

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: P973223

Luminaire Tested: FLR2-14-80HE-L840-CA125

Issue Date: 3/13/2025

**Test Information**

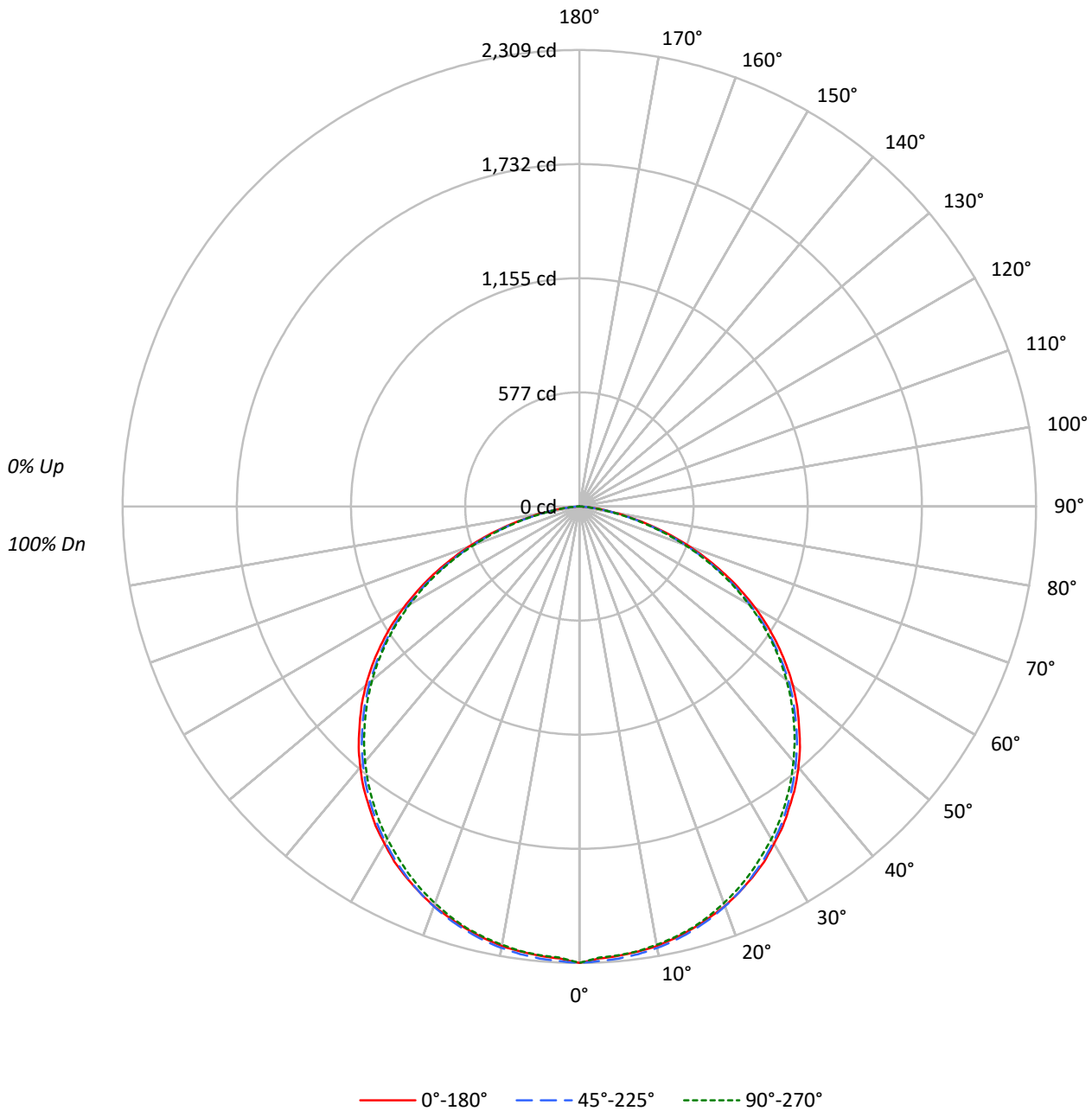
Test Method: LM-79-2019  
Report Number: P973223  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L840-CA125  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 80CRI with Clear Aryalic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6462.3 lumens  
Efficiency: N/A  
Efficacy: 104.4 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				100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85				85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71				71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60				60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44				44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39				39
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34				34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30				30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27				27
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25				25

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

	0°	45°	90°
0°	6213	6213	6213
5°	6165	6201	6157
10°	6171	6197	6152
15°	6161	6185	6147
20°	6160	6166	6117
25°	6146	6135	6078
30°	6120	6093	6034
35°	6087	6040	5980
40°	6053	5979	5918
45°	5979	5895	5834
50°	5901	5793	5725
55°	5752	5618	5564
60°	5529	5375	5329
65°	5179	5026	4972
70°	4670	4482	4444
75°	3915	3716	3676
80°	2844	2651	2577
85°	1504	1328	1210

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5979 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.7	3.4
10°-20°	628.0	9.7
20°-30°	954.2	14.8
30°-40°	1154.2	17.9
40°-50°	1199.6	18.6
50°-60°	1074.0	16.6
60°-70°	783.3	12.1
70°-80°	385.8	6.0
80°-90°	64.5	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°	1800.9	27.9
0°-40°	2955.1	45.7
0°-60°	5228.7	80.9
0°-90°	6462.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6462.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2309	2309	2309	2309	2309	
5°	2282	2307	2296	2318	2279	217
15°	2211	2232	2220	2239	2207	625
25°	2070	2080	2066	2076	2047	954
35°	1853	1857	1839	1846	1820	1160
45°	1571	1569	1549	1552	1533	1213
55°	1226	1216	1197	1195	1186	1094
65°	813	804	789	784	781	803
75°	376	370	357	354	354	401
85°	49	47	43	38	39	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2308.9	2308.9	2308.9	2308.9	2308.9
2.5°	2288.8	2314.6	2302.2	2325.1	2284.0
5°	2282.1	2307.0	2295.5	2317.5	2279.3
7.5°	2270.7	2296.5	2284.0	2305.1	2268.7
10°	2258.2	2281.2	2267.8	2288.8	2251.5
12.5°	2236.3	2259.2	2246.8	2265.9	2231.5
15°	2211.4	2231.5	2220.0	2239.1	2206.6
17.5°	2182.7	2201.9	2189.4	2206.6	2174.1
20°	2151.2	2166.5	2153.1	2167.4	2135.9
22.5°	2112.0	2126.4	2112.0	2121.6	2093.9
25°	2070.0	2080.5	2066.1	2075.7	2047.0
27.5°	2025.1	2030.8	2016.5	2024.1	1994.5
30°	1969.6	1976.3	1961.0	1970.6	1941.9
32.5°	1916.1	1919.9	1902.7	1910.4	1884.6
35°	1853.0	1856.9	1838.7	1846.3	1820.5
37.5°	1792.8	1791.9	1772.8	1777.5	1755.6
40°	1723.1	1722.1	1702.0	1705.9	1684.8
42.5°	1651.4	1647.6	1628.5	1630.4	1611.2
45°	1571.1	1569.2	1549.1	1552.0	1532.9
47.5°	1493.7	1488.0	1467.9	1468.9	1452.6
50°	1409.6	1401.0	1383.8	1381.9	1367.6
52.5°	1319.8	1310.2	1291.1	1289.2	1278.7
55°	1226.1	1215.6	1197.4	1194.6	1186.0
57.5°	1129.6	1116.2	1101.9	1096.1	1089.5
60°	1027.3	1014.9	998.7	992.9	990.1
62.5°	921.3	908.8	896.4	890.7	886.9
65°	813.3	803.7	789.4	783.6	780.8
67.5°	703.4	694.8	681.4	674.7	673.7
70°	593.5	584.9	569.6	565.8	564.8
72.5°	483.6	475.9	461.6	457.8	457.8
75°	376.5	369.8	357.4	353.6	353.6
77.5°	275.2	269.5	259.9	255.2	255.2
80°	183.5	179.7	171.1	167.2	166.3
82.5°	106.1	104.2	96.5	92.7	94.6
85°	48.7	46.8	43.0	38.2	39.2
87.5°	12.4	11.5	8.6	6.7	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)