

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: P974355

Luminaire Tested: FLR2-24-35-L940-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974355  
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: FLR2-24-35-L940-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L940-CP187  
Ballast/Driver: -

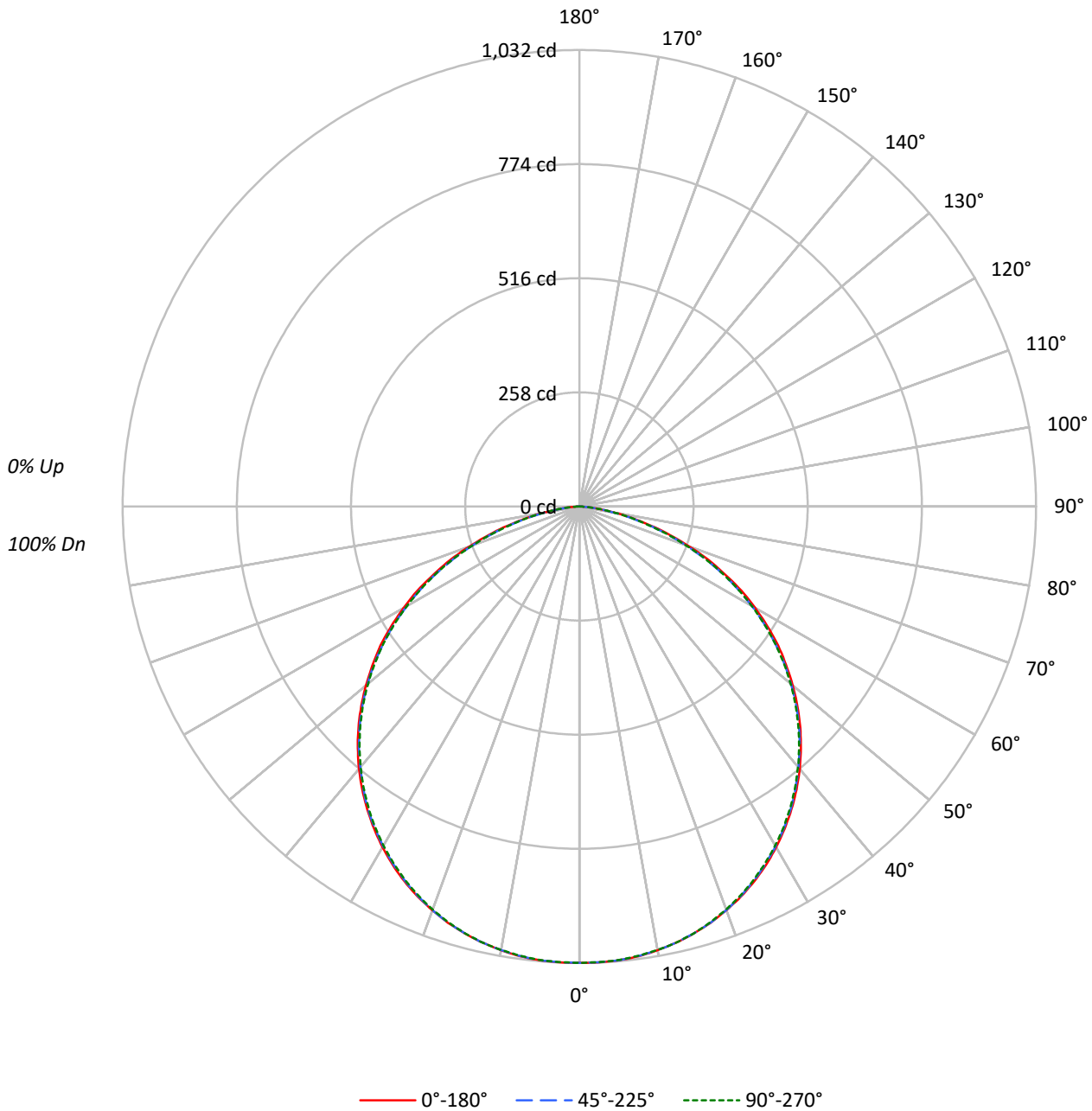
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2916.1 lumens  
Efficiency: N/A  
Efficacy: 102.7 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): 28.4  
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																		
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	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°	1388	1388	1388
5°	1391	1391	1390
10°	1392	1392	1391
15°	1392	1392	1392
20°	1391	1390	1388
25°	1388	1386	1383
30°	1382	1378	1375
35°	1373	1369	1365
40°	1361	1352	1351
45°	1343	1336	1331
50°	1318	1308	1304
55°	1287	1269	1267
60°	1233	1211	1211
65°	1154	1127	1130
70°	1039	1006	1004
75°	872	837	833
80°	637	605	631
85°	360	332	337

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1343 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.9	3.4
10°-20°	282.1	9.7
20°-30°	430.2	14.8
30°-40°	521.2	17.9
40°-50°	541.4	18.6
50°-60°	484.3	16.6
60°-70°	353.0	12.1
70°-80°	174.8	6.0
80°-90°	31.2	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°	810.2	27.8
0°-40°	1331.4	45.7
0°-60°	2357.1	80.8
0°-90°	2916.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2916.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1032	1032	1032	1032	1032	
5°	1030	1030	1030	1030	1029	98
15°	1000	999	999	1000	999	282
25°	935	934	933	933	932	431
35°	836	835	834	832	831	523
45°	706	704	702	700	700	544
55°	549	545	541	541	540	489
65°	362	360	354	355	355	359
75°	168	165	161	164	160	179
85°	23	22	22	22	22	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1031.8	1031.4	1031.4	1031.8	1031.0
5°	1029.9	1030.3	1029.9	1029.9	1029.2
7.5°	1025.9	1025.5	1025.1	1025.5	1024.4
10°	1018.8	1018.8	1018.5	1018.8	1018.1
12.5°	1010.3	1010.3	1010.3	1010.7	1010.3
15°	999.6	999.2	999.2	999.9	999.2
17.5°	987.0	986.6	986.6	986.2	985.5
20°	971.4	971.4	971.1	970.7	969.6
22.5°	954.8	954.4	953.3	953.3	951.8
25°	935.2	934.0	933.3	932.9	931.8
27.5°	913.7	912.2	911.1	910.3	909.2
30°	889.6	888.1	887.0	885.9	885.2
32.5°	863.7	863.0	861.1	860.7	859.3
35°	835.9	834.8	833.7	832.2	830.8
37.5°	806.3	805.2	802.6	801.9	800.8
40°	774.9	773.4	770.0	770.0	768.9
42.5°	741.2	739.7	737.5	736.0	735.2
45°	706.0	704.5	701.9	700.4	699.7
47.5°	668.6	667.5	664.5	663.4	662.3
50°	629.7	628.2	624.9	624.2	623.1
52.5°	589.0	588.3	583.8	583.5	582.3
55°	548.7	544.6	540.9	540.9	540.1
57.5°	504.2	501.3	496.5	496.5	495.7
60°	458.3	455.7	450.2	450.9	450.2
62.5°	413.5	408.0	402.8	405.0	403.2
65°	362.4	359.5	353.9	355.4	355.0
67.5°	315.8	310.2	305.1	308.0	306.5
70°	264.0	261.0	255.8	258.8	255.1
72.5°	215.1	212.5	207.3	210.7	206.9
75°	167.7	165.1	161.0	164.0	160.3
77.5°	122.9	121.1	117.4	120.3	121.1
80°	82.2	80.0	78.1	80.7	81.4
82.5°	48.1	46.6	45.9	46.3	48.1
85°	23.3	21.5	21.5	21.8	21.8
87.5°	6.3	5.6	6.3	6.7	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)