

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P688313

Luminaire Tested: FLR-HA-24-L3C3 (MED)-50-CP125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688313
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-24-L3C3 (MED)-50-CP125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 5000K Luminaire at Medium Lumen setting for High Abuse
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

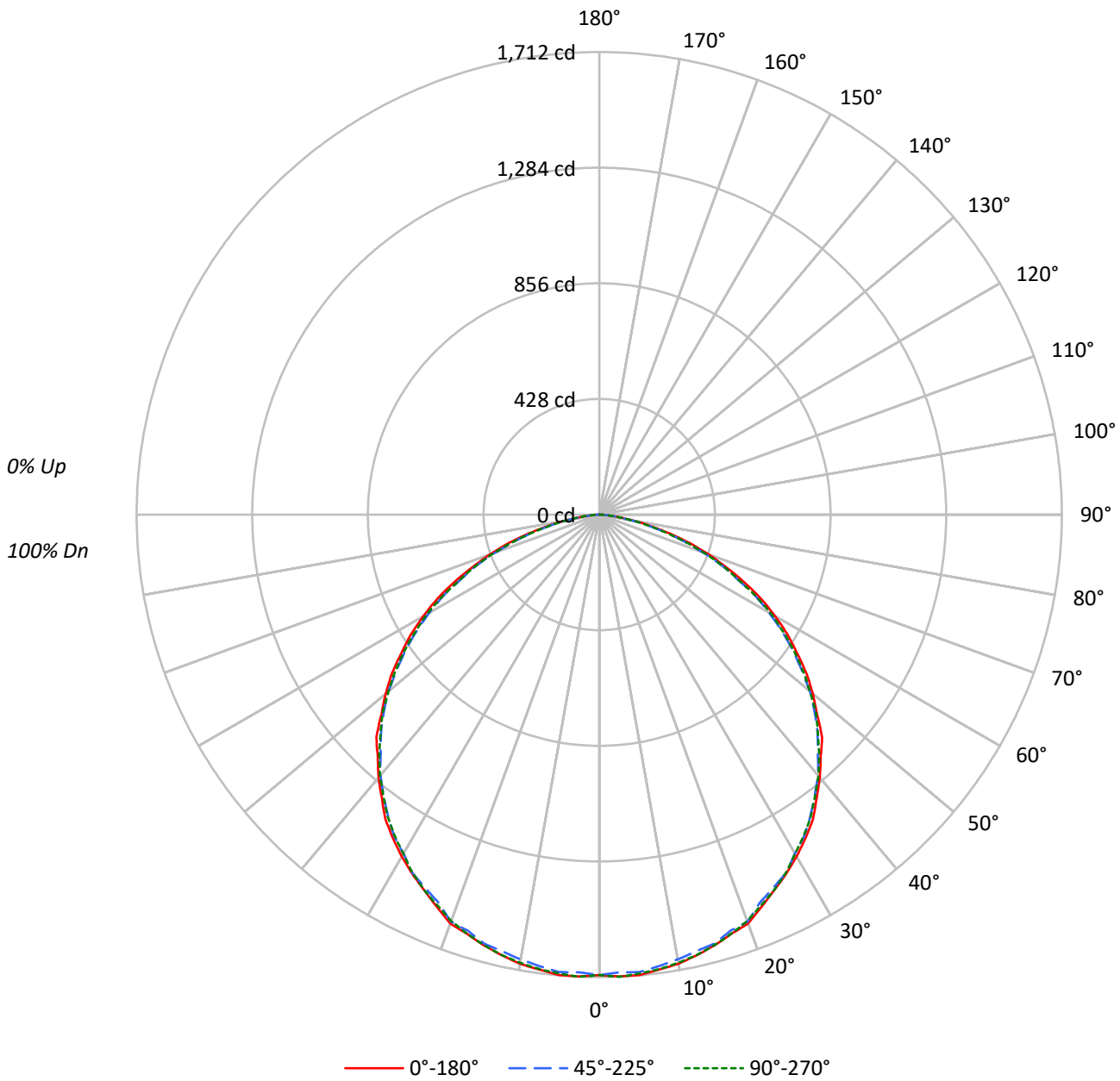
Lumens per Lamp: N/A
Luminaire Lumens: 4728.1 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.7
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: 24 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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2293	2293	2293
5°	2310	2296	2303
10°	2306	2284	2301
15°	2299	2290	2298
20°	2307	2296	2292
25°	2277	2262	2276
30°	2270	2250	2252
35°	2264	2237	2242
40°	2230	2213	2216
45°	2219	2173	2177
50°	2160	2130	2130
55°	2096	2050	2062
60°	2023	1952	1979
65°	1884	1787	1804
70°	1688	1593	1618
75°	1391	1307	1302
80°	974	918	918
85°	526	471	471

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2219 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	3.4
10°-20°	463.8	9.8
20°-30°	705.0	14.9
30°-40°	852.7	18.0
40°-50°	882.6	18.7
50°-60°	784.2	16.6
60°-70°	563.4	11.9
70°-80°	269.4	5.7
80°-90°	45.4	1.0
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°	1330.4	28.1
0°-40°	2183.1	46.2
0°-60°	3849.9	81.4
0°-90°	4728.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4728.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1704	1704	1704	1704	1704	
5°	1711	1699	1700	1702	1705	162
15°	1650	1640	1644	1640	1650	466
25°	1534	1526	1524	1530	1533	708
35°	1378	1369	1362	1360	1365	859
45°	1166	1149	1142	1139	1144	893
55°	893	884	874	868	879	800
65°	592	586	561	547	567	585
75°	268	263	251	230	250	287
85°	34	32	30	29	30	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704.3	1704.3	1704.3	1704.3	1704.3
2.5°	1711.5	1698.9	1696.2	1712.4	1712.4
5°	1710.6	1698.9	1699.8	1701.6	1705.2
7.5°	1698.9	1692.6	1686.3	1692.6	1697.1
10°	1688.1	1673.8	1672.0	1674.6	1684.5
12.5°	1670.2	1654.0	1655.8	1660.3	1669.3
15°	1650.4	1639.6	1644.1	1640.5	1649.5
17.5°	1627.1	1627.1	1615.4	1612.7	1626.2
20°	1610.9	1588.4	1603.7	1590.2	1601.0
22.5°	1570.5	1557.9	1554.3	1565.1	1565.1
25°	1533.7	1525.6	1523.8	1530.1	1532.8
27.5°	1498.7	1494.2	1496.0	1495.1	1495.1
30°	1460.9	1449.3	1448.4	1448.4	1449.3
32.5°	1420.5	1412.5	1411.6	1406.2	1408.9
35°	1378.3	1369.4	1362.2	1360.4	1364.9
37.5°	1321.8	1311.0	1310.1	1311.9	1311.9
40°	1269.7	1258.0	1259.8	1253.5	1261.6
42.5°	1213.1	1203.2	1196.9	1195.2	1205.0
45°	1166.4	1149.4	1142.2	1138.6	1144.0
47.5°	1092.8	1088.3	1081.1	1074.8	1087.4
50°	1031.7	1034.4	1017.4	1011.1	1017.4
52.5°	967.1	955.4	943.7	933.0	950.9
55°	893.4	884.5	873.7	868.3	879.1
57.5°	826.1	816.2	800.1	787.5	806.3
60°	751.6	742.6	725.5	712.1	735.4
62.5°	675.2	665.4	649.2	627.7	651.9
65°	591.7	585.5	561.2	546.8	566.6
67.5°	507.3	503.7	489.4	465.1	493.9
70°	429.2	422.0	405.0	383.4	411.3
72.5°	352.0	339.4	326.8	306.2	329.5
75°	267.6	263.1	251.4	229.9	250.5
77.5°	194.0	189.5	181.4	165.2	181.4
80°	125.7	124.8	118.5	106.9	118.5
82.5°	71.8	71.8	67.3	62.9	67.3
85°	34.1	32.3	30.5	28.7	30.5
87.5°	9.0	9.0	9.0	9.0	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)