

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: P1336364

Luminaire Tested: P3A05R159040DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336364
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: P3A05R159040DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

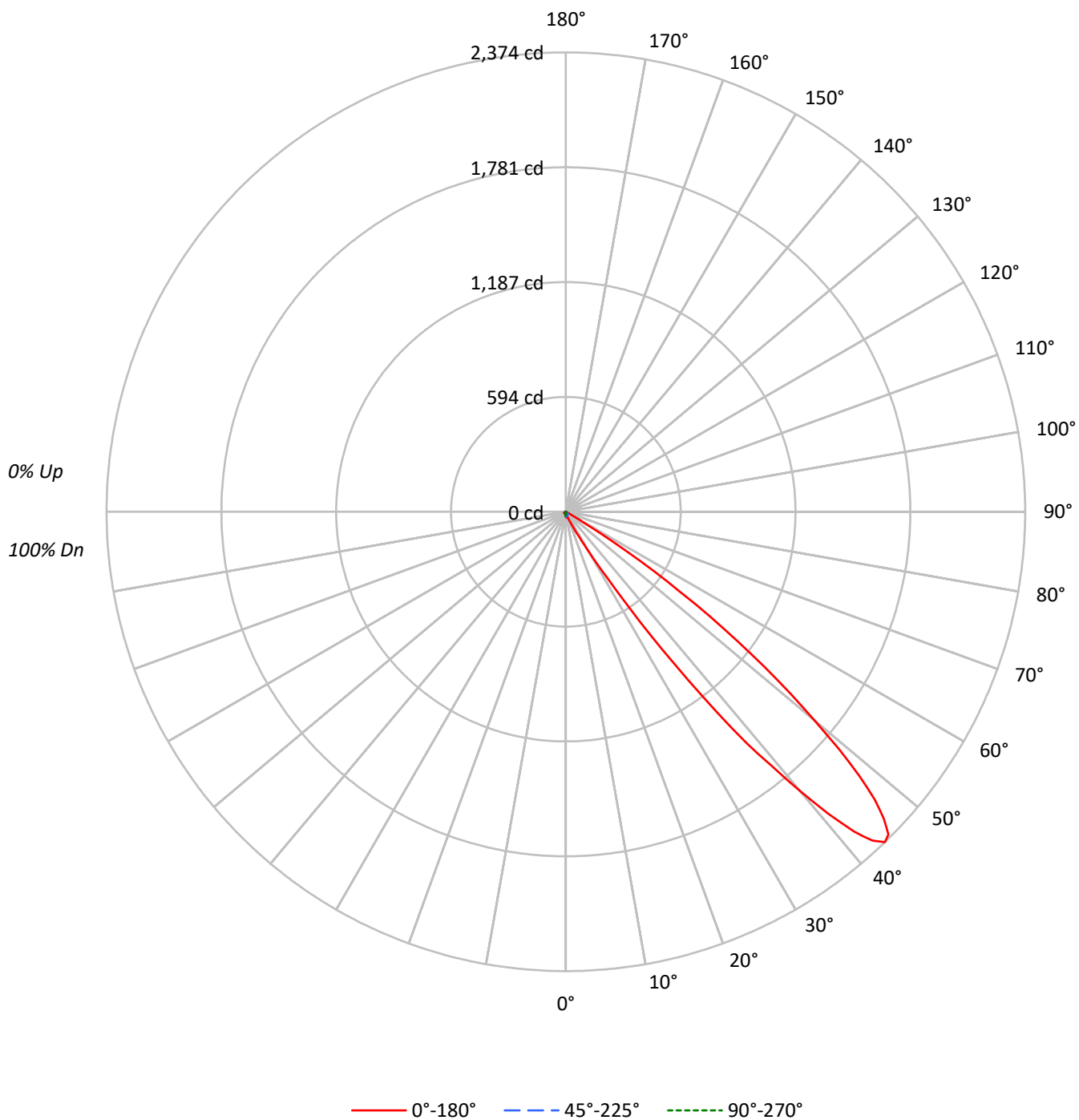
Lumens per Lamp: N/A
Luminaire Lumens: 265.0 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92	90	89	87
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	53	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37	31	26	24
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5153	5153	5153	5153	5153
5°	6405	5701	4644	4072	4006
10°	6301	4876	3585	3184	3229
15°	5221	3473	2588	2633	2815
20°	9054	2777	1984	2287	2590
25°	20203	3315	1597	2105	2419
30°	60414	4077	1393	2076	2532
35°	232571	4604	1285	2115	2677
40°	539811	4008	1202	2204	2863
45°	731146	3039	1054	2388	3101
50°	573286	1808	1092	2524	3411
55°	275183	803	994	2714	3747
60°	25130	132	921	2895	4166
65°	2750	0	830	3009	4514
70°	705	0	1026	3206	4937
75°	678	254	1356	3558	5592
80°	631	631	1642	3662	6061
85°	755	755	2768	3271	6542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 731146 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.8
10°-20°	4.2	1.6
20°-30°	10.0	3.8
30°-40°	54.8	20.7
40°-50°	132.7	50.1
50°-60°	52.9	20.0
60°-70°	4.6	1.7
70°-80°	2.6	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°	16.2	6.1
0°-40°	71.0	26.8
0°-60°	256.7	96.9
0°-90°	265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	265.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	29	26	21	18	18	3
15°	23	15	11	12	12	8
25°	84	14	7	9	10	50
35°	869	17	5	8	10	614
45°	2358	10	3	8	10	1663
55°	720	2	3	7	10	671
65°	5	0	2	6	9	14
75°	1	0	2	4	7	1
85°	0	0	1	1	3	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°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
2.5°	26.4	26.4	26.7	26.4	26.4	26.4	26.4	26.2	26.2	26.2	25.4
5°	29.1	29.1	29.1	29.1	28.8	28.8	28.8	28.5	28.5	28.3	25.9
7.5°	30.1	30.1	29.9	29.9	29.6	29.6	29.3	29.1	28.8	28.5	24.8
10°	28.3	28.3	28.3	28.0	28.0	27.7	27.5	27.2	27.0	26.4	21.9
12.5°	25.1	25.1	25.4	25.1	24.8	24.6	24.0	23.8	23.5	23.0	18.2
15°	23.0	23.0	23.0	22.7	22.5	21.9	21.7	21.1	20.9	20.1	15.3
17.5°	29.3	29.3	29.1	28.5	27.5	26.7	25.4	24.3	23.0	21.4	13.2
20°	38.8	38.8	38.3	37.8	36.5	35.1	33.0	31.2	29.1	27.2	11.9
22.5°	56.3	57.1	55.5	53.6	51.8	48.6	45.7	42.8	39.1	35.9	12.2
25°	83.5	84.3	83.5	79.3	75.8	71.6	66.1	60.2	53.9	48.1	13.7
27.5°	135.3	135.8	134.5	124.2	118.6	107.5	97.8	88.3	77.7	67.1	15.1
30°	238.6	238.9	230.4	209.8	191.6	167.3	146.6	126.8	110.2	93.3	16.1
31°	314.2	306.8	288.8	264.0	234.9	202.1	173.9	148.2	123.4	105.2	16.4
32°	399.0	397.9	368.1	325.0	286.2	245.2	202.7	169.9	141.4	116.5	16.6
33°	511.3	511.8	464.8	414.0	350.4	295.4	239.7	194.7	160.4	130.0	17.2
34°	686.7	645.5	590.3	521.6	434.9	352.2	279.8	223.5	177.6	142.9	17.2
35°	868.8	827.3	766.5	662.4	543.5	427.8	327.6	254.5	198.2	157.0	17.2
36°	1072.8	1037.6	945.7	812.8	661.1	499.1	378.4	290.1	218.5	169.6	16.9
37°	1293.1	1241.6	1139.6	994.6	791.6	599.5	440.2	325.5	238.9	183.4	16.4
38°	1516.9	1470.4	1341.8	1166.0	947.5	705.5	502.0	359.6	257.6	193.7	15.6
39°	1686.6	1661.2	1533.6	1337.3	1072.0	805.9	565.7	396.1	277.4	204.0	14.8
40°	1885.8	1844.9	1723.8	1481.0	1219.2	908.2	628.1	428.3	293.8	212.2	14.0
41°	2067.6	2015.8	1863.1	1628.4	1337.0	1000.1	687.3	461.6	307.0	216.9	13.5
42°	2223.5	2163.3	2003.7	1754.8	1435.6	1073.6	734.6	485.4	319.5	220.9	12.7
43°	2324.4	2272.4	2115.4	1849.6	1519.9	1140.9	778.7	510.2	327.1	223.5	11.6
44°	2373.6	2321.0	2169.1	1909.1	1571.6	1181.4	807.2	527.4	335.6	227.0	10.8
45°	2357.7	2304.3	2157.4	1910.1	1587.8	1195.9	819.4	535.1	340.1	230.1	9.8
46°	2285.1	2247.5	2099.6	1860.4	1557.1	1180.3	812.5	529.3	338.5	230.1	8.7
47°	2183.1	2140.3	1999.4	1775.1	1482.9	1140.2	784.8	511.5	328.7	224.9	7.7
48°	2044.1	2007.6	1859.7	1639.5	1369.0	1052.7	722.1	482.7	313.4	214.6	6.6
49°	1869.7	1819.0	1681.3	1466.2	1220.5	928.5	640.0	434.1	288.8	200.0	5.8
50°	1680.5	1617.9	1511.7	1292.6	1067.0	796.1	531.9	367.0	254.2	181.0	5.3
51°	1495.3	1431.6	1330.4	1144.1	903.1	660.6	429.1	293.0	209.3	154.8	4.5
52°	1303.2	1249.8	1136.5	990.1	773.1	535.3	357.5	247.8	173.9	130.0	3.7
53°	1111.9	1075.4	967.6	819.4	621.2	437.3	292.0	212.2	151.7	111.2	2.9
54°	920.3	880.4	798.5	666.4	500.7	345.1	247.6	177.6	131.6	97.0	2.6
55°	719.8	699.2	623.6	508.1	379.4	275.3	200.8	152.7	110.2	81.1	2.1
56°	554.4	531.1	462.1	368.6	281.9	215.6	162.5	124.7	93.3	67.9	1.6
57°	363.1	339.3	293.6	257.4	205.3	157.2	124.2	98.3	75.8	56.3	1.3
58°	214.6	192.9	185.8	158.5	136.9	106.7	91.7	73.2	56.0	44.4	0.8
59°	98.6	100.1	89.0	83.5	75.8	67.9	55.8	48.9	38.3	32.0	0.5
60°	57.3	54.2	52.8	47.3	42.0	37.3	33.6	29.6	24.0	20.6	0.3
62.5°	19.6	18.8	19.3	17.4	16.4	15.9	14.5	12.4	10.3	8.5	0.0
65°	5.3	5.3	5.0	4.8	4.5	4.2	4.0	3.4	3.2	2.6	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	1.6	1.6	1.3	1.3	1.1	1.1	0.8	0.8	0.0
70°	1.1	1.1	1.1	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°	23.5	23.5	23.5	23.5	23.5	23.5
2.5°	24.3	23.3	21.9	21.1	20.9	20.6
5°	23.3	21.1	19.6	18.5	18.2	18.2
7.5°	20.9	18.5	16.9	16.4	16.1	16.1
10°	18.2	16.1	14.8	14.3	14.5	14.5
12.5°	15.3	13.5	12.9	12.9	13.2	13.5
15°	12.4	11.4	11.4	11.6	12.2	12.4
17.5°	10.3	9.8	10.0	10.6	11.1	11.6
20°	8.5	8.5	9.0	9.8	10.6	11.1
22.5°	7.1	7.4	8.2	9.0	10.0	10.6
25°	6.1	6.6	7.4	8.7	9.8	10.0
27.5°	5.3	6.1	7.1	8.5	9.5	10.0
30°	4.5	5.5	6.9	8.2	9.5	10.0
31°	4.2	5.3	6.6	8.2	9.5	10.0
32°	4.0	5.3	6.6	8.2	9.5	10.0
33°	3.7	5.0	6.6	7.9	9.5	10.0
34°	3.4	5.0	6.6	8.2	9.5	10.0
35°	3.2	4.8	6.3	7.9	9.2	10.0
36°	2.9	4.8	6.3	7.9	9.5	10.0
37°	2.6	4.8	6.3	7.9	9.2	10.0
38°	2.6	4.5	6.1	7.9	9.2	10.0
39°	2.4	4.2	6.1	7.9	9.2	10.0
40°	2.1	4.2	5.8	7.7	9.2	10.0
41°	1.8	4.0	5.8	7.7	9.2	10.0
42°	1.6	4.0	5.8	7.7	9.2	10.0
43°	1.3	3.7	5.5	7.7	9.2	10.0
44°	1.3	3.7	5.5	7.7	9.2	10.0
45°	1.1	3.4	5.3	7.7	9.2	10.0
46°	1.1	3.4	5.3	7.4	9.2	10.0
47°	0.8	3.4	5.3	7.4	9.2	10.0
48°	0.8	3.2	5.3	7.4	9.2	10.0
49°	0.5	3.2	5.3	7.4	9.2	10.0
50°	0.5	3.2	5.0	7.4	9.2	10.0
51°	0.5	3.2	5.0	7.4	9.2	10.0
52°	0.5	2.9	5.0	7.4	9.2	10.0
53°	0.5	2.9	5.0	7.4	9.2	10.0
54°	0.5	2.9	4.8	7.4	9.2	10.0
55°	0.5	2.6	4.8	7.1	9.2	9.8
56°	0.5	2.6	4.8	7.1	9.2	9.8
57°	0.5	2.6	4.5	7.1	9.2	9.8
58°	0.5	2.4	4.5	6.9	9.0	9.8
59°	0.5	2.4	4.2	6.9	9.0	9.5
60°	0.5	2.1	4.2	6.6	8.7	9.5
62.5°	0.5	1.8	3.7	6.3	8.5	9.0
65°	0.5	1.6	3.4	5.8	8.2	8.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.6	3.2	5.5	7.7	8.5
70°	0.5	1.6	2.9	5.0	7.4	7.7
72.5°	0.8	1.6	2.6	4.8	6.9	7.1
75°	1.1	1.6	2.4	4.2	6.3	6.6
77.5°	1.1	1.6	2.1	3.7	5.5	5.8
80°	1.1	1.3	1.8	2.9	4.5	4.8
82.5°	1.1	1.3	1.3	2.4	3.4	3.7
85°	0.8	1.1	1.1	1.3	2.4	2.6
87.5°	0.8	1.1	0.5	0.8	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)