

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: P1345444

Luminaire Tested: P3A13R359030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345444
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: P3A13R359030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

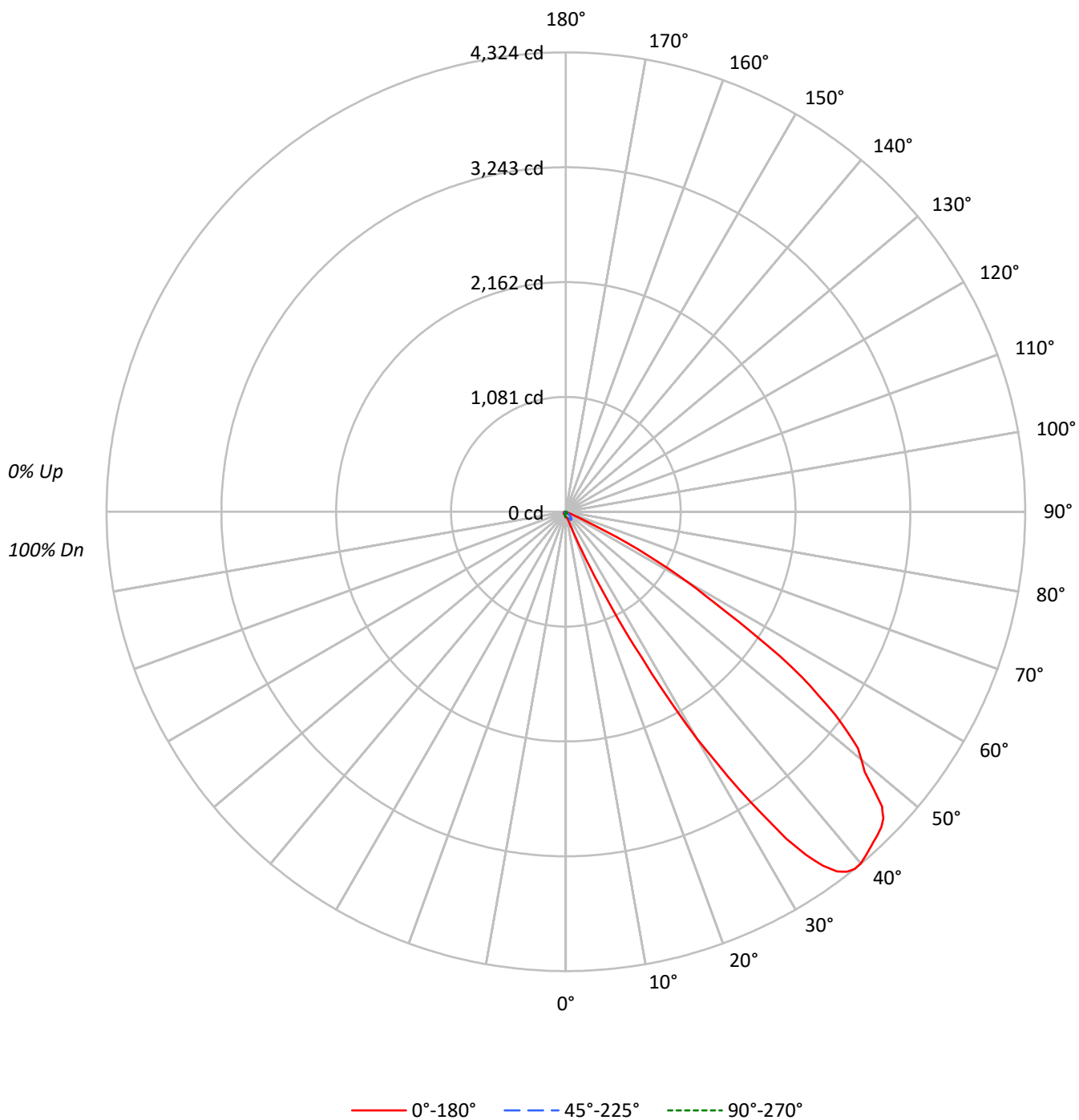
Lumens per Lamp: N/A
Luminaire Lumens: 1077.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	10876	10876	10876	10876	10876
5°	11776	11556	10698	9641	9421
10°	12336	11267	9530	8216	8216
15°	17662	11033	7719	7060	7287
20°	44244	11808	6137	6137	6814
25°	205367	15049	4694	5637	6363
30°	624299	20434	3697	5165	6406
35°	1055082	23691	3132	4952	6237
40°	1236774	23387	2519	5009	6670
45°	1302461	16591	2109	5427	7226
50°	1239772	9961	1979	5629	7949
55°	1038873	4091	2217	6308	9290
60°	581576	833	2544	7236	10218
65°	100400	519	2542	8094	11623
70°	1859	641	3142	8719	13079
75°	1610	847	4151	9913	14827
80°	1263	1263	4925	11113	17174
85°	0	2516	9812	12328	19625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1311691 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.4
10°-20°	12.7	1.2
20°-30°	66.1	6.1
30°-40°	285.4	26.5
40°-50°	407.1	37.8
50°-60°	252.1	23.4
60°-70°	38.4	3.6
70°-80°	7.2	0.7
80°-90°	3.6	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°	83.3	7.7
0°-40°	368.6	34.2
0°-60°	1027.9	95.4
0°-90°	1077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	50	50	50	50	50	
5°	54	52	49	44	43	5
15°	78	49	34	31	32	28
25°	849	62	19	23	26	508
35°	3941	88	12	18	23	2366
45°	4200	54	7	18	23	3173
55°	2717	11	6	16	24	2314
65°	194	1	5	16	22	395
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°	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
2.5°	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	49.6	48.6
5°	53.5	53.5	52.5	52.5	52.5	52.5	52.5	52.5	50.6	48.6	45.7
7.5°	54.4	54.4	53.5	53.5	53.5	53.5	52.5	51.5	49.6	45.7	42.8
10°	55.4	55.4	55.4	55.4	54.4	53.5	52.5	50.6	47.6	42.8	39.9
12.5°	62.2	62.2	61.3	59.3	57.4	55.4	53.5	49.6	43.8	38.9	36.0
15°	77.8	76.8	74.9	71.9	68.1	63.2	59.3	48.6	39.9	34.0	32.1
17.5°	108.9	106.9	104.0	94.3	85.6	76.8	69.0	48.6	36.0	30.1	28.2
20°	189.6	190.6	170.1	146.8	127.4	106.0	86.5	50.6	32.1	26.3	25.3
22.5°	395.7	380.1	331.5	275.1	210.0	162.4	122.5	55.4	28.2	22.4	22.4
25°	848.8	789.4	671.8	507.5	357.8	253.8	177.9	62.2	25.3	19.4	20.4
27.5°	1549.7	1496.3	1260.0	948.9	630.0	383.1	241.1	71.0	22.4	16.5	18.5
30°	2465.6	2317.8	2009.6	1555.6	1052.9	586.3	323.8	80.7	18.5	14.6	17.5
31°	2751.4	2683.3	2308.1	1799.6	1233.8	696.1	358.8	83.6	17.5	14.6	16.5
32°	3090.7	2970.1	2633.8	2066.9	1417.5	794.3	400.6	86.5	16.5	12.6	16.5
33°	3394.0	3277.4	2868.1	2302.2	1603.2	906.1	445.3	87.5	14.6	12.6	15.6
34°	3712.9	3553.5	3148.1	2548.2	1793.8	1026.7	486.1	88.5	13.6	11.7	15.6
35°	3941.4	3781.9	3389.2	2742.6	1958.1	1133.6	532.8	88.5	12.6	11.7	14.6
36°	4118.3	3978.3	3597.2	2942.9	2121.4	1229.9	569.7	88.5	10.7	10.7	14.6
37°	4239.9	4106.7	3737.2	3115.0	2245.8	1315.4	602.8	88.5	9.7	10.7	14.6
38°	4299.2	4188.3	3872.4	3240.4	2366.4	1382.5	629.0	86.5	8.8	9.7	13.6
39°	4324.4	4234.0	3955.0	3346.4	2456.8	1440.8	648.5	84.6	7.8	9.7	13.6
40°	4320.6	4241.8	4001.7	3419.3	2529.7	1480.7	659.2	81.7	6.8	8.8	13.6
41°	4298.2	4230.1	4026.0	3481.5	2573.5	1507.9	662.1	78.8	5.8	8.8	12.6
42°	4272.9	4210.7	4033.8	3514.6	2601.7	1516.7	654.3	74.9	5.8	7.8	12.6
43°	4246.7	4189.3	4033.8	3525.3	2608.5	1510.8	641.7	68.1	4.9	7.8	12.6
44°	4225.3	4170.8	4021.1	3522.4	2593.9	1488.5	618.3	60.3	3.9	7.8	12.6
45°	4200.0	4146.5	4004.6	3503.9	2565.7	1450.6	589.2	53.5	2.9	6.8	12.6
46°	4155.3	4113.5	3975.4	3466.0	2521.0	1398.1	552.2	48.6	1.9	6.8	11.7
47°	4068.8	4032.8	3919.0	3409.6	2461.7	1335.8	514.3	43.8	1.9	6.8	11.7
48°	3894.7	3893.8	3806.3	3304.6	2367.4	1258.1	474.4	38.9	1.9	6.8	11.7
49°	3726.5	3709.0	3600.1	3119.9	2232.2	1164.7	432.6	35.0	1.0	6.8	11.7
50°	3634.2	3596.3	3417.4	2902.1	2059.2	1035.4	387.9	29.2	1.0	5.8	11.7
51°	3537.9	3483.5	3272.5	2705.7	1853.1	911.0	339.3	23.3	1.0	5.8	10.7
52°	3363.9	3312.4	3076.1	2518.1	1652.8	783.6	292.6	19.4	1.0	5.8	11.7
53°	3176.3	3102.4	2845.7	2311.9	1476.8	670.8	245.0	16.5	1.0	5.8	10.7
54°	2940.0	2906.9	2612.4	2059.2	1270.7	561.9	201.3	13.6	1.0	5.8	10.7
55°	2717.4	2668.8	2362.5	1800.6	1084.0	460.8	168.2	10.7	1.0	5.8	10.7
56°	2433.5	2360.6	2073.8	1563.3	894.4	371.4	141.9	8.8	1.0	5.8	10.7
57°	2095.1	2017.4	1790.8	1299.9	701.9	282.9	118.6	6.8	1.0	5.8	10.7
58°	1772.4	1705.3	1462.2	1003.3	528.9	196.4	98.2	4.9	1.0	4.9	10.7
59°	1531.3	1457.4	1216.3	771.9	367.5	144.9	73.9	3.9	1.0	5.8	10.7
60°	1326.1	1230.8	979.0	597.9	262.5	104.0	54.4	1.9	1.9	5.8	10.7
62.5°	764.2	674.7	467.6	243.1	107.9	53.5	26.3	1.0	1.9	5.8	10.7
65°	193.5	172.1	111.8	52.5	30.1	18.5	9.7	1.0	1.9	4.9	9.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	6.8	6.8	6.8	5.8	4.9	3.9	1.9	1.0	1.9	4.9	9.7
70°	2.9	2.9	2.9	1.9	1.9	1.0	1.0	1.0	1.9	4.9	8.8
72.5°	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	2.9	4.9	7.8
75°	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	2.9	4.9	7.8
77.5°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	2.9	3.9	6.8
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.9	3.9	5.8
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.9	3.9	4.9
85°	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	2.9	3.9	3.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.9	3.9	2.9
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°	49.6	49.6	49.6
2.5°	46.7	46.7	46.7
5°	43.8	43.8	42.8
7.5°	40.8	39.9	39.9
10°	36.9	36.9	36.9
12.5°	34.0	34.0	34.0
15°	31.1	32.1	32.1
17.5°	28.2	30.1	30.1
20°	26.3	28.2	29.2
22.5°	24.3	26.3	27.2
25°	23.3	25.3	26.3
27.5°	21.4	24.3	26.3
30°	20.4	23.3	25.3
31°	20.4	23.3	24.3
32°	19.4	23.3	24.3
33°	19.4	23.3	24.3
34°	19.4	22.4	24.3
35°	18.5	22.4	23.3
36°	18.5	22.4	23.3
37°	18.5	22.4	24.3
38°	18.5	22.4	23.3
39°	17.5	22.4	23.3
40°	17.5	22.4	23.3
41°	17.5	22.4	23.3
42°	17.5	22.4	23.3
43°	17.5	22.4	23.3
44°	17.5	21.4	23.3
45°	17.5	21.4	23.3
46°	17.5	22.4	23.3
47°	17.5	22.4	24.3
48°	17.5	21.4	23.3
49°	16.5	21.4	23.3
50°	16.5	21.4	23.3
51°	16.5	22.4	24.3
52°	16.5	22.4	24.3
53°	16.5	22.4	24.3
54°	16.5	22.4	23.3
55°	16.5	22.4	24.3
56°	16.5	22.4	23.3
57°	16.5	22.4	23.3
58°	16.5	21.4	23.3
59°	16.5	21.4	23.3
60°	16.5	21.4	23.3
62.5°	15.6	21.4	23.3
65°	15.6	20.4	22.4

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	14.6	20.4	21.4
70°	13.6	19.4	20.4
72.5°	12.6	18.5	19.4
75°	11.7	16.5	17.5
77.5°	9.7	14.6	16.5
80°	8.8	12.6	13.6
82.5°	6.8	10.7	11.7
85°	4.9	7.8	7.8
87.5°	1.9	3.9	3.9
90°	0.0	0.0	0.0

(END OF REPORT)