

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: P1334659

Luminaire Tested: P3A02R259030D2WDE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334659
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: P3A02R259030D2WDE010 E3CA451MMS
Description: 3in Adjustable Dim to Warm LED luminaire with, R25 optic, 3000K CCT AND, 90CRI ,
E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

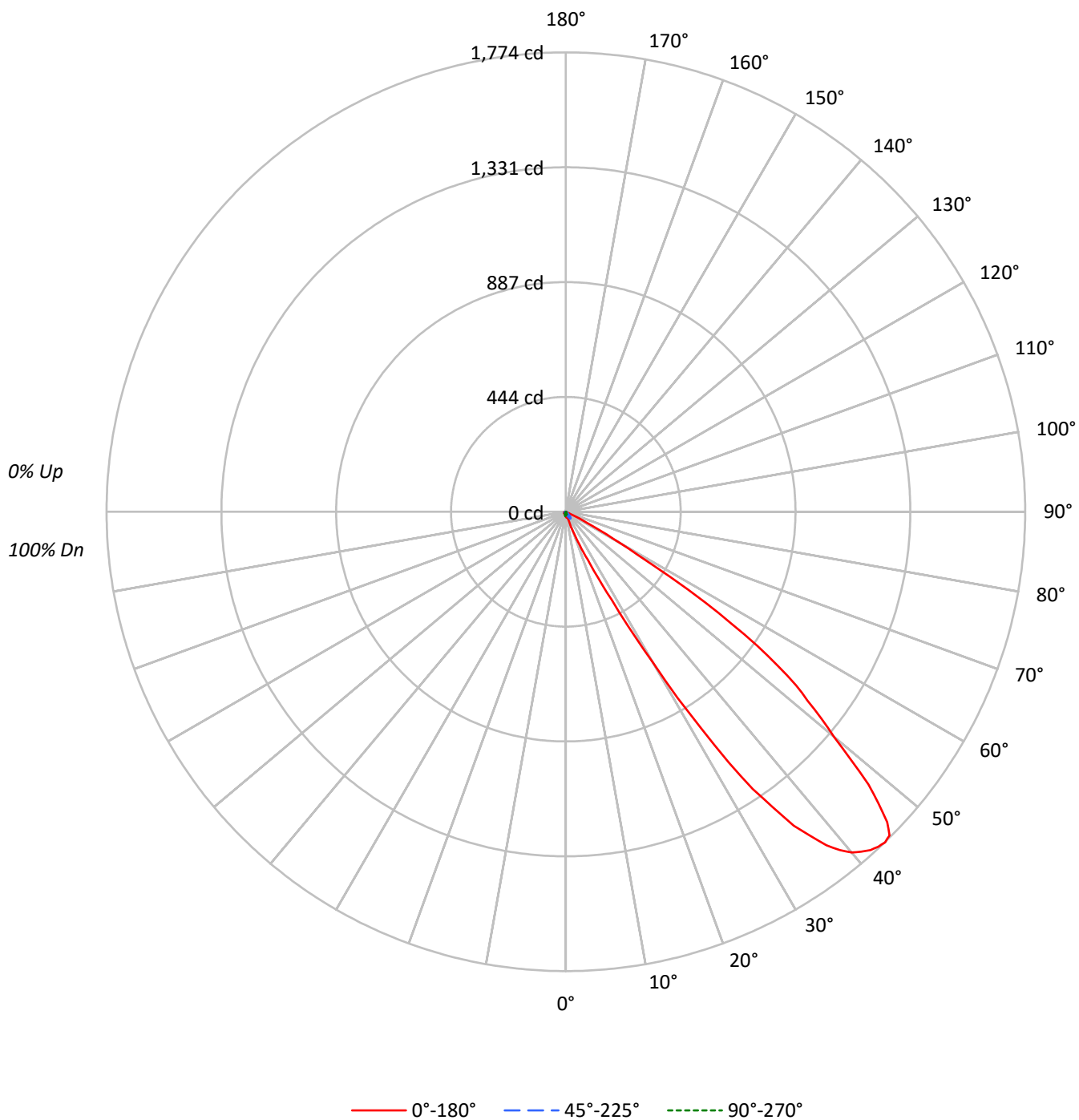
Lumens per Lamp: N/A
Luminaire Lumens: 370.0 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	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	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°	4144	4144	4144	4144	4144
5°	4733	4512	4006	3588	3522
10°	4720	4275	3407	2961	2961
15°	5244	3700	2656	2520	2656
20°	18528	3640	2054	2124	2357
25°	53326	4645	1645	1960	2274
30°	170153	7166	1317	1899	2304
35°	372681	8459	1124	1820	2356
40°	491635	7643	945	1861	2519
45°	548274	5365	899	2016	2729
50°	461494	2763	887	2115	3002
55°	345030	1109	879	2370	3364
60°	106790	307	877	2588	3728
65°	9132	0	1038	2698	4047
70°	641	192	1026	3142	4616
75°	593	254	1356	3304	5253
80°	379	379	2020	3662	6188
85°	755	755	3271	4026	6542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 548274 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.5
10°-20°	4.4	1.2
20°-30°	20.5	5.5
30°-40°	98.6	26.6
40°-50°	154.5	41.8
50°-60°	79.2	21.4
60°-70°	7.5	2.0
70°-80°	2.5	0.7
80°-90°	1.3	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°	26.5	7.2
0°-40°	125.1	33.8
0°-60°	358.8	97.0
0°-90°	370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	370.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	22	20	18	16	16	2
15°	23	16	12	11	12	10
25°	220	19	7	8	9	137
35°	1392	32	4	7	9	845
45°	1768	17	3	6	9	1294
55°	902	3	2	6	9	751
65°	18	0	2	5	8	55
75°	1	0	2	4	6	1
85°	0	0	1	2	3	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°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9
2.5°	20.5	20.5	20.5	20.5	20.5	20.5	20.2	20.2	20.5	20.2	20.2
5°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.2	21.2	21.2	20.5
7.5°	21.8	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.2	21.2	20.2
10°	21.2	21.2	21.2	21.2	20.8	20.8	20.8	20.5	20.5	20.5	19.2
12.5°	21.2	21.2	21.2	21.2	20.8	20.8	20.5	20.5	20.2	19.9	17.6
15°	23.1	23.1	23.1	22.8	22.5	22.1	21.8	21.5	21.2	20.5	16.3
17.5°	33.9	32.9	32.6	31.3	29.6	28.0	26.7	25.4	24.1	23.1	15.6
20°	79.4	79.1	77.5	73.6	69.4	64.5	59.6	54.0	46.2	41.0	15.6
22.5°	137.7	135.8	132.8	129.9	122.4	113.6	104.5	94.1	84.0	73.3	16.6
25°	220.4	225.0	215.2	207.4	194.4	178.4	161.2	146.8	128.6	111.7	19.2
27.5°	383.2	386.2	366.9	341.5	311.3	277.7	245.2	220.8	190.1	162.1	24.1
30°	672.0	675.0	642.7	588.7	526.2	471.1	396.6	331.1	270.9	224.3	28.3
31°	838.7	815.9	778.5	726.1	646.9	563.9	474.4	395.3	319.1	257.9	29.6
32°	983.6	981.7	938.0	858.6	779.1	676.6	565.6	462.3	368.9	291.7	30.6
33°	1154.5	1141.5	1080.0	1005.1	899.9	796.7	653.5	535.6	420.0	329.5	31.3
34°	1291.6	1256.5	1231.1	1145.4	1034.4	902.9	749.5	613.1	483.8	366.0	31.6
35°	1392.2	1384.7	1335.2	1255.5	1142.5	1008.0	853.0	693.5	537.2	408.3	31.6
36°	1498.7	1475.6	1427.4	1355.1	1245.1	1106.0	932.2	763.2	599.4	446.4	31.3
37°	1565.4	1551.8	1503.9	1429.3	1321.6	1188.7	1020.7	836.8	648.9	484.5	30.6
38°	1634.1	1606.5	1559.3	1488.0	1382.1	1257.4	1084.9	893.4	694.5	518.0	29.6
39°	1681.7	1653.0	1604.8	1533.9	1430.3	1306.6	1135.7	941.6	734.2	543.1	28.3
40°	1717.5	1689.8	1641.0	1568.0	1465.8	1345.3	1178.0	984.3	767.4	564.9	26.7
41°	1739.6	1713.9	1665.4	1592.8	1490.2	1367.5	1205.7	1011.9	789.9	579.6	25.1
42°	1758.2	1731.8	1682.3	1608.1	1505.2	1386.4	1222.6	1029.5	805.2	587.0	23.8
43°	1768.6	1742.2	1694.1	1618.2	1514.3	1395.2	1231.7	1037.7	810.4	586.1	21.5
44°	1774.5	1747.1	1698.6	1622.7	1518.2	1397.4	1232.4	1036.0	806.8	578.3	19.5
45°	1768.0	1740.9	1694.1	1618.2	1511.4	1390.3	1225.9	1027.2	793.1	562.9	17.3
46°	1725.6	1704.8	1661.8	1592.1	1489.9	1372.0	1209.2	1010.3	772.0	544.1	14.7
47°	1651.1	1634.5	1592.8	1541.0	1448.6	1338.5	1178.6	978.1	742.3	515.7	11.7
48°	1573.3	1548.8	1510.1	1457.0	1378.9	1278.3	1128.2	930.9	697.4	478.6	10.4
49°	1458.3	1444.0	1409.8	1350.6	1285.8	1197.2	1056.9	870.3	642.4	438.2	9.1
50°	1352.8	1343.1	1295.2	1251.6	1182.9	1100.2	960.2	790.5	574.0	388.1	8.1
51°	1270.5	1258.7	1224.2	1169.8	1096.6	1000.5	868.7	687.0	495.5	328.5	6.5
52°	1184.5	1178.0	1147.4	1091.4	1019.4	923.7	779.8	599.1	419.4	277.7	5.2
53°	1114.2	1104.7	1067.3	1017.5	939.7	840.7	683.4	517.4	355.2	233.4	4.6
54°	1011.6	1007.7	983.6	931.5	847.2	739.4	596.2	435.6	296.3	198.0	3.9
55°	902.5	889.5	865.1	823.7	746.3	645.6	495.2	361.1	239.6	166.7	2.9
56°	769.7	769.0	725.4	690.9	622.2	515.4	395.6	282.0	194.7	139.0	2.6
57°	642.7	622.2	580.2	546.0	472.1	391.0	293.7	211.3	152.4	112.7	2.0
58°	475.4	464.6	453.5	403.4	335.0	277.1	209.7	148.5	112.7	86.0	1.3
59°	322.7	322.3	309.3	271.2	231.8	172.6	130.9	100.9	77.5	63.2	1.0
60°	243.5	237.7	211.6	186.6	145.9	109.1	77.5	59.6	48.2	40.7	0.7
62.5°	85.3	88.6	77.8	64.5	49.2	40.4	30.9	25.1	20.5	16.6	0.0
65°	17.6	19.2	16.6	15.6	12.4	10.7	9.4	8.1	6.8	5.9	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°	2.3	2.0	2.0	2.0	1.6	1.6	1.6	1.6	1.3	1.3	0.3
70°	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.3
72.5°	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
85°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	18.9	18.9	18.9	18.9	18.9	18.9
2.5°	19.9	19.2	18.2	17.9	17.6	17.6
5°	19.5	18.2	17.3	16.3	16.0	16.0
7.5°	18.6	16.9	15.6	15.0	14.7	14.3
10°	17.6	15.3	14.0	13.3	13.3	13.3
12.5°	15.6	13.7	12.4	12.0	12.4	12.4
15°	14.0	11.7	11.1	11.1	11.4	11.7
17.5°	12.0	10.4	9.8	10.1	10.4	10.7
20°	10.7	8.8	8.8	9.1	10.1	10.1
22.5°	9.4	7.8	7.8	8.8	9.4	9.8
25°	8.5	6.8	7.2	8.1	9.1	9.4
27.5°	7.2	5.9	6.5	7.8	8.8	9.1
30°	6.2	5.2	6.2	7.5	8.5	9.1
31°	5.9	4.9	6.2	7.2	8.5	9.1
32°	5.2	4.9	5.9	7.2	8.5	8.8
33°	4.9	4.6	5.9	7.2	8.5	8.8
34°	4.6	4.2	5.5	7.2	8.5	8.8
35°	3.9	4.2	5.5	6.8	8.1	8.8
36°	3.6	3.9	5.5	6.8	8.1	8.8
37°	3.3	3.9	5.2	6.8	8.1	8.8
38°	2.9	3.6	5.2	6.8	8.1	8.8
39°	2.6	3.6	4.9	6.8	8.1	8.8
40°	2.3	3.3	4.9	6.5	8.1	8.8
41°	2.3	3.3	4.9	6.5	8.1	8.8
42°	2.0	3.3	4.9	6.5	8.1	8.8
43°	1.6	2.9	4.9	6.5	8.1	8.8
44°	1.3	2.9	4.6	6.5	8.1	8.8
45°	1.3	2.9	4.6	6.5	8.1	8.8
46°	1.0	2.6	4.6	6.5	8.1	8.8
47°	0.7	2.6	4.6	6.2	8.1	8.8
48°	0.7	2.6	4.6	6.2	8.1	8.8
49°	0.7	2.6	4.2	6.2	8.1	8.8
50°	0.7	2.6	4.2	6.2	8.1	8.8
51°	0.3	2.3	4.2	6.2	8.1	8.8
52°	0.3	2.3	4.2	6.2	8.1	9.1
53°	0.3	2.3	4.2	6.2	8.1	8.8
54°	0.3	2.3	3.9	6.2	8.1	8.8
55°	0.3	2.3	3.9	6.2	8.1	8.8
56°	0.3	2.0	3.9	5.9	8.1	8.8
57°	0.7	2.0	3.9	5.9	8.1	8.5
58°	0.7	2.0	3.9	5.9	7.8	8.5
59°	0.7	2.0	3.9	5.9	7.8	8.5
60°	0.7	2.0	3.6	5.9	7.8	8.5
62.5°	0.7	2.0	3.6	5.5	7.5	8.1
65°	0.7	2.0	3.3	5.2	7.5	7.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	1.6	3.3	4.9	7.2	7.5
70°	1.0	1.6	2.9	4.9	6.8	7.2
72.5°	1.0	1.6	2.9	4.2	6.2	6.8
75°	1.0	1.6	2.6	3.9	5.9	6.2
77.5°	1.0	1.6	2.3	3.6	5.2	5.5
80°	1.3	1.6	2.0	2.9	4.6	4.9
82.5°	1.3	1.6	1.6	2.3	3.6	3.9
85°	1.0	1.3	1.3	1.6	2.3	2.6
87.5°	1.0	1.3	1.0	0.7	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)