

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: P973877

Luminaire Tested: FLR2-22-20HE-L935-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973877  
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: FLR2-22-20HE-L935-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

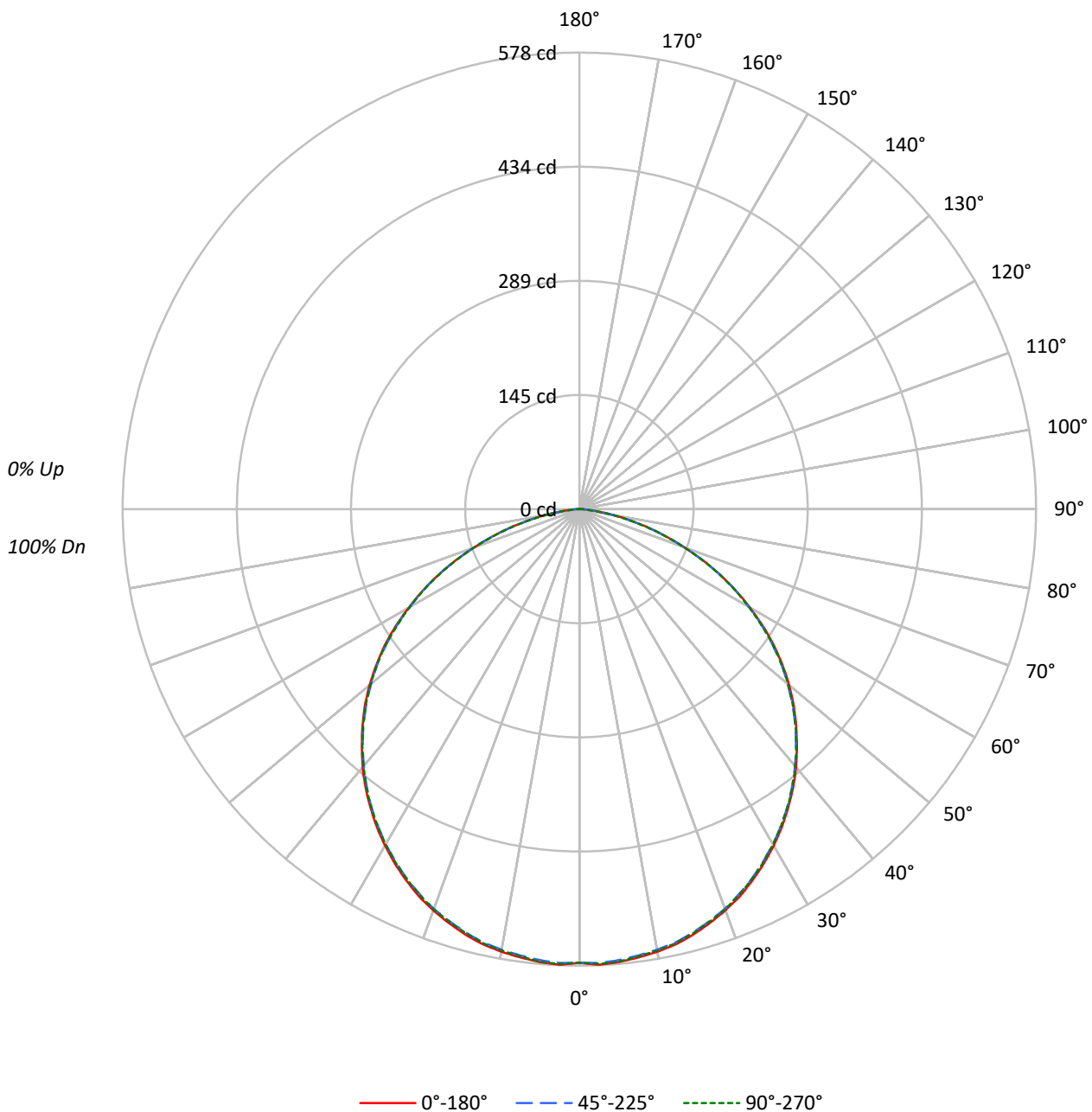
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1606.0 lumens  
Efficiency: N/A  
Efficacy: 108.5 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): 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	63	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	71	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	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	1545	1545	1545
5°	1555	1548	1553
10°	1555	1548	1551
15°	1553	1546	1548
20°	1548	1542	1544
25°	1540	1534	1534
30°	1529	1522	1523
35°	1515	1509	1510
40°	1499	1492	1493
45°	1477	1470	1473
50°	1451	1441	1443
55°	1409	1398	1403
60°	1340	1334	1334
65°	1251	1249	1244
70°	1108	1113	1111
75°	933	925	918
80°	671	660	654
85°	352	352	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1477 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.4	3.4
10°-20°	156.4	9.7
20°-30°	237.7	14.8
30°-40°	287.2	17.9
40°-50°	298.2	18.6
50°-60°	266.6	16.6
60°-70°	193.8	12.1
70°-80°	95.3	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°	448.4	27.9
0°-40°	735.7	45.8
0°-60°	1300.4	81.0
0°-90°	1606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1606.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	576	569	573	571	575	55
15°	558	551	555	554	556	157
25°	519	513	516	515	517	239
35°	461	458	459	460	460	288
45°	388	386	386	387	387	299
55°	300	299	298	299	299	268
65°	196	197	196	196	195	194
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°	574.3	574.3	574.3	574.3	574.3
2.5°	577.5	570.7	575.0	572.5	576.4
5°	575.7	569.0	573.2	571.1	575.0
7.5°	572.5	565.8	570.0	567.9	571.1
10°	569.0	561.9	566.5	564.4	567.5
12.5°	564.4	557.6	561.9	560.1	562.9
15°	557.6	551.2	555.1	553.7	555.8
17.5°	549.5	543.1	547.0	545.9	547.7
20°	540.6	534.6	538.5	537.4	539.2
22.5°	530.7	524.3	527.8	527.1	528.5
25°	518.6	512.9	516.5	515.4	516.8
27.5°	505.8	500.5	503.3	503.3	504.1
30°	492.0	487.0	489.9	489.9	490.2
32.5°	477.1	473.2	475.0	475.3	475.3
35°	461.1	457.9	459.4	459.7	459.7
37.5°	444.5	441.3	442.3	443.0	443.0
40°	426.7	423.9	424.6	425.3	425.0
42.5°	407.6	405.4	405.8	406.5	406.5
45°	388.1	386.3	386.3	387.0	387.0
47.5°	368.2	366.4	365.7	366.4	366.4
50°	346.6	344.8	344.1	344.8	344.8
52.5°	323.9	322.1	322.1	322.1	322.4
55°	300.4	298.7	298.0	298.7	299.0
57.5°	275.6	274.9	273.8	274.2	273.1
60°	249.0	249.0	247.9	248.7	247.9
62.5°	223.1	223.8	222.8	222.8	222.1
65°	196.5	197.2	196.2	196.2	195.4
67.5°	169.2	170.3	168.8	168.8	168.1
70°	140.8	143.0	141.5	141.9	141.2
72.5°	115.3	116.3	114.9	114.9	114.2
75°	89.7	90.5	89.0	89.4	88.3
77.5°	64.6	65.6	64.2	64.6	64.2
80°	43.3	43.6	42.6	42.9	42.2
82.5°	25.2	25.5	25.2	24.8	24.5
85°	11.4	11.7	11.4	11.4	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)