

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: P1334824

Luminaire Tested: P3A02R259835DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334824
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: P3A02R259835DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

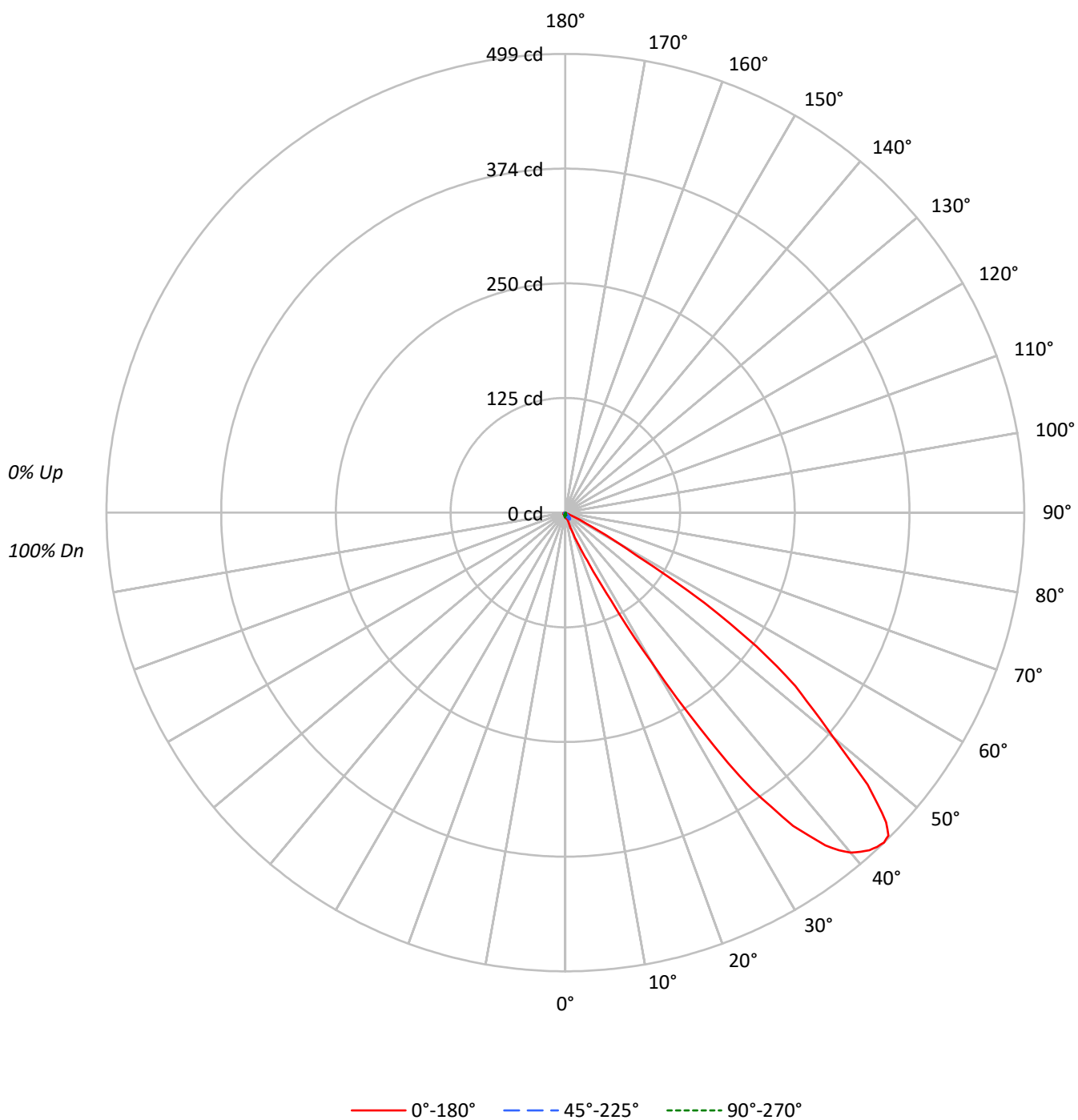
Lumens per Lamp: N/A
Luminaire Lumens: 104.0 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

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	0
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°	1162	1162	1162	1162	1162
5°	1321	1277	1123	1013	991
10°	1314	1202	957	846	846
15°	1476	1044	749	704	749
20°	5204	1027	583	607	653
25°	15001	1307	460	556	653
30°	47830	2026	380	532	658
35°	104748	2382	321	509	669
40°	138202	2147	258	515	716
45°	154094	1520	248	558	775
50°	129736	785	239	580	853
55°	96991	306	229	650	956
60°	30041	88	219	702	1053
65°	2542	0	259	778	1141
70°	192	64	321	898	1282
75°	169	85	424	932	1440
80°	126	126	631	1010	1768
85°	252	252	1006	1258	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 154094 cd/sqm

TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.5
10°-20°	1.2	1.2
20°-30°	5.8	5.5
30°-40°	27.7	26.6
40°-50°	43.4	41.7
50°-60°	22.3	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°	7.5	7.2
0°-40°	35.2	33.8
0°-60°	100.8	96.9
0°-90°	104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	104.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	6	5	5	4	1
15°	6	5	3	3	3	3
25°	62	5	2	2	3	38
35°	391	9	1	2	2	238
45°	497	5	1	2	2	364
55°	254	1	1	2	2	211
65°	5	0	0	2	2	15
75°	0	0	0	1	2	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
2.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.8	5.7	5.7
5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.8
7.5°	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.9	5.9	5.7
10°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.4
12.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.7	5.6	4.9
15°	6.5	6.5	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	4.6
17.5°	9.5	9.2	9.2	8.8	8.3	7.9	7.5	7.1	6.8	6.5	4.4
20°	22.3	22.2	21.8	20.7	19.5	18.1	16.7	15.2	13.0	11.5	4.4
22.5°	38.7	38.2	37.3	36.5	34.4	31.9	29.4	26.4	23.6	20.6	4.7
25°	62.0	63.2	60.5	58.3	54.6	50.2	45.3	41.3	36.1	31.4	5.4
27.5°	107.7	108.5	103.1	96.0	87.5	78.1	68.9	62.0	53.4	45.6	6.8
30°	188.9	189.7	180.7	165.5	147.9	132.4	111.5	93.1	76.1	63.1	8.0
31°	235.7	229.3	218.8	204.1	181.8	158.5	133.3	111.1	89.7	72.5	8.3
32°	276.5	275.9	263.7	241.3	219.0	190.2	159.0	130.0	103.7	82.0	8.6
33°	324.5	320.9	303.6	282.5	253.0	223.9	183.7	150.5	118.1	92.6	8.8
34°	363.1	353.2	346.0	322.0	290.8	253.8	210.7	172.3	136.0	102.9	8.9
35°	391.3	389.2	375.3	352.9	321.1	283.3	239.8	194.9	151.0	114.8	8.9
36°	421.3	414.8	401.2	380.9	350.0	310.9	262.0	214.5	168.5	125.5	8.8
37°	440.0	436.2	422.7	401.8	371.5	334.1	286.9	235.2	182.4	136.2	8.6
38°	459.3	451.5	438.3	418.2	388.5	353.4	304.9	251.1	195.2	145.6	8.3
39°	472.7	464.6	451.1	431.1	402.0	367.3	319.2	264.7	206.4	152.7	8.0
40°	482.8	475.0	461.2	440.7	412.0	378.2	331.1	276.7	215.7	158.8	7.5
41°	489.0	481.7	468.1	447.7	418.9	384.4	338.9	284.4	222.0	162.9	7.0
42°	494.2	486.8	472.9	452.0	423.1	389.7	343.6	289.4	226.3	165.0	6.7
43°	497.1	489.7	476.2	454.8	425.6	392.2	346.2	291.7	227.8	164.7	6.0
44°	498.8	491.1	477.4	456.1	426.7	392.8	346.4	291.2	226.8	162.5	5.5
45°	496.9	489.3	476.2	454.8	424.8	390.8	344.6	288.7	222.9	158.2	4.9
46°	485.0	479.2	467.1	447.5	418.8	385.7	339.9	284.0	217.0	152.9	4.1
47°	464.1	459.4	447.7	433.2	407.2	376.2	331.3	274.9	208.7	145.0	3.3
48°	442.2	435.3	424.5	409.5	387.6	359.3	317.1	261.6	196.0	134.5	2.9
49°	409.9	405.9	396.3	379.6	361.4	336.5	297.1	244.6	180.6	123.2	2.6
50°	380.3	377.5	364.1	351.8	332.5	309.2	269.9	222.2	161.3	109.1	2.3
51°	357.1	353.8	344.1	328.8	308.2	281.2	244.2	193.1	139.3	92.3	1.8
52°	332.9	331.1	322.5	306.8	286.5	259.6	219.2	168.4	117.9	78.1	1.5
53°	313.2	310.5	300.0	286.0	264.1	236.3	192.1	145.4	99.8	65.6	1.3
54°	284.3	283.2	276.5	261.8	238.1	207.8	167.6	122.5	83.3	55.6	1.1
55°	253.7	250.0	243.2	231.5	209.8	181.5	139.2	101.5	67.4	46.9	0.8
56°	216.3	216.2	203.9	194.2	174.9	144.9	111.2	79.3	54.7	39.1	0.7
57°	180.7	174.9	163.1	153.5	132.7	109.9	82.5	59.4	42.8	31.7	0.5
58°	133.6	130.6	127.5	113.4	94.2	77.9	58.9	41.7	31.7	24.2	0.4
59°	90.7	90.6	86.9	76.2	65.2	48.5	36.8	28.4	21.8	17.8	0.3
60°	68.5	66.8	59.5	52.4	41.0	30.7	21.8	16.7	13.5	11.4	0.2
62.5°	24.0	24.9	21.9	18.1	13.8	11.3	8.7	7.0	5.8	4.7	0.0
65°	4.9	5.4	4.7	4.4	3.5	3.0	2.7	2.3	1.9	1.6	0.0



TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	0.6	0.5	0.5	0.5	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

TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	5.3	5.3	5.3	5.3	5.3	5.3
2.5°	5.6	5.4	5.1	5.0	4.9	4.9
5°	5.5	5.1	4.9	4.6	4.5	4.5
7.5°	5.2	4.8	4.4	4.2	4.1	4.0
10°	4.9	4.3	3.9	3.8	3.8	3.8
12.5°	4.4	3.8	3.5	3.4	3.5	3.5
15°	3.9	3.3	3.1	3.1	3.2	3.3
17.5°	3.4	2.9	2.7	2.8	2.9	3.0
20°	3.0	2.5	2.5	2.6	2.8	2.8
22.5°	2.7	2.2	2.2	2.5	2.7	2.7
25°	2.4	1.9	2.0	2.3	2.6	2.7
27.5°	2.0	1.6	1.8	2.2	2.5	2.6
30°	1.7	1.5	1.7	2.1	2.4	2.6
31°	1.6	1.4	1.7	2.0	2.4	2.6
32°	1.5	1.4	1.6	2.0	2.4	2.5
33°	1.4	1.3	1.6	2.0	2.4	2.5
34°	1.3	1.2	1.6	2.0	2.4	2.5
35°	1.1	1.2	1.6	1.9	2.3	2.5
36°	1.0	1.1	1.6	1.9	2.3	2.5
37°	0.9	1.1	1.5	1.9	2.3	2.5
38°	0.8	1.0	1.5	1.9	2.3	2.5
39°	0.7	1.0	1.4	1.9	2.3	2.5
40°	0.6	0.9	1.4	1.8	2.3	2.5
41°	0.6	0.9	1.4	1.8	2.3	2.5
42°	0.5	0.9	1.4	1.8	2.3	2.5
43°	0.5	0.8	1.4	1.8	2.3	2.5
44°	0.4	0.8	1.3	1.8	2.3	2.5
45°	0.4	0.8	1.3	1.8	2.3	2.5
46°	0.3	0.7	1.3	1.8	2.3	2.5
47°	0.2	0.7	1.3	1.7	2.3	2.5
48°	0.2	0.7	1.3	1.7	2.3	2.5
49°	0.2	0.7	1.2	1.7	2.3	2.5
50°	0.2	0.7	1.2	1.7	2.3	2.5
51°	0.1	0.6	1.2	1.7	2.3	2.5
52°	0.1	0.6	1.2	1.7	2.3	2.6
53°	0.1	0.6	1.2	1.7	2.3	2.5
54°	0.1	0.6	1.1	1.7	2.3	2.5
55°	0.1	0.6	1.1	1.7	2.3	2.5
56°	0.1	0.5	1.1	1.6	2.3	2.5
57°	0.2	0.5	1.1	1.6	2.3	2.4
58°	0.2	0.5	1.1	1.6	2.2	2.4
59°	0.2	0.5	1.1	1.6	2.2	2.4
60°	0.2	0.5	1.0	1.6	2.2	2.4
62.5°	0.2	0.5	1.0	1.6	2.1	2.3
65°	0.2	0.5	0.9	1.5	2.1	2.2



TEST NUMBER: P1334824

CATALOG NUMBER: P3A02R259835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.5	0.9	1.4	2.0	2.1
70°	0.3	0.5	0.8	1.4	1.9	2.0
72.5°	0.3	0.5	0.8	1.2	1.7	1.9
75°	0.3	0.5	0.7	1.1	1.6	1.7
77.5°	0.3	0.5	0.6	1.0	1.5	1.6
80°	0.4	0.5	0.5	0.8	1.3	1.4
82.5°	0.4	0.5	0.5	0.6	1.0	1.1
85°	0.3	0.4	0.4	0.5	0.6	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)