

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: P1336478

Luminaire Tested: P3A05R159830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

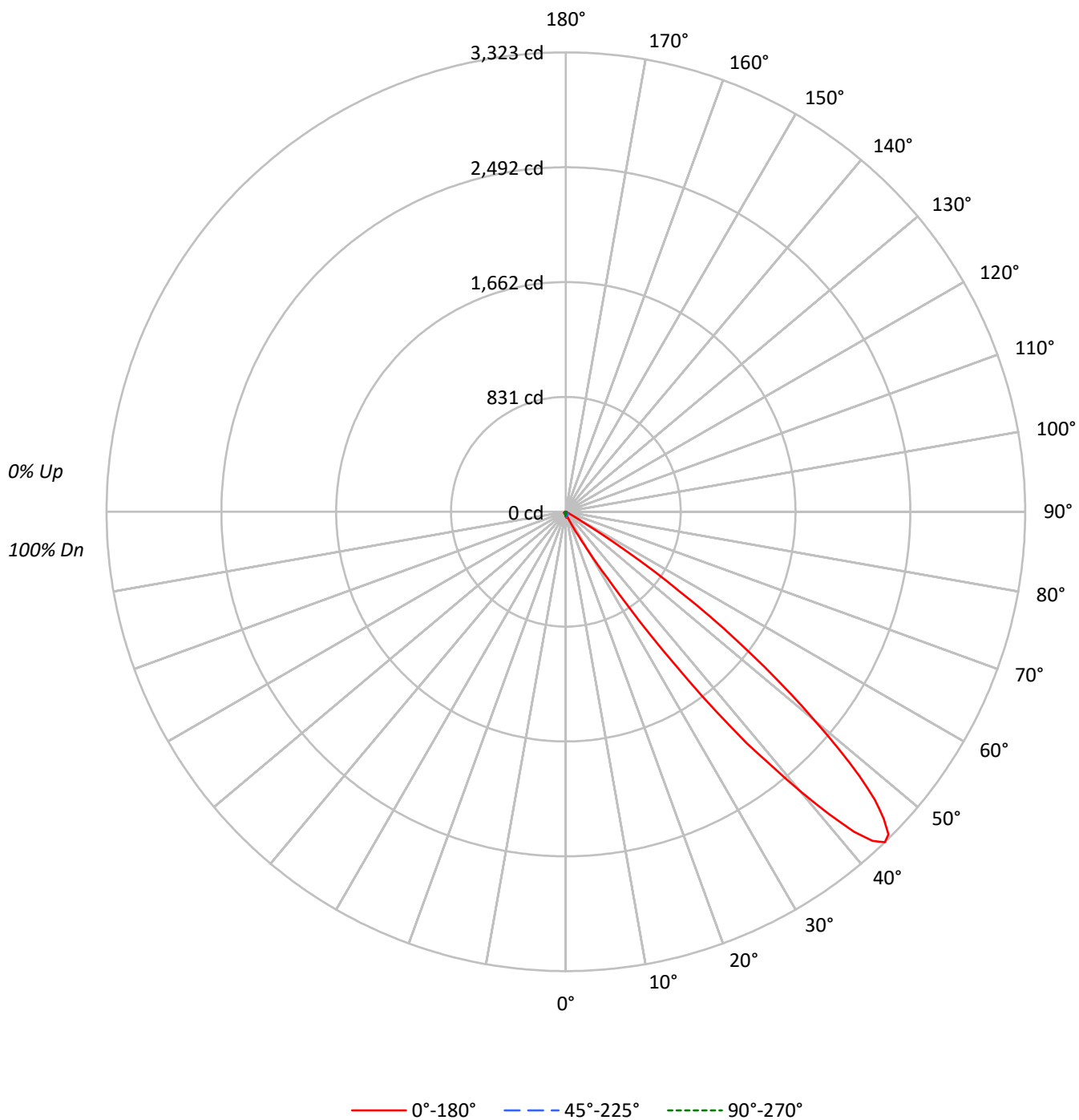
Lumens per Lamp: N/A
Luminaire Lumens: 371.0 lumens
Efficiency: N/A
Efficacy: 51.5 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	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	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	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	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	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	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7214	7214	7214	7214	7214
5°	8959	7990	6516	5701	5613
10°	8817	6836	5032	4453	4520
15°	7310	4881	3610	3700	3950
20°	12694	3874	2754	3197	3617
25°	28284	4645	2226	2952	3411
30°	84570	5722	1975	2912	3570
35°	325594	6425	1794	2971	3774
40°	755730	5611	1689	3063	4036
45°	1023610	4249	1489	3318	4373
50°	802600	2524	1501	3548	4810
55°	385248	1147	1415	3823	5238
60°	35216	175	1316	4035	5833
65°	3840	0	1141	4203	6330
70°	962	0	1410	4488	6860
75°	932	339	1864	4999	7795
80°	884	884	2273	5177	8461
85°	1006	1006	3774	4529	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1023610 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.8	0.8
10°-20°	5.9	1.6
20°-30°	14.0	3.8
30°-40°	76.7	20.7
40°-50°	185.8	50.1
50°-60°	74.1	20.0
60°-70°	6.4	1.7
70°-80°	3.6	1.0
80°-90°	1.6	0.4
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°	22.7	6.1
0°-40°	99.4	26.8
0°-60°	359.4	96.9
0°-90°	371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	371.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33	33	33	33	33	
5°	41	36	30	26	26	4
15°	32	22	16	16	17	11
25°	117	19	9	12	14	70
35°	1216	24	7	11	14	859
45°	3301	14	5	11	14	2328
55°	1008	3	4	10	14	939
65°	7	0	2	8	12	19
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
2.5°	37.0	37.0	37.4	37.0	37.0	37.0	37.0	36.6	36.6	36.6	35.5
5°	40.7	40.7	40.7	40.7	40.3	40.3	40.3	40.0	40.0	39.6	36.3
7.5°	42.2	42.2	41.8	41.8	41.4	41.4	41.1	40.7	40.3	40.0	34.8
10°	39.6	39.6	39.6	39.2	39.2	38.8	38.5	38.1	37.7	37.0	30.7
12.5°	35.1	35.1	35.5	35.1	34.8	34.4	33.7	33.3	32.9	32.2	25.5
15°	32.2	32.2	32.2	31.8	31.4	30.7	30.3	29.6	29.2	28.1	21.5
17.5°	41.1	41.1	40.7	40.0	38.5	37.4	35.5	34.0	32.2	30.0	18.5
20°	54.4	54.4	53.6	52.9	51.0	49.2	46.2	43.7	40.7	38.1	16.6
22.5°	78.8	79.9	77.7	75.1	72.5	68.1	64.0	59.9	54.7	50.3	17.0
25°	116.9	118.0	116.9	111.0	106.2	100.2	92.5	84.3	75.5	67.3	19.2
27.5°	189.4	190.1	188.3	173.9	166.1	150.6	136.9	123.6	108.8	94.0	21.1
30°	334.0	334.4	322.6	293.7	268.2	234.2	205.3	177.6	154.3	130.6	22.6
31°	439.8	429.5	404.3	369.6	328.9	283.0	243.4	207.5	172.8	147.2	22.9
32°	558.6	557.1	515.3	455.0	400.6	343.3	283.7	237.9	197.9	163.1	23.3
33°	715.8	716.5	650.7	579.7	490.5	413.6	335.5	272.6	224.5	182.0	24.0
34°	961.4	903.7	826.4	730.2	608.9	493.1	391.7	313.0	248.6	200.1	24.0
35°	1216.3	1158.2	1073.1	927.4	760.9	598.9	458.7	356.2	277.4	219.7	24.0
36°	1501.9	1452.7	1324.0	1137.9	925.5	698.8	529.7	406.2	305.9	237.5	23.7
37°	1810.4	1738.3	1595.5	1392.4	1108.3	839.4	616.3	455.7	334.4	256.7	22.9
38°	2123.7	2058.6	1878.5	1632.5	1326.5	987.7	702.9	503.5	360.7	271.2	21.8
39°	2361.2	2325.7	2147.0	1872.2	1500.8	1128.3	792.0	554.5	388.4	285.6	20.7
40°	2640.1	2582.8	2413.4	2073.4	1706.8	1271.4	879.3	599.6	411.4	297.0	19.6
41°	2894.6	2822.1	2608.3	2279.8	1871.8	1400.2	962.2	646.3	429.8	303.7	18.9
42°	3112.9	3028.6	2805.1	2456.7	2009.8	1503.0	1028.4	679.5	447.2	309.3	17.8
43°	3254.2	3181.3	2961.6	2589.5	2127.8	1597.3	1090.2	714.3	458.0	313.0	16.3
44°	3323.0	3249.4	3036.7	2672.7	2200.3	1653.9	1130.1	738.4	469.8	317.8	15.2
45°	3300.8	3226.1	3020.4	2674.2	2222.9	1674.3	1147.1	749.1	476.1	322.2	13.7
46°	3199.1	3146.6	2939.4	2604.6	2179.9	1652.4	1137.5	741.0	473.9	322.2	12.2
47°	3056.3	2996.4	2799.2	2485.1	2076.0	1596.2	1098.7	716.2	460.2	314.8	10.7
48°	2861.7	2810.7	2603.5	2295.4	1916.6	1473.8	1011.0	675.8	438.7	300.4	9.2
49°	2617.6	2546.5	2353.8	2052.7	1708.7	1299.9	896.0	607.8	404.3	280.0	8.1
50°	2352.7	2265.0	2116.3	1809.7	1493.7	1114.6	744.7	513.8	355.9	253.4	7.4
51°	2093.4	2004.2	1862.6	1601.8	1264.4	924.8	600.8	410.2	293.0	216.8	6.3
52°	1824.5	1749.7	1591.0	1386.1	1082.4	749.5	500.5	347.0	243.4	182.0	5.2
53°	1556.6	1505.6	1354.7	1147.1	869.7	612.2	408.8	297.0	212.3	155.7	4.1
54°	1288.4	1232.6	1117.9	932.9	701.0	483.1	346.6	248.6	184.2	135.8	3.7
55°	1007.7	978.8	873.0	711.4	531.2	385.5	281.1	213.8	154.3	113.6	3.0
56°	776.1	743.5	647.0	516.0	394.7	301.9	227.5	174.6	130.6	95.1	2.2
57°	508.3	475.0	411.0	360.3	287.4	220.1	173.9	137.6	106.2	78.8	1.8
58°	300.4	270.0	260.1	222.0	191.6	149.4	128.4	102.5	78.4	62.1	1.1
59°	138.0	140.2	124.7	116.9	106.2	95.1	78.1	68.4	53.6	44.8	0.7
60°	80.3	75.8	74.0	66.2	58.8	52.2	47.0	41.4	33.7	28.9	0.4
62.5°	27.4	26.3	27.0	24.4	22.9	22.2	20.3	17.4	14.4	11.8	0.0
65°	7.4	7.4	7.0	6.7	6.3	5.9	5.5	4.8	4.4	3.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	2.6	2.6	2.2	2.2	1.8	1.8	1.5	1.5	1.1	1.1	0.0
70°	1.5	1.5	1.5	1.1	1.1	1.1	0.7	0.7	0.7	0.4	0.0
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.4	0.4
75°	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.7
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	32.9	32.9	32.9	32.9	32.9	32.9
2.5°	34.0	32.6	30.7	29.6	29.2	28.9
5°	32.6	29.6	27.4	25.9	25.5	25.5
7.5°	29.2	25.9	23.7	22.9	22.6	22.6
10°	25.5	22.6	20.7	20.0	20.3	20.3
12.5°	21.5	18.9	18.1	18.1	18.5	18.9
15°	17.4	15.9	15.9	16.3	17.0	17.4
17.5°	14.4	13.7	14.1	14.8	15.5	16.3
20°	11.8	11.8	12.6	13.7	14.8	15.5
22.5°	10.0	10.4	11.5	12.6	14.1	14.8
25°	8.5	9.2	10.4	12.2	13.7	14.1
27.5°	7.4	8.5	10.0	11.8	13.3	14.1
30°	6.3	7.8	9.6	11.5	13.3	14.1
31°	5.9	7.4	9.2	11.5	13.3	14.1
32°	5.5	7.4	9.2	11.5	13.3	14.1
33°	5.2	7.0	9.2	11.1	13.3	14.1
34°	4.8	7.0	9.2	11.5	13.3	14.1
35°	4.4	6.7	8.9	11.1	12.9	14.1
36°	4.1	6.7	8.9	11.1	13.3	14.1
37°	3.7	6.7	8.9	11.1	12.9	14.1
38°	3.7	6.3	8.5	11.1	12.9	14.1
39°	3.3	5.9	8.5	11.1	12.9	14.1
40°	3.0	5.9	8.1	10.7	12.9	14.1
41°	2.6	5.5	8.1	10.7	12.9	14.1
42°	2.2	5.5	8.1	10.7	12.9	14.1
43°	1.8	5.2	7.8	10.7	12.9	14.1
44°	1.8	5.2	7.8	10.7	12.9	14.1
45°	1.5	4.8	7.4	10.7	12.9	14.1
46°	1.5	4.8	7.4	10.4	12.9	14.1
47°	1.1	4.8	7.4	10.4	12.9	14.1
48°	1.1	4.4	7.4	10.4	12.9	14.1
49°	0.7	4.4	7.4	10.4	12.9	14.1
50°	0.7	4.4	7.0	10.4	12.9	14.1
51°	0.7	4.4	7.0	10.4	12.9	14.1
52°	0.7	4.1	7.0	10.4	12.9	14.1
53°	0.7	4.1	7.0	10.4	12.9	14.1
54°	0.7	4.1	6.7	10.4	12.9	14.1
55°	0.7	3.7	6.7	10.0	12.9	13.7
56°	0.7	3.7	6.7	10.0	12.9	13.7
57°	0.7	3.7	6.3	10.0	12.9	13.7
58°	0.7	3.3	6.3	9.6	12.6	13.7
59°	0.7	3.3	5.9	9.6	12.6	13.3
60°	0.7	3.0	5.9	9.2	12.2	13.3
62.5°	0.7	2.6	5.2	8.9	11.8	12.6
65°	0.7	2.2	4.8	8.1	11.5	12.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	2.2	4.4	7.8	10.7	11.8
70°	0.7	2.2	4.1	7.0	10.4	10.7
72.5°	1.1	2.2	3.7	6.7	9.6	10.0
75°	1.5	2.2	3.3	5.9	8.9	9.2
77.5°	1.5	2.2	3.0	5.2	7.8	8.1
80°	1.5	1.8	2.6	4.1	6.3	6.7
82.5°	1.5	1.8	1.8	3.3	4.8	5.2
85°	1.1	1.5	1.5	1.8	3.3	3.7
87.5°	1.1	1.5	0.7	1.1	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)