

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: P1344998

Luminaire Tested: P3A13R309727DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344998
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: P3A13R309727DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

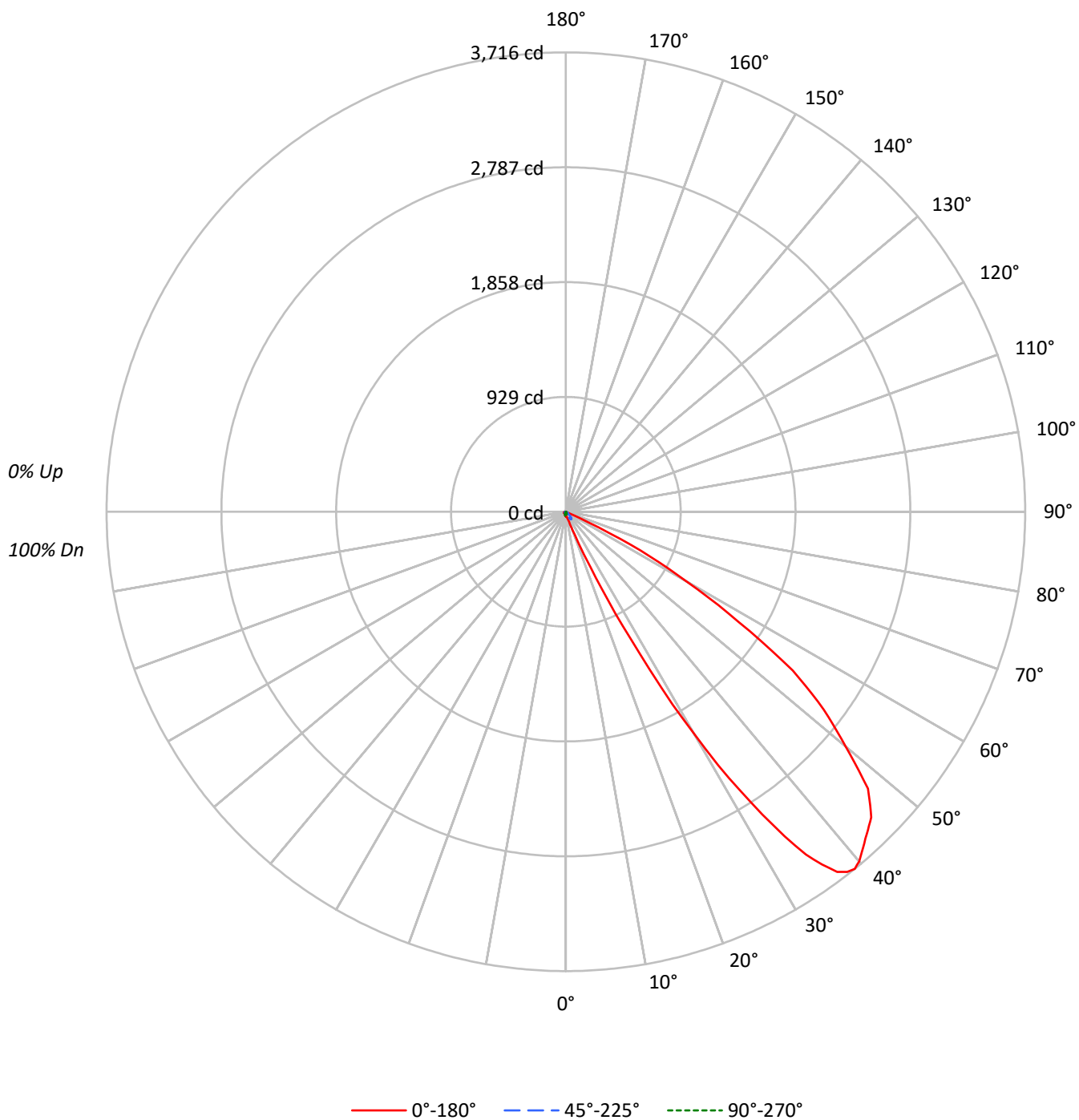
Lumens per Lamp: N/A
Luminaire Lumens: 966.0 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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°	8201	8201	8201	8201	8201
5°	8783	8607	8056	7352	7154
10°	9597	8506	7058	6346	6168
15°	14030	8490	5902	5358	5539
20°	35330	9311	4550	4550	5134
25°	163993	11614	3532	4137	4718
30°	522106	16078	2684	3925	4735
35°	905951	19595	2168	3694	4792
40°	1056551	19580	1632	3721	4895
45°	1083554	13893	1768	4031	5303
50°	1007660	7778	1399	4162	6106
55°	856438	4052	1567	4664	6843
60°	494609	1053	1798	5000	7499
65°	100919	0	2127	5915	8457
70°	1539	513	2629	6796	9938
75°	1356	678	2796	6863	11692
80°	1010	1010	4167	8208	13386
85°	0	2013	8303	8303	16354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1083554 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.4
10°-20°	9.7	1.0
20°-30°	55.7	5.8
30°-40°	260.2	26.9
40°-50°	368.0	38.1
50°-60°	226.4	23.4
60°-70°	34.5	3.6
70°-80°	5.5	0.6
80°-90°	2.7	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°	68.8	7.1
0°-40°	329.0	34.1
0°-60°	923.3	95.6
0°-90°	966.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	966.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	37	37	37	37	37	
5°	40	39	37	33	32	4
15°	62	37	26	24	24	22
25°	678	48	15	17	20	417
35°	3384	73	8	14	18	2031
45°	3494	45	6	13	17	2649
55°	2240	11	4	12	18	1906
65°	194	0	4	11	16	352
75°	2	1	3	8	14	2
85°	0	1	3	3	6	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°	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
2.5°	38.2	38.2	39.1	39.1	38.2	39.1	39.1	39.1	37.4	36.6	35.0
5°	39.9	39.9	39.9	40.7	39.9	39.9	39.1	38.2	36.6	34.2	33.4
7.5°	41.5	41.5	40.7	41.5	40.7	40.7	39.1	37.4	35.0	32.5	30.9
10°	43.1	43.1	42.3	42.3	41.5	41.5	38.2	35.8	31.7	29.3	28.5
12.5°	48.0	48.0	47.2	46.4	44.8	43.9	37.4	33.4	28.5	26.0	25.2
15°	61.8	61.0	59.4	57.0	52.9	52.1	37.4	30.9	26.0	23.6	23.6
17.5°	84.6	83.8	81.4	74.9	67.5	65.1	37.4	27.7	22.8	21.2	21.2
20°	151.4	144.8	132.6	116.4	99.3	90.3	39.9	24.4	19.5	18.7	19.5
21°	197.7	191.2	175.8	148.9	118.8	109.0	41.5	23.6	18.7	17.9	19.5
22°	269.3	262.0	230.3	193.7	150.5	133.4	42.3	22.0	17.1	17.1	18.7
23°	375.9	363.7	310.0	251.4	188.0	163.6	43.9	21.2	16.3	17.1	17.9
24°	492.3	481.7	420.7	332.8	240.0	205.1	45.6	20.3	15.5	15.5	17.1
25°	677.8	665.6	557.4	419.9	304.3	246.6	48.0	18.7	14.6	14.6	17.1
26°	917.9	861.7	717.7	541.1	375.1	309.2	50.5	17.9	13.8	14.6	16.3
27°	1145.7	1099.3	937.4	694.1	463.8	380.0	53.7	17.1	13.0	13.8	16.3
28°	1445.2	1380.1	1175.8	878.0	584.2	459.8	57.0	16.3	12.2	13.8	15.5
29°	1780.4	1689.3	1442.7	1084.7	720.1	549.3	60.2	15.5	11.4	13.0	15.5
30°	2062.0	1976.5	1730.0	1329.6	876.4	667.2	63.5	14.6	10.6	13.0	15.5
31°	2392.3	2262.9	1964.3	1537.1	1010.6	785.2	66.7	13.0	9.8	12.2	14.6
32°	2660.0	2569.7	2252.4	1771.5	1187.2	915.4	69.2	12.2	9.8	12.2	14.6
33°	2918.8	2797.6	2490.8	1996.0	1346.7	1048.9	71.6	11.4	9.0	11.4	14.6
34°	3166.2	3054.7	2716.2	2177.5	1497.2	1175.8	73.2	9.8	9.0	11.4	13.8
35°	3384.3	3254.9	2914.7	2354.9	1651.8	1291.4	73.2	9.0	8.1	10.6	13.8
36°	3525.8	3433.1	3087.2	2529.8	1791.8	1401.2	73.2	8.1	7.3	10.6	13.0
37°	3647.1	3538.9	3225.6	2664.1	1895.1	1489.1	73.2	7.3	7.3	10.6	13.0
38°	3696.7	3604.0	3320.8	2782.9	1992.0	1578.6	72.4	6.5	6.5	9.8	13.0
39°	3716.2	3633.2	3392.4	2868.4	2063.6	1638.8	70.8	5.7	6.5	9.8	13.0
40°	3691.0	3628.4	3429.0	2923.7	2120.5	1682.8	68.4	4.9	5.7	9.8	13.0
42.5°	3586.9	3545.4	3420.9	2979.0	2169.4	1715.3	59.4	3.3	5.7	9.0	13.0
45°	3494.1	3448.5	3338.7	2921.2	2105.9	1651.0	44.8	1.6	5.7	9.0	13.0
47.5°	3314.3	3285.8	3199.5	2774.0	1966.8	1506.2	31.7	0.8	4.9	8.1	12.2
50°	2953.8	2926.9	2813.0	2408.6	1691.7	1273.5	22.8	0.8	4.1	8.1	12.2
52.5°	2630.7	2602.3	2438.7	2002.6	1299.5	933.3	14.6	0.8	4.1	8.1	12.2
55°	2240.2	2190.5	1975.7	1520.0	921.1	625.7	10.6	0.8	4.1	7.3	12.2
57.5°	1658.4	1585.9	1393.9	1036.7	530.5	339.3	5.7	0.8	4.1	7.3	12.2
60°	1127.8	1084.7	872.3	546.8	226.2	143.2	2.4	0.8	4.1	7.3	11.4
62.5°	683.5	629.0	438.6	232.7	97.6	65.1	0.0	1.6	4.1	7.3	11.4
65°	194.5	172.5	114.7	52.9	27.7	21.2	0.0	1.6	4.1	7.3	11.4
67.5°	6.5	6.5	6.5	5.7	4.1	4.1	0.8	1.6	4.1	7.3	10.6
70°	2.4	2.4	2.4	1.6	1.6	0.8	0.8	1.6	4.1	6.5	10.6
72.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	1.6	3.3	5.7	9.8
75°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	2.4	3.3	5.7	8.1
77.5°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	2.4	3.3	4.9	8.1
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.3	4.9	6.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	2.4	3.3	3.3	4.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.4	3.3	2.4	3.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.4	2.4	2.4	1.6
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°	37.4	37.4
2.5°	35.0	35.0
5°	32.5	32.5
7.5°	30.1	30.1
10°	27.7	27.7
12.5°	26.0	26.0
15°	23.6	24.4
17.5°	22.0	22.8
20°	21.2	22.0
21°	21.2	22.0
22°	20.3	21.2
23°	20.3	21.2
24°	19.5	20.3
25°	18.7	19.5
26°	18.7	19.5
27°	18.7	19.5
28°	17.9	19.5
29°	17.9	18.7
30°	17.9	18.7
31°	17.1	18.7
32°	17.1	18.7
33°	17.1	17.9
34°	16.3	17.9
35°	16.3	17.9
36°	16.3	17.9
37°	16.3	17.1
38°	16.3	17.9
39°	16.3	17.1
40°	16.3	17.1
42.5°	16.3	17.1
45°	16.3	17.1
47.5°	16.3	17.9
50°	16.3	17.9
52.5°	16.3	17.9
55°	16.3	17.9
57.5°	16.3	17.1
60°	16.3	17.1
62.5°	15.5	17.1
65°	15.5	16.3
67.5°	15.5	16.3
70°	14.6	15.5
72.5°	13.8	14.6
75°	12.2	13.8
77.5°	11.4	12.2
80°	9.8	10.6

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	8.1	8.1
85°	5.7	6.5
87.5°	3.3	3.3
90°	0.0	0.0

(END OF REPORT)