

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: P1338849

Luminaire Tested: P3A05R409030D2WDE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338849
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R409030D2WDE010 E3CA451MMS
Description: 3in Adjustable Dim to Warm LED luminaire with, R40 optic, 3000K CCT AND, 90CRI ,
E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

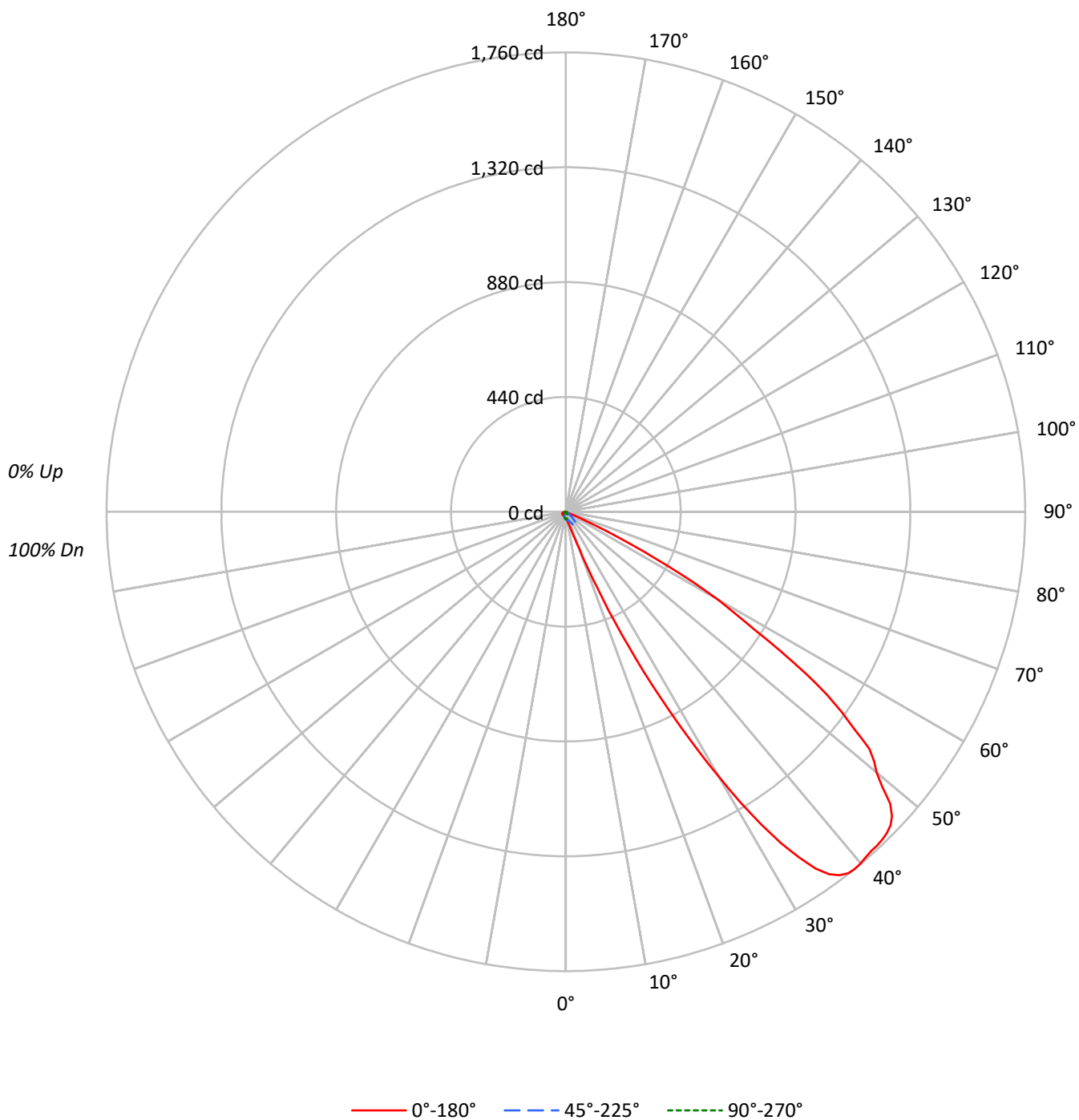
Lumens per Lamp: N/A
Luminaire Lumens: 544.0 lumens
Efficiency: N/A
Efficacy: 49.0 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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
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	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	88	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	62	62	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	26	26	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	23	23	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	19	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6140	6140	6140	6140	6140
5°	6824	6604	6053	5503	5393
10°	8239	7014	5567	5010	4899
15°	13507	7605	4767	4427	4540
20°	35680	8984	3967	3967	4317
25°	137548	11130	3145	3629	4234
30°	296755	14812	2532	3545	4178
35°	446671	17507	2142	3480	4283
40°	503257	17576	1861	3578	4580
45°	539622	13645	1706	3721	4962
50°	530371	8529	1535	3923	5458
55°	466602	4205	1529	4396	6117
60°	295327	877	1754	4824	6798
65°	60396	259	1816	5189	7524
70°	1282	321	1923	5770	8655
75°	1271	847	2118	6354	9743
80°	1263	631	2526	6945	11365
85°	1258	1258	5032	7548	12580

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 549361 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.5
10°-20°	8.6	1.6
20°-30°	42.3	7.8
30°-40°	137.4	25.3
40°-50°	189.5	34.8
50°-60°	132.0	24.3
60°-70°	25.0	4.6
70°-80°	4.5	0.8
80°-90°	2.1	0.4
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°	53.5	9.8
0°-40°	190.9	35.1
0°-60°	512.4	94.2
0°-90°	544.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	544.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	31	30	28	25	24	3
15°	60	34	21	20	20	22
25°	568	46	13	15	18	293
35°	1669	65	8	13	16	1008
45°	1740	44	6	12	16	1323
55°	1220	11	4	12	16	1043
65°	116	0	4	10	14	206
75°	2	1	2	8	12	1
85°	0	0	2	3	5	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
2.5°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.5	28.0
5°	31.0	31.0	31.0	31.0	30.5	30.5	30.5	30.0	30.0	29.0	27.5
7.5°	33.0	33.0	33.0	33.0	32.5	32.0	31.5	31.5	31.0	28.5	26.5
10°	37.0	37.0	36.5	36.0	35.5	34.5	34.0	33.0	31.5	28.0	25.0
12.5°	45.0	44.0	43.5	42.5	41.0	39.0	37.0	35.5	32.0	27.0	23.5
15°	59.5	58.5	56.5	53.5	50.5	46.5	43.0	39.5	33.5	25.5	21.0
17.5°	84.9	81.9	78.9	73.9	66.4	59.5	52.0	45.5	35.5	24.0	19.0
20°	152.9	150.9	132.9	118.9	96.4	80.4	65.4	54.5	38.5	22.5	17.0
22.5°	315.2	294.3	264.8	216.8	168.9	124.4	90.4	68.4	41.5	20.5	15.0
25°	568.5	535.6	472.1	379.7	280.3	198.3	130.9	89.4	46.0	18.5	13.0
27.5°	860.8	827.3	728.9	601.5	439.1	299.3	186.8	118.4	52.0	16.5	11.5
30°	1172.0	1143.6	1018.7	842.3	619.0	419.2	250.3	147.9	58.5	14.5	10.0
31°	1297.4	1261.0	1126.1	938.2	703.4	468.6	275.8	160.4	60.9	14.0	9.5
32°	1412.8	1371.4	1231.5	1030.2	771.9	522.1	303.7	171.4	62.9	13.0	9.0
33°	1512.3	1463.8	1328.9	1117.1	847.3	572.0	332.7	181.9	64.4	12.0	8.5
34°	1596.7	1554.7	1409.8	1204.5	914.2	620.0	361.2	192.3	65.4	11.5	8.0
35°	1668.6	1630.7	1487.3	1271.0	979.7	666.5	387.2	202.3	65.4	10.5	8.0
36°	1717.1	1684.1	1554.2	1338.9	1034.6	705.9	409.2	211.3	65.4	9.5	7.5
37°	1743.6	1711.6	1598.2	1394.9	1088.6	744.9	429.1	218.3	64.9	9.0	7.0
38°	1757.1	1729.1	1630.7	1440.3	1126.1	772.9	446.6	223.8	64.4	8.0	7.0
39°	1760.5	1737.1	1651.1	1473.3	1162.5	800.8	459.1	226.8	62.9	7.5	6.5
40°	1758.1	1737.6	1662.1	1502.8	1190.5	822.8	468.1	227.8	61.4	6.5	6.5
41°	1753.1	1737.1	1670.1	1523.2	1213.0	836.8	471.6	225.8	59.5	5.5	6.0
42°	1748.6	1731.1	1673.6	1537.2	1228.5	843.8	471.1	221.8	56.5	5.0	6.0
43°	1748.6	1728.6	1674.1	1546.2	1236.0	844.3	465.1	214.3	52.5	4.5	5.5
44°	1745.6	1727.1	1676.6	1552.2	1238.0	839.8	455.6	206.3	48.0	4.0	5.5
45°	1740.1	1720.6	1676.1	1552.7	1234.5	828.8	440.1	195.8	44.0	3.0	5.5
46°	1729.6	1712.1	1671.6	1549.2	1224.0	812.8	421.7	185.3	39.5	2.5	5.0
47°	1708.6	1695.1	1659.6	1537.2	1208.0	789.3	399.7	173.4	36.0	2.0	5.0
48°	1672.6	1663.1	1639.1	1510.8	1177.5	760.4	376.2	160.4	32.5	2.0	5.0
49°	1606.7	1599.2	1585.2	1468.3	1138.6	724.9	350.7	145.9	29.0	1.5	5.0
50°	1554.7	1546.7	1518.2	1396.8	1082.6	679.9	322.7	131.4	25.0	1.0	4.5
51°	1520.2	1507.3	1462.3	1313.9	1001.2	620.0	292.3	116.9	21.0	1.0	4.5
52°	1476.8	1457.3	1401.3	1239.5	926.7	560.0	259.3	102.4	18.5	1.0	4.5
53°	1385.9	1378.9	1323.4	1159.5	852.3	502.6	225.3	90.4	16.0	1.0	4.5
54°	1306.4	1295.9	1220.5	1048.6	771.4	438.6	190.3	79.9	13.5	1.0	4.5
55°	1220.5	1200.0	1133.1	955.2	676.4	379.7	156.9	68.9	11.0	1.0	4.0
56°	1112.1	1094.1	1022.2	855.3	589.0	319.7	131.4	56.5	8.5	1.0	4.0
57°	980.2	963.7	908.3	732.4	498.1	261.3	106.9	45.5	6.5	1.0	4.0
58°	852.8	834.3	770.9	614.5	402.2	207.3	89.4	37.0	5.0	1.0	4.0
59°	754.9	729.9	648.0	516.1	314.7	157.4	70.9	29.5	3.5	1.0	4.0
60°	673.4	653.0	568.0	429.6	246.8	115.9	52.5	22.5	2.0	1.0	4.0
62.5°	390.2	384.7	308.2	221.3	116.4	54.0	26.0	10.5	1.0	1.5	4.0
65°	116.4	101.4	78.9	47.0	30.0	18.0	9.5	3.5	0.5	1.5	3.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	3.5	3.5	3.5	3.5	3.5	3.5	2.0	1.0	0.5	1.5	3.5
70°	2.0	1.5	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.5	3.0
72.5°	1.5	1.5	1.5	1.5	1.0	1.0	1.0	0.5	1.0	1.5	2.5
75°	1.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	1.5	2.5
77.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.5	2.5
80°	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.5	1.5
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):

	112.5°	135°	157.5°	180°
0°	28.0	28.0	28.0	28.0
2.5°	27.0	26.5	26.0	26.0
5°	26.0	25.0	25.0	24.5
7.5°	24.5	23.5	23.5	23.5
10°	23.0	22.5	22.5	22.0
12.5°	21.0	21.0	21.0	21.0
15°	19.5	19.5	20.0	20.0
17.5°	17.5	18.0	19.0	19.5
20°	16.0	17.0	18.0	18.5
22.5°	15.0	16.0	17.5	18.0
25°	13.5	15.0	17.0	17.5
27.5°	12.5	14.5	16.0	17.0
30°	11.5	14.0	15.5	16.5
31°	11.5	13.5	15.5	16.5
32°	11.0	13.0	15.5	16.0
33°	11.0	13.0	15.5	16.0
34°	10.5	13.0	15.0	16.0
35°	10.5	13.0	15.0	16.0
36°	10.0	12.5	15.0	16.0
37°	10.0	12.5	15.0	16.0
38°	9.5	12.5	15.0	16.0
39°	9.5	12.5	15.0	16.0
40°	9.5	12.5	15.0	16.0
41°	9.0	12.5	15.0	16.0
42°	9.0	12.5	15.0	16.0
43°	9.0	12.0	15.0	16.0
44°	9.0	12.0	15.0	16.0
45°	8.5	12.0	15.0	16.0
46°	8.5	12.0	15.0	16.0
47°	8.5	12.0	15.0	16.0
48°	8.5	12.0	15.0	16.0
49°	8.5	12.0	15.0	16.0
50°	8.0	11.5	15.0	16.0
51°	8.0	11.5	15.0	16.0
52°	8.0	11.5	15.0	16.0
53°	8.0	11.5	15.0	16.0
54°	7.5	11.5	15.0	16.0
55°	7.5	11.5	15.0	16.0
56°	7.5	11.5	15.0	15.5
57°	7.5	11.5	14.5	15.5
58°	7.5	11.0	14.5	15.5
59°	7.5	11.0	14.5	15.5
60°	7.5	11.0	14.5	15.5
62.5°	7.0	11.0	14.0	15.0
65°	6.5	10.0	14.0	14.5



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	6.5	9.5	13.0	14.0
70°	6.0	9.0	12.5	13.5
72.5°	5.0	8.5	11.5	12.5
75°	4.5	7.5	10.5	11.5
77.5°	4.0	6.5	9.5	10.0
80°	3.5	5.5	8.0	9.0
82.5°	2.5	4.0	6.5	7.0
85°	2.0	3.0	4.5	5.0
87.5°	1.5	1.5	2.5	2.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)