

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: P973982

Luminaire Tested: FLR2-22-45HE-L850-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973982
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-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

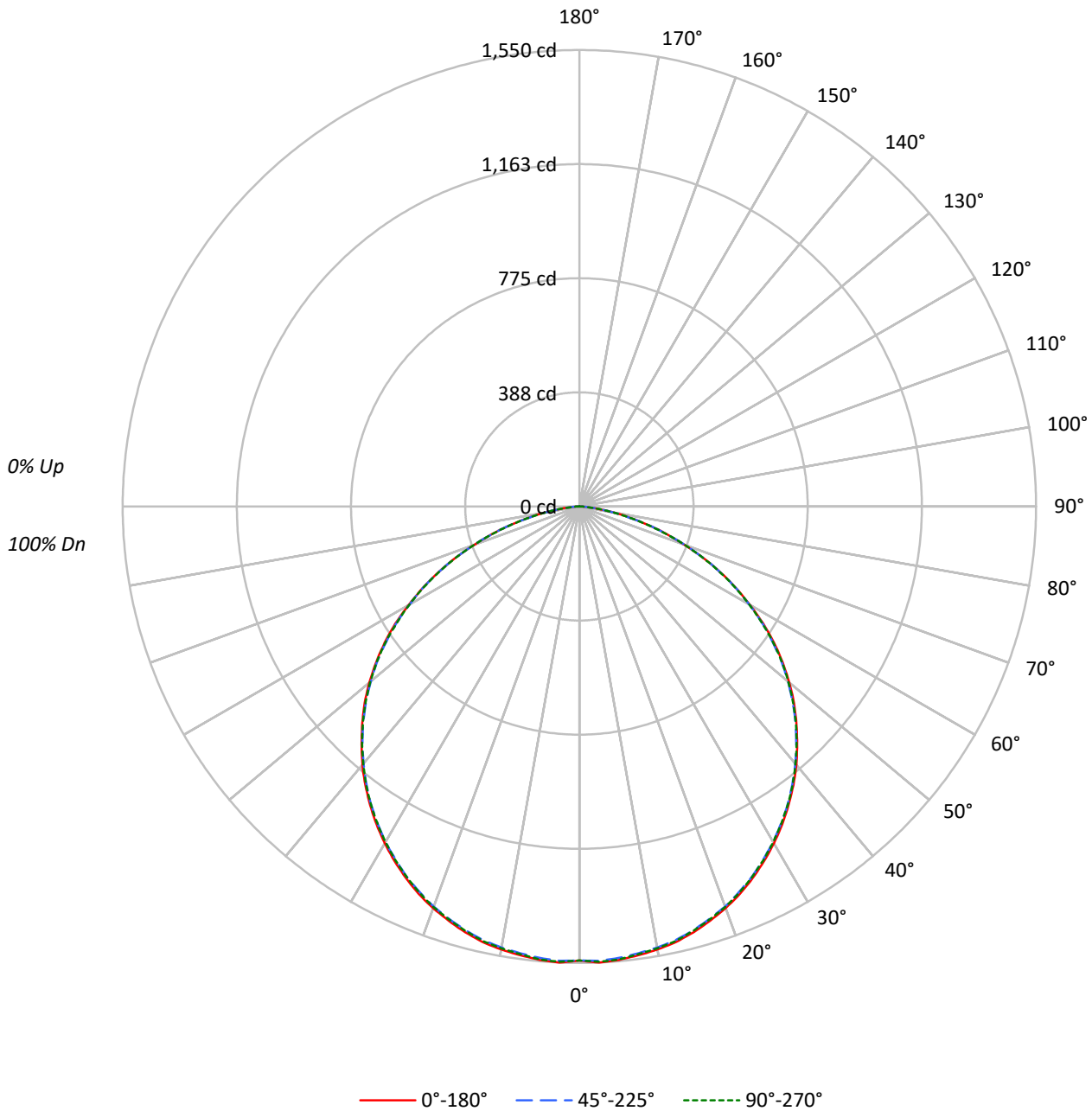
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4311.8 lumens
Efficiency: N/A
Efficacy: 119.1 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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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°	4149	4149	4149
5°	4175	4157	4170
10°	4174	4156	4163
15°	4171	4152	4157
20°	4156	4140	4145
25°	4134	4117	4120
30°	4104	4087	4089
35°	4067	4051	4054
40°	4025	4005	4008
45°	3965	3947	3954
50°	3895	3867	3875
55°	3784	3753	3766
60°	3598	3583	3583
65°	3359	3353	3341
70°	2975	2990	2982
75°	2505	2485	2465
80°	1801	1771	1756
85°	942	942	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3965 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	3.4
10°-20°	419.9	9.7
20°-30°	638.1	14.8
30°-40°	771.2	17.9
40°-50°	800.5	18.6
50°-60°	715.7	16.6
60°-70°	520.3	12.1
70°-80°	255.9	5.9
80°-90°	44.4	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°	1203.9	27.9
0°-40°	1975.1	45.8
0°-60°	3491.3	81.0
0°-90°	4311.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4311.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1546	1528	1539	1533	1544	147
15°	1497	1480	1490	1487	1492	422
25°	1392	1377	1387	1384	1388	642
35°	1238	1230	1233	1234	1234	775
45°	1042	1037	1037	1039	1039	804
55°	807	802	800	802	803	719
65°	528	530	527	527	525	520
75°	241	243	239	240	237	256
85°	30	31	30	30	30	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1541.8	1541.8	1541.8	1541.8	1541.8
2.5°	1550.4	1532.3	1543.7	1537.1	1547.6
5°	1545.6	1527.6	1539.0	1533.3	1543.7
7.5°	1537.1	1519.0	1530.4	1524.7	1533.3
10°	1527.6	1508.5	1520.9	1515.2	1523.7
12.5°	1515.2	1497.1	1508.5	1503.7	1511.4
15°	1497.1	1479.9	1490.4	1486.6	1492.3
17.5°	1475.2	1458.0	1468.5	1465.7	1470.4
20°	1451.4	1435.2	1445.7	1442.8	1447.6
22.5°	1424.7	1407.6	1417.1	1415.2	1419.0
25°	1392.3	1377.1	1386.6	1383.8	1387.6
27.5°	1358.0	1343.8	1351.4	1351.4	1353.3
30°	1320.9	1307.6	1315.2	1315.2	1316.1
32.5°	1280.9	1270.4	1275.2	1276.1	1276.1
35°	1238.0	1229.5	1233.3	1234.2	1234.2
37.5°	1193.3	1184.7	1187.6	1189.5	1189.5
40°	1145.7	1138.0	1140.0	1141.9	1140.9
42.5°	1094.2	1088.5	1089.5	1091.4	1091.4
45°	1041.9	1037.1	1037.1	1039.0	1039.0
47.5°	988.5	983.8	981.9	983.8	983.8
50°	930.4	925.7	923.8	925.7	925.7
52.5°	869.5	864.7	864.7	864.7	865.7
55°	806.6	801.9	800.0	801.9	802.8
57.5°	740.0	738.1	735.2	736.2	733.3
60°	668.5	668.5	665.7	667.6	665.7
62.5°	599.0	600.9	598.1	598.1	596.2
65°	527.6	529.5	526.6	526.6	524.7
67.5°	454.3	457.1	453.3	453.3	451.4
70°	378.1	383.8	380.0	380.9	379.0
72.5°	309.5	312.4	308.6	308.6	306.7
75°	240.9	242.8	239.0	240.0	237.1
77.5°	173.3	176.2	172.4	173.3	172.4
80°	116.2	117.1	114.3	115.2	113.3
82.5°	67.6	68.6	67.6	66.7	65.7
85°	30.5	31.4	30.5	30.5	29.5
87.5°	7.6	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)