

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: P973637

Luminaire Tested: FLR2-22-20-L940-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973637  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-20-L940-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

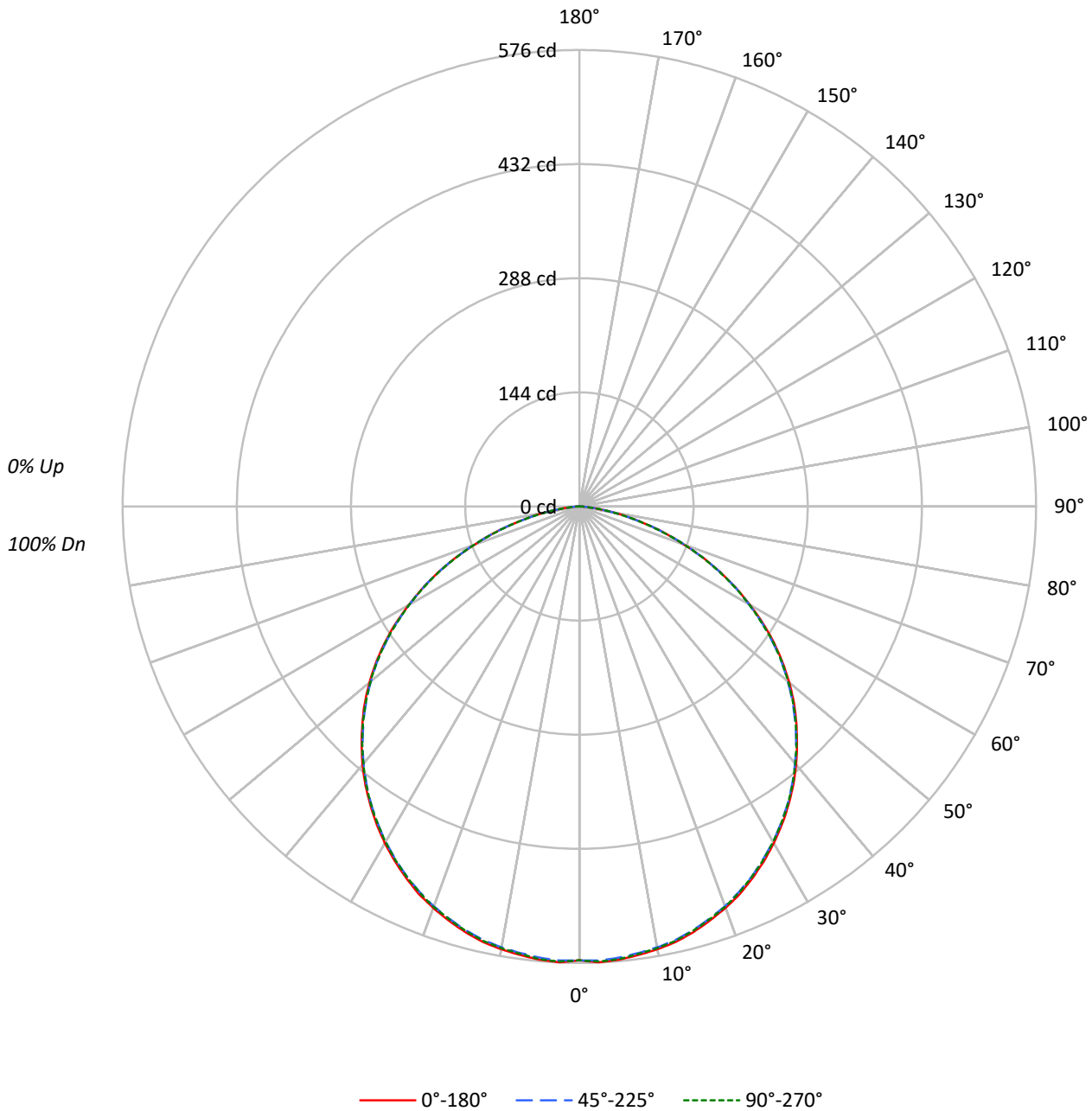
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1601.5 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.1  
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	63	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	71	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	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1541	1541	1541
5°	1551	1544	1549
10°	1550	1544	1546
15°	1549	1542	1544
20°	1544	1538	1540
25°	1535	1529	1530
30°	1524	1518	1519
35°	1510	1505	1506
40°	1495	1487	1488
45°	1473	1466	1469
50°	1447	1436	1439
55°	1406	1394	1399
60°	1336	1330	1330
65°	1248	1245	1241
70°	1105	1110	1108
75°	931	923	916
80°	669	657	652
85°	349	349	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1473 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	3.4
10°-20°	155.9	9.7
20°-30°	237.0	14.8
30°-40°	286.4	17.9
40°-50°	297.3	18.6
50°-60°	265.8	16.6
60°-70°	193.3	12.1
70°-80°	95.0	5.9
80°-90°	16.5	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°	447.1	27.9
0°-40°	733.6	45.8
0°-60°	1296.7	81.0
0°-90°	1601.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1601.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	574	567	572	570	573	55
15°	556	550	554	552	554	157
25°	517	512	515	514	515	238
35°	460	457	458	458	458	288
45°	387	385	385	386	386	299
55°	300	298	297	298	298	267
65°	196	197	196	196	195	193
75°	90	90	89	89	88	95
85°	11	12	11	11	11	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	572.7	572.7	572.7	572.7	572.7
2.5°	575.8	569.1	573.4	570.9	574.8
5°	574.1	567.4	571.6	569.5	573.4
7.5°	570.9	564.2	568.4	566.3	569.5
10°	567.4	560.3	564.9	562.8	565.9
12.5°	562.8	556.0	560.3	558.5	561.3
15°	556.0	549.7	553.6	552.1	554.3
17.5°	547.9	541.5	545.4	544.4	546.1
20°	539.1	533.0	536.9	535.9	537.6
22.5°	529.2	522.8	526.3	525.6	527.0
25°	517.1	511.5	515.0	513.9	515.4
27.5°	504.4	499.1	501.9	501.9	502.6
30°	490.6	485.6	488.5	488.5	488.8
32.5°	475.7	471.9	473.6	474.0	474.0
35°	459.8	456.6	458.1	458.4	458.4
37.5°	443.2	440.0	441.1	441.8	441.8
40°	425.5	422.7	423.4	424.1	423.7
42.5°	406.4	404.3	404.6	405.4	405.4
45°	387.0	385.2	385.2	385.9	385.9
47.5°	367.2	365.4	364.7	365.4	365.4
50°	345.6	343.8	343.1	343.8	343.8
52.5°	322.9	321.2	321.2	321.2	321.5
55°	299.6	297.8	297.1	297.8	298.2
57.5°	274.8	274.1	273.1	273.4	272.4
60°	248.3	248.3	247.2	248.0	247.2
62.5°	222.5	223.2	222.1	222.1	221.4
65°	196.0	196.7	195.6	195.6	194.9
67.5°	168.7	169.8	168.4	168.4	167.7
70°	140.4	142.5	141.1	141.5	140.8
72.5°	115.0	116.0	114.6	114.6	113.9
75°	89.5	90.2	88.8	89.1	88.1
77.5°	64.4	65.4	64.0	64.4	64.0
80°	43.2	43.5	42.4	42.8	42.1
82.5°	25.1	25.5	25.1	24.8	24.4
85°	11.3	11.7	11.3	11.3	11.0
87.5°	2.8	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)