

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: P1336462

Luminaire Tested: P3A05R159827DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336462
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: P3A05R159827DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

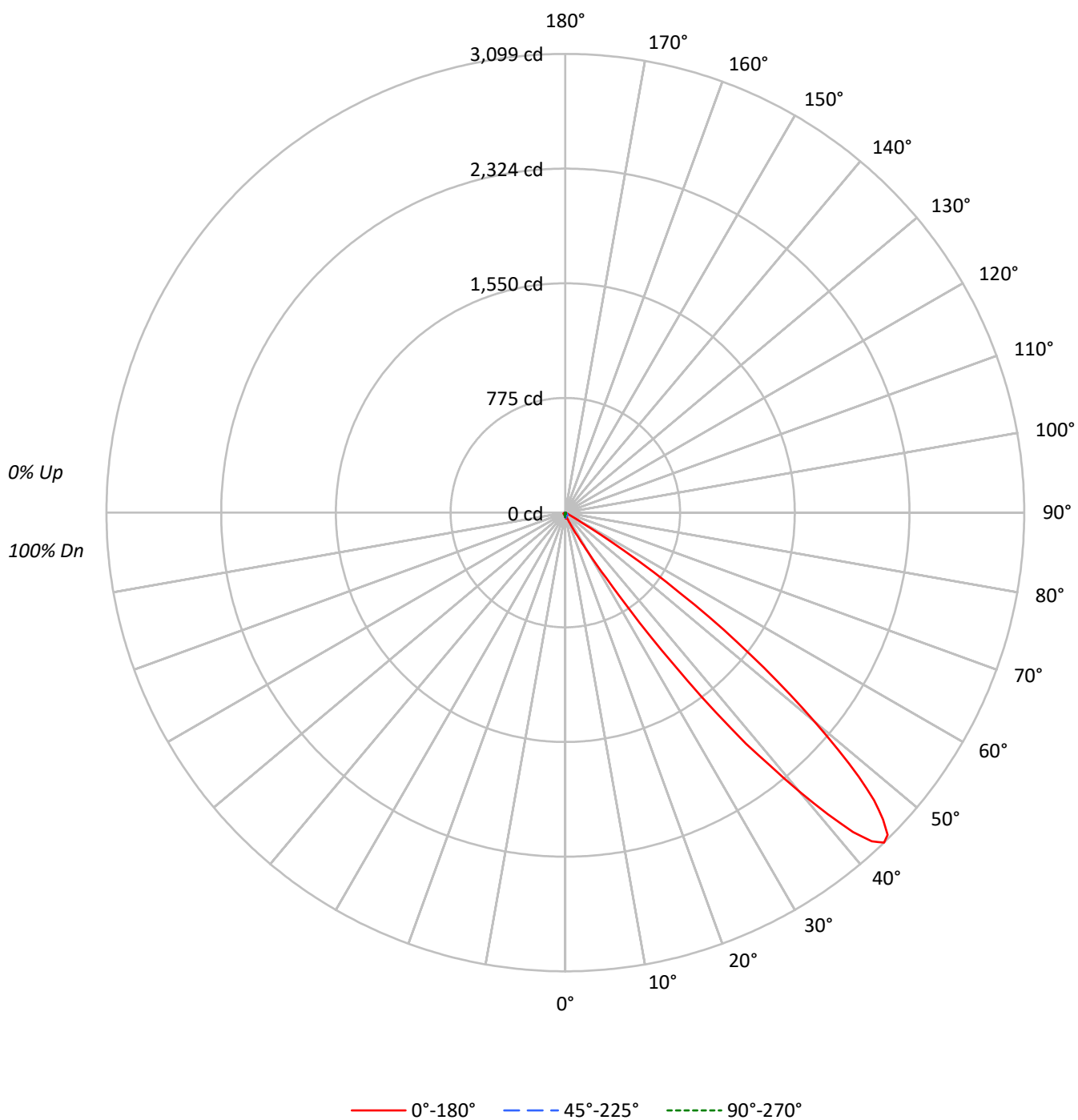
Lumens per Lamp: N/A
Luminaire Lumens: 346.0 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	6732	6732	6732	6732	6732
5°	8342	7440	6075	5305	5239
10°	8216	6368	4676	4142	4231
15°	6810	4540	3360	3451	3678
20°	11831	3617	2567	2987	3384
25°	26372	4331	2081	2758	3170
30°	78873	5317	1823	2709	3317
35°	303643	5996	1660	2757	3507
40°	704806	5238	1574	2863	3750
45°	954642	3969	1395	3101	4062
50°	748530	2354	1399	3309	4469
55°	359289	1070	1300	3555	4893
60°	32848	132	1228	3772	5438
65°	3580	0	1090	3943	5915
70°	898	0	1346	4231	6411
75°	847	254	1779	4660	7286
80°	884	884	2147	4799	7829
85°	755	755	3522	4277	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 954642 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.8
10°-20°	5.5	1.6
20°-30°	13.1	3.8
30°-40°	71.6	20.7
40°-50°	173.3	50.1
50°-60°	69.1	20.0
60°-70°	6.0	1.7
70°-80°	3.4	1.0
80°-90°	1.5	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°	21.1	6.1
0°-40°	92.7	26.8
0°-60°	335.2	96.9
0°-90°	346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	346.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	38	34	28	24	24	4
15°	30	20	15	15	16	10
25°	109	18	9	11	13	66
35°	1134	22	6	10	13	802
45°	3078	13	4	10	13	2172
55°	940	3	3	9	13	875
65°	7	0	2	8	11	18
75°	1	0	2	6	9	1
85°	0	0	1	2	3	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°	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
2.5°	34.5	34.5	34.8	34.5	34.5	34.5	34.5	34.2	34.2	34.2	33.1
5°	37.9	37.9	37.9	37.9	37.6	37.6	37.6	37.3	37.3	36.9	33.8
7.5°	39.3	39.3	39.0	39.0	38.6	38.6	38.3	37.9	37.6	37.3	32.4
10°	36.9	36.9	36.9	36.6	36.6	36.2	35.9	35.5	35.2	34.5	28.6
12.5°	32.8	32.8	33.1	32.8	32.4	32.1	31.4	31.0	30.7	30.0	23.8
15°	30.0	30.0	30.0	29.7	29.3	28.6	28.3	27.6	27.3	26.2	20.0
17.5°	38.3	38.3	37.9	37.3	35.9	34.8	33.1	31.7	30.0	27.9	17.2
20°	50.7	50.7	50.0	49.3	47.6	45.9	43.1	40.7	37.9	35.5	15.5
22.5°	73.5	74.5	72.4	70.0	67.6	63.5	59.7	55.9	51.1	46.9	15.9
25°	109.0	110.1	109.0	103.5	99.0	93.5	86.2	78.7	70.4	62.8	17.9
27.5°	176.6	177.3	175.6	162.1	154.9	140.4	127.6	115.2	101.4	87.6	19.7
30°	311.5	311.9	300.8	273.9	250.1	218.4	191.5	165.6	143.9	121.8	21.0
31°	410.2	400.5	377.1	344.6	306.7	263.9	227.0	193.5	161.1	137.3	21.4
32°	520.9	519.6	480.6	424.3	373.6	320.2	264.6	221.8	184.6	152.1	21.7
33°	667.6	668.3	606.8	540.6	457.5	385.7	312.9	254.3	209.4	169.7	22.4
34°	896.6	842.8	770.7	681.0	567.9	459.9	365.3	291.9	231.8	186.6	22.4
35°	1134.3	1080.2	1000.8	864.9	709.7	558.5	427.8	332.2	258.7	204.9	22.4
36°	1400.7	1354.8	1234.7	1061.2	863.2	651.7	494.0	378.8	285.3	221.5	22.1
37°	1688.4	1621.1	1488.0	1298.6	1033.6	782.8	574.8	425.0	311.9	239.4	21.4
38°	1980.6	1919.9	1751.9	1522.5	1237.2	921.1	655.5	469.5	336.4	252.9	20.4
39°	2202.1	2169.0	2002.3	1746.0	1399.6	1052.2	738.6	517.1	362.2	266.3	19.3
40°	2462.2	2408.8	2250.7	1933.7	1591.8	1185.7	820.1	559.2	383.6	277.0	18.3
41°	2699.6	2632.0	2432.6	2126.2	1745.7	1305.8	897.3	602.7	400.9	283.2	17.6
42°	2903.1	2824.5	2616.1	2291.1	1874.4	1401.7	959.1	633.8	417.1	288.4	16.6
43°	3034.9	2967.0	2762.0	2415.0	1984.4	1489.7	1016.7	666.2	427.1	291.9	15.2
44°	3099.1	3030.4	2832.1	2492.6	2052.0	1542.5	1054.0	688.6	438.1	296.4	14.1
45°	3078.4	3008.7	2816.9	2494.0	2073.1	1561.4	1069.8	698.6	444.0	300.5	12.8
46°	2983.5	2934.5	2741.3	2429.1	2033.1	1541.1	1060.9	691.0	441.9	300.5	11.4
47°	2850.3	2794.5	2610.6	2317.7	1936.1	1488.7	1024.6	667.9	429.2	293.6	10.0
48°	2668.9	2621.3	2428.1	2140.7	1787.4	1374.5	942.9	630.3	409.2	280.1	8.6
49°	2441.2	2374.9	2195.2	1914.4	1593.5	1212.3	835.6	566.8	377.1	261.2	7.6
50°	2194.2	2112.4	1973.7	1687.7	1393.1	1039.5	694.5	479.2	331.9	236.3	6.9
51°	1952.3	1869.2	1737.0	1493.8	1179.2	862.5	560.3	382.6	273.2	202.2	5.9
52°	1701.5	1631.8	1483.8	1292.7	1009.5	699.0	466.8	323.6	227.0	169.7	4.8
53°	1451.7	1404.1	1263.4	1069.8	811.1	571.0	381.2	277.0	198.0	145.2	3.8
54°	1201.6	1149.5	1042.6	870.1	653.8	450.6	323.3	231.8	171.8	126.6	3.4
55°	939.8	912.9	814.2	663.4	495.4	359.5	262.2	199.4	143.9	105.9	2.8
56°	723.8	693.4	603.4	481.3	368.1	281.5	212.2	162.8	121.8	88.7	2.1
57°	474.0	443.0	383.3	336.0	268.1	205.3	162.1	128.3	99.0	73.5	1.7
58°	280.1	251.8	242.5	207.0	178.7	139.4	119.7	95.6	73.1	58.0	1.0
59°	128.7	130.8	116.3	109.0	99.0	88.7	72.8	63.8	50.0	41.7	0.7
60°	74.9	70.7	69.0	61.8	54.9	48.6	43.8	38.6	31.4	26.9	0.3
62.5°	25.5	24.5	25.2	22.8	21.4	20.7	19.0	16.2	13.5	11.0	0.0
65°	6.9	6.9	6.6	6.2	5.9	5.5	5.2	4.5	4.1	3.4	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°	2.4	2.4	2.1	2.1	1.7	1.7	1.4	1.4	1.0	1.0	0.0
70°	1.4	1.4	1.4	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.0
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.3
75°	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.7
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	30.7	30.7	30.7	30.7	30.7	30.7
2.5°	31.7	30.4	28.6	27.6	27.3	26.9
5°	30.4	27.6	25.5	24.1	23.8	23.8
7.5°	27.3	24.1	22.1	21.4	21.0	21.0
10°	23.8	21.0	19.3	18.6	19.0	19.0
12.5°	20.0	17.6	16.9	16.9	17.2	17.6
15°	16.2	14.8	14.8	15.2	15.9	16.2
17.5°	13.5	12.8	13.1	13.8	14.5	15.2
20°	11.0	11.0	11.7	12.8	13.8	14.5
22.5°	9.3	9.7	10.7	11.7	13.1	13.8
25°	7.9	8.6	9.7	11.4	12.8	13.1
27.5°	6.9	7.9	9.3	11.0	12.4	13.1
30°	5.9	7.2	9.0	10.7	12.4	13.1
31°	5.5	6.9	8.6	10.7	12.4	13.1
32°	5.2	6.9	8.6	10.7	12.4	13.1
33°	4.8	6.6	8.6	10.3	12.4	13.1
34°	4.5	6.6	8.6	10.7	12.4	13.1
35°	4.1	6.2	8.3	10.3	12.1	13.1
36°	3.8	6.2	8.3	10.3	12.4	13.1
37°	3.4	6.2	8.3	10.3	12.1	13.1
38°	3.4	5.9	7.9	10.3	12.1	13.1
39°	3.1	5.5	7.9	10.3	12.1	13.1
40°	2.8	5.5	7.6	10.0	12.1	13.1
41°	2.4	5.2	7.6	10.0	12.1	13.1
42°	2.1	5.2	7.6	10.0	12.1	13.1
43°	1.7	4.8	7.2	10.0	12.1	13.1
44°	1.7	4.8	7.2	10.0	12.1	13.1
45°	1.4	4.5	6.9	10.0	12.1	13.1
46°	1.4	4.5	6.9	9.7	12.1	13.1
47°	1.0	4.5	6.9	9.7	12.1	13.1
48°	1.0	4.1	6.9	9.7	12.1	13.1
49°	0.7	4.1	6.9	9.7	12.1	13.1
50°	0.7	4.1	6.6	9.7	12.1	13.1
51°	0.7	4.1	6.6	9.7	12.1	13.1
52°	0.7	3.8	6.6	9.7	12.1	13.1
53°	0.7	3.8	6.6	9.7	12.1	13.1
54°	0.7	3.8	6.2	9.7	12.1	13.1
55°	0.7	3.4	6.2	9.3	12.1	12.8
56°	0.7	3.4	6.2	9.3	12.1	12.8
57°	0.7	3.4	5.9	9.3	12.1	12.8
58°	0.7	3.1	5.9	9.0	11.7	12.8
59°	0.7	3.1	5.5	9.0	11.7	12.4
60°	0.7	2.8	5.5	8.6	11.4	12.4
62.5°	0.7	2.4	4.8	8.3	11.0	11.7
65°	0.7	2.1	4.5	7.6	10.7	11.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	2.1	4.1	7.2	10.0	11.0
70°	0.7	2.1	3.8	6.6	9.7	10.0
72.5°	1.0	2.1	3.4	6.2	9.0	9.3
75°	1.4	2.1	3.1	5.5	8.3	8.6
77.5°	1.4	2.1	2.8	4.8	7.2	7.6
80°	1.4	1.7	2.4	3.8	5.9	6.2
82.5°	1.4	1.7	1.7	3.1	4.5	4.8
85°	1.0	1.4	1.4	1.7	3.1	3.4
87.5°	1.0	1.4	0.7	1.0	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)