

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: P1335364

Luminaire Tested: P3A02R359040DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335364
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: P3A02R359040DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

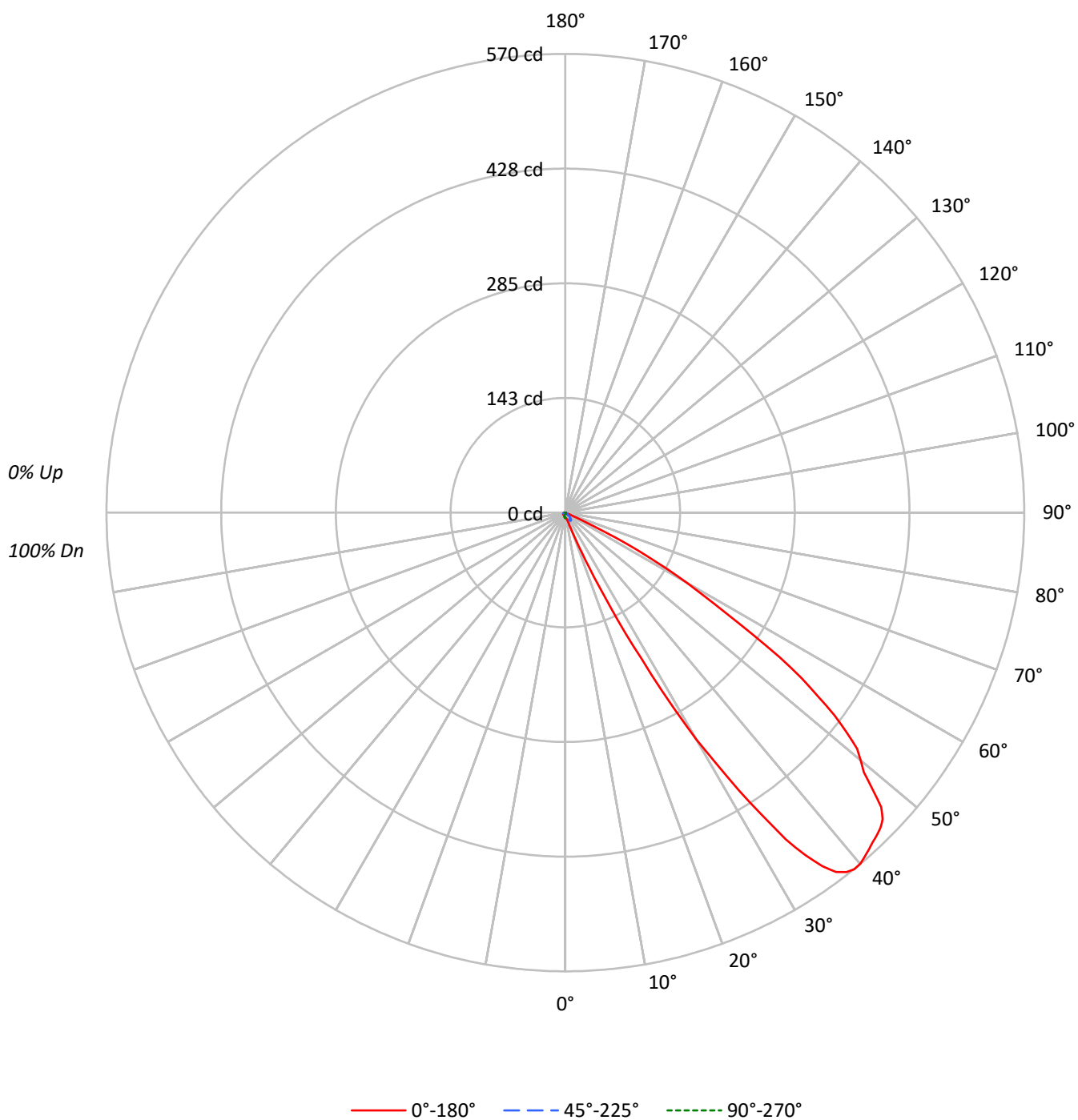
Lumens per Lamp: N/A
Luminaire Lumens: 142.0 lumens
Efficiency: N/A
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.67 / 1.42
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	100	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50	50	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35	35	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29	29	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	24	24	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20	20	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1425	1425	1425	1425	1425
5°	1563	1519	1409	1277	1233
10°	1625	1492	1247	1091	1091
15°	2338	1453	1022	931	953
20°	5834	1563	817	817	887
25°	27074	1984	629	750	847
30°	82316	2684	481	684	836
35°	139120	3132	402	642	830
40°	163077	3092	344	658	887
45°	171739	2202	279	713	961
50°	163474	1296	273	751	1058
55°	136980	535	306	841	1223
60°	76661	132	351	965	1360
65°	13231	52	311	1090	1505
70°	256	64	385	1154	1731
75°	254	85	508	1271	1949
80°	126	126	631	1515	2273
85°	0	252	1258	1510	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 172954 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.4
10°-20°	1.7	1.2
20°-30°	8.7	6.1
30°-40°	37.6	26.5
40°-50°	53.7	37.8
50°-60°	33.2	23.4
60°-70°	5.1	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°	11.0	7.7
0°-40°	48.6	34.2
0°-60°	135.5	95.4
0°-90°	142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	142.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	6	6	1
15°	10	6	4	4	4	4
25°	112	8	3	3	4	67
35°	520	12	2	2	3	312
45°	554	7	1	2	3	418
55°	358	1	1	2	3	305
65°	26	0	1	2	3	52
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°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
2.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.5	6.4
5°	7.1	7.1	6.9	6.9	6.9	6.9	6.9	6.9	6.7	6.4	6.0
7.5°	7.2	7.2	7.1	7.1	7.1	7.1	6.9	6.8	6.5	6.0	5.6
10°	7.3	7.3	7.3	7.3	7.2	7.1	6.9	6.7	6.3	5.6	5.3
12.5°	8.2	8.2	8.1	7.8	7.6	7.3	7.1	6.5	5.8	5.1	4.7
15°	10.3	10.1	9.9	9.5	9.0	8.3	7.8	6.4	5.3	4.5	4.2
17.5°	14.4	14.1	13.7	12.4	11.3	10.1	9.1	6.4	4.7	4.0	3.7
20°	25.0	25.1	22.4	19.4	16.8	14.0	11.4	6.7	4.2	3.5	3.3
22.5°	52.2	50.1	43.7	36.3	27.7	21.4	16.2	7.3	3.7	2.9	2.9
25°	111.9	104.1	88.6	66.9	47.2	33.5	23.5	8.2	3.3	2.6	2.7
27.5°	204.3	197.3	166.1	125.1	83.1	50.5	31.8	9.4	2.9	2.2	2.4
30°	325.1	305.6	265.0	205.1	138.8	77.3	42.7	10.6	2.4	1.9	2.3
31°	362.8	353.8	304.3	237.3	162.7	91.8	47.3	11.0	2.3	1.9	2.2
32°	407.5	391.6	347.3	272.5	186.9	104.7	52.8	11.4	2.2	1.7	2.2
33°	447.5	432.1	378.1	303.5	211.4	119.5	58.7	11.5	1.9	1.7	2.1
34°	489.5	468.5	415.1	336.0	236.5	135.4	64.1	11.7	1.8	1.5	2.1
35°	519.7	498.6	446.9	361.6	258.2	149.5	70.2	11.7	1.7	1.5	1.9
36°	543.0	524.5	474.3	388.0	279.7	162.2	75.1	11.7	1.4	1.4	1.9
37°	559.0	541.5	492.7	410.7	296.1	173.4	79.5	11.7	1.3	1.4	1.9
38°	566.8	552.2	510.6	427.2	312.0	182.3	82.9	11.4	1.2	1.3	1.8
39°	570.2	558.2	521.5	441.2	323.9	190.0	85.5	11.2	1.0	1.3	1.8
40°	569.7	559.3	527.6	450.8	333.5	195.2	86.9	10.8	0.9	1.2	1.8
41°	566.7	557.7	530.8	459.0	339.3	198.8	87.3	10.4	0.8	1.2	1.7
42°	563.4	555.2	531.8	463.4	343.0	200.0	86.3	9.9	0.8	1.0	1.7
43°	559.9	552.4	531.8	464.8	343.9	199.2	84.6	9.0	0.6	1.0	1.7
44°	557.1	549.9	530.2	464.4	342.0	196.3	81.5	7.9	0.5	1.0	1.7
45°	553.8	546.7	528.0	462.0	338.3	191.3	77.7	7.1	0.4	0.9	1.7
46°	547.9	542.4	524.2	457.0	332.4	184.3	72.8	6.4	0.3	0.9	1.5
47°	536.5	531.7	516.7	449.5	324.6	176.1	67.8	5.8	0.3	0.9	1.5
48°	513.5	513.4	501.8	435.7	312.1	165.9	62.6	5.1	0.3	0.9	1.5
49°	491.3	489.0	474.7	411.3	294.3	153.6	57.0	4.6	0.1	0.9	1.5
50°	479.2	474.2	450.6	382.6	271.5	136.5	51.1	3.8	0.1	0.8	1.5
51°	466.5	459.3	431.5	356.7	244.3	120.1	44.7	3.1	0.1	0.8	1.4
52°	443.5	436.7	405.6	332.0	217.9	103.3	38.6	2.6	0.1	0.8	1.5
53°	418.8	409.0	375.2	304.8	194.7	88.4	32.3	2.2	0.1	0.8	1.4
54°	387.6	383.3	344.4	271.5	167.5	74.1	26.5	1.8	0.1	0.8	1.4
55°	358.3	351.9	311.5	237.4	142.9	60.8	22.2	1.4	0.1	0.8	1.4
56°	320.8	311.2	273.4	206.1	117.9	49.0	18.7	1.2	0.1	0.8	1.4
57°	276.2	266.0	236.1	171.4	92.5	37.3	15.6	0.9	0.1	0.8	1.4
58°	233.7	224.8	192.8	132.3	69.7	25.9	12.9	0.6	0.1	0.6	1.4
59°	201.9	192.1	160.4	101.8	48.5	19.1	9.7	0.5	0.1	0.8	1.4
60°	174.8	162.3	129.1	78.8	34.6	13.7	7.2	0.3	0.3	0.8	1.4
62.5°	100.8	89.0	61.7	32.0	14.2	7.1	3.5	0.1	0.3	0.8	1.4
65°	25.5	22.7	14.7	6.9	4.0	2.4	1.3	0.1	0.3	0.6	1.3



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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	0.8	0.6	0.5	0.3	0.1	0.3	0.6	1.3
70°	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.3	0.6	1.2
72.5°	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.6	1.0
75°	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.6	1.0
77.5°	0.3	0.3	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	0.8
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°	6.5	6.5	6.5
2.5°	6.2	6.2	6.2
5°	5.8	5.8	5.6
7.5°	5.4	5.3	5.3
10°	4.9	4.9	4.9
12.5°	4.5	4.5	4.5
15°	4.1	4.2	4.2
17.5°	3.7	4.0	4.0
20°	3.5	3.7	3.8
22.5°	3.2	3.5	3.6
25°	3.1	3.3	3.5
27.5°	2.8	3.2	3.5
30°	2.7	3.1	3.3
31°	2.7	3.1	3.2
32°	2.6	3.1	3.2
33°	2.6	3.1	3.2
34°	2.6	2.9	3.2
35°	2.4	2.9	3.1
36°	2.4	2.9	3.1
37°	2.4	2.9	3.2
38°	2.4	2.9	3.1
39°	2.3	2.9	3.1
40°	2.3	2.9	3.1
41°	2.3	2.9	3.1
42°	2.3	2.9	3.1
43°	2.3	2.9	3.1
44°	2.3	2.8	3.1
45°	2.3	2.8	3.1
46°	2.3	2.9	3.1
47°	2.3	2.9	3.2
48°	2.3	2.8	3.1
49°	2.2	2.8	3.1
50°	2.2	2.8	3.1
51°	2.2	2.9	3.2
52°	2.2	2.9	3.2
53°	2.2	2.9	3.2
54°	2.2	2.9	3.1
55°	2.2	2.9	3.2
56°	2.2	2.9	3.1
57°	2.2	2.9	3.1
58°	2.2	2.8	3.1
59°	2.2	2.8	3.1
60°	2.2	2.8	3.1
62.5°	2.1	2.8	3.1
65°	2.1	2.7	2.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.9	2.7	2.8
70°	1.8	2.6	2.7
72.5°	1.7	2.4	2.6
75°	1.5	2.2	2.3
77.5°	1.3	1.9	2.2
80°	1.2	1.7	1.8
82.5°	0.9	1.4	1.5
85°	0.6	1.0	1.0
87.5°	0.3	0.5	0.5
90°	0.0	0.0	0.0

(END OF REPORT)