APPLICATION FOR CERTIFICATION
On Behalf of

Mad Catz, Inc.

EUT Description	Model Number
PS3 Wireless Stratocaster guitar controller	9756
PS3 Wireless American P-Bass guitar controller	9766

FCC ID: P25G0MC9766S0709C

Prepared for : Mad Catz, Inc.
7480 Mission Valley Road, Suite 101, San Diego,
California, 92108

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F09036
Date of Test : Feb.12~23, 2009
Date of Report : Mar.03, 2009

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TEST REPORT CERTIFICATION

Applicant : Mad Catz, Inc.

EUT Description & Model No. :

EUT Description	Model Number
PS3 Wireless Stratocaster guitar controller	9756
PS3 Wireless American P-Bass guitar controller	9766

FCC ID : P25G0MC9766S0709C

Power Supply : DC 4.5V

Test Voltage : DC 4.5V

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2008

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits for radiated and conducted emissions. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Feb.12~23, 2009

Prepared by : Edie Huang

Edie Huang / Assistant

Reviewer : Jamy Yu

Jamy Yu / Senior Engineer

AUDIX® 信華科技(深圳)有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: Ken Lu 3/30 09'

Approved & Authorized Signer :

Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission Test	FCC Part 15C: 15.207 ANSI C63.4-2003	N/A
Radiated Emission Test	FCC Part 15C: 15.209 ANSI C63.4-2003	PASS
Band Edge Compliance Test	FCC Part 15: 15.249	PASS
20dB Bandwidth Test	FCC Part 15: 15.215	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT Description & Model Number :

EUT Description	Model Number
PS3 Wireless Stratocaster guitar controller	9756
PS3 Wireless American P-Bass guitar controller	9766

The size and appearance are different only.
Test Model No.: 9766

FCC ID : P25G0MC9766S0709C

Operation frequency : 2403MHz~2480MHz

Power Supply : DC 4.5V
(Note: New batteries were used for all test.)

Applicant : Mad Catz, Inc.
7480 Mission Valley Road, Suite 101, San Diego, California, 92108

Date of Test : Feb.12~23, 2009

Date of Receipt : Feb.04, 2009

Sample Type : Prototype production

Note: This EUT has two parts, one is guitar, the other one is dongle. We test “guitar” in this report.

2.2. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Jun. 13, 2006 File on Federal Communication Commission Registration Number: 90454
3m & 10m Anechoic Chamber	:	Jan. 31, 2007 File on Federal Communication Commission Registration Number: 794232
EMC Lab.	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Feb. 02, 2009 Accredited by NVLAP, USA NVLAP Code: 200372-0 Apr.01, 2008

2.3. Test Uncertainty(95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.88dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.86dB	Polarize: V
	4.3dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.78dB	Polarize: H
	2.82dB	Polarize: V

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (f) of FCC Part 15 section 15.207, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

4. RADIATED EMISSION TEST

4.1. Test Equipment

Frequency rang: 30~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Dec.05,08	1/2 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	May 10, 08	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May 10, 08	1 Year
4.	Amplifier	HP	8447D	2648A04738	Nov.04, 08	1/2 Year
5.	Bilog Antenna	Schaffner	CBL6111C	2598	Nov.10, 08	1 Year
6.	RF Cable	JINGCHENG	JBY400	3# Chamber No.1	Nov.01, 08	1/2 Year
7.	RF Cable	JINGCHENG	JBY400	3# Chamber No.2	Nov.01, 08	1/2 Year
8.	RF Cable	JINGCHENG	JBY400	3# Chamber No.3	Nov.01, 08	1/2 Year
9.	RF Cable	JINGCHENG	JBY400	3# Chamber No.4	Nov.01, 08	1/2 Year
10.	Coaxial Switch	Anritsu	MP59B	M73989	Nov.01, 08	1/2 Year

Frequency rang: above 1000MHz

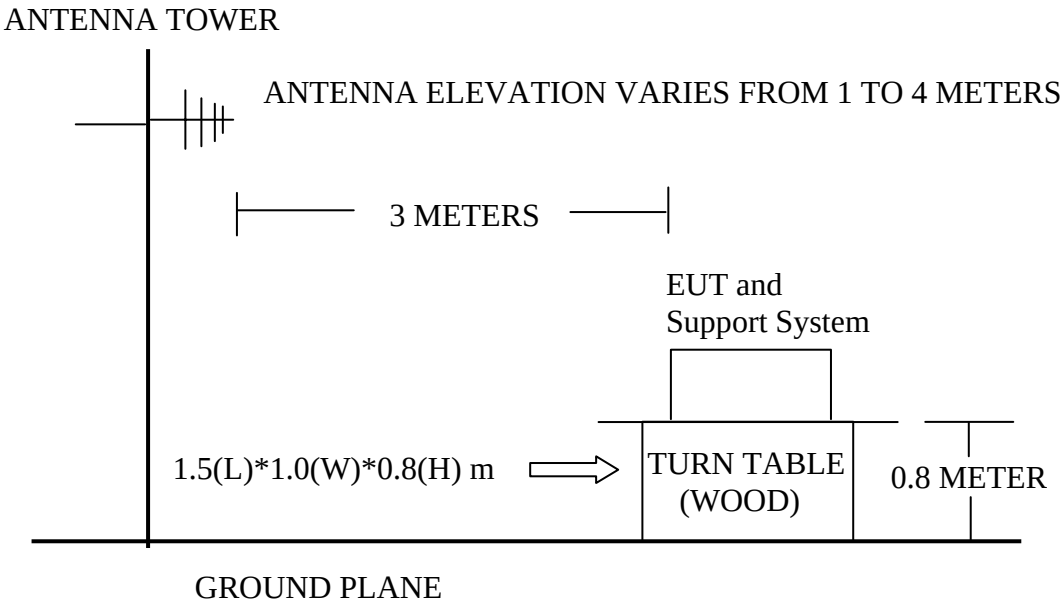
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.10, 08	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	May.27, 08	1.5 Year
3.	Horn Antenna	EMCO	3116	00060088	May.27, 08	1Year
4	Amplifier	Agilent	8449B	3008A02495	Nov.24,08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.28, 08	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	271471/4	May.28, 08	1 Year
7	RF Cable	Hubersuhner	SUCOFLEX102	29086/2	May.28, 08	1 Year

4.2. Block Diagram of Test Setup

4.2.1. Block Diagram of connection between EUT and simulators

(EUT: PS3 Wireless American P-Bass guitar controller)

4.2.2. Anechoic Chamber Setup Diagram



4.3. Radiated Emission Limit Standard: FCC 15.249

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 960MHz	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	
Field Strength of Fundamental emission for 2.4GHz-2.4835GHz	3	94.0 dB(μV)/m (Average) 114.0 dB(μV)/m(Peak)	
Field Strength of Harmonics	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1)Emission level dBμV = 20 log Emission level μV/m

(2)The smaller limit shall apply at the cross point between two frequency bands.

(3)Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

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

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. PS3 Wireless American P-Bass guitar controller (EUT)

Model Number : 9766
Serial Number : N/A

4.4.2. Support Equipment: As Tested Supporting System Detail, in Section 2.2.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT as shown in Section 4.2..

4.5.2. Let the EUT work in test mode (TX Mode) and test it.

4.6. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2003 on radiated emission Test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as the test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the VBW is set at 1MHz and RBW is set at 1MHz,PK detector for peak emissions measurement above 1GHz.

The duty cycle factor was use to calculate Average Level above 1 GHz.

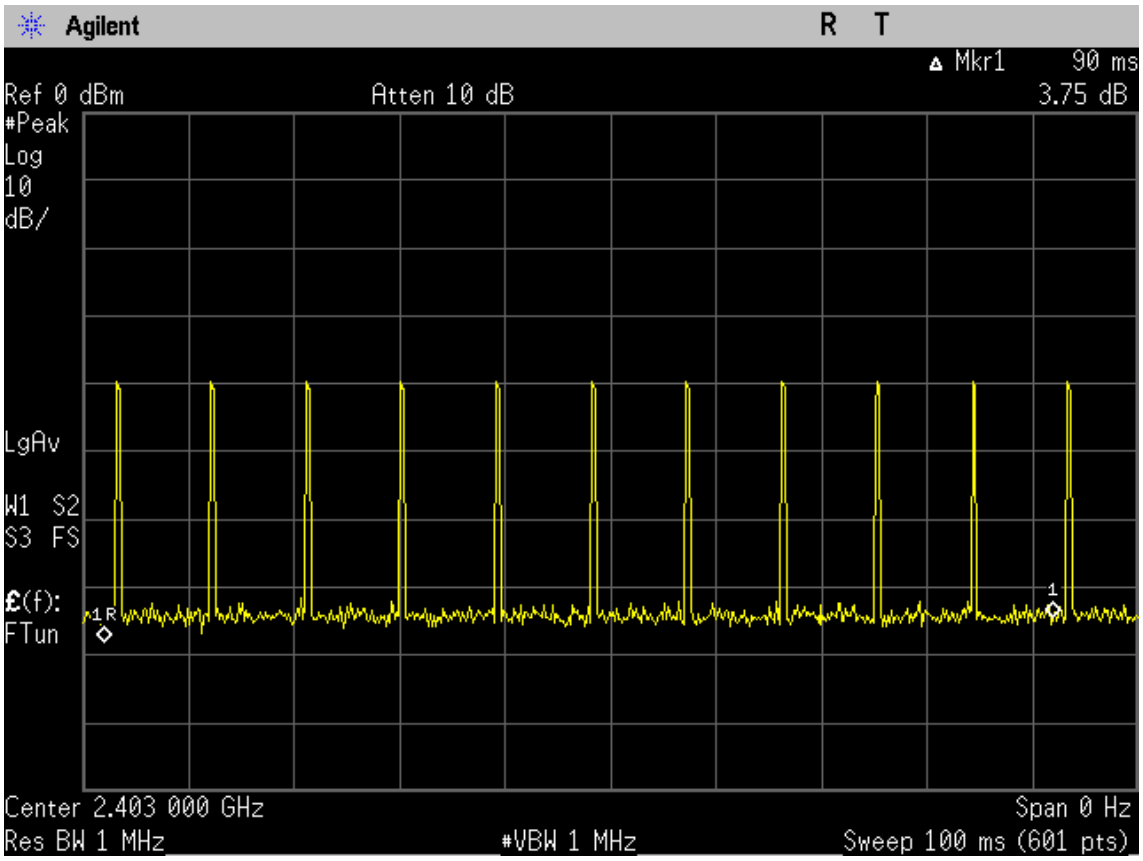
The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

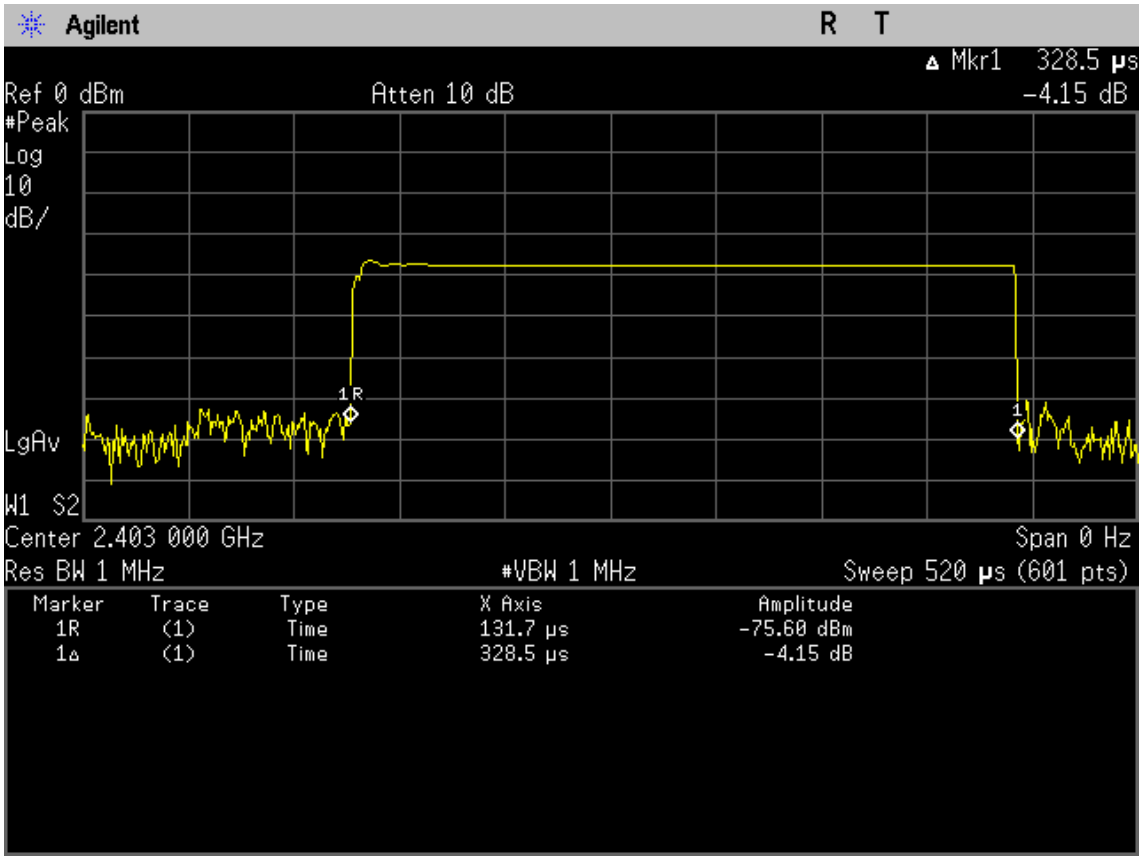
4.7. Radiated Emission Test Results

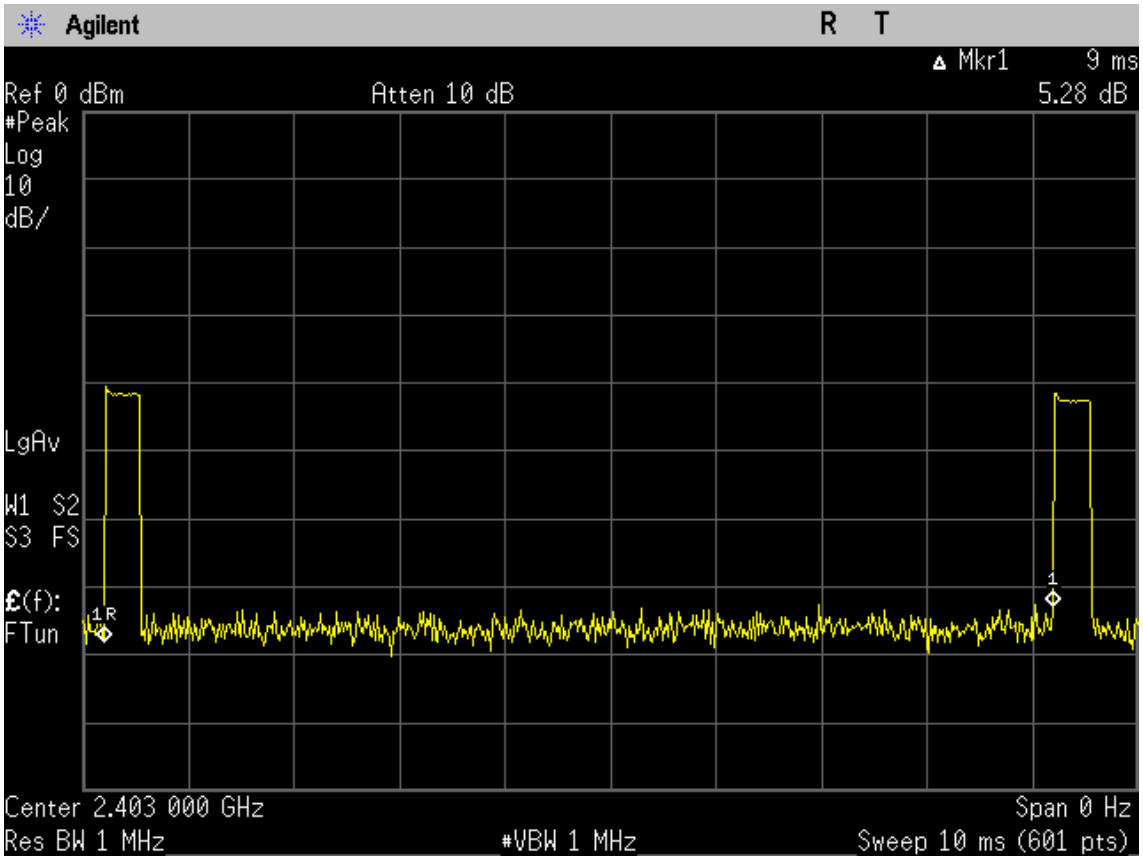
PASS.

All the emissions from 30MHz to 25GHz were comply with the 15.209 and 15.249 Limit.

Duty factor = 20 log (1/x) =28.75
X = Tx on/(Tx on + Tx off) =0.033

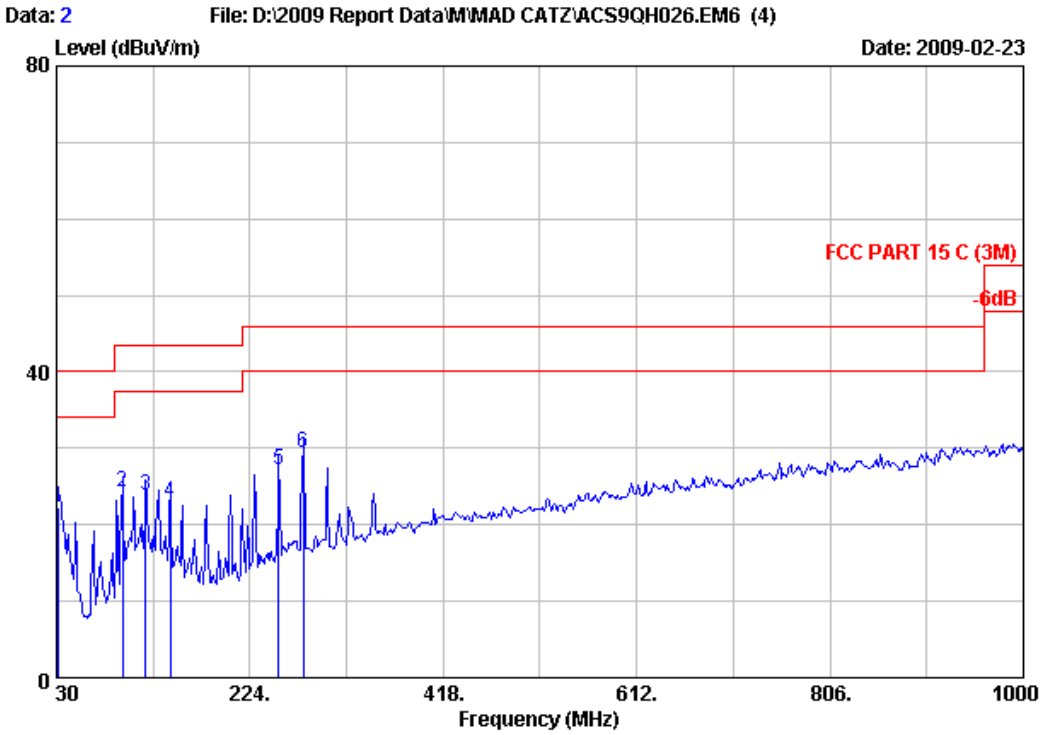





Agilent
R T
Mkr1 9 ms
Ref 0 dBm
Atten 10 dB
5.28 dB
#Peak
Log
10
dB/
LgAv
W1 S2
S3 FS
£(f):
FTun
1R
1
Center 2.403 000 GHz
Span 0 Hz
Res BW 1 MHz
#VBW 1 MHz
Sweep 10 ms (601 pts)

Test Frequency: 30MHz-1000MHz

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

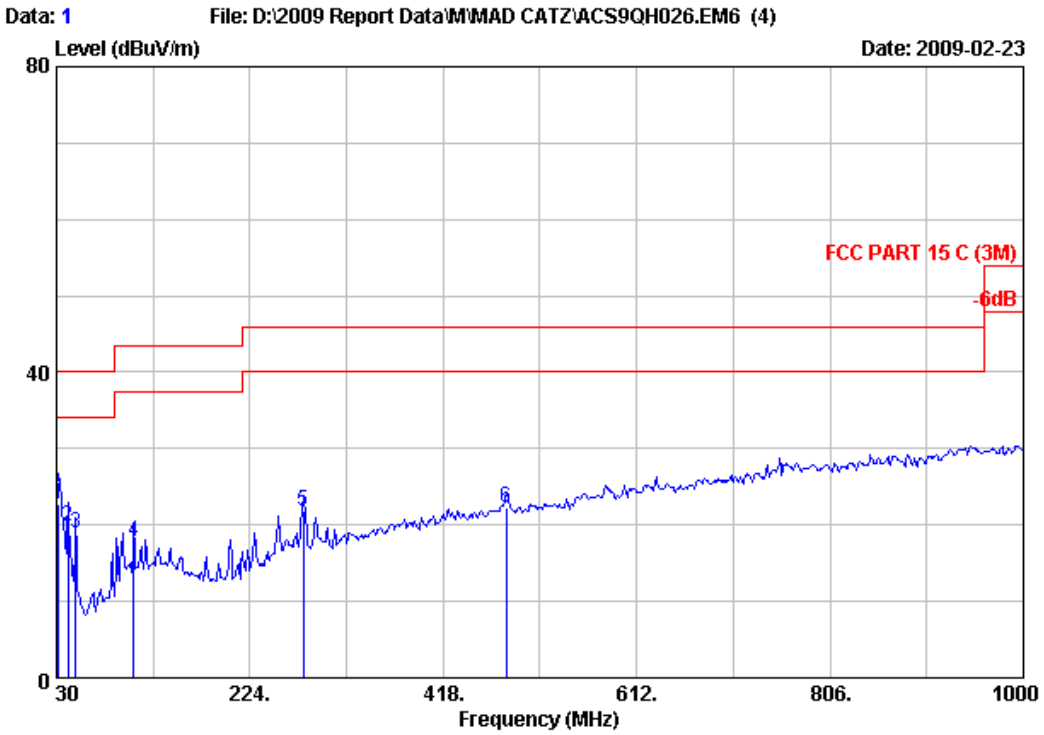


Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m CBL6111C Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/47% Engineer : Power
EUT : PS3 Wireless American P-Bass guitar controller
Power Rating : DC 4.5V
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.73	0.49	3.07	22.29	40.00	17.71	QP
2	95.960	9.74	0.91	13.54	24.19	43.50	19.31	QP
3	119.240	11.75	1.02	10.98	23.75	43.50	19.75	QP
4	144.460	11.78	1.15	9.98	22.91	43.50	20.59	QP
5	253.100	12.96	1.62	12.67	27.25	46.00	18.75	QP
6	277.350	13.13	1.73	14.63	29.49	46.00	16.51	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057



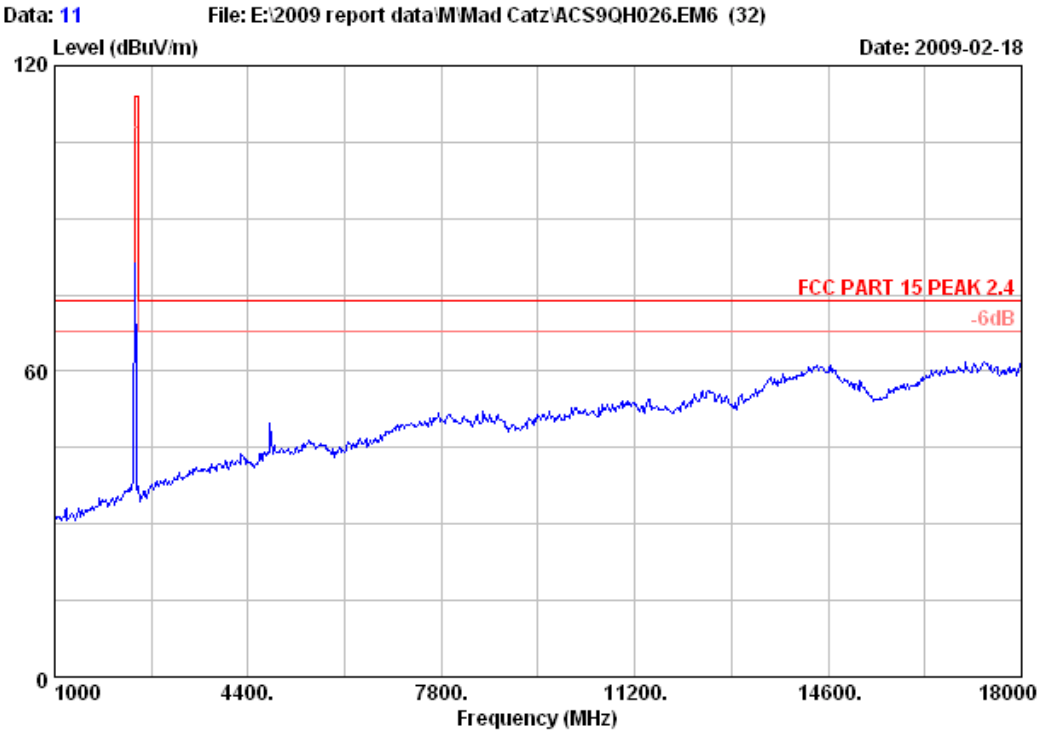
Site no. : 3m Chamber Data no. : 1
Dis. / Ant. : 3m CBL6111C Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/47% Engineer : Power
EUT : PS3 Wireless American P-Bass guitar controller
Power Rating : DC 4.5V
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.73	0.49	3.62	22.84	40.00	17.16	QP
2	41.640	13.33	0.56	6.00	19.89	40.00	20.11	QP
3	49.400	9.57	0.61	8.82	19.00	40.00	21.00	QP
4	107.600	11.04	0.97	5.76	17.77	43.50	25.73	QP
5	277.350	13.13	1.73	7.02	21.88	46.00	24.12	QP
6	481.050	17.68	2.46	2.07	22.21	46.00	23.79	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Test Frequency: 1GHz-18GHz

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 11
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%                Engineer   : Alan
EUT           : PS3 Wireless American P-Bass giutar controller
Power Rating  : DC 4.5V
Test mode     : TX 2403MHz
M/N           : 9766 (Guitar)
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No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
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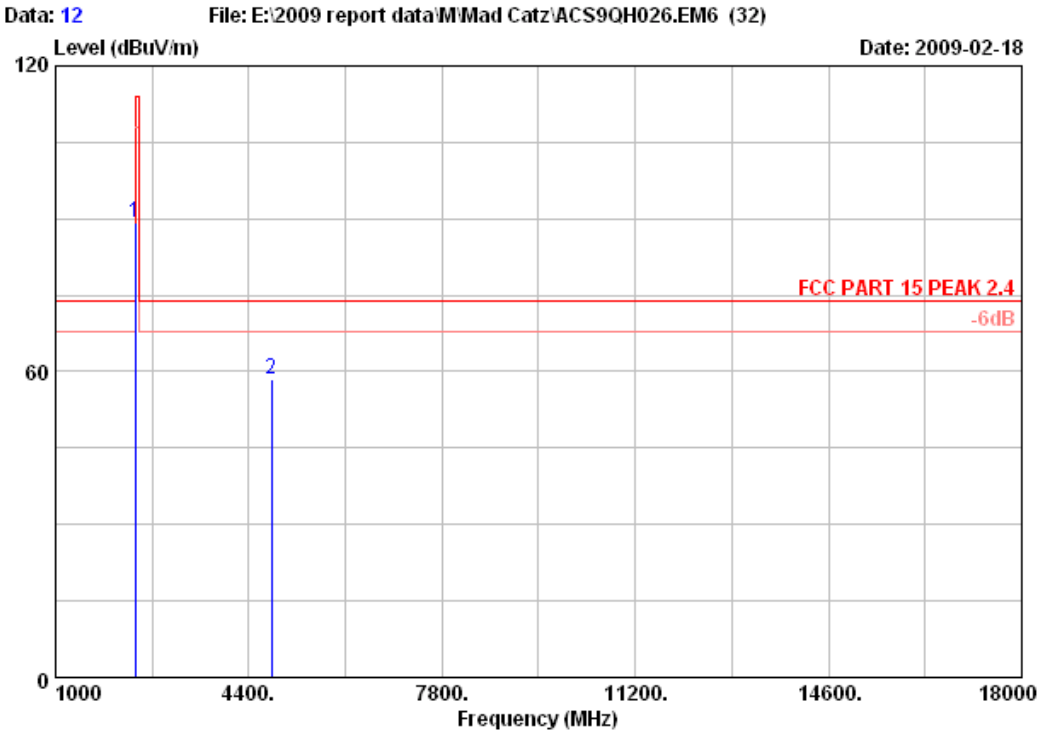

Site no. : 3# Chamber Data no. : 12
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2403MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2403.000	28.48	6.73	35.12	89.12	89.21	114.00	24.79	Peak
2	4806.000	34.36	10.54	34.60	48.20	58.50	74.00	15.50	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2403	89.21	28.75	60.46	94	33.54
4806	58.5	28.75	29.75	54	24.25

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
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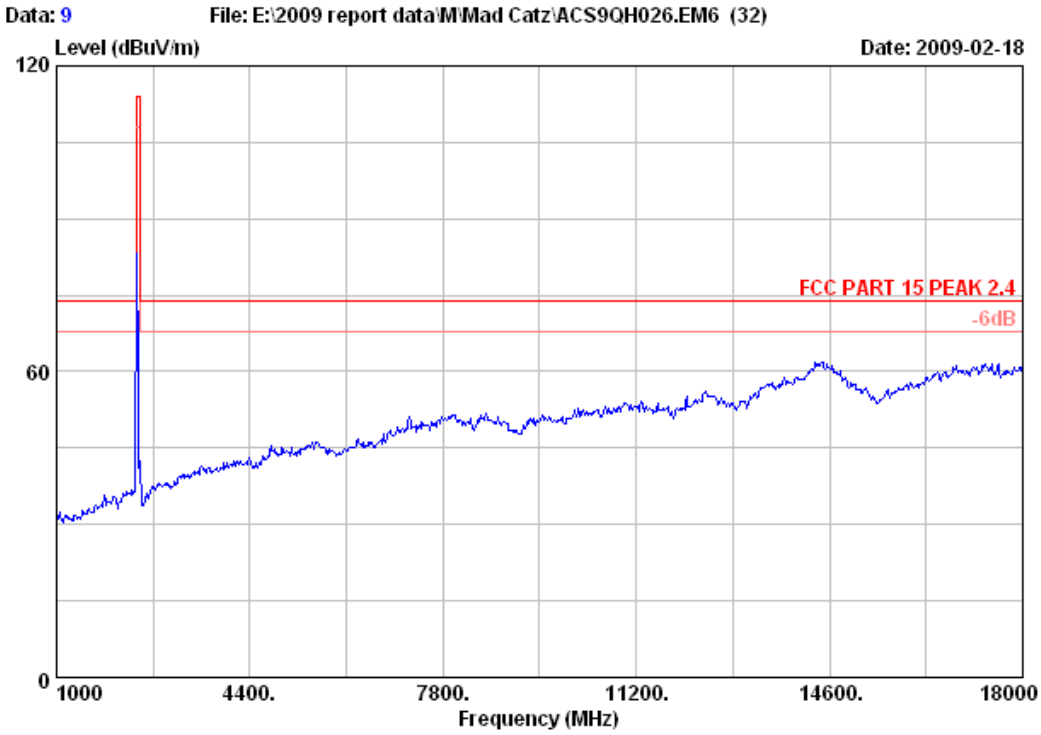
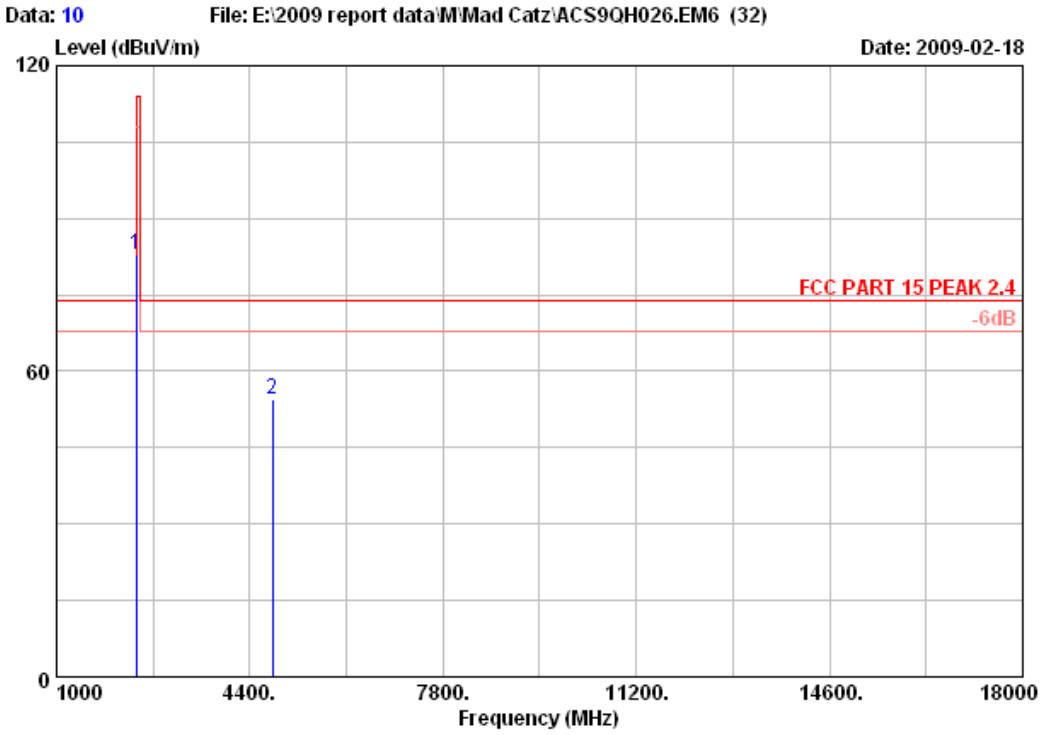
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Data no. : 9
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2403MHz
M/N : 9766 (Guitar)

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Data no. : 10
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2403MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2403.000	28.48	6.73	35.12	82.97	83.06	114.00	30.94	Peak
2	4806.000	34.36	10.54	34.60	44.17	54.47	74.00	19.53	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2403	83.06	28.75	54.31	94	39.69
4806	54.47	28.75	25.72	54	28.28

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
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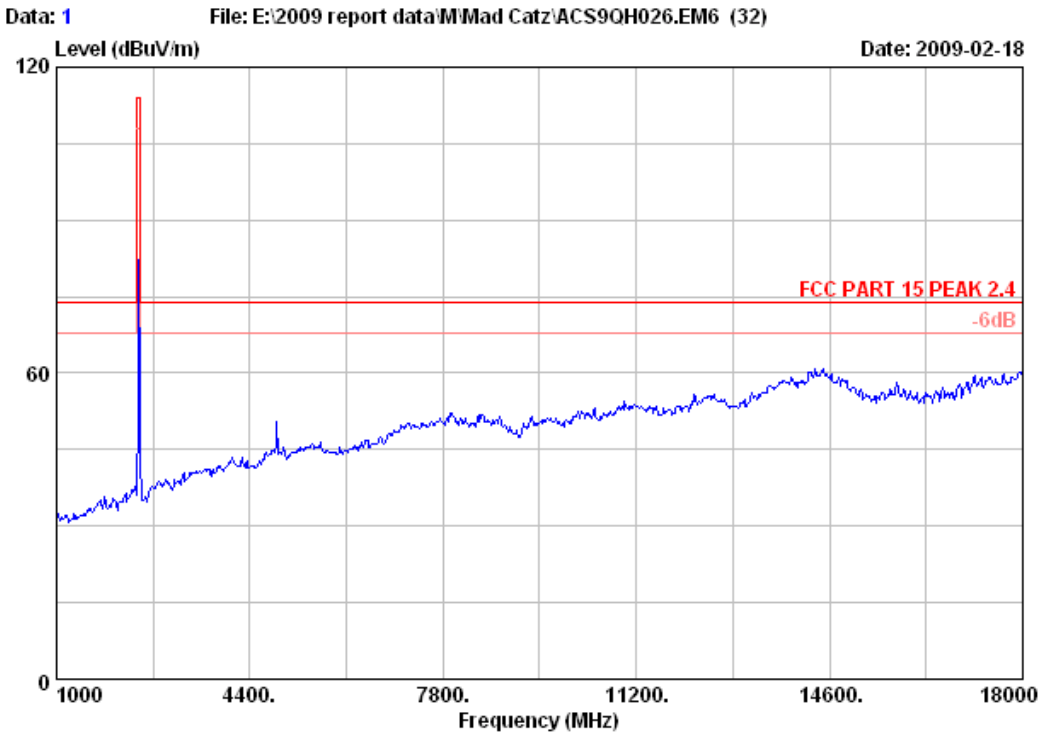
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Data no. : 1
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2441MHz
M/N : 9766 (Guitar)

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
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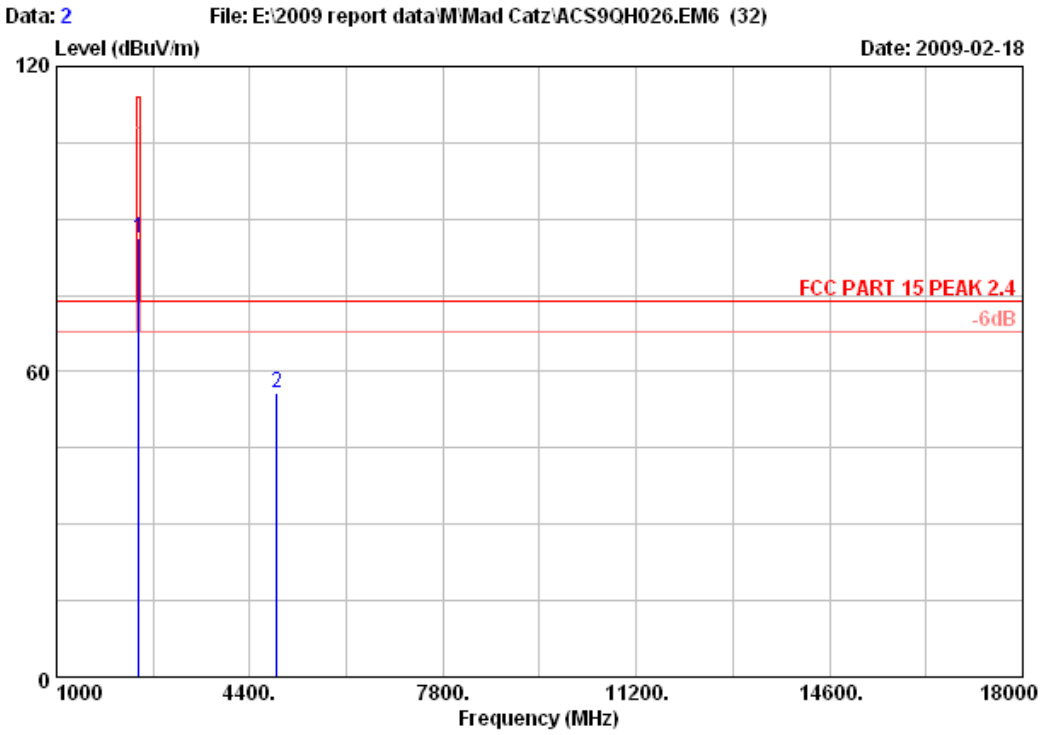

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Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2441MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.53	6.80	35.11	86.15	86.37	114.00	27.63	Peak
2	4882.000	34.78	10.57	34.58	45.08	55.85	74.00	18.15	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2441	86.37	28.75	57.62	94	36.38
4882	55.85	28.75	27.1	54	26.9

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
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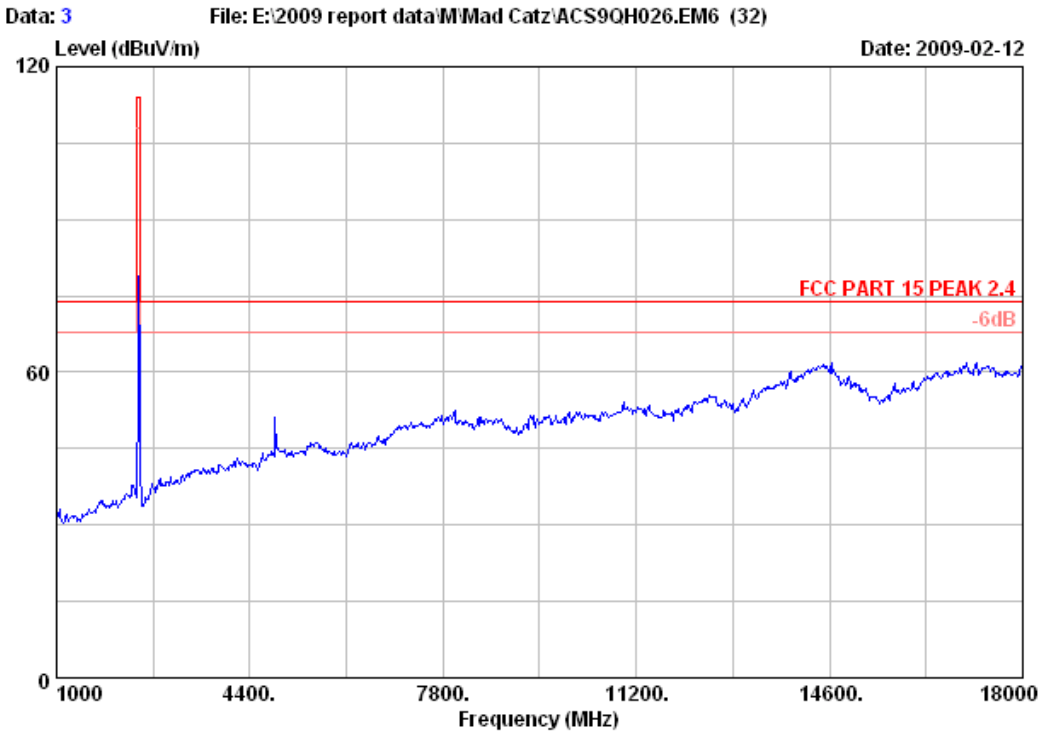
Postcode:518057



Site no. : 3# Chamber Data no. : 3
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2441MHz
M/N : 9766 (Guitar)

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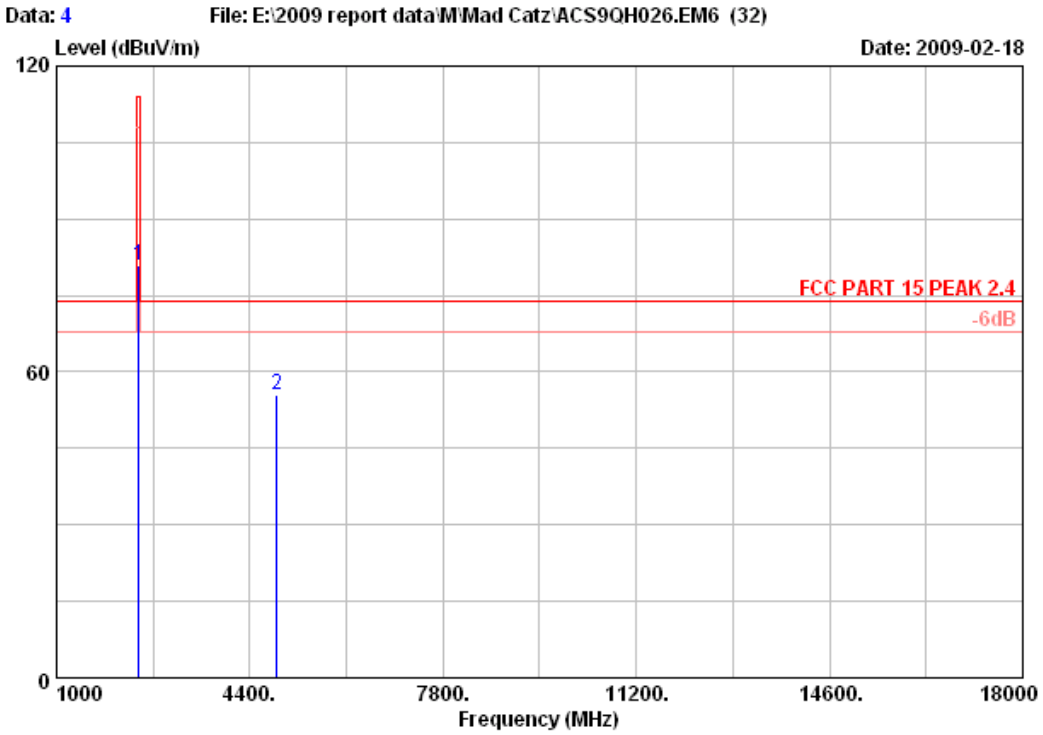

Site no. : 3# Chamber Data no. : 4
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2441MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.53	6.80	35.11	80.69	80.91	114.00	33.09	Peak
2	4882.000	34.78	10.57	34.58	44.74	55.51	74.00	18.49	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2441	80.91	28.75	52.16	94	41.84
4882	55.51	28.75	26.76	54	27.24

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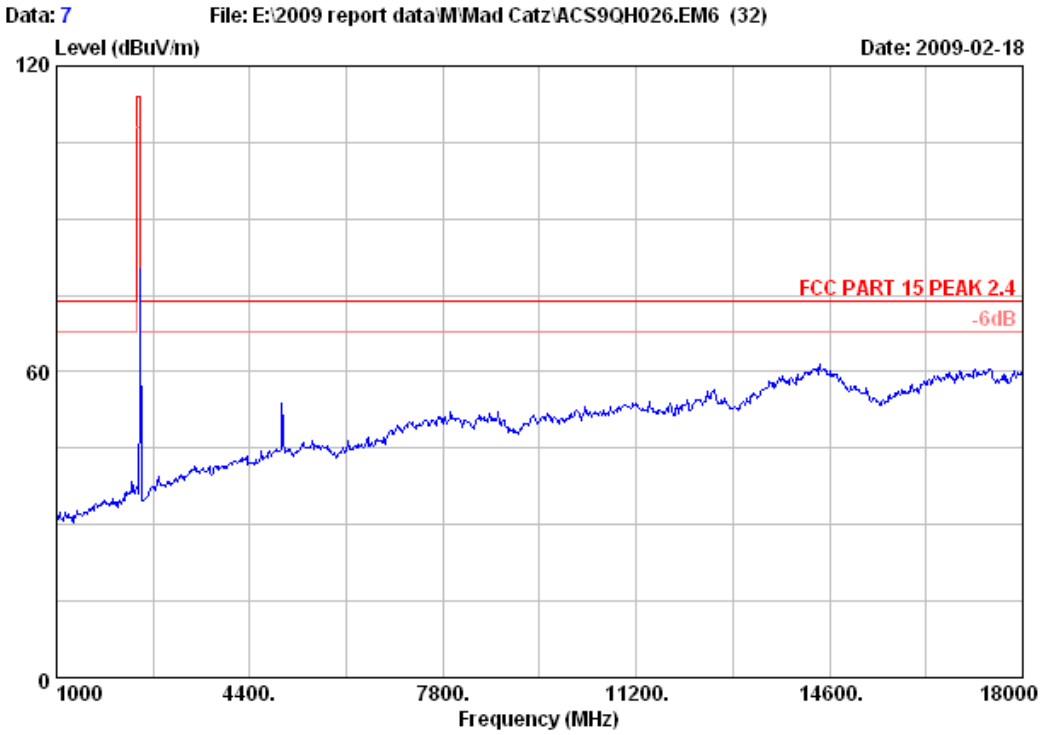

Site no.	: 3# Chamber	Data no.	: 7
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23*C/54%	Engineer	: Alan
EUT	: PS3 Wireless American P-Bass giutar controller		
Power Rating	: DC 4.5V		
Test mode	: TX 2480MHz		
M/N	: 9766 (Guitar)		

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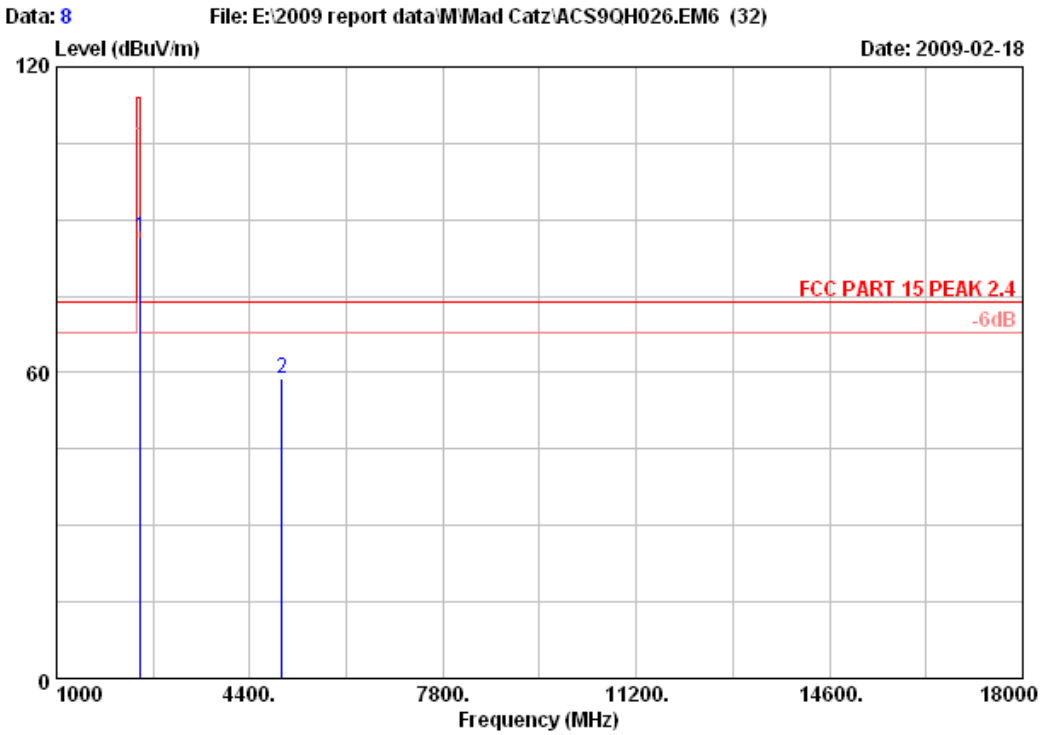

Site no. : 3# Chamber Data no. : 8
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2480MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.58	6.87	35.10	86.17	86.52	114.00	27.48	Peak
2	4960.000	35.29	10.59	34.56	47.36	58.68	74.00	15.32	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2480	86.52	28.75	57.77	94	36.23
4960	58.68	28.75	29.93	54	24.07

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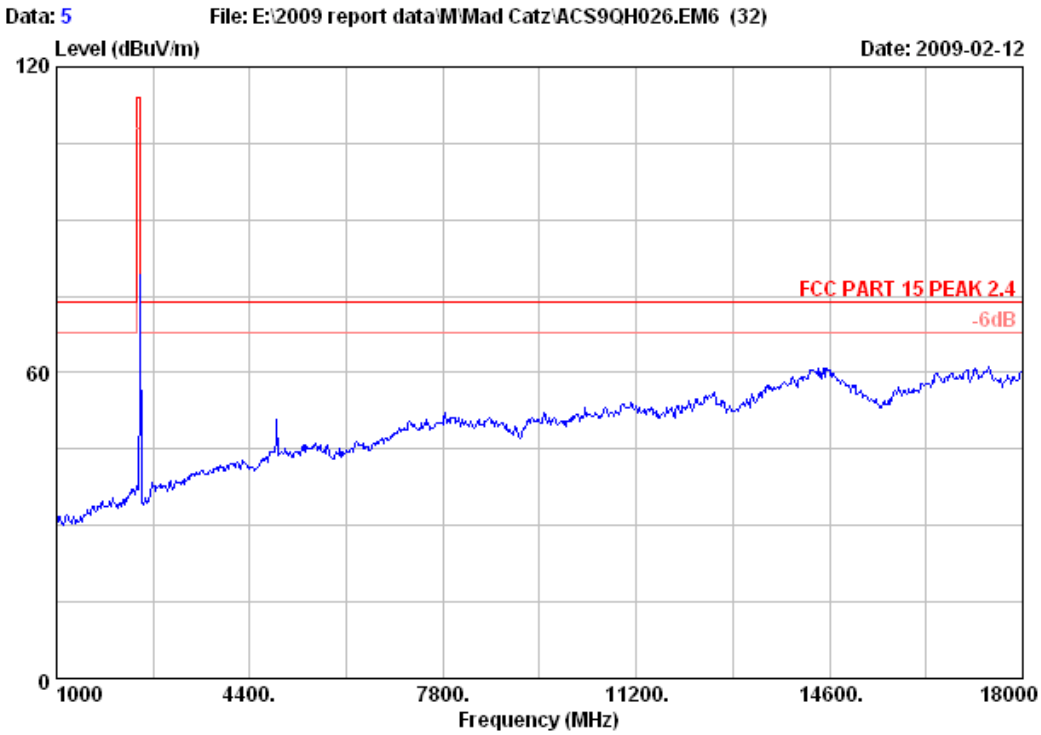

Site no. : 3# Chamber Data no. : 5
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2480MHz
M/N : 9766 (Guitar)

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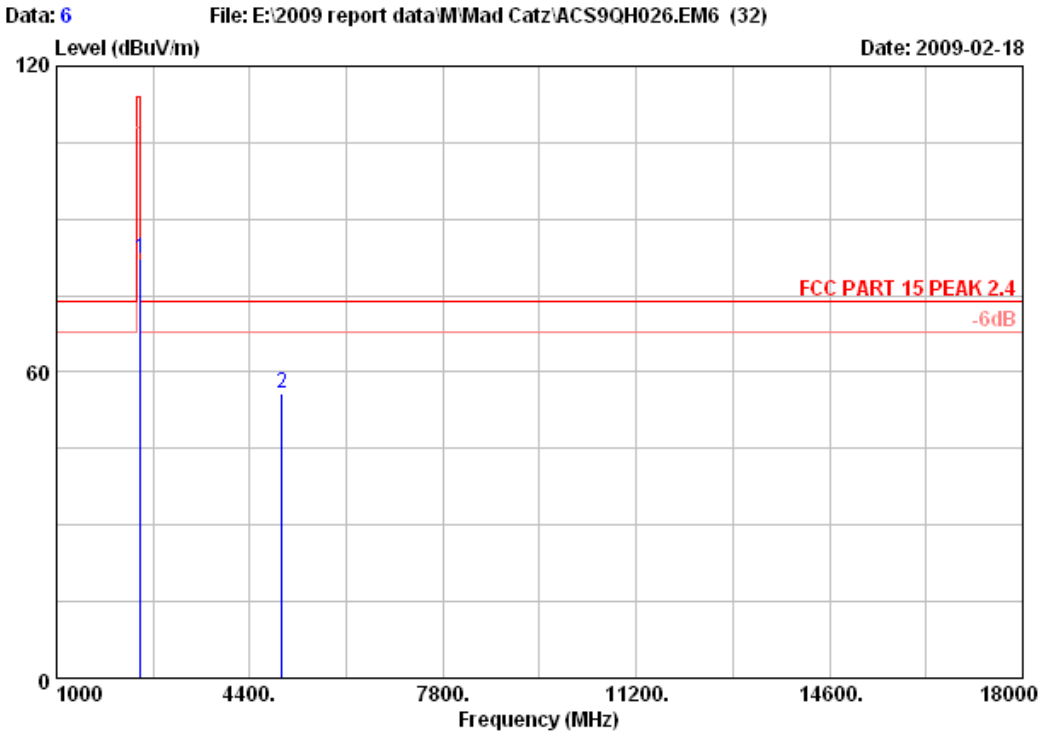

Site no. : 3# Chamber Data no. : 6
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2480MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.58	6.87	35.10	81.86	82.21	114.00	31.79	Peak
2	4960.000	35.29	10.59	34.56	44.52	55.84	74.00	18.16	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2480	82.21	28.75	53.46	94	40.54
4960	55.84	28.75	27.09	54	26.91

5. BAND EDGE COMPLIANCE TEST

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May, 27, 08	1.5 Year
3	Amplifier	Agilent	8449B	3008A02495	Nov 6.08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,28, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,28, 08	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,28, 08	1 Year

5.2. Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in section 15.209, which is the lesser attenuation.

5.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
   (a) PEAK: RBW=VBW=1MHz, PK detector, Sweep=AUTO

5.4. Test Results

Pass (The testing data was attached in the next pages.)

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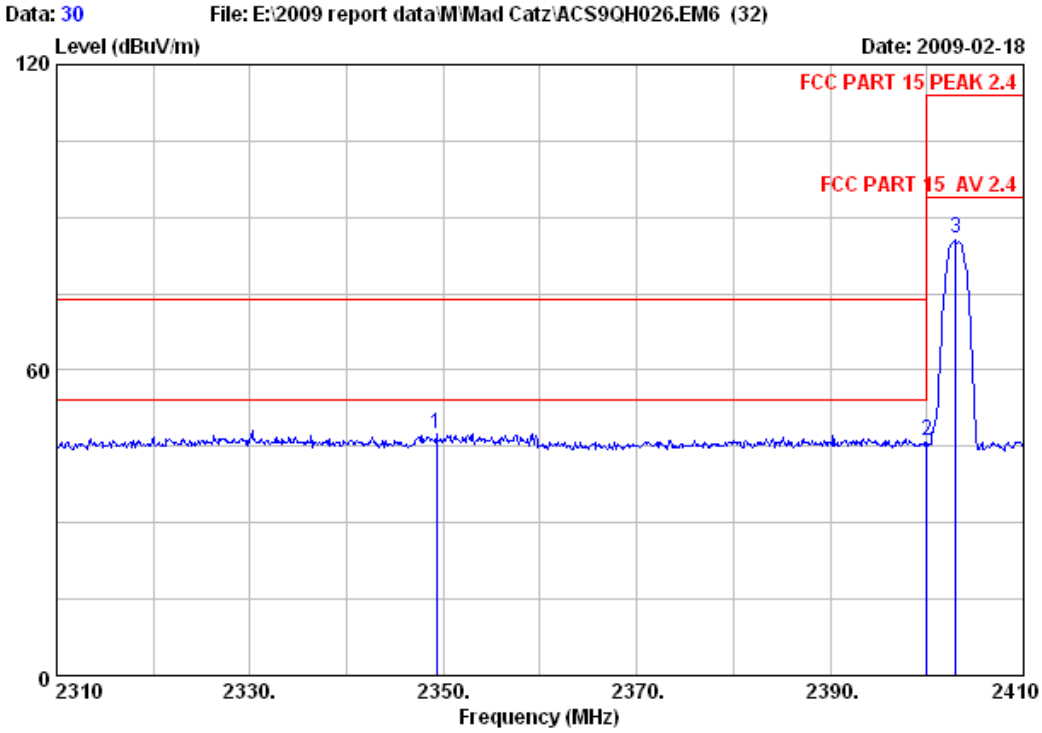

Site no. : 3# Chamber Data no. : 30
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2403MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2349.300	28.38	6.67	35.13	47.41	47.33	74.00	26.67	Peak
2	2400.000	28.46	6.73	35.12	46.09	46.16	74.00	27.84	Peak
3	2403.000	28.48	6.73	35.12	85.71	85.80	114.00	28.20	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Note: All the PK levels fall in the restricted bands comply with Average limit, so the average levels are deemed to comply with average limit.

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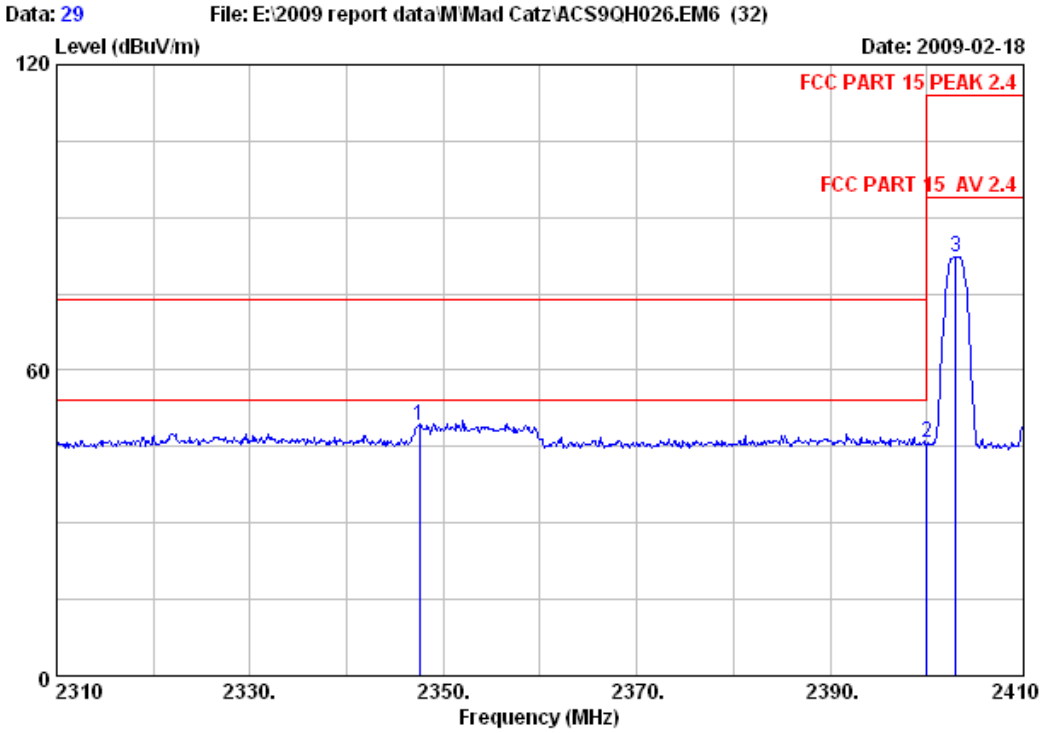

Site no. : 3# Chamber Data no. : 29
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2403MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2347.500	28.38	6.67	35.13	49.08	49.00	74.00	25.00	Peak
2	2400.000	28.46	6.73	35.12	45.84	45.91	74.00	28.09	Peak
3	2403.000	28.48	6.73	35.12	82.20	82.29	114.00	31.71	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Note: All the PK levels fall in the restricted bands comply with Average limit, so the average levels are deemed to comply with average limit.

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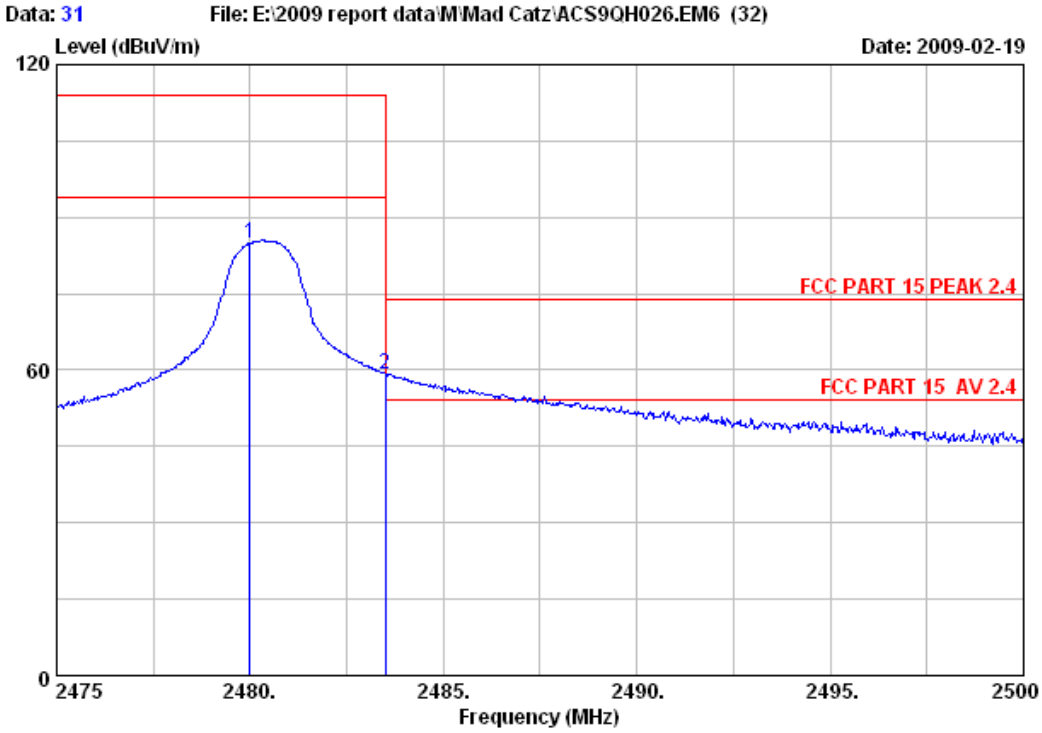

Site no. : 3# Chamber Data no. : 31
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2480MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.58	6.87	35.10	84.57	84.92	114.00	29.08	Peak
2	2483.500	28.58	6.87	35.10	58.97	59.32	74.00	14.68	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	PK Level (dBuV/m)	Duty cycle factor (dB)	Average Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2483.5	59.32	28.75	30.57	54	23.43

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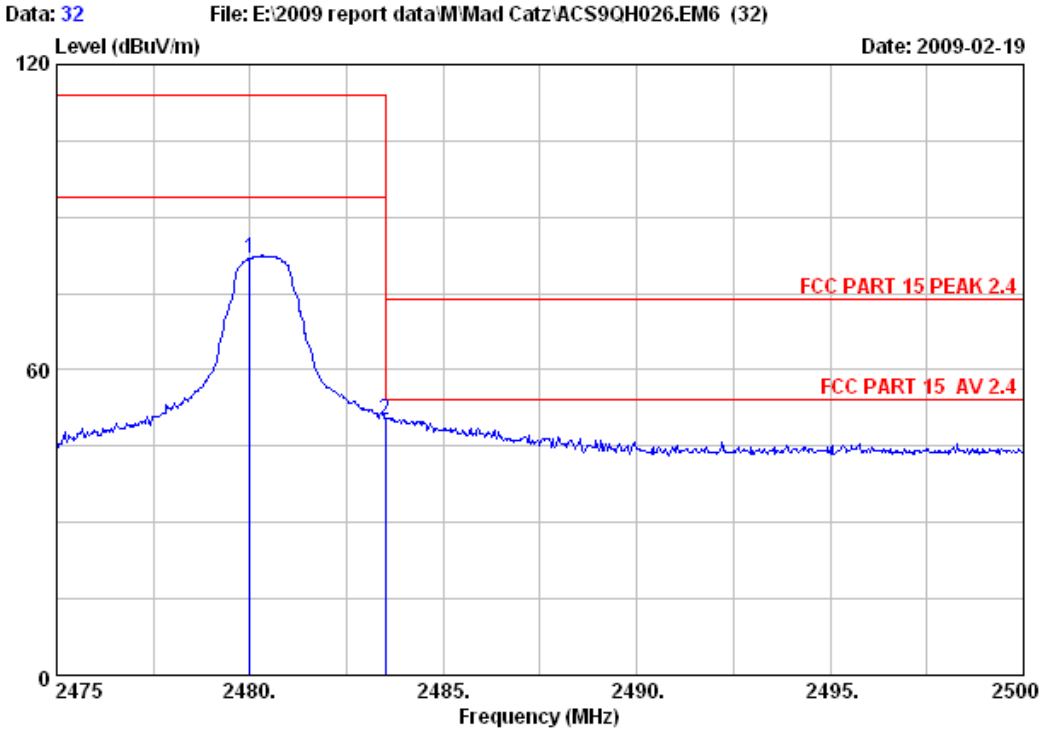


Site no. : 3# Chamber Data no. : 32
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54% Engineer : Alan
EUT : PS3 Wireless American P-Bass giutar controller
Power Rating : DC 4.5V
Test mode : TX 2480MHz
M/N : 9766 (Guitar)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.58	6.87	35.10	81.56	81.91	114.00	32.09	Peak
2	2483.500	28.58	6.87	35.10	49.86	50.21	74.00	23.79	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Note: All the PK levels fall in the restricted bands comply with Average limit, so the average levels are deemed to comply with average limit.

6. 20DB BANDWIDTH TEST

6.1. Test Equipment

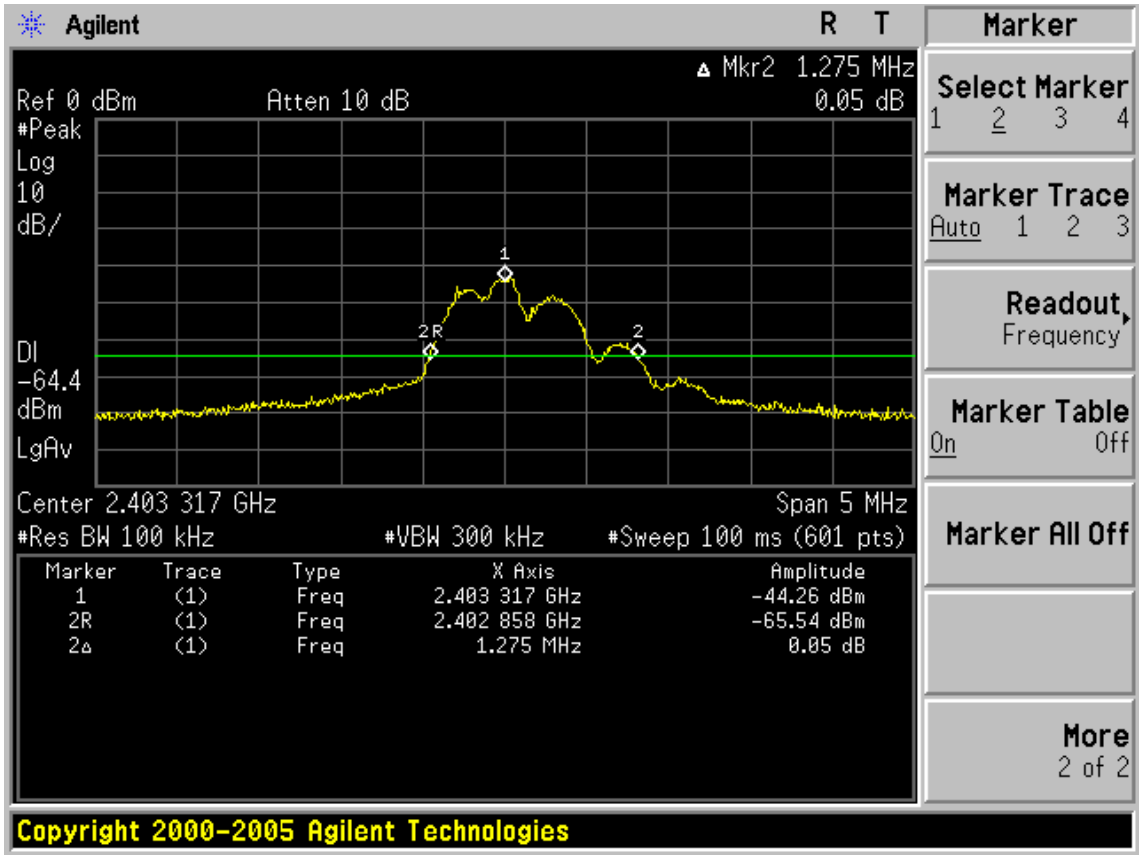
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	1Year

6.2. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

6.3. Test Results

CH	20dB Bandwidth (kHz)	Limit (kHz)	Conclusion
(Low)	1275	---	PASS
(Mid)	1008	---	PASS
(High)	900	---	PASS


Agilent
R T
Marker
Mkr2 1.275 MHz
Ref 0 dBm
Atten 10 dB
0.05 dB
#Peak
Log
10
dB/
Dl
-64.4
dBm
LgAv
Center 2.403 317 GHz
Span 5 MHz
#Res BW 100 kHz
#VBW 300 kHz
#Sweep 100 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.403 317 GHz -44.26 dBm
2R (1) Freq 2.402 858 GHz -65.54 dBm
2Δ (1) Freq 1.275 MHz 0.05 dB
Select Marker
1 2 3 4
Marker Trace
Auto 1 2 3
Readout
Frequency
Marker Table
On Off
Marker All Off
More
2 of 2
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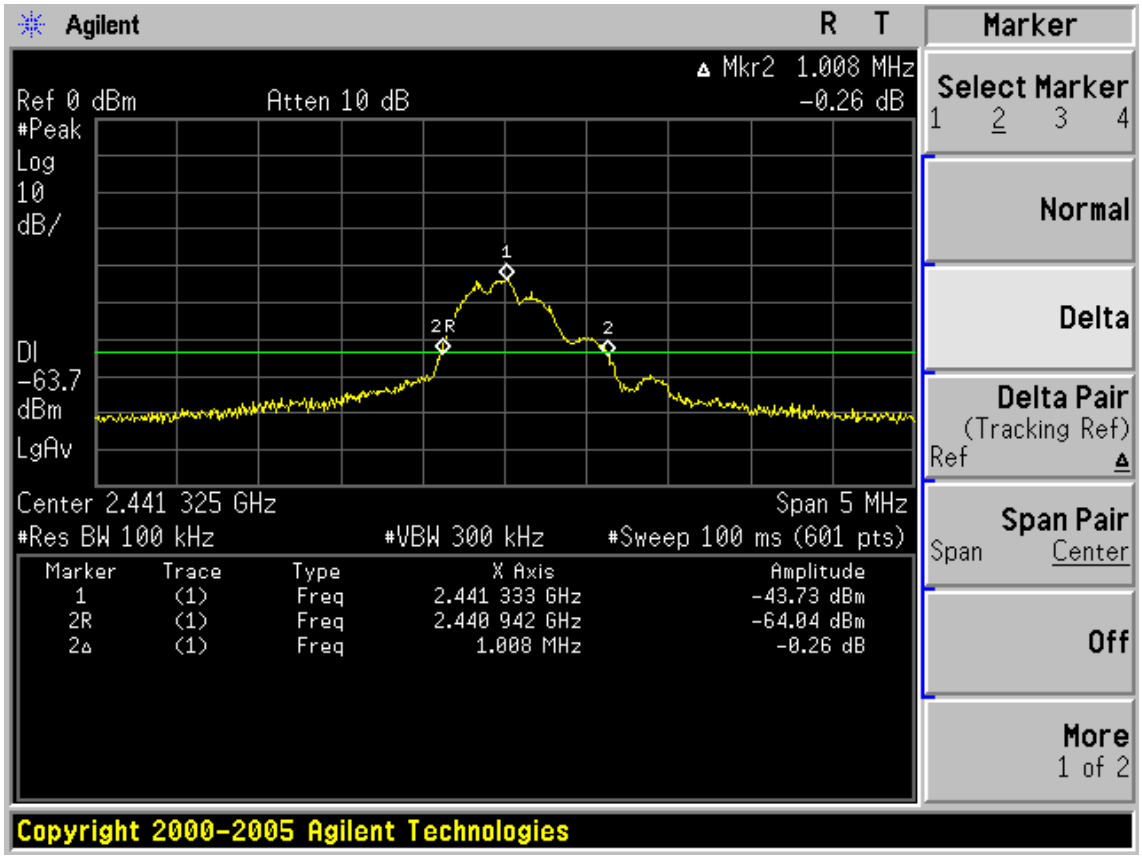
Agilent
R T
Marker
Mkr2 1.008 MHz
Ref 0 dBm
Atten 10 dB
-0.26 dB
#Peak
Log
10
dB/
Dl
-63.7
dBm
LgAv
Center 2.441 325 GHz
Span 5 MHz
#Res BW 100 kHz
#VBW 300 kHz
#Sweep 100 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.441 333 GHz -43.73 dBm
2R (1) Freq 2.440 942 GHz -64.04 dBm
2Δ (1) Freq 1.008 MHz -0.26 dB
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
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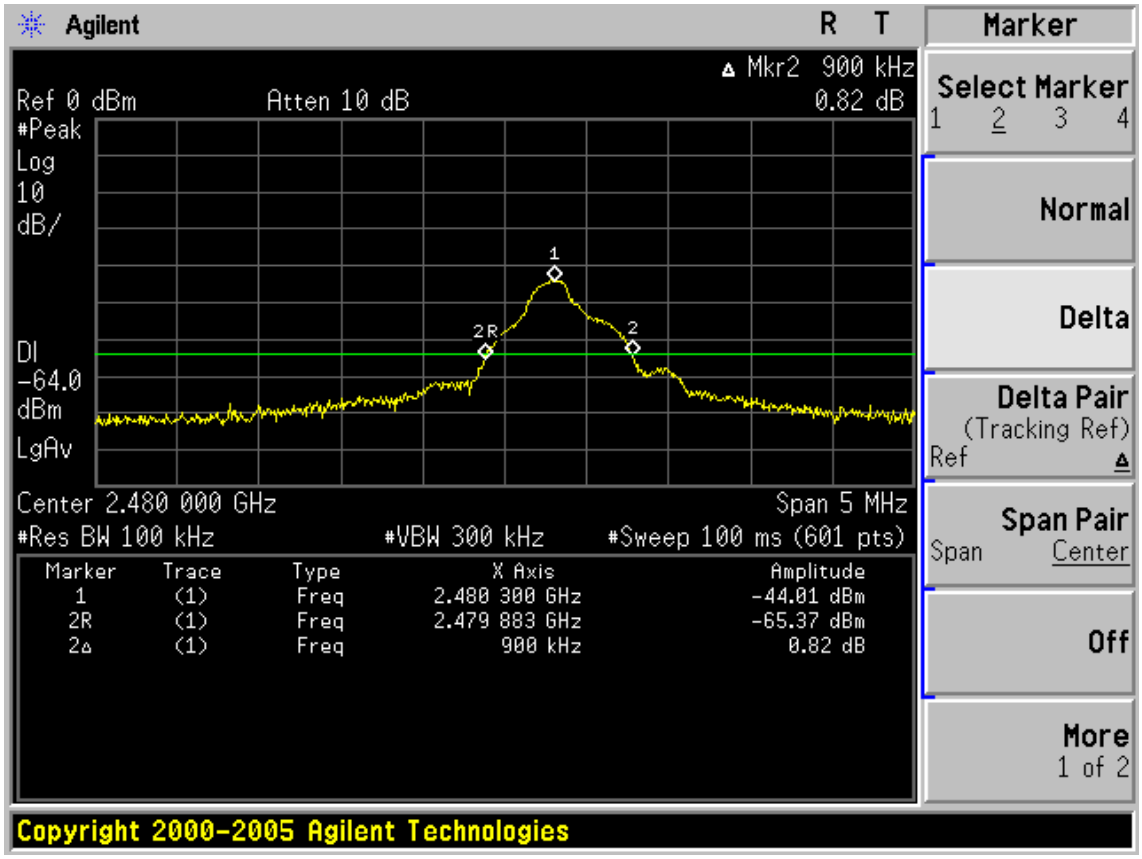
Agilent
R T
Marker
Mkr2 900 kHz
0.82 dB
Ref 0 dBm
Atten 10 dB
#Peak
Log
10
dB/
Dl
-64.0
dBm
LgAv
Center 2.480 000 GHz
Span 5 MHz
#Res BW 100 kHz
#VBW 300 kHz
#Sweep 100 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.480 300 GHz -44.01 dBm
2R (1) Freq 2.479 883 GHz -65.37 dBm
2Δ (1) Freq 900 kHz 0.82 dB
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
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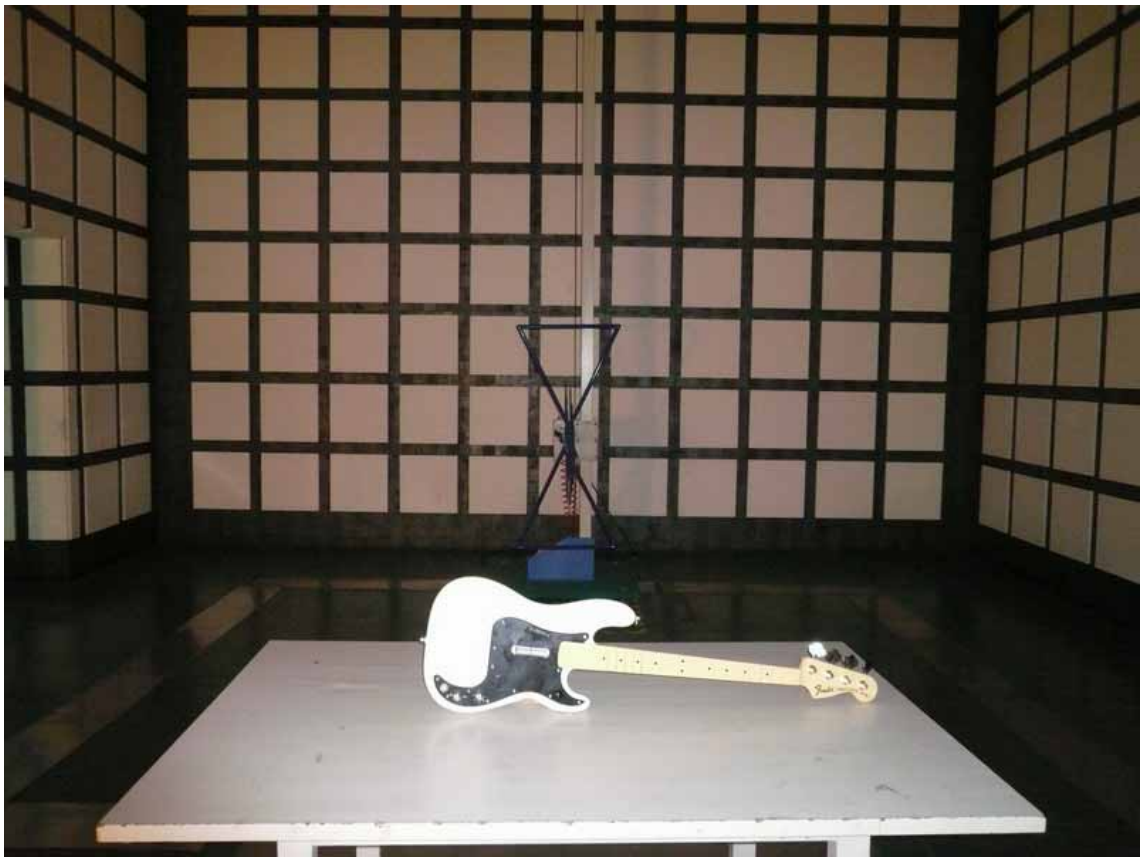
7. DEVIATION TO TEST SPECIFICATIONS

[NONE]

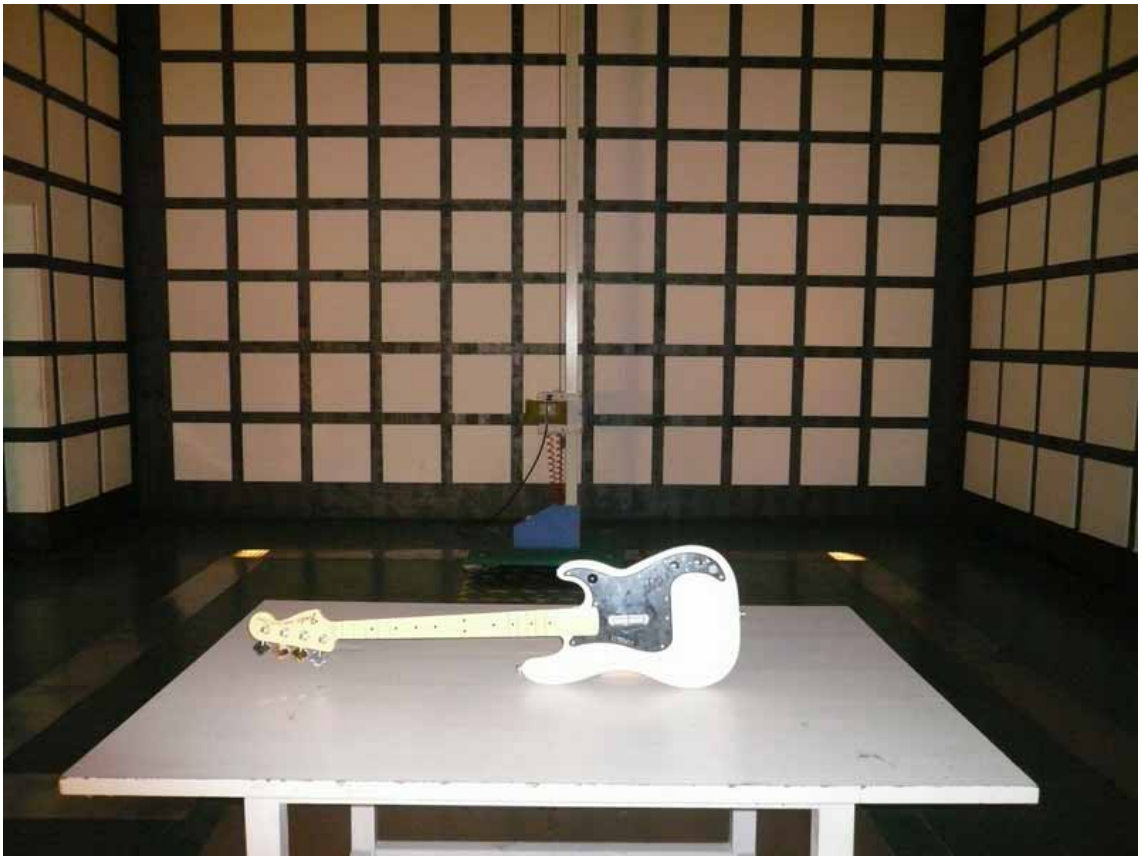
8. PHOTOGRAPH OF TEST

8.1. Photos of Radiated Emission Test (In Anechoic Chamber)

30~1000MHz



above 1000MHz



9. PHOTOGRAPH OF EUT

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT

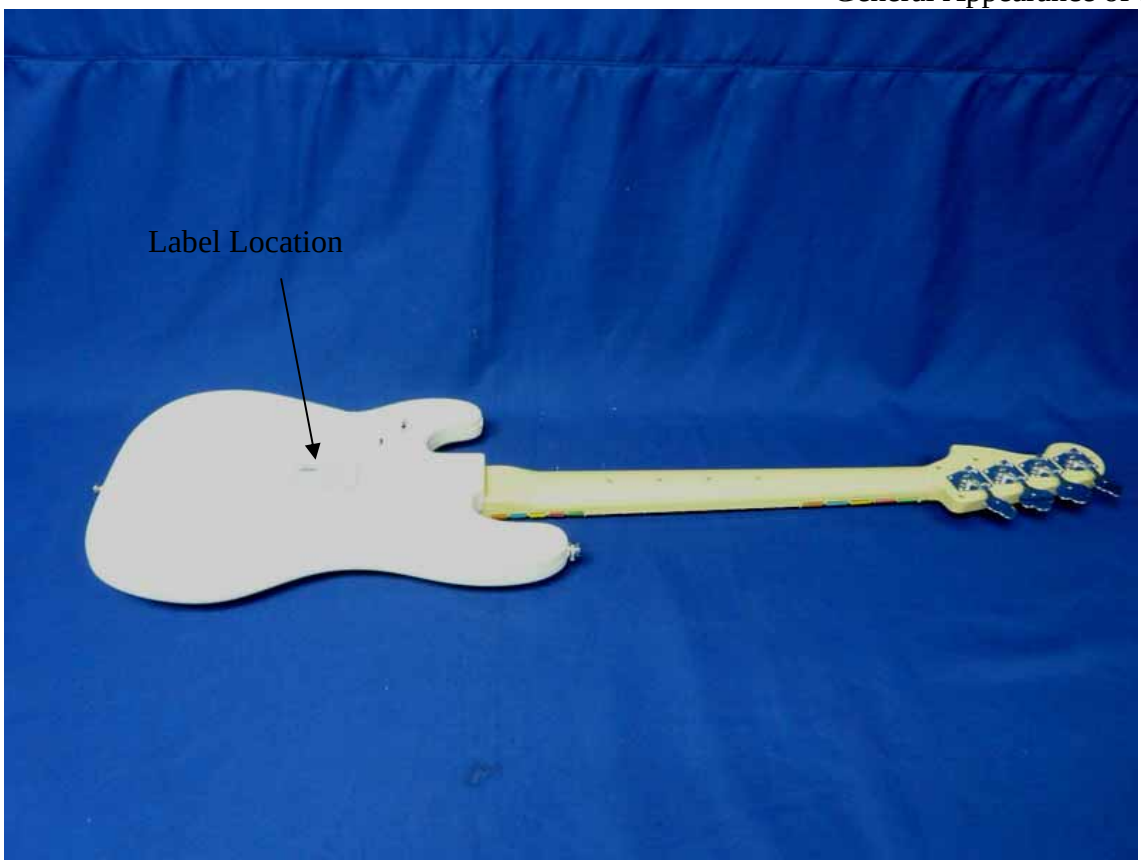


Figure 3
Inside of the EUT

Figure 4
Inside of the EUT

Figure 5
Inside of the EUT

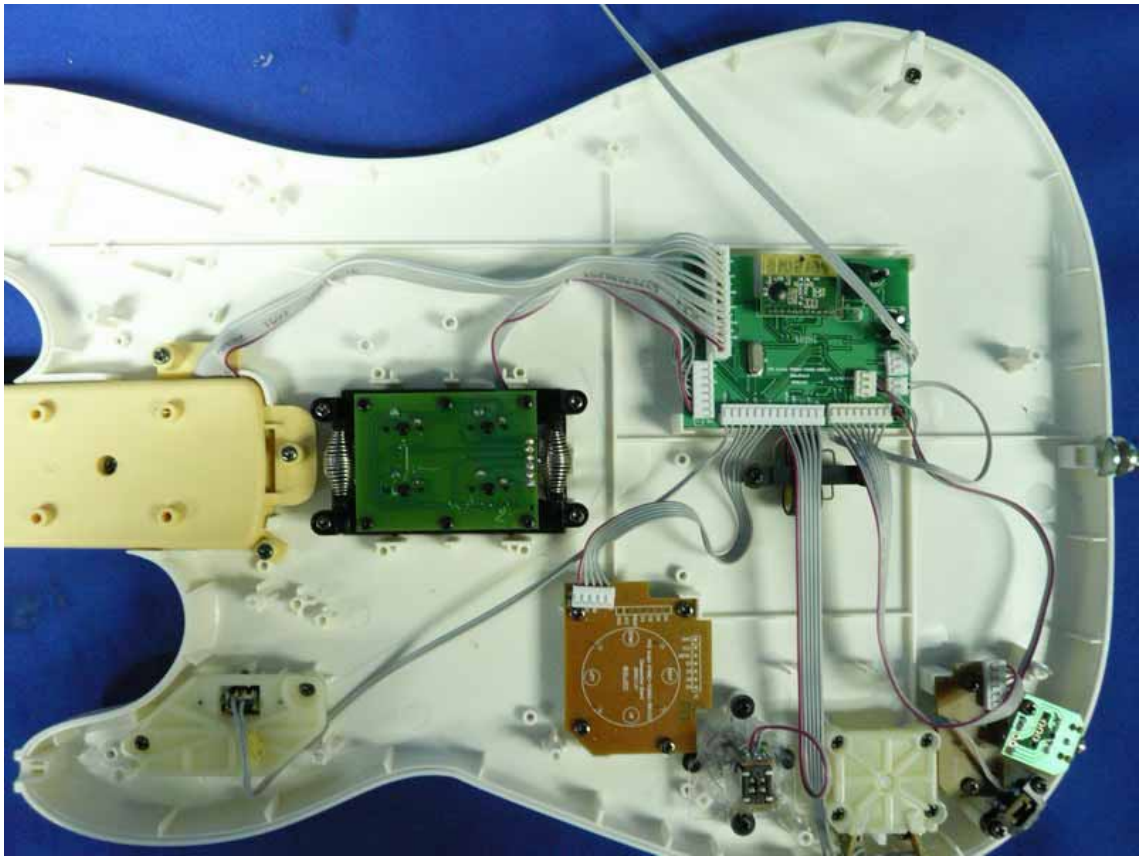


Figure 6
Inside of the EUT

Figure 7
Inside of the EUT

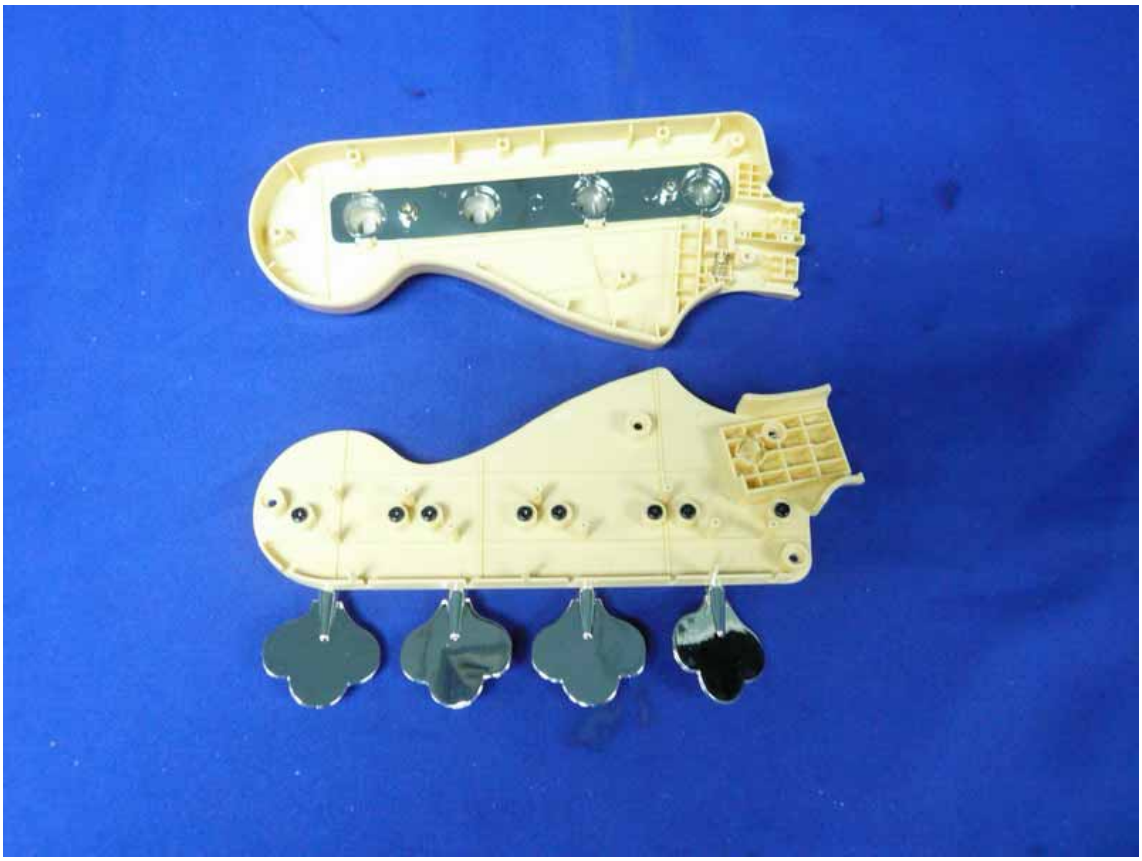


Figure 8
Inside of the EUT

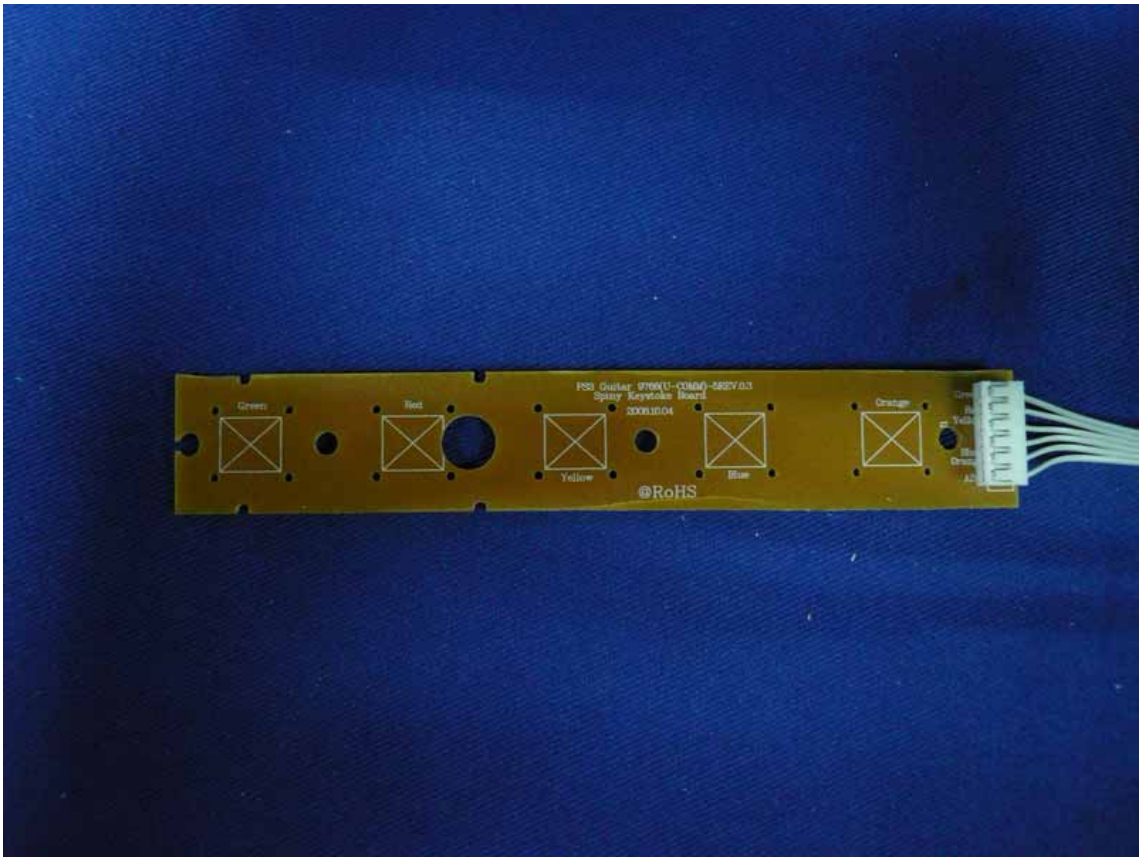


Figure 9
Inside of the EUT

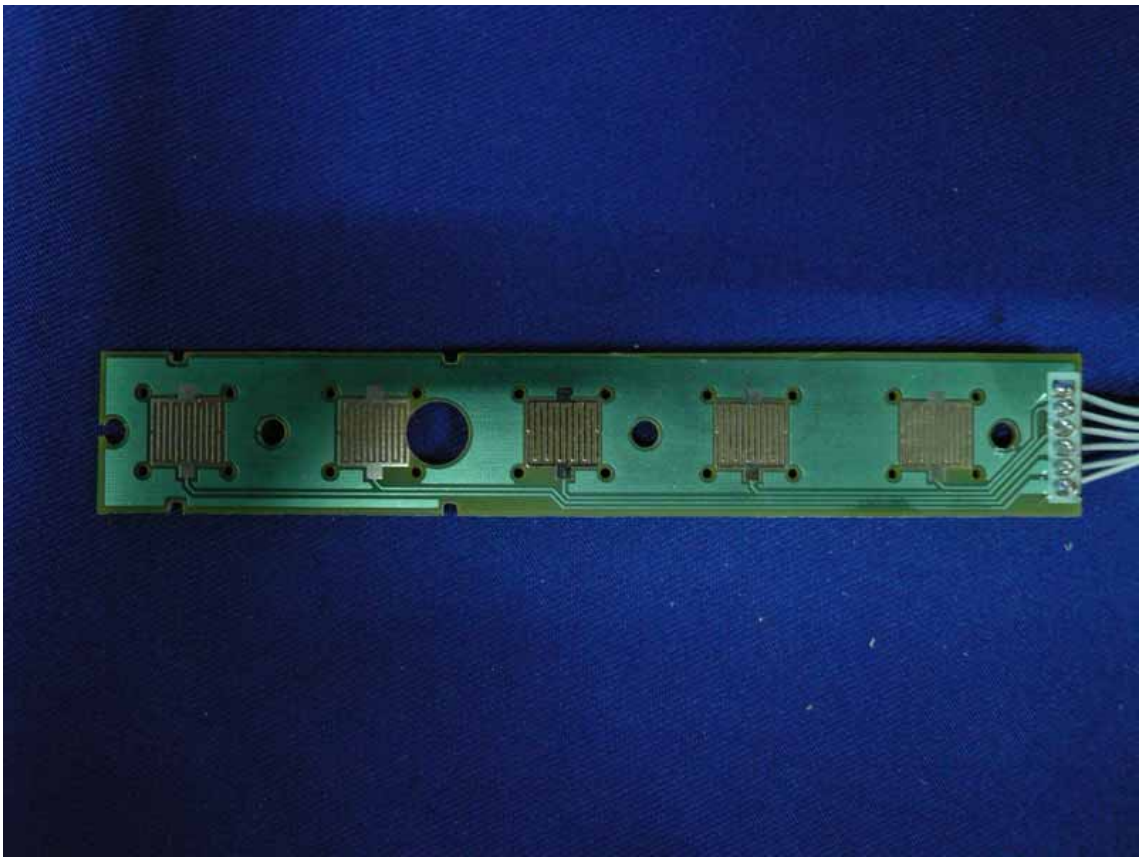


Figure 10
Inside of the EUT

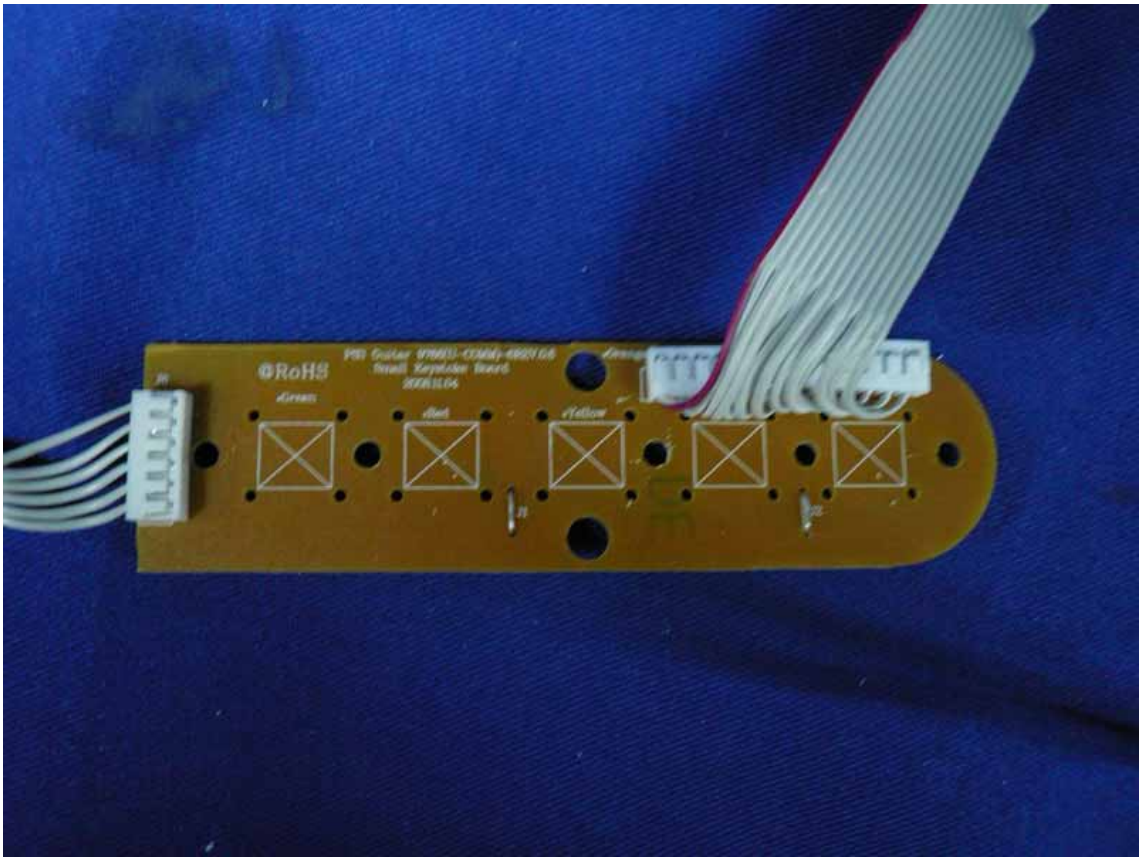


Figure 11
Inside of the EUT

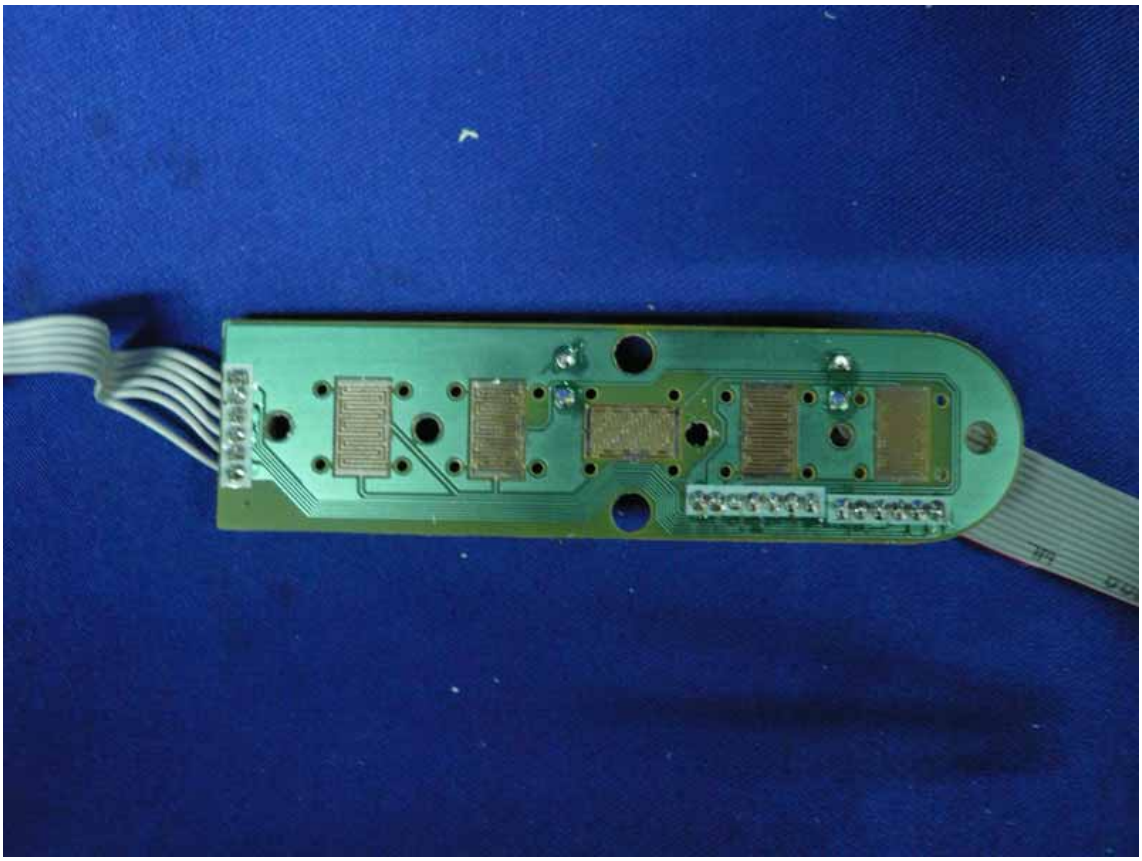


Figure 12
Inside of the EUT

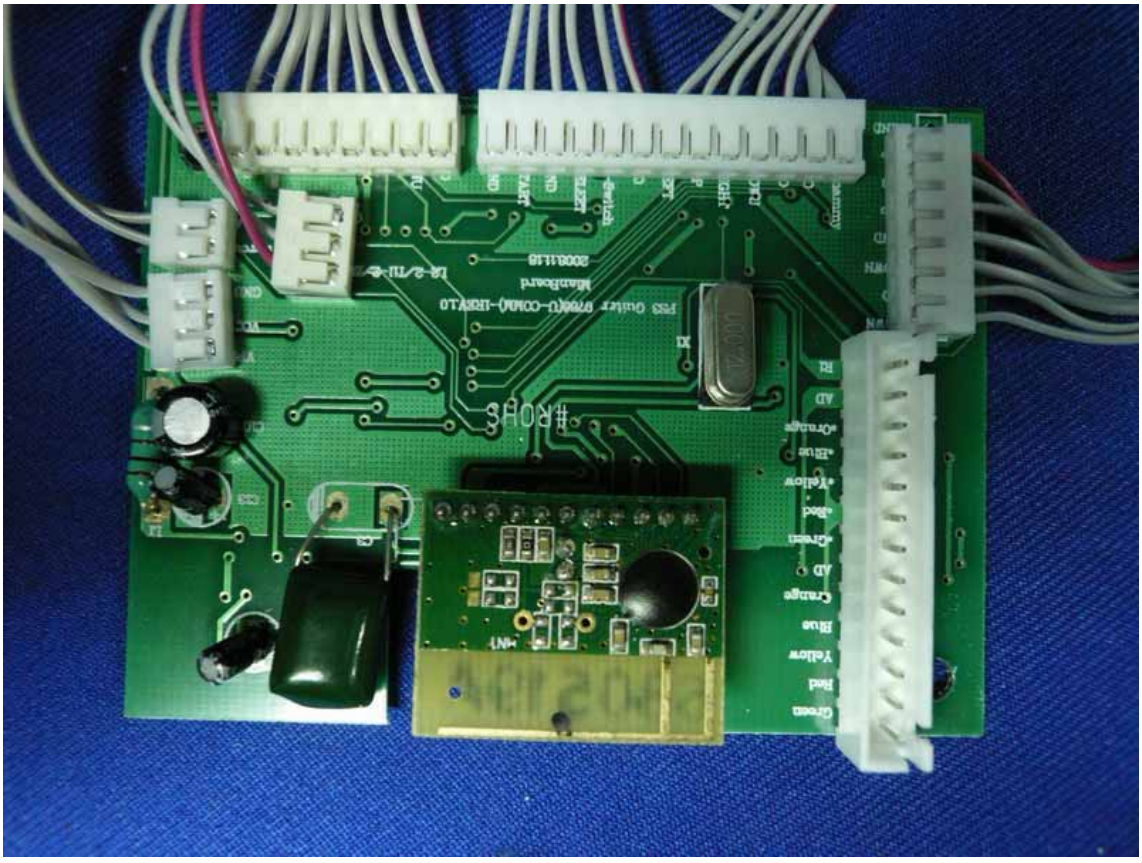


Figure 13
Inside of the EUT

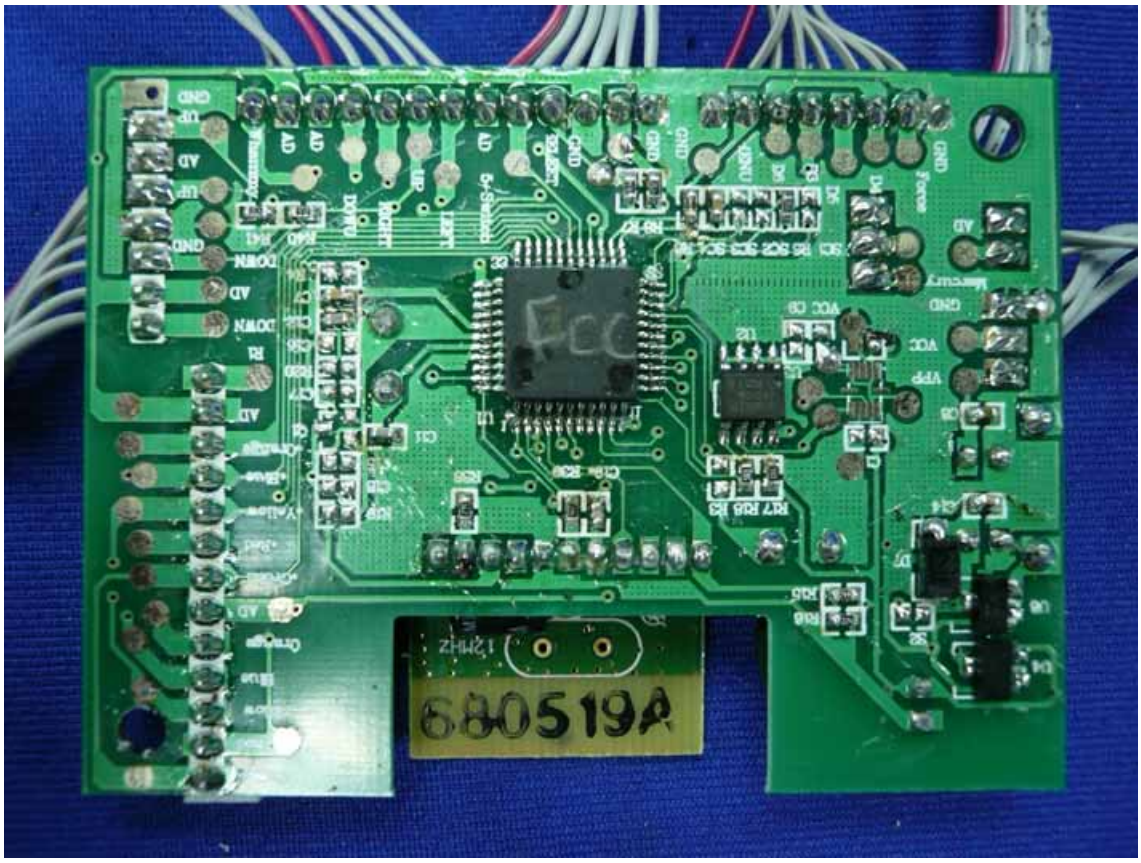


Figure 14
Inside of the EUT

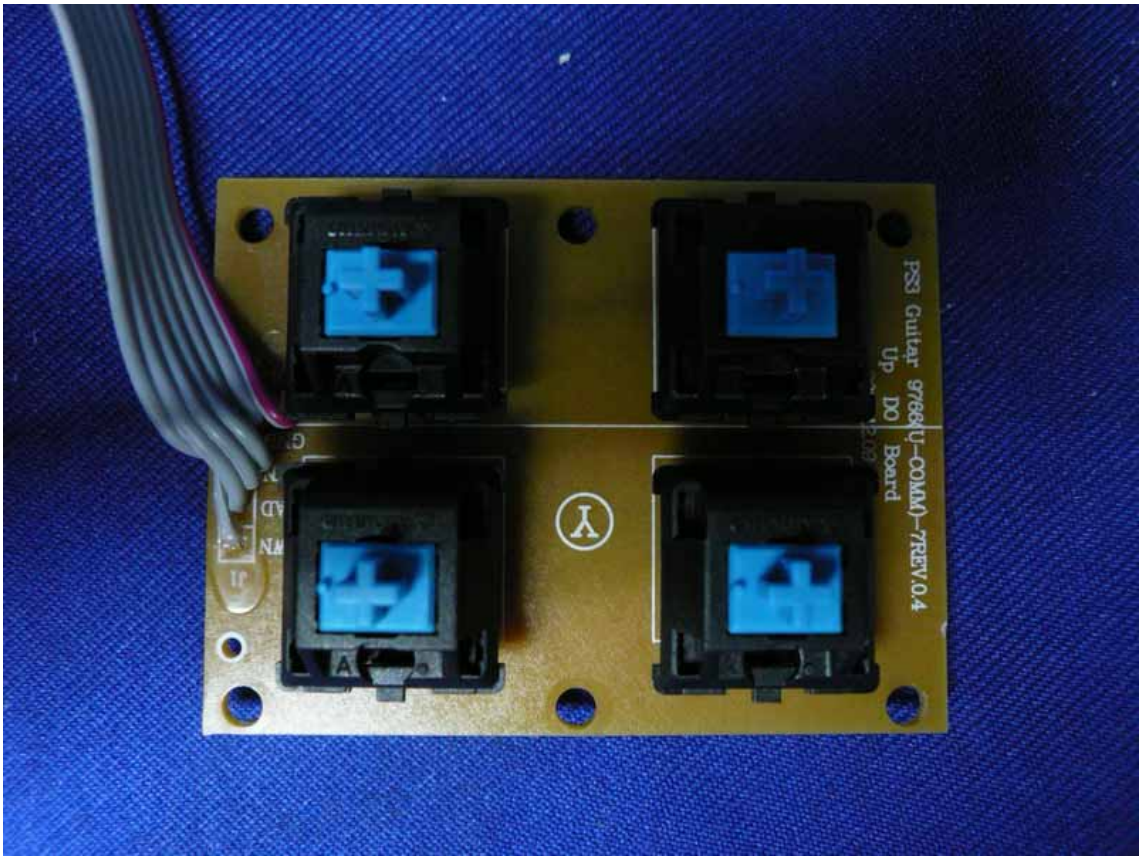


Figure 15
Inside of the EUT

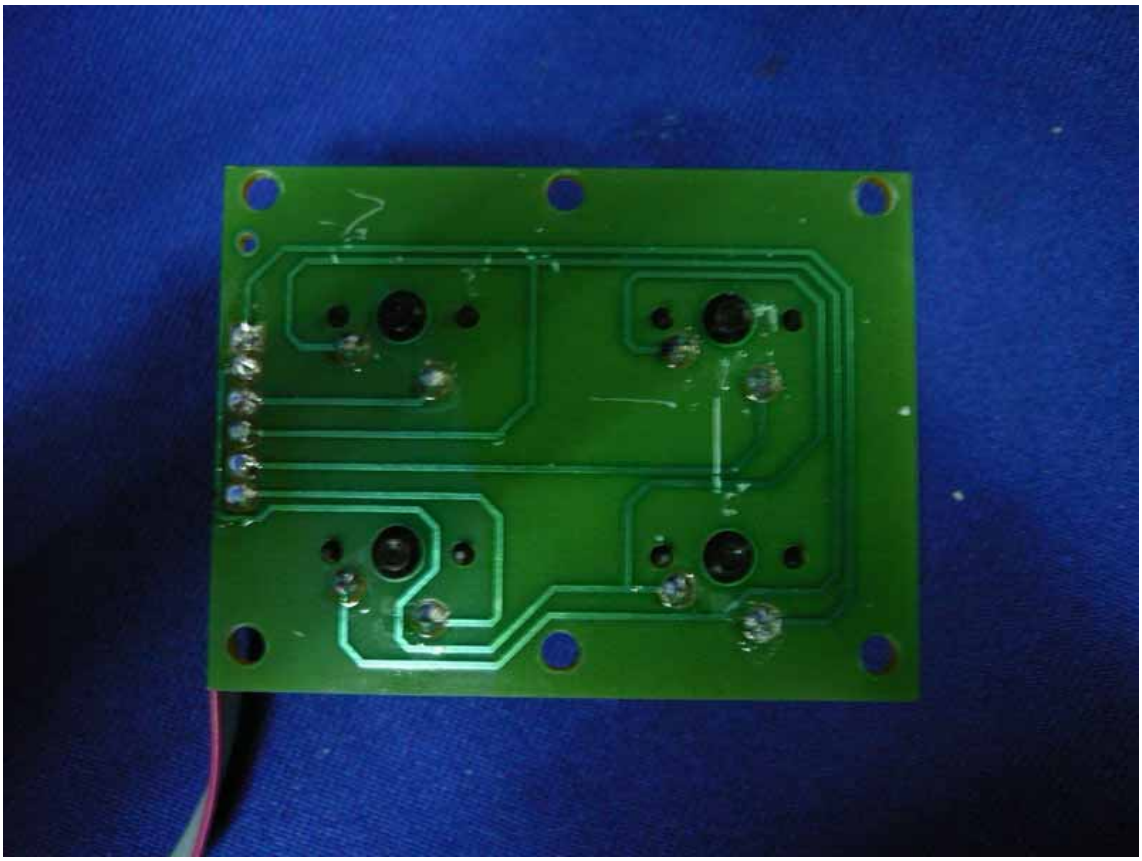


Figure 16
Inside of the EUT

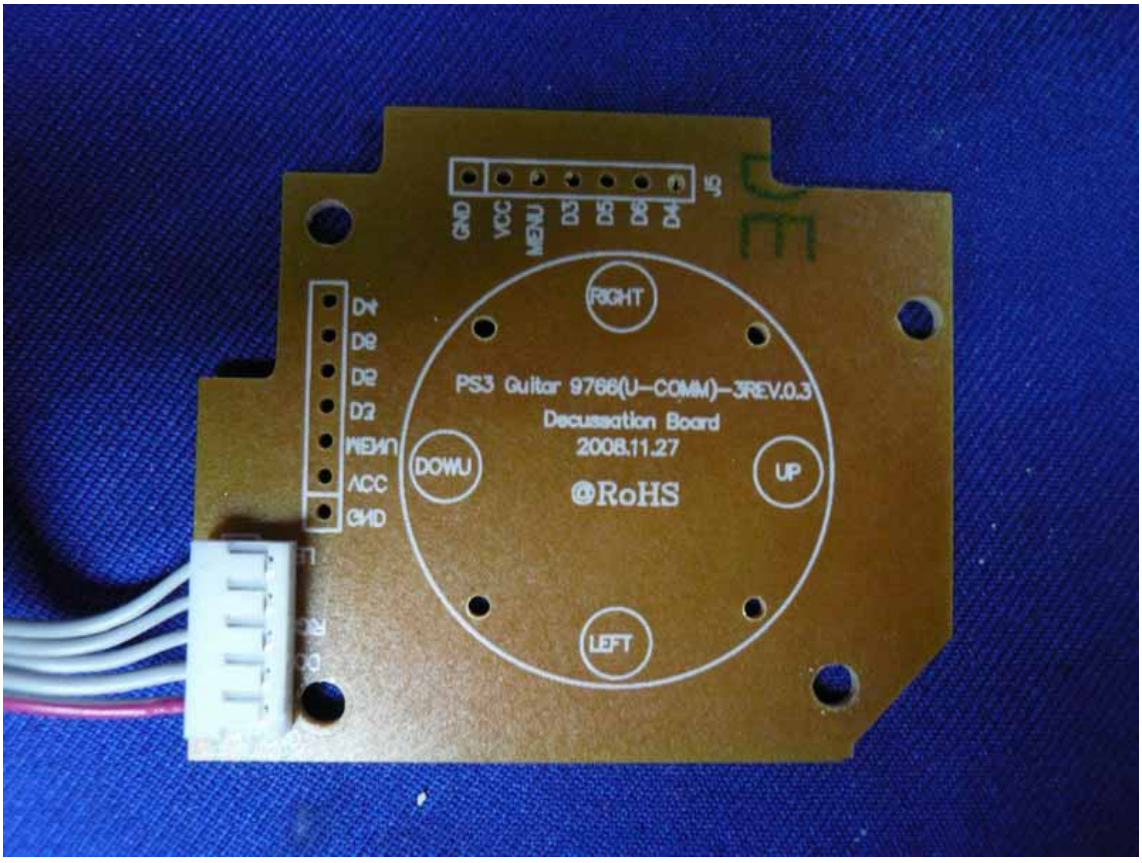


Figure 17
Inside of the EUT

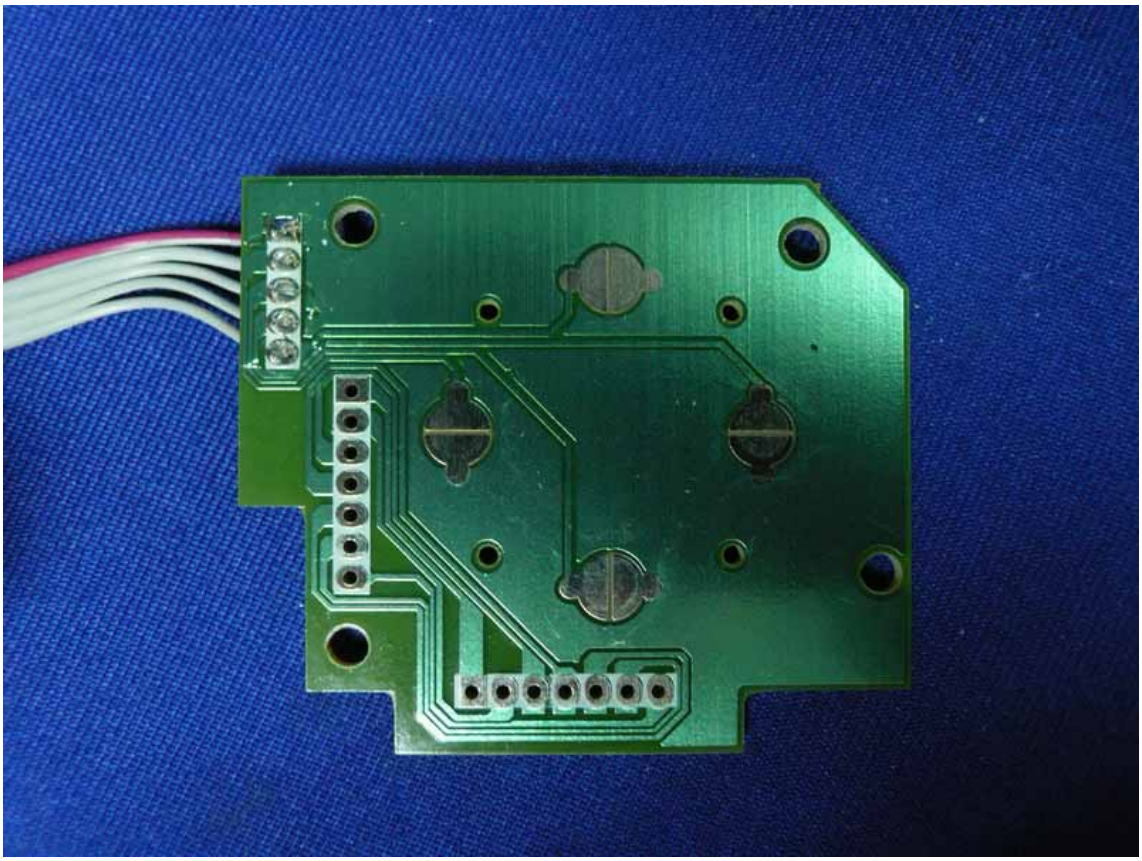


Figure 18
Inside of the EUT

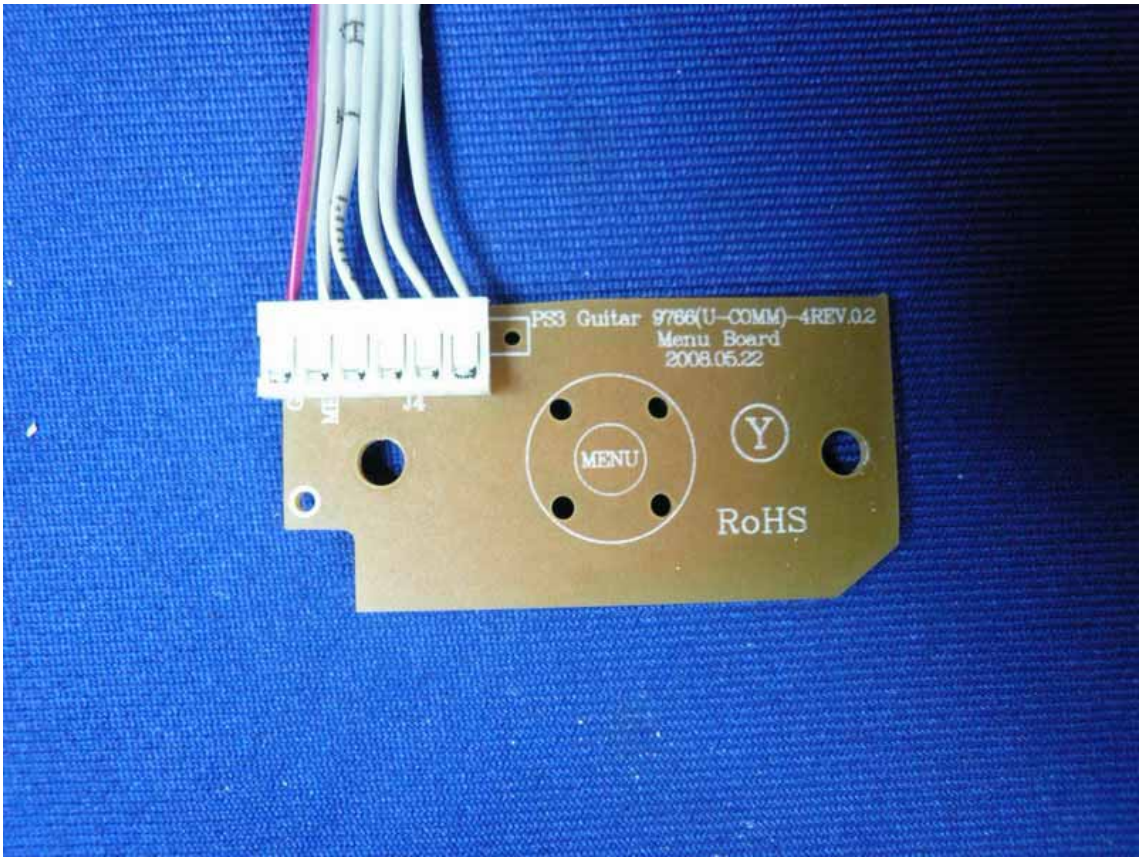


Figure 19
Inside of the EUT

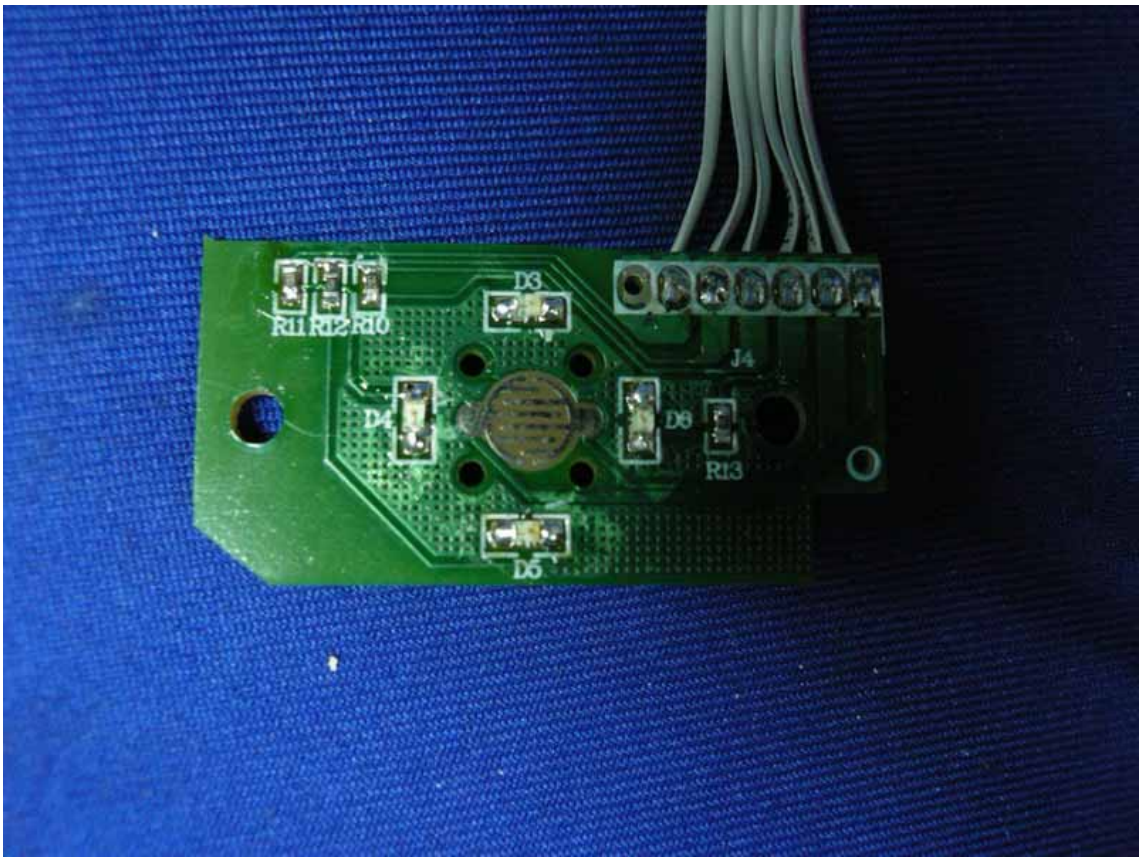


Figure 20
Inside of the EUT

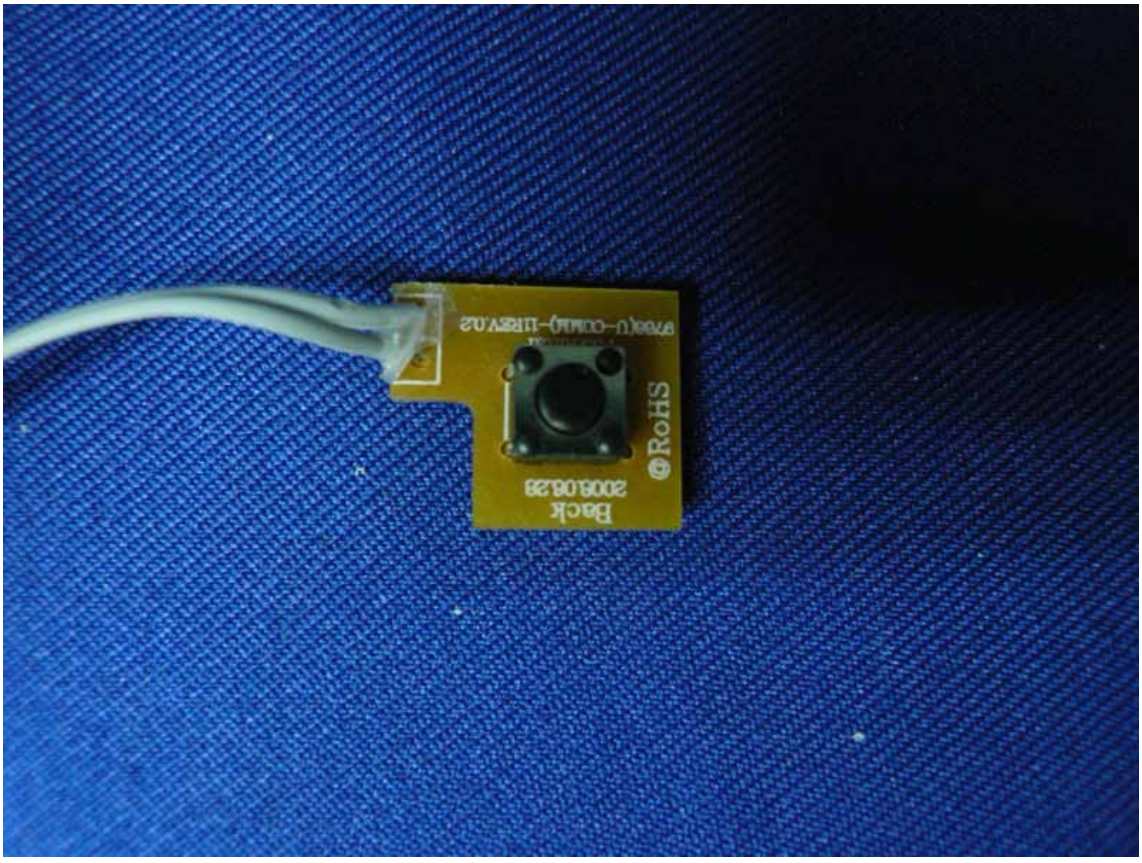


Figure 21
Inside of the EUT

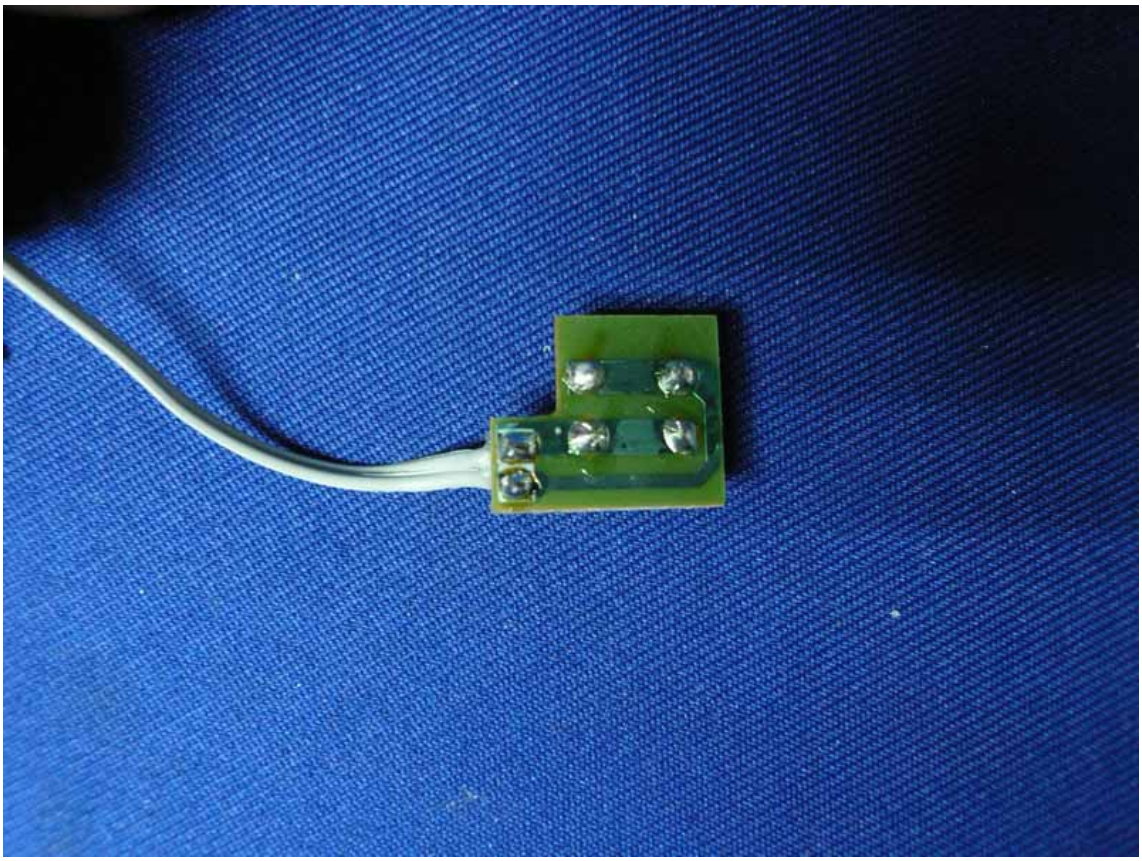


Figure 22
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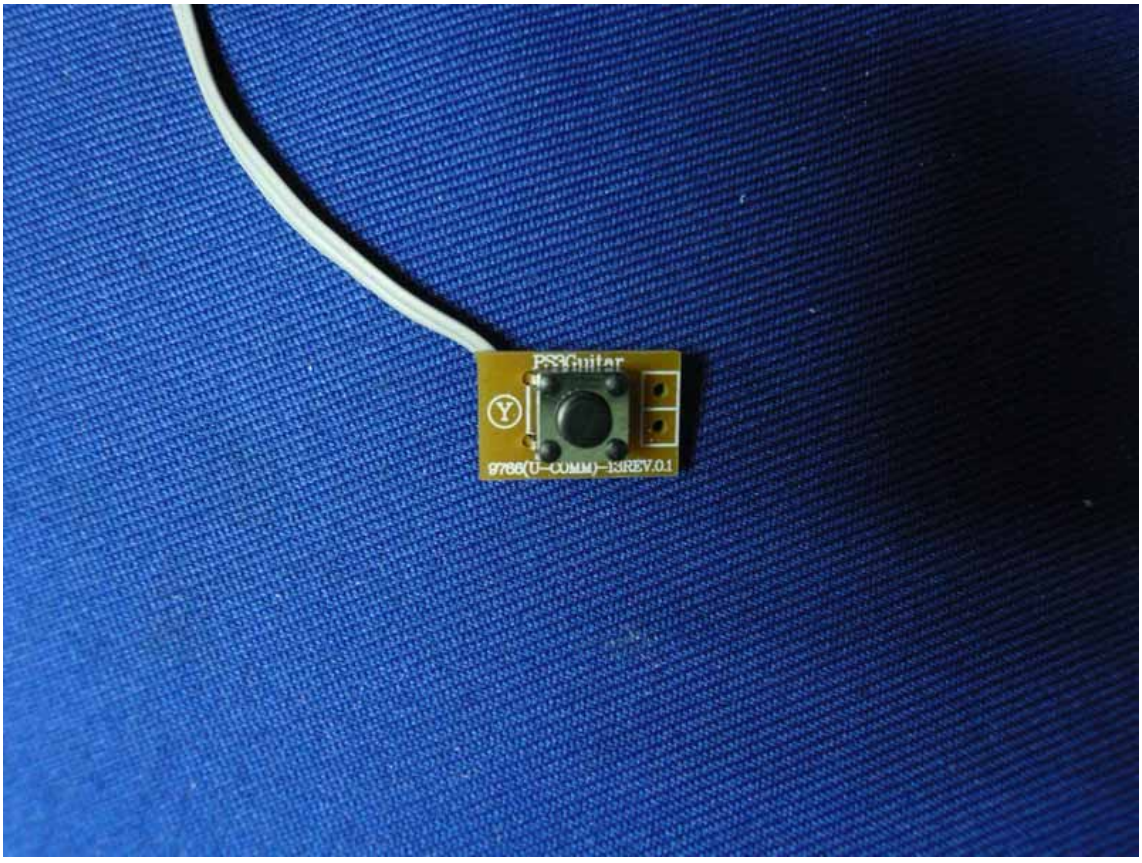

Figure 23
Inside of the EUT

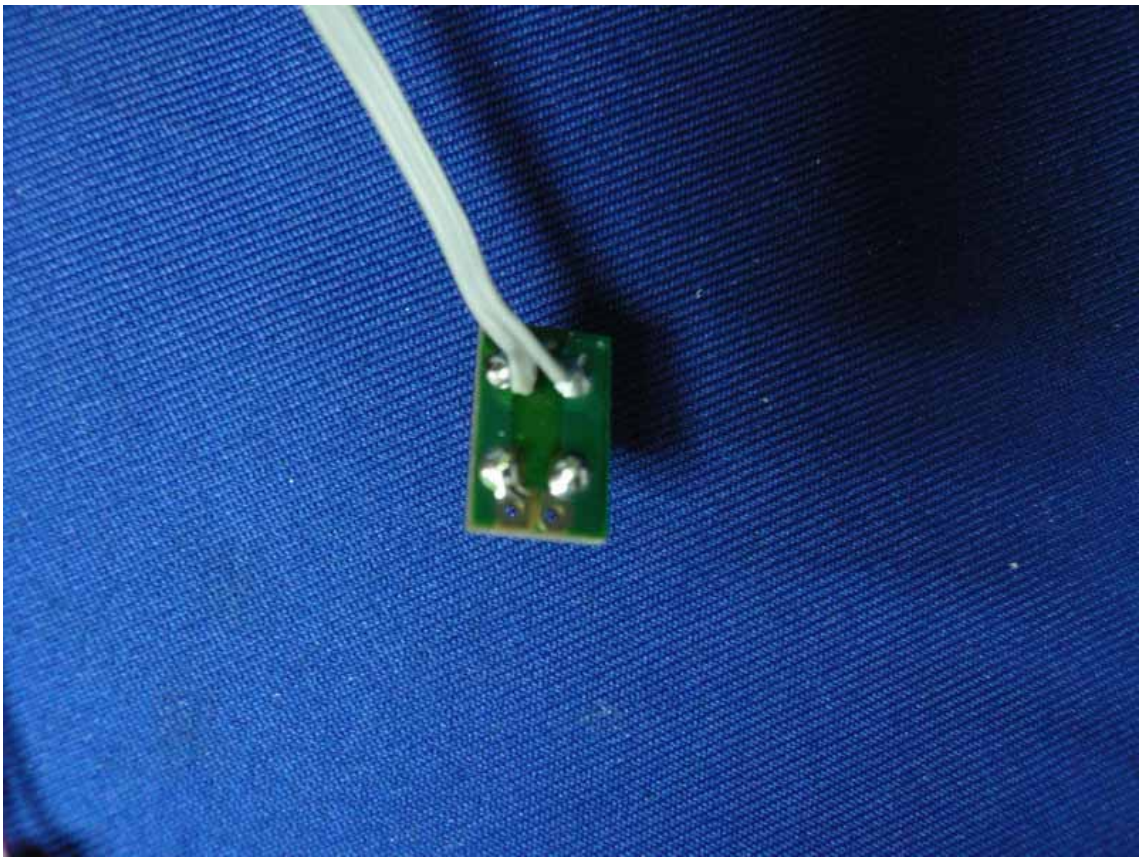

Figure 24
Inside of the EUT

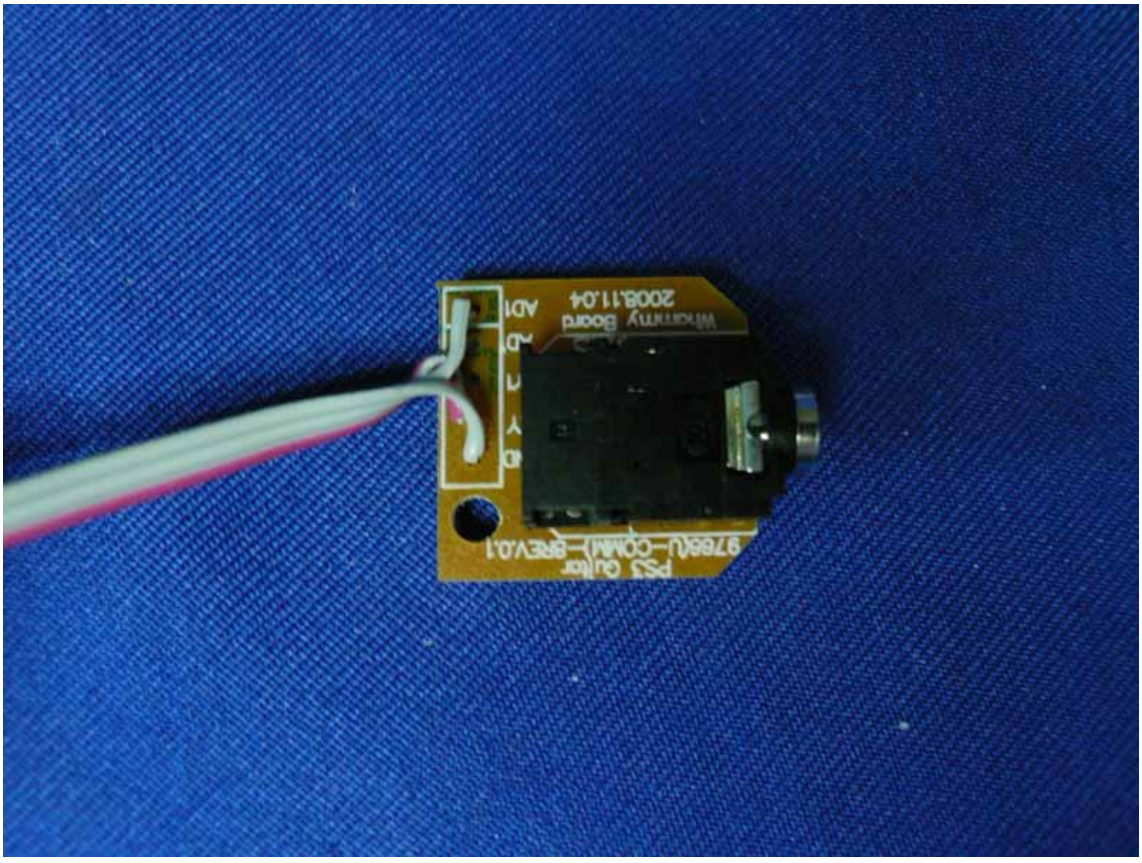

Figure 25
Inside of the EUT

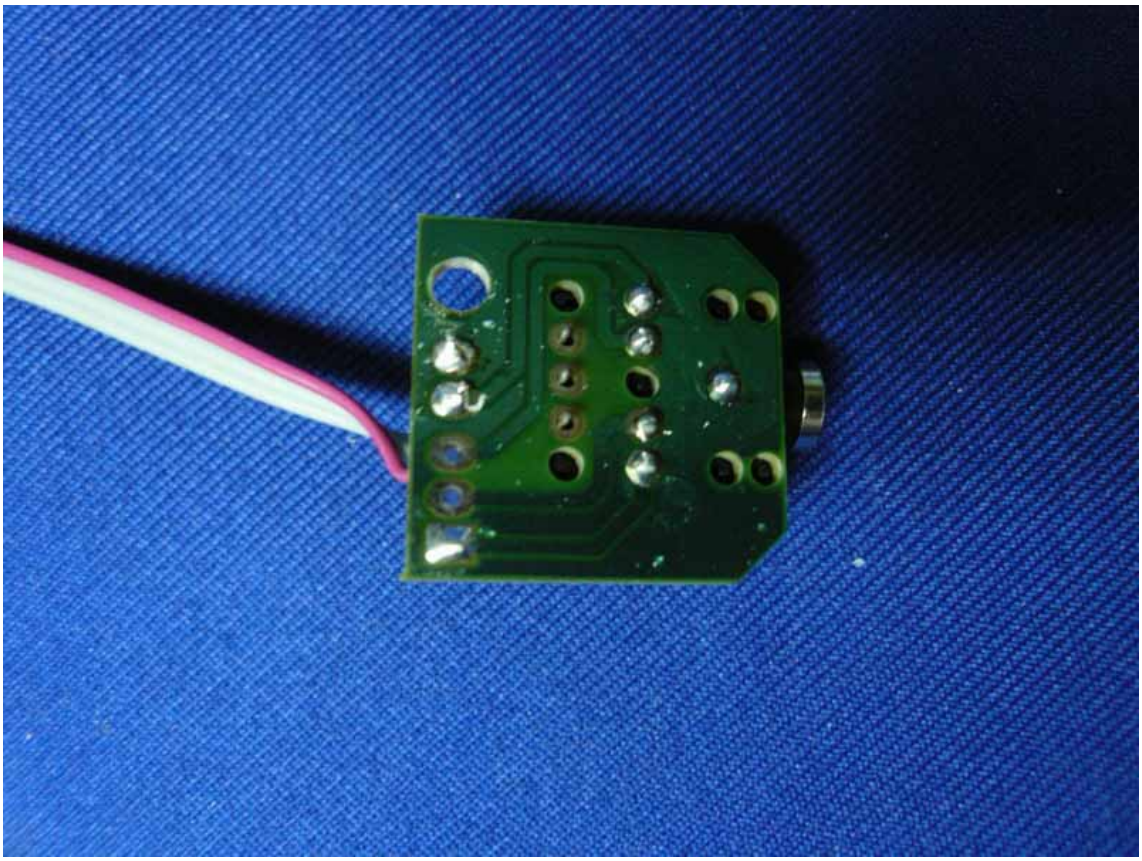

Figure 26
Inside of the EUT

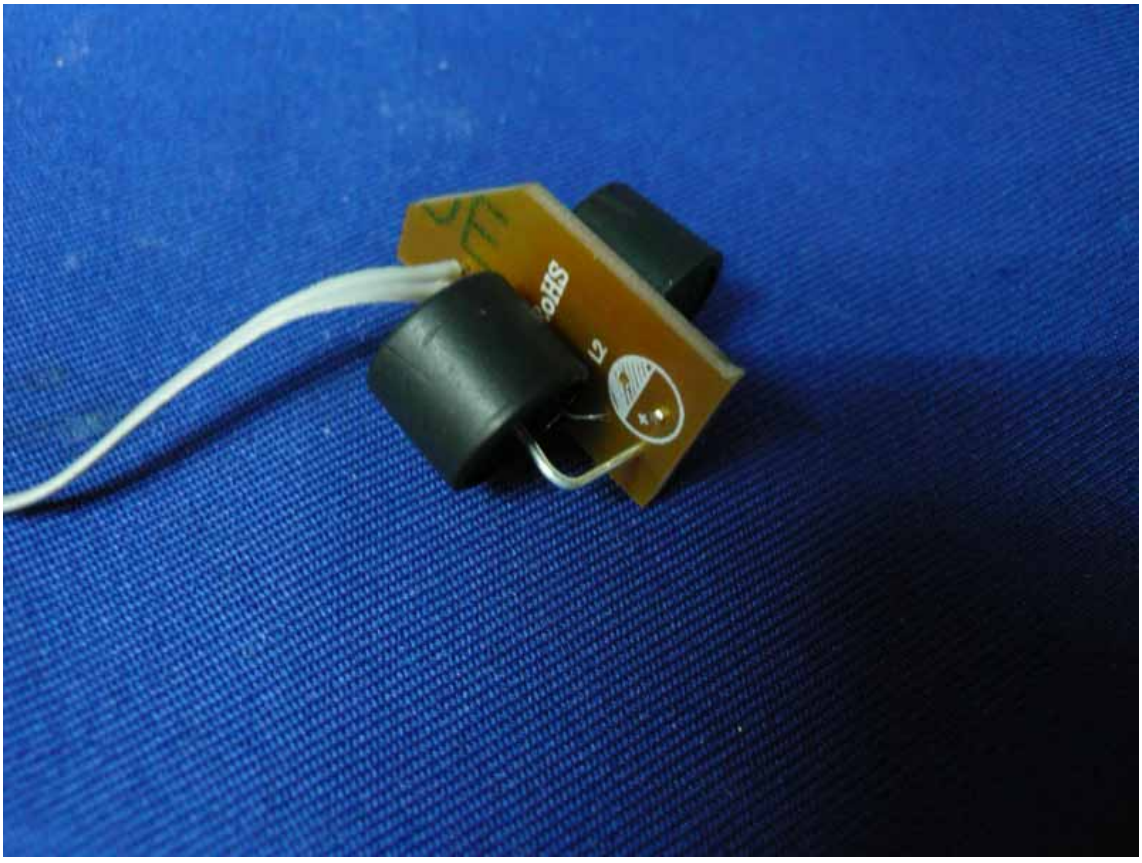

Figure 27
Inside of the EUT

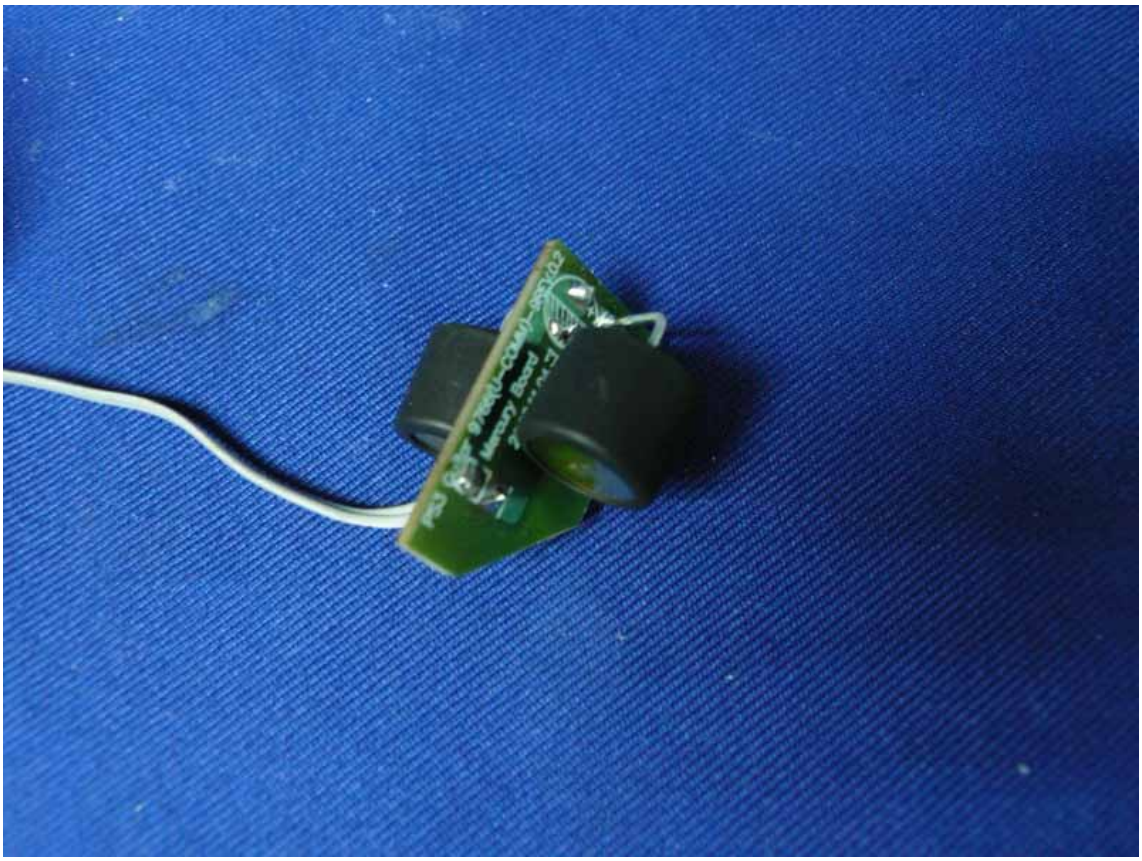

Figure 28
Inside of the EUT

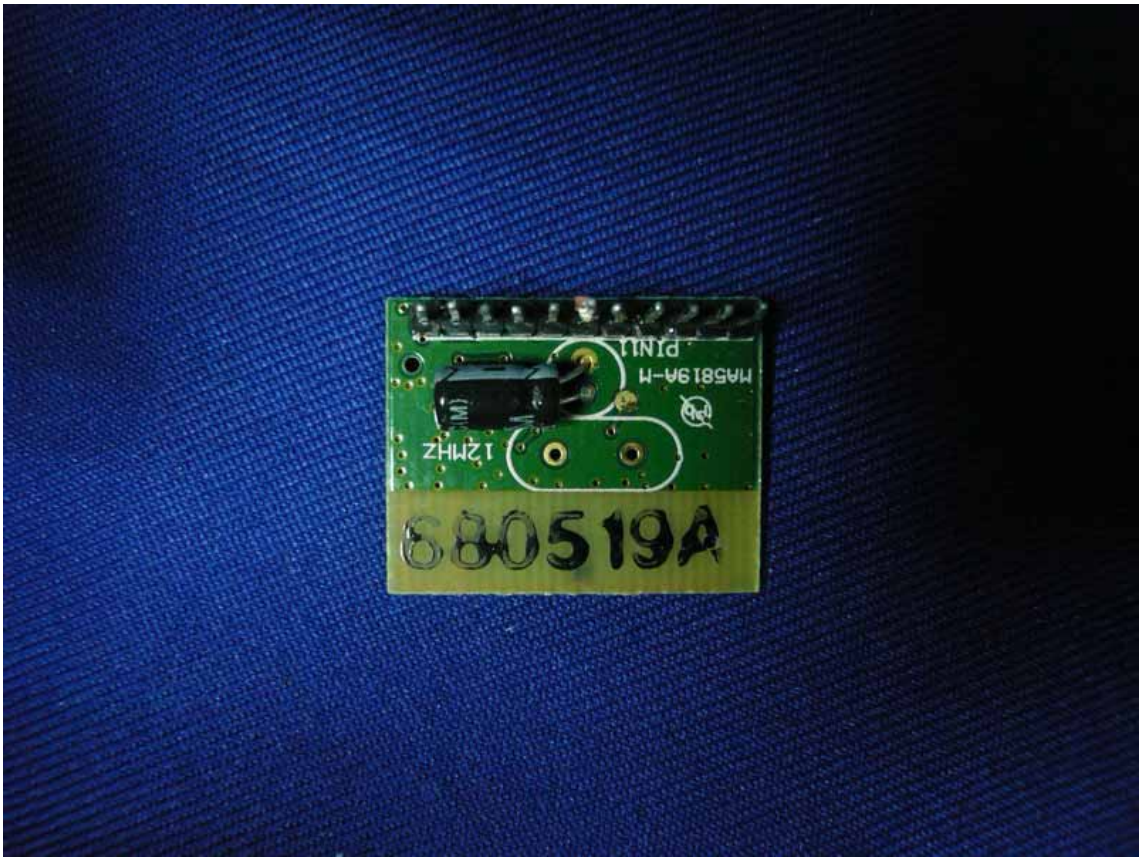

Figure 29
Inside of the EUT