

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: P476154

Luminaire Tested: **22GR-LD5-70-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476154
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-70-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: 6113.3 lumens
Efficiency: N/A
Efficacy: 116.9 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

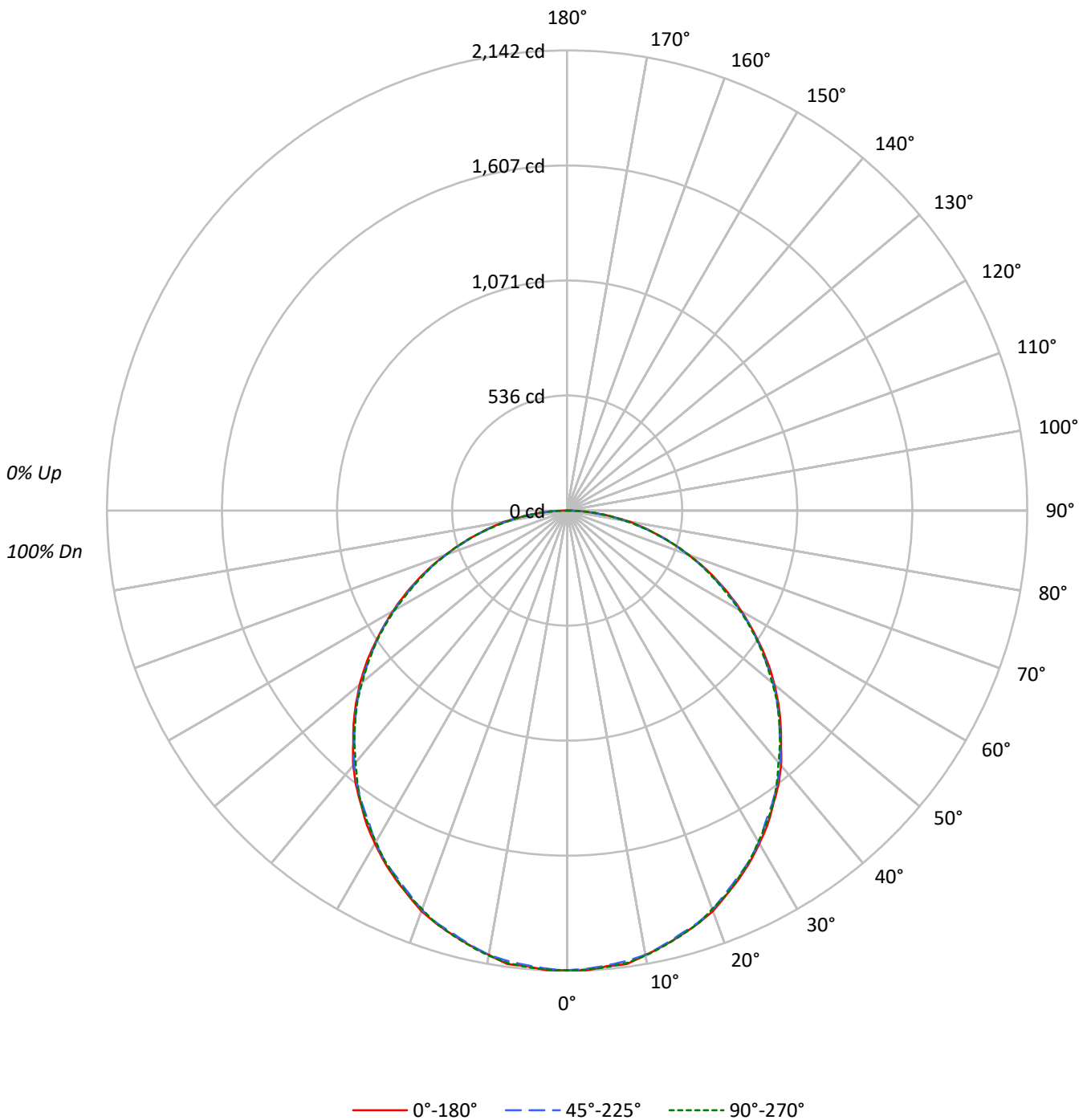
Input Watts (W): 52.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5758	5758	5758
5°	5751	5742	5761
10°	5739	5739	5749
15°	5701	5686	5706
20°	5680	5665	5655
25°	5617	5585	5601
30°	5560	5544	5533
35°	5491	5467	5491
40°	5442	5417	5379
45°	5349	5315	5315
50°	5274	5245	5215
55°	5163	5129	5121
60°	5043	5014	4994
65°	4914	4856	4833
70°	4718	4704	4718
75°	4553	4498	4534
80°	4503	4280	4252
85°	3995	3884	3940



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	3.3
10°-20°	577.6	9.4
20°-30°	869.6	14.2
30°-40°	1043.7	17.1
40°-50°	1079.9	17.7
50°-60°	978.6	16.0
60°-70°	758.5	12.4
70°-80°	460.4	7.5
80°-90°	142.6	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°	1649.6	27.0
0°-40°	2693.3	44.1
0°-60°	4751.7	77.7
0°-90°	6113.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6113.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2140	2140	2140	2140	2140	
5°	2129	2129	2126	2131	2133	203
15°	2046	2046	2041	2050	2048	578
25°	1892	1888	1881	1888	1886	872
35°	1671	1671	1664	1666	1671	1048
45°	1406	1404	1396	1396	1396	1085
55°	1100	1099	1093	1092	1092	984
65°	772	772	763	766	759	763
75°	438	436	433	433	436	466
85°	129	128	126	126	128	147
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2139.9	2139.9	2139.9	2139.9	2139.9
2.5°	2141.7	2132.7	2134.5	2138.1	2138.1
5°	2129.1	2129.1	2125.5	2130.9	2132.7
7.5°	2129.1	2120.1	2114.7	2120.1	2123.7
10°	2100.3	2096.8	2100.3	2098.6	2103.9
12.5°	2075.2	2071.6	2071.6	2077.0	2077.0
15°	2046.4	2046.4	2041.1	2050.0	2048.2
17.5°	2017.7	2017.7	2014.1	2014.1	2017.7
20°	1983.6	1974.6	1978.2	1976.4	1974.6
22.5°	1936.8	1931.5	1927.9	1933.3	1935.1
25°	1891.9	1888.3	1881.1	1888.3	1886.5
27.5°	1843.4	1839.8	1838.0	1834.4	1838.0
30°	1789.5	1785.9	1784.1	1780.5	1780.5
32.5°	1735.6	1728.4	1719.4	1728.4	1726.6
35°	1671.4	1671.4	1664.2	1666.0	1671.4
37.5°	1613.9	1610.3	1606.7	1601.3	1603.1
40°	1549.2	1543.8	1542.0	1538.4	1531.2
42.5°	1473.7	1473.7	1466.6	1468.4	1466.6
45°	1405.5	1403.7	1396.5	1396.5	1396.5
47.5°	1333.6	1331.8	1326.4	1322.8	1326.4
50°	1259.9	1252.8	1252.8	1247.4	1245.6
52.5°	1183.1	1177.7	1170.6	1172.3	1168.8
55°	1100.5	1098.7	1093.3	1091.5	1091.5
57.5°	1017.8	1019.6	1016.0	1008.8	1010.6
60°	937.0	935.2	931.6	928.0	928.0
62.5°	854.3	854.3	847.1	847.1	840.0
65°	771.7	771.7	762.7	766.3	759.1
67.5°	689.5	687.7	682.3	680.5	682.3
70°	599.7	601.4	597.9	597.9	599.7
72.5°	518.8	517.0	515.2	515.2	518.8
75°	437.9	436.1	432.6	432.6	436.1
77.5°	364.3	355.3	353.5	357.1	351.7
80°	290.6	278.0	276.2	274.4	274.4
82.5°	204.8	199.4	201.2	199.4	203.0
85°	129.4	127.6	125.8	125.8	127.6
87.5°	61.1	57.5	57.5	55.7	55.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)