

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: P1335478

Luminaire Tested: P3A02R359830DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335478
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: P3A02R359830DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

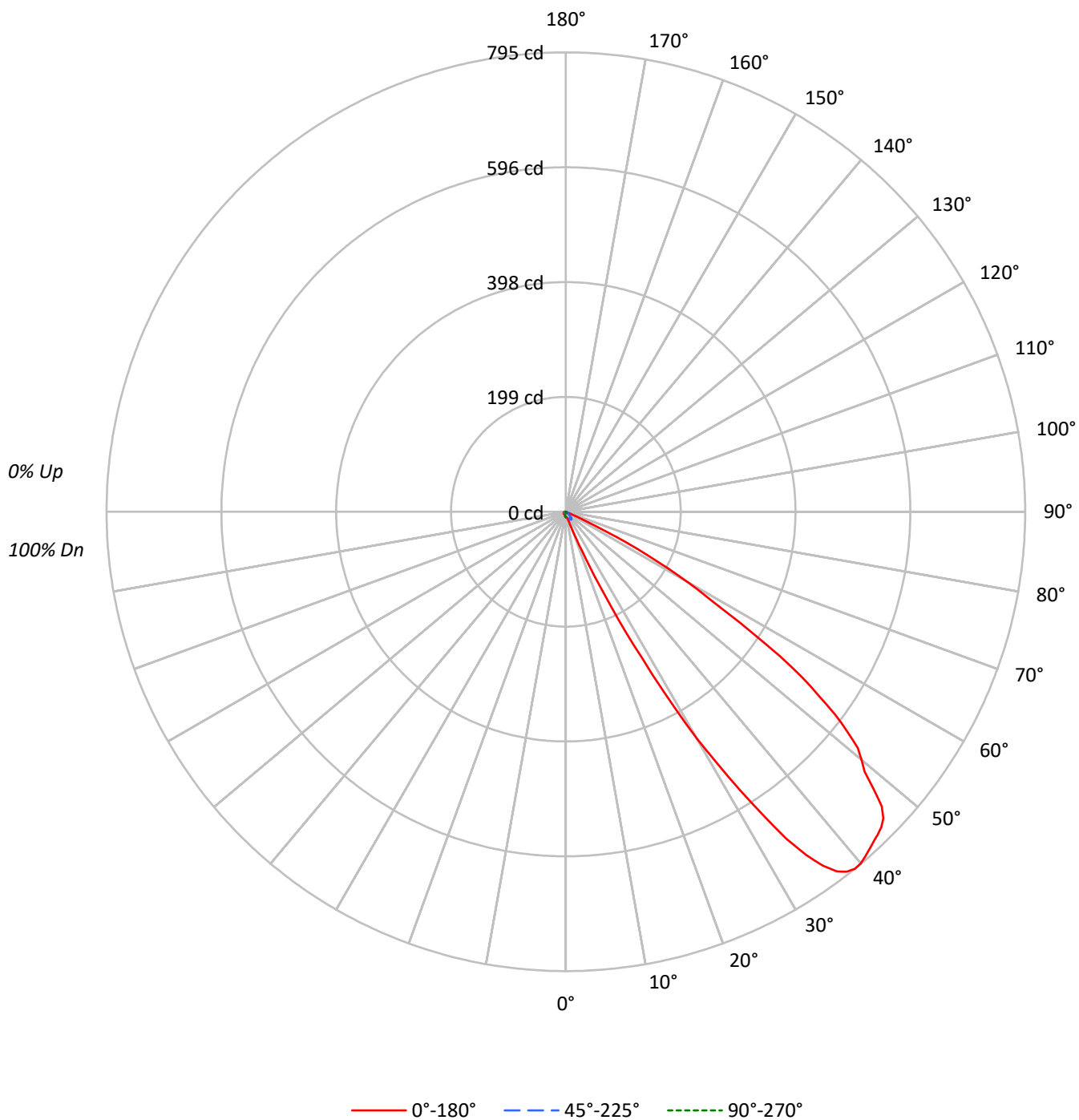
Lumens per Lamp: N/A
Luminaire Lumens: 198.0 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1995	1995	1995	1995	1995
5°	2157	2135	1959	1761	1739
10°	2271	2071	1759	1514	1514
15°	3246	2020	1430	1294	1339
20°	8144	2170	1120	1120	1260
25°	37744	2758	871	1040	1161
30°	114777	3747	684	962	1165
35°	193970	4363	562	910	1151
40°	227369	4294	458	916	1231
45°	239436	3039	403	992	1333
50°	227916	1842	375	1023	1467
55°	190999	765	421	1147	1720
60°	106921	175	482	1316	1886
65°	18471	104	467	1505	2127
70°	321	128	577	1603	2436
75°	339	169	763	1779	2711
80°	253	253	884	2020	3157
85°	0	503	1761	2264	3522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 241138 cd/sqm

TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.4
10°-20°	2.3	1.2
20°-30°	12.1	6.1
30°-40°	52.5	26.5
40°-50°	74.8	37.8
50°-60°	46.4	23.4
60°-70°	7.1	3.6
70°-80°	1.3	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°	15.3	7.7
0°-40°	67.8	34.2
0°-60°	189.0	95.4
0°-90°	198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	198.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	10	10	9	8	8	1
15°	14	9	6	6	6	5
25°	156	11	4	4	5	93
35°	725	16	2	3	4	435
45°	772	10	1	3	4	583
55°	500	2	1	3	4	425
65°	36	0	1	3	4	73
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
2.5°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.1	8.9
5°	9.8	9.8	9.7	9.7	9.7	9.7	9.7	9.7	9.3	8.9	8.4
7.5°	10.0	10.0	9.8	9.8	9.8	9.8	9.7	9.5	9.1	8.4	7.9
10°	10.2	10.2	10.2	10.2	10.0	9.8	9.7	9.3	8.8	7.9	7.3
12.5°	11.4	11.4	11.3	10.9	10.5	10.2	9.8	9.1	8.0	7.1	6.6
15°	14.3	14.1	13.8	13.2	12.5	11.6	10.9	8.9	7.3	6.3	5.9
17.5°	20.0	19.7	19.1	17.3	15.7	14.1	12.7	8.9	6.6	5.5	5.2
20°	34.9	35.0	31.3	27.0	23.4	19.5	15.9	9.3	5.9	4.8	4.6
22.5°	72.7	69.9	60.9	50.6	38.6	29.8	22.5	10.2	5.2	4.1	4.1
25°	156.0	145.1	123.5	93.3	65.8	46.7	32.7	11.4	4.6	3.6	3.8
27.5°	284.9	275.1	231.6	174.4	115.8	70.4	44.3	13.0	4.1	3.0	3.4
30°	453.3	426.1	369.5	286.0	193.6	107.8	59.5	14.8	3.4	2.7	3.2
31°	505.8	493.3	424.3	330.8	226.8	128.0	66.0	15.4	3.2	2.7	3.0
32°	568.2	546.0	484.2	380.0	260.6	146.0	73.6	15.9	3.0	2.3	3.0
33°	624.0	602.5	527.3	423.3	294.7	166.6	81.9	16.1	2.7	2.3	2.9
34°	682.6	653.3	578.8	468.5	329.8	188.7	89.4	16.3	2.5	2.1	2.9
35°	724.6	695.3	623.1	504.2	360.0	208.4	97.9	16.3	2.3	2.1	2.7
36°	757.1	731.4	661.3	541.0	390.0	226.1	104.7	16.3	2.0	2.0	2.7
37°	779.5	755.0	687.1	572.7	412.9	241.8	110.8	16.3	1.8	2.0	2.7
38°	790.4	770.0	711.9	595.7	435.0	254.2	115.6	15.9	1.6	1.8	2.5
39°	795.0	778.4	727.1	615.2	451.7	264.9	119.2	15.6	1.4	1.8	2.5
40°	794.3	779.8	735.7	628.6	465.1	272.2	121.2	15.0	1.3	1.6	2.5
41°	790.2	777.7	740.2	640.1	473.1	277.2	121.7	14.5	1.1	1.6	2.3
42°	785.6	774.1	741.6	646.1	478.3	278.8	120.3	13.8	1.1	1.4	2.3
43°	780.7	770.2	741.6	648.1	479.6	277.8	118.0	12.5	0.9	1.4	2.3
44°	776.8	766.8	739.3	647.6	476.9	273.6	113.7	11.1	0.7	1.4	2.3
45°	772.1	762.3	736.2	644.2	471.7	266.7	108.3	9.8	0.5	1.3	2.3
46°	763.9	756.2	730.9	637.2	463.5	257.0	101.5	8.9	0.4	1.3	2.1
47°	748.0	741.4	720.5	626.8	452.6	245.6	94.6	8.0	0.4	1.3	2.1
48°	716.0	715.8	699.8	607.5	435.2	231.3	87.2	7.1	0.4	1.3	2.1
49°	685.1	681.9	661.9	573.6	410.4	214.1	79.5	6.4	0.2	1.3	2.1
50°	668.1	661.1	628.3	533.5	378.6	190.4	71.3	5.4	0.2	1.1	2.1
51°	650.4	640.4	601.6	497.4	340.7	167.5	62.4	4.3	0.2	1.1	2.0
52°	618.4	609.0	565.5	462.9	303.9	144.1	53.8	3.6	0.2	1.1	2.1
53°	583.9	570.4	523.2	425.0	271.5	123.3	45.0	3.0	0.2	1.1	2.0
54°	540.5	534.4	480.3	378.6	233.6	103.3	37.0	2.5	0.2	1.1	2.0
55°	499.6	490.6	434.3	331.0	199.3	84.7	30.9	2.0	0.2	1.1	2.0
56°	447.4	434.0	381.2	287.4	164.4	68.3	26.1	1.6	0.2	1.1	2.0
57°	385.2	370.9	329.2	239.0	129.0	52.0	21.8	1.3	0.2	1.1	2.0
58°	325.8	313.5	268.8	184.5	97.2	36.1	18.1	0.9	0.2	0.9	2.0
59°	281.5	267.9	223.6	141.9	67.6	26.6	13.6	0.7	0.2	1.1	2.0
60°	243.8	226.3	180.0	109.9	48.3	19.1	10.0	0.4	0.4	1.1	2.0
62.5°	140.5	124.0	86.0	44.7	19.8	9.8	4.8	0.2	0.4	1.1	2.0
65°	35.6	31.6	20.6	9.7	5.5	3.4	1.8	0.2	0.4	0.9	1.8



TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.3	1.3	1.3	1.1	0.9	0.7	0.4	0.2	0.4	0.9	1.8
70°	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.4	0.9	1.6
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.9	1.4
75°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.9	1.4
77.5°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.3
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.1
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.9
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.5	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5
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: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	9.1	9.1	9.1
2.5°	8.6	8.6	8.6
5°	8.0	8.0	7.9
7.5°	7.5	7.3	7.3
10°	6.8	6.8	6.8
12.5°	6.3	6.3	6.3
15°	5.7	5.9	5.9
17.5°	5.2	5.5	5.5
20°	4.8	5.2	5.4
22.5°	4.5	4.8	5.0
25°	4.3	4.6	4.8
27.5°	3.9	4.5	4.8
30°	3.8	4.3	4.6
31°	3.8	4.3	4.5
32°	3.6	4.3	4.5
33°	3.6	4.3	4.5
34°	3.6	4.1	4.5
35°	3.4	4.1	4.3
36°	3.4	4.1	4.3
37°	3.4	4.1	4.5
38°	3.4	4.1	4.3
39°	3.2	4.1	4.3
40°	3.2	4.1	4.3
41°	3.2	4.1	4.3
42°	3.2	4.1	4.3
43°	3.2	4.1	4.3
44°	3.2	3.9	4.3
45°	3.2	3.9	4.3
46°	3.2	4.1	4.3
47°	3.2	4.1	4.5
48°	3.2	3.9	4.3
49°	3.0	3.9	4.3
50°	3.0	3.9	4.3
51°	3.0	4.1	4.5
52°	3.0	4.1	4.5
53°	3.0	4.1	4.5
54°	3.0	4.1	4.3
55°	3.0	4.1	4.5
56°	3.0	4.1	4.3
57°	3.0	4.1	4.3
58°	3.0	3.9	4.3
59°	3.0	3.9	4.3
60°	3.0	3.9	4.3
62.5°	2.9	3.9	4.3
65°	2.9	3.8	4.1



TEST NUMBER: P1335478

CATALOG NUMBER: P3A02R359830DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	2.7	3.8	3.9
70°	2.5	3.6	3.8
72.5°	2.3	3.4	3.6
75°	2.1	3.0	3.2
77.5°	1.8	2.7	3.0
80°	1.6	2.3	2.5
82.5°	1.3	2.0	2.1
85°	0.9	1.4	1.4
87.5°	0.4	0.7	0.7
90°	0.0	0.0	0.0

(END OF REPORT)