

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: P974317

Luminaire Tested: FLR2-24-45-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974317
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-L840-CP375
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CP375
Ballast/Driver: -

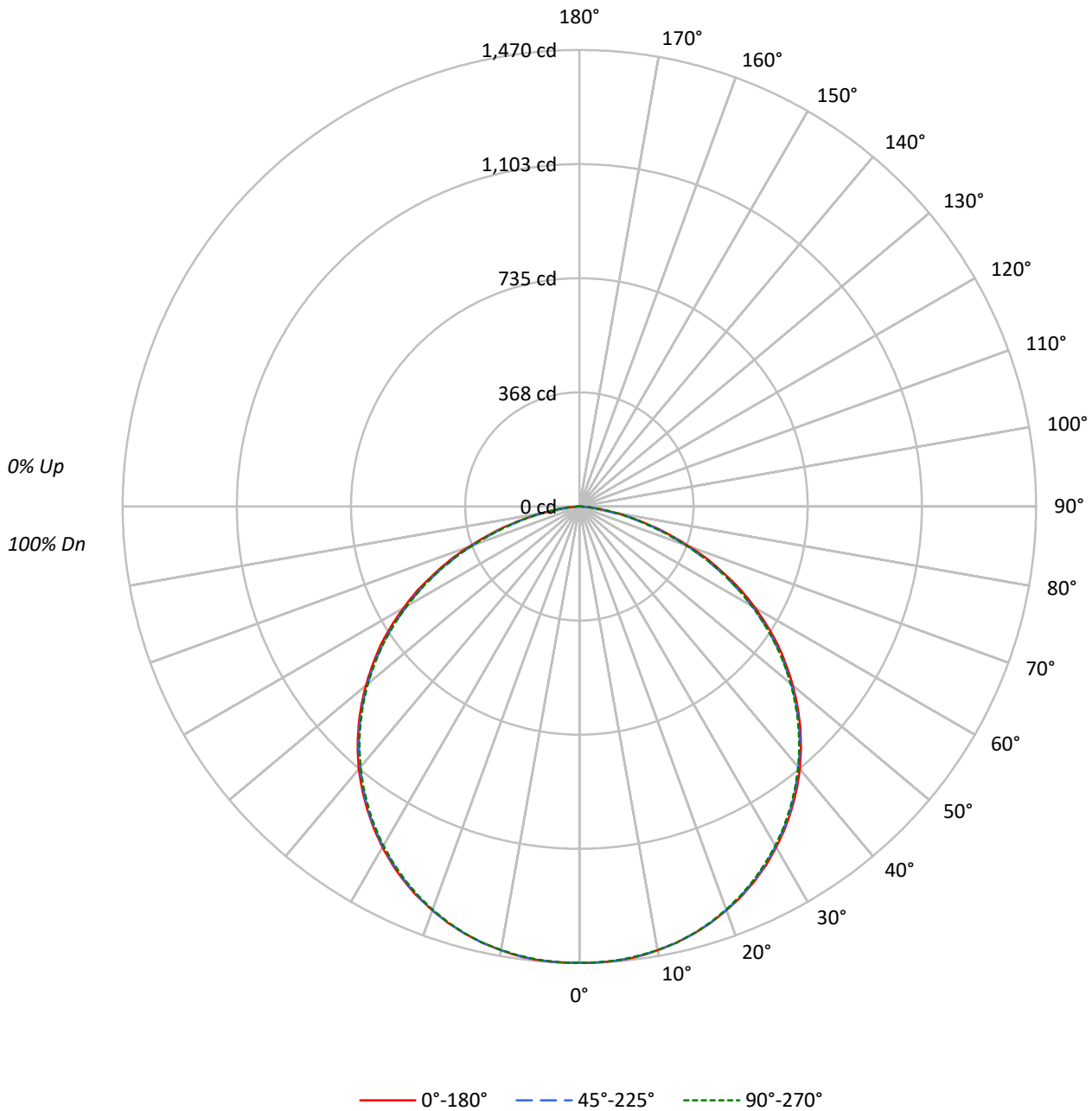
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4154.4 lumens
Efficiency: N/A
Efficacy: 116.7 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°	1978	1978	1978
5°	1982	1982	1980
10°	1983	1982	1982
15°	1984	1983	1983
20°	1982	1981	1978
25°	1978	1974	1971
30°	1969	1963	1959
35°	1956	1951	1944
40°	1939	1927	1924
45°	1914	1903	1897
50°	1878	1864	1858
55°	1833	1808	1805
60°	1757	1726	1726
65°	1644	1605	1610
70°	1479	1434	1430
75°	1242	1193	1187
80°	907	862	899
85°	513	472	480

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1914 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.5	3.4
10°-20°	402.0	9.7
20°-30°	612.8	14.8
30°-40°	742.5	17.9
40°-50°	771.3	18.6
50°-60°	690.0	16.6
60°-70°	502.8	12.1
70°-80°	249.0	6.0
80°-90°	44.5	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°	1154.3	27.8
0°-40°	1896.8	45.7
0°-60°	3358.0	80.8
0°-90°	4154.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4154.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1467	1468	1467	1467	1466	140
15°	1424	1424	1424	1425	1424	402
25°	1332	1331	1330	1329	1328	614
35°	1191	1189	1188	1186	1184	745
45°	1006	1004	1000	998	997	775
55°	782	776	771	771	770	696
65°	516	512	504	506	506	512
75°	239	235	229	234	228	255
85°	33	31	31	31	31	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.9	1469.9	1469.9	1469.9	1469.9
2.5°	1469.9	1469.4	1469.4	1469.9	1468.9
5°	1467.3	1467.8	1467.3	1467.3	1466.2
7.5°	1461.5	1460.9	1460.4	1460.9	1459.4
10°	1451.5	1451.5	1450.9	1451.5	1450.4
12.5°	1439.3	1439.3	1439.3	1439.9	1439.3
15°	1424.0	1423.5	1423.5	1424.6	1423.5
17.5°	1406.1	1405.6	1405.6	1405.0	1404.0
20°	1383.9	1383.9	1383.4	1382.9	1381.3
22.5°	1360.2	1359.7	1358.1	1358.1	1356.0
25°	1332.3	1330.7	1329.6	1329.1	1327.5
27.5°	1301.7	1299.6	1298.0	1296.9	1295.3
30°	1267.4	1265.3	1263.7	1262.1	1261.1
32.5°	1230.5	1229.4	1226.8	1226.2	1224.1
35°	1190.9	1189.3	1187.7	1185.6	1183.5
37.5°	1148.7	1147.1	1143.4	1142.4	1140.8
40°	1103.9	1101.8	1097.0	1097.0	1095.4
42.5°	1055.9	1053.8	1050.6	1048.5	1047.5
45°	1005.8	1003.7	1000.0	997.9	996.8
47.5°	952.5	950.9	946.7	945.1	943.6
50°	897.1	895.0	890.3	889.2	887.6
52.5°	839.1	838.1	831.7	831.2	829.6
55°	781.6	775.8	770.6	770.6	769.5
57.5°	718.3	714.1	707.3	707.3	706.2
60°	652.9	649.3	641.3	642.4	641.3
62.5°	589.1	581.2	573.8	577.0	574.4
65°	516.3	512.1	504.2	506.3	505.8
67.5°	449.9	442.0	434.6	438.8	436.7
70°	376.0	371.8	364.4	368.7	363.4
72.5°	306.4	302.7	295.4	300.1	294.8
75°	238.9	235.2	229.4	233.6	228.4
77.5°	175.1	172.5	167.2	171.4	172.5
80°	117.1	113.9	111.3	115.0	116.0
82.5°	68.6	66.5	65.4	65.9	68.6
85°	33.2	30.6	30.6	31.1	31.1
87.5°	9.0	7.9	9.0	9.5	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)