

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: P292727

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292727  
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-L83050-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: 2583.0 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

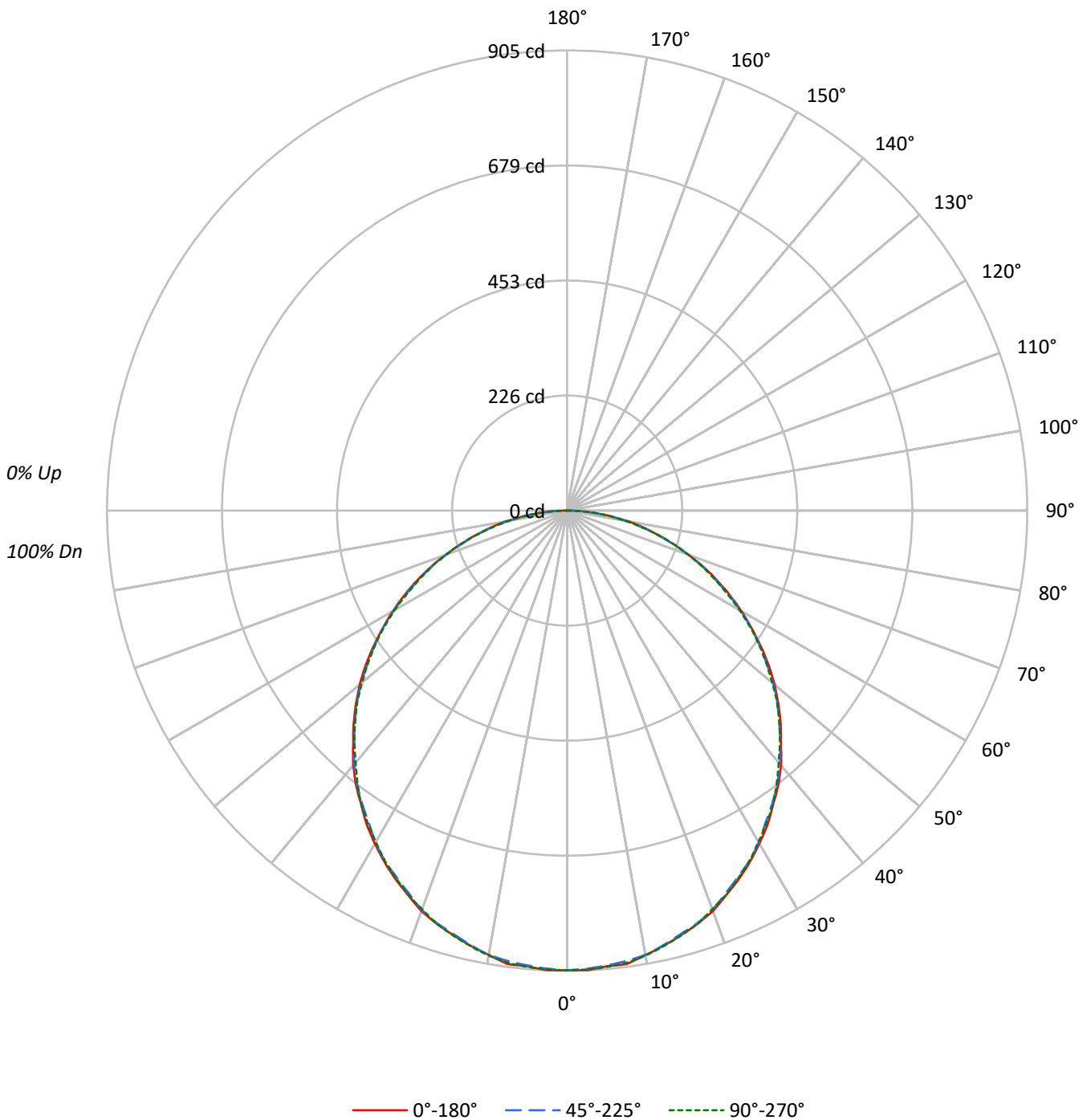
Input Watts (W): 23.157  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	2433	2433	2433
5°	2430	2426	2434
10°	2425	2425	2429
15°	2409	2403	2411
20°	2400	2393	2389
25°	2374	2360	2367
30°	2350	2343	2338
35°	2320	2310	2320
40°	2299	2289	2273
45°	2260	2246	2246
50°	2229	2216	2204
55°	2181	2167	2163
60°	2131	2118	2110
65°	2076	2052	2043
70°	1993	1987	1993
75°	1925	1901	1916
80°	1905	1810	1798
85°	1686	1639	1664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.5	3.3
10°-20°	244.0	9.4
20°-30°	367.5	14.2
30°-40°	441.0	17.1
40°-50°	456.3	17.7
50°-60°	413.5	16.0
60°-70°	320.5	12.4
70°-80°	194.6	7.5
80°-90°	60.2	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°	697.0	27.0
0°-40°	1138.0	44.1
0°-60°	2007.7	77.7
0°-90°	2583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2583.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	900	900	898	900	901	86
15°	865	865	862	866	865	244
25°	799	798	795	798	797	368
35°	706	706	703	704	706	443
45°	594	593	590	590	590	458
55°	465	464	462	461	461	416
65°	326	326	322	324	321	322
75°	185	184	183	183	184	197
85°	55	54	53	53	54	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.1	904.1	904.1	904.1	904.1
2.5°	904.8	901.0	901.8	903.3	903.3
5°	899.5	899.5	898.0	900.3	901.0
7.5°	899.5	895.7	893.5	895.7	897.2
10°	887.4	885.9	887.4	886.6	888.9
12.5°	876.8	875.3	875.3	877.5	877.5
15°	864.6	864.6	862.4	866.2	865.4
17.5°	852.5	852.5	851.0	851.0	852.5
20°	838.1	834.3	835.8	835.1	834.3
22.5°	818.4	816.1	814.6	816.9	817.6
25°	799.4	797.9	794.9	797.9	797.1
27.5°	778.9	777.4	776.7	775.1	776.7
30°	756.2	754.7	753.9	752.4	752.4
32.5°	733.4	730.4	726.6	730.4	729.6
35°	706.1	706.1	703.1	703.8	706.1
37.5°	681.8	680.3	678.8	676.5	677.3
40°	654.5	652.3	651.5	650.0	647.0
42.5°	622.7	622.7	619.7	620.4	619.7
45°	593.9	593.1	590.1	590.1	590.1
47.5°	563.5	562.8	560.5	559.0	560.5
50°	532.4	529.4	529.4	527.1	526.4
52.5°	499.8	497.5	494.5	495.3	493.8
55°	464.9	464.2	461.9	461.1	461.1
57.5°	430.0	430.8	429.3	426.2	427.0
60°	395.9	395.2	393.6	392.1	392.1
62.5°	361.0	361.0	358.0	358.0	355.0
65°	326.1	326.1	322.3	323.9	320.8
67.5°	291.2	290.5	288.2	287.5	288.2
70°	253.3	254.1	252.6	252.6	253.3
72.5°	219.2	218.4	217.7	217.7	219.2
75°	185.1	184.3	182.8	182.8	184.3
77.5°	154.0	150.2	149.4	150.9	148.7
80°	122.9	117.6	116.8	116.0	116.0
82.5°	86.5	84.2	84.9	84.2	85.7
85°	54.6	53.9	53.1	53.1	53.9
87.5°	25.8	24.3	24.3	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)