

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: P974324

Luminaire Tested: FLR2-24-40-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974324
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L840-CA080
Ballast/Driver: -

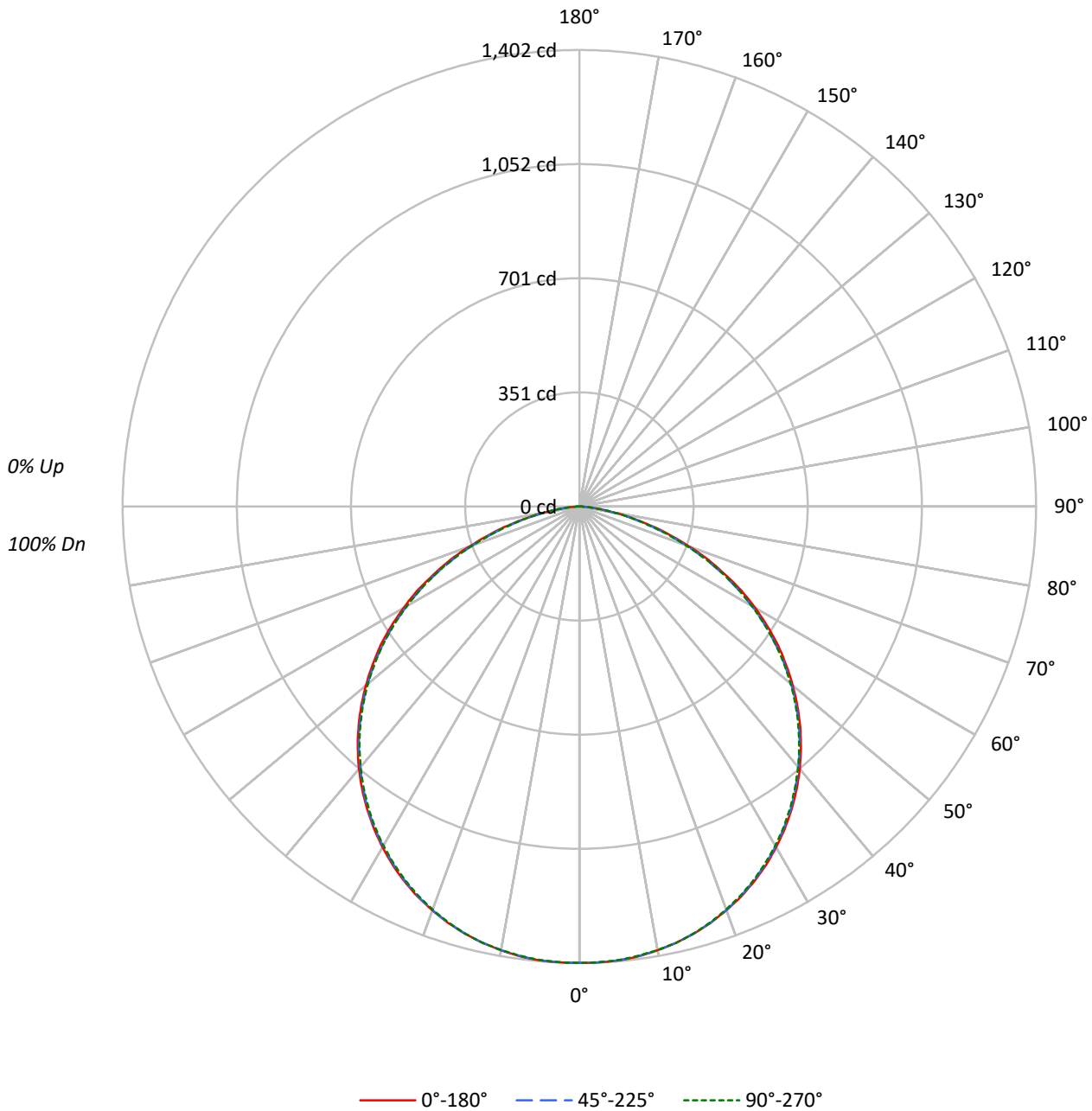
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3962.2 lumens
Efficiency: N/A
Efficacy: 130.8 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°	1886	1886	1886
5°	1890	1890	1889
10°	1891	1891	1890
15°	1892	1891	1891
20°	1890	1889	1886
25°	1886	1883	1880
30°	1878	1872	1869
35°	1866	1861	1854
40°	1849	1838	1835
45°	1825	1815	1809
50°	1791	1777	1772
55°	1749	1724	1722
60°	1676	1646	1646
65°	1568	1531	1536
70°	1411	1367	1364
75°	1185	1137	1132
80°	865	822	858
85°	489	451	459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1825 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.4
10°-20°	383.3	9.7
20°-30°	584.5	14.8
30°-40°	708.1	17.9
40°-50°	735.6	18.6
50°-60°	658.0	16.6
60°-70°	479.6	12.1
70°-80°	237.5	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°	1100.9	27.8
0°-40°	1809.0	45.7
0°-60°	3202.6	80.8
0°-90°	3962.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3962.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1402	1402	1402	1402	1402	
5°	1399	1400	1399	1399	1398	133
15°	1358	1358	1358	1359	1358	383
25°	1271	1269	1268	1268	1266	586
35°	1136	1134	1133	1131	1129	710
45°	959	957	954	952	951	739
55°	746	740	735	735	734	664
65°	492	488	481	483	482	488
75°	228	224	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°	1401.9	1401.9	1401.9	1401.9	1401.9
2.5°	1401.9	1401.4	1401.4	1401.9	1400.9
5°	1399.4	1399.9	1399.4	1399.4	1398.4
7.5°	1393.8	1393.3	1392.8	1393.3	1391.8
10°	1384.3	1384.3	1383.8	1384.3	1383.3
12.5°	1372.7	1372.7	1372.7	1373.2	1372.7
15°	1358.1	1357.6	1357.6	1358.6	1357.6
17.5°	1341.0	1340.5	1340.5	1340.0	1339.0
20°	1319.9	1319.9	1319.4	1318.9	1317.4
22.5°	1297.2	1296.7	1295.2	1295.2	1293.2
25°	1270.6	1269.1	1268.1	1267.6	1266.1
27.5°	1241.4	1239.4	1237.9	1236.9	1235.4
30°	1208.7	1206.7	1205.2	1203.7	1202.7
32.5°	1173.5	1172.5	1170.0	1169.5	1167.5
35°	1135.8	1134.3	1132.8	1130.8	1128.7
37.5°	1095.5	1094.0	1090.5	1089.5	1088.0
40°	1052.8	1050.8	1046.2	1046.2	1044.7
42.5°	1007.0	1005.0	1002.0	1000.0	999.0
45°	959.2	957.2	953.7	951.7	950.7
47.5°	908.4	906.9	902.9	901.4	899.9
50°	855.6	853.6	849.1	848.1	846.6
52.5°	800.3	799.3	793.2	792.7	791.2
55°	745.5	739.9	734.9	734.9	733.9
57.5°	685.1	681.1	674.5	674.5	673.5
60°	622.7	619.2	611.7	612.7	611.7
62.5°	561.9	554.3	547.3	550.3	547.8
65°	492.4	488.4	480.9	482.9	482.4
67.5°	429.1	421.5	414.5	418.5	416.5
70°	358.6	354.6	347.6	351.6	346.6
72.5°	292.2	288.7	281.7	286.2	281.2
75°	227.9	224.3	218.8	222.8	217.8
77.5°	167.0	164.5	159.5	163.5	164.5
80°	111.7	108.6	106.1	109.7	110.7
82.5°	65.4	63.4	62.4	62.9	65.4
85°	31.7	29.2	29.2	29.7	29.7
87.5°	8.6	7.5	8.6	9.1	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)