

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: P1346077

Luminaire Tested: P3A13R409827DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1346077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R409827DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

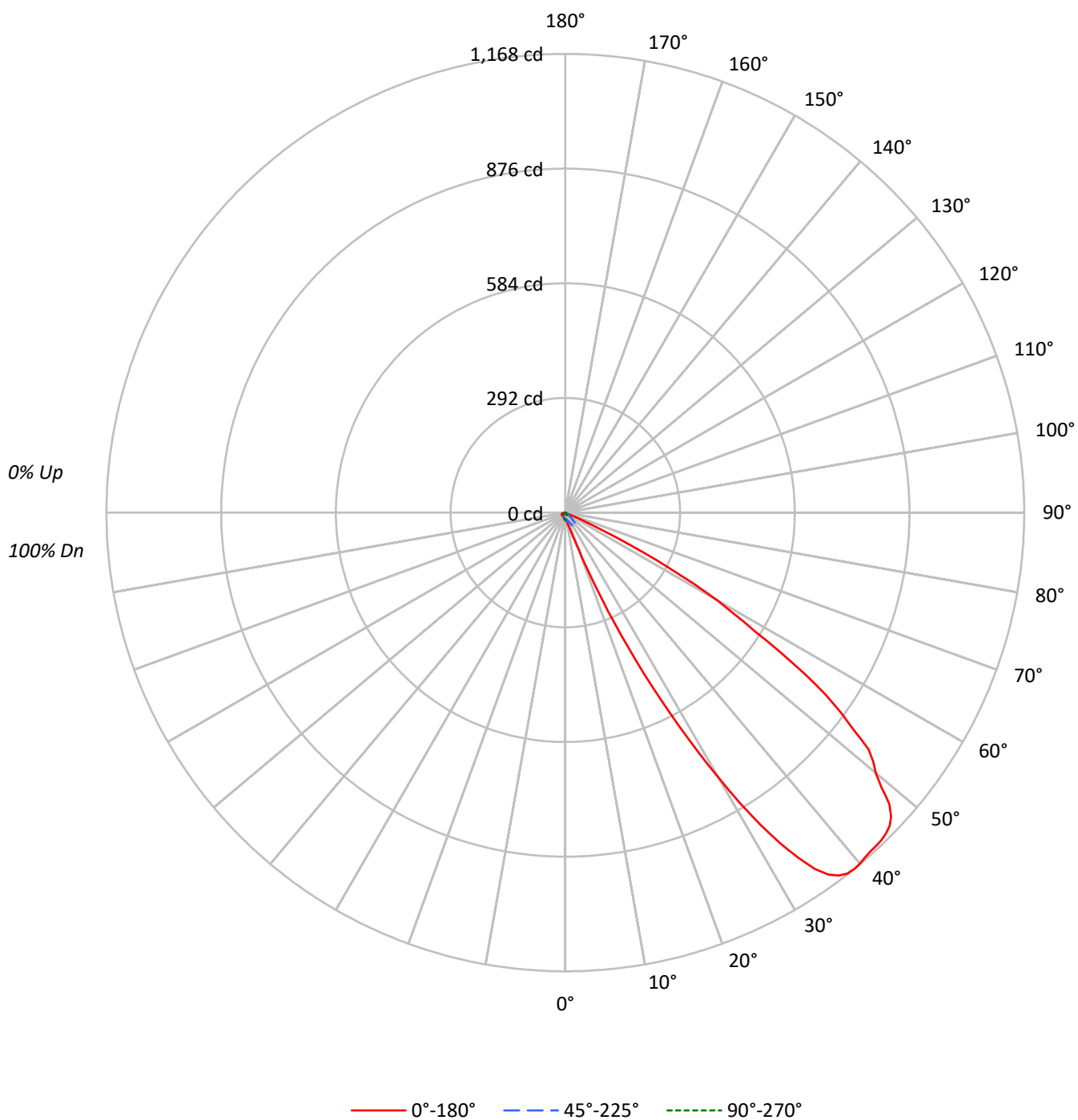
Lumens per Lamp: N/A
Luminaire Lumens: 361.0 lumens
Efficiency: N/A
Efficacy: 24.9 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4079	4079	4079	4079	4079
5°	4534	4380	4006	3654	3566
10°	5455	4654	3696	3318	3251
15°	8967	5040	3156	2929	3019
20°	23662	5951	2637	2637	2870
25°	91288	7379	2081	2395	2807
30°	196942	9824	1671	2355	2760
35°	296416	11618	1419	2302	2838
40°	333940	11679	1231	2376	3034
45°	358084	9055	1116	2481	3287
50°	351954	5663	1023	2593	3616
55°	309628	2791	1032	2906	4052
60°	195993	570	1184	3201	4517
65°	40056	156	1193	3424	4981
70°	833	192	1282	3847	5770
75°	847	593	1440	4236	6439
80°	884	379	1642	4546	7577
85°	755	755	3271	5032	8303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 364547 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.5
10°-20°	5.7	1.6
20°-30°	28.0	7.8
30°-40°	91.2	25.3
40°-50°	125.7	34.8
50°-60°	87.6	24.3
60°-70°	16.6	4.6
70°-80°	3.0	0.8
80°-90°	1.4	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°	35.5	9.8
0°-40°	126.7	35.1
0°-60°	340.0	94.2
0°-90°	361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	361.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	21	20	18	17	16	2
15°	40	22	14	13	13	14
25°	377	30	9	10	12	194
35°	1107	43	5	9	11	669
45°	1155	29	4	8	11	878
55°	810	7	3	8	11	692
65°	77	0	2	7	10	137
75°	1	1	2	5	8	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
2.5°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	18.9	18.6
5°	20.6	20.6	20.6	20.6	20.2	20.2	20.2	19.9	19.9	19.2	18.2
7.5°	21.9	21.9	21.9	21.9	21.5	21.2	20.9	20.9	20.6	18.9	17.6
10°	24.5	24.5	24.2	23.9	23.5	22.9	22.5	21.9	20.9	18.6	16.6
12.5°	29.8	29.2	28.8	28.2	27.2	25.9	24.5	23.5	21.2	17.9	15.6
15°	39.5	38.8	37.5	35.5	33.5	30.8	28.5	26.2	22.2	16.9	13.9
17.5°	56.4	54.4	52.4	49.1	44.1	39.5	34.5	30.2	23.5	15.9	12.6
20°	101.4	100.1	88.2	78.9	64.0	53.4	43.4	36.1	25.5	14.9	11.3
22.5°	209.2	195.3	175.7	143.9	112.1	82.6	60.0	45.4	27.5	13.6	9.9
25°	377.3	355.4	313.3	252.0	186.0	131.6	86.9	59.3	30.5	12.3	8.6
27.5°	571.2	549.0	483.7	399.2	291.4	198.6	124.0	78.6	34.5	10.9	7.6
30°	777.8	758.9	676.0	559.0	410.8	278.2	166.1	98.1	38.8	9.6	6.6
31°	861.0	836.8	747.3	622.6	466.8	311.0	183.0	106.4	40.4	9.3	6.3
32°	937.6	910.0	817.2	683.6	512.2	346.4	201.6	113.7	41.8	8.6	6.0
33°	1003.5	971.4	881.9	741.3	562.3	379.6	220.8	120.7	42.8	8.0	5.6
34°	1059.6	1031.7	935.6	799.3	606.7	411.4	239.7	127.6	43.4	7.6	5.3
35°	1107.3	1082.1	987.0	843.4	650.1	442.3	256.9	134.3	43.4	7.0	5.3
36°	1139.5	1117.6	1031.4	888.5	686.6	468.4	271.5	140.2	43.4	6.3	5.0
37°	1157.0	1135.8	1060.6	925.6	722.4	494.3	284.8	144.9	43.1	6.0	4.6
38°	1166.0	1147.4	1082.1	955.8	747.3	512.9	296.4	148.5	42.8	5.3	4.6
39°	1168.3	1152.7	1095.7	977.7	771.5	531.4	304.7	150.5	41.8	5.0	4.3
40°	1166.6	1153.1	1103.0	997.2	790.0	546.0	310.6	151.2	40.8	4.3	4.3
41°	1163.3	1152.7	1108.3	1010.8	805.0	555.3	313.0	149.9	39.5	3.6	4.0
42°	1160.3	1148.7	1110.6	1020.1	815.2	560.0	312.6	147.2	37.5	3.3	4.0
43°	1160.3	1147.1	1111.0	1026.1	820.2	560.3	308.7	142.2	34.8	3.0	3.6
44°	1158.4	1146.1	1112.6	1030.1	821.5	557.3	302.4	136.9	31.8	2.7	3.6
45°	1154.7	1141.8	1112.3	1030.4	819.2	550.0	292.1	130.0	29.2	2.0	3.6
46°	1147.8	1136.1	1109.3	1028.1	812.2	539.4	279.8	123.0	26.2	1.7	3.3
47°	1133.8	1124.9	1101.3	1020.1	801.6	523.8	265.2	115.0	23.9	1.3	3.3
48°	1110.0	1103.7	1087.7	1002.5	781.4	504.6	249.6	106.4	21.5	1.3	3.3
49°	1066.2	1061.2	1051.9	974.4	755.6	481.0	232.7	96.8	19.2	1.0	3.3
50°	1031.7	1026.4	1007.5	927.0	718.4	451.2	214.2	87.2	16.6	0.7	3.0
51°	1008.8	1000.2	970.4	871.9	664.4	411.4	193.9	77.6	13.9	0.7	3.0
52°	980.0	967.1	929.9	822.5	615.0	371.6	172.1	68.0	12.3	0.7	3.0
53°	919.7	915.0	878.2	769.5	565.6	333.5	149.5	60.0	10.6	0.7	3.0
54°	866.9	860.0	809.9	695.9	511.9	291.1	126.3	53.0	9.0	0.7	3.0
55°	809.9	796.3	751.9	633.9	448.9	252.0	104.1	45.8	7.3	0.7	2.7
56°	738.0	726.0	678.3	567.6	390.9	212.2	87.2	37.5	5.6	0.7	2.7
57°	650.5	639.5	602.7	486.0	330.5	173.4	70.9	30.2	4.3	0.7	2.7
58°	565.9	553.7	511.5	407.8	266.9	137.6	59.3	24.5	3.3	0.7	2.7
59°	500.9	484.4	430.0	342.5	208.9	104.4	47.1	19.6	2.3	0.7	2.7
60°	446.9	433.3	376.9	285.1	163.8	76.9	34.8	14.9	1.3	0.7	2.7
62.5°	258.9	255.3	204.6	146.9	77.2	35.8	17.2	7.0	0.7	1.0	2.7
65°	77.2	67.3	52.4	31.2	19.9	11.9	6.3	2.3	0.3	1.0	2.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.3	2.3	2.3	2.3	2.3	2.3	1.3	0.7	0.3	1.0	2.3
70°	1.3	1.0	1.0	1.0	1.0	0.7	0.7	0.3	0.3	1.0	2.0
72.5°	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.7	1.0	1.7
75°	1.0	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.7	1.0	1.7
77.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.7	1.0	1.7
80°	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.0	1.0
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):

	112.5°	135°	157.5°	180°
0°	18.6	18.6	18.6	18.6
2.5°	17.9	17.6	17.2	17.2
5°	17.2	16.6	16.6	16.2
7.5°	16.2	15.6	15.6	15.6
10°	15.3	14.9	14.9	14.6
12.5°	13.9	13.9	13.9	13.9
15°	12.9	12.9	13.3	13.3
17.5°	11.6	11.9	12.6	12.9
20°	10.6	11.3	11.9	12.3
22.5°	9.9	10.6	11.6	11.9
25°	9.0	9.9	11.3	11.6
27.5°	8.3	9.6	10.6	11.3
30°	7.6	9.3	10.3	10.9
31°	7.6	9.0	10.3	10.9
32°	7.3	8.6	10.3	10.6
33°	7.3	8.6	10.3	10.6
34°	7.0	8.6	9.9	10.6
35°	7.0	8.6	9.9	10.6
36°	6.6	8.3	9.9	10.6
37°	6.6	8.3	9.9	10.6
38°	6.3	8.3	9.9	10.6
39°	6.3	8.3	9.9	10.6
40°	6.3	8.3	9.9	10.6
41°	6.0	8.3	9.9	10.6
42°	6.0	8.3	9.9	10.6
43°	6.0	8.0	9.9	10.6
44°	6.0	8.0	9.9	10.6
45°	5.6	8.0	9.9	10.6
46°	5.6	8.0	9.9	10.6
47°	5.6	8.0	9.9	10.6
48°	5.6	8.0	9.9	10.6
49°	5.6	8.0	9.9	10.6
50°	5.3	7.6	9.9	10.6
51°	5.3	7.6	9.9	10.6
52°	5.3	7.6	9.9	10.6
53°	5.3	7.6	9.9	10.6
54°	5.0	7.6	9.9	10.6
55°	5.0	7.6	9.9	10.6
56°	5.0	7.6	9.9	10.3
57°	5.0	7.6	9.6	10.3
58°	5.0	7.3	9.6	10.3
59°	5.0	7.3	9.6	10.3
60°	5.0	7.3	9.6	10.3
62.5°	4.6	7.3	9.3	9.9
65°	4.3	6.6	9.3	9.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	4.3	6.3	8.6	9.3
70°	4.0	6.0	8.3	9.0
72.5°	3.3	5.6	7.6	8.3
75°	3.0	5.0	7.0	7.6
77.5°	2.7	4.3	6.3	6.6
80°	2.3	3.6	5.3	6.0
82.5°	1.7	2.7	4.3	4.6
85°	1.3	2.0	3.0	3.3
87.5°	1.0	1.0	1.7	1.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)