

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: P974436

Luminaire Tested: FLR2-24-40-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974436
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: FLR2-24-40-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L850-CA080
Ballast/Driver: -

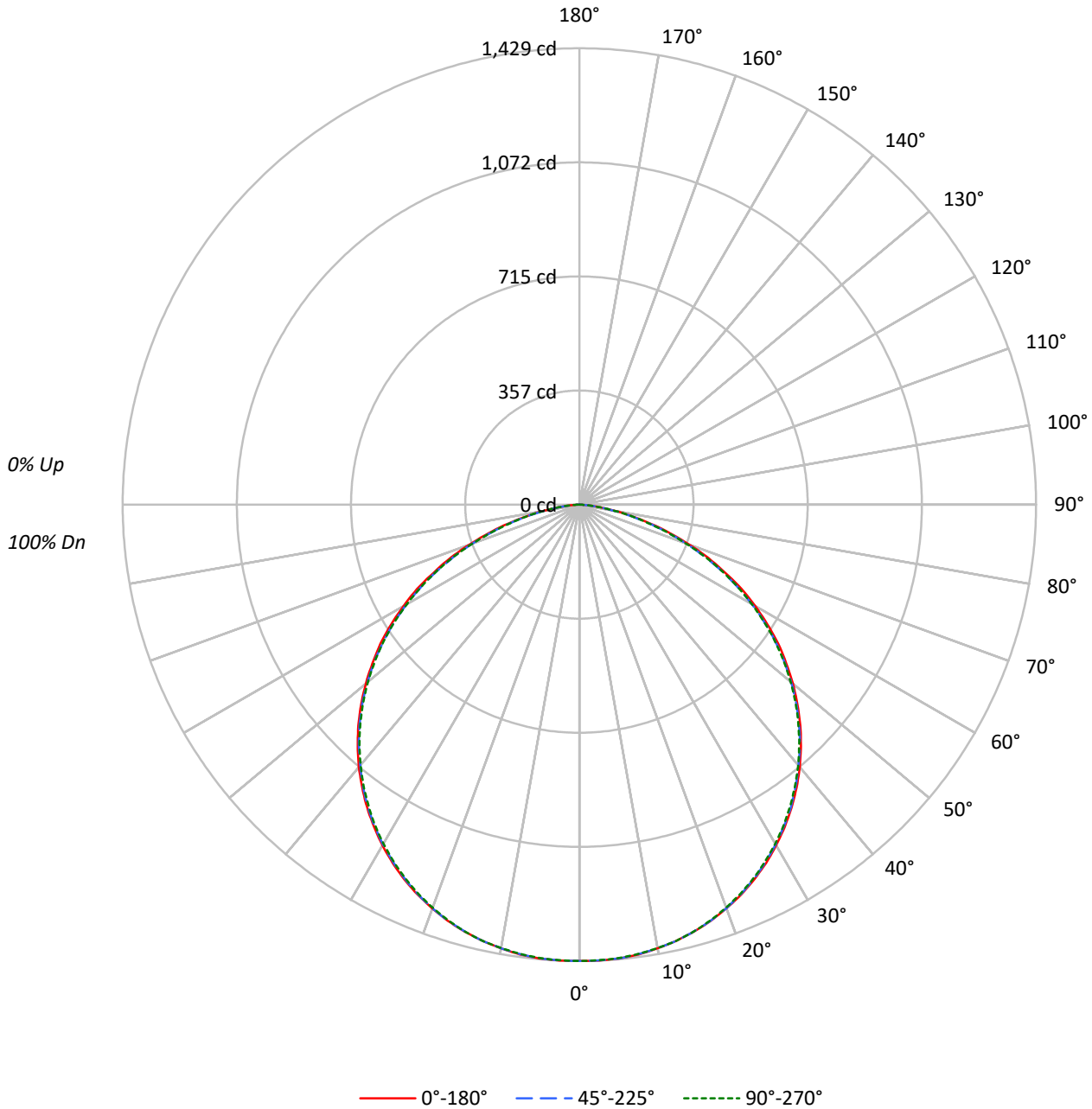
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4039.1 lumens
Efficiency: N/A
Efficacy: 133.3 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): 30.3
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	100	100	100	100	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1923	1923	1923
5°	1927	1927	1925
10°	1928	1927	1927
15°	1929	1928	1928
20°	1927	1926	1923
25°	1923	1919	1916
30°	1914	1909	1905
35°	1902	1897	1890
40°	1885	1873	1871
45°	1861	1850	1844
50°	1826	1812	1806
55°	1783	1757	1755
60°	1708	1678	1678
65°	1598	1561	1565
70°	1438	1394	1390
75°	1208	1160	1154
80°	882	838	874
85°	499	459	468

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1861 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.6	3.4
10°-20°	390.8	9.7
20°-30°	595.8	14.8
30°-40°	721.9	17.9
40°-50°	749.8	18.6
50°-60°	670.8	16.6
60°-70°	488.9	12.1
70°-80°	242.1	6.0
80°-90°	43.3	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°	1122.3	27.8
0°-40°	1844.1	45.7
0°-60°	3264.8	80.8
0°-90°	4039.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4039.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1426	1427	1426	1426	1426	136
15°	1384	1384	1384	1385	1384	391
25°	1295	1294	1293	1292	1291	597
35°	1158	1156	1155	1153	1151	724
45°	978	976	972	970	969	754
55°	760	754	749	749	748	677
65°	502	498	490	492	492	498
75°	232	229	223	227	222	248
85°	32	30	30	30	30	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.1	1429.1	1429.1	1429.1	1429.1
2.5°	1429.1	1428.6	1428.6	1429.1	1428.1
5°	1426.5	1427.0	1426.5	1426.5	1425.5
7.5°	1420.9	1420.4	1419.9	1420.4	1418.8
10°	1411.1	1411.1	1410.6	1411.1	1410.1
12.5°	1399.4	1399.4	1399.4	1399.9	1399.4
15°	1384.5	1384.0	1384.0	1385.0	1384.0
17.5°	1367.0	1366.5	1366.5	1366.0	1365.0
20°	1345.5	1345.5	1345.0	1344.5	1342.9
22.5°	1322.4	1321.9	1320.4	1320.4	1318.3
25°	1295.3	1293.7	1292.7	1292.2	1290.6
27.5°	1265.5	1263.5	1261.9	1260.9	1259.4
30°	1232.2	1230.1	1228.6	1227.1	1226.0
32.5°	1196.3	1195.3	1192.7	1192.2	1190.1
35°	1157.8	1156.3	1154.8	1152.7	1150.7
37.5°	1116.8	1115.3	1111.7	1110.7	1109.1
40°	1073.2	1071.2	1066.6	1066.6	1065.0
42.5°	1026.6	1024.5	1021.4	1019.4	1018.4
45°	977.9	975.8	972.2	970.2	969.1
47.5°	926.1	924.5	920.4	918.9	917.3
50°	872.2	870.2	865.6	864.5	863.0
52.5°	815.8	814.8	808.6	808.1	806.6
55°	759.9	754.3	749.2	749.2	748.1
57.5°	698.4	694.3	687.6	687.6	686.6
60°	634.8	631.2	623.5	624.6	623.5
62.5°	572.8	565.1	557.9	561.0	558.4
65°	502.0	497.9	490.2	492.3	491.7
67.5°	437.4	429.7	422.5	426.6	424.6
70°	365.6	361.5	354.3	358.4	353.3
72.5°	297.9	294.3	287.2	291.8	286.6
75°	232.3	228.7	223.1	227.2	222.0
77.5°	170.2	167.7	162.5	166.7	167.7
80°	113.8	110.8	108.2	111.8	112.8
82.5°	66.7	64.6	63.6	64.1	66.7
85°	32.3	29.7	29.7	30.3	30.3
87.5°	8.7	7.7	8.7	9.2	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)