

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: P292842

Luminaire Tested: **22GR-LD5-43-FGW080-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292842  
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-LD5-43-FGW080-UNV-L93050-W2A1-U-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3091.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 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

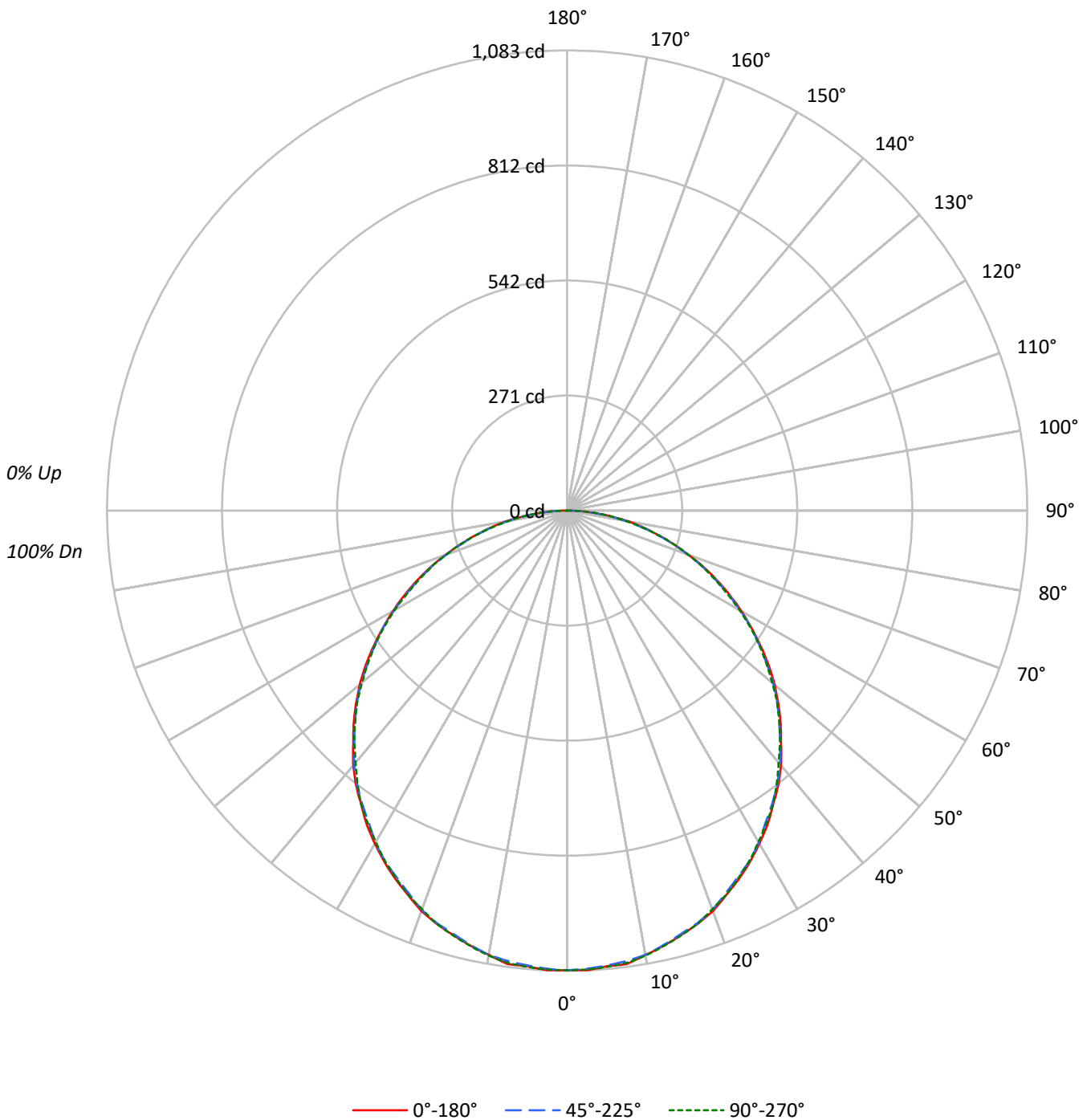
Input Watts (W): 35.805  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2911	2911	2911
5°	2908	2903	2912
10°	2902	2902	2907
15°	2883	2875	2885
20°	2872	2864	2859
25°	2840	2824	2832
30°	2812	2803	2798
35°	2776	2764	2776
40°	2752	2739	2720
45°	2705	2687	2687
50°	2667	2652	2637
55°	2610	2593	2589
60°	2550	2535	2525
65°	2485	2456	2444
70°	2385	2378	2385
75°	2303	2274	2294
80°	2278	2166	2152
85°	2016	1961	1988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.3	3.3
10°-20°	292.0	9.4
20°-30°	439.7	14.2
30°-40°	527.7	17.1
40°-50°	546.0	17.7
50°-60°	494.8	16.0
60°-70°	383.5	12.4
70°-80°	232.8	7.5
80°-90°	72.0	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°	834.1	27.0
0°-40°	1361.8	44.1
0°-60°	2402.6	77.7
0°-90°	3091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3091.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1076	1076	1075	1077	1078	103
15°	1035	1035	1032	1036	1036	292
25°	957	955	951	955	954	441
35°	845	845	841	842	845	530
45°	711	710	706	706	706	548
55°	556	556	553	552	552	498
65°	390	390	386	388	384	386
75°	222	221	219	219	221	236
85°	65	64	64	64	64	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1082.8	1078.2	1079.2	1081.0	1081.0
5°	1076.4	1076.4	1074.6	1077.3	1078.2
7.5°	1076.4	1071.9	1069.2	1071.9	1073.7
10°	1061.9	1060.1	1061.9	1061.0	1063.7
12.5°	1049.2	1047.4	1047.4	1050.1	1050.1
15°	1034.7	1034.7	1032.0	1036.5	1035.6
17.5°	1020.2	1020.2	1018.3	1018.3	1020.2
20°	1002.9	998.4	1000.2	999.3	998.4
22.5°	979.3	976.6	974.8	977.5	978.4
25°	956.6	954.8	951.2	954.8	953.9
27.5°	932.1	930.3	929.4	927.6	929.4
30°	904.9	903.1	902.2	900.4	900.4
32.5°	877.7	874.0	869.5	874.0	873.1
35°	845.0	845.0	841.4	842.3	845.0
37.5°	815.9	814.1	812.3	809.6	810.5
40°	783.3	780.6	779.6	777.8	774.2
42.5°	745.2	745.2	741.5	742.4	741.5
45°	710.7	709.8	706.1	706.1	706.1
47.5°	674.4	673.5	670.7	668.9	670.7
50°	637.1	633.5	633.5	630.8	629.9
52.5°	598.1	595.4	591.8	592.7	590.9
55°	556.4	555.5	552.7	551.8	551.8
57.5°	514.6	515.5	513.7	510.1	511.0
60°	473.8	472.9	471.1	469.2	469.2
62.5°	432.0	432.0	428.4	428.4	424.8
65°	390.3	390.3	385.7	387.6	383.9
67.5°	348.5	347.6	344.9	344.0	344.9
70°	303.1	304.1	302.2	302.2	303.1
72.5°	262.3	261.4	260.5	260.5	262.3
75°	221.5	220.6	218.7	218.7	220.6
77.5°	184.2	179.7	178.8	180.6	177.9
80°	147.0	140.7	139.8	138.9	138.9
82.5°	103.5	100.7	101.7	100.7	102.6
85°	65.3	64.4	63.5	63.5	64.4
87.5°	30.9	29.0	29.0	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)