

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: P1341562

Luminaire Tested: P3A09R309840DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341562
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: P3A09R309840DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

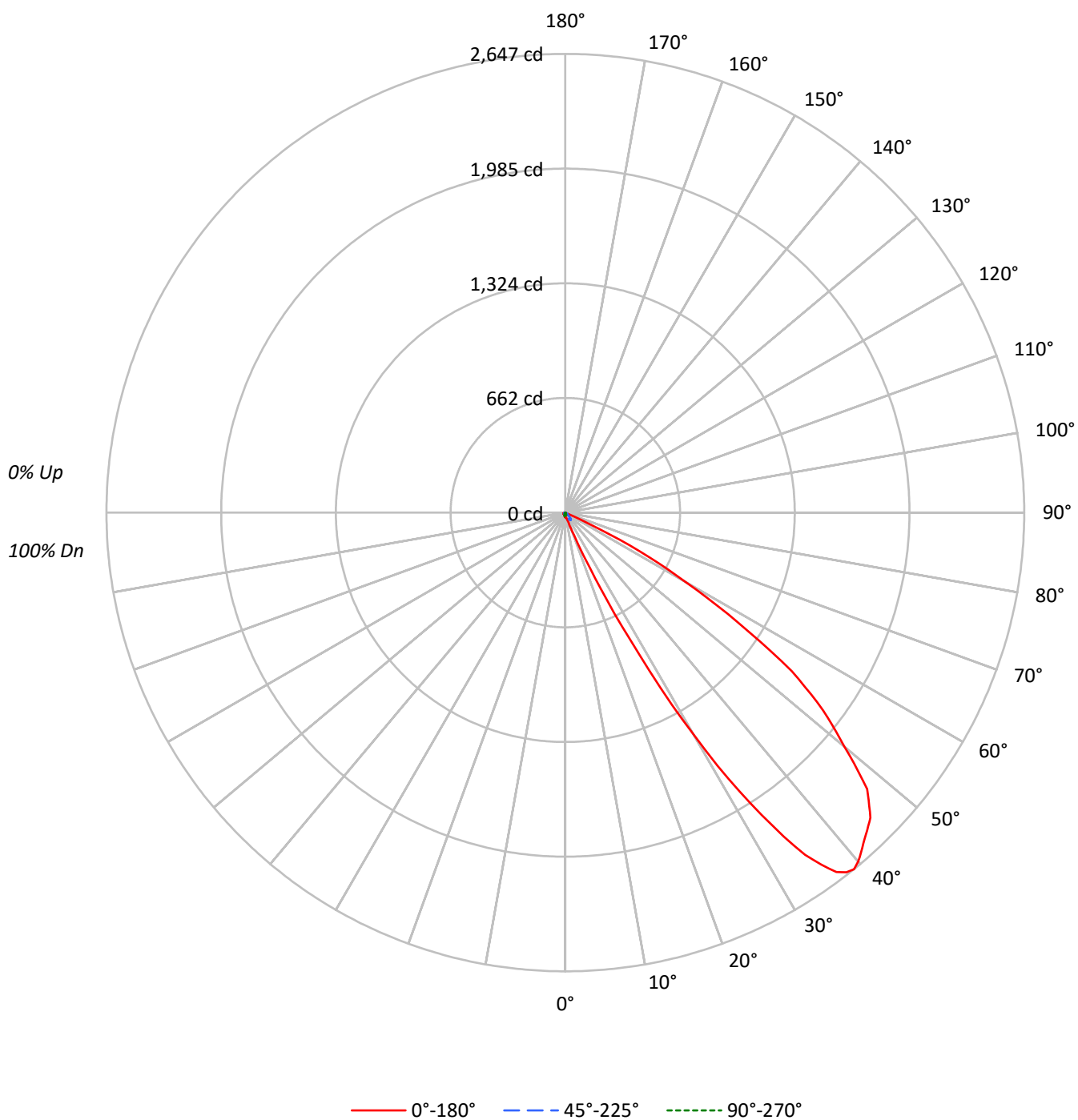
Lumens per Lamp: N/A
Luminaire Lumens: 688.0 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1341562

CATALOG NUMBER: P3A09R309840DE010 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°	5855	5855	5855	5855	5855
5°	6251	6119	5745	5239	5107
10°	6836	6056	5032	4520	4386
15°	9989	6061	4200	3814	3950
20°	25156	6627	3244	3244	3640
25°	116813	8275	2516	2952	3363
30°	371855	11445	1899	2785	3368
35°	645219	13974	1553	2650	3400
40°	752496	13940	1174	2662	3492
45°	771739	9892	1271	2884	3783
50°	717657	5526	989	2968	4332
55°	609966	2867	1109	3326	4855
60°	352252	746	1272	3552	5350
65°	71862	0	1505	4203	6019
70°	1090	385	1859	4809	7052
75°	1017	508	1949	4914	8388
80°	758	758	2904	5809	9471
85°	0	1510	5787	5787	11573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 771739 cd/sqm

TEST NUMBER: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.4
10°-20°	6.9	1.0
20°-30°	39.7	5.8
30°-40°	185.3	26.9
40°-50°	262.1	38.1
50°-60°	161.2	23.4
60°-70°	24.6	3.6
70°-80°	3.9	0.6
80°-90°	1.9	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°	49.0	7.1
0°-40°	234.3	34.1
0°-60°	657.6	95.6
0°-90°	688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	688.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	27	27	27	27	27	
5°	28	28	26	24	23	3
15°	44	27	18	17	17	16
25°	483	34	10	12	14	297
35°	2410	52	6	10	13	1447
45°	2489	32	4	9	12	1887
55°	1596	8	3	9	13	1358
65°	138	0	3	8	12	251
75°	1	1	2	6	10	1
85°	0	1	2	2	5	0
90°	0	0	0	0	0	

TEST NUMBER: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
2.5°	27.2	27.2	27.8	27.8	27.2	27.8	27.8	27.8	26.7	26.1	24.9
5°	28.4	28.4	28.4	29.0	28.4	28.4	27.8	27.2	26.1	24.3	23.8
7.5°	29.6	29.6	29.0	29.6	29.0	29.0	27.8	26.7	24.9	23.2	22.0
10°	30.7	30.7	30.1	30.1	29.6	29.6	27.2	25.5	22.6	20.9	20.3
12.5°	34.2	34.2	33.6	33.0	31.9	31.3	26.7	23.8	20.3	18.5	18.0
15°	44.0	43.5	42.3	40.6	37.7	37.1	26.7	22.0	18.5	16.8	16.8
17.5°	60.3	59.7	58.0	53.3	48.1	46.4	26.7	19.7	16.2	15.1	15.1
20°	107.8	103.2	94.5	82.9	70.7	64.3	28.4	17.4	13.9	13.3	13.9
21°	140.8	136.2	125.2	106.1	84.6	77.7	29.6	16.8	13.3	12.7	13.9
22°	191.8	186.6	164.0	137.9	107.2	95.0	30.1	15.6	12.2	12.2	13.3
23°	267.7	259.1	220.8	179.1	133.9	116.5	31.3	15.1	11.6	12.2	12.7
24°	350.6	343.1	299.6	237.0	171.0	146.0	32.5	14.5	11.0	11.0	12.2
25°	482.8	474.1	397.0	299.0	216.7	175.6	34.2	13.3	10.4	10.4	12.2
26°	653.7	613.7	511.2	385.4	267.2	220.2	35.9	12.7	9.9	10.4	11.6
27°	816.0	783.0	667.6	494.3	330.3	270.6	38.2	12.2	9.3	9.9	11.6
28°	1029.3	982.9	837.4	625.3	416.1	327.4	40.6	11.6	8.7	9.9	11.0
29°	1268.0	1203.1	1027.5	772.5	512.9	391.2	42.9	11.0	8.1	9.3	11.0
30°	1468.6	1407.7	1232.1	947.0	624.2	475.2	45.2	10.4	7.5	9.3	11.0
31°	1703.9	1611.7	1399.0	1094.8	719.8	559.3	47.5	9.3	7.0	8.7	10.4
32°	1894.5	1830.2	1604.2	1261.7	845.6	652.0	49.3	8.7	7.0	8.7	10.4
33°	2078.8	1992.5	1774.0	1421.6	959.1	747.0	51.0	8.1	6.4	8.1	10.4
34°	2255.0	2175.6	1934.5	1550.9	1066.4	837.4	52.2	7.0	6.4	8.1	9.9
35°	2410.3	2318.2	2075.9	1677.2	1176.5	919.7	52.2	6.4	5.8	7.5	9.9
36°	2511.2	2445.1	2198.8	1801.8	1276.2	998.0	52.2	5.8	5.2	7.5	9.3
37°	2597.5	2520.4	2297.3	1897.4	1349.8	1060.6	52.2	5.2	5.2	7.5	9.3
38°	2632.9	2566.8	2365.1	1982.0	1418.7	1124.3	51.6	4.6	4.6	7.0	9.3
39°	2646.8	2587.7	2416.1	2042.9	1469.7	1167.2	50.4	4.1	4.6	7.0	9.3
40°	2628.8	2584.2	2442.2	2082.3	1510.3	1198.5	48.7	3.5	4.1	7.0	9.3
42.5°	2554.6	2525.1	2436.4	2121.7	1545.1	1221.7	42.3	2.3	4.1	6.4	9.3
45°	2488.6	2456.1	2377.9	2080.6	1499.9	1175.9	31.9	1.2	4.1	6.4	9.3
47.5°	2360.5	2340.2	2278.8	1975.7	1400.8	1072.7	22.6	0.6	3.5	5.8	8.7
50°	2103.7	2084.6	2003.5	1715.4	1204.9	907.0	16.2	0.6	2.9	5.8	8.7
52.5°	1873.7	1853.4	1736.9	1426.3	925.5	664.7	10.4	0.6	2.9	5.8	8.7
55°	1595.5	1560.1	1407.1	1082.6	656.0	445.7	7.5	0.6	2.9	5.2	8.7
57.5°	1181.1	1129.5	992.8	738.3	377.9	241.7	4.1	0.6	2.9	5.2	8.7
60°	803.2	772.5	621.3	389.5	161.1	102.0	1.7	0.6	2.9	5.2	8.1
62.5°	486.8	448.0	312.4	165.7	69.5	46.4	0.0	1.2	2.9	5.2	8.1
65°	138.5	122.9	81.7	37.7	19.7	15.1	0.0	1.2	2.9	5.2	8.1
67.5°	4.6	4.6	4.6	4.1	2.9	2.9	0.6	1.2	2.9	5.2	7.5
70°	1.7	1.7	1.7	1.2	1.2	0.6	0.6	1.2	2.9	4.6	7.5
72.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	1.2	2.3	4.1	7.0
75°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.7	2.3	4.1	5.8
77.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.7	2.3	3.5	5.8
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	3.5	4.6



TEST NUMBER: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	1.7	2.3	2.3	3.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	2.3	1.7	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	1.7	1.7	1.2
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: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	26.7	26.7
2.5°	24.9	24.9
5°	23.2	23.2
7.5°	21.4	21.4
10°	19.7	19.7
12.5°	18.5	18.5
15°	16.8	17.4
17.5°	15.6	16.2
20°	15.1	15.6
21°	15.1	15.6
22°	14.5	15.1
23°	14.5	15.1
24°	13.9	14.5
25°	13.3	13.9
26°	13.3	13.9
27°	13.3	13.9
28°	12.7	13.9
29°	12.7	13.3
30°	12.7	13.3
31°	12.2	13.3
32°	12.2	13.3
33°	12.2	12.7
34°	11.6	12.7
35°	11.6	12.7
36°	11.6	12.7
37°	11.6	12.2
38°	11.6	12.7
39°	11.6	12.2
40°	11.6	12.2
42.5°	11.6	12.2
45°	11.6	12.2
47.5°	11.6	12.7
50°	11.6	12.7
52.5°	11.6	12.7
55°	11.6	12.7
57.5°	11.6	12.2
60°	11.6	12.2
62.5°	11.0	12.2
65°	11.0	11.6
67.5°	11.0	11.6
70°	10.4	11.0
72.5°	9.9	10.4
75°	8.7	9.9
77.5°	8.1	8.7
80°	7.0	7.5

TEST NUMBER: P1341562

CATALOG NUMBER: P3A09R309840DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.8	5.8
85°	4.1	4.6
87.5°	2.3	2.3
90°	0.0	0.0

(END OF REPORT)