

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: P973947

Luminaire Tested: FLR2-22-50HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973947
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

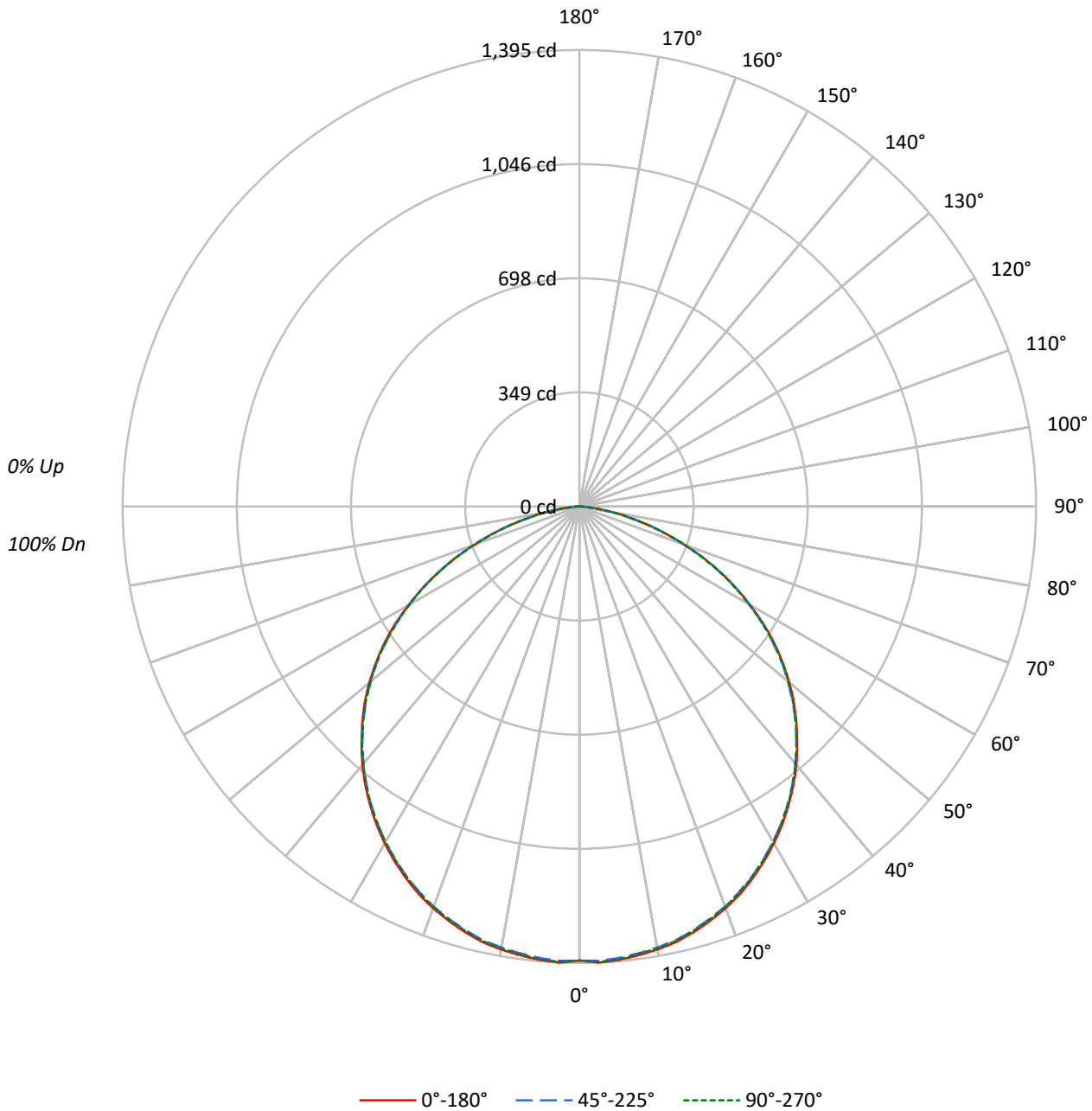
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3880.7 lumens
Efficiency: N/A
Efficacy: 97.0 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°	3734	3734	3734
5°	3758	3742	3753
10°	3757	3740	3747
15°	3754	3737	3742
20°	3741	3726	3731
25°	3721	3706	3708
30°	3694	3678	3681
35°	3661	3646	3649
40°	3622	3604	3607
45°	3569	3552	3559
50°	3506	3481	3488
55°	3406	3378	3390
60°	3238	3224	3224
65°	3023	3018	3007
70°	2677	2691	2684
75°	2255	2236	2219
80°	1621	1595	1581
85°	846	846	821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3569 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.4	3.4
10°-20°	377.9	9.7
20°-30°	574.3	14.8
30°-40°	694.1	17.9
40°-50°	720.4	18.6
50°-60°	644.1	16.6
60°-70°	468.3	12.1
70°-80°	230.3	5.9
80°-90°	39.9	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°	1083.5	27.9
0°-40°	1777.6	45.8
0°-60°	3142.2	81.0
0°-90°	3880.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3880.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1391	1375	1385	1380	1389	132
15°	1347	1332	1341	1338	1343	380
25°	1253	1239	1248	1245	1249	578
35°	1114	1106	1110	1111	1111	697
45°	938	933	933	935	935	723
55°	726	722	720	722	723	647
65°	475	477	474	474	472	468
75°	217	219	215	216	213	230
85°	27	28	27	27	27	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1387.7	1387.7	1387.7	1387.7	1387.7
2.5°	1395.4	1379.1	1389.4	1383.4	1392.8
5°	1391.1	1374.8	1385.1	1380.0	1389.4
7.5°	1383.4	1367.1	1377.4	1372.3	1380.0
10°	1374.8	1357.7	1368.8	1363.7	1371.4
12.5°	1363.7	1347.4	1357.7	1353.4	1360.3
15°	1347.4	1332.0	1341.4	1338.0	1343.1
17.5°	1327.7	1312.3	1321.7	1319.1	1323.4
20°	1306.3	1291.7	1301.1	1298.5	1302.8
22.5°	1282.3	1266.8	1275.4	1273.7	1277.1
25°	1253.1	1239.4	1248.0	1245.4	1248.8
27.5°	1222.3	1209.4	1216.3	1216.3	1218.0
30°	1188.8	1176.8	1183.7	1183.7	1184.5
32.5°	1152.8	1143.4	1147.7	1148.5	1148.5
35°	1114.3	1106.5	1110.0	1110.8	1110.8
37.5°	1074.0	1066.3	1068.8	1070.6	1070.6
40°	1031.1	1024.3	1026.0	1027.7	1026.8
42.5°	984.8	979.7	980.6	982.3	982.3
45°	937.7	933.4	933.4	935.1	935.1
47.5°	889.7	885.4	883.7	885.4	885.4
50°	837.4	833.1	831.4	833.1	833.1
52.5°	782.6	778.3	778.3	778.3	779.1
55°	726.0	721.7	720.0	721.7	722.6
57.5°	666.0	664.3	661.7	662.6	660.0
60°	601.7	601.7	599.1	600.8	599.1
62.5°	539.1	540.8	538.3	538.3	536.6
65°	474.8	476.6	474.0	474.0	472.3
67.5°	408.8	411.4	408.0	408.0	406.3
70°	340.3	345.4	342.0	342.9	341.1
72.5°	278.6	281.1	277.7	277.7	276.0
75°	216.9	218.6	215.1	216.0	213.4
77.5°	156.0	158.6	155.1	156.0	155.1
80°	104.6	105.4	102.9	103.7	102.0
82.5°	60.9	61.7	60.9	60.0	59.1
85°	27.4	28.3	27.4	27.4	26.6
87.5°	6.9	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)