

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: P1336052

Luminaire Tested: P3A02R459050DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336052
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: P3A02R459050DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

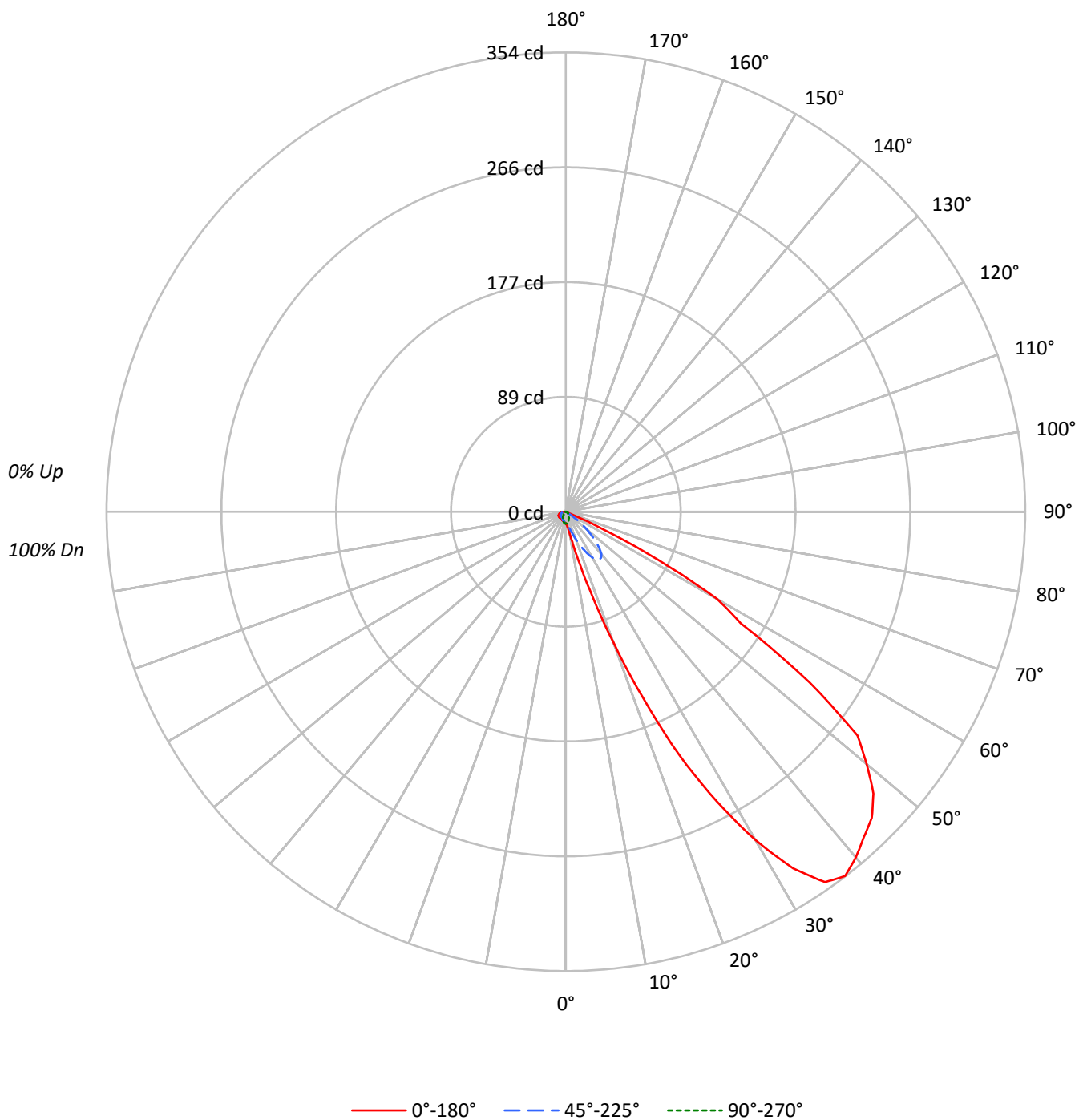
Lumens per Lamp: N/A
Luminaire Lumens: 158.0 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1336052

CATALOG NUMBER: P3A02R459050DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1336052

CATALOG NUMBER: P3A02R459050DE010 E3A451WMH

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	35	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1995	1995	1995	1995	1995
5°	2377	2223	1981	1849	1849
10°	3808	2583	1870	1737	1737
15°	9489	3473	1680	1635	1680
20°	24992	5180	1470	1563	1633
25°	50156	7670	1258	1452	1621
30°	73935	10280	1013	1418	1646
35°	93264	12046	883	1392	1713
40°	99529	12194	773	1460	1832
45°	103391	10172	713	1582	1985
50°	103229	7096	716	1706	2217
55°	87739	3135	765	1912	2447
60°	58987	614	746	2105	2807
65°	15670	259	726	2283	3165
70°	449	321	769	2500	3590
75°	339	339	763	2626	4067
80°	379	505	884	2778	4672
85°	252	755	1258	3019	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 106072 cd/sqm

TEST NUMBER: P1336052

CATALOG NUMBER: P3A02R459050DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.6
10°-20°	4.5	2.8
20°-30°	18.4	11.6
30°-40°	38.7	24.5
40°-50°	47.8	30.2
50°-60°	35.8	22.7
60°-70°	9.2	5.8
70°-80°	1.9	1.2
80°-90°	0.8	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°	23.7	15.0
0°-40°	62.5	39.5
0°-60°	146.1	92.5
0°-90°	158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	158.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	11	10	9	8	8	1
15°	42	15	7	7	7	15
25°	207	32	5	6	7	97
35°	348	45	3	5	6	212
45°	333	33	2	5	6	255
55°	230	8	2	5	6	198
65°	30	0	1	4	6	44
75°	0	0	1	3	5	0
85°	0	0	0	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1336052

CATALOG NUMBER: P3A02R459050DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
2.5°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.5	9.4	9.1	8.9
5°	10.8	10.7	10.7	10.7	10.6	10.4	10.4	10.1	9.5	9.0	8.6
7.5°	12.8	12.8	12.7	12.4	12.3	12.0	11.7	10.7	9.5	8.7	8.2
10°	17.1	16.8	16.4	16.2	15.5	14.6	14.0	11.6	9.4	8.4	8.0
12.5°	25.6	26.1	24.8	23.5	21.7	20.0	17.9	13.2	9.4	8.0	7.6
15°	41.8	42.7	40.2	37.6	33.2	29.0	25.1	15.3	9.1	7.4	7.0
17.5°	68.3	69.5	65.3	59.1	52.2	43.9	36.7	18.1	8.9	6.9	6.7
20°	107.1	106.9	98.8	91.1	77.8	65.5	52.1	22.2	8.5	6.3	6.3
22.5°	154.7	155.2	145.3	131.5	112.5	92.8	71.4	26.9	8.0	5.7	5.9
25°	207.3	202.9	191.1	174.3	150.1	122.8	94.6	31.7	7.4	5.2	5.5
27.5°	251.2	246.9	233.4	213.5	187.5	155.1	118.3	36.6	6.8	4.7	5.1
30°	292.0	286.6	270.4	247.8	216.8	181.9	140.5	40.6	6.0	4.0	4.7
32.5°	325.7	320.8	302.4	276.1	242.4	204.8	159.3	43.7	5.2	3.7	4.4
35°	348.4	343.4	326.4	297.5	260.8	221.5	174.5	45.0	4.6	3.3	4.3
37.5°	353.7	350.9	338.8	311.8	273.5	232.3	184.3	44.6	3.8	3.0	4.0
40°	347.7	348.3	342.6	320.1	280.3	236.8	188.4	42.6	3.1	2.7	3.9
42.5°	340.0	341.7	341.3	323.5	283.2	237.1	186.7	38.4	2.5	2.5	3.8
45°	333.4	335.1	337.5	322.1	281.2	233.7	181.3	32.8	1.8	2.3	3.8
47.5°	321.5	323.4	326.8	310.6	271.3	224.9	171.7	26.6	1.3	2.2	3.7
50°	302.6	303.5	302.6	284.5	252.2	210.8	156.0	20.8	0.9	2.1	3.7
52.5°	283.2	281.3	273.8	250.8	221.9	188.5	136.3	14.8	0.7	2.0	3.5
55°	229.5	226.6	221.0	206.9	190.5	161.1	110.2	8.2	0.7	2.0	3.4
57.5°	159.9	161.5	163.5	160.6	153.0	126.9	83.7	3.7	0.7	1.8	3.4
60°	134.5	133.2	133.3	131.5	118.9	92.6	57.6	1.4	0.7	1.7	3.3
62.5°	80.3	81.2	82.9	83.3	70.9	51.7	30.2	0.7	0.7	1.6	3.1
65°	30.2	31.6	27.7	24.0	19.1	14.0	7.0	0.5	0.8	1.4	2.9
67.5°	0.9	1.0	1.3	1.2	1.2	1.0	0.8	0.5	0.8	1.3	2.7
70°	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.7	1.2	2.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.0	2.2
75°	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.9	1.8
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.8	1.6
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	1.3
82.5°	0.3	0.3	0.3	0.1	0.3	0.3	0.3	0.3	0.5	0.5	1.0
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.4	0.4	0.4
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: P1336052

CATALOG NUMBER: P3A02R459050DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	9.1	9.1	9.1
2.5°	8.6	8.6	8.6
5°	8.4	8.4	8.4
7.5°	8.1	8.1	8.1
10°	7.8	7.8	7.8
12.5°	7.6	7.6	7.7
15°	7.2	7.4	7.4
17.5°	6.9	7.2	7.3
20°	6.7	6.9	7.0
22.5°	6.3	6.7	6.9
25°	6.0	6.5	6.7
27.5°	5.7	6.4	6.7
30°	5.6	6.3	6.5
32.5°	5.4	6.1	6.4
35°	5.2	6.1	6.4
37.5°	5.2	6.0	6.4
40°	5.1	6.0	6.4
42.5°	5.1	6.0	6.4
45°	5.1	6.0	6.4
47.5°	5.0	6.0	6.5
50°	5.0	6.1	6.5
52.5°	5.0	6.1	6.5
55°	5.0	6.1	6.4
57.5°	4.8	6.0	6.4
60°	4.8	6.0	6.4
62.5°	4.6	5.9	6.3
65°	4.4	5.7	6.1
67.5°	4.2	5.6	5.9
70°	3.9	5.2	5.6
72.5°	3.5	5.0	5.4
75°	3.1	4.6	4.8
77.5°	2.7	4.0	4.3
80°	2.2	3.4	3.7
82.5°	1.7	2.6	2.7
85°	1.2	1.7	1.8
87.5°	0.5	0.8	0.9
90°	0.0	0.0	0.0

(END OF REPORT)