

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: P975032

Luminaire Tested: FLR2-24-100HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975032
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: FLR2-24-100HE-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

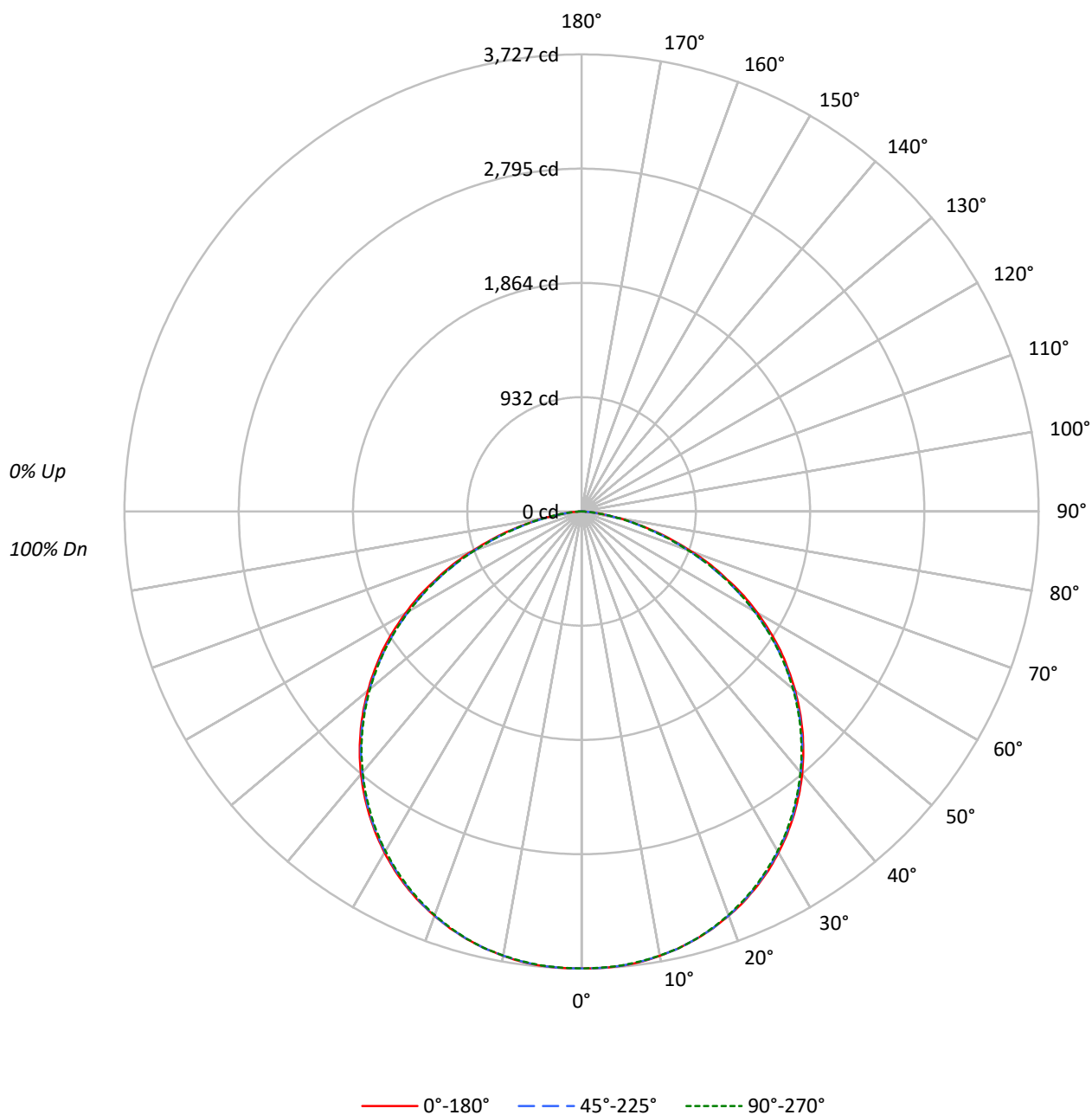
Lumens per Lamp: N/A
Luminaire Lumens: 10532.9 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82.6
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°	5014	5014	5014
5°	5024	5024	5021
10°	5028	5026	5024
15°	5029	5027	5027
20°	5024	5022	5014
25°	5014	5005	4997
30°	4992	4978	4967
35°	4959	4946	4929
40°	4916	4885	4878
45°	4852	4824	4809
50°	4761	4725	4711
55°	4649	4583	4577
60°	4455	4376	4376
65°	4168	4070	4083
70°	3751	3635	3624
75°	3149	3024	3010
80°	2300	2186	2280
85°	1300	1198	1218

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4852 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.7	3.4
10°-20°	1019.1	9.7
20°-30°	1553.8	14.8
30°-40°	1882.5	17.9
40°-50°	1955.4	18.6
50°-60°	1749.3	16.6
60°-70°	1274.9	12.1
70°-80°	631.4	6.0
80°-90°	112.9	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°	2926.6	27.8
0°-40°	4809.1	45.7
0°-60°	8513.8	80.8
0°-90°	10532.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10532.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3727	3727	3727	3727	3727	
5°	3720	3721	3720	3720	3717	354
15°	3610	3609	3609	3612	3609	1019
25°	3378	3374	3371	3370	3366	1557
35°	3019	3015	3011	3006	3001	1889
45°	2550	2545	2535	2530	2527	1965
55°	1982	1967	1954	1954	1951	1766
65°	1309	1298	1278	1284	1282	1298
75°	606	596	582	592	579	646
85°	84	78	78	79	79	117
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3726.8	3726.8	3726.8	3726.8	3726.8
2.5°	3726.8	3725.4	3725.4	3726.8	3724.1
5°	3720.1	3721.4	3720.1	3720.1	3717.4
7.5°	3705.4	3704.0	3702.7	3704.0	3700.0
10°	3679.9	3679.9	3678.6	3679.9	3677.3
12.5°	3649.2	3649.2	3649.2	3650.5	3649.2
15°	3610.4	3609.1	3609.1	3611.8	3609.1
17.5°	3565.0	3563.6	3563.6	3562.3	3559.6
20°	3508.8	3508.8	3507.5	3506.1	3502.1
22.5°	3448.6	3447.3	3443.3	3443.3	3437.9
25°	3377.7	3373.7	3371.1	3369.7	3365.7
27.5°	3300.2	3294.8	3290.8	3288.2	3284.1
30°	3213.3	3207.9	3203.9	3199.9	3197.2
32.5°	3119.7	3117.0	3110.3	3109.0	3103.6
35°	3019.4	3015.4	3011.4	3006.0	3000.7
37.5°	2912.4	2908.4	2899.0	2896.4	2892.3
40°	2798.7	2793.4	2781.4	2781.4	2777.3
42.5°	2677.1	2671.7	2663.7	2658.3	2655.7
45°	2550.0	2544.7	2535.3	2530.0	2527.3
47.5°	2415.0	2411.0	2400.3	2396.2	2392.2
50°	2274.6	2269.2	2257.2	2254.5	2250.5
52.5°	2127.5	2124.8	2108.7	2107.4	2103.4
55°	1981.7	1967.0	1953.6	1953.6	1951.0
57.5°	1821.3	1810.6	1793.2	1793.2	1790.5
60°	1655.4	1646.1	1626.0	1628.7	1626.0
62.5°	1493.6	1473.6	1454.9	1462.9	1456.2
65°	1309.1	1298.4	1278.4	1283.7	1282.4
67.5°	1140.6	1120.6	1101.8	1112.5	1107.2
70°	953.4	942.7	924.0	934.7	921.3
72.5°	776.9	767.5	748.8	760.9	747.5
75°	605.7	596.4	581.7	592.4	579.0
77.5°	443.9	437.3	423.9	434.6	437.3
80°	296.9	288.8	282.1	291.5	294.2
82.5°	173.8	168.5	165.8	167.1	173.8
85°	84.2	77.6	77.6	78.9	78.9
87.5°	22.7	20.1	22.7	24.1	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)