

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: P1337506

Luminaire Tested: P3A05R259840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337506
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R259840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

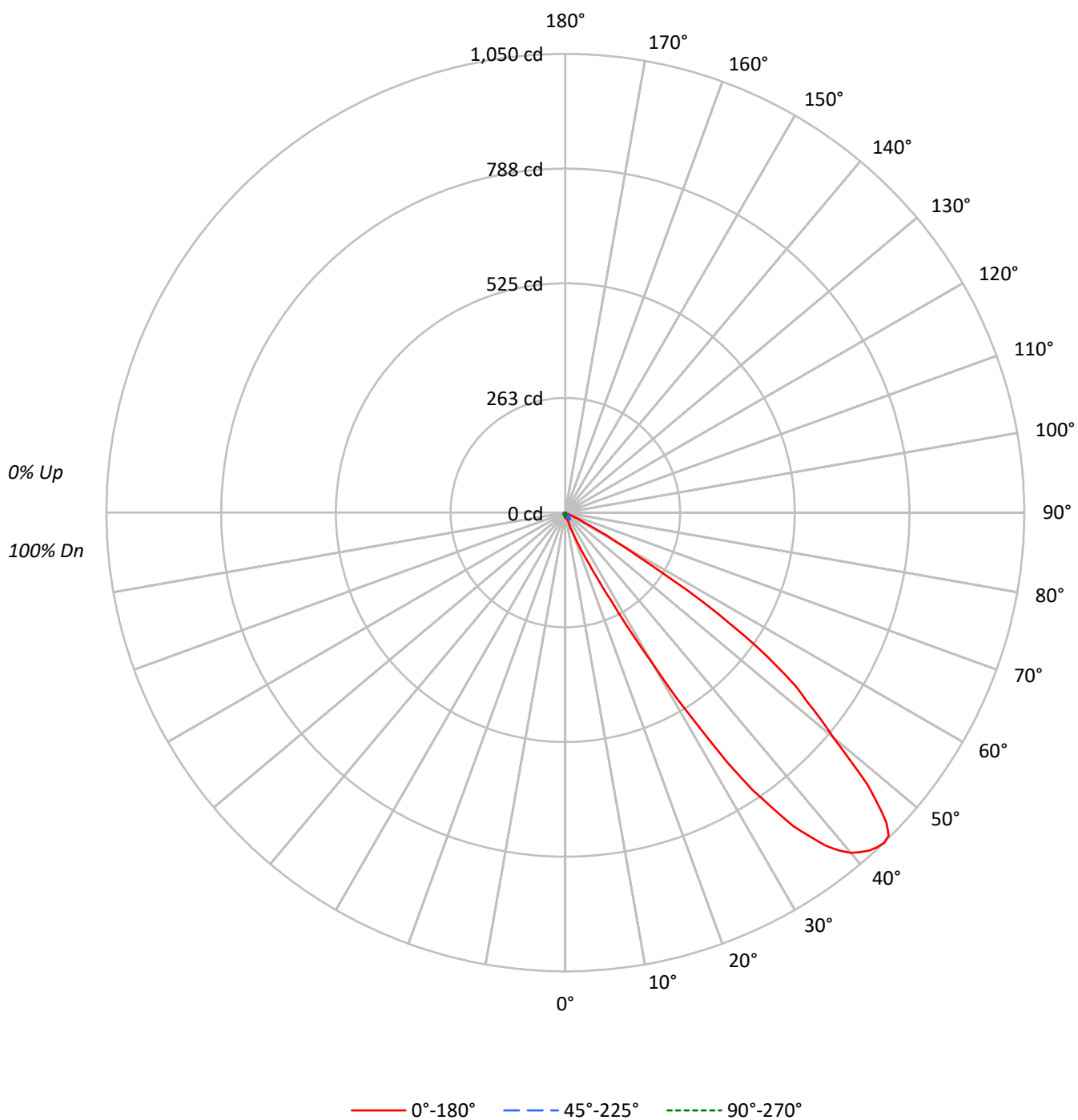
Lumens per Lamp: N/A
Luminaire Lumens: 219.0 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2456	2456	2456	2456	2456
5°	2796	2663	2377	2113	2069
10°	2783	2538	2026	1759	1759
15°	3110	2179	1566	1498	1566
20°	10968	2170	1213	1260	1400
25°	31574	2758	968	1161	1355
30°	100724	4254	785	1114	1367
35°	220578	5006	669	1071	1392
40°	291002	4523	544	1116	1489
45°	324499	3163	527	1209	1613
50°	273151	1637	512	1262	1774
55°	204227	650	497	1415	1988
60°	63241	175	526	1535	2193
65°	5396	0	623	1608	2387
70°	385	128	641	1859	2693
75°	339	169	847	1949	3135
80°	253	253	1263	2147	3662
85°	503	503	2013	2516	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 324499 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.5
10°-20°	2.6	1.2
20°-30°	12.1	5.5
30°-40°	58.3	26.6
40°-50°	91.4	41.7
50°-60°	46.9	21.4
60°-70°	4.4	2.0
70°-80°	1.5	0.7
80°-90°	0.8	0.3
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°	15.7	7.2
0°-40°	74.0	33.8
0°-60°	212.3	97.0
0°-90°	219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	219.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	13	12	11	10	9	1
15°	14	10	7	7	7	6
25°	130	11	4	5	6	81
35°	824	19	2	4	5	500
45°	1046	10	2	4	5	766
55°	534	2	1	4	5	445
65°	10	0	1	3	5	33
75°	0	0	1	2	4	0
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°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
2.5°	12.1	12.1	12.1	12.1	12.1	12.1	11.9	11.9	12.1	11.9	11.9
5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.5	12.5	12.5	12.1
7.5°	12.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.5	12.5	11.9
10°	12.5	12.5	12.5	12.5	12.3	12.3	12.3	12.1	12.1	12.1	11.4
12.5°	12.5	12.5	12.5	12.5	12.3	12.3	12.1	12.1	11.9	11.8	10.4
15°	13.7	13.7	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.1	9.6
17.5°	20.0	19.5	19.3	18.5	17.5	16.6	15.8	15.0	14.3	13.7	9.3
20°	47.0	46.8	45.9	43.6	41.0	38.2	35.3	32.0	27.4	24.3	9.3
22.5°	81.5	80.4	78.6	76.9	72.5	67.3	61.9	55.7	49.7	43.4	9.8
25°	130.5	133.2	127.4	122.8	115.1	105.6	95.4	86.9	76.1	66.1	11.4
27.5°	226.8	228.6	217.2	202.2	184.2	164.4	145.1	130.7	112.5	96.0	14.3
30°	397.8	399.5	380.4	348.4	311.4	278.9	234.7	196.0	160.3	132.8	16.8
31°	496.4	482.9	460.8	429.8	382.9	333.8	280.8	234.0	188.9	152.6	17.5
32°	582.2	581.0	555.2	508.2	461.2	400.5	334.7	273.7	218.3	172.7	18.1
33°	683.4	675.7	639.2	594.9	532.7	471.6	386.8	317.0	248.6	195.0	18.5
34°	764.5	743.7	728.7	678.0	612.3	534.4	443.6	362.9	286.4	216.6	18.7
35°	824.0	819.6	790.3	743.1	676.2	596.6	504.9	410.5	318.0	241.7	18.7
36°	887.1	873.4	844.9	802.1	736.9	654.7	551.7	451.7	354.8	264.2	18.5
37°	926.6	918.5	890.1	846.0	782.2	703.6	604.2	495.3	384.1	286.8	18.1
38°	967.2	950.9	922.9	880.7	818.1	744.3	642.1	528.8	411.1	306.6	17.5
39°	995.4	978.4	949.9	907.9	846.6	773.4	672.2	557.3	434.6	321.4	16.8
40°	1016.6	1000.2	971.3	928.1	867.6	796.3	697.2	582.6	454.2	334.4	15.8
41°	1029.7	1014.5	985.7	942.8	882.1	809.4	713.6	599.0	467.5	343.0	14.8
42°	1040.7	1025.1	995.8	951.8	890.9	820.6	723.6	609.4	476.6	347.5	14.1
43°	1046.8	1031.2	1002.7	957.8	896.3	825.8	729.0	614.2	479.7	346.9	12.7
44°	1050.3	1034.1	1005.4	960.5	898.6	827.1	729.4	613.2	477.5	342.3	11.6
45°	1046.4	1030.4	1002.7	957.8	894.6	822.9	725.6	608.0	469.5	333.2	10.2
46°	1021.4	1009.1	983.6	942.4	881.9	812.1	715.7	598.0	456.9	322.0	8.7
47°	977.3	967.4	942.8	912.1	857.4	792.3	697.6	578.9	439.4	305.3	6.9
48°	931.2	916.7	893.8	862.4	816.1	756.6	667.8	551.0	412.8	283.3	6.2
49°	863.2	854.7	834.5	799.4	761.0	708.6	625.6	515.1	380.2	259.4	5.4
50°	800.7	794.9	766.6	740.8	700.1	651.2	568.3	467.9	339.8	229.7	4.8
51°	752.0	745.0	724.6	692.4	649.1	592.2	514.2	406.6	293.3	194.4	3.9
52°	701.1	697.2	679.1	646.0	603.4	546.7	461.6	354.6	248.2	164.4	3.1
53°	659.5	653.9	631.7	602.2	556.2	497.6	404.5	306.2	210.3	138.2	2.7
54°	598.8	596.5	582.2	551.4	501.4	437.7	352.9	257.9	175.4	117.2	2.3
55°	534.2	526.5	512.0	487.6	441.7	382.2	293.1	213.7	141.8	98.7	1.7
56°	455.6	455.2	429.4	408.9	368.3	305.1	234.1	166.9	115.2	82.3	1.5
57°	380.4	368.3	343.4	323.2	279.4	231.5	173.8	125.1	90.2	66.7	1.2
58°	281.4	275.0	268.5	238.8	198.3	164.0	124.1	87.9	66.7	50.9	0.8
59°	191.0	190.8	183.1	160.5	137.2	102.1	77.5	59.7	45.9	37.4	0.6
60°	144.2	140.7	125.3	110.4	86.3	64.6	45.9	35.3	28.5	24.1	0.4
62.5°	50.5	52.4	46.1	38.2	29.1	23.9	18.3	14.8	12.1	9.8	0.0
65°	10.4	11.4	9.8	9.3	7.3	6.4	5.6	4.8	4.0	3.5	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°	1.3	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.8	0.8	0.2
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.0	0.0	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°	11.2	11.2	11.2	11.2	11.2	11.2
2.5°	11.8	11.4	10.8	10.6	10.4	10.4
5°	11.6	10.8	10.2	9.6	9.4	9.4
7.5°	11.0	10.0	9.3	8.9	8.7	8.5
10°	10.4	9.1	8.3	7.9	7.9	7.9
12.5°	9.3	8.1	7.3	7.1	7.3	7.3
15°	8.3	6.9	6.6	6.6	6.7	6.9
17.5°	7.1	6.2	5.8	6.0	6.2	6.4
20°	6.4	5.2	5.2	5.4	6.0	6.0
22.5°	5.6	4.6	4.6	5.2	5.6	5.8
25°	5.0	4.0	4.2	4.8	5.4	5.6
27.5°	4.2	3.5	3.9	4.6	5.2	5.4
30°	3.7	3.1	3.7	4.4	5.0	5.4
31°	3.5	2.9	3.7	4.2	5.0	5.4
32°	3.1	2.9	3.5	4.2	5.0	5.2
33°	2.9	2.7	3.5	4.2	5.0	5.2
34°	2.7	2.5	3.3	4.2	5.0	5.2
35°	2.3	2.5	3.3	4.0	4.8	5.2
36°	2.1	2.3	3.3	4.0	4.8	5.2
37°	1.9	2.3	3.1	4.0	4.8	5.2
38°	1.7	2.1	3.1	4.0	4.8	5.2
39°	1.5	2.1	2.9	4.0	4.8	5.2
40°	1.3	1.9	2.9	3.9	4.8	5.2
41°	1.3	1.9	2.9	3.9	4.8	5.2
42°	1.2	1.9	2.9	3.9	4.8	5.2
43°	1.0	1.7	2.9	3.9	4.8	5.2
44°	0.8	1.7	2.7	3.9	4.8	5.2
45°	0.8	1.7	2.7	3.9	4.8	5.2
46°	0.6	1.5	2.7	3.9	4.8	5.2
47°	0.4	1.5	2.7	3.7	4.8	5.2
48°	0.4	1.5	2.7	3.7	4.8	5.2
49°	0.4	1.5	2.5	3.7	4.8	5.2
50°	0.4	1.5	2.5	3.7	4.8	5.2
51°	0.2	1.3	2.5	3.7	4.8	5.2
52°	0.2	1.3	2.5	3.7	4.8	5.4
53°	0.2	1.3	2.5	3.7	4.8	5.2
54°	0.2	1.3	2.3	3.7	4.8	5.2
55°	0.2	1.3	2.3	3.7	4.8	5.2
56°	0.2	1.2	2.3	3.5	4.8	5.2
57°	0.4	1.2	2.3	3.5	4.8	5.0
58°	0.4	1.2	2.3	3.5	4.6	5.0
59°	0.4	1.2	2.3	3.5	4.6	5.0
60°	0.4	1.2	2.1	3.5	4.6	5.0
62.5°	0.4	1.2	2.1	3.3	4.4	4.8
65°	0.4	1.2	1.9	3.1	4.4	4.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.0	1.9	2.9	4.2	4.4
70°	0.6	1.0	1.7	2.9	4.0	4.2
72.5°	0.6	1.0	1.7	2.5	3.7	4.0
75°	0.6	1.0	1.5	2.3	3.5	3.7
77.5°	0.6	1.0	1.3	2.1	3.1	3.3
80°	0.8	1.0	1.2	1.7	2.7	2.9
82.5°	0.8	1.0	1.0	1.3	2.1	2.3
85°	0.6	0.8	0.8	1.0	1.3	1.5
87.5°	0.6	0.8	0.6	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)