

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: P292833

Luminaire Tested: **22GR-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292833  
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-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2774.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 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

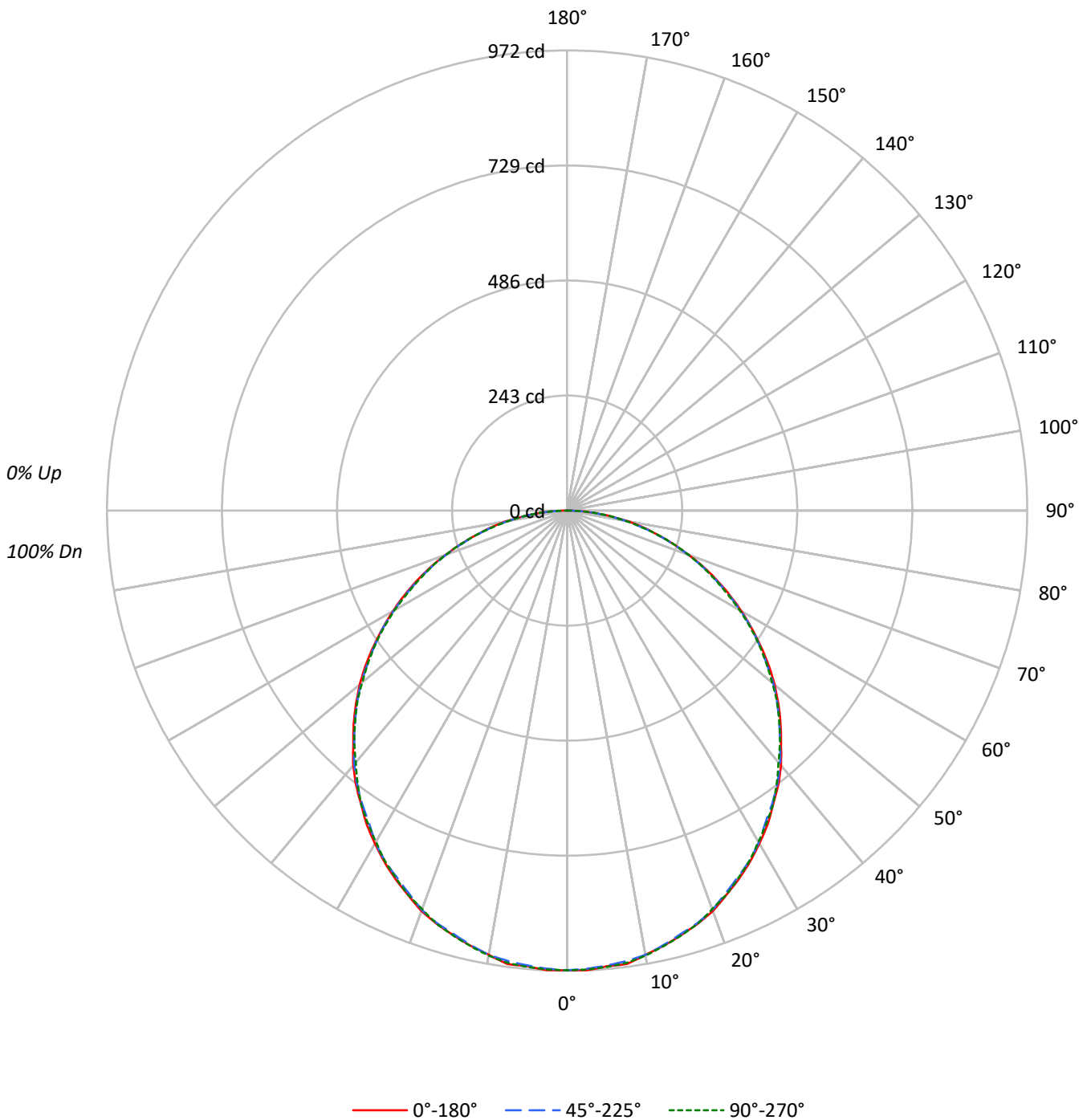
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292833

CATALOG NUMBER: 22GR-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292833

CATALOG NUMBER: 22GR-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K

**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°	2613	2613	2613
5°	2609	2605	2614
10°	2604	2604	2608
15°	2587	2580	2589
20°	2578	2570	2566
25°	2549	2534	2542
30°	2523	2516	2511
35°	2491	2481	2491
40°	2469	2458	2441
45°	2427	2412	2412
50°	2394	2380	2367
55°	2343	2327	2323
60°	2288	2275	2266
65°	2230	2204	2194
70°	2141	2134	2141
75°	2066	2041	2058
80°	2046	1943	1931
85°	1809	1760	1785



TEST NUMBER: P292833

CATALOG NUMBER: 22GR-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	3.3
10°-20°	262.1	9.4
20°-30°	394.6	14.2
30°-40°	473.6	17.1
40°-50°	490.0	17.7
50°-60°	444.0	16.0
60°-70°	344.2	12.4
70°-80°	209.0	7.5
80°-90°	64.7	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°	748.5	27.0
0°-40°	1222.1	44.1
0°-60°	2156.2	77.7
0°-90°	2774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	966	966	964	967	968	92
15°	929	929	926	930	929	262
25°	858	857	854	857	856	396
35°	758	758	755	756	758	475
45°	638	637	634	634	634	492
55°	499	498	496	495	495	447
65°	350	350	346	348	344	346
75°	199	198	196	196	198	211
85°	59	58	57	57	58	67
90°	0	0	0	0	0	



TEST NUMBER: P292833

CATALOG NUMBER: 22GR-LD5-36-FGW080-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	970.9	970.9	970.9	970.9	970.9
2.5°	971.7	967.7	968.5	970.1	970.1
5°	966.0	966.0	964.4	966.9	967.7
7.5°	966.0	962.0	959.5	962.0	963.6
10°	953.0	951.4	953.0	952.2	954.6
12.5°	941.6	940.0	940.0	942.4	942.4
15°	928.6	928.6	926.1	930.2	929.4
17.5°	915.5	915.5	913.9	913.9	915.5
20°	900.1	896.0	897.6	896.8	896.0
22.5°	878.9	876.4	874.8	877.3	878.1
25°	858.5	856.9	853.6	856.9	856.1
27.5°	836.5	834.9	834.1	832.5	834.1
30°	812.1	810.5	809.6	808.0	808.0
32.5°	787.7	784.4	780.3	784.4	783.6
35°	758.3	758.3	755.1	755.9	758.3
37.5°	732.3	730.6	729.0	726.6	727.4
40°	702.9	700.5	699.7	698.1	694.8
42.5°	668.7	668.7	665.5	666.3	665.5
45°	637.8	637.0	633.7	633.7	633.7
47.5°	605.2	604.4	601.9	600.3	601.9
50°	571.8	568.5	568.5	566.1	565.3
52.5°	536.8	534.3	531.1	531.9	530.3
55°	499.3	498.5	496.1	495.2	495.2
57.5°	461.8	462.7	461.0	457.8	458.6
60°	425.2	424.4	422.7	421.1	421.1
62.5°	387.7	387.7	384.5	384.5	381.2
65°	350.3	350.3	346.2	347.8	344.5
67.5°	312.8	312.0	309.5	308.7	309.5
70°	272.1	272.9	271.2	271.2	272.1
72.5°	235.4	234.6	233.8	233.8	235.4
75°	198.7	197.9	196.3	196.3	197.9
77.5°	165.4	161.3	160.5	162.1	159.6
80°	132.0	126.3	125.4	124.6	124.6
82.5°	92.9	90.4	91.2	90.4	92.0
85°	58.6	57.8	57.0	57.0	57.8
87.5°	27.7	26.1	26.1	25.3	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)