



Neutron Engineering Inc.

FCC Radio Test Report

FCC ID: PKX1301GAMFZ

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

Issued Date : Oct. 24, 2012
Project No. : 1210C032
Equipment : Facilitator Control Unit
Model Name : N/A
Applicant : Trainers Warehouse
Address : 89 Washington Ave., Suite K, Natick, MA
01760-3441, USA

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Oct. 12, 2012

Date of Test:

Oct. 12, 2012 ~ Oct. 23, 2012

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Declaration

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

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Limitation

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



Table of Contents	Page
1 . CERTIFICATION	5
2 . SUMMARY OF TEST RESULTS	6
2.1 TEST FACILITY	7
2.2 MEASUREMENT UNCERTAINTY	7
3 . GENERAL INFORMATION	8
3.1 GENERAL DESCRIPTION OF EUT	8
3.2 DESCRIPTION OF TEST MODES	11
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	11
3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	12
3.5 DESCRIPTION OF SUPPORT UNITS	13
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT	14
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14
4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING	14
4.1.3 TEST PROCEDURE	15
4.1.4 DEVIATION FROM TEST STANDARD	15
4.1.5 TEST SETUP	15
4.1.6 EUT OPERATING CONDITIONS	15
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS	17
4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING	18
4.2.3 TEST PROCEDURE	19
4.2.4 DEVIATION FROM TEST STANDARD	19
4.2.5 TEST SETUP	20
4.2.6 EUT OPERATING CONDITIONS	21
4.2.7 TEST RESULTS (BETWEEN30 – 1000 MHZ)	22
4.2.8 TEST RESULTS (ABOVE 1000 MHZ)	24
5 . NUMBER OF HOPPING CHANNEL	36
5.1 APPLIED PROCEDURES / LIMIT	36
5.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	36
5.1.2 TEST PROCEDURE	36
5.1.3 DEVIATION FROM STANDARD	36
5.1.4 TEST SETUP	36
5.1.5 EUT OPERATION CONDITIONS	36
5.1.6 TEST RESULTS	37
6 . AVERAGE TIME OF OCCUPANCY	38



Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	38
6.1.1 MEASUREMENT INSTRUMENTS LIST	38
6.1.2 TEST PROCEDURE	38
6.1.3. TEST SETUP LAYOUT	38
6.1.4. TEST DEVIATION	38
6.1.5. EUT OPERATION DURING TEST	38
6.1.6. TEST RESULTS	39
7 . HOPPING CHANNEL SEPARATION MEASUREMENT	41
7.1 APPLIED PROCEDURES / LIMIT	41
7.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	41
7.1.2 TEST PROCEDURE	41
7.1.3 DEVIATION FROM STANDARD	41
7.1.4 TEST SETUP	41
7.1.5 EUT OPERATION CONDITIONS	41
7.1.6 TEST RESULTS	42
8 . BANDWIDTH TEST	43
8.1 APPLIED PROCEDURES / LIMIT	43
8.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	43
8.1.2 TEST PROCEDURE	43
8.1.3 DEVIATION FROM STANDARD	43
8.1.4 TEST SETUP	43
8.1.5 EUT OPERATION CONDITIONS	43
8.1.6 TEST RESULTS	44
9 . PEAK OUTPUT POWER TEST	46
9.1 APPLIED PROCEDURES / LIMIT	46
9.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	46
9.1.2 TEST PROCEDURE	46
9.1.3 DEVIATION FROM STANDARD	46
9.1.4 TEST SETUP	46
9.1.5 EUT OPERATION CONDITIONS	46
9.1.6 TEST RESULTS	47
10 . ANTENNA CONDUCTED SPURIOUS EMISSION	49
10.1 APPLIED PROCEDURES / LIMIT	49
10.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	49
10.1.2 TEST PROCEDURE	49
10.1.3 DEVIATION FROM STANDARD	49
10.1.4 TEST SETUP	49
10.1.5 EUT OPERATION CONDITIONS	49
10.1.6 TEST RESULTS	50



1. CERTIFICATION

Equipment : Facilitator Control Unit
Brand Name : N/A
Model Name : N/A
Applicant : Trainers Warehouse
Date of Test : Oct. 12, 2012 ~ Oct. 23, 2012
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-1-1210C032) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and 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:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	Test Item	Judgment	Remark
47 CFR Part 15			
15.207	Conducted Emission	-	N/A
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-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	



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Facilitator Control Unit	
Brand Name	N/A	
Model Name	N/A	
Model Difference	N/A	
Product Description	The EUT is a Facilitator Control Unit.	
	Operation Frequency:	2402~2480MHz
	Modulation Technology:	FSK, GFSK
	Bit Rate of Transmitter:	500Kbps
	Number Of Channel	40 CH, Please see note 2. (Page 9)
	Antenna Designation:	Please see note 3. (Page 10)
	Antenna Gain(Peak)	
	Output Power:	-2.39dBm (Max)
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.		
Power Source	DC voltage supplied from 3*AAA battery.	
Power Rating	DC 4.5V	
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.

Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	11	2422	21	2442	31	2462
02	2404	12	2424	22	2444	32	2464
03	2406	13	2426	23	2446	33	2466
04	2408	14	2428	24	2448	34	2468
05	2410	15	2430	25	2450	35	2470
06	2412	16	2432	26	2452	36	2472
07	2414	17	2434	27	2454	37	2474
18	2416	18	2436	28	2456	38	2476
09	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	40	2480

Group 1				Group 2				Group 3				Group 4			
2404	2432	2458	2406	2414	2440	2466	2416	2424	2450	2478	2426	2436	2464	2410	2438
2434	2460	2410	2436	2442	2468	2418	2444	2454	2480	2428	2454	2466	2412	2440	2468
2462	2412	2438	2480	2470	2420	2446	2472	2402	2458	2432	2460	2414	2442	2470	2416
2416	2440	2464	2418	2422	2448	2476	2424	2404	2434	2462	2406	2444	2472	2418	2446
Group 5				Group 6				Group 7				Group 8			
2476	2420	2448	2478	2406	2432	2410	2434	2466	2420	2444	2468	2456	2480	2404	2402
2422	2450	2480	2424	2458	2412	2436	2460	2422	2446	2470	2424	2438	2414	2478	2448
2454	2402	2426	2456	2414	2438	2462	2416	2448	2472	2426	2450	2466	2422	2432	2462
2428	2402	2458	2412	2440	2464	2418	2442	2476	2428	2454	2478	2428	2450	2472	2406
Group 9				Group 10				Group 11				Group 12			
2404	2436	2466	2414	2418	2476	2434	2444	2428	2442	2458	2424	2420	2436	2480	2426
2424	2456	2406	2440	2456	2462	2440	2472	2438	2462	2420	2434	2444	2460	2418	2456
2480	2420	2450	2464	2406	2460	2402	2422	2466	2416	2444	2470	2472	2410	2450	2468
2418	2432	2476	2428	2468	2446	2414	2470	2412	2454	2476	2406	2414	2438	2440	2402
Group 13				Group 14				Group 15				Group 16			
2404	2440	2478	2438	2418	2476	2434	2410	2414	2446	2466	2460	2438	2448	2462	2456
2460	2413	2470	2448	2456	2462	2424	2466	2478	2428	2418	2436	2468	2424	2472	2432
2480	2422	2444	2468	2440	2472	2458	2480	2410	2442	2462	2432	2420	2440	2466	2436
2426	2446	2454	2462	2438	2402	2440	2444	2444	2472	2448	2476	2446	2476	2450	2416



Group 17				Group 18				Group 19				Group 20			
2418	2460	2478	2414	2410	2440	2470	2418	2412	2442	2472	2420	2414	2444	2476	2422
2446	2470	2406	2428	2436	2472	2406	2434	2438	2476	2412	2436	2440	2478	2412	2438
2442	2402	2416	2444	2466	2422	2444	2460	2468	2424	2446	2462	2470	2426	2448	2464
2462	2424	2456	2472	2428	2456	2480	2438	2422	2458	2402	2440	2424	2460	2404	2456
Group 21				Group 22				Group 23				Group 24			
2416	2446	2478	2424	2420	2448	2480	2426	2422	2450	2402	2428	2424	2454	2406	2432
2442	2480	2414	2440	2444	2402	2416	2442	2446	2406	2418	2444	2448	2410	2438	2446
2472	2428	2450	2466	2476	2432	2454	2468	2478	2434	2456	2470	2480	2436	2458	2472
2426	2462	2406	2458	2428	2464	2410	2460	2432	2466	2414	2462	2434	2468	2418	2464
Group 25				Group 26				Group 27				Group 28			
2426	2456	2410	2434	2428	2458	2412	2436	2432	2460	2414	2438	2434	2462	2416	2440
2450	2414	2440	2448	2454	2416	2442	2450	2456	2418	2444	2454	2458	2420	2446	2456
2402	2438	2460	2476	2404	2440	2462	2478	2406	2442	2464	2480	2410	2444	2466	2402
2436	2470	2420	2466	2438	2472	2422	2468	2440	2476	2424	2470	2442	2478	2426	2472
Group 29				Group 30				Group 31				Group 32			
2436	2464	2418	2442	2438	2466	2420	2444	2440	2468	2422	2446	2442	2470	2424	2448
2460	2422	2448	2458	2462	2424	2450	2460	2464	2426	2454	2462	2466	2428	2456	2464
2412	2446	2468	2404	2414	2448	2470	2406	2416	2450	2472	2438	2418	2454	2476	2440
2444	2480	2428	2476	2446	2402	2432	2478	2448	2478	2434	2480	2450	2480	2436	2404
Group 33				Group 34				Group 35				Group 36			
2444	2476	2426	2450	2446	2476	2428	2454	2448	2478	2432	2458	2450	2480	2434	2460
2468	2432	2458	2466	2470	2434	2460	2468	2472	2436	2462	2470	2470	2438	2464	2472
2420	2456	2478	2442	2422	2458	2480	2444	2424	2460	2402	2446	2426	2466	2404	2448
2454	2402	2438	2406	2456	2404	2440	2418	2464	2406	2442	2420	2464	2410	2444	2422

Note: The EUT 16 channels of each sequence, total 32 sequences are used.

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Printed	N/A	0



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 NOTE (1)

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
-	" N/A" denotes test is not applicable in this test report.

For Radiated Emission	
Final Test Mode	Description
Mode 1	TX Mode NOTE (1)

Note:

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

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

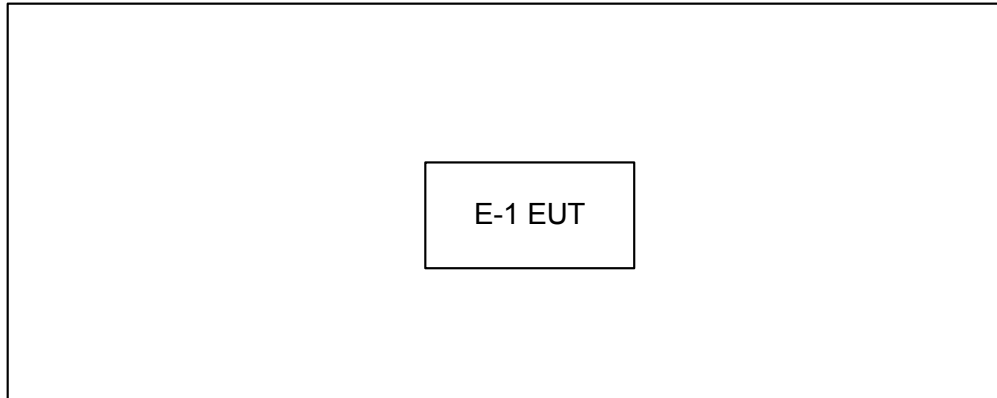
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

Test software Version	N/A		
Frequency	2402MHz	2440MHz	2480MHz
Parameters-500Kbps	N/A	N/A	N/A



3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated :





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	Facilitator Control Unit	N/A	N/A	PKX1301GAMFZ	N/A	EUT

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	May.04.2013
2	LISN	R&S	ENV216	100087	May.04.2013
3	Test Cable	N/A	C_17	N/A	Mar.28.2013
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	May.04.2013
5	50Ω Terminator	SHX	TF2-3G-A	08122902	May.04.2013

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

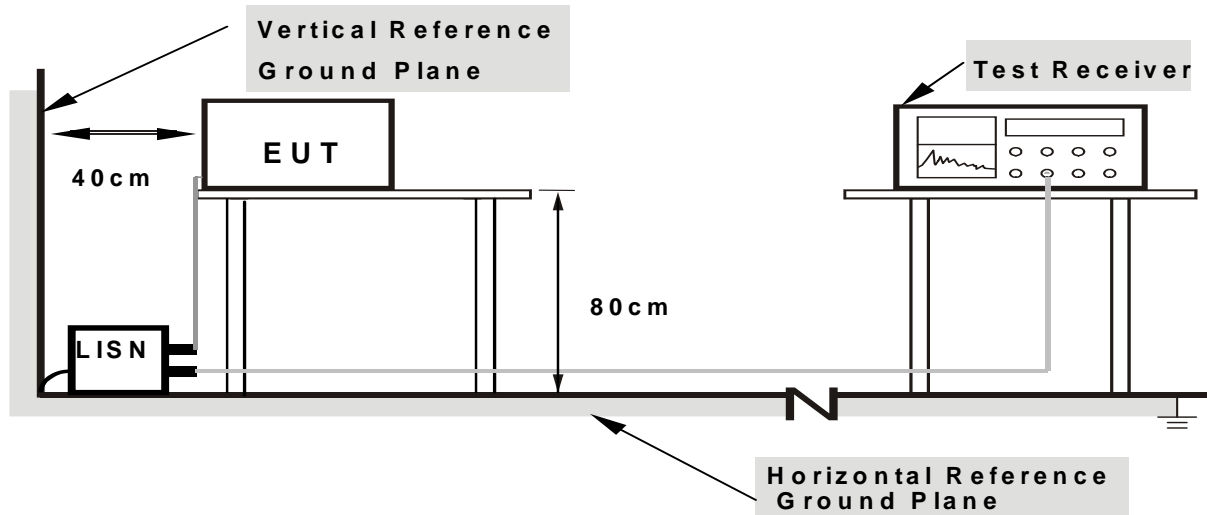
4.1.3 TEST PROCEDURE

- 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

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	-	Relative Humidity :	-
Pressure :	-	Test Power :	-
Test Mode :	" N/A" denotes test is not applicable in this test report.		

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.



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 th harmonic of the highest frequency or 40 GHz, whichever is lower



4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	May.25.2013
2	Amplifier	HP	8447D	2944A09673	May.04.2013
3	Test Receiver	R&S	ESCI	100382	May.04.2013
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2013
5	Antenna	ETS	3115	00075789	May.25.2013
6	Amplifier	Agilent	8449B	3008A02274	May.04.2013
7	Spectrum	Agilent	E4408B	US39240143	Nov.25.2012
8	Test Cable	HUBER+SUHNER	C-45	N/A	May.02.2013
9	Controller	CT	SC100	N/A	N/A
10	Active Loop Antenna	R&S	HFH2-Z2	830749/020	May.04.2013
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.12.2013
12	Horn Antenna	EMCO	3115	9605-4803	May.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
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

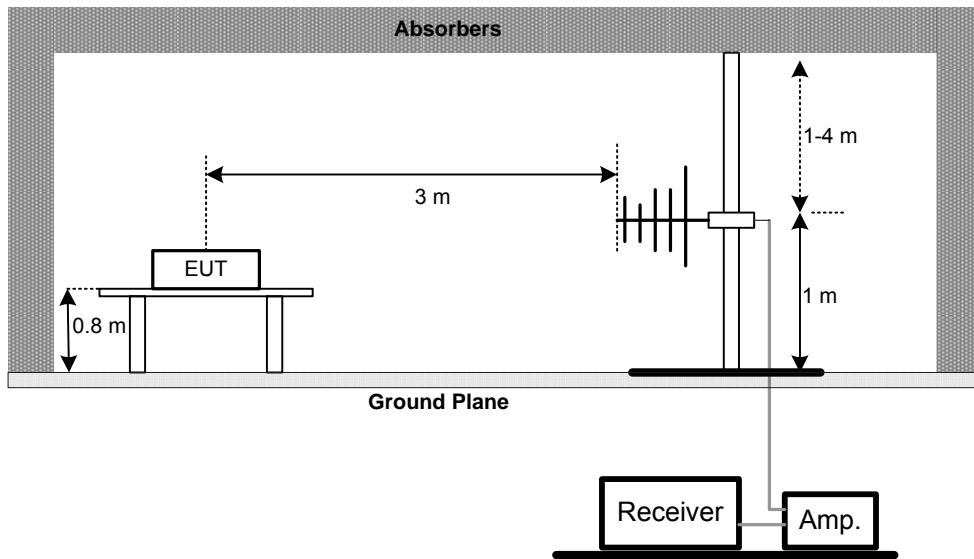
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at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

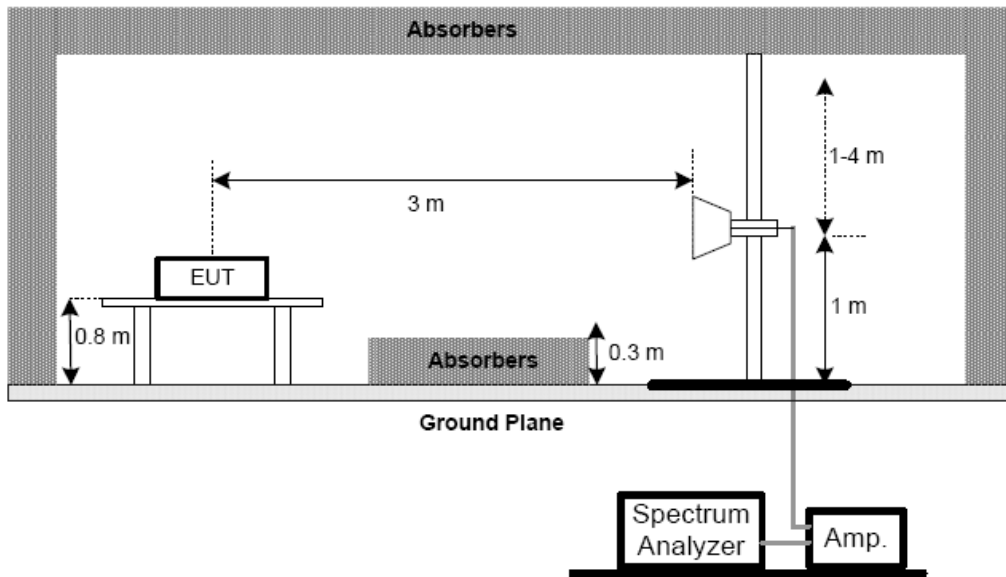
No deviation

4.2.5 TEST SETUP

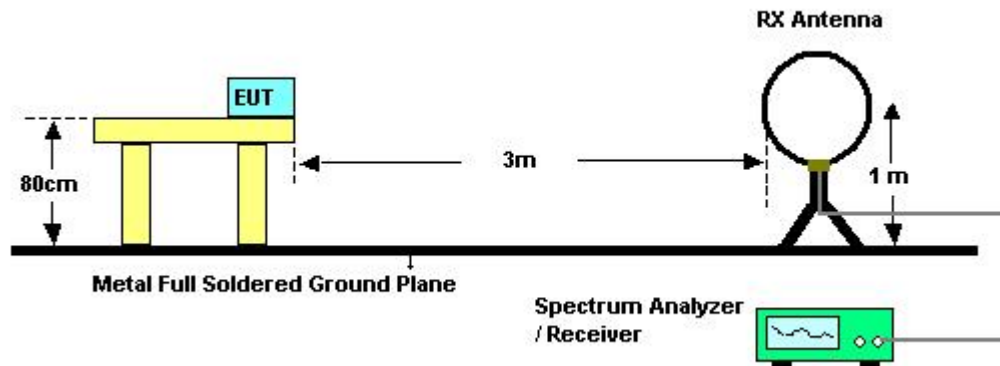
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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.



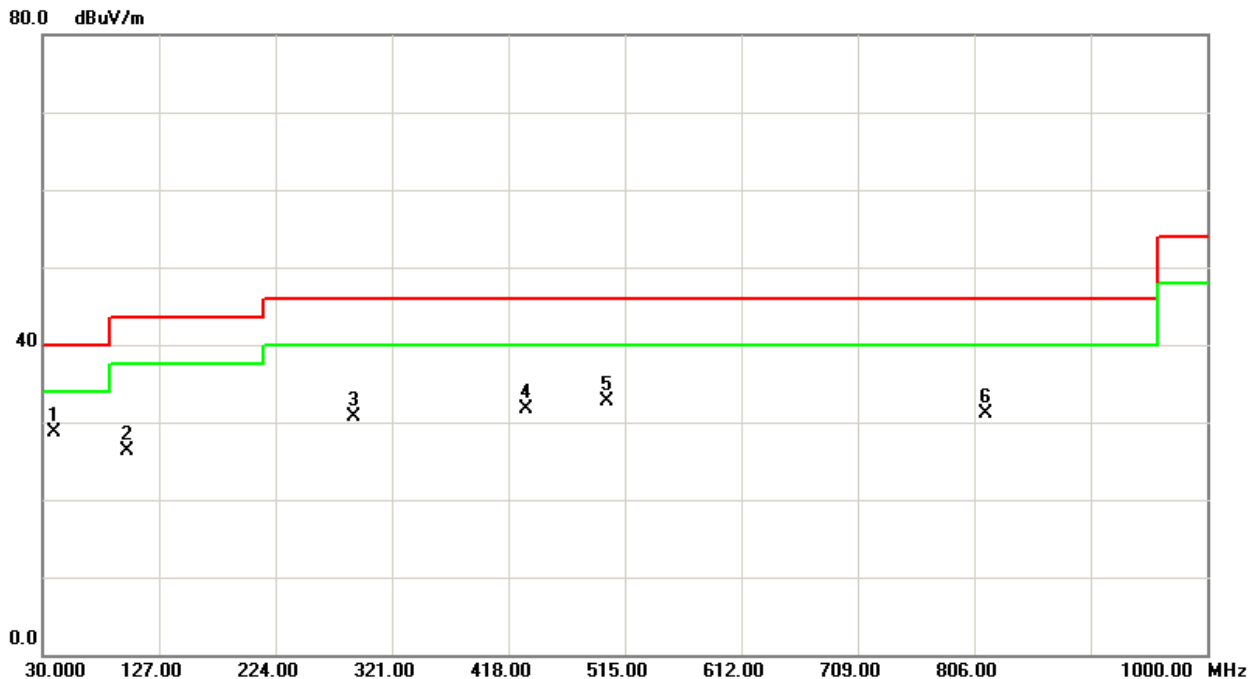
4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX Mode 2402MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
39.70	V	45.59	-16.83	28.76	40.00	- 11.24	
100.33	V	44.62	-18.41	26.21	43.50	- 17.29	
289.48	V	42.73	-12.08	30.65	46.00	- 15.35	
432.55	V	40.15	-8.43	31.72	46.00	- 14.28	
500.45	V	40.04	-7.34	32.70	46.00	- 13.30	
815.70	V	32.76	-1.56	31.20	46.00	- 14.80	

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 ◦



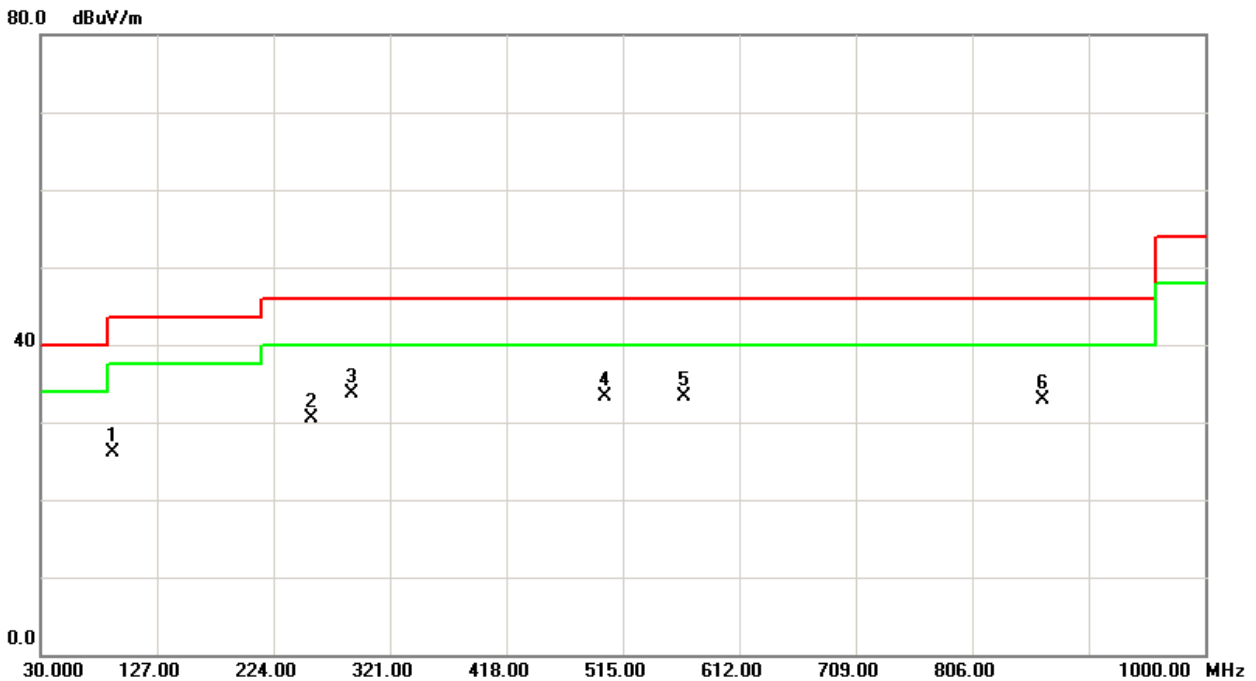


EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX Mode 2402MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
90.63	H	45.06	-19.00	26.06	43.50	- 17.44	
255.53	H	44.71	-14.18	30.53	46.00	- 15.47	
289.48	H	45.75	-12.08	33.67	46.00	- 12.33	
500.45	H	40.71	-7.34	33.37	46.00	- 12.63	
565.93	H	38.31	-5.10	33.21	46.00	- 12.79	
864.20	H	33.49	-0.65	32.84	46.00	- 13.16	

Remark :

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





4.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2402MHz – CH01		

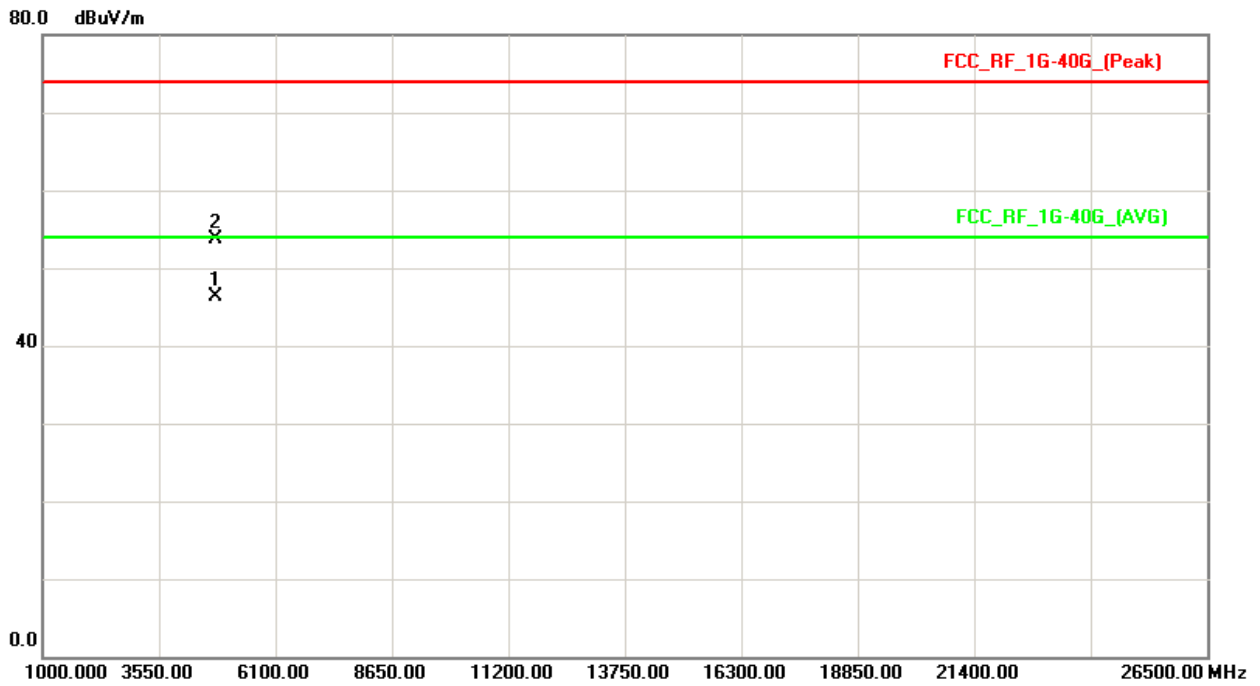
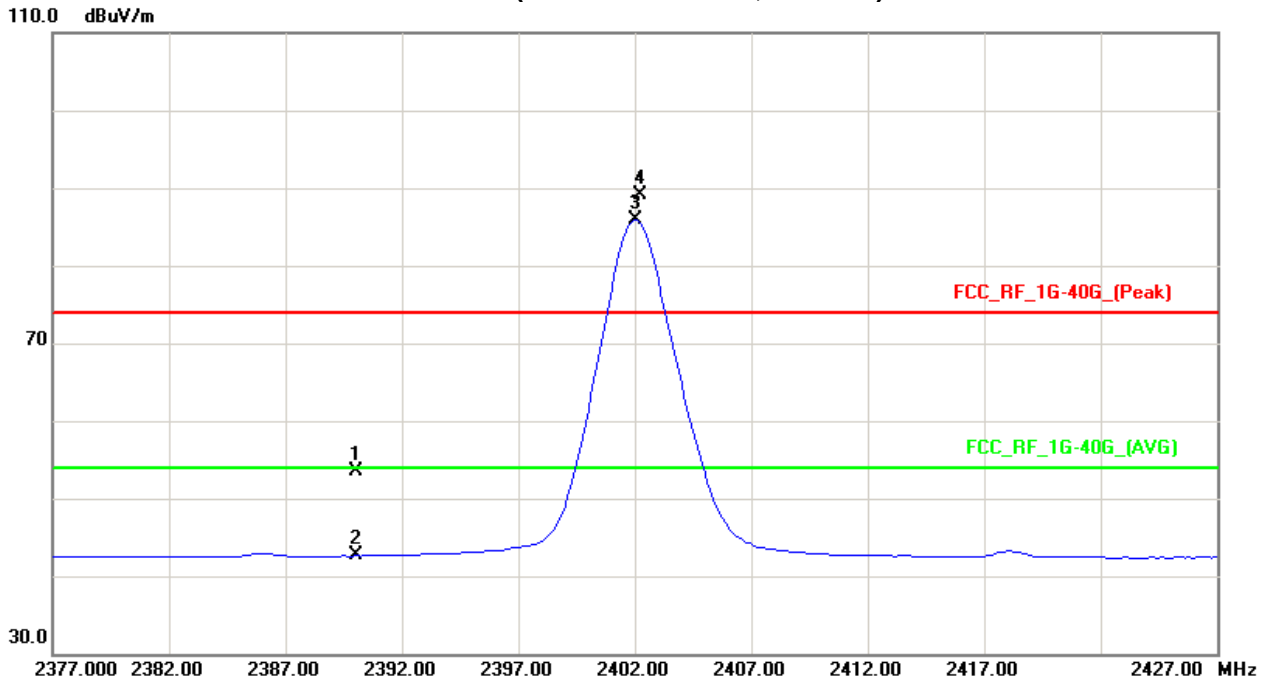
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2390.00	V	21.17	10.33	32.28	53.45	42.61	74.00	54.00	-20.55	-11.39	X/E
2402.25	V	56.78	53.63	32.27	89.05	85.90					X/F
4804.30	V	47.52	40.26	6.11	53.63	46.37	74.00	54.00	-20.37	-7.63	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 CH01(Above 1000 MHz, Vertical)





EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2402MHz – CH01		

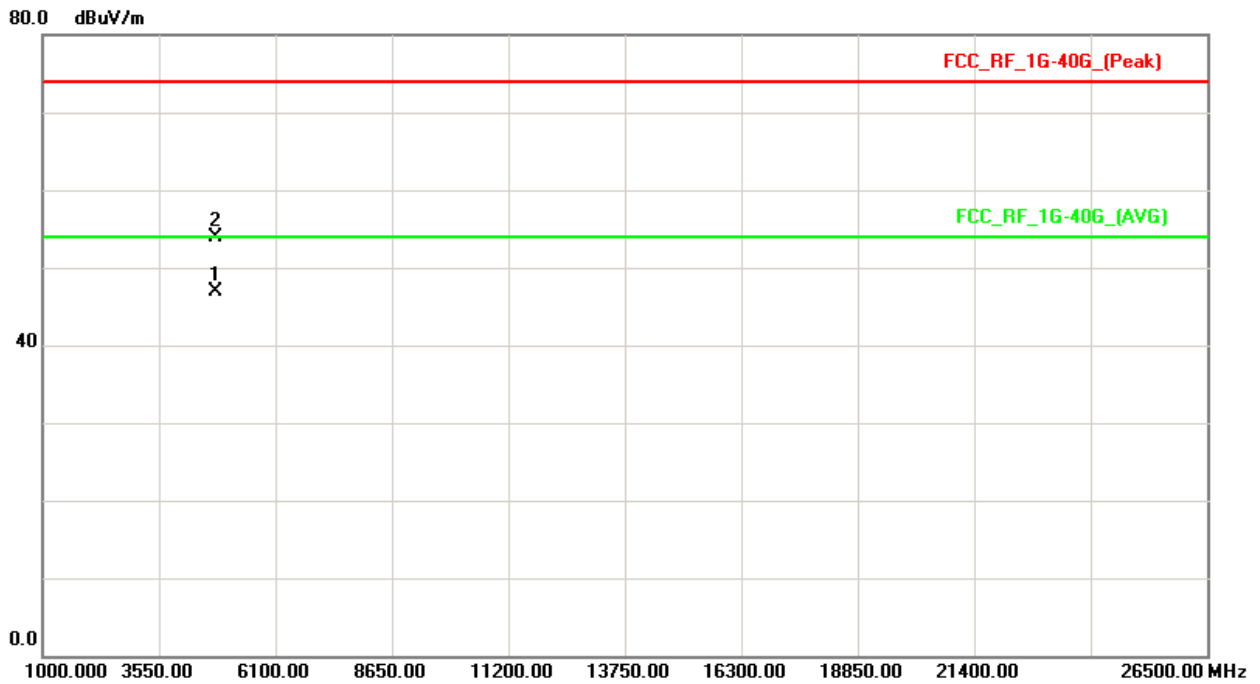
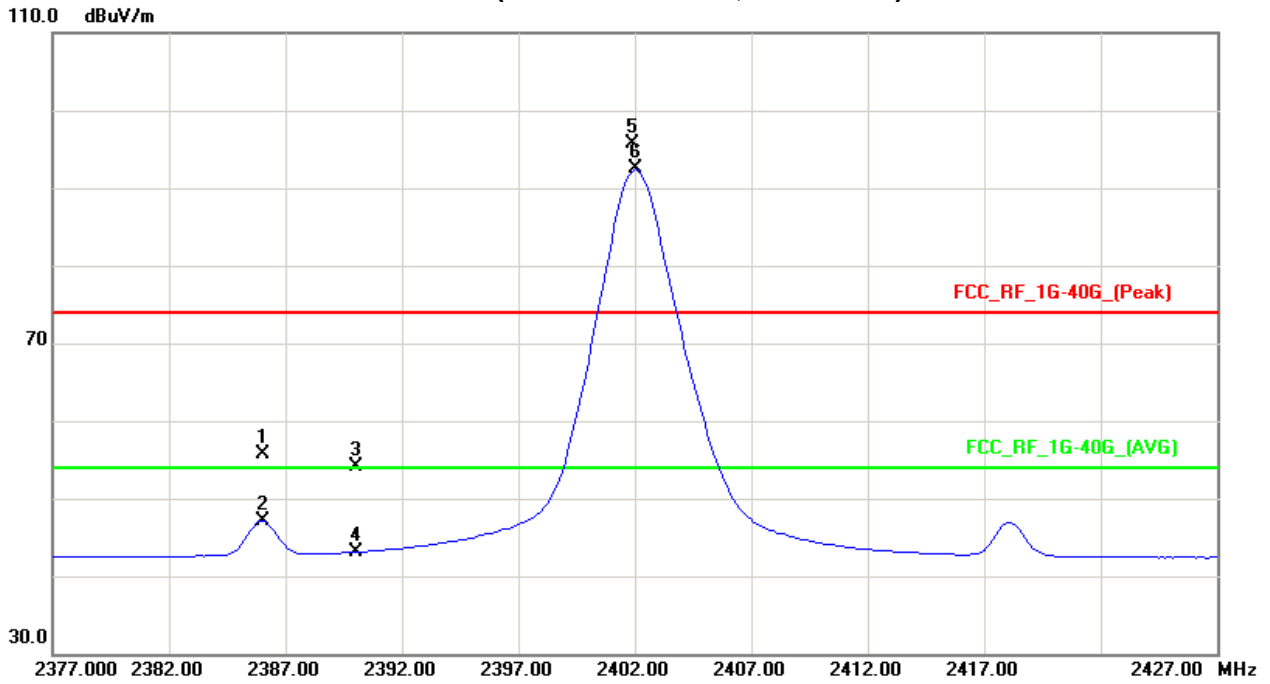
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2386.00	H	23.33	14.76	32.29	55.62	47.05	74.00	54.00	-18.38	-6.95	X/E
2390.00	H	21.78	10.80	32.28	54.06	43.08	74.00	54.00	-19.94	-10.92	X/E
2401.88	H	63.51	60.15	32.27	95.78	92.42					X/F
4804.45	H	47.88	40.80	6.11	53.99	46.91	74.00	54.00	-20.01	-7.09	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 CH01(Above 1000 MHz, Horizontal)





EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2440MHz –CH20		

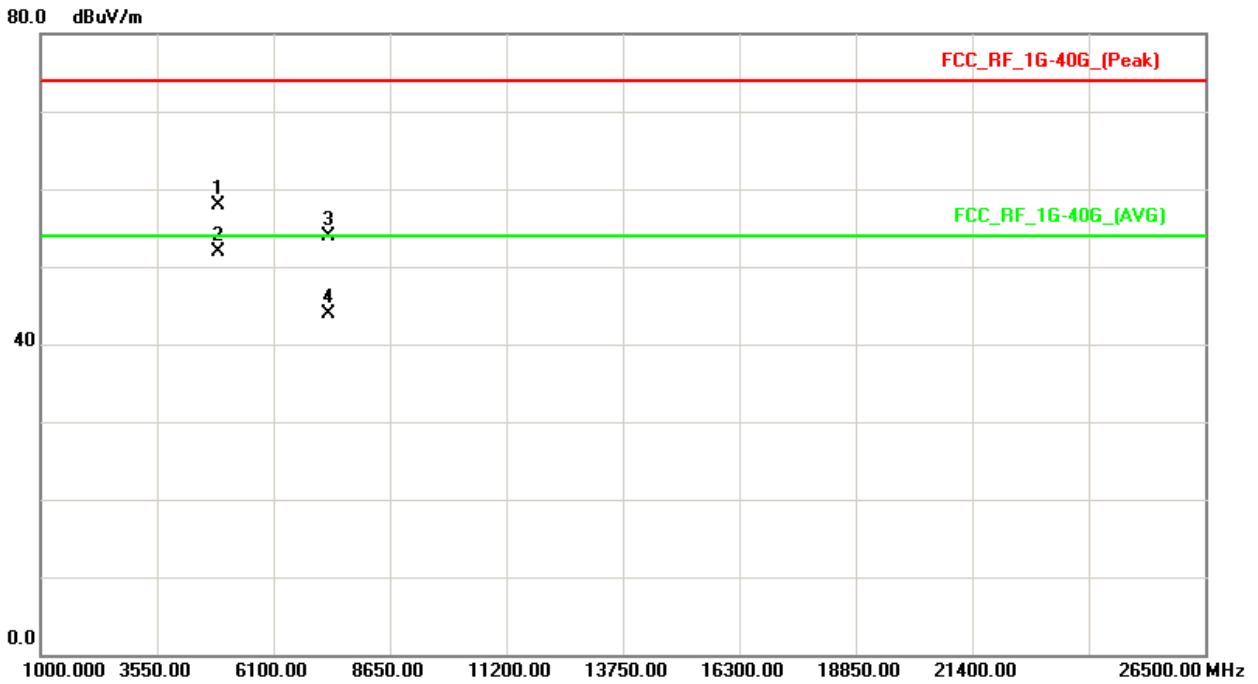
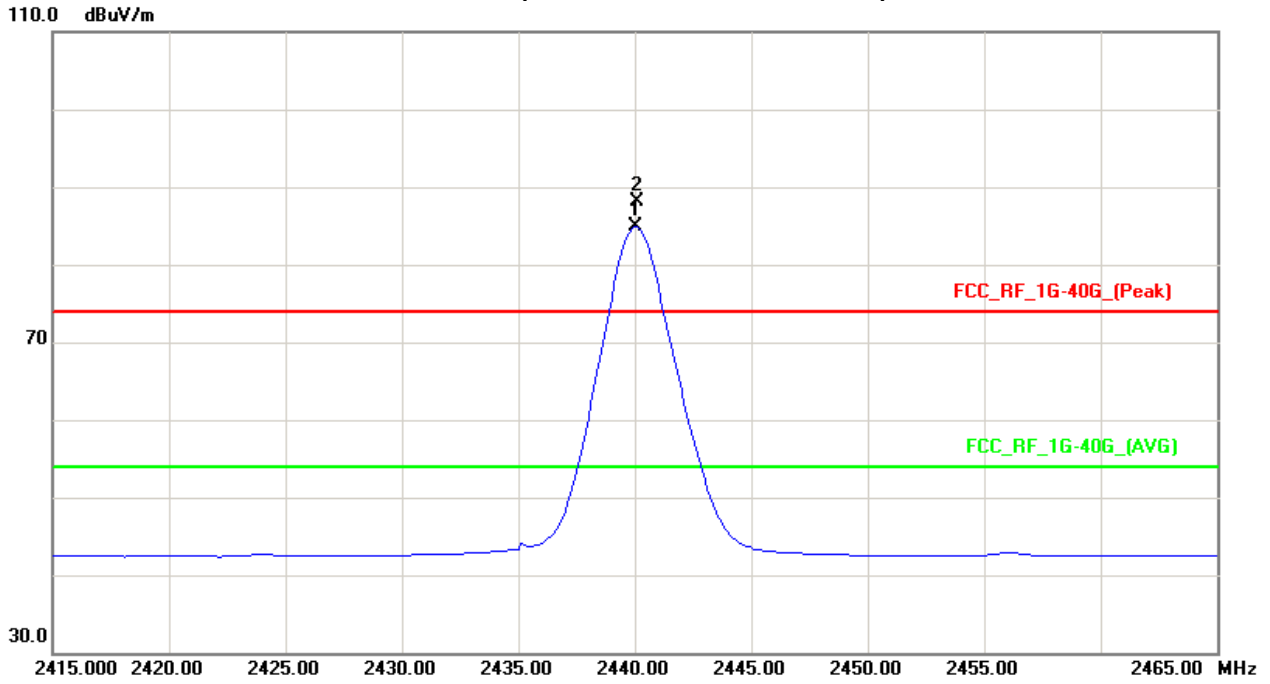
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2440.13	V	55.80	52.70	32.22	88.02	84.92					X/F
4879.50	V	51.47	45.49	6.42	57.89	51.91	74.00	54.00	-16.11	-2.09	X/H
7319.20	V	41.48	31.47	12.36	53.84	43.83	74.00	54.00	-20.16	-10.17	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 CH20 (Above 1000 MHz, Vertical)





EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2440MHz –CH20		

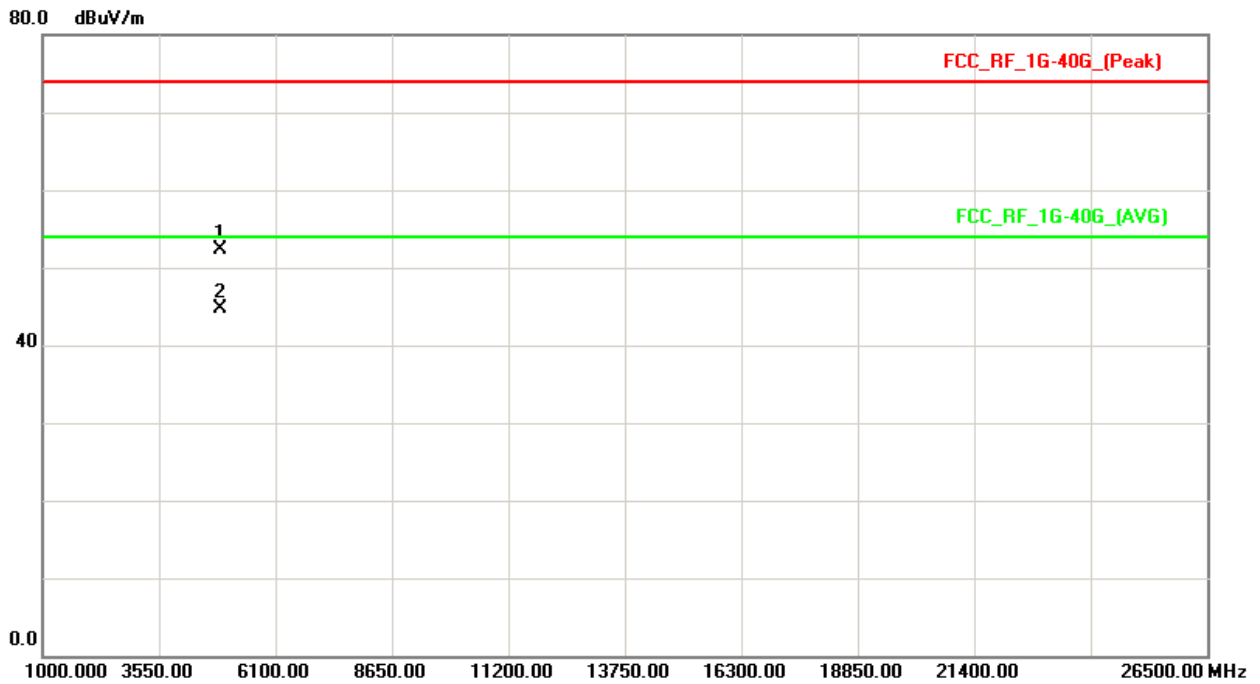
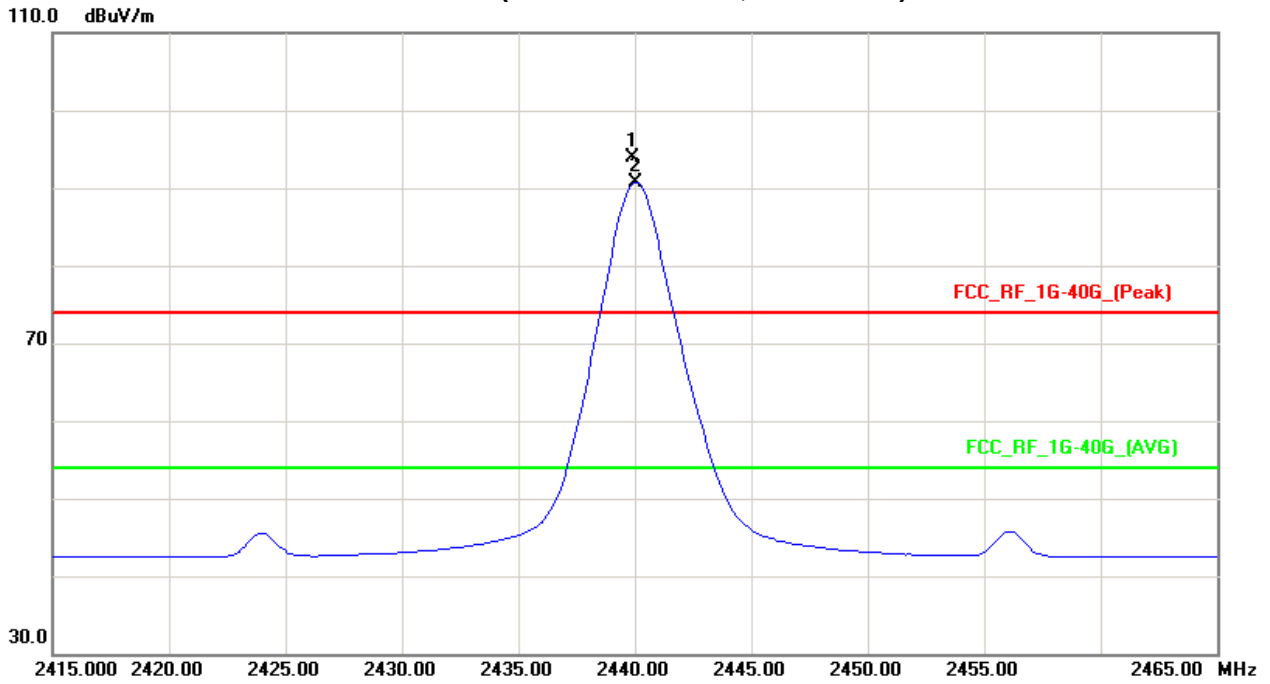
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.		Limit		Margin		Note
		Peak (dBuV)	AV (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	
2439.88	H	61.78	58.47	32.22	94.00	90.69					X/F
4879.60	H	45.86	38.19	6.42	52.28	44.61	74.00	54.00	-21.72	-9.39	X/H

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 CH20 (Above 1000 MHz, Horizontal)





EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2480MHz –CH40		

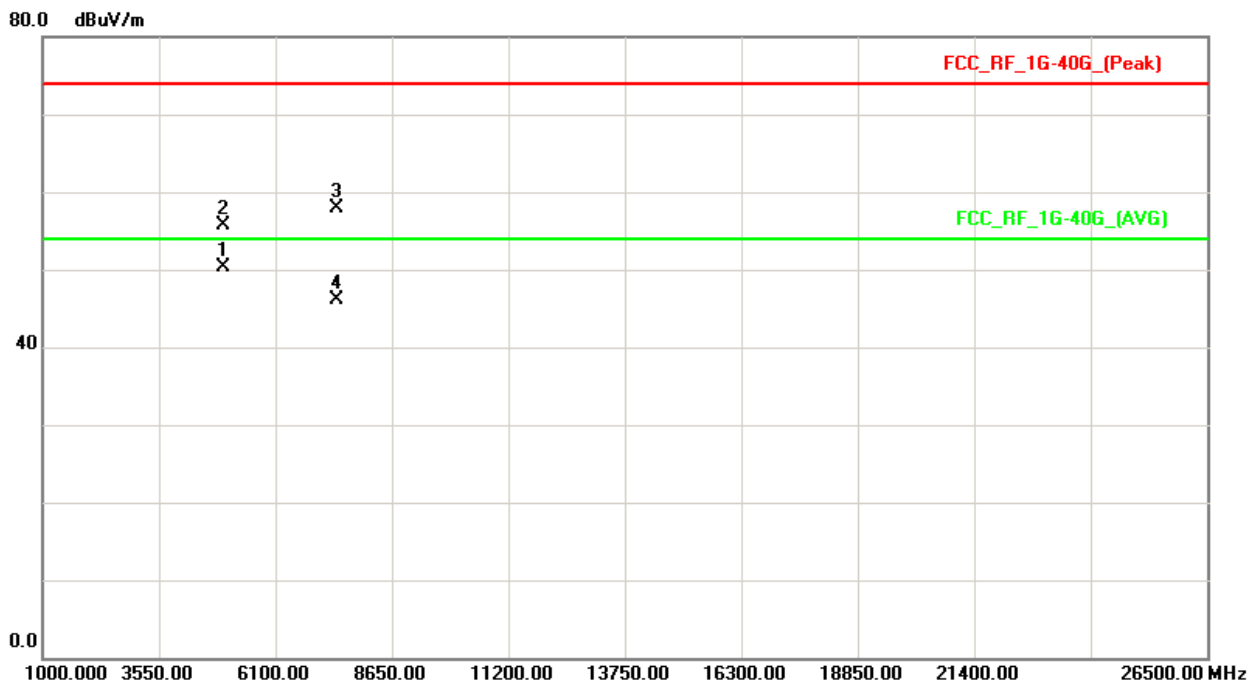
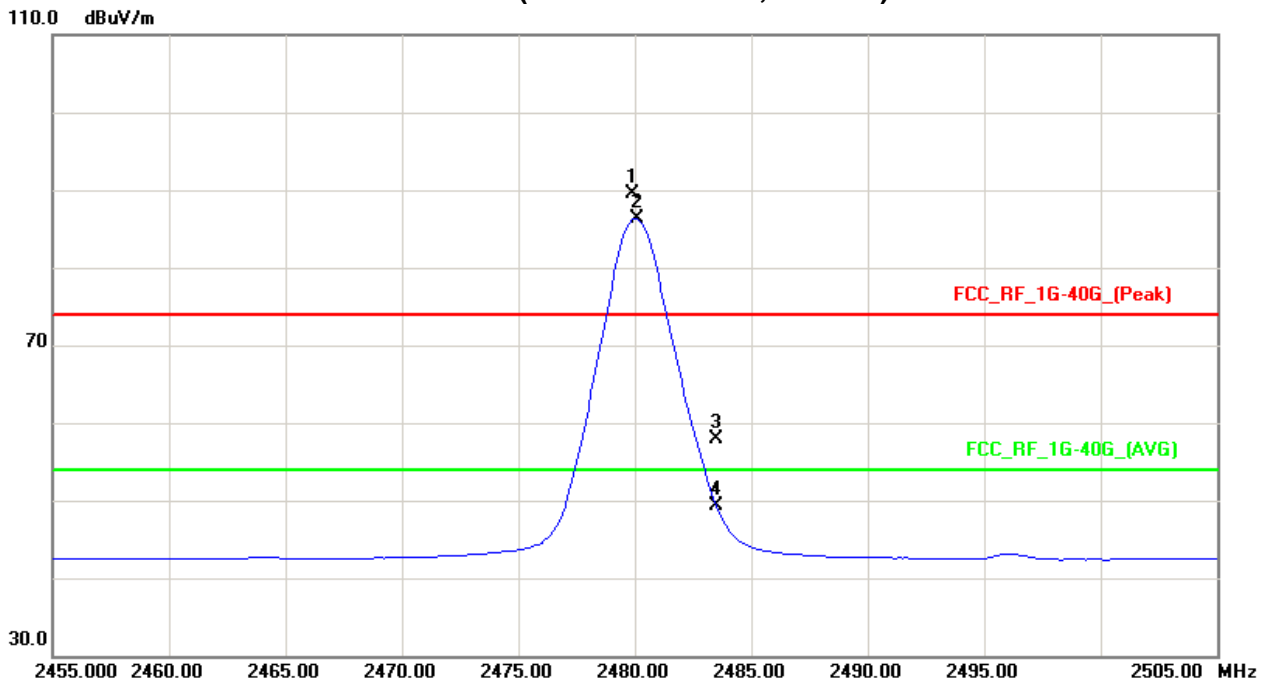
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Margin		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2479.88	V	57.40	54.20	32.18	89.58	86.38					X/F
2483.50	V	25.65	17.22	32.17	57.82	49.39	74.00	54.00	-16.18	-4.61	X/E
4960.50	V	48.92	43.58	6.75	55.67	50.33	74.00	54.00	-18.33	-3.67	X/H
7439.25	V	45.54	33.59	12.43	57.97	46.02	74.00	54.00	-16.03	-7.98	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 CH40 (Above 1000 MHz, Vertical)





EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	DC 4.5V
Test Mode :	TX 2480MHz –CH40		

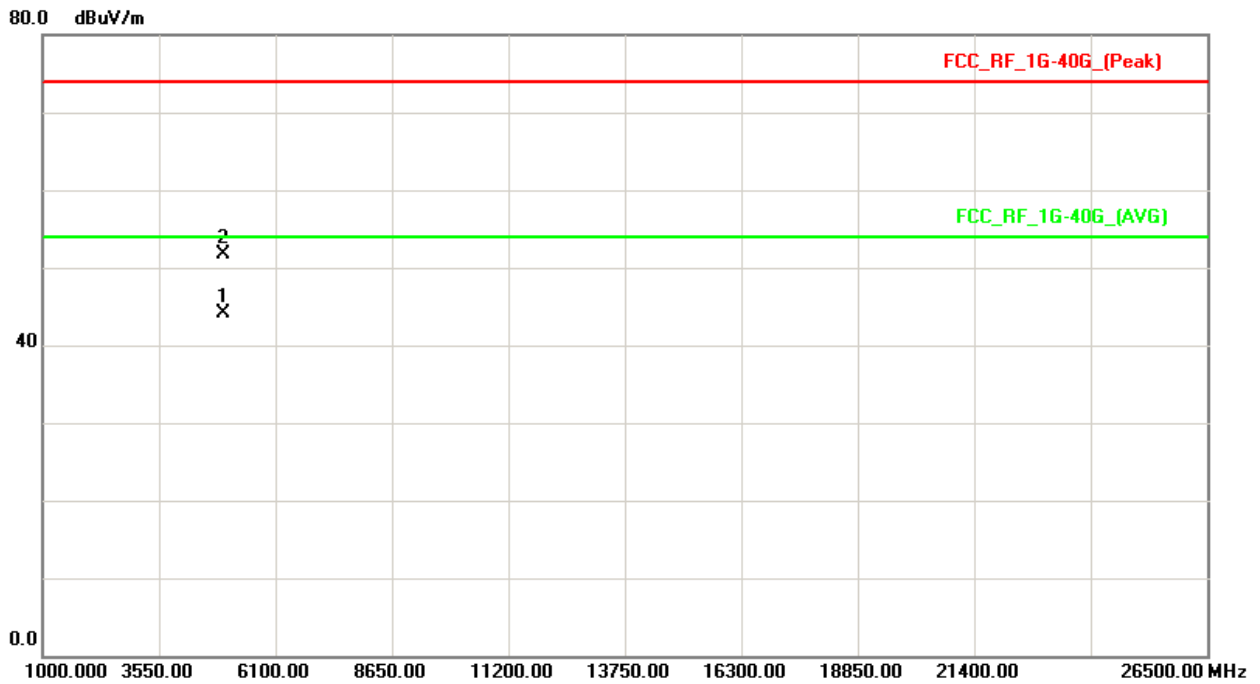
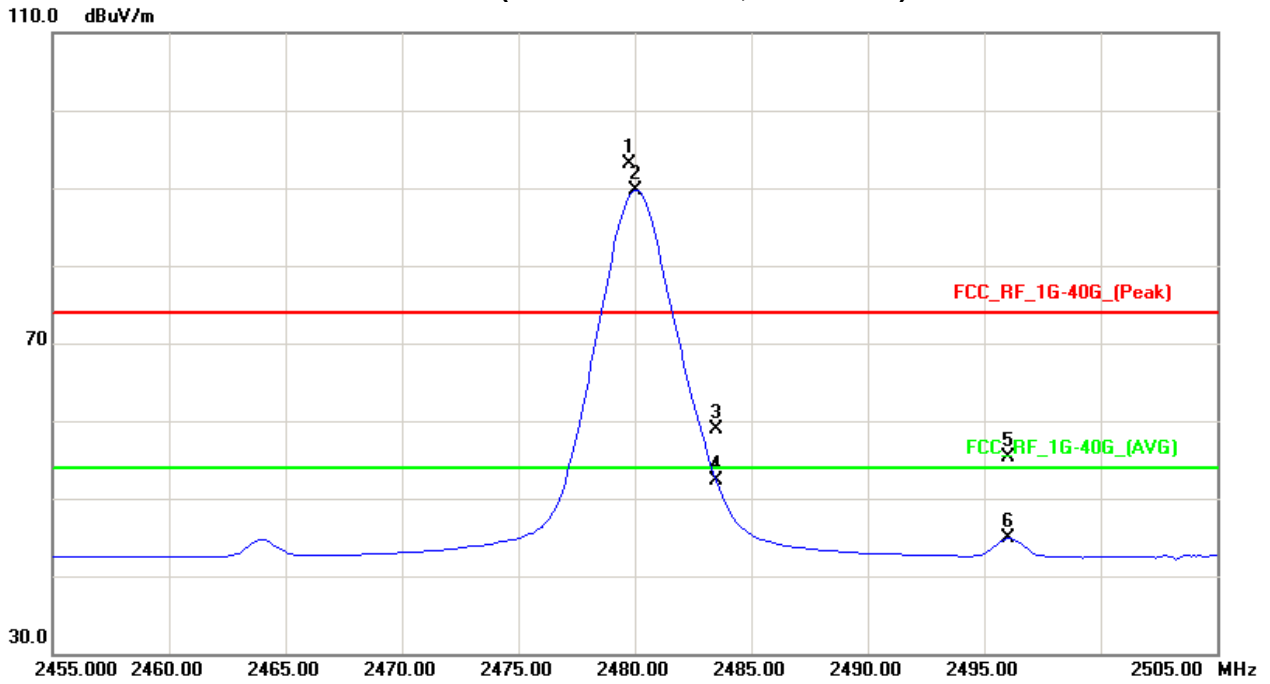
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Margin		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2479.75	H	60.87	57.58	32.18	93.05	89.76					X/F
2483.50	H	26.66	20.15	32.17	58.83	52.32	74.00	54.00	-15.17	-1.68	X/E
2496.00	H	23.23	12.70	32.17	55.40	44.87	74.00	54.00	-18.60	-9.13	X/E
4960.35	H	44.97	37.39	6.74	51.71	44.13	74.00	54.00	-22.29	-9.87	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 CH40 (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.25.2012

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

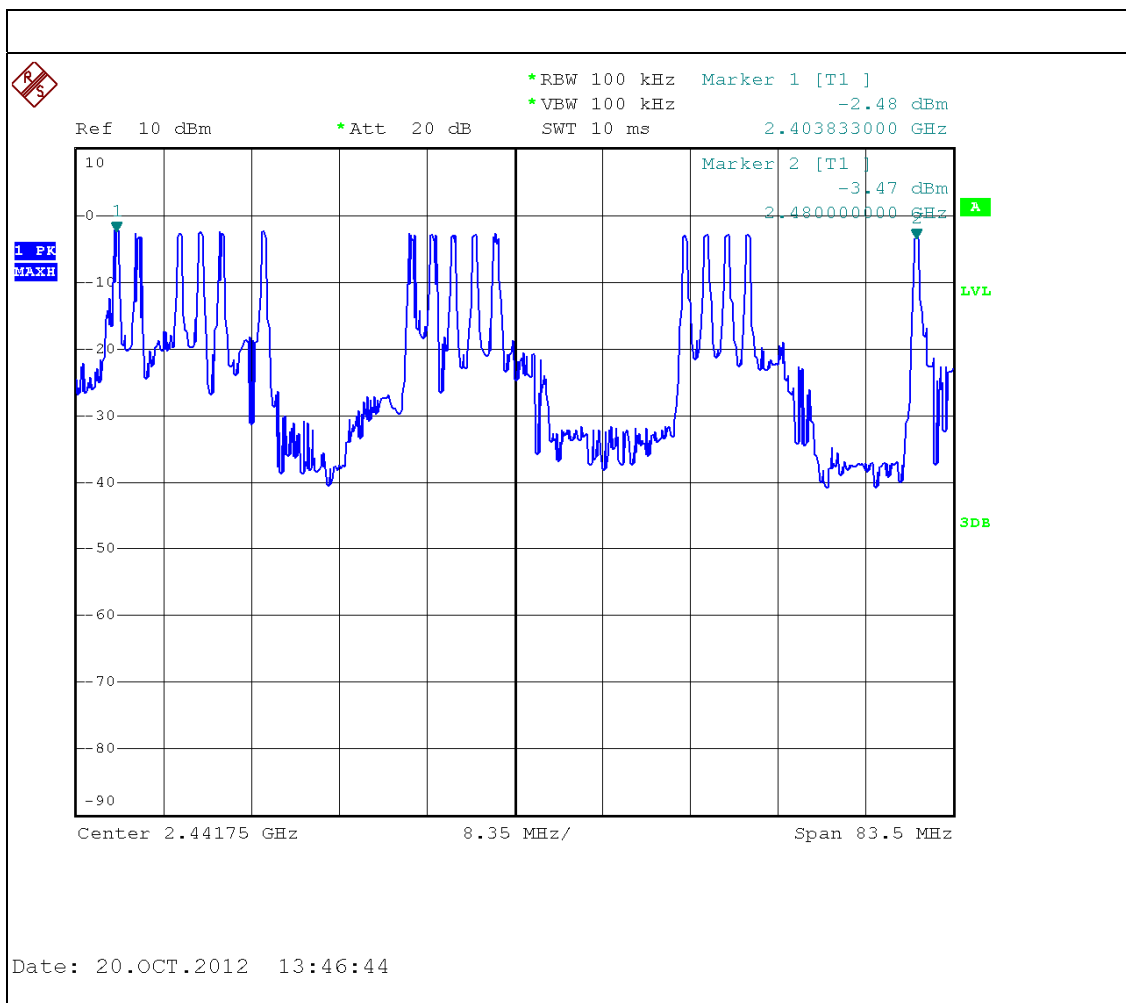
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



5.1.6 TEST RESULTS

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	Hopping Mode		

Number of Hopping Channel	16
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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

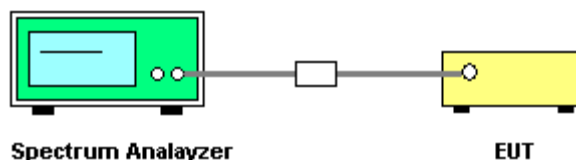
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.25.2012

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

- The transmitter output (antenna port) was connected to the spectrum analyzer
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.
- Set the EUT for packet transmitting.
- Measure the maximum time duration of one single pulse.
- 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

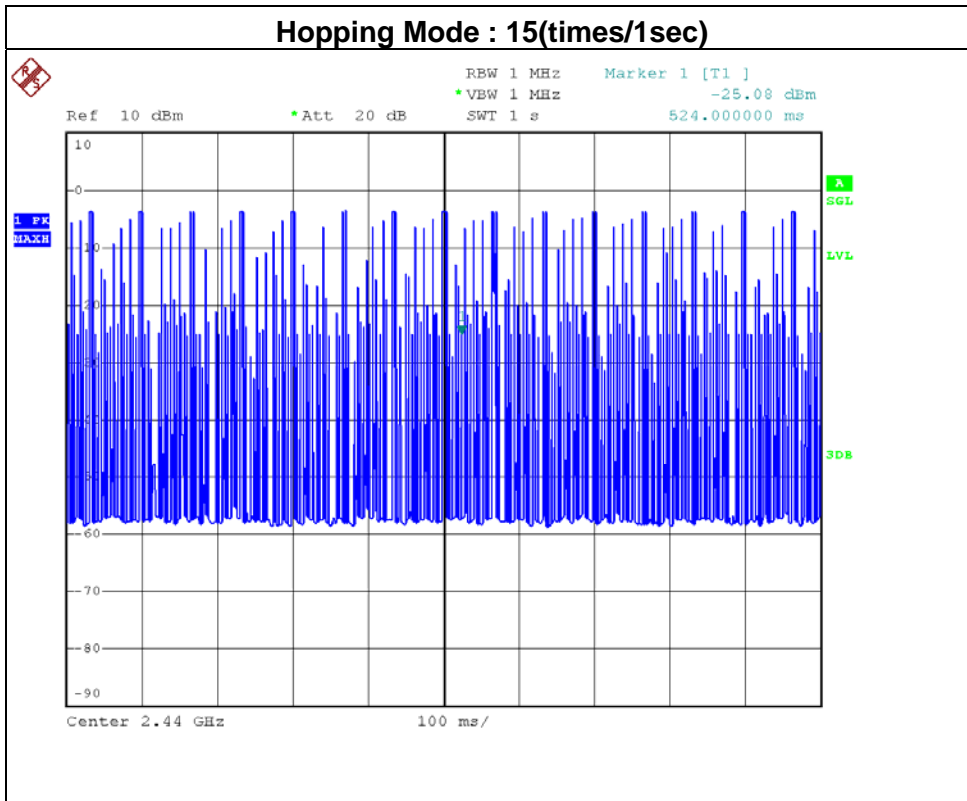
EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	Hopping Mode		

Mode	Number of transmission in a 6.4 (16Hopping*0.4)	Length of transmission time (msec)	Result (msec)	Limit (msec)
2402 MHz	(15/1) *6.4=96 times Note1	4.24	119.04	400

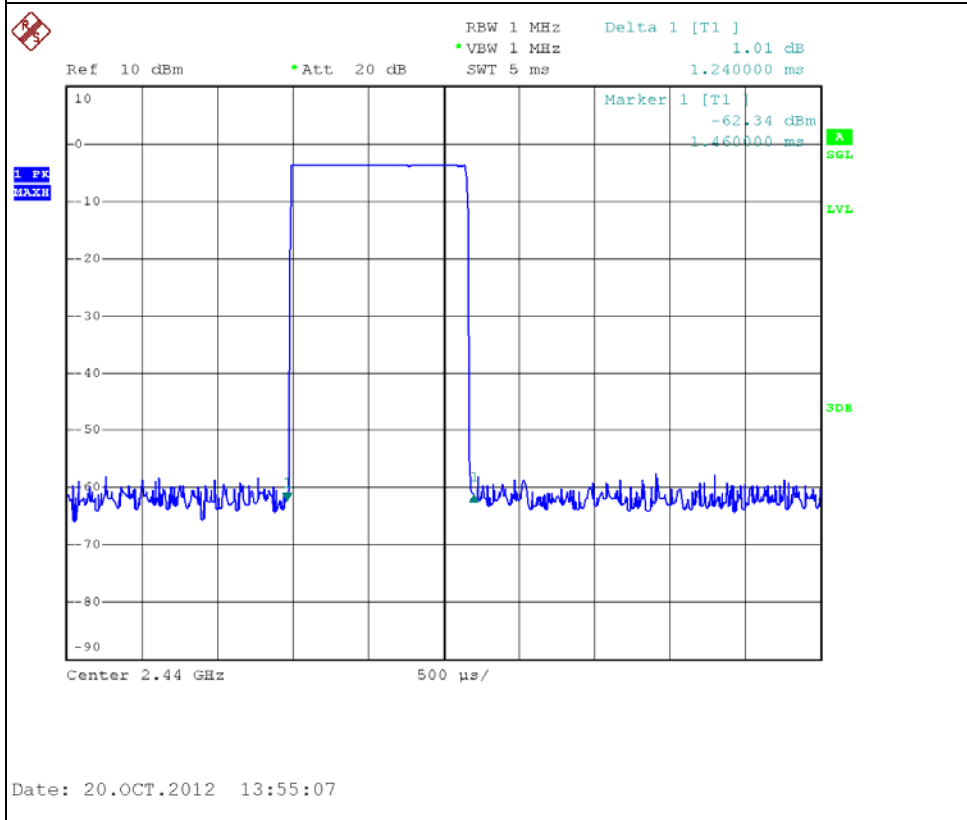
Note1: 15 times of occupied channels per 1 second.

Note2: The EUT 16 channels of each sequence, total 36 sequences are used.

	Results
Measured cycle (sec)	16 CH*0.4=6.4
The total number of frequency-hopping per second	((15/1)*16)=240
The number of occupied channels per second	240/16=15(number/sec)
occupied time for each channel(1)	1.24ms
The total number of channels occupied within one cycle (2)	(15/1) *6.4=96 times
The average time of occupancy within one cycle(1)*(2)	119.04msec
LIMIT (msec)	400msec



Date: 20.OCT.2012 13:54:32



Date: 20.OCT.2012 13:55:07

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.25.2012

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

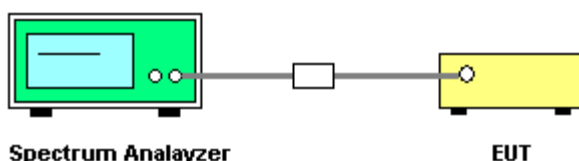
7.1.2 TEST PROCEDURE

- 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) \geq 1% of the span
 Video (or Average) Bandwidth (VBW) \geq 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.

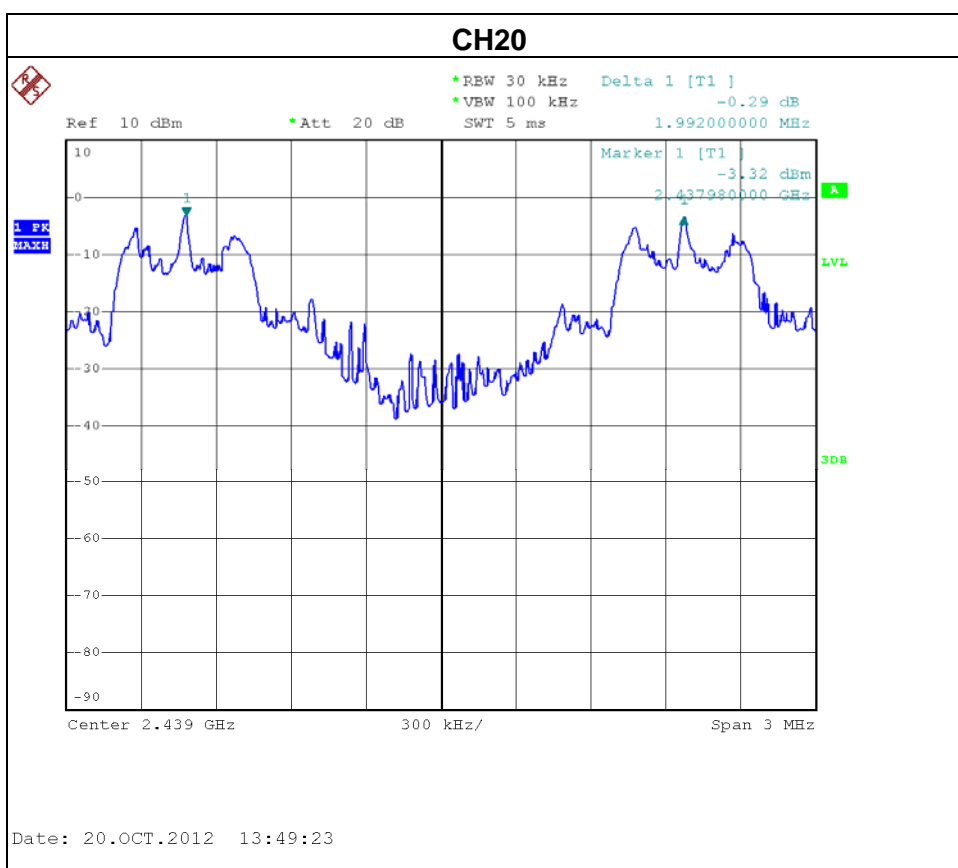


7.1.6 TEST RESULTS

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	CH20		

Frequency	Ch. Separation (MHz)	20dB Bandwidth (MHz)	Result
2440MHz	1.992	1.07	Complies

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	Limit	Frequency Range (MHz)	Result
15.247 (a)(2)	Bandwidth	<= 1 MHz (20dB 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.25.2012

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

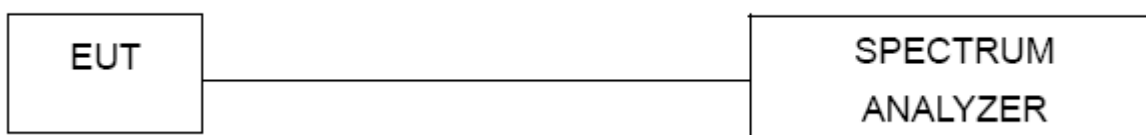
8.1.2 TEST PROCEDURE

- 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

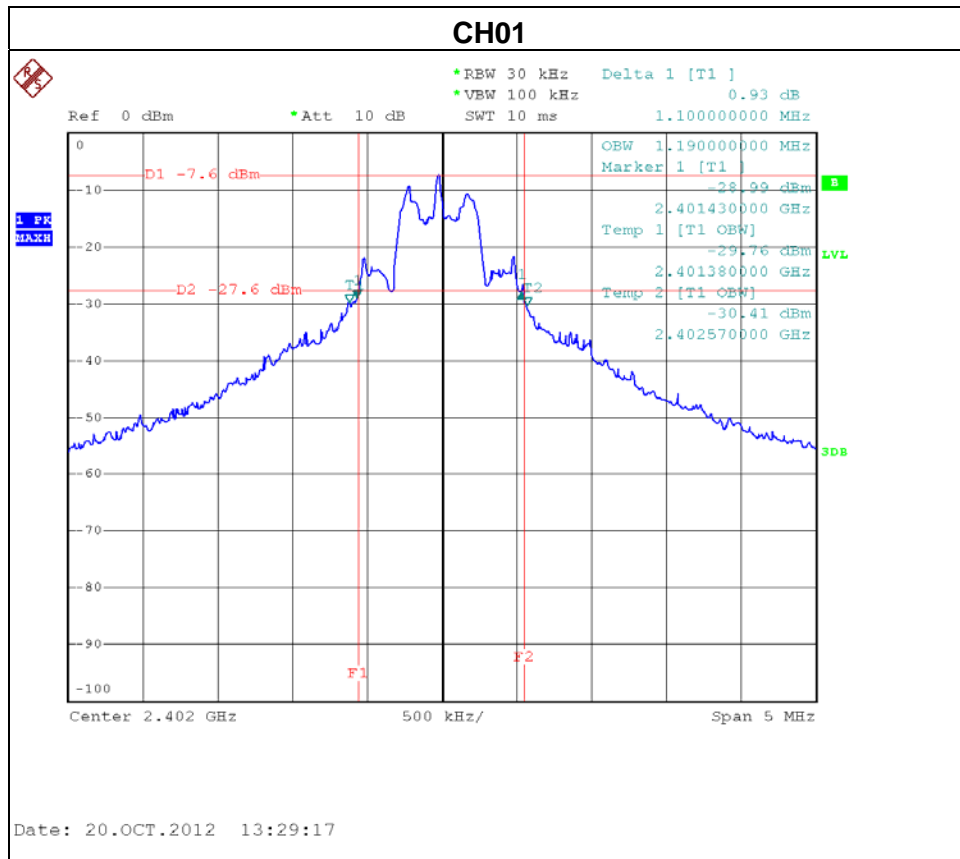
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

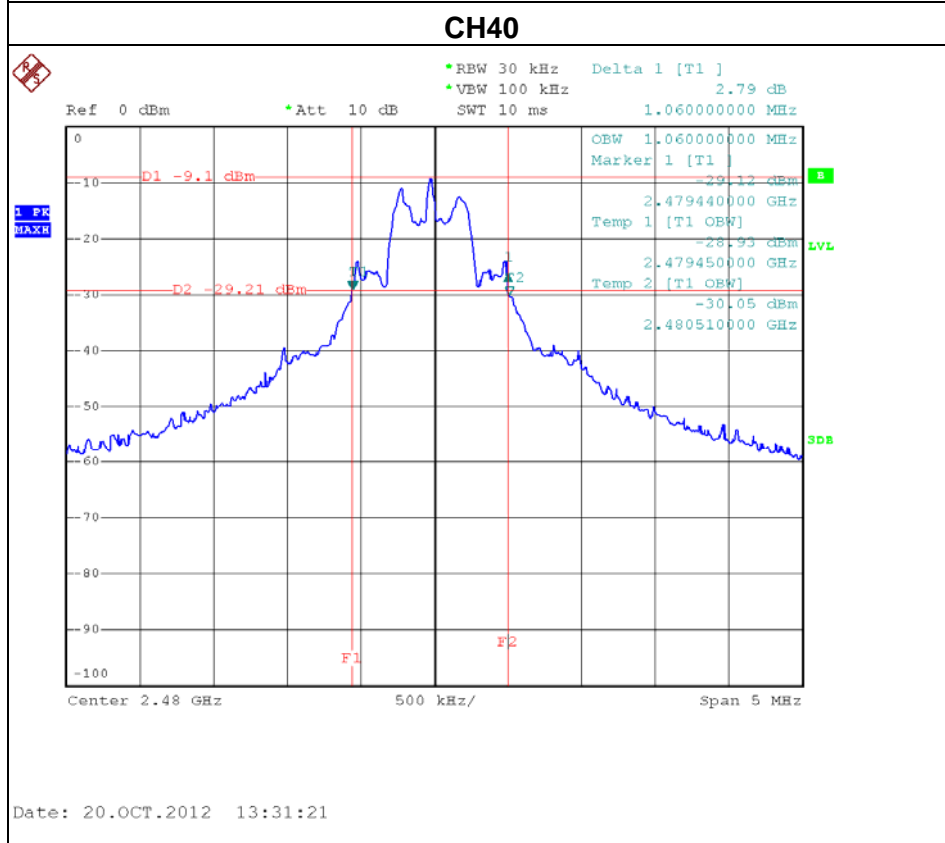
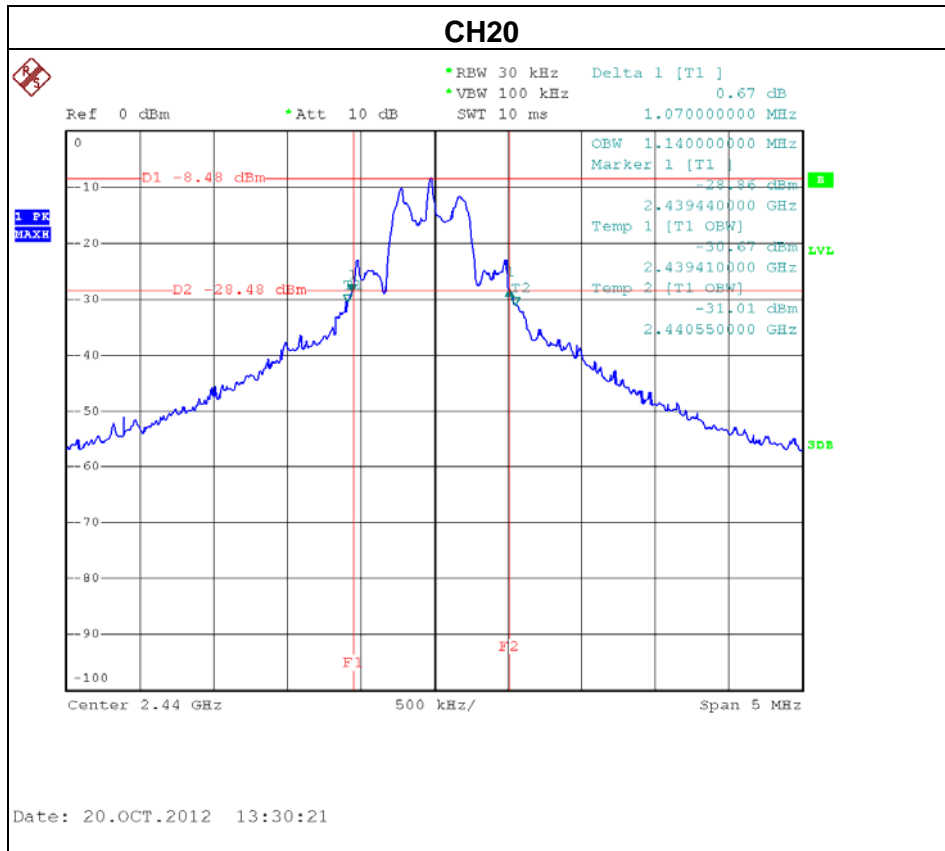


8.1.6 TEST RESULTS

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	CH01 / CH20 /CH40		

Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Channel Separation (MHz)	Result
2402	1.10	1.19	<= 1MHz	PASS
2440	1.07	1.14	<= 1MHz	PASS
2480	1.06	1.06	<= 1MHz	PASS







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.25.2012

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

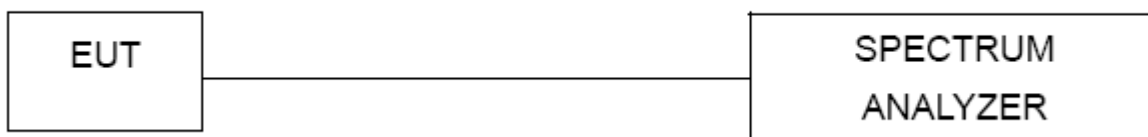
9.1.2 TEST PROCEDURE

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

9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

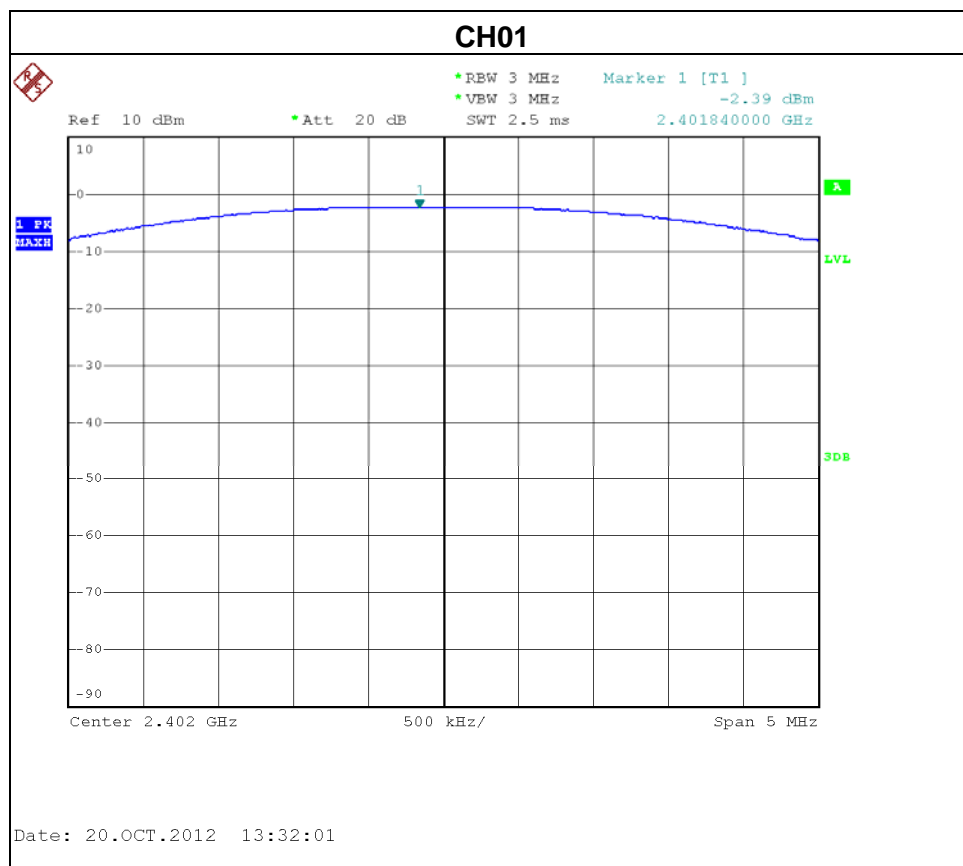
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

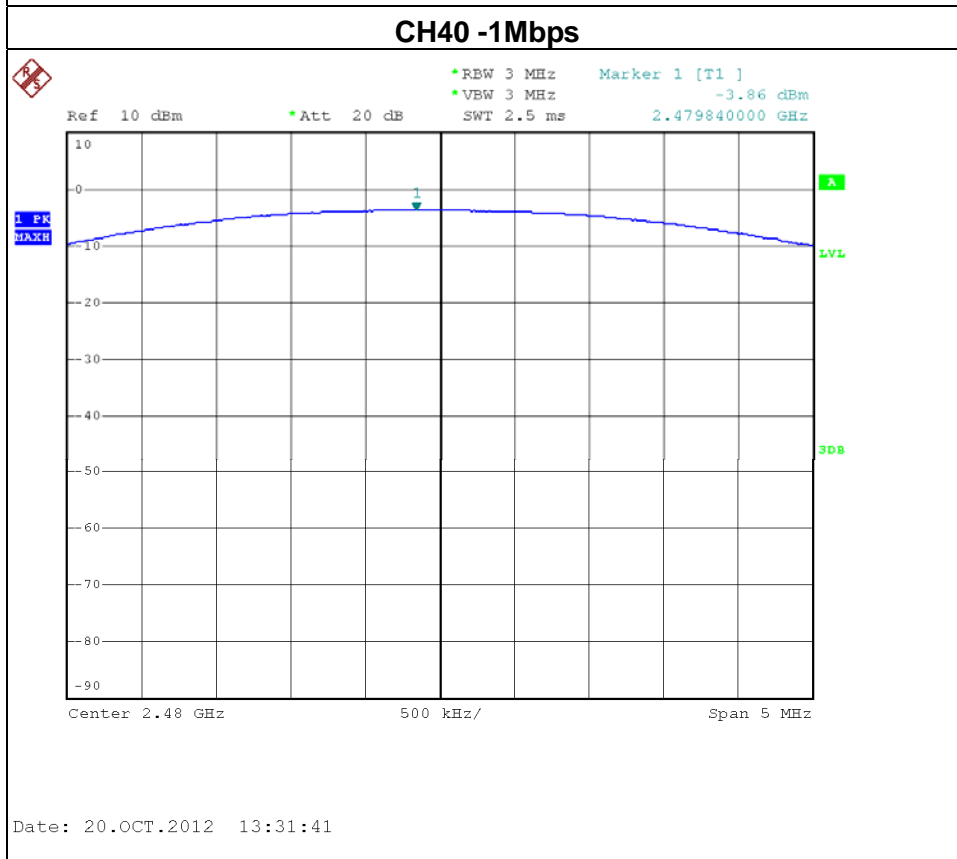
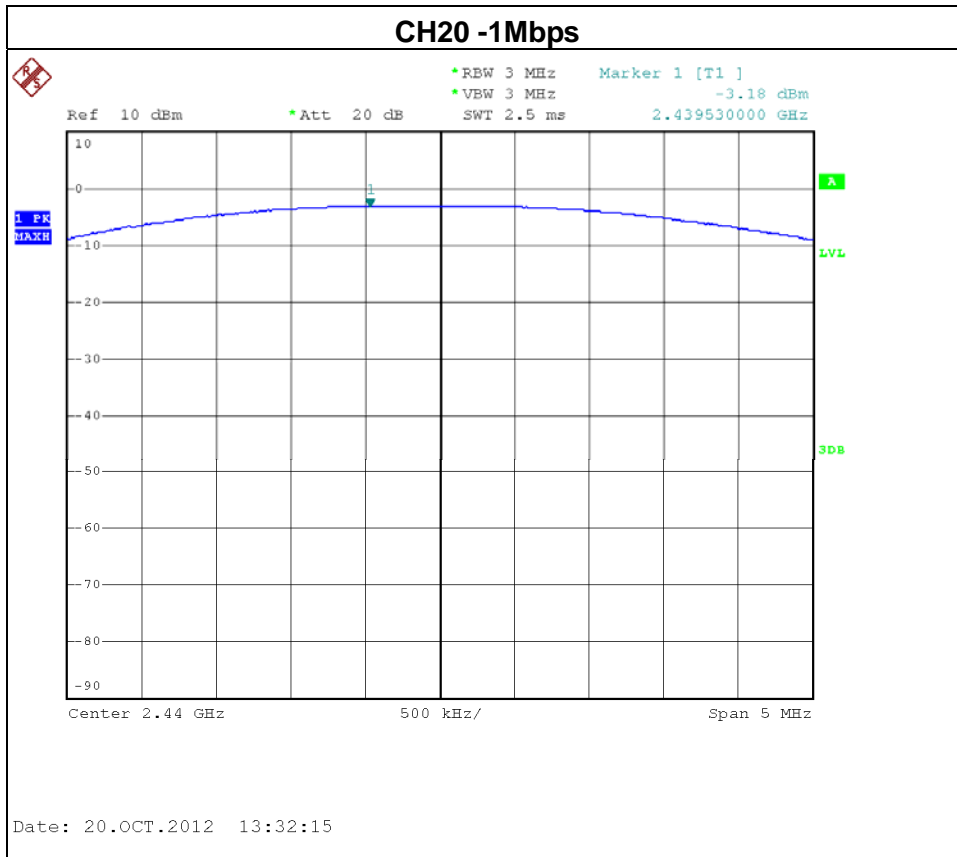


9.1.6 TEST RESULTS

EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	CH01/ CH20 /CH40		

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2402	-2.39	21	0.125
CH20	2440	-3.18	21	0.125
CH40	2480	-3.86	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.25.2012

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

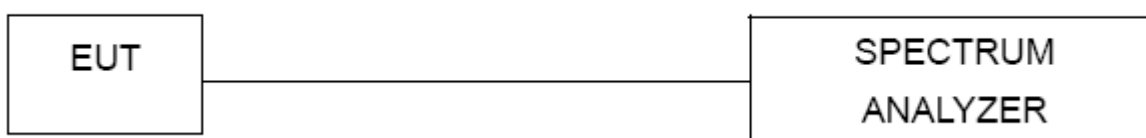
10.1.2 TEST PROCEDURE

- 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.



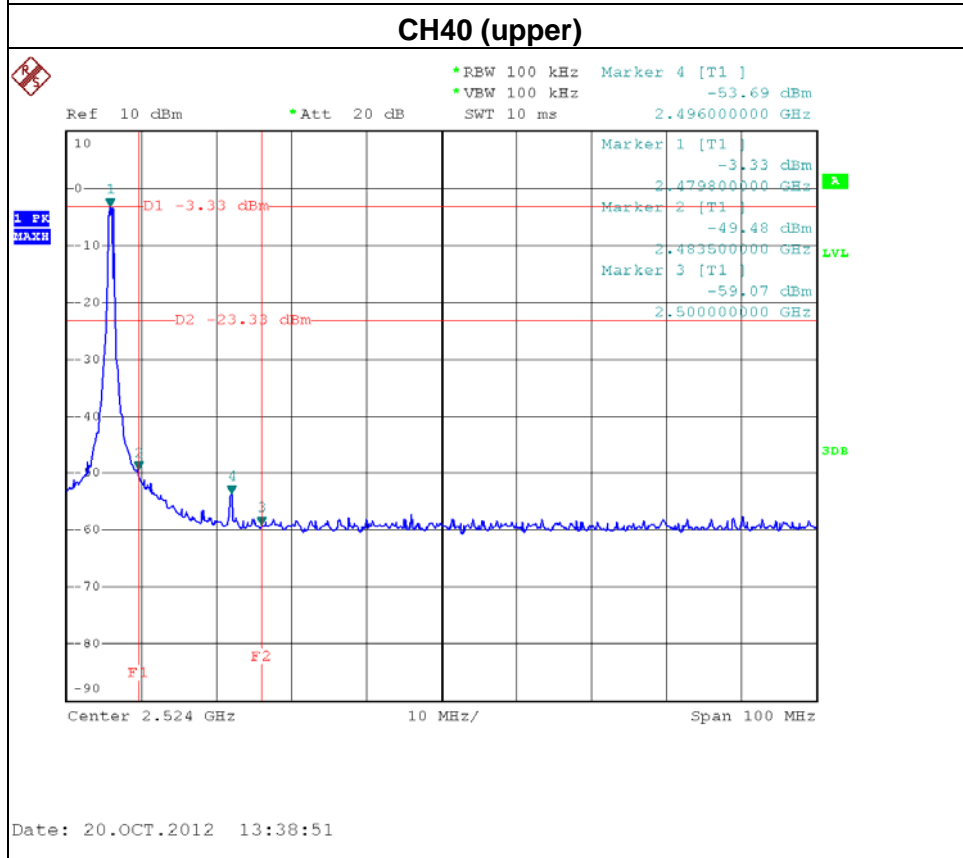
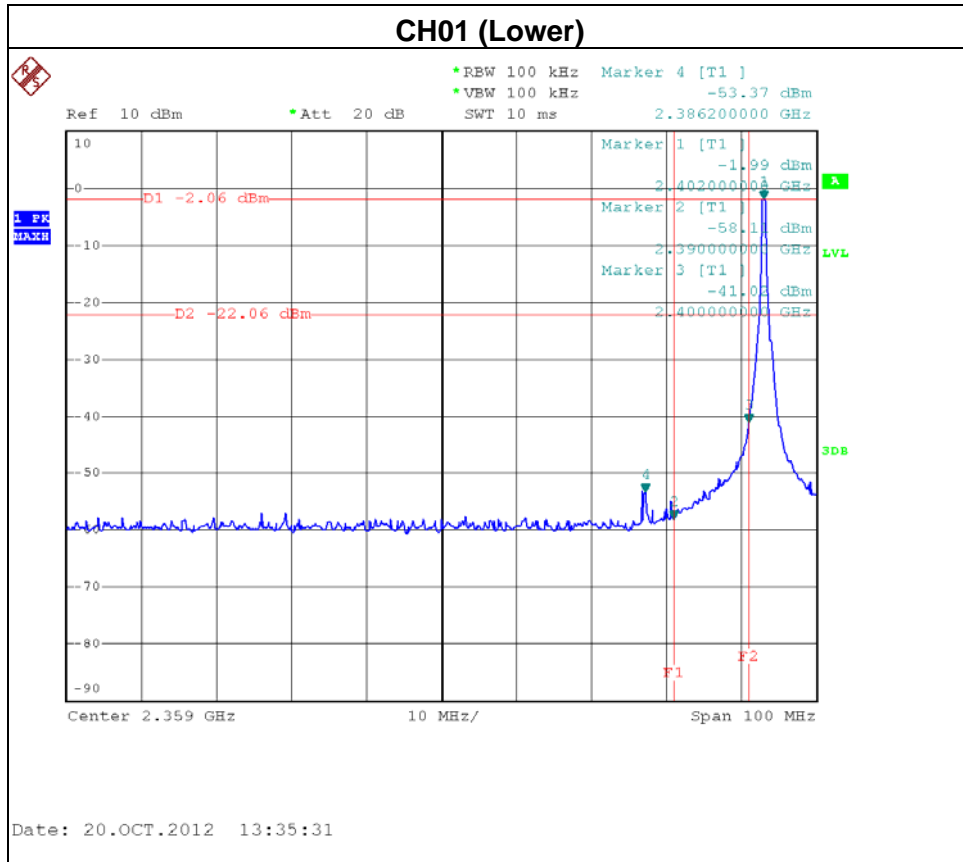
10.1.6 TEST RESULTS

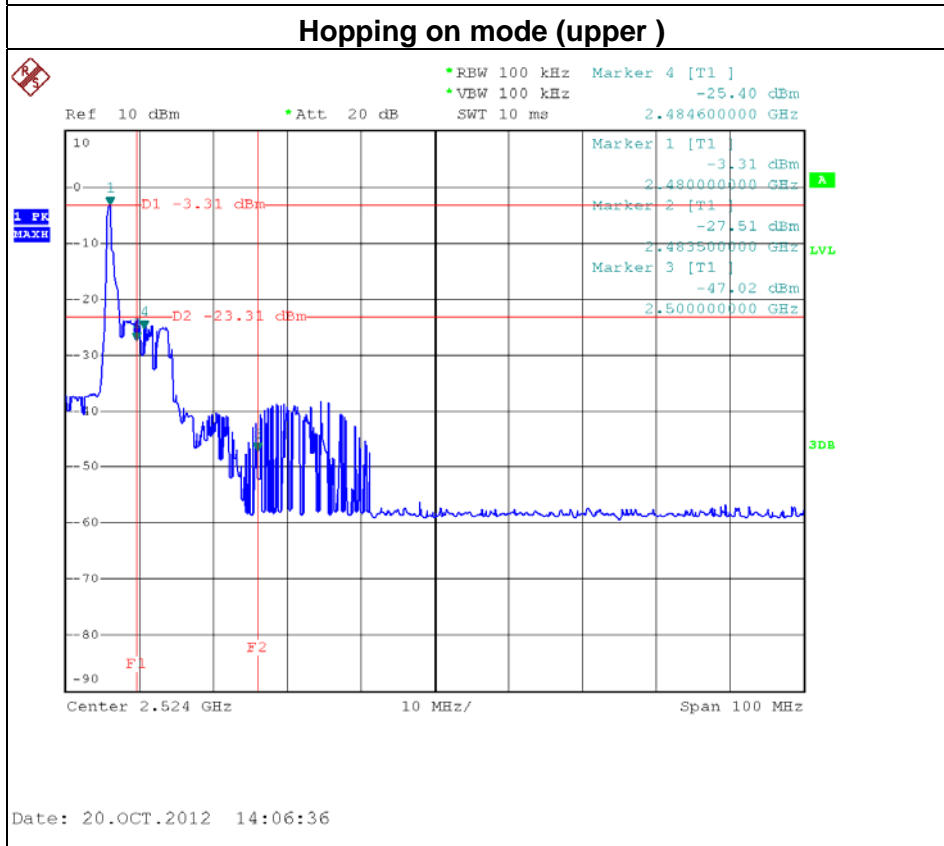
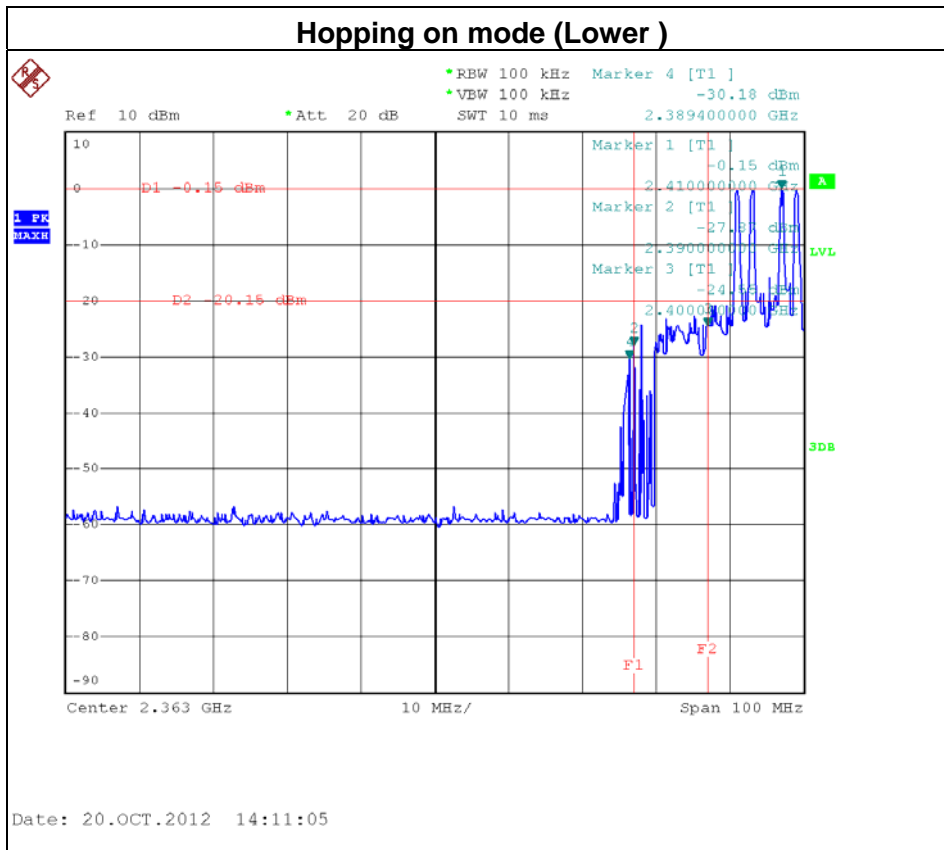
EUT :	Facilitator Control Unit	Model Name :	N/A
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	DC 4.5V
Test Mode :	CH01 / CH20/ CH40 & Hopping on mode		

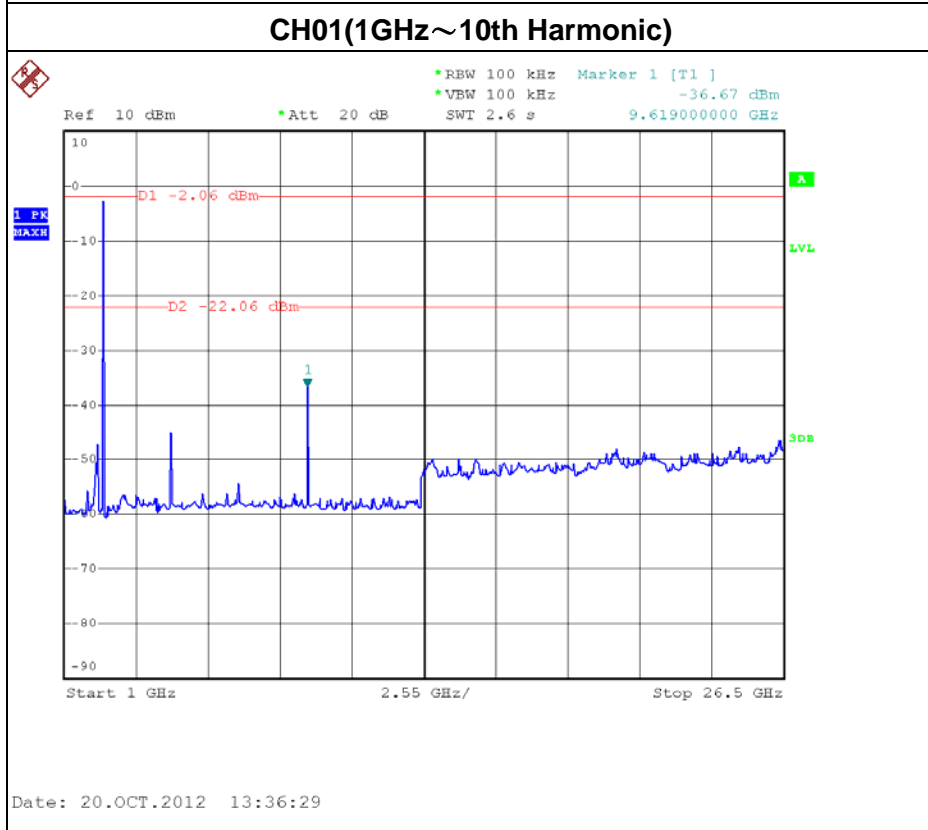
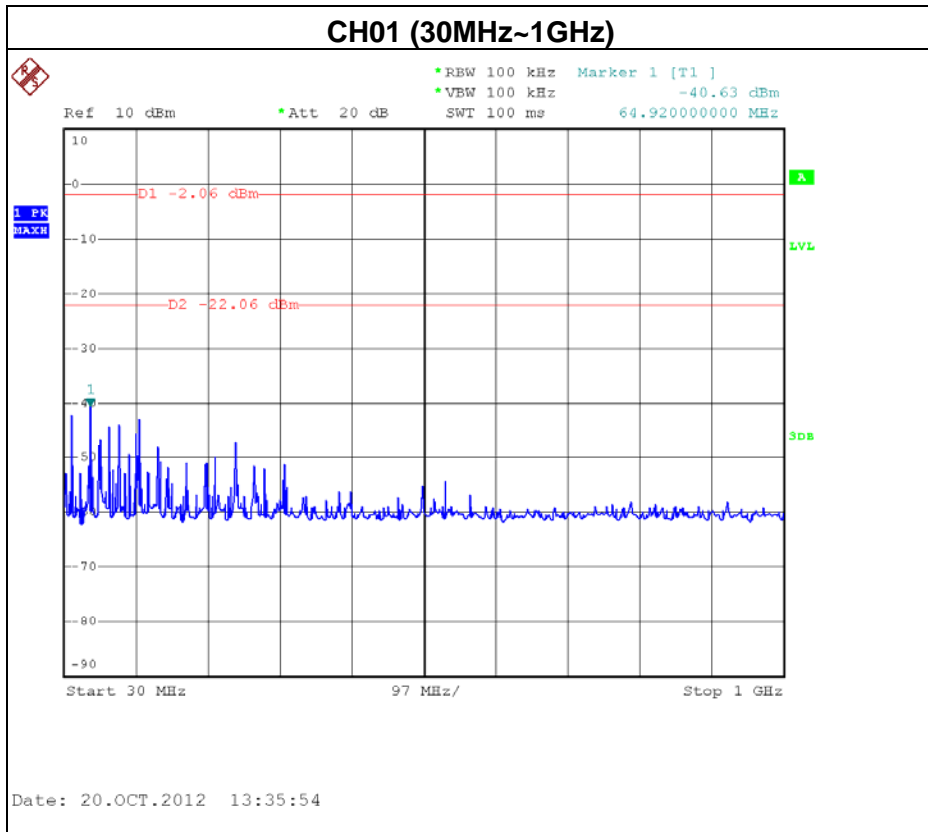
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-41.02	2483.50	-49.48

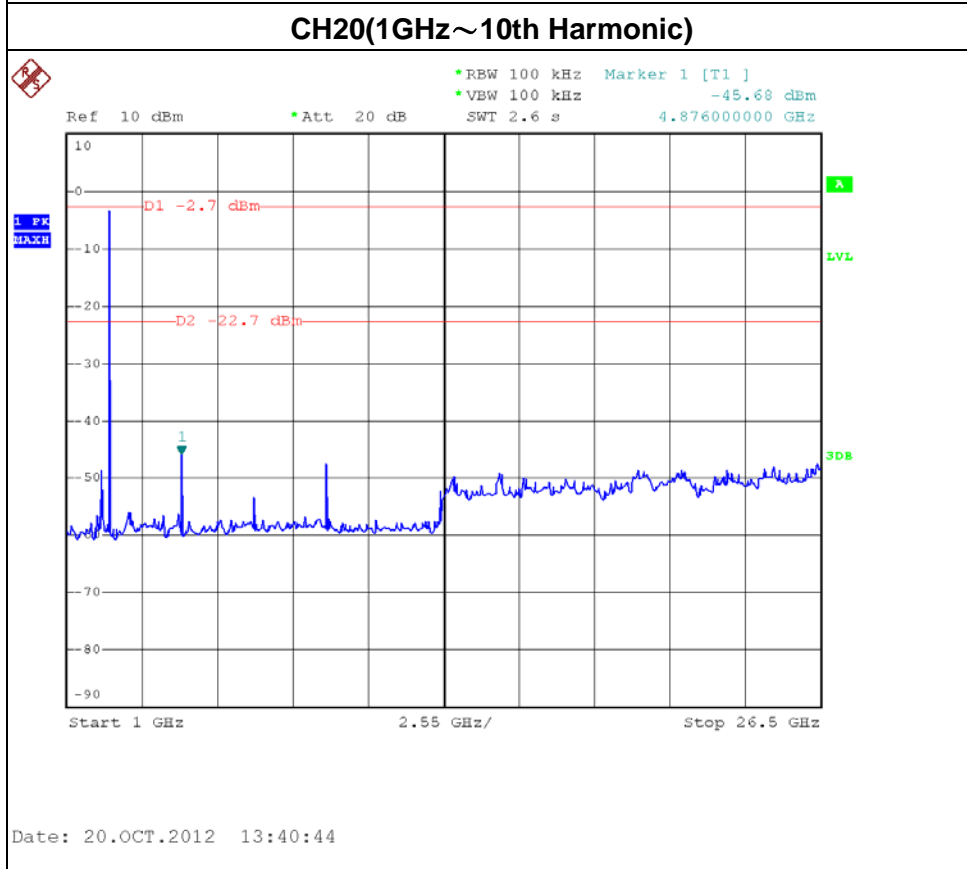
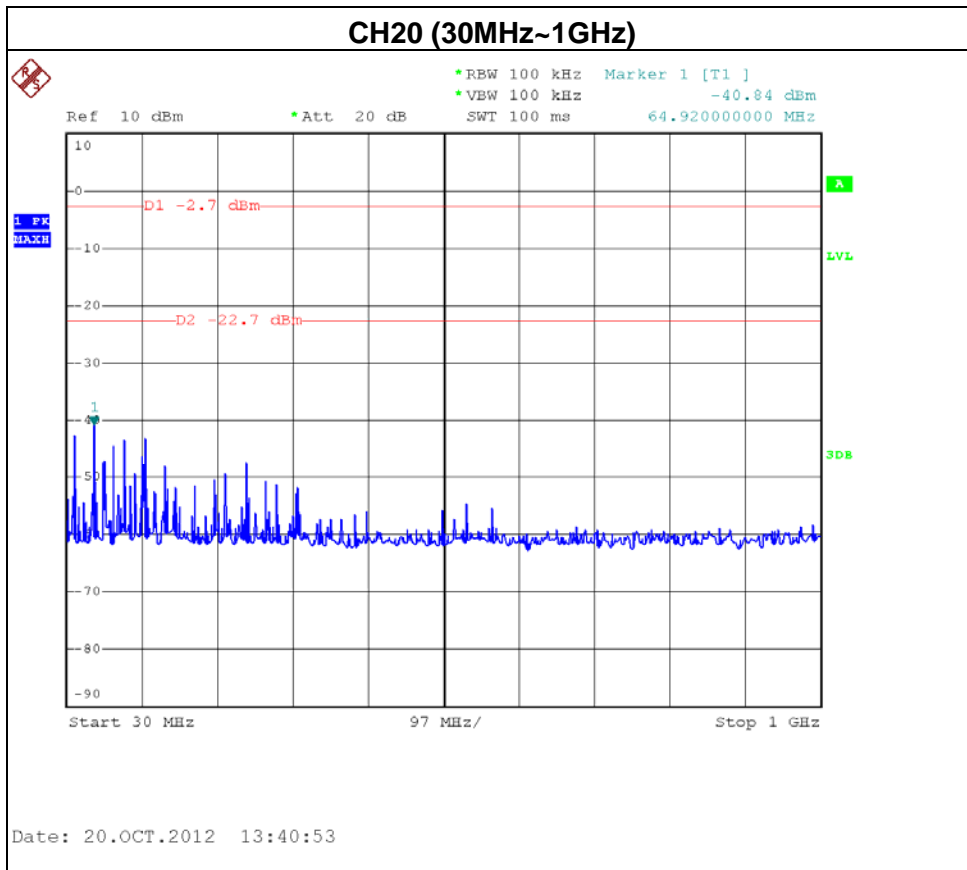
Result

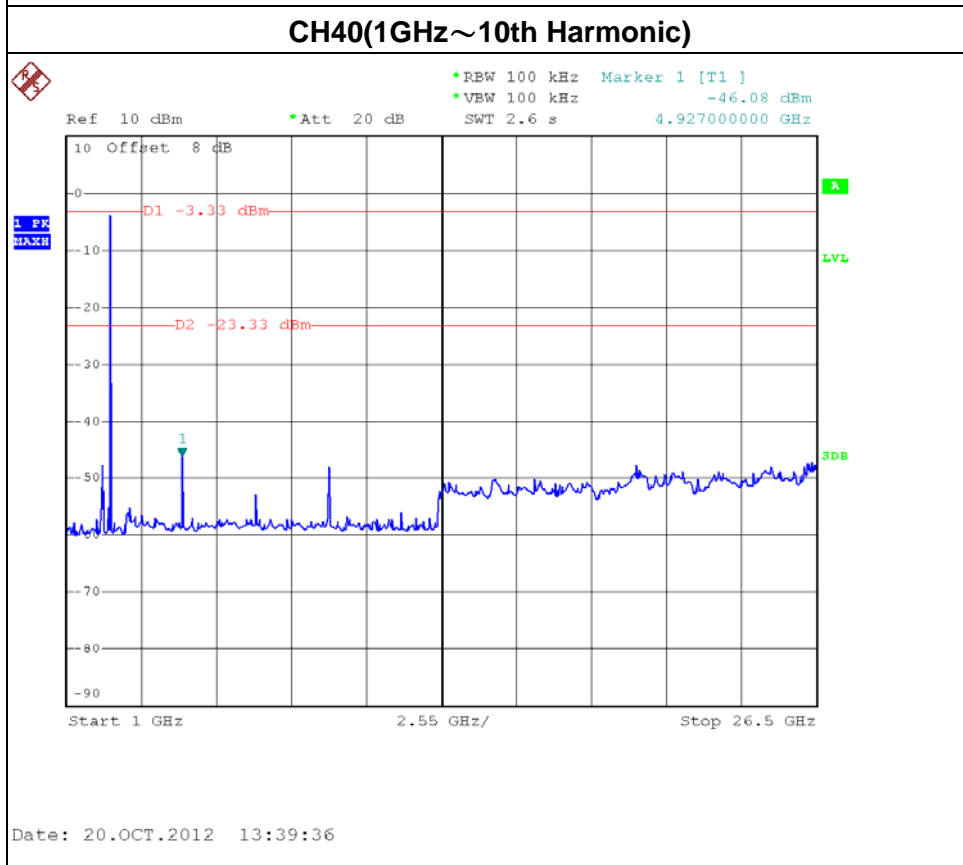
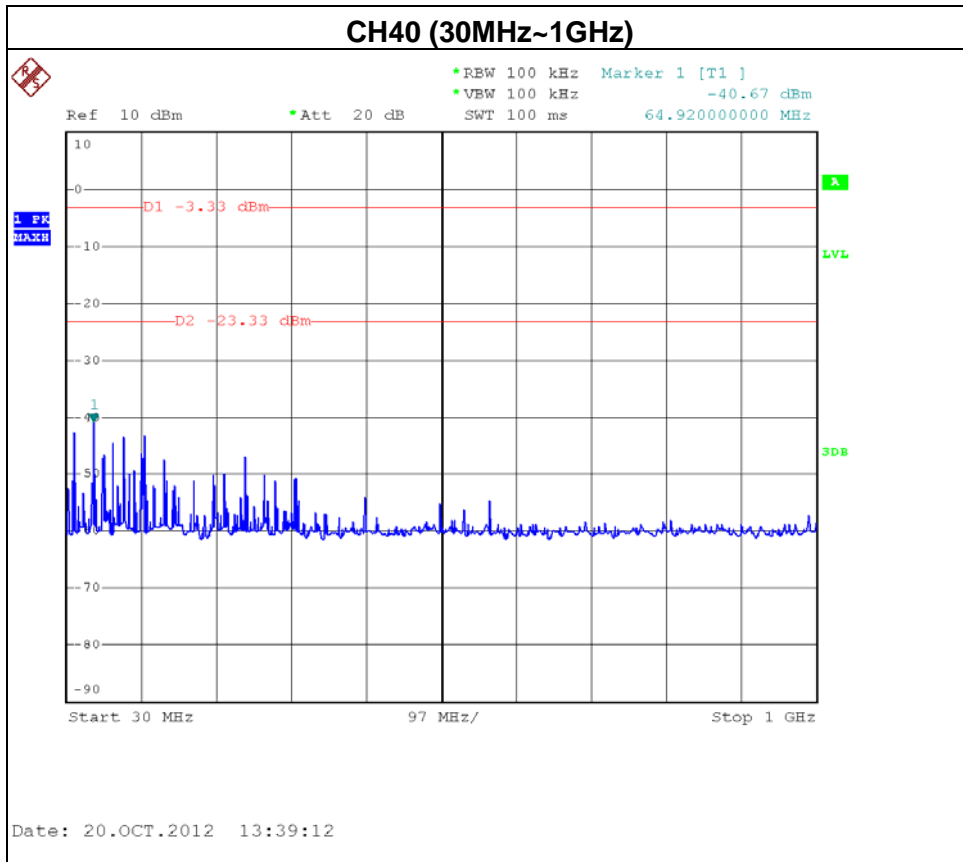
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.













10.1.7. EUT TEST PHOTO

Radiated Measurement Photos

