

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: P975053

Luminaire Tested: FLR2-24-90HE-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975053
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

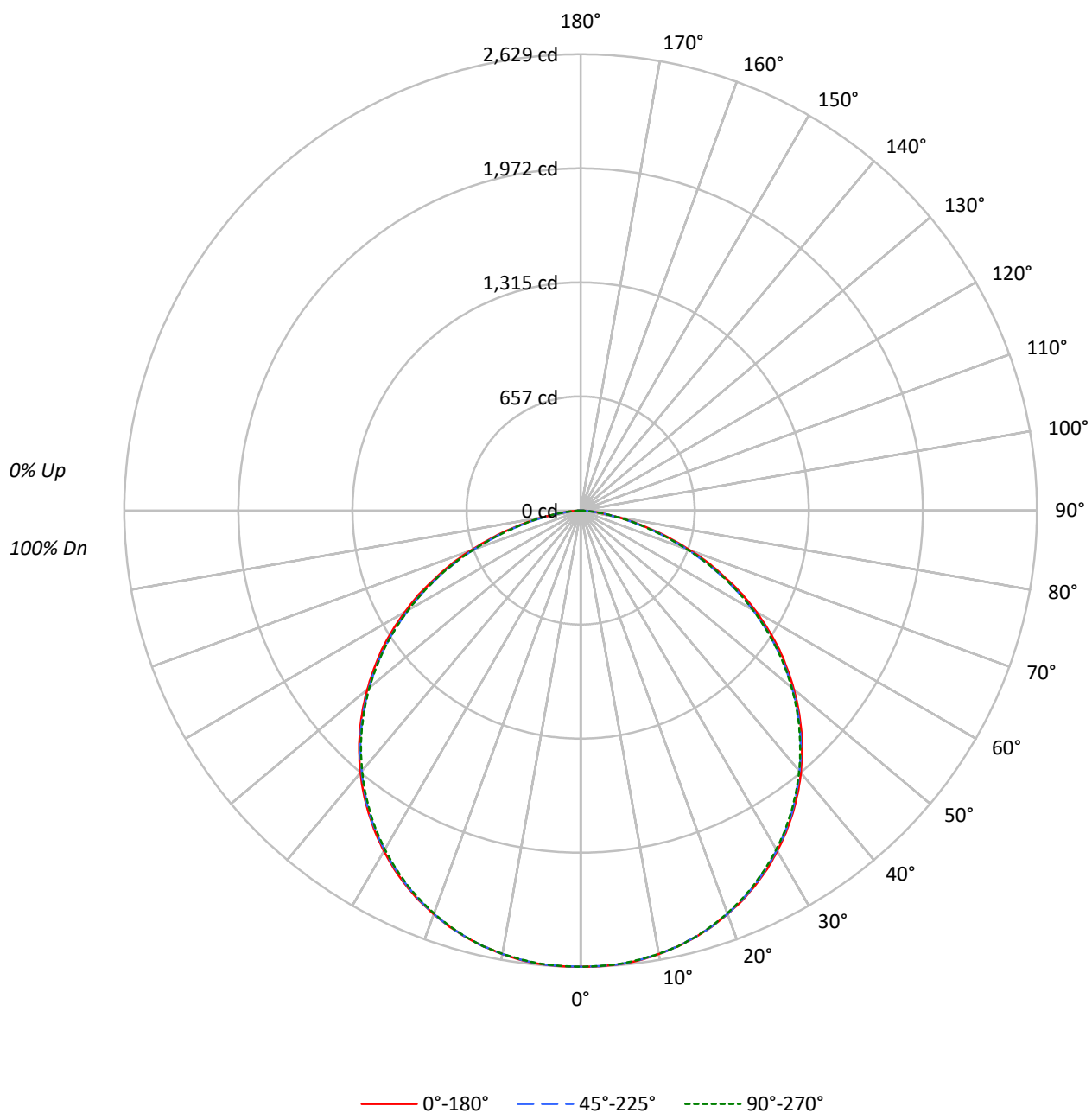
Lumens per Lamp: N/A
Luminaire Lumens: 7429.3 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3537	3537	3537
5°	3544	3544	3541
10°	3546	3545	3544
15°	3547	3546	3546
20°	3544	3542	3537
25°	3537	3530	3524
30°	3521	3511	3504
35°	3498	3489	3476
40°	3467	3446	3441
45°	3422	3403	3392
50°	3358	3333	3323
55°	3279	3232	3228
60°	3142	3086	3086
65°	2940	2871	2880
70°	2646	2564	2557
75°	2221	2133	2123
80°	1623	1542	1608
85°	917	844	858

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3422 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.5	3.4
10°-20°	718.8	9.7
20°-30°	1095.9	14.8
30°-40°	1327.8	17.9
40°-50°	1379.3	18.6
50°-60°	1233.8	16.6
60°-70°	899.2	12.1
70°-80°	445.3	6.0
80°-90°	79.6	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°	2064.3	27.8
0°-40°	3392.1	45.7
0°-60°	6005.2	80.8
0°-90°	7429.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7429.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2629	2629	2629	2629	2629	
5°	2624	2625	2624	2624	2622	250
15°	2547	2546	2546	2548	2546	719
25°	2382	2380	2378	2377	2374	1098
35°	2130	2127	2124	2120	2116	1332
45°	1799	1795	1788	1784	1783	1386
55°	1398	1387	1378	1378	1376	1245
65°	923	916	902	906	904	915
75°	427	421	410	418	408	456
85°	59	55	55	56	56	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2628.6	2628.6	2628.6	2628.6	2628.6
2.5°	2628.6	2627.7	2627.7	2628.6	2626.8
5°	2623.9	2624.9	2623.9	2623.9	2622.0
7.5°	2613.6	2612.6	2611.7	2612.6	2609.8
10°	2595.6	2595.6	2594.7	2595.6	2593.8
12.5°	2573.9	2573.9	2573.9	2574.9	2573.9
15°	2546.6	2545.6	2545.6	2547.5	2545.6
17.5°	2514.5	2513.6	2513.6	2512.6	2510.8
20°	2474.9	2474.9	2474.0	2473.0	2470.2
22.5°	2432.5	2431.5	2428.7	2428.7	2424.9
25°	2382.5	2379.6	2377.8	2376.8	2374.0
27.5°	2327.8	2324.0	2321.2	2319.3	2316.5
30°	2266.5	2262.7	2259.9	2257.0	2255.1
32.5°	2200.4	2198.6	2193.8	2192.9	2189.1
35°	2129.7	2126.9	2124.0	2120.3	2116.5
37.5°	2054.3	2051.4	2044.8	2042.9	2040.1
40°	1974.1	1970.3	1961.8	1961.8	1959.0
42.5°	1888.3	1884.5	1878.8	1875.0	1873.2
45°	1798.6	1794.9	1788.3	1784.5	1782.6
47.5°	1703.4	1700.6	1693.0	1690.2	1687.4
50°	1604.4	1600.6	1592.1	1590.2	1587.4
52.5°	1500.6	1498.7	1487.4	1486.5	1483.6
55°	1397.8	1387.4	1378.0	1378.0	1376.1
57.5°	1284.6	1277.1	1264.8	1264.8	1262.9
60°	1167.7	1161.1	1146.9	1148.8	1146.9
62.5°	1053.5	1039.4	1026.2	1031.8	1027.1
65°	923.4	915.8	901.7	905.5	904.5
67.5°	804.5	790.4	777.2	784.7	781.0
70°	672.5	664.9	651.7	659.3	649.9
72.5°	548.0	541.4	528.2	536.7	527.2
75°	427.3	420.7	410.3	417.8	408.4
77.5°	313.1	308.4	299.0	306.5	308.4
80°	209.4	203.7	199.0	205.6	207.5
82.5°	122.6	118.8	117.0	117.9	122.6
85°	59.4	54.7	54.7	55.6	55.6
87.5°	16.0	14.1	16.0	17.0	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)