

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: P1334968

Luminaire Tested: P3A02R309027DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334968
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: P3A02R309027DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

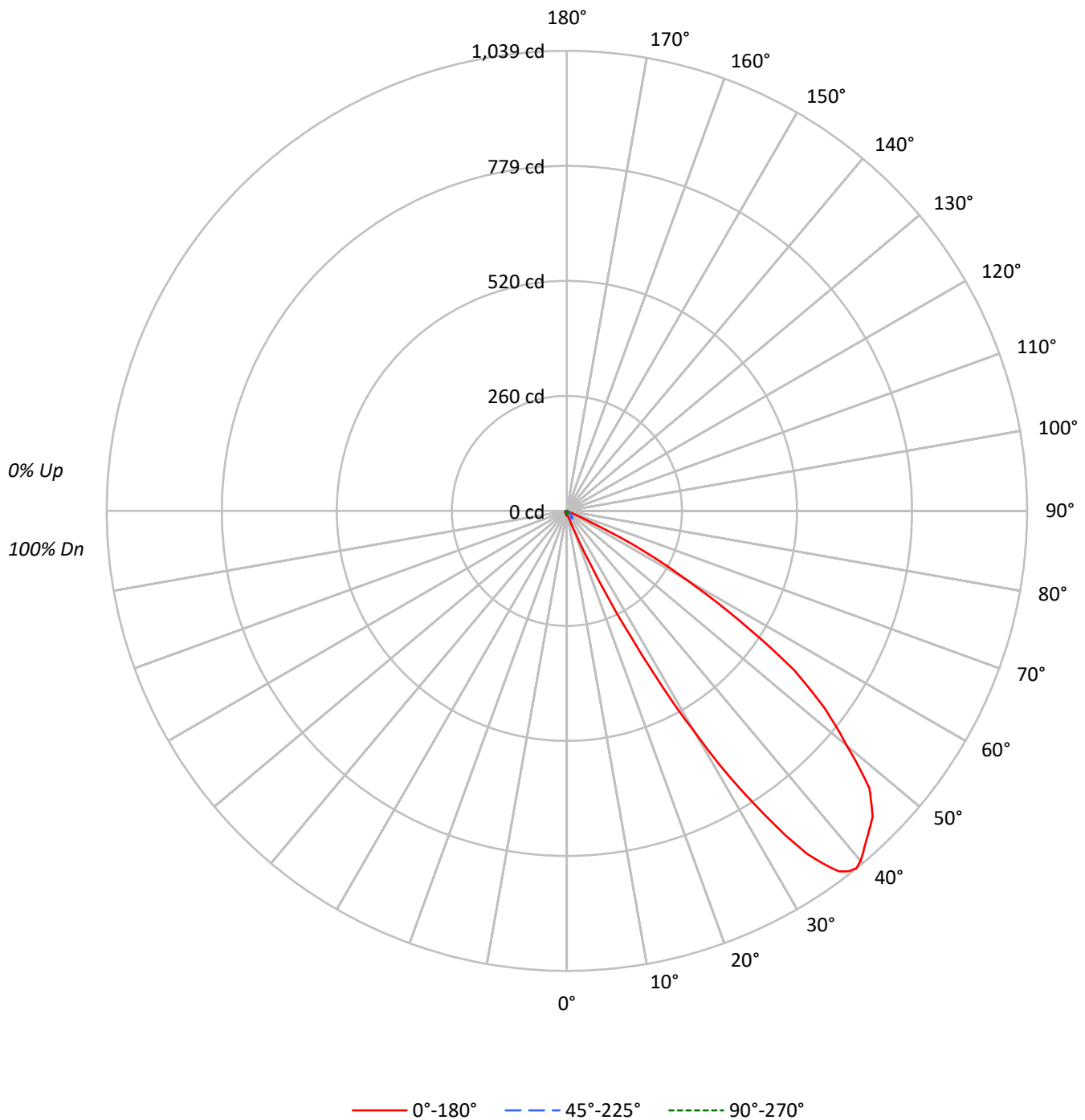
Lumens per Lamp: N/A
Luminaire Lumens: 270.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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
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	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	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	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	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	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	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	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2302	2302	2302	2302	2302
5°	2443	2399	2245	2047	2003
10°	2694	2382	1982	1781	1715
15°	3927	2384	1657	1498	1544
20°	9871	2590	1283	1283	1423
25°	45849	3242	992	1161	1331
30°	145921	4482	760	1089	1317
35°	253210	5488	616	1044	1338
40°	295325	5467	458	1031	1374
45°	302853	3876	496	1116	1489
50°	281645	2183	375	1160	1706
55°	239361	1147	421	1300	1912
60°	138235	307	482	1403	2105
65°	28226	0	571	1660	2335
70°	449	128	705	1923	2757
75°	424	169	763	1949	3304
80°	253	253	1137	2273	3788
85°	0	503	2264	2264	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 302853 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.7	1.0
20°-30°	15.6	5.8
30°-40°	72.7	26.9
40°-50°	102.8	38.1
50°-60°	63.3	23.4
60°-70°	9.6	3.6
70°-80°	1.5	0.6
80°-90°	0.8	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°	19.2	7.1
0°-40°	92.0	34.1
0°-60°	258.0	95.6
0°-90°	270.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	270.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	11	11	10	9	9	1
15°	17	10	7	7	7	6
25°	190	13	4	5	6	117
35°	946	20	2	4	5	568
45°	977	12	2	4	5	740
55°	626	3	1	3	5	533
65°	54	0	1	3	4	98
75°	0	0	1	2	4	1
85°	0	0	1	1	2	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°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
2.5°	10.7	10.7	10.9	10.9	10.7	10.9	10.9	10.9	10.5	10.2	9.8
5°	11.1	11.1	11.1	11.4	11.1	11.1	10.9	10.7	10.2	9.6	9.3
7.5°	11.6	11.6	11.4	11.6	11.4	11.4	10.9	10.5	9.8	9.1	8.6
10°	12.1	12.1	11.8	11.8	11.6	11.6	10.7	10.0	8.9	8.2	8.0
12.5°	13.4	13.4	13.2	13.0	12.5	12.3	10.5	9.3	8.0	7.3	7.1
15°	17.3	17.1	16.6	15.9	14.8	14.6	10.5	8.6	7.3	6.6	6.6
17.5°	23.7	23.4	22.7	20.9	18.9	18.2	10.5	7.7	6.4	5.9	5.9
20°	42.3	40.5	37.1	32.5	27.7	25.2	11.1	6.8	5.5	5.2	5.5
21°	55.3	53.4	49.1	41.6	33.2	30.5	11.6	6.6	5.2	5.0	5.5
22°	75.3	73.2	64.4	54.1	42.1	37.3	11.8	6.1	4.8	4.8	5.2
23°	105.1	101.7	86.7	70.3	52.5	45.7	12.3	5.9	4.5	4.8	5.0
24°	137.6	134.6	117.6	93.0	67.1	57.3	12.7	5.7	4.3	4.3	4.8
25°	189.5	186.0	155.8	117.4	85.1	68.9	13.4	5.2	4.1	4.1	4.8
26°	256.5	240.9	200.6	151.2	104.8	86.4	14.1	5.0	3.9	4.1	4.5
27°	320.2	307.3	262.0	194.0	129.6	106.2	15.0	4.8	3.6	3.9	4.5
28°	403.9	385.7	328.6	245.4	163.3	128.5	15.9	4.5	3.4	3.9	4.3
29°	497.6	472.2	403.2	303.2	201.3	153.5	16.8	4.3	3.2	3.6	4.3
30°	576.3	552.4	483.5	371.6	244.9	186.5	17.7	4.1	3.0	3.6	4.3
31°	668.7	632.5	549.0	429.6	282.5	219.5	18.6	3.6	2.7	3.4	4.1
32°	743.5	718.2	629.5	495.1	331.8	255.9	19.3	3.4	2.7	3.4	4.1
33°	815.8	781.9	696.2	557.9	376.4	293.2	20.0	3.2	2.5	3.2	4.1
34°	885.0	853.8	759.2	608.6	418.5	328.6	20.5	2.7	2.5	3.2	3.9
35°	945.9	909.7	814.7	658.2	461.7	360.9	20.5	2.5	2.3	3.0	3.9
36°	985.5	959.6	862.9	707.1	500.8	391.6	20.5	2.3	2.0	3.0	3.6
37°	1019.4	989.1	901.6	744.6	529.7	416.2	20.5	2.0	2.0	3.0	3.6
38°	1033.2	1007.3	928.2	777.8	556.8	441.2	20.2	1.8	1.8	2.7	3.6
39°	1038.7	1015.5	948.2	801.7	576.8	458.1	19.8	1.6	1.8	2.7	3.6
40°	1031.7	1014.1	958.4	817.2	592.7	470.3	19.1	1.4	1.6	2.7	3.6
42.5°	1002.5	990.9	956.1	832.6	606.3	479.4	16.6	0.9	1.6	2.5	3.6
45°	976.6	963.9	933.2	816.5	588.6	461.5	12.5	0.5	1.6	2.5	3.6
47.5°	926.3	918.4	894.3	775.3	549.7	421.0	8.9	0.2	1.4	2.3	3.4
50°	825.6	818.1	786.2	673.2	472.8	355.9	6.4	0.2	1.1	2.3	3.4
52.5°	735.3	727.3	681.6	559.7	363.2	260.9	4.1	0.2	1.1	2.3	3.4
55°	626.1	612.3	552.2	424.9	257.5	174.9	3.0	0.2	1.1	2.0	3.4
57.5°	463.5	443.3	389.6	289.8	148.3	94.8	1.6	0.2	1.1	2.0	3.4
60°	315.2	303.2	243.8	152.8	63.2	40.0	0.7	0.2	1.1	2.0	3.2
62.5°	191.0	175.8	122.6	65.0	27.3	18.2	0.0	0.5	1.1	2.0	3.2
65°	54.4	48.2	32.1	14.8	7.7	5.9	0.0	0.5	1.1	2.0	3.2
67.5°	1.8	1.8	1.8	1.6	1.1	1.1	0.2	0.5	1.1	2.0	3.0
70°	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.5	1.1	1.8	3.0
72.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.9	1.6	2.7
75°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	0.9	1.6	2.3
77.5°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	0.9	1.4	2.3
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.4	1.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.7	0.9	0.9	1.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.9	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.7	0.7	0.5
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°	10.5	10.5
2.5°	9.8	9.8
5°	9.1	9.1
7.5°	8.4	8.4
10°	7.7	7.7
12.5°	7.3	7.3
15°	6.6	6.8
17.5°	6.1	6.4
20°	5.9	6.1
21°	5.9	6.1
22°	5.7	5.9
23°	5.7	5.9
24°	5.5	5.7
25°	5.2	5.5
26°	5.2	5.5
27°	5.2	5.5
28°	5.0	5.5
29°	5.0	5.2
30°	5.0	5.2
31°	4.8	5.2
32°	4.8	5.2
33°	4.8	5.0
34°	4.5	5.0
35°	4.5	5.0
36°	4.5	5.0
37°	4.5	4.8
38°	4.5	5.0
39°	4.5	4.8
40°	4.5	4.8
42.5°	4.5	4.8
45°	4.5	4.8
47.5°	4.5	5.0
50°	4.5	5.0
52.5°	4.5	5.0
55°	4.5	5.0
57.5°	4.5	4.8
60°	4.5	4.8
62.5°	4.3	4.8
65°	4.3	4.5
67.5°	4.3	4.5
70°	4.1	4.3
72.5°	3.9	4.1
75°	3.4	3.9
77.5°	3.2	3.4
80°	2.7	3.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.3	2.3
85°	1.6	1.8
87.5°	0.9	0.9
90°	0.0	0.0

(END OF REPORT)