

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: P1344916

Luminaire Tested: P3A13R309030D2WDE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344916
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: P3A13R309030D2WDE010 E3CA451MB
Description: 3in Adjustable Dim to Warm LED luminaire with, R30 optic, 3000K CCT AND, 90CRI ,
E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

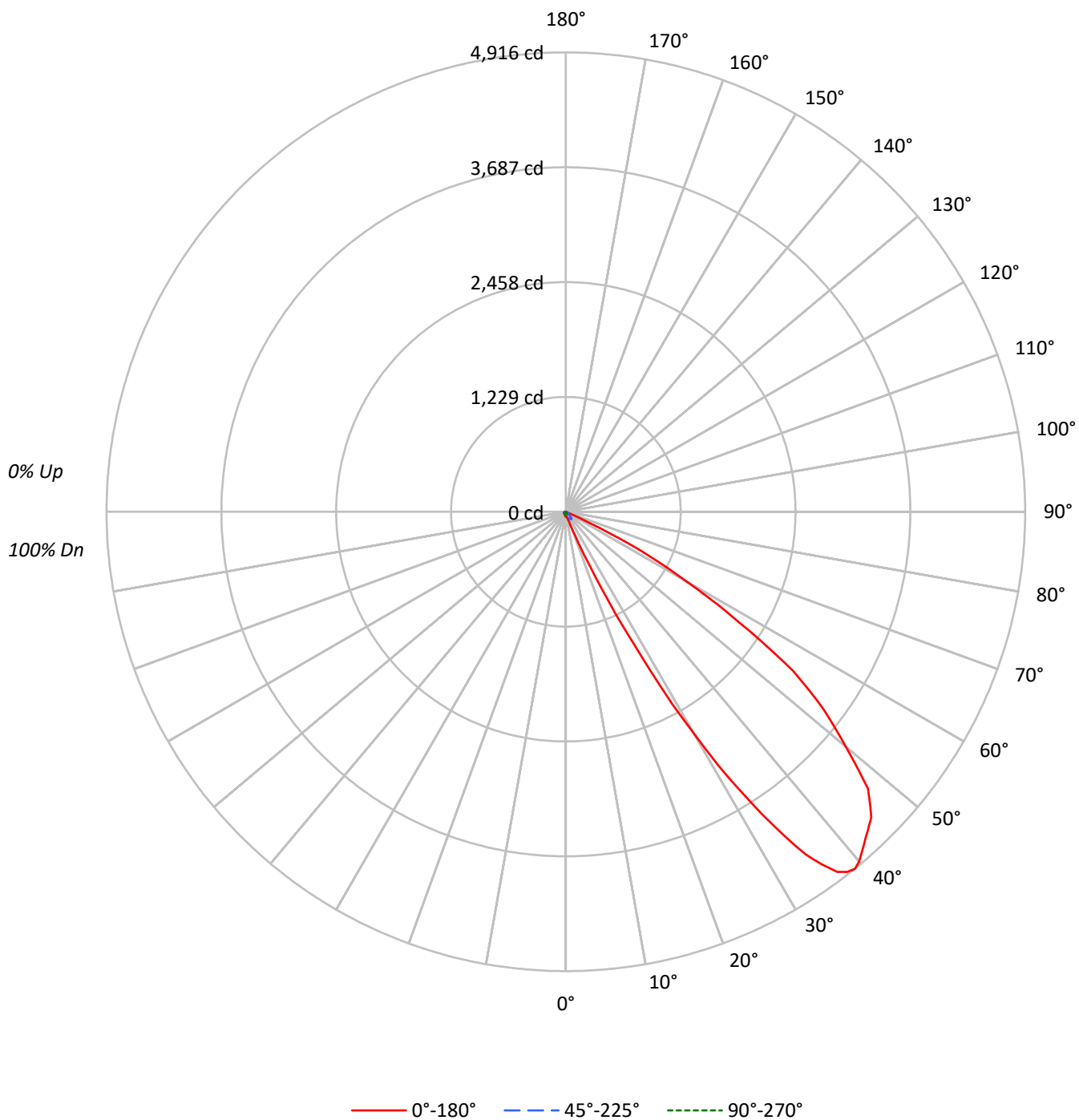
Lumens per Lamp: N/A
Luminaire Lumens: 1278.0 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.1
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	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	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	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	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	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	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	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10854	10854	10854	10854	10854
5°	11622	11380	10654	9707	9487
10°	12714	11267	9352	8394	8149
15°	18570	11237	7809	7083	7333
20°	46717	12321	6021	6021	6791
25°	216980	15364	4694	5468	6242
30°	690714	21269	3545	5191	6279
35°	1198539	25939	2891	4899	6344
40°	1397819	25877	2147	4924	6469
45°	1433513	18358	2326	5334	7008
50°	1333108	10268	1842	5492	8085
55°	1133035	5352	2064	6155	9061
60°	654377	1403	2368	6622	9911
65°	133503	0	2802	7835	11156
70°	2052	705	3462	8976	13143
75°	1864	932	3643	9150	15504
80°	1389	1389	5430	10860	17679
85°	0	2768	10819	10819	21637

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1433513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.4
10°-20°	12.9	1.0
20°-30°	73.7	5.8
30°-40°	344.2	26.9
40°-50°	486.8	38.1
50°-60°	299.5	23.4
60°-70°	45.6	3.6
70°-80°	7.2	0.6
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°	91.1	7.1
0°-40°	435.3	34.1
0°-60°	1221.5	95.6
0°-90°	1278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1278.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	50	50	50	50	50	
5°	53	52	48	44	43	5
15°	82	50	34	31	32	29
25°	897	64	19	23	26	552
35°	4477	97	11	18	24	2687
45°	4623	59	8	17	23	3505
55°	2964	14	5	16	24	2522
65°	257	0	5	15	22	466
75°	2	1	4	11	18	2
85°	0	1	4	4	9	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°	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
2.5°	50.6	50.6	51.7	51.7	50.6	51.7	51.7	51.7	49.5	48.4	46.3
5°	52.8	52.8	52.8	53.8	52.8	52.8	51.7	50.6	48.4	45.2	44.1
7.5°	54.9	54.9	53.8	54.9	53.8	53.8	51.7	49.5	46.3	43.1	40.9
10°	57.1	57.1	56.0	56.0	54.9	54.9	50.6	47.4	42.0	38.8	37.7
12.5°	63.5	63.5	62.4	61.4	59.2	58.1	49.5	44.1	37.7	34.4	33.4
15°	81.8	80.7	78.6	75.4	70.0	68.9	49.5	40.9	34.4	31.2	31.2
17.5°	112.0	110.9	107.7	99.0	89.4	86.1	49.5	36.6	30.1	28.0	28.0
20°	200.2	191.6	175.5	153.9	131.3	119.5	52.8	32.3	25.8	24.8	25.8
21°	261.6	253.0	232.5	197.0	157.2	144.3	54.9	31.2	24.8	23.7	25.8
22°	356.3	346.6	304.7	256.2	199.2	176.6	56.0	29.1	22.6	22.6	24.8
23°	497.4	481.2	410.2	332.6	248.7	216.4	58.1	28.0	21.5	22.6	23.7
24°	651.3	637.3	556.6	440.3	317.6	271.3	60.3	26.9	20.5	20.5	22.6
25°	896.8	880.6	737.4	555.5	402.6	326.2	63.5	24.8	19.4	19.4	22.6
26°	1214.3	1140.0	949.5	715.9	496.3	409.1	66.7	23.7	18.3	19.4	21.5
27°	1515.8	1454.4	1240.2	918.3	613.6	502.7	71.1	22.6	17.2	18.3	21.5
28°	1911.9	1825.8	1555.6	1161.6	773.0	608.2	75.4	21.5	16.1	18.3	20.5
29°	2355.5	2234.9	1908.7	1435.0	952.7	726.7	79.7	20.5	15.1	17.2	20.5
30°	2727.9	2614.9	2288.7	1759.1	1159.4	882.8	84.0	19.4	14.0	17.2	20.5
31°	3165.0	2993.8	2598.8	2033.6	1337.1	1038.9	88.3	17.2	12.9	16.1	19.4
32°	3519.2	3399.7	2979.8	2343.6	1570.7	1211.1	91.5	16.1	12.9	16.1	19.4
33°	3861.5	3701.1	3295.3	2640.7	1781.7	1387.7	94.7	15.1	11.8	15.1	19.4
34°	4188.8	4041.3	3593.5	2880.8	1980.8	1555.6	96.9	12.9	11.8	15.1	18.3
35°	4477.3	4306.1	3856.1	3115.5	2185.4	1708.5	96.9	11.8	10.8	14.0	18.3
36°	4664.6	4541.9	4084.4	3346.9	2370.5	1853.8	96.9	10.8	9.7	14.0	17.2
37°	4825.0	4681.8	4267.4	3524.6	2507.2	1970.1	96.9	9.7	9.7	14.0	17.2
38°	4890.7	4768.0	4393.3	3681.7	2635.4	2088.5	95.8	8.6	8.6	12.9	17.2
39°	4916.5	4806.7	4488.1	3794.8	2730.1	2168.1	93.7	7.5	8.6	12.9	17.2
40°	4883.2	4800.3	4536.5	3868.0	2805.4	2226.3	90.4	6.5	7.5	12.9	17.2
42.5°	4745.4	4690.5	4525.7	3941.2	2870.0	2269.3	78.6	4.3	7.5	11.8	17.2
45°	4622.6	4562.3	4417.0	3864.8	2786.1	2184.3	59.2	2.2	7.5	11.8	17.2
47.5°	4384.7	4347.0	4232.9	3669.9	2602.0	1992.7	42.0	1.1	6.5	10.8	16.1
50°	3907.8	3872.3	3721.6	3186.5	2238.1	1684.8	30.1	1.1	5.4	10.8	16.1
52.5°	3480.4	3442.8	3226.4	2649.3	1719.2	1234.8	19.4	1.1	5.4	10.8	16.1
55°	2963.7	2898.0	2613.8	2011.0	1218.6	827.9	14.0	1.1	5.4	9.7	16.1
57.5°	2194.0	2098.2	1844.1	1371.5	701.9	448.9	7.5	1.1	5.4	9.7	16.1
60°	1492.1	1435.0	1154.0	723.4	299.3	189.5	3.2	1.1	5.4	9.7	15.1
62.5°	904.3	832.2	580.3	307.9	129.2	86.1	0.0	2.2	5.4	9.7	15.1
65°	257.3	228.2	151.8	70.0	36.6	28.0	0.0	2.2	5.4	9.7	15.1
67.5°	8.6	8.6	8.6	7.5	5.4	5.4	1.1	2.2	5.4	9.7	14.0
70°	3.2	3.2	3.2	2.2	2.2	1.1	1.1	2.2	5.4	8.6	14.0
72.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	2.2	4.3	7.5	12.9
75°	2.2	2.2	2.2	1.1	1.1	1.1	1.1	3.2	4.3	7.5	10.8
77.5°	2.2	2.2	2.2	1.1	1.1	1.1	1.1	3.2	4.3	6.5	10.8
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3	6.5	8.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	3.2	4.3	4.3	6.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.2	4.3	3.2	4.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.2	3.2	3.2	2.2
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°	49.5	49.5
2.5°	46.3	46.3
5°	43.1	43.1
7.5°	39.8	39.8
10°	36.6	36.6
12.5°	34.4	34.4
15°	31.2	32.3
17.5°	29.1	30.1
20°	28.0	29.1
21°	28.0	29.1
22°	26.9	28.0
23°	26.9	28.0
24°	25.8	26.9
25°	24.8	25.8
26°	24.8	25.8
27°	24.8	25.8
28°	23.7	25.8
29°	23.7	24.8
30°	23.7	24.8
31°	22.6	24.8
32°	22.6	24.8
33°	22.6	23.7
34°	21.5	23.7
35°	21.5	23.7
36°	21.5	23.7
37°	21.5	22.6
38°	21.5	23.7
39°	21.5	22.6
40°	21.5	22.6
42.5°	21.5	22.6
45°	21.5	22.6
47.5°	21.5	23.7
50°	21.5	23.7
52.5°	21.5	23.7
55°	21.5	23.7
57.5°	21.5	22.6
60°	21.5	22.6
62.5°	20.5	22.6
65°	20.5	21.5
67.5°	20.5	21.5
70°	19.4	20.5
72.5°	18.3	19.4
75°	16.1	18.3
77.5°	15.1	16.1
80°	12.9	14.0

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	10.8	10.8
85°	7.5	8.6
87.5°	4.3	4.3
90°	0.0	0.0

(END OF REPORT)