

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: P1335382

Luminaire Tested: P3A02R359050DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335382
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: P3A02R359050DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 5000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

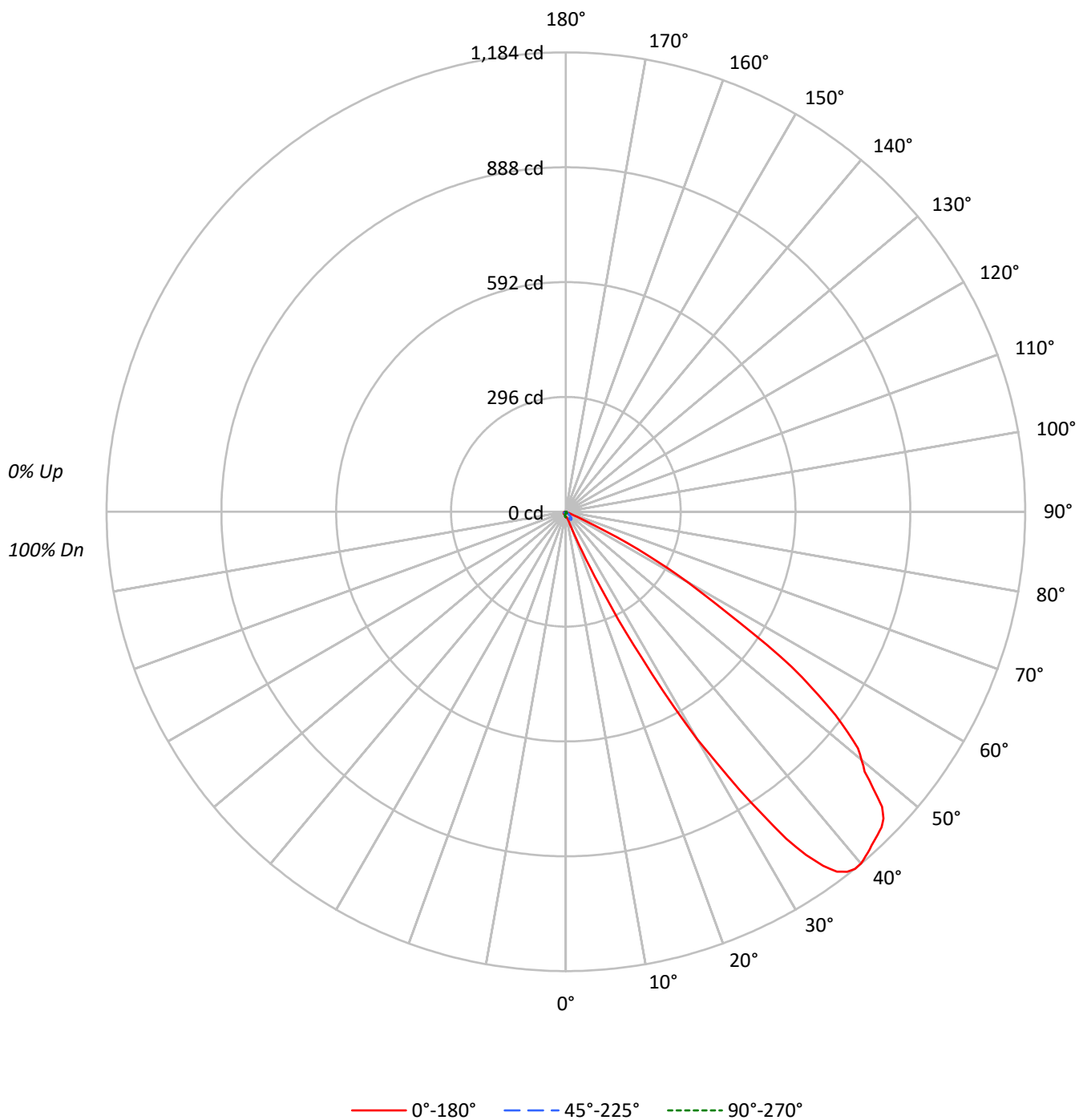
Lumens per Lamp: N/A
Luminaire Lumens: 295.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	2982	2982	2982	2982	2982
5°	3214	3170	2928	2641	2575
10°	3384	3073	2605	2249	2249
15°	4835	3019	2111	1930	1998
20°	12111	3220	1680	1680	1867
25°	56253	4113	1282	1548	1742
30°	170988	5596	1013	1418	1747
35°	289001	6478	857	1365	1713
40°	338749	6412	687	1374	1832
45°	356750	4528	589	1489	1985
50°	339571	2729	546	1535	2183
55°	284549	1109	612	1720	2561
60°	159285	219	702	1974	2807
65°	27500	156	675	2231	3165
70°	513	192	833	2372	3590
75°	424	254	1101	2711	4067
80°	379	379	1389	3031	4672
85°	0	755	2768	3271	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 359292 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.4
10°-20°	3.5	1.2
20°-30°	18.1	6.1
30°-40°	78.2	26.5
40°-50°	111.5	37.8
50°-60°	69.1	23.4
60°-70°	10.5	3.6
70°-80°	2.0	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°	22.8	7.7
0°-40°	101.0	34.2
0°-60°	281.5	95.4
0°-90°	295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	295.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	15	14	13	12	12	1
15°	21	13	9	8	9	8
25°	232	17	5	6	7	139
35°	1080	24	3	5	6	648
45°	1150	15	2	5	6	869
55°	744	3	2	4	7	634
65°	53	0	1	4	6	108
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°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
2.5°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	13.6	13.3
5°	14.6	14.6	14.4	14.4	14.4	14.4	14.4	14.4	13.8	13.3	12.5
7.5°	14.9	14.9	14.6	14.6	14.6	14.6	14.4	14.1	13.6	12.5	11.7
10°	15.2	15.2	15.2	15.2	14.9	14.6	14.4	13.8	13.0	11.7	10.9
12.5°	17.0	17.0	16.8	16.2	15.7	15.2	14.6	13.6	12.0	10.7	9.9
15°	21.3	21.0	20.5	19.7	18.6	17.3	16.2	13.3	10.9	9.3	8.8
17.5°	29.8	29.3	28.5	25.8	23.4	21.0	18.9	13.3	9.9	8.3	7.7
20°	51.9	52.2	46.6	40.2	34.9	29.0	23.7	13.8	8.8	7.2	6.9
22.5°	108.4	104.1	90.8	75.4	57.5	44.5	33.6	15.2	7.7	6.1	6.1
25°	232.5	216.2	184.0	139.0	98.0	69.5	48.7	17.0	6.9	5.3	5.6
27.5°	424.5	409.8	345.1	259.9	172.6	104.9	66.0	19.4	6.1	4.5	5.1
30°	675.3	634.9	550.4	426.1	288.4	160.6	88.7	22.1	5.1	4.0	4.8
31°	753.6	735.0	632.2	492.9	337.9	190.7	98.3	22.9	4.8	4.0	4.5
32°	846.6	813.5	721.4	566.2	388.3	217.6	109.7	23.7	4.5	3.5	4.5
33°	929.7	897.7	785.6	630.6	439.1	248.2	122.0	24.0	4.0	3.5	4.3
34°	1017.0	973.3	862.3	698.0	491.3	281.2	133.2	24.2	3.7	3.2	4.3
35°	1079.6	1035.9	928.3	751.2	536.3	310.5	145.9	24.2	3.5	3.2	4.0
36°	1128.0	1089.7	985.3	806.1	581.1	336.9	156.1	24.2	2.9	2.9	4.0
37°	1161.3	1124.9	1023.7	853.2	615.2	360.3	165.1	24.2	2.7	2.9	4.0
38°	1177.6	1147.2	1060.7	887.6	648.2	378.7	172.3	23.7	2.4	2.7	3.7
39°	1184.5	1159.7	1083.3	916.6	672.9	394.7	177.6	23.2	2.1	2.7	3.7
40°	1183.4	1161.9	1096.1	936.6	692.9	405.6	180.6	22.4	1.9	2.4	3.7
41°	1177.3	1158.7	1102.8	953.6	704.9	413.0	181.4	21.6	1.6	2.4	3.5
42°	1170.4	1153.3	1104.9	962.7	712.6	415.4	179.2	20.5	1.6	2.1	3.5
43°	1163.2	1147.5	1104.9	965.6	714.5	413.8	175.8	18.6	1.3	2.1	3.5
44°	1157.3	1142.4	1101.4	964.8	710.5	407.7	169.4	16.5	1.1	2.1	3.5
45°	1150.4	1135.8	1096.9	959.7	702.8	397.3	161.4	14.6	0.8	1.9	3.5
46°	1138.2	1126.7	1088.9	949.4	690.5	382.9	151.3	13.3	0.5	1.9	3.2
47°	1114.5	1104.6	1073.5	933.9	674.3	365.9	140.9	12.0	0.5	1.9	3.2
48°	1066.8	1066.5	1042.6	905.2	648.4	344.6	130.0	10.7	0.5	1.9	3.2
49°	1020.7	1015.9	986.1	854.6	611.4	319.0	118.5	9.6	0.3	1.9	3.2
50°	995.4	985.0	936.0	794.9	564.0	283.6	106.3	8.0	0.3	1.6	3.2
51°	969.1	954.2	896.4	741.1	507.6	249.5	92.9	6.4	0.3	1.6	2.9
52°	921.4	907.3	842.6	689.7	452.7	214.6	80.2	5.3	0.3	1.6	3.2
53°	870.0	849.8	779.5	633.3	404.5	183.7	67.1	4.5	0.3	1.6	2.9
54°	805.3	796.2	715.5	564.0	348.1	153.9	55.1	3.7	0.3	1.6	2.9
55°	744.3	731.0	647.1	493.2	296.9	126.2	46.1	2.9	0.3	1.6	2.9
56°	666.6	646.6	568.0	428.2	245.0	101.7	38.9	2.4	0.3	1.6	2.9
57°	573.9	552.6	490.5	356.0	192.3	77.5	32.5	1.9	0.3	1.6	2.9
58°	485.5	467.1	400.5	274.8	144.9	53.8	26.9	1.3	0.3	1.3	2.9
59°	419.4	399.2	333.1	211.4	100.7	39.7	20.2	1.1	0.3	1.6	2.9
60°	363.2	337.1	268.2	163.8	71.9	28.5	14.9	0.5	0.5	1.6	2.9
62.5°	209.3	184.8	128.1	66.6	29.6	14.6	7.2	0.3	0.5	1.6	2.9
65°	53.0	47.1	30.6	14.4	8.3	5.1	2.7	0.3	0.5	1.3	2.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.9	1.9	1.9	1.6	1.3	1.1	0.5	0.3	0.5	1.3	2.7
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	1.1	1.9
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.6
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.8	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	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°	13.6	13.6	13.6
2.5°	12.8	12.8	12.8
5°	12.0	12.0	11.7
7.5°	11.2	10.9	10.9
10°	10.1	10.1	10.1
12.5°	9.3	9.3	9.3
15°	8.5	8.8	8.8
17.5°	7.7	8.3	8.3
20°	7.2	7.7	8.0
22.5°	6.7	7.2	7.5
25°	6.4	6.9	7.2
27.5°	5.9	6.7	7.2
30°	5.6	6.4	6.9
31°	5.6	6.4	6.7
32°	5.3	6.4	6.7
33°	5.3	6.4	6.7
34°	5.3	6.1	6.7
35°	5.1	6.1	6.4
36°	5.1	6.1	6.4
37°	5.1	6.1	6.7
38°	5.1	6.1	6.4
39°	4.8	6.1	6.4
40°	4.8	6.1	6.4
41°	4.8	6.1	6.4
42°	4.8	6.1	6.4
43°	4.8	6.1	6.4
44°	4.8	5.9	6.4
45°	4.8	5.9	6.4
46°	4.8	6.1	6.4
47°	4.8	6.1	6.7
48°	4.8	5.9	6.4
49°	4.5	5.9	6.4
50°	4.5	5.9	6.4
51°	4.5	6.1	6.7
52°	4.5	6.1	6.7
53°	4.5	6.1	6.7
54°	4.5	6.1	6.4
55°	4.5	6.1	6.7
56°	4.5	6.1	6.4
57°	4.5	6.1	6.4
58°	4.5	5.9	6.4
59°	4.5	5.9	6.4
60°	4.5	5.9	6.4
62.5°	4.3	5.9	6.4
65°	4.3	5.6	6.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	4.0	5.6	5.9
70°	3.7	5.3	5.6
72.5°	3.5	5.1	5.3
75°	3.2	4.5	4.8
77.5°	2.7	4.0	4.5
80°	2.4	3.5	3.7
82.5°	1.9	2.9	3.2
85°	1.3	2.1	2.1
87.5°	0.5	1.1	1.1
90°	0.0	0.0	0.0

(END OF REPORT)