FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

Mad Catz Inc

Bluetooth Headset

Model Number: 88606

FCC ID: P2SA988606

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

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-F11129
Date of Test	:	Jul.20~21, 2011
Date of Report	:	Jul.25, 2011

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TEST REPORT CERTIFICATION

Applicant	:	Mad Catz Inc
EUT Description	:	Bluetooth Headset
FCC ID	:	P2SA988606
(A) MODEL NO.	:	88606
(B) SERIAL NO.	:	N/A
(C)POWER SUPPLY	:	DC 3.7V
(D)TEST VOLTAGE	:	DC 3.7V

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2008
Test procedure used:
ANSI C63.10:2009
FCC KDB Publication 447498

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

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 these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jul.20~ 21, 2011 Report of date: Jul.25, 2011

Prepared by : Cerry He/ Assistant

Reviewer by : Sunny Lu / Senior Assistant

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:

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 15: 15.207 ANSI C63.10 :2009	N/A
Radiated Emission Test	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10 :2009	PASS
Conducted Spurious Emissions	FCC Part 15: 15.247(a)(1) ANSI C63.10 :2009	PASS
Carrier Frequency Separation Test	FCC Part 15: 15.247(a)(1) ANSI C63.10 :2009	PASS
20dB Bandwidth Test	FCC Part 15: 15.215 ANSI C63.10 :2009	PASS
Number Of Hopping Frequency Test	FCC Part 15: 15.247(a)(1)(iii) ANSI C63.10 :2009	PASS
Dwell Time Test	FCC Part 15: 15.247(a)(1)(iii) ANSI C63.10 :2009	PASS
Maximum Peak Output Power Test	FCC Part 15: 15.247(b)(1)\ ANSI C63.10 :2009	PASS
Band Edge Compliance Test	FCC Part 15: 15.247(d) ANSI C63.10 :2009	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name	:	Bluetooth Headset
Model Number	:	88606
FCC ID	:	P2SA988606
Operation frequency	:	2.4GHz
Antenna	:	PCB, 2.0dBi gain
Modulation	:	GFSK, π/4 DQPSK, 8-DPSK
Power Supply	:	DC 3.7V
Applicant	:	Mad Catz Inc 7480 Mission Valley Road, Suite 101, San Diego, California, 92108, USA
USB Cable	:	Unshielded, Detachable, 1.0m
Date of Test	:	Jul.20~21, 2011
Date of Receipt	:	Jul.20, 2011
Sample Type	:	Prototype production

2.2. EUT Configuration and operation conditions for test.

EUT

(EUT: Bluetooth Headset)

2.3.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	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Mar.31, 2012
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Dec.30, 2012
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: Jul. 02, 2011 Accredited by DATech, German Registration Number: DAT-P-091/99-01 Valid Date: Feb.01, 2014 Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2012

2.4.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiation Emission test in 3m chamber	3.6 dB(30~200MHz, Polarize: H)
	3.7 dB(30~200MHz, Polarize: V)
	4.0 dB(200M~1GHz, Polarize: H)
	3.7 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	$7x10^{-8}$
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. RADIATED EMISSION TEST

3.1.Test Equipment

Frequency rang: 30~1000MHz

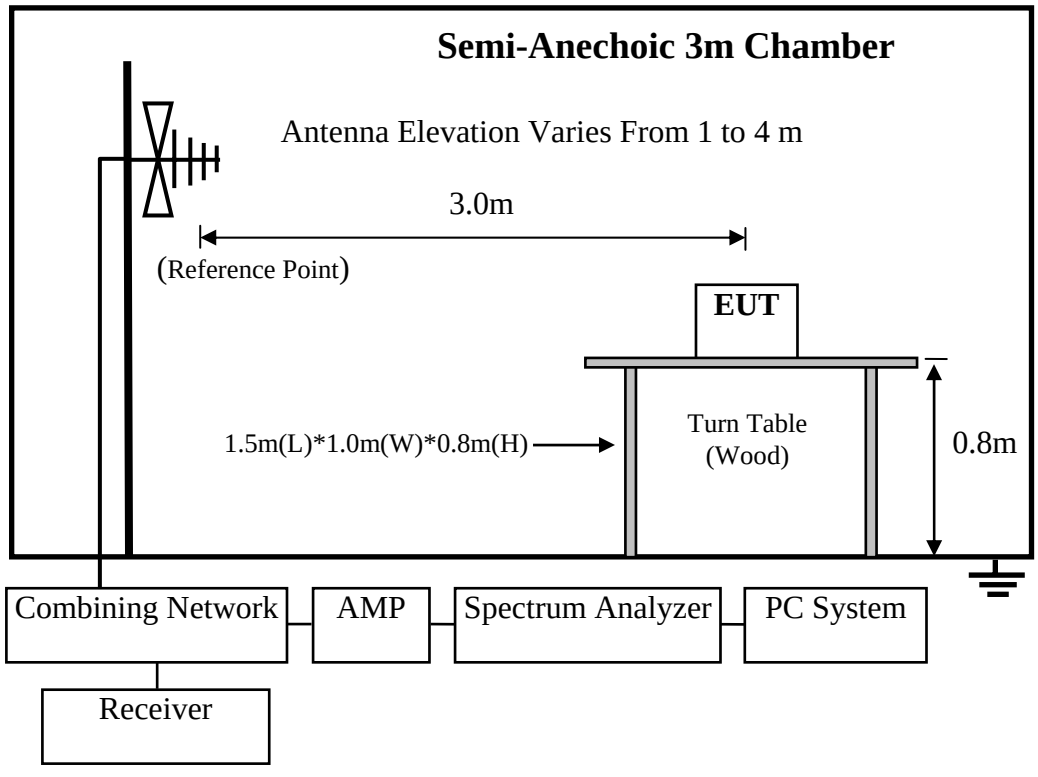
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 11	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 11	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 11	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 11	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 11	1 Year

Frequency rang: above 1000MHz

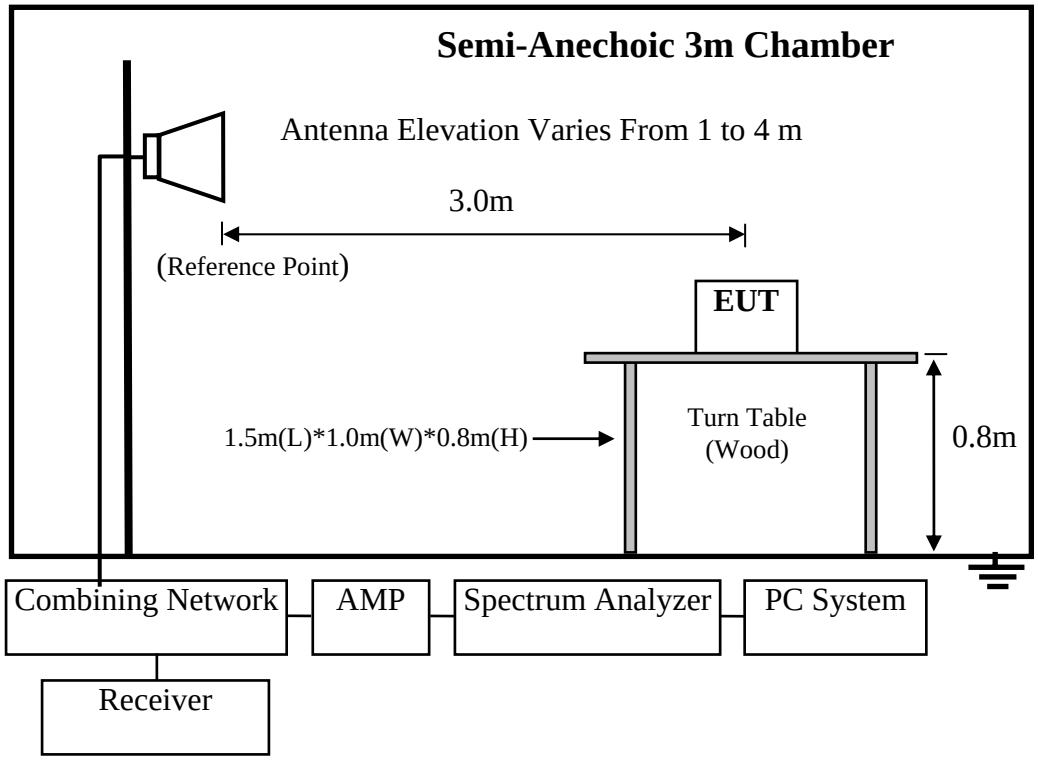
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May 08, 11	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May 08, 11	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May 08, 11	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28622/2	May 08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May 08, 11	1 Year

3.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-6GHz



3.3. Radiated Emission Limit Standard: FCC 15.209

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 1000MHz	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.

3.4.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.

3.4.1. Bluetooth Headset (EUT)

Model Number	:	88606
Serial Number	:	N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.4

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. Let EUT work in Tx mode.

3.6. 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 C63.10-2009 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 Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz

This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level.

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.

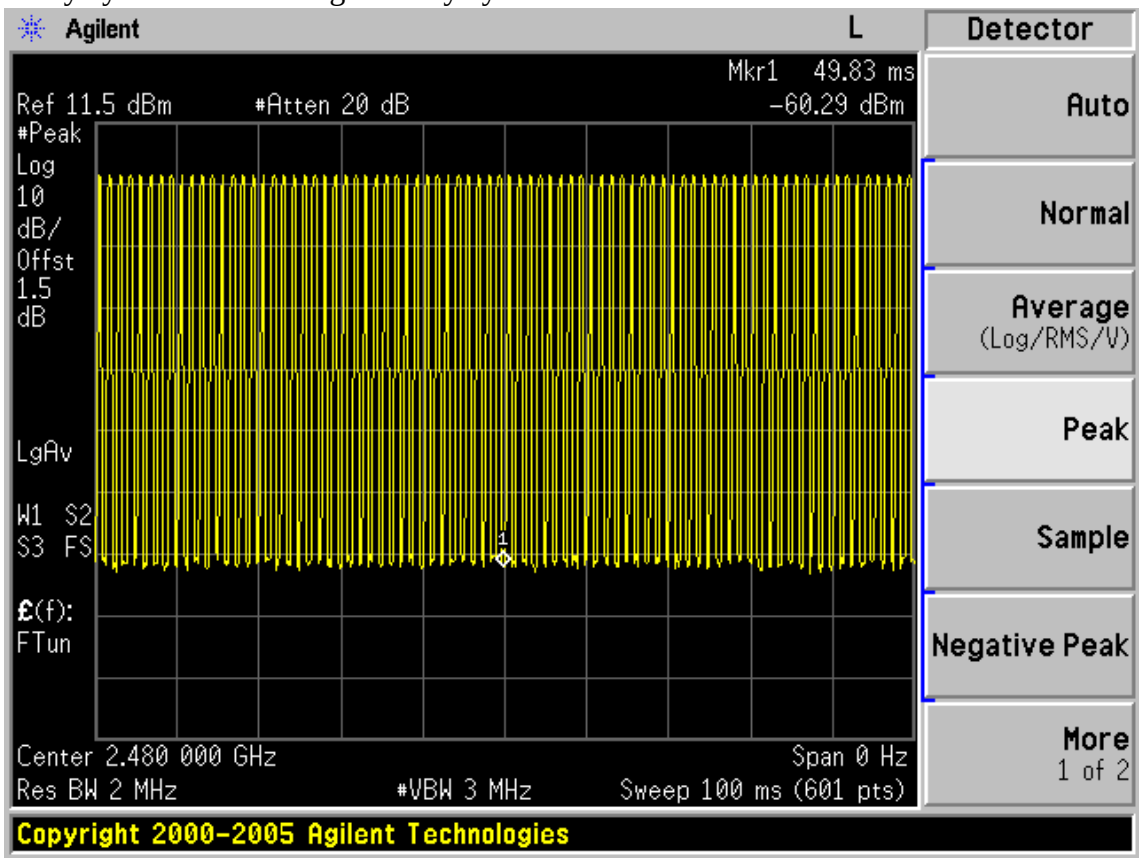
3.7. Radiated Emission Test Results

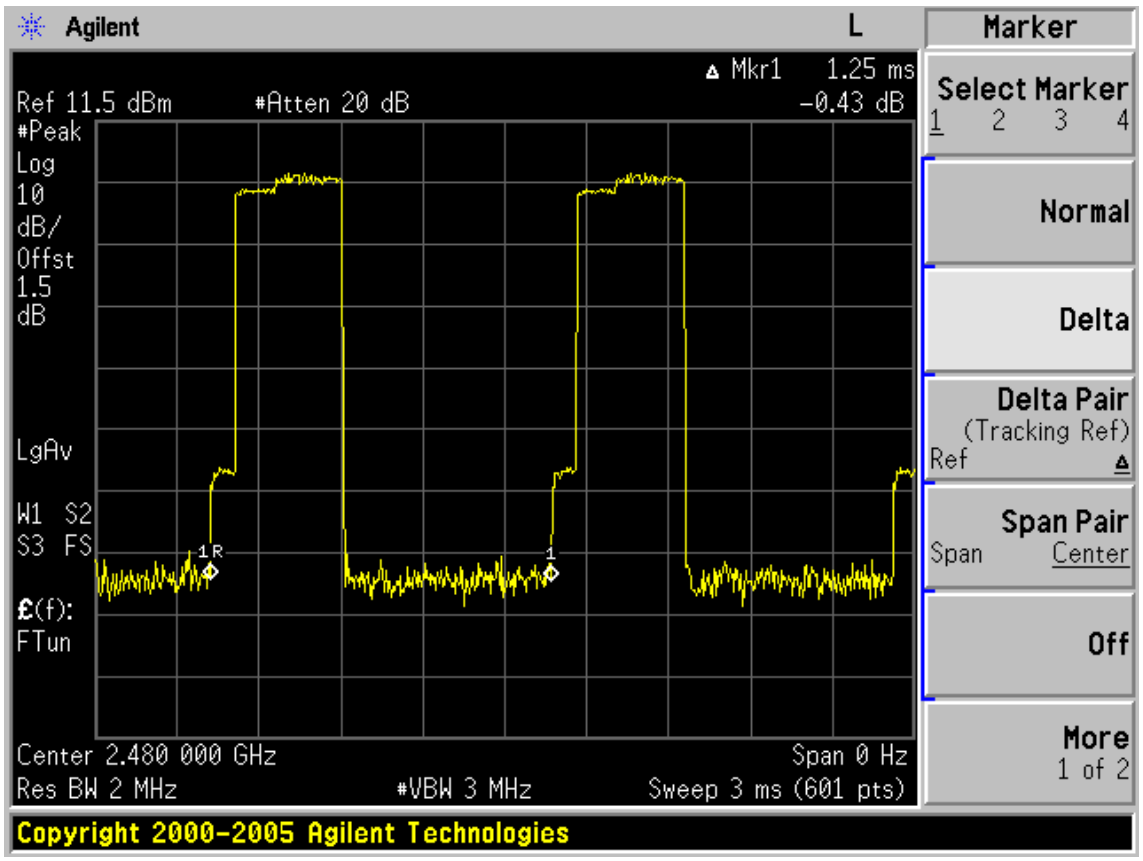
PASS.

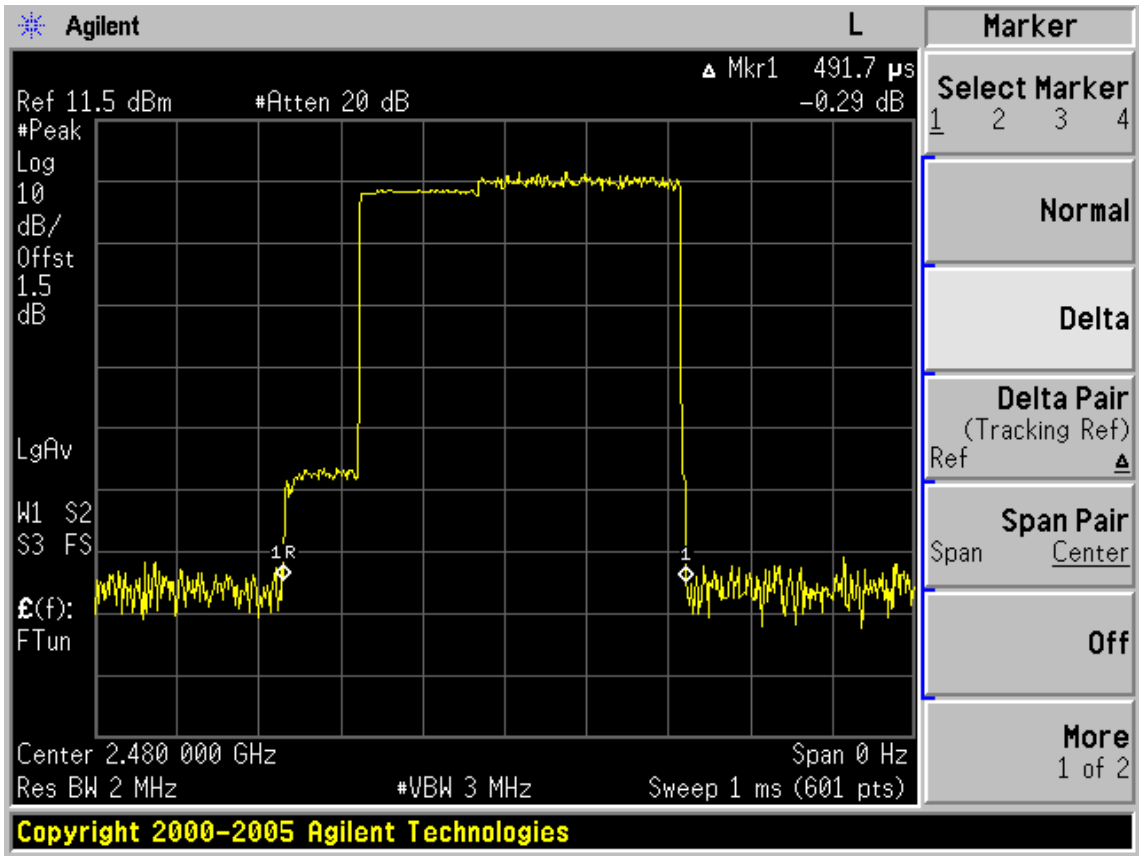
All the emissions from 30MHz to 25GHz were comply with the 15.209 Limit.

Note: The duty cycle factor for calculate average level is 8.1dB, and average limit is 20dB below peak limit, so if peak measured level comply with peak limit, the average level was deemed to comply with average limit.

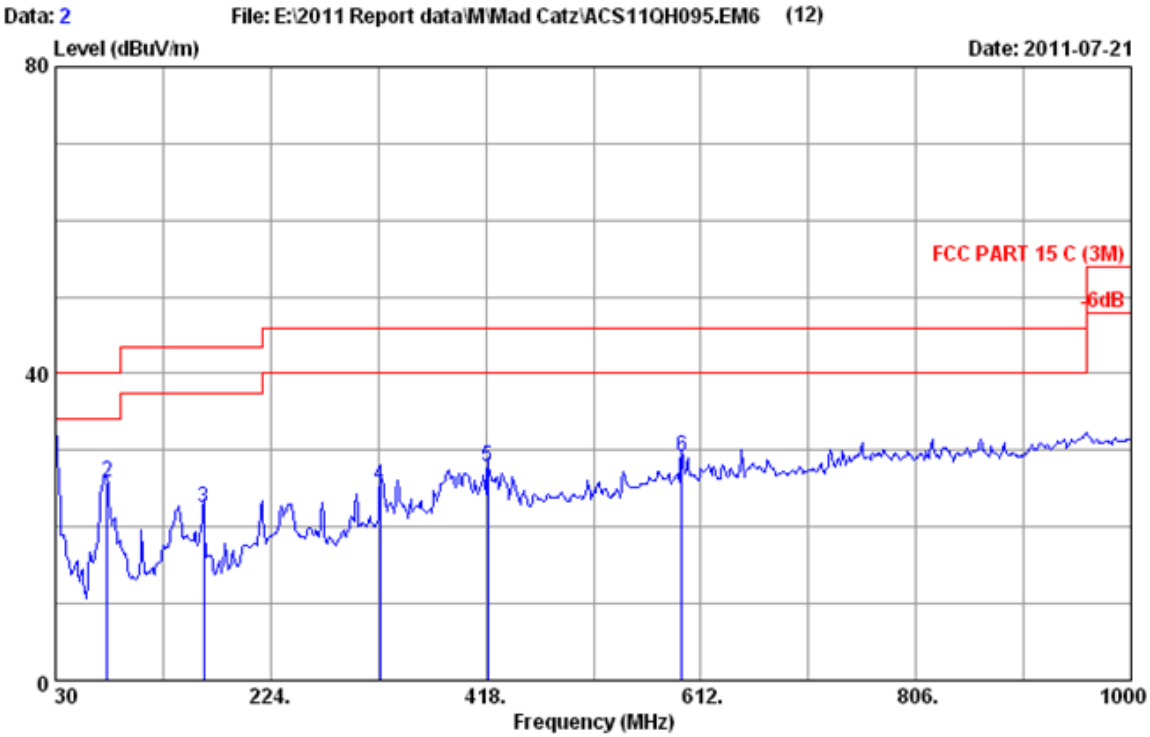
Duty cycle: 491.7us /1.25ms *100% = 39.3%
Duty cycle factor = 20log（1/duty cycle）= 8.1






Agilent
L
Marker
Mkr1 491.7 µs
Ref 11.5 dBm
#Atten 20 dB
-0.29 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
FTun
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Center 2.480 000 GHz
Span 0 Hz
Res BW 2 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

Frequency: 30MHz~1GHz

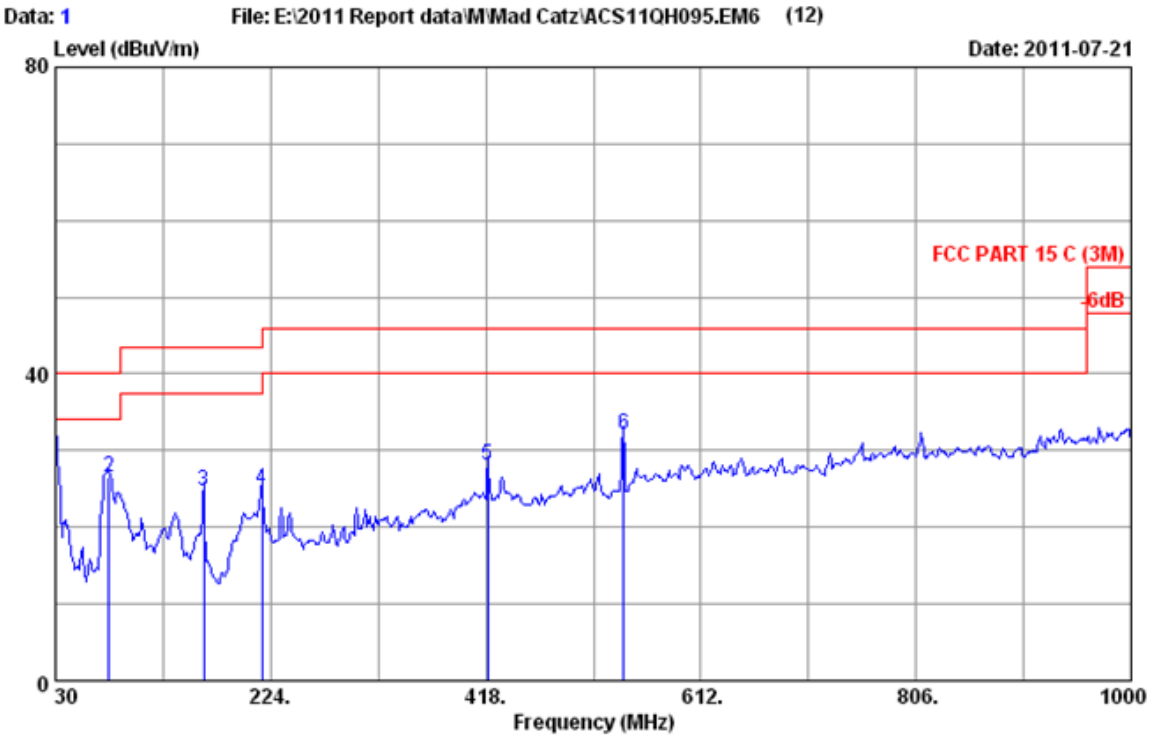


Site no. : 3m Chamber
Dis. / Ant. : 3m 2010 CBL6111C 2598
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/56%
EUT : Bluetooth Headset
Power rating : DC 3.7V
Test Mode : Tx Mode
88606

Data no. : 2
Ant. pol. : HORIZONTAL
Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.58	11.07	31.65	40.00	8.35	QP
2	76.560	7.47	1.01	17.26	25.74	40.00	14.26	QP
3	163.860	10.78	1.59	10.22	22.59	43.50	20.91	QP
4	322.940	14.26	3.08	8.10	25.44	46.00	20.56	QP
5	419.940	17.00	3.46	7.46	27.92	46.00	18.08	QP
6	594.540	19.85	4.47	4.85	29.17	46.00	16.83	QP

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



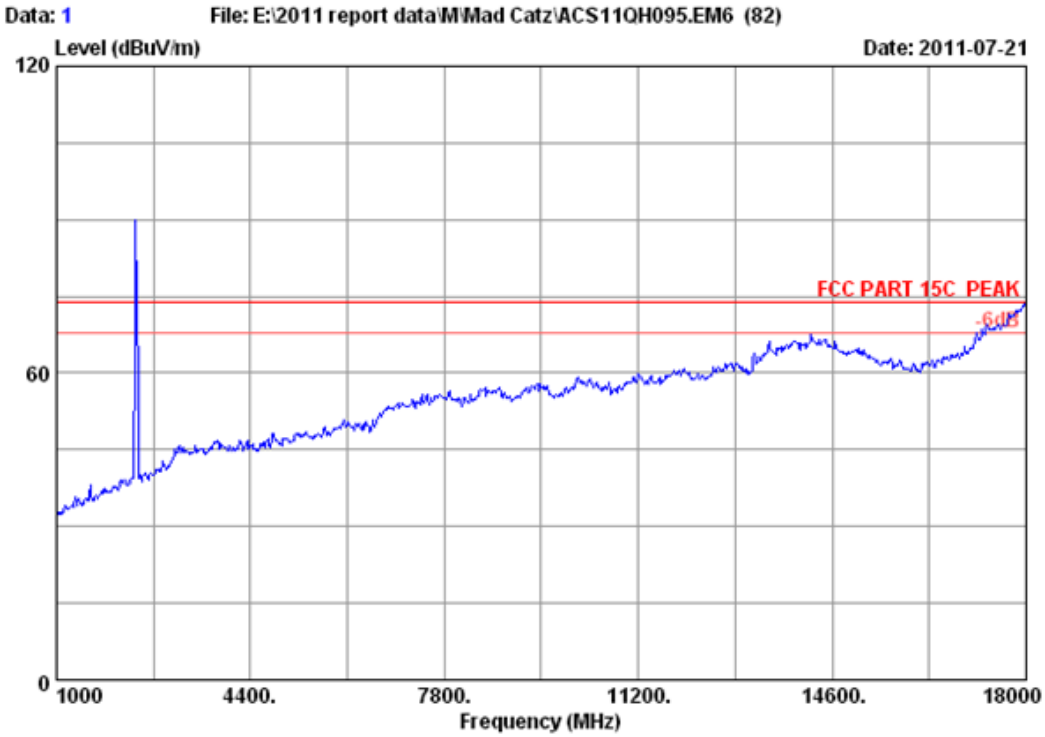
Site no. : 3m Chamber
Dis. / Ant. : 3m 2010 CBL6111C 2598
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/56%
EUT : Bluetooth Headset
Power rating : DC 3.7V
Test Mode : Tx Mode
88606

Data no. : 1
Ant. pol. : VERTICAL
Engineer : Leo-Li

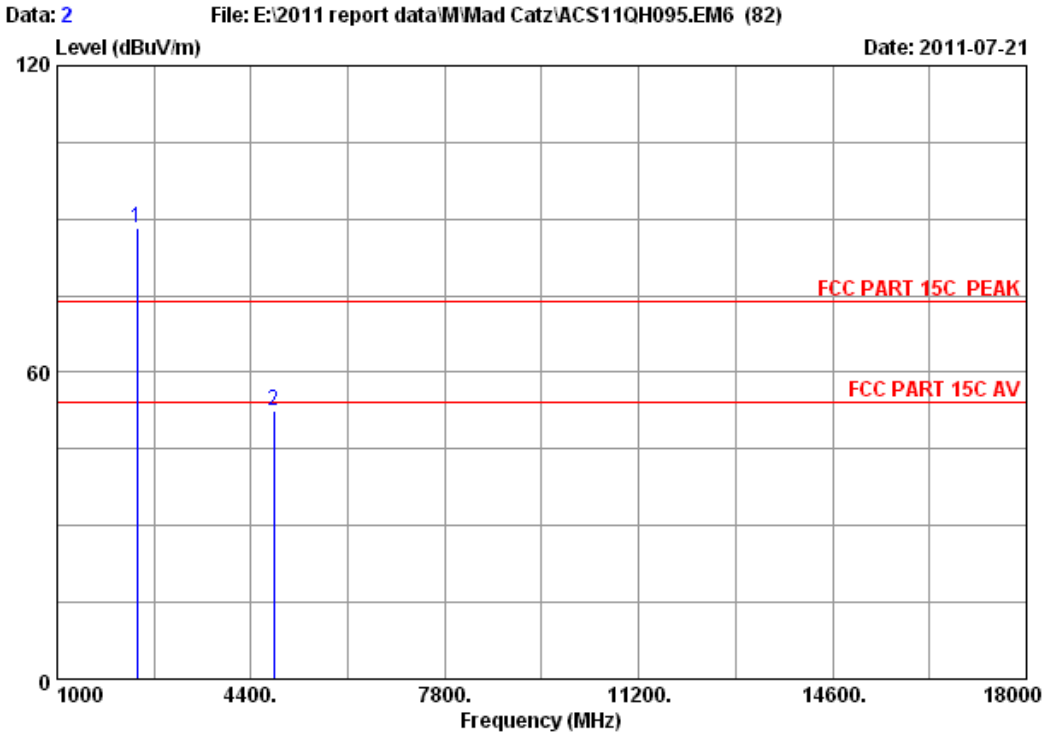
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.58	11.34	31.92	40.00	8.08	QP
2	78.500	7.63	1.02	17.94	26.59	40.00	13.41	QP
3	163.860	10.78	1.59	12.41	24.78	43.50	18.72	QP
4	216.240	10.04	2.02	12.81	24.87	46.00	21.13	QP
5	419.940	17.00	3.46	7.73	28.19	46.00	17.81	QP
6	542.160	18.40	4.21	9.50	32.11	46.00	13.89	QP

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

Frequency: 1GHz~18GHz



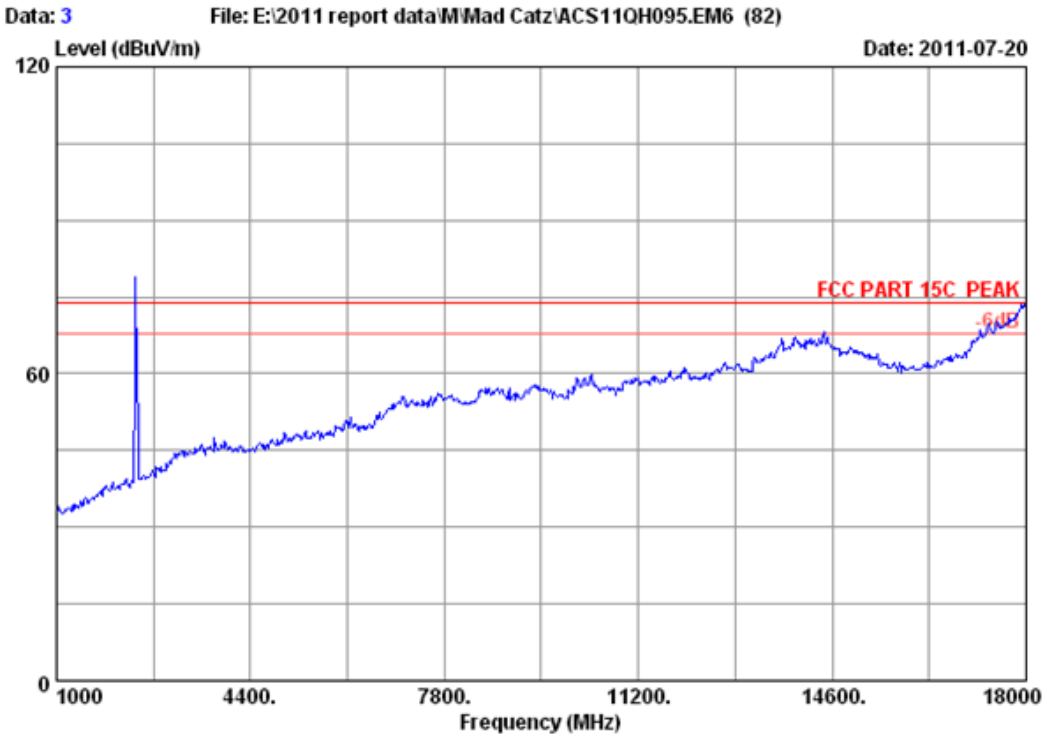
Site no.	: 3m Chamber	Data no.	: 1
Dis. / Ant.	: 3m 2011 3115 4580	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: Bluetooth Headset		
Power	: DC 3.7V		
Test mode	: GFSK 2402MHz Tx		
M/N	: 88606		



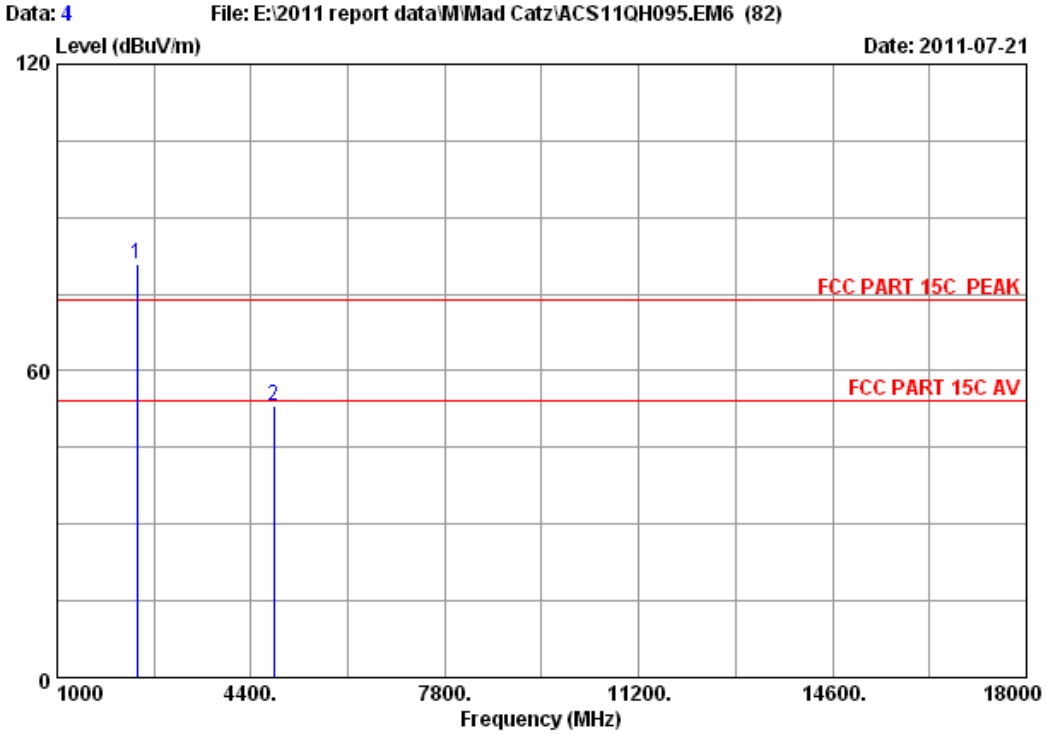
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2402MHz Tx
M/N : 88606

	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	2402.000	27.96	6.75	34.44	87.98	88.25	74.00	-14.25	Peak
2	4804.000	32.86	9.55	34.60	44.76	52.57	74.00	21.43	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.



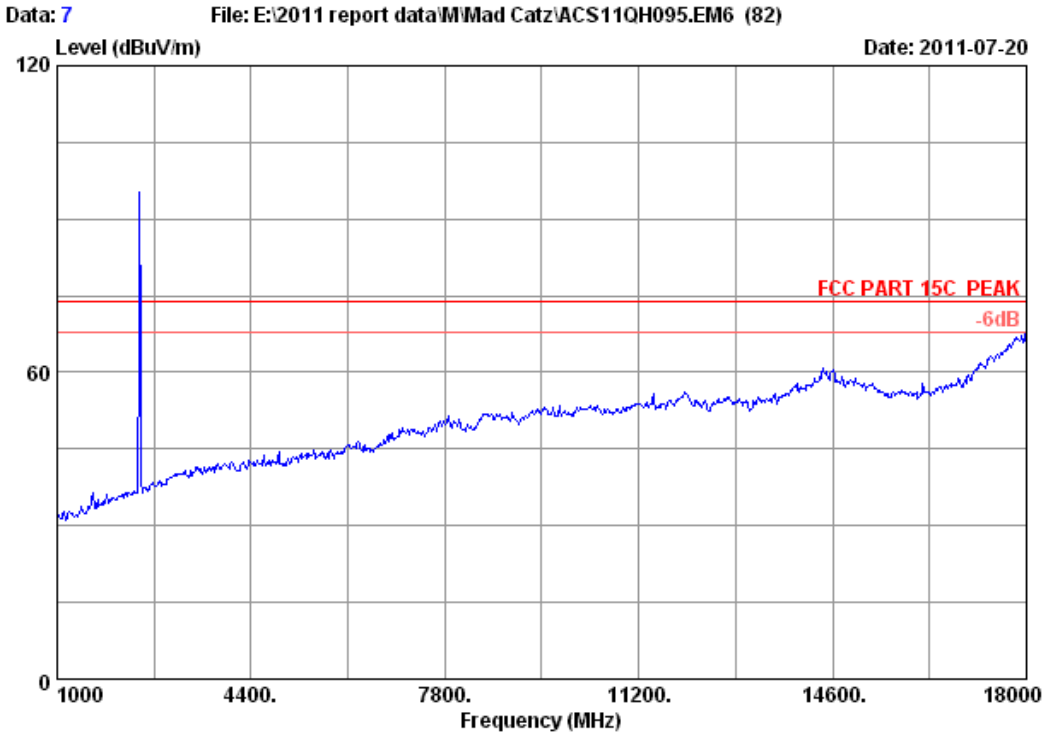
Site no. : 3m Chamber
Data no. : 3
Dis. / Ant. : 3m 2011 3115 4580
Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2402MHz Tx
M/N : 88606



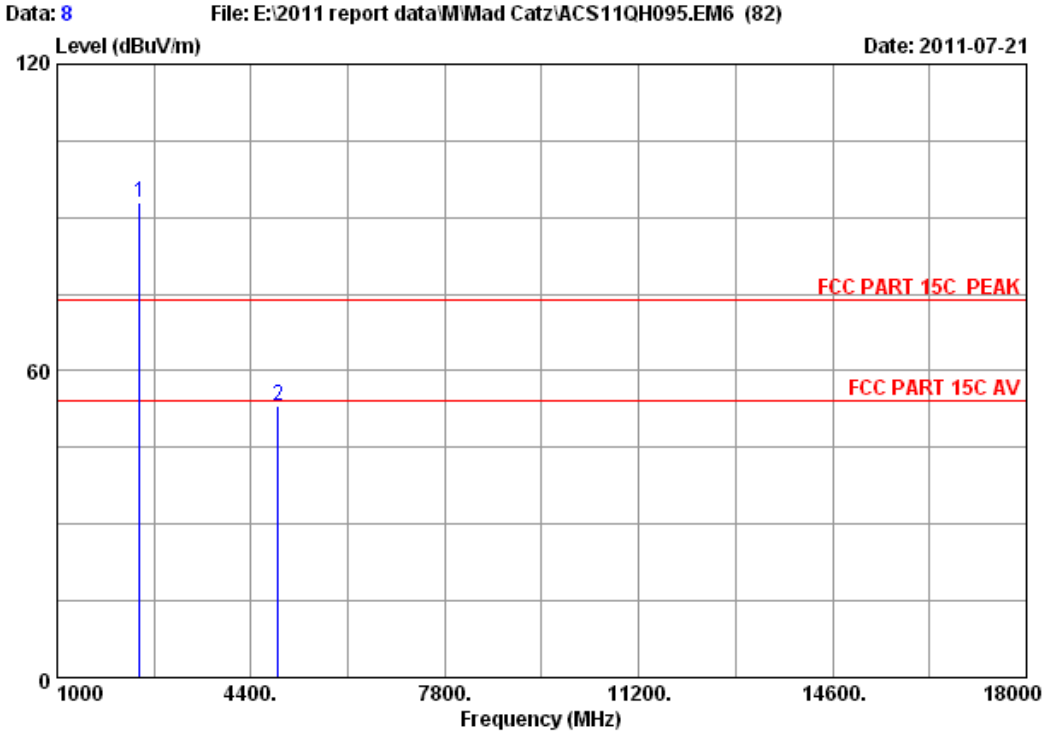
Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2402MHz Tx
M/N : 88606

	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	2402.000	27.96	6.75	34.44	80.49	80.76	74.00	-6.76	Peak
2	4804.000	32.86	9.55	34.60	45.26	53.07	74.00	20.93	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.



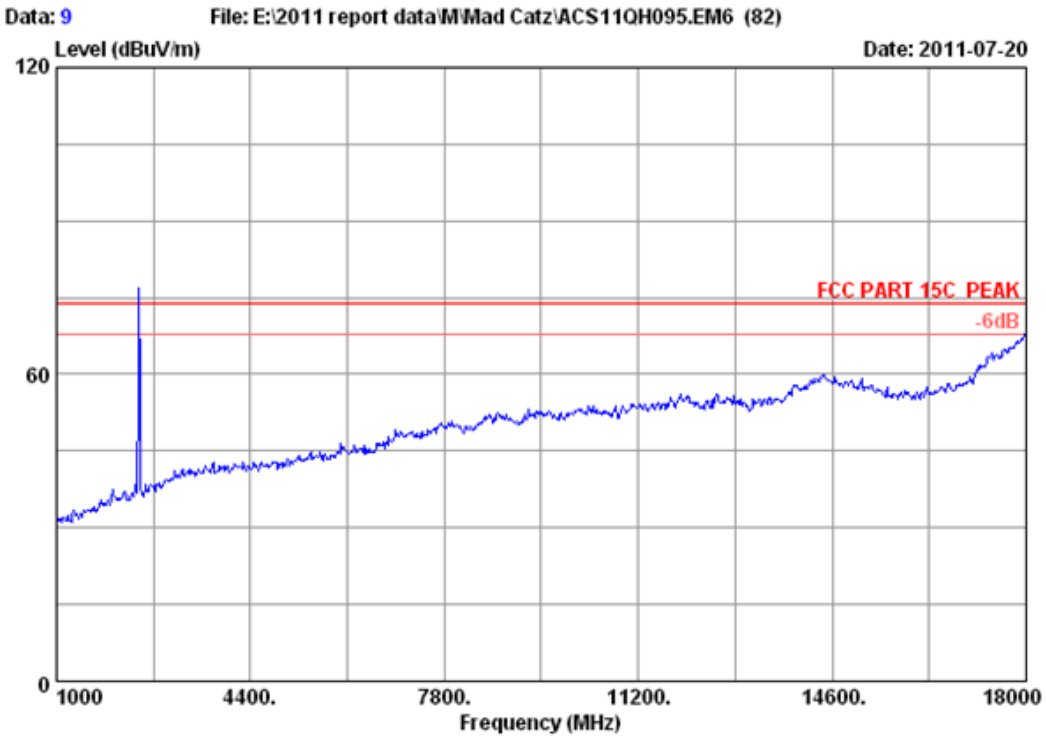
Site no. : 3m Chamber Data no. : 7
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2441MHz Tx
M/N : 88606



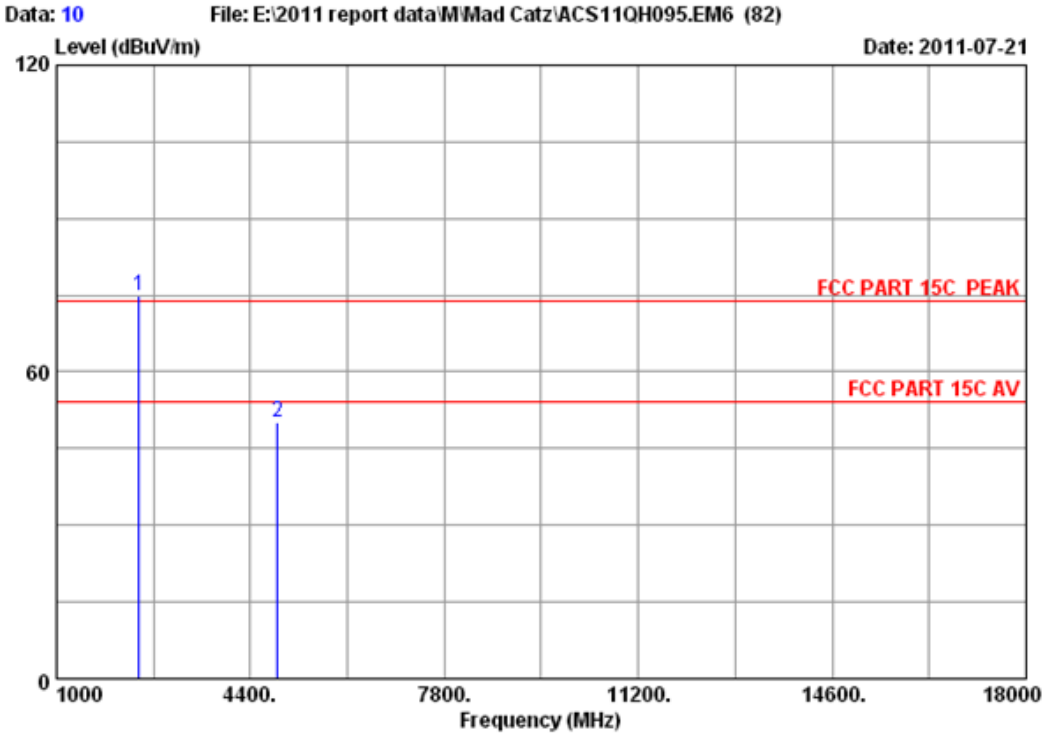
Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2441MHz Tx
M/N : 88606

	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	28.03	6.81	34.44	92.44	92.84	74.00	-18.84	Peak
2	4882.000	32.98	9.62	34.60	45.06	53.06	74.00	20.94	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.



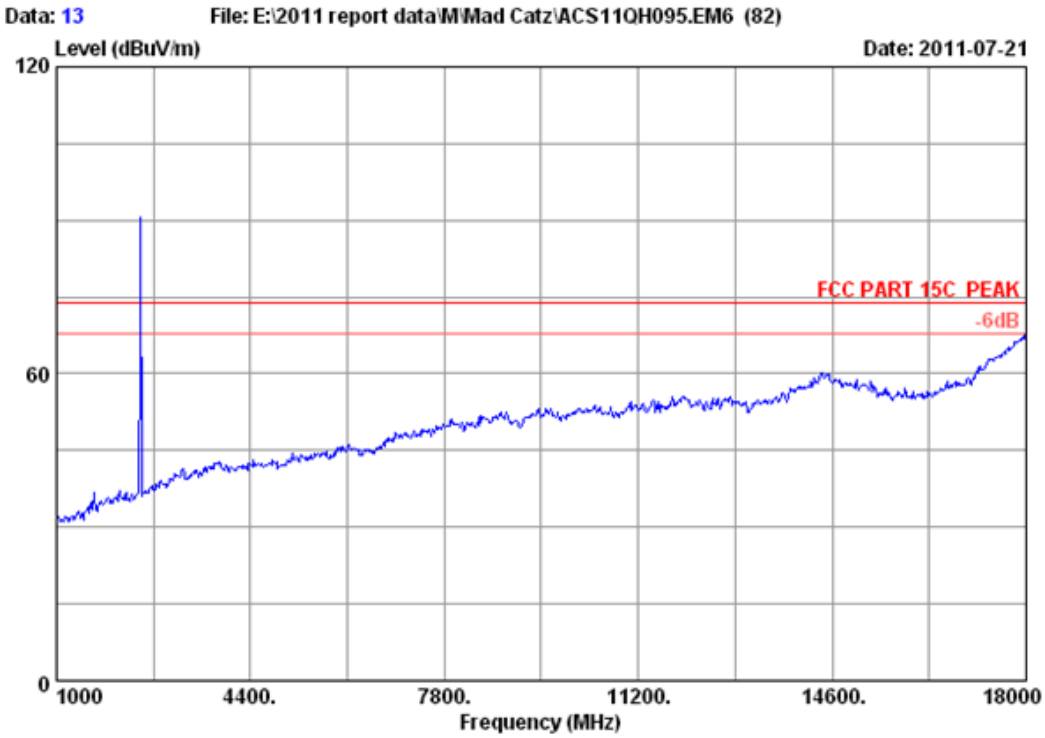
Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2441MHz Tx
M/N : 88606



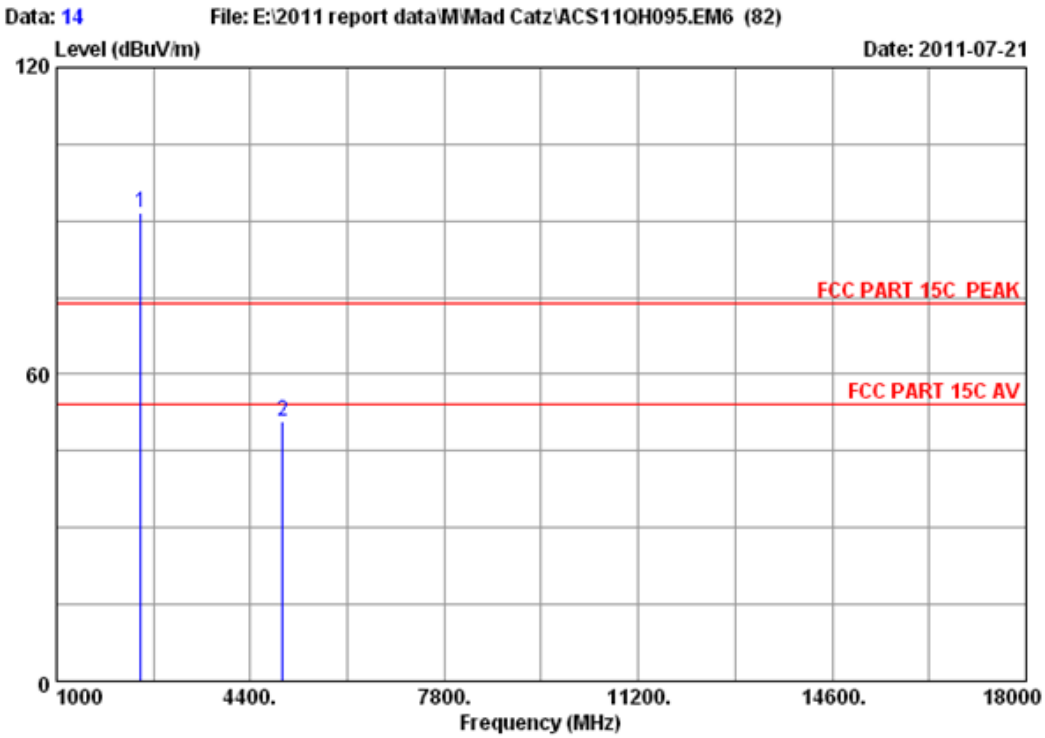
Site no. : 3m Chamber
Data no. : 10
Dis. / Ant. : 3m 2011 3115 4580
Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2441MHz Tx
M/N : 88606

	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	28.03	6.81	34.44	74.56	74.96	74.00	-0.96	Peak
2	4882.000	32.98	9.62	34.60	42.16	50.16	74.00	23.84	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.



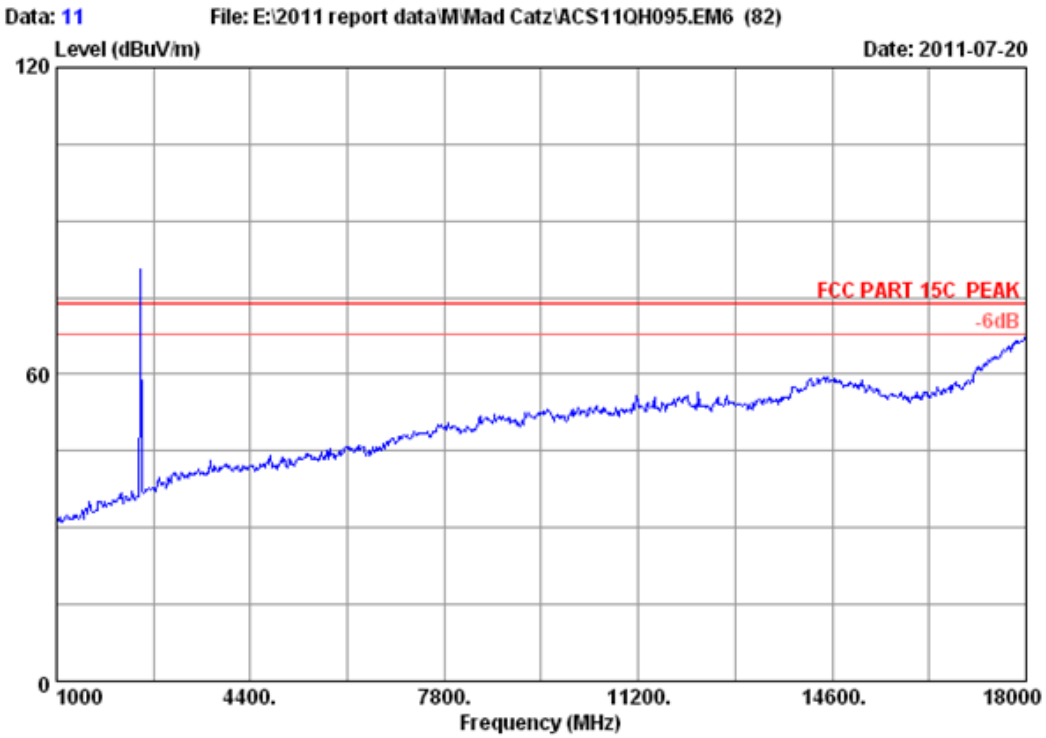
Site no. : 3m Chamber Data no. : 13
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606



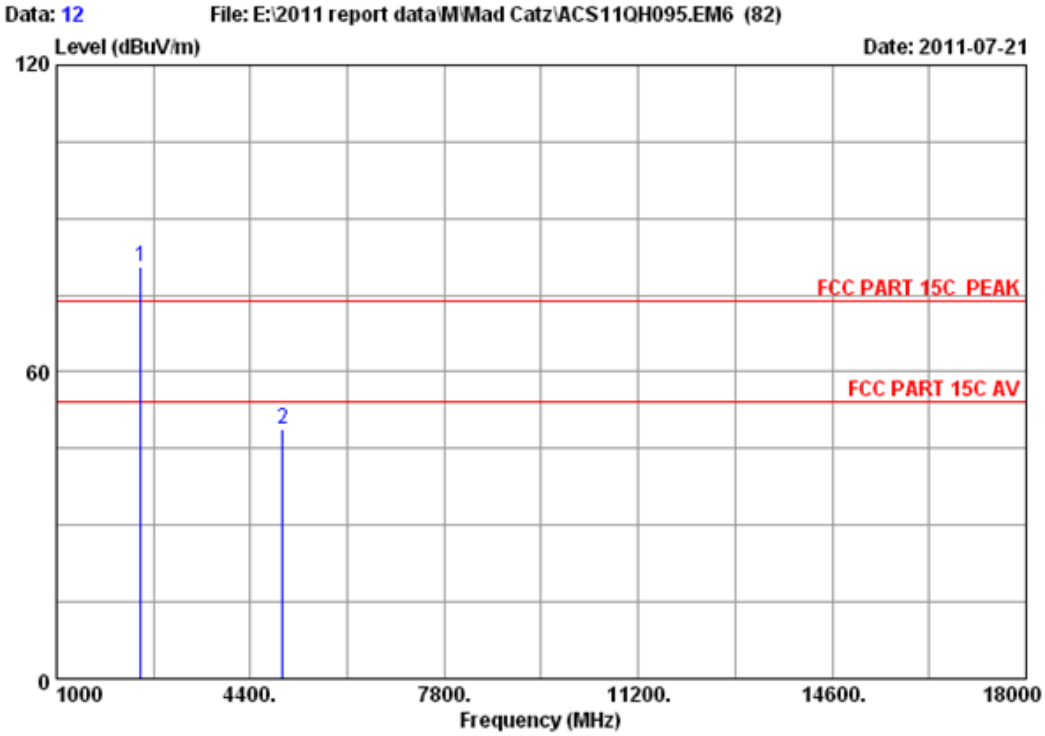
Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606

	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	28.08	6.87	34.45	90.97	91.47	74.00	-17.47	Peak
2	4960.000	33.14	9.69	34.60	42.69	50.92	74.00	23.08	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.



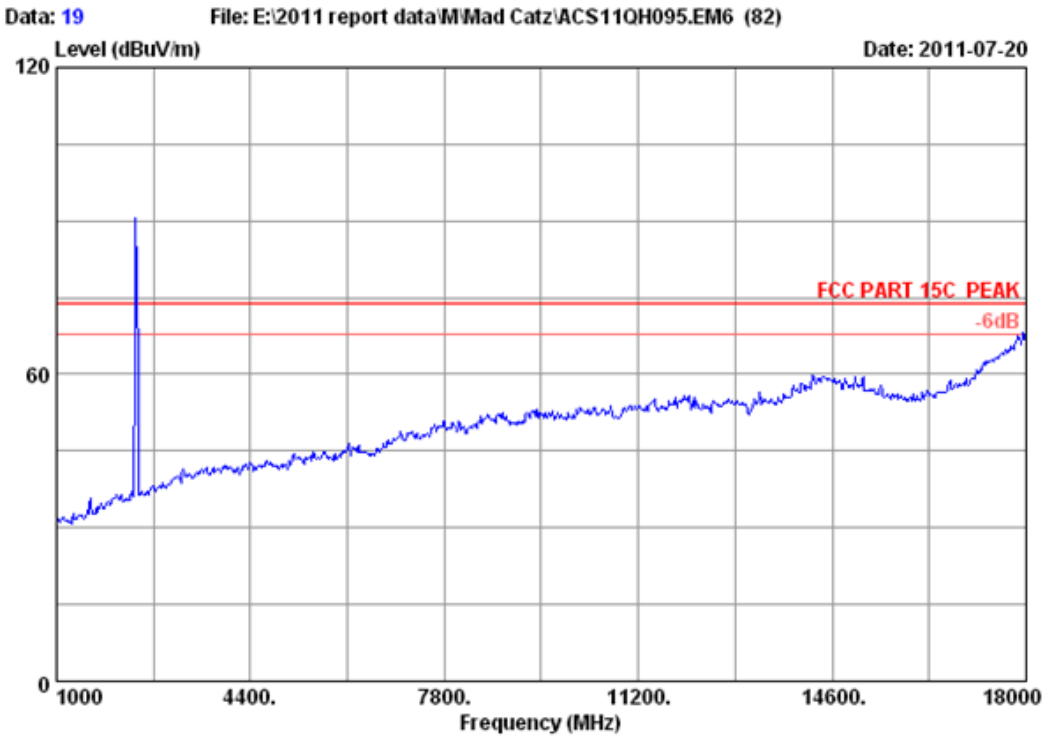
Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606



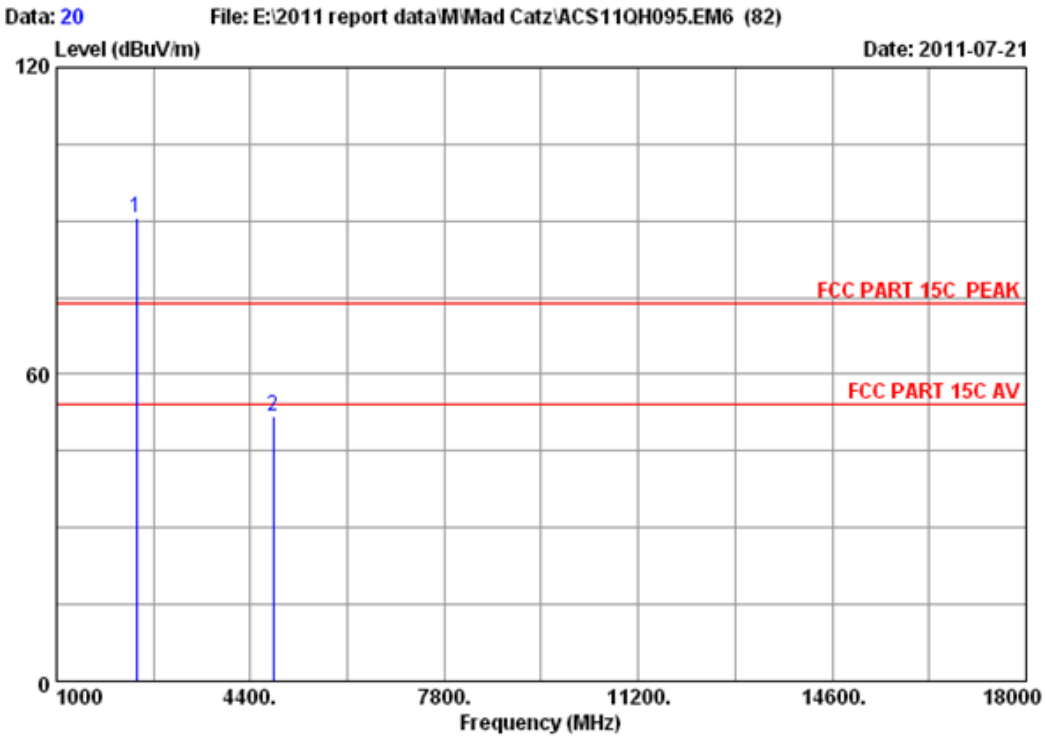
Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606

	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	28.08	6.87	34.45	80.02	80.52	74.00	-6.52	Peak
2	4960.000	33.14	9.69	34.60	40.68	48.91	74.00	25.09	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.



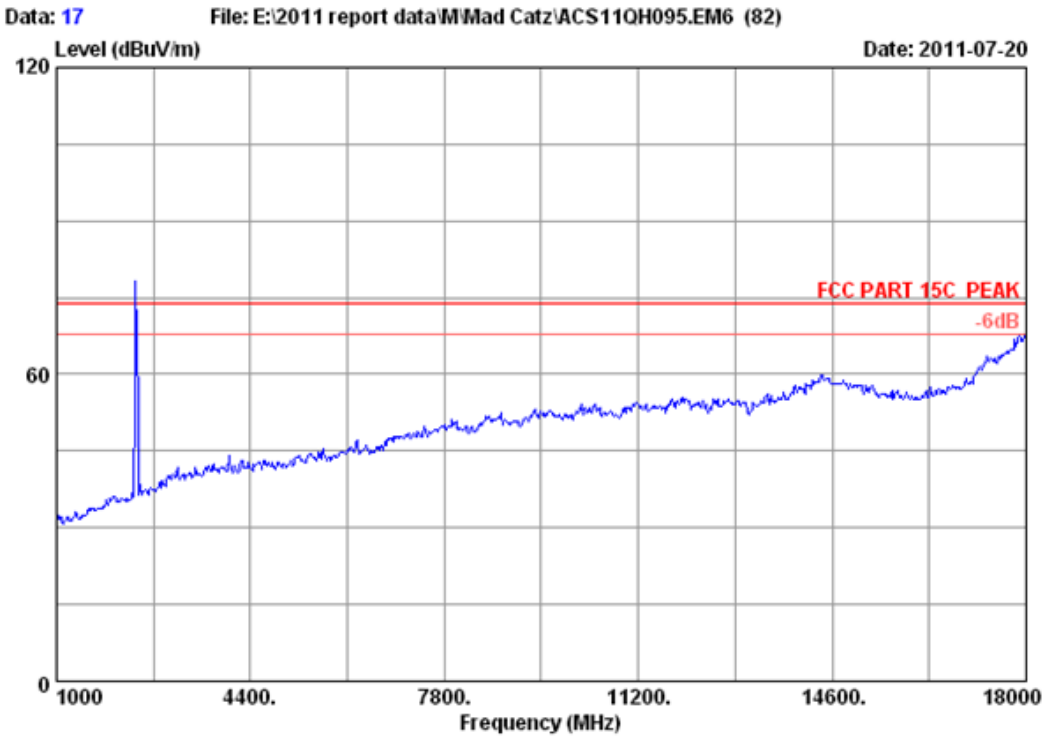
Site no. : 3m Chamber Data no. : 19
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2402MHz Tx
M/N : 88606



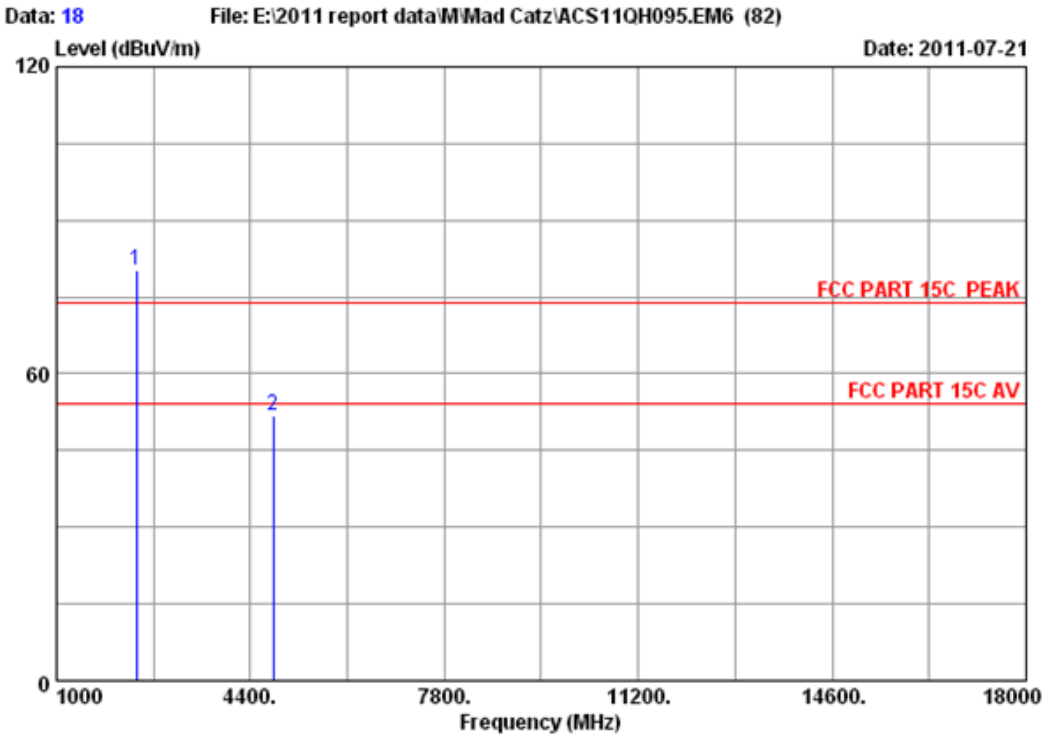
Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2402MHz Tx
M/N : 88606

	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	2402.000	27.96	6.75	34.44	90.41	90.68	74.00	-16.68	Peak
2	4804.000	32.86	9.55	34.60	44.13	51.94	74.00	22.06	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.



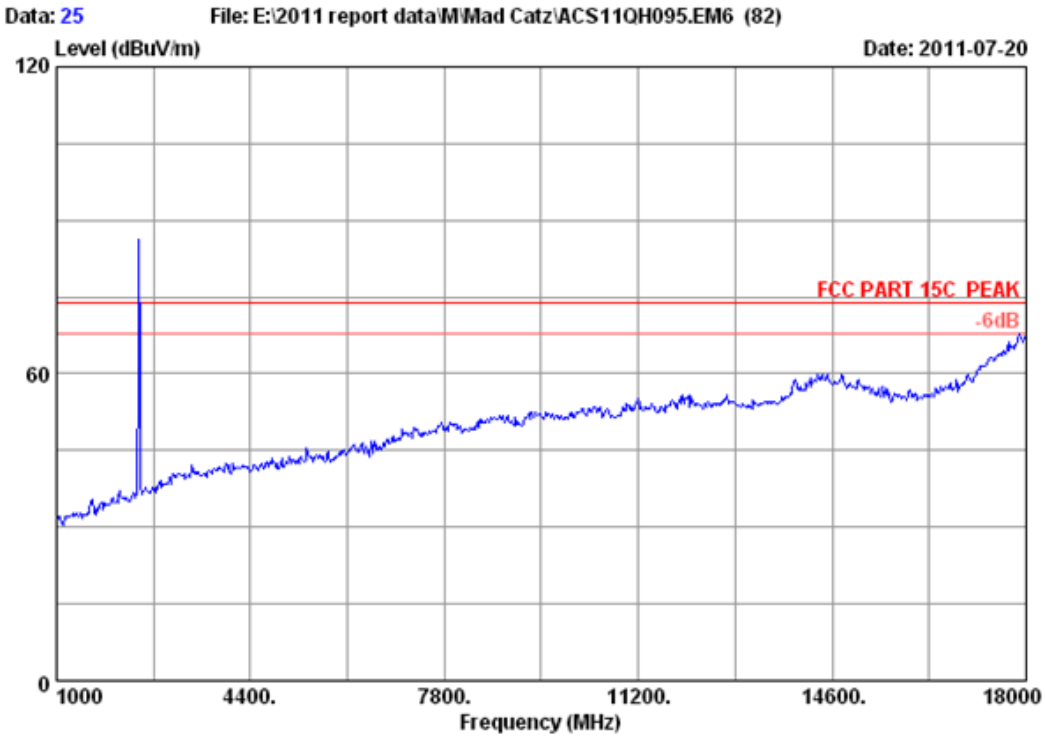

```
Site no.      : 3m Chamber              Data no. :  17
Dis. / Ant.   : 3m   2011 3115 4580      Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Leo-Li
EUT           : Bluetooth Headset
Power         : DC 3.7V
Test mode     : 8DPSK    2402MHz Tx
M/N           : 88606
```



Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2402MHz Tx
M/N : 88606

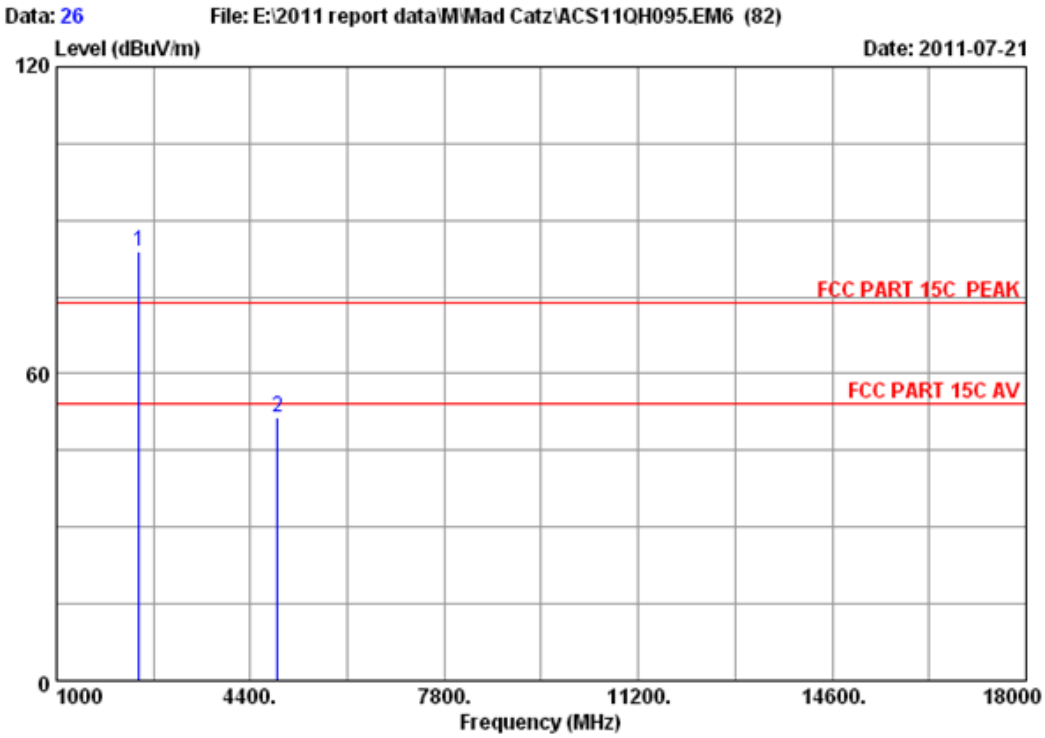
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	27.96	6.75	34.44	80.02	80.29	74.00	-6.29	Peak
2	4804.000	32.86	9.55	34.60	43.86	51.67	74.00	22.33	Peak

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.



Site no. : 3m Chamber
Dis. / Ant. : 3m 2011 3115 4580
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2441MHz Tx
M/N : 88606

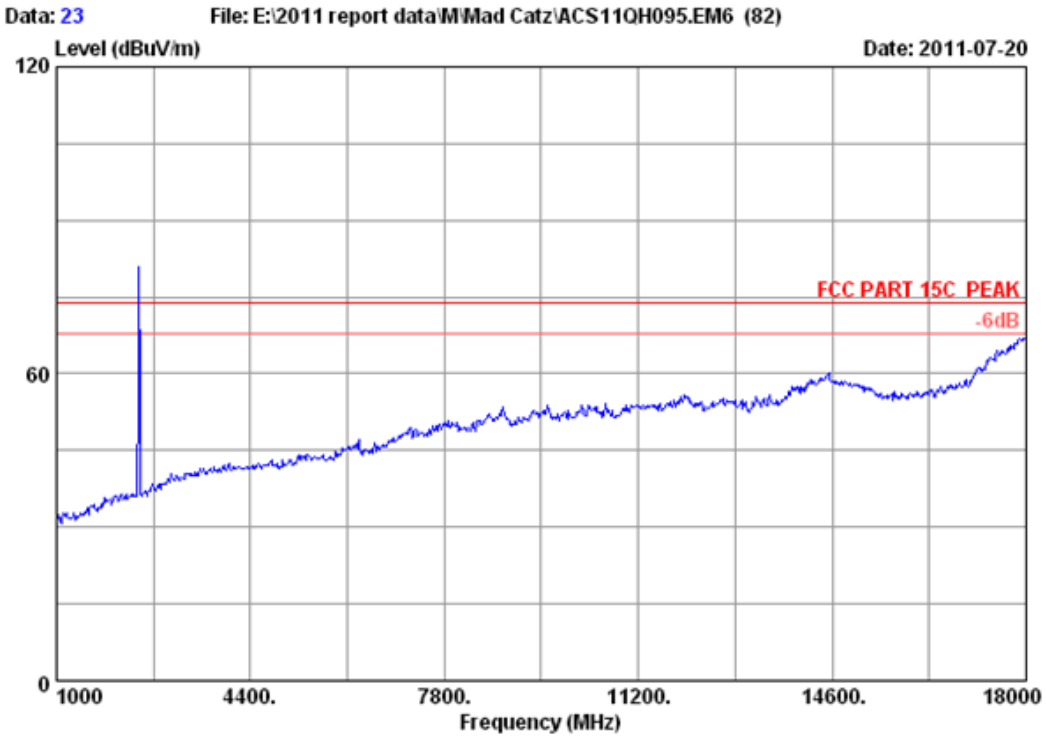
Data no. : 25
Ant. pol. : HORIZONTAL
Engineer : Leo-Li



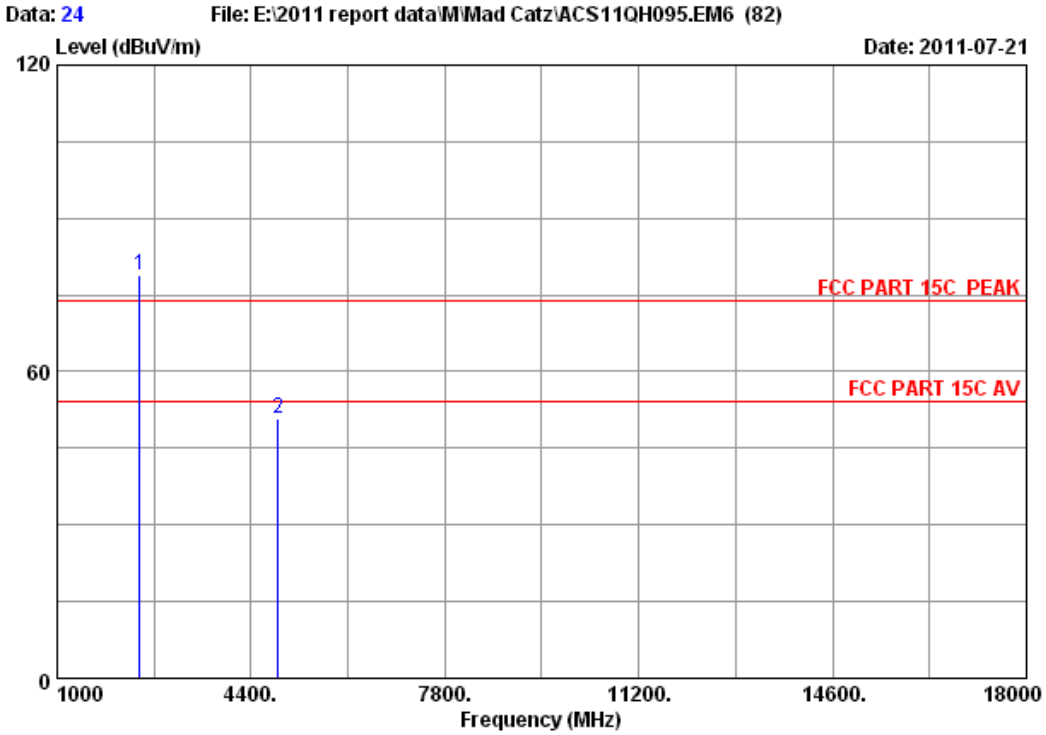
Site no. : 3m Chamber Data no. : 26
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2441MHz Tx
M/N : 88606

	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	28.03	6.81	34.44	83.66	84.06	74.00	-10.06	Peak
2	4882.000	32.98	9.62	34.60	43.37	51.37	74.00	22.63	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.



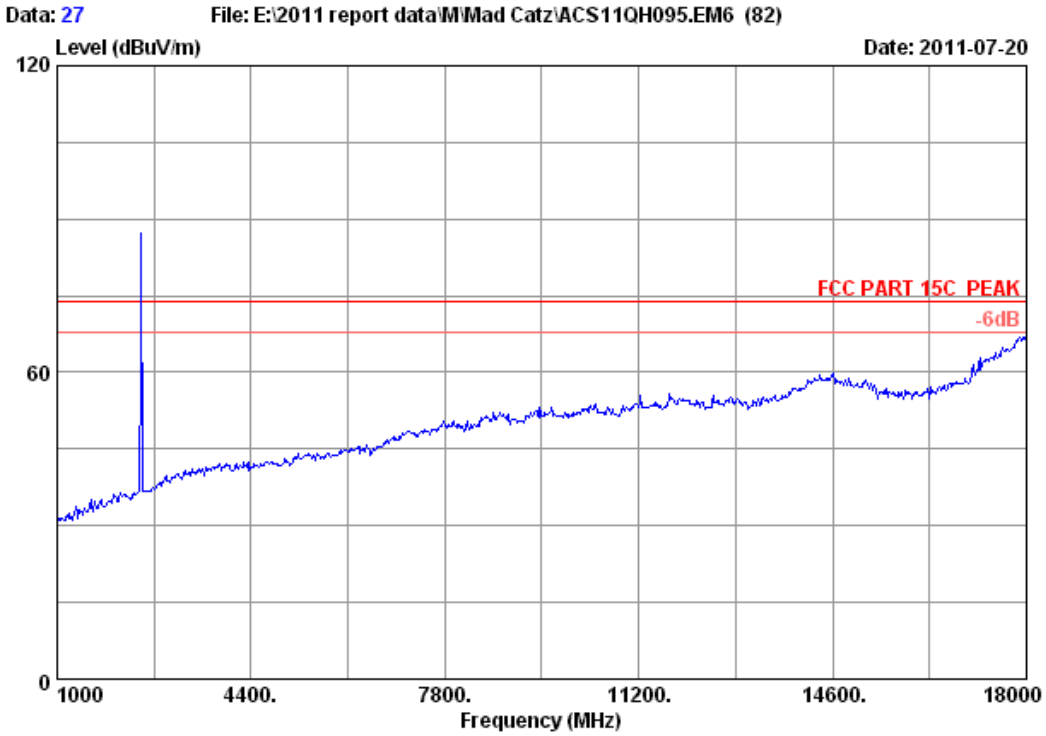
Site no. : 3m Chamber
Data no. : 23
Dis. / Ant. : 3m 2011 3115 4580
Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2441MHz Tx
M/N : 88606



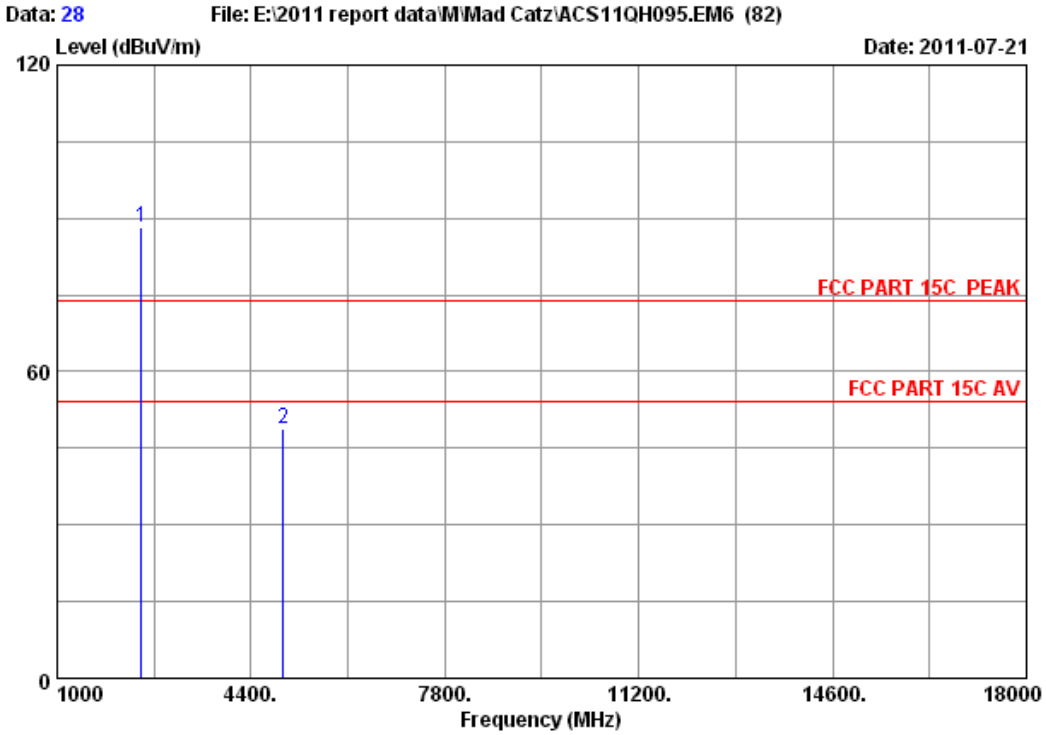
Site no. : 3m Chamber Data no. : 24
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2441MHz Tx
M/N : 88606

	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	28.03	6.81	34.44	78.53	78.93	74.00	-4.93	Peak
2	4882.000	32.98	9.62	34.60	42.84	50.84	74.00	23.16	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.



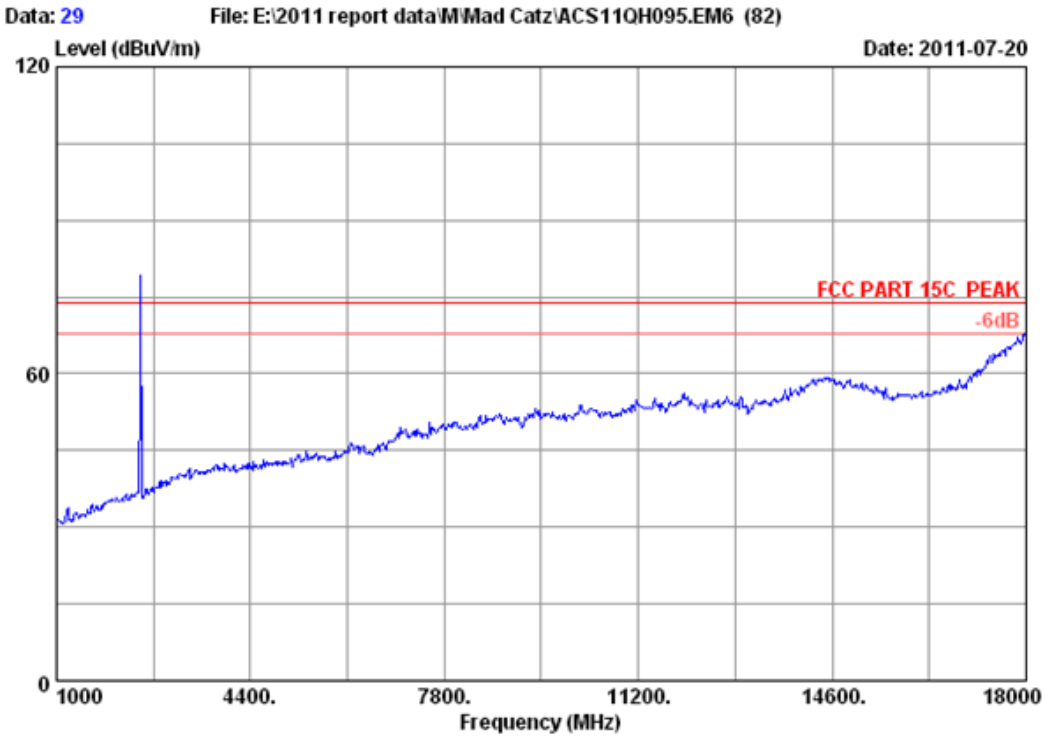
Site no. : 3m Chamber Data no. : 27
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606



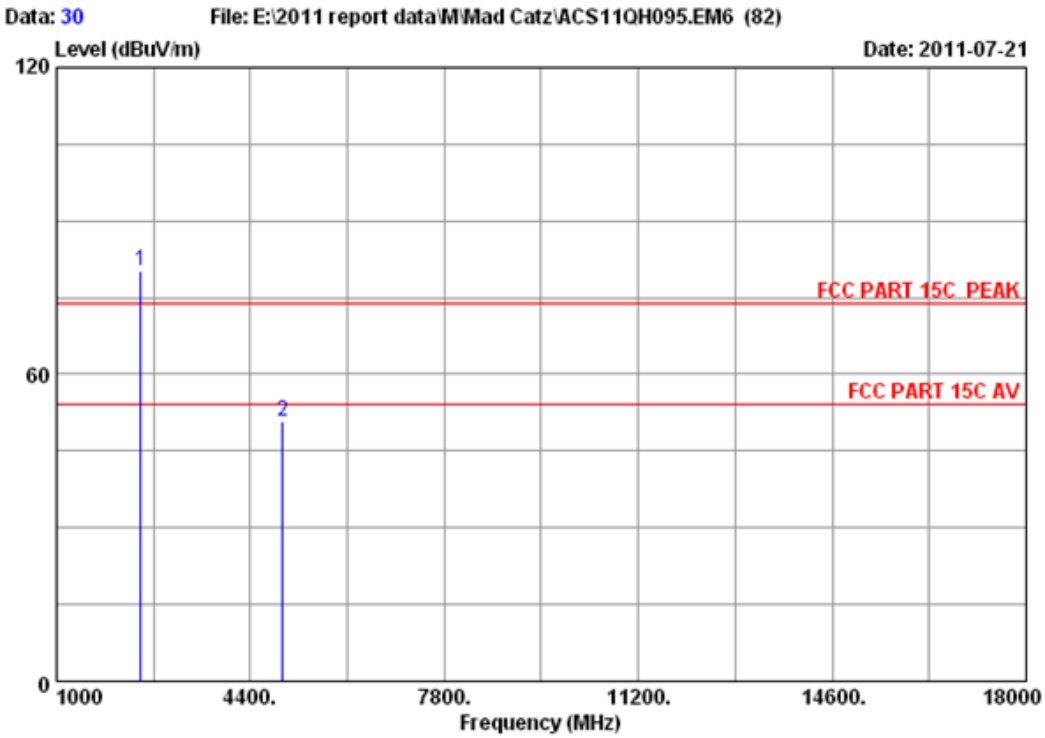
Site no. : 3m Chamber Data no. : 28
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606

	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	28.08	6.87	34.45	87.78	88.28	74.00	-14.28	Peak
2	4960.000	33.14	9.69	34.60	40.43	48.66	74.00	25.34	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.



Site no. : 3m Chamber Data no. : 29
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606



Site no. : 3m Chamber Data no. : 30
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606

	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	28.08	6.87	34.45	79.83	80.33	74.00	-6.33	Peak
2	4960.000	33.14	9.69	34.60	42.51	50.74	74.00	23.26	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.

4. CONDUCTED SPURIOUS EMISSIONS

4.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

4.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

4.3.Test Procedure

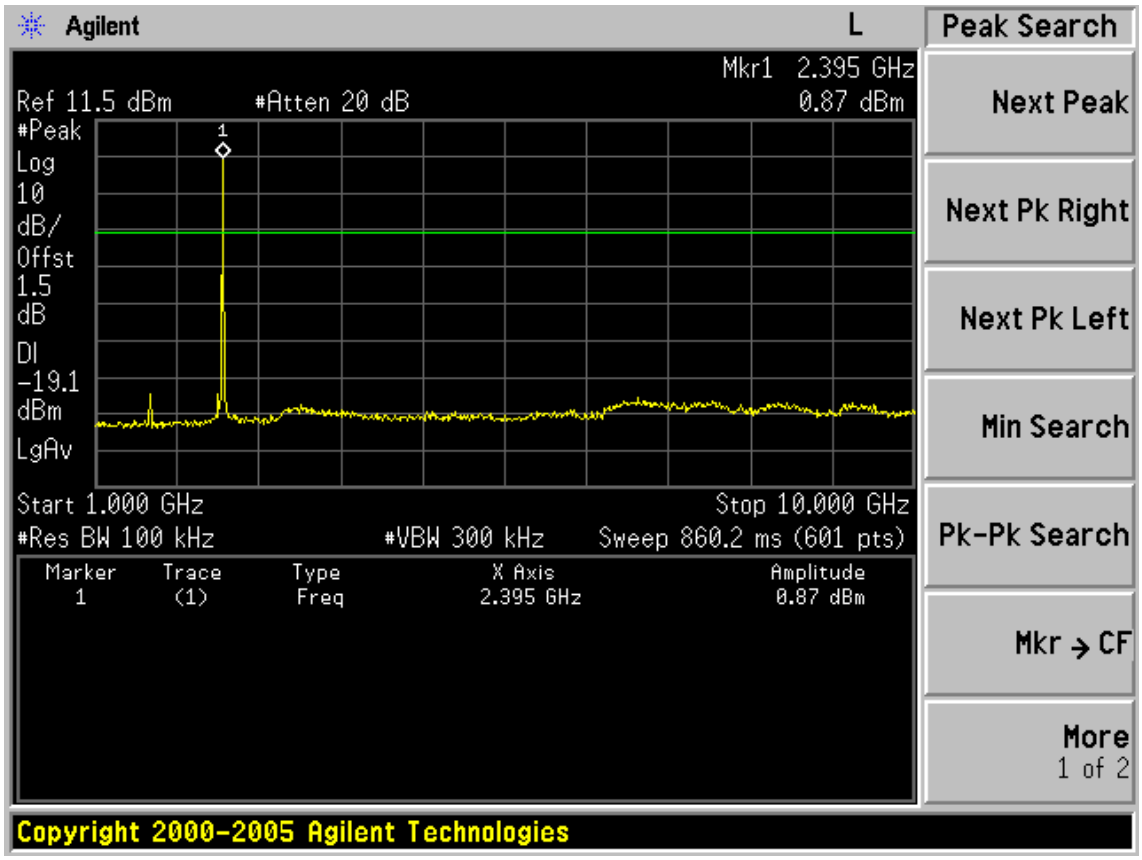
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

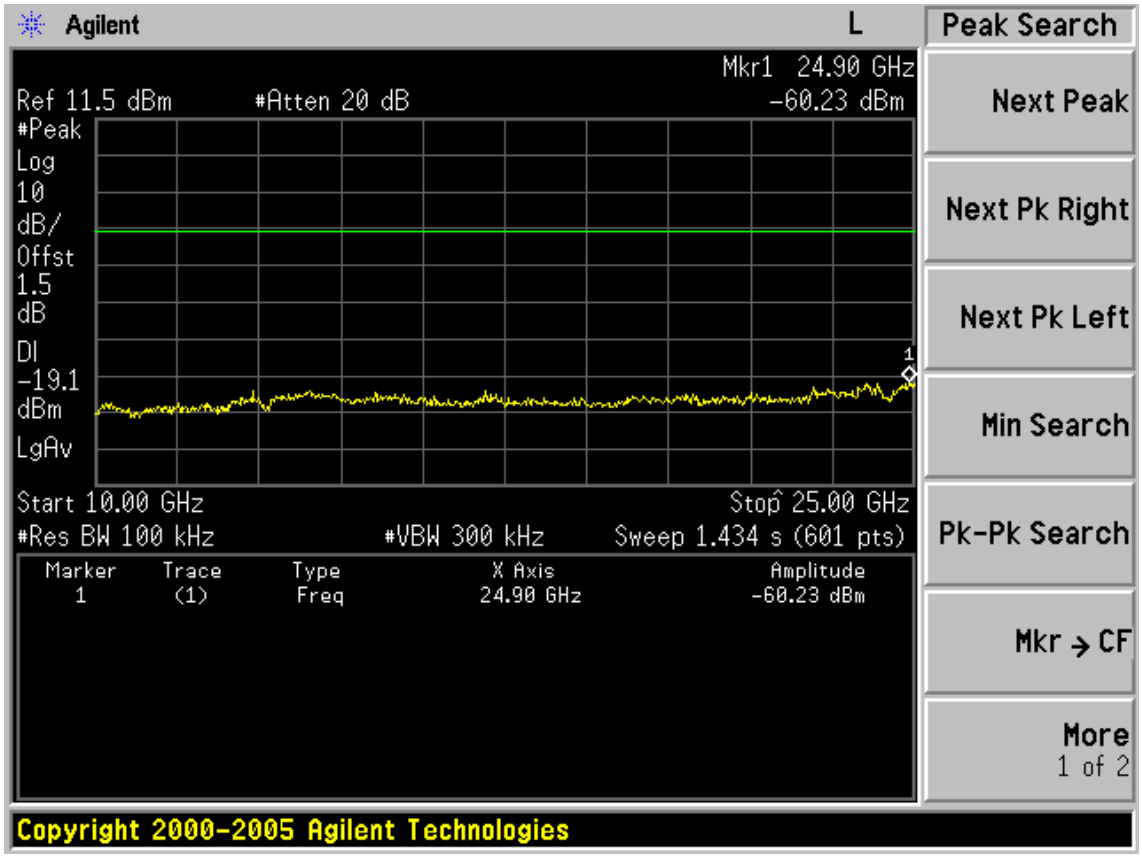
4.4.Test result

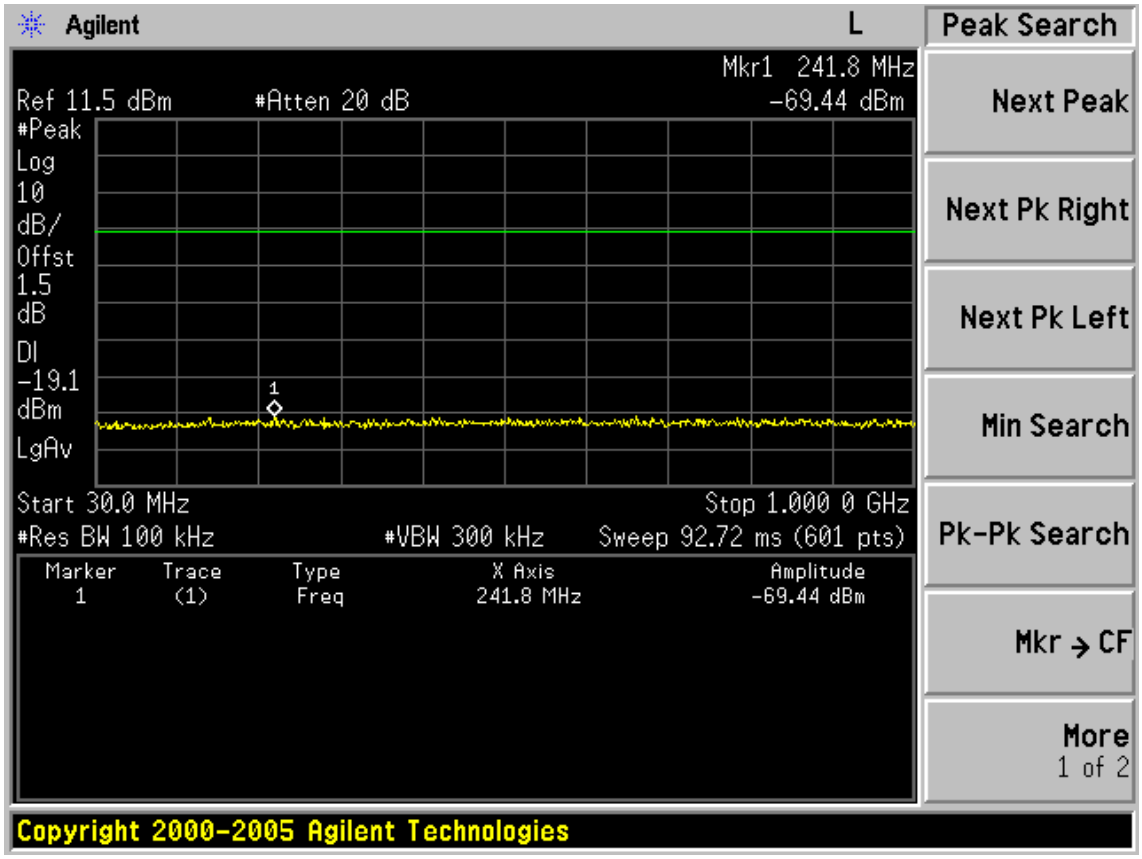
PASS (The testing data was attached in the next pages.)

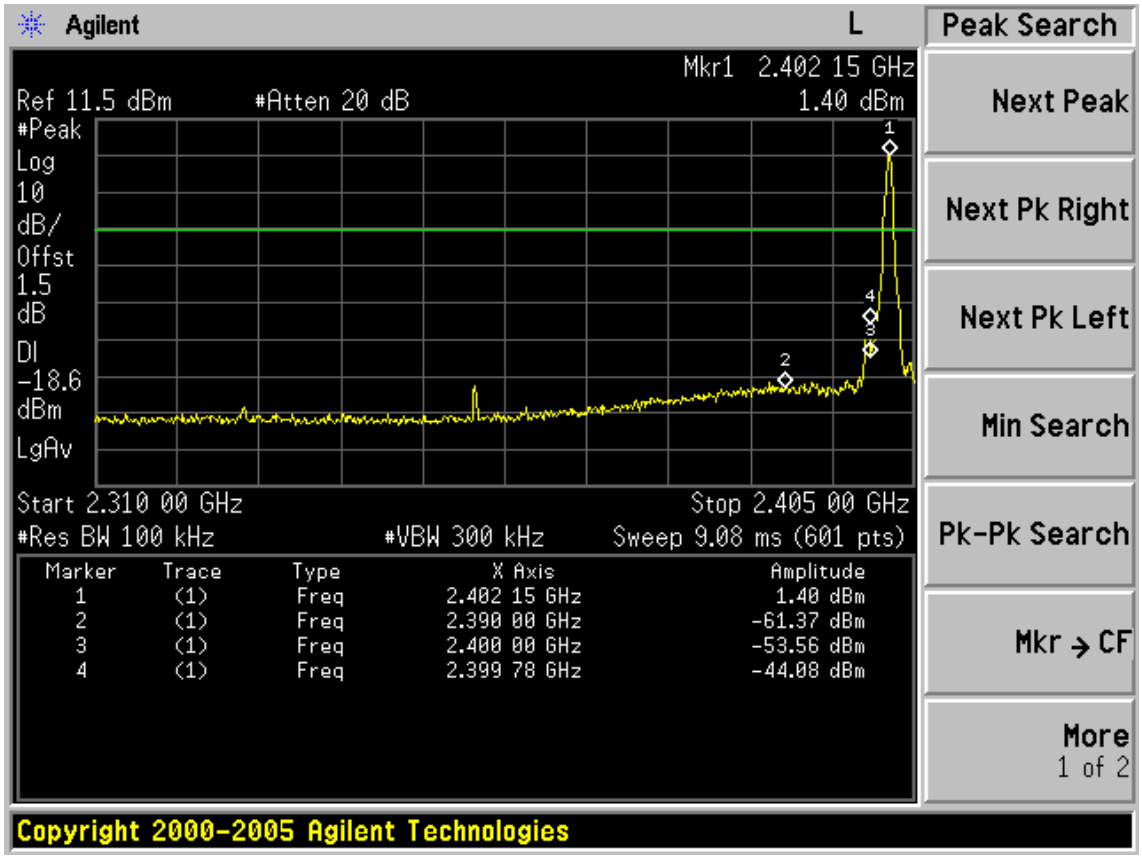
GFSK

2402

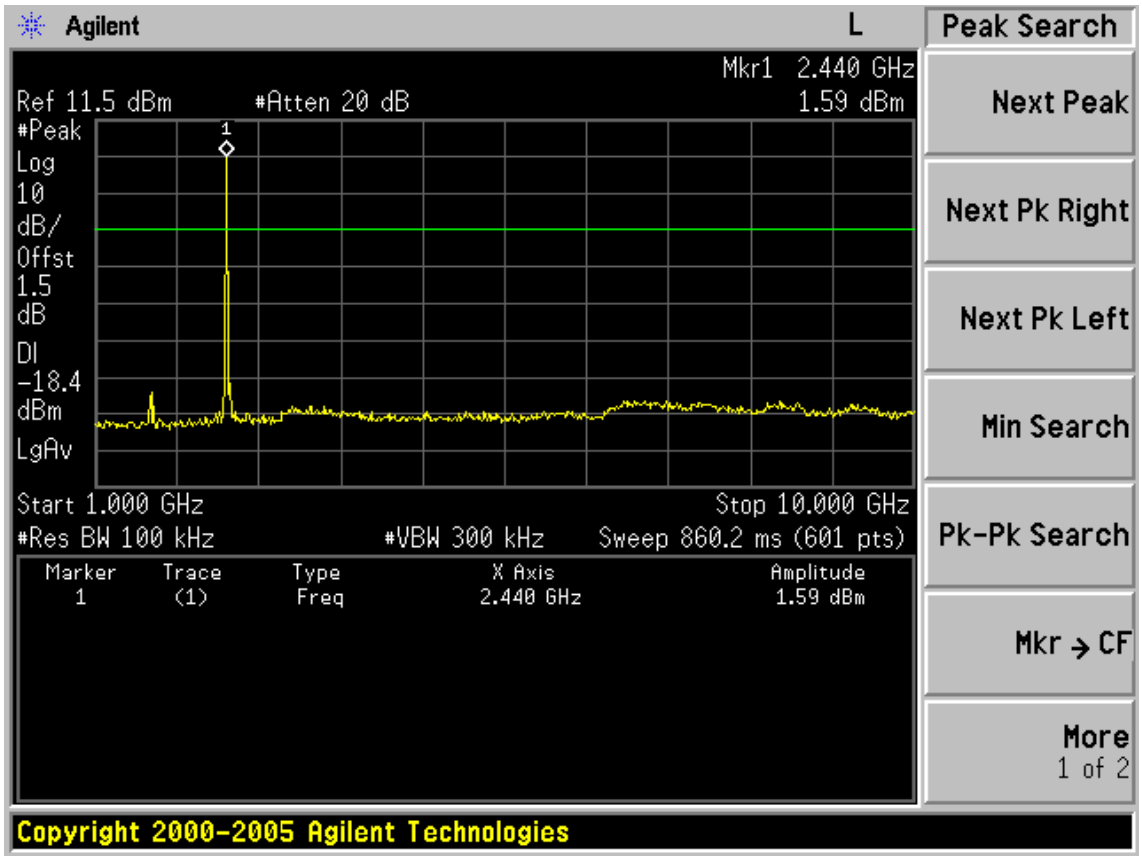

Agilent
L
Peak Search
Mkr1 2.395 GHz
Ref 11.5 dBm
#Atten 20 dB
0.87 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-19.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.395 GHz 0.87 dBm
Copyright 2000-2005 Agilent Technologies

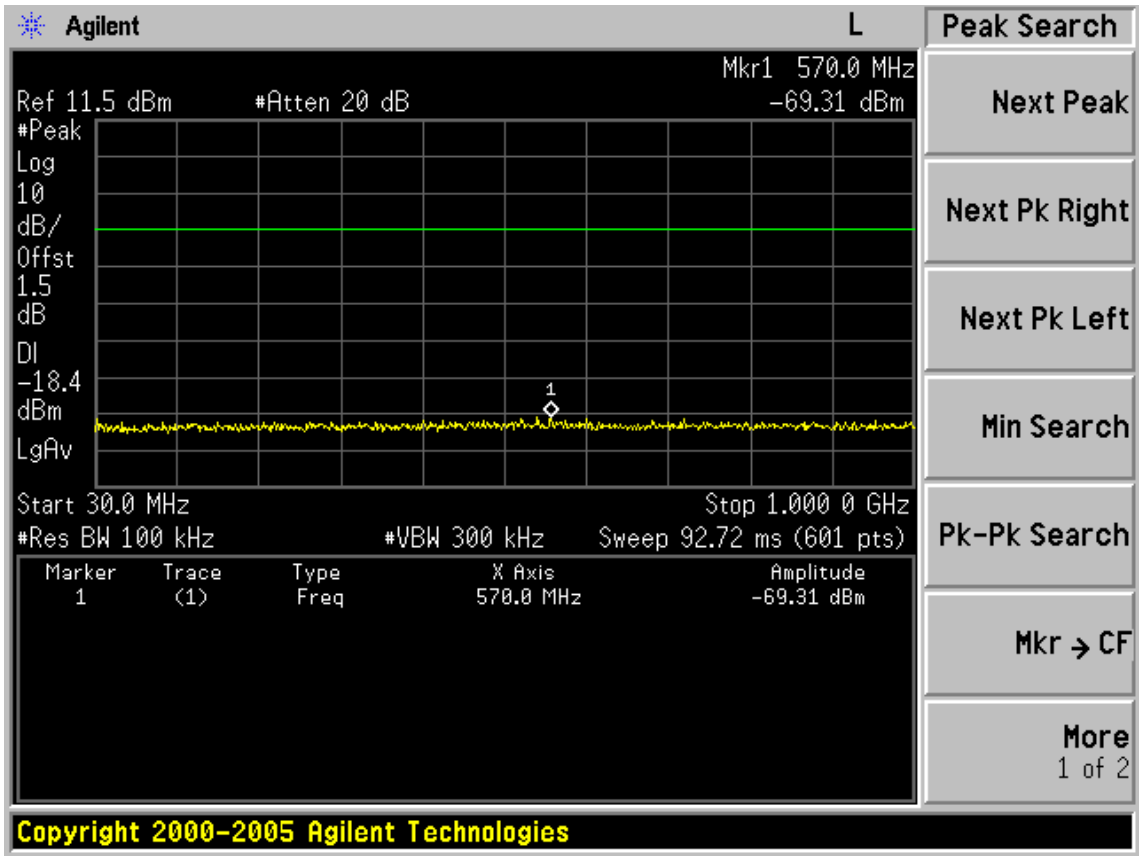

Agilent
L
Peak Search
Mkr1 24.90 GHz
Ref 11.5 dBm
#Atten 20 dB
-60.23 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-19.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.90 GHz -60.23 dBm
Copyright 2000-2005 Agilent Technologies

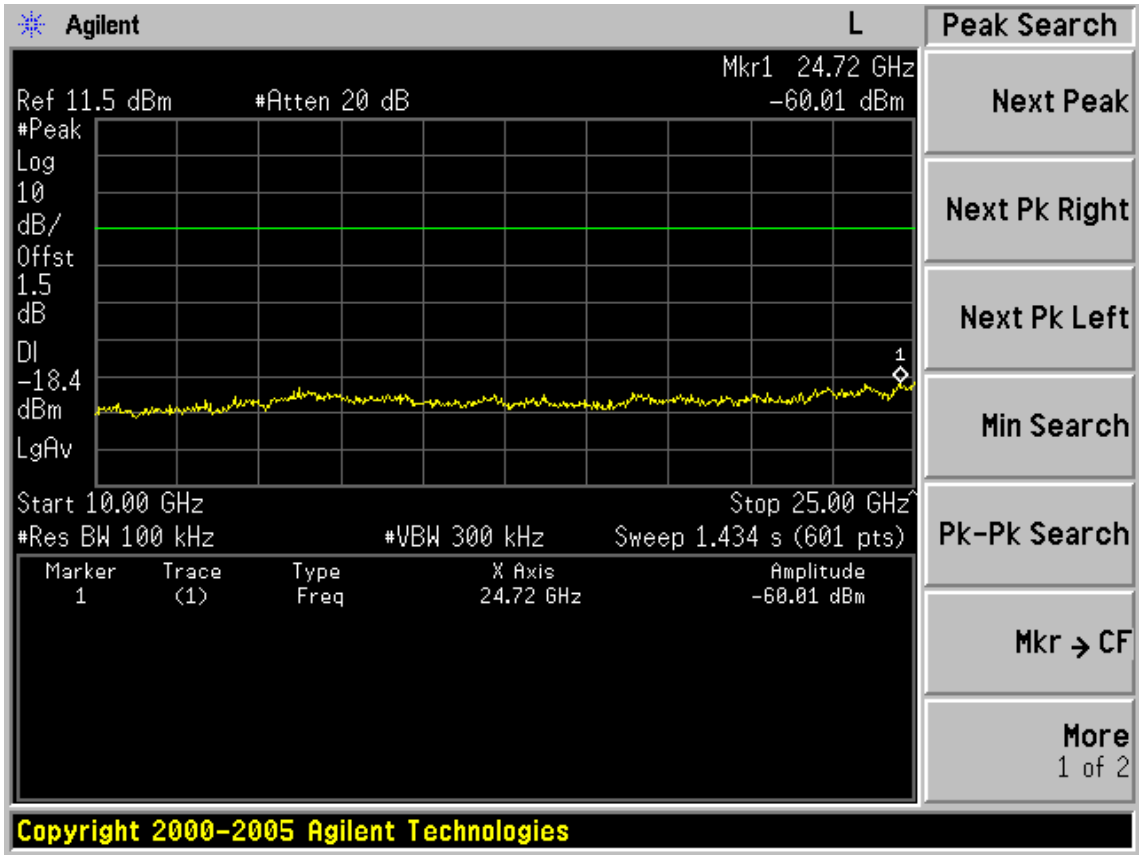

Agilent
L
Peak Search
Mkr1 241.8 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.44 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-19.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 241.8 MHz -69.44 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.402 15 GHz
Ref 11.5 dBm
#Atten 20 dB
1.40 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-18.6
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.310 00 GHz
Stop 2.405 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 9.08 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.402 15 GHz 1.40 dBm
2 (1) Freq 2.390 00 GHz -61.37 dBm
3 (1) Freq 2.400 00 GHz -53.56 dBm
4 (1) Freq 2.399 78 GHz -44.08 dBm
Copyright 2000-2005 Agilent Technologies

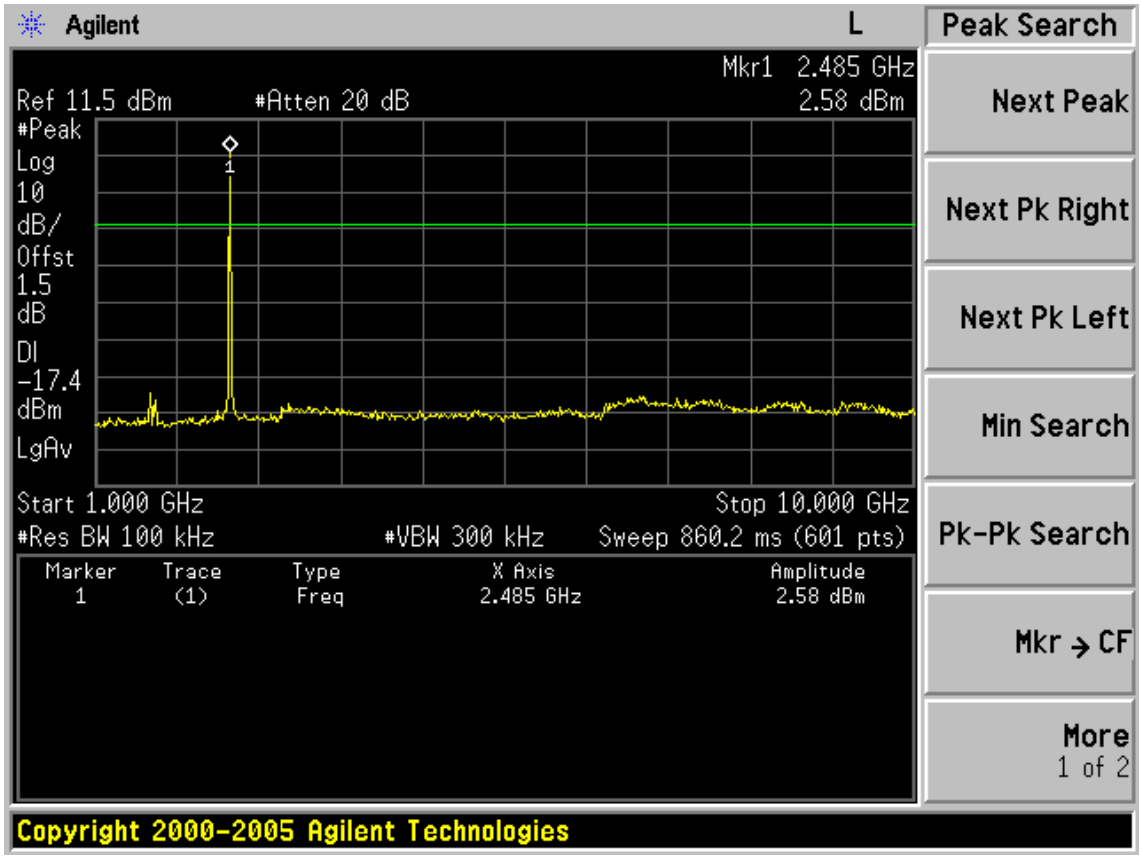
2441

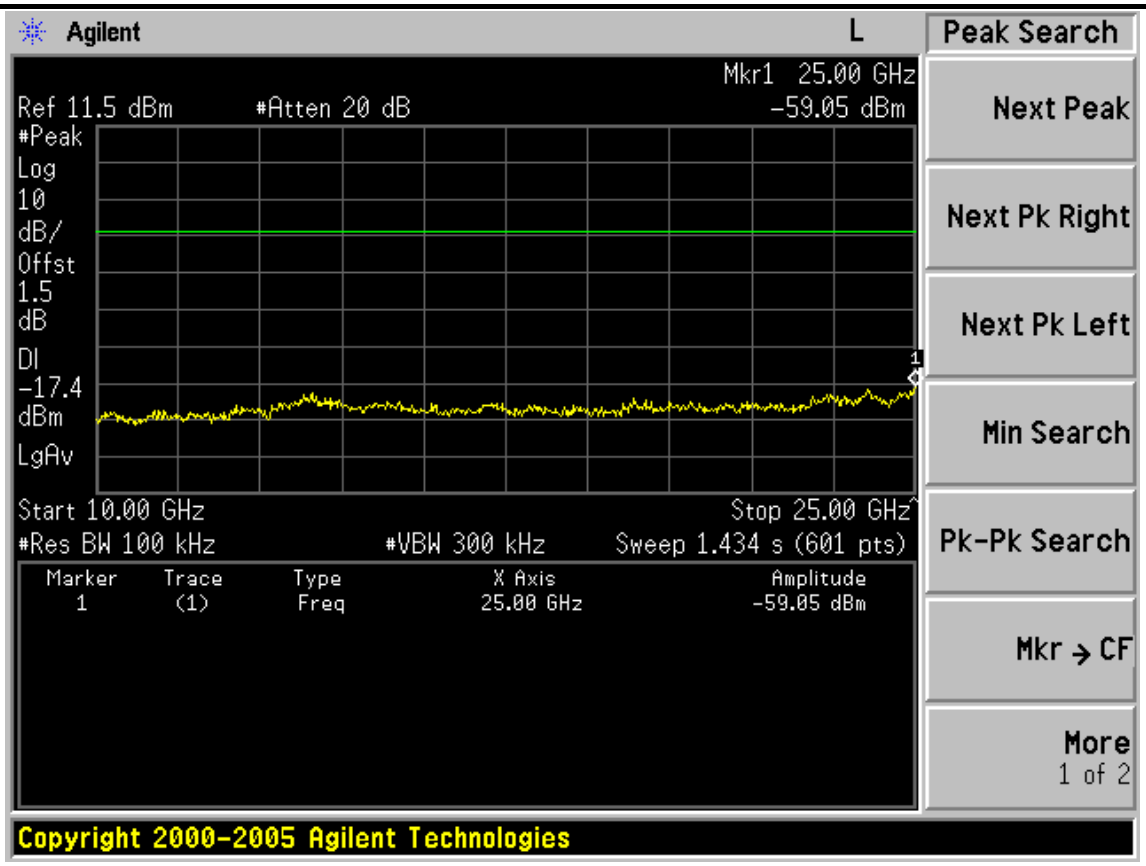

Agilent
L
Peak Search
Mkr1 2.440 GHz
Ref 11.5 dBm
#Atten 20 dB
1.59 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-18.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.440 GHz 1.59 dBm
Copyright 2000-2005 Agilent Technologies

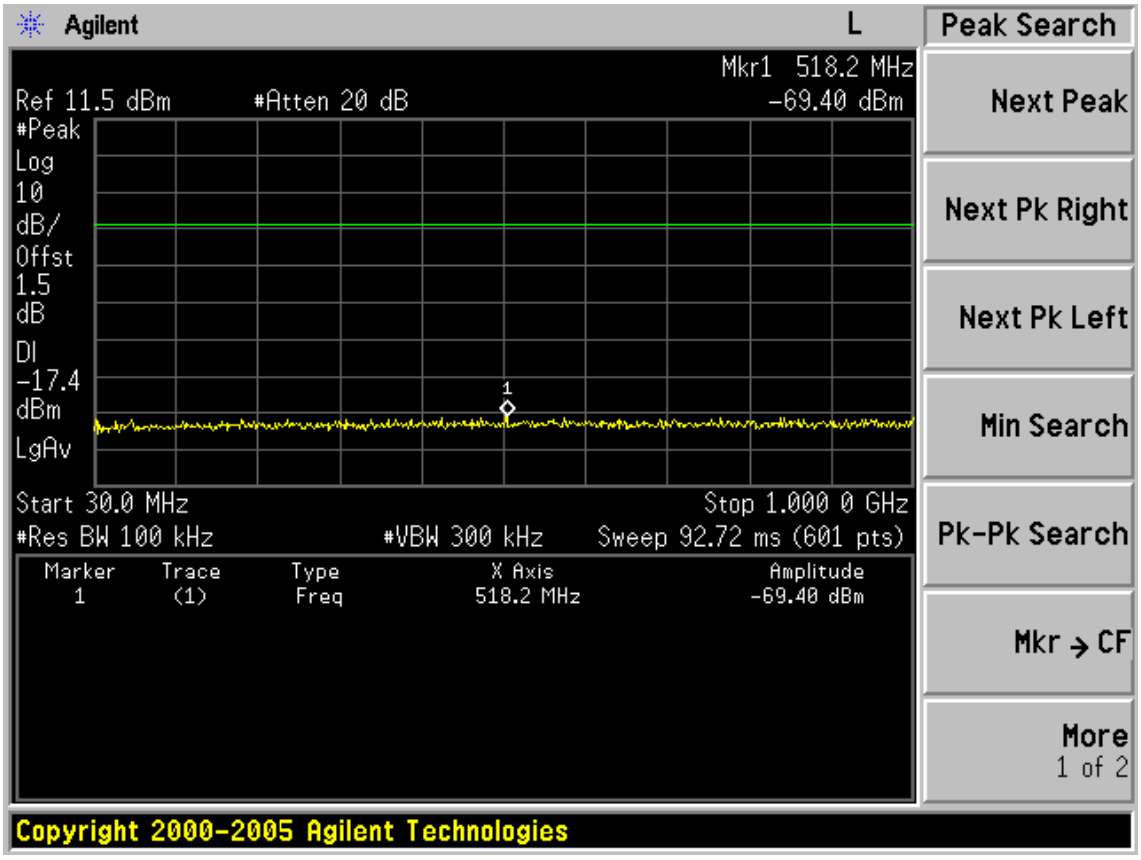

Agilent
L
Peak Search
Mkr1 570.0 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.31 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-18.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 570.0 MHz -69.31 dBm
Copyright 2000-2005 Agilent Technologies

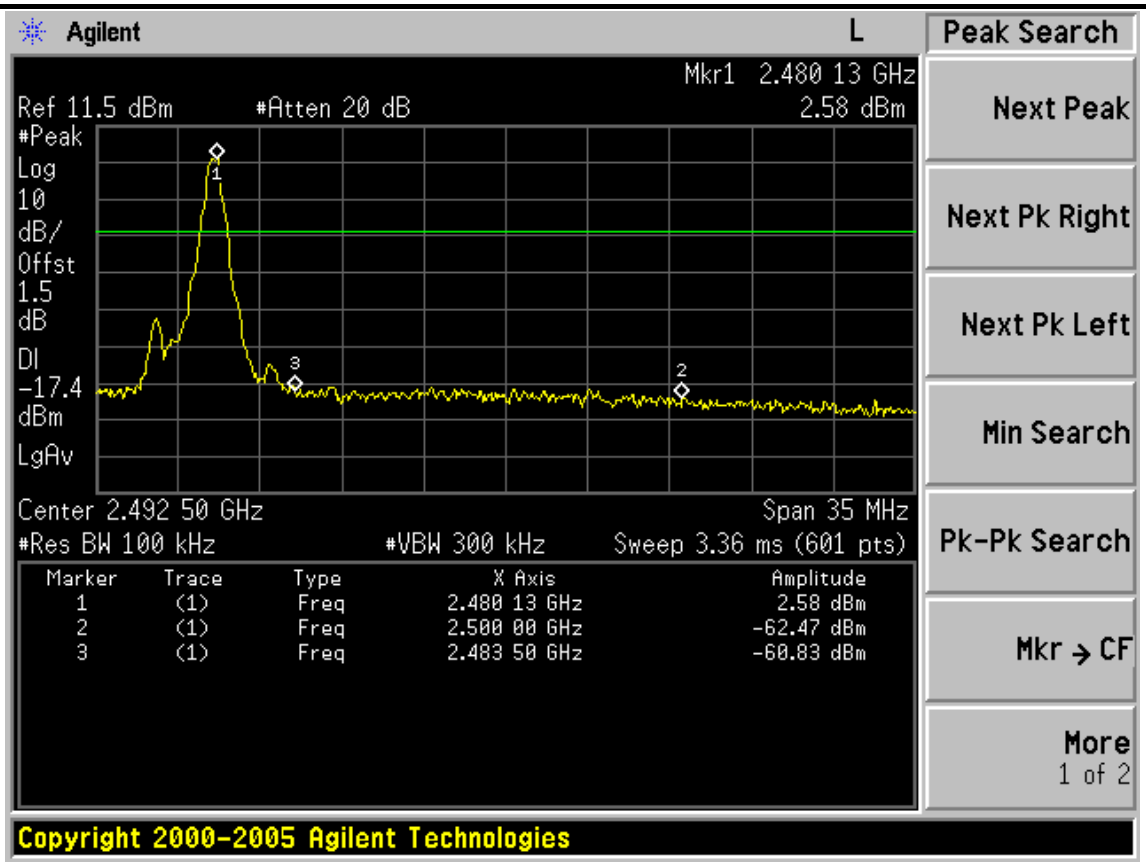

Agilent
L
Peak Search
Mkr1 24.72 GHz
Ref 11.5 dBm
#Atten 20 dB
-60.01 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-18.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.72 GHz -60.01 dBm
Copyright 2000-2005 Agilent Technologies

2480


Agilent
L
Peak Search
Mkr1 2.485 GHz
Ref 11.5 dBm
#Atten 20 dB
2.58 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-17.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.485 GHz 2.58 dBm
Copyright 2000-2005 Agilent Technologies

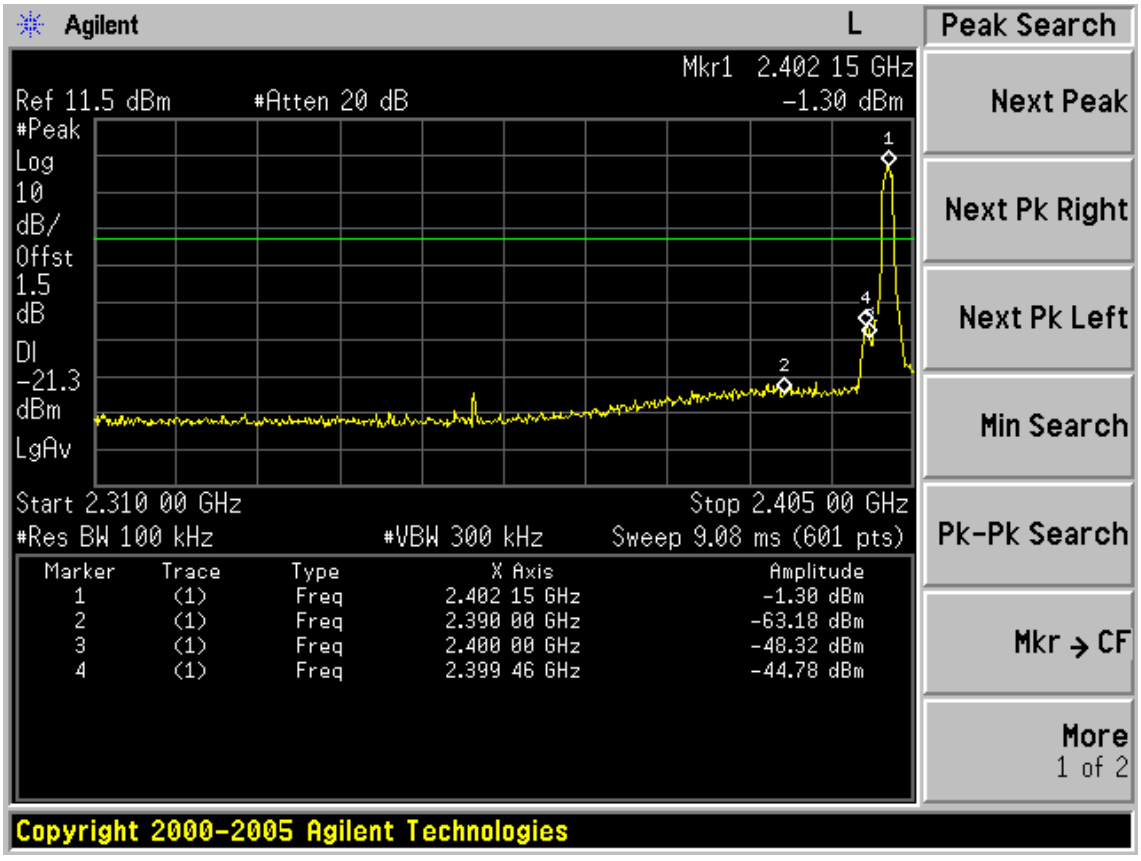

Agilent
L
Peak Search
Mkr1 25.00 GHz
Ref 11.5 dBm
#Atten 20 dB
-59.05 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-17.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -59.05 dBm
Copyright 2000-2005 Agilent Technologies

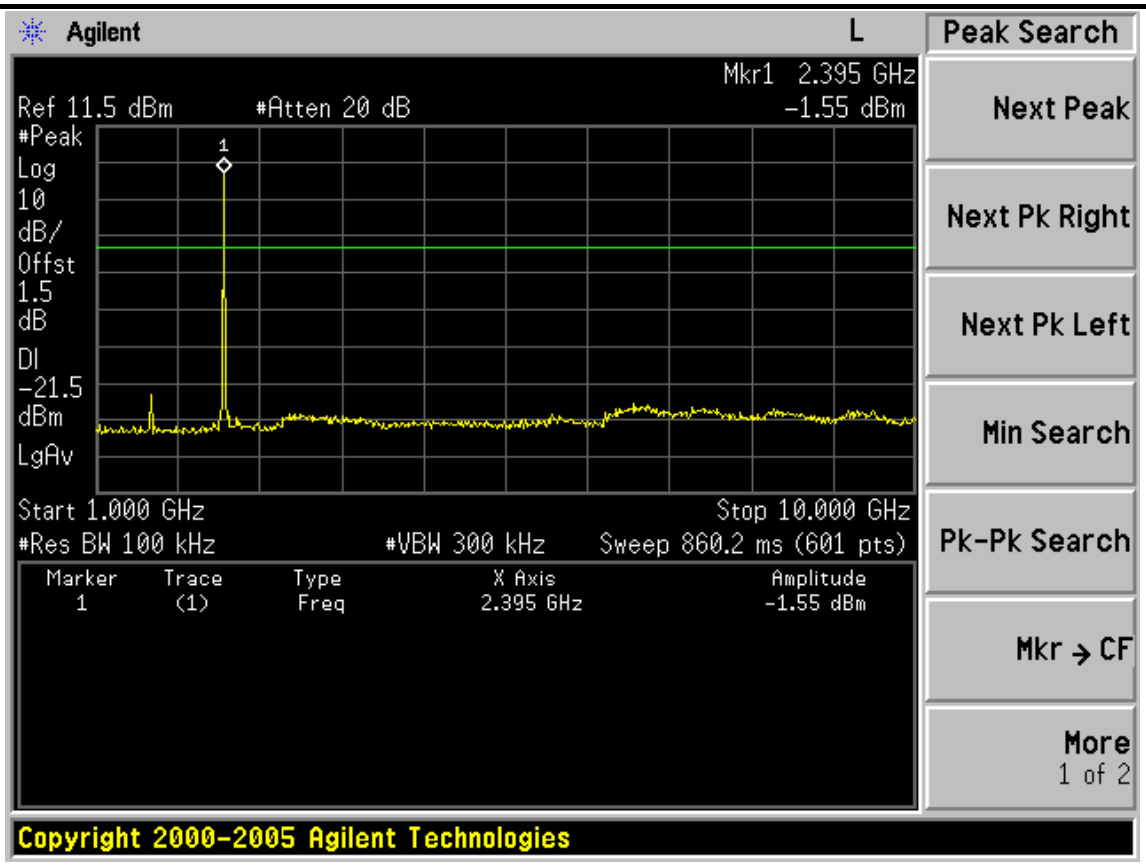

Agilent
L
Peak Search
Mkr1 518.2 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.40 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-17.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 518.2 MHz -69.40 dBm
Copyright 2000-2005 Agilent Technologies

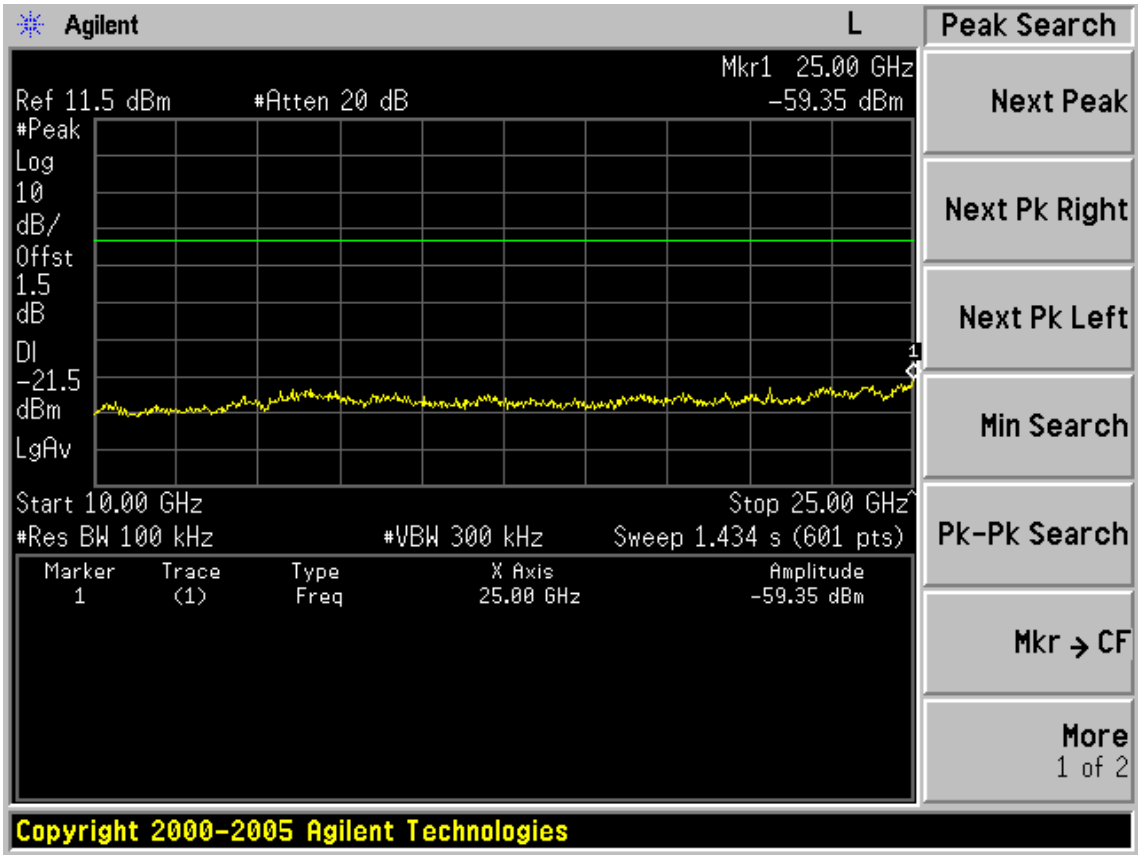

Agilent
L
Peak Search
Mkr1 2.480 13 GHz
Ref 11.5 dBm
#Atten 20 dB
2.58 dBm
Next Peak
#Peak
Log
10
dB/
Offst
1.5
dB
Next Pk Right
Next Pk Left
Dl
-17.4
dBm
LgAv
Min Search
Center 2.492 50 GHz
Span 35 MHz
Pk-Pk Search
#Res BW 100 kHz
#VBW 300 kHz
Sweep 3.36 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.480 13 GHz 2.58 dBm
2 (1) Freq 2.500 00 GHz -62.47 dBm
3 (1) Freq 2.483 50 GHz -60.83 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

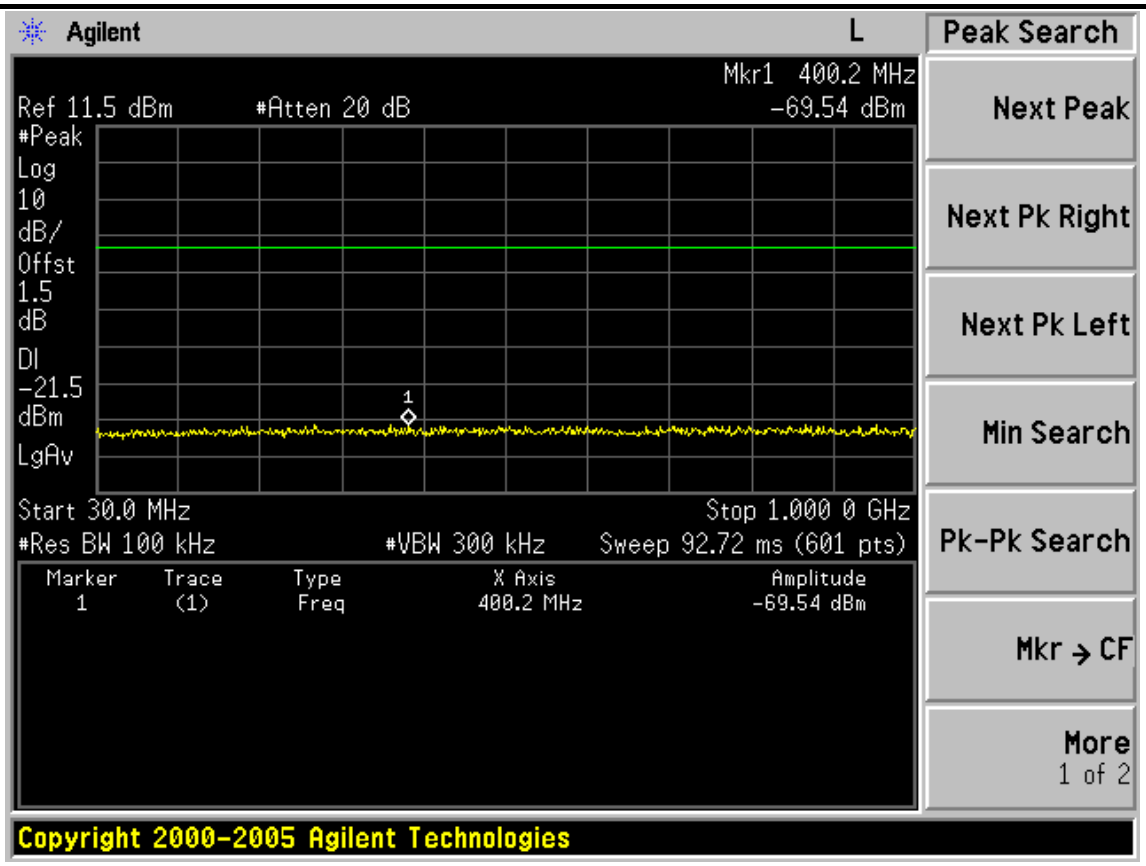
8DPSK

2402


Agilent
L
Peak Search
Mkr1 2.402 15 GHz
Ref 11.5 dBm
#Atten 20 dB
-1.30 dBm
Next Peak
#Peak
Log
10
dB/
Offst
1.5
dB
Next Pk Right
Next Pk Left
Dl
-21.3
dBm
LgAv
Min Search
Start 2.310 00 GHz
Stop 2.405 00 GHz
Pk-Pk Search
#Res BW 100 kHz
#VBW 300 kHz
Sweep 9.08 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.402 15 GHz -1.30 dBm
2 (1) Freq 2.390 00 GHz -63.18 dBm
3 (1) Freq 2.400 00 GHz -48.32 dBm
4 (1) Freq 2.399 46 GHz -44.78 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.395 GHz
Ref 11.5 dBm
#Atten 20 dB
-1.55 dBm
Next Peak
#Peak
Log
10
dB/
Offst
1.5
dB
Next Pk Right
Dl
-21.5
dBm
Next Pk Left
LgAv
Min Search
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.395 GHz -1.55 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 25.00 GHz
Ref 11.5 dBm
#Atten 20 dB
-59.35 dBm
Next Peak
#Peak
Log
10
dB/
Offst
1.5
dB
Next Pk Right
Dl
-21.5
dBm
Next Pk Left
LgAv
Min Search
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -59.35 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 400.2 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.54 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-21.5
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 400.2 MHz -69.54 dBm
Copyright 2000-2005 Agilent Technologies

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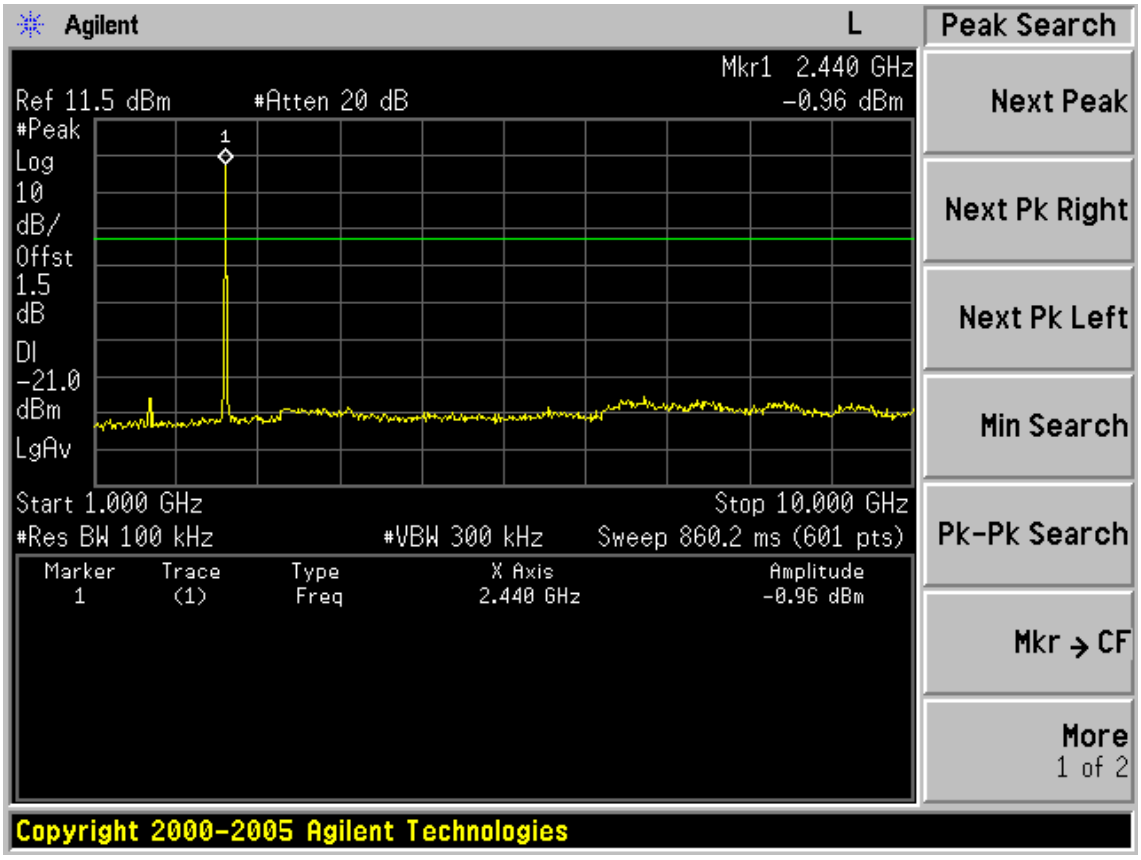
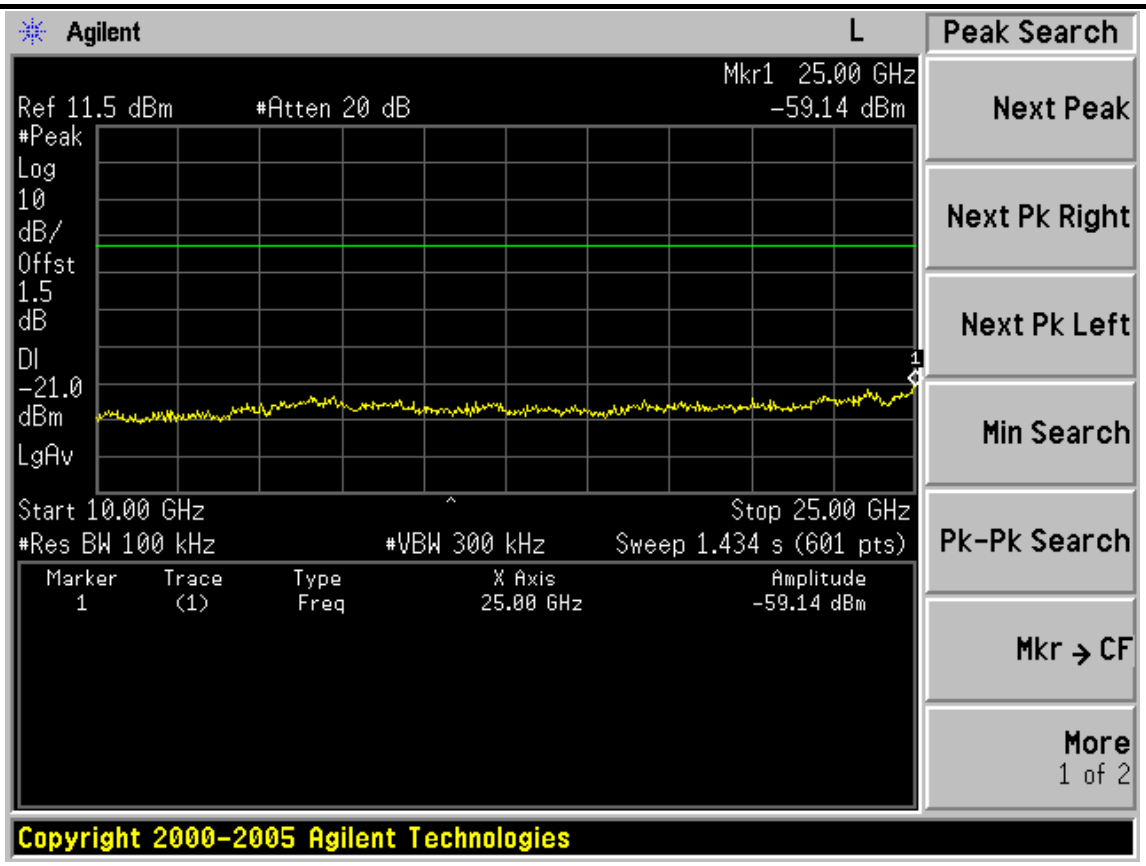
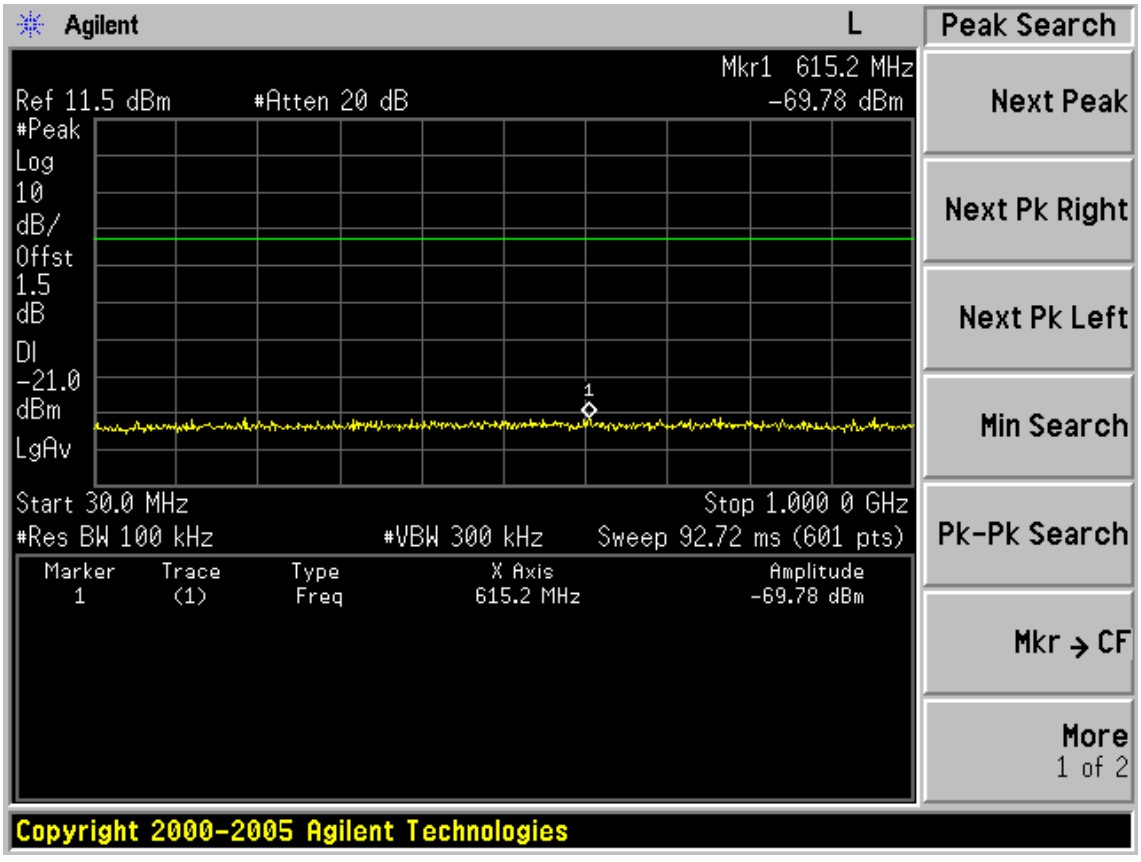

Agilent
L
Peak Search
Mkr1 2.440 GHz
Ref 11.5 dBm
#Atten 20 dB
-0.96 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-21.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.440 GHz -0.96 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 25.00 GHz
Ref 11.5 dBm
#Atten 20 dB
-59.14 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-21.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -59.14 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 615.2 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.78 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-21.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 615.2 MHz -69.78 dBm
Copyright 2000-2005 Agilent Technologies

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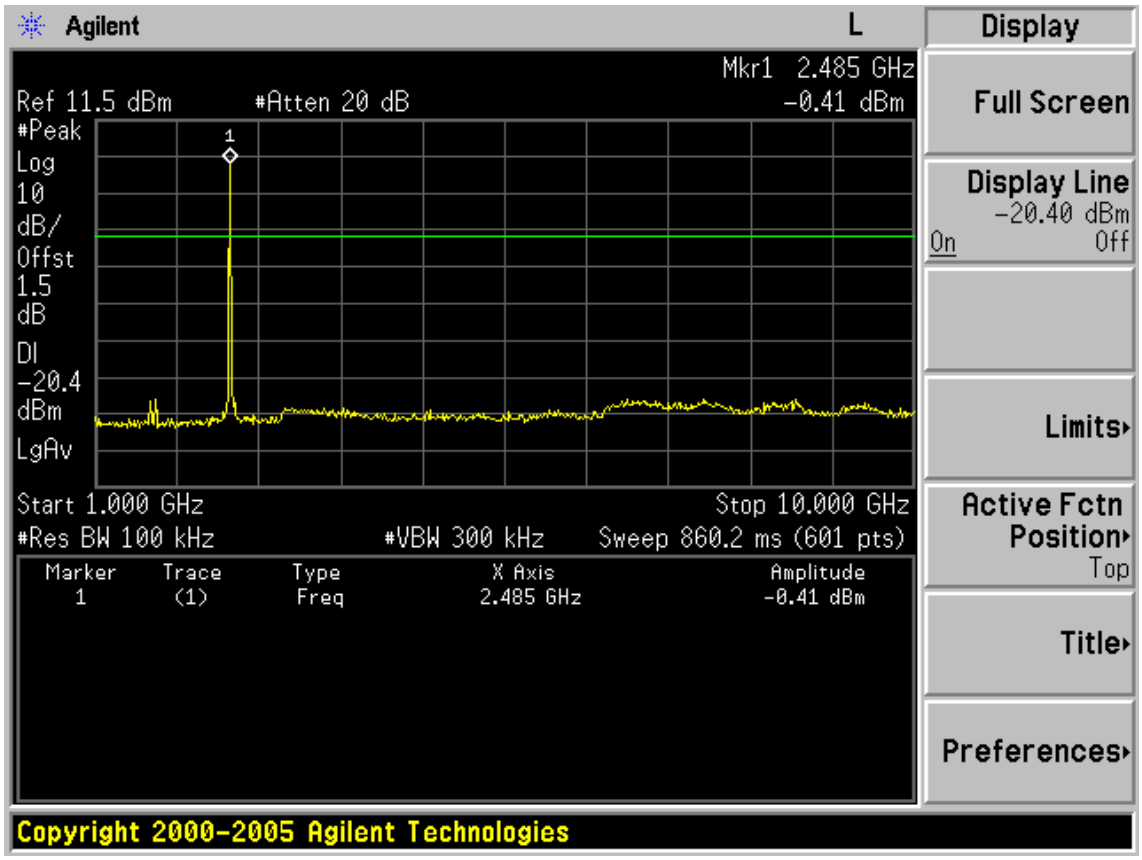
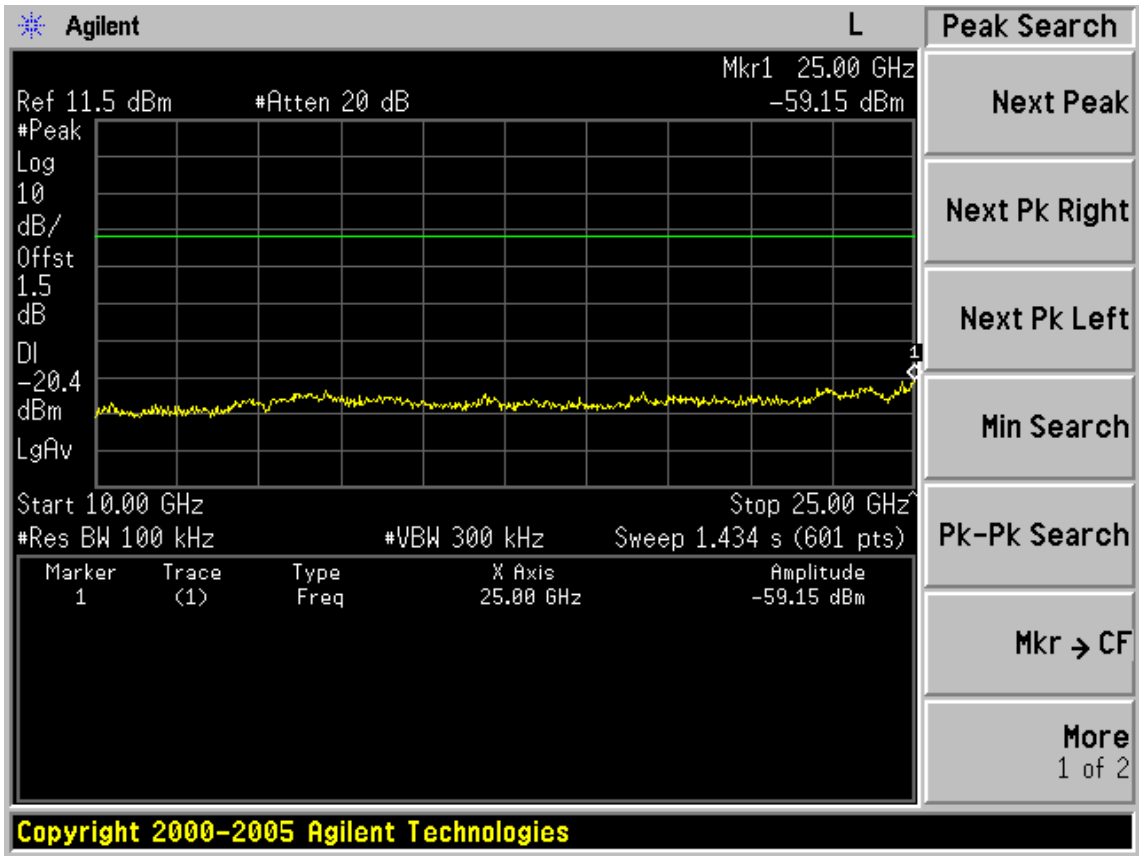
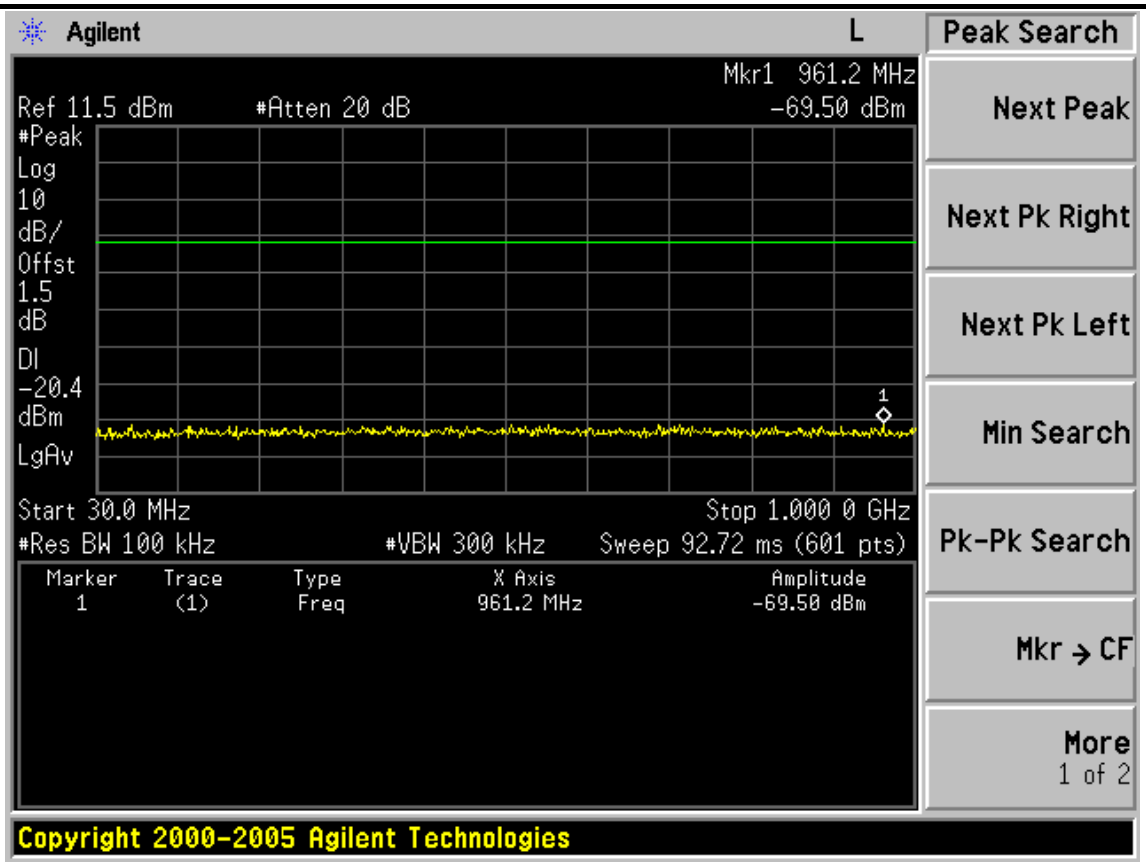
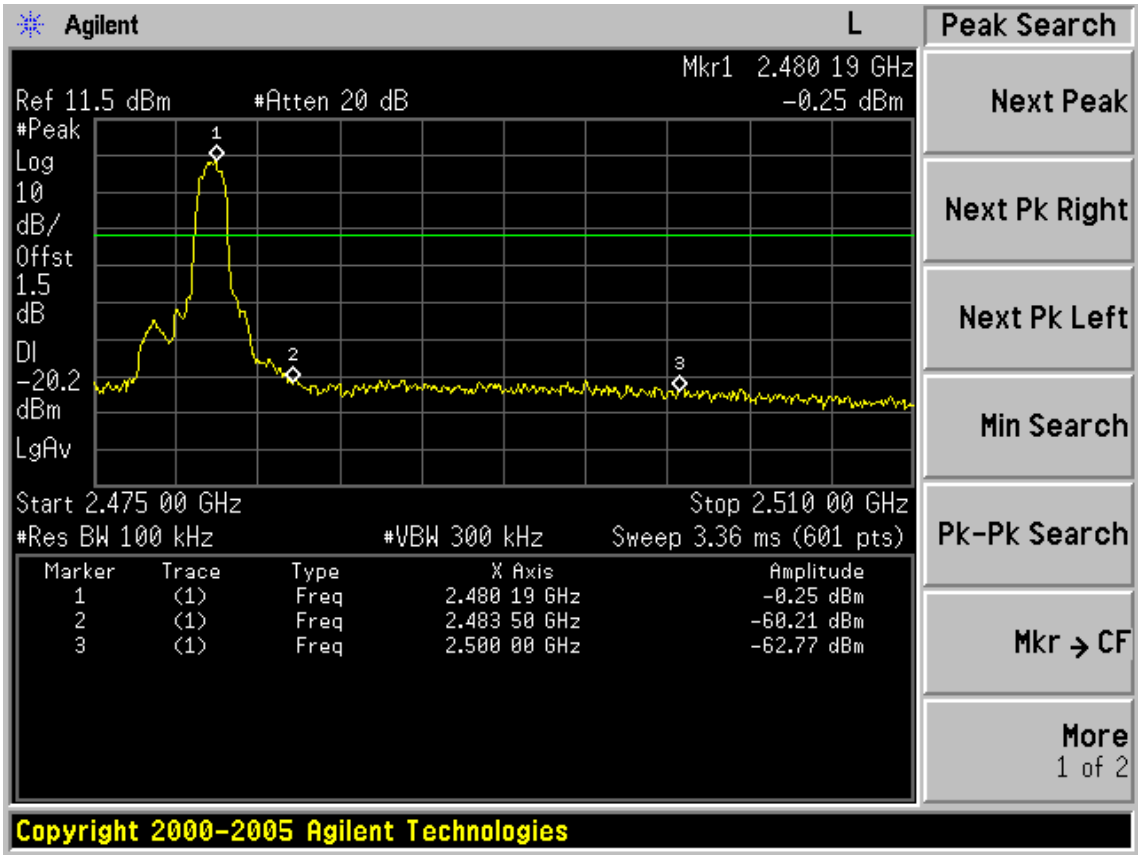

Agilent
L
Display
Mkr1 2.485 GHz
Ref 11.5 dBm
#Atten 20 dB
-0.41 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-20.4
dBm
LgAv
1
Start 1.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 860.2 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.485 GHz -0.41 dBm
Full Screen
Display Line
-20.40 dBm
On Off
Limits
Active Fctn
Position
Top
Title
Preferences
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 25.00 GHz
Ref 11.5 dBm
#Atten 20 dB
-59.15 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-20.4
dBm
LgAv
1
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -59.15 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 961.2 MHz
Ref 11.5 dBm
#Atten 20 dB
-69.50 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-20.4
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 30.0 MHz
Stop 1.000 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 92.72 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 961.2 MHz -69.50 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.480 19 GHz
Ref 11.5 dBm
#Atten 20 dB
-0.25 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
Dl
-20.2
dBm
LgAv
1
2
3
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.475 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 3.36 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.480 19 GHz -0.25 dBm
2 (1) Freq 2.483 50 GHz -60.21 dBm
3 (1) Freq 2.500 00 GHz -62.77 dBm
Copyright 2000-2005 Agilent Technologies

5. CARRIER FREQUENCY SEPARATION TEST

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year

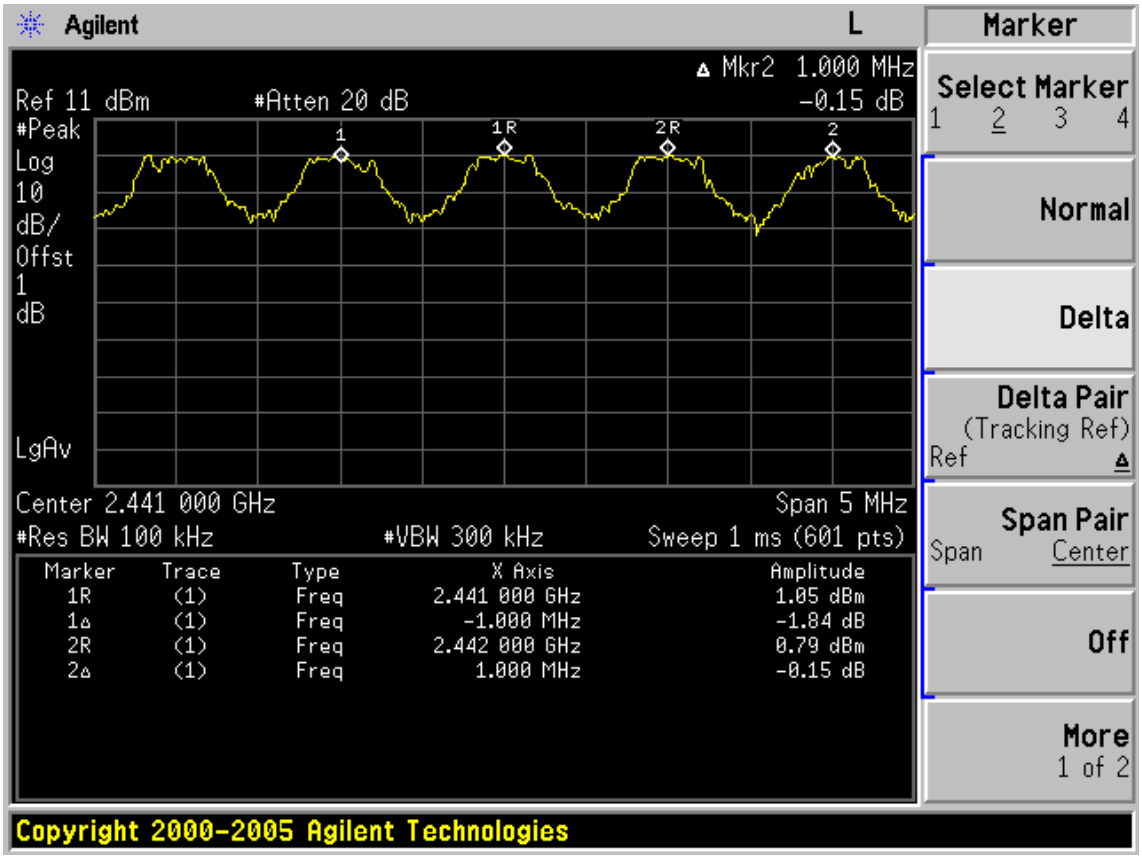
5.2.Limit

Frequency hopping systems shall have hopping channel carrier frequency separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, 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, provided the systems operate with an output power no greater than 125 mW.

5.3.Test Results.

EUT: Bluetooth Headset		
M/N: 88606		
Test date:2011-07-05	Pressure:100.6 kpa	Humidity:53%
Tested by: Leo-Li	Test site: RF site	Temperature:25 ℃

Channel separation	Conclusion
1.00MHz	PASS


Agilent
L
Marker
Mkr2 1.000 MHz
-0.15 dB
Ref 11 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1
dB
LgAv
1
1R
2R
2
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1 ms (601 pts)
Marker Trace Type X Axis Amplitude
1R (1) Freq 2.441 000 GHz 1.05 dBm
1Δ (1) Freq -1.000 MHz -1.84 dB
2R (1) Freq 2.442 000 GHz 0.79 dBm
2Δ (1) Freq 1.000 MHz -0.15 dB
Copyright 2000-2005 Agilent Technologies

6. 20 DB BANDWIDTH TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year

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.

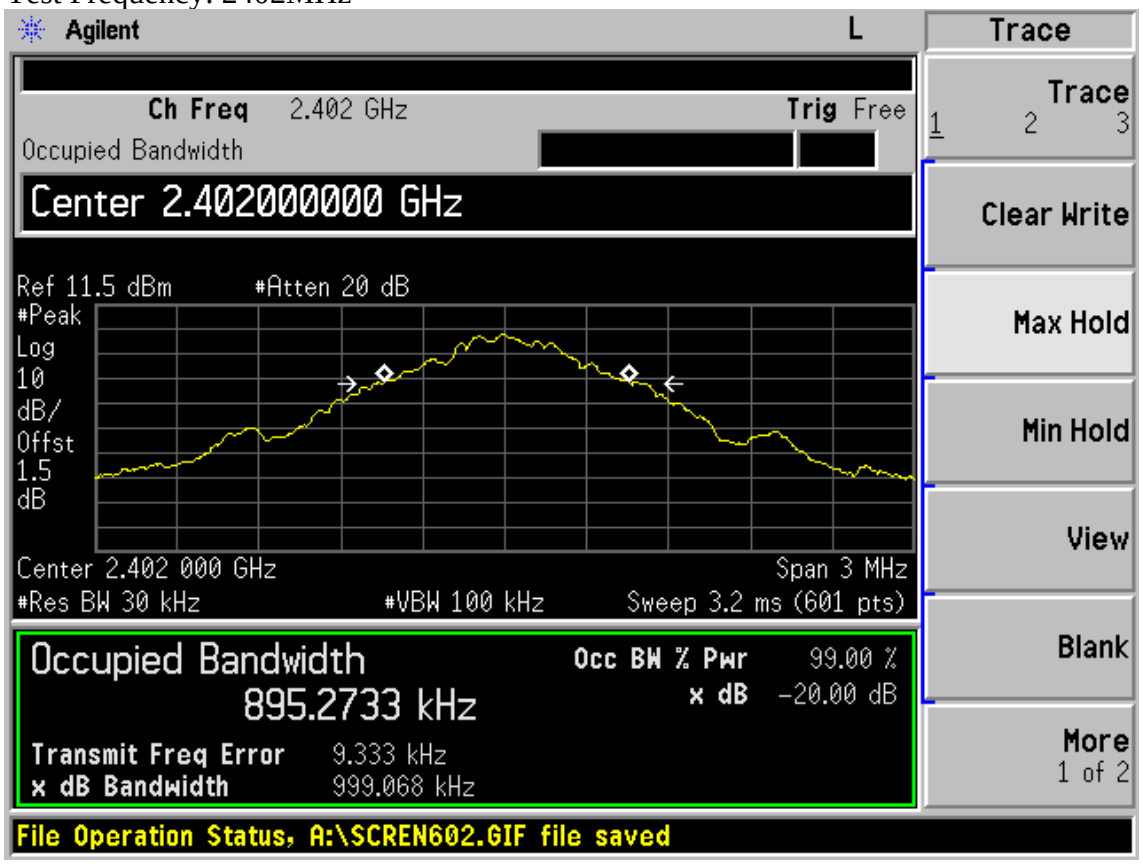
6.3. Test Results

EUT: Bluetooth Headset		
M/N: 88606		
Test date: 2011-07-20	Pressure: 100.7 kpa	Humidity: 55%
Tested by: Leo-Li	Test site: RF Site	Temperature：25 ℃

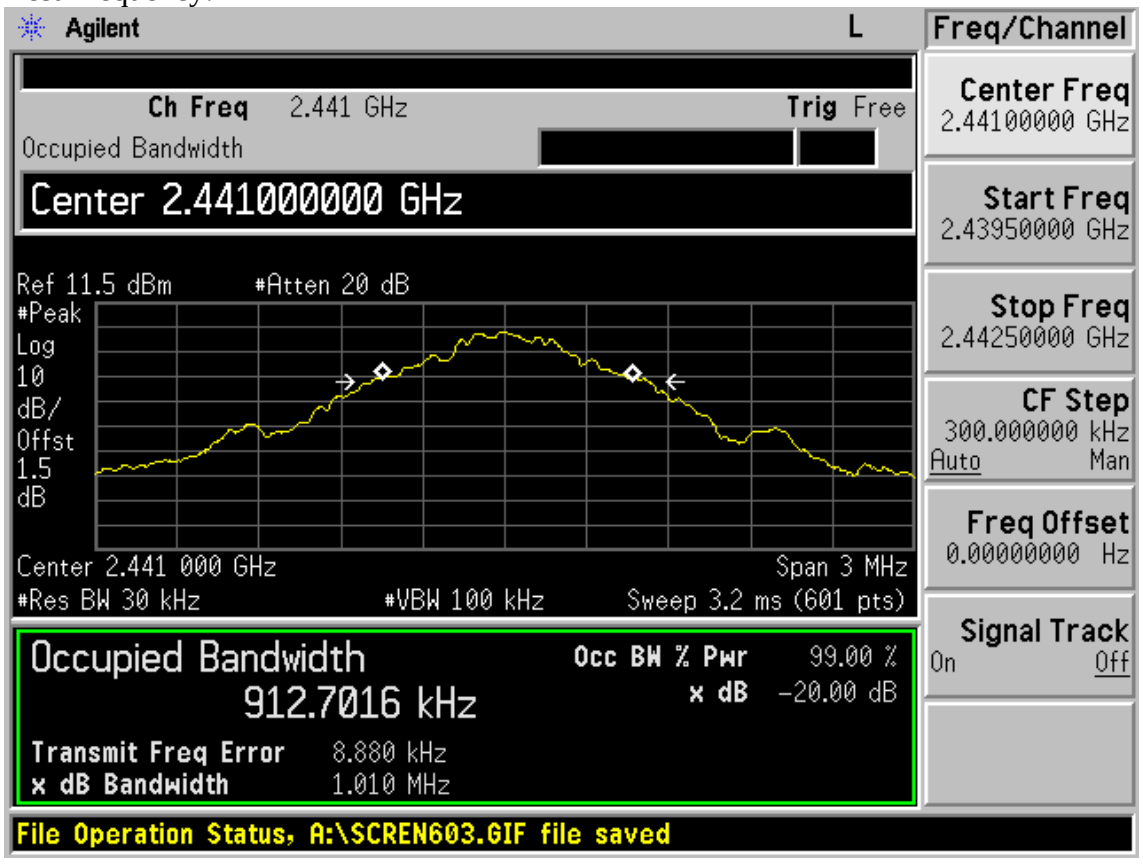
Cable loss: 1.50 dB		Attenuator loss: 20 dB	Antenna Gain: 2.0 dBi
Test Mode	CH （MHz）	20dB bandwidth （MHz）	Limit (KHz)
GFSK	2402	0.999068	N/A
	2441	1.010	N/A
	2480	1.023	N/A
8DPSK	2402	1.268	N/A
	2441	1.269	N/A
	2480	1.269	N/A
Conclusion：PASS			

GFSK

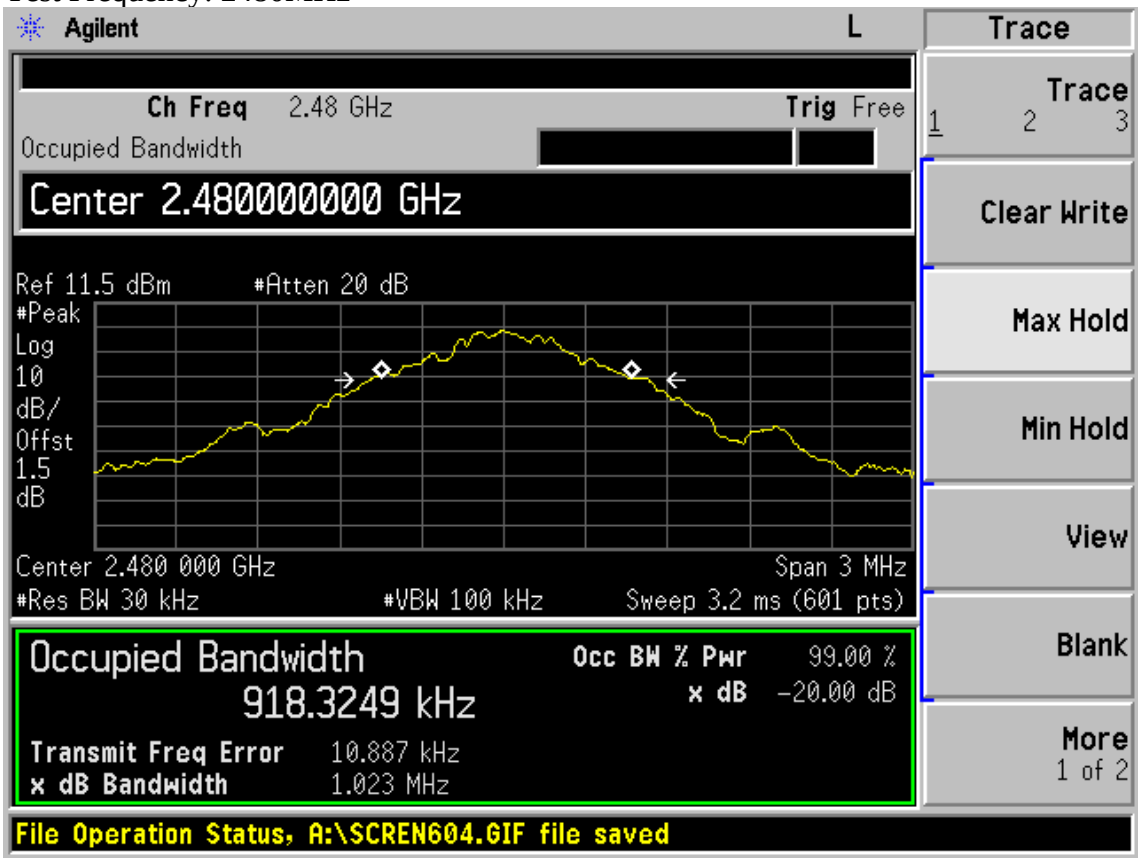
Test Frequency: 2402MHz



Test Frequency: 2441MHz

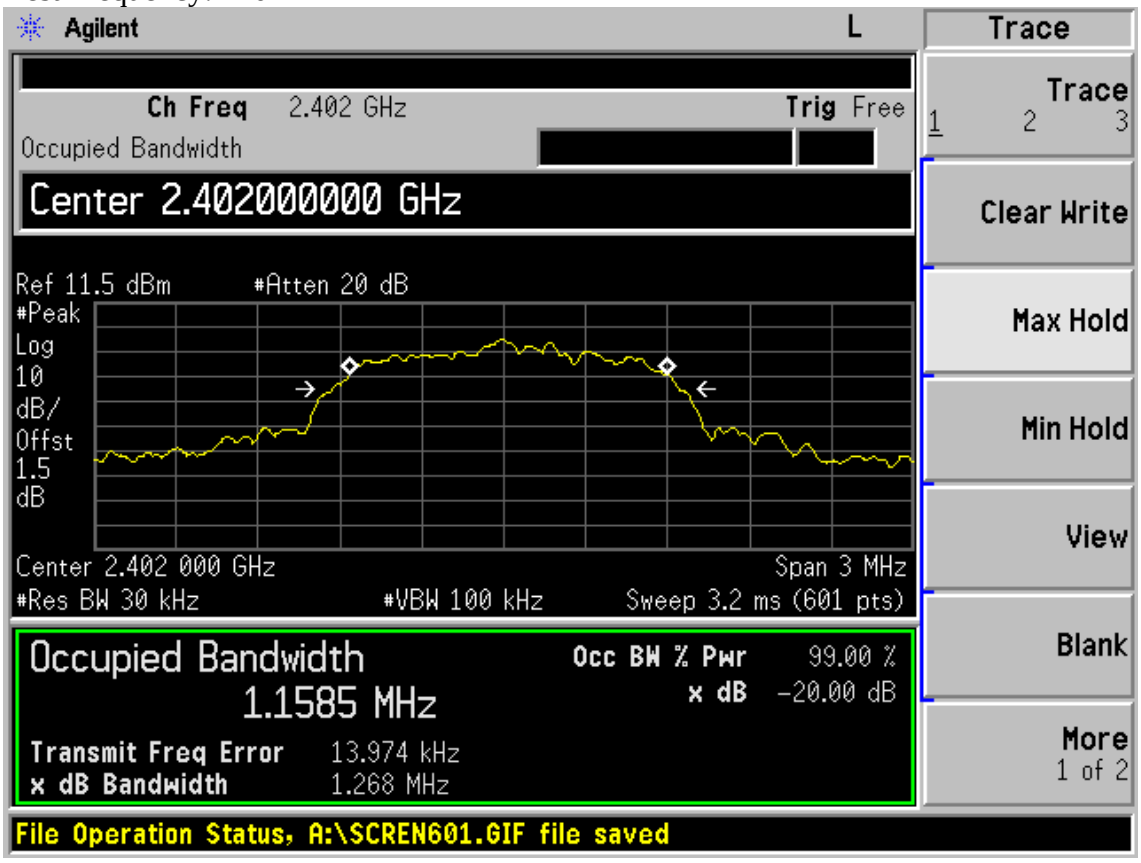


Test Frequency: 2480MHz

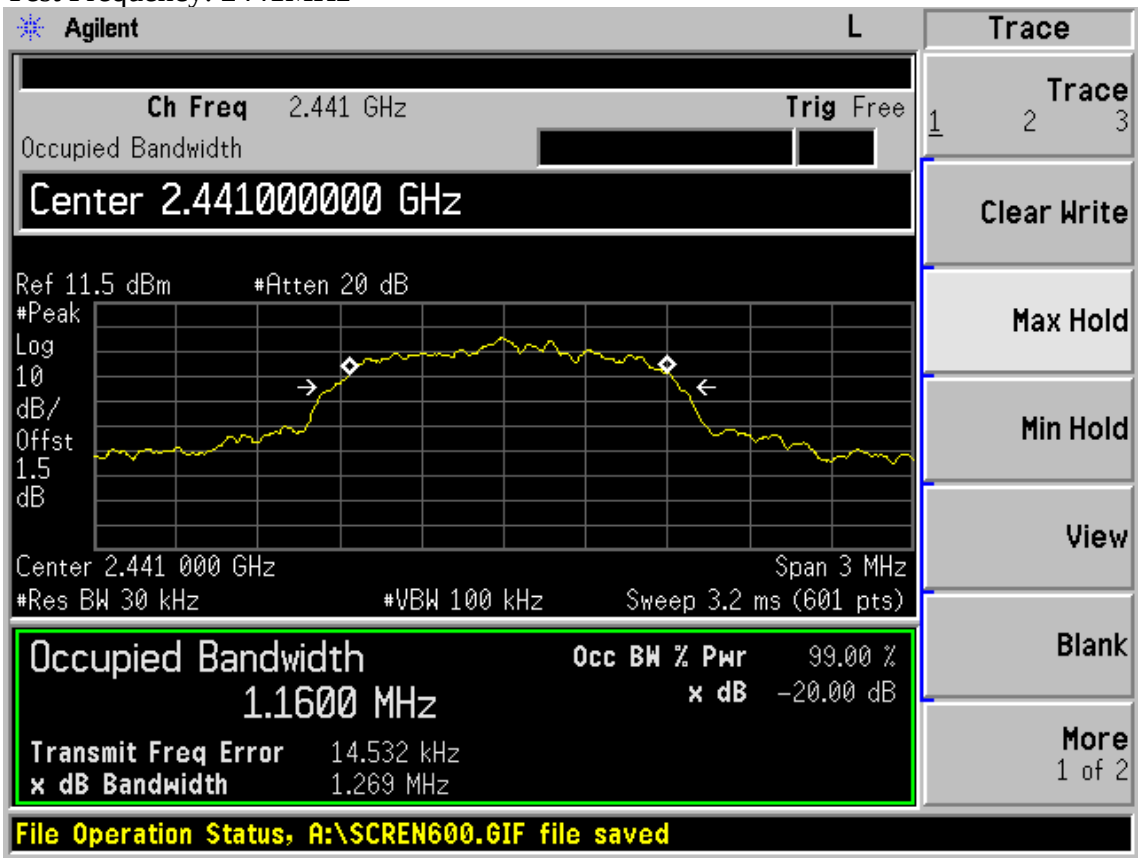


8DPSK

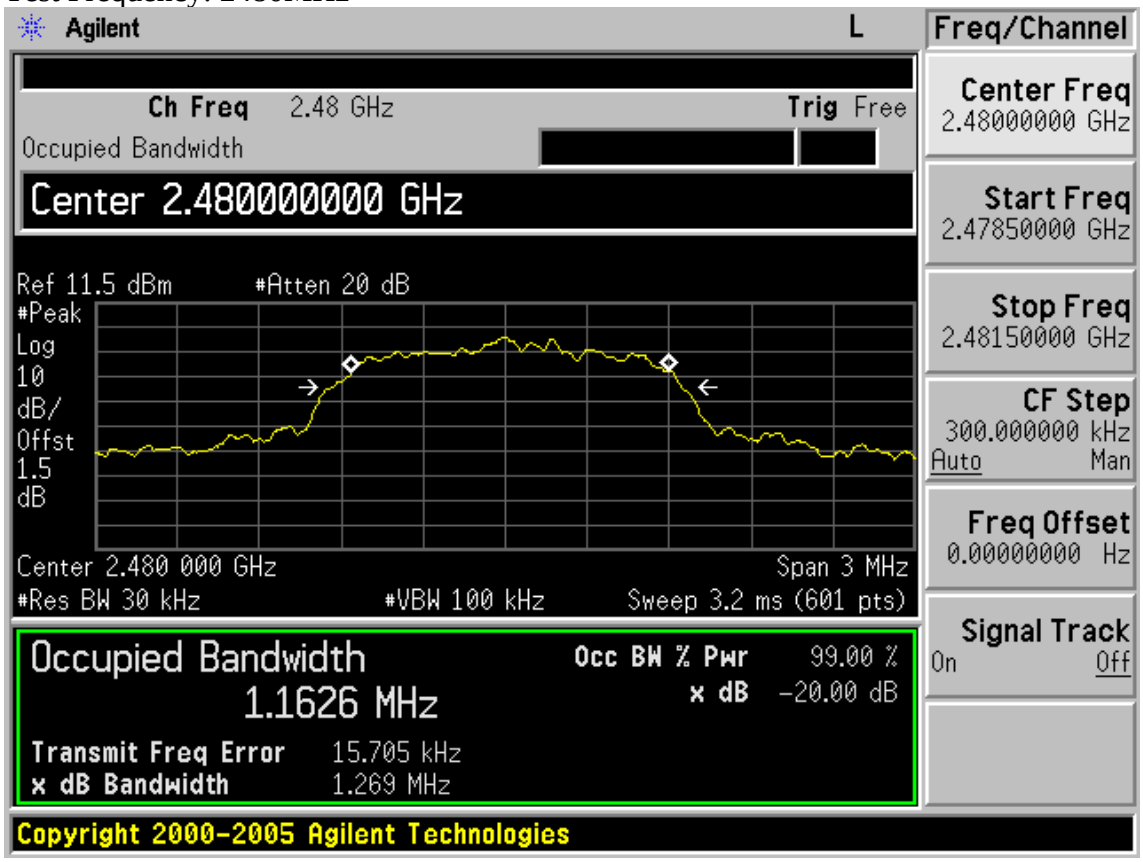
Test Frequency: 2402MHz



Test Frequency: 2441MHz



Test Frequency: 2480MHz



7. NUMBER OF HOPPING FREQUENCY TEST

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year

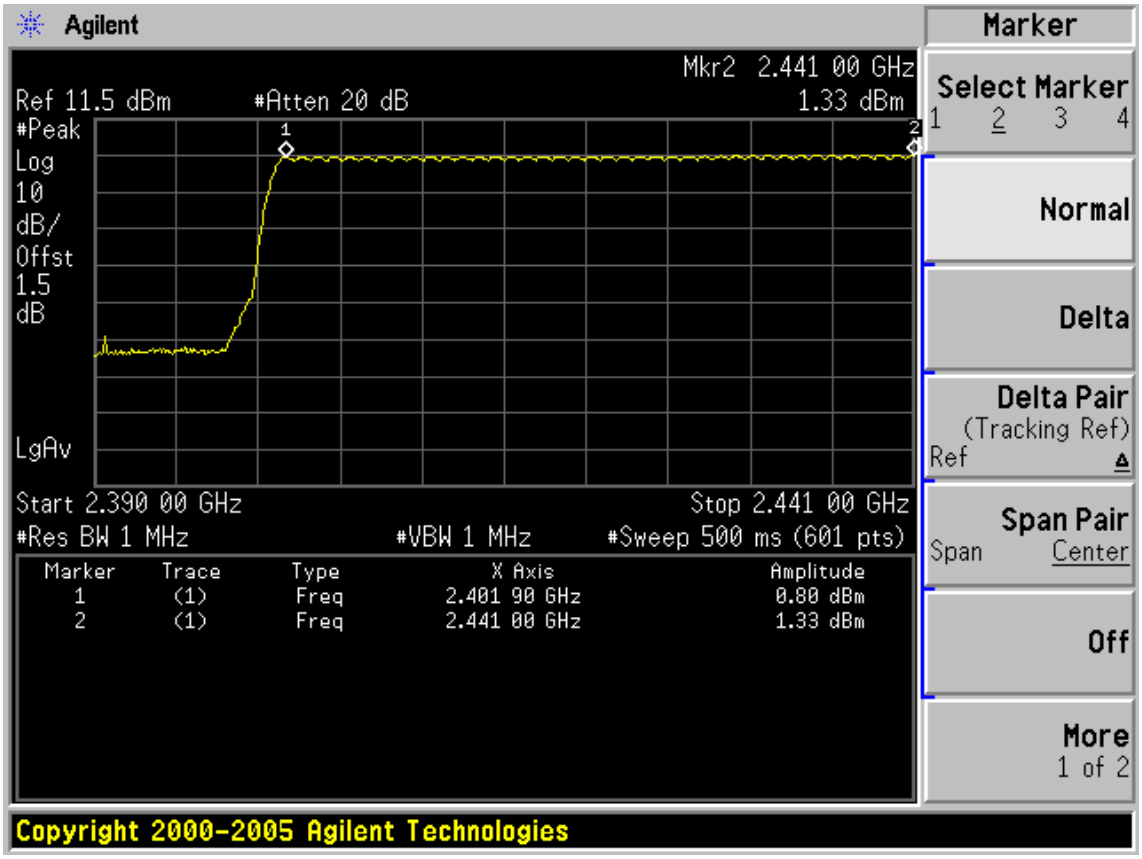
7.2.Limit

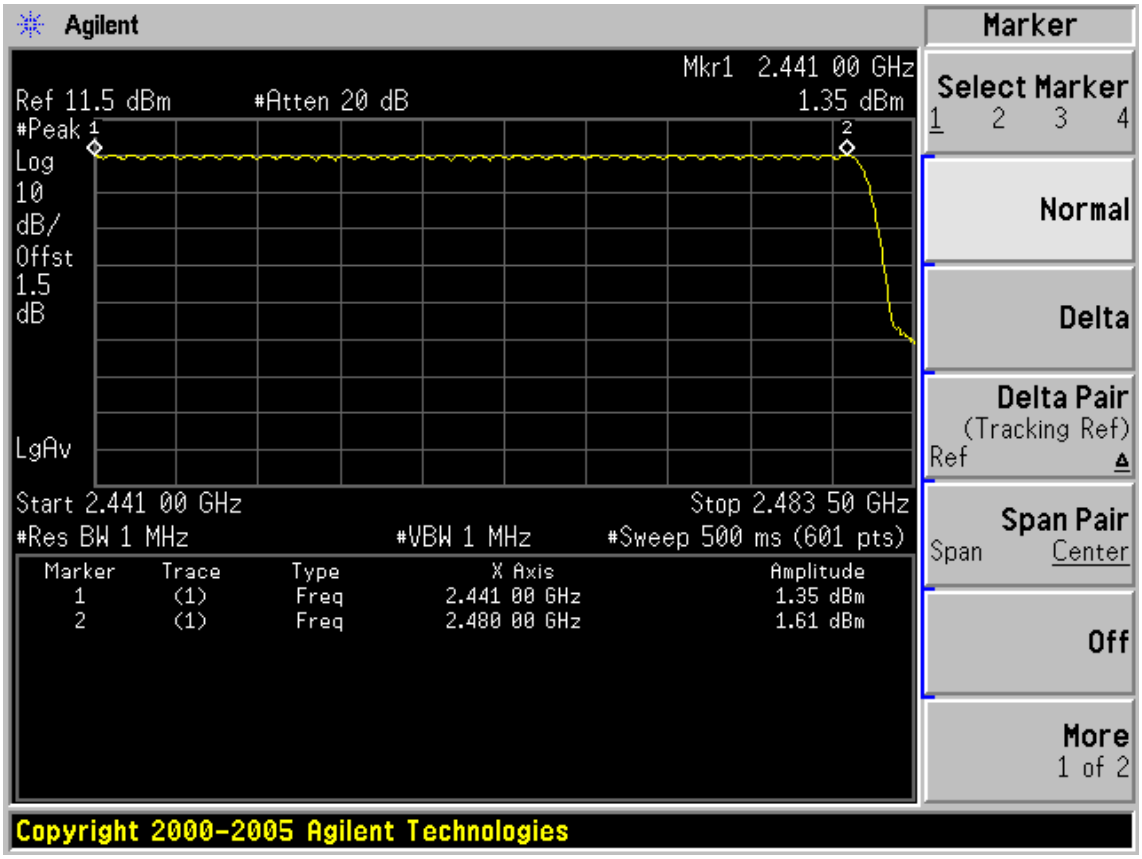
Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

7.3.Test Results

EUT: Bluetooth Headset		
M/N: 88606		
Test date:2011-07-20	Pressure:100.6 kpa	Humidity:53%
Tested by:Leo-Li	Test site: RF site	Temperature:25 ℃

Number of channel	Limit	Conclusion
79	>=15	PASS


Agilent
Marker
Mkr2 2.441 00 GHz
Ref 11.5 dBm
#Atten 20 dB
1.33 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
Start 2.390 00 GHz
Stop 2.441 00 GHz
#Res BW 1 MHz
#VBW 1 MHz
#Sweep 500 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.401 90 GHz 0.80 dBm
2 (1) Freq 2.441 00 GHz 1.33 dBm
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr1 2.441 00 GHz
Ref 11.5 dBm
#Atten 20 dB
1.35 dBm
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
Start 2.441 00 GHz
Stop 2.483 50 GHz
#Res BW 1 MHz
#VBW 1 MHz
#Sweep 500 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.441 00 GHz 1.35 dBm
2 (1) Freq 2.480 00 GHz 1.61 dBm
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

8. DWELL TIME

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year

8.2.Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

8.3.Test Results

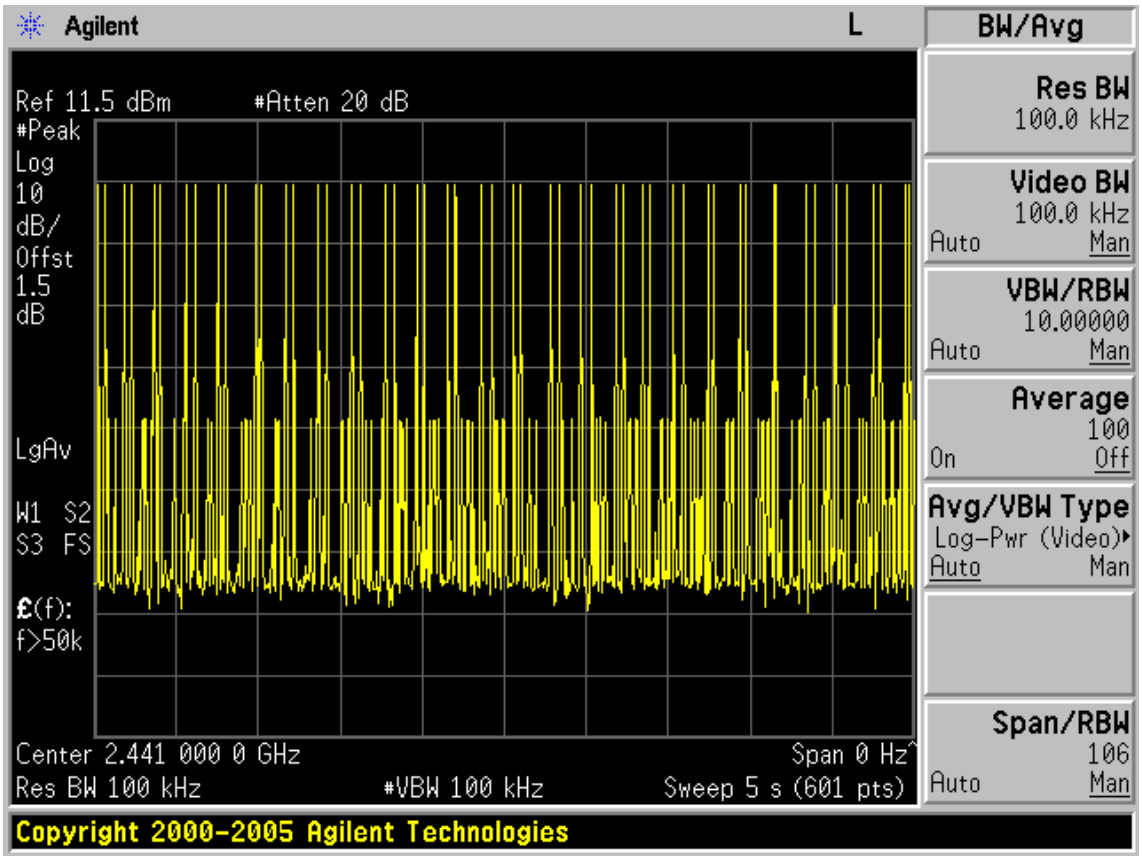
EUT: Bluetooth Headset		
M/N: 88606		
Test date:2011-07-05	Pressure:100.6 kpa	Humidity:53%
Tested by:Leo-Li	Test site: RF site	Temperature:25 ℃

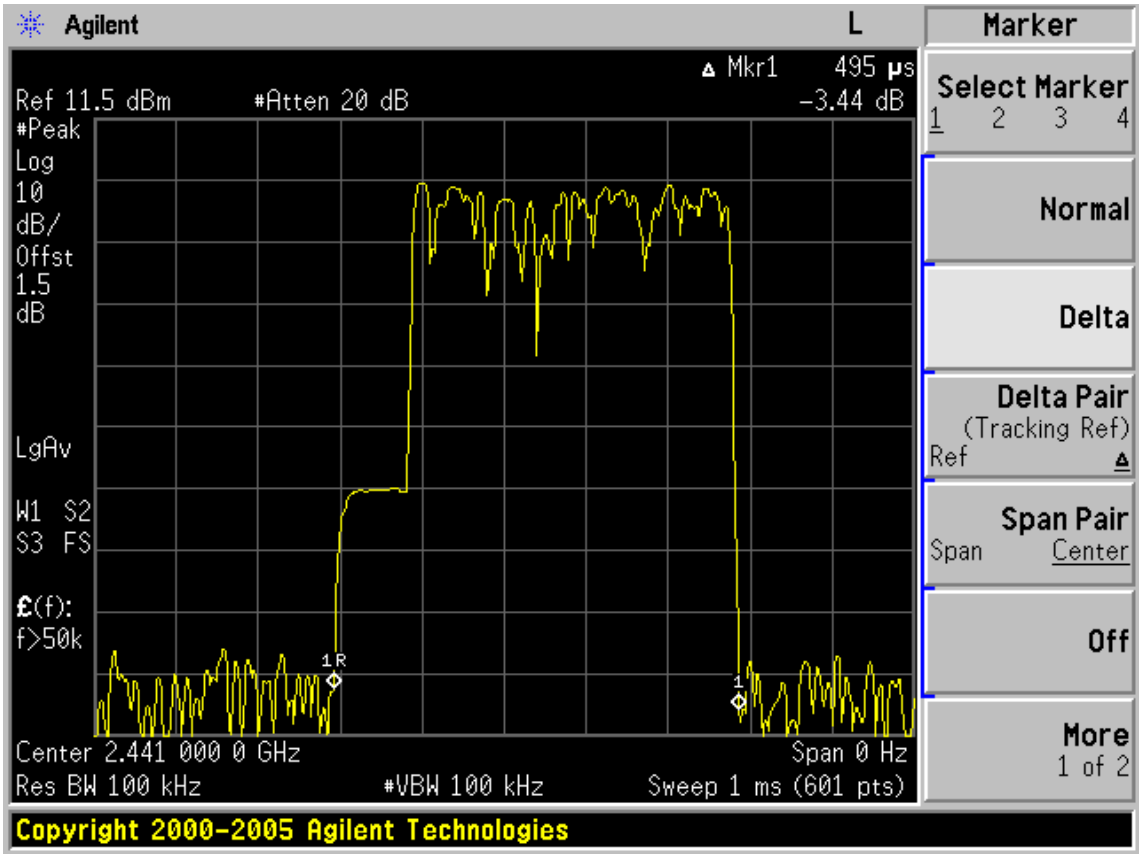
Mode		dwell time	Limit	Conclusion
GFSK	DH1	26hops/5s*0.4*79chanels*0.495ms =81.34ms	<400ms	PASS
	DH3	18hops/5s*0.4*79chanels*1.758ms =200ms	<400ms	PASS
	DH5	18hops/5s*0.4*79chanels*3.017ms=343.21ms	<400ms	PASS
8DPSK	DH1	26hops/5s*0.4*79chanels*0.508ms =83.47ms	<400ms	PASS
	DH3	18hops/5s*0.4*79chanels*0.495ms =199.08ms	<400ms	PASS
	DH5	14hops/5s*0.4*79chanels*3.027ms =267.83ms	<400ms	PASS

Note: All the lower levels were signal from receiver's, and should not considered in here.

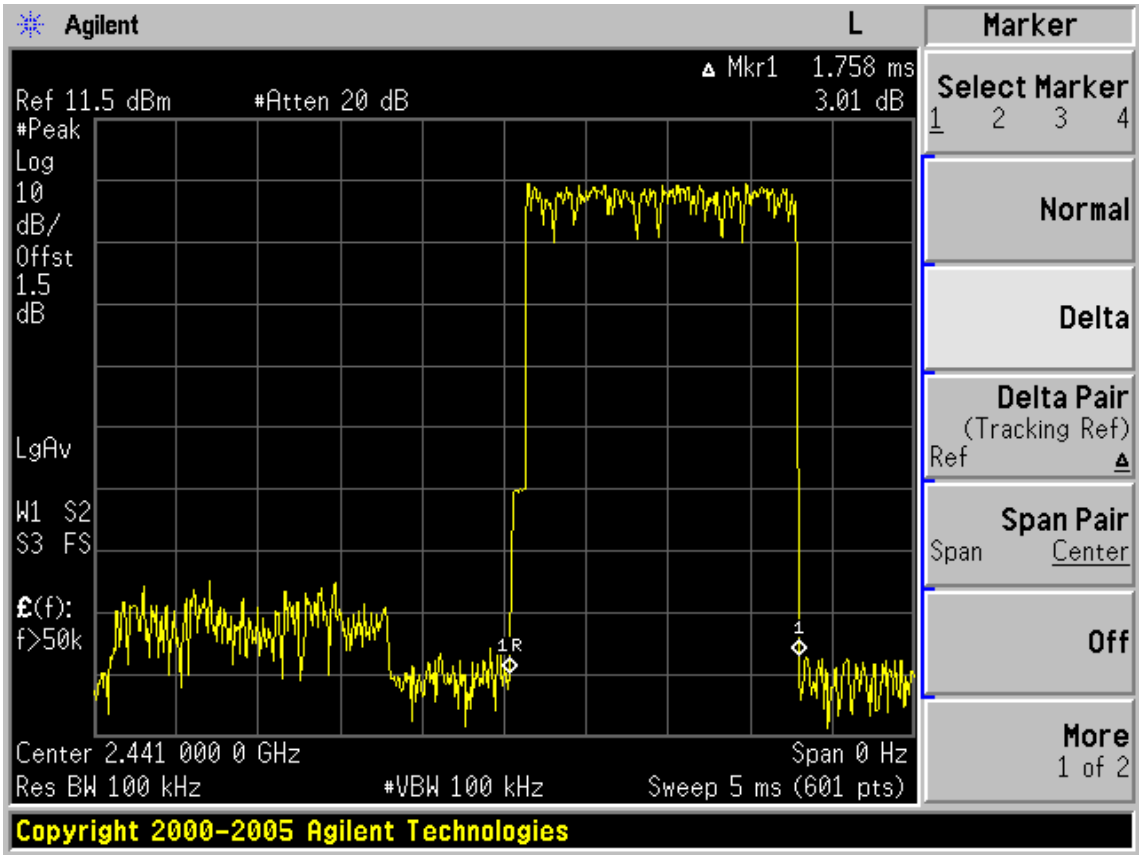
GFSK

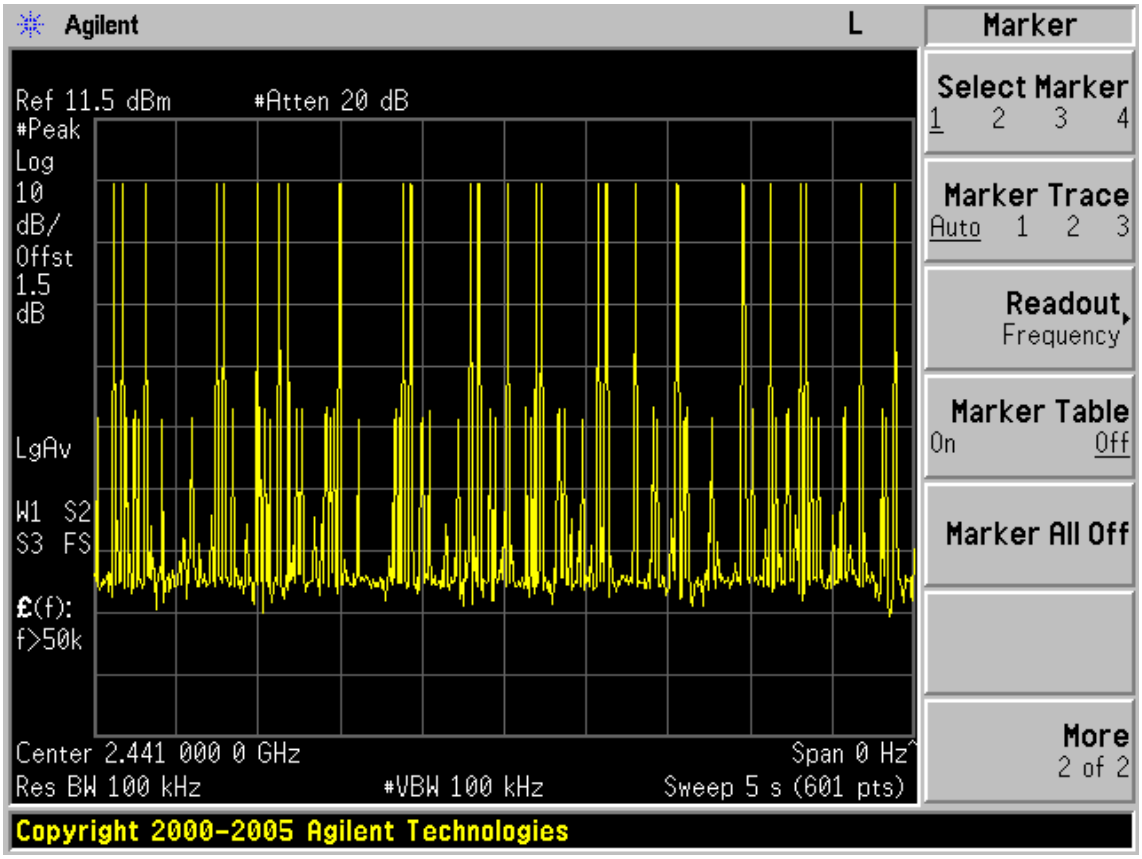
DH 1


Agilent
L
BW/Avg
Res BW
100.0 kHz
Video BW
100.0 kHz
Auto Man
VBW/RBW
10.00000
Auto Man
Average
100
On Off
Avg/VBW Type
Log-Pwr (Video)
Auto Man
Span/RBW
106
Auto Man
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
Copyright 2000-2005 Agilent Technologies

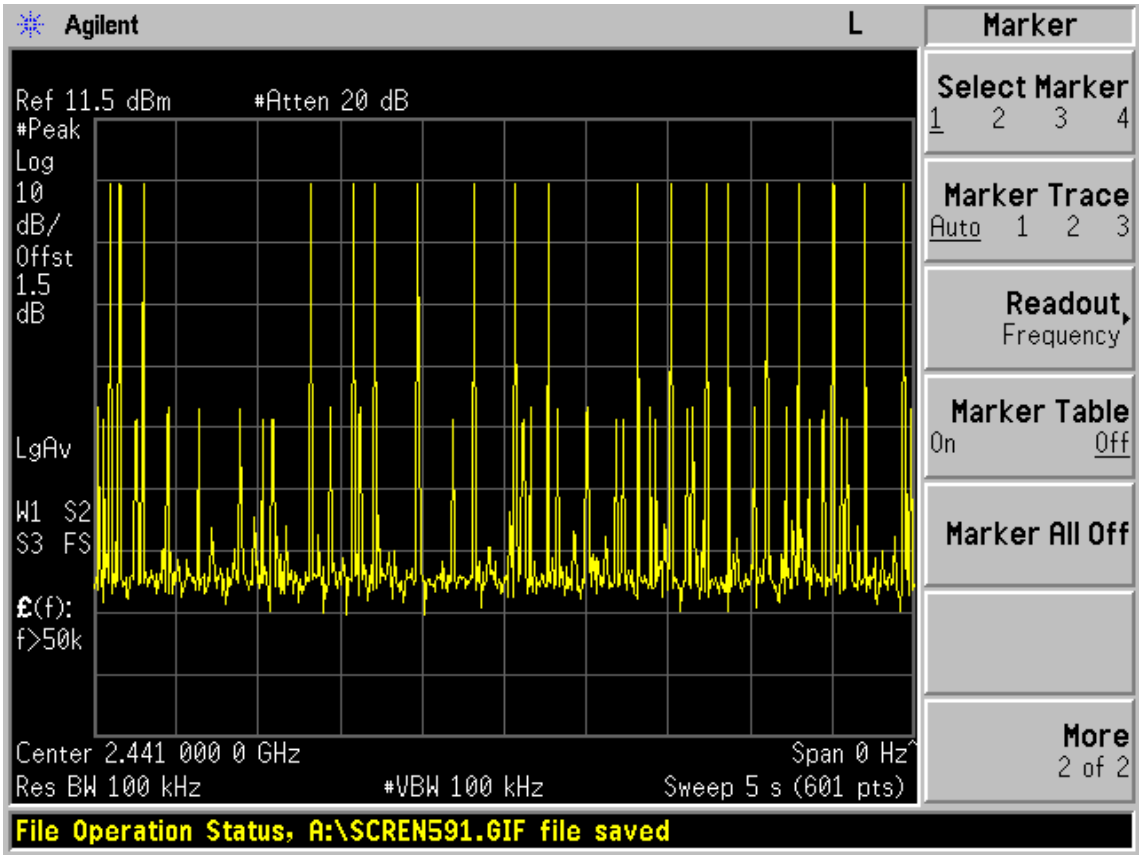

Agilent
L
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Δ
Span Pair
Span Center
Off
More
1 of 2
Δ Mkr1 495 µs
-3.44 dB
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
1R
1
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

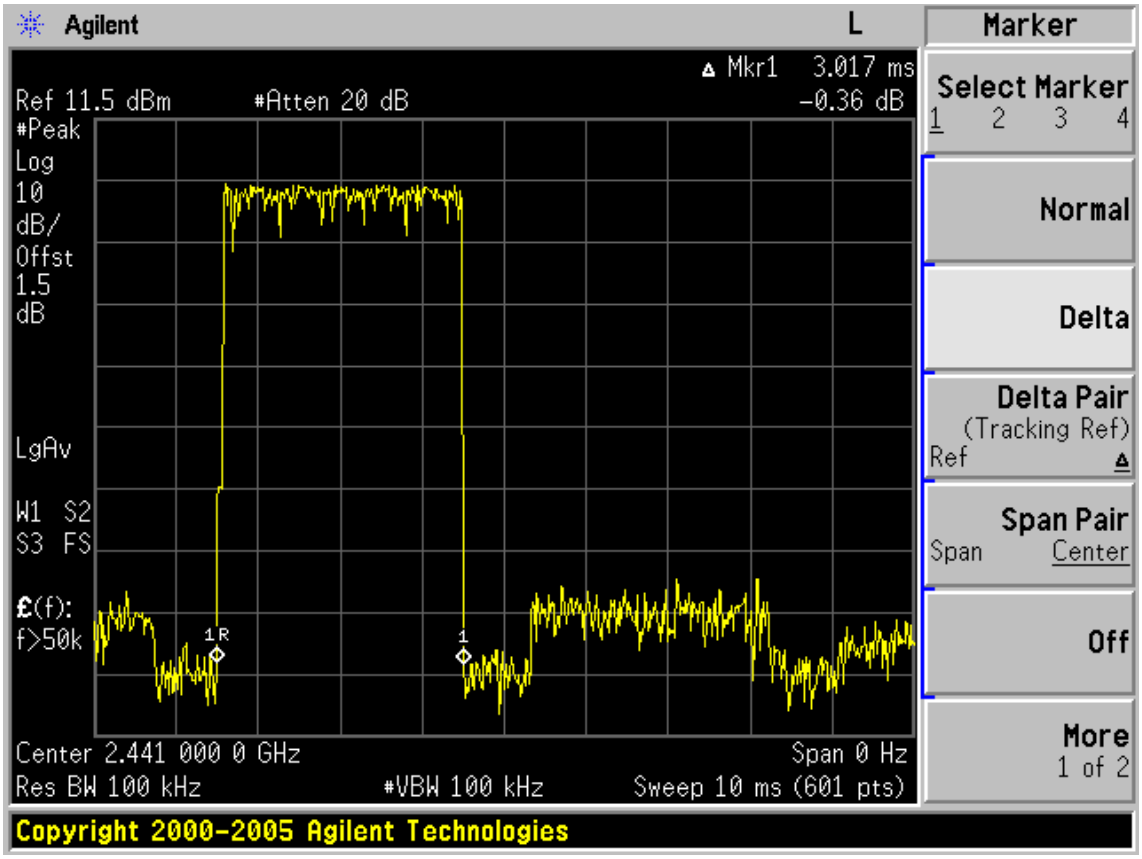
DH 3


Agilent
L
Marker
Mkr1 1.758 ms
3.01 dB
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 ms (601 pts)
Copyright 2000-2005 Agilent Technologies


Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
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
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
Copyright 2000-2005 Agilent Technologies

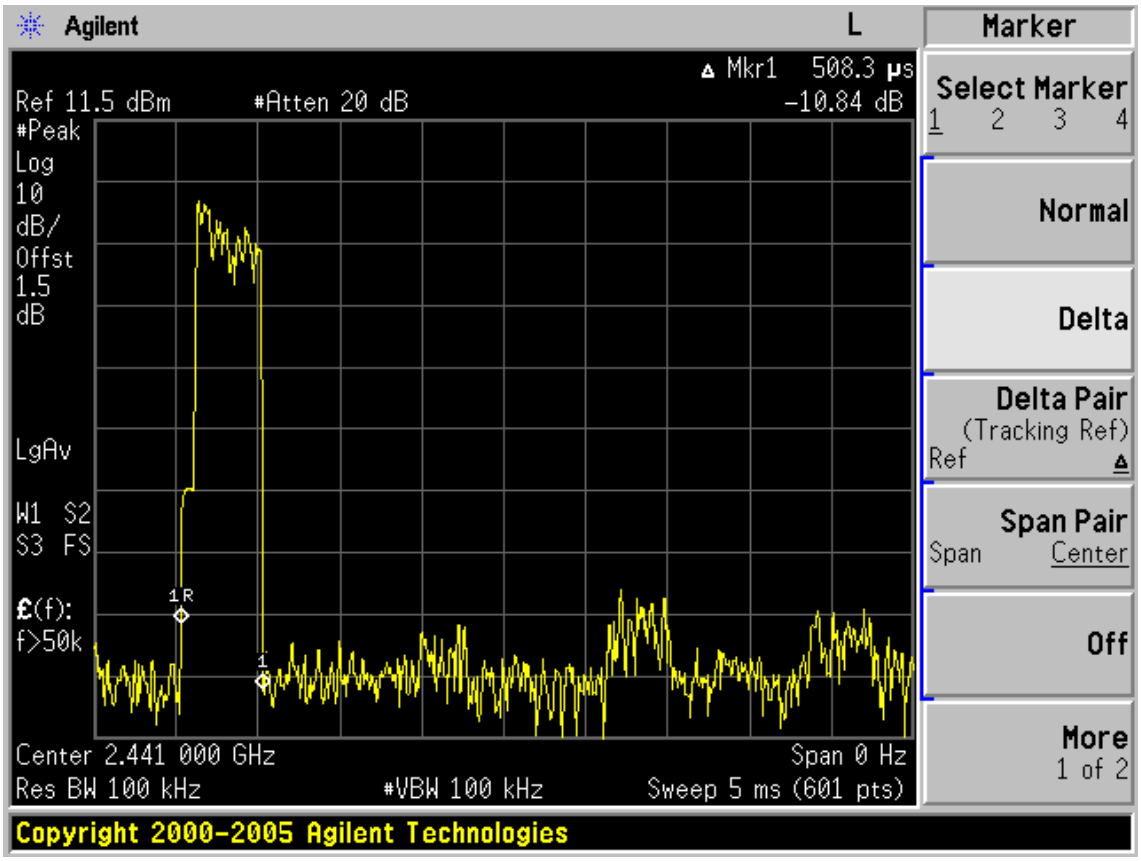
DH 5

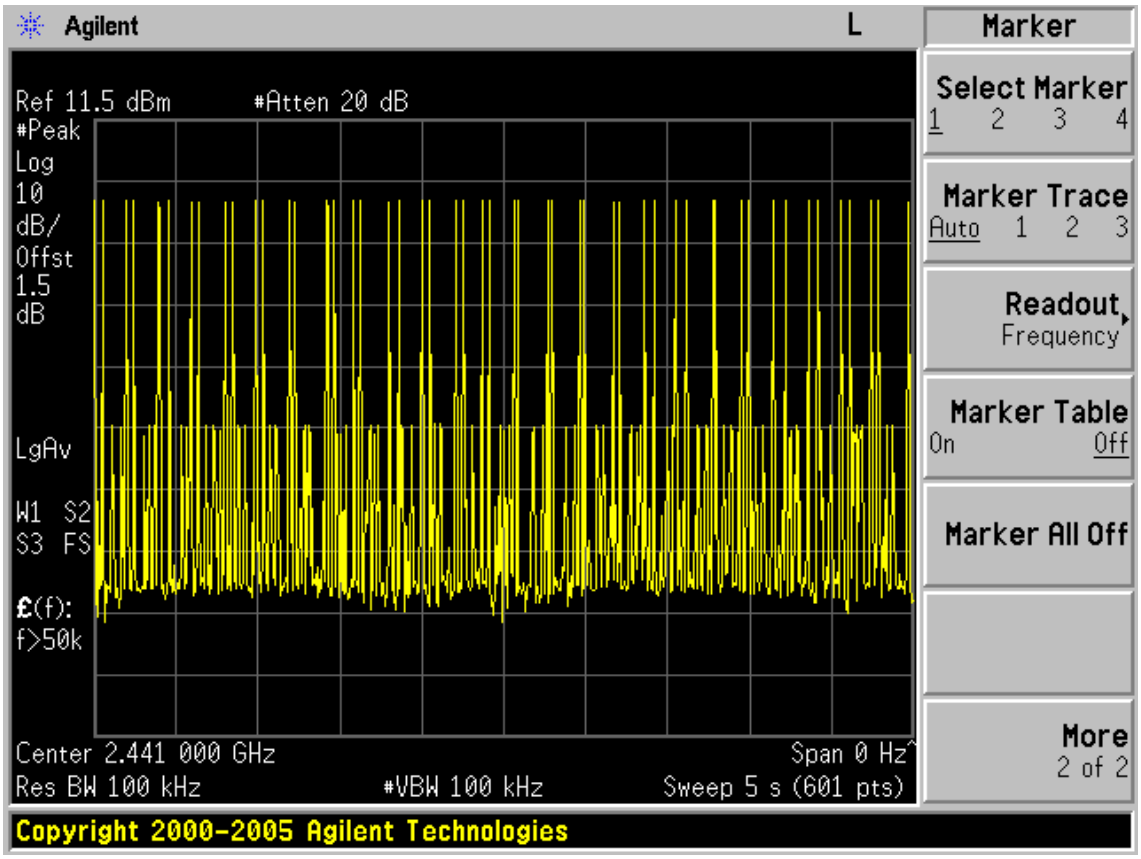

Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
Select Marker
1 2 3 4
Marker Trace
Auto 1 2 3
Readout
Frequency
Marker Table
On Off
Marker All Off
More
2 of 2
File Operation Status, A:\SCREN591.GIF file saved


Agilent
L
Marker
Δ Mkr1 3.017 ms
-0.36 dB
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
1R
1
Center 2.441 000 0 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 10 ms (601 pts)
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Δ
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

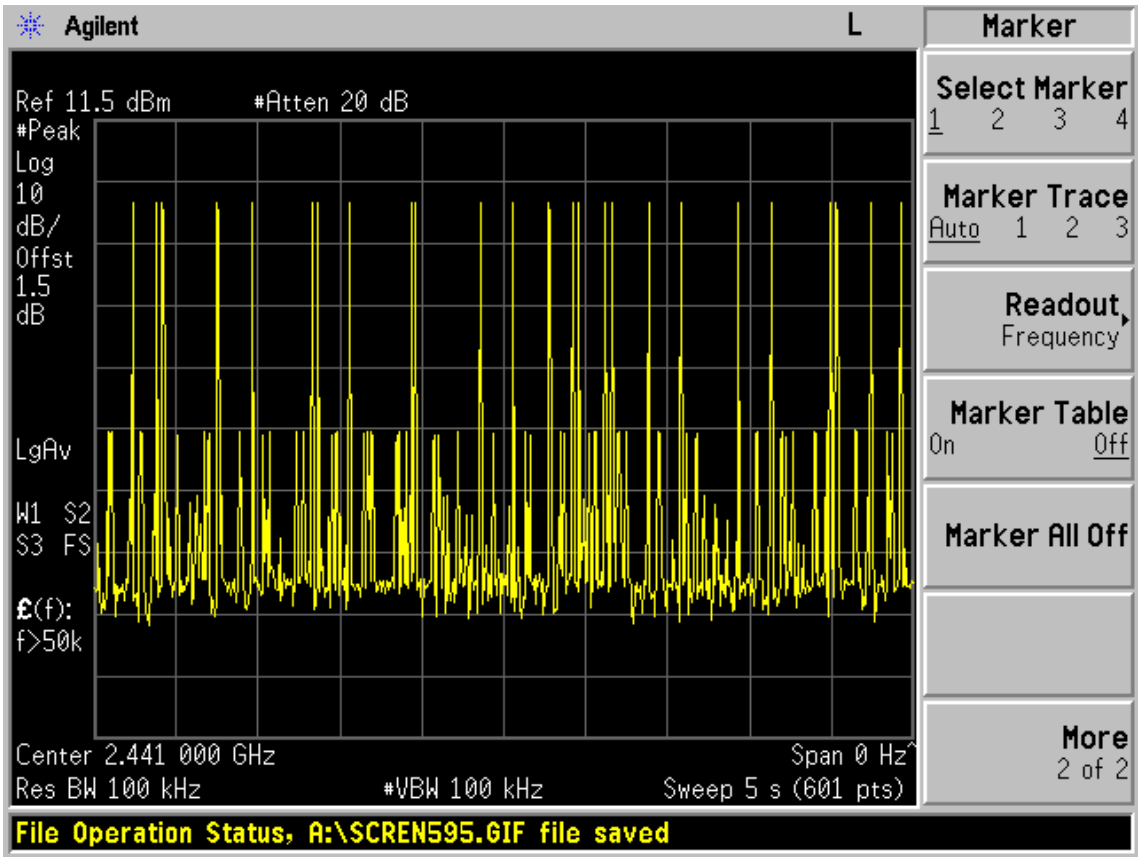
8DPSK

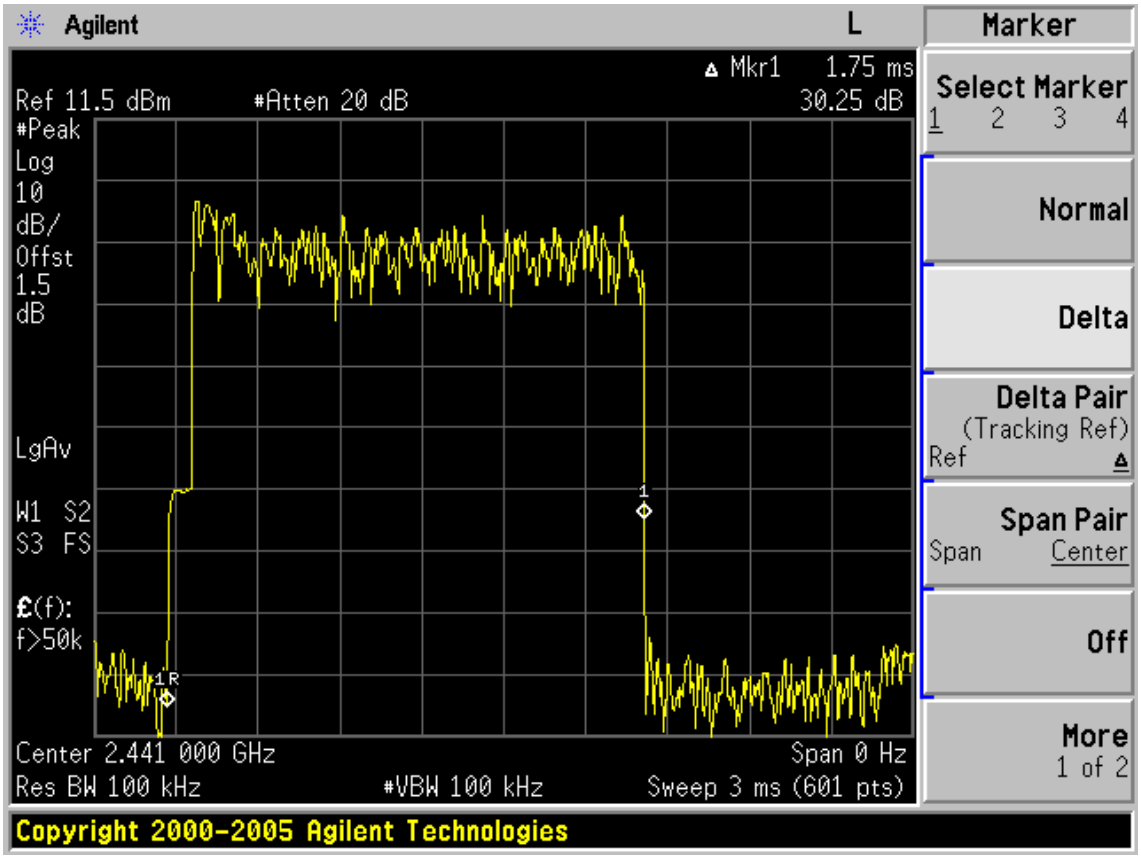
DH 1


Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
Mkr1 508.3 µs
-10.84 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 ms (601 pts)
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

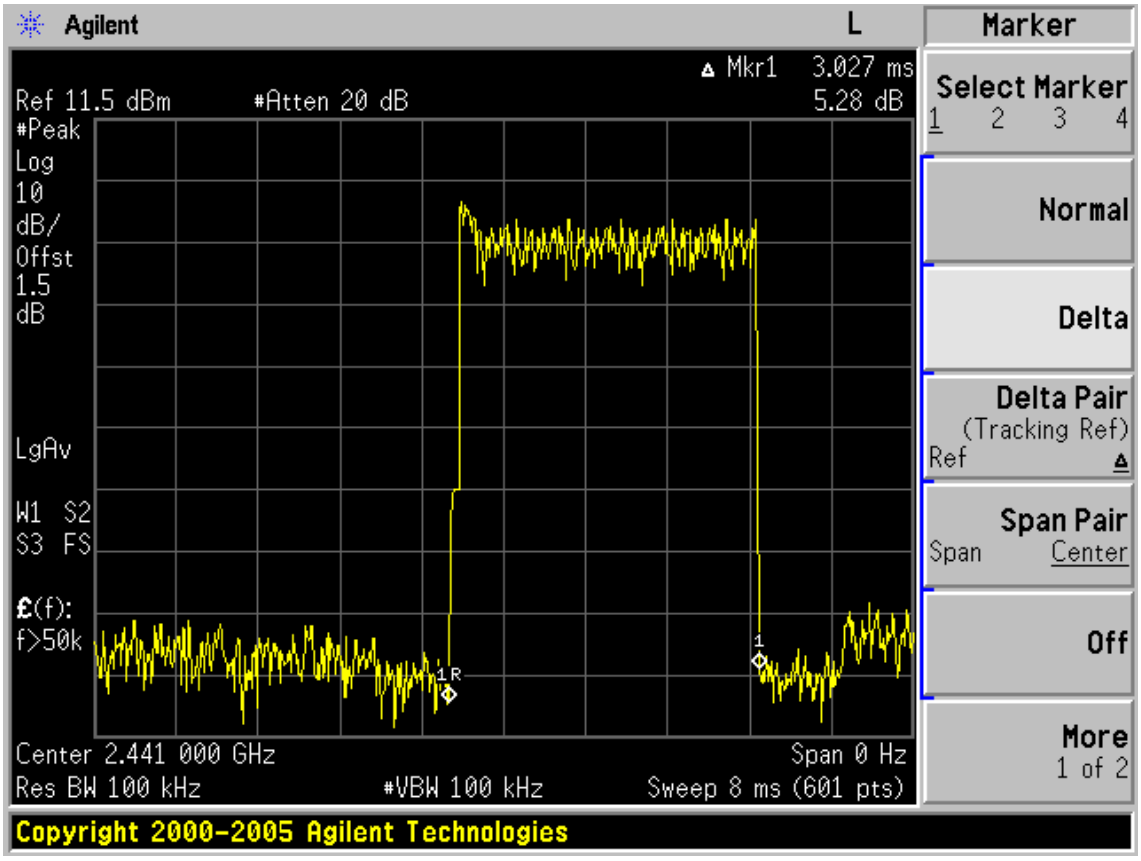

Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
Select Marker
1 2 3 4
Marker Trace
Auto 1 2 3
Readout
Frequency
Marker Table
On Off
Marker All Off
More
2 of 2
Copyright 2000-2005 Agilent Technologies

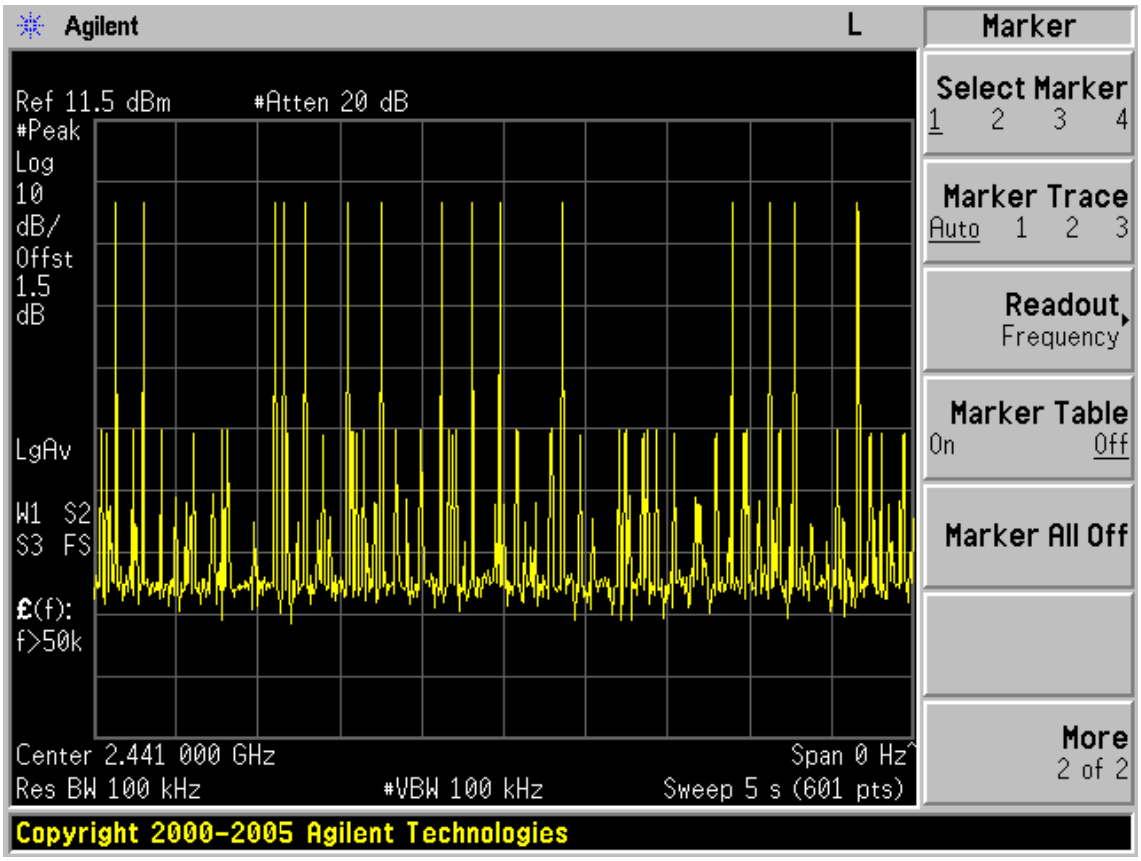
DH 3


Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
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
File Operation Status, A:\SCREN595.GIF file saved


Agilent
L
Marker
Δ Mkr1 1.75 ms
30.25 dB
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
1R
1
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 3 ms (601 pts)
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Δ
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

DH 5


Agilent
L
Marker
Mkr1 3.027 ms
5.28 dB
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 8 ms (601 pts)
Copyright 2000-2005 Agilent Technologies


Agilent
L
Marker
Ref 11.5 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1.5
dB
LgAv
W1 S2
S3 FS
£(f):
f>50k
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
Center 2.441 000 GHz
Span 0 Hz
Res BW 100 kHz
#VBW 100 kHz
Sweep 5 s (601 pts)
Copyright 2000-2005 Agilent Technologies

9. MAXIMUM PEAK OUTPUT POWER TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 10	1.5 Year
3.	Horn Antenna	EMCO	3115	9607-4877	Nov. 25, 10	1.5 Year
4.	Signal Generator	HP	83732B	VS34490501	May.08, 11	1 Year
5.	Amplifier	Agilent	8491B	MY39262165	May.08, 11	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,08, 11	1 Year
7.	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,08, 11	1 Year
8.	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,08, 11	1 Year
9.	RF Cable	Hubersuhner	SUCOFLEX 102	271473/4	May,08, 11	1 Year
10.	RF Cable	Hubersuhner	SUCOFLEX 102	29091/2	May,08, 11	1 Year

9.2.Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

9.3.Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer.
2. Set the RBW> Bandwidth of test Frequency and put the test Frequency, Set the Span large enough to capture the entire signal
3. Use a peak detector on max hold
4. Reading the value from the Spectrum analyzer

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

9.4.Test Results

EUT: Bluetooth Headset			
M/N: 88606			
Test date: 2011-07-20		Pressure: 101.7 kpa	Humidity: 55.2%
Tested by: Leo-Li		Test site: RF site	Temperature: 25℃
Cable loss: 1.5 dB		Attenuator loss: 20 dB	Antenna Gain: 2.0 dBi
Test Mode	CH (MHz)	Peak output Power （dBm）	Limit (dBm)
8DPSK	2402	2.79	30
	2441	2.08	30
	2480	1.38	30
GFSK	2402	3.08	30
	2441	2.54	30
	2480	2.13	30
Conclusion: PASS			

10.BAND EDGE COMPLIANCE TEST

10.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 10	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year

10.2.Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

10.3.Test Produce

For upper band emissions that are up to two bandwidths(2MHz) away (2483.5MHz to 2485.5MHz） from the band-edge use below produce:

1. Choose a spectrum analyzer span that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set the analyzer RBW to 100KHz and with a video bandwidth 300KHz. Record the peak levels of the fundamental emission and the relevant band-edge emission, Observe the stored trace and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission. This is not a field strength measurement, it is only a relative measurement to determine the amount by which the emission drops at the band edge relative to the highest fundamental emission level.
2. Subtract the delta measured in step (1) from the maximum field strengths measured in clause 4 .The resultant field strengths are then used to determine band-edge compliance as required by Section 15.205

For emissions above two bandwidths away from the band-edge use below 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:

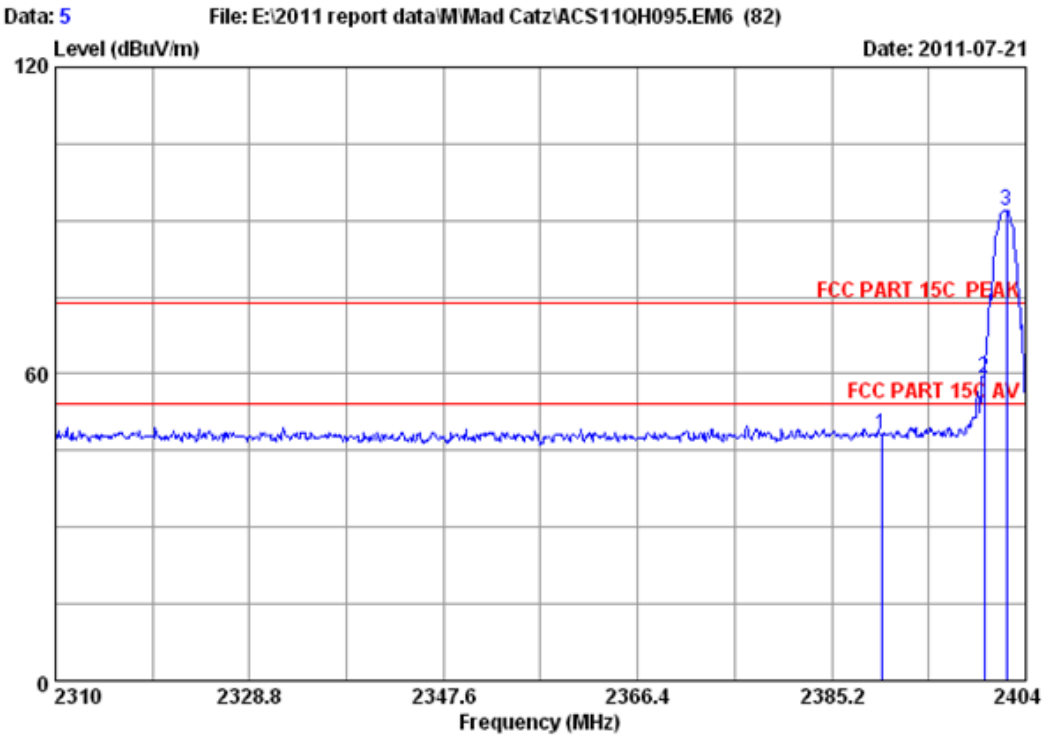
   (a) PEAK: RBW=1MHz ;VBW=3MHz, PK detector, Sweep=AUTO

   (b)This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level

10.4.Test Results

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

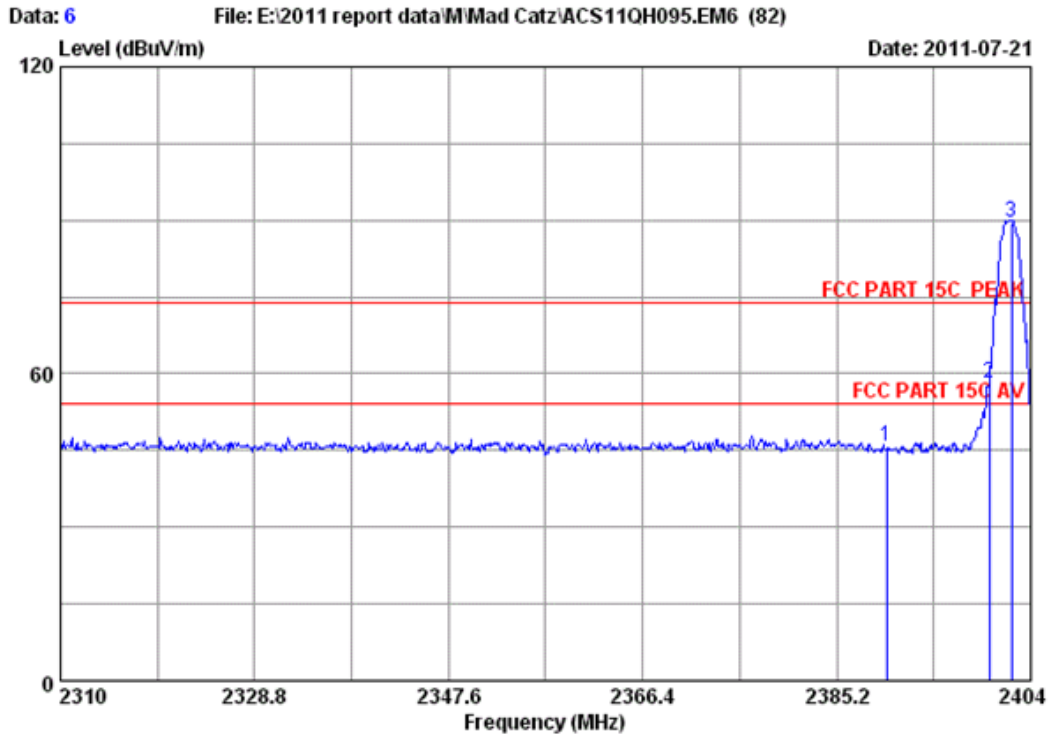
Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2402MHz Tx
M/N : 88606

	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	2390.000	27.96	6.72	34.44	47.74	47.98	74.00	26.02	Peak
2	2400.000	27.96	6.75	34.44	58.89	59.16	74.00	14.84	Peak
3	2402.120	27.96	6.75	34.44	91.70	91.97	74.00	-17.97	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.

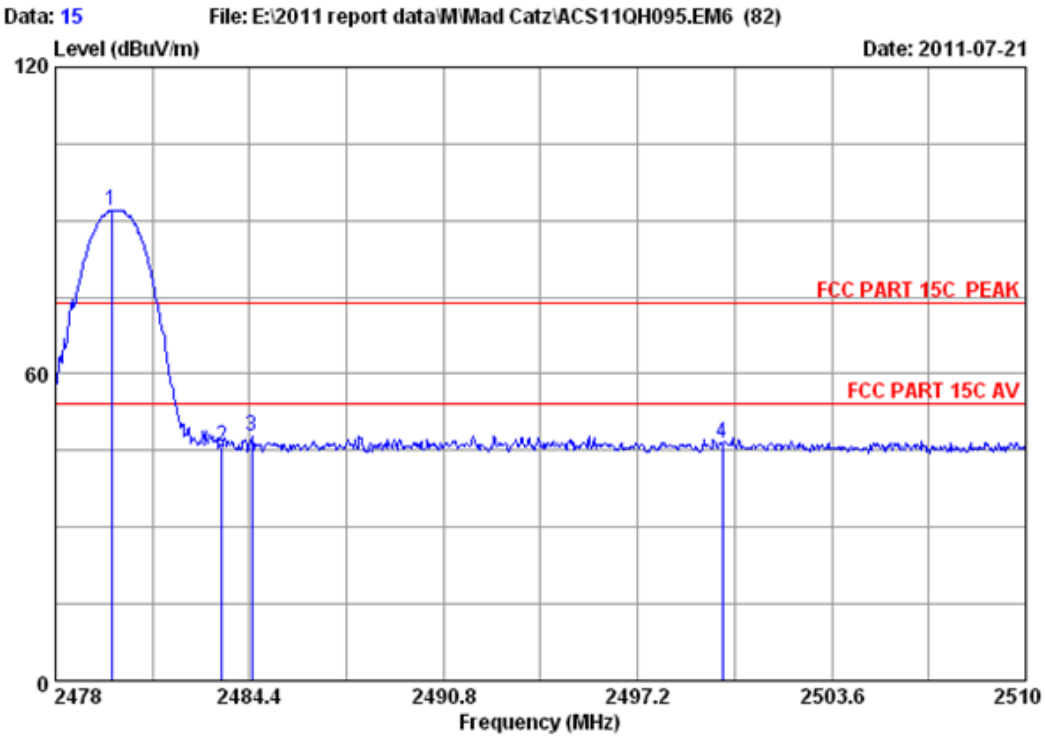


Site no. : 3m Chamber
Dis. / Ant. : 3m 2011 3115 4580
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2402MHz Tx
M/N : 88606

Data no. : 6
Ant. pol. : VERTICAL
Engineer : Leo-Li

	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	2390.000	27.96	6.72	34.44	45.52	45.76	74.00	28.24	Peak
2	2400.000	27.96	6.75	34.44	57.84	58.11	74.00	15.89	Peak
3	2402.120	27.96	6.75	34.44	89.41	89.68	74.00	-15.68	Peak

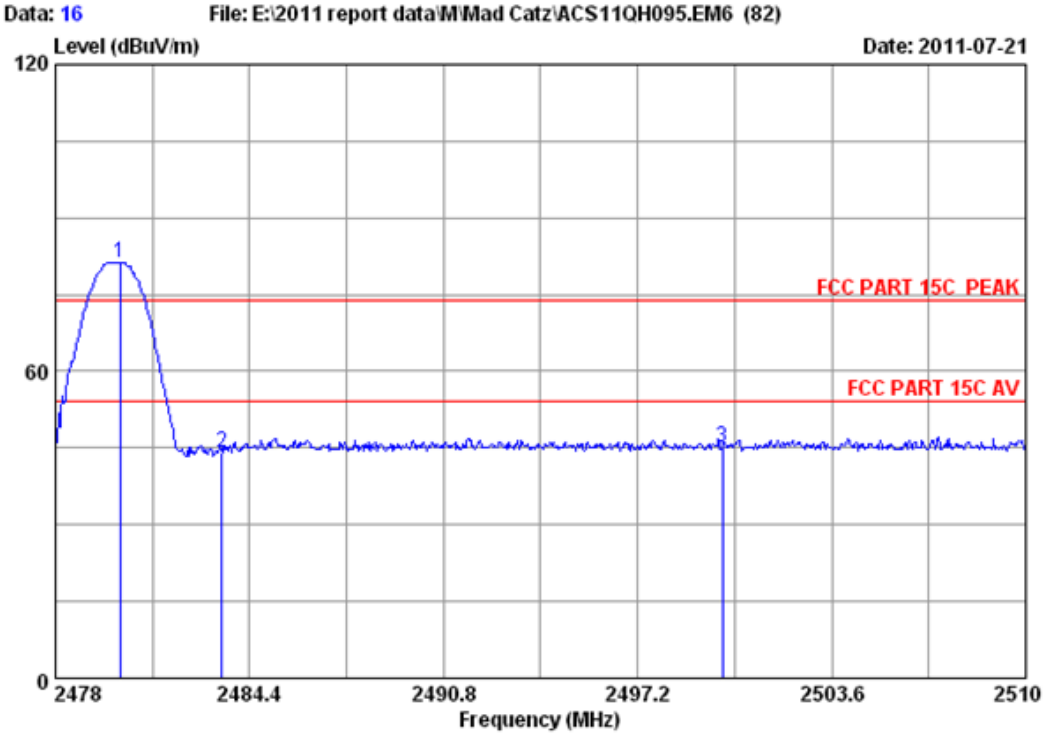
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606

	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	2479.856	28.08	6.87	34.45	91.54	92.04	74.00	-18.04	Peak
2	2483.500	28.08	6.90	34.45	45.40	45.93	74.00	28.07	Peak
3	2484.464	28.08	6.90	34.45	47.41	47.94	74.00	26.06	Peak
4	2500.000	28.10	6.90	34.45	45.83	46.38	74.00	27.62	Peak

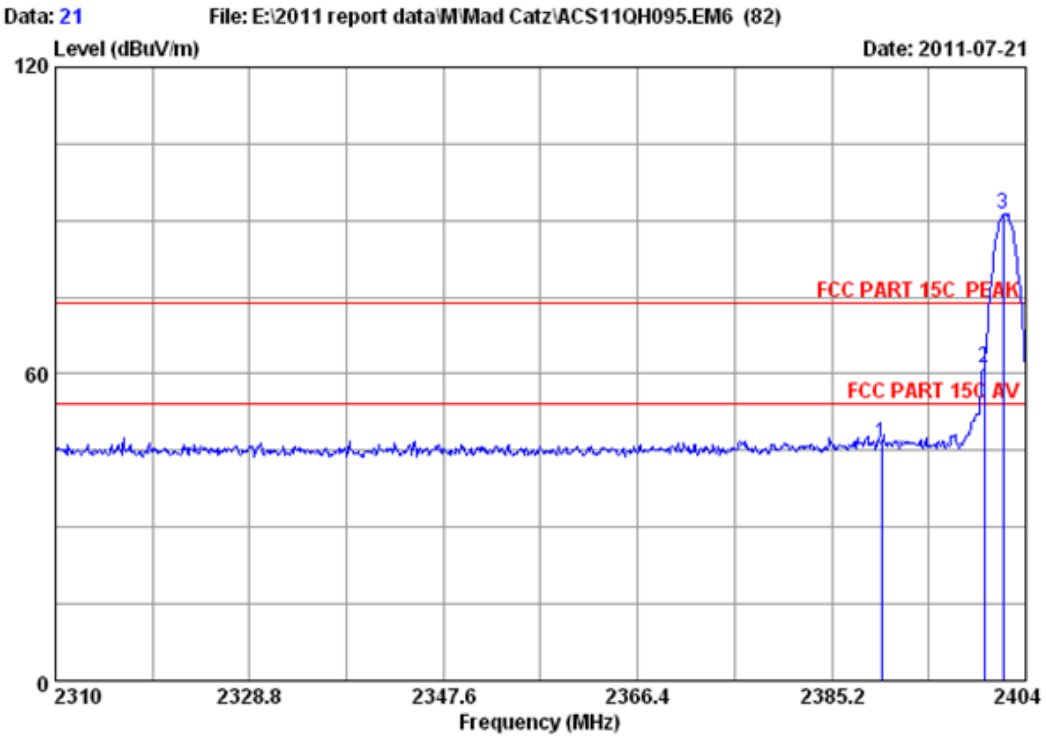
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : GFSK 2480MHz Tx
M/N : 88606

	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	2480.144	28.08	6.87	34.45	80.84	81.34	74.00	-7.34	Peak
2	2483.500	28.08	6.90	34.45	43.66	44.19	74.00	29.81	Peak
3	2500.000	28.10	6.90	34.45	44.53	45.08	74.00	28.92	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.

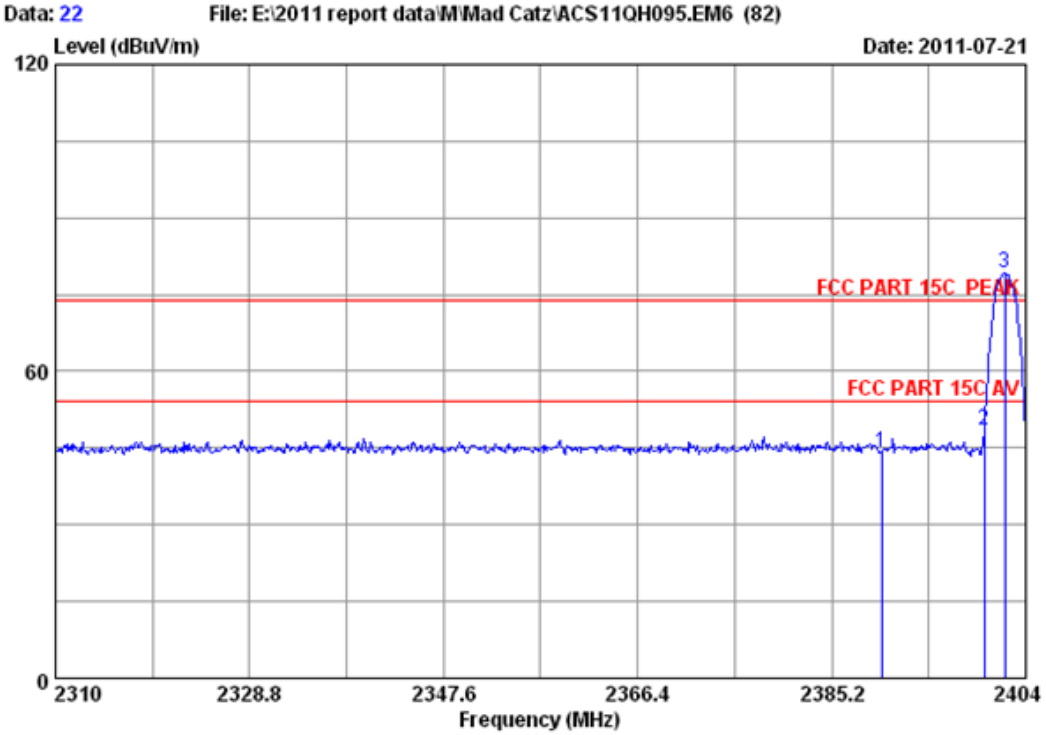


Site no. : 3m Chamber
Dis. / Ant. : 3m 2011 3115 4580
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54%
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2402MHz Tx
M/N : 88606

Data no. : 21
Ant. pol. : HORIZONTAL
Engineer : Leo-Li

	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	2390.000	27.96	6.72	34.44	46.06	46.30	74.00	27.70	Peak
2	2400.000	27.96	6.75	34.44	60.90	61.17	74.00	12.83	Peak
3	2401.838	27.96	6.75	34.44	91.09	91.36	74.00	-17.36	Peak

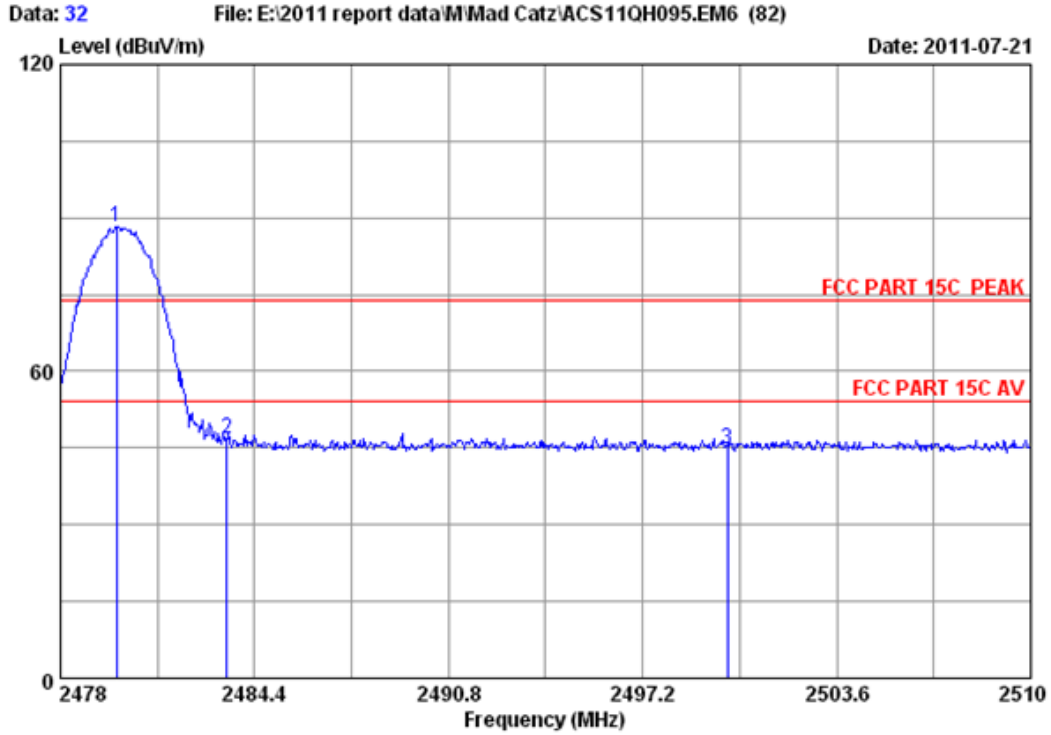
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2402MHz Tx
M/N : 88606

	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	2390.000	27.96	6.72	34.44	43.97	44.21	74.00	29.79	Peak
2	2400.000	27.96	6.75	34.44	48.26	48.53	74.00	25.47	Peak
3	2401.932	27.96	6.75	34.44	79.08	79.35	74.00	-5.35	Peak

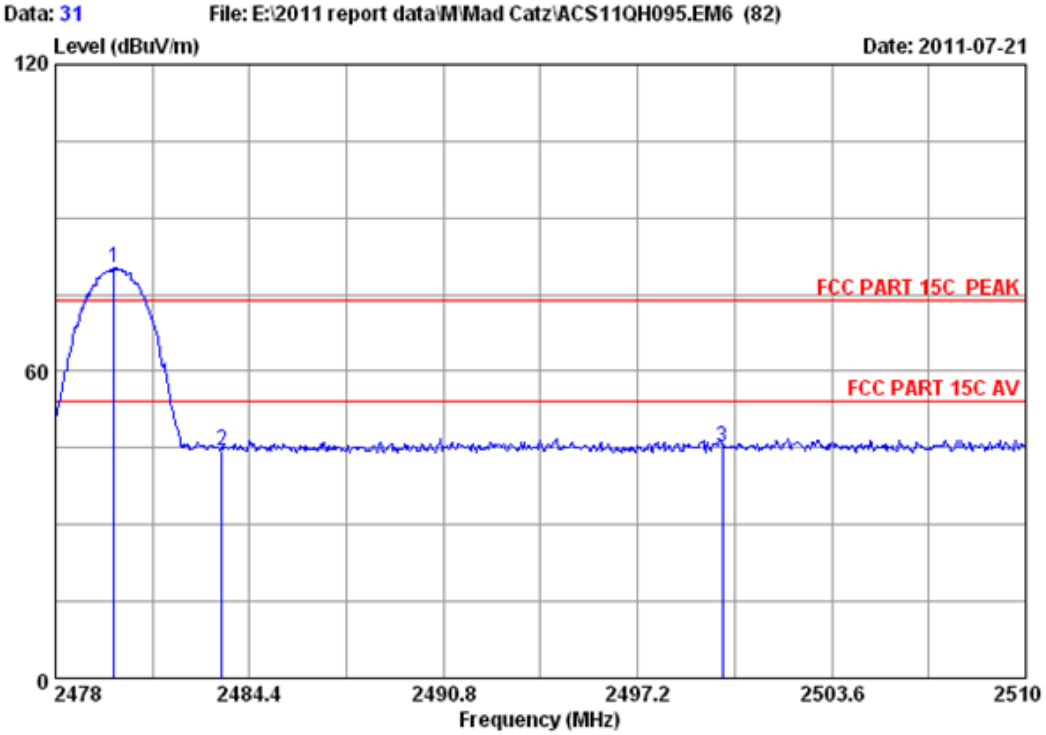
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606

	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	2479.856	28.08	6.87	34.45	87.81	88.31	74.00	-14.31	Peak
2	2483.500	28.08	6.90	34.45	46.38	46.91	74.00	27.09	Peak
3	2500.000	28.10	6.90	34.45	44.13	44.68	74.00	29.32	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.



Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : Bluetooth Headset
Power : DC 3.7V
Test mode : 8DPSK 2480MHz Tx
M/N : 88606

	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	2479.920	28.08	6.87	34.45	79.72	80.22	74.00	-6.22	Peak
2	2483.500	28.08	6.90	34.45	43.80	44.33	74.00	29.67	Peak
3	2500.000	28.10	6.90	34.45	44.67	45.22	74.00	28.78	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.

11. ANTENNA REQUIREMENT

RESULT : PASS

Test Date : Jul.20, 2011

Test standard : FCC Part 15.203

Limit : the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 2.0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply the provision

12. RADIO FRREQUENCY EXPOSURE COMPLIANCE

RESULT : PASS

Test standard : FCC KDB Publication 447498

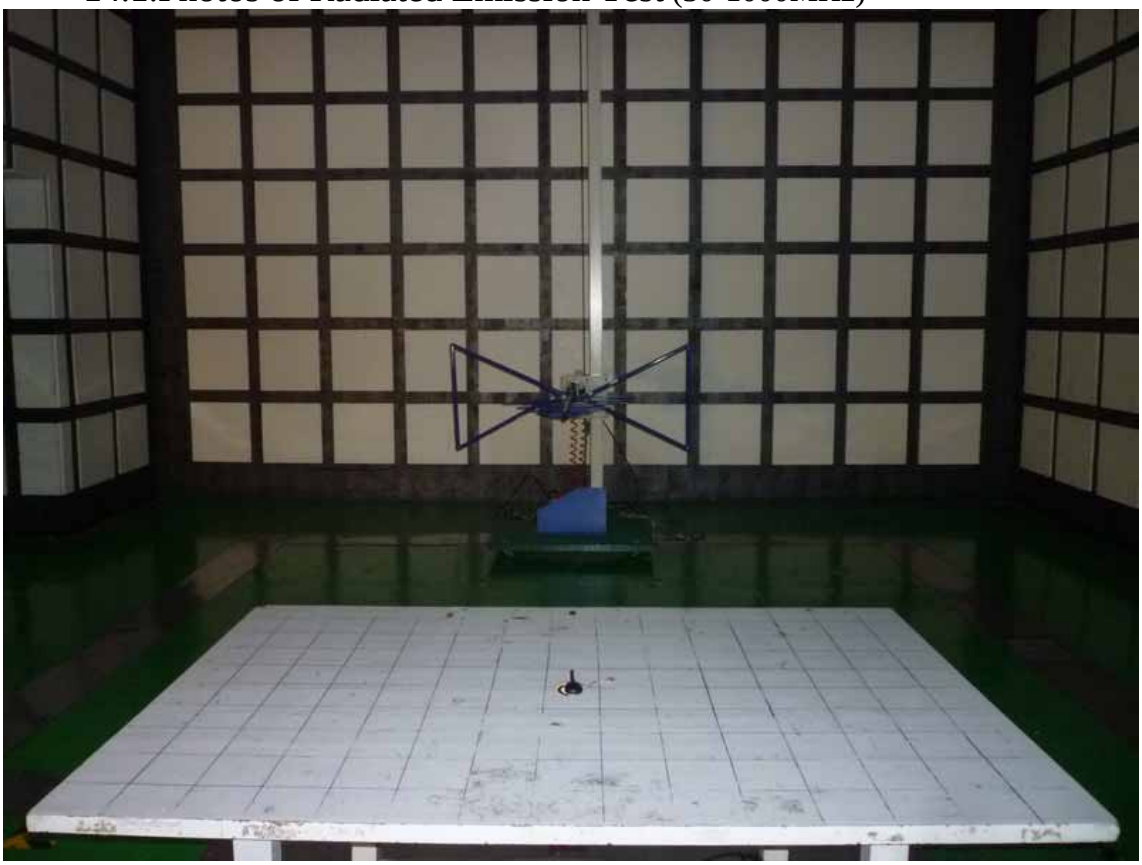
The maximum peak output power of the transmitter is<60/f(GHz)mW.
i.e.2.03Mw<25(=60/2.4)mW, hence the EUT is exclueded from SAR evaluation according to FCC KDB Publication 447498 D01:Mobile Portable RF Exposure

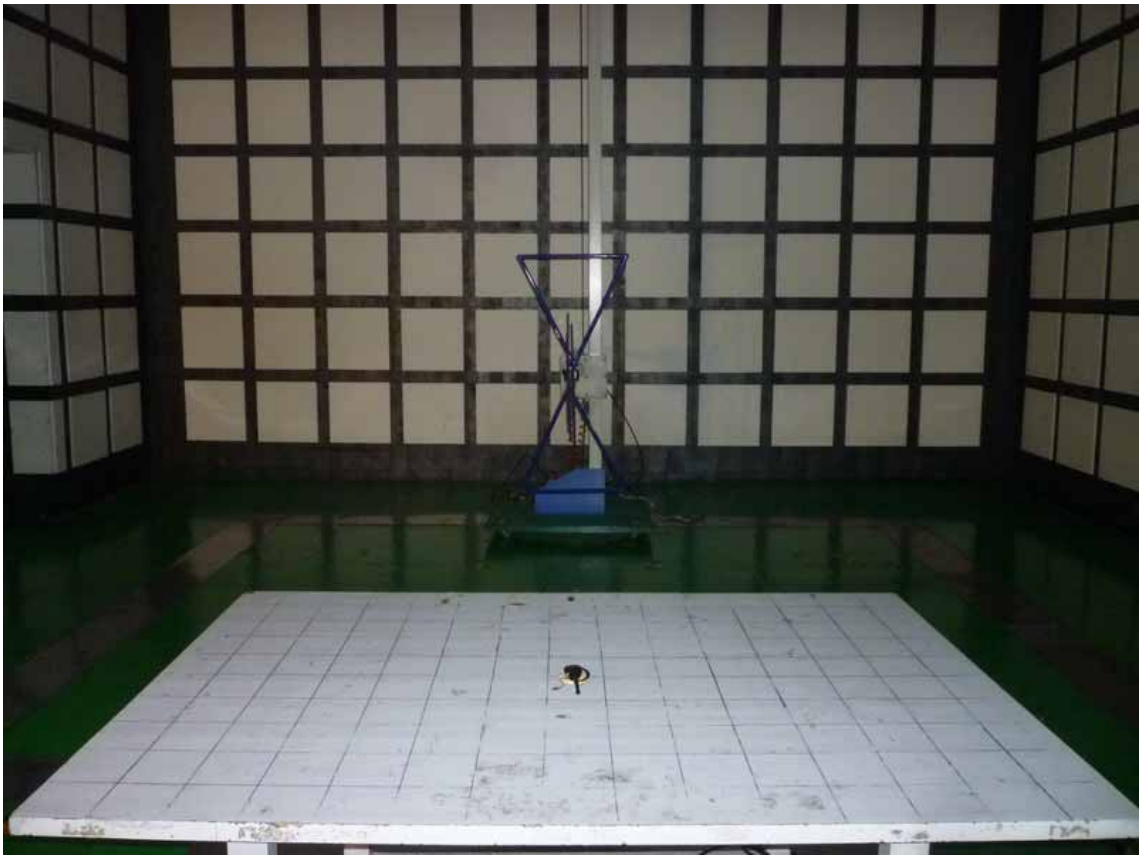
13. DEVIATION TO TEST SPECIFICATIONS

[NONE]

14.PHOTOGRAPH OF TEST

14.1.Photos of Radiated Emission Test (30-1000MHz)





(Above 1000MHz)

15. PHOTOS OF THE EUT

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT

Figure 3
General Appearance of the EUT

Figure 4
General Appearance of the EUT

Figure 5
General Appearance of the EUT

Figure 6
General Appearance of the EUT

Figure 7
Inside of the EUT

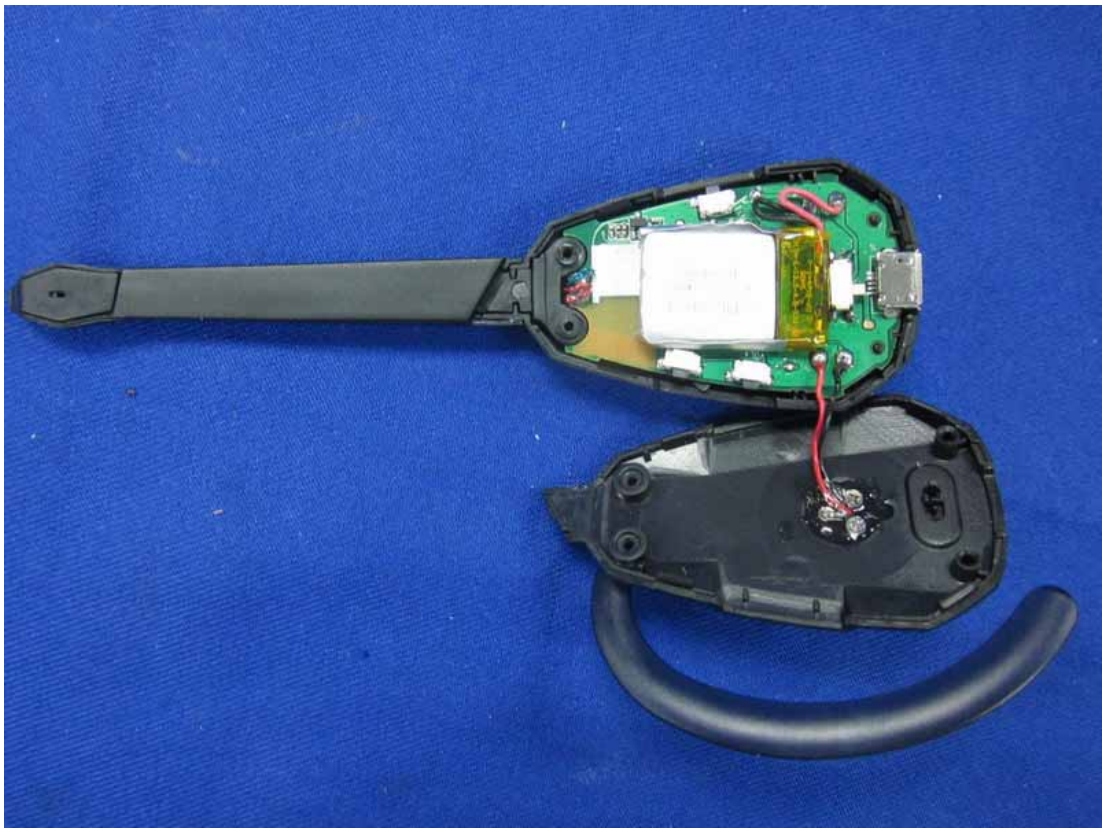


Figure 8
Inside of the EUT

Figure 9

Inside of the EUT

Figure 10
Inside of the EUT

Figure 11
Inside of the EUT

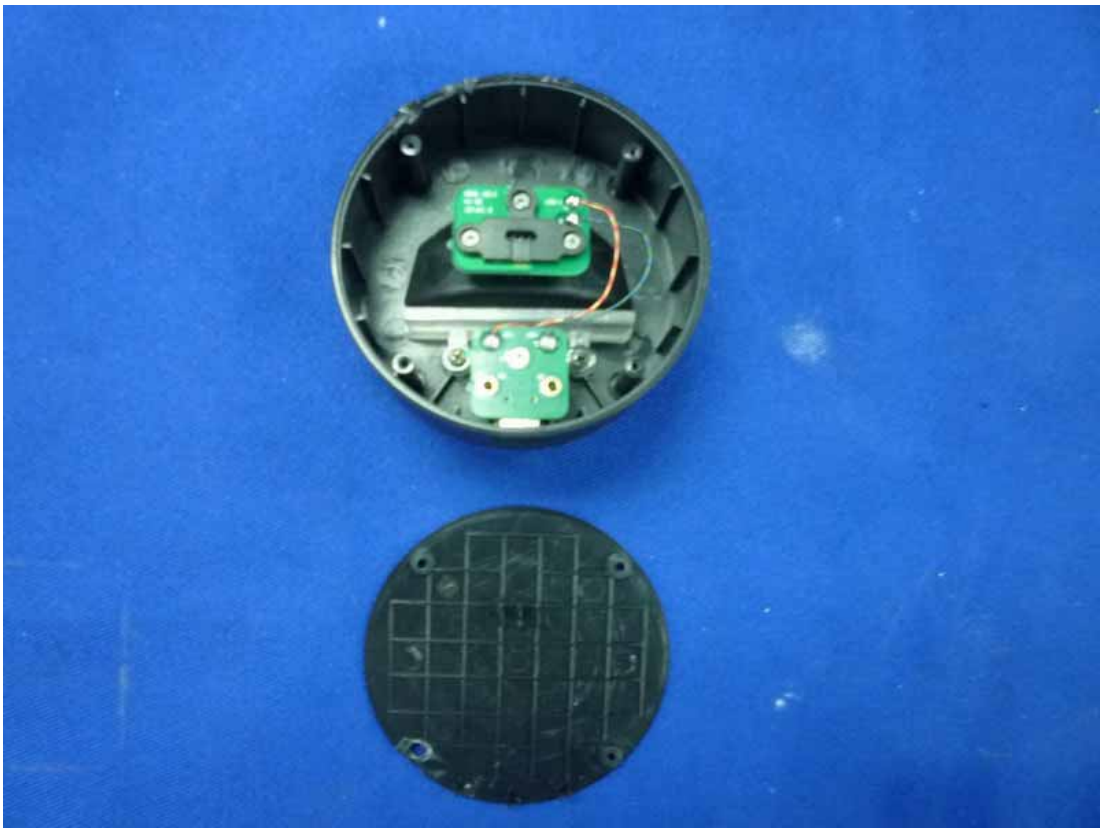


Figure 12
Inside of the EUT

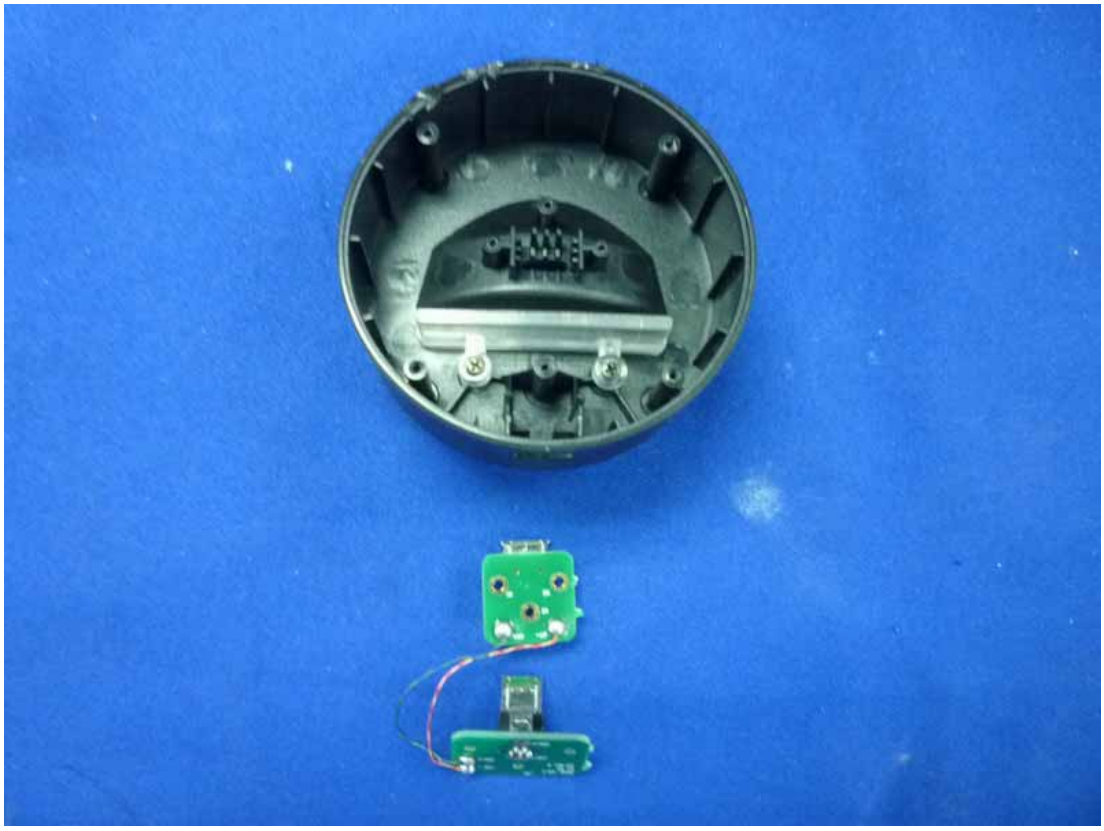


Figure 13
Inside of the EUT

Figure 14
Inside of the EUT

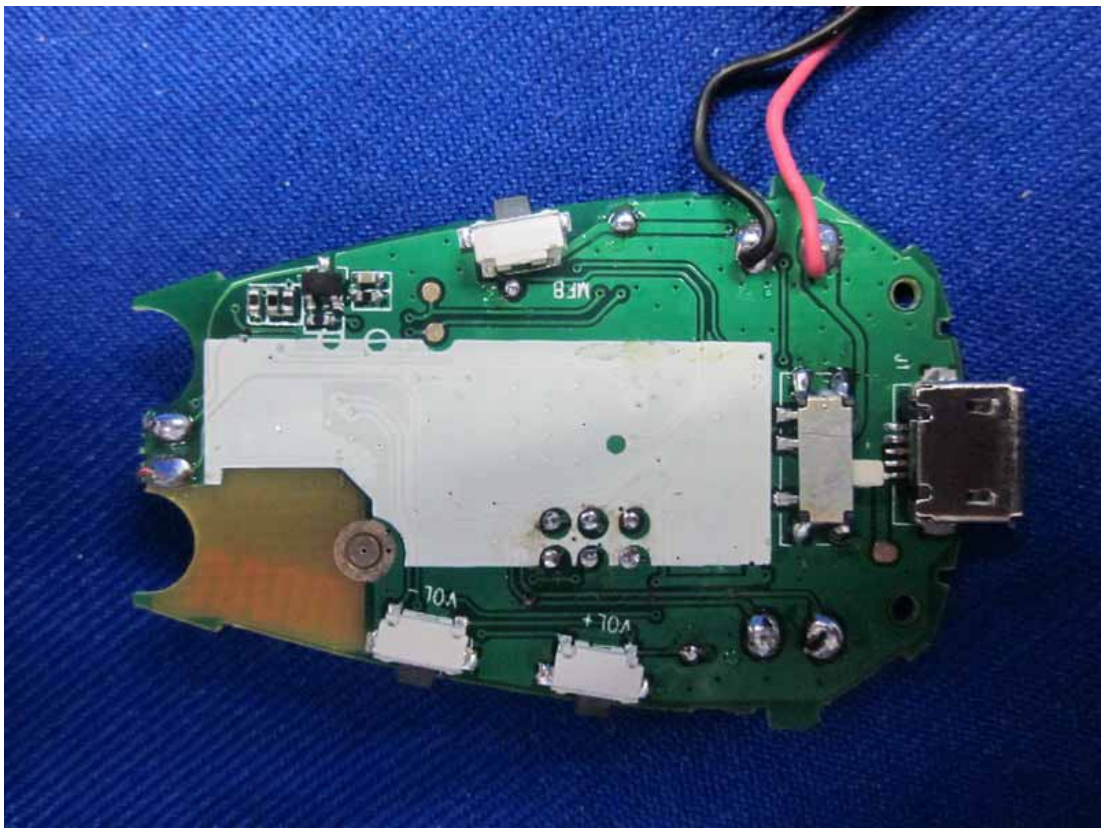


Figure 15

Inside of the EUT

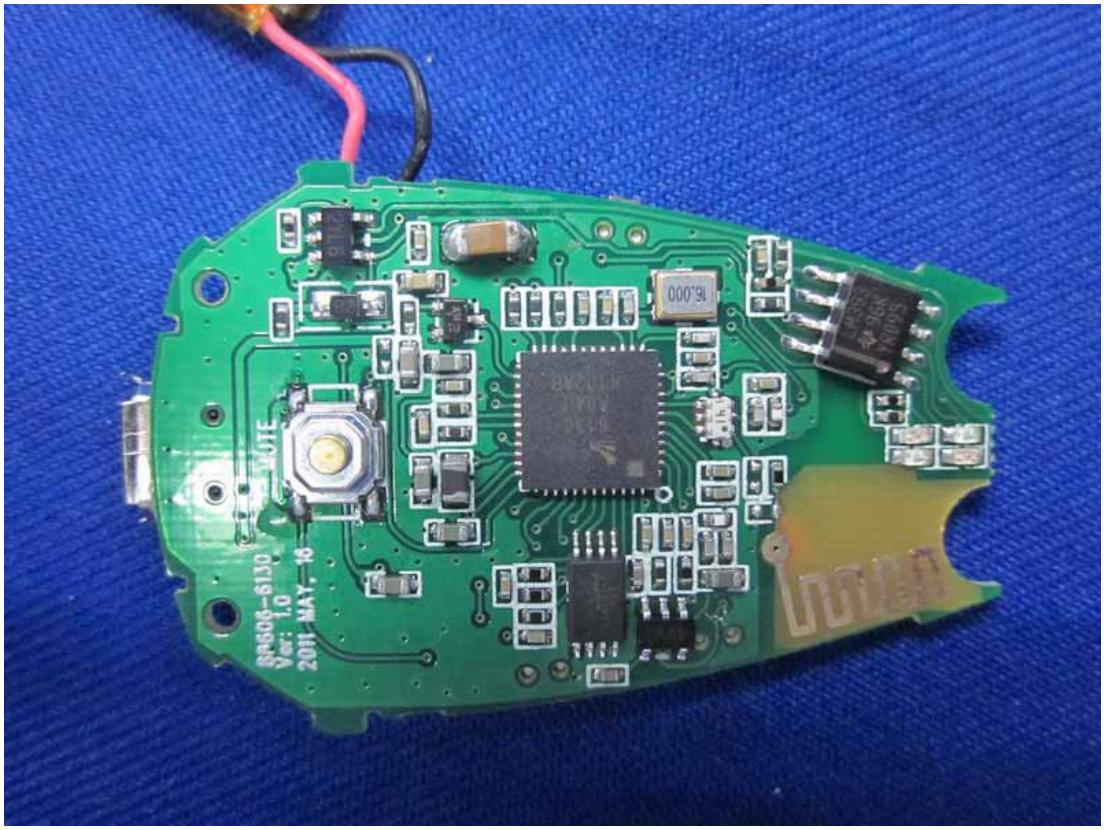


Figure 16

Inside of the EUT

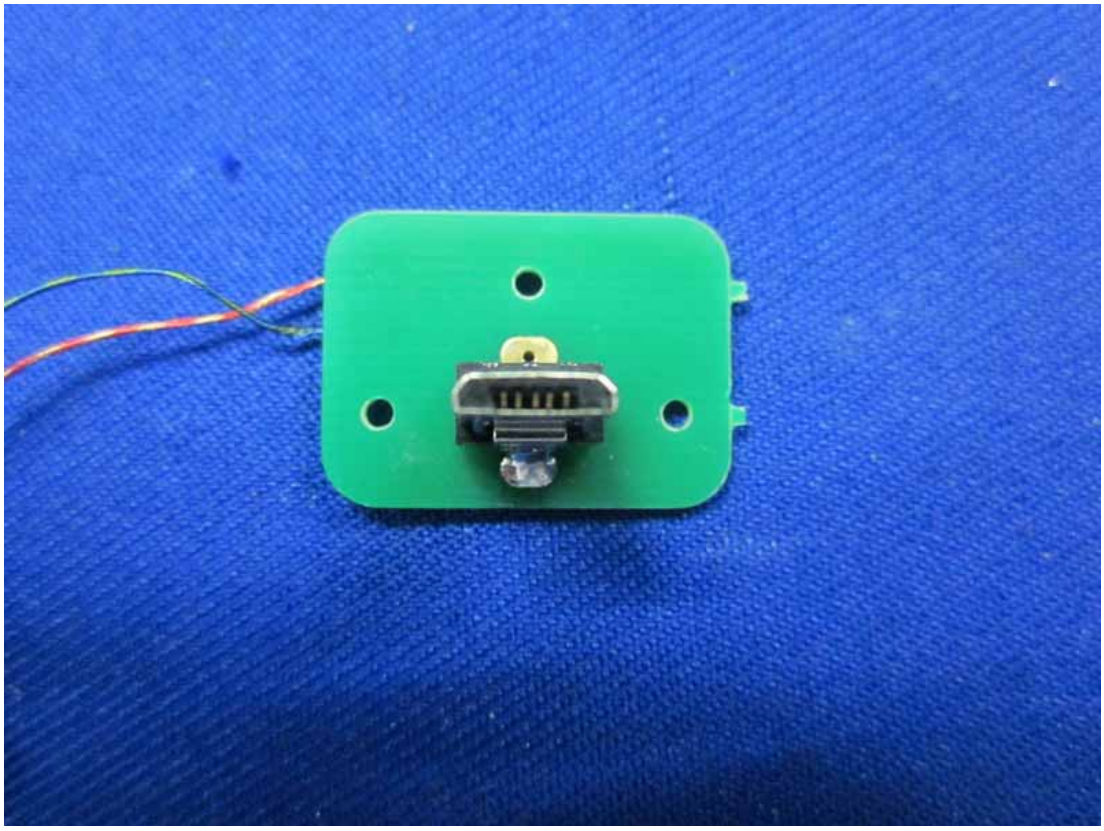


Figure 17
Inside of the EUT

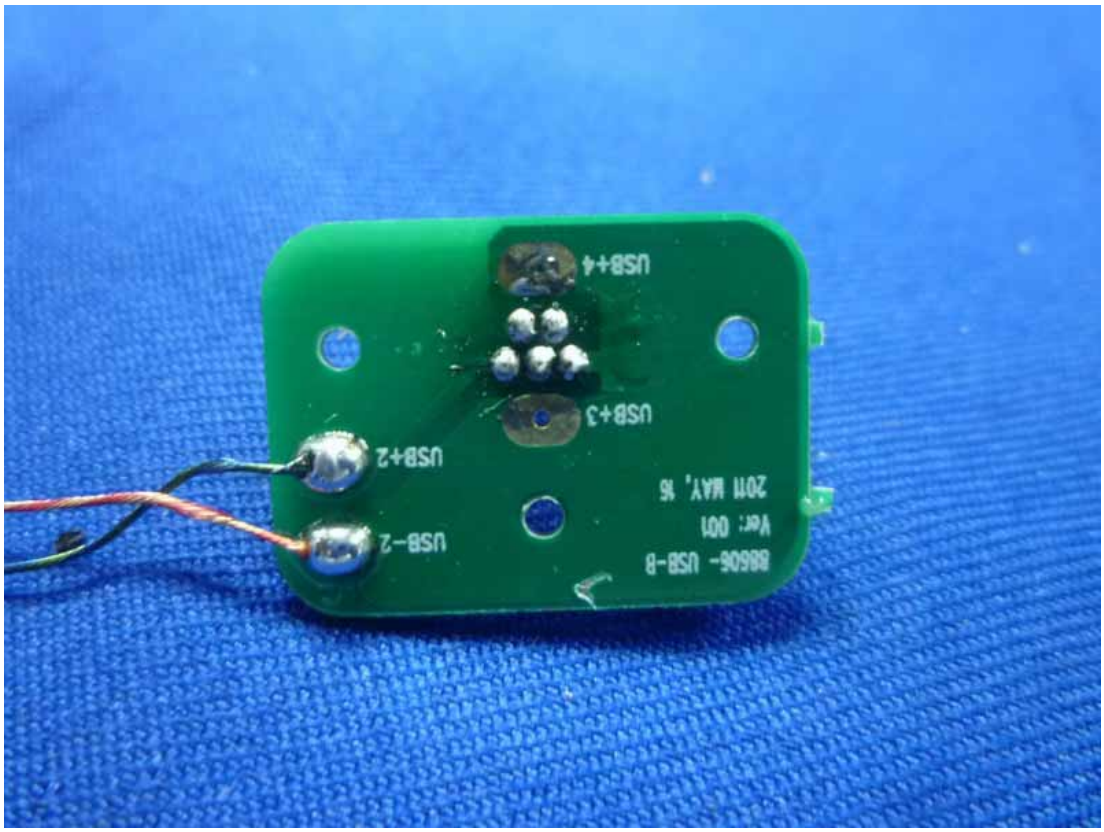


Figure 18
Inside of the EUT

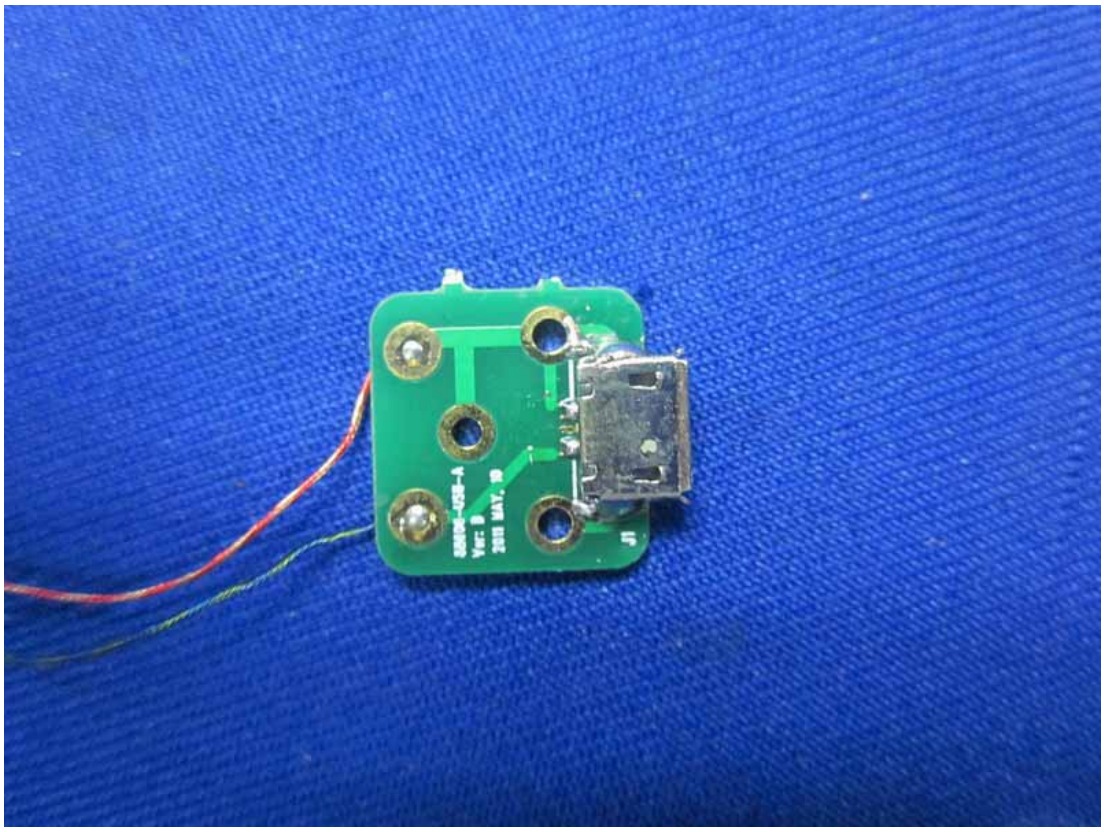


Figure 19
Inside of the EUT