

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: P975086

Luminaire Tested: FLR2-24-90HE-L950-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-90HE-L950-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

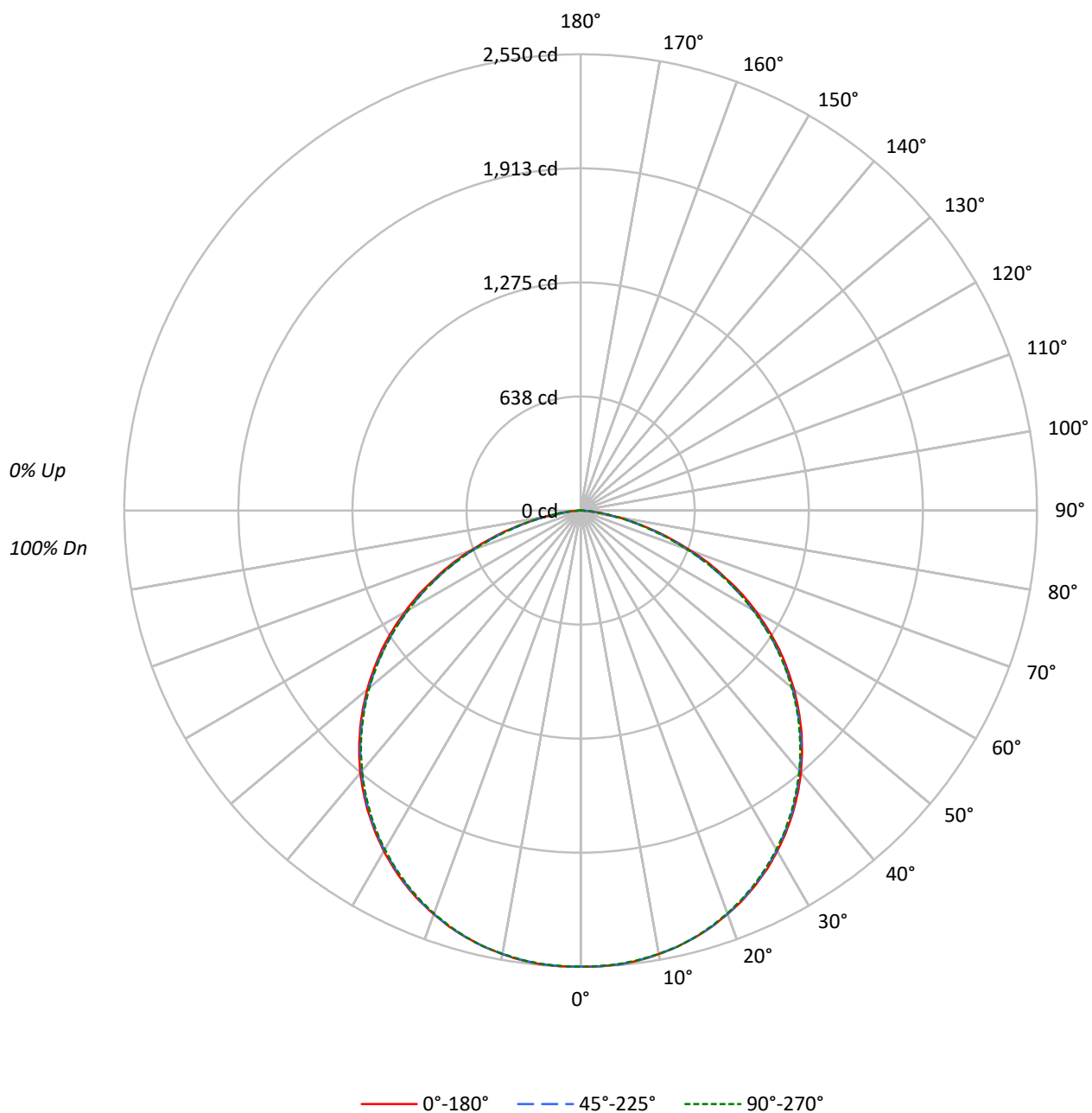
Lumens per Lamp: N/A
Luminaire Lumens: 7207.1 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.3
Input Voltage (V):
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3431	3431	3431
5°	3438	3438	3435
10°	3440	3439	3438
15°	3441	3440	3440
20°	3438	3436	3431
25°	3431	3424	3419
30°	3416	3406	3399
35°	3393	3384	3372
40°	3364	3343	3338
45°	3320	3301	3291
50°	3258	3233	3223
55°	3181	3136	3131
60°	3048	2994	2994
65°	2852	2785	2793
70°	2567	2487	2480
75°	2155	2069	2060
80°	1574	1496	1560
85°	889	820	834

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3320 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.0	3.4
10°-20°	697.3	9.7
20°-30°	1063.1	14.8
30°-40°	1288.1	17.9
40°-50°	1338.0	18.6
50°-60°	1196.9	16.6
60°-70°	872.3	12.1
70°-80°	432.0	6.0
80°-90°	77.2	1.1
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°	2002.5	27.8
0°-40°	3290.6	45.7
0°-60°	5825.5	80.8
0°-90°	7207.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7207.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2550	2550	2550	2550	2550	
5°	2545	2546	2545	2545	2544	242
15°	2470	2470	2470	2471	2470	697
25°	2311	2308	2307	2306	2303	1065
35°	2066	2063	2060	2057	2053	1292
45°	1745	1741	1735	1731	1729	1345
55°	1356	1346	1337	1337	1335	1208
65°	896	888	875	878	877	888
75°	414	408	398	405	396	442
85°	58	53	53	54	54	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2550.0	2550.0	2550.0	2550.0	2550.0
2.5°	2550.0	2549.1	2549.1	2550.0	2548.2
5°	2545.4	2546.3	2545.4	2545.4	2543.6
7.5°	2535.3	2534.4	2533.5	2534.4	2531.7
10°	2518.0	2518.0	2517.0	2518.0	2516.1
12.5°	2496.9	2496.9	2496.9	2497.8	2496.9
15°	2470.4	2469.5	2469.5	2471.3	2469.5
17.5°	2439.3	2438.4	2438.4	2437.4	2435.6
20°	2400.8	2400.8	2399.9	2399.0	2396.3
22.5°	2359.7	2358.8	2356.0	2356.0	2352.4
25°	2311.2	2308.4	2306.6	2305.7	2302.9
27.5°	2258.1	2254.5	2251.7	2249.9	2247.1
30°	2198.6	2195.0	2192.2	2189.5	2187.7
32.5°	2134.6	2132.8	2128.2	2127.3	2123.6
35°	2066.0	2063.2	2060.5	2056.8	2053.2
37.5°	1992.8	1990.0	1983.6	1981.8	1979.1
40°	1915.0	1911.3	1903.1	1903.1	1900.4
42.5°	1831.7	1828.1	1822.6	1818.9	1817.1
45°	1744.8	1741.2	1734.8	1731.1	1729.3
47.5°	1652.4	1649.7	1642.3	1639.6	1636.9
50°	1556.3	1552.7	1544.4	1542.6	1539.9
52.5°	1455.7	1453.9	1442.9	1442.0	1439.2
55°	1356.0	1345.9	1336.8	1336.8	1334.9
57.5°	1246.2	1238.9	1227.0	1227.0	1225.1
60°	1132.7	1126.3	1112.6	1114.4	1112.6
62.5°	1022.0	1008.3	995.5	1001.0	996.4
65°	895.7	888.4	874.7	878.4	877.4
67.5°	780.5	766.7	753.9	761.2	757.6
70°	652.4	645.0	632.2	639.6	630.4
72.5°	531.6	525.2	512.4	520.6	511.5
75°	414.5	408.1	398.0	405.3	396.2
77.5°	303.8	299.2	290.0	297.4	299.2
80°	203.1	197.6	193.1	199.5	201.3
82.5°	118.9	115.3	113.5	114.4	118.9
85°	57.6	53.1	53.1	54.0	54.0
87.5°	15.6	13.7	15.6	16.5	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)