

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: P1335396

Luminaire Tested: P3A02R359727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

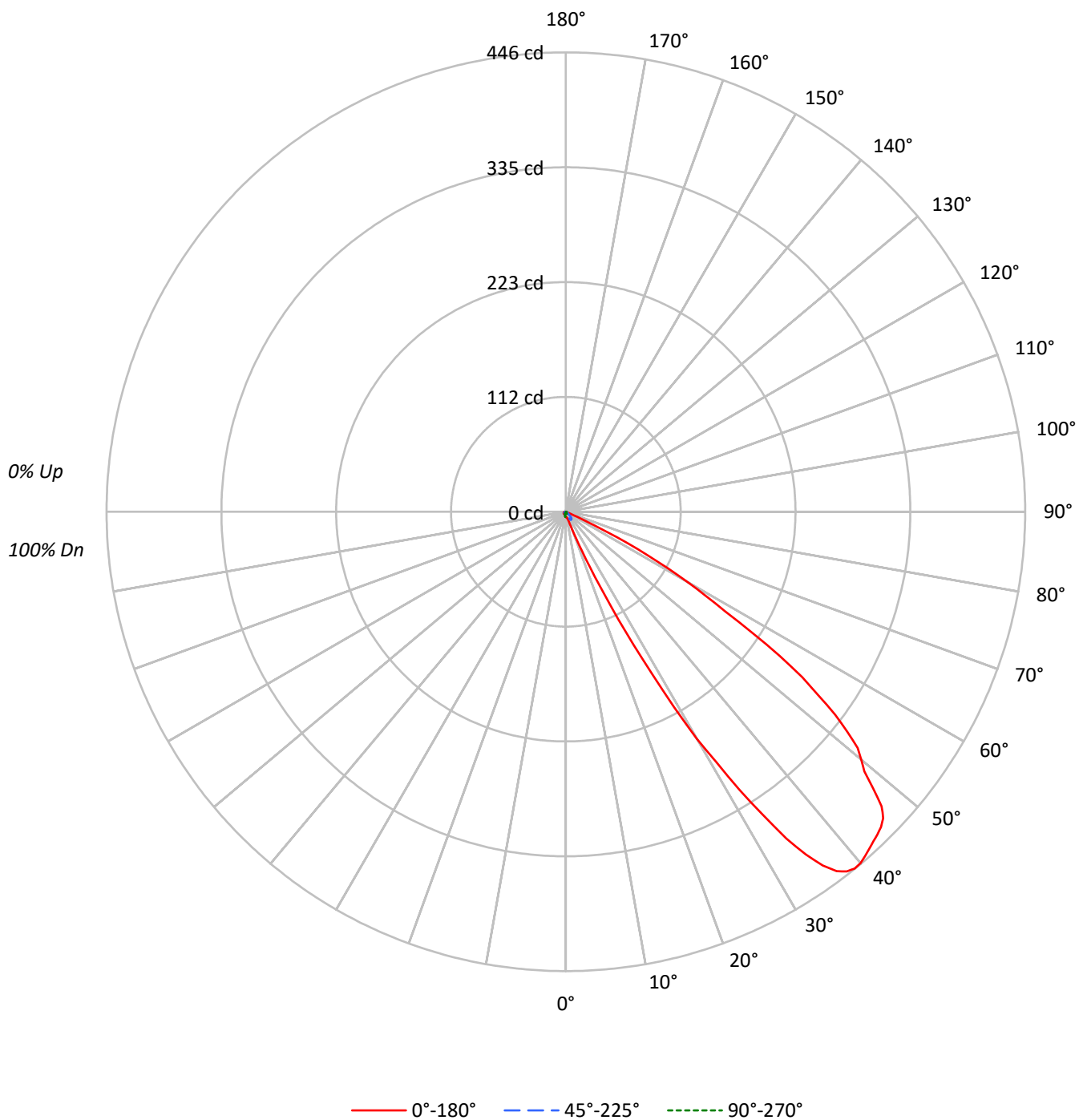
Lumens per Lamp: N/A
Luminaire Lumens: 111.0 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1118	1118	1118	1118	1118
5°	1211	1189	1101	991	969
10°	1269	1158	980	846	846
15°	1816	1135	795	726	749
20°	4550	1213	630	630	700
25°	21171	1548	484	581	653
30°	64339	2102	380	532	658
35°	108737	2436	321	509	642
40°	127467	2405	258	515	687
45°	134246	1706	217	558	744
50°	127791	1023	205	580	819
55°	107083	421	229	650	956
60°	59951	88	263	746	1053
65°	10325	52	259	830	1193
70°	192	64	321	898	1346
75°	169	85	424	1017	1525
80°	126	126	505	1137	1768
85°	0	252	1006	1258	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 135200 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.3	1.2
20°-30°	6.8	6.1
30°-40°	29.4	26.5
40°-50°	42.0	37.8
50°-60°	26.0	23.4
60°-70°	4.0	3.6
70°-80°	0.7	0.7
80°-90°	0.4	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°	8.6	7.7
0°-40°	38.0	34.2
0°-60°	105.9	95.4
0°-90°	111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	111.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	5	5	4	4	1
15°	8	5	4	3	3	3
25°	88	6	2	2	3	52
35°	406	9	1	2	2	244
45°	433	6	1	2	2	327
55°	280	1	1	2	2	239
65°	20	0	0	2	2	41
75°	0	0	0	1	2	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
2.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.1	5.0
5°	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.2	5.0	4.7
7.5°	5.6	5.6	5.5	5.5	5.5	5.5	5.4	5.3	5.1	4.7	4.4
10°	5.7	5.7	5.7	5.7	5.6	5.5	5.4	5.2	4.9	4.4	4.1
12.5°	6.4	6.4	6.3	6.1	5.9	5.7	5.5	5.1	4.5	4.0	3.7
15°	8.0	7.9	7.7	7.4	7.0	6.5	6.1	5.0	4.1	3.5	3.3
17.5°	11.2	11.0	10.7	9.7	8.8	7.9	7.1	5.0	3.7	3.1	2.9
20°	19.5	19.6	17.5	15.1	13.1	10.9	8.9	5.2	3.3	2.7	2.6
22.5°	40.8	39.2	34.2	28.4	21.6	16.7	12.6	5.7	2.9	2.3	2.3
25°	87.5	81.4	69.2	52.3	36.9	26.2	18.3	6.4	2.6	2.0	2.1
27.5°	159.7	154.2	129.9	97.8	64.9	39.5	24.8	7.3	2.3	1.7	1.9
30°	254.1	238.9	207.1	160.3	108.5	60.4	33.4	8.3	1.9	1.5	1.8
31°	283.6	276.6	237.9	185.5	127.2	71.7	37.0	8.6	1.8	1.5	1.7
32°	318.5	306.1	271.4	213.0	146.1	81.9	41.3	8.9	1.7	1.3	1.7
33°	349.8	337.8	295.6	237.3	165.2	93.4	45.9	9.0	1.5	1.3	1.6
34°	382.7	366.2	324.5	262.6	184.9	105.8	50.1	9.1	1.4	1.2	1.6
35°	406.2	389.8	349.3	282.7	201.8	116.8	54.9	9.1	1.3	1.2	1.5
36°	424.5	410.0	370.7	303.3	218.6	126.8	58.7	9.1	1.1	1.1	1.5
37°	437.0	423.3	385.2	321.0	231.5	135.6	62.1	9.1	1.0	1.1	1.5
38°	443.1	431.7	399.1	334.0	243.9	142.5	64.8	8.9	0.9	1.0	1.4
39°	445.7	436.4	407.6	344.9	253.2	148.5	66.8	8.7	0.8	1.0	1.4
40°	445.3	437.2	412.4	352.4	260.7	152.6	67.9	8.4	0.7	0.9	1.4
41°	443.0	436.0	414.9	358.8	265.2	155.4	68.2	8.1	0.6	0.9	1.3
42°	440.4	434.0	415.7	362.2	268.1	156.3	67.4	7.7	0.6	0.8	1.3
43°	437.7	431.8	415.7	363.3	268.8	155.7	66.1	7.0	0.5	0.8	1.3
44°	435.5	429.9	414.4	363.0	267.3	153.4	63.7	6.2	0.4	0.8	1.3
45°	432.9	427.4	412.7	361.1	264.4	149.5	60.7	5.5	0.3	0.7	1.3
46°	428.3	424.0	409.7	357.2	259.8	144.1	56.9	5.0	0.2	0.7	1.2
47°	419.3	415.6	403.9	351.4	253.7	137.7	53.0	4.5	0.2	0.7	1.2
48°	401.4	401.3	392.3	340.6	244.0	129.7	48.9	4.0	0.2	0.7	1.2
49°	384.1	382.3	371.0	321.5	230.1	120.0	44.6	3.6	0.1	0.7	1.2
50°	374.6	370.6	352.2	299.1	212.2	106.7	40.0	3.0	0.1	0.6	1.2
51°	364.6	359.0	337.3	278.9	191.0	93.9	35.0	2.4	0.1	0.6	1.1
52°	346.7	341.4	317.0	259.5	170.3	80.8	30.2	2.0	0.1	0.6	1.2
53°	327.4	319.7	293.3	238.3	152.2	69.1	25.3	1.7	0.1	0.6	1.1
54°	303.0	299.6	269.2	212.2	131.0	57.9	20.7	1.4	0.1	0.6	1.1
55°	280.1	275.1	243.5	185.6	111.7	47.5	17.3	1.1	0.1	0.6	1.1
56°	250.8	243.3	213.7	161.1	92.2	38.3	14.6	0.9	0.1	0.6	1.1
57°	215.9	207.9	184.6	134.0	72.3	29.2	12.2	0.7	0.1	0.6	1.1
58°	182.7	175.8	150.7	103.4	54.5	20.2	10.1	0.5	0.1	0.5	1.1
59°	157.8	150.2	125.4	79.6	37.9	14.9	7.6	0.4	0.1	0.6	1.1
60°	136.7	126.9	100.9	61.6	27.1	10.7	5.6	0.2	0.2	0.6	1.1
62.5°	78.8	69.5	48.2	25.1	11.1	5.5	2.7	0.1	0.2	0.6	1.1
65°	19.9	17.7	11.5	5.4	3.1	1.9	1.0	0.1	0.2	0.5	1.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.7	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.2	0.5	1.0
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.9
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.8
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.8
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.7
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	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):

	135°	157.5°	180°
0°	5.1	5.1	5.1
2.5°	4.8	4.8	4.8
5°	4.5	4.5	4.4
7.5°	4.2	4.1	4.1
10°	3.8	3.8	3.8
12.5°	3.5	3.5	3.5
15°	3.2	3.3	3.3
17.5°	2.9	3.1	3.1
20°	2.7	2.9	3.0
22.5°	2.5	2.7	2.8
25°	2.4	2.6	2.7
27.5°	2.2	2.5	2.7
30°	2.1	2.4	2.6
31°	2.1	2.4	2.5
32°	2.0	2.4	2.5
33°	2.0	2.4	2.5
34°	2.0	2.3	2.5
35°	1.9	2.3	2.4
36°	1.9	2.3	2.4
37°	1.9	2.3	2.5
38°	1.9	2.3	2.4
39°	1.8	2.3	2.4
40°	1.8	2.3	2.4
41°	1.8	2.3	2.4
42°	1.8	2.3	2.4
43°	1.8	2.3	2.4
44°	1.8	2.2	2.4
45°	1.8	2.2	2.4
46°	1.8	2.3	2.4
47°	1.8	2.3	2.5
48°	1.8	2.2	2.4
49°	1.7	2.2	2.4
50°	1.7	2.2	2.4
51°	1.7	2.3	2.5
52°	1.7	2.3	2.5
53°	1.7	2.3	2.5
54°	1.7	2.3	2.4
55°	1.7	2.3	2.5
56°	1.7	2.3	2.4
57°	1.7	2.3	2.4
58°	1.7	2.2	2.4
59°	1.7	2.2	2.4
60°	1.7	2.2	2.4
62.5°	1.6	2.2	2.4
65°	1.6	2.1	2.3

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.5	2.1	2.2
70°	1.4	2.0	2.1
72.5°	1.3	1.9	2.0
75°	1.2	1.7	1.8
77.5°	1.0	1.5	1.7
80°	0.9	1.3	1.4
82.5°	0.7	1.1	1.2
85°	0.5	0.8	0.8
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)