

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: P1337902

Luminaire Tested: P3A05R309727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R309727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

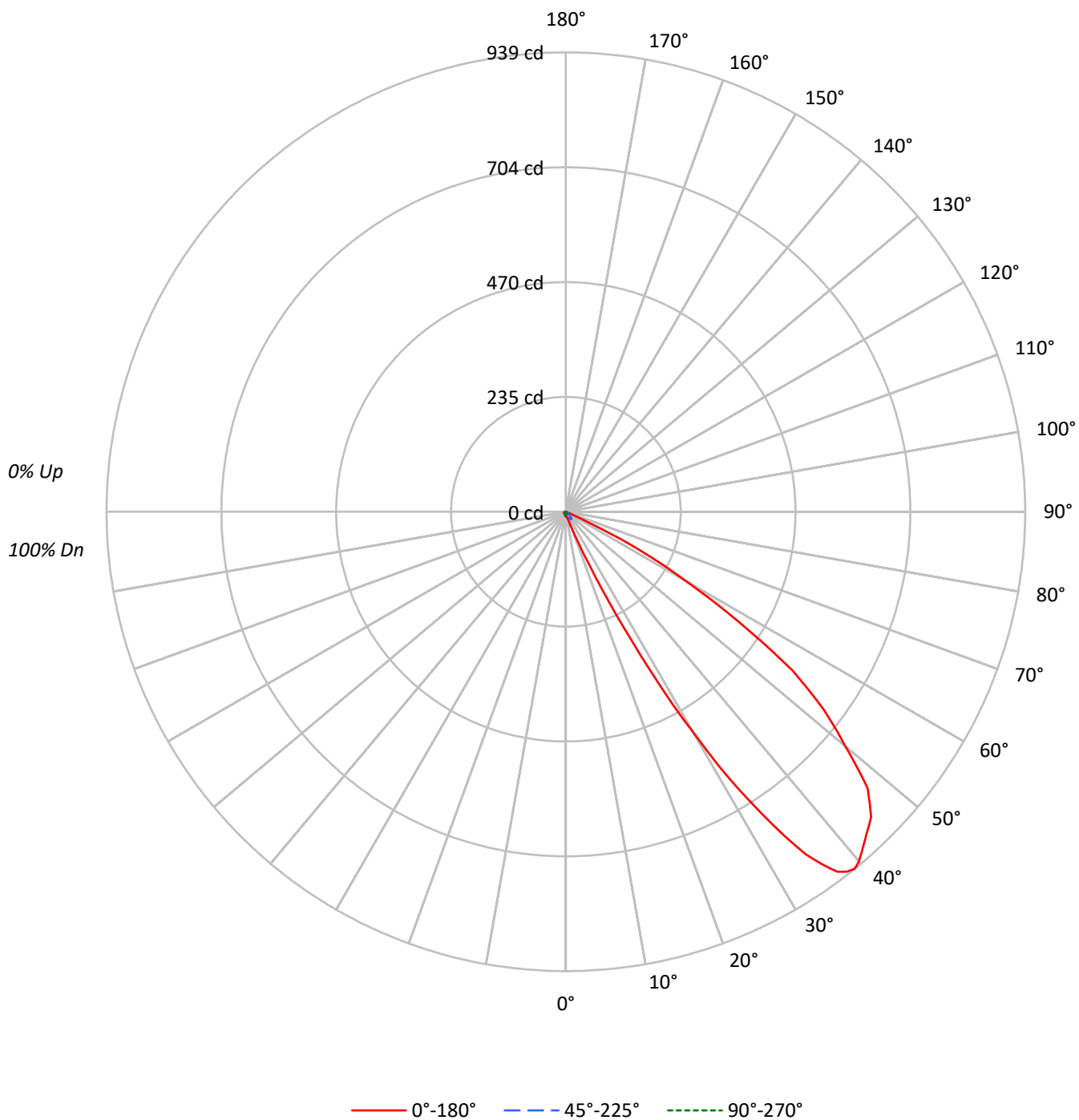
Lumens per Lamp: N/A
Luminaire Lumens: 244.0 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	108	104	100	97	100	97	94		96	93	91		92	90	89	87
2	100	93	86	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	52	50
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	48	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	32	26		37	31	26	24
9	52	37	29	23	50	37	28	23	36	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	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2083	2083	2083	2083	2083
5°	2223	2179	2025	1849	1805
10°	2427	2160	1781	1603	1559
15°	3541	2157	1498	1362	1407
20°	8914	2357	1143	1143	1283
25°	41422	2928	895	1040	1186
30°	131868	4051	684	987	1190
35°	228823	4952	562	937	1205
40°	266871	4952	401	945	1231
45°	273703	3504	434	1023	1333
50°	254525	1979	341	1058	1535
55°	216308	1032	382	1185	1720
60°	124946	263	439	1272	1886
65°	25476	0	519	1505	2127
70°	385	128	641	1731	2500
75°	339	169	678	1779	2965
80°	253	253	1010	2020	3410
85°	0	503	2013	2013	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 273703 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.5	1.0
20°-30°	14.1	5.8
30°-40°	65.7	26.9
40°-50°	92.9	38.1
50°-60°	57.2	23.4
60°-70°	8.7	3.6
70°-80°	1.4	0.6
80°-90°	0.7	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°	17.4	7.1
0°-40°	83.1	34.1
0°-60°	233.2	95.6
0°-90°	244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	244.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	10	10	9	8	8	1
15°	16	10	7	6	6	6
25°	171	12	4	4	5	105
35°	855	18	2	4	4	513
45°	883	11	1	3	4	669
55°	566	3	1	3	4	481
65°	49	0	1	3	4	89
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°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
2.5°	9.7	9.7	9.9	9.9	9.7	9.9	9.9	9.9	9.5	9.2	8.8
5°	10.1	10.1	10.1	10.3	10.1	10.1	9.9	9.7	9.2	8.6	8.4
7.5°	10.5	10.5	10.3	10.5	10.3	10.3	9.9	9.5	8.8	8.2	7.8
10°	10.9	10.9	10.7	10.7	10.5	10.5	9.7	9.0	8.0	7.4	7.2
12.5°	12.1	12.1	11.9	11.7	11.3	11.1	9.5	8.4	7.2	6.6	6.4
15°	15.6	15.4	15.0	14.4	13.4	13.2	9.5	7.8	6.6	6.0	6.0
17.5°	21.4	21.2	20.6	18.9	17.1	16.4	9.5	7.0	5.8	5.3	5.3
20°	38.2	36.6	33.5	29.4	25.1	22.8	10.1	6.2	4.9	4.7	4.9
21°	49.9	48.3	44.4	37.6	30.0	27.5	10.5	6.0	4.7	4.5	4.9
22°	68.0	66.2	58.2	48.9	38.0	33.7	10.7	5.5	4.3	4.3	4.7
23°	95.0	91.9	78.3	63.5	47.5	41.3	11.1	5.3	4.1	4.3	4.5
24°	124.3	121.7	106.3	84.1	60.6	51.8	11.5	5.1	3.9	3.9	4.3
25°	171.2	168.1	140.8	106.1	76.9	62.3	12.1	4.7	3.7	3.7	4.3
26°	231.8	217.7	181.3	136.7	94.8	78.1	12.7	4.5	3.5	3.7	4.1
27°	289.4	277.7	236.8	175.3	117.2	96.0	13.6	4.3	3.3	3.5	4.1
28°	365.0	348.6	297.0	221.8	147.6	116.1	14.4	4.1	3.1	3.5	3.9
29°	449.7	426.7	364.4	274.0	181.9	138.7	15.2	3.9	2.9	3.3	3.9
30°	520.8	499.2	437.0	335.8	221.4	168.5	16.0	3.7	2.7	3.3	3.9
31°	604.3	571.6	496.2	388.3	255.3	198.3	16.9	3.3	2.5	3.1	3.7
32°	671.9	649.1	568.9	447.5	299.9	231.2	17.5	3.1	2.5	3.1	3.7
33°	737.3	706.6	629.1	504.2	340.2	264.9	18.1	2.9	2.3	2.9	3.7
34°	799.7	771.6	686.1	550.0	378.2	297.0	18.5	2.5	2.3	2.9	3.5
35°	854.8	822.1	736.2	594.8	417.2	326.2	18.5	2.3	2.1	2.7	3.5
36°	890.6	867.2	779.8	639.0	452.6	353.9	18.5	2.1	1.8	2.7	3.3
37°	921.2	893.9	814.7	672.9	478.7	376.1	18.5	1.8	1.8	2.7	3.3
38°	933.7	910.3	838.8	702.9	503.2	398.7	18.3	1.6	1.6	2.5	3.3
39°	938.7	917.7	856.9	724.5	521.2	413.9	17.9	1.4	1.6	2.5	3.3
40°	932.3	916.5	866.1	738.5	535.6	425.0	17.3	1.2	1.4	2.5	3.3
42.5°	906.0	895.5	864.1	752.5	548.0	433.3	15.0	0.8	1.4	2.3	3.3
45°	882.6	871.1	843.3	737.9	531.9	417.0	11.3	0.4	1.4	2.3	3.3
47.5°	837.1	830.0	808.2	700.7	496.8	380.4	8.0	0.2	1.2	2.1	3.1
50°	746.1	739.3	710.5	608.4	427.3	321.7	5.8	0.2	1.0	2.1	3.1
52.5°	664.5	657.3	616.0	505.8	328.2	235.7	3.7	0.2	1.0	2.1	3.1
55°	565.8	553.3	499.0	383.9	232.7	158.1	2.7	0.2	1.0	1.8	3.1
57.5°	418.9	400.6	352.1	261.9	134.0	85.7	1.4	0.2	1.0	1.8	3.1
60°	284.9	274.0	220.3	138.1	57.1	36.2	0.6	0.2	1.0	1.8	2.9
62.5°	172.6	158.9	110.8	58.8	24.7	16.4	0.0	0.4	1.0	1.8	2.9
65°	49.1	43.6	29.0	13.4	7.0	5.3	0.0	0.4	1.0	1.8	2.9
67.5°	1.6	1.6	1.6	1.4	1.0	1.0	0.2	0.4	1.0	1.8	2.7
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	1.0	1.6	2.7
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.8	1.4	2.5
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.4	2.1
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.2	2.1
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.2	1.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.6	0.8	0.8	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.6	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

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	9.5	9.5
2.5°	8.8	8.8
5°	8.2	8.2
7.5°	7.6	7.6
10°	7.0	7.0
12.5°	6.6	6.6
15°	6.0	6.2
17.5°	5.5	5.8
20°	5.3	5.5
21°	5.3	5.5
22°	5.1	5.3
23°	5.1	5.3
24°	4.9	5.1
25°	4.7	4.9
26°	4.7	4.9
27°	4.7	4.9
28°	4.5	4.9
29°	4.5	4.7
30°	4.5	4.7
31°	4.3	4.7
32°	4.3	4.7
33°	4.3	4.5
34°	4.1	4.5
35°	4.1	4.5
36°	4.1	4.5
37°	4.1	4.3
38°	4.1	4.5
39°	4.1	4.3
40°	4.1	4.3
42.5°	4.1	4.3
45°	4.1	4.3
47.5°	4.1	4.5
50°	4.1	4.5
52.5°	4.1	4.5
55°	4.1	4.5
57.5°	4.1	4.3
60°	4.1	4.3
62.5°	3.9	4.3
65°	3.9	4.1
67.5°	3.9	4.1
70°	3.7	3.9
72.5°	3.5	3.7
75°	3.1	3.5
77.5°	2.9	3.1
80°	2.5	2.7

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.1	2.1
85°	1.4	1.6
87.5°	0.8	0.8
90°	0.0	0.0

(END OF REPORT)