

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: P1343080

Luminaire Tested: P3A09R459835DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R459835DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

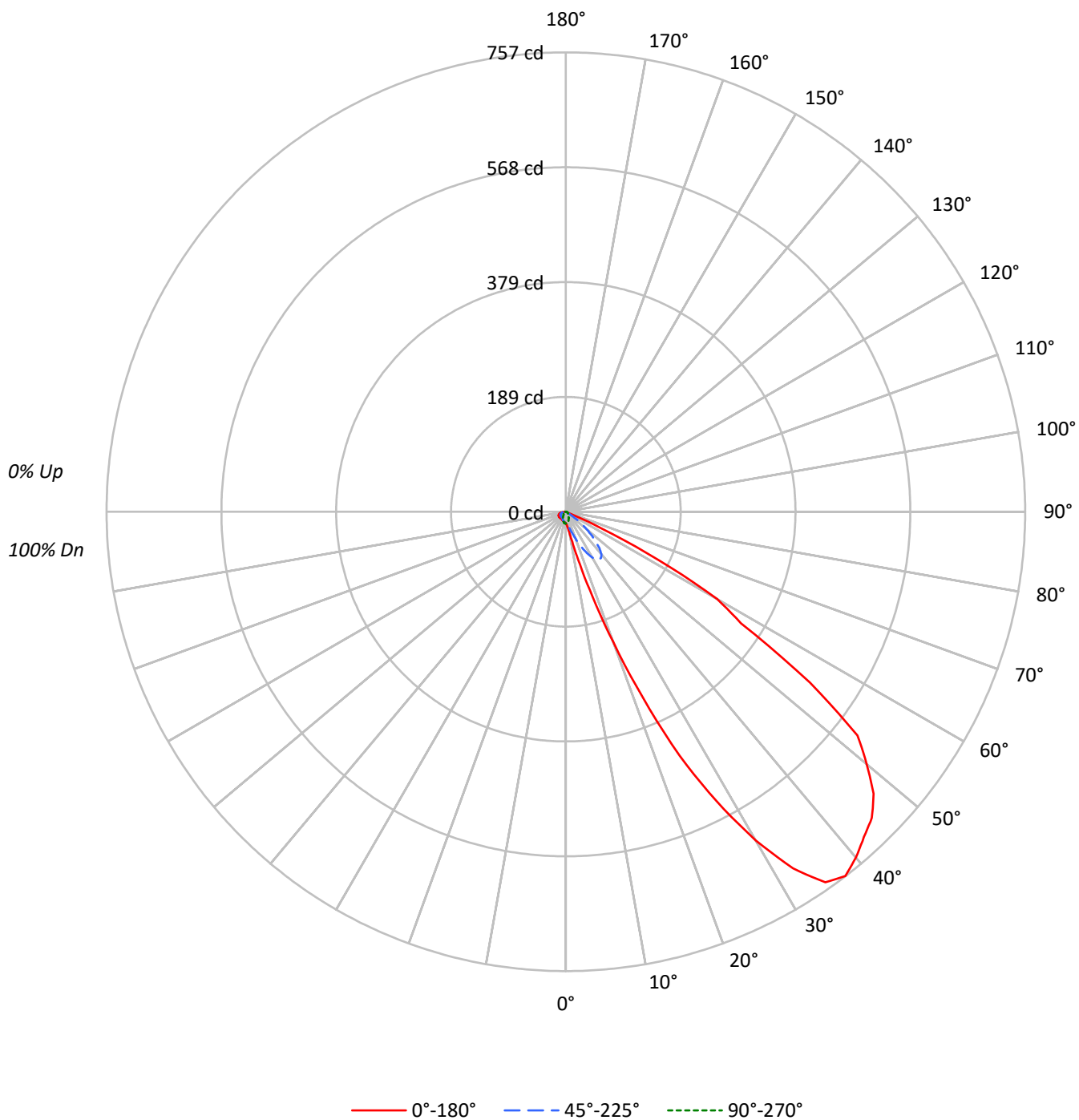
Lumens per Lamp: N/A
Luminaire Lumens: 338.0 lumens
Efficiency: N/A
Efficacy: 30.7 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4276	4276	4276	4276	4276
5°	5107	4733	4248	3940	3940
10°	8149	5544	3986	3741	3741
15°	20295	7423	3610	3496	3610
20°	53438	11084	3127	3314	3524
25°	107305	16428	2710	3097	3436
30°	158202	22003	2203	3038	3545
35°	199538	25806	1874	2998	3667
40°	212885	26049	1689	3120	3922
45°	221201	21739	1551	3380	4249
50°	220854	15147	1535	3616	4776
55°	187711	6729	1606	4052	5238
60°	126174	1360	1579	4517	6008
65°	33467	571	1608	4929	6797
70°	898	705	1603	5386	7694
75°	678	678	1694	5676	8727
80°	758	1010	1768	5935	9850
85°	755	1510	2768	6290	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 226879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.6
10°-20°	9.5	2.8
20°-30°	39.3	11.6
30°-40°	82.9	24.5
40°-50°	102.2	30.2
50°-60°	76.6	22.7
60°-70°	19.7	5.8
70°-80°	4.1	1.2
80°-90°	1.7	0.5
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°	50.8	15.0
0°-40°	133.7	39.5
0°-60°	312.5	92.5
0°-90°	338.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	338.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	23	22	19	18	18	3
15°	89	33	16	15	16	33
25°	444	68	11	13	14	207
35°	745	96	7	11	14	454
45°	713	70	5	11	14	546
55°	491	18	4	11	14	424
65°	64	1	3	10	13	93
75°	1	1	2	7	10	1
85°	0	1	1	2	4	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°	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
2.5°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.4	20.1	19.5	19.0
5°	23.2	22.9	22.9	22.9	22.6	22.3	22.3	21.5	20.4	19.3	18.4
7.5°	27.4	27.4	27.1	26.5	26.3	25.7	25.1	22.9	20.4	18.7	17.6
10°	36.6	36.0	35.2	34.6	33.2	31.3	29.9	24.9	20.1	17.9	17.0
12.5°	54.7	55.9	53.1	50.3	46.4	42.7	38.3	28.2	20.1	17.0	16.2
15°	89.4	91.3	86.0	80.4	70.9	62.0	53.6	32.7	19.5	15.9	15.1
17.5°	146.1	148.6	139.6	126.5	111.7	93.8	78.5	38.8	19.0	14.8	14.2
20°	229.0	228.7	211.4	194.9	166.5	140.2	111.4	47.5	18.2	13.4	13.4
22.5°	330.9	332.1	310.8	281.2	240.7	198.6	152.8	57.5	17.0	12.3	12.6
25°	443.5	434.0	408.9	372.8	321.2	262.8	202.5	67.9	15.9	11.2	11.7
27.5°	537.3	528.1	499.4	456.6	401.0	331.8	253.0	78.2	14.5	10.1	10.9
30°	624.8	613.0	578.4	530.1	463.9	389.0	300.5	86.9	12.8	8.7	10.1
32.5°	696.8	686.2	646.8	590.7	518.6	438.2	340.7	93.6	11.2	7.8	9.5
35°	745.4	734.5	698.2	636.5	558.0	473.9	373.4	96.4	9.8	7.0	9.2
37.5°	756.6	750.7	724.7	666.9	585.1	496.8	394.3	95.5	8.1	6.4	8.7
40°	743.7	745.1	732.8	684.8	599.6	506.6	403.0	91.0	6.7	5.9	8.4
42.5°	727.2	730.9	730.0	692.1	605.8	507.2	399.4	82.1	5.3	5.3	8.1
45°	713.3	716.9	721.9	689.0	601.6	499.9	387.9	70.1	3.9	5.0	8.1
47.5°	687.9	691.8	699.0	664.4	580.3	481.2	367.3	57.0	2.8	4.7	7.8
50°	647.4	649.3	647.4	608.6	539.6	451.0	333.7	44.4	2.0	4.5	7.8
52.5°	605.8	601.9	585.7	536.5	474.8	403.3	291.6	31.6	1.4	4.2	7.5
55°	491.0	484.8	472.8	442.7	407.5	344.6	235.7	17.6	1.4	4.2	7.3
57.5°	342.1	345.5	349.7	343.5	327.3	271.5	179.0	7.8	1.4	3.9	7.3
60°	287.7	284.9	285.1	281.2	254.4	198.0	123.2	3.1	1.4	3.6	7.0
62.5°	171.8	173.7	177.3	178.2	151.6	110.6	64.5	1.4	1.4	3.4	6.7
65°	64.5	67.6	59.2	51.4	40.8	29.9	15.1	1.1	1.7	3.1	6.1
67.5°	2.0	2.2	2.8	2.5	2.5	2.2	1.7	1.1	1.7	2.8	5.9
70°	1.4	1.4	1.4	1.4	1.4	1.1	1.1	1.1	1.4	2.5	5.3
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.4	2.2	4.7
75°	0.8	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.4	2.0	3.9
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.7	3.4
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	1.1	1.4	2.8
82.5°	0.6	0.6	0.6	0.3	0.6	0.6	0.6	0.6	1.1	1.1	2.2
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.8	1.1	1.4
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.6	0.8	0.8	0.8
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°	19.5	19.5	19.5
2.5°	18.4	18.4	18.4
5°	17.9	17.9	17.9
7.5°	17.3	17.3	17.3
10°	16.8	16.8	16.8
12.5°	16.2	16.2	16.5
15°	15.4	15.9	15.9
17.5°	14.8	15.4	15.6
20°	14.2	14.8	15.1
22.5°	13.4	14.2	14.8
25°	12.8	14.0	14.2
27.5°	12.3	13.7	14.2
30°	12.0	13.4	14.0
32.5°	11.5	13.1	13.7
35°	11.2	13.1	13.7
37.5°	11.2	12.8	13.7
40°	10.9	12.8	13.7
42.5°	10.9	12.8	13.7
45°	10.9	12.8	13.7
47.5°	10.6	12.8	14.0
50°	10.6	13.1	14.0
52.5°	10.6	13.1	14.0
55°	10.6	13.1	13.7
57.5°	10.3	12.8	13.7
60°	10.3	12.8	13.7
62.5°	9.8	12.6	13.4
65°	9.5	12.3	13.1
67.5°	8.9	12.0	12.6
70°	8.4	11.2	12.0
72.5°	7.5	10.6	11.5
75°	6.7	9.8	10.3
77.5°	5.9	8.7	9.2
80°	4.7	7.3	7.8
82.5°	3.6	5.6	5.9
85°	2.5	3.6	3.9
87.5°	1.1	1.7	2.0
90°	0.0	0.0	0.0

(END OF REPORT)