

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: P973898

Luminaire Tested: FLR2-22-45HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973898
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-L840-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

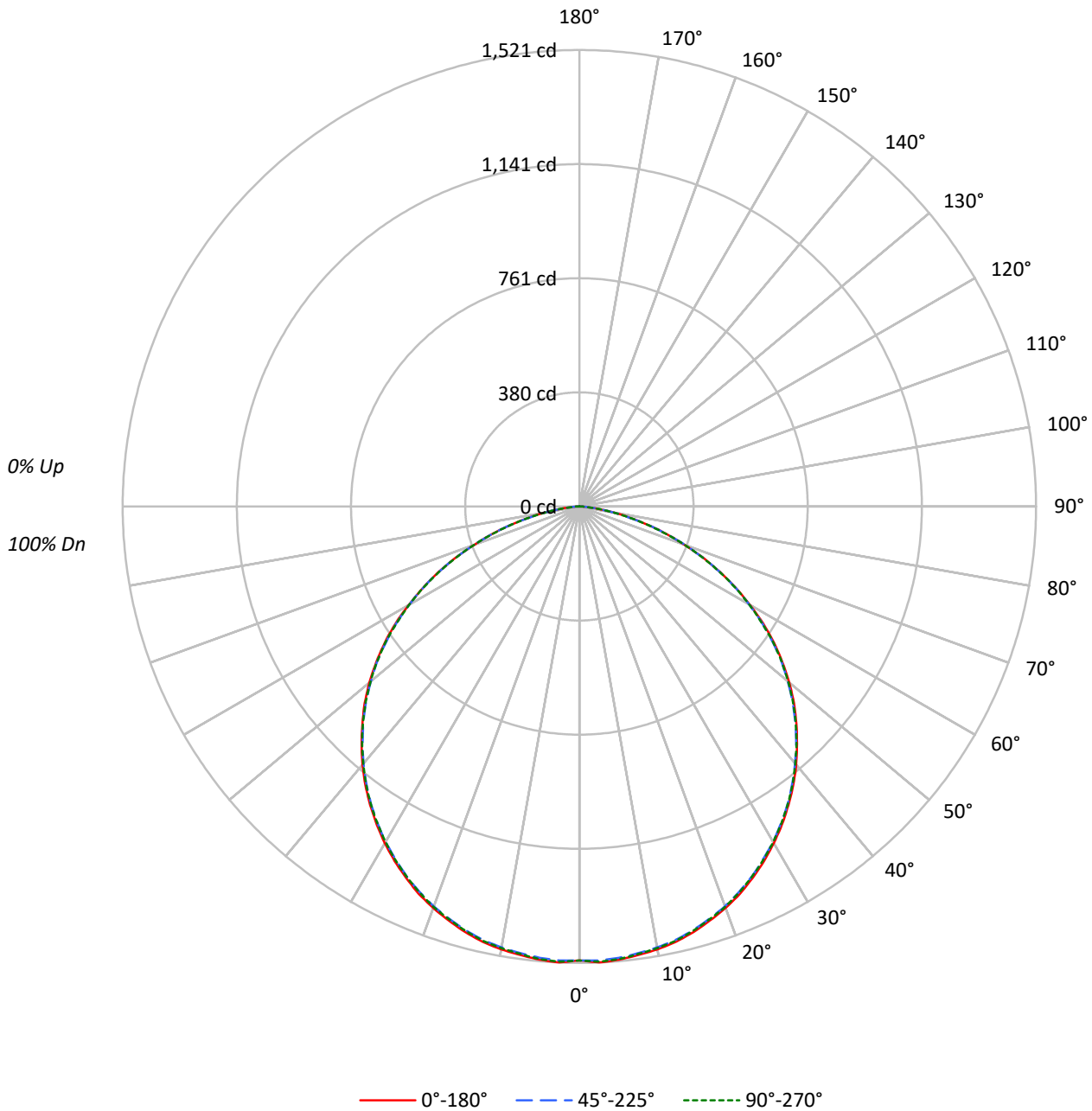
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4229.7 lumens
Efficiency: N/A
Efficacy: 116.8 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 (A_{in}): 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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4070	4070	4070
5°	4096	4078	4091
10°	4095	4077	4084
15°	4091	4073	4078
20°	4077	4061	4066
25°	4055	4039	4041
30°	4026	4009	4012
35°	3990	3974	3977
40°	3948	3928	3932
45°	3889	3871	3879
50°	3821	3794	3801
55°	3712	3681	3695
60°	3529	3514	3514
65°	3295	3289	3277
70°	2918	2932	2925
75°	2458	2438	2418
80°	1767	1737	1723
85°	923	923	895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3889 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	3.4
10°-20°	411.9	9.7
20°-30°	625.9	14.8
30°-40°	756.5	17.9
40°-50°	785.2	18.6
50°-60°	702.0	16.6
60°-70°	510.4	12.1
70°-80°	251.0	5.9
80°-90°	43.5	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°	1181.0	27.9
0°-40°	1937.5	45.8
0°-60°	3424.7	81.0
0°-90°	4229.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4229.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1516	1498	1510	1504	1514	144
15°	1469	1452	1462	1458	1464	414
25°	1366	1351	1360	1357	1361	630
35°	1214	1206	1210	1211	1211	760
45°	1022	1017	1017	1019	1019	788
55°	791	787	785	787	788	705
65°	518	519	517	517	515	510
75°	236	238	234	235	233	251
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°	1512.5	1512.5	1512.5	1512.5	1512.5
2.5°	1520.9	1503.1	1514.3	1507.8	1518.1
5°	1516.2	1498.5	1509.7	1504.1	1514.3
7.5°	1507.8	1490.1	1501.3	1495.7	1504.1
10°	1498.5	1479.8	1491.9	1486.3	1494.7
12.5°	1486.3	1468.6	1479.8	1475.1	1482.6
15°	1468.6	1451.7	1462.0	1458.3	1463.9
17.5°	1447.1	1430.3	1440.5	1437.7	1442.4
20°	1423.7	1407.8	1418.1	1415.3	1420.0
22.5°	1397.6	1380.7	1390.1	1388.2	1392.0
25°	1365.8	1350.9	1360.2	1357.4	1361.1
27.5°	1332.2	1318.2	1325.6	1325.6	1327.5
30°	1295.7	1282.7	1290.1	1290.1	1291.1
32.5°	1256.5	1246.2	1250.9	1251.8	1251.8
35°	1214.5	1206.1	1209.8	1210.7	1210.7
37.5°	1170.6	1162.1	1164.9	1166.8	1166.8
40°	1123.8	1116.4	1118.2	1120.1	1119.2
42.5°	1073.4	1067.8	1068.7	1070.6	1070.6
45°	1022.0	1017.3	1017.3	1019.2	1019.2
47.5°	969.7	965.0	963.2	965.0	965.0
50°	912.7	908.0	906.2	908.0	908.0
52.5°	852.9	848.3	848.3	848.3	849.2
55°	791.3	786.6	784.7	786.6	787.5
57.5°	725.9	724.0	721.2	722.1	719.3
60°	655.8	655.8	653.0	654.9	653.0
62.5°	587.6	589.5	586.7	586.7	584.8
65°	517.5	519.4	516.6	516.6	514.7
67.5°	445.6	448.4	444.7	444.7	442.8
70°	370.9	376.5	372.7	373.7	371.8
72.5°	303.6	306.4	302.7	302.7	300.8
75°	236.4	238.2	234.5	235.4	232.6
77.5°	170.0	172.8	169.1	170.0	169.1
80°	114.0	114.9	112.1	113.0	111.2
82.5°	66.3	67.3	66.3	65.4	64.5
85°	29.9	30.8	29.9	29.9	29.0
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)