

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: P974955

Luminaire Tested: FLR2-24-100HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974955
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

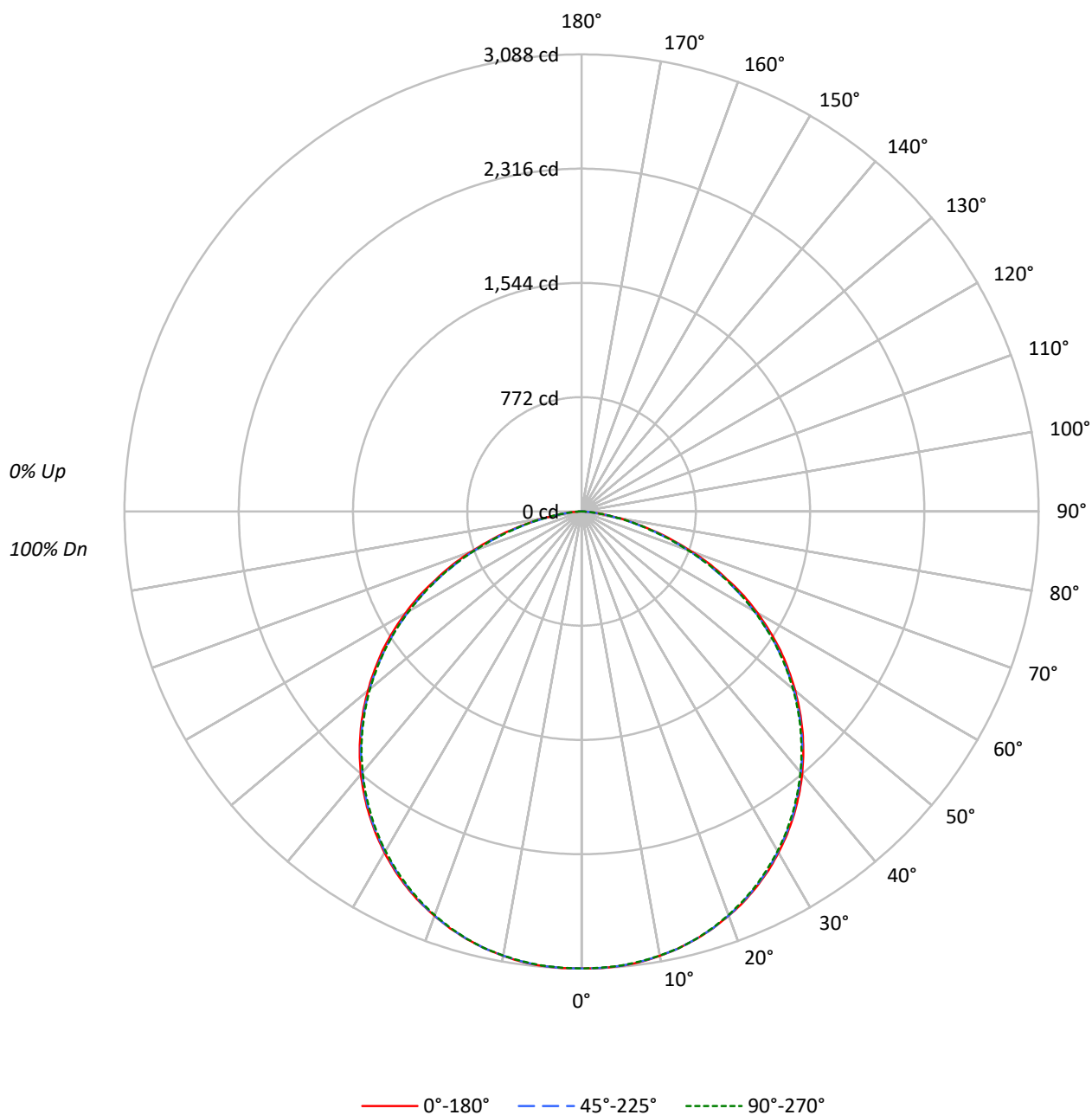
Lumens per Lamp: N/A
Luminaire Lumens: 8727.3 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4155	4155	4155
5°	4163	4163	4160
10°	4166	4164	4163
15°	4167	4165	4165
20°	4163	4161	4155
25°	4155	4147	4140
30°	4136	4124	4116
35°	4109	4098	4084
40°	4073	4048	4042
45°	4020	3997	3984
50°	3945	3915	3903
55°	3852	3797	3792
60°	3691	3626	3626
65°	3453	3372	3383
70°	3108	3012	3003
75°	2609	2506	2494
80°	1906	1812	1889
85°	1078	993	1010

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4020 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.1	3.4
10°-20°	844.4	9.7
20°-30°	1287.4	14.8
30°-40°	1559.8	17.9
40°-50°	1620.2	18.6
50°-60°	1449.4	16.6
60°-70°	1056.3	12.1
70°-80°	523.1	6.0
80°-90°	93.5	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°	2424.9	27.8
0°-40°	3984.7	45.7
0°-60°	7054.3	80.8
0°-90°	8727.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8727.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3088	3088	3088	3088	3088	
5°	3082	3083	3082	3082	3080	293
15°	2992	2990	2990	2993	2990	845
25°	2799	2795	2793	2792	2789	1290
35°	2502	2498	2495	2491	2486	1565
45°	2113	2108	2101	2096	2094	1628
55°	1642	1630	1619	1619	1616	1463
65°	1085	1076	1059	1064	1062	1075
75°	502	494	482	491	480	535
85°	70	64	64	65	65	97
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3087.9	3087.9	3087.9	3087.9	3087.9
2.5°	3087.9	3086.8	3086.8	3087.9	3085.7
5°	3082.3	3083.4	3082.3	3082.3	3080.1
7.5°	3070.2	3069.0	3067.9	3069.0	3065.7
10°	3049.1	3049.1	3048.0	3049.1	3046.9
12.5°	3023.6	3023.6	3023.6	3024.7	3023.6
15°	2991.5	2990.4	2990.4	2992.6	2990.4
17.5°	2953.8	2952.7	2952.7	2951.6	2949.4
20°	2907.3	2907.3	2906.2	2905.1	2901.7
22.5°	2857.4	2856.3	2853.0	2853.0	2848.6
25°	2798.7	2795.4	2793.2	2792.1	2788.7
27.5°	2734.4	2730.0	2726.7	2724.5	2721.1
30°	2662.4	2658.0	2654.7	2651.3	2649.1
32.5°	2584.9	2582.6	2577.1	2576.0	2571.6
35°	2501.8	2498.4	2495.1	2490.7	2486.3
37.5°	2413.1	2409.8	2402.1	2399.8	2396.5
40°	2319.0	2314.5	2304.6	2304.6	2301.2
42.5°	2218.1	2213.7	2207.1	2202.6	2200.4
45°	2112.9	2108.4	2100.7	2096.3	2094.0
47.5°	2001.0	1997.6	1988.8	1985.5	1982.1
50°	1884.6	1880.2	1870.2	1868.0	1864.7
52.5°	1762.8	1760.5	1747.2	1746.1	1742.8
55°	1642.0	1629.8	1618.7	1618.7	1616.5
57.5°	1509.0	1500.2	1485.8	1485.8	1483.6
60°	1371.7	1363.9	1347.3	1349.5	1347.3
62.5°	1237.6	1221.0	1205.5	1212.1	1206.6
65°	1084.7	1075.8	1059.2	1063.6	1062.5
67.5°	945.1	928.5	913.0	921.8	917.4
70°	790.0	781.1	765.6	774.5	763.4
72.5°	643.7	636.0	620.5	630.4	619.3
75°	501.9	494.1	482.0	490.8	479.7
77.5°	367.8	362.3	351.2	360.1	362.3
80°	246.0	239.3	233.8	241.5	243.8
82.5°	144.0	139.6	137.4	138.5	144.0
85°	69.8	64.3	64.3	65.4	65.4
87.5°	18.8	16.6	18.8	19.9	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)