

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: P1341528

Luminaire Tested: P3A09R309830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341528
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: P3A09R309830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

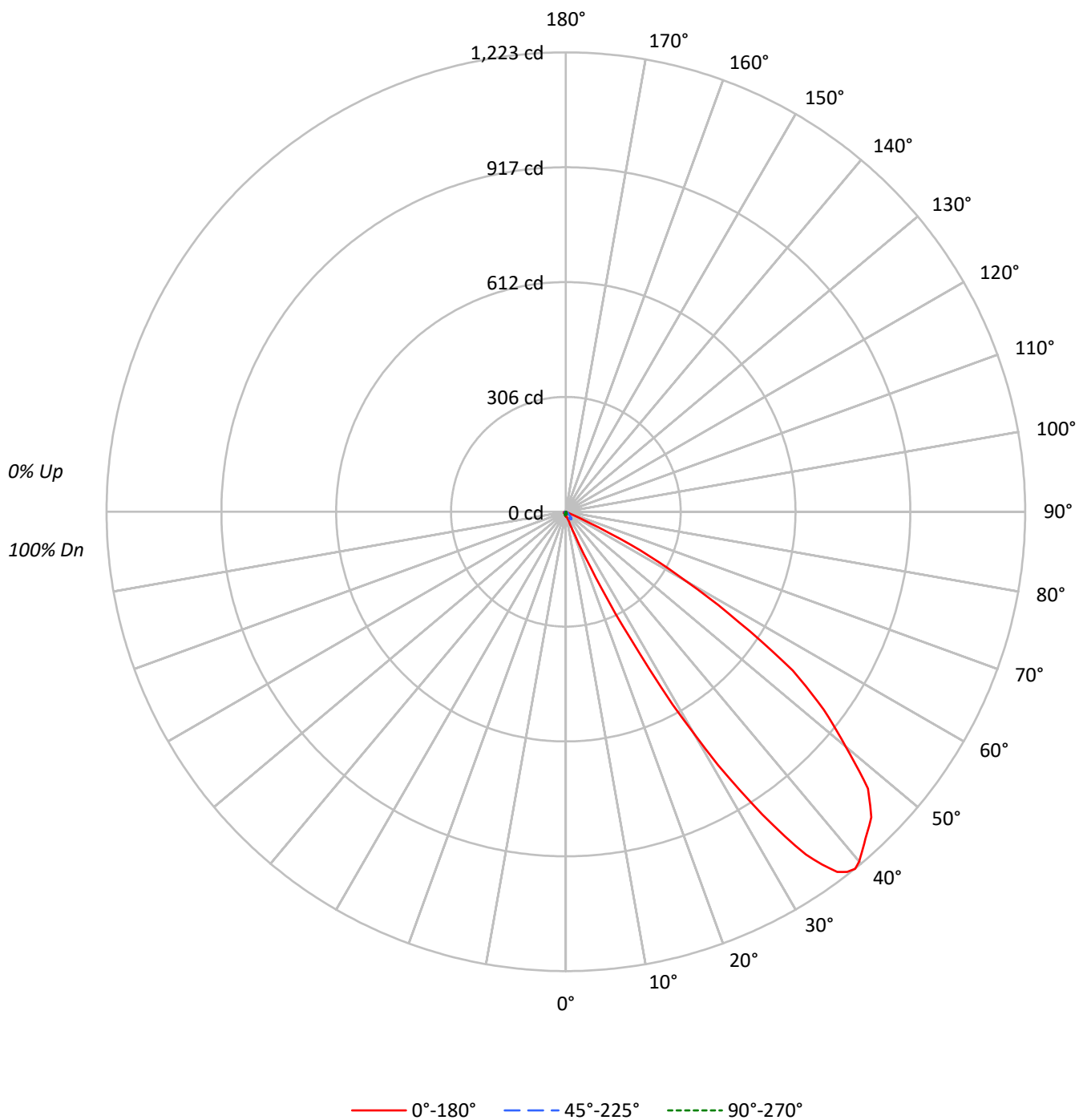
Lumens per Lamp: N/A
Luminaire Lumens: 318.0 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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°	2697	2697	2697	2697	2697
5°	2884	2840	2663	2421	2355
10°	3162	2806	2316	2093	2026
15°	4631	2792	1952	1771	1816
20°	11621	3057	1493	1493	1680
25°	53979	3823	1161	1355	1548
30°	171875	5292	886	1291	1570
35°	298236	6451	723	1231	1579
40°	347823	6441	544	1231	1603
45°	356688	4559	589	1333	1737
50°	331725	2559	443	1365	2013
55°	281911	1338	497	1529	2256
60°	162838	351	570	1667	2456
65°	33207	0	675	1972	2802
70°	513	192	833	2244	3270
75°	424	254	932	2288	3897
80°	379	379	1389	2652	4420
85°	0	755	2768	2768	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 356688 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.4
10°-20°	3.2	1.0
20°-30°	18.3	5.8
30°-40°	85.7	26.9
40°-50°	121.1	38.1
50°-60°	74.5	23.4
60°-70°	11.3	3.6
70°-80°	1.8	0.6
80°-90°	0.9	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°	22.7	7.1
0°-40°	108.3	34.1
0°-60°	304.0	95.6
0°-90°	318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	318.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	13	13	12	11	11	1
15°	20	12	9	8	8	7
25°	223	16	5	6	6	137
35°	1114	24	3	5	6	669
45°	1150	15	2	4	6	872
55°	737	4	1	4	6	627
65°	64	0	1	4	5	116
75°	0	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°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
2.5°	12.6	12.6	12.9	12.9	12.6	12.9	12.9	12.9	12.3	12.1	11.5
5°	13.1	13.1	13.1	13.4	13.1	13.1	12.9	12.6	12.1	11.3	11.0
7.5°	13.7	13.7	13.4	13.7	13.4	13.4	12.9	12.3	11.5	10.7	10.2
10°	14.2	14.2	13.9	13.9	13.7	13.7	12.6	11.8	10.4	9.6	9.4
12.5°	15.8	15.8	15.5	15.3	14.7	14.5	12.3	11.0	9.4	8.6	8.3
15°	20.4	20.1	19.6	18.8	17.4	17.1	12.3	10.2	8.6	7.8	7.8
17.5°	27.9	27.6	26.8	24.6	22.2	21.4	12.3	9.1	7.5	7.0	7.0
20°	49.8	47.7	43.7	38.3	32.7	29.7	13.1	8.0	6.4	6.2	6.4
21°	65.1	62.9	57.9	49.0	39.1	35.9	13.7	7.8	6.2	5.9	6.4
22°	88.7	86.3	75.8	63.8	49.6	43.9	13.9	7.2	5.6	5.6	6.2
23°	123.8	119.7	102.1	82.8	61.9	53.8	14.5	7.0	5.4	5.6	5.9
24°	162.1	158.6	138.5	109.6	79.0	67.5	15.0	6.7	5.1	5.1	5.6
25°	223.1	219.1	183.5	138.2	100.2	81.2	15.8	6.2	4.8	4.8	5.6
26°	302.2	283.7	236.3	178.1	123.5	101.8	16.6	5.9	4.6	4.8	5.4
27°	377.2	361.9	308.6	228.5	152.7	125.1	17.7	5.6	4.3	4.6	5.4
28°	475.7	454.3	387.1	289.0	192.3	151.3	18.8	5.4	4.0	4.6	5.1
29°	586.1	556.1	474.9	357.1	237.1	180.8	19.8	5.1	3.8	4.3	5.1
30°	678.8	650.7	569.5	437.7	288.5	219.7	20.9	4.8	3.5	4.3	5.1
31°	787.5	744.9	646.6	506.0	332.7	258.5	22.0	4.3	3.2	4.0	4.8
32°	875.7	845.9	741.5	583.2	390.8	301.4	22.8	4.0	3.2	4.0	4.8
33°	960.8	920.9	819.9	657.1	443.3	345.3	23.6	3.8	2.9	3.8	4.8
34°	1042.3	1005.6	894.1	716.8	492.9	387.1	24.1	3.2	2.9	3.8	4.6
35°	1114.1	1071.5	959.5	775.2	543.8	425.1	24.1	2.9	2.7	3.5	4.6
36°	1160.7	1130.1	1016.3	832.8	589.8	461.3	24.1	2.7	2.4	3.5	4.3
37°	1200.6	1165.0	1061.8	877.0	623.9	490.2	24.1	2.4	2.4	3.5	4.3
38°	1216.9	1186.4	1093.2	916.1	655.7	519.7	23.8	2.1	2.1	3.2	4.3
39°	1223.4	1196.0	1116.7	944.2	679.3	539.5	23.3	1.9	2.1	3.2	4.3
40°	1215.1	1194.4	1128.8	962.5	698.1	554.0	22.5	1.6	1.9	3.2	4.3
42.5°	1180.8	1167.1	1126.1	980.7	714.1	564.7	19.6	1.1	1.9	2.9	4.3
45°	1150.2	1135.2	1099.1	961.7	693.2	543.5	14.7	0.5	1.9	2.9	4.3
47.5°	1091.0	1081.7	1053.3	913.2	647.4	495.8	10.4	0.3	1.6	2.7	4.0
50°	972.4	963.5	926.0	792.9	556.9	419.2	7.5	0.3	1.3	2.7	4.0
52.5°	866.0	856.6	802.8	659.2	427.8	307.2	4.8	0.3	1.3	2.7	4.0
55°	737.4	721.1	650.4	500.4	303.2	206.0	3.5	0.3	1.3	2.4	4.0
57.5°	545.9	522.1	458.9	341.3	174.7	111.7	1.9	0.3	1.3	2.4	4.0
60°	371.3	357.1	287.2	180.0	74.5	47.1	0.8	0.3	1.3	2.4	3.8
62.5°	225.0	207.1	144.4	76.6	32.1	21.4	0.0	0.5	1.3	2.4	3.8
65°	64.0	56.8	37.8	17.4	9.1	7.0	0.0	0.5	1.3	2.4	3.8
67.5°	2.1	2.1	2.1	1.9	1.3	1.3	0.3	0.5	1.3	2.4	3.5
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.5	1.3	2.1	3.5
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	1.1	1.9	3.2
75°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.9	2.7
77.5°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.7
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.8	1.1	1.1	1.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.8	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°	12.3	12.3
2.5°	11.5	11.5
5°	10.7	10.7
7.5°	9.9	9.9
10°	9.1	9.1
12.5°	8.6	8.6
15°	7.8	8.0
17.5°	7.2	7.5
20°	7.0	7.2
21°	7.0	7.2
22°	6.7	7.0
23°	6.7	7.0
24°	6.4	6.7
25°	6.2	6.4
26°	6.2	6.4
27°	6.2	6.4
28°	5.9	6.4
29°	5.9	6.2
30°	5.9	6.2
31°	5.6	6.2
32°	5.6	6.2
33°	5.6	5.9
34°	5.4	5.9
35°	5.4	5.9
36°	5.4	5.9
37°	5.4	5.6
38°	5.4	5.9
39°	5.4	5.6
40°	5.4	5.6
42.5°	5.4	5.6
45°	5.4	5.6
47.5°	5.4	5.9
50°	5.4	5.9
52.5°	5.4	5.9
55°	5.4	5.9
57.5°	5.4	5.6
60°	5.4	5.6
62.5°	5.1	5.6
65°	5.1	5.4
67.5°	5.1	5.4
70°	4.8	5.1
72.5°	4.6	4.8
75°	4.0	4.6
77.5°	3.8	4.0
80°	3.2	3.5

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.7	2.7
85°	1.9	2.1
87.5°	1.1	1.1
90°	0.0	0.0

(END OF REPORT)