

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: P1338990

Luminaire Tested: P3A05R409827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338990
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: P3A05R409827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

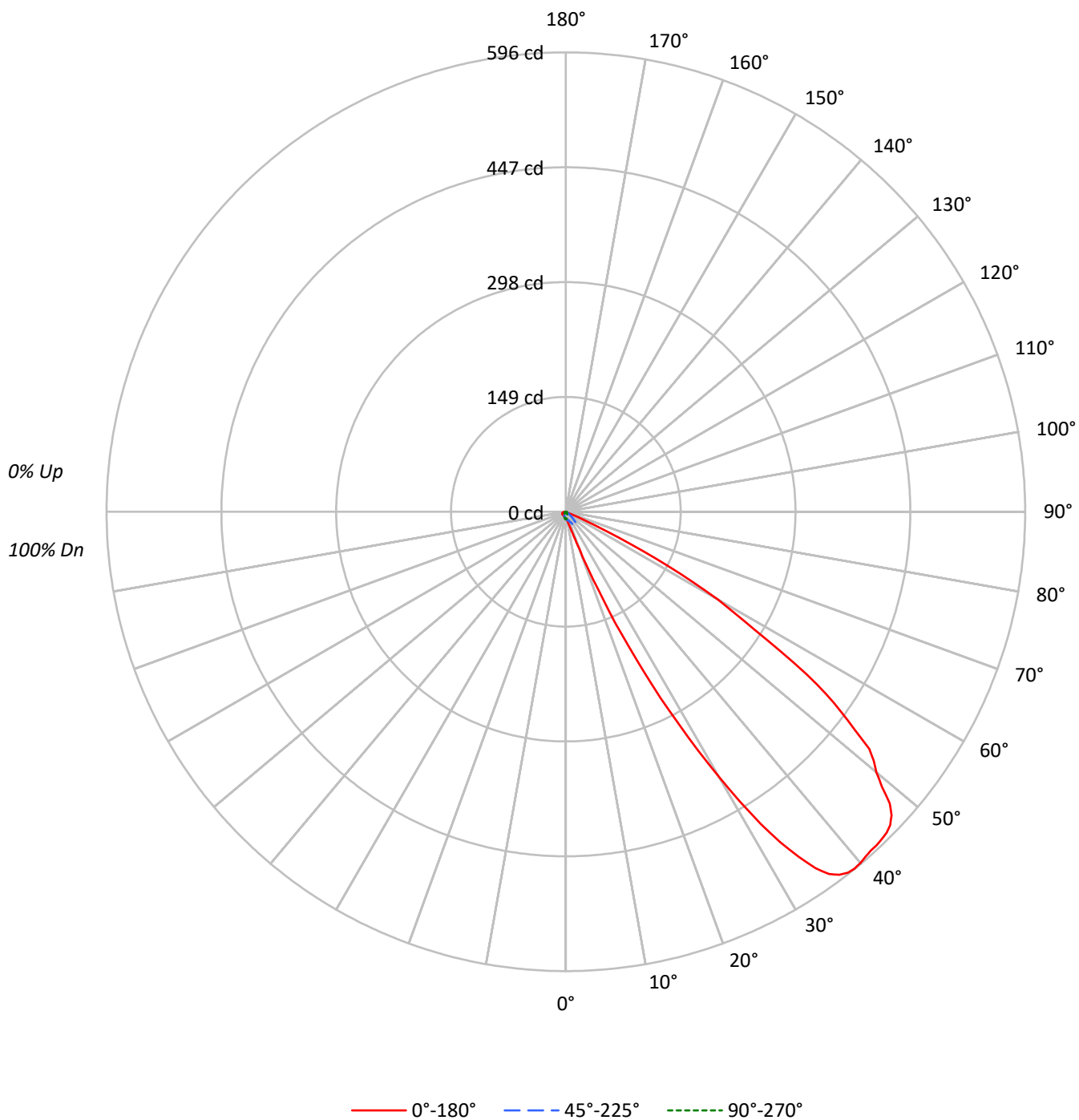
Lumens per Lamp: N/A
Luminaire Lumens: 184.0 lumens
Efficiency: N/A
Efficacy: 25.6 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2083	2083	2083	2083	2083
5°	2311	2223	2047	1849	1827
10°	2783	2360	1870	1692	1648
15°	4563	2565	1612	1498	1544
20°	12064	3034	1330	1330	1470
25°	46527	3750	1065	1234	1428
30°	100370	5013	861	1190	1418
35°	151086	5916	723	1178	1446
40°	170205	5954	630	1202	1546
45°	182531	4621	589	1271	1675
50°	179406	2866	512	1330	1842
55°	157815	1415	535	1491	2064
60°	99904	307	614	1623	2281
65°	20443	104	623	1764	2542
70°	449	128	641	1923	2949
75°	424	254	678	2118	3304
80°	379	253	884	2399	3788
85°	503	503	1761	2516	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 185810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.5
10°-20°	2.9	1.6
20°-30°	14.3	7.8
30°-40°	46.5	25.3
40°-50°	64.1	34.8
50°-60°	44.6	24.3
60°-70°	8.5	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°	18.1	9.8
0°-40°	64.6	35.1
0°-60°	173.3	94.2
0°-90°	184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	184.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	10	10	9	8	8	1
15°	20	11	7	7	7	7
25°	192	16	4	5	6	99
35°	564	22	3	4	5	341
45°	589	15	2	4	5	448
55°	413	4	1	4	5	353
65°	39	0	1	3	5	70
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°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
2.5°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.6	9.5
5°	10.5	10.5	10.5	10.5	10.3	10.3	10.3	10.1	10.1	9.8	9.3
7.5°	11.2	11.2	11.2	11.2	11.0	10.8	10.6	10.6	10.5	9.6	9.0
10°	12.5	12.5	12.3	12.2	12.0	11.7	11.5	11.2	10.6	9.5	8.4
12.5°	15.2	14.9	14.7	14.4	13.9	13.2	12.5	12.0	10.8	9.1	7.9
15°	20.1	19.8	19.1	18.1	17.1	15.7	14.5	13.3	11.3	8.6	7.1
17.5°	28.7	27.7	26.7	25.0	22.5	20.1	17.6	15.4	12.0	8.1	6.4
20°	51.7	51.0	44.9	40.2	32.6	27.2	22.1	18.4	13.0	7.6	5.7
22.5°	106.6	99.5	89.6	73.3	57.1	42.1	30.6	23.2	14.0	6.9	5.1
25°	192.3	181.1	159.7	128.4	94.8	67.1	44.3	30.2	15.5	6.3	4.4
27.5°	291.1	279.8	246.5	203.5	148.5	101.2	63.2	40.0	17.6	5.6	3.9
30°	396.4	386.8	344.5	284.9	209.4	141.8	84.7	50.0	19.8	4.9	3.4
31°	438.8	426.5	380.9	317.3	237.9	158.5	93.3	54.2	20.6	4.7	3.2
32°	477.9	463.8	416.5	348.4	261.1	176.6	102.7	58.0	21.3	4.4	3.0
33°	511.5	495.1	449.5	377.8	286.6	193.5	112.5	61.5	21.8	4.1	2.9
34°	540.1	525.9	476.9	407.4	309.2	209.7	122.2	65.1	22.1	3.9	2.7
35°	564.4	551.5	503.0	429.9	331.4	225.4	131.0	68.4	22.1	3.5	2.7
36°	580.8	569.6	525.7	452.9	350.0	238.8	138.4	71.5	22.1	3.2	2.5
37°	589.7	578.9	540.6	471.8	368.2	251.9	145.2	73.8	22.0	3.0	2.4
38°	594.3	584.8	551.5	487.2	380.9	261.4	151.1	75.7	21.8	2.7	2.4
39°	595.5	587.5	558.5	498.3	393.2	270.9	155.3	76.7	21.3	2.5	2.2
40°	594.6	587.7	562.2	508.3	402.7	278.3	158.3	77.1	20.8	2.2	2.2
41°	592.9	587.5	564.9	515.2	410.3	283.0	159.5	76.4	20.1	1.9	2.0
42°	591.4	585.5	566.1	519.9	415.5	285.4	159.3	75.0	19.1	1.7	2.0
43°	591.4	584.7	566.2	523.0	418.1	285.6	157.3	72.5	17.7	1.5	1.9
44°	590.4	584.2	567.1	525.0	418.7	284.1	154.1	69.8	16.2	1.4	1.9
45°	588.6	582.0	566.9	525.2	417.5	280.3	148.9	66.2	14.9	1.0	1.9
46°	585.0	579.1	565.4	524.0	414.0	274.9	142.6	62.7	13.3	0.8	1.7
47°	577.9	573.3	561.3	519.9	408.6	267.0	135.2	58.6	12.2	0.7	1.7
48°	565.7	562.5	554.4	511.0	398.3	257.2	127.2	54.2	11.0	0.7	1.7
49°	543.4	540.9	536.2	496.6	385.1	245.2	118.6	49.3	9.8	0.5	1.7
50°	525.9	523.2	513.5	472.5	366.2	230.0	109.2	44.4	8.4	0.3	1.5
51°	514.2	509.8	494.6	444.4	338.6	209.7	98.9	39.5	7.1	0.3	1.5
52°	499.5	492.9	474.0	419.2	313.5	189.4	87.7	34.6	6.3	0.3	1.5
53°	468.7	466.4	447.6	392.2	288.3	170.0	76.2	30.6	5.4	0.3	1.5
54°	441.9	438.3	412.8	354.7	260.9	148.4	64.4	27.0	4.6	0.3	1.5
55°	412.8	405.9	383.2	323.1	228.8	128.4	53.1	23.3	3.7	0.3	1.4
56°	376.1	370.1	345.7	289.3	199.2	108.1	44.4	19.1	2.9	0.3	1.4
57°	331.5	326.0	307.2	247.7	168.5	88.4	36.2	15.4	2.2	0.3	1.4
58°	288.4	282.2	260.7	207.8	136.0	70.1	30.2	12.5	1.7	0.3	1.4
59°	255.3	246.9	219.2	174.6	106.5	53.2	24.0	10.0	1.2	0.3	1.4
60°	227.8	220.9	192.1	145.3	83.5	39.2	17.7	7.6	0.7	0.3	1.4
62.5°	132.0	130.1	104.3	74.9	39.4	18.2	8.8	3.5	0.3	0.5	1.4
65°	39.4	34.3	26.7	15.9	10.1	6.1	3.2	1.2	0.2	0.5	1.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.2	1.2	1.2	1.2	1.2	1.2	0.7	0.3	0.2	0.5	1.2
70°	0.7	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	0.7
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7
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°	9.5	9.5	9.5	9.5
2.5°	9.1	9.0	8.8	8.8
5°	8.8	8.4	8.4	8.3
7.5°	8.3	7.9	7.9	7.9
10°	7.8	7.6	7.6	7.4
12.5°	7.1	7.1	7.1	7.1
15°	6.6	6.6	6.8	6.8
17.5°	5.9	6.1	6.4	6.6
20°	5.4	5.7	6.1	6.3
22.5°	5.1	5.4	5.9	6.1
25°	4.6	5.1	5.7	5.9
27.5°	4.2	4.9	5.4	5.7
30°	3.9	4.7	5.2	5.6
31°	3.9	4.6	5.2	5.6
32°	3.7	4.4	5.2	5.4
33°	3.7	4.4	5.2	5.4
34°	3.5	4.4	5.1	5.4
35°	3.5	4.4	5.1	5.4
36°	3.4	4.2	5.1	5.4
37°	3.4	4.2	5.1	5.4
38°	3.2	4.2	5.1	5.4
39°	3.2	4.2	5.1	5.4
40°	3.2	4.2	5.1	5.4
41°	3.0	4.2	5.1	5.4
42°	3.0	4.2	5.1	5.4
43°	3.0	4.1	5.1	5.4
44°	3.0	4.1	5.1	5.4
45°	2.9	4.1	5.1	5.4
46°	2.9	4.1	5.1	5.4
47°	2.9	4.1	5.1	5.4
48°	2.9	4.1	5.1	5.4
49°	2.9	4.1	5.1	5.4
50°	2.7	3.9	5.1	5.4
51°	2.7	3.9	5.1	5.4
52°	2.7	3.9	5.1	5.4
53°	2.7	3.9	5.1	5.4
54°	2.5	3.9	5.1	5.4
55°	2.5	3.9	5.1	5.4
56°	2.5	3.9	5.1	5.2
57°	2.5	3.9	4.9	5.2
58°	2.5	3.7	4.9	5.2
59°	2.5	3.7	4.9	5.2
60°	2.5	3.7	4.9	5.2
62.5°	2.4	3.7	4.7	5.1
65°	2.2	3.4	4.7	4.9



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.2	3.2	4.4	4.7
70°	2.0	3.0	4.2	4.6
72.5°	1.7	2.9	3.9	4.2
75°	1.5	2.5	3.5	3.9
77.5°	1.4	2.2	3.2	3.4
80°	1.2	1.9	2.7	3.0
82.5°	0.8	1.4	2.2	2.4
85°	0.7	1.0	1.5	1.7
87.5°	0.5	0.5	0.8	0.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)