

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: P1336132

Luminaire Tested: P3A02R459827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336132
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: P3A02R459827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

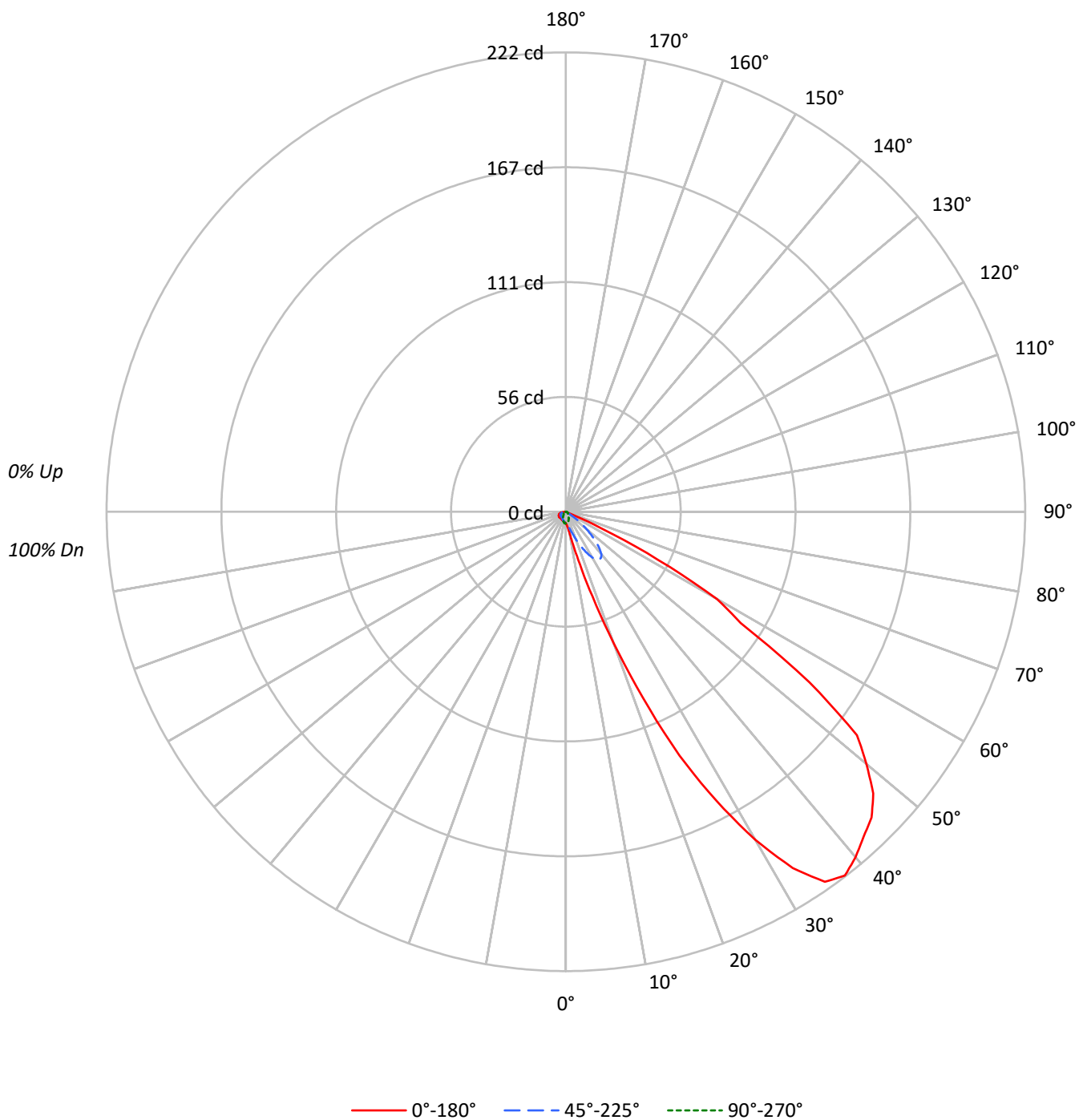
Lumens per Lamp: N/A
Luminaire Lumens: 99.0 lumens
Efficiency: N/A
Efficacy: 27.5 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.83 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1336132

CATALOG NUMBER: P3A02R459827DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1336132

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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	40	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	36	27	22	48	35	27	22	34	27	21		33	26	21		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1250	1250	1250	1250	1250
5°	1497	1387	1233	1145	1145
10°	2382	1625	1158	1091	1091
15°	5948	2179	1067	1022	1067
20°	15658	3244	910	980	1027
25°	31429	4815	798	919	1016
30°	46336	6431	633	886	1038
35°	58437	7549	535	883	1071
40°	62345	7643	487	916	1145
45°	64782	6357	465	992	1240
50°	64680	4435	443	1058	1399
55°	54975	1988	459	1185	1529
60°	36971	395	482	1316	1754
65°	9806	156	467	1453	1972
70°	256	192	449	1603	2244
75°	169	169	508	1694	2542
80°	253	253	505	1768	2904
85°	252	503	755	1761	2768

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 66441 cd/sqm

TEST NUMBER: P1336132

CATALOG NUMBER: P3A02R459827DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.6
10°-20°	2.8	2.8
20°-30°	11.5	11.6
30°-40°	24.3	24.5
40°-50°	30.0	30.3
50°-60°	22.4	22.7
60°-70°	5.8	5.8
70°-80°	1.2	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°	14.9	15.0
0°-40°	39.2	39.6
0°-60°	91.5	92.5
0°-90°	99.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	99.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	6	6	5	5	1
15°	26	10	5	4	5	10
25°	130	20	3	4	4	61
35°	218	28	2	3	4	133
45°	209	20	2	3	4	160
55°	144	5	1	3	4	124
65°	19	0	1	3	4	27
75°	0	0	1	2	3	0
85°	0	0	0	1	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1336132

CATALOG NUMBER: P3A02R459827DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
2.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.0	5.9	5.7	5.6
5°	6.8	6.7	6.7	6.7	6.6	6.5	6.5	6.3	6.0	5.6	5.4
7.5°	8.0	8.0	7.9	7.8	7.7	7.5	7.4	6.7	6.0	5.5	5.2
10°	10.7	10.6	10.3	10.1	9.7	9.2	8.8	7.3	5.9	5.2	5.0
12.5°	16.0	16.4	15.5	14.7	13.6	12.5	11.2	8.3	5.9	5.0	4.7
15°	26.2	26.7	25.2	23.6	20.8	18.2	15.7	9.6	5.7	4.7	4.4
17.5°	42.8	43.5	40.9	37.1	32.7	27.5	23.0	11.4	5.6	4.3	4.2
20°	67.1	67.0	61.9	57.1	48.8	41.1	32.6	13.9	5.3	3.9	3.9
22.5°	96.9	97.3	91.0	82.4	70.5	58.2	44.7	16.9	5.0	3.6	3.7
25°	129.9	127.1	119.8	109.2	94.1	77.0	59.3	19.9	4.7	3.3	3.4
27.5°	157.4	154.7	146.3	133.7	117.5	97.2	74.1	22.9	4.3	2.9	3.2
30°	183.0	179.6	169.4	155.3	135.9	113.9	88.0	25.4	3.8	2.5	2.9
32.5°	204.1	201.0	189.5	173.0	151.9	128.3	99.8	27.4	3.3	2.3	2.8
35°	218.3	215.1	204.5	186.4	163.4	138.8	109.4	28.2	2.9	2.0	2.7
37.5°	221.6	219.9	212.3	195.3	171.4	145.5	115.5	28.0	2.4	1.9	2.5
40°	217.8	218.2	214.6	200.6	175.6	148.4	118.0	26.7	2.0	1.7	2.5
42.5°	213.0	214.1	213.8	202.7	177.4	148.6	117.0	24.0	1.6	1.6	2.4
45°	208.9	210.0	211.5	201.8	176.2	146.4	113.6	20.5	1.1	1.5	2.4
47.5°	201.5	202.6	204.7	194.6	170.0	140.9	107.6	16.7	0.8	1.4	2.3
50°	189.6	190.2	189.6	178.2	158.0	132.1	97.8	13.0	0.6	1.3	2.3
52.5°	177.4	176.3	171.5	157.1	139.1	118.1	85.4	9.2	0.4	1.2	2.2
55°	143.8	142.0	138.5	129.7	119.3	100.9	69.0	5.2	0.4	1.2	2.1
57.5°	100.2	101.2	102.4	100.6	95.9	79.5	52.4	2.3	0.4	1.1	2.1
60°	84.3	83.4	83.5	82.4	74.5	58.0	36.1	0.9	0.4	1.1	2.0
62.5°	50.3	50.9	51.9	52.2	44.4	32.4	18.9	0.4	0.4	1.0	2.0
65°	18.9	19.8	17.3	15.1	11.9	8.8	4.4	0.3	0.5	0.9	1.8
67.5°	0.6	0.7	0.8	0.7	0.7	0.7	0.5	0.3	0.5	0.8	1.7
70°	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.7	1.6
72.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.7	1.4
75°	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	1.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	1.0
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.8
82.5°	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.7
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1336132

CATALOG NUMBER: P3A02R459827DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	5.7	5.7	5.7
2.5°	5.4	5.4	5.4
5°	5.2	5.2	5.2
7.5°	5.1	5.1	5.1
10°	4.9	4.9	4.9
12.5°	4.7	4.7	4.8
15°	4.5	4.7	4.7
17.5°	4.3	4.5	4.6
20°	4.2	4.3	4.4
22.5°	3.9	4.2	4.3
25°	3.8	4.1	4.2
27.5°	3.6	4.0	4.2
30°	3.5	3.9	4.1
32.5°	3.4	3.8	4.0
35°	3.3	3.8	4.0
37.5°	3.3	3.8	4.0
40°	3.2	3.8	4.0
42.5°	3.2	3.8	4.0
45°	3.2	3.8	4.0
47.5°	3.1	3.8	4.1
50°	3.1	3.8	4.1
52.5°	3.1	3.8	4.1
55°	3.1	3.8	4.0
57.5°	3.0	3.8	4.0
60°	3.0	3.8	4.0
62.5°	2.9	3.7	3.9
65°	2.8	3.6	3.8
67.5°	2.6	3.5	3.7
70°	2.5	3.3	3.5
72.5°	2.2	3.1	3.4
75°	2.0	2.9	3.0
77.5°	1.7	2.5	2.7
80°	1.4	2.1	2.3
82.5°	1.1	1.6	1.7
85°	0.7	1.1	1.1
87.5°	0.3	0.5	0.6
90°	0.0	0.0	0.0

(END OF REPORT)