

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: P1335015

Luminaire Tested: P3A02R309035DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335015
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: P3A02R309035DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

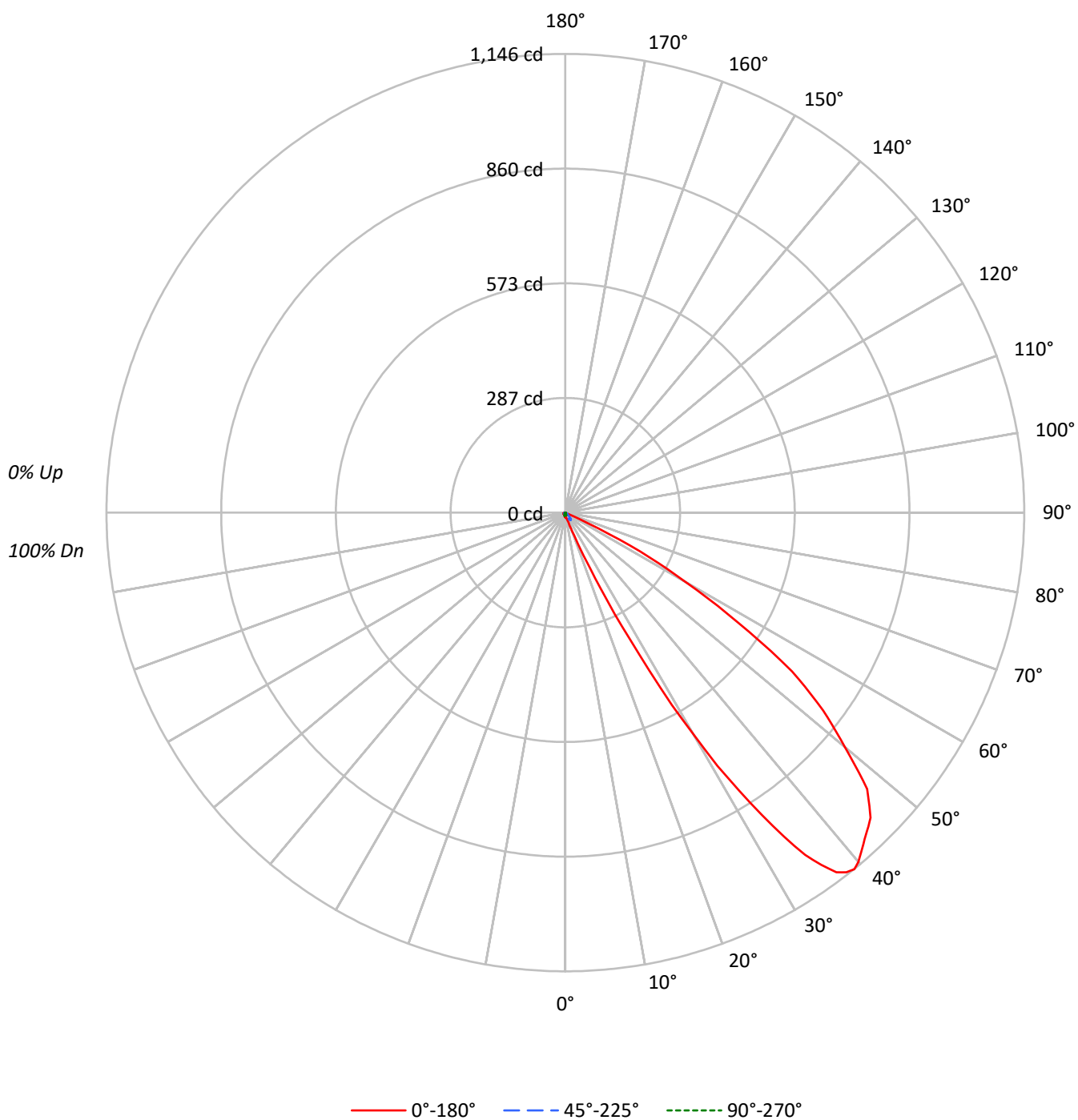
Lumens per Lamp: N/A
Luminaire Lumens: 298.1 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

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	31	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°	2522	2522	2522	2522	2522
5°	2707	2641	2487	2267	2201
10°	2961	2627	2182	1959	1893
15°	4336	2611	1816	1657	1703
20°	10898	2870	1400	1400	1587
25°	50592	3581	1089	1282	1452
30°	161063	4963	836	1215	1469
35°	279471	6050	669	1151	1472
40°	325925	6040	515	1145	1517
45°	334267	4280	558	1240	1644
50°	310847	2388	443	1296	1876
55°	264210	1262	497	1453	2103
60°	152575	351	570	1535	2324
65°	31132	0	675	1816	2594
70°	513	192	833	2116	3077
75°	424	254	847	2118	3643
80°	379	379	1263	2526	4167
85°	0	755	2516	2516	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 334267 cd/sqm

TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.3
10°-20°	3.0	1.0
20°-30°	17.2	5.8
30°-40°	80.3	26.9
40°-50°	113.5	38.1
50°-60°	69.8	23.4
60°-70°	10.7	3.6
70°-80°	1.7	0.6
80°-90°	0.9	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°	21.2	7.1
0°-40°	101.5	34.1
0°-60°	284.9	95.6
0°-90°	298.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	298.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	12	12	11	10	10	1
15°	19	12	8	7	8	7
25°	209	15	4	5	6	129
35°	1044	23	2	4	6	627
45°	1078	14	2	4	5	817
55°	691	3	1	4	6	588
65°	60	0	1	4	5	109
75°	0	0	1	2	4	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
2.5°	11.8	11.8	12.0	12.0	11.8	12.0	12.0	12.0	11.5	11.3	10.8
5°	12.3	12.3	12.3	12.6	12.3	12.3	12.0	11.8	11.3	10.5	10.3
7.5°	12.8	12.8	12.6	12.8	12.6	12.6	12.0	11.5	10.8	10.0	9.5
10°	13.3	13.3	13.1	13.1	12.8	12.8	11.8	11.0	9.8	9.0	8.8
12.5°	14.8	14.8	14.6	14.3	13.8	13.6	11.5	10.3	8.8	8.0	7.8
15°	19.1	18.8	18.3	17.6	16.3	16.1	11.5	9.5	8.0	7.3	7.3
17.5°	26.1	25.9	25.1	23.1	20.8	20.1	11.5	8.5	7.0	6.5	6.5
20°	46.7	44.7	40.9	35.9	30.6	27.9	12.3	7.5	6.0	5.8	6.0
21°	61.0	59.0	54.2	45.9	36.6	33.6	12.8	7.3	5.8	5.5	6.0
22°	83.1	80.8	71.0	59.7	46.4	41.2	13.1	6.8	5.3	5.3	5.8
23°	116.0	112.2	95.6	77.6	58.0	50.5	13.6	6.5	5.0	5.3	5.5
24°	151.9	148.6	129.8	102.7	74.1	63.3	14.1	6.3	4.8	4.8	5.3
25°	209.1	205.3	172.0	129.5	93.9	76.1	14.8	5.8	4.5	4.5	5.3
26°	283.2	265.8	221.4	166.9	115.7	95.4	15.6	5.5	4.3	4.5	5.0
27°	353.4	339.1	289.2	214.1	143.1	117.2	16.6	5.3	4.0	4.3	5.0
28°	445.8	425.7	362.7	270.9	180.2	141.8	17.6	5.0	3.8	4.3	4.8
29°	549.2	521.1	445.1	334.6	222.2	169.4	18.6	4.8	3.5	4.0	4.8
30°	636.1	609.7	533.7	410.2	270.4	205.8	19.6	4.5	3.3	4.0	4.8
31°	738.0	698.1	606.0	474.2	311.8	242.2	20.6	4.0	3.0	3.8	4.5
32°	820.6	792.7	694.8	546.5	366.2	282.4	21.3	3.8	3.0	3.8	4.5
33°	900.4	863.0	768.4	615.8	415.4	323.6	22.1	3.5	2.8	3.5	4.5
34°	976.7	942.3	837.9	671.7	461.9	362.7	22.6	3.0	2.8	3.5	4.3
35°	1044.0	1004.1	899.2	726.5	509.6	398.4	22.6	2.8	2.5	3.3	4.3
36°	1087.7	1059.1	952.4	780.4	552.8	432.3	22.6	2.5	2.3	3.3	4.0
37°	1125.1	1091.7	995.1	821.8	584.6	459.4	22.6	2.3	2.3	3.3	4.0
38°	1140.4	1111.8	1024.4	858.5	614.5	487.0	22.3	2.0	2.0	3.0	4.0
39°	1146.4	1120.8	1046.5	884.9	636.6	505.6	21.8	1.8	2.0	3.0	4.0
40°	1138.6	1119.3	1057.8	901.9	654.2	519.1	21.1	1.5	1.8	3.0	4.0
42.5°	1106.5	1093.7	1055.3	919.0	669.2	529.2	18.3	1.0	1.8	2.8	4.0
45°	1077.9	1063.8	1029.9	901.2	649.6	509.3	13.8	0.5	1.8	2.8	4.0
47.5°	1022.4	1013.6	987.0	855.7	606.7	464.6	9.8	0.3	1.5	2.5	3.8
50°	911.2	902.9	867.8	743.0	521.9	392.9	7.0	0.3	1.3	2.5	3.8
52.5°	811.6	802.8	752.3	617.8	400.9	287.9	4.5	0.3	1.3	2.5	3.8
55°	691.1	675.8	609.5	468.9	284.2	193.0	3.3	0.3	1.3	2.3	3.8
57.5°	511.6	489.2	430.0	319.8	163.7	104.7	1.8	0.3	1.3	2.3	3.8
60°	347.9	334.6	269.1	168.7	69.8	44.2	0.8	0.3	1.3	2.3	3.5
62.5°	210.9	194.0	135.3	71.8	30.1	20.1	0.0	0.5	1.3	2.3	3.5
65°	60.0	53.2	35.4	16.3	8.5	6.5	0.0	0.5	1.3	2.3	3.5
67.5°	2.0	2.0	2.0	1.8	1.3	1.3	0.3	0.5	1.3	2.3	3.3
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.5	1.3	2.0	3.3
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	1.0	1.8	3.0
75°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.0	1.8	2.5
77.5°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.0	1.5	2.5
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.5	2.0



TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

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	0.8	1.0	1.0	1.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.0	0.8	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.8	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	11.5	11.5
2.5°	10.8	10.8
5°	10.0	10.0
7.5°	9.3	9.3
10°	8.5	8.5
12.5°	8.0	8.0
15°	7.3	7.5
17.5°	6.8	7.0
20°	6.5	6.8
21°	6.5	6.8
22°	6.3	6.5
23°	6.3	6.5
24°	6.0	6.3
25°	5.8	6.0
26°	5.8	6.0
27°	5.8	6.0
28°	5.5	6.0
29°	5.5	5.8
30°	5.5	5.8
31°	5.3	5.8
32°	5.3	5.8
33°	5.3	5.5
34°	5.0	5.5
35°	5.0	5.5
36°	5.0	5.5
37°	5.0	5.3
38°	5.0	5.5
39°	5.0	5.3
40°	5.0	5.3
42.5°	5.0	5.3
45°	5.0	5.3
47.5°	5.0	5.5
50°	5.0	5.5
52.5°	5.0	5.5
55°	5.0	5.5
57.5°	5.0	5.3
60°	5.0	5.3
62.5°	4.8	5.3
65°	4.8	5.0
67.5°	4.8	5.0
70°	4.5	4.8
72.5°	4.3	4.5
75°	3.8	4.3
77.5°	3.5	3.8
80°	3.0	3.3



TEST NUMBER: P1335015

CATALOG NUMBER: P3A02R309035DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.5	2.5
85°	1.8	2.0
87.5°	1.0	1.0
90°	0.0	0.0

(END OF REPORT)