

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: P476149

Luminaire Tested: **22GR-LD5-36-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476149
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-36-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: 3190.0 lumens
Efficiency: N/A
Efficacy: 111.9 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

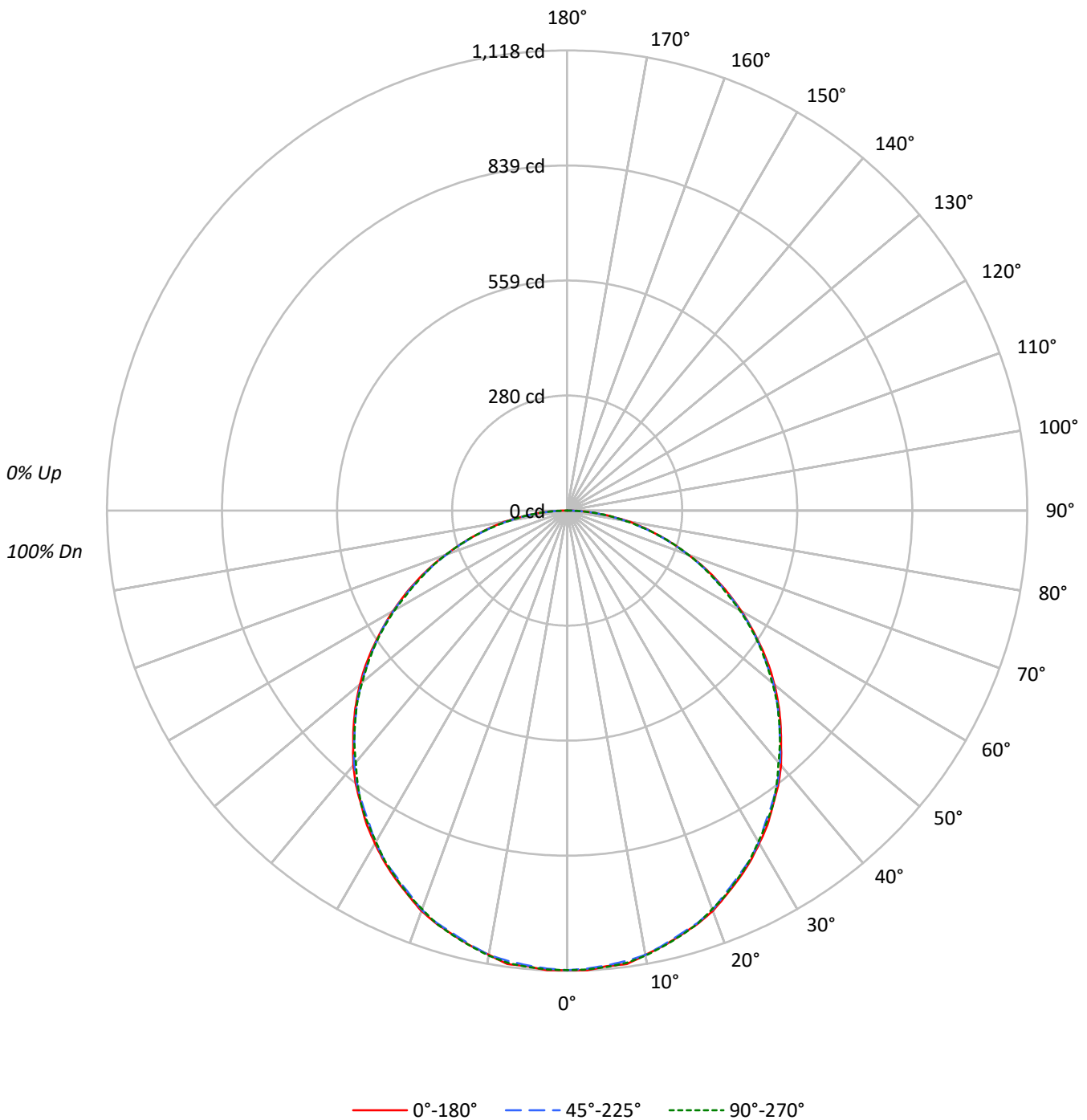
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3005	3005	3005
5°	3001	2996	3006
10°	2995	2995	3000
15°	2975	2967	2978
20°	2964	2956	2951
25°	2931	2915	2923
30°	2902	2893	2887
35°	2865	2853	2865
40°	2840	2827	2807
45°	2791	2773	2773
50°	2753	2737	2721
55°	2694	2677	2672
60°	2631	2616	2606
65°	2564	2534	2522
70°	2462	2455	2462
75°	2376	2347	2366
80°	2349	2233	2219
85°	2084	2025	2056



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.3
10°-20°	301.4	9.4
20°-30°	453.8	14.2
30°-40°	544.6	17.1
40°-50°	563.5	17.7
50°-60°	510.7	16.0
60°-70°	395.8	12.4
70°-80°	240.3	7.5
80°-90°	74.4	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°	860.8	27.0
0°-40°	1405.4	44.1
0°-60°	2479.6	77.7
0°-90°	3190.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3190.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1111	1111	1109	1112	1113	106
15°	1068	1068	1065	1070	1069	302
25°	987	985	982	985	984	455
35°	872	872	868	869	872	547
45°	733	732	729	729	729	566
55°	574	573	570	570	570	514
65°	403	403	398	400	396	398
75°	228	228	226	226	228	243
85°	68	67	66	66	67	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.6	1116.6	1116.6	1116.6	1116.6
2.5°	1117.6	1112.9	1113.8	1115.7	1115.7
5°	1111.0	1111.0	1109.1	1111.9	1112.9
7.5°	1111.0	1106.3	1103.5	1106.3	1108.2
10°	1096.0	1094.1	1096.0	1095.1	1097.9
12.5°	1082.9	1081.0	1081.0	1083.8	1083.8
15°	1067.9	1067.9	1065.1	1069.8	1068.8
17.5°	1052.9	1052.9	1051.0	1051.0	1052.9
20°	1035.1	1030.4	1032.2	1031.3	1030.4
22.5°	1010.7	1007.9	1006.0	1008.8	1009.7
25°	987.2	985.4	981.6	985.4	984.4
27.5°	961.9	960.1	959.1	957.2	959.1
30°	933.8	931.9	931.0	929.1	929.1
32.5°	905.7	901.9	897.2	901.9	901.0
35°	872.2	872.2	868.4	869.3	872.2
37.5°	842.2	840.3	838.4	835.6	836.5
40°	808.4	805.6	804.7	802.8	799.0
42.5°	769.0	769.0	765.3	766.2	765.3
45°	733.4	732.5	728.7	728.7	728.7
47.5°	695.9	695.0	692.1	690.3	692.1
50°	657.5	653.7	653.7	650.9	650.0
52.5°	617.4	614.6	610.8	611.8	609.9
55°	574.3	573.3	570.5	569.6	569.6
57.5°	531.1	532.1	530.2	526.4	527.4
60°	488.9	488.0	486.1	484.2	484.2
62.5°	445.8	445.8	442.1	442.1	438.3
65°	402.7	402.7	398.0	399.9	396.1
67.5°	359.8	358.8	356.0	355.1	356.0
70°	312.9	313.8	312.0	312.0	312.9
72.5°	270.7	269.8	268.8	268.8	270.7
75°	228.5	227.6	225.7	225.7	227.6
77.5°	190.1	185.4	184.5	186.3	183.5
80°	151.6	145.1	144.1	143.2	143.2
82.5°	106.9	104.1	105.0	104.1	105.9
85°	67.5	66.6	65.6	65.6	66.6
87.5°	31.9	30.0	30.0	29.1	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)