

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: P973113

Luminaire Tested: FLR2-14-80HE-L930-CA080

Issue Date: 3/13/2025

**Test Information**

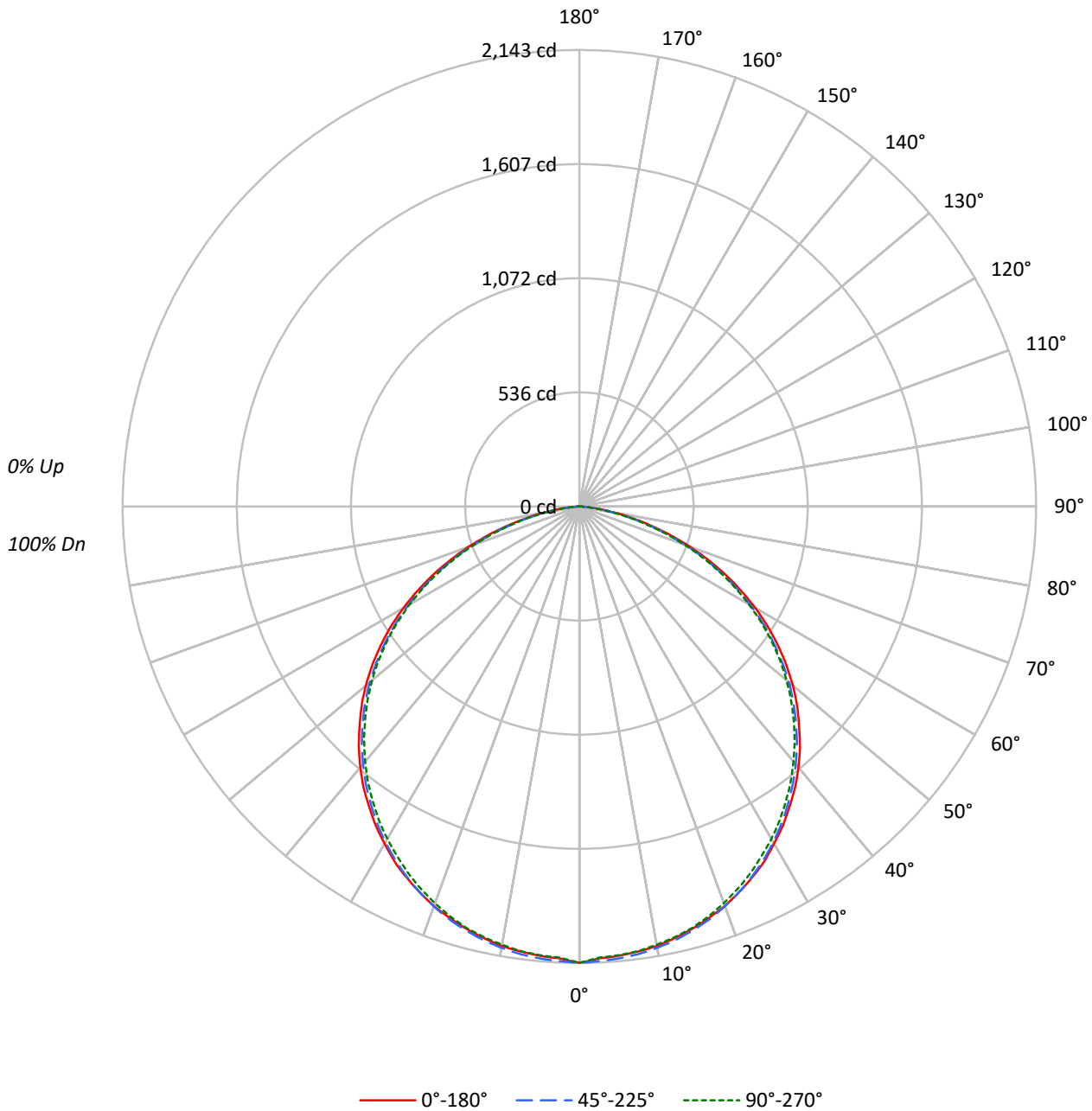
Test Method: LM-79-2019  
Report Number: P973113  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L930-CA080  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Arylic (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5996.9 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 61.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor:  
Total Harmonic Distortion (THDi):  
Frequency (hertz): 60  
Stabilization Time: HR  
Operation Time: HR  
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	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	89	91	89	87	85				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71				
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60				
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44				
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39				
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34				
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30				
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27				
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5766	5766	5766
5°	5721	5754	5714
10°	5726	5751	5709
15°	5717	5740	5705
20°	5717	5722	5676
25°	5703	5693	5640
30°	5679	5655	5600
35°	5649	5605	5550
40°	5617	5549	5492
45°	5549	5471	5413
50°	5476	5376	5313
55°	5338	5213	5164
60°	5131	4988	4945
65°	4805	4664	4614
70°	4333	4159	4124
75°	3633	3449	3411
80°	2639	2459	2391
85°	1396	1232	1124

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5549 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.0	3.4
10°-20°	582.8	9.7
20°-30°	885.5	14.8
30°-40°	1071.1	17.9
40°-50°	1113.2	18.6
50°-60°	996.7	16.6
60°-70°	726.9	12.1
70°-80°	358.0	6.0
80°-90°	59.9	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°	1671.2	27.9
0°-40°	2742.3	45.7
0°-60°	4852.2	80.9
0°-90°	5996.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5996.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2143	2143	2143	2143	2143	
5°	2118	2141	2130	2151	2115	201
15°	2052	2071	2060	2078	2048	580
25°	1921	1931	1917	1926	1900	886
35°	1720	1723	1706	1713	1690	1077
45°	1458	1456	1438	1440	1422	1126
55°	1138	1128	1111	1109	1101	1016
65°	755	746	732	727	725	745
75°	349	343	332	328	328	372
85°	45	44	40	36	36	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2142.6	2142.6	2142.6	2142.6	2142.6
2.5°	2124.0	2148.0	2136.4	2157.7	2119.6
5°	2117.8	2140.9	2130.2	2150.6	2115.2
7.5°	2107.2	2131.1	2119.6	2139.1	2105.4
10°	2095.6	2116.9	2104.5	2124.0	2089.4
12.5°	2075.2	2096.5	2085.0	2102.7	2070.8
15°	2052.2	2070.8	2060.2	2077.9	2047.8
17.5°	2025.6	2043.3	2031.8	2047.8	2017.6
20°	1996.3	2010.5	1998.1	2011.4	1982.1
22.5°	1960.0	1973.3	1960.0	1968.8	1943.1
25°	1920.9	1930.7	1917.4	1926.3	1899.6
27.5°	1879.2	1884.6	1871.3	1878.4	1850.9
30°	1827.8	1834.0	1819.8	1828.7	1802.1
32.5°	1778.1	1781.7	1765.7	1772.8	1748.9
35°	1719.6	1723.2	1706.3	1713.4	1689.5
37.5°	1663.7	1662.9	1645.1	1649.6	1629.2
40°	1599.0	1598.1	1579.5	1583.0	1563.5
42.5°	1532.5	1528.9	1511.2	1513.0	1495.2
45°	1458.0	1456.2	1437.6	1440.3	1422.5
47.5°	1386.2	1380.8	1362.2	1363.1	1348.0
50°	1308.1	1300.1	1284.2	1282.4	1269.1
52.5°	1224.7	1215.9	1198.1	1196.4	1186.6
55°	1137.8	1128.1	1111.2	1108.6	1100.6
57.5°	1048.3	1035.8	1022.5	1017.2	1011.0
60°	953.4	941.8	926.8	921.4	918.8
62.5°	854.9	843.4	831.9	826.6	823.0
65°	754.7	745.8	732.5	727.2	724.6
67.5°	652.7	644.7	632.3	626.1	625.2
70°	550.7	542.8	528.6	525.0	524.1
72.5°	448.7	441.7	428.4	424.8	424.8
75°	349.4	343.2	331.7	328.1	328.1
77.5°	255.4	250.1	241.2	236.8	236.8
80°	170.3	166.7	158.7	155.2	154.3
82.5°	98.4	96.7	89.6	86.0	87.8
85°	45.2	43.5	39.9	35.5	36.4
87.5°	11.5	10.6	8.0	6.2	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)