

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: P973289

Luminaire Tested: FLR2-14-20HE-L850-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973289
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-20HE-L850-CA125
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Aryalic (0.125" thickness)

Light Source:
Ballast/Driver: -

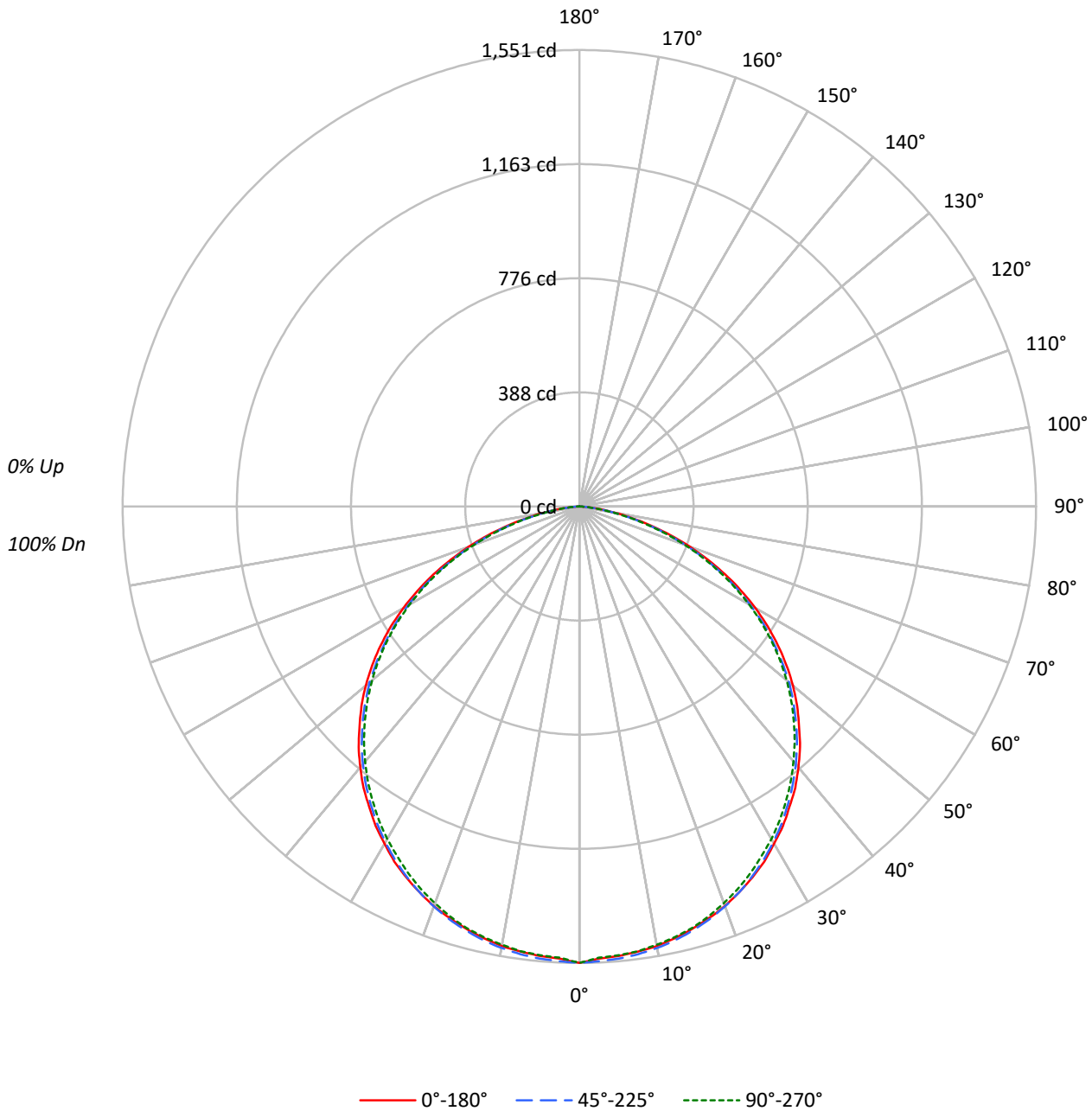
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4341.1 lumens
Efficiency: N/A
Efficacy: 293.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.8
Input Voltage (V): 120
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: P973289
CATALOG NUMBER: FLR2-14-20HE-L850-CA125

Luminous Intensity Polar Plot





TEST NUMBER: P973289
 CATALOG NUMBER: FLR2-14-20HE-L850-CA125

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
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	40	34	29	27					27															
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4174	4174	4174
5°	4141	4166	4136
10°	4145	4163	4133
15°	4139	4155	4130
20°	4138	4142	4109
25°	4129	4121	4083
30°	4111	4094	4053
35°	4089	4058	4018
40°	4066	4017	3976
45°	4016	3961	3919
50°	3964	3892	3846
55°	3864	3774	3738
60°	3714	3611	3580
65°	3479	3377	3340
70°	3137	3010	2985
75°	2629	2496	2469
80°	1911	1781	1731
85°	1010	892	812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4016 cd/sqm



TEST NUMBER: P973289
 CATALOG NUMBER: FLR2-14-20HE-L850-CA125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	3.4
10°-20°	421.9	9.7
20°-30°	641.0	14.8
30°-40°	775.4	17.9
40°-50°	805.8	18.6
50°-60°	721.5	16.6
60°-70°	526.2	12.1
70°-80°	259.1	6.0
80°-90°	43.3	1.0
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°	1209.8	27.9
0°-40°	1985.1	45.7
0°-60°	3512.5	80.9
0°-90°	4341.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4341.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1533	1550	1542	1557	1531	146
15°	1486	1499	1491	1504	1482	420
25°	1390	1398	1388	1394	1375	641
35°	1245	1247	1235	1240	1223	780
45°	1055	1054	1041	1043	1030	815
55°	824	817	804	802	797	735
65°	546	540	530	526	524	540
75°	253	248	240	238	238	270
85°	33	32	29	26	26	47
90°	0	0	0	0	0	



TEST NUMBER: P973289
 CATALOG NUMBER: FLR2-14-20HE-L850-CA125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.0	1551.0	1551.0	1551.0	1551.0
2.5°	1537.6	1554.9	1546.6	1562.0	1534.4
5°	1533.1	1549.8	1542.1	1556.8	1531.1
7.5°	1525.4	1542.7	1534.4	1548.5	1524.1
10°	1517.0	1532.4	1523.4	1537.6	1512.5
12.5°	1502.3	1517.7	1509.3	1522.2	1499.0
15°	1485.6	1499.0	1491.3	1504.2	1482.4
17.5°	1466.3	1479.1	1470.8	1482.4	1460.5
20°	1445.1	1455.4	1446.4	1456.0	1434.8
22.5°	1418.8	1428.4	1418.8	1425.2	1406.6
25°	1390.5	1397.6	1388.0	1394.4	1375.1
27.5°	1360.4	1364.2	1354.6	1359.7	1339.8
30°	1323.1	1327.6	1317.4	1323.8	1304.5
32.5°	1287.2	1289.8	1278.2	1283.3	1266.0
35°	1244.8	1247.4	1235.2	1240.3	1223.0
37.5°	1204.4	1203.7	1190.9	1194.1	1179.3
40°	1157.5	1156.9	1143.4	1146.0	1131.8
42.5°	1109.4	1106.8	1093.9	1095.2	1082.4
45°	1055.4	1054.1	1040.7	1042.6	1029.8
47.5°	1003.4	999.6	986.1	986.7	975.8
50°	946.9	941.2	929.6	928.3	918.7
52.5°	886.6	880.2	867.3	866.0	859.0
55°	823.7	816.6	804.4	802.5	796.7
57.5°	758.8	749.8	740.2	736.4	731.9
60°	690.1	681.8	670.9	667.0	665.1
62.5°	618.9	610.5	602.2	598.3	595.8
65°	546.3	539.9	530.3	526.4	524.5
67.5°	472.5	466.7	457.7	453.2	452.6
70°	398.7	392.9	382.6	380.1	379.4
72.5°	324.8	319.7	310.1	307.5	307.5
75°	252.9	248.4	240.1	237.5	237.5
77.5°	184.9	181.0	174.6	171.4	171.4
80°	123.3	120.7	114.9	112.3	111.7
82.5°	71.3	70.0	64.8	62.3	63.6
85°	32.7	31.5	28.9	25.7	26.3
87.5°	8.3	7.7	5.8	4.5	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)