

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: P1334980

Luminaire Tested: P3A02R309030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R309030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R30 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

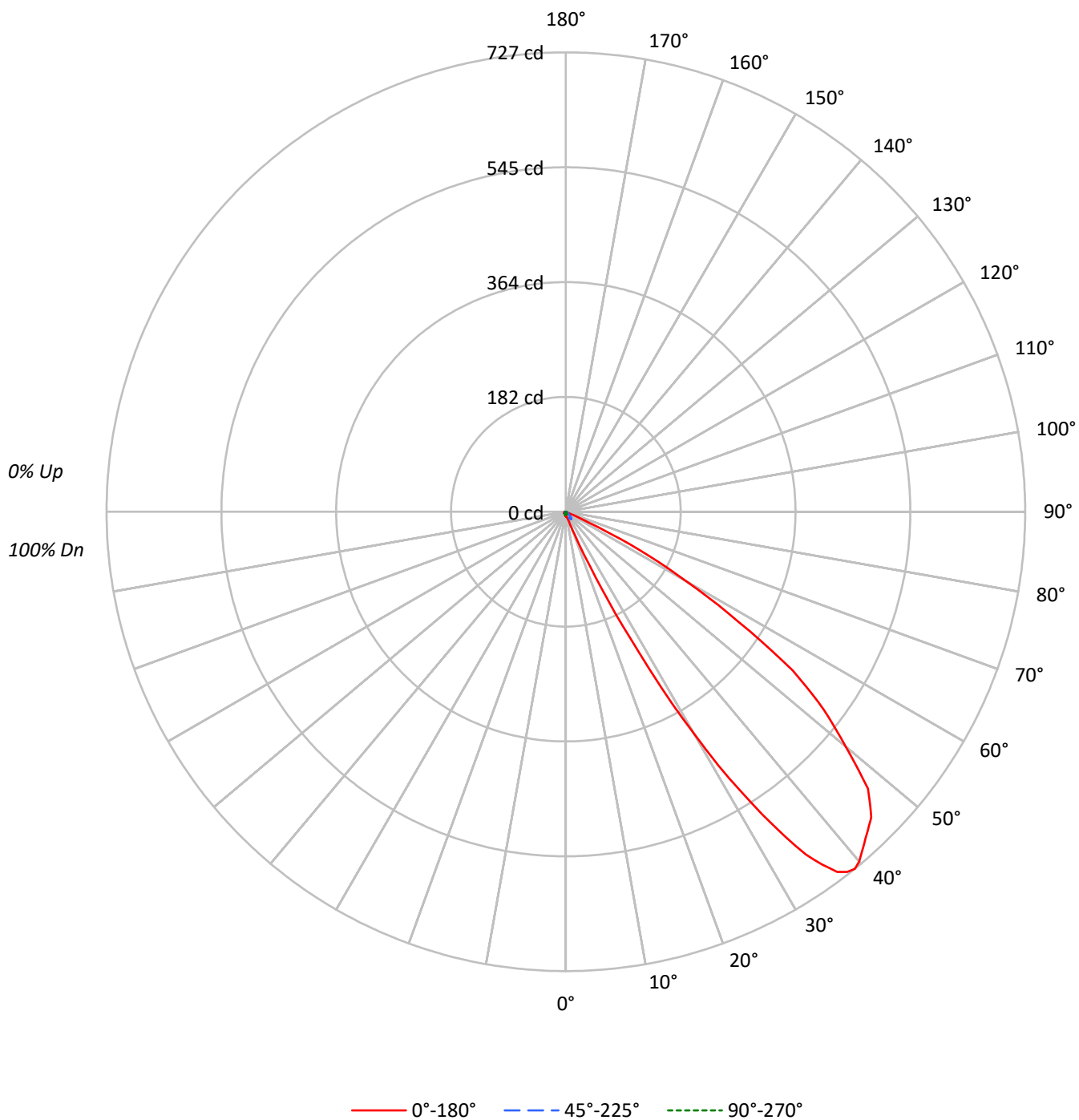
Lumens per Lamp: N/A
Luminaire Lumens: 189.0 lumens
Efficiency: N/A
Efficacy: 26.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
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	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1601	1601	1601	1601	1601
5°	1717	1673	1585	1431	1409
10°	1870	1670	1381	1247	1202
15°	2747	1657	1158	1044	1090
20°	6907	1820	887	887	1003
25°	32082	2274	702	798	919
30°	102142	3140	532	760	937
35°	177239	3828	428	723	937
40°	206730	3836	315	716	945
45°	211991	2729	341	775	1023
50°	197145	1535	273	819	1194
55°	167564	803	306	918	1338
60°	96790	219	351	965	1447
65°	19769	0	415	1141	1660
70°	321	128	513	1346	1923
75°	254	169	508	1356	2288
80°	253	253	758	1642	2652
85°	0	503	1510	1510	3271

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 211991 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.3
10°-20°	1.9	1.0
20°-30°	10.9	5.8
30°-40°	50.9	26.9
40°-50°	72.0	38.1
50°-60°	44.3	23.4
60°-70°	6.7	3.6
70°-80°	1.1	0.6
80°-90°	0.5	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°	13.5	7.1
0°-40°	64.4	34.1
0°-60°	180.7	95.6
0°-90°	189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	189.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7	7	7	7	7	
5°	8	8	7	6	6	1
15°	12	7	5	5	5	4
25°	133	9	3	3	4	82
35°	662	14	2	3	4	397
45°	684	9	1	2	3	518
55°	438	2	1	2	4	373
65°	38	0	1	2	3	69
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°	22.5°	45°	67.5°	90°	112.5°	135°
0°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
2.5°	7.5	7.5	7.6	7.6	7.5	7.6	7.6	7.6	7.3	7.2	6.8
5°	7.8	7.8	7.8	8.0	7.8	7.8	7.6	7.5	7.2	6.7	6.5
7.5°	8.1	8.1	8.0	8.1	8.0	8.0	7.6	7.3	6.8	6.4	6.0
10°	8.4	8.4	8.3	8.3	8.1	8.1	7.5	7.0	6.2	5.7	5.6
12.5°	9.4	9.4	9.2	9.1	8.8	8.6	7.3	6.5	5.6	5.1	4.9
15°	12.1	11.9	11.6	11.1	10.3	10.2	7.3	6.0	5.1	4.6	4.6
17.5°	16.6	16.4	15.9	14.6	13.2	12.7	7.3	5.4	4.5	4.1	4.1
20°	29.6	28.3	26.0	22.8	19.4	17.7	7.8	4.8	3.8	3.7	3.8
21°	38.7	37.4	34.4	29.1	23.2	21.3	8.1	4.6	3.7	3.5	3.8
22°	52.7	51.3	45.1	37.9	29.5	26.1	8.3	4.3	3.3	3.3	3.7
23°	73.6	71.2	60.7	49.2	36.8	32.0	8.6	4.1	3.2	3.3	3.5
24°	96.3	94.2	82.3	65.1	47.0	40.1	8.9	4.0	3.0	3.0	3.3
25°	132.6	130.2	109.1	82.2	59.5	48.2	9.4	3.7	2.9	2.9	3.3
26°	179.6	168.6	140.4	105.9	73.4	60.5	9.9	3.5	2.7	2.9	3.2
27°	224.2	215.1	183.4	135.8	90.7	74.3	10.5	3.3	2.5	2.7	3.2
28°	282.7	270.0	230.1	171.8	114.3	90.0	11.1	3.2	2.4	2.7	3.0
29°	348.3	330.5	282.3	212.2	140.9	107.5	11.8	3.0	2.2	2.5	3.0
30°	403.4	386.7	338.5	260.1	171.5	130.5	12.4	2.9	2.1	2.5	3.0
31°	468.1	442.8	384.3	300.7	197.7	153.6	13.1	2.5	1.9	2.4	2.9
32°	520.4	502.8	440.7	346.6	232.3	179.1	13.5	2.4	1.9	2.4	2.9
33°	571.1	547.3	487.3	390.5	263.5	205.2	14.0	2.2	1.8	2.2	2.9
34°	619.5	597.7	531.4	426.0	292.9	230.1	14.3	1.9	1.8	2.2	2.7
35°	662.1	636.8	570.3	460.7	323.2	252.7	14.3	1.8	1.6	2.1	2.7
36°	689.8	671.7	604.0	495.0	350.6	274.2	14.3	1.6	1.4	2.1	2.5
37°	713.6	692.4	631.1	521.2	370.8	291.3	14.3	1.4	1.4	2.1	2.5
38°	723.3	705.1	649.7	544.5	389.7	308.9	14.2	1.3	1.3	1.9	2.5
39°	727.1	710.9	663.7	561.2	403.7	320.6	13.9	1.1	1.3	1.9	2.5
40°	722.2	709.9	670.9	572.0	414.9	329.2	13.4	1.0	1.1	1.9	2.5
42.5°	701.8	693.7	669.3	582.9	424.4	335.6	11.6	0.6	1.1	1.8	2.5
45°	683.6	674.7	653.2	571.5	412.0	323.0	8.8	0.3	1.1	1.8	2.5
47.5°	648.4	642.9	626.0	542.7	384.8	294.7	6.2	0.2	1.0	1.6	2.4
50°	577.9	572.7	550.4	471.2	331.0	249.2	4.5	0.2	0.8	1.6	2.4
52.5°	514.7	509.1	477.1	391.8	254.3	182.6	2.9	0.2	0.8	1.6	2.4
55°	438.3	428.6	386.6	297.4	180.2	122.4	2.1	0.2	0.8	1.4	2.4
57.5°	324.5	310.3	272.7	202.8	103.8	66.4	1.1	0.2	0.8	1.4	2.4
60°	220.7	212.2	170.7	107.0	44.3	28.0	0.5	0.2	0.8	1.4	2.2
62.5°	133.7	123.1	85.8	45.5	19.1	12.7	0.0	0.3	0.8	1.4	2.2
65°	38.1	33.8	22.4	10.3	5.4	4.1	0.0	0.3	0.8	1.4	2.2
67.5°	1.3	1.3	1.3	1.1	0.8	0.8	0.2	0.3	0.8	1.4	2.1
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.8	1.3	2.1
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.6	1.1	1.9
75°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.6	1.1	1.6
77.5°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.6	1.0	1.6
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	1.0	1.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.5	0.6	0.6	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	0.5	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.3
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):

	157.5°	180°
0°	7.3	7.3
2.5°	6.8	6.8
5°	6.4	6.4
7.5°	5.9	5.9
10°	5.4	5.4
12.5°	5.1	5.1
15°	4.6	4.8
17.5°	4.3	4.5
20°	4.1	4.3
21°	4.1	4.3
22°	4.0	4.1
23°	4.0	4.1
24°	3.8	4.0
25°	3.7	3.8
26°	3.7	3.8
27°	3.7	3.8
28°	3.5	3.8
29°	3.5	3.7
30°	3.5	3.7
31°	3.3	3.7
32°	3.3	3.7
33°	3.3	3.5
34°	3.2	3.5
35°	3.2	3.5
36°	3.2	3.5
37°	3.2	3.3
38°	3.2	3.5
39°	3.2	3.3
40°	3.2	3.3
42.5°	3.2	3.3
45°	3.2	3.3
47.5°	3.2	3.5
50°	3.2	3.5
52.5°	3.2	3.5
55°	3.2	3.5
57.5°	3.2	3.3
60°	3.2	3.3
62.5°	3.0	3.3
65°	3.0	3.2
67.5°	3.0	3.2
70°	2.9	3.0
72.5°	2.7	2.9
75°	2.4	2.7
77.5°	2.2	2.4
80°	1.9	2.1

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.6	1.6
85°	1.1	1.3
87.5°	0.6	0.6
90°	0.0	0.0

(END OF REPORT)