

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: P974437

Luminaire Tested: FLR2-24-45-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-45-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L850-CA080
Ballast/Driver: -

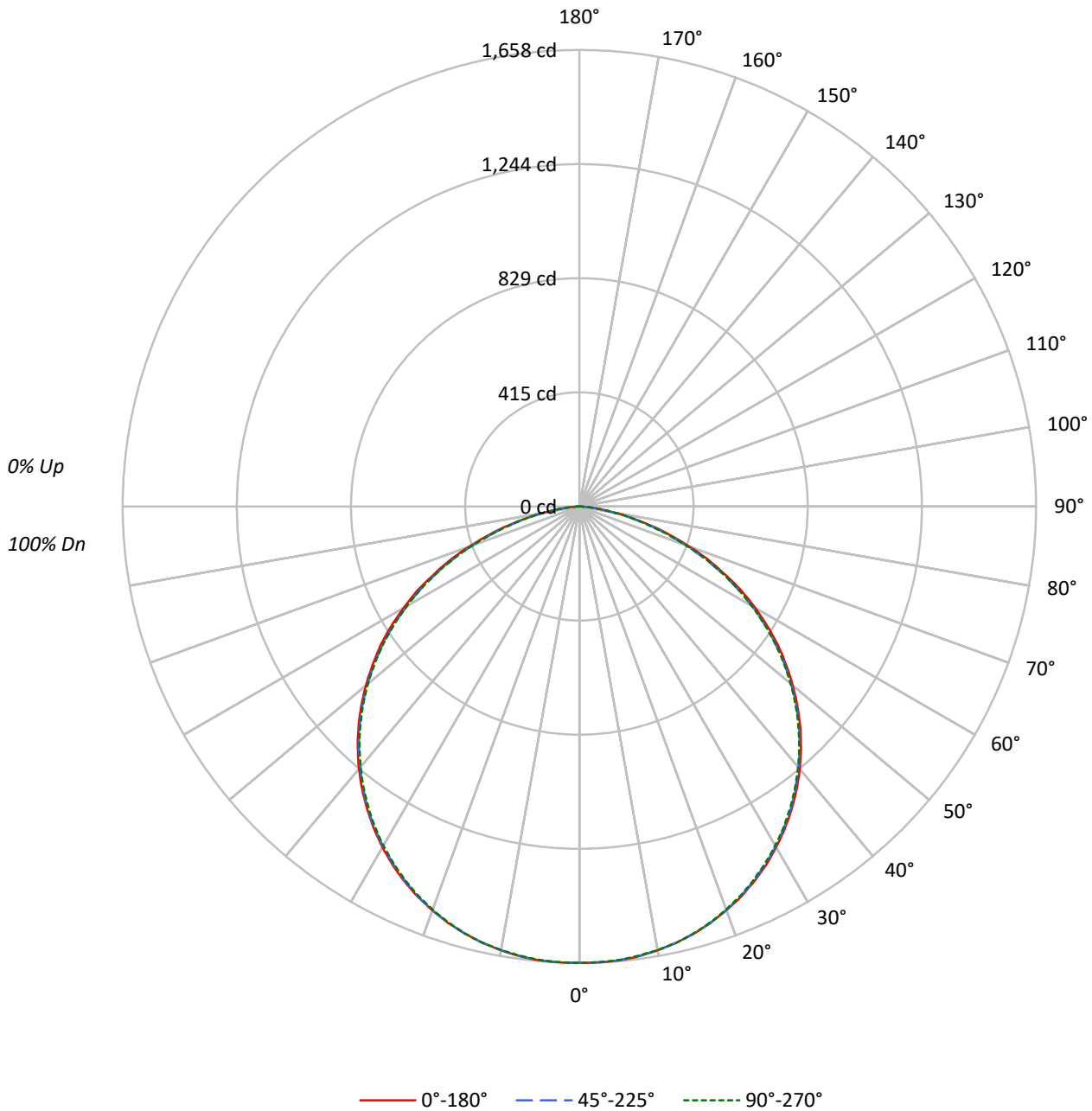
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4685.6 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.6
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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38						38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	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	39	33	29	27						27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2231	2231	2231
5°	2235	2235	2234
10°	2237	2236	2235
15°	2237	2236	2236
20°	2235	2234	2231
25°	2231	2226	2223
30°	2221	2214	2210
35°	2206	2200	2192
40°	2187	2173	2170
45°	2159	2146	2139
50°	2118	2102	2096
55°	2068	2039	2036
60°	1982	1946	1946
65°	1854	1811	1816
70°	1668	1617	1612
75°	1401	1345	1339
80°	1024	972	1014
85°	579	533	542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2159 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.4	3.4
10°-20°	453.3	9.7
20°-30°	691.2	14.8
30°-40°	837.4	17.9
40°-50°	869.9	18.6
50°-60°	778.2	16.6
60°-70°	567.1	12.1
70°-80°	280.9	6.0
80°-90°	50.2	1.1
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°	1301.9	27.8
0°-40°	2139.3	45.7
0°-60°	3787.3	80.8
0°-90°	4685.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4685.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1655	1656	1655	1655	1654	157
15°	1606	1606	1606	1607	1606	453
25°	1503	1501	1500	1499	1497	693
35°	1343	1341	1340	1337	1335	840
45°	1134	1132	1128	1125	1124	874
55°	882	875	869	869	868	785
65°	582	578	569	571	570	577
75°	270	265	259	264	258	287
85°	38	34	34	35	35	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.8	1657.8	1657.8	1657.8	1657.8
2.5°	1657.8	1657.2	1657.2	1657.8	1656.6
5°	1654.9	1655.5	1654.9	1654.9	1653.7
7.5°	1648.3	1647.7	1647.1	1647.7	1645.9
10°	1637.0	1637.0	1636.4	1637.0	1635.8
12.5°	1623.3	1623.3	1623.3	1623.9	1623.3
15°	1606.1	1605.5	1605.5	1606.7	1605.5
17.5°	1585.9	1585.3	1585.3	1584.7	1583.5
20°	1560.9	1560.9	1560.3	1559.7	1557.9
22.5°	1534.1	1533.5	1531.7	1531.7	1529.3
25°	1502.6	1500.8	1499.6	1499.0	1497.2
27.5°	1468.1	1465.7	1463.9	1462.7	1460.9
30°	1429.4	1427.0	1425.3	1423.5	1422.3
32.5°	1387.8	1386.6	1383.6	1383.0	1380.6
35°	1343.2	1341.4	1339.6	1337.2	1334.8
37.5°	1295.6	1293.8	1289.6	1288.4	1286.7
40°	1245.0	1242.6	1237.3	1237.3	1235.5
42.5°	1190.9	1188.5	1184.9	1182.6	1181.4
45°	1134.4	1132.0	1127.8	1125.4	1124.3
47.5°	1074.3	1072.5	1067.7	1066.0	1064.2
50°	1011.8	1009.5	1004.1	1002.9	1001.1
52.5°	946.4	945.2	938.1	937.5	935.7
55°	881.6	875.0	869.1	869.1	867.9
57.5°	810.2	805.4	797.7	797.7	796.5
60°	736.4	732.3	723.3	724.5	723.3
62.5°	664.4	655.5	647.2	650.8	647.8
65°	582.4	577.6	568.7	571.1	570.5
67.5°	507.4	498.5	490.2	494.9	492.5
70°	424.1	419.4	411.0	415.8	409.8
72.5°	345.6	341.4	333.1	338.5	332.5
75°	269.5	265.3	258.8	263.5	257.6
77.5°	197.5	194.5	188.6	193.3	194.5
80°	132.1	128.5	125.5	129.7	130.9
82.5°	77.3	75.0	73.8	74.4	77.3
85°	37.5	34.5	34.5	35.1	35.1
87.5°	10.1	8.9	10.1	10.7	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)