

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: P688310

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-50-CP125

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688310  
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 (LOW)-50-CP125  
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: -

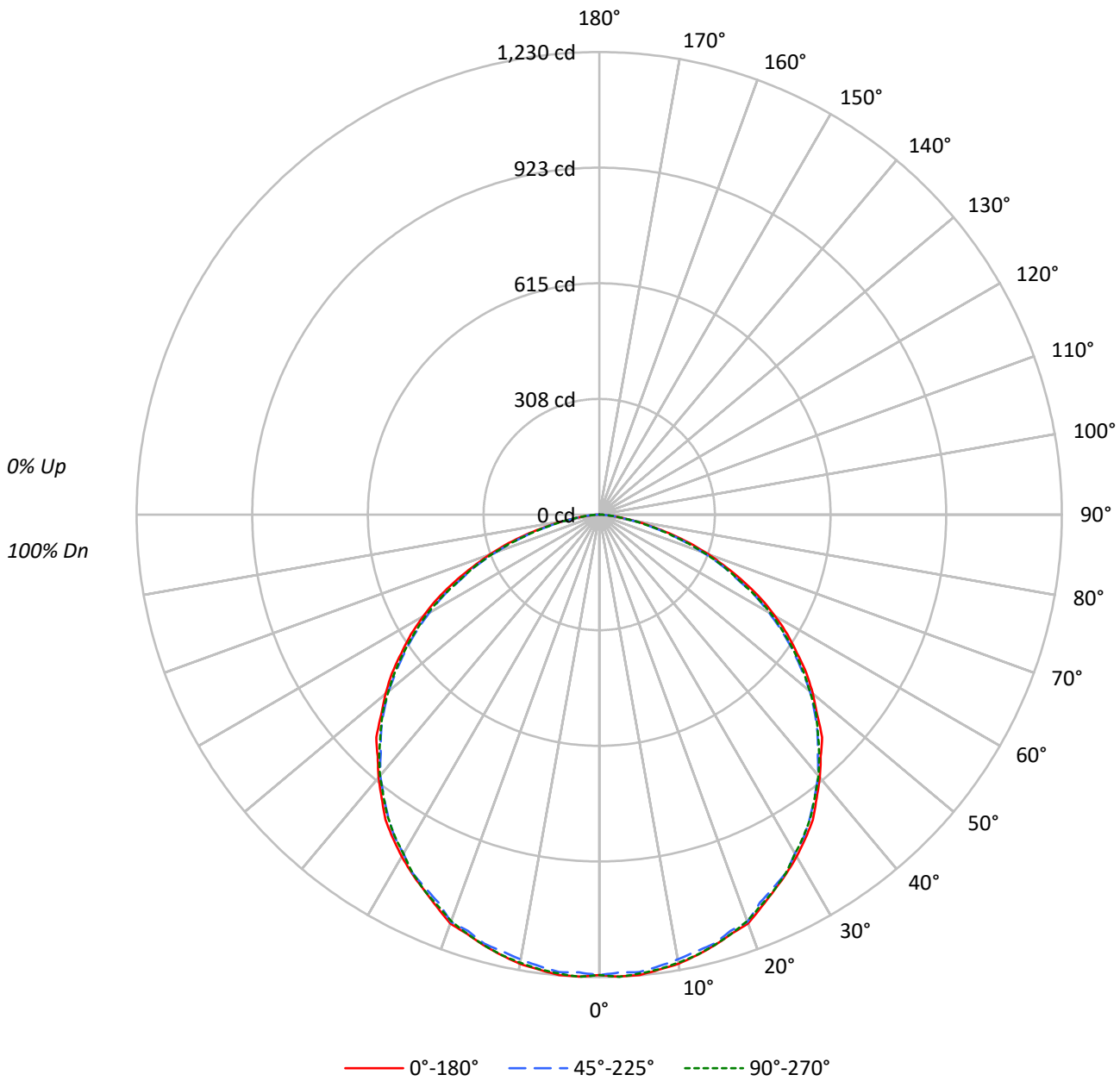
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3397.4 lumens  
Efficiency: N/A  
Efficacy: 122.2 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): 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	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°	1648	1648	1648
5°	1660	1650	1655
10°	1657	1641	1654
15°	1652	1646	1651
20°	1657	1650	1647
25°	1636	1625	1635
30°	1631	1617	1618
35°	1627	1608	1611
40°	1602	1590	1592
45°	1595	1562	1564
50°	1552	1530	1530
55°	1506	1473	1482
60°	1453	1403	1422
65°	1354	1284	1296
70°	1213	1145	1162
75°	1000	939	936
80°	700	660	660
85°	378	338	338

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1595 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	3.4
10°-20°	333.3	9.8
20°-30°	506.6	14.9
30°-40°	612.7	18.0
40°-50°	634.2	18.7
50°-60°	563.5	16.6
60°-70°	404.8	11.9
70°-80°	193.6	5.7
80°-90°	32.6	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°	956.0	28.1
0°-40°	1568.7	46.2
0°-60°	2766.3	81.4
0°-90°	3397.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3397.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1229	1221	1221	1223	1225	117
15°	1186	1178	1181	1179	1185	335
25°	1102	1096	1095	1100	1101	509
35°	990	984	979	978	981	617
45°	838	826	821	818	822	641
55°	642	636	628	624	632	575
65°	425	421	403	393	407	420
75°	192	189	181	165	180	206
85°	24	23	22	21	22	35
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1229.8	1220.8	1218.8	1230.4	1230.4
5°	1229.1	1220.8	1221.4	1222.7	1225.3
7.5°	1220.8	1216.2	1211.7	1216.2	1219.5
10°	1213.0	1202.7	1201.4	1203.3	1210.4
12.5°	1200.1	1188.5	1189.8	1193.0	1199.5
15°	1185.9	1178.2	1181.4	1178.8	1185.3
17.5°	1169.1	1169.1	1160.8	1158.8	1168.5
20°	1157.5	1141.4	1152.4	1142.7	1150.4
22.5°	1128.5	1119.5	1116.9	1124.6	1124.6
25°	1102.0	1096.2	1094.9	1099.5	1101.4
27.5°	1076.9	1073.6	1074.9	1074.3	1074.3
30°	1049.8	1041.4	1040.7	1040.7	1041.4
32.5°	1020.7	1014.9	1014.3	1010.4	1012.4
35°	990.4	984.0	978.8	977.5	980.7
37.5°	949.8	942.0	941.4	942.7	942.7
40°	912.3	904.0	905.2	900.7	906.5
42.5°	871.7	864.6	860.1	858.8	865.9
45°	838.1	825.9	820.7	818.1	822.0
47.5°	785.2	782.0	776.8	772.3	781.4
50°	741.4	743.3	731.0	726.5	731.0
52.5°	694.9	686.5	678.1	670.4	683.3
55°	642.0	635.5	627.8	623.9	631.7
57.5°	593.6	586.5	574.9	565.9	579.4
60°	540.0	533.6	521.3	511.7	528.4
62.5°	485.2	478.1	466.5	451.0	468.4
65°	425.2	420.7	403.3	392.9	407.1
67.5°	364.5	362.0	351.6	334.2	354.9
70°	308.4	303.3	291.0	275.5	295.5
72.5°	252.9	243.9	234.9	220.0	236.8
75°	192.3	189.0	180.7	165.2	180.0
77.5°	139.4	136.1	130.3	118.7	130.3
80°	90.3	89.7	85.2	76.8	85.2
82.5°	51.6	51.6	48.4	45.2	48.4
85°	24.5	23.2	21.9	20.6	21.9
87.5°	6.5	6.5	6.5	6.5	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)