

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: P974922

Luminaire Tested: FLR2-24-100HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974922
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

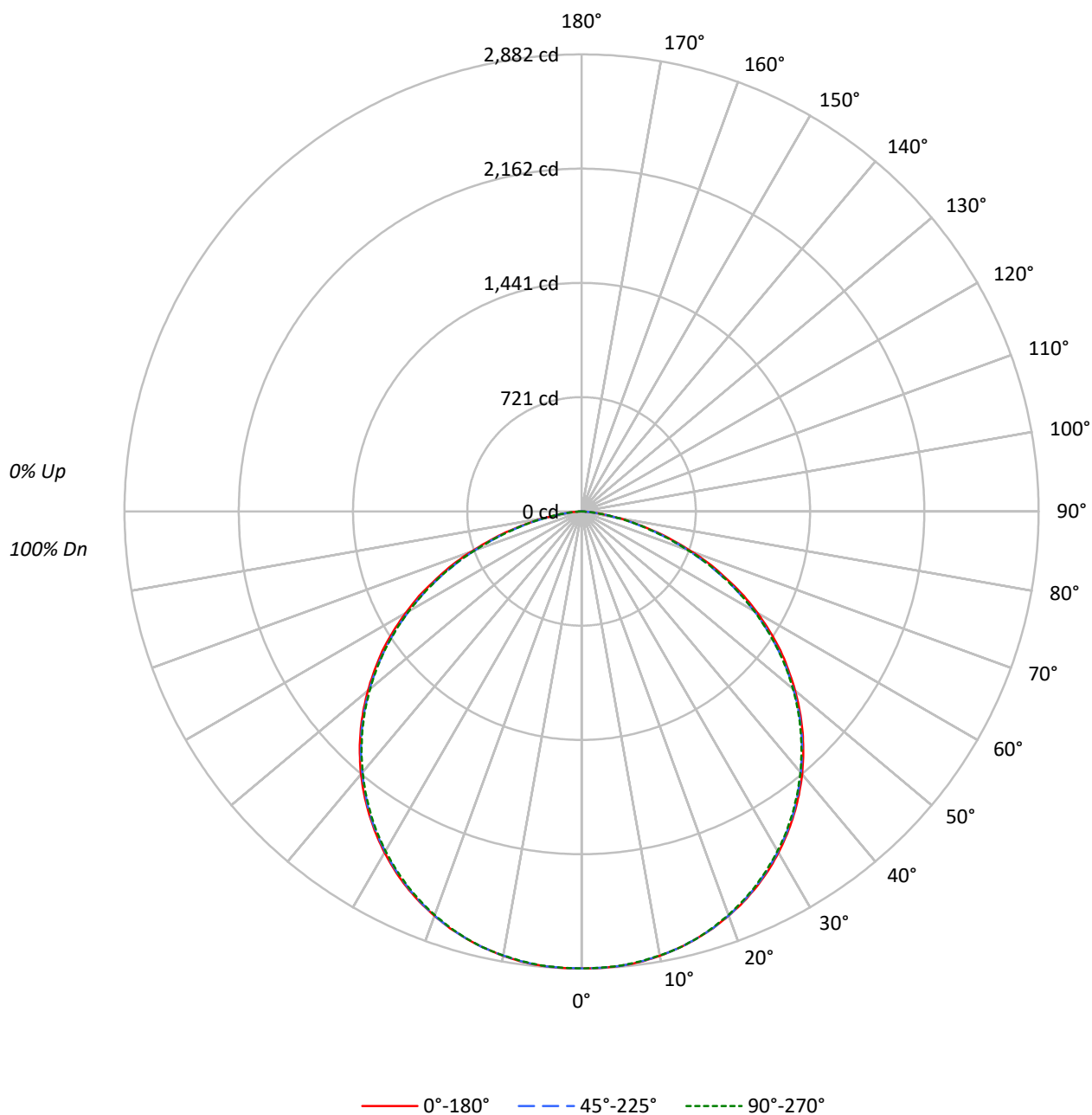
Lumens per Lamp: N/A
Luminaire Lumens: 8143.9 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P974922

CATALOG NUMBER: FLR2-24-100HE-L940-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974922

CATALOG NUMBER: FLR2-24-100HE-L940-CP187

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°	3877	3877	3877
5°	3885	3885	3882
10°	3887	3886	3885
15°	3888	3887	3887
20°	3884	3883	3877
25°	3877	3869	3863
30°	3860	3849	3841
35°	3835	3824	3811
40°	3801	3777	3772
45°	3752	3730	3718
50°	3681	3653	3642
55°	3594	3543	3539
60°	3444	3383	3383
65°	3223	3147	3157
70°	2900	2810	2803
75°	2435	2338	2327
80°	1778	1691	1763
85°	1005	926	942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3752 cd/sqm

TEST NUMBER: P974922

CATALOG NUMBER: FLR2-24-100HE-L940-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.5	3.4
10°-20°	787.9	9.7
20°-30°	1201.3	14.8
30°-40°	1455.5	17.9
40°-50°	1511.9	18.6
50°-60°	1352.5	16.6
60°-70°	985.7	12.1
70°-80°	488.2	6.0
80°-90°	87.3	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°	2262.8	27.8
0°-40°	3718.3	45.7
0°-60°	6582.7	80.8
0°-90°	8143.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8143.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2882	2882	2882	2882	2882	
5°	2876	2877	2876	2876	2874	274
15°	2792	2790	2790	2793	2790	788
25°	2612	2608	2606	2605	2602	1204
35°	2334	2331	2328	2324	2320	1460
45°	1972	1968	1960	1956	1954	1519
55°	1532	1521	1510	1510	1508	1365
65°	1012	1004	988	992	992	1003
75°	468	461	450	458	448	499
85°	65	60	60	61	61	90
90°	0	0	0	0	0	

TEST NUMBER: P974922

CATALOG NUMBER: FLR2-24-100HE-L940-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2881.5	2881.5	2881.5	2881.5	2881.5
2.5°	2881.5	2880.4	2880.4	2881.5	2879.4
5°	2876.3	2877.3	2876.3	2876.3	2874.2
7.5°	2864.9	2863.9	2862.9	2863.9	2860.8
10°	2845.3	2845.3	2844.2	2845.3	2843.2
12.5°	2821.5	2821.5	2821.5	2822.5	2821.5
15°	2791.5	2790.5	2790.5	2792.6	2790.5
17.5°	2756.4	2755.3	2755.3	2754.3	2752.2
20°	2712.9	2712.9	2711.9	2710.9	2707.8
22.5°	2666.4	2665.4	2662.3	2662.3	2658.1
25°	2611.6	2608.5	2606.4	2605.4	2602.3
27.5°	2551.7	2547.5	2544.4	2542.3	2539.2
30°	2484.4	2480.3	2477.2	2474.1	2472.0
32.5°	2412.1	2410.0	2404.8	2403.8	2399.7
35°	2334.5	2331.4	2328.3	2324.2	2320.1
37.5°	2251.8	2248.7	2241.5	2239.4	2236.3
40°	2163.9	2159.8	2150.5	2150.5	2147.4
42.5°	2069.9	2065.7	2059.5	2055.4	2053.3
45°	1971.6	1967.5	1960.3	1956.1	1954.1
47.5°	1867.2	1864.1	1855.8	1852.7	1849.6
50°	1758.7	1754.5	1745.2	1743.1	1740.0
52.5°	1644.9	1642.9	1630.5	1629.4	1626.3
55°	1532.2	1520.9	1510.5	1510.5	1508.5
57.5°	1408.2	1399.9	1386.5	1386.5	1384.4
60°	1280.0	1272.7	1257.2	1259.3	1257.2
62.5°	1154.9	1139.4	1124.9	1131.1	1125.9
65°	1012.2	1003.9	988.4	992.5	991.5
67.5°	881.9	866.4	851.9	860.2	856.1
70°	737.2	728.9	714.4	722.7	712.4
72.5°	600.7	593.5	579.0	588.3	577.9
75°	468.4	461.1	449.7	458.0	447.7
77.5°	343.3	338.1	327.7	336.0	338.1
80°	229.5	223.3	218.2	225.4	227.5
82.5°	134.4	130.3	128.2	129.2	134.4
85°	65.1	60.0	60.0	61.0	61.0
87.5°	17.6	15.5	17.6	18.6	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)