

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: P688032

Luminaire Tested: FLR-HA-24-55-35-CP375

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688032  
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-24-55-35-CP375  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire for High Abuse  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

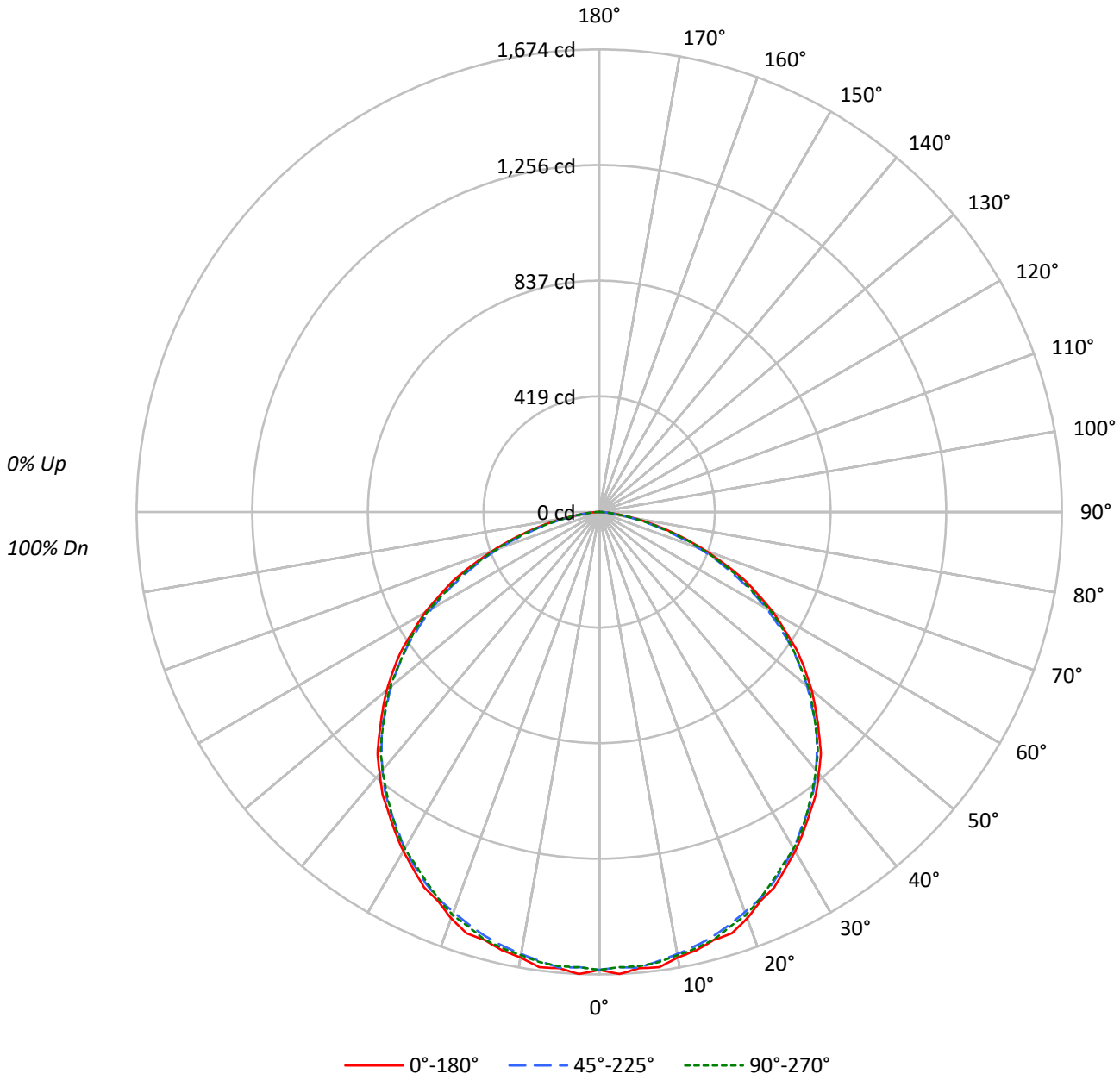
Lumens per Lamp: N/A  
Luminaire Lumens: 4568.6 lumens  
Efficiency: N/A  
Efficacy: 97.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	2230	2230	2230
5°	2239	2236	2229
10°	2237	2220	2226
15°	2234	2215	2232
20°	2242	2207	2223
25°	2226	2203	2194
30°	2203	2187	2186
35°	2183	2166	2162
40°	2171	2144	2142
45°	2138	2115	2109
50°	2101	2057	2070
55°	2047	1986	1996
60°	1960	1879	1924
65°	1836	1718	1773
70°	1608	1504	1561
75°	1331	1199	1265
80°	943	845	879
85°	477	420	449

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2138 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.9	3.4
10°-20°	450.3	9.9
20°-30°	683.7	15.0
30°-40°	825.2	18.1
40°-50°	855.5	18.7
50°-60°	757.8	16.6
60°-70°	541.0	11.8
70°-80°	256.3	5.6
80°-90°	42.0	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°	1290.9	28.3
0°-40°	2116.1	46.3
0°-60°	3729.4	81.6
0°-90°	4568.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4568.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1658	1649	1656	1644	1650	158
15°	1604	1595	1590	1599	1602	455
25°	1500	1475	1484	1485	1478	689
35°	1329	1315	1319	1313	1316	833
45°	1124	1107	1112	1108	1108	867
55°	873	848	846	843	851	776
65°	577	540	540	543	557	564
75°	256	235	231	236	243	273
85°	31	28	27	26	29	46
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1657.6	1657.6	1657.6	1657.6	1657.6
2.5°	1673.9	1644.8	1649.4	1653.0	1649.4
5°	1657.6	1649.4	1655.7	1643.9	1650.3
7.5°	1662.1	1642.1	1639.4	1635.8	1643.9
10°	1637.6	1625.8	1624.9	1631.2	1629.4
12.5°	1624.9	1614.9	1609.4	1610.3	1617.6
15°	1604.0	1594.9	1590.3	1599.4	1602.2
17.5°	1598.5	1566.7	1566.7	1568.5	1574.0
20°	1565.8	1544.9	1541.3	1544.9	1552.2
22.5°	1524.0	1516.8	1516.8	1519.5	1517.7
25°	1499.5	1475.0	1484.1	1485.0	1477.7
27.5°	1456.8	1447.7	1445.9	1442.3	1439.6
30°	1417.8	1403.2	1407.8	1407.8	1406.9
32.5°	1374.2	1364.2	1359.6	1360.6	1365.1
35°	1328.8	1315.1	1318.8	1313.3	1316.1
37.5°	1287.9	1269.7	1273.4	1270.6	1267.9
40°	1236.1	1221.6	1220.7	1216.1	1219.8
42.5°	1187.1	1166.2	1165.3	1166.2	1170.7
45°	1123.5	1107.2	1111.7	1108.1	1108.1
47.5°	1062.7	1051.8	1043.6	1044.5	1048.1
50°	1003.6	982.7	982.7	975.5	989.1
52.5°	938.2	917.3	914.6	917.3	915.5
55°	872.8	848.3	846.5	842.9	851.0
57.5°	793.8	770.2	772.0	773.8	785.6
60°	728.4	696.6	698.4	700.3	714.8
62.5°	647.6	621.2	620.3	623.1	626.7
65°	576.7	539.5	539.5	543.1	556.8
67.5°	486.8	464.1	463.2	467.7	473.2
70°	408.7	382.4	382.4	387.8	396.9
72.5°	330.6	308.8	305.2	313.3	319.7
75°	256.1	235.2	230.7	236.1	243.4
77.5°	183.5	169.8	166.2	171.7	173.5
80°	121.7	109.9	109.0	111.7	113.5
82.5°	69.9	62.7	59.9	62.7	63.6
85°	30.9	28.2	27.2	26.3	29.1
87.5°	7.3	7.3	7.3	7.3	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)