

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: P1341004

Luminaire Tested: P3A09R259827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341004
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: P3A09R259827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

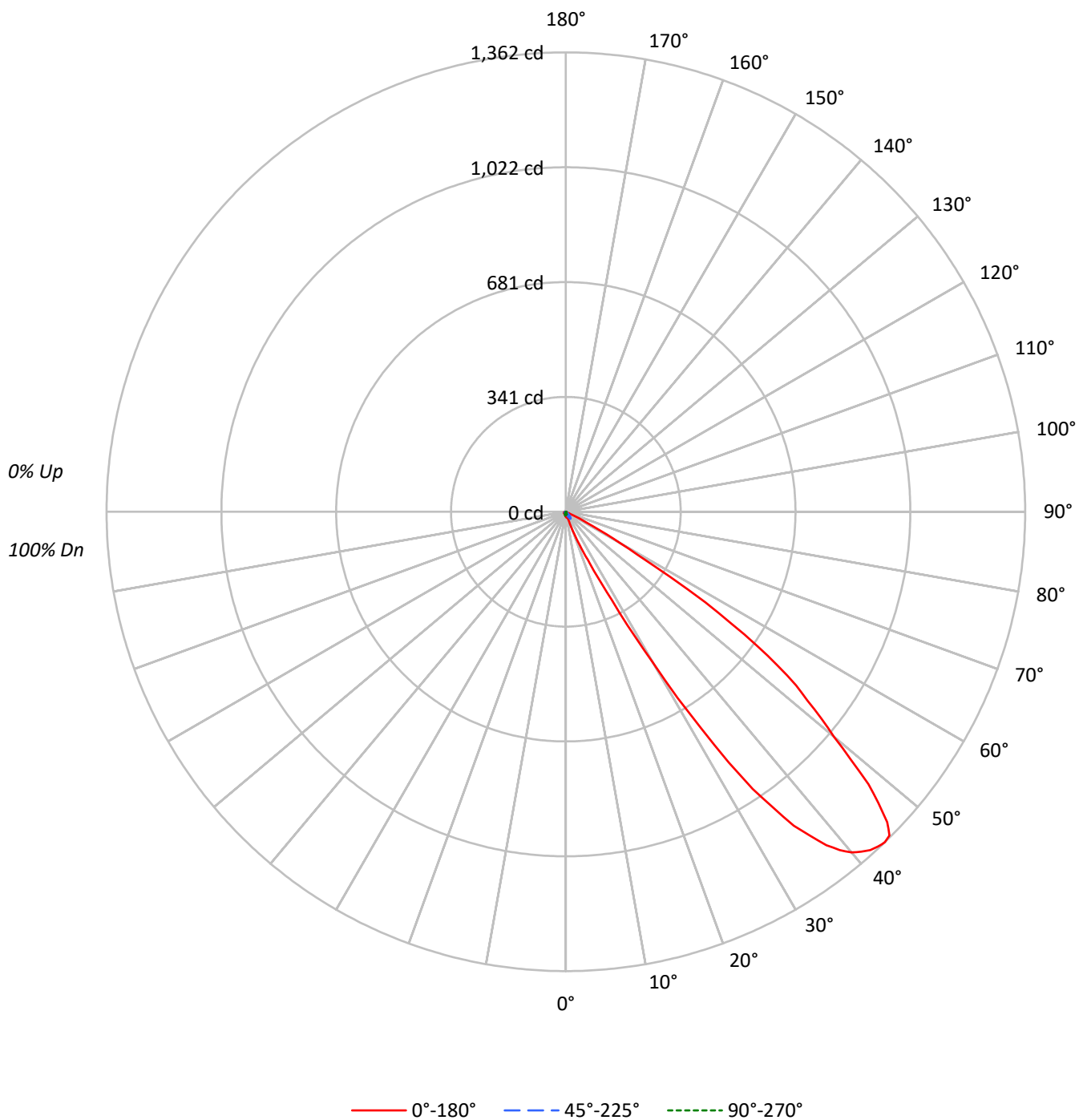
Lumens per Lamp: N/A
Luminaire Lumens: 283.9 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	101	97	100	97	94		96	94	92		92
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82
3	92	81	74	67	89	80	73	67	77	71	66		74	69	65		72
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		48
7	62	48	39	32	60	47	39	32	46	38	32		44	37	32		43
8	57	43	34	27	55	42	33	27	40	33	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3180	3180	3180	3180	3180
5°	3632	3456	3082	2751	2685
10°	3607	3273	2605	2271	2271
15°	4018	2838	2043	1930	2043
20°	14235	2800	1563	1633	1797
25°	40938	3557	1258	1500	1742
30°	130602	5495	1013	1443	1772
35°	286056	6478	857	1392	1794
40°	377364	5868	716	1431	1918
45°	420819	4093	682	1551	2078
50°	354240	2115	682	1603	2286
55°	264860	841	650	1797	2561
60°	81967	219	658	1974	2851
65°	7005	0	778	2075	3113
70°	449	128	769	2372	3526
75°	424	169	1017	2542	3982
80°	253	253	1515	2778	4672
85°	503	503	2516	3019	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 420819 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.5
10°-20°	3.3	1.2
20°-30°	15.7	5.5
30°-40°	75.6	26.6
40°-50°	118.6	41.8
50°-60°	60.8	21.4
60°-70°	5.7	2.0
70°-80°	1.9	0.7
80°-90°	0.9	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°	20.3	7.2
0°-40°	96.0	33.8
0°-60°	275.3	97.0
0°-90°	283.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	283.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	16	16	14	12	12	2
15°	18	12	9	8	9	7
25°	169	15	5	6	7	105
35°	1069	24	3	5	7	649
45°	1357	13	2	5	7	993
55°	693	2	2	5	7	577
65°	14	0	2	4	6	42
75°	0	0	1	3	5	1
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°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.7	15.7	15.7	15.7	15.7	15.7	15.5	15.5	15.7	15.5	15.5
5°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.2	16.2	16.2	15.7
7.5°	16.7	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.2	16.2	15.5
10°	16.2	16.2	16.2	16.2	16.0	16.0	16.0	15.7	15.7	15.7	14.7
12.5°	16.2	16.2	16.2	16.2	16.0	16.0	15.7	15.7	15.5	15.2	13.5
15°	17.7	17.7	17.7	17.5	17.2	17.0	16.7	16.5	16.2	15.7	12.5
17.5°	26.0	25.2	25.0	24.0	22.7	21.5	20.5	19.5	18.5	17.7	12.0
20°	61.0	60.7	59.5	56.5	53.2	49.5	45.7	41.5	35.5	31.5	12.0
22.5°	105.7	104.2	102.0	99.7	94.0	87.2	80.2	72.2	64.5	56.2	12.7
25°	169.2	172.7	165.2	159.2	149.2	137.0	123.7	112.7	98.7	85.7	14.7
27.5°	294.1	296.4	281.7	262.2	238.9	213.2	188.2	169.4	145.9	124.5	18.5
30°	515.8	518.1	493.3	451.8	403.9	361.6	304.4	254.2	207.9	172.2	21.7
31°	643.8	626.3	597.5	557.3	496.6	432.8	364.1	303.4	244.9	197.9	22.7
32°	755.0	753.5	720.0	659.0	598.0	519.3	434.1	354.9	283.2	223.9	23.5
33°	886.2	876.2	829.0	771.5	690.8	611.5	501.6	411.1	322.4	252.9	24.0
34°	991.4	964.4	944.9	879.2	794.0	693.0	575.3	470.6	371.4	280.9	24.2
35°	1068.6	1062.9	1024.9	963.7	876.9	773.7	654.8	532.3	412.4	313.4	24.2
36°	1150.4	1132.6	1095.6	1040.1	955.7	849.0	715.5	585.8	460.1	342.6	24.0
37°	1201.6	1191.1	1154.3	1097.1	1014.4	912.4	783.5	642.3	498.1	371.9	23.5
38°	1254.3	1233.1	1196.8	1142.1	1060.9	965.2	832.7	685.8	533.1	397.6	22.7
39°	1290.8	1268.8	1231.8	1177.3	1097.9	1002.9	871.7	722.7	563.6	416.9	21.7
40°	1318.3	1297.1	1259.6	1203.6	1125.1	1032.6	904.2	755.5	589.0	433.6	20.5
41°	1335.3	1315.5	1278.3	1222.6	1143.9	1049.6	925.4	776.7	606.3	444.8	19.2
42°	1349.5	1329.3	1291.3	1234.3	1155.3	1064.1	938.4	790.2	618.0	450.6	18.2
43°	1357.5	1337.3	1300.3	1242.1	1162.3	1070.9	945.4	796.5	622.0	449.8	16.5
44°	1362.0	1341.0	1303.8	1245.6	1165.3	1072.6	945.9	795.2	619.3	443.8	15.0
45°	1357.0	1336.3	1300.3	1242.1	1160.1	1067.1	940.9	788.5	608.8	432.1	13.2
46°	1324.5	1308.5	1275.6	1222.1	1143.6	1053.1	928.2	775.5	592.5	417.6	11.2
47°	1267.3	1254.6	1222.6	1182.8	1111.9	1027.4	904.7	750.7	569.8	395.9	9.0
48°	1207.6	1188.8	1159.1	1118.4	1058.4	981.2	865.9	714.5	535.3	367.4	8.0
49°	1119.4	1108.4	1082.1	1036.6	986.9	918.9	811.2	668.0	493.1	336.4	7.0
50°	1038.4	1030.9	994.2	960.7	907.9	844.5	737.0	606.8	440.6	297.9	6.2
51°	975.2	966.2	939.7	897.9	841.7	768.0	666.8	527.3	380.4	252.2	5.0
52°	909.2	904.2	880.7	837.7	782.5	709.0	598.5	459.8	321.9	213.2	4.0
53°	855.2	848.0	819.2	781.0	721.2	645.3	524.6	397.1	272.7	179.2	3.5
54°	776.5	773.5	755.0	715.0	650.3	567.6	457.6	334.4	227.4	151.9	3.0
55°	692.8	682.8	664.0	632.3	572.8	495.6	380.1	277.2	183.9	128.0	2.2
56°	590.8	590.3	556.8	530.3	477.6	395.6	303.6	216.4	149.4	106.7	2.0
57°	493.3	477.6	445.3	419.1	362.4	300.1	225.4	162.2	117.0	86.5	1.5
58°	364.9	356.6	348.1	309.6	257.2	212.7	160.9	114.0	86.5	66.0	1.0
59°	247.7	247.4	237.4	208.2	177.9	132.5	100.5	77.5	59.5	48.5	0.7
60°	186.9	182.4	162.4	143.2	112.0	83.7	59.5	45.7	37.0	31.2	0.5
62.5°	65.5	68.0	59.7	49.5	37.7	31.0	23.7	19.2	15.7	12.7	0.0
65°	13.5	14.7	12.7	12.0	9.5	8.2	7.2	6.2	5.2	4.5	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°	1.7	1.5	1.5	1.5	1.2	1.2	1.2	1.2	1.0	1.0	0.2
70°	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.2
72.5°	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	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	0.5
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°	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.2	14.7	14.0	13.7	13.5	13.5
5°	15.0	14.0	13.2	12.5	12.2	12.2
7.5°	14.2	13.0	12.0	11.5	11.2	11.0
10°	13.5	11.7	10.7	10.2	10.2	10.2
12.5°	12.0	10.5	9.5	9.2	9.5	9.5
15°	10.7	9.0	8.5	8.5	8.7	9.0
17.5°	9.2	8.0	7.5	7.7	8.0	8.2
20°	8.2	6.7	6.7	7.0	7.7	7.7
22.5°	7.2	6.0	6.0	6.7	7.2	7.5
25°	6.5	5.2	5.5	6.2	7.0	7.2
27.5°	5.5	4.5	5.0	6.0	6.7	7.0
30°	4.7	4.0	4.7	5.7	6.5	7.0
31°	4.5	3.7	4.7	5.5	6.5	7.0
32°	4.0	3.7	4.5	5.5	6.5	6.7
33°	3.7	3.5	4.5	5.5	6.5	6.7
34°	3.5	3.2	4.2	5.5	6.5	6.7
35°	3.0	3.2	4.2	5.2	6.2	6.7
36°	2.7	3.0	4.2	5.2	6.2	6.7
37°	2.5	3.0	4.0	5.2	6.2	6.7
38°	2.2	2.7	4.0	5.2	6.2	6.7
39°	2.0	2.7	3.7	5.2	6.2	6.7
40°	1.7	2.5	3.7	5.0	6.2	6.7
41°	1.7	2.5	3.7	5.0	6.2	6.7
42°	1.5	2.5	3.7	5.0	6.2	6.7
43°	1.2	2.2	3.7	5.0	6.2	6.7
44°	1.0	2.2	3.5	5.0	6.2	6.7
45°	1.0	2.2	3.5	5.0	6.2	6.7
46°	0.7	2.0	3.5	5.0	6.2	6.7
47°	0.5	2.0	3.5	4.7	6.2	6.7
48°	0.5	2.0	3.5	4.7	6.2	6.7
49°	0.5	2.0	3.2	4.7	6.2	6.7
50°	0.5	2.0	3.2	4.7	6.2	6.7
51°	0.2	1.7	3.2	4.7	6.2	6.7
52°	0.2	1.7	3.2	4.7	6.2	7.0
53°	0.2	1.7	3.2	4.7	6.2	6.7
54°	0.2	1.7	3.0	4.7	6.2	6.7
55°	0.2	1.7	3.0	4.7	6.2	6.7
56°	0.2	1.5	3.0	4.5	6.2	6.7
57°	0.5	1.5	3.0	4.5	6.2	6.5
58°	0.5	1.5	3.0	4.5	6.0	6.5
59°	0.5	1.5	3.0	4.5	6.0	6.5
60°	0.5	1.5	2.7	4.5	6.0	6.5
62.5°	0.5	1.5	2.7	4.2	5.7	6.2
65°	0.5	1.5	2.5	4.0	5.7	6.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.2	2.5	3.7	5.5	5.7
70°	0.7	1.2	2.2	3.7	5.2	5.5
72.5°	0.7	1.2	2.2	3.2	4.7	5.2
75°	0.7	1.2	2.0	3.0	4.5	4.7
77.5°	0.7	1.2	1.7	2.7	4.0	4.2
80°	1.0	1.2	1.5	2.2	3.5	3.7
82.5°	1.0	1.2	1.2	1.7	2.7	3.0
85°	0.7	1.0	1.0	1.2	1.7	2.0
87.5°	0.7	1.0	0.7	0.5	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)