

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: P973905

Luminaire Tested: FLR2-22-50HE-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973905
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-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

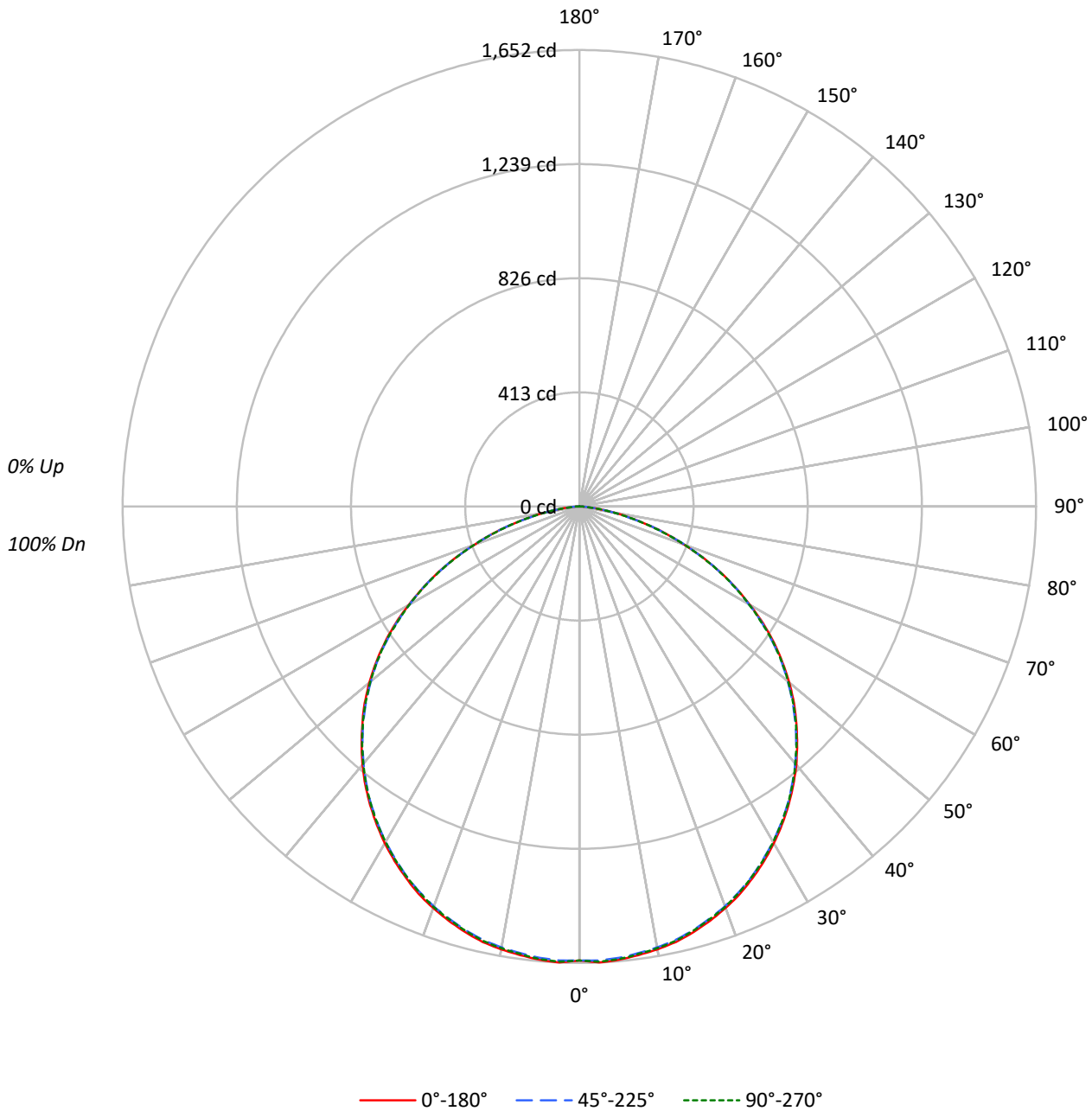
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4594.4 lumens
Efficiency: N/A
Efficacy: 114.9 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°	4421	4421	4421
5°	4449	4430	4443
10°	4448	4428	4436
15°	4444	4424	4430
20°	4429	4411	4417
25°	4405	4387	4390
30°	4373	4355	4358
35°	4334	4317	4320
40°	4288	4267	4271
45°	4225	4206	4213
50°	4150	4121	4129
55°	4032	3999	4013
60°	3834	3817	3817
65°	3580	3573	3560
70°	3170	3186	3178
75°	2669	2648	2627
80°	1918	1888	1872
85°	1003	1003	973

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	3.4
10°-20°	447.4	9.7
20°-30°	679.9	14.8
30°-40°	821.8	17.9
40°-50°	852.9	18.6
50°-60°	762.5	16.6
60°-70°	554.4	12.1
70°-80°	272.6	5.9
80°-90°	47.3	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°	1282.8	27.9
0°-40°	2104.6	45.8
0°-60°	3720.0	81.0
0°-90°	4594.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1643	1643	1643	1643	1643	
5°	1647	1628	1640	1634	1645	157
15°	1595	1577	1588	1584	1590	450
25°	1484	1467	1478	1474	1478	684
35°	1319	1310	1314	1315	1315	825
45°	1110	1105	1105	1107	1107	856
55°	860	854	852	854	855	766
65°	562	564	561	561	559	554
75°	257	259	255	256	253	273
85°	32	34	32	32	32	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1642.9	1642.9	1642.9	1642.9	1642.9
2.5°	1652.0	1632.7	1644.9	1637.8	1649.0
5°	1647.0	1627.7	1639.8	1633.8	1644.9
7.5°	1637.8	1618.5	1630.7	1624.6	1633.8
10°	1627.7	1607.4	1620.6	1614.5	1623.6
12.5°	1614.5	1595.2	1607.4	1602.3	1610.4
15°	1595.2	1576.9	1588.1	1584.0	1590.1
17.5°	1571.9	1553.6	1564.8	1561.7	1566.8
20°	1546.5	1529.2	1540.4	1537.4	1542.4
22.5°	1518.1	1499.8	1510.0	1507.9	1512.0
25°	1483.6	1467.3	1477.5	1474.4	1478.5
27.5°	1447.0	1431.8	1439.9	1439.9	1442.0
30°	1407.5	1393.3	1401.4	1401.4	1402.4
32.5°	1364.8	1353.7	1358.8	1359.8	1359.8
35°	1319.2	1310.1	1314.1	1315.1	1315.1
37.5°	1271.5	1262.4	1265.4	1267.4	1267.4
40°	1220.8	1212.6	1214.7	1216.7	1215.7
42.5°	1166.0	1159.9	1160.9	1162.9	1162.9
45°	1110.1	1105.1	1105.1	1107.1	1107.1
47.5°	1053.3	1048.2	1046.2	1048.2	1048.2
50°	991.4	986.3	984.3	986.3	986.3
52.5°	926.5	921.4	921.4	921.4	922.4
55°	859.5	854.4	852.4	854.4	855.4
57.5°	788.5	786.4	783.4	784.4	781.4
60°	712.4	712.4	709.3	711.3	709.3
62.5°	638.3	640.3	637.3	637.3	635.2
65°	562.2	564.2	561.2	561.2	559.1
67.5°	484.0	487.1	483.0	483.0	481.0
70°	402.9	408.9	404.9	405.9	403.9
72.5°	329.8	332.8	328.8	328.8	326.8
75°	256.7	258.8	254.7	255.7	252.7
77.5°	184.7	187.7	183.7	184.7	183.7
80°	123.8	124.8	121.8	122.8	120.8
82.5°	72.0	73.1	72.0	71.0	70.0
85°	32.5	33.5	32.5	32.5	31.5
87.5°	8.1	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)