

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: P973935

Luminaire Tested: FLR2-22-50HE-L940-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973935  
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: FLR2-22-50HE-L940-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

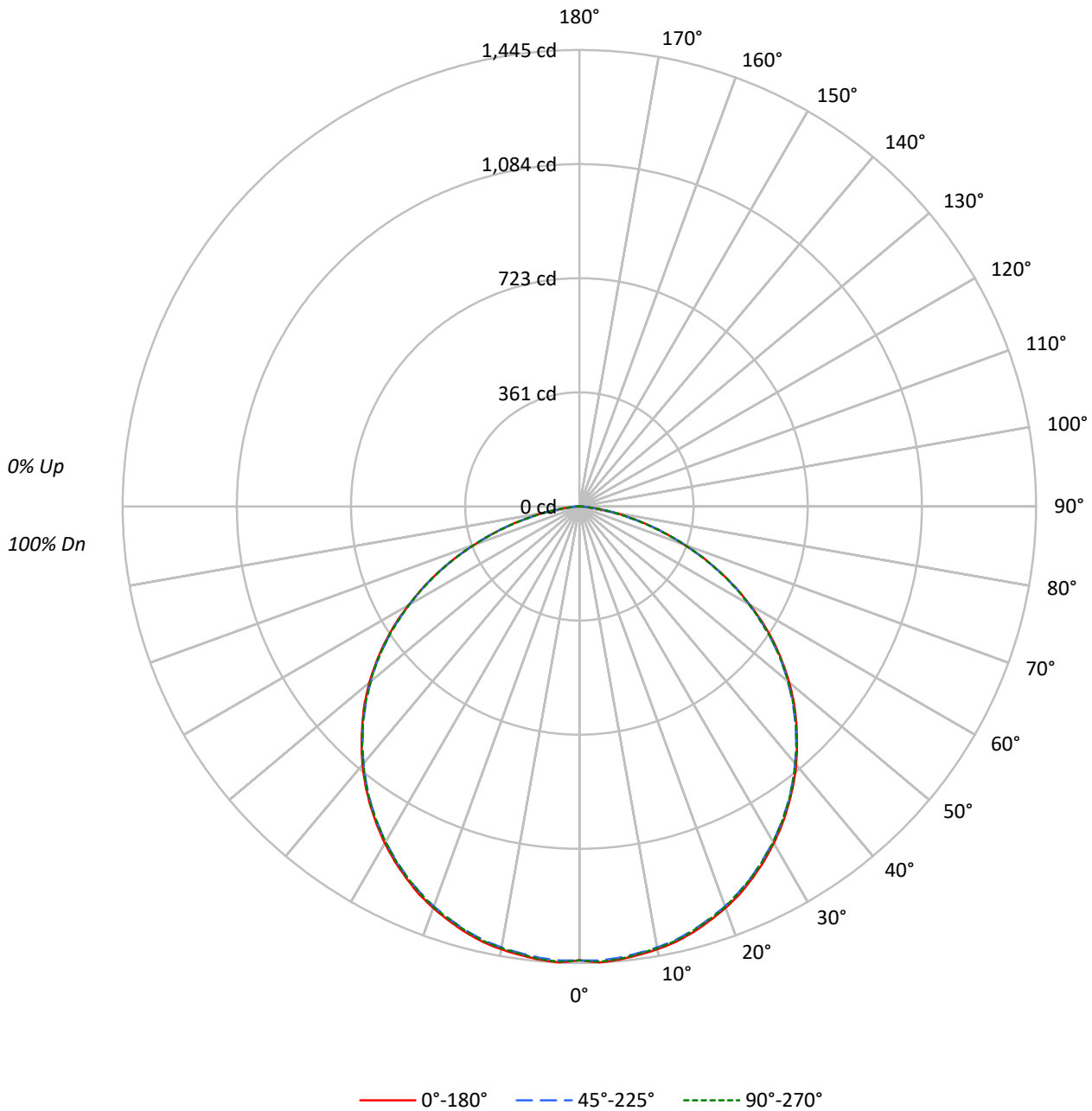
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4018.1 lumens  
Efficiency: N/A  
Efficacy: 100.5 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): 40  
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°	3866	3866	3866
5°	3891	3874	3886
10°	3890	3873	3880
15°	3887	3869	3874
20°	3873	3858	3863
25°	3852	3837	3839
30°	3825	3808	3811
35°	3790	3776	3778
40°	3750	3732	3735
45°	3695	3678	3685
50°	3630	3604	3611
55°	3527	3498	3510
60°	3353	3338	3338
65°	3131	3125	3114
70°	2772	2786	2779
75°	2334	2316	2298
80°	1678	1650	1636
85°	877	877	849

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3695 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.1	3.4
10°-20°	391.3	9.7
20°-30°	594.6	14.8
30°-40°	718.7	17.9
40°-50°	746.0	18.6
50°-60°	666.9	16.6
60°-70°	484.9	12.1
70°-80°	238.4	5.9
80°-90°	41.4	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°	1121.9	27.9
0°-40°	1840.6	45.8
0°-60°	3253.5	81.0
0°-90°	4018.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4018.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1437	1437	1437	1437	1437	
5°	1440	1424	1434	1429	1439	137
15°	1395	1379	1389	1385	1391	394
25°	1298	1283	1292	1290	1293	598
35°	1154	1146	1149	1150	1150	722
45°	971	966	966	968	968	749
55°	752	747	746	747	748	670
65°	492	493	491	491	489	485
75°	224	226	223	224	221	238
85°	28	29	28	28	28	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1444.8	1428.0	1438.6	1432.4	1442.2
5°	1440.4	1423.5	1434.2	1428.8	1438.6
7.5°	1432.4	1415.5	1426.2	1420.9	1428.8
10°	1423.5	1405.8	1417.3	1412.0	1420.0
12.5°	1412.0	1395.1	1405.8	1401.3	1408.4
15°	1395.1	1379.1	1388.9	1385.4	1390.7
17.5°	1374.7	1358.7	1368.5	1365.8	1370.3
20°	1352.5	1337.4	1347.2	1344.5	1349.0
22.5°	1327.7	1311.7	1320.6	1318.8	1322.3
25°	1297.5	1283.3	1292.2	1289.5	1293.1
27.5°	1265.5	1252.2	1259.3	1259.3	1261.1
30°	1230.9	1218.5	1225.6	1225.6	1226.5
32.5°	1193.7	1183.9	1188.3	1189.2	1189.2
35°	1153.7	1145.7	1149.3	1150.2	1150.2
37.5°	1112.0	1104.0	1106.7	1108.5	1108.5
40°	1067.6	1060.5	1062.3	1064.1	1063.2
42.5°	1019.7	1014.4	1015.3	1017.1	1017.1
45°	970.9	966.5	966.5	968.2	968.2
47.5°	921.2	916.8	915.0	916.8	916.8
50°	867.1	862.6	860.9	862.6	862.6
52.5°	810.3	805.8	805.8	805.8	806.7
55°	751.7	747.3	745.5	747.3	748.1
57.5°	689.6	687.8	685.1	686.0	683.4
60°	623.0	623.0	620.3	622.1	620.3
62.5°	558.2	560.0	557.3	557.3	555.6
65°	491.7	493.4	490.8	490.8	489.0
67.5°	423.3	426.0	422.4	422.4	420.7
70°	352.3	357.7	354.1	355.0	353.2
72.5°	288.4	291.1	287.5	287.5	285.8
75°	224.5	226.3	222.8	223.6	221.0
77.5°	161.5	164.2	160.6	161.5	160.6
80°	108.3	109.2	106.5	107.4	105.6
82.5°	63.0	63.9	63.0	62.1	61.2
85°	28.4	29.3	28.4	28.4	27.5
87.5°	7.1	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)