

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: P1337394

Luminaire Tested: P3A05R259727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337394
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: P3A05R259727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

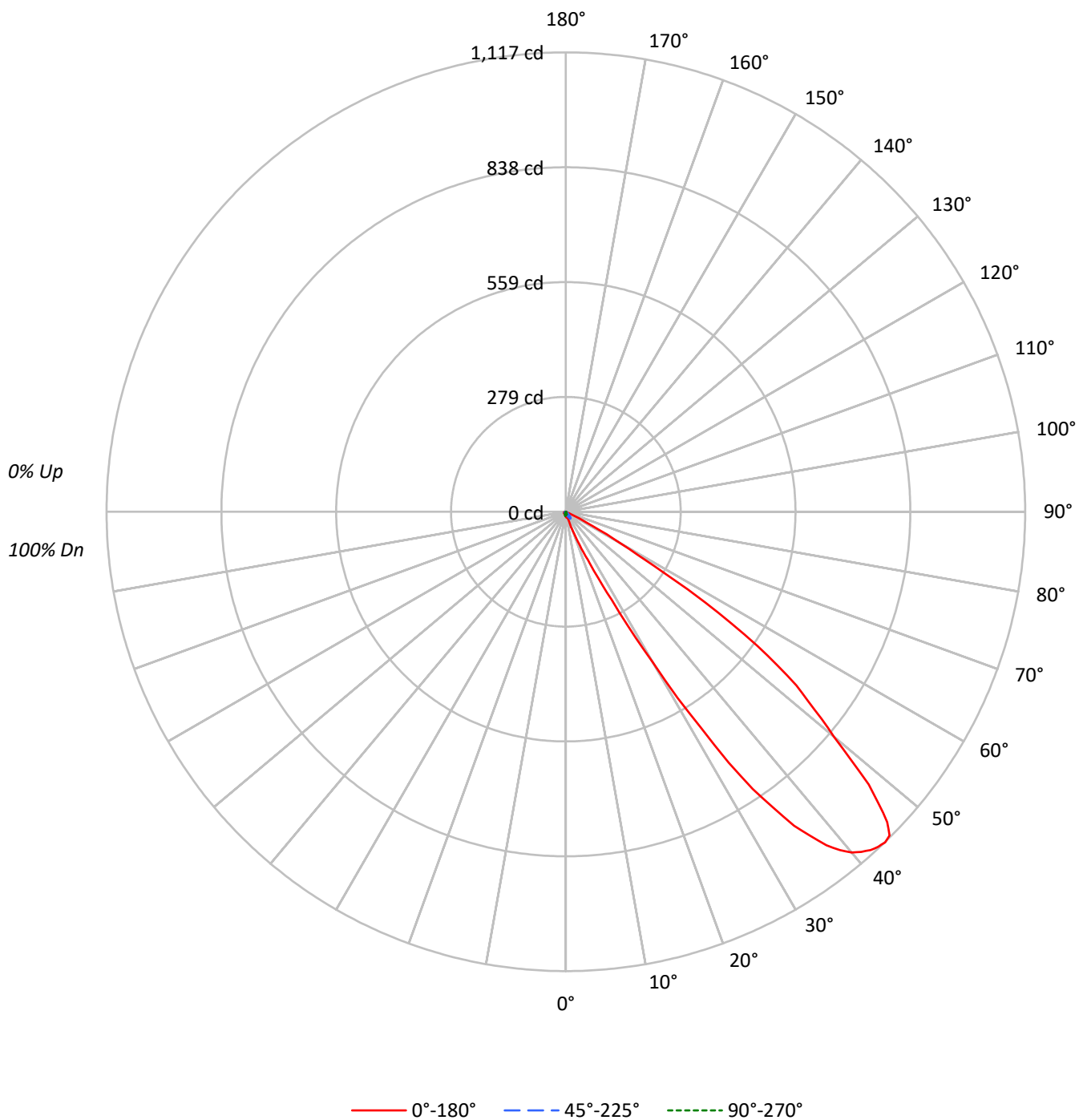
Lumens per Lamp: N/A
Luminaire Lumens: 233.0 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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°	2609	2609	2609	2609	2609
5°	2972	2840	2531	2267	2201
10°	2961	2694	2138	1870	1870
15°	3314	2338	1680	1589	1680
20°	11668	2287	1283	1330	1493
25°	33583	2928	1040	1234	1428
30°	107156	4507	836	1190	1443
35°	234686	5327	723	1151	1472
40°	309609	4809	601	1174	1574
45°	345245	3380	558	1271	1706
50°	290617	1740	546	1330	1876
55°	217302	688	535	1491	2103
60°	67275	175	526	1623	2324
65°	5759	0	623	1712	2542
70°	385	128	641	1988	2885
75°	339	169	847	2118	3304
80°	253	253	1263	2273	3915
85°	503	503	2013	2516	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 345245 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°	12.9	5.5
30°-40°	62.1	26.6
40°-50°	97.3	41.8
50°-60°	49.9	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°	16.7	7.2
0°-40°	78.8	33.8
0°-60°	225.9	97.0
0°-90°	233.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	233.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	14	13	12	10	10	1
15°	15	10	7	7	7	6
25°	139	12	4	5	6	86
35°	877	20	3	4	6	532
45°	1113	11	2	4	6	815
55°	568	2	1	4	6	473
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°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
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	12.1
12.5°	13.3	13.3	13.3	13.3	13.1	13.1	12.9	12.9	12.7	12.5	11.1
15°	14.6	14.6	14.6	14.4	14.1	13.9	13.7	13.5	13.3	12.9	10.3
17.5°	21.3	20.7	20.5	19.7	18.7	17.6	16.8	16.0	15.2	14.6	9.8
20°	50.0	49.8	48.8	46.3	43.7	40.6	37.5	34.0	29.1	25.8	9.8
22.5°	86.7	85.5	83.7	81.8	77.1	71.6	65.8	59.3	52.9	46.1	10.5
25°	138.8	141.7	135.5	130.6	122.4	112.4	101.5	92.5	81.0	70.3	12.1
27.5°	241.3	243.2	231.1	215.1	196.0	174.9	154.4	139.0	119.7	102.1	15.2
30°	423.2	425.0	404.7	370.7	331.3	296.7	249.7	208.5	170.6	141.3	17.8
31°	528.2	513.8	490.2	457.2	407.4	355.1	298.7	248.9	200.9	162.4	18.7
32°	619.4	618.2	590.7	540.7	490.6	426.1	356.1	291.1	232.3	183.7	19.3
33°	727.1	718.9	680.1	632.9	566.7	501.7	411.5	337.3	264.5	207.5	19.7
34°	813.4	791.2	775.2	721.3	651.4	568.6	472.0	386.1	304.7	230.5	19.9
35°	876.7	872.0	840.8	790.6	719.5	634.8	537.2	436.7	338.3	257.1	19.9
36°	943.8	929.2	898.9	853.4	784.1	696.5	587.0	480.6	377.5	281.1	19.7
37°	985.8	977.2	947.1	900.1	832.2	748.6	642.8	526.9	408.6	305.1	19.3
38°	1029.1	1011.6	981.9	937.0	870.4	791.8	683.2	562.6	437.3	326.2	18.7
39°	1059.0	1041.0	1010.6	965.9	900.7	822.8	715.2	593.0	462.4	342.0	17.8
40°	1081.6	1064.1	1033.4	987.4	923.1	847.2	741.8	619.8	483.3	355.7	16.8
41°	1095.5	1079.3	1048.8	1003.0	938.4	861.1	759.2	637.2	497.4	365.0	15.8
42°	1107.2	1090.6	1059.4	1012.7	947.9	873.0	769.9	648.3	507.1	369.7	15.0
43°	1113.7	1097.1	1066.8	1019.0	953.6	878.6	775.6	653.4	510.3	369.1	13.5
44°	1117.4	1100.2	1069.7	1021.9	956.1	880.0	776.1	652.4	508.1	364.1	12.3
45°	1113.3	1096.3	1066.8	1019.0	951.8	875.5	772.0	646.9	499.5	354.5	10.9
46°	1086.7	1073.6	1046.5	1002.6	938.2	864.0	761.5	636.2	486.1	342.6	9.2
47°	1039.7	1029.3	1003.0	970.4	912.2	842.9	742.2	615.9	467.5	324.8	7.4
48°	990.7	975.3	951.0	917.5	868.3	805.0	710.4	586.2	439.2	301.4	6.6
49°	918.3	909.3	887.8	850.5	809.7	753.9	665.5	548.1	404.5	276.0	5.7
50°	851.9	845.8	815.6	788.2	744.9	692.8	604.6	497.8	361.5	244.4	5.1
51°	800.0	792.7	770.9	736.7	690.6	630.1	547.0	432.6	312.1	206.9	4.1
52°	745.9	741.8	722.5	687.3	642.0	581.7	491.1	377.3	264.1	174.9	3.3
53°	701.6	695.7	672.1	640.7	591.7	529.4	430.4	325.8	223.7	147.0	2.9
54°	637.0	634.6	619.4	586.6	533.5	465.6	375.4	274.3	186.6	124.7	2.5
55°	568.4	560.2	544.8	518.7	469.9	406.6	311.9	227.4	150.9	105.0	1.8
56°	484.7	484.3	456.8	435.1	391.8	324.6	249.1	177.6	122.6	87.5	1.6
57°	404.7	391.8	365.4	343.8	297.3	246.2	184.9	133.1	96.0	70.9	1.2
58°	299.4	292.6	285.6	254.0	211.0	174.5	132.0	93.5	70.9	54.1	0.8
59°	203.2	203.0	194.8	170.8	146.0	108.7	82.4	63.6	48.8	39.8	0.6
60°	153.4	149.7	133.3	117.5	91.9	68.7	48.8	37.5	30.3	25.6	0.4
62.5°	53.7	55.8	49.0	40.6	31.0	25.4	19.5	15.8	12.9	10.5	0.0
65°	11.1	12.1	10.5	9.8	7.8	6.8	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°	11.9	11.9	11.9	11.9	11.9	11.9
2.5°	12.5	12.1	11.5	11.3	11.1	11.1
5°	12.3	11.5	10.9	10.3	10.0	10.0
7.5°	11.7	10.7	9.8	9.4	9.2	9.0
10°	11.1	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	7.4	7.0	7.0	7.2	7.4
17.5°	7.6	6.6	6.2	6.4	6.6	6.8
20°	6.8	5.5	5.5	5.7	6.4	6.4
22.5°	5.9	4.9	4.9	5.5	5.9	6.2
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°	2.5	2.7	3.5	4.3	5.1	5.5
36°	2.3	2.5	3.5	4.3	5.1	5.5
37°	2.1	2.5	3.3	4.3	5.1	5.5
38°	1.8	2.3	3.3	4.3	5.1	5.5
39°	1.6	2.3	3.1	4.3	5.1	5.5
40°	1.4	2.1	3.1	4.1	5.1	5.5
41°	1.4	2.1	3.1	4.1	5.1	5.5
42°	1.2	2.1	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	2.5	3.9	5.1	5.5
55°	0.2	1.4	2.5	3.9	5.1	5.5
56°	0.2	1.2	2.5	3.7	5.1	5.5
57°	0.4	1.2	2.5	3.7	5.1	5.3
58°	0.4	1.2	2.5	3.7	4.9	5.3
59°	0.4	1.2	2.5	3.7	4.9	5.3
60°	0.4	1.2	2.3	3.7	4.9	5.3
62.5°	0.4	1.2	2.3	3.5	4.7	5.1
65°	0.4	1.2	2.1	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	2.1	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	2.5	3.7	3.9
77.5°	0.6	1.0	1.4	2.3	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	2.3	2.5
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)