FCC Radio Test Report

FCC ID: X5B-PL6310

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

Issued Date	:	Aug. 31, 2011
Project No.	:	1108C198
Equipment	:	Wireless Controller for PS3
Model Name	:	PL-6310
Applicant	:	Performance Designed Products, LLC
Address	:	14144 Ventura Blvd. Suite 200, Sherman Oaks, CA 91423

Tested by:
Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Aug. 18, 2011

Date of Test:
Aug. 18, 2011 ~ Aug. 30, 2011

Testing Engineer : (Ivan Cao)

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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 **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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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:	Wireless Controller for PS3
Trade Name	N/A
Model Name.	PL-6310
Applicant:	Performance Designed Products, LLC
Date of Test:	Aug. 18, 2011 ~ Aug. 30, 2011
Test Item:	ENGINEERING SAMPLE
Standards:	FCC Part15, Subpart C(15.247) / ANSI C63.4 : 2003

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-1-1108C198) 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:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247 (a)(1)	Hopping Channel Separation	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

2.1 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 is 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** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

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	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Controller for PS3
Trade Name	N/A
Model Name	PL-6310
OEM Brand/Model Name	N/A
Model Difference	N/A
Product Description	The EUT is a Wireless Controller for PS3 Operation Frequency: 2402~2480 MHz Modulation Type: GFSK Number Of Channel 64CH .Please see Note 2. Antenna Designation: Please see Note 4. Antenna Gain(Peak) Please see Note 4. Output Power: -4.10 dBm More details of EUT technical specification, please refer to the User's Manual.
Channel List	Please refer to the Note 2.
Power Source	# DC Voltage supplied from Li-ion battery # DC Voltage supplied from PS3 Host system (USB)
Power Rating	# 3.7Vdc 800mAh (PL753034) # I/P AC 120V/60Hz O/P DC 5V
Connecting I/O Port(s)	Please refer to the User's Manual
Products Covered	N/A
EUT Modification(s)	N/A

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)
01	**2402**	23	2428	45	2454
02	2403	24	2429	46	2455
03	2404	25	2430	47	2456
04	2405	26	2431	48	2457
05	2406	27	2432	49	2459
06	2407	28	2433	50	2461
07	2408	29	2434	51	2463
08	2409	30	2435	52	2465
09	2411	31	2436	53	2466
10	2413	32	2437	54	2467
11	2415	33	2438	55	2468
12	2417	34	2439	56	2469
13	2418	35	2440	57	2470
14	2419	**36**	**2441**	58	2471
15	2420	37	2443	59	2472
16	2421	38	2445	60	2473
17	2422	39	2447	61	2474
18	2423	40	2449	62	2476
19	2424	41	2450	63	2478
20	2425	42	2451	**64**	**2480**
21	2426	43	2452		
22	2427	44	2453		

Group 1		Group 2	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
1	**2402**	1	2404
2	2467	2	2469
3	2434	3	2436
4	2450	4	2452
5	2466	5	2468
6	2403	6	2405
7	2419	7	2421
8	2435	8	2437
9	2451	9	2453
10	2418	10	2420
11	2474	11	2476
12	2411	12	2413
13	2427	13	2429
14	2443	14	2445
15	2459	15	2461
16	2426	16	2428

Group 3		Group 4	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
1	2406	1	2408
2	2471	2	2473
3	2438	3	2440
4	2454	4	2456
5	2470	5	2472
6	2407	6	2409
7	2423	7	2425
8	2439	**8**	**2441**
9	2455	9	2457
10	2422	10	2424
11	2478	**11**	**2480**
12	2415	12	2417
13	2431	13	2433
14	2447	14	2449
15	2463	15	2465
16	2430	16	2432

4. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Printed Antenna	N/A	2.0

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	CH01
Mode 2	CH36
Mode 3	CH64
Mode 4	Charger Mode

For Conducted Emission	
Final Test Mode	Description
Mode 4	Charger Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	CH01
Mode 2	CH36
Mode 3	CH64

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

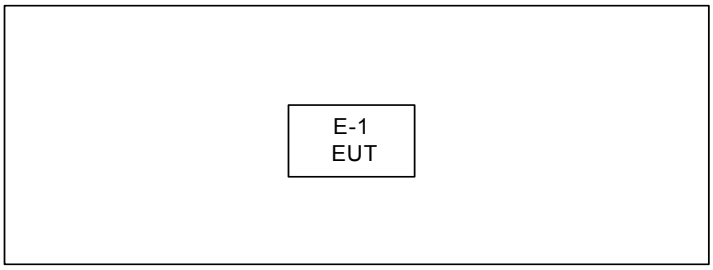
(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

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	Test program: RF-2-003-03-A		
Frequency	2402 MHz	2441MHz	2480MHz
Parameters(1Mbps)	DEF	DEF	DEF

3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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	Wireless Controller for PS3	N/A	PL-6310	X5B-PL6310	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm 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.26.2012
2	LISN	R&S	ENV216	100087	May.26.2012
3	Test Cable	N/A	C_17	N/A	Mar.30.2012
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	May.26.2012
5	50Ω Terminator	SHX	TF2-3G-A	08122902	May.26.2012

Remark: ” N/A” denotes No Model No. , Serial No. or No Calibration specified.

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

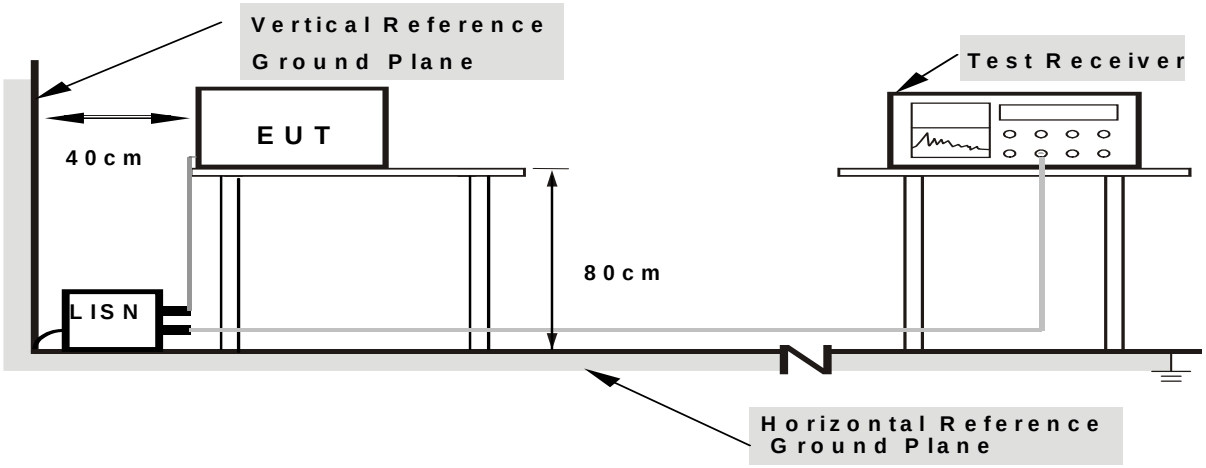
4.1.3 TEST PROCEDURE

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

4.1.4 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 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 was programmed to be in continuously transmitting / Hopping on mode.

4.1.7 TEST RESULTS

EUT：	Wireless Controller for PS3	Model Name. ：	PL-6310
Temperature：	25°C	Relative Humidity：	58 %
Pressure：	1009 hPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	Charge Mode		

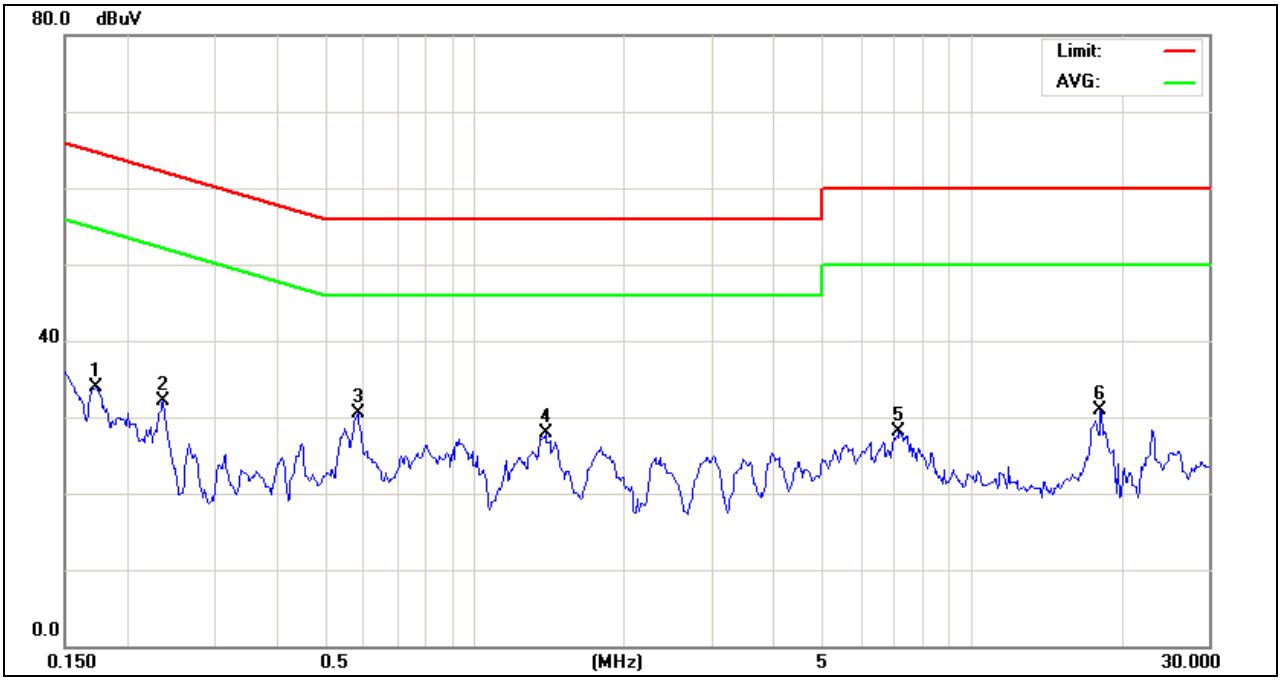
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Line	33.86	*	64.81	54.81	-30.95	(QP)
0.24	Line	32.04	*	62.21	52.21	-30.17	(QP)
0.58	Line	30.42	*	56.00	46.00	-25.58	(QP)
1.39	Line	27.99	*	56.00	46.00	-28.01	(QP)
7.14	Line	28.13	*	60.00	50.00	-31.87	(QP)
18.14	Line	30.98	*	60.00	50.00	-29.02	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.3 sec./MHz。

(2) 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。

(3) Measuring frequency range from 150KHz to 30MHz。



E.U.T :	Wireless Controller for PS3	Model Name. ：	PL-6310
Temperature :	25°C	Relative Humidity :	58 %
Pressure :	1009 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Charge Mode		

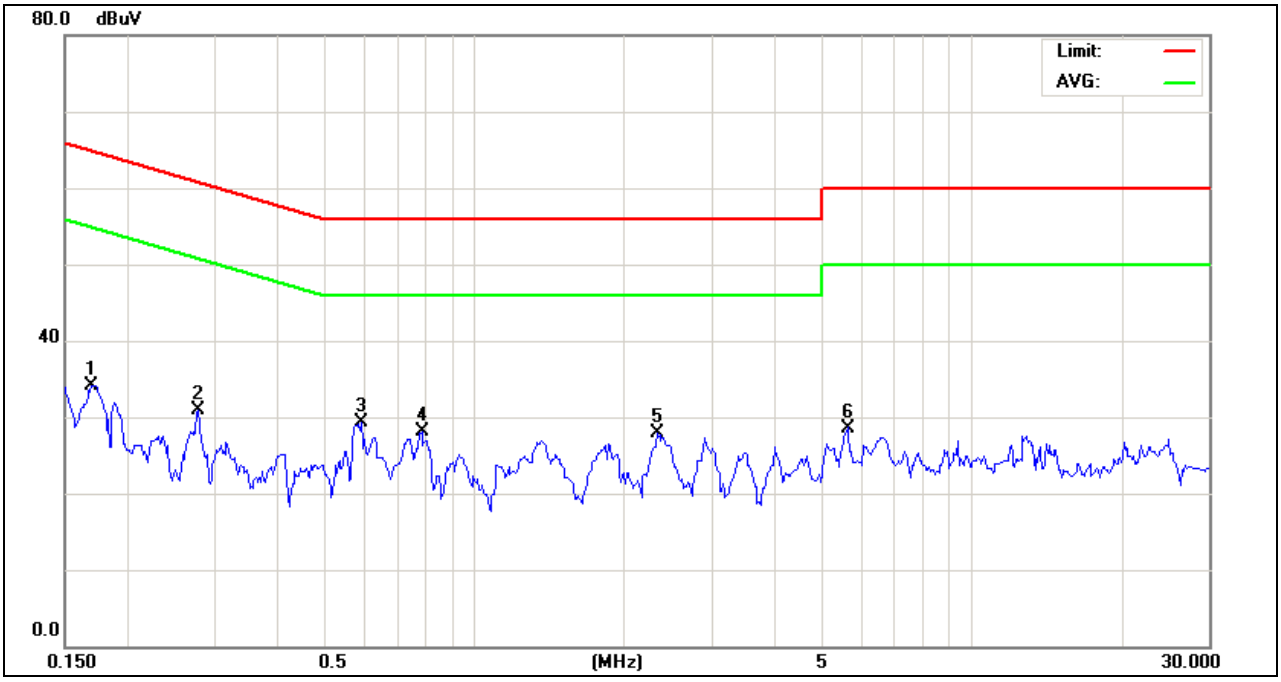
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Neutral	34.17	*	64.99	54.99	-30.82	(QP)
0.28	Neutral	30.86	*	60.85	50.85	-29.99	(QP)
0.59	Neutral	29.29	*	56.00	46.00	-26.71	(QP)
0.78	Neutral	28.18	*	56.00	46.00	-27.82	(QP)
2.33	Neutral	27.92	*	56.00	46.00	-28.08	(QP)
5.62	Neutral	28.60	*	60.00	50.00	-31.40	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.3 sec./MHz。

(2) 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。

(3) 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	5th 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	Jun .04.2012
2	Amplifier	HP	8447D	2944A09673	May.26.2012
3	Test Receiver	R&S	ESCI	100382	May.26.2012
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2012
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	May.26.2012
7	Amplifier	Agilent	8449B	3008A02274	May.26.2012
8	Spectrum	Agilent	E4408B	US39240143	Nov.26.2011
9	Test Cable	HUBER+SUHNER	C-45	N/A	May.04.2012
10	Active Loop Antenna	R&S	HFH2-Z2	830749/020	May.26.2012
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Aug.16.2011

Remark: ” N/A” denotes No Model Name / Serial No. and No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, Average=PK-dycty cycle

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

DUTY CYCLE : TX 2402MHz

Dwell time=ON/ON+OFF

ON:0.5msec

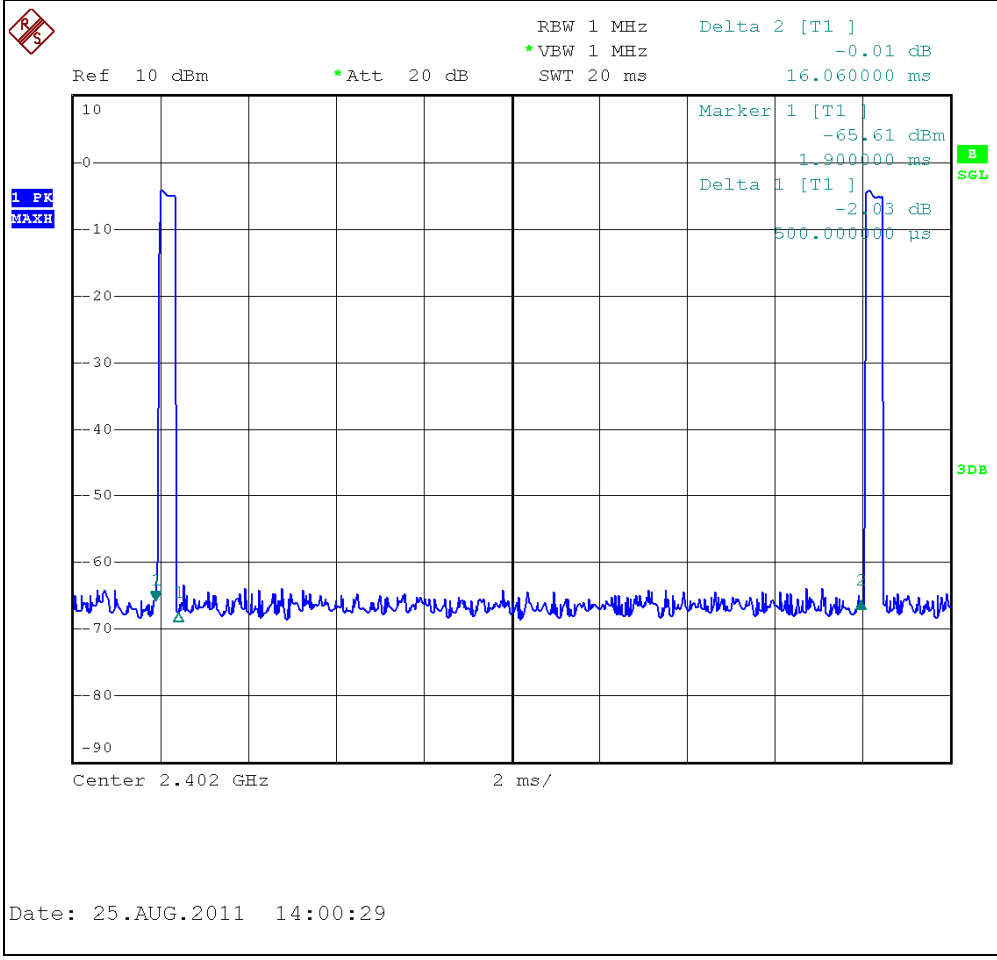
ON+OFF:(total time):16msec

Dwell time:3.11%

AV=PK+20 log(Dwell time)

AV=PK-30.14

Total time(ON+OFF)= 16 msec ； ON= 0.5 msec



4.2.3 TEST PROCEDURE

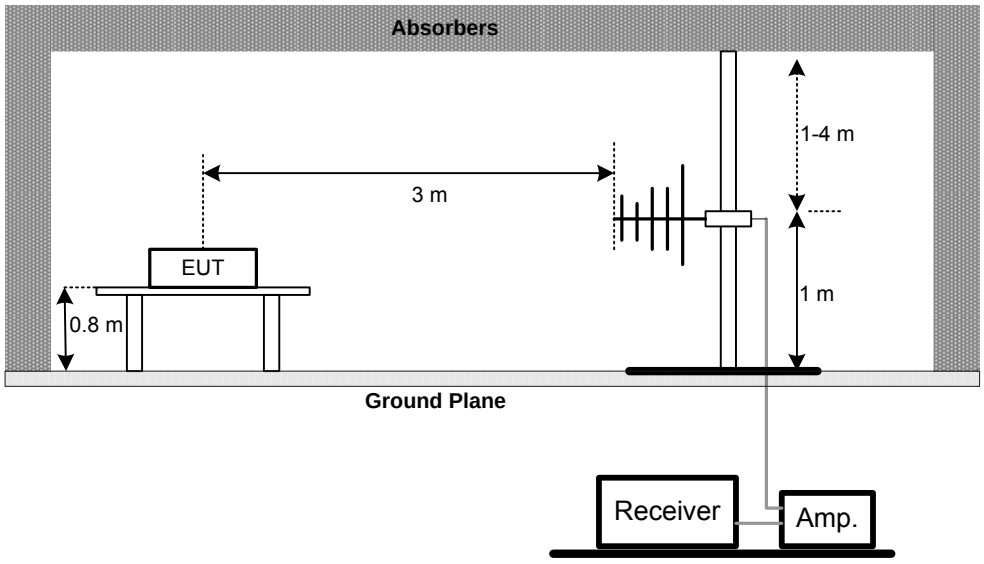
a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
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

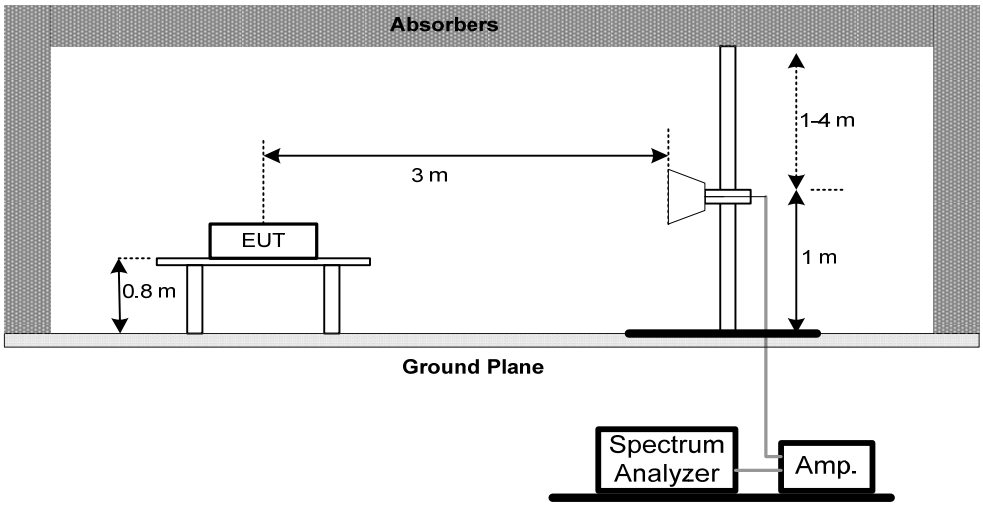
No deviation

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



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 (BETWEEN30 – 1000 MHZ)

EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
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
53.28	V	40.60	-17.52	23.08	40.00	- 16.92	
191.02	V	43.34	-16.72	26.62	43.50	- 16.88	
272.50	V	35.52	-13.12	22.40	46.00	- 23.60	
286.08	V	34.22	-12.29	21.93	46.00	- 24.07	
462.62	V	33.62	-7.92	25.70	46.00	- 20.30	
635.28	V	29.13	-3.61	25.52	46.00	- 20.48	

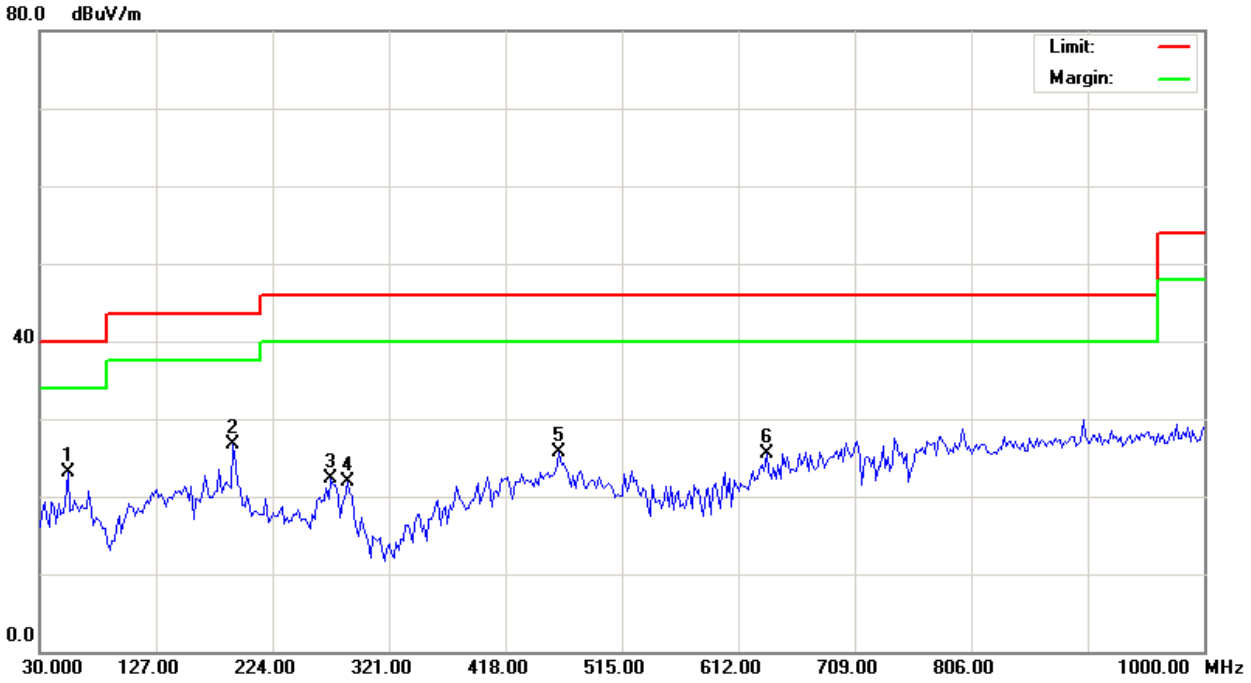
Remark：

(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：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
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
70.74	H	43.23	-18.41	24.82	40.00	- 15.18	
159.98	H	44.69	-17.65	27.04	43.50	- 16.46	
303.54	H	36.71	-11.98	24.73	46.00	- 21.27	
414.12	H	36.10	-8.76	27.34	46.00	- 18.66	
600.36	H	33.45	-4.26	29.19	46.00	- 16.81	
660.50	H	36.81	-3.30	33.51	46.00	- 12.49	

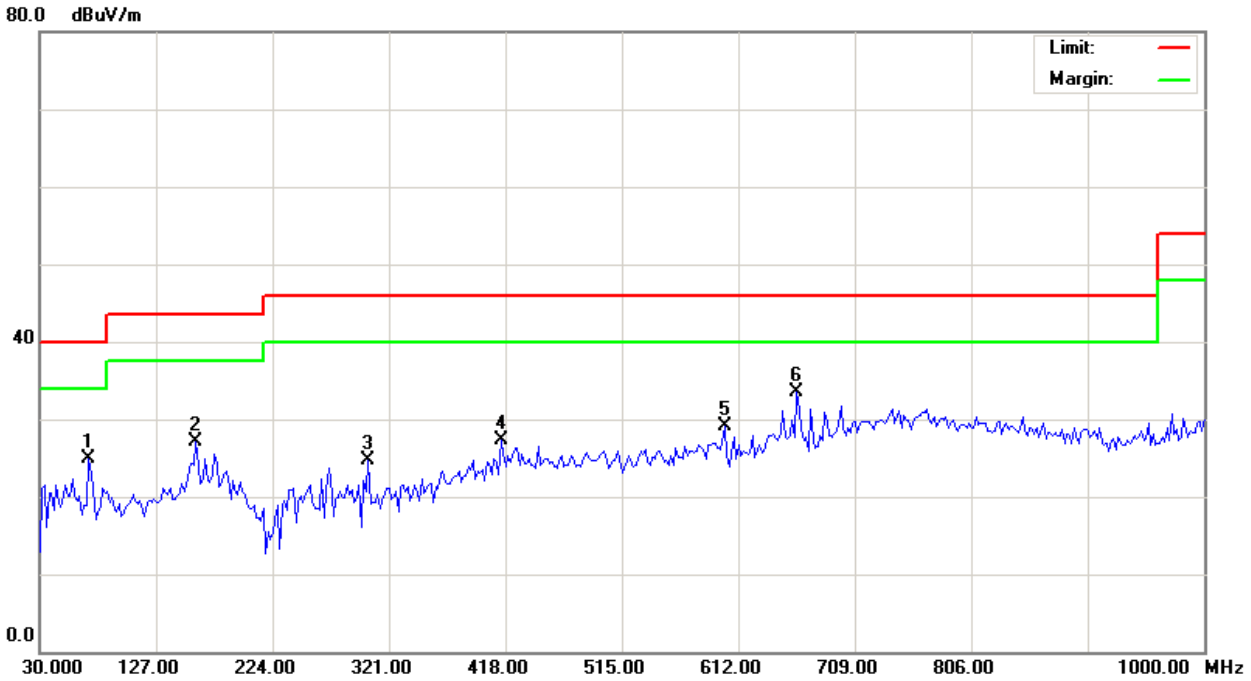
Remark：

(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：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2402MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	23.30	-6.84	31.91	55.21	25.07	74.00	54.00	X/E
2401.75	**V**	**55.39**	**25.25**	**31.90**	**87.29**	**57.15**			**X/F**
4804.00	V	36.47	6.33	6.17	42.64	12.50	74.00	54.00	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.

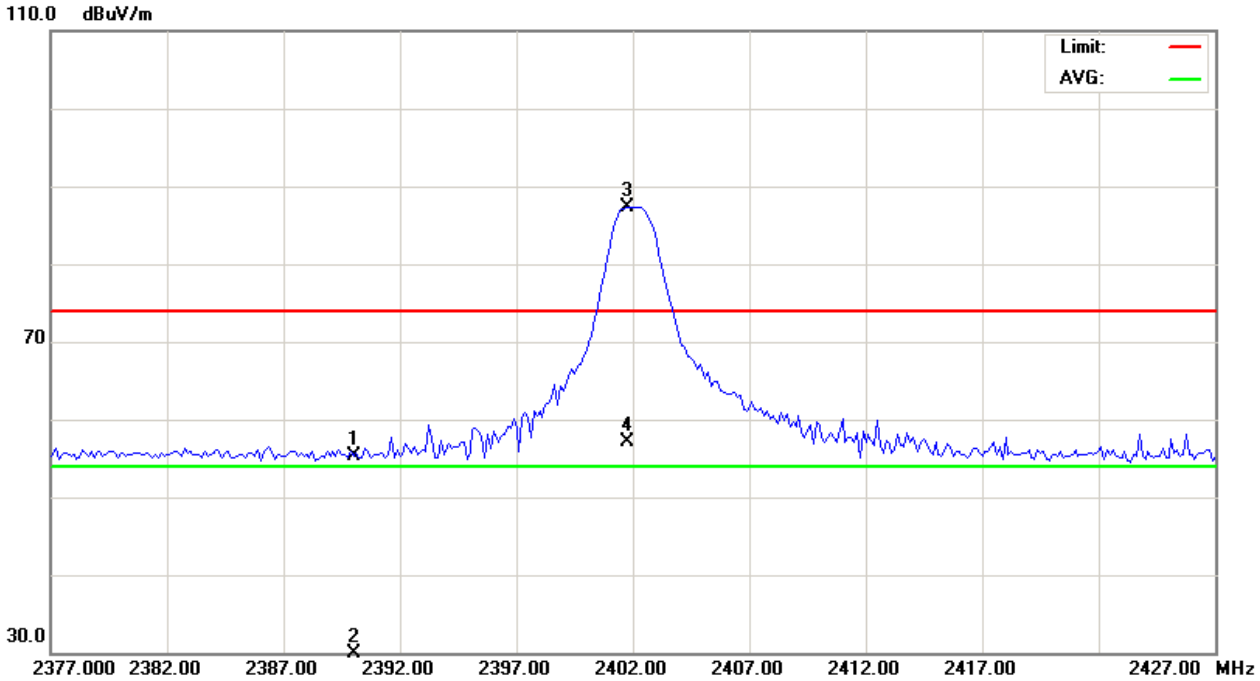
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

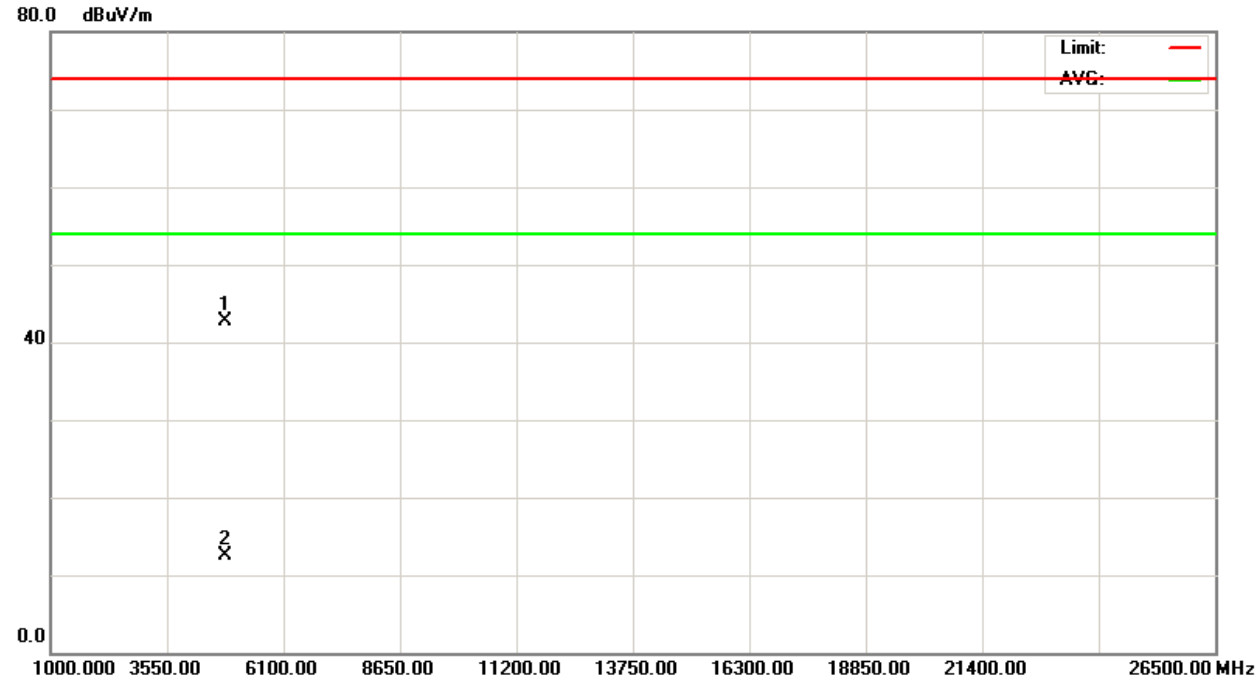
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH01(Above 1000 MHz, Vertical)





EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2402MHz		

(MHz)	H/V	Peak (dBuV)	AV (dBuV)	CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2390.00	H	24.45	-5.69	31.91	56.36	26.22	74.00	54.00	X/E
2401.75	**H**	**54.83**	**24.69**	**31.90**	**86.73**	**56.59**			**X/F**
4804.40	H	37.85	7.71	6.17	44.02	13.88	74.00	54.00	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.

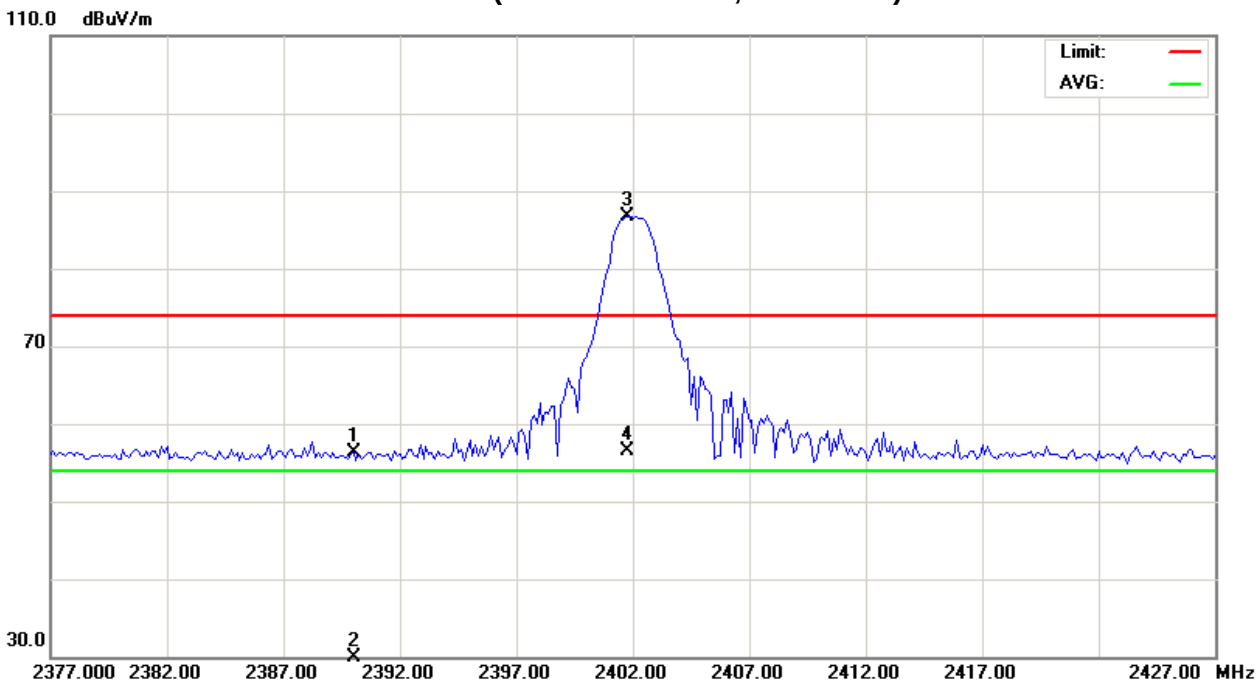
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

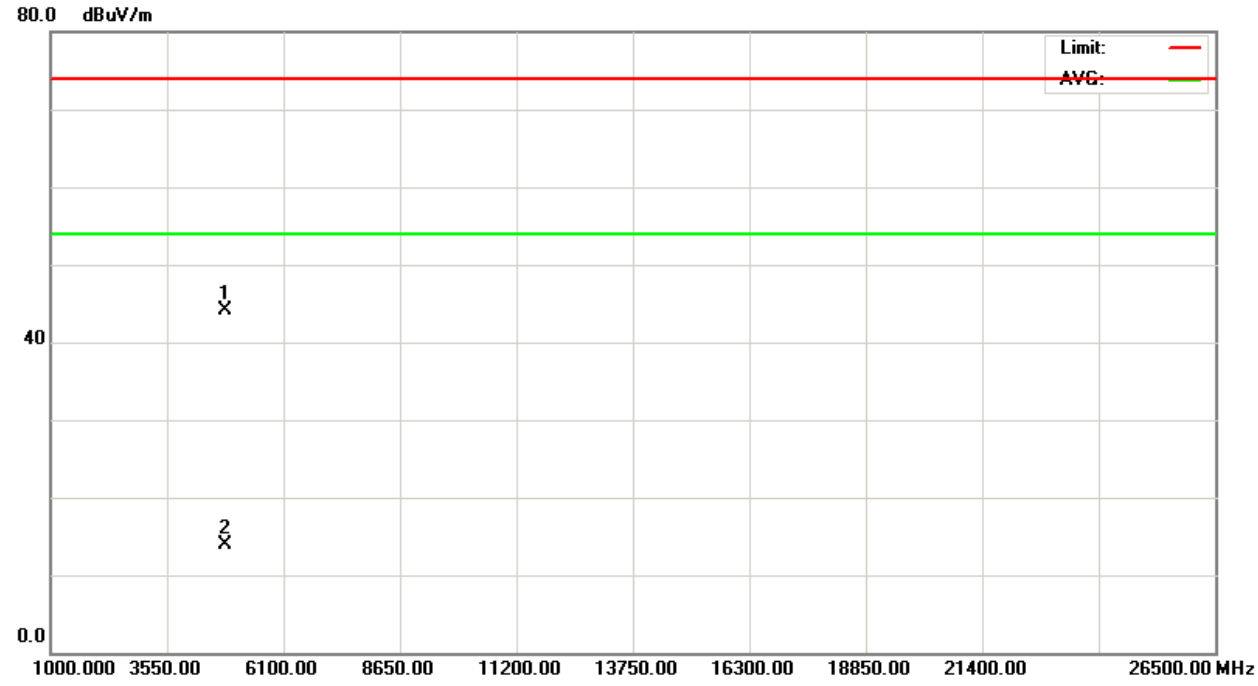
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH01(Above 1000 MHz, Horizontal)





EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2441MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2440.75	**V**	**56.36**	**26.22**	**31.85**	**88.21**	**58.07**			**X/F**
4882.45	V	37.60	7.46	6.46	44.06	13.92	74.00	54.00	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.

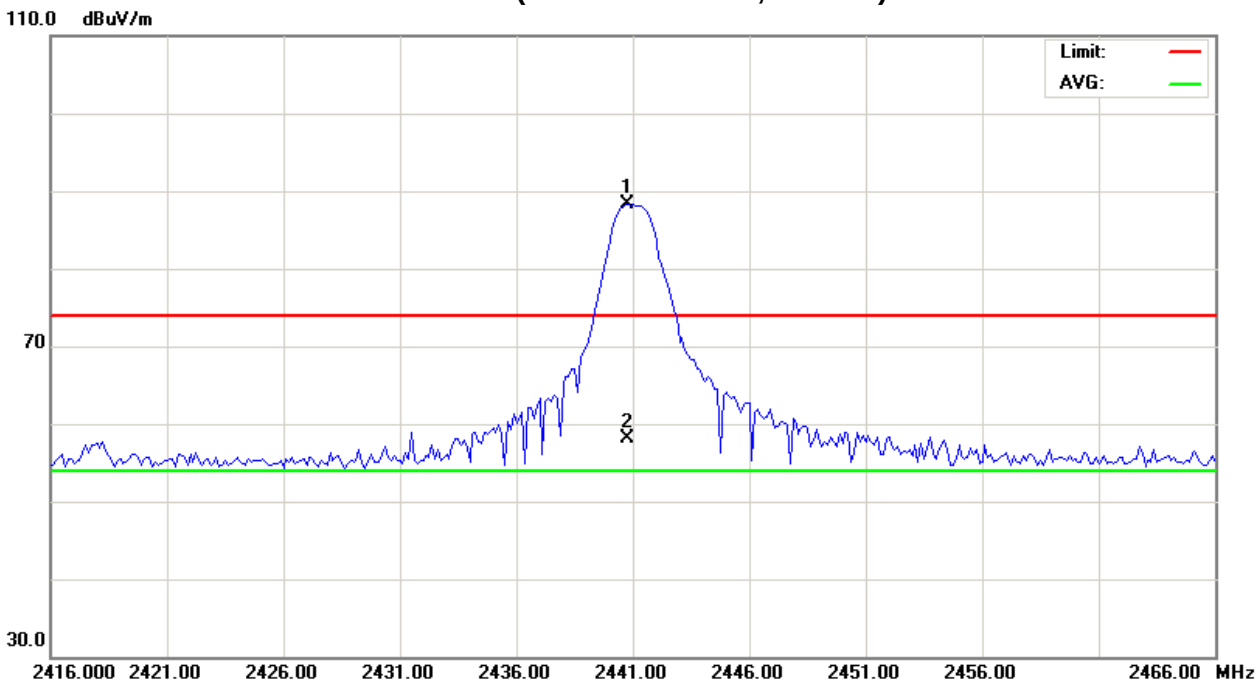
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

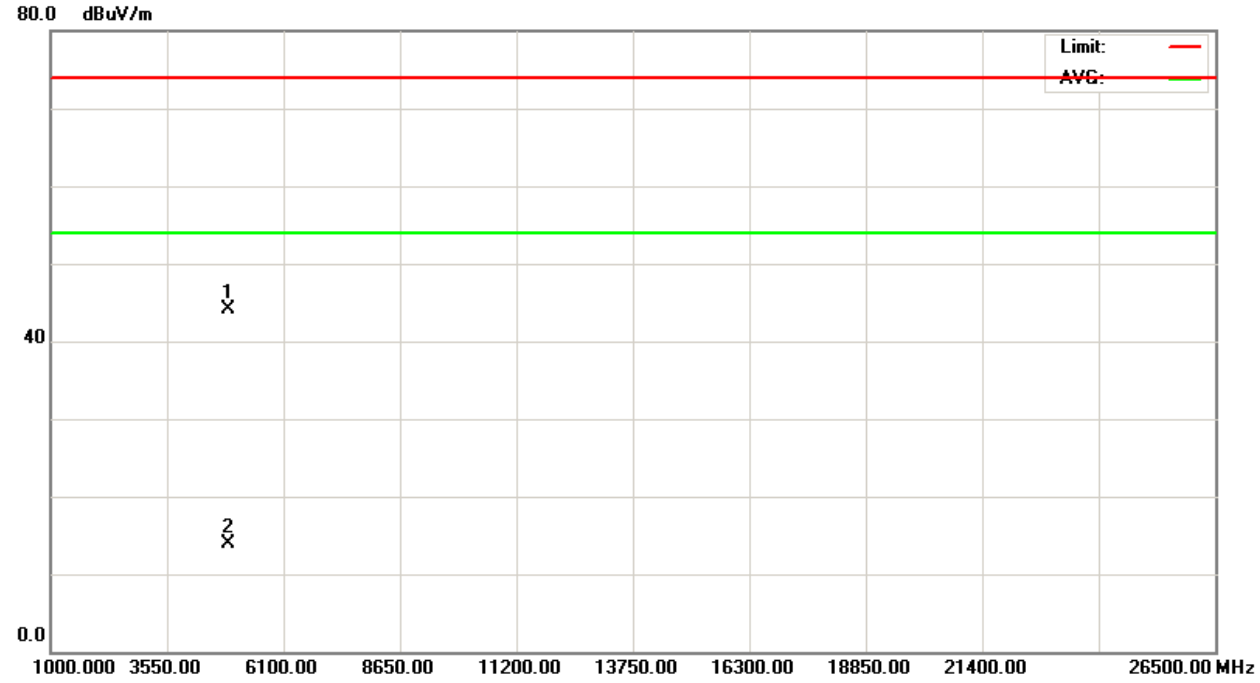
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH36 (Above 1000 MHz, Vertical)





EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2441MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2440.75	**H**	**56.38**	**26.24**	**31.85**	**88.23**	**58.09**			**X/F**
4882.45	H	38.09	7.95	6.46	44.55	14.41	74.00	54.00	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.

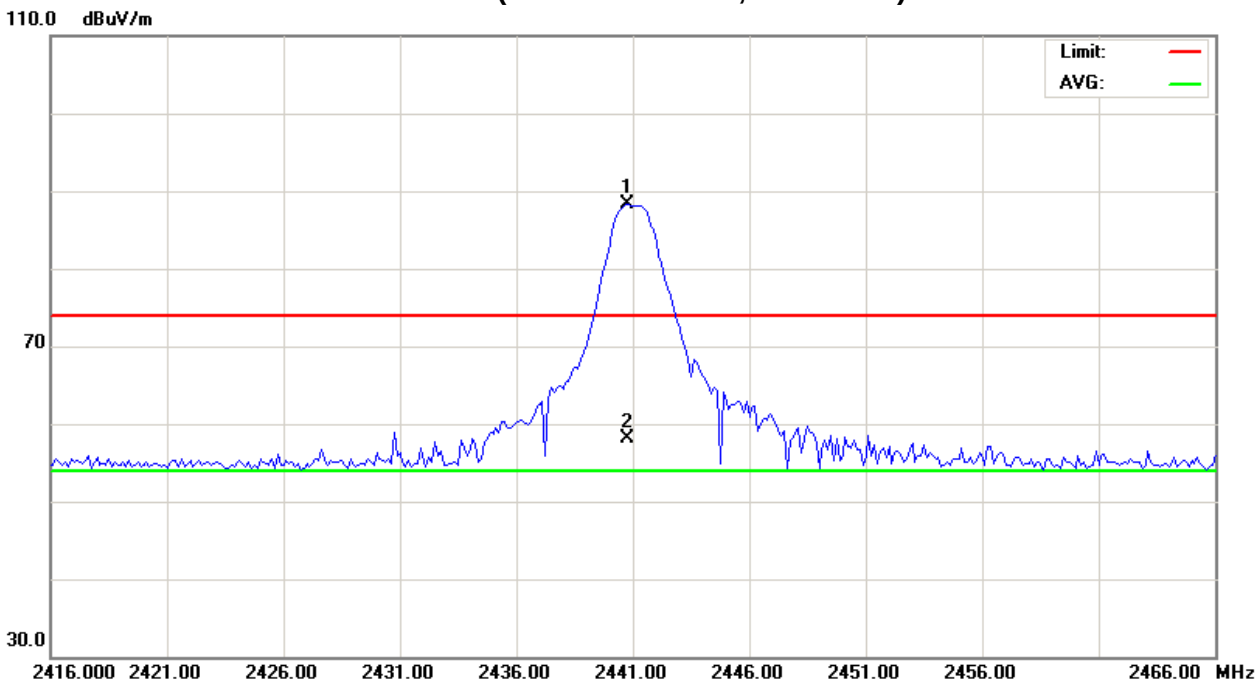
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

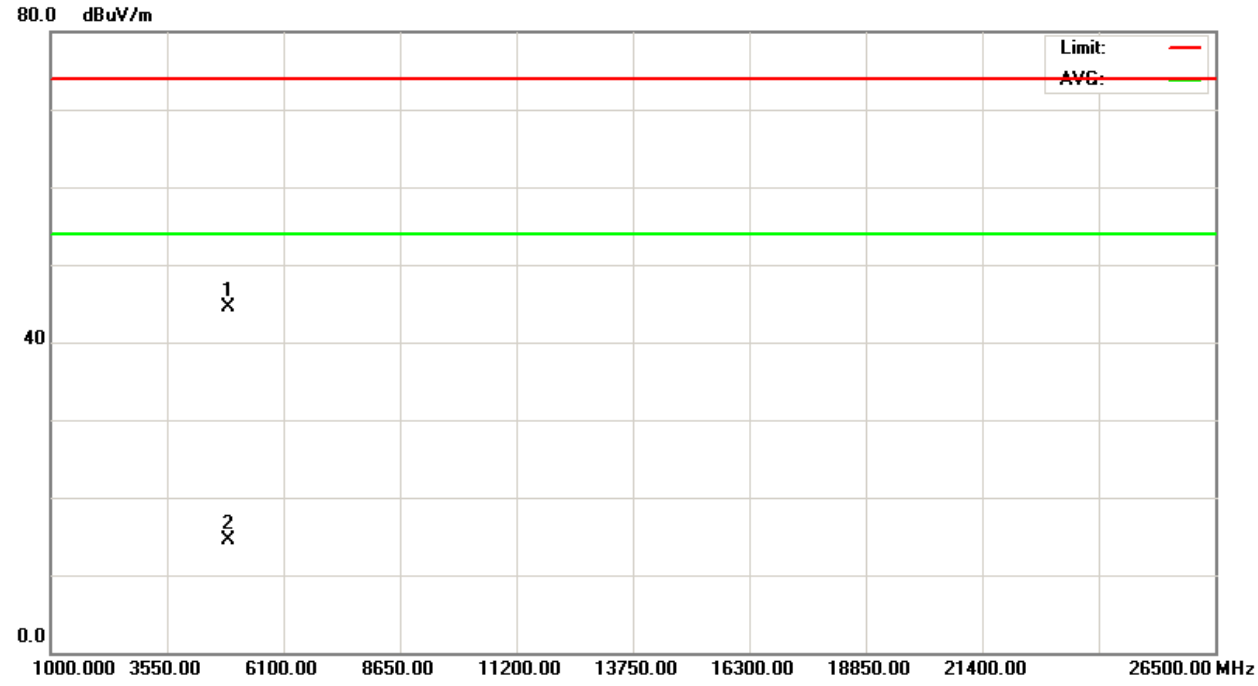
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH36 (Above 1000 MHz, Horizontal)





EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2480MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2480.25	**V**	**57.30**	**27.16**	**31.80**	**89.10**	**58.96**			**X/F**
2483.50	V	33.78	3.64	31.80	65.58	35.44	74.00	54.00	X/E
4960.50	V	36.68	6.54	6.74	43.42	13.28	74.00	54.00	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.

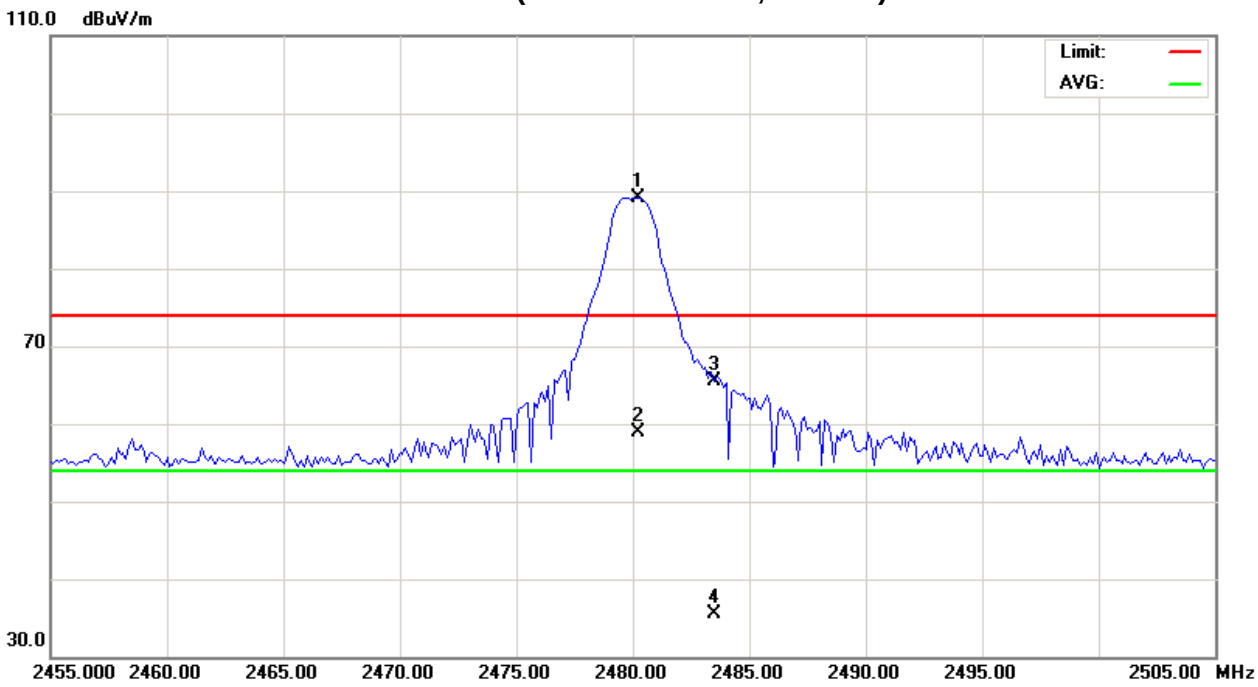
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

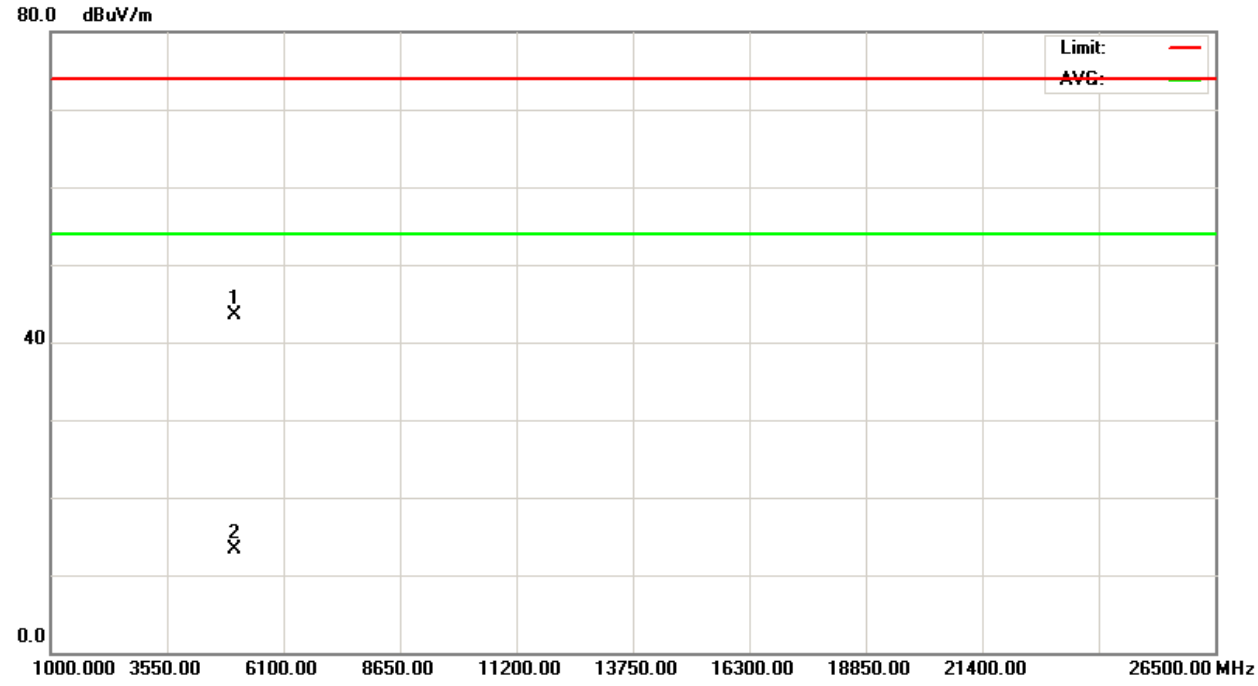
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH64 (Above 1000 MHz, Vertical)





EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX 2480MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2480.00	**H**	**56.99**	**26.85**	**31.80**	**88.79**	**58.65**			**X/F**
2483.50	H	34.53	4.39	31.80	66.33	36.19	74.00	54.00	X/E
4960.50	H	37.96	7.82	6.74	44.70	14.56	74.00	54.00	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.

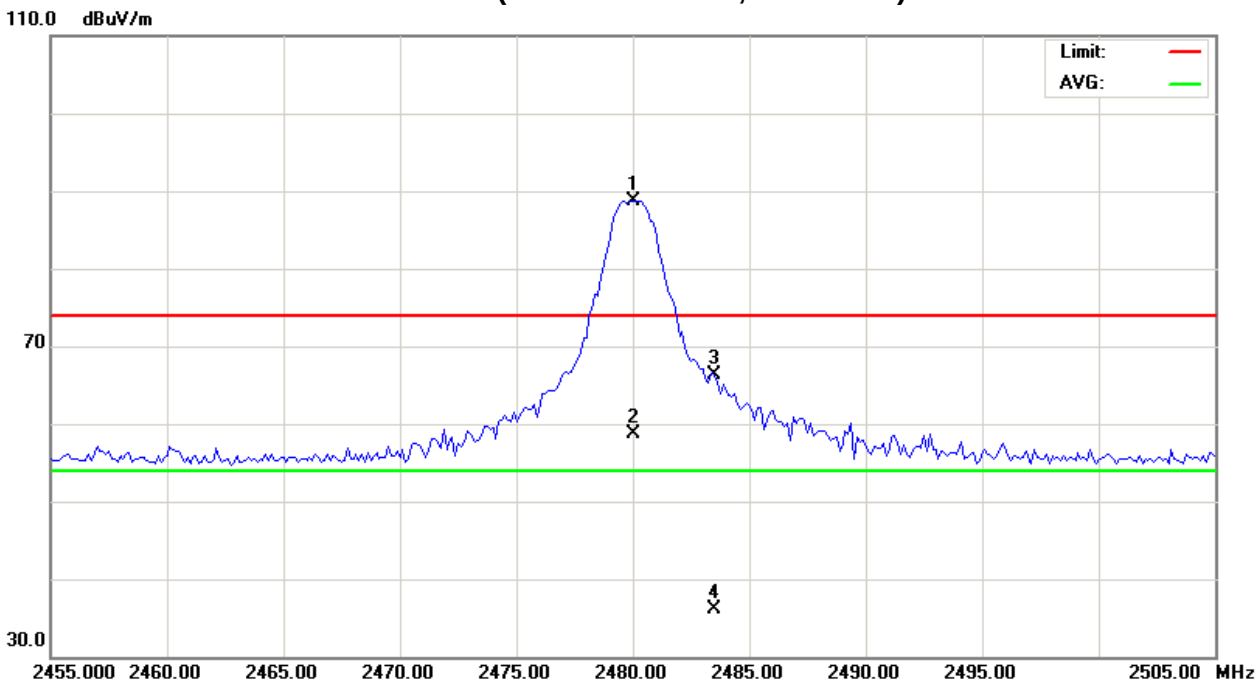
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

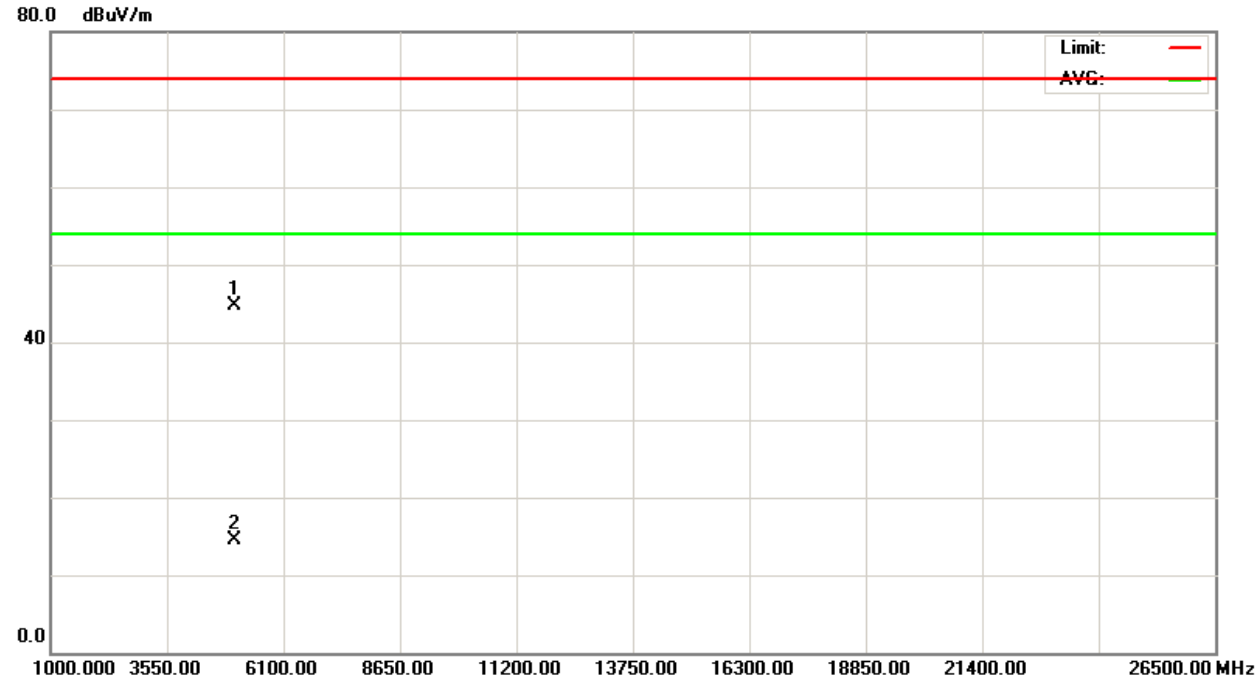
(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(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

(8) The average value of fundamental frequency is:
Average = Peak value + 20log(Duty cycle) ，Final AV=PK-30.14

TX CH64 (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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

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

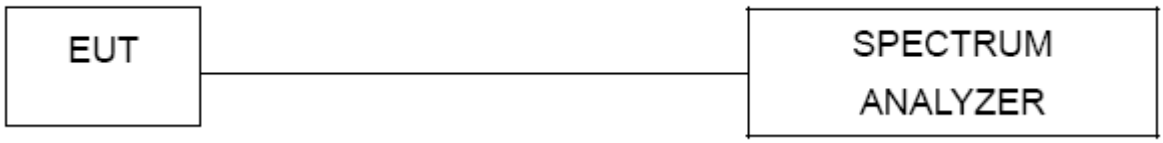
5.1.2 TEST PROCEDURE

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



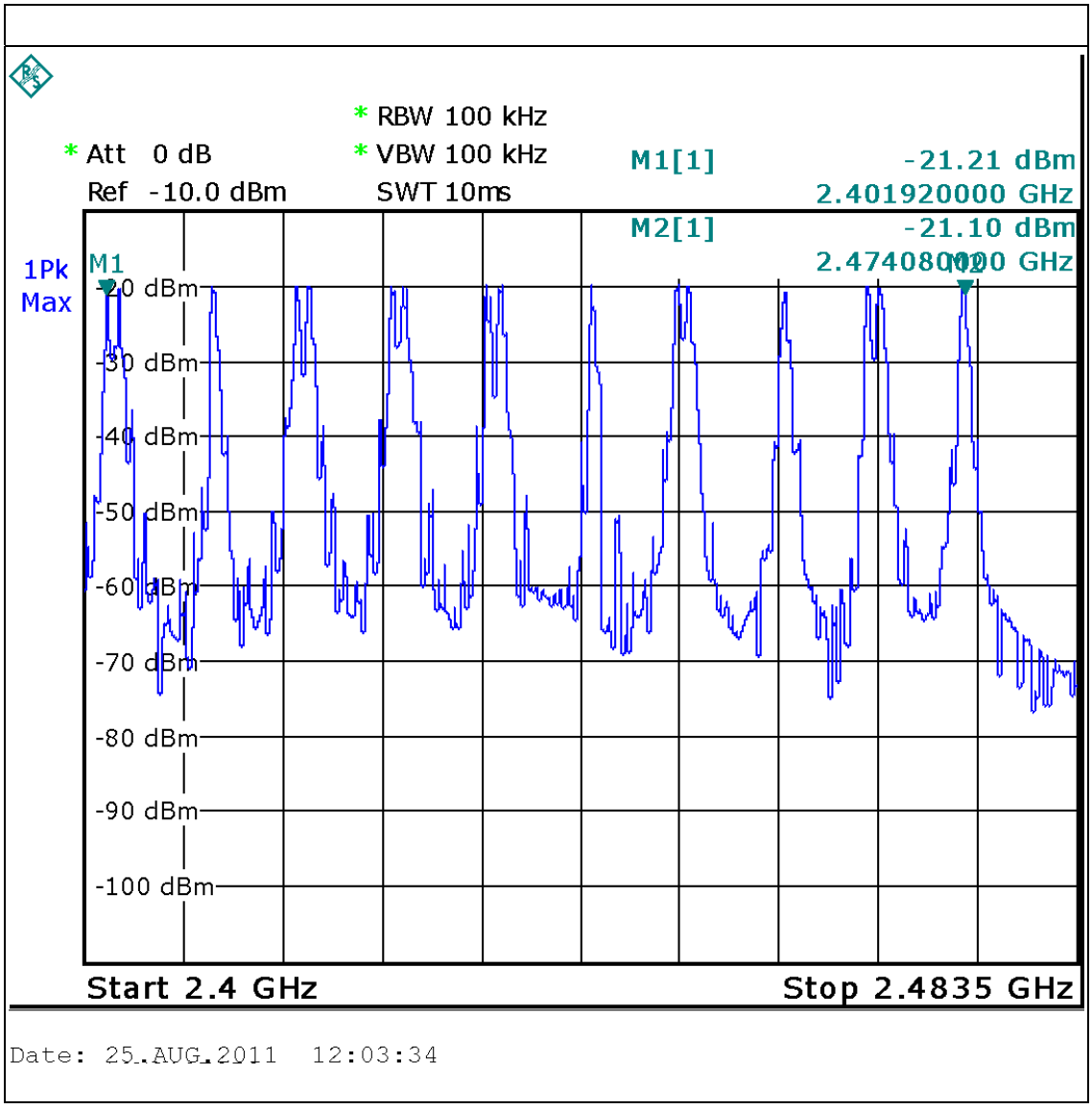
5.1.5 EUT OPERATION CONDITIONS

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：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	Hopping Mode –Group 1		

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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

6.1.2. TEST PROCEDURES

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

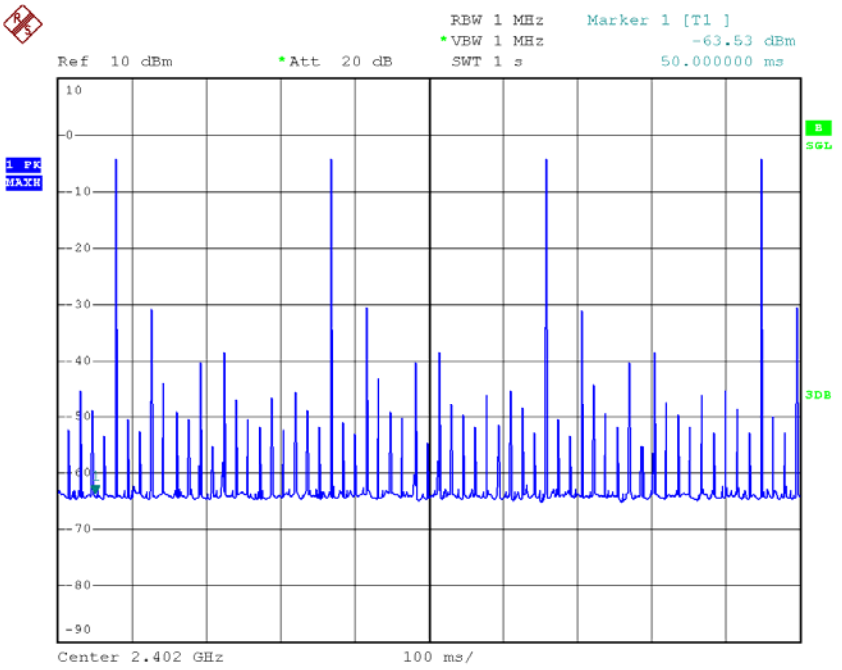
EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1015 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	Hopping Mode		

Mode	Number of transmission in a 6.4 (16Hopping*0.4)	Length of transmission time (msec)	Result (msec)	Limit (msec)
2441 MHz	(4/1) *6.4=25.6 times **Note1**	0.48	12.288	400

Note1: 4 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	((4/1)*16)=64
The number of occupied channels per second	64/16=4(number/sec)
occupied time for each channel(1)	0.48ms
The total number of channels occupied within one cycle (2)	(4/1) *6.4=25.6 times
The average time of occupancy within one cycle(1)*(2)	12.288msec
LIMIT (msec)	400msec

Hopping Mode : 4(times/1sec)



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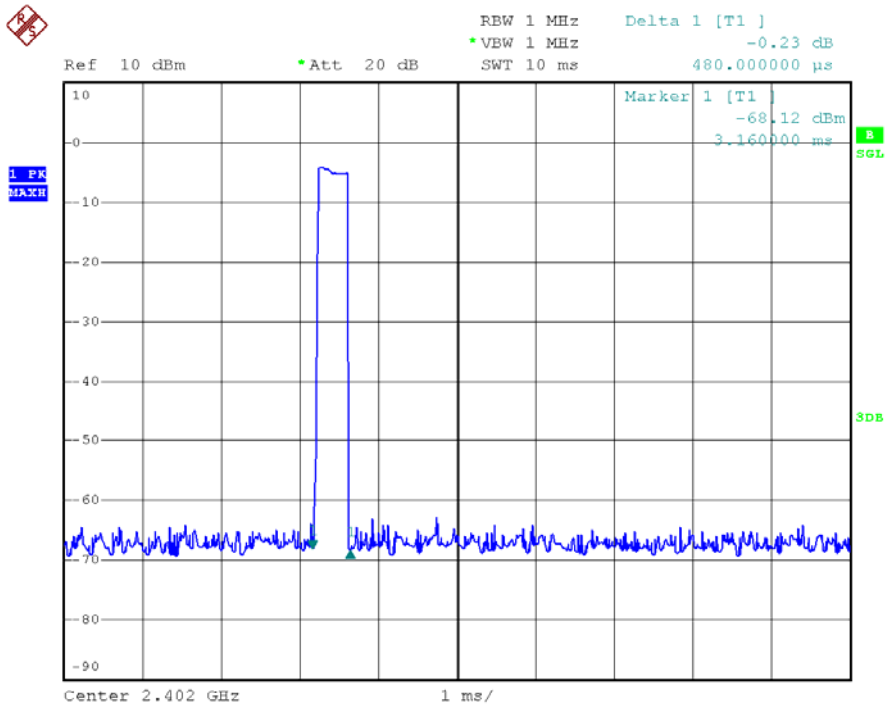


Date: 25.AUG.2011 13:57:56

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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	10 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

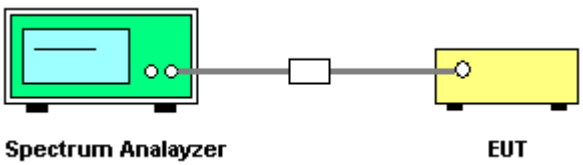
7.1.2 TEST PROCEDURE

a. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
b. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
c. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for channel separation measurement.

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 on mode.

7.1.6 TEST RESULTS

EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	Hopping on CH01		

Frequency	Ch. Separation (MHz)	20dB Bandwidth (MHz)	Result
2402 MHz	1	0.86	**Complies**

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

CH01

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	None	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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	10 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

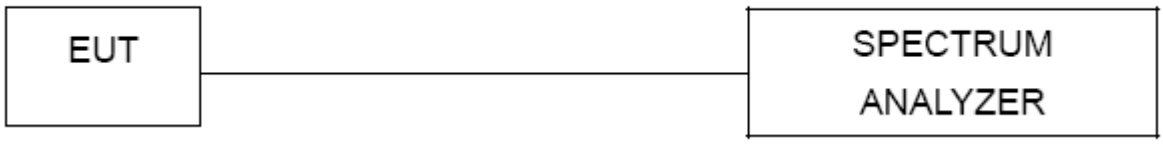
8.1.2 TEST PROCEDURE

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= 10KHz, 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.

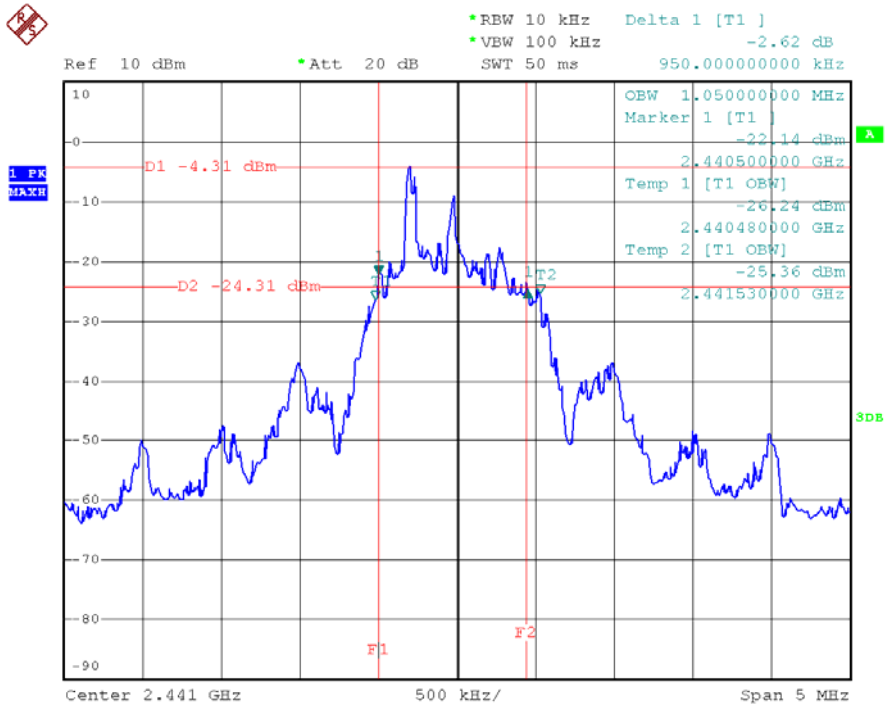
8.1.6 TEST RESULTS

EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	CH01 / CH36/ CH64		

Frequency	20dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2402 MHz	0.86	<= 1MHz	**PASS**
2441 MHz	0.95	<= 1MHz	**PASS**
2480 MHz	0.99	<= 1MHz	**PASS**

CH01

CH36



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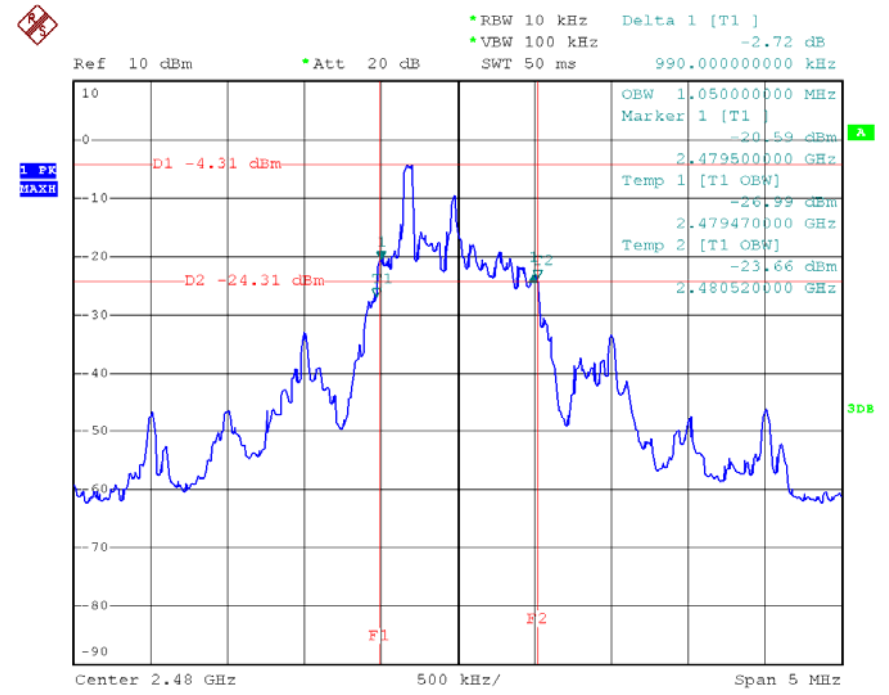
CH64



Date: 25.AUG.2011 11:41:09

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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

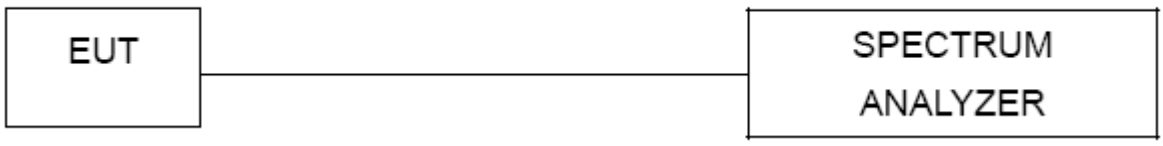
9.1.2 TEST PROCEDURE

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= 1MHz, VBW= 1MHz, Sweep time = Auto.

9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

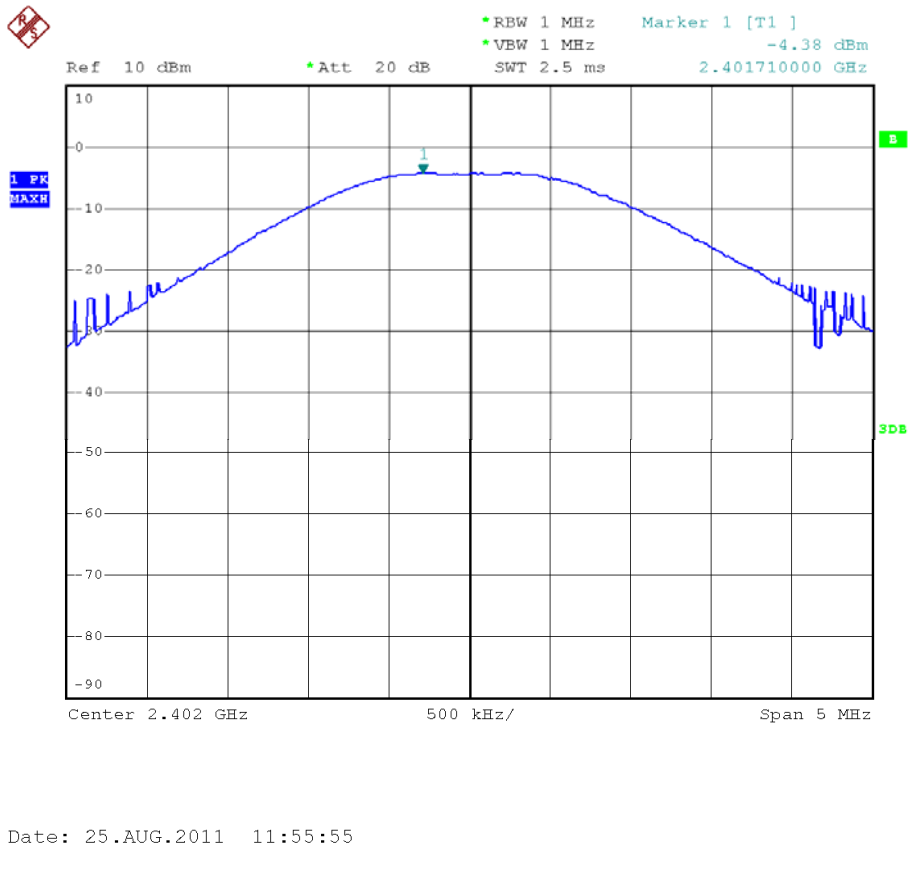
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

9.1.6 TEST RESULTS

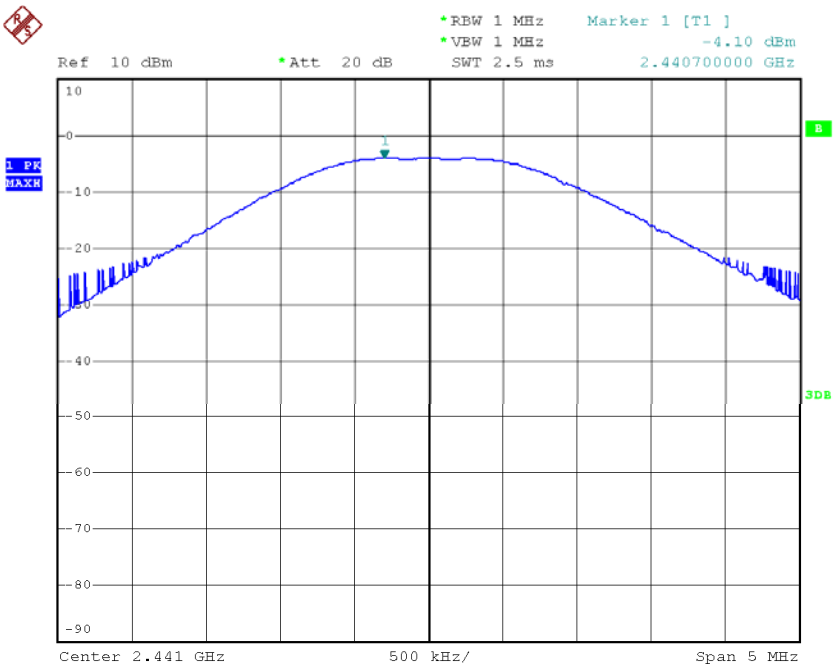
EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	CH01 / CH36/ CH64		

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2402	-4.38	21	0.125
CH36	2441	-4.10	21	0.125
CH64	2480	-4.10	21	0.125

CH01

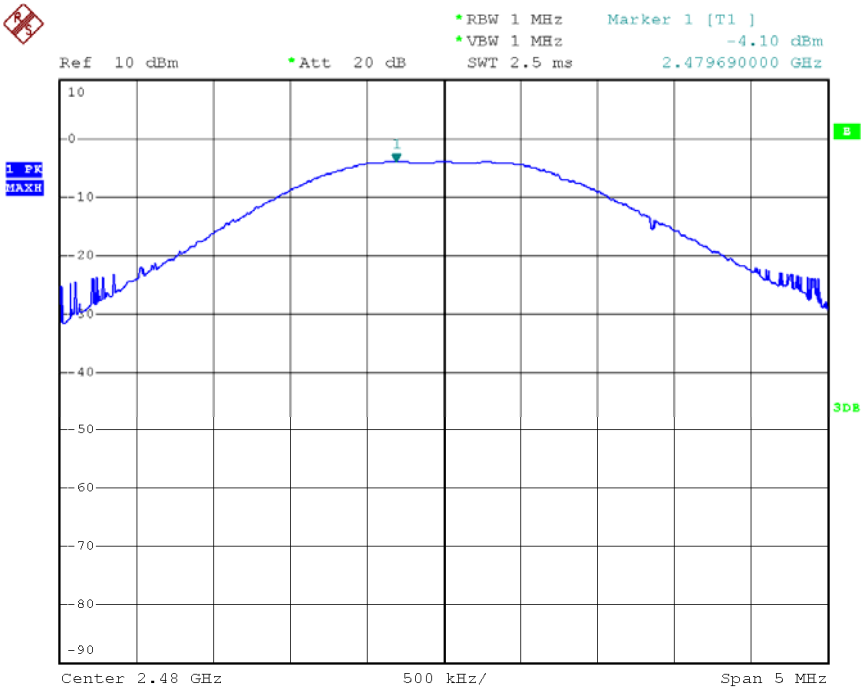


CH36



Date: 25.AUG.2011 11:53:18

CH64



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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.26.2011

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

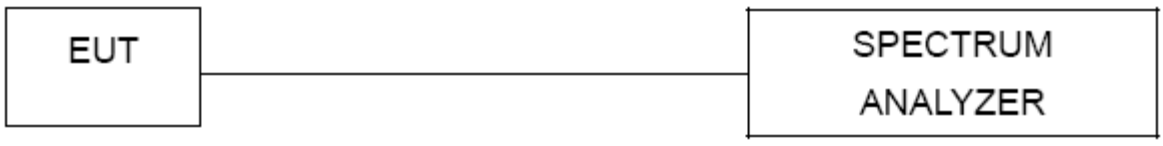
10.1.2 TEST PROCEDURE

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

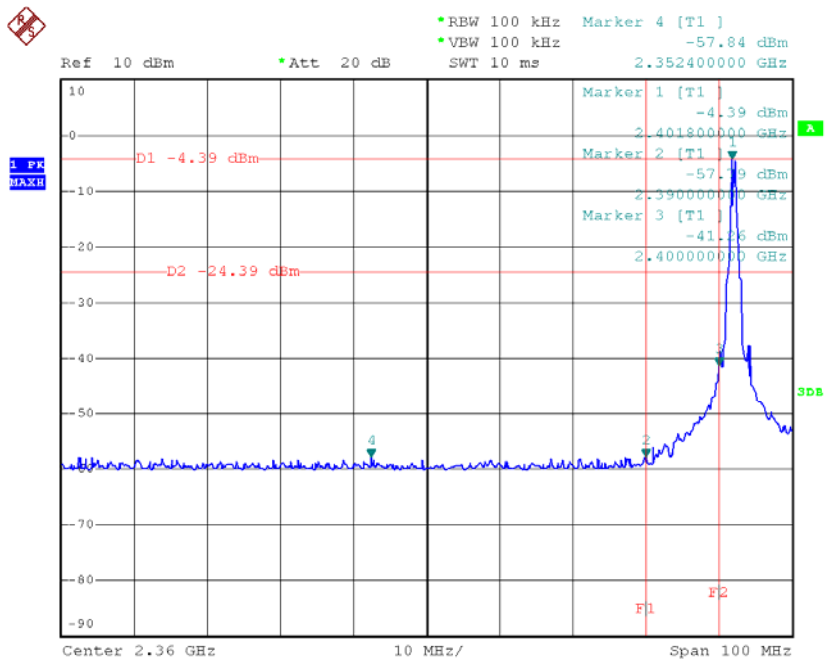
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

10.1.6 TEST RESULTS

EUT：	Wireless Controller for PS3	Model Name ：	PL-6310
Temperature：	23 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	CH01 / CH36 / CH64-1Mbps & 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)
2390.00	-57.79	2484.20	-49.03
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 lever of the desired power.			

Lower -TX CH01



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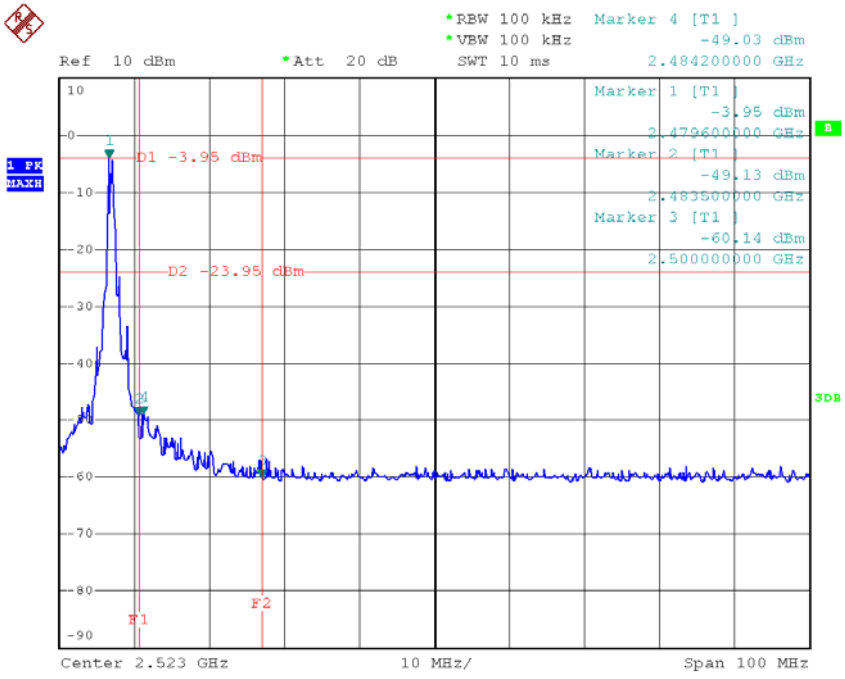
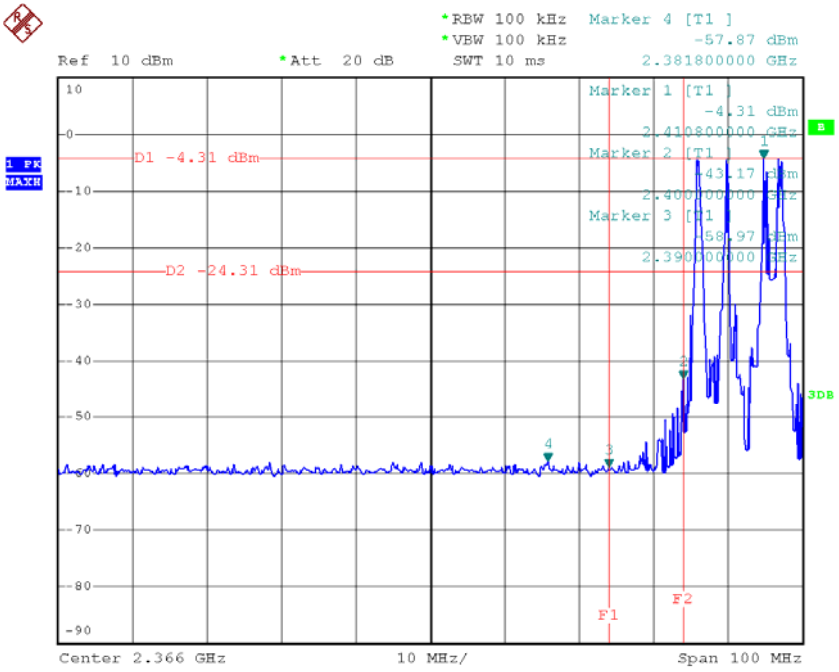
Upper -TX CH64



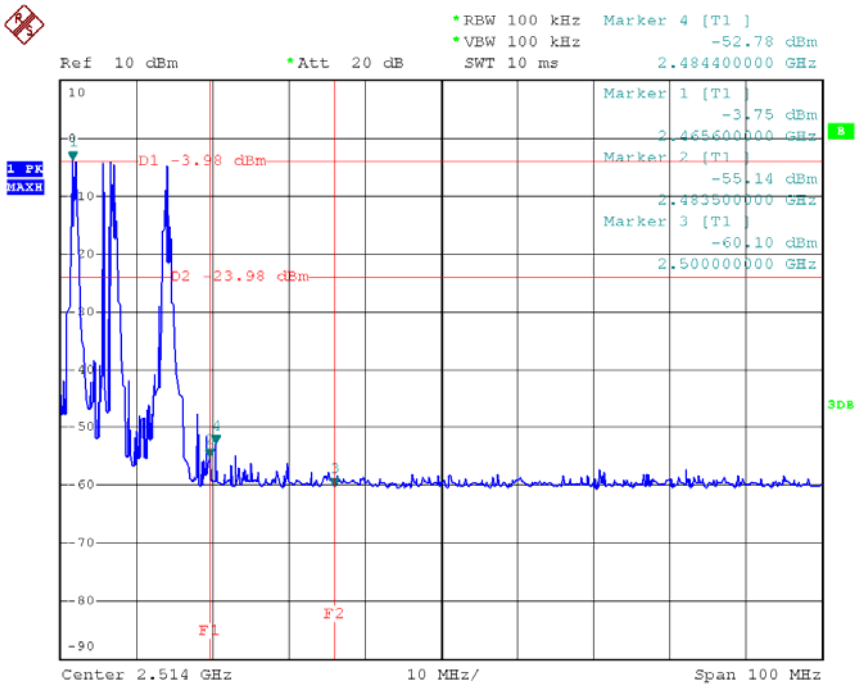
Date: 25.AUG.2011 11:43:50

Hopping on mode (Lower)



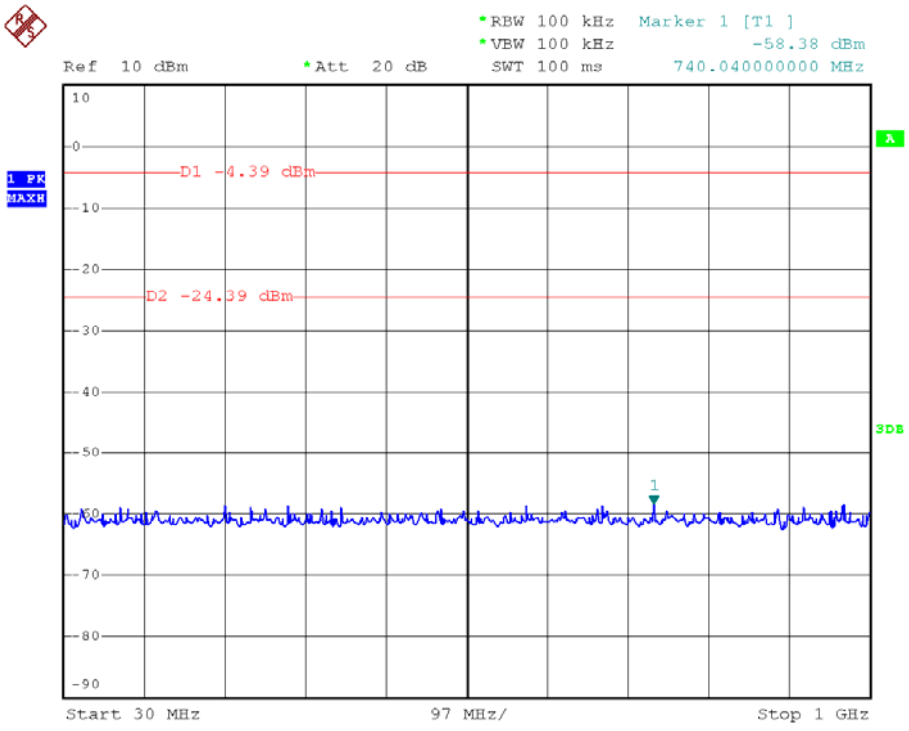
Date: 25.AUG.2011 12:09:30

Hopping on mode (upper)



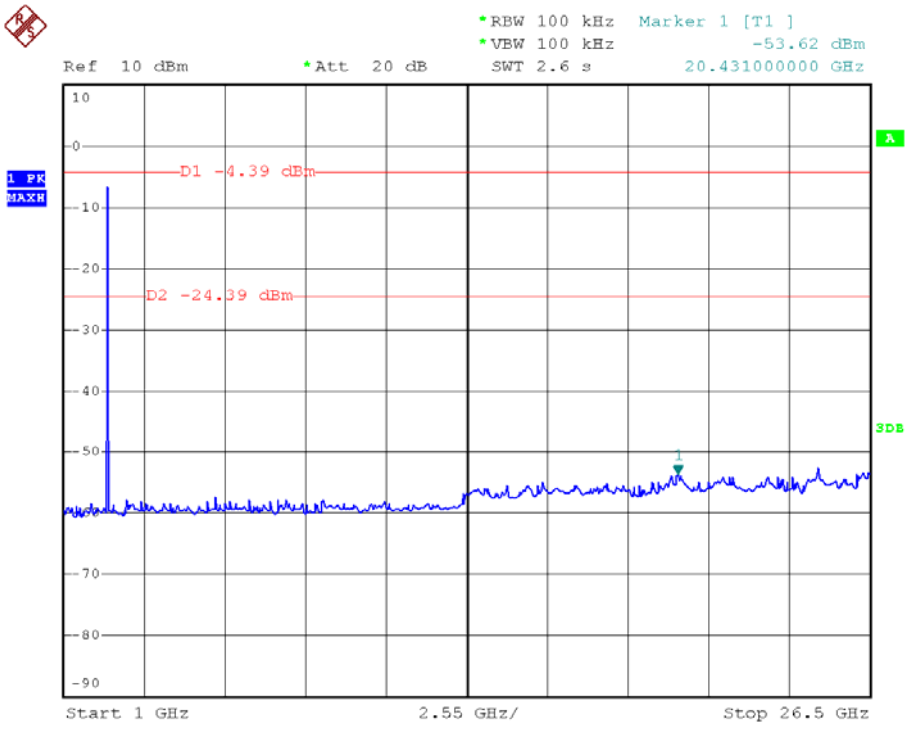
Date: 25.AUG.2011 13:43:09

CH01 (30MHz~1GHz)



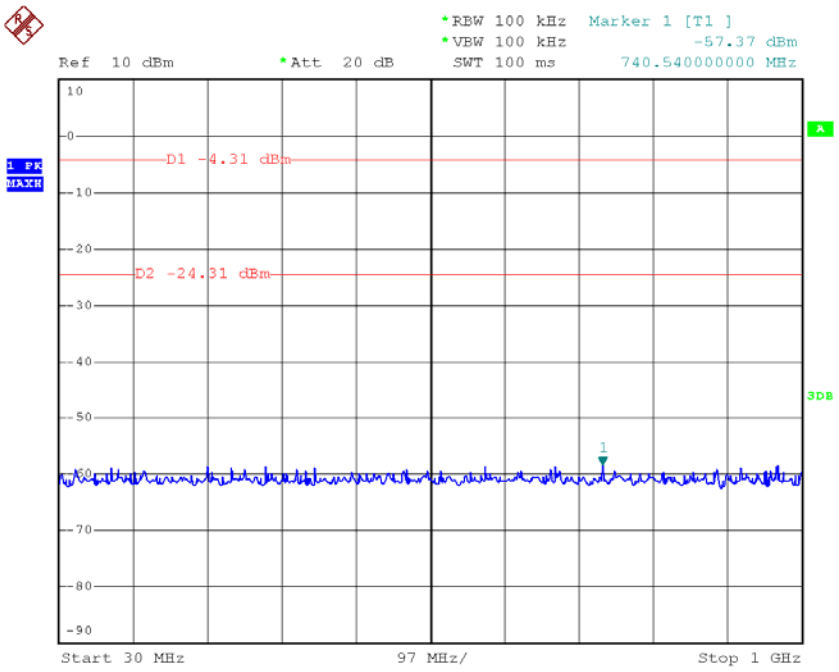
Date: 25.AUG.2011 11:06:38

CH01 (1GHz～10th Harmonic)



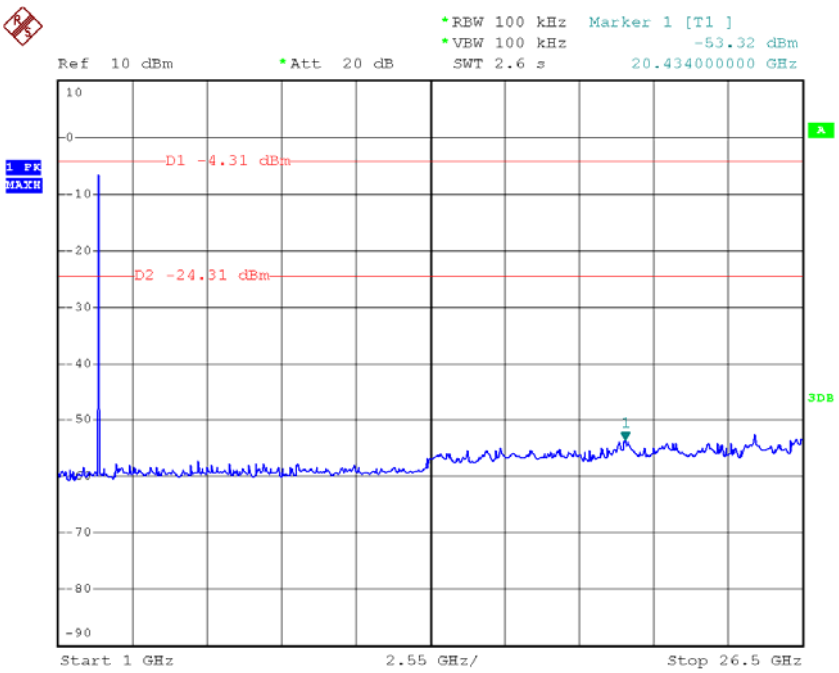
Date: 25.AUG.2011 11:07:51

CH36 (30MHz~1GHz)



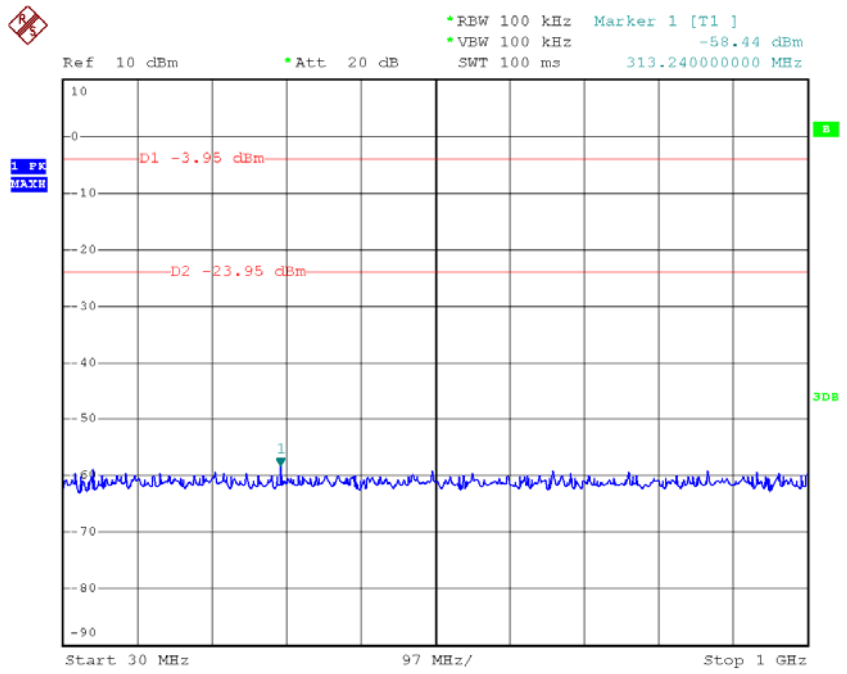
Date: 25.AUG.2011 11:08:33

CH36 (1GHz～10th Harmonic)



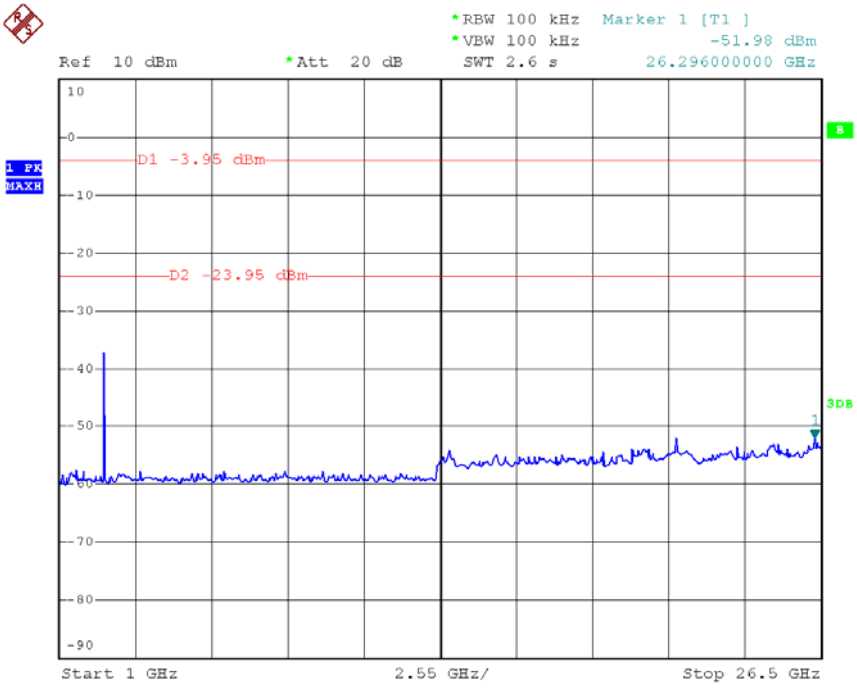
Date: 25.AUG.2011 11:17:11

CH64 (30MHz~1GHz)



Date: 25.AUG.2011 11:44:33

CH64 (1GHz～10th Harmonic)

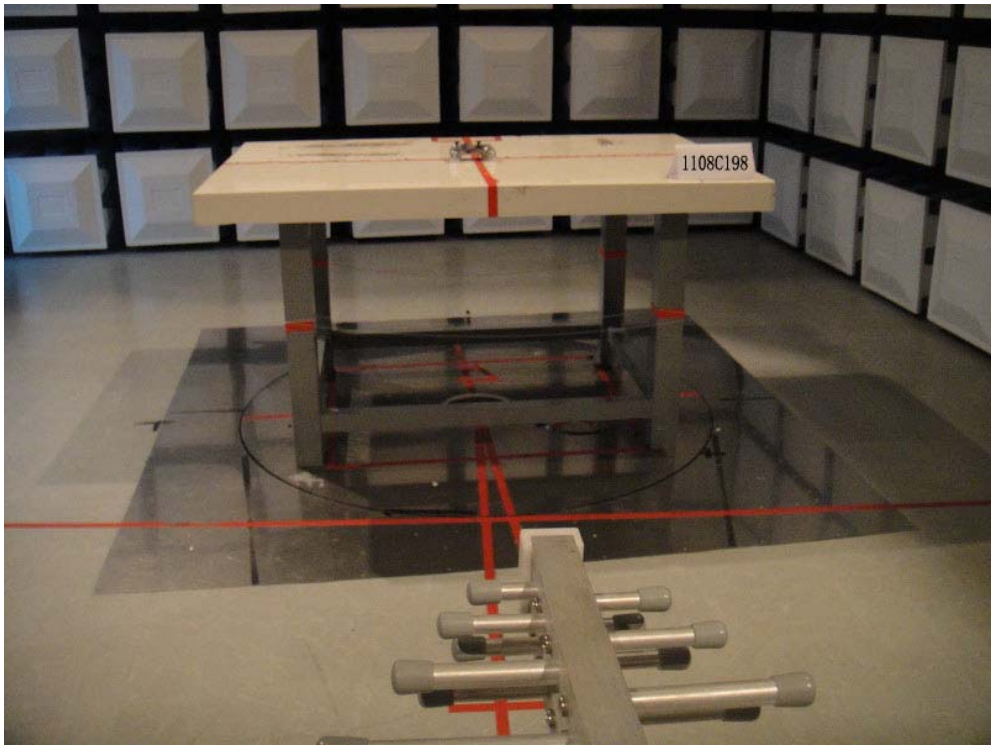


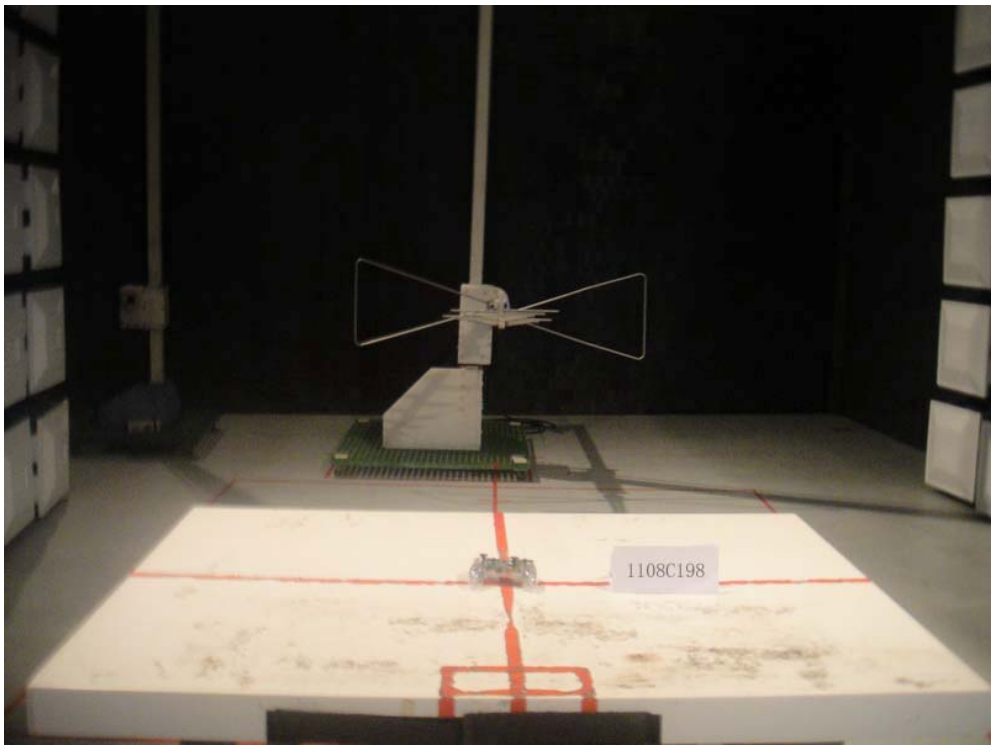
Date: 25.AUG.2011 11:46:56

11. EUT TEST PHOTO

Conducted Measurement Photos

Radiated Measurement Photos
30M~1000MHz





Radiated Measurement Photos
Above 1000MHz