

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: P688040

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-50-CP375

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-15)  
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-CP375  
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: -

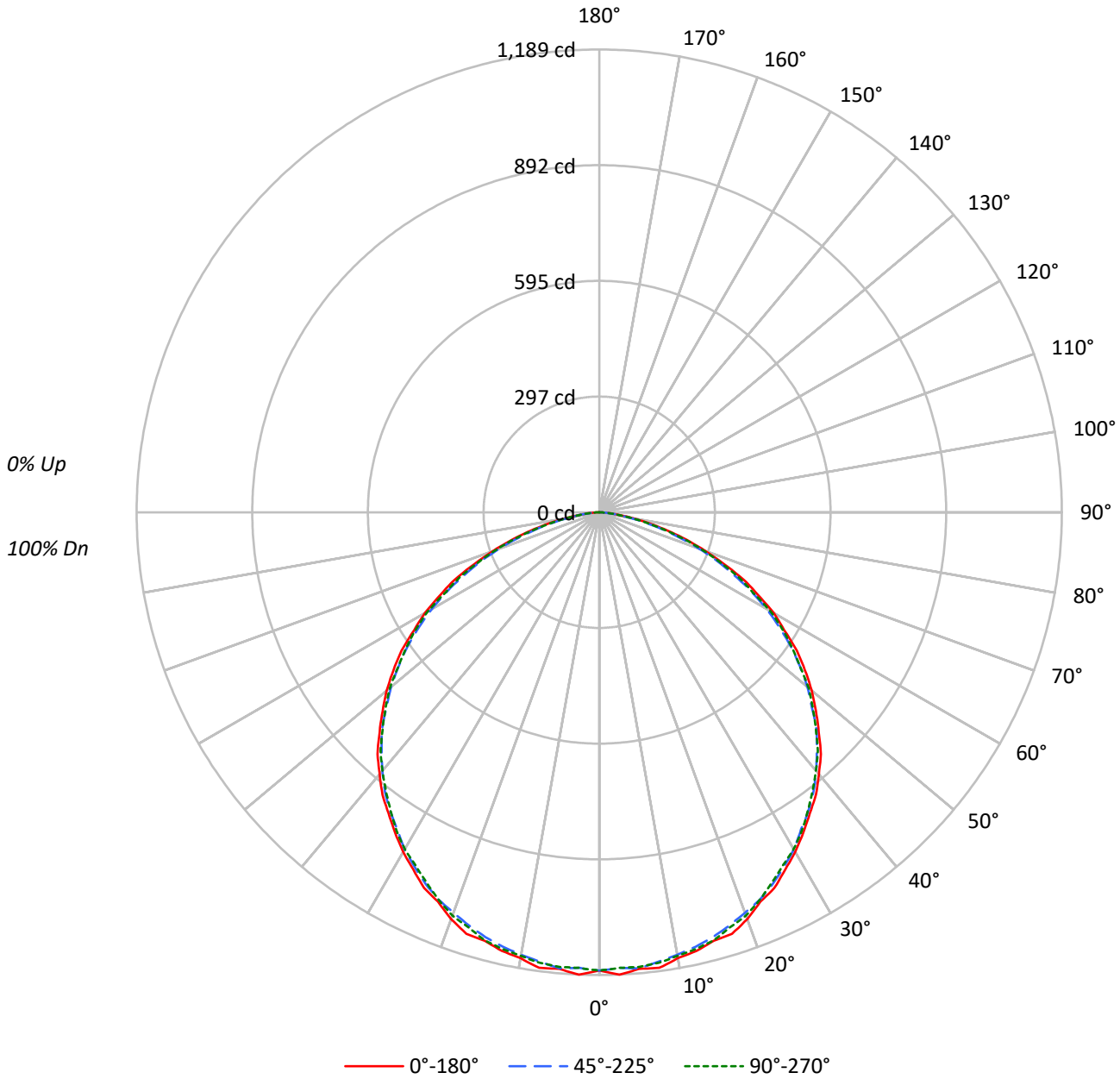
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3245.8 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 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	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	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	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	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°	1584	1584	1584
5°	1591	1589	1583
10°	1589	1577	1582
15°	1587	1574	1585
20°	1593	1568	1579
25°	1582	1565	1559
30°	1565	1554	1553
35°	1551	1539	1536
40°	1542	1523	1522
45°	1519	1503	1498
50°	1492	1461	1471
55°	1455	1411	1418
60°	1393	1335	1366
65°	1304	1220	1259
70°	1142	1069	1109
75°	946	852	899
80°	670	600	625
85°	338	299	318

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1519 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.4	3.4
10°-20°	319.9	9.9
20°-30°	485.8	15.0
30°-40°	586.2	18.1
40°-50°	607.8	18.7
50°-60°	538.4	16.6
60°-70°	384.3	11.8
70°-80°	182.1	5.6
80°-90°	29.8	0.9
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°	917.1	28.3
0°-40°	1503.4	46.3
0°-60°	2649.6	81.6
0°-90°	3245.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3245.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1178	1178	1178	1178	1178	
5°	1178	1172	1176	1168	1172	112
15°	1140	1133	1130	1136	1138	323
25°	1065	1048	1054	1055	1050	490
35°	944	934	937	933	935	592
45°	798	787	790	787	787	616
55°	620	603	601	599	605	551
65°	410	383	383	386	396	400
75°	182	167	164	168	173	194
85°	22	20	19	19	21	33
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1177.6	1177.6	1177.6	1177.6	1177.6
2.5°	1189.2	1168.6	1171.8	1174.4	1171.8
5°	1177.6	1171.8	1176.3	1167.9	1172.4
7.5°	1180.8	1166.6	1164.7	1162.1	1167.9
10°	1163.4	1155.0	1154.4	1158.9	1157.6
12.5°	1154.4	1147.3	1143.4	1144.1	1149.2
15°	1139.5	1133.1	1129.9	1136.3	1138.2
17.5°	1135.7	1113.1	1113.1	1114.4	1118.2
20°	1112.4	1097.6	1095.0	1097.6	1102.8
22.5°	1082.8	1077.6	1077.6	1079.5	1078.2
25°	1065.3	1047.9	1054.4	1055.0	1049.8
27.5°	1035.0	1028.6	1027.3	1024.7	1022.7
30°	1007.3	996.9	1000.2	1000.2	999.5
32.5°	976.3	969.2	966.0	966.6	969.8
35°	944.0	934.3	936.9	933.1	935.0
37.5°	915.0	902.1	904.7	902.7	900.8
40°	878.2	867.9	867.2	864.0	866.6
42.5°	843.4	828.5	827.9	828.5	831.7
45°	798.2	786.6	789.8	787.2	787.2
47.5°	755.0	747.2	741.4	742.1	744.6
50°	713.0	698.2	698.2	693.0	702.7
52.5°	666.6	651.7	649.8	651.7	650.4
55°	620.1	602.7	601.4	598.8	604.6
57.5°	564.0	547.2	548.5	549.8	558.2
60°	517.5	494.9	496.2	497.5	507.8
62.5°	460.1	441.4	440.7	442.7	445.2
65°	409.7	383.3	383.3	385.9	395.5
67.5°	345.9	329.7	329.1	332.3	336.2
70°	290.4	271.7	271.7	275.5	282.0
72.5°	234.9	219.4	216.8	222.6	227.1
75°	182.0	167.1	163.9	167.8	172.9
77.5°	130.3	120.7	118.1	122.0	123.2
80°	86.5	78.1	77.4	79.4	80.7
82.5°	49.7	44.5	42.6	44.5	45.2
85°	21.9	20.0	19.4	18.7	20.6
87.5°	5.2	5.2	5.2	5.2	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)