

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: P973775

Luminaire Tested: FLR2-22-20HE-L930-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973775  
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-L930-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

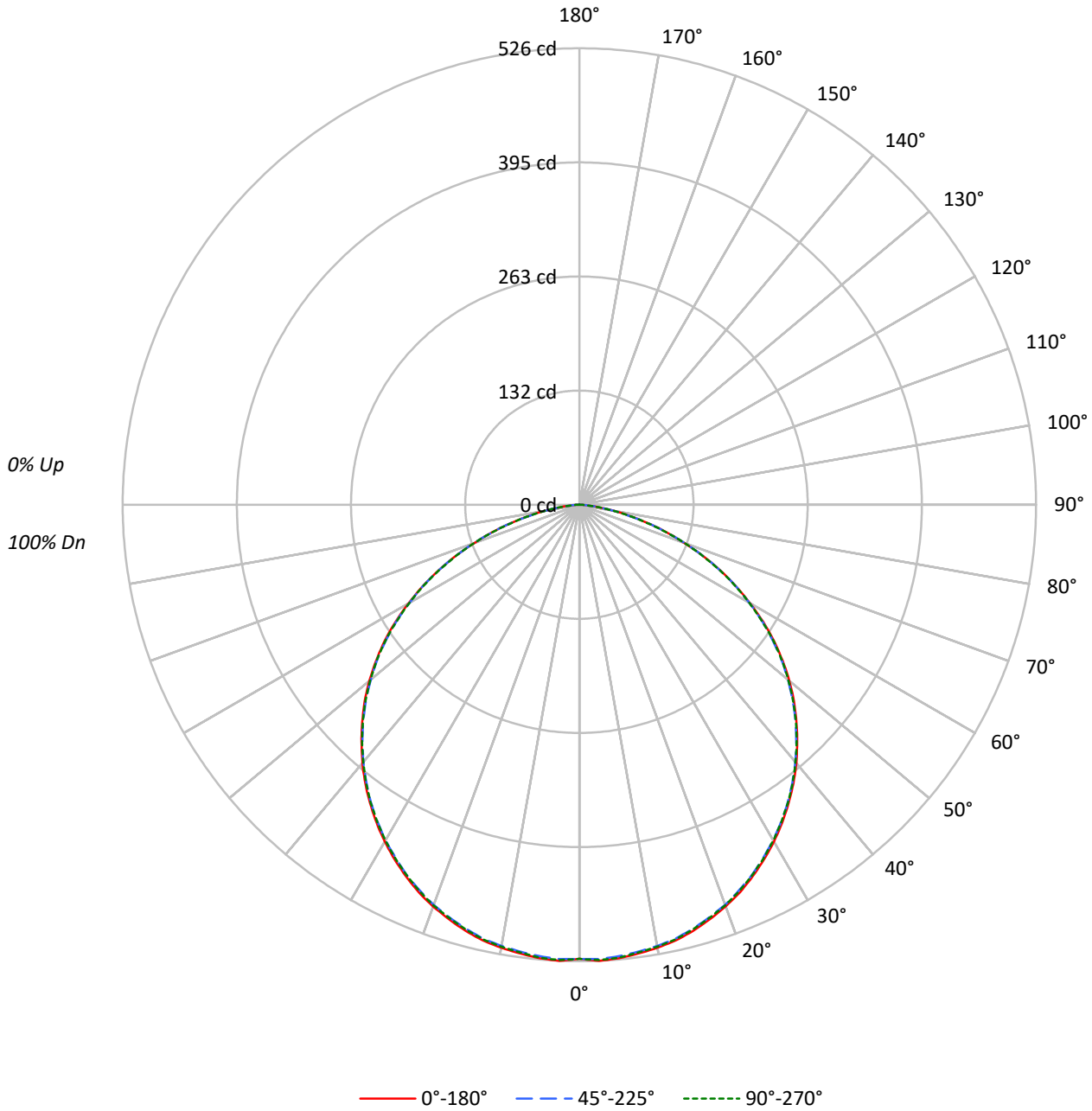
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1463.4 lumens  
Efficiency: N/A  
Efficacy: 98.9 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°	1408	1408	1408
5°	1417	1411	1415
10°	1417	1411	1413
15°	1416	1409	1411
20°	1411	1405	1407
25°	1403	1397	1398
30°	1393	1387	1388
35°	1380	1375	1376
40°	1366	1359	1360
45°	1346	1340	1342
50°	1322	1312	1315
55°	1285	1274	1278
60°	1221	1216	1216
65°	1140	1138	1134
70°	1009	1015	1012
75°	850	843	837
80°	611	601	597
85°	318	318	309

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1346 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.6	3.4
10°-20°	142.5	9.7
20°-30°	216.5	14.8
30°-40°	261.7	17.9
40°-50°	271.7	18.6
50°-60°	242.9	16.6
60°-70°	176.6	12.1
70°-80°	86.8	5.9
80°-90°	15.1	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°	408.6	27.9
0°-40°	670.3	45.8
0°-60°	1184.9	81.0
0°-90°	1463.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1463.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	523	523	523	523	523	
5°	525	518	522	520	524	50
15°	508	502	506	504	506	143
25°	472	467	471	470	471	218
35°	420	417	419	419	419	263
45°	354	352	352	353	353	273
55°	274	272	272	272	272	244
65°	179	180	179	179	178	177
75°	82	82	81	82	80	87
85°	10	11	10	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	523.3	523.3	523.3	523.3	523.3
2.5°	526.2	520.1	523.9	521.7	525.2
5°	524.6	518.4	522.3	520.4	523.9
7.5°	521.7	515.5	519.4	517.5	520.4
10°	518.4	512.0	516.2	514.2	517.1
12.5°	514.2	508.1	512.0	510.4	512.9
15°	508.1	502.3	505.8	504.5	506.5
17.5°	500.7	494.8	498.4	497.4	499.0
20°	492.6	487.1	490.6	489.7	491.3
22.5°	483.5	477.7	480.9	480.3	481.6
25°	472.5	467.4	470.6	469.6	470.9
27.5°	460.9	456.1	458.6	458.6	459.3
30°	448.3	443.8	446.4	446.4	446.7
32.5°	434.7	431.2	432.8	433.1	433.1
35°	420.2	417.3	418.6	418.9	418.9
37.5°	405.0	402.1	403.1	403.7	403.7
40°	388.8	386.2	386.9	387.5	387.2
42.5°	371.4	369.4	369.8	370.4	370.4
45°	353.6	352.0	352.0	352.6	352.6
47.5°	335.5	333.9	333.2	333.9	333.9
50°	315.8	314.2	313.5	314.2	314.2
52.5°	295.1	293.5	293.5	293.5	293.8
55°	273.8	272.1	271.5	272.1	272.5
57.5°	251.1	250.5	249.5	249.8	248.9
60°	226.9	226.9	225.9	226.6	225.9
62.5°	203.3	204.0	203.0	203.0	202.3
65°	179.1	179.7	178.7	178.7	178.1
67.5°	154.2	155.1	153.9	153.9	153.2
70°	128.3	130.3	129.0	129.3	128.6
72.5°	105.0	106.0	104.7	104.7	104.1
75°	81.8	82.4	81.1	81.5	80.5
77.5°	58.8	59.8	58.5	58.8	58.5
80°	39.4	39.8	38.8	39.1	38.5
82.5°	22.9	23.3	22.9	22.6	22.3
85°	10.3	10.7	10.3	10.3	10.0
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)