

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: P1342043

Luminaire Tested: P3A09R359830DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342043
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: P3A09R359830DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

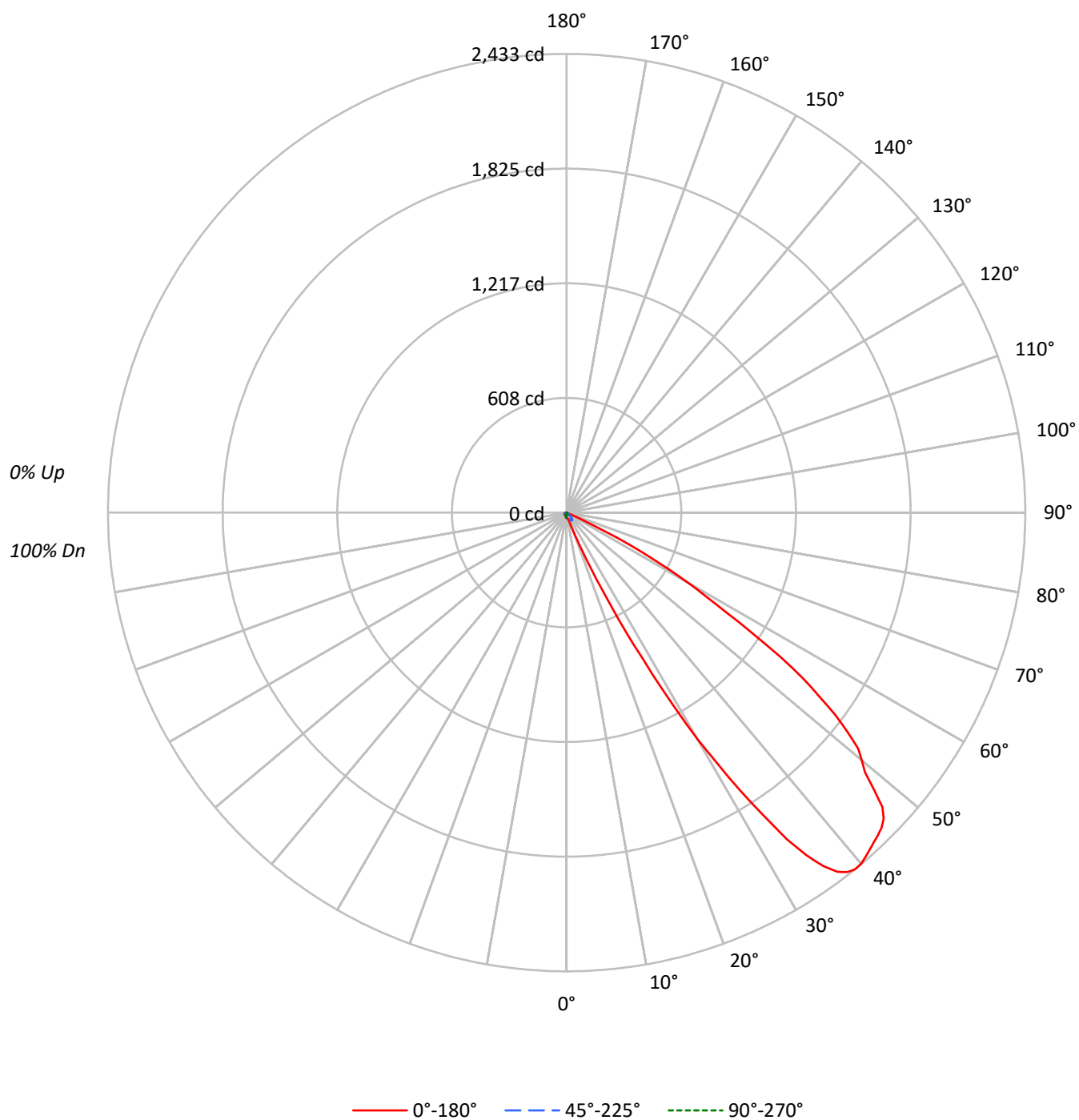
Lumens per Lamp: N/A
Luminaire Lumens: 606.0 lumens
Efficiency: N/A
Efficacy: 55.1 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6118	6118	6118	6118	6118
5°	6626	6493	6031	5415	5305
10°	6947	6324	5366	4631	4631
15°	9943	6220	4336	3973	4109
20°	24899	6627	3454	3454	3827
25°	115555	8468	2637	3170	3581
30°	351269	11495	2076	2912	3595
35°	593661	13331	1767	2784	3507
40°	695904	13168	1403	2805	3750
45°	732851	9334	1178	3039	4062
50°	697598	5595	1126	3173	4469
55°	584543	2294	1262	3555	5238
60°	327254	482	1447	4079	5745
65°	56504	259	1401	4566	6538
70°	1026	321	1731	4937	7373
75°	932	424	2288	5592	8303
80°	631	631	2778	6188	9723
85°	0	1258	5535	6793	11070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 738061 cd/sqm

TEST NUMBER: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.4
10°-20°	7.1	1.2
20°-30°	37.2	6.1
30°-40°	160.6	26.5
40°-50°	229.1	37.8
50°-60°	141.9	23.4
60°-70°	21.6	3.6
70°-80°	4.0	0.7
80°-90°	2.0	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°	46.8	7.7
0°-40°	207.4	34.2
0°-60°	578.3	95.4
0°-90°	606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	606.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	30	30	27	25	24	3
15°	44	27	19	18	18	16
25°	478	35	11	13	15	286
35°	2218	50	7	10	13	1332
45°	2363	30	4	10	13	1785
55°	1529	6	3	9	14	1302
65°	109	0	3	9	13	222
75°	1	0	3	7	10	1
85°	0	0	2	3	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
2.5°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	27.9	27.4
5°	30.1	30.1	29.5	29.5	29.5	29.5	29.5	29.5	28.4	27.4	25.7
7.5°	30.6	30.6	30.1	30.1	30.1	30.1	29.5	29.0	27.9	25.7	24.1
10°	31.2	31.2	31.2	31.2	30.6	30.1	29.5	28.4	26.8	24.1	22.4
12.5°	35.0	35.0	34.5	33.4	32.3	31.2	30.1	27.9	24.6	21.9	20.2
15°	43.8	43.2	42.1	40.5	38.3	35.6	33.4	27.4	22.4	19.1	18.1
17.5°	61.3	60.2	58.5	53.1	48.1	43.2	38.8	27.4	20.2	17.0	15.9
20°	106.7	107.2	95.7	82.6	71.7	59.6	48.7	28.4	18.1	14.8	14.2
22.5°	222.6	213.9	186.5	154.8	118.2	91.4	68.9	31.2	15.9	12.6	12.6
25°	477.6	444.2	378.0	285.6	201.3	142.8	100.1	35.0	14.2	10.9	11.5
27.5°	872.0	841.9	709.0	533.9	354.5	215.5	135.7	39.9	12.6	9.3	10.4
30°	1387.3	1304.2	1130.7	875.3	592.4	329.9	182.2	45.4	10.4	8.2	9.8
31°	1548.1	1509.8	1298.7	1012.6	694.2	391.7	201.9	47.0	9.8	8.2	9.3
32°	1739.1	1671.2	1481.9	1163.0	797.6	446.9	225.4	48.7	9.3	7.1	9.3
33°	1909.7	1844.1	1613.8	1295.4	902.1	509.8	250.5	49.2	8.2	7.1	8.8
34°	2089.2	1999.4	1771.3	1433.8	1009.3	577.7	273.5	49.8	7.7	6.6	8.8
35°	2217.7	2128.0	1907.0	1543.2	1101.7	637.9	299.8	49.8	7.1	6.6	8.2
36°	2317.3	2238.5	2024.1	1655.9	1193.7	692.0	320.6	49.8	6.0	6.0	8.2
37°	2385.7	2310.7	2102.8	1752.7	1263.7	740.2	339.2	49.8	5.5	6.0	8.2
38°	2419.0	2356.7	2178.9	1823.3	1331.5	777.9	353.9	48.7	4.9	5.5	7.7
39°	2433.3	2382.4	2225.4	1882.9	1382.4	810.7	364.9	47.6	4.4	5.5	7.7
40°	2431.1	2386.8	2251.6	1924.0	1423.4	833.1	370.9	46.0	3.8	4.9	7.7
41°	2418.5	2380.2	2265.3	1959.0	1448.0	848.5	372.5	44.3	3.3	4.9	7.1
42°	2404.3	2369.3	2269.7	1977.6	1463.9	853.4	368.2	42.1	3.3	4.4	7.1
43°	2389.5	2357.2	2269.7	1983.6	1467.7	850.1	361.0	38.3	2.7	4.4	7.1
44°	2377.5	2346.8	2262.6	1981.9	1459.5	837.5	347.9	33.9	2.2	4.4	7.1
45°	2363.2	2333.1	2253.3	1971.5	1443.7	816.2	331.5	30.1	1.6	3.8	7.1
46°	2338.1	2314.5	2236.9	1950.2	1418.5	786.7	310.7	27.4	1.1	3.8	6.6
47°	2289.4	2269.1	2205.1	1918.5	1385.1	751.6	289.4	24.6	1.1	3.8	6.6
48°	2191.5	2190.9	2141.7	1859.4	1332.1	707.9	267.0	21.9	1.1	3.8	6.6
49°	2096.8	2087.0	2025.7	1755.5	1256.0	655.4	243.4	19.7	0.5	3.8	6.6
50°	2044.9	2023.5	1922.9	1632.9	1158.6	582.6	218.3	16.4	0.5	3.3	6.6
51°	1990.7	1960.1	1841.4	1522.4	1042.7	512.6	190.9	13.1	0.5	3.3	6.0
52°	1892.8	1863.8	1730.8	1416.8	930.0	440.9	164.7	10.9	0.5	3.3	6.6
53°	1787.2	1745.6	1601.2	1300.9	831.0	377.5	137.9	9.3	0.5	3.3	6.0
54°	1654.3	1635.7	1469.9	1158.6	715.0	316.2	113.2	7.7	0.5	3.3	6.0
55°	1529.0	1501.6	1329.3	1013.1	610.0	259.3	94.6	6.0	0.5	3.3	6.0
56°	1369.3	1328.2	1166.8	879.6	503.3	209.0	79.9	4.9	0.5	3.3	6.0
57°	1178.9	1135.1	1007.7	731.4	395.0	159.2	66.7	3.8	0.5	3.3	6.0
58°	997.3	959.5	822.8	564.6	297.6	110.5	55.3	2.7	0.5	2.7	6.0
59°	861.6	820.0	684.4	434.4	206.8	81.5	41.6	2.2	0.5	3.3	6.0
60°	746.2	692.6	550.9	336.4	147.7	58.5	30.6	1.1	1.1	3.3	6.0
62.5°	430.0	379.6	263.1	136.8	60.7	30.1	14.8	0.5	1.1	3.3	6.0
65°	108.9	96.8	62.9	29.5	17.0	10.4	5.5	0.5	1.1	2.7	5.5



TEST NUMBER: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	3.8	3.8	3.8	3.3	2.7	2.2	1.1	0.5	1.1	2.7	5.5
70°	1.6	1.6	1.6	1.1	1.1	0.5	0.5	0.5	1.1	2.7	4.9
72.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.7	4.4
75°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.7	4.4
77.5°	1.1	1.1	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2	3.8
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2	3.3
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2	2.7
85°	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	1.6	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	2.2	1.6
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: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	27.9	27.9	27.9
2.5°	26.3	26.3	26.3
5°	24.6	24.6	24.1
7.5°	23.0	22.4	22.4
10°	20.8	20.8	20.8
12.5°	19.1	19.1	19.1
15°	17.5	18.1	18.1
17.5°	15.9	17.0	17.0
20°	14.8	15.9	16.4
22.5°	13.7	14.8	15.3
25°	13.1	14.2	14.8
27.5°	12.0	13.7	14.8
30°	11.5	13.1	14.2
31°	11.5	13.1	13.7
32°	10.9	13.1	13.7
33°	10.9	13.1	13.7
34°	10.9	12.6	13.7
35°	10.4	12.6	13.1
36°	10.4	12.6	13.1
37°	10.4	12.6	13.7
38°	10.4	12.6	13.1
39°	9.8	12.6	13.1
40°	9.8	12.6	13.1
41°	9.8	12.6	13.1
42°	9.8	12.6	13.1
43°	9.8	12.6	13.1
44°	9.8	12.0	13.1
45°	9.8	12.0	13.1
46°	9.8	12.6	13.1
47°	9.8	12.6	13.7
48°	9.8	12.0	13.1
49°	9.3	12.0	13.1
50°	9.3	12.0	13.1
51°	9.3	12.6	13.7
52°	9.3	12.6	13.7
53°	9.3	12.6	13.7
54°	9.3	12.6	13.1
55°	9.3	12.6	13.7
56°	9.3	12.6	13.1
57°	9.3	12.6	13.1
58°	9.3	12.0	13.1
59°	9.3	12.0	13.1
60°	9.3	12.0	13.1
62.5°	8.8	12.0	13.1
65°	8.8	11.5	12.6



TEST NUMBER: P1342043

CATALOG NUMBER: P3A09R359830DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	8.2	11.5	12.0
70°	7.7	10.9	11.5
72.5°	7.1	10.4	10.9
75°	6.6	9.3	9.8
77.5°	5.5	8.2	9.3
80°	4.9	7.1	7.7
82.5°	3.8	6.0	6.6
85°	2.7	4.4	4.4
87.5°	1.1	2.2	2.2
90°	0.0	0.0	0.0

(END OF REPORT)