

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: P974647

Luminaire Tested: FLR2-24-100HE-L930-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974647
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-L930-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

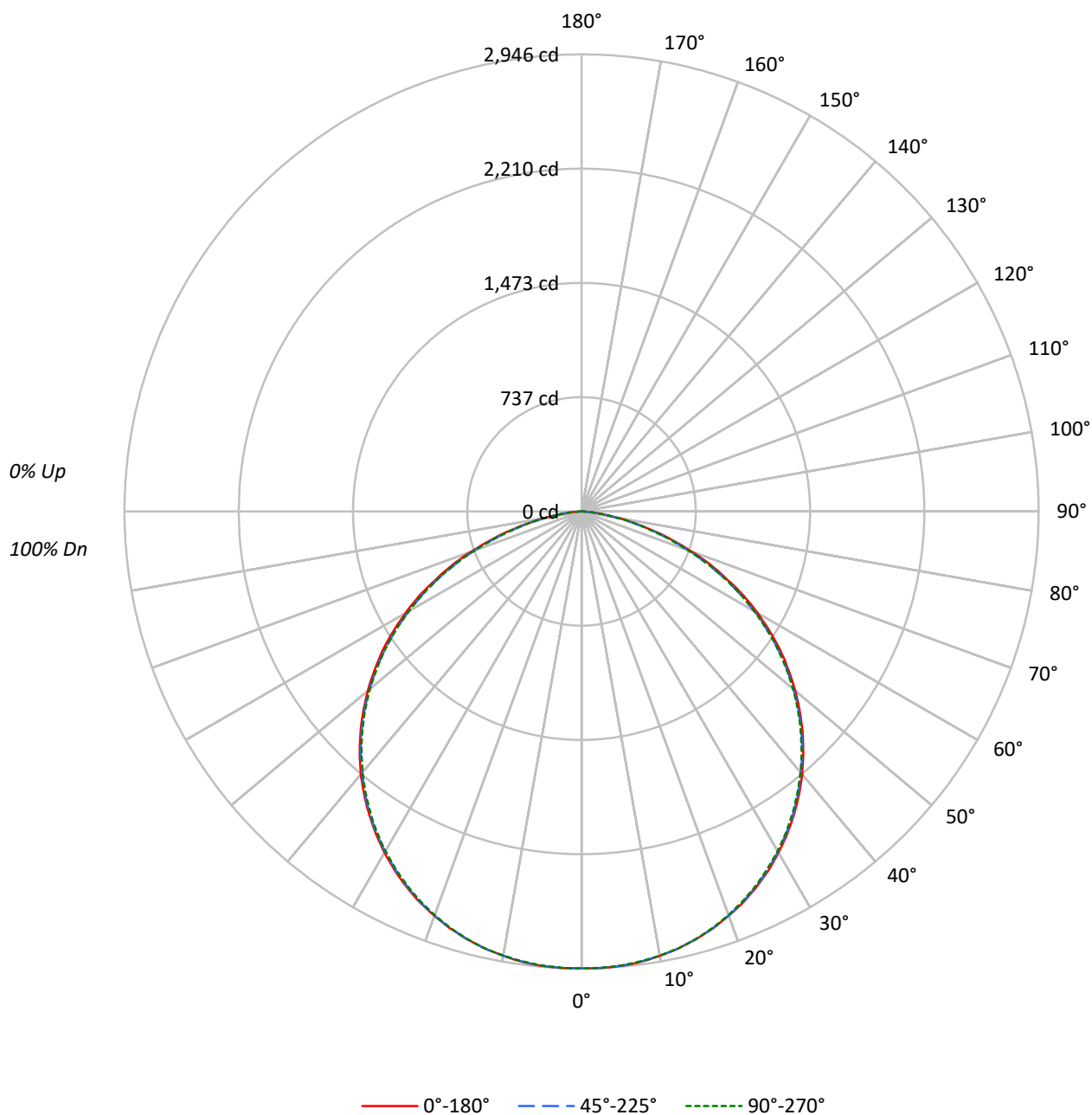
Lumens per Lamp: N/A
Luminaire Lumens: 8326.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3964	3964	3964
5°	3972	3972	3969
10°	3974	3973	3971
15°	3975	3974	3974
20°	3971	3970	3964
25°	3964	3956	3950
30°	3946	3935	3927
35°	3920	3910	3896
40°	3886	3862	3856
45°	3835	3813	3801
50°	3764	3735	3724
55°	3675	3623	3618
60°	3521	3459	3459
65°	3294	3217	3227
70°	2965	2873	2865
75°	2489	2390	2379
80°	1819	1728	1801
85°	1028	946	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3835 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.6	3.4
10°-20°	805.6	9.7
20°-30°	1228.2	14.8
30°-40°	1488.1	17.9
40°-50°	1545.7	18.6
50°-60°	1382.8	16.6
60°-70°	1007.8	12.1
70°-80°	499.1	6.0
80°-90°	89.2	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°	2313.4	27.8
0°-40°	3801.5	45.7
0°-60°	6730.0	80.8
0°-90°	8326.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8326.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2946	2946	2946	2946	2946	
5°	2941	2942	2941	2941	2938	280
15°	2854	2853	2853	2855	2853	806
25°	2670	2667	2665	2664	2660	1231
35°	2387	2384	2380	2376	2372	1493
45°	2016	2012	2004	2000	1998	1553
55°	1566	1555	1544	1544	1542	1396
65°	1035	1026	1010	1015	1014	1026
75°	479	471	460	468	458	511
85°	67	61	61	62	62	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2945.9	2945.9	2945.9	2945.9	2945.9
2.5°	2945.9	2944.9	2944.9	2945.9	2943.8
5°	2940.6	2941.7	2940.6	2940.6	2938.5
7.5°	2929.0	2927.9	2926.9	2927.9	2924.8
10°	2908.9	2908.9	2907.9	2908.9	2906.8
12.5°	2884.6	2884.6	2884.6	2885.7	2884.6
15°	2853.9	2852.9	2852.9	2855.0	2852.9
17.5°	2818.0	2817.0	2817.0	2815.9	2813.8
20°	2773.6	2773.6	2772.6	2771.5	2768.3
22.5°	2726.0	2725.0	2721.8	2721.8	2717.6
25°	2670.0	2666.9	2664.7	2663.7	2660.5
27.5°	2608.7	2604.5	2601.3	2599.2	2596.0
30°	2540.0	2535.8	2532.6	2529.4	2527.3
32.5°	2466.0	2463.9	2458.6	2457.6	2453.3
35°	2386.7	2383.6	2380.4	2376.2	2371.9
37.5°	2302.2	2299.0	2291.6	2289.5	2286.3
40°	2212.3	2208.1	2198.6	2198.6	2195.4
42.5°	2116.1	2111.9	2105.6	2101.4	2099.2
45°	2015.7	2011.5	2004.1	1999.9	1997.8
47.5°	1909.0	1905.8	1897.3	1894.2	1891.0
50°	1798.0	1793.8	1784.2	1782.1	1779.0
52.5°	1681.7	1679.6	1666.9	1665.9	1662.7
55°	1566.5	1554.9	1544.3	1544.3	1542.2
57.5°	1439.7	1431.2	1417.5	1417.5	1415.3
60°	1308.6	1301.2	1285.3	1287.4	1285.3
62.5°	1180.7	1164.8	1150.0	1156.4	1151.1
65°	1034.8	1026.4	1010.5	1014.7	1013.7
67.5°	901.6	885.8	871.0	879.4	875.2
70°	753.7	745.2	730.4	738.9	728.3
72.5°	614.1	606.7	591.9	601.4	590.9
75°	478.8	471.4	459.8	468.3	457.7
77.5°	350.9	345.6	335.1	343.5	345.6
80°	234.7	228.3	223.0	230.4	232.5
82.5°	137.4	133.2	131.1	132.1	137.4
85°	66.6	61.3	61.3	62.4	62.4
87.5°	18.0	15.9	18.0	19.0	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)