

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: P973911

Luminaire Tested: FLR2-22-50HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973911
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

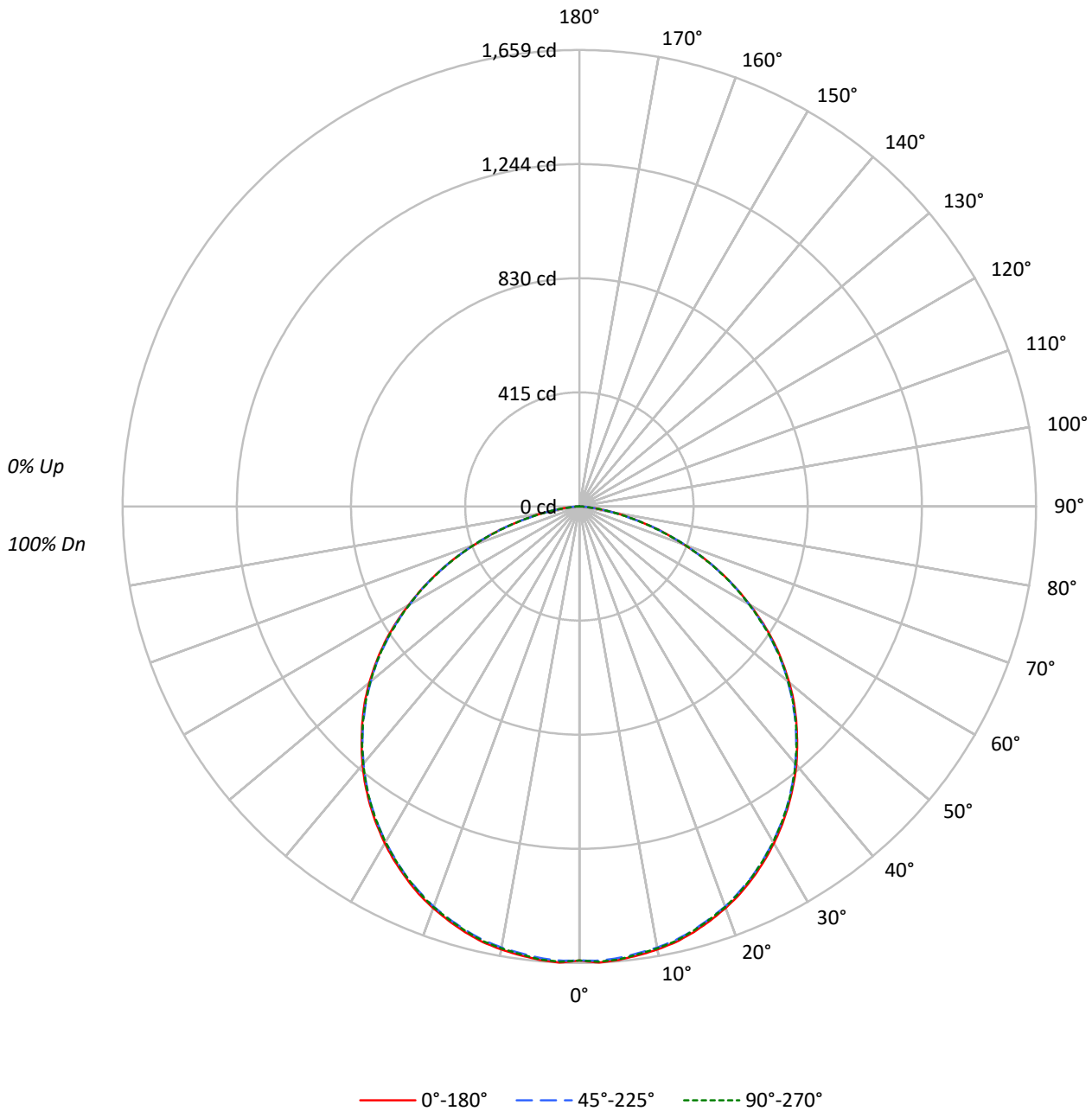
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4614.8 lumens
Efficiency: N/A
Efficacy: 115.4 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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CATALOG NUMBER: FLR2-22-50HE-L840-CP250

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°	4441	4441	4441
5°	4468	4449	4463
10°	4467	4448	4456
15°	4464	4444	4450
20°	4448	4431	4437
25°	4424	4406	4410
30°	4393	4374	4377
35°	4353	4336	4340
40°	4307	4286	4290
45°	4244	4224	4232
50°	4169	4139	4147
55°	4050	4017	4031
60°	3851	3835	3835
65°	3596	3589	3576
70°	3183	3200	3192
75°	2681	2660	2639
80°	1926	1895	1880
85°	1007	1007	976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4244 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.3	3.4
10°-20°	449.4	9.7
20°-30°	682.9	14.8
30°-40°	825.4	17.9
40°-50°	856.7	18.6
50°-60°	765.9	16.6
60°-70°	556.9	12.1
70°-80°	273.9	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°	1288.5	27.9
0°-40°	2113.9	45.8
0°-60°	3736.5	81.0
0°-90°	4614.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1654	1635	1647	1641	1652	157
15°	1602	1584	1595	1591	1597	452
25°	1490	1474	1484	1481	1485	687
35°	1325	1316	1320	1321	1321	829
45°	1115	1110	1110	1112	1112	860
55°	863	858	856	858	859	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°	1650.2	1650.2	1650.2	1650.2	1650.2
2.5°	1659.3	1640.0	1652.2	1645.1	1656.3
5°	1654.2	1634.9	1647.1	1641.0	1652.2
7.5°	1645.1	1625.7	1637.9	1631.8	1641.0
10°	1634.9	1614.5	1627.7	1621.6	1630.8
12.5°	1621.6	1602.3	1614.5	1609.4	1617.6
15°	1602.3	1583.9	1595.1	1591.1	1597.2
17.5°	1578.8	1560.5	1571.7	1568.6	1573.7
20°	1553.3	1536.0	1547.2	1544.2	1549.3
22.5°	1524.8	1506.5	1516.6	1514.6	1518.7
25°	1490.1	1473.8	1484.0	1481.0	1485.1
27.5°	1453.5	1438.2	1446.3	1446.3	1448.4
30°	1413.7	1399.4	1407.6	1407.6	1408.6
32.5°	1370.9	1359.7	1364.8	1365.8	1365.8
35°	1325.0	1315.9	1319.9	1321.0	1321.0
37.5°	1277.1	1268.0	1271.0	1273.0	1273.0
40°	1226.2	1218.0	1220.0	1222.1	1221.1
42.5°	1171.1	1165.0	1166.0	1168.1	1168.1
45°	1115.1	1110.0	1110.0	1112.0	1112.0
47.5°	1058.0	1052.9	1050.8	1052.9	1052.9
50°	995.8	990.7	988.7	990.7	990.7
52.5°	930.6	925.5	925.5	925.5	926.5
55°	863.3	858.2	856.2	858.2	859.2
57.5°	792.0	789.9	786.9	787.9	784.8
60°	715.5	715.5	712.5	714.5	712.5
62.5°	641.1	643.1	640.1	640.1	638.1
65°	564.7	566.7	563.6	563.6	561.6
67.5°	486.2	489.2	485.2	485.2	483.1
70°	404.6	410.8	406.7	407.7	405.7
72.5°	331.3	334.3	330.2	330.2	328.2
75°	257.9	259.9	255.8	256.9	253.8
77.5°	185.5	188.6	184.5	185.5	184.5
80°	124.3	125.4	122.3	123.3	121.3
82.5°	72.4	73.4	72.4	71.3	70.3
85°	32.6	33.6	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)