

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: P688312

Luminaire Tested: FLR-HA-24-L3C3 (MED)-40-CP125

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688312  
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)-40-CP125  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 4000K Luminaire at Medium Lumen setting for High Abuse  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

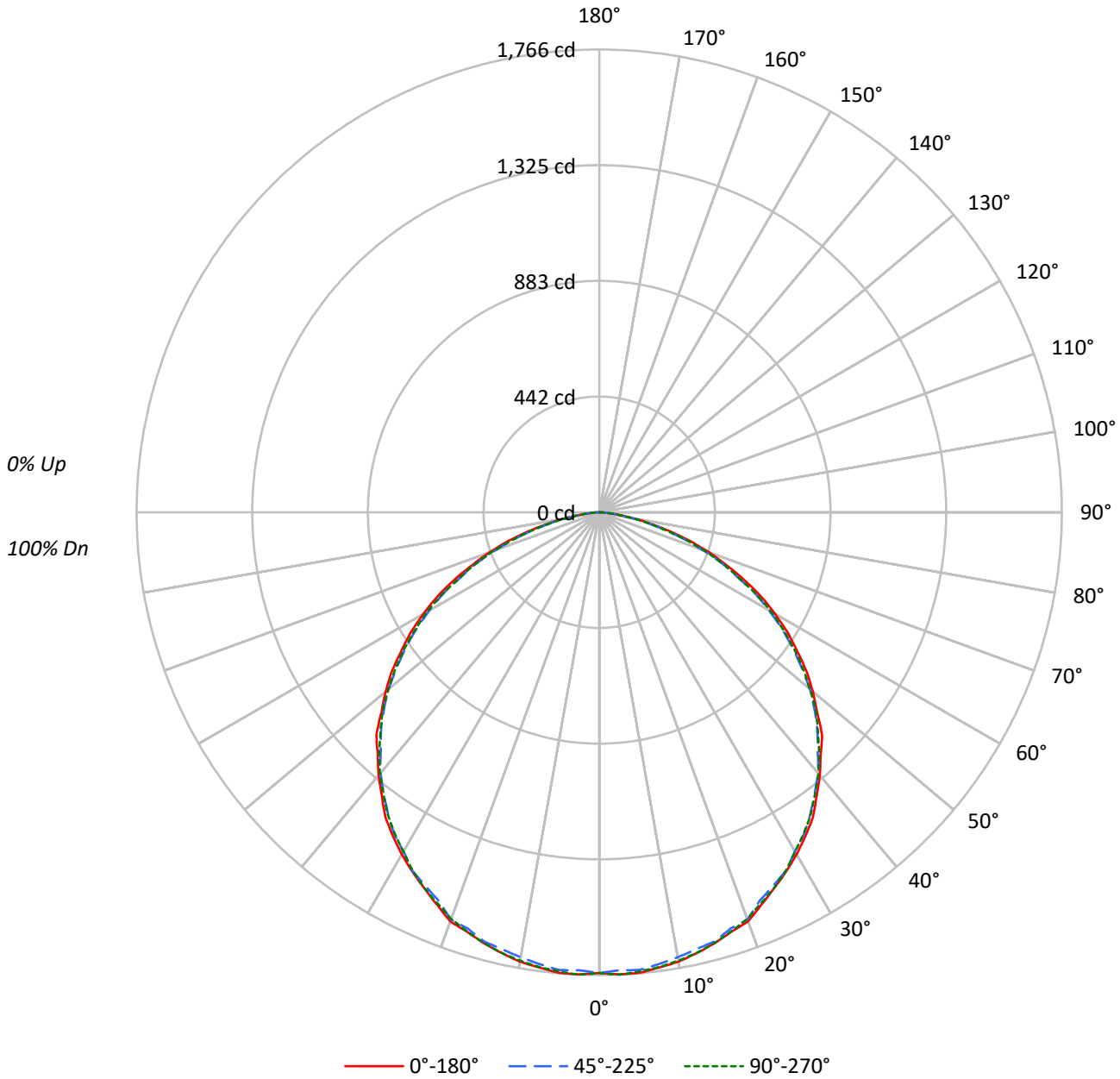
Lumens per Lamp: N/A  
Luminaire Lumens: 4877.0 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.5  
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°	2365	2365	2365
5°	2383	2368	2376
10°	2379	2356	2374
15°	2371	2362	2370
20°	2379	2369	2365
25°	2349	2333	2347
30°	2341	2321	2323
35°	2335	2308	2312
40°	2300	2282	2286
45°	2289	2242	2245
50°	2228	2197	2197
55°	2162	2114	2127
60°	2086	2014	2041
65°	1943	1843	1861
70°	1742	1643	1669
75°	1435	1348	1343
80°	1005	948	948
85°	543	486	486

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2289 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.7	3.4
10°-20°	478.4	9.8
20°-30°	727.2	14.9
30°-40°	879.5	18.0
40°-50°	910.4	18.7
50°-60°	808.9	16.6
60°-70°	581.2	11.9
70°-80°	277.9	5.7
80°-90°	46.8	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°	1372.3	28.1
0°-40°	2251.8	46.2
0°-60°	3971.1	81.4
0°-90°	4877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4877.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1764	1752	1753	1755	1759	168
15°	1702	1691	1696	1692	1702	481
25°	1582	1574	1572	1578	1581	731
35°	1422	1412	1405	1403	1408	886
45°	1203	1186	1178	1174	1180	921
55°	922	912	901	896	907	825
65°	610	604	579	564	584	603
75°	276	271	259	237	258	296
85°	35	33	32	30	32	50
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1757.9	1757.9	1757.9	1757.9	1757.9
2.5°	1765.4	1752.4	1749.6	1766.3	1766.3
5°	1764.4	1752.4	1753.3	1755.2	1758.9
7.5°	1752.4	1745.9	1739.4	1745.9	1750.5
10°	1741.3	1726.5	1724.6	1727.4	1737.6
12.5°	1722.8	1706.1	1707.9	1712.6	1721.8
15°	1702.4	1691.3	1695.9	1692.2	1701.5
17.5°	1678.3	1678.3	1666.3	1663.5	1677.4
20°	1661.6	1638.5	1654.2	1640.3	1651.4
22.5°	1619.9	1607.0	1603.3	1614.4	1614.4
25°	1582.0	1573.6	1571.8	1578.3	1581.0
27.5°	1545.8	1541.2	1543.1	1542.1	1542.1
30°	1506.9	1494.9	1494.0	1494.0	1494.9
32.5°	1465.3	1456.9	1456.0	1450.4	1453.2
35°	1421.7	1412.5	1405.1	1403.2	1407.8
37.5°	1363.4	1352.3	1351.3	1353.2	1353.2
40°	1309.7	1297.6	1299.5	1293.0	1301.3
42.5°	1251.3	1241.1	1234.6	1232.8	1243.0
45°	1203.1	1185.6	1178.1	1174.4	1180.0
47.5°	1127.2	1122.6	1115.2	1108.7	1121.6
50°	1064.2	1067.0	1049.4	1042.9	1049.4
52.5°	997.5	985.5	973.4	962.3	980.9
55°	921.6	912.3	901.2	895.6	906.8
57.5°	852.1	841.9	825.3	812.3	831.7
60°	775.2	766.0	748.4	734.5	758.6
62.5°	696.5	686.3	669.7	647.4	672.4
65°	610.4	603.9	578.9	564.1	584.4
67.5°	523.3	519.6	504.8	479.8	509.4
70°	442.7	435.3	417.7	395.5	424.2
72.5°	363.1	350.1	337.1	315.8	339.9
75°	276.0	271.4	259.3	237.1	258.4
77.5°	200.1	195.4	187.1	170.4	187.1
80°	129.7	128.7	122.3	110.2	122.3
82.5°	74.1	74.1	69.5	64.8	69.5
85°	35.2	33.3	31.5	29.6	31.5
87.5°	9.3	9.3	9.3	9.3	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)