

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: P1337982

Luminaire Tested: P3A05R309830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337982
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: P3A05R309830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

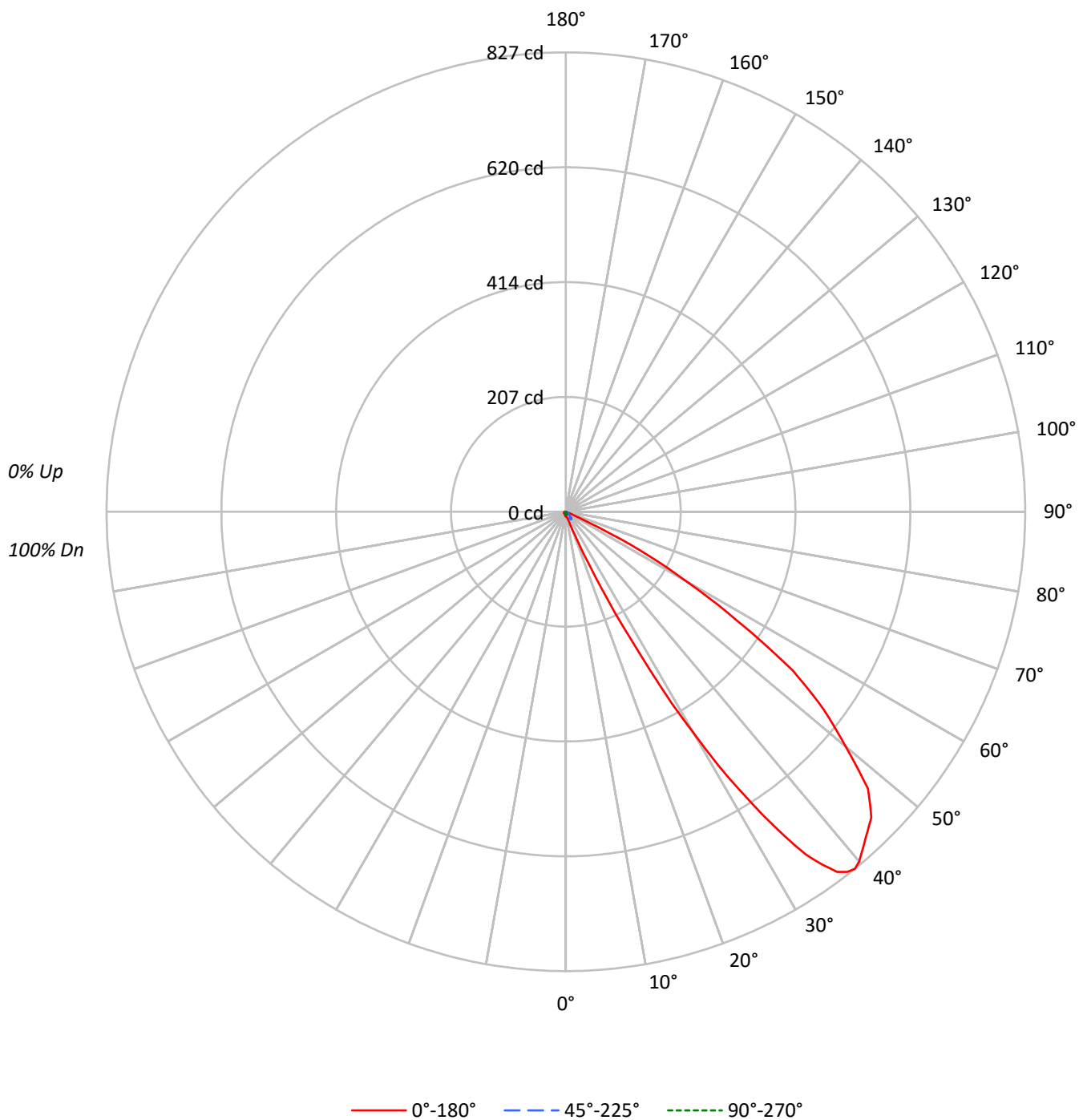
Lumens per Lamp: N/A
Luminaire Lumens: 215.0 lumens
Efficiency: N/A
Efficacy: 29.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1820	1820	1820	1820	1820
5°	1959	1915	1783	1629	1585
10°	2138	1893	1581	1403	1381
15°	3133	1884	1317	1203	1226
20°	7864	2077	1003	1003	1143
25°	36510	2589	798	919	1040
30°	116195	3570	608	861	1063
35°	201626	4363	482	830	1071
40°	235155	4351	372	830	1088
45°	241172	3101	403	899	1178
50°	224266	1740	307	921	1365
55°	190617	918	344	1032	1529
60°	110079	219	395	1096	1667
65°	22467	0	467	1297	1868
70°	321	128	577	1539	2180
75°	339	169	593	1525	2626
80°	253	253	884	1768	3031
85°	0	503	1761	1761	3522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 241172 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.3
10°-20°	2.2	1.0
20°-30°	12.4	5.8
30°-40°	57.9	26.9
40°-50°	81.9	38.1
50°-60°	50.4	23.4
60°-70°	7.7	3.6
70°-80°	1.2	0.6
80°-90°	0.6	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°	15.3	7.1
0°-40°	73.2	34.1
0°-60°	205.5	95.6
0°-90°	215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	215.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	9	9	8	7	7	1
15°	14	8	6	5	5	5
25°	151	11	3	4	4	93
35°	753	16	2	3	4	452
45°	778	10	1	3	4	590
55°	499	2	1	3	4	424
65°	43	0	1	2	4	78
75°	0	0	1	2	3	0
85°	0	0	1	1	1	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°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
2.5°	8.5	8.5	8.7	8.7	8.5	8.7	8.7	8.7	8.3	8.1	7.8
5°	8.9	8.9	8.9	9.1	8.9	8.9	8.7	8.5	8.1	7.6	7.4
7.5°	9.2	9.2	9.1	9.2	9.1	9.1	8.7	8.3	7.8	7.2	6.9
10°	9.6	9.6	9.4	9.4	9.2	9.2	8.5	8.0	7.1	6.5	6.3
12.5°	10.7	10.7	10.5	10.3	10.0	9.8	8.3	7.4	6.3	5.8	5.6
15°	13.8	13.6	13.2	12.7	11.8	11.6	8.3	6.9	5.8	5.3	5.3
17.5°	18.8	18.7	18.1	16.7	15.0	14.5	8.3	6.2	5.1	4.7	4.7
20°	33.7	32.2	29.5	25.9	22.1	20.1	8.9	5.4	4.3	4.2	4.3
21°	44.0	42.6	39.1	33.1	26.4	24.3	9.2	5.3	4.2	4.0	4.3
22°	59.9	58.3	51.3	43.1	33.5	29.7	9.4	4.9	3.8	3.8	4.2
23°	83.7	81.0	69.0	56.0	41.8	36.4	9.8	4.7	3.6	3.8	4.0
24°	109.6	107.2	93.6	74.1	53.4	45.6	10.1	4.5	3.4	3.4	3.8
25°	150.9	148.1	124.1	93.5	67.7	54.9	10.7	4.2	3.3	3.3	3.8
26°	204.3	191.8	159.7	120.4	83.5	68.8	11.2	4.0	3.1	3.3	3.6
27°	255.0	244.7	208.6	154.5	103.2	84.6	12.0	3.8	2.9	3.1	3.6
28°	321.6	307.2	261.7	195.4	130.0	102.3	12.7	3.6	2.7	3.1	3.4
29°	396.3	376.0	321.1	241.4	160.3	122.2	13.4	3.4	2.5	2.9	3.4
30°	458.9	439.9	385.0	295.9	195.1	148.5	14.1	3.3	2.4	2.9	3.4
31°	532.5	503.7	437.2	342.1	224.9	174.8	14.9	2.9	2.2	2.7	3.3
32°	592.0	571.9	501.3	394.3	264.2	203.7	15.4	2.7	2.2	2.7	3.3
33°	649.6	622.6	554.4	444.3	299.7	233.4	15.9	2.5	2.0	2.5	3.3
34°	704.7	679.9	604.5	484.6	333.2	261.7	16.3	2.2	2.0	2.5	3.1
35°	753.2	724.4	648.7	524.1	367.6	287.4	16.3	2.0	1.8	2.4	3.1
36°	784.7	764.1	687.1	563.1	398.8	311.9	16.3	1.8	1.6	2.4	2.9
37°	811.7	787.6	717.9	592.9	421.8	331.4	16.3	1.6	1.6	2.4	2.9
38°	822.8	802.1	739.1	619.4	443.3	351.3	16.1	1.4	1.4	2.2	2.9
39°	827.1	808.6	755.0	638.4	459.3	364.7	15.8	1.3	1.4	2.2	2.9
40°	821.5	807.6	763.2	650.7	472.0	374.5	15.2	1.1	1.3	2.2	2.9
42.5°	798.3	789.1	761.4	663.0	482.8	381.8	13.2	0.7	1.3	2.0	2.9
45°	777.7	767.5	743.1	650.2	468.7	367.5	10.0	0.4	1.3	2.0	2.9
47.5°	737.6	731.3	712.1	617.4	437.7	335.2	7.1	0.2	1.1	1.8	2.7
50°	657.4	651.4	626.1	536.1	376.5	283.4	5.1	0.2	0.9	1.8	2.7
52.5°	585.5	579.2	542.8	445.7	289.2	207.7	3.3	0.2	0.9	1.8	2.7
55°	498.6	487.5	439.7	338.3	205.0	139.3	2.4	0.2	0.9	1.6	2.7
57.5°	369.1	353.0	310.2	230.7	118.1	75.5	1.3	0.2	0.9	1.6	2.7
60°	251.0	241.4	194.1	121.7	50.3	31.9	0.5	0.2	0.9	1.6	2.5
62.5°	152.1	140.0	97.6	51.8	21.7	14.5	0.0	0.4	0.9	1.6	2.5
65°	43.3	38.4	25.5	11.8	6.2	4.7	0.0	0.4	0.9	1.6	2.5
67.5°	1.4	1.4	1.4	1.3	0.9	0.9	0.2	0.4	0.9	1.6	2.4
70°	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.4	0.9	1.4	2.4
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	1.3	2.2
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.7	1.3	1.8
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.7	1.1	1.8
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.1	1.4



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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	0.5	0.7	0.7	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.5	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°	8.3	8.3
2.5°	7.8	7.8
5°	7.2	7.2
7.5°	6.7	6.7
10°	6.2	6.2
12.5°	5.8	5.8
15°	5.3	5.4
17.5°	4.9	5.1
20°	4.7	4.9
21°	4.7	4.9
22°	4.5	4.7
23°	4.5	4.7
24°	4.3	4.5
25°	4.2	4.3
26°	4.2	4.3
27°	4.2	4.3
28°	4.0	4.3
29°	4.0	4.2
30°	4.0	4.2
31°	3.8	4.2
32°	3.8	4.2
33°	3.8	4.0
34°	3.6	4.0
35°	3.6	4.0
36°	3.6	4.0
37°	3.6	3.8
38°	3.6	4.0
39°	3.6	3.8
40°	3.6	3.8
42.5°	3.6	3.8
45°	3.6	3.8
47.5°	3.6	4.0
50°	3.6	4.0
52.5°	3.6	4.0
55°	3.6	4.0
57.5°	3.6	3.8
60°	3.6	3.8
62.5°	3.4	3.8
65°	3.4	3.6
67.5°	3.4	3.6
70°	3.3	3.4
72.5°	3.1	3.3
75°	2.7	3.1
77.5°	2.5	2.7
80°	2.2	2.4

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.8	1.8
85°	1.3	1.4
87.5°	0.7	0.7
90°	0.0	0.0

(END OF REPORT)