

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: P973632

Luminaire Tested: FLR2-22-45-L840-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973632  
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: FLR2-22-45-L840-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

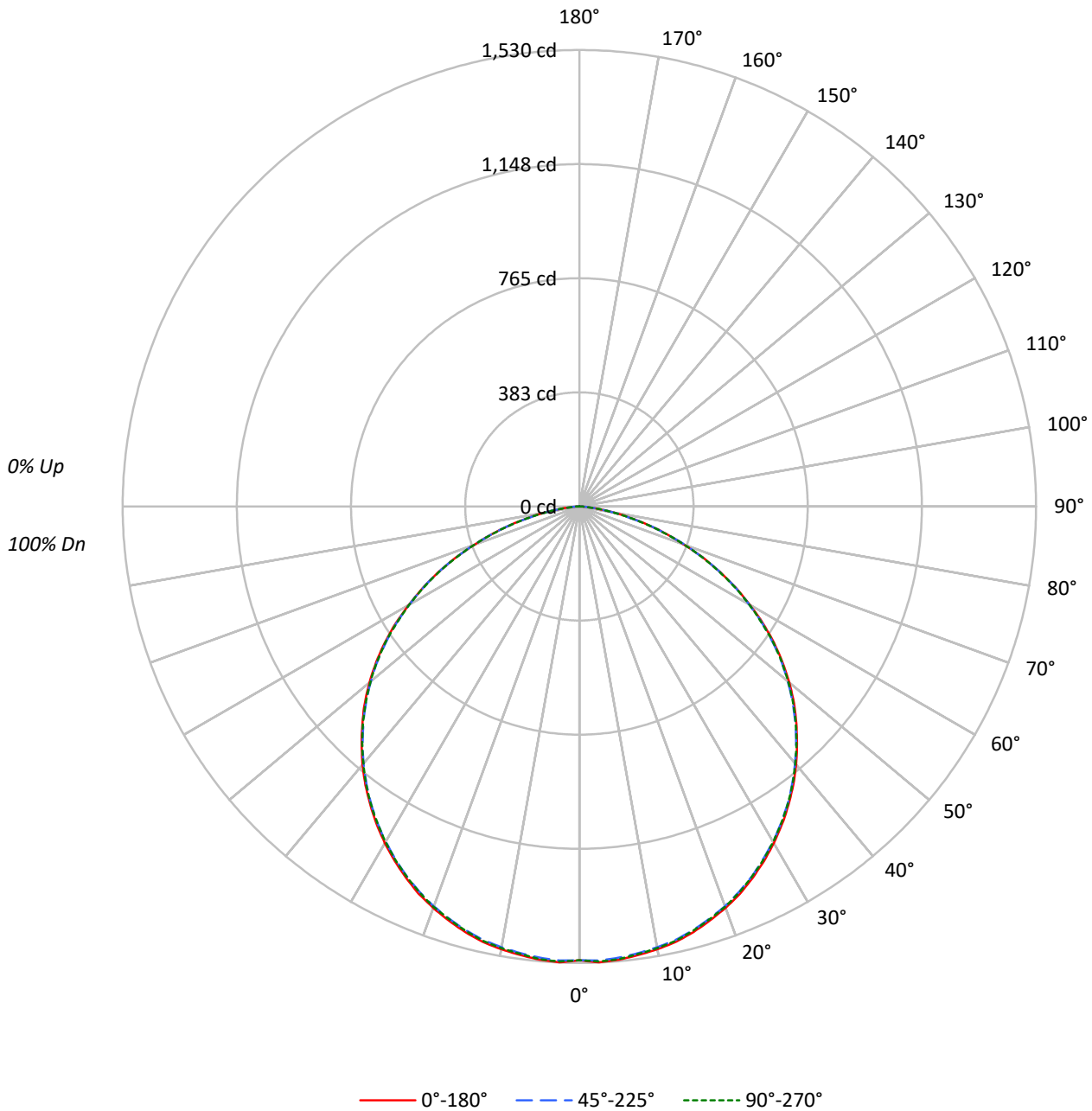
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4253.9 lumens  
Efficiency: N/A  
Efficacy: 117.8 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): 36.1  
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				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°	4093	4093	4093
5°	4119	4101	4114
10°	4118	4100	4108
15°	4115	4096	4102
20°	4101	4084	4090
25°	4078	4062	4064
30°	4049	4032	4035
35°	4012	3997	4000
40°	3971	3951	3954
45°	3912	3894	3901
50°	3843	3816	3823
55°	3734	3703	3716
60°	3550	3534	3534
65°	3314	3309	3296
70°	2935	2950	2942
75°	2471	2452	2432
80°	1776	1746	1733
85°	929	929	898

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3912 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.0	3.4
10°-20°	414.2	9.7
20°-30°	629.5	14.8
30°-40°	760.9	17.9
40°-50°	789.7	18.6
50°-60°	706.0	16.6
60°-70°	513.3	12.1
70°-80°	252.4	5.9
80°-90°	43.8	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°	1187.7	27.9
0°-40°	1948.6	45.8
0°-60°	3444.3	81.0
0°-90°	4253.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4253.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1521	1521	1521	1521	1521	
5°	1525	1507	1518	1513	1523	145
15°	1477	1460	1470	1467	1472	417
25°	1374	1359	1368	1365	1369	633
35°	1221	1213	1217	1218	1218	764
45°	1028	1023	1023	1025	1025	793
55°	796	791	789	791	792	709
65°	520	522	520	520	518	513
75°	238	240	236	237	234	252
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°	1521.1	1521.1	1521.1	1521.1	1521.1
2.5°	1529.6	1511.7	1523.0	1516.4	1526.8
5°	1524.9	1507.0	1518.3	1512.7	1523.0
7.5°	1516.4	1498.6	1509.9	1504.2	1512.7
10°	1507.0	1488.2	1500.5	1494.8	1503.3
12.5°	1494.8	1477.0	1488.2	1483.5	1491.1
15°	1477.0	1460.1	1470.4	1466.6	1472.3
17.5°	1455.4	1438.4	1448.8	1446.0	1450.7
20°	1431.9	1415.9	1426.2	1423.4	1428.1
22.5°	1405.6	1388.7	1398.0	1396.2	1399.9
25°	1373.6	1358.6	1368.0	1365.2	1368.9
27.5°	1339.8	1325.7	1333.2	1333.2	1335.1
30°	1303.2	1290.0	1297.5	1297.5	1298.5
32.5°	1263.7	1253.4	1258.1	1259.0	1259.0
35°	1221.4	1213.0	1216.7	1217.7	1217.7
37.5°	1177.3	1168.8	1171.6	1173.5	1173.5
40°	1130.3	1122.8	1124.6	1126.5	1125.6
42.5°	1079.5	1073.9	1074.8	1076.7	1076.7
45°	1027.9	1023.2	1023.2	1025.0	1025.0
47.5°	975.3	970.6	968.7	970.6	970.6
50°	917.9	913.2	911.4	913.2	913.2
52.5°	857.8	853.1	853.1	853.1	854.0
55°	795.8	791.1	789.2	791.1	792.0
57.5°	730.0	728.1	725.3	726.3	723.5
60°	659.6	659.6	656.7	658.6	656.7
62.5°	591.0	592.9	590.0	590.0	588.2
65°	520.5	522.4	519.6	519.6	517.7
67.5°	448.2	451.0	447.2	447.2	445.3
70°	373.0	378.6	374.9	375.8	373.9
72.5°	305.4	308.2	304.4	304.4	302.5
75°	237.7	239.6	235.8	236.8	233.9
77.5°	171.0	173.8	170.1	171.0	170.1
80°	114.6	115.6	112.7	113.7	111.8
82.5°	66.7	67.6	66.7	65.8	64.8
85°	30.1	31.0	30.1	30.1	29.1
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)