

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: P975020

Luminaire Tested: FLR2-24-90HE-L850-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975020
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-L850-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

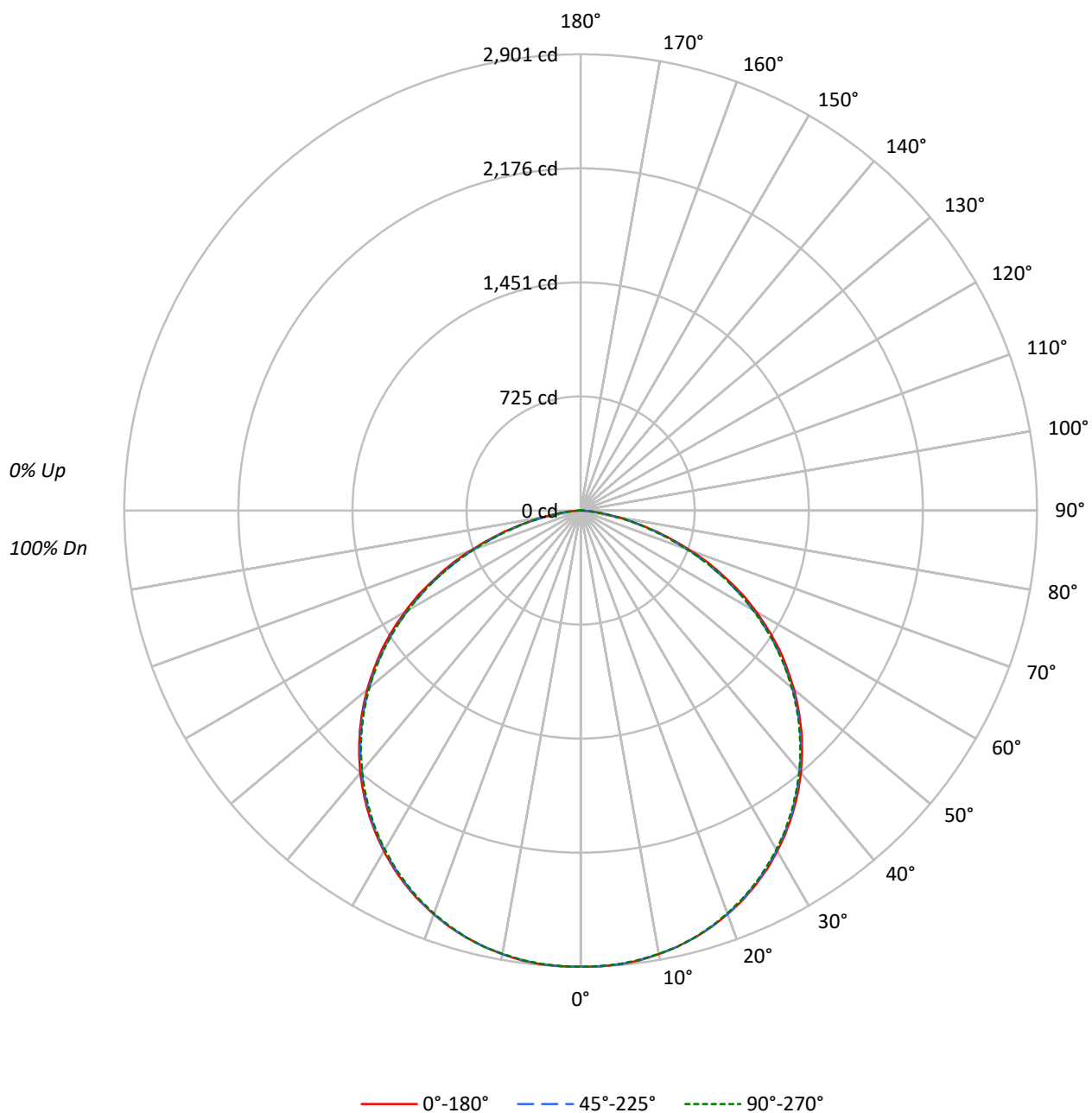
Lumens per Lamp: N/A
Luminaire Lumens: 8199.5 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3903	3903	3903
5°	3911	3911	3908
10°	3914	3913	3911
15°	3915	3914	3914
20°	3911	3909	3904
25°	3904	3896	3890
30°	3886	3875	3867
35°	3861	3850	3837
40°	3827	3803	3798
45°	3777	3755	3744
50°	3706	3678	3667
55°	3619	3567	3563
60°	3468	3406	3406
65°	3245	3168	3178
70°	2920	2830	2821
75°	2452	2354	2343
80°	1791	1702	1774
85°	1013	932	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3777 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.4	3.4
10°-20°	793.3	9.7
20°-30°	1209.5	14.8
30°-40°	1465.5	17.9
40°-50°	1522.2	18.6
50°-60°	1361.7	16.6
60°-70°	992.5	12.1
70°-80°	491.5	6.0
80°-90°	87.9	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°	2278.2	27.8
0°-40°	3743.7	45.7
0°-60°	6627.7	80.8
0°-90°	8199.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8199.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2901	2901	2901	2901	2901	
5°	2896	2897	2896	2896	2894	275
15°	2811	2810	2810	2812	2810	794
25°	2629	2626	2624	2623	2620	1212
35°	2350	2347	2344	2340	2336	1470
45°	1985	1981	1974	1970	1967	1530
55°	1543	1531	1521	1521	1519	1374
65°	1019	1011	995	999	998	1010
75°	472	464	453	461	451	503
85°	66	60	60	61	61	91
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2901.1	2901.1	2901.1	2901.1	2901.1
2.5°	2901.1	2900.1	2900.1	2901.1	2899.1
5°	2895.9	2897.0	2895.9	2895.9	2893.8
7.5°	2884.5	2883.4	2882.4	2883.4	2880.3
10°	2864.7	2864.7	2863.7	2864.7	2862.6
12.5°	2840.8	2840.8	2840.8	2841.8	2840.8
15°	2810.6	2809.5	2809.5	2811.6	2809.5
17.5°	2775.2	2774.1	2774.1	2773.1	2771.0
20°	2731.5	2731.5	2730.4	2729.4	2726.3
22.5°	2684.6	2683.6	2680.5	2680.5	2676.3
25°	2629.4	2626.3	2624.2	2623.2	2620.1
27.5°	2569.1	2564.9	2561.8	2559.7	2556.6
30°	2501.4	2497.2	2494.1	2491.0	2488.9
32.5°	2428.5	2426.5	2421.3	2420.2	2416.1
35°	2350.5	2347.3	2344.2	2340.1	2335.9
37.5°	2267.2	2264.1	2256.8	2254.7	2251.6
40°	2178.7	2174.5	2165.2	2165.2	2162.1
42.5°	2084.0	2079.8	2073.6	2069.4	2067.3
45°	1985.1	1980.9	1973.6	1969.5	1967.4
47.5°	1880.0	1876.8	1868.5	1865.4	1862.3
50°	1770.7	1766.5	1757.1	1755.0	1751.9
52.5°	1656.2	1654.1	1641.6	1640.5	1637.4
55°	1542.7	1531.2	1520.8	1520.8	1518.7
57.5°	1417.8	1409.4	1395.9	1395.9	1393.8
60°	1288.7	1281.4	1265.8	1267.9	1265.8
62.5°	1162.7	1147.1	1132.6	1138.8	1133.6
65°	1019.1	1010.8	995.2	999.3	998.3
67.5°	887.9	872.3	857.7	866.1	861.9
70°	742.2	733.9	719.3	727.6	717.2
72.5°	604.8	597.5	582.9	592.3	581.9
75°	471.6	464.3	452.8	461.1	450.7
77.5°	345.6	340.4	330.0	338.3	340.4
80°	231.1	224.8	219.6	226.9	229.0
82.5°	135.3	131.2	129.1	130.1	135.3
85°	65.6	60.4	60.4	61.4	61.4
87.5°	17.7	15.6	17.7	18.7	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)