

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: P1334840

Luminaire Tested: P3A02R259840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334840
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: P3A02R259840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

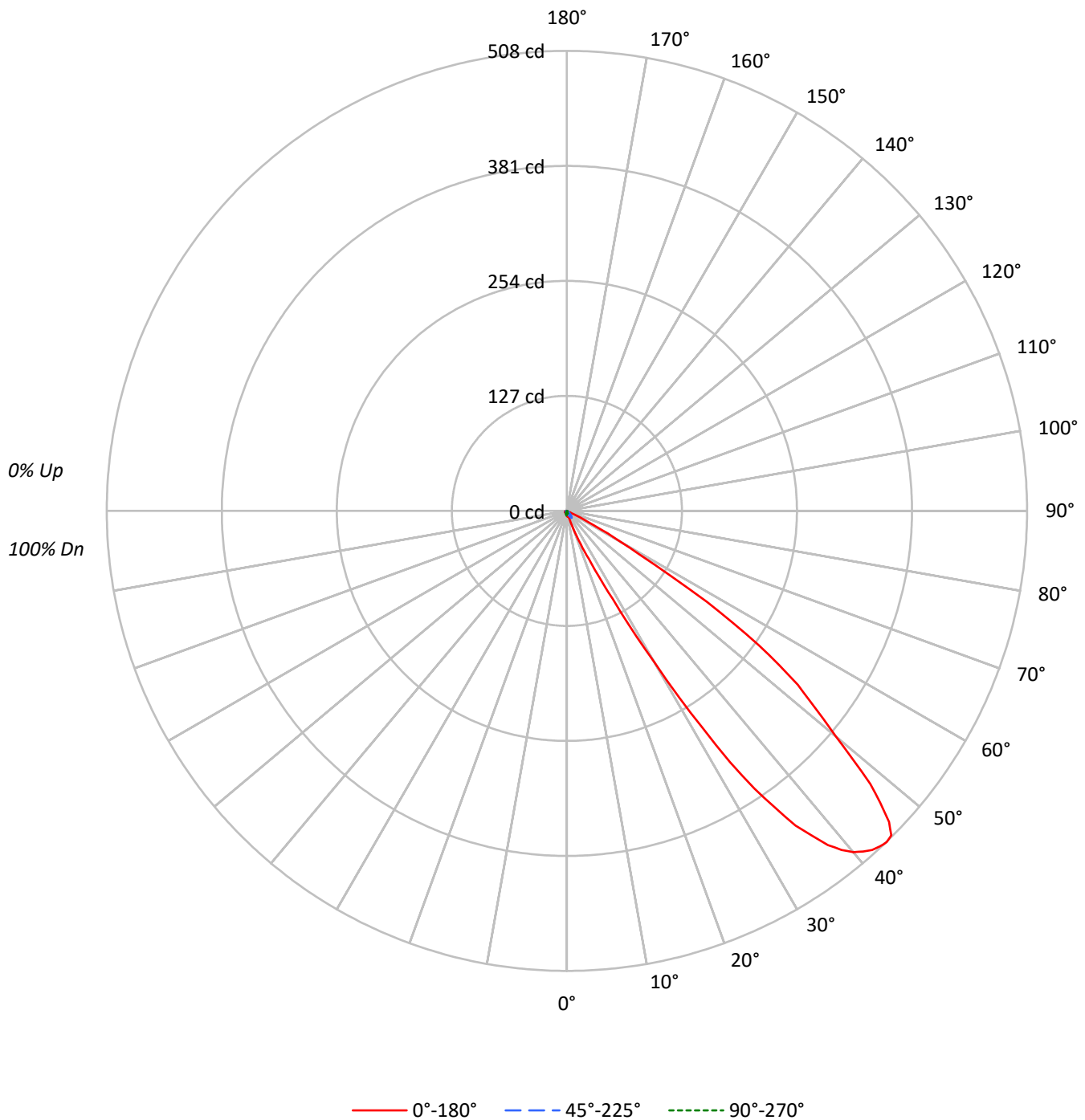
Lumens per Lamp: N/A
Luminaire Lumens: 106.0 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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°	1184	1184	1184	1184	1184
5°	1365	1299	1145	1035	1013
10°	1358	1225	980	846	846
15°	1498	1067	772	726	772
20°	5320	1050	583	607	677
25°	15267	1331	484	556	653
30°	48742	2051	380	532	658
35°	106782	2409	321	535	669
40°	140835	2176	258	544	716
45°	157071	1520	248	589	775
50°	132226	785	239	614	853
55°	98864	306	268	688	956
60°	30612	88	263	746	1053
65°	2594	0	311	778	1141
70°	192	64	321	898	1346
75°	169	85	424	932	1525
80°	126	126	631	1010	1768
85°	252	252	1006	1258	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 157071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.5
10°-20°	1.3	1.2
20°-30°	5.9	5.5
30°-40°	28.2	26.6
40°-50°	44.3	41.7
50°-60°	22.7	21.4
60°-70°	2.1	2.0
70°-80°	0.7	0.7
80°-90°	0.4	0.4
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°	7.6	7.2
0°-40°	35.8	33.8
0°-60°	102.8	96.9
0°-90°	106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	106.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	6	5	5	5	1
15°	7	5	3	3	3	3
25°	63	6	2	2	3	39
35°	399	9	1	2	2	242
45°	506	5	1	2	2	371
55°	259	1	1	2	2	215
65°	5	0	1	2	2	16
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°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.9	5.8	5.8
5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1	5.9
7.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	5.8
10°	6.1	6.1	6.1	6.1	6.0	6.0	6.0	5.9	5.9	5.9	5.5
12.5°	6.1	6.1	6.1	6.1	6.0	6.0	5.9	5.9	5.8	5.7	5.0
15°	6.6	6.6	6.6	6.5	6.4	6.3	6.2	6.2	6.1	5.9	4.7
17.5°	9.7	9.4	9.3	9.0	8.5	8.0	7.6	7.3	6.9	6.6	4.5
20°	22.8	22.7	22.2	21.1	19.9	18.5	17.1	15.5	13.2	11.8	4.5
22.5°	39.5	38.9	38.1	37.2	35.1	32.6	29.9	27.0	24.1	21.0	4.8
25°	63.1	64.5	61.7	59.4	55.7	51.1	46.2	42.1	36.8	32.0	5.5
27.5°	109.8	110.6	105.1	97.8	89.2	79.6	70.2	63.2	54.5	46.5	6.9
30°	192.5	193.4	184.1	168.6	150.7	135.0	113.6	94.9	77.6	64.3	8.1
31°	240.3	233.8	223.0	208.0	185.3	161.6	135.9	113.2	91.4	73.9	8.5
32°	281.8	281.2	268.7	246.0	223.2	193.8	162.0	132.5	105.7	83.6	8.8
33°	330.8	327.0	309.4	287.9	257.8	228.3	187.2	153.4	120.3	94.4	9.0
34°	370.0	360.0	352.7	328.2	296.3	258.7	214.7	175.6	138.6	104.8	9.0
35°	398.9	396.7	382.5	359.7	327.3	288.8	244.4	198.7	153.9	117.0	9.0
36°	429.4	422.7	408.9	388.2	356.7	316.9	267.1	218.6	171.7	127.9	9.0
37°	448.5	444.6	430.8	409.5	378.6	340.6	292.4	239.7	185.9	138.8	8.8
38°	468.2	460.2	446.7	426.3	396.0	360.2	310.8	256.0	199.0	148.4	8.5
39°	481.8	473.6	459.8	439.4	409.8	374.3	325.4	269.8	210.3	155.6	8.1
40°	492.0	484.1	470.1	449.2	419.9	385.4	337.5	282.0	219.9	161.8	7.6
41°	498.4	491.0	477.1	456.3	426.9	391.8	345.4	289.9	226.3	166.0	7.2
42°	503.7	496.1	482.0	460.7	431.2	397.2	350.3	294.9	230.7	168.2	6.8
43°	506.7	499.1	485.3	463.6	433.8	399.7	352.9	297.3	232.2	167.9	6.2
44°	508.4	500.5	486.6	464.9	435.0	400.3	353.1	296.8	231.1	165.7	5.6
45°	506.5	498.8	485.3	463.6	433.0	398.3	351.2	294.3	227.2	161.3	4.9
46°	494.4	488.4	476.1	456.1	426.8	393.1	346.4	289.4	221.2	155.9	4.2
47°	473.0	468.3	456.3	441.5	415.0	383.5	337.7	280.2	212.7	147.8	3.4
48°	450.7	443.7	432.6	417.4	395.0	366.2	323.2	266.7	199.8	137.1	3.0
49°	417.8	413.7	403.9	386.9	368.4	343.0	302.8	249.3	184.0	125.6	2.6
50°	387.6	384.8	371.1	358.6	338.9	315.2	275.1	226.5	164.4	111.2	2.3
51°	364.0	360.6	350.7	335.1	314.2	286.6	248.9	196.8	142.0	94.1	1.9
52°	339.3	337.5	328.7	312.7	292.1	264.6	223.4	171.6	120.1	79.6	1.5
53°	319.2	316.5	305.8	291.5	269.2	240.8	195.8	148.2	101.8	66.9	1.3
54°	289.8	288.7	281.8	266.9	242.7	211.8	170.8	124.8	84.9	56.7	1.1
55°	258.6	254.8	247.8	236.0	213.8	185.0	141.9	103.4	68.7	47.8	0.8
56°	220.5	220.3	207.8	197.9	178.3	147.7	113.3	80.8	55.8	39.8	0.7
57°	184.1	178.3	166.2	156.4	135.3	112.0	84.1	60.5	43.7	32.3	0.6
58°	136.2	133.1	129.9	115.6	96.0	79.4	60.1	42.5	32.3	24.6	0.4
59°	92.4	92.3	88.6	77.7	66.4	49.4	37.5	28.9	22.2	18.1	0.3
60°	69.8	68.1	60.6	53.4	41.8	31.2	22.2	17.1	13.8	11.7	0.2
62.5°	24.4	25.4	22.3	18.5	14.1	11.6	8.9	7.2	5.9	4.8	0.0
65°	5.0	5.5	4.8	4.5	3.5	3.1	2.7	2.3	2.0	1.7	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°	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	5.7	5.5	5.2	5.1	5.0	5.0
5°	5.6	5.2	4.9	4.7	4.6	4.6
7.5°	5.3	4.9	4.5	4.3	4.2	4.1
10°	5.0	4.4	4.0	3.8	3.8	3.8
12.5°	4.5	3.9	3.5	3.5	3.5	3.5
15°	4.0	3.4	3.2	3.2	3.3	3.4
17.5°	3.5	3.0	2.8	2.9	3.0	3.1
20°	3.1	2.5	2.5	2.6	2.9	2.9
22.5°	2.7	2.2	2.2	2.5	2.7	2.8
25°	2.4	2.0	2.1	2.3	2.6	2.7
27.5°	2.1	1.7	1.9	2.2	2.5	2.6
30°	1.8	1.5	1.8	2.1	2.4	2.6
31°	1.7	1.4	1.8	2.1	2.4	2.6
32°	1.5	1.4	1.7	2.1	2.4	2.5
33°	1.4	1.3	1.7	2.1	2.4	2.5
34°	1.3	1.2	1.6	2.1	2.4	2.5
35°	1.1	1.2	1.6	2.0	2.3	2.5
36°	1.0	1.1	1.6	2.0	2.3	2.5
37°	0.9	1.1	1.5	2.0	2.3	2.5
38°	0.8	1.0	1.5	2.0	2.3	2.5
39°	0.7	1.0	1.4	2.0	2.3	2.5
40°	0.7	0.9	1.4	1.9	2.3	2.5
41°	0.7	0.9	1.4	1.9	2.3	2.5
42°	0.6	0.9	1.4	1.9	2.3	2.5
43°	0.5	0.8	1.4	1.9	2.3	2.5
44°	0.4	0.8	1.3	1.9	2.3	2.5
45°	0.4	0.8	1.3	1.9	2.3	2.5
46°	0.3	0.7	1.3	1.9	2.3	2.5
47°	0.2	0.7	1.3	1.8	2.3	2.5
48°	0.2	0.7	1.3	1.8	2.3	2.5
49°	0.2	0.7	1.2	1.8	2.3	2.5
50°	0.2	0.7	1.2	1.8	2.3	2.5
51°	0.1	0.7	1.2	1.8	2.3	2.5
52°	0.1	0.7	1.2	1.8	2.3	2.6
53°	0.1	0.7	1.2	1.8	2.3	2.5
54°	0.1	0.7	1.1	1.8	2.3	2.5
55°	0.1	0.7	1.1	1.8	2.3	2.5
56°	0.1	0.6	1.1	1.7	2.3	2.5
57°	0.2	0.6	1.1	1.7	2.3	2.4
58°	0.2	0.6	1.1	1.7	2.2	2.4
59°	0.2	0.6	1.1	1.7	2.2	2.4
60°	0.2	0.6	1.0	1.7	2.2	2.4
62.5°	0.2	0.6	1.0	1.6	2.1	2.3
65°	0.2	0.6	0.9	1.5	2.1	2.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.5	0.9	1.4	2.1	2.1
70°	0.3	0.5	0.8	1.4	2.0	2.1
72.5°	0.3	0.5	0.8	1.2	1.8	2.0
75°	0.3	0.5	0.7	1.1	1.7	1.8
77.5°	0.3	0.5	0.7	1.0	1.5	1.6
80°	0.4	0.5	0.6	0.8	1.3	1.4
82.5°	0.4	0.5	0.5	0.7	1.0	1.1
85°	0.3	0.4	0.4	0.5	0.7	0.7
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)