

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: P975030

Luminaire Tested: FLR2-24-80HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975030
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-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

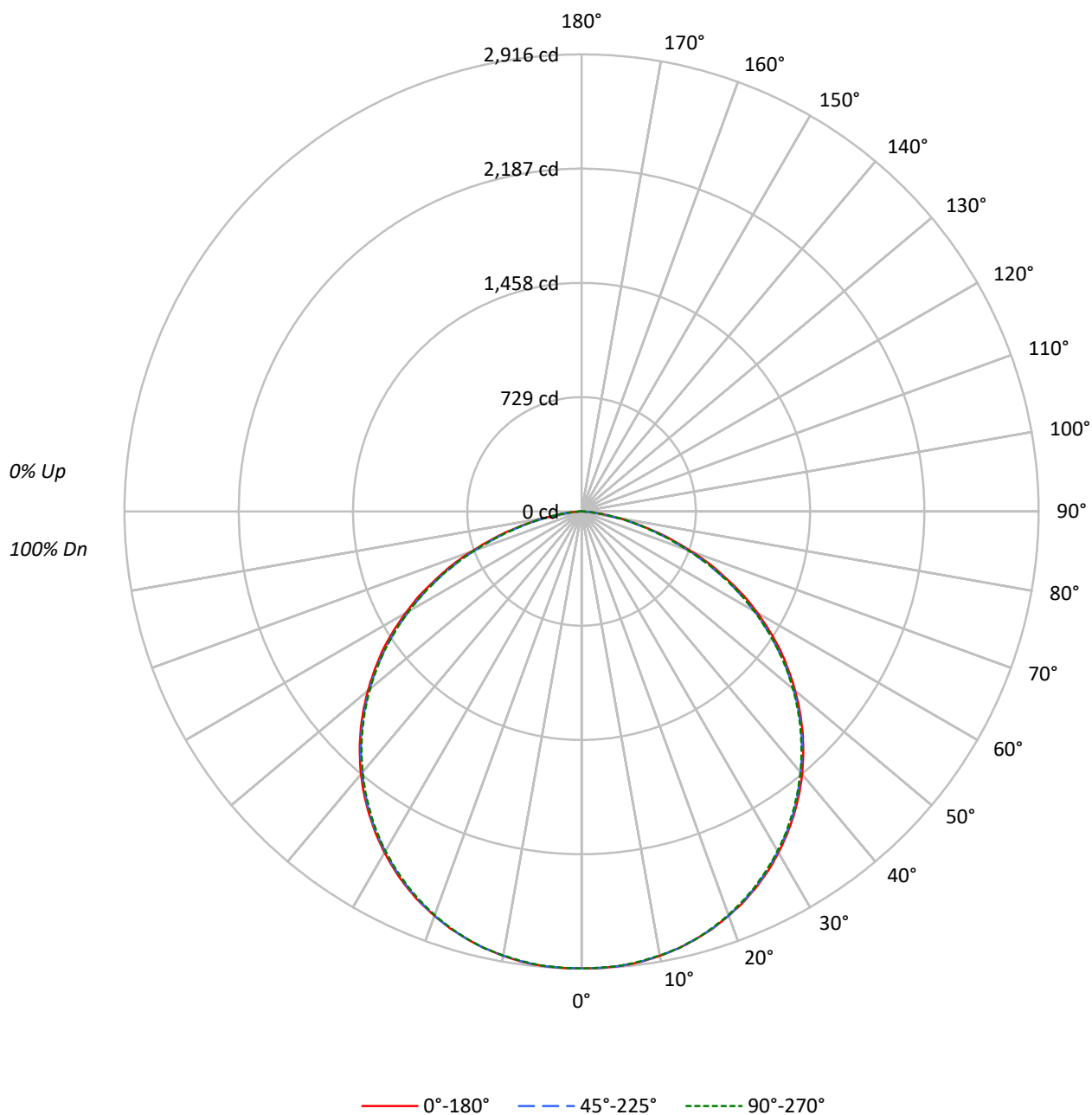
Lumens per Lamp: N/A
Luminaire Lumens: 8240.3 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3923	3923	3923
5°	3931	3931	3928
10°	3933	3932	3930
15°	3934	3933	3933
20°	3930	3929	3923
25°	3923	3915	3909
30°	3906	3894	3886
35°	3880	3870	3856
40°	3846	3822	3816
45°	3796	3774	3762
50°	3725	3696	3685
55°	3637	3585	3580
60°	3485	3423	3423
65°	3261	3184	3194
70°	2934	2844	2836
75°	2464	2366	2355
80°	1799	1710	1783
85°	1017	937	953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3796 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.7	3.4
10°-20°	797.3	9.7
20°-30°	1215.6	14.8
30°-40°	1472.7	17.9
40°-50°	1529.8	18.6
50°-60°	1368.5	16.6
60°-70°	997.4	12.1
70°-80°	493.9	6.0
80°-90°	88.3	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°	2289.6	27.8
0°-40°	3762.3	45.7
0°-60°	6660.6	80.8
0°-90°	8240.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8240.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2916	2916	2916	2916	2916	
5°	2910	2911	2910	2910	2908	277
15°	2824	2824	2824	2826	2824	797
25°	2642	2639	2637	2636	2633	1218
35°	2362	2359	2356	2352	2348	1477
45°	1995	1991	1984	1979	1977	1537
55°	1550	1539	1528	1528	1526	1381
65°	1024	1016	1000	1004	1003	1015
75°	474	467	455	463	453	505
85°	66	61	61	62	62	91
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2915.6	2915.6	2915.6	2915.6	2915.6
2.5°	2915.6	2914.5	2914.5	2915.6	2913.5
5°	2910.3	2911.4	2910.3	2910.3	2908.2
7.5°	2898.8	2897.8	2896.7	2897.8	2894.6
10°	2878.9	2878.9	2877.9	2878.9	2876.8
12.5°	2854.9	2854.9	2854.9	2855.9	2854.9
15°	2824.5	2823.5	2823.5	2825.6	2823.5
17.5°	2789.0	2787.9	2787.9	2786.9	2784.8
20°	2745.0	2745.0	2744.0	2742.9	2739.8
22.5°	2698.0	2696.9	2693.8	2693.8	2689.6
25°	2642.5	2639.4	2637.3	2636.2	2633.1
27.5°	2581.8	2577.7	2574.5	2572.4	2569.3
30°	2513.8	2509.7	2506.5	2503.4	2501.3
32.5°	2440.6	2438.5	2433.3	2432.2	2428.1
35°	2362.2	2359.0	2355.9	2351.7	2347.5
37.5°	2278.5	2275.3	2268.0	2265.9	2262.8
40°	2189.5	2185.4	2175.9	2175.9	2172.8
42.5°	2094.3	2090.2	2083.9	2079.7	2077.6
45°	1995.0	1990.8	1983.5	1979.3	1977.2
47.5°	1889.3	1886.2	1877.8	1874.7	1871.5
50°	1779.5	1775.3	1765.9	1763.8	1760.6
52.5°	1664.4	1662.3	1649.7	1648.7	1645.6
55°	1550.4	1538.9	1528.4	1528.4	1526.3
57.5°	1424.8	1416.5	1402.9	1402.9	1400.8
60°	1295.1	1287.8	1272.1	1274.2	1272.1
62.5°	1168.5	1152.8	1138.2	1144.5	1139.2
65°	1024.2	1015.8	1000.1	1004.3	1003.2
67.5°	892.3	876.7	862.0	870.4	866.2
70°	745.9	737.5	722.9	731.2	720.8
72.5°	607.8	600.5	585.8	595.2	584.8
75°	473.9	466.6	455.1	463.4	453.0
77.5°	347.3	342.1	331.6	340.0	342.1
80°	232.2	226.0	220.7	228.1	230.1
82.5°	136.0	131.8	129.7	130.8	136.0
85°	65.9	60.7	60.7	61.7	61.7
87.5°	17.8	15.7	17.8	18.8	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)