

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: P1338993

Luminaire Tested: P3A05R409827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338993
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: P3A05R409827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

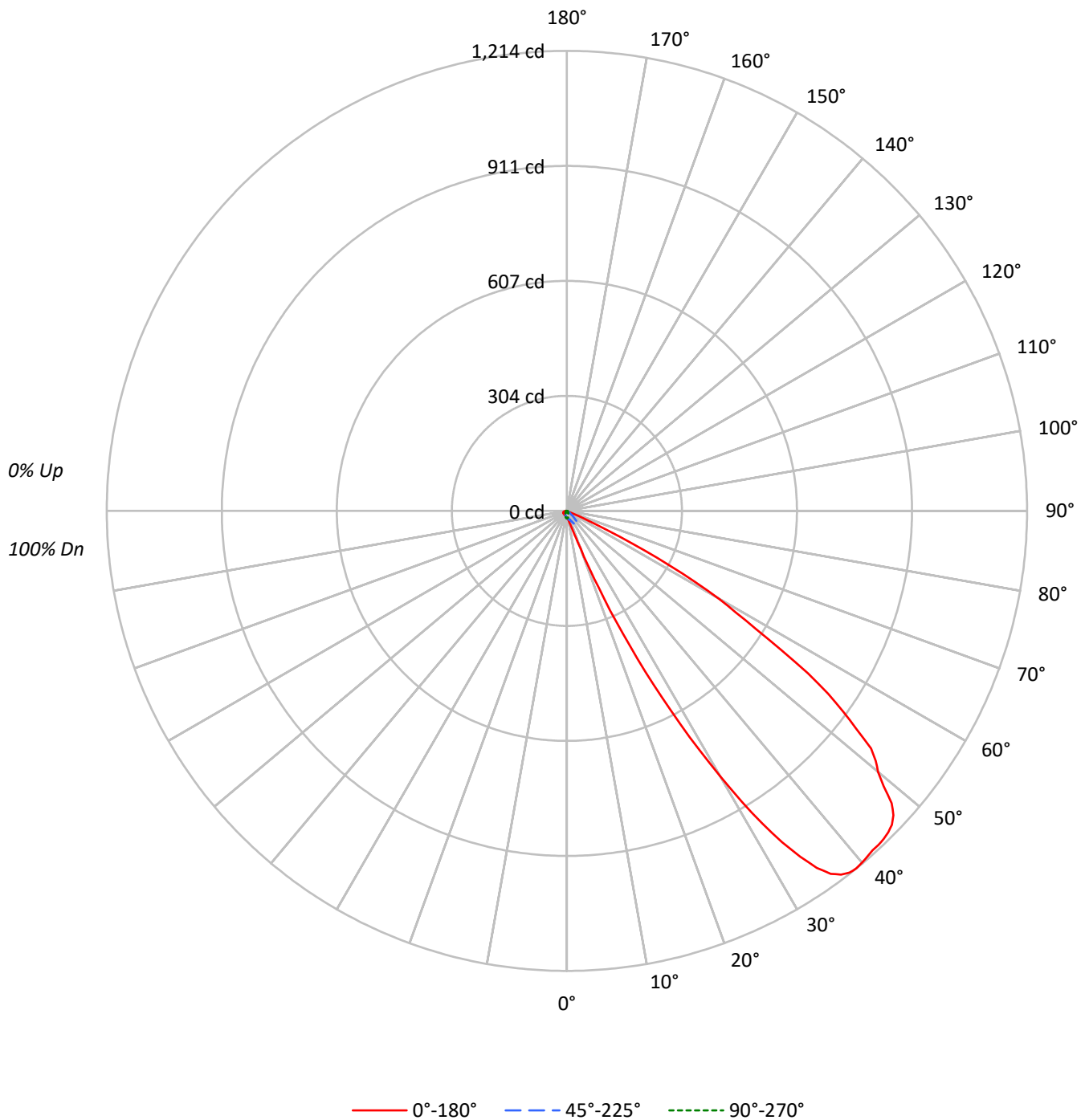
Lumens per Lamp: N/A
Luminaire Lumens: 375.0 lumens
Efficiency: N/A
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	4232	4232	4232	4232	4232
5°	4711	4556	4160	3786	3720
10°	5678	4832	3830	3451	3384
15°	9308	5244	3292	3042	3133
20°	24595	6184	2730	2730	2964
25°	94820	7670	2178	2492	2928
30°	204563	10204	1747	2431	2887
35°	307900	12073	1472	2409	2945
40°	346907	12137	1288	2462	3149
45°	371977	9396	1178	2574	3411
50°	365600	5868	1058	2695	3753
55°	321633	2906	1070	3020	4205
60°	203580	614	1228	3333	4693
65°	41613	156	1245	3580	5189
70°	898	192	1346	3975	5963
75°	847	593	1440	4406	6693
80°	884	379	1768	4799	7829
85°	755	755	3522	5284	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 378694 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.5
10°-20°	5.9	1.6
20°-30°	29.1	7.8
30°-40°	94.7	25.3
40°-50°	130.6	34.8
50°-60°	91.0	24.3
60°-70°	17.2	4.6
70°-80°	3.1	0.8
80°-90°	1.4	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°	36.9	9.8
0°-40°	131.6	35.1
0°-60°	353.2	94.2
0°-90°	375.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	375.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	21	21	19	17	17	2
15°	41	23	14	13	14	15
25°	392	32	9	10	12	202
35°	1150	45	6	9	11	695
45°	1200	30	4	8	11	912
55°	841	8	3	8	11	719
65°	80	0	2	7	10	142
75°	1	1	2	5	8	1
85°	0	0	1	2	3	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°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
2.5°	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	19.6	19.3
5°	21.4	21.4	21.4	21.4	21.0	21.0	21.0	20.7	20.7	20.0	18.9
7.5°	22.7	22.7	22.7	22.7	22.4	22.0	21.7	21.7	21.4	19.6	18.3
10°	25.5	25.5	25.1	24.8	24.5	23.8	23.4	22.7	21.7	19.3	17.2
12.5°	31.0	30.3	30.0	29.3	28.2	26.9	25.5	24.5	22.0	18.6	16.2
15°	41.0	40.3	38.9	36.8	34.8	32.0	29.6	27.2	23.1	17.6	14.5
17.5°	58.5	56.5	54.4	51.0	45.8	41.0	35.8	31.3	24.5	16.5	13.1
20°	105.4	104.0	91.6	82.0	66.5	55.4	45.1	37.5	26.5	15.5	11.7
22.5°	217.3	202.8	182.5	149.5	116.4	85.8	62.3	47.2	28.6	14.1	10.3
25°	391.9	369.2	325.4	261.7	193.2	136.7	90.2	61.6	31.7	12.7	9.0
27.5°	593.4	570.3	502.5	414.6	302.7	206.3	128.8	81.6	35.8	11.4	7.9
30°	807.9	788.3	702.2	580.6	426.7	288.9	172.5	101.9	40.3	10.0	6.9
31°	894.4	869.2	776.2	646.8	484.9	323.0	190.1	110.5	42.0	9.6	6.5
32°	973.9	945.3	848.9	710.1	532.1	359.9	209.4	118.1	43.4	9.0	6.2
33°	1042.5	1009.0	916.1	770.0	584.1	394.3	229.4	125.4	44.4	8.3	5.9
34°	1100.7	1071.7	971.9	830.3	630.2	427.4	249.0	132.6	45.1	7.9	5.5
35°	1150.2	1124.1	1025.2	876.1	675.3	459.4	266.9	139.5	45.1	7.2	5.5
36°	1183.7	1160.9	1071.4	923.0	713.2	486.6	282.1	145.7	45.1	6.5	5.2
37°	1201.9	1179.9	1101.7	961.5	750.4	513.5	295.8	150.5	44.8	6.2	4.8
38°	1211.2	1191.9	1124.1	992.9	776.2	532.8	307.9	154.3	44.4	5.5	4.8
39°	1213.6	1197.4	1138.2	1015.6	801.4	552.0	316.5	156.4	43.4	5.2	4.5
40°	1211.9	1197.8	1145.8	1035.9	820.7	567.2	322.7	157.0	42.4	4.5	4.5
41°	1208.4	1197.4	1151.3	1050.0	836.2	576.8	325.1	155.7	41.0	3.8	4.1
42°	1205.3	1193.3	1153.7	1059.7	846.8	581.7	324.8	152.9	38.9	3.4	4.1
43°	1205.3	1191.6	1154.0	1065.9	852.0	582.0	320.6	147.7	36.2	3.1	3.8
44°	1203.3	1190.5	1155.8	1070.0	853.4	578.9	314.1	142.2	33.1	2.8	3.8
45°	1199.5	1186.1	1155.4	1070.3	851.0	571.3	303.4	135.0	30.3	2.1	3.8
46°	1192.3	1180.2	1152.3	1067.9	843.7	560.3	290.7	127.8	27.2	1.7	3.4
47°	1177.8	1168.5	1144.0	1059.7	832.7	544.1	275.5	119.5	24.8	1.4	3.4
48°	1153.0	1146.5	1129.9	1041.4	811.7	524.2	259.3	110.5	22.4	1.4	3.4
49°	1107.5	1102.4	1092.7	1012.1	784.9	499.7	241.8	100.6	20.0	1.0	3.4
50°	1071.7	1066.2	1046.6	962.9	746.3	468.7	222.5	90.6	17.2	0.7	3.1
51°	1048.0	1039.0	1008.0	905.7	690.1	427.4	201.5	80.6	14.5	0.7	3.1
52°	1018.0	1004.6	966.0	854.4	638.8	386.1	178.7	70.6	12.7	0.7	3.1
53°	955.3	950.5	912.3	799.3	587.5	346.5	155.3	62.3	11.0	0.7	3.1
54°	900.6	893.3	841.3	722.9	531.7	302.4	131.2	55.1	9.3	0.7	3.1
55°	841.3	827.2	781.1	658.5	466.3	261.7	108.1	47.5	7.6	0.7	2.8
56°	766.6	754.2	704.6	589.6	406.0	220.4	90.6	38.9	5.9	0.7	2.8
57°	675.7	664.3	626.1	504.9	343.4	180.1	73.7	31.3	4.5	0.7	2.8
58°	587.9	575.1	531.4	423.6	277.2	142.9	61.6	25.5	3.4	0.7	2.8
59°	520.4	503.1	446.7	355.8	217.0	108.5	48.9	20.3	2.4	0.7	2.8
60°	464.2	450.1	391.6	296.2	170.1	79.9	36.2	15.5	1.4	0.7	2.8
62.5°	269.0	265.2	212.5	152.6	80.2	37.2	17.9	7.2	0.7	1.0	2.8
65°	80.2	69.9	54.4	32.4	20.7	12.4	6.5	2.4	0.3	1.0	2.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.4	2.4	2.4	2.4	2.4	2.4	1.4	0.7	0.3	1.0	2.4
70°	1.4	1.0	1.0	1.0	1.0	0.7	0.7	0.3	0.3	1.0	2.1
72.5°	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.7	1.0	1.7
75°	1.0	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.7	1.0	1.7
77.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.7	1.0	1.7
80°	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.4
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.4
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.0	1.0
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°	19.3	19.3	19.3	19.3
2.5°	18.6	18.3	17.9	17.9
5°	17.9	17.2	17.2	16.9
7.5°	16.9	16.2	16.2	16.2
10°	15.8	15.5	15.5	15.2
12.5°	14.5	14.5	14.5	14.5
15°	13.4	13.4	13.8	13.8
17.5°	12.1	12.4	13.1	13.4
20°	11.0	11.7	12.4	12.7
22.5°	10.3	11.0	12.1	12.4
25°	9.3	10.3	11.7	12.1
27.5°	8.6	10.0	11.0	11.7
30°	7.9	9.6	10.7	11.4
31°	7.9	9.3	10.7	11.4
32°	7.6	9.0	10.7	11.0
33°	7.6	9.0	10.7	11.0
34°	7.2	9.0	10.3	11.0
35°	7.2	9.0	10.3	11.0
36°	6.9	8.6	10.3	11.0
37°	6.9	8.6	10.3	11.0
38°	6.5	8.6	10.3	11.0
39°	6.5	8.6	10.3	11.0
40°	6.5	8.6	10.3	11.0
41°	6.2	8.6	10.3	11.0
42°	6.2	8.6	10.3	11.0
43°	6.2	8.3	10.3	11.0
44°	6.2	8.3	10.3	11.0
45°	5.9	8.3	10.3	11.0
46°	5.9	8.3	10.3	11.0
47°	5.9	8.3	10.3	11.0
48°	5.9	8.3	10.3	11.0
49°	5.9	8.3	10.3	11.0
50°	5.5	7.9	10.3	11.0
51°	5.5	7.9	10.3	11.0
52°	5.5	7.9	10.3	11.0
53°	5.5	7.9	10.3	11.0
54°	5.2	7.9	10.3	11.0
55°	5.2	7.9	10.3	11.0
56°	5.2	7.9	10.3	10.7
57°	5.2	7.9	10.0	10.7
58°	5.2	7.6	10.0	10.7
59°	5.2	7.6	10.0	10.7
60°	5.2	7.6	10.0	10.7
62.5°	4.8	7.6	9.6	10.3
65°	4.5	6.9	9.6	10.0



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	4.5	6.5	9.0	9.6
70°	4.1	6.2	8.6	9.3
72.5°	3.4	5.9	7.9	8.6
75°	3.1	5.2	7.2	7.9
77.5°	2.8	4.5	6.5	6.9
80°	2.4	3.8	5.5	6.2
82.5°	1.7	2.8	4.5	4.8
85°	1.4	2.1	3.1	3.4
87.5°	1.0	1.0	1.7	1.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)