

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: P974039

Luminaire Tested: FLR2-22-20HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974039
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-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

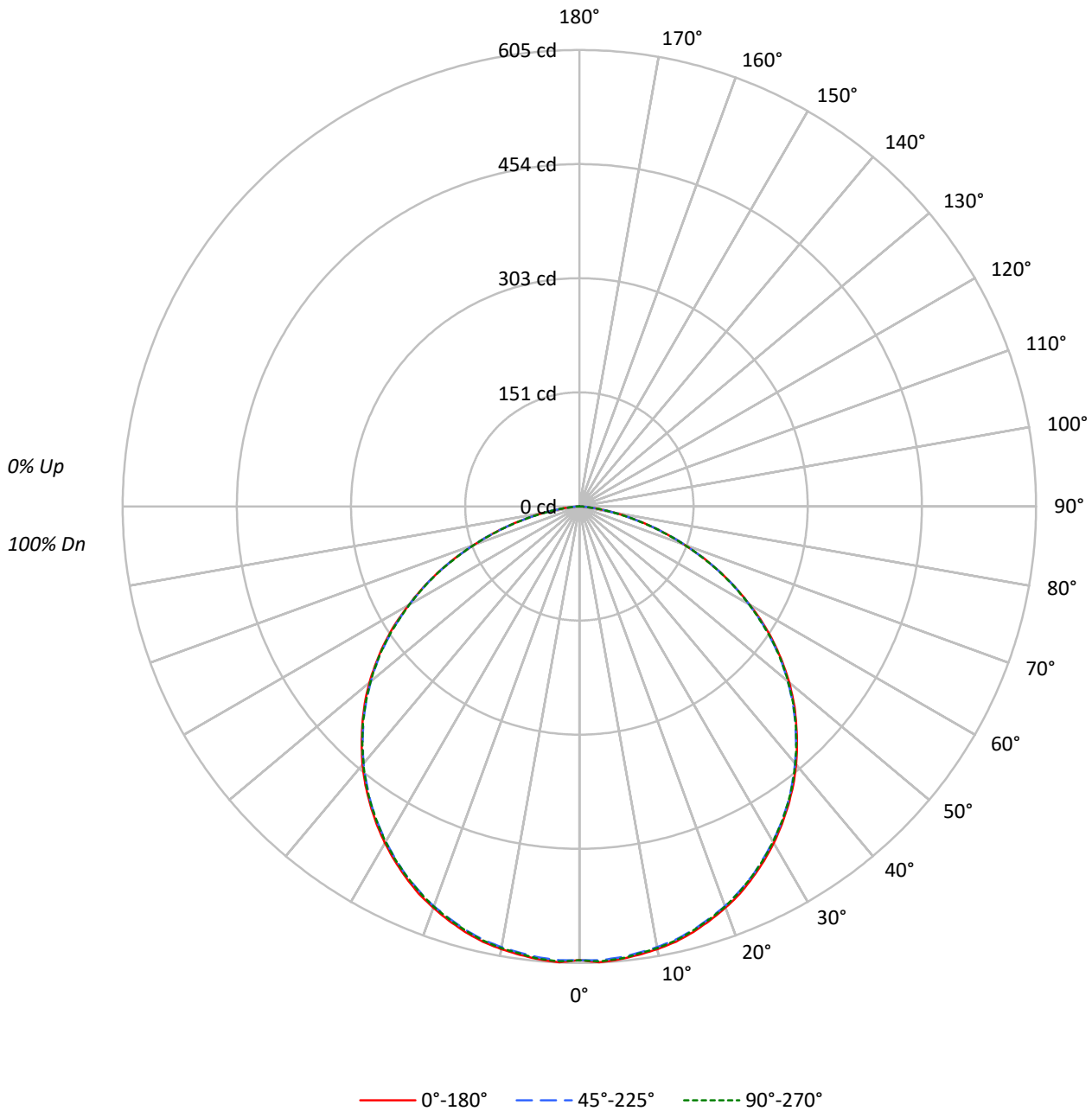
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1681.6 lumens
Efficiency: N/A
Efficacy: 113.6 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°	1618	1618	1618
5°	1628	1621	1626
10°	1628	1621	1624
15°	1627	1619	1621
20°	1621	1615	1617
25°	1612	1606	1607
30°	1601	1594	1595
35°	1586	1580	1581
40°	1570	1562	1563
45°	1546	1539	1542
50°	1519	1508	1511
55°	1476	1464	1469
60°	1403	1397	1397
65°	1310	1308	1303
70°	1160	1166	1163
75°	977	969	962
80°	702	691	685
85°	367	367	355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1546 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	3.4
10°-20°	163.7	9.7
20°-30°	248.8	14.8
30°-40°	300.8	17.9
40°-50°	312.2	18.6
50°-60°	279.1	16.6
60°-70°	202.9	12.1
70°-80°	99.8	5.9
80°-90°	17.3	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°	469.5	27.9
0°-40°	770.3	45.8
0°-60°	1361.6	81.0
0°-90°	1681.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1681.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	603	596	600	598	602	57
15°	584	577	581	580	582	165
25°	543	537	541	540	541	250
35°	483	480	481	481	481	302
45°	406	404	404	405	405	313
55°	315	313	312	313	313	280
65°	206	206	205	205	205	203
75°	94	95	93	94	92	100
85°	12	12	12	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.3	601.3	601.3	601.3	601.3
2.5°	604.7	597.6	602.1	599.5	603.5
5°	602.8	595.7	600.2	598.0	602.1
7.5°	599.5	592.4	596.9	594.6	598.0
10°	595.7	588.3	593.1	590.9	594.3
12.5°	590.9	583.9	588.3	586.5	589.4
15°	583.9	577.2	581.3	579.8	582.0
17.5°	575.3	568.6	572.7	571.6	573.5
20°	566.0	559.7	563.8	562.7	564.5
22.5°	555.6	548.9	552.7	551.9	553.4
25°	543.0	537.1	540.8	539.7	541.1
27.5°	529.6	524.1	527.0	527.0	527.8
30°	515.1	509.9	512.9	512.9	513.3
32.5°	499.5	495.5	497.3	497.7	497.7
35°	482.8	479.5	481.0	481.3	481.3
37.5°	465.4	462.0	463.1	463.9	463.9
40°	446.8	443.8	444.6	445.3	444.9
42.5°	426.7	424.5	424.9	425.6	425.6
45°	406.3	404.5	404.5	405.2	405.2
47.5°	385.5	383.7	382.9	383.7	383.7
50°	362.9	361.0	360.3	361.0	361.0
52.5°	339.1	337.2	337.2	337.2	337.6
55°	314.6	312.7	312.0	312.7	313.1
57.5°	288.6	287.8	286.7	287.1	286.0
60°	260.7	260.7	259.6	260.4	259.6
62.5°	233.6	234.4	233.2	233.2	232.5
65°	205.8	206.5	205.4	205.4	204.6
67.5°	177.2	178.3	176.8	176.8	176.0
70°	147.4	149.7	148.2	148.6	147.8
72.5°	120.7	121.8	120.3	120.3	119.6
75°	94.0	94.7	93.2	93.6	92.5
77.5°	67.6	68.7	67.2	67.6	67.2
80°	45.3	45.7	44.6	44.9	44.2
82.5°	26.4	26.7	26.4	26.0	25.6
85°	11.9	12.3	11.9	11.9	11.5
87.5°	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)