

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: P688392

Luminaire Tested: FLR-HA-24-55-35-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-938-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-24-55-35-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

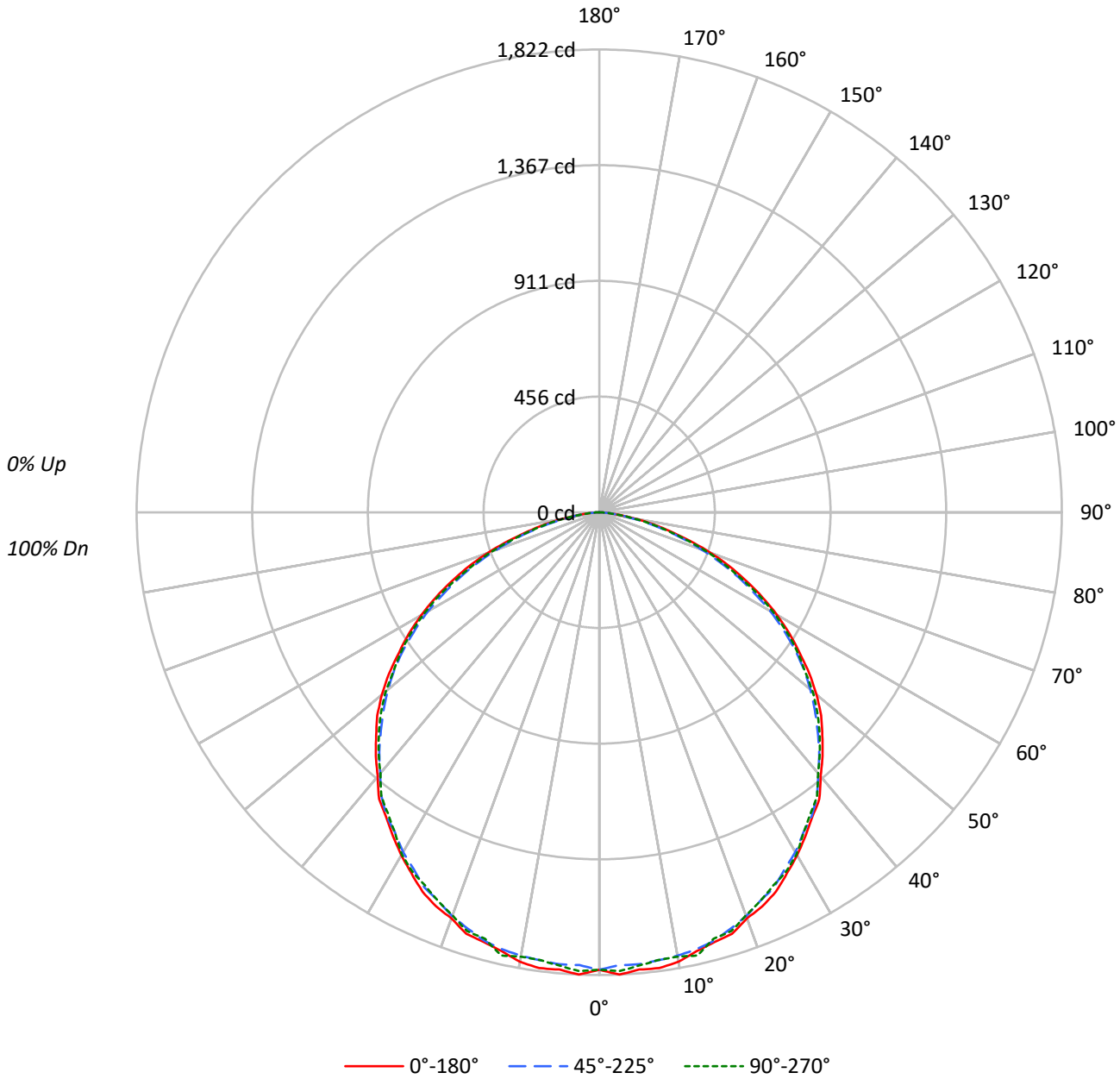
Lumens per Lamp: N/A
Luminaire Lumens: 5060.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	91	85	79	97	90	83	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2423	2423	2423
5°	2441	2413	2420
10°	2456	2422	2427
15°	2440	2433	2421
20°	2436	2423	2419
25°	2446	2419	2408
30°	2423	2400	2416
35°	2403	2397	2381
40°	2383	2358	2354
45°	2364	2314	2335
50°	2338	2272	2296
55°	2256	2205	2231
60°	2175	2092	2139
65°	2033	1920	1966
70°	1836	1686	1762
75°	1501	1374	1421
80°	1077	964	1007
85°	588	505	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2364 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	3.4
10°-20°	492.2	9.7
20°-30°	749.0	14.8
30°-40°	908.2	17.9
40°-50°	944.2	18.7
50°-60°	843.9	16.7
60°-70°	608.4	12.0
70°-80°	293.1	5.8
80°-90°	50.2	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°	1411.9	27.9
0°-40°	2320.1	45.9
0°-60°	4108.3	81.2
0°-90°	5060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1801	1801	1801	1801	1801	
5°	1807	1792	1786	1796	1792	173
15°	1752	1739	1746	1736	1738	496
25°	1648	1622	1629	1621	1622	757
35°	1463	1447	1460	1450	1450	917
45°	1242	1226	1216	1222	1227	959
55°	962	949	940	937	951	862
65°	638	623	603	608	618	632
75°	289	281	264	267	273	311
85°	38	35	33	34	34	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1801.0	1801.0	1801.0	1801.0	1801.0
2.5°	1821.9	1807.4	1784.7	1795.6	1808.3
5°	1807.4	1791.9	1786.5	1795.6	1791.9
7.5°	1810.1	1786.5	1779.2	1789.2	1778.3
10°	1797.4	1776.5	1772.9	1777.4	1776.5
12.5°	1770.1	1765.6	1762.9	1755.6	1787.4
15°	1752.0	1739.3	1746.5	1735.6	1738.3
17.5°	1740.2	1710.2	1719.3	1717.5	1729.3
20°	1701.1	1693.8	1692.0	1686.6	1689.3
22.5°	1679.3	1662.1	1656.6	1654.8	1656.6
25°	1647.5	1622.1	1629.4	1621.2	1622.1
27.5°	1602.1	1574.0	1583.0	1582.1	1594.8
30°	1559.4	1538.5	1544.9	1539.4	1554.9
32.5°	1511.3	1493.1	1495.8	1494.9	1496.8
35°	1463.2	1446.8	1459.5	1450.4	1449.5
37.5°	1424.1	1391.4	1408.7	1398.7	1409.6
40°	1356.9	1344.2	1342.4	1336.0	1340.5
42.5°	1301.5	1285.1	1282.4	1286.0	1286.0
45°	1242.5	1226.1	1216.1	1221.6	1227.0
47.5°	1185.2	1164.3	1151.6	1154.4	1165.3
50°	1117.1	1089.9	1085.3	1089.0	1097.1
52.5°	1043.6	1021.8	1015.4	1014.5	1018.1
55°	961.8	949.1	940.0	937.3	950.9
57.5°	888.2	869.2	858.3	862.8	875.5
60°	808.3	787.4	777.4	781.1	794.7
62.5°	724.8	703.9	688.4	695.7	711.1
65°	638.5	623.0	603.1	607.6	617.6
67.5°	554.9	537.7	516.8	519.5	530.4
70°	466.8	448.7	428.7	433.2	447.8
72.5°	374.2	362.4	344.2	346.0	358.7
75°	288.8	280.6	264.3	267.0	273.4
77.5°	214.3	203.4	190.7	193.5	201.6
80°	139.0	135.3	124.4	126.2	129.9
82.5°	79.0	79.0	74.5	72.7	77.2
85°	38.1	35.4	32.7	33.6	33.6
87.5°	9.1	10.0	9.1	8.2	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)