

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: P1336494

Luminaire Tested: P3A05R159835DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159835DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

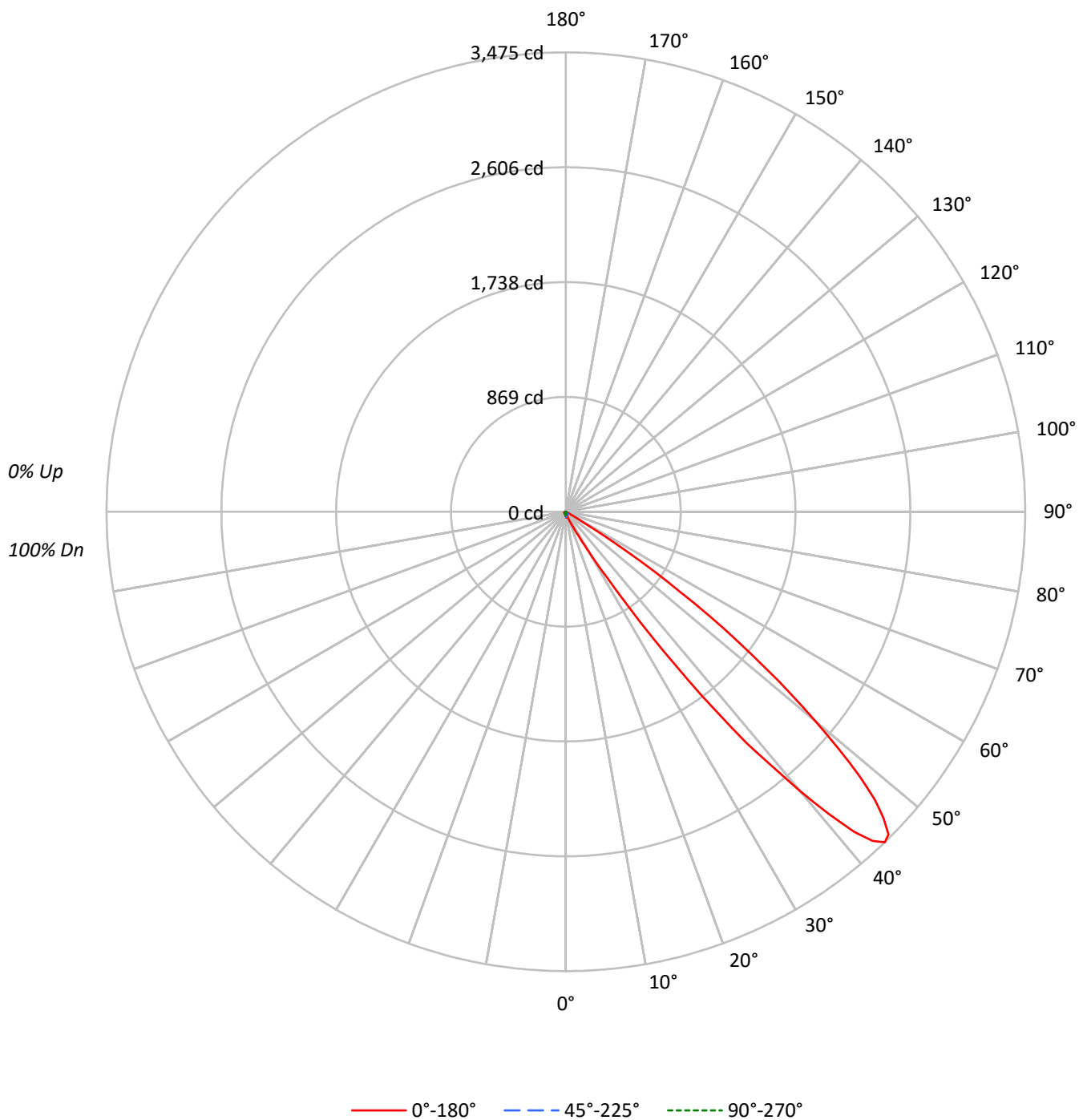
Lumens per Lamp: N/A
Luminaire Lumens: 388.0 lumens
Efficiency: N/A
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.09
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	107	104	100	97	100	97	94	96	93	91	92	90	89
2	101	93	87	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	53
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	47	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	31	26	37	31	26
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7543	7543	7543	7543	7543
5°	9377	8342	6802	5965	5877
10°	9218	7147	5255	4654	4743
15°	7650	5085	3768	3859	4132
20°	13278	4060	2894	3337	3780
25°	29590	4863	2347	3097	3557
30°	88444	5976	2051	3038	3722
35°	340505	6719	1874	3105	3935
40°	790367	5868	1775	3206	4208
45°	1070530	4435	1551	3473	4559
50°	839375	2627	1569	3684	5015
55°	402872	1185	1491	3976	5467
60°	36839	175	1360	4254	6096
65°	3995	0	1193	4410	6641
70°	962	0	1475	4744	7181
75°	1017	339	1949	5253	8218
80°	1010	1010	2399	5430	8840
85°	1006	1006	3774	4780	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1070530 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.9	0.8
10°-20°	6.1	1.6
20°-30°	14.7	3.8
30°-40°	80.3	20.7
40°-50°	194.3	50.1
50°-60°	77.5	20.0
60°-70°	6.7	1.7
70°-80°	3.8	1.0
80°-90°	1.7	0.4
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°	23.7	6.1
0°-40°	104.0	26.8
0°-60°	375.8	96.9
0°-90°	388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	34	34	34	34	34	
5°	43	38	31	27	27	4
15°	34	22	17	17	18	12
25°	122	20	10	13	15	74
35°	1272	25	7	12	15	899
45°	3452	14	5	11	15	2435
55°	1054	3	4	10	14	982
65°	8	0	2	8	13	20
75°	1	0	2	6	10	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
2.5°	38.7	38.7	39.1	38.7	38.7	38.7	38.7	38.3	38.3	38.3	37.1
5°	42.6	42.6	42.6	42.6	42.2	42.2	42.2	41.8	41.8	41.4	37.9
7.5°	44.1	44.1	43.7	43.7	43.3	43.3	42.9	42.6	42.2	41.8	36.4
10°	41.4	41.4	41.4	41.0	41.0	40.6	40.2	39.8	39.5	38.7	32.1
12.5°	36.8	36.8	37.1	36.8	36.4	36.0	35.2	34.8	34.4	33.7	26.7
15°	33.7	33.7	33.7	33.3	32.9	32.1	31.7	30.9	30.6	29.4	22.4
17.5°	42.9	42.9	42.6	41.8	40.2	39.1	37.1	35.6	33.7	31.3	19.3
20°	56.9	56.9	56.1	55.3	53.4	51.5	48.4	45.7	42.6	39.8	17.4
22.5°	82.4	83.6	81.2	78.5	75.8	71.2	66.9	62.7	57.3	52.6	17.8
25°	122.3	123.4	122.3	116.1	111.0	104.8	96.7	88.2	78.9	70.4	20.1
27.5°	198.1	198.9	196.9	181.8	173.7	157.5	143.1	129.2	113.7	98.3	22.1
30°	349.3	349.7	337.4	307.2	280.5	244.9	214.7	185.7	161.3	136.6	23.6
31°	460.0	449.2	422.9	386.5	343.9	296.0	254.6	217.0	180.7	154.0	24.0
32°	584.2	582.6	538.9	475.9	419.0	359.0	296.7	248.8	207.0	170.6	24.4
33°	748.6	749.4	680.5	606.2	513.0	432.5	350.9	285.1	234.8	190.3	25.1
34°	1005.5	945.1	864.3	763.7	636.8	515.7	409.7	327.3	260.0	209.3	25.1
35°	1272.0	1211.3	1122.3	969.9	795.8	626.3	479.7	372.6	290.2	229.8	25.1
36°	1570.7	1519.2	1384.6	1190.0	968.0	730.8	554.0	424.8	319.9	248.4	24.8
37°	1893.4	1817.9	1668.6	1456.2	1159.1	877.8	644.5	476.6	349.7	268.5	24.0
38°	2221.0	2152.9	1964.5	1707.3	1387.3	1032.9	735.1	526.5	377.2	283.6	22.8
39°	2469.4	2432.3	2245.4	1958.0	1569.5	1180.0	828.3	579.9	406.2	298.7	21.7
40°	2761.1	2701.1	2524.0	2168.4	1785.0	1329.7	919.6	627.1	430.2	310.7	20.5
41°	3027.3	2951.5	2727.8	2384.3	1957.6	1464.3	1006.3	675.9	449.5	317.6	19.7
42°	3255.5	3167.3	2933.7	2569.2	2101.9	1571.9	1075.5	710.7	467.7	323.4	18.6
43°	3403.3	3327.1	3097.3	2708.1	2225.3	1670.5	1140.1	747.1	478.9	327.3	17.0
44°	3475.3	3398.3	3175.8	2795.2	2301.1	1729.7	1181.9	772.2	491.3	332.3	15.9
45°	3452.1	3373.9	3158.8	2796.7	2324.7	1751.0	1199.7	783.4	497.9	337.0	14.3
46°	3345.7	3290.7	3074.1	2724.0	2279.8	1728.2	1189.6	774.9	495.6	337.0	12.8
47°	3196.3	3133.7	2927.5	2599.0	2171.1	1669.4	1149.0	749.0	481.3	329.2	11.2
48°	2992.8	2939.5	2722.8	2400.5	2004.4	1541.3	1057.3	706.8	458.8	314.1	9.7
49°	2737.5	2663.2	2461.7	2146.8	1787.0	1359.5	937.0	635.6	422.9	292.9	8.5
50°	2460.5	2368.8	2213.3	1892.6	1562.2	1165.6	778.8	537.4	372.2	265.0	7.7
51°	2189.3	2096.1	1947.9	1675.2	1322.3	967.2	628.3	429.0	306.4	226.7	6.6
52°	1908.1	1829.9	1663.9	1449.6	1132.0	783.8	523.4	362.9	254.6	190.3	5.4
53°	1628.0	1574.6	1416.7	1199.7	909.5	640.3	427.5	310.7	222.1	162.9	4.3
54°	1347.5	1289.1	1169.1	975.7	733.1	505.3	362.5	260.0	192.7	142.0	3.9
55°	1053.8	1023.7	913.0	744.0	555.5	403.1	294.0	223.6	161.3	118.8	3.1
56°	811.7	777.6	676.6	539.7	412.8	315.7	237.9	182.6	136.6	99.4	2.3
57°	531.6	496.7	429.8	376.8	300.6	230.2	181.8	143.9	111.0	82.4	1.9
58°	314.1	282.4	272.0	232.1	200.4	156.3	134.2	107.2	82.0	65.0	1.2
59°	144.3	146.6	130.4	122.3	111.0	99.4	81.6	71.6	56.1	46.8	0.8
60°	84.0	79.3	77.4	69.3	61.5	54.5	49.1	43.3	35.2	30.2	0.4
62.5°	28.6	27.5	28.2	25.5	24.0	23.2	21.3	18.2	15.1	12.4	0.0
65°	7.7	7.7	7.4	7.0	6.6	6.2	5.8	5.0	4.6	3.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	2.7	2.7	2.3	2.3	1.9	1.9	1.5	1.5	1.2	1.2	0.0
70°	1.5	1.5	1.5	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.0
72.5°	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.4
75°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.8
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	34.4	34.4	34.4	34.4	34.4	34.4
2.5°	35.6	34.0	32.1	30.9	30.6	30.2
5°	34.0	30.9	28.6	27.1	26.7	26.7
7.5°	30.6	27.1	24.8	24.0	23.6	23.6
10°	26.7	23.6	21.7	20.9	21.3	21.3
12.5°	22.4	19.7	19.0	19.0	19.3	19.7
15°	18.2	16.6	16.6	17.0	17.8	18.2
17.5°	15.1	14.3	14.7	15.5	16.2	17.0
20°	12.4	12.4	13.2	14.3	15.5	16.2
22.5°	10.4	10.8	12.0	13.2	14.7	15.5
25°	8.9	9.7	10.8	12.8	14.3	14.7
27.5°	7.7	8.9	10.4	12.4	13.9	14.7
30°	6.6	8.1	10.1	12.0	13.9	14.7
31°	6.2	7.7	9.7	12.0	13.9	14.7
32°	5.8	7.7	9.7	12.0	13.9	14.7
33°	5.4	7.4	9.7	11.6	13.9	14.7
34°	5.0	7.4	9.7	12.0	13.9	14.7
35°	4.6	7.0	9.3	11.6	13.5	14.7
36°	4.3	7.0	9.3	11.6	13.9	14.7
37°	3.9	7.0	9.3	11.6	13.5	14.7
38°	3.9	6.6	8.9	11.6	13.5	14.7
39°	3.5	6.2	8.9	11.6	13.5	14.7
40°	3.1	6.2	8.5	11.2	13.5	14.7
41°	2.7	5.8	8.5	11.2	13.5	14.7
42°	2.3	5.8	8.5	11.2	13.5	14.7
43°	1.9	5.4	8.1	11.2	13.5	14.7
44°	1.9	5.4	8.1	11.2	13.5	14.7
45°	1.5	5.0	7.7	11.2	13.5	14.7
46°	1.5	5.0	7.7	10.8	13.5	14.7
47°	1.2	5.0	7.7	10.8	13.5	14.7
48°	1.2	4.6	7.7	10.8	13.5	14.7
49°	0.8	4.6	7.7	10.8	13.5	14.7
50°	0.8	4.6	7.4	10.8	13.5	14.7
51°	0.8	4.6	7.4	10.8	13.5	14.7
52°	0.8	4.3	7.4	10.8	13.5	14.7
53°	0.8	4.3	7.4	10.8	13.5	14.7
54°	0.8	4.3	7.0	10.8	13.5	14.7
55°	0.8	3.9	7.0	10.4	13.5	14.3
56°	0.8	3.9	7.0	10.4	13.5	14.3
57°	0.8	3.9	6.6	10.4	13.5	14.3
58°	0.8	3.5	6.6	10.1	13.2	14.3
59°	0.8	3.5	6.2	10.1	13.2	13.9
60°	0.8	3.1	6.2	9.7	12.8	13.9
62.5°	0.8	2.7	5.4	9.3	12.4	13.2
65°	0.8	2.3	5.0	8.5	12.0	12.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.3	4.6	8.1	11.2	12.4
70°	0.8	2.3	4.3	7.4	10.8	11.2
72.5°	1.2	2.3	3.9	7.0	10.1	10.4
75°	1.5	2.3	3.5	6.2	9.3	9.7
77.5°	1.5	2.3	3.1	5.4	8.1	8.5
80°	1.5	1.9	2.7	4.3	6.6	7.0
82.5°	1.5	1.9	1.9	3.5	5.0	5.4
85°	1.2	1.5	1.5	1.9	3.5	3.9
87.5°	1.2	1.5	0.8	1.2	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)