

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: P292771

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292771  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-26)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2509.0 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

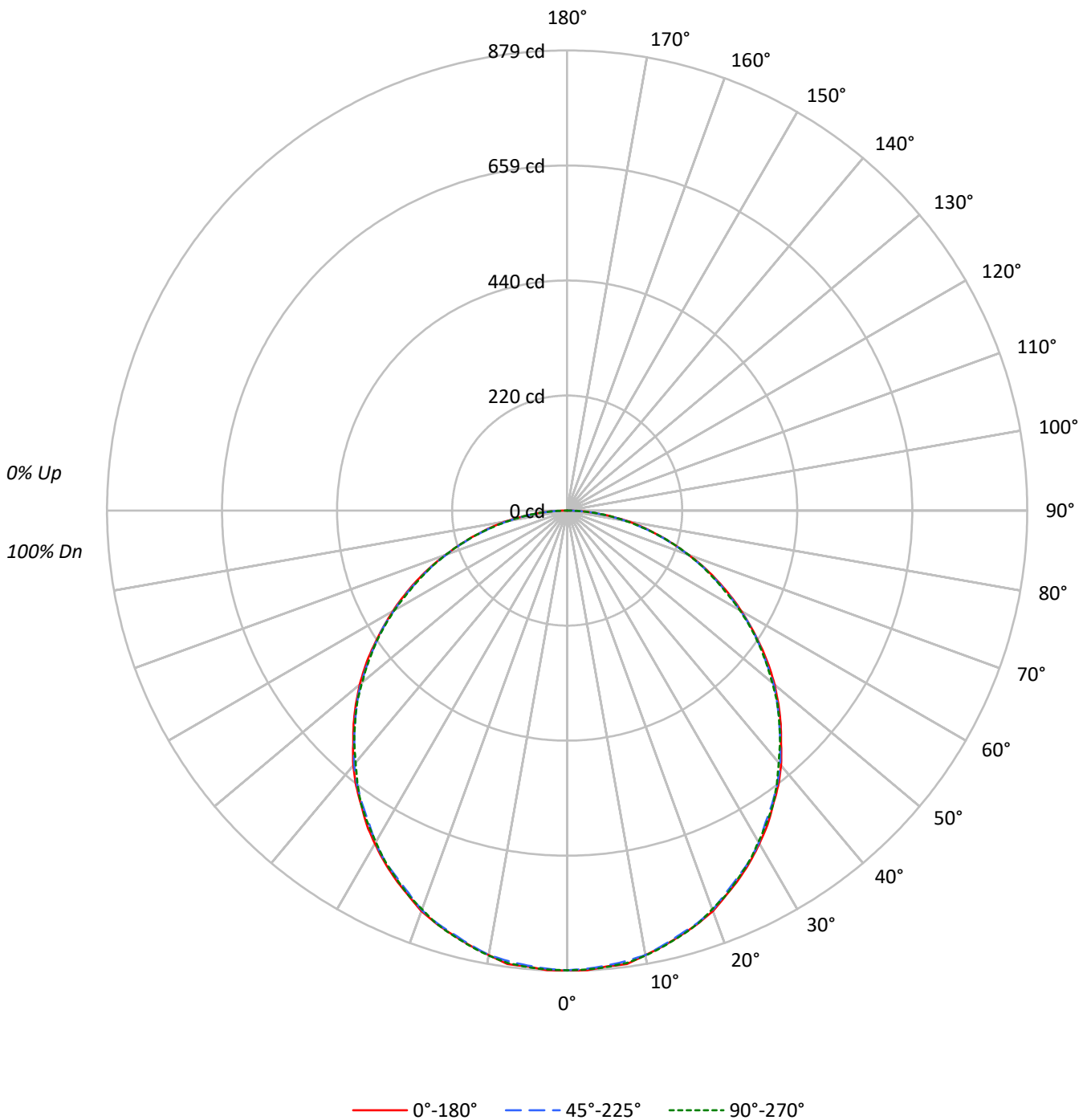
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292771

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292771

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K

**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	85	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°	2363	2363	2363
5°	2360	2356	2364
10°	2355	2355	2359
15°	2340	2334	2342
20°	2331	2325	2321
25°	2306	2292	2299
30°	2282	2275	2271
35°	2253	2243	2253
40°	2233	2223	2207
45°	2195	2181	2181
50°	2165	2153	2141
55°	2119	2105	2101
60°	2070	2058	2050
65°	2017	1994	1984
70°	1936	1930	1936
75°	1869	1847	1861
80°	1849	1759	1746
85°	1636	1593	1615



TEST NUMBER: P292771

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.1	3.3
10°-20°	237.0	9.4
20°-30°	356.9	14.2
30°-40°	428.3	17.1
40°-50°	443.2	17.7
50°-60°	401.6	16.0
60°-70°	311.3	12.4
70°-80°	189.0	7.5
80°-90°	58.5	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°	677.0	27.0
0°-40°	1105.4	44.1
0°-60°	1950.2	77.7
0°-90°	2509.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2509.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	874	874	872	874	875	83
15°	840	840	838	841	841	237
25°	776	775	772	775	774	358
35°	686	686	683	684	686	430
45°	577	576	573	573	573	445
55°	452	451	449	448	448	404
65°	317	317	313	315	312	313
75°	180	179	178	178	179	191
85°	53	52	52	52	52	60
90°	0	0	0	0	0	



TEST NUMBER: P292771

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L82765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.2	878.2	878.2	878.2	878.2
2.5°	878.9	875.2	876.0	877.4	877.4
5°	873.8	873.8	872.3	874.5	875.2
7.5°	873.8	870.1	867.9	870.1	871.5
10°	862.0	860.5	862.0	861.2	863.4
12.5°	851.7	850.2	850.2	852.4	852.4
15°	839.9	839.9	837.7	841.3	840.6
17.5°	828.1	828.1	826.6	826.6	828.1
20°	814.1	810.4	811.9	811.1	810.4
22.5°	794.9	792.7	791.2	793.5	794.2
25°	776.5	775.0	772.1	775.0	774.3
27.5°	756.6	755.1	754.4	752.9	754.4
30°	734.5	733.0	732.3	730.8	730.8
32.5°	712.4	709.5	705.8	709.5	708.7
35°	685.9	685.9	682.9	683.7	685.9
37.5°	662.3	660.8	659.4	657.2	657.9
40°	635.8	633.6	632.8	631.4	628.4
42.5°	604.8	604.8	601.9	602.6	601.9
45°	576.9	576.1	573.2	573.2	573.2
47.5°	547.4	546.6	544.4	543.0	544.4
50°	517.2	514.2	514.2	512.0	511.3
52.5°	485.5	483.3	480.3	481.1	479.6
55°	451.6	450.9	448.7	447.9	447.9
57.5°	417.7	418.5	417.0	414.0	414.8
60°	384.6	383.8	382.4	380.9	380.9
62.5°	350.7	350.7	347.7	347.7	344.8
65°	316.8	316.8	313.1	314.6	311.6
67.5°	282.9	282.2	280.0	279.2	280.0
70°	246.1	246.8	245.3	245.3	246.1
72.5°	212.9	212.2	211.4	211.4	212.9
75°	179.8	179.0	177.6	177.6	179.0
77.5°	149.6	145.9	145.1	146.6	144.4
80°	119.3	114.2	113.5	112.7	112.7
82.5°	84.0	81.8	82.5	81.8	83.2
85°	53.0	52.3	51.6	51.6	52.3
87.5°	25.0	23.6	23.6	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)