

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: P1338304

Luminaire Tested: P3A05R359024DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338304
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: P3A05R359024DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 2400K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

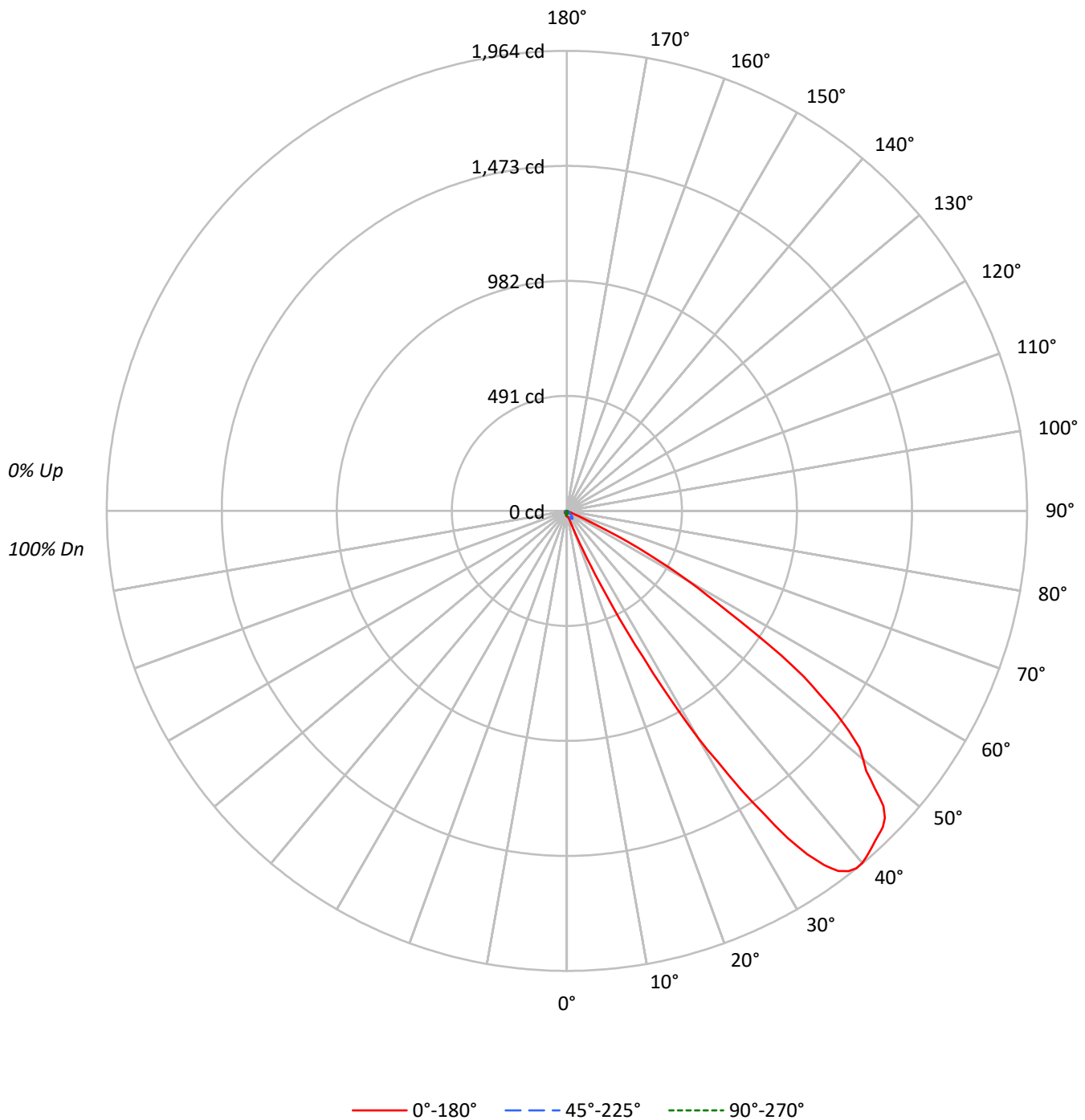
Lumens per Lamp: N/A
Luminaire Lumens: 489.0 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1338304

CATALOG NUMBER: P3A05R359024DE010 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
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°	4934	4934	4934	4934	4934
5°	5349	5239	4865	4380	4270
10°	5611	5121	4320	3741	3741
15°	8014	5017	3496	3201	3314
20°	20092	5367	2777	2777	3080
25°	93247	6847	2129	2565	2879
30°	283461	9267	1671	2355	2912
35°	479035	10761	1419	2249	2838
40°	561538	10620	1145	2261	3034
45°	591379	7536	961	2450	3287
50°	562915	4503	887	2559	3616
55°	471687	1873	994	2867	4205
60°	264058	395	1140	3289	4649
65°	45556	208	1141	3684	5292
70°	833	256	1410	3975	5963
75°	763	339	1864	4490	6693
80°	505	505	2273	5051	7829
85°	0	1006	4529	5535	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 595569 cd/sqm

TEST NUMBER: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.4
10°-20°	5.8	1.2
20°-30°	30.0	6.1
30°-40°	129.6	26.5
40°-50°	184.8	37.8
50°-60°	114.5	23.4
60°-70°	17.4	3.6
70°-80°	3.2	0.7
80°-90°	1.6	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°	37.8	7.7
0°-40°	167.4	34.2
0°-60°	466.7	95.4
0°-90°	489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	489.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	24	24	22	20	19	2
15°	35	22	15	14	15	13
25°	385	28	9	11	12	231
35°	1790	40	5	8	11	1074
45°	1907	24	3	8	11	1441
55°	1234	5	3	8	11	1051
65°	88	0	2	7	10	179
75°	1	0	2	5	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
2.5°	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	22.5	22.1
5°	24.3	24.3	23.8	23.8	23.8	23.8	23.8	23.8	23.0	22.1	20.7
7.5°	24.7	24.7	24.3	24.3	24.3	24.3	23.8	23.4	22.5	20.7	19.4
10°	25.2	25.2	25.2	25.2	24.7	24.3	23.8	23.0	21.6	19.4	18.1
12.5°	28.3	28.3	27.8	26.9	26.0	25.2	24.3	22.5	19.9	17.7	16.3
15°	35.3	34.9	34.0	32.7	30.9	28.7	26.9	22.1	18.1	15.4	14.6
17.5°	49.4	48.6	47.2	42.8	38.8	34.9	31.3	22.1	16.3	13.7	12.8
20°	86.1	86.5	77.2	66.7	57.8	48.1	39.3	23.0	14.6	11.9	11.5
22.5°	179.7	172.6	150.5	124.9	95.3	73.7	55.6	25.2	12.8	10.2	10.2
25°	385.4	358.4	305.0	230.4	162.4	115.2	80.8	28.3	11.5	8.8	9.3
27.5°	703.6	679.4	572.1	430.8	286.0	173.9	109.5	32.2	10.2	7.5	8.4
30°	1119.5	1052.4	912.4	706.3	478.1	266.2	147.0	36.6	8.4	6.6	7.9
31°	1249.2	1218.3	1047.9	817.1	560.2	316.1	162.9	38.0	7.9	6.6	7.5
32°	1403.3	1348.6	1195.8	938.5	643.6	360.6	181.9	39.3	7.5	5.7	7.5
33°	1541.0	1488.1	1302.2	1045.3	727.9	411.4	202.2	39.7	6.6	5.7	7.1
34°	1685.8	1613.4	1429.3	1157.0	814.4	466.1	220.7	40.2	6.2	5.3	7.1
35°	1789.5	1717.2	1538.8	1245.3	889.0	514.7	241.9	40.2	5.7	5.3	6.6
36°	1869.9	1806.3	1633.3	1336.2	963.2	558.4	258.7	40.2	4.9	4.9	6.6
37°	1925.1	1864.6	1696.8	1414.3	1019.7	597.3	273.7	40.2	4.4	4.9	6.6
38°	1952.0	1901.7	1758.2	1471.3	1074.4	627.7	285.6	39.3	4.0	4.4	6.2
39°	1963.5	1922.4	1795.7	1519.4	1115.5	654.2	294.4	38.4	3.5	4.4	6.2
40°	1961.7	1925.9	1816.9	1552.5	1148.6	672.3	299.3	37.1	3.1	4.0	6.2
41°	1951.5	1920.6	1827.9	1580.8	1168.5	684.7	300.6	35.8	2.6	4.0	5.7
42°	1940.1	1911.8	1831.5	1595.8	1181.3	688.6	297.1	34.0	2.6	3.5	5.7
43°	1928.2	1902.1	1831.5	1600.6	1184.3	686.0	291.3	30.9	2.2	3.5	5.7
44°	1918.4	1893.7	1825.7	1599.3	1177.7	675.8	280.7	27.4	1.8	3.5	5.7
45°	1907.0	1882.7	1818.2	1590.9	1164.9	658.6	267.5	24.3	1.3	3.1	5.7
46°	1886.7	1867.7	1805.0	1573.7	1144.6	634.8	250.7	22.1	0.9	3.1	5.3
47°	1847.4	1831.0	1779.4	1548.1	1117.7	606.5	233.5	19.9	0.9	3.1	5.3
48°	1768.4	1767.9	1728.2	1500.4	1074.9	571.2	215.4	17.7	0.9	3.1	5.3
49°	1692.0	1684.0	1634.6	1416.5	1013.5	528.8	196.4	15.9	0.4	3.1	5.3
50°	1650.1	1632.8	1551.6	1317.7	934.9	470.1	176.1	13.2	0.4	2.6	5.3
51°	1606.4	1581.6	1485.8	1228.5	841.4	413.6	154.1	10.6	0.4	2.6	4.9
52°	1527.3	1503.9	1396.7	1143.3	750.4	355.8	132.9	8.8	0.4	2.6	5.3
53°	1442.1	1408.6	1292.1	1049.7	670.5	304.6	111.2	7.5	0.4	2.6	4.9
54°	1334.9	1319.9	1186.1	934.9	576.9	255.1	91.4	6.2	0.4	2.6	4.9
55°	1233.8	1211.7	1072.7	817.5	492.2	209.2	76.4	4.9	0.4	2.6	4.9
56°	1104.9	1071.8	941.6	709.8	406.1	168.6	64.4	4.0	0.4	2.6	4.9
57°	951.3	916.0	813.1	590.2	318.7	128.5	53.9	3.1	0.4	2.6	4.9
58°	804.7	774.3	663.9	455.6	240.1	89.2	44.6	2.2	0.4	2.2	4.9
59°	695.2	661.7	552.2	350.5	166.9	65.8	33.5	1.8	0.4	2.6	4.9
60°	602.1	558.8	444.5	271.5	119.2	47.2	24.7	0.9	0.9	2.6	4.9
62.5°	347.0	306.4	212.3	110.4	49.0	24.3	11.9	0.4	0.9	2.6	4.9
65°	87.8	78.1	50.8	23.8	13.7	8.4	4.4	0.4	0.9	2.2	4.4



TEST NUMBER: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	3.1	3.1	3.1	2.6	2.2	1.8	0.9	0.4	0.9	2.2	4.4
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.4	0.9	2.2	4.0
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	2.2	3.5
75°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	2.2	3.5
77.5°	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	3.1
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.6
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.2
85°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.3	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.8	1.3
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: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	22.5	22.5	22.5
2.5°	21.2	21.2	21.2
5°	19.9	19.9	19.4
7.5°	18.5	18.1	18.1
10°	16.8	16.8	16.8
12.5°	15.4	15.4	15.4
15°	14.1	14.6	14.6
17.5°	12.8	13.7	13.7
20°	11.9	12.8	13.2
22.5°	11.0	11.9	12.4
25°	10.6	11.5	11.9
27.5°	9.7	11.0	11.9
30°	9.3	10.6	11.5
31°	9.3	10.6	11.0
32°	8.8	10.6	11.0
33°	8.8	10.6	11.0
34°	8.8	10.2	11.0
35°	8.4	10.2	10.6
36°	8.4	10.2	10.6
37°	8.4	10.2	11.0
38°	8.4	10.2	10.6
39°	7.9	10.2	10.6
40°	7.9	10.2	10.6
41°	7.9	10.2	10.6
42°	7.9	10.2	10.6
43°	7.9	10.2	10.6
44°	7.9	9.7	10.6
45°	7.9	9.7	10.6
46°	7.9	10.2	10.6
47°	7.9	10.2	11.0
48°	7.9	9.7	10.6
49°	7.5	9.7	10.6
50°	7.5	9.7	10.6
51°	7.5	10.2	11.0
52°	7.5	10.2	11.0
53°	7.5	10.2	11.0
54°	7.5	10.2	10.6
55°	7.5	10.2	11.0
56°	7.5	10.2	10.6
57°	7.5	10.2	10.6
58°	7.5	9.7	10.6
59°	7.5	9.7	10.6
60°	7.5	9.7	10.6
62.5°	7.1	9.7	10.6
65°	7.1	9.3	10.2



TEST NUMBER: P1338304

CATALOG NUMBER: P3A05R359024DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	6.6	9.3	9.7
70°	6.2	8.8	9.3
72.5°	5.7	8.4	8.8
75°	5.3	7.5	7.9
77.5°	4.4	6.6	7.5
80°	4.0	5.7	6.2
82.5°	3.1	4.9	5.3
85°	2.2	3.5	3.5
87.5°	0.9	1.8	1.8
90°	0.0	0.0	0.0

(END OF REPORT)