

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: P1337872

Luminaire Tested: P3A05R309040DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337872
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: P3A05R309040DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

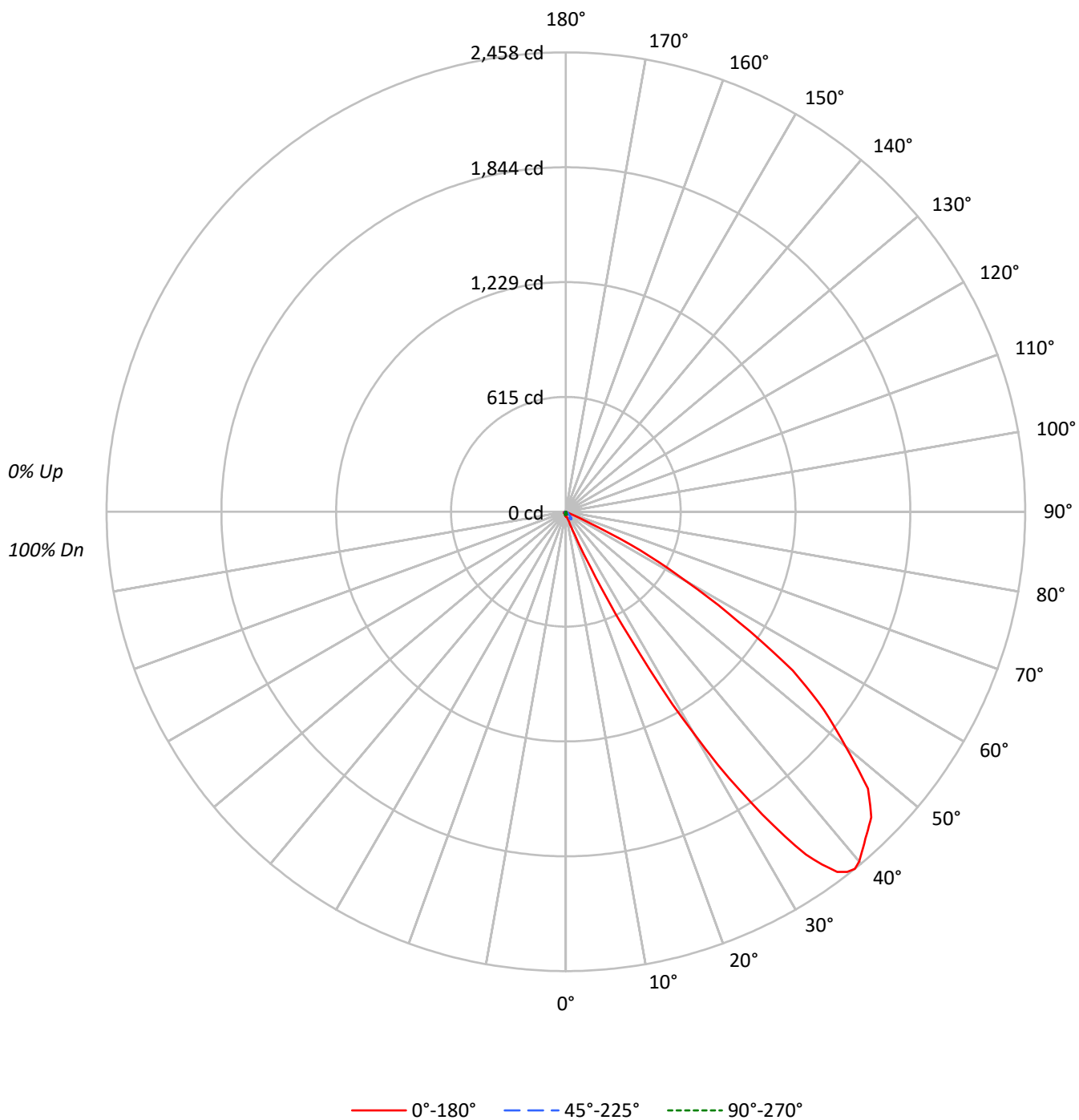
Lumens per Lamp: N/A
Luminaire Lumens: 639.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1337872

CATALOG NUMBER: P3A05R309040DE010 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	108	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	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48
7	62	48	38	32	60	47	38	32	45	37	31		44	36	31		42
8	56	42	33	27	55	41	33	27	40	32	26		39	32	26		37
9	52	37	29	23	50	37	28	23	36	28	22		34	27	22		33
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5438	5438	5438	5438	5438
5°	5811	5679	5327	4865	4733
10°	6346	5633	4676	4186	4075
15°	9285	5630	3905	3541	3655
20°	23359	6161	3010	3010	3384
25°	108490	7694	2347	2734	3121
30°	345370	10635	1772	2583	3140
35°	599283	12956	1446	2463	3159
40°	698909	12939	1088	2462	3235
45°	716757	9179	1178	2667	3504
50°	666554	5151	921	2763	4025
55°	566498	2676	1032	3097	4511
60°	327167	702	1184	3289	4956
65°	66726	0	1401	3891	5604
70°	1026	321	1731	4488	6540
75°	932	424	1864	4575	7795
80°	631	631	2778	5430	8840
85°	0	1258	5535	5535	10819

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 716757 cd/sqm

TEST NUMBER: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.2	0.4
10°-20°	6.4	1.0
20°-30°	36.9	5.8
30°-40°	172.1	26.9
40°-50°	243.4	38.1
50°-60°	149.7	23.4
60°-70°	22.8	3.6
70°-80°	3.6	0.6
80°-90°	1.8	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°	45.5	7.1
0°-40°	217.6	34.1
0°-60°	610.8	95.6
0°-90°	639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	25	25	25	25	25	
5°	26	26	24	22	22	3
15°	41	25	17	16	16	15
25°	448	32	10	11	13	276
35°	2239	48	5	9	12	1344
45°	2311	30	4	9	11	1752
55°	1482	7	3	8	12	1261
65°	129	0	3	8	11	233
75°	1	0	2	5	9	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
2.5°	25.3	25.3	25.8	25.8	25.3	25.8	25.8	25.8	24.8	24.2	23.1
5°	26.4	26.4	26.4	26.9	26.4	26.4	25.8	25.3	24.2	22.6	22.1
7.5°	27.5	27.5	26.9	27.5	26.9	26.9	25.8	24.8	23.1	21.5	20.5
10°	28.5	28.5	28.0	28.0	27.5	27.5	25.3	23.7	21.0	19.4	18.8
12.5°	31.8	31.8	31.2	30.7	29.6	29.1	24.8	22.1	18.8	17.2	16.7
15°	40.9	40.4	39.3	37.7	35.0	34.4	24.8	20.5	17.2	15.6	15.6
17.5°	56.0	55.4	53.8	49.5	44.7	43.1	24.8	18.3	15.1	14.0	14.0
20°	100.1	95.8	87.7	77.0	65.7	59.7	26.4	16.1	12.9	12.4	12.9
21°	130.8	126.5	116.3	98.5	78.6	72.1	27.5	15.6	12.4	11.8	12.9
22°	178.2	173.3	152.3	128.1	99.6	88.3	28.0	14.5	11.3	11.3	12.4
23°	248.7	240.6	205.1	166.3	124.3	108.2	29.1	14.0	10.8	11.3	11.8
24°	325.7	318.7	278.3	220.2	158.8	135.6	30.1	13.5	10.2	10.2	11.3
25°	448.4	440.3	368.7	277.7	201.3	163.1	31.8	12.4	9.7	9.7	11.3
26°	607.2	570.0	474.8	357.9	248.1	204.5	33.4	11.8	9.2	9.7	10.8
27°	757.9	727.2	620.1	459.1	306.8	251.4	35.5	11.3	8.6	9.2	10.8
28°	956.0	912.9	777.8	580.8	386.5	304.1	37.7	10.8	8.1	9.2	10.2
29°	1177.7	1117.4	954.3	717.5	476.4	363.3	39.8	10.2	7.5	8.6	10.2
30°	1364.0	1307.4	1144.4	879.5	579.7	441.4	42.0	9.7	7.0	8.6	10.2
31°	1582.5	1496.9	1299.4	1016.8	668.5	519.4	44.1	8.6	6.5	8.1	9.7
32°	1759.6	1699.8	1489.9	1171.8	785.3	605.5	45.8	8.1	6.5	8.1	9.7
33°	1930.8	1850.6	1647.6	1320.4	890.8	693.8	47.4	7.5	5.9	7.5	9.7
34°	2094.4	2020.7	1796.7	1440.4	990.4	777.8	48.4	6.5	5.9	7.5	9.2
35°	2238.7	2153.1	1928.1	1557.7	1092.7	854.2	48.4	5.9	5.4	7.0	9.2
36°	2332.3	2270.9	2042.2	1673.5	1185.3	926.9	48.4	5.4	4.8	7.0	8.6
37°	2412.5	2340.9	2133.7	1762.3	1253.6	985.0	48.4	4.8	4.8	7.0	8.6
38°	2445.3	2384.0	2196.7	1840.9	1317.7	1044.2	47.9	4.3	4.3	6.5	8.6
39°	2458.3	2403.4	2244.0	1897.4	1365.0	1084.1	46.8	3.8	4.3	6.5	8.6
40°	2441.6	2400.1	2268.3	1934.0	1402.7	1113.1	45.2	3.2	3.8	6.5	8.6
42.5°	2372.7	2345.2	2262.9	1970.6	1435.0	1134.7	39.3	2.2	3.8	5.9	8.6
45°	2311.3	2281.2	2208.5	1932.4	1393.0	1092.1	29.6	1.1	3.8	5.9	8.6
47.5°	2192.4	2173.5	2116.5	1835.0	1301.0	996.3	21.0	0.5	3.2	5.4	8.1
50°	1953.9	1936.1	1860.8	1593.3	1119.1	842.4	15.1	0.5	2.7	5.4	8.1
52.5°	1740.2	1721.4	1613.2	1324.7	859.6	617.4	9.7	0.5	2.7	5.4	8.1
55°	1481.8	1449.0	1306.9	1005.5	609.3	413.9	7.0	0.5	2.7	4.8	8.1
57.5°	1097.0	1049.1	922.1	685.8	350.9	224.5	3.8	0.5	2.7	4.8	8.1
60°	746.0	717.5	577.0	361.7	149.6	94.7	1.6	0.5	2.7	4.8	7.5
62.5°	452.1	416.1	290.1	153.9	64.6	43.1	0.0	1.1	2.7	4.8	7.5
65°	128.6	114.1	75.9	35.0	18.3	14.0	0.0	1.1	2.7	4.8	7.5
67.5°	4.3	4.3	4.3	3.8	2.7	2.7	0.5	1.1	2.7	4.8	7.0
70°	1.6	1.6	1.6	1.1	1.1	0.5	0.5	1.1	2.7	4.3	7.0
72.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	1.1	2.2	3.8	6.5
75°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.2	3.8	5.4
77.5°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.2	3.2	5.4
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2	3.2	4.3



TEST NUMBER: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.6	2.2	2.2	3.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	2.2	1.6	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	1.6	1.6	1.1
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: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	24.8	24.8
2.5°	23.1	23.1
5°	21.5	21.5
7.5°	19.9	19.9
10°	18.3	18.3
12.5°	17.2	17.2
15°	15.6	16.1
17.5°	14.5	15.1
20°	14.0	14.5
21°	14.0	14.5
22°	13.5	14.0
23°	13.5	14.0
24°	12.9	13.5
25°	12.4	12.9
26°	12.4	12.9
27°	12.4	12.9
28°	11.8	12.9
29°	11.8	12.4
30°	11.8	12.4
31°	11.3	12.4
32°	11.3	12.4
33°	11.3	11.8
34°	10.8	11.8
35°	10.8	11.8
36°	10.8	11.8
37°	10.8	11.3
38°	10.8	11.8
39°	10.8	11.3
40°	10.8	11.3
42.5°	10.8	11.3
45°	10.8	11.3
47.5°	10.8	11.8
50°	10.8	11.8
52.5°	10.8	11.8
55°	10.8	11.8
57.5°	10.8	11.3
60°	10.8	11.3
62.5°	10.2	11.3
65°	10.2	10.8
67.5°	10.2	10.8
70°	9.7	10.2
72.5°	9.2	9.7
75°	8.1	9.2
77.5°	7.5	8.1
80°	6.5	7.0

TEST NUMBER: P1337872

CATALOG NUMBER: P3A05R309040DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.4	5.4
85°	3.8	4.3
87.5°	2.2	2.2
90°	0.0	0.0

(END OF REPORT)