

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: P974031

Luminaire Tested: FLR2-22-50HE-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974031
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-L950-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

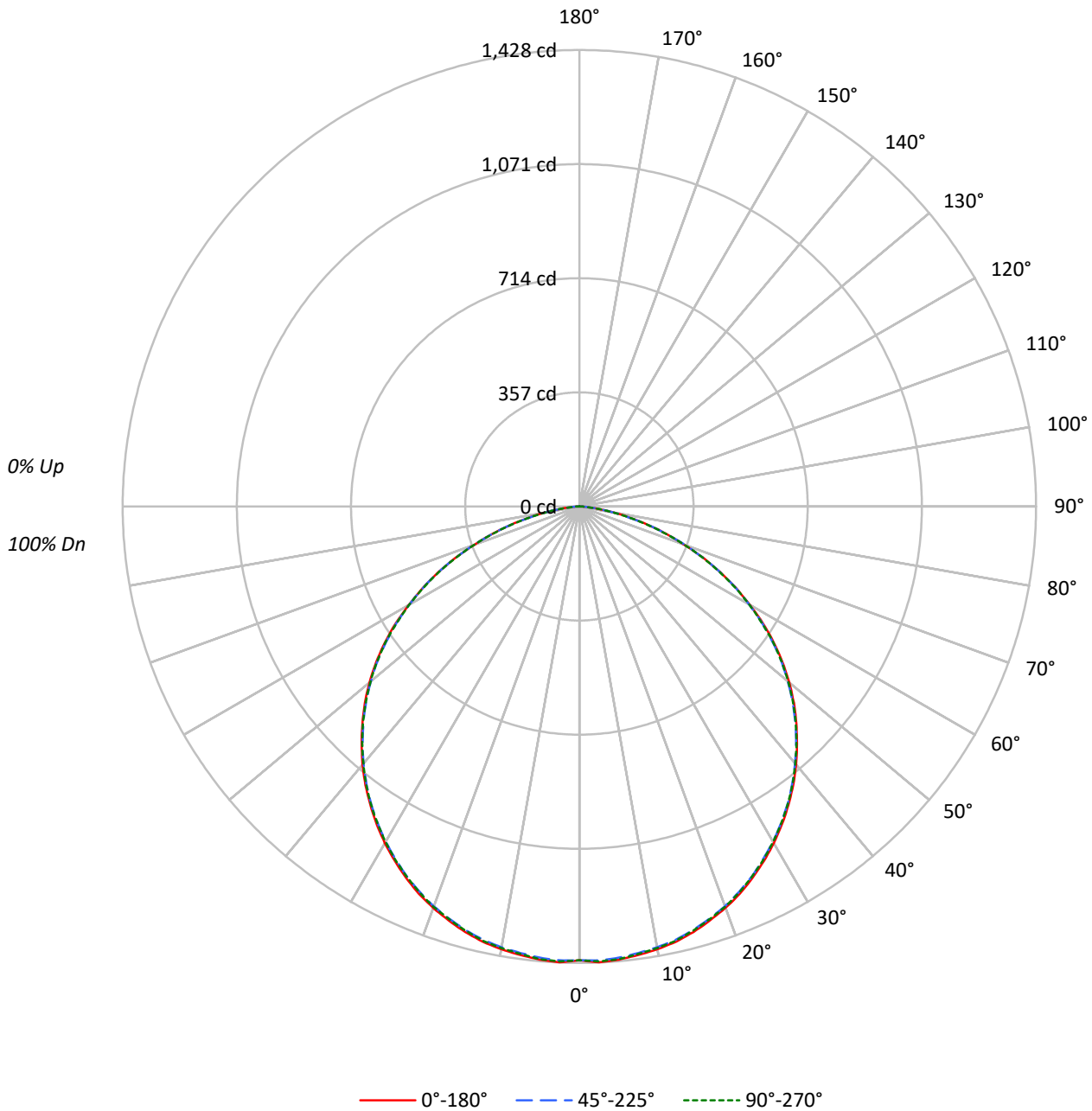
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3969.9 lumens
Efficiency: N/A
Efficacy: 99.2 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				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°	3820	3820	3820
5°	3844	3828	3839
10°	3843	3826	3833
15°	3840	3823	3828
20°	3827	3812	3817
25°	3806	3791	3793
30°	3779	3763	3765
35°	3745	3730	3733
40°	3705	3687	3690
45°	3651	3634	3640
50°	3587	3561	3568
55°	3484	3455	3468
60°	3313	3299	3299
65°	3093	3088	3076
70°	2739	2753	2746
75°	2306	2288	2270
80°	1658	1630	1616
85°	868	868	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3651 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	3.4
10°-20°	386.6	9.7
20°-30°	587.5	14.8
30°-40°	710.1	17.9
40°-50°	737.0	18.6
50°-60°	658.9	16.6
60°-70°	479.1	12.1
70°-80°	235.6	5.9
80°-90°	40.9	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°	1108.4	27.9
0°-40°	1818.5	45.8
0°-60°	3214.4	81.0
0°-90°	3969.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3969.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1423	1406	1417	1412	1421	135
15°	1378	1363	1372	1369	1374	389
25°	1282	1268	1277	1274	1278	591
35°	1140	1132	1136	1136	1136	713
45°	959	955	955	957	957	740
55°	743	738	736	738	739	662
65°	486	488	485	485	483	479
75°	222	224	220	221	218	235
85°	28	29	28	28	27	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1419.6	1419.6	1419.6	1419.6	1419.6
2.5°	1427.5	1410.8	1421.3	1415.2	1424.8
5°	1423.1	1406.4	1417.0	1411.7	1421.3
7.5°	1415.2	1398.5	1409.1	1403.8	1411.7
10°	1406.4	1388.9	1400.3	1395.0	1402.9
12.5°	1395.0	1378.4	1388.9	1384.5	1391.5
15°	1378.4	1362.6	1372.2	1368.7	1374.0
17.5°	1358.2	1342.4	1352.1	1349.4	1353.8
20°	1336.3	1321.4	1331.0	1328.4	1332.8
22.5°	1311.7	1296.0	1304.7	1303.0	1306.5
25°	1281.9	1267.9	1276.7	1274.0	1277.5
27.5°	1250.4	1237.2	1244.2	1244.2	1246.0
30°	1216.2	1203.9	1210.9	1210.9	1211.8
32.5°	1179.3	1169.7	1174.1	1175.0	1175.0
35°	1139.9	1132.0	1135.5	1136.4	1136.4
37.5°	1098.7	1090.8	1093.4	1095.2	1095.2
40°	1054.8	1047.8	1049.6	1051.3	1050.4
42.5°	1007.5	1002.2	1003.1	1004.8	1004.8
45°	959.3	954.9	954.9	956.6	956.6
47.5°	910.1	905.8	904.0	905.8	905.8
50°	856.7	852.3	850.5	852.3	852.3
52.5°	800.5	796.2	796.2	796.2	797.0
55°	742.7	738.3	736.5	738.3	739.2
57.5°	681.3	679.5	676.9	677.8	675.2
60°	615.5	615.5	612.9	614.7	612.9
62.5°	551.5	553.3	550.6	550.6	548.9
65°	485.8	487.5	484.9	484.9	483.1
67.5°	418.2	420.9	417.4	417.4	415.6
70°	348.1	353.4	349.9	350.7	349.0
72.5°	285.0	287.6	284.1	284.1	282.3
75°	221.8	223.6	220.1	221.0	218.3
77.5°	159.6	162.2	158.7	159.6	158.7
80°	107.0	107.9	105.2	106.1	104.3
82.5°	62.3	63.1	62.3	61.4	60.5
85°	28.1	28.9	28.1	28.1	27.2
87.5°	7.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)