

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: P476155

Luminaire Tested: **22GR-LD5-85-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476155
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-85-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: 7402.1 lumens
Efficiency: N/A
Efficacy: 114.2 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

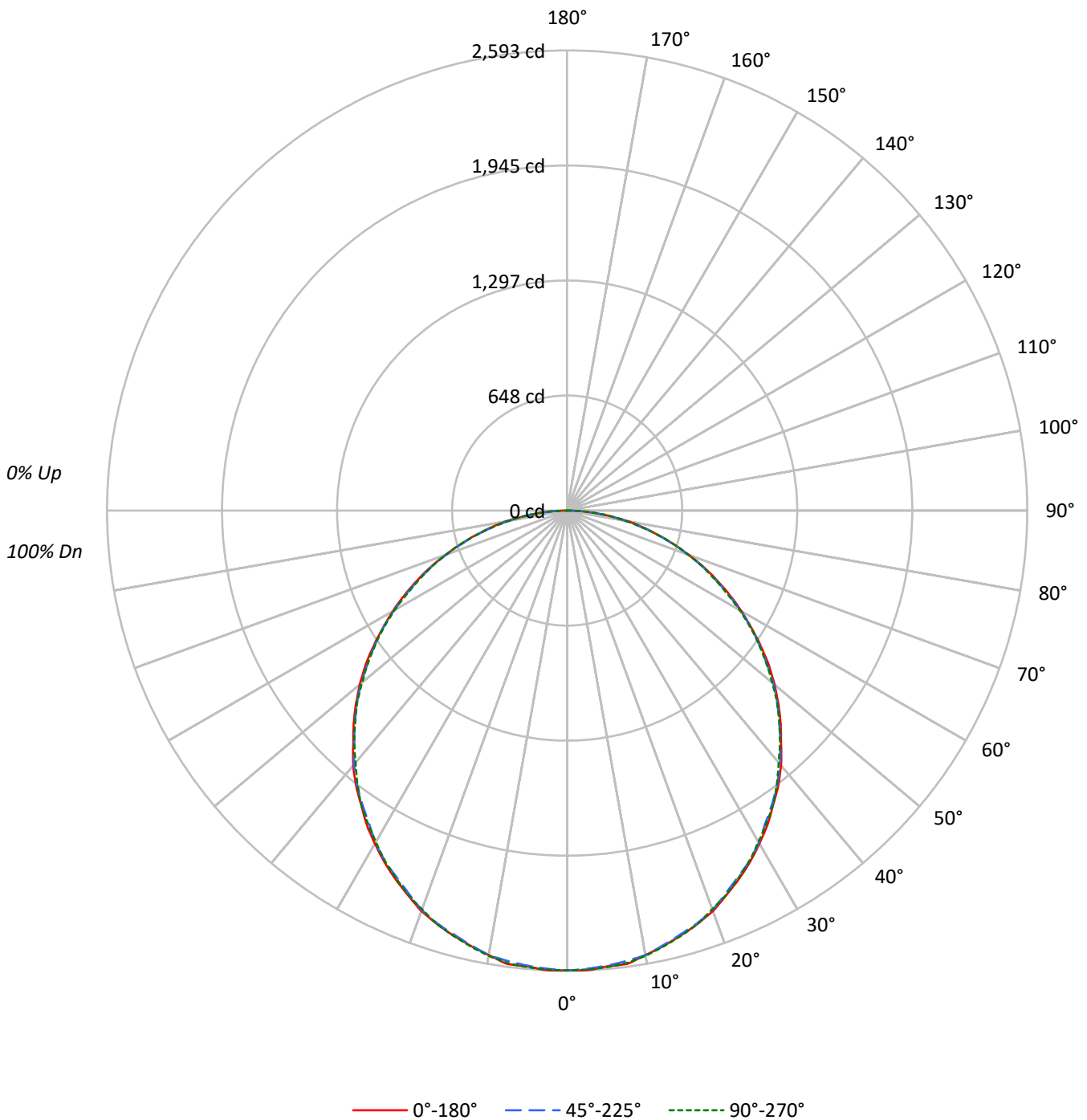
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476155

CATALOG NUMBER: 22GR-LD5-85-FGW080-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476155

CATALOG NUMBER: 22GR-LD5-85-FGW080-UNV-L840-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°	6972	6972	6972
5°	6964	6952	6975
10°	6949	6949	6961
15°	6903	6885	6909
20°	6878	6859	6847
25°	6802	6763	6782
30°	6733	6713	6699
35°	6648	6620	6648
40°	6589	6559	6513
45°	6476	6435	6435
50°	6387	6350	6314
55°	6252	6211	6200
60°	6106	6071	6047
65°	5950	5880	5852
70°	5713	5696	5713
75°	5514	5446	5491
80°	5453	5184	5150
85°	4835	4702	4770



TEST NUMBER: P476155

CATALOG NUMBER: 22GR-LD5-85-FGW080-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.1	3.3
10°-20°	699.3	9.4
20°-30°	1053.0	14.2
30°-40°	1263.7	17.1
40°-50°	1307.5	17.7
50°-60°	1184.9	16.0
60°-70°	918.4	12.4
70°-80°	557.5	7.5
80°-90°	172.6	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°	1997.4	27.0
0°-40°	3261.1	44.1
0°-60°	5753.5	77.7
0°-90°	7402.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7402.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2591	2591	2591	2591	2591	
5°	2578	2578	2574	2580	2582	246
15°	2478	2478	2471	2482	2480	700
25°	2291	2286	2278	2286	2284	1056
35°	2024	2024	2015	2017	2024	1269
45°	1702	1700	1691	1691	1691	1313
55°	1332	1330	1324	1322	1322	1192
65°	934	934	924	928	919	924
75°	530	528	524	524	528	564
85°	157	154	152	152	154	178
90°	0	0	0	0	0	



TEST NUMBER: P476155

CATALOG NUMBER: 22GR-LD5-85-FGW080-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2591.0	2591.0	2591.0	2591.0	2591.0
2.5°	2593.2	2582.3	2584.5	2588.8	2588.8
5°	2578.0	2578.0	2573.6	2580.1	2582.3
7.5°	2578.0	2567.1	2560.6	2567.1	2571.4
10°	2543.2	2538.8	2543.2	2541.0	2547.5
12.5°	2512.7	2508.3	2508.3	2514.9	2514.9
15°	2477.9	2477.9	2471.4	2482.2	2480.1
17.5°	2443.1	2443.1	2438.7	2438.7	2443.1
20°	2401.7	2390.9	2395.2	2393.0	2390.9
22.5°	2345.2	2338.7	2334.3	2340.8	2343.0
25°	2290.8	2286.4	2277.7	2286.4	2284.3
27.5°	2232.1	2227.7	2225.5	2221.2	2225.5
30°	2166.8	2162.4	2160.3	2155.9	2155.9
32.5°	2101.5	2092.8	2081.9	2092.8	2090.6
35°	2023.8	2023.8	2015.1	2017.2	2023.8
37.5°	1954.1	1949.8	1945.4	1938.9	1941.1
40°	1875.8	1869.3	1867.1	1862.8	1854.1
42.5°	1784.4	1784.4	1775.7	1777.9	1775.7
45°	1701.8	1699.6	1690.9	1690.9	1690.9
47.5°	1614.8	1612.6	1606.1	1601.7	1606.1
50°	1525.6	1516.9	1516.9	1510.3	1508.2
52.5°	1432.6	1426.0	1417.3	1419.5	1415.2
55°	1332.5	1330.3	1323.8	1321.6	1321.6
57.5°	1232.4	1234.6	1230.2	1221.5	1223.7
60°	1134.5	1132.3	1128.0	1123.6	1123.6
62.5°	1034.4	1034.4	1025.7	1025.7	1017.0
65°	934.4	934.4	923.5	927.8	919.1
67.5°	834.8	832.7	826.1	824.0	826.1
70°	726.1	728.2	723.9	723.9	726.1
72.5°	628.2	626.0	623.8	623.8	628.2
75°	530.3	528.1	523.8	523.8	528.1
77.5°	441.1	430.2	428.0	432.4	425.9
80°	351.9	336.7	334.5	332.3	332.3
82.5°	248.0	241.5	243.7	241.5	245.8
85°	156.6	154.5	152.3	152.3	154.5
87.5°	74.0	69.6	69.6	67.4	67.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)