

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: IRiS

Report Number: P1335127

Luminaire Tested: P3A02R309827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335127
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R309827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

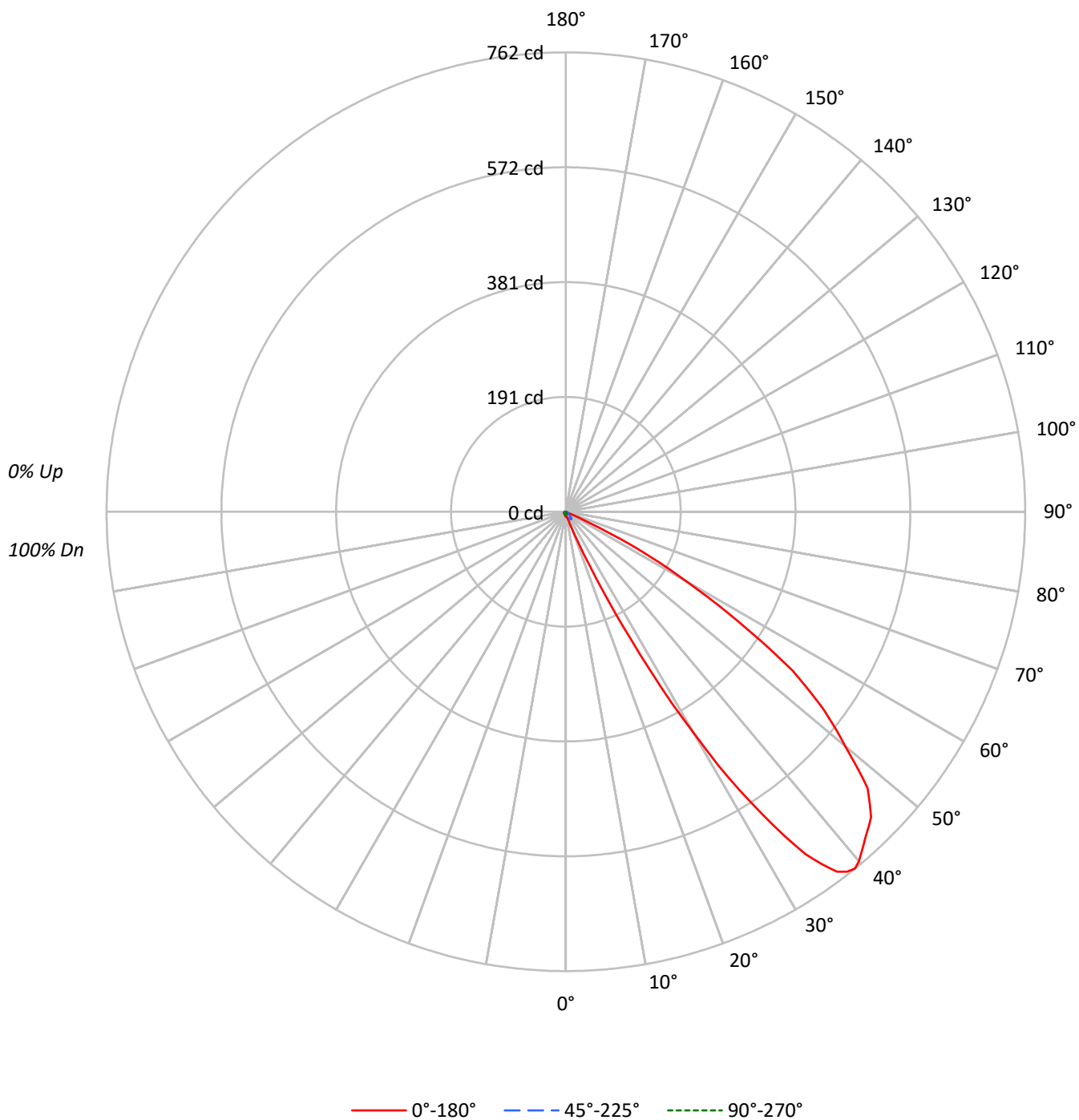
Lumens per Lamp: N/A
Luminaire Lumens: 198.0 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50	50	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24	24	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1688	1688	1688	1688	1688
5°	1805	1761	1651	1497	1475
10°	1959	1737	1447	1291	1269
15°	2883	1748	1203	1090	1135
20°	7234	1913	933	933	1050
25°	33607	2371	726	847	968
30°	107004	3292	557	810	962
35°	185698	4015	455	750	990
40°	216549	4008	344	773	1002
45°	222101	2853	372	837	1085
50°	206526	1603	273	853	1262
55°	175554	841	306	956	1415
60°	101395	219	351	1009	1535
65°	20703	0	415	1193	1712
70°	321	128	513	1410	2052
75°	254	169	593	1440	2372
80°	253	253	884	1642	2778
85°	0	503	1761	1761	3271

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 222101 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.4
10°-20°	2.0	1.0
20°-30°	11.4	5.8
30°-40°	53.3	26.9
40°-50°	75.4	38.1
50°-60°	46.4	23.4
60°-70°	7.1	3.6
70°-80°	1.1	0.6
80°-90°	0.6	0.3
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°	14.1	7.1
0°-40°	67.4	34.1
0°-60°	189.3	95.6
0°-90°	198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	198.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	8	8	8	7	7	1
15°	13	8	5	5	5	5
25°	139	10	3	4	4	85
35°	694	15	2	3	4	416
45°	716	9	1	3	4	543
55°	459	2	1	2	4	391
65°	40	0	1	2	3	72
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
2.5°	7.8	7.8	8.0	8.0	7.8	8.0	8.0	8.0	7.7	7.5	7.2
5°	8.2	8.2	8.2	8.3	8.2	8.2	8.0	7.8	7.5	7.0	6.8
7.5°	8.5	8.5	8.3	8.5	8.3	8.3	8.0	7.7	7.2	6.7	6.3
10°	8.8	8.8	8.7	8.7	8.5	8.5	7.8	7.3	6.5	6.0	5.8
12.5°	9.8	9.8	9.7	9.5	9.2	9.0	7.7	6.8	5.8	5.3	5.2
15°	12.7	12.5	12.2	11.7	10.8	10.7	7.7	6.3	5.3	4.8	4.8
17.5°	17.3	17.2	16.7	15.3	13.8	13.3	7.7	5.7	4.7	4.3	4.3
20°	31.0	29.7	27.2	23.9	20.3	18.5	8.2	5.0	4.0	3.8	4.0
21°	40.5	39.2	36.0	30.5	24.4	22.3	8.5	4.8	3.8	3.7	4.0
22°	55.2	53.7	47.2	39.7	30.9	27.4	8.7	4.5	3.5	3.5	3.8
23°	77.1	74.6	63.5	51.5	38.5	33.5	9.0	4.3	3.3	3.5	3.7
24°	100.9	98.7	86.2	68.2	49.2	42.0	9.3	4.2	3.2	3.2	3.5
25°	138.9	136.4	114.2	86.1	62.4	50.5	9.8	3.8	3.0	3.0	3.5
26°	188.1	176.6	147.1	110.9	76.9	63.4	10.3	3.7	2.8	3.0	3.3
27°	234.8	225.3	192.1	142.3	95.1	77.9	11.0	3.5	2.7	2.8	3.3
28°	296.2	282.9	241.0	180.0	119.8	94.2	11.7	3.3	2.5	2.8	3.2
29°	364.9	346.2	295.7	222.3	147.6	112.6	12.3	3.2	2.3	2.7	3.2
30°	422.6	405.1	354.6	272.5	179.6	136.8	13.0	3.0	2.2	2.7	3.2
31°	490.4	463.8	402.6	315.1	207.1	160.9	13.7	2.7	2.0	2.5	3.0
32°	545.2	526.7	461.7	363.1	243.3	187.6	14.2	2.5	2.0	2.5	3.0
33°	598.3	573.4	510.5	409.1	276.0	215.0	14.7	2.3	1.8	2.3	3.0
34°	649.0	626.1	556.7	446.3	306.9	241.0	15.0	2.0	1.8	2.3	2.8
35°	693.7	667.1	597.4	482.7	338.6	264.7	15.0	1.8	1.7	2.2	2.8
36°	722.7	703.7	632.8	518.5	367.3	287.2	15.0	1.7	1.5	2.2	2.7
37°	747.5	725.4	661.1	546.1	388.4	305.2	15.0	1.5	1.5	2.2	2.7
38°	757.7	738.7	680.7	570.4	408.3	323.6	14.8	1.3	1.3	2.0	2.7
39°	761.7	744.7	695.3	587.9	423.0	335.9	14.5	1.2	1.3	2.0	2.7
40°	756.5	743.7	702.8	599.3	434.6	344.9	14.0	1.0	1.2	2.0	2.7
42.5°	735.2	726.7	701.2	610.6	444.7	351.6	12.2	0.7	1.2	1.8	2.7
45°	716.2	706.8	684.3	598.8	431.6	338.4	9.2	0.3	1.2	1.8	2.7
47.5°	679.3	673.5	655.8	568.6	403.1	308.7	6.5	0.2	1.0	1.7	2.5
50°	605.4	599.9	576.6	493.7	346.7	261.0	4.7	0.2	0.8	1.7	2.5
52.5°	539.2	533.4	499.9	410.5	266.4	191.3	3.0	0.2	0.8	1.7	2.5
55°	459.2	449.0	405.0	311.6	188.8	128.3	2.2	0.2	0.8	1.5	2.5
57.5°	339.9	325.1	285.7	212.5	108.7	69.6	1.2	0.2	0.8	1.5	2.5
60°	231.2	222.3	178.8	112.1	46.4	29.4	0.5	0.2	0.8	1.5	2.3
62.5°	140.1	128.9	89.9	47.7	20.0	13.3	0.0	0.3	0.8	1.5	2.3
65°	39.9	35.4	23.5	10.8	5.7	4.3	0.0	0.3	0.8	1.5	2.3
67.5°	1.3	1.3	1.3	1.2	0.8	0.8	0.2	0.3	0.8	1.5	2.2
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.8	1.3	2.2
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.7	1.2	2.0
75°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	1.2	1.7
77.5°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.7
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.5	0.7	0.7	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	7.7	7.7
2.5°	7.2	7.2
5°	6.7	6.7
7.5°	6.2	6.2
10°	5.7	5.7
12.5°	5.3	5.3
15°	4.8	5.0
17.5°	4.5	4.7
20°	4.3	4.5
21°	4.3	4.5
22°	4.2	4.3
23°	4.2	4.3
24°	4.0	4.2
25°	3.8	4.0
26°	3.8	4.0
27°	3.8	4.0
28°	3.7	4.0
29°	3.7	3.8
30°	3.7	3.8
31°	3.5	3.8
32°	3.5	3.8
33°	3.5	3.7
34°	3.3	3.7
35°	3.3	3.7
36°	3.3	3.7
37°	3.3	3.5
38°	3.3	3.7
39°	3.3	3.5
40°	3.3	3.5
42.5°	3.3	3.5
45°	3.3	3.5
47.5°	3.3	3.7
50°	3.3	3.7
52.5°	3.3	3.7
55°	3.3	3.7
57.5°	3.3	3.5
60°	3.3	3.5
62.5°	3.2	3.5
65°	3.2	3.3
67.5°	3.2	3.3
70°	3.0	3.2
72.5°	2.8	3.0
75°	2.5	2.8
77.5°	2.3	2.5
80°	2.0	2.2

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.7	1.7
85°	1.2	1.3
87.5°	0.7	0.7
90°	0.0	0.0

(END OF REPORT)