

TEST REPORT

No. I22N00378-BLE

TCL Communication Ltd.

Tablet PC

Model Name: 9132X

with

Hardware Version: PIO

Software Version: CS61

FCC ID: 2ACCJB176

Issued Date: 2022-03-18

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

Shenzhen Academy of Information and Communications Technology

Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000.

Tel: +86(0)755-33322000, Fax: +86(0)755-33322001 Email: yewu@caict.ac.cn, website: www.cszit.com



CONTENTS

1.	SU	MMARY OF TEST REPORT	3
1	.1.	TEST ITEMS.	3
1	.2.	TEST STANDARDS	3
1	.3.	TEST RESULT	3
1	.4.	TESTING LOCATION	3
1	.5.	PROJECT DATA	3
1	.6.	SIGNATURE	3
2.	CL	JENT INFORMATION	4
2	.1.	APPLICANT INFORMATION	4
2	.2.	MANUFACTURER INFORMATION	4
3.	EQ	UIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	5
3	.1.	ABOUT EUT	5
3	.2.	INTERNAL IDENTIFICATION OF EUT	5
3	.3.	INTERNAL IDENTIFICATION OF AE	5
3	.4.	GENERAL DESCRIPTION	5
4.	RE	FERENCE DOCUMENTS	6
4	.1.	DOCUMENTS SUPPLIED BY APPLICANT	6
4	.2.	REFERENCE DOCUMENTS FOR TESTING	6
5.	TE	ST RESULTS	7
5	.1.	TESTING ENVIRONMENT	7
5	.2.	TEST RESULTS	7
5	.3.	STATEMENTS	7
6.	TE	ST EQUIPMENTS UTILIZED	8
7.	LA	BORATORY ENVIRONMENT	9
8.	MF	EASUREMENT UNCERTAINTY 1	0
AN	NEX	X A: DETAILED TEST RESULTS1	1
Α	.0 A	NTENNA REQUIREMENT	1
Α	1.1 M	IAXIMUM PEAK OUTPUT POWER	2
Α	.2 P	EAK POWER SPECTRAL DENSITY	3
Δ	.3 61	DB BANDWIDTH1	7
Δ	.4 B	AND EDGES COMPLIANCE	1
A	1.5 T	RANSMITTER SPURIOUS EMISSION - CONDUCTED	4
A	.6 T	RANSMITTER SPURIOUS EMISSION - RADIATED	3
Α	.7 A	C Power line Conducted Emission	4
AN	NEX	X B: SPOT CHECK OF OUTPUT POWER4	7



1. Summary of Test Report

1.1. Test Items

Description Tablet PC Model Name 9132X

Applicant's name TCL Communication Ltd.

Manufacturer's Name TCL Communication Ltd.

1.2. Test Standards

FCC Part15-2019; ANSI C63.10-2013

1.3. Test Result

Pass

Please refer to 5.2 Test Results.

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project data

Testing Start Date: 2022-02-10
Testing End Date: 2022-03-10

1.6. Signature

Lin Kanfeng

林仆丰

(Prepared this test report)

An Ran

(Reviewed this test report)

Zhang Bojun

(Approved this test report)



Address:

2. Client Information

2.1. Applicant Information

Company Name: TCL Communication Ltd.

5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Address:

Park, Shatin, NT, Hong Kong

Contact Person: Peter yang

E-Mail: peter.yang@tcl.com
Telephone: +86 755 3664 5759

FAX: 0086-755-36612000-81722

2.2. Manufacturer Information

Company Name: TCL Communication Ltd.

5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science

Park, Shatin, NT, Hong Kong

Contact Person: Peter yang

E-Mail: peter.yang@tcl.com
Telephone: +86 755 3664 5759

FAX: 0086-755-36612000-81722



3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description Tablet PC Model Name 9132X

Frequency Range 2400MHz~2483.5MHz

Type of Modulation GFSK Number of Channels 40

Antenna Type Integrated
Antenna Gain 1.9 dBi

Power Supply 3.85V DC by Battery

FCC ID 2ACCJB176

Condition of EUT as received No abnormality in appearance

3.2. Internal Identification of EUT

EUT ID*	IMEI	HW Version	SW Version	Receive Date
UT04aa	/	PIO	CS61	2022-02-10
UT02aa	/	PIO	CS61	2022-02-23

^{*}EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description	SN
AE1	Battery	CAC4000018C7
AE2	Adapter	CBA0058AATC5
AE3	Adapter	CBA0058ABTC5
AE4	Adapter	CBA0058AGTC5
AE5	USB Cable	CDA0000162C2
AE6	USB Cable	CDA0000162C1

^{*}AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment under Test (EUT) is a model of Tablet PC with integrated antenna and battery. It consists of normal options: Lithium Battery and Charger. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the client.

^{*}UT04aa is used for Conduction test; UT02aa is used for Radiation test.



4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version		
FCC Part15	FCC CFR 47, Part 15, Subpart C:			
	15.205 Restricted bands of operation;			
	15.209 Radiated emission limits, general requirements;			
	15.247 Operation within the bands 902-928MHz,			
	2400-2483.5 MHz, and 5725-5850 MHz			
ANSI C63.10	American National Standard of Procedures for Compliance 2013			

Testing of Unlicensed Wireless Devices



5. Test Results

5.1. Testing Environment

Normal Temperature: 15~35°C Relative Humidity: 20~75%

5.2. Test Results

No	Test cases	Sub-clause of Part 15C	Verdict
0	Antenna Requirement	15.203	Р
1	Maximum Peak Output Power	15.247 (b)	Р
2	Peak Power Spectral Density	15.247 (e)	Р
3	6dB Bandwidth	15.247 (a)	Р
4	Band Edges Compliance	15.247 (d)	Р
5	Transmitter Spurious Emission - Conducted	15.247 (d)	Р
6	Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	Р
7	AC Power line Conducted Emission	15.107, 15.207	Р

See ANNEX A for details.

5.3. Statements

SAICT has evaluated the test cases requested by the applicant/manufacturer as listed in section 5.2 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

Disclaimer:

- A. After confirmation with the customer, the sample information provided by the customer may affect the validity of the measurement results in this report, and the impact and consequences arising therefrom shall be borne by the customer.
- B. The samples in this report are provided by the customer, and the test results are only applicable to the samples received.

According to the customer's description, 9132X is a variant product of 9132G. Conduction test results were from the initial model. And Radiation test is new. The initial model report number is I22N00113-BLE.



6. Test Equipments Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Date	Calibration Period
1	Vector Signal Analyzer	FSV40	100903	Rohde & Schwarz	2022-12-29	1 year
2	Power Sensor	U2021XA	MY55430013	Agilent	2022-12-29	1 year
3	Data Acquisiton	U2531A	TW55443507	Agilent	/	/

Radiated emission test system

Na	Faurin mont	Madal	Serial	Manufacturer	Calibration	Calibration
No.	Equipment	Model	Number	Manufacturer	Date	Period
1	LISN	ENV216	102067	R&S	2022-07-15	1 year
2	Test Receiver	ESCI	100702	R&S	2023-01-12	1 year
3	Loop Antenna	HLA6120	35779	TESEQ	2022-04-25	3 year
4	BiLog Antenna	3142E	0224831	ETS-Lindgren	2024-05-27	3 year
5	Horn Antenna	3117	00066577	ETS-Lindgren	2022-04-02	3 year
6	Test Receiver	ESR7	101676	R&S	2022-11-24	1 year
7	Spectrum	EC\/40	FSV40 101192	R&S	2023-01-12	1 year
-	Analyzer	F3V40	101192	Κασ	2023-01-12	i yeai
8	Chamber	FACT3-2.0	1285	ETS-Lindgren	2023-05-29	2 year
9	Antonna	QSH-SL-1	17013	Oper	2022 04 00	2
9	Antenna	8-26-S-20	17013	Q-par	2023-01-06	3 year
10	Antonna	QSH-SL-1	15070	Oper	2023-01-06	2 voor
10	Antenna	8-40-K-SG	15979	Q-par	2023-01-06	3 year

Test software

No.	Equipment	Manufacturer	Version
1	TechMgr Software	CAICT	2.1.1
2	EMC32	Rohde & Schwarz	10.50.40

EUT is engineering software provided by the customer to control the transmitting signal.

The EUT was programmed to be in continuously transmitting mode.

Anechoic chamber

Fully anechoic chamber by ETS-Lindgren



7. Laboratory Environment

Semi-anechoic chamber

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ±4 dB, 3 m distance, from 30 to 1000 MHz

Shielded room

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-1000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω

Fully-anechoic chamber

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	<4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz



8. Measurement Uncertainty

Test Name	Uncertain	ty (k=2)
RF Output Power - Conducted	1.32	dB
2. Power Spectral Density - Conducted	2.32	dB
3. Occupied channel bandwidth - Conducted	66H	łz
	30MHz≤f<1GHz	1.41dB
4 Transmitter Spurious Emission Conducted	1GHz≤f<7GHz	1.92dB
4. Transmitter Spurious Emission - Conducted	7GHz≤f<13GHz	2.31dB
	13GHz≤f≤26GHz	2.61dB
	9kHz≤f<30MHz	1.70dB
F. Transmitter Churique Emission Dedicted	30MHz≤f<1GHz	4.90dB
5. Transmitter Spurious Emission - Radiated	1GHz≤f<18GHz	4.60dB
	18GHz≤f≤40GHz	4.10dB
6. AC Power line Conducted Emission	150kHz≤f≤30MHz	3.00dB



ANNEX A: Detailed Test Results

A.0 Antenna requirement

Measurement Limit:

Standard	Requirement		
FCC CRF Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.		

Conclusion: The Directional gains of antenna used for transmitting is 1.9 dBi. The RF transmitter uses an integrate antenna without connector.



A.1 Maximum Peak Output Power

Method of Measurement: See ANSI C63.10-clause 11.9.1.3

The maximum peak conducted output power may be measured using a broadband peak RF power meter.

Measurement Limit:

Standard	Limit (dBm)	E.I.R.P Limit (dBm)
FCC CRF Part 15.247 (b)	< 30	< 36

Measurement Results:

Mode	Frequency (MHz)	Peak Conducted Output Power (dBm)	E.I.R.P (dBm)	Conclusion
	2402 (CH0)	-2.25	-0.35	Р
LE-1M	2440 (CH19)	-0.53	1.37	Р
	2480 (CH39)	-1.61	0.29	Р
	2402 (CH0)	-2.40	-0.50	Р
LE-2M	2440 (CH19)	-0.72	1.18	Р
	2480 (CH39)	-1.77	0.13	Р

Conclusion: Pass



A.2 Peak Power Spectral Density

Method of Measurement: See ANSI C63.10-clause 11.10.2

Measurement Limit:

Standard	Limit
FCC CRF Part 15.247 (e)	< 8 dBm/3 kHz

Measurement Results:

Mode	Frequency (MHz)	Peak Power Spec	tral Density (dBm)	Conclusion
	2402 (CH0)	Fig.1	-18.84	Р
LE-1M	2440 (CH19)	Fig.2	-17.26	Р
	2480 (CH39)	Fig.3	-18.22	Р
	2402 (CH0)	Fig.4	-22.72	Р
LE-2M	2440 (CH19)	Fig.5	-21.10	Р
	2480 (CH39)	Fig.6	-22.11	Р

See below for test graphs.

Conclusion: PASS

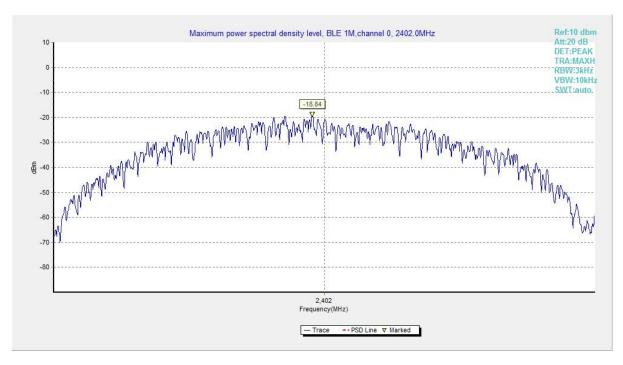


Fig.1 Power Spectral Density (Ch 0), LE 1M



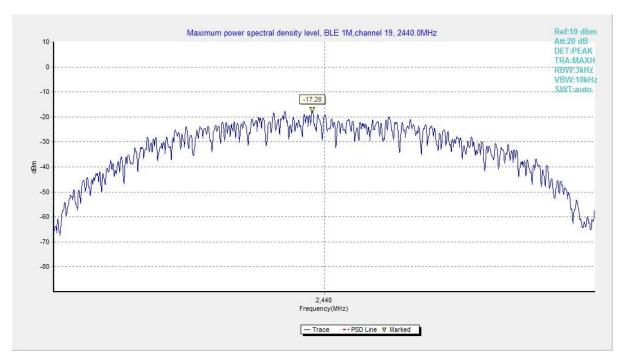


Fig.2 Power Spectral Density (Ch 19), LE 1M

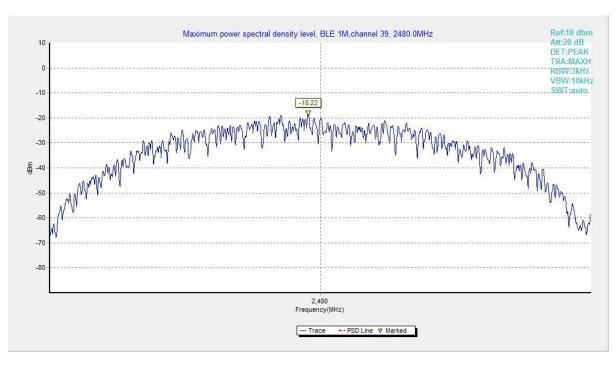


Fig.3 Power Spectral Density (Ch 39), LE 1M



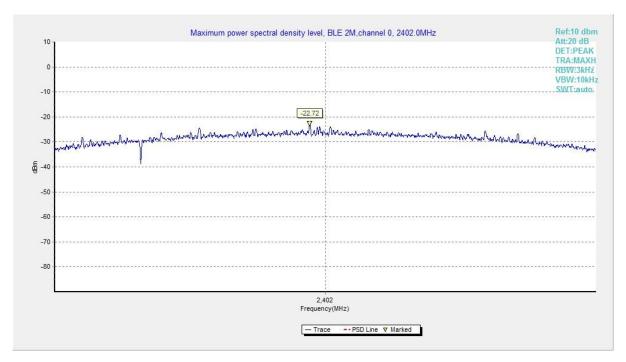


Fig.4 Power Spectral Density (Ch 0), LE 2M

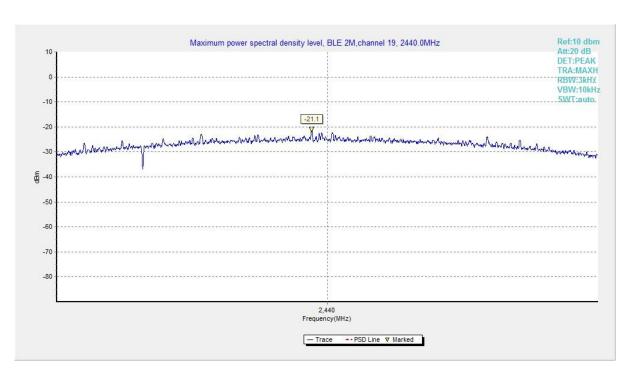


Fig.5 Power Spectral Density (Ch 19), LE 2M



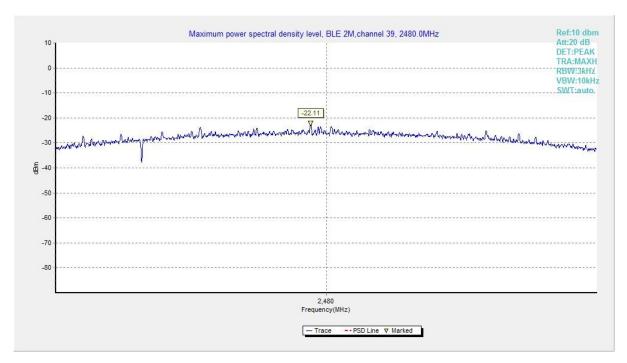


Fig.6 Power Spectral Density (Ch 39), LE 2M



A.3 6dB Bandwidth

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

Measurement Result:

Mode	Frequency (MHz)	Test Results (kHz)		Conclusion
	2402 (CH0)	Fig.7	667.00	Р
LE-1M	2440 (CH19)	Fig.8	667.00	Р
	2480 (CH39)	Fig.9	665.50	Р
	2402 (CH0)	Fig.10	1169.00	Р
LE-2M	2440 (CH19)	Fig.11	1170.50	Р
	2480 (CH39)	Fig.12	1172.50	Р

See below for test graphs.

Conclusion: PASS

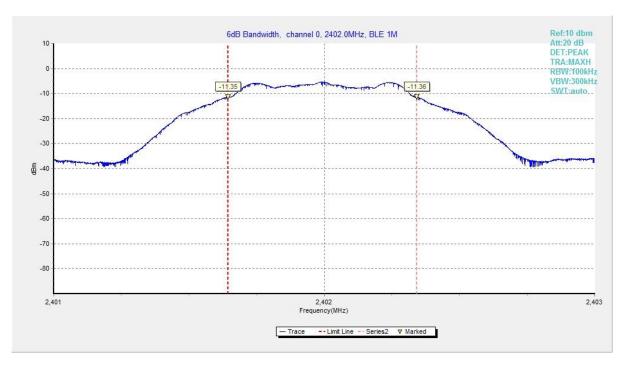


Fig.7 6dB Bandwidth (Ch 0), LE 1M



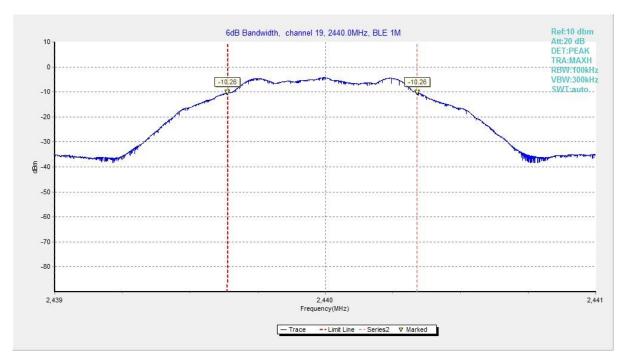


Fig.8 6dB Bandwidth (Ch 19), LE 1M

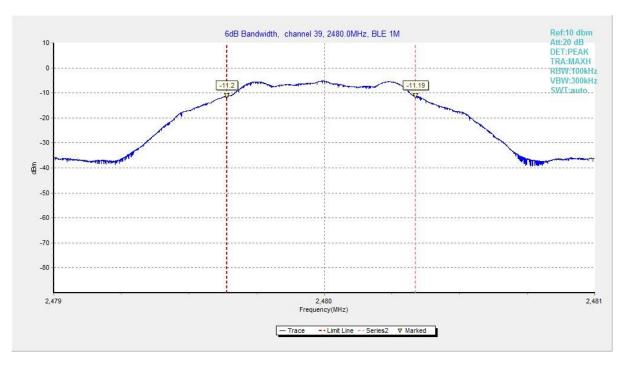


Fig.9 6dB Bandwidth (Ch 39), LE 1M



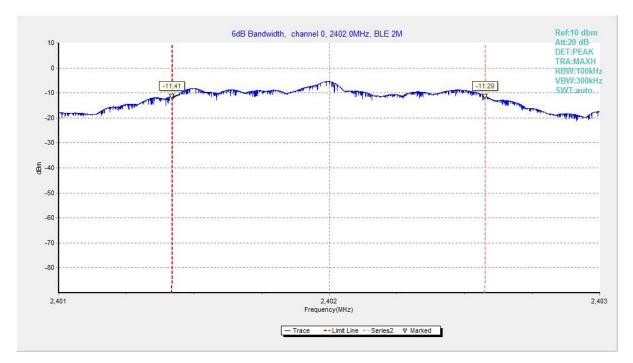


Fig.10 6dB Bandwidth (Ch 0), LE 2M

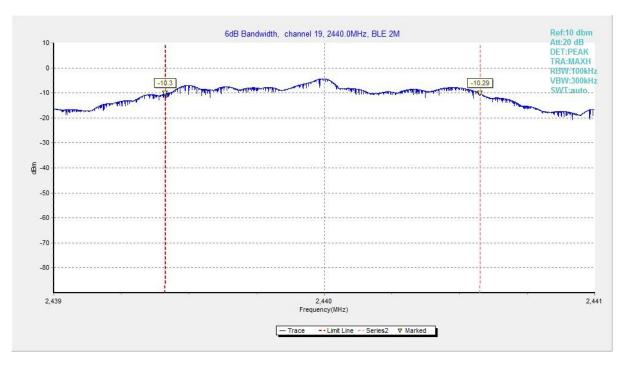


Fig.11 6dB Bandwidth (Ch 19), LE 2M



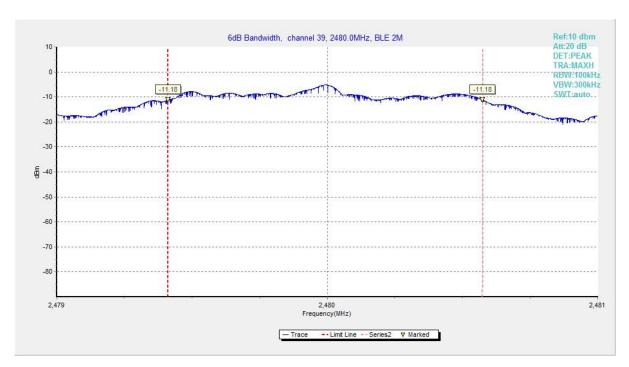


Fig.12 6dB Bandwidth (Ch 39), LE 2M



A.4 Band Edges Compliance

Measurement Limit:

Standard	Limit (dB)
FCC 47 CFR Part 15.247 (d)	> 20

Measurement Result:

Mode	Frequency (MHz)	Test Results (dB)		Conclusion
LE-1M	2402 (CH0)	Fig.13	56.80	Р
LE-TIVI	2480 (CH39)	Fig.14	56.95	Р
LE-2M	2402 (CH0)	Fig.15	31.59	Р
	2480 (CH39)	Fig.16	56.17	Р

See below for test graphs.

Conclusion: Pass

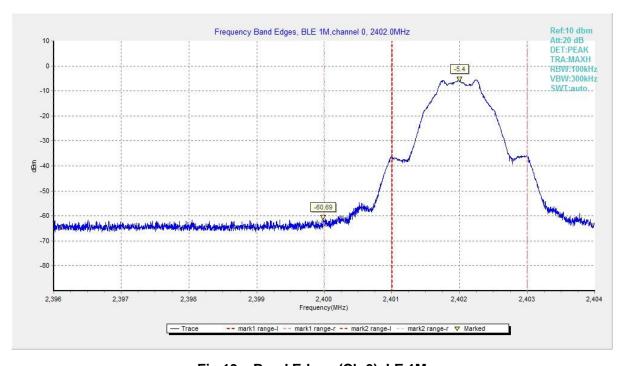


Fig.13 Band Edges (Ch 0), LE 1M



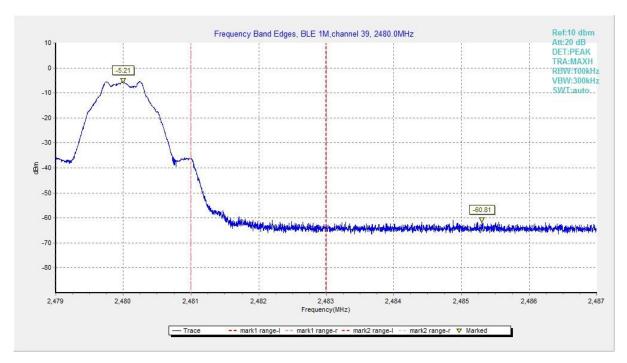


Fig.14 Band Edges (Ch 39), LE 1M

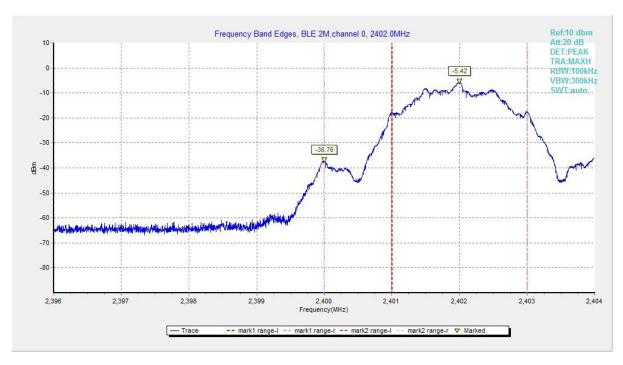


Fig.15 Band Edges (Ch 0), LE 2M



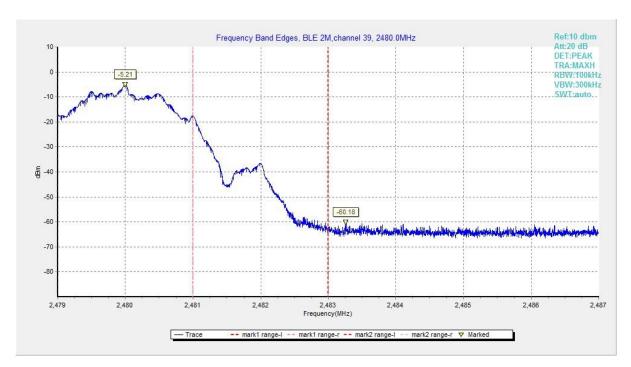


Fig.16 Band Edges (Ch 39), LE 2M



A.5 Transmitter Spurious Emission - Conducted

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100kHz bandwidth

Measurement Results:

MODE	Channel	Frequency Range	Test Results	Conclusion
	0	1 GHz ~ 3 GHz	Fig.17	Р
	0	3 GHz ~ 10 GHz	Fig.18	Р
	10	1 GHz ~ 3 GHz	Fig.19	Р
1 E 4M	19	3 GHz ~ 10 GHz	Fig.20	Р
LE-1M	39	1 GHz ~ 3 GHz	Fig.21	Р
	39	3 GHz ~ 10 GHz	Fig.22	Р
	All channels	30 MHz ~ 1 GHz	Fig.23	Р
		10 GHz ~ 26 GHz	Fig.24	Р
	0 19	1 GHz ~ 3 GHz	Fig.25	Р
		3 GHz ~ 10 GHz	Fig.26	Р
		1 GHz ~ 3 GHz	Fig.27	Р
LE-2M		3 GHz ~ 10 GHz	Fig.28	Р
LE-ZIVI	00	1 GHz ~ 3 GHz	Fig.29	Р
	39	3 GHz ~ 10 GHz	Fig.30	Р
	A II ala a a a a la	30 MHz ~ 1 GHz	Fig.31	Р
	All channels	10 GHz ~ 26 GHz	Fig.32	Р

See below for test graphs.

Conclusion: Pass



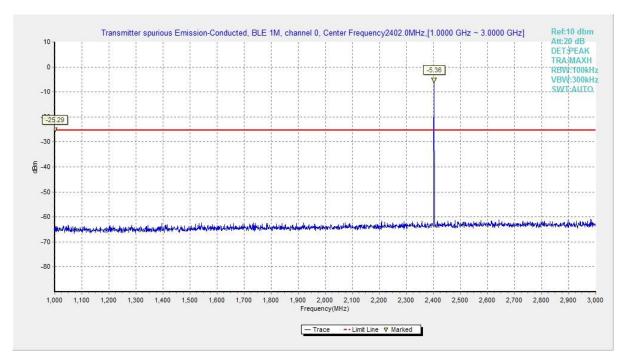


Fig.17 Conducted Spurious Emission (Ch0, 1 GHz-3 GHz), LE 1M

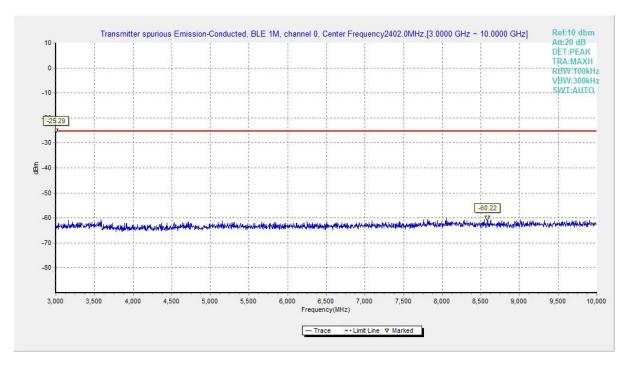


Fig.18 Conducted Spurious Emission (Ch0, 3 GHz-10 GHz), LE 1M



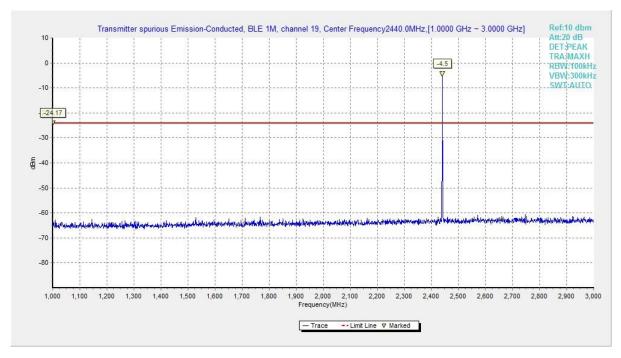


Fig.19 Conducted Spurious Emission (Ch19, 1 GHz-3 GHz), LE 1M

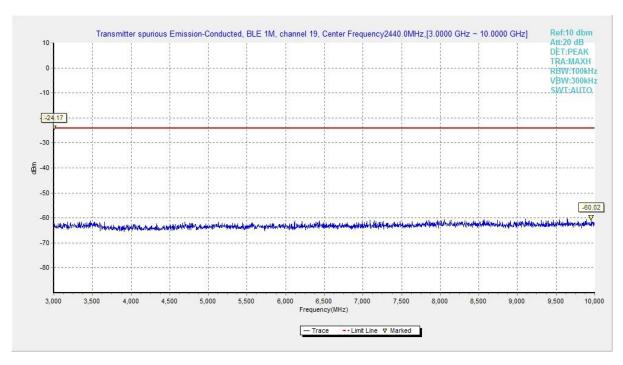


Fig.20 Conducted Spurious Emission (Ch19, 3 GHz-10 GHz), LE 1M



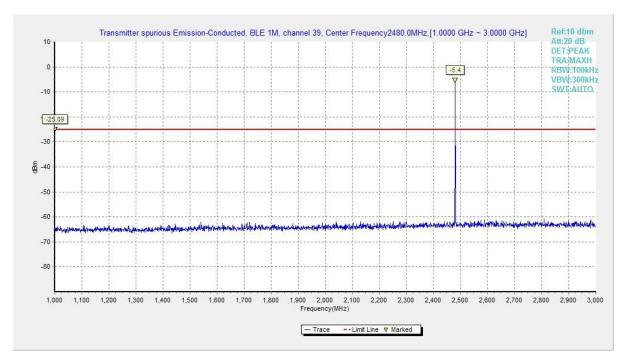


Fig.21 Conducted Spurious Emission (Ch39, 1 GHz-3 GHz), LE 1M

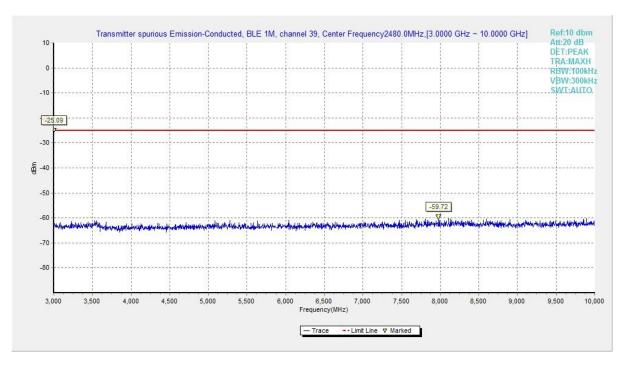


Fig.22 Conducted Spurious Emission (Ch39, 3 GHz-10 GHz), LE 1M



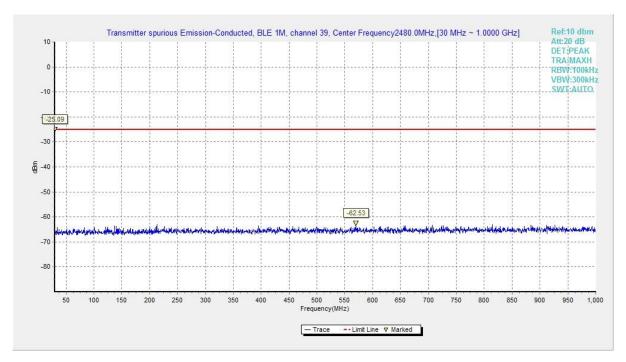


Fig.23 Conducted Spurious Emission (All channels, 30 MHz-1 GHz), LE 1M

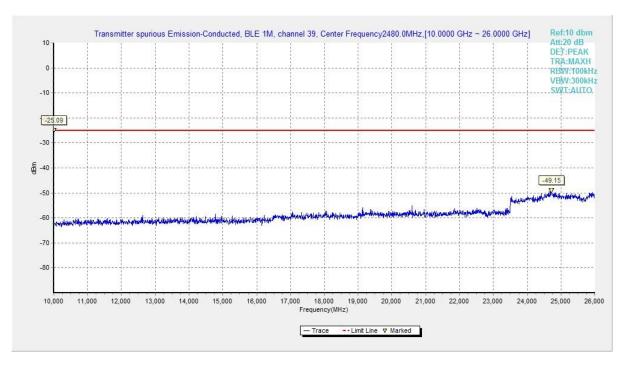


Fig.24 Conducted Spurious Emission (All channels, 10 GHz-26 GHz), LE 1M



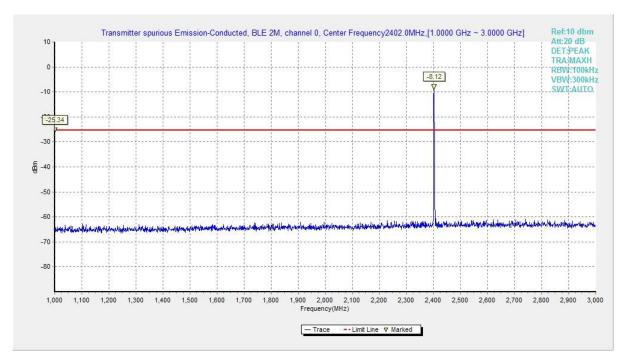


Fig.25 Conducted Spurious Emission (Ch0, 1 GHz-3 GHz), LE 2M

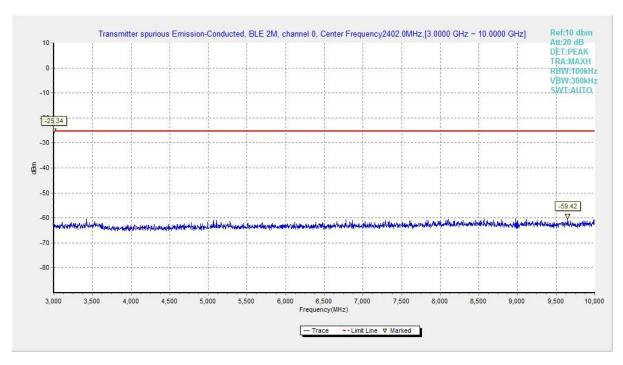


Fig.26 Conducted Spurious Emission (Ch0, 3 GHz-10 GHz), LE 2M



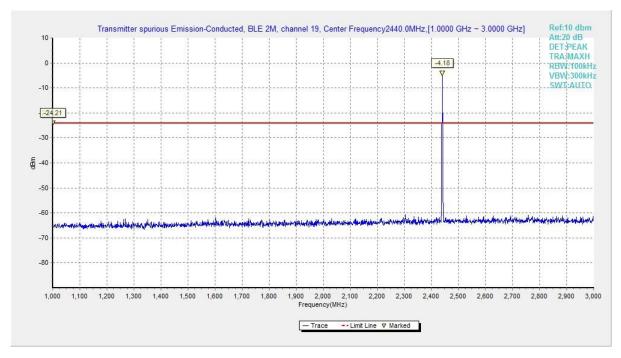


Fig.27 Conducted Spurious Emission (Ch19, 1 GHz-3 GHz), LE 2M

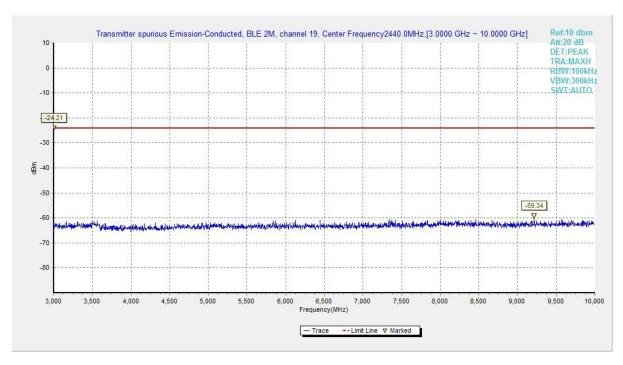


Fig.28 Conducted Spurious Emission (Ch19, 3 GHz-10 GHz), LE 2M



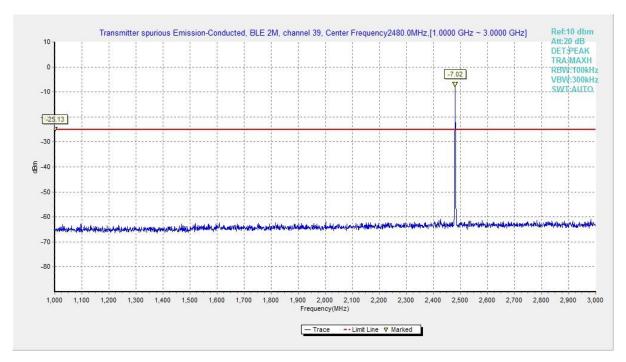


Fig.29 Conducted Spurious Emission (Ch39, 1 GHz-3 GHz), LE 2M

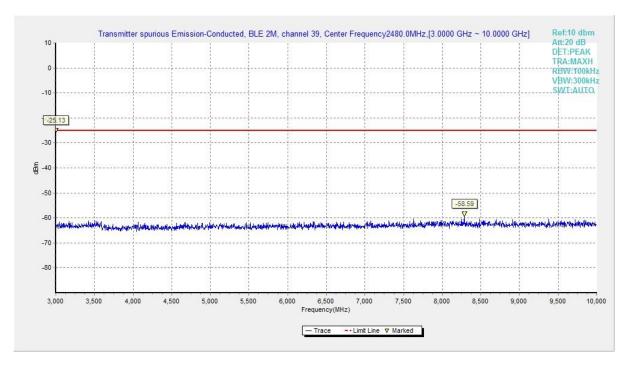


Fig.30 Conducted Spurious Emission (Ch39, 3 GHz-10 GHz), LE 2M



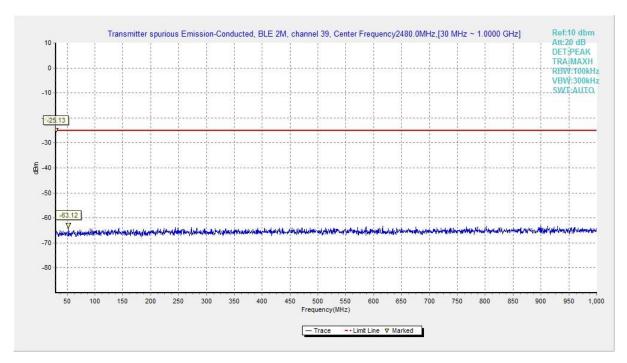


Fig.31 Conducted Spurious Emission (All channels, 30 MHz-1 GHz), LE 2M

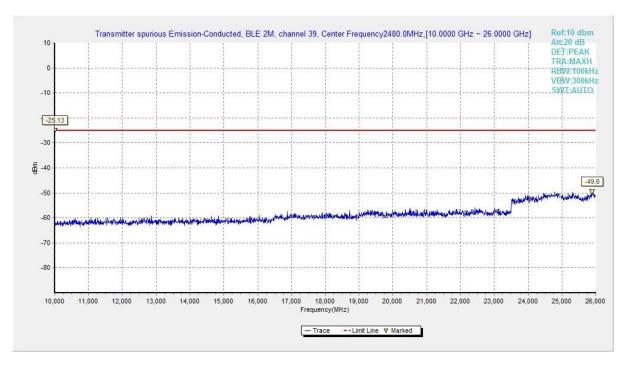


Fig.32 Conducted Spurious Emission (All channels, 10 GHz-26 GHz), LE 2M



A.6 Transmitter Spurious Emission - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength (μV/m)	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

Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time (s)
30-1000	120kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Note: According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band from 9kHz to 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic. The measurement results include the horizontal polarization and vertical polarization measurements.



Measurement Results:

Mode	Channel	Frequency Range	Test Results	Conclusion
	0	1 GHz ~ 18 GHz	Fig.33	Р
		9 kHz ~ 30 MHz	Fig.34	Р
	19	30 MHz ~ 1 GHz	Fig.35	Р
LE-1M	19	1 GHz ~ 18 GHz	Fig.36	Р
LE-11VI		18 GHz ~ 26.5 GHz	Fig.37	Р
	39	1 GHz ~ 18 GHz	Fig.38	Р
	Restricted Band(CH0)	2.38 GHz ~ 2.45 GHz	Fig.39	Р
	Restricted Band(CH39)	2.45 GHz ~ 2.5 GHz	Fig.40	Р
	0	1 GHz ~ 18 GHz	Fig.41	Р
		9 kHz ~ 30 MHz	Fig.42	Р
	19	30 MHz ~ 1 GHz	Fig.43	Р
LE-2M	19	1 GHz ~ 18 GHz	Fig.44	Р
LE-ZIVI		18 GHz ~ 26.5 GHz	Fig.45	Р
	39	1 GHz ~ 18 GHz	Fig.46	Р
	Restricted Band(CH0)	2.38 GHz ~ 2.45 GHz	Fig.47	Р
	Restricted Band(CH39)	2.45 GHz ~ 2.5 GHz	Fig.48	Р

See below for test graphs.

Conclusion: Pass

Worst Case Result

LE-1M CH19 (1-18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB)
2871.600000	48.05	74.00	25.95	Н	10.67
3559.800000	36.71	74.00	37.29	V	-13.04
6082.400000	40.17	74.00	33.83	V	-6.32
9830.400000	46.32	74.00	27.68	V	-0.35
14233.200000	51.15	74.00	22.85	Н	6.66
17994.000000	54.12	74.00	19.88	V	13.95

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB)
2871.600000	35.81	54.00	18.19	Н	10.67
3559.800000	22.87	54.00	31.13	V	-13.04
6082.400000	27.62	54.00	26.38	V	-6.32
9830.400000	33.20	54.00	20.80	V	-0.35
14233.200000	38.48	54.00	15.52	Н	6.66
17994.000000	41.74	54.00	12.26	V	13.95



LE-2M CH19 (1-18GHz)

Frequency	MaxPeak	Limit	Margin (dB)	Pol	Corr. (dB)
(MHz)	(dBµV/m)	(dBµV/m)			
2923.600000	47.10	74.00	26.90	Н	10.64
3438.600000	34.63	74.00	39.37	Н	-13.95
4587.300000	37.95	74.00	36.05	V	-9.74
7320.000000	42.86	74.00	31.14	V	-1.75
14284.800000	51.54	74.00	22.46	Н	6.36
17954.800000	54.49	74.00	19.51	Н	14.72

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB)
2923.600000	34.85	54.00	19.15	Н	10.64
3438.600000	22.23	54.00	31.77	Н	-13.95
4587.300000	24.56	54.00	29.44	V	-9.74
7320.000000	30.93	54.00	23.07	V	-1.75
14284.800000	39.19	54.00	14.81	Н	6.36
17954.800000	41.65	54.00	12.35	Н	14.72

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and Antenna Factor, the gain of the preamplifier, the cable loss. P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result = P_{Mea} + Cable Loss + Antenna Factor - Gain of the preamplifier



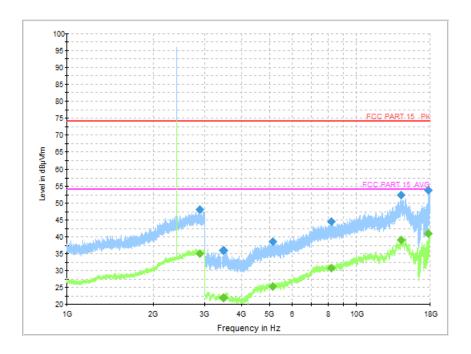


Fig.33 Radiated Spurious Emission (Ch0, 1 GHz - 18 GHz), 1M

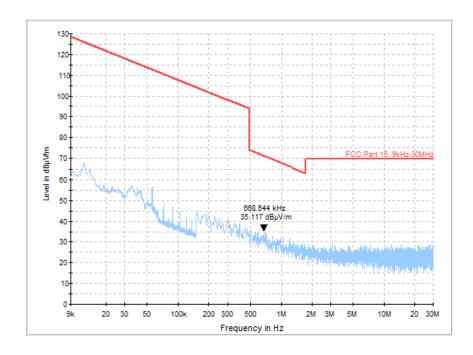


Fig.34 Radiated Spurious Emission (Ch19, 9 kHz - 30 MHz), 1M



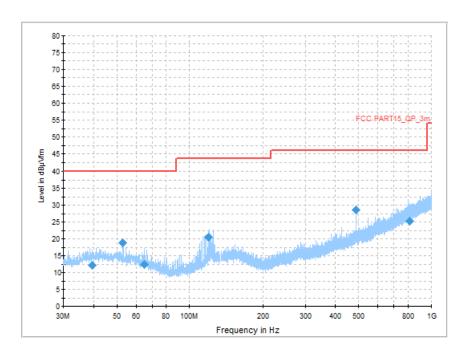


Fig.35 Radiated Spurious Emission (Ch19, 30 MHz - 1 GHz), 1M

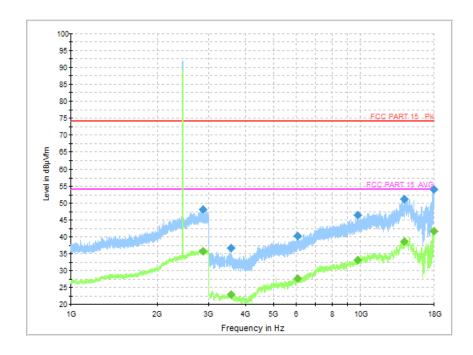


Fig.36 Radiated Spurious Emission (Ch19, 1 GHz - 18 GHz), 1M



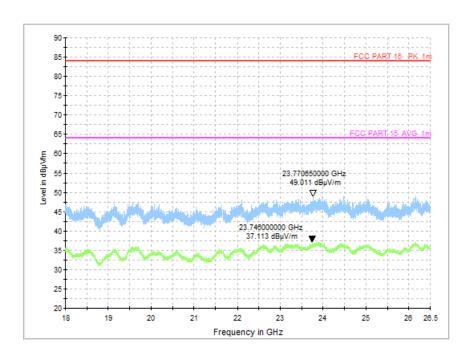


Fig.37 Radiated Spurious Emission (Ch19, 18 GHz - 26.5 GHz), 1M

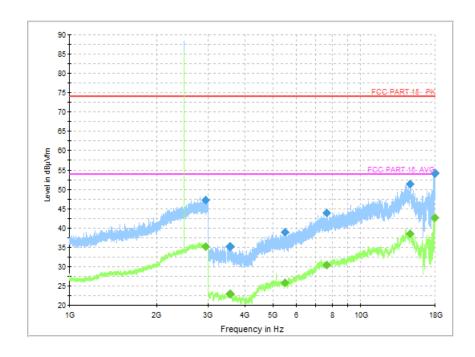


Fig.38 Radiated Spurious Emission (Ch39, 1 GHz - 18 GHz), 1M



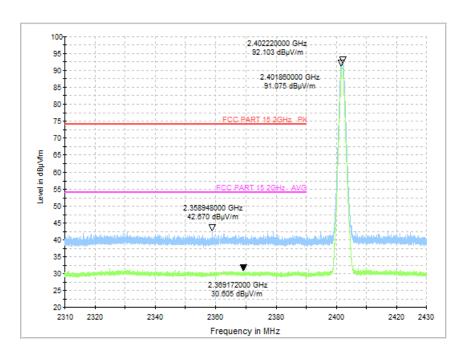


Fig.39 Radiated Band Edges (Ch0, 2380GHz - 2450GHz), 1M

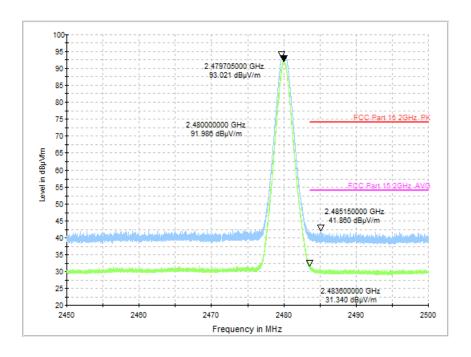


Fig.40 Radiated Band Edges (Ch39, 2450GHz - 2500GHz), 1M



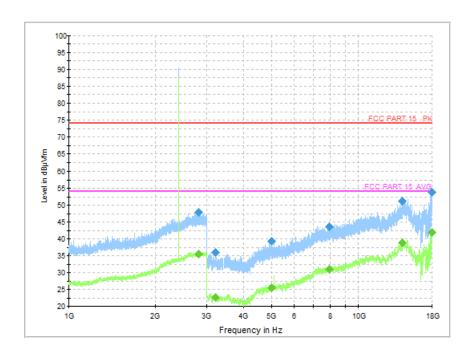


Fig.41 Radiated Spurious Emission (Ch0, 1 GHz - 18 GHz), 2M

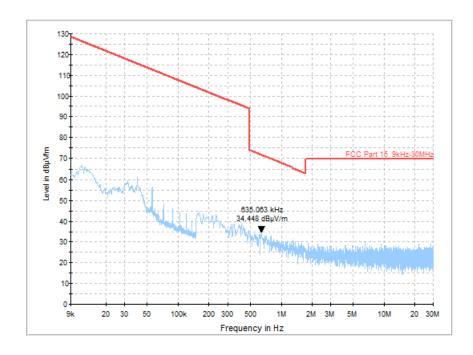


Fig.42 Radiated Spurious Emission (Ch19, 9 kHz - 30 MHz), 2M



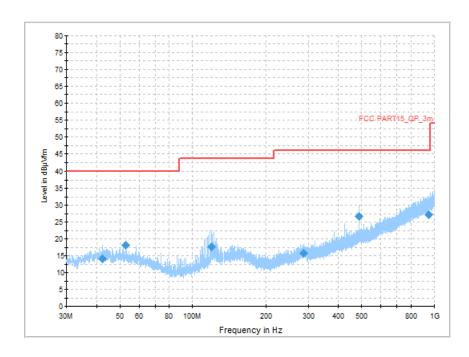


Fig.43 Radiated Spurious Emission (Ch19, 30 MHz - 1 GHz), 2M

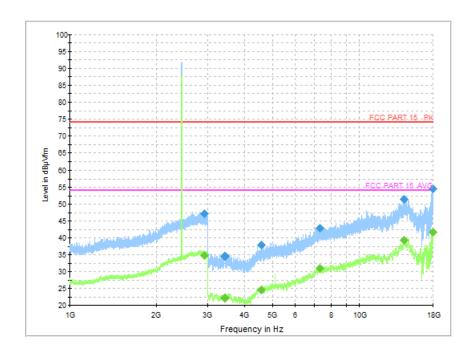


Fig.44 Radiated Spurious Emission (Ch19, 1 GHz - 18 GHz), 2M



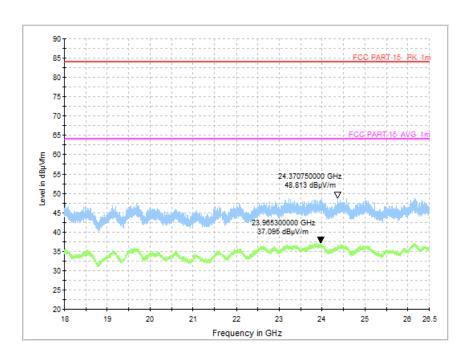


Fig.45 Radiated Spurious Emission (Ch19, 18 GHz - 26.5 GHz), 2M

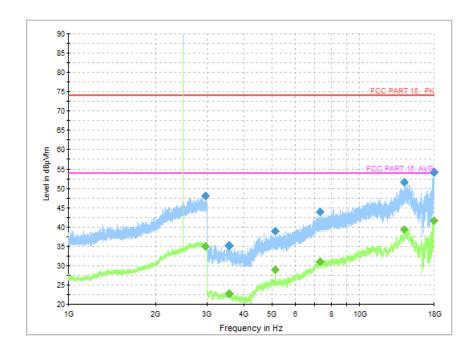


Fig.46 Radiated Spurious Emission (Ch39, 1 GHz - 18 GHz), 2M



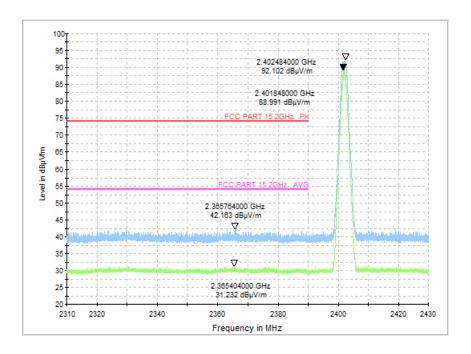


Fig.47 Radiated Band Edges (Ch0, 2380GHz - 2450GHz), 2M

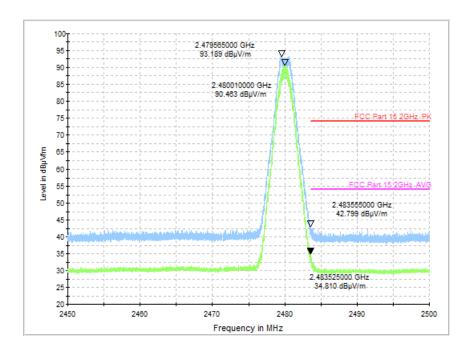


Fig.48 Radiated Band Edges (Ch39, 2450GHz - 2500GHz), 2M



A.7 AC Power line Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)		
120	60		

Measurement Result and limit:

LE-1M

BLE (Quasi-peak Limit) - AE2

Frequency	Quasi-peak	Result (dBμV)		Conclusion
range (MHz)	Limit (dBμV)	Traffic	ldle	Conclusion
0.15 to 0.5	66 to 56			
0.5 to 5	56	Fig.49	Fig.50	Р
5 to 30	60			

Note: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

BLE (Average Limit) - AE2

Frequency	Average-peak	Result (dBμV)		Canalysian
range (MHz)	Limit (dBμV)	Traffic	ldle	Conclusion
0.15 to 0.5	56 to 46			
0.5 to 5	46	Fig.49	Fig.50	Р
5 to 30	50			

Note: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Note: The measurement results include the L1 and N measurements.

See below for test graphs.

Conclusion: Pass



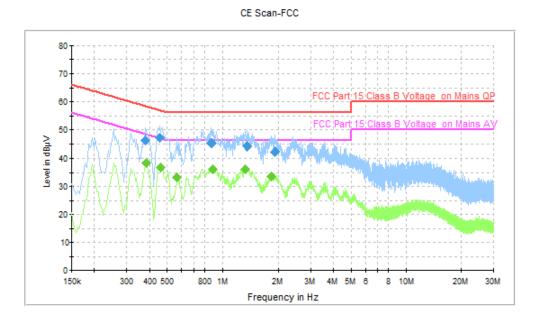


Fig.49 AC Power line Conducted Emission (Traffic, AE2, 120V), 1M

Measurement Results: Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.378000	46.0	GND	L1	9.8	12.3	58.3
0.454000	47.0	GND	L1	9.8	9.8	56.8
0.870000	45.1	GND	L1	9.8	10.9	56.0
0.878000	45.1	GND	L1	9.8	10.9	56.0
1.370000	44.1	GND	L1	9.8	11.9	56.0
1.918000	42.2	GND	L1	9.8	13.8	56.0

Measurement Results: Average

Frequency	Average	PE	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	PE	Line	(dB)	(dB)	(dBµV)
0.386000	38.4	GND	L1	9.8	9.8	48.1
0.462000	36.9	GND	L1	9.8	9.8	46.7
0.566000	33.1	GND	L1	9.8	12.9	46.0
0.886000	36.2	GND	L1	9.8	9.8	46.0
1.330000	36.1	GND	L1	9.8	9.9	46.0
1.838000	33.7	GND	L1	9.8	12.3	46.0



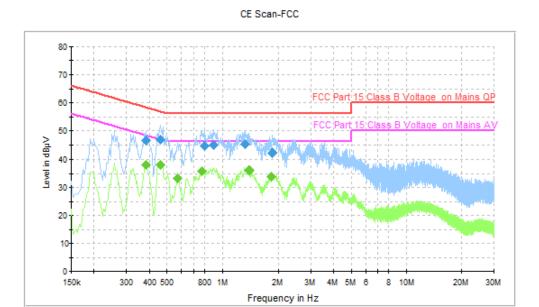


Fig.50 AC Power line Conducted Emission (Idle, AE2, 120V), 1M

Measurement Results: Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.382000	46.4	GND	L1	9.8	11.8	58.2
0.462000	46.6	GND	L1	9.8	10.0	56.7
0.802000	44.6	GND	L1	9.8	11.4	56.0
0.902000	44.8	GND	L1	9.8	11.2	56.0
1.330000	45.2	GND	L1	9.8	10.8	56.0
1.858000	42.3	GND	L1	9.8	13.7	56.0

Measurement Results: Average

Frequency	Average	PE	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	PE	Line	(dB)	(dB)	(dBµV)
0.382000	37.9	GND	L1	9.8	10.3	48.2
0.458000	38.0	GND	L1	9.8	8.7	46.7
0.570000	33.4	GND	L1	9.8	12.6	46.0
0.778000	35.9	GND	L1	9.8	10.1	46.0
1.394000	36.1	GND	L1	9.8	9.9	46.0
1.834000	34.0	GND	L1	9.8	12.0	46.0



ANNEX B: Spot Check of Output Power

Company Name: TCL Communication Ltd.

Product Name: Tablet PC Model Name: 9132G, 9132X

Spot Check of Different Mode

Model	Mode	Frequency (MHz)	Conducted Power (dBm)	
9132G	LE 1M	2440 (CH19)	-0.53	
	BR (GFSK)	2441 (CH39)	5.58	
	802.11b	2437 (CH6)	16.44	
	802.11a	5260 (Ch52)	15.89	
	002.11a	5825 (CH165)	15.51	
9132X	LE 1M	2440 (CH19)	-0.64	
	BR (GFSK)	2441 (CH39)	5.51	
	802.11b	2437 (CH6)	16.39	
	802.11a	5260 (Ch52)	15.82	
	002.11a	5825 (CH165)	15.45	

Note: Spot check test data included for the variants based on worst-case results reported in the original FCC ID filing. From the above data, it can be concluded that the conducted output power of the variant is less than or near to the original. And the variant test data can refer to the original report. This condition applies to the reports I22N00113.

END OF REPORT