

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: P476123

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476123  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-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: 2329.5 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

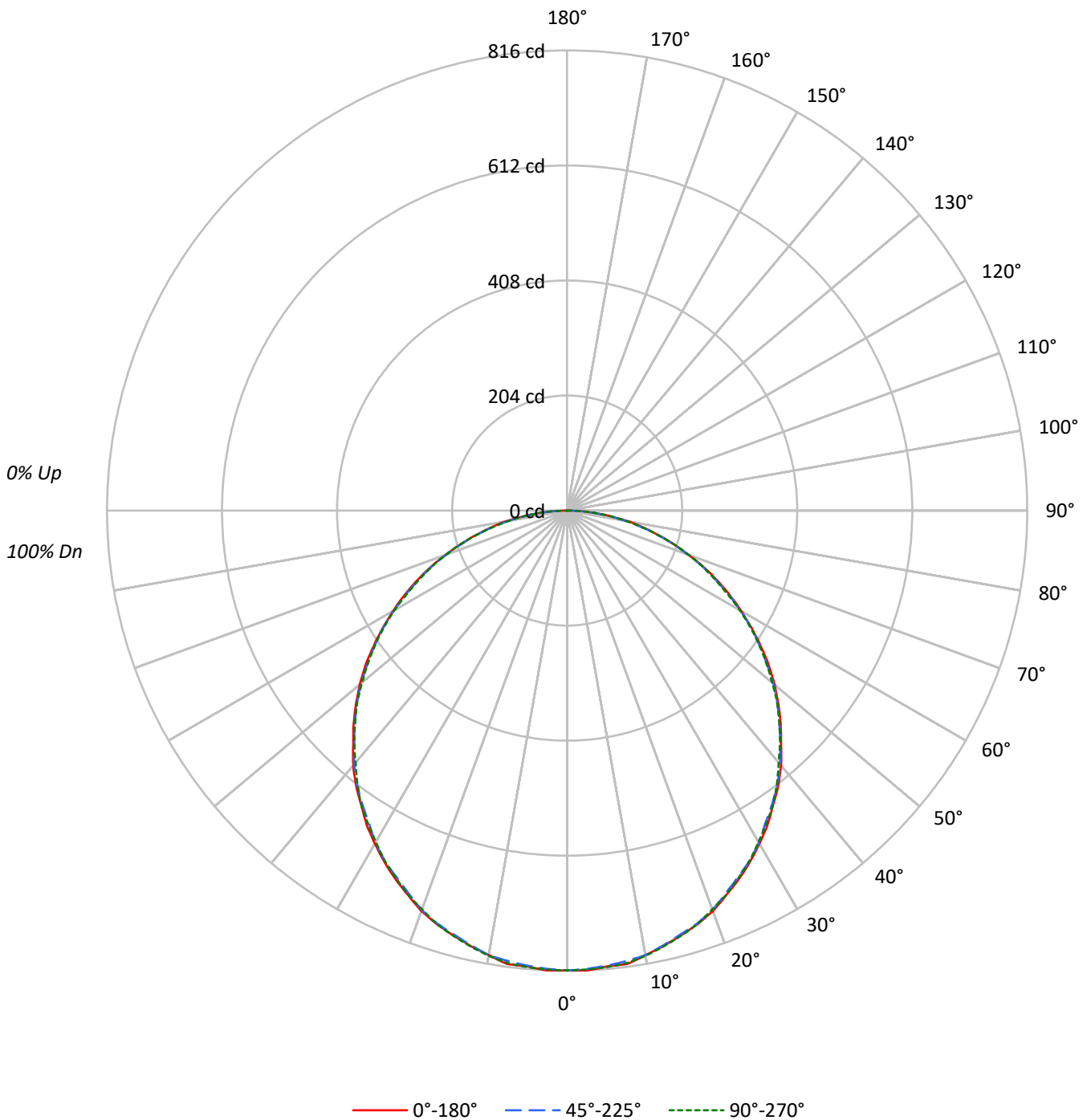
Input Watts (W): 21  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2194	2194	2194
5°	2192	2188	2195
10°	2187	2187	2191
15°	2172	2167	2174
20°	2164	2159	2155
25°	2140	2128	2135
30°	2119	2113	2108
35°	2092	2083	2092
40°	2074	2064	2050
45°	2038	2025	2025
50°	2010	1999	1987
55°	1967	1955	1951
60°	1921	1911	1903
65°	1873	1850	1842
70°	1798	1792	1798
75°	1735	1713	1728
80°	1715	1632	1621
85°	1522	1479	1501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	3.3
10°-20°	220.1	9.4
20°-30°	331.4	14.2
30°-40°	397.7	17.1
40°-50°	411.5	17.7
50°-60°	372.9	16.0
60°-70°	289.0	12.4
70°-80°	175.4	7.5
80°-90°	54.3	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°	628.6	27.0
0°-40°	1026.3	44.1
0°-60°	1810.7	77.7
0°-90°	2329.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2329.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	811	811	810	812	813	77
15°	780	780	778	781	780	220
25°	721	720	717	720	719	332
35°	637	637	634	635	637	399
45°	536	535	532	532	532	413
55°	419	419	417	416	416	375
65°	294	294	291	292	289	291
75°	167	166	165	165	166	178
85°	49	49	48	48	49	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.4	815.4	815.4	815.4	815.4
2.5°	816.1	812.7	813.4	814.7	814.7
5°	811.3	811.3	809.9	812.0	812.7
7.5°	811.3	807.9	805.8	807.9	809.3
10°	800.4	799.0	800.4	799.7	801.7
12.5°	790.8	789.4	789.4	791.5	791.5
15°	779.8	779.8	777.8	781.2	780.5
17.5°	768.9	768.9	767.5	767.5	768.9
20°	755.8	752.4	753.8	753.1	752.4
22.5°	738.0	736.0	734.6	736.7	737.4
25°	720.9	719.6	716.8	719.6	718.9
27.5°	702.4	701.1	700.4	699.0	700.4
30°	681.9	680.5	679.9	678.5	678.5
32.5°	661.4	658.6	655.2	658.6	657.9
35°	636.9	636.9	634.2	634.8	636.9
37.5°	615.0	613.6	612.2	610.2	610.9
40°	590.3	588.3	587.6	586.2	583.5
42.5°	561.6	561.6	558.8	559.5	558.8
45°	535.6	534.9	532.1	532.1	532.1
47.5°	508.2	507.5	505.4	504.1	505.4
50°	480.1	477.4	477.4	475.3	474.6
52.5°	450.8	448.8	446.0	446.7	445.4
55°	419.3	418.7	416.6	415.9	415.9
57.5°	387.9	388.5	387.2	384.4	385.1
60°	357.0	356.4	355.0	353.6	353.6
62.5°	325.5	325.5	322.8	322.8	320.1
65°	294.1	294.1	290.6	292.0	289.3
67.5°	262.7	262.0	260.0	259.3	260.0
70°	228.5	229.2	227.8	227.8	228.5
72.5°	197.7	197.0	196.3	196.3	197.7
75°	166.9	166.2	164.8	164.8	166.2
77.5°	138.8	135.4	134.7	136.1	134.0
80°	110.7	105.9	105.3	104.6	104.6
82.5°	78.0	76.0	76.7	76.0	77.4
85°	49.3	48.6	47.9	47.9	48.6
87.5°	23.3	21.9	21.9	21.2	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)