

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: P1345012

Luminaire Tested: P3A13R309730DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309730DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

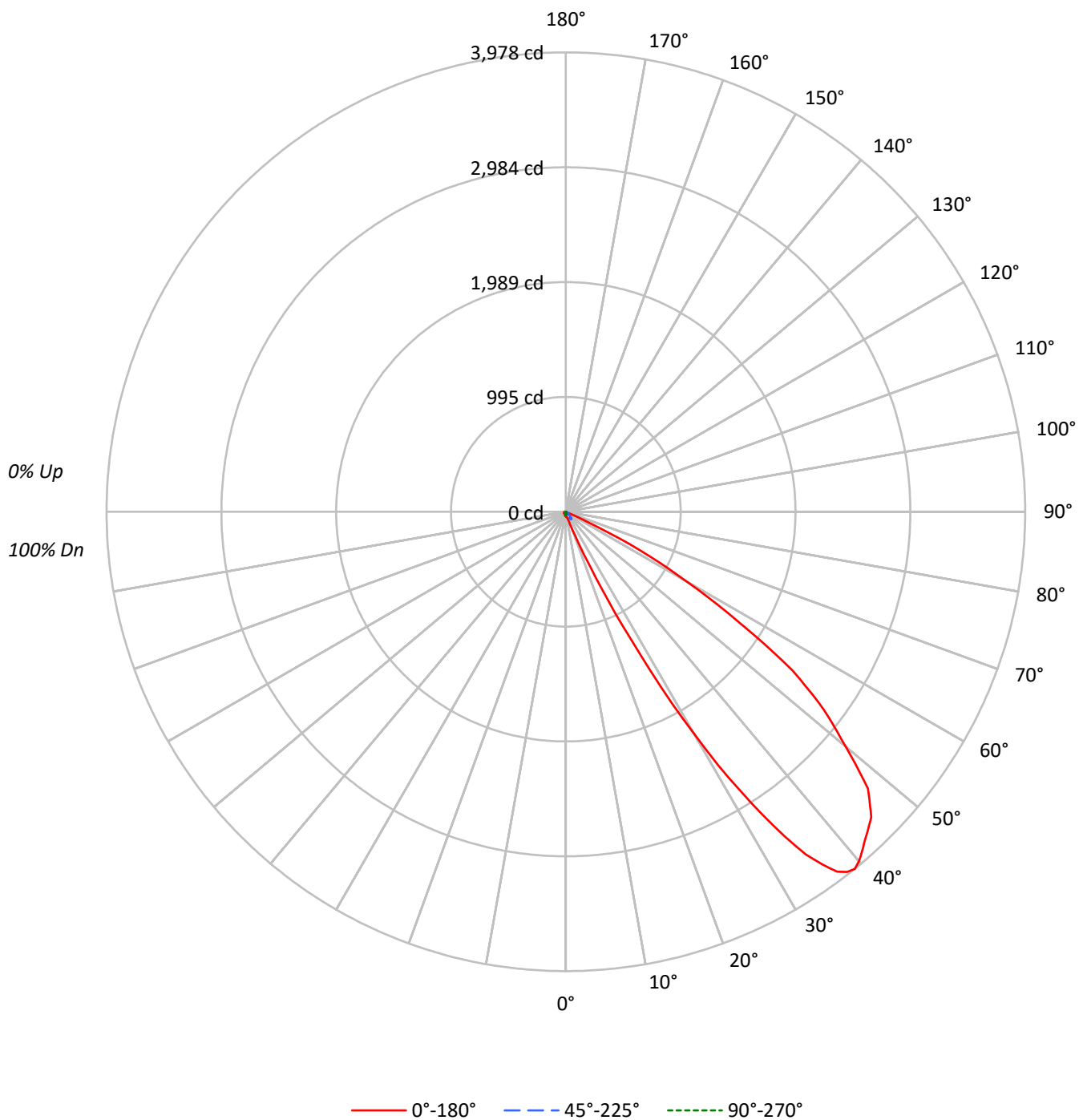
Lumens per Lamp: N/A
Luminaire Lumens: 1034.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1345012

CATALOG NUMBER: P3A13R309730DE010 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	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	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	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8793	8793	8793	8793	8793
5°	9399	9201	8629	7858	7660
10°	10287	9107	7571	6791	6591
15°	15028	9103	6334	5744	5925
20°	37803	9964	4877	4877	5484
25°	175534	12436	3799	4428	5057
30°	558845	17193	2861	4178	5064
35°	969715	20987	2329	3962	5140
40°	1130919	20954	1746	3979	5238
45°	1159841	14854	1892	4311	5675
50°	1078583	8324	1501	4469	6550
55°	916727	4320	1682	5008	7340
60°	529431	1140	1930	5350	8026
65°	108027	0	2283	6330	9028
70°	1667	577	2821	7245	10579
75°	1440	763	2965	7371	12539
80°	1137	1137	4420	8840	14269
85°	0	2264	8806	8806	17612

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1159841 cd/sqm

TEST NUMBER: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.6	0.4
10°-20°	10.4	1.0
20°-30°	59.6	5.8
30°-40°	278.5	26.9
40°-50°	393.9	38.1
50°-60°	242.3	23.4
60°-70°	36.9	3.6
70°-80°	5.8	0.6
80°-90°	2.9	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°	73.7	7.1
0°-40°	352.2	34.1
0°-60°	988.3	95.6
0°-90°	1034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	43	42	39	36	35	4
15°	66	40	28	25	26	24
25°	726	51	16	18	21	446
35°	3622	78	9	15	19	2174
45°	3740	48	6	14	18	2835
55°	2398	11	4	13	19	2040
65°	208	0	4	12	17	377
75°	2	1	4	9	15	2
85°	0	1	4	4	7	0
90°	0	0	0	0	0	

TEST NUMBER: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
2.5°	40.9	40.9	41.8	41.8	40.9	41.8	41.8	41.8	40.1	39.2	37.5
5°	42.7	42.7	42.7	43.5	42.7	42.7	41.8	40.9	39.2	36.6	35.7
7.5°	44.4	44.4	43.5	44.4	43.5	43.5	41.8	40.1	37.5	34.8	33.1
10°	46.2	46.2	45.3	45.3	44.4	44.4	40.9	38.3	34.0	31.4	30.5
12.5°	51.4	51.4	50.5	49.6	47.9	47.0	40.1	35.7	30.5	27.9	27.0
15°	66.2	65.3	63.6	61.0	56.6	55.7	40.1	33.1	27.9	25.3	25.3
17.5°	90.6	89.7	87.1	80.1	72.3	69.7	40.1	29.6	24.4	22.6	22.6
20°	162.0	155.0	142.0	124.6	106.3	96.7	42.7	26.1	20.9	20.0	20.9
21°	211.7	204.7	188.1	159.4	127.2	116.7	44.4	25.3	20.0	19.2	20.9
22°	288.3	280.5	246.5	207.3	161.1	142.8	45.3	23.5	18.3	18.3	20.0
23°	402.4	389.3	331.9	269.1	201.2	175.1	47.0	22.6	17.4	18.3	19.2
24°	527.0	515.6	450.3	356.2	256.9	219.5	48.8	21.8	16.5	16.5	18.3
25°	725.5	712.5	596.6	449.4	325.8	263.9	51.4	20.0	15.7	15.7	18.3
26°	982.5	922.4	768.2	579.2	401.5	331.0	54.0	19.2	14.8	15.7	17.4
27°	1226.4	1176.7	1003.4	743.0	496.5	406.8	57.5	18.3	13.9	14.8	17.4
28°	1546.9	1477.2	1258.6	939.8	625.4	492.1	61.0	17.4	13.1	14.8	16.5
29°	1905.7	1808.2	1544.3	1161.0	770.8	587.9	64.5	16.5	12.2	13.9	16.5
30°	2207.1	2115.7	1851.7	1423.2	938.1	714.2	67.9	15.7	11.3	13.9	16.5
31°	2560.7	2422.2	2102.6	1645.3	1081.8	840.5	71.4	13.9	10.5	13.1	15.7
32°	2847.3	2750.6	2410.9	1896.2	1270.8	979.9	74.0	13.1	10.5	13.1	15.7
33°	3124.3	2994.5	2666.1	2136.6	1441.5	1122.7	76.6	12.2	9.6	12.2	15.7
34°	3389.1	3269.7	2907.4	2330.8	1602.6	1258.6	78.4	10.5	9.6	12.2	14.8
35°	3622.5	3484.0	3119.9	2520.7	1768.1	1382.3	78.4	9.6	8.7	11.3	14.8
36°	3774.0	3674.7	3304.6	2707.9	1917.9	1499.9	78.4	8.7	7.8	11.3	13.9
37°	3903.8	3788.0	3452.6	2851.6	2028.6	1593.9	78.4	7.8	7.8	11.3	13.9
38°	3956.9	3857.7	3554.5	2978.8	2132.2	1689.7	77.5	7.0	7.0	10.5	13.9
39°	3977.8	3889.0	3631.2	3070.3	2208.9	1754.2	75.8	6.1	7.0	10.5	13.9
40°	3950.8	3883.8	3670.4	3129.5	2269.8	1801.2	73.2	5.2	6.1	10.5	13.9
42.5°	3839.4	3794.9	3661.7	3188.7	2322.1	1836.1	63.6	3.5	6.1	9.6	13.9
45°	3740.1	3691.3	3573.7	3126.9	2254.1	1767.3	47.9	1.7	6.1	9.6	13.9
47.5°	3547.6	3517.1	3424.8	2969.2	2105.2	1612.2	34.0	0.9	5.2	8.7	13.1
50°	3161.7	3133.0	3011.0	2578.2	1810.8	1363.1	24.4	0.9	4.4	8.7	13.1
52.5°	2815.9	2785.5	2610.4	2143.5	1391.0	999.0	15.7	0.9	4.4	8.7	13.1
55°	2397.9	2344.7	2114.8	1627.0	986.0	669.8	11.3	0.9	4.4	7.8	13.1
57.5°	1775.1	1697.6	1492.0	1109.7	567.9	363.2	6.1	0.9	4.4	7.8	13.1
60°	1207.2	1161.0	933.7	585.3	242.1	153.3	2.6	0.9	4.4	7.8	12.2
62.5°	731.6	673.3	469.5	249.1	104.5	69.7	0.0	1.7	4.4	7.8	12.2
65°	208.2	184.7	122.8	56.6	29.6	22.6	0.0	1.7	4.4	7.8	12.2
67.5°	7.0	7.0	7.0	6.1	4.4	4.4	0.9	1.7	4.4	7.8	11.3
70°	2.6	2.6	2.6	1.7	1.7	0.9	0.9	1.7	4.4	7.0	11.3
72.5°	1.7	1.7	1.7	1.7	0.9	0.9	0.9	1.7	3.5	6.1	10.5
75°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	3.5	6.1	8.7
77.5°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	3.5	5.2	8.7
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.6	3.5	5.2	7.0



TEST NUMBER: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	2.6	3.5	3.5	5.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	3.5	2.6	3.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	2.6	2.6	1.7
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: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	40.1	40.1
2.5°	37.5	37.5
5°	34.8	34.8
7.5°	32.2	32.2
10°	29.6	29.6
12.5°	27.9	27.9
15°	25.3	26.1
17.5°	23.5	24.4
20°	22.6	23.5
21°	22.6	23.5
22°	21.8	22.6
23°	21.8	22.6
24°	20.9	21.8
25°	20.0	20.9
26°	20.0	20.9
27°	20.0	20.9
28°	19.2	20.9
29°	19.2	20.0
30°	19.2	20.0
31°	18.3	20.0
32°	18.3	20.0
33°	18.3	19.2
34°	17.4	19.2
35°	17.4	19.2
36°	17.4	19.2
37°	17.4	18.3
38°	17.4	19.2
39°	17.4	18.3
40°	17.4	18.3
42.5°	17.4	18.3
45°	17.4	18.3
47.5°	17.4	19.2
50°	17.4	19.2
52.5°	17.4	19.2
55°	17.4	19.2
57.5°	17.4	18.3
60°	17.4	18.3
62.5°	16.5	18.3
65°	16.5	17.4
67.5°	16.5	17.4
70°	15.7	16.5
72.5°	14.8	15.7
75°	13.1	14.8
77.5°	12.2	13.1
80°	10.5	11.3

TEST NUMBER: P1345012

CATALOG NUMBER: P3A13R309730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	8.7	8.7
85°	6.1	7.0
87.5°	3.5	3.5
90°	0.0	0.0

(END OF REPORT)