	2802	2809
60°	2743	2735	2760
65°	2659	2669	2679
70°	2572	2585	2566
75°	2482	2482	2482
80°	2344	2344	2369
85°	2164	2189	2117



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.8	3.3
10°-20°	631.2	9.4
20°-30°	951.2	14.2
30°-40°	1139.3	17.1
40°-50°	1179.3	17.7
50°-60°	1069.3	16.0
60°-70°	829.0	12.4
70°-80°	504.1	7.5
80°-90°	156.8	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°	1803.2	27.0
0°-40°	2942.5	44.0
0°-60°	5191.0	77.7
0°-90°	6681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6681.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2335	2335	2335	2335	2335	
5°	2335	2321	2322	2319	2324	222
15°	2239	2240	2237	2230	2242	633
25°	2062	2062	2061	2067	2067	952
35°	1826	1814	1817	1825	1826	1142
45°	1528	1532	1533	1527	1530	1177
55°	1198	1191	1194	1199	1198	1070
65°	835	840	838	835	841	828
75°	477	476	477	476	477	504
85°	140	139	142	140	137	157
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2335.1	2335.1	2335.1	2335.1	2335.1
2.5°	2339.8	2330.4	2330.4	2327.2	2331.9
5°	2335.1	2320.9	2322.5	2319.3	2324.1
7.5°	2327.2	2308.3	2309.9	2306.7	2308.3
10°	2313.0	2291.0	2289.4	2287.8	2289.4
12.5°	2281.5	2268.9	2267.3	2264.2	2268.9
15°	2239.0	2240.5	2237.4	2229.5	2242.1
17.5°	2205.9	2204.3	2201.2	2193.3	2205.9
20°	2161.8	2163.3	2160.2	2157.0	2164.9
22.5°	2119.2	2114.5	2116.1	2114.5	2116.1
25°	2062.5	2062.5	2060.9	2067.2	2067.2
27.5°	2010.5	2004.2	2007.4	2013.7	2016.8
30°	1958.5	1942.8	1945.9	1952.2	1960.1
32.5°	1897.1	1881.3	1884.5	1890.8	1893.9
35°	1826.2	1813.6	1816.7	1824.6	1826.2
37.5°	1753.7	1745.8	1749.0	1755.3	1760.0
40°	1679.6	1676.5	1681.2	1679.6	1690.7
42.5°	1604.0	1602.4	1607.1	1607.1	1608.7
45°	1528.4	1531.5	1533.1	1526.8	1529.9
47.5°	1444.9	1446.4	1452.7	1449.6	1451.2
50°	1362.9	1361.3	1367.6	1369.2	1364.5
52.5°	1284.1	1276.3	1282.6	1285.7	1282.6
55°	1197.5	1191.2	1194.3	1199.1	1197.5
57.5°	1112.4	1106.1	1107.7	1115.5	1112.4
60°	1019.4	1017.9	1016.3	1022.6	1025.7
62.5°	928.0	926.5	923.3	929.6	932.8
65°	835.1	839.8	838.2	835.1	841.4
67.5°	746.8	751.6	746.8	743.7	743.7
70°	653.9	658.6	657.0	653.9	652.3
72.5°	567.2	567.2	564.1	562.5	564.1
75°	477.4	475.8	477.4	475.8	477.4
77.5°	389.2	390.8	390.8	390.8	389.2
80°	302.5	302.5	302.5	304.1	305.7
82.5°	222.2	217.4	222.2	219.0	220.6
85°	140.2	138.7	141.8	140.2	137.1
87.5°	63.0	64.6	64.6	66.2	66.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)