

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: P1335367

Luminaire Tested: P3A02R359040DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359040DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

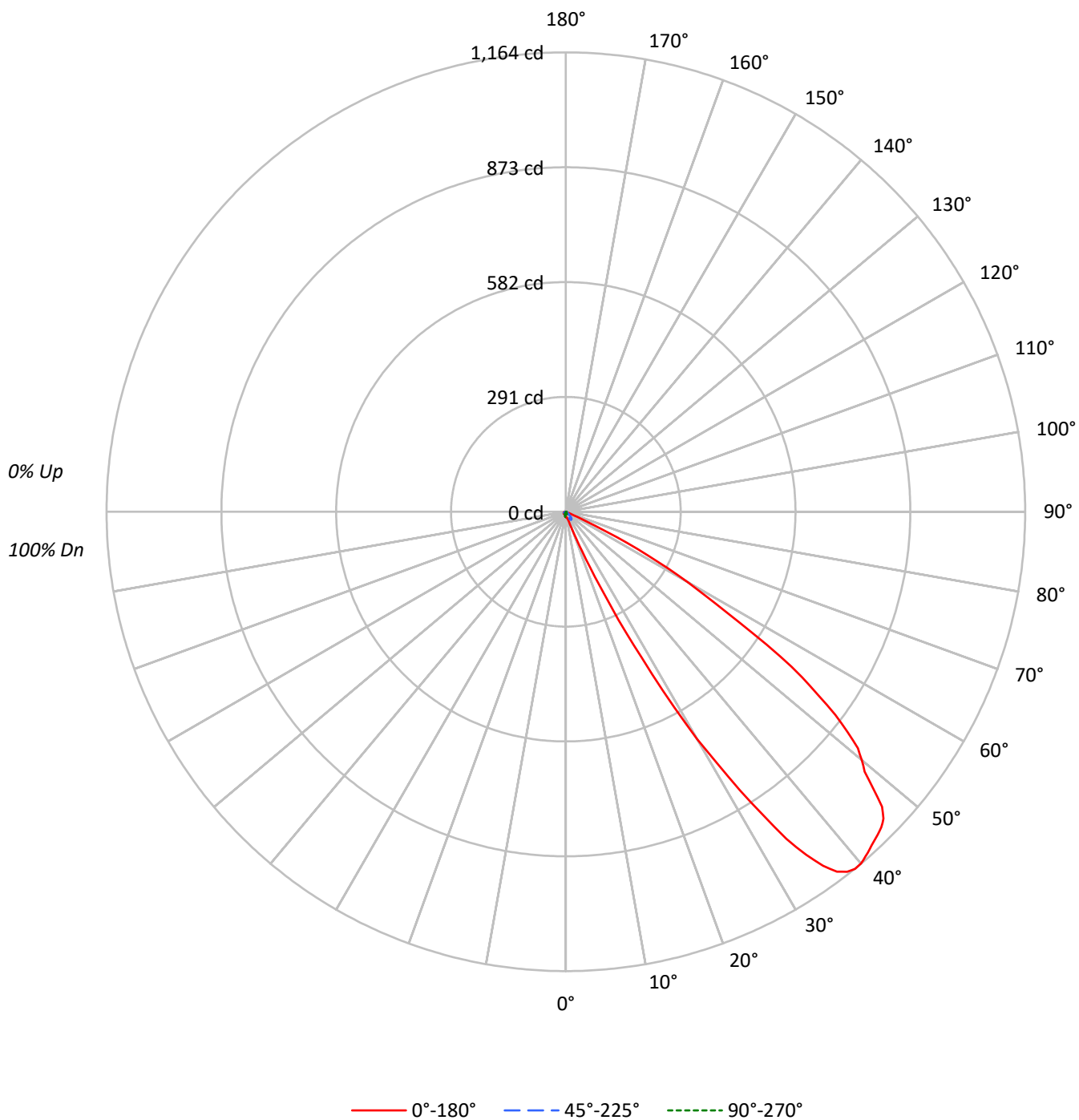
Lumens per Lamp: N/A
Luminaire Lumens: 290.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	0
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	107	104	100	97	100	97	94		96	93	91		92	90	89	87
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	52	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38	31	26	24
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34	27	22	20
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2938	2938	2938	2938	2938
5°	3170	3104	2884	2597	2531
10°	3318	3028	2561	2204	2204
15°	4745	2974	2089	1907	1952
20°	11901	3174	1657	1657	1843
25°	55285	4065	1258	1524	1718
30°	168102	5495	987	1393	1722
35°	284102	6371	830	1338	1686
40°	333024	6298	687	1345	1803
45°	350703	4466	558	1458	1954
50°	333840	2695	546	1535	2149
55°	279732	1109	612	1720	2485
60°	156610	219	702	1974	2763
65°	27033	156	675	2179	3113
70°	513	192	833	2372	3526
75°	424	254	1101	2626	3982
80°	379	379	1263	3031	4672
85°	0	755	2516	3271	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 353200 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.4
10°-20°	3.4	1.2
20°-30°	17.8	6.1
30°-40°	76.8	26.5
40°-50°	109.6	37.8
50°-60°	67.9	23.4
60°-70°	10.3	3.6
70°-80°	1.9	0.7
80°-90°	1.0	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°	22.4	7.7
0°-40°	99.3	34.2
0°-60°	276.8	95.4
0°-90°	290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	290.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	14	13	12	12	1
15°	21	13	9	8	9	8
25°	228	17	5	6	7	137
35°	1061	24	3	5	6	637
45°	1131	14	2	5	6	854
55°	732	3	2	4	6	623
65°	52	0	1	4	6	106
75°	0	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
2.5°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.4	13.1
5°	14.4	14.4	14.1	14.1	14.1	14.1	14.1	14.1	13.6	13.1	12.3
7.5°	14.7	14.7	14.4	14.4	14.4	14.4	14.1	13.9	13.4	12.3	11.5
10°	14.9	14.9	14.9	14.9	14.7	14.4	14.1	13.6	12.8	11.5	10.7
12.5°	16.8	16.8	16.5	16.0	15.4	14.9	14.4	13.4	11.8	10.5	9.7
15°	20.9	20.7	20.2	19.4	18.3	17.0	16.0	13.1	10.7	9.2	8.6
17.5°	29.3	28.8	28.0	25.4	23.0	20.7	18.6	13.1	9.7	8.1	7.6
20°	51.0	51.3	45.8	39.5	34.3	28.5	23.3	13.6	8.6	7.1	6.8
22.5°	106.5	102.4	89.3	74.1	56.5	43.7	33.0	14.9	7.6	6.0	6.0
25°	228.5	212.6	180.9	136.7	96.3	68.3	47.9	16.8	6.8	5.2	5.5
27.5°	417.3	402.9	339.3	255.5	169.6	103.1	64.9	19.1	6.0	4.5	5.0
30°	663.9	624.1	541.1	418.9	283.5	157.9	87.2	21.7	5.0	3.9	4.7
31°	740.9	722.5	621.5	484.6	332.2	187.4	96.6	22.5	4.7	3.9	4.5
32°	832.2	799.8	709.2	556.6	381.7	213.9	107.9	23.3	4.5	3.4	4.5
33°	913.9	882.5	772.3	619.9	431.7	244.0	119.9	23.6	3.9	3.4	4.2
34°	999.8	956.8	847.7	686.1	483.0	276.4	130.9	23.8	3.7	3.1	4.2
35°	1061.3	1018.4	912.6	738.5	527.2	305.2	143.5	23.8	3.4	3.1	3.9
36°	1108.9	1071.2	968.6	792.4	571.2	331.2	153.4	23.8	2.9	2.9	3.9
37°	1141.7	1105.8	1006.3	838.8	604.7	354.2	162.3	23.8	2.6	2.9	3.9
38°	1157.6	1127.8	1042.7	872.5	637.2	372.3	169.4	23.3	2.4	2.6	3.7
39°	1164.4	1140.1	1064.9	901.1	661.5	388.0	174.6	22.8	2.1	2.6	3.7
40°	1163.4	1142.2	1077.5	920.7	681.2	398.7	177.5	22.0	1.8	2.4	3.7
41°	1157.4	1139.0	1084.1	937.5	693.0	406.0	178.3	21.2	1.6	2.4	3.4
42°	1150.6	1133.8	1086.2	946.4	700.5	408.4	176.2	20.2	1.6	2.1	3.4
43°	1143.5	1128.0	1086.2	949.2	702.4	406.8	172.8	18.3	1.3	2.1	3.4
44°	1137.7	1123.1	1082.8	948.5	698.4	400.8	166.5	16.2	1.0	2.1	3.4
45°	1130.9	1116.5	1078.3	943.5	690.9	390.6	158.6	14.4	0.8	1.8	3.4
46°	1118.9	1107.6	1070.4	933.3	678.8	376.4	148.7	13.1	0.5	1.8	3.1
47°	1095.6	1085.9	1055.3	918.1	662.8	359.7	138.5	11.8	0.5	1.8	3.1
48°	1048.7	1048.5	1024.9	889.8	637.5	338.8	127.8	10.5	0.5	1.8	3.1
49°	1003.4	998.7	969.4	840.1	601.1	313.6	116.5	9.4	0.3	1.8	3.1
50°	978.6	968.4	920.2	781.4	554.5	278.8	104.5	7.9	0.3	1.6	3.1
51°	952.6	938.0	881.2	728.6	499.0	245.3	91.4	6.3	0.3	1.6	2.9
52°	905.8	891.9	828.3	678.0	445.0	211.0	78.8	5.2	0.3	1.6	3.1
53°	855.3	835.4	766.3	622.5	397.7	180.6	66.0	4.5	0.3	1.6	2.9
54°	791.6	782.7	703.4	554.5	342.2	151.3	54.2	3.7	0.3	1.6	2.9
55°	731.7	718.6	636.1	484.8	291.9	124.1	45.3	2.9	0.3	1.6	2.9
56°	655.3	635.6	558.4	421.0	240.8	100.0	38.2	2.4	0.3	1.6	2.9
57°	564.2	543.2	482.2	350.0	189.0	76.2	31.9	1.8	0.3	1.6	2.9
58°	477.2	459.2	393.7	270.2	142.4	52.9	26.4	1.3	0.3	1.3	2.9
59°	412.3	392.4	327.5	207.9	99.0	39.0	19.9	1.0	0.3	1.6	2.9
60°	357.1	331.4	263.6	161.0	70.7	28.0	14.7	0.5	0.5	1.6	2.9
62.5°	205.8	181.7	125.9	65.4	29.1	14.4	7.1	0.3	0.5	1.6	2.9
65°	52.1	46.3	30.1	14.1	8.1	5.0	2.6	0.3	0.5	1.3	2.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.8	1.8	1.8	1.6	1.3	1.0	0.5	0.3	0.5	1.3	2.6
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.3	0.5	1.3	2.4
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.1
75°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.1
77.5°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.8
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.6
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.8	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.0	0.8
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):

	135°	157.5°	180°
0°	13.4	13.4	13.4
2.5°	12.6	12.6	12.6
5°	11.8	11.8	11.5
7.5°	11.0	10.7	10.7
10°	9.9	9.9	9.9
12.5°	9.2	9.2	9.2
15°	8.4	8.6	8.6
17.5°	7.6	8.1	8.1
20°	7.1	7.6	7.9
22.5°	6.5	7.1	7.3
25°	6.3	6.8	7.1
27.5°	5.8	6.5	7.1
30°	5.5	6.3	6.8
31°	5.5	6.3	6.5
32°	5.2	6.3	6.5
33°	5.2	6.3	6.5
34°	5.2	6.0	6.5
35°	5.0	6.0	6.3
36°	5.0	6.0	6.3
37°	5.0	6.0	6.5
38°	5.0	6.0	6.3
39°	4.7	6.0	6.3
40°	4.7	6.0	6.3
41°	4.7	6.0	6.3
42°	4.7	6.0	6.3
43°	4.7	6.0	6.3
44°	4.7	5.8	6.3
45°	4.7	5.8	6.3
46°	4.7	6.0	6.3
47°	4.7	6.0	6.5
48°	4.7	5.8	6.3
49°	4.5	5.8	6.3
50°	4.5	5.8	6.3
51°	4.5	6.0	6.5
52°	4.5	6.0	6.5
53°	4.5	6.0	6.5
54°	4.5	6.0	6.3
55°	4.5	6.0	6.5
56°	4.5	6.0	6.3
57°	4.5	6.0	6.3
58°	4.5	5.8	6.3
59°	4.5	5.8	6.3
60°	4.5	5.8	6.3
62.5°	4.2	5.8	6.3
65°	4.2	5.5	6.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	3.9	5.5	5.8
70°	3.7	5.2	5.5
72.5°	3.4	5.0	5.2
75°	3.1	4.5	4.7
77.5°	2.6	3.9	4.5
80°	2.4	3.4	3.7
82.5°	1.8	2.9	3.1
85°	1.3	2.1	2.1
87.5°	0.5	1.0	1.0
90°	0.0	0.0	0.0

(END OF REPORT)