

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: P973274

Luminaire Tested: FLR2-14-20HE-L850-CP250

Issue Date: 3/13/2025

**Test Information**

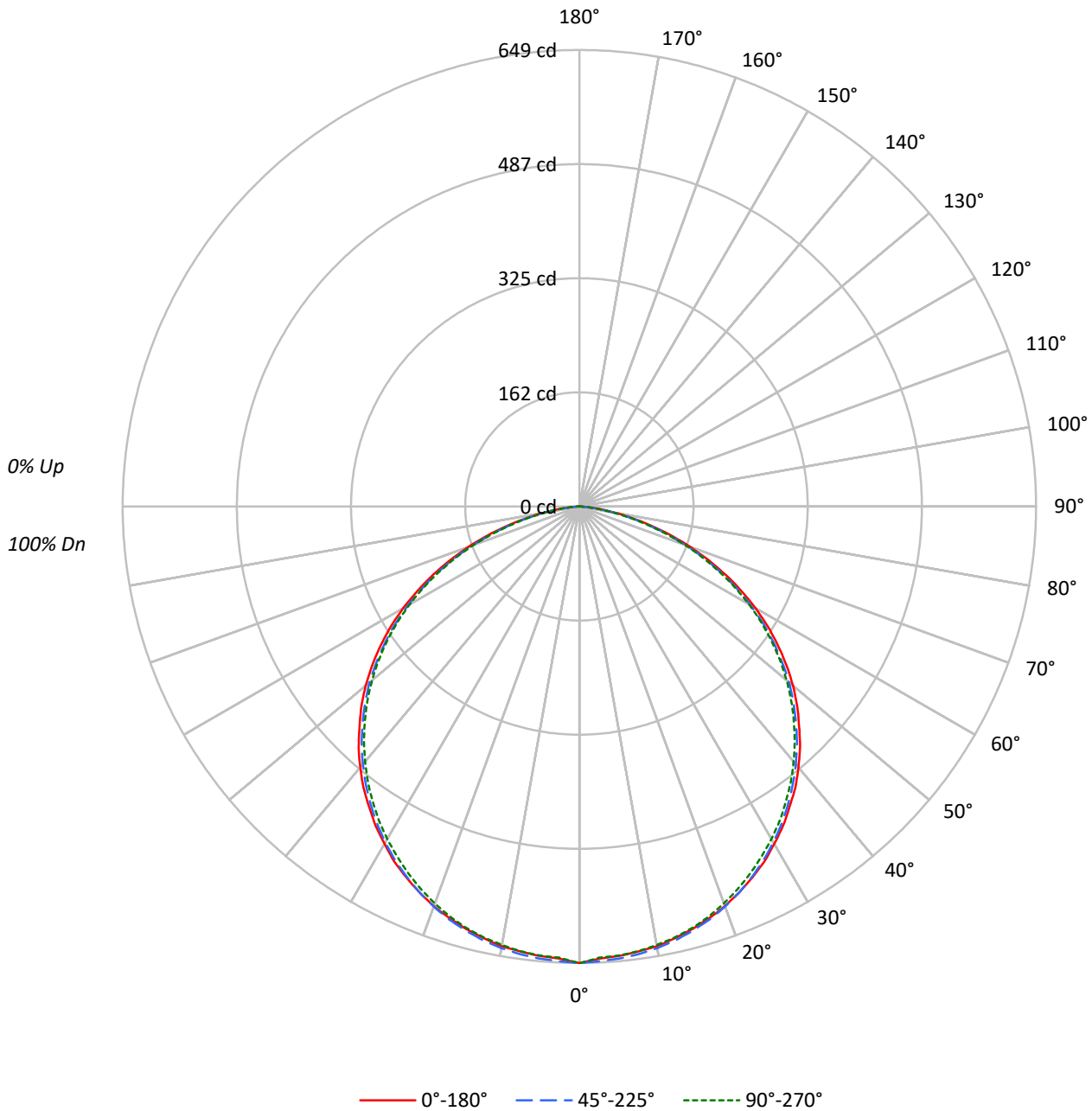
Test Method: LM-79-2019  
Report Number: P973274  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L850-CP250  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1816.9 lumens  
Efficiency: N/A  
Efficacy: 122.8 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				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	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°	1747	1747	1747
5°	1733	1743	1731
10°	1735	1742	1730
15°	1732	1739	1728
20°	1732	1734	1720
25°	1728	1725	1709
30°	1721	1713	1697
35°	1712	1698	1682
40°	1702	1681	1664
45°	1681	1657	1640
50°	1659	1629	1610
55°	1617	1580	1564
60°	1554	1511	1498
65°	1456	1413	1398
70°	1313	1260	1249
75°	1101	1045	1033
80°	800	745	725
85°	423	374	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1681 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.5	3.4
10°-20°	176.6	9.7
20°-30°	268.3	14.8
30°-40°	324.5	17.9
40°-50°	337.3	18.6
50°-60°	302.0	16.6
60°-70°	220.2	12.1
70°-80°	108.5	6.0
80°-90°	18.1	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°	506.3	27.9
0°-40°	830.8	45.7
0°-60°	1470.1	80.9
0°-90°	1816.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1816.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	642	649	645	652	641	61
15°	622	627	624	630	620	176
25°	582	585	581	584	576	268
35°	521	522	517	519	512	326
45°	442	441	436	436	431	341
55°	345	342	337	336	333	308
65°	229	226	222	220	220	226
75°	106	104	100	99	99	113
85°	14	13	12	11	11	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	649.2	649.2	649.2	649.2	649.2
2.5°	643.5	650.8	647.3	653.7	642.2
5°	641.6	648.6	645.4	651.6	640.8
7.5°	638.4	645.7	642.2	648.1	637.9
10°	634.9	641.4	637.6	643.5	633.0
12.5°	628.7	635.2	631.7	637.1	627.4
15°	621.7	627.4	624.2	629.5	620.4
17.5°	613.7	619.1	615.6	620.4	611.3
20°	604.8	609.1	605.4	609.4	600.5
22.5°	593.8	597.8	593.8	596.5	588.7
25°	582.0	584.9	580.9	583.6	575.5
27.5°	569.4	571.0	566.9	569.1	560.8
30°	553.8	555.6	551.4	554.0	546.0
32.5°	538.7	539.8	535.0	537.1	529.9
35°	521.0	522.1	517.0	519.1	511.9
37.5°	504.1	503.8	498.4	499.8	493.6
40°	484.4	484.2	478.5	479.6	473.7
42.5°	464.3	463.2	457.8	458.4	453.0
45°	441.7	441.2	435.5	436.4	431.0
47.5°	420.0	418.3	412.7	413.0	408.4
50°	396.3	393.9	389.1	388.5	384.5
52.5°	371.1	368.4	363.0	362.5	359.5
55°	344.7	341.8	336.7	335.9	333.4
57.5°	317.6	313.8	309.8	308.2	306.3
60°	288.8	285.3	280.8	279.2	278.4
62.5°	259.0	255.5	252.0	250.4	249.3
65°	228.7	226.0	221.9	220.3	219.5
67.5°	197.8	195.3	191.6	189.7	189.4
70°	166.9	164.4	160.1	159.1	158.8
72.5°	136.0	133.8	129.8	128.7	128.7
75°	105.9	104.0	100.5	99.4	99.4
77.5°	77.4	75.8	73.1	71.7	71.7
80°	51.6	50.5	48.1	47.0	46.8
82.5°	29.8	29.3	27.1	26.1	26.6
85°	13.7	13.2	12.1	10.7	11.0
87.5°	3.5	3.2	2.4	1.9	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)