

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: P1334080

Luminaire Tested: P3A02R159727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R159727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

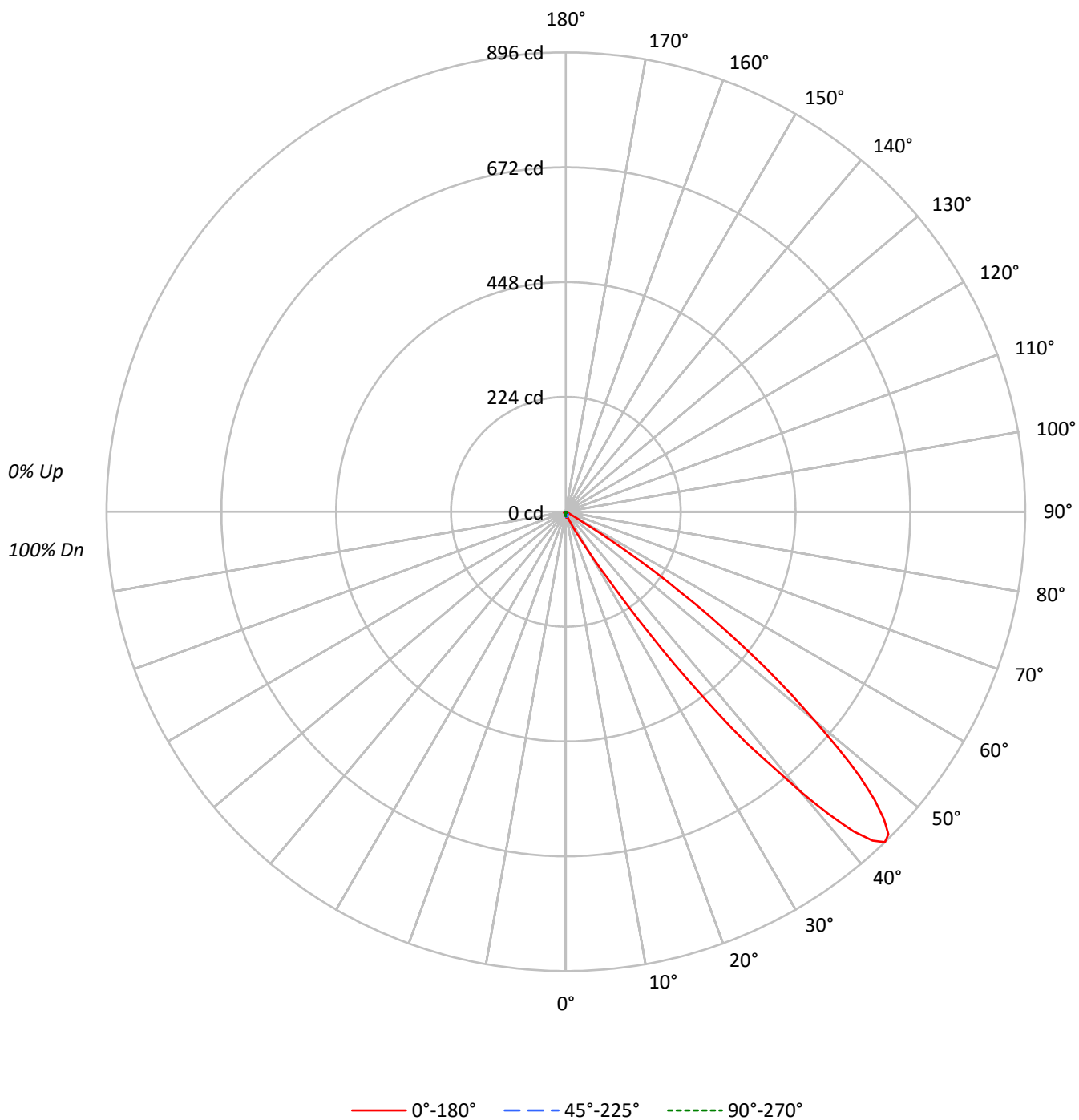
Lumens per Lamp: N/A
Luminaire Lumens: 100.0 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

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	101	93	87	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	53
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	37	49	42	37	48	42	37
7	62	47	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	31	26	37	31	26
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1952	1952	1952	1952	1952
5°	2421	2157	1761	1541	1519
10°	2382	1848	1358	1202	1225
15°	1975	1317	976	999	1067
20°	3430	1050	747	863	980
25°	7621	1258	605	798	919
30°	22788	1545	532	785	962
35°	87750	1740	482	803	1017
40°	203696	1517	458	830	1088
45°	275905	1147	403	899	1178
50°	216351	682	409	955	1296
55°	103834	306	382	1032	1415
60°	9473	44	351	1096	1579
65°	1038	0	311	1141	1712
70°	256	0	385	1218	1859
75°	254	85	508	1356	2118
80°	253	253	631	1389	2273
85°	252	252	1006	1258	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 275905 cd/sqm

TEST NUMBER: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.8
10°-20°	1.6	1.6
20°-30°	3.8	3.8
30°-40°	20.7	20.7
40°-50°	50.1	50.1
50°-60°	20.0	20.0
60°-70°	1.7	1.7
70°-80°	1.0	1.0
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°	6.1	6.1
0°-40°	26.8	26.8
0°-60°	96.9	96.9
0°-90°	100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	100.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	11	10	8	7	7	1
15°	9	6	4	4	5	3
25°	32	5	2	3	4	19
35°	328	6	2	3	4	232
45°	890	4	1	3	4	628
55°	272	1	1	3	4	253
65°	2	0	1	2	3	5
75°	0	0	1	2	2	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
2.5°	10.0	10.0	10.1	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.6
5°	11.0	11.0	11.0	11.0	10.9	10.9	10.9	10.8	10.8	10.7	9.8
7.5°	11.4	11.4	11.3	11.3	11.2	11.2	11.1	11.0	10.9	10.8	9.4
10°	10.7	10.7	10.7	10.6	10.6	10.5	10.4	10.3	10.2	10.0	8.3
12.5°	9.5	9.5	9.6	9.5	9.4	9.3	9.1	9.0	8.9	8.7	6.9
15°	8.7	8.7	8.7	8.6	8.5	8.3	8.2	8.0	7.9	7.6	5.8
17.5°	11.1	11.1	11.0	10.8	10.4	10.1	9.6	9.2	8.7	8.1	5.0
20°	14.7	14.7	14.5	14.3	13.8	13.3	12.5	11.8	11.0	10.3	4.5
22.5°	21.2	21.5	20.9	20.2	19.5	18.3	17.2	16.2	14.8	13.6	4.6
25°	31.5	31.8	31.5	29.9	28.6	27.0	24.9	22.7	20.3	18.1	5.2
27.5°	51.1	51.3	50.8	46.9	44.8	40.6	36.9	33.3	29.3	25.3	5.7
30°	90.0	90.1	86.9	79.2	72.3	63.1	55.3	47.9	41.6	35.2	6.1
31°	118.6	115.8	109.0	99.6	88.6	76.3	65.6	55.9	46.6	39.7	6.2
32°	150.6	150.2	138.9	122.6	108.0	92.5	76.5	64.1	53.3	44.0	6.3
33°	192.9	193.1	175.4	156.2	132.2	111.5	90.4	73.5	60.5	49.1	6.5
34°	259.1	243.6	222.8	196.8	164.1	132.9	105.6	84.4	67.0	53.9	6.5
35°	327.8	312.2	289.3	250.0	205.1	161.4	123.6	96.0	74.8	59.2	6.5
36°	404.8	391.6	356.9	306.7	249.5	188.4	142.8	109.5	82.5	64.0	6.4
37°	488.0	468.5	430.0	375.3	298.7	226.2	166.1	122.8	90.1	69.2	6.2
38°	572.4	554.9	506.3	440.0	357.6	266.2	189.4	135.7	97.2	73.1	5.9
39°	636.4	626.9	578.7	504.6	404.5	304.1	213.5	149.5	104.7	77.0	5.6
40°	711.6	696.2	650.5	558.9	460.1	342.7	237.0	161.6	110.9	80.1	5.3
41°	780.2	760.7	703.1	614.5	504.5	377.4	259.3	174.2	115.9	81.9	5.1
42°	839.1	816.3	756.1	662.2	541.7	405.1	277.2	183.2	120.5	83.4	4.8
43°	877.1	857.5	798.3	698.0	573.5	430.5	293.8	192.5	123.4	84.4	4.4
44°	895.7	875.8	818.5	720.4	593.1	445.8	304.6	199.0	126.6	85.7	4.1
45°	889.7	869.6	814.1	720.8	599.2	451.3	309.2	201.9	128.3	86.8	3.7
46°	862.3	848.1	792.3	702.1	587.6	445.4	306.6	199.7	127.7	86.8	3.3
47°	823.8	807.6	754.5	669.8	559.6	430.2	296.1	193.0	124.0	84.9	2.9
48°	771.4	757.6	701.8	618.7	516.6	397.2	272.5	182.2	118.3	81.0	2.5
49°	705.5	686.4	634.5	553.3	460.6	350.4	241.5	163.8	109.0	75.5	2.2
50°	634.2	610.5	570.4	487.8	402.6	300.4	200.7	138.5	95.9	68.3	2.0
51°	564.3	540.2	502.0	431.7	340.8	249.3	161.9	110.6	79.0	58.4	1.7
52°	491.8	471.6	428.9	373.6	291.7	202.0	134.9	93.5	65.6	49.1	1.4
53°	419.6	405.8	365.1	309.2	234.4	165.0	110.2	80.1	57.2	42.0	1.1
54°	347.3	332.2	301.3	251.5	188.9	130.2	93.4	67.0	49.7	36.6	1.0
55°	271.6	263.8	235.3	191.7	143.2	103.9	75.8	57.6	41.6	30.6	0.8
56°	209.2	200.4	174.4	139.1	106.4	81.4	61.3	47.1	35.2	25.6	0.6
57°	137.0	128.0	110.8	97.1	77.5	59.3	46.9	37.1	28.6	21.2	0.5
58°	81.0	72.8	70.1	59.8	51.6	40.3	34.6	27.6	21.1	16.8	0.3
59°	37.2	37.8	33.6	31.5	28.6	25.6	21.0	18.4	14.5	12.1	0.2
60°	21.6	20.4	19.9	17.8	15.9	14.1	12.7	11.2	9.1	7.8	0.1
62.5°	7.4	7.1	7.3	6.6	6.2	6.0	5.5	4.7	3.9	3.2	0.0
65°	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.3	1.2	1.0	0.0

TEST NUMBER: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.0
70°	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.0
72.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1
75°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
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	0.1	0.1	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: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	8.9	8.9	8.9	8.9	8.9	8.9
2.5°	9.2	8.8	8.3	8.0	7.9	7.8
5°	8.8	8.0	7.4	7.0	6.9	6.9
7.5°	7.9	7.0	6.4	6.2	6.1	6.1
10°	6.9	6.1	5.6	5.4	5.5	5.5
12.5°	5.8	5.1	4.9	4.9	5.0	5.1
15°	4.7	4.3	4.3	4.4	4.6	4.7
17.5°	3.9	3.7	3.8	4.0	4.2	4.4
20°	3.2	3.2	3.4	3.7	4.0	4.2
22.5°	2.7	2.8	3.1	3.4	3.8	4.0
25°	2.3	2.5	2.8	3.3	3.7	3.8
27.5°	2.0	2.3	2.7	3.2	3.6	3.8
30°	1.7	2.1	2.6	3.1	3.6	3.8
31°	1.6	2.0	2.5	3.1	3.6	3.8
32°	1.5	2.0	2.5	3.1	3.6	3.8
33°	1.4	1.9	2.5	3.0	3.6	3.8
34°	1.3	1.9	2.5	3.1	3.6	3.8
35°	1.2	1.8	2.4	3.0	3.5	3.8
36°	1.1	1.8	2.4	3.0	3.6	3.8
37°	1.0	1.8	2.4	3.0	3.5	3.8
38°	1.0	1.7	2.3	3.0	3.5	3.8
39°	0.9	1.6	2.3	3.0	3.5	3.8
40°	0.8	1.6	2.2	2.9	3.5	3.8
41°	0.7	1.5	2.2	2.9	3.5	3.8
42°	0.6	1.5	2.2	2.9	3.5	3.8
43°	0.5	1.4	2.1	2.9	3.5	3.8
44°	0.5	1.4	2.1	2.9	3.5	3.8
45°	0.4	1.3	2.0	2.9	3.5	3.8
46°	0.4	1.3	2.0	2.8	3.5	3.8
47°	0.3	1.3	2.0	2.8	3.5	3.8
48°	0.3	1.2	2.0	2.8	3.5	3.8
49°	0.2	1.2	2.0	2.8	3.5	3.8
50°	0.2	1.2	1.9	2.8	3.5	3.8
51°	0.2	1.2	1.9	2.8	3.5	3.8
52°	0.2	1.1	1.9	2.8	3.5	3.8
53°	0.2	1.1	1.9	2.8	3.5	3.8
54°	0.2	1.1	1.8	2.8	3.5	3.8
55°	0.2	1.0	1.8	2.7	3.5	3.7
56°	0.2	1.0	1.8	2.7	3.5	3.7
57°	0.2	1.0	1.7	2.7	3.5	3.7
58°	0.2	0.9	1.7	2.6	3.4	3.7
59°	0.2	0.9	1.6	2.6	3.4	3.6
60°	0.2	0.8	1.6	2.5	3.3	3.6
62.5°	0.2	0.7	1.4	2.4	3.2	3.4
65°	0.2	0.6	1.3	2.2	3.1	3.3



TEST NUMBER: P1334080

CATALOG NUMBER: P3A02R159727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.2	2.1	2.9	3.2
70°	0.2	0.6	1.1	1.9	2.8	2.9
72.5°	0.3	0.6	1.0	1.8	2.6	2.7
75°	0.4	0.6	0.9	1.6	2.4	2.5
77.5°	0.4	0.6	0.8	1.4	2.1	2.2
80°	0.4	0.5	0.7	1.1	1.7	1.8
82.5°	0.4	0.5	0.5	0.9	1.3	1.4
85°	0.3	0.4	0.4	0.5	0.9	1.0
87.5°	0.3	0.4	0.2	0.3	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)