

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: P1334684

Luminaire Tested: P3A02R259035DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334684
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: P3A02R259035DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

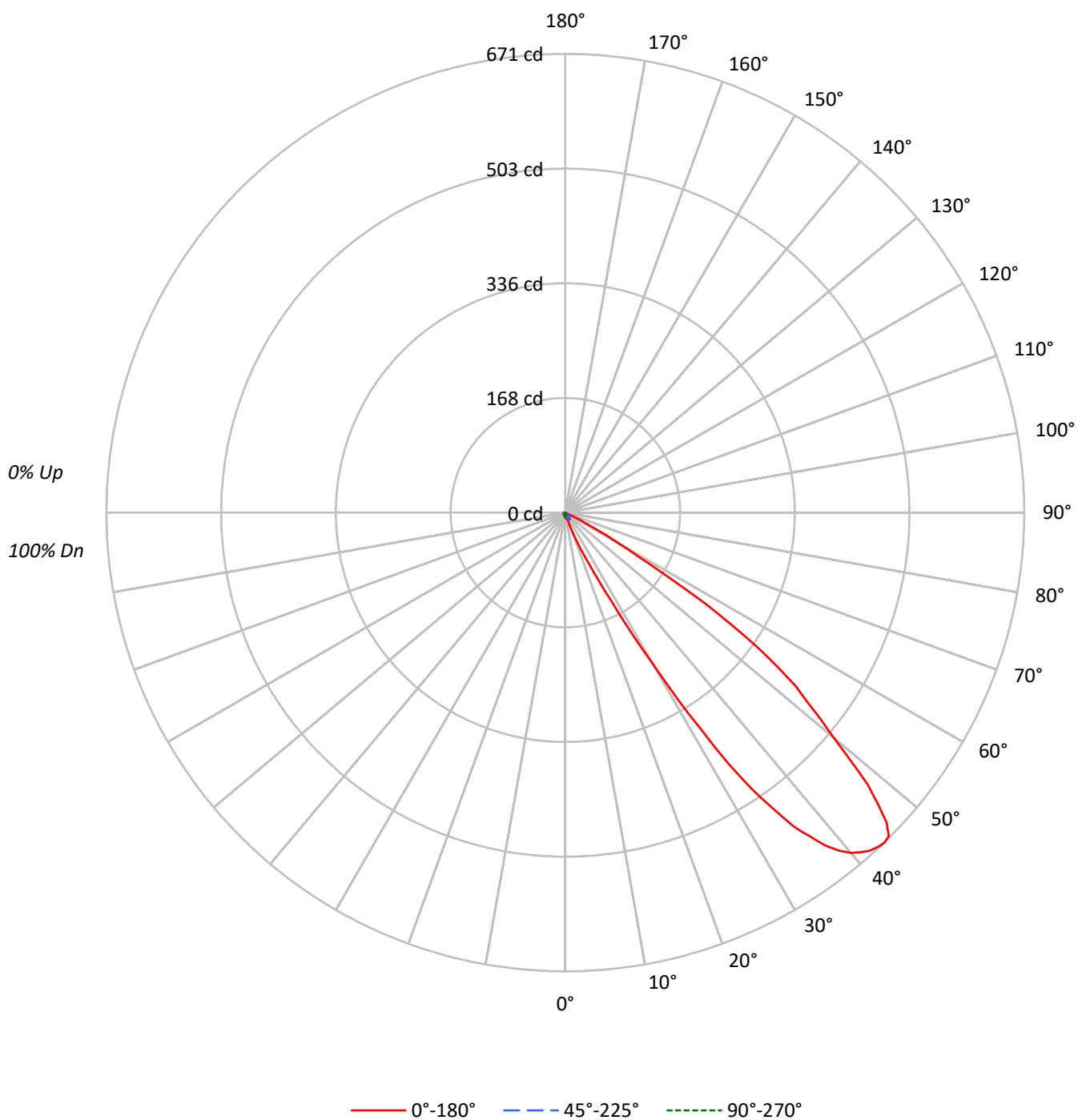
Lumens per Lamp: N/A
Luminaire Lumens: 140.0 lumens
Efficiency: N/A
Efficacy: 38.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	1557	1557	1557	1557	1557
5°	1783	1717	1519	1365	1321
10°	1781	1625	1291	1136	1136
15°	1975	1407	999	953	999
20°	7024	1377	770	793	887
25°	20179	1766	629	750	871
30°	64390	2709	506	709	861
35°	141020	3212	428	696	883
40°	186034	2891	344	716	945
45°	207463	2016	341	775	1023
50°	174630	1058	341	785	1126
55°	130557	421	344	879	1262
60°	40435	88	307	965	1403
65°	3476	0	363	1038	1557
70°	256	64	385	1154	1731
75°	169	85	508	1271	1949
80°	126	126	758	1389	2273
85°	252	252	1258	1510	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 207463 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.5
10°-20°	1.7	1.2
20°-30°	7.7	5.5
30°-40°	37.3	26.6
40°-50°	58.4	41.8
50°-60°	30.0	21.4
60°-70°	2.8	2.0
70°-80°	0.9	0.7
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°	10.0	7.2
0°-40°	47.3	33.8
0°-60°	135.7	97.0
0°-90°	140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	140.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7	7	7	7	7	
5°	8	8	7	6	6	1
15°	9	6	4	4	4	4
25°	83	7	3	3	4	52
35°	527	12	2	3	3	320
45°	669	6	1	2	3	489
55°	342	1	1	2	3	284
65°	7	0	1	2	3	21
75°	0	0	1	2	2	0
85°	0	0	0	1	1	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°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
2.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.8	7.6	7.6
5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0	7.8
7.5°	8.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.0	7.6
10°	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.3
12.5°	8.0	8.0	8.0	8.0	7.9	7.9	7.8	7.8	7.6	7.5	6.7
15°	8.7	8.7	8.7	8.6	8.5	8.4	8.3	8.1	8.0	7.8	6.2
17.5°	12.8	12.4	12.3	11.8	11.2	10.6	10.1	9.6	9.1	8.7	5.9
20°	30.1	29.9	29.3	27.8	26.2	24.4	22.5	20.5	17.5	15.5	5.9
22.5°	52.1	51.4	50.3	49.2	46.3	43.0	39.5	35.6	31.8	27.7	6.3
25°	83.4	85.1	81.4	78.5	73.5	67.5	61.0	55.6	48.7	42.3	7.3
27.5°	145.0	146.1	138.8	129.2	117.8	105.1	92.8	83.5	71.9	61.4	9.1
30°	254.3	255.4	243.2	222.7	199.1	178.3	150.1	125.3	102.5	84.9	10.7
31°	317.4	308.7	294.6	274.7	244.8	213.4	179.5	149.6	120.7	97.6	11.2
32°	372.2	371.4	354.9	324.9	294.8	256.0	214.0	174.9	139.6	110.4	11.6
33°	436.9	431.9	408.6	380.3	340.5	301.5	247.3	202.7	158.9	124.7	11.8
34°	488.7	475.4	465.8	433.4	391.4	341.6	283.6	232.0	183.1	138.5	12.0
35°	526.8	524.0	505.2	475.0	432.3	381.4	322.8	262.4	203.3	154.5	12.0
36°	567.1	558.3	540.1	512.7	471.1	418.5	352.7	288.8	226.8	168.9	11.8
37°	592.3	587.2	569.0	540.8	500.1	449.8	386.2	316.6	245.5	183.3	11.6
38°	618.3	607.9	590.0	563.0	523.0	475.8	410.5	338.1	262.8	196.0	11.2
39°	636.3	625.5	607.2	580.4	541.2	494.4	429.7	356.3	277.8	205.5	10.7
40°	649.9	639.4	620.9	593.3	554.6	509.0	445.7	372.4	290.4	213.7	10.1
41°	658.2	648.5	630.2	602.7	563.9	517.4	456.2	382.9	298.9	219.3	9.5
42°	665.3	655.3	636.6	608.5	569.5	524.6	462.6	389.5	304.7	222.1	9.0
43°	669.2	659.2	641.0	612.3	573.0	527.9	466.1	392.6	306.6	221.8	8.1
44°	671.4	661.1	642.7	614.0	574.5	528.8	466.3	392.0	305.3	218.8	7.4
45°	669.0	658.7	641.0	612.3	571.9	526.0	463.8	388.7	300.1	213.0	6.5
46°	652.9	645.1	628.8	602.4	563.7	519.2	457.6	382.3	292.1	205.9	5.5
47°	624.7	618.4	602.7	583.1	548.1	506.5	446.0	370.1	280.9	195.1	4.4
48°	595.3	586.0	571.4	551.3	521.7	483.7	426.9	352.2	263.9	181.1	3.9
49°	551.8	546.4	533.4	511.0	486.5	453.0	399.9	329.3	243.1	165.8	3.4
50°	511.9	508.2	490.1	473.6	447.6	416.3	363.3	299.1	217.2	146.9	3.1
51°	480.7	476.3	463.2	442.6	414.9	378.6	328.7	259.9	187.5	124.3	2.5
52°	448.2	445.7	434.1	413.0	385.7	349.5	295.1	226.7	158.7	105.1	2.0
53°	421.6	418.0	403.8	385.0	355.5	318.1	258.6	195.8	134.4	88.3	1.7
54°	382.8	381.3	372.2	352.5	320.6	279.8	225.6	164.8	112.1	74.9	1.5
55°	341.5	336.6	327.3	311.7	282.4	244.3	187.4	136.6	90.7	63.1	1.1
56°	291.2	291.0	274.5	261.4	235.4	195.0	149.7	106.7	73.7	52.6	1.0
57°	243.2	235.4	219.5	206.6	178.6	148.0	111.1	80.0	57.7	42.6	0.7
58°	179.9	175.8	171.6	152.6	126.8	104.8	79.3	56.2	42.6	32.5	0.5
59°	122.1	122.0	117.0	102.6	87.7	65.3	49.5	38.2	29.3	23.9	0.4
60°	92.2	89.9	80.1	70.6	55.2	41.3	29.3	22.5	18.2	15.4	0.2
62.5°	32.3	33.5	29.4	24.4	18.6	15.3	11.7	9.5	7.8	6.3	0.0
65°	6.7	7.3	6.3	5.9	4.7	4.1	3.6	3.1	2.6	2.2	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°	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.1
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.1
72.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
75°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
85°	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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°	7.1	7.1	7.1	7.1	7.1	7.1
2.5°	7.5	7.3	6.9	6.8	6.7	6.7
5°	7.4	6.9	6.5	6.2	6.0	6.0
7.5°	7.0	6.4	5.9	5.7	5.5	5.4
10°	6.7	5.8	5.3	5.1	5.1	5.1
12.5°	5.9	5.2	4.7	4.6	4.7	4.7
15°	5.3	4.4	4.2	4.2	4.3	4.4
17.5°	4.6	3.9	3.7	3.8	3.9	4.1
20°	4.1	3.3	3.3	3.4	3.8	3.8
22.5°	3.6	3.0	3.0	3.3	3.6	3.7
25°	3.2	2.6	2.7	3.1	3.4	3.6
27.5°	2.7	2.2	2.5	3.0	3.3	3.4
30°	2.3	2.0	2.3	2.8	3.2	3.4
31°	2.2	1.8	2.3	2.7	3.2	3.4
32°	2.0	1.8	2.2	2.7	3.2	3.3
33°	1.8	1.7	2.2	2.7	3.2	3.3
34°	1.7	1.6	2.1	2.7	3.2	3.3
35°	1.5	1.6	2.1	2.6	3.1	3.3
36°	1.4	1.5	2.1	2.6	3.1	3.3
37°	1.2	1.5	2.0	2.6	3.1	3.3
38°	1.1	1.4	2.0	2.6	3.1	3.3
39°	1.0	1.4	1.8	2.6	3.1	3.3
40°	0.9	1.2	1.8	2.5	3.1	3.3
41°	0.9	1.2	1.8	2.5	3.1	3.3
42°	0.7	1.2	1.8	2.5	3.1	3.3
43°	0.6	1.1	1.8	2.5	3.1	3.3
44°	0.5	1.1	1.7	2.5	3.1	3.3
45°	0.5	1.1	1.7	2.5	3.1	3.3
46°	0.4	1.0	1.7	2.5	3.1	3.3
47°	0.2	1.0	1.7	2.3	3.1	3.3
48°	0.2	1.0	1.7	2.3	3.1	3.3
49°	0.2	1.0	1.6	2.3	3.1	3.3
50°	0.2	1.0	1.6	2.3	3.1	3.3
51°	0.1	0.9	1.6	2.3	3.1	3.3
52°	0.1	0.9	1.6	2.3	3.1	3.4
53°	0.1	0.9	1.6	2.3	3.1	3.3
54°	0.1	0.9	1.5	2.3	3.1	3.3
55°	0.1	0.9	1.5	2.3	3.1	3.3
56°	0.1	0.7	1.5	2.2	3.1	3.3
57°	0.2	0.7	1.5	2.2	3.1	3.2
58°	0.2	0.7	1.5	2.2	3.0	3.2
59°	0.2	0.7	1.5	2.2	3.0	3.2
60°	0.2	0.7	1.4	2.2	3.0	3.2
62.5°	0.2	0.7	1.4	2.1	2.8	3.1
65°	0.2	0.7	1.2	2.0	2.8	3.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.2	1.8	2.7	2.8
70°	0.4	0.6	1.1	1.8	2.6	2.7
72.5°	0.4	0.6	1.1	1.6	2.3	2.6
75°	0.4	0.6	1.0	1.5	2.2	2.3
77.5°	0.4	0.6	0.9	1.4	2.0	2.1
80°	0.5	0.6	0.7	1.1	1.7	1.8
82.5°	0.5	0.6	0.6	0.9	1.4	1.5
85°	0.4	0.5	0.5	0.6	0.9	1.0
87.5°	0.4	0.5	0.4	0.2	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)