

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: P973844

Luminaire Tested: FLR2-22-45HE-L835-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973844
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-45HE-L835-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

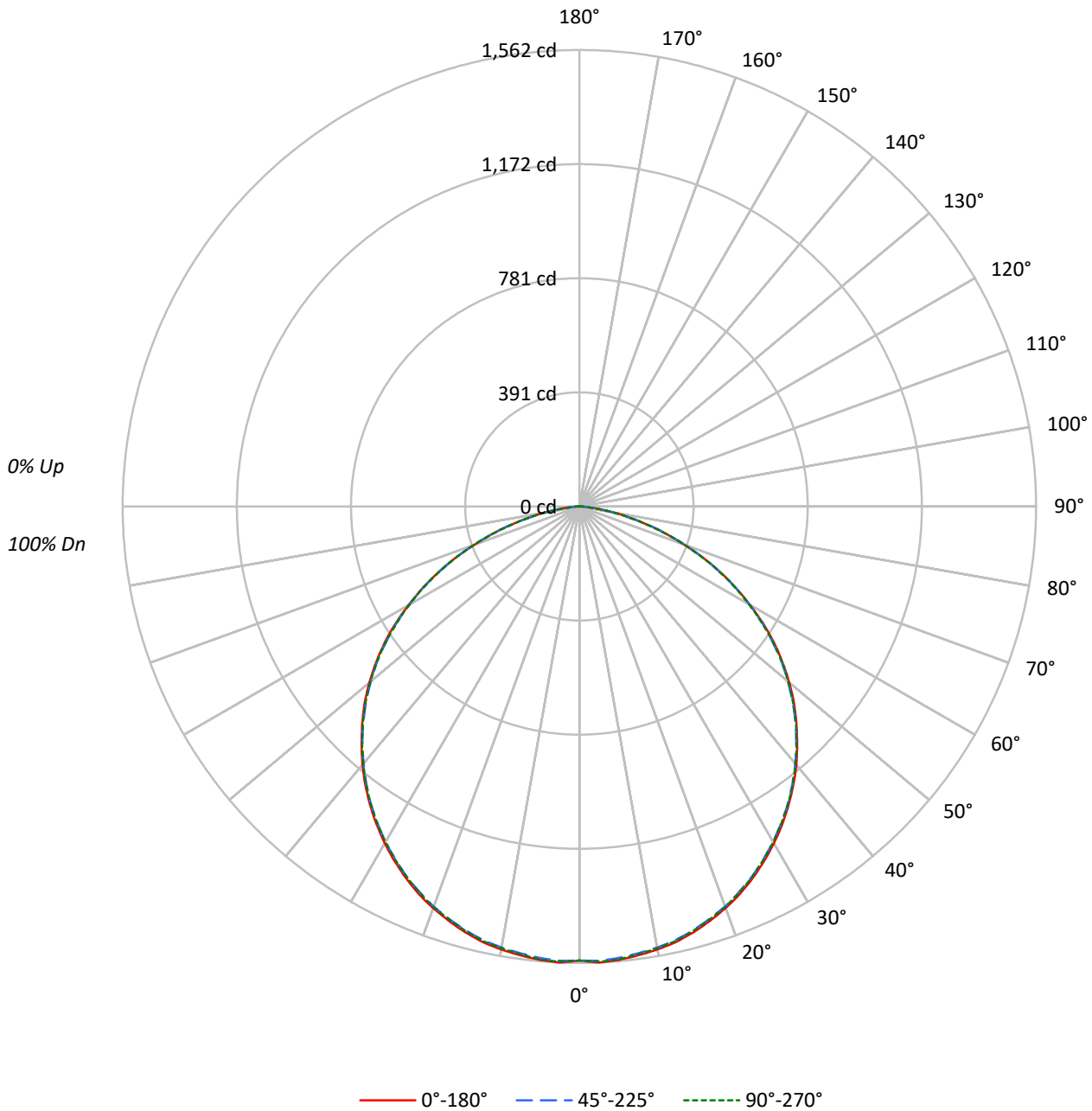
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4345.1 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
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: P973844
CATALOG NUMBER: FLR2-22-45HE-L835-CA125

Luminous Intensity Polar Plot





TEST NUMBER: P973844
 CATALOG NUMBER: FLR2-22-45HE-L835-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	63	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	71	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	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4181	4181	4181
5°	4207	4189	4202
10°	4206	4188	4196
15°	4203	4184	4190
20°	4188	4172	4178
25°	4166	4149	4152
30°	4136	4118	4121
35°	4098	4083	4086
40°	4056	4036	4039
45°	3996	3977	3984
50°	3925	3897	3905
55°	3814	3782	3795
60°	3626	3610	3610
65°	3386	3379	3367
70°	2998	3013	3006
75°	2524	2505	2485
80°	1815	1785	1770
85°	948	948	920

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3996 cd/sqm



TEST NUMBER: P973844
 CATALOG NUMBER: FLR2-22-45HE-L835-CA125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.4
10°-20°	423.1	9.7
20°-30°	643.0	14.8
30°-40°	777.2	17.9
40°-50°	806.7	18.6
50°-60°	721.2	16.6
60°-70°	524.3	12.1
70°-80°	257.8	5.9
80°-90°	44.7	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°	1213.2	27.9
0°-40°	1990.4	45.8
0°-60°	3518.2	81.0
0°-90°	4345.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4345.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1558	1539	1551	1545	1556	148
15°	1509	1491	1502	1498	1504	426
25°	1403	1388	1397	1394	1398	647
35°	1248	1239	1243	1244	1244	781
45°	1050	1045	1045	1047	1047	810
55°	813	808	806	808	809	725
65°	532	534	531	531	529	524
75°	243	245	241	242	239	258
85°	31	32	31	31	30	45
90°	0	0	0	0	0	



TEST NUMBER: P973844
 CATALOG NUMBER: FLR2-22-45HE-L835-CA125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.8	1553.8	1553.8	1553.8	1553.8
2.5°	1562.4	1544.2	1555.7	1549.0	1559.5
5°	1557.6	1539.4	1550.9	1545.1	1555.7
7.5°	1549.0	1530.7	1542.2	1536.5	1545.1
10°	1539.4	1520.2	1532.6	1526.9	1535.5
12.5°	1526.9	1508.7	1520.2	1515.4	1523.1
15°	1508.7	1491.4	1501.9	1498.1	1503.9
17.5°	1486.6	1469.3	1479.9	1477.0	1481.8
20°	1462.6	1446.3	1456.8	1454.0	1458.8
22.5°	1435.7	1418.4	1428.0	1426.1	1430.0
25°	1403.1	1387.7	1397.3	1394.5	1398.3
27.5°	1368.5	1354.1	1361.8	1361.8	1363.7
30°	1331.1	1317.7	1325.4	1325.4	1326.3
32.5°	1290.8	1280.2	1285.0	1286.0	1286.0
35°	1247.6	1239.0	1242.8	1243.8	1243.8
37.5°	1202.5	1193.9	1196.8	1198.7	1198.7
40°	1154.5	1146.8	1148.8	1150.7	1149.7
42.5°	1102.7	1096.9	1097.9	1099.8	1099.8
45°	1049.9	1045.1	1045.1	1047.0	1047.0
47.5°	996.2	991.4	989.5	991.4	991.4
50°	937.6	932.8	930.9	932.8	932.8
52.5°	876.2	871.4	871.4	871.4	872.4
55°	812.9	808.1	806.2	808.1	809.0
57.5°	745.7	743.8	740.9	741.9	739.0
60°	673.7	673.7	670.8	672.8	670.8
62.5°	603.7	605.6	602.7	602.7	600.8
65°	531.7	533.6	530.7	530.7	528.8
67.5°	457.8	460.7	456.8	456.8	454.9
70°	381.0	386.8	382.9	383.9	382.0
72.5°	311.9	314.8	310.9	310.9	309.0
75°	242.8	244.7	240.9	241.8	239.0
77.5°	174.7	177.5	173.7	174.7	173.7
80°	117.1	118.0	115.2	116.1	114.2
82.5°	68.1	69.1	68.1	67.2	66.2
85°	30.7	31.7	30.7	30.7	29.8
87.5°	7.7	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)