

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: P974076

Luminaire Tested: FLR2-24-40-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974076
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L830-CP187
Ballast/Driver: -

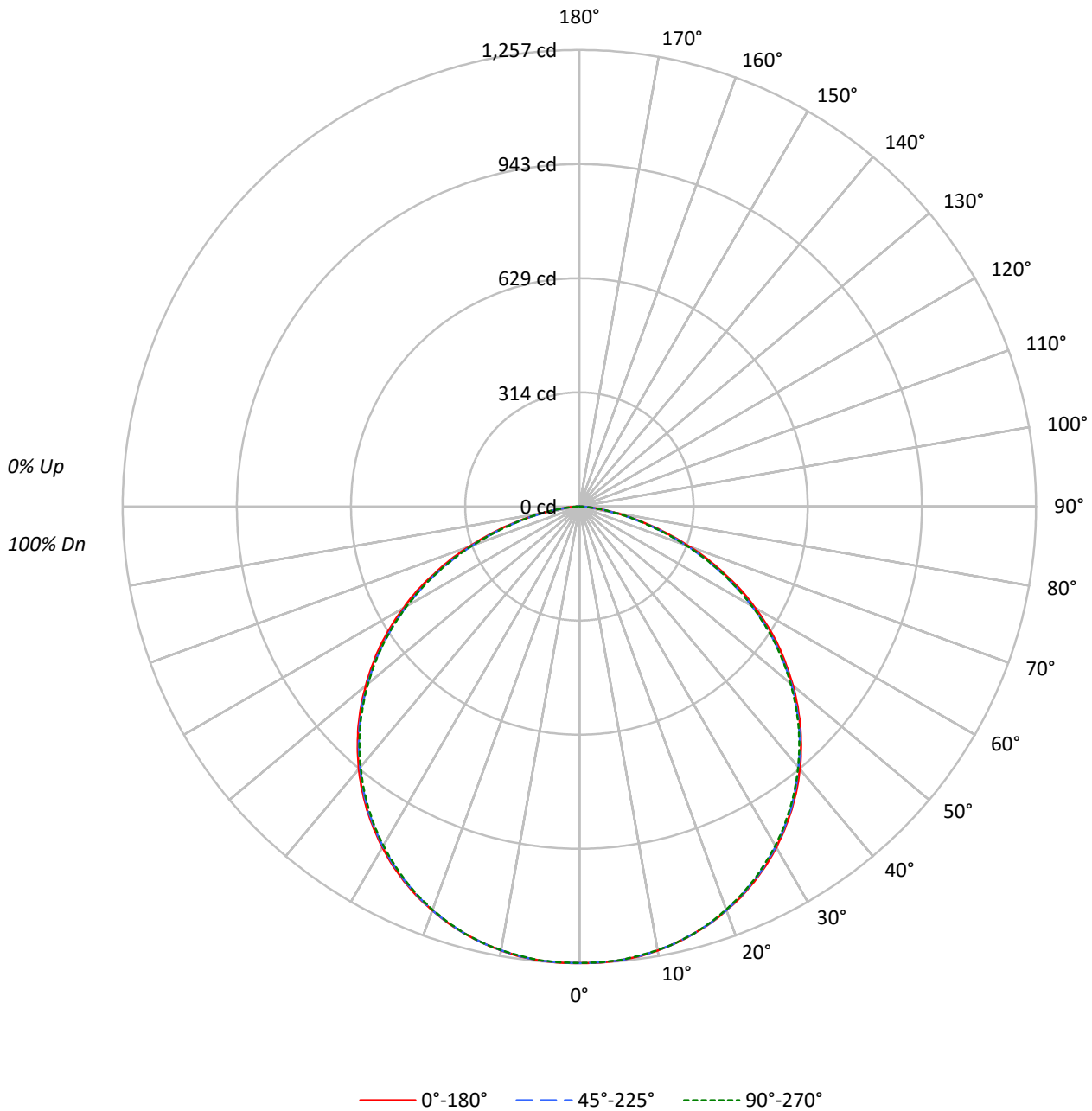
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3553.7 lumens
Efficiency: N/A
Efficacy: 117.3 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°	1692	1692	1692
5°	1695	1695	1694
10°	1696	1696	1695
15°	1697	1696	1696
20°	1695	1694	1692
25°	1692	1689	1686
30°	1684	1679	1676
35°	1673	1669	1663
40°	1659	1648	1646
45°	1637	1628	1623
50°	1606	1594	1589
55°	1568	1546	1544
60°	1503	1476	1476
65°	1406	1373	1378
70°	1266	1226	1223
75°	1063	1020	1015
80°	776	738	769
85°	438	404	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1637 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.4
10°-20°	343.8	9.7
20°-30°	524.2	14.8
30°-40°	635.1	17.9
40°-50°	659.7	18.6
50°-60°	590.2	16.6
60°-70°	430.1	12.1
70°-80°	213.0	6.0
80°-90°	38.1	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°	987.4	27.8
0°-40°	1622.5	45.7
0°-60°	2872.5	80.8
0°-90°	3553.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1255	1256	1255	1255	1254	119
15°	1218	1218	1218	1219	1218	344
25°	1140	1138	1137	1137	1136	525
35°	1019	1017	1016	1014	1012	637
45°	860	858	855	854	853	663
55°	669	664	659	659	658	596
65°	442	438	431	433	433	438
75°	204	201	196	200	195	218
85°	28	26	26	27	27	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.4	1257.4	1257.4	1257.4	1257.4
2.5°	1257.4	1256.9	1256.9	1257.4	1256.5
5°	1255.1	1255.6	1255.1	1255.1	1254.2
7.5°	1250.1	1249.7	1249.2	1249.7	1248.3
10°	1241.6	1241.6	1241.1	1241.6	1240.7
12.5°	1231.2	1231.2	1231.2	1231.6	1231.2
15°	1218.1	1217.7	1217.7	1218.6	1217.7
17.5°	1202.8	1202.3	1202.3	1201.9	1201.0
20°	1183.8	1183.8	1183.4	1182.9	1181.6
22.5°	1163.5	1163.1	1161.7	1161.7	1159.9
25°	1139.6	1138.3	1137.4	1136.9	1135.5
27.5°	1113.4	1111.6	1110.3	1109.4	1108.0
30°	1084.1	1082.3	1081.0	1079.6	1078.7
32.5°	1052.5	1051.6	1049.4	1048.9	1047.1
35°	1018.7	1017.3	1016.0	1014.2	1012.4
37.5°	982.6	981.3	978.1	977.2	975.8
40°	944.3	942.5	938.4	938.4	937.0
42.5°	903.2	901.4	898.7	896.9	896.0
45°	860.3	858.5	855.4	853.6	852.7
47.5°	814.8	813.4	809.8	808.5	807.1
50°	767.4	765.6	761.5	760.6	759.3
52.5°	717.8	716.9	711.5	711.0	709.7
55°	668.6	663.6	659.1	659.1	658.2
57.5°	614.5	610.9	605.0	605.0	604.1
60°	558.5	555.4	548.6	549.5	548.6
62.5°	503.9	497.2	490.9	493.6	491.3
65°	441.7	438.1	431.3	433.1	432.7
67.5°	384.8	378.1	371.7	375.4	373.6
70°	321.7	318.1	311.7	315.4	310.8
72.5°	262.1	259.0	252.6	256.7	252.2
75°	204.4	201.2	196.3	199.9	195.3
77.5°	149.8	147.5	143.0	146.6	147.5
80°	100.2	97.4	95.2	98.4	99.3
82.5°	58.6	56.8	55.9	56.4	58.6
85°	28.4	26.2	26.2	26.6	26.6
87.5°	7.7	6.8	7.7	8.1	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)