

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: P294420

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294420  
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-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6859.0 lumens  
Efficiency: N/A  
Efficacy: 105.1 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

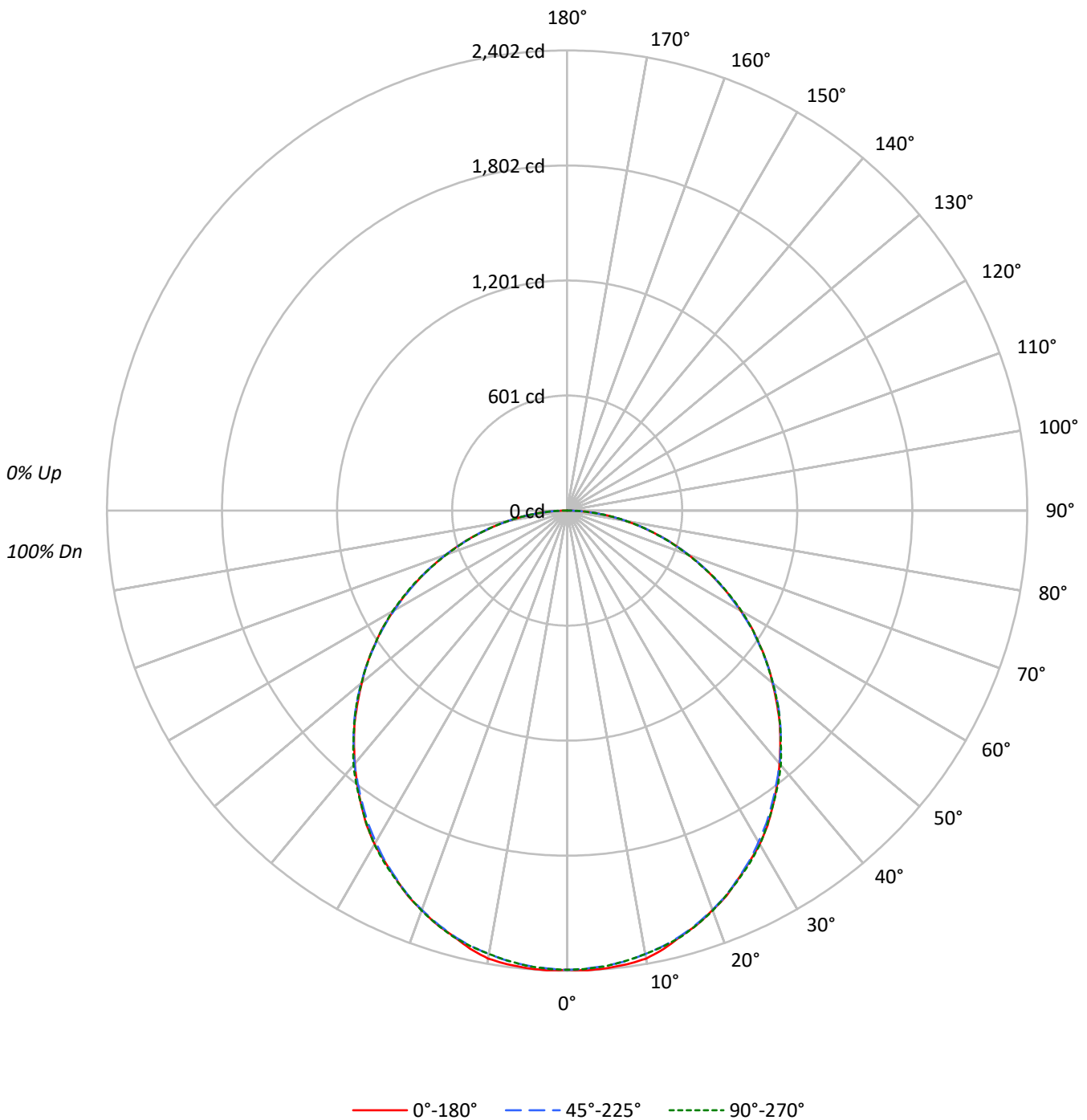
Input Watts (W): 65.286  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294420

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P294420

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-6500K

**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°	3226	3226	3226
5°	3238	3220	3223
10°	3244	3211	3211
15°	3202	3200	3206
20°	3178	3175	3182
25°	3144	3141	3151
30°	3124	3104	3126
35°	3079	3063	3079
40°	3029	3032	3049
45°	2986	2995	2989
50°	2929	2939	2932
55°	2884	2876	2884
60°	2816	2808	2834
65°	2729	2740	2750
70°	2641	2653	2635
75°	2548	2548	2548
80°	2407	2407	2431
85°	2223	2248	2172



TEST NUMBER: P294420

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.7	3.3
10°-20°	648.0	9.4
20°-30°	976.5	14.2
30°-40°	1169.6	17.1
40°-50°	1210.7	17.7
50°-60°	1097.8	16.0
60°-70°	851.1	12.4
70°-80°	517.6	7.5
80°-90°	161.0	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°	1851.2	27.0
0°-40°	3020.8	44.0
0°-60°	5329.3	77.7
0°-90°	6859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6859.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2397	2397	2397	2397	2397	
5°	2397	2383	2384	2381	2386	228
15°	2299	2300	2297	2289	2302	650
25°	2118	2118	2116	2122	2122	977
35°	1875	1862	1865	1873	1875	1173
45°	1569	1572	1574	1568	1571	1209
55°	1229	1223	1226	1231	1229	1099
65°	857	862	861	857	864	850
75°	490	488	490	488	490	518
85°	144	142	146	144	141	161
90°	0	0	0	0	0	



TEST NUMBER: P294420

CATALOG NUMBER: 24GR-LD5-85-FGW080-UNV-L92765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2397.3	2397.3	2397.3	2397.3	2397.3
2.5°	2402.2	2392.4	2392.4	2389.2	2394.1
5°	2397.3	2382.7	2384.4	2381.1	2386.0
7.5°	2389.2	2369.8	2371.4	2368.2	2369.8
10°	2374.7	2352.0	2350.4	2348.8	2350.4
12.5°	2342.3	2329.4	2327.7	2324.5	2329.4
15°	2298.6	2300.2	2297.0	2288.9	2301.9
17.5°	2264.7	2263.0	2259.8	2251.7	2264.7
20°	2219.4	2221.0	2217.7	2214.5	2222.6
22.5°	2175.7	2170.8	2172.5	2170.8	2172.5
25°	2117.5	2117.5	2115.8	2122.3	2122.3
27.5°	2064.1	2057.6	2060.8	2067.3	2070.5
30°	2010.7	1994.5	1997.7	2004.2	2012.3
32.5°	1947.6	1931.4	1934.7	1941.1	1944.4
35°	1874.8	1861.9	1865.1	1873.2	1874.8
37.5°	1800.4	1792.3	1795.5	1802.0	1806.9
40°	1724.4	1721.1	1726.0	1724.4	1735.7
42.5°	1646.7	1645.1	1650.0	1650.0	1651.6
45°	1569.1	1572.3	1573.9	1567.5	1570.7
47.5°	1483.3	1485.0	1491.4	1488.2	1489.8
50°	1399.2	1397.6	1404.1	1405.7	1400.9
52.5°	1318.4	1310.3	1316.7	1320.0	1316.7
55°	1229.4	1222.9	1226.1	1231.0	1229.4
57.5°	1142.0	1135.6	1137.2	1145.3	1142.0
60°	1046.6	1045.0	1043.4	1049.8	1053.1
62.5°	952.8	951.2	947.9	954.4	957.6
65°	857.3	862.2	860.6	857.3	863.8
67.5°	766.7	771.6	766.7	763.5	763.5
70°	671.3	676.2	674.5	671.3	669.7
72.5°	582.3	582.3	579.1	577.5	579.1
75°	490.1	488.5	490.1	488.5	490.1
77.5°	399.5	401.2	401.2	401.2	399.5
80°	310.6	310.6	310.6	312.2	313.8
82.5°	228.1	223.2	228.1	224.8	226.5
85°	144.0	142.3	145.6	144.0	140.7
87.5°	64.7	66.3	66.3	67.9	67.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)