

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: P1336135

Luminaire Tested: P3A02R459827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336135
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: P3A02R459827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

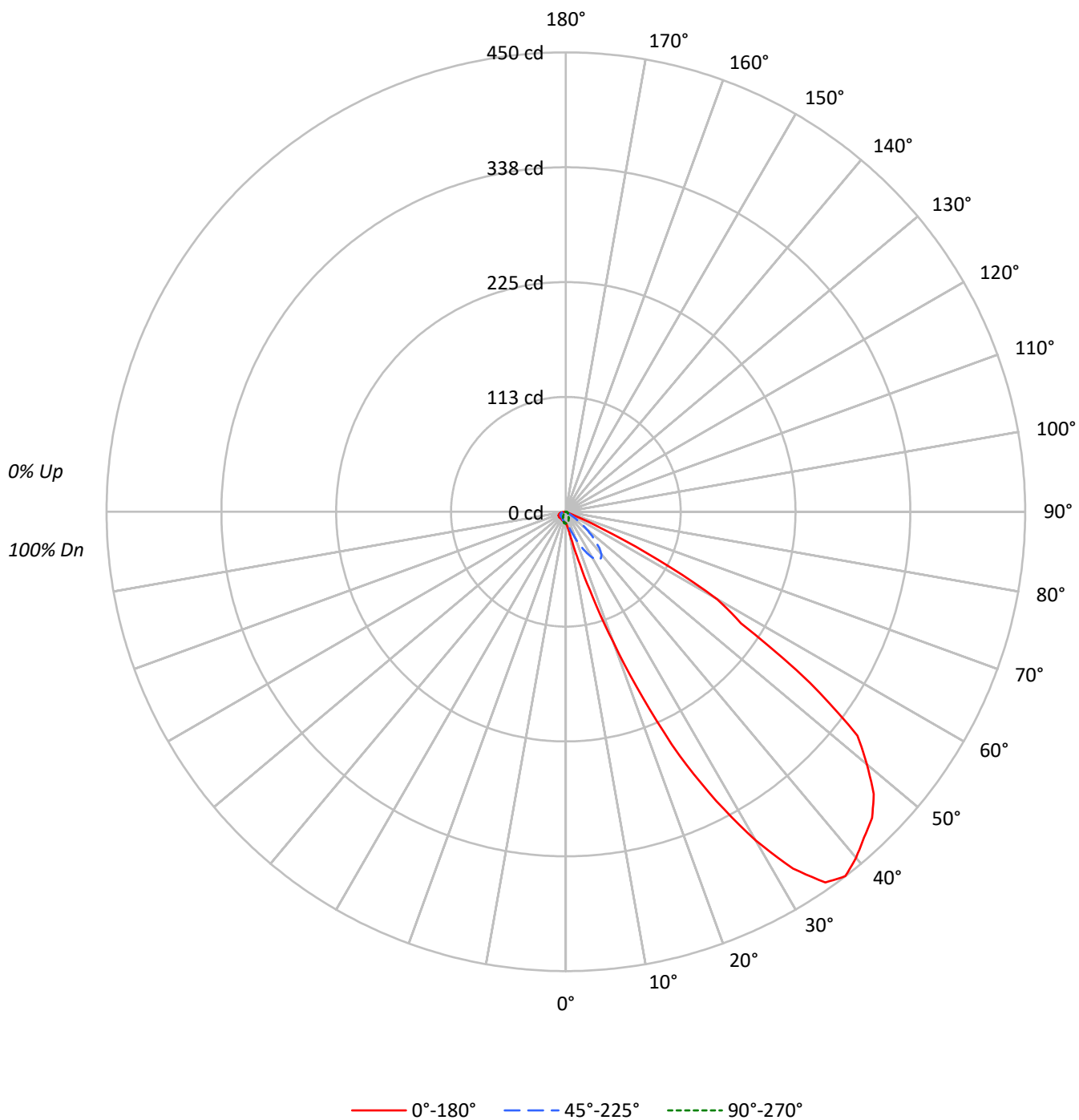
Lumens per Lamp: N/A
Luminaire Lumens: 201.0 lumens
Efficiency: N/A
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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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	0
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	107	104	100	97	99	97	94		96	93	91		92	90	88	86
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	80	72	66	77	70	65		74	69	64		71	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2544	2544	2544	2544	2544
5°	3038	2818	2531	2333	2333
10°	4854	3295	2360	2227	2227
15°	12055	4404	2157	2066	2157
20°	31783	6581	1867	1984	2100
25°	63802	9775	1597	1839	2057
30°	94065	13091	1291	1798	2102
35°	118668	15339	1124	1767	2168
40°	126609	15486	1002	1861	2319
45°	131549	12932	930	2016	2512
50°	131339	9006	921	2149	2831
55°	111633	4014	956	2409	3097
60°	75038	789	965	2675	3552
65°	19924	363	934	2906	4047
70°	513	449	962	3206	4552
75°	424	424	1017	3389	5168
80°	379	631	1010	3536	5935
85°	503	755	1761	3774	5787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 134926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.6
10°-20°	5.7	2.8
20°-30°	23.4	11.6
30°-40°	49.3	24.5
40°-50°	60.8	30.2
50°-60°	45.6	22.7
60°-70°	11.7	5.8
70°-80°	2.4	1.2
80°-90°	1.0	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°	30.2	15.0
0°-40°	79.5	39.5
0°-60°	185.8	92.5
0°-90°	201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	201.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	14	13	12	11	11	2
15°	53	19	10	9	10	19
25°	264	40	7	8	8	123
35°	443	57	4	7	8	270
45°	424	42	3	6	8	325
55°	292	10	2	6	8	252
65°	38	1	2	6	8	55
75°	0	0	1	4	6	1
85°	0	0	1	2	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
2.5°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.1	12.0	11.6	11.3
5°	13.8	13.6	13.6	13.6	13.5	13.3	13.3	12.8	12.1	11.5	11.0
7.5°	16.3	16.3	16.1	15.8	15.6	15.3	14.9	13.6	12.1	11.1	10.5
10°	21.8	21.4	20.9	20.6	19.8	18.6	17.8	14.8	12.0	10.6	10.1
12.5°	32.6	33.2	31.6	29.9	27.6	25.4	22.8	16.8	12.0	10.1	9.6
15°	53.1	54.3	51.2	47.8	42.2	36.9	31.9	19.4	11.6	9.5	9.0
17.5°	86.9	88.4	83.0	75.2	66.4	55.8	46.7	23.1	11.3	8.8	8.5
20°	136.2	136.0	125.7	115.9	99.0	83.4	66.3	28.2	10.8	8.0	8.0
22.5°	196.8	197.5	184.8	167.2	143.2	118.1	90.8	34.2	10.1	7.3	7.5
25°	263.7	258.1	243.1	221.7	191.0	156.3	120.4	40.4	9.5	6.6	7.0
27.5°	319.5	314.1	297.0	271.5	238.5	197.3	150.5	46.5	8.6	6.0	6.5
30°	371.5	364.5	344.0	315.2	275.9	231.4	178.7	51.7	7.6	5.1	6.0
32.5°	414.4	408.1	384.6	351.3	308.4	260.6	202.6	55.6	6.6	4.7	5.6
35°	443.3	436.8	415.2	378.5	331.8	281.8	222.1	57.3	5.8	4.2	5.5
37.5°	449.9	446.4	431.0	396.6	347.9	295.5	234.5	56.8	4.8	3.8	5.1
40°	442.3	443.1	435.8	407.2	356.6	301.3	239.7	54.1	4.0	3.5	5.0
42.5°	432.5	434.6	434.1	411.5	360.2	301.6	237.5	48.8	3.2	3.2	4.8
45°	424.2	426.3	429.3	409.7	357.7	297.3	230.7	41.7	2.3	3.0	4.8
47.5°	409.1	411.4	415.7	395.1	345.1	286.2	218.4	33.9	1.7	2.8	4.7
50°	385.0	386.1	385.0	361.9	320.9	268.2	198.5	26.4	1.2	2.7	4.7
52.5°	360.2	357.9	348.3	319.0	282.3	239.8	173.4	18.8	0.8	2.5	4.5
55°	292.0	288.3	281.2	263.2	242.3	204.9	140.2	10.5	0.8	2.5	4.3
57.5°	203.4	205.4	207.9	204.3	194.6	161.4	106.5	4.7	0.8	2.3	4.3
60°	171.1	169.4	169.6	167.2	151.3	117.8	73.2	1.8	0.8	2.2	4.2
62.5°	102.1	103.3	105.5	106.0	90.2	65.8	38.4	0.8	0.8	2.0	4.0
65°	38.4	40.2	35.2	30.6	24.2	17.8	9.0	0.7	1.0	1.8	3.7
67.5°	1.2	1.3	1.7	1.5	1.5	1.3	1.0	0.7	1.0	1.7	3.5
70°	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	1.5	3.2
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	1.3	2.8
75°	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.2	2.3
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.0	2.0
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.7	0.8	1.7
82.5°	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.7	0.7	1.3
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.8
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.5	0.5	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

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	11.6	11.6	11.6
2.5°	11.0	11.0	11.0
5°	10.6	10.6	10.6
7.5°	10.3	10.3	10.3
10°	10.0	10.0	10.0
12.5°	9.6	9.6	9.8
15°	9.1	9.5	9.5
17.5°	8.8	9.1	9.3
20°	8.5	8.8	9.0
22.5°	8.0	8.5	8.8
25°	7.6	8.3	8.5
27.5°	7.3	8.1	8.5
30°	7.1	8.0	8.3
32.5°	6.8	7.8	8.1
35°	6.6	7.8	8.1
37.5°	6.6	7.6	8.1
40°	6.5	7.6	8.1
42.5°	6.5	7.6	8.1
45°	6.5	7.6	8.1
47.5°	6.3	7.6	8.3
50°	6.3	7.8	8.3
52.5°	6.3	7.8	8.3
55°	6.3	7.8	8.1
57.5°	6.1	7.6	8.1
60°	6.1	7.6	8.1
62.5°	5.8	7.5	8.0
65°	5.6	7.3	7.8
67.5°	5.3	7.1	7.5
70°	5.0	6.6	7.1
72.5°	4.5	6.3	6.8
75°	4.0	5.8	6.1
77.5°	3.5	5.1	5.5
80°	2.8	4.3	4.7
82.5°	2.2	3.3	3.5
85°	1.5	2.2	2.3
87.5°	0.7	1.0	1.2
90°	0.0	0.0	0.0

(END OF REPORT)