

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: P974340

Luminaire Tested: FLR2-24-40-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974340
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L940-CP080
Ballast/Driver: -

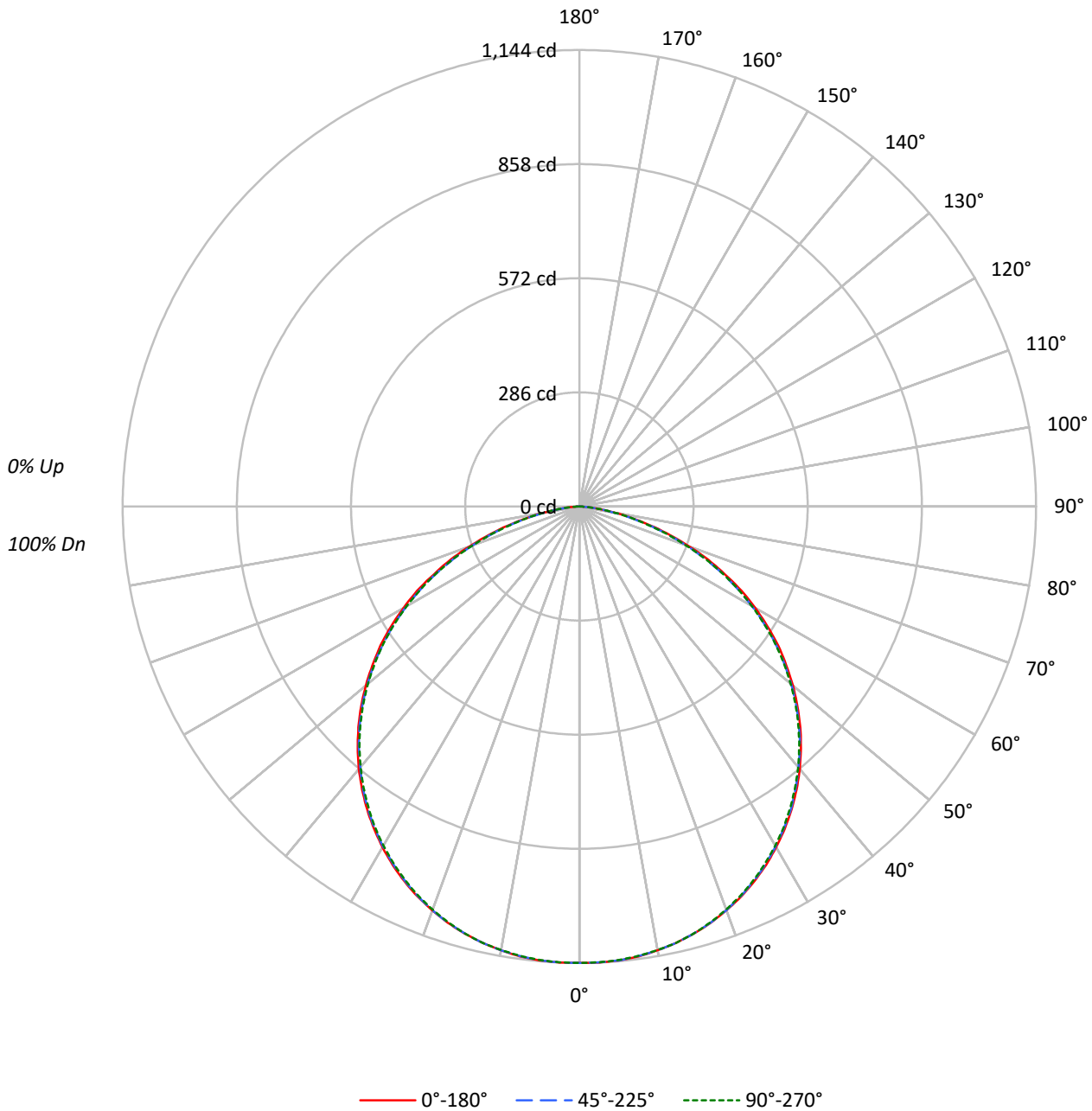
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3233.5 lumens
Efficiency: N/A
Efficacy: 106.7 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): 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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	1539	1539	1539
5°	1542	1542	1541
10°	1543	1543	1542
15°	1544	1543	1543
20°	1542	1542	1539
25°	1539	1536	1534
30°	1533	1528	1525
35°	1522	1519	1513
40°	1509	1500	1498
45°	1490	1481	1476
50°	1462	1450	1446
55°	1427	1407	1405
60°	1368	1343	1343
65°	1280	1249	1253
70°	1151	1116	1113
75°	967	928	924
80°	706	671	700
85°	400	367	374

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1490 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	3.4
10°-20°	312.9	9.7
20°-30°	477.0	14.8
30°-40°	577.9	17.9
40°-50°	600.3	18.6
50°-60°	537.0	16.6
60°-70°	391.4	12.1
70°-80°	193.8	6.0
80°-90°	34.6	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°	898.4	27.8
0°-40°	1476.4	45.7
0°-60°	2613.7	80.8
0°-90°	3233.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3233.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1142	1142	1142	1142	1141	109
15°	1108	1108	1108	1109	1108	313
25°	1037	1036	1035	1034	1033	478
35°	927	926	924	923	921	580
45°	783	781	778	777	776	603
55°	608	604	600	600	599	542
65°	402	399	392	394	394	398
75°	186	183	179	182	178	198
85°	26	24	24	24	24	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1144.1	1144.1	1144.1	1144.1	1144.1
2.5°	1144.1	1143.7	1143.7	1144.1	1143.3
5°	1142.0	1142.4	1142.0	1142.0	1141.2
7.5°	1137.5	1137.1	1136.7	1137.1	1135.9
10°	1129.7	1129.7	1129.3	1129.7	1128.9
12.5°	1120.3	1120.3	1120.3	1120.7	1120.3
15°	1108.4	1108.0	1108.0	1108.8	1108.0
17.5°	1094.4	1094.0	1094.0	1093.6	1092.8
20°	1077.2	1077.2	1076.8	1076.3	1075.1
22.5°	1058.7	1058.3	1057.1	1057.1	1055.4
25°	1036.9	1035.7	1034.9	1034.5	1033.2
27.5°	1013.1	1011.5	1010.3	1009.4	1008.2
30°	986.4	984.8	983.6	982.3	981.5
32.5°	957.7	956.9	954.8	954.4	952.8
35°	926.9	925.7	924.5	922.8	921.2
37.5°	894.1	892.9	890.0	889.2	887.9
40°	859.2	857.5	853.9	853.9	852.6
42.5°	821.8	820.2	817.7	816.1	815.3
45°	782.8	781.2	778.3	776.7	775.9
47.5°	741.4	740.1	736.9	735.6	734.4
50°	698.3	696.6	692.9	692.1	690.9
52.5°	653.1	652.3	647.4	647.0	645.7
55°	608.4	603.9	599.8	599.8	598.9
57.5°	559.1	555.8	550.5	550.5	549.7
60°	508.2	505.3	499.2	500.0	499.2
62.5°	458.5	452.4	446.6	449.1	447.0
65°	401.9	398.6	392.4	394.1	393.7
67.5°	350.2	344.0	338.3	341.5	339.9
70°	292.7	289.4	283.7	286.9	282.8
72.5°	238.5	235.6	229.9	233.6	229.5
75°	186.0	183.1	178.6	181.9	177.7
77.5°	136.3	134.2	130.1	133.4	134.2
80°	91.1	88.7	86.6	89.5	90.3
82.5°	53.4	51.7	50.9	51.3	53.4
85°	25.9	23.8	23.8	24.2	24.2
87.5°	7.0	6.2	7.0	7.4	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)