

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: P1339041

Luminaire Tested: P3A05R409840DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339041
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: P3A05R409840DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

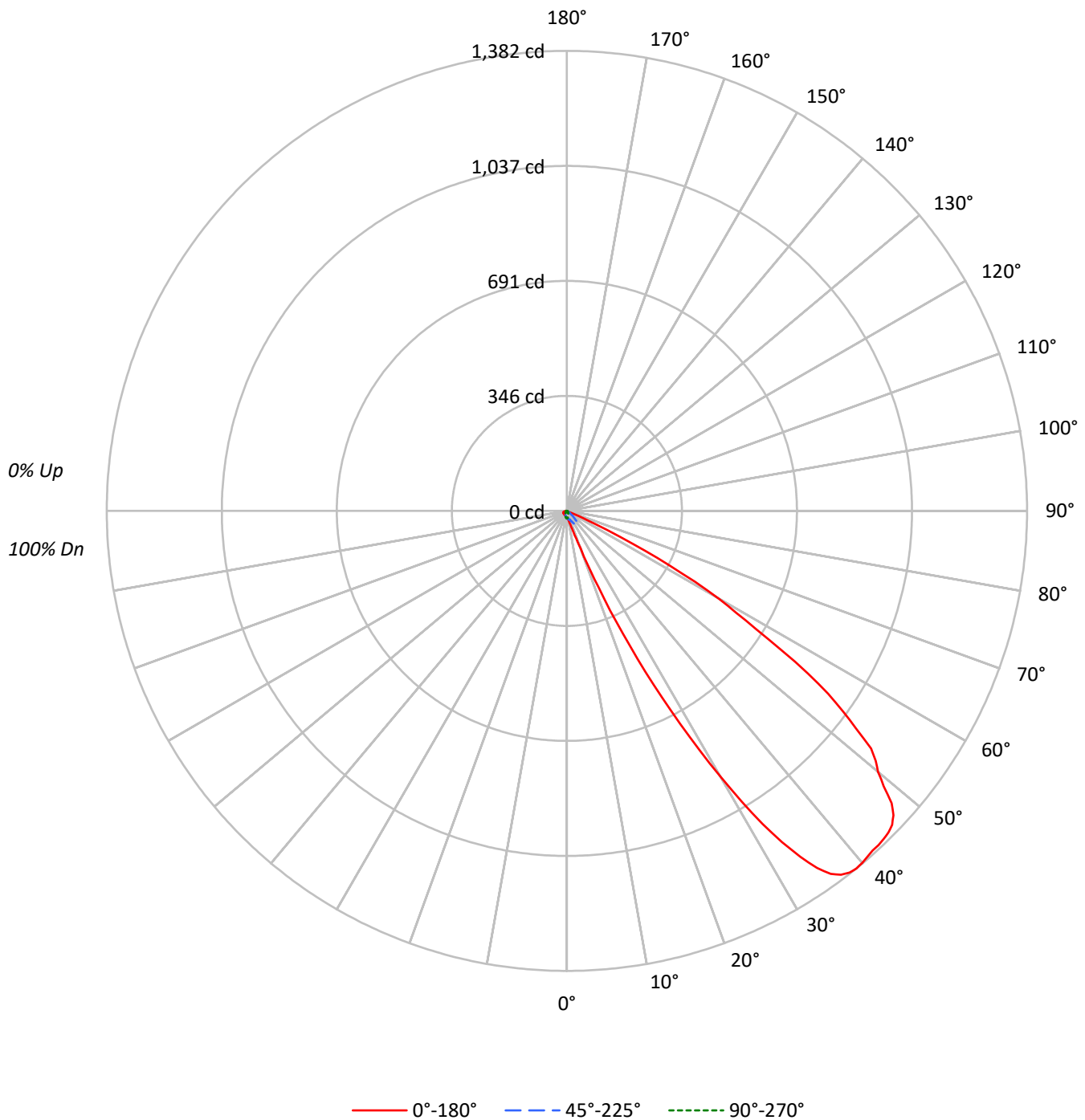
Lumens per Lamp: N/A
Luminaire Lumens: 427.0 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	4824	4824	4824	4824	4824
5°	5349	5173	4755	4314	4226
10°	6457	5500	4364	3919	3852
15°	10602	5971	3746	3473	3564
20°	28002	7047	3104	3104	3384
25°	107982	8734	2468	2855	3315
30°	232947	11622	1975	2785	3266
35°	350597	13759	1686	2730	3346
40°	394997	13797	1460	2805	3578
45°	423548	10699	1333	2915	3876
50°	416293	6686	1194	3070	4264
55°	366247	3288	1185	3441	4779
60°	231824	702	1360	3772	5350
65°	47424	208	1401	4047	5915
70°	1026	256	1539	4552	6796
75°	1017	678	1694	4999	7625
80°	1010	505	2020	5430	8966
85°	1006	1006	4026	6038	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 431199 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.5
10°-20°	6.8	1.6
20°-30°	33.2	7.8
30°-40°	107.9	25.3
40°-50°	148.7	34.8
50°-60°	103.6	24.3
60°-70°	19.6	4.6
70°-80°	3.6	0.8
80°-90°	1.7	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°	42.0	9.8
0°-40°	149.9	35.1
0°-60°	402.2	94.2
0°-90°	427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	427.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	24	24	22	20	19	2
15°	47	26	16	15	16	17
25°	446	36	10	12	14	230
35°	1310	51	6	10	12	791
45°	1366	34	4	9	12	1039
55°	958	9	3	9	12	819
65°	91	0	3	8	11	162
75°	1	1	2	6	9	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°	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
2.5°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.4	22.0
5°	24.3	24.3	24.3	24.3	23.9	23.9	23.9	23.5	23.5	22.7	21.6
7.5°	25.9	25.9	25.9	25.9	25.5	25.1	24.7	24.7	24.3	22.4	20.8
10°	29.0	29.0	28.6	28.2	27.8	27.1	26.7	25.9	24.7	22.0	19.6
12.5°	35.3	34.5	34.1	33.3	32.2	30.6	29.0	27.8	25.1	21.2	18.4
15°	46.7	45.9	44.3	42.0	39.6	36.5	33.7	31.0	26.3	20.0	16.5
17.5°	66.7	64.3	62.0	58.0	52.2	46.7	40.8	35.7	27.8	18.8	14.9
20°	120.0	118.4	104.3	93.3	75.7	63.1	51.4	42.7	30.2	17.6	13.3
22.5°	247.4	231.0	207.8	170.2	132.5	97.6	71.0	53.7	32.5	16.1	11.8
25°	446.3	420.4	370.6	298.0	220.0	155.7	102.7	70.2	36.1	14.5	10.2
27.5°	675.7	649.4	572.1	472.1	344.7	234.9	146.7	92.9	40.8	12.9	9.0
30°	920.0	897.6	799.6	661.1	485.9	329.0	196.5	116.1	45.9	11.4	7.8
31°	1018.4	989.8	883.9	736.4	552.1	367.8	216.5	125.9	47.8	11.0	7.5
32°	1109.0	1076.4	966.6	808.6	605.9	409.8	238.4	134.5	49.4	10.2	7.1
33°	1187.0	1149.0	1043.1	876.8	665.1	449.0	261.2	142.7	50.6	9.4	6.7
34°	1253.3	1220.3	1106.6	945.4	717.6	486.6	283.5	151.0	51.4	9.0	6.3
35°	1309.7	1279.9	1167.4	997.6	769.0	523.1	303.9	158.8	51.4	8.2	6.3
36°	1347.8	1321.9	1219.9	1050.9	812.1	554.1	321.2	165.9	51.4	7.5	5.9
37°	1368.6	1343.5	1254.5	1094.9	854.5	584.7	336.8	171.4	51.0	7.1	5.5
38°	1379.2	1357.2	1279.9	1130.5	883.9	606.6	350.6	175.7	50.6	6.3	5.5
39°	1381.9	1363.5	1296.0	1156.4	912.5	628.6	360.4	178.0	49.4	5.9	5.1
40°	1379.9	1363.9	1304.7	1179.6	934.5	645.9	367.4	178.8	48.2	5.1	5.1
41°	1376.0	1363.5	1310.9	1195.6	952.1	656.8	370.2	177.2	46.7	4.3	4.7
42°	1372.5	1358.8	1313.7	1206.6	964.3	662.3	369.8	174.1	44.3	3.9	4.7
43°	1372.5	1356.8	1314.1	1213.7	970.2	662.7	365.1	168.2	41.2	3.5	4.3
44°	1370.1	1355.6	1316.0	1218.4	971.7	659.2	357.6	162.0	37.6	3.1	4.3
45°	1365.8	1350.5	1315.6	1218.8	969.0	650.6	345.5	153.7	34.5	2.4	4.3
46°	1357.6	1343.9	1312.1	1216.0	960.7	638.0	331.0	145.5	31.0	2.0	3.9
47°	1341.1	1330.5	1302.7	1206.6	948.2	619.6	313.7	136.1	28.2	1.6	3.9
48°	1312.9	1305.4	1286.6	1185.8	924.3	596.8	295.3	125.9	25.5	1.6	3.9
49°	1261.1	1255.2	1244.3	1152.5	893.7	569.0	275.3	114.5	22.7	1.2	3.9
50°	1220.3	1214.1	1191.7	1096.4	849.8	533.7	253.3	103.1	19.6	0.8	3.5
51°	1193.3	1183.1	1147.8	1031.3	785.8	486.6	229.4	91.8	16.5	0.8	3.5
52°	1159.2	1143.9	1100.0	972.9	727.4	439.6	203.5	80.4	14.5	0.8	3.5
53°	1087.8	1082.3	1038.8	910.2	669.0	394.5	176.9	71.0	12.5	0.8	3.5
54°	1025.4	1017.2	958.0	823.1	605.5	344.3	149.4	62.7	10.6	0.8	3.5
55°	958.0	941.9	889.4	749.8	531.0	298.0	123.1	54.1	8.6	0.8	3.1
56°	872.9	858.8	802.3	671.3	462.3	251.0	103.1	44.3	6.7	0.8	3.1
57°	769.4	756.4	712.9	574.9	391.0	205.1	83.9	35.7	5.1	0.8	3.1
58°	669.4	654.9	605.1	482.3	315.7	162.7	70.2	29.0	3.9	0.8	3.1
59°	592.5	572.9	508.6	405.1	247.0	123.5	55.7	23.1	2.7	0.8	3.1
60°	528.6	512.5	445.9	337.2	193.7	91.0	41.2	17.6	1.6	0.8	3.1
62.5°	306.3	301.9	242.0	173.7	91.4	42.4	20.4	8.2	0.8	1.2	3.1
65°	91.4	79.6	62.0	36.9	23.5	14.1	7.5	2.7	0.4	1.2	2.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.7	2.7	2.7	2.7	2.7	2.7	1.6	0.8	0.4	1.2	2.7
70°	1.6	1.2	1.2	1.2	1.2	0.8	0.8	0.4	0.4	1.2	2.4
72.5°	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.8	1.2	2.0
75°	1.2	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.2	2.0
77.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.8	1.2	2.0
80°	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.6
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.6
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.2	1.2
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):

	112.5°	135°	157.5°	180°
0°	22.0	22.0	22.0	22.0
2.5°	21.2	20.8	20.4	20.4
5°	20.4	19.6	19.6	19.2
7.5°	19.2	18.4	18.4	18.4
10°	18.0	17.6	17.6	17.3
12.5°	16.5	16.5	16.5	16.5
15°	15.3	15.3	15.7	15.7
17.5°	13.7	14.1	14.9	15.3
20°	12.5	13.3	14.1	14.5
22.5°	11.8	12.5	13.7	14.1
25°	10.6	11.8	13.3	13.7
27.5°	9.8	11.4	12.5	13.3
30°	9.0	11.0	12.2	12.9
31°	9.0	10.6	12.2	12.9
32°	8.6	10.2	12.2	12.5
33°	8.6	10.2	12.2	12.5
34°	8.2	10.2	11.8	12.5
35°	8.2	10.2	11.8	12.5
36°	7.8	9.8	11.8	12.5
37°	7.8	9.8	11.8	12.5
38°	7.5	9.8	11.8	12.5
39°	7.5	9.8	11.8	12.5
40°	7.5	9.8	11.8	12.5
41°	7.1	9.8	11.8	12.5
42°	7.1	9.8	11.8	12.5
43°	7.1	9.4	11.8	12.5
44°	7.1	9.4	11.8	12.5
45°	6.7	9.4	11.8	12.5
46°	6.7	9.4	11.8	12.5
47°	6.7	9.4	11.8	12.5
48°	6.7	9.4	11.8	12.5
49°	6.7	9.4	11.8	12.5
50°	6.3	9.0	11.8	12.5
51°	6.3	9.0	11.8	12.5
52°	6.3	9.0	11.8	12.5
53°	6.3	9.0	11.8	12.5
54°	5.9	9.0	11.8	12.5
55°	5.9	9.0	11.8	12.5
56°	5.9	9.0	11.8	12.2
57°	5.9	9.0	11.4	12.2
58°	5.9	8.6	11.4	12.2
59°	5.9	8.6	11.4	12.2
60°	5.9	8.6	11.4	12.2
62.5°	5.5	8.6	11.0	11.8
65°	5.1	7.8	11.0	11.4



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	5.1	7.5	10.2	11.0
70°	4.7	7.1	9.8	10.6
72.5°	3.9	6.7	9.0	9.8
75°	3.5	5.9	8.2	9.0
77.5°	3.1	5.1	7.5	7.8
80°	2.7	4.3	6.3	7.1
82.5°	2.0	3.1	5.1	5.5
85°	1.6	2.4	3.5	3.9
87.5°	1.2	1.2	2.0	2.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)