Page 1 of 25

FCC ID: 2A2VW-C9E2CA11

Report No.: LCSA01114056EB

FCC TEST REPORT

For

Shenzhen Zhiling Technology Co., Ltd

SolarCam D1 SE

Test Model: C9E2CA11

Additional Model No.: Please Refer to Page 6

Prepared for Shenzhen Zhiling Technology Co., Ltd

Address Room 201, Building A, No.1 Qianwan Road, Qianhai Shenzhen-Hong

Kong Cooperation Zone, Shenzhen, Guangdong, China

Prepared by Shenzhen LCS Compliance Testing Laboratory Ltd.

Address 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei,

Shajing Street, Baoan District, Shenzhen, 518000, China

Tel (+86)755-82591330 Fax (+86)755-82591332 Web www.LCS-cert.com

Mail webmaster@LCS-cert.com

Date of receipt of test sample December 19, 2022

Number of tested samples

Sample number A120922018-1, A120922018-2

Serial number Prototype

Date of Test December 19, 2022 ~ January 09, 2023

Date of Report March 11, 2024



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FCC ID: 2A2VW-C9E2CA11

Report No.: LCSA01114056EB

FCC TEST REPORT FCC CFR 47 PART 15 C(15.247)

Report Reference No.: LCSA01114056EB

Date of Issue.....: March 11, 2024

Testing Laboratory Name.....: Shenzhen LCS Compliance Testing Laboratory Ltd.

Address......: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei,

Shajing Street, Baoan District, Shenzhen, 518000, China

Testing Location/ Procedure.....: Full application of Harmonised standards

Partial application of Harmonised standards

Applicant's Name.....: Shenzhen Zhiling Technology Co., Ltd

Address...... : Room 201, Building A, No.1 Qianwan Road, Qianhai

Shenzhen-Hong Kong Cooperation Zone, Shenzhen, Guangdong,

China

Test Specification

Standard..... : FCC CFR 47 PART 15 C(15.247)

Test Report Form No.....: LCSEMC-1.0

TRF Originator.....: Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF...... Dated 2011-03

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EUT Description.....: SolarCam D1 SE

Trade Mark : DEKCO, Saato

Test Model.....: C9E2CA11

Ratings.....: Input: DC 5V, 1A

DC 3.7V by Rechargeable Li-ion Battery, 5Ah

Result: Positive

Compiled by:

Supervised by:

Approved by:

Joker. Hu

Joker Hu/ Administrator

Cary Luo/ Technique principal

Gavin Liang/ Manager





FCC -- TEST REPORT

Test Report No. : LCSA01114056EB March 11, 2024

Date of issue

EUT.....: SolarCam D1 SE

Test Model..... : C9E2CA11

Applicant.....: : Shenzhen Zhiling Technology Co., Ltd

Address......: Room 201, Building A, No.1 Qianwan Road, Qianhai

Shenzhen-Hong Kong Cooperation Zone, Shenzhen, Guangdong,

Report No.: LCSA01114056EB

China

Telephone..... : /
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Manufacturer.....: Shenzhen Zhiling Technology Co., Ltd

Address...... : Room 201, Building A, No.1 Qianwan Road, Qianhai

Shenzhen-Hong Kong Cooperation Zone, Shenzhen, Guangdong,

China

Telephone...... : / Fax...... : /

Factory.....: Shenzhen Zhiling Technology Co., Ltd

Address.....: Room 201, Building A, No.1 Qianwan Road, Qianhai

Shenzhen-Hong Kong Cooperation Zone, Shenzhen, Guangdong,

China

Telephone.....: / Fax.....: : /

Toet Posult	Positive
l est result	Positive

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.





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FCC ID: 2A2VW-C9E2CA11

Revision History

Report No.: LCSA01114056EB

	Revision History		
Report Version	Issue Date	Revision Content	Revised By
000	March 11, 2024	Initial Issue	

Note: At the request of the customer, this report is based on test data reported (LCSA01114056EB). The photos, trade mark, product name and model of the original report (LCSA01114056EB) have been changed.

The changes are as follows: Original Trade Mark: AOSU

Original Product name: SolarCam D1 Lite

Original Model: C9L, C9E, C9P, C9S, DC9L, DC9E, DC9P, DC9S

The changed Trade Mark: DEKCO, Saato The changed Product name: SolarCam D1 SE

The changed Model: C9E2CA11, C9L2BA11, C9L2BA12, C9E2CA12, C9L1BA11, C9E1CA11, C9L1BA12,

C9E1CA12, C9L1BA13, C9E1CA13, C9L2BA13, C9E2CA13, C9L3BA11, C9E3CA11, C9L3BA12, C9E3CA12, C9L3BA13, C9E3CA13, C9L1BA14, C9L1BA15, C9L1BA16, C9L1BA17, C9L2BA14,

C9L2BA15, C9L2BA16, C9L2BA17, C9L3BA14, C9L3BA15, C9L3BA16, C9L3BA17



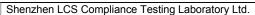




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1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : SolarCam D1 SE

Test Model : C9E2CA11

Additional Model No. : C9L2BA11, C9L2BA12, C9E2CA12, C9L1BA11, C9E1CA11,

C9L1BA12, C9E1CA12, C9L1BA13, C9E1CA13, C9L2BA13, C9E2CA13, C9L3BA11, C9E3CA11, C9L3BA12, C9E3CA12, C9L3BA13, C9E3CA13, C9L1BA14, C9L1BA15, C9L1BA16, C9L1BA17, C9L2BA14, C9L2BA15, C9L2BA16, C9L2BA17,

C9L3BA14, C9L3BA15, C9L3BA16, C9L3BA17

Model Declaration : PCB board, structure and internal of these model(s) are the same, So

no additional models were tested

Power Supply : Input: DC 5V, 1A

DC 3.7V by Rechargeable Li-ion Battery, 5Ah

Hardware Version : V1.1 Software Version : V2.1.6

Bluetooth

Frequency Range : 2402MHz-2480MHz

Bluetooth Channel Number: 40 channels for Bluetooth V5.0 (DTS)

Bluetooth Channel Spacing: 2MHz for Bluetooth V5.0 (DTS) Bluetooth Modulation Type: GFSK for Bluetooth V5.0 (DTS)

Bluetooth Version : V5.0

Antenna Description : External Antenna, 3.2dBi(Max.)

2.4G WLAN

Frequency Range : 2412 – 2462 MHz

Channel Number : 11 Channels for 20MHz bandwidth (2412~2462MHz)

Channel Spacing : 5MHz

Modulation Type : IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)

IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)

Antenna Description : External Antenna, 3.2dBi(Max.)







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1.2. Host System Configuration List and Details

100	Manufacturer	Description	Model	Serial Number	Certificate
		ADAPTER	THX-120050KB		FCC

Note: Auxiliary equipment is provided by the laboratory.

1.3. External I/O Cable

I/O Port Description	Quantity	Cable
Type-C Port	1	N/A

1.4. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

Test Firm Registration Number: 254912

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4:2014 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

1.5. Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16-4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.6. Measurement Uncertainty

Test Item		Frequency Range	Uncertainty	Note
Live Live		9KHz~30MHz	±3.10dB	(1)
		30MHz~200MHz	±2.96dB	(1)
Radiation Uncertainty	: [200MHz~1000MHz	±3.10dB	(1)
		1GHz~26.5GHz	±3.80dB	(1)
		26.5GHz~40GHz	±3.90dB	(1)
Conduction Uncertainty	:	150kHz~30MHz	±1.63dB	(1)
Power disturbance	:	30MHz~300MHz	±1.60dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.





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1.7. Description of Test Modes

The EUT has been tested under operating condition.

This test was performed with EUT in X, Y, Z position and the worst case was found when EUT in Y position.

AC conducted emission pre-test at both at AC 120V/60Hz and AC 240V/60Hz modes, recorded worst case:

AC conducted emission pre-test at both at power adapter and power from PC modes, recorded worst case:

Worst-case mode and channel used for 150 KHz-30 MHz power line conducted emissions was determined to be IEEE 802.11b mode (High Channel).

Worst-case mode and channel used for 9 KHz-1000 MHz radiated emissions was determined to be IEEE 802.11b mode (High Channel).

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

IEEE 802.11b Mode: 1 Mbps, DSSS. IEEE 802.11g Mode: 6 Mbps, OFDM. IEEE 802.11n Mode HT20: MCS0, OFDM.

Channel List & Frequency

IEEE 802.11b/g/n HT20

Frequency Band	Channel No.	Frequency(MHz)	Channel No.	Frequency(MHz)
68. S.	VIST ISTES	2412	7 CS Te5 117	2442
	2	2417	8	2447
0440. 0460MU=	3	2422	9	2452
2412~2462MHz	4	2427	10	2457
	5	2432	11	2462
	6	2437		











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2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd.

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to FCC's request, Test Procedure KDB558074 D01 15.247 Meas Guidance v05r02 is required to be used for this kind of FCC 15.247 digital modulation device.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

2.3. General Test Procedures

2.3.1 Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

2.3.2 Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane below 1GHz and 1.5 m above ground plane above 1GHz. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of ANSI C63.10-2013.

2.4. Test Sample

The application provides 2 samples to meet requirement;

Sample Number	Description
Sample 1(A120922018-1)	Engineer sample – continuous transmit
Sample 2(A120922018-2)	Normal sample – Intermittent transmit



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3. SYSTEM TEST CONFIGURATION

3.1. Justification

The system was configured for testing in a continuous transmits condition.

3.2. EUT Exercise Software

The system was configured for testing in a continuous transmits condition and change test channels by software(Serial port tool) provided by application.

3.3. Special Accessories

N/A.

3.4. Block Diagram/Schematics

Please refer to the related document

3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

3.6. Test Setup

Please refer to the test setup photo.







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4. SUMMARY OF TEST RESULTS

UMMARY OF TEST RESULTS					
- ra35	Applied Standard: FCC Par	t 15 Subpart (C		
FCC Rules	Description of Test	Test Sample	Result	Remark	
§15.205	Radiated Emissions	Sample 1	Compliant	Note 1	
§15.207(a)	Conducted Emissions	Sample 2	Compliant	Note 1	

Remark:

- 1. Note 1 Test results inside test report;
- 医主 立语检测股份 LCS Testing Lab 2. Note 2 – Test results in other test report (RF Report); July 10 Costing Lab



5. TEST RESULT

5.1. Radiated Emissions Measurement

5.1.1. Standard Applicable

15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

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MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
\1\ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293.	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(\2\)
 13.36-13.41			

\1\ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

\2\ Above 38.6

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

5.1.2. Measuring Instruments and Setting

Please refer to equipment list in this report. The following table is the setting of spectrum analyzer and receiver.

receiver.	
Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10 th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG



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Start ~ Stop Frequency

30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

5.1.3. Test Procedures

1) Sequence of testing 9 kHz to 30 MHz

Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

Premeasurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna height is 1.0 meter.
- --- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

- --- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).
- --- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.
- --- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.



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2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

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- --- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

Premeasurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna is polarized vertical and horizontal.
- --- The antenna height changes from 1 to 3 meter.
- --- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

- --- The final measurement will be performed with minimum the six highest peaks.
- --- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (\pm 45°) and antenna movement between 1 and 4 meter.
- --- The final measurement will be done with QP detector with an EMI receiver.
- --- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.





3) Sequence of testing 1 GHz to 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

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- --- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

Premeasurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna is polarized vertical and horizontal.
- --- The antenna height scan range is 1 meter to 2.5 meter.
- --- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

- --- The final measurement will be performed with minimum the six highest peaks.
- --- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- --- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- --- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.













4) Sequence of testing above 18 GHz

Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 1 meter.
- --- The EUT was set into operation.

Premeasurement:

--- The antenna is moved spherical over the EUT in different polarizations of the antenna.

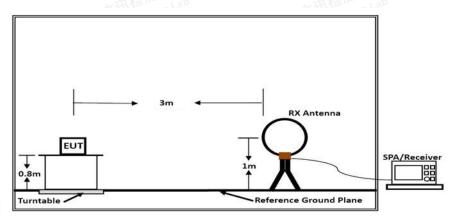
Final measurement:

- --- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- --- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

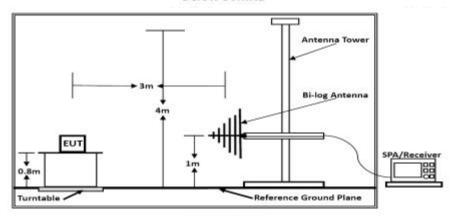




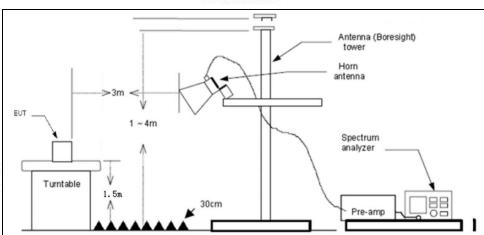
5.1.4. Test Setup Layout



Below 30MHz



Below 1GHz



Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

5.1.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.



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5.1.6. Results of Radiated Emissions (9 KHz~30MHz)

.b. Results of Radiated I	=missions (9 KHZ~30IVI	HZ)	
TO THE LED	THE SHAPE THE PARTY OF THE PART		Fr da
Temperature	23.8℃	Humidity	52.1%
Test Engineer	Jack Cheng	Configurations	IEEE 802.11b/g/n

req. MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dB)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

5.1.7. Results of Radiated Emissions (30MHz~1GHz)

WW. 250 4 - C.25 - 1	WAY 2017 F. C.	¥9 *	W/X 7557 & 67 75
Temperature	23.8℃	Humidity	52.1%
Test Engineer	Jack Cheng	Configurations	IEEE 802.11b/g/n

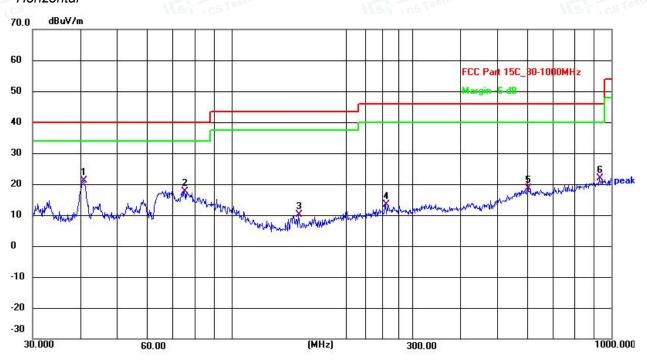
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Test result for IEEE 802.11b mode (High Channel) Horizontal



Report No.: LCSA01114056EB

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.8446	38.50	-17.43	21.07	40.00	-18.93	QP
2	75.1822	37.31	-19.68	17.63	40.00	-22.37	QP
3	150.0108	29.88	-19.82	10.06	43.50	-33.44	QP
4	254.7284	29.06	-15.56	13.50	46.00	-32.50	QP
5	603.5392	29.26	-10.52	18.74	46.00	-27.26	QP
6	929.0082	29.76	-7.91	21.85	46.00	-24.15	QP

医红斑检测股份 LCS Testing Lab





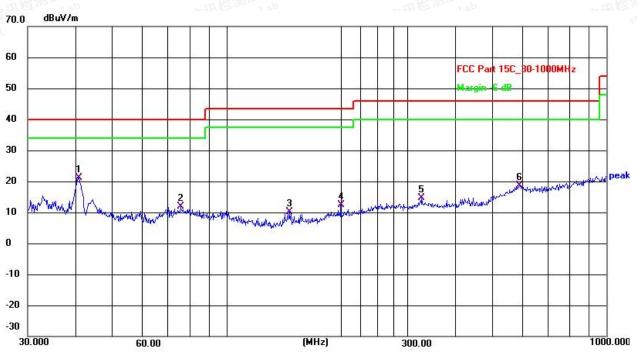




Report No.: LCSA01114056EB



Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.8446	38.68	-17.43	21.25	40.00	-18.75	QP
2	75.7114	31.56	-19.71	11.85	40.00	-28.15	QP
3	146.3735	30.44	-20.22	10.22	43.50	-33.28	QP
4	199.9856	29.87	-17.39	12.48	43.50	-31.02	QP
5	326.7395	28.90	-14.24	14.66	46.00	-31.34	QP
6	590.9737	29.22	-10.58	18.64	46.00	-27.36	QP

Note:

Pre-scan all modes and recorded the worst case results in this report IEEE 802.11b mode (High Channel).

Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.

Level = Reading + Factor, Margin = Level - Limit,

Factor = Antenna Factor + Cable Loss - Preamp Factor







5.2. AC Power line conducted emissions

5.2.1 Standard Applicable

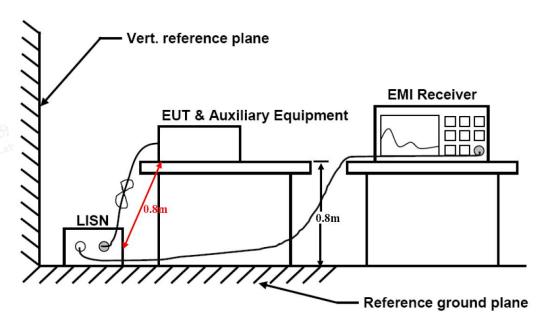
According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Report No.: LCSA01114056EB

Frequency Range	Limits (dBµV)			
(MHz)	Quasi-peak	Average		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5	56	46		
5 to 30	60	50		

^{*} Decreasing linearly with the logarithm of the frequency

5.2.2 Block Diagram of Test Setup



5.2.3 Test Results

PASS.

The test data please refer to following page.

Temperature	23.9℃	Humidity	53.2%
Test Engineer	Jack Cheng	Configurations	IEEE 802.11b/g/n



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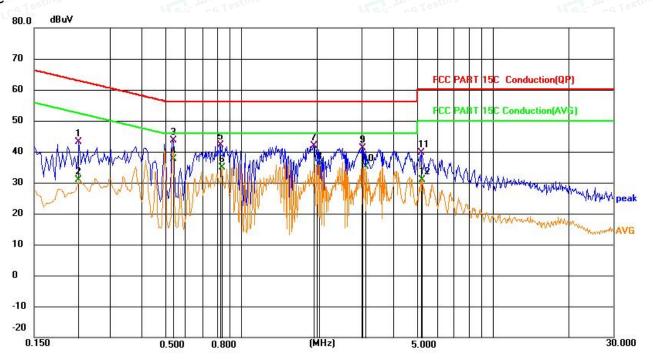
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AC Conducted Emission of power @ AC 120V/60Hz @ IEEE 802.11b mode (High Channel) (worst case)

Line



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.2266	23.48	19.63	43.11	62.57	-19.46	QP
2	0.2266	11.33	19.63	30.96	52.57	-21.61	AVG
3	0.5326	24.07	19.65	43.72	56.00	-12.28	QP
4 *	0.5378	17.99	19.65	37.64	46.00	-8.36	AVG
5	0.8251	22.53	19.64	42.17	56.00	-13.83	QP
6	0.8386	15.36	19.64	35.00	46.00	-11.00	AVG
7	1.9366	22.27	19.68	41.95	56.00	-14.05	QP
8	2.0311	16.32	19.68	36.00	46.00	-10.00	AVG
9	3.0301	21.46	19.70	41.16	56.00	-14.84	QP
10	3.1111	15.42	19.70	35.12	46.00	-10.88	AVG
11	5.1855	19.84	19.70	39.54	60.00	-20.46	QP
12	5.2261	11.08	19.70	30.78	50.00	-19.22	AVG



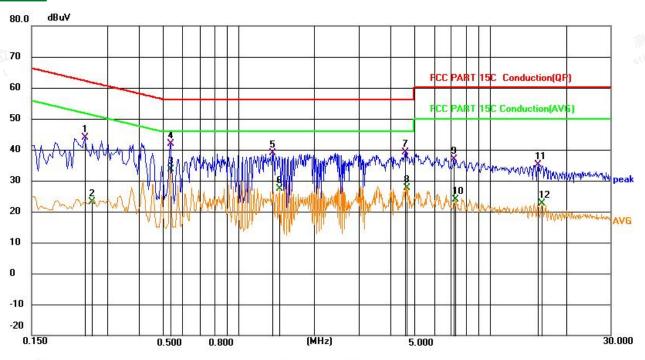


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Report No.: LCSA01114056EB





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2446	24.33	19.63	43.96	61.94	-17.98	QP
2		0.2589	3.45	19.63	23.08	51.47	-28.39	AVG
3	*	0.5326	13.99	19.65	33.64	46.00	-12.36	AVG
4		0.5371	22.22	19.65	41.87	56.00	-14.13	QP
5		1.3606	19.25	19.66	38.91	56.00	-17.09	QP
6		1.4551	7.61	19.66	27.27	46.00	-18.73	AVG
7		4.6006	19.30	19.80	39.10	56.00	-16.90	QP
8		4.6771	7.84	19.80	27.64	46.00	-18.36	AVG
9		7.2061	16.96	19.83	36.79	60.00	-23.21	QP
10		7.2961	4.06	19.83	23.89	50.00	-26.11	AVG
11		15.5401	15.20	19.90	35.10	60.00	-24.90	QP
12		16.1161	2.67	19.92	22.59	50.00	-27.41	AVG

^{***}Note: 1). Pre-scan all modes and recorded the worst case results in this report IEEE 802.11b mode (High Channel).

2). Measurement= Reading + Correct, Margin = Measurement – Limit.

Correct Factor= Lisn Factor+Cable Factor



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FCC ID: 2A2VW-C9E2CA11

Report No.: LCSA01114056EB

6. LIST OF MEASURING EQUIPMENTS

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power Meter	R&S	NRVS	100444	2022-06-16	2023-06-15
2	Power Sensor	R&S	NRV-Z81	100458	2022-06-16	2023-06-15
3	Power Sensor	R&S	NRV-Z32	10057	2022-06-16	2023-06-15
4	Test Software	Tonscend	JS1120-2	1	N/A	N/A
5	RF Control Unit	Tonscend	JS0806-2	N/A	2022-10-29	2023-10-28
6	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2022-10-29	2023-10-28
7	DC Power Supply	Agilent	E3642A	N/A	2022-10-29	2023-10-28
8	EMI Test Software	AUDIX	E3	1	N/A	N/A
9	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2022-06-16	2023-06-15
10	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
11	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2021-08-29	2024-08-28
12	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
13	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
14	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2021-08-29	2024-08-28
15	Broadband Preamplifier	SCHWARZBECK	BBV9719	9719-025	2022-06-16	2023-06-15
16	EMI Test Receiver	R&S	ESR 7	101181	2022-06-16	2023-06-15
17	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2022-10-29	2023-10-28
18	Broadband Preamplifier	- 1 FE 45	BP-01M18G	P190501	2022-06-16	2023-06-15
19	6dB Attenuator	to the transmitted to the total	100W/6dB	1172040	2022-06-16	2023-06-15
20	3dB Attenuator	LCSTEST	2N-3dB	CSTEST/	2022-10-29	2023-10-28
21	EMI Test Receiver	R&S	ESPI	101940	2022-08-18	2023-08-17
22	Artificial Mains	R&S	ENV216	101288	2022-06-16	2023-06-15
23	10dB Attenuator	SCHWARZBECK	MTS-IMP-136	261115-001-0032	2022-06-16	2023-06-15
24	EMI Test Software	Farad	EZ	1	N/A	N/A
		1	1	1		

















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7. TEST SETUP PHOTOGRAPHS OF EUT

Please refer to separated files for Test Setup Photos of the EUT.

8. EXTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for External Photos of the EUT.

9. INTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

-----THE END OF REPORT------













