

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: P476150

Luminaire Tested: **22GR-LD5-40-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476150
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-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: 3561.6 lumens
Efficiency: N/A
Efficacy: 109.9 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

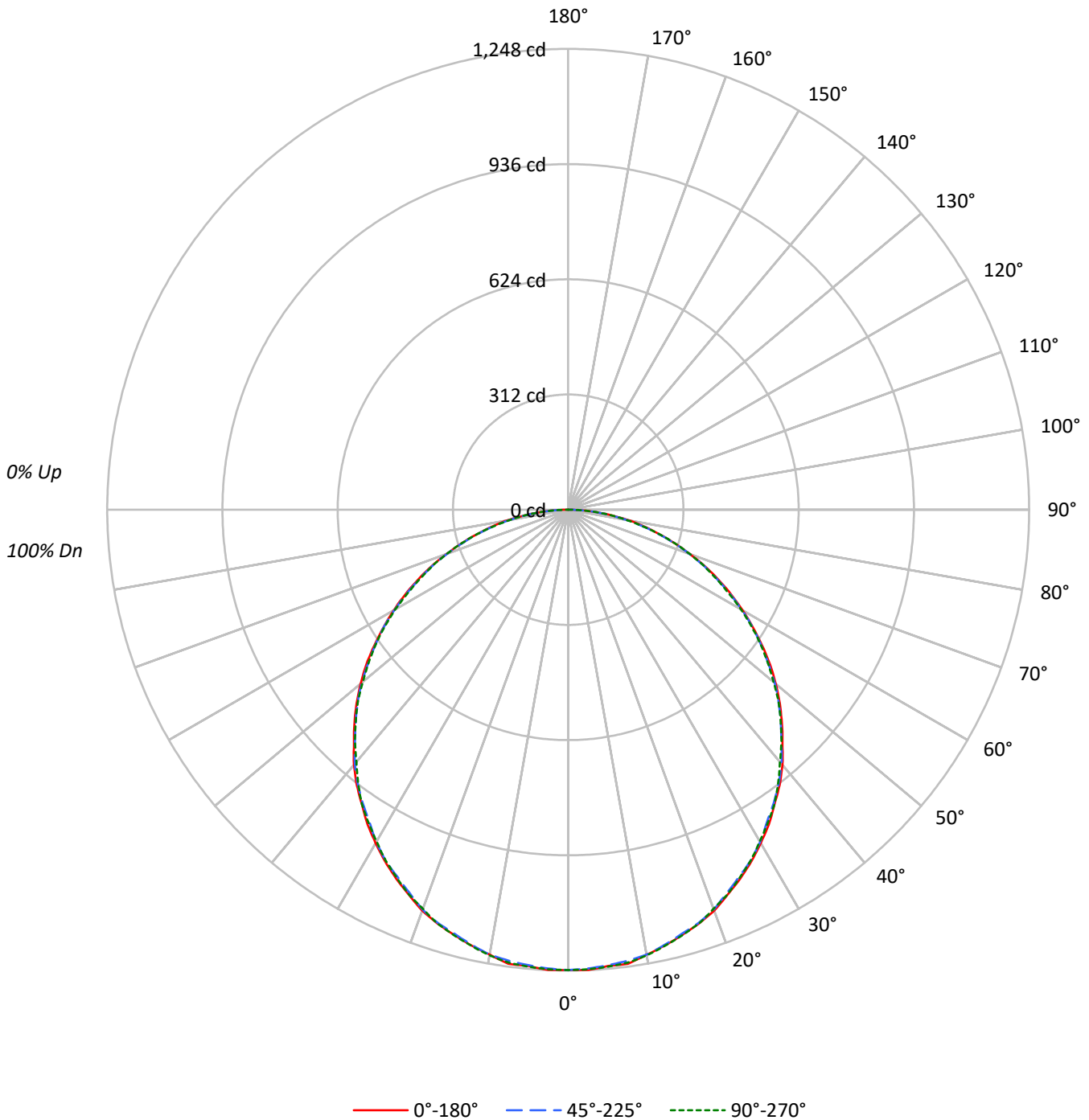
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476150

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476150

CATALOG NUMBER: 22GR-LD5-40-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°	3355	3355	3355
5°	3351	3345	3356
10°	3344	3344	3349
15°	3322	3313	3324
20°	3309	3300	3294
25°	3273	3254	3263
30°	3240	3230	3223
35°	3199	3185	3199
40°	3171	3156	3134
45°	3116	3096	3096
50°	3073	3056	3038
55°	3008	2989	2983
60°	2938	2921	2910
65°	2863	2830	2816
70°	2749	2740	2749
75°	2652	2620	2642
80°	2624	2493	2478
85°	2328	2263	2294



TEST NUMBER: P476150

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.3
10°-20°	336.5	9.4
20°-30°	506.6	14.2
30°-40°	608.1	17.1
40°-50°	629.1	17.7
50°-60°	570.1	16.0
60°-70°	441.9	12.4
70°-80°	268.3	7.5
80°-90°	83.1	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°	961.1	27.0
0°-40°	1569.1	44.1
0°-60°	2768.4	77.7
0°-90°	3561.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3561.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1240	1240	1238	1242	1242	118
15°	1192	1192	1189	1194	1193	337
25°	1102	1100	1096	1100	1099	508
35°	974	974	970	971	974	610
45°	819	818	814	814	814	632
55°	641	640	637	636	636	573
65°	450	450	444	446	442	445
75°	255	254	252	252	254	271
85°	75	74	73	73	74	86
90°	0	0	0	0	0	



TEST NUMBER: P476150

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.7	1246.7	1246.7	1246.7	1246.7
2.5°	1247.7	1242.5	1243.6	1245.6	1245.6
5°	1240.4	1240.4	1238.3	1241.5	1242.5
7.5°	1240.4	1235.2	1232.0	1235.2	1237.3
10°	1223.7	1221.6	1223.7	1222.6	1225.8
12.5°	1209.0	1206.9	1206.9	1210.1	1210.1
15°	1192.3	1192.3	1189.1	1194.4	1193.3
17.5°	1175.5	1175.5	1173.4	1173.4	1175.5
20°	1155.6	1150.4	1152.5	1151.4	1150.4
22.5°	1128.4	1125.3	1123.2	1126.3	1127.4
25°	1102.2	1100.1	1096.0	1100.1	1099.1
27.5°	1074.0	1071.9	1070.8	1068.7	1070.8
30°	1042.6	1040.5	1039.4	1037.3	1037.3
32.5°	1011.2	1007.0	1001.8	1007.0	1005.9
35°	973.8	973.8	969.6	970.6	973.8
37.5°	940.3	938.2	936.1	932.9	934.0
40°	902.6	899.4	898.4	896.3	892.1
42.5°	858.6	858.6	854.4	855.5	854.4
45°	818.8	817.8	813.6	813.6	813.6
47.5°	777.0	775.9	772.8	770.7	772.8
50°	734.0	729.9	729.9	726.7	725.7
52.5°	689.3	686.2	682.0	683.0	680.9
55°	641.1	640.1	637.0	635.9	635.9
57.5°	593.0	594.0	591.9	587.8	588.8
60°	545.9	544.8	542.7	540.7	540.7
62.5°	497.7	497.7	493.5	493.5	489.4
65°	449.6	449.6	444.4	446.4	442.3
67.5°	401.7	400.6	397.5	396.5	397.5
70°	349.4	350.4	348.3	348.3	349.4
72.5°	302.3	301.2	300.2	300.2	302.3
75°	255.1	254.1	252.0	252.0	254.1
77.5°	212.2	207.0	206.0	208.0	204.9
80°	169.3	162.0	160.9	159.9	159.9
82.5°	119.3	116.2	117.2	116.2	118.3
85°	75.4	74.3	73.3	73.3	74.3
87.5°	35.6	33.5	33.5	32.4	32.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)