

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: P1334672

Luminaire Tested: P3A02R259030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

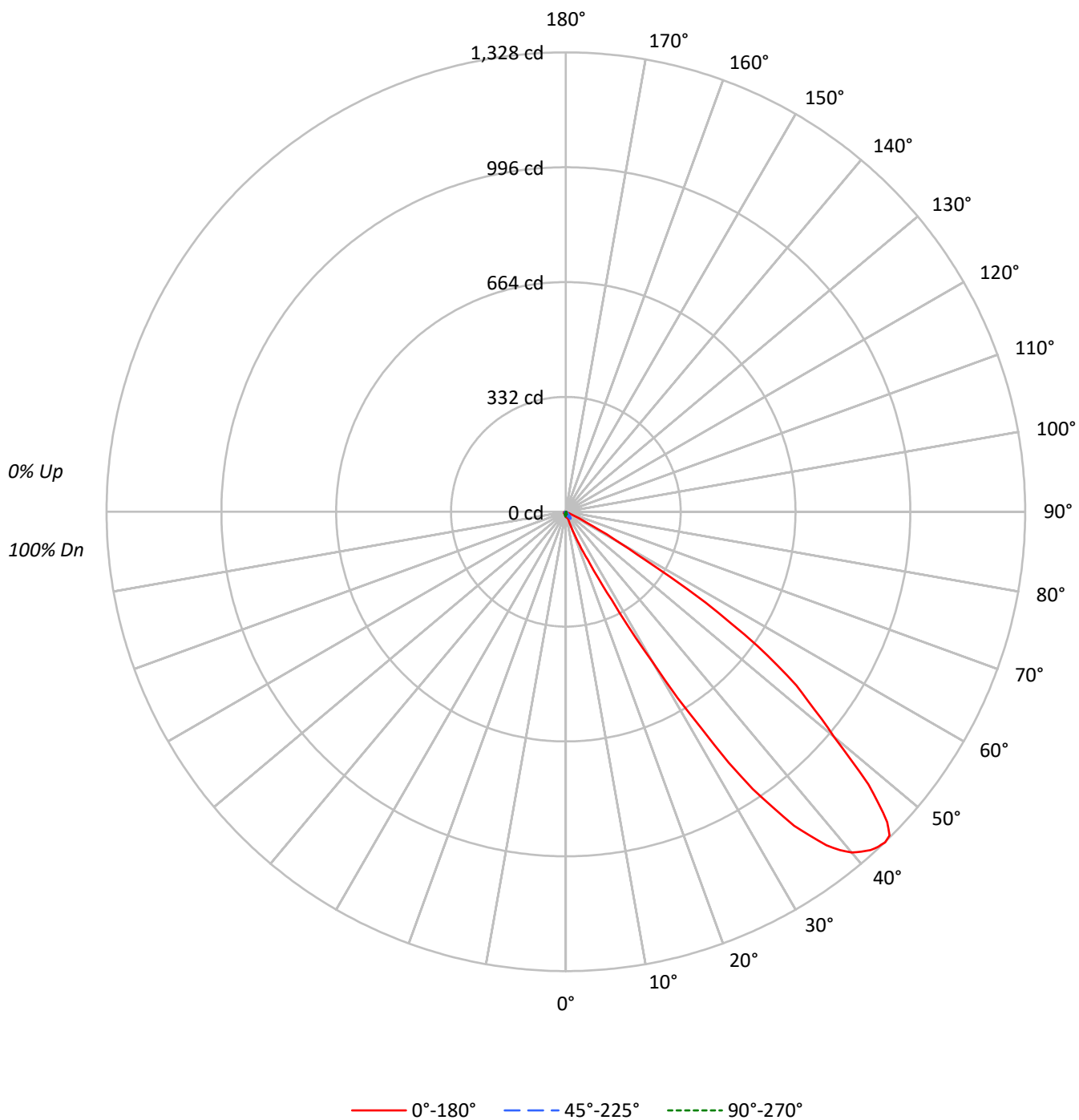
Lumens per Lamp: N/A
Luminaire Lumens: 277.0 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	50	30	10
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3092	3092	3092	3092	3092
5°	3544	3390	3016	2685	2619
10°	3518	3206	2561	2227	2227
15°	3927	2770	1998	1884	1998
20°	13885	2730	1540	1587	1773
25°	39922	3484	1234	1476	1718
30°	127387	5368	987	1418	1722
35°	279016	6318	857	1365	1767
40°	368061	5725	687	1403	1889
45°	410461	4000	682	1520	2047
50°	345507	2081	682	1569	2252
55°	258323	841	650	1759	2523
60°	79950	219	658	1930	2763
65°	6849	0	778	2024	3061
70°	449	128	769	2372	3462
75°	424	169	1017	2457	3897
80°	253	253	1515	2778	4672
85°	503	503	2516	3019	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 410461 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.5
10°-20°	3.3	1.2
20°-30°	15.3	5.5
30°-40°	73.8	26.6
40°-50°	115.7	41.8
50°-60°	59.3	21.4
60°-70°	5.6	2.0
70°-80°	1.9	0.7
80°-90°	0.9	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°	19.9	7.2
0°-40°	93.6	33.8
0°-60°	268.6	97.0
0°-90°	277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	277.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	16	15	14	12	12	2
15°	17	12	9	8	9	7
25°	165	14	5	6	7	102
35°	1042	24	3	5	7	633
45°	1324	13	2	5	7	969
55°	676	2	2	5	7	563
65°	13	0	2	4	6	41
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
2.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.1	15.1	15.4	15.1	15.1
5°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	15.8	15.8	15.8	15.4
7.5°	16.3	16.1	16.1	16.1	16.1	16.1	16.1	16.1	15.8	15.8	15.1
10°	15.8	15.8	15.8	15.8	15.6	15.6	15.6	15.4	15.4	15.4	14.4
12.5°	15.8	15.8	15.8	15.8	15.6	15.6	15.4	15.4	15.1	14.9	13.2
15°	17.3	17.3	17.3	17.1	16.8	16.6	16.3	16.1	15.8	15.4	12.2
17.5°	25.4	24.6	24.4	23.4	22.2	21.0	20.0	19.0	18.0	17.3	11.7
20°	59.5	59.2	58.0	55.1	51.9	48.3	44.6	40.5	34.6	30.7	11.7
22.5°	103.1	101.6	99.5	97.3	91.7	85.1	78.2	70.4	62.9	54.8	12.4
25°	165.0	168.4	161.1	155.3	145.5	133.6	120.7	109.9	96.3	83.6	14.4
27.5°	286.9	289.1	274.7	255.7	233.0	207.9	183.5	165.3	142.4	121.4	18.0
30°	503.1	505.3	481.2	440.7	393.9	352.7	296.9	247.9	202.8	167.9	21.2
31°	627.9	610.8	582.8	543.6	484.3	422.2	355.1	295.9	238.9	193.1	22.2
32°	736.4	734.9	702.3	642.8	583.3	506.5	423.4	346.1	276.2	218.4	22.9
33°	864.3	854.6	808.5	752.5	673.7	596.5	489.2	401.0	314.4	246.7	23.4
34°	967.0	940.6	921.6	857.5	774.4	675.9	561.1	459.0	362.2	274.0	23.6
35°	1042.3	1036.7	999.6	939.9	855.3	754.7	638.6	519.2	402.2	305.7	23.6
36°	1122.0	1104.7	1068.6	1014.5	932.1	828.0	697.9	571.4	448.8	334.2	23.4
37°	1172.0	1161.7	1125.9	1070.1	989.4	889.9	764.2	626.4	485.8	362.7	22.9
38°	1223.4	1202.7	1167.3	1114.0	1034.7	941.4	812.2	668.9	519.9	387.8	22.2
39°	1259.0	1237.5	1201.5	1148.3	1070.8	978.2	850.2	704.9	549.7	406.6	21.2
40°	1285.8	1265.1	1228.5	1173.9	1097.4	1007.2	881.9	736.9	574.5	422.9	20.0
41°	1302.4	1283.1	1246.8	1192.4	1115.7	1023.8	902.6	757.6	591.3	433.9	18.8
42°	1316.3	1296.5	1259.5	1203.9	1126.9	1037.9	915.3	770.7	602.8	439.5	17.8
43°	1324.1	1304.3	1268.2	1211.5	1133.7	1044.5	922.1	776.8	606.7	438.8	16.1
44°	1328.5	1308.0	1271.7	1214.9	1136.6	1046.2	922.6	775.6	604.0	432.9	14.6
45°	1323.6	1303.3	1268.2	1211.5	1131.5	1040.8	917.7	769.0	593.8	421.4	12.9
46°	1291.9	1276.3	1244.1	1192.0	1115.4	1027.2	905.3	756.4	577.9	407.3	11.0
47°	1236.1	1223.6	1192.4	1153.7	1084.5	1002.1	882.4	732.2	555.8	386.1	8.8
48°	1177.8	1159.5	1130.5	1090.8	1032.3	957.0	844.6	696.9	522.1	358.3	7.8
49°	1091.8	1081.0	1055.5	1011.1	962.6	896.3	791.2	651.6	480.9	328.1	6.8
50°	1012.8	1005.5	969.7	937.0	885.6	823.6	718.8	591.8	429.7	290.6	6.1
51°	951.1	942.4	916.5	875.8	821.0	749.1	650.3	514.3	371.0	245.9	4.9
52°	886.8	881.9	859.0	817.1	763.2	691.5	583.8	448.5	314.0	207.9	3.9
53°	834.1	827.1	799.0	761.7	703.5	629.4	511.6	387.3	265.9	174.8	3.4
54°	757.3	754.4	736.4	697.4	634.2	553.6	446.3	326.1	221.8	148.2	2.9
55°	675.7	665.9	647.7	616.7	558.7	483.4	370.7	270.3	179.4	124.8	2.2
56°	576.2	575.7	543.1	517.2	465.8	385.9	296.2	211.1	145.8	104.1	2.0
57°	481.2	465.8	434.4	408.8	353.4	292.7	219.9	158.2	114.1	84.3	1.5
58°	355.9	347.8	339.5	302.0	250.8	207.4	157.0	111.2	84.3	64.4	1.0
59°	241.6	241.3	231.6	203.0	173.6	129.2	98.0	75.6	58.0	47.3	0.7
60°	182.3	177.9	158.4	139.7	109.2	81.7	58.0	44.6	36.1	30.5	0.5
62.5°	63.9	66.3	58.3	48.3	36.8	30.2	23.2	18.8	15.4	12.4	0.0
65°	13.2	14.4	12.4	11.7	9.3	8.0	7.1	6.1	5.1	4.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.7	1.5	1.5	1.5	1.2	1.2	1.2	1.2	1.0	1.0	0.2
70°	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.2
72.5°	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	14.1	14.1	14.1	14.1	14.1	14.1
2.5°	14.9	14.4	13.7	13.4	13.2	13.2
5°	14.6	13.7	12.9	12.2	11.9	11.9
7.5°	13.9	12.7	11.7	11.2	11.0	10.7
10°	13.2	11.5	10.5	10.0	10.0	10.0
12.5°	11.7	10.2	9.3	9.0	9.3	9.3
15°	10.5	8.8	8.3	8.3	8.5	8.8
17.5°	9.0	7.8	7.3	7.6	7.8	8.0
20°	8.0	6.6	6.6	6.8	7.6	7.6
22.5°	7.1	5.9	5.9	6.6	7.1	7.3
25°	6.3	5.1	5.4	6.1	6.8	7.1
27.5°	5.4	4.4	4.9	5.9	6.6	6.8
30°	4.6	3.9	4.6	5.6	6.3	6.8
31°	4.4	3.7	4.6	5.4	6.3	6.8
32°	3.9	3.7	4.4	5.4	6.3	6.6
33°	3.7	3.4	4.4	5.4	6.3	6.6
34°	3.4	3.2	4.1	5.4	6.3	6.6
35°	2.9	3.2	4.1	5.1	6.1	6.6
36°	2.7	2.9	4.1	5.1	6.1	6.6
37°	2.4	2.9	3.9	5.1	6.1	6.6
38°	2.2	2.7	3.9	5.1	6.1	6.6
39°	2.0	2.7	3.7	5.1	6.1	6.6
40°	1.7	2.4	3.7	4.9	6.1	6.6
41°	1.7	2.4	3.7	4.9	6.1	6.6
42°	1.5	2.4	3.7	4.9	6.1	6.6
43°	1.2	2.2	3.7	4.9	6.1	6.6
44°	1.0	2.2	3.4	4.9	6.1	6.6
45°	1.0	2.2	3.4	4.9	6.1	6.6
46°	0.7	2.0	3.4	4.9	6.1	6.6
47°	0.5	2.0	3.4	4.6	6.1	6.6
48°	0.5	2.0	3.4	4.6	6.1	6.6
49°	0.5	2.0	3.2	4.6	6.1	6.6
50°	0.5	2.0	3.2	4.6	6.1	6.6
51°	0.2	1.7	3.2	4.6	6.1	6.6
52°	0.2	1.7	3.2	4.6	6.1	6.8
53°	0.2	1.7	3.2	4.6	6.1	6.6
54°	0.2	1.7	2.9	4.6	6.1	6.6
55°	0.2	1.7	2.9	4.6	6.1	6.6
56°	0.2	1.5	2.9	4.4	6.1	6.6
57°	0.5	1.5	2.9	4.4	6.1	6.3
58°	0.5	1.5	2.9	4.4	5.9	6.3
59°	0.5	1.5	2.9	4.4	5.9	6.3
60°	0.5	1.5	2.7	4.4	5.9	6.3
62.5°	0.5	1.5	2.7	4.1	5.6	6.1
65°	0.5	1.5	2.4	3.9	5.6	5.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.2	2.4	3.7	5.4	5.6
70°	0.7	1.2	2.2	3.7	5.1	5.4
72.5°	0.7	1.2	2.2	3.2	4.6	5.1
75°	0.7	1.2	2.0	2.9	4.4	4.6
77.5°	0.7	1.2	1.7	2.7	3.9	4.1
80°	1.0	1.2	1.5	2.2	3.4	3.7
82.5°	1.0	1.2	1.2	1.7	2.7	2.9
85°	0.7	1.0	1.0	1.2	1.7	2.0
87.5°	0.7	1.0	0.7	0.5	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)