

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: P974537

Luminaire Tested: FLR2-24-100HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974537
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-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

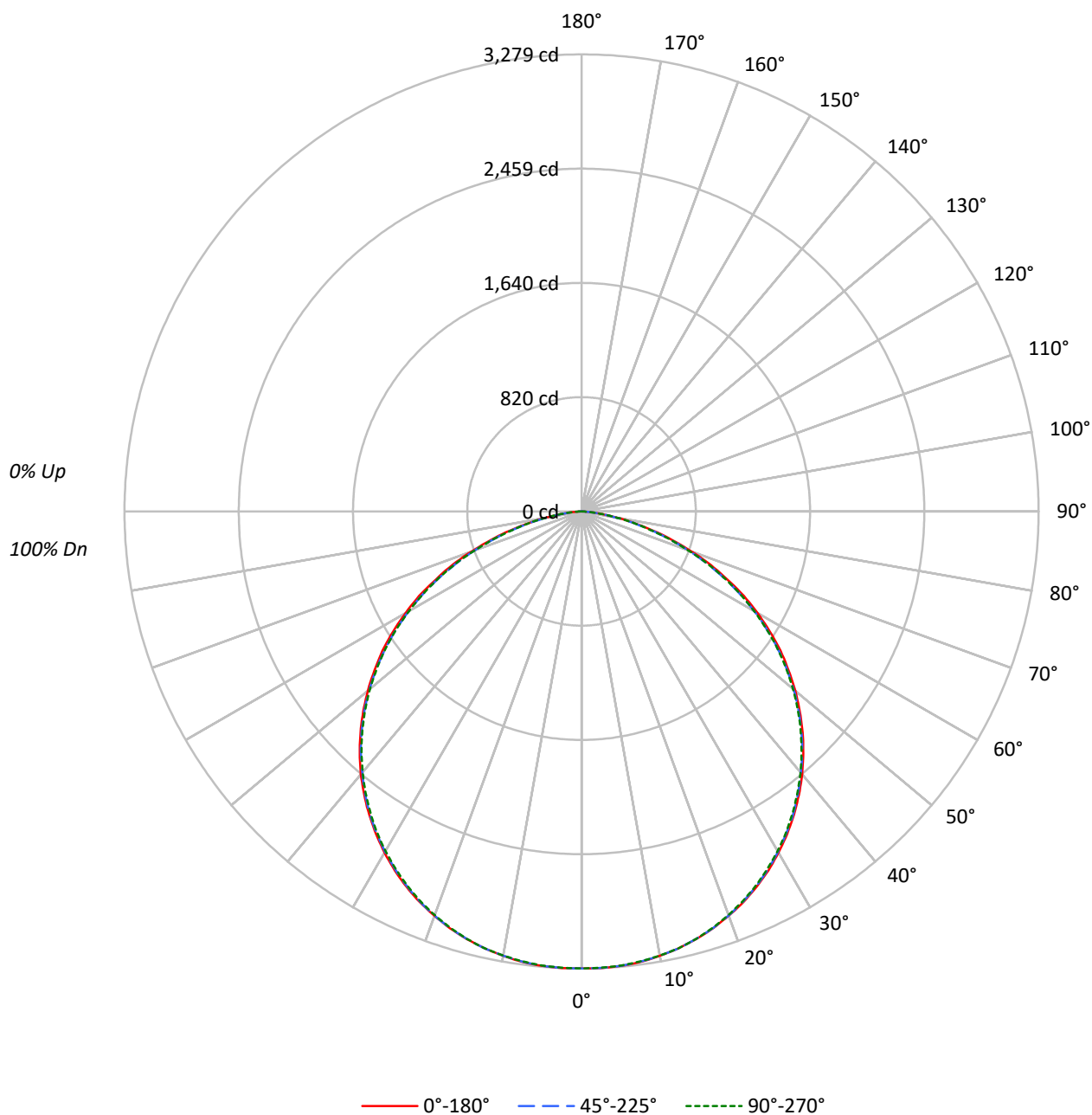
Lumens per Lamp: N/A
Luminaire Lumens: 9267.2 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4412	4412	4412
5°	4421	4421	4418
10°	4423	4422	4420
15°	4425	4423	4423
20°	4420	4419	4412
25°	4412	4403	4396
30°	4392	4380	4370
35°	4363	4352	4336
40°	4325	4298	4292
45°	4269	4244	4231
50°	4189	4157	4145
55°	4090	4032	4027
60°	3919	3850	3850
65°	3667	3581	3592
70°	3300	3198	3189
75°	2771	2661	2648
80°	2024	1923	2005
85°	1144	1053	1071

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4269 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.2	3.4
10°-20°	896.6	9.7
20°-30°	1367.1	14.8
30°-40°	1656.3	17.9
40°-50°	1720.4	18.6
50°-60°	1539.1	16.6
60°-70°	1121.7	12.1
70°-80°	555.5	6.0
80°-90°	99.3	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°	2574.9	27.8
0°-40°	4231.2	45.7
0°-60°	7490.7	80.8
0°-90°	9267.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9267.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3279	3279	3279	3279	3279	
5°	3273	3274	3273	3273	3271	311
15°	3177	3175	3175	3178	3175	897
25°	2972	2968	2966	2965	2961	1370
35°	2656	2653	2650	2645	2640	1662
45°	2244	2239	2231	2226	2224	1729
55°	1744	1731	1719	1719	1716	1553
65°	1152	1142	1125	1129	1128	1142
75°	533	525	512	521	509	568
85°	74	68	68	69	69	103
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3278.9	3278.9	3278.9	3278.9	3278.9
2.5°	3278.9	3277.7	3277.7	3278.9	3276.6
5°	3273.0	3274.2	3273.0	3273.0	3270.7
7.5°	3260.1	3258.9	3257.7	3258.9	3255.4
10°	3237.7	3237.7	3236.6	3237.7	3235.4
12.5°	3210.7	3210.7	3210.7	3211.8	3210.7
15°	3176.6	3175.4	3175.4	3177.7	3175.4
17.5°	3136.6	3135.4	3135.4	3134.2	3131.8
20°	3087.1	3087.1	3086.0	3084.8	3081.3
22.5°	3034.2	3033.0	3029.5	3029.5	3024.8
25°	2971.8	2968.3	2966.0	2964.8	2961.3
27.5°	2903.6	2898.9	2895.4	2893.0	2889.5
30°	2827.1	2822.4	2818.9	2815.4	2813.0
32.5°	2744.8	2742.4	2736.5	2735.4	2730.7
35°	2656.5	2653.0	2649.5	2644.8	2640.1
37.5°	2562.4	2558.9	2550.7	2548.3	2544.8
40°	2462.4	2457.7	2447.1	2447.1	2443.6
42.5°	2355.4	2350.6	2343.6	2338.9	2336.5
45°	2243.6	2238.9	2230.6	2225.9	2223.6
47.5°	2124.8	2121.2	2111.8	2108.3	2104.8
50°	2001.2	1996.5	1985.9	1983.6	1980.1
52.5°	1871.8	1869.5	1855.3	1854.2	1850.6
55°	1743.6	1730.6	1718.9	1718.9	1716.5
57.5°	1602.4	1593.0	1577.7	1577.7	1575.3
60°	1456.5	1448.3	1430.6	1433.0	1430.6
62.5°	1314.2	1296.5	1280.0	1287.1	1281.2
65°	1151.8	1142.4	1124.7	1129.4	1128.3
67.5°	1003.6	985.9	969.4	978.8	974.1
70°	838.8	829.4	813.0	822.4	810.6
72.5°	683.5	675.3	658.8	669.4	657.7
75°	533.0	524.7	511.8	521.2	509.4
77.5°	390.6	384.7	373.0	382.4	384.7
80°	261.2	254.1	248.2	256.5	258.8
82.5°	152.9	148.2	145.9	147.1	152.9
85°	74.1	68.2	68.2	69.4	69.4
87.5°	20.0	17.6	20.0	21.2	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)