

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: P1335463

Luminaire Tested: P3A02R359827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

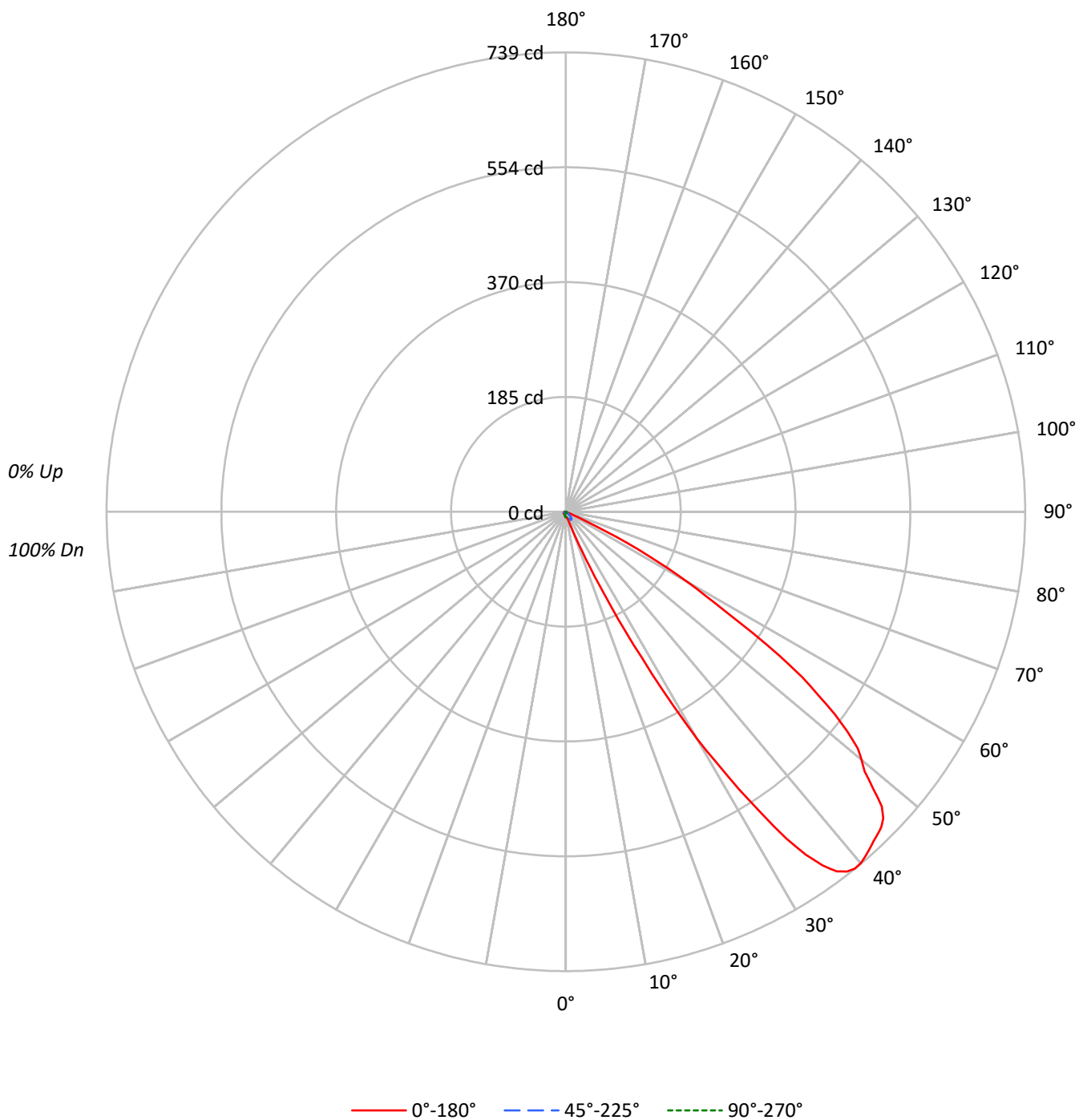
Lumens per Lamp: N/A
Luminaire Lumens: 184.0 lumens
Efficiency: N/A
Efficacy: 51.1 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.65 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1864	1864	1864	1864	1864
5°	2003	1981	1827	1651	1607
10°	2115	1915	1625	1403	1403
15°	3019	1884	1317	1203	1249
20°	7561	2007	1050	1050	1167
25°	35083	2565	798	968	1089
30°	106649	3494	633	886	1089
35°	180264	4042	535	857	1071
40°	211282	4008	429	859	1145
45°	222504	2822	372	930	1240
50°	211814	1706	341	955	1365
55°	177466	688	382	1070	1606
60°	99378	132	439	1228	1754
65°	17174	104	415	1401	1972
70°	321	128	513	1475	2244
75°	254	169	678	1694	2542
80°	253	253	884	1894	2904
85°	0	503	1761	2013	3271

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 224092 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.4
10°-20°	2.2	1.2
20°-30°	11.3	6.1
30°-40°	48.8	26.5
40°-50°	69.6	37.8
50°-60°	43.1	23.4
60°-70°	6.6	3.6
70°-80°	1.2	0.7
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°	14.2	7.7
0°-40°	63.0	34.2
0°-60°	175.6	95.4
0°-90°	184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	184.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	9	9	8	8	7	1
15°	13	8	6	5	6	5
25°	145	11	3	4	4	87
35°	673	15	2	3	4	404
45°	718	9	1	3	4	542
55°	464	2	1	3	4	395
65°	33	0	1	3	4	68
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°	25°	30°	45°	67.5°	90°	112.5°
0°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
2.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.5	8.3
5°	9.1	9.1	9.0	9.0	9.0	9.0	9.0	9.0	8.6	8.3	7.8
7.5°	9.3	9.3	9.1	9.1	9.1	9.1	9.0	8.8	8.5	7.8	7.3
10°	9.5	9.5	9.5	9.5	9.3	9.1	9.0	8.6	8.1	7.3	6.8
12.5°	10.6	10.6	10.5	10.1	9.8	9.5	9.1	8.5	7.5	6.6	6.1
15°	13.3	13.1	12.8	12.3	11.6	10.8	10.1	8.3	6.8	5.8	5.5
17.5°	18.6	18.3	17.8	16.1	14.6	13.1	11.8	8.3	6.1	5.1	4.8
20°	32.4	32.6	29.1	25.1	21.8	18.1	14.8	8.6	5.5	4.5	4.3
22.5°	67.6	64.9	56.6	47.0	35.9	27.7	20.9	9.5	4.8	3.8	3.8
25°	145.0	134.9	114.8	86.7	61.1	43.4	30.4	10.6	4.3	3.3	3.5
27.5°	264.8	255.6	215.3	162.1	107.6	65.4	41.2	12.1	3.8	2.8	3.2
30°	421.2	396.0	343.3	265.8	179.9	100.2	55.3	13.8	3.2	2.5	3.0
31°	470.1	458.4	394.3	307.4	210.8	118.9	61.3	14.3	3.0	2.5	2.8
32°	528.0	507.4	450.0	353.1	242.2	135.7	68.4	14.8	2.8	2.2	2.8
33°	579.9	559.9	490.0	393.3	273.9	154.8	76.1	14.9	2.5	2.2	2.7
34°	634.3	607.1	537.8	435.3	306.5	175.4	83.0	15.1	2.3	2.0	2.7
35°	673.4	646.1	579.0	468.6	334.5	193.7	91.0	15.1	2.2	2.0	2.5
36°	703.6	679.7	614.6	502.8	362.4	210.1	97.3	15.1	1.8	1.8	2.5
37°	724.4	701.6	638.5	532.2	383.7	224.7	103.0	15.1	1.7	1.8	2.5
38°	734.5	715.6	661.6	553.6	404.3	236.2	107.5	14.8	1.5	1.7	2.3
39°	738.8	723.4	675.7	571.7	419.7	246.2	110.8	14.5	1.3	1.7	2.3
40°	738.1	724.7	683.7	584.2	432.2	253.0	112.6	14.0	1.2	1.5	2.3
41°	734.3	722.7	687.8	594.8	439.7	257.6	113.1	13.5	1.0	1.5	2.2
42°	730.0	719.4	689.1	600.4	444.5	259.1	111.8	12.8	1.0	1.3	2.2
43°	725.5	715.7	689.1	602.3	445.6	258.1	109.6	11.6	0.8	1.3	2.2
44°	721.9	712.6	687.0	601.8	443.2	254.3	105.6	10.3	0.7	1.3	2.2
45°	717.5	708.4	684.2	598.6	438.3	247.8	100.7	9.1	0.5	1.2	2.2
46°	709.9	702.8	679.2	592.1	430.7	238.9	94.3	8.3	0.3	1.2	2.0
47°	695.1	689.0	669.5	582.5	420.6	228.2	87.9	7.5	0.3	1.2	2.0
48°	665.4	665.2	650.3	564.6	404.5	214.9	81.1	6.6	0.3	1.2	2.0
49°	636.7	633.7	615.1	533.0	381.4	199.0	73.9	6.0	0.2	1.2	2.0
50°	620.9	614.4	583.8	495.8	351.8	176.9	66.3	5.0	0.2	1.0	2.0
51°	604.4	595.1	559.1	462.3	316.6	155.6	58.0	4.0	0.2	1.0	1.8
52°	574.7	565.9	525.5	430.2	282.4	133.9	50.0	3.3	0.2	1.0	2.0
53°	542.6	530.0	486.2	395.0	252.3	114.6	41.9	2.8	0.2	1.0	1.8
54°	502.3	496.6	446.3	351.8	217.1	96.0	34.4	2.3	0.2	1.0	1.8
55°	464.2	455.9	403.6	307.6	185.2	78.7	28.7	1.8	0.2	1.0	1.8
56°	415.7	403.3	354.3	267.1	152.8	63.4	24.3	1.5	0.2	1.0	1.8
57°	357.9	344.7	306.0	222.1	119.9	48.3	20.3	1.2	0.2	1.0	1.8
58°	302.8	291.3	249.8	171.4	90.4	33.6	16.8	0.8	0.2	0.8	1.8
59°	261.6	249.0	207.8	131.9	62.8	24.7	12.6	0.7	0.2	1.0	1.8
60°	226.6	210.3	167.3	102.2	44.8	17.8	9.3	0.3	0.3	1.0	1.8
62.5°	130.6	115.3	79.9	41.5	18.4	9.1	4.5	0.2	0.3	1.0	1.8
65°	33.1	29.4	19.1	9.0	5.1	3.2	1.7	0.2	0.3	0.8	1.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.2	1.2	1.2	1.0	0.8	0.7	0.3	0.2	0.3	0.8	1.7
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.8	1.5
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.3
75°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.3
77.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.5	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5
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):

	135°	157.5°	180°
0°	8.5	8.5	8.5
2.5°	8.0	8.0	8.0
5°	7.5	7.5	7.3
7.5°	7.0	6.8	6.8
10°	6.3	6.3	6.3
12.5°	5.8	5.8	5.8
15°	5.3	5.5	5.5
17.5°	4.8	5.1	5.1
20°	4.5	4.8	5.0
22.5°	4.2	4.5	4.7
25°	4.0	4.3	4.5
27.5°	3.7	4.2	4.5
30°	3.5	4.0	4.3
31°	3.5	4.0	4.2
32°	3.3	4.0	4.2
33°	3.3	4.0	4.2
34°	3.3	3.8	4.2
35°	3.2	3.8	4.0
36°	3.2	3.8	4.0
37°	3.2	3.8	4.2
38°	3.2	3.8	4.0
39°	3.0	3.8	4.0
40°	3.0	3.8	4.0
41°	3.0	3.8	4.0
42°	3.0	3.8	4.0
43°	3.0	3.8	4.0
44°	3.0	3.7	4.0
45°	3.0	3.7	4.0
46°	3.0	3.8	4.0
47°	3.0	3.8	4.2
48°	3.0	3.7	4.0
49°	2.8	3.7	4.0
50°	2.8	3.7	4.0
51°	2.8	3.8	4.2
52°	2.8	3.8	4.2
53°	2.8	3.8	4.2
54°	2.8	3.8	4.0
55°	2.8	3.8	4.2
56°	2.8	3.8	4.0
57°	2.8	3.8	4.0
58°	2.8	3.7	4.0
59°	2.8	3.7	4.0
60°	2.8	3.7	4.0
62.5°	2.7	3.7	4.0
65°	2.7	3.5	3.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	2.5	3.5	3.7
70°	2.3	3.3	3.5
72.5°	2.2	3.2	3.3
75°	2.0	2.8	3.0
77.5°	1.7	2.5	2.8
80°	1.5	2.2	2.3
82.5°	1.2	1.8	2.0
85°	0.8	1.3	1.3
87.5°	0.3	0.7	0.7
90°	0.0	0.0	0.0

(END OF REPORT)