



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

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Report No.: SZEM170700752302  
Page: 1 of 52

## TEST REPORT

**Application No.:** SZEM1707007523CR  
**Applicant:** Zhuhai Pantum Electronics Co.,Ltd  
**Address of Applicant:** Area A, 3rd floor, Building No.1, No.3883, Zhuhai Avenue, Zhuhai, Guangdong, China  
**Manufacturer/ Factory:** Zhuhai Pantum Electronics Co.,Ltd  
**Address of Manufacturer /Factory:** Area A, 3rd floor, Building No.1, No.3883, Zhuhai Avenue, Zhuhai, Guangdong, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Monochrome Laser Printer  
**Model No.:** P2500W, P2506W, P2502W ♣  
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.  
**FCC ID:** 2AEGOPANTUM-2  
**Trade mark:** PANTUM  
**Standards:** 47 CFR PART 15 Subpart C:2016 section 15.247  
**Date of Receipt:** 2017-07-19  
**Date of Test:** 2017-08-07 to 2017-08-09  
**Date of Issue:** 2017-08-15

<b>Test Result :</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Jack Zhang  
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2017-08-15		Original

<b>Authorized for issue by:</b>			
		 Bill Chen /Project Engineer	
		 Eric Fu /Reviewer	

## 2 Test Summary

<b>Radio Spectrum Matter Part</b>				
<b>Item</b>	<b>Standard</b>	<b>Method</b>	<b>Requirement</b>	<b>Result</b>
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR PART 15 Subpart C:2016 section 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15 Subpart C:2016 section 15.207	Pass
Radiated Spurious Emissions	47 CFR PART 15 Subpart C:2016 section 15.247	ANSI C63.10 (2013) Section 6.10.4	47 CFR Part 15 Subpart C:2016 section 15.209 & 15.247(d)	Pass

**Remark:**

Model No.: P2500W, P2506W, P2502W

Only the model P2500W was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on model number.

This test report (Ref. No.: SZEM170700752302) is only valid with the original test report (Ref. No.: GZEM150400142601).

According to the declaration from the applicant, the models in this report and models in original report were identical on electrical circuit design, layout, components used and internal wiring, with only difference that the models in this report have two different power panels (1# & 2 #).

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report Conducted Emissions at AC Power Line (150kHz-30MHz) and Radiated Spurious Emissions were fully retested on Model P2500W and shown the data in this report, other tests please refer to original report GZEM150400142601.

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## 4 General Information

### 4.1 Details of E.U.T.

Type of Modulation:	IEEE for 802.11b: DSSS (CCK, QPSK, BPSK) IEEE for 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n (HT20 and HT40): OFDM (64QAM, 16QAM, QPSK, BPSK)
Operating Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz
Channel Number:	IEEE 802.11b/g, IEEE 802.11n(HT20): 11 Channels IEEE 802.11n(HT40): 7 Channels
Channels Step:	5MHz step
Sample Type:	Fixed production
Antenna Type:	Integral
Antenna Gain:	2dBi
Power supply:	AC 100-127V 50/60Hz
Test voltage:	AC 120V 60Hz
Cable:	AC Cable: 150cm unscreened USB Port: 1.45m screened USB cable

Operation Frequency each of channel(802.11b/g/n HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Operation Frequency each of channel(802.11n HT40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2422MHz	3	2432MHz	5	2442MHz	7	2452MHz
2	2427MHz	4	2437MHz	6	2447MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11b/g/n (HT20):

Channel	Frequency
The Lowest channel	2412MHz
The Middle channel	2437MHz
The Highest channel	2462MHz

For 802.11n (HT40):

Channel	Frequency
The Lowest channel	2422MHz
The Middle channel	2437MHz
The Highest channel	2452MHz

#### **4.2 Description of Support Units**

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
Laptop	Lenovo	T430u
Test board	Supply to SGS	FT232

#### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$7.25 \times 10^{-8}$
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF conducted power	0.75dB
5	RF power density	2.84dB
6	Conducted Spurious emissions	0.75dB
7	RF Radiated power	4.5dB (below 1GHz)
		4.8dB (above 1GHz)
8	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-18GHz)
9	Temperature test	1 °C
10	Humidity test	3%
11	Supply voltages	1.5%
12	Time	3%

#### **4.4 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.  
518057.

Tel: +86 755 2601 2053      Fax: +86 755 2671 0594

No tests were sub-contracted.

#### **4.5 Test Facility**

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

- CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

#### **4.6 Deviation from Standards**

None

#### **4.7 Abnormalities from Standard Conditions**

None

## 5 Equipment List

<b>Conducted Emissions at AC Power Line (150kHz-30MHz)</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017-05-10	2018-05-10
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A
LISN	Rohde & Schwarz	ENV216	SEM007-01	2016-10-09	2017-10-09
LISN	ETS-LINDGREN	3816/2	SEM007-02	2017-04-14	2018-04-13
8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	EMC0120	2016-09-28	2017-09-28
4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	EMC0121	2016-09-28	2017-09-28
2 Line ISN	Fischer Custom	FCC-TLISN-T2-02	EMC0122	2016-09-28	2017-09-28

<b>Radiated Emissions (30MHz-1GHz)</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-12	2020-08-11
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
EMI Test Receiver	Agilent Technologies	N9038A	SEM004-05	2016-10-09	2017-10-09
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2014-11-01	2017-11-01
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2017-04-14	2018-04-13

<b>Radiated Spurious Emissions</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2017-05-02	2020-05-01
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-02	2017-03-05	2020-03-05
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-14
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-14	2017-06-16	2020-06-15
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2016-10-09	2017-10-09
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2016-10-09	2017-10-09
Pre-amplifier(0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-10	2016-10-17	2017-10-17
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2015-08-14	2018-08-14
Band filter	N/A	N/A	SEM023-01	N/A	N/A

<b>General used equipment</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2016-10-12	2017-10-12
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2016-10-12	2017-10-12
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2016-10-12	2017-10-12
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2017-04-18	2018-04-18

## 6 Radio Spectrum Matter Test Results

### 6.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15 Subpart C:2016 section 15.207  
Test Method: ANSI C63.10 (2013) Section 6.2  
Limit:

Frequency of emission(MHz)	Conducted limit(dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

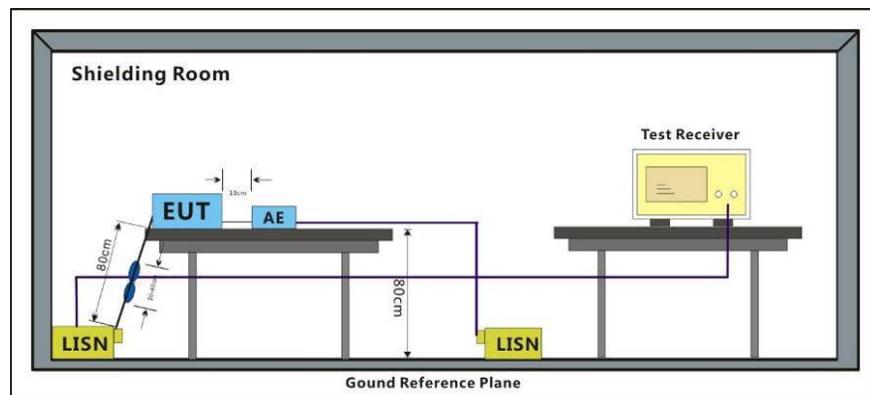
### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C      Humidity: 55 % RH      Atmospheric Pressure: 1000 mbar

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 6.1.2 Test Setup Diagram



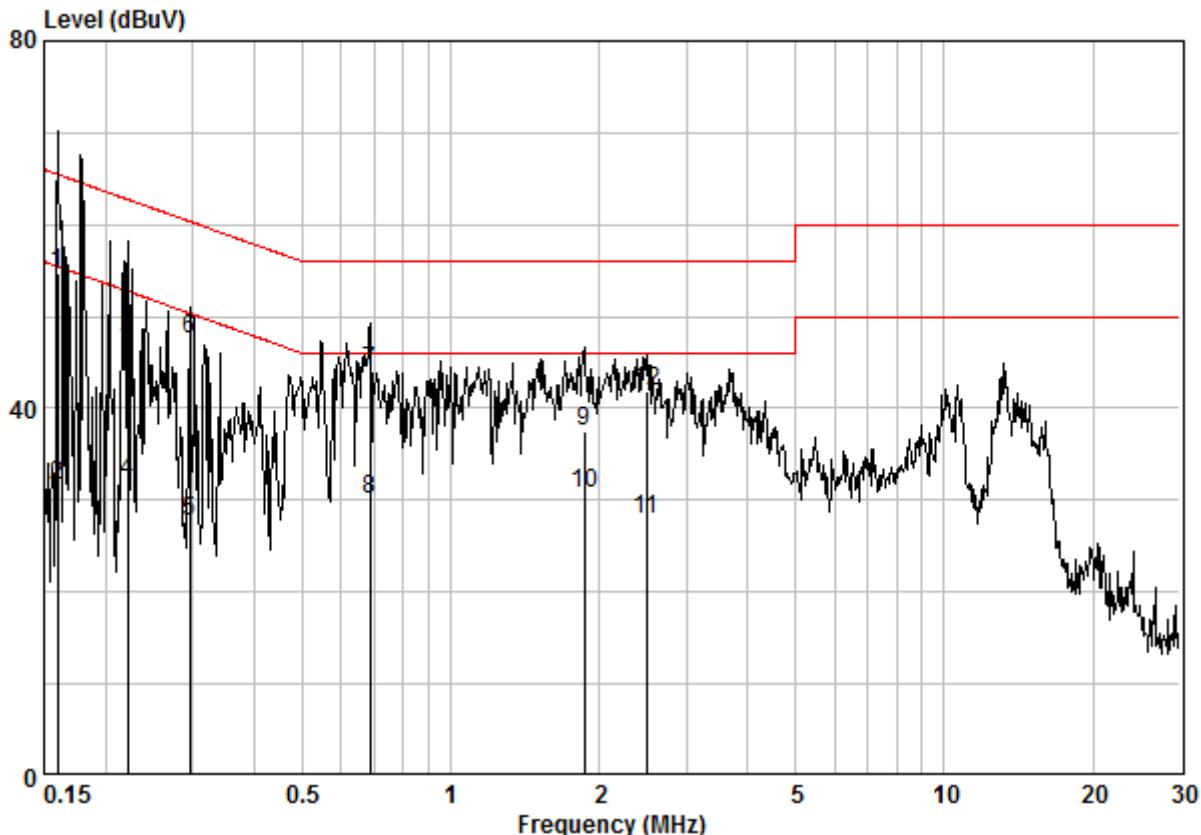
### 6.1.3 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50µH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: LISN=Read Level+ Cable Loss+ LISN Factor

1#

Mode:a; Line:Live Line



Site : Shielding Room

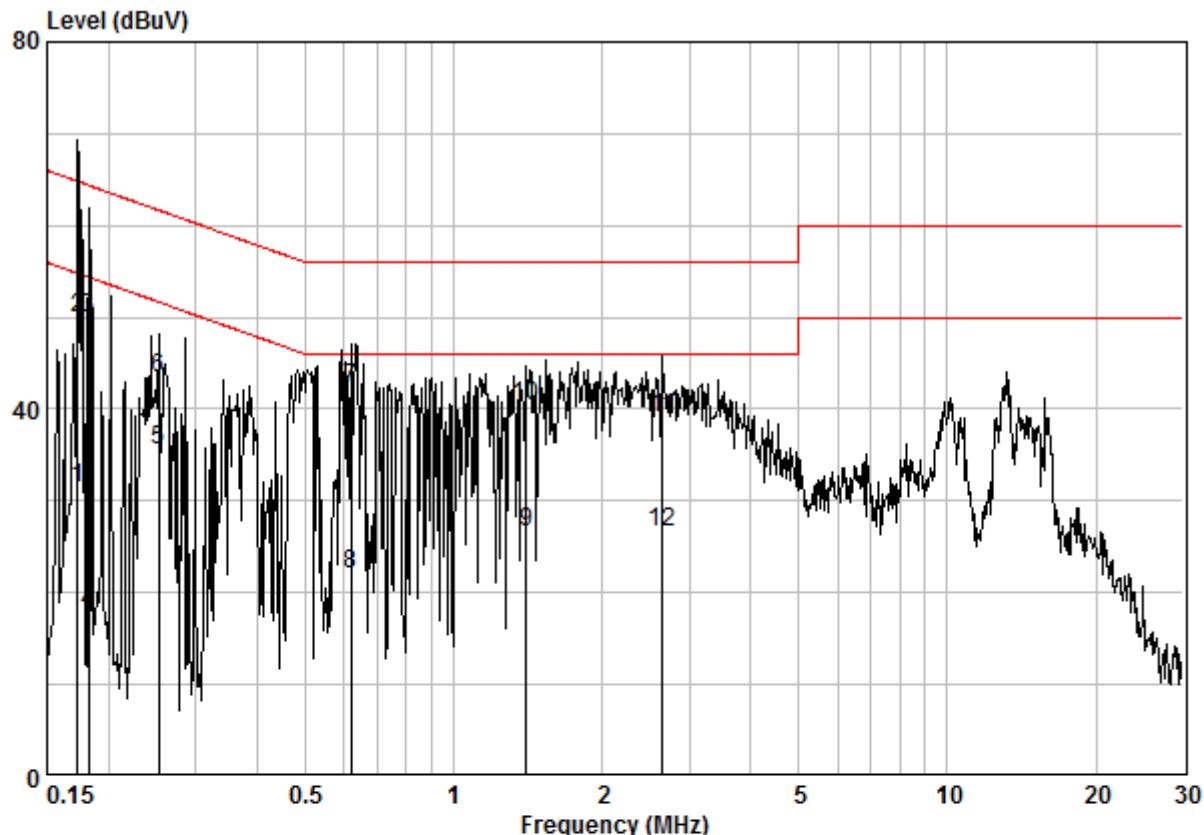
Condition : CE LINE

Job No. : 07523CR

Test Mode : a

	Freq	Cable	LISN	Read	Limit	Over	Remark
		Loss	Factor	Level	Level	Line	
	MHz	dB	dB	dBuV	dBuV	dBuV	
1 @	0.16000	0.02	9.64	45.10	54.76	65.46	-10.70 QP
2	0.16000	0.02	9.64	22.00	31.66	55.46	-23.80 Average
3	0.22201	0.02	9.64	37.97	47.63	62.74	-15.12 QP
4	0.22201	0.02	9.64	22.46	32.12	52.74	-20.63 AVERAGE
5	0.29554	0.02	9.64	18.13	27.79	50.37	-22.58 AVERAGE
6	0.29554	0.02	9.64	37.79	47.45	60.37	-12.91 QP
7	0.68626	0.02	9.65	34.36	44.03	56.00	-11.97 QP
8	0.68626	0.02	9.65	20.37	30.04	46.00	-15.96 AVERAGE
9	1.868	0.03	9.67	27.71	37.41	56.00	-18.59 QP
10	1.868	0.03	9.67	21.07	30.77	46.00	-15.23 AVERAGE
11	2.487	0.03	9.68	18.12	27.83	46.00	-18.17 AVERAGE
12	2.487	0.03	9.68	32.16	41.87	56.00	-14.13 QP

Mode:a; Line:Neutral Line

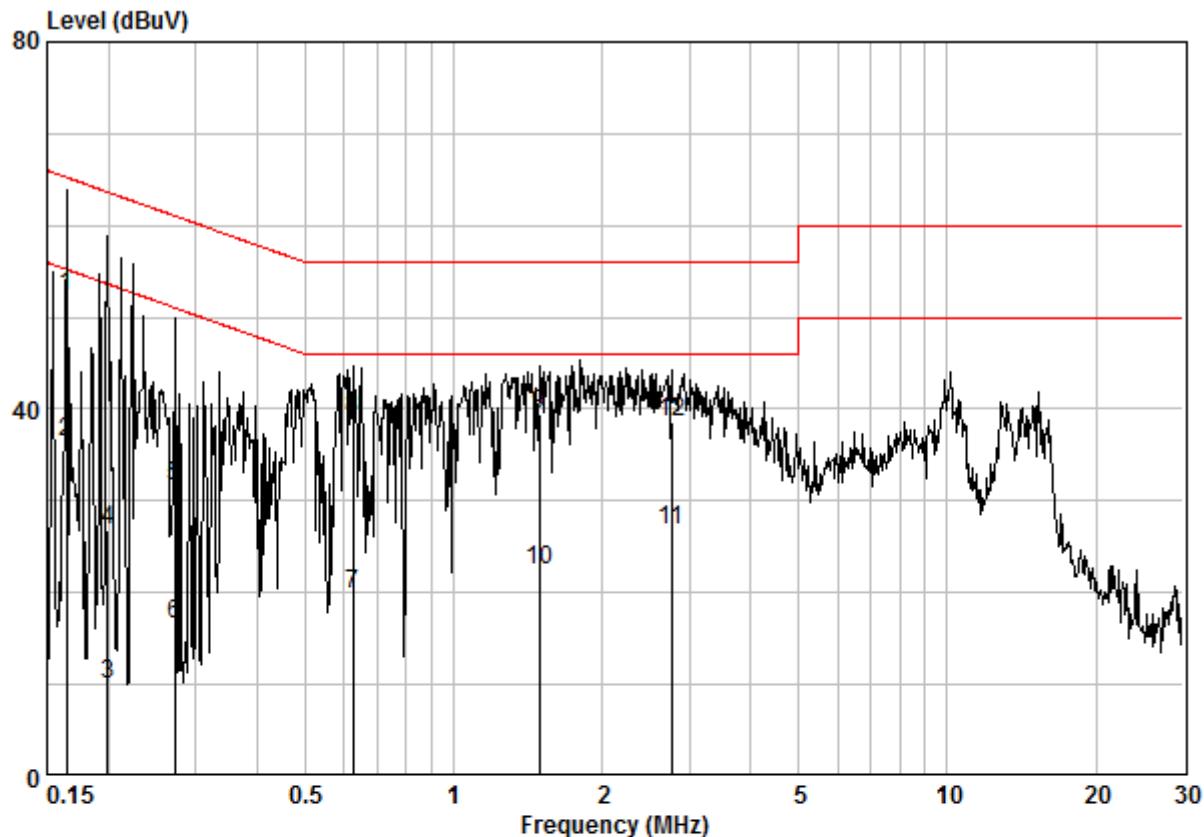


Site : Shielding Room  
Condition : CE NEUTRAL  
Job No. : 07523CR  
Test Mode : a

	Freq	Cable	LISN	Read	Limit	Over	Remark
		Loss	Factor	Level			
	MHz	dB	dB	dBuV	dBuV	dBuV	dB
1	0.17307	0.02	9.63	21.70	31.35	54.81	-23.46 AVERAGE
2	0.17307	0.02	9.63	40.26	49.91	64.81	-14.90 QP
3	0.18249	0.02	9.63	40.35	50.00	64.37	-14.37 QP
4	0.18249	0.02	9.63	8.26	17.91	54.37	-36.46 AVERAGE
5	0.25211	0.02	9.63	25.98	35.63	51.69	-16.06 AVERAGE
6	0.25211	0.02	9.63	33.82	43.47	61.69	-18.21 QP
7	0.62054	0.02	9.63	32.68	42.34	56.00	-13.66 QP
8	0.62054	0.02	9.63	12.45	22.11	46.00	-23.89 AVERAGE
9	1.403	0.03	9.65	16.87	26.55	46.00	-19.45 AVERAGE
10	1.403	0.03	9.65	30.54	40.22	56.00	-15.78 QP
11	2.650	0.03	9.66	29.36	39.05	56.00	-16.95 QP
12	2.650	0.03	9.66	16.99	26.68	46.00	-19.32 AVERAGE

2#

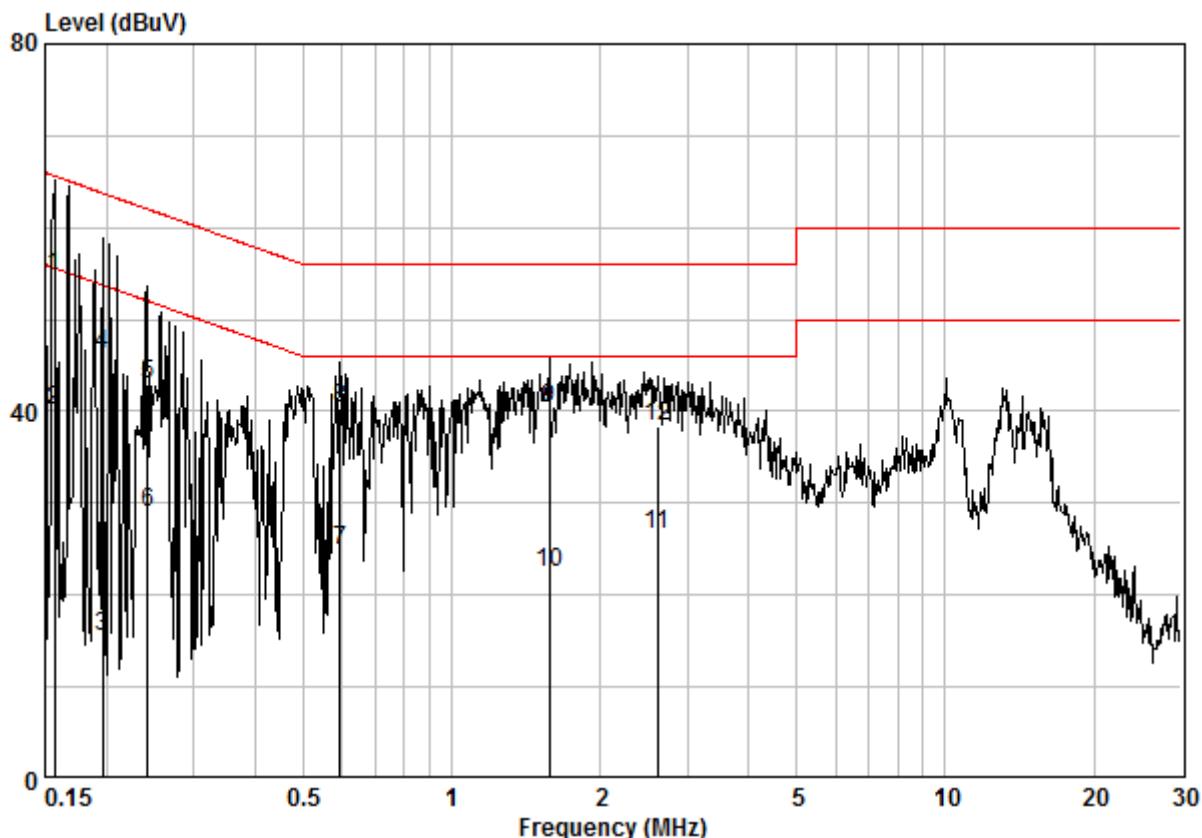
Mode:a; Line:Live Line



Site : Shielding Room  
Condition : CE LINE  
Job No. : 07523CR  
Test Mode : a  
:#2

	Freq	Cable	LISN	Read	Limit	Over	Remark	
		MHz	dB	dB	dBuV	dBuV	dBuV	dB
1 @	0.16414	0.02	9.64	42.75	52.41	65.25	-12.85	QP
2	0.16414	0.02	9.64	26.71	36.37	55.25	-18.88	AVERAGE
3	0.19863	0.02	9.64	0.33	9.99	53.67	-43.67	AVERAGE
4	0.19863	0.02	9.64	17.23	26.89	63.67	-36.78	QP
5	0.27152	0.02	9.64	21.95	31.61	61.07	-29.46	QP
6	0.27152	0.02	9.64	6.84	16.50	51.07	-34.58	AVERAGE
7	0.62383	0.02	9.65	10.16	19.83	46.00	-26.17	AVERAGE
8	0.62383	0.02	9.65	29.44	39.11	56.00	-16.89	QP
9	1.487	0.03	9.66	29.85	39.54	56.00	-16.46	QP
10	1.487	0.03	9.66	12.74	22.43	46.00	-23.57	AVERAGE
11	2.765	0.03	9.69	17.18	26.89	46.00	-19.11	AVERAGE
12	2.765	0.03	9.69	28.88	38.59	56.00	-17.41	QP

Mode:a; Line:Neutral Line



Site : Shielding Room

Condition : CE NEUTRAL

Job No. : 07523CR

Test Mode : a

: #2

	Freq	Cable	LISN	Read	Limit	Over	Remark
		Loss	Factor	Level	Level	Line	
	MHz	dB	dB	dBuV	dBuV	dBuV	dB
1	0.15649	0.02	9.64	45.02	54.68	65.65	-10.97 QP
2	0.15649	0.02	9.64	30.53	40.18	55.65	-15.46 AVERAGE
3	0.19654	0.02	9.63	5.82	15.47	53.76	-38.29 AVERAGE
4	0.19654	0.02	9.63	36.49	46.14	63.76	-17.62 QP
5	0.24165	0.02	9.63	33.35	43.00	62.04	-19.04 QP
6	0.24165	0.02	9.63	19.37	29.02	52.04	-23.02 AVERAGE
7	0.59478	0.02	9.63	15.25	24.90	46.00	-21.10 AVERAGE
8	0.59478	0.02	9.63	30.70	40.35	56.00	-15.65 QP
9	1.577	0.03	9.65	30.72	40.40	56.00	-15.60 QP
10	1.577	0.03	9.65	12.72	22.40	46.00	-23.60 AVERAGE
11	2.608	0.03	9.66	17.01	26.70	46.00	-19.30 AVERAGE
12	2.608	0.03	9.66	28.67	38.36	56.00	-17.64 QP

## 6.2 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15 Subpart C:2016 section 15.209 & 15.247(d)

Test Method: ANSI C63.10 (2013) Section 6.10.4

Measurement Distance: 3m

Limit:

Frequency(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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, 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.

### 6.2.1 E.U.T. Operation

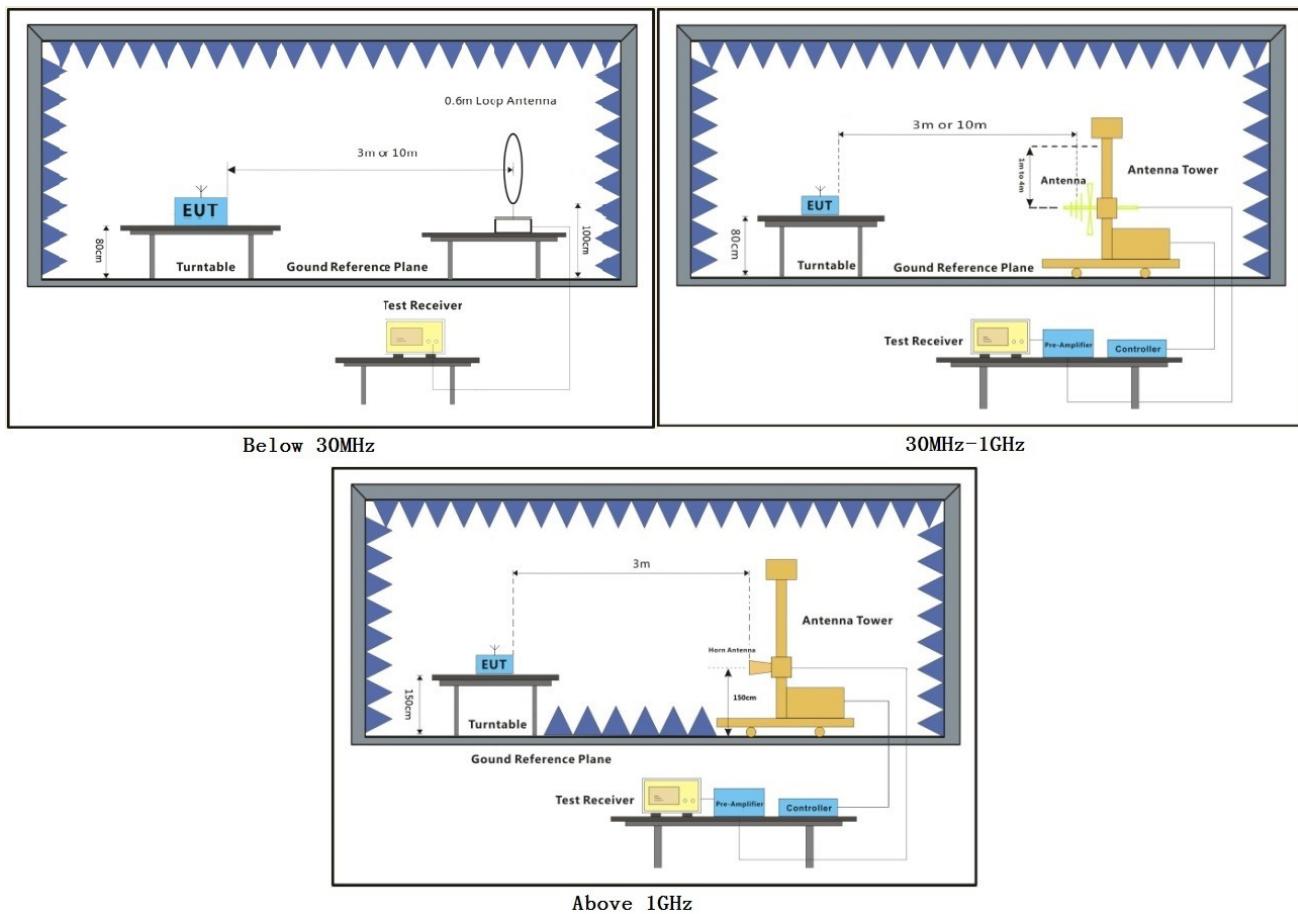
Operating Environment:

Temperature: 23 °C      Humidity: 54 % RH      Atmospheric Pressure: 1000 mbar

Test mode

a:TX mode\_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 6.2.2 Test Setup Diagram



### **6.2.3 Measurement Procedure and Data**

- a. For below 1GHz, 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.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. 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.
- e. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle 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 the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

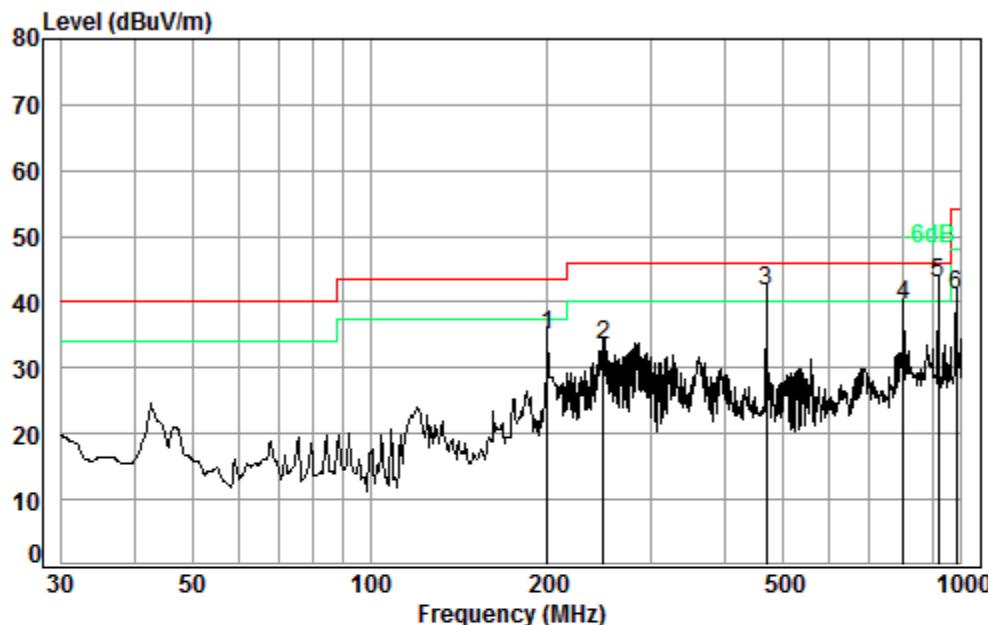
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

**Radiated Emission below 1GHz**

30MHz~1GHz (QP)

1#

Polarization:Horizontal;



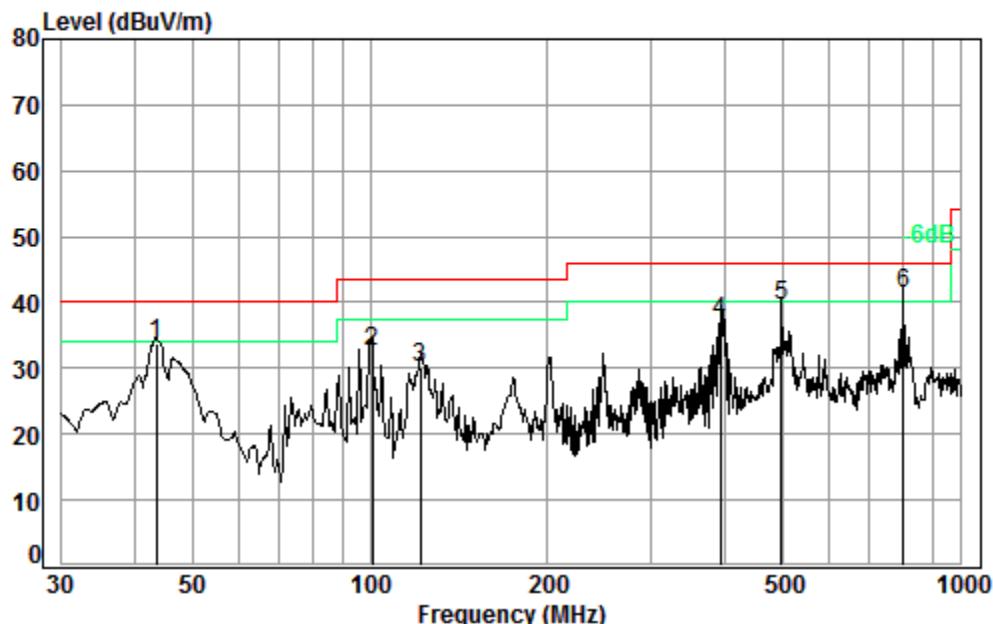
Condition: 3m HORIZONTAL

Job No. : 07523CR

Test mode: a

Freq	Cable	Ant	Preamp	Read	Limit	Over		
	Loss	Factor	Factor	Level			Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	199.29	1.40	10.19	26.70	50.21	35.10	43.50	-8.40
2	248.55	1.67	12.25	26.54	46.17	33.55	46.00	-12.45
3	468.88	2.48	17.58	27.54	49.13	41.65	46.00	-4.35
4	798.98	3.20	22.10	27.30	41.41	39.41	46.00	-6.59
5 pp	916.07	3.62	23.26	26.71	42.62	42.79	46.00	-3.21
6	982.62	3.68	23.60	26.40	40.09	40.97	54.00	-13.03

Polarization:Vertical;



Condition: 3m VERTICAL

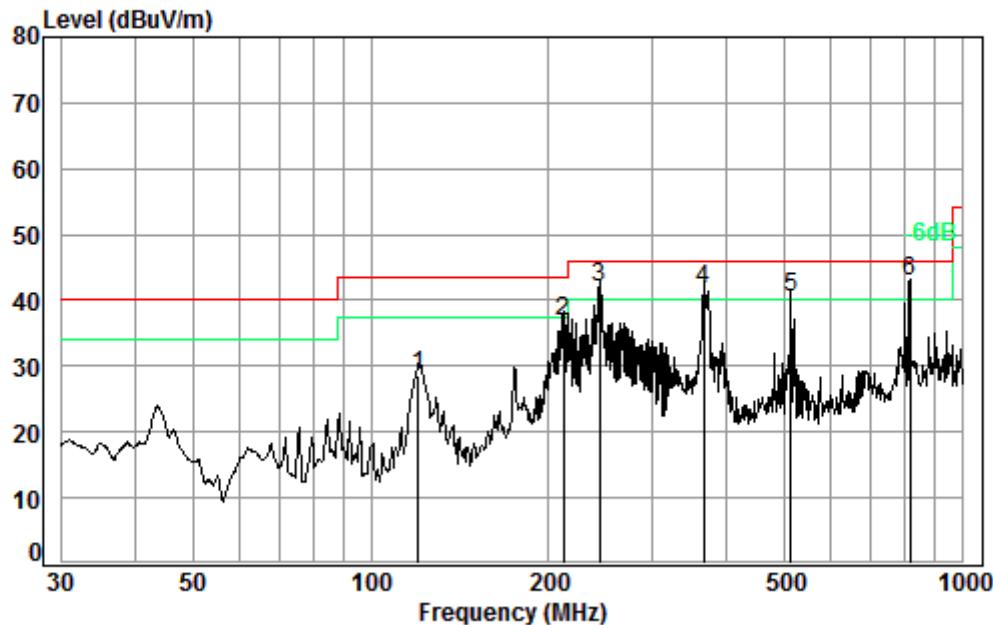
Job No. : 07523CR

Test mode: a

Freq	Cable	Ant	Preamp	Read	Limit	Over		
	Loss	Factor	Factor	Level			Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	43.51	0.68	11.56	27.31	48.74	33.67	40.00	-6.33
2	100.93	1.20	9.05	27.19	49.59	32.65	43.50	-10.85
3	121.98	1.26	7.86	27.06	48.11	30.17	43.50	-13.33
4	392.10	2.18	16.21	27.09	45.84	37.14	46.00	-8.86
5	497.68	2.59	17.80	27.70	46.89	39.58	46.00	-6.42
6 pp	798.98	3.20	22.10	27.30	43.36	41.36	46.00	-4.64

2#

Polarization:Horizontal;



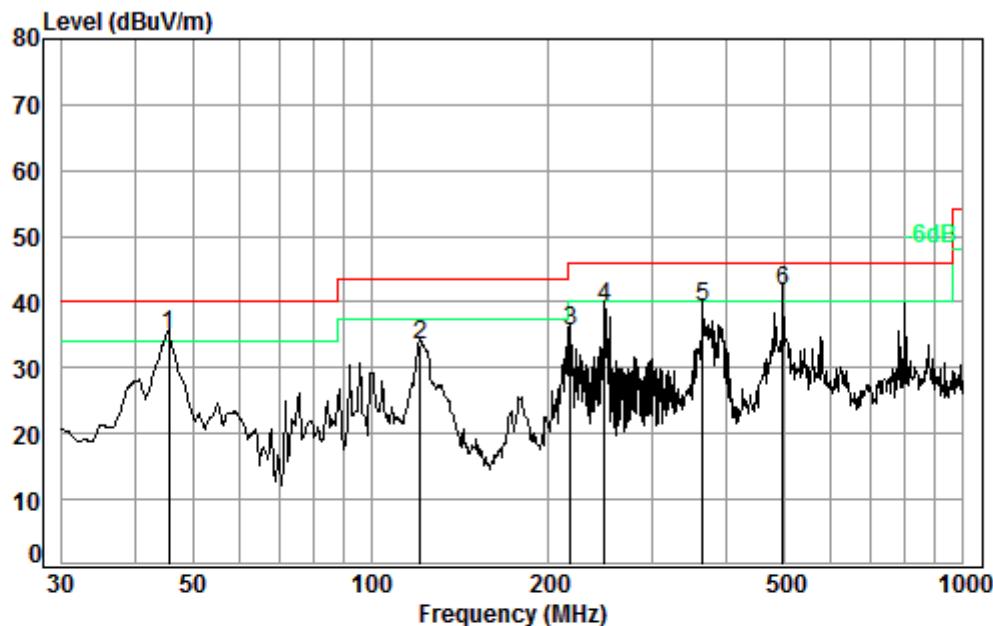
Condition: 3m HORIZONTAL

Job No. : 07523CR

Test mode: a

Freq	Cable	Ant	Preamp	Read	Limit	Over		
	Loss	Factor	Factor	Level			Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	120.28	1.26	7.89	27.07	46.37	28.45	43.50	-15.05
2	211.53	1.47	10.80	26.66	51.20	36.81	43.50	-6.69
3	243.38	1.64	12.09	26.55	54.90	42.08	46.00	-3.92
4	365.54	2.11	15.21	26.91	51.37	41.78	46.00	-4.22
5	513.63	2.61	18.18	27.67	47.31	40.43	46.00	-5.57
6 pp	816.02	3.27	22.29	27.20	44.59	42.95	46.00	-3.05

Polarization:Vertical;



Condition: 3m VERTICAL

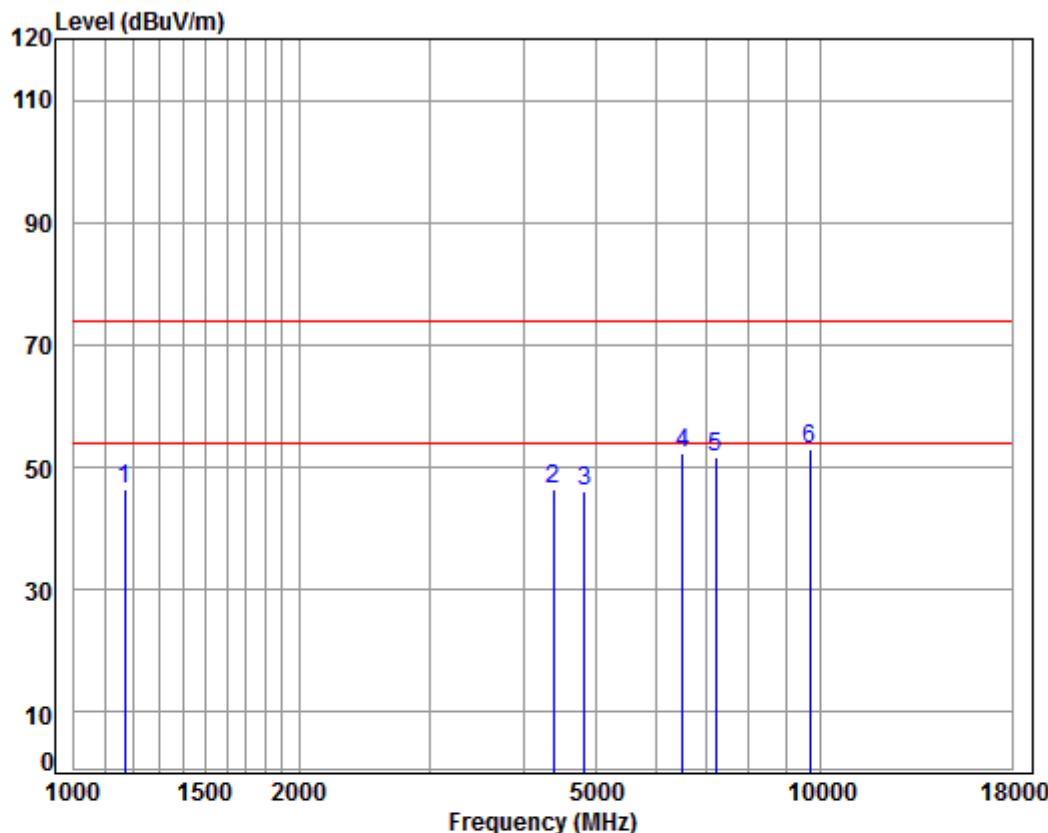
Job No. : 07523CR

Test mode: a

Freq	Cable	Ant	Preamp	Read	Limit	Over	Limit	
	Loss	Factor	Factor	Level				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	45.53	0.72	10.66	27.30	50.84	34.92	40.00	-5.08
2	121.12	1.26	7.88	27.06	51.34	33.42	43.50	-10.08
3	217.54	1.50	11.11	26.63	49.61	35.59	46.00	-10.41
4	248.55	1.67	12.25	26.54	51.79	39.17	46.00	-6.83
5	364.26	2.10	15.10	26.89	48.95	39.26	46.00	-6.74
6 pp	497.68	2.59	17.80	27.70	48.90	41.59	46.00	-4.41

**Transmitter emission above 1GHz**

Mode:a; Polarization:Horizontal; Modulation Type:802.11b; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL

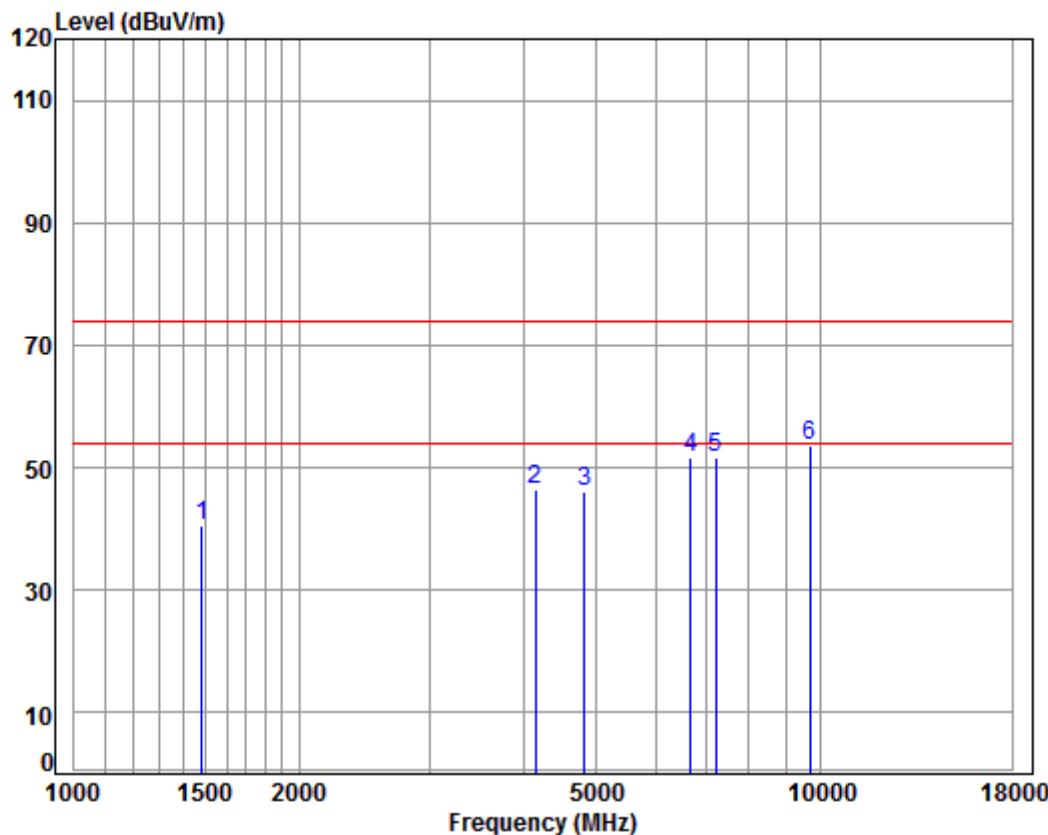
Job No : 07523CR

Mode : 2412 TX RSE

: 2.4G WIFI 11B

		Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Level	Over Line Limit	Over Line Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1168.920	4.29	24.32	38.08	56.01	46.54	74.00	-27.46	peak
2	4379.699	7.43	33.60	38.20	43.53	46.36	74.00	-27.64	peak
3	4824.000	7.91	34.19	38.42	42.36	46.04	74.00	-27.96	peak
4	6526.373	11.46	35.18	37.75	43.40	52.29	74.00	-21.71	peak
5	7236.000	10.07	36.40	37.08	42.18	51.57	74.00	-22.43	peak
6	pp 9648.000	10.77	37.53	35.07	39.88	53.11	74.00	-20.89	peak

Mode:a; Polarization:Vertical; Modulation Type:802.11b; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL

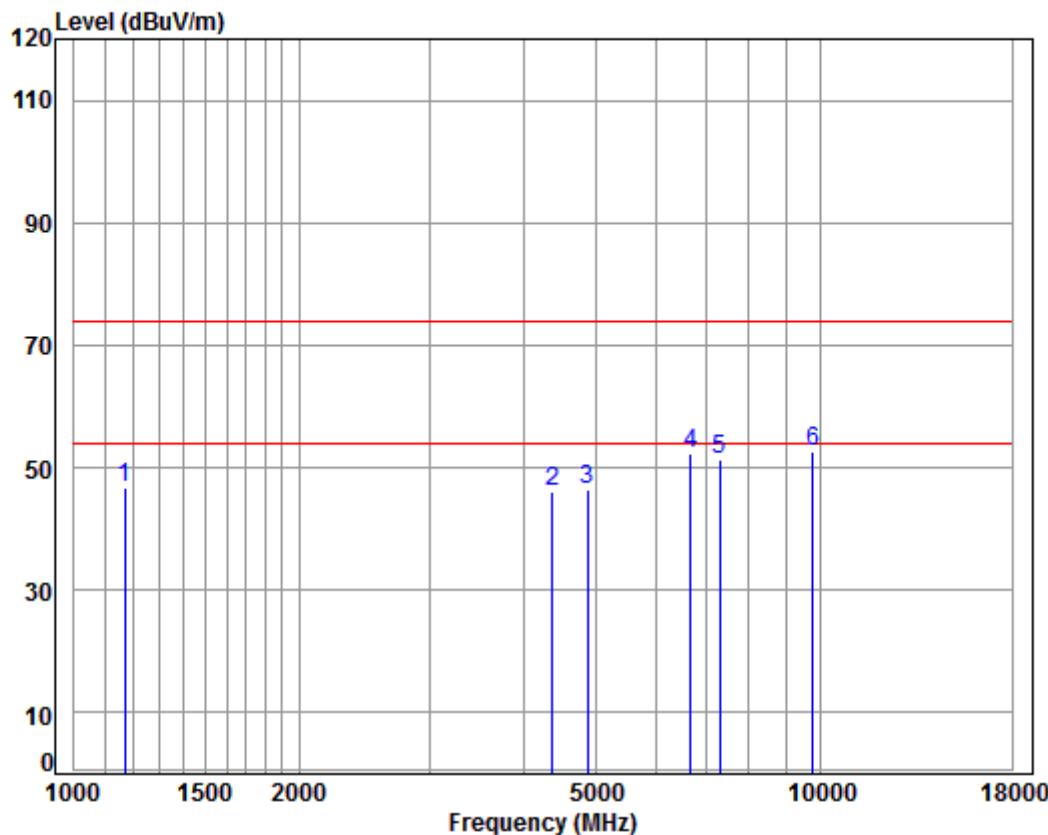
Job No : 07523CR

Mode : 2412 TX RSE

: 2.4G WIFI 11B

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over	Remark
							dB	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1481.553	5.42	25.73	38.04	47.34	40.45	74.00	-33.55 peak
2	4145.664	7.16	33.60	38.08	43.90	46.58	74.00	-27.42 peak
3	4824.000	7.91	34.19	38.42	42.32	46.00	74.00	-28.00 peak
4	6679.040	11.02	35.61	37.60	42.78	51.81	74.00	-22.19 peak
5	7236.000	10.07	36.40	37.08	42.41	51.80	74.00	-22.20 peak
6	pp 9648.000	10.77	37.53	35.07	40.27	53.50	74.00	-20.50 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11b; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL

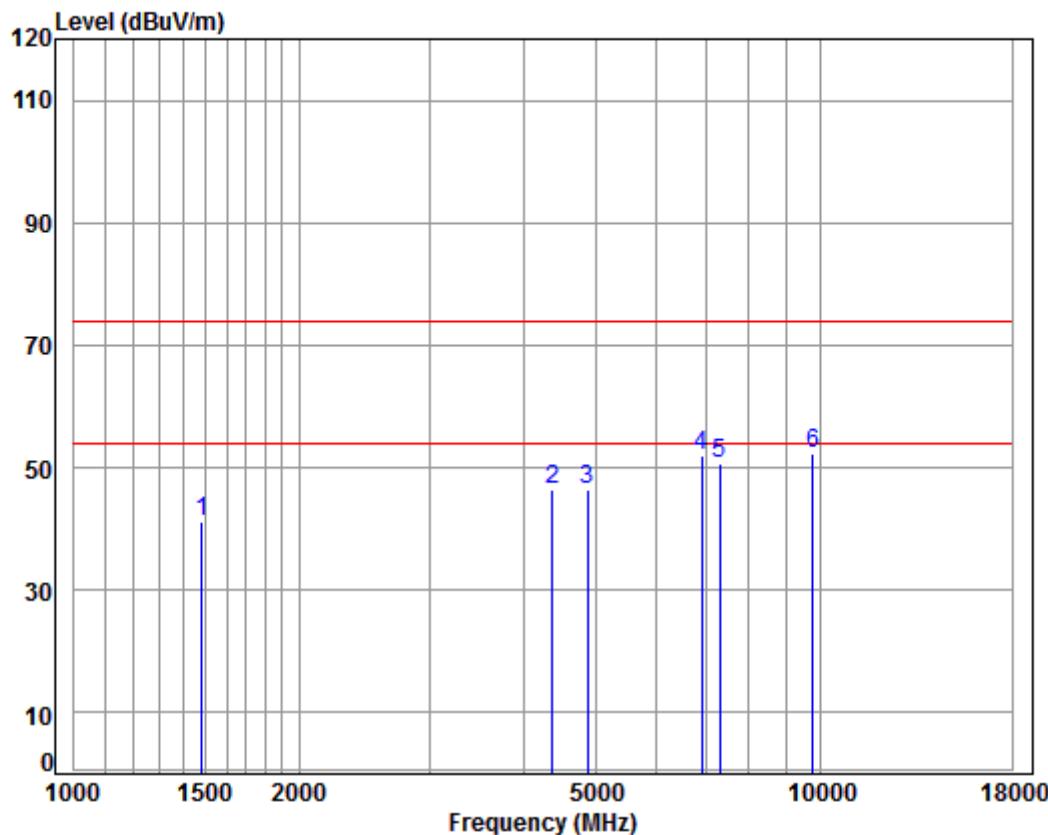
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11B

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over	Remark
							dB	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1168.920	4.29	24.32	38.08	56.35	46.88	74.00	-27.12 peak
2	4367.058	7.41	33.60	38.20	43.38	46.19	74.00	-27.81 peak
3	4874.000	7.96	34.28	38.44	42.60	46.40	74.00	-27.60 peak
4	6679.040	11.02	35.61	37.60	43.36	52.39	74.00	-21.61 peak
5	7311.000	10.05	36.37	37.01	41.99	51.40	74.00	-22.60 peak
6	pp 9748.000	10.82	37.55	35.02	39.33	52.68	74.00	-21.32 peak

Mode:a; Polarization:Vertical; Modulation Type:802.11b; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL

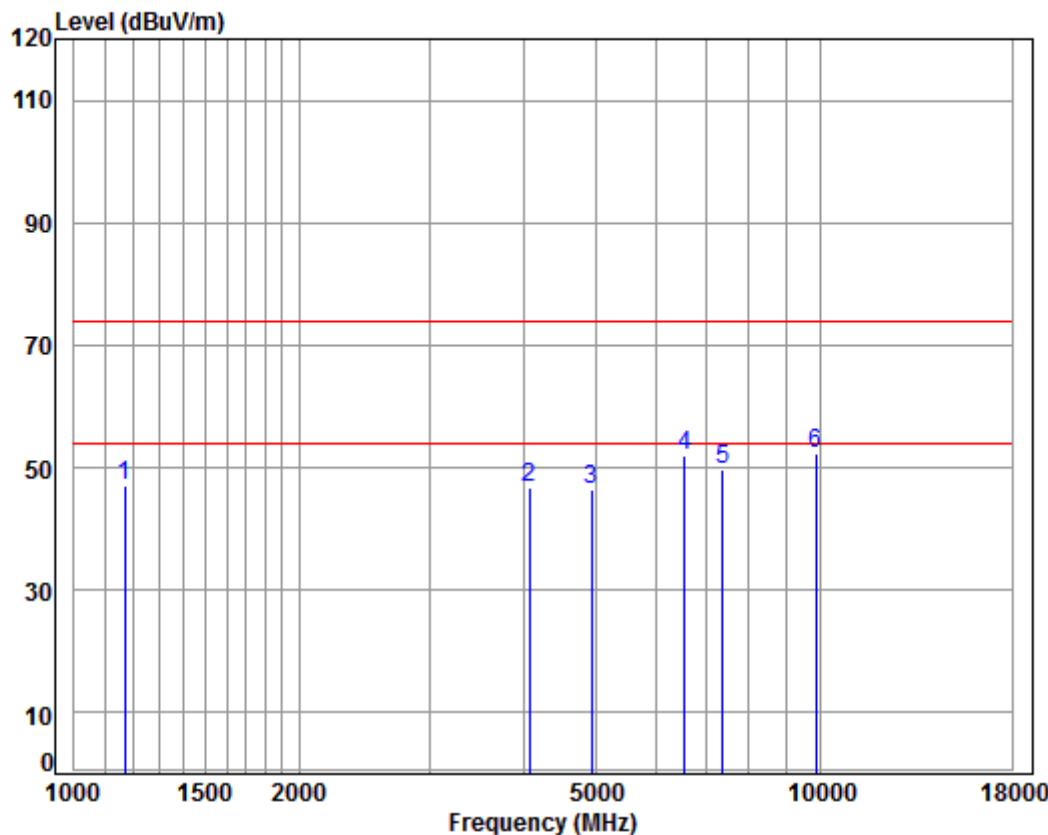
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11B

		Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Level	Over Line Limit	Over Line Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1481.553	5.42	25.73	38.04	47.97	41.08	74.00	-32.92	peak
2	4367.058	7.41	33.60	38.20	43.53	46.34	74.00	-27.66	peak
3	4874.000	7.96	34.28	38.44	42.49	46.29	74.00	-27.71	peak
4	6914.763	10.36	36.27	37.38	42.87	52.12	74.00	-21.88	peak
5	7311.000	10.05	36.37	37.01	41.25	50.66	74.00	-23.34	peak
6 pp	9748.000	10.82	37.55	35.02	39.04	52.39	74.00	-21.61	peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11b; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL

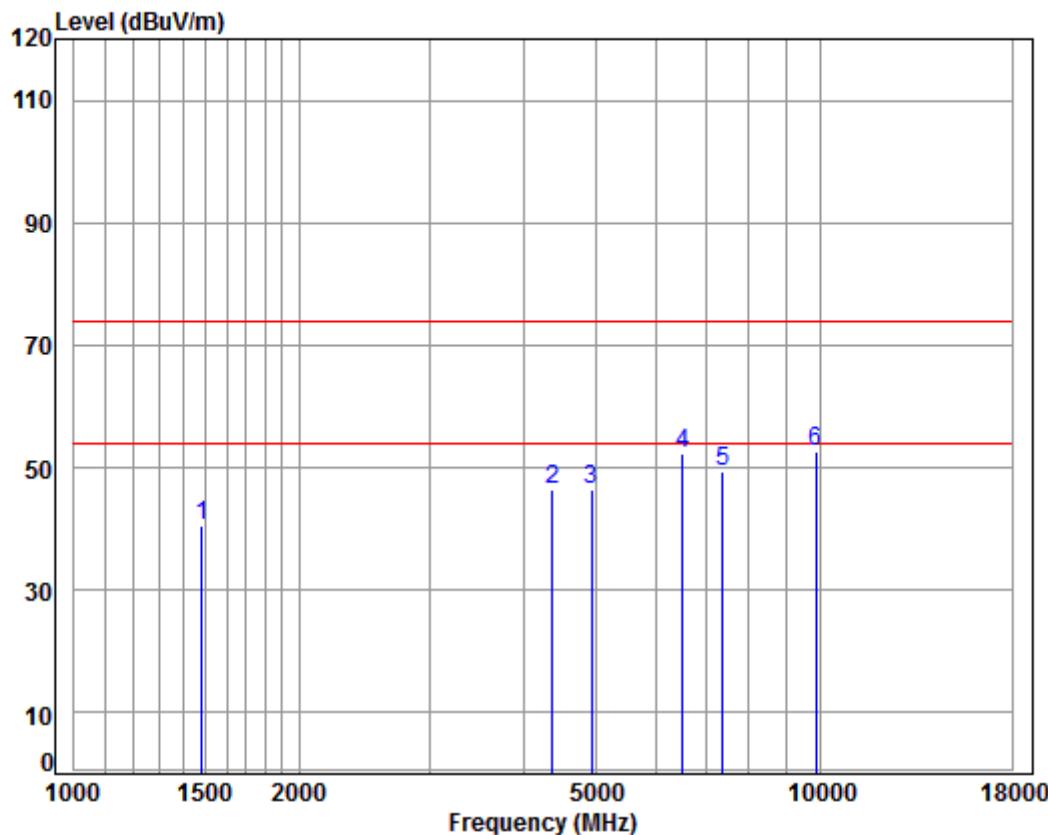
Job No : 07523CR

Mode : 2462 TX RSE

: 2.4G WIFI 11B

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level		Limit Line	Over Line	Remark
				dB	dBuV	dBuV/m	dBuV/m	dB
1 1168.920	4.29	24.32	38.08	56.53	47.06	74.00	-26.94	peak
2 4074.388	7.07	33.60	38.04	44.12	46.75	74.00	-27.25	peak
3 4924.000	8.01	34.37	38.47	42.58	46.49	74.00	-27.51	peak
4 6564.209	11.35	35.29	37.72	43.03	51.95	74.00	-22.05	peak
5 7386.000	10.03	36.34	36.94	40.23	49.66	74.00	-24.34	peak
6 pp 9848.000	10.87	37.57	34.97	38.79	52.26	74.00	-21.74	peak

Mode:a; Polarization:Vertical; Modulation Type:802.11b; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL

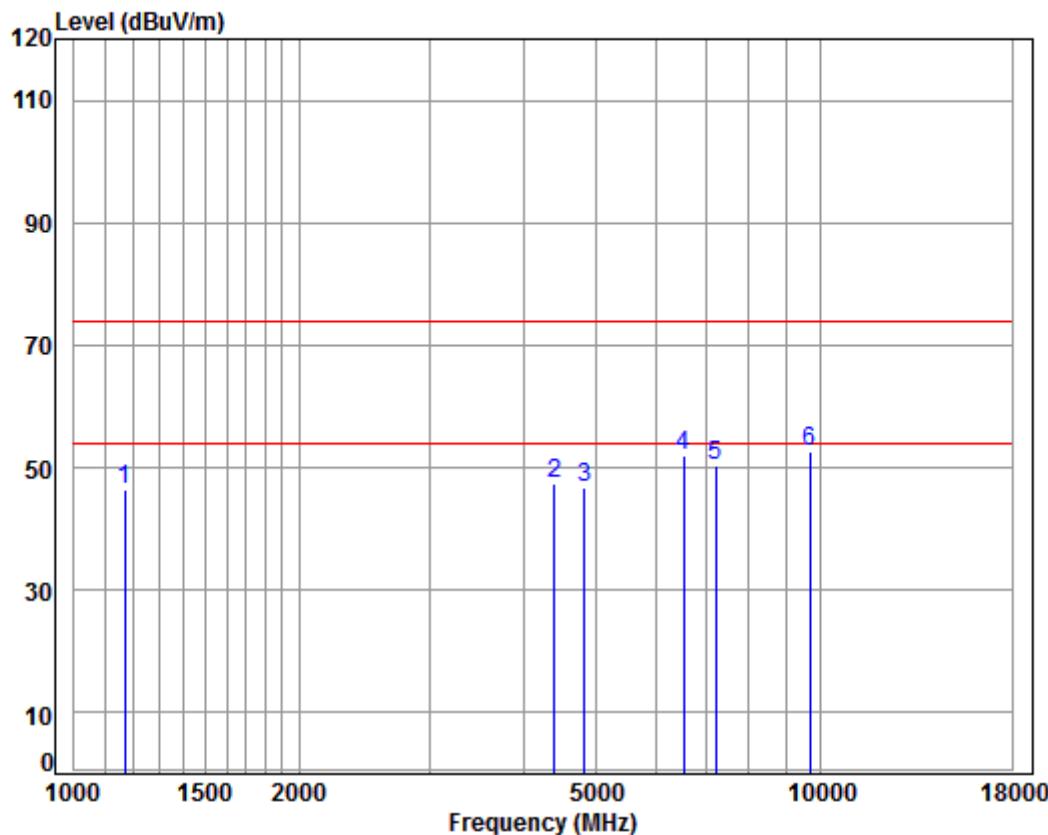
Job No : 07523CR

Mode : 2462 TX RSE

: 2.4G WIFI 11B

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1481.553	5.42	25.73	38.04	47.42	40.53	74.00	-33.47	peak
2	4367.058	7.41	33.60	38.20	43.67	46.48	74.00	-27.52	peak
3	4924.000	8.01	34.37	38.47	42.67	46.58	74.00	-27.42	peak
4	6526.373	11.46	35.18	37.75	43.40	52.29	74.00	-21.71	peak
5	7386.000	10.03	36.34	36.94	39.97	49.40	74.00	-24.60	peak
6 pp	9848.000	10.87	37.57	34.97	39.20	52.67	74.00	-21.33	peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11g; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL

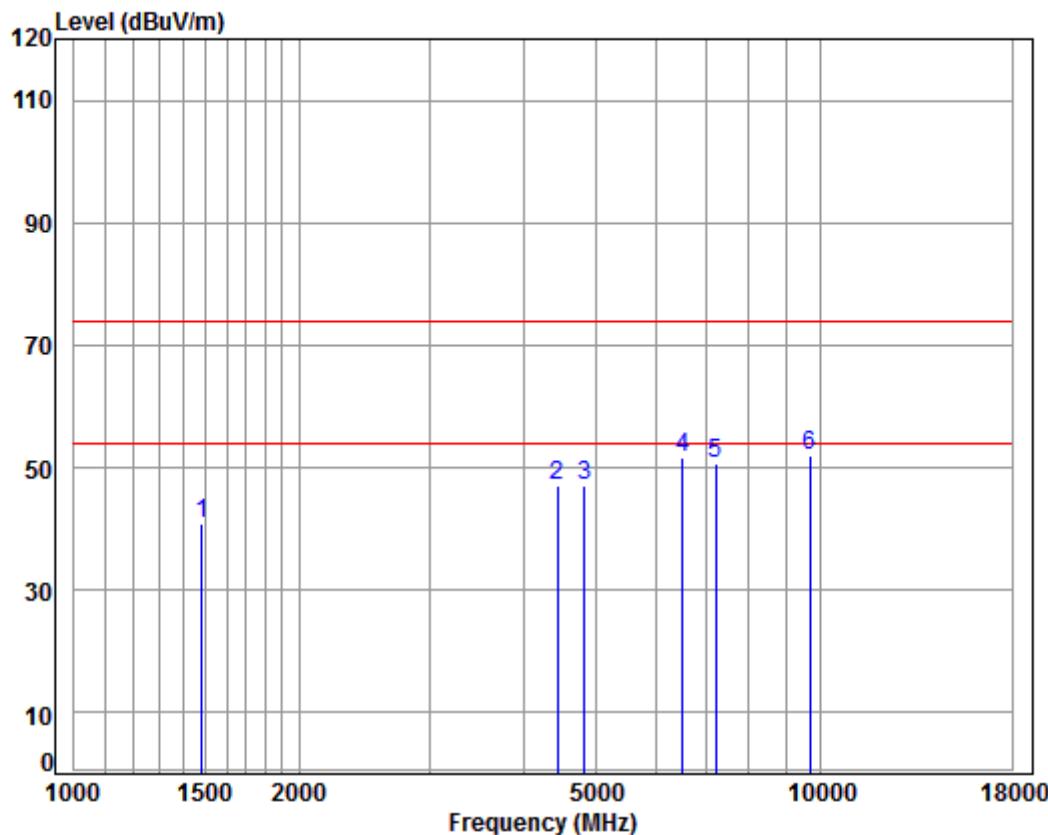
Job No : 07523CR

Mode : 2412 TX RSE

: 2.4G WIFI 11G

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1168.920	4.29	24.32	38.08	56.06	46.59	74.00	-27.41 peak
2 4392.376	7.44	33.60	38.21	44.64	47.47	74.00	-26.53 peak
3 4824.000	7.91	34.19	38.42	43.01	46.69	74.00	-27.31 peak
4 6545.263	11.41	35.23	37.74	43.12	52.02	74.00	-21.98 peak
5 7236.000	10.07	36.40	37.08	40.85	50.24	74.00	-23.76 peak
6 pp 9648.000	10.77	37.53	35.07	39.46	52.69	74.00	-21.31 peak

Mode:a; Polarization:Vertical; Modulation Type:802.11g; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL

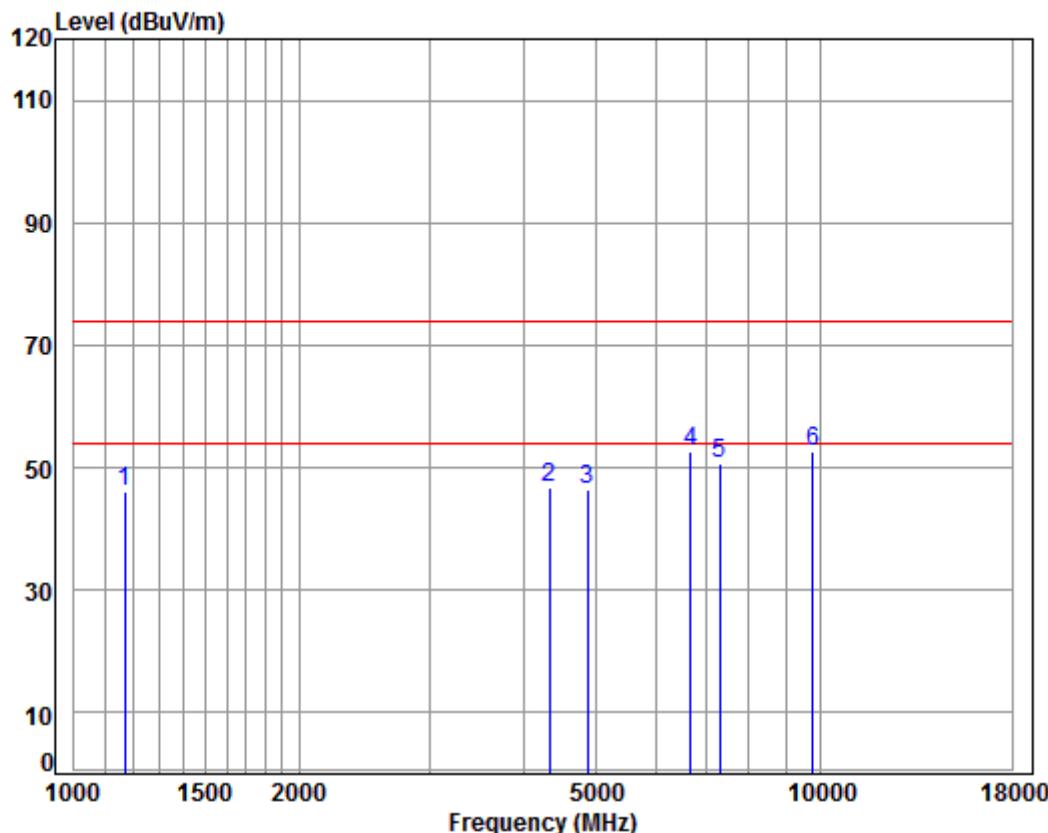
Job No : 07523CR

Mode : 2412 TX RSE

: 2.4G WIFI 11G

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over	Remark
							dB	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1481.553	5.42	25.73	38.04	47.67	40.78	74.00	-33.22 peak
2	4443.453	7.50	33.60	38.24	44.25	47.11	74.00	-26.89 peak
3	4824.000	7.91	34.19	38.42	43.27	46.95	74.00	-27.05 peak
4	6526.373	11.46	35.18	37.75	42.87	51.76	74.00	-22.24 peak
5	7236.000	10.07	36.40	37.08	41.32	50.71	74.00	-23.29 peak
6 pp	9648.000	10.77	37.53	35.07	38.88	52.11	74.00	-21.89 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11g; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL

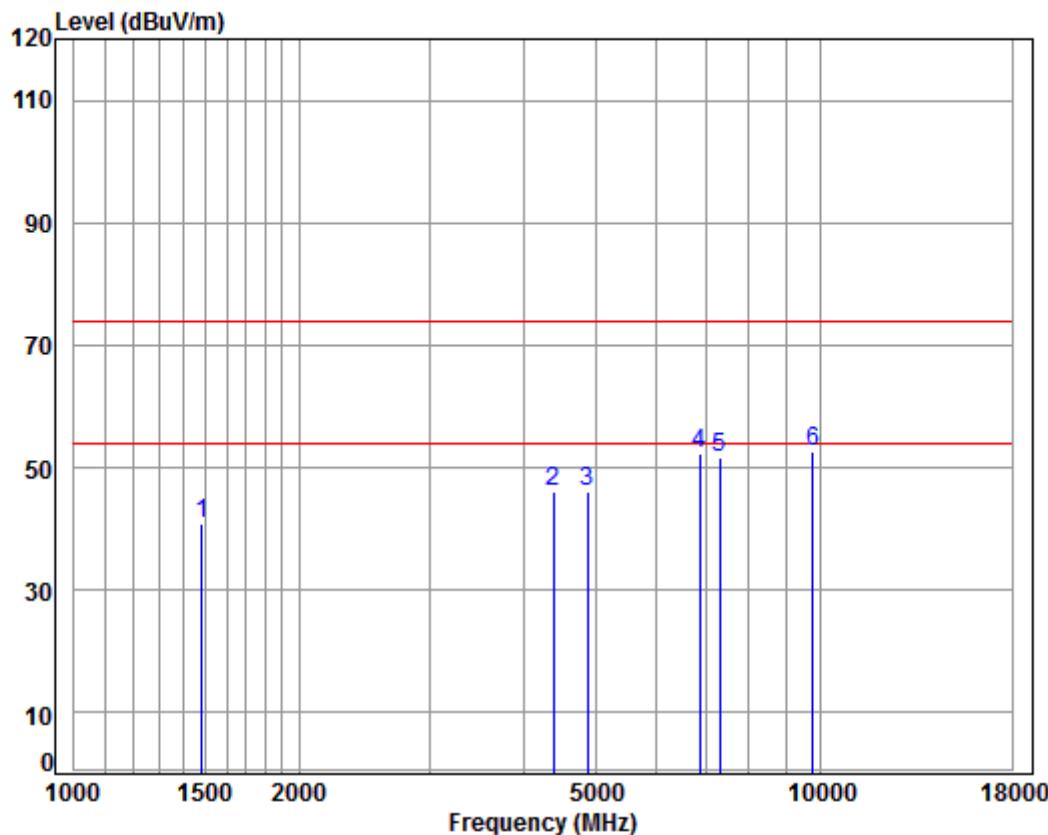
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11G

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark	
								dB	
1 1168.920	4.29	24.32	38.08	55.41	45.94	74.00	-28.06	peak	
2 4329.354	7.37	33.60	38.18	44.01	46.80	74.00	-27.20	peak	
3 4874.000	7.96	34.28	38.44	42.58	46.38	74.00	-27.62	peak	
4 6698.373	10.97	35.67	37.59	43.58	52.63	74.00	-21.37	peak	
5 7311.000	10.05	36.37	37.01	41.36	50.77	74.00	-23.23	peak	
6 pp 9748.000	10.82	37.55	35.02	39.44	52.79	74.00	-21.21	peak	

Mode:a; Polarization:Vertical; Modulation Type:802.11g; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL

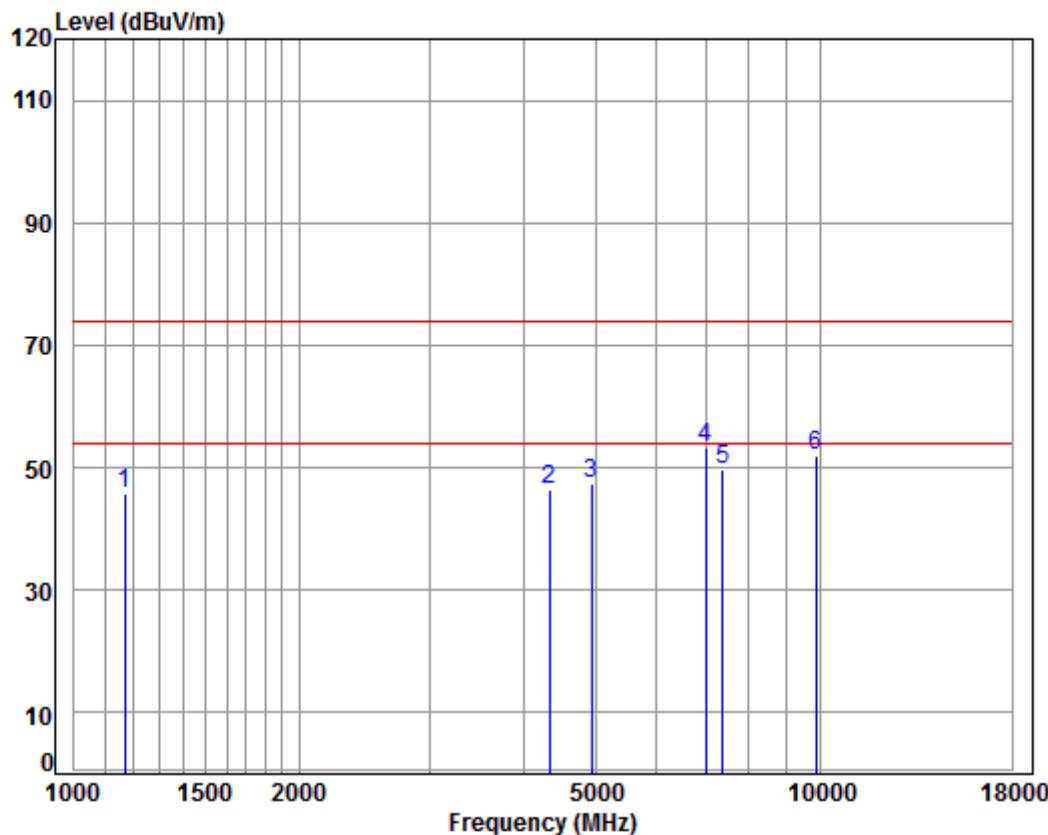
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11G

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1481.553	5.42	25.73	38.04	47.81	40.92	74.00	-33.08	peak
2	4379.699	7.43	33.60	38.20	43.25	46.08	74.00	-27.92	peak
3	4874.000	7.96	34.28	38.44	42.43	46.23	74.00	-27.77	peak
4	6874.906	10.47	36.16	37.42	43.09	52.30	74.00	-21.70	peak
5	7311.000	10.05	36.37	37.01	42.18	51.59	74.00	-22.41	peak
6 pp	9748.000	10.82	37.55	35.02	39.38	52.73	74.00	-21.27	peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11g; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL

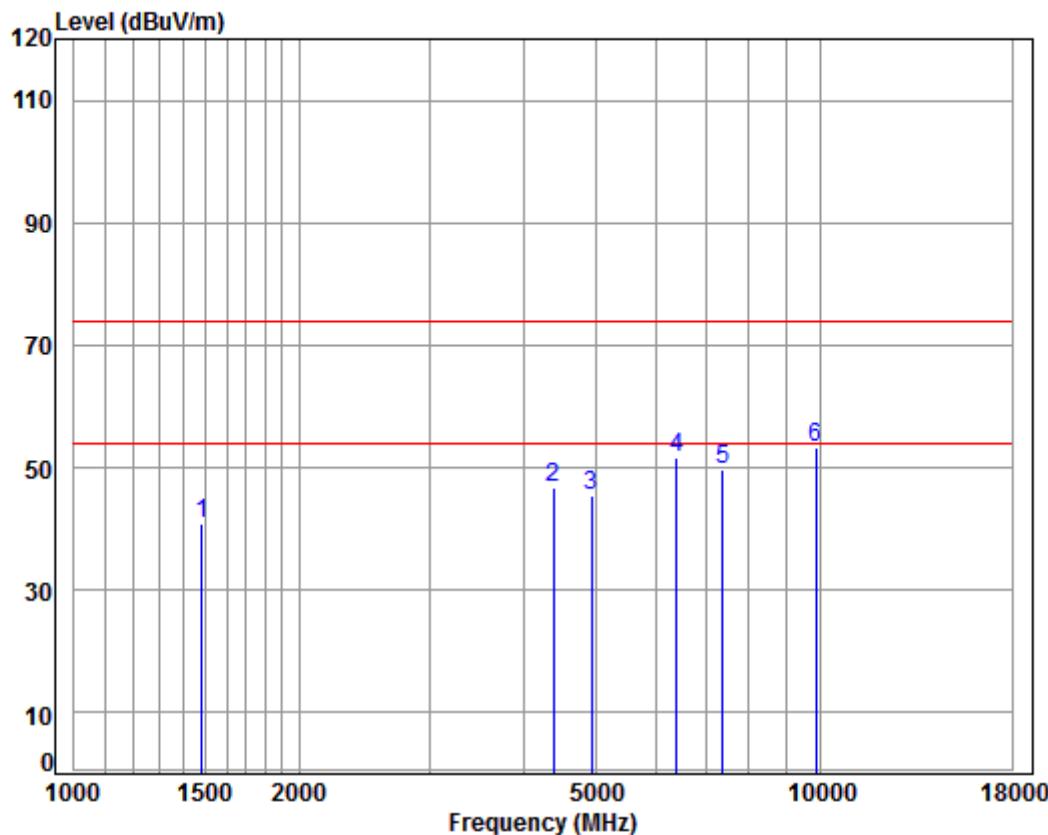
Job No : 07523CR

Mode : 2462 TX RSE

: 2.4G WIFI 11G

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	4.29	24.32	38.08	55.11	45.64	74.00	-28.36	peak
2	4329.354	7.37	33.60	38.18	43.53	46.32	74.00	-27.68	peak
3	4924.000	8.01	34.37	38.47	43.35	47.26	74.00	-26.74	peak
4 pp	6995.172	10.14	36.49	37.30	43.85	53.18	74.00	-20.82	peak
5	7386.000	10.03	36.34	36.94	40.42	49.85	74.00	-24.15	peak
6	9848.000	10.87	37.57	34.97	38.61	52.08	74.00	-21.92	peak

Mode:a; Polarization:Vertical; Modulation Type:802.11g; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL

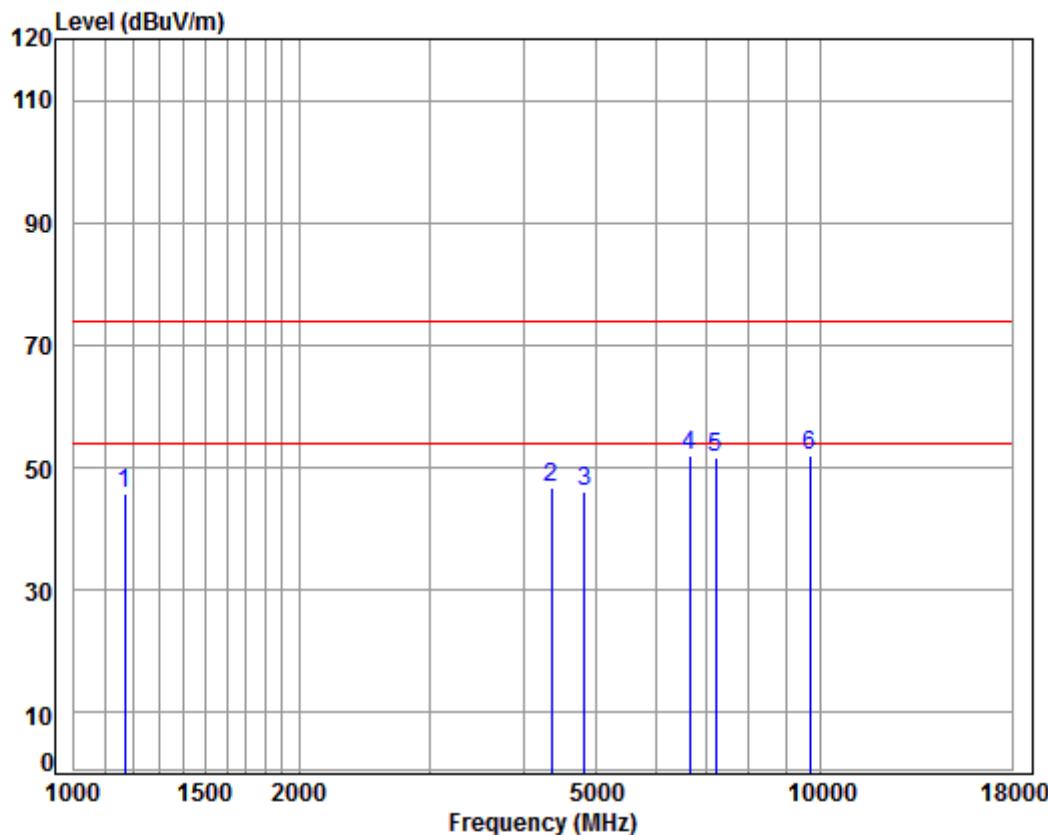
Job No : 07523CR

Mode : 2462 TX RSE

: 2.4G WIFI 11G

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1481.553	5.42	25.73	38.04	47.75	40.86	74.00	-33.14	peak
2	4379.699	7.43	33.60	38.20	43.95	46.78	74.00	-27.22	peak
3	4924.000	8.01	34.37	38.47	41.68	45.59	74.00	-28.41	peak
4	6414.167	11.38	35.03	37.87	43.21	51.75	74.00	-22.25	peak
5	7386.000	10.03	36.34	36.94	40.26	49.69	74.00	-24.31	peak
6 pp	9848.000	10.87	37.57	34.97	39.82	53.29	74.00	-20.71	peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL

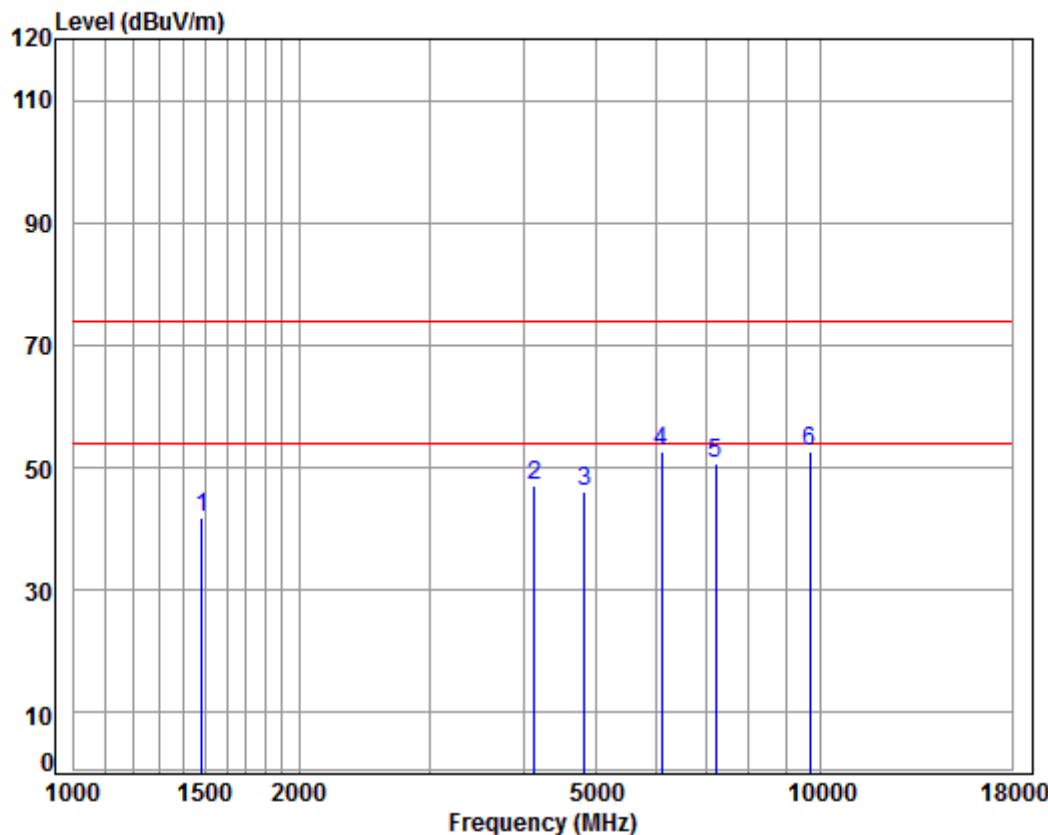
Job No : 07523CR

Mode : 2412 TX RSE

: 2.4G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	4.29	24.32	38.08	55.21	45.74	74.00	-28.26	peak
2	4354.454	7.40	33.60	38.19	43.89	46.70	74.00	-27.30	peak
3	4824.000	7.91	34.19	38.42	42.27	45.95	74.00	-28.05	peak
4	6659.763	11.08	35.56	37.62	43.08	52.10	74.00	-21.90	peak
5	7236.000	10.07	36.40	37.08	42.34	51.73	74.00	-22.27	peak
6	pp 9648.000	10.77	37.53	35.07	38.90	52.13	74.00	-21.87	peak

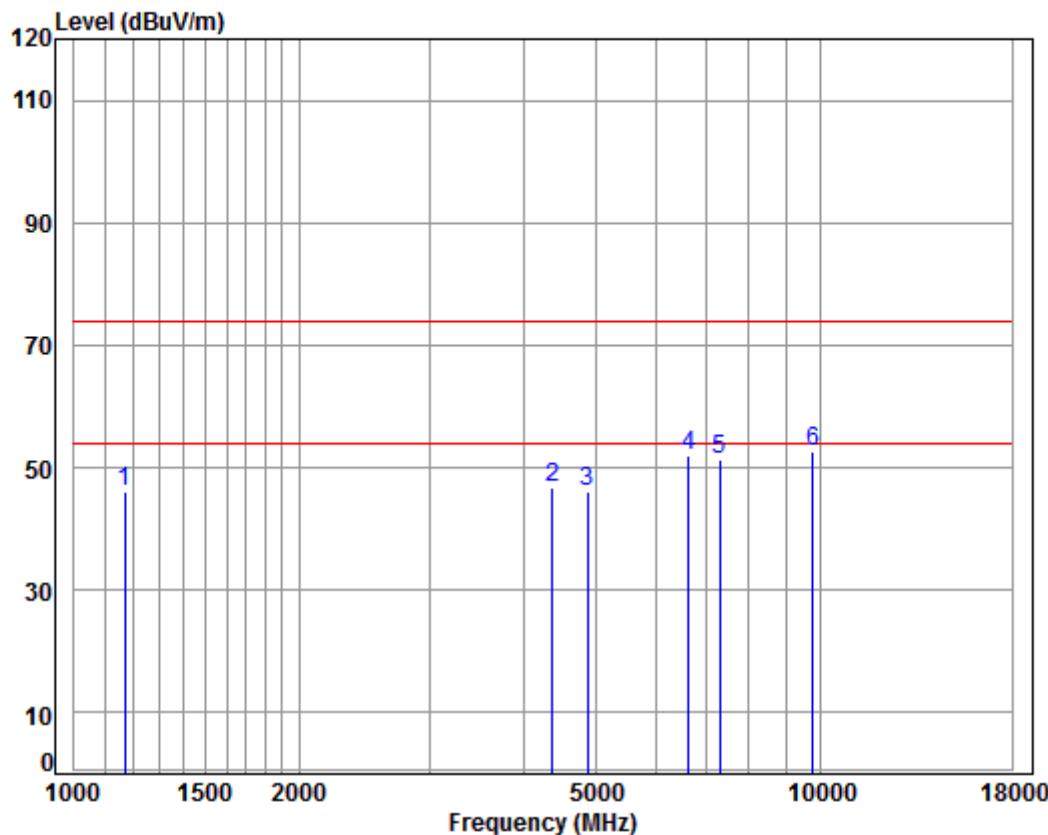
Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL  
Job No : 07523CR  
Mode : 2412 TX RSE  
: 2.4G WIFI 11N20

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1481.553	5.42	25.73	38.04	48.66	41.77	74.00	-32.23 peak
2 4133.699	7.14	33.60	38.07	44.27	46.94	74.00	-27.06 peak
3 4824.000	7.91	34.19	38.42	42.46	46.14	74.00	-27.86 peak
4 6124.292	10.82	34.80	38.17	45.09	52.54	74.00	-21.46 peak
5 7236.000	10.07	36.40	37.08	41.38	50.77	74.00	-23.23 peak
6 pp 9648.000	10.77	37.53	35.07	39.43	52.66	74.00	-21.34 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL

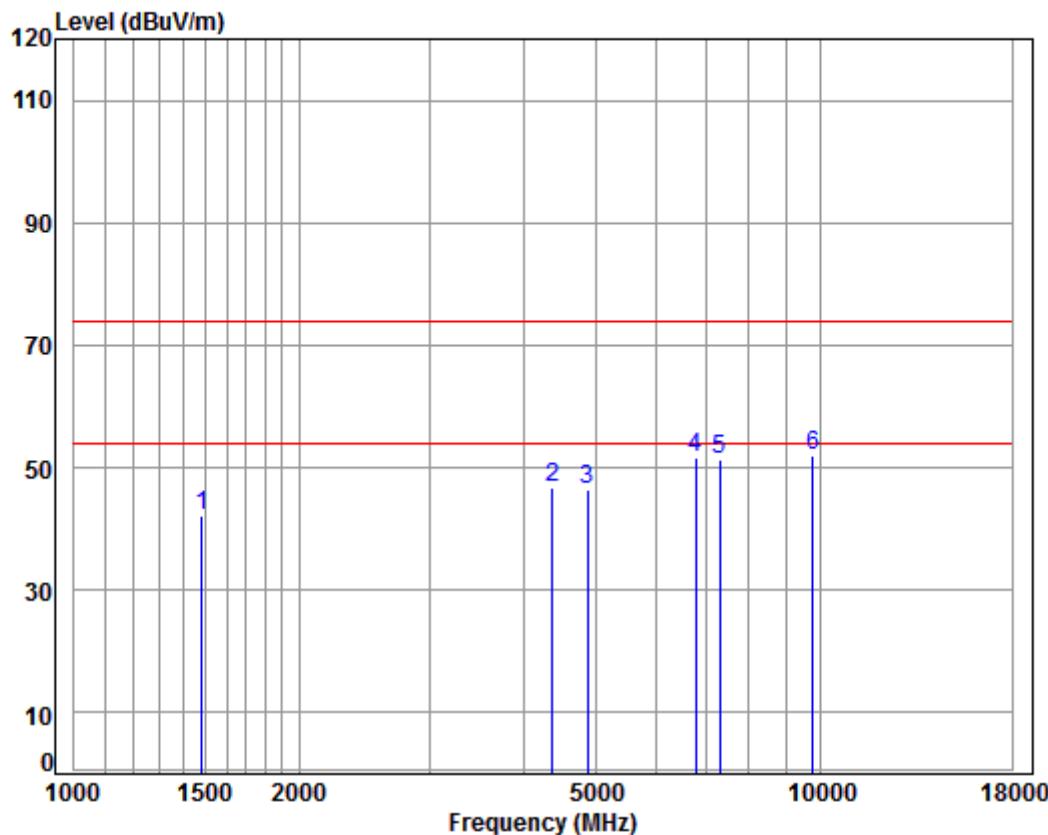
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11N20

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Limit	Remark
				Level			
1 1168.920	4.29	24.32	38.08	55.63	46.16	74.00	-27.84 peak
2 4367.058	7.41	33.60	38.20	43.86	46.67	74.00	-27.33 peak
3 4874.000	7.96	34.28	38.44	42.38	46.18	74.00	-27.82 peak
4 6640.542	11.13	35.50	37.64	43.02	52.01	74.00	-21.99 peak
5 7311.000	10.05	36.37	37.01	41.81	51.22	74.00	-22.78 peak
6 pp 9748.000	10.82	37.55	35.02	39.37	52.72	74.00	-21.28 peak

Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL

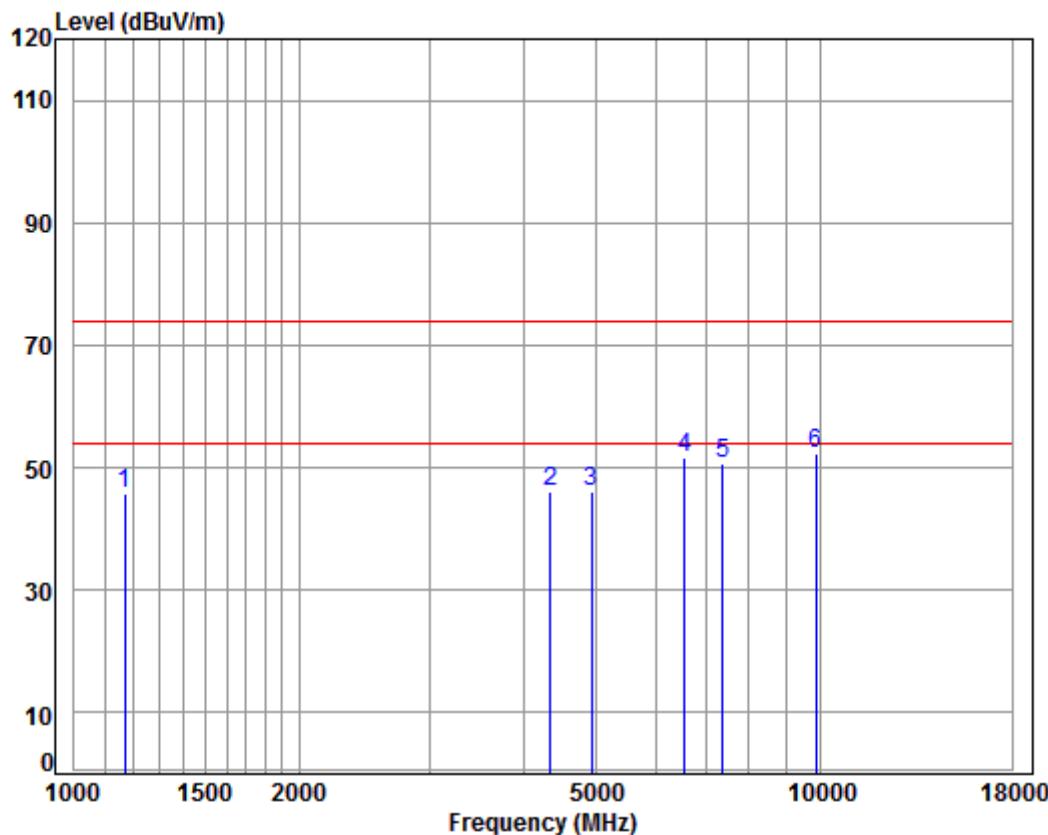
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11N20

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1481.553	5.42	25.73	38.04	49.08	42.19	74.00	-31.81 peak
2 4367.058	7.41	33.60	38.20	43.81	46.62	74.00	-27.38 peak
3 4874.000	7.96	34.28	38.44	42.58	46.38	74.00	-27.62 peak
4 6795.879	10.69	35.94	37.49	42.40	51.54	74.00	-22.46 peak
5 7311.000	10.05	36.37	37.01	41.90	51.31	74.00	-22.69 peak
6 pp 9748.000	10.82	37.55	35.02	38.62	51.97	74.00	-22.03 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL

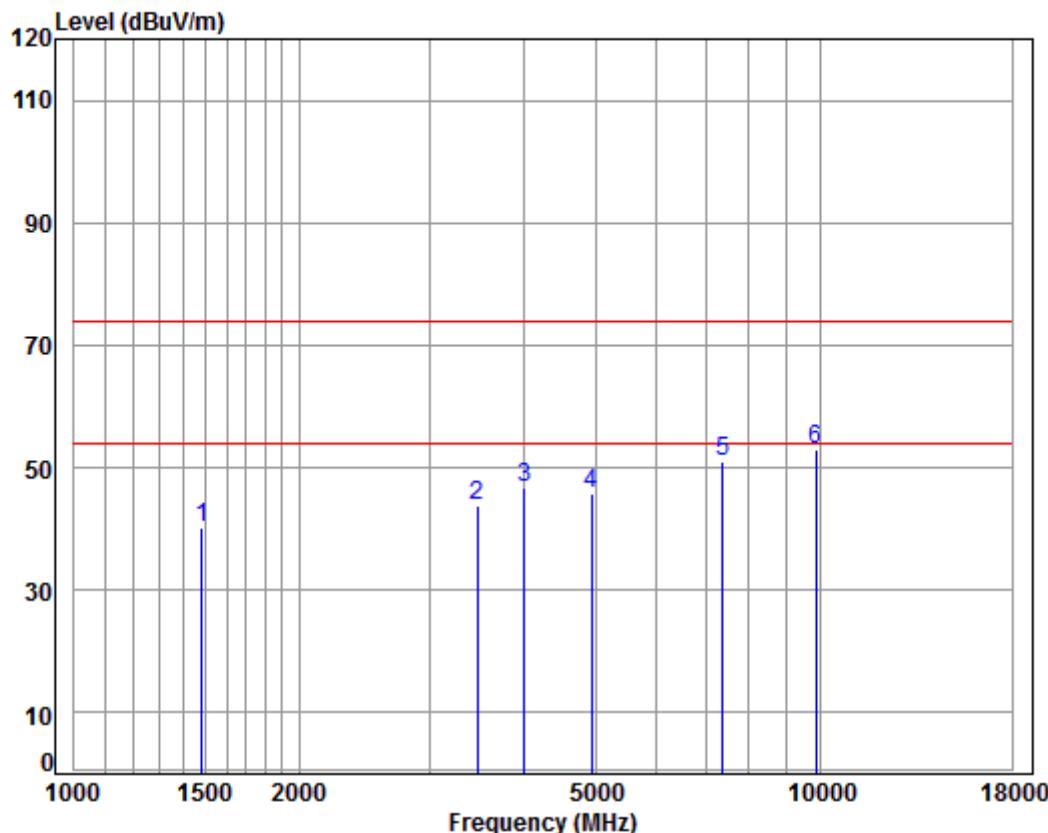
Job No : 07523CR

Mode : 2462 TX RSE

: 2.4G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	4.29	24.32	38.08	55.40	45.93	74.00	-28.07	peak
2	4341.886	7.38	33.60	38.18	43.39	46.19	74.00	-27.81	peak
3	4924.000	8.01	34.37	38.47	42.16	46.07	74.00	-27.93	peak
4	6564.209	11.35	35.29	37.72	42.78	51.70	74.00	-22.30	peak
5	7386.000	10.03	36.34	36.94	41.29	50.72	74.00	-23.28	peak
6 pp	9848.000	10.87	37.57	34.97	38.86	52.33	74.00	-21.67	peak

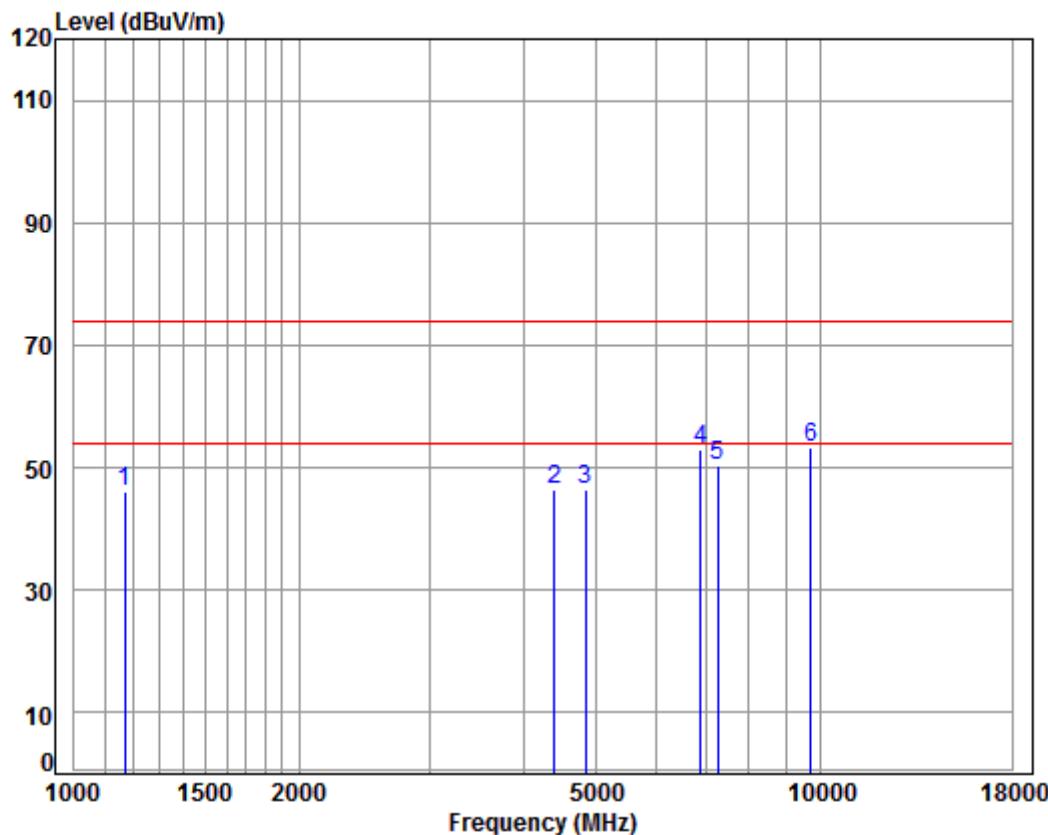
Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL  
Job No : 07523CR  
Mode : 2462 TX RSE  
: 2.4G WIFI 11N20

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1481.553	5.42	25.73	38.04	47.20	40.31	74.00	-33.69 peak
2 3465.510	6.43	32.14	37.95	43.11	43.73	74.00	-30.27 Peak
3 4004.339	6.99	33.60	38.00	44.12	46.71	74.00	-27.29 peak
4 4924.000	8.01	34.37	38.47	41.88	45.79	74.00	-28.21 peak
5 7386.000	10.03	36.34	36.94	41.49	50.92	74.00	-23.08 peak
6 pp 9848.000	10.87	37.57	34.97	39.59	53.06	74.00	-20.94 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m HORIZONTAL

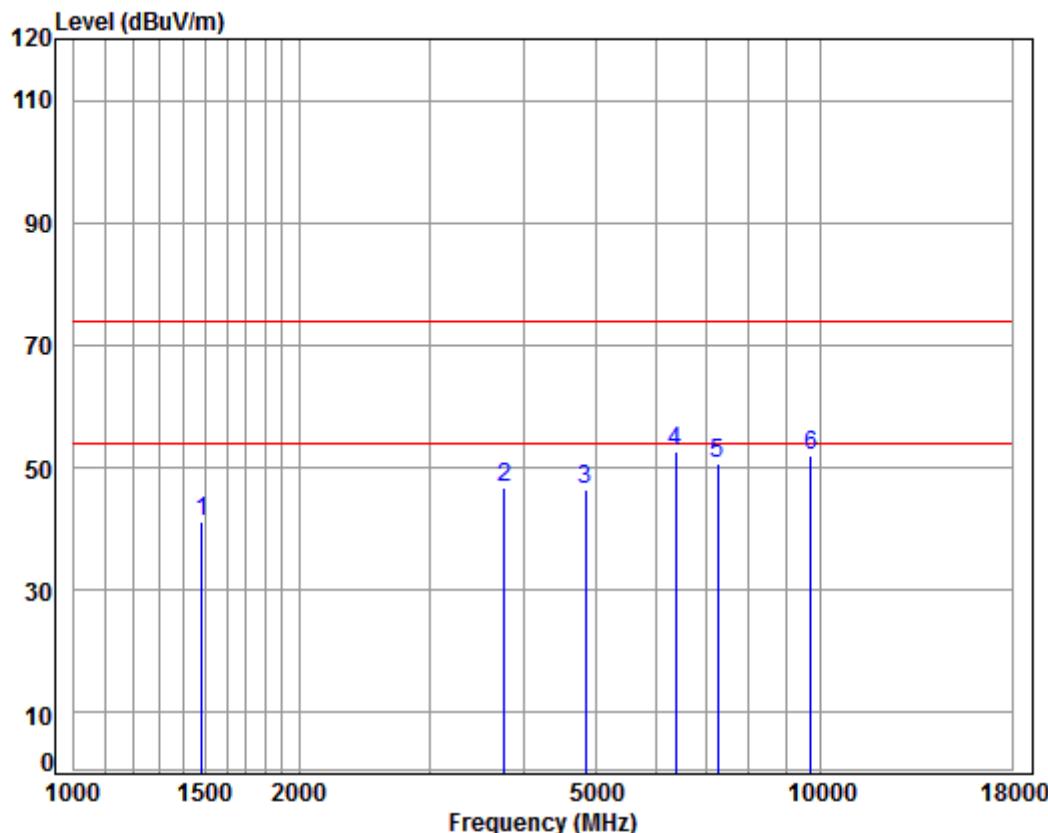
Job No : 07523CR

Mode : 2422 TX RSE

: 2.4G WIFI 11N40

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1168.920	4.29	24.32	38.08	55.65	46.18	74.00	-27.82 peak
2 4392.376	7.44	33.60	38.21	43.56	46.39	74.00	-27.61 peak
3 4844.000	7.93	34.23	38.43	42.69	46.42	74.00	-27.58 peak
4 6894.806	10.42	36.21	37.40	43.70	52.93	74.00	-21.07 peak
5 7266.000	10.06	36.39	37.05	40.93	50.33	74.00	-23.67 peak
6 pp 9688.000	10.79	37.54	35.05	40.08	53.36	74.00	-20.64 peak

Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m VERTICAL

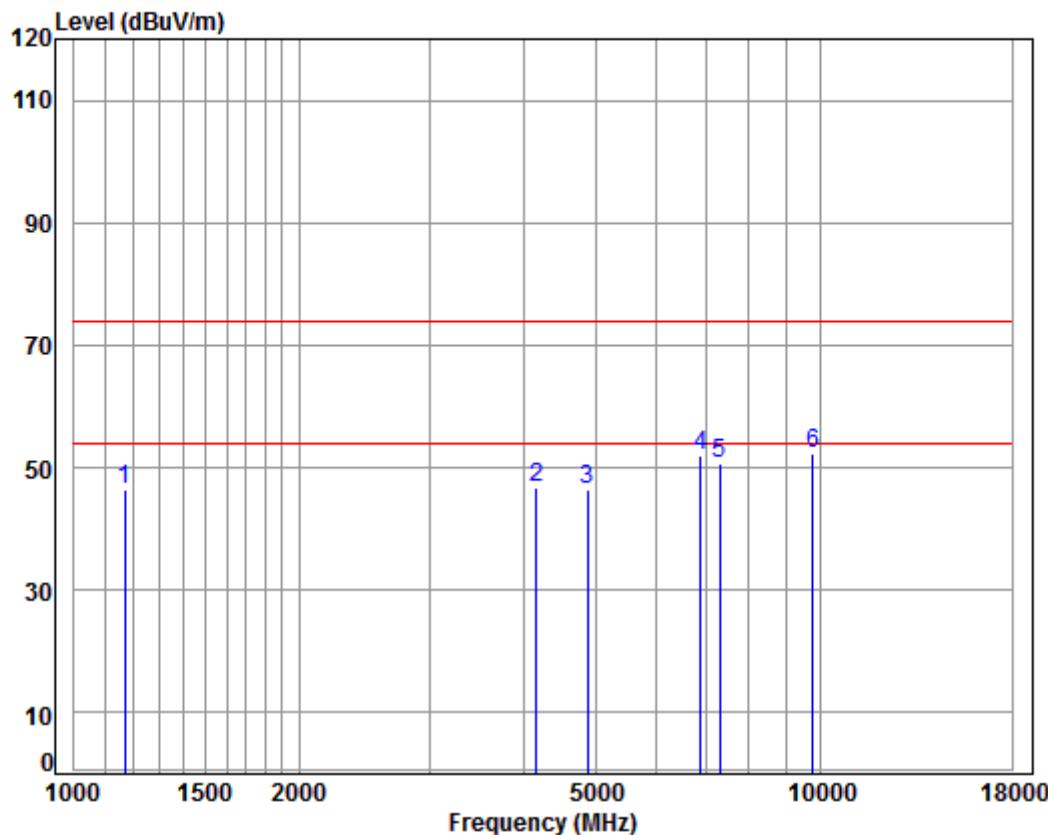
Job No : 07523CR

Mode : 2422 TX RSE

: 2.4G WIFI 11N40

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1481.553	5.42	25.73	38.04	48.02	41.13	74.00	-32.87 peak
2 3768.513	6.75	32.97	37.98	44.86	46.60	74.00	-27.40 peak
3 4844.000	7.93	34.23	38.43	42.69	46.42	74.00	-27.58 peak
4 pp 6377.195	11.31	35.00	37.90	44.13	52.54	74.00	-21.46 peak
5 7266.000	10.06	36.39	37.05	41.44	50.84	74.00	-23.16 peak
6 9688.000	10.79	37.54	35.05	38.65	51.93	74.00	-22.07 peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:middle



Condition: 3m HORIZONTAL

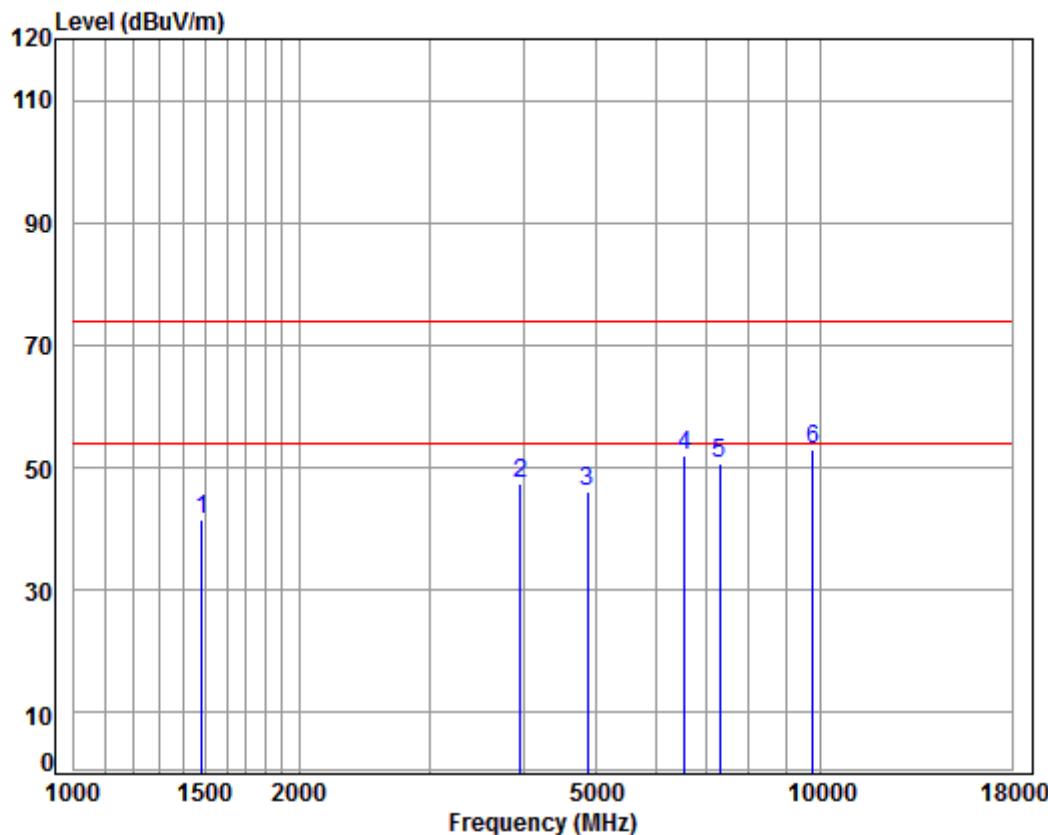
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11N40

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Level	Limit Line	Over Limit	Remark
				dB	dB/m	dB	dBuV	dBuV/m
1 1168.920	4.29	24.32	38.08	56.03	46.56	74.00	-27.44	peak
2 4157.664	7.17	33.60	38.09	43.97	46.65	74.00	-27.35	peak
3 4874.000	7.96	34.28	38.44	42.47	46.27	74.00	-27.73	peak
4 6894.806	10.42	36.21	37.40	42.91	52.14	74.00	-21.86	peak
5 7311.000	10.05	36.37	37.01	41.31	50.72	74.00	-23.28	peak
6 pp 9748.000	10.82	37.55	35.02	39.05	52.40	74.00	-21.60	peak

Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:middle



Condition: 3m VERTICAL

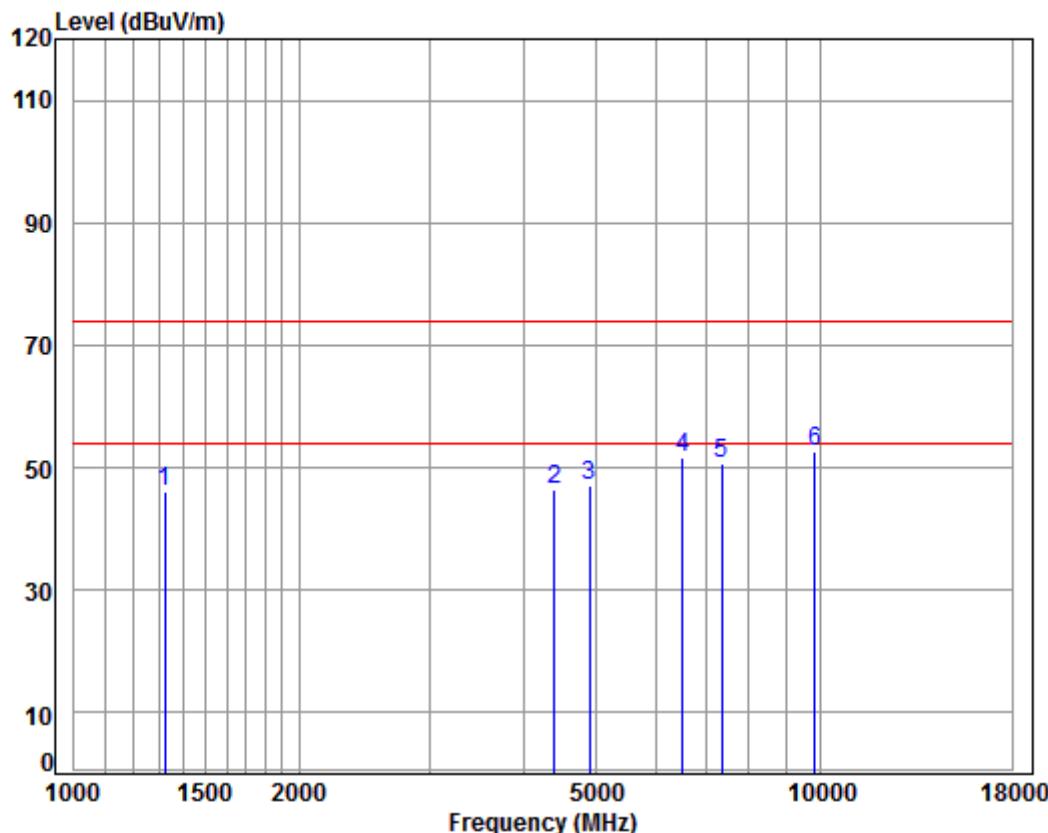
Job No : 07523CR

Mode : 2437 TX RSE

: 2.4G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1481.553	5.42	25.73	38.04	48.51	41.62	74.00	-32.38	peak
2	3958.309	6.94	33.49	38.00	45.12	47.55	74.00	-26.45	peak
3	4874.000	7.96	34.28	38.44	42.15	45.95	74.00	-28.05	peak
4	6564.209	11.35	35.29	37.72	42.99	51.91	74.00	-22.09	peak
5	7311.000	10.05	36.37	37.01	41.17	50.58	74.00	-23.42	peak
6 pp	9748.000	10.82	37.55	35.02	39.57	52.92	74.00	-21.08	peak

Mode:a; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m HORIZONTAL

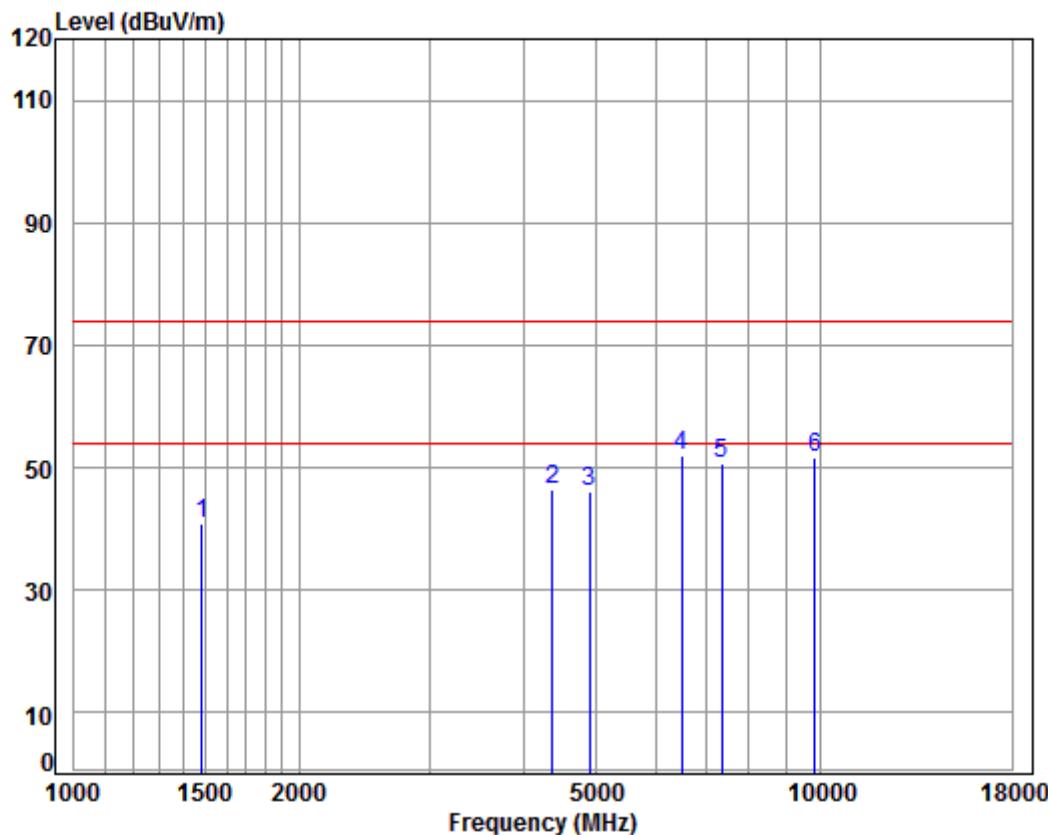
Job No : 07523CR

Mode : 2452 TX RSE

: 2.4G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1323.614	4.88	25.06	38.06	54.31	46.19	74.00	-27.81	peak
2	4392.376	7.44	33.60	38.21	43.54	46.37	74.00	-27.63	peak
3	4904.000	7.99	34.33	38.46	43.18	47.04	74.00	-26.96	peak
4	6526.373	11.46	35.18	37.75	42.86	51.75	74.00	-22.25	peak
5	7356.000	10.04	36.36	36.97	41.22	50.65	74.00	-23.35	peak
6 pp	9808.000	10.85	37.56	34.99	39.07	52.49	74.00	-21.51	peak

Mode:a; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m VERTICAL  
Job No : 07523CR  
Mode : 2452 TX RSE  
: 2.4G WIFI 11N40

Freq	Cable Loss	Ant Factor	Preamp Factor	Read	Limit Line	Over Line	Remark
				Level			
1 1481.553	5.42	25.73	38.04	47.71	40.82	74.00	-33.18 peak
2 4367.058	7.41	33.60	38.20	43.51	46.32	74.00	-27.68 peak
3 4904.000	7.99	34.33	38.46	42.28	46.14	74.00	-27.86 peak
4 pp 6507.536	11.52	35.12	37.77	43.19	52.06	74.00	-21.94 peak
5 7356.000	10.04	36.36	36.97	41.16	50.59	74.00	-23.41 peak
6 9808.000	10.85	37.56	34.99	38.12	51.54	74.00	-22.46 peak

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. 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. So, only the peak measurements were shown in the report.

## 7 Photographs

### 7.1 Conducted Emissions at AC Power Line (150kHz-30MHz) Test Setup

1#



2#

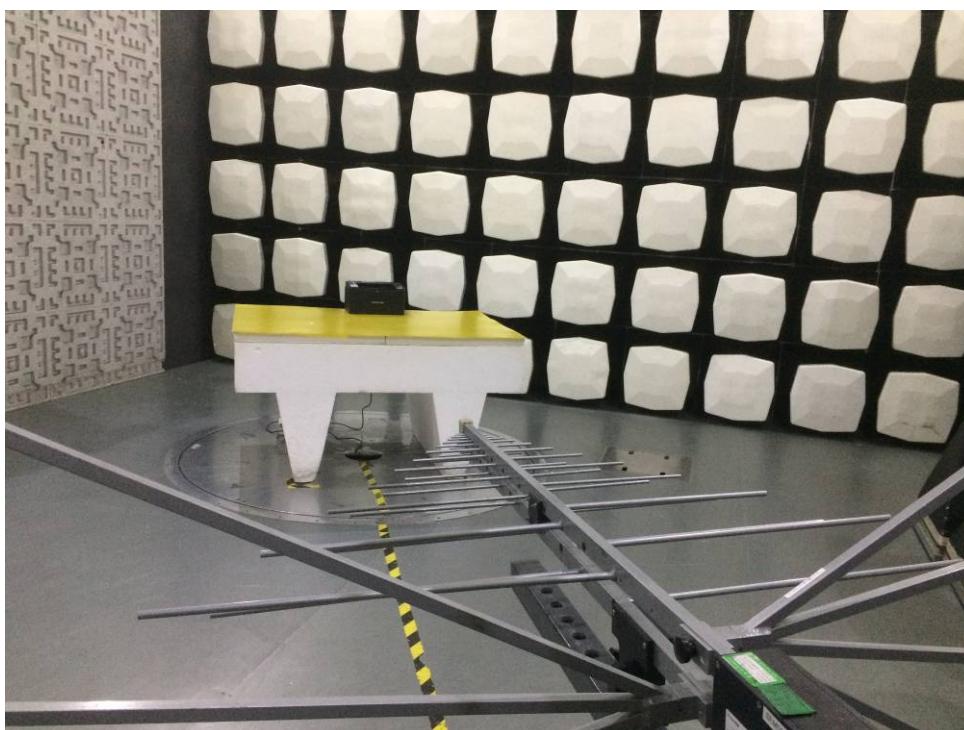


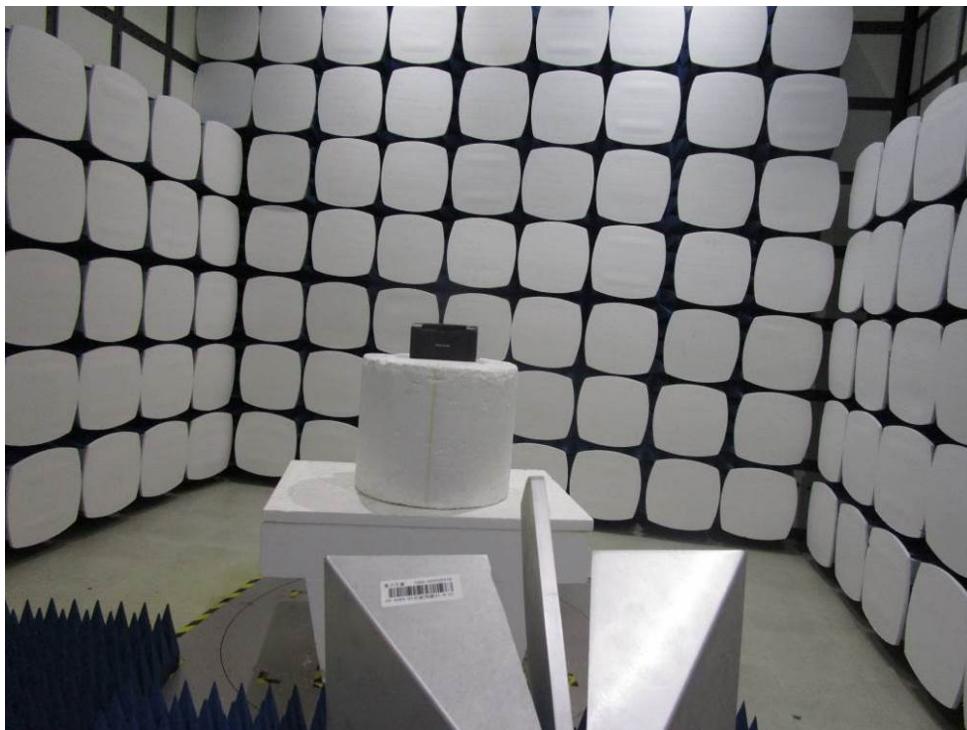
## 7.2 Radiated Spurious Emissions Test Setup

1#



2#





### **7.3 EUT Constructional Details**

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1705007523CR.