

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: P1342067

Luminaire Tested: P3A09R359840DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342067
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: P3A09R359840DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 98CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

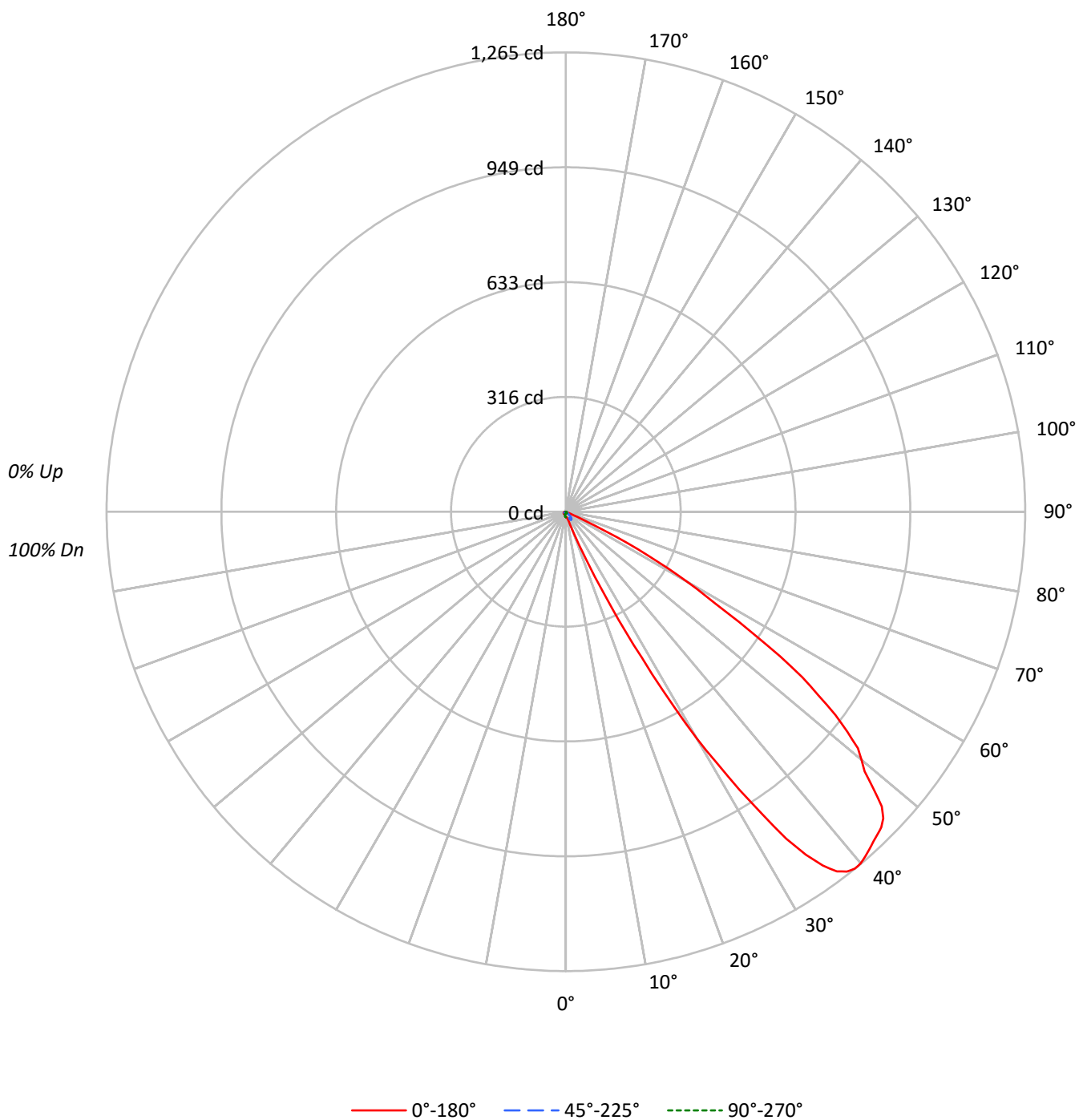
Lumens per Lamp: N/A
Luminaire Lumens: 315.0 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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	107	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	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38	31	26	24
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34	27	22	20
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3180	3180	3180	3180	3180
5°	3434	3390	3126	2818	2751
10°	3607	3295	2783	2405	2405
15°	5153	3224	2270	2066	2134
20°	12928	3454	1797	1797	1984
25°	60052	4403	1379	1645	1863
30°	182585	5976	1089	1519	1874
35°	308596	6933	910	1446	1820
40°	361735	6841	744	1460	1947
45°	380939	4838	620	1582	2109
50°	362598	2900	580	1637	2320
55°	303855	1185	650	1835	2714
60°	170118	263	746	2105	2982
65°	29368	156	726	2335	3373
70°	577	192	898	2565	3847
75°	508	254	1186	2881	4321
80°	379	379	1389	3283	5051
85°	0	755	2768	3522	5787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 383630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.4
10°-20°	3.7	1.2
20°-30°	19.3	6.1
30°-40°	83.5	26.5
40°-50°	119.1	37.8
50°-60°	73.7	23.4
60°-70°	11.2	3.6
70°-80°	2.1	0.7
80°-90°	1.1	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°	24.3	7.7
0°-40°	107.8	34.2
0°-60°	300.6	95.4
0°-90°	315.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	315.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	16	15	14	13	12	2
15°	23	14	10	9	9	8
25°	248	18	6	7	8	149
35°	1153	26	3	5	7	692
45°	1228	16	2	5	7	928
55°	795	3	2	5	7	677
65°	57	0	1	4	6	116
75°	1	0	1	3	5	1
85°	0	0	1	1	2	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°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	14.5	14.2
5°	15.6	15.6	15.4	15.4	15.4	15.4	15.4	15.4	14.8	14.2	13.4
7.5°	15.9	15.9	15.6	15.6	15.6	15.6	15.4	15.1	14.5	13.4	12.5
10°	16.2	16.2	16.2	16.2	15.9	15.6	15.4	14.8	13.9	12.5	11.7
12.5°	18.2	18.2	17.9	17.3	16.8	16.2	15.6	14.5	12.8	11.4	10.5
15°	22.7	22.5	21.9	21.0	19.9	18.5	17.3	14.2	11.7	10.0	9.4
17.5°	31.8	31.3	30.4	27.6	25.0	22.5	20.2	14.2	10.5	8.8	8.2
20°	55.4	55.7	49.8	42.9	37.3	31.0	25.3	14.8	9.4	7.7	7.4
22.5°	115.7	111.2	97.0	80.5	61.4	47.5	35.8	16.2	8.2	6.5	6.5
25°	248.2	230.9	196.5	148.4	104.6	74.2	52.0	18.2	7.4	5.7	6.0
27.5°	453.3	437.6	368.5	277.5	184.3	112.0	70.5	20.8	6.5	4.8	5.4
30°	721.1	677.9	587.8	455.0	308.0	171.5	94.7	23.6	5.4	4.3	5.1
31°	804.7	784.8	675.1	526.3	360.8	203.6	104.9	24.5	5.1	4.3	4.8
32°	904.0	868.7	770.3	604.5	414.6	232.3	117.2	25.3	4.8	3.7	4.8
33°	992.7	958.6	838.8	673.4	468.9	265.0	130.2	25.6	4.3	3.7	4.5
34°	1086.0	1039.3	920.7	745.3	524.6	300.3	142.2	25.9	4.0	3.4	4.5
35°	1152.8	1106.1	991.3	802.2	572.7	331.6	155.8	25.9	3.7	3.4	4.3
36°	1204.5	1163.6	1052.1	860.7	620.5	359.7	166.6	25.9	3.1	3.1	4.3
37°	1240.1	1201.1	1093.1	911.1	656.9	384.7	176.3	25.9	2.8	3.1	4.3
38°	1257.4	1225.0	1132.6	947.8	692.1	404.4	184.0	25.3	2.6	2.8	4.0
39°	1264.8	1238.4	1156.8	978.7	718.6	421.4	189.7	24.7	2.3	2.8	4.0
40°	1263.7	1240.6	1170.4	1000.1	739.9	433.1	192.8	23.9	2.0	2.6	4.0
41°	1257.1	1237.2	1177.5	1018.3	752.7	441.0	193.6	23.0	1.7	2.6	3.7
42°	1249.7	1231.5	1179.8	1027.9	760.9	443.6	191.4	21.9	1.7	2.3	3.7
43°	1242.1	1225.3	1179.8	1031.1	762.9	441.9	187.7	19.9	1.4	2.3	3.7
44°	1235.8	1219.9	1176.1	1030.2	758.7	435.3	180.8	17.6	1.1	2.3	3.7
45°	1228.4	1212.8	1171.3	1024.8	750.4	424.3	172.3	15.6	0.9	2.0	3.7
46°	1215.3	1203.1	1162.7	1013.7	737.3	408.9	161.5	14.2	0.6	2.0	3.4
47°	1190.0	1179.5	1146.2	997.2	720.0	390.7	150.4	12.8	0.6	2.0	3.4
48°	1139.1	1138.8	1113.2	966.5	692.4	368.0	138.8	11.4	0.6	2.0	3.4
49°	1089.9	1084.8	1053.0	912.5	652.9	340.7	126.5	10.2	0.3	2.0	3.4
50°	1062.9	1051.8	999.5	848.8	602.3	302.8	113.5	8.5	0.3	1.7	3.4
51°	1034.8	1018.8	957.1	791.4	542.0	266.4	99.2	6.8	0.3	1.7	3.1
52°	983.9	968.8	899.7	736.5	483.4	229.2	85.6	5.7	0.3	1.7	3.4
53°	929.0	907.4	832.3	676.2	431.9	196.2	71.7	4.8	0.3	1.7	3.1
54°	859.9	850.2	764.1	602.3	371.7	164.4	58.9	4.0	0.3	1.7	3.1
55°	794.8	780.6	691.0	526.6	317.1	134.8	49.2	3.1	0.3	1.7	3.1
56°	711.7	690.4	606.5	457.2	261.6	108.6	41.5	2.6	0.3	1.7	3.1
57°	612.8	590.0	523.8	380.2	205.3	82.7	34.7	2.0	0.3	1.7	3.1
58°	518.4	498.8	427.7	293.5	154.7	57.4	28.7	1.4	0.3	1.4	3.1
59°	447.9	426.2	355.7	225.8	107.5	42.4	21.6	1.1	0.3	1.7	3.1
60°	387.9	360.0	286.3	174.9	76.8	30.4	15.9	0.6	0.6	1.7	3.1
62.5°	223.5	197.3	136.8	71.1	31.6	15.6	7.7	0.3	0.6	1.7	3.1
65°	56.6	50.3	32.7	15.4	8.8	5.4	2.8	0.3	0.6	1.4	2.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	2.0	2.0	2.0	1.7	1.4	1.1	0.6	0.3	0.6	1.4	2.8
70°	0.9	0.9	0.9	0.6	0.6	0.3	0.3	0.3	0.6	1.4	2.6
72.5°	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.9	1.4	2.3
75°	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.9	1.4	2.3
77.5°	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.9	1.1	2.0
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.9	1.1	1.7
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.9	1.1	1.4
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.9	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.1	0.9
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°	14.5	14.5	14.5
2.5°	13.6	13.6	13.6
5°	12.8	12.8	12.5
7.5°	11.9	11.7	11.7
10°	10.8	10.8	10.8
12.5°	10.0	10.0	10.0
15°	9.1	9.4	9.4
17.5°	8.2	8.8	8.8
20°	7.7	8.2	8.5
22.5°	7.1	7.7	8.0
25°	6.8	7.4	7.7
27.5°	6.3	7.1	7.7
30°	6.0	6.8	7.4
31°	6.0	6.8	7.1
32°	5.7	6.8	7.1
33°	5.7	6.8	7.1
34°	5.7	6.5	7.1
35°	5.4	6.5	6.8
36°	5.4	6.5	6.8
37°	5.4	6.5	7.1
38°	5.4	6.5	6.8
39°	5.1	6.5	6.8
40°	5.1	6.5	6.8
41°	5.1	6.5	6.8
42°	5.1	6.5	6.8
43°	5.1	6.5	6.8
44°	5.1	6.3	6.8
45°	5.1	6.3	6.8
46°	5.1	6.5	6.8
47°	5.1	6.5	7.1
48°	5.1	6.3	6.8
49°	4.8	6.3	6.8
50°	4.8	6.3	6.8
51°	4.8	6.5	7.1
52°	4.8	6.5	7.1
53°	4.8	6.5	7.1
54°	4.8	6.5	6.8
55°	4.8	6.5	7.1
56°	4.8	6.5	6.8
57°	4.8	6.5	6.8
58°	4.8	6.3	6.8
59°	4.8	6.3	6.8
60°	4.8	6.3	6.8
62.5°	4.5	6.3	6.8
65°	4.5	6.0	6.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	4.3	6.0	6.3
70°	4.0	5.7	6.0
72.5°	3.7	5.4	5.7
75°	3.4	4.8	5.1
77.5°	2.8	4.3	4.8
80°	2.6	3.7	4.0
82.5°	2.0	3.1	3.4
85°	1.4	2.3	2.3
87.5°	0.6	1.1	1.1
90°	0.0	0.0	0.0

(END OF REPORT)