

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: P1334084

Luminaire Tested: P3A02R159727DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334084
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: P3A02R159727DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

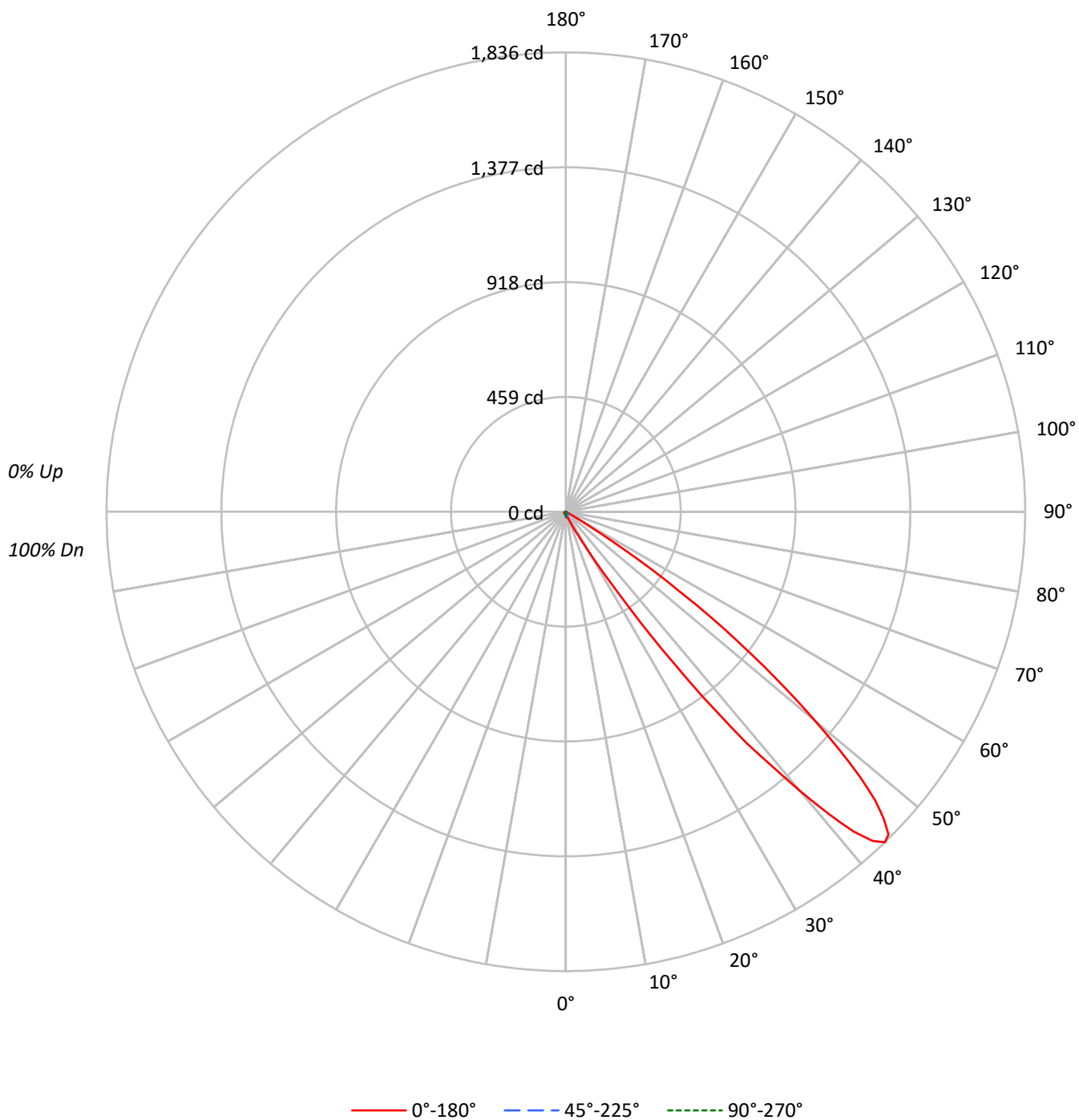
Lumens per Lamp: N/A
Luminaire Lumens: 205.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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		
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3991	3991	3991	3991	3991
5°	4953	4402	3610	3148	3104
10°	4876	3785	2783	2449	2494
15°	4041	2701	1998	2043	2179
20°	7001	2147	1517	1773	2007
25°	15630	2565	1234	1621	1887
30°	46741	3165	1089	1595	1975
35°	179916	3560	990	1633	2088
40°	417582	3092	945	1689	2233
45°	565609	2357	837	1830	2419
50°	443482	1399	853	1944	2661
55°	212867	612	765	2103	2906
60°	19472	88	702	2237	3245
65°	2127	0	623	2335	3476
70°	513	0	769	2500	3783
75°	508	169	1017	2796	4321
80°	505	505	1263	2778	4672
85°	503	503	2013	2516	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 565609 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.8
10°-20°	3.2	1.6
20°-30°	7.7	3.8
30°-40°	42.4	20.7
40°-50°	102.7	50.1
50°-60°	41.0	20.0
60°-70°	3.5	1.7
70°-80°	2.0	1.0
80°-90°	0.9	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°	12.5	6.1
0°-40°	54.9	26.8
0°-60°	198.6	96.9
0°-90°	205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	205.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	22	20	16	14	14	2
15°	18	12	9	9	10	6
25°	65	11	5	7	8	39
35°	672	13	4	6	8	475
45°	1824	8	3	6	8	1287
55°	557	2	2	6	8	519
65°	4	0	1	4	7	10
75°	1	0	1	3	5	1
85°	0	0	1	1	2	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°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
2.5°	20.4	20.4	20.6	20.4	20.4	20.4	20.4	20.2	20.2	20.2	19.6
5°	22.5	22.5	22.5	22.5	22.3	22.3	22.3	22.1	22.1	21.9	20.0
7.5°	23.3	23.3	23.1	23.1	22.9	22.9	22.7	22.5	22.3	22.1	19.2
10°	21.9	21.9	21.9	21.7	21.7	21.5	21.3	21.1	20.8	20.4	17.0
12.5°	19.4	19.4	19.6	19.4	19.2	19.0	18.6	18.4	18.2	17.8	14.1
15°	17.8	17.8	17.8	17.6	17.4	17.0	16.8	16.4	16.1	15.5	11.9
17.5°	22.7	22.7	22.5	22.1	21.3	20.6	19.6	18.8	17.8	16.6	10.2
20°	30.0	30.0	29.6	29.2	28.2	27.2	25.6	24.1	22.5	21.1	9.2
22.5°	43.5	44.2	42.9	41.5	40.1	37.6	35.4	33.1	30.3	27.8	9.4
25°	64.6	65.2	64.6	61.3	58.7	55.4	51.1	46.6	41.7	37.2	10.6
27.5°	104.7	105.1	104.0	96.1	91.8	83.2	75.6	68.3	60.1	51.9	11.7
30°	184.6	184.8	178.2	162.3	148.2	129.4	113.4	98.1	85.2	72.2	12.5
31°	243.0	237.3	223.4	204.2	181.7	156.4	134.5	114.7	95.5	81.4	12.7
32°	308.7	307.8	284.7	251.4	221.4	189.7	156.8	131.4	109.4	90.1	12.9
33°	395.5	395.9	359.5	320.3	271.0	228.5	185.4	150.6	124.1	100.6	13.3
34°	531.2	499.4	456.6	403.5	336.4	272.5	216.5	172.9	137.4	110.6	13.3
35°	672.1	640.0	593.0	512.4	420.5	330.9	253.5	196.8	153.3	121.4	13.3
36°	829.9	802.7	731.6	628.7	511.4	386.1	292.7	224.4	169.0	131.2	13.1
37°	1000.4	960.5	881.6	769.4	612.4	463.8	340.5	251.8	184.8	141.9	12.7
38°	1173.5	1137.5	1038.0	902.0	733.0	545.8	388.4	278.2	199.3	149.8	12.1
39°	1304.7	1285.1	1186.4	1034.5	829.3	623.4	437.6	306.4	214.6	157.8	11.4
40°	1458.8	1427.2	1333.5	1145.7	943.1	702.5	485.9	331.3	227.3	164.1	10.8
41°	1599.5	1559.4	1441.3	1259.7	1034.3	773.7	531.7	357.1	237.5	167.8	10.4
42°	1720.1	1673.5	1550.0	1357.4	1110.5	830.5	568.2	375.5	247.1	170.9	9.8
43°	1798.1	1757.9	1636.5	1430.8	1175.7	882.6	602.4	394.7	253.1	172.9	9.0
44°	1836.2	1795.5	1678.0	1476.8	1215.8	913.9	624.5	408.0	259.6	175.6	8.4
45°	1823.9	1782.6	1669.0	1477.6	1228.3	925.1	633.9	413.9	263.1	178.0	7.6
46°	1767.7	1738.7	1624.2	1439.2	1204.6	913.1	628.5	409.4	261.8	178.0	6.7
47°	1688.8	1655.7	1546.7	1373.2	1147.1	882.0	607.1	395.7	254.3	173.9	5.9
48°	1581.3	1553.1	1438.6	1268.3	1059.0	814.3	558.6	373.4	242.4	166.0	5.1
49°	1446.4	1407.1	1300.6	1134.2	944.1	718.3	495.1	335.8	223.4	154.7	4.5
50°	1300.0	1251.6	1169.4	999.9	825.4	615.9	411.5	283.9	196.6	140.0	4.1
51°	1156.7	1107.5	1029.2	885.1	698.7	511.0	332.0	226.7	161.9	119.8	3.5
52°	1008.1	966.8	879.1	765.9	598.1	414.1	276.6	191.7	134.5	100.6	2.9
53°	860.1	831.9	748.5	633.9	480.6	338.3	225.9	164.1	117.3	86.1	2.2
54°	711.9	681.1	617.7	515.5	387.3	267.0	191.5	137.4	101.8	75.0	2.0
55°	556.8	540.9	482.4	393.1	293.5	213.0	155.3	118.1	85.2	62.8	1.6
56°	428.8	410.9	357.5	285.1	218.1	166.8	125.7	96.5	72.2	52.5	1.2
57°	280.9	262.5	227.1	199.1	158.8	121.6	96.1	76.0	58.7	43.5	1.0
58°	166.0	149.2	143.7	122.6	105.9	82.6	70.9	56.6	43.3	34.3	0.6
59°	76.2	77.5	68.9	64.6	58.7	52.5	43.1	37.8	29.6	24.7	0.4
60°	44.4	41.9	40.9	36.6	32.5	28.8	26.0	22.9	18.6	15.9	0.2
62.5°	15.1	14.5	14.9	13.5	12.7	12.3	11.2	9.6	8.0	6.5	0.0
65°	4.1	4.1	3.9	3.7	3.5	3.3	3.1	2.7	2.5	2.0	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°	1.4	1.4	1.2	1.2	1.0	1.0	0.8	0.8	0.6	0.6	0.0
70°	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.0
72.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.2
75°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.4
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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°	18.2	18.2	18.2	18.2	18.2	18.2
2.5°	18.8	18.0	17.0	16.4	16.1	15.9
5°	18.0	16.4	15.1	14.3	14.1	14.1
7.5°	16.1	14.3	13.1	12.7	12.5	12.5
10°	14.1	12.5	11.4	11.0	11.2	11.2
12.5°	11.9	10.4	10.0	10.0	10.2	10.4
15°	9.6	8.8	8.8	9.0	9.4	9.6
17.5°	8.0	7.6	7.8	8.2	8.6	9.0
20°	6.5	6.5	6.9	7.6	8.2	8.6
22.5°	5.5	5.7	6.3	6.9	7.8	8.2
25°	4.7	5.1	5.7	6.7	7.6	7.8
27.5°	4.1	4.7	5.5	6.5	7.4	7.8
30°	3.5	4.3	5.3	6.3	7.4	7.8
31°	3.3	4.1	5.1	6.3	7.4	7.8
32°	3.1	4.1	5.1	6.3	7.4	7.8
33°	2.9	3.9	5.1	6.1	7.4	7.8
34°	2.7	3.9	5.1	6.3	7.4	7.8
35°	2.5	3.7	4.9	6.1	7.2	7.8
36°	2.2	3.7	4.9	6.1	7.4	7.8
37°	2.0	3.7	4.9	6.1	7.2	7.8
38°	2.0	3.5	4.7	6.1	7.2	7.8
39°	1.8	3.3	4.7	6.1	7.2	7.8
40°	1.6	3.3	4.5	5.9	7.2	7.8
41°	1.4	3.1	4.5	5.9	7.2	7.8
42°	1.2	3.1	4.5	5.9	7.2	7.8
43°	1.0	2.9	4.3	5.9	7.2	7.8
44°	1.0	2.9	4.3	5.9	7.2	7.8
45°	0.8	2.7	4.1	5.9	7.2	7.8
46°	0.8	2.7	4.1	5.7	7.2	7.8
47°	0.6	2.7	4.1	5.7	7.2	7.8
48°	0.6	2.5	4.1	5.7	7.2	7.8
49°	0.4	2.5	4.1	5.7	7.2	7.8
50°	0.4	2.5	3.9	5.7	7.2	7.8
51°	0.4	2.5	3.9	5.7	7.2	7.8
52°	0.4	2.2	3.9	5.7	7.2	7.8
53°	0.4	2.2	3.9	5.7	7.2	7.8
54°	0.4	2.2	3.7	5.7	7.2	7.8
55°	0.4	2.0	3.7	5.5	7.2	7.6
56°	0.4	2.0	3.7	5.5	7.2	7.6
57°	0.4	2.0	3.5	5.5	7.2	7.6
58°	0.4	1.8	3.5	5.3	6.9	7.6
59°	0.4	1.8	3.3	5.3	6.9	7.4
60°	0.4	1.6	3.3	5.1	6.7	7.4
62.5°	0.4	1.4	2.9	4.9	6.5	6.9
65°	0.4	1.2	2.7	4.5	6.3	6.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.2	2.5	4.3	5.9	6.5
70°	0.4	1.2	2.2	3.9	5.7	5.9
72.5°	0.6	1.2	2.0	3.7	5.3	5.5
75°	0.8	1.2	1.8	3.3	4.9	5.1
77.5°	0.8	1.2	1.6	2.9	4.3	4.5
80°	0.8	1.0	1.4	2.2	3.5	3.7
82.5°	0.8	1.0	1.0	1.8	2.7	2.9
85°	0.6	0.8	0.8	1.0	1.8	2.0
87.5°	0.6	0.8	0.4	0.6	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)