

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: P973341

Luminaire Tested: FLR2-14-20-L830-CP375

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973341  
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-L830-CP375  
Description: 1\*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.375" thickness)  
  
Light Source: 3000k CCT, 80 CRI LEDS  
Ballast/Driver: -

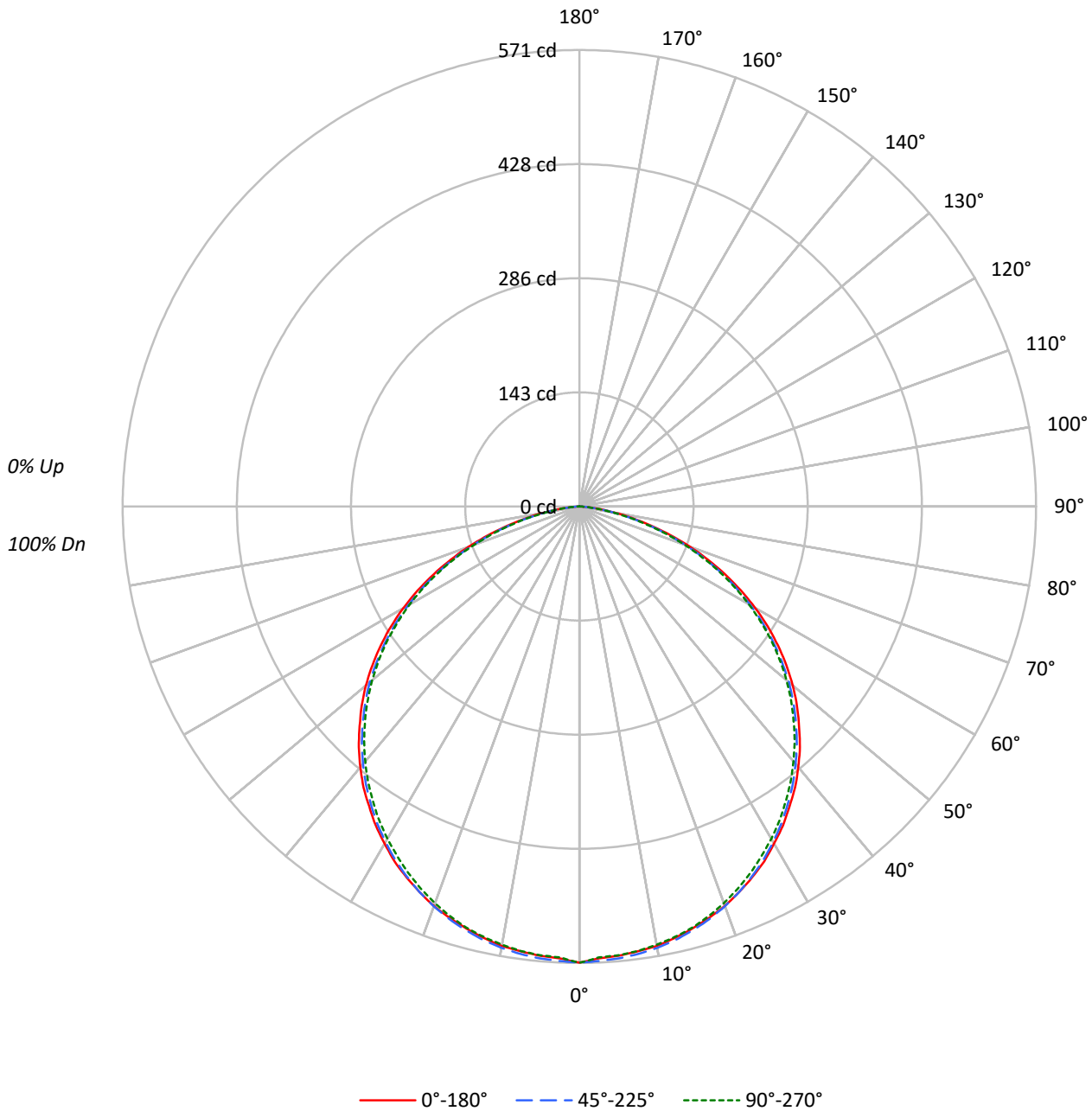
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1597.4 lumens  
Efficiency: N/A  
Efficacy: 97.4 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): 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-L830-CP375

### 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°	1536	1536	1536
5°	1524	1533	1522
10°	1525	1532	1521
15°	1523	1529	1520
20°	1523	1524	1512
25°	1519	1516	1502
30°	1513	1506	1491
35°	1505	1493	1478
40°	1496	1478	1463
45°	1478	1457	1442
50°	1459	1432	1415
55°	1422	1389	1376
60°	1366	1329	1317
65°	1280	1242	1229
70°	1154	1108	1098
75°	968	919	909
80°	704	656	637
85°	371	327	299

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1478 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.1	3.4
10°-20°	155.3	9.7
20°-30°	235.9	14.8
30°-40°	285.3	17.9
40°-50°	296.5	18.6
50°-60°	265.5	16.6
60°-70°	193.6	12.1
70°-80°	95.4	6.0
80°-90°	15.9	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°	445.2	27.9
0°-40°	730.5	45.7
0°-60°	1292.5	80.9
0°-90°	1597.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1597.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	564	570	567	573	563	54
15°	547	552	549	554	546	154
25°	512	514	511	513	506	236
35°	458	459	454	456	450	287
45°	388	388	383	384	379	300
55°	303	300	296	295	293	271
65°	201	199	195	194	193	199
75°	93	91	88	87	87	99
85°	12	12	11	9	10	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	570.7	570.7	570.7	570.7	570.7
2.5°	565.8	572.2	569.1	574.8	564.6
5°	564.1	570.3	567.4	572.9	563.4
7.5°	561.3	567.7	564.6	569.8	560.8
10°	558.2	563.9	560.6	565.8	556.6
12.5°	552.8	558.5	555.4	560.1	551.6
15°	546.6	551.6	548.8	553.5	545.5
17.5°	539.6	544.3	541.2	545.5	537.4
20°	531.8	535.5	532.2	535.8	528.0
22.5°	522.1	525.6	522.1	524.4	517.6
25°	511.7	514.3	510.7	513.1	506.0
27.5°	500.6	502.0	498.4	500.3	493.0
30°	486.9	488.5	484.7	487.1	480.0
32.5°	473.6	474.6	470.3	472.2	465.8
35°	458.1	459.0	454.5	456.4	450.0
37.5°	443.2	442.9	438.2	439.4	434.0
40°	425.9	425.7	420.7	421.7	416.5
42.5°	408.2	407.3	402.5	403.0	398.3
45°	388.4	387.9	382.9	383.6	378.9
47.5°	369.2	367.8	362.9	363.1	359.1
50°	348.4	346.3	342.1	341.6	338.0
52.5°	326.2	323.9	319.1	318.7	316.1
55°	303.1	300.5	296.0	295.3	293.2
57.5°	279.2	275.9	272.4	271.0	269.3
60°	253.9	250.9	246.9	245.4	244.7
62.5°	227.7	224.7	221.6	220.2	219.2
65°	201.0	198.7	195.1	193.7	193.0
67.5°	173.9	171.7	168.4	166.8	166.5
70°	146.7	144.6	140.8	139.8	139.6
72.5°	119.5	117.6	114.1	113.2	113.2
75°	93.1	91.4	88.4	87.4	87.4
77.5°	68.0	66.6	64.3	63.1	63.1
80°	45.4	44.4	42.3	41.3	41.1
82.5°	26.2	25.7	23.9	22.9	23.4
85°	12.0	11.6	10.6	9.4	9.7
87.5°	3.1	2.8	2.1	1.7	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)