

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: P1335348

Luminaire Tested: P3A02R359035DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335348
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359035DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

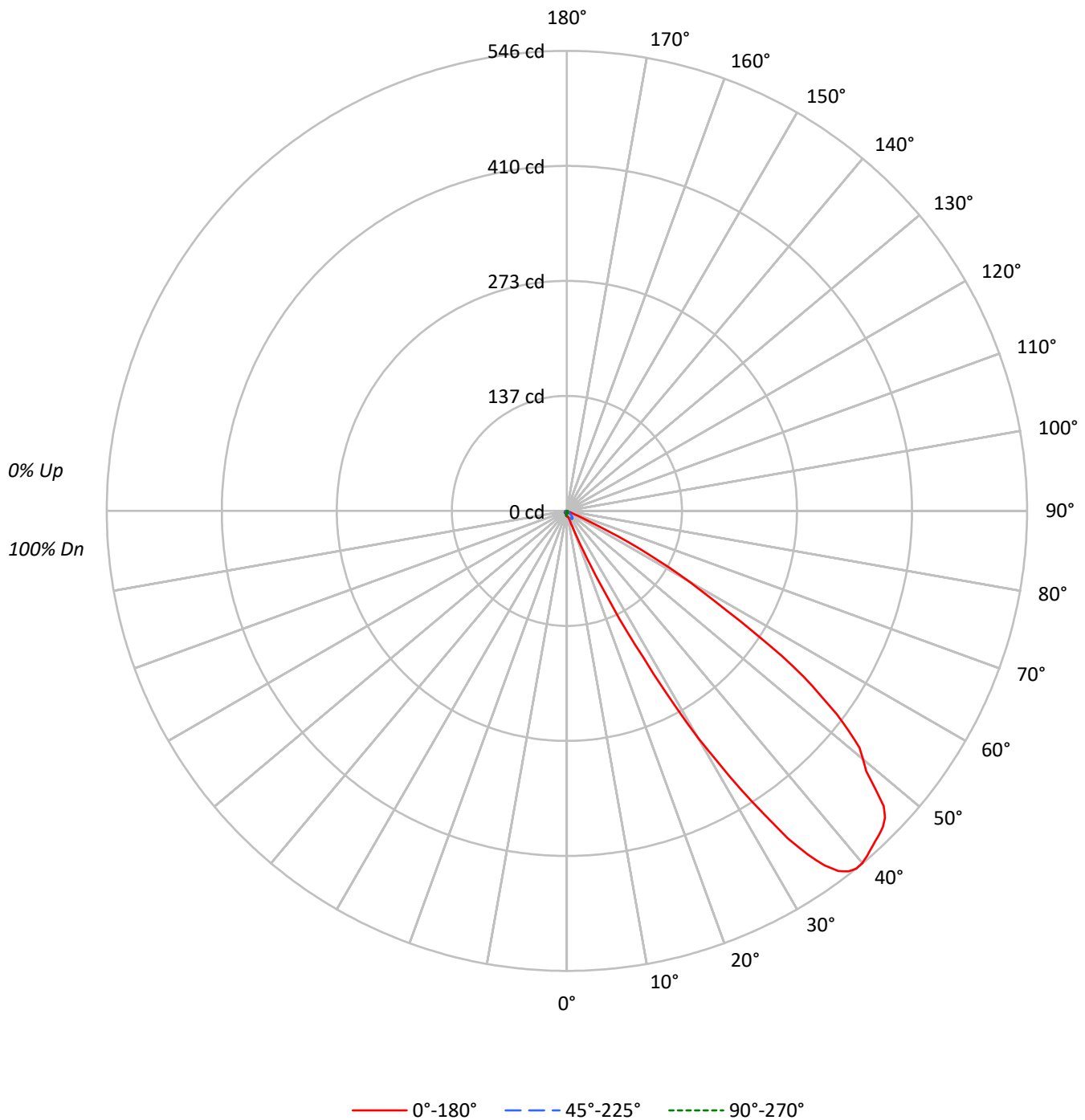
Lumens per Lamp: N/A
Luminaire Lumens: 136.0 lumens
Efficiency: N/A
Efficacy: 37.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1381	1381	1381	1381	1381
5°	1497	1453	1343	1211	1189
10°	1559	1425	1202	1047	1047
15°	2225	1385	976	885	931
20°	5577	1493	770	770	863
25°	25937	1911	605	702	798
30°	78822	2583	456	658	810
35°	133230	2998	402	616	776
40°	156178	2948	315	630	830
45°	164482	2109	279	682	899
50°	156549	1262	239	716	989
55°	131169	535	268	803	1185
60°	73459	88	307	921	1272
65°	12660	52	311	1038	1453
70°	256	64	385	1090	1667
75°	169	85	508	1271	1864
80°	126	126	631	1389	2147
85°	0	252	1258	1510	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 165630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.4
10°-20°	1.6	1.2
20°-30°	8.3	6.1
30°-40°	36.0	26.5
40°-50°	51.4	37.8
50°-60°	31.8	23.4
60°-70°	4.8	3.6
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°	10.5	7.7
0°-40°	46.5	34.2
0°-60°	129.8	95.4
0°-90°	136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	136.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	6	5	1
15°	10	6	4	4	4	4
25°	107	8	2	3	3	64
35°	498	11	2	2	3	299
45°	530	7	1	2	3	401
55°	343	1	1	2	3	292
65°	24	0	1	2	3	50
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°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
2.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.1
5°	6.8	6.8	6.6	6.6	6.6	6.6	6.6	6.6	6.4	6.1	5.8
7.5°	6.9	6.9	6.8	6.8	6.8	6.8	6.6	6.5	6.3	5.8	5.4
10°	7.0	7.0	7.0	7.0	6.9	6.8	6.6	6.4	6.0	5.4	5.0
12.5°	7.9	7.9	7.7	7.5	7.2	7.0	6.8	6.3	5.5	4.9	4.5
15°	9.8	9.7	9.5	9.1	8.6	8.0	7.5	6.1	5.0	4.3	4.1
17.5°	13.8	13.5	13.1	11.9	10.8	9.7	8.7	6.1	4.5	3.8	3.6
20°	23.9	24.1	21.5	18.5	16.1	13.4	10.9	6.4	4.1	3.3	3.2
22.5°	50.0	48.0	41.9	34.7	26.5	20.5	15.5	7.0	3.6	2.8	2.8
25°	107.2	99.7	84.8	64.1	45.2	32.0	22.5	7.9	3.2	2.5	2.6
27.5°	195.7	188.9	159.1	119.8	79.6	48.4	30.4	9.0	2.8	2.1	2.3
30°	311.3	292.7	253.8	196.4	133.0	74.0	40.9	10.2	2.3	1.8	2.2
31°	347.4	338.8	291.5	227.2	155.8	87.9	45.3	10.6	2.2	1.8	2.1
32°	390.3	375.1	332.6	261.0	179.0	100.3	50.6	10.9	2.1	1.6	2.1
33°	428.6	413.9	362.2	290.7	202.4	114.4	56.2	11.0	1.8	1.6	2.0
34°	468.9	448.7	397.5	321.8	226.5	129.6	61.4	11.2	1.7	1.5	2.0
35°	497.7	477.6	428.0	346.3	247.3	143.1	67.3	11.2	1.6	1.5	1.8
36°	520.0	502.4	454.2	371.6	267.9	155.3	71.9	11.2	1.4	1.4	1.8
37°	535.4	518.6	471.9	393.4	283.6	166.1	76.1	11.2	1.2	1.4	1.8
38°	542.9	528.9	489.0	409.2	298.8	174.6	79.4	10.9	1.1	1.2	1.7
39°	546.1	534.7	499.4	422.6	310.2	181.9	81.9	10.7	1.0	1.2	1.7
40°	545.6	535.6	505.3	431.8	319.4	187.0	83.2	10.3	0.9	1.1	1.7
41°	542.8	534.2	508.4	439.6	325.0	190.4	83.6	9.9	0.7	1.1	1.6
42°	539.6	531.7	509.4	443.8	328.5	191.5	82.6	9.5	0.7	1.0	1.6
43°	536.3	529.0	509.4	445.2	329.4	190.8	81.0	8.6	0.6	1.0	1.6
44°	533.6	526.7	507.8	444.8	327.5	188.0	78.1	7.6	0.5	1.0	1.6
45°	530.4	523.6	505.7	442.5	324.0	183.2	74.4	6.8	0.4	0.9	1.6
46°	524.7	519.4	502.0	437.7	318.3	176.5	69.7	6.1	0.2	0.9	1.5
47°	513.8	509.2	494.9	430.6	310.9	168.7	64.9	5.5	0.2	0.9	1.5
48°	491.8	491.7	480.6	417.3	298.9	158.9	59.9	4.9	0.2	0.9	1.5
49°	470.6	468.4	454.6	394.0	281.9	147.1	54.6	4.4	0.1	0.9	1.5
50°	458.9	454.1	431.5	366.5	260.0	130.7	49.0	3.7	0.1	0.7	1.5
51°	446.8	439.9	413.2	341.7	234.0	115.0	42.8	2.9	0.1	0.7	1.4
52°	424.8	418.3	388.4	318.0	208.7	99.0	37.0	2.5	0.1	0.7	1.5
53°	401.1	391.8	359.3	291.9	186.5	84.7	30.9	2.1	0.1	0.7	1.4
54°	371.3	367.1	329.9	260.0	160.5	71.0	25.4	1.7	0.1	0.7	1.4
55°	343.1	337.0	298.3	227.4	136.9	58.2	21.2	1.4	0.1	0.7	1.4
56°	307.3	298.1	261.9	197.4	112.9	46.9	17.9	1.1	0.1	0.7	1.4
57°	264.6	254.7	226.1	164.1	88.6	35.7	15.0	0.9	0.1	0.7	1.4
58°	223.8	215.3	184.6	126.7	66.8	24.8	12.4	0.6	0.1	0.6	1.4
59°	193.4	184.0	153.6	97.5	46.4	18.3	9.3	0.5	0.1	0.7	1.4
60°	167.5	155.4	123.6	75.5	33.1	13.1	6.9	0.2	0.2	0.7	1.4
62.5°	96.5	85.2	59.1	30.7	13.6	6.8	3.3	0.1	0.2	0.7	1.4
65°	24.4	21.7	14.1	6.6	3.8	2.3	1.2	0.1	0.2	0.6	1.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.9	0.9	0.9	0.7	0.6	0.5	0.2	0.1	0.2	0.6	1.2
70°	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.2	0.6	1.1
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.6	1.0
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.6	1.0
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.9
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.7
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.4
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°	6.3	6.3	6.3
2.5°	5.9	5.9	5.9
5°	5.5	5.5	5.4
7.5°	5.2	5.0	5.0
10°	4.7	4.7	4.7
12.5°	4.3	4.3	4.3
15°	3.9	4.1	4.1
17.5°	3.6	3.8	3.8
20°	3.3	3.6	3.7
22.5°	3.1	3.3	3.4
25°	2.9	3.2	3.3
27.5°	2.7	3.1	3.3
30°	2.6	2.9	3.2
31°	2.6	2.9	3.1
32°	2.5	2.9	3.1
33°	2.5	2.9	3.1
34°	2.5	2.8	3.1
35°	2.3	2.8	2.9
36°	2.3	2.8	2.9
37°	2.3	2.8	3.1
38°	2.3	2.8	2.9
39°	2.2	2.8	2.9
40°	2.2	2.8	2.9
41°	2.2	2.8	2.9
42°	2.2	2.8	2.9
43°	2.2	2.8	2.9
44°	2.2	2.7	2.9
45°	2.2	2.7	2.9
46°	2.2	2.8	2.9
47°	2.2	2.8	3.1
48°	2.2	2.7	2.9
49°	2.1	2.7	2.9
50°	2.1	2.7	2.9
51°	2.1	2.8	3.1
52°	2.1	2.8	3.1
53°	2.1	2.8	3.1
54°	2.1	2.8	2.9
55°	2.1	2.8	3.1
56°	2.1	2.8	2.9
57°	2.1	2.8	2.9
58°	2.1	2.7	2.9
59°	2.1	2.7	2.9
60°	2.1	2.7	2.9
62.5°	2.0	2.7	2.9
65°	2.0	2.6	2.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.8	2.6	2.7
70°	1.7	2.5	2.6
72.5°	1.6	2.3	2.5
75°	1.5	2.1	2.2
77.5°	1.2	1.8	2.1
80°	1.1	1.6	1.7
82.5°	0.9	1.4	1.5
85°	0.6	1.0	1.0
87.5°	0.2	0.5	0.5
90°	0.0	0.0	0.0

(END OF REPORT)