

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: P973380

Luminaire Tested: FLR2-14-20-L835-CP250

Issue Date: 3/13/2025

**Test Information**

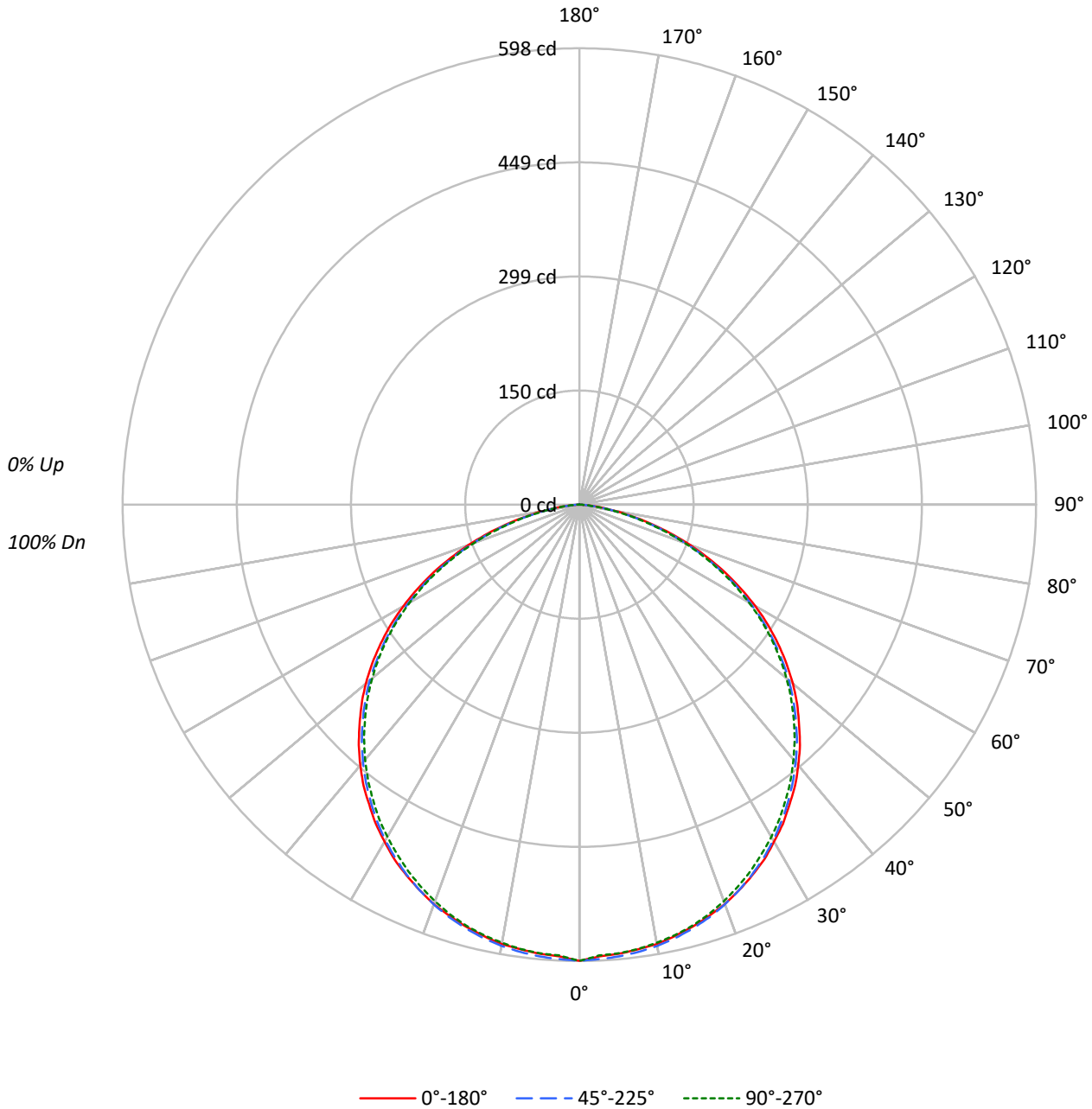
Test Method: LM-79-2019  
Report Number: P973380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20-L835-CP250  
Description: 1\*4 FLR-2.0 2000 LUMEN at 3500 CCT & 80CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1673.2 lumens  
Efficiency: N/A  
Efficacy: 102.0 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): 16.4  
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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CATALOG NUMBER: FLR2-14-20-L835-CP250

### 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°	1609	1609	1609
5°	1596	1606	1594
10°	1598	1605	1593
15°	1595	1601	1592
20°	1595	1597	1584
25°	1591	1589	1574
30°	1585	1578	1562
35°	1576	1564	1549
40°	1567	1548	1532
45°	1548	1526	1510
50°	1528	1500	1482
55°	1490	1454	1441
60°	1432	1392	1379
65°	1341	1301	1287
70°	1209	1161	1150
75°	1014	962	952
80°	736	687	668
85°	389	343	312

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.6	3.4
10°-20°	162.6	9.7
20°-30°	247.0	14.8
30°-40°	298.9	17.9
40°-50°	310.6	18.6
50°-60°	278.1	16.6
60°-70°	202.8	12.1
70°-80°	99.9	6.0
80°-90°	16.7	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°	466.3	27.9
0°-40°	765.1	45.7
0°-60°	1353.8	80.9
0°-90°	1673.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1673.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	591	597	594	600	590	56
15°	573	578	575	580	571	162
25°	536	539	535	537	530	247
35°	480	481	476	478	471	300
45°	407	406	401	402	397	314
55°	318	315	310	309	307	283
65°	211	208	204	203	202	208
75°	98	96	92	92	92	104
85°	13	12	11	10	10	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	597.8	597.8	597.8	597.8	597.8
2.5°	592.6	599.3	596.1	602.0	591.4
5°	590.9	597.3	594.4	600.0	590.1
7.5°	587.9	594.6	591.4	596.8	587.4
10°	584.7	590.6	587.2	592.6	583.0
12.5°	579.0	585.0	581.7	586.7	577.8
15°	572.6	577.8	574.8	579.8	571.3
17.5°	565.2	570.1	566.9	571.3	562.9
20°	557.0	561.0	557.5	561.2	553.0
22.5°	546.8	550.6	546.8	549.3	542.1
25°	536.0	538.7	535.0	537.4	530.0
27.5°	524.3	525.8	522.1	524.1	516.4
30°	510.0	511.7	507.8	510.2	502.8
32.5°	496.1	497.1	492.7	494.6	488.0
35°	479.8	480.8	476.1	478.1	471.4
37.5°	464.2	464.0	459.0	460.2	454.6
40°	446.1	445.9	440.7	441.7	436.2
42.5°	427.6	426.6	421.6	422.1	417.2
45°	406.8	406.3	401.1	401.8	396.9
47.5°	386.8	385.3	380.1	380.3	376.1
50°	365.0	362.7	358.3	357.8	354.1
52.5°	341.7	339.2	334.3	333.8	331.1
55°	317.5	314.7	310.0	309.3	307.1
57.5°	292.5	289.0	285.3	283.8	282.1
60°	266.0	262.8	258.6	257.1	256.3
62.5°	238.5	235.3	232.1	230.6	229.6
65°	210.6	208.1	204.4	202.9	202.2
67.5°	182.1	179.9	176.4	174.7	174.4
70°	153.7	151.4	147.5	146.5	146.2
72.5°	125.2	123.2	119.5	118.5	118.5
75°	97.5	95.8	92.5	91.6	91.6
77.5°	71.3	69.8	67.3	66.1	66.1
80°	47.5	46.5	44.3	43.3	43.1
82.5°	27.5	27.0	25.0	24.0	24.5
85°	12.6	12.1	11.1	9.9	10.1
87.5°	3.2	3.0	2.2	1.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)