

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: P1338002

Luminaire Tested: P3A05R309835DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338002
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: P3A05R309835DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

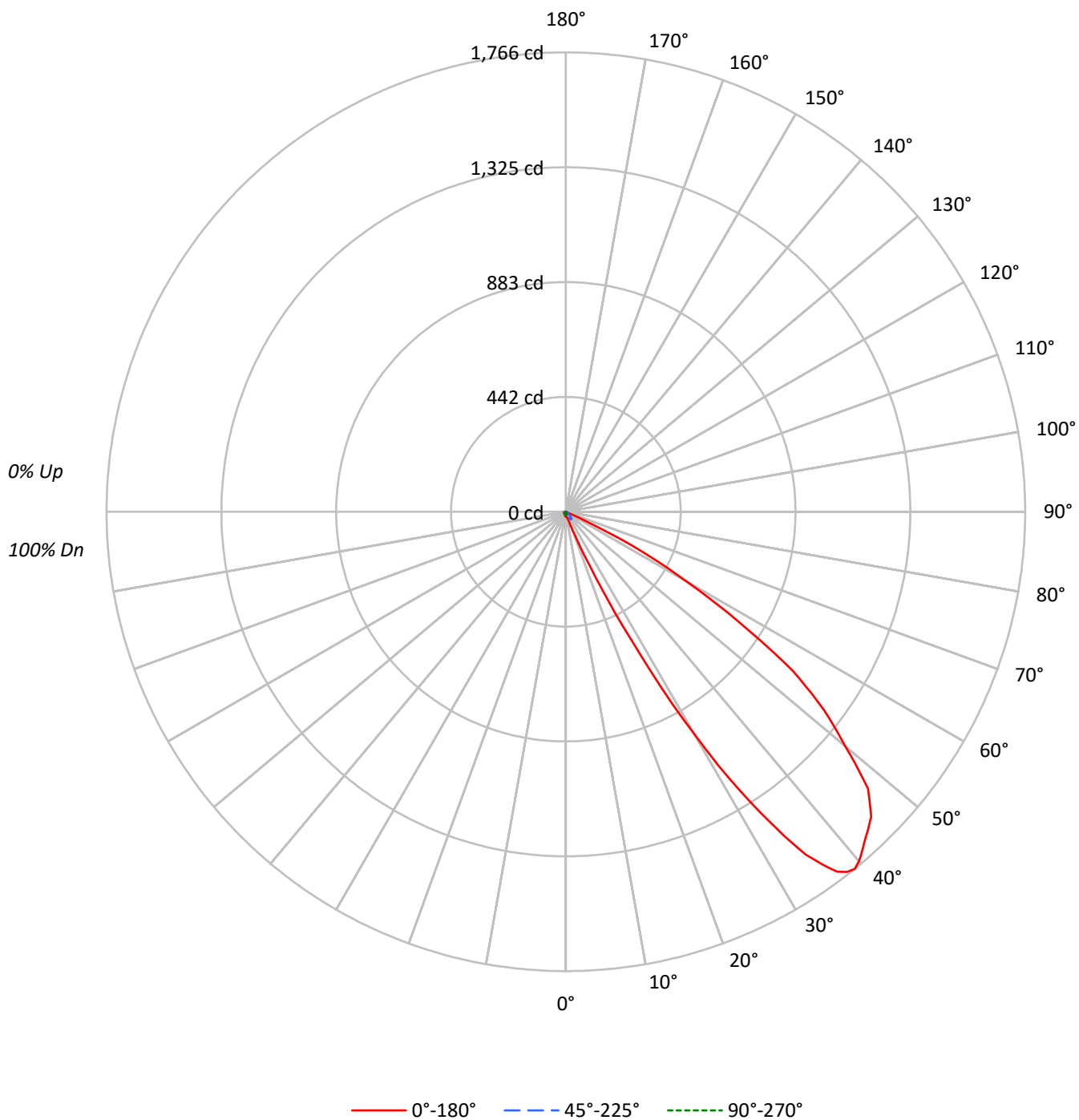
Lumens per Lamp: N/A
Luminaire Lumens: 459.0 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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				0
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°	3903	3903	3903	3903	3903
5°	4160	4094	3830	3500	3412
10°	4565	4052	3362	3006	2917
15°	6674	4041	2815	2543	2633
20°	16778	4410	2170	2170	2427
25°	77932	5516	1694	1960	2250
30°	248089	7647	1266	1848	2254
35°	430449	9316	1044	1767	2275
40°	502026	9303	773	1775	2319
45°	514844	6605	837	1923	2512
50°	478790	3684	648	1979	2900
55°	406925	1912	726	2217	3250
60°	235025	526	833	2368	3552
65°	47943	0	986	2802	3995
70°	769	256	1218	3206	4680
75°	678	339	1271	3304	5592
80°	505	505	1894	3915	6314
85°	0	1006	3774	3774	7799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 514844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.4
10°-20°	4.6	1.0
20°-30°	26.5	5.8
30°-40°	123.6	26.9
40°-50°	174.8	38.1
50°-60°	107.6	23.4
60°-70°	16.4	3.6
70°-80°	2.6	0.6
80°-90°	1.3	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°	32.7	7.1
0°-40°	156.3	34.1
0°-60°	438.7	95.6
0°-90°	459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	459.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	19	19	17	16	16	2
15°	29	18	12	11	12	10
25°	322	23	7	8	9	198
35°	1608	35	4	7	8	965
45°	1660	21	3	6	8	1259
55°	1064	5	2	6	8	906
65°	92	0	2	5	8	167
75°	1	0	2	4	7	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°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
2.5°	18.2	18.2	18.6	18.6	18.2	18.6	18.6	18.6	17.8	17.4	16.6
5°	18.9	18.9	18.9	19.3	18.9	18.9	18.6	18.2	17.4	16.2	15.9
7.5°	19.7	19.7	19.3	19.7	19.3	19.3	18.6	17.8	16.6	15.5	14.7
10°	20.5	20.5	20.1	20.1	19.7	19.7	18.2	17.0	15.1	13.9	13.5
12.5°	22.8	22.8	22.4	22.0	21.3	20.9	17.8	15.9	13.5	12.4	12.0
15°	29.4	29.0	28.2	27.1	25.1	24.7	17.8	14.7	12.4	11.2	11.2
17.5°	40.2	39.8	38.7	35.6	32.1	30.9	17.8	13.1	10.8	10.1	10.1
20°	71.9	68.8	63.0	55.3	47.2	42.9	18.9	11.6	9.3	8.9	9.3
21°	94.0	90.9	83.5	70.8	56.4	51.8	19.7	11.2	8.9	8.5	9.3
22°	128.0	124.5	109.4	92.0	71.5	63.4	20.1	10.4	8.1	8.1	8.9
23°	178.6	172.8	147.3	119.5	89.3	77.7	20.9	10.1	7.7	8.1	8.5
24°	233.9	228.9	199.9	158.1	114.1	97.4	21.7	9.7	7.3	7.3	8.1
25°	322.1	316.3	264.8	199.5	144.6	117.2	22.8	8.9	7.0	7.0	8.1
26°	436.1	409.5	341.0	257.1	178.2	146.9	24.0	8.5	6.6	7.0	7.7
27°	544.4	522.4	445.4	329.8	220.4	180.6	25.5	8.1	6.2	6.6	7.7
28°	686.7	655.7	558.7	417.2	277.6	218.5	27.1	7.7	5.8	6.6	7.3
29°	846.0	802.7	685.5	515.4	342.2	261.0	28.6	7.3	5.4	6.2	7.3
30°	979.8	939.2	822.0	631.8	416.4	317.0	30.2	7.0	5.0	6.2	7.3
31°	1136.7	1075.3	933.4	730.4	480.2	373.1	31.7	6.2	4.6	5.8	7.0
32°	1263.9	1221.0	1070.2	841.7	564.1	435.0	32.9	5.8	4.6	5.8	7.0
33°	1386.9	1329.3	1183.5	948.4	639.9	498.4	34.0	5.4	4.3	5.4	7.0
34°	1504.4	1451.5	1290.6	1034.7	711.4	558.7	34.8	4.6	4.3	5.4	6.6
35°	1608.0	1546.6	1385.0	1118.9	784.9	613.6	34.8	4.3	3.9	5.0	6.6
36°	1675.3	1631.2	1466.9	1202.1	851.4	665.8	34.8	3.9	3.5	5.0	6.2
37°	1732.9	1681.5	1532.6	1265.9	900.5	707.6	34.8	3.5	3.5	5.0	6.2
38°	1756.5	1712.4	1577.9	1322.3	946.5	750.1	34.4	3.1	3.1	4.6	6.2
39°	1765.8	1726.4	1611.9	1362.9	980.5	778.7	33.6	2.7	3.1	4.6	6.2
40°	1753.8	1724.0	1629.3	1389.2	1007.6	799.6	32.5	2.3	2.7	4.6	6.2
42.5°	1704.3	1684.6	1625.4	1415.5	1030.8	815.0	28.2	1.5	2.7	4.3	6.2
45°	1660.2	1638.6	1586.4	1388.0	1000.6	784.5	21.3	0.8	2.7	4.3	6.2
47.5°	1574.8	1561.3	1520.3	1318.1	934.5	715.7	15.1	0.4	2.3	3.9	5.8
50°	1403.5	1390.8	1336.6	1144.5	803.8	605.1	10.8	0.4	1.9	3.9	5.8
52.5°	1250.0	1236.5	1158.8	951.5	617.5	443.5	7.0	0.4	1.9	3.9	5.8
55°	1064.4	1040.8	938.8	722.2	437.7	297.3	5.0	0.4	1.9	3.5	5.8
57.5°	788.0	753.6	662.3	492.6	252.1	161.2	2.7	0.4	1.9	3.5	5.8
60°	535.9	515.4	414.5	259.8	107.5	68.0	1.2	0.4	1.9	3.5	5.4
62.5°	324.8	298.9	208.4	110.6	46.4	30.9	0.0	0.8	1.9	3.5	5.4
65°	92.4	82.0	54.5	25.1	13.1	10.1	0.0	0.8	1.9	3.5	5.4
67.5°	3.1	3.1	3.1	2.7	1.9	1.9	0.4	0.8	1.9	3.5	5.0
70°	1.2	1.2	1.2	0.8	0.8	0.4	0.4	0.8	1.9	3.1	5.0
72.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.5	2.7	4.6
75°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.2	1.5	2.7	3.9
77.5°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.2	1.5	2.3	3.9
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.5	2.3	3.1



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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	1.2	1.5	1.5	2.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.5	1.2	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.2	1.2	0.8
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°	17.8	17.8
2.5°	16.6	16.6
5°	15.5	15.5
7.5°	14.3	14.3
10°	13.1	13.1
12.5°	12.4	12.4
15°	11.2	11.6
17.5°	10.4	10.8
20°	10.1	10.4
21°	10.1	10.4
22°	9.7	10.1
23°	9.7	10.1
24°	9.3	9.7
25°	8.9	9.3
26°	8.9	9.3
27°	8.9	9.3
28°	8.5	9.3
29°	8.5	8.9
30°	8.5	8.9
31°	8.1	8.9
32°	8.1	8.9
33°	8.1	8.5
34°	7.7	8.5
35°	7.7	8.5
36°	7.7	8.5
37°	7.7	8.1
38°	7.7	8.5
39°	7.7	8.1
40°	7.7	8.1
42.5°	7.7	8.1
45°	7.7	8.1
47.5°	7.7	8.5
50°	7.7	8.5
52.5°	7.7	8.5
55°	7.7	8.5
57.5°	7.7	8.1
60°	7.7	8.1
62.5°	7.3	8.1
65°	7.3	7.7
67.5°	7.3	7.7
70°	7.0	7.3
72.5°	6.6	7.0
75°	5.8	6.6
77.5°	5.4	5.8
80°	4.6	5.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.9	3.9
85°	2.7	3.1
87.5°	1.5	1.5
90°	0.0	0.0

(END OF REPORT)