FCC Radio Test Report
FCC ID: V7TF1200
This report concerns (check one):
Project No.: 1406C099Equipment: Wireless AC1200 Dual-band RouterModel Name: F1200Applicant: SHENZHEN TENDA TECHNOLOGY CO.,LTDAddress: 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen,China.518052
Tested by: BTL Inc. EMC Laboratory Date of Receipt: Jun. 16, 2014 Date of Test: Jun. 16, 2014 ~ Jun. 27, 2014 Issued Date: Jun. 30, 2014
Testing Engineer : David Mao (David Mao)
Technical Manager :
Authorized Signatory :(Steven Lu)
BTL INC. No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China. TEL: 0769-8318-3000 FAX: 0769-8319-6000



Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FCCP-3-1406C099	Original Issue.	Jun. 30, 2014



1. CERTIFICATION

Equipment : Brand Name : Model Name :	
Applicant	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Manufacturer :	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address :	6-8 Floor,Tower E3,No.1001,Zhongshanyuan Road,Nanshan District,
	Shenzhen, China. 518052
Date of Test :	Jun. 16, 2014 ~ Jun.27, 2014
Test Item :	ENGINEERING SAMPLE
Standard(s) :	FCC Part15, Subpart C(15.247) / ANSI C63.4-2009

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-3-1406C099) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).



2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C

Standard(s) Section FCC	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.209/15.205	Transmitter Radiated Emissions	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this test report.

(2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r01 (Measurement Guidelines of DTS)



2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792 BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

The reported uncertainty of measurement y $~\pm~$ U , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of ~ k=2 , providing a level of confidence of approximately 95 % $^\circ$

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	NOTE
		9KHz~30MHz	V	3.79	
		9KHz~30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CB03	CIOFK	200MHz ~ 1,000MHz	Н	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	Н	4.14	



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless AC1200 Dual-band Router		
Brand Name	Tenda		
Model Name	F1200		
Model Difference	N/A		
	Operation Frequency	5745~5825 MHz	
	Modulation Technology	802.11a/n/ac:OFDM	
	Bit Rate of Transmitter	300Mbps	
Product Description	Output Power (Max.)	802.11a: 23.40dBm 802.11n (20M): 25.56dBm 802.11n (40M): 26.14dBm 802.11ac (20M): 25.66 dBm 802.11ac (40M): 25.91 dBm 802.11ac (80M): 26.16 dBm	
Power Source	DC Voltage supplied from AC/DC adapter. Manufacturer: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY CO.LTD Model: TEA12U-12100		
Power Rating	I/P: AC 100-240V~ 50/60Hz 0.3A O/P: DC 12V/1 A		
Connecting I/O Port(s)	Please refer to the User's	Manual	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



2.

802.11a / 802.11n 20M / 802.11ac 20M					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785
161	5805	165	5825		

802.11n 40M / 802.11ac 40M					
Channel Frequency (MHz) Channel Frequency (MHz)					
151 5755 159 5795					

802.11ac 80M			
Channel	Frequency (MHz)		
155	5775		

3. Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
0	Tend a [®]	Q5116	Internal	N/A	3.25	TX/RX
1	Tend a [®]	Q5116	Internal	N/A	3.25	TX/RX

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=3.25.

4.

Operating Mode TX Mode	1TX	2TX
802.11a	V (ANT 2 or ANT 3)	-
802.11n(20MHz)	-	V (ANT 2 + ANT 3)
802.11n(40MHz)	-	V (ANT 2 + ANT 3)
802.11ac(40MHz)	-	V (ANT 2 + ANT 3)
802.11ac(80MHz)	-	V (ANT 2 + ANT 3)



3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX A MODE CHANNEL 149/157/165
Mode 2 TX N-20MHZ MODE CHANNEL 149/157/165	
Mode 3 TX N-40MHZ MODE CHANNEL 151/159	
Mode 4	TX AC N20 Mode Channel 149/157/165
Mode 5 TX AC N40 Mode Channel 151/159	
Mode 6 TX AC N80 Mode Channel 155	
Mode 7 TX MODE	

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test			
Final Test Mode	Description		
Mode 4	TX MODE		

For Radiated Test				
Final Test Mode	Description			
Mode 1	TX A Mode Channel 149/157/165			
Mode 2	TX N20 Mode Channel 149/157/165			
Mode 3 TX N40 Mode Channel 151/159				
Mode 4	TX AC N20 Mode Channel 149/157/165			
Mode 5 TX AC N40 Mode Channel 151/159				
Mode 6 TX AC N80 Mode Channel 155				

Note:

(1) For radiated below 1G test, the 802.11a is found to be the worst case and recorded.



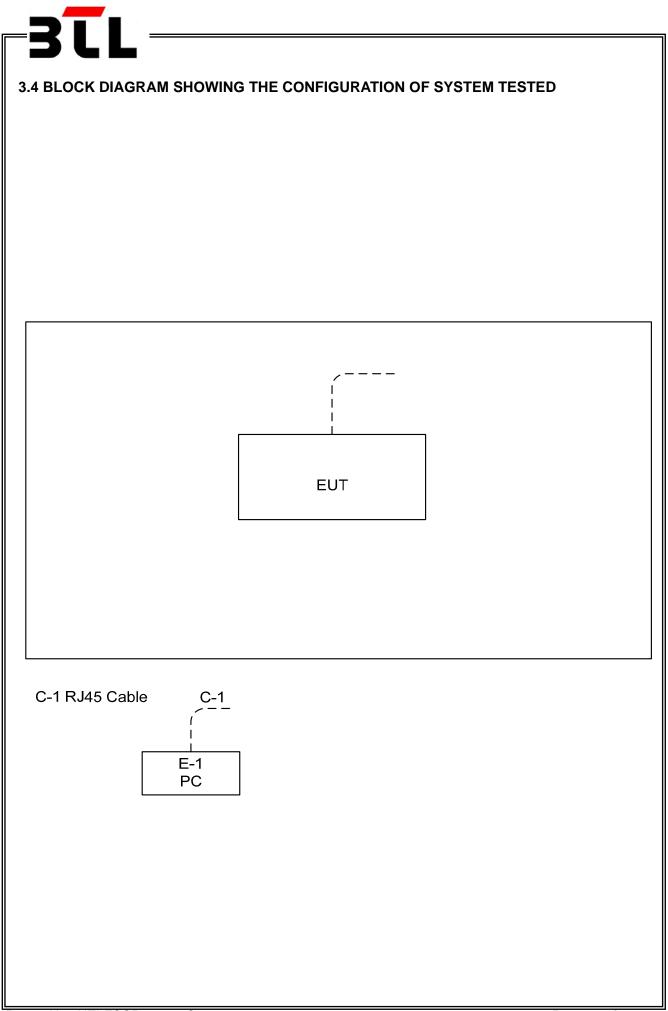
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

Test software version	Mtool_2.0.0.6exe		
Frequency	5745 MHz	5785 MHz	5825MHz
TX A Mode	78	78	78
TX N20 Mode	65	67	68
TX AC 20 Mode	69	67	69

Test software version	Mtool_2.0.0.6exe		
Frequency	5745 MHz	5825MHz	
TX N40 Mode	70	69	
TX AC 40 Mode	70	70	

Test software version	Mtool_2.0.0.6exe		
Frequency	5775 MHz		
TX AC 80 Mode	71		





3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	PC	Dell 745	DCSM	DOC	G7K832X	-

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	-



4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

	Class A	(dBuV)	Class B	(dBuV)	Standard
Frequency (MHz)	Quasi-peak	Average	Quasi-peak	Average	Standard
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

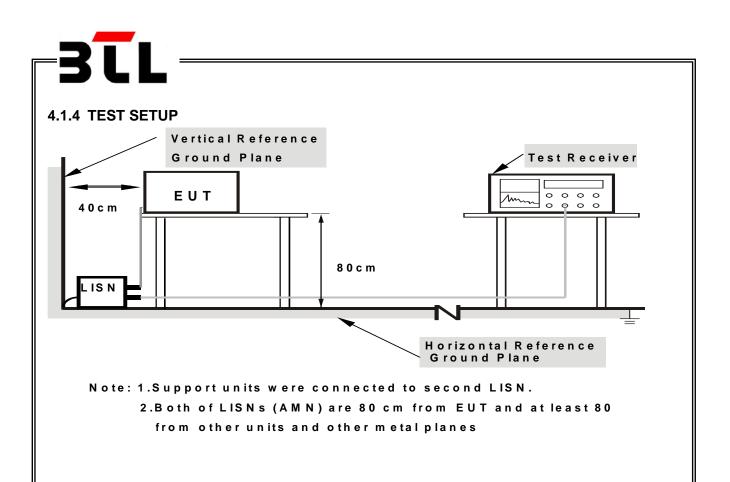
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation



4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

4.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of ^ℂNote_□. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform ∘ In this case, a "*" marked in AVG Mode column of Interference Voltage Measured ∘
- (2) Measuring frequency range from 150KHz to 30MHz \circ



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9KHz-1000MHz)

20dB 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.

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

	(dBuV/m) (at 3 meters)		
Frequency (MHz)	PEAK	AVERAGE	
Above 1000	74	54	

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

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

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	1000 MHz	
Stop Frequency	10th carrier harmonic	
RBW / VBW	1ML = / 1ML = for Deck, 1 ML = / 10L = for Average	
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average	

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency 30MHz~1000MHz for QP detector	



4.2.2 TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.

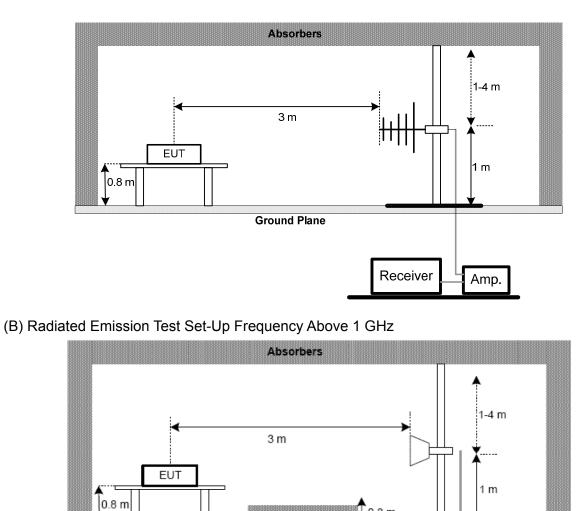
4.2.3 DEVIATION FROM TEST STANDARD

No deviation



4.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz

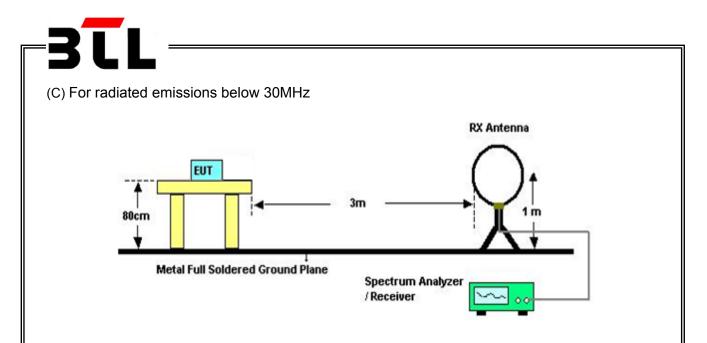


Ground Plane

Absorbers

Spectrum Analyzer — Amp.

T0.3 m



4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing. **4.2.6 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

4.2.7 TEST RESULTS (9K TO 30MHZ)

Please refer to the Attachment B

4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHZ)

Please refer to the Attachment C

Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz.
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.



4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (3) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (5) EUT Orthogonal Axis: "X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand
- (6) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



5. BANDWIDTH TEST

5.1 Applied procedures

FCC Part15 (15.247), Subpart C					
Section	Frequency Range (MHz)	Result			
15.247(a)(2)	Bandwidth	5725 - 5825	PASS		

5.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

5.1.6 TEST RESULTS

Please refer to the Attachment E.



6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	5725 - 5825	PASS		

6.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.3 of FCC KDB 558074 D01 DTS Meas Guidance v03r01.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

6.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

6.1.6 TEST RESULTS

Please refer to the Attachment F.



7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

7.1.6 TEST RESULTS

Please refer to the Attachment G.



8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	5745 - 5825	PASS		

8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

8.1.6 TEST RESULTS

Please refer to the Attachment H.



9. MEASUREMENT INSTRUMENTS LIST

	Conducted Emission Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015		
2	LISN	R&S	ENV216	101447	Mar. 29, 2015		
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015		
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015		
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015		

	Radiated Emission Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Antenna	EMCO	3142C	00066462	Mar. 29, 2015		
2	Antenna	EMCO	3142C	00066464	Mar. 29, 2015		
3	Amplifier	Agilent	8447D	2944A11203	Nov. 11, 2014		
4	Amplifier	Agilent	8447D	2944A11204	Nov. 11, 2014		
5	Spectrum Analyzer	Agilent	E4443A	MY48250370	Nov. 11, 2014		
6	RF Pre-selector	Agilent	N9039A	MY46520201	Nov. 11, 2014		
7	Test Cable	N/A	Cable_5m_8m _15m	N/A	Jan. 14, 2015		
8	Test Cable	N/A	Cable_5m_11 m_15m	N/A	Jan. 14, 2015		
9	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014		
10	RF Pre-selector	Agilent	N9039A	MY46520214	Nov. 11, 2014		
11	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A		
12	Horn Antenna	EMCO	3115	9605-4803	Mar. 29, 2015		
13	Amplifier	Agilent	8449B	3008A02584	Nov. 11, 2014		
14	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014		
15	Test Cable	Huber+Suhner	SUCOFLEX_1 5m_4m	N/A	Jan. 14, 2015		
16	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A		
17	Broad-Band Horn Antenna (40G)	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015		



	6dB Bandwidth Measurement						
Item Kin	d of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1 Spe	ctrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014		

	Peak Output Power Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	P-series Power meter	Agilent	N1911A	MY45100473	Apr. 24, 2015		
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Apr. 24,2015		

Antenna Conducted Spurious Emission Measurement								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until			
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014			

Power Spectral Density Measurement								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until			
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014			

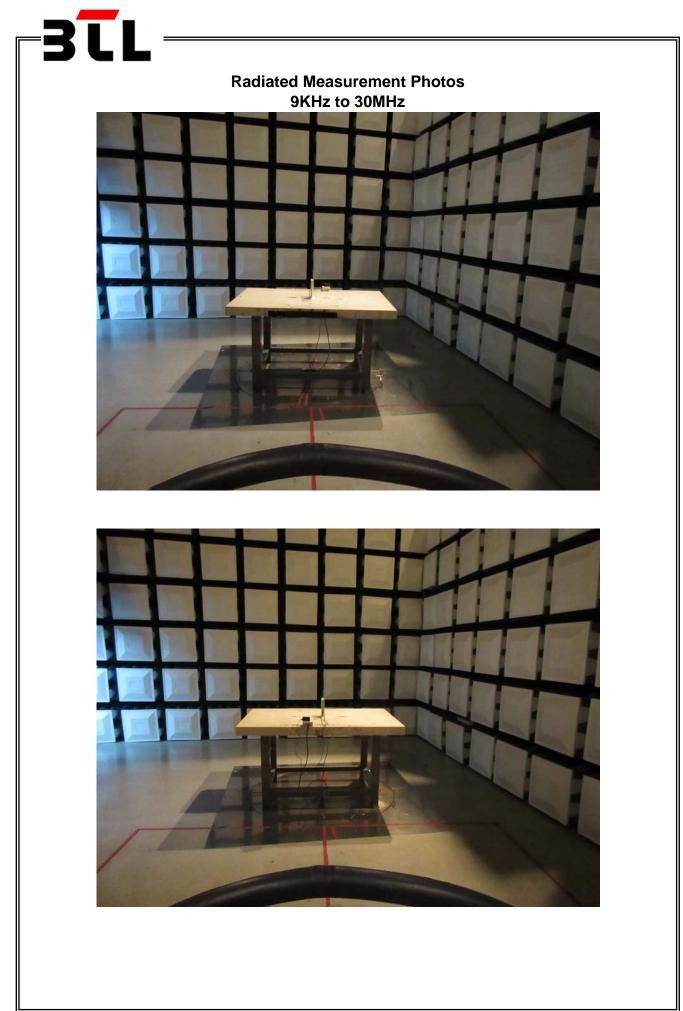
Remark: "N/A" denotes no model name, serial no. or calibration specified. All calibration period of equipment list is one year.



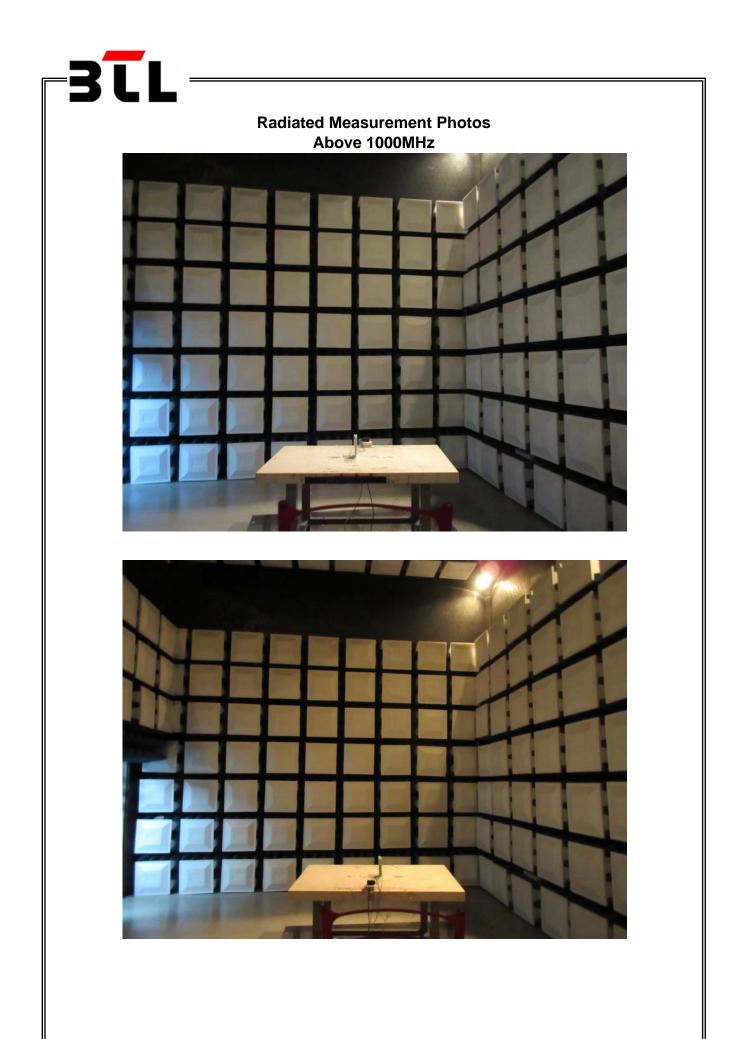
Conducted Measurement Photos





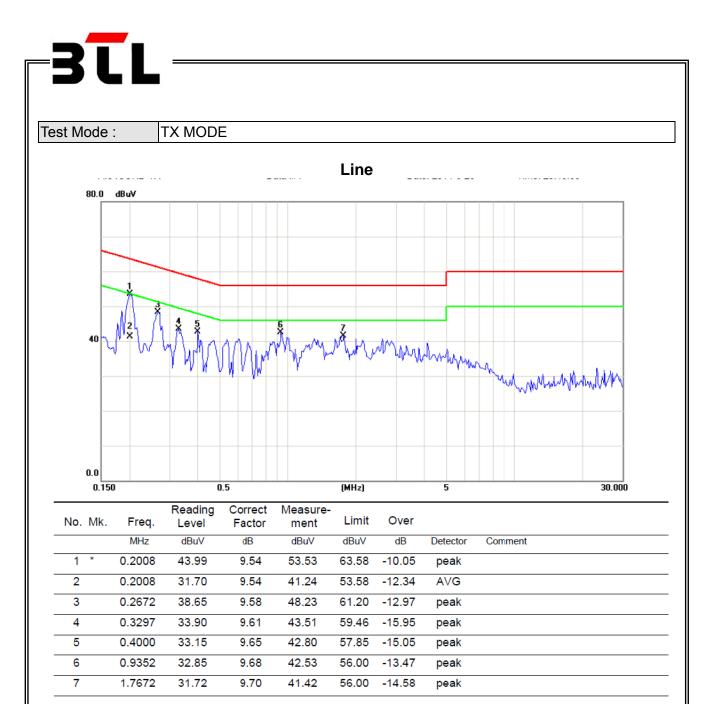




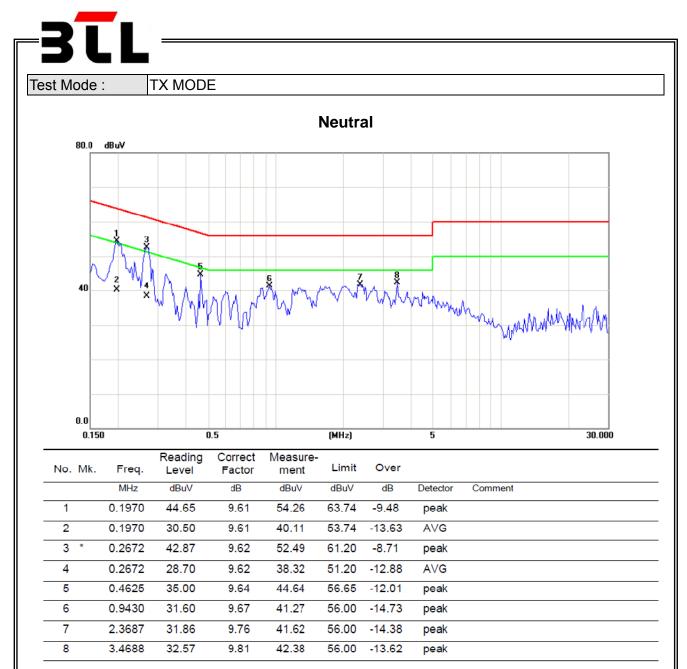




ATTACHMENT A - CONDUCTED EMISSION



Note : The test result has included the cable loss.



Note : The test result has included the cable loss.



ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)



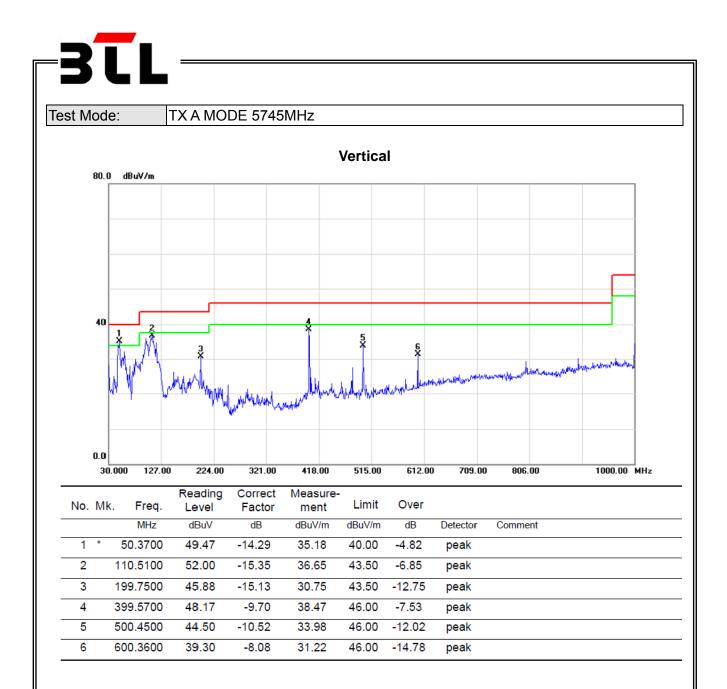
Task Made: TV Made 2442041								
Test Mode: TX Mode 2412MHz								
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Nata	
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note	
0.0094	0°	68.35	24.30	92.65	128.12	-35.47	AVG	
0.0095	0°	72.35	24.30	96.65	148.12	-51.47	PEAK	
0.0136	0°	70.35	24.30	94.65	124.93	-30.28	AVG	
0.0137	0°	79.35	24.30	103.65	144.93	-41.28	PEAK	
0.0243	0°	56.36	24.03	80.39	119.89	-39.50	AVG	
0.0245	0°	60.12	24.03	84.15	139.89	-55.74	PEAK	
0.0326	0°	61.36	23.50	84.86	117.34	-32.48	AVG	
0.0328	0°	65.38	23.50	88.88	137.34	-48.46	PEAK	
0.5670	0°	18.72	20.01	38.73	72.53	-33.80	QP	
1.7535	0°	18.95	19.52	38.47	69.54	-31.07	QP	
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note	
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE	
0.0094	90°	76.35	24.30	100.65	128.19	-27.54	AVG	
0.0094	90°	82.36	24.30	106.66	148.19	-41.53	PEAK	
0.0234	90°	56.38	24.08	80.46	120.22	-39.76	AVG	
0.0237	90°	59.35	24.08	83.43	140.22	-56.79	PEAK	
0.0315	90°	57.35	23.57	80.92	117.64	-36.72	AVG	
0.0318	90°	58.35	23.57	81.92	137.64	-55.72	PEAK	
0.0426	90°	59.35	22.87	82.22	115.02	-32.80	AVG	
0.0429	90°	63.35	22.87	86.22	135.02	-48.80	PEAK	
0.4914	90°	17.45	19.82	37.27	73.78	-36.50	QP	
1.7157	90°	18.63	19.53	38.16	69.54	-31.38	QP	

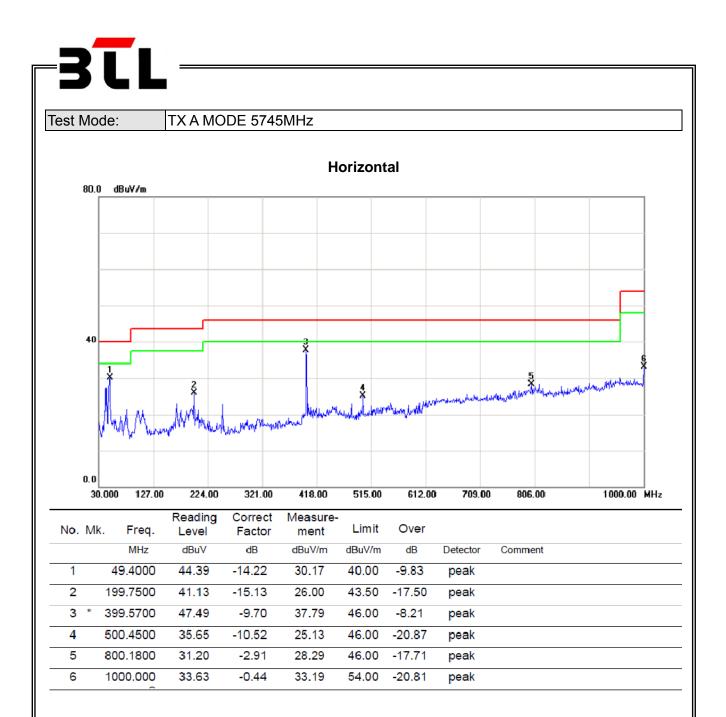
Remark:

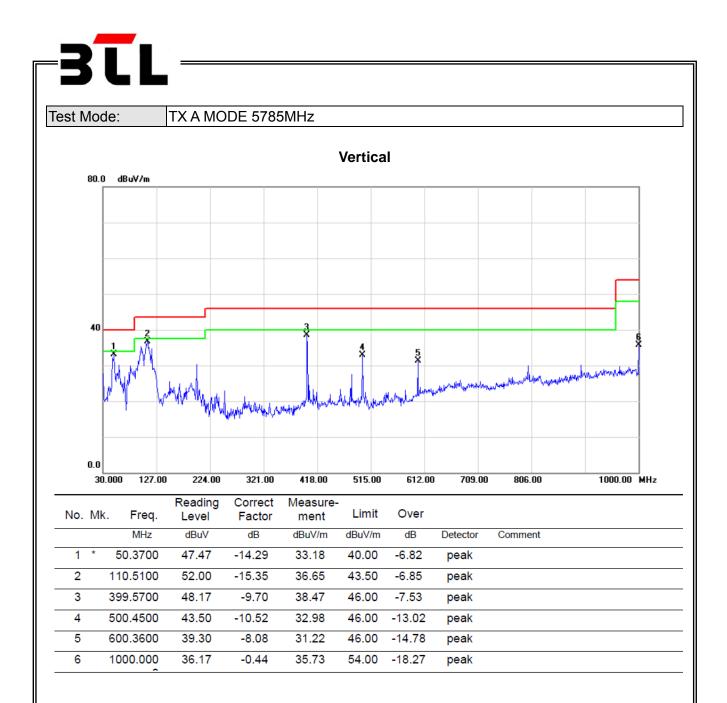
- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

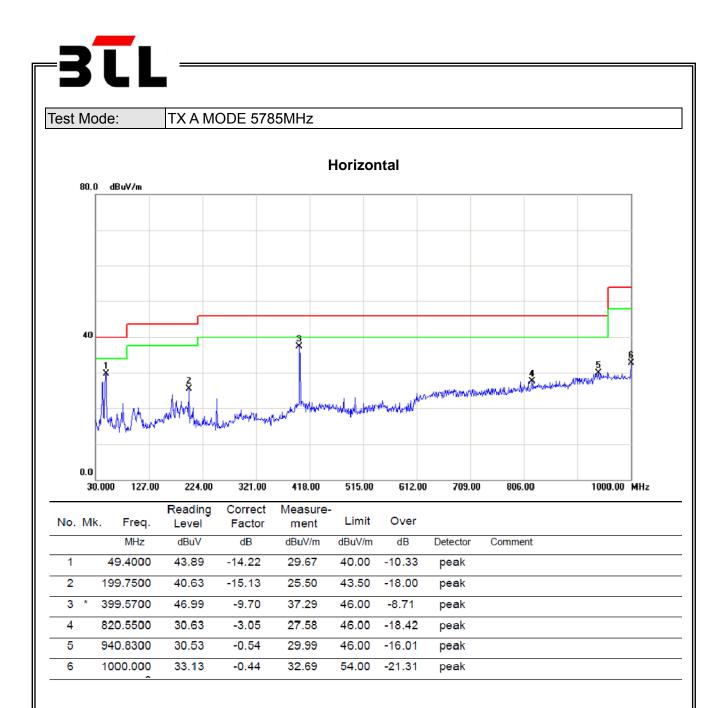


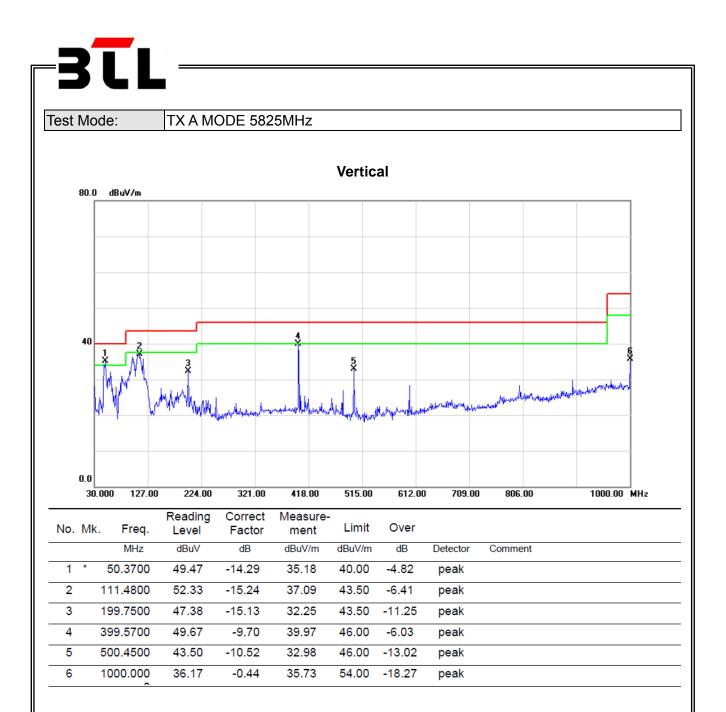
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

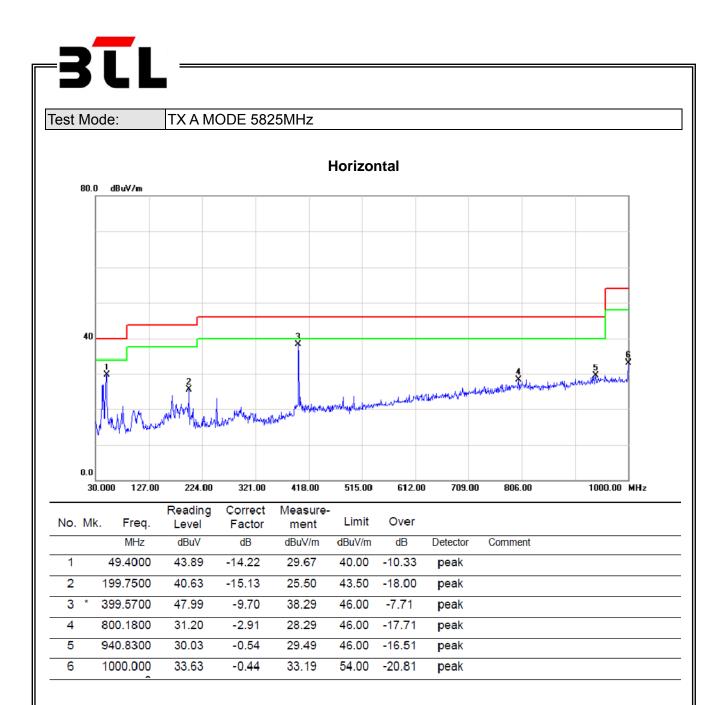














ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

