

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: P973793

Luminaire Tested: FLR2-22-20HE-L930-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973793  
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-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

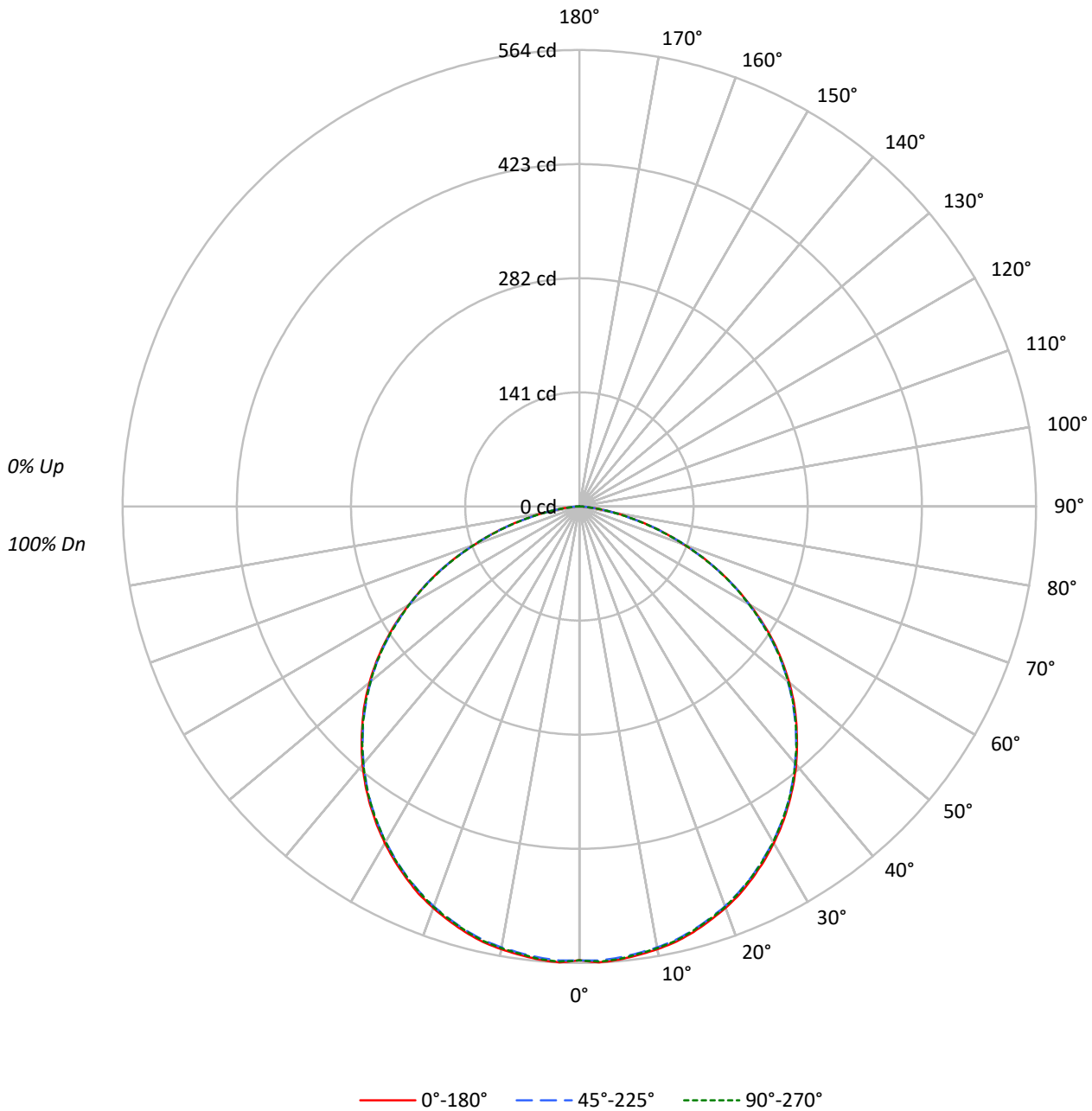
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1568.2 lumens  
Efficiency: N/A  
Efficacy: 106.0 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										
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°	1509	1509	1509
5°	1519	1512	1517
10°	1518	1512	1514
15°	1517	1510	1512
20°	1512	1506	1508
25°	1504	1497	1499
30°	1493	1486	1487
35°	1479	1474	1475
40°	1464	1456	1458
45°	1442	1435	1438
50°	1417	1407	1410
55°	1377	1365	1370
60°	1309	1303	1303
65°	1222	1219	1216
70°	1082	1087	1085
75°	911	904	896
80°	656	645	638
85°	343	343	330

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1442 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	3.4
10°-20°	152.7	9.7
20°-30°	232.1	14.8
30°-40°	280.5	17.9
40°-50°	291.1	18.6
50°-60°	260.3	16.6
60°-70°	189.2	12.1
70°-80°	93.1	5.9
80°-90°	16.1	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°	437.9	27.9
0°-40°	718.4	45.8
0°-60°	1269.8	81.0
0°-90°	1568.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1568.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	562	556	560	558	562	53
15°	544	538	542	541	543	154
25°	506	501	504	503	505	233
35°	450	447	449	449	449	282
45°	379	377	377	378	378	292
55°	293	292	291	292	292	261
65°	192	193	192	192	191	189
75°	88	88	87	87	86	93
85°	11	11	11	11	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	560.8	560.8	560.8	560.8	560.8
2.5°	563.9	557.3	561.5	559.0	562.9
5°	562.2	555.6	559.7	557.7	561.5
7.5°	559.0	552.5	556.6	554.5	557.7
10°	555.6	548.7	553.2	551.1	554.2
12.5°	551.1	544.5	548.7	546.9	549.7
15°	544.5	538.3	542.1	540.7	542.8
17.5°	536.5	530.3	534.1	533.1	534.8
20°	527.9	522.0	525.8	524.8	526.5
22.5°	518.2	511.9	515.4	514.7	516.1
25°	506.4	500.9	504.3	503.3	504.7
27.5°	493.9	488.7	491.5	491.5	492.2
30°	480.4	475.6	478.3	478.3	478.7
32.5°	465.9	462.1	463.8	464.1	464.1
35°	450.3	447.2	448.6	448.9	448.9
37.5°	434.0	430.9	431.9	432.6	432.6
40°	416.7	413.9	414.6	415.3	415.0
42.5°	398.0	395.9	396.2	396.9	396.9
45°	378.9	377.2	377.2	377.9	377.9
47.5°	359.5	357.8	357.1	357.8	357.8
50°	338.4	336.7	336.0	336.7	336.7
52.5°	316.2	314.5	314.5	314.5	314.9
55°	293.4	291.6	291.0	291.6	292.0
57.5°	269.1	268.4	267.4	267.7	266.7
60°	243.2	243.2	242.1	242.8	242.1
62.5°	217.9	218.6	217.5	217.5	216.8
65°	191.9	192.6	191.5	191.5	190.9
67.5°	165.2	166.3	164.9	164.9	164.2
70°	137.5	139.6	138.2	138.5	137.9
72.5°	112.6	113.6	112.2	112.2	111.5
75°	87.6	88.3	86.9	87.3	86.2
77.5°	63.0	64.1	62.7	63.0	62.7
80°	42.3	42.6	41.6	41.9	41.2
82.5°	24.6	24.9	24.6	24.2	23.9
85°	11.1	11.4	11.1	11.1	10.7
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)