

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: P1337870

Luminaire Tested: P3A05R309040DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R309040DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

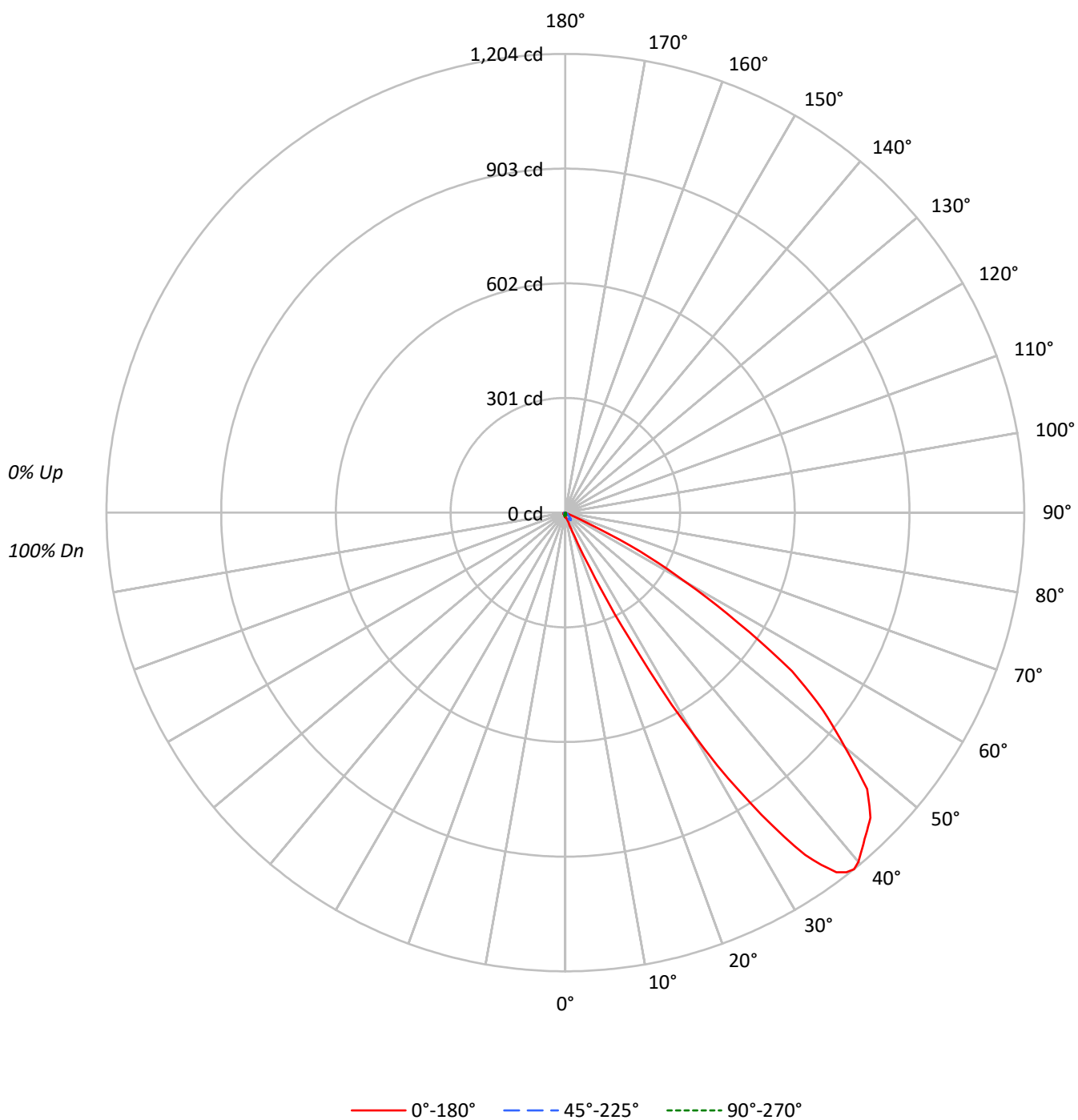
Lumens per Lamp: N/A
Luminaire Lumens: 313.0 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2653	2653	2653	2653	2653
5°	2840	2796	2619	2377	2311
10°	3117	2761	2293	2049	2004
15°	4540	2747	1907	1725	1793
20°	11434	3010	1470	1470	1657
25°	53132	3774	1137	1331	1524
30°	169165	5216	861	1266	1545
35°	293551	6344	696	1205	1553
40°	342356	6326	515	1202	1574
45°	351075	4497	558	1302	1706
50°	326505	2524	443	1365	1979
55°	277515	1300	497	1529	2217
60°	160250	351	570	1623	2412
65°	32688	0	675	1920	2750
70°	513	192	833	2180	3206
75°	424	254	932	2203	3813
80°	379	379	1389	2652	4293
85°	0	755	2768	2768	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 351075 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.4
10°-20°	3.2	1.0
20°-30°	18.1	5.8
30°-40°	84.3	26.9
40°-50°	119.2	38.1
50°-60°	73.4	23.4
60°-70°	11.2	3.6
70°-80°	1.8	0.6
80°-90°	0.9	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°	22.3	7.1
0°-40°	106.6	34.1
0°-60°	299.2	95.6
0°-90°	313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	313.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	13	13	12	11	10	1
15°	20	12	8	8	8	7
25°	220	16	5	6	6	135
35°	1097	24	3	4	6	658
45°	1132	14	2	4	6	858
55°	726	3	1	4	6	618
65°	63	0	1	4	5	114
75°	0	0	1	3	4	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
2.5°	12.4	12.4	12.7	12.7	12.4	12.7	12.7	12.7	12.1	11.9	11.3
5°	12.9	12.9	12.9	13.2	12.9	12.9	12.7	12.4	11.9	11.1	10.8
7.5°	13.4	13.4	13.2	13.4	13.2	13.2	12.7	12.1	11.3	10.5	10.0
10°	14.0	14.0	13.7	13.7	13.4	13.4	12.4	11.6	10.3	9.5	9.2
12.5°	15.6	15.6	15.3	15.0	14.5	14.2	12.1	10.8	9.2	8.4	8.2
15°	20.0	19.8	19.2	18.5	17.1	16.9	12.1	10.0	8.4	7.6	7.6
17.5°	27.4	27.2	26.4	24.3	21.9	21.1	12.1	9.0	7.4	6.9	6.9
20°	49.0	46.9	43.0	37.7	32.2	29.3	12.9	7.9	6.3	6.1	6.3
21°	64.1	62.0	57.0	48.2	38.5	35.3	13.4	7.6	6.1	5.8	6.3
22°	87.3	84.9	74.6	62.8	48.8	43.2	13.7	7.1	5.5	5.5	6.1
23°	121.8	117.9	100.5	81.5	60.9	53.0	14.2	6.9	5.3	5.5	5.8
24°	159.5	156.1	136.3	107.8	77.8	66.4	14.8	6.6	5.0	5.0	5.5
25°	219.6	215.7	180.6	136.0	98.6	79.9	15.6	6.1	4.7	4.7	5.5
26°	297.4	279.2	232.5	175.3	121.5	100.2	16.3	5.8	4.5	4.7	5.3
27°	371.2	356.2	303.7	224.9	150.3	123.1	17.4	5.5	4.2	4.5	5.3
28°	468.3	447.2	381.0	284.5	189.3	149.0	18.5	5.3	4.0	4.5	5.0
29°	576.9	547.4	467.5	351.5	233.3	178.0	19.5	5.0	3.7	4.2	5.0
30°	668.1	640.4	560.5	430.8	284.0	216.2	20.6	4.7	3.4	4.2	5.0
31°	775.2	733.2	636.5	498.0	327.5	254.4	21.6	4.2	3.2	4.0	4.7
32°	861.9	832.6	729.8	574.0	384.7	296.6	22.4	4.0	3.2	4.0	4.7
33°	945.7	906.5	807.1	646.8	436.4	339.9	23.2	3.7	2.9	3.7	4.7
34°	1025.9	989.8	880.1	705.5	485.1	381.0	23.7	3.2	2.9	3.7	4.5
35°	1096.6	1054.6	944.4	763.0	535.2	418.4	23.7	2.9	2.6	3.4	4.5
36°	1142.4	1112.4	1000.3	819.7	580.6	454.0	23.7	2.6	2.4	3.4	4.2
37°	1181.7	1146.6	1045.1	863.2	614.1	482.5	23.7	2.4	2.4	3.4	4.2
38°	1197.8	1167.7	1076.0	901.7	645.4	511.5	23.5	2.1	2.1	3.2	4.2
39°	1204.1	1177.2	1099.2	929.4	668.6	531.0	22.9	1.8	2.1	3.2	4.2
40°	1196.0	1175.7	1111.1	947.3	687.1	545.2	22.1	1.6	1.8	3.2	4.2
42.5°	1162.2	1148.8	1108.4	965.3	702.9	555.8	19.2	1.1	1.8	2.9	4.2
45°	1132.1	1117.4	1081.8	946.5	682.3	535.0	14.5	0.5	1.8	2.9	4.2
47.5°	1073.9	1064.7	1036.7	898.8	637.3	488.0	10.3	0.3	1.6	2.6	4.0
50°	957.1	948.4	911.5	780.4	548.1	412.6	7.4	0.3	1.3	2.6	4.0
52.5°	852.4	843.2	790.2	648.9	421.1	302.4	4.7	0.3	1.3	2.6	4.0
55°	725.9	709.8	640.2	492.5	298.5	202.8	3.4	0.3	1.3	2.4	4.0
57.5°	537.3	513.9	451.6	335.9	171.9	109.9	1.8	0.3	1.3	2.4	4.0
60°	365.4	351.5	282.6	177.2	73.3	46.4	0.8	0.3	1.3	2.4	3.7
62.5°	221.5	203.8	142.1	75.4	31.6	21.1	0.0	0.5	1.3	2.4	3.7
65°	63.0	55.9	37.2	17.1	9.0	6.9	0.0	0.5	1.3	2.4	3.7
67.5°	2.1	2.1	2.1	1.8	1.3	1.3	0.3	0.5	1.3	2.4	3.4
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.5	1.3	2.1	3.4
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	1.1	1.8	3.2
75°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.8	2.6
77.5°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.6
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.8	1.1	1.1	1.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.8	0.5
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):

	157.5°	180°
0°	12.1	12.1
2.5°	11.3	11.3
5°	10.5	10.5
7.5°	9.8	9.8
10°	9.0	9.0
12.5°	8.4	8.4
15°	7.6	7.9
17.5°	7.1	7.4
20°	6.9	7.1
21°	6.9	7.1
22°	6.6	6.9
23°	6.6	6.9
24°	6.3	6.6
25°	6.1	6.3
26°	6.1	6.3
27°	6.1	6.3
28°	5.8	6.3
29°	5.8	6.1
30°	5.8	6.1
31°	5.5	6.1
32°	5.5	6.1
33°	5.5	5.8
34°	5.3	5.8
35°	5.3	5.8
36°	5.3	5.8
37°	5.3	5.5
38°	5.3	5.8
39°	5.3	5.5
40°	5.3	5.5
42.5°	5.3	5.5
45°	5.3	5.5
47.5°	5.3	5.8
50°	5.3	5.8
52.5°	5.3	5.8
55°	5.3	5.8
57.5°	5.3	5.5
60°	5.3	5.5
62.5°	5.0	5.5
65°	5.0	5.3
67.5°	5.0	5.3
70°	4.7	5.0
72.5°	4.5	4.7
75°	4.0	4.5
77.5°	3.7	4.0
80°	3.2	3.4



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.6	2.6
85°	1.8	2.1
87.5°	1.1	1.1
90°	0.0	0.0

(END OF REPORT)