

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: P1335144

Luminaire Tested: P3A02R309830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335144
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: P3A02R309830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

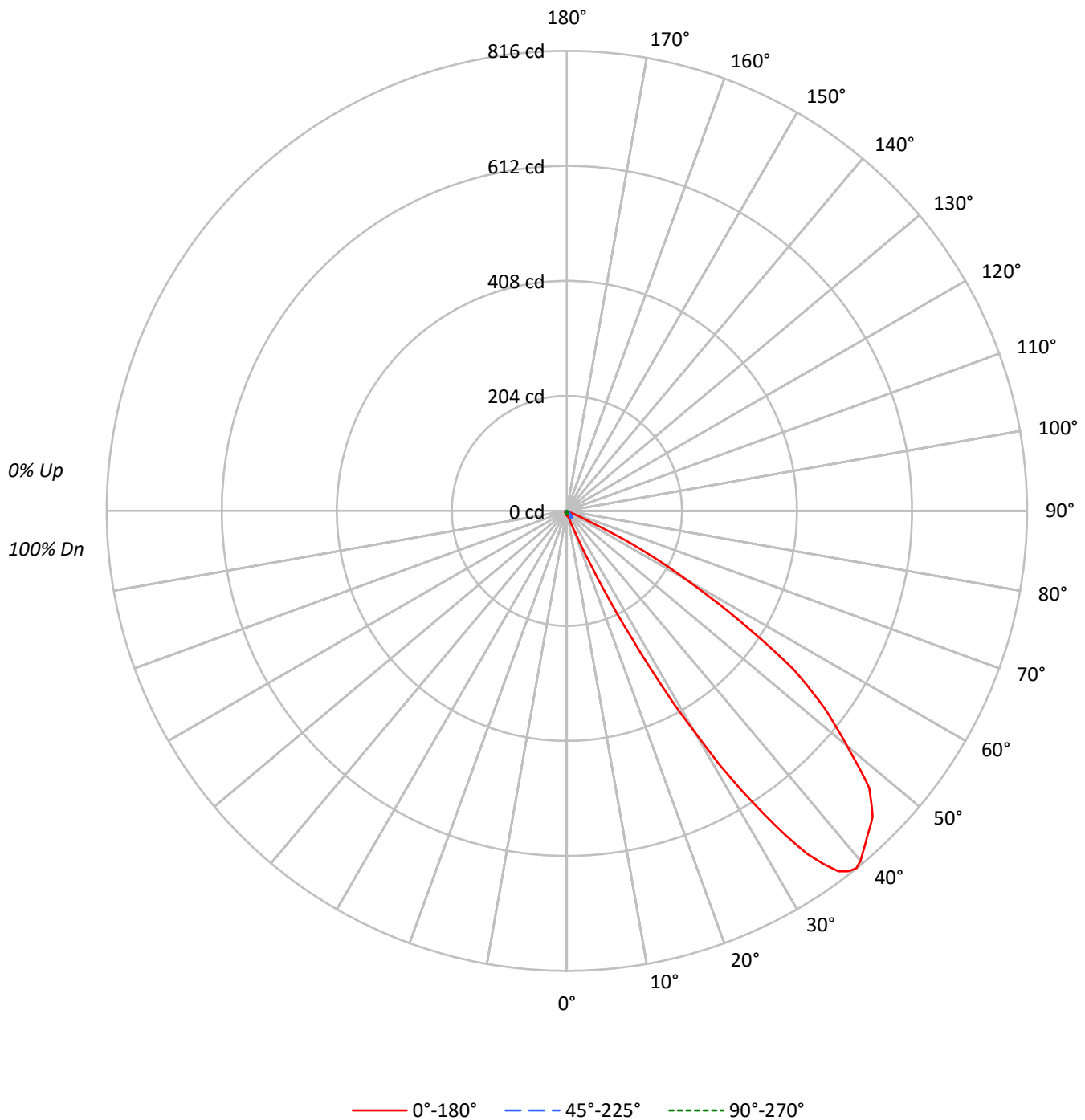
Lumens per Lamp: N/A
Luminaire Lumens: 212.0 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50	50	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24	24	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1798	1798	1798	1798	1798
5°	1937	1893	1761	1607	1563
10°	2115	1870	1559	1403	1358
15°	3087	1862	1294	1180	1226
20°	7747	2054	1003	1003	1120
25°	36002	2540	774	919	1040
30°	114575	3520	582	861	1038
35°	198815	4310	482	803	1044
40°	231863	4294	372	830	1088
45°	237792	3039	403	899	1178
50°	221127	1706	307	921	1330
55°	187941	879	344	1032	1491
60°	108544	219	395	1096	1667
65°	22155	0	467	1297	1868
70°	321	128	577	1475	2180
75°	339	169	593	1525	2542
80°	253	253	884	1768	2904
85°	0	503	1761	1761	3522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 237792 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.4
10°-20°	2.1	1.0
20°-30°	12.2	5.8
30°-40°	57.1	26.9
40°-50°	80.8	38.1
50°-60°	49.7	23.4
60°-70°	7.6	3.6
70°-80°	1.2	0.6
80°-90°	0.6	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°	15.1	7.1
0°-40°	72.2	34.1
0°-60°	202.7	95.6
0°-90°	212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	9	9	8	7	7	1
15°	14	8	6	5	5	5
25°	149	10	3	4	4	92
35°	743	16	2	3	4	446
45°	767	10	1	3	4	581
55°	492	2	1	3	4	418
65°	43	0	1	2	4	77
75°	0	0	1	2	3	0
85°	0	0	1	1	1	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°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
2.5°	8.4	8.4	8.6	8.6	8.4	8.6	8.6	8.6	8.2	8.0	7.7
5°	8.8	8.8	8.8	8.9	8.8	8.8	8.6	8.4	8.0	7.5	7.3
7.5°	9.1	9.1	8.9	9.1	8.9	8.9	8.6	8.2	7.7	7.1	6.8
10°	9.5	9.5	9.3	9.3	9.1	9.1	8.4	7.9	7.0	6.4	6.3
12.5°	10.5	10.5	10.4	10.2	9.8	9.6	8.2	7.3	6.3	5.7	5.5
15°	13.6	13.4	13.0	12.5	11.6	11.4	8.2	6.8	5.7	5.2	5.2
17.5°	18.6	18.4	17.9	16.4	14.8	14.3	8.2	6.1	5.0	4.6	4.6
20°	33.2	31.8	29.1	25.5	21.8	19.8	8.8	5.4	4.3	4.1	4.3
21°	43.4	42.0	38.6	32.7	26.1	23.9	9.1	5.2	4.1	3.9	4.3
22°	59.1	57.5	50.5	42.5	33.0	29.3	9.3	4.8	3.8	3.8	4.1
23°	82.5	79.8	68.0	55.2	41.3	35.9	9.6	4.6	3.6	3.8	3.9
24°	108.0	105.7	92.3	73.0	52.7	45.0	10.0	4.5	3.4	3.4	3.8
25°	148.8	146.1	122.3	92.1	66.8	54.1	10.5	4.1	3.2	3.2	3.8
26°	201.4	189.1	157.5	118.8	82.3	67.9	11.1	3.9	3.0	3.2	3.6
27°	251.4	241.3	205.7	152.3	101.8	83.4	11.8	3.8	2.9	3.0	3.6
28°	317.2	302.9	258.0	192.7	128.2	100.9	12.5	3.6	2.7	3.0	3.4
29°	390.7	370.7	316.6	238.0	158.0	120.5	13.2	3.4	2.5	2.9	3.4
30°	452.5	433.8	379.7	291.8	192.3	146.4	13.9	3.2	2.3	2.9	3.4
31°	525.0	496.6	431.1	337.3	221.8	172.3	14.6	2.9	2.1	2.7	3.2
32°	583.8	564.0	494.3	388.8	260.5	200.9	15.2	2.7	2.1	2.7	3.2
33°	640.6	614.0	546.6	438.1	295.5	230.2	15.7	2.5	2.0	2.5	3.2
34°	694.9	670.4	596.1	477.9	328.6	258.0	16.1	2.1	2.0	2.5	3.0
35°	742.7	714.3	639.7	516.8	362.5	283.4	16.1	2.0	1.8	2.3	3.0
36°	773.8	753.4	677.5	555.2	393.2	307.5	16.1	1.8	1.6	2.3	2.9
37°	800.4	776.6	707.9	584.7	415.9	326.8	16.1	1.6	1.6	2.3	2.9
38°	811.3	790.9	728.8	610.7	437.2	346.4	15.9	1.4	1.4	2.1	2.9
39°	815.6	797.4	744.5	629.5	452.9	359.7	15.5	1.3	1.4	2.1	2.9
40°	810.0	796.3	752.5	641.6	465.4	369.3	15.0	1.1	1.3	2.1	2.9
42.5°	787.2	778.1	750.7	653.8	476.1	376.4	13.0	0.7	1.3	2.0	2.9
45°	766.8	756.8	732.7	641.1	462.2	362.3	9.8	0.4	1.3	2.0	2.9
47.5°	727.4	721.1	702.2	608.8	431.6	330.6	7.0	0.2	1.1	1.8	2.7
50°	648.2	642.4	617.4	528.6	371.3	279.5	5.0	0.2	0.9	1.8	2.7
52.5°	577.3	571.1	535.2	439.5	285.2	204.8	3.2	0.2	0.9	1.8	2.7
55°	491.6	480.7	433.6	333.6	202.2	137.3	2.3	0.2	0.9	1.6	2.7
57.5°	363.9	348.1	305.9	227.5	116.4	74.5	1.3	0.2	0.9	1.6	2.7
60°	247.5	238.0	191.4	120.0	49.6	31.4	0.5	0.2	0.9	1.6	2.5
62.5°	150.0	138.0	96.3	51.1	21.4	14.3	0.0	0.4	0.9	1.6	2.5
65°	42.7	37.9	25.2	11.6	6.1	4.6	0.0	0.4	0.9	1.6	2.5
67.5°	1.4	1.4	1.4	1.3	0.9	0.9	0.2	0.4	0.9	1.6	2.3
70°	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.4	0.9	1.4	2.3
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	1.3	2.1
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.7	1.3	1.8
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.7	1.1	1.8
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.1	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.5	0.7	0.7	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.4
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°	8.2	8.2
2.5°	7.7	7.7
5°	7.1	7.1
7.5°	6.6	6.6
10°	6.1	6.1
12.5°	5.7	5.7
15°	5.2	5.4
17.5°	4.8	5.0
20°	4.6	4.8
21°	4.6	4.8
22°	4.5	4.6
23°	4.5	4.6
24°	4.3	4.5
25°	4.1	4.3
26°	4.1	4.3
27°	4.1	4.3
28°	3.9	4.3
29°	3.9	4.1
30°	3.9	4.1
31°	3.8	4.1
32°	3.8	4.1
33°	3.8	3.9
34°	3.6	3.9
35°	3.6	3.9
36°	3.6	3.9
37°	3.6	3.8
38°	3.6	3.9
39°	3.6	3.8
40°	3.6	3.8
42.5°	3.6	3.8
45°	3.6	3.8
47.5°	3.6	3.9
50°	3.6	3.9
52.5°	3.6	3.9
55°	3.6	3.9
57.5°	3.6	3.8
60°	3.6	3.8
62.5°	3.4	3.8
65°	3.4	3.6
67.5°	3.4	3.6
70°	3.2	3.4
72.5°	3.0	3.2
75°	2.7	3.0
77.5°	2.5	2.7
80°	2.1	2.3



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.8	1.8
85°	1.3	1.4
87.5°	0.7	0.7
90°	0.0	0.0

(END OF REPORT)