

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: P974722

Luminaire Tested: FLR2-24-80HE-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974722
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: FLR2-24-80HE-L835-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

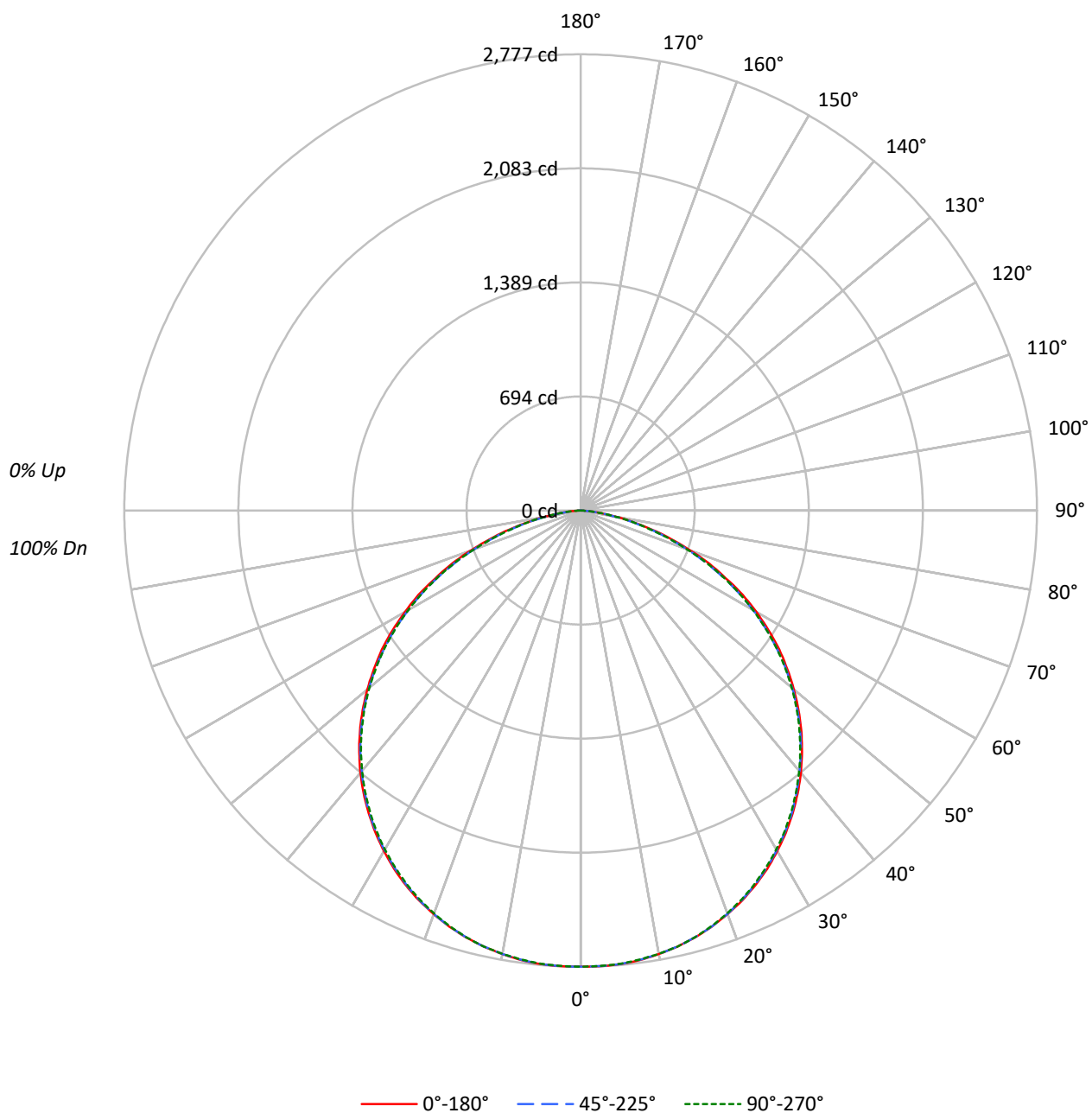
Lumens per Lamp: N/A
Luminaire Lumens: 7847.8 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 63.5
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°	3736	3736	3736
5°	3744	3744	3741
10°	3746	3745	3743
15°	3747	3746	3746
20°	3743	3742	3736
25°	3736	3729	3723
30°	3720	3709	3701
35°	3695	3685	3672
40°	3663	3640	3635
45°	3615	3594	3583
50°	3547	3520	3510
55°	3464	3415	3410
60°	3319	3260	3260
65°	3105	3032	3042
70°	2795	2709	2701
75°	2346	2253	2243
80°	1714	1629	1698
85°	969	892	908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.6	3.4
10°-20°	759.3	9.7
20°-30°	1157.7	14.8
30°-40°	1402.6	17.9
40°-50°	1456.9	18.6
50°-60°	1303.4	16.6
60°-70°	949.9	12.1
70°-80°	470.4	6.0
80°-90°	84.1	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°	2180.5	27.8
0°-40°	3583.1	45.7
0°-60°	6343.4	80.8
0°-90°	7847.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7847.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2777	2777	2777	2777	2777	
5°	2772	2773	2772	2772	2770	264
15°	2690	2689	2689	2691	2689	760
25°	2517	2514	2512	2511	2508	1160
35°	2250	2247	2244	2240	2236	1407
45°	1900	1896	1889	1885	1883	1464
55°	1476	1466	1456	1456	1454	1315
65°	975	967	952	956	956	967
75°	451	444	433	441	431	481
85°	63	58	58	59	59	87
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2776.7	2776.7	2776.7	2776.7	2776.7
2.5°	2776.7	2775.7	2775.7	2776.7	2774.7
5°	2771.7	2772.7	2771.7	2771.7	2769.7
7.5°	2760.8	2759.8	2758.8	2759.8	2756.8
10°	2741.8	2741.8	2740.9	2741.8	2739.9
12.5°	2718.9	2718.9	2718.9	2719.9	2718.9
15°	2690.0	2689.0	2689.0	2691.0	2689.0
17.5°	2656.2	2655.2	2655.2	2654.2	2652.2
20°	2614.3	2614.3	2613.3	2612.3	2609.3
22.5°	2569.5	2568.5	2565.5	2565.5	2561.5
25°	2516.7	2513.7	2511.7	2510.7	2507.7
27.5°	2458.9	2454.9	2451.9	2449.9	2446.9
30°	2394.1	2390.1	2387.2	2384.2	2382.2
32.5°	2324.4	2322.4	2317.4	2316.4	2312.4
35°	2249.7	2246.7	2243.7	2239.7	2235.7
37.5°	2170.0	2167.0	2160.0	2158.0	2155.0
40°	2085.3	2081.3	2072.3	2072.3	2069.3
42.5°	1994.6	1990.6	1984.7	1980.7	1978.7
45°	1900.0	1896.0	1889.0	1885.0	1883.0
47.5°	1799.3	1796.3	1788.4	1785.4	1782.4
50°	1694.7	1690.7	1681.8	1679.8	1676.8
52.5°	1585.1	1583.1	1571.2	1570.2	1567.2
55°	1476.5	1465.6	1455.6	1455.6	1453.6
57.5°	1357.0	1349.0	1336.1	1336.1	1334.1
60°	1233.4	1226.5	1211.5	1213.5	1211.5
62.5°	1112.9	1097.9	1084.0	1090.0	1085.0
65°	975.4	967.4	952.5	956.5	955.5
67.5°	849.9	834.9	821.0	828.9	824.9
70°	710.4	702.4	688.5	696.4	686.5
72.5°	578.9	571.9	557.9	566.9	556.9
75°	451.3	444.4	433.4	441.4	431.4
77.5°	330.8	325.8	315.8	323.8	325.8
80°	221.2	215.2	210.2	217.2	219.2
82.5°	129.5	125.5	123.5	124.5	129.5
85°	62.8	57.8	57.8	58.8	58.8
87.5°	16.9	14.9	16.9	17.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)