

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: P1334610

Luminaire Tested: P3A02R20B2750DE010 E3CA451MMS_4000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R20B2750DE010 E3CA451MMS_4000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 4000K CCT AND, 80CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

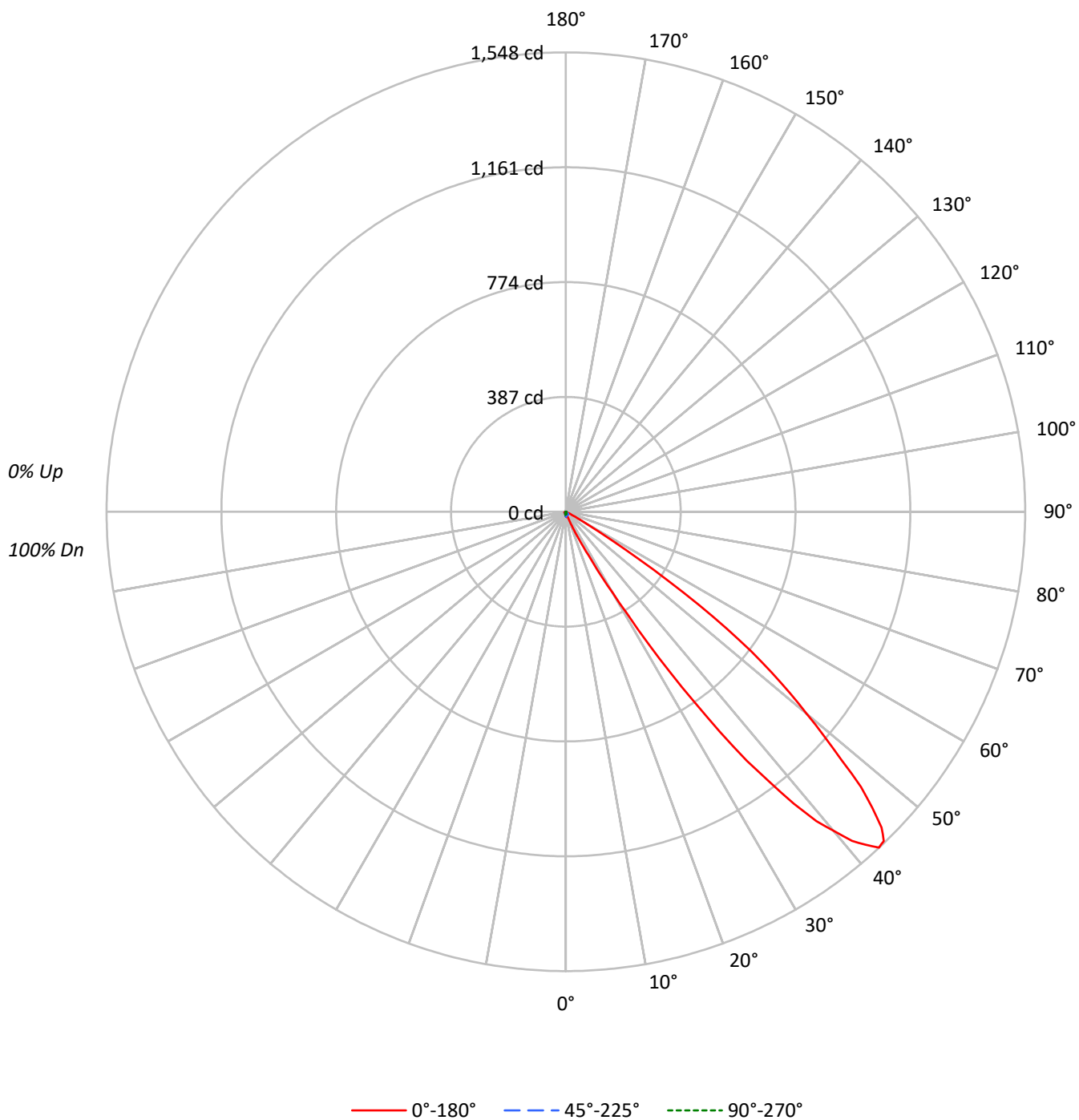
Lumens per Lamp: N/A
Luminaire Lumens: 215.0 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 2.9
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: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	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	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	65	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	38	52	44	38	50	43	38	48	42	37	35			
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29			
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	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	19	31	24	19	30	24	19	17			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3289	3289	3289	3289	3289
5°	3830	3566	3060	2663	2575
10°	3785	3229	2427	2071	2026
15°	3292	2474	1793	1657	1748
20°	4900	2077	1330	1423	1563
25°	21122	2153	1016	1282	1524
30°	79860	2608	861	1215	1494
35°	242101	3132	803	1231	1579
40°	401438	3120	687	1317	1689
45°	466622	2140	620	1364	1830
50°	362223	1160	614	1433	2081
55°	209656	765	612	1606	2256
60°	35436	175	526	1667	2500
65°	2750	0	623	1868	2854
70°	385	0	769	2052	3270
75°	339	169	847	2372	3728
80°	253	253	1263	2526	4293
85°	503	503	2013	2516	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 466622 cd/sqm

TEST NUMBER: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.6
10°-20°	2.7	1.3
20°-30°	8.6	4.0
30°-40°	54.8	25.5
40°-50°	100.4	46.7
50°-60°	41.2	19.2
60°-70°	3.5	1.6
70°-80°	1.7	0.8
80°-90°	0.8	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°	12.6	5.8
0°-40°	67.4	31.3
0°-60°	209.0	97.2
0°-90°	215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	215.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	17	16	14	12	12	2
15°	14	11	8	7	8	5
25°	87	9	4	5	6	57
35°	904	12	3	5	6	572
45°	1505	7	2	4	6	1080
55°	548	2	2	4	6	479
65°	5	0	1	4	6	17
75°	0	0	1	3	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
2.5°	16.4	16.4	16.4	16.2	16.2	16.4	16.2	16.2	16.2	16.2	16.0
5°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.2	17.2	17.0	16.2
7.5°	17.8	17.8	17.8	17.8	17.6	17.6	17.6	17.6	17.4	17.2	15.8
10°	17.0	17.0	17.0	16.8	16.8	16.8	16.6	16.6	16.4	16.2	14.5
12.5°	15.4	15.4	15.4	15.4	15.2	15.2	15.0	15.0	14.7	14.5	12.7
15°	14.5	14.5	14.5	14.3	14.3	14.1	13.9	13.7	13.5	13.1	10.9
17.5°	15.8	15.8	15.6	15.6	15.2	14.7	14.5	13.9	13.5	12.9	9.7
20°	21.0	21.2	20.4	19.8	19.4	18.2	17.6	16.6	15.8	14.7	8.9
22.5°	42.4	41.6	40.2	38.0	35.4	33.1	29.1	25.9	23.6	20.6	8.7
25°	87.3	86.5	82.6	79.4	71.3	65.1	56.4	49.3	42.0	35.0	8.9
27.5°	165.9	160.4	159.4	144.7	133.4	117.2	100.4	86.3	73.3	59.0	9.5
30°	315.4	309.1	287.1	264.9	234.4	199.8	166.9	136.2	110.5	87.3	10.3
31°	400.3	406.3	380.5	335.8	290.7	246.5	201.4	162.4	129.3	100.4	10.7
32°	526.1	499.7	472.4	426.5	361.1	304.5	247.9	191.7	148.1	114.6	11.1
33°	645.1	629.6	588.0	530.8	452.2	372.8	299.4	226.3	171.1	131.7	11.3
34°	772.0	754.9	721.1	639.1	552.8	448.8	351.0	266.1	198.6	148.5	11.5
35°	904.4	897.1	832.0	760.9	654.8	529.4	413.0	309.7	225.5	163.9	11.7
36°	1037.5	1014.1	963.2	859.3	748.6	603.9	478.0	350.4	252.8	182.0	11.7
37°	1137.7	1132.5	1065.0	963.8	833.7	683.5	534.2	395.4	280.2	197.6	11.7
38°	1248.3	1227.5	1159.0	1055.9	913.7	756.5	593.0	434.6	306.3	211.7	11.5
39°	1341.4	1310.5	1241.4	1139.6	983.6	811.8	639.7	472.6	329.3	223.5	11.3
40°	1402.4	1381.0	1308.9	1194.3	1047.0	864.2	687.0	503.9	346.5	232.4	10.9
41°	1469.7	1434.1	1362.8	1247.7	1093.1	910.2	716.7	524.5	359.9	238.2	10.5
42°	1509.9	1480.8	1396.2	1283.4	1126.0	936.5	740.9	540.3	367.9	241.2	9.7
43°	1547.5	1507.9	1425.5	1304.2	1147.8	955.1	752.0	547.6	369.8	241.2	8.7
44°	1542.4	1504.9	1419.4	1307.1	1152.7	960.5	756.7	547.8	366.9	238.2	7.7
45°	1504.7	1467.3	1390.3	1282.4	1135.3	949.8	747.4	539.7	359.0	233.0	6.9
46°	1435.4	1398.2	1339.2	1241.2	1103.0	925.6	725.8	522.1	345.9	224.5	6.1
47°	1360.0	1323.8	1263.4	1174.7	1047.8	882.4	694.4	497.4	327.5	212.2	5.5
48°	1250.7	1228.1	1167.4	1091.7	971.3	814.7	639.5	457.2	302.9	196.2	4.6
49°	1154.1	1130.3	1077.1	995.7	871.4	735.9	573.8	408.3	270.7	178.4	4.0
50°	1061.8	1041.0	991.9	899.9	781.3	640.7	485.1	346.7	230.3	156.4	3.4
51°	971.5	955.9	905.8	821.3	700.9	567.6	420.3	288.7	190.3	129.7	3.2
52°	880.7	878.9	824.6	739.1	622.7	494.6	357.2	243.7	161.4	108.9	3.0
53°	783.1	771.4	723.9	647.2	535.4	418.6	302.9	205.5	139.0	92.7	2.6
54°	672.0	658.9	608.0	538.7	437.4	342.9	244.1	166.1	115.8	78.4	2.4
55°	548.4	525.9	489.0	417.8	341.7	261.7	188.5	131.5	92.5	65.3	2.0
56°	416.0	393.6	372.8	320.5	250.7	195.2	140.4	100.8	72.3	51.5	1.8
57°	289.3	288.1	254.0	213.8	167.7	132.9	96.2	71.1	51.1	40.0	1.4
58°	187.7	181.4	159.6	136.4	109.7	83.0	61.8	48.3	34.8	27.3	1.2
59°	131.5	119.0	107.3	90.9	69.1	52.3	39.8	30.9	24.0	19.0	0.8
60°	80.8	78.2	70.3	55.4	44.9	37.0	29.7	22.8	17.6	13.5	0.4
62.5°	23.0	23.4	21.2	18.8	16.2	13.9	12.5	10.7	8.9	7.1	0.0
65°	5.3	5.1	5.5	5.1	4.6	4.6	4.0	3.6	3.2	3.0	0.0



TEST NUMBER: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.6	1.6	1.4	1.4	1.4	1.2	1.2	1.0	1.0	0.8	0.0
70°	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.2	0.0
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85°	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	15.0	15.0	15.0	15.0	15.0	15.0
2.5°	15.6	14.7	14.1	13.5	13.3	13.3
5°	15.2	13.9	12.7	12.1	11.7	11.7
7.5°	13.9	12.5	11.3	10.7	10.5	10.5
10°	12.5	10.9	9.7	9.3	9.3	9.1
12.5°	10.9	9.3	8.5	8.3	8.3	8.3
15°	9.1	7.9	7.3	7.3	7.5	7.7
17.5°	7.7	6.5	6.3	6.7	7.1	7.1
20°	6.5	5.7	5.7	6.1	6.5	6.7
22.5°	5.5	4.8	5.1	5.7	6.3	6.5
25°	4.8	4.2	4.6	5.3	5.9	6.3
27.5°	4.0	3.8	4.2	5.1	5.9	6.1
30°	3.4	3.4	4.0	4.8	5.7	5.9
31°	3.2	3.2	4.0	4.8	5.7	5.9
32°	3.0	3.2	3.8	4.8	5.7	5.9
33°	2.8	3.0	3.8	4.6	5.7	5.9
34°	2.6	3.0	3.8	4.6	5.7	5.9
35°	2.4	3.0	3.8	4.6	5.7	5.9
36°	2.2	2.8	3.6	4.6	5.7	5.9
37°	2.0	2.8	3.6	4.6	5.7	5.9
38°	1.8	2.6	3.6	4.6	5.7	5.9
39°	1.8	2.6	3.4	4.6	5.5	5.9
40°	1.6	2.4	3.4	4.6	5.5	5.9
41°	1.4	2.4	3.4	4.4	5.5	5.9
42°	1.2	2.2	3.2	4.4	5.5	5.9
43°	1.0	2.2	3.2	4.4	5.5	5.9
44°	1.0	2.0	3.2	4.4	5.5	5.9
45°	0.8	2.0	3.2	4.4	5.5	5.9
46°	0.6	2.0	3.2	4.4	5.5	5.9
47°	0.6	1.8	3.0	4.4	5.5	5.9
48°	0.4	1.8	3.0	4.4	5.5	5.9
49°	0.4	1.8	3.0	4.4	5.5	6.1
50°	0.4	1.8	3.0	4.2	5.5	6.1
51°	0.2	1.8	3.0	4.2	5.5	6.1
52°	0.2	1.8	2.8	4.2	5.7	6.1
53°	0.2	1.6	2.8	4.2	5.7	6.1
54°	0.2	1.6	2.8	4.2	5.7	5.9
55°	0.2	1.6	2.8	4.2	5.5	5.9
56°	0.2	1.4	2.8	4.2	5.5	5.9
57°	0.2	1.4	2.6	4.0	5.5	5.7
58°	0.2	1.4	2.6	4.0	5.5	5.7
59°	0.2	1.4	2.6	4.0	5.3	5.7
60°	0.4	1.2	2.4	3.8	5.3	5.7
62.5°	0.4	1.2	2.4	3.8	5.1	5.5
65°	0.4	1.2	2.2	3.6	5.1	5.5



TEST NUMBER: P1334610

CATALOG NUMBER: P3A02R20B2750DE010 E3CA451MMS_4000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.0	2.0	3.4	4.8	5.3
70°	0.4	1.2	2.0	3.2	4.6	5.1
72.5°	0.6	1.0	1.8	3.0	4.4	4.8
75°	0.6	1.0	1.8	2.8	4.2	4.4
77.5°	0.8	1.0	1.6	2.4	3.8	4.0
80°	0.8	1.0	1.4	2.0	3.2	3.4
82.5°	0.8	1.0	1.0	1.6	2.4	2.6
85°	0.6	0.8	0.8	1.0	1.6	1.8
87.5°	0.6	0.8	0.6	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)