

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: P973124

Luminaire Tested: FLR2-14-20HE-L835-CP125

Issue Date: 3/13/2025

**Test Information**

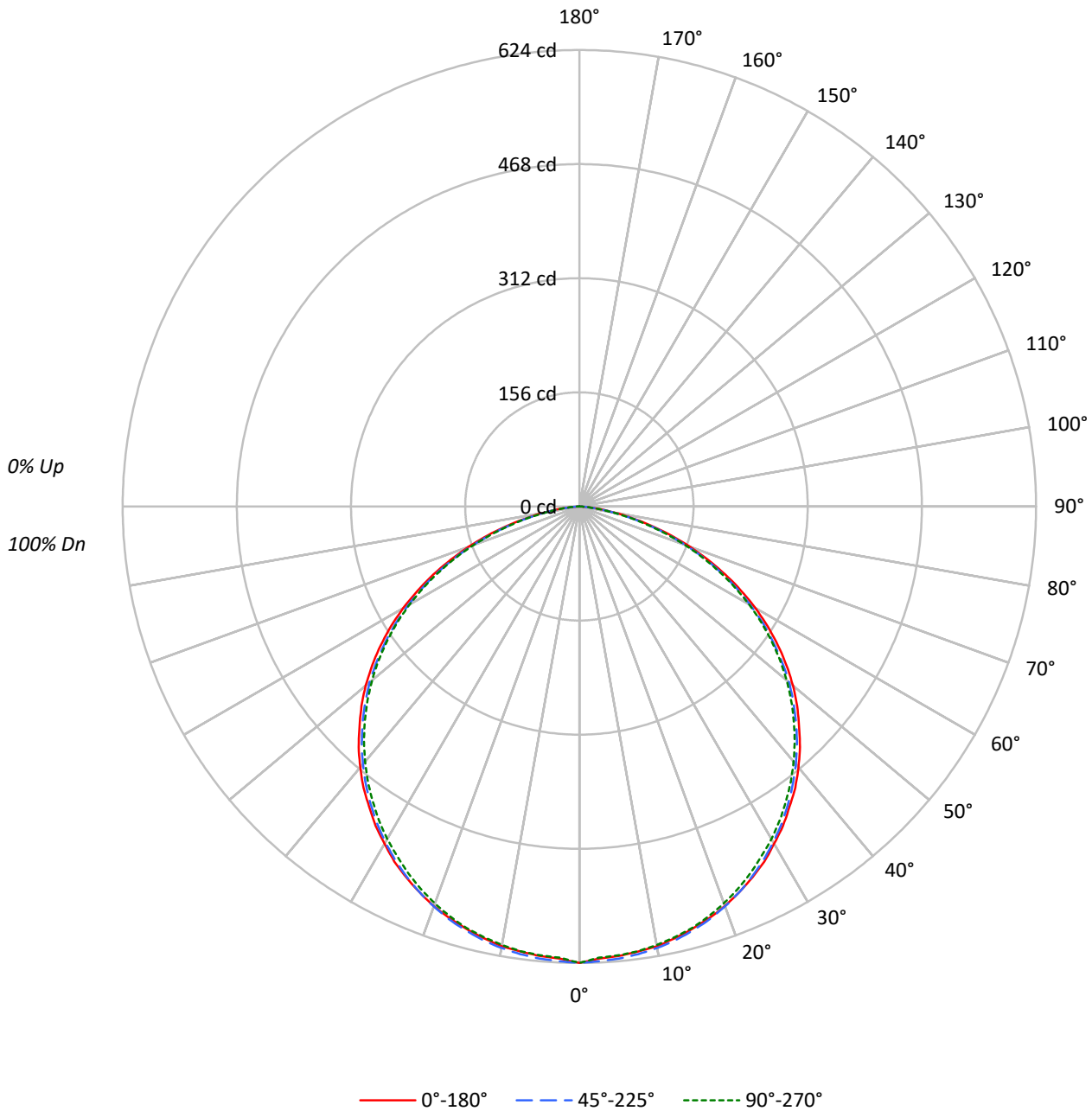
Test Method: LM-79-2019  
Report Number: P973124  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L835-CP125  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1746.6 lumens  
Efficiency: N/A  
Efficacy: 118.0 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	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°	1679	1679	1679
5°	1666	1676	1664
10°	1668	1675	1663
15°	1665	1672	1662
20°	1665	1666	1653
25°	1661	1658	1643
30°	1654	1647	1631
35°	1645	1633	1617
40°	1636	1616	1600
45°	1616	1593	1577
50°	1595	1566	1547
55°	1555	1518	1504
60°	1495	1453	1440
65°	1400	1359	1344
70°	1262	1211	1201
75°	1058	1004	994
80°	769	716	696
85°	408	358	327

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1616 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	3.4
10°-20°	169.7	9.7
20°-30°	257.9	14.8
30°-40°	312.0	17.9
40°-50°	324.2	18.6
50°-60°	290.3	16.6
60°-70°	211.7	12.1
70°-80°	104.3	6.0
80°-90°	17.4	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°	486.7	27.9
0°-40°	798.7	45.7
0°-60°	1413.2	80.9
0°-90°	1746.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1746.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	617	624	620	626	616	59
15°	598	603	600	605	596	169
25°	560	562	558	561	553	258
35°	501	502	497	499	492	314
45°	425	424	419	420	414	328
55°	331	329	324	323	320	296
65°	220	217	213	212	211	217
75°	102	100	97	96	96	109
85°	13	13	12	10	11	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	624.0	624.0	624.0	624.0	624.0
2.5°	618.6	625.6	622.2	628.4	617.3
5°	616.8	623.5	620.4	626.4	616.0
7.5°	613.7	620.7	617.3	623.0	613.2
10°	610.4	616.6	612.9	618.6	608.6
12.5°	604.4	610.6	607.3	612.4	603.1
15°	597.7	603.1	600.0	605.2	596.4
17.5°	590.0	595.1	591.8	596.4	587.6
20°	581.4	585.6	581.9	585.8	577.3
22.5°	570.8	574.7	570.8	573.4	565.9
25°	559.5	562.3	558.4	561.0	553.3
27.5°	547.3	548.9	545.0	547.1	539.1
30°	532.4	534.2	530.0	532.6	524.9
32.5°	517.9	518.9	514.3	516.3	509.4
35°	500.8	501.9	497.0	499.0	492.1
37.5°	484.6	484.3	479.1	480.4	474.5
40°	465.7	465.5	460.0	461.1	455.4
42.5°	446.3	445.3	440.1	440.7	435.5
45°	424.6	424.1	418.7	419.5	414.3
47.5°	403.7	402.2	396.7	397.0	392.6
50°	381.0	378.7	374.0	373.5	369.6
52.5°	356.7	354.1	349.0	348.4	345.6
55°	331.4	328.6	323.6	322.9	320.5
57.5°	305.3	301.7	297.8	296.3	294.5
60°	277.7	274.3	269.9	268.4	267.6
62.5°	249.0	245.6	242.3	240.7	239.7
65°	219.8	217.2	213.4	211.8	211.0
67.5°	190.1	187.8	184.2	182.4	182.1
70°	160.4	158.1	153.9	152.9	152.7
72.5°	130.7	128.6	124.8	123.7	123.7
75°	101.8	100.0	96.6	95.6	95.6
77.5°	74.4	72.8	70.3	69.0	69.0
80°	49.6	48.6	46.2	45.2	44.9
82.5°	28.7	28.2	26.1	25.1	25.6
85°	13.2	12.7	11.6	10.3	10.6
87.5°	3.4	3.1	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)