

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: P1342040

Luminaire Tested: P3A09R359830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342040
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: P3A09R359830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

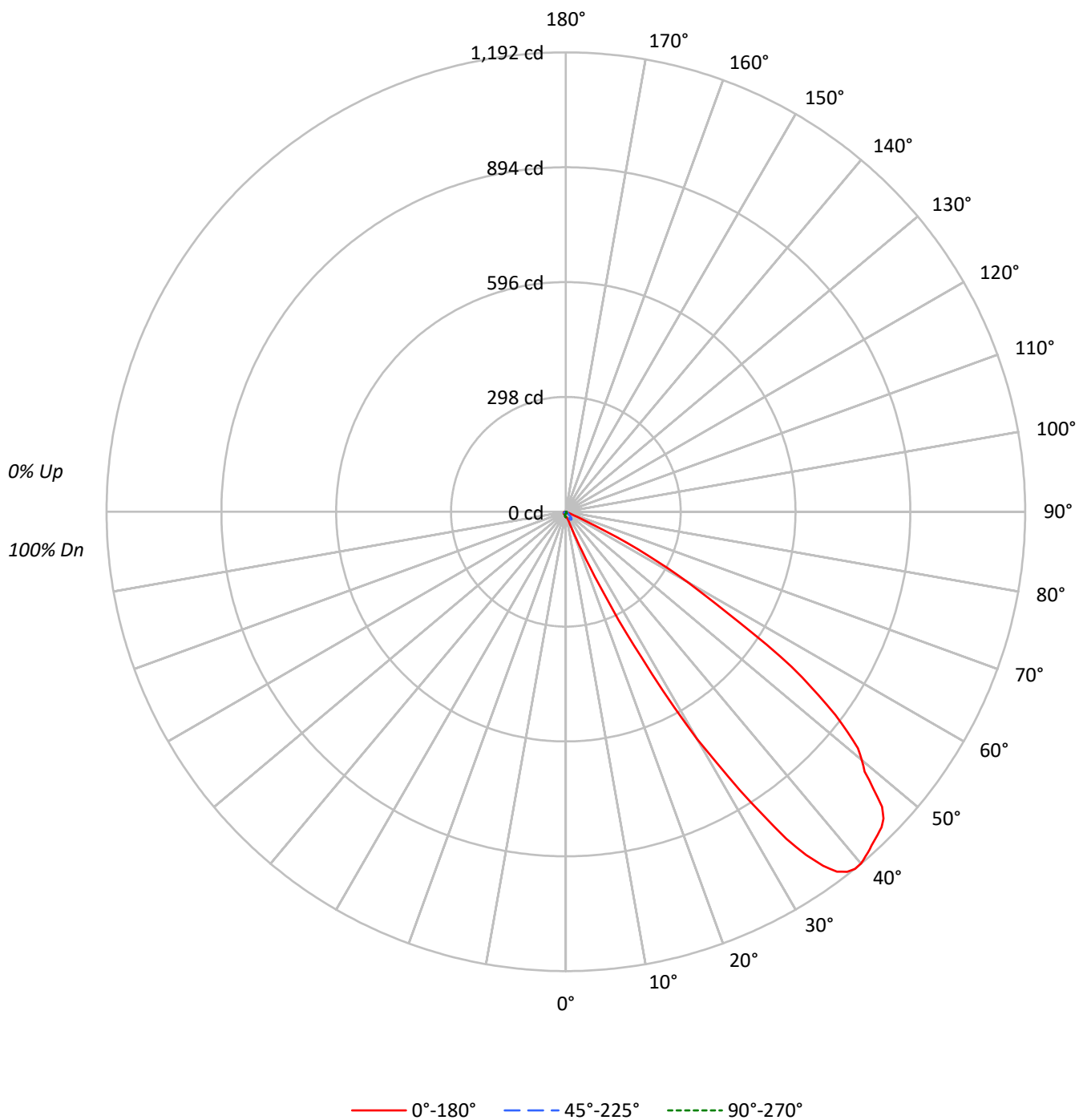
Lumens per Lamp: N/A
Luminaire Lumens: 297.0 lumens
Efficiency: N/A
Efficacy: 27.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1342040

CATALOG NUMBER: P3A09R359830DE010 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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3004	3004	3004	3004	3004
5°	3236	3192	2950	2663	2597
10°	3407	3095	2627	2271	2271
15°	4858	3042	2134	1952	1998
20°	12204	3244	1680	1680	1867
25°	56640	4162	1307	1548	1742
30°	172153	5646	1013	1418	1772
35°	290955	6532	857	1365	1713
40°	341068	6441	687	1374	1832
45°	359169	4559	589	1489	1985
50°	341891	2729	546	1569	2183
55°	286499	1109	612	1759	2561
60°	160382	219	702	2017	2807
65°	27707	156	675	2231	3217
70°	513	192	833	2436	3590
75°	424	254	1101	2711	4067
80°	379	379	1389	3031	4799
85°	0	755	2768	3271	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 361723 cd/sqm

TEST NUMBER: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.4
10°-20°	3.5	1.2
20°-30°	18.2	6.1
30°-40°	78.7	26.5
40°-50°	112.3	37.8
50°-60°	69.5	23.4
60°-70°	10.6	3.6
70°-80°	2.0	0.7
80°-90°	1.0	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°	23.0	7.7
0°-40°	101.7	34.2
0°-60°	283.5	95.4
0°-90°	297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	297.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	15	14	13	12	12	1
15°	21	13	9	9	9	8
25°	234	17	5	6	7	140
35°	1087	24	3	5	6	653
45°	1158	15	2	5	6	875
55°	749	3	2	5	7	638
65°	53	0	1	4	6	109
75°	0	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
2.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	13.7	13.4
5°	14.7	14.7	14.5	14.5	14.5	14.5	14.5	14.5	13.9	13.4	12.6
7.5°	15.0	15.0	14.7	14.7	14.7	14.7	14.5	14.2	13.7	12.6	11.8
10°	15.3	15.3	15.3	15.3	15.0	14.7	14.5	13.9	13.1	11.8	11.0
12.5°	17.2	17.2	16.9	16.4	15.8	15.3	14.7	13.7	12.1	10.7	9.9
15°	21.4	21.2	20.6	19.8	18.8	17.4	16.4	13.4	11.0	9.4	8.8
17.5°	30.0	29.5	28.7	26.0	23.6	21.2	19.0	13.4	9.9	8.3	7.8
20°	52.3	52.5	46.9	40.5	35.1	29.2	23.9	13.9	8.8	7.2	7.0
22.5°	109.1	104.8	91.4	75.9	57.9	44.8	33.8	15.3	7.8	6.2	6.2
25°	234.1	217.7	185.3	140.0	98.7	70.0	49.1	17.2	7.0	5.4	5.6
27.5°	427.4	412.6	347.5	261.7	173.7	105.6	66.5	19.6	6.2	4.6	5.1
30°	679.9	639.2	554.2	429.0	290.4	161.7	89.3	22.3	5.1	4.0	4.8
31°	758.7	740.0	636.5	496.3	340.2	192.0	98.9	23.1	4.8	4.0	4.6
32°	852.3	819.1	726.3	570.0	390.9	219.0	110.5	23.9	4.6	3.5	4.6
33°	936.0	903.8	790.9	634.9	442.1	249.9	122.8	24.1	4.0	3.5	4.3
34°	1023.9	979.9	868.1	702.7	494.7	283.1	134.1	24.4	3.8	3.2	4.3
35°	1086.9	1042.9	934.6	756.3	540.0	312.6	146.9	24.4	3.5	3.2	4.0
36°	1135.7	1097.1	992.0	811.6	585.0	339.2	157.1	24.4	2.9	2.9	4.0
37°	1169.2	1132.5	1030.6	859.0	619.3	362.7	166.2	24.4	2.7	2.9	4.0
38°	1185.6	1155.0	1067.9	893.6	652.6	381.2	173.5	23.9	2.4	2.7	3.8
39°	1192.5	1167.6	1090.7	922.8	677.5	397.3	178.8	23.3	2.1	2.7	3.8
40°	1191.5	1169.7	1103.5	942.9	697.6	408.3	181.8	22.5	1.9	2.4	3.8
41°	1185.3	1166.5	1110.2	960.1	709.7	415.8	182.6	21.7	1.6	2.4	3.5
42°	1178.3	1161.2	1112.4	969.2	717.5	418.2	180.4	20.6	1.6	2.1	3.5
43°	1171.1	1155.3	1112.4	972.2	719.3	416.6	177.0	18.8	1.3	2.1	3.5
44°	1165.2	1150.2	1108.9	971.3	715.3	410.5	170.5	16.6	1.1	2.1	3.5
45°	1158.2	1143.5	1104.3	966.3	707.5	400.0	162.5	14.7	0.8	1.9	3.5
46°	1145.9	1134.4	1096.3	955.8	695.2	385.5	152.3	13.4	0.5	1.9	3.2
47°	1122.0	1112.1	1080.7	940.2	678.8	368.4	141.8	12.1	0.5	1.9	3.2
48°	1074.0	1073.8	1049.6	911.3	652.8	346.9	130.8	10.7	0.5	1.9	3.2
49°	1027.7	1022.8	992.8	860.4	615.6	321.2	119.3	9.7	0.3	1.9	3.2
50°	1002.2	991.7	942.4	800.3	567.8	285.5	107.0	8.0	0.3	1.6	3.2
51°	975.6	960.6	902.4	746.1	511.0	251.2	93.6	6.4	0.3	1.6	2.9
52°	927.6	913.4	848.3	694.4	455.8	216.1	80.7	5.4	0.3	1.6	3.2
53°	875.9	855.5	784.7	637.6	407.3	185.0	67.6	4.6	0.3	1.6	2.9
54°	810.8	801.6	720.4	567.8	350.4	155.0	55.5	3.8	0.3	1.6	2.9
55°	749.4	736.0	651.5	496.5	298.9	127.1	46.4	2.9	0.3	1.6	2.9
56°	671.1	651.0	571.9	431.1	246.7	102.4	39.1	2.4	0.3	1.6	2.9
57°	577.8	556.3	493.9	358.5	193.6	78.0	32.7	1.9	0.3	1.6	2.9
58°	488.8	470.3	403.2	276.7	145.8	54.2	27.1	1.3	0.3	1.3	2.9
59°	422.3	401.9	335.4	212.9	101.3	39.9	20.4	1.1	0.3	1.6	2.9
60°	365.7	339.4	270.0	164.9	72.4	28.7	15.0	0.5	0.5	1.6	2.9
62.5°	210.7	186.1	129.0	67.0	29.8	14.7	7.2	0.3	0.5	1.6	2.9
65°	53.4	47.5	30.8	14.5	8.3	5.1	2.7	0.3	0.5	1.3	2.7



TEST NUMBER: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.9	1.9	1.9	1.6	1.3	1.1	0.5	0.3	0.5	1.3	2.7
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.3	0.5	1.3	2.4
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.1
75°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.1
77.5°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.9
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.6
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.8	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	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: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	13.7	13.7	13.7
2.5°	12.9	12.9	12.9
5°	12.1	12.1	11.8
7.5°	11.3	11.0	11.0
10°	10.2	10.2	10.2
12.5°	9.4	9.4	9.4
15°	8.6	8.8	8.8
17.5°	7.8	8.3	8.3
20°	7.2	7.8	8.0
22.5°	6.7	7.2	7.5
25°	6.4	7.0	7.2
27.5°	5.9	6.7	7.2
30°	5.6	6.4	7.0
31°	5.6	6.4	6.7
32°	5.4	6.4	6.7
33°	5.4	6.4	6.7
34°	5.4	6.2	6.7
35°	5.1	6.2	6.4
36°	5.1	6.2	6.4
37°	5.1	6.2	6.7
38°	5.1	6.2	6.4
39°	4.8	6.2	6.4
40°	4.8	6.2	6.4
41°	4.8	6.2	6.4
42°	4.8	6.2	6.4
43°	4.8	6.2	6.4
44°	4.8	5.9	6.4
45°	4.8	5.9	6.4
46°	4.8	6.2	6.4
47°	4.8	6.2	6.7
48°	4.8	5.9	6.4
49°	4.6	5.9	6.4
50°	4.6	5.9	6.4
51°	4.6	6.2	6.7
52°	4.6	6.2	6.7
53°	4.6	6.2	6.7
54°	4.6	6.2	6.4
55°	4.6	6.2	6.7
56°	4.6	6.2	6.4
57°	4.6	6.2	6.4
58°	4.6	5.9	6.4
59°	4.6	5.9	6.4
60°	4.6	5.9	6.4
62.5°	4.3	5.9	6.4
65°	4.3	5.6	6.2



TEST NUMBER: P1342040

CATALOG NUMBER: P3A09R359830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	4.0	5.6	5.9
70°	3.8	5.4	5.6
72.5°	3.5	5.1	5.4
75°	3.2	4.6	4.8
77.5°	2.7	4.0	4.6
80°	2.4	3.5	3.8
82.5°	1.9	2.9	3.2
85°	1.3	2.1	2.1
87.5°	0.5	1.1	1.1
90°	0.0	0.0	0.0

(END OF REPORT)