

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: P974983

Luminaire Tested: FLR2-24-55HE-L850-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974983
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: FLR2-24-55HE-L850-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

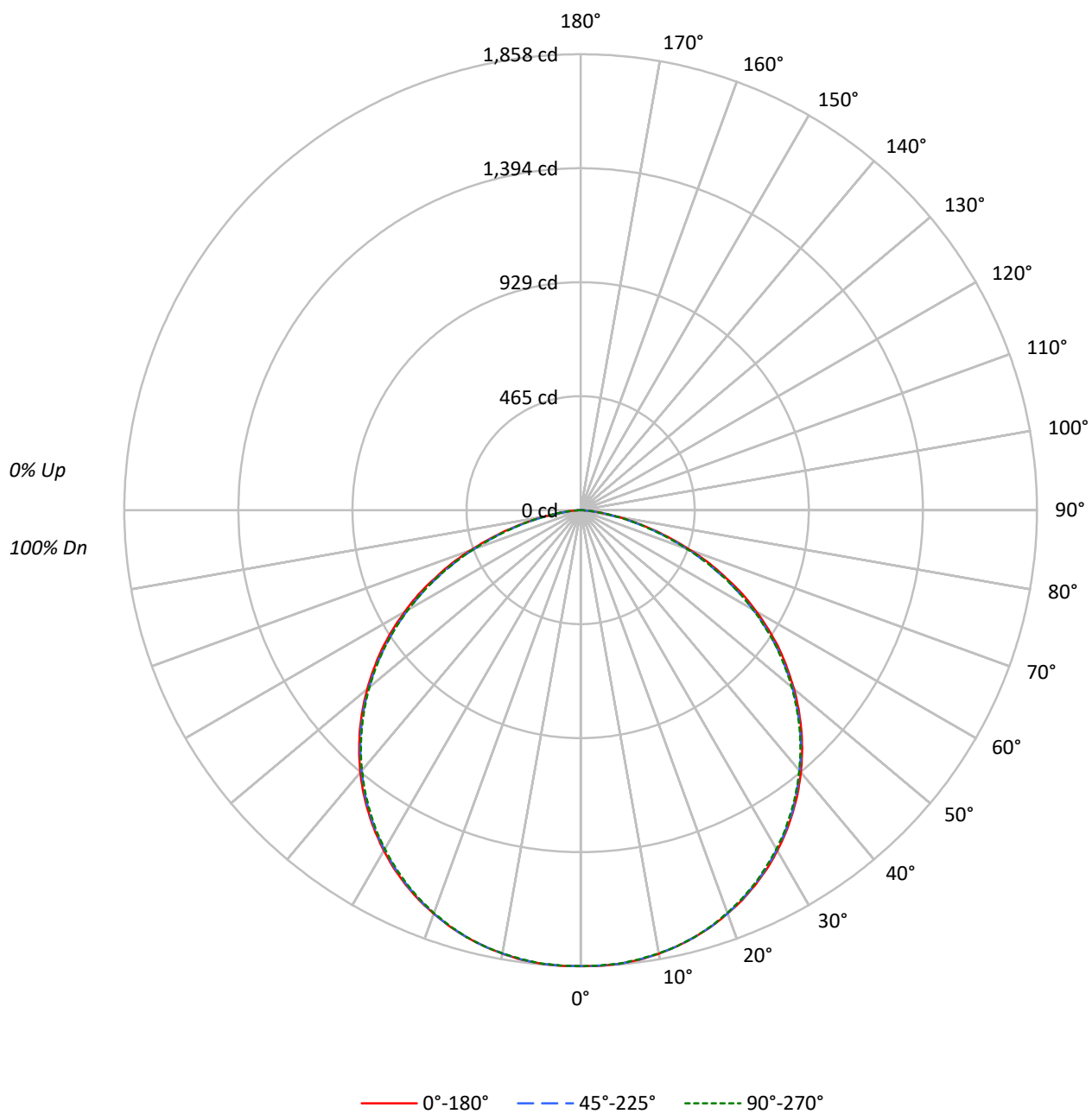
Lumens per Lamp: N/A
Luminaire Lumens: 5252.7 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.3
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: P974983

CATALOG NUMBER: FLR2-24-55HE-L850-CP125

Luminous Intensity Polar Plot



TEST NUMBER: P974983

CATALOG NUMBER: FLR2-24-55HE-L850-CP125

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°	2501	2501	2501
5°	2506	2506	2504
10°	2507	2506	2505
15°	2508	2507	2507
20°	2505	2504	2501
25°	2501	2496	2492
30°	2490	2482	2477
35°	2473	2467	2458
40°	2451	2436	2433
45°	2420	2406	2398
50°	2374	2356	2349
55°	2318	2286	2282
60°	2222	2182	2182
65°	2078	2030	2036
70°	1871	1813	1808
75°	1570	1508	1501
80°	1147	1090	1137
85°	648	597	607

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2420 cd/sqm

TEST NUMBER: P974983

CATALOG NUMBER: FLR2-24-55HE-L850-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	3.4
10°-20°	508.2	9.7
20°-30°	774.9	14.8
30°-40°	938.8	17.9
40°-50°	975.2	18.6
50°-60°	872.3	16.6
60°-70°	635.8	12.1
70°-80°	314.9	6.0
80°-90°	56.3	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°	1459.5	27.8
0°-40°	2398.3	45.7
0°-60°	4245.8	80.8
0°-90°	5252.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5252.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1855	1856	1855	1855	1854	176
15°	1800	1800	1800	1801	1800	508
25°	1684	1682	1681	1680	1678	776
35°	1506	1504	1502	1499	1496	942
45°	1272	1269	1264	1262	1260	980
55°	988	981	974	974	973	880
65°	653	648	638	640	640	647
75°	302	297	290	295	289	322
85°	42	39	39	39	39	58
90°	0	0	0	0	0	

TEST NUMBER: P974983

CATALOG NUMBER: FLR2-24-55HE-L850-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1858.5	1858.5	1858.5	1858.5	1858.5
2.5°	1858.5	1857.8	1857.8	1858.5	1857.2
5°	1855.2	1855.8	1855.2	1855.2	1853.8
7.5°	1847.8	1847.2	1846.5	1847.2	1845.2
10°	1835.2	1835.2	1834.5	1835.2	1833.8
12.5°	1819.8	1819.8	1819.8	1820.5	1819.8
15°	1800.5	1799.8	1799.8	1801.2	1799.8
17.5°	1777.8	1777.2	1777.2	1776.5	1775.2
20°	1749.8	1749.8	1749.1	1748.5	1746.5
22.5°	1719.8	1719.1	1717.1	1717.1	1714.5
25°	1684.5	1682.5	1681.1	1680.5	1678.5
27.5°	1645.8	1643.1	1641.1	1639.8	1637.8
30°	1602.4	1599.8	1597.8	1595.8	1594.4
32.5°	1555.8	1554.4	1551.1	1550.4	1547.8
35°	1505.7	1503.7	1501.7	1499.1	1496.4
37.5°	1452.4	1450.4	1445.7	1444.4	1442.4
40°	1395.7	1393.0	1387.0	1387.0	1385.0
42.5°	1335.0	1332.4	1328.4	1325.7	1324.4
45°	1271.7	1269.0	1264.3	1261.7	1260.3
47.5°	1204.3	1202.3	1197.0	1195.0	1193.0
50°	1134.3	1131.6	1125.6	1124.3	1122.3
52.5°	1061.0	1059.6	1051.6	1051.0	1049.0
55°	988.3	980.9	974.3	974.3	972.9
57.5°	908.2	902.9	894.2	894.2	892.9
60°	825.6	820.9	810.9	812.2	810.9
62.5°	744.9	734.9	725.5	729.5	726.2
65°	652.8	647.5	637.5	640.2	639.5
67.5°	568.8	558.8	549.5	554.8	552.2
70°	475.5	470.1	460.8	466.1	459.5
72.5°	387.4	382.8	373.4	379.4	372.8
75°	302.1	297.4	290.1	295.4	288.7
77.5°	221.4	218.1	211.4	216.7	218.1
80°	148.0	144.0	140.7	145.4	146.7
82.5°	86.7	84.0	82.7	83.4	86.7
85°	42.0	38.7	38.7	39.3	39.3
87.5°	11.3	10.0	11.3	12.0	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)