

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: P1337954

Luminaire Tested: P3A05R309740DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337954
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: P3A05R309740DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

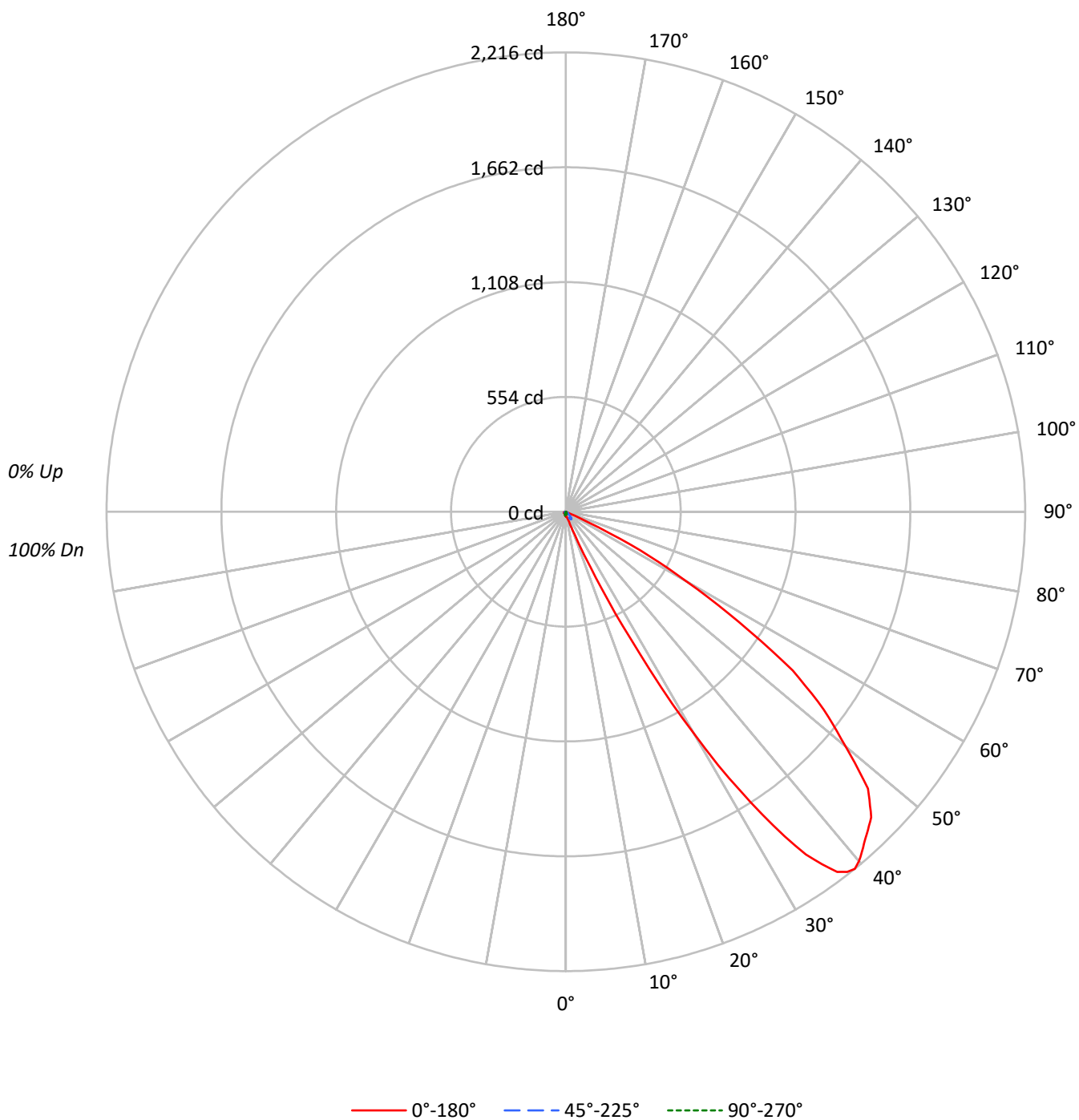
Lumens per Lamp: N/A
Luminaire Lumens: 576.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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				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°	4890	4890	4890	4890	4890
5°	5239	5129	4799	4380	4270
10°	5722	5077	4208	3785	3674
15°	8377	5062	3519	3201	3314
20°	21048	5554	2707	2707	3057
25°	97796	6920	2105	2468	2807
30°	311314	9571	1595	2329	2836
35°	540176	11698	1312	2195	2864
40°	630009	11679	973	2233	2920
45°	646083	8280	1054	2419	3163
50°	600850	4640	819	2490	3650
55°	510682	2409	918	2791	4091
60°	294933	658	1053	2982	4473
65°	60188	0	1245	3528	5033
70°	962	321	1539	4039	5898
75°	847	424	1610	4151	6947
80°	631	631	2399	4925	7956
85°	0	1258	4780	4780	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 646083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.4
10°-20°	5.8	1.0
20°-30°	33.2	5.8
30°-40°	155.1	26.9
40°-50°	219.4	38.1
50°-60°	135.0	23.4
60°-70°	20.6	3.6
70°-80°	3.3	0.6
80°-90°	1.6	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°	41.0	7.1
0°-40°	196.2	34.1
0°-60°	550.6	95.6
0°-90°	576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	24	23	22	20	19	2
15°	37	22	16	14	15	13
25°	404	29	9	10	12	249
35°	2018	44	5	8	11	1211
45°	2083	27	3	8	10	1580
55°	1336	6	2	7	11	1137
65°	116	0	2	7	10	210
75°	1	0	2	5	8	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°	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
2.5°	22.8	22.8	23.3	23.3	22.8	23.3	23.3	23.3	22.3	21.8	20.9
5°	23.8	23.8	23.8	24.3	23.8	23.8	23.3	22.8	21.8	20.4	19.9
7.5°	24.7	24.7	24.3	24.7	24.3	24.3	23.3	22.3	20.9	19.4	18.4
10°	25.7	25.7	25.2	25.2	24.7	24.7	22.8	21.3	18.9	17.5	17.0
12.5°	28.6	28.6	28.1	27.7	26.7	26.2	22.3	19.9	17.0	15.5	15.0
15°	36.9	36.4	35.4	34.0	31.5	31.1	22.3	18.4	15.5	14.1	14.1
17.5°	50.5	50.0	48.5	44.6	40.3	38.8	22.3	16.5	13.6	12.6	12.6
20°	90.2	86.4	79.1	69.4	59.2	53.9	23.8	14.6	11.6	11.2	11.6
21°	117.9	114.0	104.8	88.8	70.8	65.0	24.7	14.1	11.2	10.7	11.6
22°	160.6	156.2	137.3	115.5	89.8	79.6	25.2	13.1	10.2	10.2	11.2
23°	224.2	216.9	184.9	149.9	112.1	97.5	26.2	12.6	9.7	10.2	10.7
24°	293.5	287.2	250.8	198.4	143.1	122.3	27.2	12.1	9.2	9.2	10.2
25°	404.2	396.9	332.4	250.4	181.5	147.0	28.6	11.2	8.7	8.7	10.2
26°	547.3	513.8	427.9	322.7	223.7	184.4	30.1	10.7	8.2	8.7	9.7
27°	683.2	655.5	558.9	413.9	276.6	226.6	32.0	10.2	7.8	8.2	9.7
28°	861.7	822.9	701.1	523.5	348.4	274.1	34.0	9.7	7.3	8.2	9.2
29°	1061.6	1007.3	860.3	646.8	429.4	327.5	35.9	9.2	6.8	7.8	9.2
30°	1229.5	1178.5	1031.5	792.8	522.6	397.9	37.8	8.7	6.3	7.8	9.2
31°	1426.5	1349.3	1171.3	916.5	602.6	468.2	39.8	7.8	5.8	7.3	8.7
32°	1586.1	1532.3	1343.0	1056.3	707.9	545.8	41.2	7.3	5.8	7.3	8.7
33°	1740.4	1668.1	1485.2	1190.2	803.0	625.4	42.7	6.8	5.3	6.8	8.7
34°	1887.9	1821.4	1619.6	1298.4	892.8	701.1	43.7	5.8	5.3	6.8	8.2
35°	2017.9	1940.8	1738.0	1404.2	985.0	770.0	43.7	5.3	4.9	6.3	8.2
36°	2102.4	2047.1	1840.8	1508.5	1068.4	835.5	43.7	4.9	4.4	6.3	7.8
37°	2174.7	2110.1	1923.3	1588.5	1130.0	887.9	43.7	4.4	4.4	6.3	7.8
38°	2204.3	2148.9	1980.1	1659.4	1187.8	941.3	43.2	3.9	3.9	5.8	7.8
39°	2215.9	2166.4	2022.8	1710.3	1230.5	977.2	42.2	3.4	3.9	5.8	7.8
40°	2200.9	2163.5	2044.6	1743.3	1264.4	1003.4	40.8	2.9	3.4	5.8	7.8
42.5°	2138.8	2114.0	2039.8	1776.3	1293.5	1022.8	35.4	1.9	3.4	5.3	7.8
45°	2083.4	2056.3	1990.8	1741.9	1255.7	984.5	26.7	1.0	3.4	5.3	7.8
47.5°	1976.2	1959.2	1907.8	1654.0	1172.7	898.1	18.9	0.5	2.9	4.9	7.3
50°	1761.3	1745.3	1677.3	1436.2	1008.7	759.3	13.6	0.5	2.4	4.9	7.3
52.5°	1568.6	1551.7	1454.1	1194.1	774.9	556.5	8.7	0.5	2.4	4.9	7.3
55°	1335.8	1306.2	1178.1	906.4	549.2	373.1	6.3	0.5	2.4	4.4	7.3
57.5°	988.8	945.7	831.1	618.1	316.3	202.3	3.4	0.5	2.4	4.4	7.3
60°	672.5	646.8	520.1	326.1	134.9	85.4	1.5	0.5	2.4	4.4	6.8
62.5°	407.6	375.1	261.5	138.8	58.2	38.8	0.0	1.0	2.4	4.4	6.8
65°	116.0	102.9	68.4	31.5	16.5	12.6	0.0	1.0	2.4	4.4	6.8
67.5°	3.9	3.9	3.9	3.4	2.4	2.4	0.5	1.0	2.4	4.4	6.3
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.0	2.4	3.9	6.3
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	1.9	3.4	5.8
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	1.9	3.4	4.9
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	1.9	2.9	4.9
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	1.9	2.9	3.9



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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	1.9	1.9	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.9	1.5	1.9
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°	22.3	22.3
2.5°	20.9	20.9
5°	19.4	19.4
7.5°	18.0	18.0
10°	16.5	16.5
12.5°	15.5	15.5
15°	14.1	14.6
17.5°	13.1	13.6
20°	12.6	13.1
21°	12.6	13.1
22°	12.1	12.6
23°	12.1	12.6
24°	11.6	12.1
25°	11.2	11.6
26°	11.2	11.6
27°	11.2	11.6
28°	10.7	11.6
29°	10.7	11.2
30°	10.7	11.2
31°	10.2	11.2
32°	10.2	11.2
33°	10.2	10.7
34°	9.7	10.7
35°	9.7	10.7
36°	9.7	10.7
37°	9.7	10.2
38°	9.7	10.7
39°	9.7	10.2
40°	9.7	10.2
42.5°	9.7	10.2
45°	9.7	10.2
47.5°	9.7	10.7
50°	9.7	10.7
52.5°	9.7	10.7
55°	9.7	10.7
57.5°	9.7	10.2
60°	9.7	10.2
62.5°	9.2	10.2
65°	9.2	9.7
67.5°	9.2	9.7
70°	8.7	9.2
72.5°	8.2	8.7
75°	7.3	8.2
77.5°	6.8	7.3
80°	5.8	6.3



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.9	4.9
85°	3.4	3.9
87.5°	1.9	1.9
90°	0.0	0.0

(END OF REPORT)