# **FCC TEST REPORT**

Product

Mobile Phone

Trade mark

LeEco

Model/Type reference

Le X522

**Report Number** 

1611100482RFC-3

Date of Issue

Nov. 28, 2016

FCC ID

2AFWMLEX522

**Test Standards** 

47 CFR Part 15 Subpart C (2015)

Test result

**PASS** 

#### Prepared for:

Lemobile Information Technology (Beijing) Co., Ltd. WENHUAYING NORTH (No.1, LINKONG 2nd St.), GAOLIYING, SHUNYI DISTRICT, BEIJING, CHINA

#### Prepared by:

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## Version

Version No. Date		Description		
V1.0	Nov. 28, 2016	Original		





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## **1 General Information**

### 1.1 Client Information

Applicant:	Lemobile Information Technology (Beijing) Co., Ltd.
Address of Applicant:	WENHUAYING NORTH (No.1, LINKONG 2nd St.), GAOLIYING, SHUNYI DISTRICT, BEIJING, CHINA
Manufacturer:	Lemobile Information Technology (Beijing) Co., Ltd.
Address of Manufacturer:	WENHUAYING NORTH (No.1, LINKONG 2nd St.), GAOLIYING, SHUNYI DISTRICT, BEIJING, CHINA

1.2 General Description of EUT

Product Name:	Mobile Phone				
Model No.(EUT):	Le X522				
Add. Mode No.:	N/A				
Trade Mark:	LeEco				
EUT Supports Radios	GSM850/900/1800				
application:	WCDMA Band I/II/				
	LTE FDD Band 1/2				
		.11b/g/n(HT20)/n(HT40)			
	Wlan 5180~5825 /ac(VHT80)	MHz: 802.11a/g/n(HT20)/n(HT40)/ac(VHT20)/ac(VHT40)			
	Bluetooth V3.0+EDR&Bluetooth V4.1 BLE				
	GPS				
Power Supply:	Adapter 1	Model: EQ-24BUS			
		Brand: Dongyang			
		Input: 100-240V~50/60Hz, 0.8A;			
		Output: 12V = 2A or 3.6-8V = 3A			
	Adapter 2	Model: EQ-24BUS			
		Brand: Kunxing			
		Input: 100-240V~50/60Hz, 0.8A;			
		Output: 12V = 2A or 3.6-8V = 3A			
	Battery	Model: LTF21A			
		Brand: SCUD			
		Rated voltage: 3.83Vdc			
		Battery capacity: 3000mAh(Li-on Rechargeable)			
USB Micro-B Plug cable:	100cm(Shielded w/o core)				
Earphone:	100cm(Unshielded	l w/o core)			
Sample Received Date:	Nov. 07, 2016				
Sample tested Date:	Nov. 17, 2016 to Nov. 26, 2016				

1.3 Product Specification subjective to this standard

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz		
	802.11n(HT40): 2422MHz to 2452MHz		
Channel Numbers:	802.11b/g/n(HT20): 11 Channels		
	802.11n(HT40): 7 Channels		
Channel Separation:	Channels with 5MHz step		
Transmit Data Rate:	802.11b: 1M/ 2M/ 5.5M/ 11M bps		
	802.11g: 6M/ 9M/ 12M/ 18M/ 24M/ 36M/ 48M/ 54M bps		
	802.11n: up to MCS7		



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Type of Modulation:	802.11b:DSSS(CCK,DQPSK,DBPSK)
	802.11g:OFDM(64QAM, 16QAM, QPSK, BPSK)
	802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,QPSK,BPSK)
Sample Type:	Portable Device
Test Software of EUT:	Provided by the manufacturer
Antenna Type	LDS Antenna
Antenna Gain:	-1.5 dBi
Normal Test voltage:	3.83Vdc
Extreme Test voltage:	3.6~4.4Vdc (declared by the manufacturer)

Operation	Operation Frequency each of channel(802.11b/g/n HT20)								
Channel	Channel Frequency Channel		Frequency	Channel	Fre	quency	Char	nnel	Frequency
1	1 2412MHz		2427MHz	7	244	42MHz	10	)	2457MHz
2	2 2417MHz		2432MHz	8	244	47MHz	11		2462MHz
3	3 2422MHz		2437MHz	9	24	2452MHz		N	N/A
Operation	Frequency ea	ch of chanr	nel(802.11n HT	40)					
Channe	l Frequ	ency	Channel	Frequency Channel Fre		requency			
3 2422MHz		MHz	6	2437MHz 9				2452MHz	
4 2427MH		MHz	7	2442MF	łz				
5	2432	MHz	8	2447MH	łz			N/A	

## 1.4 Description of Support Units

The EUT has been tested with associated equipment below.

1) Support equipment

Description	Manufacturer	Model No.	Serial Number	Supplied by
Notebook	Lenovo	E450	SL10G10780	UnionTrust
2) Cable				

Cable No.	Description	Connector Type	Cable Type/Length	Supplied by
N/A	N/A	N/A	N/A	N/A

### 1.5 Test Location

All tests were performed at:

Compliance Certification Services (Shenzhen) Inc.

No.10-1 Mingkeda Logistics Park, No.18 Huanguan South RD. Guan lan Town, Baoan Distr, Shenzhen, Guangdong, China.

Tel: 86 0755 28055000 Fax: 86 0755 29055221

Tested by: Darry Wu

### 1.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Compliance Certification Services (Shenzhen) Inc. has been accepted by the FCC, the FCC Registration Number is **441872**.



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### 1.7 Deviation from Standards

None.

### 1.8 Abnormalities from Standard Conditions

None

## 1.9 Other Information Requested by the Customer

None.

## 1.10 Measurement Uncertainty (95% confidence levels, k=1.96)

No.	Item	Measurement Uncertainty
1	Transmitter power conducted	0.57 dB
2	Transmitter power Radiated	2.20 dB
3	Conducted spurious emission 9KHz-40GHz	1.60 dB
3	Radiated spurious emission 9KHz-40GHz	2.20 dB
4	Conducted emission 9KHz-30MHz	3.39 dB
4	Radiated emission 30MHz-1000MHz	4.24 dB
5	Radiated emission 1GHz-18GHz	5.16 dB
6	Radiated emission 18GHz-40GHz	5.54 dB



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## 2 Test Summary

Tests for radiated and conducted emissions were performed. All measurements were performed according to the 2013 version of ANSI C63.10

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203/15.247 (c)	ANSI C63.10-2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	N/A <sup>1</sup>
Conducted Peak Output Power	47 CFR Part 15 Subpart C Section 15.247 (b)(3)	KDB 558074 D01 v03r05 Section 9.1.2	N/A <sup>1</sup>
6dB Bandwidth	47 CFR Part 15 Subpart C Section KDB 558074 D01 v03r05 Section 8.1		N/A <sup>1</sup>
Power Spectral Density	47 CFR Part 15 Subpart C Section 15.247 (e)	KDB 558074 D01 v03r05 Section 10.2	N/A <sup>1</sup>
Conducted Out of Band Emission	47 CFR Part 15 Subpart C Section 15.247(d)	KDB 558074 D01 v03r05 Section 11	N/A <sup>1</sup>
Radiated Spurious Emissions	47 CFR Part 15 Subpart C Section 15.205/15.209	KDB 558074 D01 v03r05 Section 12.1	PASS
Band Edge Measurements (Radiated)	47 CFR Part 15 Subpart C Section 15.205/15.209	KDB 558074 D01 v03r05 Section 12.1	PASS

#### Remark:

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

CH: In this whole report CH means channel.

N/A: In this whole report not application

1. The EUT this time and previous all the mobile phone are identical in appearance, circuitry and electrical, mechanical and physical construction, trade mark and model number, the only differences are the GPS/BT/WLAN antenna and WLAN power Note1. After assessment, this differences does not affect the test results, so the test data from the original report with report No. RF160315C17.

Note1: These differences please refer to "declaration of hardware differences in tested devices".



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3 Equipment List

3m (Semi-Anechoic Chamber)							
Equipment	Manufacturer	Mode No.	Serial Number	Cal. Due date (mm-dd-yyyy)	Cal. Interval		
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	02-20-2017	1 Year		
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R		
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R		
Controller	СТ	N/A	N/A	N.C.R	N.C.R		
Bilog Antenna	SCHAFFNER	CBL6143	5063	02-21-2017	1 Year		
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02-20-2017	1 Year		
Loop Antenna	COM-POWER	AL-130	121044	02-20-2017	1 Year		
High Noise Amplifier	Agilent	8449B	3008A01838	02-21-2017	1 Year		
Horn Antenna	Schwarzbeck	BBHA9120	D286	02-21-2017	1 Year		
Temp. / Humidity Meter	Anymetre	JR913	N/A	02-21-2017	N.C.R		
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R		
Test S/W	FARAO	AO LZ-RF / CCS-SZ-3A2					

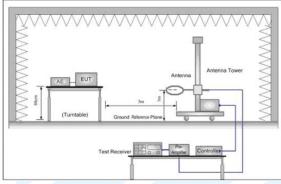
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## **4 Test Requirement**

### 4.1 Test setup

#### 4.1.1 For Radiated Emissions test setup

#### Radiated Emissions setup:



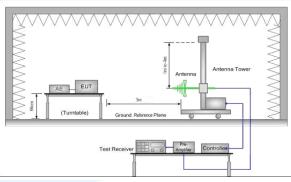


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

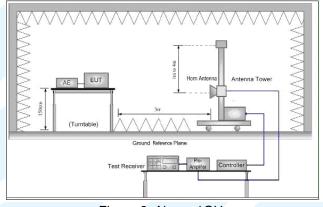


Figure 3. Above 1GHz

#### 4.2 Test Environment

Operating Environment:	
Temperature:	23.7 °C
Humidity:	55 % RH
Atmospheric Pressure:	100.25 Kpa

## 4.3 System Test Configuration

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario. It was powered by a 3.83Vdc rechargeable Li-on battery. Only the worst case data were recorded in this test report.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a



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closer distance. Therefore, all final radiated testing was performed with the EUT in (see table below) orientation.

Frequency Band(GHz)	Mode	Worst-case Orientation
2.400~2.4835	1Tx SISO	Y-Portrait

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000MHz. The resolution is 1 MHz or greater for frequencies above 1000MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

#### 4.4 Test Condition

#### 4.4.1 Test channel

Test Mode	Tx/Rx	RF Channel				
rest wode	IX/NX	Low(L)	Middle(M)	High(H)		
902 11b/g/p/UT20)	2412MHz ~2462 MHz	Channel 1	Channel 6	Channel 11		
802.11b/g/n(HT20)		2412MHz	2437MHz	2462MHz		
000 44 <del>~</del> /UT40)	2422MHz ~2452 MHz	Channel 3	Channel 6	Channel 9		
802.11n(HT40)		2422MHz	2437MHz	2452MHz		

Transmitting mode:

Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.

#### 4.4.2 Test mode

According the original report with report No. RF160315C17, the worst-case rates see table below:

Mode	Worst-case data rates
802.11n HT40	MCS 0

#### 4.4.3 Duty Cycle

Mode	Data rates (Mbps)	On Time (msec)	Period (msec)	Duty Cycle (linear)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/ T Minimum VBW (kHz)
802.11b	1	8.270	8.430	0.9810	98.1020	0.0832	0.1209
802.11g	6	1.360	1.560	0.8718	87.1795	0.5959	0.7353
802.11n(HT20)	MCS 0	1.275	1.475	0.8644	86.4407	0.6328	0.7843
802.11n(HT40)	MCS 0	0.635	0.835	0.7605	76.0479	1.1891	1.5748

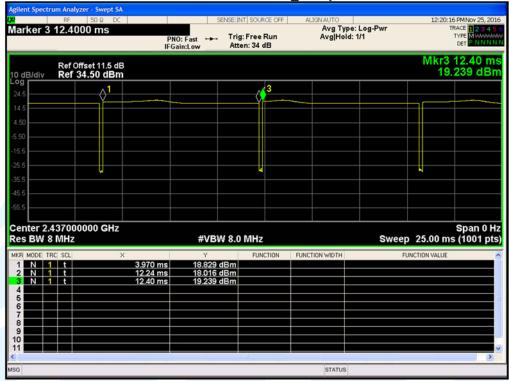
#### Remark:

- 1) Duty cycle= On Time/ Period
- 2) Duty Cycle factor = 10 \* log(1/ Duty cycle)

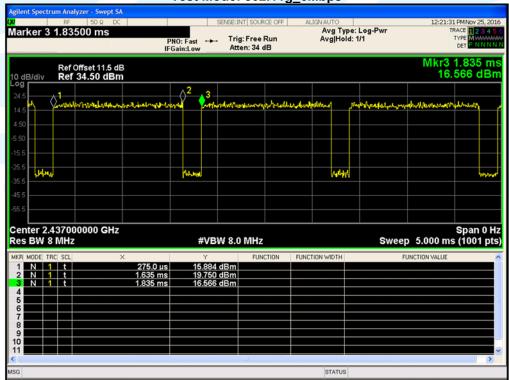


#### The test plot as follows:

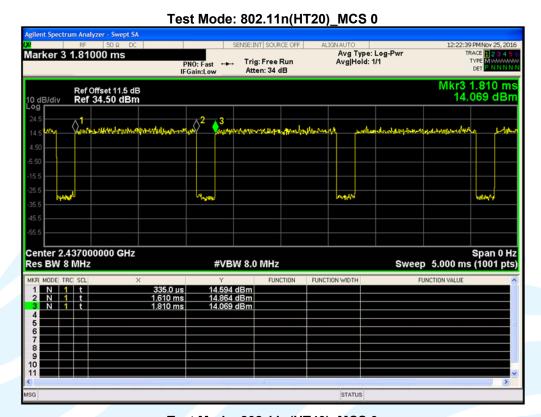


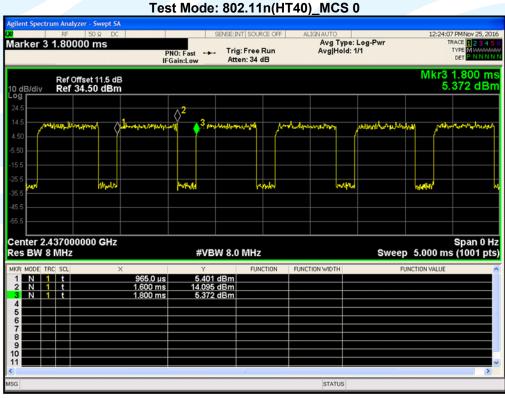


#### Test Mode: 802.11g\_6Mbps











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## 5 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title						
1	FCC Part15C (2015)	Subpart C-Intentional Radiators						
2	ANSI C63.10-2013	American National Standard for Testing Unlicesed Wireless Devices						
3	KDB 558074 D01 DTS Meas Guidance v03r05	Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247						
4	KDB 662911 D01 Multiple Transmitter Output v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band						

## **Antenna Requirement**

#### 15.203 requirement:

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, 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.

#### 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **EUT Antenna:**

Both antenna in the interior of the equipment and no consideration of replacement. The gain of the antenna is -1.5dBi.

### Radiated Spurious Emissions

Test Requirement:

47 CFR Part 15 Subpart C Section 15.205/15.209

Test Method:

KDB 558074 D01 v03r05 Section 12.1

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

#### Remark:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- For frequencies above 1000 MHz, the field strength limits are based on



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average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

The emissions were measured using the following resolution bandwidths:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	100 kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
ADOVE IGHZ	Peak	1MHz	10Hz	Average

Harmonic and Spurious emissions that were identified as coming from the EUT were checked in Peak and in Average Mode. The high frequency, which started from 10 to26.5GHz, which above 10GHz are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured was not reported.

Peak measurements and average measurements are made. All emissions were determined to have a peak-to-average ratio of less than 20dB.

#### **Test Procedure:**

#### Below 1GHz test procedure as below:

- a) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
- e) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f) Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel

#### Above 1GHz test procedure as below:

- g) Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber change form table 0.8 meter to 1.5 meter (Above 18GHz the distance is 1 meter and table is 1.5 meter).
- h) Test the EUT in the lowest channel, the Highest channel
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
- j) Repeat above procedures until all frequencies measured was complete.

**Test Setup:** 

Refer to section 4.1.2 for details.

**Instruments Used:** 

Refer to section 3 for details



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**Test Mode:** Transmitter mode

Test Results: Pass

**Test Data:** 

Radiated Emission Test Data (9 KHz ~ 30MHz):

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Radiated Emission Test Data (Below 1 GHz Worst Case):

	Tradition Emission Fost Bata (Bolow Fortz World Gast).							
M	ode	Tx_802.11n(HT40)_2452 MHz						
.No.	Frequency (MHz)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Remark	Ant. Polar.		
1	47.8260	16.03	40.00	-23.97	Peak	Horizontal		
2	207.1226	13.97	43.50	-29.53	Peak	Horizontal		
3	955.4381	28.11	46.00	-17.89	Peak	Horizontal		
4	48.5016	17.25	40.00	-22.75	Peak	Vertical		
5	556.7744	23.88	46.00	-22.12	Peak	Vertical		
6	922.5157	29.93	46.00	-16.07	Peak	Vertical		

Radiated Emission Test Data (Above 1GHz Worst Case):

Ttaalatoa Ellin	Radiated Emission Test Bata (Above 1912 Worst Gase).							
Me	ode	Tx_802.11n(HT40)_2422 MHz						
.No.	Frequency (MHz)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Remark	Ant. Polar.		
1	4844.0000	44.76	74	-29.24	Peak	Horizontal		
2	4844.0000	32.65	54	-21.35	Average	Horizontal		
3	7266.0000	48.19	74	-25.81	Peak	Horizontal		
4	7266.0000	36.26	54	-17.74	Average	Horizontal		
5	4844.0000	43.04	74	-30.96	Peak	Vertical		
6	4844.0000	31.51	54	-22.49	Average	Vertical		
7	7266.0000	46.97	74	-27.03	Peak	Vertical		
8	7266.0000	35.19	54	-18.81	Average	Vertical		

M	lode	Tx_802.11n(HT40)_2437 MHz				
.No.	Frequency (MHz)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Remark	Ant. Polar.
1	4874.0000	44.82	74	-29.18	Peak	Horizontal
2	4874.0000	32.79	54	-21.21	Average	Horizontal
3	7311.0000	48.07	74	-25.93	Peak	Horizontal
4	7311.0000	36.41	54	-17.59	Average	Horizontal
5	4874.0000	43.78	74	-30.22	Peak	Vertical



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6	4874.0000	31.97	54	-22.03	Average	Vertical
7	7311.0000	46.35	74	-27.65	Peak	Vertical
8	7311.0000	35.41	54	-18.59	Average	Vertical

Mode		Tx_802.11n(HT40)_2452 MHz					
.No.	Frequency (MHz)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Remark	Ant. Polar.	
1	4904.0000	44.7	74	-29.3	Peak	Horizontal	
2	4904.0000	32.93	54	-21.07	Average	Horizontal	
3	7356.0000	48.23	74	-25.77	Peak	Horizontal	
4	7356.0000	36.33	54	-17.67	Average	Horizontal	
5	4904.0000	44.93	74	-29.07	Peak	Vertical	
6	4904.0000	31.79	54	-22.21	Average	Vertical	
7	7356.0000	47.31	74	-26.69	Peak	Vertical	
8	7356.0000	34.98	54	-19.02	Average	Vertical	

#### Note:

<sup>1)</sup> Scan from 9 KHz to 25 GHz, the disturbance above 18 GHz and below 30 MHz was very low, the amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



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## 5.3 Band Edge Measurements (Radiated)

**Test Requirement:** 47 CFR Part 15 Subpart C Section 15.205/15.209 KDB 558074 D01 v03r05 Section 12.1

Limit:

122 00001 1201 100100 0001011 1211						
Frequency	Limit (dBµV/m @3m)	Remark				
30MHz-88MHz	40.0	Quasi-peak Value				
88MHz-216MHz	43.5	Quasi-peak Value				
216MHz-960MHz	46.0	Quasi-peak Value				
960MHz-1GHz	54.0	Quasi-peak Value				
Above 1GHz	54.0	Average Value				
Above IGnz	74.0	Peak Value				

**Test Procedure:** 

Radiated band edge measurements at 2390MHz and 2483MHz were made with the unit transmitting in the low end of the channel range and the high end closest to the restricted bands respectively. The emissions were made on the 966 Semi-Chamber. Use (resolution bandwidth (RBW) = 1 MHz, video bandwidth (VBW) = 3 MHz for peak levels and RBW = 1 MHz and VBW = 10 Hz or 1/T for average levels).

- 1. Use radiated spurious emission test procedure described in 5.6 clause. The transmitter output (antenna port) was connected to the test receiver.
- 2. Set the PK and AV limit line.
- 3. Record the fundamental emission and emissions out of the band-edge.
- 4. Determine band-edge compliance as required.

**Test Setup:** Refer to section 4.1.2 for details.

Instruments Used: Refer to section 3 for details

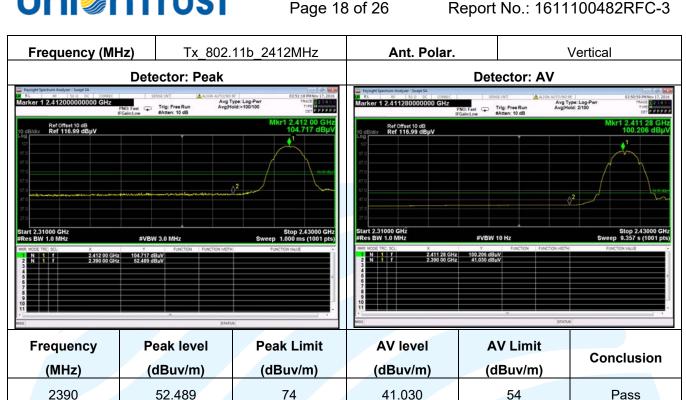
Test Mode: Transmitter mode

Test Results: Pass

**Test Data:** 

Frequency (MH	<b>z)</b> Tx_802.	11b_2412MHz	Ant. Polar.		Horizontal
	Detector: Peak		Detector: AV		
	SENSE INT ALION AUTO/NO CONTROL AND TO NO CONTROL AND TO NO CONTROL AND THE ALION AUTO/NO CONTROL ALION AUTO	93.53.47 PMNov 17, 2016  104: Log-Pwr  TAGE 12.34  THE TAGE 12.34  TOTAL	Krysight Spectrum Analyzer - Swept SA  III RL NV SO DC CORREC  Marker 1 2.411280000000 GHz	SUNSECINT ALLON AUTON AU	O NO RE 03:56:56 PM Nov 17, 2016 Avg Type: Log-Pwr 18Acc 03:54 Vvg Hold: 1/100 0er PPPP
Ref Offset 10 dB   Nef Offset 10	#VBW 3.0 MHz  1	Mkr1 2.412 12 GHz 99.589 dBµV	Ref Offset 10 dB 10 dBidly Ref 116.99 dBµV 10 dB	#VBW 10 Hz  96.133 dBuV  FUNCTION   FUNCTION   FUNCTION	Mkr1 2.411 28 GHz 95.133 dBpV  1  Stop 2.43000 GHz Sweep 9.357 s (1001 pts
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit	AV level (dBuv/m)	AV Limit	Conclusion
2390	52.447	74	40.826	( <b>dBdV</b> /III)	Pass

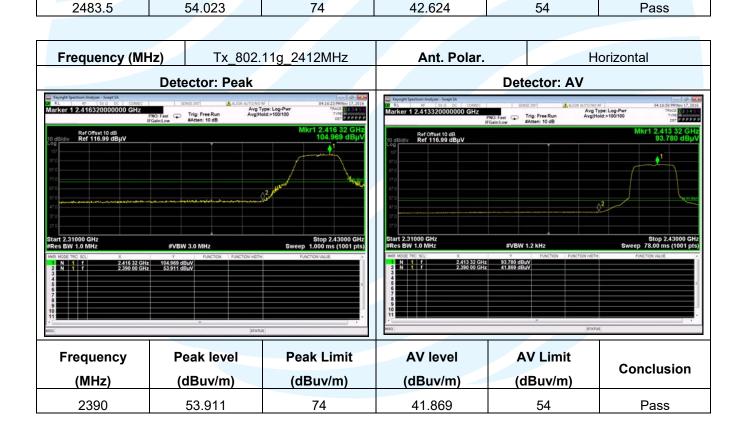
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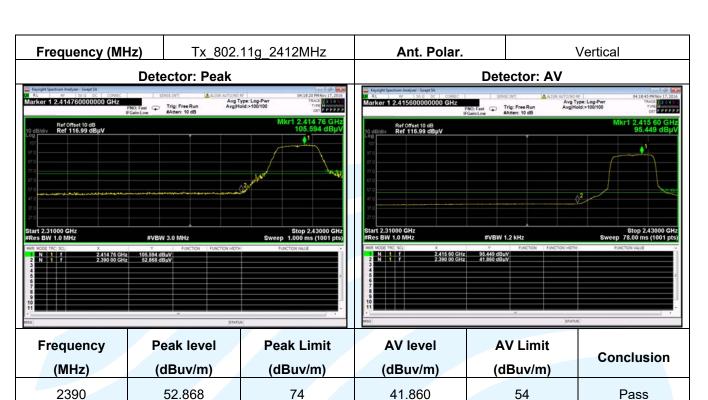




Frequency (MHz) Tx 802.11b 2462MHz Ant. Polar. Vertical **Detector: Peak Detector: AV** Avg Type: Log-Pwr Avg|Hold:>100/100 Avg Type: Log-Pw Avg|Hold: 2/100 Trig: Free Run st Trig: Free Run Stop 2.50000 GHz 104,098 dB: 54,023 dB: Peak level **Peak Limit AV** level **AV** Limit Frequency Conclusion (MHz) (dBuv/m) (dBuv/m) (dBuv/m) (dBuv/m)



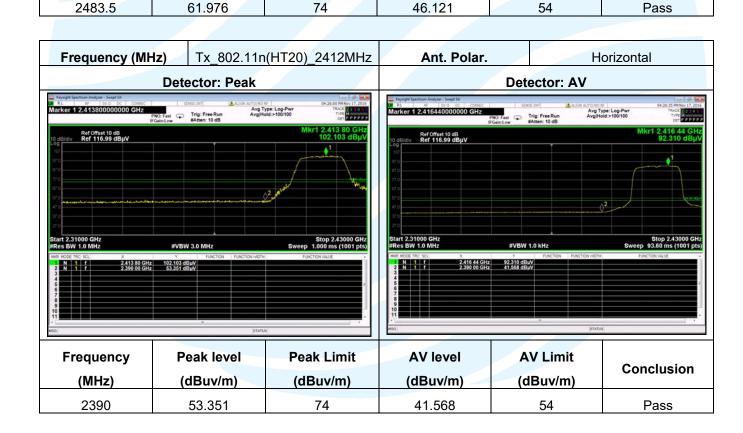




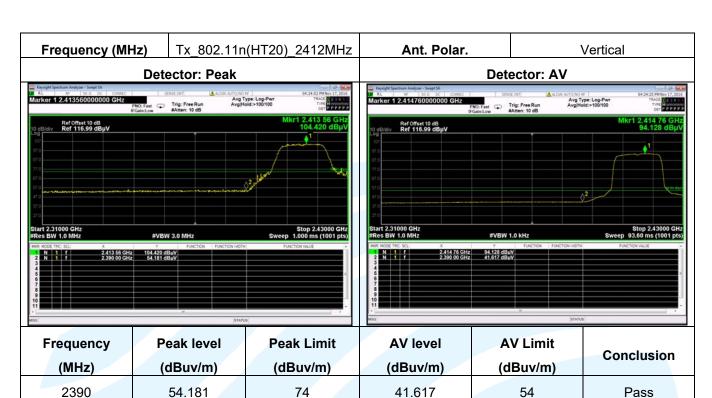


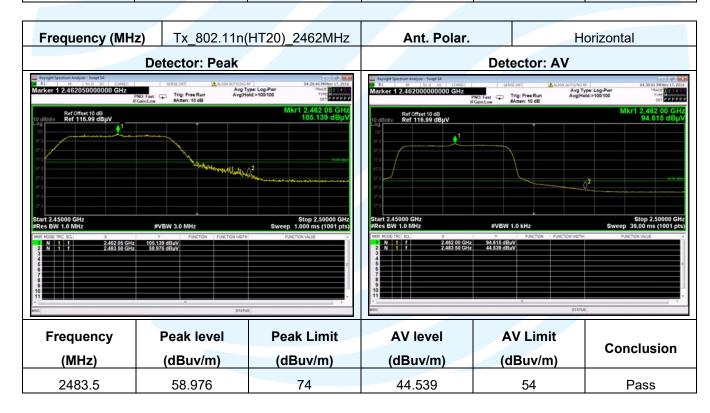


Frequency (MHz) Tx 802.11g 2462MHz Ant. Polar. Vertical **Detector: Peak Detector: AV** Avg Type: Log-Pwr Avg|Hold:>100/100 Avg Type: Log-Pwr Avg/Hold:>100/100 Fast Trig: Free Run Trig: Free Run Ref Offset 10 dB Ref 116.99 dBµV Ref Offset 10 dB Ref 116.99 dBµ\ Stop 2.50000 GH 106,877 dBp 61,976 dBp Peak level **Peak Limit AV** level **AV** Limit Frequency Conclusion (MHz) (dBuv/m) (dBuv/m) (dBuv/m) (dBuv/m)











2483.5

57.975

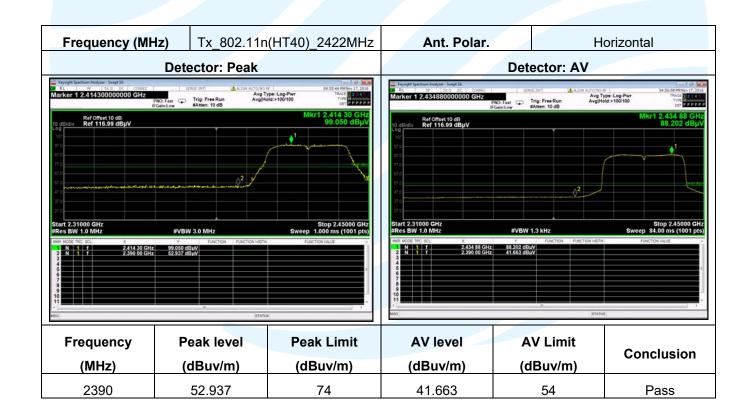
Frequency (MHz) Tx 802.11n(HT20) 2462MHz Ant. Polar. Vertical **Detector: Peak Detector: AV** Avg Type: Log-Pwr Avg|Hold:>100/100 Avg Type: Log-Pwr Avg/Hold:>100/100 Fast Trig: Free Run Trig: Free Run Ref Offset 10 dB Ref 116.99 dBµV Stop 2.50000 GHz 105.538 dB: 57.975 dB: Peak level **Peak Limit AV** level **AV** Limit Frequency Conclusion (MHz) (dBuv/m) (dBuv/m) (dBuv/m) (dBuv/m)

44.910

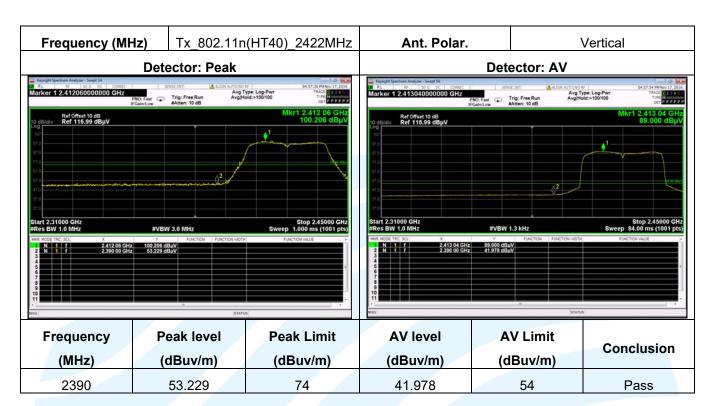
54

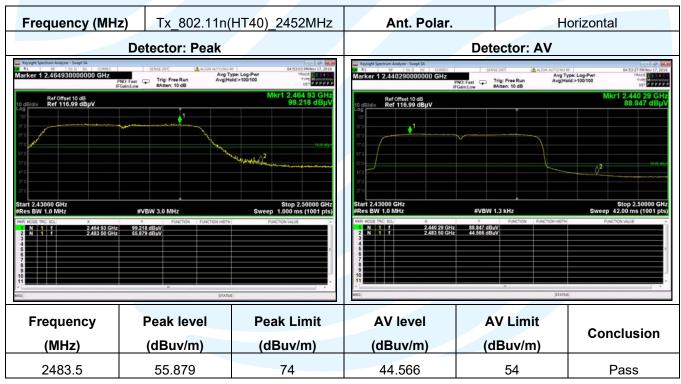
**Pass** 

74

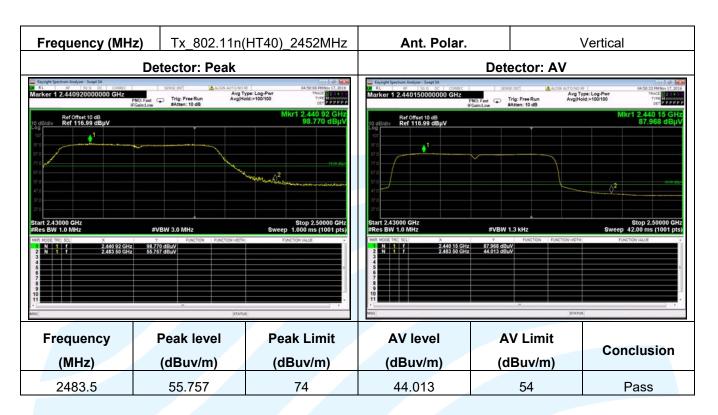












#### Note:

1) Through Pre-scan transmitting mode with all kind of modulation and data rate, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; MCS0 of rate is the worst case of 802.11n(HT20), and then only the worst case is recorded in the report.



## **APPENDIX 1 PHOTOGRAPHS OF TEST SETUP**

See test photographs attached in Appendix 1 for the actual connections between Product and support equipment.

## **APPENDIX 2 PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS**

Refer to Appendix 2 for EUT external and internal photographs.

\*\*\* End of Report \*\*\*

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