



# FCC Radio Test Report

## FCC ID: SGPG07UF02

This report concerns (check one):  Original Grant  Class II Change

**Issued Date** : Jun. 11, 2013  
**Project No.** : 1303C163  
**Equipment** : Dongle  
**Model Name** : G07UF  
**Applicant** : Shenzhen Delux Industry Co., Ltd.  
**Address** : Delux Industrial Park, lan zhu road, ping shan street,  
long gang borough, Shenzhen, China

**Tested by:**  
Neutron Engineering Inc. EMC Laboratory  
**Date of Receipt:** Mar. 25, 2013  
**Date of Test:**  
Mar. 25, 2013 ~ Jun. 10, 2013

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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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## 1. CERTIFICATION

Equipment : Dongle  
Brand Name : DELUX  
Model Name : G07UF  
Applicant : Shenzhen Delux Industry Co., Ltd.  
Date of Test : Mar. 25, 2013 ~ Jun. 10, 2013  
Test Item : ENGINEERING SAMPLE  
Standards : FCC Part15, Subpart C(15.247) / ANSI C63.4 : 2009  
FCC Public Notice DA 00-705, March 30, 2000.

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1303C163) 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 standards:

<b>APPLIED STANDARD: 47 CFR Part 15, Subpart C</b>			
Standard Section	Test Item	Judgment	Remark
<b>47 CFR Part 15</b>			
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247 (a)(1)	Hopping Channel Separation	PASS	
15.247 (a)(2)	20dB Bandwidth	PASS	
15.247 (b)(1)	Peak Output Power	PASS	
15.247(d) 15.209	Radiated Spurious Emission	PASS	
15.247 (a)(1)(iii)	Number of Hopping Frequency	PASS	
15.247 (a)(1)(iii)	Dwell Time	PASS	
15.205	Restricted Bands	PASS	
15.203	Antenna Requirement	PASS	

**NOTE:**

- (1) "N/A" denotes test is not applicable in this test report.
- (2) According to FCC Public Notice DA 00-705, March 30, 2000.



**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  
 Neutron'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 expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**, providing a level of confidence of approximately **95 %**.

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
DG-CB03	CISPR	30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	H	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	H	4.14	



**3. GENERAL INFORMATION**

**3.1 GENERAL DESCRIPTION OF EUT**

Equipment	Dongle	
Brand Name	DELUX	
Model Name	G07UF	
Model Difference	N/A	
Product Description	The EUT is a Dongle.	
	Operation Frequency:	2403~2480MHz
	Modulation Technology:	GFSK
	Bit Rate of Transmitter:	1Mbps
	Number Of Channel	52 CH, Please see note 2. (Page 9)
	Antenna Designation:	Please see note 3. (Page 9)
	Antenna Gain(Peak)	
	Output Power:	-7.90dBm (Max)
More details of EUT technical specification, please refer to the User's Manual.		
Power Source	DC voltage supplied from host system.	
Power Rating	I/P AC 120/60Hz O/P DC 5V	
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

**Channel List**

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2403	14	2425	27	2443	40	2467
02	2404	15	2426	28	2447	41	2468
03	2405	16	2427	29	2449	42	2469
04	2407	17	2429	30	2450	43	2470
05	2409	18	2430	31	2451	44	2471
06	2410	19	2431	32	2453	45	2473
07	2411	20	2433	33	2454	46	2475
18	2413	21	2434	34	2455	47	2476
09	2414	22	2435	35	2458	48	2477
10	2415	23	2437	36	2461	49	2478
11	2418	24	2438	37	2462	50	2479
12	2421	25	2439	38	2465	51	2480
13	2422	26	2441	39	2466		

Group 1	Group 2	Group 3	Group 4
2478	2479	2480	2476
2468	2455	2462	2465
2454	2439	2438	2441
2405	2415	2422	2425
2477	2475	2478	2477
2455	2451	2458	2461
2430	2435	2434	2437
2404	2411	2418	2421
2479	2471	2470	2473
2450	2447	2454	2453
2429	2431	2430	2433
2403	2407	2414	2413
2476	2467	2466	2469
2449	2443	2450	2449
2425	2427	2426	2429
2443	2403	2410	2409

Note: The EUT 16 channels of each sequence, total 4 sequences are used.  
3 Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Printed Antenna	N/A	1.45	-



**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 Mode <b>NOTE (1)</b>
Mode 2	WIRELESS

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

For Conducted Emission	
Final Test Mode	Description
Mode 2	WIRELESS

For Radiated Emission	
Final Test Mode	Description
Mode 1	TX Mode <b>NOTE (1)</b>

**Note:**

(1) The measurements are performed at the high, middle, low available channels.

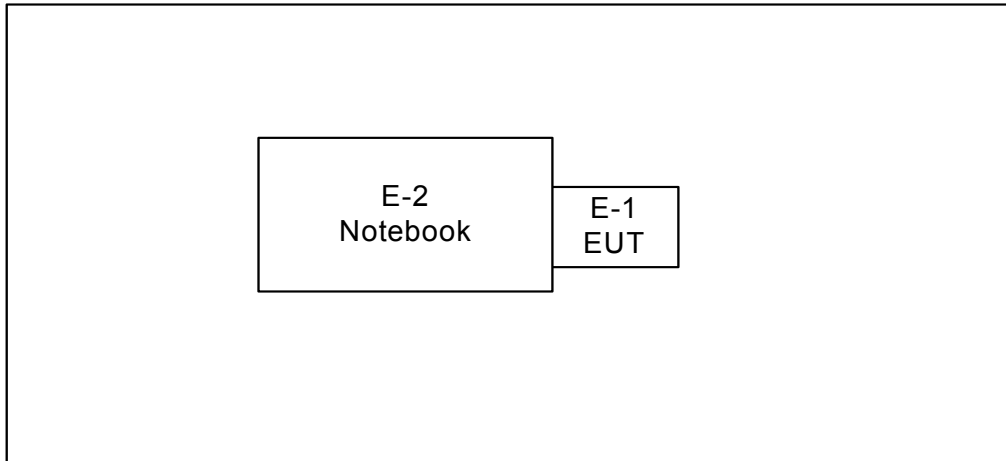
**3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING**

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 FHSS

Test software version	N/A		
Frequency	2403MHz	2447MHz	2480MHz
Parameters-1Mbps	N/A	N/A	N/A



**3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**





**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	Dongle	DELUX	G07UF	SGPG07UF02	N/A	EUT
E-2	Notebook	HP	HSTNN-169C-3	DOC	CNU02203XG	

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

Note:

- (1) For detachable type I/O cable should be specified the length in m in 『Length』 column.



**4. EMC EMISSION TEST**

**4.1 CONDUCTED EMISSION MEASUREMENT**

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

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
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.

**4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov.16.2013
3	Test Cable	N/A	C_17	N/A	Mar.15.2014
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Apr. 25, 2014

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

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

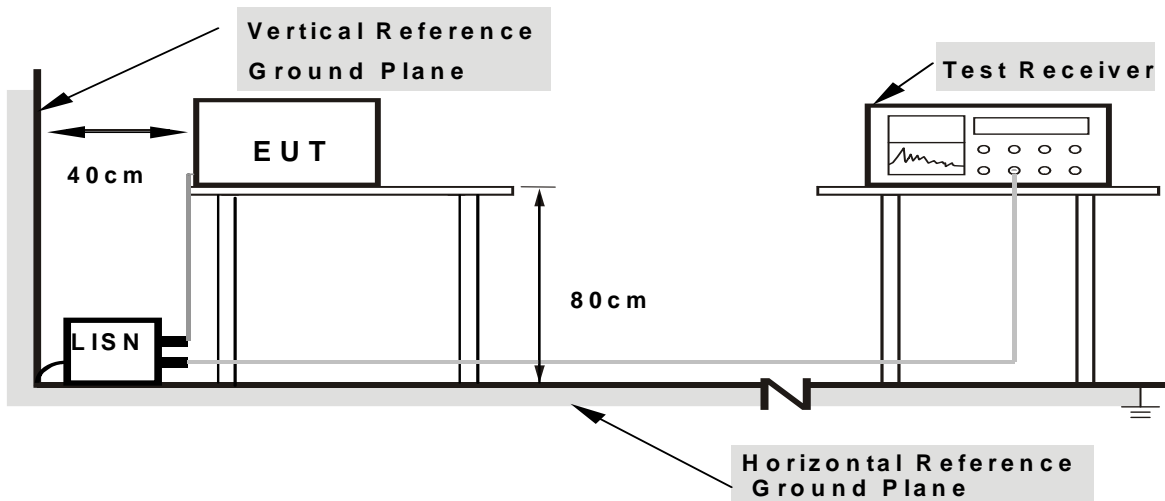
#### 4.1.3 TEST PROCEDURE

- 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.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.5 TEST SETUP



**Note: 1. Support units were connected to second LISN.**

**2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes**

#### 4.1.6 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.

The EUT is continued Transmitter/Receive data or Hopping on mode.



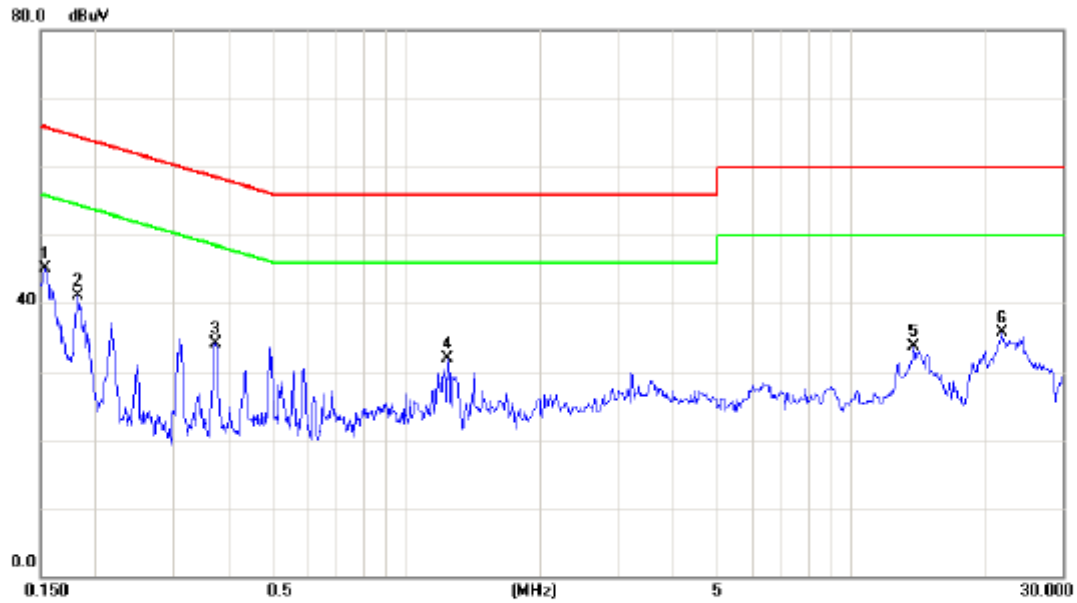
#### 4.1.7 TEST RESULTS

Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. 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.



EUT:	Dongle	Model Name :	G07UF
Temperature:	25 °C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Polarization:	Line
Test Mode :	WIRELESS		

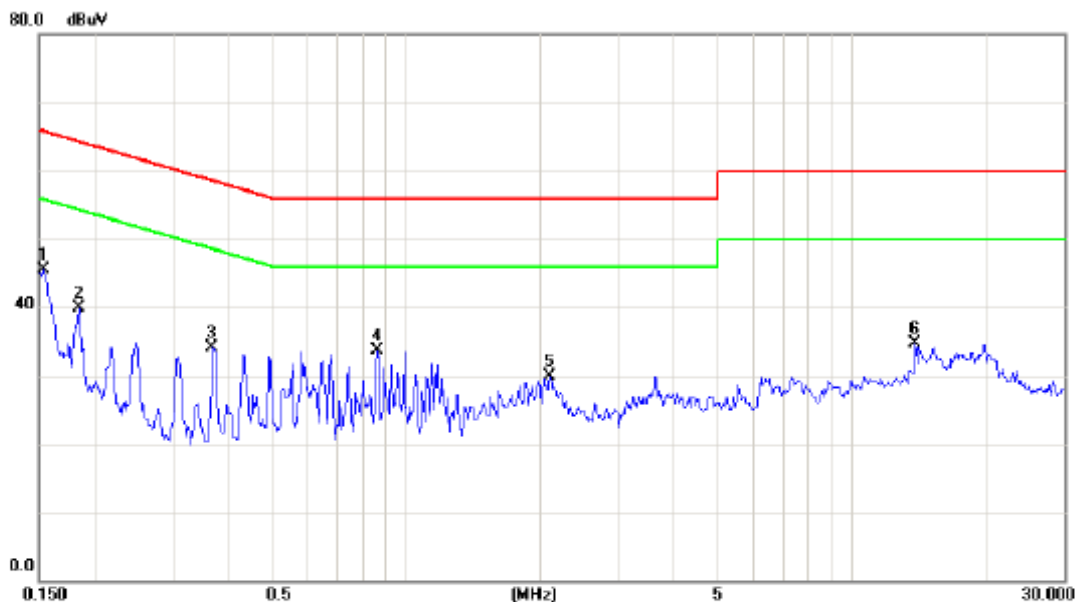


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1532	35.32	9.79	45.11	65.82	-20.71	peak	
2		0.1824	31.26	9.78	41.04	64.38	-23.34	peak	
3		0.3710	24.37	9.78	34.15	58.48	-24.33	peak	
4		1.2357	22.00	9.84	31.84	56.00	-24.16	peak	
5		13.8411	23.19	10.43	33.62	60.00	-26.38	peak	
6		21.9463	24.56	11.08	35.64	60.00	-24.36	peak	





EUT:	Dongle	Model Name :	G07UF
Temperature:	25 °C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Polarization:	Neutral
Test Mode :	WIRELESS		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1532	35.70	9.79	45.49	65.82	-20.33	peak	
2		0.1844	30.17	9.78	39.95	64.29	-24.34	peak	
3		0.3673	24.25	9.78	34.03	58.56	-24.53	peak	
4		0.8618	24.02	9.69	33.71	56.00	-22.29	peak	
5		2.0990	20.15	9.81	29.96	56.00	-26.04	peak	
6		13.8411	23.62	11.07	34.69	60.00	-25.31	peak	



**4.2 RADIATED EMISSION MEASUREMENT**

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

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

Frequencies (MHz)	Field Strength (micorvolts/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

**LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)**

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	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).

**FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)**

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower



**4.2.2 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Apr. 25, 2014
2	Amplifier	HP	8447D	2944A09673	Apr. 25, 2014
3	Test Receiver	R&S	ESCI	100382	Apr. 25, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jun.30.2013
5	Antenna	ETS	3115	00075789	Apr. 25, 2014
6	Amplifier	Agilent	8449B	3008A02274	Apr. 25, 2014
7	Spectrum	Agilent	E4408B	US39240143	Nov. 16.2013
8	Test Cable	HUBER+SUHNER	C-45	N/A	Apr. 30, 2014
9	Controller	CT	SC100	N/A	N/A
10	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Apr. 25, 2014
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.12.2013
12	Horn Antenna	EMCO	3115	9605-4803	Apr. 25, 2014

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
 All calibration period of Equipment List is One Year.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic

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



**4.2.3 TEST PROCEDURE**

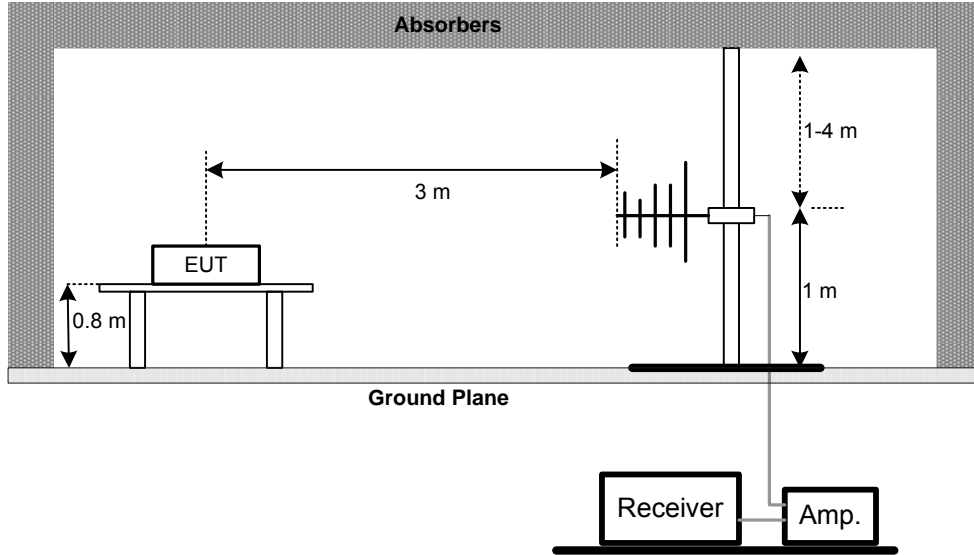
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-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.

**4.2.4 DEVIATION FROM TEST STANDARD**

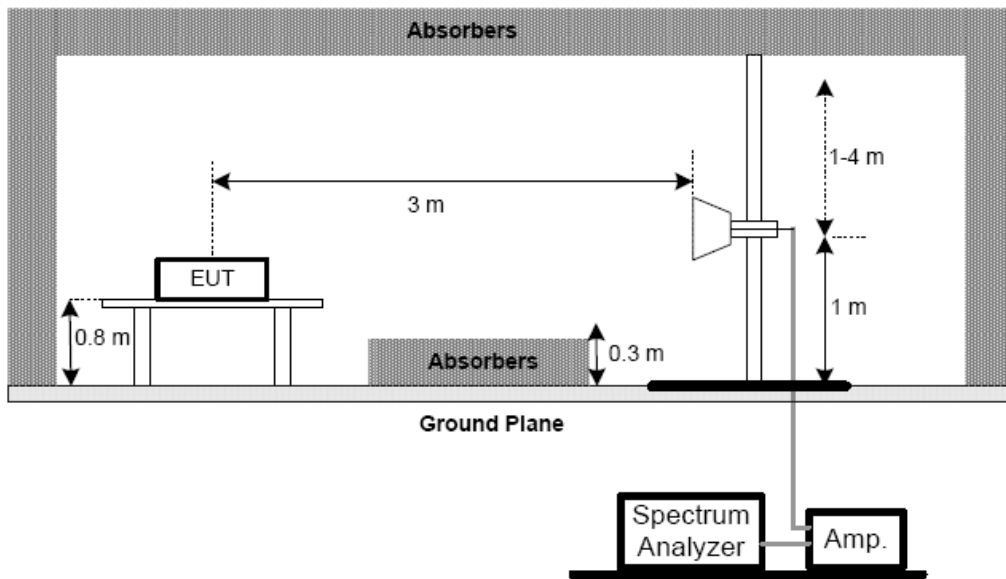
No deviation

**4.2.5 TEST SETUP**

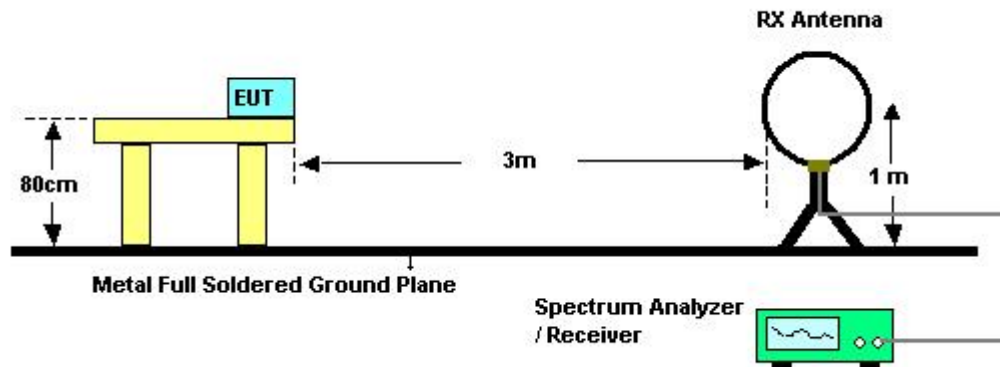
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



(C) For radiated emissions below 30MHz



#### 4.2.6 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.



**4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ)**

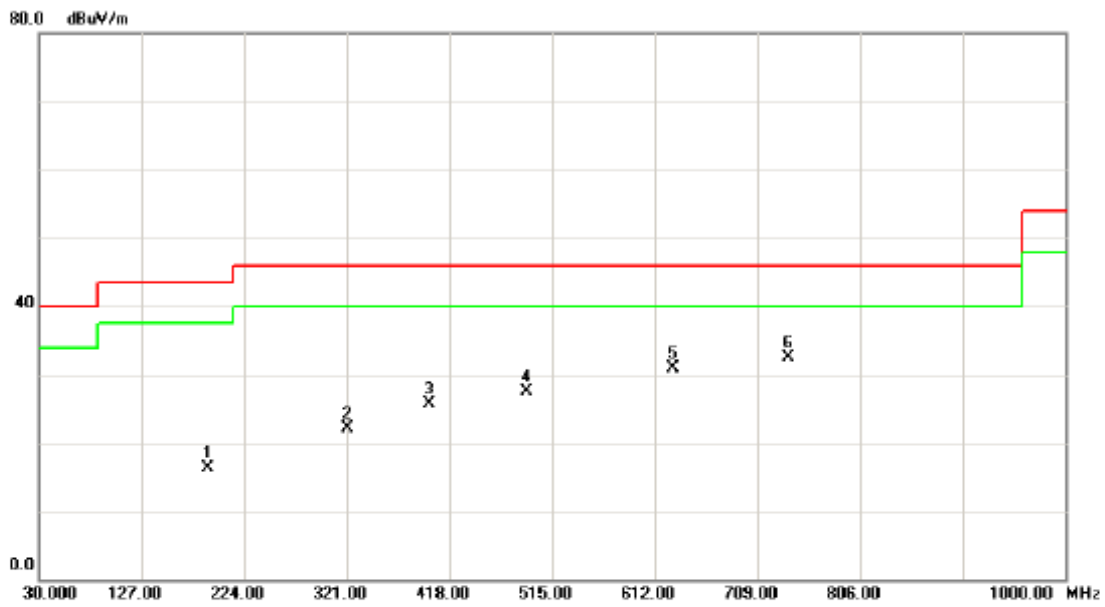
Remark :

- (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 ◦



# Neutron Engineering Inc.

EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2403MHz	Polarization:	Vertical

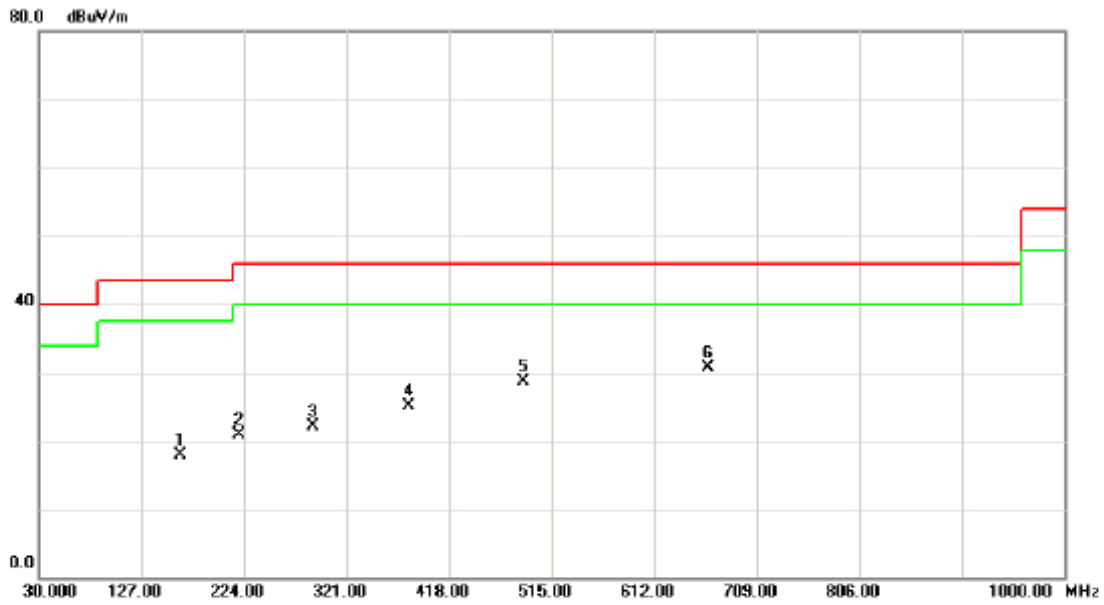


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		190.0500	33.35	-17.09	16.26	43.50	-27.24	peak	
2		321.0000	34.30	-12.18	22.12	46.00	-23.88	peak	
3		398.6000	35.52	-9.86	25.66	46.00	-20.34	peak	
4		490.7500	36.06	-8.50	27.56	46.00	-18.44	peak	
5		628.9750	35.89	-5.01	30.88	46.00	-15.12	peak	
6	*	738.1000	36.88	-4.34	32.54	46.00	-13.46	peak	





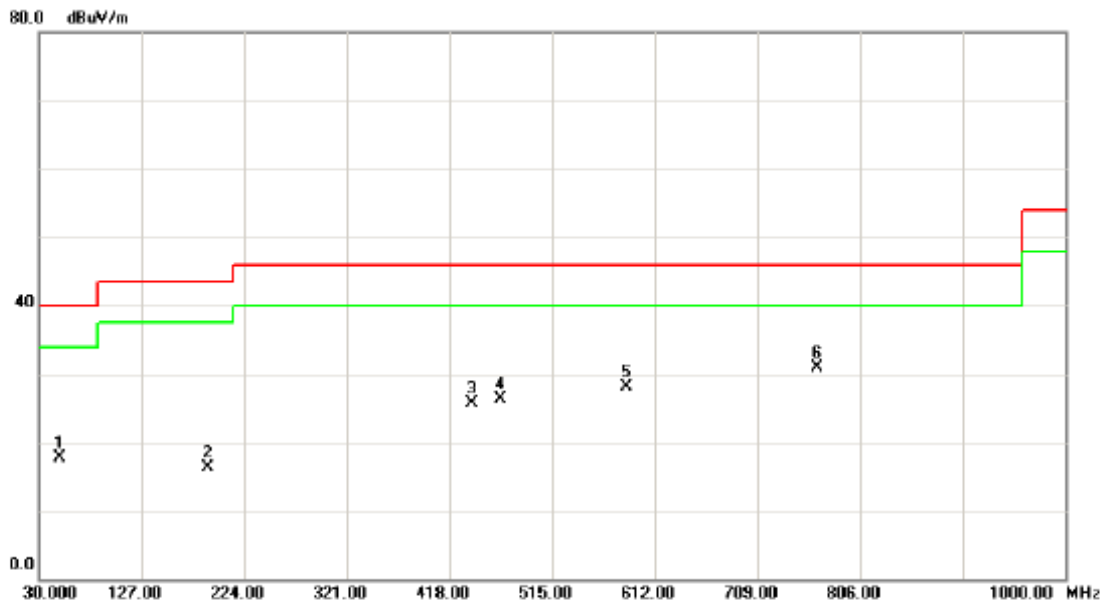
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2403MHz	Polarization:	Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	163.3750	35.68	-17.85	17.83	43.50	-25.67	peak	
2	219.1500	37.20	-16.35	20.85	46.00	-25.15	peak	
3	289.4750	34.71	-12.63	22.08	46.00	-23.92	peak	
4	379.2000	35.62	-10.53	25.09	46.00	-20.91	peak	
5	488.3250	37.19	-8.53	28.66	46.00	-17.34	peak	
6 *	662.9250	35.27	-4.66	30.61	46.00	-15.39	peak	



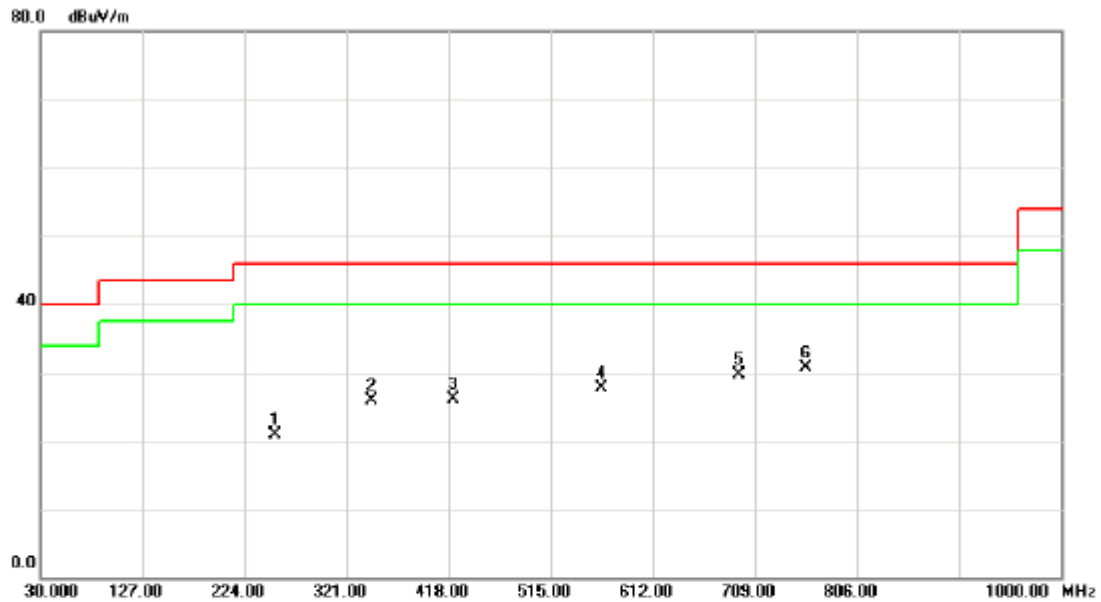
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2447MHz	Polarization:	Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		49.4000	35.15	-17.38	17.77	40.00	-22.23	peak	
2		190.0500	33.35	-17.09	16.26	43.50	-27.24	peak	
3		439.8250	34.88	-9.17	25.71	46.00	-20.29	peak	
4		466.5000	35.00	-8.79	26.21	46.00	-19.79	peak	
5		585.3250	33.92	-5.80	28.12	46.00	-17.88	peak	
6	*	764.7750	35.02	-4.05	30.97	46.00	-15.03	peak	



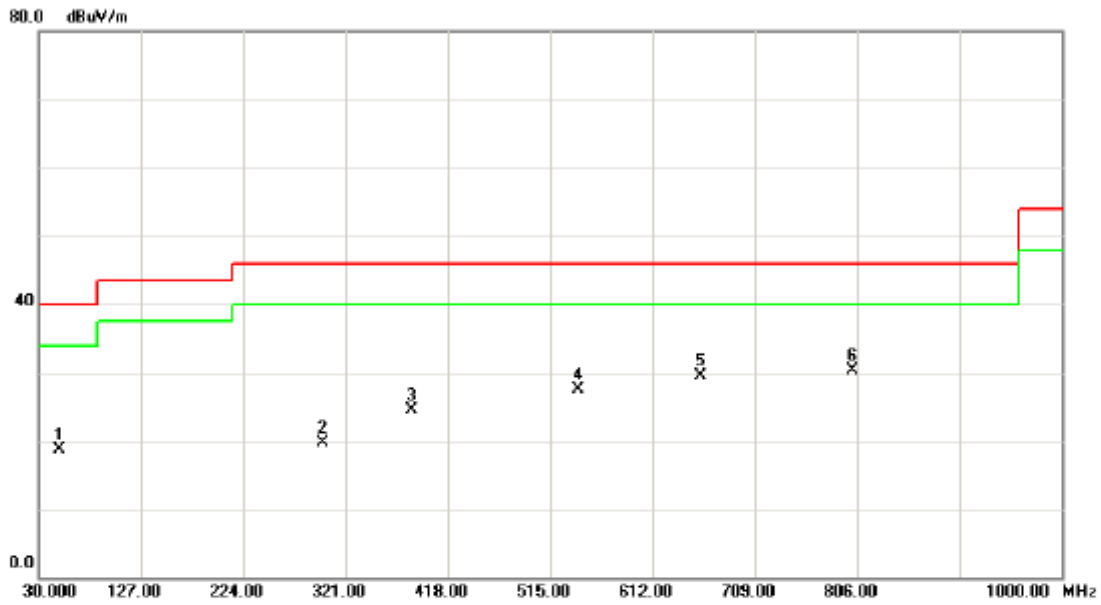
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2447MHz	Polarization:	Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	253.1000	35.70	-14.82	20.88	46.00	-25.12	peak	
2	345.2500	37.47	-11.63	25.84	46.00	-20.16	peak	
3	422.8500	35.47	-9.44	26.03	46.00	-19.97	peak	
4	563.5000	34.10	-6.30	27.80	46.00	-18.20	peak	
5	694.4500	34.43	-4.66	29.77	46.00	-16.23	peak	
6 *	757.5000	34.90	-4.14	30.76	46.00	-15.24	peak	



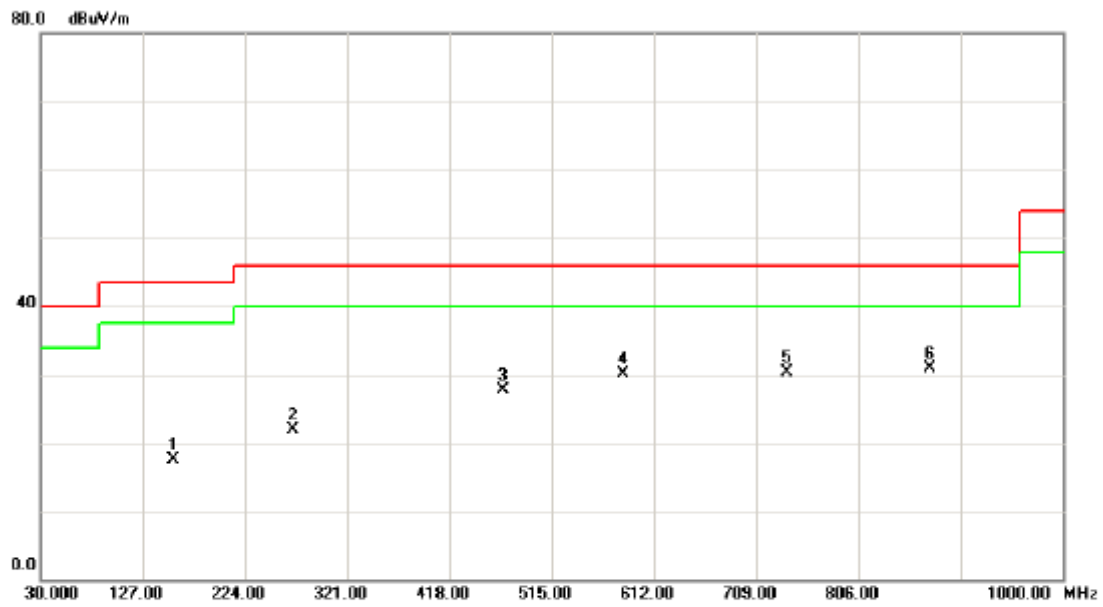
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2480MHz	Polarization:	Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		49.4000	36.15	-17.38	18.77	40.00	-21.23	peak	
2		299.1750	32.42	-12.64	19.78	46.00	-26.22	peak	
3		384.0500	34.79	-10.36	24.43	46.00	-21.57	peak	
4		541.6750	34.42	-6.90	27.52	46.00	-18.48	peak	
5		658.0750	34.20	-4.66	29.54	46.00	-16.46	peak	
6	*	801.1500	33.89	-3.60	30.29	46.00	-15.71	peak	



EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX Mode 2480MHz	Polarization:	Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	156.1000	35.35	-17.91	17.44	43.50	-26.06	peak	
2	270.0750	35.80	-13.82	21.98	46.00	-24.02	peak	
3	468.9250	36.40	-8.76	27.64	46.00	-18.36	peak	
4	582.9000	35.97	-5.86	30.11	46.00	-15.89	peak	
5	738.1000	34.74	-4.34	30.40	46.00	-15.60	peak	
6 *	873.9000	33.26	-2.32	30.94	46.00	-15.06	peak	



**4.2.8 TEST RESULTS (ABOVE 1000 MHZ)**

EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2403MHz		

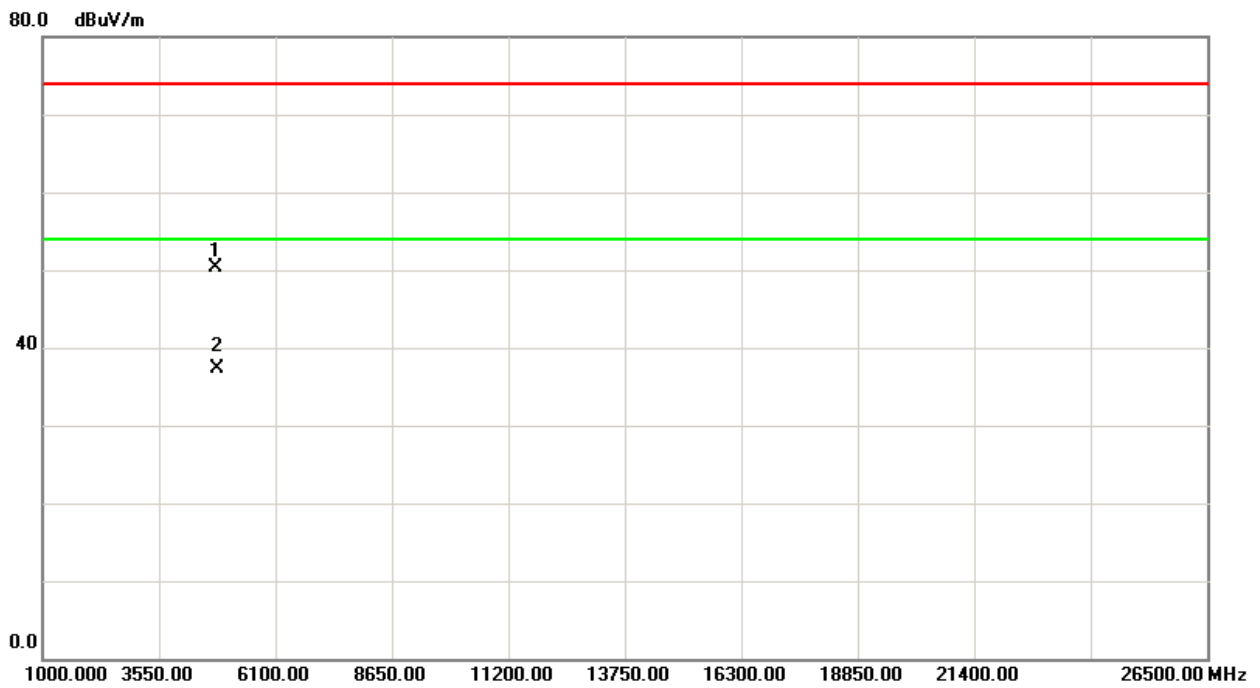
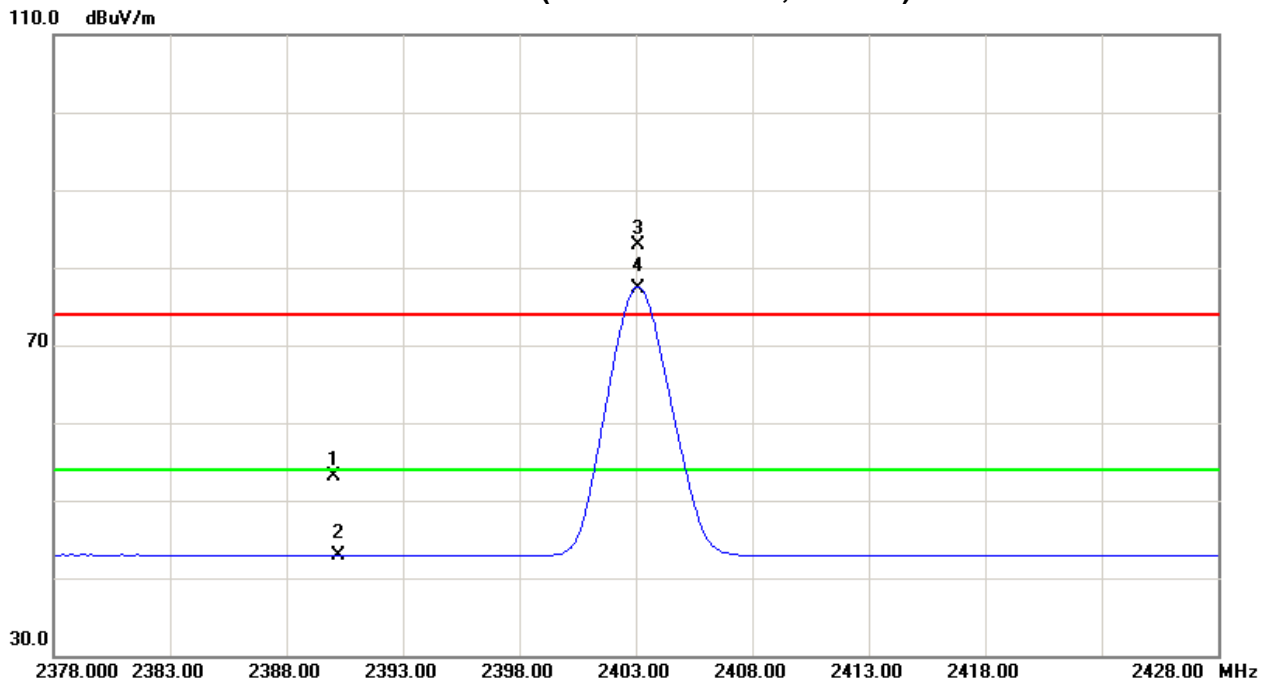
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF (dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2390.00	V	20.74	10.66	32.28	53.02	42.94	74.00	54.00	-20.98	-11.06	X/E
<b>2403.10</b>	<b>V</b>	<b>50.58</b>	<b>45.13</b>	<b>32.26</b>	<b>82.84</b>	<b>77.39</b>					<b>X/F</b>
4805.97	V	44.11	31.13	6.12	50.23	37.25	74.00	54.00	-23.77	-16.75	X/H

**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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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



TX 2403MHz(Above 1000 MHz, Vertical)





EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2403MHz		

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2390.00	H	22.32	10.68	32.28	54.60	42.96	74.00	54.00	-19.40	-11.04	X/E
<b>2403.10</b>	<b>H</b>	<b>54.58</b>	<b>46.85</b>	<b>32.26</b>	<b>86.84</b>	<b>79.11</b>					<b>X/F</b>
4806.13	H	47.57	33.14	6.12	53.69	39.26	74.00	54.00	-20.31	-14.74	X/H

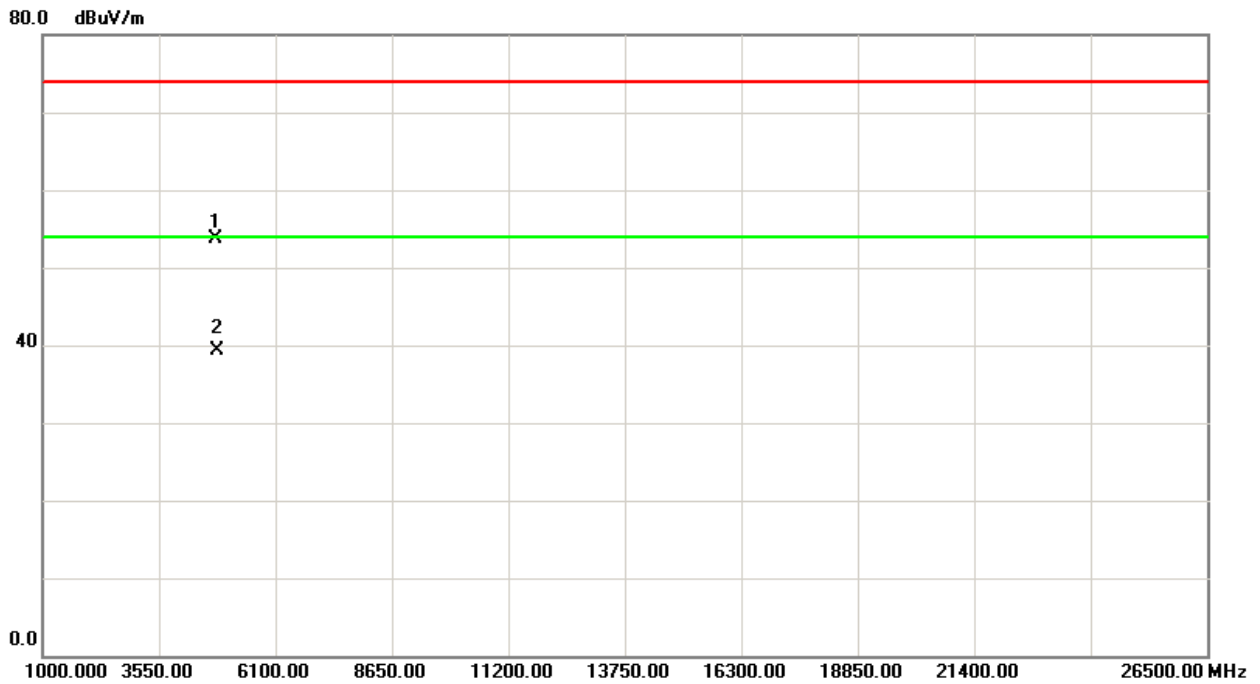
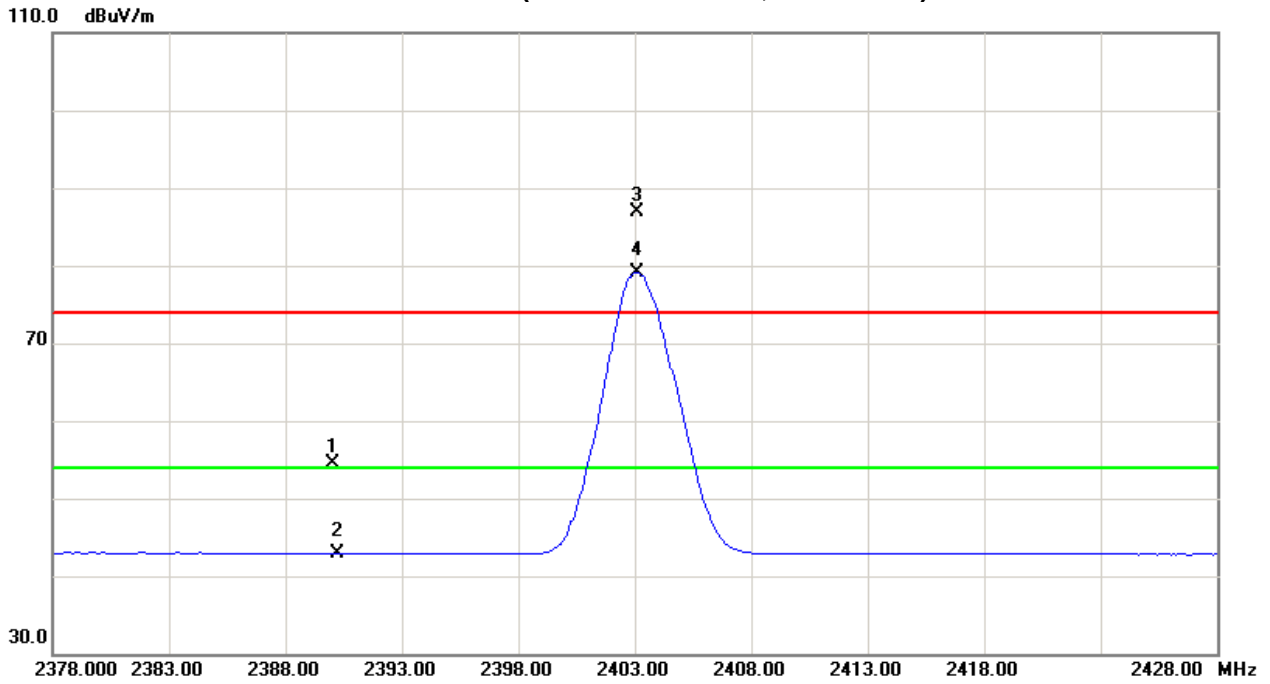
**Remark :**

- (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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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





TX 2403MHz(Above 1000 MHz, Horizontal)





EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2447MHz		

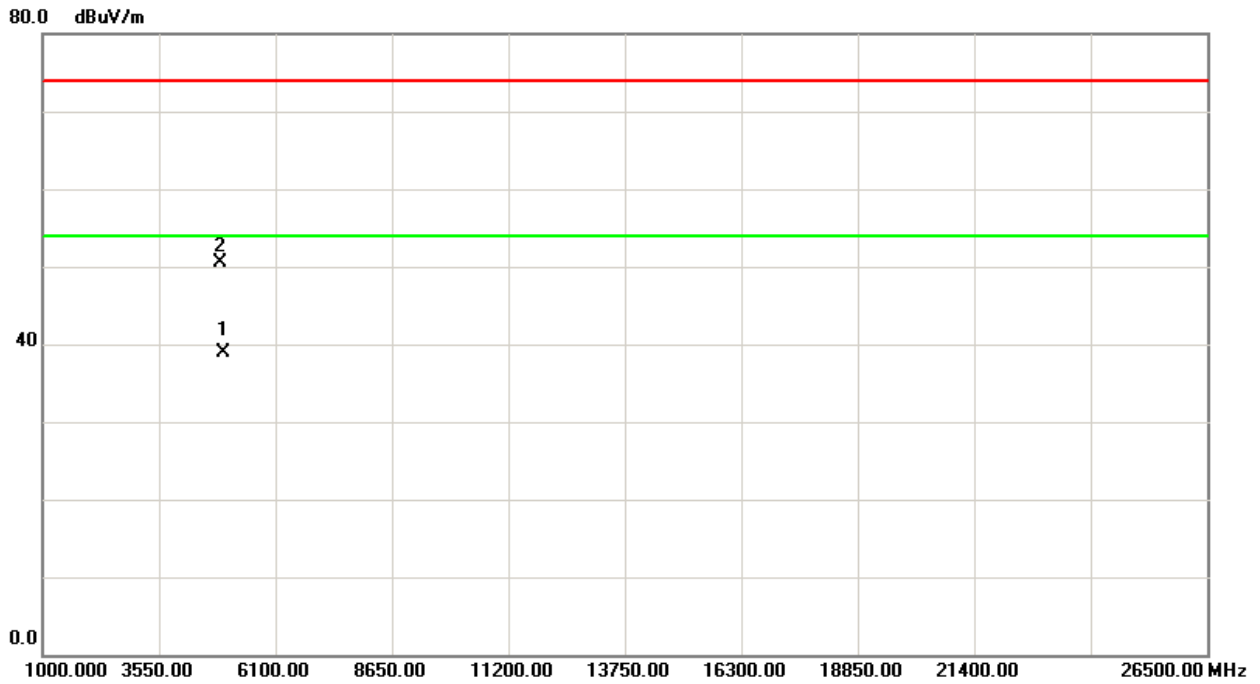
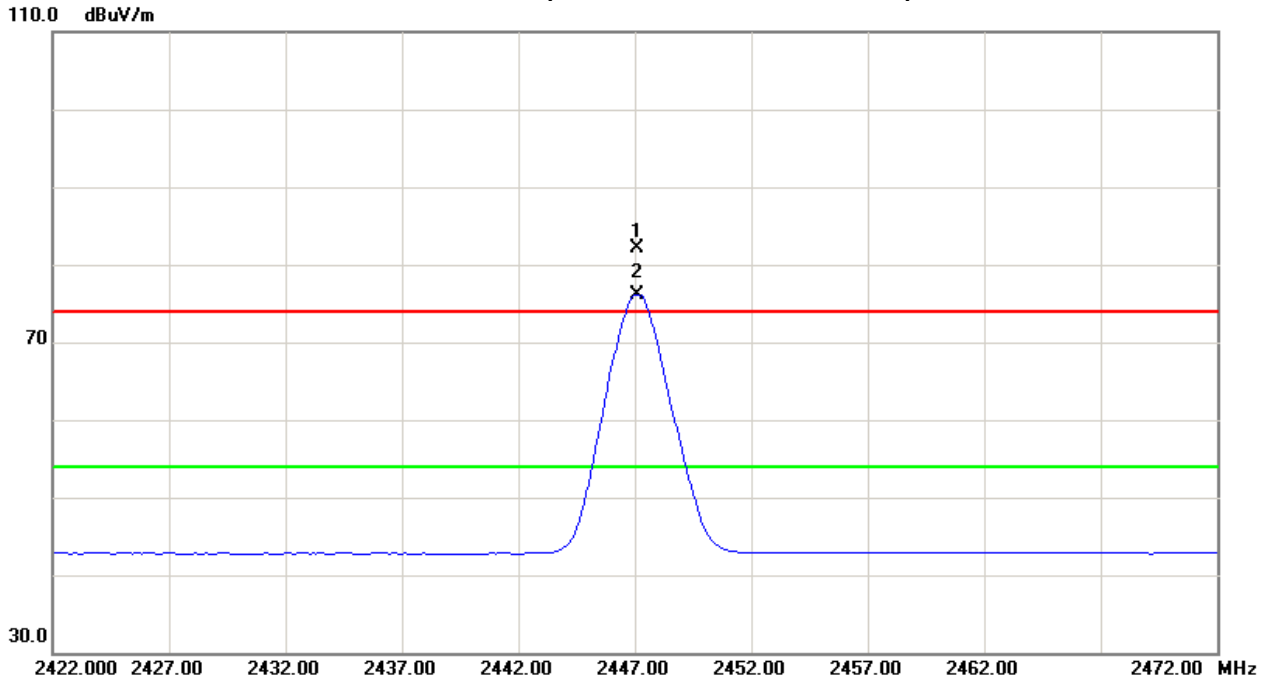
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
<b>2447.10</b>	<b>V</b>	<b>49.88</b>	<b>43.84</b>	<b>32.22</b>	<b>82.10</b>	<b>76.06</b>					<b>X/F</b>
4894.13	V	44.12	32.38	6.47	50.59	38.85	74.00	54.00	-23.41	-15.15	X/H

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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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



TX 2447MHz (Above 1000 MHz, Vertical)





EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2447MHz		

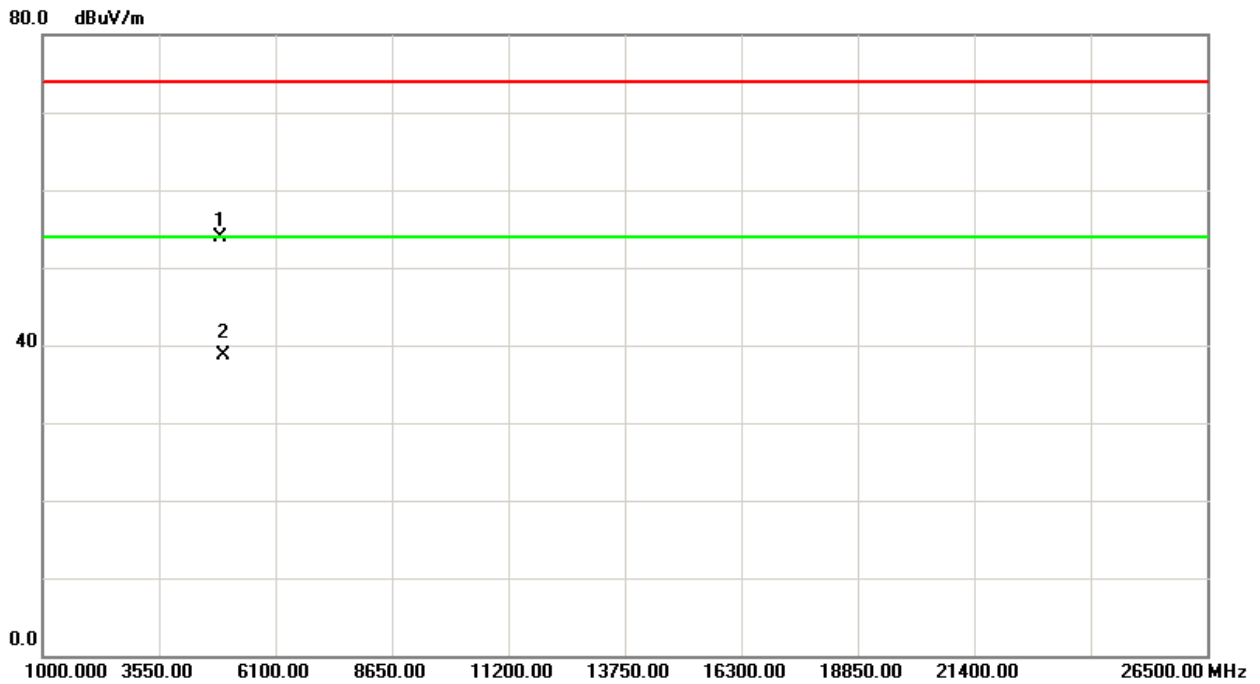
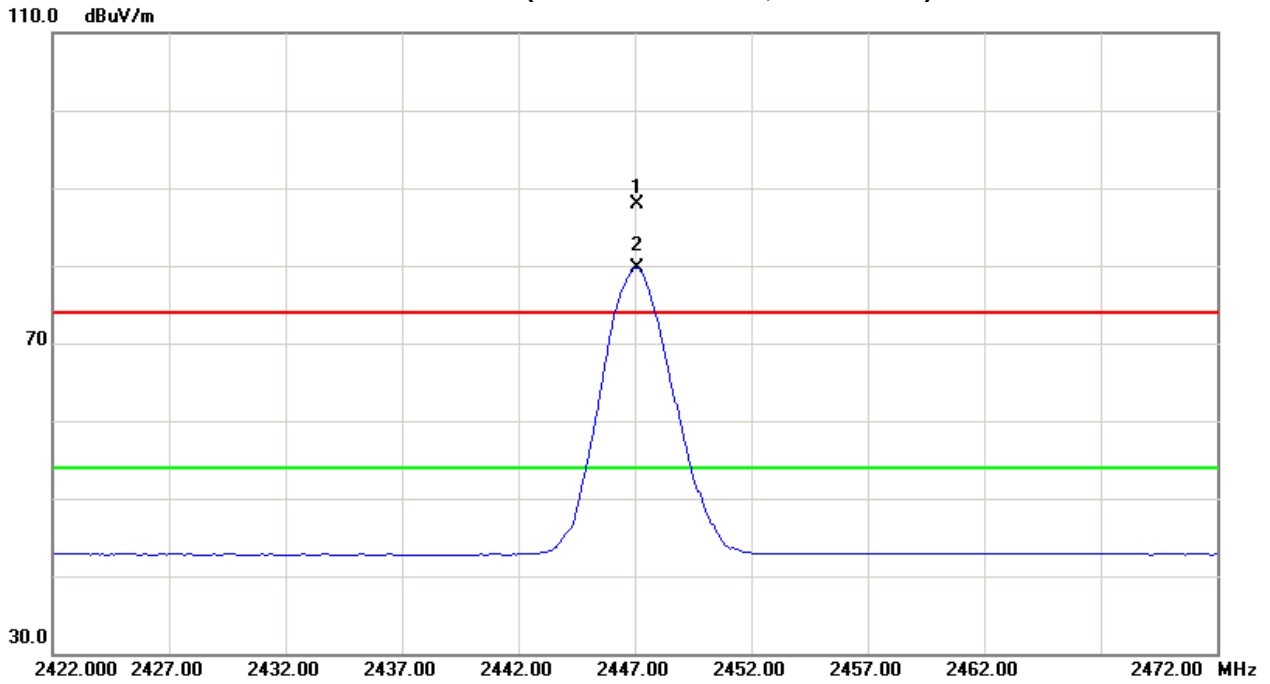
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
<b>2447.10</b>	<b>H</b>	<b>55.75</b>	<b>47.45</b>	<b>32.22</b>	<b>87.97</b>	<b>79.67</b>					<b>X/F</b>
4894.01	H	47.42	32.17	6.47	53.89	38.64	74.00	54.00	-20.11	-15.36	X/H

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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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



TX 2447MHz (Above 1000 MHz, Horizontal)





EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2480MHz		

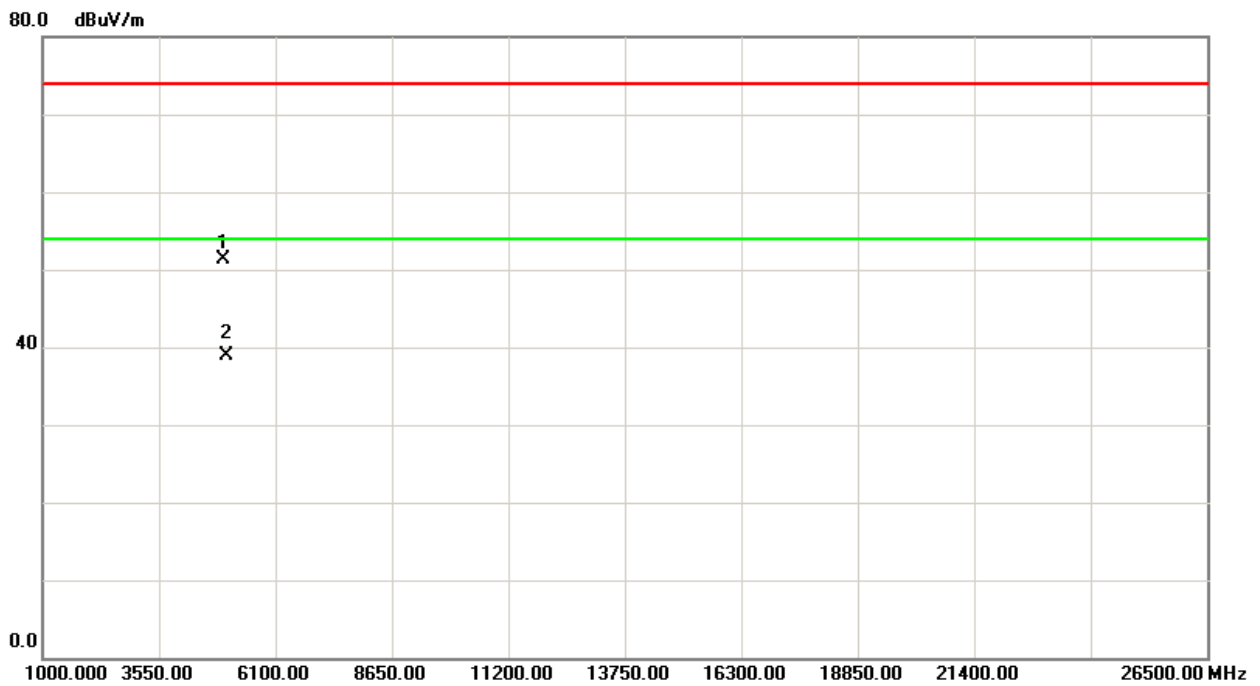
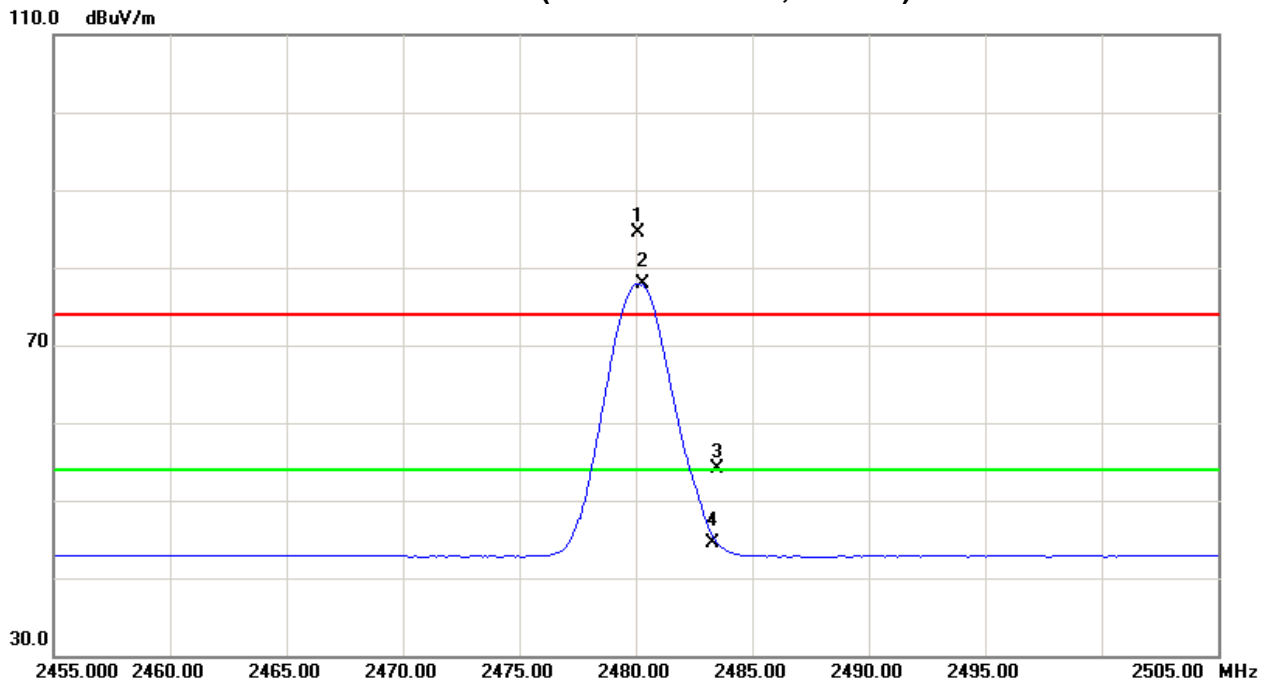
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Margin		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
<b>2480.10</b>	<b>V</b>	<b>52.28</b>	<b>45.70</b>	<b>32.18</b>	<b>84.46</b>	<b>77.88</b>					<b>X/F</b>
2483.50	V	21.87	12.40	32.17	54.04	44.57	74.00	54.00	-19.96	-9.43	X/E
4960.01	V	44.57	32.12	6.74	51.31	38.86	74.00	54.00	-22.69	-15.14	X/H

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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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



TX 2480MHz(Above 1000 MHz, Vertical)





EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	TX 2480MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Margin		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
<b>2480.00</b>	<b>H</b>	<b>54.75</b>	<b>47.80</b>	<b>32.18</b>	<b>86.93</b>	<b>79.98</b>					<b>X/F</b>
2483.50	H	22.74	13.54	32.17	54.91	45.71	74.00	54.00	-19.09	-8.29	X/E
4960.06	H	47.24	33.02	6.74	53.98	39.76	74.00	54.00	-20.02	-14.24	X/H

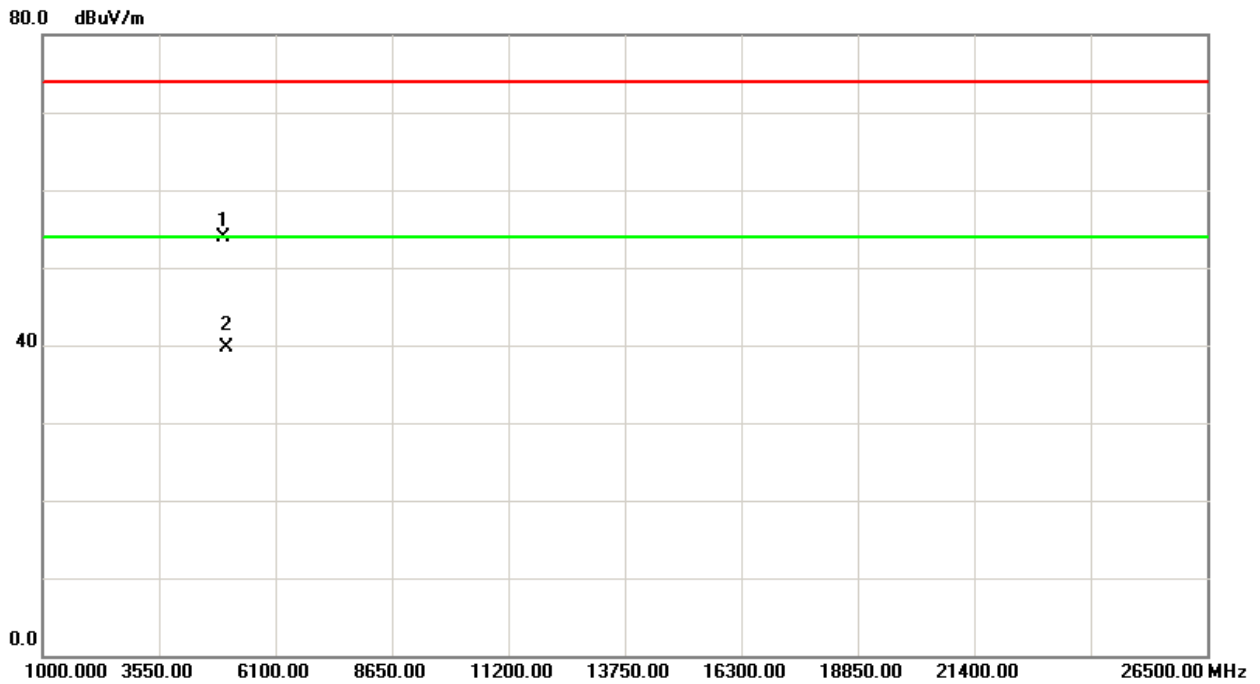
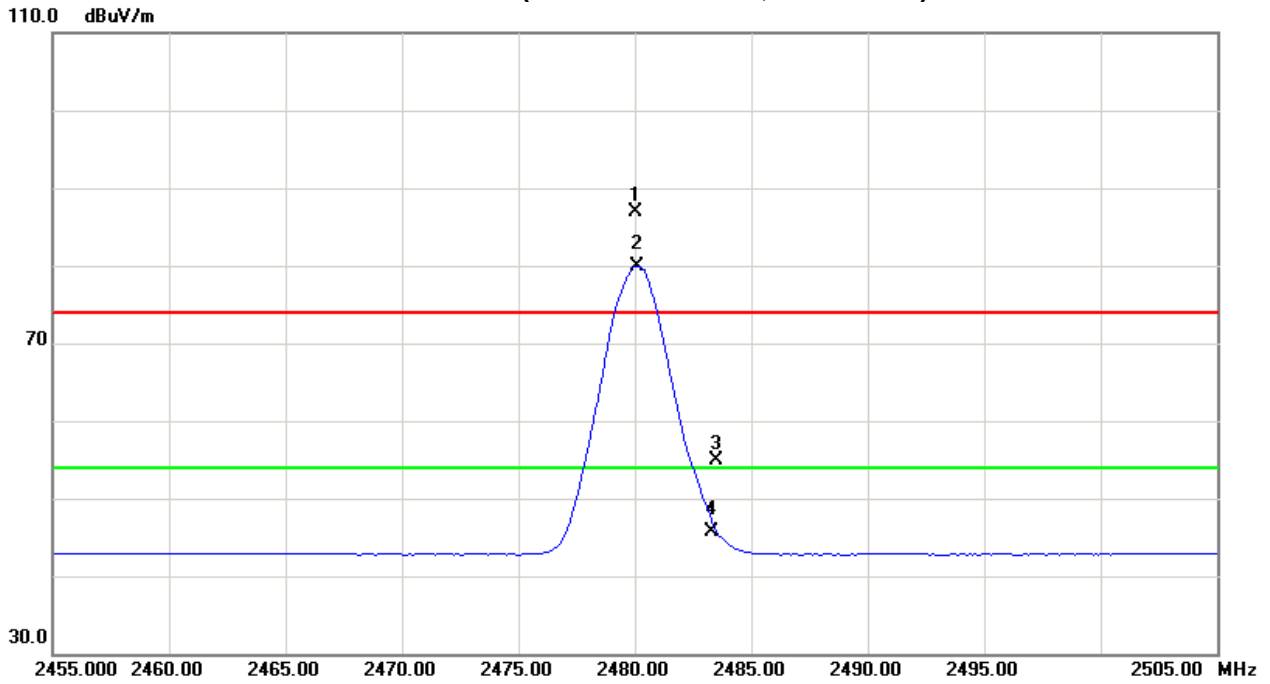
**Remark :**

- (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) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis :  
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) 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





TX 2480MHz(Above 1000 MHz, Horizontal)





**5. NUMBER OF HOPPING CHANNEL**

**5.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247 (a)(1)(iii)	Number of Hopping Channel	2400-2483.5	PASS

**5.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating Frequency Range
RB	100 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

**5.1.2 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=100KHz, Sweep time = Auto.

**5.1.3 DEVIATION FROM STANDARD**

No deviation.

**5.1.4 TEST SETUP**



**5.1.5 EUT OPERATION CONDITIONS**

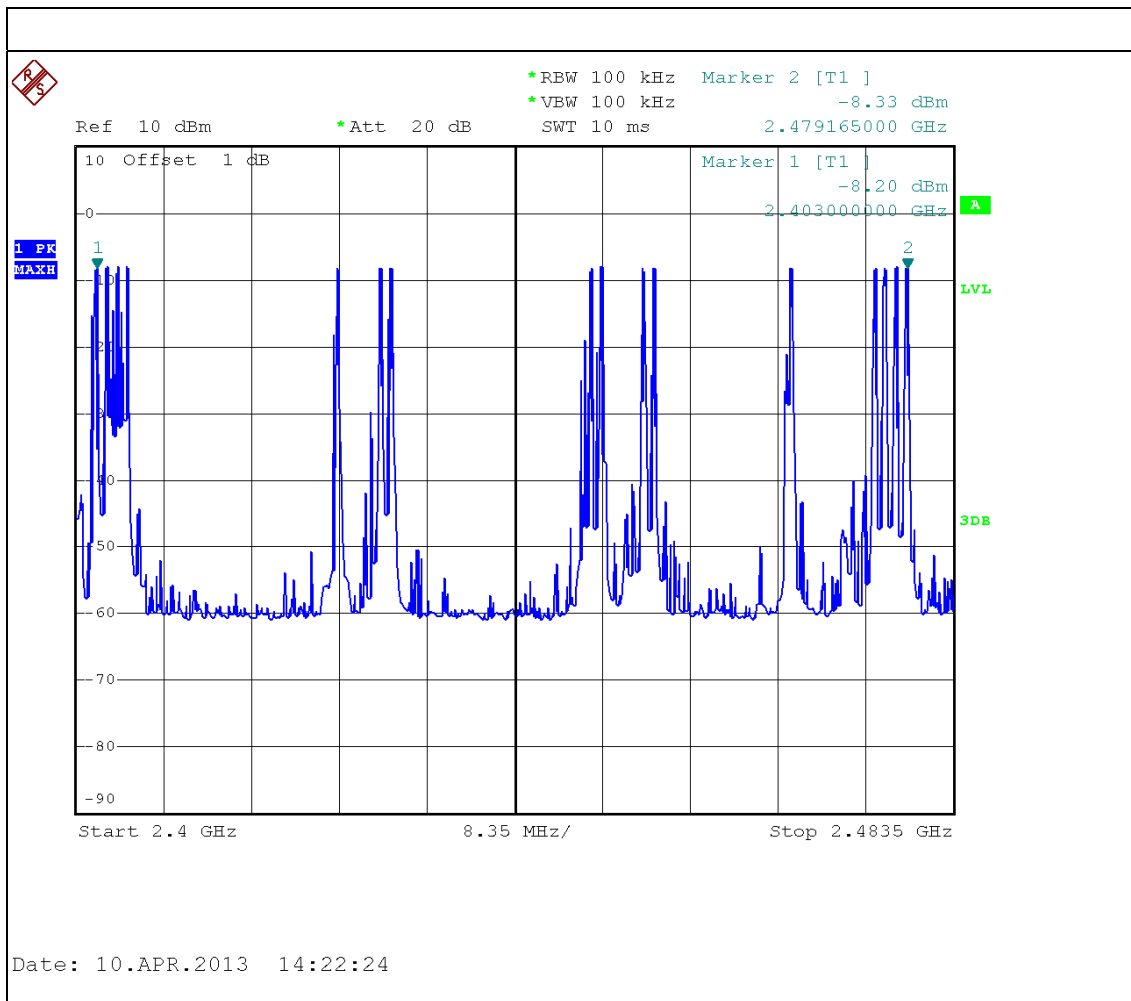
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



**5.1.6 TEST RESULTS**

EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	Hopping Mode		

Number of Hopping Channel	16
---------------------------	----



**6. AVERAGE TIME OF OCCUPANCY**

**6.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247 (a)(1)(iii)	Average Time of Occupancy	0.4sec	2400-2483.5	PASS

**6.1.1 MEASUREMENT INSTRUMENTS LIST**

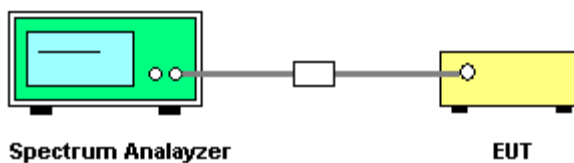
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of Equipment List is One Year.

**6.1.2 TEST PROCEDURE**

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
- d. Sweep Time is more than once pulse time.
- e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- f. Measure the maximum time duration of one single pulse.
- g. Set the EUT for packet transmitting.
- h. Measure the maximum time duration of one single pulse.
- i. Dwell time = [spreading rate/16] x duty-cycle x 0.4 seconds

**6.1.3. TEST SETUP LAYOUT**



**6.1.4. TEST DEVIATION**

There is no deviation with the original standard.

**6.1.5. EUT OPERATION DURING TEST**

The EUT was programmed to be in continuously transmitting/Hopping mode.



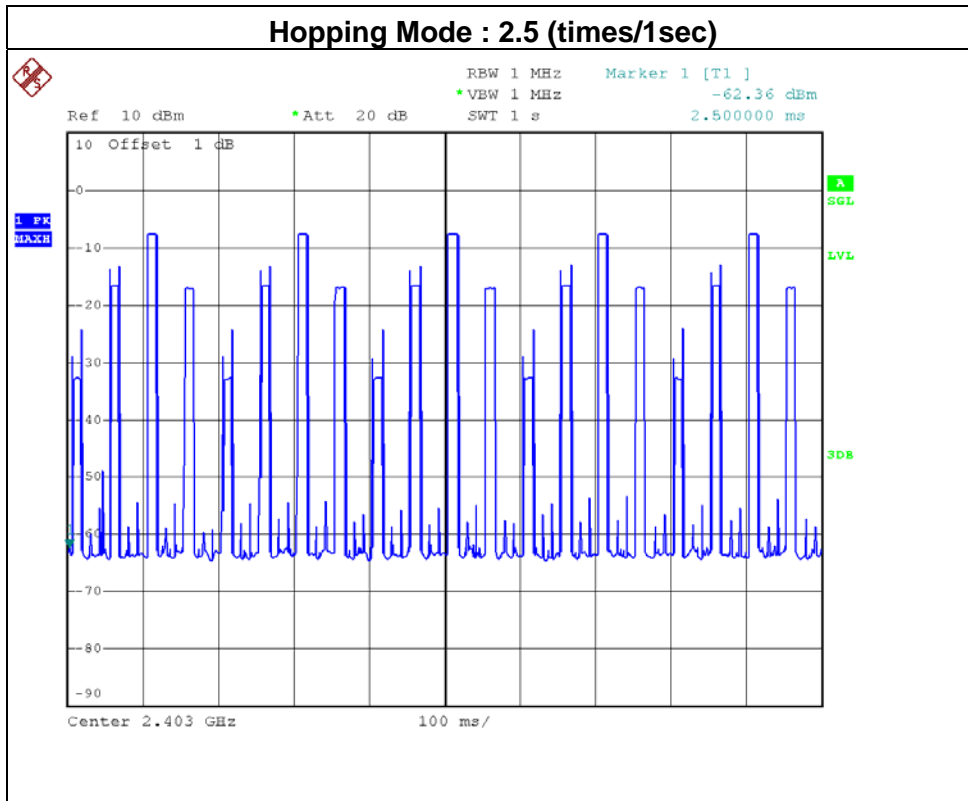
**6.1.6. TEST RESULTS**

EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	Hopping Mode		

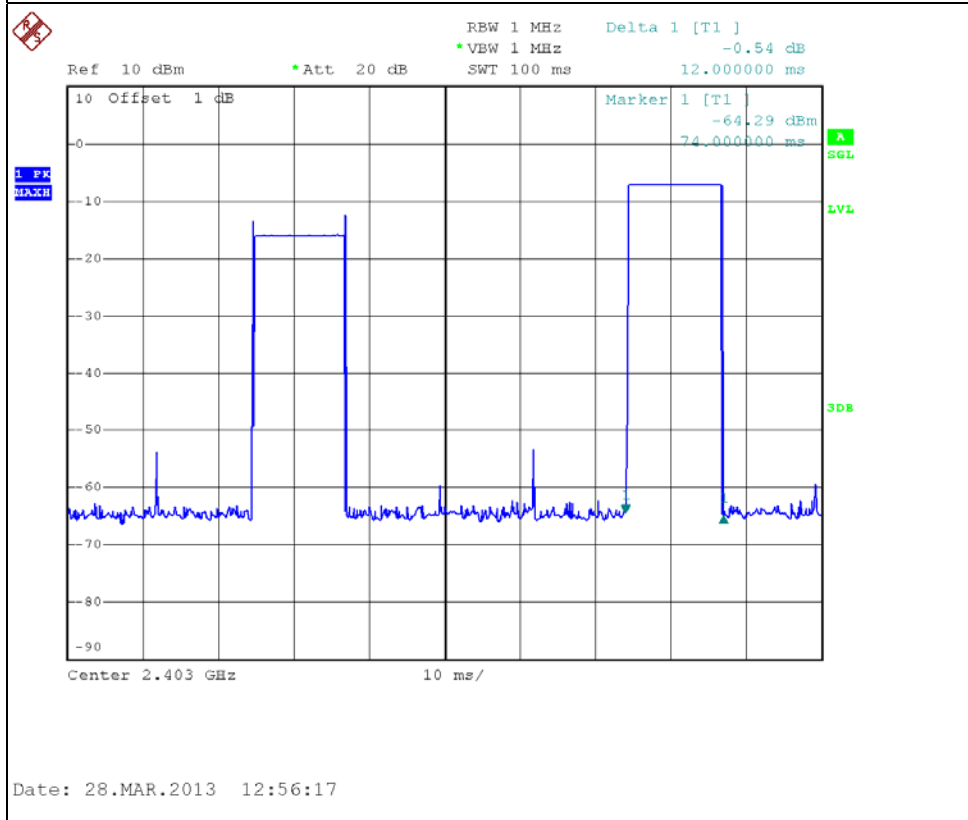
Mode	Number of transmission in a 6.4 (16Hopping*0.4)	Length of transmission time (msec)	Result (msec)	Limit (msec)
2403 MHz	(2.5/1) *6.4=16 times <b>Note1</b>	12	192	400

**Note1:** 2.5 times of occupied channels per 1 second.

	Results
Measured cycle (sec)	16 CH*0.4=6.4
The total number of frequency-hopping per second	((2.5/1)*6.4)=16
The number of occupied channels per second	16/6.4=2.5(number/sec)
occupied time for each channel(1)	12ms
The total number of channels occupied within one cycle (2)	(2.5/1) *6.4=16 times
The average time of occupancy within one cycle(1)*(2)	192msec
LIMIT (msec)	400msec



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**7. HOPPING CHANNEL SEPARATION MEASUREMENT**

**7.1 APPLIED PROCEDURES / LIMIT**

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

**7.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of Equipment List is One Year.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

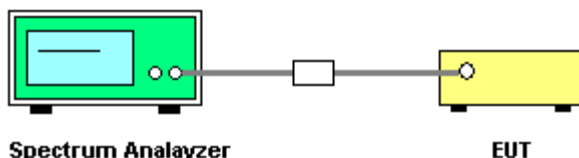
**7.1.2 TEST PROCEDURE**

- a. The EUT must have its hopping function enabled
- b. Span = wide enough to capture the peaks of two adjacent channels  
Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span  
Video (or Average) Bandwidth (VBW) ≥ RBW  
Sweep = auto  
Detector function = peak  
Trace = max hold

**7.1.3 DEVIATION FROM STANDARD**

No deviation.

**7.1.4 TEST SETUP**



**7.1.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in hopping mode.

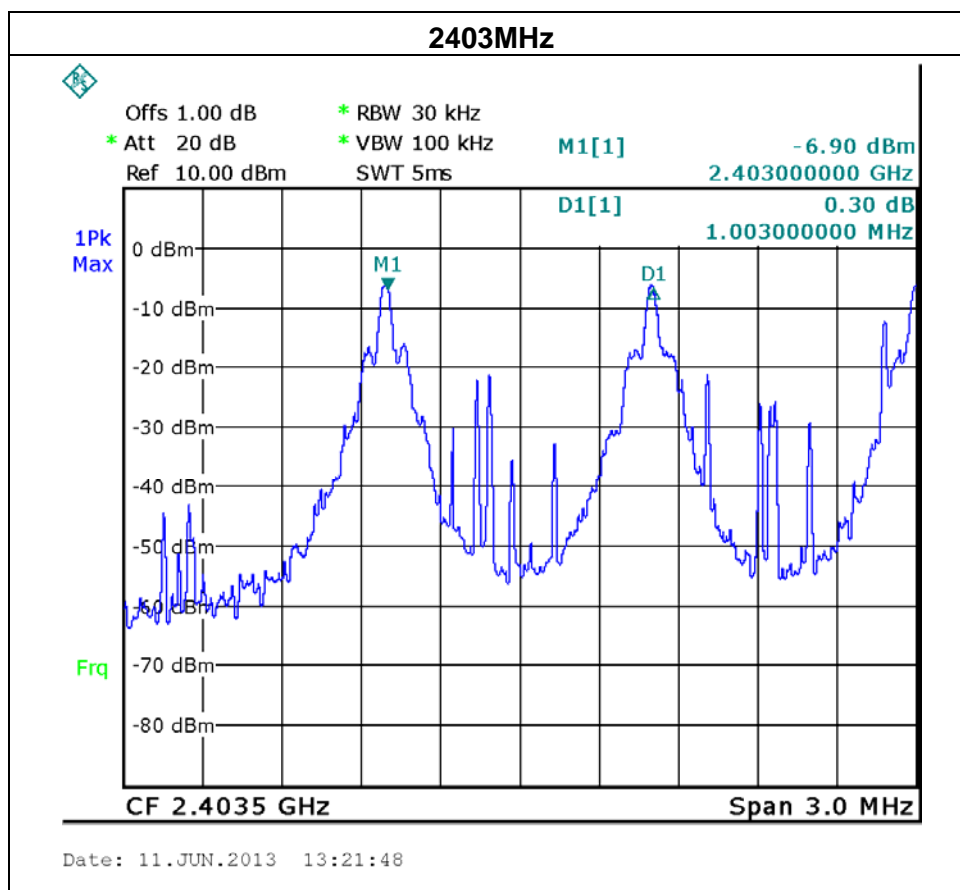


**7.1.6 TEST RESULTS**

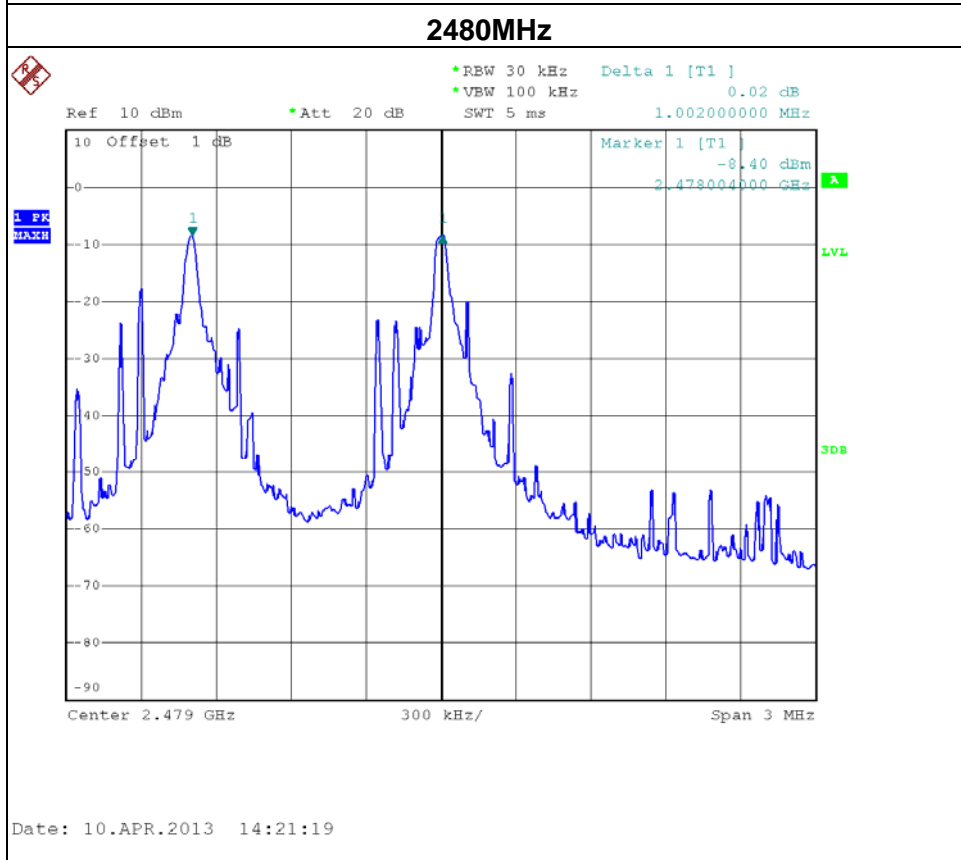
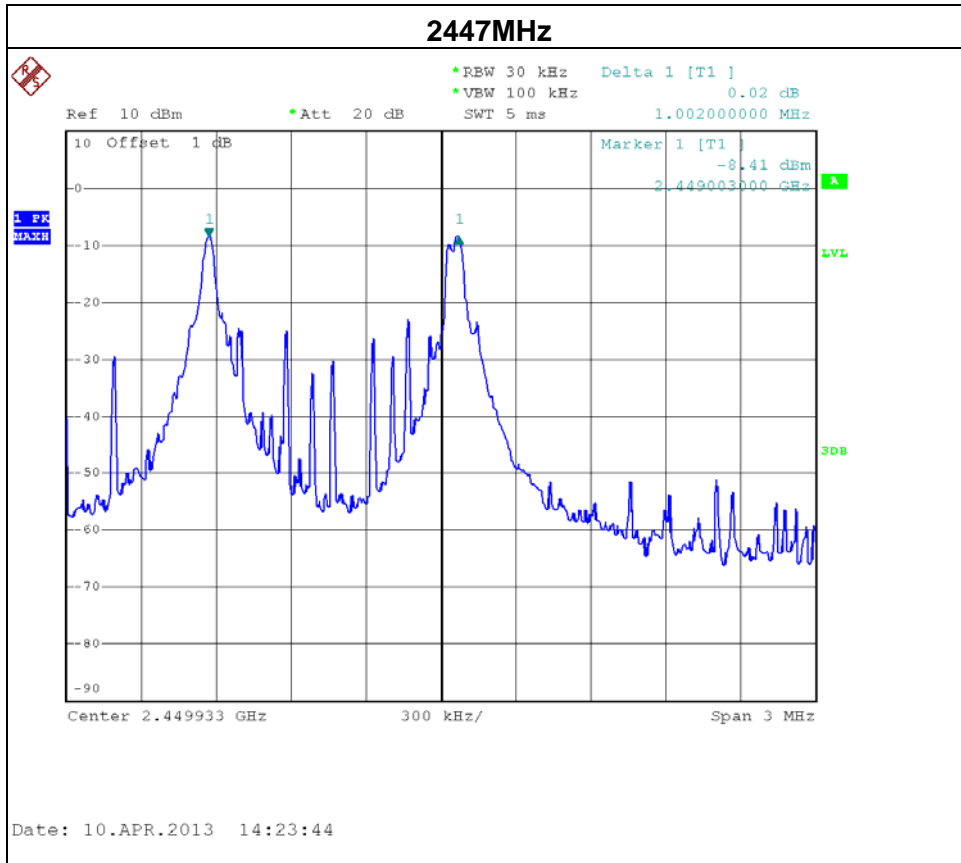
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	CH01 / CH28 / CH51		

Frequency (MHz)	Ch. Separation (MHz)	20dB Bandwidth (MHz)	Result
2403	1.003	1.14	<b>Complies</b>
2447	1.002	1.15	<b>Complies</b>
2480	1.002	1.21	<b>Complies</b>

**Ch. Separation Limits: >20dB bandwidth or >2/3 of 20dB bandwidth**









**8. BANDWIDTH TEST**

**8.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247 (a)(2)	Bandwidth	2400-2483.5	PASS

**8.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of Equipment List is One Year.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

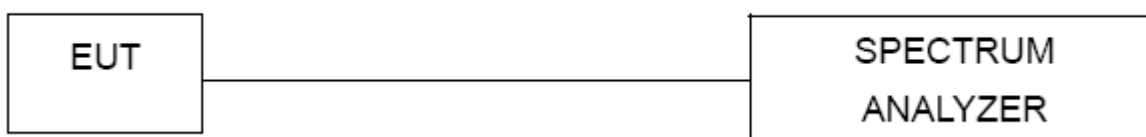
**8.1.2 TEST PROCEDURE**

- 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= 30KHz, VBW=100KHz, Sweep time = Auto.

**8.1.3 DEVIATION FROM STANDARD**

No deviation.

**8.1.4 TEST SETUP**



**8.1.5 EUT OPERATION CONDITIONS**

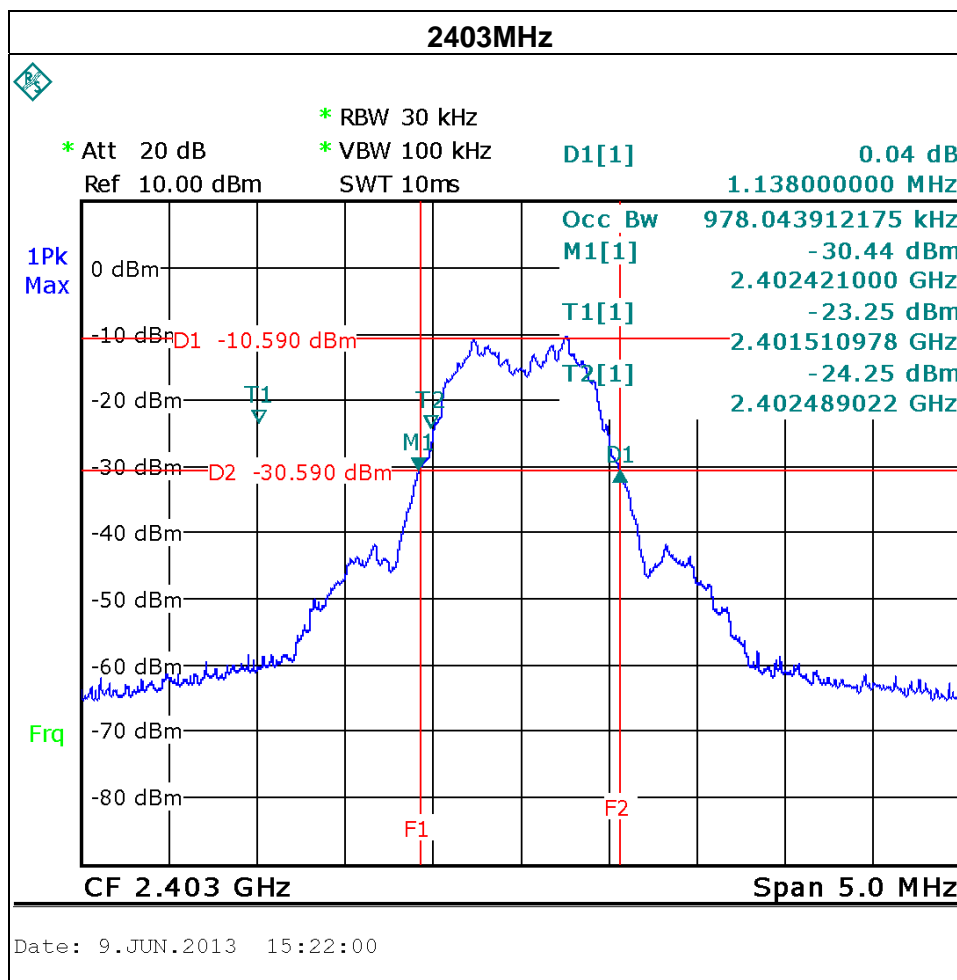
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

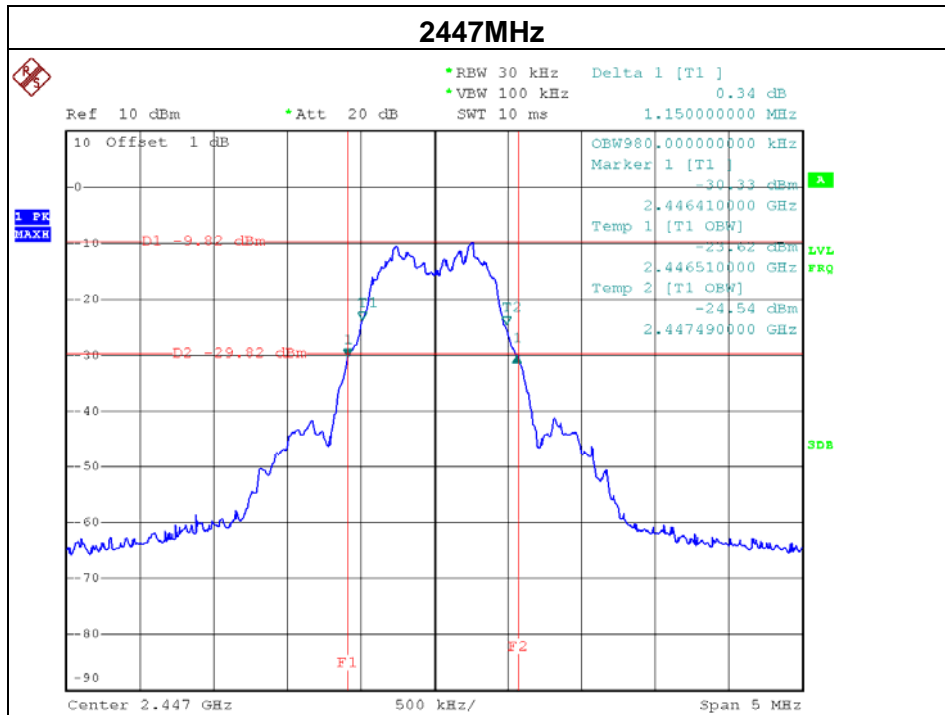


**8.1.6 TEST RESULTS**

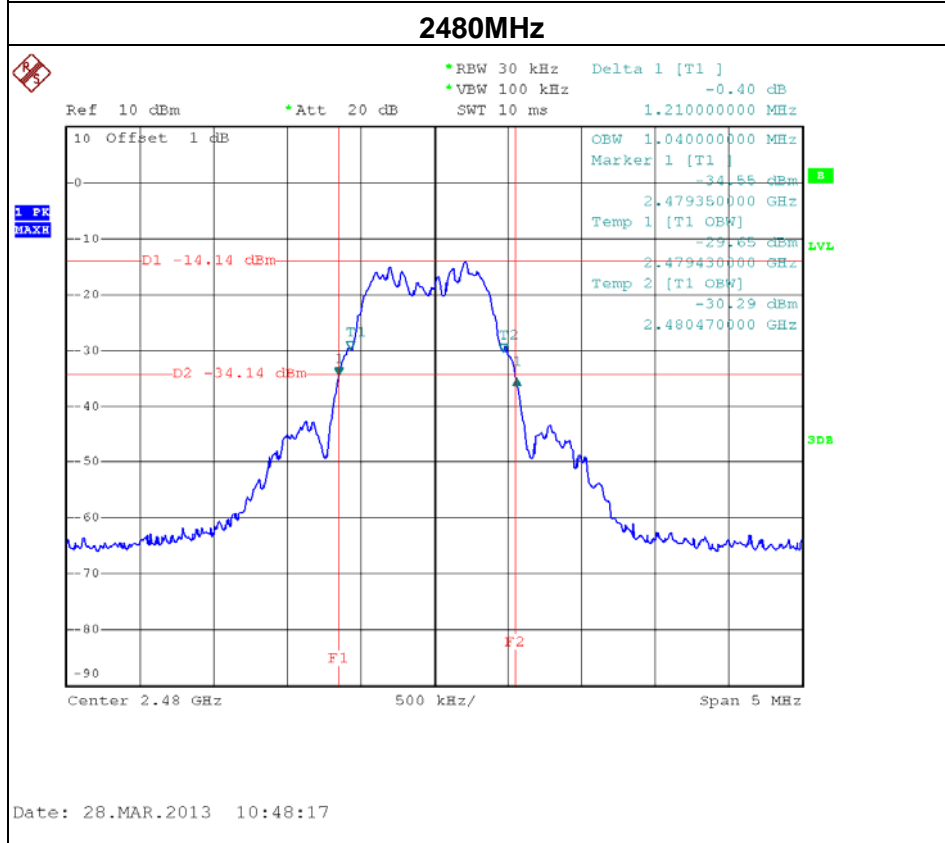
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	CH01 / CH28 / CH51		

Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Result
2403	1.14	0.98	<b>PASS</b>
2447	1.15	0.98	<b>PASS</b>
2480	1.21	1.04	<b>PASS</b>





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**9. PEAK OUTPUT POWER TEST**

**9.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247 (b)(1)	Peak Output Power	0.125 watt or 21dBm	2400-2483.5	PASS

**9.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
 All calibration period of Equipment List is One Year.

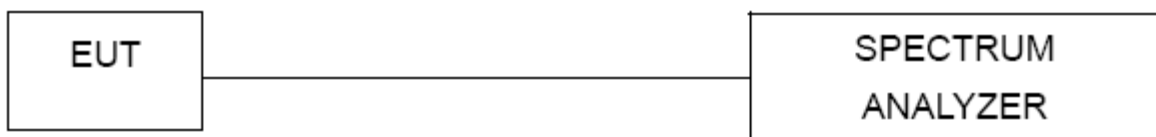
**9.1.2 TEST PROCEDURE**

- a. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram below,

**9.1.3 DEVIATION FROM STANDARD**

No deviation.

**9.1.4 TEST SETUP**



**9.1.5 EUT OPERATION CONDITIONS**

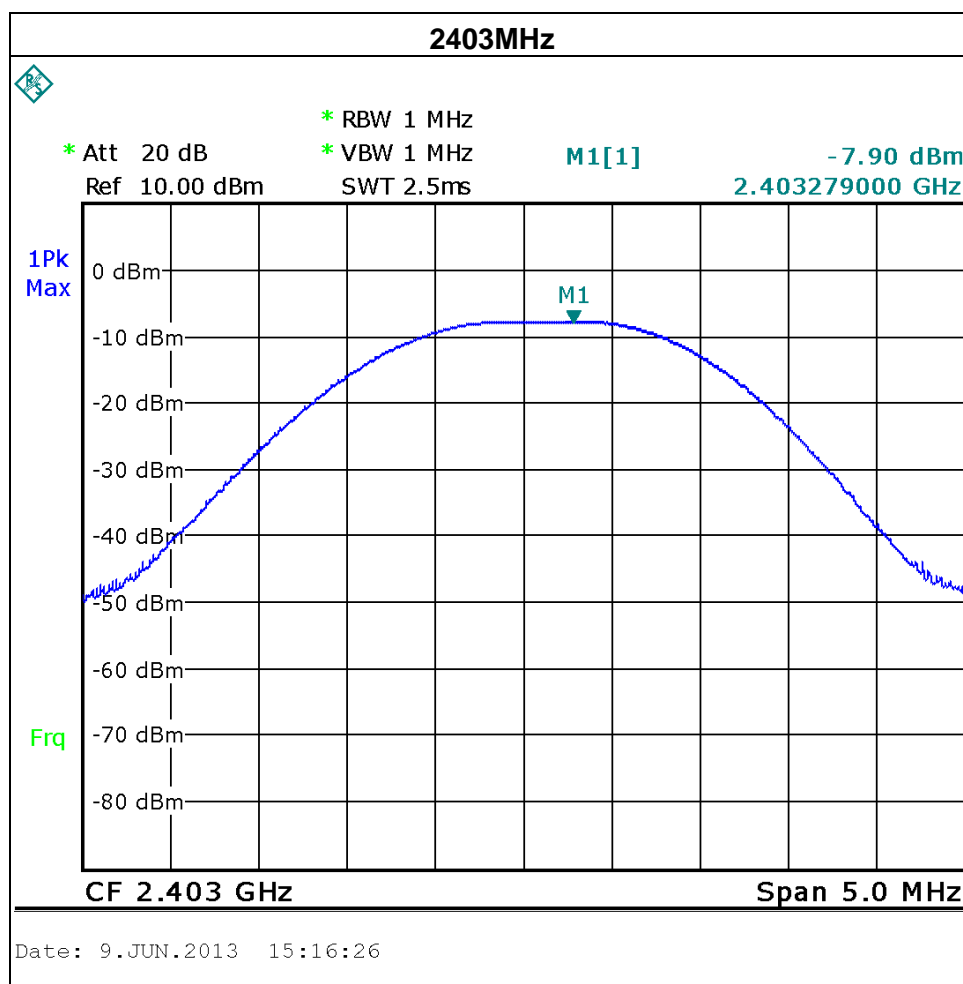
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

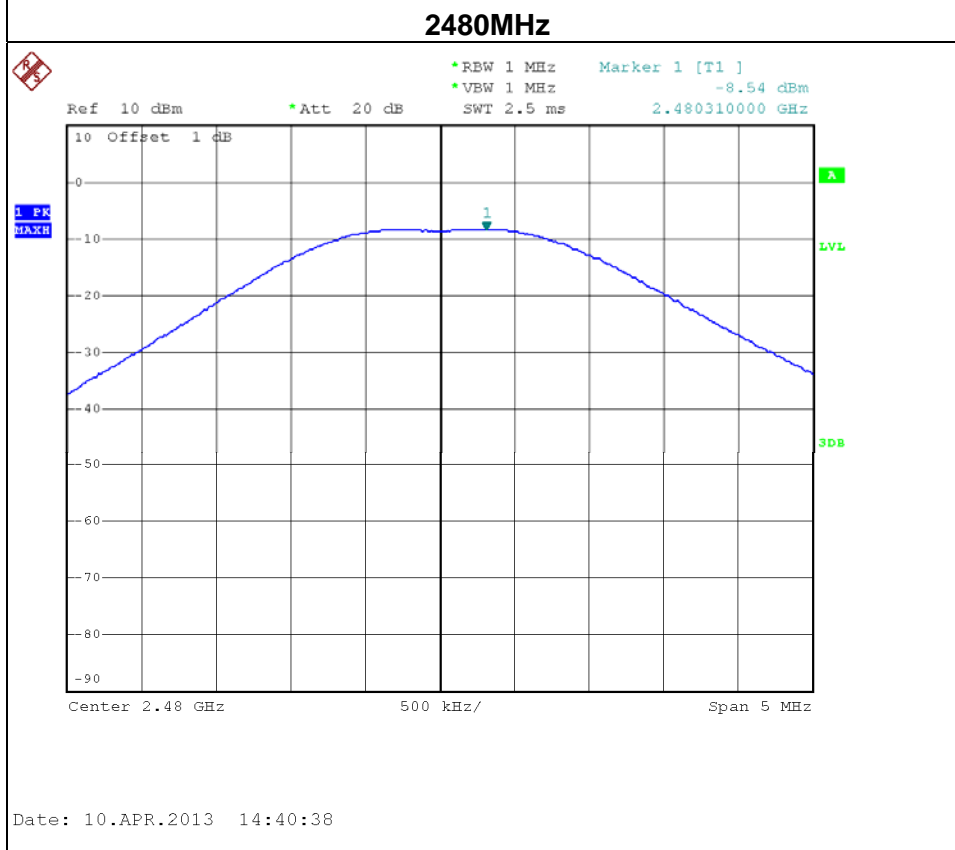
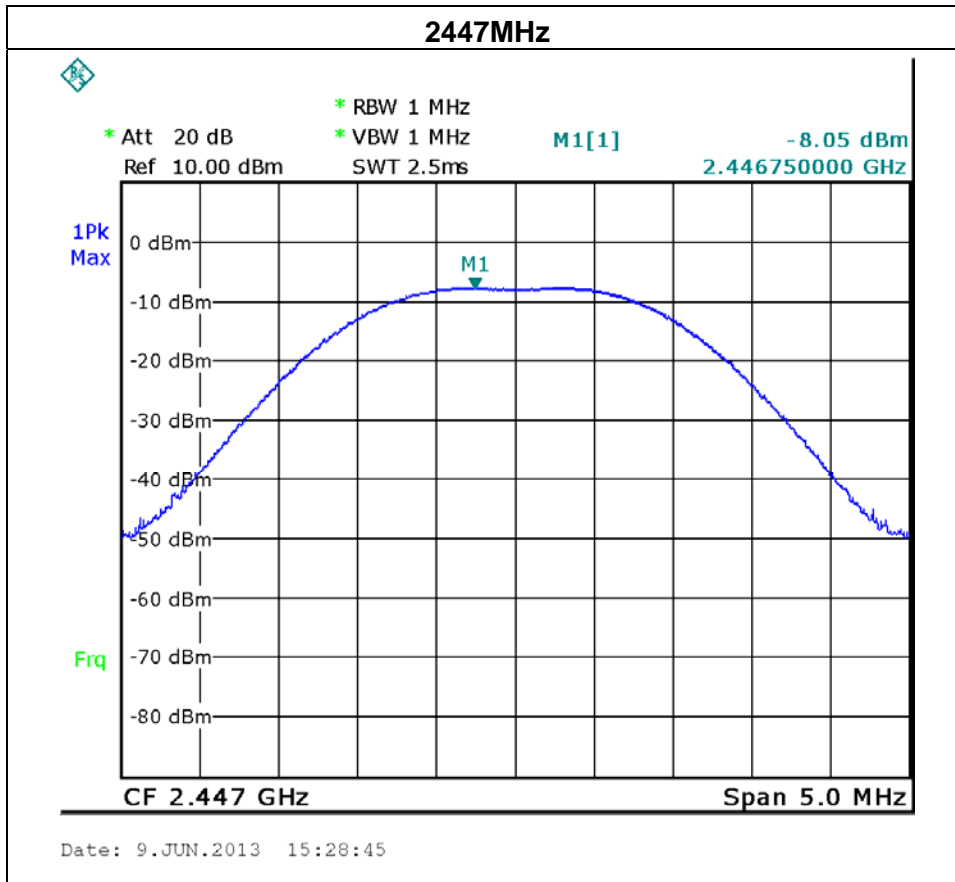


**9.1.6 TEST RESULTS**

EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	CH01 / CH28 / CH51		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2403	-7.90	21	0.125
2447	-8.05	21	0.125
2480	-8.54	21	0.125







**10. ANTENNA CONDUCTED SPURIOUS EMISSION**

**10.1 APPLIED PROCEDURES / LIMIT**

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

Frequencies (MHz)	Field Strength (micorvolts/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

**10.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of Equipment List is One Year.

**10.1.2 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=100KHz, Sweep time = Auto.

**10.1.3 DEVIATION FROM STANDARD**

No deviation.

**10.1.4 TEST SETUP**



**10.1.5 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.





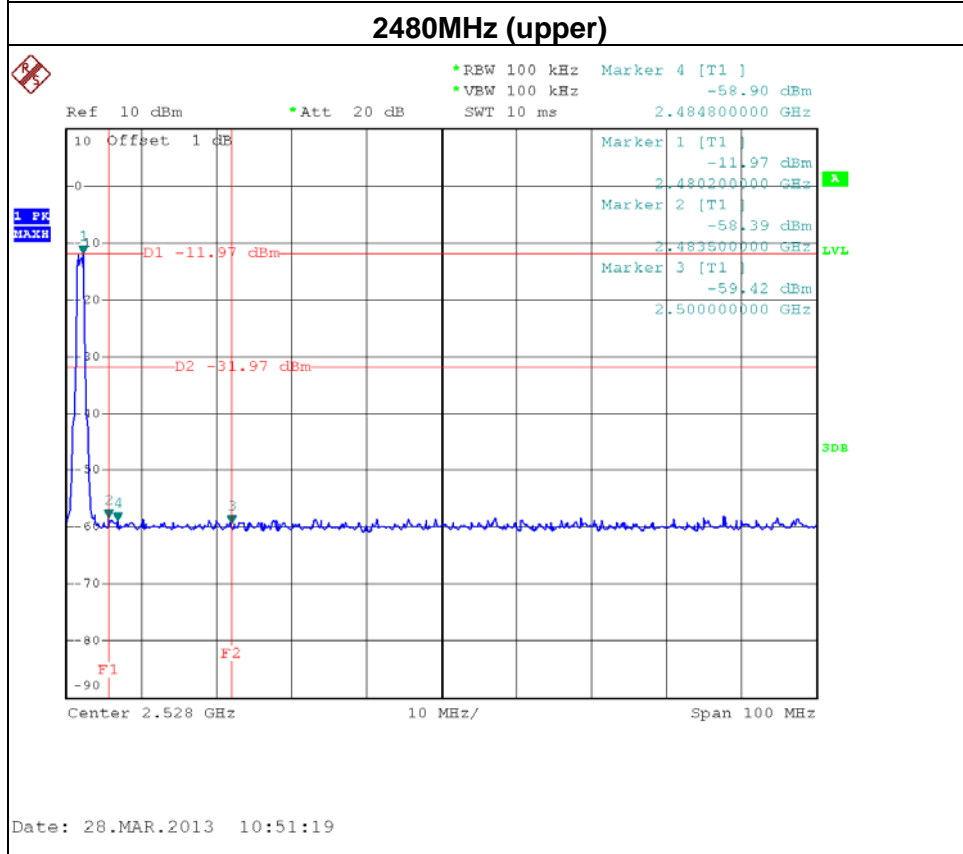
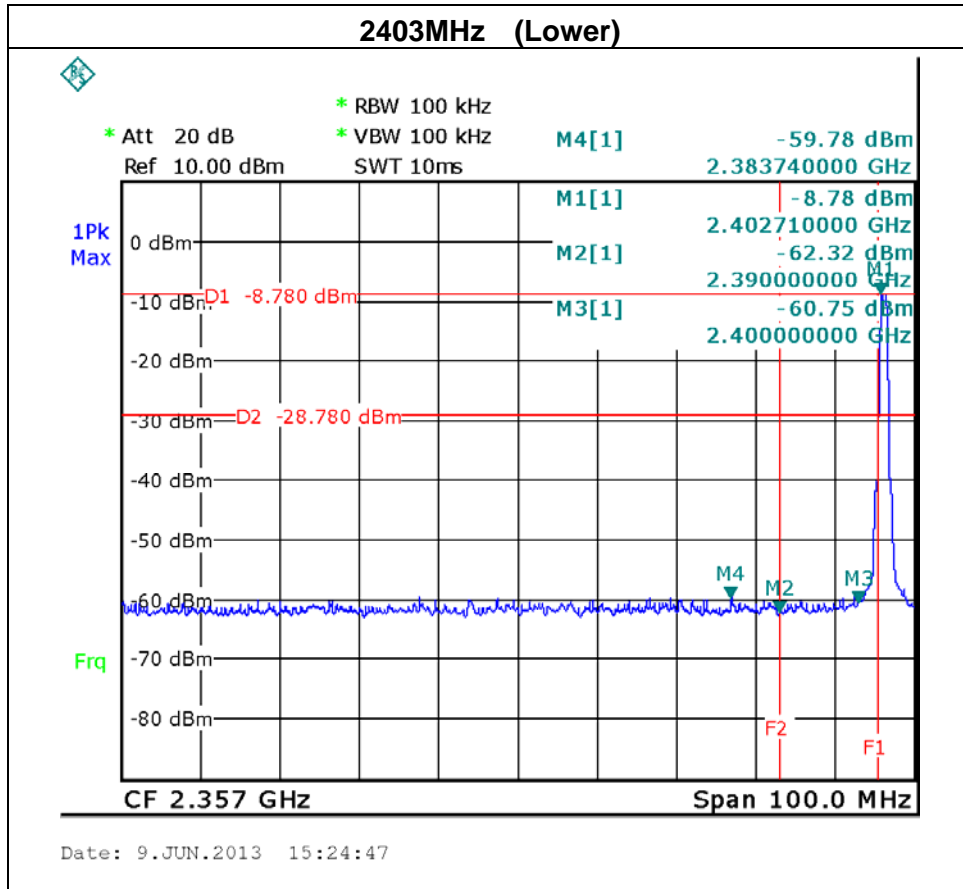
**10.1.6 TEST RESULTS**

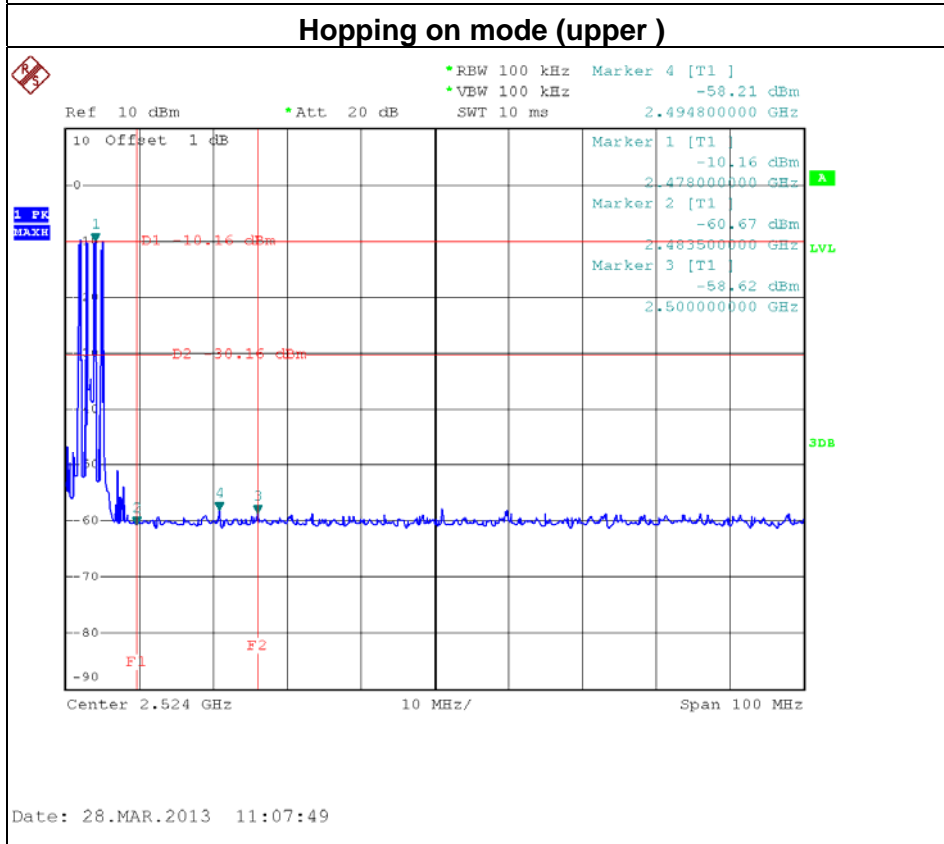
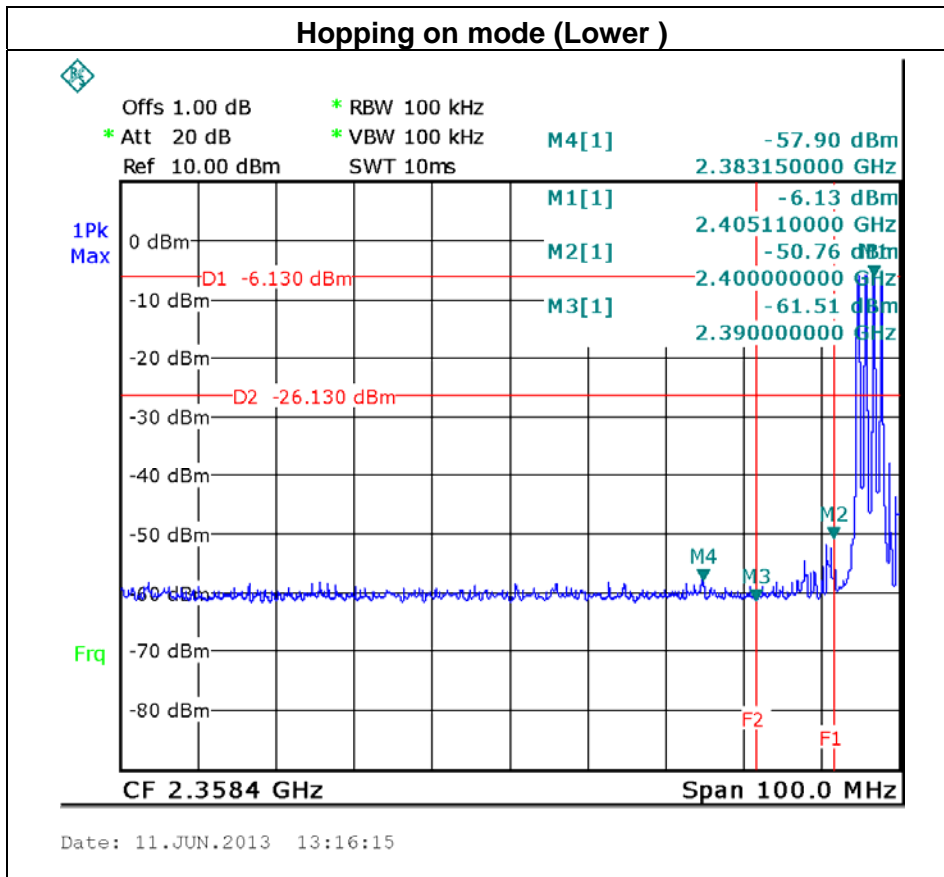
EUT :	Dongle	Model Name :	G07UF
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 230/50Hz
Test Mode :	CH01 / CH28 / CH51 & Hopping on mode		

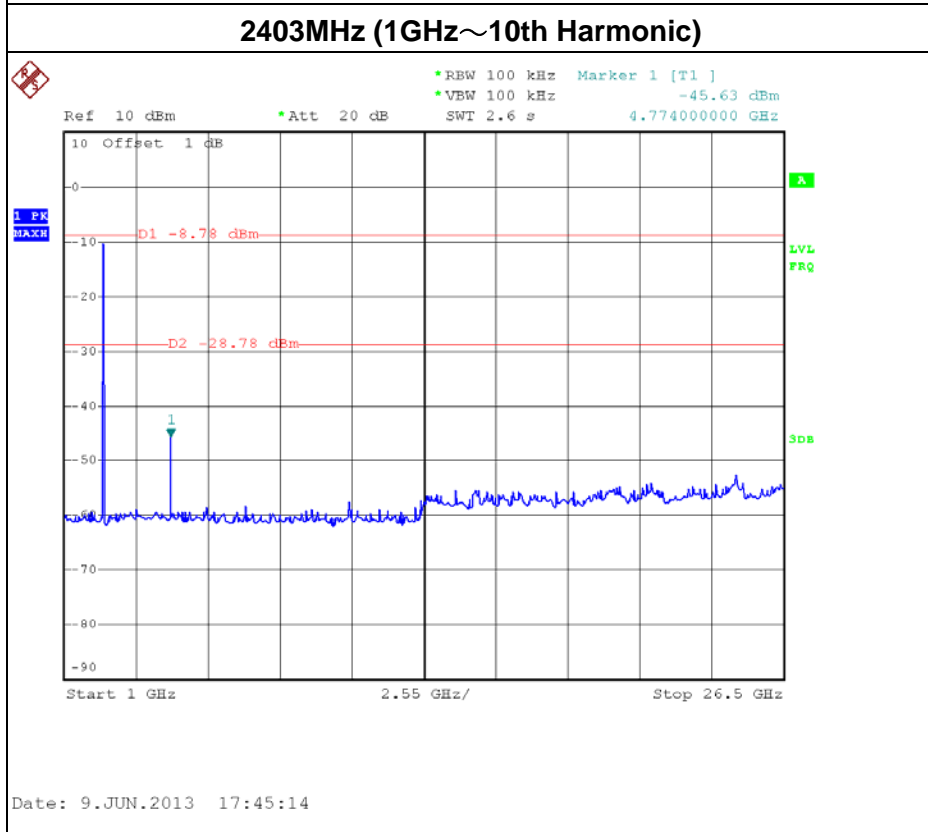
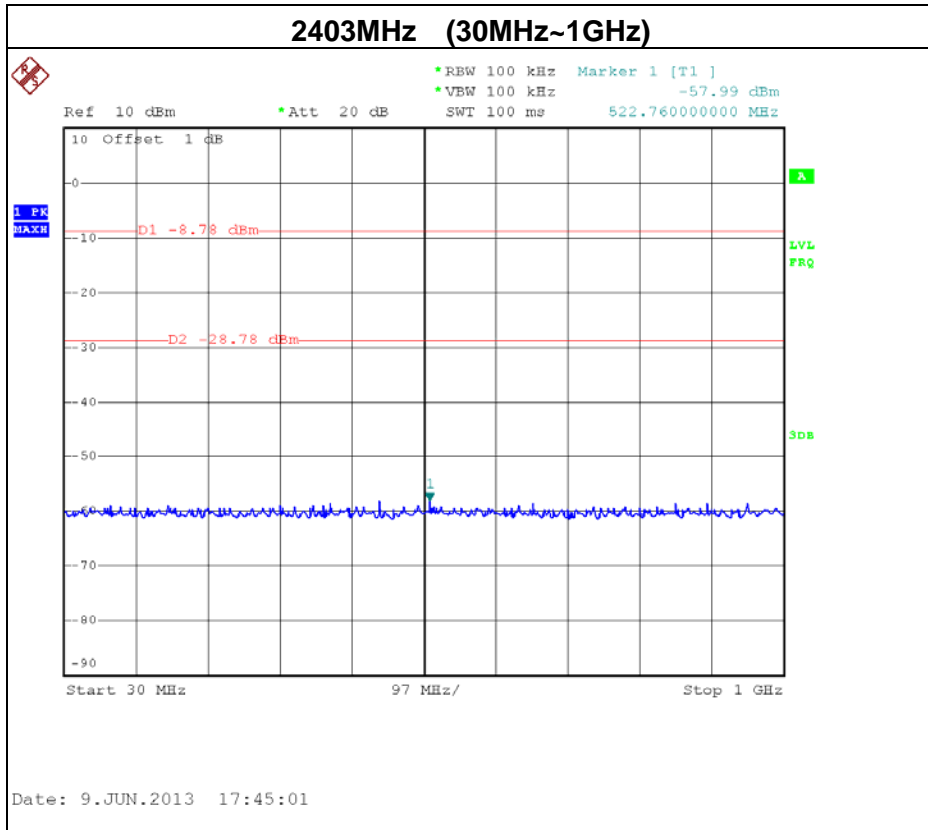
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2383.74	-59.78	2483.50	-58.39

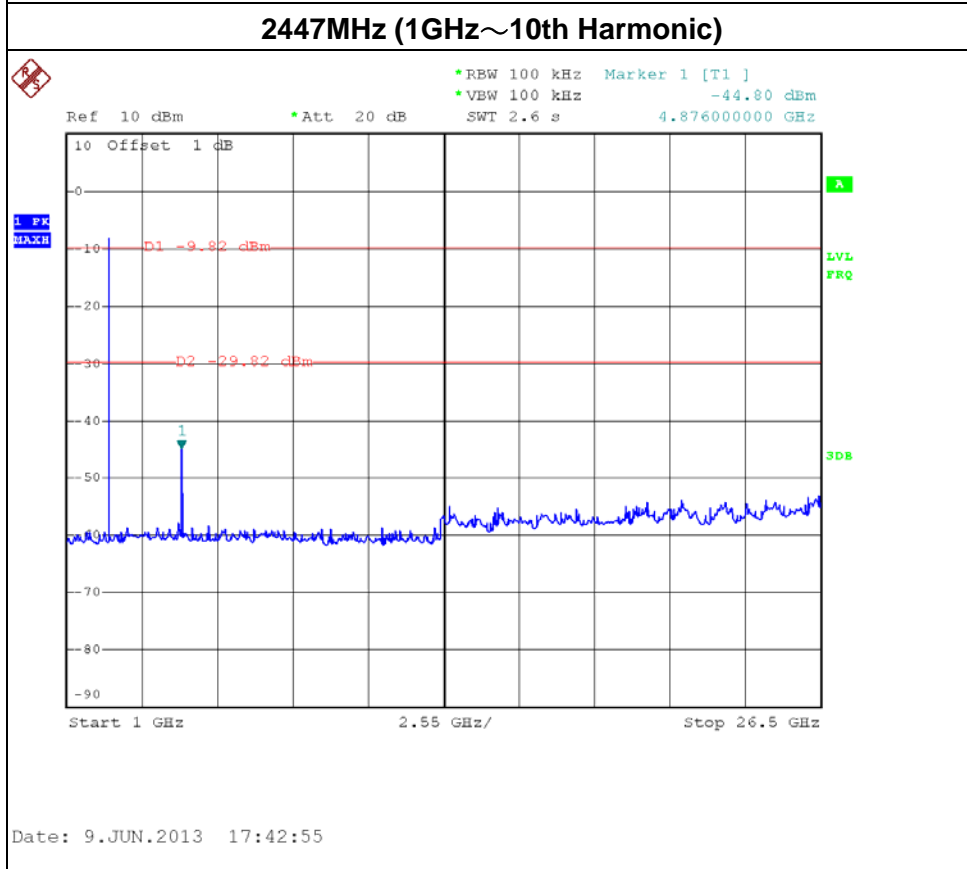
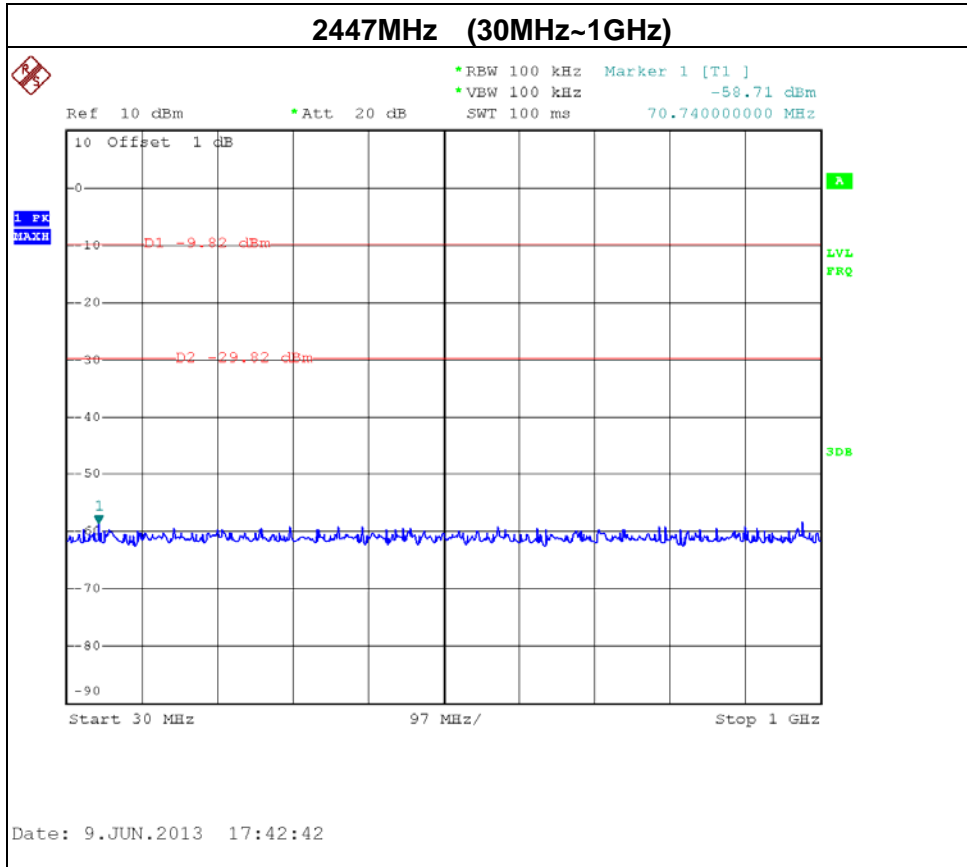
**Result**

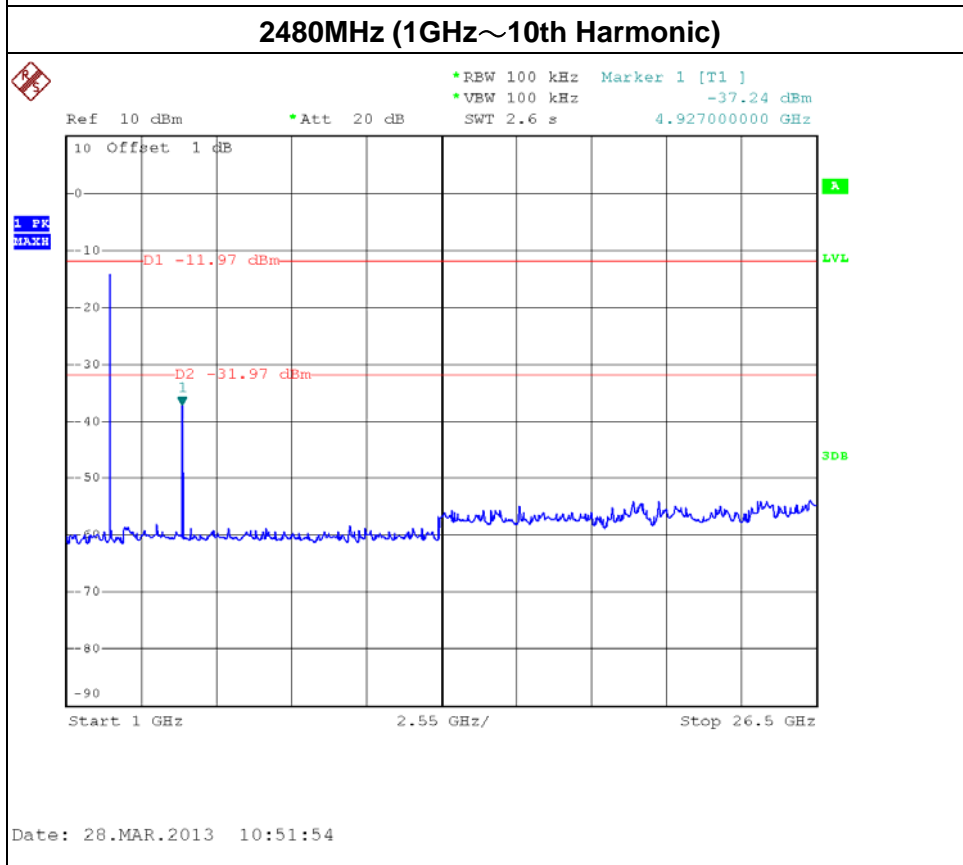
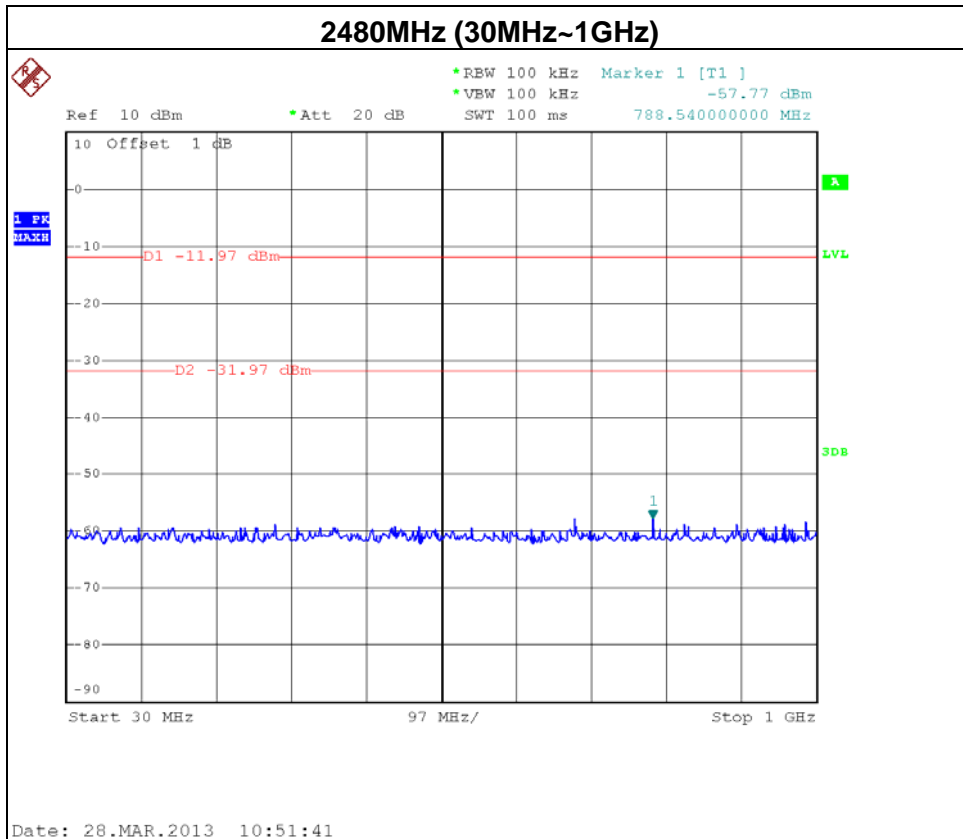
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.













**11. EUT PHOTOS**

**Conducted Measurement Photos**





**Radiated Measurement Photos**

