

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: P973284

Luminaire Tested: FLR2-14-20HE-L850-CA080

Issue Date: 3/13/2025

**Test Information**

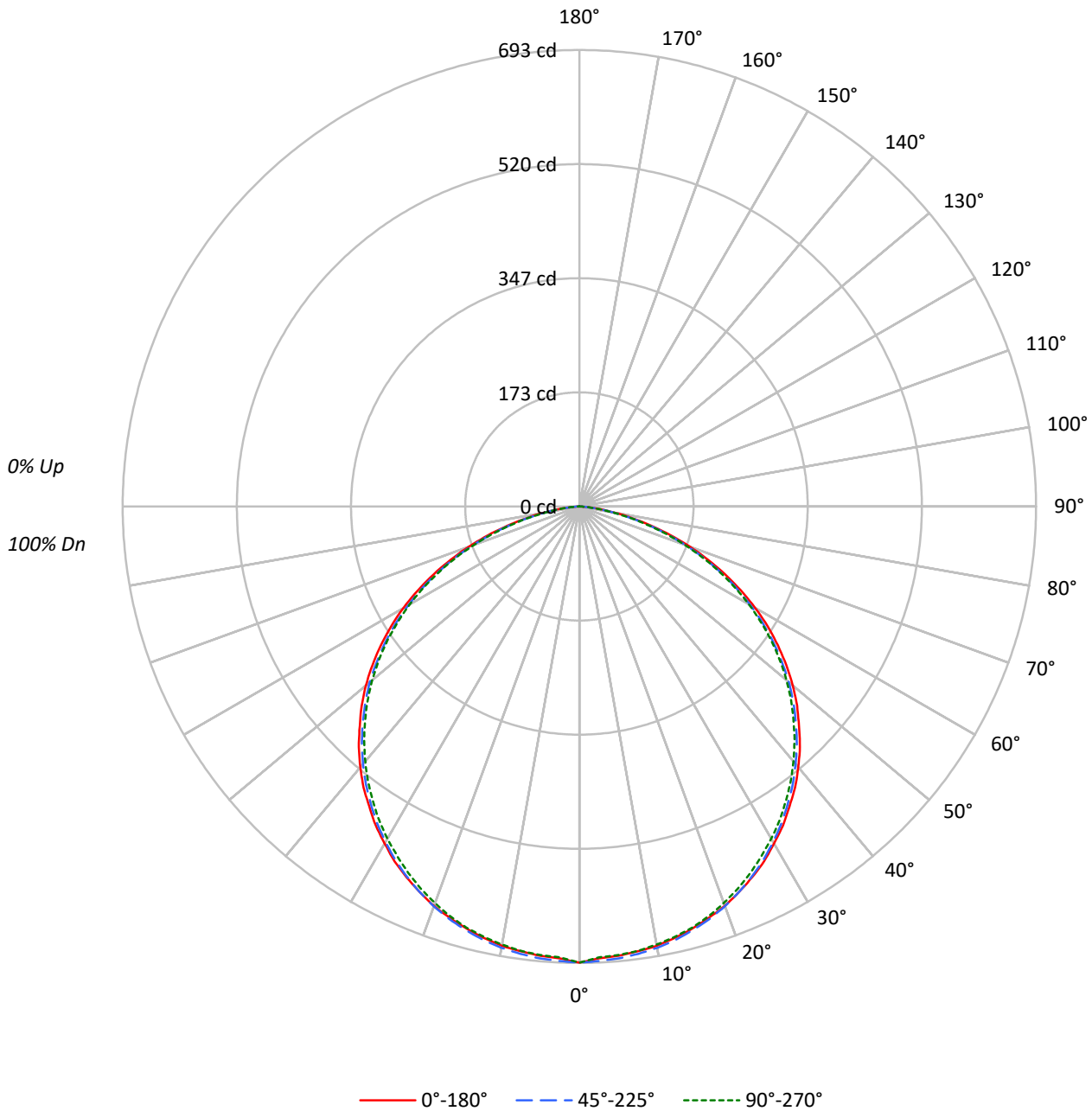
Test Method: LM-79-2019  
Report Number: P973284  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L850-CA080  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Aryalic (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1938.5 lumens  
Efficiency: N/A  
Efficacy: 131.0 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): 14.8  
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																		
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	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°	1864	1864	1864
5°	1849	1860	1847
10°	1851	1859	1846
15°	1848	1855	1844
20°	1848	1850	1835
25°	1844	1840	1823
30°	1836	1828	1810
35°	1826	1812	1794
40°	1816	1794	1775
45°	1794	1768	1750
50°	1770	1738	1717
55°	1726	1685	1669
60°	1659	1612	1598
65°	1554	1508	1491
70°	1400	1345	1333
75°	1174	1115	1103
80°	852	795	773
85°	451	398	364

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1794 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	3.4
10°-20°	188.4	9.7
20°-30°	286.2	14.8
30°-40°	346.2	17.9
40°-50°	359.8	18.6
50°-60°	322.2	16.6
60°-70°	235.0	12.1
70°-80°	115.7	6.0
80°-90°	19.3	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°	540.2	27.9
0°-40°	886.4	45.7
0°-60°	1568.4	80.9
0°-90°	1938.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1938.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	693	693	693	693	693	
5°	685	692	689	695	684	65
15°	663	669	666	672	662	187
25°	621	624	620	623	614	286
35°	556	557	552	554	546	348
45°	471	471	465	466	460	364
55°	368	365	359	358	356	328
65°	244	241	237	235	234	241
75°	113	111	107	106	106	120
85°	15	14	13	12	12	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	692.6	692.6	692.6	692.6	692.6
2.5°	686.6	694.3	690.6	697.5	685.1
5°	684.6	692.0	688.6	695.2	683.7
7.5°	681.1	688.9	685.1	691.4	680.5
10°	677.4	684.3	680.3	686.6	675.4
12.5°	670.8	677.7	674.0	679.7	669.4
15°	663.3	669.4	665.9	671.7	661.9
17.5°	654.7	660.5	656.8	661.9	652.2
20°	645.3	649.9	645.9	650.2	640.7
22.5°	633.5	637.8	633.5	636.4	628.1
25°	620.9	624.1	619.8	622.6	614.0
27.5°	607.4	609.2	604.9	607.2	598.3
30°	590.8	592.8	588.2	591.1	582.5
32.5°	574.8	575.9	570.8	573.0	565.3
35°	555.8	557.0	551.5	553.8	546.1
37.5°	537.8	537.5	531.8	533.2	526.6
40°	516.9	516.6	510.6	511.7	505.4
42.5°	495.4	494.2	488.5	489.1	483.3
45°	471.3	470.7	464.7	465.5	459.8
47.5°	448.1	446.3	440.3	440.6	435.7
50°	422.8	420.3	415.1	414.5	410.2
52.5°	395.9	393.0	387.3	386.7	383.6
55°	367.8	364.6	359.2	358.3	355.8
57.5°	338.8	334.8	330.5	328.8	326.8
60°	308.2	304.4	299.6	297.8	297.0
62.5°	276.3	272.6	268.9	267.2	266.0
65°	244.0	241.1	236.8	235.1	234.2
67.5°	211.0	208.4	204.4	202.4	202.1
70°	178.0	175.4	170.9	169.7	169.4
72.5°	145.1	142.8	138.5	137.3	137.3
75°	112.9	110.9	107.2	106.1	106.1
77.5°	82.6	80.8	78.0	76.5	76.5
80°	55.0	53.9	51.3	50.2	49.9
82.5°	31.8	31.2	29.0	27.8	28.4
85°	14.6	14.0	12.9	11.5	11.8
87.5°	3.7	3.4	2.6	2.0	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)