

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: P1337986

Luminaire Tested: P3A05R309830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337986
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: P3A05R309830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

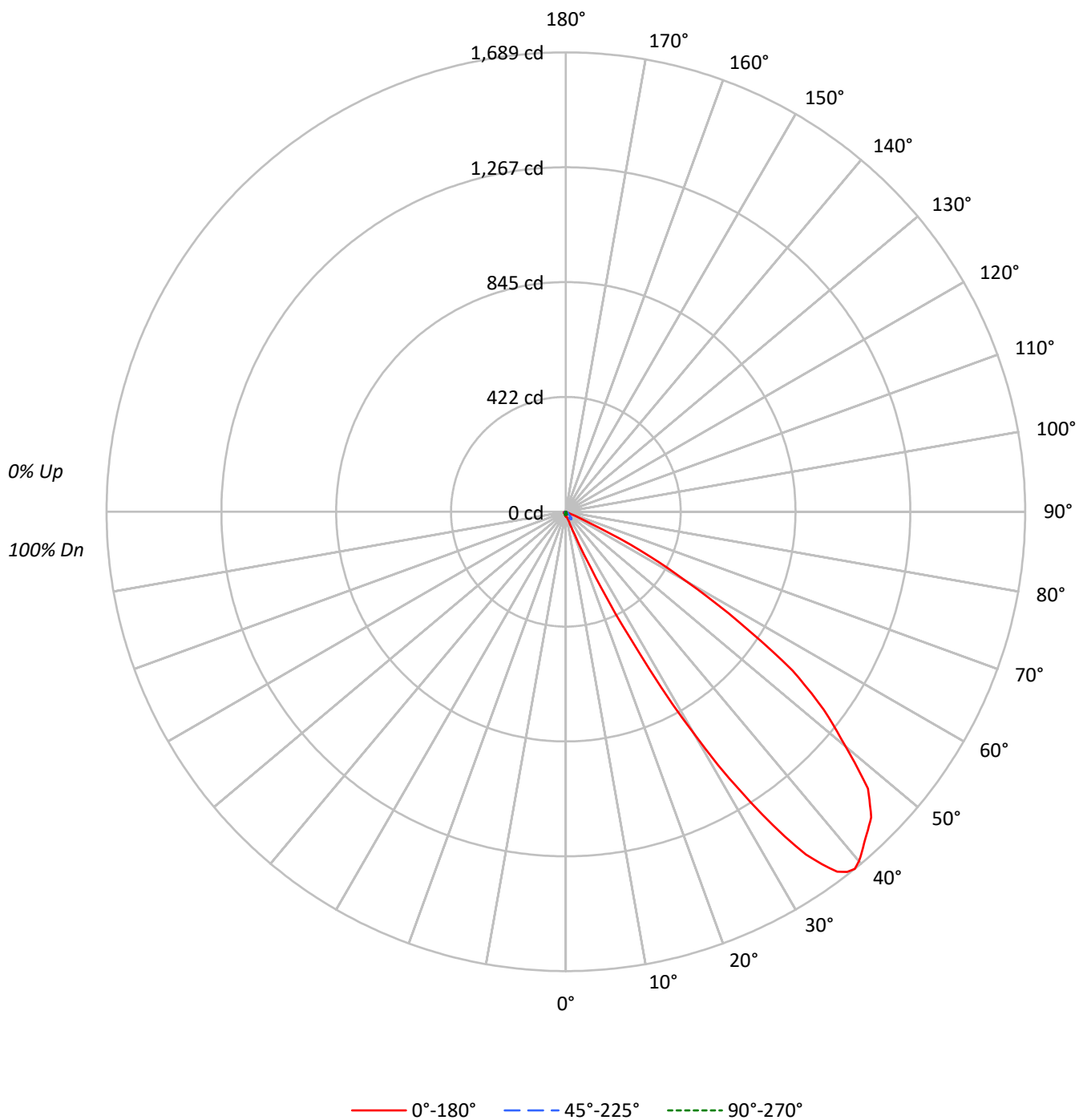
Lumens per Lamp: N/A
Luminaire Lumens: 439.0 lumens
Efficiency: N/A
Efficacy: 61.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	3728	3728	3728	3728	3728
5°	3984	3918	3654	3346	3258
10°	4364	3874	3206	2872	2806
15°	6379	3859	2679	2429	2520
20°	16055	4224	2077	2077	2334
25°	74520	5274	1621	1887	2153
30°	237277	7292	1215	1772	2152
35°	411711	8914	990	1686	2168
40°	480157	8902	744	1689	2233
45°	492423	6295	806	1830	2419
50°	457947	3548	614	1876	2763
55°	389186	1835	688	2103	3097
60°	224763	482	789	2281	3421
65°	45867	0	934	2698	3840
70°	705	256	1154	3077	4488
75°	593	339	1271	3135	5338
80°	505	505	1894	3788	6061
85°	0	1006	3774	3774	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 492423 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.5	0.4
10°-20°	4.4	1.0
20°-30°	25.3	5.8
30°-40°	118.2	26.9
40°-50°	167.2	38.1
50°-60°	102.9	23.4
60°-70°	15.7	3.6
70°-80°	2.5	0.6
80°-90°	1.2	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°	31.3	7.1
0°-40°	149.5	34.1
0°-60°	419.6	95.6
0°-90°	439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	439.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	18	18	17	15	15	2
15°	28	17	12	11	11	10
25°	308	22	7	8	9	190
35°	1538	33	4	6	8	923
45°	1588	20	3	6	8	1204
55°	1018	5	2	6	8	866
65°	88	0	2	5	7	160
75°	1	0	2	4	6	1
85°	0	0	2	2	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°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
2.5°	17.4	17.4	17.8	17.8	17.4	17.8	17.8	17.8	17.0	16.6	15.9
5°	18.1	18.1	18.1	18.5	18.1	18.1	17.8	17.4	16.6	15.5	15.2
7.5°	18.9	18.9	18.5	18.9	18.5	18.5	17.8	17.0	15.9	14.8	14.1
10°	19.6	19.6	19.2	19.2	18.9	18.9	17.4	16.3	14.4	13.3	12.9
12.5°	21.8	21.8	21.4	21.1	20.3	20.0	17.0	15.2	12.9	11.8	11.5
15°	28.1	27.7	27.0	25.9	24.0	23.7	17.0	14.1	11.8	10.7	10.7
17.5°	38.5	38.1	37.0	34.0	30.7	29.6	17.0	12.6	10.4	9.6	9.6
20°	68.8	65.8	60.3	52.9	45.1	41.0	18.1	11.1	8.9	8.5	8.9
21°	89.9	86.9	79.9	67.7	54.0	49.6	18.9	10.7	8.5	8.1	8.9
22°	122.4	119.1	104.7	88.0	68.4	60.6	19.2	10.0	7.8	7.8	8.5
23°	170.8	165.3	140.9	114.3	85.4	74.3	20.0	9.6	7.4	7.8	8.1
24°	223.7	218.9	191.2	151.2	109.1	93.2	20.7	9.2	7.0	7.0	7.8
25°	308.0	302.5	253.3	190.8	138.3	112.0	21.8	8.5	6.7	6.7	7.8
26°	417.1	391.6	326.2	245.9	170.5	140.5	22.9	8.1	6.3	6.7	7.4
27°	520.7	499.6	426.0	315.4	210.8	172.7	24.4	7.8	5.9	6.3	7.4
28°	656.8	627.2	534.4	399.0	265.5	208.9	25.9	7.4	5.5	6.3	7.0
29°	809.1	767.7	655.6	492.9	327.3	249.6	27.4	7.0	5.2	5.9	7.0
30°	937.1	898.2	786.2	604.2	398.3	303.2	28.8	6.7	4.8	5.9	7.0
31°	1087.2	1028.4	892.7	698.5	459.3	356.9	30.3	5.9	4.4	5.5	6.7
32°	1208.9	1167.8	1023.6	805.0	539.5	416.0	31.4	5.5	4.4	5.5	6.7
33°	1326.5	1271.4	1131.9	907.1	612.0	476.7	32.5	5.2	4.1	5.2	6.7
34°	1438.9	1388.2	1234.4	989.6	680.4	534.4	33.3	4.4	4.1	5.2	6.3
35°	1538.0	1479.2	1324.6	1070.2	750.7	586.9	33.3	4.1	3.7	4.8	6.3
36°	1602.3	1560.2	1403.0	1149.7	814.3	636.8	33.3	3.7	3.3	4.8	5.9
37°	1657.4	1608.2	1465.9	1210.7	861.3	676.7	33.3	3.3	3.3	4.8	5.9
38°	1680.0	1637.8	1509.1	1264.7	905.3	717.4	32.9	3.0	3.0	4.4	5.9
39°	1688.9	1651.1	1541.7	1303.5	937.8	744.8	32.2	2.6	3.0	4.4	5.9
40°	1677.4	1648.9	1558.3	1328.7	963.7	764.7	31.1	2.2	2.6	4.4	5.9
42.5°	1630.1	1611.2	1554.6	1353.8	985.9	779.5	27.0	1.5	2.6	4.1	5.9
45°	1587.9	1567.2	1517.3	1327.6	957.0	750.3	20.3	0.7	2.6	4.1	5.9
47.5°	1506.2	1493.2	1454.0	1260.6	893.8	684.5	14.4	0.4	2.2	3.7	5.5
50°	1342.4	1330.2	1278.4	1094.6	768.8	578.7	10.4	0.4	1.8	3.7	5.5
52.5°	1195.5	1182.6	1108.3	910.1	590.6	424.2	6.7	0.4	1.8	3.7	5.5
55°	1018.0	995.5	897.9	690.8	418.6	284.4	4.8	0.4	1.8	3.3	5.5
57.5°	753.6	720.7	633.5	471.1	241.1	154.2	2.6	0.4	1.8	3.3	5.5
60°	512.5	492.9	396.4	248.5	102.8	65.1	1.1	0.4	1.8	3.3	5.2
62.5°	310.6	285.9	199.3	105.8	44.4	29.6	0.0	0.7	1.8	3.3	5.2
65°	88.4	78.4	52.1	24.0	12.6	9.6	0.0	0.7	1.8	3.3	5.2
67.5°	3.0	3.0	3.0	2.6	1.8	1.8	0.4	0.7	1.8	3.3	4.8
70°	1.1	1.1	1.1	0.7	0.7	0.4	0.4	0.7	1.8	3.0	4.8
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.7	1.5	2.6	4.4
75°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.5	2.6	3.7
77.5°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.5	2.2	3.7
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	2.2	3.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	1.1	1.5	1.5	2.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.5	1.1	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.1	1.1	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°	17.0	17.0
2.5°	15.9	15.9
5°	14.8	14.8
7.5°	13.7	13.7
10°	12.6	12.6
12.5°	11.8	11.8
15°	10.7	11.1
17.5°	10.0	10.4
20°	9.6	10.0
21°	9.6	10.0
22°	9.2	9.6
23°	9.2	9.6
24°	8.9	9.2
25°	8.5	8.9
26°	8.5	8.9
27°	8.5	8.9
28°	8.1	8.9
29°	8.1	8.5
30°	8.1	8.5
31°	7.8	8.5
32°	7.8	8.5
33°	7.8	8.1
34°	7.4	8.1
35°	7.4	8.1
36°	7.4	8.1
37°	7.4	7.8
38°	7.4	8.1
39°	7.4	7.8
40°	7.4	7.8
42.5°	7.4	7.8
45°	7.4	7.8
47.5°	7.4	8.1
50°	7.4	8.1
52.5°	7.4	8.1
55°	7.4	8.1
57.5°	7.4	7.8
60°	7.4	7.8
62.5°	7.0	7.8
65°	7.0	7.4
67.5°	7.0	7.4
70°	6.7	7.0
72.5°	6.3	6.7
75°	5.5	6.3
77.5°	5.2	5.5
80°	4.4	4.8



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.7	3.7
85°	2.6	3.0
87.5°	1.5	1.5
90°	0.0	0.0

(END OF REPORT)