

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: P1336071

Luminaire Tested: P3A02R459727DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R459727DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

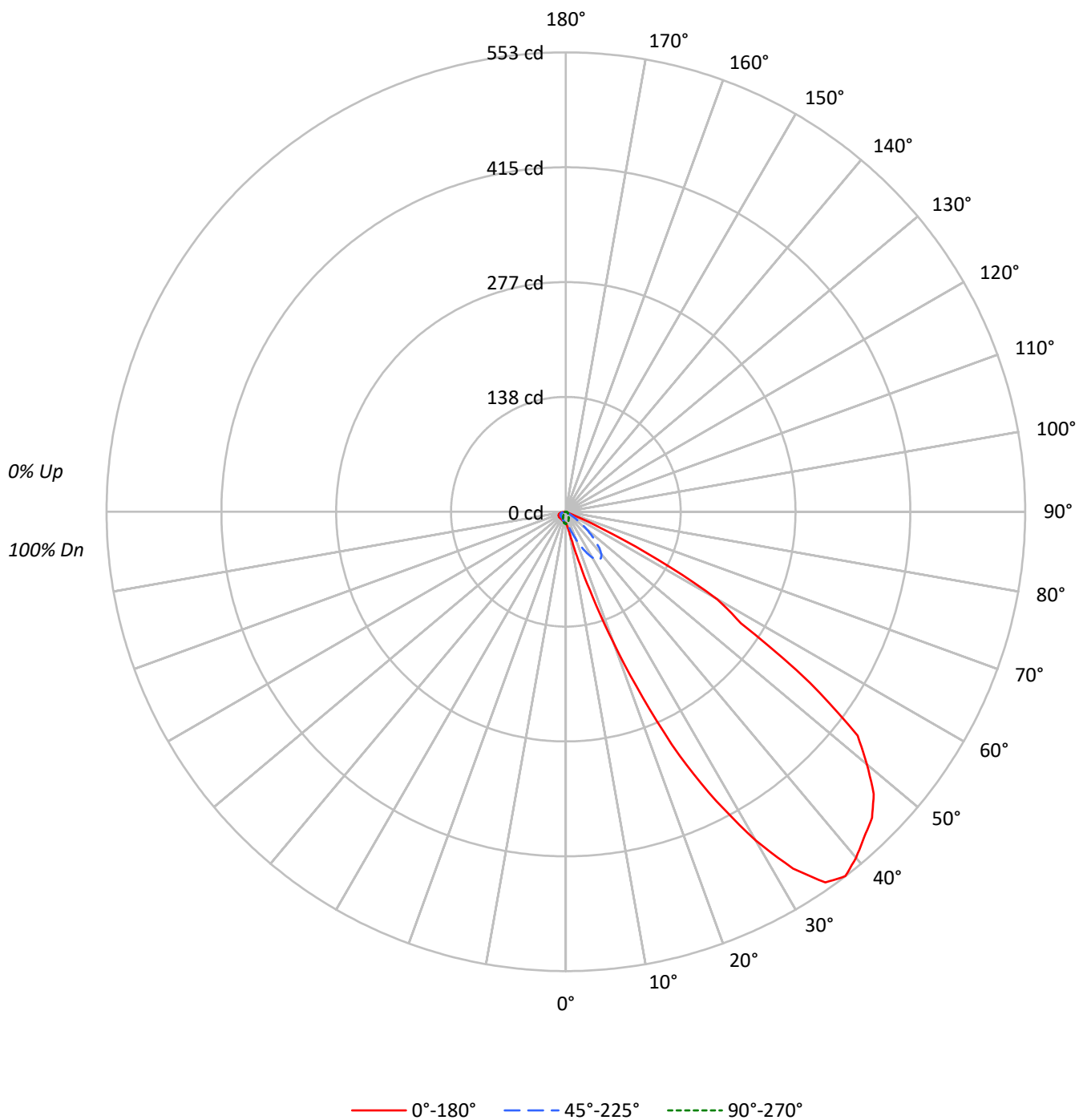
Lumens per Lamp: N/A
Luminaire Lumens: 247.0 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1336071

CATALOG NUMBER: P3A02R459727DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1336071

CATALOG NUMBER: P3A02R459727DE010 E3CA451MMS

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3136	3136	3136	3136	3136
5°	3720	3456	3104	2884	2884
10°	5945	4052	2917	2716	2716
15°	14824	5426	2633	2543	2633
20°	39063	8097	2287	2427	2567
25°	78416	12001	1984	2274	2516
30°	115587	16078	1595	2228	2583
35°	145812	18846	1365	2195	2677
40°	155577	19036	1231	2290	2863
45°	161629	15878	1147	2481	3101
50°	161393	11087	1126	2661	3480
55°	137171	4932	1185	2982	3823
60°	92186	965	1184	3333	4386
65°	24438	415	1141	3580	4981
70°	641	513	1154	3911	5642
75°	508	508	1186	4151	6439
80°	505	758	1263	4420	7198
85°	503	1006	2013	4529	7296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 165794 cd/sqm

TEST NUMBER: P1336071

CATALOG NUMBER: P3A02R459727DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.6
10°-20°	7.0	2.8
20°-30°	28.7	11.6
30°-40°	60.6	24.5
40°-50°	74.7	30.3
50°-60°	56.0	22.7
60°-70°	14.4	5.8
70°-80°	3.0	1.2
80°-90°	1.2	0.5
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°	37.1	15.0
0°-40°	97.7	39.5
0°-60°	228.4	92.5
0°-90°	247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	247.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	17	16	14	13	13	2
15°	65	24	12	11	12	24
25°	324	50	8	9	10	151
35°	545	70	5	8	10	332
45°	521	51	4	8	10	399
55°	359	13	3	8	10	310
65°	47	1	2	7	10	68
75°	1	1	1	5	8	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

TEST NUMBER: P1336071

CATALOG NUMBER: P3A02R459727DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
2.5°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	14.9	14.7	14.3	13.9
5°	16.9	16.7	16.7	16.7	16.5	16.3	16.3	15.7	14.9	14.1	13.5
7.5°	20.0	20.0	19.8	19.4	19.2	18.8	18.4	16.7	14.9	13.7	12.9
10°	26.7	26.3	25.7	25.3	24.3	22.9	21.8	18.2	14.7	13.1	12.4
12.5°	40.0	40.8	38.8	36.7	33.9	31.2	28.0	20.6	14.7	12.4	11.8
15°	65.3	66.7	62.9	58.8	51.8	45.3	39.2	23.9	14.3	11.6	11.0
17.5°	106.7	108.6	102.0	92.5	81.6	68.6	57.3	28.4	13.9	10.8	10.4
20°	167.4	167.1	154.5	142.5	121.6	102.5	81.4	34.7	13.3	9.8	9.8
22.5°	241.8	242.7	227.2	205.5	175.9	145.1	111.6	42.0	12.4	9.0	9.2
25°	324.1	317.2	298.8	272.5	234.7	192.0	148.0	49.6	11.6	8.2	8.6
27.5°	392.7	385.9	364.9	333.7	293.1	242.5	184.9	57.1	10.6	7.3	8.0
30°	456.5	448.0	422.7	387.4	339.0	284.3	219.6	63.5	9.4	6.3	7.3
32.5°	509.2	501.4	472.7	431.7	379.0	320.2	249.0	68.4	8.2	5.7	6.9
35°	544.7	536.8	510.2	465.1	407.8	346.3	272.9	70.4	7.1	5.1	6.7
37.5°	552.9	548.6	529.6	487.4	427.6	363.1	288.2	69.8	5.9	4.7	6.3
40°	543.5	544.5	535.5	500.4	438.2	370.2	294.5	66.5	4.9	4.3	6.1
42.5°	531.5	534.1	533.5	505.7	442.7	370.6	291.8	60.0	3.9	3.9	5.9
45°	521.2	523.9	527.6	503.5	439.6	365.3	283.5	51.2	2.9	3.7	5.9
47.5°	502.7	505.5	510.8	485.5	424.1	351.6	268.4	41.6	2.0	3.5	5.7
50°	473.1	474.5	473.1	444.7	394.3	329.6	243.9	32.5	1.4	3.3	5.7
52.5°	442.7	439.8	428.0	392.1	347.0	294.7	213.1	23.1	1.0	3.1	5.5
55°	358.8	354.3	345.5	323.5	297.8	251.8	172.3	12.9	1.0	3.1	5.3
57.5°	250.0	252.5	255.5	251.0	239.2	198.4	130.8	5.7	1.0	2.9	5.3
60°	210.2	208.2	208.4	205.5	185.9	144.7	90.0	2.2	1.0	2.7	5.1
62.5°	125.5	126.9	129.6	130.2	110.8	80.8	47.1	1.0	1.0	2.4	4.9
65°	47.1	49.4	43.3	37.6	29.8	21.8	11.0	0.8	1.2	2.2	4.5
67.5°	1.4	1.6	2.0	1.8	1.8	1.6	1.2	0.8	1.2	2.0	4.3
70°	1.0	1.0	1.0	1.0	1.0	0.8	0.8	0.8	1.0	1.8	3.9
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	1.6	3.5
75°	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.4	2.9
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	1.2	2.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.8	1.0	2.0
82.5°	0.4	0.4	0.4	0.2	0.4	0.4	0.4	0.4	0.8	0.8	1.6
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.8	1.0
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.6	0.6	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

TEST NUMBER: P1336071

CATALOG NUMBER: P3A02R459727DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	14.3	14.3	14.3
2.5°	13.5	13.5	13.5
5°	13.1	13.1	13.1
7.5°	12.7	12.7	12.7
10°	12.2	12.2	12.2
12.5°	11.8	11.8	12.0
15°	11.2	11.6	11.6
17.5°	10.8	11.2	11.4
20°	10.4	10.8	11.0
22.5°	9.8	10.4	10.8
25°	9.4	10.2	10.4
27.5°	9.0	10.0	10.4
30°	8.8	9.8	10.2
32.5°	8.4	9.6	10.0
35°	8.2	9.6	10.0
37.5°	8.2	9.4	10.0
40°	8.0	9.4	10.0
42.5°	8.0	9.4	10.0
45°	8.0	9.4	10.0
47.5°	7.8	9.4	10.2
50°	7.8	9.6	10.2
52.5°	7.8	9.6	10.2
55°	7.8	9.6	10.0
57.5°	7.6	9.4	10.0
60°	7.6	9.4	10.0
62.5°	7.1	9.2	9.8
65°	6.9	9.0	9.6
67.5°	6.5	8.8	9.2
70°	6.1	8.2	8.8
72.5°	5.5	7.8	8.4
75°	4.9	7.1	7.6
77.5°	4.3	6.3	6.7
80°	3.5	5.3	5.7
82.5°	2.7	4.1	4.3
85°	1.8	2.7	2.9
87.5°	0.8	1.2	1.4
90°	0.0	0.0	0.0

(END OF REPORT)