

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: P292843

Luminaire Tested: **22GR-LD5-43-FGW080-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292843  
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-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: 3338.0 lumens  
Efficiency: N/A  
Efficacy: 92.5 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

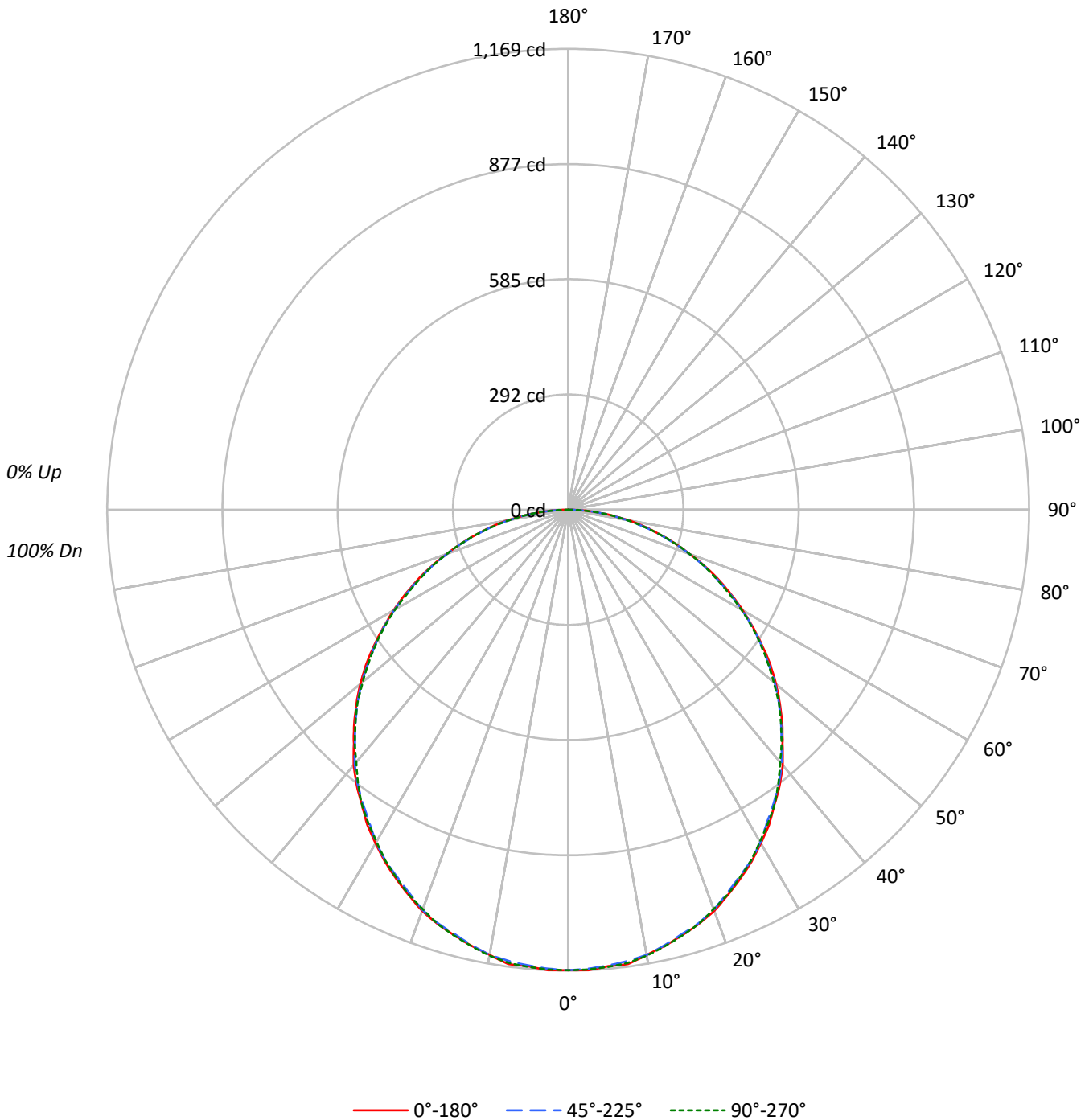
Input Watts (W): 36.084  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3144	3144	3144
5°	3140	3135	3145
10°	3134	3134	3139
15°	3113	3105	3115
20°	3102	3093	3088
25°	3067	3050	3059
30°	3036	3027	3021
35°	2998	2985	2998
40°	2971	2957	2937
45°	2921	2902	2902
50°	2881	2864	2848
55°	2819	2800	2796
60°	2753	2738	2727
65°	2684	2653	2640
70°	2576	2568	2576
75°	2487	2456	2477
80°	2461	2338	2325
85°	2180	2118	2149



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	3.3
10°-20°	315.4	9.4
20°-30°	474.9	14.2
30°-40°	569.9	17.1
40°-50°	589.7	17.7
50°-60°	534.3	16.0
60°-70°	414.2	12.4
70°-80°	251.4	7.5
80°-90°	77.8	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°	900.7	27.0
0°-40°	1470.6	44.1
0°-60°	2594.6	77.7
0°-90°	3338.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3338.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1162	1162	1160	1163	1164	111
15°	1117	1117	1114	1119	1118	316
25°	1033	1031	1027	1031	1030	476
35°	912	912	909	910	912	572
45°	768	766	763	763	763	592
55°	601	600	597	596	596	537
65°	422	422	417	418	415	417
75°	239	238	236	236	238	254
85°	71	70	69	69	70	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1168.3	1168.3	1168.3	1168.3	1168.3
2.5°	1169.3	1164.4	1165.4	1167.4	1167.4
5°	1162.5	1162.5	1160.5	1163.4	1164.4
7.5°	1162.5	1157.5	1154.6	1157.5	1159.5
10°	1146.8	1144.8	1146.8	1145.8	1148.7
12.5°	1133.0	1131.1	1131.1	1134.0	1134.0
15°	1117.4	1117.4	1114.4	1119.3	1118.3
17.5°	1101.7	1101.7	1099.7	1099.7	1101.7
20°	1083.1	1078.2	1080.1	1079.1	1078.2
22.5°	1057.6	1054.6	1052.7	1055.6	1056.6
25°	1033.1	1031.1	1027.2	1031.1	1030.1
27.5°	1006.6	1004.6	1003.7	1001.7	1003.7
30°	977.2	975.2	974.3	972.3	972.3
32.5°	947.8	943.9	939.0	943.9	942.9
35°	912.5	912.5	908.6	909.6	912.5
37.5°	881.1	879.2	877.2	874.3	875.3
40°	845.9	842.9	841.9	840.0	836.1
42.5°	804.7	804.7	800.8	801.8	800.8
45°	767.5	766.5	762.6	762.6	762.6
47.5°	728.2	727.3	724.3	722.4	724.3
50°	688.1	684.1	684.1	681.2	680.2
52.5°	645.9	643.0	639.1	640.0	638.1
55°	600.8	599.8	596.9	595.9	595.9
57.5°	555.7	556.7	554.8	550.8	551.8
60°	511.6	510.7	508.7	506.7	506.7
62.5°	466.5	466.5	462.6	462.6	458.7
65°	421.5	421.5	416.6	418.5	414.6
67.5°	376.4	375.4	372.5	371.5	372.5
70°	327.4	328.3	326.4	326.4	327.4
72.5°	283.3	282.3	281.3	281.3	283.3
75°	239.2	238.2	236.2	236.2	238.2
77.5°	199.0	194.1	193.1	195.0	192.1
80°	158.8	151.9	150.9	150.0	150.0
82.5°	111.7	108.8	109.8	108.8	110.8
85°	70.6	69.6	68.6	68.6	69.6
87.5°	33.3	31.4	31.4	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)