

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: P1341516

Luminaire Tested: P3A09R309827DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341516
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: P3A09R309827DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

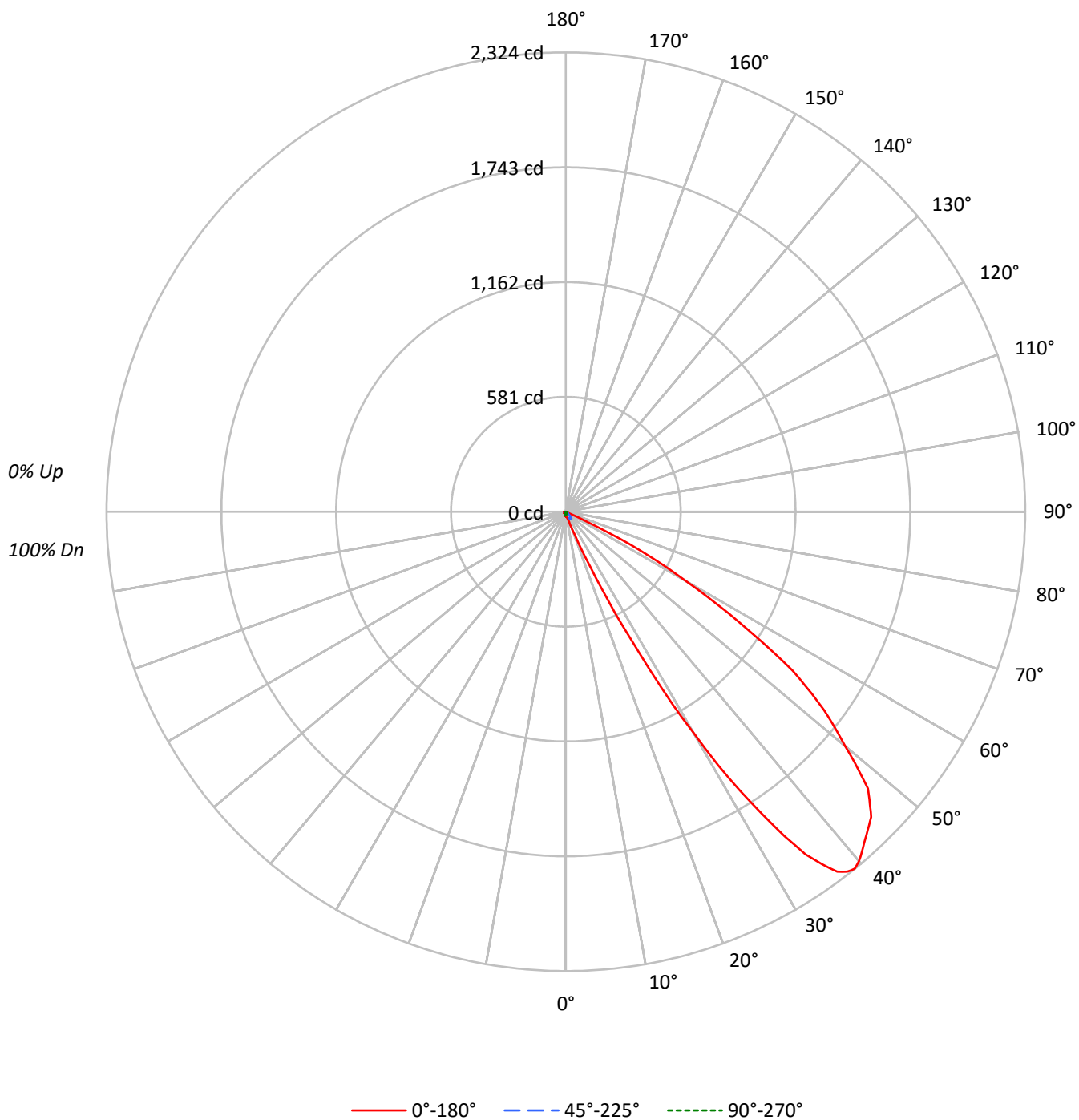
Lumens per Lamp: N/A
Luminaire Lumens: 604.0 lumens
Efficiency: N/A
Efficacy: 54.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5131	5131	5131	5131	5131
5°	5481	5371	5041	4600	4490
10°	6012	5322	4409	3963	3852
15°	8786	5312	3700	3360	3473
20°	22075	5811	2847	2847	3197
25°	102538	7258	2226	2589	2952
30°	326455	10052	1671	2456	2962
35°	566437	12260	1365	2302	2998
40°	660609	12223	1031	2319	3063
45°	677497	8683	1116	2512	3318
50°	630052	4844	853	2593	3821
55°	535493	2523	956	2906	4282
60°	309273	658	1096	3114	4693
65°	63094	0	1297	3684	5292
70°	962	321	1603	4231	6219
75°	847	424	1694	4321	7286
80°	631	631	2526	5177	8334
85°	0	1258	5032	5032	10315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 677497 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.4
10°-20°	6.1	1.0
20°-30°	34.8	5.8
30°-40°	162.7	26.9
40°-50°	230.1	38.1
50°-60°	141.5	23.4
60°-70°	21.6	3.6
70°-80°	3.4	0.6
80°-90°	1.7	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°	43.0	7.1
0°-40°	205.7	34.1
0°-60°	577.3	95.6
0°-90°	604.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	604.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	25	24	23	21	20	2
15°	39	23	16	15	15	14
25°	424	30	9	11	12	261
35°	2116	46	5	9	11	1270
45°	2185	28	4	8	11	1656
55°	1401	7	2	8	11	1192
65°	122	0	2	7	10	220
75°	1	0	2	5	9	1
85°	0	0	2	2	4	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°	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
2.5°	23.9	23.9	24.4	24.4	23.9	24.4	24.4	24.4	23.4	22.9	21.9
5°	24.9	24.9	24.9	25.4	24.9	24.9	24.4	23.9	22.9	21.4	20.9
7.5°	25.9	25.9	25.4	25.9	25.4	25.4	24.4	23.4	21.9	20.4	19.3
10°	27.0	27.0	26.5	26.5	25.9	25.9	23.9	22.4	19.8	18.3	17.8
12.5°	30.0	30.0	29.5	29.0	28.0	27.5	23.4	20.9	17.8	16.3	15.8
15°	38.7	38.2	37.1	35.6	33.1	32.6	23.4	19.3	16.3	14.8	14.8
17.5°	52.9	52.4	50.9	46.8	42.2	40.7	23.4	17.3	14.2	13.2	13.2
20°	94.6	90.6	82.9	72.8	62.1	56.5	24.9	15.3	12.2	11.7	12.2
21°	123.6	119.6	109.9	93.1	74.3	68.2	25.9	14.8	11.7	11.2	12.2
22°	168.4	163.8	144.0	121.1	94.1	83.4	26.5	13.7	10.7	10.7	11.7
23°	235.1	227.4	193.8	157.2	117.5	102.3	27.5	13.2	10.2	10.7	11.2
24°	307.8	301.2	263.0	208.1	150.1	128.2	28.5	12.7	9.7	9.7	10.7
25°	423.8	416.2	348.5	262.5	190.3	154.2	30.0	11.7	9.2	9.2	10.7
26°	573.9	538.8	448.7	338.3	234.5	193.3	31.5	11.2	8.6	9.2	10.2
27°	716.4	687.4	586.1	434.0	290.0	237.6	33.6	10.7	8.1	8.6	10.2
28°	903.6	862.9	735.2	549.0	365.3	287.5	35.6	10.2	7.6	8.6	9.7
29°	1113.2	1056.2	902.1	678.2	450.3	343.4	37.7	9.7	7.1	8.1	9.7
30°	1289.3	1235.8	1081.7	831.4	548.0	417.2	39.7	9.2	6.6	8.1	9.7
31°	1495.8	1414.9	1228.2	961.1	631.9	491.0	41.7	8.1	6.1	7.6	9.2
32°	1663.2	1606.7	1408.3	1107.6	742.3	572.4	43.2	7.6	6.1	7.6	9.2
33°	1825.0	1749.2	1557.4	1248.0	842.0	655.8	44.8	7.1	5.6	7.1	9.2
34°	1979.7	1910.0	1698.3	1361.5	936.2	735.2	45.8	6.1	5.6	7.1	8.6
35°	2116.0	2035.1	1822.5	1472.4	1032.8	807.4	45.8	5.6	5.1	6.6	8.6
36°	2204.6	2146.6	1930.3	1581.8	1120.3	876.1	45.8	5.1	4.6	6.6	8.1
37°	2280.4	2212.7	2016.8	1665.8	1185.0	931.1	45.8	4.6	4.6	6.6	8.1
38°	2311.4	2253.4	2076.3	1740.0	1245.5	987.0	45.3	4.1	4.1	6.1	8.1
39°	2323.6	2271.7	2121.1	1793.5	1290.3	1024.7	44.3	3.6	4.1	6.1	8.1
40°	2307.8	2268.7	2144.0	1828.1	1325.9	1052.2	42.7	3.1	3.6	6.1	8.1
42.5°	2242.7	2216.8	2138.9	1862.7	1356.4	1072.5	37.1	2.0	3.6	5.6	8.1
45°	2184.7	2156.2	2087.5	1826.5	1316.7	1032.3	28.0	1.0	3.6	5.6	8.1
47.5°	2072.3	2054.5	2000.5	1734.4	1229.7	941.8	19.8	0.5	3.1	5.1	7.6
50°	1846.9	1830.1	1758.9	1506.0	1057.8	796.2	14.2	0.5	2.5	5.1	7.6
52.5°	1644.9	1627.1	1524.8	1252.1	812.5	583.6	9.2	0.5	2.5	5.1	7.6
55°	1400.7	1369.6	1235.3	950.4	575.9	391.3	6.6	0.5	2.5	4.6	7.6
57.5°	1036.9	991.6	871.5	648.2	331.7	212.2	3.6	0.5	2.5	4.6	7.6
60°	705.2	678.2	545.4	341.9	141.4	89.5	1.5	0.5	2.5	4.6	7.1
62.5°	427.4	393.3	274.2	145.5	61.1	40.7	0.0	1.0	2.5	4.6	7.1
65°	121.6	107.9	71.7	33.1	17.3	13.2	0.0	1.0	2.5	4.6	7.1
67.5°	4.1	4.1	4.1	3.6	2.5	2.5	0.5	1.0	2.5	4.6	6.6
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.0	2.5	4.1	6.6
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	2.0	3.6	6.1
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	3.6	5.1
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	3.1	5.1
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	3.1	4.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.5	2.0	2.0	3.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	1.5	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.5	1.5	1.0
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°	23.4	23.4
2.5°	21.9	21.9
5°	20.4	20.4
7.5°	18.8	18.8
10°	17.3	17.3
12.5°	16.3	16.3
15°	14.8	15.3
17.5°	13.7	14.2
20°	13.2	13.7
21°	13.2	13.7
22°	12.7	13.2
23°	12.7	13.2
24°	12.2	12.7
25°	11.7	12.2
26°	11.7	12.2
27°	11.7	12.2
28°	11.2	12.2
29°	11.2	11.7
30°	11.2	11.7
31°	10.7	11.7
32°	10.7	11.7
33°	10.7	11.2
34°	10.2	11.2
35°	10.2	11.2
36°	10.2	11.2
37°	10.2	10.7
38°	10.2	11.2
39°	10.2	10.7
40°	10.2	10.7
42.5°	10.2	10.7
45°	10.2	10.7
47.5°	10.2	11.2
50°	10.2	11.2
52.5°	10.2	11.2
55°	10.2	11.2
57.5°	10.2	10.7
60°	10.2	10.7
62.5°	9.7	10.7
65°	9.7	10.2
67.5°	9.7	10.2
70°	9.2	9.7
72.5°	8.6	9.2
75°	7.6	8.6
77.5°	7.1	7.6
80°	6.1	6.6



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.1	5.1
85°	3.6	4.1
87.5°	2.0	2.0
90°	0.0	0.0

(END OF REPORT)