

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: P974033

Luminaire Tested: FLR2-22-20HE-L950-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974033
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

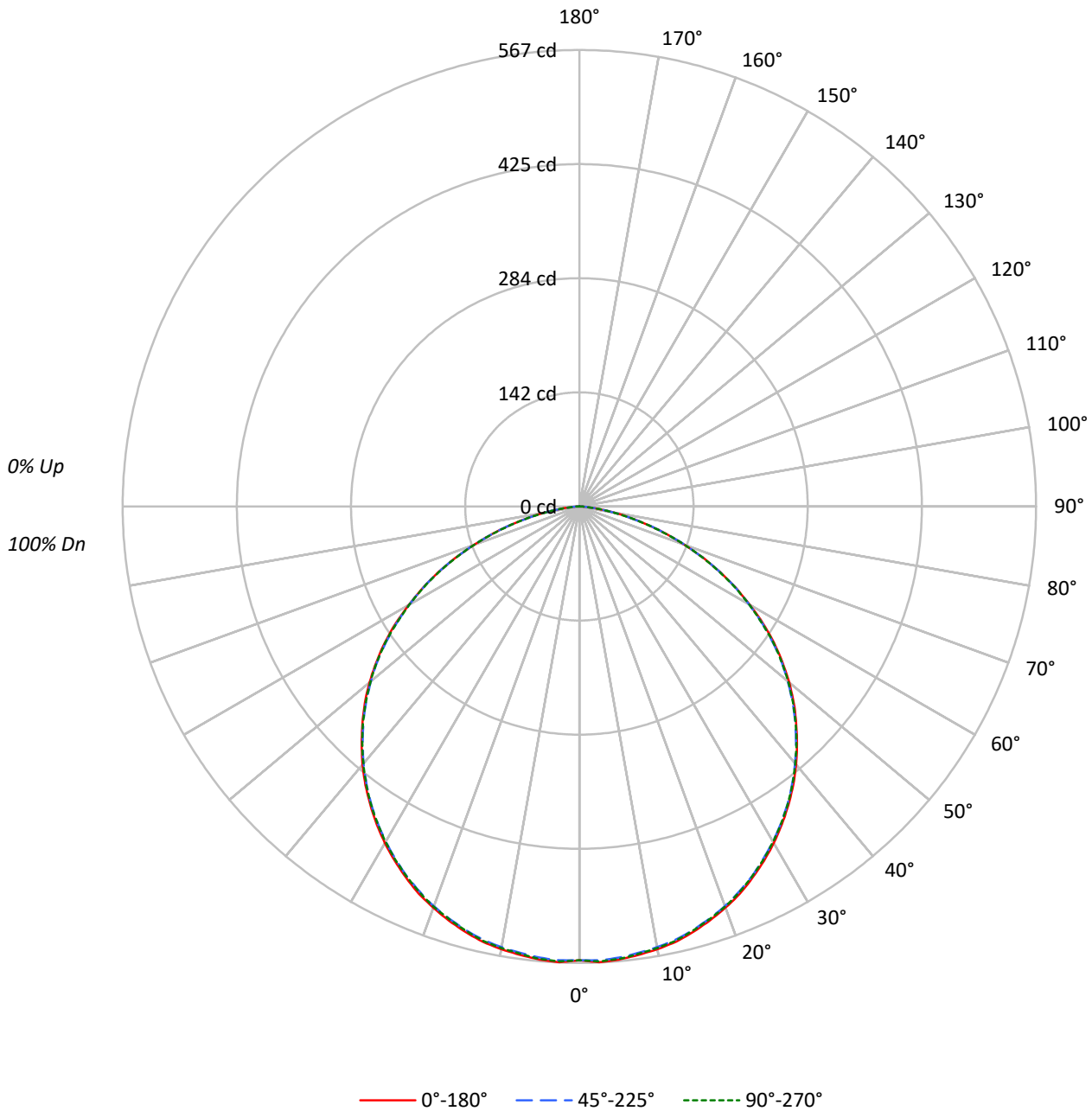
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1576.1 lumens
Efficiency: N/A
Efficacy: 106.5 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									
RC	80									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	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°	1517	1517	1517
5°	1526	1520	1524
10°	1526	1519	1522
15°	1524	1518	1520
20°	1519	1513	1515
25°	1511	1505	1506
30°	1500	1494	1495
35°	1487	1481	1482
40°	1471	1464	1465
45°	1449	1443	1445
50°	1424	1414	1417
55°	1384	1372	1377
60°	1315	1309	1309
65°	1228	1226	1221
70°	1087	1093	1090
75°	916	909	901
80°	659	648	642
85°	343	343	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1449 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	3.4
10°-20°	153.5	9.7
20°-30°	233.2	14.8
30°-40°	281.9	17.9
40°-50°	292.6	18.6
50°-60°	261.6	16.6
60°-70°	190.2	12.1
70°-80°	93.5	5.9
80°-90°	16.2	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°	440.1	27.9
0°-40°	722.0	45.8
0°-60°	1276.2	81.0
0°-90°	1576.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1576.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	565	558	563	560	564	54
15°	547	541	545	543	546	154
25°	509	503	507	506	507	235
35°	453	449	451	451	451	283
45°	381	379	379	380	380	294
55°	295	293	292	293	294	263
65°	193	194	192	192	192	190
75°	88	89	87	88	87	94
85°	11	12	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°	563.6	563.6	563.6	563.6	563.6
2.5°	566.7	560.1	564.3	561.9	565.7
5°	565.0	558.4	562.6	560.5	564.3
7.5°	561.9	555.2	559.4	557.3	560.5
10°	558.4	551.4	555.9	553.9	557.0
12.5°	553.9	547.2	551.4	549.7	552.5
15°	547.2	541.0	544.8	543.4	545.5
17.5°	539.2	533.0	536.8	535.8	537.5
20°	530.5	524.6	528.4	527.4	529.1
22.5°	520.8	514.5	518.0	517.3	518.7
25°	508.9	503.4	506.9	505.8	507.2
27.5°	496.4	491.2	494.0	494.0	494.7
30°	482.8	478.0	480.8	480.8	481.1
32.5°	468.2	464.4	466.1	466.5	466.5
35°	452.6	449.4	450.8	451.2	451.2
37.5°	436.2	433.1	434.1	434.8	434.8
40°	418.8	416.0	416.7	417.4	417.0
42.5°	400.0	397.9	398.2	398.9	398.9
45°	380.8	379.1	379.1	379.8	379.8
47.5°	361.3	359.6	358.9	359.6	359.6
50°	340.1	338.4	337.7	338.4	338.4
52.5°	317.8	316.1	316.1	316.1	316.4
55°	294.9	293.1	292.4	293.1	293.5
57.5°	270.5	269.8	268.7	269.1	268.1
60°	244.4	244.4	243.3	244.0	243.3
62.5°	219.0	219.7	218.6	218.6	217.9
65°	192.9	193.6	192.5	192.5	191.8
67.5°	166.1	167.1	165.7	165.7	165.0
70°	138.2	140.3	138.9	139.2	138.6
72.5°	113.1	114.2	112.8	112.8	112.1
75°	88.1	88.8	87.4	87.7	86.7
77.5°	63.4	64.4	63.0	63.4	63.0
80°	42.5	42.8	41.8	42.1	41.4
82.5°	24.7	25.1	24.7	24.4	24.0
85°	11.1	11.5	11.1	11.1	10.8
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)