

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: P292840

Luminaire Tested: **22GR-LD5-40-FGW080-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292840  
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-LD5-40-FGW080-UNV-L93050-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3181.0 lumens  
Efficiency: N/A  
Efficacy: 94.2 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

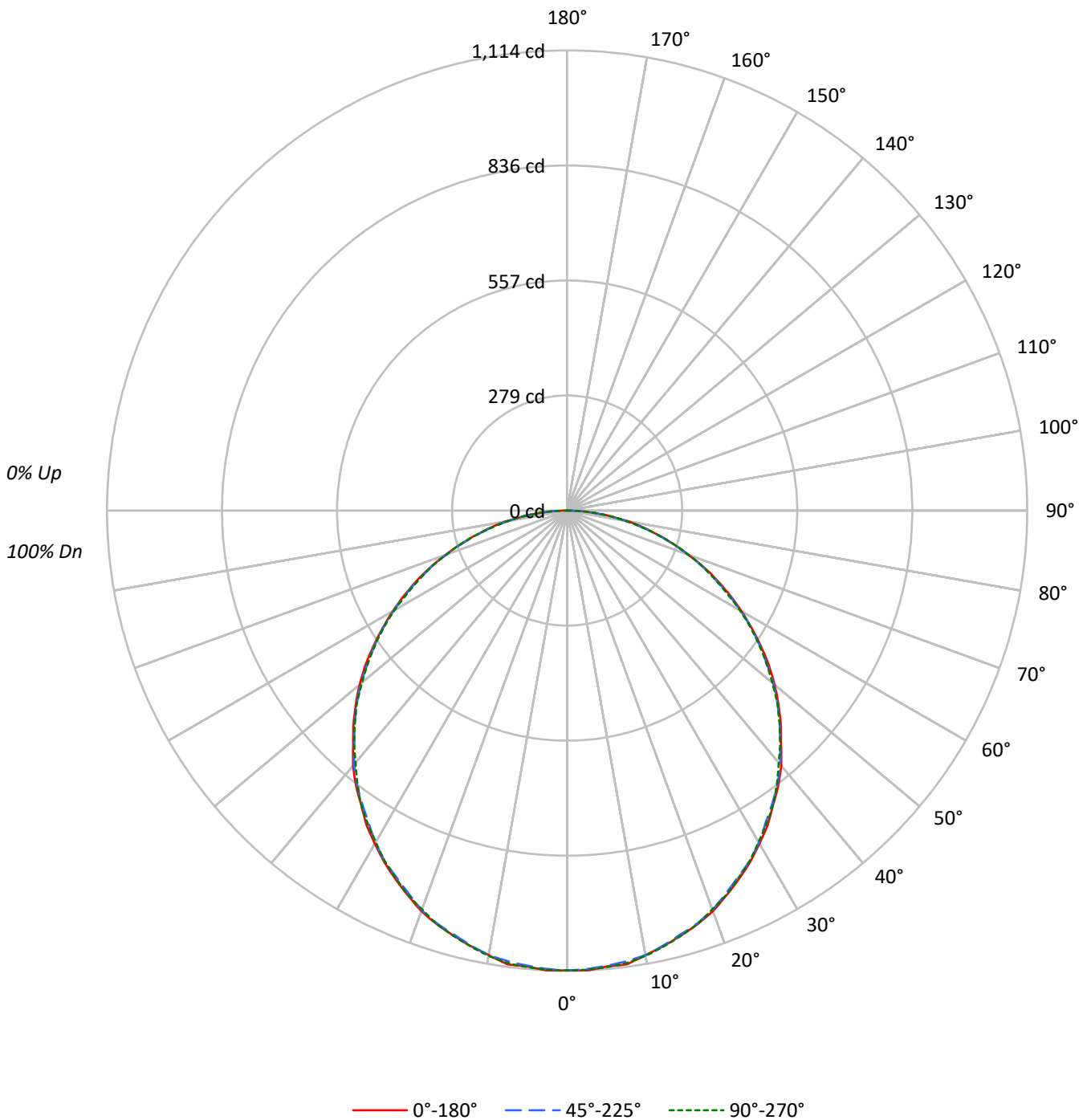
Input Watts (W): 33.759  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2996	2996	2996
5°	2992	2987	2997
10°	2986	2986	2991
15°	2966	2959	2969
20°	2956	2948	2942
25°	2923	2907	2915
30°	2893	2885	2879
35°	2857	2845	2857
40°	2832	2818	2799
45°	2783	2766	2766
50°	2745	2730	2714
55°	2686	2669	2664
60°	2624	2609	2599
65°	2557	2528	2516
70°	2455	2447	2455
75°	2370	2340	2360
80°	2345	2228	2214
85°	2078	2019	2047



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.3	3.3
10°-20°	300.5	9.4
20°-30°	452.5	14.2
30°-40°	543.1	17.1
40°-50°	561.9	17.7
50°-60°	509.2	16.0
60°-70°	394.7	12.4
70°-80°	239.6	7.5
80°-90°	74.2	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°	858.4	27.0
0°-40°	1401.4	44.1
0°-60°	2472.5	77.7
0°-90°	3181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3181.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1113	1113	1113	1113	1113	
5°	1108	1108	1106	1109	1110	106
15°	1065	1065	1062	1067	1066	301
25°	984	983	979	983	982	454
35°	870	870	866	867	870	545
45°	731	730	727	727	727	564
55°	573	572	569	568	568	512
65°	402	402	397	399	395	397
75°	228	227	225	225	227	242
85°	67	66	65	65	66	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1113.4	1113.4	1113.4	1113.4	1113.4
2.5°	1114.3	1109.6	1110.6	1112.4	1112.4
5°	1107.8	1107.8	1105.9	1108.7	1109.6
7.5°	1107.8	1103.1	1100.3	1103.1	1105.0
10°	1092.8	1091.0	1092.8	1091.9	1094.7
12.5°	1079.8	1077.9	1077.9	1080.7	1080.7
15°	1064.8	1064.8	1062.0	1066.7	1065.7
17.5°	1049.9	1049.9	1048.0	1048.0	1049.9
20°	1032.1	1027.4	1029.3	1028.4	1027.4
22.5°	1007.8	1005.0	1003.2	1006.0	1006.9
25°	984.5	982.6	978.9	982.6	981.7
27.5°	959.3	957.4	956.5	954.6	956.5
30°	931.2	929.4	928.4	926.6	926.6
32.5°	903.2	899.5	894.8	899.5	898.5
35°	869.6	869.6	865.9	866.8	869.6
37.5°	839.7	837.8	836.0	833.2	834.1
40°	806.1	803.3	802.3	800.5	796.7
42.5°	766.8	766.8	763.1	764.0	763.1
45°	731.4	730.4	726.7	726.7	726.7
47.5°	694.0	693.1	690.3	688.4	690.3
50°	655.7	652.0	652.0	649.2	648.2
52.5°	615.5	612.7	609.0	609.9	608.1
55°	572.6	571.6	568.8	567.9	567.9
57.5°	529.6	530.5	528.7	524.9	525.9
60°	487.6	486.6	484.8	482.9	482.9
62.5°	444.6	444.6	440.9	440.9	437.1
65°	401.6	401.6	397.0	398.8	395.1
67.5°	358.7	357.7	354.9	354.0	354.9
70°	312.0	312.9	311.0	311.0	312.0
72.5°	269.9	269.0	268.1	268.1	269.9
75°	227.9	227.0	225.1	225.1	227.0
77.5°	189.6	184.9	184.0	185.9	183.1
80°	151.3	144.8	143.8	142.9	142.9
82.5°	106.5	103.7	104.6	103.7	105.5
85°	67.3	66.3	65.4	65.4	66.3
87.5°	31.8	29.9	29.9	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)