

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: P1334626

Luminaire Tested: P3A02R259024DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334626
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: P3A02R259024DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2400K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

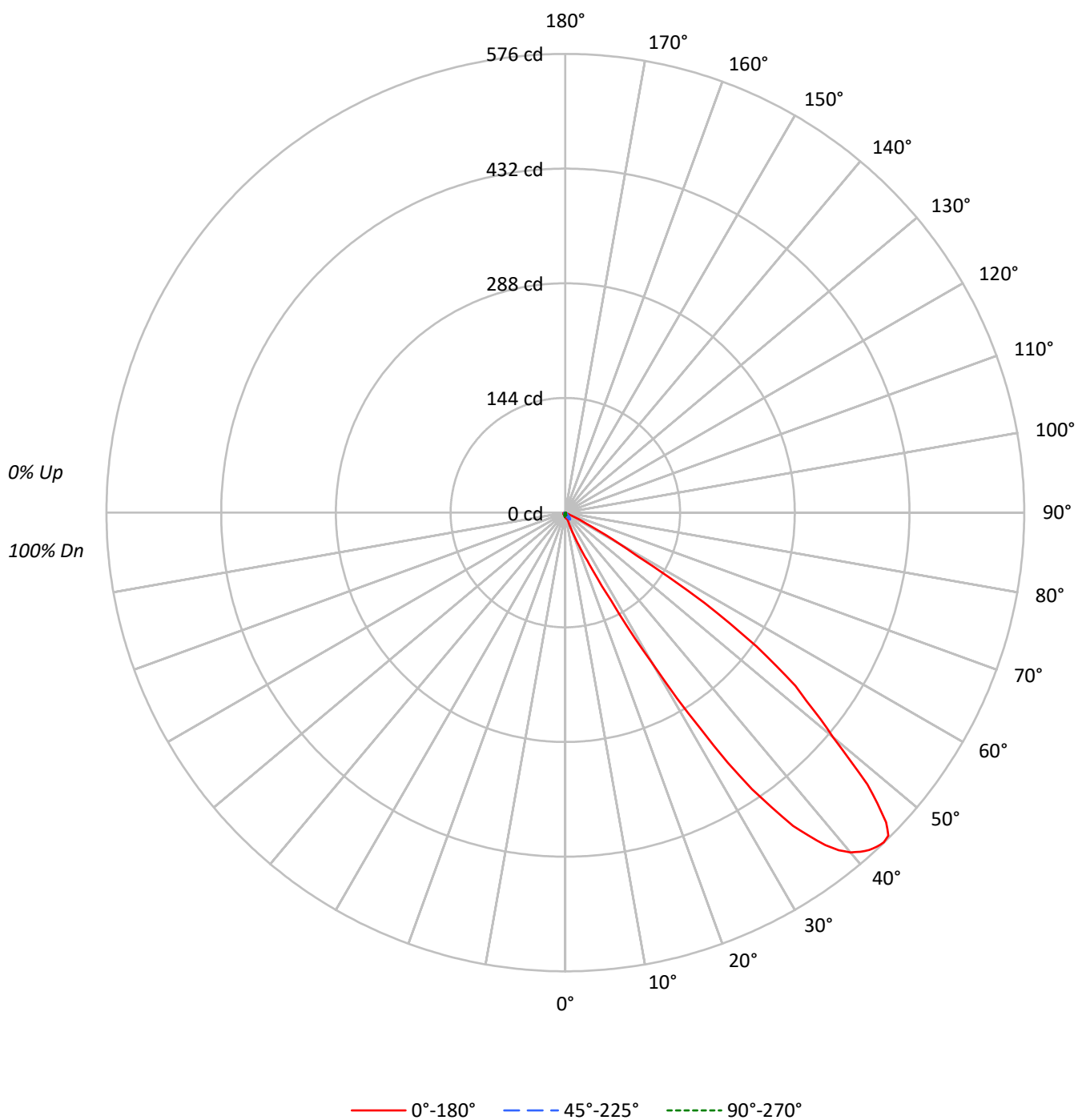
Lumens per Lamp: N/A
Luminaire Lumens: 120.0 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	101	97	100	97	94		96	94	92		92
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		48
7	62	48	39	32	60	47	39	32	46	38	32		44	37	32		43
8	57	43	34	27	55	42	33	27	40	33	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1338	1338	1338	1338	1338
5°	1541	1475	1299	1167	1145
10°	1536	1381	1113	957	957
15°	1703	1203	863	817	863
20°	6021	1190	677	700	770
25°	17299	1500	532	629	750
30°	55198	2329	430	608	760
35°	120863	2730	375	589	776
40°	159442	2490	315	601	830
45°	177817	1737	310	651	899
50°	149692	887	273	682	989
55°	111900	382	268	765	1109
60°	34646	88	263	833	1184
65°	2958	0	311	882	1297
70°	192	64	321	1026	1475
75°	169	85	424	1101	1694
80°	126	126	631	1263	2020
85°	252	252	1006	1258	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 177817 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.5
10°-20°	1.4	1.2
20°-30°	6.6	5.5
30°-40°	32.0	26.6
40°-50°	50.1	41.8
50°-60°	25.7	21.4
60°-70°	2.4	2.0
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°	8.6	7.2
0°-40°	40.6	33.8
0°-60°	116.3	97.0
0°-90°	120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	120.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	5	5	1
15°	8	5	4	4	4	3
25°	72	6	2	3	3	44
35°	452	10	1	2	3	274
45°	573	6	1	2	3	420
55°	293	1	1	2	3	244
65°	6	0	1	2	2	18
75°	0	0	0	1	2	0
85°	0	0	0	0	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°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
2.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.5	6.5	6.7	6.5	6.5
5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.7
7.5°	7.1	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.5
10°	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.7	6.7	6.7	6.2
12.5°	6.9	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.5	6.4	5.7
15°	7.5	7.5	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.7	5.3
17.5°	11.0	10.7	10.6	10.1	9.6	9.1	8.7	8.2	7.8	7.5	5.1
20°	25.8	25.7	25.1	23.9	22.5	20.9	19.3	17.5	15.0	13.3	5.1
22.5°	44.7	44.0	43.1	42.1	39.7	36.9	33.9	30.5	27.2	23.8	5.4
25°	71.5	73.0	69.8	67.3	63.0	57.9	52.3	47.6	41.7	36.2	6.2
27.5°	124.3	125.2	119.0	110.8	101.0	90.1	79.5	71.6	61.7	52.6	7.8
30°	218.0	218.9	208.4	190.9	170.6	152.8	128.6	107.4	87.9	72.8	9.2
31°	272.0	264.6	252.5	235.5	209.8	182.9	153.9	128.2	103.5	83.6	9.6
32°	319.0	318.4	304.2	278.5	252.7	219.4	183.4	149.9	119.6	94.6	9.9
33°	374.4	370.2	350.3	326.0	291.9	258.4	211.9	173.7	136.2	106.9	10.1
34°	418.9	407.5	399.3	371.5	335.5	292.8	243.1	198.8	156.9	118.7	10.2
35°	451.5	449.1	433.1	407.2	370.5	326.9	276.7	224.9	174.2	132.4	10.2
36°	486.1	478.6	462.9	439.5	403.8	358.7	302.3	247.5	194.4	144.8	10.1
37°	507.7	503.3	487.8	463.6	428.6	385.5	331.0	271.4	210.5	157.1	9.9
38°	530.0	521.0	505.7	482.6	448.3	407.8	351.8	289.8	225.2	168.0	9.6
39°	545.4	536.1	520.5	497.5	463.9	423.8	368.3	305.4	238.1	176.1	9.2
40°	557.0	548.0	532.2	508.6	475.4	436.3	382.1	319.2	248.9	183.2	8.7
41°	564.2	555.9	540.1	516.6	483.3	443.5	391.0	328.2	256.2	188.0	8.1
42°	570.2	561.7	545.6	521.5	488.2	449.6	396.5	333.9	261.1	190.4	7.7
43°	573.6	565.1	549.4	524.8	491.1	452.5	399.5	336.5	262.8	190.1	7.0
44°	575.5	566.6	550.9	526.3	492.4	453.2	399.7	336.0	261.7	187.5	6.3
45°	573.4	564.6	549.4	524.8	490.2	450.9	397.6	333.2	257.2	182.6	5.6
46°	559.7	552.9	539.0	516.4	483.2	445.0	392.2	327.7	250.4	176.5	4.8
47°	535.5	530.1	516.6	499.8	469.8	434.1	382.3	317.2	240.8	167.3	3.8
48°	510.2	502.3	489.8	472.5	447.2	414.6	365.9	301.9	226.2	155.2	3.4
49°	473.0	468.3	457.2	438.0	417.0	388.3	342.8	282.3	208.3	142.1	3.0
50°	438.8	435.6	420.1	405.9	383.6	356.8	311.4	256.4	186.2	125.9	2.6
51°	412.0	408.2	397.0	379.4	355.7	324.5	281.7	222.8	160.7	106.5	2.1
52°	384.2	382.1	372.1	354.0	330.6	299.6	252.9	194.3	136.0	90.1	1.7
53°	361.4	358.3	346.1	330.0	304.8	272.7	221.6	167.8	115.2	75.7	1.5
54°	328.1	326.8	319.0	302.1	274.8	239.8	193.3	141.3	96.1	64.2	1.3
55°	292.7	288.5	280.6	267.2	242.0	209.4	160.6	117.1	77.7	54.1	1.0
56°	249.6	249.4	235.3	224.1	201.8	167.2	128.3	91.4	63.1	45.1	0.8
57°	208.4	201.8	188.2	177.1	153.1	126.8	95.2	68.5	49.4	36.5	0.6
58°	154.2	150.7	147.1	130.8	108.7	89.9	68.0	48.2	36.5	27.9	0.4
59°	104.6	104.5	100.3	88.0	75.2	56.0	42.5	32.7	25.1	20.5	0.3
60°	79.0	77.1	68.6	60.5	47.3	35.4	25.1	19.3	15.6	13.2	0.2
62.5°	27.7	28.7	25.2	20.9	15.9	13.1	10.0	8.1	6.7	5.4	0.0
65°	5.7	6.2	5.4	5.1	4.0	3.5	3.1	2.6	2.2	1.9	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°	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.1
70°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1
72.5°	0.3	0.3	0.3	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°	6.1	6.1	6.1	6.1	6.1	6.1
2.5°	6.4	6.2	5.9	5.8	5.7	5.7
5°	6.3	5.9	5.6	5.3	5.2	5.2
7.5°	6.0	5.5	5.1	4.9	4.8	4.6
10°	5.7	5.0	4.5	4.3	4.3	4.3
12.5°	5.1	4.4	4.0	3.9	4.0	4.0
15°	4.5	3.8	3.6	3.6	3.7	3.8
17.5°	3.9	3.4	3.2	3.3	3.4	3.5
20°	3.5	2.9	2.9	3.0	3.3	3.3
22.5°	3.1	2.5	2.5	2.9	3.1	3.2
25°	2.7	2.2	2.3	2.6	3.0	3.1
27.5°	2.3	1.9	2.1	2.5	2.9	3.0
30°	2.0	1.7	2.0	2.4	2.7	3.0
31°	1.9	1.6	2.0	2.3	2.7	3.0
32°	1.7	1.6	1.9	2.3	2.7	2.9
33°	1.6	1.5	1.9	2.3	2.7	2.9
34°	1.5	1.4	1.8	2.3	2.7	2.9
35°	1.3	1.4	1.8	2.2	2.6	2.9
36°	1.2	1.3	1.8	2.2	2.6	2.9
37°	1.1	1.3	1.7	2.2	2.6	2.9
38°	1.0	1.2	1.7	2.2	2.6	2.9
39°	0.8	1.2	1.6	2.2	2.6	2.9
40°	0.7	1.1	1.6	2.1	2.6	2.9
41°	0.7	1.1	1.6	2.1	2.6	2.9
42°	0.6	1.1	1.6	2.1	2.6	2.9
43°	0.5	1.0	1.6	2.1	2.6	2.9
44°	0.4	1.0	1.5	2.1	2.6	2.9
45°	0.4	1.0	1.5	2.1	2.6	2.9
46°	0.3	0.8	1.5	2.1	2.6	2.9
47°	0.2	0.8	1.5	2.0	2.6	2.9
48°	0.2	0.8	1.5	2.0	2.6	2.9
49°	0.2	0.8	1.4	2.0	2.6	2.9
50°	0.2	0.8	1.4	2.0	2.6	2.9
51°	0.1	0.7	1.4	2.0	2.6	2.9
52°	0.1	0.7	1.4	2.0	2.6	3.0
53°	0.1	0.7	1.4	2.0	2.6	2.9
54°	0.1	0.7	1.3	2.0	2.6	2.9
55°	0.1	0.7	1.3	2.0	2.6	2.9
56°	0.1	0.6	1.3	1.9	2.6	2.9
57°	0.2	0.6	1.3	1.9	2.6	2.7
58°	0.2	0.6	1.3	1.9	2.5	2.7
59°	0.2	0.6	1.3	1.9	2.5	2.7
60°	0.2	0.6	1.2	1.9	2.5	2.7
62.5°	0.2	0.6	1.2	1.8	2.4	2.6
65°	0.2	0.6	1.1	1.7	2.4	2.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.5	1.1	1.6	2.3	2.4
70°	0.3	0.5	1.0	1.6	2.2	2.3
72.5°	0.3	0.5	1.0	1.4	2.0	2.2
75°	0.3	0.5	0.8	1.3	1.9	2.0
77.5°	0.3	0.5	0.7	1.2	1.7	1.8
80°	0.4	0.5	0.6	1.0	1.5	1.6
82.5°	0.4	0.5	0.5	0.7	1.2	1.3
85°	0.3	0.4	0.4	0.5	0.7	0.8
87.5°	0.3	0.4	0.3	0.2	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)