

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: P973994

Luminaire Tested: FLR2-22-45HE-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973994
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-L850-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

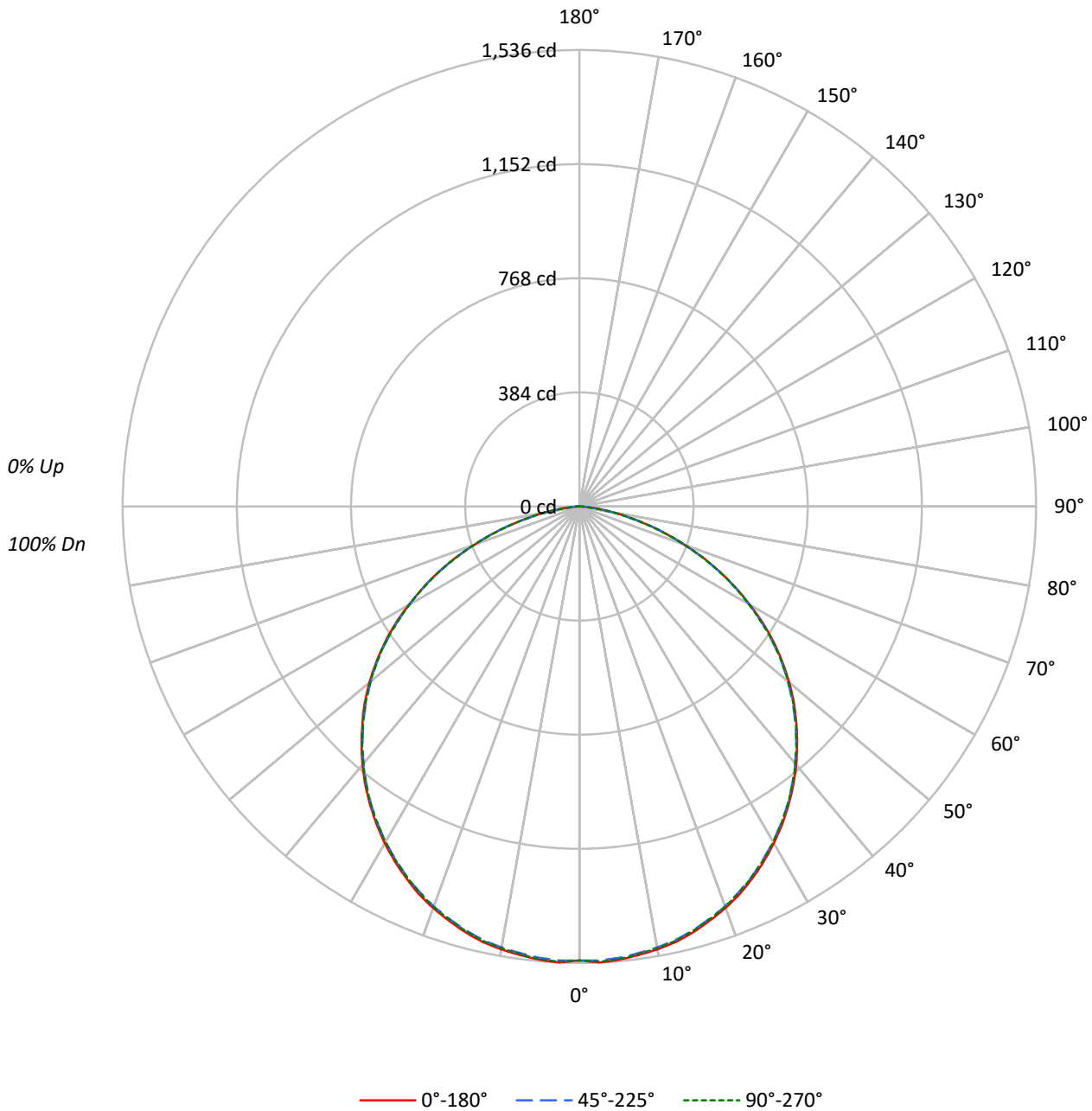
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4271.6 lumens
Efficiency: N/A
Efficacy: 118.0 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

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CATALOG NUMBER: FLR2-22-45HE-L850-CP250

Luminous Intensity Polar Plot





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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°	4110	4110	4110
5°	4136	4119	4131
10°	4135	4117	4125
15°	4132	4113	4119
20°	4118	4101	4107
25°	4096	4079	4081
30°	4066	4048	4052
35°	4029	4014	4017
40°	3987	3967	3971
45°	3928	3910	3917
50°	3859	3831	3839
55°	3749	3718	3732
60°	3564	3549	3549
65°	3328	3322	3310
70°	2947	2961	2954
75°	2482	2462	2442
80°	1784	1754	1740
85°	932	932	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3928 cd/sqm



TEST NUMBER: P973994
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.4
10°-20°	416.0	9.7
20°-30°	632.1	14.8
30°-40°	764.0	17.9
40°-50°	793.0	18.6
50°-60°	709.0	16.6
60°-70°	515.5	12.1
70°-80°	253.5	5.9
80°-90°	43.9	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°	1192.7	27.9
0°-40°	1956.7	45.8
0°-60°	3458.7	81.0
0°-90°	4271.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4271.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1531	1513	1525	1519	1529	146
15°	1483	1466	1476	1473	1478	419
25°	1379	1364	1374	1371	1375	636
35°	1226	1218	1222	1223	1223	767
45°	1032	1027	1027	1029	1029	796
55°	799	794	792	794	795	712
65°	523	525	522	522	520	515
75°	239	241	237	238	235	253
85°	30	31	30	30	29	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527.5	1527.5	1527.5	1527.5	1527.5
2.5°	1536.0	1518.1	1529.4	1522.8	1533.2
5°	1531.3	1513.3	1524.7	1519.0	1529.4
7.5°	1522.8	1504.8	1516.2	1510.5	1519.0
10°	1513.3	1494.5	1506.7	1501.1	1509.6
12.5°	1501.1	1483.1	1494.5	1489.8	1497.3
15°	1483.1	1466.2	1476.5	1472.8	1478.4
17.5°	1461.4	1444.5	1454.8	1452.0	1456.7
20°	1437.9	1421.8	1432.2	1429.4	1434.1
22.5°	1411.4	1394.5	1403.9	1402.0	1405.8
25°	1379.4	1364.3	1373.7	1370.9	1374.6
27.5°	1345.4	1331.2	1338.8	1338.8	1340.7
30°	1308.6	1295.4	1302.9	1302.9	1303.9
32.5°	1269.0	1258.6	1263.3	1264.3	1264.3
35°	1226.5	1218.0	1221.8	1222.7	1222.7
37.5°	1182.2	1173.7	1176.5	1178.4	1178.4
40°	1135.0	1127.5	1129.3	1131.2	1130.3
42.5°	1084.1	1078.4	1079.3	1081.2	1081.2
45°	1032.2	1027.4	1027.4	1029.3	1029.3
47.5°	979.3	974.6	972.7	974.6	974.6
50°	921.8	917.1	915.2	917.1	917.1
52.5°	861.4	856.7	856.7	856.7	857.6
55°	799.1	794.4	792.5	794.4	795.4
57.5°	733.1	731.2	728.4	729.3	726.5
60°	662.3	662.3	659.5	661.4	659.5
62.5°	593.4	595.3	592.5	592.5	590.6
65°	522.7	524.6	521.7	521.7	519.9
67.5°	450.0	452.9	449.1	449.1	447.2
70°	374.6	380.2	376.4	377.4	375.5
72.5°	306.6	309.5	305.7	305.7	303.8
75°	238.7	240.6	236.8	237.8	234.9
77.5°	171.7	174.5	170.8	171.7	170.8
80°	115.1	116.0	113.2	114.2	112.3
82.5°	67.0	67.9	67.0	66.0	65.1
85°	30.2	31.1	30.2	30.2	29.2
87.5°	7.5	7.5	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)