

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: P292731

Luminaire Tested: **22GR-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292731  
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-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2853.0 lumens  
Efficiency: N/A  
Efficacy: 110.7 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

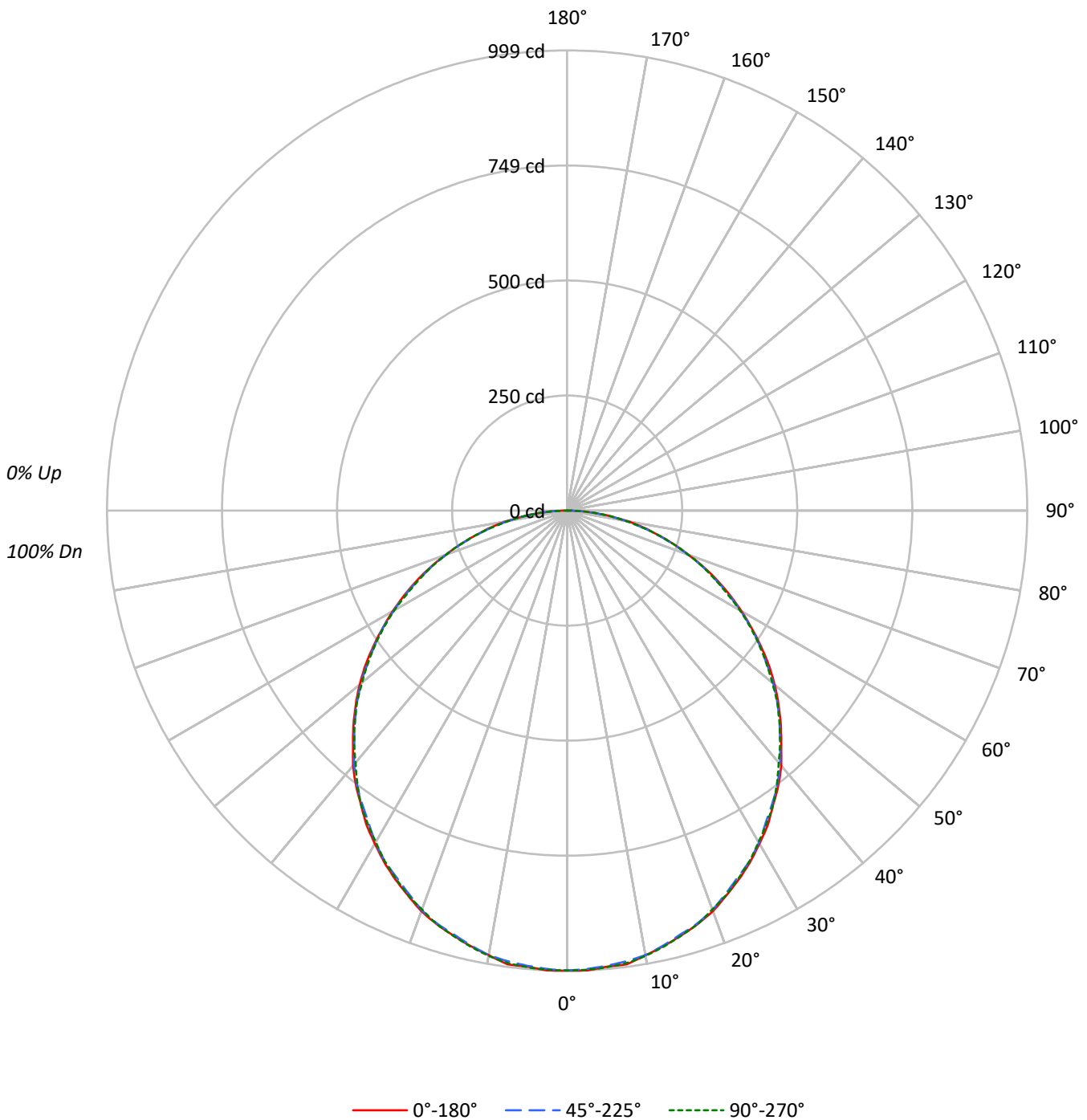
Input Watts (W): 25.761  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292731

CATALOG NUMBER: 22GR-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P292731

CATALOG NUMBER: 22GR-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K

**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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2687	2687	2687
5°	2684	2679	2688
10°	2678	2678	2683
15°	2661	2654	2663
20°	2651	2644	2639
25°	2622	2607	2614
30°	2595	2587	2582
35°	2562	2551	2562
40°	2540	2528	2510
45°	2496	2481	2481
50°	2462	2448	2434
55°	2409	2394	2389
60°	2354	2340	2331
65°	2294	2267	2257
70°	2201	2195	2201
75°	2125	2099	2117
80°	2103	1999	1987
85°	1862	1809	1837



TEST NUMBER: P292731

CATALOG NUMBER: 22GR-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	3.3
10°-20°	269.5	9.4
20°-30°	405.9	14.2
30°-40°	487.1	17.1
40°-50°	504.0	17.7
50°-60°	456.7	16.0
60°-70°	354.0	12.4
70°-80°	214.9	7.5
80°-90°	66.5	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°	769.9	27.0
0°-40°	1256.9	44.1
0°-60°	2217.6	77.7
0°-90°	2853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2853.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	999	999	999	999	999	
5°	994	994	992	994	995	95
15°	955	955	952	957	956	270
25°	883	881	878	881	880	407
35°	780	780	777	777	780	489
45°	656	655	652	652	652	506
55°	514	513	510	509	509	459
65°	360	360	356	358	354	356
75°	204	204	202	202	204	217
85°	60	60	59	59	60	69
90°	0	0	0	0	0	



TEST NUMBER: P292731

CATALOG NUMBER: 22GR-LD5-32-FGW080-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	998.6	998.6	998.6	998.6	998.6
2.5°	999.4	995.2	996.1	997.7	997.7
5°	993.6	993.6	991.9	994.4	995.2
7.5°	993.6	989.4	986.8	989.4	991.0
10°	980.1	978.5	980.1	979.3	981.8
12.5°	968.4	966.7	966.7	969.3	969.3
15°	955.0	955.0	952.5	956.7	955.9
17.5°	941.6	941.6	939.9	939.9	941.6
20°	925.7	921.5	923.2	922.3	921.5
22.5°	903.9	901.4	899.7	902.2	903.1
25°	883.0	881.3	877.9	881.3	880.5
27.5°	860.4	858.7	857.8	856.2	857.8
30°	835.2	833.5	832.7	831.0	831.0
32.5°	810.1	806.7	802.5	806.7	805.9
35°	779.9	779.9	776.6	777.4	779.9
37.5°	753.1	751.4	749.8	747.3	748.1
40°	723.0	720.4	719.6	717.9	714.6
42.5°	687.8	687.8	684.4	685.3	684.4
45°	655.9	655.1	651.8	651.8	651.8
47.5°	622.4	621.6	619.1	617.4	619.1
50°	588.1	584.7	584.7	582.2	581.4
52.5°	552.1	549.6	546.2	547.0	545.4
55°	513.5	512.7	510.2	509.3	509.3
57.5°	475.0	475.8	474.2	470.8	471.6
60°	437.3	436.5	434.8	433.1	433.1
62.5°	398.8	398.8	395.4	395.4	392.1
65°	360.2	360.2	356.0	357.7	354.4
67.5°	321.7	320.9	318.3	317.5	318.3
70°	279.8	280.6	279.0	279.0	279.8
72.5°	242.1	241.3	240.4	240.4	242.1
75°	204.4	203.6	201.9	201.9	203.6
77.5°	170.1	165.9	165.0	166.7	164.2
80°	135.7	129.8	129.0	128.2	128.2
82.5°	95.5	93.0	93.8	93.0	94.7
85°	60.3	59.5	58.6	58.6	59.5
87.5°	28.5	26.8	26.8	26.0	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)