

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: P1339010

Luminaire Tested: P3A05R409830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339010
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: P3A05R409830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

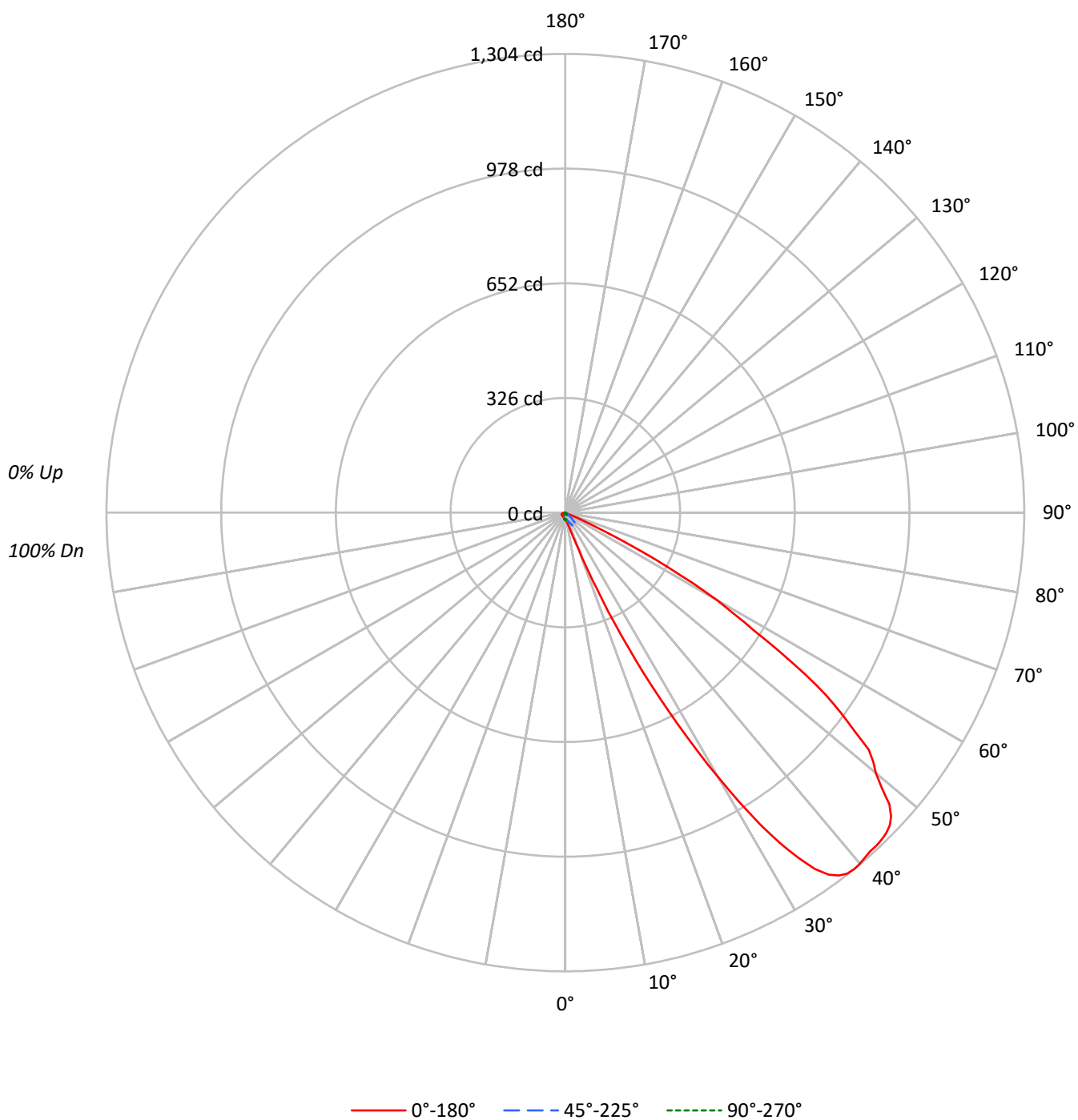
Lumens per Lamp: N/A
Luminaire Lumens: 403.0 lumens
Efficiency: N/A
Efficacy: 56.0 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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
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	82	78		84	80	76		81
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	20		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4539	4539	4539	4539	4539
5°	5041	4887	4490	4072	3984
10°	6101	5188	4119	3718	3629
15°	9989	5630	3519	3269	3360
20°	26439	6651	2940	2940	3197
25°	101909	8226	2323	2686	3145
30°	219857	10964	1874	2633	3089
35°	330894	12983	1579	2570	3159
40°	372813	13024	1374	2662	3378
45°	399762	10110	1271	2760	3659
50°	392891	6311	1126	2900	4025
55°	345679	3097	1147	3250	4511
60°	218798	658	1316	3552	5043
65°	44726	208	1349	3840	5552
70°	962	256	1410	4296	6411
75°	932	593	1610	4745	7202
80°	884	505	1894	5177	8461
85°	1006	1006	3774	5535	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 406956 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.5
10°-20°	6.4	1.6
20°-30°	31.3	7.8
30°-40°	101.8	25.3
40°-50°	140.4	34.8
50°-60°	97.8	24.3
60°-70°	18.5	4.6
70°-80°	3.4	0.8
80°-90°	1.6	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°	39.6	9.8
0°-40°	141.4	35.1
0°-60°	379.6	94.2
0°-90°	403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	403.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21	21	21	21	21	
5°	23	22	20	18	18	2
15°	44	25	16	14	15	16
25°	421	34	10	11	13	217
35°	1236	48	6	10	12	747
45°	1289	33	4	9	12	980
55°	904	8	3	8	12	773
65°	86	0	3	7	11	152
75°	1	1	2	6	8	1
85°	0	0	2	2	4	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°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
2.5°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.1	20.7
5°	22.9	22.9	22.9	22.9	22.6	22.6	22.6	22.2	22.2	21.5	20.4
7.5°	24.4	24.4	24.4	24.4	24.1	23.7	23.3	23.3	22.9	21.1	19.6
10°	27.4	27.4	27.0	26.6	26.3	25.5	25.2	24.4	23.3	20.7	18.5
12.5°	33.3	32.6	32.2	31.5	30.3	28.9	27.4	26.3	23.7	20.0	17.4
15°	44.0	43.3	41.8	39.6	37.4	34.4	31.8	29.2	24.8	18.9	15.5
17.5°	62.9	60.7	58.5	54.8	49.2	44.0	38.5	33.7	26.3	17.8	14.1
20°	113.3	111.8	98.4	88.1	71.4	59.6	48.5	40.3	28.5	16.7	12.6
22.5°	233.5	218.0	196.2	160.6	125.1	92.2	67.0	50.7	30.7	15.2	11.1
25°	421.2	396.7	349.7	281.3	207.6	146.9	97.0	66.2	34.0	13.7	9.6
27.5°	637.7	612.9	540.0	445.6	325.3	221.7	138.4	87.7	38.5	12.2	8.5
30°	868.3	847.2	754.6	624.0	458.6	310.5	185.4	109.5	43.3	10.7	7.4
31°	961.1	934.1	834.2	695.0	521.1	347.2	204.3	118.8	45.2	10.4	7.0
32°	1046.6	1015.9	912.3	763.1	571.8	386.8	225.0	126.9	46.6	9.6	6.7
33°	1120.3	1084.4	984.5	827.5	627.7	423.8	246.5	134.7	47.7	8.9	6.3
34°	1182.8	1151.7	1044.4	892.3	677.3	459.3	267.6	142.5	48.5	8.5	5.9
35°	1236.1	1208.0	1101.8	941.5	725.8	493.7	286.8	149.9	48.5	7.8	5.9
36°	1272.0	1247.6	1151.4	991.9	766.5	523.0	303.1	156.6	48.5	7.0	5.6
37°	1291.6	1268.0	1183.9	1033.3	806.4	551.8	317.9	161.7	48.1	6.7	5.2
38°	1301.6	1280.9	1208.0	1067.0	834.2	572.5	330.9	165.8	47.7	5.9	5.2
39°	1304.2	1286.8	1223.2	1091.4	861.2	593.3	340.1	168.0	46.6	5.6	4.8
40°	1302.4	1287.2	1231.3	1113.3	881.9	609.6	346.8	168.8	45.5	4.8	4.8
41°	1298.7	1286.8	1237.2	1128.4	898.6	619.9	349.4	167.3	44.0	4.1	4.4
42°	1295.3	1282.4	1239.8	1138.8	910.1	625.1	349.0	164.3	41.8	3.7	4.4
43°	1295.3	1280.5	1240.2	1145.5	915.6	625.5	344.6	158.8	38.9	3.3	4.1
44°	1293.1	1279.4	1242.1	1149.9	917.1	622.1	337.5	152.9	35.5	3.0	4.1
45°	1289.1	1274.6	1241.7	1150.3	914.5	614.0	326.1	145.1	32.6	2.2	4.1
46°	1281.3	1268.3	1238.4	1147.7	906.7	602.2	312.4	137.3	29.2	1.9	3.7
47°	1265.7	1255.7	1229.5	1138.8	894.9	584.8	296.1	128.4	26.6	1.5	3.7
48°	1239.1	1232.1	1214.3	1119.2	872.3	563.3	278.7	118.8	24.1	1.5	3.7
49°	1190.2	1184.7	1174.3	1087.7	843.5	537.0	259.8	108.1	21.5	1.1	3.7
50°	1151.7	1145.8	1124.7	1034.8	802.0	503.7	239.1	97.3	18.5	0.7	3.3
51°	1126.2	1116.6	1083.3	973.4	741.7	459.3	216.5	86.6	15.5	0.7	3.3
52°	1094.0	1079.6	1038.1	918.2	686.5	414.9	192.1	75.9	13.7	0.7	3.3
53°	1026.7	1021.5	980.4	859.0	631.4	372.3	166.9	67.0	11.8	0.7	3.3
54°	967.8	960.0	904.2	776.8	571.4	324.9	141.0	59.2	10.0	0.7	3.3
55°	904.2	889.0	839.4	707.6	501.1	281.3	116.2	51.1	8.1	0.7	3.0
56°	823.8	810.5	757.2	633.6	436.3	236.9	97.3	41.8	6.3	0.7	3.0
57°	726.1	713.9	672.8	542.6	369.0	193.6	79.2	33.7	4.8	0.7	3.0
58°	631.8	618.1	571.1	455.2	297.9	153.6	66.2	27.4	3.7	0.7	3.0
59°	559.2	540.7	480.0	382.3	233.2	116.6	52.6	21.8	2.6	0.7	3.0
60°	498.9	483.7	420.8	318.3	182.8	85.9	38.9	16.7	1.5	0.7	3.0
62.5°	289.0	285.0	228.4	164.0	86.2	40.0	19.2	7.8	0.7	1.1	3.0
65°	86.2	75.1	58.5	34.8	22.2	13.3	7.0	2.6	0.4	1.1	2.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	1.5	0.7	0.4	1.1	2.6
70°	1.5	1.1	1.1	1.1	1.1	0.7	0.7	0.4	0.4	1.1	2.2
72.5°	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.4	0.7	1.1	1.9
75°	1.1	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.7	1.1	1.9
77.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.7	1.1	1.9
80°	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.1	1.1
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°	20.7	20.7	20.7	20.7
2.5°	20.0	19.6	19.2	19.2
5°	19.2	18.5	18.5	18.1
7.5°	18.1	17.4	17.4	17.4
10°	17.0	16.7	16.7	16.3
12.5°	15.5	15.5	15.5	15.5
15°	14.4	14.4	14.8	14.8
17.5°	13.0	13.3	14.1	14.4
20°	11.8	12.6	13.3	13.7
22.5°	11.1	11.8	13.0	13.3
25°	10.0	11.1	12.6	13.0
27.5°	9.3	10.7	11.8	12.6
30°	8.5	10.4	11.5	12.2
31°	8.5	10.0	11.5	12.2
32°	8.1	9.6	11.5	11.8
33°	8.1	9.6	11.5	11.8
34°	7.8	9.6	11.1	11.8
35°	7.8	9.6	11.1	11.8
36°	7.4	9.3	11.1	11.8
37°	7.4	9.3	11.1	11.8
38°	7.0	9.3	11.1	11.8
39°	7.0	9.3	11.1	11.8
40°	7.0	9.3	11.1	11.8
41°	6.7	9.3	11.1	11.8
42°	6.7	9.3	11.1	11.8
43°	6.7	8.9	11.1	11.8
44°	6.7	8.9	11.1	11.8
45°	6.3	8.9	11.1	11.8
46°	6.3	8.9	11.1	11.8
47°	6.3	8.9	11.1	11.8
48°	6.3	8.9	11.1	11.8
49°	6.3	8.9	11.1	11.8
50°	5.9	8.5	11.1	11.8
51°	5.9	8.5	11.1	11.8
52°	5.9	8.5	11.1	11.8
53°	5.9	8.5	11.1	11.8
54°	5.6	8.5	11.1	11.8
55°	5.6	8.5	11.1	11.8
56°	5.6	8.5	11.1	11.5
57°	5.6	8.5	10.7	11.5
58°	5.6	8.1	10.7	11.5
59°	5.6	8.1	10.7	11.5
60°	5.6	8.1	10.7	11.5
62.5°	5.2	8.1	10.4	11.1
65°	4.8	7.4	10.4	10.7



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	4.8	7.0	9.6	10.4
70°	4.4	6.7	9.3	10.0
72.5°	3.7	6.3	8.5	9.3
75°	3.3	5.6	7.8	8.5
77.5°	3.0	4.8	7.0	7.4
80°	2.6	4.1	5.9	6.7
82.5°	1.9	3.0	4.8	5.2
85°	1.5	2.2	3.3	3.7
87.5°	1.1	1.1	1.9	1.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)