

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: P1337889

Luminaire Tested: P3A05R309050DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337889
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: P3A05R309050DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 5000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

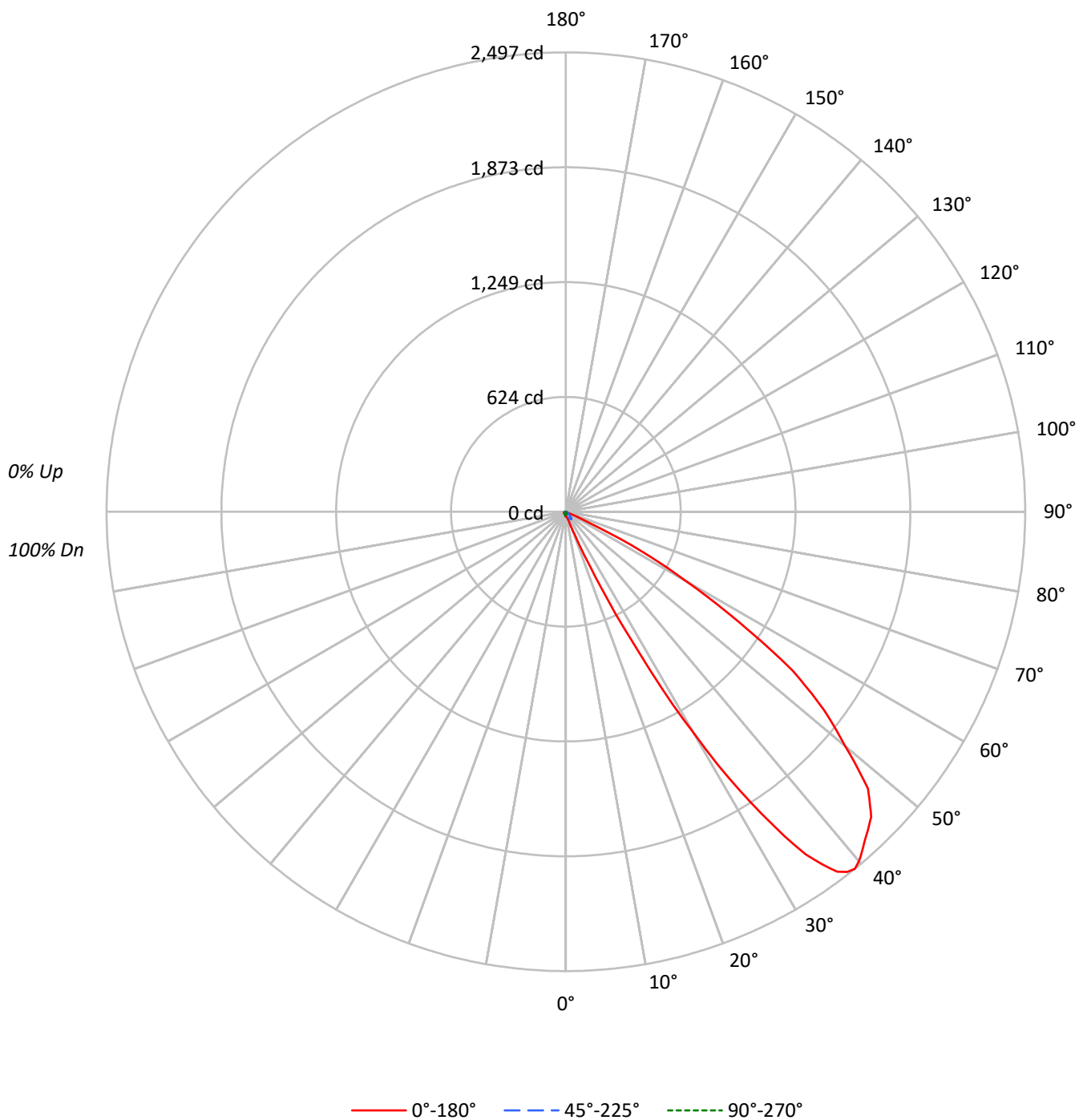
Lumens per Lamp: N/A
Luminaire Lumens: 648.9 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5504	5504	5504	5504	5504
5°	5899	5767	5415	4931	4821
10°	6457	5722	4743	4253	4142
15°	9421	5698	3973	3610	3723
20°	23732	6254	3057	3057	3454
25°	110184	7815	2371	2782	3170
30°	350763	10786	1798	2633	3190
35°	608652	13170	1472	2490	3212
40°	709844	13139	1088	2490	3292
45°	727983	9334	1178	2698	3566
50°	676993	5219	921	2797	4094
55°	575368	2714	1032	3135	4588
60°	332298	702	1184	3377	5043
65°	67815	0	1401	3995	5656
70°	1026	321	1731	4552	6668
75°	932	424	1864	4660	7879
80°	631	631	2778	5556	8966
85°	0	1258	5535	5535	11070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 727983 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.4
10°-20°	6.5	1.0
20°-30°	37.4	5.8
30°-40°	174.8	26.9
40°-50°	247.2	38.1
50°-60°	152.1	23.4
60°-70°	23.2	3.6
70°-80°	3.7	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°	46.2	7.1
0°-40°	221.0	34.1
0°-60°	620.3	95.6
0°-90°	648.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	648.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	25	25	25	25	25	
5°	27	26	25	22	22	3
15°	42	25	18	16	16	15
25°	455	32	10	12	13	280
35°	2274	49	6	9	12	1365
45°	2348	30	4	9	12	1780
55°	1505	7	3	8	12	1281
65°	131	0	3	8	11	236
75°	1	0	2	6	9	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
2.5°	25.7	25.7	26.2	26.2	25.7	26.2	26.2	26.2	25.1	24.6	23.5
5°	26.8	26.8	26.8	27.3	26.8	26.8	26.2	25.7	24.6	23.0	22.4
7.5°	27.9	27.9	27.3	27.9	27.3	27.3	26.2	25.1	23.5	21.9	20.8
10°	29.0	29.0	28.4	28.4	27.9	27.9	25.7	24.1	21.3	19.7	19.1
12.5°	32.3	32.3	31.7	31.2	30.1	29.5	25.1	22.4	19.1	17.5	16.9
15°	41.5	41.0	39.9	38.3	35.5	35.0	25.1	20.8	17.5	15.9	15.9
17.5°	56.9	56.3	54.7	50.3	45.4	43.7	25.1	18.6	15.3	14.2	14.2
20°	101.7	97.3	89.1	78.2	66.7	60.7	26.8	16.4	13.1	12.6	13.1
21°	132.8	128.5	118.1	100.0	79.8	73.3	27.9	15.9	12.6	12.0	13.1
22°	181.0	176.0	154.7	130.1	101.1	89.7	28.4	14.8	11.5	11.5	12.6
23°	252.6	244.4	208.3	168.9	126.3	109.9	29.5	14.2	10.9	11.5	12.0
24°	330.7	323.6	282.6	223.6	161.3	137.8	30.6	13.7	10.4	10.4	11.5
25°	455.4	447.2	374.5	282.1	204.5	165.6	32.3	12.6	9.8	9.8	11.5
26°	616.7	578.9	482.2	363.5	252.0	207.7	33.9	12.0	9.3	9.8	10.9
27°	769.7	738.6	629.8	466.3	311.6	255.3	36.1	11.5	8.7	9.3	10.9
28°	970.9	927.2	790.0	589.9	392.5	308.9	38.3	10.9	8.2	9.3	10.4
29°	1196.2	1134.9	969.3	728.7	483.8	369.0	40.5	10.4	7.7	8.7	10.4
30°	1385.3	1327.9	1162.3	893.3	588.8	448.3	42.6	9.8	7.1	8.7	10.4
31°	1607.3	1520.3	1319.7	1032.7	679.0	527.6	44.8	8.7	6.6	8.2	9.8
32°	1787.1	1726.4	1513.2	1190.1	797.6	615.0	46.5	8.2	6.6	8.2	9.8
33°	1961.0	1879.5	1673.4	1341.0	904.8	704.7	48.1	7.7	6.0	7.7	9.8
34°	2127.2	2052.3	1824.9	1462.9	1005.9	790.0	49.2	6.6	6.0	7.7	9.3
35°	2273.7	2186.8	1958.2	1582.1	1109.8	867.6	49.2	6.0	5.5	7.1	9.3
36°	2368.8	2306.5	2074.1	1699.7	1203.8	941.4	49.2	5.5	4.9	7.1	8.7
37°	2450.3	2377.6	2167.1	1789.9	1273.2	1000.4	49.2	4.9	4.9	7.1	8.7
38°	2483.6	2421.3	2231.0	1869.7	1338.3	1060.6	48.7	4.4	4.4	6.6	8.7
39°	2496.7	2441.0	2279.2	1927.1	1386.4	1101.0	47.6	3.8	4.4	6.6	8.7
40°	2479.8	2437.7	2303.8	1964.3	1424.7	1130.6	45.9	3.3	3.8	6.6	8.7
42.5°	2409.8	2381.9	2298.3	2001.4	1457.5	1152.4	39.9	2.2	3.8	6.0	8.7
45°	2347.5	2316.9	2243.1	1962.6	1414.8	1109.2	30.1	1.1	3.8	6.0	8.7
47.5°	2226.7	2207.5	2149.6	1863.7	1321.4	1011.9	21.3	0.5	3.3	5.5	8.2
50°	1984.5	1966.4	1889.9	1618.2	1136.6	855.6	15.3	0.5	2.7	5.5	8.2
52.5°	1767.4	1748.3	1638.4	1345.4	873.1	627.1	9.8	0.5	2.7	5.5	8.2
55°	1505.0	1471.7	1327.4	1021.2	618.9	420.4	7.1	0.5	2.7	4.9	8.2
57.5°	1114.2	1065.5	936.5	696.5	356.4	228.0	3.8	0.5	2.7	4.9	8.2
60°	757.7	728.7	586.1	367.4	152.0	96.2	1.6	0.5	2.7	4.9	7.7
62.5°	459.2	422.6	294.7	156.4	65.6	43.7	0.0	1.1	2.7	4.9	7.7
65°	130.7	115.9	77.1	35.5	18.6	14.2	0.0	1.1	2.7	4.9	7.7
67.5°	4.4	4.4	4.4	3.8	2.7	2.7	0.5	1.1	2.7	4.9	7.1
70°	1.6	1.6	1.6	1.1	1.1	0.5	0.5	1.1	2.7	4.4	7.1
72.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	1.1	2.2	3.8	6.6
75°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.2	3.8	5.5
77.5°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.2	3.3	5.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2	3.3	4.4



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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	3.3
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

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	25.1	25.1
2.5°	23.5	23.5
5°	21.9	21.9
7.5°	20.2	20.2
10°	18.6	18.6
12.5°	17.5	17.5
15°	15.9	16.4
17.5°	14.8	15.3
20°	14.2	14.8
21°	14.2	14.8
22°	13.7	14.2
23°	13.7	14.2
24°	13.1	13.7
25°	12.6	13.1
26°	12.6	13.1
27°	12.6	13.1
28°	12.0	13.1
29°	12.0	12.6
30°	12.0	12.6
31°	11.5	12.6
32°	11.5	12.6
33°	11.5	12.0
34°	10.9	12.0
35°	10.9	12.0
36°	10.9	12.0
37°	10.9	11.5
38°	10.9	12.0
39°	10.9	11.5
40°	10.9	11.5
42.5°	10.9	11.5
45°	10.9	11.5
47.5°	10.9	12.0
50°	10.9	12.0
52.5°	10.9	12.0
55°	10.9	12.0
57.5°	10.9	11.5
60°	10.9	11.5
62.5°	10.4	11.5
65°	10.4	10.9
67.5°	10.4	10.9
70°	9.8	10.4
72.5°	9.3	9.8
75°	8.2	9.3
77.5°	7.7	8.2
80°	6.6	7.1



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.5	5.5
85°	3.8	4.4
87.5°	2.2	2.2
90°	0.0	0.0

(END OF REPORT)