

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: P688304

Luminaire Tested: FLR-HA-24-55-50-CP125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688304
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-24-55-50-CP125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 5000K Luminaire for High Abuse
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

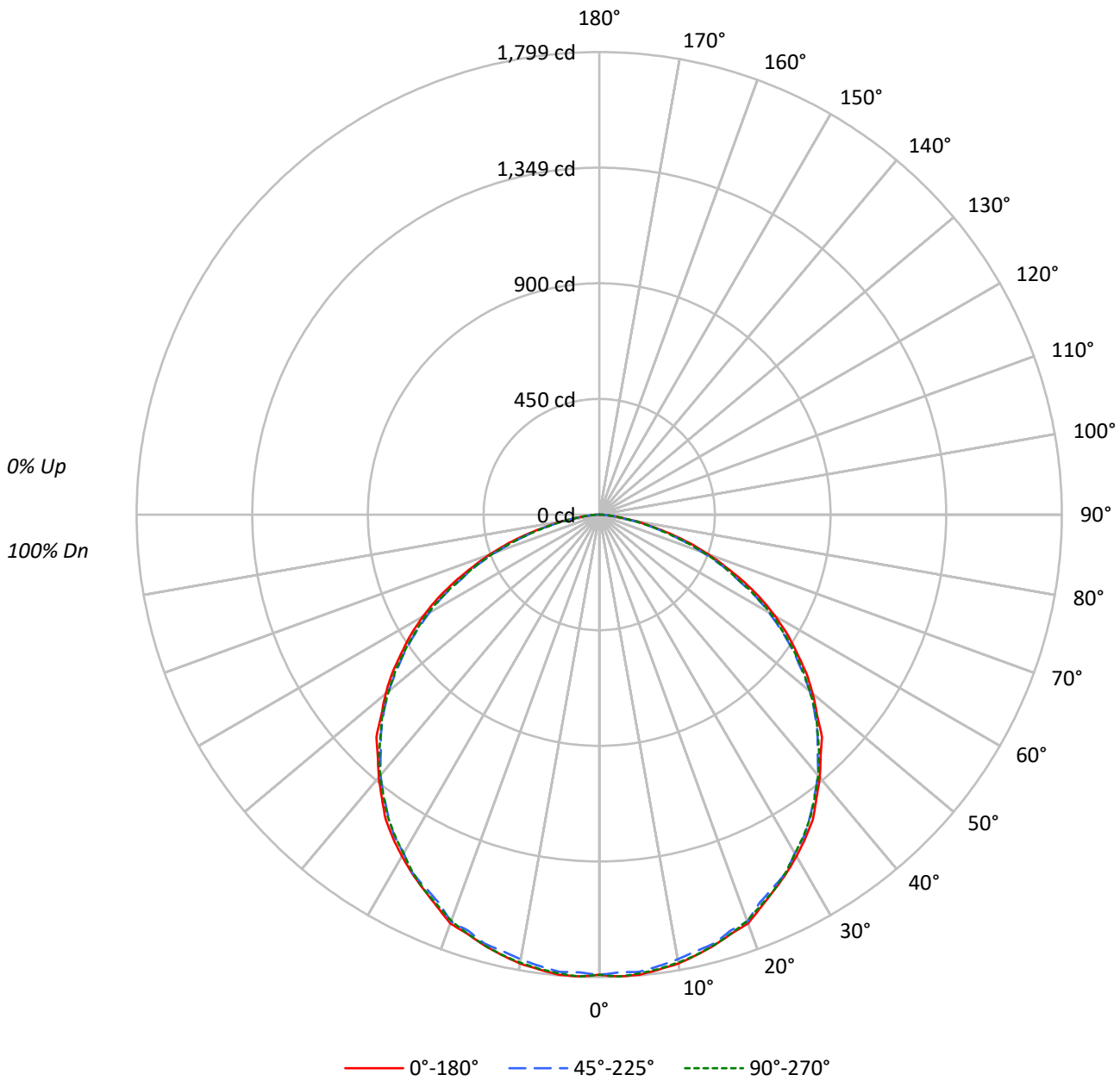
Lumens per Lamp: N/A
Luminaire Lumens: 4966.3 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10
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°	2409	2409	2409
5°	2427	2411	2419
10°	2423	2399	2417
15°	2415	2406	2413
20°	2423	2412	2408
25°	2392	2376	2390
30°	2384	2364	2365
35°	2378	2350	2355
40°	2343	2324	2328
45°	2331	2283	2286
50°	2268	2237	2237
55°	2202	2153	2166
60°	2124	2051	2079
65°	1979	1877	1895
70°	1773	1674	1699
75°	1461	1373	1368
80°	1023	965	965
85°	553	496	496

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2331 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.8	3.4
10°-20°	487.2	9.8
20°-30°	740.5	14.9
30°-40°	895.6	18.0
40°-50°	927.1	18.7
50°-60°	823.7	16.6
60°-70°	591.8	11.9
70°-80°	283.0	5.7
80°-90°	47.7	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°	1397.4	28.1
0°-40°	2293.0	46.2
0°-60°	4043.8	81.4
0°-90°	4966.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4966.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1797	1784	1785	1787	1791	171
15°	1734	1722	1727	1723	1733	490
25°	1611	1602	1601	1607	1610	744
35°	1448	1438	1431	1429	1434	902
45°	1225	1207	1200	1196	1202	938
55°	938	929	918	912	923	840
65°	622	615	590	574	595	614
75°	281	276	264	242	263	302
85°	36	34	32	30	32	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1790.1	1790.1	1790.1	1790.1	1790.1
2.5°	1797.7	1784.5	1781.7	1798.6	1798.6
5°	1796.8	1784.5	1785.4	1787.3	1791.1
7.5°	1784.5	1777.9	1771.3	1777.9	1782.6
10°	1773.2	1758.1	1756.2	1759.0	1769.4
12.5°	1754.3	1737.3	1739.2	1743.9	1753.4
15°	1733.6	1722.2	1727.0	1723.2	1732.6
17.5°	1709.0	1709.0	1696.8	1693.9	1708.1
20°	1692.1	1668.5	1684.5	1670.4	1681.7
22.5°	1649.6	1636.4	1632.6	1644.0	1644.0
25°	1610.9	1602.5	1600.6	1607.2	1610.0
27.5°	1574.2	1569.4	1571.3	1570.4	1570.4
30°	1534.5	1522.3	1521.3	1521.3	1522.3
32.5°	1492.1	1483.6	1482.7	1477.0	1479.8
35°	1447.8	1438.3	1430.8	1428.9	1433.6
37.5°	1388.4	1377.0	1376.1	1378.0	1378.0
40°	1333.7	1321.4	1323.3	1316.7	1325.2
42.5°	1274.2	1263.9	1257.3	1255.4	1265.7
45°	1225.2	1207.3	1199.7	1195.9	1201.6
47.5°	1147.8	1143.1	1135.6	1129.0	1142.2
50°	1083.7	1086.5	1068.6	1062.0	1068.6
52.5°	1015.8	1003.5	991.3	980.0	998.8
55°	938.5	929.0	917.7	912.1	923.4
57.5°	867.7	857.3	840.4	827.2	847.0
60°	789.4	780.0	762.1	747.9	772.5
62.5°	709.3	698.9	681.9	659.3	684.7
65°	621.6	615.0	589.5	574.4	595.1
67.5°	532.9	529.1	514.0	488.6	518.7
70°	450.8	443.3	425.4	402.7	432.0
72.5°	369.7	356.5	343.3	321.6	346.1
75°	281.1	276.4	264.1	241.5	263.1
77.5°	203.7	199.0	190.5	173.5	190.5
80°	132.0	131.1	124.5	112.2	124.5
82.5°	75.5	75.5	70.7	66.0	70.7
85°	35.8	34.0	32.1	30.2	32.1
87.5°	9.4	9.4	9.4	9.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)