

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: P974298

Luminaire Tested: FLR2-24-30-L840-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974298  
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: FLR2-24-30-L840-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-30-L840-CP187  
Ballast/Driver: -

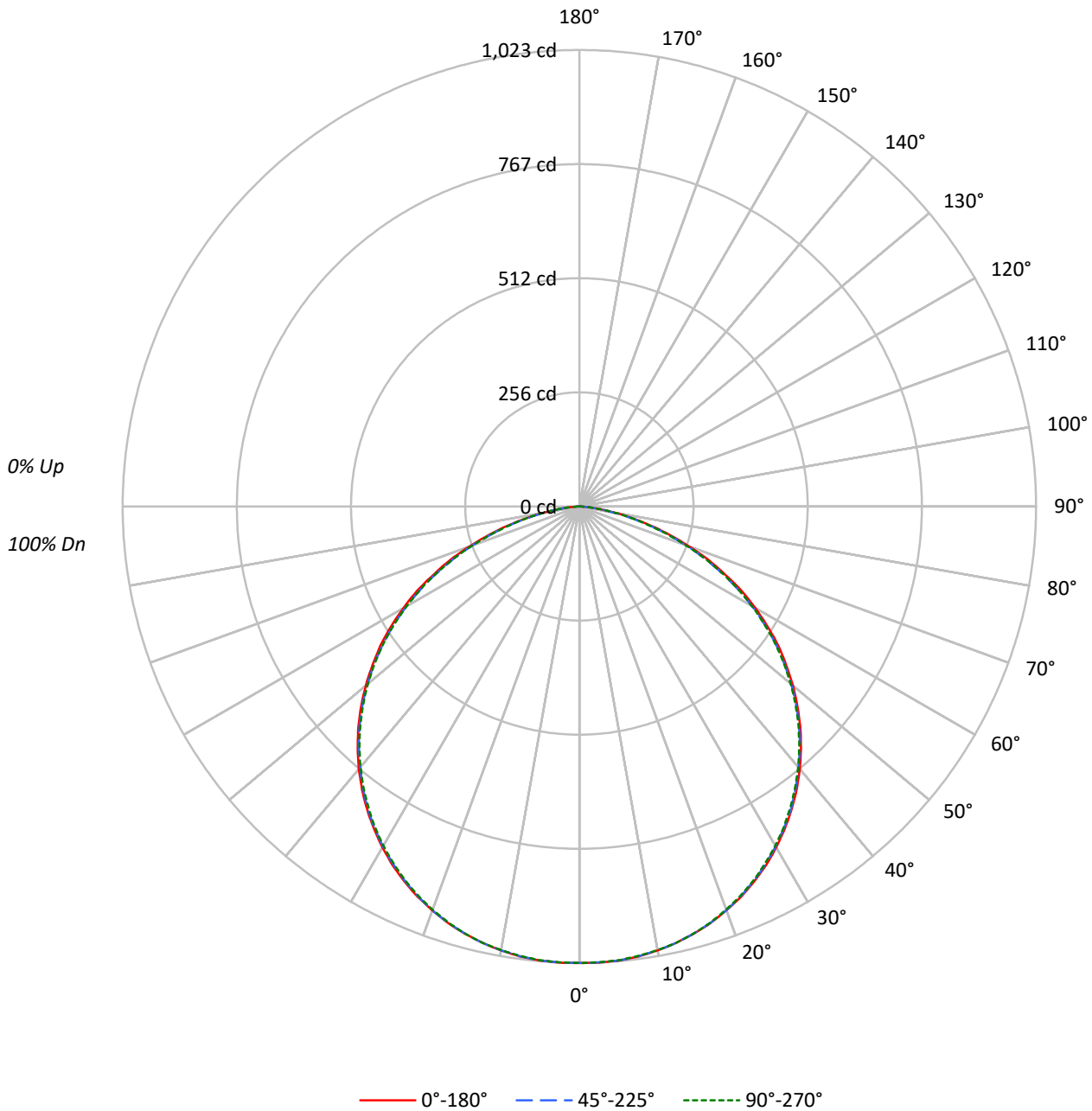
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2891.8 lumens  
Efficiency: N/A  
Efficacy: 122.0 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): 23.7  
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°	1377	1377	1377
5°	1379	1379	1378
10°	1380	1380	1379
15°	1381	1380	1380
20°	1379	1379	1377
25°	1377	1374	1372
30°	1371	1367	1364
35°	1362	1358	1353
40°	1350	1341	1339
45°	1332	1325	1320
50°	1307	1297	1293
55°	1276	1258	1256
60°	1223	1201	1201
65°	1144	1117	1121
70°	1030	998	995
75°	865	830	827
80°	631	600	626
85°	357	329	335

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1332 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	3.4
10°-20°	279.8	9.7
20°-30°	426.6	14.8
30°-40°	516.8	17.9
40°-50°	536.9	18.6
50°-60°	480.3	16.6
60°-70°	350.0	12.1
70°-80°	173.3	6.0
80°-90°	31.0	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°	803.5	27.8
0°-40°	1320.3	45.7
0°-60°	2337.5	80.8
0°-90°	2891.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2891.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1023	1023	1023	1023	1023	
5°	1021	1022	1021	1021	1021	97
15°	991	991	991	992	991	280
25°	927	926	926	925	924	427
35°	829	828	827	825	824	519
45°	700	699	696	695	694	540
55°	544	540	536	536	536	485
65°	359	356	351	352	352	356
75°	166	164	160	163	159	177
85°	23	21	21	22	22	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1023.2	1023.2	1023.2	1023.2	1023.2
2.5°	1023.2	1022.8	1022.8	1023.2	1022.4
5°	1021.3	1021.7	1021.3	1021.3	1020.6
7.5°	1017.3	1016.9	1016.6	1016.9	1015.8
10°	1010.3	1010.3	1010.0	1010.3	1009.6
12.5°	1001.9	1001.9	1001.9	1002.3	1001.9
15°	991.2	990.9	990.9	991.6	990.9
17.5°	978.8	978.4	978.4	978.0	977.3
20°	963.3	963.3	963.0	962.6	961.5
22.5°	946.8	946.5	945.4	945.4	943.9
25°	927.4	926.3	925.5	925.2	924.1
27.5°	906.1	904.6	903.5	902.8	901.7
30°	882.2	880.7	879.6	878.5	877.8
32.5°	856.5	855.8	853.9	853.6	852.1
35°	829.0	827.9	826.8	825.3	823.8
37.5°	799.6	798.5	795.9	795.2	794.1
40°	768.4	766.9	763.6	763.6	762.5
42.5°	735.0	733.5	731.3	729.8	729.1
45°	700.1	698.6	696.1	694.6	693.9
47.5°	663.0	661.9	659.0	657.9	656.8
50°	624.5	623.0	619.7	619.0	617.9
52.5°	584.1	583.4	579.0	578.6	577.5
55°	544.1	540.0	536.4	536.4	535.6
57.5°	500.0	497.1	492.3	492.3	491.6
60°	454.5	451.9	446.4	447.2	446.4
62.5°	410.1	404.6	399.4	401.6	399.8
65°	359.4	356.5	351.0	352.4	352.1
67.5°	313.2	307.7	302.5	305.4	304.0
70°	261.8	258.8	253.7	256.6	253.0
72.5°	213.3	210.7	205.6	208.9	205.2
75°	166.3	163.7	159.7	162.6	159.0
77.5°	121.9	120.1	116.4	119.3	120.1
80°	81.5	79.3	77.5	80.0	80.8
82.5°	47.7	46.3	45.5	45.9	47.7
85°	23.1	21.3	21.3	21.7	21.7
87.5°	6.2	5.5	6.2	6.6	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)