

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: P974965

Luminaire Tested: FLR2-24-90HE-L940-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974965
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-L940-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

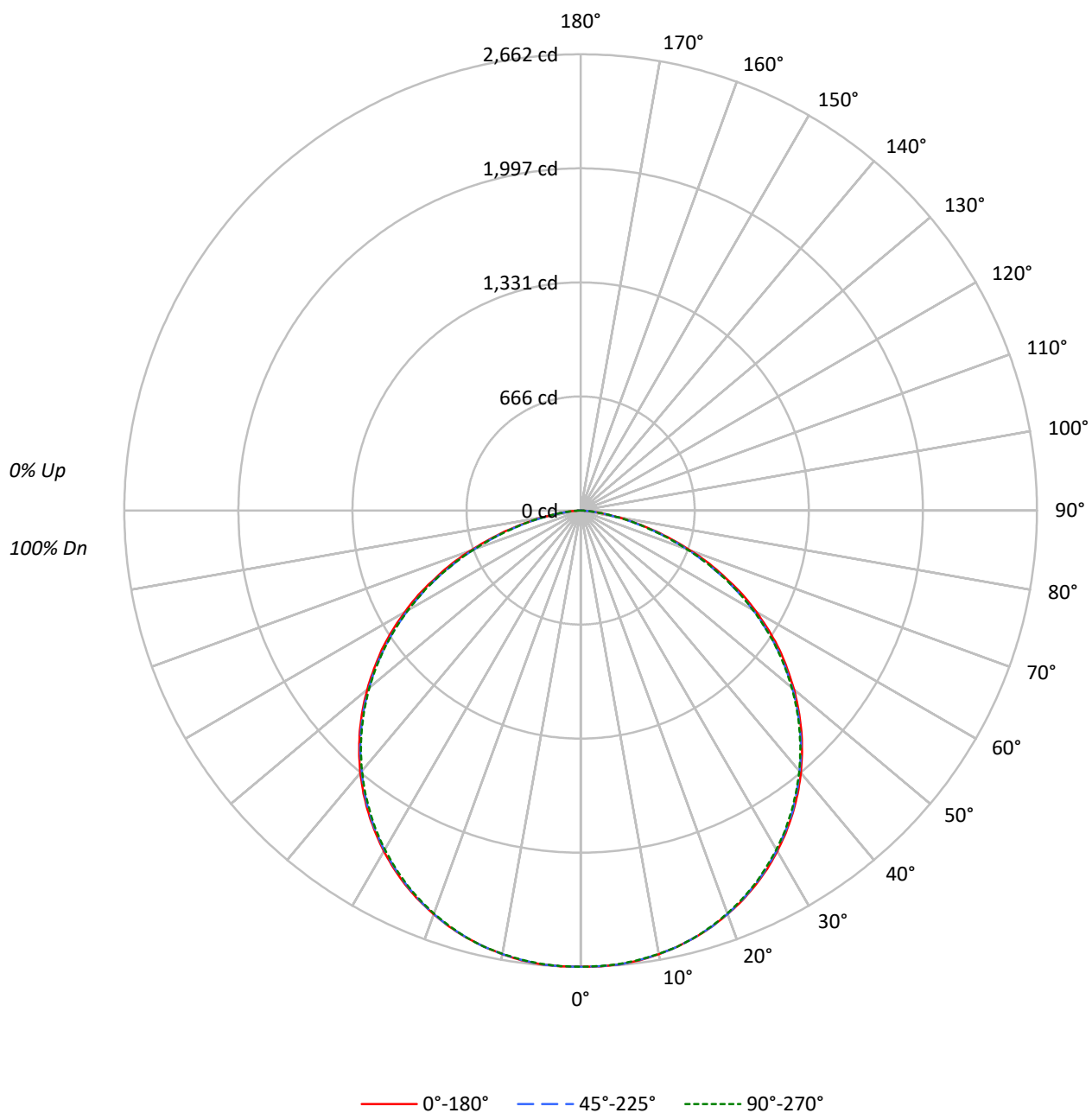
Lumens per Lamp: N/A
Luminaire Lumens: 7524.6 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3582	3582	3582
5°	3589	3589	3587
10°	3592	3590	3589
15°	3593	3591	3591
20°	3589	3588	3582
25°	3582	3575	3570
30°	3566	3556	3549
35°	3543	3534	3521
40°	3512	3490	3485
45°	3466	3446	3436
50°	3401	3375	3365
55°	3321	3274	3269
60°	3182	3126	3126
65°	2977	2907	2917
70°	2679	2597	2589
75°	2249	2160	2150
80°	1643	1562	1629
85°	929	855	871

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3466 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.7	3.4
10°-20°	728.0	9.7
20°-30°	1110.0	14.8
30°-40°	1344.8	17.9
40°-50°	1396.9	18.6
50°-60°	1249.6	16.6
60°-70°	910.8	12.1
70°-80°	451.0	6.0
80°-90°	80.6	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°	2090.7	27.8
0°-40°	3435.5	45.7
0°-60°	6082.1	80.8
0°-90°	7524.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7524.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2662	2662	2662	2662	2662	
5°	2658	2658	2658	2658	2656	253
15°	2579	2578	2578	2580	2578	728
25°	2413	2410	2408	2407	2404	1112
35°	2157	2154	2151	2147	2144	1349
45°	1822	1818	1811	1807	1806	1404
55°	1416	1405	1396	1396	1394	1261
65°	935	928	913	917	916	927
75°	433	426	416	423	414	461
85°	60	55	55	56	56	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2662.3	2662.3	2662.3	2662.3	2662.3
2.5°	2662.3	2661.4	2661.4	2662.3	2660.4
5°	2657.6	2658.5	2657.6	2657.6	2655.6
7.5°	2647.1	2646.1	2645.1	2646.1	2643.2
10°	2628.9	2628.9	2627.9	2628.9	2627.0
12.5°	2606.9	2606.9	2606.9	2607.9	2606.9
15°	2579.2	2578.3	2578.3	2580.2	2578.3
17.5°	2546.7	2545.8	2545.8	2544.8	2542.9
20°	2506.6	2506.6	2505.7	2504.7	2501.9
22.5°	2463.6	2462.7	2459.8	2459.8	2456.0
25°	2413.0	2410.1	2408.2	2407.3	2404.4
27.5°	2357.6	2353.8	2350.9	2349.0	2346.1
30°	2295.5	2291.7	2288.8	2286.0	2284.0
32.5°	2228.6	2226.7	2222.0	2221.0	2217.2
35°	2157.0	2154.1	2151.3	2147.4	2143.6
37.5°	2080.6	2077.7	2071.0	2069.1	2066.2
40°	1999.4	1995.6	1987.0	1987.0	1984.1
42.5°	1912.4	1908.6	1902.9	1899.1	1897.2
45°	1821.7	1817.9	1811.2	1807.4	1805.5
47.5°	1725.2	1722.4	1714.7	1711.8	1709.0
50°	1624.9	1621.1	1612.5	1610.6	1607.7
52.5°	1519.8	1517.9	1506.5	1505.5	1502.6
55°	1415.7	1405.2	1395.6	1395.6	1393.7
57.5°	1301.1	1293.4	1281.0	1281.0	1279.1
60°	1182.6	1175.9	1161.6	1163.5	1161.6
62.5°	1067.0	1052.7	1039.3	1045.1	1040.3
65°	935.2	927.6	913.2	917.1	916.1
67.5°	814.8	800.5	787.1	794.8	791.0
70°	681.1	673.5	660.1	667.7	658.2
72.5°	555.0	548.3	535.0	543.5	534.0
75°	432.7	426.1	415.5	423.2	413.6
77.5°	317.1	312.4	302.8	310.5	312.4
80°	212.1	206.3	201.6	208.2	210.2
82.5°	124.2	120.4	118.5	119.4	124.2
85°	60.2	55.4	55.4	56.4	56.4
87.5°	16.2	14.3	16.2	17.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)