

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: P476168

Luminaire Tested: **22GR-LD5-90-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476168
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-FGW080-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7853.3 lumens
Efficiency: N/A
Efficacy: 113.3 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

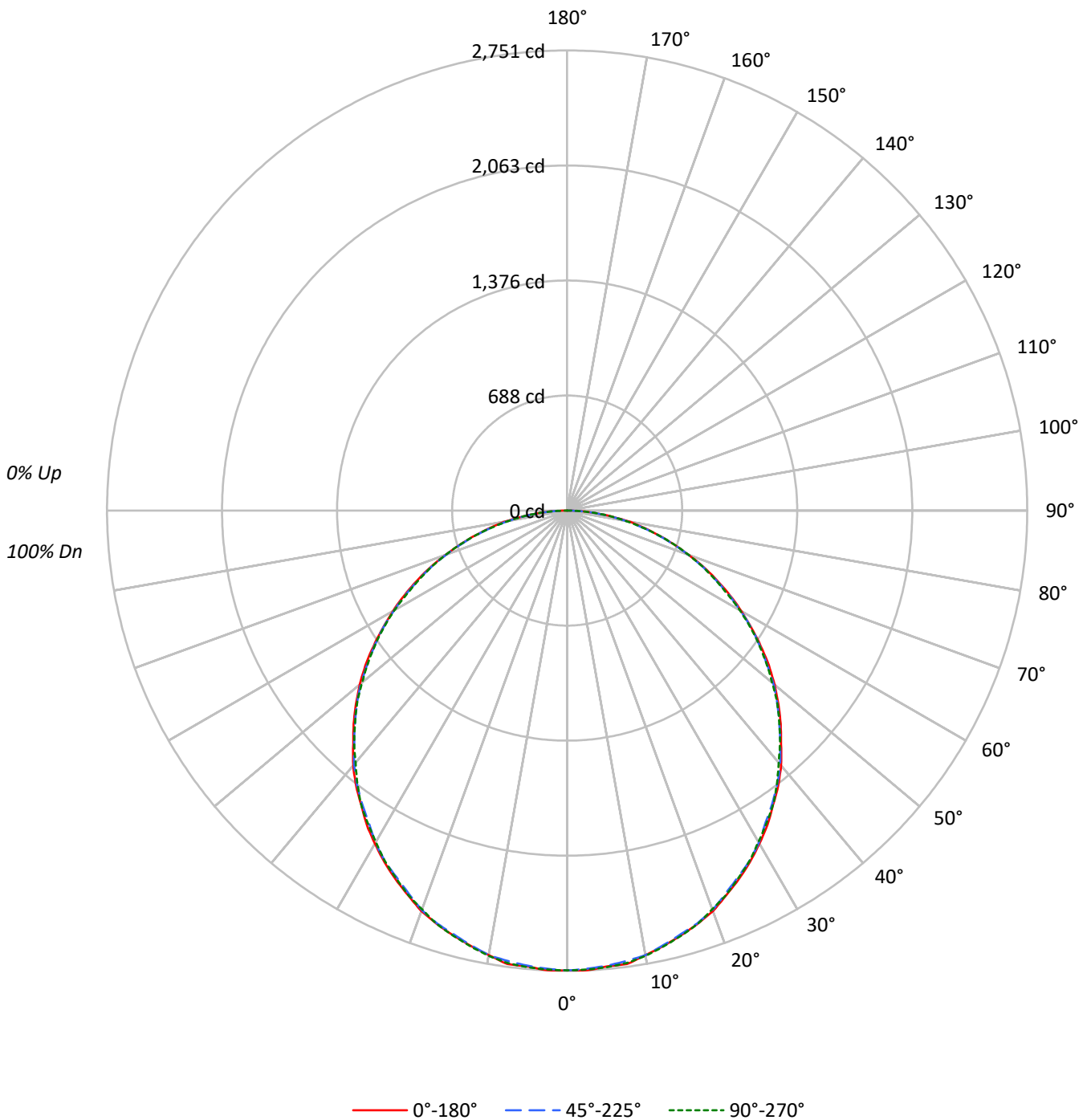
Input Watts (W): 69.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476168

CATALOG NUMBER: 22GR-LD5-90-FGW080-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476168

CATALOG NUMBER: 22GR-LD5-90-FGW080-UNV-L850-CD1-U

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°	7397	7397	7397
5°	7388	7376	7401
10°	7373	7373	7385
15°	7324	7305	7330
20°	7297	7277	7264
25°	7216	7175	7196
30°	7143	7122	7107
35°	7053	7023	7053
40°	6991	6959	6910
45°	6871	6827	6827
50°	6776	6737	6699
55°	6632	6589	6579
60°	6478	6441	6416
65°	6312	6239	6209
70°	6061	6043	6061
75°	5849	5778	5826
80°	5785	5500	5464
85°	5132	4989	5060



TEST NUMBER: P476168

CATALOG NUMBER: 22GR-LD5-90-FGW080-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.0	3.3
10°-20°	742.0	9.4
20°-30°	1117.2	14.2
30°-40°	1340.7	17.1
40°-50°	1387.2	17.7
50°-60°	1257.1	16.0
60°-70°	974.4	12.4
70°-80°	591.5	7.5
80°-90°	183.2	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°	2119.2	27.0
0°-40°	3459.9	44.1
0°-60°	6104.2	77.7
0°-90°	7853.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7853.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2749	2749	2749	2749	2749	
5°	2735	2735	2730	2737	2740	261
15°	2629	2629	2622	2634	2631	743
25°	2430	2426	2417	2426	2424	1120
35°	2147	2147	2138	2140	2147	1346
45°	1806	1803	1794	1794	1794	1393
55°	1414	1411	1404	1402	1402	1264
65°	991	991	980	984	975	980
75°	563	560	556	556	560	599
85°	166	164	162	162	164	189
90°	0	0	0	0	0	



TEST NUMBER: P476168

CATALOG NUMBER: 22GR-LD5-90-FGW080-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2748.9	2748.9	2748.9	2748.9	2748.9
2.5°	2751.2	2739.7	2742.0	2746.6	2746.6
5°	2735.1	2735.1	2730.5	2737.4	2739.7
7.5°	2735.1	2723.5	2716.6	2723.5	2728.2
10°	2698.2	2693.5	2698.2	2695.9	2702.8
12.5°	2665.8	2661.2	2661.2	2668.2	2668.2
15°	2628.9	2628.9	2622.0	2633.5	2631.2
17.5°	2592.0	2592.0	2587.4	2587.4	2592.0
20°	2548.1	2536.6	2541.2	2538.9	2536.6
22.5°	2488.1	2481.2	2476.6	2483.5	2485.8
25°	2430.4	2425.8	2416.6	2425.8	2423.5
27.5°	2368.1	2363.5	2361.2	2356.6	2361.2
30°	2298.9	2294.2	2291.9	2287.3	2287.3
32.5°	2229.6	2220.4	2208.8	2220.4	2218.1
35°	2147.1	2147.1	2137.9	2140.2	2147.1
37.5°	2073.2	2068.6	2064.0	2057.1	2059.4
40°	1990.2	1983.2	1980.9	1976.3	1967.1
42.5°	1893.2	1893.2	1884.0	1886.3	1884.0
45°	1805.5	1803.2	1794.0	1794.0	1794.0
47.5°	1713.2	1710.9	1703.9	1699.3	1703.9
50°	1618.6	1609.3	1609.3	1602.4	1600.1
52.5°	1519.9	1513.0	1503.7	1506.0	1501.4
55°	1413.7	1411.4	1404.5	1402.2	1402.2
57.5°	1307.5	1309.8	1305.2	1296.0	1298.3
60°	1203.7	1201.4	1196.7	1192.1	1192.1
62.5°	1097.5	1097.5	1088.3	1088.3	1079.0
65°	991.3	991.3	979.8	984.4	975.2
67.5°	885.7	883.4	876.5	874.2	876.5
70°	770.3	772.6	768.0	768.0	770.3
72.5°	666.5	664.2	661.8	661.8	666.5
75°	562.6	560.3	555.7	555.7	560.3
77.5°	468.0	456.4	454.1	458.7	451.8
80°	373.3	357.2	354.9	352.6	352.6
82.5°	263.1	256.2	258.5	256.2	260.8
85°	166.2	163.9	161.6	161.6	163.9
87.5°	78.5	73.9	73.9	71.6	71.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)