

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: P1335780

Luminaire Tested: P3A02R409740DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R409740DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

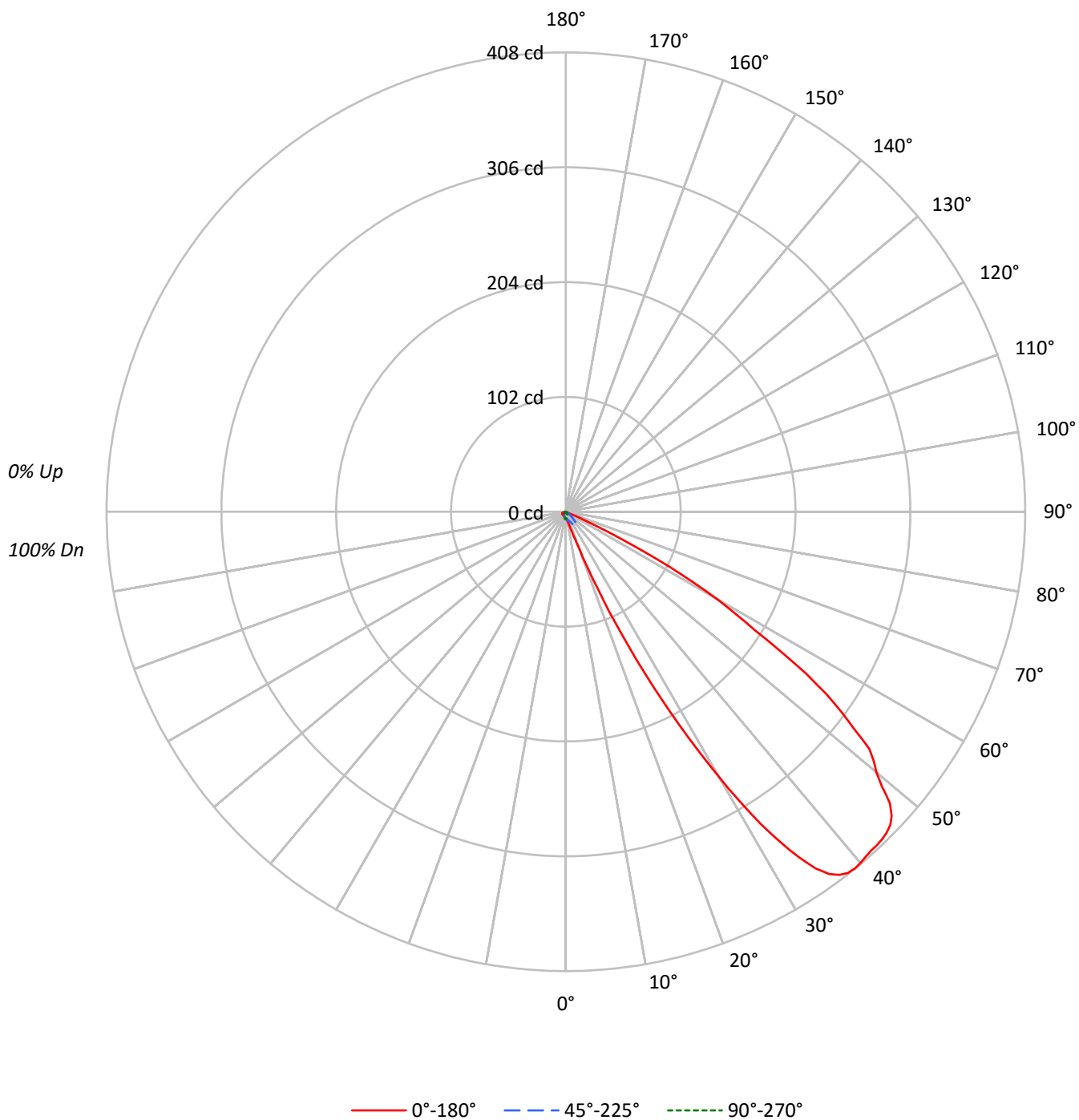
Lumens per Lamp: N/A
Luminaire Lumens: 126.0 lumens
Efficiency: N/A
Efficacy: 35.0 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1425	1425	1425	1425	1425
5°	1585	1519	1409	1277	1255
10°	1915	1625	1291	1158	1136
15°	3133	1771	1112	1022	1044
20°	8261	2077	910	910	1003
25°	31865	2565	726	847	968
30°	68745	3418	582	810	962
35°	103463	4069	509	803	990
40°	116561	4065	429	830	1059
45°	124974	3163	403	868	1147
50°	122845	1979	341	921	1262
55°	108077	956	344	1032	1415
60°	68416	219	395	1096	1579
65°	14009	52	415	1193	1764
70°	321	64	449	1346	1988
75°	254	169	508	1440	2288
80°	253	126	631	1642	2652
85°	252	252	1258	1761	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 127228 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.5
10°-20°	2.0	1.6
20°-30°	9.8	7.8
30°-40°	31.8	25.3
40°-50°	43.9	34.8
50°-60°	30.6	24.3
60°-70°	5.8	4.6
70°-80°	1.0	0.8
80°-90°	0.5	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°	12.4	9.8
0°-40°	44.2	35.1
0°-60°	118.7	94.2
0°-90°	126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	126.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	6	6	1
15°	14	8	5	4	5	5
25°	132	11	3	4	4	68
35°	386	15	2	3	4	234
45°	403	10	1	3	4	306
55°	283	2	1	3	4	242
65°	27	0	1	2	3	48
75°	0	0	1	2	3	0
85°	0	0	0	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
2.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.5
5°	7.2	7.2	7.2	7.2	7.1	7.1	7.1	6.9	6.9	6.7	6.4
7.5°	7.6	7.6	7.6	7.6	7.5	7.4	7.3	7.3	7.2	6.6	6.1
10°	8.6	8.6	8.4	8.3	8.2	8.0	7.9	7.6	7.3	6.5	5.8
12.5°	10.4	10.2	10.1	9.8	9.5	9.0	8.6	8.2	7.4	6.2	5.4
15°	13.8	13.5	13.1	12.4	11.7	10.8	10.0	9.1	7.8	5.9	4.9
17.5°	19.7	19.0	18.3	17.1	15.4	13.8	12.0	10.5	8.2	5.6	4.4
20°	35.4	34.9	30.8	27.5	22.3	18.6	15.2	12.6	8.9	5.2	3.9
22.5°	73.0	68.2	61.3	50.2	39.1	28.8	20.9	15.9	9.6	4.7	3.5
25°	131.7	124.0	109.3	87.9	64.9	45.9	30.3	20.7	10.6	4.3	3.0
27.5°	199.4	191.6	168.8	139.3	101.7	69.3	43.3	27.4	12.0	3.8	2.7
30°	271.5	264.9	235.9	195.1	143.4	97.1	58.0	34.3	13.5	3.4	2.3
31°	300.5	292.1	260.8	217.3	162.9	108.5	63.9	37.1	14.1	3.2	2.2
32°	327.2	317.6	285.2	238.6	178.8	120.9	70.4	39.7	14.6	3.0	2.1
33°	350.3	339.0	307.8	258.7	196.3	132.5	77.1	42.1	14.9	2.8	2.0
34°	369.8	360.1	326.5	279.0	211.8	143.6	83.7	44.5	15.2	2.7	1.9
35°	386.5	377.7	344.5	294.4	226.9	154.4	89.7	46.9	15.2	2.4	1.9
36°	397.7	390.1	360.0	310.1	239.6	163.5	94.8	48.9	15.2	2.2	1.7
37°	403.8	396.4	370.2	323.1	252.1	172.5	99.4	50.6	15.0	2.1	1.6
38°	407.0	400.5	377.7	333.6	260.8	179.0	103.4	51.8	14.9	1.9	1.6
39°	407.8	402.3	382.4	341.2	269.3	185.5	106.3	52.5	14.6	1.7	1.5
40°	407.2	402.5	385.0	348.1	275.7	190.6	108.4	52.8	14.2	1.5	1.5
41°	406.0	402.3	386.8	352.8	281.0	193.8	109.2	52.3	13.8	1.3	1.4
42°	405.0	400.9	387.6	356.1	284.5	195.4	109.1	51.4	13.1	1.2	1.4
43°	405.0	400.4	387.8	358.1	286.3	195.6	107.7	49.6	12.1	1.0	1.3
44°	404.3	400.0	388.3	359.5	286.7	194.5	105.5	47.8	11.1	0.9	1.3
45°	403.0	398.5	388.2	359.6	285.9	192.0	101.9	45.4	10.2	0.7	1.3
46°	400.6	396.6	387.2	358.8	283.5	188.3	97.7	42.9	9.1	0.6	1.2
47°	395.7	392.6	384.4	356.1	279.8	182.8	92.6	40.2	8.3	0.5	1.2
48°	387.4	385.2	379.7	349.9	272.7	176.1	87.1	37.1	7.5	0.5	1.2
49°	372.1	370.4	367.2	340.1	263.7	167.9	81.2	33.8	6.7	0.3	1.2
50°	360.1	358.2	351.7	323.5	250.8	157.5	74.8	30.4	5.8	0.2	1.0
51°	352.1	349.1	338.7	304.3	231.9	143.6	67.7	27.1	4.9	0.2	1.0
52°	342.0	337.5	324.6	287.1	214.6	129.7	60.1	23.7	4.3	0.2	1.0
53°	321.0	319.4	306.5	268.6	197.4	116.4	52.2	20.9	3.7	0.2	1.0
54°	302.6	300.2	282.7	242.9	178.7	101.6	44.1	18.5	3.1	0.2	1.0
55°	282.7	277.9	262.4	221.2	156.7	87.9	36.3	16.0	2.5	0.2	0.9
56°	257.6	253.4	236.7	198.1	136.4	74.1	30.4	13.1	2.0	0.2	0.9
57°	227.0	223.2	210.4	169.6	115.4	60.5	24.8	10.5	1.5	0.2	0.9
58°	197.5	193.2	178.5	142.3	93.1	48.0	20.7	8.6	1.2	0.2	0.9
59°	174.8	169.1	150.1	119.5	72.9	36.4	16.4	6.8	0.8	0.2	0.9
60°	156.0	151.2	131.6	99.5	57.2	26.8	12.1	5.2	0.5	0.2	0.9
62.5°	90.4	89.1	71.4	51.3	27.0	12.5	6.0	2.4	0.2	0.3	0.9
65°	27.0	23.5	18.3	10.9	6.9	4.2	2.2	0.8	0.1	0.3	0.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.2	0.1	0.3	0.8
70°	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.3	0.7
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.6
75°	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.6
77.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.6
80°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3
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):

	112.5°	135°	157.5°	180°
0°	6.5	6.5	6.5	6.5
2.5°	6.2	6.1	6.0	6.0
5°	6.0	5.8	5.8	5.7
7.5°	5.7	5.4	5.4	5.4
10°	5.3	5.2	5.2	5.1
12.5°	4.9	4.9	4.9	4.9
15°	4.5	4.5	4.6	4.6
17.5°	4.0	4.2	4.4	4.5
20°	3.7	3.9	4.2	4.3
22.5°	3.5	3.7	4.0	4.2
25°	3.1	3.5	3.9	4.0
27.5°	2.9	3.4	3.7	3.9
30°	2.7	3.2	3.6	3.8
31°	2.7	3.1	3.6	3.8
32°	2.5	3.0	3.6	3.7
33°	2.5	3.0	3.6	3.7
34°	2.4	3.0	3.5	3.7
35°	2.4	3.0	3.5	3.7
36°	2.3	2.9	3.5	3.7
37°	2.3	2.9	3.5	3.7
38°	2.2	2.9	3.5	3.7
39°	2.2	2.9	3.5	3.7
40°	2.2	2.9	3.5	3.7
41°	2.1	2.9	3.5	3.7
42°	2.1	2.9	3.5	3.7
43°	2.1	2.8	3.5	3.7
44°	2.1	2.8	3.5	3.7
45°	2.0	2.8	3.5	3.7
46°	2.0	2.8	3.5	3.7
47°	2.0	2.8	3.5	3.7
48°	2.0	2.8	3.5	3.7
49°	2.0	2.8	3.5	3.7
50°	1.9	2.7	3.5	3.7
51°	1.9	2.7	3.5	3.7
52°	1.9	2.7	3.5	3.7
53°	1.9	2.7	3.5	3.7
54°	1.7	2.7	3.5	3.7
55°	1.7	2.7	3.5	3.7
56°	1.7	2.7	3.5	3.6
57°	1.7	2.7	3.4	3.6
58°	1.7	2.5	3.4	3.6
59°	1.7	2.5	3.4	3.6
60°	1.7	2.5	3.4	3.6
62.5°	1.6	2.5	3.2	3.5
65°	1.5	2.3	3.2	3.4



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	1.5	2.2	3.0	3.2
70°	1.4	2.1	2.9	3.1
72.5°	1.2	2.0	2.7	2.9
75°	1.0	1.7	2.4	2.7
77.5°	0.9	1.5	2.2	2.3
80°	0.8	1.3	1.9	2.1
82.5°	0.6	0.9	1.5	1.6
85°	0.5	0.7	1.0	1.2
87.5°	0.3	0.3	0.6	0.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)