

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: P1335428

Luminaire Tested: P3A02R359735DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335428
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: P3A02R359735DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

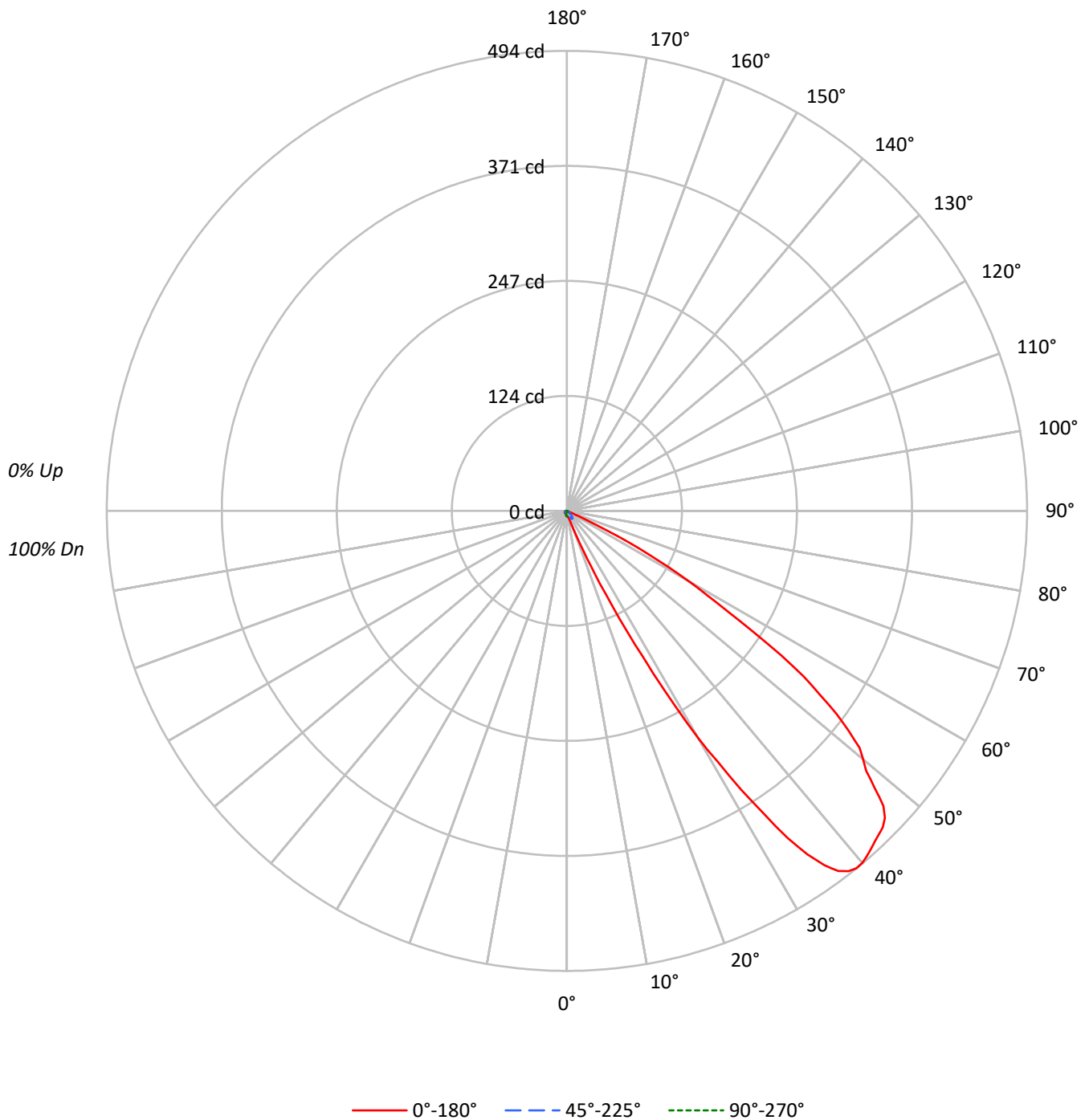
Lumens per Lamp: N/A
Luminaire Lumens: 123.0 lumens
Efficiency: N/A
Efficacy: 34.2 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.65 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	1250	1250	1250	1250	1250
5°	1343	1321	1233	1101	1079
10°	1403	1291	1091	935	935
15°	2020	1271	885	817	840
20°	5064	1353	700	700	770
25°	23445	1718	532	653	726
30°	71302	2329	430	582	734
35°	120488	2704	348	562	723
40°	141236	2662	286	573	773
45°	148760	1892	248	620	837
50°	141573	1126	239	648	921
55°	118629	459	268	726	1070
60°	66442	88	307	833	1184
65°	11467	52	311	934	1349
70°	192	64	385	1026	1475
75°	169	85	508	1101	1694
80°	126	126	505	1263	2020
85°	0	252	1006	1510	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 149816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.5	1.2
20°-30°	7.5	6.1
30°-40°	32.6	26.5
40°-50°	46.5	37.8
50°-60°	28.8	23.4
60°-70°	4.4	3.6
70°-80°	0.8	0.7
80°-90°	0.4	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°	9.5	7.7
0°-40°	42.1	34.2
0°-60°	117.4	95.5
0°-90°	123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	123.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	6	6	6	5	5	1
15°	9	6	4	4	4	3
25°	97	7	2	3	3	58
35°	450	10	1	2	3	270
45°	480	6	1	2	3	362
55°	310	1	1	2	3	264
65°	22	0	1	2	3	45
75°	0	0	1	1	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°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
2.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.7	5.6
5°	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	5.8	5.6	5.2
7.5°	6.2	6.2	6.1	6.1	6.1	6.1	6.0	5.9	5.7	5.2	4.9
10°	6.3	6.3	6.3	6.3	6.2	6.1	6.0	5.8	5.4	4.9	4.6
12.5°	7.1	7.1	7.0	6.8	6.6	6.3	6.1	5.7	5.0	4.4	4.1
15°	8.9	8.8	8.5	8.2	7.8	7.2	6.8	5.6	4.6	3.9	3.7
17.5°	12.4	12.2	11.9	10.8	9.8	8.8	7.9	5.6	4.1	3.4	3.2
20°	21.7	21.8	19.4	16.8	14.5	12.1	9.9	5.8	3.7	3.0	2.9
22.5°	45.2	43.4	37.9	31.4	24.0	18.5	14.0	6.3	3.2	2.6	2.6
25°	96.9	90.2	76.7	58.0	40.9	29.0	20.3	7.1	2.9	2.2	2.3
27.5°	177.0	170.9	143.9	108.4	71.9	43.7	27.5	8.1	2.6	1.9	2.1
30°	281.6	264.7	229.5	177.7	120.2	67.0	37.0	9.2	2.1	1.7	2.0
31°	314.2	306.5	263.6	205.5	140.9	79.5	41.0	9.5	2.0	1.7	1.9
32°	353.0	339.2	300.8	236.1	161.9	90.7	45.7	9.9	1.9	1.4	1.9
33°	387.6	374.3	327.5	262.9	183.1	103.5	50.9	10.0	1.7	1.4	1.8
34°	424.0	405.8	359.5	291.0	204.9	117.3	55.5	10.1	1.6	1.3	1.8
35°	450.1	431.9	387.1	313.2	223.6	129.5	60.8	10.1	1.4	1.3	1.7
36°	470.3	454.4	410.8	336.1	242.3	140.5	65.1	10.1	1.2	1.2	1.7
37°	484.2	469.0	426.8	355.8	256.5	150.2	68.8	10.1	1.1	1.2	1.7
38°	491.0	478.3	442.2	370.1	270.3	157.9	71.8	9.9	1.0	1.1	1.6
39°	493.9	483.6	451.7	382.2	280.6	164.6	74.1	9.7	0.9	1.1	1.6
40°	493.4	484.4	457.0	390.5	288.9	169.1	75.3	9.3	0.8	1.0	1.6
41°	490.9	483.1	459.8	397.6	293.9	172.2	75.6	9.0	0.7	1.0	1.4
42°	488.0	480.9	460.7	401.4	297.1	173.2	74.7	8.5	0.7	0.9	1.4
43°	485.0	478.4	460.7	402.6	297.9	172.5	73.3	7.8	0.6	0.9	1.4
44°	482.6	476.3	459.2	402.3	296.2	170.0	70.6	6.9	0.4	0.9	1.4
45°	479.7	473.6	457.3	400.2	293.0	165.7	67.3	6.1	0.3	0.8	1.4
46°	474.6	469.8	454.0	395.8	287.9	159.7	63.1	5.6	0.2	0.8	1.3
47°	464.7	460.6	447.6	389.4	281.1	152.6	58.7	5.0	0.2	0.8	1.3
48°	444.8	444.7	434.7	377.4	270.4	143.7	54.2	4.4	0.2	0.8	1.3
49°	425.6	423.6	411.2	356.3	254.9	133.0	49.4	4.0	0.1	0.8	1.3
50°	415.0	410.7	390.3	331.4	235.2	118.3	44.3	3.3	0.1	0.7	1.3
51°	404.1	397.8	373.7	309.0	211.6	104.0	38.8	2.7	0.1	0.7	1.2
52°	384.2	378.3	351.3	287.6	188.8	89.5	33.4	2.2	0.1	0.7	1.3
53°	362.7	354.3	325.0	264.0	168.7	76.6	28.0	1.9	0.1	0.7	1.2
54°	335.8	332.0	298.3	235.2	145.1	64.2	23.0	1.6	0.1	0.7	1.2
55°	310.3	304.8	269.8	205.6	123.8	52.6	19.2	1.2	0.1	0.7	1.2
56°	277.9	269.6	236.8	178.5	102.2	42.4	16.2	1.0	0.1	0.7	1.2
57°	239.3	230.4	204.5	148.5	80.2	32.3	13.5	0.8	0.1	0.7	1.2
58°	202.4	194.8	167.0	114.6	60.4	22.4	11.2	0.6	0.1	0.6	1.2
59°	174.9	166.4	138.9	88.2	42.0	16.5	8.4	0.4	0.1	0.7	1.2
60°	151.5	140.6	111.8	68.3	30.0	11.9	6.2	0.2	0.2	0.7	1.2
62.5°	87.3	77.1	53.4	27.8	12.3	6.1	3.0	0.1	0.2	0.7	1.2
65°	22.1	19.7	12.8	6.0	3.4	2.1	1.1	0.1	0.2	0.6	1.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.8	0.8	0.8	0.7	0.6	0.4	0.2	0.1	0.2	0.6	1.1
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.6	1.0
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.6	0.9
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.6	0.9
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.8
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.7
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	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):

	135°	157.5°	180°
0°	5.7	5.7	5.7
2.5°	5.3	5.3	5.3
5°	5.0	5.0	4.9
7.5°	4.7	4.6	4.6
10°	4.2	4.2	4.2
12.5°	3.9	3.9	3.9
15°	3.6	3.7	3.7
17.5°	3.2	3.4	3.4
20°	3.0	3.2	3.3
22.5°	2.8	3.0	3.1
25°	2.7	2.9	3.0
27.5°	2.4	2.8	3.0
30°	2.3	2.7	2.9
31°	2.3	2.7	2.8
32°	2.2	2.7	2.8
33°	2.2	2.7	2.8
34°	2.2	2.6	2.8
35°	2.1	2.6	2.7
36°	2.1	2.6	2.7
37°	2.1	2.6	2.8
38°	2.1	2.6	2.7
39°	2.0	2.6	2.7
40°	2.0	2.6	2.7
41°	2.0	2.6	2.7
42°	2.0	2.6	2.7
43°	2.0	2.6	2.7
44°	2.0	2.4	2.7
45°	2.0	2.4	2.7
46°	2.0	2.6	2.7
47°	2.0	2.6	2.8
48°	2.0	2.4	2.7
49°	1.9	2.4	2.7
50°	1.9	2.4	2.7
51°	1.9	2.6	2.8
52°	1.9	2.6	2.8
53°	1.9	2.6	2.8
54°	1.9	2.6	2.7
55°	1.9	2.6	2.8
56°	1.9	2.6	2.7
57°	1.9	2.6	2.7
58°	1.9	2.4	2.7
59°	1.9	2.4	2.7
60°	1.9	2.4	2.7
62.5°	1.8	2.4	2.7
65°	1.8	2.3	2.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.7	2.3	2.4
70°	1.6	2.2	2.3
72.5°	1.4	2.1	2.2
75°	1.3	1.9	2.0
77.5°	1.1	1.7	1.9
80°	1.0	1.4	1.6
82.5°	0.8	1.2	1.3
85°	0.6	0.9	0.9
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)