

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: P1334827

Luminaire Tested: P3A02R259835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334827
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

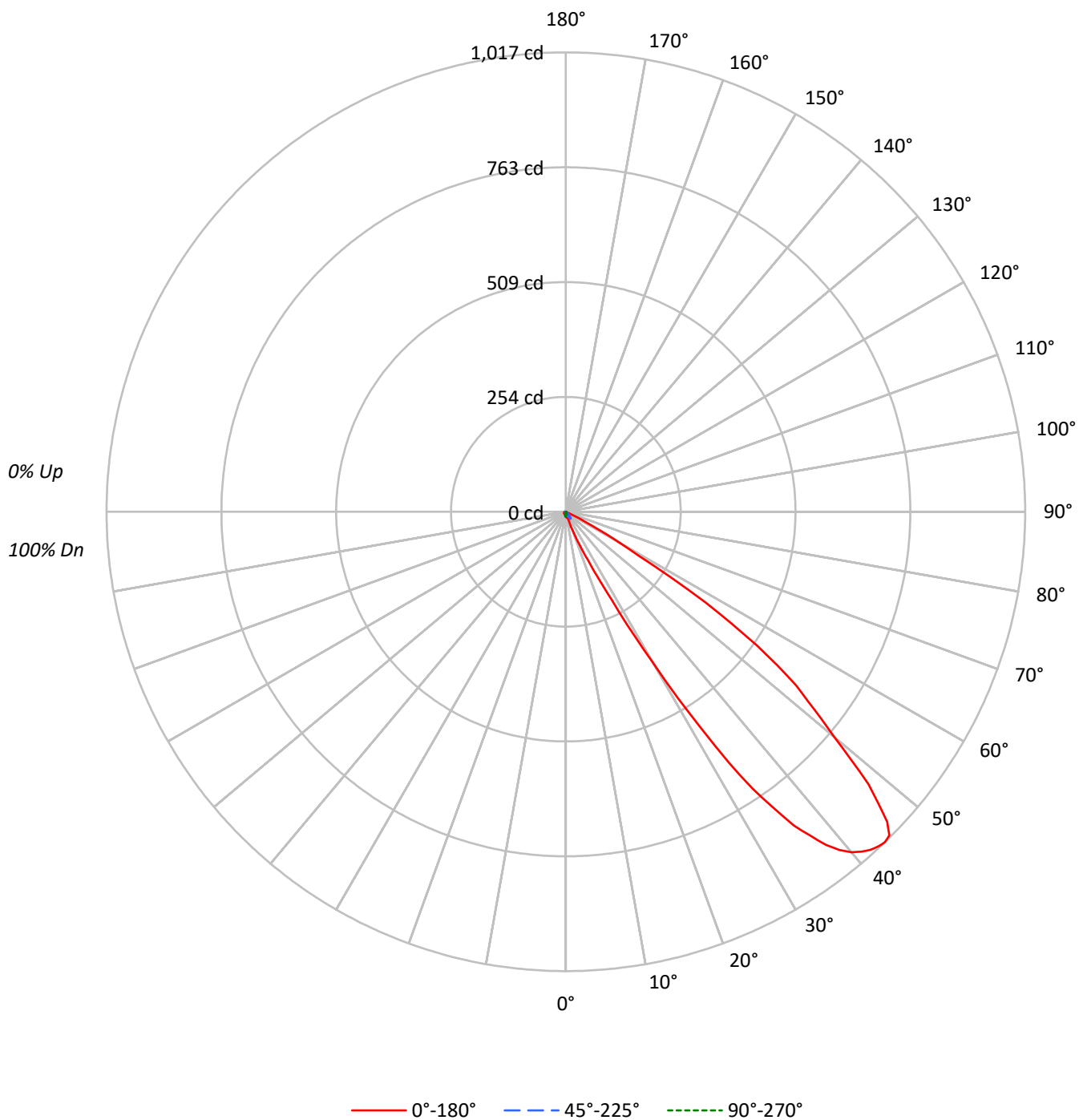
Lumens per Lamp: N/A
Luminaire Lumens: 212.0 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	108	104	101	97	100	97	94		96	94	92		92	91	89	87
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	78	75	73
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	42
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		48	42	37	35
7	62	48	39	32	60	47	39	32	46	38	32		44	37	32		43	36	32	29
8	57	43	34	27	55	42	33	27	40	33	27		39	32	27		38	32	27	25
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34	27	23	21
10	48	34	25	20	47	33	25	20	32	25	20		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2368	2368	2368	2368	2368
5°	2707	2597	2289	2047	2003
10°	2694	2449	1959	1692	1692
15°	2997	2111	1521	1430	1521
20°	10618	2100	1167	1213	1353
25°	30558	2661	944	1137	1307
30°	97483	4102	760	1089	1317
35°	213538	4845	642	1044	1338
40°	281699	4380	544	1059	1431
45°	314141	3070	527	1147	1551
50°	264418	1603	512	1194	1706
55°	197689	650	497	1338	1912
60°	61179	175	482	1491	2149
65°	5241	0	571	1557	2335
70°	385	128	577	1795	2629
75°	339	169	763	1864	2965
80°	253	253	1137	2147	3536
85°	503	503	1761	2264	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 314141 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.5
10°-20°	2.5	1.2
20°-30°	11.7	5.5
30°-40°	56.5	26.6
40°-50°	88.5	41.7
50°-60°	45.4	21.4
60°-70°	4.3	2.0
70°-80°	1.4	0.7
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°	15.2	7.2
0°-40°	71.7	33.8
0°-60°	205.6	97.0
0°-90°	212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	12	10	9	9	1
15°	13	9	7	6	7	6
25°	126	11	4	5	5	78
35°	798	18	2	4	5	484
45°	1013	10	2	4	5	741
55°	517	2	1	4	5	431
65°	10	0	1	3	4	32
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
2.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.6	11.6	11.8	11.6	11.6
5°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.1	12.1	12.1	11.8
7.5°	12.5	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.1	12.1	11.6
10°	12.1	12.1	12.1	12.1	11.9	11.9	11.9	11.8	11.8	11.8	11.0
12.5°	12.1	12.1	12.1	12.1	11.9	11.9	11.8	11.8	11.6	11.4	10.1
15°	13.2	13.2	13.2	13.1	12.9	12.7	12.5	12.3	12.1	11.8	9.3
17.5°	19.4	18.8	18.7	17.9	17.0	16.0	15.3	14.6	13.8	13.2	9.0
20°	45.5	45.3	44.4	42.2	39.7	36.9	34.1	31.0	26.5	23.5	9.0
22.5°	78.9	77.8	76.1	74.4	70.1	65.1	59.9	53.9	48.1	42.0	9.5
25°	126.3	128.9	123.3	118.8	111.4	102.2	92.3	84.1	73.7	64.0	11.0
27.5°	219.6	221.3	210.2	195.7	178.3	159.1	140.5	126.5	108.9	92.9	13.8
30°	385.0	386.7	368.3	337.3	301.5	269.9	227.2	189.7	155.2	128.5	16.2
31°	480.6	467.5	446.1	416.0	370.7	323.1	271.8	226.5	182.8	147.8	17.0
32°	563.6	562.5	537.5	491.9	446.4	387.7	324.0	264.9	211.4	167.2	17.5
33°	661.5	654.1	618.8	575.9	515.6	456.5	374.4	306.9	240.7	188.8	17.9
34°	740.1	719.9	705.4	656.3	592.7	517.3	429.4	351.3	277.2	209.7	18.1
35°	797.7	793.4	765.1	719.4	654.6	577.6	488.8	397.4	307.8	233.9	18.1
36°	858.7	845.5	817.9	776.4	713.4	633.7	534.1	437.3	343.4	255.8	17.9
37°	897.0	889.1	861.7	819.0	757.2	681.1	584.8	479.4	371.8	277.6	17.5
38°	936.3	920.5	893.4	852.6	791.9	720.5	621.6	511.9	397.9	296.8	17.0
39°	963.6	947.1	919.5	878.9	819.5	748.6	650.7	539.5	420.7	311.2	16.2
40°	984.1	968.2	940.2	898.4	839.9	770.8	675.0	564.0	439.7	323.7	15.3
41°	996.8	982.0	954.2	912.6	853.9	783.5	690.8	579.8	452.6	332.1	14.4
42°	1007.4	992.3	963.9	921.4	862.4	794.4	700.5	589.9	461.4	336.4	13.6
43°	1013.4	998.3	970.6	927.2	867.7	799.4	705.7	594.6	464.3	335.8	12.3
44°	1016.7	1001.1	973.3	929.8	869.9	800.7	706.1	593.6	462.3	331.3	11.2
45°	1013.0	997.5	970.6	927.2	866.0	796.6	702.4	588.6	454.4	322.6	9.9
46°	988.7	976.8	952.2	912.3	853.7	786.1	692.9	578.9	442.3	311.7	8.4
47°	946.0	936.5	912.6	883.0	830.0	766.9	675.3	560.4	425.3	295.5	6.7
48°	901.4	887.4	865.2	834.8	790.1	732.4	646.4	533.4	399.6	274.2	6.0
49°	835.6	827.4	807.8	773.8	736.7	686.0	605.6	498.7	368.1	251.1	5.2
50°	775.1	769.5	742.1	717.1	677.8	630.4	550.2	453.0	328.9	222.4	4.7
51°	727.9	721.2	701.4	670.3	628.3	573.3	497.7	393.6	283.9	188.2	3.7
52°	678.7	675.0	657.4	625.3	584.1	529.3	446.8	343.3	240.3	159.1	3.0
53°	638.4	633.0	611.5	583.0	538.4	481.7	391.6	296.4	203.5	133.8	2.6
54°	579.6	577.4	563.6	533.7	485.4	423.7	341.6	249.6	169.8	113.4	2.2
55°	517.1	509.7	495.7	472.0	427.6	369.9	283.8	206.9	137.3	95.5	1.7
56°	441.0	440.6	415.6	395.9	356.5	295.3	226.7	161.6	111.6	79.7	1.5
57°	368.3	356.5	332.4	312.9	270.5	224.1	168.3	121.1	87.3	64.5	1.1
58°	272.4	266.2	259.9	231.1	192.0	158.8	120.1	85.1	64.5	49.3	0.7
59°	184.9	184.7	177.2	155.4	132.8	98.9	75.0	57.8	44.4	36.2	0.6
60°	139.5	136.2	121.3	106.9	83.6	62.5	44.4	34.1	27.6	23.3	0.4
62.5°	48.9	50.7	44.6	36.9	28.2	23.1	17.7	14.4	11.8	9.5	0.0
65°	10.1	11.0	9.5	9.0	7.1	6.2	5.4	4.7	3.9	3.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.3	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.7	0.7	0.2
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	10.8	10.8	10.8	10.8	10.8	10.8
2.5°	11.4	11.0	10.4	10.3	10.1	10.1
5°	11.2	10.4	9.9	9.3	9.1	9.1
7.5°	10.6	9.7	9.0	8.6	8.4	8.2
10°	10.1	8.8	8.0	7.6	7.6	7.6
12.5°	9.0	7.8	7.1	6.9	7.1	7.1
15°	8.0	6.7	6.3	6.3	6.5	6.7
17.5°	6.9	6.0	5.6	5.8	6.0	6.2
20°	6.2	5.0	5.0	5.2	5.8	5.8
22.5°	5.4	4.5	4.5	5.0	5.4	5.6
25°	4.9	3.9	4.1	4.7	5.2	5.4
27.5°	4.1	3.4	3.7	4.5	5.0	5.2
30°	3.5	3.0	3.5	4.3	4.9	5.2
31°	3.4	2.8	3.5	4.1	4.9	5.2
32°	3.0	2.8	3.4	4.1	4.9	5.0
33°	2.8	2.6	3.4	4.1	4.9	5.0
34°	2.6	2.4	3.2	4.1	4.9	5.0
35°	2.2	2.4	3.2	3.9	4.7	5.0
36°	2.1	2.2	3.2	3.9	4.7	5.0
37°	1.9	2.2	3.0	3.9	4.7	5.0
38°	1.7	2.1	3.0	3.9	4.7	5.0
39°	1.5	2.1	2.8	3.9	4.7	5.0
40°	1.3	1.9	2.8	3.7	4.7	5.0
41°	1.3	1.9	2.8	3.7	4.7	5.0
42°	1.1	1.9	2.8	3.7	4.7	5.0
43°	0.9	1.7	2.8	3.7	4.7	5.0
44°	0.7	1.7	2.6	3.7	4.7	5.0
45°	0.7	1.7	2.6	3.7	4.7	5.0
46°	0.6	1.5	2.6	3.7	4.7	5.0
47°	0.4	1.5	2.6	3.5	4.7	5.0
48°	0.4	1.5	2.6	3.5	4.7	5.0
49°	0.4	1.5	2.4	3.5	4.7	5.0
50°	0.4	1.5	2.4	3.5	4.7	5.0
51°	0.2	1.3	2.4	3.5	4.7	5.0
52°	0.2	1.3	2.4	3.5	4.7	5.2
53°	0.2	1.3	2.4	3.5	4.7	5.0
54°	0.2	1.3	2.2	3.5	4.7	5.0
55°	0.2	1.3	2.2	3.5	4.7	5.0
56°	0.2	1.1	2.2	3.4	4.7	5.0
57°	0.4	1.1	2.2	3.4	4.7	4.9
58°	0.4	1.1	2.2	3.4	4.5	4.9
59°	0.4	1.1	2.2	3.4	4.5	4.9
60°	0.4	1.1	2.1	3.4	4.5	4.9
62.5°	0.4	1.1	2.1	3.2	4.3	4.7
65°	0.4	1.1	1.9	3.0	4.3	4.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	0.9	1.9	2.8	4.1	4.3
70°	0.6	0.9	1.7	2.8	3.9	4.1
72.5°	0.6	0.9	1.7	2.4	3.5	3.9
75°	0.6	0.9	1.5	2.2	3.4	3.5
77.5°	0.6	0.9	1.3	2.1	3.0	3.2
80°	0.7	0.9	1.1	1.7	2.6	2.8
82.5°	0.7	0.9	0.9	1.3	2.1	2.2
85°	0.6	0.7	0.7	0.9	1.3	1.5
87.5°	0.6	0.7	0.6	0.4	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)