

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: P974089

Luminaire Tested: FLR2-24-20-L830-CP375

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974089  
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: FLR2-24-20-L830-CP375  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-20-L830-CP375  
Ballast/Driver: -

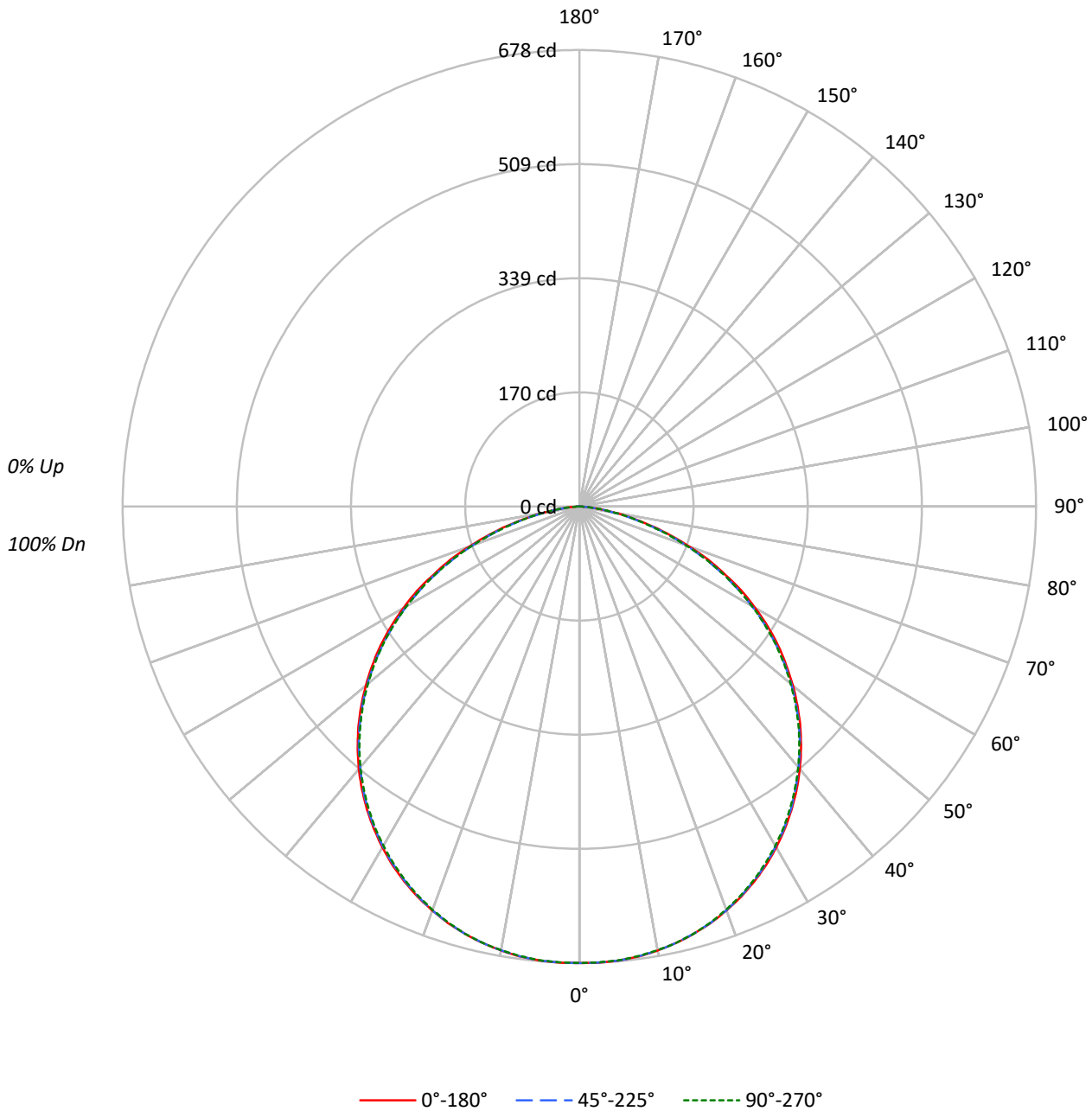
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1916.9 lumens  
Efficiency: N/A  
Efficacy: 114.8 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): 16.7  
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	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°	913	913	913
5°	914	914	914
10°	915	915	914
15°	915	915	915
20°	914	914	913
25°	913	911	909
30°	909	906	904
35°	903	900	897
40°	895	889	888
45°	883	878	875
50°	866	860	857
55°	846	834	833
60°	811	796	796
65°	758	741	743
70°	683	662	660
75°	573	551	548
80°	418	397	415
85°	236	218	222

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 883 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.4	3.4
10°-20°	185.5	9.7
20°-30°	282.8	14.8
30°-40°	342.6	17.9
40°-50°	355.9	18.6
50°-60°	318.4	16.6
60°-70°	232.0	12.1
70°-80°	114.9	6.0
80°-90°	20.5	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°	532.6	27.8
0°-40°	875.2	45.7
0°-60°	1549.4	80.8
0°-90°	1916.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1916.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	677	677	677	677	676	64
15°	657	657	657	657	657	186
25°	615	614	614	613	612	283
35°	550	549	548	547	546	344
45°	464	463	461	460	460	358
55°	361	358	356	356	355	321
65°	238	236	233	234	233	236
75°	110	108	106	108	105	118
85°	15	14	14	14	14	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	678.2	678.2	678.2	678.2	678.2
2.5°	678.2	678.0	678.0	678.2	677.7
5°	677.0	677.3	677.0	677.0	676.5
7.5°	674.3	674.1	673.9	674.1	673.4
10°	669.7	669.7	669.5	669.7	669.2
12.5°	664.1	664.1	664.1	664.4	664.1
15°	657.1	656.8	656.8	657.3	656.8
17.5°	648.8	648.5	648.5	648.3	647.8
20°	638.6	638.6	638.3	638.1	637.3
22.5°	627.6	627.4	626.6	626.6	625.7
25°	614.7	614.0	613.5	613.3	612.5
27.5°	600.6	599.6	598.9	598.4	597.7
30°	584.8	583.8	583.1	582.4	581.9
32.5°	567.7	567.3	566.0	565.8	564.8
35°	549.5	548.8	548.0	547.1	546.1
37.5°	530.0	529.3	527.6	527.1	526.4
40°	509.3	508.4	506.2	506.2	505.5
42.5°	487.2	486.2	484.8	483.8	483.3
45°	464.1	463.1	461.4	460.4	459.9
47.5°	439.5	438.8	436.8	436.1	435.4
50°	413.9	413.0	410.8	410.3	409.6
52.5°	387.2	386.7	383.8	383.5	382.8
55°	360.7	358.0	355.5	355.5	355.1
57.5°	331.5	329.5	326.3	326.3	325.9
60°	301.3	299.6	295.9	296.4	295.9
62.5°	271.8	268.2	264.8	266.2	265.0
65°	238.2	236.3	232.6	233.6	233.4
67.5°	207.6	203.9	200.5	202.5	201.5
70°	173.5	171.6	168.2	170.1	167.7
72.5°	141.4	139.7	136.3	138.5	136.0
75°	110.2	108.5	105.9	107.8	105.4
77.5°	80.8	79.6	77.1	79.1	79.6
80°	54.0	52.6	51.3	53.1	53.5
82.5°	31.6	30.7	30.2	30.4	31.6
85°	15.3	14.1	14.1	14.4	14.4
87.5°	4.1	3.7	4.1	4.4	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)