

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: P1338302

Luminaire Tested: P3A05R359024DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338302
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: P3A05R359024DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2400K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

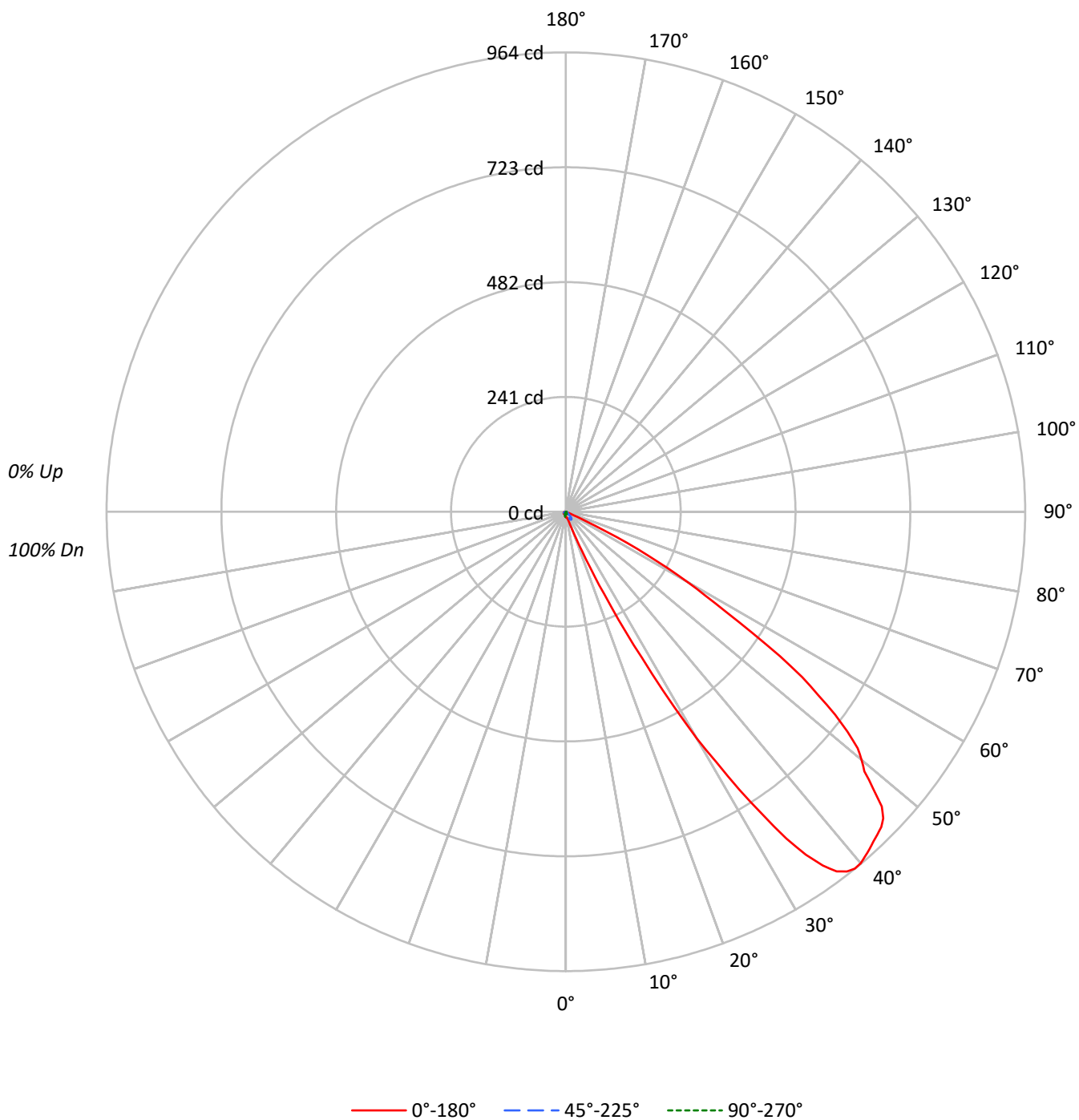
Lumens per Lamp: N/A
Luminaire Lumens: 240.0 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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		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°	2412	2412	2412	2412	2412
5°	2619	2575	2377	2135	2091
10°	2739	2516	2115	1826	1826
15°	3927	2452	1725	1566	1612
20°	9848	2637	1353	1353	1517
25°	45753	3363	1040	1258	1403
30°	139110	4558	810	1139	1418
35°	235114	5274	696	1098	1392
40°	275602	5210	544	1116	1489
45°	290232	3690	465	1209	1613
50°	276255	2217	443	1262	1774
55°	231485	918	497	1415	2064
60°	129595	175	570	1623	2281
65°	22363	104	571	1816	2594
70°	385	128	705	1923	2885
75°	339	169	932	2203	3304
80°	253	253	1137	2399	3788
85°	0	503	2264	2768	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 292308 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.4
10°-20°	2.8	1.2
20°-30°	14.7	6.1
30°-40°	63.6	26.5
40°-50°	90.7	37.8
50°-60°	56.2	23.4
60°-70°	8.5	3.6
70°-80°	1.6	0.7
80°-90°	0.8	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°	18.5	7.7
0°-40°	82.1	34.2
0°-60°	229.0	95.4
0°-90°	240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	240.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	12	11	10	10	1
15°	17	11	8	7	7	6
25°	189	14	4	5	6	113
35°	878	20	3	4	5	527
45°	936	12	2	4	5	707
55°	606	2	1	4	5	516
65°	43	0	1	4	5	88
75°	0	0	1	3	4	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°	25°	30°	45°	67.5°	90°	112.5°
0°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
2.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.0	10.8
5°	11.9	11.9	11.7	11.7	11.7	11.7	11.7	11.7	11.3	10.8	10.2
7.5°	12.1	12.1	11.9	11.9	11.9	11.9	11.7	11.5	11.0	10.2	9.5
10°	12.3	12.3	12.3	12.3	12.1	11.9	11.7	11.3	10.6	9.5	8.9
12.5°	13.9	13.9	13.6	13.2	12.8	12.3	11.9	11.0	9.7	8.7	8.0
15°	17.3	17.1	16.7	16.0	15.2	14.1	13.2	10.8	8.9	7.6	7.1
17.5°	24.3	23.8	23.2	21.0	19.1	17.1	15.4	10.8	8.0	6.7	6.3
20°	42.2	42.5	37.9	32.7	28.4	23.6	19.3	11.3	7.1	5.8	5.6
22.5°	88.2	84.7	73.9	61.3	46.8	36.2	27.3	12.3	6.3	5.0	5.0
25°	189.1	175.9	149.7	113.1	79.7	56.5	39.6	13.9	5.6	4.3	4.5
27.5°	345.3	333.4	280.8	211.5	140.4	85.4	53.7	15.8	5.0	3.7	4.1
30°	549.4	516.5	447.8	346.6	234.6	130.6	72.1	18.0	4.1	3.2	3.9
31°	613.1	598.0	514.3	401.0	274.9	155.1	79.9	18.6	3.9	3.2	3.7
32°	688.7	661.9	586.9	460.6	315.9	177.0	89.3	19.3	3.7	2.8	3.7
33°	756.3	730.3	639.1	513.0	357.3	201.9	99.2	19.5	3.2	2.8	3.5
34°	827.4	791.9	701.5	567.8	399.7	228.8	108.3	19.7	3.0	2.6	3.5
35°	878.3	842.8	755.2	611.2	436.3	252.6	118.7	19.7	2.8	2.6	3.2
36°	917.7	886.5	801.6	655.8	472.7	274.1	127.0	19.7	2.4	2.4	3.2
37°	944.8	915.1	832.8	694.2	500.5	293.1	134.3	19.7	2.2	2.4	3.2
38°	958.0	933.3	862.9	722.1	527.3	308.1	140.2	19.3	1.9	2.2	3.0
39°	963.7	943.5	881.3	745.7	547.5	321.1	144.5	18.8	1.7	2.2	3.0
40°	962.8	945.2	891.7	762.0	563.7	330.0	146.9	18.2	1.5	1.9	3.0
41°	957.8	942.7	897.2	775.8	573.5	336.0	147.5	17.5	1.3	1.9	2.8
42°	952.2	938.3	898.9	783.2	579.8	338.0	145.8	16.7	1.3	1.7	2.8
43°	946.3	933.6	898.9	785.6	581.3	336.7	143.0	15.2	1.1	1.7	2.8
44°	941.6	929.4	896.1	784.9	578.0	331.7	137.8	13.4	0.9	1.7	2.8
45°	935.9	924.0	892.4	780.8	571.7	323.2	131.3	11.9	0.6	1.5	2.8
46°	926.0	916.7	885.9	772.4	561.8	311.5	123.1	10.8	0.4	1.5	2.6
47°	906.7	898.7	873.3	759.8	548.6	297.7	114.6	9.7	0.4	1.5	2.6
48°	867.9	867.7	848.2	736.4	527.5	280.3	105.7	8.7	0.4	1.5	2.6
49°	830.4	826.5	802.3	695.2	497.4	259.5	96.4	7.8	0.2	1.5	2.6
50°	809.8	801.4	761.5	646.7	458.9	230.7	86.4	6.5	0.2	1.3	2.6
51°	788.4	776.3	729.2	602.9	412.9	203.0	75.6	5.2	0.2	1.3	2.4
52°	749.6	738.1	685.5	561.1	368.3	174.6	65.2	4.3	0.2	1.3	2.6
53°	707.8	691.3	634.1	515.2	329.1	149.5	54.6	3.7	0.2	1.3	2.4
54°	655.2	647.8	582.1	458.9	283.2	125.2	44.8	3.0	0.2	1.3	2.4
55°	605.5	594.7	526.5	401.2	241.6	102.7	37.5	2.4	0.2	1.3	2.4
56°	542.3	526.0	462.1	348.4	199.3	82.8	31.6	1.9	0.2	1.3	2.4
57°	466.9	449.6	399.1	289.7	156.4	63.0	26.4	1.5	0.2	1.3	2.4
58°	395.0	380.0	325.8	223.6	117.9	43.8	21.9	1.1	0.2	1.1	2.4
59°	341.2	324.8	271.0	172.0	81.9	32.3	16.5	0.9	0.2	1.3	2.4
60°	295.5	274.3	218.2	133.2	58.5	23.2	12.1	0.4	0.4	1.3	2.4
62.5°	170.3	150.4	104.2	54.2	24.0	11.9	5.8	0.2	0.4	1.3	2.4
65°	43.1	38.3	24.9	11.7	6.7	4.1	2.2	0.2	0.4	1.1	2.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.5	1.5	1.5	1.3	1.1	0.9	0.4	0.2	0.4	1.1	2.2
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.2	0.4	1.1	1.9
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	1.1	1.7
75°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	1.1	1.7
77.5°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.9	1.5
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.9	1.3
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.9	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.6	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.9	0.6
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°	11.0	11.0	11.0
2.5°	10.4	10.4	10.4
5°	9.7	9.7	9.5
7.5°	9.1	8.9	8.9
10°	8.2	8.2	8.2
12.5°	7.6	7.6	7.6
15°	6.9	7.1	7.1
17.5°	6.3	6.7	6.7
20°	5.8	6.3	6.5
22.5°	5.4	5.8	6.1
25°	5.2	5.6	5.8
27.5°	4.8	5.4	5.8
30°	4.5	5.2	5.6
31°	4.5	5.2	5.4
32°	4.3	5.2	5.4
33°	4.3	5.2	5.4
34°	4.3	5.0	5.4
35°	4.1	5.0	5.2
36°	4.1	5.0	5.2
37°	4.1	5.0	5.4
38°	4.1	5.0	5.2
39°	3.9	5.0	5.2
40°	3.9	5.0	5.2
41°	3.9	5.0	5.2
42°	3.9	5.0	5.2
43°	3.9	5.0	5.2
44°	3.9	4.8	5.2
45°	3.9	4.8	5.2
46°	3.9	5.0	5.2
47°	3.9	5.0	5.4
48°	3.9	4.8	5.2
49°	3.7	4.8	5.2
50°	3.7	4.8	5.2
51°	3.7	5.0	5.4
52°	3.7	5.0	5.4
53°	3.7	5.0	5.4
54°	3.7	5.0	5.2
55°	3.7	5.0	5.4
56°	3.7	5.0	5.2
57°	3.7	5.0	5.2
58°	3.7	4.8	5.2
59°	3.7	4.8	5.2
60°	3.7	4.8	5.2
62.5°	3.5	4.8	5.2
65°	3.5	4.5	5.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	3.2	4.5	4.8
70°	3.0	4.3	4.5
72.5°	2.8	4.1	4.3
75°	2.6	3.7	3.9
77.5°	2.2	3.2	3.7
80°	1.9	2.8	3.0
82.5°	1.5	2.4	2.6
85°	1.1	1.7	1.7
87.5°	0.4	0.9	0.9
90°	0.0	0.0	0.0

(END OF REPORT)