

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: P974581

Luminaire Tested: FLR2-24-100HE-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974581
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-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

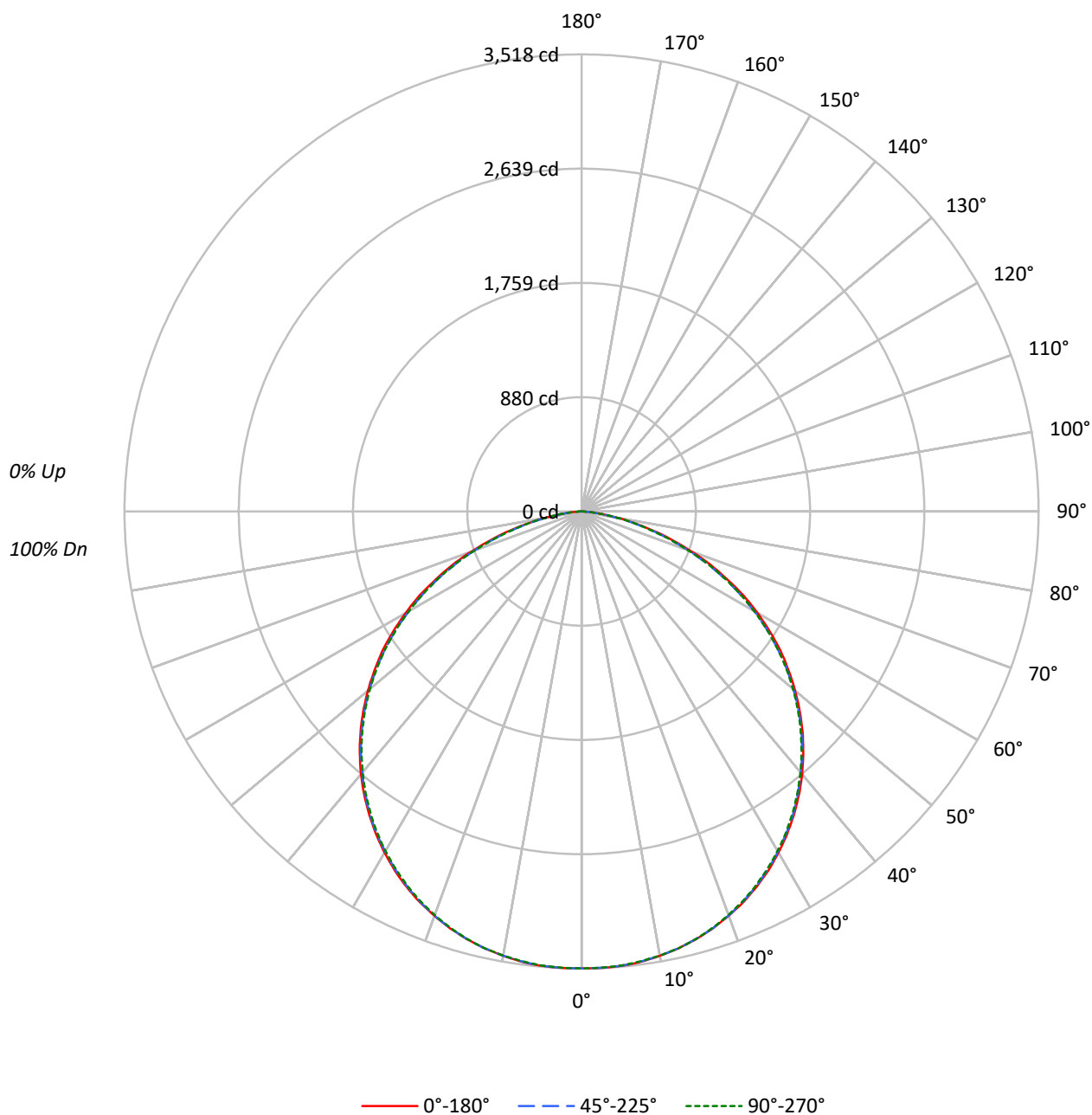
Lumens per Lamp: N/A
Luminaire Lumens: 9941.7 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	99	95	98	95	92		94	92	89		85
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		51
5	76	64	55	48	74	62	54	48	60	53	47		58	52	47		44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		38
7	65	52	43	37	64	51	43	37	49	42	37		48	41	36		34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		27
10	53	40	32	27	52	39	32	27	38	31	27		38	31	26		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4733	4733	4733
5°	4742	4742	4739
10°	4746	4744	4742
15°	4747	4745	4745
20°	4742	4740	4733
25°	4733	4724	4716
30°	4712	4698	4689
35°	4681	4669	4652
40°	4640	4611	4604
45°	4580	4553	4539
50°	4494	4460	4446
55°	4388	4326	4320
60°	4205	4130	4130
65°	3934	3841	3854
70°	3540	3431	3421
75°	2972	2854	2841
80°	2171	2063	2152
85°	1227	1130	1150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4580 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.9	3.4
10°-20°	961.9	9.7
20°-30°	1466.6	14.8
30°-40°	1776.8	17.9
40°-50°	1845.7	18.6
50°-60°	1651.1	16.6
60°-70°	1203.3	12.1
70°-80°	595.9	6.0
80°-90°	106.5	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°	2762.3	27.8
0°-40°	4539.2	45.7
0°-60°	8035.9	80.8
0°-90°	9941.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9941.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3518	3518	3518	3518	3518	
5°	3511	3512	3511	3511	3509	334
15°	3408	3406	3406	3409	3406	962
25°	3188	3184	3182	3181	3177	1469
35°	2850	2846	2842	2837	2832	1783
45°	2407	2402	2393	2388	2385	1855
55°	1870	1857	1844	1844	1842	1666
65°	1236	1226	1207	1212	1210	1225
75°	572	563	549	559	546	610
85°	80	73	73	74	74	110
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3517.6	3517.6	3517.6	3517.6	3517.6
2.5°	3517.6	3516.3	3516.3	3517.6	3515.1
5°	3511.3	3512.5	3511.3	3511.3	3508.7
7.5°	3497.4	3496.1	3494.9	3496.1	3492.3
10°	3473.4	3473.4	3472.1	3473.4	3470.9
12.5°	3444.4	3444.4	3444.4	3445.6	3444.4
15°	3407.8	3406.5	3406.5	3409.0	3406.5
17.5°	3364.9	3363.6	3363.6	3362.3	3359.8
20°	3311.9	3311.9	3310.6	3309.3	3305.5
22.5°	3255.1	3253.8	3250.0	3250.0	3245.0
25°	3188.2	3184.4	3181.9	3180.6	3176.8
27.5°	3115.0	3109.9	3106.1	3103.6	3099.8
30°	3032.9	3027.9	3024.1	3020.3	3017.8
32.5°	2944.6	2942.0	2935.7	2934.5	2929.4
35°	2849.9	2846.1	2842.3	2837.3	2832.2
37.5°	2748.9	2745.2	2736.3	2733.8	2730.0
40°	2641.7	2636.6	2625.2	2625.2	2621.5
42.5°	2526.8	2521.8	2514.2	2509.1	2506.6
45°	2406.9	2401.9	2393.0	2388.0	2385.4
47.5°	2279.4	2275.6	2265.5	2261.8	2258.0
50°	2146.9	2141.8	2130.5	2128.0	2124.2
52.5°	2008.1	2005.5	1990.4	1989.1	1985.3
55°	1870.5	1856.6	1844.0	1844.0	1841.5
57.5°	1719.0	1708.9	1692.5	1692.5	1690.0
60°	1562.5	1553.7	1534.8	1537.3	1534.8
62.5°	1409.8	1390.9	1373.2	1380.8	1374.5
65°	1235.6	1225.5	1206.6	1211.7	1210.4
67.5°	1076.6	1057.7	1040.0	1050.1	1045.1
70°	899.9	889.8	872.1	882.2	869.6
72.5°	733.3	724.5	706.8	718.2	705.5
75°	571.7	562.9	549.0	559.1	546.5
77.5°	419.0	412.7	400.1	410.2	412.7
80°	280.2	272.6	266.3	275.1	277.7
82.5°	164.1	159.0	156.5	157.8	164.1
85°	79.5	73.2	73.2	74.5	74.5
87.5°	21.5	18.9	21.5	22.7	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)