

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: P1335044

Luminaire Tested: P3A02R309050DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335044
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: P3A02R309050DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 5000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

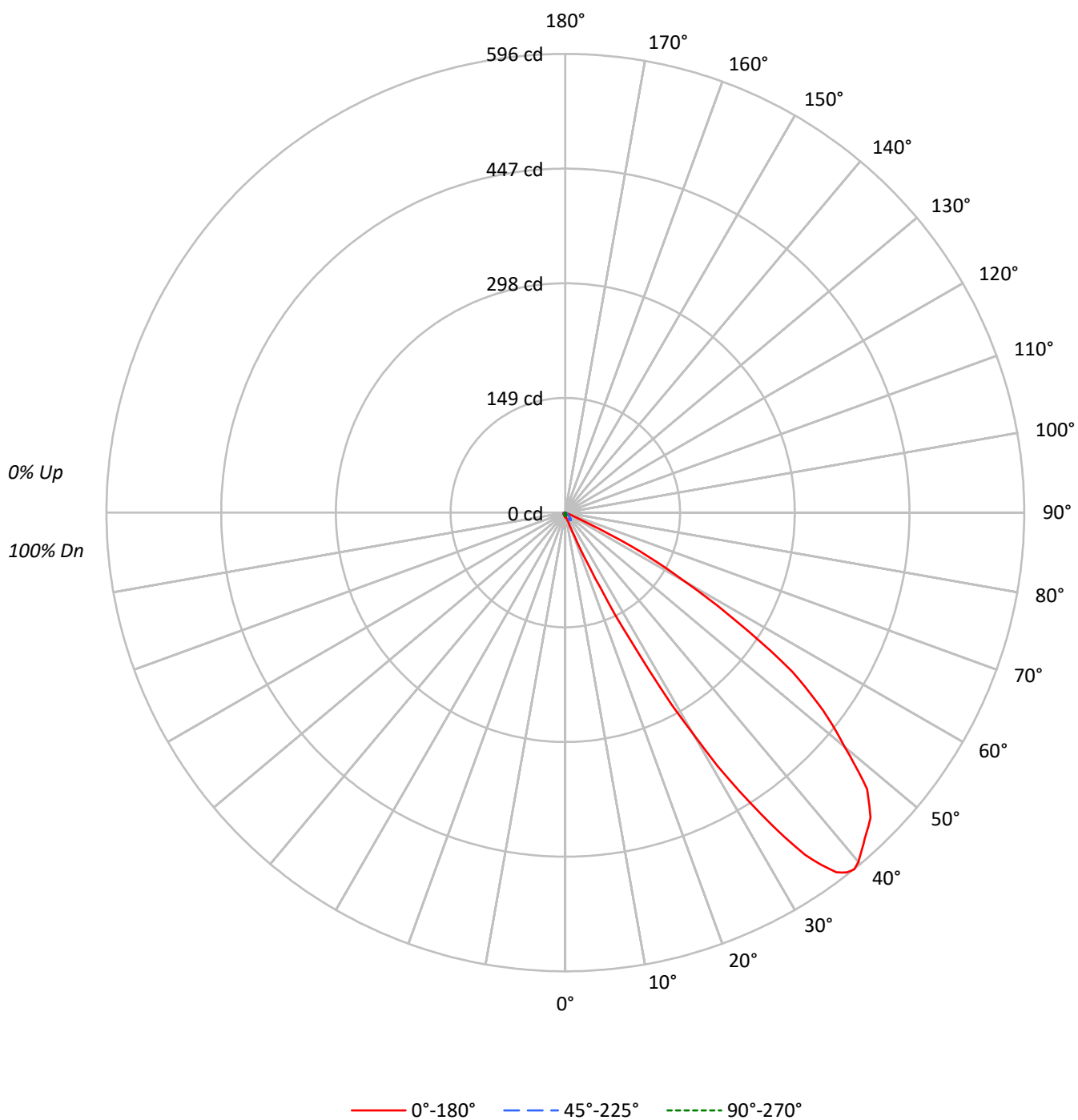
Lumens per Lamp: N/A
Luminaire Lumens: 155.0 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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	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°	1316	1316	1316	1316	1316
5°	1409	1387	1299	1189	1145
10°	1536	1358	1136	1024	980
15°	2247	1362	953	863	885
20°	5670	1493	723	723	817
25°	26324	1863	581	653	750
30°	83785	2583	430	633	760
35°	145357	3159	348	589	776
40°	169518	3149	258	601	773
45°	173848	2233	279	651	837
50°	161700	1262	239	682	989
55°	137400	650	268	765	1109
60°	79380	175	307	789	1184
65°	16189	0	363	934	1349
70°	256	64	449	1090	1603
75°	254	85	424	1101	1864
80°	126	126	631	1263	2147
85°	0	252	1258	1258	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 173848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.6	1.0
20°-30°	8.9	5.8
30°-40°	41.8	26.9
40°-50°	59.0	38.1
50°-60°	36.3	23.4
60°-70°	5.5	3.6
70°-80°	0.9	0.6
80°-90°	0.4	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°	11.0	7.1
0°-40°	52.8	34.1
0°-60°	148.2	95.6
0°-90°	155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	155.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	6	6	6	5	5	1
15°	10	6	4	4	4	4
25°	109	8	2	3	3	67
35°	543	12	1	2	3	326
45°	561	7	1	2	3	425
55°	359	2	1	2	3	306
65°	31	0	1	2	3	56
75°	0	0	0	1	2	0
85°	0	0	0	0	1	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°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
2.5°	6.1	6.1	6.3	6.3	6.1	6.3	6.3	6.3	6.0	5.9	5.6
5°	6.4	6.4	6.4	6.5	6.4	6.4	6.3	6.1	5.9	5.5	5.4
7.5°	6.7	6.7	6.5	6.7	6.5	6.5	6.3	6.0	5.6	5.2	5.0
10°	6.9	6.9	6.8	6.8	6.7	6.7	6.1	5.7	5.1	4.7	4.6
12.5°	7.7	7.7	7.6	7.4	7.2	7.1	6.0	5.4	4.6	4.2	4.0
15°	9.9	9.8	9.5	9.1	8.5	8.4	6.0	5.0	4.2	3.8	3.8
17.5°	13.6	13.4	13.1	12.0	10.8	10.4	6.0	4.4	3.7	3.4	3.4
20°	24.3	23.2	21.3	18.7	15.9	14.5	6.4	3.9	3.1	3.0	3.1
21°	31.7	30.7	28.2	23.9	19.1	17.5	6.7	3.8	3.0	2.9	3.1
22°	43.2	42.0	37.0	31.1	24.2	21.4	6.8	3.5	2.7	2.7	3.0
23°	60.3	58.4	49.7	40.3	30.2	26.2	7.1	3.4	2.6	2.7	2.9
24°	79.0	77.3	67.5	53.4	38.5	32.9	7.3	3.3	2.5	2.5	2.7
25°	108.8	106.8	89.4	67.4	48.8	39.6	7.7	3.0	2.4	2.4	2.7
26°	147.3	138.3	115.2	86.8	60.2	49.6	8.1	2.9	2.2	2.4	2.6
27°	183.8	176.4	150.4	111.4	74.4	61.0	8.6	2.7	2.1	2.2	2.6
28°	231.9	221.4	188.7	140.9	93.7	73.8	9.1	2.6	2.0	2.2	2.5
29°	285.7	271.1	231.5	174.0	115.6	88.1	9.7	2.5	1.8	2.1	2.5
30°	330.9	317.1	277.6	213.3	140.6	107.1	10.2	2.4	1.7	2.1	2.5
31°	383.9	363.1	315.2	246.6	162.2	126.0	10.7	2.1	1.6	2.0	2.4
32°	426.8	412.3	361.4	284.2	190.5	146.9	11.1	2.0	1.6	2.0	2.4
33°	468.3	448.9	399.7	320.3	216.1	168.3	11.5	1.8	1.4	1.8	2.4
34°	508.0	490.1	435.8	349.4	240.2	188.7	11.8	1.6	1.4	1.8	2.2
35°	543.0	522.3	467.7	377.9	265.0	207.2	11.8	1.4	1.3	1.7	2.2
36°	565.7	550.9	495.4	405.9	287.5	224.8	11.8	1.3	1.2	1.7	2.1
37°	585.2	567.8	517.6	427.5	304.1	238.9	11.8	1.2	1.2	1.7	2.1
38°	593.2	578.3	532.8	446.5	319.6	253.3	11.6	1.0	1.0	1.6	2.1
39°	596.3	583.0	544.3	460.2	331.1	263.0	11.4	0.9	1.0	1.6	2.1
40°	592.2	582.2	550.2	469.1	340.3	270.0	11.0	0.8	0.9	1.6	2.1
42.5°	575.5	568.9	548.9	478.0	348.1	275.2	9.5	0.5	0.9	1.4	2.1
45°	560.6	553.3	535.7	468.7	337.9	264.9	7.2	0.3	0.9	1.4	2.1
47.5°	531.8	527.2	513.4	445.1	315.6	241.7	5.1	0.1	0.8	1.3	2.0
50°	474.0	469.6	451.4	386.5	271.4	204.3	3.7	0.1	0.7	1.3	2.0
52.5°	422.1	417.5	391.3	321.3	208.5	149.8	2.4	0.1	0.7	1.3	2.0
55°	359.4	351.5	317.0	243.9	147.8	100.4	1.7	0.1	0.7	1.2	2.0
57.5°	266.1	254.5	223.7	166.3	85.1	54.4	0.9	0.1	0.7	1.2	2.0
60°	181.0	174.0	140.0	87.7	36.3	23.0	0.4	0.1	0.7	1.2	1.8
62.5°	109.7	100.9	70.4	37.3	15.7	10.4	0.0	0.3	0.7	1.2	1.8
65°	31.2	27.7	18.4	8.5	4.4	3.4	0.0	0.3	0.7	1.2	1.8
67.5°	1.0	1.0	1.0	0.9	0.7	0.7	0.1	0.3	0.7	1.2	1.7
70°	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.3	0.7	1.0	1.7
72.5°	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.3	0.5	0.9	1.6
75°	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.5	0.9	1.3
77.5°	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.5	0.8	1.3
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.8	1.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.5	0.5	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.4	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.4	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):

	157.5°	180°
0°	6.0	6.0
2.5°	5.6	5.6
5°	5.2	5.2
7.5°	4.8	4.8
10°	4.4	4.4
12.5°	4.2	4.2
15°	3.8	3.9
17.5°	3.5	3.7
20°	3.4	3.5
21°	3.4	3.5
22°	3.3	3.4
23°	3.3	3.4
24°	3.1	3.3
25°	3.0	3.1
26°	3.0	3.1
27°	3.0	3.1
28°	2.9	3.1
29°	2.9	3.0
30°	2.9	3.0
31°	2.7	3.0
32°	2.7	3.0
33°	2.7	2.9
34°	2.6	2.9
35°	2.6	2.9
36°	2.6	2.9
37°	2.6	2.7
38°	2.6	2.9
39°	2.6	2.7
40°	2.6	2.7
42.5°	2.6	2.7
45°	2.6	2.7
47.5°	2.6	2.9
50°	2.6	2.9
52.5°	2.6	2.9
55°	2.6	2.9
57.5°	2.6	2.7
60°	2.6	2.7
62.5°	2.5	2.7
65°	2.5	2.6
67.5°	2.5	2.6
70°	2.4	2.5
72.5°	2.2	2.4
75°	2.0	2.2
77.5°	1.8	2.0
80°	1.6	1.7



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.3	1.3
85°	0.9	1.0
87.5°	0.5	0.5
90°	0.0	0.0

(END OF REPORT)