

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: P974380

Luminaire Tested: FLR2-24-40-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974380
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L940-CA080
Ballast/Driver: -

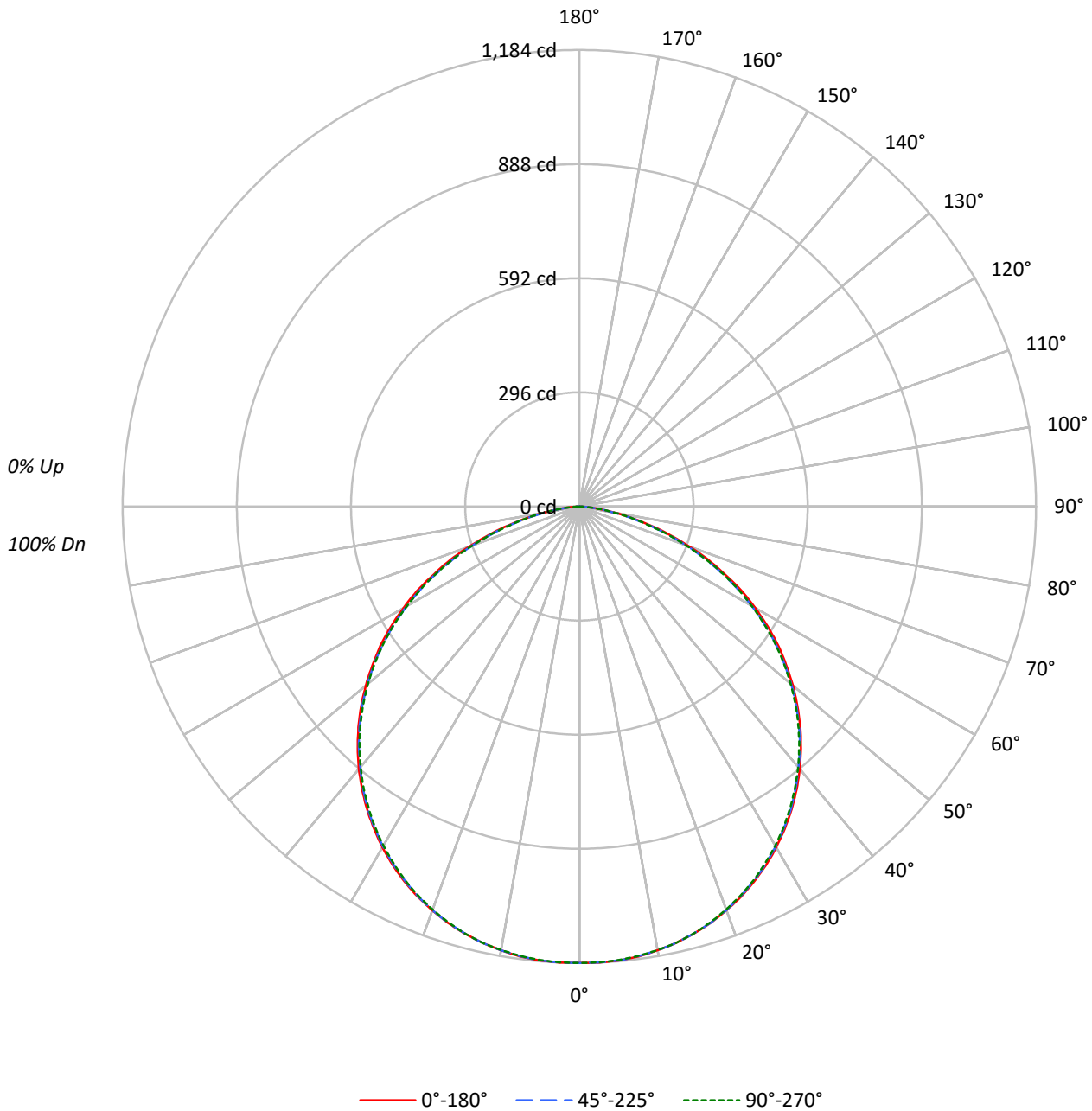
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3346.6 lumens
Efficiency: N/A
Efficacy: 110.4 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): 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°	1593	1593	1593
5°	1596	1596	1595
10°	1597	1597	1596
15°	1598	1597	1597
20°	1596	1596	1593
25°	1593	1590	1588
30°	1586	1582	1578
35°	1576	1572	1566
40°	1562	1552	1550
45°	1542	1533	1528
50°	1513	1501	1497
55°	1477	1456	1454
60°	1415	1390	1390
65°	1324	1293	1297
70°	1192	1155	1151
75°	1001	961	957
80°	731	694	724
85°	414	380	387

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1542 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.4
10°-20°	323.8	9.7
20°-30°	493.7	14.8
30°-40°	598.1	17.9
40°-50°	621.3	18.6
50°-60°	555.8	16.6
60°-70°	405.1	12.1
70°-80°	200.6	6.0
80°-90°	35.8	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°	929.9	27.8
0°-40°	1528.0	45.7
0°-60°	2705.1	80.8
0°-90°	3346.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3346.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1182	1182	1182	1182	1181	112
15°	1147	1147	1147	1148	1147	324
25°	1073	1072	1071	1071	1069	495
35°	959	958	957	955	953	600
45°	810	808	806	804	803	624
55°	630	625	621	621	620	561
65°	416	412	406	408	407	412
75°	192	190	185	188	184	205
85°	27	25	25	25	25	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1184.1	1184.1	1184.1	1184.1	1184.1
2.5°	1184.1	1183.7	1183.7	1184.1	1183.3
5°	1182.0	1182.4	1182.0	1182.0	1181.1
7.5°	1177.3	1176.9	1176.5	1176.9	1175.6
10°	1169.2	1169.2	1168.8	1169.2	1168.4
12.5°	1159.5	1159.5	1159.5	1159.9	1159.5
15°	1147.1	1146.7	1146.7	1147.6	1146.7
17.5°	1132.7	1132.3	1132.3	1131.8	1131.0
20°	1114.9	1114.9	1114.4	1114.0	1112.7
22.5°	1095.7	1095.3	1094.0	1094.0	1092.3
25°	1073.2	1071.9	1071.1	1070.7	1069.4
27.5°	1048.6	1046.9	1045.6	1044.7	1043.5
30°	1021.0	1019.3	1018.0	1016.7	1015.9
32.5°	991.2	990.4	988.2	987.8	986.1
35°	959.4	958.1	956.8	955.1	953.4
37.5°	925.4	924.1	921.1	920.3	919.0
40°	889.2	887.5	883.7	883.7	882.4
42.5°	850.6	848.9	846.3	844.6	843.8
45°	810.2	808.5	805.5	803.8	803.0
47.5°	767.3	766.0	762.6	761.4	760.1
50°	722.7	721.0	717.2	716.3	715.1
52.5°	676.0	675.1	670.0	669.6	668.3
55°	629.7	625.0	620.7	620.7	619.9
57.5°	578.7	575.3	569.7	569.7	568.9
60°	526.0	523.0	516.6	517.5	516.6
62.5°	474.6	468.2	462.3	464.8	462.7
65°	415.9	412.5	406.2	407.9	407.4
67.5°	362.4	356.0	350.1	353.5	351.8
70°	302.9	299.5	293.6	297.0	292.7
72.5°	246.8	243.9	237.9	241.7	237.5
75°	192.5	189.5	184.8	188.2	184.0
77.5°	141.1	138.9	134.7	138.1	138.9
80°	94.3	91.8	89.6	92.6	93.5
82.5°	55.2	53.5	52.7	53.1	55.2
85°	26.8	24.6	24.6	25.1	25.1
87.5°	7.2	6.4	7.2	7.6	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)