

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: P1335108

Luminaire Tested: P3A02R309740DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335108
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: P3A02R309740DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

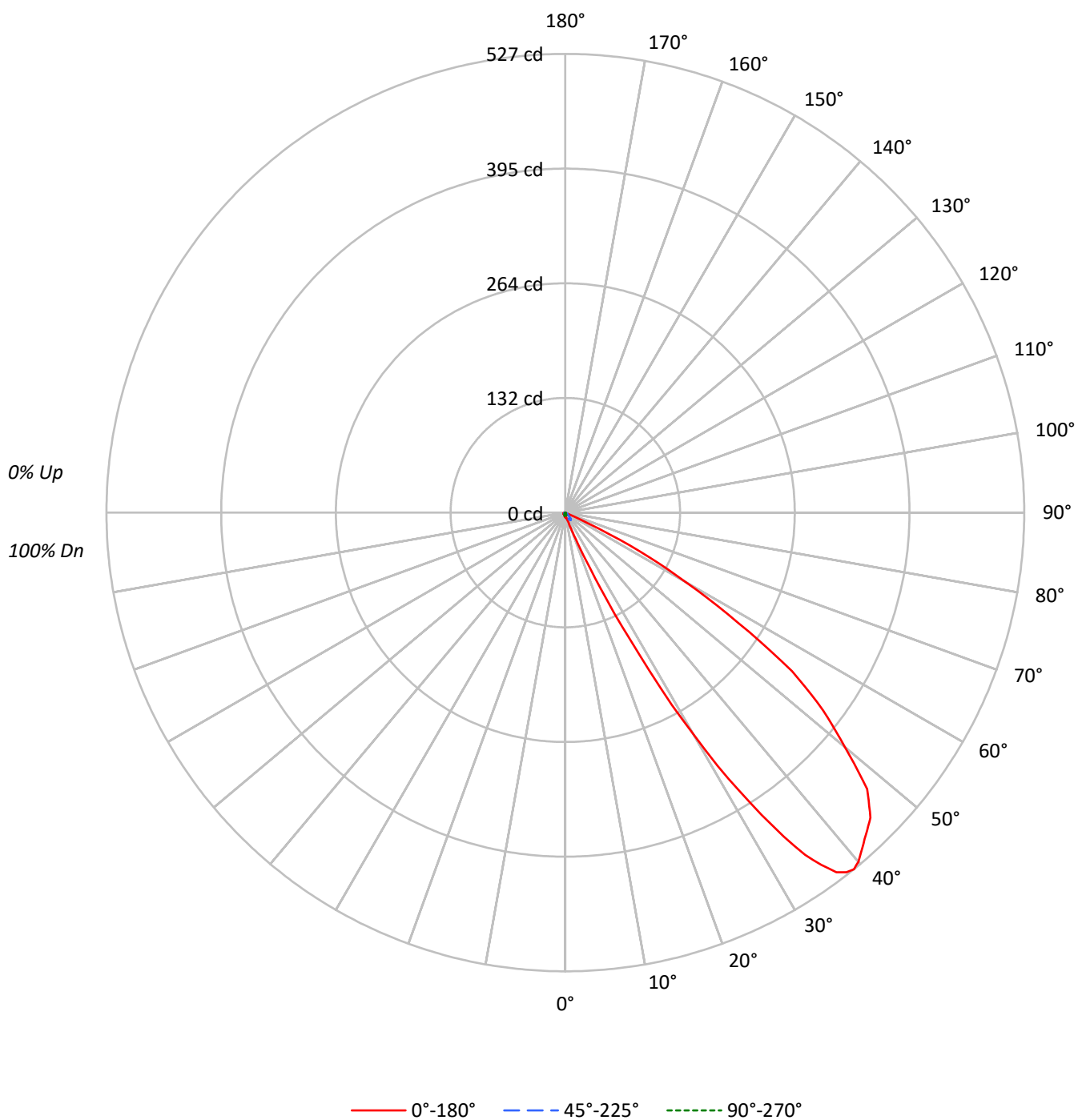
Lumens per Lamp: N/A
Luminaire Lumens: 137.0 lumens
Efficiency: N/A
Efficacy: 38.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1162	1162	1162	1162	1162
5°	1255	1211	1145	1035	1013
10°	1358	1202	1002	891	868
15°	1998	1203	840	749	795
20°	5017	1330	653	653	723
25°	23251	1645	508	581	677
30°	74037	2279	380	557	684
35°	128492	2784	321	535	669
40°	149852	2777	229	515	687
45°	153659	1954	248	558	744
50°	142904	1092	205	580	853
55°	121458	573	229	650	956
60°	70126	132	263	702	1053
65°	14321	0	311	830	1193
70°	192	64	385	962	1410
75°	169	85	424	1017	1694
80°	126	126	631	1137	1894
85°	0	252	1258	1258	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 153659 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.4	1.0
20°-30°	7.9	5.8
30°-40°	36.9	26.9
40°-50°	52.2	38.1
50°-60°	32.1	23.4
60°-70°	4.9	3.6
70°-80°	0.8	0.6
80°-90°	0.4	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°	9.8	7.1
0°-40°	46.7	34.1
0°-60°	130.9	95.6
0°-90°	137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	137.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	6	5	5	5	1
15°	9	5	4	3	4	3
25°	96	7	2	2	3	59
35°	480	10	1	2	2	288
45°	496	6	1	2	2	376
55°	318	2	1	2	2	270
65°	28	0	1	2	2	50
75°	0	0	0	1	2	0
85°	0	0	0	0	1	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°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
2.5°	5.4	5.4	5.5	5.5	5.4	5.5	5.5	5.5	5.3	5.2	5.0
5°	5.7	5.7	5.7	5.8	5.7	5.7	5.5	5.4	5.2	4.8	4.7
7.5°	5.9	5.9	5.8	5.9	5.8	5.8	5.5	5.3	5.0	4.6	4.4
10°	6.1	6.1	6.0	6.0	5.9	5.9	5.4	5.1	4.5	4.2	4.0
12.5°	6.8	6.8	6.7	6.6	6.3	6.2	5.3	4.7	4.0	3.7	3.6
15°	8.8	8.7	8.4	8.1	7.5	7.4	5.3	4.4	3.7	3.3	3.3
17.5°	12.0	11.9	11.5	10.6	9.6	9.2	5.3	3.9	3.2	3.0	3.0
20°	21.5	20.5	18.8	16.5	14.1	12.8	5.7	3.5	2.8	2.7	2.8
21°	28.0	27.1	24.9	21.1	16.8	15.5	5.9	3.3	2.7	2.5	2.8
22°	38.2	37.2	32.7	27.5	21.3	18.9	6.0	3.1	2.4	2.4	2.7
23°	53.3	51.6	44.0	35.7	26.7	23.2	6.2	3.0	2.3	2.4	2.5
24°	69.8	68.3	59.7	47.2	34.0	29.1	6.5	2.9	2.2	2.2	2.4
25°	96.1	94.4	79.1	59.5	43.2	35.0	6.8	2.7	2.1	2.1	2.4
26°	130.2	122.2	101.8	76.7	53.2	43.9	7.2	2.5	2.0	2.1	2.3
27°	162.5	155.9	132.9	98.4	65.8	53.9	7.6	2.4	1.8	2.0	2.3
28°	205.0	195.7	166.8	124.5	82.9	65.2	8.1	2.3	1.7	2.0	2.2
29°	252.5	239.6	204.6	153.8	102.1	77.9	8.5	2.2	1.6	1.8	2.2
30°	292.4	280.3	245.3	188.6	124.3	94.6	9.0	2.1	1.5	1.8	2.2
31°	339.3	320.9	278.6	218.0	143.3	111.4	9.5	1.8	1.4	1.7	2.1
32°	377.3	364.4	319.4	251.2	168.4	129.8	9.8	1.7	1.4	1.7	2.1
33°	414.0	396.8	353.2	283.1	191.0	148.8	10.2	1.6	1.3	1.6	2.1
34°	449.0	433.2	385.2	308.8	212.3	166.8	10.4	1.4	1.3	1.6	2.0
35°	480.0	461.6	413.4	334.0	234.3	183.1	10.4	1.3	1.2	1.5	2.0
36°	500.0	486.9	437.8	358.8	254.1	198.7	10.4	1.2	1.0	1.5	1.8
37°	517.2	501.9	457.5	377.8	268.8	211.2	10.4	1.0	1.0	1.5	1.8
38°	524.3	511.1	471.0	394.7	282.5	223.9	10.3	0.9	0.9	1.4	1.8
39°	527.0	515.3	481.1	406.8	292.7	232.4	10.0	0.8	0.9	1.4	1.8
40°	523.5	514.6	486.3	414.6	300.7	238.7	9.7	0.7	0.8	1.4	1.8
42.5°	508.7	502.8	485.2	422.5	307.7	243.3	8.4	0.5	0.8	1.3	1.8
45°	495.5	489.1	473.5	414.3	298.7	234.2	6.3	0.2	0.8	1.3	1.8
47.5°	470.0	466.0	453.8	393.4	278.9	213.6	4.5	0.1	0.7	1.2	1.7
50°	418.9	415.1	398.9	341.6	239.9	180.6	3.2	0.1	0.6	1.2	1.7
52.5°	373.1	369.1	345.9	284.0	184.3	132.4	2.1	0.1	0.6	1.2	1.7
55°	317.7	310.7	280.2	215.6	130.6	88.7	1.5	0.1	0.6	1.0	1.7
57.5°	235.2	224.9	197.7	147.0	75.2	48.1	0.8	0.1	0.6	1.0	1.7
60°	159.9	153.8	123.7	77.6	32.1	20.3	0.3	0.1	0.6	1.0	1.6
62.5°	96.9	89.2	62.2	33.0	13.8	9.2	0.0	0.2	0.6	1.0	1.6
65°	27.6	24.5	16.3	7.5	3.9	3.0	0.0	0.2	0.6	1.0	1.6
67.5°	0.9	0.9	0.9	0.8	0.6	0.6	0.1	0.2	0.6	1.0	1.5
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.6	0.9	1.5
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.8	1.4
75°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.8	1.2
77.5°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.7	1.2
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.7	0.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.3	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.2
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°	5.3	5.3
2.5°	5.0	5.0
5°	4.6	4.6
7.5°	4.3	4.3
10°	3.9	3.9
12.5°	3.7	3.7
15°	3.3	3.5
17.5°	3.1	3.2
20°	3.0	3.1
21°	3.0	3.1
22°	2.9	3.0
23°	2.9	3.0
24°	2.8	2.9
25°	2.7	2.8
26°	2.7	2.8
27°	2.7	2.8
28°	2.5	2.8
29°	2.5	2.7
30°	2.5	2.7
31°	2.4	2.7
32°	2.4	2.7
33°	2.4	2.5
34°	2.3	2.5
35°	2.3	2.5
36°	2.3	2.5
37°	2.3	2.4
38°	2.3	2.5
39°	2.3	2.4
40°	2.3	2.4
42.5°	2.3	2.4
45°	2.3	2.4
47.5°	2.3	2.5
50°	2.3	2.5
52.5°	2.3	2.5
55°	2.3	2.5
57.5°	2.3	2.4
60°	2.3	2.4
62.5°	2.2	2.4
65°	2.2	2.3
67.5°	2.2	2.3
70°	2.1	2.2
72.5°	2.0	2.1
75°	1.7	2.0
77.5°	1.6	1.7
80°	1.4	1.5



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.2	1.2
85°	0.8	0.9
87.5°	0.5	0.5
90°	0.0	0.0

(END OF REPORT)