

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: P1345461

Luminaire Tested: P3A13R359035DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345461
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: P3A13R359035DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

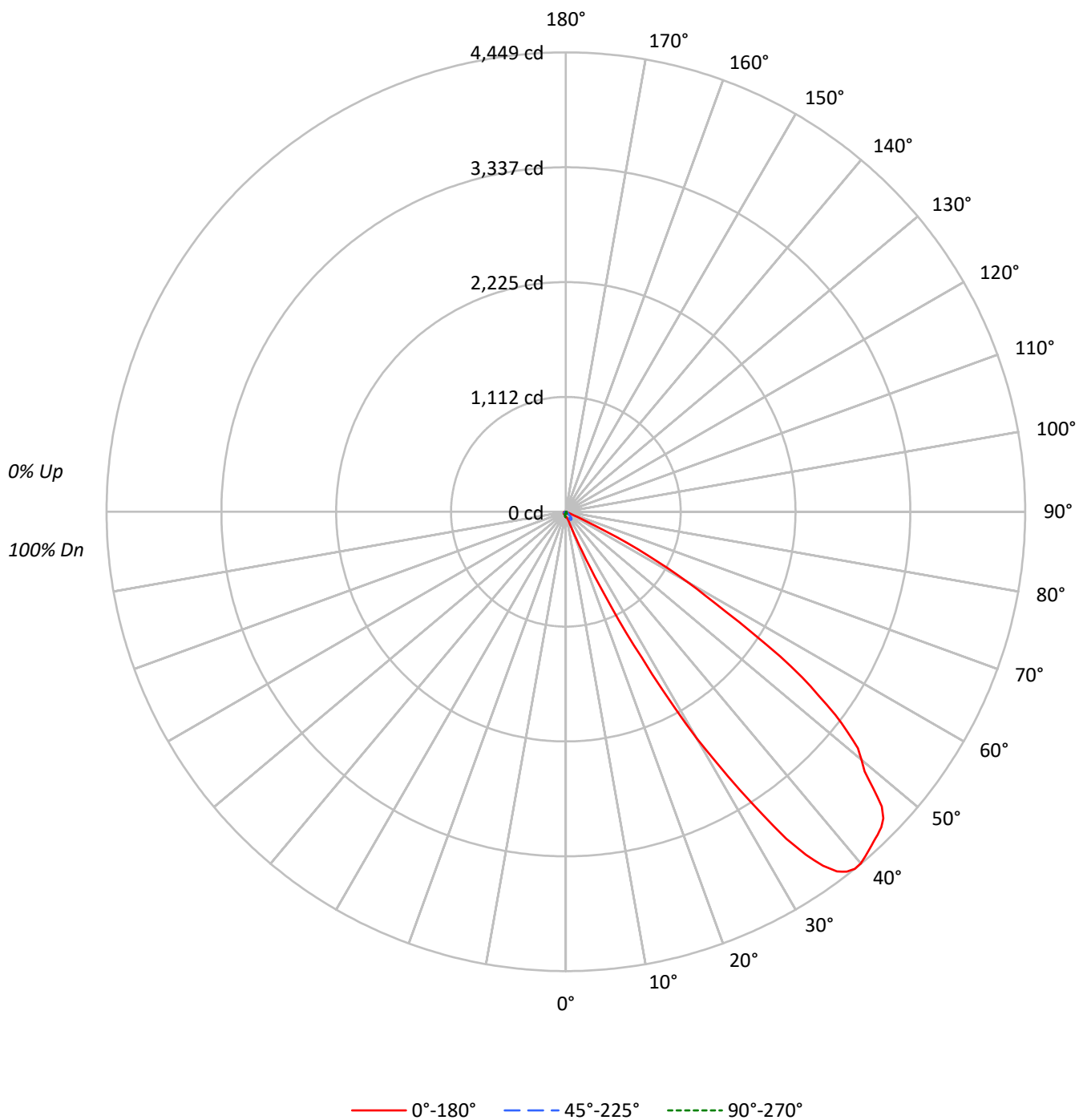
Lumens per Lamp: N/A
Luminaire Lumens: 1108.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	107	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	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11183	11183	11183	11183	11183
5°	12107	11886	11006	9905	9685
10°	12692	11578	9797	8461	8461
15°	18161	11351	7946	7265	7492
20°	45504	12134	6301	6301	7001
25°	211270	15485	4839	5807	6533
30°	642251	21016	3798	5317	6583
35°	1085439	24360	3212	5086	6425
40°	1272355	24045	2576	5153	6870
45°	1339953	17056	2171	5582	7443
50°	1275455	10234	2047	5799	8187
55°	1068770	4205	2294	6499	9558
60°	598329	877	2631	7456	10525
65°	103254	519	2594	8302	11934
70°	1923	641	3206	8976	13464
75°	1694	847	4236	10167	15250
80°	1263	1263	5051	11365	17679
85°	0	2516	10064	12580	20128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1349445 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.6	0.4
10°-20°	13.1	1.2
20°-30°	68.0	6.1
30°-40°	293.6	26.5
40°-50°	418.8	37.8
50°-60°	259.4	23.4
60°-70°	39.5	3.6
70°-80°	7.4	0.7
80°-90°	3.7	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°	85.6	7.7
0°-40°	379.2	34.2
0°-60°	1057.4	95.4
0°-90°	1108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1108.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	51	51	51	51	51	
5°	55	54	50	45	44	5
15°	80	50	35	32	33	29
25°	873	64	20	24	27	523
35°	4055	91	12	19	24	2435
45°	4321	55	7	18	24	3264
55°	2796	11	6	17	25	2381
65°	199	1	5	16	23	407
75°	2	1	5	12	18	2
85°	0	1	4	5	8	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
2.5°	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	51.0	50.0
5°	55.0	55.0	54.0	54.0	54.0	54.0	54.0	54.0	52.0	50.0	47.0
7.5°	56.0	56.0	55.0	55.0	55.0	55.0	54.0	53.0	51.0	47.0	44.0
10°	57.0	57.0	57.0	57.0	56.0	55.0	54.0	52.0	49.0	44.0	41.0
12.5°	64.0	64.0	63.0	61.0	59.0	57.0	55.0	51.0	45.0	40.0	37.0
15°	80.0	79.0	77.0	74.0	70.0	65.0	61.0	50.0	41.0	35.0	33.0
17.5°	112.0	110.0	107.0	97.0	88.0	79.0	71.0	50.0	37.0	31.0	29.0
20°	195.0	196.0	175.0	151.0	131.0	109.0	89.0	52.0	33.0	27.0	26.0
22.5°	407.1	391.1	341.1	283.1	216.0	167.0	126.0	57.0	29.0	23.0	23.0
25°	873.2	812.2	691.1	522.1	368.1	261.1	183.0	64.0	26.0	20.0	21.0
27.5°	1594.3	1539.3	1296.3	976.2	648.1	394.1	248.1	73.0	23.0	17.0	19.0
30°	2536.5	2384.5	2067.4	1600.3	1083.2	603.1	333.1	83.0	19.0	15.0	18.0
31°	2830.6	2760.6	2374.5	1851.4	1269.3	716.1	369.1	86.0	18.0	15.0	17.0
32°	3179.7	3055.6	2709.6	2126.4	1458.3	817.2	412.1	89.0	17.0	13.0	17.0
33°	3491.7	3371.7	2950.6	2368.5	1649.3	932.2	458.1	90.0	15.0	13.0	16.0
34°	3819.8	3655.8	3238.7	2621.5	1845.4	1056.2	500.1	91.0	14.0	12.0	16.0
35°	4054.8	3890.8	3486.7	2821.6	2014.4	1166.2	548.1	91.0	13.0	12.0	15.0
36°	4236.9	4092.8	3700.8	3027.6	2182.5	1265.3	586.1	91.0	11.0	11.0	15.0
37°	4361.9	4224.9	3844.8	3204.7	2310.5	1353.3	620.1	91.0	10.0	11.0	15.0
38°	4422.9	4308.9	3983.8	3333.7	2434.5	1422.3	647.1	89.0	9.0	10.0	14.0
39°	4448.9	4355.9	4068.8	3442.7	2527.5	1482.3	667.1	87.0	8.0	10.0	14.0
40°	4444.9	4363.9	4116.9	3517.7	2602.5	1523.3	678.1	84.0	7.0	9.0	14.0
41°	4421.9	4351.9	4141.9	3581.7	2647.5	1551.3	681.1	81.0	6.0	9.0	13.0
42°	4395.9	4331.9	4149.9	3615.7	2676.6	1560.3	673.1	77.0	6.0	8.0	13.0
43°	4368.9	4309.9	4149.9	3626.8	2683.6	1554.3	660.1	70.0	5.0	8.0	13.0
44°	4346.9	4290.9	4136.9	3623.8	2668.6	1531.3	636.1	62.0	4.0	8.0	13.0
45°	4320.9	4265.9	4119.9	3604.7	2639.5	1492.3	606.1	55.0	3.0	7.0	13.0
46°	4274.9	4231.9	4089.8	3565.7	2593.5	1438.3	568.1	50.0	2.0	7.0	12.0
47°	4185.9	4148.9	4031.8	3507.7	2532.5	1374.3	529.1	45.0	2.0	7.0	12.0
48°	4006.8	4005.8	3915.8	3399.7	2435.5	1294.3	488.1	40.0	2.0	7.0	12.0
49°	3833.8	3815.8	3703.8	3209.7	2296.5	1198.2	445.1	36.0	1.0	7.0	12.0
50°	3738.8	3699.8	3515.7	2985.6	2118.4	1065.2	399.1	30.0	1.0	6.0	12.0
51°	3639.8	3583.7	3366.7	2783.6	1906.4	937.2	349.1	24.0	1.0	6.0	11.0
52°	3460.7	3407.7	3164.7	2590.5	1700.4	806.2	301.1	20.0	1.0	6.0	12.0
53°	3267.7	3191.7	2927.6	2378.5	1519.3	690.1	252.1	17.0	1.0	6.0	11.0
54°	3024.6	2990.6	2687.6	2118.4	1307.3	578.1	207.0	14.0	1.0	6.0	11.0
55°	2795.6	2745.6	2430.5	1852.4	1115.2	474.1	173.0	11.0	1.0	6.0	11.0
56°	2503.5	2428.5	2133.4	1608.3	920.2	382.1	146.0	9.0	1.0	6.0	11.0
57°	2155.4	2075.4	1842.4	1337.3	722.1	291.1	122.0	7.0	1.0	6.0	11.0
58°	1823.4	1754.4	1504.3	1032.2	544.1	202.0	101.0	5.0	1.0	5.0	11.0
59°	1575.3	1499.3	1251.3	794.2	378.1	149.0	76.0	4.0	1.0	6.0	11.0
60°	1364.3	1266.3	1007.2	615.1	270.1	107.0	56.0	2.0	2.0	6.0	11.0
62.5°	786.2	694.1	481.1	250.1	111.0	55.0	27.0	1.0	2.0	6.0	11.0
65°	199.0	177.0	115.0	54.0	31.0	19.0	10.0	1.0	2.0	5.0	10.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	7.0	7.0	7.0	6.0	5.0	4.0	2.0	1.0	2.0	5.0	10.0
70°	3.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0	2.0	5.0	9.0
72.5°	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	3.0	5.0	8.0
75°	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	3.0	5.0	8.0
77.5°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	4.0	7.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	4.0	6.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	4.0	5.0
85°	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	4.0	4.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.0	3.0
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):

	135°	157.5°	180°
0°	51.0	51.0	51.0
2.5°	48.0	48.0	48.0
5°	45.0	45.0	44.0
7.5°	42.0	41.0	41.0
10°	38.0	38.0	38.0
12.5°	35.0	35.0	35.0
15°	32.0	33.0	33.0
17.5°	29.0	31.0	31.0
20°	27.0	29.0	30.0
22.5°	25.0	27.0	28.0
25°	24.0	26.0	27.0
27.5°	22.0	25.0	27.0
30°	21.0	24.0	26.0
31°	21.0	24.0	25.0
32°	20.0	24.0	25.0
33°	20.0	24.0	25.0
34°	20.0	23.0	25.0
35°	19.0	23.0	24.0
36°	19.0	23.0	24.0
37°	19.0	23.0	25.0
38°	19.0	23.0	24.0
39°	18.0	23.0	24.0
40°	18.0	23.0	24.0
41°	18.0	23.0	24.0
42°	18.0	23.0	24.0
43°	18.0	23.0	24.0
44°	18.0	22.0	24.0
45°	18.0	22.0	24.0
46°	18.0	23.0	24.0
47°	18.0	23.0	25.0
48°	18.0	22.0	24.0
49°	17.0	22.0	24.0
50°	17.0	22.0	24.0
51°	17.0	23.0	25.0
52°	17.0	23.0	25.0
53°	17.0	23.0	25.0
54°	17.0	23.0	24.0
55°	17.0	23.0	25.0
56°	17.0	23.0	24.0
57°	17.0	23.0	24.0
58°	17.0	22.0	24.0
59°	17.0	22.0	24.0
60°	17.0	22.0	24.0
62.5°	16.0	22.0	24.0
65°	16.0	21.0	23.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	15.0	21.0	22.0
70°	14.0	20.0	21.0
72.5°	13.0	19.0	20.0
75°	12.0	17.0	18.0
77.5°	10.0	15.0	17.0
80°	9.0	13.0	14.0
82.5°	7.0	11.0	12.0
85°	5.0	8.0	8.0
87.5°	2.0	4.0	4.0
90°	0.0	0.0	0.0

(END OF REPORT)