

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: P973809

Luminaire Tested: FLR2-22-50HE-L835-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973809  
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-L835-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

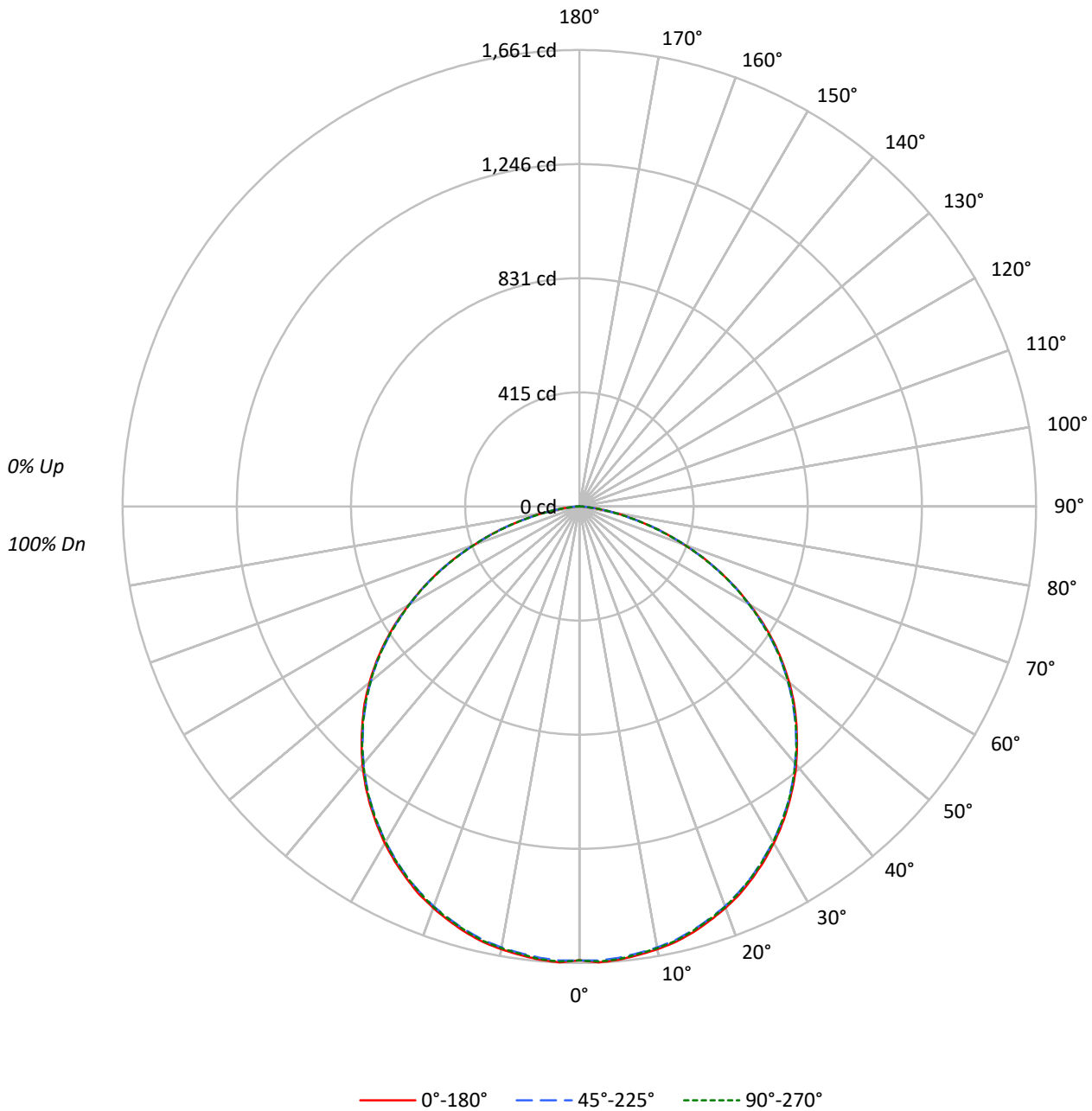
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4618.5 lumens  
Efficiency: N/A  
Efficacy: 115.5 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	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°	4444	4444	4444
5°	4472	4453	4467
10°	4471	4452	4460
15°	4467	4447	4453
20°	4452	4434	4440
25°	4428	4410	4413
30°	4396	4377	4381
35°	4356	4340	4343
40°	4311	4289	4293
45°	4247	4228	4235
50°	4172	4142	4151
55°	4054	4020	4034
60°	3854	3837	3837
65°	3598	3592	3579
70°	3186	3202	3194
75°	2684	2662	2641
80°	1929	1897	1881
85°	1007	1007	976

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4247 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.4	3.4
10°-20°	449.7	9.7
20°-30°	683.4	14.8
30°-40°	826.1	17.9
40°-50°	857.4	18.6
50°-60°	766.5	16.6
60°-70°	557.3	12.1
70°-80°	274.1	5.9
80°-90°	47.5	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°	1289.6	27.9
0°-40°	2115.6	45.8
0°-60°	3739.6	81.0
0°-90°	4618.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4618.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1656	1636	1648	1642	1654	157
15°	1604	1585	1596	1592	1598	452
25°	1491	1475	1485	1482	1486	687
35°	1326	1317	1321	1322	1322	830
45°	1116	1111	1111	1113	1113	861
55°	864	859	857	859	860	770
65°	565	567	564	564	562	557
75°	258	260	256	257	254	274
85°	33	34	33	33	32	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1651.5	1651.5	1651.5	1651.5	1651.5
2.5°	1660.7	1641.3	1653.6	1646.4	1657.6
5°	1655.6	1636.2	1648.5	1642.3	1653.6
7.5°	1646.4	1627.0	1639.3	1633.2	1642.3
10°	1636.2	1615.8	1629.1	1623.0	1632.1
12.5°	1623.0	1603.6	1615.8	1610.7	1618.9
15°	1603.6	1585.2	1596.4	1592.4	1598.5
17.5°	1580.1	1561.8	1573.0	1569.9	1575.0
20°	1554.6	1537.3	1548.5	1545.4	1550.5
22.5°	1526.1	1507.7	1517.9	1515.9	1519.9
25°	1491.4	1475.1	1485.3	1482.2	1486.3
27.5°	1454.7	1439.3	1447.5	1447.5	1449.6
30°	1414.9	1400.6	1408.7	1408.7	1409.8
32.5°	1372.0	1360.8	1365.9	1366.9	1366.9
35°	1326.1	1316.9	1321.0	1322.0	1322.0
37.5°	1278.2	1269.0	1272.1	1274.1	1274.1
40°	1227.2	1219.0	1221.0	1223.1	1222.1
42.5°	1172.1	1166.0	1167.0	1169.0	1169.0
45°	1116.0	1110.9	1110.9	1112.9	1112.9
47.5°	1058.9	1053.8	1051.7	1053.8	1053.8
50°	996.6	991.5	989.5	991.5	991.5
52.5°	931.3	926.2	926.2	926.2	927.3
55°	864.0	858.9	856.9	858.9	859.9
57.5°	792.6	790.6	787.5	788.5	785.5
60°	716.1	716.1	713.0	715.1	713.0
62.5°	641.6	643.7	640.6	640.6	638.6
65°	565.1	567.2	564.1	564.1	562.1
67.5°	486.6	489.6	485.6	485.6	483.5
70°	405.0	411.1	407.0	408.0	406.0
72.5°	331.5	334.6	330.5	330.5	328.5
75°	258.1	260.1	256.0	257.1	254.0
77.5°	185.7	188.7	184.6	185.7	184.6
80°	124.5	125.5	122.4	123.4	121.4
82.5°	72.4	73.4	72.4	71.4	70.4
85°	32.6	33.7	32.6	32.6	31.6
87.5°	8.2	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)