

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: P1334842

Luminaire Tested: P3A02R259840DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334842
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: P3A02R259840DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

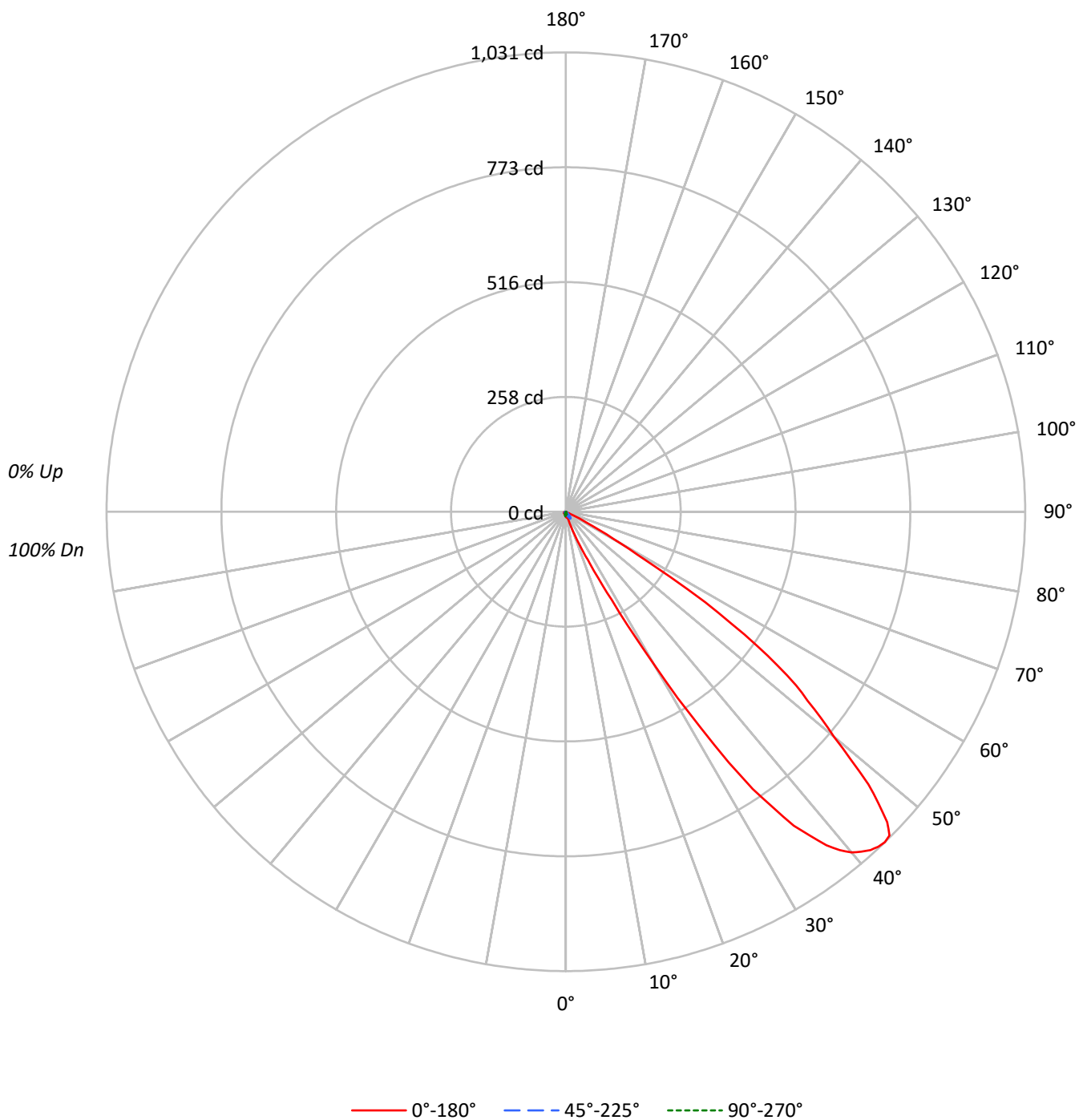
Lumens per Lamp: N/A
Luminaire Lumens: 215.0 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

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	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°	2412	2412	2412	2412	2412
5°	2751	2619	2333	2091	2047
10°	2739	2494	1982	1737	1737
15°	3042	2157	1544	1453	1544
20°	10781	2124	1190	1237	1377
25°	30994	2710	968	1137	1331
30°	98876	4178	760	1114	1342
35°	216563	4926	669	1071	1365
40°	285678	4437	544	1088	1460
45°	318576	3101	527	1178	1582
50°	268170	1603	512	1228	1740
55°	200480	650	497	1376	1950
60°	62056	175	482	1491	2149
65°	5292	0	571	1557	2335
70°	385	128	577	1795	2693
75°	339	169	763	1949	3050
80°	253	253	1137	2147	3536
85°	503	503	2013	2264	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 318576 cd/sqm

TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.5
10°-20°	2.5	1.2
20°-30°	11.9	5.5
30°-40°	57.3	26.6
40°-50°	89.8	41.7
50°-60°	46.0	21.4
60°-70°	4.3	2.0
70°-80°	1.5	0.7
80°-90°	0.7	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°	15.4	7.2
0°-40°	72.7	33.8
0°-60°	208.5	97.0
0°-90°	215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	215.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	12	11	10	9	1
15°	13	10	7	6	7	6
25°	128	11	4	5	6	79
35°	809	18	2	4	5	491
45°	1027	10	2	4	5	752
55°	524	2	1	4	5	437
65°	10	0	1	3	4	32
75°	0	0	1	2	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
2.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.7	11.7	11.9	11.7	11.7
5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.3	12.3	12.3	11.9
7.5°	12.7	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.3	12.3	11.7
10°	12.3	12.3	12.3	12.3	12.1	12.1	12.1	11.9	11.9	11.9	11.2
12.5°	12.3	12.3	12.3	12.3	12.1	12.1	11.9	11.9	11.7	11.5	10.2
15°	13.4	13.4	13.4	13.2	13.1	12.9	12.7	12.5	12.3	11.9	9.5
17.5°	19.7	19.1	18.9	18.2	17.2	16.3	15.5	14.8	14.0	13.4	9.1
20°	46.2	46.0	45.0	42.8	40.3	37.5	34.6	31.4	26.9	23.8	9.1
22.5°	80.0	78.9	77.2	75.5	71.1	66.0	60.7	54.7	48.8	42.6	9.6
25°	128.1	130.7	125.1	120.5	112.9	103.7	93.7	85.3	74.7	64.9	11.2
27.5°	222.7	224.4	213.2	198.5	180.9	161.4	142.5	128.3	110.5	94.2	14.0
30°	390.5	392.2	373.5	342.1	305.7	273.8	230.4	192.4	157.4	130.4	16.5
31°	487.4	474.1	452.4	421.9	375.9	327.7	275.7	229.7	185.4	149.8	17.2
32°	571.6	570.4	545.1	498.9	452.7	393.1	328.6	268.7	214.4	169.5	17.8
33°	670.9	663.3	627.6	584.0	522.9	463.0	379.7	311.2	244.1	191.5	18.2
34°	750.5	730.1	715.3	665.6	601.1	524.6	435.5	356.3	281.1	212.7	18.4
35°	809.0	804.6	775.9	729.5	663.9	585.7	495.7	403.0	312.2	237.3	18.4
36°	870.9	857.4	829.4	787.4	723.5	642.7	541.7	443.5	348.3	259.4	18.2
37°	909.6	901.7	873.9	830.6	767.9	690.8	593.1	486.2	377.1	281.5	17.8
38°	949.6	933.5	906.1	864.6	803.1	730.7	630.4	519.2	403.6	301.0	17.2
39°	977.2	960.5	932.5	891.3	831.1	759.2	659.9	547.2	426.6	315.6	16.5
40°	998.0	981.9	953.5	911.2	851.8	781.8	684.5	571.9	445.9	328.3	15.5
41°	1010.9	995.9	967.7	925.5	865.9	794.6	700.6	588.0	459.0	336.8	14.6
42°	1021.7	1006.3	977.6	934.4	874.6	805.6	710.4	598.2	467.9	341.1	13.8
43°	1027.7	1012.4	984.4	940.3	879.9	810.7	715.7	603.0	470.9	340.6	12.5
44°	1031.1	1015.2	987.0	942.9	882.2	812.0	716.1	602.0	468.8	336.0	11.4
45°	1027.3	1011.6	984.4	940.3	878.2	807.9	712.3	596.9	460.9	327.1	10.0
46°	1002.7	990.6	965.7	925.2	865.8	797.3	702.7	587.1	448.6	316.1	8.5
47°	959.4	949.8	925.5	895.5	841.7	777.8	684.9	568.3	431.4	299.7	6.8
48°	914.2	900.0	877.5	846.6	801.2	742.8	655.6	540.9	405.3	278.1	6.1
49°	847.4	839.1	819.2	784.8	747.1	695.7	614.1	505.7	373.3	254.7	5.3
50°	786.1	780.4	752.6	727.3	687.3	639.3	557.9	459.4	333.6	225.5	4.7
51°	738.2	731.4	711.4	679.8	637.2	581.4	504.8	399.2	288.0	190.9	3.8
52°	688.3	684.5	666.7	634.2	592.4	536.7	453.1	348.1	243.7	161.4	3.0
53°	647.4	641.9	620.2	591.2	546.0	488.5	397.1	300.6	206.4	135.7	2.6
54°	587.8	585.6	571.6	541.3	492.3	429.7	346.4	253.1	172.2	115.0	2.3
55°	524.4	516.9	502.7	478.7	433.6	375.2	287.8	209.8	139.2	96.9	1.7
56°	447.3	446.9	421.5	401.5	361.6	299.5	229.9	163.8	113.1	80.8	1.5
57°	373.5	361.6	337.1	317.3	274.3	227.2	170.7	122.8	88.5	65.5	1.1
58°	276.2	270.0	263.5	234.4	194.7	161.0	121.8	86.3	65.5	49.9	0.8
59°	187.5	187.3	179.7	157.6	134.7	100.3	76.1	58.7	45.0	36.7	0.6
60°	141.5	138.1	123.0	108.4	84.8	63.4	45.0	34.6	28.0	23.6	0.4
62.5°	49.6	51.5	45.2	37.5	28.6	23.5	18.0	14.6	11.9	9.6	0.0
65°	10.2	11.2	9.6	9.1	7.2	6.2	5.5	4.7	4.0	3.4	0.0



TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.3	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.8	0.8	0.2
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	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	0.4
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

TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	11.0	11.0	11.0	11.0	11.0	11.0
2.5°	11.5	11.2	10.6	10.4	10.2	10.2
5°	11.4	10.6	10.0	9.5	9.3	9.3
7.5°	10.8	9.8	9.1	8.7	8.5	8.3
10°	10.2	8.9	8.1	7.8	7.8	7.8
12.5°	9.1	7.9	7.2	7.0	7.2	7.2
15°	8.1	6.8	6.4	6.4	6.6	6.8
17.5°	7.0	6.1	5.7	5.9	6.1	6.2
20°	6.2	5.1	5.1	5.3	5.9	5.9
22.5°	5.5	4.5	4.5	5.1	5.5	5.7
25°	4.9	4.0	4.2	4.7	5.3	5.5
27.5°	4.2	3.4	3.8	4.5	5.1	5.3
30°	3.6	3.0	3.6	4.4	4.9	5.3
31°	3.4	2.8	3.6	4.2	4.9	5.3
32°	3.0	2.8	3.4	4.2	4.9	5.1
33°	2.8	2.6	3.4	4.2	4.9	5.1
34°	2.6	2.5	3.2	4.2	4.9	5.1
35°	2.3	2.5	3.2	4.0	4.7	5.1
36°	2.1	2.3	3.2	4.0	4.7	5.1
37°	1.9	2.3	3.0	4.0	4.7	5.1
38°	1.7	2.1	3.0	4.0	4.7	5.1
39°	1.5	2.1	2.8	4.0	4.7	5.1
40°	1.3	1.9	2.8	3.8	4.7	5.1
41°	1.3	1.9	2.8	3.8	4.7	5.1
42°	1.1	1.9	2.8	3.8	4.7	5.1
43°	0.9	1.7	2.8	3.8	4.7	5.1
44°	0.8	1.7	2.6	3.8	4.7	5.1
45°	0.8	1.7	2.6	3.8	4.7	5.1
46°	0.6	1.5	2.6	3.8	4.7	5.1
47°	0.4	1.5	2.6	3.6	4.7	5.1
48°	0.4	1.5	2.6	3.6	4.7	5.1
49°	0.4	1.5	2.5	3.6	4.7	5.1
50°	0.4	1.5	2.5	3.6	4.7	5.1
51°	0.2	1.3	2.5	3.6	4.7	5.1
52°	0.2	1.3	2.5	3.6	4.7	5.3
53°	0.2	1.3	2.5	3.6	4.7	5.1
54°	0.2	1.3	2.3	3.6	4.7	5.1
55°	0.2	1.3	2.3	3.6	4.7	5.1
56°	0.2	1.1	2.3	3.4	4.7	5.1
57°	0.4	1.1	2.3	3.4	4.7	4.9
58°	0.4	1.1	2.3	3.4	4.5	4.9
59°	0.4	1.1	2.3	3.4	4.5	4.9
60°	0.4	1.1	2.1	3.4	4.5	4.9
62.5°	0.4	1.1	2.1	3.2	4.4	4.7
65°	0.4	1.1	1.9	3.0	4.4	4.5



TEST NUMBER: P1334842

CATALOG NUMBER: P3A02R259840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	0.9	1.9	2.8	4.2	4.4
70°	0.6	0.9	1.7	2.8	4.0	4.2
72.5°	0.6	0.9	1.7	2.5	3.6	4.0
75°	0.6	0.9	1.5	2.3	3.4	3.6
77.5°	0.6	0.9	1.3	2.1	3.0	3.2
80°	0.8	0.9	1.1	1.7	2.6	2.8
82.5°	0.8	0.9	0.9	1.3	2.1	2.3
85°	0.6	0.8	0.8	0.9	1.3	1.5
87.5°	0.6	0.8	0.6	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)