

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: P1336322

Luminaire Tested: P3A05R159030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R15 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

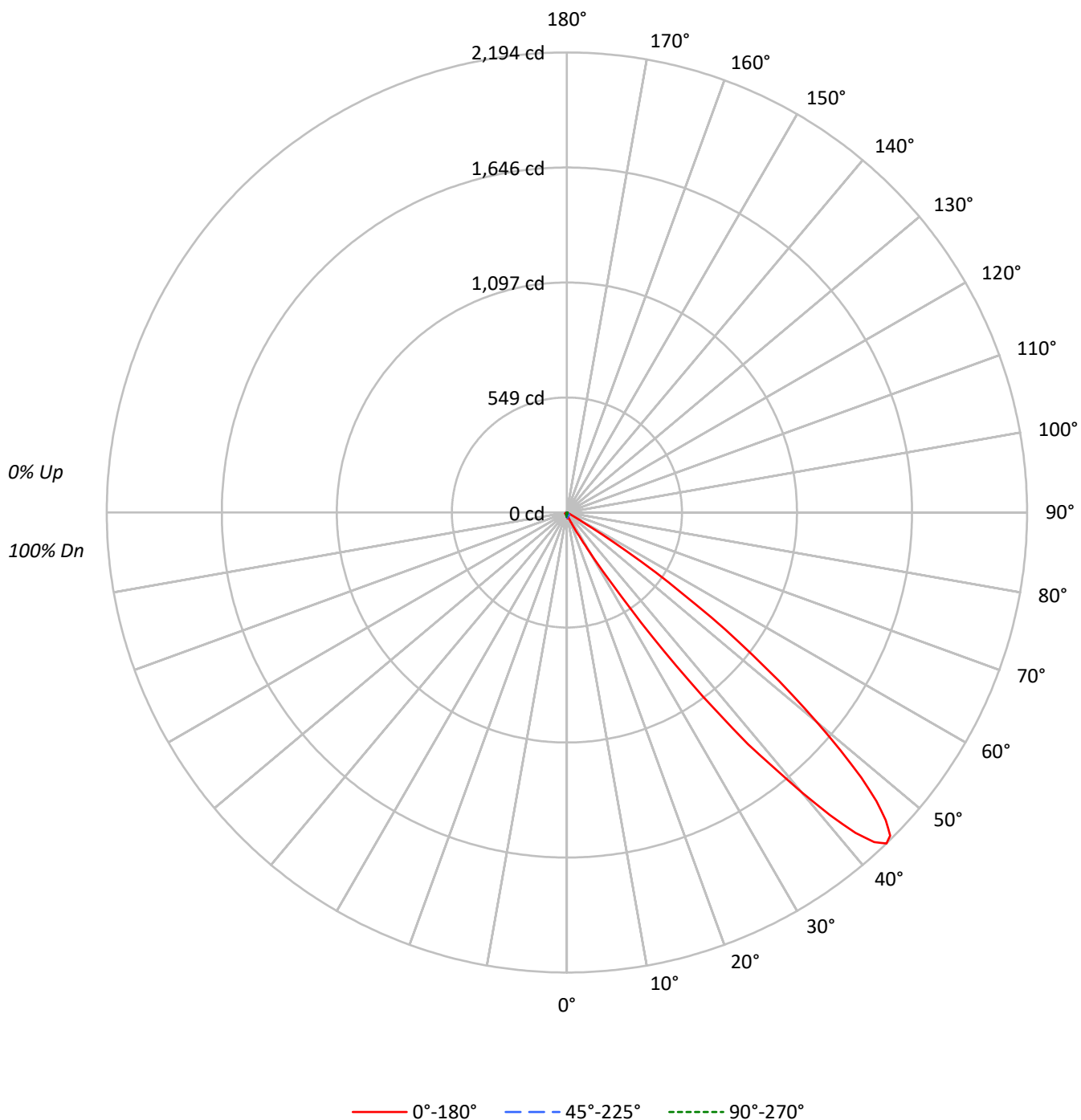
Lumens per Lamp: N/A
Luminaire Lumens: 245.0 lumens
Efficiency: N/A
Efficacy: 22.1 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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	100	97	94		96	93	91		92
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4758	4758	4758	4758	4758
5°	5921	5261	4292	3764	3720
10°	5812	4520	3318	2939	2984
15°	4835	3224	2384	2429	2611
20°	8377	2567	1820	2100	2404
25°	18678	3073	1476	1960	2250
30°	55857	3773	1291	1924	2355
35°	215010	4256	1178	1954	2490
40°	499078	3693	1116	2032	2662
45°	675977	2791	992	2202	2884
50°	530029	1672	989	2320	3173
55°	254385	765	918	2523	3441
60°	23244	88	877	2675	3859
65°	2542	0	778	2802	4203
70°	641	0	962	2949	4552
75°	593	169	1271	3304	5168
80°	631	631	1515	3410	5556
85°	503	503	2516	3019	6038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 675977 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.8
10°-20°	3.9	1.6
20°-30°	9.3	3.8
30°-40°	50.7	20.7
40°-50°	122.7	50.1
50°-60°	49.0	20.0
60°-70°	4.2	1.7
70°-80°	2.4	1.0
80°-90°	1.0	0.4
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°	15.0	6.1
0°-40°	65.7	26.8
0°-60°	237.3	96.9
0°-90°	245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	245.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	27	24	20	17	17	3
15°	21	14	10	11	12	7
25°	77	13	6	8	9	47
35°	803	16	4	7	9	568
45°	2180	9	3	7	9	1538
55°	665	2	2	7	9	620
65°	5	0	2	5	8	13
75°	1	0	2	4	6	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
2.5°	24.4	24.4	24.7	24.4	24.4	24.4	24.4	24.2	24.2	24.2	23.5
5°	26.9	26.9	26.9	26.9	26.6	26.6	26.6	26.4	26.4	26.1	23.9
7.5°	27.8	27.8	27.6	27.6	27.4	27.4	27.1	26.9	26.6	26.4	23.0
10°	26.1	26.1	26.1	25.9	25.9	25.7	25.4	25.2	24.9	24.4	20.3
12.5°	23.2	23.2	23.5	23.2	23.0	22.7	22.2	22.0	21.7	21.3	16.9
15°	21.3	21.3	21.3	21.0	20.8	20.3	20.0	19.5	19.3	18.6	14.2
17.5°	27.1	27.1	26.9	26.4	25.4	24.7	23.5	22.5	21.3	19.8	12.2
20°	35.9	35.9	35.4	34.9	33.7	32.5	30.5	28.8	26.9	25.2	11.0
22.5°	52.0	52.8	51.3	49.6	47.9	44.9	42.3	39.6	36.2	33.2	11.2
25°	77.2	77.9	77.2	73.3	70.1	66.2	61.1	55.7	49.8	44.5	12.7
27.5°	125.1	125.6	124.3	114.8	109.7	99.4	90.4	81.6	71.8	62.0	13.9
30°	220.6	220.8	213.0	194.0	177.1	154.6	135.6	117.3	101.9	86.2	14.9
31°	290.5	283.6	267.0	244.0	217.2	186.9	160.7	137.0	114.1	97.2	15.1
32°	368.9	367.9	340.3	300.5	264.6	226.7	187.4	157.1	130.7	107.7	15.4
33°	472.7	473.2	429.7	382.8	323.9	273.1	221.6	180.0	148.3	120.2	15.9
34°	634.9	596.8	545.7	482.2	402.1	325.6	258.7	206.7	164.2	132.2	15.9
35°	803.2	764.9	708.7	612.4	502.5	395.5	302.9	235.2	183.2	145.1	15.9
36°	991.8	959.3	874.3	751.4	611.2	461.5	349.8	268.2	202.0	156.8	15.6
37°	1195.5	1147.9	1053.6	919.5	731.9	554.3	407.0	301.0	220.8	169.5	15.1
38°	1402.5	1359.5	1240.5	1078.0	876.0	652.2	464.1	332.5	238.2	179.1	14.4
39°	1559.3	1535.8	1417.8	1236.3	991.1	745.1	523.0	366.2	256.5	188.6	13.7
40°	1743.5	1705.6	1593.7	1369.2	1127.1	839.6	580.7	396.0	271.6	196.2	12.9
41°	1911.6	1863.7	1722.5	1505.5	1236.1	924.6	635.4	426.8	283.9	200.6	12.5
42°	2055.7	2000.0	1852.4	1622.3	1327.2	992.5	679.1	448.8	295.3	204.2	11.7
43°	2149.0	2100.9	1955.8	1710.0	1405.1	1054.8	719.9	471.7	302.4	206.7	10.7
44°	2194.4	2145.8	2005.4	1765.0	1453.0	1092.2	746.3	487.6	310.2	209.8	10.0
45°	2179.8	2130.4	1994.6	1766.0	1467.9	1105.6	757.5	494.7	314.4	212.8	9.0
46°	2112.6	2077.9	1941.1	1720.0	1439.6	1091.2	751.2	489.3	312.9	212.8	8.1
47°	2018.3	1978.7	1848.5	1641.1	1370.9	1054.1	725.5	472.9	303.9	207.9	7.1
48°	1889.8	1856.1	1719.3	1515.8	1265.7	973.2	667.6	446.3	289.7	198.4	6.1
49°	1728.6	1681.7	1554.4	1355.6	1128.4	858.4	591.7	401.4	267.0	184.9	5.4
50°	1553.7	1495.8	1397.6	1195.1	986.4	736.0	491.8	339.3	235.0	167.3	4.9
51°	1382.4	1323.6	1230.0	1057.8	835.0	610.7	396.7	270.9	193.5	143.2	4.2
52°	1204.8	1155.5	1050.7	915.3	714.8	494.9	330.5	229.1	160.7	120.2	3.4
53°	1028.0	994.3	894.6	757.5	574.3	404.3	269.9	196.2	140.2	102.8	2.7
54°	850.9	814.0	738.2	616.1	462.9	319.0	228.9	164.2	121.7	89.7	2.4
55°	665.4	646.4	576.5	469.8	350.8	254.5	185.7	141.2	101.9	75.0	2.0
56°	512.5	491.0	427.3	340.8	260.7	199.3	150.2	115.3	86.2	62.8	1.5
57°	335.7	313.7	271.4	237.9	189.8	145.4	114.8	90.9	70.1	52.0	1.2
58°	198.4	178.3	171.7	146.6	126.5	98.7	84.8	67.7	51.8	41.0	0.7
59°	91.1	92.6	82.3	77.2	70.1	62.8	51.5	45.2	35.4	29.6	0.5
60°	53.0	50.1	48.9	43.7	38.8	34.4	31.0	27.4	22.2	19.1	0.2
62.5°	18.1	17.3	17.8	16.1	15.1	14.7	13.4	11.5	9.5	7.8	0.0
65°	4.9	4.9	4.6	4.4	4.2	3.9	3.7	3.2	2.9	2.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.7	1.7	1.5	1.5	1.2	1.2	1.0	1.0	0.7	0.7	0.0
70°	1.0	1.0	1.0	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.0
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.2
75°	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	21.7	21.7	21.7	21.7	21.7	21.7
2.5°	22.5	21.5	20.3	19.5	19.3	19.1
5°	21.5	19.5	18.1	17.1	16.9	16.9
7.5°	19.3	17.1	15.6	15.1	14.9	14.9
10°	16.9	14.9	13.7	13.2	13.4	13.4
12.5°	14.2	12.5	12.0	12.0	12.2	12.5
15°	11.5	10.5	10.5	10.7	11.2	11.5
17.5°	9.5	9.0	9.3	9.8	10.3	10.7
20°	7.8	7.8	8.3	9.0	9.8	10.3
22.5°	6.6	6.8	7.6	8.3	9.3	9.8
25°	5.6	6.1	6.8	8.1	9.0	9.3
27.5°	4.9	5.6	6.6	7.8	8.8	9.3
30°	4.2	5.1	6.4	7.6	8.8	9.3
31°	3.9	4.9	6.1	7.6	8.8	9.3
32°	3.7	4.9	6.1	7.6	8.8	9.3
33°	3.4	4.6	6.1	7.3	8.8	9.3
34°	3.2	4.6	6.1	7.6	8.8	9.3
35°	2.9	4.4	5.9	7.3	8.6	9.3
36°	2.7	4.4	5.9	7.3	8.8	9.3
37°	2.4	4.4	5.9	7.3	8.6	9.3
38°	2.4	4.2	5.6	7.3	8.6	9.3
39°	2.2	3.9	5.6	7.3	8.6	9.3
40°	2.0	3.9	5.4	7.1	8.6	9.3
41°	1.7	3.7	5.4	7.1	8.6	9.3
42°	1.5	3.7	5.4	7.1	8.6	9.3
43°	1.2	3.4	5.1	7.1	8.6	9.3
44°	1.2	3.4	5.1	7.1	8.6	9.3
45°	1.0	3.2	4.9	7.1	8.6	9.3
46°	1.0	3.2	4.9	6.8	8.6	9.3
47°	0.7	3.2	4.9	6.8	8.6	9.3
48°	0.7	2.9	4.9	6.8	8.6	9.3
49°	0.5	2.9	4.9	6.8	8.6	9.3
50°	0.5	2.9	4.6	6.8	8.6	9.3
51°	0.5	2.9	4.6	6.8	8.6	9.3
52°	0.5	2.7	4.6	6.8	8.6	9.3
53°	0.5	2.7	4.6	6.8	8.6	9.3
54°	0.5	2.7	4.4	6.8	8.6	9.3
55°	0.5	2.4	4.4	6.6	8.6	9.0
56°	0.5	2.4	4.4	6.6	8.6	9.0
57°	0.5	2.4	4.2	6.6	8.6	9.0
58°	0.5	2.2	4.2	6.4	8.3	9.0
59°	0.5	2.2	3.9	6.4	8.3	8.8
60°	0.5	2.0	3.9	6.1	8.1	8.8
62.5°	0.5	1.7	3.4	5.9	7.8	8.3
65°	0.5	1.5	3.2	5.4	7.6	8.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.5	2.9	5.1	7.1	7.8
70°	0.5	1.5	2.7	4.6	6.8	7.1
72.5°	0.7	1.5	2.4	4.4	6.4	6.6
75°	1.0	1.5	2.2	3.9	5.9	6.1
77.5°	1.0	1.5	2.0	3.4	5.1	5.4
80°	1.0	1.2	1.7	2.7	4.2	4.4
82.5°	1.0	1.2	1.2	2.2	3.2	3.4
85°	0.7	1.0	1.0	1.2	2.2	2.4
87.5°	0.7	1.0	0.5	0.7	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)