

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: P1338814

Luminaire Tested: P3A05R409024DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338814
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: P3A05R409024DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 2400K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

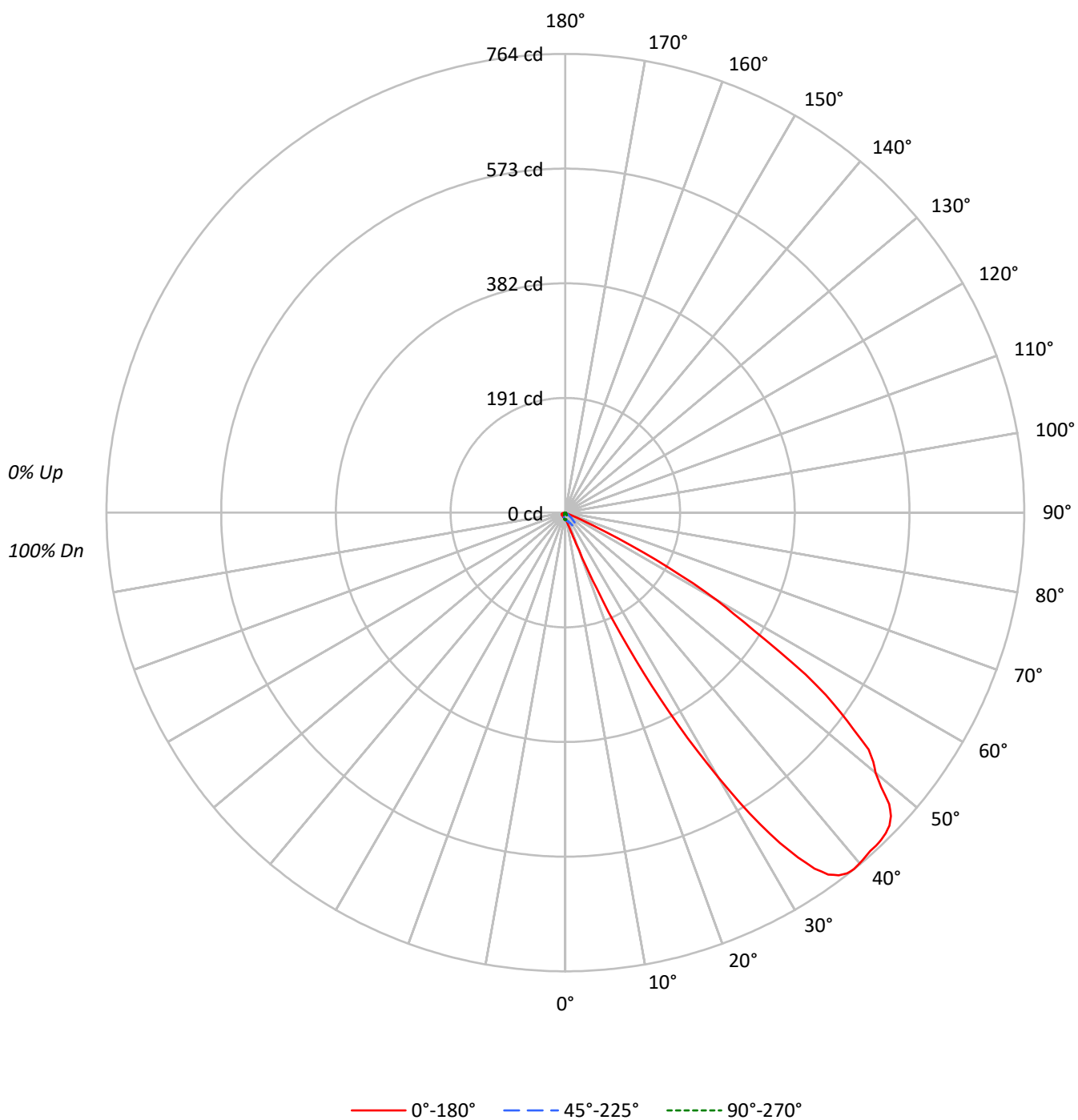
Lumens per Lamp: N/A
Luminaire Lumens: 236.0 lumens
Efficiency: N/A
Efficacy: 32.8 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.74 / 1.55
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	2653	2653	2653	2653	2653
5°	2950	2862	2619	2377	2333
10°	3563	3050	2405	2182	2115
15°	5857	3292	2066	1930	1975
20°	15471	3897	1727	1727	1867
25°	59665	4815	1355	1573	1839
30°	128754	6431	1089	1545	1823
35°	193782	7602	937	1499	1847
40°	218323	7643	802	1546	1975
45°	234102	5923	744	1613	2140
50°	230099	3684	682	1706	2354
55°	202430	1835	650	1912	2638
60°	128148	395	746	2105	2938
65°	26203	104	778	2231	3269
70°	577	128	833	2500	3783
75°	593	339	932	2796	4236
80°	505	253	1137	3031	4925
85°	503	503	2264	3271	5535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 238316 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	3.7	1.6
20°-30°	18.3	7.8
30°-40°	59.6	25.3
40°-50°	82.2	34.8
50°-60°	57.3	24.3
60°-70°	10.9	4.6
70°-80°	2.0	0.8
80°-90°	0.9	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°	23.2	9.8
0°-40°	82.8	35.1
0°-60°	222.3	94.2
0°-90°	236.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	236.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	13	13	12	11	11	1
15°	26	14	9	8	9	9
25°	247	20	6	6	8	127
35°	724	28	4	6	7	437
45°	755	19	2	5	7	574
55°	530	5	2	5	7	453
65°	50	0	2	4	6	89
75°	1	0	1	3	5	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°	25°	30°	35°	45°	67.5°	90°
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°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.4	12.1
5°	13.4	13.4	13.4	13.4	13.2	13.2	13.2	13.0	13.0	12.6	11.9
7.5°	14.3	14.3	14.3	14.3	14.1	13.9	13.7	13.7	13.4	12.4	11.5
10°	16.0	16.0	15.8	15.6	15.4	15.0	14.7	14.3	13.7	12.1	10.8
12.5°	19.5	19.1	18.9	18.4	17.8	16.9	16.0	15.4	13.9	11.7	10.2
15°	25.8	25.4	24.5	23.2	21.9	20.2	18.6	17.1	14.5	11.1	9.1
17.5°	36.8	35.5	34.2	32.1	28.8	25.8	22.5	19.7	15.4	10.4	8.2
20°	66.3	65.5	57.7	51.6	41.8	34.9	28.4	23.6	16.7	9.8	7.4
22.5°	136.8	127.7	114.9	94.1	73.3	54.0	39.2	29.7	18.0	8.9	6.5
25°	246.6	232.3	204.8	164.7	121.6	86.0	56.8	38.8	19.9	8.0	5.6
27.5°	373.4	358.9	316.2	260.9	190.5	129.8	81.1	51.4	22.5	7.2	5.0
30°	508.5	496.1	441.9	365.4	268.5	181.8	108.6	64.2	25.4	6.3	4.3
31°	562.9	547.0	488.5	407.0	305.2	203.3	119.6	69.6	26.4	6.1	4.1
32°	612.9	594.9	534.2	446.9	334.9	226.5	131.8	74.3	27.3	5.6	3.9
33°	656.1	635.0	576.5	484.6	367.6	248.2	144.3	78.9	28.0	5.2	3.7
34°	692.7	674.5	611.6	522.5	396.6	269.0	156.7	83.4	28.4	5.0	3.5
35°	723.9	707.4	645.2	551.4	425.0	289.1	168.0	87.8	28.4	4.6	3.5
36°	744.9	730.6	674.3	580.8	448.9	306.2	177.5	91.7	28.4	4.1	3.3
37°	756.4	742.5	693.3	605.1	472.3	323.1	186.2	94.7	28.2	3.9	3.0
38°	762.3	750.1	707.4	624.8	488.5	335.3	193.8	97.1	28.0	3.5	3.0
39°	763.8	753.6	716.3	639.1	504.3	347.4	199.2	98.4	27.3	3.3	2.8
40°	762.7	753.8	721.1	651.9	516.5	357.0	203.1	98.8	26.7	2.8	2.8
41°	760.5	753.6	724.5	660.8	526.2	363.0	204.6	98.0	25.8	2.4	2.6
42°	758.6	751.0	726.1	666.9	532.9	366.1	204.4	96.2	24.5	2.2	2.6
43°	758.6	749.9	726.3	670.8	536.2	366.3	201.8	93.0	22.8	2.0	2.4
44°	757.3	749.2	727.4	673.4	537.1	364.3	197.7	89.5	20.8	1.7	2.4
45°	754.9	746.4	727.1	673.6	535.5	359.6	190.9	85.0	19.1	1.3	2.4
46°	750.3	742.7	725.2	672.1	531.0	352.6	182.9	80.4	17.1	1.1	2.2
47°	741.2	735.4	720.0	666.9	524.1	342.4	173.4	75.2	15.6	0.9	2.2
48°	725.6	721.5	711.1	655.4	510.8	329.9	163.2	69.6	14.1	0.9	2.2
49°	697.0	693.8	687.7	637.0	493.9	314.5	152.1	63.3	12.6	0.7	2.2
50°	674.5	671.0	658.7	606.0	469.7	295.0	140.0	57.0	10.8	0.4	2.0
51°	659.5	653.9	634.4	570.0	434.3	269.0	126.8	50.7	9.1	0.4	2.0
52°	640.7	632.2	607.9	537.7	402.0	243.0	112.5	44.4	8.0	0.4	2.0
53°	601.2	598.2	574.1	503.0	369.7	218.0	97.7	39.2	6.9	0.4	2.0
54°	566.8	562.2	529.5	454.9	334.6	190.3	82.6	34.7	5.9	0.4	2.0
55°	529.5	520.6	491.6	414.4	293.5	164.7	68.1	29.9	4.8	0.4	1.7
56°	482.4	474.6	443.4	371.0	255.5	138.7	57.0	24.5	3.7	0.4	1.7
57°	425.2	418.1	394.0	317.7	216.1	113.4	46.4	19.7	2.8	0.4	1.7
58°	370.0	361.9	334.4	266.6	174.5	89.9	38.8	16.0	2.2	0.4	1.7
59°	327.5	316.6	281.1	223.9	136.5	68.3	30.8	12.8	1.5	0.4	1.7
60°	292.2	283.3	246.4	186.4	107.1	50.3	22.8	9.8	0.9	0.4	1.7
62.5°	169.3	166.9	133.7	96.0	50.5	23.4	11.3	4.6	0.4	0.7	1.7
65°	50.5	44.0	34.2	20.4	13.0	7.8	4.1	1.5	0.2	0.7	1.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.9	0.4	0.2	0.7	1.5
70°	0.9	0.7	0.7	0.7	0.7	0.4	0.4	0.2	0.2	0.7	1.3
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.2	0.4	0.7	1.1
75°	0.7	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	1.1
77.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.7	1.1
80°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	0.7
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°	12.1	12.1	12.1	12.1
2.5°	11.7	11.5	11.3	11.3
5°	11.3	10.8	10.8	10.6
7.5°	10.6	10.2	10.2	10.2
10°	10.0	9.8	9.8	9.5
12.5°	9.1	9.1	9.1	9.1
15°	8.5	8.5	8.7	8.7
17.5°	7.6	7.8	8.2	8.5
20°	6.9	7.4	7.8	8.0
22.5°	6.5	6.9	7.6	7.8
25°	5.9	6.5	7.4	7.6
27.5°	5.4	6.3	6.9	7.4
30°	5.0	6.1	6.7	7.2
31°	5.0	5.9	6.7	7.2
32°	4.8	5.6	6.7	6.9
33°	4.8	5.6	6.7	6.9
34°	4.6	5.6	6.5	6.9
35°	4.6	5.6	6.5	6.9
36°	4.3	5.4	6.5	6.9
37°	4.3	5.4	6.5	6.9
38°	4.1	5.4	6.5	6.9
39°	4.1	5.4	6.5	6.9
40°	4.1	5.4	6.5	6.9
41°	3.9	5.4	6.5	6.9
42°	3.9	5.4	6.5	6.9
43°	3.9	5.2	6.5	6.9
44°	3.9	5.2	6.5	6.9
45°	3.7	5.2	6.5	6.9
46°	3.7	5.2	6.5	6.9
47°	3.7	5.2	6.5	6.9
48°	3.7	5.2	6.5	6.9
49°	3.7	5.2	6.5	6.9
50°	3.5	5.0	6.5	6.9
51°	3.5	5.0	6.5	6.9
52°	3.5	5.0	6.5	6.9
53°	3.5	5.0	6.5	6.9
54°	3.3	5.0	6.5	6.9
55°	3.3	5.0	6.5	6.9
56°	3.3	5.0	6.5	6.7
57°	3.3	5.0	6.3	6.7
58°	3.3	4.8	6.3	6.7
59°	3.3	4.8	6.3	6.7
60°	3.3	4.8	6.3	6.7
62.5°	3.0	4.8	6.1	6.5
65°	2.8	4.3	6.1	6.3



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.8	4.1	5.6	6.1
70°	2.6	3.9	5.4	5.9
72.5°	2.2	3.7	5.0	5.4
75°	2.0	3.3	4.6	5.0
77.5°	1.7	2.8	4.1	4.3
80°	1.5	2.4	3.5	3.9
82.5°	1.1	1.7	2.8	3.0
85°	0.9	1.3	2.0	2.2
87.5°	0.7	0.7	1.1	1.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)