

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: P974900

Luminaire Tested: FLR2-24-100HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974900
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-L940-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

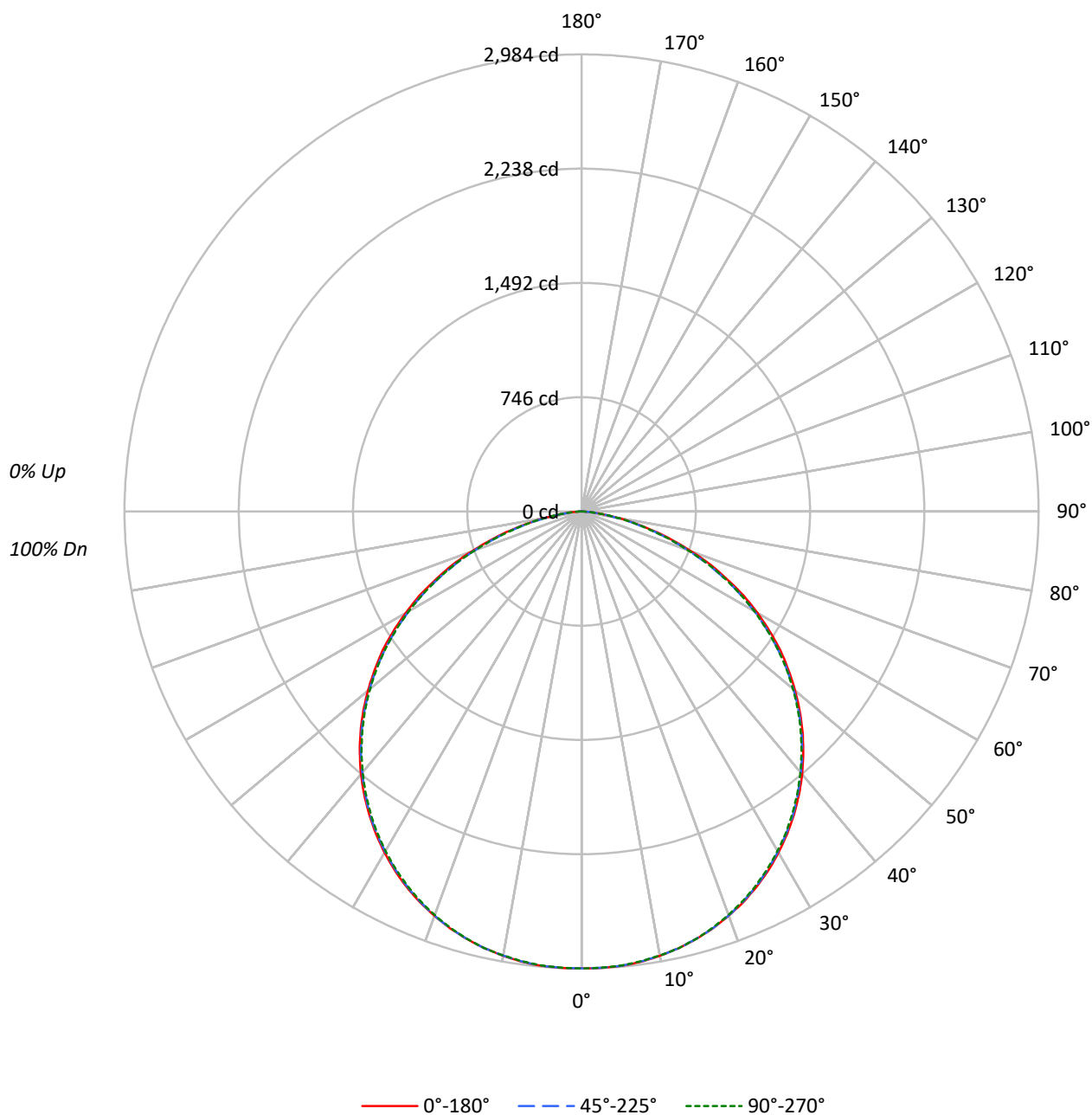
Lumens per Lamp: N/A
Luminaire Lumens: 8432.3 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4014	4014	4014
5°	4022	4022	4019
10°	4025	4024	4022
15°	4026	4025	4025
20°	4022	4020	4014
25°	4014	4007	4000
30°	3997	3985	3977
35°	3970	3960	3946
40°	3935	3911	3905
45°	3885	3862	3850
50°	3812	3782	3771
55°	3722	3669	3664
60°	3566	3503	3503
65°	3337	3258	3268
70°	3003	2910	2902
75°	2521	2421	2410
80°	1842	1750	1825
85°	1041	959	976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3885 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	3.4
10°-20°	815.8	9.7
20°-30°	1243.9	14.8
30°-40°	1507.1	17.9
40°-50°	1565.5	18.6
50°-60°	1400.4	16.6
60°-70°	1020.6	12.1
70°-80°	505.5	6.0
80°-90°	90.4	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°	2342.9	27.8
0°-40°	3850.0	45.7
0°-60°	6815.9	80.8
0°-90°	8432.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8432.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2984	2984	2984	2984	2984	
5°	2978	2979	2978	2978	2976	283
15°	2890	2889	2889	2891	2889	816
25°	2704	2701	2699	2698	2694	1246
35°	2417	2414	2411	2406	2402	1512
45°	2042	2037	2030	2025	2023	1573
55°	1586	1575	1564	1564	1562	1413
65°	1048	1040	1023	1028	1027	1039
75°	485	477	466	474	464	517
85°	67	62	62	63	63	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2983.5	2983.5	2983.5	2983.5	2983.5
2.5°	2983.5	2982.4	2982.4	2983.5	2981.4
5°	2978.2	2979.2	2978.2	2978.2	2976.0
7.5°	2966.4	2965.3	2964.2	2965.3	2962.1
10°	2946.0	2946.0	2945.0	2946.0	2943.9
12.5°	2921.4	2921.4	2921.4	2922.5	2921.4
15°	2890.4	2889.3	2889.3	2891.4	2889.3
17.5°	2854.0	2852.9	2852.9	2851.8	2849.7
20°	2809.0	2809.0	2807.9	2806.9	2803.7
22.5°	2760.8	2759.8	2756.6	2756.6	2752.3
25°	2704.1	2700.9	2698.8	2697.7	2694.5
27.5°	2642.0	2637.7	2634.5	2632.4	2629.2
30°	2572.4	2568.2	2564.9	2561.7	2559.6
32.5°	2497.5	2495.4	2490.0	2488.9	2484.7
35°	2417.2	2414.0	2410.8	2406.5	2402.2
37.5°	2331.6	2328.4	2320.9	2318.7	2315.5
40°	2240.6	2236.3	2226.7	2226.7	2223.4
42.5°	2143.2	2138.9	2132.5	2128.2	2126.0
45°	2041.5	2037.2	2029.7	2025.4	2023.3
47.5°	1933.3	1930.1	1921.6	1918.4	1915.1
50°	1820.9	1816.7	1807.0	1804.9	1801.7
52.5°	1703.2	1701.0	1688.2	1687.1	1683.9
55°	1586.5	1574.7	1564.0	1564.0	1561.9
57.5°	1458.0	1449.5	1435.6	1435.6	1433.4
60°	1325.3	1317.8	1301.7	1303.9	1301.7
62.5°	1195.8	1179.7	1164.7	1171.1	1165.8
65°	1048.0	1039.5	1023.4	1027.7	1026.6
67.5°	913.1	897.1	882.1	890.7	886.4
70°	763.3	754.7	739.7	748.3	737.6
72.5°	622.0	614.5	599.5	609.1	598.4
75°	484.9	477.4	465.7	474.2	463.5
77.5°	355.4	350.1	339.4	347.9	350.1
80°	237.7	231.2	225.9	233.4	235.5
82.5°	139.2	134.9	132.7	133.8	139.2
85°	67.4	62.1	62.1	63.2	63.2
87.5°	18.2	16.1	18.2	19.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)