

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: P974332

Luminaire Tested: FLR2-24-40-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974332
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-L840-CA125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L840-CA125
Ballast/Driver: -

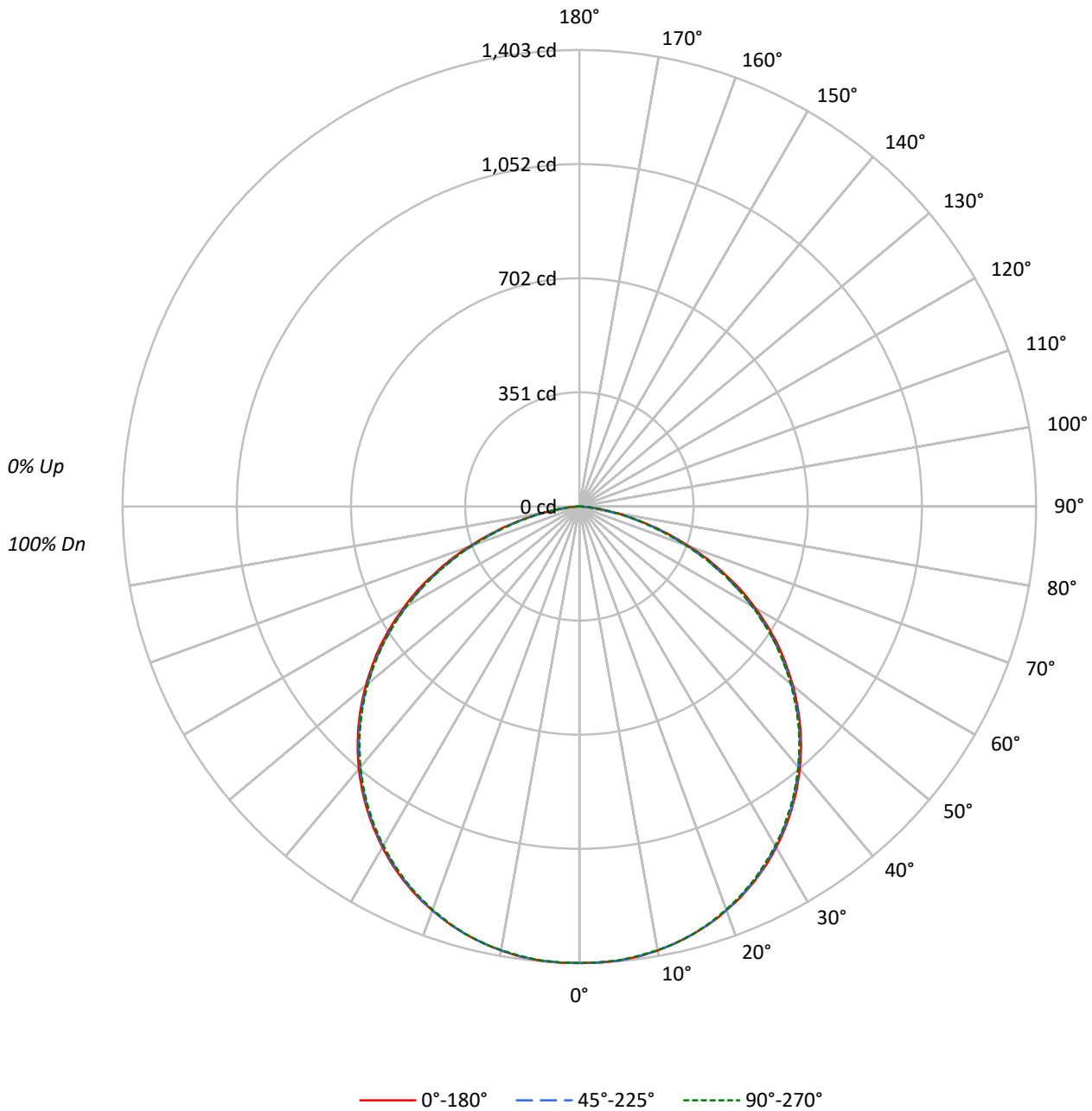
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3966.4 lumens
Efficiency: N/A
Efficacy: 130.9 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				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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1888	1888	1888
5°	1892	1892	1891
10°	1893	1893	1892
15°	1894	1893	1893
20°	1892	1891	1888
25°	1888	1885	1882
30°	1880	1874	1871
35°	1868	1863	1856
40°	1851	1840	1837
45°	1827	1817	1811
50°	1793	1779	1774
55°	1751	1726	1723
60°	1678	1648	1648
65°	1570	1533	1537
70°	1412	1369	1365
75°	1186	1138	1133
80°	866	823	859
85°	489	451	459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1827 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	3.4
10°-20°	383.8	9.7
20°-30°	585.1	14.8
30°-40°	708.9	17.9
40°-50°	736.4	18.6
50°-60°	658.7	16.6
60°-70°	480.1	12.1
70°-80°	237.8	6.0
80°-90°	42.5	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°	1102.1	27.8
0°-40°	1811.0	45.7
0°-60°	3206.1	80.8
0°-90°	3966.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3966.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1401	1401	1401	1401	1400	133
15°	1360	1359	1359	1360	1359	384
25°	1272	1270	1269	1269	1267	586
35°	1137	1136	1134	1132	1130	711
45°	960	958	955	953	952	740
55°	746	741	736	736	735	665
65°	493	489	481	483	483	489
75°	228	225	219	223	218	243
85°	32	29	29	30	30	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1403.4	1403.4	1403.4	1403.4	1403.4
2.5°	1403.4	1402.9	1402.9	1403.4	1402.4
5°	1400.9	1401.4	1400.9	1400.9	1399.9
7.5°	1395.3	1394.8	1394.3	1394.8	1393.3
10°	1385.8	1385.8	1385.3	1385.8	1384.8
12.5°	1374.2	1374.2	1374.2	1374.7	1374.2
15°	1359.6	1359.1	1359.1	1360.1	1359.1
17.5°	1342.5	1342.0	1342.0	1341.4	1340.4
20°	1321.3	1321.3	1320.8	1320.3	1318.8
22.5°	1298.6	1298.1	1296.6	1296.6	1294.6
25°	1272.0	1270.4	1269.4	1268.9	1267.4
27.5°	1242.8	1240.7	1239.2	1238.2	1236.7
30°	1210.0	1208.0	1206.5	1205.0	1204.0
32.5°	1174.8	1173.8	1171.2	1170.7	1168.7
35°	1137.0	1135.5	1134.0	1132.0	1130.0
37.5°	1096.7	1095.2	1091.7	1090.7	1089.2
40°	1053.9	1051.9	1047.4	1047.4	1045.9
42.5°	1008.1	1006.1	1003.1	1001.1	1000.0
45°	960.3	958.2	954.7	952.7	951.7
47.5°	909.4	907.9	903.9	902.4	900.8
50°	856.5	854.5	850.0	849.0	847.5
52.5°	801.1	800.1	794.1	793.6	792.1
55°	746.3	740.7	735.7	735.7	734.7
57.5°	685.8	681.8	675.3	675.3	674.2
60°	623.4	619.9	612.3	613.3	612.3
62.5°	562.5	554.9	547.9	550.9	548.4
65°	493.0	488.9	481.4	483.4	482.9
67.5°	429.5	422.0	414.9	419.0	416.9
70°	359.0	355.0	348.0	352.0	346.9
72.5°	292.6	289.0	282.0	286.5	281.5
75°	228.1	224.6	219.0	223.1	218.0
77.5°	167.2	164.7	159.6	163.7	164.7
80°	111.8	108.8	106.2	109.8	110.8
82.5°	65.5	63.4	62.4	62.9	65.5
85°	31.7	29.2	29.2	29.7	29.7
87.5°	8.6	7.6	8.6	9.1	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)