

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: P294290

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294290  
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-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7342.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 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

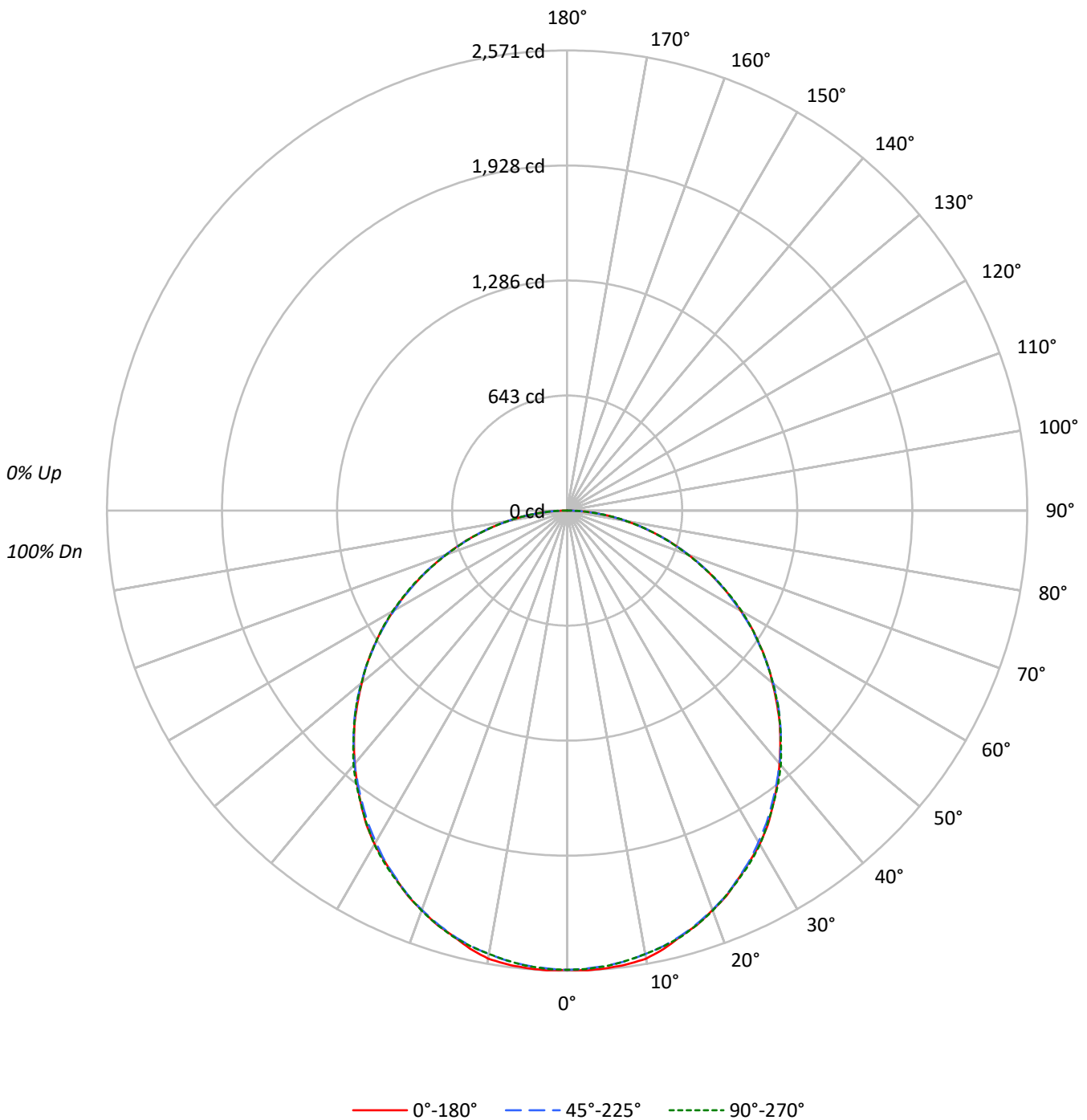
Input Watts (W): 63.612  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3453	3453	3453
5°	3466	3447	3450
10°	3473	3437	3437
15°	3427	3425	3432
20°	3401	3399	3406
25°	3365	3362	3373
30°	3344	3322	3347
35°	3296	3279	3296
40°	3242	3245	3263
45°	3196	3206	3199
50°	3135	3146	3139
55°	3087	3079	3087
60°	3015	3005	3033
65°	2922	2933	2944
70°	2827	2840	2820
75°	2728	2728	2728
80°	2576	2576	2603
85°	2379	2405	2325



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.6	3.3
10°-20°	693.6	9.4
20°-30°	1045.3	14.2
30°-40°	1252.0	17.1
40°-50°	1296.0	17.7
50°-60°	1175.1	16.0
60°-70°	911.0	12.4
70°-80°	554.0	7.5
80°-90°	172.4	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°	1981.6	27.0
0°-40°	3233.6	44.0
0°-60°	5704.6	77.7
0°-90°	7342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7342.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2566	2550	2552	2549	2554	244
15°	2460	2462	2459	2450	2464	696
25°	2267	2267	2265	2272	2272	1046
35°	2007	1993	1996	2005	2007	1255
45°	1680	1683	1685	1678	1681	1294
55°	1316	1309	1312	1318	1316	1176
65°	918	923	921	918	925	910
75°	525	523	525	523	525	554
85°	154	152	156	154	151	172
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2566.1	2566.1	2566.1	2566.1	2566.1
2.5°	2571.3	2560.9	2560.9	2557.5	2562.7
5°	2566.1	2550.5	2552.3	2548.8	2554.0
7.5°	2557.5	2536.7	2538.4	2534.9	2536.7
10°	2541.9	2517.6	2515.9	2514.2	2515.9
12.5°	2507.2	2493.4	2491.7	2488.2	2493.4
15°	2460.5	2462.2	2458.8	2450.1	2464.0
17.5°	2424.1	2422.4	2418.9	2410.3	2424.1
20°	2375.6	2377.4	2373.9	2370.5	2379.1
22.5°	2328.9	2323.7	2325.4	2323.7	2325.4
25°	2266.6	2266.6	2264.8	2271.8	2271.8
27.5°	2209.4	2202.5	2206.0	2212.9	2216.3
30°	2152.3	2135.0	2138.4	2145.4	2154.0
32.5°	2084.8	2067.4	2070.9	2077.8	2081.3
35°	2006.8	1993.0	1996.4	2005.1	2006.8
37.5°	1927.2	1918.5	1922.0	1928.9	1934.1
40°	1845.8	1842.3	1847.5	1845.8	1857.9
42.5°	1762.7	1761.0	1766.2	1766.2	1767.9
45°	1679.6	1683.0	1684.8	1677.8	1681.3
47.5°	1587.8	1589.5	1596.5	1593.0	1594.7
50°	1497.8	1496.0	1503.0	1504.7	1499.5
52.5°	1411.2	1402.5	1409.5	1412.9	1409.5
55°	1316.0	1309.0	1312.5	1317.7	1316.0
57.5°	1222.5	1215.5	1217.3	1225.9	1222.5
60°	1120.3	1118.6	1116.8	1123.8	1127.2
62.5°	1019.9	1018.1	1014.7	1021.6	1025.1
65°	917.7	922.9	921.2	917.7	924.6
67.5°	820.7	825.9	820.7	817.3	817.3
70°	718.6	723.8	722.0	718.6	716.8
72.5°	623.3	623.3	619.9	618.2	619.9
75°	524.7	522.9	524.7	522.9	524.7
77.5°	427.7	429.4	429.4	429.4	427.7
80°	332.5	332.5	332.5	334.2	335.9
82.5°	244.1	238.9	244.1	240.7	242.4
85°	154.1	152.4	155.8	154.1	150.6
87.5°	69.3	71.0	71.0	72.7	72.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)