

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: P476153

Luminaire Tested: **22GR-LD5-60-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476153
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-60-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: 5171.8 lumens
Efficiency: N/A
Efficacy: 116.5 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

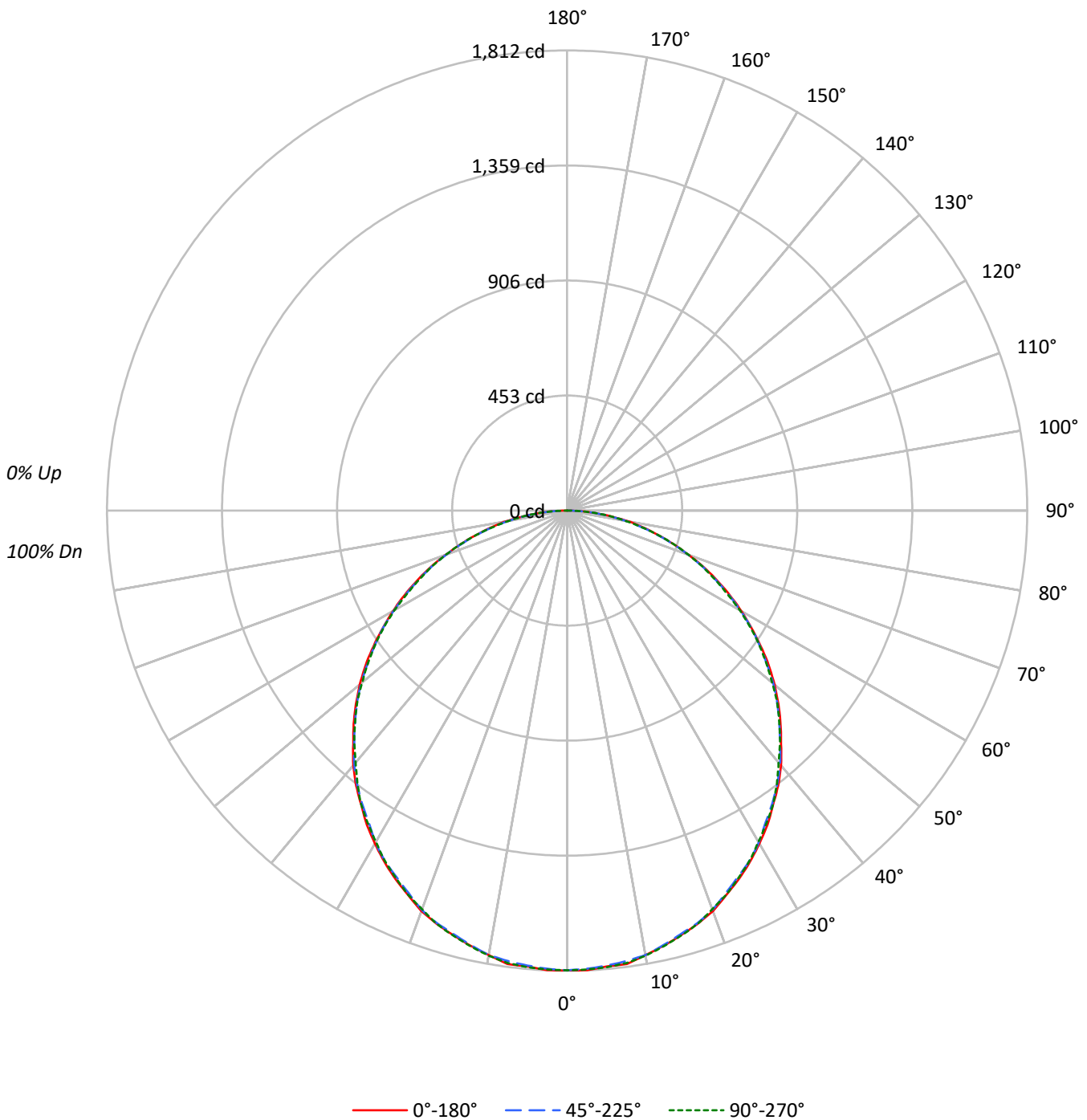
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4871	4871	4871
5°	4866	4857	4874
10°	4855	4855	4864
15°	4823	4810	4827
20°	4806	4792	4784
25°	4752	4725	4739
30°	4704	4690	4680
35°	4645	4625	4645
40°	4604	4582	4551
45°	4525	4496	4496
50°	4462	4437	4411
55°	4368	4339	4332
60°	4266	4242	4225
65°	4157	4108	4089
70°	3991	3980	3991
75°	3852	3804	3837
80°	3811	3622	3598
85°	3378	3285	3331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	3.3
10°-20°	488.6	9.4
20°-30°	735.7	14.2
30°-40°	882.9	17.1
40°-50°	913.5	17.7
50°-60°	827.9	16.0
60°-70°	641.7	12.4
70°-80°	389.5	7.5
80°-90°	120.6	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°	1395.6	27.0
0°-40°	2278.5	44.1
0°-60°	4020.0	77.7
0°-90°	5171.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5171.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1810	1810	1810	1810	1810	
5°	1801	1801	1798	1803	1804	172
15°	1731	1731	1727	1734	1733	489
25°	1601	1598	1591	1598	1596	738
35°	1414	1414	1408	1409	1414	886
45°	1189	1188	1181	1181	1181	918
55°	931	930	925	923	923	833
65°	653	653	645	648	642	646
75°	370	369	366	366	369	394
85°	109	108	106	106	108	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1810.3	1810.3	1810.3	1810.3	1810.3
2.5°	1811.8	1804.2	1805.8	1808.8	1808.8
5°	1801.2	1801.2	1798.2	1802.7	1804.2
7.5°	1801.2	1793.6	1789.0	1793.6	1796.6
10°	1776.9	1773.8	1776.9	1775.4	1779.9
12.5°	1755.6	1752.6	1752.6	1757.1	1757.1
15°	1731.3	1731.3	1726.7	1734.3	1732.8
17.5°	1707.0	1707.0	1703.9	1703.9	1707.0
20°	1678.1	1670.5	1673.5	1672.0	1670.5
22.5°	1638.6	1634.0	1631.0	1635.5	1637.0
25°	1600.6	1597.5	1591.4	1597.5	1596.0
27.5°	1559.5	1556.5	1555.0	1551.9	1555.0
30°	1513.9	1510.9	1509.4	1506.3	1506.3
32.5°	1468.3	1462.2	1454.6	1462.2	1460.7
35°	1414.0	1414.0	1407.9	1409.4	1414.0
37.5°	1365.3	1362.3	1359.3	1354.7	1356.2
40°	1310.6	1306.1	1304.5	1301.5	1295.4
42.5°	1246.8	1246.8	1240.7	1242.2	1240.7
45°	1189.0	1187.5	1181.4	1181.4	1181.4
47.5°	1128.2	1126.7	1122.1	1119.1	1122.1
50°	1065.9	1059.8	1059.8	1055.3	1053.7
52.5°	1000.9	996.4	990.3	991.8	988.8
55°	931.0	929.5	924.9	923.4	923.4
57.5°	861.1	862.6	859.6	853.5	855.0
60°	792.7	791.2	788.1	785.1	785.1
62.5°	722.8	722.8	716.7	716.7	710.6
65°	652.8	652.8	645.2	648.3	642.2
67.5°	583.3	581.8	577.2	575.7	577.2
70°	507.3	508.8	505.8	505.8	507.3
72.5°	438.9	437.4	435.9	435.9	438.9
75°	370.5	369.0	365.9	365.9	369.0
77.5°	308.2	300.6	299.1	302.1	297.5
80°	245.9	235.2	233.7	232.2	232.2
82.5°	173.3	168.7	170.2	168.7	171.8
85°	109.4	107.9	106.4	106.4	107.9
87.5°	51.7	48.6	48.6	47.1	47.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)