

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: P1338014

Luminaire Tested: P3A05R309840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338014
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R309840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

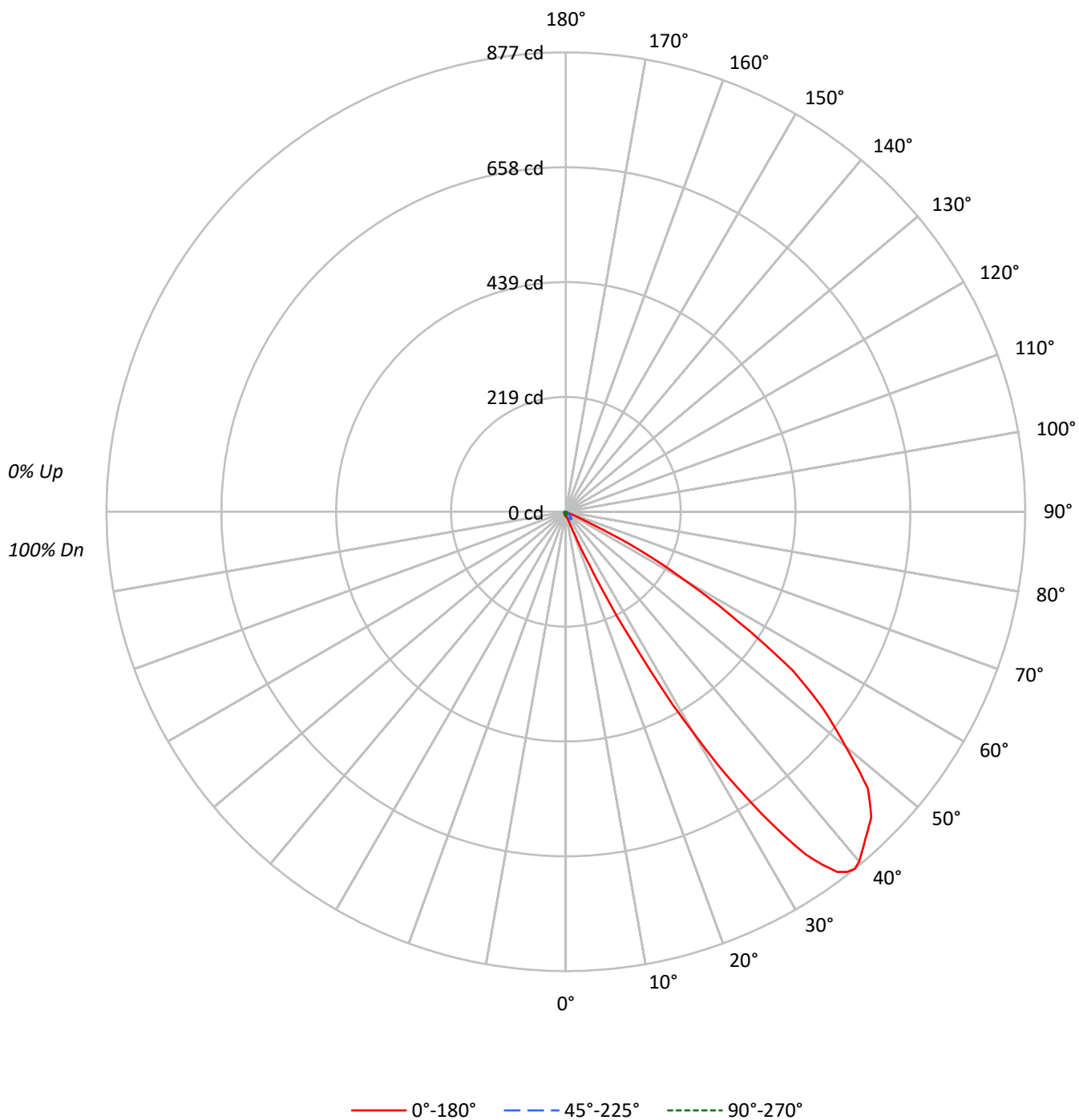
Lumens per Lamp: N/A
Luminaire Lumens: 228.0 lumens
Efficiency: N/A
Efficacy: 31.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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		108	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	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	37		49	42	37		48	42	37
7	62	48	38	32		60	47	38	32		45	37	31		44	36	31		42	36	31
8	56	42	33	27		55	41	33	27		40	32	26		39	32	26		37	31	26
9	52	37	29	23		50	37	28	23		36	28	22		34	27	22		33	27	22
10	48	33	25	19		46	33	25	19		32	24	19		31	24	19		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1930	1930	1930	1930	1930
5°	2069	2025	1893	1739	1695
10°	2271	2004	1670	1492	1447
15°	3314	1998	1385	1271	1317
20°	8331	2194	1073	1073	1213
25°	38712	2734	847	968	1113
30°	123234	3798	633	912	1114
35°	213833	4631	509	883	1124
40°	249382	4609	372	887	1145
45°	255747	3287	403	961	1240
50°	237843	1842	341	989	1433
55°	202124	956	382	1109	1606
60°	116745	263	439	1184	1754
65°	23816	0	519	1401	1972
70°	385	128	641	1603	2308
75°	339	169	678	1610	2796
80°	253	253	1010	1894	3157
85°	0	503	2013	2013	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 255747 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.3
10°-20°	2.3	1.0
20°-30°	13.1	5.8
30°-40°	61.4	26.9
40°-50°	86.8	38.1
50°-60°	53.4	23.4
60°-70°	8.1	3.6
70°-80°	1.3	0.6
80°-90°	0.7	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°	16.2	7.1
0°-40°	77.7	34.1
0°-60°	217.9	95.6
0°-90°	228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	228.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	9	9	9	8	8	1
15°	15	9	6	6	6	5
25°	160	11	4	4	5	98
35°	799	17	2	3	4	479
45°	825	11	1	3	4	625
55°	529	2	1	3	4	450
65°	46	0	1	3	4	83
75°	0	0	1	2	3	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
2.5°	9.0	9.0	9.2	9.2	9.0	9.2	9.2	9.2	8.8	8.6	8.3
5°	9.4	9.4	9.4	9.6	9.4	9.4	9.2	9.0	8.6	8.1	7.9
7.5°	9.8	9.8	9.6	9.8	9.6	9.6	9.2	8.8	8.3	7.7	7.3
10°	10.2	10.2	10.0	10.0	9.8	9.8	9.0	8.5	7.5	6.9	6.7
12.5°	11.3	11.3	11.1	10.9	10.6	10.4	8.8	7.9	6.7	6.1	6.0
15°	14.6	14.4	14.0	13.4	12.5	12.3	8.8	7.3	6.1	5.6	5.6
17.5°	20.0	19.8	19.2	17.7	15.9	15.4	8.8	6.5	5.4	5.0	5.0
20°	35.7	34.2	31.3	27.5	23.4	21.3	9.4	5.8	4.6	4.4	4.6
21°	46.7	45.1	41.5	35.1	28.0	25.7	9.8	5.6	4.4	4.2	4.6
22°	63.6	61.8	54.4	45.7	35.5	31.5	10.0	5.2	4.0	4.0	4.4
23°	88.7	85.8	73.2	59.3	44.4	38.6	10.4	5.0	3.8	4.0	4.2
24°	116.2	113.7	99.3	78.6	56.7	48.4	10.8	4.8	3.6	3.6	4.0
25°	160.0	157.1	131.6	99.1	71.8	58.2	11.3	4.4	3.5	3.5	4.0
26°	216.6	203.4	169.4	127.7	88.5	73.0	11.9	4.2	3.3	3.5	3.8
27°	270.4	259.5	221.3	163.8	109.5	89.7	12.7	4.0	3.1	3.3	3.8
28°	341.1	325.7	277.5	207.2	137.9	108.5	13.4	3.8	2.9	3.3	3.6
29°	420.2	398.7	340.5	256.0	170.0	129.6	14.2	3.6	2.7	3.1	3.6
30°	486.7	466.5	408.3	313.8	206.8	157.5	15.0	3.5	2.5	3.1	3.6
31°	564.6	534.1	463.6	362.8	238.5	185.3	15.7	3.1	2.3	2.9	3.5
32°	627.8	606.5	531.6	418.1	280.2	216.1	16.3	2.9	2.3	2.9	3.5
33°	688.9	660.3	587.9	471.1	317.9	247.6	16.9	2.7	2.1	2.7	3.5
34°	747.3	721.0	641.1	513.9	353.4	277.5	17.3	2.3	2.1	2.7	3.3
35°	798.8	768.2	688.0	555.8	389.9	304.8	17.3	2.1	1.9	2.5	3.3
36°	832.2	810.3	728.7	597.1	422.9	330.7	17.3	1.9	1.7	2.5	3.1
37°	860.8	835.3	761.3	628.8	447.3	351.5	17.3	1.7	1.7	2.5	3.1
38°	872.5	850.6	783.8	656.8	470.2	372.6	17.1	1.5	1.5	2.3	3.1
39°	877.1	857.5	800.7	677.0	487.1	386.8	16.7	1.3	1.5	2.3	3.1
40°	871.2	856.4	809.3	690.1	500.5	397.2	16.1	1.2	1.3	2.3	3.1
42.5°	846.6	836.8	807.4	703.1	512.0	404.9	14.0	0.8	1.3	2.1	3.1
45°	824.7	813.9	788.0	689.5	497.0	389.7	10.6	0.4	1.3	2.1	3.1
47.5°	782.3	775.5	755.2	654.7	464.2	355.5	7.5	0.2	1.2	1.9	2.9
50°	697.2	690.8	663.9	568.5	399.3	300.6	5.4	0.2	1.0	1.9	2.9
52.5°	620.9	614.2	575.6	472.7	306.7	220.3	3.5	0.2	1.0	1.9	2.9
55°	528.7	517.0	466.3	358.8	217.4	147.7	2.5	0.2	1.0	1.7	2.9
57.5°	391.4	374.3	329.0	244.7	125.2	80.1	1.3	0.2	1.0	1.7	2.9
60°	266.2	256.0	205.9	129.1	53.4	33.8	0.6	0.2	1.0	1.7	2.7
62.5°	161.3	148.5	103.5	54.9	23.0	15.4	0.0	0.4	1.0	1.7	2.7
65°	45.9	40.7	27.1	12.5	6.5	5.0	0.0	0.4	1.0	1.7	2.7
67.5°	1.5	1.5	1.5	1.3	1.0	1.0	0.2	0.4	1.0	1.7	2.5
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	1.0	1.5	2.5
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.8	1.3	2.3
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.3	1.9
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.2	1.9
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.2	1.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.6	0.8	0.8	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.6	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):

	157.5°	180°
0°	8.8	8.8
2.5°	8.3	8.3
5°	7.7	7.7
7.5°	7.1	7.1
10°	6.5	6.5
12.5°	6.1	6.1
15°	5.6	5.8
17.5°	5.2	5.4
20°	5.0	5.2
21°	5.0	5.2
22°	4.8	5.0
23°	4.8	5.0
24°	4.6	4.8
25°	4.4	4.6
26°	4.4	4.6
27°	4.4	4.6
28°	4.2	4.6
29°	4.2	4.4
30°	4.2	4.4
31°	4.0	4.4
32°	4.0	4.4
33°	4.0	4.2
34°	3.8	4.2
35°	3.8	4.2
36°	3.8	4.2
37°	3.8	4.0
38°	3.8	4.2
39°	3.8	4.0
40°	3.8	4.0
42.5°	3.8	4.0
45°	3.8	4.0
47.5°	3.8	4.2
50°	3.8	4.2
52.5°	3.8	4.2
55°	3.8	4.2
57.5°	3.8	4.0
60°	3.8	4.0
62.5°	3.6	4.0
65°	3.6	3.8
67.5°	3.6	3.8
70°	3.5	3.6
72.5°	3.3	3.5
75°	2.9	3.3
77.5°	2.7	2.9
80°	2.3	2.5

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.9	1.9
85°	1.3	1.5
87.5°	0.8	0.8
90°	0.0	0.0

(END OF REPORT)