

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: P476164

Luminaire Tested: **22GR-LD5-50-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476164
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-50-FGW080-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4386.1 lumens
Efficiency: N/A
Efficacy: 118.9 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

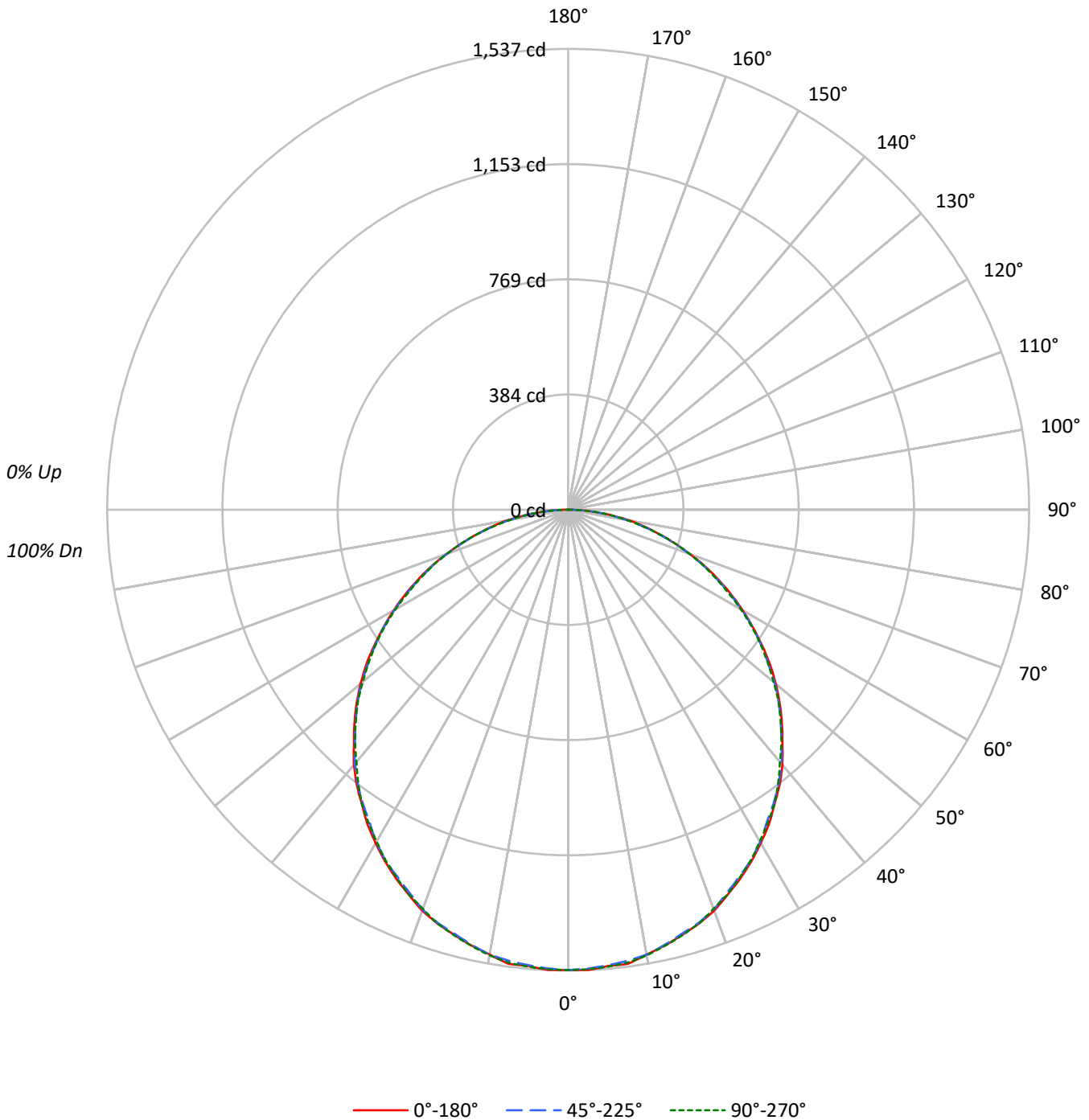
Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4131	4131	4131
5°	4126	4119	4133
10°	4118	4118	4125
15°	4091	4080	4094
20°	4076	4064	4057
25°	4030	4007	4019
30°	3989	3978	3970
35°	3939	3922	3939
40°	3905	3887	3859
45°	3838	3813	3813
50°	3785	3763	3741
55°	3704	3680	3674
60°	3618	3597	3583
65°	3526	3484	3468
70°	3385	3375	3385
75°	3267	3227	3253
80°	3231	3071	3051
85°	2865	2785	2825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	3.3
10°-20°	414.4	9.4
20°-30°	623.9	14.2
30°-40°	748.8	17.1
40°-50°	774.8	17.7
50°-60°	702.1	16.0
60°-70°	544.2	12.4
70°-80°	330.3	7.5
80°-90°	102.3	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°	1183.6	27.0
0°-40°	1932.4	44.1
0°-60°	3409.3	77.7
0°-90°	4386.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4386.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1535	1535	1535	1535	1535	
5°	1528	1528	1525	1529	1530	146
15°	1468	1468	1464	1471	1470	415
25°	1357	1355	1350	1355	1354	626
35°	1199	1199	1194	1195	1199	752
45°	1008	1007	1002	1002	1002	778
55°	790	788	784	783	783	706
65°	554	554	547	550	545	548
75°	314	313	310	310	313	334
85°	93	92	90	90	92	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1535.3	1535.3	1535.3	1535.3	1535.3
2.5°	1536.6	1530.2	1531.4	1534.0	1534.0
5°	1527.6	1527.6	1525.0	1528.9	1530.2
7.5°	1527.6	1521.1	1517.3	1521.1	1523.7
10°	1507.0	1504.4	1507.0	1505.7	1509.5
12.5°	1488.9	1486.3	1486.3	1490.2	1490.2
15°	1468.3	1468.3	1464.4	1470.9	1469.6
17.5°	1447.7	1447.7	1445.1	1445.1	1447.7
20°	1423.2	1416.7	1419.3	1418.0	1416.7
22.5°	1389.6	1385.8	1383.2	1387.1	1388.4
25°	1357.4	1354.8	1349.7	1354.8	1353.6
27.5°	1322.6	1320.0	1318.7	1316.2	1318.7
30°	1283.9	1281.4	1280.1	1277.5	1277.5
32.5°	1245.3	1240.1	1233.7	1240.1	1238.8
35°	1199.2	1199.2	1194.0	1195.3	1199.2
37.5°	1157.9	1155.4	1152.8	1148.9	1150.2
40°	1111.5	1107.7	1106.4	1103.8	1098.6
42.5°	1057.4	1057.4	1052.2	1053.5	1052.2
45°	1008.4	1007.1	1002.0	1002.0	1002.0
47.5°	956.8	955.5	951.7	949.1	951.7
50°	904.0	898.8	898.8	895.0	893.7
52.5°	848.9	845.0	839.8	841.1	838.6
55°	789.6	788.3	784.4	783.1	783.1
57.5°	730.3	731.6	729.0	723.8	725.1
60°	672.3	671.0	668.4	665.8	665.8
62.5°	613.0	613.0	607.8	607.8	602.7
65°	553.7	553.7	547.2	549.8	544.6
67.5°	494.7	493.4	489.5	488.2	489.5
70°	430.2	431.5	428.9	428.9	430.2
72.5°	372.2	370.9	369.6	369.6	372.2
75°	314.2	312.9	310.4	310.4	312.9
77.5°	261.4	254.9	253.6	256.2	252.3
80°	208.5	199.5	198.2	196.9	196.9
82.5°	147.0	143.1	144.4	143.1	145.7
85°	92.8	91.5	90.2	90.2	91.5
87.5°	43.8	41.3	41.3	40.0	40.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)