

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: P1345428

Luminaire Tested: P3A13R359030D2WDE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345428
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: P3A13R359030D2WDE010 E3CA451MB
Description: 3in Adjustable Dim to Warm LED luminaire with, R35 optic, 3000K CCT AND, 90CRI ,
E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

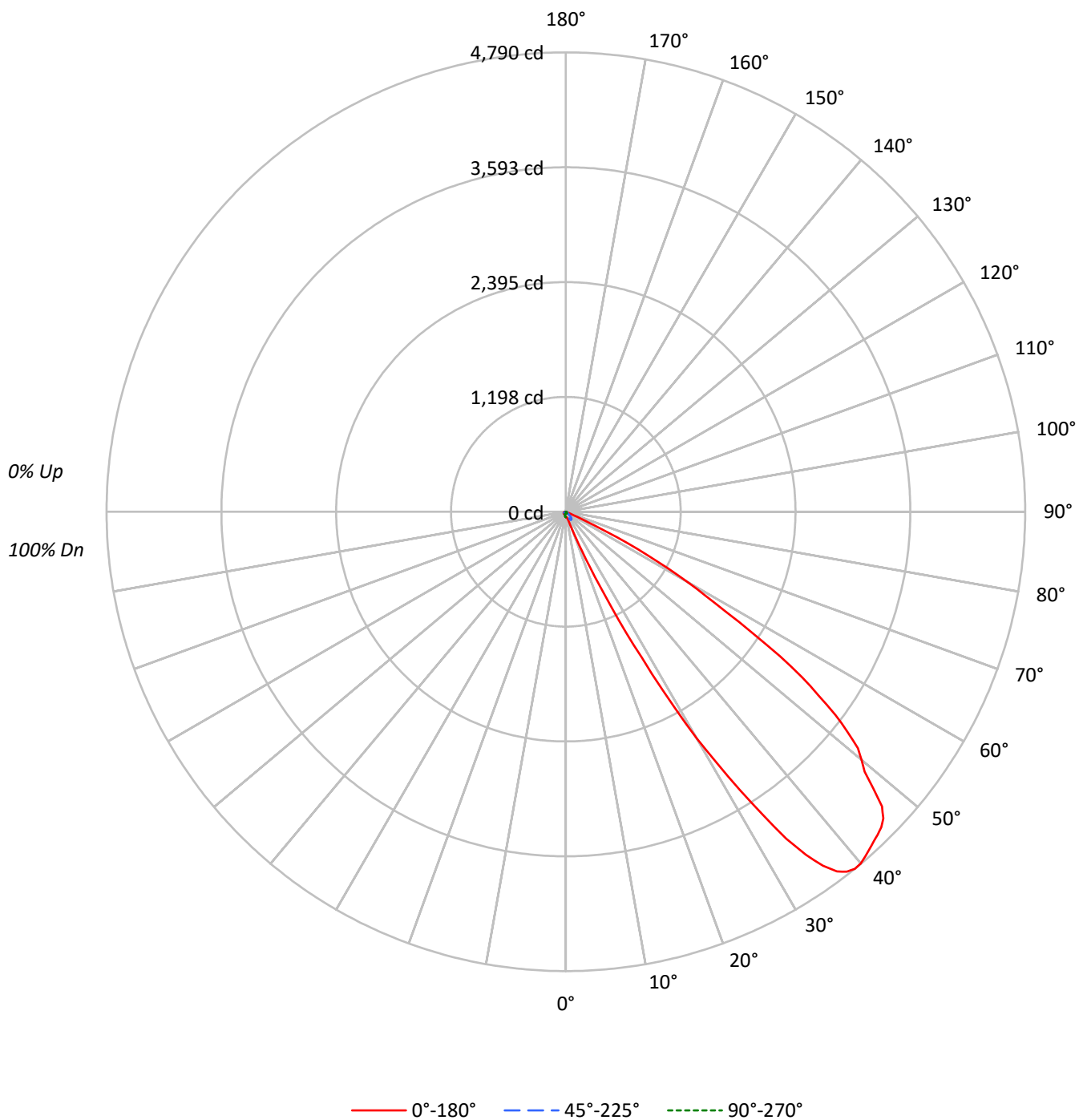
Lumens per Lamp: N/A
Luminaire Lumens: 1193.0 lumens
Efficiency: N/A
Efficacy: 59.4 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12039	12039	12039	12039	12039
5°	13031	12811	11842	10676	10434
10°	13672	12469	10554	9107	9107
15°	19569	12213	8559	7832	8059
20°	49004	13068	6791	6791	7537
25°	227481	16670	5202	6242	7041
30°	691524	22636	4102	5722	7090
35°	1168718	26234	3453	5488	6906
40°	1369967	25906	2777	5553	7385
45°	1442754	18358	2326	6016	8001
50°	1373294	11019	2217	6243	8801
55°	1150736	4511	2485	6996	10284
60°	644203	965	2851	8026	11315
65°	111192	571	2802	8924	12868
70°	2052	705	3462	9681	14490
75°	1864	932	4575	10929	16436
80°	1389	1389	5430	12249	19068
85°	0	2768	10819	13586	21637

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1452952 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.0	0.4
10°-20°	14.1	1.2
20°-30°	73.2	6.1
30°-40°	316.1	26.5
40°-50°	450.9	37.8
50°-60°	279.3	23.4
60°-70°	42.5	3.6
70°-80°	8.0	0.7
80°-90°	4.0	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°	92.2	7.7
0°-40°	408.3	34.2
0°-60°	1138.6	95.4
0°-90°	1193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	55	55	55	55	55	
5°	59	58	54	48	47	6
15°	86	54	38	34	36	31
25°	940	69	22	26	29	563
35°	4366	98	13	20	26	2621
45°	4652	59	8	19	26	3515
55°	3010	12	6	18	27	2564
65°	214	1	5	17	25	438
75°	2	1	5	13	19	2
85°	0	1	4	5	9	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°	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
2.5°	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	54.9	53.8
5°	59.2	59.2	58.2	58.2	58.2	58.2	58.2	58.2	56.0	53.8	50.6
7.5°	60.3	60.3	59.2	59.2	59.2	59.2	58.2	57.1	54.9	50.6	47.4
10°	61.4	61.4	61.4	61.4	60.3	59.2	58.2	56.0	52.8	47.4	44.2
12.5°	68.9	68.9	67.8	65.7	63.5	61.4	59.2	54.9	48.5	43.1	39.8
15°	86.2	85.1	82.9	79.7	75.4	70.0	65.7	53.8	44.2	37.7	35.5
17.5°	120.6	118.5	115.2	104.5	94.8	85.1	76.5	53.8	39.8	33.4	31.2
20°	210.0	211.1	188.5	162.6	141.1	117.4	95.8	56.0	35.5	29.1	28.0
22.5°	438.3	421.1	367.2	304.8	232.6	179.8	135.7	61.4	31.2	24.8	24.8
25°	940.2	874.5	744.2	562.2	396.3	281.1	197.1	68.9	28.0	21.5	22.6
27.5°	1716.6	1657.4	1395.7	1051.1	697.9	424.3	267.1	78.6	24.8	18.3	20.5
30°	2731.1	2567.4	2226.0	1723.1	1166.3	649.4	358.6	89.4	20.5	16.2	19.4
31°	3047.7	2972.3	2556.7	1993.4	1366.6	771.1	397.4	92.6	19.4	16.2	18.3
32°	3423.6	3290.0	2917.4	2289.6	1570.2	879.9	443.7	95.8	18.3	14.0	18.3
33°	3759.6	3630.4	3177.0	2550.2	1775.9	1003.7	493.2	96.9	16.2	14.0	17.2
34°	4112.8	3936.2	3487.1	2822.7	1987.0	1137.2	538.5	98.0	15.1	12.9	17.2
35°	4365.9	4189.3	3754.2	3038.0	2169.0	1255.7	590.2	98.0	14.0	12.9	16.2
36°	4561.9	4406.8	3984.7	3259.9	2349.9	1362.3	631.1	98.0	11.8	11.8	16.2
37°	4696.5	4549.0	4139.7	3450.5	2487.7	1457.1	667.7	98.0	10.8	11.8	16.2
38°	4762.2	4639.4	4289.4	3589.4	2621.3	1531.4	696.8	95.8	9.7	10.8	15.1
39°	4790.2	4690.1	4381.0	3706.8	2721.4	1596.0	718.3	93.7	8.6	10.8	15.1
40°	4785.9	4698.7	4432.7	3787.6	2802.2	1640.2	730.2	90.5	7.5	9.7	15.1
41°	4761.1	4685.8	4459.6	3856.5	2850.7	1670.3	733.4	87.2	6.5	9.7	14.0
42°	4733.1	4664.2	4468.2	3893.1	2881.9	1680.0	724.8	82.9	6.5	8.6	14.0
43°	4704.1	4640.5	4468.2	3905.0	2889.4	1673.6	710.8	75.4	5.4	8.6	14.0
44°	4680.4	4620.1	4454.2	3901.7	2873.3	1648.8	684.9	66.8	4.3	8.6	14.0
45°	4652.4	4593.1	4435.9	3881.3	2842.0	1606.8	652.6	59.2	3.2	7.5	14.0
46°	4602.8	4556.5	4403.6	3839.3	2792.5	1548.6	611.7	53.8	2.2	7.5	12.9
47°	4507.0	4467.1	4341.1	3776.8	2726.8	1479.7	569.7	48.5	2.2	7.5	12.9
48°	4314.2	4313.1	4216.2	3660.5	2622.3	1393.6	525.5	43.1	2.2	7.5	12.9
49°	4127.9	4108.5	3987.9	3455.9	2472.6	1290.2	479.2	38.8	1.1	7.5	12.9
50°	4025.6	3983.6	3785.4	3214.7	2281.0	1146.9	429.7	32.3	1.1	6.5	12.9
51°	3919.0	3858.7	3625.0	2997.1	2052.6	1009.1	375.9	25.8	1.1	6.5	11.8
52°	3726.2	3669.1	3407.4	2789.3	1830.8	868.0	324.2	21.5	1.1	6.5	12.9
53°	3518.4	3436.5	3152.2	2561.0	1635.9	743.1	271.4	18.3	1.1	6.5	11.8
54°	3256.7	3220.0	2893.7	2281.0	1407.6	622.5	222.9	15.1	1.1	6.5	11.8
55°	3010.0	2956.2	2617.0	1994.5	1200.8	510.5	186.3	11.8	1.1	6.5	11.8
56°	2695.6	2614.8	2297.1	1731.7	990.8	411.4	157.2	9.7	1.1	6.5	11.8
57°	2320.8	2234.6	1983.7	1439.9	777.5	313.4	131.4	7.5	1.1	6.5	11.8
58°	1963.3	1888.9	1619.7	1111.4	585.9	217.5	108.8	5.4	1.1	5.4	11.8
59°	1696.2	1614.3	1347.2	855.1	407.1	160.5	81.8	4.3	1.1	6.5	11.8
60°	1468.9	1363.4	1084.5	662.3	290.8	115.2	60.3	2.2	2.2	6.5	11.8
62.5°	846.5	747.4	518.0	269.2	119.5	59.2	29.1	1.1	2.2	6.5	11.8
65°	214.3	190.6	123.8	58.2	33.4	20.5	10.8	1.1	2.2	5.4	10.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	7.5	7.5	7.5	6.5	5.4	4.3	2.2	1.1	2.2	5.4	10.8
70°	3.2	3.2	3.2	2.2	2.2	1.1	1.1	1.1	2.2	5.4	9.7
72.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	3.2	5.4	8.6
75°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	3.2	5.4	8.6
77.5°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3	7.5
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3	6.5
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3	5.4
85°	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	3.2	4.3	4.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.2	4.3	3.2
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):

	135°	157.5°	180°
0°	54.9	54.9	54.9
2.5°	51.7	51.7	51.7
5°	48.5	48.5	47.4
7.5°	45.2	44.2	44.2
10°	40.9	40.9	40.9
12.5°	37.7	37.7	37.7
15°	34.5	35.5	35.5
17.5°	31.2	33.4	33.4
20°	29.1	31.2	32.3
22.5°	26.9	29.1	30.2
25°	25.8	28.0	29.1
27.5°	23.7	26.9	29.1
30°	22.6	25.8	28.0
31°	22.6	25.8	26.9
32°	21.5	25.8	26.9
33°	21.5	25.8	26.9
34°	21.5	24.8	26.9
35°	20.5	24.8	25.8
36°	20.5	24.8	25.8
37°	20.5	24.8	26.9
38°	20.5	24.8	25.8
39°	19.4	24.8	25.8
40°	19.4	24.8	25.8
41°	19.4	24.8	25.8
42°	19.4	24.8	25.8
43°	19.4	24.8	25.8
44°	19.4	23.7	25.8
45°	19.4	23.7	25.8
46°	19.4	24.8	25.8
47°	19.4	24.8	26.9
48°	19.4	23.7	25.8
49°	18.3	23.7	25.8
50°	18.3	23.7	25.8
51°	18.3	24.8	26.9
52°	18.3	24.8	26.9
53°	18.3	24.8	26.9
54°	18.3	24.8	25.8
55°	18.3	24.8	26.9
56°	18.3	24.8	25.8
57°	18.3	24.8	25.8
58°	18.3	23.7	25.8
59°	18.3	23.7	25.8
60°	18.3	23.7	25.8
62.5°	17.2	23.7	25.8
65°	17.2	22.6	24.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	16.2	22.6	23.7
70°	15.1	21.5	22.6
72.5°	14.0	20.5	21.5
75°	12.9	18.3	19.4
77.5°	10.8	16.2	18.3
80°	9.7	14.0	15.1
82.5°	7.5	11.8	12.9
85°	5.4	8.6	8.6
87.5°	2.2	4.3	4.3
90°	0.0	0.0	0.0

(END OF REPORT)