

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: P1337970

Luminaire Tested: P3A05R309827DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337970
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: P3A05R309827DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

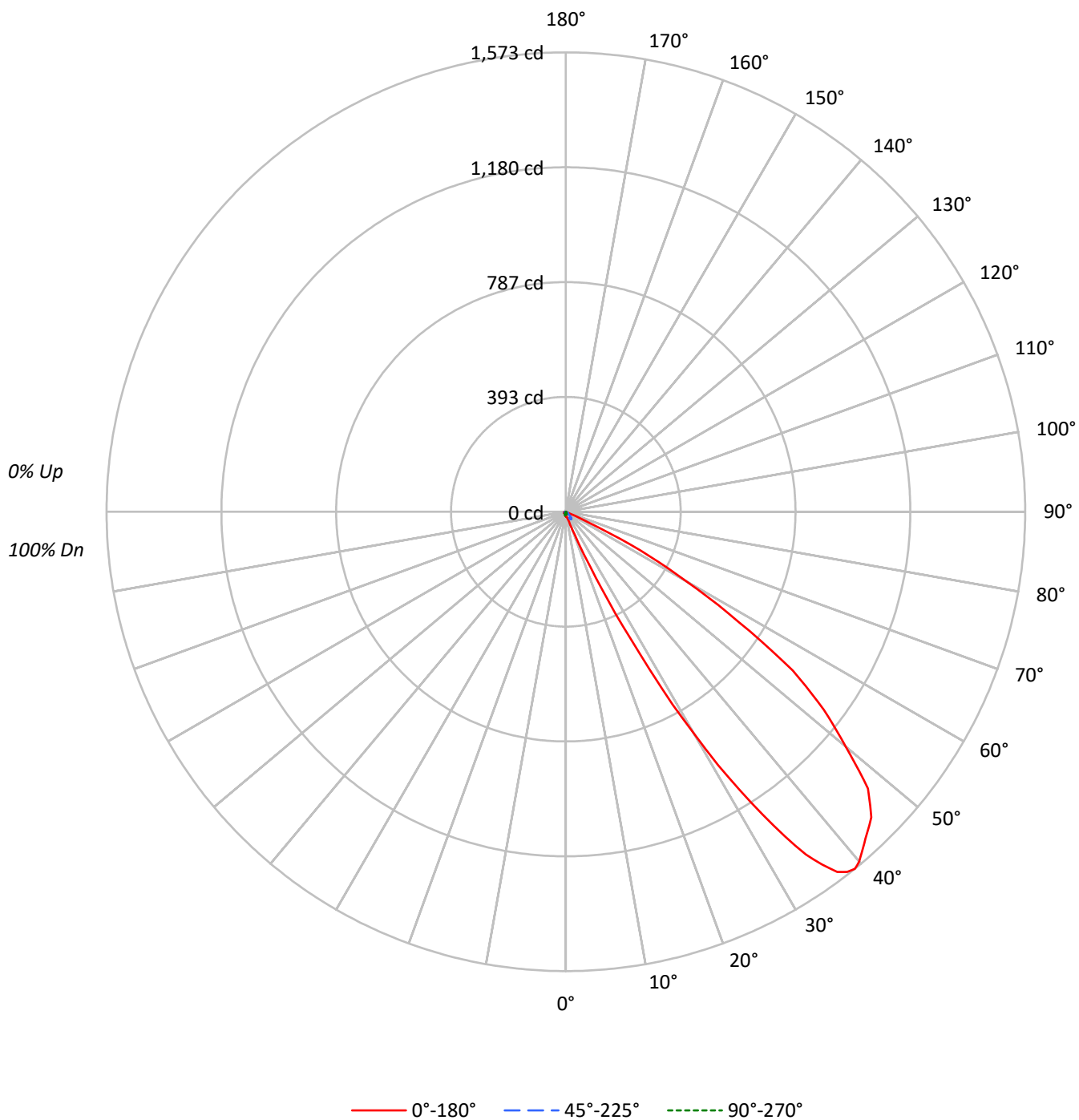
Lumens per Lamp: N/A
Luminaire Lumens: 409.0 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	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	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3465	3465	3465	3465	3465
5°	3720	3632	3412	3104	3038
10°	4075	3607	2984	2694	2605
15°	5948	3587	2497	2270	2338
20°	14958	3944	1937	1937	2170
25°	69439	4912	1500	1742	2008
30°	221047	6811	1139	1646	2000
35°	383576	8298	910	1579	2034
40°	447352	8273	687	1574	2061
45°	458776	5861	744	1706	2233
50°	426630	3275	580	1774	2593
55°	362616	1720	650	1988	2906
60°	209413	439	746	2105	3158
65°	42702	0	882	2491	3580
70°	641	192	1090	2885	4167
75°	593	254	1186	2881	4999
80°	379	379	1768	3536	5683
85°	0	755	3522	3522	7045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 458776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.3
10°-20°	4.1	1.0
20°-30°	23.6	5.8
30°-40°	110.2	26.9
40°-50°	155.8	38.1
50°-60°	95.8	23.4
60°-70°	14.6	3.6
70°-80°	2.3	0.6
80°-90°	1.1	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°	29.1	7.1
0°-40°	139.3	34.1
0°-60°	390.9	95.6
0°-90°	409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	409.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	17	16	16	14	14	2
15°	26	16	11	10	10	9
25°	287	20	6	7	8	177
35°	1433	31	3	6	8	860
45°	1479	19	2	6	7	1122
55°	948	4	2	5	8	807
65°	82	0	2	5	7	149
75°	1	0	1	3	6	1
85°	0	0	1	1	3	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°	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
2.5°	16.2	16.2	16.5	16.5	16.2	16.5	16.5	16.5	15.8	15.5	14.8
5°	16.9	16.9	16.9	17.2	16.9	16.9	16.5	16.2	15.5	14.5	14.1
7.5°	17.6	17.6	17.2	17.6	17.2	17.2	16.5	15.8	14.8	13.8	13.1
10°	18.3	18.3	17.9	17.9	17.6	17.6	16.2	15.2	13.4	12.4	12.1
12.5°	20.3	20.3	20.0	19.6	18.9	18.6	15.8	14.1	12.1	11.0	10.7
15°	26.2	25.8	25.2	24.1	22.4	22.0	15.8	13.1	11.0	10.0	10.0
17.5°	35.8	35.5	34.5	31.7	28.6	27.6	15.8	11.7	9.6	9.0	9.0
20°	64.1	61.3	56.2	49.3	42.0	38.2	16.9	10.3	8.3	7.9	8.3
21°	83.7	81.0	74.4	63.0	50.3	46.2	17.6	10.0	7.9	7.6	8.3
22°	114.0	110.9	97.5	82.0	63.7	56.5	17.9	9.3	7.2	7.2	7.9
23°	159.2	154.0	131.3	106.5	79.6	69.2	18.6	9.0	6.9	7.2	7.6
24°	208.4	204.0	178.1	140.9	101.6	86.8	19.3	8.6	6.5	6.5	7.2
25°	287.0	281.8	236.0	177.8	128.9	104.4	20.3	7.9	6.2	6.2	7.2
26°	388.6	364.9	303.9	229.1	158.8	130.9	21.4	7.6	5.9	6.2	6.9
27°	485.1	465.5	396.9	293.9	196.4	160.9	22.7	7.2	5.5	5.9	6.9
28°	611.9	584.3	497.8	371.7	247.4	194.7	24.1	6.9	5.2	5.9	6.5
29°	753.8	715.2	610.8	459.3	304.9	232.6	25.5	6.5	4.8	5.5	6.5
30°	873.0	836.8	732.5	563.0	371.1	282.5	26.9	6.2	4.5	5.5	6.5
31°	1012.9	958.1	831.7	650.8	427.9	332.5	28.3	5.5	4.1	5.2	6.2
32°	1126.3	1088.0	953.6	750.0	502.7	387.6	29.3	5.2	4.1	5.2	6.2
33°	1235.8	1184.5	1054.6	845.1	570.2	444.1	30.3	4.8	3.8	4.8	6.2
34°	1340.5	1293.3	1150.0	921.9	633.9	497.8	31.0	4.1	3.8	4.8	5.9
35°	1432.9	1378.1	1234.1	997.1	699.4	546.8	31.0	3.8	3.4	4.5	5.9
36°	1492.8	1453.5	1307.1	1071.1	758.6	593.3	31.0	3.4	3.1	4.5	5.5
37°	1544.2	1498.3	1365.7	1128.0	802.4	630.5	31.0	3.1	3.1	4.5	5.5
38°	1565.2	1525.9	1406.0	1178.3	843.4	668.4	30.7	2.8	2.8	4.1	5.5
39°	1573.4	1538.3	1436.3	1214.4	873.7	693.9	30.0	2.4	2.8	4.1	5.5
40°	1562.8	1536.2	1451.8	1237.9	897.8	712.5	28.9	2.1	2.4	4.1	5.5
42.5°	1518.7	1501.1	1448.4	1261.3	918.5	726.3	25.2	1.4	2.4	3.8	5.5
45°	1479.4	1460.1	1413.6	1236.8	891.6	699.0	18.9	0.7	2.4	3.8	5.5
47.5°	1403.2	1391.2	1354.7	1174.5	832.7	637.7	13.4	0.3	2.1	3.4	5.2
50°	1250.6	1239.3	1191.0	1019.8	716.3	539.2	9.6	0.3	1.7	3.4	5.2
52.5°	1113.8	1101.8	1032.5	847.9	550.2	395.2	6.2	0.3	1.7	3.4	5.2
55°	948.5	927.5	836.5	643.6	390.0	264.9	4.5	0.3	1.7	3.1	5.2
57.5°	702.1	671.5	590.2	438.9	224.6	143.7	2.4	0.3	1.7	3.1	5.2
60°	477.5	459.3	369.3	231.5	95.8	60.6	1.0	0.3	1.7	3.1	4.8
62.5°	289.4	266.3	185.7	98.5	41.3	27.6	0.0	0.7	1.7	3.1	4.8
65°	82.3	73.0	48.6	22.4	11.7	9.0	0.0	0.7	1.7	3.1	4.8
67.5°	2.8	2.8	2.8	2.4	1.7	1.7	0.3	0.7	1.7	3.1	4.5
70°	1.0	1.0	1.0	0.7	0.7	0.3	0.3	0.7	1.7	2.8	4.5
72.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.7	1.4	2.4	4.1
75°	0.7	0.7	0.7	0.3	0.3	0.3	0.3	1.0	1.4	2.4	3.4
77.5°	0.7	0.7	0.7	0.3	0.3	0.3	0.3	1.0	1.4	2.1	3.4
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.4	2.1	2.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	1.0	1.4	1.4	2.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.4	1.0	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.0	1.0	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):

	157.5°	180°
0°	15.8	15.8
2.5°	14.8	14.8
5°	13.8	13.8
7.5°	12.7	12.7
10°	11.7	11.7
12.5°	11.0	11.0
15°	10.0	10.3
17.5°	9.3	9.6
20°	9.0	9.3
21°	9.0	9.3
22°	8.6	9.0
23°	8.6	9.0
24°	8.3	8.6
25°	7.9	8.3
26°	7.9	8.3
27°	7.9	8.3
28°	7.6	8.3
29°	7.6	7.9
30°	7.6	7.9
31°	7.2	7.9
32°	7.2	7.9
33°	7.2	7.6
34°	6.9	7.6
35°	6.9	7.6
36°	6.9	7.6
37°	6.9	7.2
38°	6.9	7.6
39°	6.9	7.2
40°	6.9	7.2
42.5°	6.9	7.2
45°	6.9	7.2
47.5°	6.9	7.6
50°	6.9	7.6
52.5°	6.9	7.6
55°	6.9	7.6
57.5°	6.9	7.2
60°	6.9	7.2
62.5°	6.5	7.2
65°	6.5	6.9
67.5°	6.5	6.9
70°	6.2	6.5
72.5°	5.9	6.2
75°	5.2	5.9
77.5°	4.8	5.2
80°	4.1	4.5

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.4	3.4
85°	2.4	2.8
87.5°	1.4	1.4
90°	0.0	0.0

(END OF REPORT)