

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: P476126

Luminaire Tested: **22GR-LD5-40-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476126  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-40-FGW080-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3372.9 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

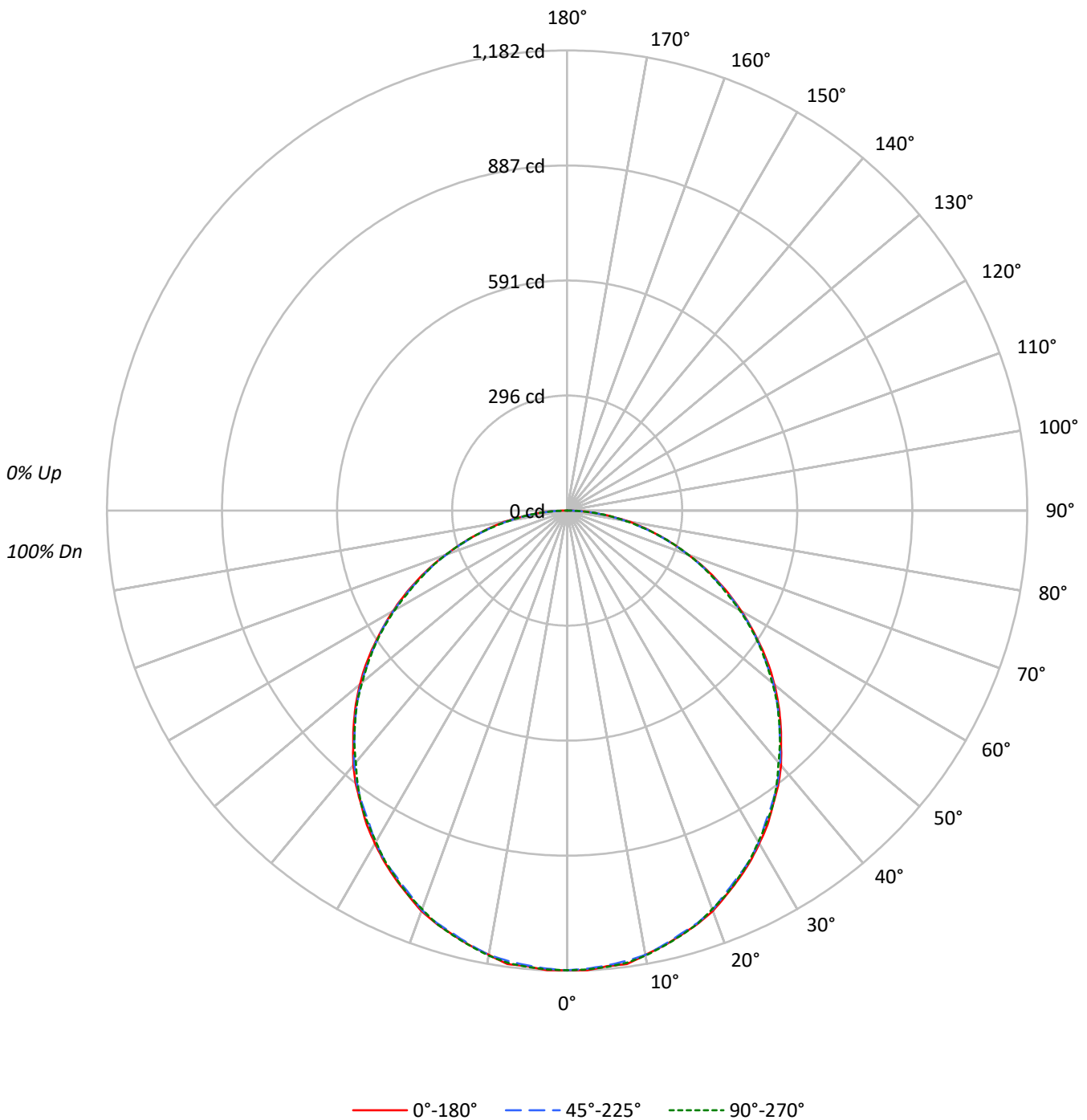
Input Watts (W): 32.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3177	3177	3177
5°	3173	3168	3179
10°	3166	3166	3172
15°	3146	3137	3148
20°	3134	3125	3120
25°	3099	3082	3091
30°	3068	3059	3053
35°	3029	3016	3029
40°	3002	2989	2968
45°	2951	2932	2932
50°	2910	2894	2877
55°	2849	2830	2825
60°	2782	2766	2756
65°	2711	2679	2667
70°	2603	2596	2603
75°	2512	2482	2502
80°	2484	2362	2346
85°	2205	2143	2174



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	3.3
10°-20°	318.7	9.4
20°-30°	479.8	14.2
30°-40°	575.8	17.1
40°-50°	595.8	17.7
50°-60°	539.9	16.0
60°-70°	418.5	12.4
70°-80°	254.0	7.5
80°-90°	78.7	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°	910.1	27.0
0°-40°	1486.0	44.1
0°-60°	2621.7	77.7
0°-90°	3372.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3372.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1175	1175	1173	1176	1177	112
15°	1129	1129	1126	1131	1130	319
25°	1044	1042	1038	1042	1041	481
35°	922	922	918	919	922	578
45°	775	774	770	770	770	598
55°	607	606	603	602	602	543
65°	426	426	421	423	419	421
75°	242	241	239	239	241	257
85°	71	70	69	69	70	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1180.6	1180.6	1180.6	1180.6	1180.6
2.5°	1181.6	1176.7	1177.7	1179.6	1179.6
5°	1174.7	1174.7	1172.7	1175.7	1176.7
7.5°	1174.7	1169.7	1166.7	1169.7	1171.7
10°	1158.8	1156.8	1158.8	1157.8	1160.8
12.5°	1144.9	1143.0	1143.0	1145.9	1145.9
15°	1129.1	1129.1	1126.1	1131.1	1130.1
17.5°	1113.2	1113.2	1111.2	1111.2	1113.2
20°	1094.4	1089.4	1091.4	1090.4	1089.4
22.5°	1068.6	1065.6	1063.7	1066.6	1067.6
25°	1043.8	1041.8	1037.9	1041.8	1040.9
27.5°	1017.1	1015.1	1014.1	1012.1	1014.1
30°	987.3	985.3	984.4	982.4	982.4
32.5°	957.6	953.6	948.7	953.6	952.6
35°	922.1	922.1	918.2	919.2	922.1
37.5°	890.4	888.4	886.5	883.5	884.5
40°	854.7	851.8	850.8	848.8	844.8
42.5°	813.1	813.1	809.1	810.1	809.1
45°	775.4	774.4	770.5	770.5	770.5
47.5°	735.8	734.8	731.8	729.8	731.8
50°	695.1	691.2	691.2	688.2	687.2
52.5°	652.8	649.8	645.8	646.8	644.8
55°	607.2	606.2	603.2	602.2	602.2
57.5°	561.6	562.6	560.6	556.6	557.6
60°	517.0	516.0	514.0	512.0	512.0
62.5°	471.4	471.4	467.4	467.4	463.4
65°	425.8	425.8	420.8	422.8	418.8
67.5°	380.4	379.4	376.4	375.5	376.4
70°	330.8	331.8	329.9	329.9	330.8
72.5°	286.2	285.2	284.3	284.3	286.2
75°	241.6	240.6	238.7	238.7	240.6
77.5°	201.0	196.0	195.0	197.0	194.0
80°	160.3	153.4	152.4	151.4	151.4
82.5°	113.0	110.0	111.0	110.0	112.0
85°	71.4	70.4	69.4	69.4	70.4
87.5°	33.7	31.7	31.7	30.7	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)