

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: P476156

Luminaire Tested: **22GR-LD5-90-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476156
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7845.6 lumens
Efficiency: N/A
Efficacy: 113.2 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

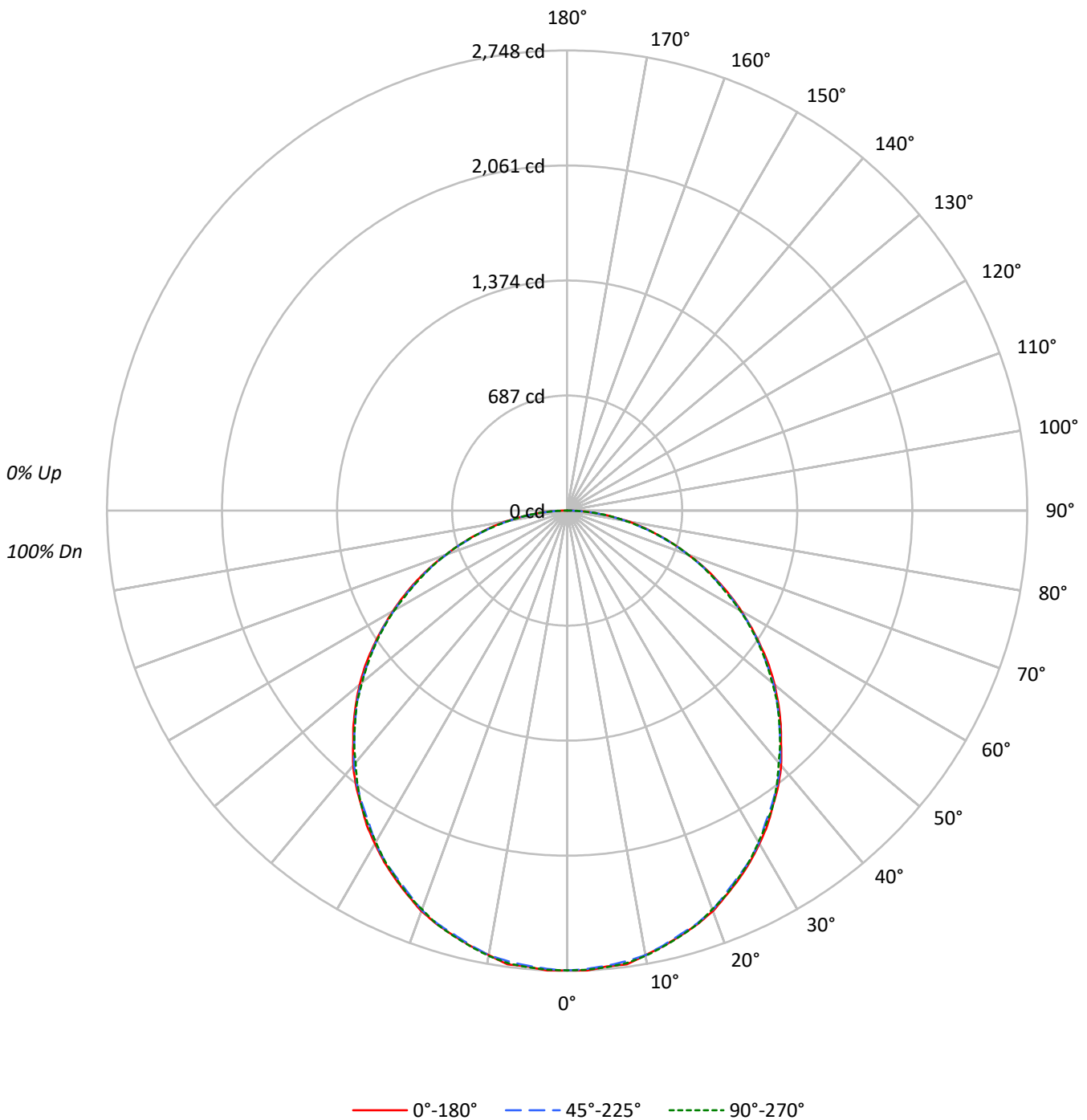
Input Watts (W): 69.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7390	7390	7390
5°	7381	7368	7393
10°	7365	7365	7378
15°	7317	7297	7323
20°	7290	7270	7257
25°	7209	7168	7189
30°	7136	7115	7100
35°	7046	7016	7046
40°	6984	6952	6903
45°	6864	6820	6820
50°	6769	6731	6692
55°	6626	6583	6572
60°	6472	6435	6410
65°	6306	6232	6203
70°	6055	6037	6055
75°	5843	5771	5819
80°	5780	5494	5458
85°	5125	4983	5054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.8	3.3
10°-20°	741.2	9.4
20°-30°	1116.1	14.2
30°-40°	1339.4	17.1
40°-50°	1385.9	17.7
50°-60°	1255.9	16.0
60°-70°	973.5	12.4
70°-80°	590.9	7.5
80°-90°	183.0	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°	2117.1	27.0
0°-40°	3456.5	44.1
0°-60°	6098.2	77.7
0°-90°	7845.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7845.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2746	2746	2746	2746	2746	
5°	2732	2732	2728	2735	2737	260
15°	2626	2626	2619	2631	2629	742
25°	2428	2423	2414	2423	2421	1119
35°	2145	2145	2136	2138	2145	1345
45°	1804	1801	1792	1792	1792	1392
55°	1412	1410	1403	1401	1401	1263
65°	990	990	979	983	974	979
75°	562	560	555	555	560	598
85°	166	164	161	161	164	189
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2746.2	2746.2	2746.2	2746.2	2746.2
2.5°	2748.5	2737.0	2739.3	2743.9	2743.9
5°	2732.4	2732.4	2727.8	2734.7	2737.0
7.5°	2732.4	2720.9	2714.0	2720.9	2725.5
10°	2695.5	2690.9	2695.5	2693.2	2700.1
12.5°	2663.2	2658.6	2658.6	2665.5	2665.5
15°	2626.3	2626.3	2619.4	2631.0	2628.6
17.5°	2589.4	2589.4	2584.8	2584.8	2589.4
20°	2545.6	2534.1	2538.7	2536.4	2534.1
22.5°	2485.7	2478.8	2474.2	2481.1	2483.4
25°	2428.0	2423.4	2414.2	2423.4	2421.1
27.5°	2365.8	2361.2	2358.9	2354.3	2358.9
30°	2296.6	2292.0	2289.7	2285.1	2285.1
32.5°	2227.4	2218.2	2206.7	2218.2	2215.9
35°	2145.0	2145.0	2135.8	2138.1	2145.0
37.5°	2071.2	2066.6	2062.0	2055.1	2057.4
40°	1988.2	1981.3	1979.0	1974.4	1965.1
42.5°	1891.4	1891.4	1882.1	1884.4	1882.1
45°	1803.7	1801.4	1792.2	1792.2	1792.2
47.5°	1711.5	1709.2	1702.3	1697.7	1702.3
50°	1617.0	1607.7	1607.7	1600.8	1598.5
52.5°	1518.4	1511.5	1502.2	1504.6	1499.9
55°	1412.3	1410.0	1403.1	1400.8	1400.8
57.5°	1306.3	1308.6	1303.9	1294.7	1297.0
60°	1202.5	1200.2	1195.6	1191.0	1191.0
62.5°	1096.4	1096.4	1087.2	1087.2	1078.0
65°	990.4	990.4	978.8	983.4	974.2
67.5°	884.9	882.6	875.6	873.3	875.6
70°	769.6	771.9	767.3	767.3	769.6
72.5°	665.8	663.5	661.2	661.2	665.8
75°	562.0	559.7	555.1	555.1	559.7
77.5°	467.5	456.0	453.7	458.3	451.4
80°	373.0	356.8	354.5	352.2	352.2
82.5°	262.9	255.9	258.3	255.9	260.6
85°	166.0	163.7	161.4	161.4	163.7
87.5°	78.4	73.8	73.8	71.5	71.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)