

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: P974669

Luminaire Tested: FLR2-24-100HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974669
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-L835-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

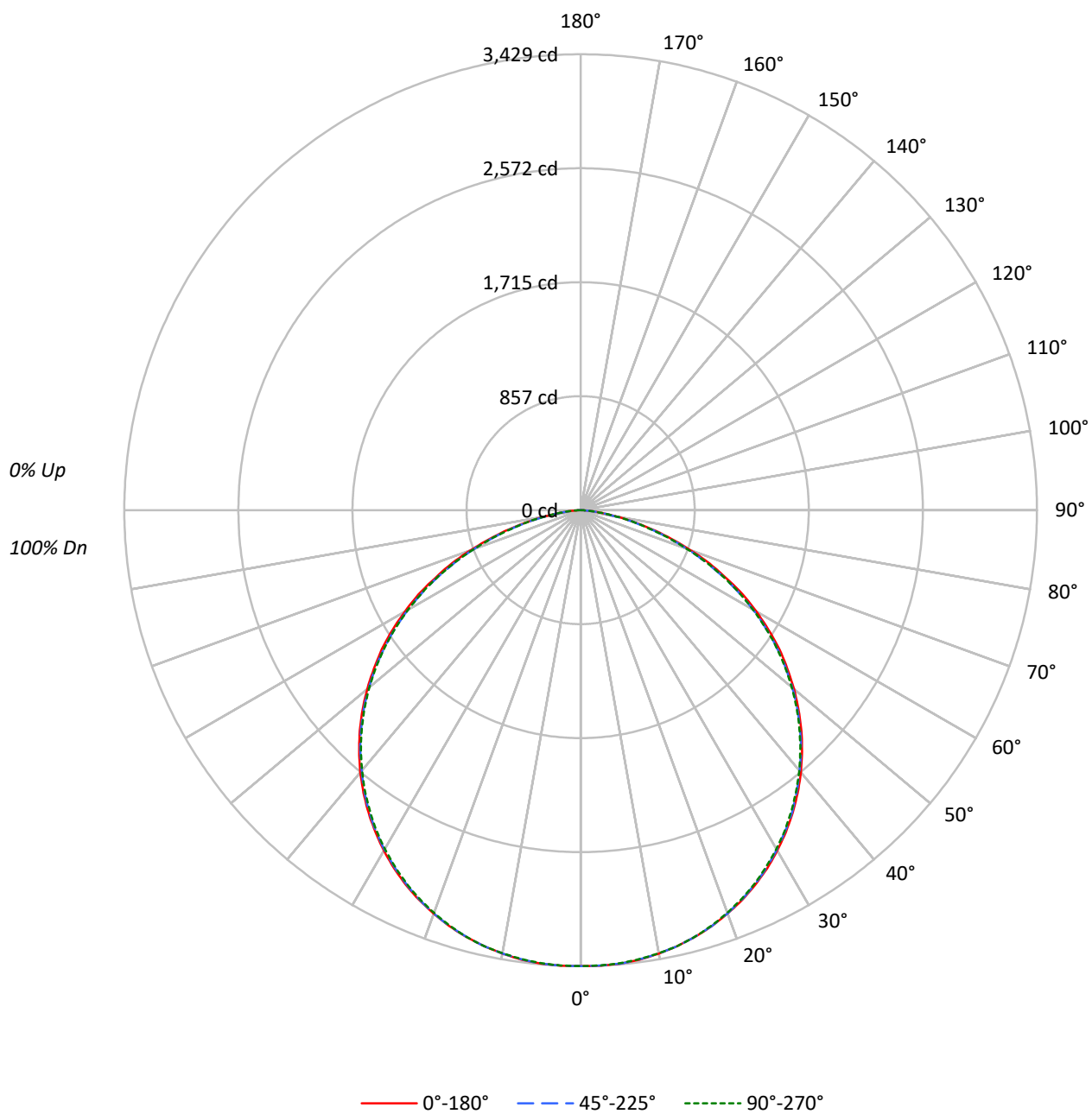
Lumens per Lamp: N/A
Luminaire Lumens: 9692.3 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4614	4614	4614
5°	4623	4623	4620
10°	4627	4625	4623
15°	4628	4626	4626
20°	4623	4621	4614
25°	4614	4605	4598
30°	4594	4580	4571
35°	4564	4551	4535
40°	4523	4495	4489
45°	4465	4439	4425
50°	4381	4348	4335
55°	4278	4217	4211
60°	4099	4027	4027
65°	3835	3745	3757
70°	3451	3345	3335
75°	2898	2783	2770
80°	2117	2011	2097
85°	1196	1102	1121

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4465 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.5	3.4
10°-20°	937.8	9.7
20°-30°	1429.8	14.8
30°-40°	1732.3	17.9
40°-50°	1799.4	18.6
50°-60°	1609.7	16.6
60°-70°	1173.2	12.1
70°-80°	581.0	6.0
80°-90°	103.9	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°	2693.0	27.8
0°-40°	4425.3	45.7
0°-60°	7834.3	80.8
0°-90°	9692.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9692.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3429	3429	3429	3429	3429	
5°	3423	3424	3423	3423	3421	326
15°	3322	3321	3321	3324	3321	938
25°	3108	3104	3102	3101	3097	1432
35°	2778	2775	2771	2766	2761	1738
45°	2346	2342	2333	2328	2326	1808
55°	1824	1810	1798	1798	1795	1625
65°	1205	1195	1176	1181	1180	1194
75°	557	549	535	545	533	594
85°	78	71	71	73	73	107
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3429.3	3429.3	3429.3	3429.3	3429.3
2.5°	3429.3	3428.1	3428.1	3429.3	3426.9
5°	3423.2	3424.4	3423.2	3423.2	3420.7
7.5°	3409.6	3408.4	3407.2	3408.4	3404.7
10°	3386.3	3386.3	3385.0	3386.3	3383.8
12.5°	3358.0	3358.0	3358.0	3359.2	3358.0
15°	3322.3	3321.0	3321.0	3323.5	3321.0
17.5°	3280.4	3279.2	3279.2	3278.0	3275.5
20°	3228.8	3228.8	3227.5	3226.3	3222.6
22.5°	3173.4	3172.2	3168.5	3168.5	3163.5
25°	3108.2	3104.5	3102.0	3100.8	3097.1
27.5°	3036.8	3031.9	3028.2	3025.7	3022.0
30°	2956.8	2951.9	2948.2	2944.5	2942.1
32.5°	2870.7	2868.2	2862.1	2860.8	2855.9
35°	2778.4	2774.7	2771.0	2766.1	2761.2
37.5°	2680.0	2676.3	2667.7	2665.2	2661.5
40°	2575.4	2570.5	2559.4	2559.4	2555.7
42.5°	2463.4	2458.5	2451.1	2446.2	2443.7
45°	2346.5	2341.6	2333.0	2328.0	2325.6
47.5°	2222.2	2218.5	2208.7	2205.0	2201.3
50°	2093.0	2088.1	2077.0	2074.6	2070.9
52.5°	1957.7	1955.2	1940.5	1939.2	1935.5
55°	1823.6	1810.0	1797.7	1797.7	1795.3
57.5°	1675.9	1666.1	1650.1	1650.1	1647.6
60°	1523.3	1514.7	1496.3	1498.7	1496.3
62.5°	1374.4	1356.0	1338.8	1346.1	1340.0
65°	1204.6	1194.8	1176.3	1181.3	1180.0
67.5°	1049.6	1031.1	1013.9	1023.8	1018.8
70°	877.3	867.5	850.3	860.1	847.8
72.5°	714.9	706.3	689.1	700.1	687.8
75°	557.4	548.8	535.3	545.1	532.8
77.5°	408.5	402.4	390.1	399.9	402.4
80°	273.2	265.8	259.6	268.2	270.7
82.5°	160.0	155.0	152.6	153.8	160.0
85°	77.5	71.4	71.4	72.6	72.6
87.5°	20.9	18.5	20.9	22.1	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)