

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: P294287

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294287  
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-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6823.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

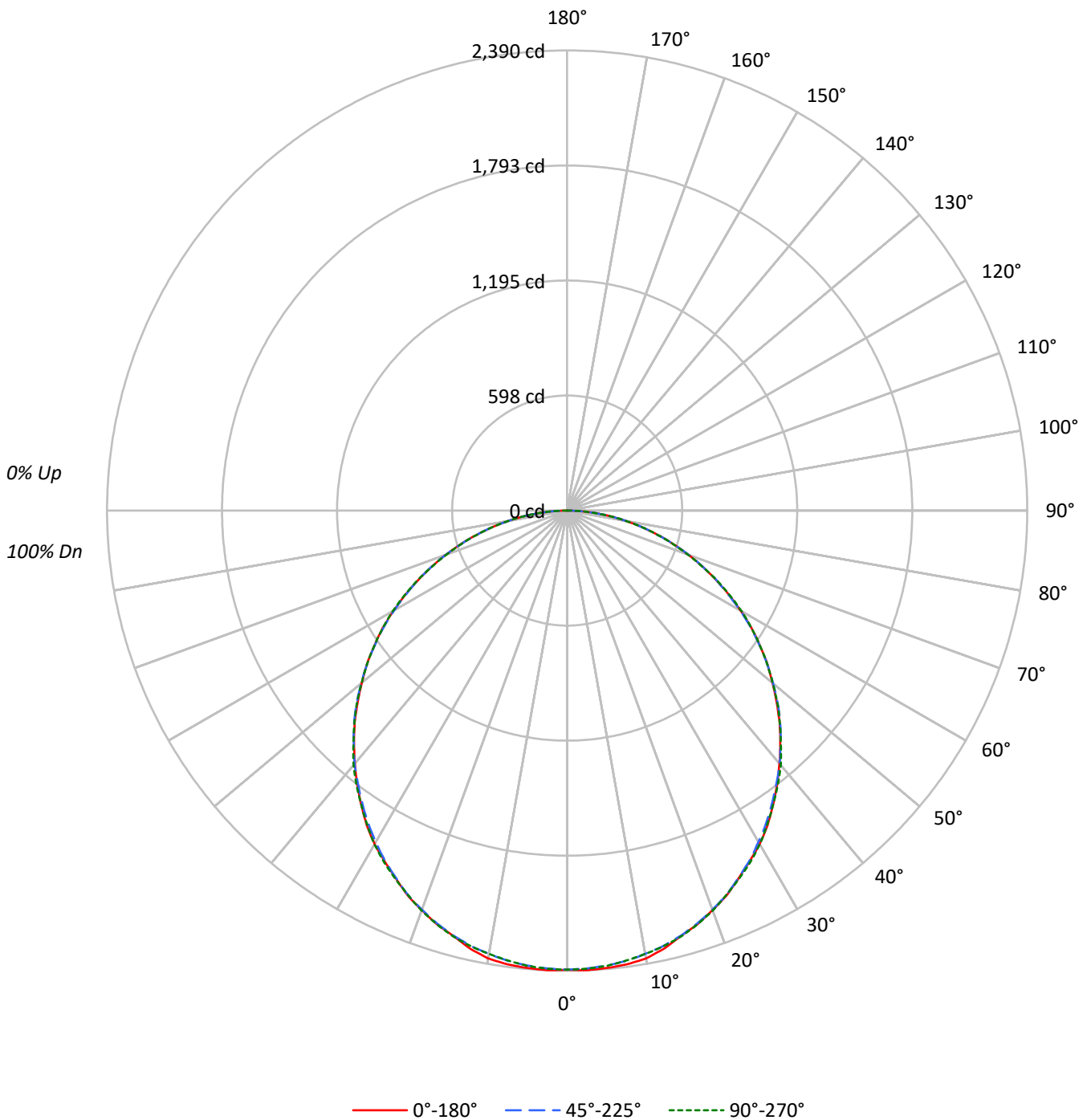
Input Watts (W): 61.938  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294287

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P294287

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-3000K

**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°	3209	3209	3209
5°	3221	3203	3206
10°	3227	3194	3194
15°	3185	3183	3190
20°	3161	3159	3166
25°	3127	3125	3134
30°	3107	3088	3110
35°	3063	3047	3063
40°	3013	3016	3033
45°	2970	2979	2973
50°	2914	2924	2917
55°	2869	2861	2869
60°	2802	2793	2819
65°	2715	2726	2736
70°	2627	2640	2621
75°	2535	2535	2535
80°	2394	2394	2419
85°	2211	2235	2161



TEST NUMBER: P294287

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.5	3.3
10°-20°	644.6	9.4
20°-30°	971.4	14.2
30°-40°	1163.5	17.1
40°-50°	1204.4	17.7
50°-60°	1092.0	16.0
60°-70°	846.6	12.4
70°-80°	514.9	7.5
80°-90°	160.2	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°	1841.5	27.0
0°-40°	3005.0	44.0
0°-60°	5301.3	77.7
0°-90°	6823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6823.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2385	2385	2385	2385	2385	
5°	2385	2370	2372	2369	2374	227
15°	2287	2288	2285	2277	2290	647
25°	2106	2106	2105	2111	2111	972
35°	1865	1852	1855	1863	1865	1167
45°	1561	1564	1566	1559	1562	1202
55°	1223	1216	1220	1224	1223	1093
65°	853	858	856	853	859	846
75°	488	486	488	486	488	515
85°	143	142	145	143	140	160
90°	0	0	0	0	0	



TEST NUMBER: P294287

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L82765-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2384.7	2384.7	2384.7	2384.7	2384.7
2.5°	2389.5	2379.9	2379.9	2376.7	2381.5
5°	2384.7	2370.2	2371.8	2368.6	2373.5
7.5°	2376.7	2357.4	2359.0	2355.8	2357.4
10°	2362.2	2339.7	2338.1	2336.4	2338.1
12.5°	2330.0	2317.1	2315.5	2312.3	2317.1
15°	2286.6	2288.2	2285.0	2276.9	2289.8
17.5°	2252.8	2251.2	2247.9	2239.9	2252.8
20°	2207.7	2209.3	2206.1	2202.9	2210.9
22.5°	2164.3	2159.4	2161.0	2159.4	2161.0
25°	2106.3	2106.3	2104.7	2111.2	2111.2
27.5°	2053.2	2046.8	2050.0	2056.5	2059.7
30°	2000.1	1984.0	1987.3	1993.7	2001.7
32.5°	1937.4	1921.3	1924.5	1930.9	1934.2
35°	1865.0	1852.1	1855.3	1863.4	1865.0
37.5°	1791.0	1782.9	1786.1	1792.6	1797.4
40°	1715.3	1712.1	1716.9	1715.3	1726.6
42.5°	1638.1	1636.5	1641.3	1641.3	1642.9
45°	1560.8	1564.1	1565.7	1559.2	1562.5
47.5°	1475.6	1477.2	1483.6	1480.4	1482.0
50°	1391.9	1390.3	1396.7	1398.3	1393.5
52.5°	1311.4	1303.4	1309.8	1313.0	1309.8
55°	1222.9	1216.5	1219.7	1224.5	1222.9
57.5°	1136.0	1129.6	1131.2	1139.3	1136.0
60°	1041.1	1039.5	1037.9	1044.3	1047.5
62.5°	947.8	946.2	942.9	949.4	952.6
65°	852.8	857.7	856.1	852.8	859.3
67.5°	762.7	767.6	762.7	759.5	759.5
70°	667.8	672.6	671.0	667.8	666.2
72.5°	579.3	579.3	576.1	574.5	576.1
75°	487.6	486.0	487.6	486.0	487.6
77.5°	397.5	399.1	399.1	399.1	397.5
80°	309.0	309.0	309.0	310.6	312.2
82.5°	226.9	222.1	226.9	223.7	225.3
85°	143.2	141.6	144.8	143.2	140.0
87.5°	64.4	66.0	66.0	67.6	67.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)