

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: P1334953

Luminaire Tested: P3A02R309024DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334953
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: P3A02R309024DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 2400K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

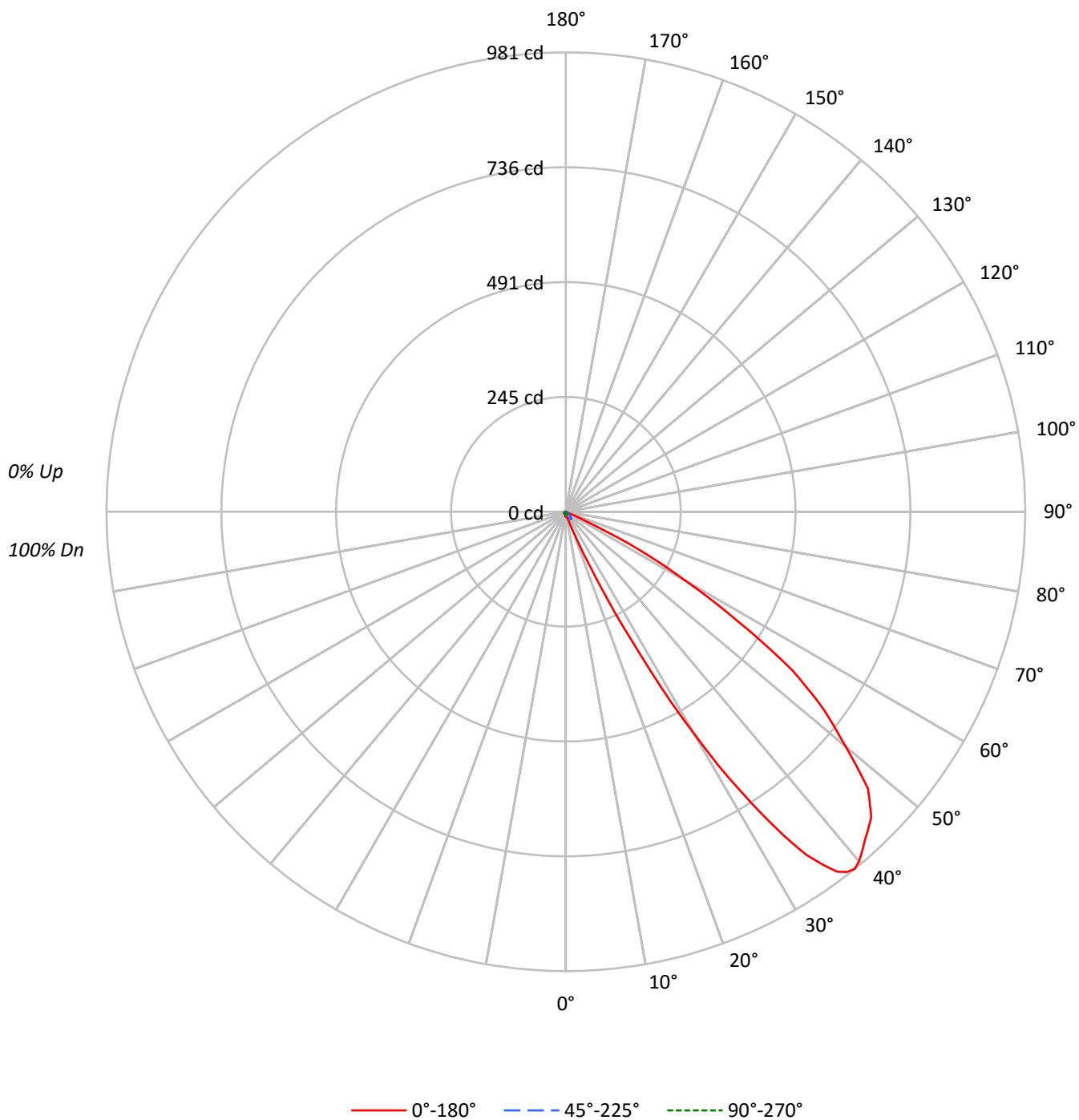
Lumens per Lamp: N/A
Luminaire Lumens: 255.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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			0
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°	2171	2171	2171	2171	2171
5°	2311	2267	2135	1937	1893
10°	2538	2249	1870	1670	1625
15°	3700	2247	1566	1407	1453
20°	9334	2450	1213	1213	1353
25°	43285	3073	944	1089	1258
30°	137819	4254	709	1038	1241
35°	239156	5166	562	990	1258
40°	278894	5153	429	973	1288
45°	286045	3659	465	1054	1395
50°	265987	2047	375	1092	1603
55°	226056	1070	421	1223	1797
60°	130560	263	482	1316	1974
65°	26618	0	571	1557	2231
70°	385	128	705	1795	2629
75°	339	169	763	1779	3135
80°	253	253	1137	2147	3536
85°	0	503	2264	2264	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 286045 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.6	1.0
20°-30°	14.7	5.8
30°-40°	68.7	26.9
40°-50°	97.1	38.1
50°-60°	59.7	23.4
60°-70°	9.1	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°	18.2	7.1
0°-40°	86.9	34.1
0°-60°	243.7	95.6
0°-90°	255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	255.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	10	10	10	9	9	1
15°	16	10	7	6	6	6
25°	179	13	4	4	5	110
35°	893	19	2	4	5	536
45°	922	12	2	3	4	699
55°	591	3	1	3	5	503
65°	51	0	1	3	4	93
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°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2.5°	10.1	10.1	10.3	10.3	10.1	10.3	10.3	10.3	9.9	9.7	9.2
5°	10.5	10.5	10.5	10.7	10.5	10.5	10.3	10.1	9.7	9.0	8.8
7.5°	11.0	11.0	10.7	11.0	10.7	10.7	10.3	9.9	9.2	8.6	8.2
10°	11.4	11.4	11.2	11.2	11.0	11.0	10.1	9.5	8.4	7.7	7.5
12.5°	12.7	12.7	12.5	12.2	11.8	11.6	9.9	8.8	7.5	6.9	6.7
15°	16.3	16.1	15.7	15.0	14.0	13.7	9.9	8.2	6.9	6.2	6.2
17.5°	22.3	22.1	21.5	19.8	17.8	17.2	9.9	7.3	6.0	5.6	5.6
20°	40.0	38.2	35.0	30.7	26.2	23.8	10.5	6.4	5.2	4.9	5.2
21°	52.2	50.5	46.4	39.3	31.4	28.8	11.0	6.2	4.9	4.7	5.2
22°	71.1	69.2	60.8	51.1	39.7	35.2	11.2	5.8	4.5	4.5	4.9
23°	99.2	96.0	81.8	66.4	49.6	43.2	11.6	5.6	4.3	4.5	4.7
24°	130.0	127.2	111.1	87.9	63.4	54.1	12.0	5.4	4.1	4.1	4.5
25°	178.9	175.7	147.1	110.8	80.3	65.1	12.7	4.9	3.9	3.9	4.5
26°	242.3	227.5	189.5	142.8	99.0	81.6	13.3	4.7	3.7	3.9	4.3
27°	302.4	290.2	247.5	183.2	122.4	100.3	14.2	4.5	3.4	3.7	4.3
28°	381.5	364.3	310.4	231.8	154.2	121.4	15.0	4.3	3.2	3.7	4.1
29°	470.0	445.9	380.8	286.3	190.1	145.0	15.9	4.1	3.0	3.4	4.1
30°	544.3	521.8	456.7	351.0	231.3	176.1	16.8	3.9	2.8	3.4	4.1
31°	631.5	597.4	518.5	405.8	266.8	207.3	17.6	3.4	2.6	3.2	3.9
32°	702.2	678.3	594.6	467.6	313.4	241.7	18.3	3.2	2.6	3.2	3.9
33°	770.5	738.5	657.5	526.9	355.5	276.9	18.9	3.0	2.4	3.0	3.9
34°	835.8	806.4	717.0	574.8	395.2	310.4	19.3	2.6	2.4	3.0	3.7
35°	893.4	859.2	769.4	621.6	436.0	340.9	19.3	2.4	2.1	2.8	3.7
36°	930.7	906.2	815.0	667.8	473.0	369.9	19.3	2.1	1.9	2.8	3.4
37°	962.7	934.2	851.5	703.3	500.3	393.1	19.3	1.9	1.9	2.8	3.4
38°	975.8	951.4	876.6	734.6	525.8	416.7	19.1	1.7	1.7	2.6	3.4
39°	981.0	959.1	895.5	757.2	544.7	432.6	18.7	1.5	1.7	2.6	3.4
40°	974.3	957.8	905.2	771.8	559.8	444.2	18.0	1.3	1.5	2.6	3.4
42.5°	946.8	935.9	903.0	786.4	572.7	452.8	15.7	0.9	1.5	2.4	3.4
45°	922.4	910.3	881.3	771.1	555.9	435.8	11.8	0.4	1.5	2.4	3.4
47.5°	874.9	867.4	844.6	732.3	519.2	397.6	8.4	0.2	1.3	2.1	3.2
50°	779.7	772.6	742.6	635.8	446.6	336.2	6.0	0.2	1.1	2.1	3.2
52.5°	694.5	686.9	643.8	528.6	343.0	246.4	3.9	0.2	1.1	2.1	3.2
55°	591.3	578.2	521.5	401.2	243.2	165.2	2.8	0.2	1.1	1.9	3.2
57.5°	437.8	418.6	368.0	273.7	140.1	89.6	1.5	0.2	1.1	1.9	3.2
60°	297.7	286.3	230.3	144.3	59.7	37.8	0.6	0.2	1.1	1.9	3.0
62.5°	180.4	166.0	115.8	61.4	25.8	17.2	0.0	0.4	1.1	1.9	3.0
65°	51.3	45.5	30.3	14.0	7.3	5.6	0.0	0.4	1.1	1.9	3.0
67.5°	1.7	1.7	1.7	1.5	1.1	1.1	0.2	0.4	1.1	1.9	2.8
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	1.1	1.7	2.8
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.9	1.5	2.6
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.5	2.1
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.3	2.1
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.9	1.3	1.7



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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	0.9	0.9	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.9	0.6	0.9
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°	9.9	9.9
2.5°	9.2	9.2
5°	8.6	8.6
7.5°	7.9	7.9
10°	7.3	7.3
12.5°	6.9	6.9
15°	6.2	6.4
17.5°	5.8	6.0
20°	5.6	5.8
21°	5.6	5.8
22°	5.4	5.6
23°	5.4	5.6
24°	5.2	5.4
25°	4.9	5.2
26°	4.9	5.2
27°	4.9	5.2
28°	4.7	5.2
29°	4.7	4.9
30°	4.7	4.9
31°	4.5	4.9
32°	4.5	4.9
33°	4.5	4.7
34°	4.3	4.7
35°	4.3	4.7
36°	4.3	4.7
37°	4.3	4.5
38°	4.3	4.7
39°	4.3	4.5
40°	4.3	4.5
42.5°	4.3	4.5
45°	4.3	4.5
47.5°	4.3	4.7
50°	4.3	4.7
52.5°	4.3	4.7
55°	4.3	4.7
57.5°	4.3	4.5
60°	4.3	4.5
62.5°	4.1	4.5
65°	4.1	4.3
67.5°	4.1	4.3
70°	3.9	4.1
72.5°	3.7	3.9
75°	3.2	3.7
77.5°	3.0	3.2
80°	2.6	2.8



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.1	2.1
85°	1.5	1.7
87.5°	0.9	0.9
90°	0.0	0.0

(END OF REPORT)