

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: P1336148

Luminaire Tested: P3A02R459830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336148
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R459830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

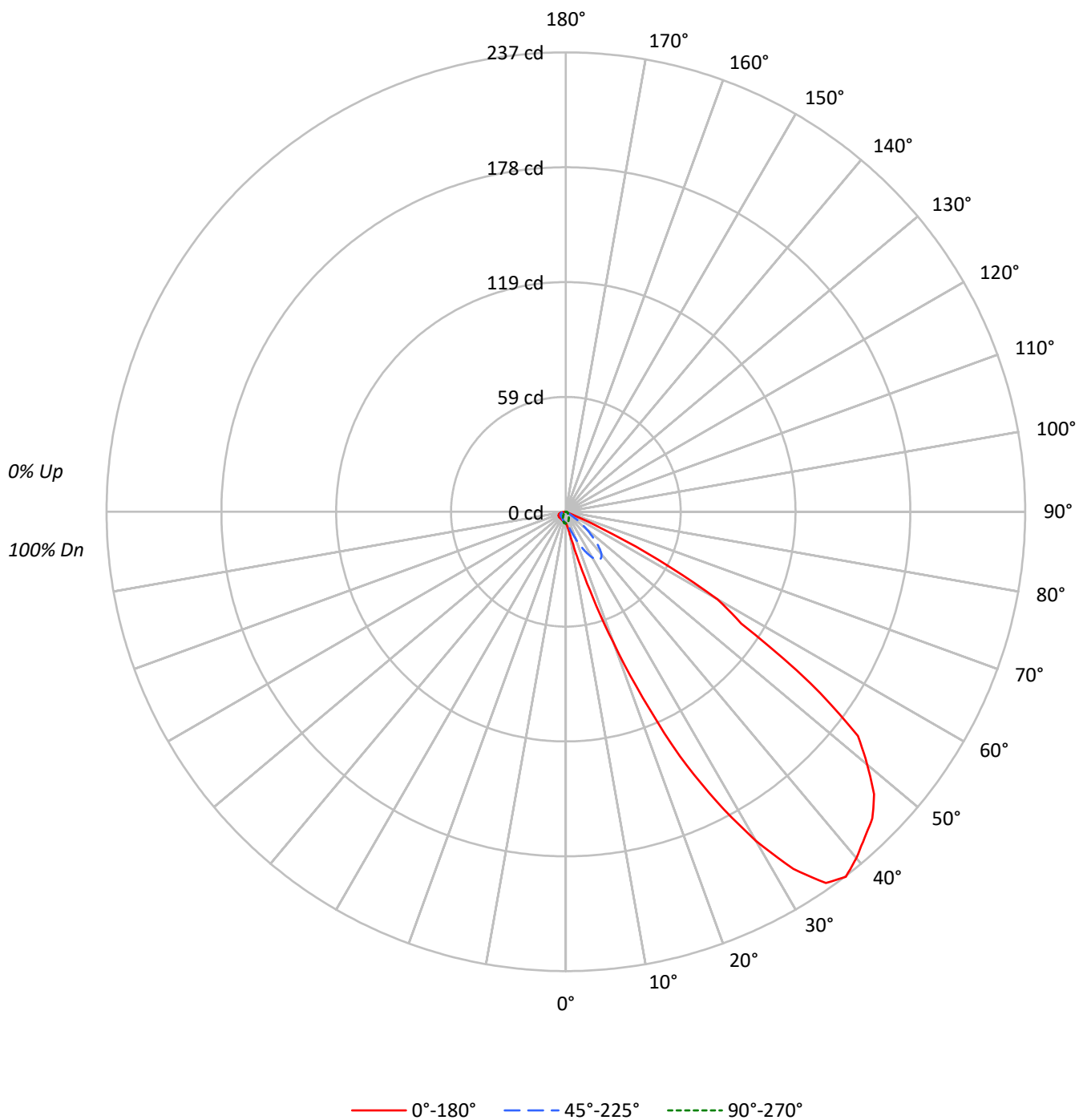
Lumens per Lamp: N/A
Luminaire Lumens: 106.0 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.83 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35
10	49	35	27	22	48	35	27	22	34	27	21		33	26	21		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1338	1338	1338	1338	1338
5°	1607	1475	1321	1233	1233
10°	2561	1737	1247	1180	1180
15°	6356	2316	1135	1090	1135
20°	16755	3477	980	1050	1097
25°	33655	5154	847	968	1089
30°	49603	6887	684	962	1114
35°	62586	8084	589	937	1151
40°	66754	8187	515	973	1231
45°	69372	6822	496	1054	1333
50°	69251	4742	478	1126	1501
55°	58875	2103	497	1262	1644
60°	39558	439	482	1403	1886
65°	10481	208	519	1557	2127
70°	256	256	513	1667	2436
75°	254	254	508	1779	2711
80°	253	379	505	1894	3157
85°	252	503	1006	2013	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 71147 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.6
10°-20°	3.0	2.8
20°-30°	12.3	11.6
30°-40°	26.0	24.5
40°-50°	32.1	30.2
50°-60°	24.0	22.7
60°-70°	6.2	5.8
70°-80°	1.3	1.2
80°-90°	0.5	0.5
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°	15.9	15.0
0°-40°	41.9	39.5
0°-60°	98.0	92.4
0°-90°	106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	106.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	6	6	1
15°	28	10	5	5	5	10
25°	139	21	4	4	4	65
35°	234	30	2	4	4	142
45°	224	22	2	3	4	171
55°	154	6	1	3	4	133
65°	20	0	1	3	4	29
75°	0	0	1	2	3	0
85°	0	0	0	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
2.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.4	6.3	6.1	6.0
5°	7.3	7.2	7.2	7.2	7.1	7.0	7.0	6.7	6.4	6.0	5.8
7.5°	8.6	8.6	8.5	8.3	8.2	8.1	7.9	7.2	6.4	5.9	5.5
10°	11.5	11.3	11.0	10.9	10.4	9.8	9.4	7.8	6.3	5.6	5.3
12.5°	17.2	17.5	16.6	15.8	14.5	13.4	12.0	8.8	6.3	5.3	5.1
15°	28.0	28.6	27.0	25.2	22.2	19.4	16.8	10.2	6.1	5.0	4.7
17.5°	45.8	46.6	43.8	39.7	35.0	29.4	24.6	12.2	6.0	4.6	4.5
20°	71.8	71.7	66.3	61.1	52.2	44.0	34.9	14.9	5.7	4.2	4.2
22.5°	103.8	104.1	97.5	88.2	75.5	62.3	47.9	18.0	5.3	3.9	3.9
25°	139.1	136.1	128.2	116.9	100.7	82.4	63.5	21.3	5.0	3.5	3.7
27.5°	168.5	165.6	156.6	143.2	125.8	104.1	79.4	24.5	4.6	3.2	3.4
30°	195.9	192.2	181.4	166.2	145.5	122.0	94.2	27.2	4.0	2.7	3.2
32.5°	218.5	215.2	202.8	185.2	162.6	137.4	106.9	29.3	3.5	2.5	3.0
35°	233.8	230.3	219.0	199.6	175.0	148.6	117.1	30.2	3.1	2.2	2.9
37.5°	237.3	235.4	227.3	209.2	183.5	155.8	123.7	30.0	2.5	2.0	2.7
40°	233.2	233.7	229.8	214.8	188.0	158.9	126.4	28.6	2.1	1.8	2.6
42.5°	228.1	229.2	228.9	217.0	190.0	159.1	125.2	25.8	1.7	1.7	2.5
45°	223.7	224.8	226.4	216.1	188.7	156.8	121.7	22.0	1.2	1.6	2.5
47.5°	215.7	216.9	219.2	208.4	182.0	150.9	115.2	17.9	0.9	1.5	2.5
50°	203.0	203.6	203.0	190.8	169.2	141.5	104.7	13.9	0.6	1.4	2.5
52.5°	190.0	188.7	183.7	168.3	148.9	126.5	91.4	9.9	0.4	1.3	2.4
55°	154.0	152.0	148.3	138.8	127.8	108.1	73.9	5.5	0.4	1.3	2.3
57.5°	107.3	108.3	109.7	107.7	102.6	85.1	56.1	2.5	0.4	1.2	2.3
60°	90.2	89.3	89.4	88.2	79.8	62.1	38.6	1.0	0.4	1.1	2.2
62.5°	53.9	54.5	55.6	55.9	47.6	34.7	20.2	0.4	0.4	1.1	2.1
65°	20.2	21.2	18.6	16.1	12.8	9.4	4.7	0.4	0.5	1.0	1.9
67.5°	0.6	0.7	0.9	0.8	0.8	0.7	0.5	0.4	0.5	0.9	1.8
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.7
72.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.5
75°	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.6	1.2
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	1.1
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.9
82.5°	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.7
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	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):

	135°	157.5°	180°
0°	6.1	6.1	6.1
2.5°	5.8	5.8	5.8
5°	5.6	5.6	5.6
7.5°	5.4	5.4	5.4
10°	5.3	5.3	5.3
12.5°	5.1	5.1	5.2
15°	4.8	5.0	5.0
17.5°	4.6	4.8	4.9
20°	4.5	4.6	4.7
22.5°	4.2	4.5	4.6
25°	4.0	4.4	4.5
27.5°	3.9	4.3	4.5
30°	3.8	4.2	4.4
32.5°	3.6	4.1	4.3
35°	3.5	4.1	4.3
37.5°	3.5	4.0	4.3
40°	3.4	4.0	4.3
42.5°	3.4	4.0	4.3
45°	3.4	4.0	4.3
47.5°	3.3	4.0	4.4
50°	3.3	4.1	4.4
52.5°	3.3	4.1	4.4
55°	3.3	4.1	4.3
57.5°	3.2	4.0	4.3
60°	3.2	4.0	4.3
62.5°	3.1	3.9	4.2
65°	3.0	3.9	4.1
67.5°	2.8	3.8	3.9
70°	2.6	3.5	3.8
72.5°	2.4	3.3	3.6
75°	2.1	3.1	3.2
77.5°	1.8	2.7	2.9
80°	1.5	2.3	2.5
82.5°	1.1	1.8	1.8
85°	0.8	1.1	1.2
87.5°	0.4	0.5	0.6
90°	0.0	0.0	0.0

(END OF REPORT)