

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: P475912

Luminaire Tested: **22GR-LD5-50-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475912
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-50-F1-UNV-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5153.5 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

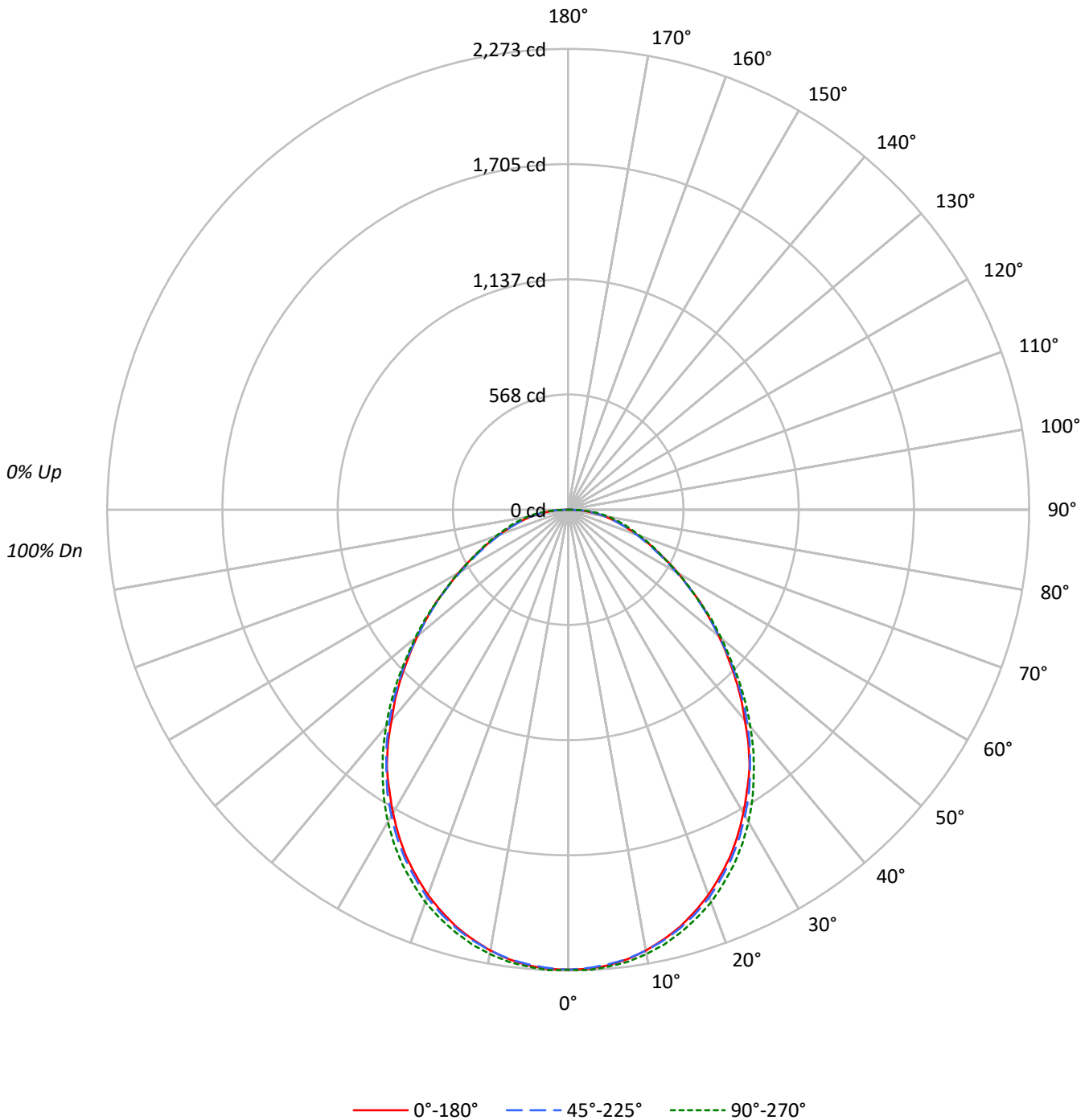
Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6106	6106	6106
5°	6094	6082	6111
10°	6034	6034	6081
15°	5934	5952	6006
20°	5788	5825	5900
25°	5608	5646	5737
30°	5369	5416	5524
35°	5119	5133	5240
40°	4756	4825	4909
45°	4417	4458	4524
50°	4058	4058	4122
55°	3722	3681	3701
60°	3369	3310	3357
65°	3072	3003	3100
70°	2839	2821	2958
75°	2734	2712	2983
80°	2762	2762	3166
85°	2887	3020	3625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	4.2
10°-20°	602.3	11.7
20°-30°	875.7	17.0
30°-40°	980.2	19.0
40°-50°	904.7	17.6
50°-60°	706.0	13.7
60°-70°	477.9	9.3
70°-80°	285.4	5.5
80°-90°	107.2	2.1
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°	1692.0	32.8
0°-40°	2672.2	51.9
0°-60°	4282.9	83.1
0°-90°	5153.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5153.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2269	2269	2269	2269	2269	
5°	2256	2252	2252	2260	2262	214
15°	2130	2130	2136	2149	2156	599
25°	1889	1889	1902	1921	1932	867
35°	1558	1556	1563	1586	1595	969
45°	1161	1167	1171	1180	1189	895
55°	793	787	785	789	789	708
65°	482	478	472	480	487	480
75°	263	261	261	276	287	279
85°	94	91	98	113	117	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2268.9	2268.9	2268.9	2268.9	2268.9
2.5°	2266.8	2262.4	2262.4	2268.9	2273.3
5°	2255.9	2251.6	2251.6	2260.3	2262.4
7.5°	2236.3	2234.2	2234.2	2242.9	2249.4
10°	2208.1	2205.9	2208.1	2216.8	2225.5
12.5°	2171.1	2171.1	2175.5	2186.4	2195.1
15°	2129.9	2129.9	2136.4	2149.4	2155.9
17.5°	2077.7	2079.9	2088.6	2103.8	2110.3
20°	2021.2	2025.5	2034.2	2047.3	2060.3
22.5°	1956.0	1960.3	1969.0	1988.6	1997.3
25°	1888.6	1888.6	1901.7	1921.2	1932.1
27.5°	1810.4	1812.6	1825.6	1847.3	1858.2
30°	1727.8	1734.3	1743.0	1762.6	1777.8
32.5°	1640.9	1647.4	1658.2	1680.0	1690.8
35°	1558.3	1556.1	1562.6	1586.5	1595.2
37.5°	1460.5	1462.6	1471.3	1488.7	1499.6
40°	1354.0	1364.8	1373.5	1386.6	1397.4
42.5°	1260.5	1267.0	1273.6	1286.6	1295.3
45°	1160.6	1167.1	1171.4	1180.1	1188.8
47.5°	1062.8	1064.9	1071.4	1075.8	1082.3
50°	969.3	971.5	969.3	975.8	984.5
52.5°	878.0	875.8	875.8	878.0	891.1
55°	793.3	786.7	784.6	788.9	788.9
57.5°	699.8	697.6	697.6	695.5	706.3
60°	625.9	619.4	615.1	619.4	623.7
62.5°	549.9	543.3	539.0	547.7	547.7
65°	482.5	478.1	471.6	480.3	486.8
67.5°	417.3	412.9	410.8	421.6	430.3
70°	360.8	358.6	358.6	369.5	376.0
72.5°	308.6	306.4	306.4	321.7	328.2
75°	263.0	260.8	260.8	276.0	286.9
77.5°	217.3	215.2	221.7	234.7	245.6
80°	178.2	176.0	178.2	195.6	204.3
82.5°	134.7	134.7	139.1	156.5	165.2
85°	93.5	91.3	97.8	113.0	117.4
87.5°	47.8	50.0	52.2	60.9	60.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)