

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: P1334701

Luminaire Tested: P3A02R259040DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334701
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: P3A02R259040DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

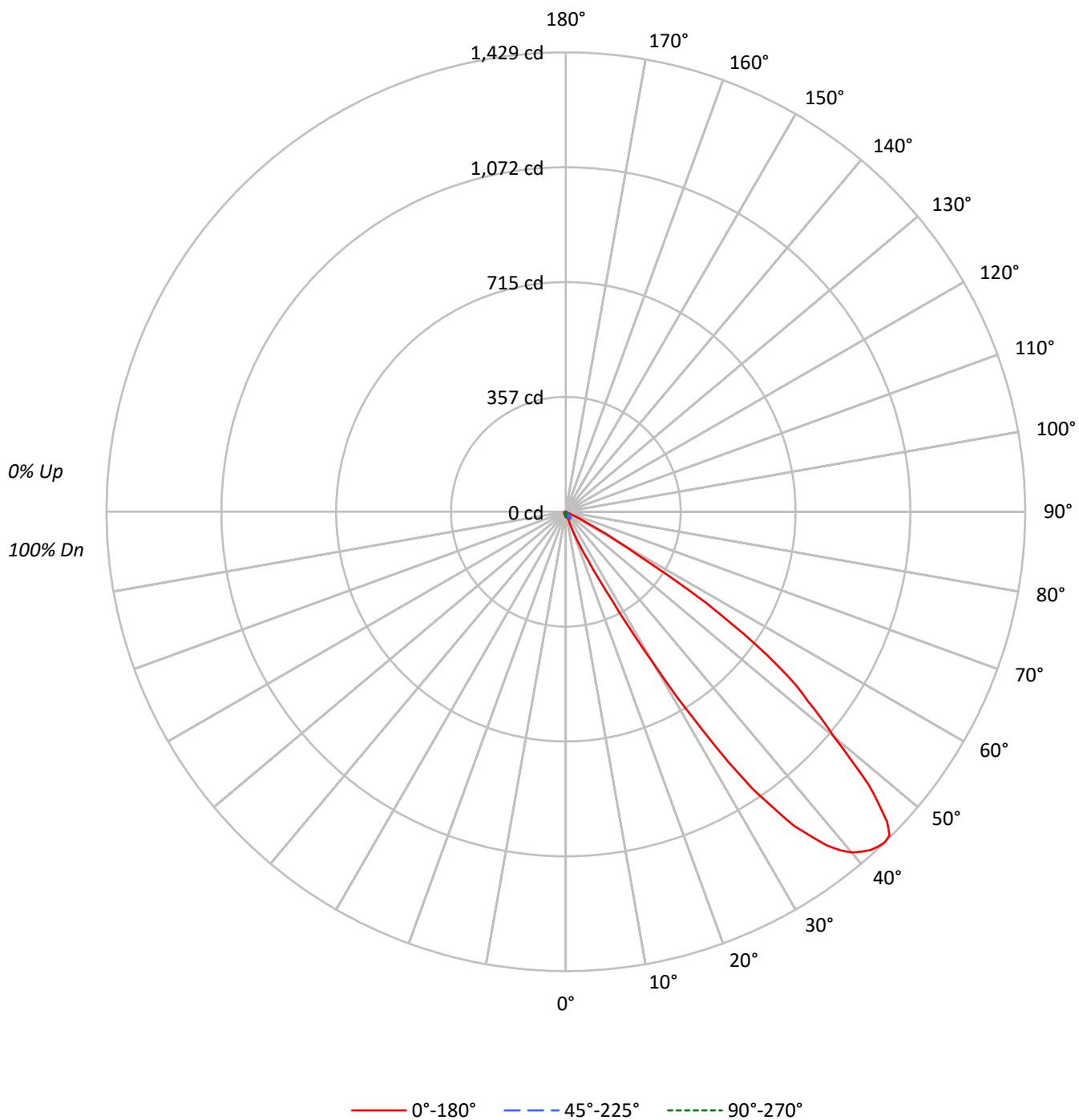
Lumens per Lamp: N/A
Luminaire Lumens: 298.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

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°	3333	3333	3333	3333	3333
5°	3808	3632	3236	2884	2818
10°	3785	3451	2739	2405	2405
15°	4222	2974	2134	2020	2134
20°	14935	2940	1657	1703	1890
25°	42946	3750	1331	1597	1839
30°	137034	5773	1063	1519	1848
35°	300163	6799	910	1472	1901
40°	395970	6154	744	1489	2032
45°	441565	4311	744	1613	2202
50°	371706	2252	716	1706	2422
55°	277897	918	688	1912	2714
60°	86046	219	702	2061	2982
65°	7368	0	830	2179	3269
70°	513	192	833	2500	3719
75°	424	254	1101	2626	4236
80°	379	379	1642	3031	4925
85°	755	755	2516	3271	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 441565 cd/sqm

TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.5
10°-20°	3.5	1.2
20°-30°	16.5	5.5
30°-40°	79.4	26.6
40°-50°	124.4	41.8
50°-60°	63.8	21.4
60°-70°	6.0	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°	21.4	7.2
0°-40°	100.7	33.8
0°-60°	288.9	97.0
0°-90°	298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	298.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	17	16	15	13	13	2
15°	19	13	9	9	9	8
25°	178	16	6	7	8	110
35°	1121	25	3	6	7	681
45°	1424	14	2	5	7	1042
55°	727	2	2	5	7	605
65°	14	0	2	4	6	44
75°	0	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
2.5°	16.5	16.5	16.5	16.5	16.5	16.5	16.3	16.3	16.5	16.3	16.3
5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.0	17.0	17.0	16.5
7.5°	17.6	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.0	17.0	16.3
10°	17.0	17.0	17.0	17.0	16.8	16.8	16.8	16.5	16.5	16.5	15.5
12.5°	17.0	17.0	17.0	17.0	16.8	16.8	16.5	16.5	16.3	16.0	14.2
15°	18.6	18.6	18.6	18.4	18.1	17.8	17.6	17.3	17.0	16.5	13.1
17.5°	27.3	26.5	26.2	25.2	23.9	22.6	21.5	20.5	19.4	18.6	12.6
20°	64.0	63.7	62.4	59.3	55.9	51.9	48.0	43.5	37.2	33.0	12.6
22.5°	110.9	109.4	107.0	104.6	98.6	91.5	84.2	75.8	67.7	59.0	13.4
25°	177.5	181.2	173.3	167.0	156.6	143.7	129.8	118.3	103.6	89.9	15.5
27.5°	308.6	311.0	295.5	275.1	250.7	223.7	197.5	177.8	153.1	130.6	19.4
30°	541.2	543.6	517.6	474.1	423.8	379.5	319.4	266.7	218.2	180.7	22.8
31°	675.5	657.2	627.0	584.8	521.1	454.2	382.1	318.4	257.0	207.7	23.9
32°	792.2	790.6	755.5	691.5	627.5	544.9	455.5	372.4	297.1	235.0	24.6
33°	929.9	919.4	869.8	809.5	724.8	641.7	526.3	431.4	338.3	265.4	25.2
34°	1040.3	1012.0	991.5	922.5	833.1	727.2	603.7	493.8	389.7	294.7	25.4
35°	1121.3	1115.3	1075.4	1011.2	920.2	811.9	687.1	558.6	432.7	328.8	25.4
36°	1207.1	1188.4	1149.6	1091.4	1002.8	890.8	750.8	614.7	482.8	359.5	25.2
37°	1260.8	1249.8	1211.3	1151.2	1064.4	957.4	822.1	673.9	522.6	390.2	24.6
38°	1316.1	1293.9	1255.8	1198.4	1113.2	1012.7	873.8	719.6	559.3	417.2	23.9
39°	1354.4	1331.4	1292.5	1235.4	1152.0	1052.3	914.7	758.4	591.3	437.4	22.8
40°	1383.3	1361.0	1321.7	1262.9	1180.6	1083.5	948.8	792.7	618.1	455.0	21.5
41°	1401.1	1380.4	1341.3	1282.8	1200.2	1101.4	971.0	815.0	636.2	466.8	20.2
42°	1416.1	1394.8	1355.0	1295.2	1212.3	1116.6	984.7	829.2	648.5	472.8	19.1
43°	1424.4	1403.2	1364.4	1303.3	1219.6	1123.7	992.0	835.7	652.7	472.0	17.3
44°	1429.2	1407.1	1368.1	1307.0	1222.8	1125.5	992.6	834.4	649.8	465.7	15.7
45°	1423.9	1402.2	1364.4	1303.3	1217.3	1119.7	987.3	827.3	638.8	453.4	13.9
46°	1389.8	1373.1	1338.4	1282.3	1200.0	1105.0	973.9	813.7	621.8	438.2	11.8
47°	1329.8	1316.4	1282.8	1241.1	1166.7	1078.0	949.3	787.7	597.9	415.4	9.4
48°	1267.1	1247.4	1216.2	1173.5	1110.6	1029.5	908.6	749.7	561.7	385.5	8.4
49°	1174.5	1163.0	1135.5	1087.7	1035.6	964.2	851.2	700.9	517.4	353.0	7.3
50°	1089.6	1081.7	1043.2	1008.0	952.7	886.1	773.3	636.7	462.3	312.6	6.6
51°	1023.2	1013.8	986.0	942.2	883.2	805.8	699.6	553.3	399.1	264.6	5.2
52°	954.0	948.8	924.1	879.0	821.1	744.0	628.0	482.5	337.8	223.7	4.2
53°	897.4	889.8	859.6	819.5	756.8	677.1	550.4	416.7	286.1	188.0	3.7
54°	814.8	811.6	792.2	750.2	682.3	595.5	480.1	350.9	238.6	159.4	3.1
55°	726.9	716.4	696.8	663.4	601.0	520.0	398.9	290.8	193.0	134.3	2.4
56°	619.9	619.4	584.3	556.5	501.1	415.1	318.6	227.1	156.8	112.0	2.1
57°	517.6	501.1	467.3	439.8	380.2	314.9	236.5	170.2	122.7	90.7	1.6
58°	382.9	374.2	365.3	324.9	269.8	223.2	168.9	119.6	90.7	69.2	1.0
59°	259.9	259.6	249.1	218.4	186.7	139.0	105.4	81.3	62.4	50.9	0.8
60°	196.2	191.4	170.5	150.3	117.5	87.8	62.4	48.0	38.8	32.8	0.5
62.5°	68.7	71.3	62.7	51.9	39.6	32.5	24.9	20.2	16.5	13.4	0.0
65°	14.2	15.5	13.4	12.6	10.0	8.7	7.6	6.6	5.5	4.7	0.0



TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.8	1.6	1.6	1.6	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

TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	15.2	15.2	15.2	15.2	15.2	15.2
2.5°	16.0	15.5	14.7	14.4	14.2	14.2
5°	15.7	14.7	13.9	13.1	12.8	12.8
7.5°	14.9	13.6	12.6	12.1	11.8	11.5
10°	14.2	12.3	11.3	10.8	10.8	10.8
12.5°	12.6	11.0	10.0	9.7	10.0	10.0
15°	11.3	9.4	8.9	8.9	9.2	9.4
17.5°	9.7	8.4	7.9	8.1	8.4	8.7
20°	8.7	7.1	7.1	7.3	8.1	8.1
22.5°	7.6	6.3	6.3	7.1	7.6	7.9
25°	6.8	5.5	5.8	6.6	7.3	7.6
27.5°	5.8	4.7	5.2	6.3	7.1	7.3
30°	5.0	4.2	5.0	6.0	6.8	7.3
31°	4.7	3.9	5.0	5.8	6.8	7.3
32°	4.2	3.9	4.7	5.8	6.8	7.1
33°	3.9	3.7	4.7	5.8	6.8	7.1
34°	3.7	3.4	4.5	5.8	6.8	7.1
35°	3.1	3.4	4.5	5.5	6.6	7.1
36°	2.9	3.1	4.5	5.5	6.6	7.1
37°	2.6	3.1	4.2	5.5	6.6	7.1
38°	2.4	2.9	4.2	5.5	6.6	7.1
39°	2.1	2.9	3.9	5.5	6.6	7.1
40°	1.8	2.6	3.9	5.2	6.6	7.1
41°	1.8	2.6	3.9	5.2	6.6	7.1
42°	1.6	2.6	3.9	5.2	6.6	7.1
43°	1.3	2.4	3.9	5.2	6.6	7.1
44°	1.0	2.4	3.7	5.2	6.6	7.1
45°	1.0	2.4	3.7	5.2	6.6	7.1
46°	0.8	2.1	3.7	5.2	6.6	7.1
47°	0.5	2.1	3.7	5.0	6.6	7.1
48°	0.5	2.1	3.7	5.0	6.6	7.1
49°	0.5	2.1	3.4	5.0	6.6	7.1
50°	0.5	2.1	3.4	5.0	6.6	7.1
51°	0.3	1.8	3.4	5.0	6.6	7.1
52°	0.3	1.8	3.4	5.0	6.6	7.3
53°	0.3	1.8	3.4	5.0	6.6	7.1
54°	0.3	1.8	3.1	5.0	6.6	7.1
55°	0.3	1.8	3.1	5.0	6.6	7.1
56°	0.3	1.6	3.1	4.7	6.6	7.1
57°	0.5	1.6	3.1	4.7	6.6	6.8
58°	0.5	1.6	3.1	4.7	6.3	6.8
59°	0.5	1.6	3.1	4.7	6.3	6.8
60°	0.5	1.6	2.9	4.7	6.3	6.8
62.5°	0.5	1.6	2.9	4.5	6.0	6.6
65°	0.5	1.6	2.6	4.2	6.0	6.3



TEST NUMBER: P1334701

CATALOG NUMBER: P3A02R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.3	2.6	3.9	5.8	6.0
70°	0.8	1.3	2.4	3.9	5.5	5.8
72.5°	0.8	1.3	2.4	3.4	5.0	5.5
75°	0.8	1.3	2.1	3.1	4.7	5.0
77.5°	0.8	1.3	1.8	2.9	4.2	4.5
80°	1.0	1.3	1.6	2.4	3.7	3.9
82.5°	1.0	1.3	1.3	1.8	2.9	3.1
85°	0.8	1.0	1.0	1.3	1.8	2.1
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)