

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: P688302

Luminaire Tested: FLR-HA-24-55-35-CP125

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688302  
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-24-55-35-CP125  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire for High Abuse  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

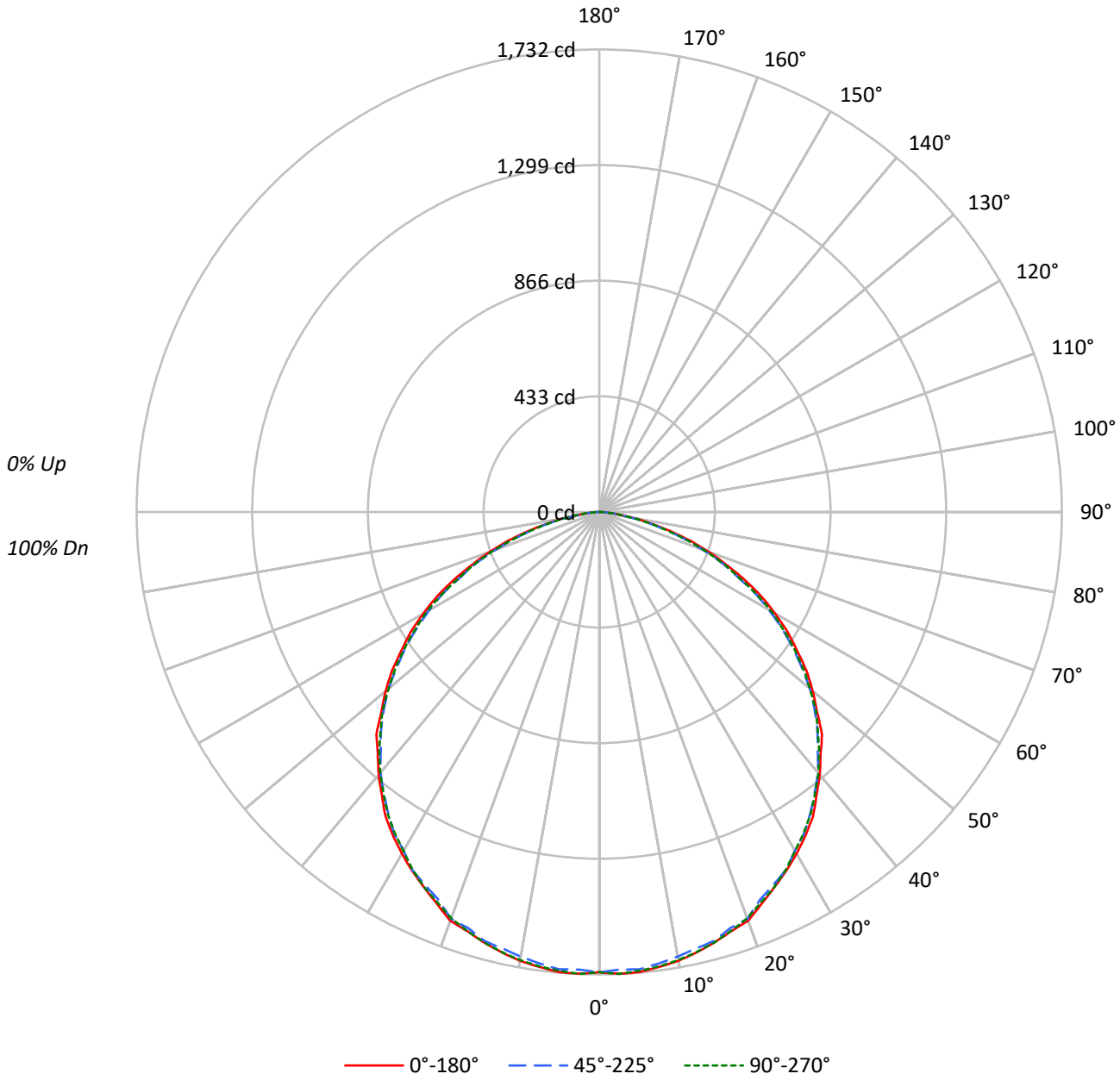
Lumens per Lamp: N/A  
Luminaire Lumens: 4782.1 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	2319	2319	2319
5°	2337	2322	2329
10°	2333	2310	2328
15°	2325	2316	2324
20°	2333	2322	2319
25°	2303	2288	2302
30°	2296	2276	2277
35°	2290	2263	2267
40°	2256	2238	2241
45°	2245	2198	2202
50°	2184	2154	2154
55°	2120	2073	2086
60°	2046	1975	2002
65°	1905	1807	1825
70°	1708	1611	1636
75°	1407	1322	1317
80°	985	929	929
85°	533	477	477

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2245 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.5	3.4
10°-20°	469.1	9.8
20°-30°	713.0	14.9
30°-40°	862.4	18.0
40°-50°	892.7	18.7
50°-60°	793.1	16.6
60°-70°	569.8	11.9
70°-80°	272.5	5.7
80°-90°	45.9	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°	1345.6	28.1
0°-40°	2208.0	46.2
0°-60°	3893.8	81.4
0°-90°	4782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4782.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1730	1718	1719	1721	1725	164
15°	1669	1658	1663	1659	1668	472
25°	1551	1543	1541	1548	1550	716
35°	1394	1385	1378	1376	1380	869
45°	1180	1162	1155	1152	1157	903
55°	904	895	884	878	889	809
65°	598	592	568	553	573	591
75°	271	266	254	232	253	291
85°	34	33	31	29	31	49
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1723.7	1723.7	1723.7	1723.7	1723.7
2.5°	1731.0	1718.3	1715.6	1731.9	1731.9
5°	1730.1	1718.3	1719.2	1721.0	1724.6
7.5°	1718.3	1711.9	1705.6	1711.9	1716.5
10°	1707.4	1692.9	1691.0	1693.8	1703.8
12.5°	1689.2	1672.9	1674.7	1679.2	1688.3
15°	1669.2	1658.3	1662.9	1659.3	1668.3
17.5°	1645.6	1645.6	1633.8	1631.1	1644.7
20°	1629.3	1606.6	1622.0	1608.4	1619.3
22.5°	1588.4	1575.7	1572.1	1583.0	1583.0
25°	1551.2	1543.0	1541.2	1547.5	1550.3
27.5°	1515.8	1511.2	1513.0	1512.1	1512.1
30°	1477.6	1465.8	1464.9	1464.9	1465.8
32.5°	1436.7	1428.6	1427.7	1422.2	1424.9
35°	1394.1	1385.0	1377.7	1375.9	1380.4
37.5°	1336.8	1326.0	1325.0	1326.9	1326.9
40°	1284.2	1272.4	1274.2	1267.8	1276.0
42.5°	1227.0	1217.0	1210.6	1208.8	1218.8
45°	1179.7	1162.5	1155.2	1151.6	1157.0
47.5°	1105.3	1100.7	1093.5	1087.1	1099.8
50°	1043.5	1046.2	1029.0	1022.6	1029.0
52.5°	978.1	966.3	954.5	943.6	961.8
55°	903.6	894.6	883.7	878.2	889.1
57.5°	835.5	825.5	809.2	796.5	815.6
60°	760.2	751.1	733.8	720.2	743.8
62.5°	683.0	673.0	656.6	634.8	659.3
65°	598.5	592.1	567.6	553.1	573.1
67.5°	513.1	509.5	495.0	470.4	499.5
70°	434.1	426.8	409.6	387.8	415.9
72.5°	356.0	343.3	330.6	309.7	333.3
75°	270.6	266.1	254.3	232.5	253.4
77.5°	196.2	191.6	183.5	167.1	183.5
80°	127.1	126.2	119.9	108.1	119.9
82.5°	72.7	72.7	68.1	63.6	68.1
85°	34.5	32.7	30.9	29.1	30.9
87.5°	9.1	9.1	9.1	9.1	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)