

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: P1344949

Luminaire Tested: P3A13R309035DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344949
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: P3A13R309035DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

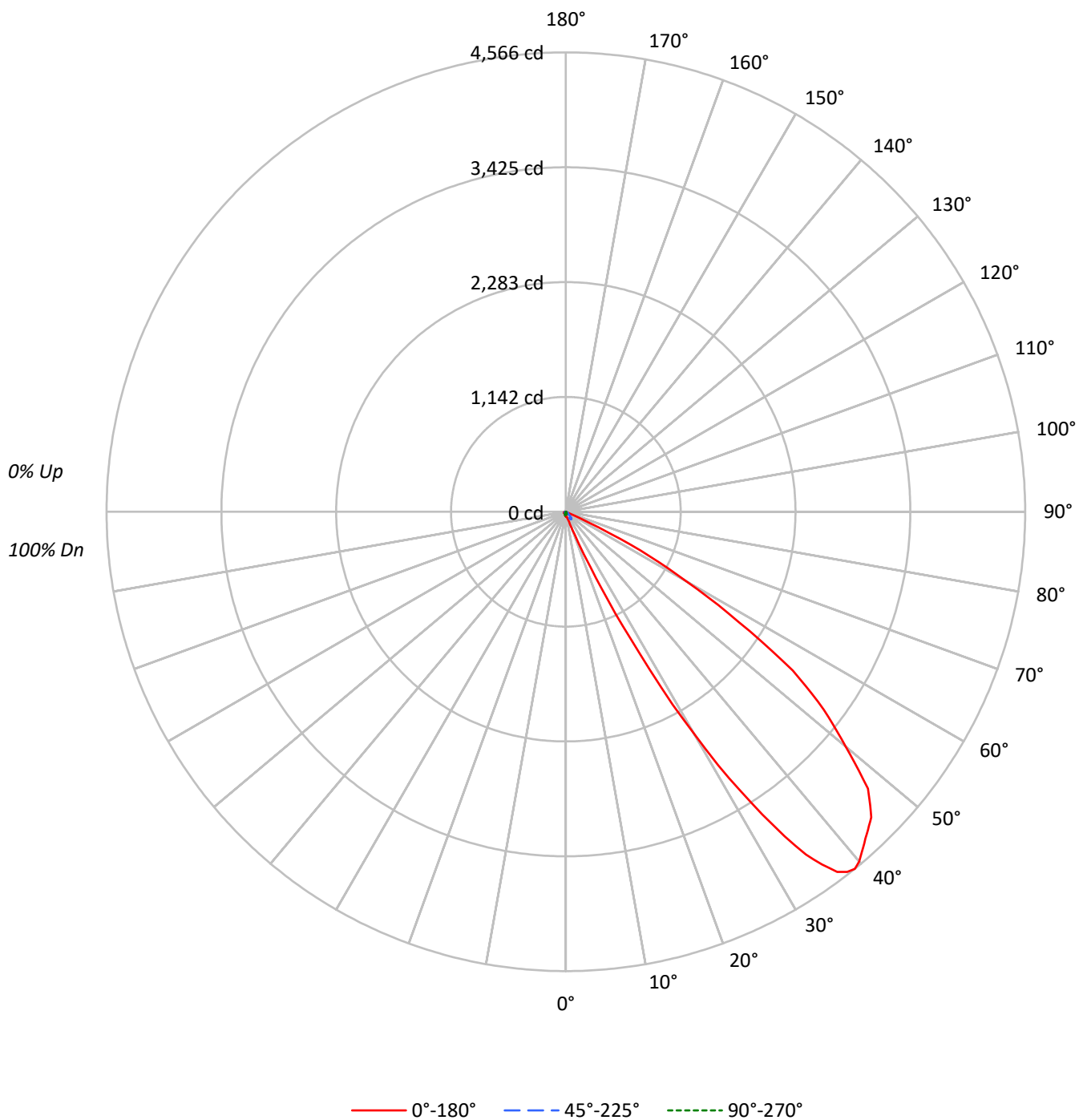
Lumens per Lamp: N/A
Luminaire Lumens: 1187.0 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	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°	10087	10087	10087	10087	10087
5°	10786	10566	9905	9025	8805
10°	11801	10465	8684	7793	7571
15°	17253	10443	7265	6583	6810
20°	43404	11434	5600	5600	6301
25°	201520	14275	4355	5081	5807
30°	641542	19750	3292	4811	5824
35°	1113198	24092	2677	4551	5889
40°	1298261	24045	2004	4580	6011
45°	1331456	17056	2171	4962	6512
50°	1238202	9552	1706	5117	7505
55°	1052369	4970	1912	5735	8411
60°	607758	1316	2193	6140	9210
65°	124008	0	2594	7264	10377
70°	1923	641	3206	8335	12182
75°	1694	847	3389	8472	14403
80°	1263	1263	5051	10102	16416
85°	0	2516	10064	10064	20128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1331456 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.2	0.4
10°-20°	12.0	1.0
20°-30°	68.5	5.8
30°-40°	319.7	26.9
40°-50°	452.1	38.1
50°-60°	278.2	23.4
60°-70°	42.4	3.6
70°-80°	6.7	0.6
80°-90°	3.4	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°	84.6	7.1
0°-40°	404.3	34.1
0°-60°	1134.6	95.6
0°-90°	1187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1187.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	46	46	46	46	46	
5°	49	48	45	41	40	5
15°	76	46	32	29	30	27
25°	833	59	18	21	24	513
35°	4158	90	10	17	22	2496
45°	4294	55	7	16	21	3255
55°	2753	13	5	15	22	2342
65°	239	0	5	14	20	432
75°	2	1	4	10	17	2
85°	0	1	4	4	8	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°	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
2.5°	47.0	47.0	48.0	48.0	47.0	48.0	48.0	48.0	46.0	45.0	43.0
5°	49.0	49.0	49.0	50.0	49.0	49.0	48.0	47.0	45.0	42.0	41.0
7.5°	51.0	51.0	50.0	51.0	50.0	50.0	48.0	46.0	43.0	40.0	38.0
10°	53.0	53.0	52.0	52.0	51.0	51.0	47.0	44.0	39.0	36.0	35.0
12.5°	59.0	59.0	58.0	57.0	55.0	54.0	46.0	41.0	35.0	32.0	31.0
15°	76.0	75.0	73.0	70.0	65.0	64.0	46.0	38.0	32.0	29.0	29.0
17.5°	104.0	103.0	100.0	92.0	83.0	80.0	46.0	34.0	28.0	26.0	26.0
20°	186.0	178.0	163.0	143.0	122.0	111.0	49.0	30.0	24.0	23.0	24.0
21°	243.0	235.0	216.0	183.0	146.0	134.0	51.0	29.0	23.0	22.0	24.0
22°	331.0	322.0	283.0	238.0	185.0	164.0	52.0	27.0	21.0	21.0	23.0
23°	461.9	446.9	381.0	309.0	231.0	201.0	54.0	26.0	20.0	21.0	22.0
24°	604.9	591.9	516.9	409.0	295.0	252.0	56.0	25.0	19.0	19.0	21.0
25°	832.9	817.9	684.9	515.9	374.0	303.0	59.0	23.0	18.0	18.0	21.0
26°	1127.9	1058.9	881.9	664.9	460.9	380.0	62.0	22.0	17.0	18.0	20.0
27°	1407.8	1350.8	1151.9	852.9	569.9	466.9	66.0	21.0	16.0	17.0	20.0
28°	1775.8	1695.8	1444.8	1078.9	717.9	564.9	70.0	20.0	15.0	17.0	19.0
29°	2187.7	2075.7	1772.8	1332.8	884.9	674.9	74.0	19.0	14.0	16.0	19.0
30°	2533.7	2428.7	2125.7	1633.8	1076.9	819.9	78.0	18.0	13.0	16.0	19.0
31°	2939.6	2780.7	2413.7	1888.8	1241.8	964.9	82.0	16.0	12.0	15.0	18.0
32°	3268.6	3157.6	2767.7	2176.7	1458.8	1124.9	85.0	15.0	12.0	15.0	18.0
33°	3586.6	3437.6	3060.6	2452.7	1654.8	1288.8	88.0	14.0	11.0	14.0	18.0
34°	3890.5	3753.5	3337.6	2675.7	1839.8	1444.8	90.0	12.0	11.0	14.0	17.0
35°	4158.5	3999.5	3581.6	2893.6	2029.8	1586.8	90.0	11.0	10.0	13.0	17.0
36°	4332.5	4218.5	3793.5	3108.6	2201.7	1721.8	90.0	10.0	9.0	13.0	16.0
37°	4481.5	4348.5	3963.5	3273.6	2328.7	1829.8	90.0	9.0	9.0	13.0	16.0
38°	4542.4	4428.5	4080.5	3419.6	2447.7	1939.8	89.0	8.0	8.0	12.0	16.0
39°	4566.4	4464.5	4168.5	3524.6	2535.7	2013.8	87.0	7.0	8.0	12.0	16.0
40°	4535.4	4458.5	4213.5	3592.6	2605.7	2067.7	84.0	6.0	7.0	12.0	16.0
42.5°	4407.5	4356.5	4203.5	3660.6	2665.7	2107.7	73.0	4.0	7.0	11.0	16.0
45°	4293.5	4237.5	4102.5	3589.6	2587.7	2028.8	55.0	2.0	7.0	11.0	16.0
47.5°	4072.5	4037.5	3931.5	3408.6	2416.7	1850.8	39.0	1.0	6.0	10.0	15.0
50°	3629.6	3596.6	3456.6	2959.6	2078.7	1564.8	28.0	1.0	5.0	10.0	15.0
52.5°	3232.6	3197.6	2996.6	2460.7	1596.8	1146.9	18.0	1.0	5.0	10.0	15.0
55°	2752.7	2691.7	2427.7	1867.8	1131.9	768.9	13.0	1.0	5.0	9.0	15.0
57.5°	2037.8	1948.8	1712.8	1273.8	651.9	416.9	7.0	1.0	5.0	9.0	15.0
60°	1385.8	1332.8	1071.9	671.9	278.0	176.0	3.0	1.0	5.0	9.0	14.0
62.5°	839.9	772.9	538.9	286.0	120.0	80.0	0.0	2.0	5.0	9.0	14.0
65°	239.0	212.0	141.0	65.0	34.0	26.0	0.0	2.0	5.0	9.0	14.0
67.5°	8.0	8.0	8.0	7.0	5.0	5.0	1.0	2.0	5.0	9.0	13.0
70°	3.0	3.0	3.0	2.0	2.0	1.0	1.0	2.0	5.0	8.0	13.0
72.5°	2.0	2.0	2.0	2.0	1.0	1.0	1.0	2.0	4.0	7.0	12.0
75°	2.0	2.0	2.0	1.0	1.0	1.0	1.0	3.0	4.0	7.0	10.0
77.5°	2.0	2.0	2.0	1.0	1.0	1.0	1.0	3.0	4.0	6.0	10.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	4.0	6.0	8.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	3.0	4.0	4.0	6.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.0	3.0	4.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	3.0	3.0	2.0
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°	46.0	46.0
2.5°	43.0	43.0
5°	40.0	40.0
7.5°	37.0	37.0
10°	34.0	34.0
12.5°	32.0	32.0
15°	29.0	30.0
17.5°	27.0	28.0
20°	26.0	27.0
21°	26.0	27.0
22°	25.0	26.0
23°	25.0	26.0
24°	24.0	25.0
25°	23.0	24.0
26°	23.0	24.0
27°	23.0	24.0
28°	22.0	24.0
29°	22.0	23.0
30°	22.0	23.0
31°	21.0	23.0
32°	21.0	23.0
33°	21.0	22.0
34°	20.0	22.0
35°	20.0	22.0
36°	20.0	22.0
37°	20.0	21.0
38°	20.0	22.0
39°	20.0	21.0
40°	20.0	21.0
42.5°	20.0	21.0
45°	20.0	21.0
47.5°	20.0	22.0
50°	20.0	22.0
52.5°	20.0	22.0
55°	20.0	22.0
57.5°	20.0	21.0
60°	20.0	21.0
62.5°	19.0	21.0
65°	19.0	20.0
67.5°	19.0	20.0
70°	18.0	19.0
72.5°	17.0	18.0
75°	15.0	17.0
77.5°	14.0	15.0
80°	12.0	13.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	10.0	10.0
85°	7.0	8.0
87.5°	4.0	4.0
90°	0.0	0.0

(END OF REPORT)