

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: P1345586

Luminaire Tested: P3A13R359830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345586
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: P3A13R359830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

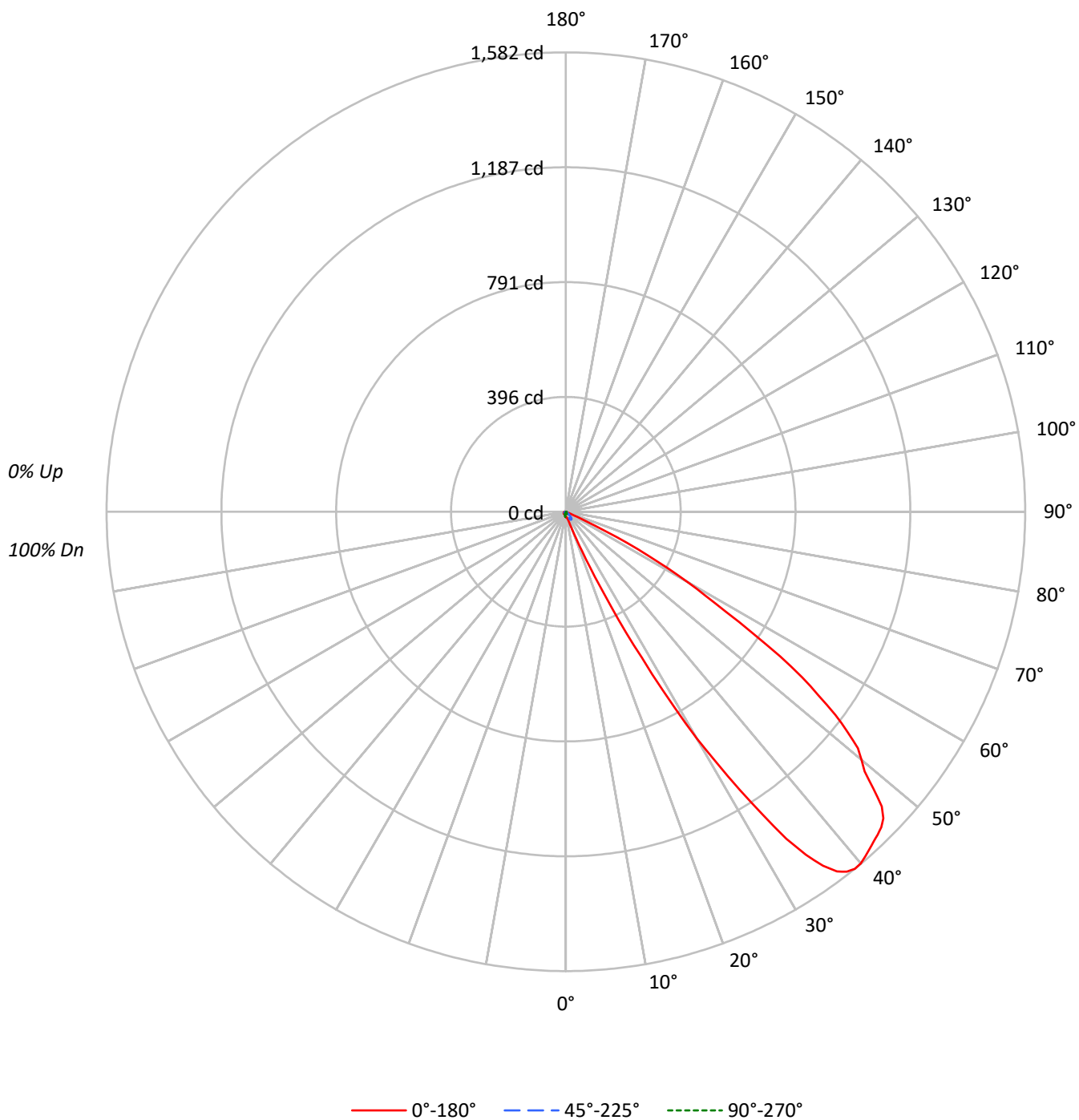
Lumens per Lamp: N/A
Luminaire Lumens: 394.0 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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°	3969	3969	3969	3969	3969
5°	4314	4226	3918	3522	3434
10°	4520	4119	3474	3006	3006
15°	6470	4041	2815	2588	2656
20°	16195	4317	2240	2240	2497
25°	75125	5516	1718	2057	2323
30°	228390	7470	1342	1899	2329
35°	385985	8673	1151	1820	2275
40°	452448	8559	916	1832	2433
45°	476484	6078	775	1985	2636
50°	453546	3650	716	2047	2900
55°	380049	1491	803	2294	3403
60°	212746	307	921	2631	3728
65°	36735	208	934	2958	4255
70°	705	256	1154	3206	4809
75°	593	339	1525	3643	5422
80°	505	505	1768	4041	6314
85°	0	1006	3522	4529	7045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 479845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.4
10°-20°	4.6	1.2
20°-30°	24.2	6.1
30°-40°	104.4	26.5
40°-50°	148.9	37.8
50°-60°	92.2	23.4
60°-70°	14.0	3.6
70°-80°	2.6	0.7
80°-90°	1.3	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°	30.5	7.7
0°-40°	134.9	34.2
0°-60°	376.0	95.4
0°-90°	394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	394.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	20	19	18	16	16	2
15°	28	18	12	11	12	10
25°	310	23	7	8	10	186
35°	1442	32	4	7	8	866
45°	1536	20	2	6	8	1161
55°	994	4	2	6	9	847
65°	71	0	2	6	8	145
75°	1	0	2	4	6	1
85°	0	0	1	2	3	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°	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
2.5°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.1	17.8
5°	19.6	19.6	19.2	19.2	19.2	19.2	19.2	19.2	18.5	17.8	16.7
7.5°	19.9	19.9	19.6	19.6	19.6	19.6	19.2	18.9	18.1	16.7	15.6
10°	20.3	20.3	20.3	20.3	19.9	19.6	19.2	18.5	17.4	15.6	14.6
12.5°	22.8	22.8	22.4	21.7	21.0	20.3	19.6	18.1	16.0	14.2	13.2
15°	28.5	28.1	27.4	26.3	24.9	23.1	21.7	17.8	14.6	12.4	11.7
17.5°	39.8	39.1	38.1	34.5	31.3	28.1	25.3	17.8	13.2	11.0	10.3
20°	69.4	69.7	62.2	53.7	46.6	38.8	31.7	18.5	11.7	9.6	9.2
22.5°	144.8	139.1	121.3	100.7	76.8	59.4	44.8	20.3	10.3	8.2	8.2
25°	310.5	288.8	245.8	185.7	130.9	92.8	65.1	22.8	9.2	7.1	7.5
27.5°	566.9	547.4	460.9	347.1	230.5	140.1	88.2	26.0	8.2	6.0	6.8
30°	902.0	847.9	735.2	569.1	385.2	214.5	118.4	29.5	6.8	5.3	6.4
31°	1006.5	981.6	844.4	658.3	451.3	254.7	131.2	30.6	6.4	5.3	6.0
32°	1130.7	1086.6	963.5	756.2	518.6	290.6	146.5	31.7	6.0	4.6	6.0
33°	1241.6	1199.0	1049.2	842.2	586.5	331.5	162.9	32.0	5.3	4.6	5.7
34°	1358.3	1300.0	1151.7	932.2	656.2	375.6	177.8	32.4	5.0	4.3	5.7
35°	1441.9	1383.6	1239.9	1003.3	716.3	414.7	194.9	32.4	4.6	4.3	5.3
36°	1506.6	1455.4	1316.0	1076.6	776.1	449.9	208.4	32.4	3.9	3.9	5.3
37°	1551.1	1502.3	1367.2	1139.6	821.6	481.2	220.5	32.4	3.6	3.9	5.3
38°	1572.8	1532.2	1416.6	1185.4	865.7	505.8	230.1	31.7	3.2	3.6	5.0
39°	1582.0	1548.9	1446.9	1224.2	898.8	527.1	237.2	30.9	2.8	3.6	5.0
40°	1580.6	1551.8	1463.9	1250.9	925.5	541.7	241.1	29.9	2.5	3.2	5.0
41°	1572.4	1547.5	1472.8	1273.7	941.5	551.6	242.2	28.8	2.1	3.2	4.6
42°	1563.2	1540.4	1475.7	1285.7	951.8	554.8	239.4	27.4	2.1	2.8	4.6
43°	1553.6	1532.6	1475.7	1289.7	954.3	552.7	234.7	24.9	1.8	2.8	4.6
44°	1545.7	1525.8	1471.0	1288.6	948.9	544.5	226.2	22.1	1.4	2.8	4.6
45°	1536.5	1516.9	1465.0	1281.8	938.6	530.7	215.5	19.6	1.1	2.5	4.6
46°	1520.1	1504.8	1454.3	1268.0	922.3	511.5	202.0	17.8	0.7	2.5	4.3
47°	1488.5	1475.3	1433.7	1247.3	900.6	488.7	188.1	16.0	0.7	2.5	4.3
48°	1424.8	1424.5	1392.4	1208.9	866.1	460.2	173.6	14.2	0.7	2.5	4.3
49°	1363.3	1356.9	1317.0	1141.3	816.6	426.1	158.3	12.8	0.4	2.5	4.3
50°	1329.5	1315.6	1250.2	1061.7	753.3	378.8	141.9	10.7	0.4	2.1	4.3
51°	1294.3	1274.4	1197.2	989.8	677.9	333.3	124.1	8.5	0.4	2.1	3.9
52°	1230.6	1211.8	1125.3	921.2	604.6	286.7	107.1	7.1	0.4	2.1	4.3
53°	1162.0	1134.9	1041.0	845.8	540.3	245.4	89.6	6.0	0.4	2.1	3.9
54°	1075.5	1063.5	955.7	753.3	464.9	205.6	73.6	5.0	0.4	2.1	3.9
55°	994.1	976.3	864.3	658.7	396.6	168.6	61.5	3.9	0.4	2.1	3.9
56°	890.2	863.6	758.6	571.9	327.2	135.9	51.9	3.2	0.4	2.1	3.9
57°	766.5	738.0	655.1	475.5	256.8	103.5	43.4	2.5	0.4	2.1	3.9
58°	648.4	623.8	534.9	367.1	193.5	71.8	35.9	1.8	0.4	1.8	3.9
59°	560.2	533.1	444.9	282.4	134.4	53.0	27.0	1.4	0.4	2.1	3.9
60°	485.1	450.3	358.2	218.7	96.0	38.1	19.9	0.7	0.7	2.1	3.9
62.5°	279.6	246.8	171.1	88.9	39.5	19.6	9.6	0.4	0.7	2.1	3.9
65°	70.8	63.0	40.9	19.2	11.0	6.8	3.6	0.4	0.7	1.8	3.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	2.5	2.5	2.5	2.1	1.8	1.4	0.7	0.4	0.7	1.8	3.6
70°	1.1	1.1	1.1	0.7	0.7	0.4	0.4	0.4	0.7	1.8	3.2
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.8	2.8
75°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.8	2.8
77.5°	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.4	2.5
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.4	2.1
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.4	1.8
85°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.1	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.4	1.1
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°	18.1	18.1	18.1
2.5°	17.1	17.1	17.1
5°	16.0	16.0	15.6
7.5°	14.9	14.6	14.6
10°	13.5	13.5	13.5
12.5°	12.4	12.4	12.4
15°	11.4	11.7	11.7
17.5°	10.3	11.0	11.0
20°	9.6	10.3	10.7
22.5°	8.9	9.6	10.0
25°	8.5	9.2	9.6
27.5°	7.8	8.9	9.6
30°	7.5	8.5	9.2
31°	7.5	8.5	8.9
32°	7.1	8.5	8.9
33°	7.1	8.5	8.9
34°	7.1	8.2	8.9
35°	6.8	8.2	8.5
36°	6.8	8.2	8.5
37°	6.8	8.2	8.9
38°	6.8	8.2	8.5
39°	6.4	8.2	8.5
40°	6.4	8.2	8.5
41°	6.4	8.2	8.5
42°	6.4	8.2	8.5
43°	6.4	8.2	8.5
44°	6.4	7.8	8.5
45°	6.4	7.8	8.5
46°	6.4	8.2	8.5
47°	6.4	8.2	8.9
48°	6.4	7.8	8.5
49°	6.0	7.8	8.5
50°	6.0	7.8	8.5
51°	6.0	8.2	8.9
52°	6.0	8.2	8.9
53°	6.0	8.2	8.9
54°	6.0	8.2	8.5
55°	6.0	8.2	8.9
56°	6.0	8.2	8.5
57°	6.0	8.2	8.5
58°	6.0	7.8	8.5
59°	6.0	7.8	8.5
60°	6.0	7.8	8.5
62.5°	5.7	7.8	8.5
65°	5.7	7.5	8.2



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CATALOG NUMBER: P3A13R359830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	5.3	7.5	7.8
70°	5.0	7.1	7.5
72.5°	4.6	6.8	7.1
75°	4.3	6.0	6.4
77.5°	3.6	5.3	6.0
80°	3.2	4.6	5.0
82.5°	2.5	3.9	4.3
85°	1.8	2.8	2.8
87.5°	0.7	1.4	1.4
90°	0.0	0.0	0.0

(END OF REPORT)