

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: P974007

Luminaire Tested: FLR2-22-50HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974007
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-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

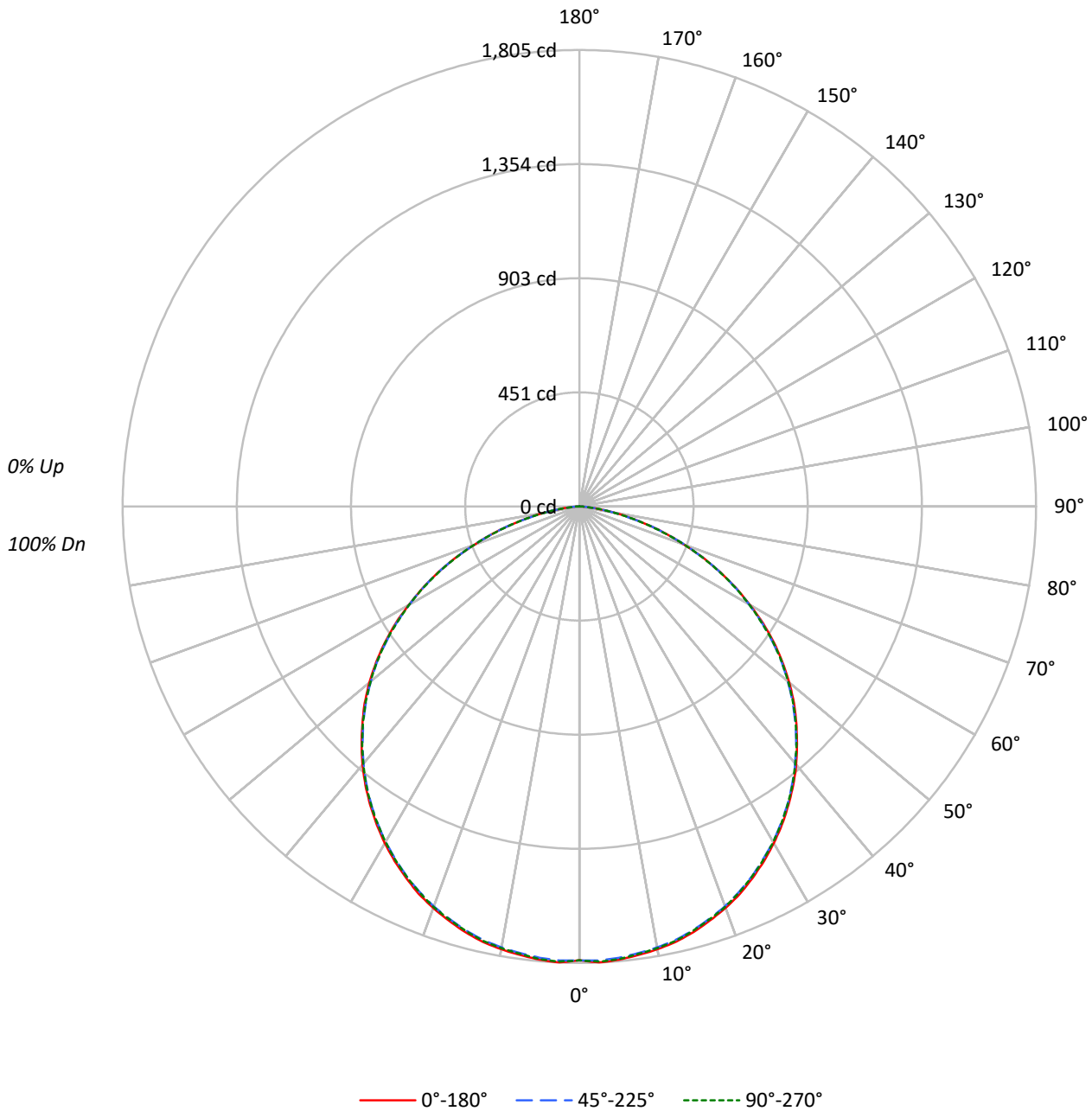
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5019.1 lumens
Efficiency: N/A
Efficacy: 125.5 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	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°	4830	4830	4830
5°	4860	4839	4854
10°	4859	4838	4847
15°	4855	4833	4839
20°	4838	4819	4825
25°	4812	4793	4796
30°	4778	4757	4760
35°	4734	4716	4720
40°	4685	4662	4665
45°	4615	4594	4603
50°	4534	4502	4511
55°	4405	4369	4384
60°	4188	4170	4170
65°	3910	3903	3889
70°	3463	3480	3471
75°	2916	2892	2870
80°	2095	2061	2044
85°	1096	1096	1062

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4615 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	3.4
10°-20°	488.7	9.7
20°-30°	742.7	14.8
30°-40°	897.7	17.9
40°-50°	931.8	18.6
50°-60°	833.0	16.6
60°-70°	605.7	12.1
70°-80°	297.9	5.9
80°-90°	51.7	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°	1401.4	27.9
0°-40°	2299.1	45.8
0°-60°	4063.9	81.0
0°-90°	5019.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5019.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1799	1778	1791	1785	1797	171
15°	1743	1723	1735	1730	1737	492
25°	1621	1603	1614	1611	1615	747
35°	1441	1431	1436	1437	1437	902
45°	1213	1207	1207	1209	1209	936
55°	939	933	931	933	934	837
65°	614	616	613	613	611	606
75°	280	283	278	279	276	298
85°	36	37	36	36	34	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1804.7	1783.7	1797.0	1789.2	1801.4
5°	1799.2	1778.1	1791.4	1784.8	1797.0
7.5°	1789.2	1768.2	1781.5	1774.8	1784.8
10°	1778.1	1756.0	1770.4	1763.7	1773.7
12.5°	1763.7	1742.7	1756.0	1750.4	1759.3
15°	1742.7	1722.7	1734.9	1730.5	1737.1
17.5°	1717.2	1697.2	1709.4	1706.1	1711.6
20°	1689.5	1670.6	1682.8	1679.5	1685.0
22.5°	1658.4	1638.5	1649.5	1647.3	1651.8
25°	1620.7	1603.0	1614.1	1610.7	1615.2
27.5°	1580.8	1564.2	1573.1	1573.1	1575.3
30°	1537.6	1522.1	1530.9	1530.9	1532.0
32.5°	1491.0	1478.8	1484.4	1485.5	1485.5
35°	1441.1	1431.2	1435.6	1436.7	1436.7
37.5°	1389.0	1379.1	1382.4	1384.6	1384.6
40°	1333.6	1324.7	1327.0	1329.2	1328.1
42.5°	1273.7	1267.1	1268.2	1270.4	1270.4
45°	1212.8	1207.2	1207.2	1209.4	1209.4
47.5°	1150.7	1145.1	1142.9	1145.1	1145.1
50°	1083.1	1077.5	1075.3	1077.5	1077.5
52.5°	1012.1	1006.6	1006.6	1006.6	1007.7
55°	939.0	933.4	931.2	933.4	934.5
57.5°	861.4	859.1	855.8	856.9	853.6
60°	778.2	778.2	774.9	777.1	774.9
62.5°	697.3	699.5	696.2	696.2	694.0
65°	614.1	616.4	613.0	613.0	610.8
67.5°	528.8	532.1	527.7	527.7	525.5
70°	440.1	446.8	442.3	443.4	441.2
72.5°	360.3	363.6	359.2	359.2	357.0
75°	280.5	282.7	278.2	279.4	276.0
77.5°	201.8	205.1	200.7	201.8	200.7
80°	135.2	136.4	133.0	134.1	131.9
82.5°	78.7	79.8	78.7	77.6	76.5
85°	35.5	36.6	35.5	35.5	34.4
87.5°	8.9	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)