

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: P974876

Luminaire Tested: FLR2-24-80HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974876
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-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

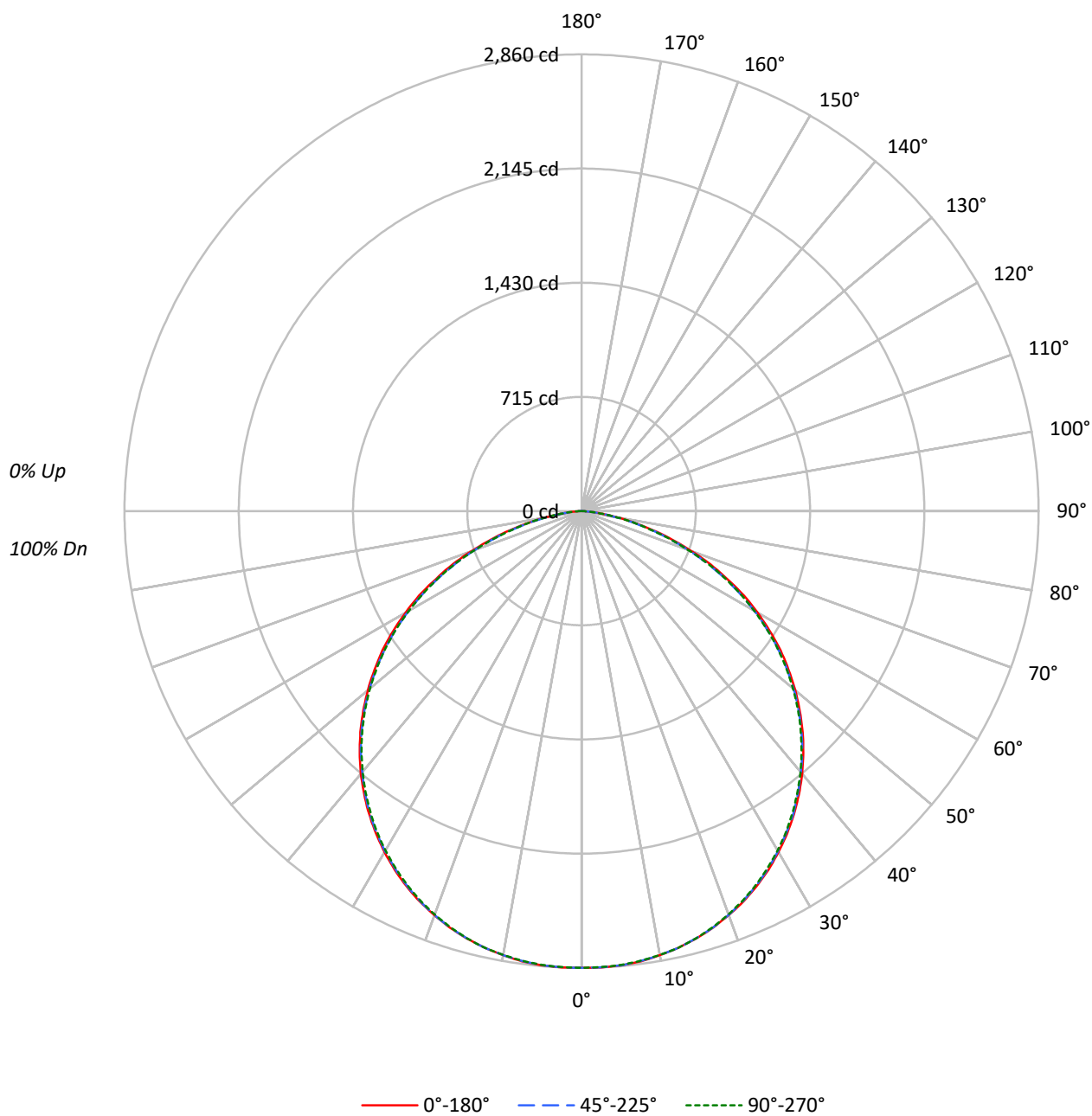
Lumens per Lamp: N/A
Luminaire Lumens: 8083.3 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3848	3848	3848
5°	3856	3856	3853
10°	3858	3857	3856
15°	3859	3858	3858
20°	3856	3854	3848
25°	3848	3841	3835
30°	3831	3820	3812
35°	3806	3796	3782
40°	3772	3749	3744
45°	3724	3702	3690
50°	3654	3626	3615
55°	3567	3517	3512
60°	3419	3358	3358
65°	3199	3123	3133
70°	2878	2790	2782
75°	2417	2321	2310
80°	1765	1678	1750
85°	999	919	934

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3724 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	3.4
10°-20°	782.1	9.7
20°-30°	1192.4	14.8
30°-40°	1444.7	17.9
40°-50°	1500.7	18.6
50°-60°	1342.4	16.6
60°-70°	978.4	12.1
70°-80°	484.5	6.0
80°-90°	86.6	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°	2246.0	27.8
0°-40°	3690.6	45.7
0°-60°	6533.7	80.8
0°-90°	8083.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8083.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2860	2860	2860	2860	2860	
5°	2855	2856	2855	2855	2853	272
15°	2771	2770	2770	2772	2770	782
25°	2592	2589	2587	2586	2583	1195
35°	2317	2314	2311	2307	2303	1449
45°	1957	1953	1946	1942	1940	1508
55°	1521	1510	1499	1499	1497	1355
65°	1005	996	981	985	984	996
75°	465	458	446	455	444	496
85°	65	60	60	60	60	90
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2860.0	2860.0	2860.0	2860.0	2860.0
2.5°	2860.0	2859.0	2859.0	2860.0	2858.0
5°	2854.9	2855.9	2854.9	2854.9	2852.8
7.5°	2843.6	2842.6	2841.5	2842.6	2839.5
10°	2824.1	2824.1	2823.1	2824.1	2822.1
12.5°	2800.5	2800.5	2800.5	2801.5	2800.5
15°	2770.7	2769.7	2769.7	2771.8	2769.7
17.5°	2735.8	2734.8	2734.8	2733.8	2731.7
20°	2692.7	2692.7	2691.7	2690.7	2687.6
22.5°	2646.6	2645.5	2642.5	2642.5	2638.4
25°	2592.2	2589.1	2587.1	2586.0	2582.9
27.5°	2532.7	2528.6	2525.5	2523.4	2520.3
30°	2466.0	2461.9	2458.8	2455.7	2453.6
32.5°	2394.1	2392.1	2386.9	2385.9	2381.8
35°	2317.2	2314.1	2311.0	2306.9	2302.8
37.5°	2235.1	2232.0	2224.8	2222.7	2219.7
40°	2147.8	2143.7	2134.5	2134.5	2131.4
42.5°	2054.5	2050.3	2044.2	2040.1	2038.0
45°	1957.0	1952.9	1945.7	1941.6	1939.5
47.5°	1853.3	1850.2	1842.0	1839.0	1835.9
50°	1745.6	1741.5	1732.2	1730.2	1727.1
52.5°	1632.7	1630.6	1618.3	1617.3	1614.2
55°	1520.8	1509.5	1499.3	1499.3	1497.2
57.5°	1397.7	1389.5	1376.1	1376.1	1374.1
60°	1270.4	1263.3	1247.9	1249.9	1247.9
62.5°	1146.3	1130.9	1116.5	1122.7	1117.5
65°	1004.7	996.4	981.0	985.2	984.1
67.5°	875.3	860.0	845.6	853.8	849.7
70°	731.7	723.5	709.1	717.3	707.1
72.5°	596.2	589.0	574.7	583.9	573.6
75°	464.9	457.7	446.4	454.6	444.3
77.5°	340.7	335.6	325.3	333.5	335.6
80°	227.8	221.7	216.5	223.7	225.8
82.5°	133.4	129.3	127.2	128.3	133.4
85°	64.7	59.5	59.5	60.5	60.5
87.5°	17.4	15.4	17.4	18.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)