

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: P1334686

Luminaire Tested: P3A02R259035DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334686
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: P3A02R259035DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

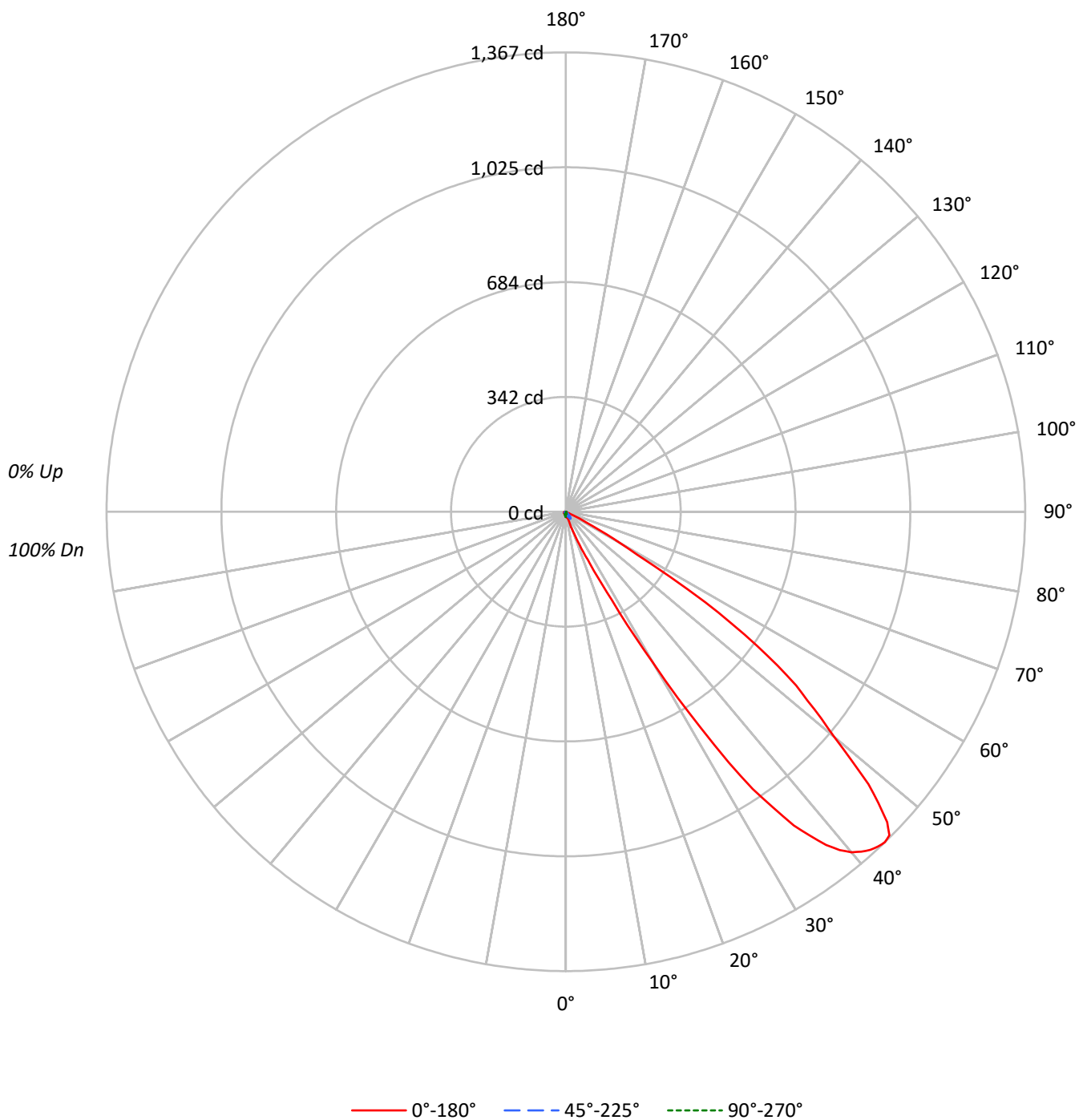
Lumens per Lamp: N/A
Luminaire Lumens: 285.1 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	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°	3180	3180	3180	3180	3180
5°	3654	3478	3082	2751	2707
10°	3629	3295	2627	2293	2293
15°	4041	2838	2043	1930	2043
20°	14281	2800	1587	1633	1820
25°	41083	3581	1282	1524	1766
30°	131058	5520	1013	1469	1772
35°	287073	6505	883	1419	1820
40°	378681	5897	716	1431	1947
45°	422307	4124	713	1551	2109
50°	355468	2149	682	1637	2320
55°	265778	879	688	1835	2600
60°	82274	219	658	1974	2851
65°	7005	0	778	2075	3113
70°	513	192	833	2436	3526
75°	424	254	1101	2542	4067
80°	379	379	1642	2904	4799
85°	755	755	2516	3271	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 422307 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.5
10°-20°	3.4	1.2
20°-30°	15.8	5.5
30°-40°	75.9	26.6
40°-50°	119.0	41.7
50°-60°	61.0	21.4
60°-70°	5.8	2.0
70°-80°	2.0	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°	20.4	7.2
0°-40°	96.3	33.8
0°-60°	276.4	96.9
0°-90°	285.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	285.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	17	16	14	12	12	2
15°	18	12	9	8	9	8
25°	170	15	5	6	7	105
35°	1072	24	3	5	7	651
45°	1362	13	2	5	7	996
55°	695	2	2	5	7	579
65°	14	0	2	4	6	42
75°	0	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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
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°	15.8	15.8	15.8	15.8	15.8	15.8	15.5	15.5	15.8	15.5	15.5
5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.3	16.3	16.3	15.8
7.5°	16.8	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.3	16.3	15.5
10°	16.3	16.3	16.3	16.3	16.1	16.1	16.1	15.8	15.8	15.8	14.8
12.5°	16.3	16.3	16.3	16.3	16.1	16.1	15.8	15.8	15.5	15.3	13.5
15°	17.8	17.8	17.8	17.6	17.3	17.1	16.8	16.6	16.3	15.8	12.5
17.5°	26.1	25.3	25.1	24.1	22.8	21.6	20.6	19.6	18.6	17.8	12.0
20°	61.2	60.9	59.7	56.7	53.4	49.7	45.9	41.6	35.6	31.6	12.0
22.5°	106.1	104.6	102.3	100.1	94.3	87.5	80.5	72.5	64.7	56.4	12.8
25°	169.8	173.3	165.8	159.8	149.7	137.4	124.1	113.1	99.1	86.0	14.8
27.5°	295.2	297.4	282.6	263.1	239.8	213.9	188.8	170.0	146.5	124.9	18.6
30°	517.6	519.9	495.1	453.4	405.3	362.9	305.5	255.1	208.7	172.8	21.8
31°	646.0	628.5	599.6	559.3	498.3	434.4	365.4	304.5	245.8	198.6	22.8
32°	757.6	756.1	722.5	661.3	600.1	521.1	435.6	356.1	284.1	224.7	23.6
33°	889.3	879.3	831.9	774.2	693.2	613.7	503.3	412.6	323.5	253.8	24.1
34°	994.9	967.8	948.2	882.3	796.8	695.4	577.3	472.2	372.7	281.9	24.3
35°	1072.4	1066.6	1028.5	967.1	880.0	776.5	657.1	534.2	413.8	314.5	24.3
36°	1154.4	1136.6	1099.5	1043.8	959.0	851.9	718.0	587.9	461.7	343.8	24.1
37°	1205.8	1195.3	1158.4	1101.0	1018.0	915.6	786.2	644.5	499.8	373.2	23.6
38°	1258.7	1237.4	1201.0	1146.1	1064.6	968.6	835.6	688.2	534.9	399.0	22.8
39°	1295.3	1273.3	1236.2	1181.5	1101.7	1006.4	874.8	725.3	565.5	418.3	21.8
40°	1322.9	1301.6	1264.0	1207.8	1129.1	1036.3	907.4	758.1	591.1	435.1	20.6
41°	1340.0	1320.2	1282.8	1226.9	1147.9	1053.3	928.7	779.5	608.4	446.4	19.3
42°	1354.3	1334.0	1295.8	1238.7	1159.4	1067.9	941.7	793.0	620.2	452.2	18.3
43°	1362.3	1342.0	1304.9	1246.4	1166.4	1074.6	948.8	799.3	624.2	451.4	16.6
44°	1366.8	1345.8	1308.4	1250.0	1169.4	1076.4	949.3	798.0	621.5	445.4	15.0
45°	1361.8	1341.0	1304.9	1246.4	1164.2	1070.9	944.2	791.3	610.9	433.6	13.3
46°	1329.2	1313.2	1280.0	1226.4	1147.6	1056.8	931.4	778.2	594.6	419.1	11.3
47°	1271.8	1259.0	1226.9	1187.0	1115.8	1031.0	907.9	753.4	571.8	397.3	9.0
48°	1211.8	1193.0	1163.2	1122.3	1062.1	984.6	869.0	717.0	537.2	368.7	8.0
49°	1123.3	1112.3	1085.9	1040.3	990.4	922.2	814.1	670.4	494.8	337.6	7.0
50°	1042.0	1034.5	997.7	964.0	911.1	847.4	739.6	608.9	442.1	298.9	6.3
51°	978.6	969.6	943.0	901.1	844.7	770.7	669.1	529.2	381.7	253.1	5.0
52°	912.4	907.4	883.8	840.7	785.2	711.5	600.6	461.5	323.0	213.9	4.0
53°	858.2	850.9	822.1	783.7	723.8	647.5	526.4	398.5	273.6	179.8	3.5
54°	779.2	776.2	757.6	717.5	652.6	569.6	459.2	335.6	228.2	152.5	3.0
55°	695.2	685.2	666.4	634.5	574.8	497.3	381.5	278.1	184.6	128.4	2.3
56°	592.9	592.4	558.8	532.2	479.3	397.0	304.7	217.2	150.0	107.1	2.0
57°	495.1	479.3	446.9	420.6	363.7	301.2	226.2	162.8	117.4	86.8	1.5
58°	366.2	357.9	349.4	310.7	258.1	213.4	161.5	114.4	86.8	66.2	1.0
59°	248.5	248.3	238.3	208.9	178.6	132.9	100.8	77.7	59.7	48.7	0.8
60°	187.6	183.1	163.0	143.7	112.4	84.0	59.7	45.9	37.1	31.3	0.5
62.5°	65.7	68.2	59.9	49.7	37.9	31.1	23.8	19.3	15.8	12.8	0.0
65°	13.5	14.8	12.8	12.0	9.5	8.3	7.3	6.3	5.3	4.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.8	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.0	1.0	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

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.3	14.8	14.0	13.8	13.5	13.5
5°	15.0	14.0	13.3	12.5	12.3	12.3
7.5°	14.3	13.0	12.0	11.5	11.3	11.0
10°	13.5	11.8	10.8	10.3	10.3	10.3
12.5°	12.0	10.5	9.5	9.3	9.5	9.5
15°	10.8	9.0	8.5	8.5	8.8	9.0
17.5°	9.3	8.0	7.5	7.8	8.0	8.3
20°	8.3	6.8	6.8	7.0	7.8	7.8
22.5°	7.3	6.0	6.0	6.8	7.3	7.5
25°	6.5	5.3	5.5	6.3	7.0	7.3
27.5°	5.5	4.5	5.0	6.0	6.8	7.0
30°	4.8	4.0	4.8	5.8	6.5	7.0
31°	4.5	3.8	4.8	5.5	6.5	7.0
32°	4.0	3.8	4.5	5.5	6.5	6.8
33°	3.8	3.5	4.5	5.5	6.5	6.8
34°	3.5	3.3	4.3	5.5	6.5	6.8
35°	3.0	3.3	4.3	5.3	6.3	6.8
36°	2.8	3.0	4.3	5.3	6.3	6.8
37°	2.5	3.0	4.0	5.3	6.3	6.8
38°	2.3	2.8	4.0	5.3	6.3	6.8
39°	2.0	2.8	3.8	5.3	6.3	6.8
40°	1.8	2.5	3.8	5.0	6.3	6.8
41°	1.8	2.5	3.8	5.0	6.3	6.8
42°	1.5	2.5	3.8	5.0	6.3	6.8
43°	1.3	2.3	3.8	5.0	6.3	6.8
44°	1.0	2.3	3.5	5.0	6.3	6.8
45°	1.0	2.3	3.5	5.0	6.3	6.8
46°	0.8	2.0	3.5	5.0	6.3	6.8
47°	0.5	2.0	3.5	4.8	6.3	6.8
48°	0.5	2.0	3.5	4.8	6.3	6.8
49°	0.5	2.0	3.3	4.8	6.3	6.8
50°	0.5	2.0	3.3	4.8	6.3	6.8
51°	0.3	1.8	3.3	4.8	6.3	6.8
52°	0.3	1.8	3.3	4.8	6.3	7.0
53°	0.3	1.8	3.3	4.8	6.3	6.8
54°	0.3	1.8	3.0	4.8	6.3	6.8
55°	0.3	1.8	3.0	4.8	6.3	6.8
56°	0.3	1.5	3.0	4.5	6.3	6.8
57°	0.5	1.5	3.0	4.5	6.3	6.5
58°	0.5	1.5	3.0	4.5	6.0	6.5
59°	0.5	1.5	3.0	4.5	6.0	6.5
60°	0.5	1.5	2.8	4.5	6.0	6.5
62.5°	0.5	1.5	2.8	4.3	5.8	6.3
65°	0.5	1.5	2.5	4.0	5.8	6.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.3	2.5	3.8	5.5	5.8
70°	0.8	1.3	2.3	3.8	5.3	5.5
72.5°	0.8	1.3	2.3	3.3	4.8	5.3
75°	0.8	1.3	2.0	3.0	4.5	4.8
77.5°	0.8	1.3	1.8	2.8	4.0	4.3
80°	1.0	1.3	1.5	2.3	3.5	3.8
82.5°	1.0	1.3	1.3	1.8	2.8	3.0
85°	0.8	1.0	1.0	1.3	1.8	2.0
87.5°	0.8	1.0	0.8	0.5	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)