

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: P1334731

Luminaire Tested: P3A02R259727DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259727DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

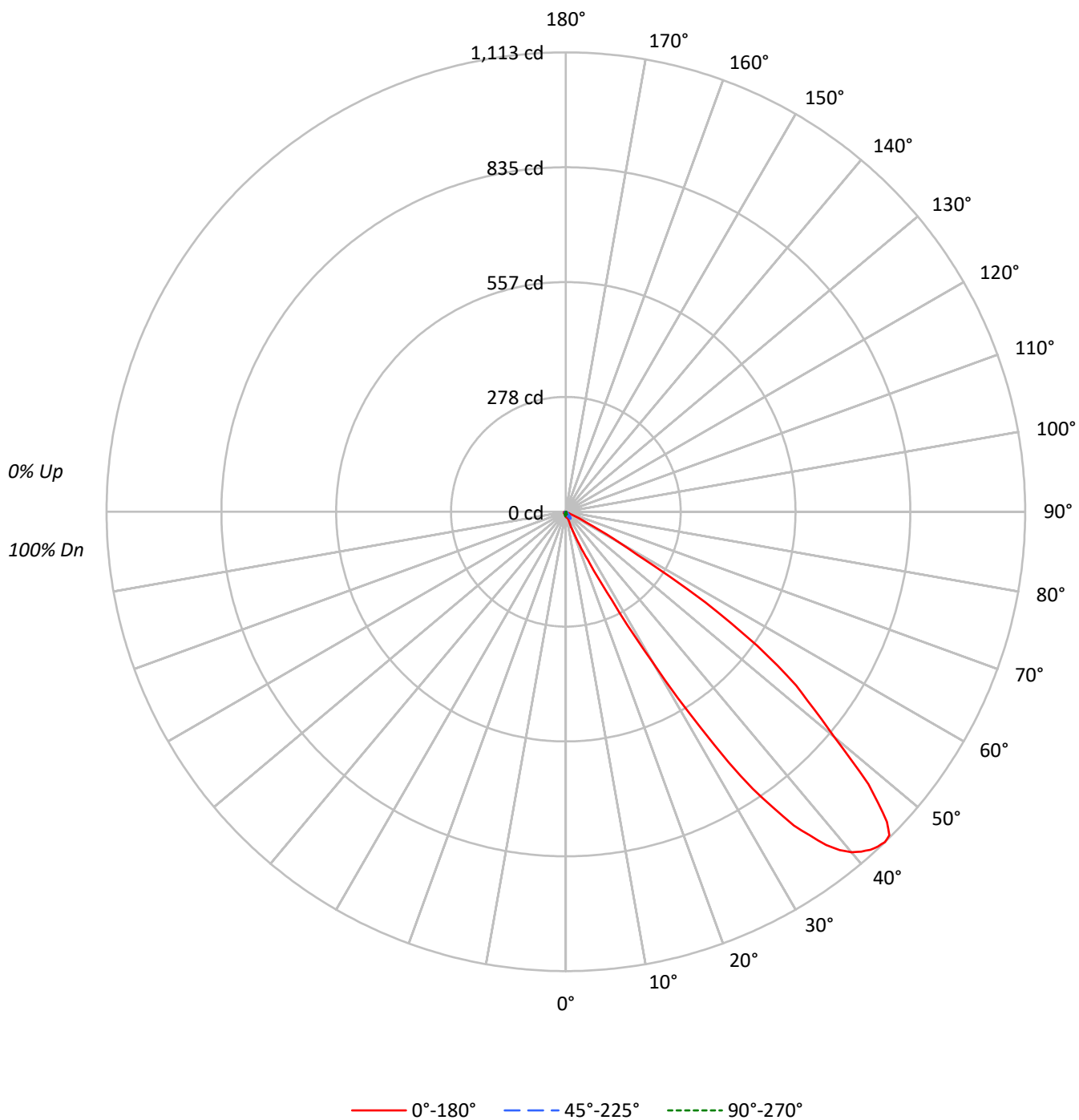
Lumens per Lamp: N/A
Luminaire Lumens: 232.0 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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		
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2588	2588	2588	2588	2588
5°	2972	2840	2509	2245	2201
10°	2961	2672	2138	1870	1870
15°	3292	2316	1657	1566	1657
20°	11621	2287	1283	1330	1470
25°	33437	2903	1040	1234	1428
30°	106700	4507	836	1190	1443
35°	233695	5300	723	1151	1472
40°	308263	4780	573	1174	1574
45°	343788	3349	558	1271	1706
50°	289389	1740	546	1330	1876
55°	216346	688	535	1491	2103
60°	66968	175	526	1623	2324
65°	5707	0	623	1712	2542
70°	385	128	641	1988	2885
75°	339	169	847	2033	3304
80°	253	253	1263	2273	3915
85°	503	503	2013	2516	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 343788 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	2.7	1.2
20°-30°	12.8	5.5
30°-40°	61.8	26.6
40°-50°	96.9	41.8
50°-60°	49.7	21.4
60°-70°	4.7	2.0
70°-80°	1.6	0.7
80°-90°	0.8	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°	16.6	7.2
0°-40°	78.4	33.8
0°-60°	224.9	97.0
0°-90°	232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	232.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	14	13	11	10	10	1
15°	14	10	7	7	7	6
25°	138	12	4	5	6	86
35°	873	20	3	4	6	530
45°	1109	11	2	4	6	811
55°	566	2	1	4	6	471
65°	11	0	1	3	5	35
75°	0	0	1	2	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
2.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.7	12.7	12.9	12.7	12.7
5°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.3	13.3	13.3	12.9
7.5°	13.7	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.3	13.3	12.7
10°	13.3	13.3	13.3	13.3	13.1	13.1	13.1	12.9	12.9	12.9	12.0
12.5°	13.3	13.3	13.3	13.3	13.1	13.1	12.9	12.9	12.7	12.5	11.0
15°	14.5	14.5	14.5	14.3	14.1	13.9	13.7	13.5	13.3	12.9	10.2
17.5°	21.2	20.6	20.4	19.6	18.6	17.6	16.7	15.9	15.1	14.5	9.8
20°	49.8	49.6	48.6	46.1	43.5	40.4	37.4	33.9	29.0	25.7	9.8
22.5°	86.4	85.1	83.3	81.5	76.8	71.2	65.5	59.0	52.7	45.9	10.4
25°	138.2	141.1	134.9	130.0	121.9	111.9	101.1	92.1	80.6	70.0	12.0
27.5°	240.3	242.1	230.1	214.2	195.2	174.1	153.7	138.4	119.2	101.7	15.1
30°	421.4	423.2	403.0	369.1	329.9	295.4	248.7	207.6	169.9	140.7	17.8
31°	525.9	511.6	488.1	455.3	405.7	353.6	297.5	247.8	200.1	161.7	18.6
32°	616.8	615.5	588.2	538.4	488.5	424.2	354.6	289.9	231.3	182.9	19.2
33°	723.9	715.8	677.2	630.2	564.3	499.6	409.7	335.8	263.4	206.6	19.6
34°	809.9	787.8	771.9	718.2	648.6	566.1	470.0	384.4	303.4	229.5	19.8
35°	873.0	868.3	837.2	787.2	716.4	632.1	534.9	434.8	336.9	256.0	19.8
36°	939.7	925.2	895.0	849.7	780.7	693.5	584.5	478.5	375.8	279.9	19.6
37°	981.6	973.0	943.0	896.2	828.7	745.4	640.0	524.7	406.9	303.8	19.2
38°	1024.7	1007.3	977.7	933.0	866.6	788.4	680.2	560.2	435.5	324.8	18.6
39°	1054.5	1036.5	1006.3	961.8	896.9	819.3	712.1	590.4	460.4	340.5	17.8
40°	1076.9	1059.6	1028.9	983.2	919.1	843.6	738.6	617.2	481.2	354.2	16.7
41°	1090.8	1074.7	1044.3	998.7	934.4	857.4	756.0	634.5	495.3	363.4	15.7
42°	1102.4	1085.9	1054.9	1008.3	943.8	869.3	766.6	645.5	504.9	368.1	14.9
43°	1109.0	1092.4	1062.2	1014.6	949.5	874.8	772.3	650.6	508.1	367.5	13.5
44°	1112.6	1095.5	1065.1	1017.5	952.0	876.2	772.7	649.6	505.9	362.6	12.2
45°	1108.6	1091.6	1062.2	1014.6	947.7	871.7	768.6	644.1	497.3	353.0	10.8
46°	1082.0	1069.0	1042.0	998.3	934.2	860.3	758.2	633.5	484.1	341.1	9.2
47°	1035.3	1024.9	998.7	966.3	908.3	839.3	739.0	613.3	465.5	323.4	7.3
48°	986.5	971.2	946.9	913.6	864.6	801.5	707.4	583.7	437.3	300.1	6.5
49°	914.4	905.4	884.0	846.8	806.2	750.7	662.7	545.7	402.8	274.8	5.7
50°	848.3	842.1	812.1	784.8	741.7	689.8	602.1	495.7	359.9	243.4	5.1
51°	796.6	789.3	767.6	733.5	687.6	627.4	544.7	430.8	310.7	206.0	4.1
52°	742.7	738.6	719.4	684.3	639.2	579.2	489.0	375.6	263.0	174.1	3.3
53°	698.6	692.7	669.2	638.0	589.2	527.1	428.5	324.4	222.7	146.4	2.9
54°	634.3	631.9	616.8	584.1	531.2	463.6	373.8	273.2	185.8	124.1	2.4
55°	565.9	557.8	542.4	516.5	467.9	404.8	310.5	226.4	150.3	104.5	1.8
56°	482.6	482.2	454.9	433.2	390.1	323.2	248.0	176.8	122.1	87.2	1.6
57°	403.0	390.1	363.8	342.4	296.0	245.2	184.1	132.5	95.5	70.6	1.2
58°	298.1	291.3	284.4	252.9	210.1	173.7	131.5	93.1	70.6	53.9	0.8
59°	202.3	202.1	193.9	170.1	145.4	108.2	82.1	63.3	48.6	39.6	0.6
60°	152.7	149.0	132.7	117.0	91.5	68.4	48.6	37.4	30.2	25.5	0.4
62.5°	53.5	55.5	48.8	40.4	30.8	25.3	19.4	15.7	12.9	10.4	0.0
65°	11.0	12.0	10.4	9.8	7.8	6.7	5.9	5.1	4.3	3.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.4	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.8	0.8	0.2
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	11.8	11.8	11.8	11.8	11.8	11.8
2.5°	12.5	12.0	11.4	11.2	11.0	11.0
5°	12.2	11.4	10.8	10.2	10.0	10.0
7.5°	11.6	10.6	9.8	9.4	9.2	9.0
10°	11.0	9.6	8.8	8.4	8.4	8.4
12.5°	9.8	8.6	7.8	7.6	7.8	7.8
15°	8.8	7.3	6.9	6.9	7.1	7.3
17.5°	7.6	6.5	6.1	6.3	6.5	6.7
20°	6.7	5.5	5.5	5.7	6.3	6.3
22.5°	5.9	4.9	4.9	5.5	5.9	6.1
25°	5.3	4.3	4.5	5.1	5.7	5.9
27.5°	4.5	3.7	4.1	4.9	5.5	5.7
30°	3.9	3.3	3.9	4.7	5.3	5.7
31°	3.7	3.1	3.9	4.5	5.3	5.7
32°	3.3	3.1	3.7	4.5	5.3	5.5
33°	3.1	2.9	3.7	4.5	5.3	5.5
34°	2.9	2.7	3.5	4.5	5.3	5.5
35°	2.4	2.7	3.5	4.3	5.1	5.5
36°	2.2	2.4	3.5	4.3	5.1	5.5
37°	2.0	2.4	3.3	4.3	5.1	5.5
38°	1.8	2.2	3.3	4.3	5.1	5.5
39°	1.6	2.2	3.1	4.3	5.1	5.5
40°	1.4	2.0	3.1	4.1	5.1	5.5
41°	1.4	2.0	3.1	4.1	5.1	5.5
42°	1.2	2.0	3.1	4.1	5.1	5.5
43°	1.0	1.8	3.1	4.1	5.1	5.5
44°	0.8	1.8	2.9	4.1	5.1	5.5
45°	0.8	1.8	2.9	4.1	5.1	5.5
46°	0.6	1.6	2.9	4.1	5.1	5.5
47°	0.4	1.6	2.9	3.9	5.1	5.5
48°	0.4	1.6	2.9	3.9	5.1	5.5
49°	0.4	1.6	2.7	3.9	5.1	5.5
50°	0.4	1.6	2.7	3.9	5.1	5.5
51°	0.2	1.4	2.7	3.9	5.1	5.5
52°	0.2	1.4	2.7	3.9	5.1	5.7
53°	0.2	1.4	2.7	3.9	5.1	5.5
54°	0.2	1.4	2.4	3.9	5.1	5.5
55°	0.2	1.4	2.4	3.9	5.1	5.5
56°	0.2	1.2	2.4	3.7	5.1	5.5
57°	0.4	1.2	2.4	3.7	5.1	5.3
58°	0.4	1.2	2.4	3.7	4.9	5.3
59°	0.4	1.2	2.4	3.7	4.9	5.3
60°	0.4	1.2	2.2	3.7	4.9	5.3
62.5°	0.4	1.2	2.2	3.5	4.7	5.1
65°	0.4	1.2	2.0	3.3	4.7	4.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.0	2.0	3.1	4.5	4.7
70°	0.6	1.0	1.8	3.1	4.3	4.5
72.5°	0.6	1.0	1.8	2.7	3.9	4.3
75°	0.6	1.0	1.6	2.4	3.7	3.9
77.5°	0.6	1.0	1.4	2.2	3.3	3.5
80°	0.8	1.0	1.2	1.8	2.9	3.1
82.5°	0.8	1.0	1.0	1.4	2.2	2.4
85°	0.6	0.8	0.8	1.0	1.4	1.6
87.5°	0.6	0.8	0.6	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)