

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: P974341

Luminaire Tested: FLR2-24-45-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974341
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-L940-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L940-CP080
Ballast/Driver: -

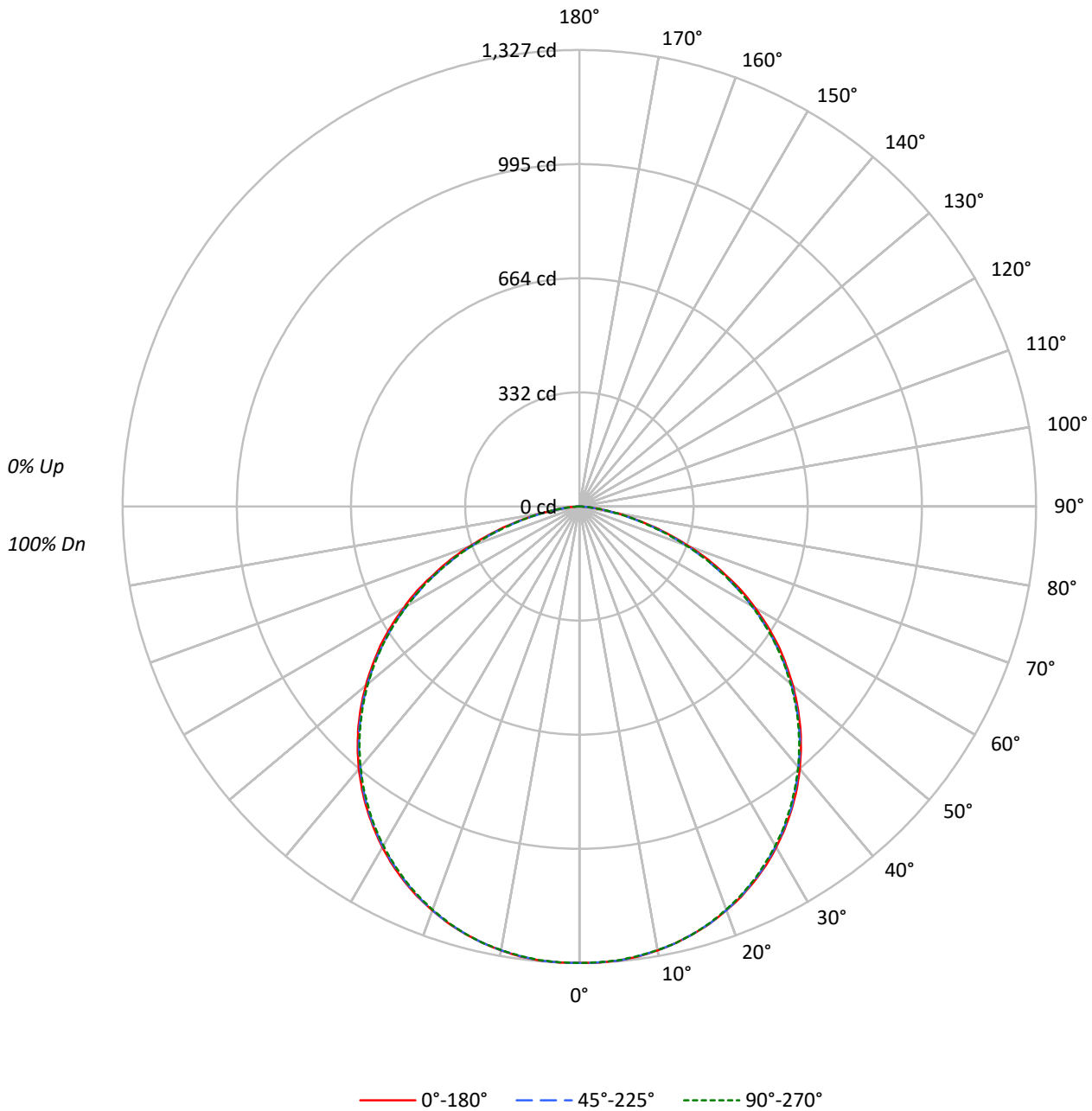
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3751.1 lumens
Efficiency: N/A
Efficacy: 105.4 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				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°	1786	1786	1786
5°	1789	1789	1788
10°	1790	1790	1789
15°	1791	1790	1790
20°	1789	1789	1786
25°	1786	1782	1779
30°	1778	1773	1769
35°	1766	1761	1755
40°	1751	1740	1737
45°	1728	1718	1713
50°	1696	1683	1678
55°	1655	1632	1630
60°	1587	1558	1558
65°	1484	1450	1454
70°	1336	1295	1291
75°	1121	1077	1072
80°	819	779	812
85°	463	426	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1728 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	3.4
10°-20°	362.9	9.7
20°-30°	553.3	14.8
30°-40°	670.4	17.9
40°-50°	696.4	18.6
50°-60°	623.0	16.6
60°-70°	454.0	12.1
70°-80°	224.9	6.0
80°-90°	40.2	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°	1042.2	27.8
0°-40°	1712.7	45.7
0°-60°	3032.0	80.8
0°-90°	3751.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3751.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1325	1325	1325	1325	1324	126
15°	1286	1285	1285	1286	1285	363
25°	1203	1202	1200	1200	1199	554
35°	1075	1074	1072	1070	1069	673
45°	908	906	903	901	900	700
55°	706	700	696	696	695	629
65°	466	462	455	457	457	462
75°	216	212	207	211	206	230
85°	30	28	28	28	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.2	1327.2	1327.2	1327.2	1327.2
2.5°	1327.2	1326.7	1326.7	1327.2	1326.3
5°	1324.8	1325.3	1324.8	1324.8	1323.9
7.5°	1319.6	1319.1	1318.6	1319.1	1317.7
10°	1310.5	1310.5	1310.1	1310.5	1309.6
12.5°	1299.6	1299.6	1299.6	1300.1	1299.6
15°	1285.8	1285.3	1285.3	1286.3	1285.3
17.5°	1269.6	1269.1	1269.1	1268.6	1267.7
20°	1249.6	1249.6	1249.1	1248.6	1247.2
22.5°	1228.2	1227.7	1226.2	1226.2	1224.3
25°	1202.9	1201.5	1200.5	1200.1	1198.6
27.5°	1175.3	1173.4	1172.0	1171.0	1169.6
30°	1144.3	1142.4	1141.0	1139.6	1138.6
32.5°	1111.0	1110.1	1107.7	1107.2	1105.3
35°	1075.3	1073.9	1072.4	1070.5	1068.6
37.5°	1037.2	1035.8	1032.4	1031.5	1030.0
40°	996.7	994.8	990.5	990.5	989.1
42.5°	953.4	951.5	948.6	946.7	945.8
45°	908.1	906.2	902.9	901.0	900.0
47.5°	860.0	858.6	854.8	853.4	851.9
50°	810.0	808.1	803.8	802.9	801.5
52.5°	757.7	756.7	751.0	750.5	749.1
55°	705.7	700.5	695.7	695.7	694.8
57.5°	648.6	644.8	638.6	638.6	637.6
60°	589.6	586.2	579.1	580.0	579.1
62.5°	531.9	524.8	518.1	521.0	518.6
65°	466.2	462.4	455.3	457.2	456.7
67.5°	406.2	399.1	392.4	396.2	394.3
70°	339.5	335.7	329.1	332.9	328.1
72.5°	276.7	273.3	266.7	271.0	266.2
75°	215.7	212.4	207.2	211.0	206.2
77.5°	158.1	155.7	151.0	154.8	155.7
80°	105.7	102.9	100.5	103.8	104.8
82.5°	61.9	60.0	59.1	59.5	61.9
85°	30.0	27.6	27.6	28.1	28.1
87.5°	8.1	7.1	8.1	8.6	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)