

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: P974027

Luminaire Tested: FLR2-22-20HE-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974027
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

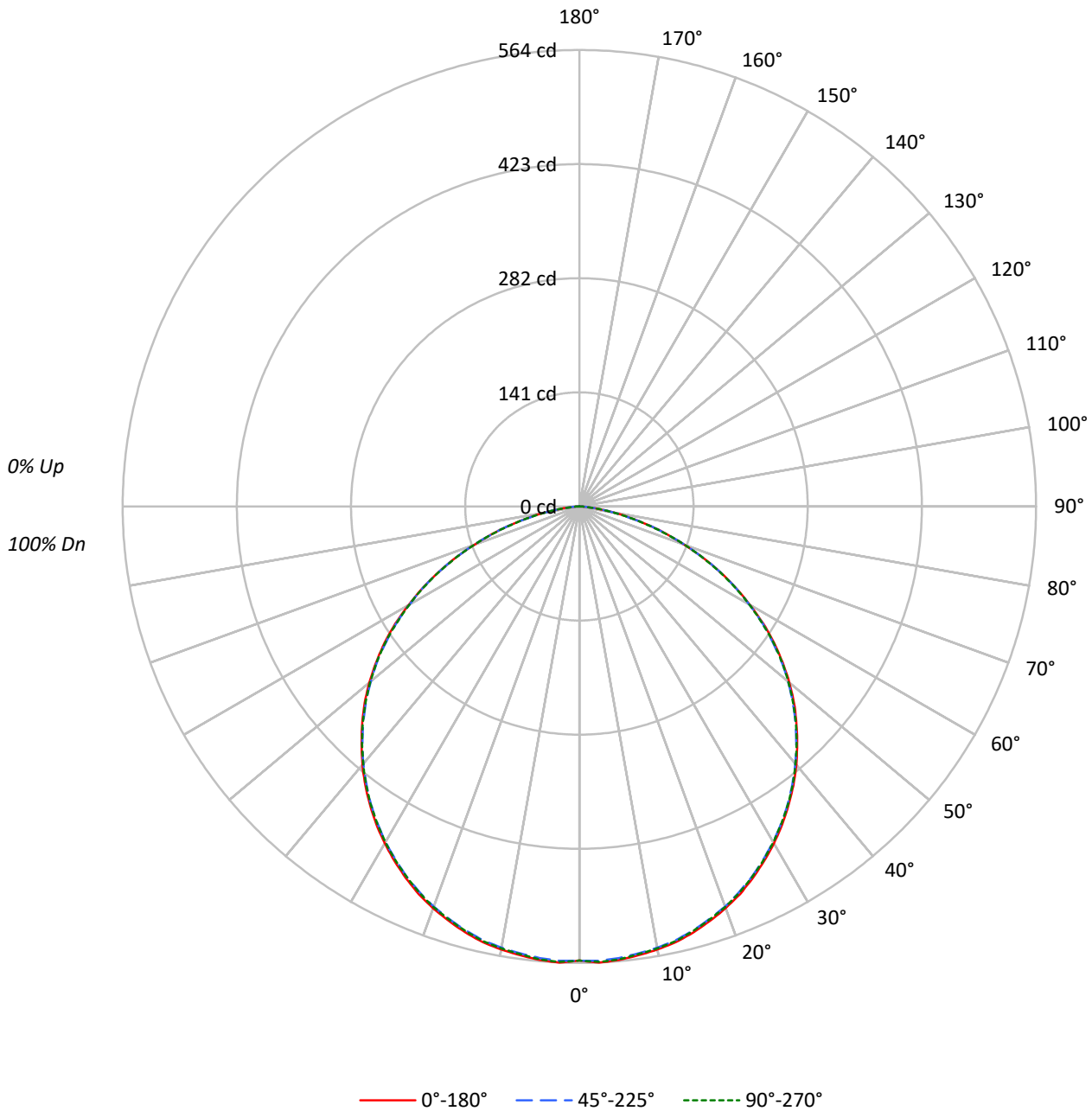
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1569.2 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°	1510	1510	1510
5°	1519	1513	1518
10°	1519	1512	1515
15°	1518	1511	1513
20°	1513	1507	1509
25°	1504	1498	1499
30°	1494	1487	1488
35°	1480	1474	1476
40°	1464	1457	1459
45°	1443	1436	1439
50°	1418	1407	1410
55°	1377	1366	1371
60°	1309	1304	1304
65°	1223	1221	1216
70°	1083	1088	1085
75°	912	905	897
80°	656	645	638
85°	343	343	330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1443 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	3.4
10°-20°	152.8	9.7
20°-30°	232.2	14.8
30°-40°	280.7	17.9
40°-50°	291.3	18.6
50°-60°	260.4	16.6
60°-70°	189.4	12.1
70°-80°	93.1	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°	438.1	27.9
0°-40°	718.8	45.8
0°-60°	1270.6	81.0
0°-90°	1569.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.2	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°	545	539	542	541	543	154
25°	507	501	505	504	505	234
35°	451	447	449	449	449	282
45°	379	377	377	378	378	292
55°	294	292	291	292	292	262
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°	561.1	561.1	561.1	561.1	561.1
2.5°	564.2	557.7	561.8	559.4	563.2
5°	562.5	555.9	560.1	558.0	561.8
7.5°	559.4	552.8	557.0	554.9	558.0
10°	555.9	549.0	553.5	551.4	554.5
12.5°	551.4	544.8	549.0	547.3	550.0
15°	544.8	538.6	542.4	541.0	543.1
17.5°	536.9	530.6	534.4	533.4	535.1
20°	528.2	522.3	526.1	525.1	526.8
22.5°	518.5	512.2	515.7	515.0	516.4
25°	506.7	501.2	504.6	503.6	505.0
27.5°	494.2	489.0	491.8	491.8	492.5
30°	480.7	475.9	478.6	478.6	479.0
32.5°	466.2	462.3	464.1	464.4	464.4
35°	450.6	447.4	448.8	449.2	449.2
37.5°	434.3	431.1	432.2	432.9	432.9
40°	416.9	414.2	414.9	415.6	415.2
42.5°	398.2	396.1	396.5	397.2	397.2
45°	379.2	377.4	377.4	378.1	378.1
47.5°	359.8	358.0	357.3	358.0	358.0
50°	338.6	336.9	336.2	336.9	336.9
52.5°	316.4	314.7	314.7	314.7	315.0
55°	293.6	291.8	291.1	291.8	292.2
57.5°	269.3	268.6	267.6	267.9	266.9
60°	243.3	243.3	242.3	243.0	242.3
62.5°	218.0	218.7	217.7	217.7	217.0
65°	192.0	192.7	191.7	191.7	191.0
67.5°	165.3	166.4	165.0	165.0	164.3
70°	137.6	139.7	138.3	138.6	137.9
72.5°	112.6	113.7	112.3	112.3	111.6
75°	87.7	88.4	87.0	87.3	86.3
77.5°	63.1	64.1	62.7	63.1	62.7
80°	42.3	42.6	41.6	41.9	41.2
82.5°	24.6	25.0	24.6	24.3	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)