

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: P1335652

Luminaire Tested: P3A02R409030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335652
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: P3A02R409030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R40 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

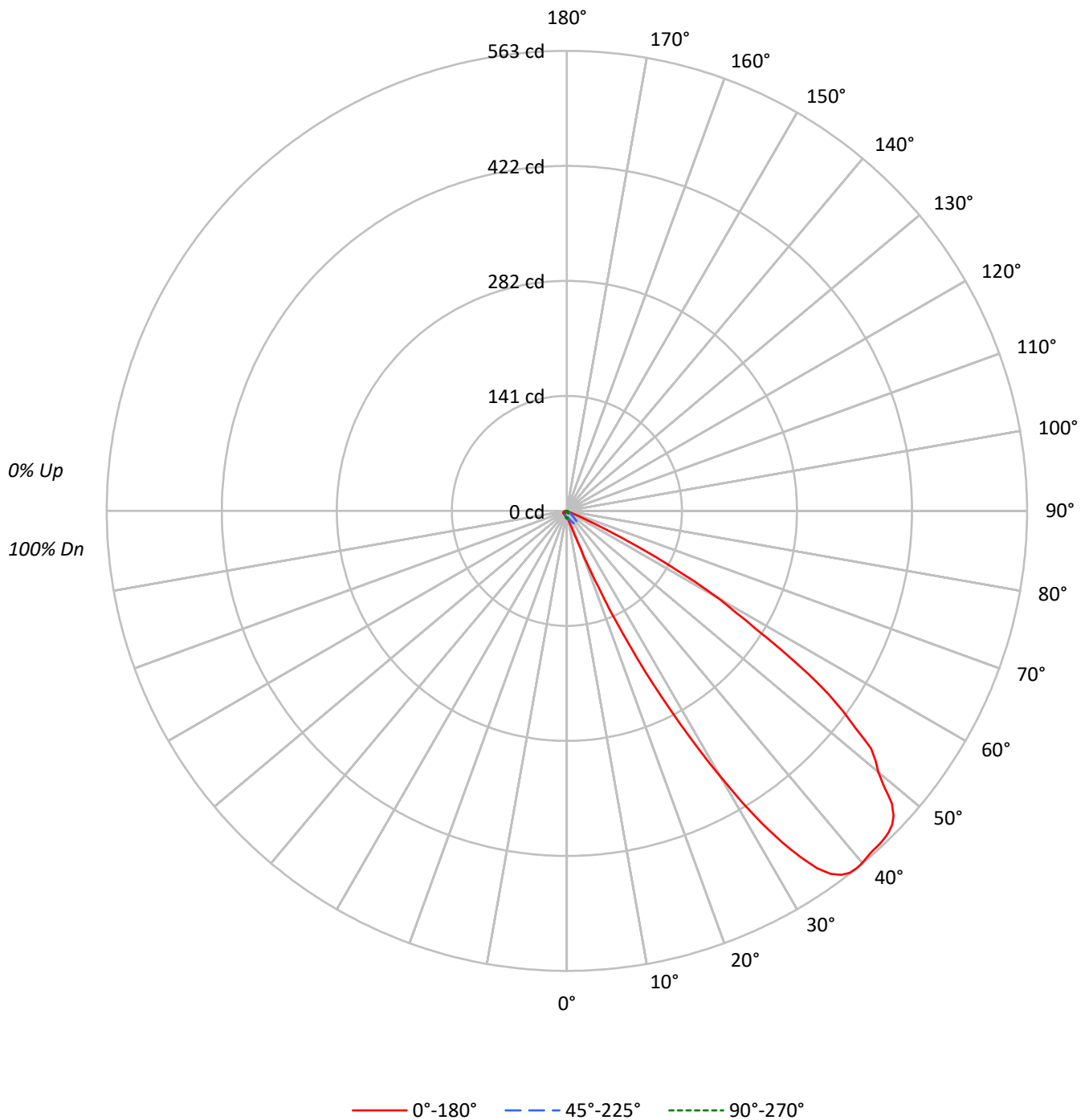
Lumens per Lamp: N/A
Luminaire Lumens: 174.0 lumens
Efficiency: N/A
Efficacy: 24.2 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.55
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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	100		
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1952	1952	1952	1952	1952
5°	2179	2113	1937	1761	1717
10°	2627	2249	1781	1603	1559
15°	4313	2429	1521	1407	1453
20°	11411	2870	1260	1260	1377
25°	43986	3557	1016	1161	1355
30°	94926	4735	810	1139	1342
35°	142867	5595	696	1124	1365
40°	160959	5639	601	1145	1460
45°	172607	4373	558	1178	1582
50°	169649	2729	478	1262	1740
55°	149252	1338	497	1415	1950
60°	94466	263	570	1535	2193
65°	19302	104	571	1660	2387
70°	385	128	641	1859	2757
75°	424	254	678	2033	3135
80°	379	253	758	2273	3662
85°	503	503	1510	2516	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 175714 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.5
10°-20°	2.8	1.6
20°-30°	13.5	7.8
30°-40°	44.0	25.3
40°-50°	60.6	34.8
50°-60°	42.2	24.3
60°-70°	8.0	4.6
70°-80°	1.5	0.8
80°-90°	0.7	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°	17.1	9.8
0°-40°	61.1	35.1
0°-60°	163.9	94.2
0°-90°	174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	10	10	9	8	8	1
15°	19	11	7	6	6	7
25°	182	15	4	5	6	94
35°	534	21	3	4	5	323
45°	557	14	2	4	5	423
55°	390	4	1	4	5	334
65°	37	0	1	3	5	66
75°	0	0	1	2	4	0
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°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
2.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.1	8.9
5°	9.9	9.9	9.9	9.9	9.7	9.7	9.7	9.6	9.6	9.3	8.8
7.5°	10.5	10.5	10.5	10.5	10.4	10.2	10.1	10.1	9.9	9.1	8.5
10°	11.8	11.8	11.7	11.5	11.3	11.0	10.9	10.5	10.1	8.9	8.0
12.5°	14.4	14.1	13.9	13.6	13.1	12.5	11.8	11.3	10.2	8.6	7.5
15°	19.0	18.7	18.1	17.1	16.1	14.9	13.7	12.6	10.7	8.1	6.7
17.5°	27.2	26.2	25.2	23.6	21.3	19.0	16.6	14.5	11.3	7.7	6.1
20°	48.9	48.3	42.5	38.0	30.8	25.7	20.9	17.4	12.3	7.2	5.4
22.5°	100.8	94.1	84.7	69.4	54.0	39.8	28.9	21.9	13.3	6.6	4.8
25°	181.8	171.3	151.0	121.4	89.6	63.4	41.9	28.6	14.7	5.9	4.2
27.5°	275.3	264.6	233.1	192.4	140.5	95.7	59.8	37.9	16.6	5.3	3.7
30°	374.9	365.8	325.8	269.4	198.0	134.1	80.1	47.3	18.7	4.6	3.2
31°	415.0	403.3	360.2	300.1	225.0	149.9	88.2	51.3	19.5	4.5	3.0
32°	451.9	438.6	393.9	329.5	246.9	167.0	97.2	54.8	20.1	4.2	2.9
33°	483.7	468.2	425.1	357.3	271.0	183.0	106.4	58.2	20.6	3.8	2.7
34°	510.7	497.3	450.9	385.3	292.4	198.3	115.5	61.5	20.9	3.7	2.6
35°	533.7	521.6	475.7	406.5	313.4	213.2	123.8	64.7	20.9	3.4	2.6
36°	549.2	538.7	497.1	428.3	330.9	225.8	130.9	67.6	20.9	3.0	2.4
37°	557.7	547.5	511.2	446.1	348.2	238.3	137.3	69.8	20.8	2.9	2.2
38°	562.0	553.0	521.6	460.7	360.2	247.2	142.9	71.6	20.6	2.6	2.2
39°	563.1	555.6	528.1	471.2	371.8	256.2	146.9	72.5	20.1	2.4	2.1
40°	562.3	555.8	531.6	480.7	380.8	263.2	149.7	72.9	19.7	2.1	2.1
41°	560.7	555.6	534.2	487.2	388.0	267.7	150.8	72.2	19.0	1.8	1.9
42°	559.3	553.7	535.3	491.7	392.9	269.9	150.7	70.9	18.1	1.6	1.9
43°	559.3	552.9	535.5	494.6	395.3	270.1	148.8	68.6	16.8	1.4	1.8
44°	558.3	552.4	536.3	496.5	396.0	268.6	145.7	66.0	15.3	1.3	1.8
45°	556.6	550.3	536.1	496.6	394.9	265.1	140.8	62.6	14.1	1.0	1.8
46°	553.2	547.6	534.7	495.5	391.5	260.0	134.9	59.3	12.6	0.8	1.6
47°	546.5	542.2	530.8	491.7	386.4	252.5	127.8	55.4	11.5	0.6	1.6
48°	535.0	532.0	524.3	483.2	376.6	243.2	120.3	51.3	10.4	0.6	1.6
49°	513.9	511.5	507.0	469.6	364.2	231.9	112.2	46.7	9.3	0.5	1.6
50°	497.3	494.7	485.6	446.8	346.3	217.5	103.2	42.0	8.0	0.3	1.4
51°	486.3	482.1	467.7	420.3	320.2	198.3	93.5	37.4	6.7	0.3	1.4
52°	472.4	466.1	448.2	396.5	296.4	179.1	82.9	32.8	5.9	0.3	1.4
53°	443.3	441.0	423.3	370.9	272.6	160.8	72.1	28.9	5.1	0.3	1.4
54°	417.9	414.5	390.4	335.4	246.7	140.3	60.9	25.6	4.3	0.3	1.4
55°	390.4	383.8	362.4	305.5	216.4	121.4	50.2	22.1	3.5	0.3	1.3
56°	355.7	350.0	326.9	273.6	188.4	102.3	42.0	18.1	2.7	0.3	1.3
57°	313.5	308.2	290.5	234.3	159.3	83.6	34.2	14.5	2.1	0.3	1.3
58°	272.8	266.9	246.6	196.5	128.6	66.3	28.6	11.8	1.6	0.3	1.3
59°	241.4	233.5	207.3	165.1	100.7	50.3	22.7	9.4	1.1	0.3	1.3
60°	215.4	208.9	181.7	137.4	78.9	37.1	16.8	7.2	0.6	0.3	1.3
62.5°	124.8	123.0	98.6	70.8	37.2	17.3	8.3	3.4	0.3	0.5	1.3
65°	37.2	32.4	25.2	15.0	9.6	5.8	3.0	1.1	0.2	0.5	1.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.6	0.3	0.2	0.5	1.1
70°	0.6	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.5	1.0
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.3	0.5	0.8
75°	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.5	0.8
77.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.8
80°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	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):

	112.5°	135°	157.5°	180°
0°	8.9	8.9	8.9	8.9
2.5°	8.6	8.5	8.3	8.3
5°	8.3	8.0	8.0	7.8
7.5°	7.8	7.5	7.5	7.5
10°	7.4	7.2	7.2	7.0
12.5°	6.7	6.7	6.7	6.7
15°	6.2	6.2	6.4	6.4
17.5°	5.6	5.8	6.1	6.2
20°	5.1	5.4	5.8	5.9
22.5°	4.8	5.1	5.6	5.8
25°	4.3	4.8	5.4	5.6
27.5°	4.0	4.6	5.1	5.4
30°	3.7	4.5	5.0	5.3
31°	3.7	4.3	5.0	5.3
32°	3.5	4.2	5.0	5.1
33°	3.5	4.2	5.0	5.1
34°	3.4	4.2	4.8	5.1
35°	3.4	4.2	4.8	5.1
36°	3.2	4.0	4.8	5.1
37°	3.2	4.0	4.8	5.1
38°	3.0	4.0	4.8	5.1
39°	3.0	4.0	4.8	5.1
40°	3.0	4.0	4.8	5.1
41°	2.9	4.0	4.8	5.1
42°	2.9	4.0	4.8	5.1
43°	2.9	3.8	4.8	5.1
44°	2.9	3.8	4.8	5.1
45°	2.7	3.8	4.8	5.1
46°	2.7	3.8	4.8	5.1
47°	2.7	3.8	4.8	5.1
48°	2.7	3.8	4.8	5.1
49°	2.7	3.8	4.8	5.1
50°	2.6	3.7	4.8	5.1
51°	2.6	3.7	4.8	5.1
52°	2.6	3.7	4.8	5.1
53°	2.6	3.7	4.8	5.1
54°	2.4	3.7	4.8	5.1
55°	2.4	3.7	4.8	5.1
56°	2.4	3.7	4.8	5.0
57°	2.4	3.7	4.6	5.0
58°	2.4	3.5	4.6	5.0
59°	2.4	3.5	4.6	5.0
60°	2.4	3.5	4.6	5.0
62.5°	2.2	3.5	4.5	4.8
65°	2.1	3.2	4.5	4.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.1	3.0	4.2	4.5
70°	1.9	2.9	4.0	4.3
72.5°	1.6	2.7	3.7	4.0
75°	1.4	2.4	3.4	3.7
77.5°	1.3	2.1	3.0	3.2
80°	1.1	1.8	2.6	2.9
82.5°	0.8	1.3	2.1	2.2
85°	0.6	1.0	1.4	1.6
87.5°	0.5	0.5	0.8	0.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)