

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: P1319355

Luminaire Tested: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1319355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRIS
Catalog Number: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

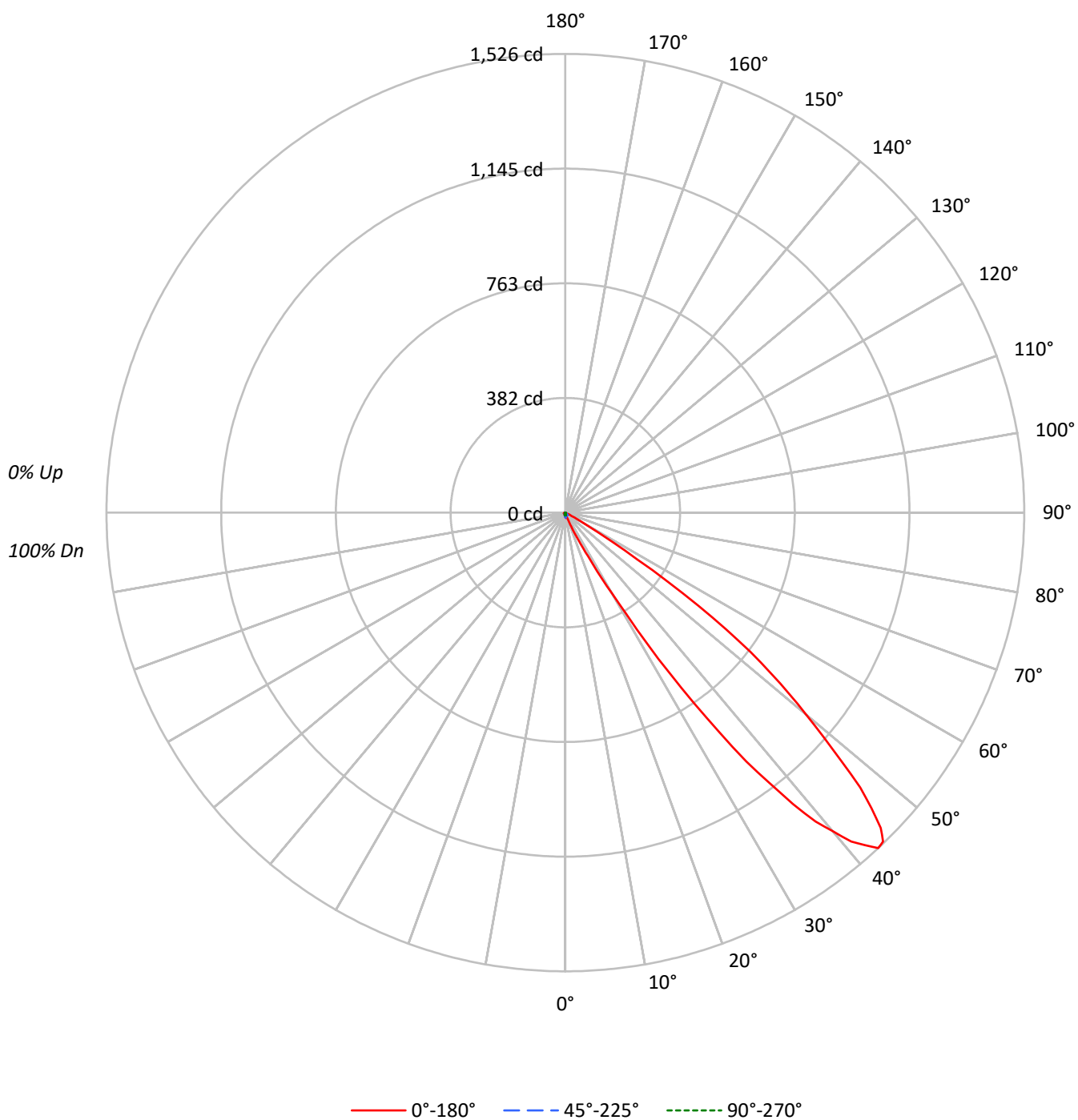
Lumens per Lamp: N/A
Luminaire Lumens: 212.1 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.52 / 1.14
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1319355

CATALOG NUMBER: P3SQA02R20B2750DE010 E3SQA451MMS_3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					10
RW	70	50	30	10		70	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
1	110	106	102	99		108	104	101	97		100	97	94		96	94	92		92	91	89
2	101	93	87	82		98	91	86	81		88	83	79		85	81	77		82	78	75
3	92	81	74	67		89	80	73	67		77	71	66		74	69	65		72	67	63
4	83	71	62	56		81	70	62	55		67	60	55		65	59	54		63	58	53
5	75	62	53	46		73	61	53	46		59	51	46		57	50	45		55	49	45
6	68	55	45	39		66	54	45	38		52	44	38		50	43	38		48	42	37
7	62	48	39	32		60	47	38	32		46	38	32		44	37	32		43	36	31
8	57	42	33	27		55	42	33	27		40	33	27		39	32	27		38	31	27
9	52	38	29	23		51	37	29	23		36	28	23		35	28	23		34	27	23
10	48	34	25	20		47	33	25	20		32	25	19		31	24	19		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2532	2532	2532	2532	2532
5°	2956	2749	2368	2075	2005
10°	2920	2501	1889	1609	1574
15°	2550	1926	1391	1284	1355
20°	3794	1613	1026	1100	1210
25°	16361	1672	798	988	1178
30°	61847	2028	676	955	1153
35°	187497	2439	631	967	1219
40°	310905	2428	540	1034	1304
45°	361369	1656	487	1072	1413
50°	280524	911	482	1125	1608
55°	162351	601	480	1261	1742
60°	27452	138	413	1309	1929
65°	2119	0	489	1467	2201
70°	302	0	604	1611	2518
75°	266	133	665	1863	2928
80°	198	198	992	1984	3372
85°	395	395	1581	1976	3557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 361369 cd/sqm

TEST NUMBER: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.6
10°-20°	2.7	1.3
20°-30°	8.5	4.0
30°-40°	54.1	25.5
40°-50°	99.0	46.7
50°-60°	40.7	19.2
60°-70°	3.4	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°	12.4	5.8
0°-40°	66.5	31.3
0°-60°	206.1	97.2
0°-90°	212.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	212.1	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°	86	9	4	5	6	57
35°	892	12	3	5	6	564
45°	1484	7	2	4	6	1065
55°	541	2	2	4	6	473
65°	5	0	1	4	5	17
75°	0	0	1	3	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
2.5°	16.1	16.1	16.1	15.9	15.9	16.1	15.9	15.9	15.9	15.9	15.7
5°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	16.9	16.9	16.7	15.9
7.5°	17.5	17.5	17.5	17.5	17.3	17.3	17.3	17.3	17.1	16.9	15.5
10°	16.7	16.7	16.7	16.5	16.5	16.5	16.3	16.3	16.1	15.9	14.3
12.5°	15.1	15.1	15.1	15.1	14.9	14.9	14.7	14.7	14.5	14.3	12.6
15°	14.3	14.3	14.3	14.1	14.1	13.9	13.7	13.5	13.3	12.9	10.8
17.5°	15.5	15.5	15.3	15.3	14.9	14.5	14.3	13.7	13.3	12.8	9.6
20°	20.7	20.9	20.1	19.5	19.1	17.9	17.3	16.3	15.5	14.5	8.8
22.5°	41.8	41.0	39.6	37.5	34.9	32.7	28.7	25.5	23.3	20.3	8.6
25°	86.1	85.3	81.5	78.3	70.3	64.2	55.6	48.6	41.4	34.5	8.8
27.5°	163.6	158.2	157.2	142.6	131.5	115.6	99.0	85.1	72.3	58.2	9.4
30°	311.0	304.8	283.1	261.2	231.1	197.0	164.6	134.3	109.0	86.1	10.2
31°	394.7	400.7	375.2	331.1	286.7	243.1	198.6	160.2	127.5	99.0	10.6
32°	518.8	492.7	465.8	420.6	356.0	300.2	244.5	189.1	146.0	113.0	11.0
33°	636.1	620.8	579.8	523.4	445.9	367.6	295.3	223.1	168.7	129.9	11.2
34°	761.3	744.3	711.1	630.2	545.1	442.5	346.1	262.4	195.8	146.4	11.4
35°	891.8	884.6	820.4	750.3	645.7	522.0	407.2	305.4	222.3	161.6	11.6
36°	1023.0	999.9	949.7	847.3	738.1	595.5	471.4	345.5	249.2	179.5	11.6
37°	1121.9	1116.7	1050.1	950.3	822.0	674.0	526.8	389.9	276.3	194.8	11.6
38°	1230.8	1210.3	1142.8	1041.2	900.9	745.9	584.7	428.5	302.0	208.8	11.4
39°	1322.7	1292.2	1224.1	1123.7	969.9	800.5	630.8	466.0	324.7	220.3	11.2
40°	1382.9	1361.7	1290.6	1177.6	1032.4	852.1	677.4	496.9	341.7	229.1	10.8
41°	1449.2	1414.1	1343.8	1230.2	1077.8	897.5	706.7	517.2	354.8	234.9	10.4
42°	1488.8	1460.2	1376.7	1265.5	1110.3	923.4	730.6	532.7	362.8	237.9	9.6
43°	1525.9	1486.9	1405.6	1286.0	1131.8	941.8	741.5	539.9	364.6	237.9	8.6
44°	1520.9	1483.9	1399.6	1288.8	1136.6	947.1	746.1	540.1	361.8	234.9	7.6
45°	1483.7	1446.8	1370.9	1264.5	1119.5	936.6	737.0	532.1	354.0	229.7	6.8
46°	1415.3	1378.7	1320.5	1223.9	1087.6	912.7	715.6	514.8	341.1	221.3	6.0
47°	1341.0	1305.4	1245.8	1158.3	1033.2	870.0	684.8	490.5	323.0	209.2	5.4
48°	1233.2	1210.9	1151.2	1076.4	957.7	803.3	630.6	450.9	298.6	193.5	4.6
49°	1138.0	1114.5	1062.1	981.8	859.3	725.6	565.8	402.6	267.0	175.9	4.0
50°	1047.0	1026.4	978.0	887.4	770.4	631.8	478.4	341.9	227.1	154.2	3.4
51°	957.9	942.6	893.1	809.9	691.1	559.6	414.4	284.7	187.7	127.9	3.2
52°	868.4	866.7	813.1	728.8	614.0	487.7	352.2	240.3	159.2	107.4	3.0
53°	772.2	760.7	713.8	638.1	528.0	412.8	298.6	202.6	137.1	91.4	2.6
54°	662.6	649.7	599.5	531.1	431.3	338.1	240.7	163.8	114.2	77.3	2.4
55°	540.7	518.6	482.1	412.0	336.9	258.0	185.9	129.7	91.2	64.4	2.0
56°	410.2	388.1	367.6	316.0	247.2	192.5	138.5	99.4	71.3	50.8	1.8
57°	285.3	284.1	250.4	210.8	165.4	131.1	94.8	70.1	50.4	39.4	1.4
58°	185.1	178.9	157.4	134.5	108.2	81.9	61.0	47.6	34.3	26.9	1.2
59°	129.7	117.3	105.8	89.7	68.1	51.6	39.2	30.5	23.7	18.7	0.8
60°	79.7	77.1	69.3	54.6	44.2	36.5	29.3	22.5	17.3	13.3	0.4
62.5°	22.7	23.1	20.9	18.5	15.9	13.7	12.4	10.6	8.8	7.0	0.0
65°	5.2	5.0	5.4	5.0	4.6	4.6	4.0	3.6	3.2	3.0	0.0



TEST NUMBER: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

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: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	14.7	14.7	14.7	14.7	14.7	14.7
2.5°	15.3	14.5	13.9	13.3	13.1	13.1
5°	14.9	13.7	12.6	12.0	11.6	11.6
7.5°	13.7	12.4	11.2	10.6	10.4	10.4
10°	12.4	10.8	9.6	9.2	9.2	9.0
12.5°	10.8	9.2	8.4	8.2	8.2	8.2
15°	9.0	7.8	7.2	7.2	7.4	7.6
17.5°	7.6	6.4	6.2	6.6	7.0	7.0
20°	6.4	5.6	5.6	6.0	6.4	6.6
22.5°	5.4	4.8	5.0	5.6	6.2	6.4
25°	4.8	4.2	4.6	5.2	5.8	6.2
27.5°	4.0	3.8	4.2	5.0	5.8	6.0
30°	3.4	3.4	4.0	4.8	5.6	5.8
31°	3.2	3.2	4.0	4.8	5.6	5.8
32°	3.0	3.2	3.8	4.8	5.6	5.8
33°	2.8	3.0	3.8	4.6	5.6	5.8
34°	2.6	3.0	3.8	4.6	5.6	5.8
35°	2.4	3.0	3.8	4.6	5.6	5.8
36°	2.2	2.8	3.6	4.6	5.6	5.8
37°	2.0	2.8	3.6	4.6	5.6	5.8
38°	1.8	2.6	3.6	4.6	5.6	5.8
39°	1.8	2.6	3.4	4.6	5.4	5.8
40°	1.6	2.4	3.4	4.6	5.4	5.8
41°	1.4	2.4	3.4	4.4	5.4	5.8
42°	1.2	2.2	3.2	4.4	5.4	5.8
43°	1.0	2.2	3.2	4.4	5.4	5.8
44°	1.0	2.0	3.2	4.4	5.4	5.8
45°	0.8	2.0	3.2	4.4	5.4	5.8
46°	0.6	2.0	3.2	4.4	5.4	5.8
47°	0.6	1.8	3.0	4.4	5.4	5.8
48°	0.4	1.8	3.0	4.4	5.4	5.8
49°	0.4	1.8	3.0	4.4	5.4	6.0
50°	0.4	1.8	3.0	4.2	5.4	6.0
51°	0.2	1.8	3.0	4.2	5.4	6.0
52°	0.2	1.8	2.8	4.2	5.6	6.0
53°	0.2	1.6	2.8	4.2	5.6	6.0
54°	0.2	1.6	2.8	4.2	5.6	5.8
55°	0.2	1.6	2.8	4.2	5.4	5.8
56°	0.2	1.4	2.8	4.2	5.4	5.8
57°	0.2	1.4	2.6	4.0	5.4	5.6
58°	0.2	1.4	2.6	4.0	5.4	5.6
59°	0.2	1.4	2.6	4.0	5.2	5.6
60°	0.4	1.2	2.4	3.8	5.2	5.6
62.5°	0.4	1.2	2.4	3.8	5.0	5.4
65°	0.4	1.2	2.2	3.6	5.0	5.4



TEST NUMBER: P1319355

CATALOG NUMBER: P3SQAS02R20B2750DE010 E3SQCA451MMS_3000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.0	2.0	3.4	4.8	5.2
70°	0.4	1.2	2.0	3.2	4.6	5.0
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)