

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: P974568

Luminaire Tested: FLR2-24-80HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974568
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-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

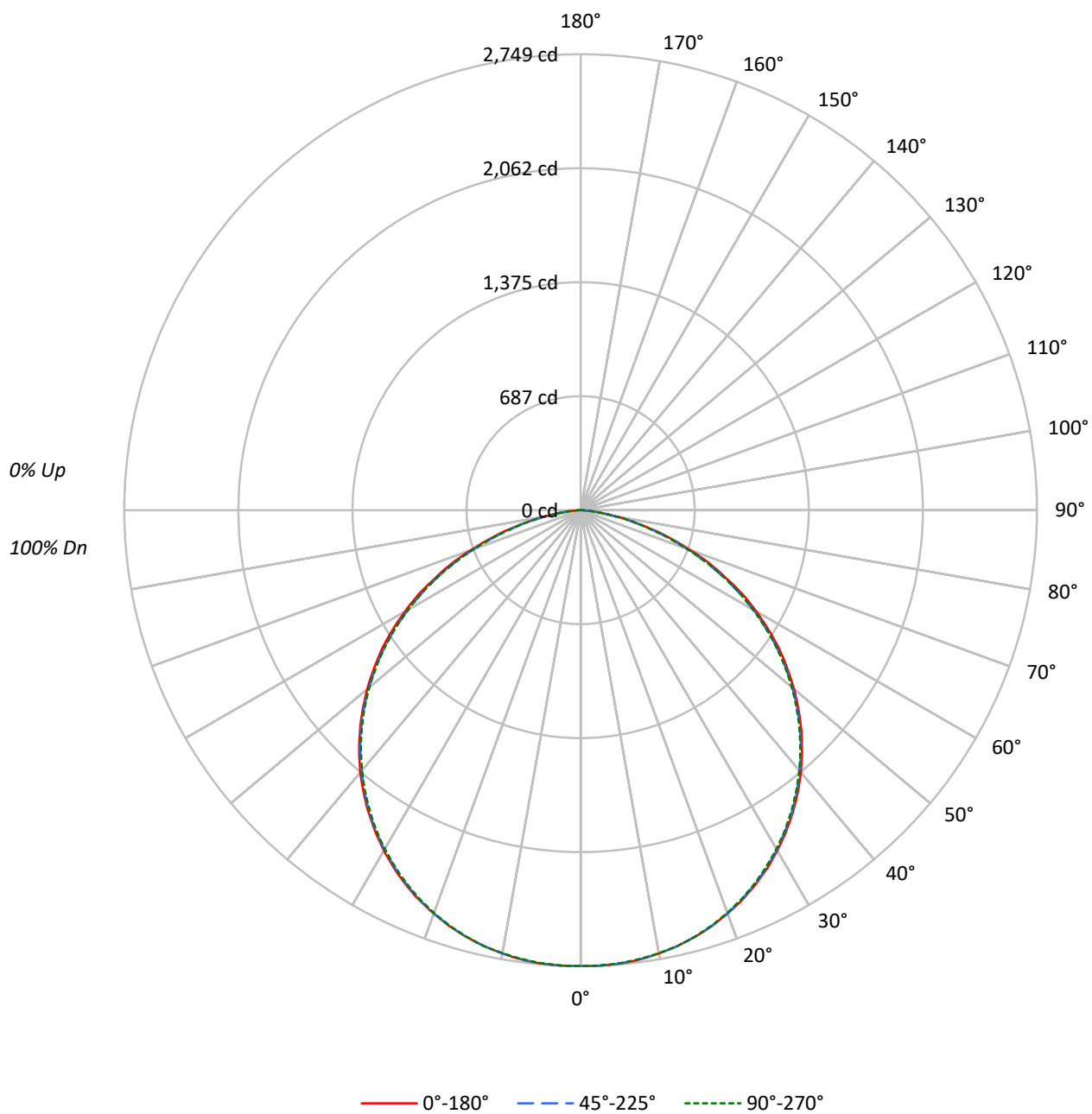
Lumens per Lamp: N/A
Luminaire Lumens: 7769.4 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3699	3699	3699
5°	3706	3706	3703
10°	3709	3707	3706
15°	3710	3708	3708
20°	3706	3704	3699
25°	3699	3692	3686
30°	3682	3672	3664
35°	3658	3649	3636
40°	3626	3603	3598
45°	3579	3558	3547
50°	3512	3485	3475
55°	3429	3381	3376
60°	3286	3228	3228
65°	3074	3002	3011
70°	2767	2681	2674
75°	2323	2231	2220
80°	1697	1612	1681
85°	959	883	898

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3579 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.9	3.4
10°-20°	751.7	9.7
20°-30°	1146.1	14.8
30°-40°	1388.6	17.9
40°-50°	1442.4	18.6
50°-60°	1290.3	16.6
60°-70°	940.4	12.1
70°-80°	465.7	6.0
80°-90°	83.2	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°	2158.7	27.8
0°-40°	3547.3	45.7
0°-60°	6280.0	80.8
0°-90°	7769.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7769.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2749	2749	2749	2749	2749	
5°	2744	2745	2744	2744	2742	261
15°	2663	2662	2662	2664	2662	752
25°	2492	2489	2487	2486	2483	1148
35°	2227	2224	2221	2217	2213	1393
45°	1881	1877	1870	1866	1864	1450
55°	1462	1451	1441	1441	1439	1302
65°	966	958	943	947	946	957
75°	447	440	429	437	427	476
85°	62	57	57	58	58	86
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2749.0	2749.0	2749.0	2749.0	2749.0
2.5°	2749.0	2748.0	2748.0	2749.0	2747.0
5°	2744.0	2745.0	2744.0	2744.0	2742.0
7.5°	2733.2	2732.2	2731.2	2732.2	2729.2
10°	2714.4	2714.4	2713.4	2714.4	2712.5
12.5°	2691.7	2691.7	2691.7	2692.7	2691.7
15°	2663.1	2662.2	2662.2	2664.1	2662.2
17.5°	2629.6	2628.6	2628.6	2627.6	2625.7
20°	2588.2	2588.2	2587.2	2586.2	2583.2
22.5°	2543.8	2542.8	2539.8	2539.8	2535.9
25°	2491.5	2488.6	2486.6	2485.6	2482.6
27.5°	2434.3	2430.4	2427.4	2425.4	2422.5
30°	2370.2	2366.2	2363.3	2360.3	2358.4
32.5°	2301.1	2299.2	2294.2	2293.3	2289.3
35°	2227.2	2224.2	2221.3	2217.3	2213.4
37.5°	2148.3	2145.3	2138.4	2136.4	2133.5
40°	2064.4	2060.5	2051.6	2051.6	2048.6
42.5°	1974.7	1970.7	1964.8	1960.9	1958.9
45°	1881.0	1877.0	1870.1	1866.2	1864.2
47.5°	1781.3	1778.4	1770.5	1767.5	1764.6
50°	1677.8	1673.8	1665.0	1663.0	1660.0
52.5°	1569.3	1567.3	1555.5	1554.5	1551.5
55°	1461.8	1450.9	1441.1	1441.1	1439.1
57.5°	1343.4	1335.5	1322.7	1322.7	1320.7
60°	1221.1	1214.2	1199.4	1201.4	1199.4
62.5°	1101.8	1087.0	1073.1	1079.1	1074.1
65°	965.6	957.7	942.9	946.9	945.9
67.5°	841.4	826.6	812.8	820.6	816.7
70°	703.3	695.4	681.6	689.5	679.6
72.5°	573.1	566.2	552.4	561.2	551.4
75°	446.8	439.9	429.1	437.0	427.1
77.5°	327.5	322.5	312.7	320.6	322.5
80°	219.0	213.1	208.1	215.0	217.0
82.5°	128.2	124.3	122.3	123.3	128.2
85°	62.1	57.2	57.2	58.2	58.2
87.5°	16.8	14.8	16.8	17.8	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)