

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: P1341560

Luminaire Tested: P3A09R309840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341560
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: P3A09R309840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

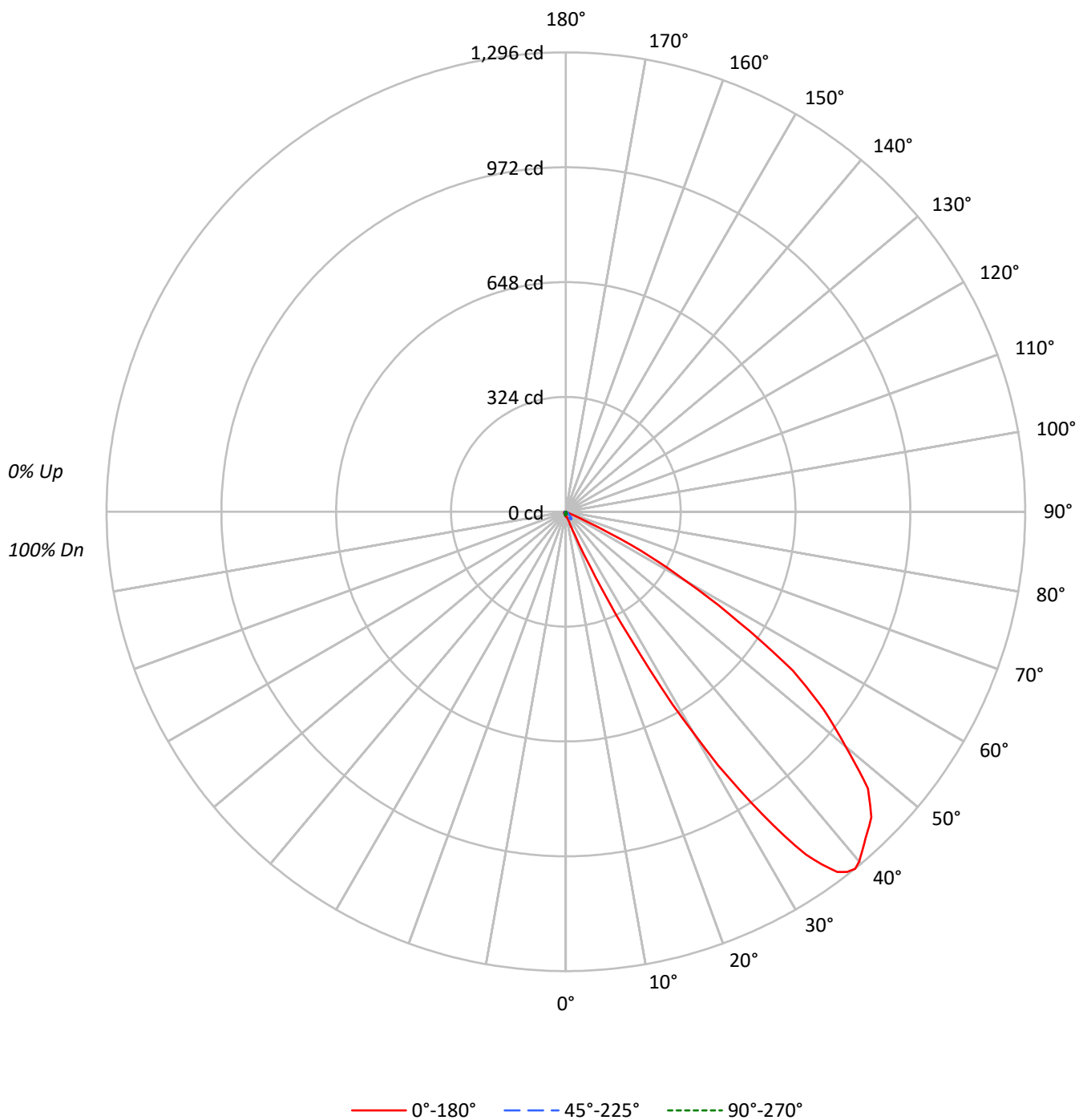
Lumens per Lamp: N/A
Luminaire Lumens: 337.0 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.65 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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	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°	2873	2873	2873	2873	2873
5°	3060	2994	2818	2553	2509
10°	3340	2961	2472	2204	2160
15°	4904	2974	2066	1862	1930
20°	12321	3244	1587	1587	1797
25°	57221	4041	1234	1452	1645
30°	182129	5596	937	1367	1646
35°	316038	6826	750	1285	1660
40°	368605	6813	573	1288	1718
45°	378024	4838	620	1395	1861
50°	351545	2695	478	1467	2115
55°	298771	1415	535	1644	2370
60°	172574	395	614	1754	2631
65°	35179	0	726	2075	2958
70°	577	192	898	2372	3462
75°	508	254	932	2372	4067
80°	379	379	1389	2904	4672
85°	0	755	2768	2768	5787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 378024 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.4
10°-20°	3.4	1.0
20°-30°	19.4	5.8
30°-40°	90.8	26.9
40°-50°	128.4	38.1
50°-60°	79.0	23.4
60°-70°	12.0	3.6
70°-80°	1.9	0.6
80°-90°	1.0	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°	24.0	7.1
0°-40°	114.8	34.1
0°-60°	322.1	95.6
0°-90°	337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	337.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	14	13	12	11	1
15°	22	13	9	8	8	8
25°	236	17	5	6	7	146
35°	1181	26	3	5	6	709
45°	1219	16	2	4	6	924
55°	782	4	1	4	6	665
65°	68	0	1	4	6	123
75°	1	0	1	3	5	1
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°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
2.5°	13.3	13.3	13.6	13.6	13.3	13.6	13.6	13.6	13.1	12.8	12.2
5°	13.9	13.9	13.9	14.2	13.9	13.9	13.6	13.3	12.8	11.9	11.6
7.5°	14.5	14.5	14.2	14.5	14.2	14.2	13.6	13.1	12.2	11.4	10.8
10°	15.0	15.0	14.8	14.8	14.5	14.5	13.3	12.5	11.1	10.2	9.9
12.5°	16.7	16.7	16.5	16.2	15.6	15.3	13.1	11.6	9.9	9.1	8.8
15°	21.6	21.3	20.7	19.9	18.5	18.2	13.1	10.8	9.1	8.2	8.2
17.5°	29.5	29.2	28.4	26.1	23.6	22.7	13.1	9.7	7.9	7.4	7.4
20°	52.8	50.5	46.3	40.6	34.6	31.5	13.9	8.5	6.8	6.5	6.8
21°	69.0	66.7	61.3	51.9	41.4	38.0	14.5	8.2	6.5	6.2	6.8
22°	94.0	91.4	80.3	67.6	52.5	46.6	14.8	7.7	6.0	6.0	6.5
23°	131.2	126.9	108.2	87.7	65.6	57.1	15.3	7.4	5.7	6.0	6.2
24°	171.7	168.1	146.8	116.1	83.7	71.5	15.9	7.1	5.4	5.4	6.0
25°	236.5	232.2	194.5	146.5	106.2	86.0	16.7	6.5	5.1	5.1	6.0
26°	320.2	300.6	250.4	188.8	130.9	107.9	17.6	6.2	4.8	5.1	5.7
27°	399.7	383.5	327.0	242.1	161.8	132.6	18.7	6.0	4.5	4.8	5.7
28°	504.2	481.5	410.2	306.3	203.8	160.4	19.9	5.7	4.3	4.8	5.4
29°	621.1	589.3	503.3	378.4	251.2	191.6	21.0	5.4	4.0	4.5	5.4
30°	719.3	689.5	603.5	463.9	305.7	232.8	22.1	5.1	3.7	4.5	5.4
31°	834.6	789.5	685.3	536.2	352.6	273.9	23.3	4.5	3.4	4.3	5.1
32°	928.0	896.5	785.8	618.0	414.2	319.4	24.1	4.3	3.4	4.3	5.1
33°	1018.3	976.0	868.9	696.3	469.8	365.9	25.0	4.0	3.1	4.0	5.1
34°	1104.6	1065.7	947.6	759.6	522.3	410.2	25.5	3.4	3.1	4.0	4.8
35°	1180.6	1135.5	1016.8	821.5	576.3	450.5	25.5	3.1	2.8	3.7	4.8
36°	1230.0	1197.7	1077.0	882.6	625.1	488.8	25.5	2.8	2.6	3.7	4.5
37°	1272.3	1234.6	1125.3	929.4	661.1	519.5	25.5	2.6	2.6	3.7	4.5
38°	1289.6	1257.3	1158.5	970.9	694.9	550.7	25.3	2.3	2.3	3.4	4.5
39°	1296.5	1267.5	1183.5	1000.7	719.9	571.7	24.7	2.0	2.3	3.4	4.5
40°	1287.7	1265.8	1196.2	1020.0	739.8	587.1	23.8	1.7	2.0	3.4	4.5
42.5°	1251.3	1236.8	1193.4	1039.3	756.8	598.4	20.7	1.1	2.0	3.1	4.5
45°	1219.0	1203.1	1164.7	1019.1	734.7	576.0	15.6	0.6	2.0	3.1	4.5
47.5°	1156.2	1146.3	1116.2	967.7	686.1	525.5	11.1	0.3	1.7	2.8	4.3
50°	1030.5	1021.1	981.4	840.3	590.2	444.3	7.9	0.3	1.4	2.8	4.3
52.5°	917.8	907.8	850.8	698.6	453.3	325.6	5.1	0.3	1.4	2.8	4.3
55°	781.5	764.2	689.2	530.3	321.3	218.3	3.7	0.3	1.4	2.6	4.3
57.5°	578.5	553.3	486.3	361.7	185.1	118.4	2.0	0.3	1.4	2.6	4.3
60°	393.5	378.4	304.3	190.8	78.9	50.0	0.9	0.3	1.4	2.6	4.0
62.5°	238.5	219.4	153.0	81.2	34.1	22.7	0.0	0.6	1.4	2.6	4.0
65°	67.8	60.2	40.0	18.5	9.7	7.4	0.0	0.6	1.4	2.6	4.0
67.5°	2.3	2.3	2.3	2.0	1.4	1.4	0.3	0.6	1.4	2.6	3.7
70°	0.9	0.9	0.9	0.6	0.6	0.3	0.3	0.6	1.4	2.3	3.7
72.5°	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.6	1.1	2.0	3.4
75°	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.9	1.1	2.0	2.8
77.5°	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.9	1.1	1.7	2.8
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.9	1.1	1.7	2.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.9	1.1	1.1	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.1	0.9	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.9	0.9	0.6
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°	13.1	13.1
2.5°	12.2	12.2
5°	11.4	11.4
7.5°	10.5	10.5
10°	9.7	9.7
12.5°	9.1	9.1
15°	8.2	8.5
17.5°	7.7	7.9
20°	7.4	7.7
21°	7.4	7.7
22°	7.1	7.4
23°	7.1	7.4
24°	6.8	7.1
25°	6.5	6.8
26°	6.5	6.8
27°	6.5	6.8
28°	6.2	6.8
29°	6.2	6.5
30°	6.2	6.5
31°	6.0	6.5
32°	6.0	6.5
33°	6.0	6.2
34°	5.7	6.2
35°	5.7	6.2
36°	5.7	6.2
37°	5.7	6.0
38°	5.7	6.2
39°	5.7	6.0
40°	5.7	6.0
42.5°	5.7	6.0
45°	5.7	6.0
47.5°	5.7	6.2
50°	5.7	6.2
52.5°	5.7	6.2
55°	5.7	6.2
57.5°	5.7	6.0
60°	5.7	6.0
62.5°	5.4	6.0
65°	5.4	5.7
67.5°	5.4	5.7
70°	5.1	5.4
72.5°	4.8	5.1
75°	4.3	4.8
77.5°	4.0	4.3
80°	3.4	3.7



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.8	2.8
85°	2.0	2.3
87.5°	1.1	1.1
90°	0.0	0.0

(END OF REPORT)