

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: P1341020

Luminaire Tested: P3A09R259830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R259830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

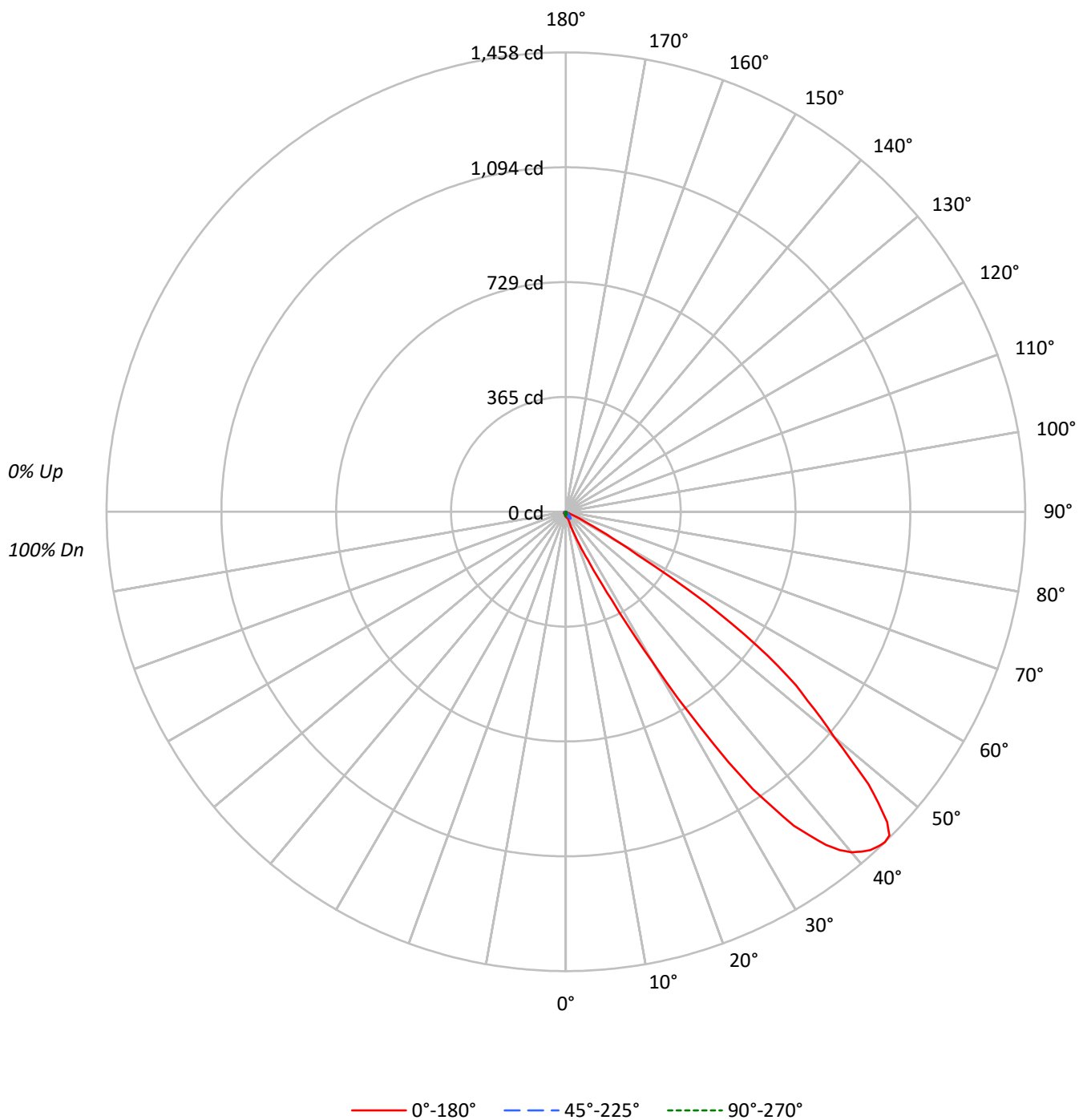
Lumens per Lamp: N/A
Luminaire Lumens: 304.0 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

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	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	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3399	3399	3399	3399	3399
5°	3896	3720	3302	2950	2884
10°	3874	3518	2806	2449	2449
15°	4313	3042	2179	2066	2179
20°	15238	2987	1680	1750	1937
25°	43817	3823	1355	1621	1887
30°	139794	5900	1089	1570	1899
35°	306213	6933	937	1499	1927
40°	403928	6269	773	1546	2061
45°	450465	4404	744	1675	2233
50°	379177	2286	716	1740	2456
55°	283479	918	726	1950	2753
60°	87756	219	702	2105	3070
65°	7472	0	830	2231	3321
70°	513	192	833	2565	3783
75°	424	254	1101	2711	4321
80°	379	379	1642	3031	5051
85°	755	755	2768	3271	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 450465 cd/sqm

TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.5
10°-20°	3.6	1.2
20°-30°	16.8	5.5
30°-40°	81.0	26.6
40°-50°	126.9	41.8
50°-60°	65.1	21.4
60°-70°	6.1	2.0
70°-80°	2.1	0.7
80°-90°	1.0	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°	21.8	7.2
0°-40°	102.8	33.8
0°-60°	294.8	97.0
0°-90°	304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	304.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	18	17	15	13	13	2
15°	19	13	10	9	10	8
25°	181	16	6	7	8	112
35°	1144	26	4	6	7	694
45°	1453	14	2	5	7	1063
55°	742	2	2	5	7	617
65°	14	0	2	4	6	45
75°	0	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
2.5°	16.9	16.9	16.9	16.9	16.9	16.9	16.6	16.6	16.9	16.6	16.6
5°	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.4	17.4	17.4	16.9
7.5°	17.9	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.4	17.4	16.6
10°	17.4	17.4	17.4	17.4	17.1	17.1	17.1	16.9	16.9	16.9	15.8
12.5°	17.4	17.4	17.4	17.4	17.1	17.1	16.9	16.9	16.6	16.3	14.4
15°	19.0	19.0	19.0	18.7	18.5	18.2	17.9	17.7	17.4	16.9	13.4
17.5°	27.8	27.0	26.8	25.7	24.3	23.0	21.9	20.9	19.8	19.0	12.8
20°	65.3	65.0	63.7	60.5	57.0	53.0	49.0	44.4	38.0	33.7	12.8
22.5°	113.2	111.6	109.1	106.7	100.6	93.4	85.9	77.3	69.0	60.2	13.6
25°	181.1	184.9	176.8	170.4	159.7	146.6	132.4	120.6	105.7	91.8	15.8
27.5°	314.9	317.3	301.5	280.6	255.7	228.2	201.4	181.4	156.2	133.2	19.8
30°	552.1	554.6	528.1	483.7	432.3	387.1	325.8	272.1	222.6	184.3	23.3
31°	689.1	670.4	639.6	596.6	531.5	463.3	389.8	324.8	262.2	211.9	24.3
32°	808.2	806.6	770.7	705.4	640.2	555.9	464.7	379.9	303.1	239.7	25.1
33°	948.6	937.9	887.3	825.8	739.4	654.6	536.9	440.1	345.1	270.7	25.7
34°	1061.2	1032.3	1011.5	941.1	849.9	741.8	615.8	503.7	397.5	300.7	25.9
35°	1143.9	1137.7	1097.1	1031.5	938.7	828.2	700.9	569.8	441.4	335.5	25.9
36°	1231.4	1212.4	1172.8	1113.4	1023.0	908.7	765.9	627.1	492.5	366.8	25.7
37°	1286.2	1275.0	1235.6	1174.4	1085.8	976.7	838.7	687.5	533.2	398.1	25.1
38°	1342.6	1319.9	1281.1	1222.5	1135.6	1033.1	891.4	734.1	570.6	425.6	24.3
39°	1381.7	1358.2	1318.6	1260.3	1175.2	1073.5	933.1	773.6	603.2	446.2	23.3
40°	1411.1	1388.4	1348.3	1288.3	1204.3	1105.4	967.9	808.7	630.5	464.1	21.9
41°	1429.3	1408.2	1368.3	1308.7	1224.4	1123.6	990.6	831.4	649.0	476.2	20.6
42°	1444.6	1422.9	1382.2	1321.2	1236.7	1139.1	1004.5	845.9	661.6	482.3	19.5
43°	1453.1	1431.5	1391.9	1329.5	1244.2	1146.3	1012.0	852.6	665.8	481.5	17.7
44°	1457.9	1435.5	1395.6	1333.3	1247.4	1148.2	1012.5	851.2	662.9	475.1	16.1
45°	1452.6	1430.4	1391.9	1329.5	1241.8	1142.3	1007.2	844.0	651.7	462.5	14.2
46°	1417.8	1400.7	1365.4	1308.1	1224.1	1127.3	993.5	830.1	634.3	447.0	12.0
47°	1356.6	1342.9	1308.7	1266.1	1190.2	1099.7	968.4	803.6	609.9	423.7	9.6
48°	1292.6	1272.6	1240.7	1197.1	1132.9	1050.3	926.9	764.8	573.0	393.2	8.6
49°	1198.2	1186.4	1158.3	1109.6	1056.4	983.6	868.3	715.1	527.8	360.1	7.5
50°	1111.5	1103.5	1064.2	1028.3	971.9	903.9	788.9	649.5	471.6	318.9	6.7
51°	1043.8	1034.2	1005.8	961.2	901.0	822.1	713.7	564.5	407.2	269.9	5.4
52°	973.2	967.9	942.7	896.7	837.6	758.9	640.7	492.2	344.6	228.2	4.3
53°	915.4	907.7	876.9	836.0	772.0	690.7	561.5	425.1	291.9	191.8	3.7
54°	831.2	828.0	808.2	765.4	696.1	607.5	489.8	357.9	243.4	162.6	3.2
55°	741.5	730.8	710.8	676.8	613.1	530.5	406.9	296.7	196.9	137.0	2.4
56°	632.4	631.9	596.0	567.7	511.2	423.5	325.0	231.7	160.0	114.2	2.1
57°	528.1	511.2	476.7	448.6	387.9	321.3	241.3	173.6	125.2	92.6	1.6
58°	390.6	381.7	372.6	331.4	275.3	227.7	172.3	122.0	92.6	70.6	1.1
59°	265.1	264.8	254.1	222.8	190.5	141.8	107.5	82.9	63.7	51.9	0.8
60°	200.1	195.3	173.9	153.3	119.8	89.6	63.7	49.0	39.6	33.4	0.5
62.5°	70.1	72.8	63.9	53.0	40.4	33.2	25.4	20.6	16.9	13.6	0.0
65°	14.4	15.8	13.6	12.8	10.2	8.8	7.8	6.7	5.6	4.8	0.0



TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.9	1.6	1.6	1.6	1.3	1.3	1.3	1.3	1.1	1.1	0.3
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.3
72.5°	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
85°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	15.5	15.5	15.5	15.5	15.5	15.5
2.5°	16.3	15.8	15.0	14.7	14.4	14.4
5°	16.1	15.0	14.2	13.4	13.1	13.1
7.5°	15.2	13.9	12.8	12.3	12.0	11.8
10°	14.4	12.6	11.5	11.0	11.0	11.0
12.5°	12.8	11.2	10.2	9.9	10.2	10.2
15°	11.5	9.6	9.1	9.1	9.4	9.6
17.5°	9.9	8.6	8.0	8.3	8.6	8.8
20°	8.8	7.2	7.2	7.5	8.3	8.3
22.5°	7.8	6.4	6.4	7.2	7.8	8.0
25°	7.0	5.6	5.9	6.7	7.5	7.8
27.5°	5.9	4.8	5.4	6.4	7.2	7.5
30°	5.1	4.3	5.1	6.2	7.0	7.5
31°	4.8	4.0	5.1	5.9	7.0	7.5
32°	4.3	4.0	4.8	5.9	7.0	7.2
33°	4.0	3.7	4.8	5.9	7.0	7.2
34°	3.7	3.5	4.5	5.9	7.0	7.2
35°	3.2	3.5	4.5	5.6	6.7	7.2
36°	2.9	3.2	4.5	5.6	6.7	7.2
37°	2.7	3.2	4.3	5.6	6.7	7.2
38°	2.4	2.9	4.3	5.6	6.7	7.2
39°	2.1	2.9	4.0	5.6	6.7	7.2
40°	1.9	2.7	4.0	5.4	6.7	7.2
41°	1.9	2.7	4.0	5.4	6.7	7.2
42°	1.6	2.7	4.0	5.4	6.7	7.2
43°	1.3	2.4	4.0	5.4	6.7	7.2
44°	1.1	2.4	3.7	5.4	6.7	7.2
45°	1.1	2.4	3.7	5.4	6.7	7.2
46°	0.8	2.1	3.7	5.4	6.7	7.2
47°	0.5	2.1	3.7	5.1	6.7	7.2
48°	0.5	2.1	3.7	5.1	6.7	7.2
49°	0.5	2.1	3.5	5.1	6.7	7.2
50°	0.5	2.1	3.5	5.1	6.7	7.2
51°	0.3	1.9	3.5	5.1	6.7	7.2
52°	0.3	1.9	3.5	5.1	6.7	7.5
53°	0.3	1.9	3.5	5.1	6.7	7.2
54°	0.3	1.9	3.2	5.1	6.7	7.2
55°	0.3	1.9	3.2	5.1	6.7	7.2
56°	0.3	1.6	3.2	4.8	6.7	7.2
57°	0.5	1.6	3.2	4.8	6.7	7.0
58°	0.5	1.6	3.2	4.8	6.4	7.0
59°	0.5	1.6	3.2	4.8	6.4	7.0
60°	0.5	1.6	2.9	4.8	6.4	7.0
62.5°	0.5	1.6	2.9	4.5	6.2	6.7
65°	0.5	1.6	2.7	4.3	6.2	6.4



TEST NUMBER: P1341020

CATALOG NUMBER: P3A09R259830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.3	2.7	4.0	5.9	6.2
70°	0.8	1.3	2.4	4.0	5.6	5.9
72.5°	0.8	1.3	2.4	3.5	5.1	5.6
75°	0.8	1.3	2.1	3.2	4.8	5.1
77.5°	0.8	1.3	1.9	2.9	4.3	4.5
80°	1.1	1.3	1.6	2.4	3.7	4.0
82.5°	1.1	1.3	1.3	1.9	2.9	3.2
85°	0.8	1.1	1.1	1.3	1.9	2.1
87.5°	0.8	1.1	0.8	0.5	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)