

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: P1336350

Luminaire Tested: P3A05R159035DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336350
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: P3A05R159035DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

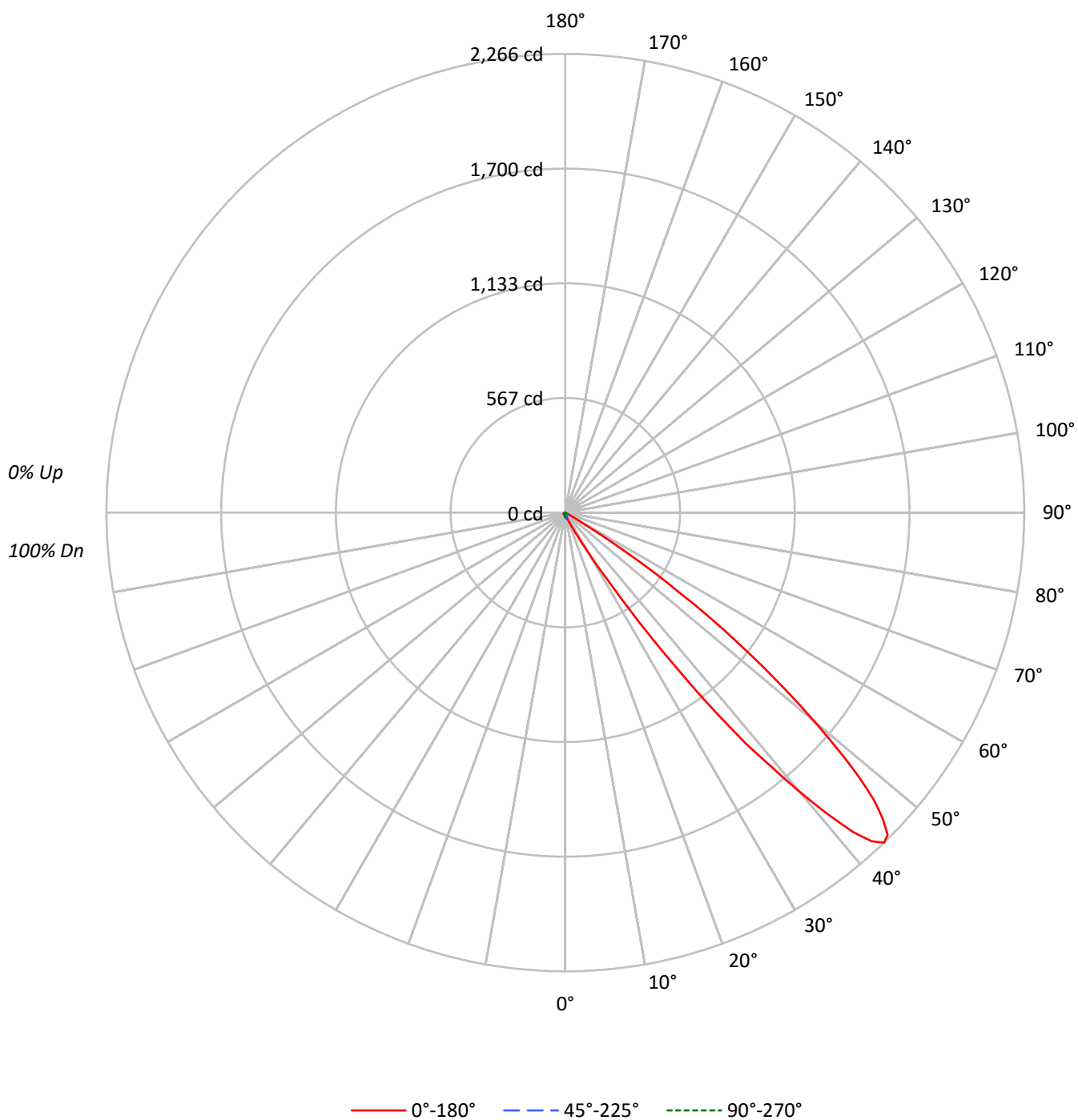
Lumens per Lamp: N/A
Luminaire Lumens: 253.0 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	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		54
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°	4934	4934	4934	4934	4934
5°	6097	5437	4446	3896	3830
10°	6012	4654	3429	3028	3095
15°	4972	3314	2452	2520	2701
20°	8657	2660	1890	2170	2474
25°	19283	3170	1524	2008	2323
30°	57680	3899	1342	1975	2431
35°	222024	4390	1205	2034	2570
40°	515366	3836	1145	2090	2748
45°	698057	2884	1023	2264	2977
50°	547325	1706	1023	2422	3275
55°	262719	765	956	2600	3555
60°	23989	132	877	2763	3991
65°	2594	0	778	2854	4307
70°	641	0	962	3077	4680
75°	678	254	1271	3389	5338
80°	631	631	1642	3536	5683
85°	755	755	2516	3271	6290

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 698057 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.8
10°-20°	4.0	1.6
20°-30°	9.6	3.8
30°-40°	52.3	20.7
40°-50°	126.7	50.1
50°-60°	50.6	20.0
60°-70°	4.4	1.7
70°-80°	2.5	1.0
80°-90°	1.1	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°	15.5	6.1
0°-40°	67.8	26.8
0°-60°	245.1	96.9
0°-90°	253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	253.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	28	25	20	18	17	3
15°	22	15	11	11	12	8
25°	80	13	6	8	10	48
35°	829	16	4	8	10	586
45°	2251	9	3	7	10	1588
55°	687	2	2	7	9	640
65°	5	0	2	6	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°	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
2.5°	25.2	25.2	25.5	25.2	25.2	25.2	25.2	25.0	25.0	25.0	24.2
5°	27.7	27.7	27.7	27.7	27.5	27.5	27.5	27.2	27.2	27.0	24.7
7.5°	28.8	28.8	28.5	28.5	28.3	28.3	28.0	27.7	27.5	27.2	23.7
10°	27.0	27.0	27.0	26.7	26.7	26.5	26.2	26.0	25.7	25.2	20.9
12.5°	24.0	24.0	24.2	24.0	23.7	23.5	23.0	22.7	22.5	21.9	17.4
15°	21.9	21.9	21.9	21.7	21.4	20.9	20.7	20.2	19.9	19.2	14.6
17.5°	28.0	28.0	27.7	27.2	26.2	25.5	24.2	23.2	21.9	20.4	12.6
20°	37.1	37.1	36.6	36.1	34.8	33.6	31.5	29.8	27.7	26.0	11.4
22.5°	53.7	54.5	53.0	51.2	49.4	46.4	43.6	40.9	37.3	34.3	11.6
25°	79.7	80.5	79.7	75.7	72.4	68.4	63.1	57.5	51.5	45.9	13.1
27.5°	129.2	129.7	128.4	118.6	113.3	102.7	93.3	84.3	74.2	64.1	14.4
30°	227.8	228.0	220.0	200.3	182.9	159.7	140.0	121.1	105.2	89.0	15.4
31°	299.9	292.9	275.7	252.0	224.3	193.0	166.0	141.5	117.8	100.4	15.6
32°	380.9	379.9	351.4	310.3	273.2	234.1	193.5	162.2	135.0	111.2	15.9
33°	488.1	488.6	443.7	395.3	334.5	282.0	228.8	185.9	153.1	124.1	16.4
34°	655.6	616.3	563.6	498.0	415.2	336.3	267.1	213.4	169.5	136.5	16.4
35°	829.4	789.8	731.8	632.4	518.9	408.4	312.8	242.9	189.2	149.8	16.4
36°	1024.2	990.6	902.9	776.0	631.2	476.5	361.2	277.0	208.6	162.0	16.1
37°	1234.6	1185.4	1088.0	949.5	755.8	572.4	420.3	310.8	228.0	175.1	15.6
38°	1448.3	1403.9	1281.0	1113.2	904.6	673.5	479.3	343.3	246.0	184.9	14.9
39°	1610.2	1586.0	1464.1	1276.7	1023.4	769.4	540.1	378.1	264.9	194.7	14.1
40°	1800.4	1761.3	1645.8	1413.9	1163.9	867.0	599.6	408.9	280.5	202.6	13.4
41°	1974.0	1924.5	1778.7	1554.7	1276.5	954.8	656.1	440.7	293.1	207.1	12.9
42°	2122.8	2065.3	1912.9	1675.3	1370.6	1025.0	701.3	463.4	305.0	210.9	12.1
43°	2219.2	2169.5	2019.6	1765.9	1451.0	1089.3	743.4	487.1	312.3	213.4	11.1
44°	2266.1	2215.9	2070.8	1822.6	1500.5	1127.9	770.7	503.5	320.4	216.7	10.3
45°	2251.0	2200.0	2059.7	1823.6	1515.9	1141.8	782.3	510.8	324.7	219.7	9.3
46°	2181.6	2145.8	2004.5	1776.2	1486.6	1126.9	775.7	505.3	323.2	219.7	8.3
47°	2084.2	2043.3	1908.9	1694.7	1415.7	1088.5	749.2	488.4	313.8	214.7	7.3
48°	1951.5	1916.7	1775.4	1565.3	1307.0	1005.0	689.4	460.9	299.2	204.8	6.3
49°	1785.0	1736.6	1605.2	1399.8	1165.2	886.5	611.0	414.5	275.7	191.0	5.5
50°	1604.4	1544.6	1443.2	1234.1	1018.6	760.1	507.8	350.4	242.7	172.8	5.0
51°	1427.6	1366.8	1270.2	1092.3	862.2	630.7	409.7	279.8	199.8	147.8	4.3
52°	1244.2	1193.2	1085.0	945.2	738.1	511.1	341.3	236.6	166.0	124.1	3.5
53°	1061.5	1026.7	923.8	782.3	593.1	417.5	278.8	202.6	144.8	106.2	2.8
54°	878.6	840.5	762.3	636.2	478.0	329.5	236.4	169.5	125.6	92.6	2.5
55°	687.2	667.5	595.3	485.1	362.3	262.9	191.7	145.8	105.2	77.4	2.0
56°	529.3	507.1	441.2	351.9	269.2	205.8	155.1	119.1	89.0	64.8	1.5
57°	346.6	323.9	280.3	245.7	196.0	150.1	118.6	93.8	72.4	53.7	1.3
58°	204.8	184.2	177.3	151.4	130.7	101.9	87.5	69.9	53.5	42.4	0.8
59°	94.1	95.6	85.0	79.7	72.4	64.8	53.2	46.7	36.6	30.5	0.5
60°	54.7	51.7	50.5	45.2	40.1	35.6	32.0	28.3	23.0	19.7	0.3
62.5°	18.7	17.9	18.4	16.6	15.6	15.1	13.9	11.9	9.8	8.1	0.0
65°	5.0	5.0	4.8	4.5	4.3	4.0	3.8	3.3	3.0	2.5	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°	1.8	1.8	1.5	1.5	1.3	1.3	1.0	1.0	0.8	0.8	0.0
70°	1.0	1.0	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.3	0.0
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.3	0.3
75°	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3
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	0.3	0.5
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	22.5	22.5	22.5	22.5	22.5	22.5
2.5°	23.2	22.2	20.9	20.2	19.9	19.7
5°	22.2	20.2	18.7	17.7	17.4	17.4
7.5°	19.9	17.7	16.1	15.6	15.4	15.4
10°	17.4	15.4	14.1	13.6	13.9	13.9
12.5°	14.6	12.9	12.4	12.4	12.6	12.9
15°	11.9	10.8	10.8	11.1	11.6	11.9
17.5°	9.8	9.3	9.6	10.1	10.6	11.1
20°	8.1	8.1	8.6	9.3	10.1	10.6
22.5°	6.8	7.1	7.8	8.6	9.6	10.1
25°	5.8	6.3	7.1	8.3	9.3	9.6
27.5°	5.0	5.8	6.8	8.1	9.1	9.6
30°	4.3	5.3	6.6	7.8	9.1	9.6
31°	4.0	5.0	6.3	7.8	9.1	9.6
32°	3.8	5.0	6.3	7.8	9.1	9.6
33°	3.5	4.8	6.3	7.6	9.1	9.6
34°	3.3	4.8	6.3	7.8	9.1	9.6
35°	3.0	4.5	6.1	7.6	8.8	9.6
36°	2.8	4.5	6.1	7.6	9.1	9.6
37°	2.5	4.5	6.1	7.6	8.8	9.6
38°	2.5	4.3	5.8	7.6	8.8	9.6
39°	2.3	4.0	5.8	7.6	8.8	9.6
40°	2.0	4.0	5.5	7.3	8.8	9.6
41°	1.8	3.8	5.5	7.3	8.8	9.6
42°	1.5	3.8	5.5	7.3	8.8	9.6
43°	1.3	3.5	5.3	7.3	8.8	9.6
44°	1.3	3.5	5.3	7.3	8.8	9.6
45°	1.0	3.3	5.0	7.3	8.8	9.6
46°	1.0	3.3	5.0	7.1	8.8	9.6
47°	0.8	3.3	5.0	7.1	8.8	9.6
48°	0.8	3.0	5.0	7.1	8.8	9.6
49°	0.5	3.0	5.0	7.1	8.8	9.6
50°	0.5	3.0	4.8	7.1	8.8	9.6
51°	0.5	3.0	4.8	7.1	8.8	9.6
52°	0.5	2.8	4.8	7.1	8.8	9.6
53°	0.5	2.8	4.8	7.1	8.8	9.6
54°	0.5	2.8	4.5	7.1	8.8	9.6
55°	0.5	2.5	4.5	6.8	8.8	9.3
56°	0.5	2.5	4.5	6.8	8.8	9.3
57°	0.5	2.5	4.3	6.8	8.8	9.3
58°	0.5	2.3	4.3	6.6	8.6	9.3
59°	0.5	2.3	4.0	6.6	8.6	9.1
60°	0.5	2.0	4.0	6.3	8.3	9.1
62.5°	0.5	1.8	3.5	6.1	8.1	8.6
65°	0.5	1.5	3.3	5.5	7.8	8.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.5	3.0	5.3	7.3	8.1
70°	0.5	1.5	2.8	4.8	7.1	7.3
72.5°	0.8	1.5	2.5	4.5	6.6	6.8
75°	1.0	1.5	2.3	4.0	6.1	6.3
77.5°	1.0	1.5	2.0	3.5	5.3	5.5
80°	1.0	1.3	1.8	2.8	4.3	4.5
82.5°	1.0	1.3	1.3	2.3	3.3	3.5
85°	0.8	1.0	1.0	1.3	2.3	2.5
87.5°	0.8	1.0	0.5	0.8	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)