

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: P974100

Luminaire Tested: FLR2-24-40-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974100
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-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L830-CA080
Ballast/Driver: -

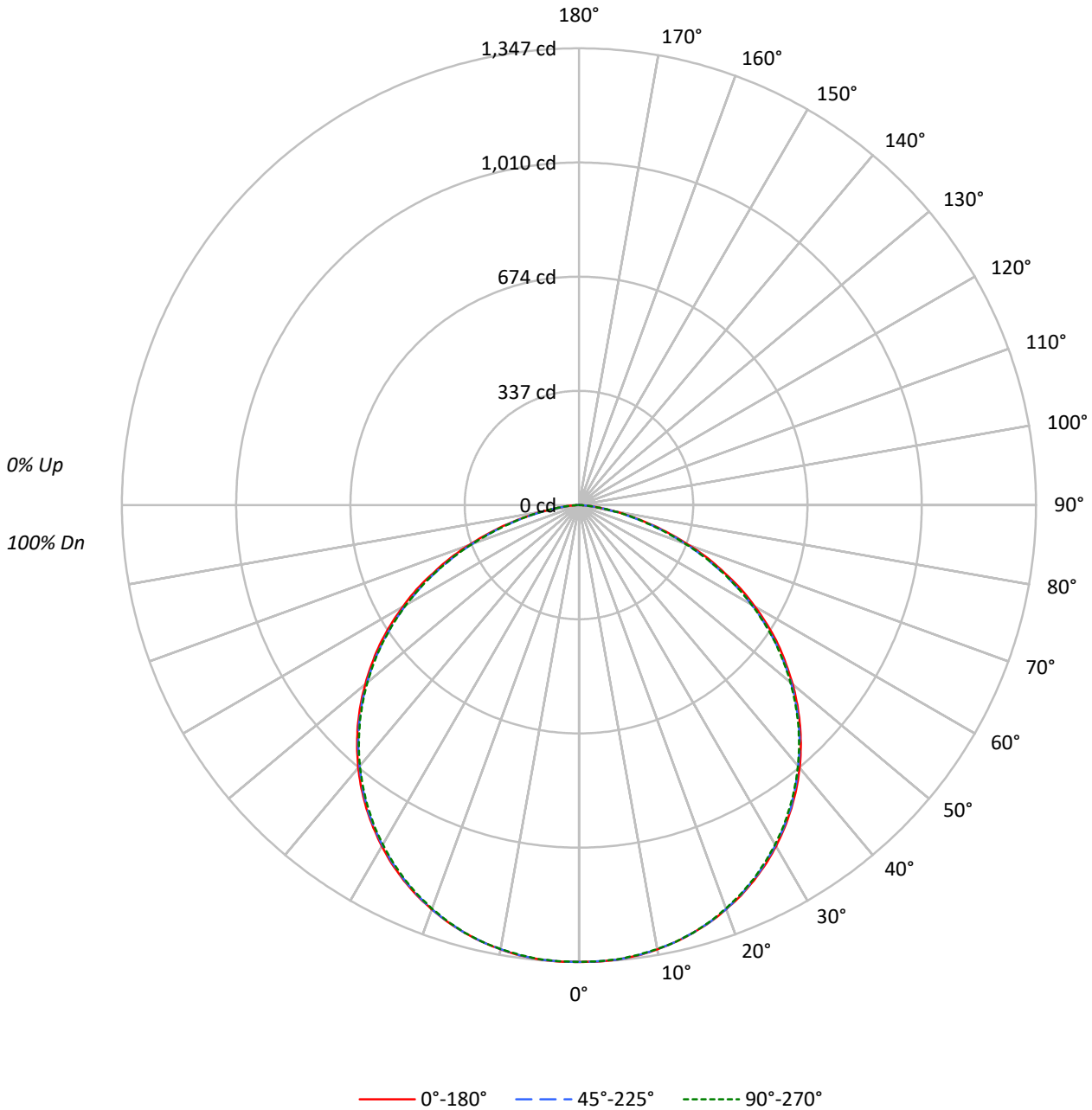
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3808.2 lumens
Efficiency: N/A
Efficacy: 125.7 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	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°	1813	1813	1813
5°	1817	1817	1815
10°	1818	1817	1816
15°	1818	1818	1818
20°	1816	1816	1813
25°	1813	1809	1807
30°	1805	1800	1796
35°	1793	1788	1782
40°	1777	1766	1764
45°	1754	1744	1739
50°	1721	1708	1703
55°	1681	1657	1655
60°	1611	1582	1582
65°	1507	1472	1476
70°	1356	1314	1310
75°	1138	1093	1088
80°	831	790	824
85°	471	432	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1754 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	3.4
10°-20°	368.5	9.7
20°-30°	561.8	14.8
30°-40°	680.6	17.9
40°-50°	707.0	18.6
50°-60°	632.4	16.6
60°-70°	460.9	12.1
70°-80°	228.3	6.0
80°-90°	40.8	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°	1058.1	27.8
0°-40°	1738.8	45.7
0°-60°	3078.2	80.8
0°-90°	3808.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3808.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1345	1346	1345	1345	1344	128
15°	1305	1305	1305	1306	1305	369
25°	1221	1220	1219	1218	1217	563
35°	1092	1090	1089	1087	1085	683
45°	922	920	917	915	914	711
55°	716	711	706	706	705	638
65°	473	469	462	464	464	469
75°	219	216	210	214	209	234
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°	1347.4	1347.4	1347.4	1347.4	1347.4
2.5°	1347.4	1346.9	1346.9	1347.4	1346.5
5°	1345.0	1345.5	1345.0	1345.0	1344.0
7.5°	1339.7	1339.2	1338.7	1339.2	1337.8
10°	1330.5	1330.5	1330.0	1330.5	1329.5
12.5°	1319.4	1319.4	1319.4	1319.9	1319.4
15°	1305.4	1304.9	1304.9	1305.9	1304.9
17.5°	1288.9	1288.4	1288.4	1288.0	1287.0
20°	1268.6	1268.6	1268.1	1267.7	1266.2
22.5°	1246.9	1246.4	1244.9	1244.9	1243.0
25°	1221.2	1219.8	1218.8	1218.3	1216.9
27.5°	1193.2	1191.3	1189.8	1188.9	1187.4
30°	1161.8	1159.8	1158.4	1156.9	1156.0
32.5°	1127.9	1127.0	1124.6	1124.1	1122.1
35°	1091.7	1090.2	1088.8	1086.8	1084.9
37.5°	1053.0	1051.5	1048.2	1047.2	1045.7
40°	1011.9	1010.0	1005.6	1005.6	1004.2
42.5°	967.9	966.0	963.1	961.1	960.2
45°	922.0	920.0	916.7	914.7	913.8
47.5°	873.1	871.7	867.8	866.4	864.9
50°	822.4	820.4	816.1	815.1	813.7
52.5°	769.2	768.2	762.4	761.9	760.5
55°	716.5	711.2	706.3	706.3	705.4
57.5°	658.5	654.6	648.3	648.3	647.4
60°	598.5	595.2	587.9	588.9	587.9
62.5°	540.0	532.8	526.0	528.9	526.5
65°	473.3	469.4	462.2	464.1	463.6
67.5°	412.4	405.1	398.4	402.2	400.3
70°	344.7	340.8	334.1	337.9	333.1
72.5°	280.9	277.5	270.7	275.1	270.3
75°	219.0	215.6	210.3	214.2	209.3
77.5°	160.5	158.1	153.3	157.1	158.1
80°	107.3	104.4	102.0	105.4	106.4
82.5°	62.9	60.9	60.0	60.4	62.9
85°	30.5	28.0	28.0	28.5	28.5
87.5°	8.2	7.3	8.2	8.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)