

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: P1342568

Luminaire Tested: P3A09R409835DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R409835DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

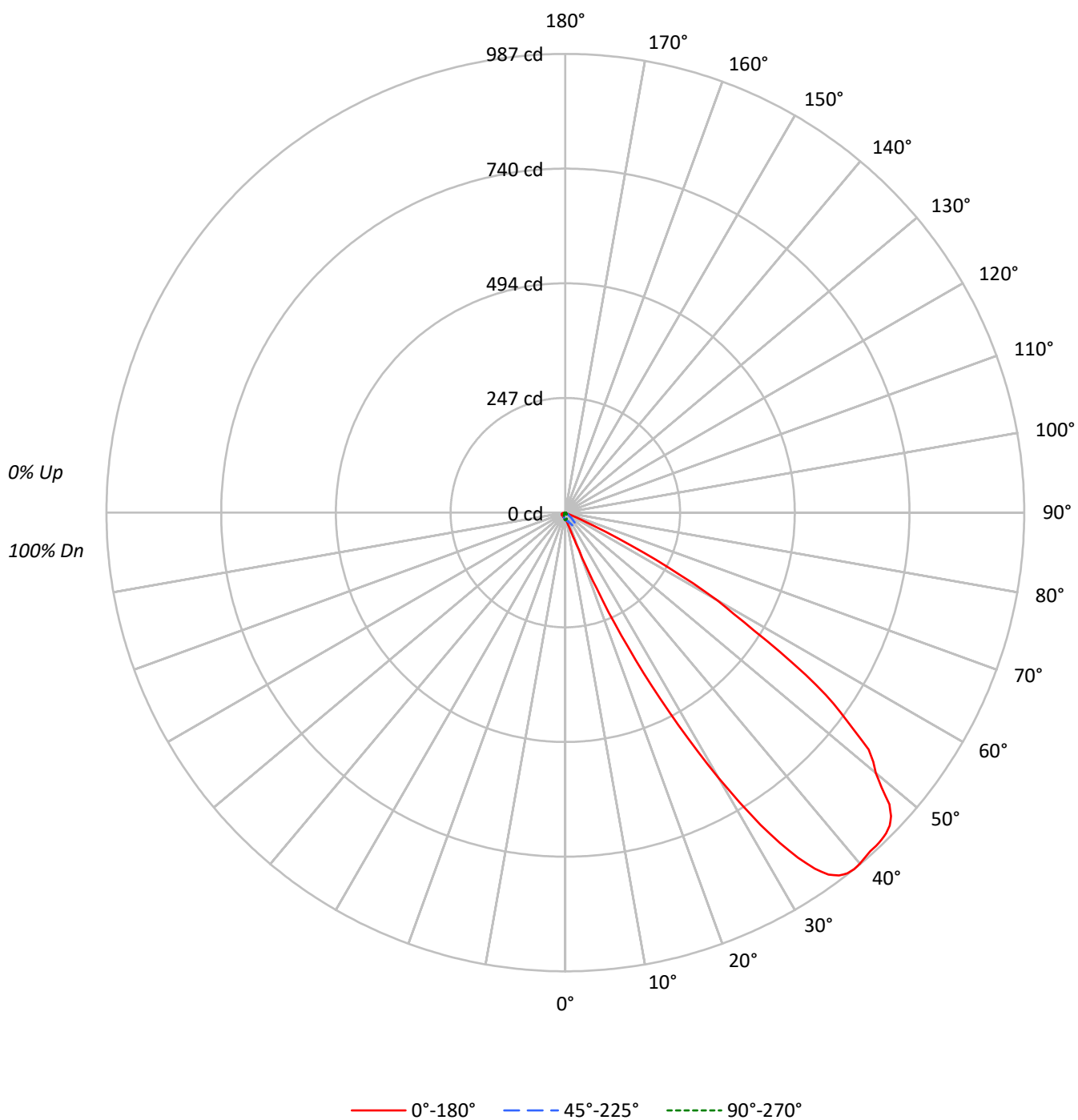
Lumens per Lamp: N/A
Luminaire Lumens: 305.0 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1342568

CATALOG NUMBER: P3A09R409835DE010 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	107	104	100	97	99	97	94		96	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71	66	62	60
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38	31	26	24
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	20		30	24	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3443	3443	3443	3443	3443
5°	3830	3698	3390	3082	3016
10°	4609	3919	3117	2806	2739
15°	7560	4268	2679	2474	2543
20°	19998	5040	2217	2217	2427
25°	77133	6242	1766	2032	2371
30°	166380	8305	1418	1975	2329
35°	250426	9824	1205	1954	2409
40°	282157	9876	1031	2004	2576
45°	302543	7629	961	2078	2791
50°	297372	4776	853	2183	3070
55°	261611	2370	841	2447	3441
60°	165601	482	965	2719	3815
65°	33882	156	1038	2906	4203
70°	705	192	1090	3206	4873
75°	678	508	1186	3558	5422
80°	758	379	1389	3915	6314
85°	755	755	2768	4277	7045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 307990 cd/sqm

TEST NUMBER: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.5	0.5
10°-20°	4.8	1.6
20°-30°	23.7	7.8
30°-40°	77.1	25.3
40°-50°	106.2	34.8
50°-60°	74.0	24.3
60°-70°	14.0	4.6
70°-80°	2.5	0.8
80°-90°	1.2	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°	30.0	9.8
0°-40°	107.0	35.1
0°-60°	287.3	94.2
0°-90°	305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	305.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	17	17	15	14	14	2
15°	33	19	12	11	11	12
25°	319	26	7	8	10	164
35°	936	37	4	7	9	565
45°	976	25	3	7	9	742
55°	684	6	2	6	9	585
65°	65	0	2	6	8	115
75°	1	1	1	4	6	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

TEST NUMBER: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
2.5°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.0	15.7
5°	17.4	17.4	17.4	17.4	17.1	17.1	17.1	16.8	16.8	16.2	15.4
7.5°	18.5	18.5	18.5	18.5	18.2	17.9	17.6	17.6	17.4	16.0	14.8
10°	20.7	20.7	20.4	20.2	19.9	19.3	19.0	18.5	17.6	15.7	14.0
12.5°	25.2	24.6	24.4	23.8	23.0	21.8	20.7	19.9	17.9	15.1	13.2
15°	33.3	32.8	31.7	30.0	28.3	26.0	24.1	22.1	18.8	14.3	11.8
17.5°	47.6	45.9	44.3	41.5	37.3	33.3	29.1	25.5	19.9	13.4	10.6
20°	85.7	84.6	74.5	66.7	54.1	45.1	36.7	30.5	21.6	12.6	9.5
22.5°	176.7	165.0	148.5	121.6	94.7	69.7	50.7	38.4	23.2	11.5	8.4
25°	318.8	300.3	264.7	212.9	157.1	111.2	73.4	50.1	25.8	10.4	7.3
27.5°	482.6	463.8	408.7	337.2	246.2	167.8	104.8	66.4	29.1	9.2	6.4
30°	657.1	641.1	571.1	472.2	347.0	235.0	140.3	82.9	32.8	8.1	5.6
31°	727.4	707.0	631.3	526.0	394.4	262.7	154.6	89.9	34.2	7.8	5.3
32°	792.1	768.9	690.4	577.6	432.8	292.7	170.3	96.1	35.3	7.3	5.0
33°	847.9	820.7	745.1	626.3	475.0	320.7	186.5	102.0	36.1	6.7	4.8
34°	895.2	871.7	790.4	675.3	512.6	347.6	202.5	107.8	36.7	6.4	4.5
35°	935.5	914.2	833.9	712.6	549.3	373.7	217.1	113.4	36.7	5.9	4.5
36°	962.7	944.2	871.4	750.7	580.1	395.8	229.4	118.5	36.7	5.3	4.2
37°	977.5	959.6	896.0	782.0	610.3	417.6	240.6	122.4	36.4	5.0	3.9
38°	985.1	969.4	914.2	807.5	631.3	433.3	250.4	125.5	36.1	4.5	3.9
39°	987.1	973.9	925.7	826.0	651.8	449.0	257.4	127.2	35.3	4.2	3.6
40°	985.7	974.2	931.9	842.5	667.5	461.3	262.5	127.7	34.5	3.6	3.6
41°	982.9	973.9	936.4	854.0	680.1	469.2	264.4	126.6	33.3	3.1	3.4
42°	980.4	970.5	938.3	861.9	688.8	473.1	264.1	124.4	31.7	2.8	3.4
43°	980.4	969.1	938.6	866.9	693.0	473.4	260.8	120.2	29.4	2.5	3.1
44°	978.7	968.3	940.0	870.3	694.1	470.8	255.5	115.7	26.9	2.2	3.1
45°	975.6	964.7	939.7	870.6	692.1	464.7	246.8	109.8	24.6	1.7	3.1
46°	969.7	959.9	937.2	868.6	686.2	455.7	236.4	103.9	22.1	1.4	2.8
47°	957.9	950.4	930.5	861.9	677.3	442.6	224.1	97.2	20.2	1.1	2.8
48°	937.8	932.5	919.0	847.0	660.2	426.3	210.9	89.9	18.2	1.1	2.8
49°	900.8	896.6	888.8	823.2	638.3	406.4	196.6	81.8	16.2	0.8	2.8
50°	871.7	867.2	851.2	783.2	607.0	381.2	180.9	73.7	14.0	0.6	2.5
51°	852.3	845.1	819.9	736.7	561.3	347.6	163.9	65.5	11.8	0.6	2.5
52°	828.0	817.1	785.7	694.9	519.6	314.0	145.4	57.4	10.4	0.6	2.5
53°	777.0	773.1	742.0	650.1	477.9	281.8	126.3	50.7	9.0	0.6	2.5
54°	732.5	726.6	684.3	587.9	432.5	245.9	106.7	44.8	7.6	0.6	2.5
55°	684.3	672.8	635.3	535.6	379.3	212.9	88.0	38.7	6.2	0.6	2.2
56°	623.5	613.4	573.1	479.5	330.2	179.3	73.7	31.7	4.8	0.6	2.2
57°	549.6	540.3	509.2	410.6	279.3	146.5	59.9	25.5	3.6	0.6	2.2
58°	478.1	467.8	432.2	344.5	225.5	116.2	50.1	20.7	2.8	0.6	2.2
59°	423.2	409.2	363.3	289.3	176.5	88.2	39.8	16.5	2.0	0.6	2.2
60°	377.6	366.1	318.5	240.9	138.4	65.0	29.4	12.6	1.1	0.6	2.2
62.5°	218.8	215.7	172.8	124.1	65.3	30.3	14.6	5.9	0.6	0.8	2.2
65°	65.3	56.9	44.3	26.3	16.8	10.1	5.3	2.0	0.3	0.8	2.0



TEST NUMBER: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.0	2.0	2.0	2.0	2.0	2.0	1.1	0.6	0.3	0.8	2.0
70°	1.1	0.8	0.8	0.8	0.8	0.6	0.6	0.3	0.3	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.3	0.6	0.8	1.4
75°	0.8	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.6	0.8	1.4
77.5°	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.6	0.8	1.4
80°	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.8
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: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	15.7	15.7	15.7	15.7
2.5°	15.1	14.8	14.6	14.6
5°	14.6	14.0	14.0	13.7
7.5°	13.7	13.2	13.2	13.2
10°	12.9	12.6	12.6	12.3
12.5°	11.8	11.8	11.8	11.8
15°	10.9	10.9	11.2	11.2
17.5°	9.8	10.1	10.6	10.9
20°	9.0	9.5	10.1	10.4
22.5°	8.4	9.0	9.8	10.1
25°	7.6	8.4	9.5	9.8
27.5°	7.0	8.1	9.0	9.5
30°	6.4	7.8	8.7	9.2
31°	6.4	7.6	8.7	9.2
32°	6.2	7.3	8.7	9.0
33°	6.2	7.3	8.7	9.0
34°	5.9	7.3	8.4	9.0
35°	5.9	7.3	8.4	9.0
36°	5.6	7.0	8.4	9.0
37°	5.6	7.0	8.4	9.0
38°	5.3	7.0	8.4	9.0
39°	5.3	7.0	8.4	9.0
40°	5.3	7.0	8.4	9.0
41°	5.0	7.0	8.4	9.0
42°	5.0	7.0	8.4	9.0
43°	5.0	6.7	8.4	9.0
44°	5.0	6.7	8.4	9.0
45°	4.8	6.7	8.4	9.0
46°	4.8	6.7	8.4	9.0
47°	4.8	6.7	8.4	9.0
48°	4.8	6.7	8.4	9.0
49°	4.8	6.7	8.4	9.0
50°	4.5	6.4	8.4	9.0
51°	4.5	6.4	8.4	9.0
52°	4.5	6.4	8.4	9.0
53°	4.5	6.4	8.4	9.0
54°	4.2	6.4	8.4	9.0
55°	4.2	6.4	8.4	9.0
56°	4.2	6.4	8.4	8.7
57°	4.2	6.4	8.1	8.7
58°	4.2	6.2	8.1	8.7
59°	4.2	6.2	8.1	8.7
60°	4.2	6.2	8.1	8.7
62.5°	3.9	6.2	7.8	8.4
65°	3.6	5.6	7.8	8.1



TEST NUMBER: P1342568

CATALOG NUMBER: P3A09R409835DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.6	5.3	7.3	7.8
70°	3.4	5.0	7.0	7.6
72.5°	2.8	4.8	6.4	7.0
75°	2.5	4.2	5.9	6.4
77.5°	2.2	3.6	5.3	5.6
80°	2.0	3.1	4.5	5.0
82.5°	1.4	2.2	3.6	3.9
85°	1.1	1.7	2.5	2.8
87.5°	0.8	0.8	1.4	1.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)