

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: P1341548

Luminaire Tested: P3A09R309835DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341548
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: P3A09R309835DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

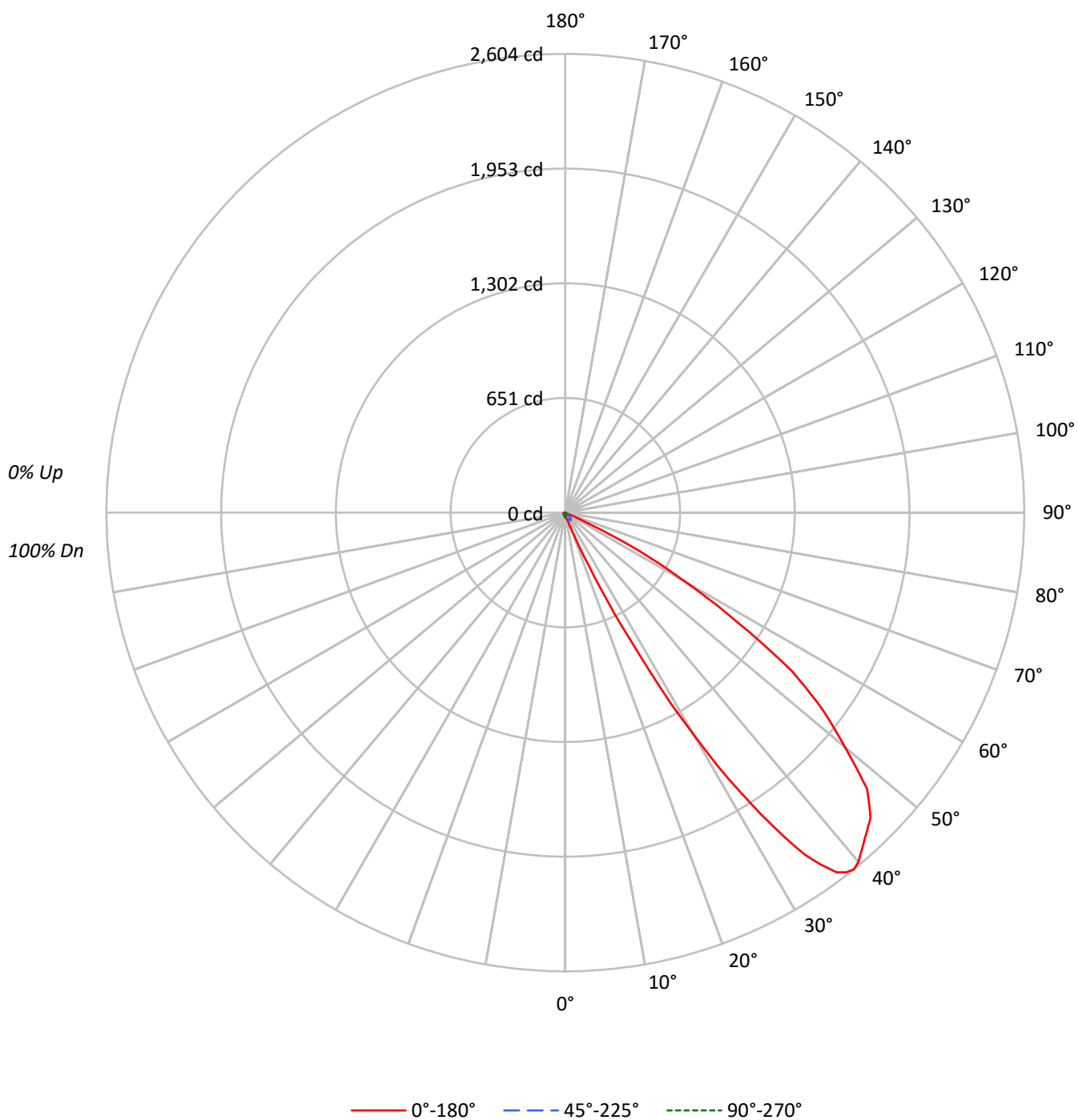
Lumens per Lamp: N/A
Luminaire Lumens: 677.0 lumens
Efficiency: N/A
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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°	5745	5745	5745	5745	5745
5°	6141	6031	5657	5151	5019
10°	6724	5967	4943	4453	4320
15°	9830	5948	4132	3746	3882
20°	24759	6511	3197	3197	3594
25°	114926	8130	2492	2903	3315
30°	365904	11268	1874	2735	3317
35°	634913	13733	1526	2597	3346
40°	740473	13711	1145	2605	3435
45°	759397	9737	1240	2822	3721
50°	706194	5458	989	2934	4264
55°	600218	2829	1109	3288	4779
60°	346639	746	1272	3508	5263
65°	70721	0	1505	4151	5915
70°	1090	385	1859	4744	6924
75°	932	508	1949	4829	8218
80°	758	758	2904	5809	9345
85°	0	1510	5787	5787	11573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 759397 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.4
10°-20°	6.8	1.0
20°-30°	39.0	5.8
30°-40°	182.3	26.9
40°-50°	257.9	38.1
50°-60°	158.7	23.4
60°-70°	24.2	3.6
70°-80°	3.8	0.6
80°-90°	1.9	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°	48.2	7.1
0°-40°	230.6	34.1
0°-60°	647.1	95.6
0°-90°	677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	677.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	28	27	26	23	23	3
15°	43	26	18	16	17	15
25°	475	34	10	12	14	292
35°	2372	51	6	10	12	1423
45°	2449	31	4	9	12	1856
55°	1570	7	3	9	12	1336
65°	136	0	3	8	11	247
75°	1	1	2	6	10	1
85°	0	1	2	2	5	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°	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
2.5°	26.8	26.8	27.4	27.4	26.8	27.4	27.4	27.4	26.2	25.7	24.5
5°	27.9	27.9	27.9	28.5	27.9	27.9	27.4	26.8	25.7	24.0	23.4
7.5°	29.1	29.1	28.5	29.1	28.5	28.5	27.4	26.2	24.5	22.8	21.7
10°	30.2	30.2	29.7	29.7	29.1	29.1	26.8	25.1	22.2	20.5	20.0
12.5°	33.6	33.6	33.1	32.5	31.4	30.8	26.2	23.4	20.0	18.2	17.7
15°	43.3	42.8	41.6	39.9	37.1	36.5	26.2	21.7	18.2	16.5	16.5
17.5°	59.3	58.7	57.0	52.5	47.3	45.6	26.2	19.4	16.0	14.8	14.8
20°	106.1	101.5	93.0	81.5	69.6	63.3	27.9	17.1	13.7	13.1	13.7
21°	138.6	134.0	123.2	104.4	83.3	76.4	29.1	16.5	13.1	12.5	13.7
22°	188.8	183.6	161.4	135.7	105.5	93.5	29.7	15.4	12.0	12.0	13.1
23°	263.5	254.9	217.3	176.2	131.7	114.6	30.8	14.8	11.4	12.0	12.5
24°	345.0	337.6	294.8	233.2	168.2	143.7	31.9	14.3	10.8	10.8	12.0
25°	475.0	466.5	390.6	294.3	213.3	172.8	33.6	13.1	10.3	10.3	12.0
26°	643.3	603.9	503.0	379.2	262.9	216.7	35.4	12.5	9.7	10.3	11.4
27°	802.9	770.4	657.0	486.4	325.1	266.3	37.6	12.0	9.1	9.7	11.4
28°	1012.8	967.2	824.0	615.3	409.5	322.2	39.9	11.4	8.6	9.7	10.8
29°	1247.8	1183.9	1011.1	760.2	504.7	384.9	42.2	10.8	8.0	9.1	10.8
30°	1445.1	1385.2	1212.4	931.8	614.2	467.6	44.5	10.3	7.4	9.1	10.8
31°	1676.6	1585.9	1376.6	1077.3	708.3	550.3	46.8	9.1	6.8	8.6	10.3
32°	1864.2	1800.9	1578.5	1241.5	832.0	641.6	48.5	8.6	6.8	8.6	10.3
33°	2045.6	1960.6	1745.6	1398.9	943.8	735.1	50.2	8.0	6.3	8.0	10.3
34°	2218.9	2140.8	1903.6	1526.1	1049.3	824.0	51.3	6.8	6.3	8.0	9.7
35°	2371.8	2281.1	2042.7	1650.4	1157.7	905.0	51.3	6.3	5.7	7.4	9.7
36°	2471.0	2406.0	2163.6	1773.0	1255.7	982.0	51.3	5.7	5.1	7.4	9.1
37°	2556.0	2480.1	2260.6	1867.1	1328.2	1043.6	51.3	5.1	5.1	7.4	9.1
38°	2590.8	2525.8	2327.3	1950.3	1396.0	1106.3	50.8	4.6	4.6	6.8	9.1
39°	2604.5	2546.3	2377.5	2010.2	1446.2	1148.5	49.6	4.0	4.6	6.8	9.1
40°	2586.8	2542.9	2403.1	2049.0	1486.1	1179.3	47.9	3.4	4.0	6.8	9.1
42.5°	2513.8	2484.7	2397.4	2087.8	1520.4	1202.1	41.6	2.3	4.0	6.3	9.1
45°	2448.8	2416.8	2339.8	2047.3	1475.9	1157.1	31.4	1.1	4.0	6.3	9.1
47.5°	2322.7	2302.8	2242.3	1944.1	1378.4	1055.6	22.2	0.6	3.4	5.7	8.6
50°	2070.1	2051.3	1971.4	1688.0	1185.6	892.5	16.0	0.6	2.9	5.7	8.6
52.5°	1843.7	1823.7	1709.1	1403.4	910.7	654.1	10.3	0.6	2.9	5.7	8.6
55°	1570.0	1535.2	1384.6	1065.3	645.6	438.5	7.4	0.6	2.9	5.1	8.6
57.5°	1162.2	1111.5	976.9	726.5	371.8	237.8	4.0	0.6	2.9	5.1	8.6
60°	790.4	760.2	611.3	383.2	158.5	100.4	1.7	0.6	2.9	5.1	8.0
62.5°	479.0	440.8	307.4	163.1	68.4	45.6	0.0	1.1	2.9	5.1	8.0
65°	136.3	120.9	80.4	37.1	19.4	14.8	0.0	1.1	2.9	5.1	8.0
67.5°	4.6	4.6	4.6	4.0	2.9	2.9	0.6	1.1	2.9	5.1	7.4
70°	1.7	1.7	1.7	1.1	1.1	0.6	0.6	1.1	2.9	4.6	7.4
72.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	1.1	2.3	4.0	6.8
75°	1.1	1.1	1.1	0.6	0.6	0.6	0.6	1.7	2.3	4.0	5.7
77.5°	1.1	1.1	1.1	0.6	0.6	0.6	0.6	1.7	2.3	3.4	5.7
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	3.4	4.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	1.7	2.3	2.3	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	2.3	1.7	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	1.7	1.7	1.1
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°	26.2	26.2
2.5°	24.5	24.5
5°	22.8	22.8
7.5°	21.1	21.1
10°	19.4	19.4
12.5°	18.2	18.2
15°	16.5	17.1
17.5°	15.4	16.0
20°	14.8	15.4
21°	14.8	15.4
22°	14.3	14.8
23°	14.3	14.8
24°	13.7	14.3
25°	13.1	13.7
26°	13.1	13.7
27°	13.1	13.7
28°	12.5	13.7
29°	12.5	13.1
30°	12.5	13.1
31°	12.0	13.1
32°	12.0	13.1
33°	12.0	12.5
34°	11.4	12.5
35°	11.4	12.5
36°	11.4	12.5
37°	11.4	12.0
38°	11.4	12.5
39°	11.4	12.0
40°	11.4	12.0
42.5°	11.4	12.0
45°	11.4	12.0
47.5°	11.4	12.5
50°	11.4	12.5
52.5°	11.4	12.5
55°	11.4	12.5
57.5°	11.4	12.0
60°	11.4	12.0
62.5°	10.8	12.0
65°	10.8	11.4
67.5°	10.8	11.4
70°	10.3	10.8
72.5°	9.7	10.3
75°	8.6	9.7
77.5°	8.0	8.6
80°	6.8	7.4

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.7	5.7
85°	4.0	4.6
87.5°	2.3	2.3
90°	0.0	0.0

(END OF REPORT)