

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: P688400

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-50-CA125

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688400  
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-L3C3 (LOW)-50-CA125  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 5000K Luminaire at Low Lumen setting for High Abuse  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

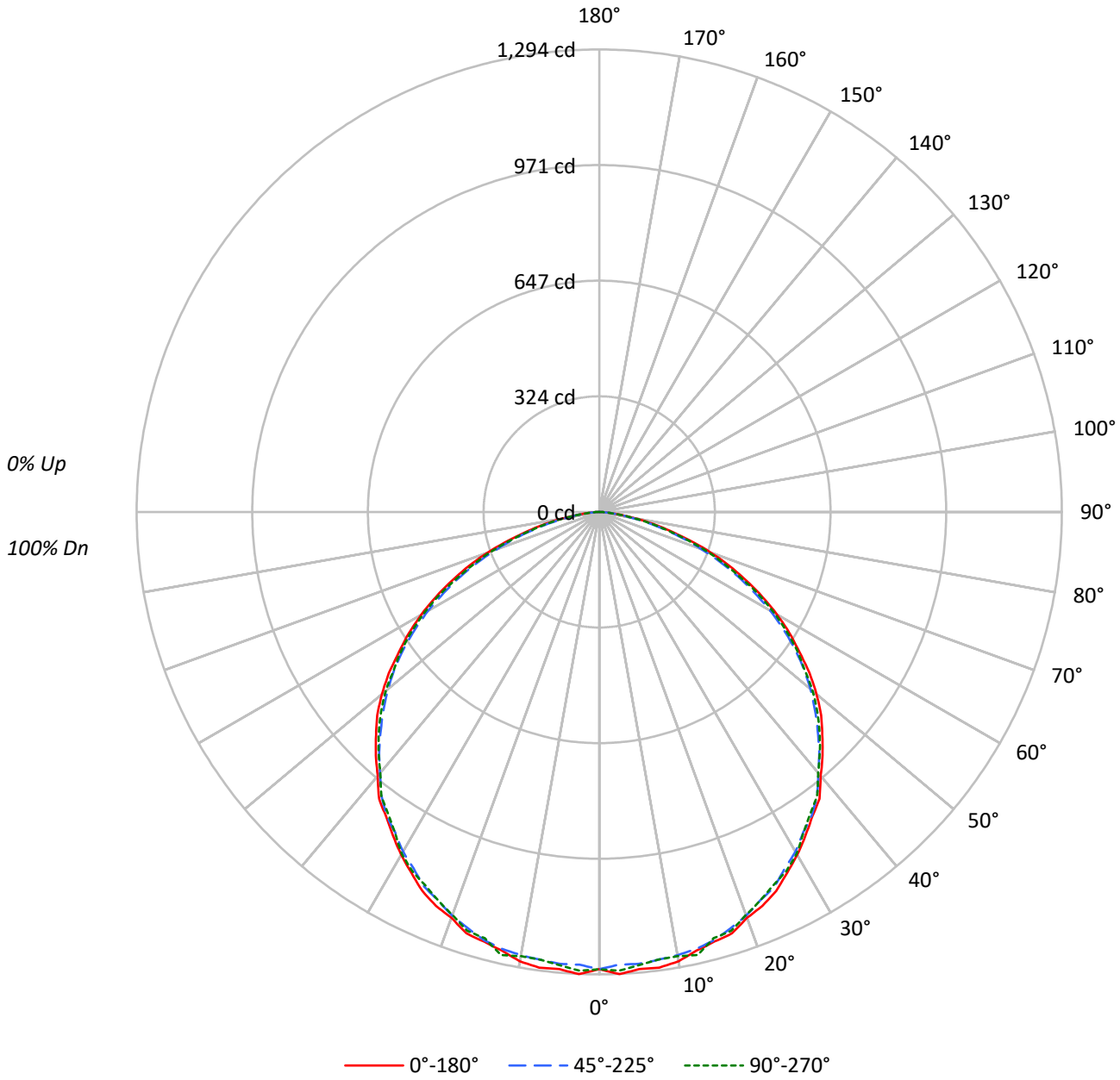
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3594.9 lumens  
Efficiency: N/A  
Efficacy: 129.3 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): 27.8  
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°	1722	1722	1722
5°	1734	1714	1719
10°	1745	1721	1724
15°	1734	1728	1720
20°	1730	1721	1718
25°	1738	1719	1711
30°	1721	1705	1716
35°	1707	1703	1691
40°	1693	1675	1673
45°	1680	1644	1659
50°	1661	1614	1632
55°	1603	1567	1585
60°	1545	1486	1519
65°	1444	1364	1397
70°	1305	1198	1251
75°	1067	976	1010
80°	765	685	715
85°	418	358	369

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1680 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.3	3.4
10°-20°	349.7	9.7
20°-30°	532.1	14.8
30°-40°	645.2	17.9
40°-50°	670.8	18.7
50°-60°	599.5	16.7
60°-70°	432.2	12.0
70°-80°	208.3	5.8
80°-90°	35.6	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°	1003.1	27.9
0°-40°	1648.3	45.9
0°-60°	2918.7	81.2
0°-90°	3594.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3594.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1284	1273	1269	1276	1273	123
15°	1245	1236	1241	1233	1235	352
25°	1170	1152	1158	1152	1152	538
35°	1040	1028	1037	1030	1030	652
45°	883	871	864	868	872	681
55°	683	674	668	666	676	613
65°	454	443	428	432	439	449
75°	205	199	188	190	194	221
85°	27	25	23	24	24	38
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1279.5	1279.5	1279.5	1279.5	1279.5
2.5°	1294.4	1284.0	1267.9	1275.7	1284.7
5°	1284.0	1273.1	1269.2	1275.7	1273.1
7.5°	1286.0	1269.2	1264.0	1271.1	1263.4
10°	1276.9	1262.1	1259.5	1262.8	1262.1
12.5°	1257.6	1254.4	1252.4	1247.3	1269.8
15°	1244.7	1235.7	1240.8	1233.1	1235.0
17.5°	1236.3	1215.0	1221.5	1220.2	1228.6
20°	1208.5	1203.4	1202.1	1198.2	1200.2
22.5°	1193.1	1180.8	1176.9	1175.6	1176.9
25°	1170.5	1152.4	1157.6	1151.8	1152.4
27.5°	1138.2	1118.2	1124.7	1124.0	1133.1
30°	1107.9	1093.1	1097.6	1093.7	1104.7
32.5°	1073.7	1060.8	1062.7	1062.1	1063.4
35°	1039.5	1027.9	1036.9	1030.5	1029.8
37.5°	1011.7	988.5	1000.8	993.7	1001.4
40°	964.0	955.0	953.7	949.2	952.4
42.5°	924.6	913.0	911.1	913.7	913.7
45°	882.7	871.1	864.0	867.9	871.7
47.5°	842.0	827.2	818.2	820.1	827.9
50°	793.7	774.3	771.1	773.7	779.5
52.5°	741.4	725.9	721.4	720.7	723.3
55°	683.3	674.3	667.8	665.9	675.6
57.5°	631.1	617.5	609.8	613.0	622.0
60°	574.3	559.4	552.3	554.9	564.6
62.5°	514.9	500.1	489.1	494.3	505.2
65°	453.6	442.6	428.4	431.7	438.8
67.5°	394.2	382.0	367.1	369.1	376.8
70°	331.7	318.8	304.6	307.8	318.1
72.5°	265.8	257.5	244.5	245.8	254.9
75°	205.2	199.4	187.8	189.7	194.2
77.5°	152.3	144.5	135.5	137.4	143.2
80°	98.7	96.1	88.4	89.7	92.3
82.5°	56.1	56.1	52.9	51.6	54.8
85°	27.1	25.2	23.2	23.9	23.9
87.5°	6.5	7.1	6.5	5.8	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)