

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: P476132

Luminaire Tested: **22GR-LD5-90-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476132
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-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: 7429.8 lumens
Efficiency: N/A
Efficacy: 107.2 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

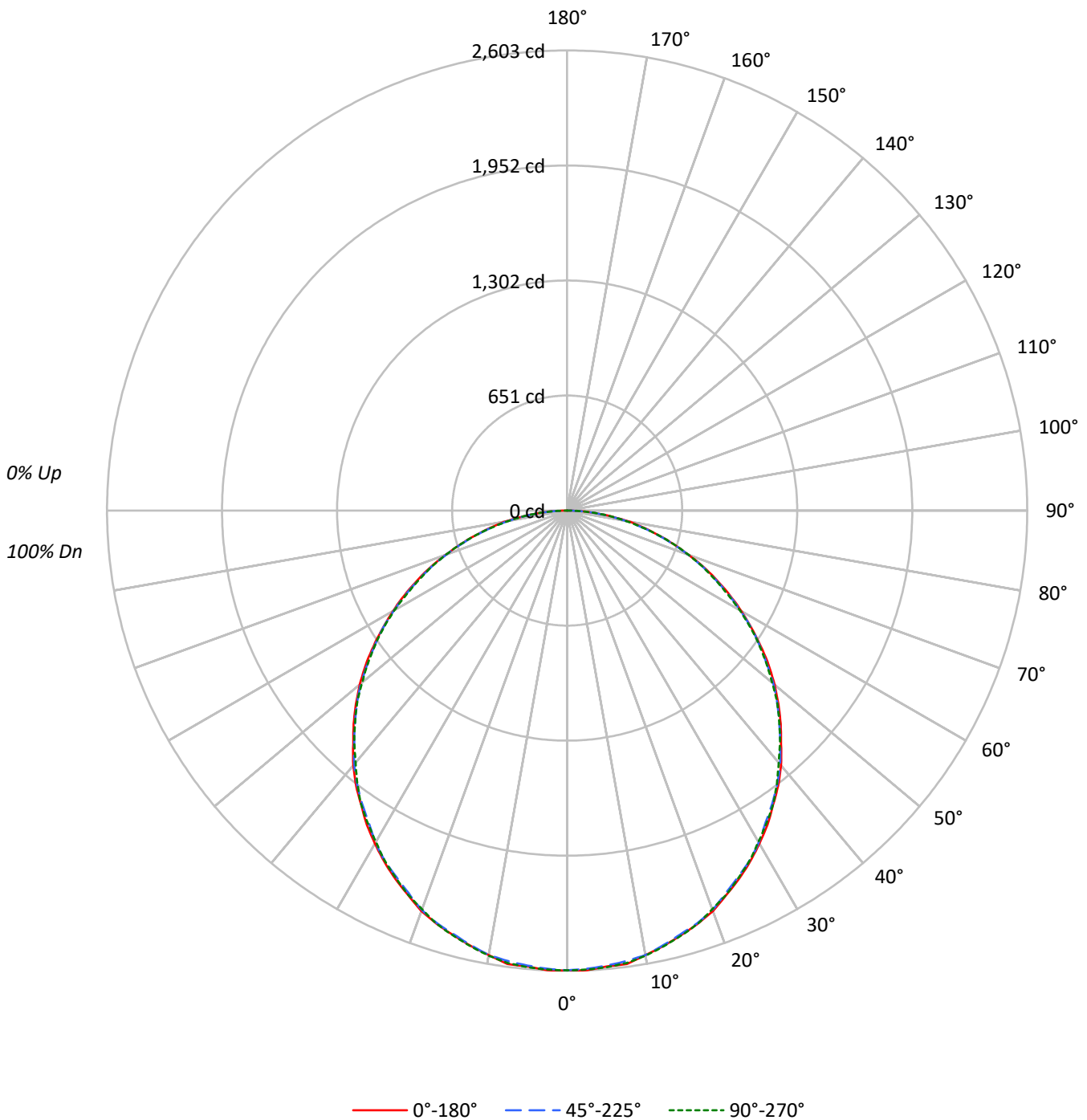
Input Watts (W): 69.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6998	6998	6998
5°	6990	6978	7002
10°	6975	6975	6987
15°	6929	6911	6935
20°	6903	6885	6872
25°	6827	6788	6808
30°	6758	6738	6724
35°	6673	6644	6673
40°	6614	6583	6537
45°	6500	6459	6459
50°	6411	6374	6337
55°	6275	6234	6224
60°	6129	6093	6070
65°	5972	5903	5875
70°	5734	5717	5734
75°	5534	5466	5512
80°	5473	5202	5170
85°	4854	4721	4786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.0	3.3
10°-20°	701.9	9.4
20°-30°	1056.9	14.2
30°-40°	1268.4	17.1
40°-50°	1312.4	17.7
50°-60°	1189.3	16.0
60°-70°	921.9	12.4
70°-80°	559.6	7.5
80°-90°	173.3	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°	2004.9	27.0
0°-40°	3273.3	44.1
0°-60°	5775.1	77.7
0°-90°	7429.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7429.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2601	2601	2601	2601	2601	
5°	2588	2588	2583	2590	2592	246
15°	2487	2487	2481	2492	2489	703
25°	2299	2295	2286	2295	2293	1060
35°	2031	2031	2023	2025	2031	1273
45°	1708	1706	1697	1697	1697	1318
55°	1338	1335	1329	1327	1327	1196
65°	938	938	927	931	923	928
75°	532	530	526	526	530	566
85°	157	155	153	153	155	179
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2600.7	2600.7	2600.7	2600.7	2600.7
2.5°	2602.9	2592.0	2594.2	2598.5	2598.5
5°	2587.6	2587.6	2583.2	2589.8	2592.0
7.5°	2587.6	2576.7	2570.1	2576.7	2581.1
10°	2552.7	2548.3	2552.7	2550.5	2557.0
12.5°	2522.1	2517.7	2517.7	2524.3	2524.3
15°	2487.2	2487.2	2480.6	2491.5	2489.3
17.5°	2452.2	2452.2	2447.9	2447.9	2452.2
20°	2410.7	2399.8	2404.2	2402.0	2399.8
22.5°	2354.0	2347.4	2343.0	2349.6	2351.8
25°	2299.4	2295.0	2286.3	2295.0	2292.8
27.5°	2240.4	2236.0	2233.9	2229.5	2233.9
30°	2174.9	2170.5	2168.4	2164.0	2164.0
32.5°	2109.4	2100.7	2089.7	2100.7	2098.5
35°	2031.3	2031.3	2022.6	2024.8	2031.3
37.5°	1961.5	1957.1	1952.7	1946.2	1948.4
40°	1882.8	1876.3	1874.1	1869.7	1861.0
42.5°	1791.1	1791.1	1782.4	1784.6	1782.4
45°	1708.1	1706.0	1697.2	1697.2	1697.2
47.5°	1620.8	1618.6	1612.1	1607.7	1612.1
50°	1531.3	1522.5	1522.5	1516.0	1513.8
52.5°	1437.9	1431.4	1422.6	1424.8	1420.5
55°	1337.5	1335.3	1328.7	1326.6	1326.6
57.5°	1237.0	1239.2	1234.8	1226.1	1228.3
60°	1138.8	1136.6	1132.2	1127.8	1127.8
62.5°	1038.3	1038.3	1029.6	1029.6	1020.9
65°	937.9	937.9	927.0	931.3	922.6
67.5°	838.0	835.8	829.2	827.1	829.2
70°	728.8	731.0	726.6	726.6	728.8
72.5°	630.5	628.3	626.2	626.2	630.5
75°	532.3	530.1	525.7	525.7	530.1
77.5°	442.7	431.8	429.6	434.0	427.4
80°	353.2	337.9	335.7	333.6	333.6
82.5°	248.9	242.4	244.6	242.4	246.8
85°	157.2	155.0	152.9	152.9	155.0
87.5°	74.2	69.9	69.9	67.7	67.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)