Test Report
Application for Certification
on Behalf of

Center Technology Corp.

EUT: BLUETOOTH TRANSCEIVER
Model Number: BT-120, BT-300
FCC ID: 2AB7UBTXX0

Prepared for:
Center Technology Corp.
4F, No. 415, Jung Jeng Rd., Shu Lin District, New Taipei City 238, Taiwan

Report By : **Global EMC Standard Tech. Corp.**
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1. CERTIFICATION

Applicant	:	Center Technology Corp.
Applicant Address	:	4F, No. 415, Jung Jeng Rd., Shu Lin District, New Taipei City 238, Taiwan
EUT Description	:	BLUETOOTH TRANSCEIVER
Model Number	:	BT-120, BT-300
Serial Number	:	N/A
Brade Name	:	CENTER
FCC ID	:	2AB7UBTXX0
Tested Power Supply	:	DC 6V
Manufacturer	:	Center Technology Corp.
Manufacturer Address	:	4F, No. 415, Jung Jeng Rd., Shu Lin District, New Taipei City 238, Taiwan

MEASUREMENT PROCEDURES USED:

☑ **CFR 47, Part 15**	Radio Frequency Device Subpart C Intentional Radiators: 2012
☑ **ANSI C63.4**	Methods of Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9kHz To 40GHz: 2009

☑**FCC Public Notice DA 00-705**

THE MEASUREMENT SHOWN IN THE ATTACHMENT WAS MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED, AND THE MAXIMUM ENERGY EMITTED BY THE EQUIPMENT WAS FOUND TO BE WITHIN THE ABOVE LIMITS APPLICABLE.

Sample Received Date : April 07, 2014

Date of Test : April 22, 2014 – April 23, 2014

Issue Date : May 21, 2014

In order to ensure the quality and accuracy of this document, the contents have been thoroughly reviewed by the following qualified personnel from GesTek Lab.

Documented By :

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Approved By :

Tony Tsai / eng. Dept. Manager

2. GENERAL INFORMATION

2.1 PRODUCTION DESCRIPTION

Product Name	: BLUETOOTH TRANSCEIVER
Model Number	: BT-120, BT-300
Serial Number	: N/A
Brade Name	: CENTER
FCC ID	: 2AB7UBTXX0
Modulation Type	: GFSK, π/4 PSK, 8DPSK
Antenna Gain	: 4 dBi
Antenna Type	: Printed on PCB
Frequencg Range	: 2402MHz to 2480MHz
Channel Number	: 79 Channel
Channel Control	: Control by Software
Working Voltage	: DC 6V

Frequency of Each Channel:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

Note:

1. This device is a BLUETOOTH TRANSCEIVER include Bluetooth function and this report is for transmitter.
2. Test of channel was included the lowest、middle and highest frequency in highest data rate and to perform the test, then record on this report.
3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
4. The EUT has different model numbers for the requirement of marketing;
   The difference of model numbers are shown as below

Model Number	Stereo headphone plug	Remark
BT-120	Straight	TX and RX switching positions
BT-300	Bending	

2.2 OPERATIONAL DESCRIPTION

The device is BLUETOOTH TRANSCEIVER have Bluetooth function and can link with Bluetooth dongle for control PC.

Another information please refer to users manual.

2.3 TEST MODES & EUT COMPONENTS DESCRIPTION

EUT: BLUETOOTH TRANSCEIVER, M/N: BT-120, BT-300, The EUT tested with Notebook PC.			
Test Mode	**Mode 1- GFSK**	**Mode 2- π/4 PSK**	**Mode 3- 8DPSK**

2.4 SUMMARY OF TEST PROCEDURE AND TEST RESULTS

Test Item	Applied Standard Section	Test Resut
Conducted Emissison	15.207 ANSI C63.4 Section 7, 13, Annex I	Pass (refer to section 3.7)
Radiated Emission	15.209,15.247(d) ANSI C63.4 Section 8,13 Annex I	Pass (refer to section 4.7)
Peak Power Output	15.247(b), ANSI C63.4 Section 13 & Annex I	Pass (refer to section 5.4)
Band Edge	15.247(d) , ANSI C63.4 Section 13 & Annex I	Pass (refer to section 6.6)
Occupied Bandwidth	15.247(a) , ANSI C63.4 Section 13 & Annex I	Pass (refer to section 7.4)
Channel Separation	15.247(a) , ANSI C63.4 Section 13 & Annex I	Pass (refer to section 8.4)
Dwell Time	15.247(a) , ANSI C63.4 Section 13 & Annex I	Pass (refer to section 9.4)
Hopping Channel	15.247(b) , ANSI C63.4 Section 13 & Annex I	Pass (refer to section 10.4)

2.5 CONFIGURATION OF THE TESTED SYSTEM

The FCC IDs/Types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards, which have grants) are:

Item	Device	No.	Configuration
1	**NOTEBOOK**	**DELL NB 1**	Model Number : Latitude D600 PPO5L BSMI ID : R33002 FCC ID E2K24CLNS Serial Number : 10826163280 C.P.U : Intel Pentium M 1.4G HZ DDR : PC2100 256MB WIRELESS LAN : Manufacturer :INTEL CARD M/N:WM3A2100 FCC ID: E2K24CLNS H.D.D. : Manufacturer : FUJITSU 30G M/N: MHT2030AT S/N:NN15T421E09C BSMI ID:D33073 DVD-ROM : Manufacturer :DELL M/N:5W299-A01 BATTERY : Manufacturer :DELL Li-ion MODULE M/N:6Y270 RATING:14.8V 220mAh AC ADAPTOR : Manufacturer :DELL M/N: PA-1650-05D S/N:CN-05U092-48010-39N-227C INPUT:AC 100-240 V~1.5A 50-60HZ Shielded, Undetachable, 2.5m
2	**Test Fixture**	**--**	Manufacturer : BlueSoleil Model Number : i40E/i40EL

Note: All the peripherals above were selected specifically after confirming that there is no impact on test results.

2.6 LAB AMBIENT

Items	Range Requirement
Temperature (°C)	10-40
Humidity (%RH)	10-90
Barometric pressure (mbar)	860-1060

2.7 TEST FACILITY AUTHORIZATION AND ACCREDITATION

Global EMC Standard Tech. Corp. is accredited in respect of laboratory and the accreditation criteria is ISO/IEC 17025: 2005.

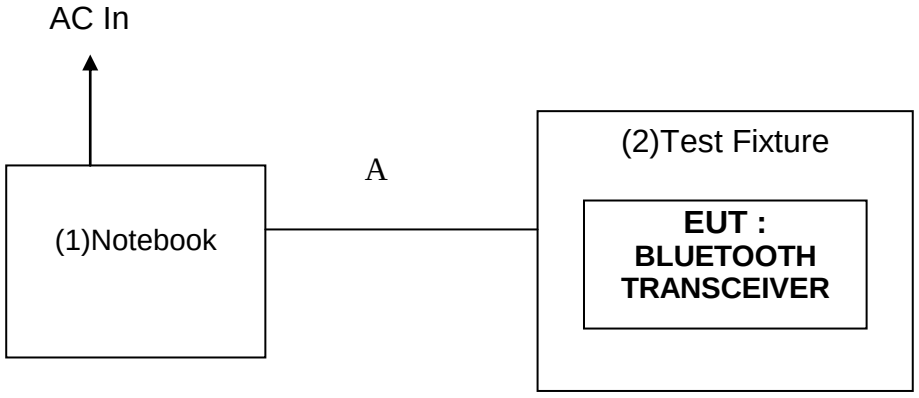
AUTHORIZATION	
CC SITE DESCRIPTION	Aug. 10, 1995 /Aug. 25, 1998 File on FCC Engineering Laboratory Federal Communications Commission Designation Number: TW1031, TW1032

ACCREDITATION	
Taiwan Accreditation Foundation (TAF)	Recognized by the Council of Taiwan Accreditation Foundation and confirmed to meet the requirements of ISO/IEC 17025. Registration No.: 1082 Registration on TAF effective through Sep. 18, 2015

2.8 TEST SETUP

BLOCK DIAGRAM OF CONNECTIONS BETWEEN EUT AND SIMULATORS

Bluetooth Tx Mode + AC Conducted Emission Mode



Signal Cable Description of the above support units				
No.	Signal Cable Description	Shielded	Core type	Length (m)
A	USB Cable	☒Yes ☐No	☒No ☐1(near EUT) ☐1(near Aux) ☐2	1.5

2.9 EUT OPERATING CONDITIONS

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below:

1. Setup the EUT as shown on 2.7.
2. Turn on the power of all equipments.
3. Execute the test program (EDR_RF_test_Customer).
4. Choose the test mode and setup the parameter.
5. Test it.
6. Repeat the above steps.

Note: Let the EUT operating in the RF test mode must be performed Software (EDR_RF_test_Customer) by Notebook to control Test Fixture(hardware).

3. CONDUCTED EMISSION MEASUREMENT

3.1 TEST EQUIPMENTS

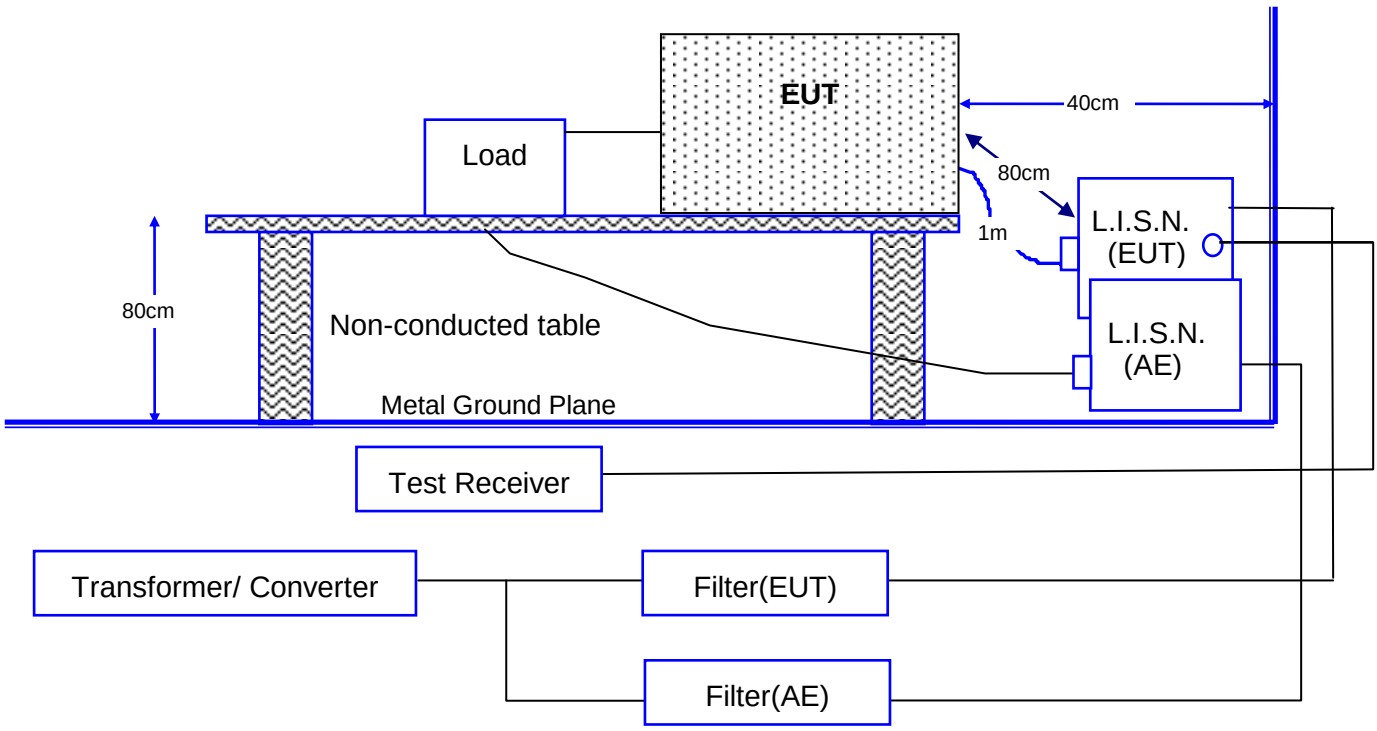
Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	TEST RECEIVER	RS	ESCS30	849650/023	2014.06.17
2	L.I.S.N.(EUT)	RS	ENV216	100108	2014.05.12
3	LISN	RS	ENV216	100006	2014.08.16
4	CABLE	GTK	N/A	GTK-E-A154-01	2015.01.10
5	50 Ohm Terminator	JYEBAO	BNC 0/3GHz	GTK-E-A424-01	2014.06.17
6	Software	FARAD	EZ-EMC	2A1.1(USB)	N/A

Note: 1. All equipments are calibrated and will be valid only for a period of 1 year.

2. The test was performed at GTK Shielded Room B5.

3.2 BLOCK DIAGRAM OF TEST SETUP

3.2.1 TEST SETUP FOR EMISSION MEASUREMENT AT MAINS TERMINAL



Note: This is a representative setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.

3.3 CONDUCTED EMISSION LIMITS

3.3.1 CONDUCTED EMISSION LIMITS (MAINS TERMINAL)

Frequency	Voltage dB(μV)	
	Class B	
MHz	QUASI-PEAK	AVERAGE
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

Remarks: In the Above Table, the tighter limit applies at the band edges.

3.4 TEST CONFIGURATION ON MEASUREMENT

The equipments that are listed in section 4.1 are installed on Conducted Power Line Test in order to meet the requirement of the Commission and operating in a manner, which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 4.3, was placed on a non-conductive table whose total height equal to 80cm. Powered from one L.I.S.N. which signal output to receiver, and the other peripherals was powered from another L.I.S.N. which signal output was terminated by 50Ω.

3.5 CONDUCTED EMISSION MEASURED PROCEDURE AND DATA

3.5.1 CONDUCTED EMISSION (MAINS TERMINAL)

The measurement range of conducted emission, which is from 0.15 MHz to 30 MHz, was scan for peak emission curve of all the test modes. The worst mode is then measured using an average and/or quasi peak detector and record at least the disturbance levels and the frequencies of the six highest disturbances. The final measurement value is equal to the receiver reading plus the correction factor. If AMN insertion loss is more than 0.5dB, automatically the receiver will add the correction factor to the reading level.

3.6 OPERATING CONDITIONS OF THE EUT

Same as conducted emission measurement, which is listed in 2.9

3.7CONDUCTED EMISSION MEASUREMENT RESULTS

Date of Test	April 28, 2014	**Temperature**	22 ℃
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	59 %
Test Mode	Normal Operation	**Display Pattern**	Program
Test Power Supply	AC 110V/60Hz		

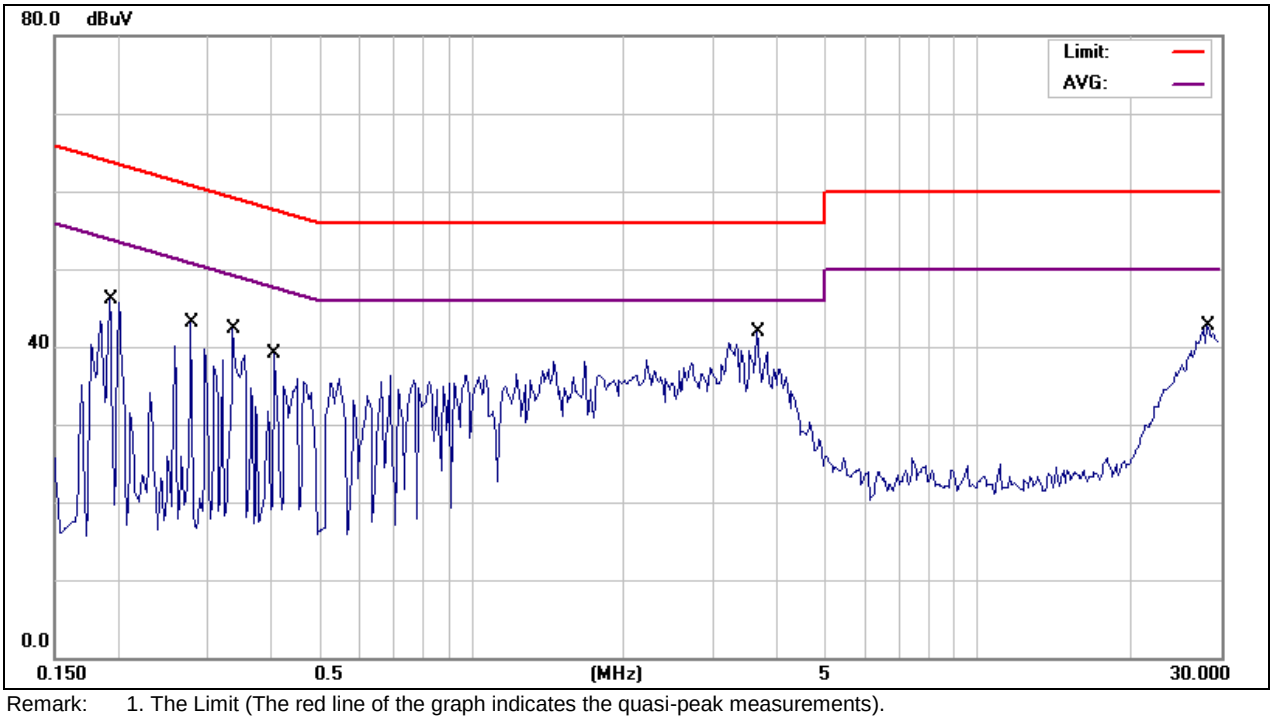
Line

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV	Limit dBµV	Over Limit dB	Detector
1	★0.1922	36.83	9.66	46.49	63.94	-17.45	QP
2	0.1922	21.37	9.66	31.03	53.94	-22.91	AVG
3	0.2785	29.49	9.67	39.16	60.86	-21.70	QP
4	0.2785	13.58	9.67	23.25	50.86	-27.61	AVG
5	0.3378	29.65	9.68	39.33	59.26	-19.93	QP
6	0.3378	17.13	9.68	26.81	49.26	-22.45	AVG
7	0.4079	26.56	9.68	36.24	57.69	-21.45	QP
8	0.4079	12.42	9.68	22.10	47.69	-25.59	AVG
9	3.6757	24.98	9.78	34.76	56.00	-21.24	QP
10	3.6757	14.13	9.78	23.91	46.00	-22.09	AVG
11	28.4730	27.34	9.87	37.21	60.00	-22.79	QP
12	28.4730	21.78	9.87	31.65	50.00	-18.35	AVG

Remarks :

1. All readings are Quasi-peak and Average values.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = L.I.S.N. insertion loss + cable loss
5. " ★ " means that this data is the worst case measurement level.
6. The measurement uncertainty is 3.93 dB.

Line



Remark: 1. The Limit (The red line of the graph indicates the quasi-peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The scan curve indicates peak detector measurement.

Date of Test	April 28, 2014	**Temperature**	22 ℃
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	59 %
Test Mode	Normal Operation	**Display Pattern**	Program
Test Power Supply	AC 110V/60Hz		

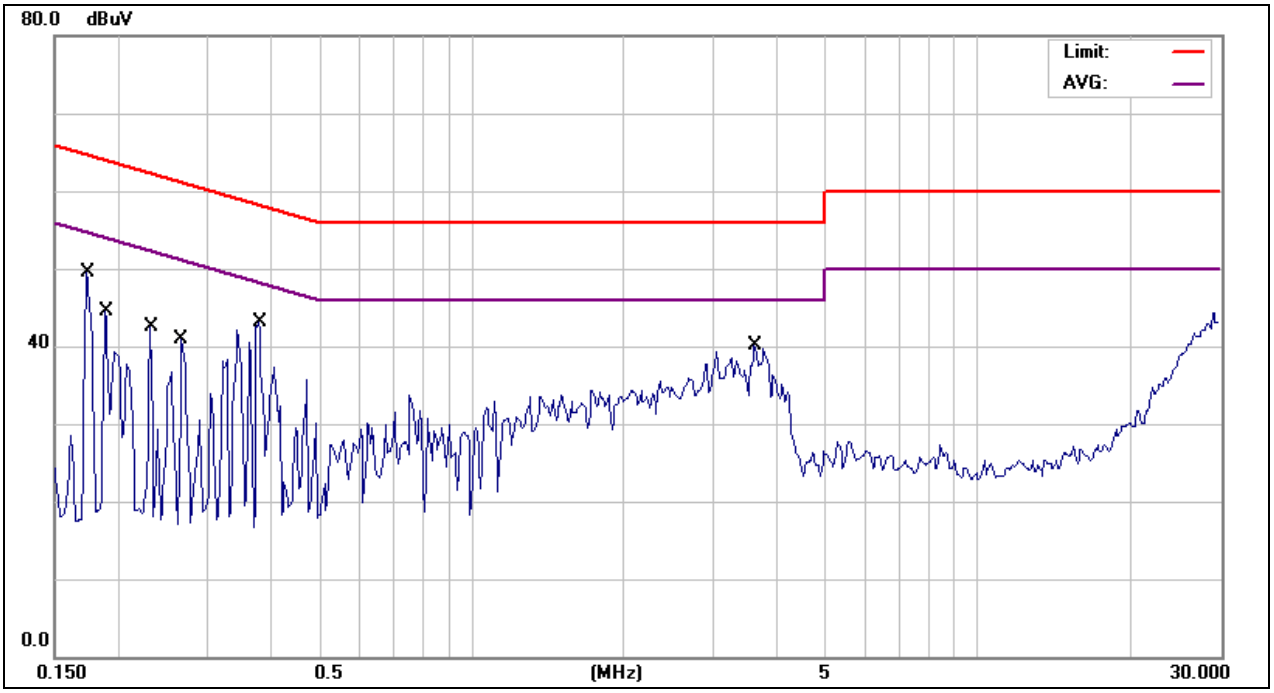
Neutral

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV	Limit dBµV	Over Limit dB	Detector
1	0.1737	38.92	9.67	48.59	64.78	-16.19	QP
2	0.1737	17.97	9.67	27.64	54.78	-27.14	AVG
3	★0.1890	38.37	9.67	48.04	64.08	-16.04	QP
4	0.1890	20.72	9.67	30.39	54.08	-23.69	AVG
5	0.2314	29.98	9.67	39.65	62.40	-22.75	QP
6	0.2314	8.02	9.67	17.69	52.40	-34.71	AVG
7	0.2667	29.63	9.67	39.30	61.22	-21.92	QP
8	0.2667	13.74	9.67	23.41	51.22	-27.81	AVG
9	0.3817	28.40	9.67	38.07	58.24	-20.17	QP
10	0.3817	12.53	9.67	22.20	48.24	-26.04	AVG
11	3.6342	23.28	9.78	33.06	56.00	-22.94	QP
12	3.6342	12.43	9.78	22.21	46.00	-23.79	AVG

Remarks :

1. All readings are Quasi-peak and Average values.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = L.I.S.N. insertion loss + cable loss
5. " ★ " means that this data is the worst case measurement level.
6. The measurement uncertainty is 3.93 dB.

Neutral



Remark: 1. The Limit (The red line of the graph indicates the quasi-peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The scan curve indicates peak detector measurement.

4. RADIATION EMISSION DATA

4.1 TEST EQUIPMENT

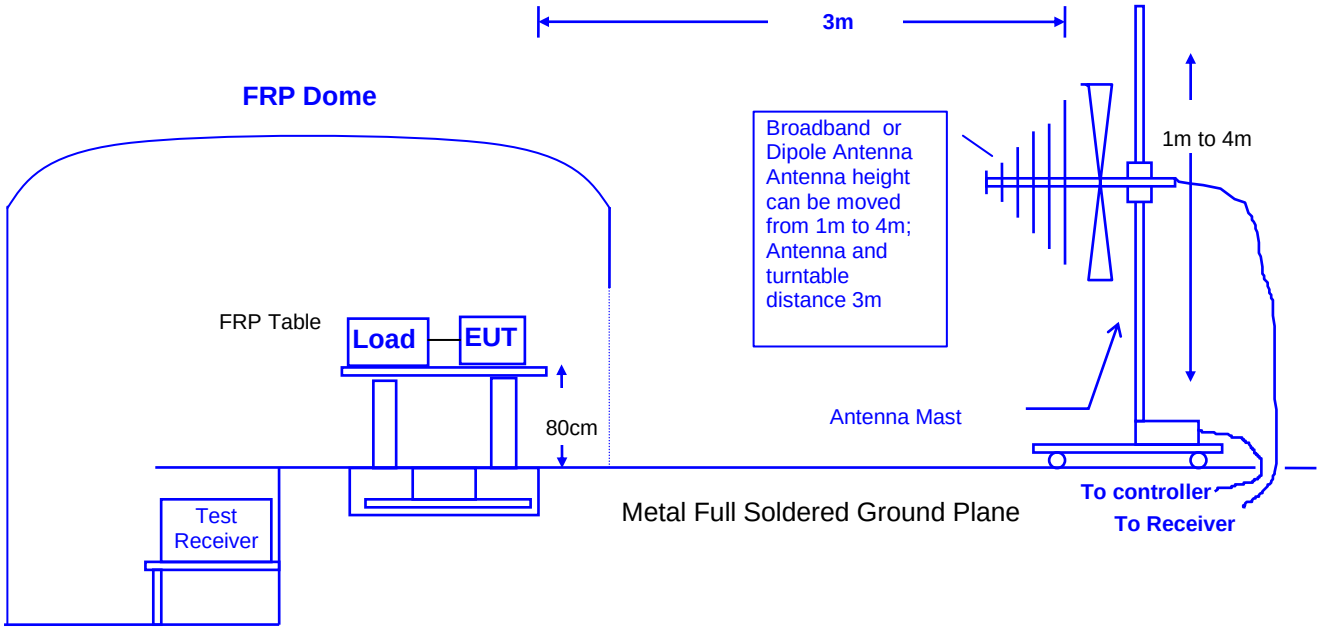
The following test equipments are used during the radiated emission tests:

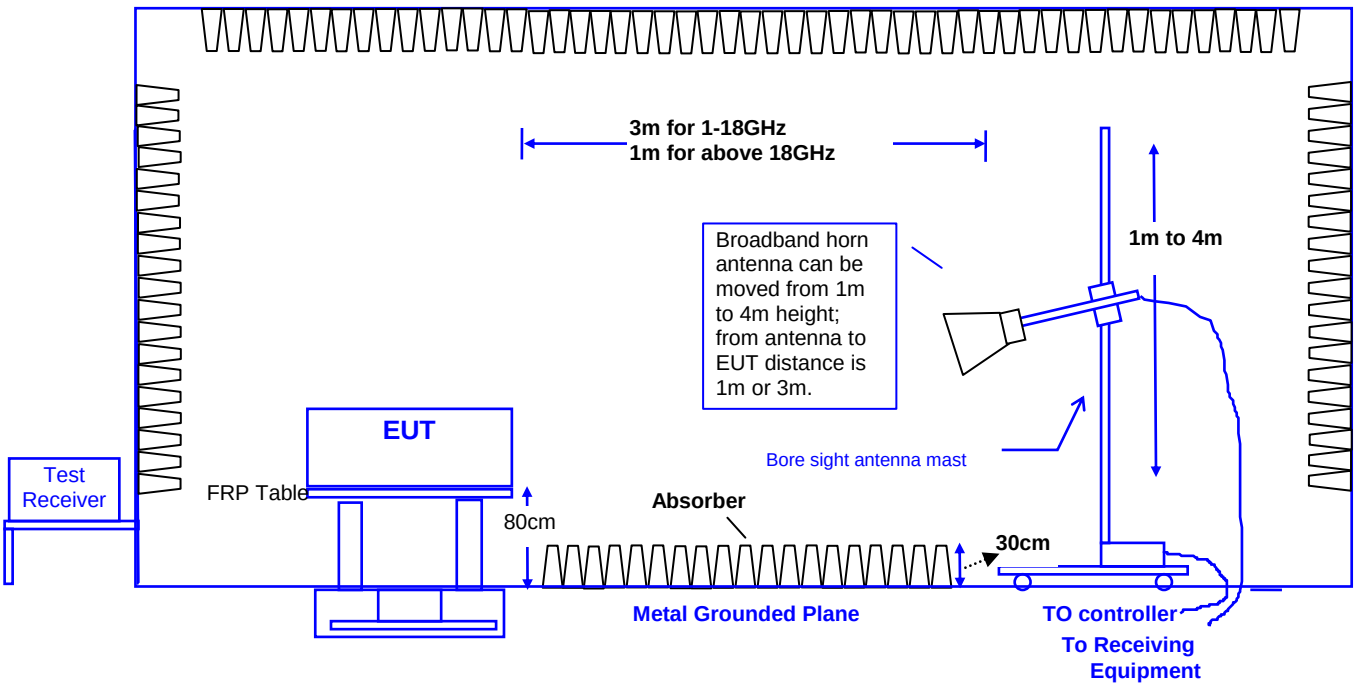
Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	TEST RECEIVER	RS	ESVS10	8421122/001	2014.05.12
2	SPECTRUM	ADVANTEST	U3751	161000226	2015.03.19
3	SPECTRUM	RS	FSU26	200882	2014.09.02
4	PRE-AMPLIFIER	HP	8447D	2944A08273	2014.10.01
5	PRE-AMPLIFIER	HP	8449B	3008A01264	2015.03.09
6	BILOG ANTENNA	SCHAFFNER	CBL6112B	2879	2014.07.02
7	HORN ANTENNA	SCHWARZBECK	BBHA 9120	473	2015.03.16
8	CABLE	GTK	N/A	GTK-E-A358-01	2014.10.14
9	CABLE	INSULATED WIRE INC.	SPS-2801-3940-NPS	03262012	2015.04.08
10	CABLE	SUHNER	SUCOFLEX 104PEA	MY3501/4PEA	2014.10.02
11	Active Loop	EMCO	6507	95101353	2015.01.13
12	BOARD-BAND ANTENNA	SCHWARZBECK	BBHA 9170	BBHA9170164	2015.01.26
13	Software	FARAD	EZ-EMC	2A1.1(USB)	N/A

Note: 1. All equipments are calibrated and will be valid only for a period of 1 year.

2. The test was performed at GTK Chamber A6 (Under 1GHz) and Chamber A6 (Above 1GHz).

4.2 OPEN TEST SITE SETUP DIAGRAM





Note: This is a representative setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all the other setup conditions remain the same.

4.3 RADIATED EMISSION LIMIT

In any 100KHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209 (a) (see Section 15.205(c)).

☒**FCC 15.209 Limit**

Frequency	Distance	Field Strength	
MHz	Meter	μV/M	dBμV/M
0.009 – 0.490	300	2400/F (KHz)	97.0 – 27.6
0.490 – 1.705	30	24000/F (KHz)	67.6 – 45.9
1.705 – 30.0	30	30	59.0
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0

Note：The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.

4.4 TEST CONFIGURATION

The equipment which is listed 4.1 are installed on Radiated Emission Test to meet the Commission requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 4.2, was placed on a non-conductive table whose total height equaled 80 cm. This table can be rotated 360 degree. The measurement antenna was mounted to a non-conductive mast capable of moving the antenna vertically. Antenna height was varied from 1 meter to 4 meters and the system under test was rotated from 0 degree through 360 degrees relative to the antenna position and polarization (Horizontal and Vertical). Also the I/O cable position was investigated to find the maximum emission condition.

4.5 OPERATING CONDITION OF EUT

Same as section 2.9.

4.6 RADIATED EMISSION DATA

The measurement range of radiated emission, which is from **9 kHz to 10th Harmonics,** was investigated. All readings below 1GHz are quasi-peak values with a resolution bandwidth of 120 KHz. Above 1GHz are peak and avg. values with a resolution bandwidth of 1MHz. The initial step in collecting radiated emission data is a spectrum analyzer peak scans of the measurement range for all the test modes and then use test receiver for final measurement. Then the worst modes were reported the following data pages.

The measured results between 9kHz and 30MHz are 20dB lower than the allowed limit already, therefore the test results are not recorded in this report.

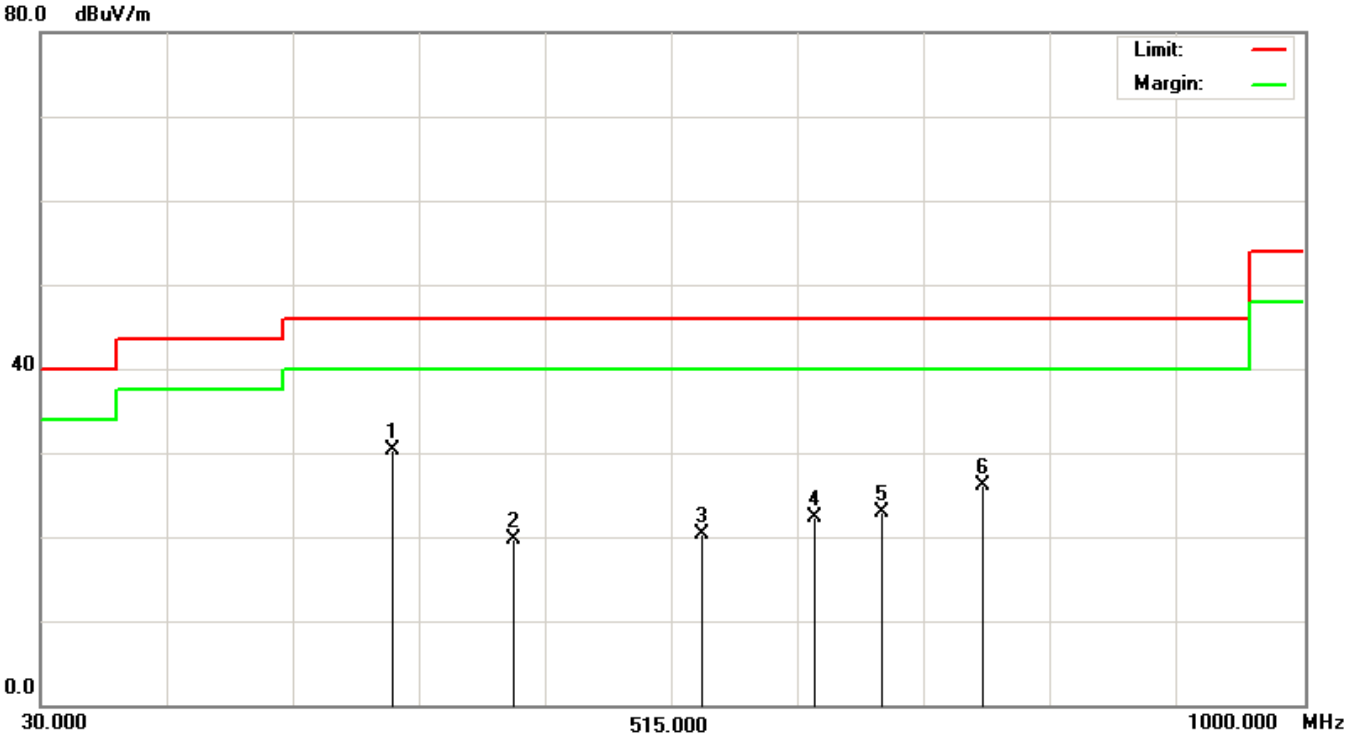
4.7 RADIATED EMISSIONS MEASUREMENT RESULTS

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBμV	Factor dB	Measurement dBμV/m	Limit dBμV/m	Over Limit dB	Detector
1	★300.4808	43.57	-13.34	30.23	46.00	-15.77	QP
2	393.7500	30.50	-10.80	19.70	46.00	-26.30	QP
3	538.3173	27.57	-7.28	20.29	46.00	-25.71	QP
4	625.3686	27.85	-5.51	22.34	46.00	-23.66	QP
5	676.6667	27.80	-4.91	22.89	46.00	-23.11	QP
6	754.3910	29.62	-3.60	26.02	46.00	-19.98	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



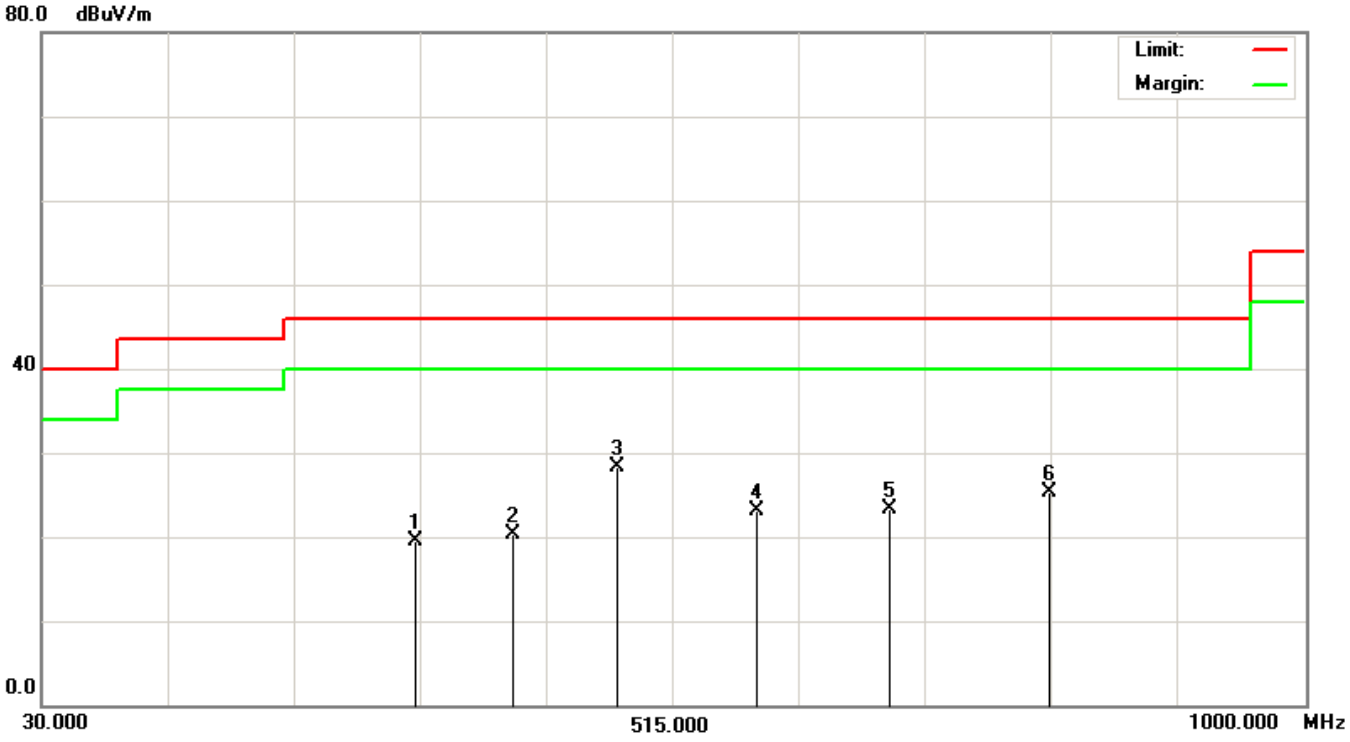
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	317.5801	32.44	-12.87	19.57	46.00	-26.43	QP
2	392.1955	31.12	-10.84	20.28	46.00	-25.72	QP
3	★473.0288	37.14	-8.86	28.28	46.00	-17.72	QP
4	580.2885	29.35	-6.28	23.07	46.00	-22.93	QP
5	682.8846	28.10	-4.83	23.27	46.00	-22.73	QP
6	805.6891	27.90	-2.66	25.24	46.00	-20.76	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



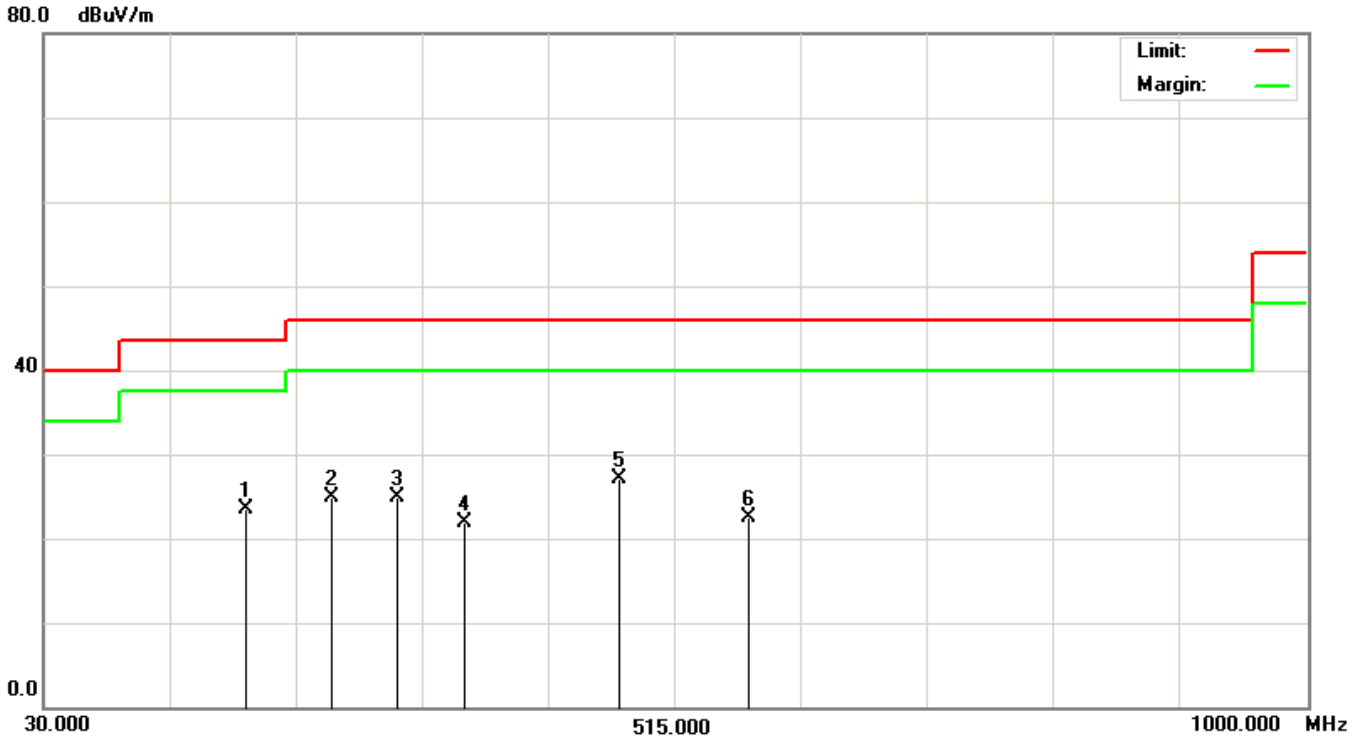
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	185.4487	39.87	-16.33	23.54	43.50	-19.96	QP
2	252.2917	40.16	-15.19	24.97	46.00	-21.03	QP
3	302.0353	38.17	-13.29	24.88	46.00	-21.12	QP
4	353.3333	33.84	-11.90	21.94	46.00	-24.06	QP
5	★473.0288	35.98	-8.86	27.12	46.00	-18.88	QP
6	572.5160	29.07	-6.47	22.60	46.00	-23.40	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



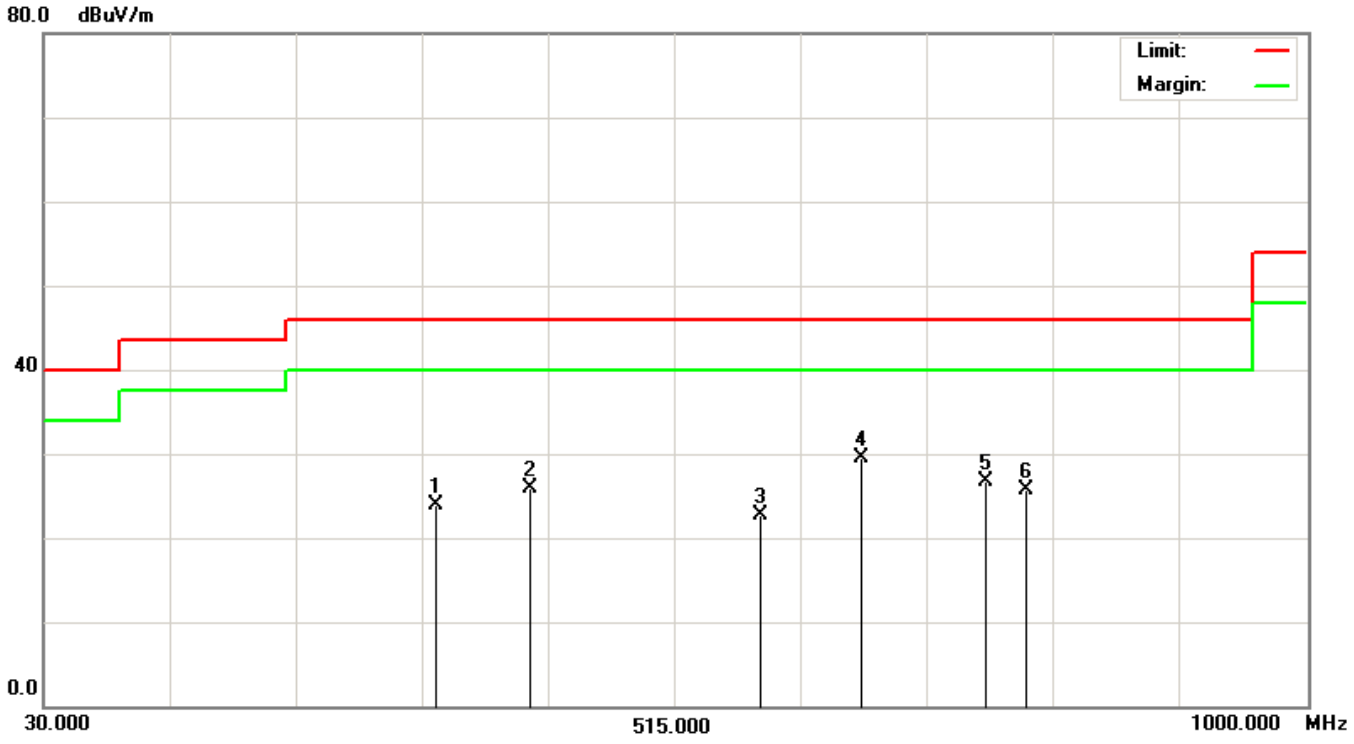
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	331.5705	36.47	-12.49	23.98	46.00	-22.02	QP
2	404.6314	36.39	-10.52	25.87	46.00	-20.13	QP
3	581.8429	29.00	-6.24	22.76	46.00	-23.24	QP
4	★659.5673	34.53	-5.11	29.42	46.00	-16.58	QP
5	754.3910	30.36	-3.60	26.76	46.00	-19.24	QP
6	785.4808	28.63	-3.01	25.62	46.00	-20.38	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



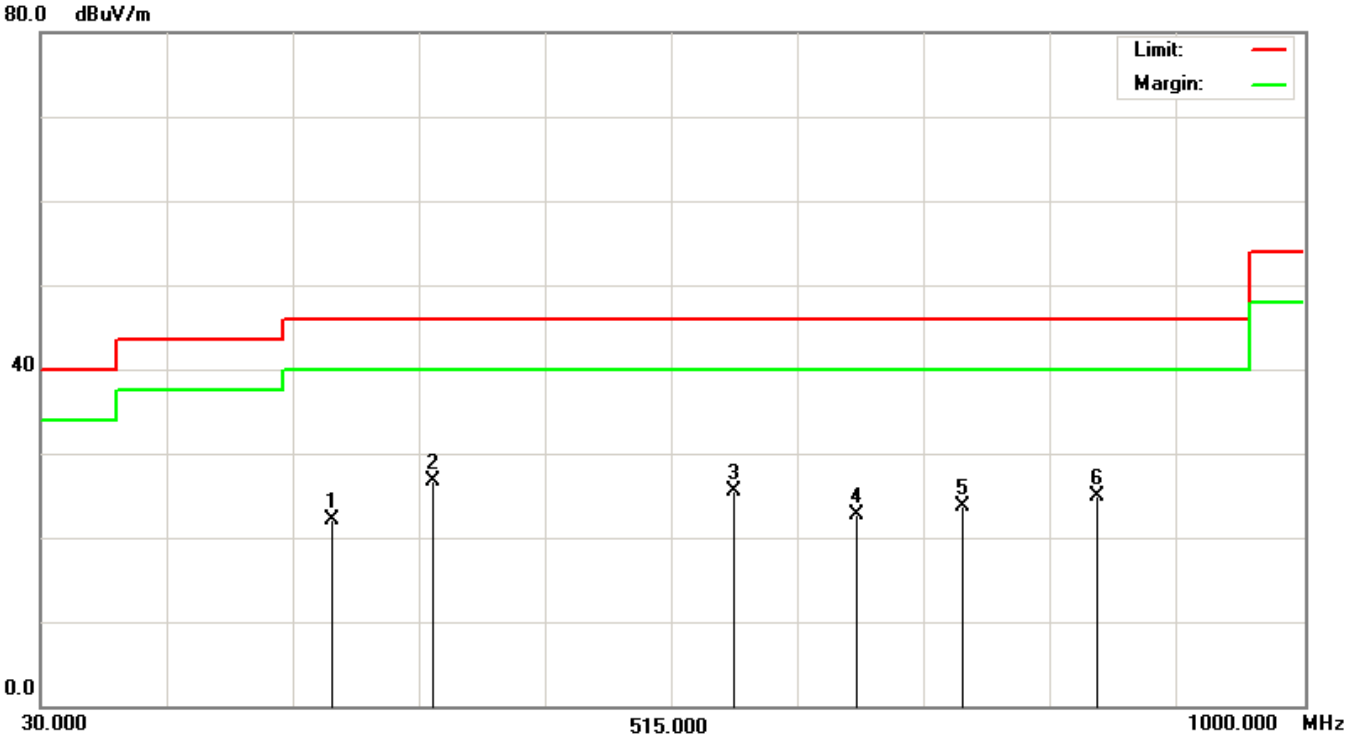
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	253.8462	37.33	-15.13	22.20	46.00	-23.80	QP
2	★331.5705	39.14	-12.49	26.65	46.00	-19.35	QP
3	563.1891	32.26	-6.69	25.57	46.00	-20.43	QP
4	658.0128	27.89	-5.13	22.76	46.00	-23.24	QP
5	738.8462	27.62	-3.90	23.72	46.00	-22.28	QP
6	842.9968	27.09	-2.17	24.92	46.00	-21.08	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



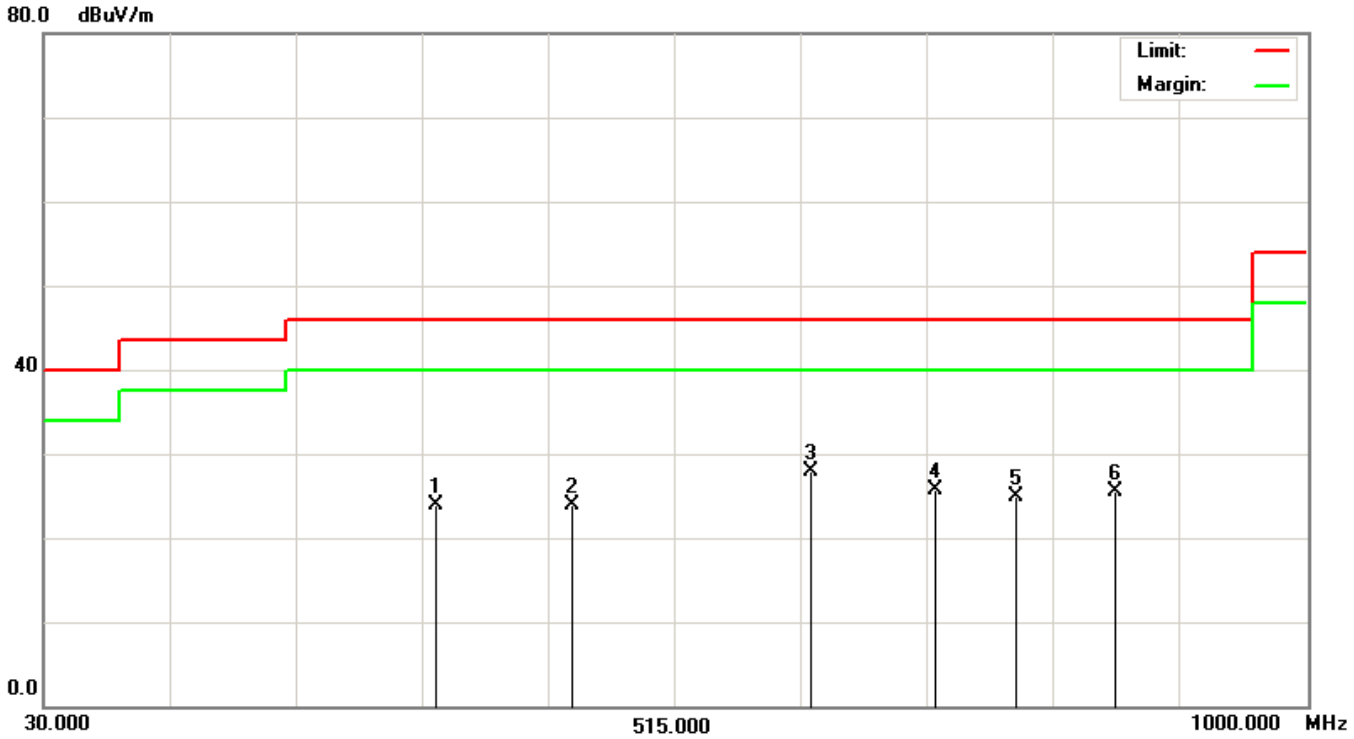
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	331.5705	36.47	-12.49	23.98	46.00	-22.02	QP
2	437.2756	33.64	-9.72	23.92	46.00	-22.08	QP
3	★620.7051	33.42	-5.57	27.85	46.00	-18.15	QP
4	715.5288	29.99	-4.34	25.65	46.00	-20.35	QP
5	777.7083	28.03	-3.16	24.87	46.00	-21.13	QP
6	853.8782	27.59	-2.03	25.56	46.00	-20.44	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



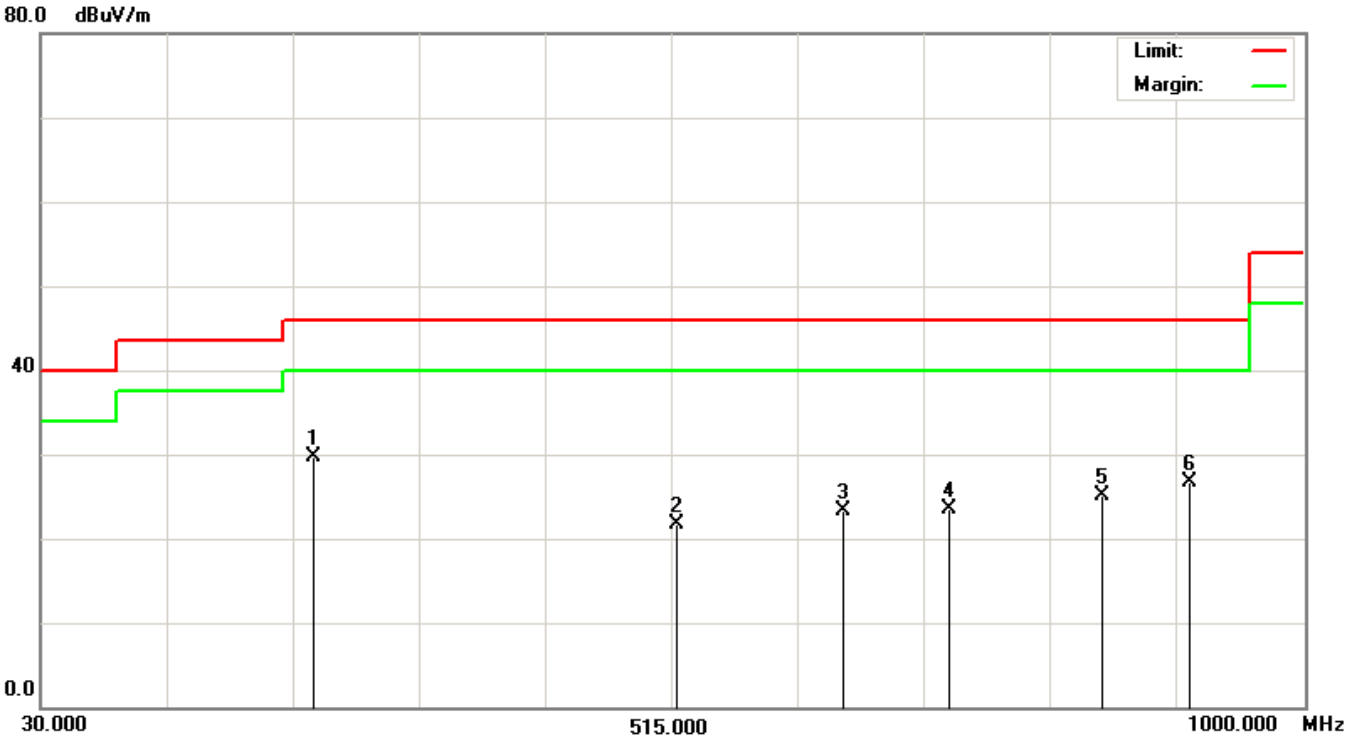
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★239.8558	45.45	-15.65	29.80	46.00	-16.20	QP
2	519.6635	29.53	-7.73	21.80	46.00	-24.20	QP
3	647.1314	28.47	-5.25	23.22	46.00	-22.78	QP
4	729.5192	27.62	-4.07	23.55	46.00	-22.45	QP
5	846.1058	27.20	-2.13	25.07	46.00	-20.93	QP
6	914.5032	27.99	-1.19	26.80	46.00	-19.20	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



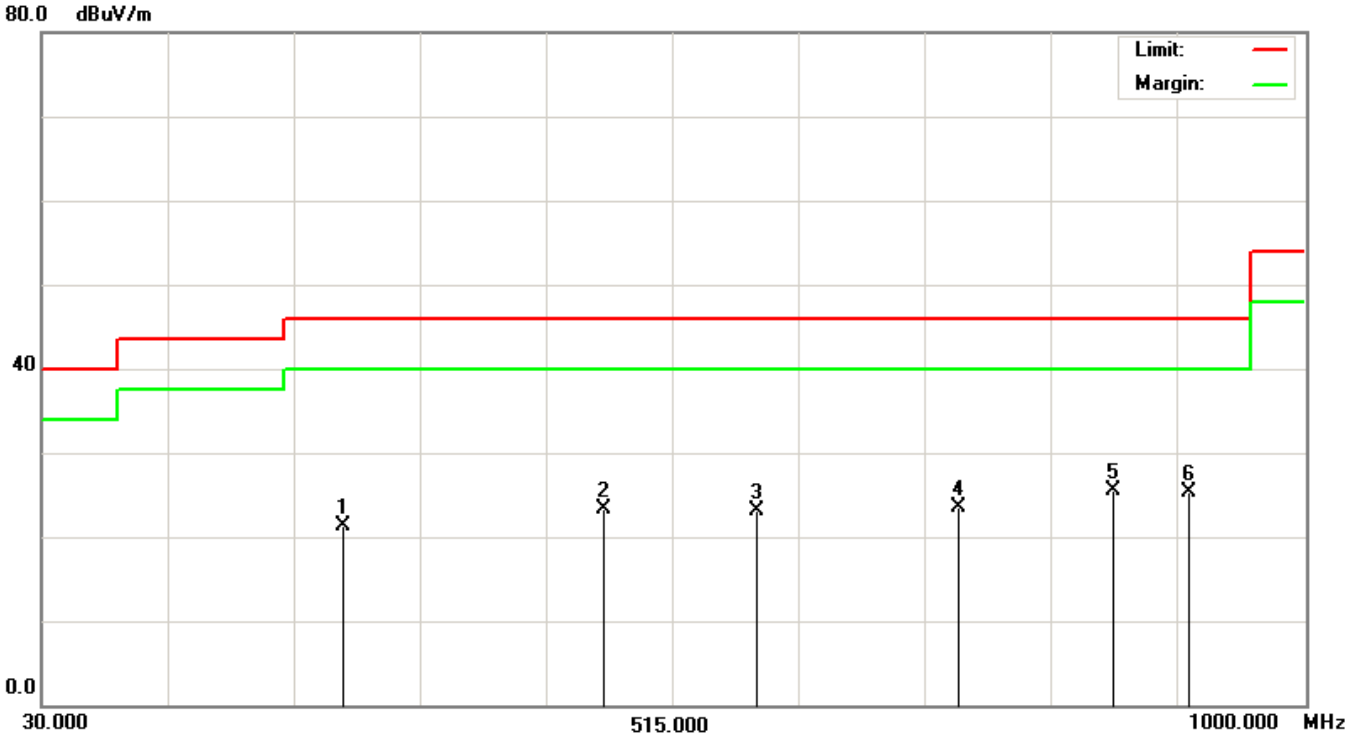
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	261.6186	36.22	-14.83	21.39	46.00	-24.61	QP
2	462.1474	32.45	-9.12	23.33	46.00	-22.67	QP
3	580.2885	29.35	-6.28	23.07	46.00	-22.93	QP
4	735.7372	27.37	-3.95	23.42	46.00	-22.58	QP
5	★853.8782	27.59	-2.03	25.56	46.00	-20.44	QP
6	912.9487	26.51	-1.22	25.29	46.00	-20.71	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



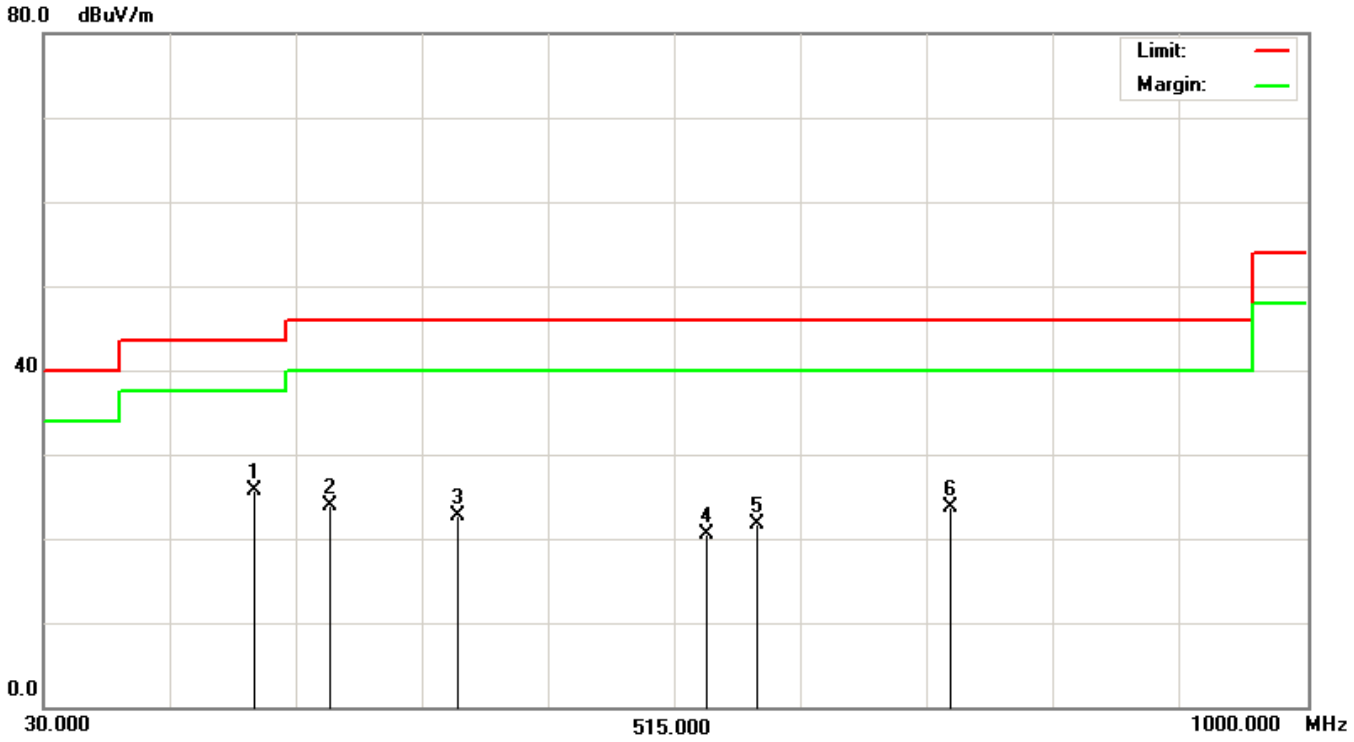
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★191.6667	42.29	-16.67	25.62	43.50	-17.88	QP
2	250.7372	39.12	-15.25	23.87	46.00	-22.13	QP
3	348.6699	34.74	-12.03	22.71	46.00	-23.29	QP
4	539.8718	27.66	-7.25	20.41	46.00	-25.59	QP
5	578.7340	28.02	-6.32	21.70	46.00	-24.30	QP
6	727.9647	27.78	-4.10	23.68	46.00	-22.32	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



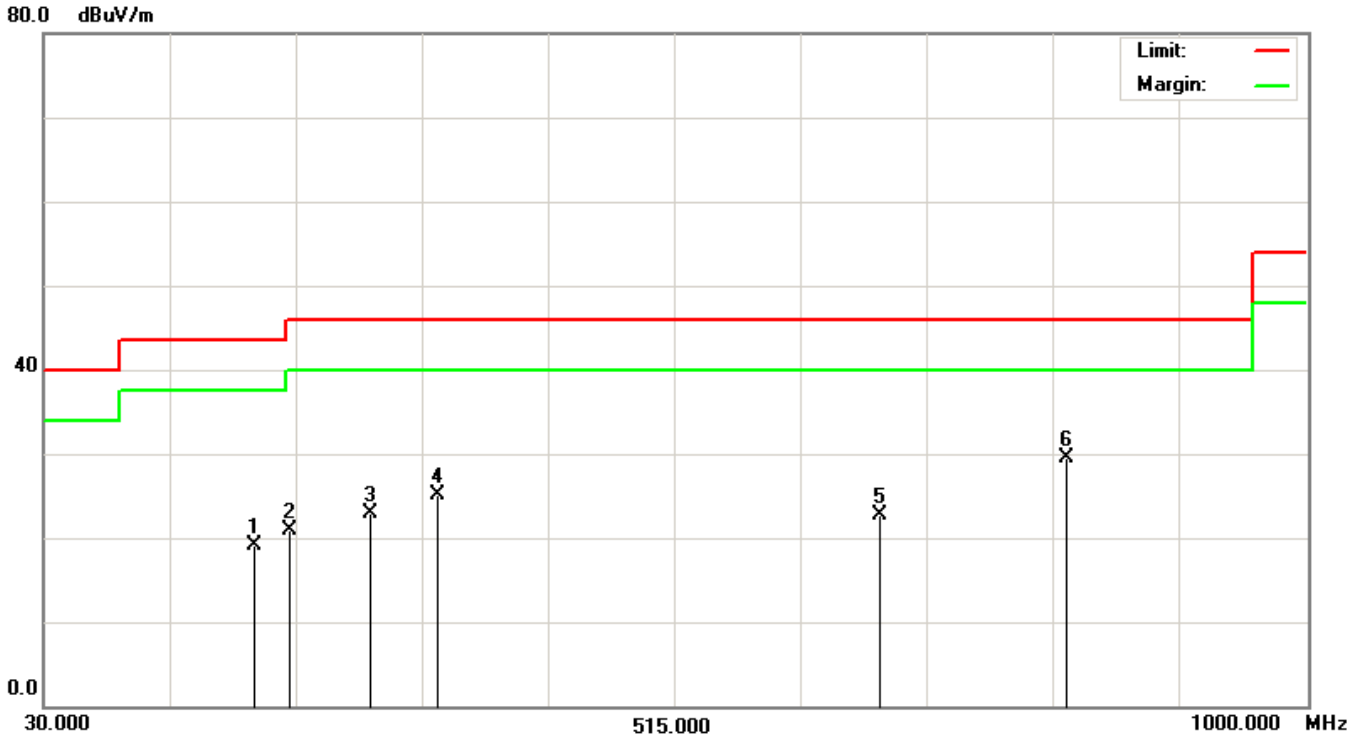
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	191.6667	35.78	-16.67	19.11	43.50	-24.39	QP
2	219.6474	37.23	-16.40	20.83	46.00	-25.17	QP
3	281.8269	36.90	-14.05	22.85	46.00	-23.15	QP
4	333.1250	37.49	-12.45	25.04	46.00	-20.96	QP
5	673.5577	27.64	-4.94	22.70	46.00	-23.30	QP
6	★816.5705	32.11	-2.52	29.59	46.00	-16.41	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



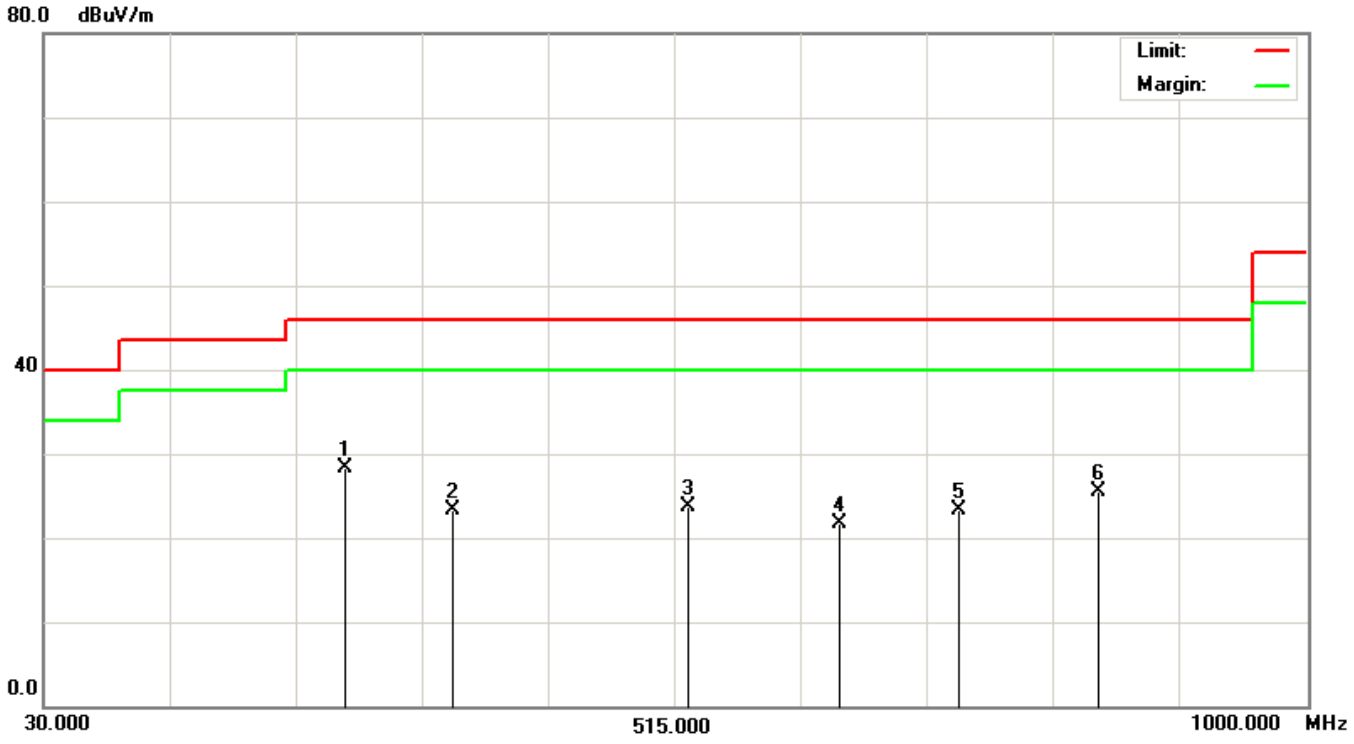
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π /4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★261.6186	43.05	-14.83	28.22	46.00	-17.78	QP
2	345.5609	35.42	-12.11	23.31	46.00	-22.69	QP
3	525.8814	31.30	-7.58	23.72	46.00	-22.28	QP
4	642.4679	27.05	-5.31	21.74	46.00	-24.26	QP
5	734.1827	27.23	-3.98	23.25	46.00	-22.75	QP
6	841.4423	27.64	-2.19	25.45	46.00	-20.55	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 4.61 dB.



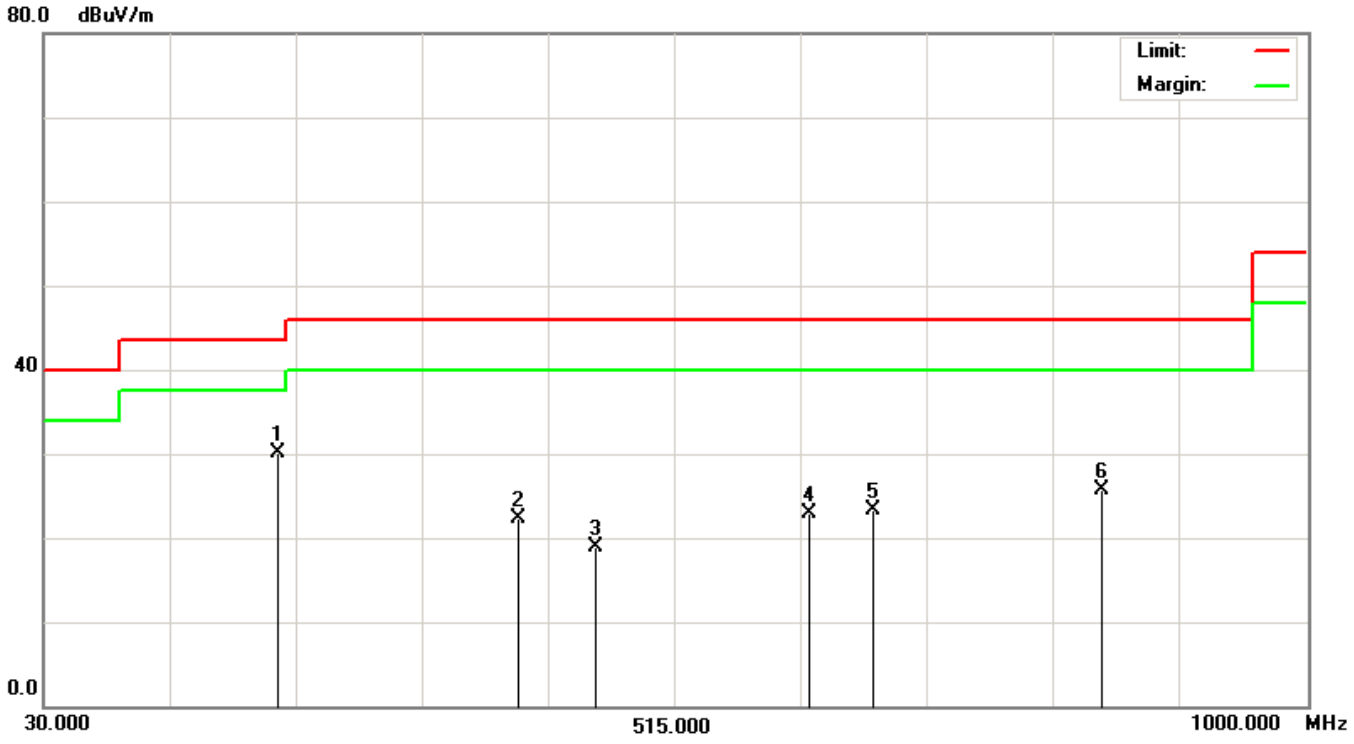
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★210.3205	46.85	-16.74	30.11	43.50	-13.39	QP
2	395.3045	33.09	-10.76	22.33	46.00	-23.67	QP
3	454.3750	28.20	-9.31	18.89	46.00	-27.11	QP
4	619.1506	28.46	-5.58	22.88	46.00	-23.12	QP
5	668.8942	28.34	-5.00	23.34	46.00	-22.66	QP
6	844.5513	27.91	-2.15	25.76	46.00	-20.24	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



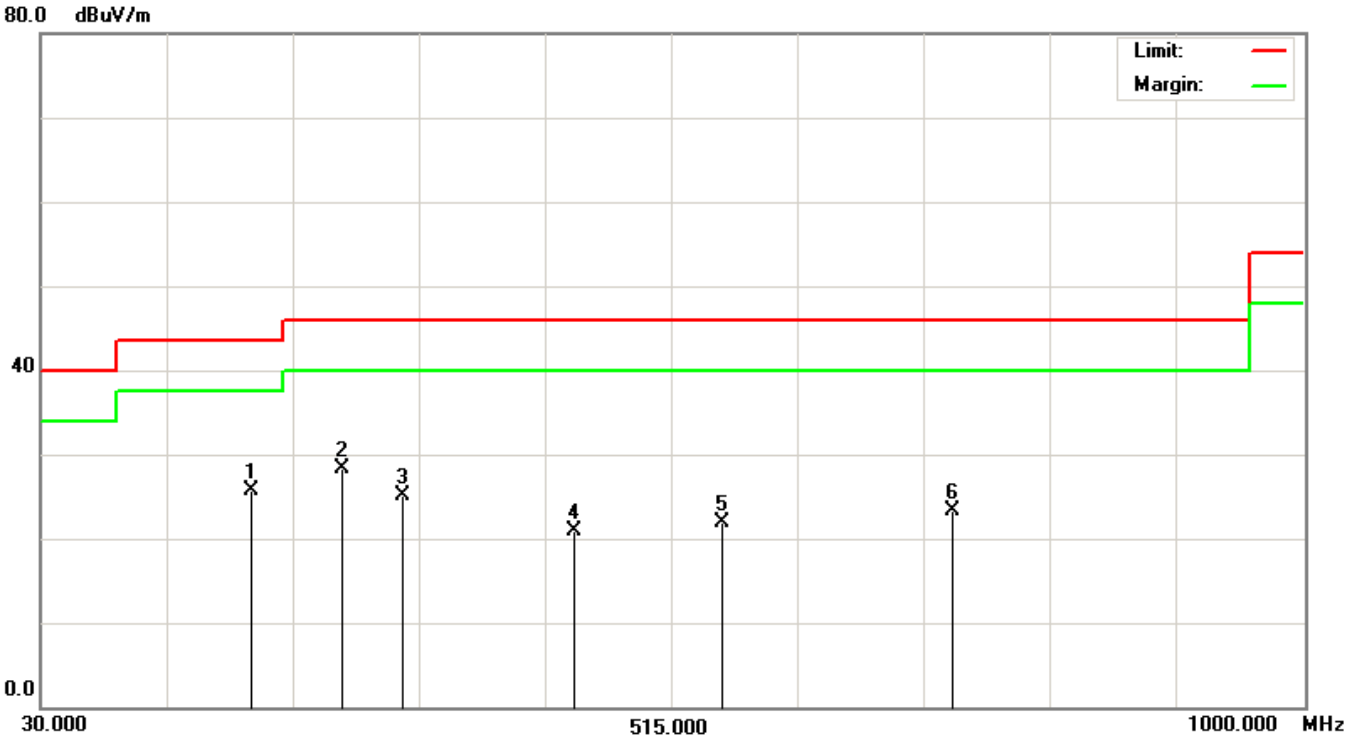
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	191.6667	42.29	-16.67	25.62	43.50	-17.88	QP
2	★261.6186	43.05	-14.83	28.22	46.00	-17.78	QP
3	308.2532	38.16	-13.13	25.03	46.00	-20.97	QP
4	440.3846	30.47	-9.65	20.82	46.00	-25.18	QP
5	553.8622	28.74	-6.91	21.83	46.00	-24.17	QP
6	731.0737	27.34	-4.04	23.30	46.00	-22.70	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



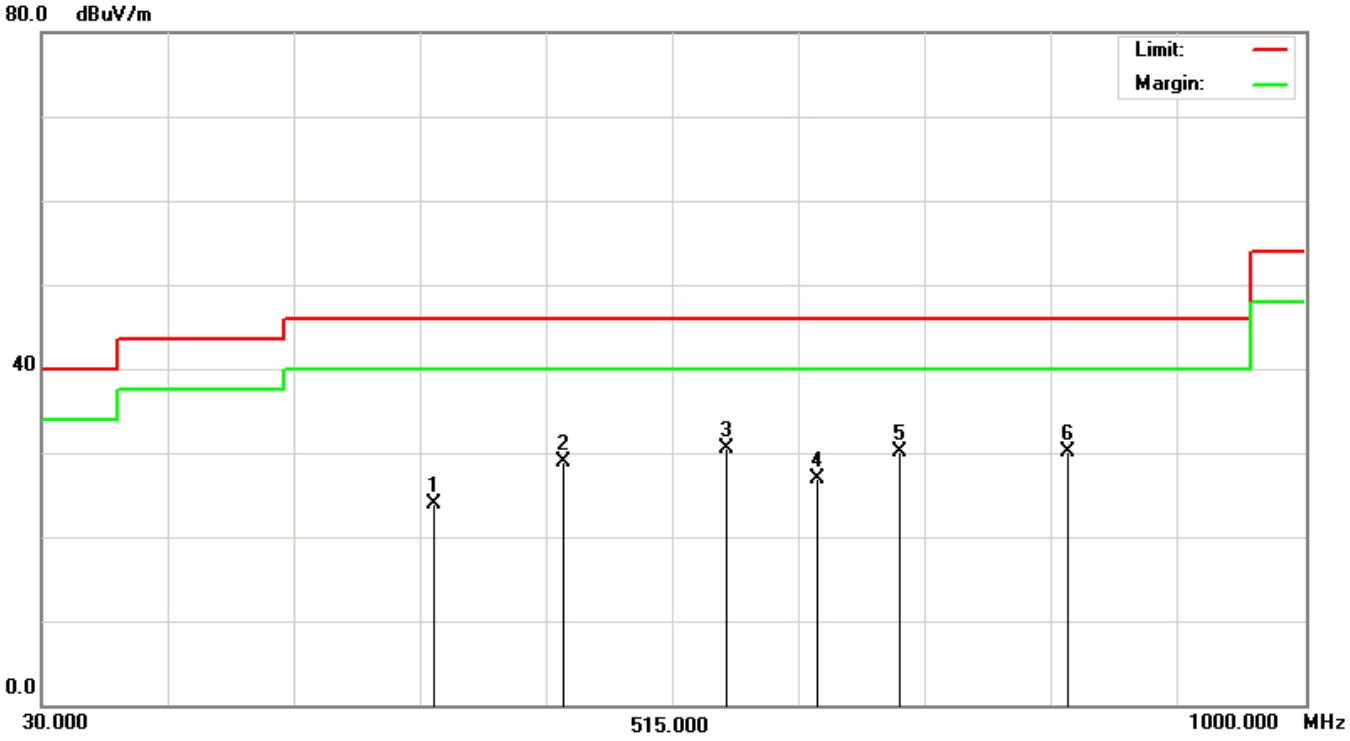
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	331.5705	36.47	-12.49	23.98	46.00	-22.02	QP
2	431.0577	38.79	-9.88	28.91	46.00	-17.09	QP
3	★556.9712	37.34	-6.84	30.50	46.00	-15.50	QP
4	626.9231	32.35	-5.49	26.86	46.00	-19.14	QP
5	690.6571	34.79	-4.74	30.05	46.00	-15.95	QP
6	819.6795	32.64	-2.48	30.16	46.00	-15.84	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



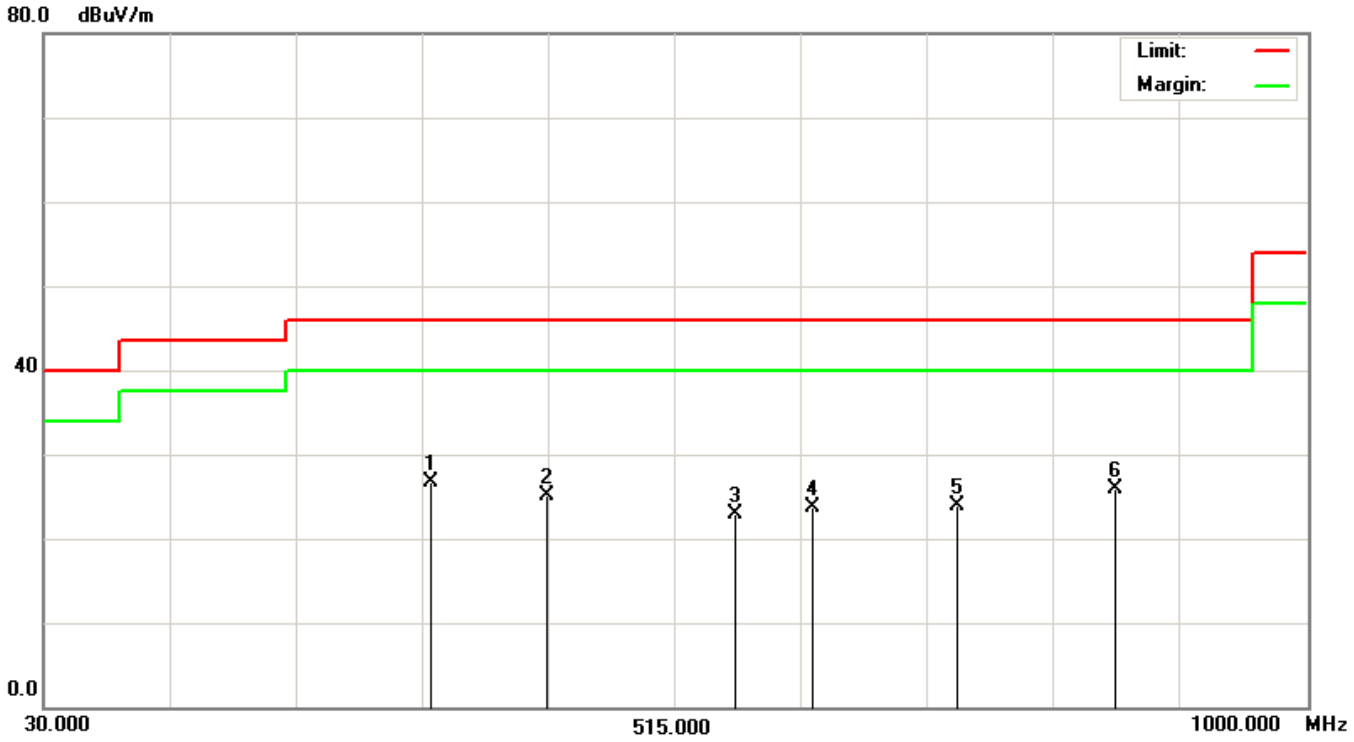
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★328.4615	39.29	-12.58	26.71	46.00	-19.29	QP
2	417.0673	35.40	-10.22	25.18	46.00	-20.82	QP
3	561.6346	29.68	-6.73	22.95	46.00	-23.05	QP
4	622.2596	29.18	-5.55	23.63	46.00	-22.37	QP
5	732.6282	27.82	-4.01	23.81	46.00	-22.19	QP
6	853.8782	27.84	-2.03	25.81	46.00	-20.19	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



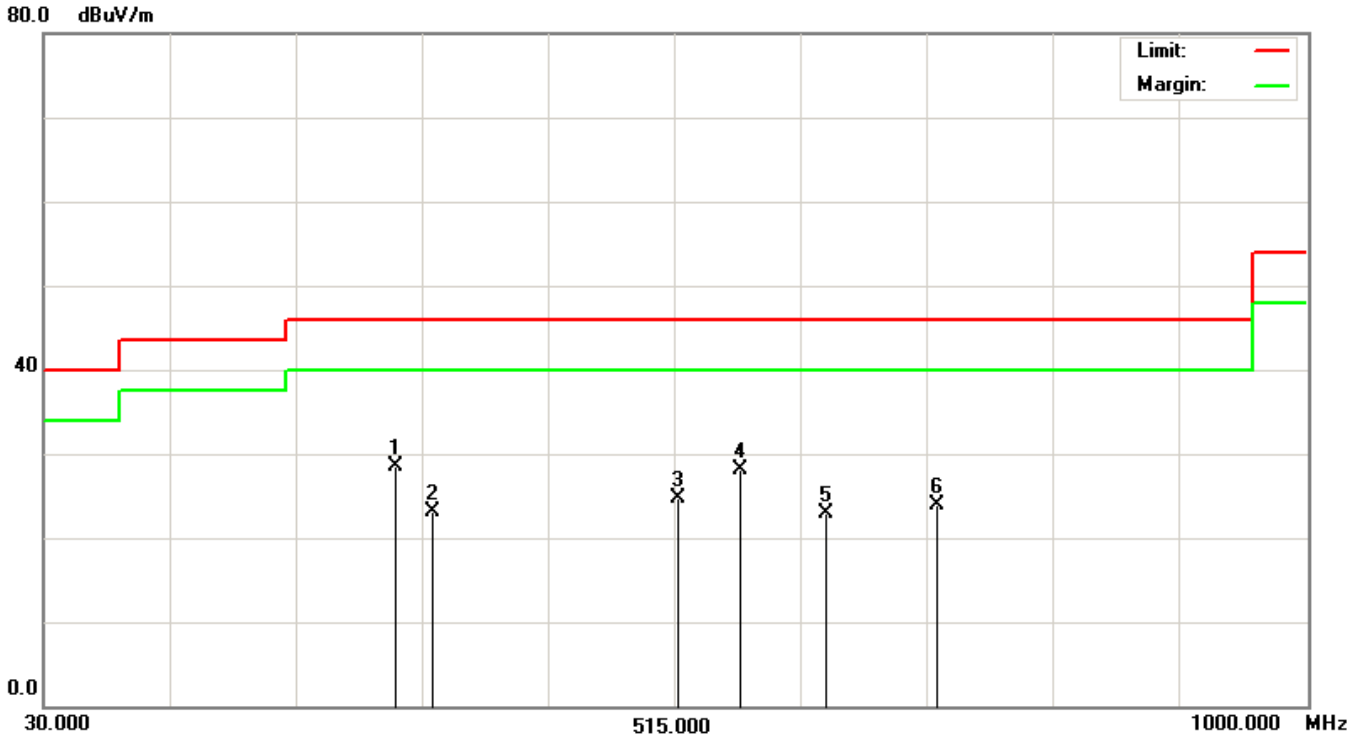
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★300.4808	41.84	-13.34	28.50	46.00	-17.50	QP
2	330.0160	35.66	-12.53	23.13	46.00	-22.87	QP
3	518.1090	32.44	-7.77	24.67	46.00	-21.33	QP
4	566.2981	34.75	-6.62	28.13	46.00	-17.87	QP
5	631.5865	28.33	-5.44	22.89	46.00	-23.11	QP
6	717.0833	28.23	-4.31	23.92	46.00	-22.08	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93dB.



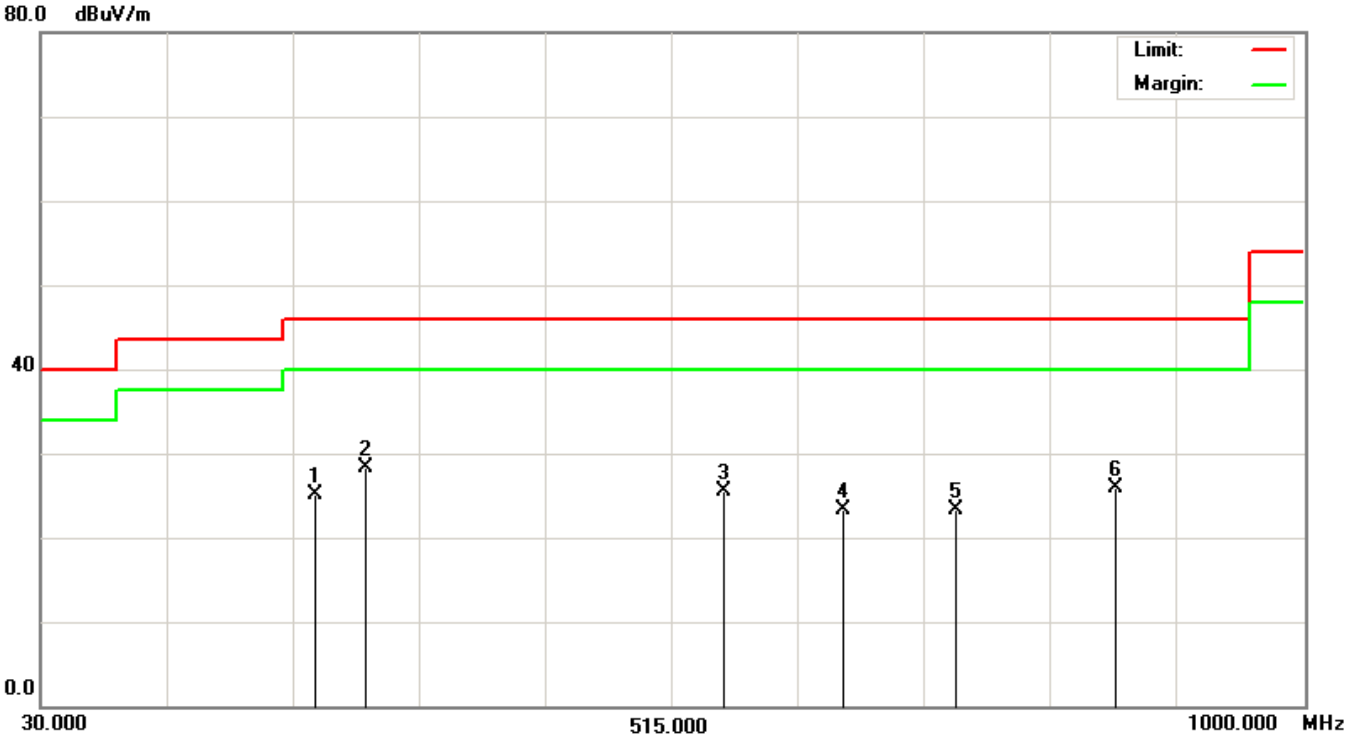
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	241.4103	40.78	-15.60	25.18	46.00	-20.82	QP
2	★280.2724	42.51	-14.11	28.40	46.00	-17.60	QP
3	555.4167	32.32	-6.88	25.44	46.00	-20.56	QP
4	647.1314	28.47	-5.25	23.22	46.00	-22.78	QP
5	734.1827	27.23	-3.98	23.25	46.00	-22.75	QP
6	856.1240	27.81	-2.00	25.81	46.00	-20.19	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 4.61 dB.



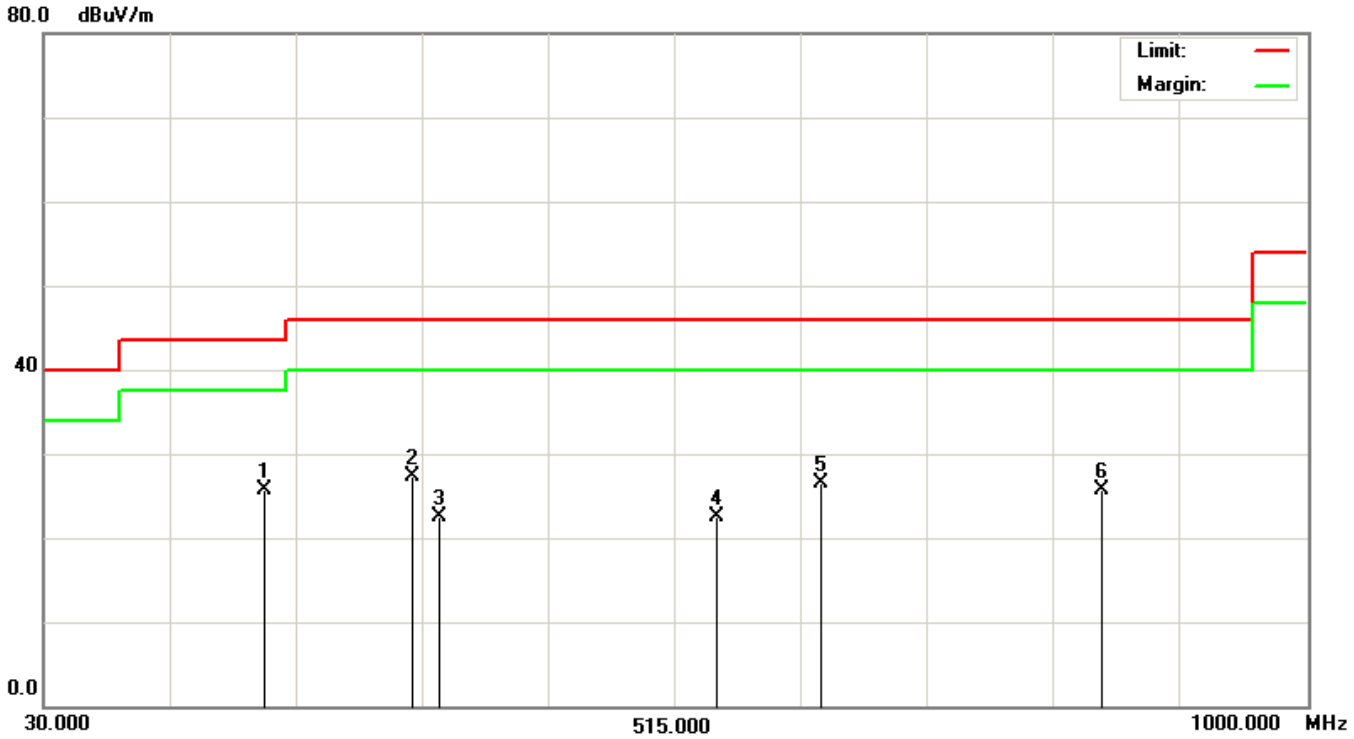
Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

Date of Test	April 28, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	★199.4391	42.84	-17.09	25.75	43.50	-17.75	QP
2	314.4712	40.33	-12.96	27.37	46.00	-18.63	QP
3	334.6795	34.92	-12.41	22.51	46.00	-23.49	QP
4	547.6442	29.48	-7.06	22.42	46.00	-23.58	QP
5	628.4776	31.96	-5.47	26.49	46.00	-19.51	QP
6	844.5513	27.91	-2.15	25.76	46.00	-20.24	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. " ★ " means that this data is the worse case measurement level.
6. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
7. The measurement uncertainty is 3.93 dB.



Remark: 1. The Limit (The red line of the graph indicates the quasi -peak measurements).
2. The Margin (The green line of the graph indicates the 6dB margin).

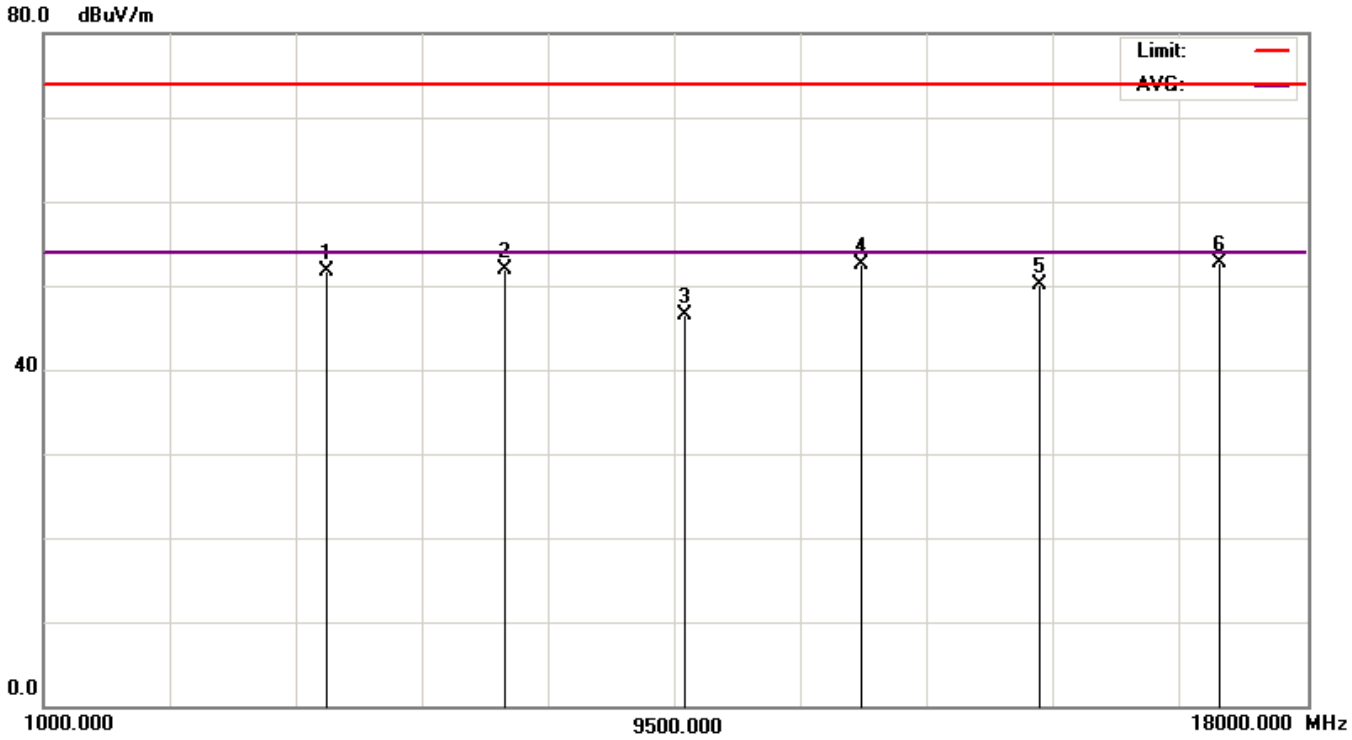
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	42.53	9.12	51.65	74.00	-22.35	peak
2	7206.0000	37.61	14.38	51.99	74.00	-22.01	peak
3	9608.0000	35.59	10.98	46.57	74.00	-27.43	peak
4	12010.0000	36.84	15.70	52.54	74.00	-21.46	peak
5	14412.0000	39.77	10.39	50.16	74.00	-23.84	peak
6	16814.0000	39.13	13.64	52.77	74.00	-21.23	peak
7	19216.0000	50.34	-18.50	31.84	74.00	-42.16	peak
8	21618.0000	46.18	-18.50	27.68	74.00	-46.32	peak
9	24020.0000	45.67	-18.50	27.17	74.00	-46.83	peak

Remarks:

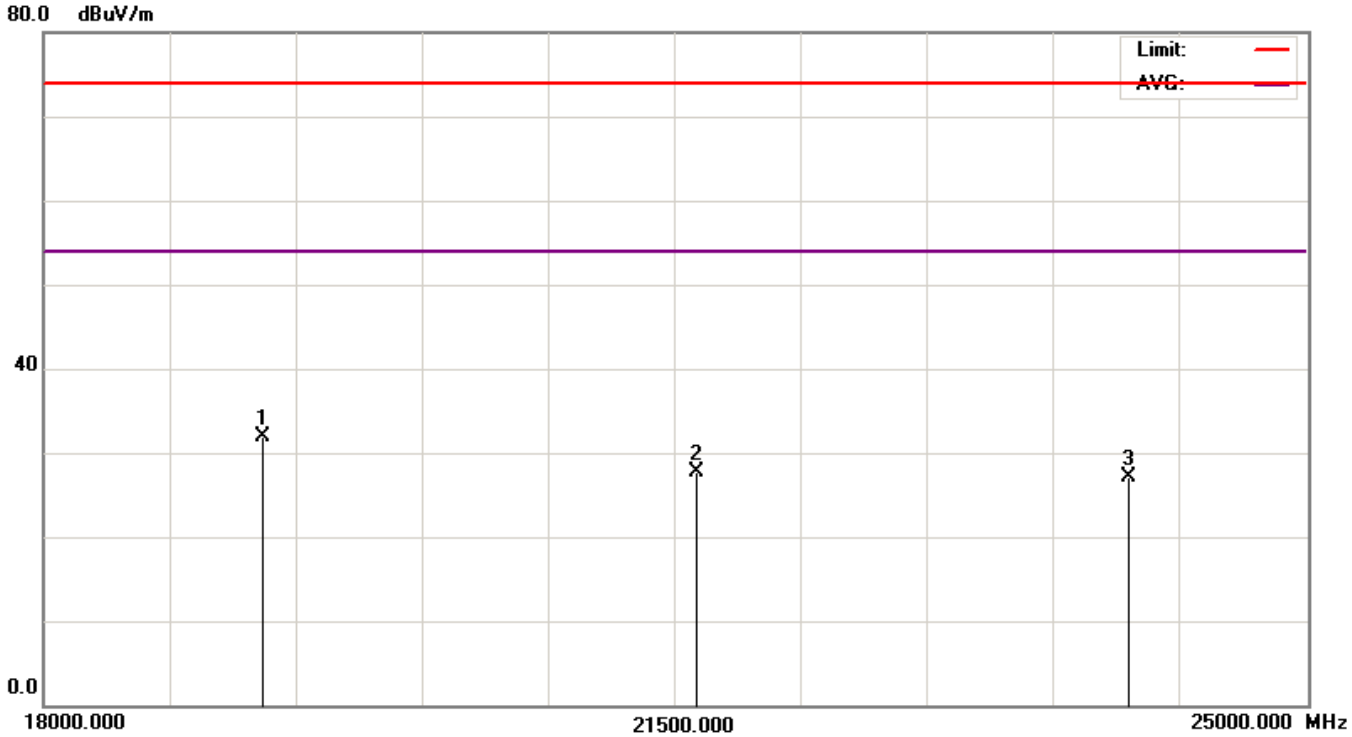
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

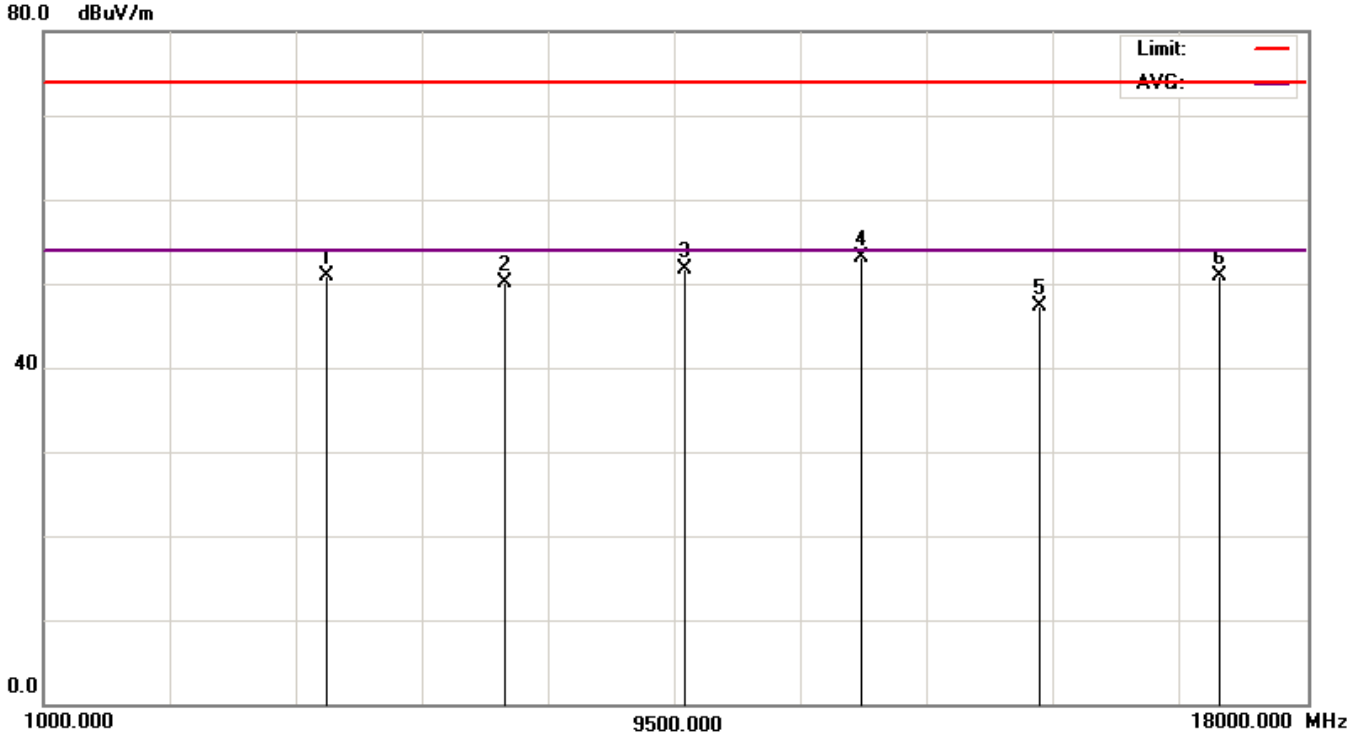
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	41.51	9.42	50.93	74.00	-23.07	peak
2	7206.0000	35.81	14.27	50.08	74.00	-23.92	peak
3	9608.0000	38.64	13.12	51.76	74.00	-22.24	peak
4	12010.0000	35.72	17.37	53.09	74.00	-20.91	peak
5	14412.0000	37.55	9.66	47.21	74.00	-26.79	peak
6	16814.0000	36.29	14.56	50.85	74.00	-23.15	peak
7	19216.0000	44.28	-17.50	26.78	74.00	-47.22	peak
8	21618.0000	45.63	-17.50	28.13	74.00	-45.87	peak
9	24020.0000	46.07	-17.50	28.57	74.00	-45.43	peak

Remarks:

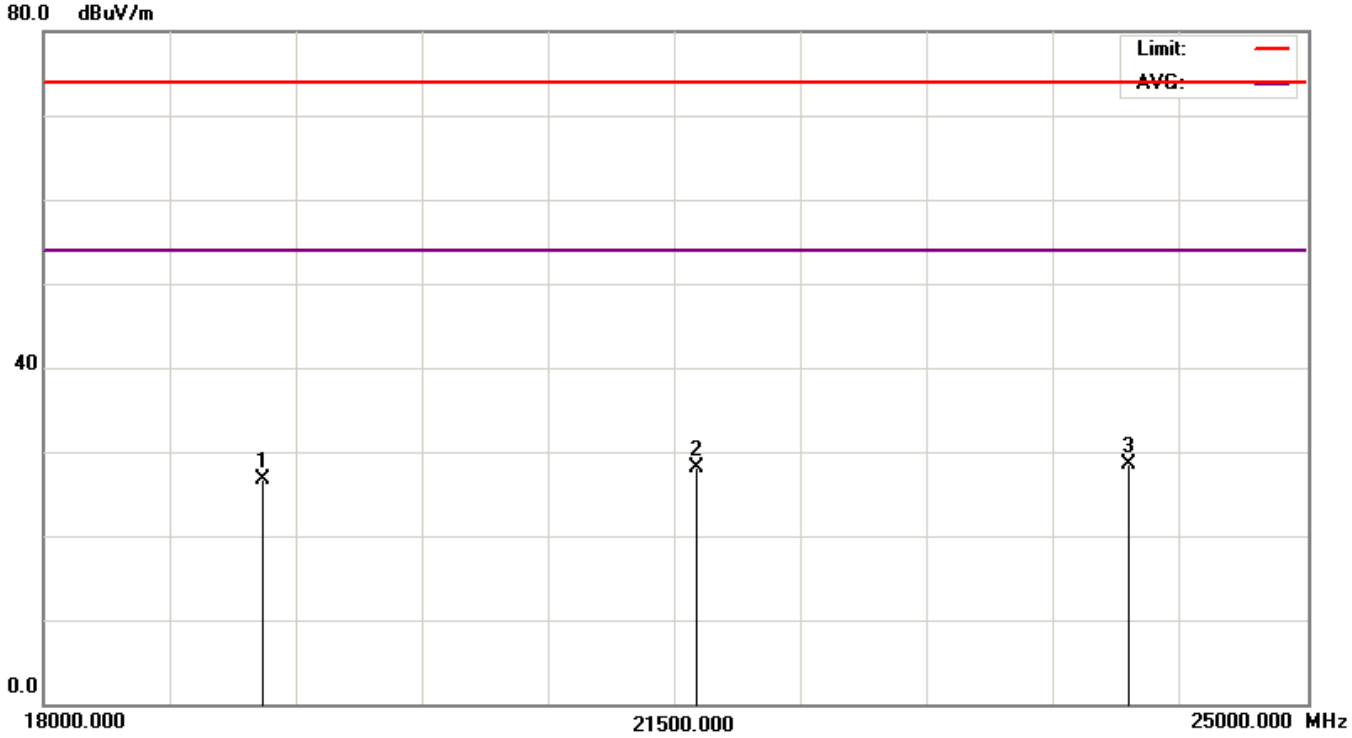
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

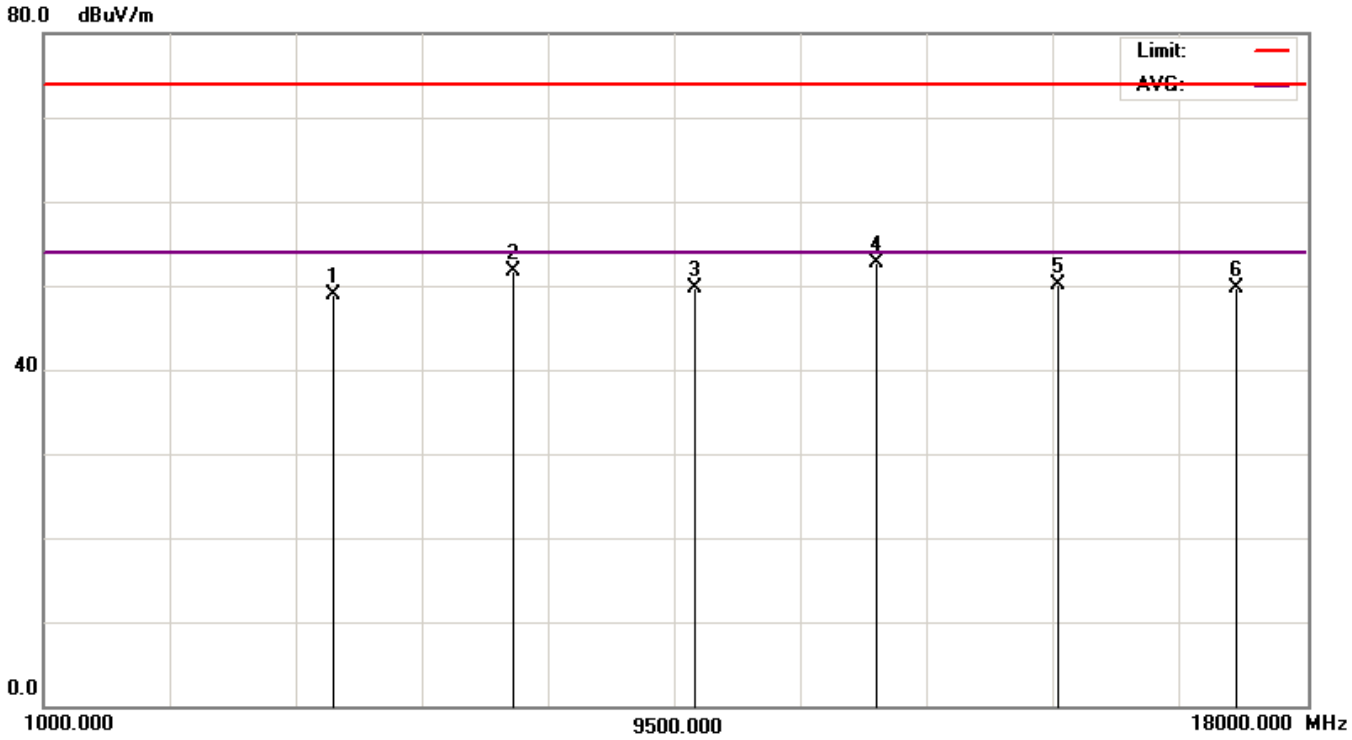
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440Hz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	39.37	9.46	48.83	74.00	-25.17	peak
2	7320.0000	37.05	14.74	51.79	74.00	-22.21	peak
3	9760.0000	38.52	11.24	49.76	74.00	-24.24	peak
4	12200.0000	36.63	16.10	52.73	74.00	-21.27	peak
5	14640.0000	38.57	11.61	50.18	74.00	-23.82	peak
6	17080.0000	35.49	14.24	49.73	74.00	-24.27	peak
7	19520.0000	43.05	-18.50	24.55	74.00	-49.45	peak
8	21960.0000	45.74	-18.50	27.24	74.00	-46.76	peak
9	24400.0000	47.63	-18.50	29.13	74.00	-44.87	peak

Remarks:

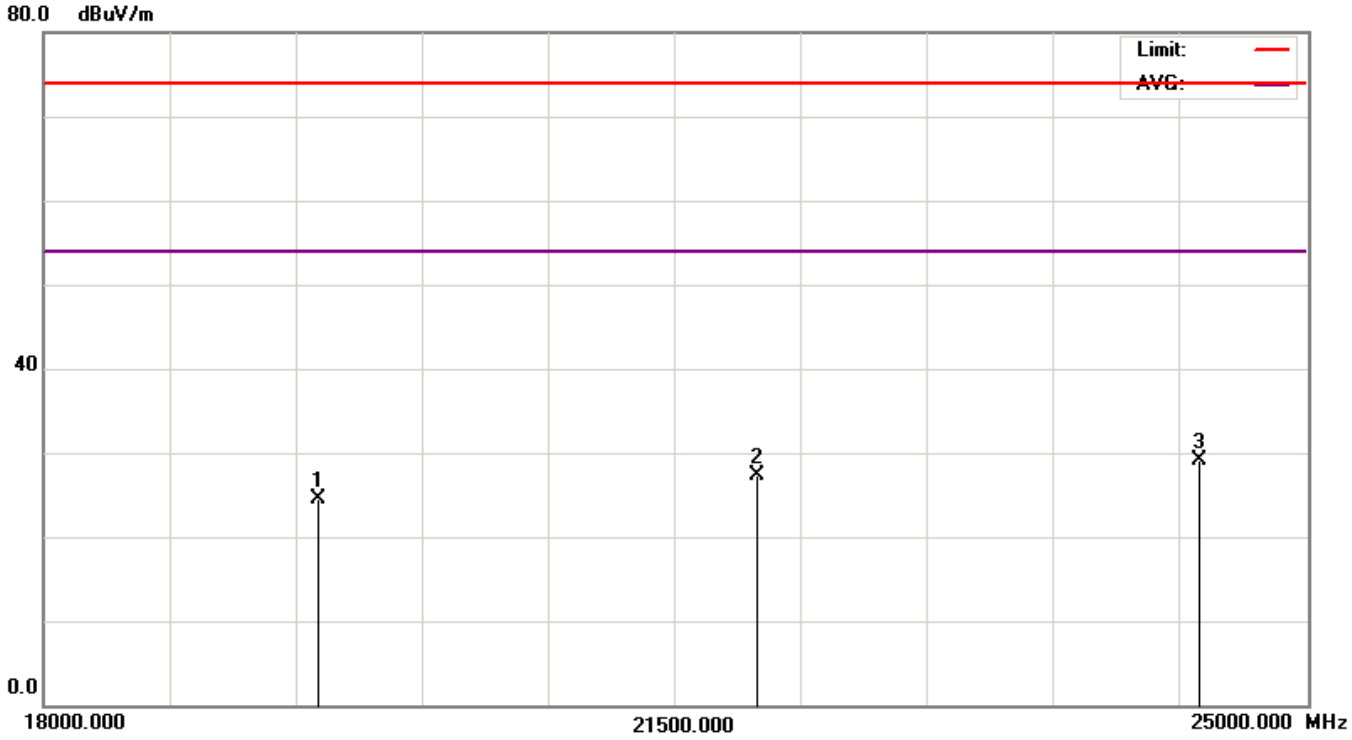
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

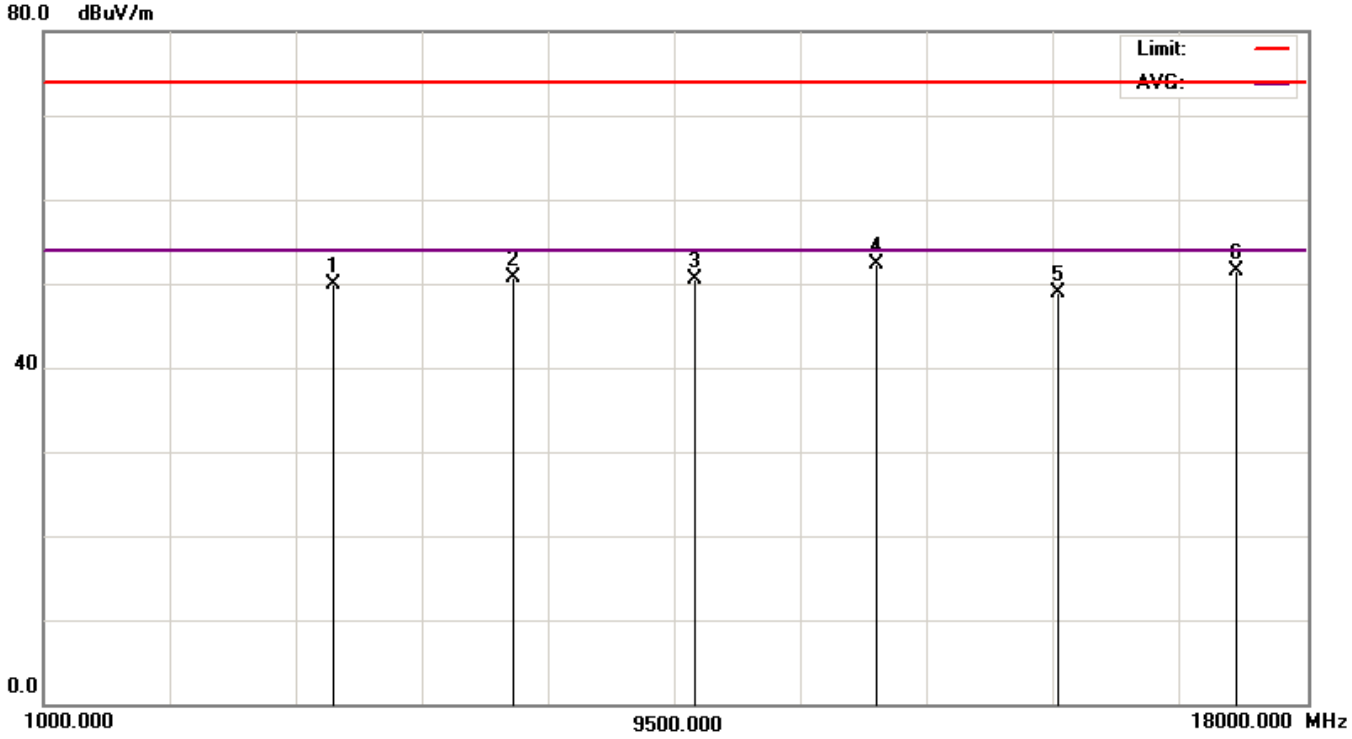
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440z

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	39.58	10.28	49.86	74.00	-24.14	peak
2	7320.0000	36.21	14.51	50.72	74.00	-23.28	peak
3	9760.0000	37.15	13.37	50.52	74.00	-23.48	peak
4	12200.0000	34.54	17.83	52.37	74.00	-21.63	peak
5	14640.0000	38.92	10.03	48.95	74.00	-25.05	peak
6	17080.0000	36.34	15.07	51.41	74.00	-22.59	peak
7	19520.0000	45.03	-17.50	27.53	74.00	-46.47	peak
8	21960.0000	43.51	-17.50	26.01	74.00	-47.99	peak
9	24400.0000	44.85	-17.50	27.35	74.00	-46.65	peak

Remarks:

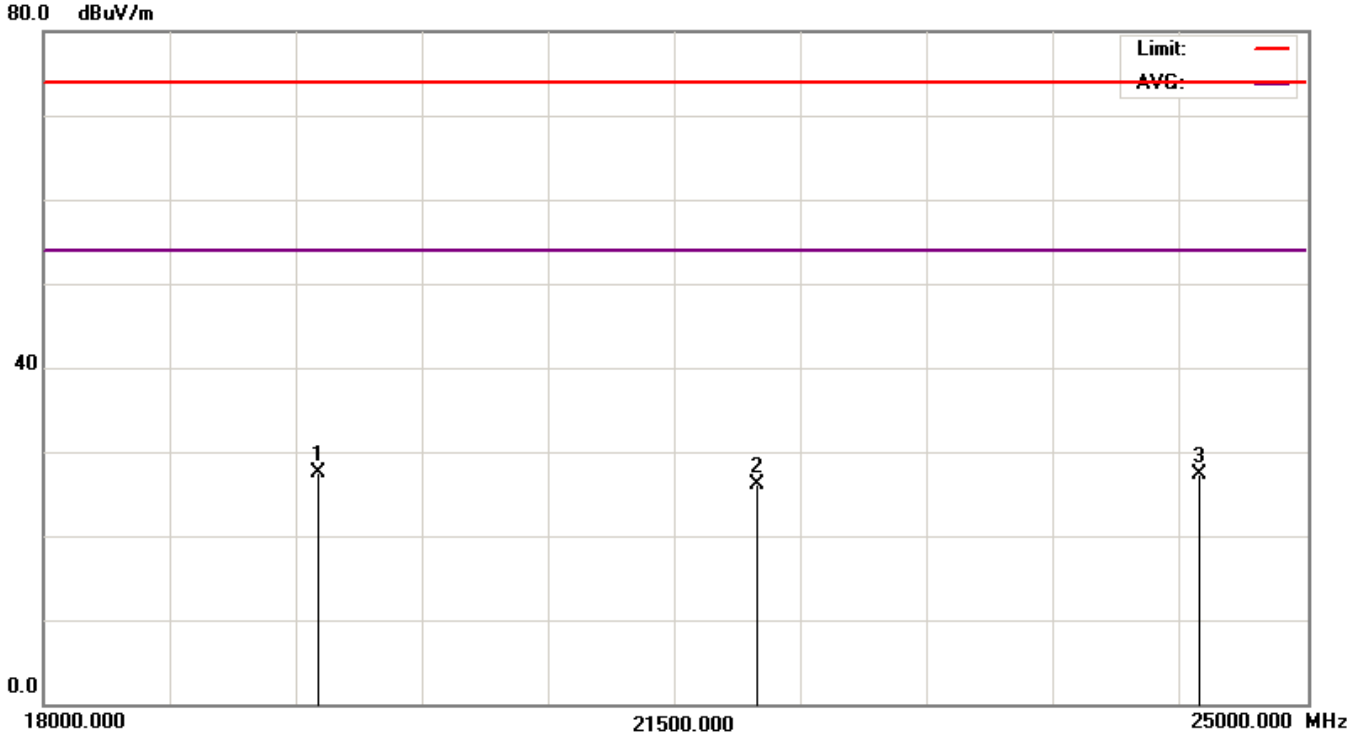
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

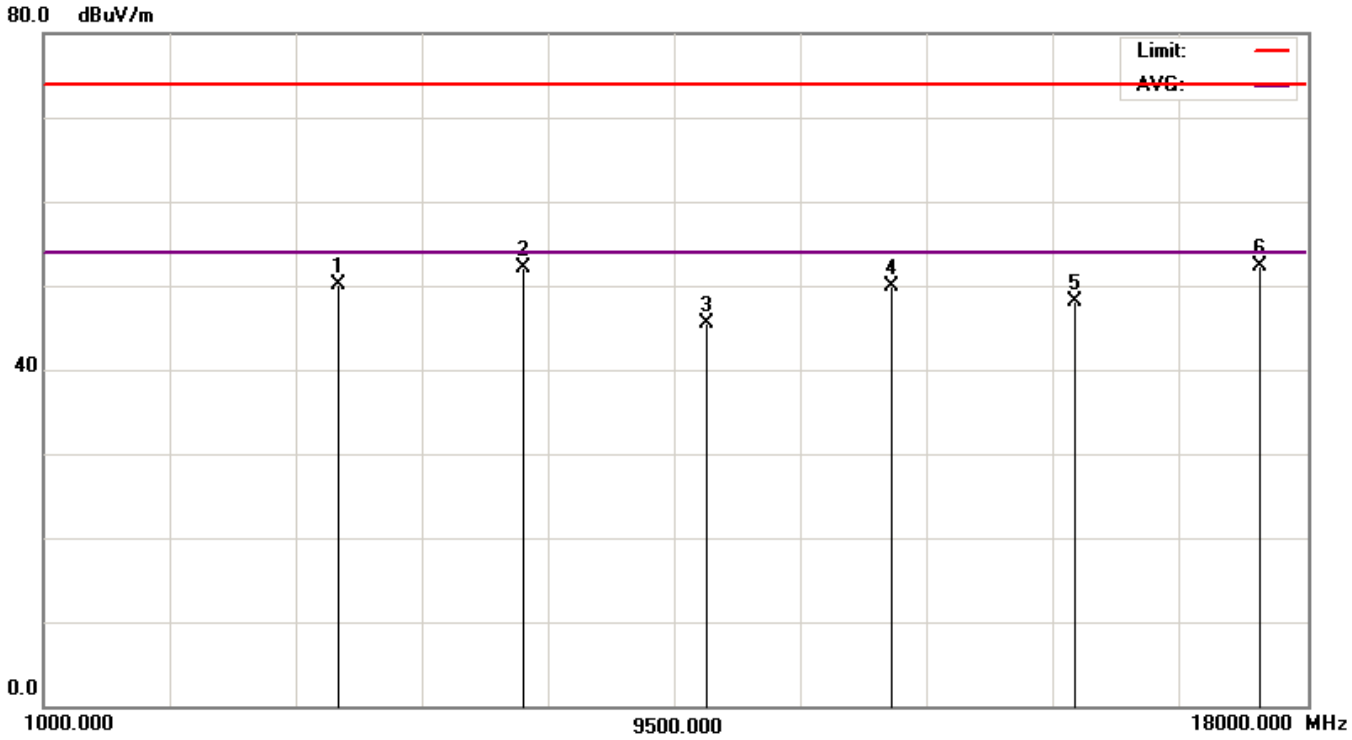
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480Hz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	39.78	10.26	50.04	74.00	-23.96	peak
2	7440.0000	37.61	14.40	52.01	74.00	-21.99	peak
3	9920.0000	36.82	8.67	45.49	74.00	-28.51	peak
4	12400.0000	37.47	12.45	49.92	74.00	-24.08	peak
5	14880.0000	35.58	12.52	48.10	74.00	-25.90	peak
6	17360.0000	36.44	15.80	52.24	74.00	-21.76	peak
7	19840.0000	46.52	-18.50	28.02	74.00	-45.98	peak
8	22320.0000	45.61	-18.50	27.11	74.00	-46.89	peak
9	24800.0000	45.14	-18.50	26.64	74.00	-47.36	peak

Remarks:

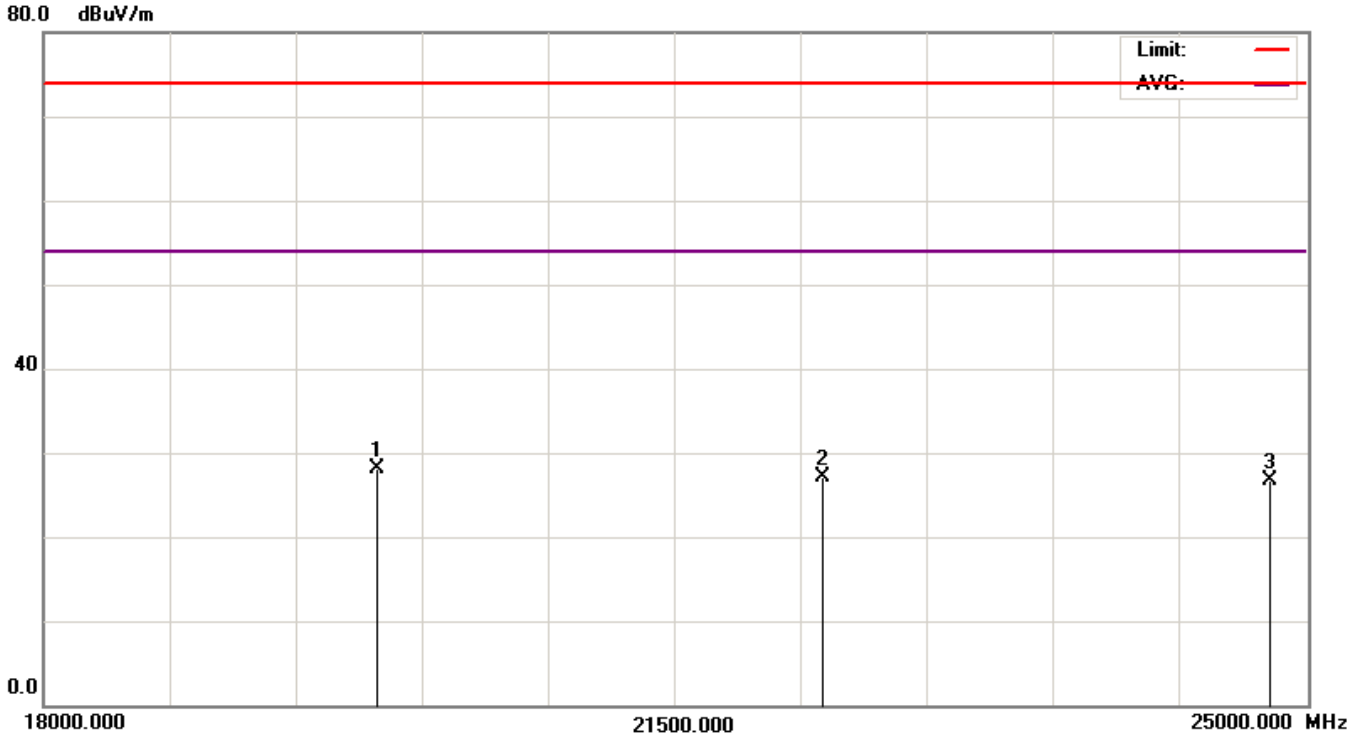
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

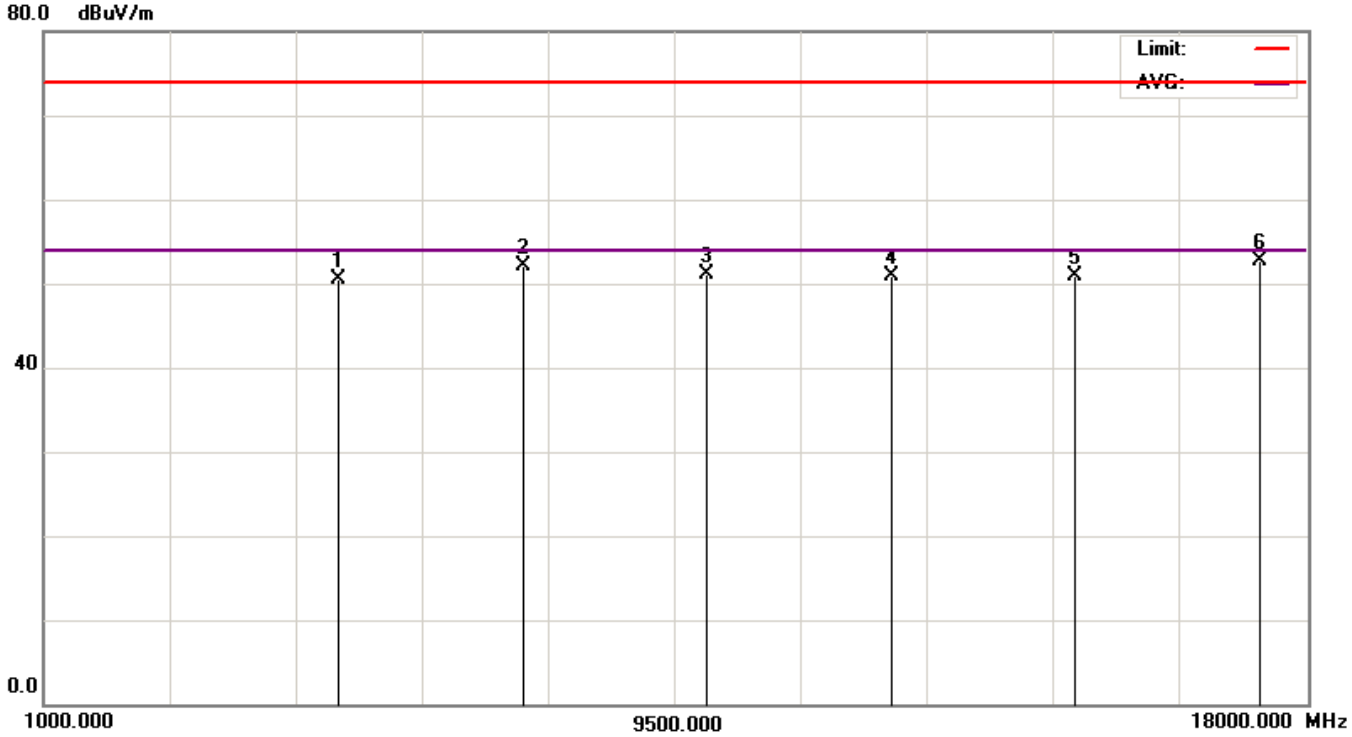
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	38.66	11.92	50.58	74.00	-23.42	peak
2	7440.0000	37.96	14.07	52.03	74.00	-21.97	peak
3	9920.0000	38.27	12.91	51.18	74.00	-22.82	peak
4	12400.0000	37.55	13.39	50.94	74.00	-23.06	peak
5	14880.0000	39.23	11.77	51.00	74.00	-23.00	peak
6	17360.0000	35.42	17.25	52.67	74.00	-21.33	peak
7	19840.0000	45.06	-17.50	27.56	74.00	-46.44	peak
8	22320.0000	45.29	-17.50	27.79	74.00	-46.21	peak
9	24800.0000	46.51	-17.50	29.01	74.00	-44.99	peak

Remarks:

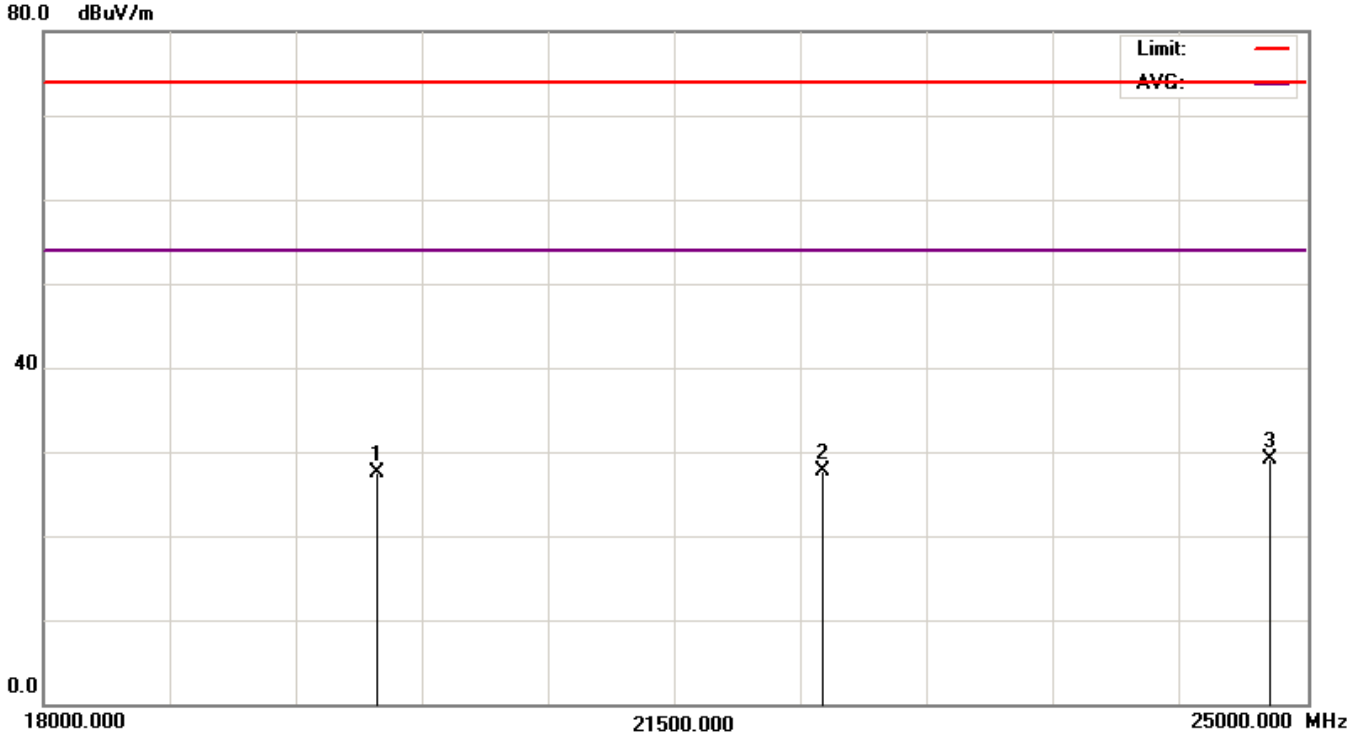
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

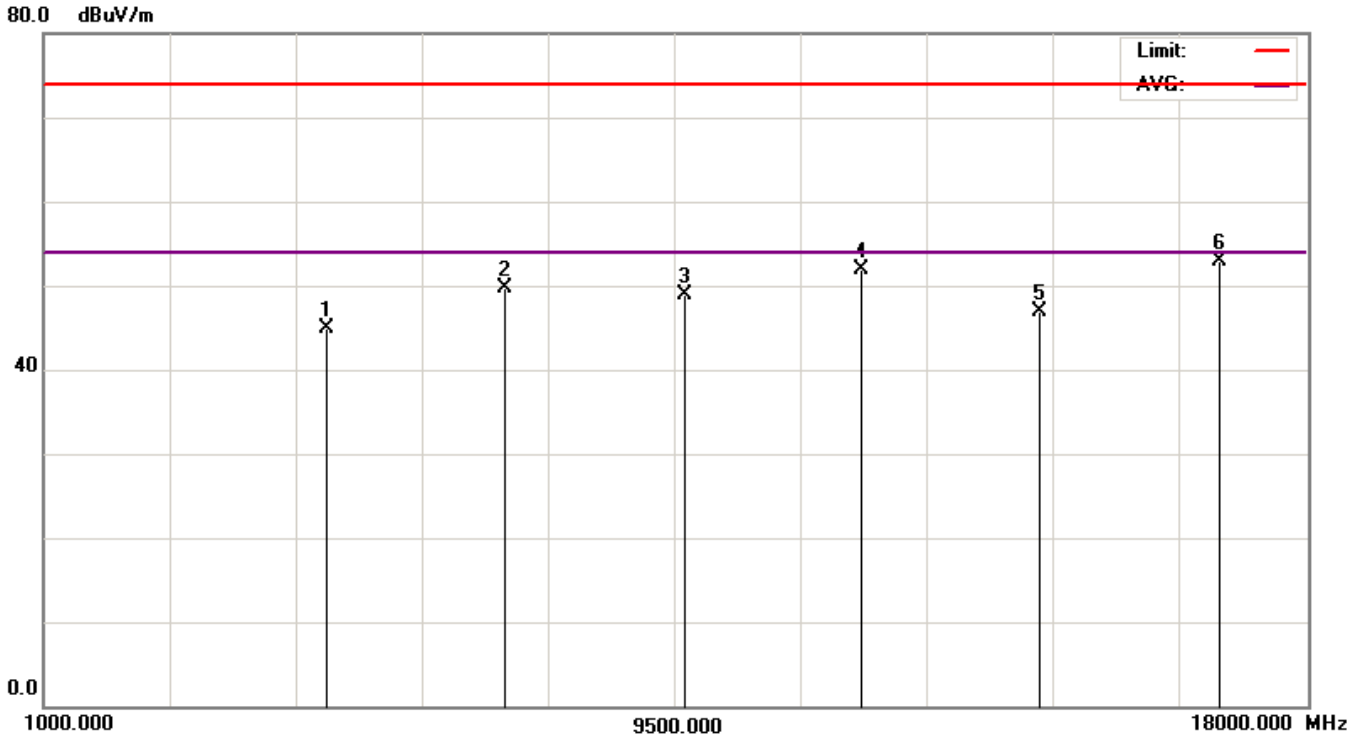
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	35.69	9.12	44.81	74.00	-29.19	peak
2	7206.0000	35.41	14.38	49.79	74.00	-24.21	peak
3	9608.0000	37.84	10.98	48.82	74.00	-25.18	peak
4	12010.0000	36.30	15.70	52.00	74.00	-22.00	peak
5	14412.0000	36.55	10.39	46.94	74.00	-27.06	peak
6	16814.0000	39.35	13.64	52.99	74.00	-21.01	peak
7	19216.0000	40.85	-18.50	22.35	74.00	-51.65	peak
8	21618.0000	46.64	-18.50	28.14	74.00	-45.86	peak
9	24020.0000	41.66	-18.50	23.16	74.00	-50.84	peak

Remarks:

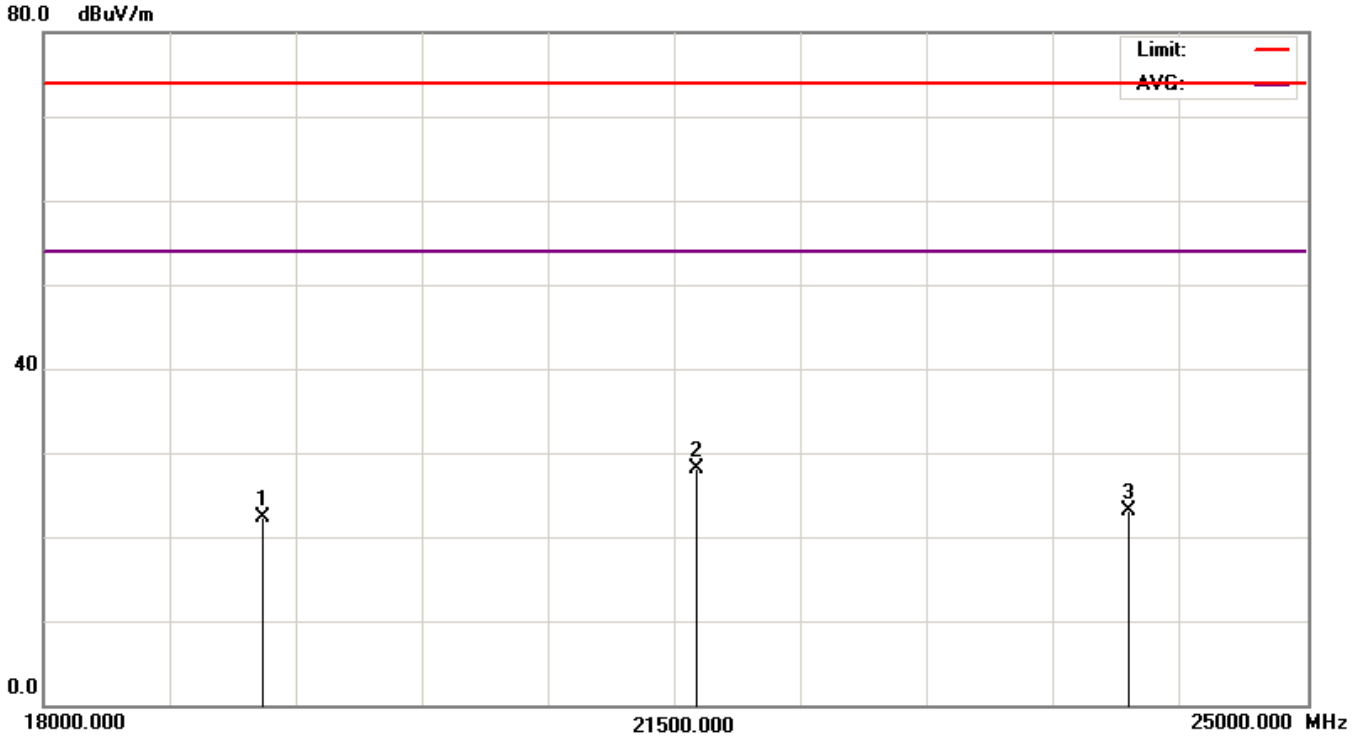
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment.
The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment.
The tested frequency range is mention in above column of the test data table.

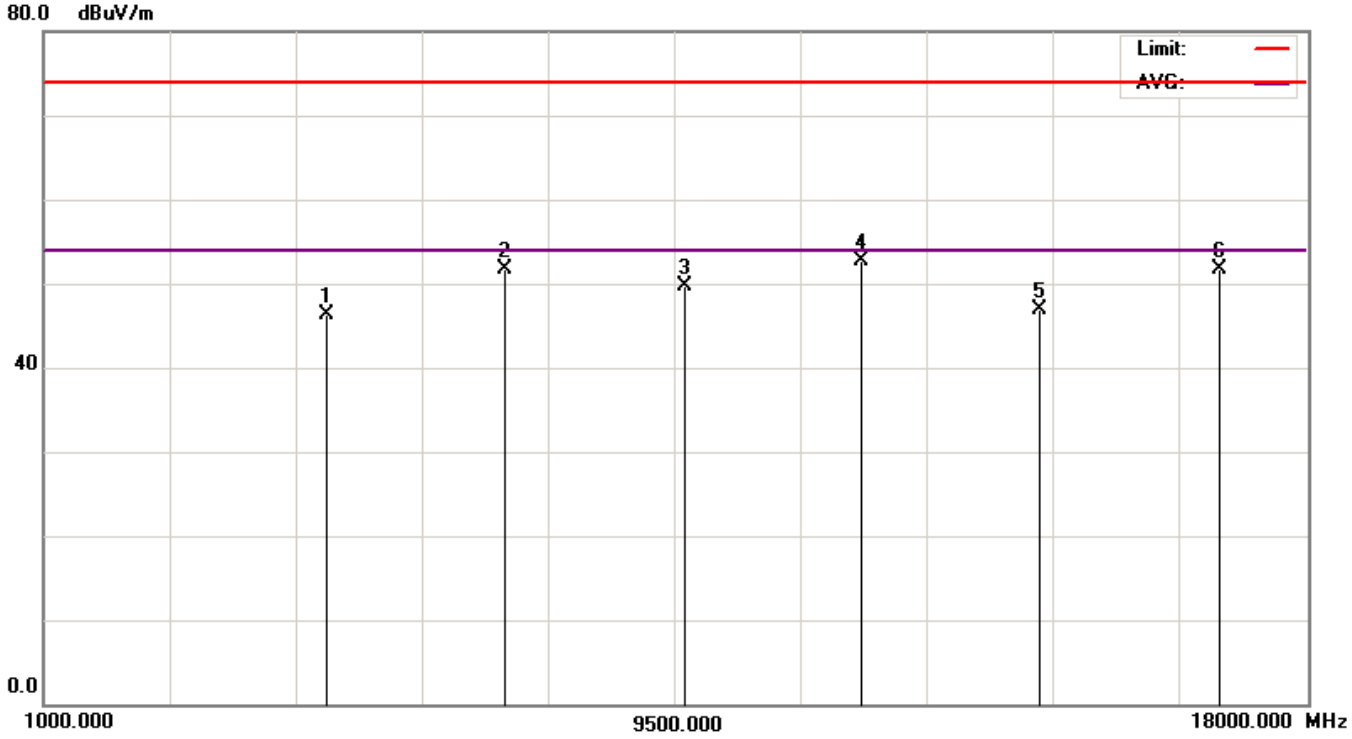
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	36.95	9.42	46.37	74.00	-27.63	peak
2	7206.0000	37.51	14.27	51.78	74.00	-22.22	peak
3	9608.0000	36.67	13.12	49.79	74.00	-24.21	peak
4	12010.0000	35.43	17.37	52.80	74.00	-21.20	peak
5	14412.0000	37.29	9.66	46.95	74.00	-27.05	peak
6	16814.0000	37.17	14.56	51.73	74.00	-22.27	peak
7	19216.0000	45.62	-17.50	28.12	74.00	-45.88	peak
8	21618.0000	45.65	-17.50	28.15	74.00	-45.85	peak
9	24020.0000	46.69	-17.50	29.19	74.00	-44.81	peak

Remarks:

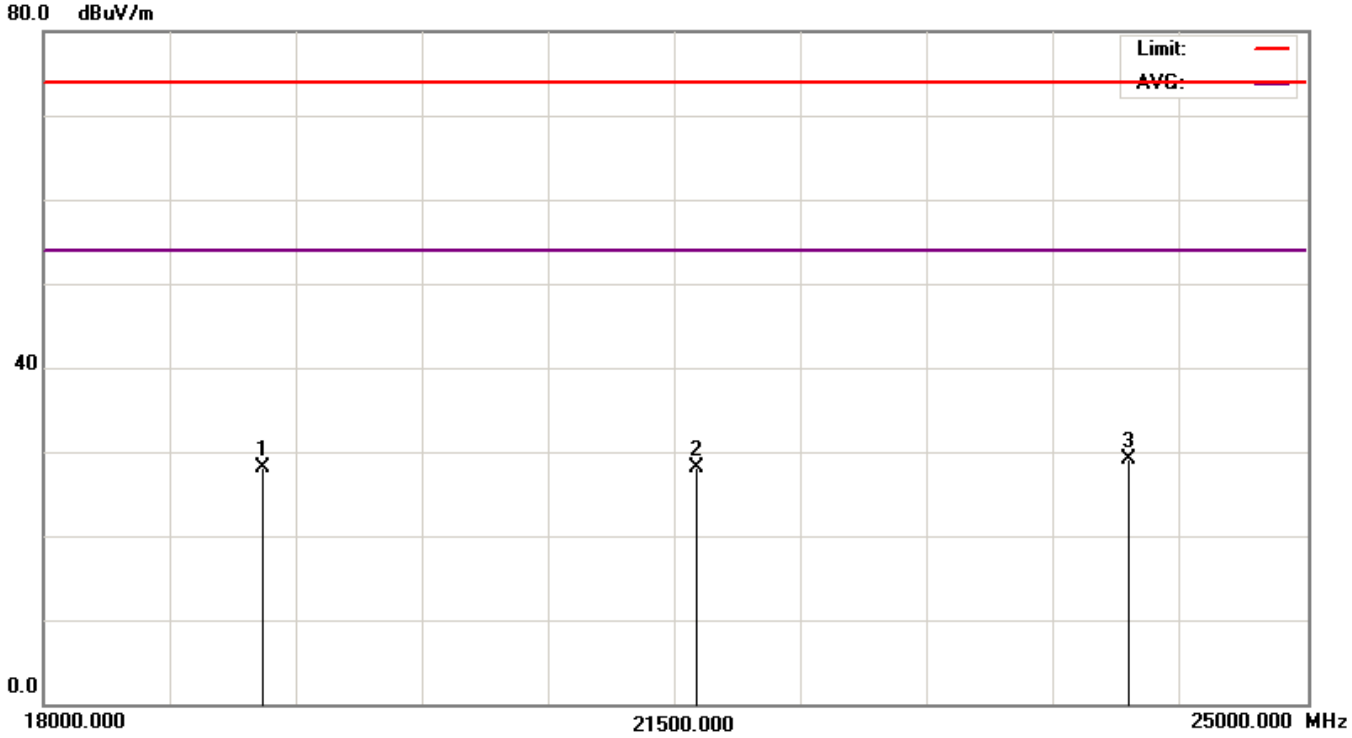
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

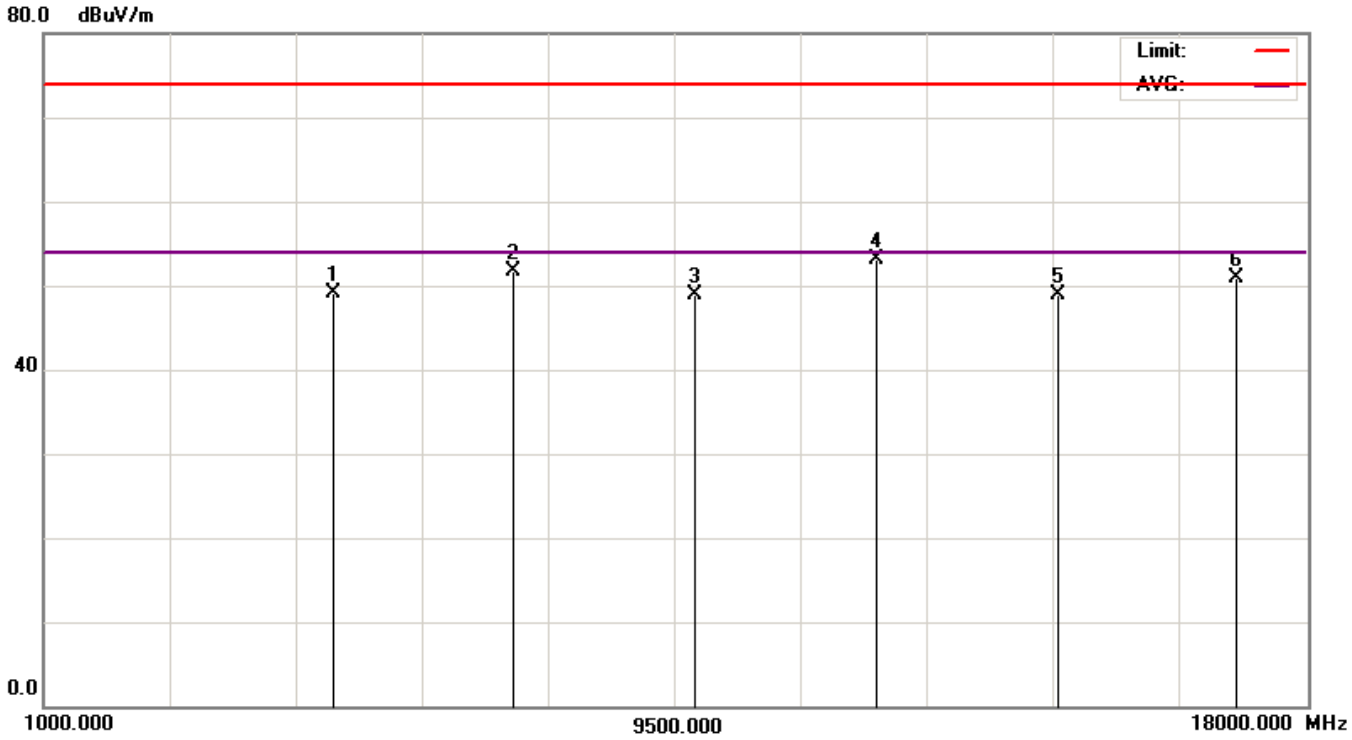
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	39.63	9.46	49.09	74.00	-24.91	peak
2	7320.0000	36.89	14.74	51.63	74.00	-22.37	peak
3	9760.0000	37.64	11.24	48.88	74.00	-25.12	peak
4	12200.0000	36.95	16.10	53.05	74.00	-20.95	peak
5	14640.0000	37.35	11.61	48.96	74.00	-25.04	peak
6	17080.0000	36.71	14.24	50.95	74.00	-23.05	peak
7	19520.0000	45.65	-18.50	27.15	74.00	-46.85	peak
8	21960.0000	44.51	-18.50	26.01	74.00	-47.99	peak
9	24400.0000	46.08	-18.50	27.58	74.00	-46.42	peak

Remarks:

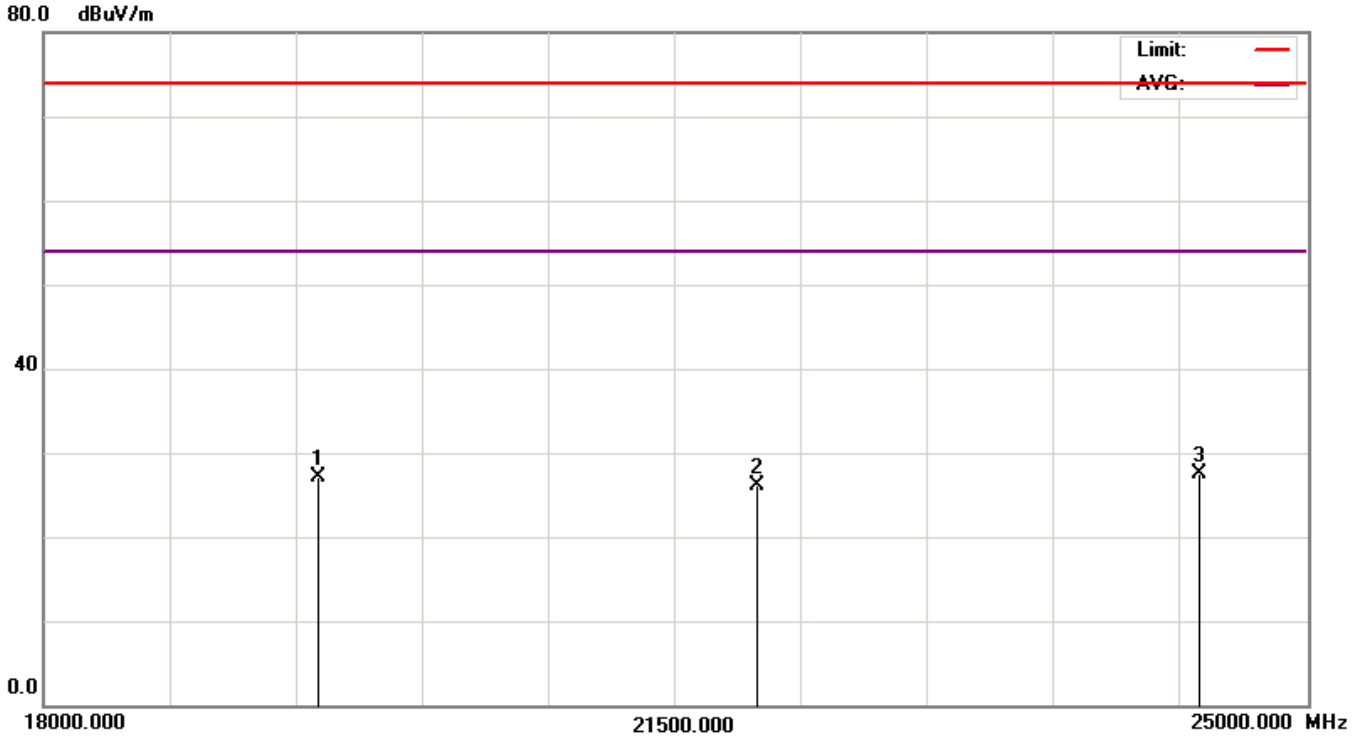
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

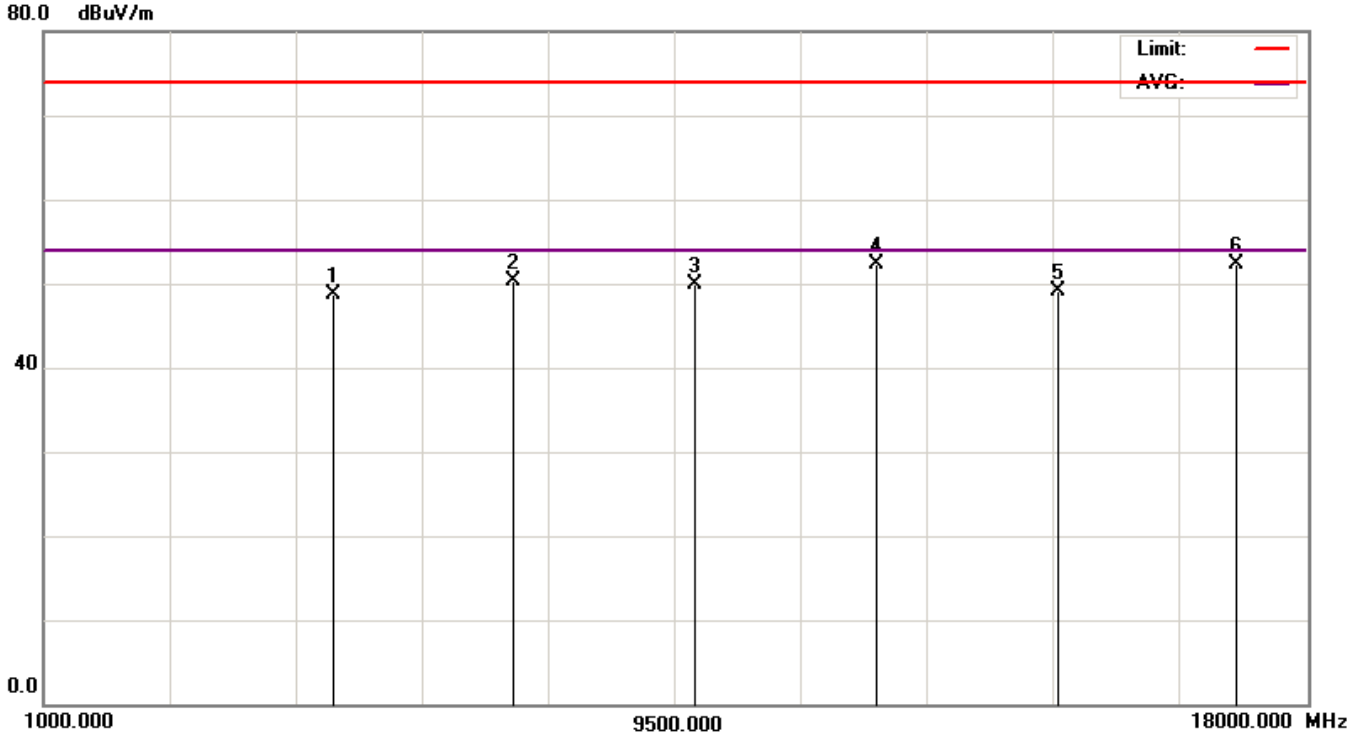
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	38.52	10.28	48.80	74.00	-25.20	peak
2	7320.0000	35.86	14.51	50.37	74.00	-23.63	peak
3	9760.0000	36.48	13.37	49.85	74.00	-24.15	peak
4	12200.0000	34.46	17.83	52.29	74.00	-21.71	peak
5	14640.0000	39.15	10.03	49.18	74.00	-24.82	peak
6	17080.0000	37.28	15.07	52.35	74.00	-21.65	peak
7	19520.0000	44.51	-17.50	27.01	74.00	-46.99	peak
8	21960.0000	43.65	-17.50	26.15	74.00	-47.85	peak
9	24400.0000	46.39	-17.50	28.89	74.00	-45.11	peak

Remarks:

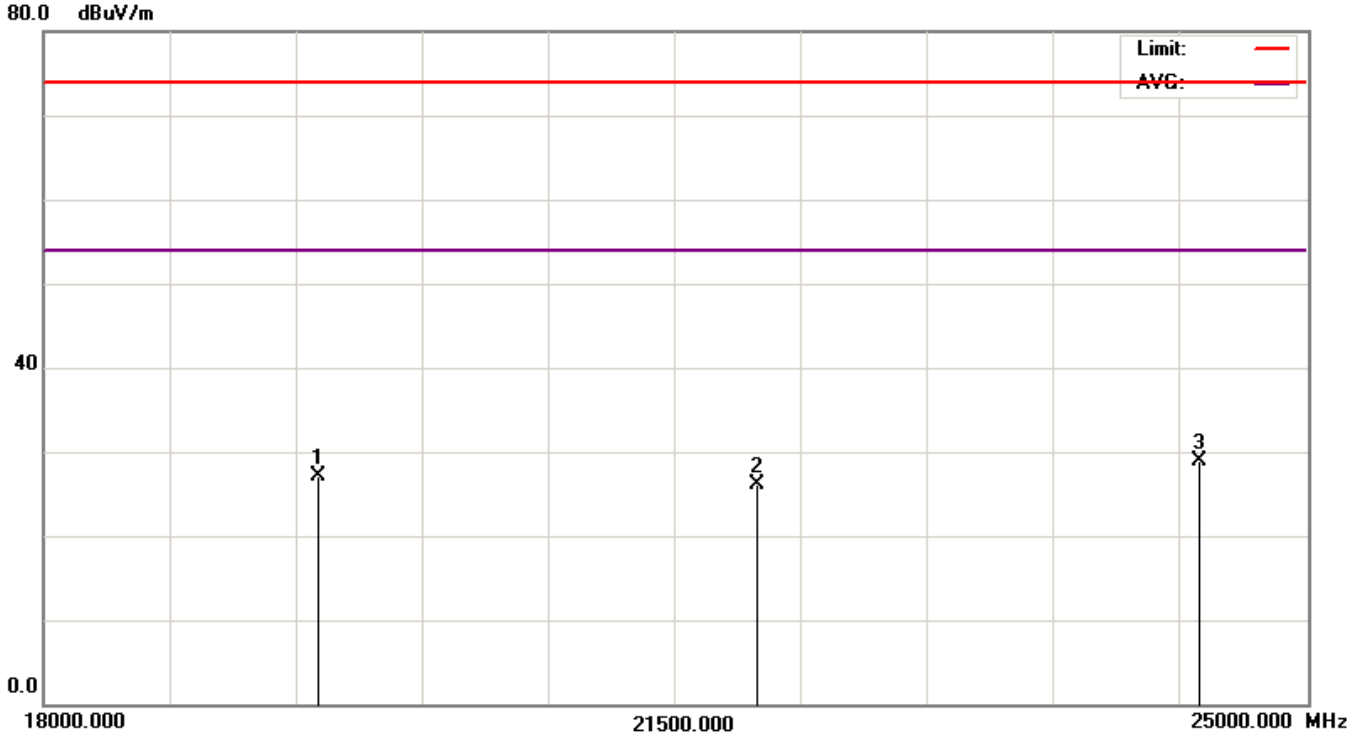
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

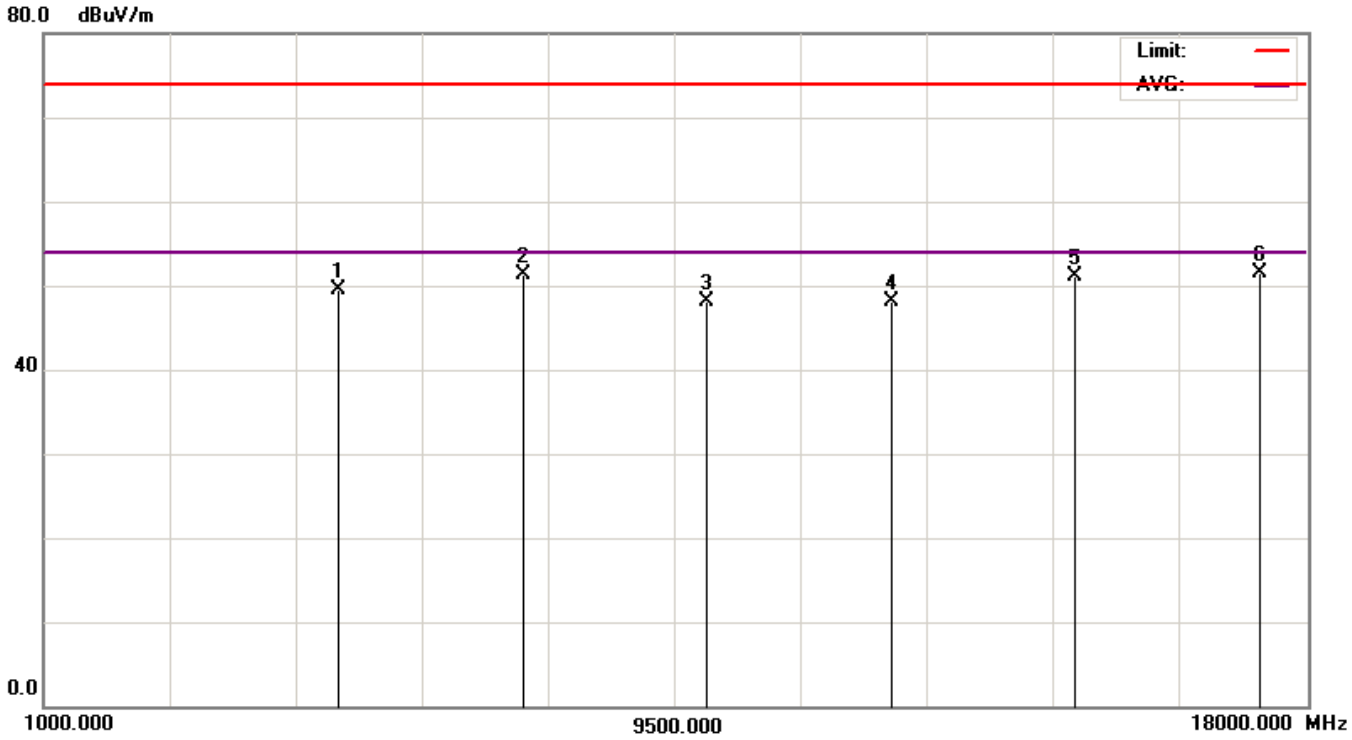
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	39.24	10.26	49.50	74.00	-24.50	peak
2	7440.0000	36.83	14.40	51.23	74.00	-22.77	peak
3	9920.0000	39.41	8.67	48.08	74.00	-25.92	peak
4	12400.0000	35.67	12.45	48.12	74.00	-25.88	peak
5	14880.0000	38.49	12.52	51.01	74.00	-22.99	peak
6	17360.0000	35.74	15.80	51.54	74.00	-22.46	peak
7	19840.0000	47.81	-18.50	29.31	74.00	-44.69	peak
8	22320.0000	44.52	-18.50	26.02	74.00	-47.98	peak
9	24800.0000	46.68	-18.50	28.18	74.00	-45.82	peak

Remarks:

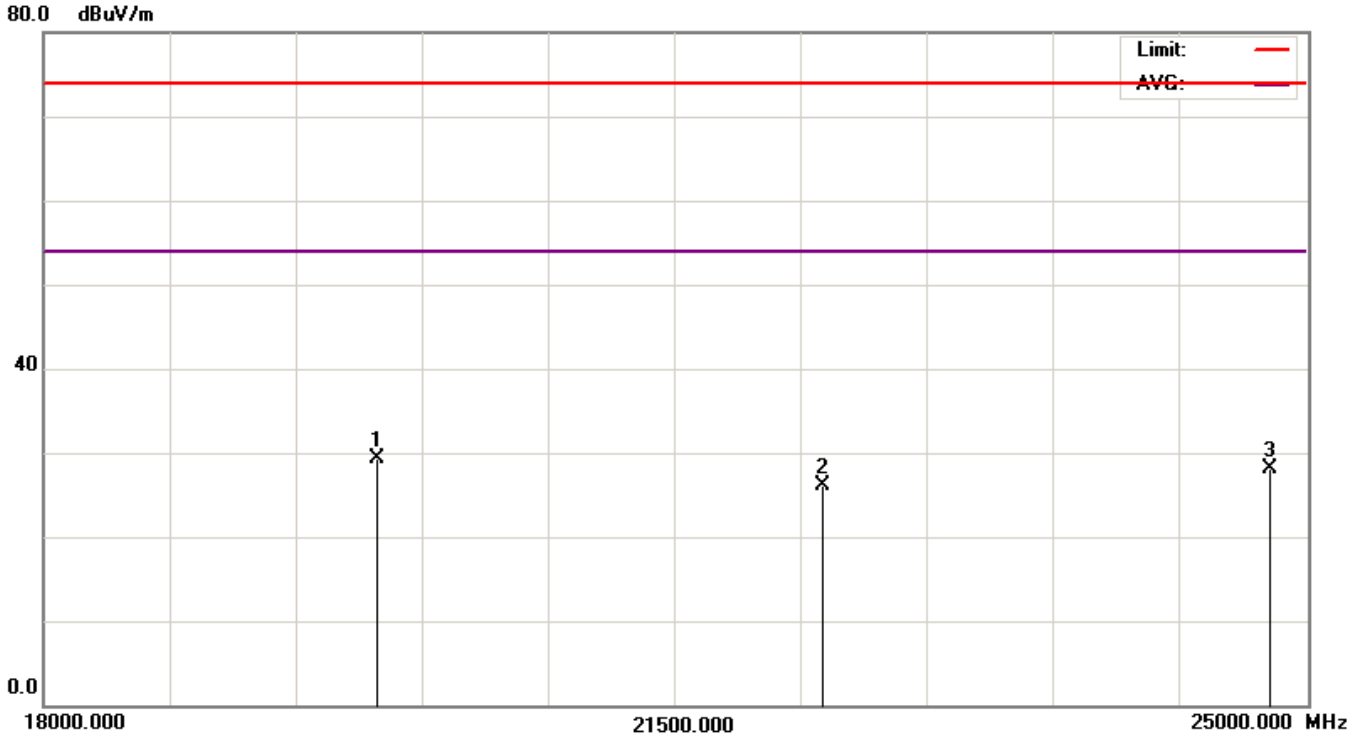
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

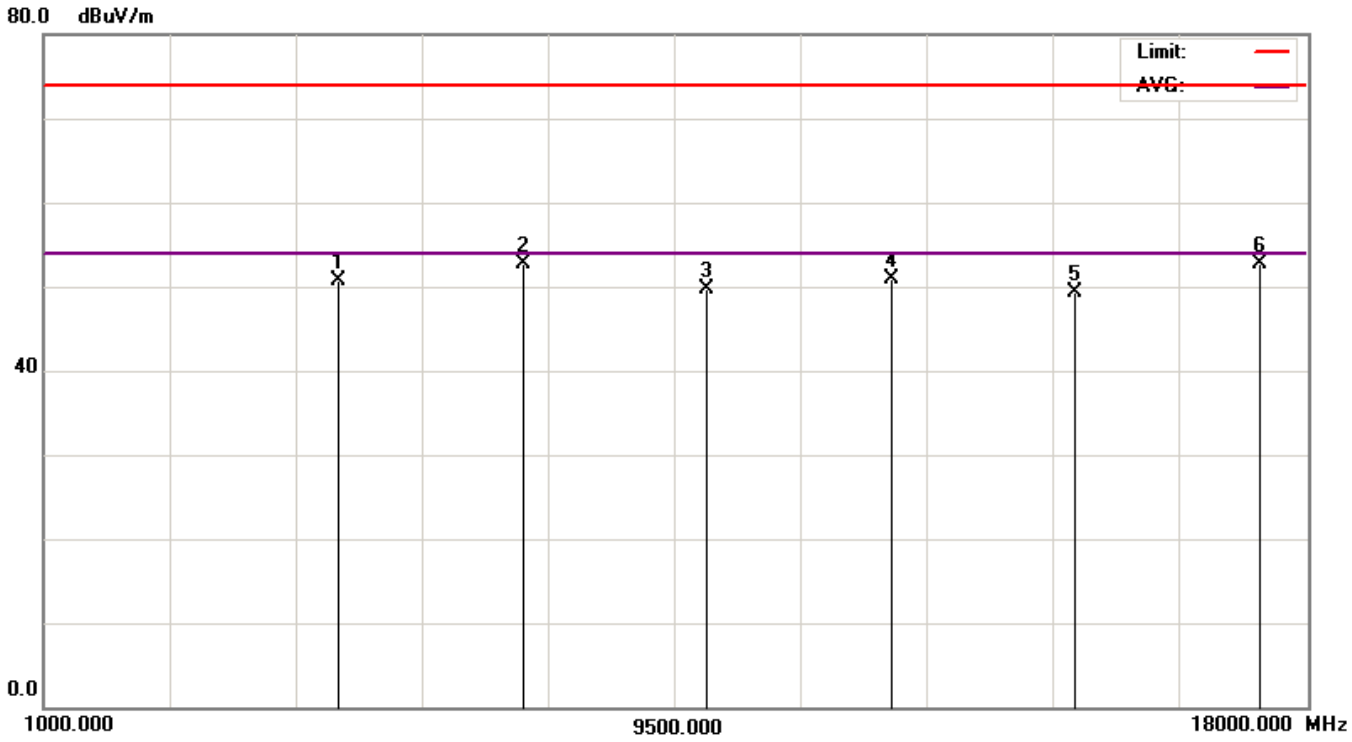
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	38.69	11.92	50.61	74.00	-23.39	peak
2	7440.0000	38.62	14.07	52.69	74.00	-21.31	peak
3	9920.0000	36.77	12.91	49.68	74.00	-24.32	peak
4	12400.0000	37.49	13.39	50.88	74.00	-23.12	peak
5	14880.0000	37.50	11.77	49.27	74.00	-24.73	peak
6	17360.0000	35.41	17.25	52.66	74.00	-21.34	peak
7	19840.0000	46.51	-17.50	29.01	74.00	-44.99	peak
8	22320.0000	43.65	-17.50	26.15	74.00	-47.85	peak
9	24800.0000	44.80	-17.50	27.30	74.00	-46.70	peak

Remarks:

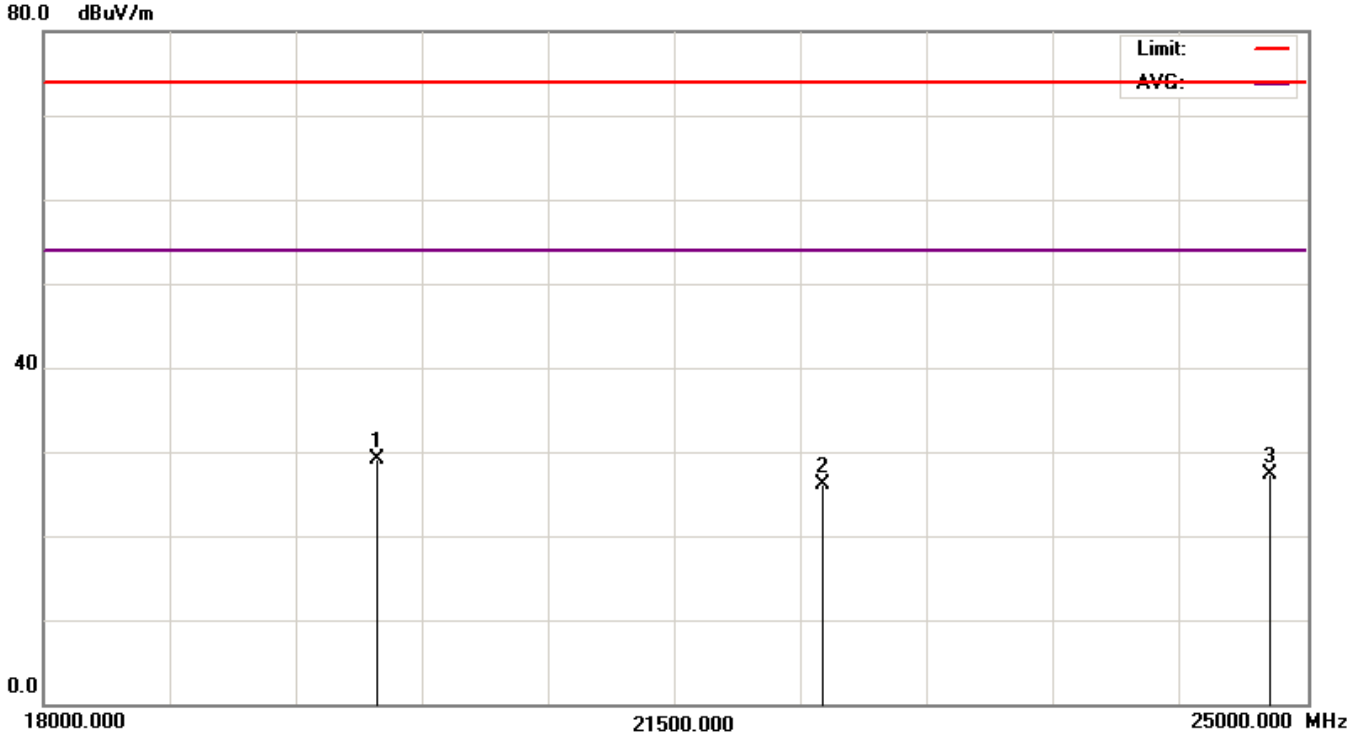
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

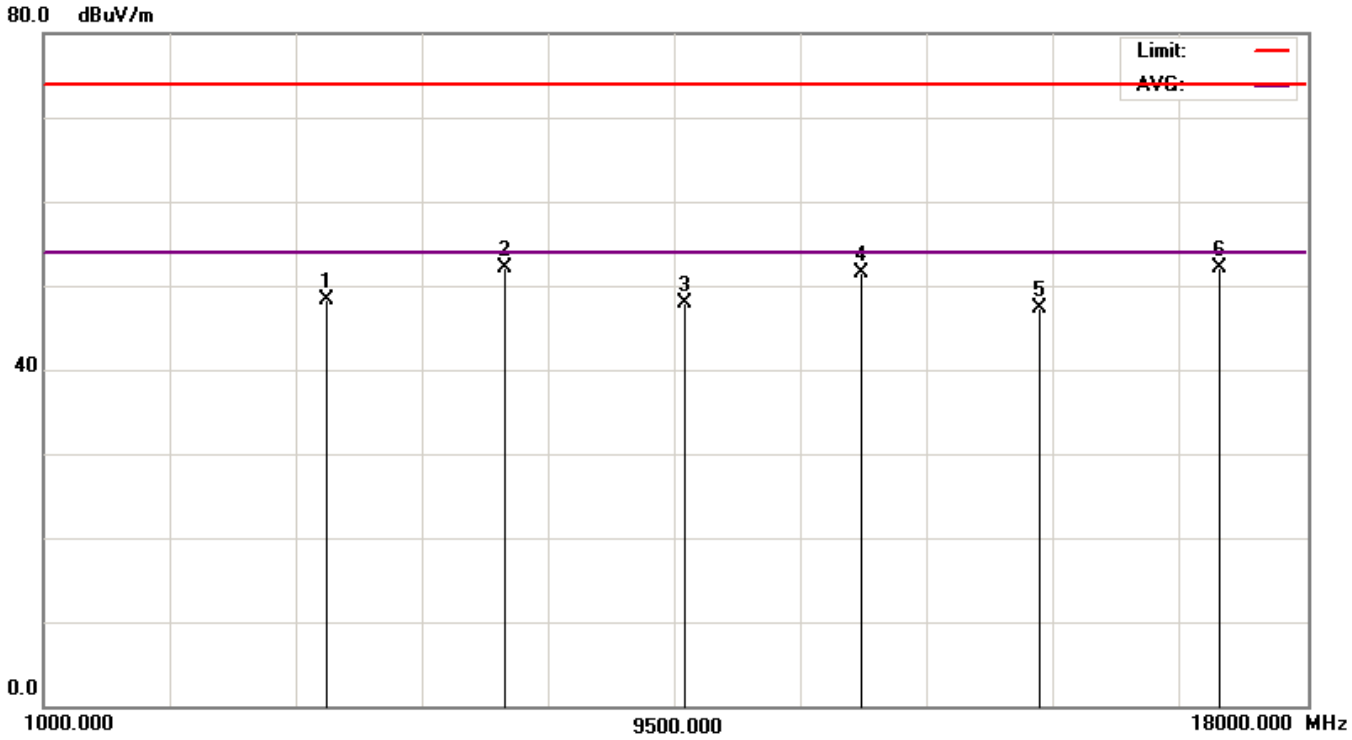
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	39.18	9.12	48.30	74.00	-25.70	peak
2	7206.0000	37.66	14.38	52.04	74.00	-21.96	peak
3	9608.0000	36.98	10.98	47.96	74.00	-26.04	peak
4	12010.0000	35.84	15.70	51.54	74.00	-22.46	peak
5	14412.0000	36.96	10.39	47.35	74.00	-26.65	peak
6	16814.0000	38.55	13.64	52.19	74.00	-21.81	peak
7	19216.0000	44.19	-18.50	25.69	74.00	-48.31	peak
8	21618.0000	45.65	-18.50	27.15	74.00	-46.85	peak
9	24020.0000	46.95	-18.50	28.45	74.00	-45.55	peak

Remarks:

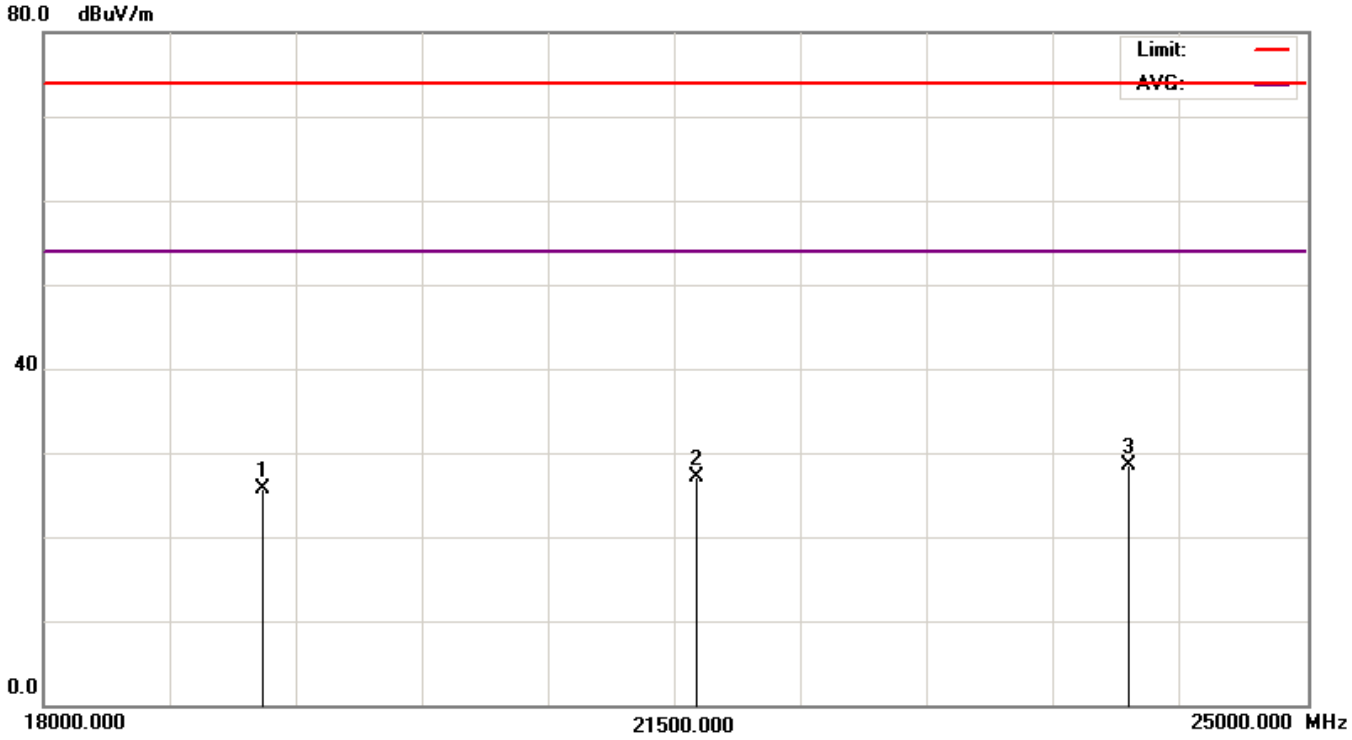
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

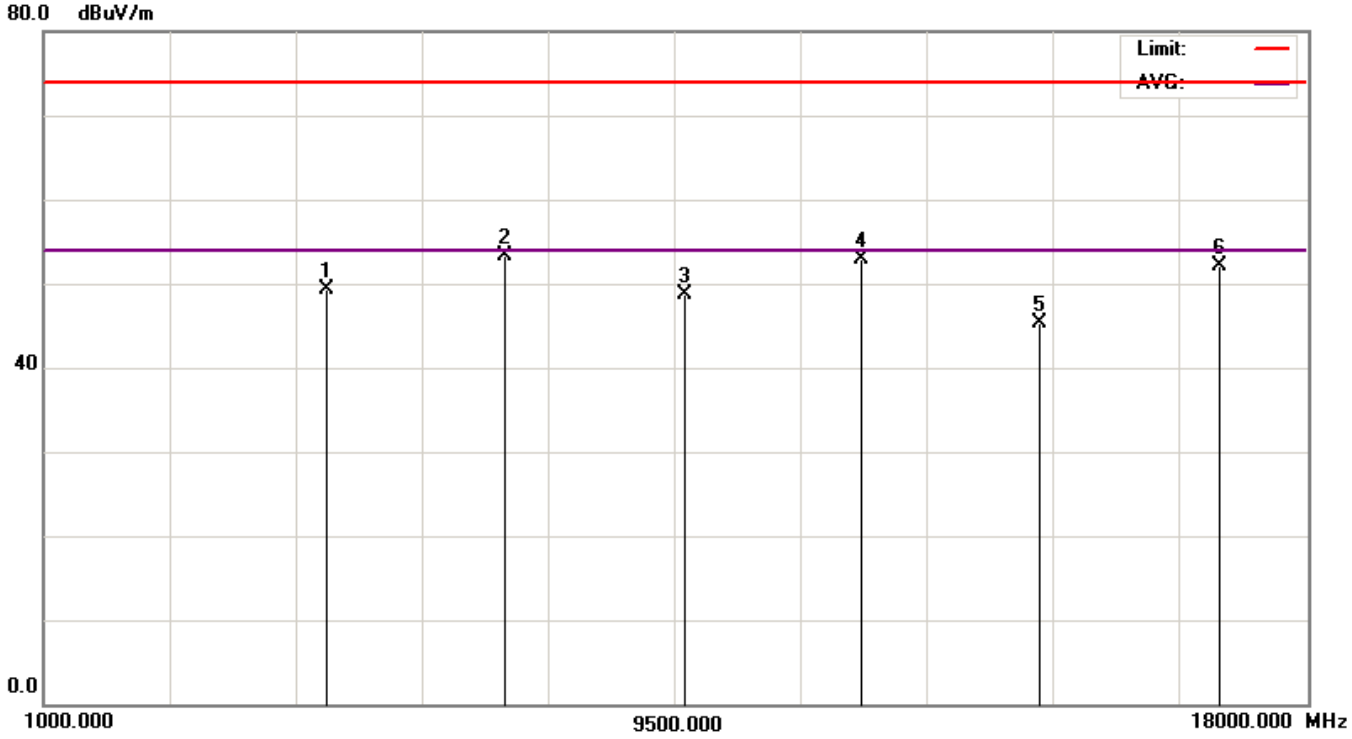
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4804.0000	39.84	9.42	49.26	74.00	-24.74	peak
2	7206.0000	38.99	14.27	53.26	74.00	-20.74	peak
3	9608.0000	35.62	13.12	48.74	74.00	-25.26	peak
4	12010.0000	35.51	17.37	52.88	74.00	-21.12	peak
5	14412.0000	35.69	9.66	45.35	74.00	-28.65	peak
6	16814.0000	37.58	14.56	52.14	74.00	-21.86	peak
7	19216.0000	43.26	-17.50	25.76	74.00	-48.24	peak
8	21618.0000	43.11	-17.50	25.61	74.00	-48.39	peak
9	24020.0000	47.82	-17.50	30.32	74.00	-43.68	peak

Remarks:

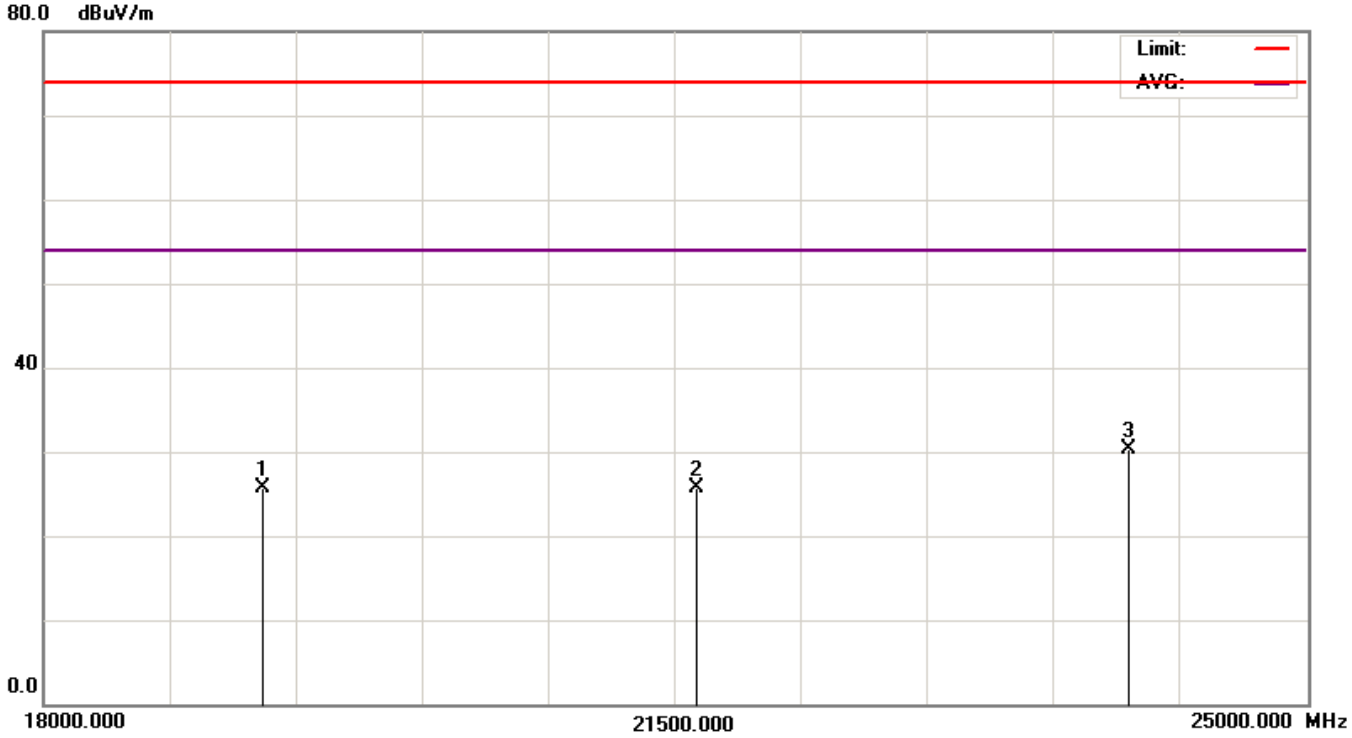
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark:
1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

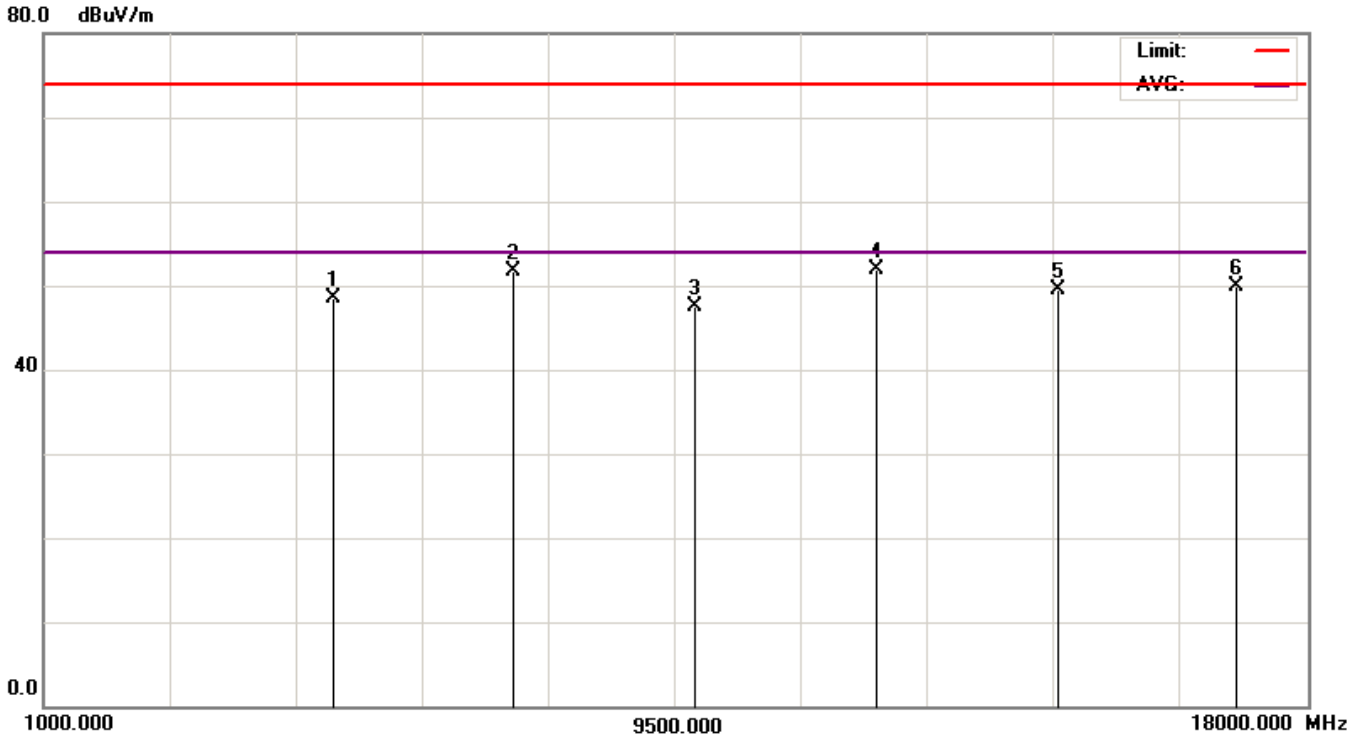
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2440 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	38.95	9.46	48.41	74.00	-25.59	peak
2	7320.0000	36.87	14.74	51.61	74.00	-22.39	peak
3	9760.0000	36.34	11.24	47.58	74.00	-26.42	peak
4	12200.0000	35.82	16.10	51.92	74.00	-22.08	peak
5	14640.0000	37.83	11.61	49.44	74.00	-24.56	peak
6	17080.0000	35.66	14.24	49.90	74.00	-24.10	peak
7	19520.0000	45.03	-18.50	26.53	74.00	-47.47	peak
8	21960.0000	44.62	-18.50	26.12	74.00	-47.88	peak
9	24400.0000	45.95	-18.50	27.45	74.00	-46.55	peak

Remarks:

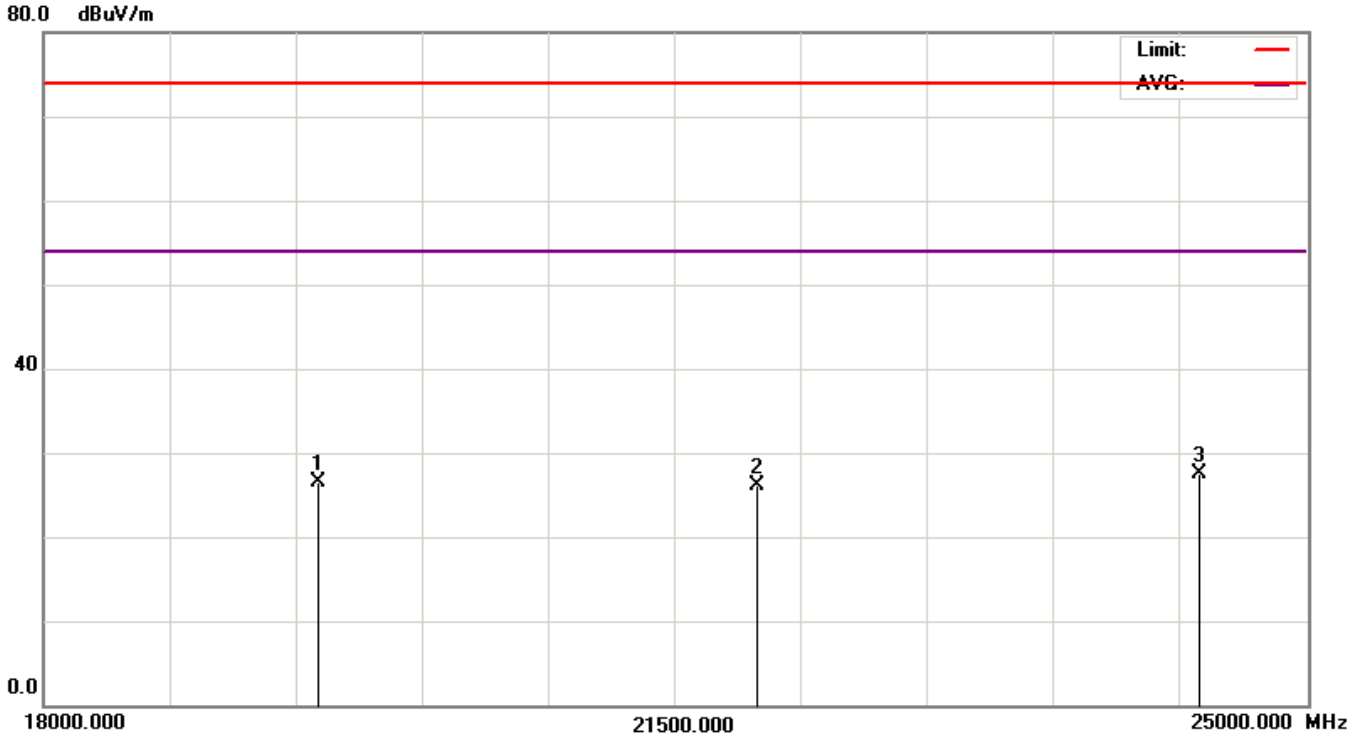
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

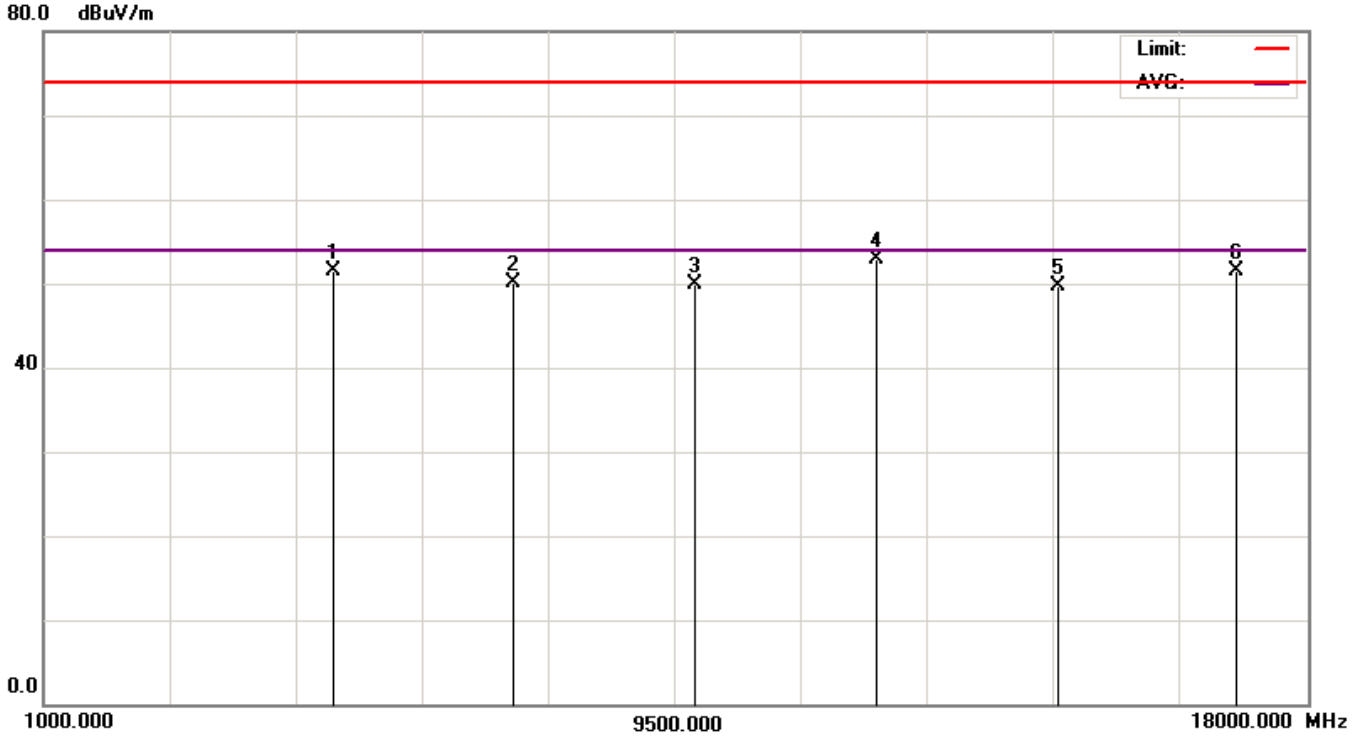
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2440MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4880.0000	41.32	10.28	51.60	74.00	-22.40	peak
2	7320.0000	35.59	14.51	50.10	74.00	-23.90	peak
3	9760.0000	36.44	13.37	49.81	74.00	-24.19	peak
4	12200.0000	35.08	17.83	52.91	74.00	-21.09	peak
5	14640.0000	39.77	10.03	49.80	74.00	-24.20	peak
6	17080.0000	36.39	15.07	51.46	74.00	-22.54	peak
7	19520.0000	45.09	-17.50	27.59	74.00	-46.41	peak
8	21960.0000	43.62	-17.50	26.12	74.00	-47.88	peak
9	24400.0000	46.31	-17.50	28.81	74.00	-45.19	peak

Remarks:

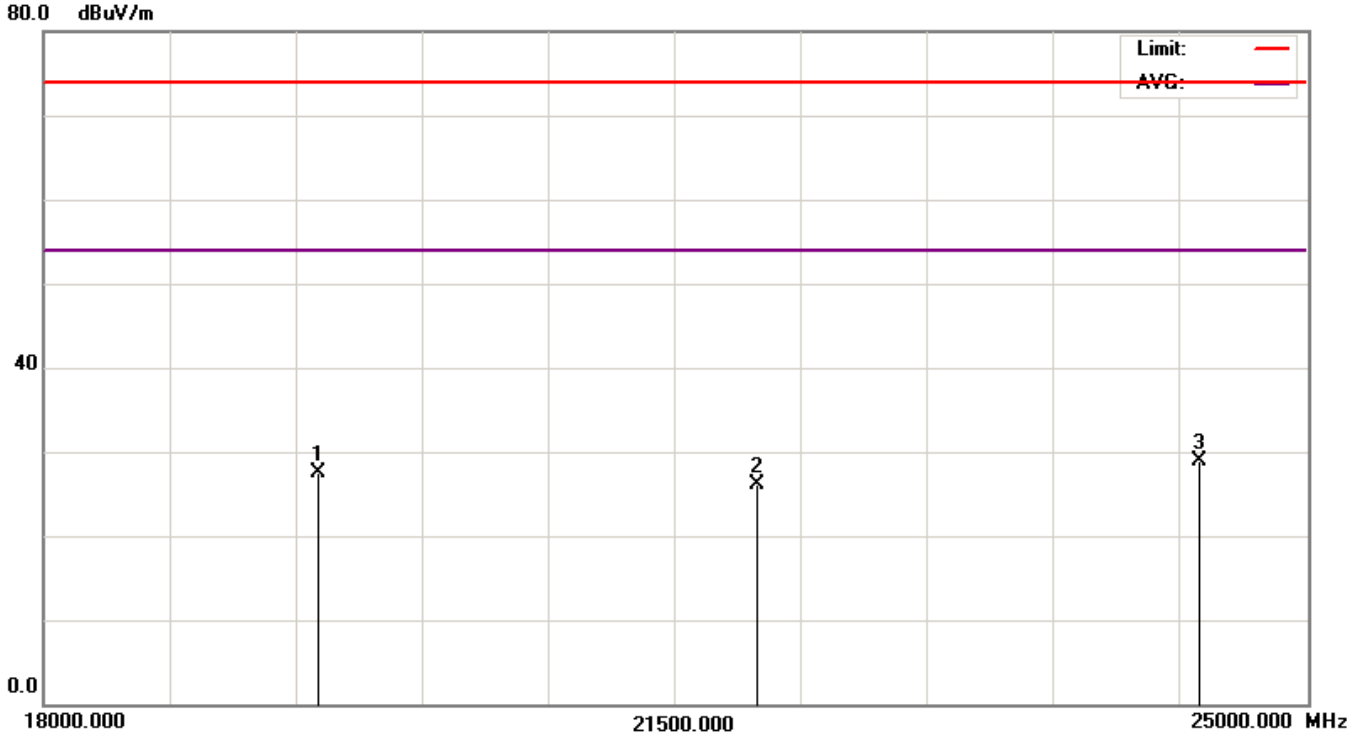
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

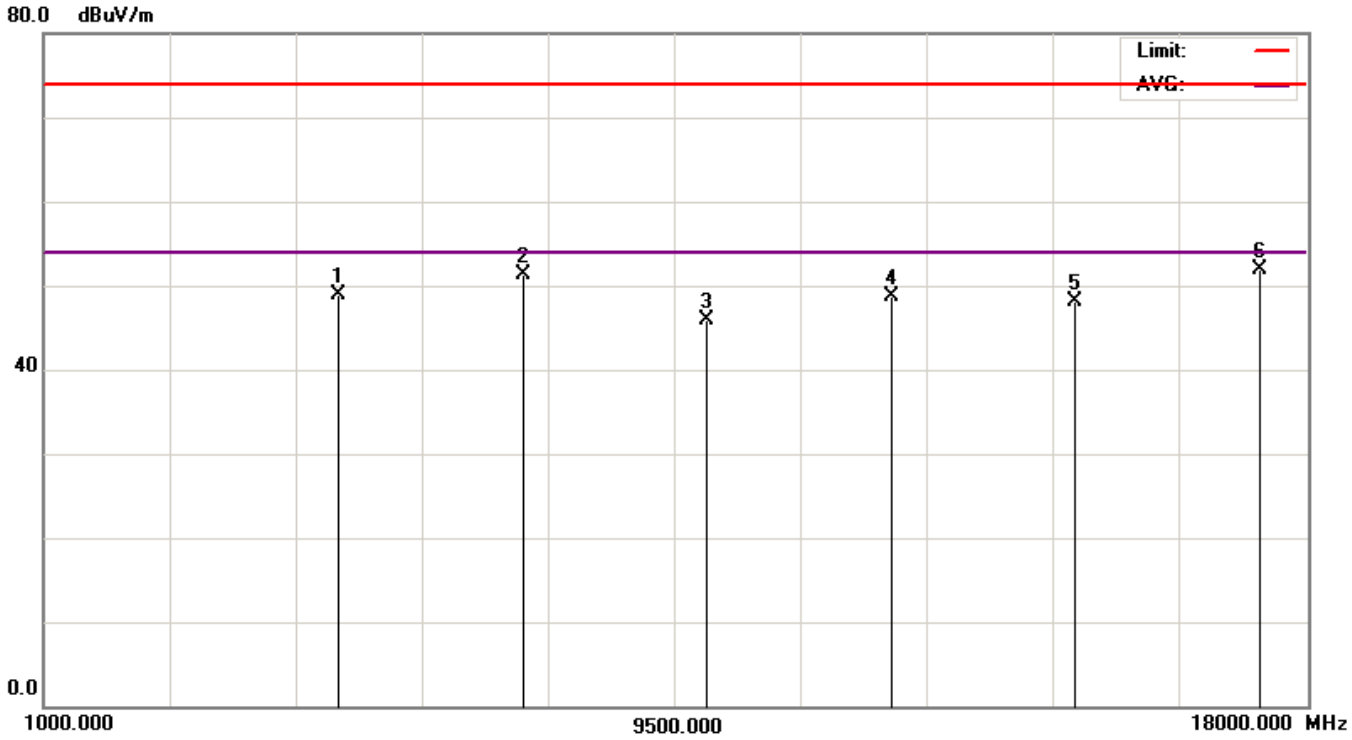
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	38.67	10.26	48.93	74.00	-25.07	peak
2	7440.0000	36.81	14.40	51.21	74.00	-22.79	peak
3	9920.0000	37.25	8.67	45.92	74.00	-28.08	peak
4	12400.0000	36.33	12.45	48.78	74.00	-25.22	peak
5	14880.0000	35.61	12.52	48.13	74.00	-25.87	peak
6	17360.0000	36.18	15.80	51.98	74.00	-22.02	peak
7	19840.0000	44.05	-18.50	25.55	74.00	-48.45	peak
8	22320.0000	47.63	-18.50	29.13	74.00	-44.87	peak
9	24800.0000	46.19	-18.50	27.69	74.00	-46.31	peak

Remarks:

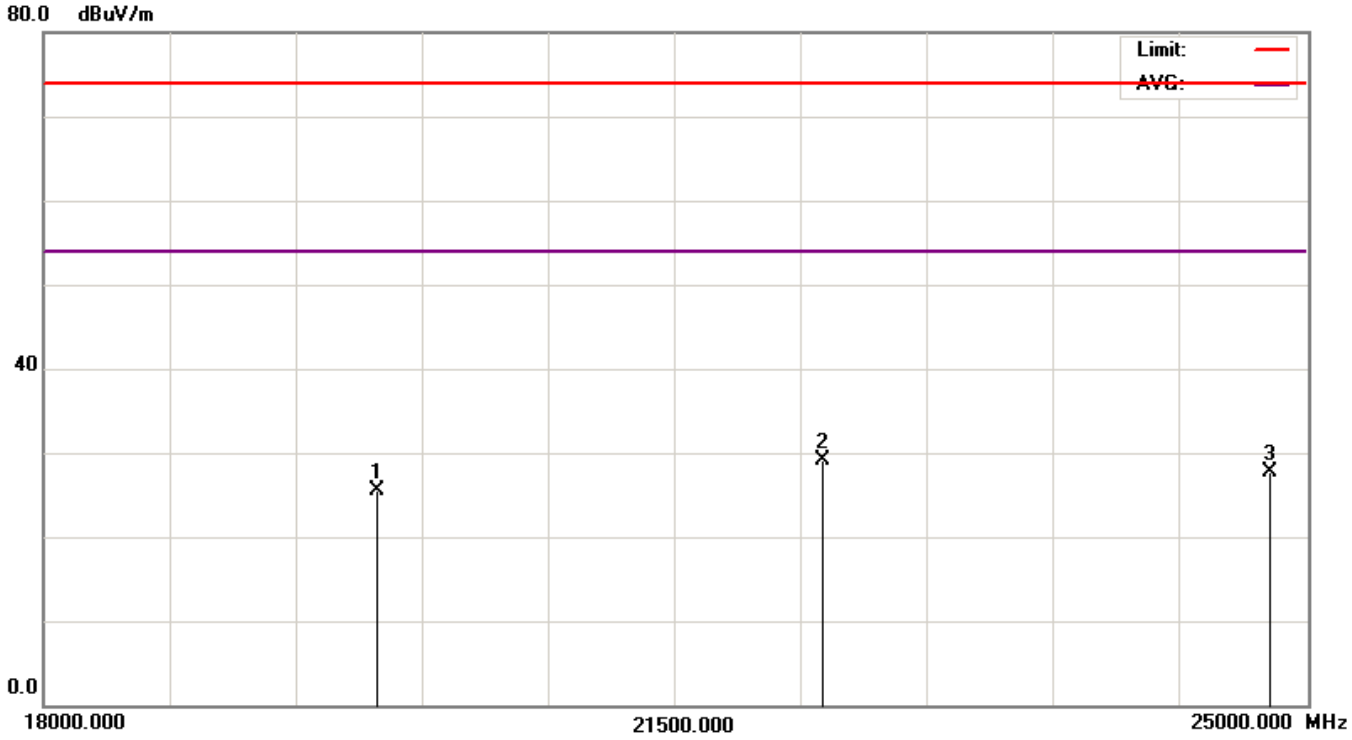
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Horizontal



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

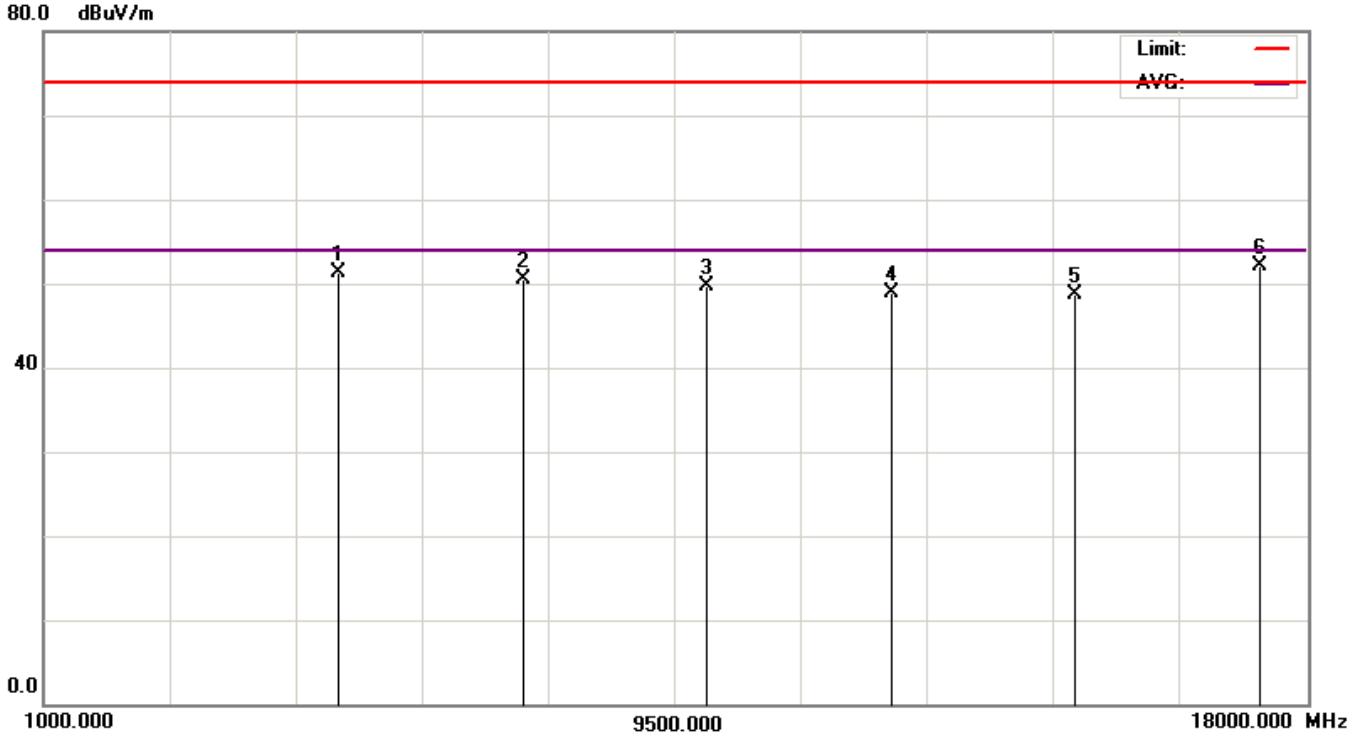
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	4960.0000	39.37	11.92	51.29	74.00	-22.71	peak
2	7440.0000	36.52	14.07	50.59	74.00	-23.41	peak
3	9920.0000	36.75	12.91	49.66	74.00	-24.34	peak
4	12400.0000	35.59	13.39	48.98	74.00	-25.02	peak
5	14880.0000	36.91	11.77	48.68	74.00	-25.32	peak
6	17360.0000	34.82	17.25	52.07	74.00	-21.93	peak
7	19840.0000	44.59	-17.50	27.09	74.00	-46.91	peak
8	22320.0000	43.28	-17.50	25.78	74.00	-48.22	peak
9	24800.0000	45.61	-17.50	28.11	74.00	-45.89	peak

Remarks:

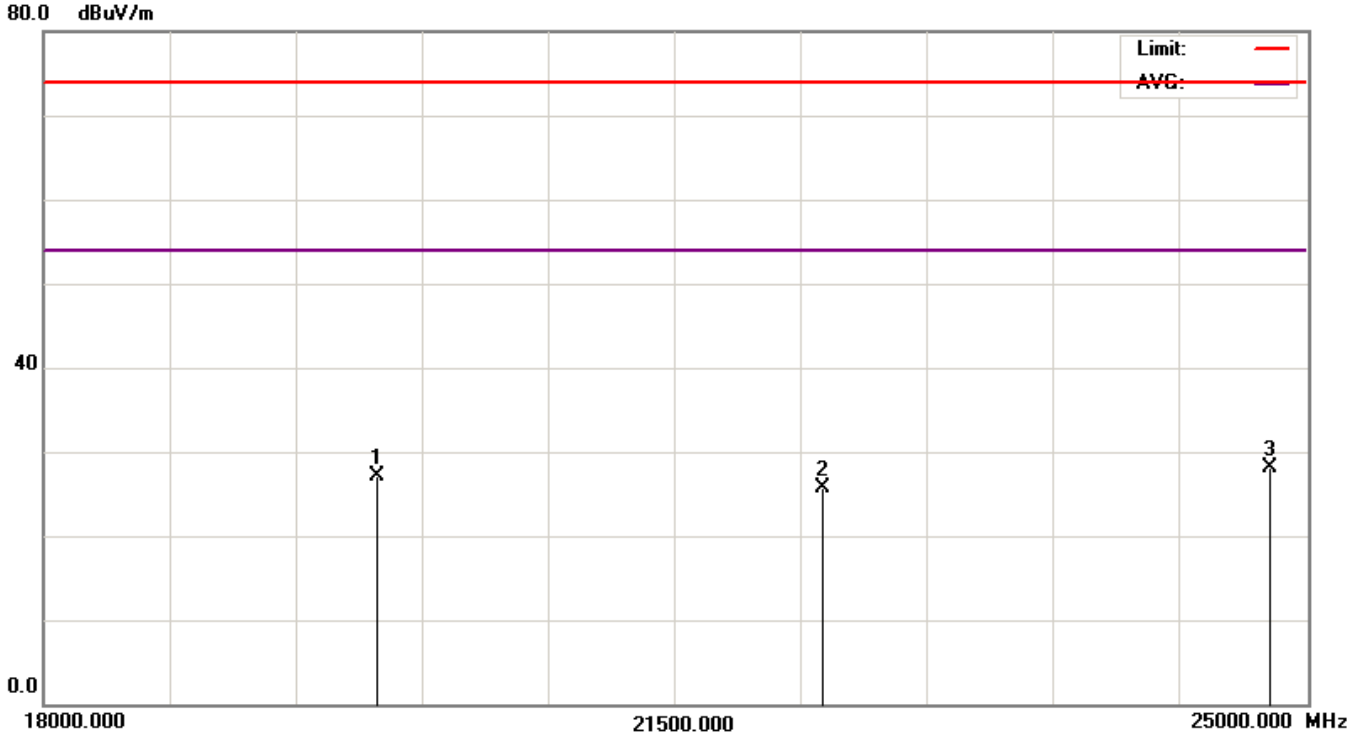
1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 4.35 dB.(1G-18G)
7. The measurement uncertainty is 4.37 dB.(18G-40G)

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

Vertical



Remark: 1. The Peak (The red line of the graph indicates the peak measurements).
2. The AVG (The purple line of the graph indicates the average measurements).
3. The frequency range indicated in this graph is just a frequency range set automatically by the test equipment. The tested frequency range is mention in above column of the test data table.

5. PEAK POWER OUTPUT

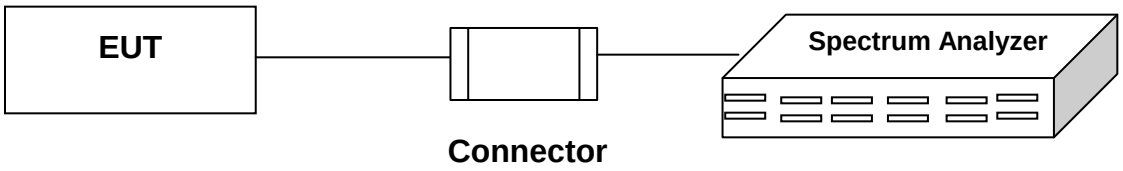
5.1 TEST EQUIPMENT

The following test equipments are used during the Conduct tests:

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

5.2 BLOCK DIAGRAM OF TEST SETUP



5.3 PEAK POWER OUTPUT LIMIT

The maximum peak power shall be less 1W.

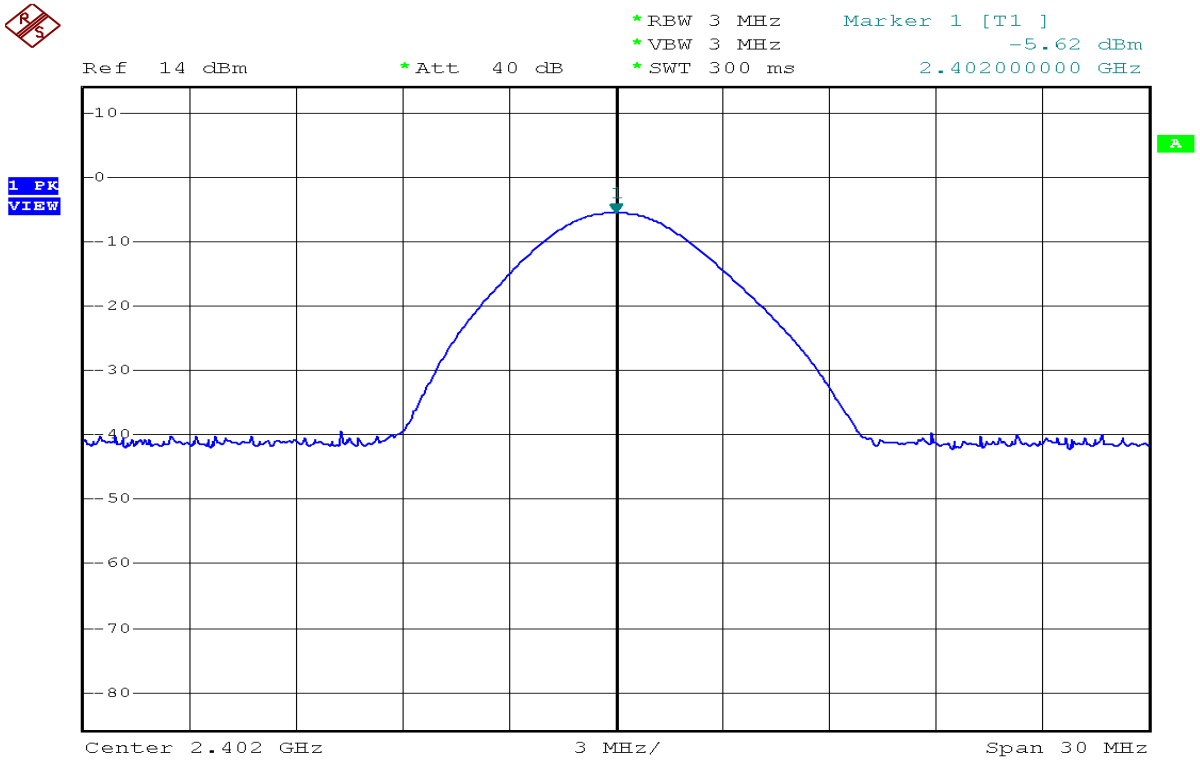
5.4 TEST RESULT

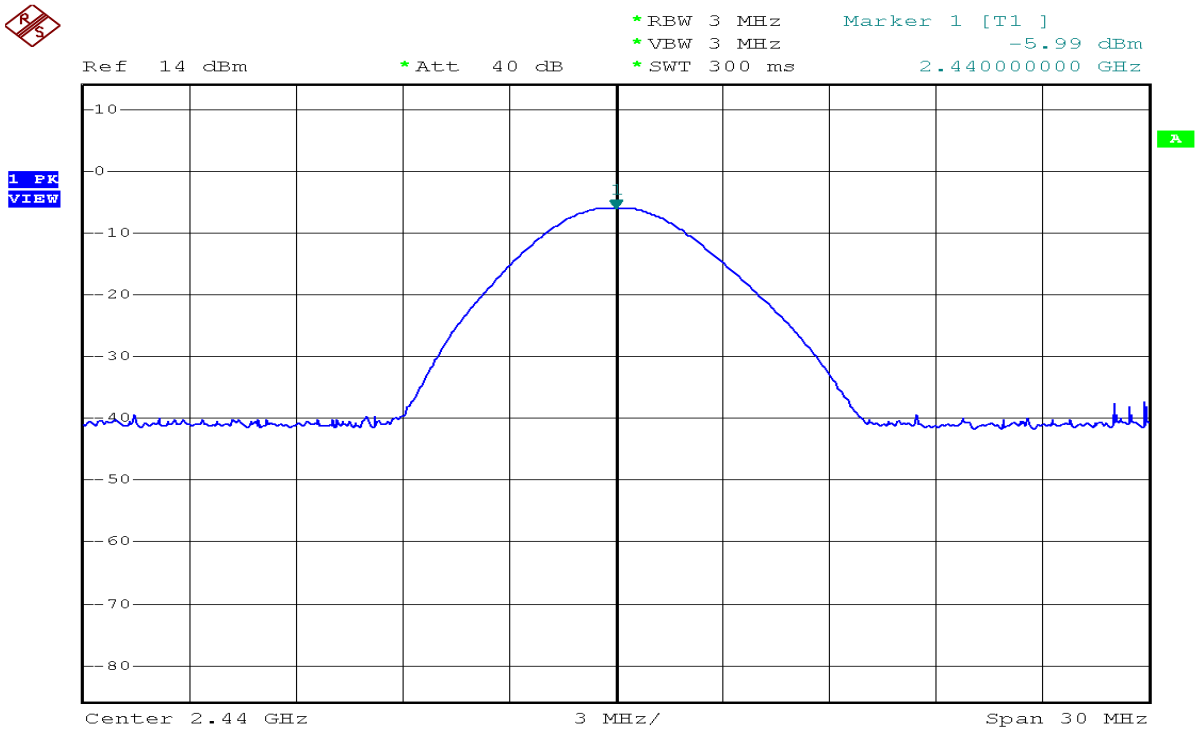
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Test Mode	GFSK	**Display Pattern**	Program

Channel No.	Frequency (MHz)	Reading Level (dBm)	Cable loss (dB)	Measurement (dBm)	Required Limit	Result
0	2402.00	-5.62	0.63	-4.99	1W(30dBm)	Pass
38	2440.00	-5.99	0.71	-5.28	1W(30dBm)	Pass
78	2480.00	-6.86	0.85	-6.01	1W(30dBm)	Pass

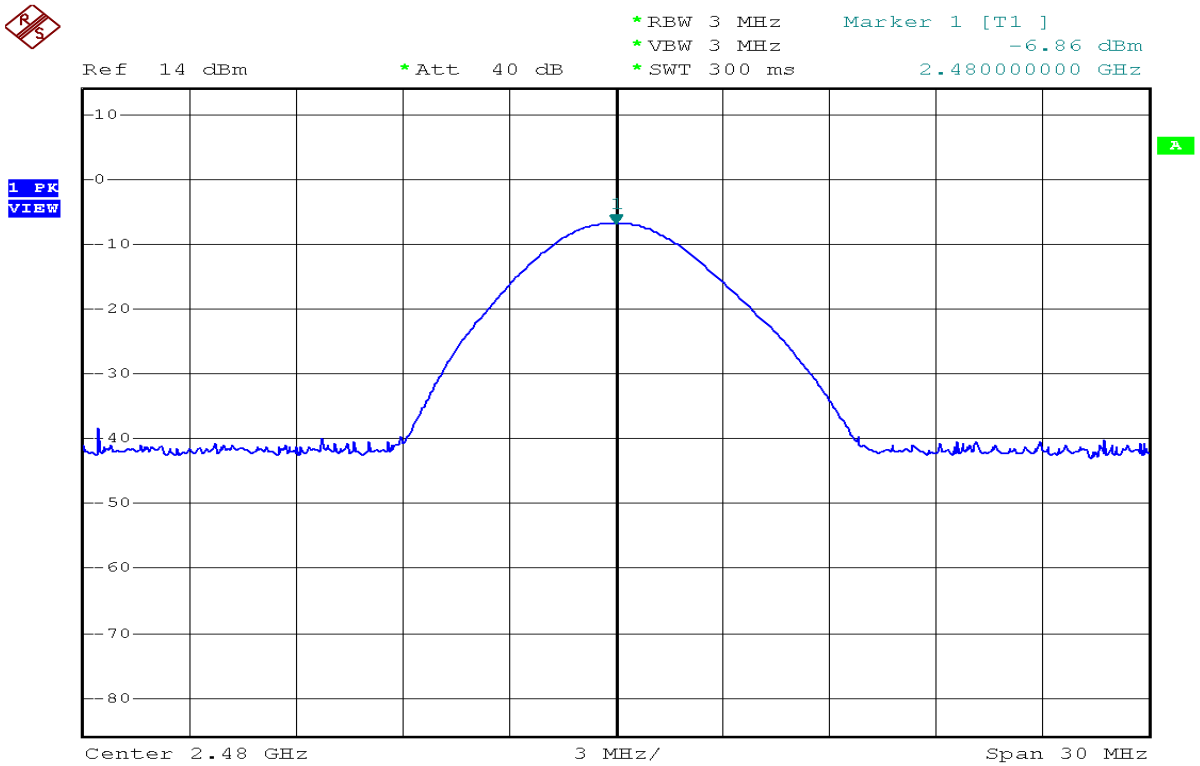
Note :

Measurement = Reading Level +Cable loss





Date: 21.APR.2014 06:36:10



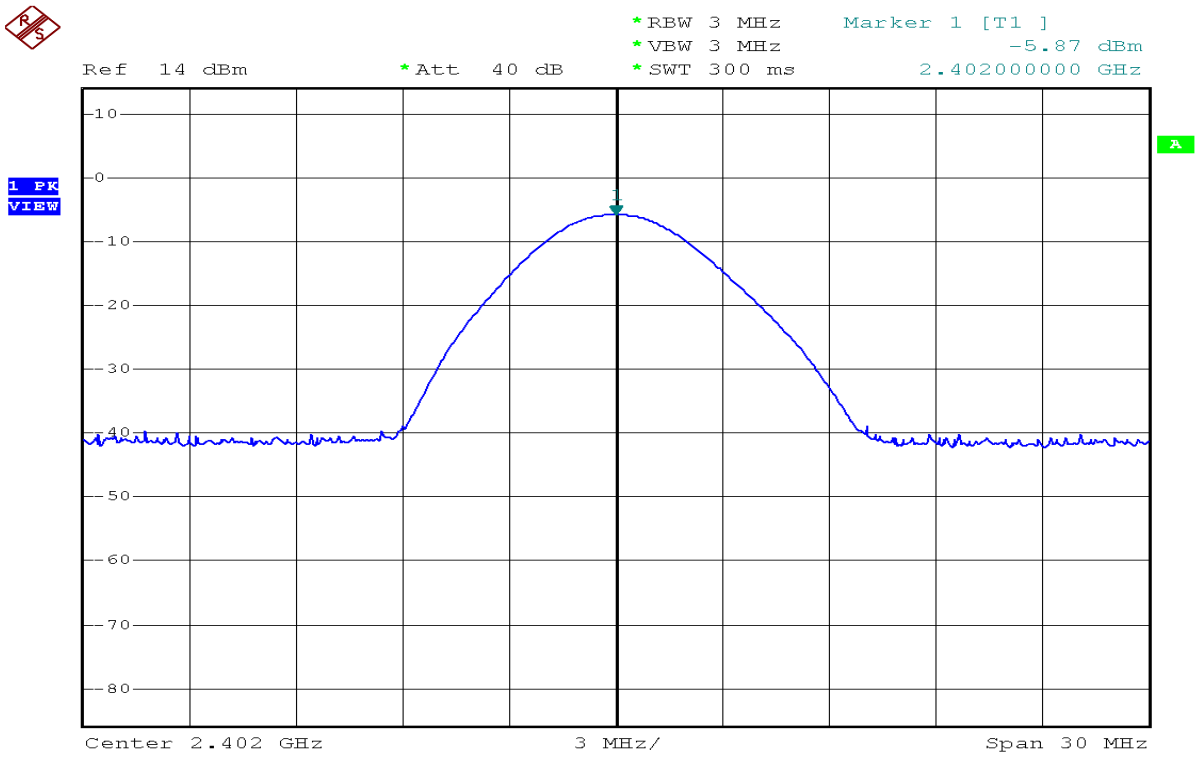
Date: 21.APR.2014 06:37:27

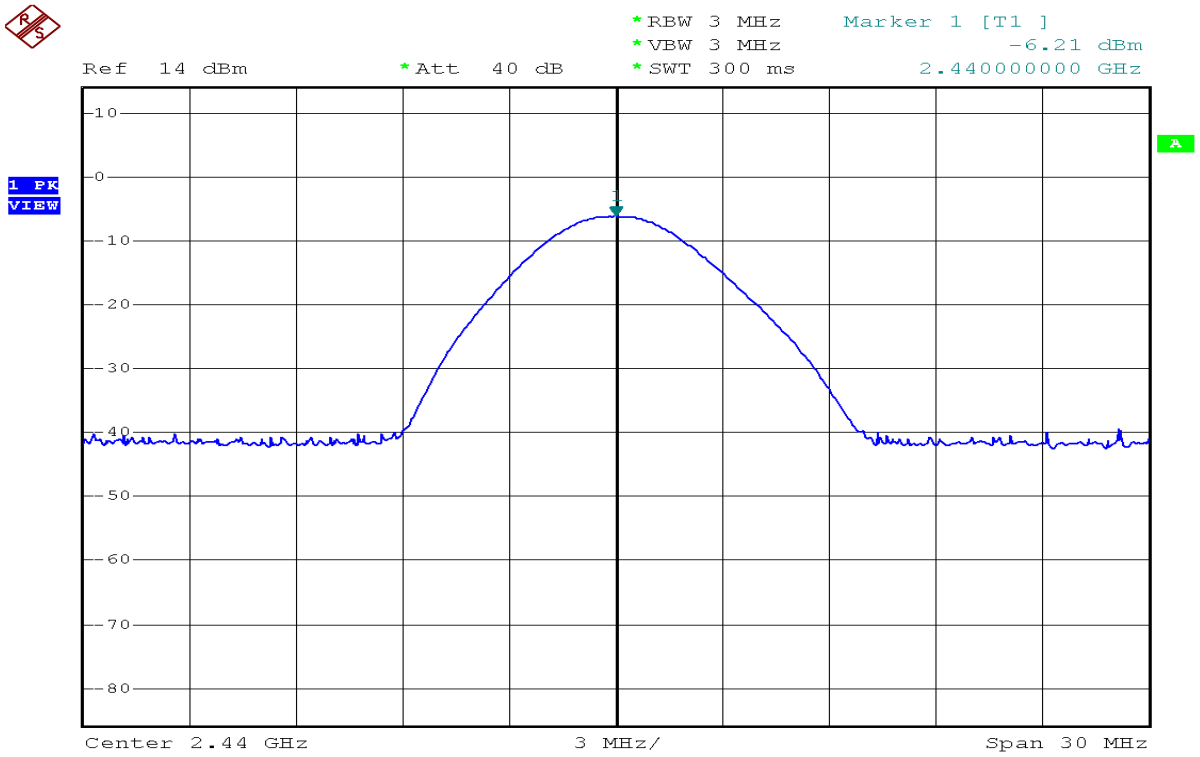
Date of Test	April 22, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Test Mode	π/4 PSK	**Display Pattern**	Program

Channel No.	Frequency (MHz)	Reading Level (dBm)	Cable loss (dB)	Measurement (dBm)	Required Limit	Result
0	2402.00	-5.87	0.63	-5.24	1W(30dBm)	Pass
38	2440.00	-6.21	0.71	-5.50	1W(30dBm)	Pass
78	2480.00	-7.04	0.85	-6.19	1W(30dBm)	Pass

Note :

Measurement = Reading Level +Cable loss





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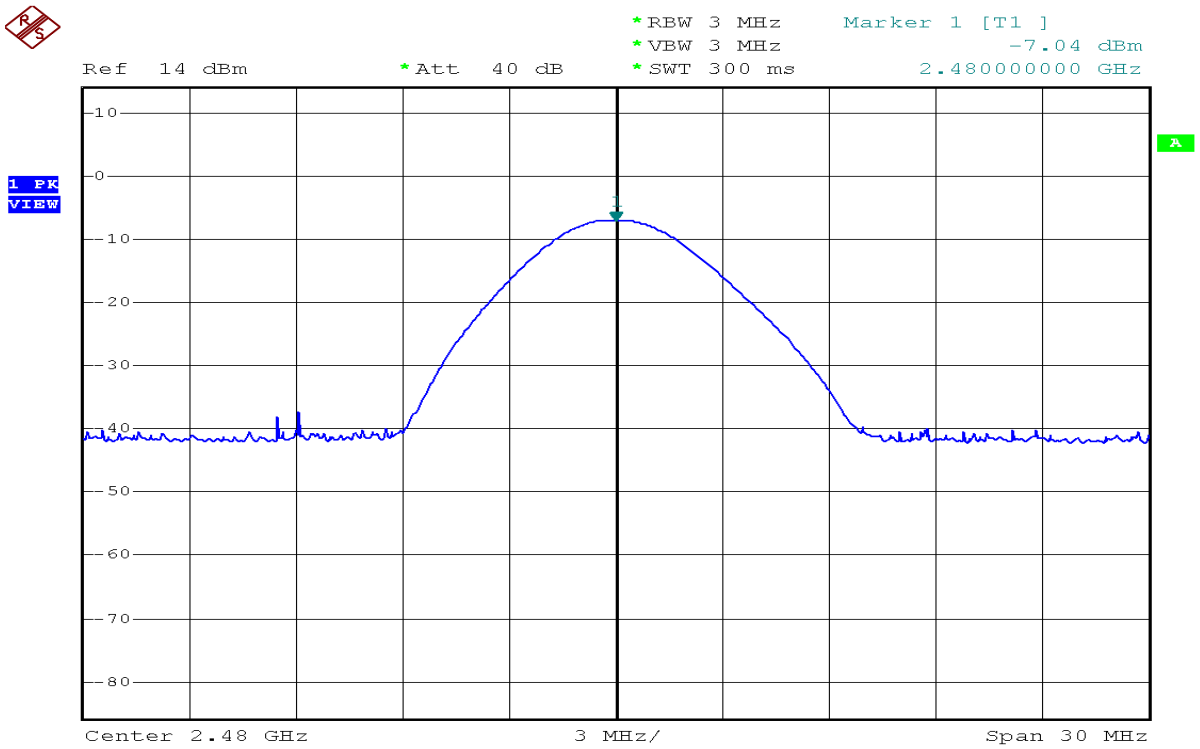


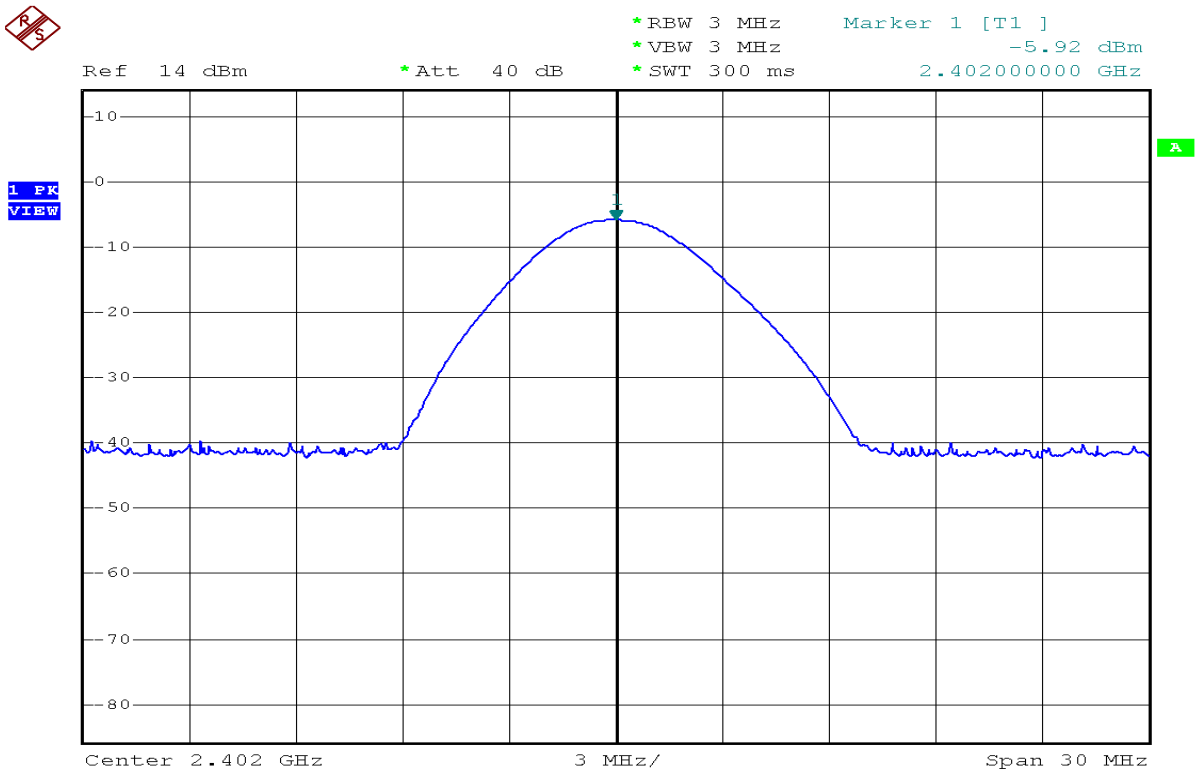
Date: 21.APR.2014 06:47:38

Date of Test	April 22, 2014	**Temperature**	20 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Test Mode	8DPSK	**Display Pattern**	Program

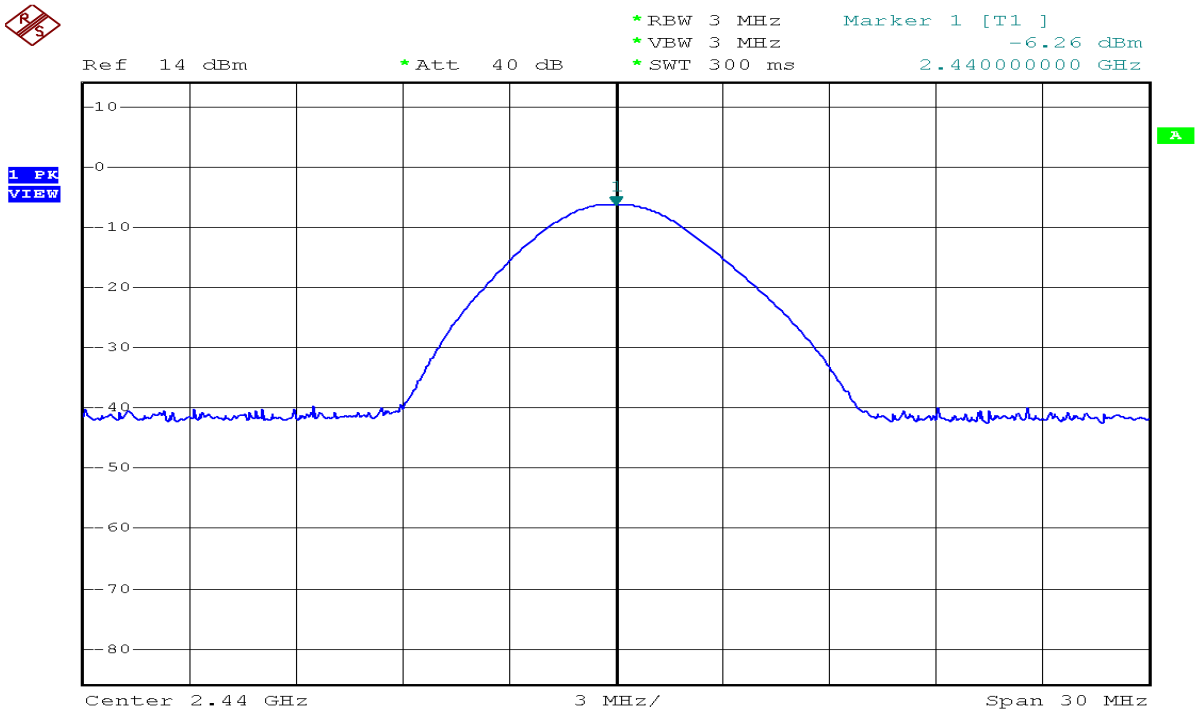
Channel No.	Frequency (MHz)	Reading Level (dBm)	Cable loss (dB)	Measurement (dBm)	Required Limit	Result
0	2402.00	-5.92	0.63	-5.29	1W(30dBm)	Pass
38	2440.00	-6.26	0.71	-5.55	1W(30dBm)	Pass
78	2480.00	-7.12	0.85	-6.27	1W(30dBm)	Pass

Note :

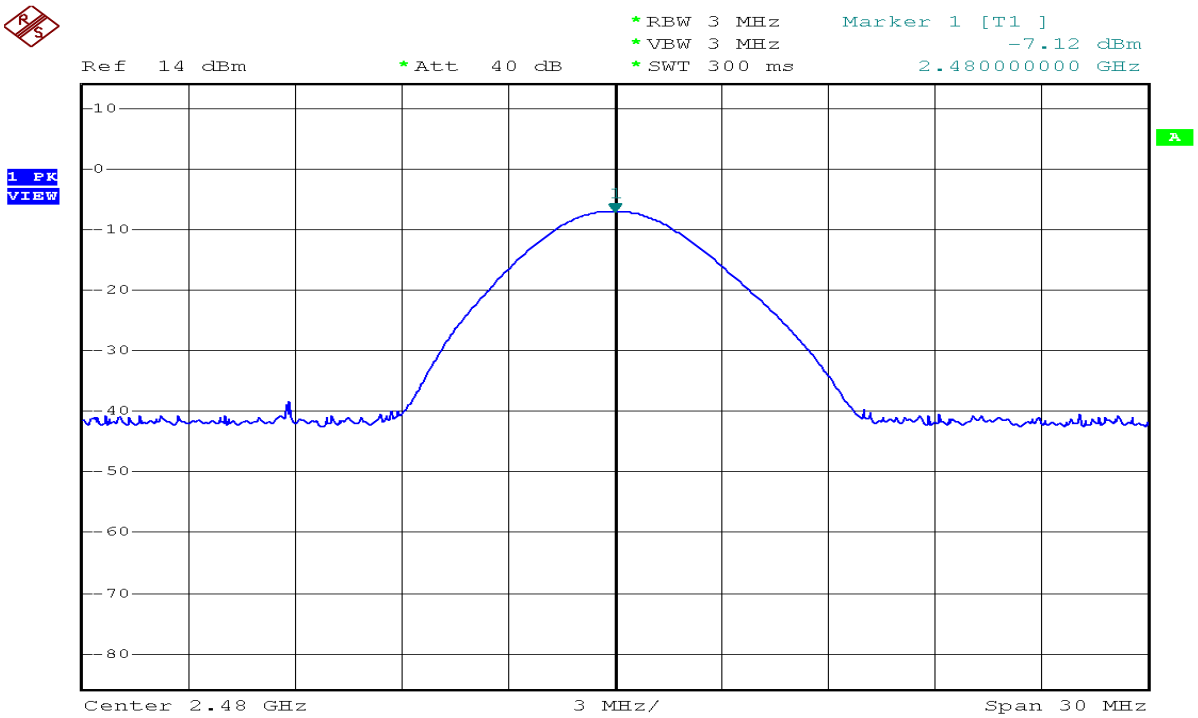
Measurement = Reading Level +Cable loss



Date: 21.APR.2014 06:50:31



Date: 21.APR.2014 06:51:06



Date: 21.APR.2014 06:51:37

6. BAND EDGE

6.1 TEST EQUIPMENT

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14
2	Pre-Amplifier	HP	8449B	3008A01264	2014.06.10
3	HORN ANTENNA	SCHWARZBECK	BBHA 9120	D243	2015.01.23
4	BOARD-BAND ANTENNA	SCHWARZBECK	BBHA 9170	BBHA9170164	2014.02.05
5	CABLE	INSULATED WIRE INC.	SPS-2801-3940-NPS	03262012	2015.04.08
6	CABLE	SUHNER	SUCOFLEX 104	225972/4	2015.02.09
7	CABLE	SUHNER	SUCOFLEX 104PEA	27054/4PEA	2015.02.09
8	CABLE	SUHNER	SUCOFLEX 102	28523/2	2014.09.03
9	Test Program Software	Hotlife	CSR BC4	N/A	N/A

6.2 BLOCK DIAGRAM OF TEST SETUP

RF Radiated Measurement:

Refer to Section 4.2

RF Couductive Measurement:

Refer to Section 5.2

6.3 BAND EDGE LIMIT

In any 100KHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209 (a) (see Section 15.205(c)).

6.4 EUT CONFIGURATION

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2000 on radiated measurement.
The bandwidth below 1GHz setting on the field strength meter is 120KHz, above 1GHz are 1MHz.

6.5 OPERATING CONDITION OF EUT

Same as section 2.9.

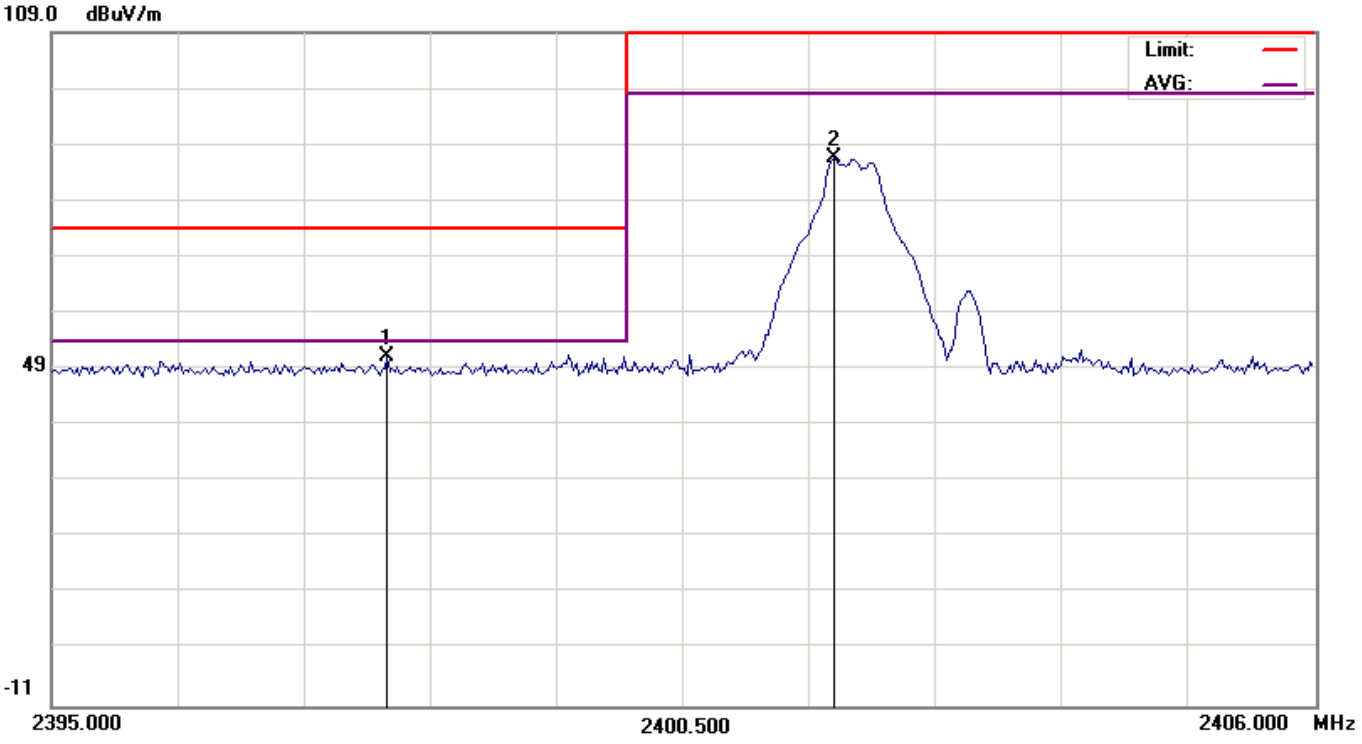
6.6 TEST RELULT

Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2397.9260	41.74	9.46	51.20	74.00	-22.80	peak
2	2401.8200	77.05	9.47	86.52	118.00	-31.48	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2401.8420MHz is Carrier signal.

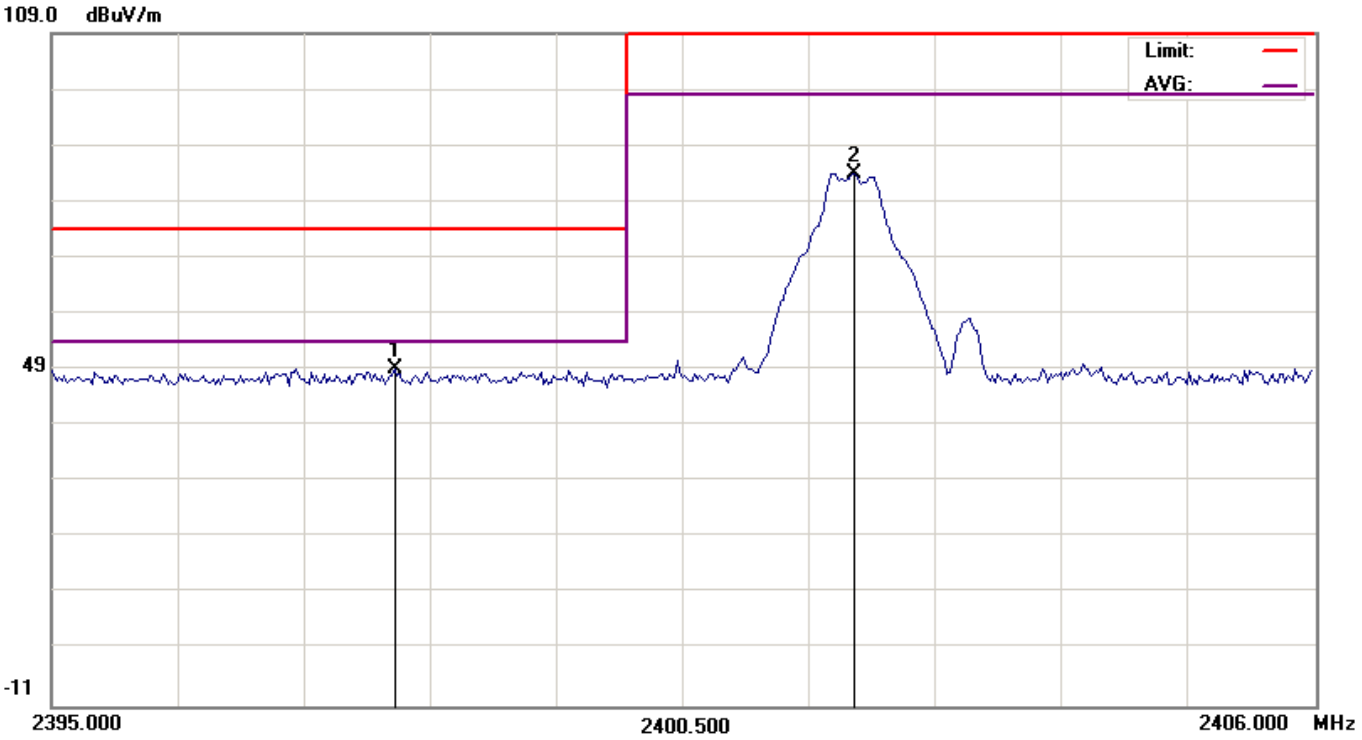


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2397.9920	41.16	7.86	49.02	74.00	-24.98	peak
2	2401.9960	76.09	7.86	83.95	118.00	-34.05	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.1 2396.0340MHz is Carrier signal.

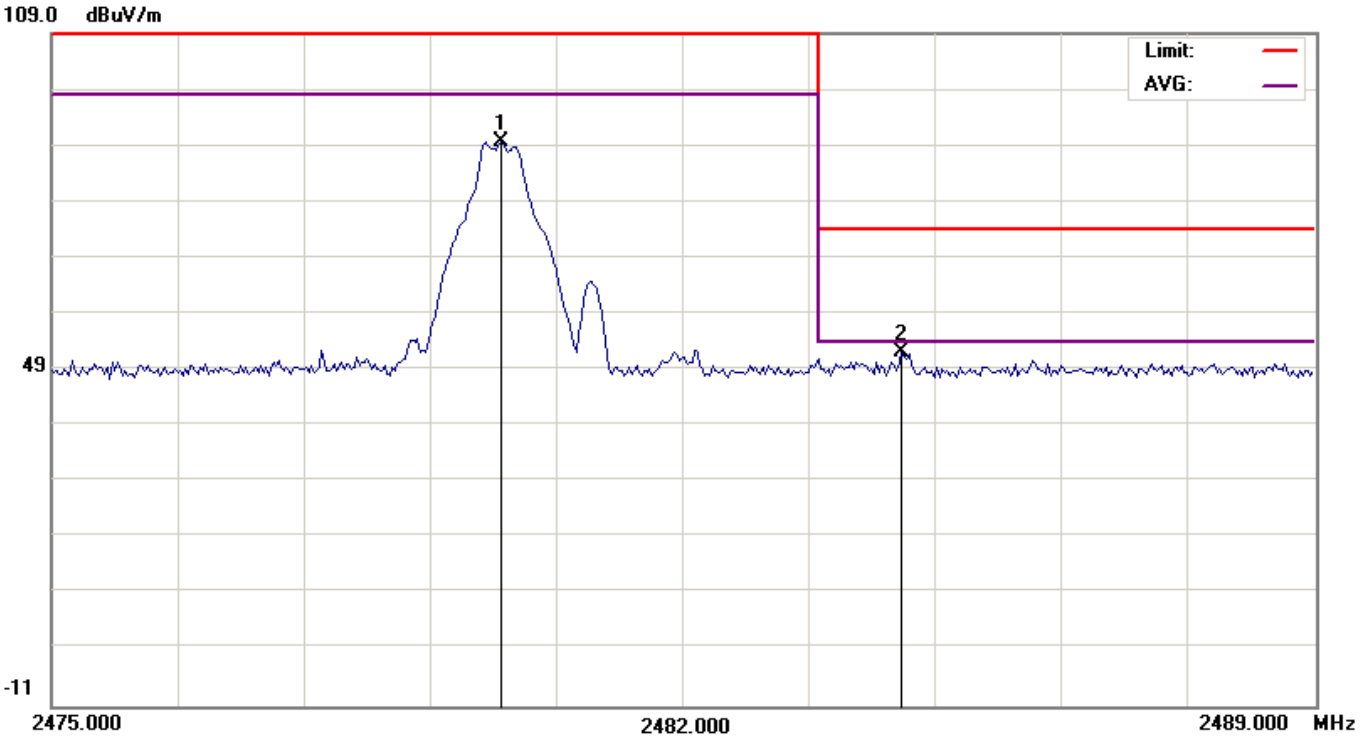


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2479.9840	80.04	9.50	89.54	118.00	-28.46	peak
2	2484.4360	42.67	9.50	52.17	74.00	-21.83	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2484.4360MHz is Carrier signal.

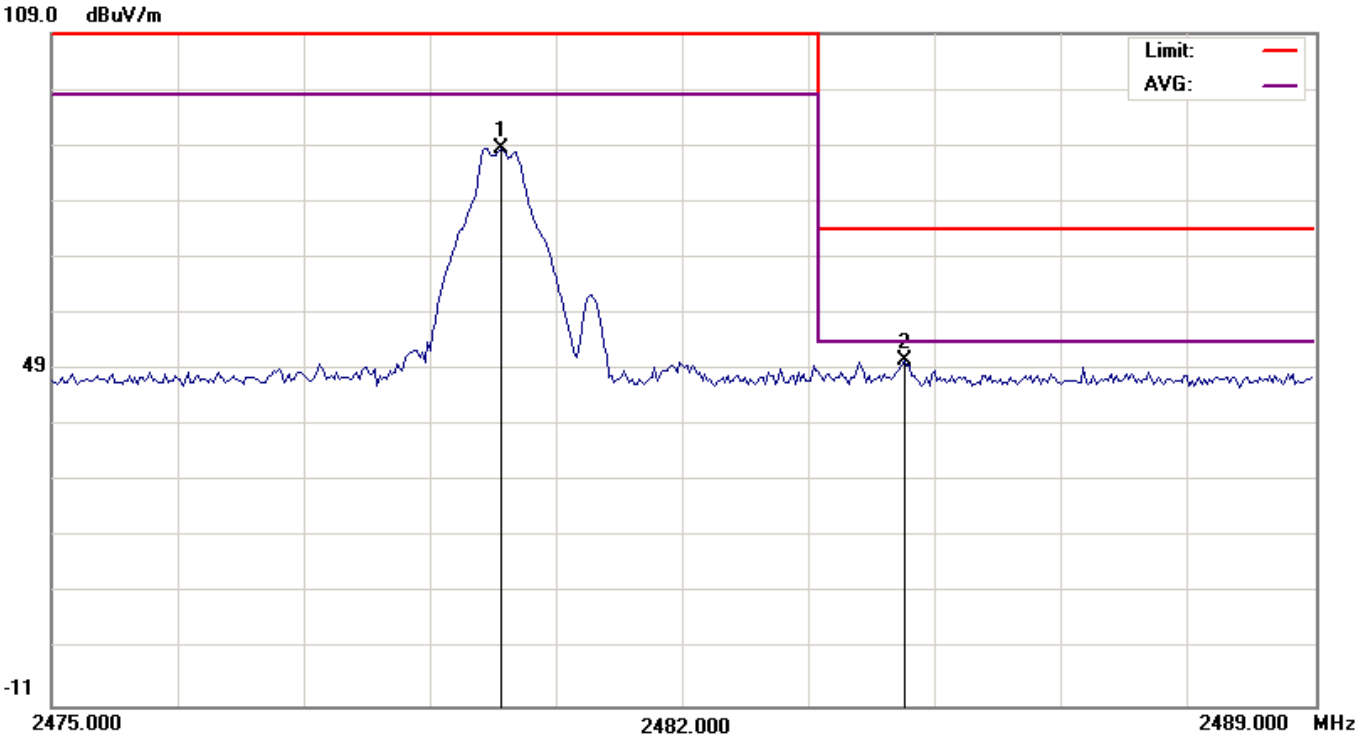


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1 -GFSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2479.9840	80.52	7.88	88.40	118.00	-29.60	peak
2	2484.4640	42.76	7.89	50.65	74.00	-23.35	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2486.0880MHz is Carrier signal.

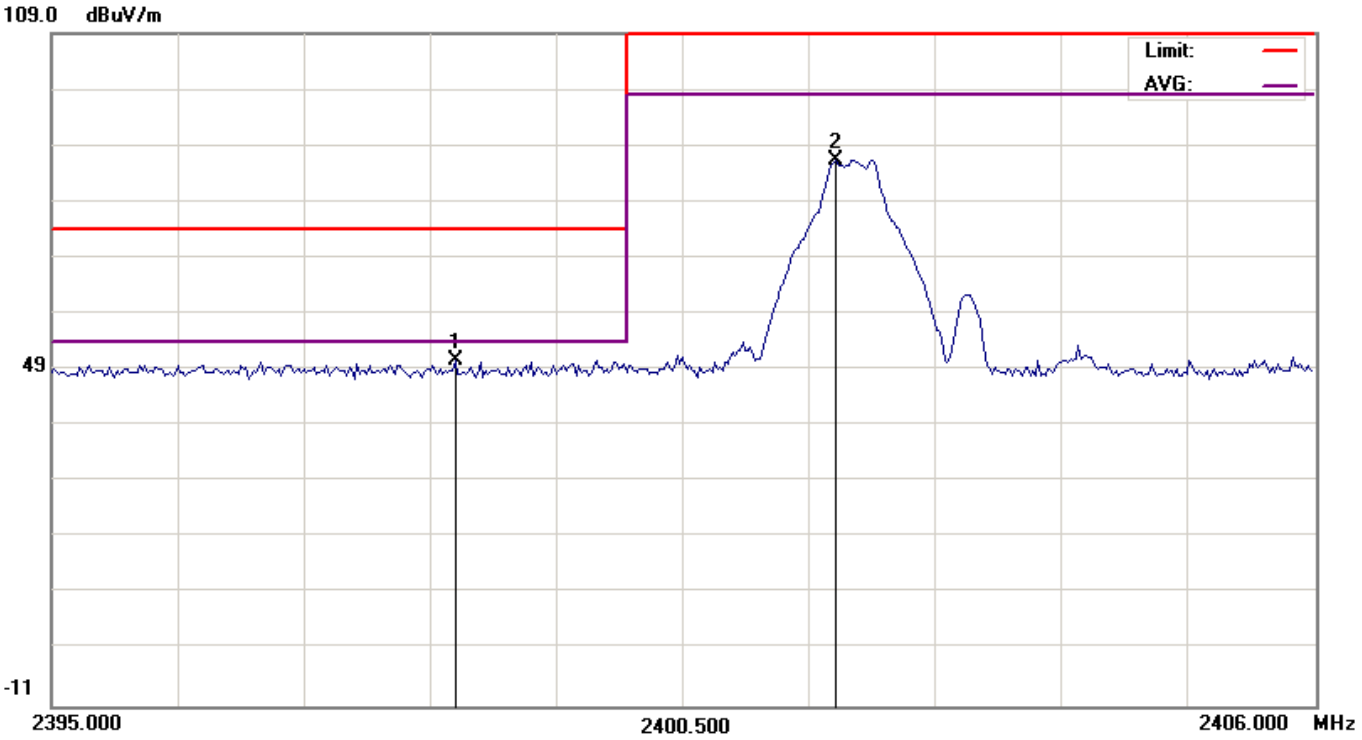


Date of Test	April 24, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2398.5200	41.06	9.46	50.52	74.00	-23.48	peak
2	2401.8420	76.95	9.47	86.42	118.00	-31.58	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.1 2398.0140MHz is Carrier signal.

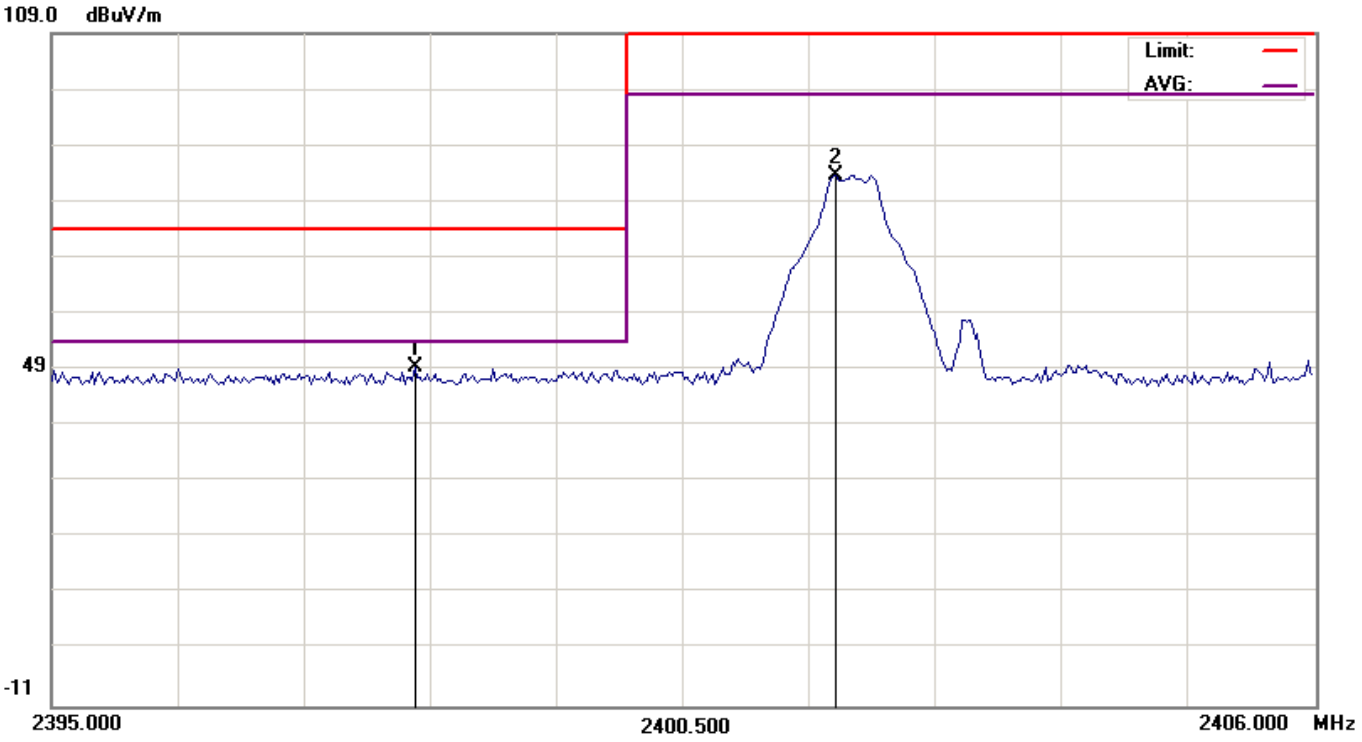


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2398.1680	41.61	7.86	49.47	74.00	-24.53	peak
2	2401.8420	75.88	7.86	83.74	118.00	-34.26	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.1 2399.0260MHz is Carrier signal.

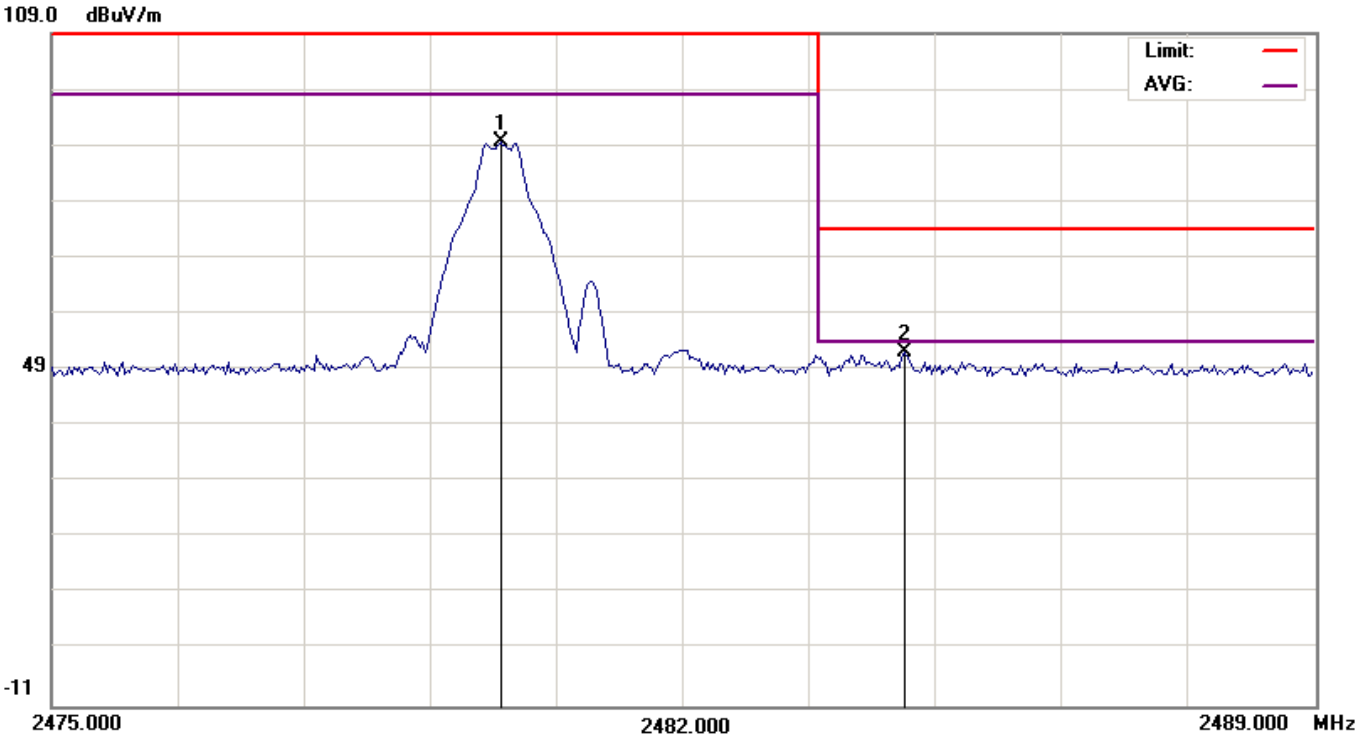


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2479.9840	80.02	9.50	89.52	118.00	-28.48	peak
2	2484.4640	42.55	9.50	52.05	74.00	-21.95	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2484.5200MHz is Carrier signal.

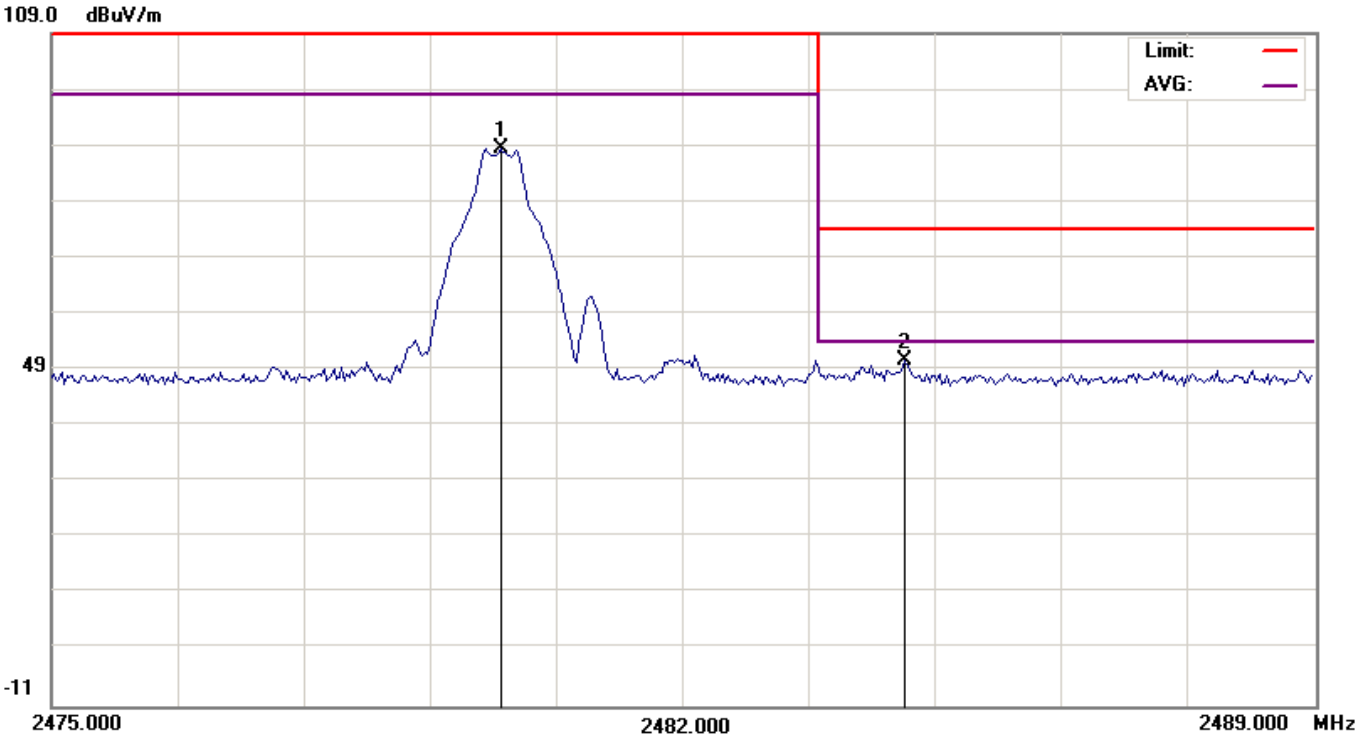


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2 - π/4 PSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2479.9840	80.45	7.88	88.33	118.00	-29.67	peak
2	2484.4640	42.77	7.89	50.66	74.00	-23.34	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2485.2760MHz is Carrier signal.

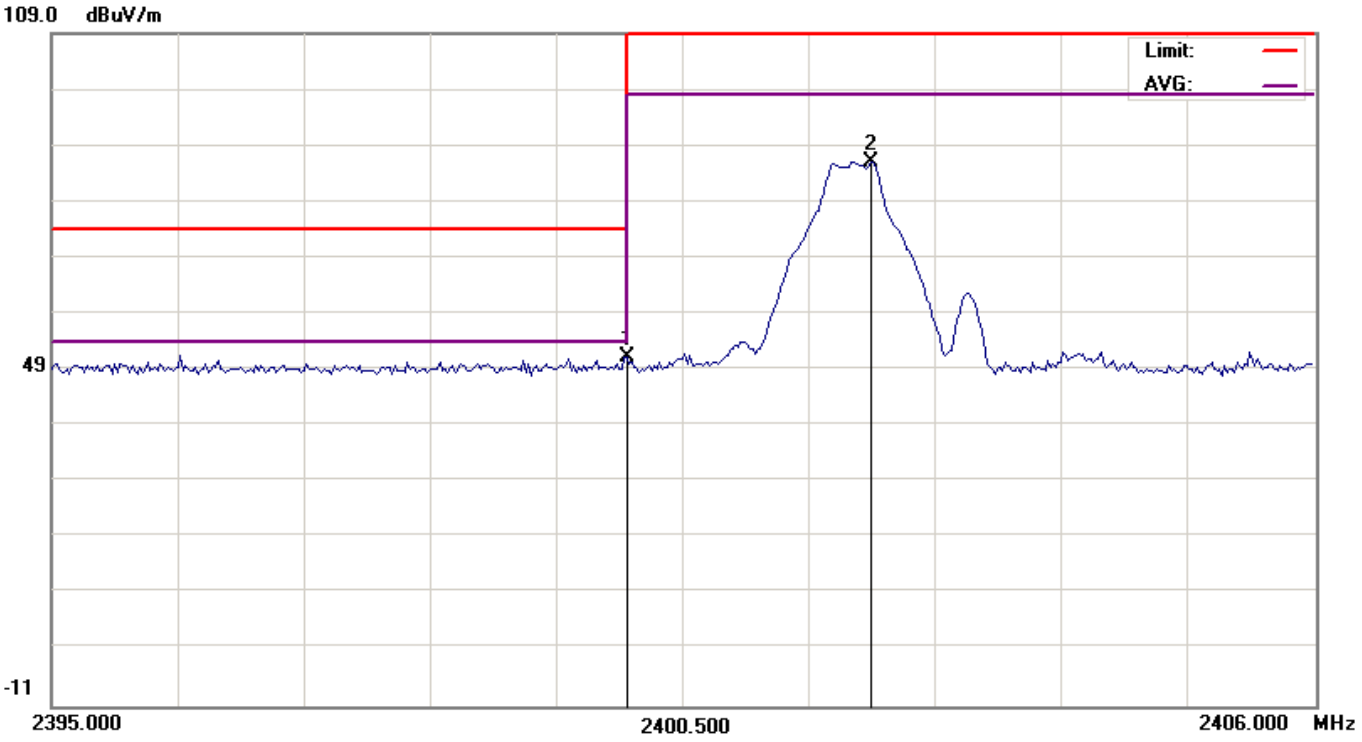


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2400.0160	41.81	9.47	51.28	118.00	-66.72	peak
2	2402.1500	76.73	9.47	86.20	118.00	-31.80	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.1 2399.2900MHz is Carrier signal.

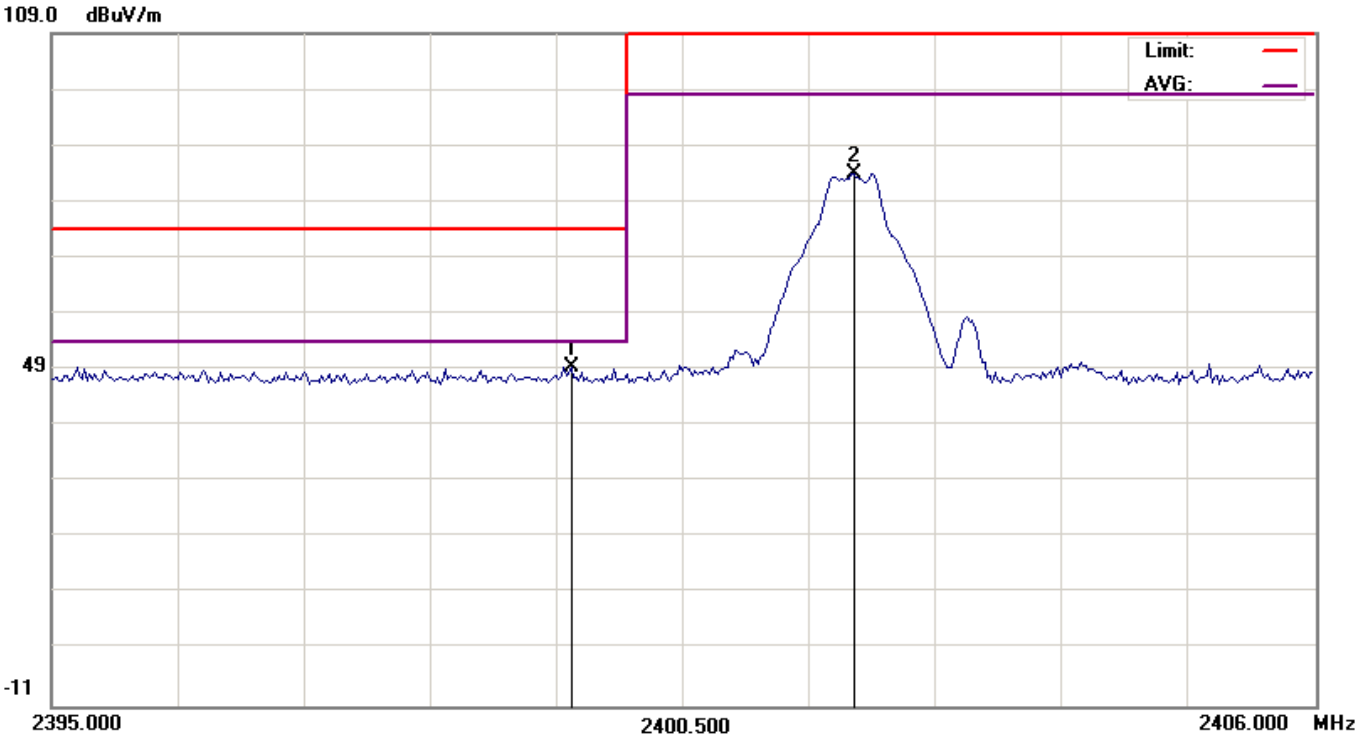


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2402 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2399.5320	41.74	7.86	49.60	74.00	-24.40	peak
2	2401.9960	76.03	7.86	83.89	118.00	-34.11	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.1 2399.1360MHz is Carrier signal.

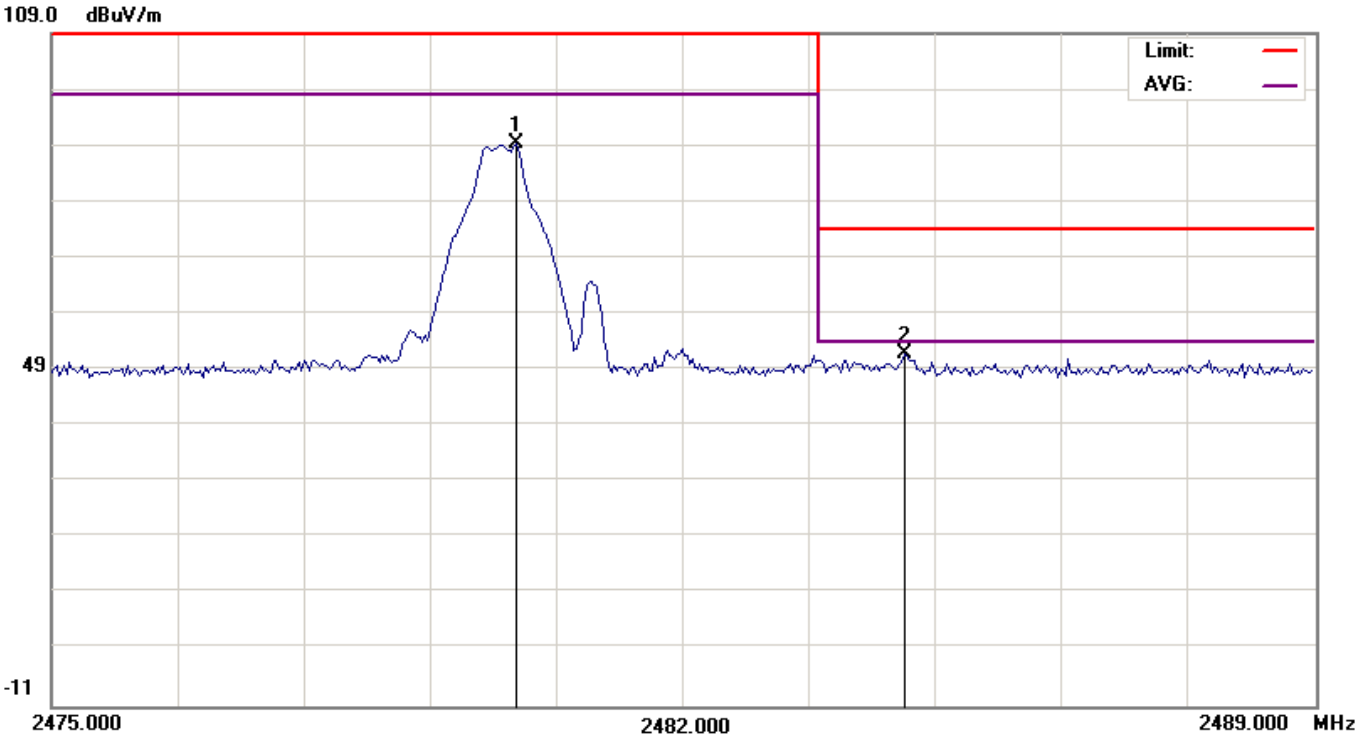


Date of Test	April 24, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Horizontal**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2480.1520	79.74	9.50	89.24	118.00	-28.76	peak
2	2484.4640	42.27	9.50	51.77	74.00	-22.23	peak

Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2483.8760MHz is Carrier signal.

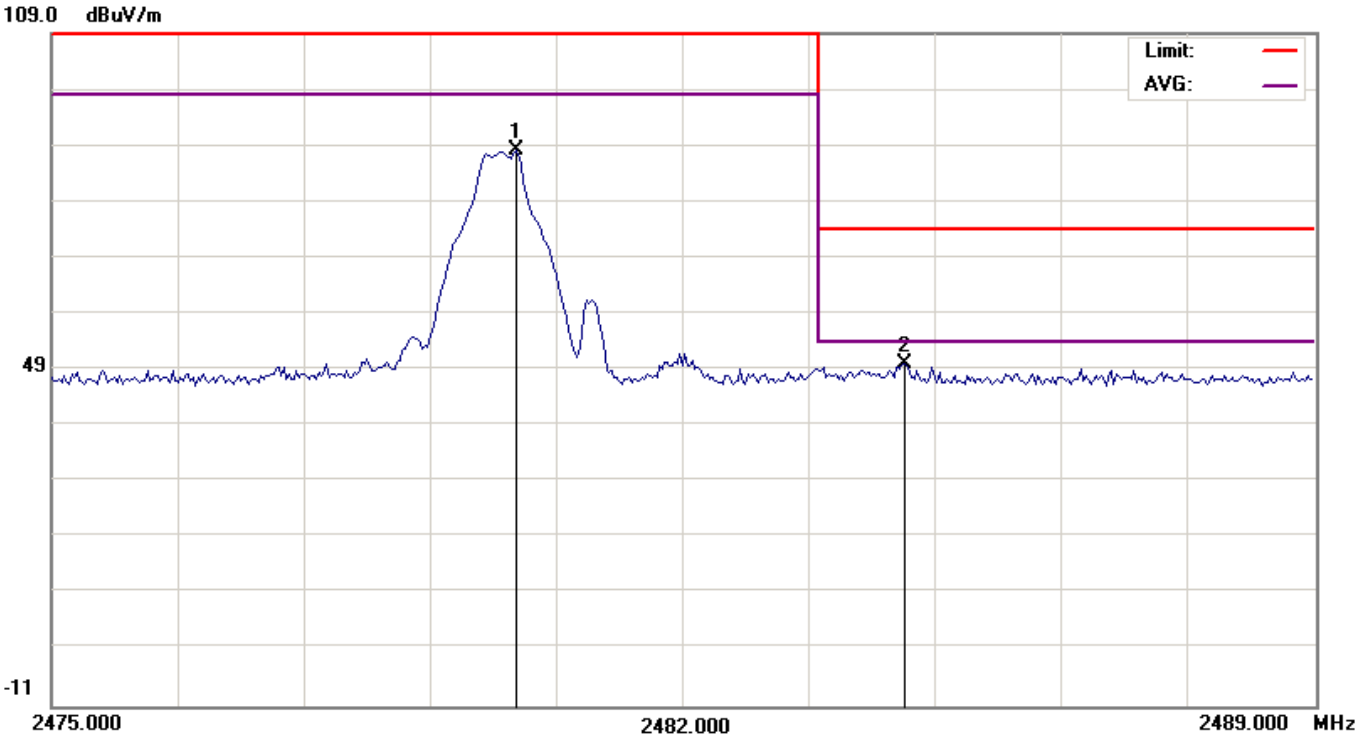


Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3 -8DPSK	**Display Pattern**	Program
Antenna distance	3m at **Vertical**	**Fundamental**	2480 MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB/m	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	2480.1520	80.15	7.88	88.03	118.00	-29.97	peak
2	2484.4640	42.17	7.89	50.06	74.00	-23.94	peak

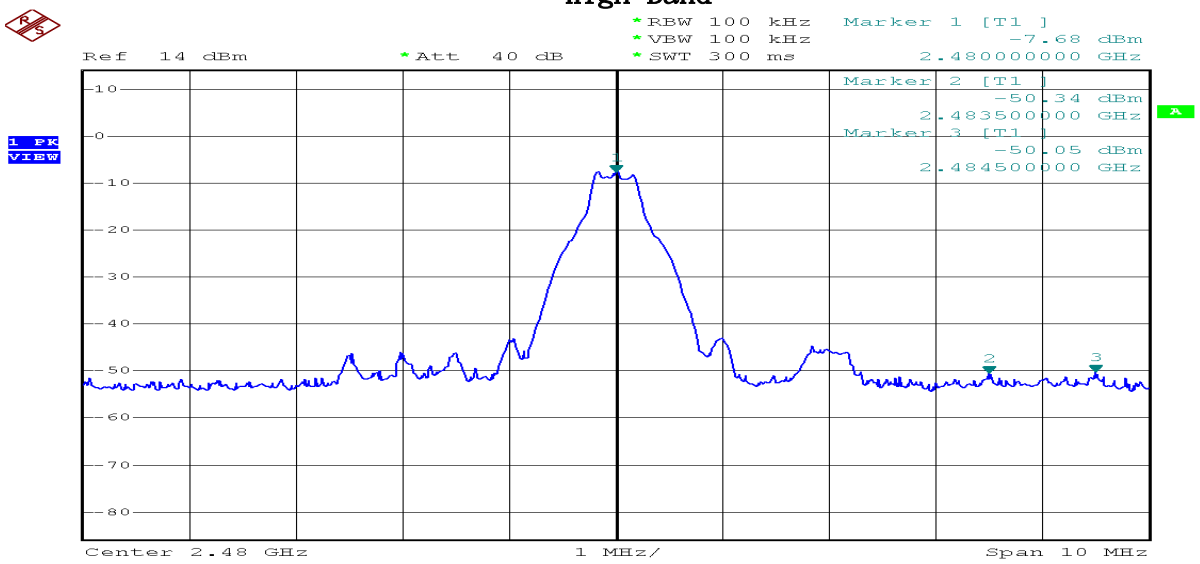
Remarks:

1. All Readings are Peak and Average value.
2. Measurement = Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. Factor = antenna factor + cable loss – amplifier gain.
5. The antenna height could have ±1cm tolerance and the turn table degree could have ±1° tolerance.
6. The measurement uncertainty is 1.19 dB.
7 The No.2 2486.4240MHz is Carrier signal.



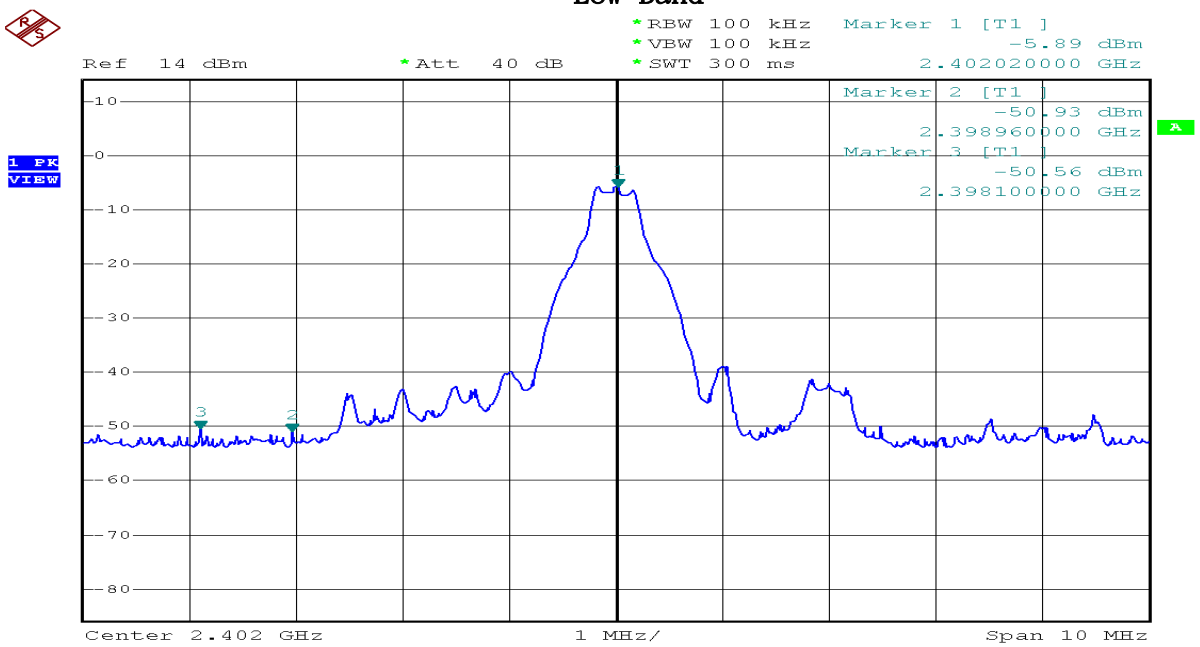
Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Fundamental**	CH-00 and CH-78 (2402~2480MHz)

High Band



Date: 29.APR.2014 04:47:52

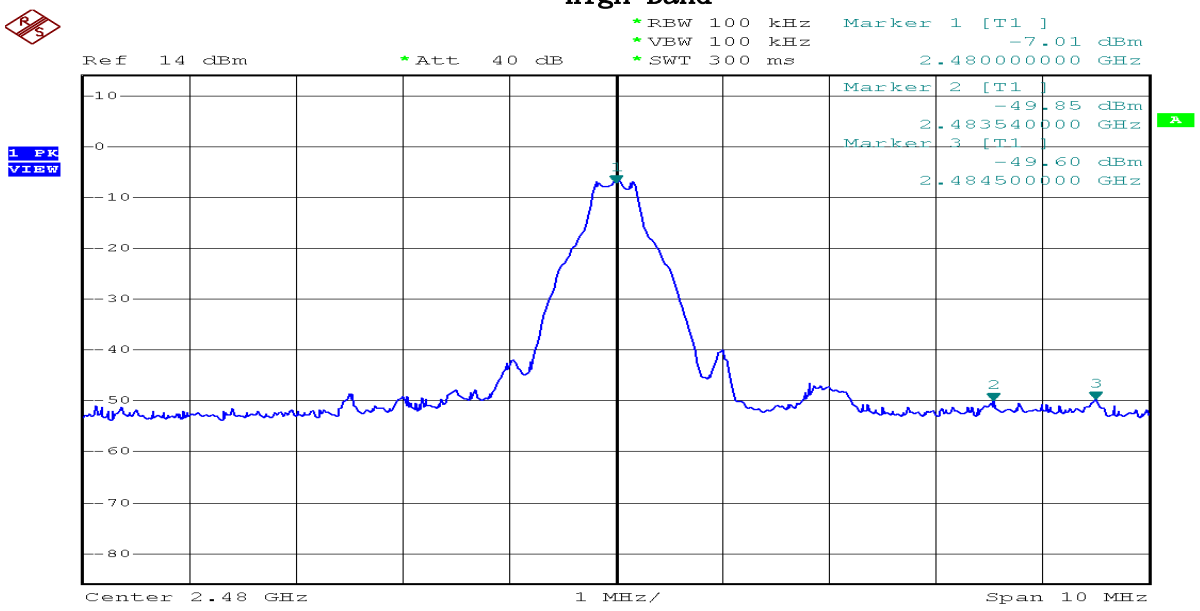
Low Band



Date: 29.APR.2014 04:46:47

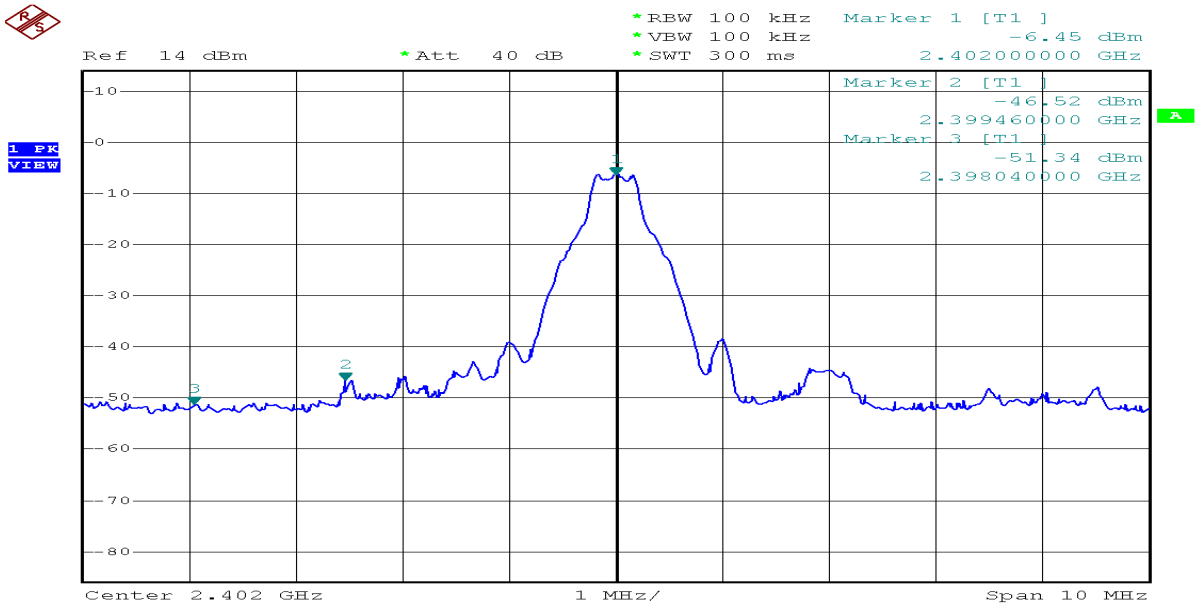
Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Fundamental**	CH-00 and CH-78 (2402~2480MHz)

High Band



Date: 23.APR.2014 10:36:33

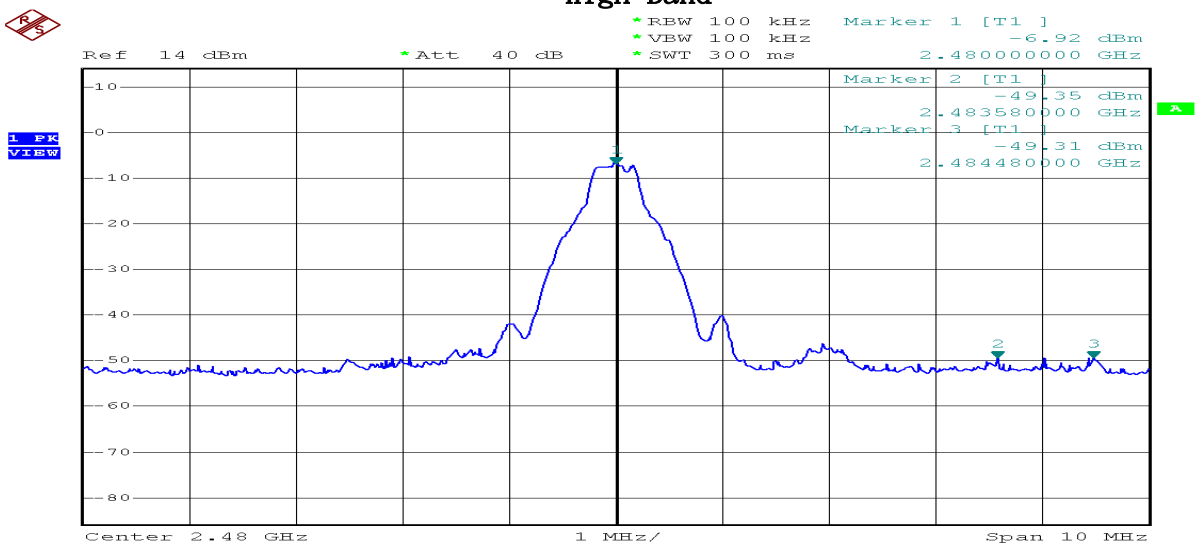
Low Band



Date: 23.APR.2014 10:38:23

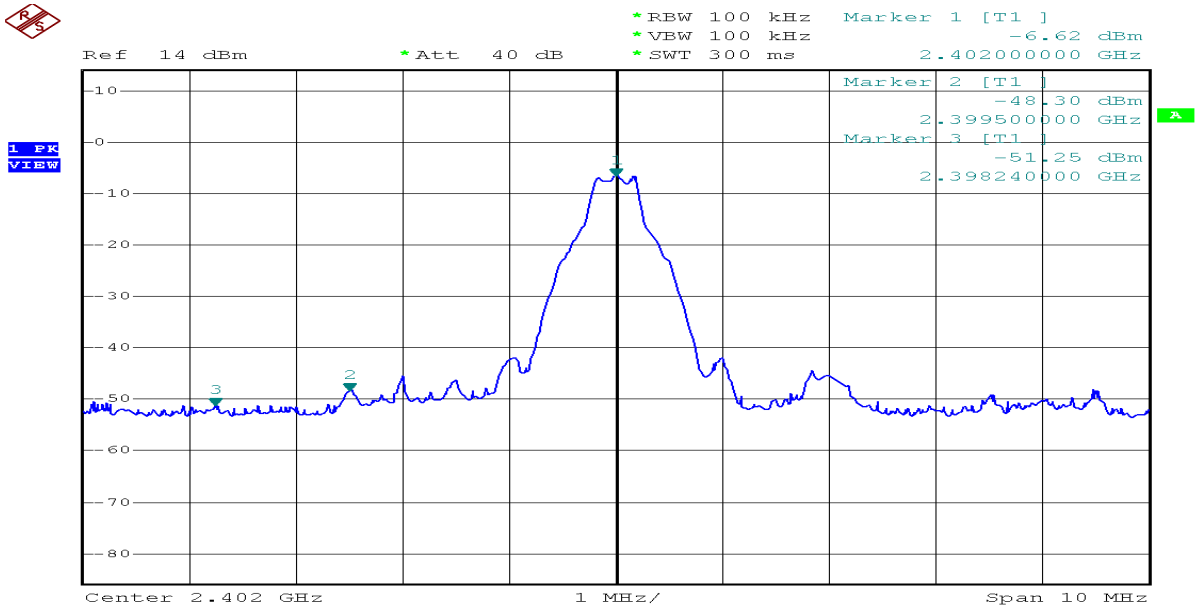
Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Fundamental**	CH-00 and CH-78 (2402~2480MHz)

High Band



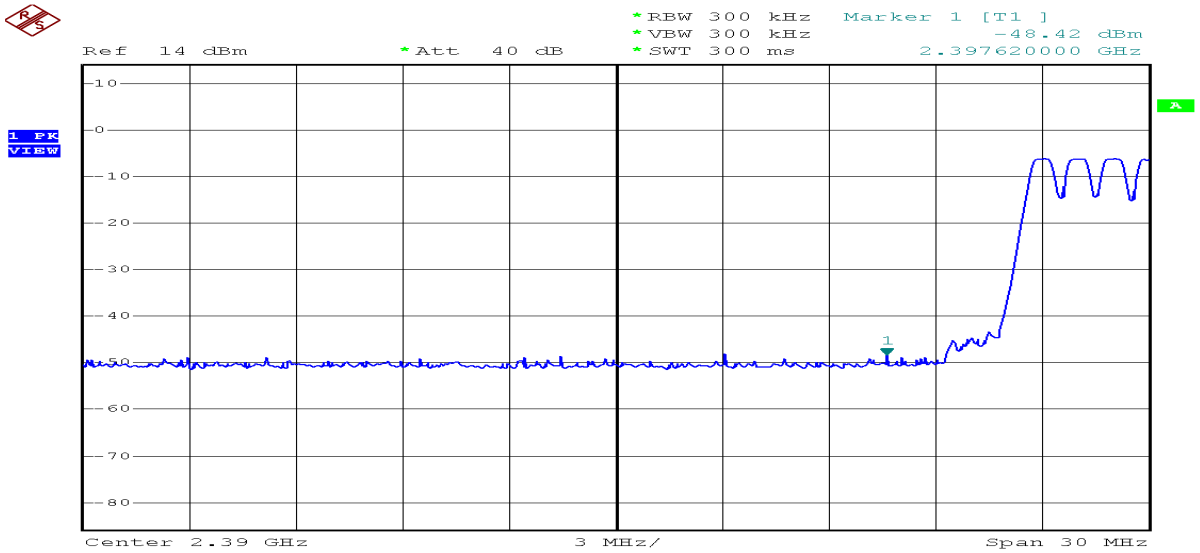
Date: 23.APR.2014 10:51:18

Low Band



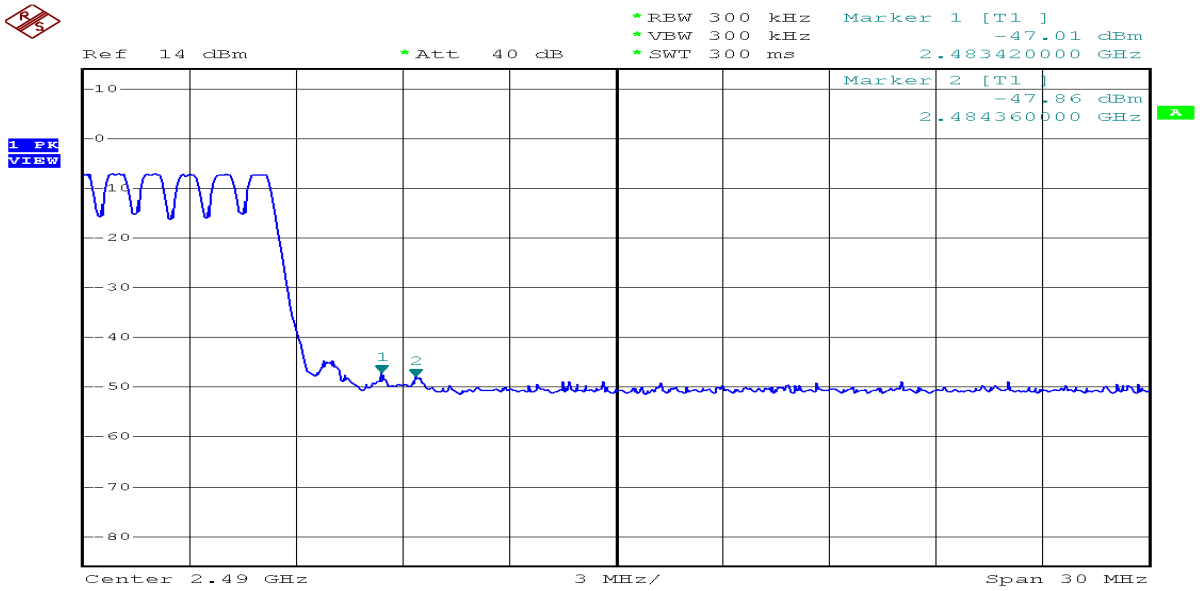
Date: 23.APR.2014 10:49:50

Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Fundamental**	2402MHz



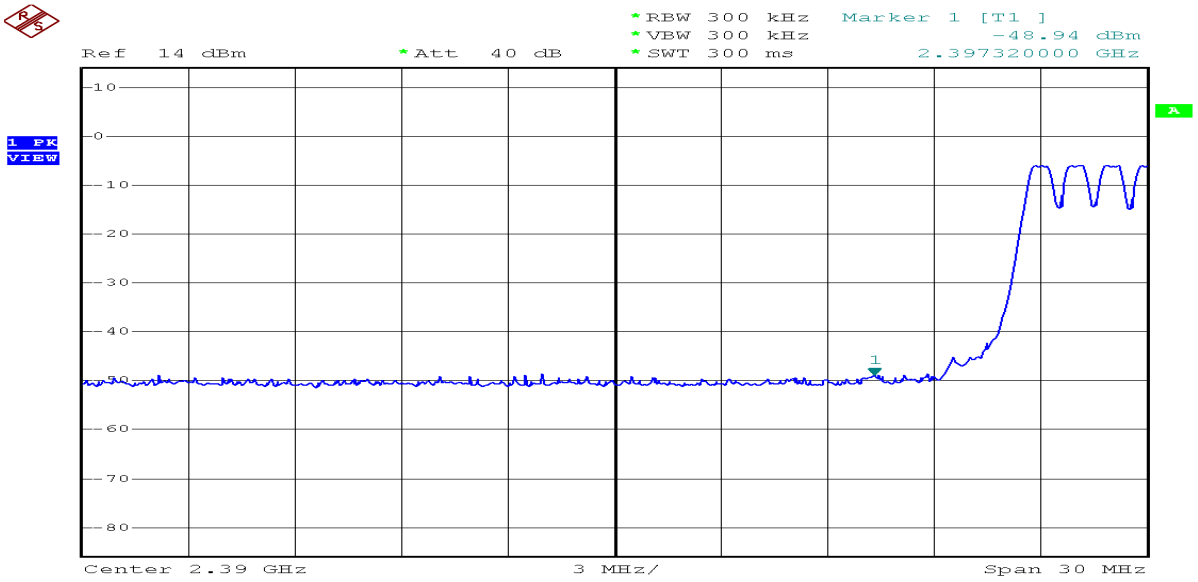
Date: 21.APR.2014 07:21:50

Date of Test	April 22, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Fundamental**	2480MHz



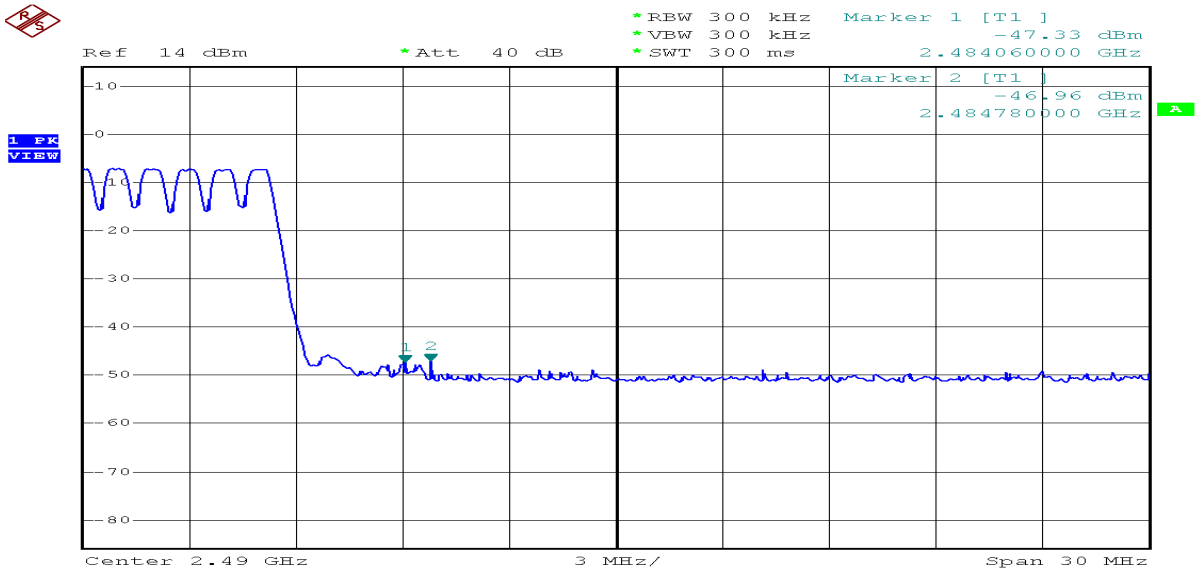
Date: 21.APR.2014 07:20:26

Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Fundamental**	2402MHz



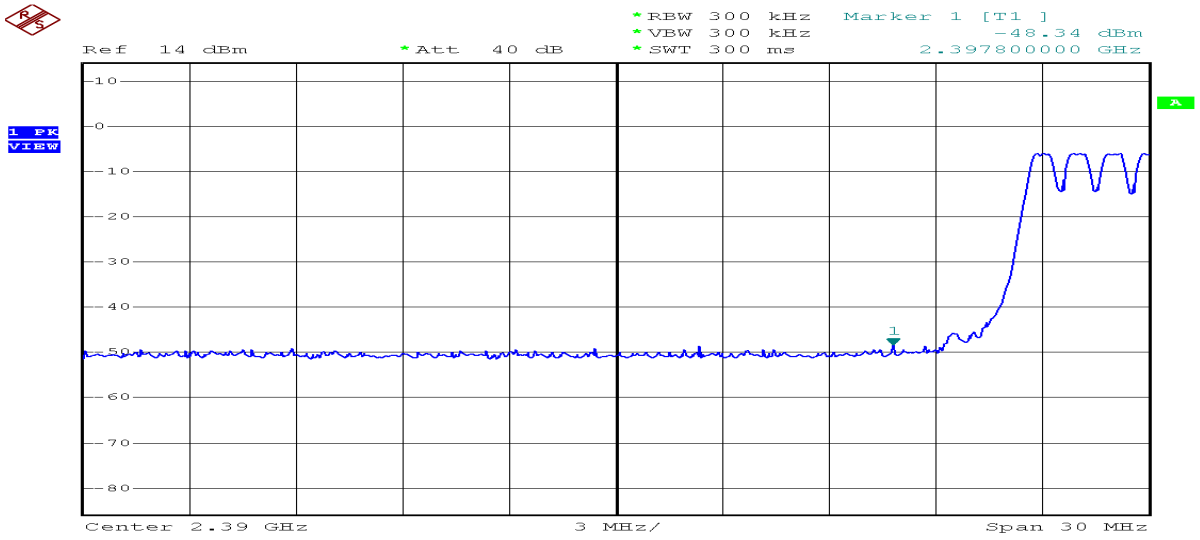
Date: 21.APR.2014 07:27:01

Date of Test	April 22, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Fundamental**	2480MHz



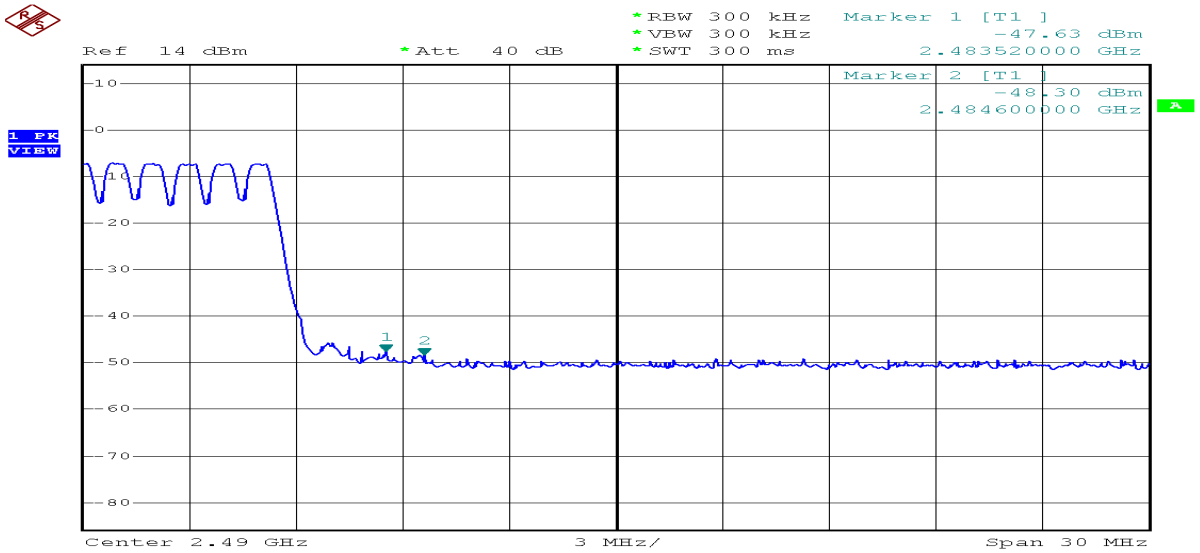
Date: 21.APR.2014 07:28:32

Date of Test	April 23, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Fundamental**	2402MHz



Date: 21.APR.2014 07:32:07

Date of Test	April 22, 2014	**Temperature**	23 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Fundamental**	2480MHz



Date: 21.APR.2014 07:30:19

7. OCCUPIED BANDWIDTH

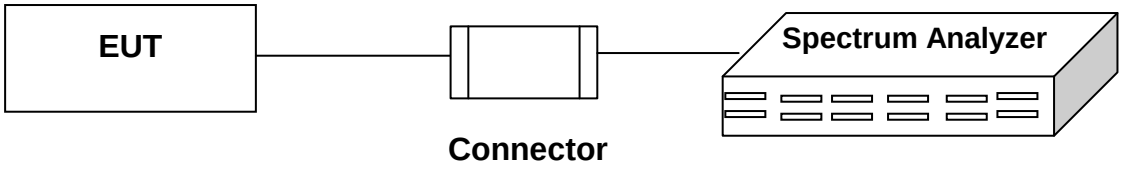
7.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

7.2 BLOCK DIAGRAM OF TEST SETUP



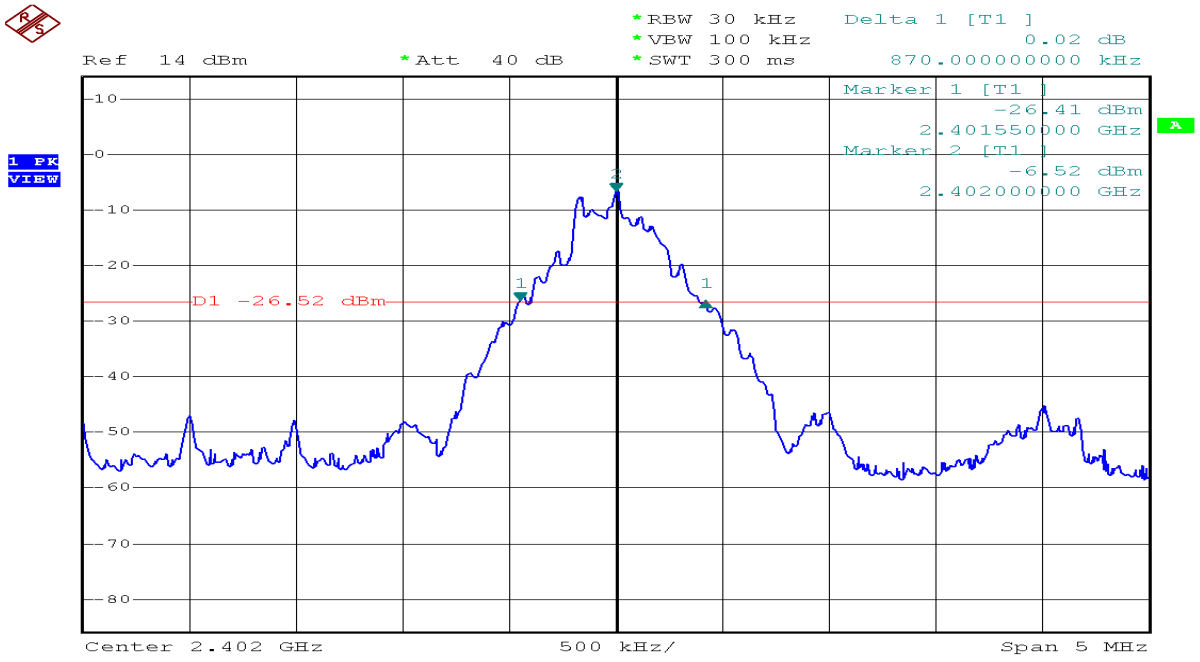
7.3 LIMIT

The maximum 20 dB bandwidth shall be muasurement.

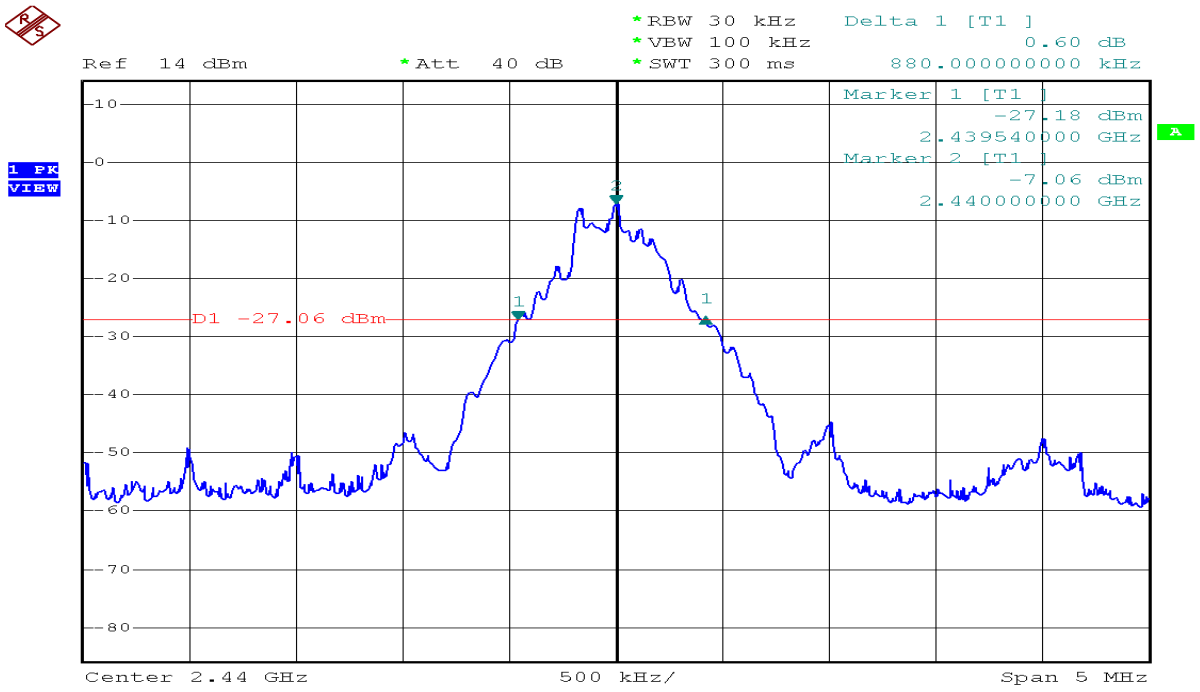
7.4 TEST RESULT

Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Display Pattern**	Program

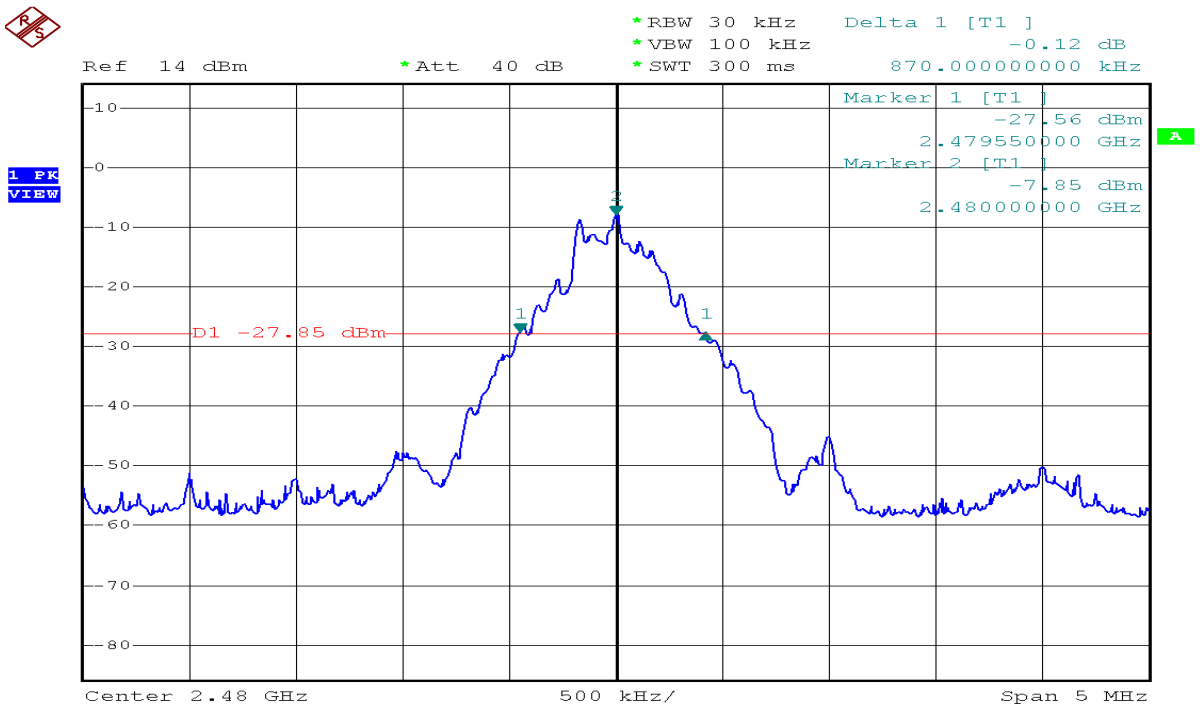
Channel No.	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402.0000	0.870
38	2440.0000	0.880
78	2480.0000	0.870



Date: 21.APR.2014 07:41:23



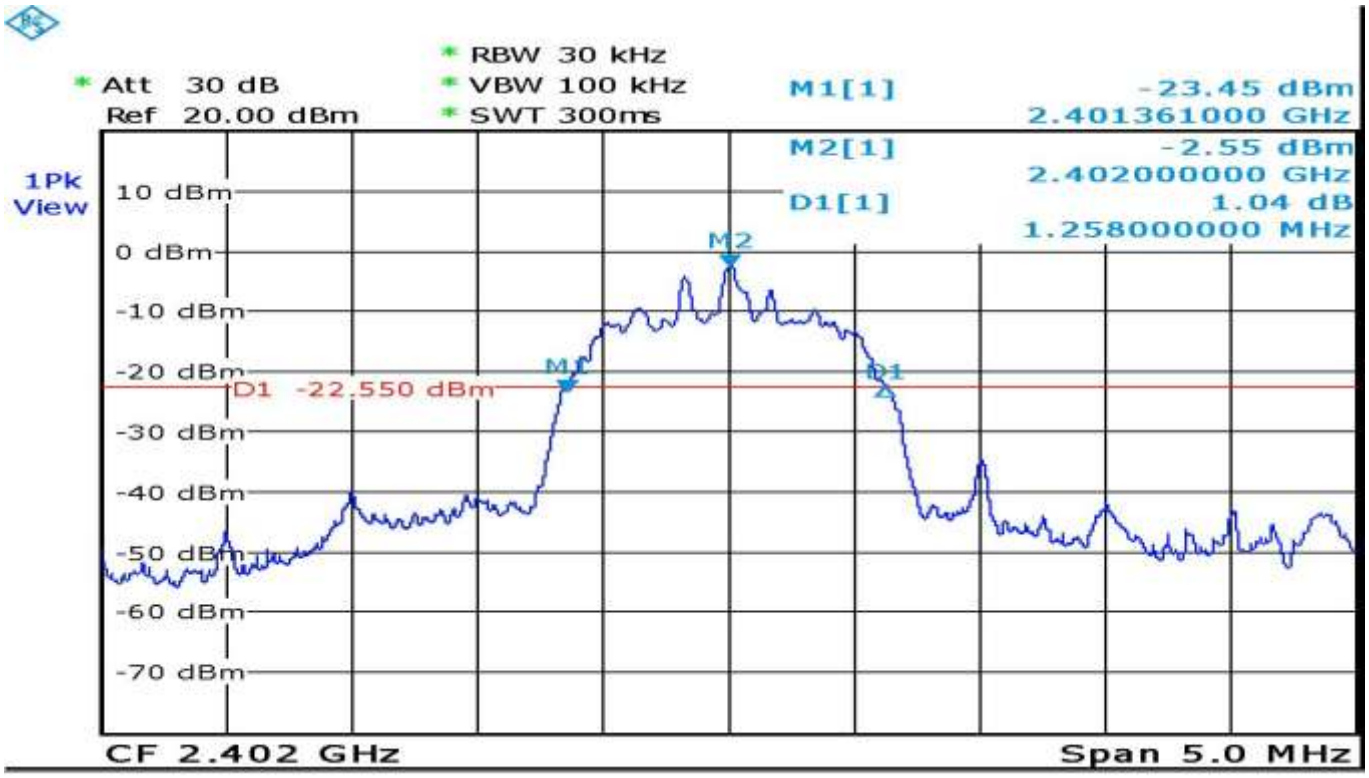
Date: 21.APR.2014 07:42:56



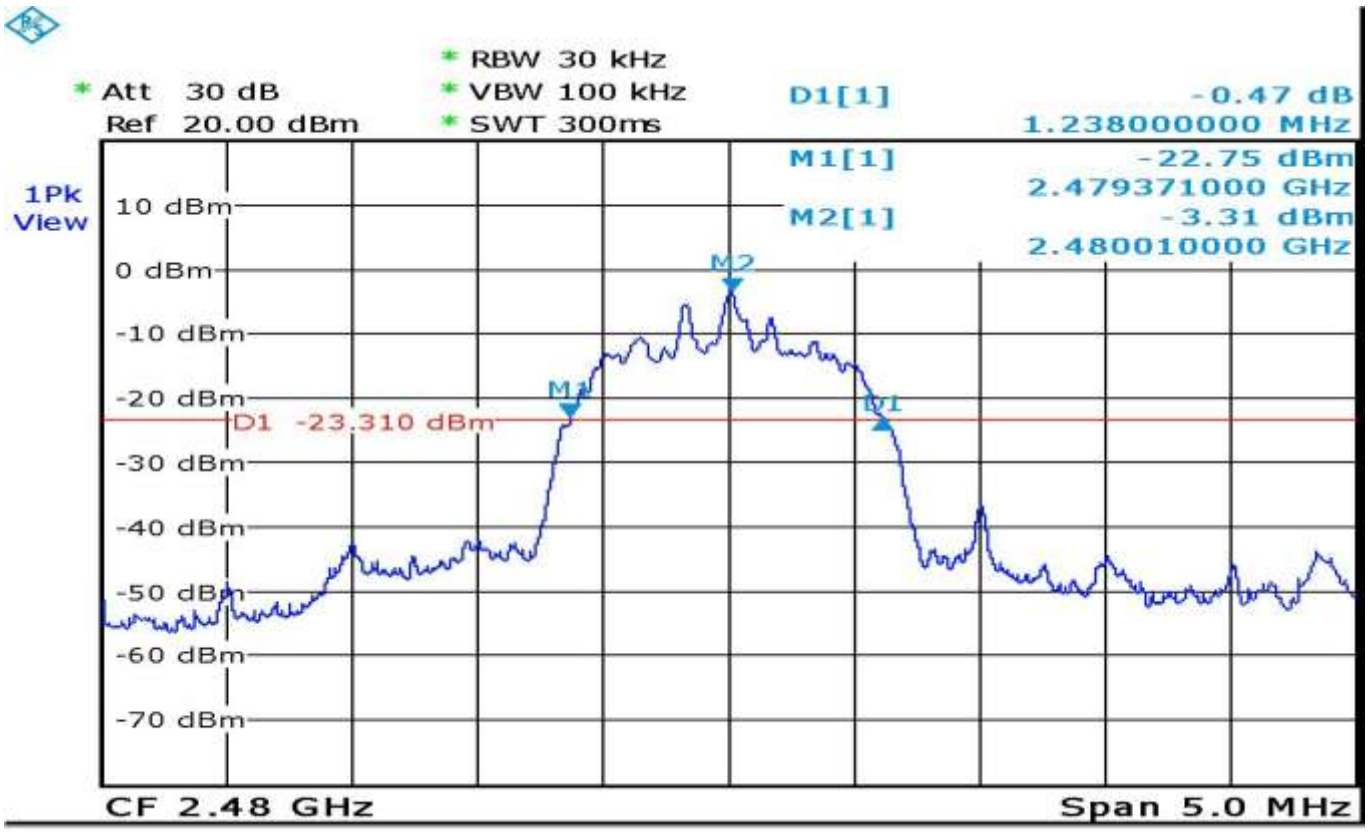
Date: 21.APR.2014 07:44:32

Date of Test	May 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Display Pattern**	Program

Channel No.	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402.0000	1.258
38	2440.0000	1.257
78	2480.0100	1.238

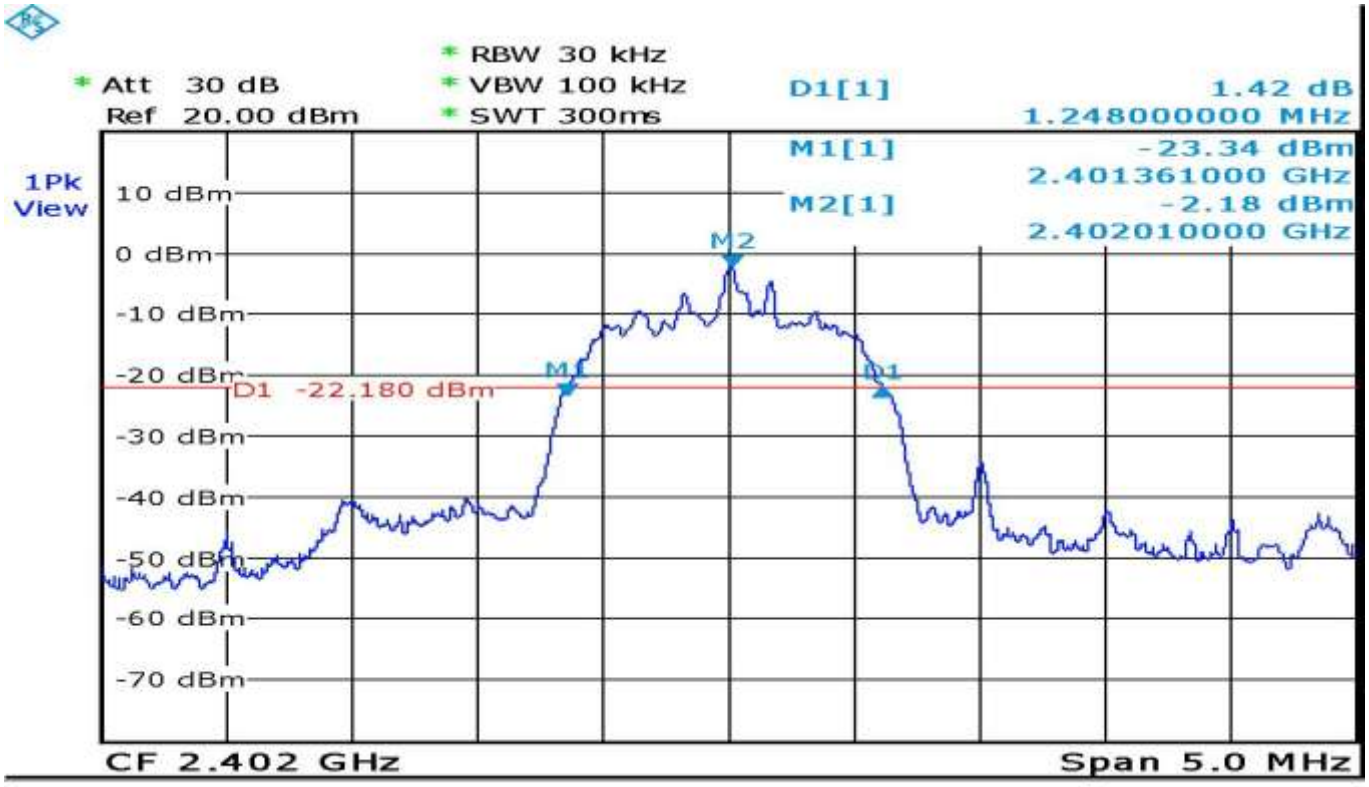


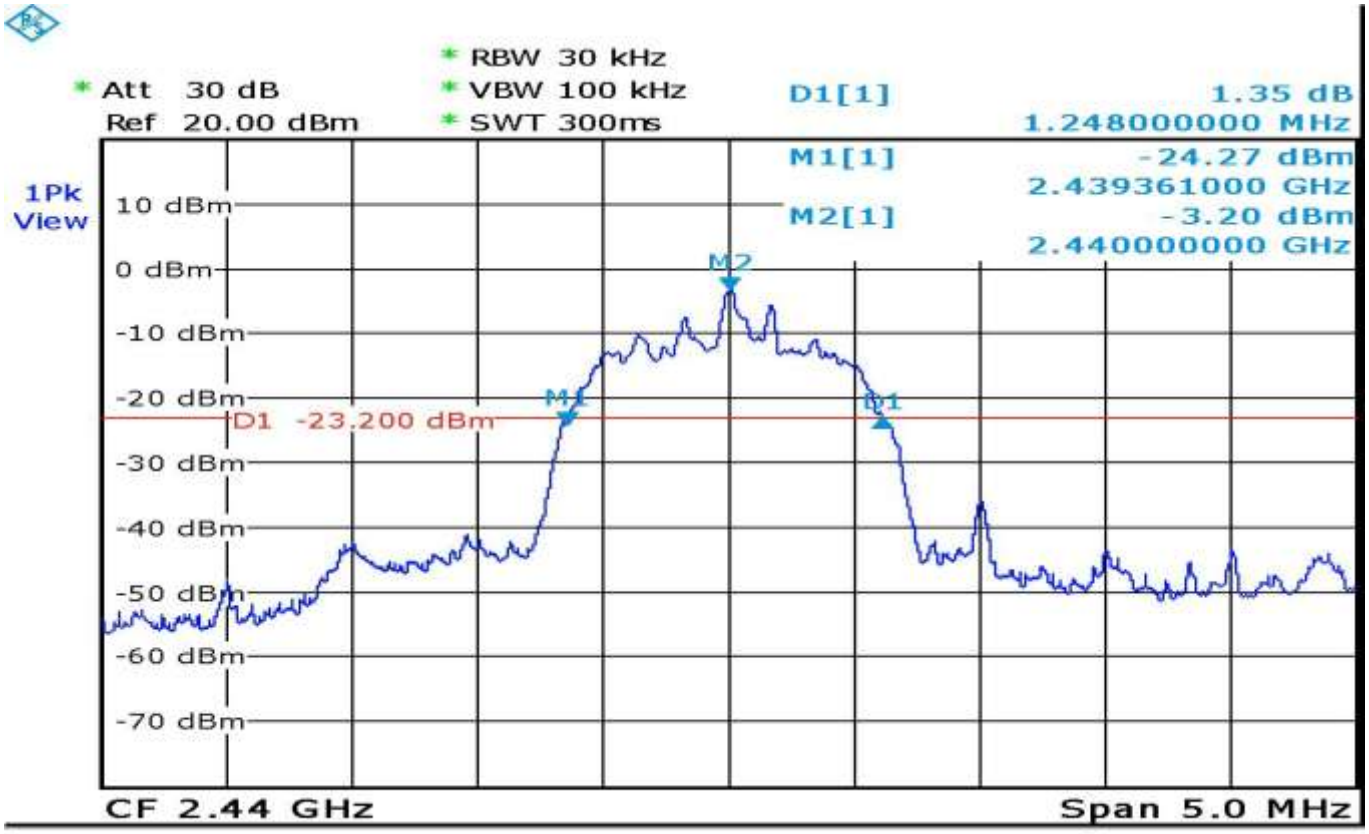

* RBW 30 kHz
* Att 30 dB
* VBW 100 kHz
D1[1]
1.09 dB
Ref 20.00 dBm
* SWT 300ms
1.257000000 MHz
M1[1]
-24.40 dBm
2.439361000 GHz
1Pk
View
M2[1]
-3.21 dBm
2.440000000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -23.210 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.44 GHz
Span 5.0 MHz


* RBW 30 kHz
* Att 30 dB
* VBW 100 kHz
D1[1]
-0.47 dB
Ref 20.00 dBm
* SWT 300ms
1.238000000 MHz
M1[1]
-22.75 dBm
2.479371000 GHz
1Pk
View
M2[1]
-3.31 dBm
2.480010000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -23.310 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.48 GHz
Span 5.0 MHz

Date of Test	May 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Display Pattern**	Program

Channel No.	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402.0100	1.248
38	2440.0000	1.248
78	2480.0000	1.238




* RBW 30 kHz
* Att 30 dB
* VBW 100 kHz
Ref 20.00 dBm
* SWT 300ms
D1[1]
1.35 dB
1.248000000 MHz
M1[1]
-24.27 dBm
2.439361000 GHz
M2[1]
-3.20 dBm
2.440000000 GHz
1Pk
View
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1
D1 -23.200 dBm
CF 2.44 GHz
Span 5.0 MHz


* RBW 30 kHz
* Att 30 dB
* VBW 100 kHz
Ref 20.00 dBm
* SWT 300ms
D1[1]
-0.67 dB
1.238000000 MHz
M1[1]
-22.67 dBm
2.479371000 GHz
M2[1]
-3.47 dBm
2.480000000 GHz
1Pk
View
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1
D1 -23.470 dBm
CF 2.48 GHz
Span 5.0 MHz

8. CHANNEL SEPARATION

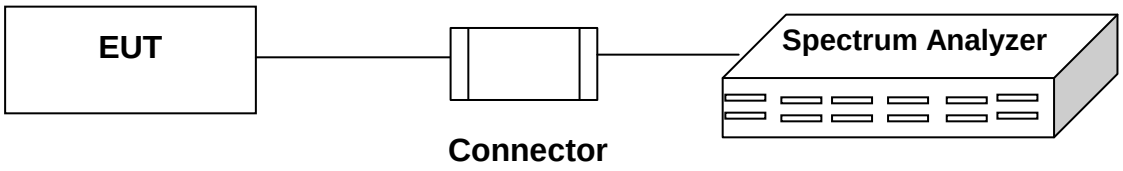
8.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

8.2 BLOCK DIAGRAM OF TEST SETUP



8.3 LIMIT

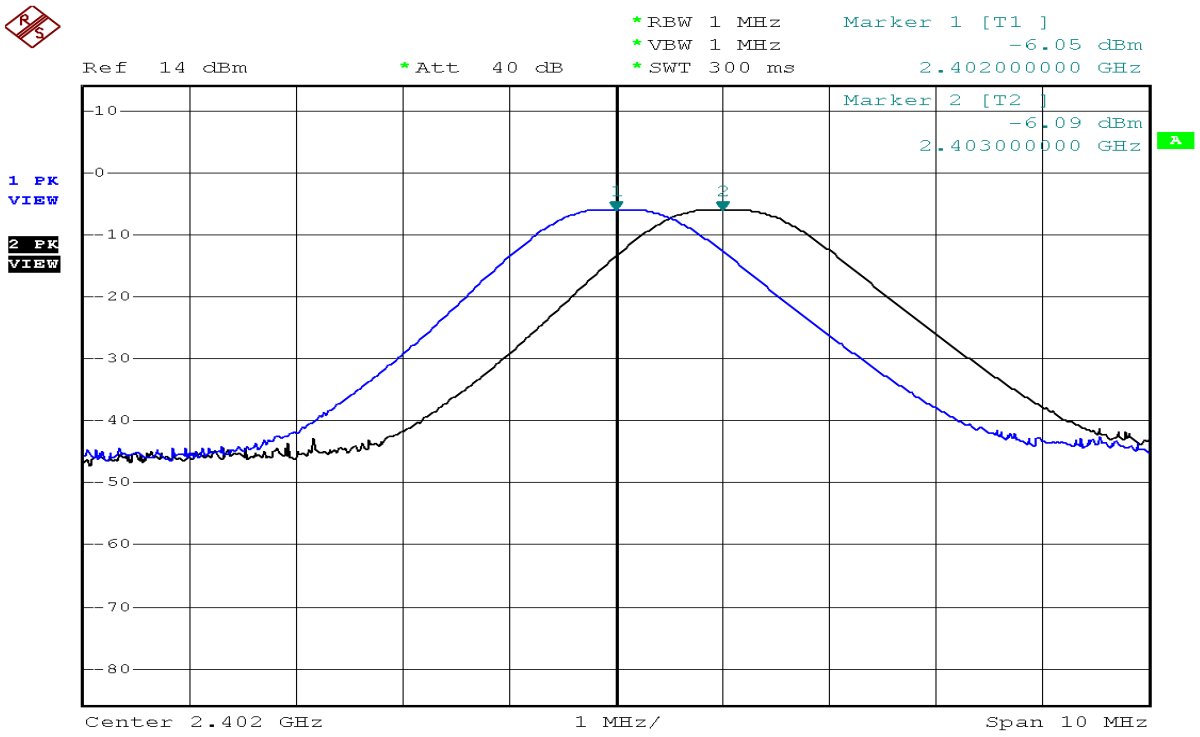
Frequency hopping systems shall have hopping channel carrier frequencies separated by minimum of 25kHz or the 20dB bandwidth of hopping channel, whichever is greater.

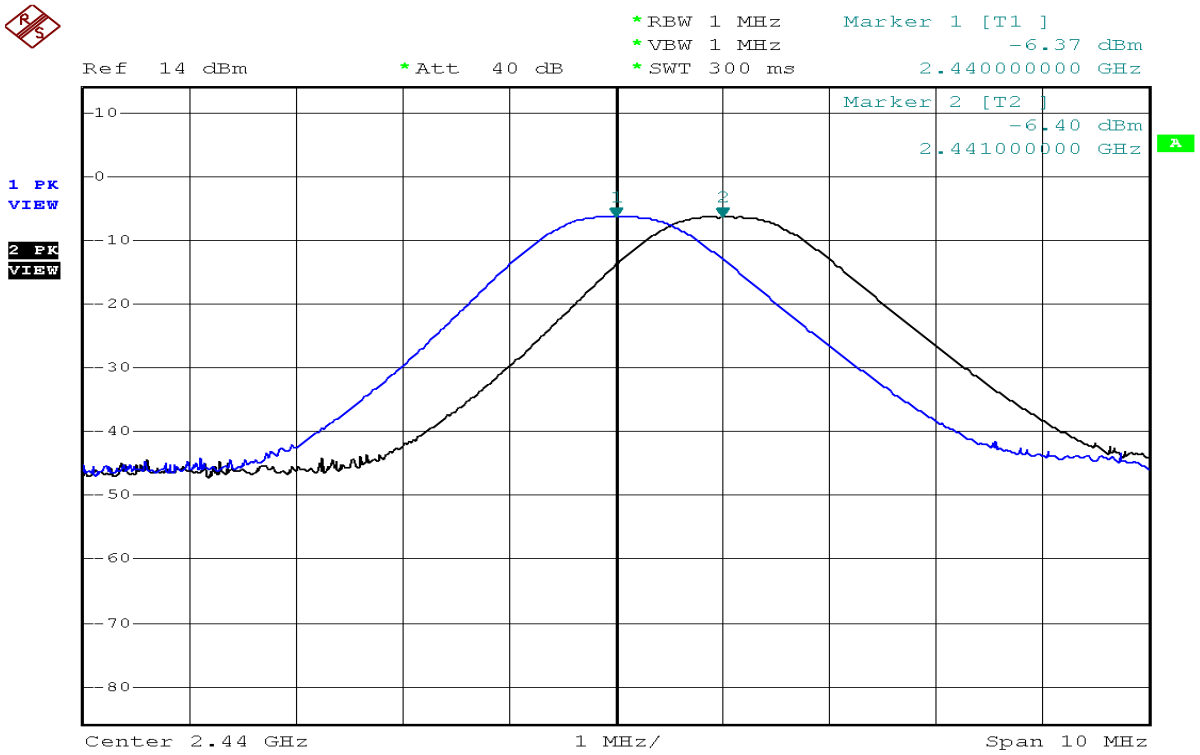
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater,

8.4 TEST RESULT

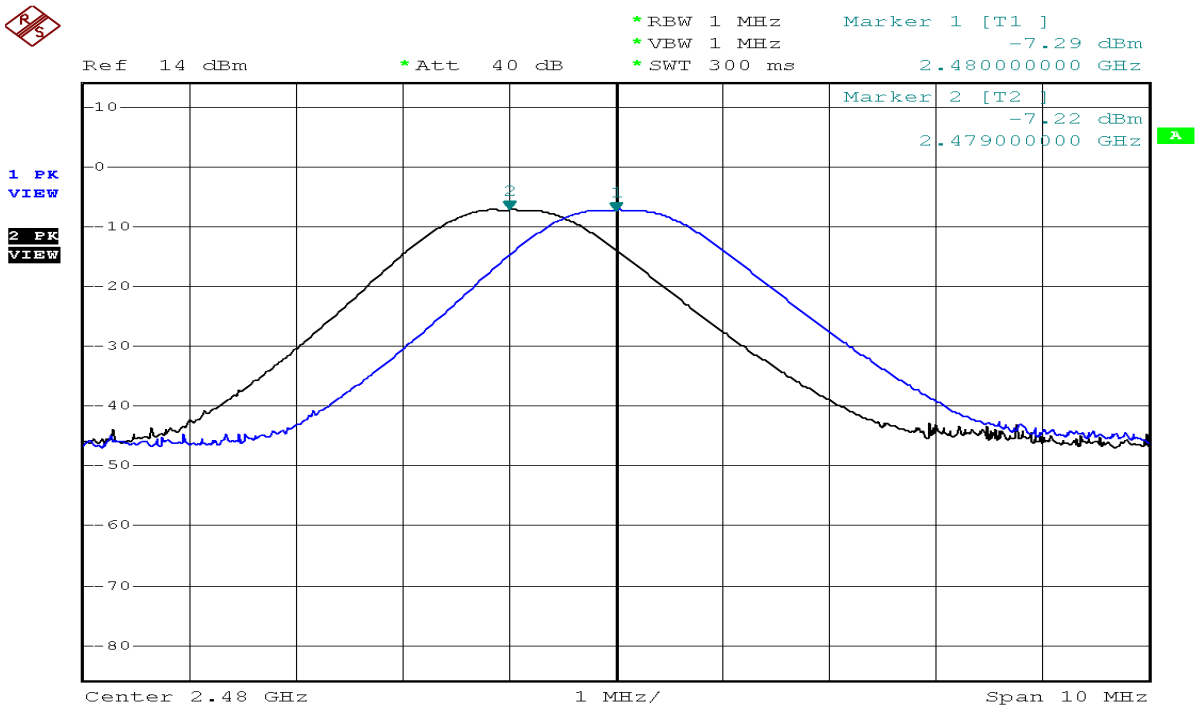
Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Display Pattern**	Program

Test Channel No.	Channel Separated (kHz)	Limit (kHz)	Two-thirds of 20dB Bandwidth (kHz)	Result
00	1000	>25	>580	Pass
38	1000	>25	>587	Pass
78	1000	>25	>580	Pass





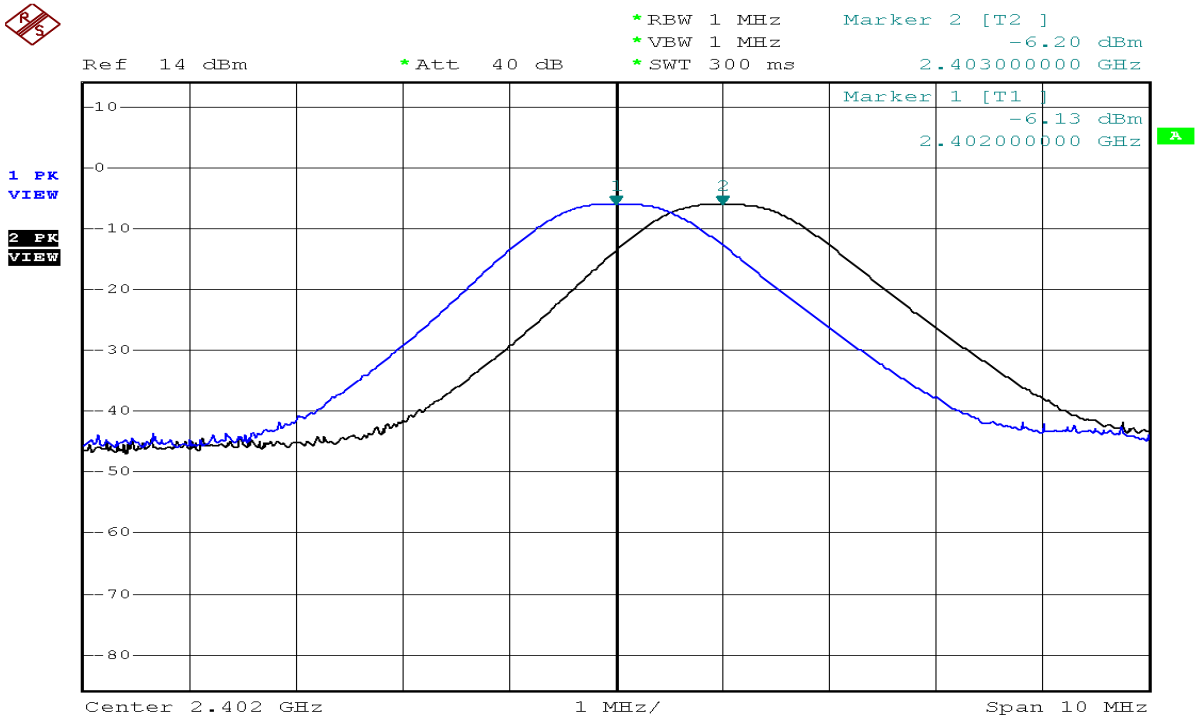
Date: 21.APR.2014 08:04:02



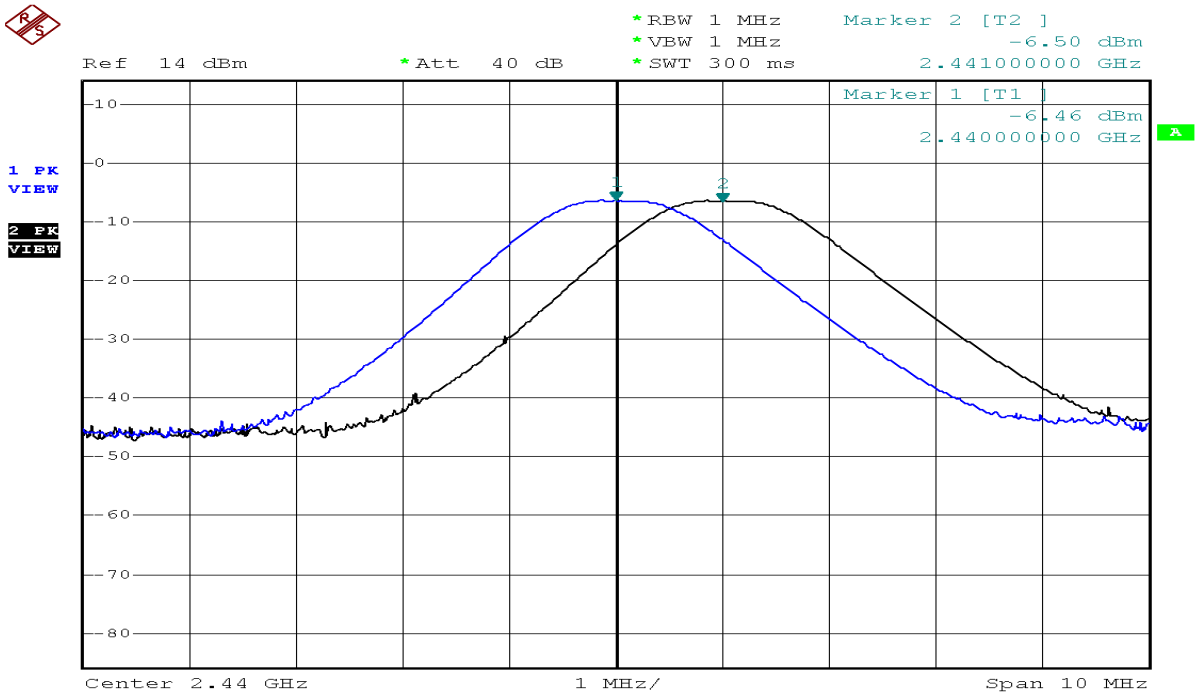
Date: 21.APR.2014 08:05:36

Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Display Pattern**	Program

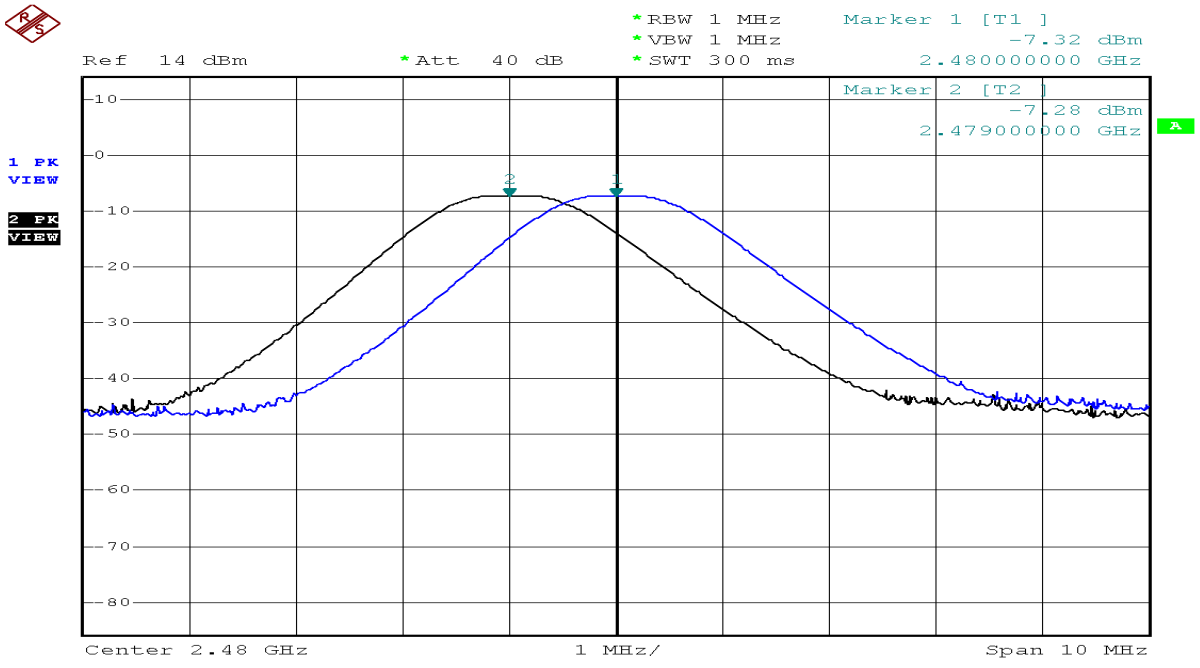
Test Channel No.	Channel Separated (kHz)	Limit (kHz)	Two-thirds of 20dB Bandwidth (kHz)	Result
00	1000	>25	>839	Pass
38	1000	>25	>838	Pass
78	1000	>25	>826	Pass



Date: 21.APR.2014 08:09:40



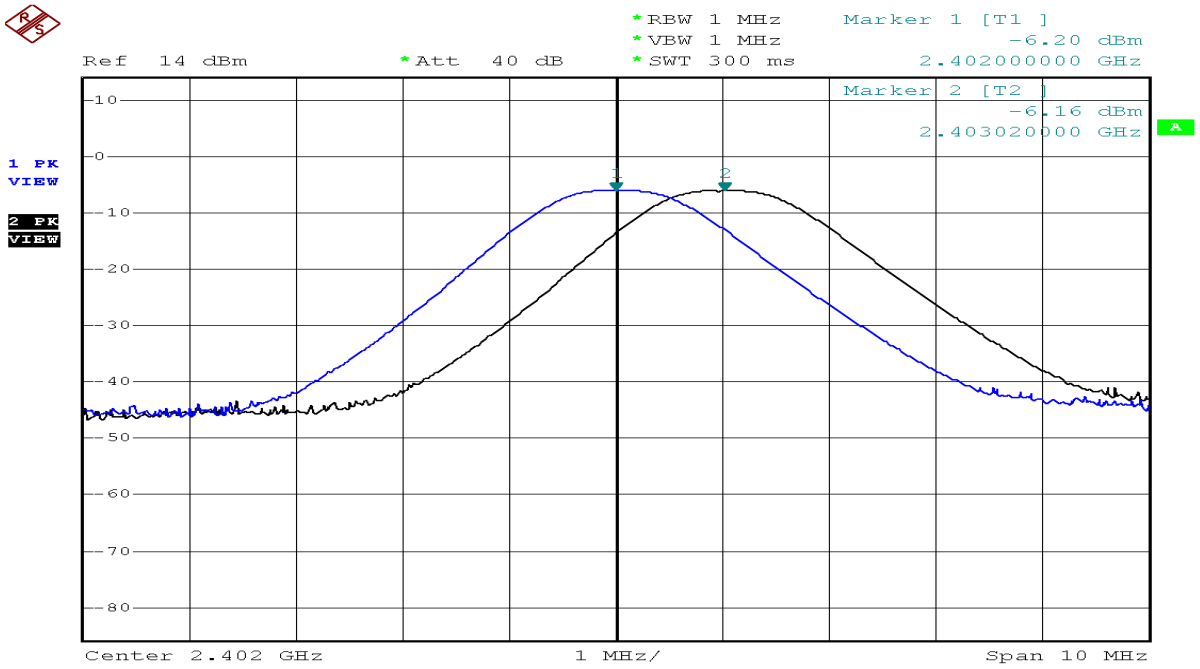
Date: 21.APR.2014 08:08:09

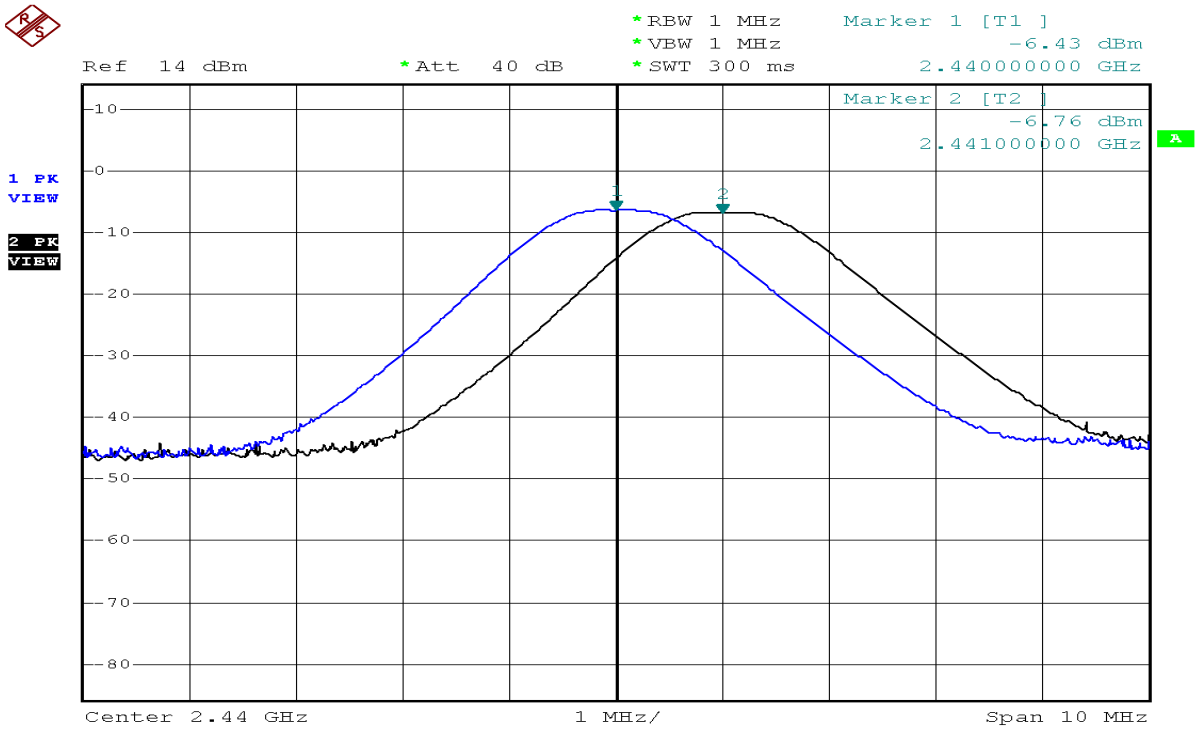


Date: 21.APR.2014 08:07:07

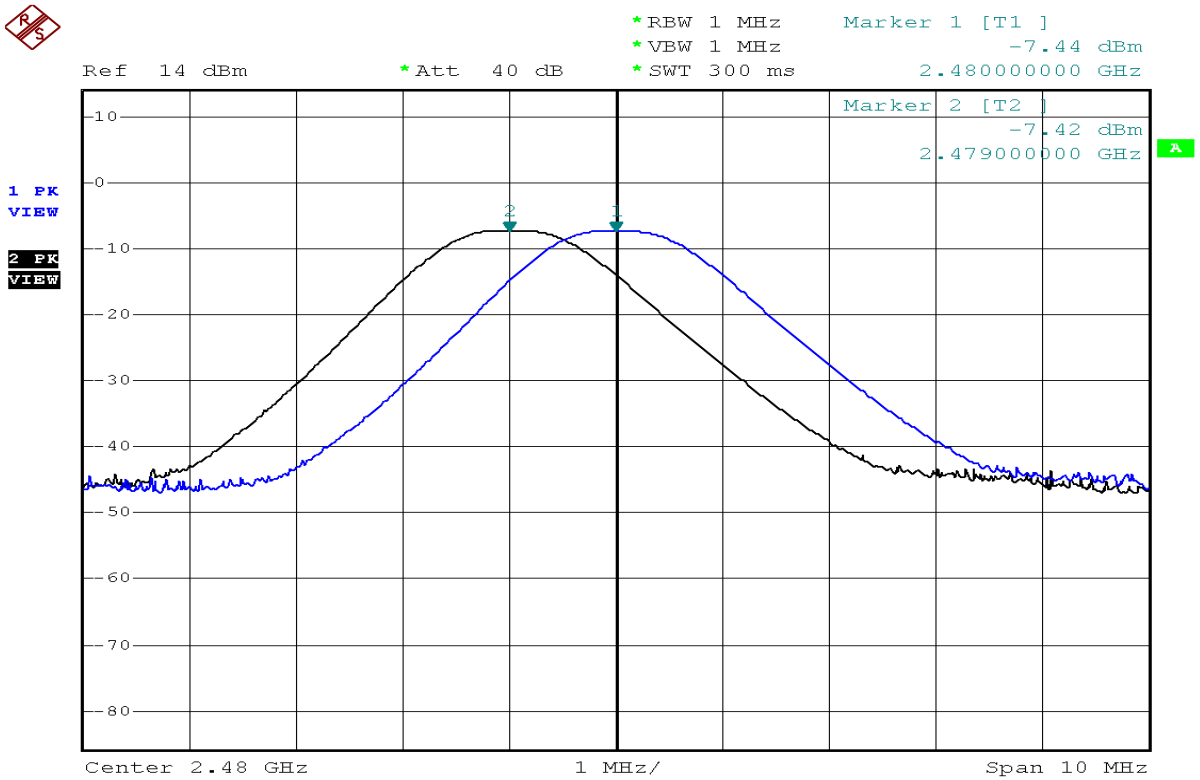
Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Display Pattern**	Program

Test Channel No.	Channel Separated (kHz)	Limit (kHz)	Two-thirds of 20dB Bandwidth (kHz)	Result
00	1020	>25	>832	Pass
38	1000	>25	>832	Pass
78	1000	>25	>826	Pass





Date: 21.APR.2014 08:13:11



Date: 21.APR.2014 08:14:29

9. DWELL TIME

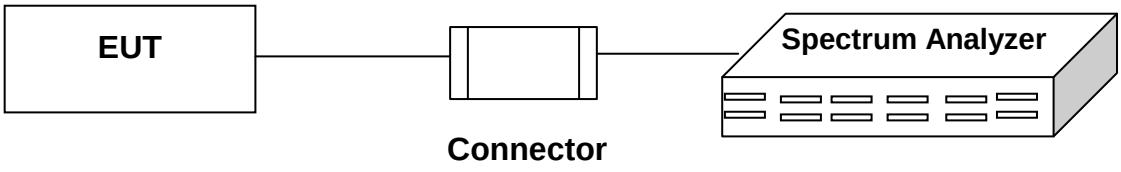
9.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

9.2 BLOCK DIAGRAM OF TEST SETUP



9.3 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 number of hopping channels employed.

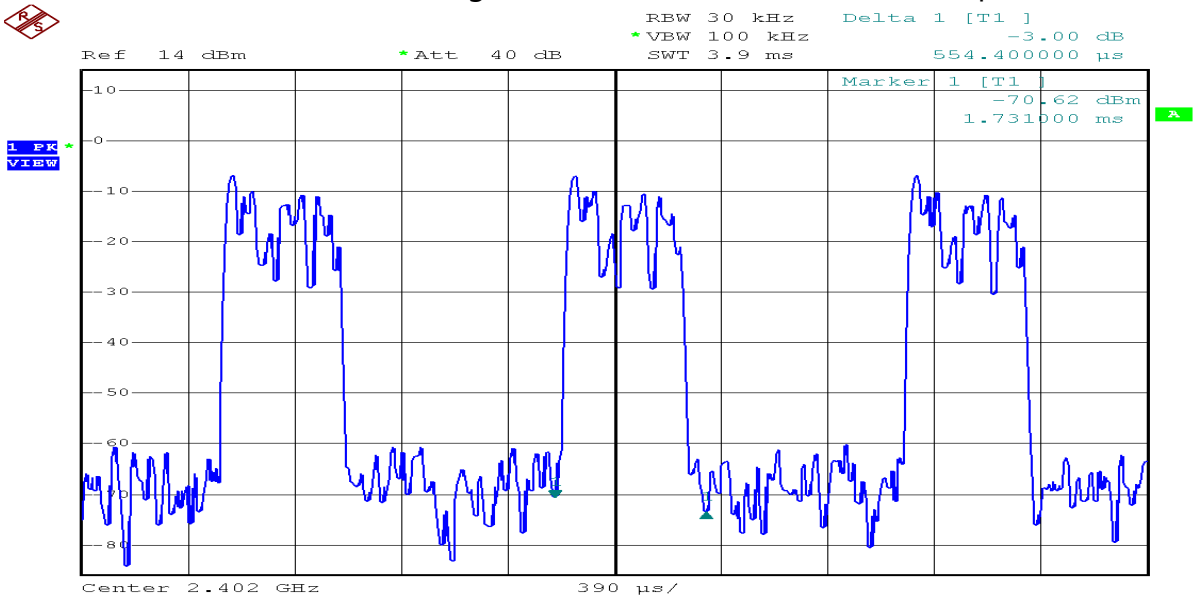
9.4 TEST RESULT

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	GFSK	**Test Frequency Range**	2402 MHz

DH1

Measurement Level (sec)	**Required Limit (sec)**	**Result**
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 554.4(μs) = 0.0005544 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005544 (sec) × 320 (times) = 0.177408(sec)		

Note: Dwell time = time slot length * number of transmission in the period.

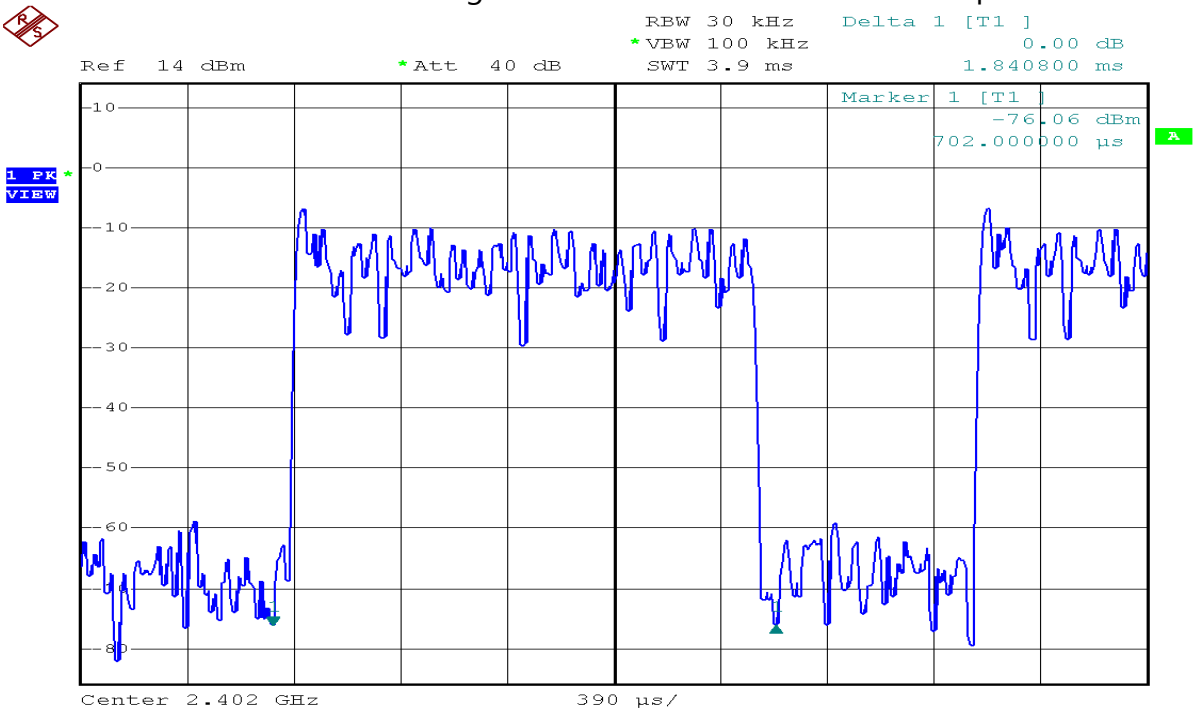


Date: 21.APR.2014 09:05:48

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1840.8(μs) = 0.0018408(sec)	< 0.4	Pass
※ Dwell Time = 0.0018408(sec) × 160 (times) = 0.294528(sec)		

Note: Dwell time = time slot length * number of transmission in the period.

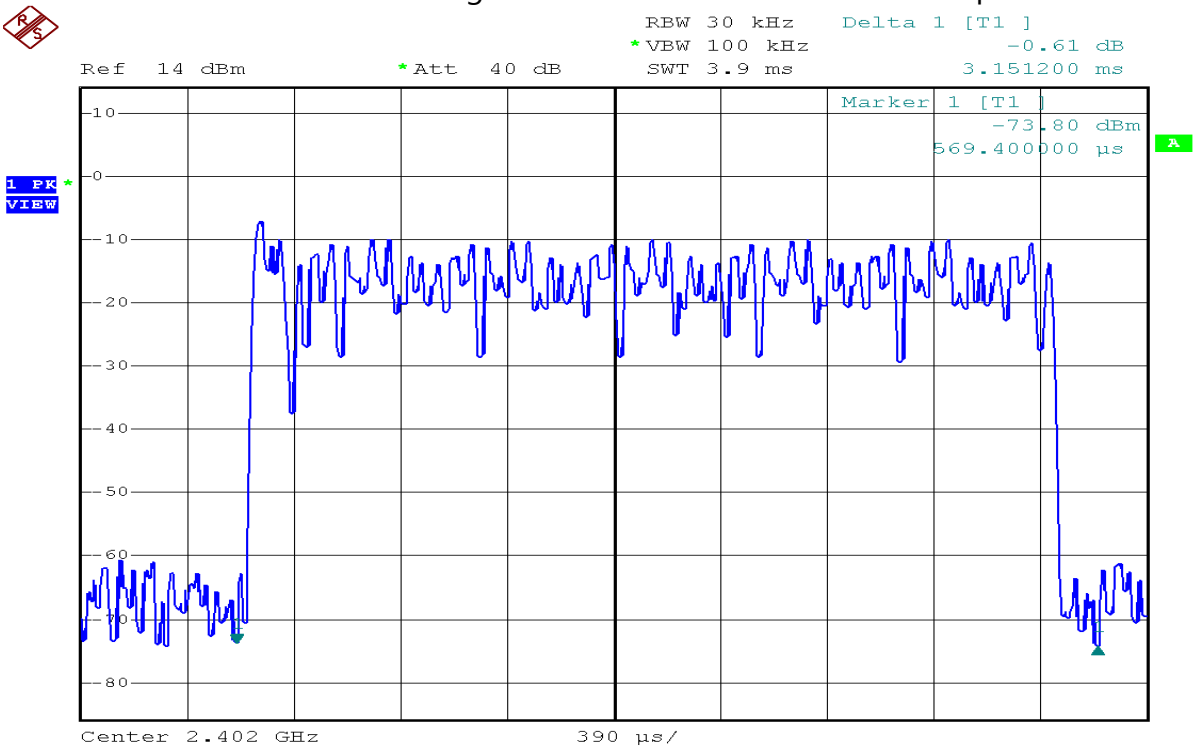


Date: 21.APR.2014 09:08:10

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3151.2(μs) = 0.0031512(sec)	< 0.4	Pass
※ Dwell Time = 0.0031512 (sec) × 107 (times) = 0.3371784 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



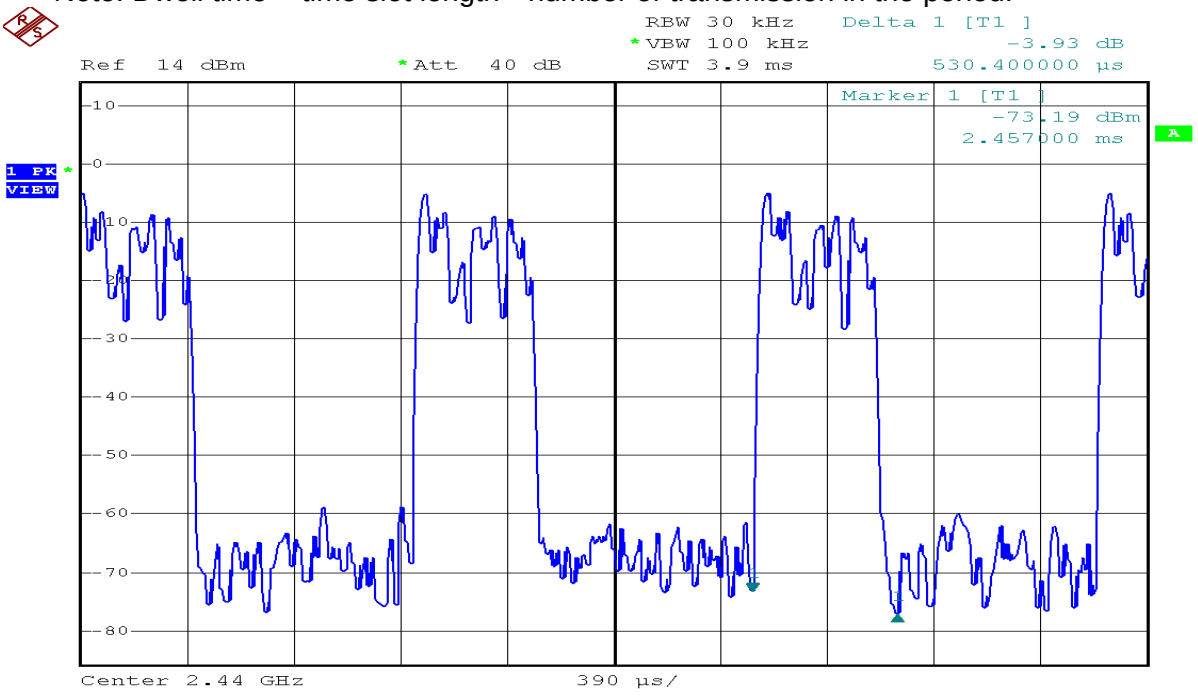
Date: 21.APR.2014 09:09:26

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	GFSK	**Test Frequency Range**	2440 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 530.4 (μs) = 0.0005304 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005304 (sec) x 320 (times) = 0.169728 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

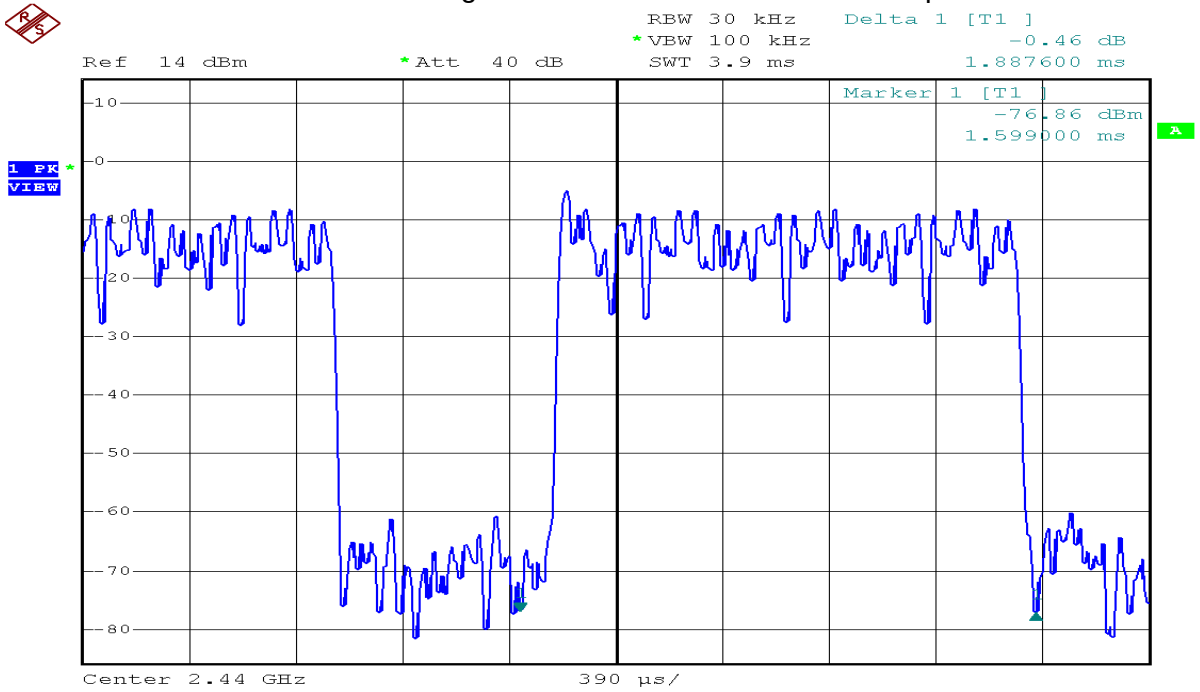


Date: 21.APR.2014 09:13:30

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1887.6(μs) = 0.0018876 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018876(sec) × 160 (times) = 0.302016(sec)		

Note: Dwell time = time slot length * number of transmission in the period.

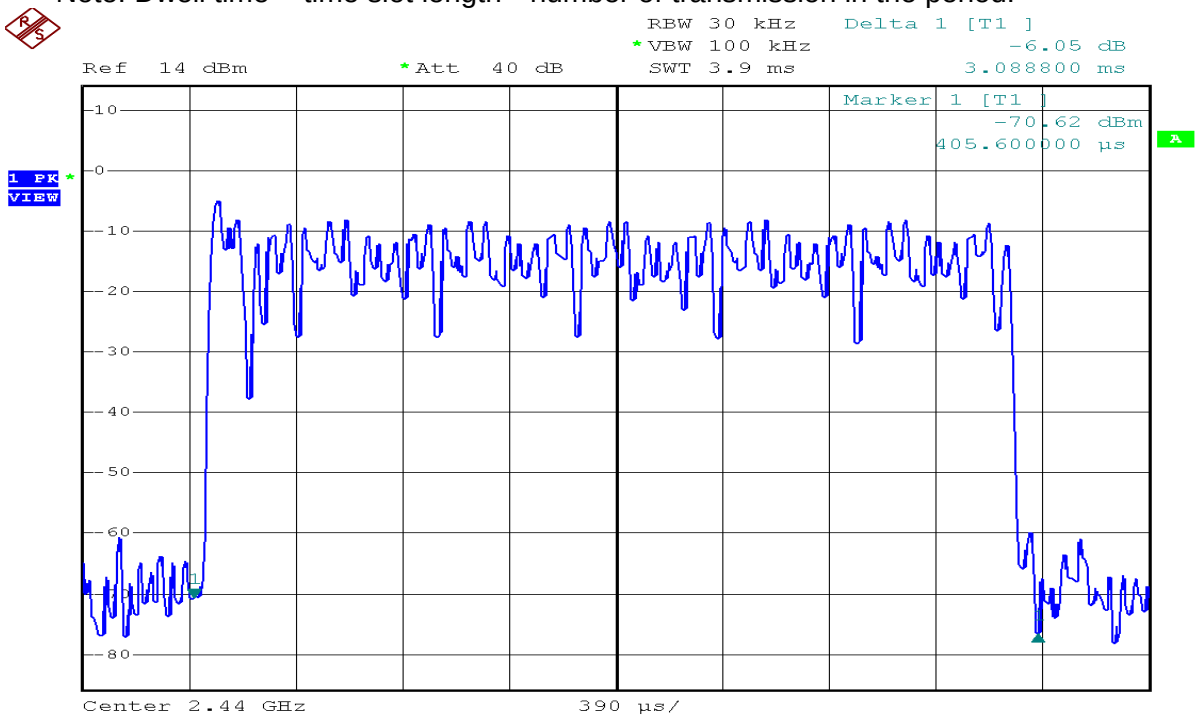


Date: 21.APR.2014 09:14:18

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3088.8 (μs) = 0.0030888 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030888 (sec) × 107 (times) = 0.3305016 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



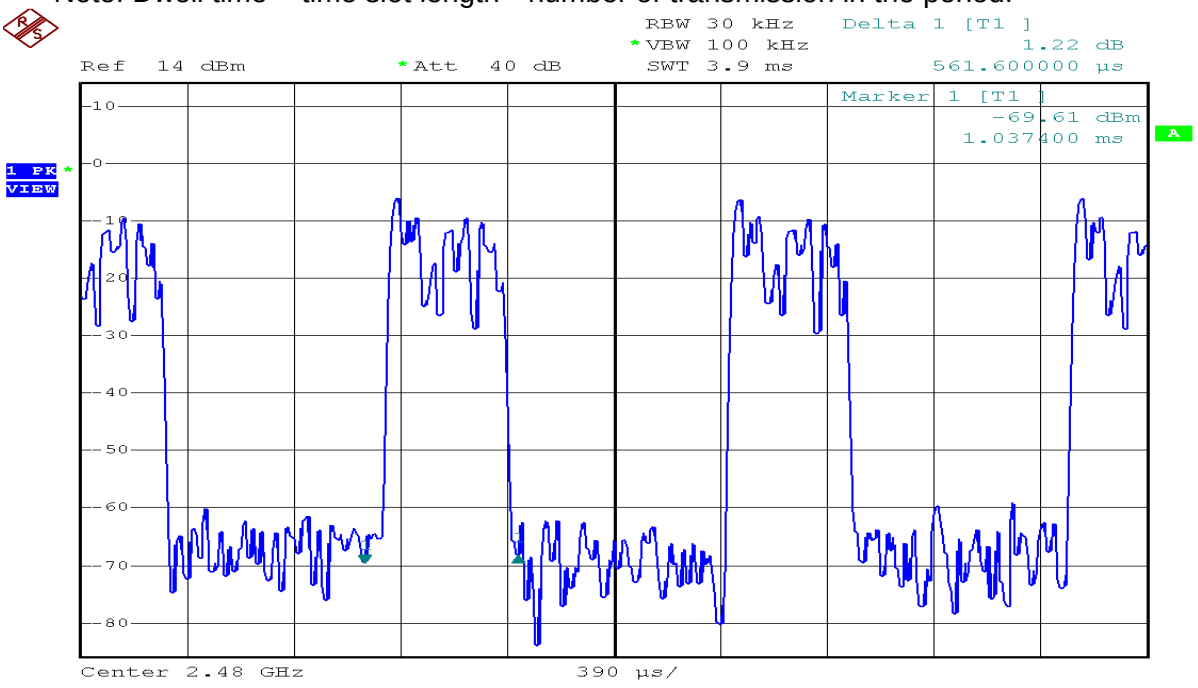
Date: 21.APR.2014 09:18:33

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	GFSK	**Test Frequency Range**	2480 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 561.6 (μs) = 0.0005616(sec)	< 0.4	Pass
※ Dwell Time = 0. 0005616(sec) × 320 (times) = 0.179712(sec)		

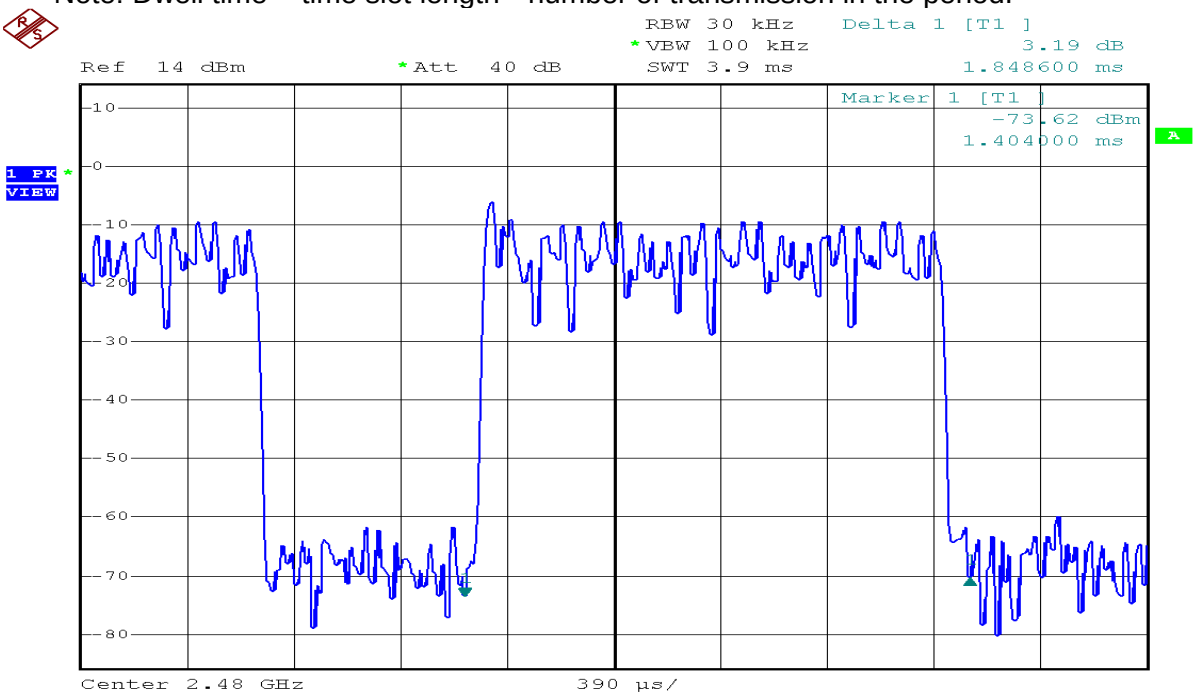
Note: Dwell time = time slot length * number of transmission in the period.



DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1848.6 (μs) = 0.0018486 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018486 (sec) × 160 (times) = 0.295776 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

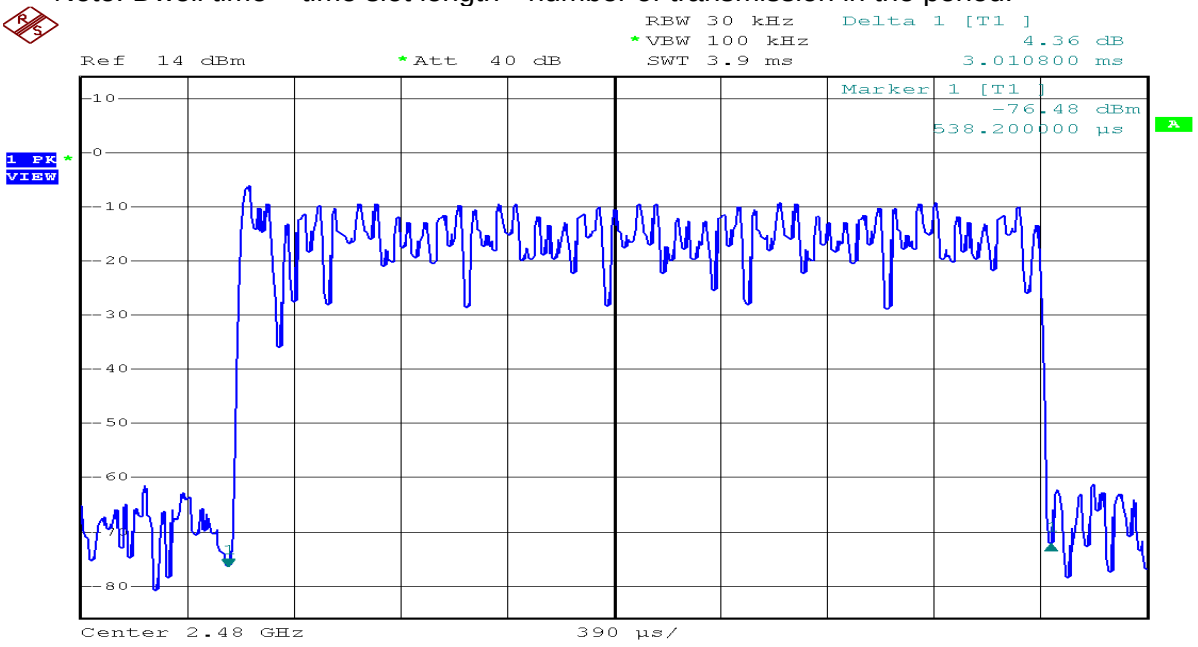


Date: 21.APR.2014 09:21:39

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3010.8 (μs) = 0.0030108 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030108 (sec) × 107 (times) = 0.3221556 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



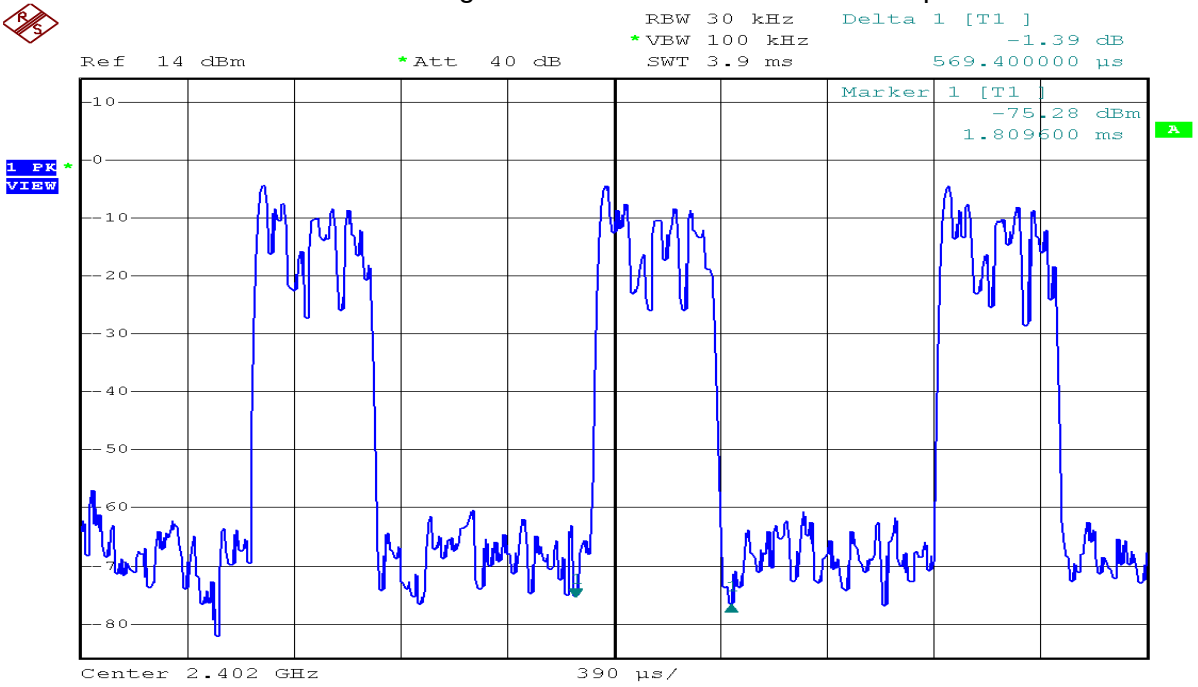
Date: 21.APR.2014 09:22:15

Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	π /4 PSK	**Test Frequency Range**	2402 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 569.4 (μs) = 0.0005694 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005694 (sec) x 320 (times) = 0.182208 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

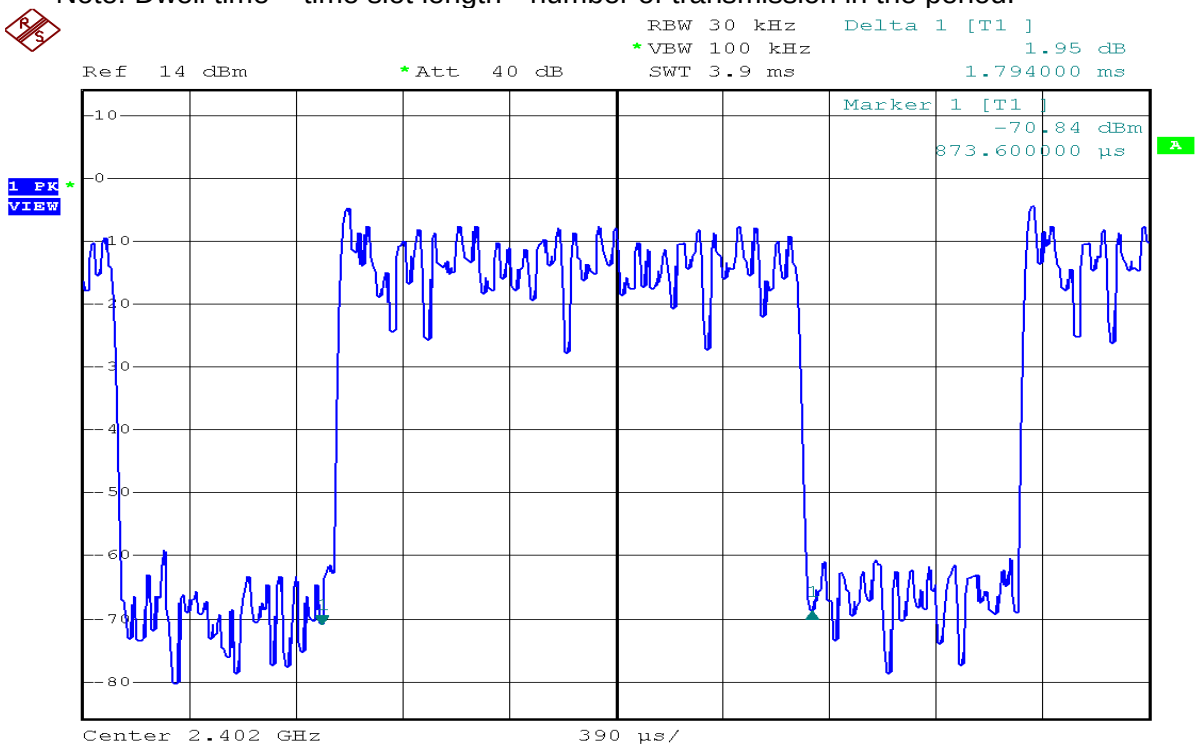


Date: 21.APR.2014 09:38:50

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1794.00 (μs) = 0.001794 (sec)	< 0.4	Pass
※ Dwell Time = 0.001794 (sec) × 160 (times) = 0.28704 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

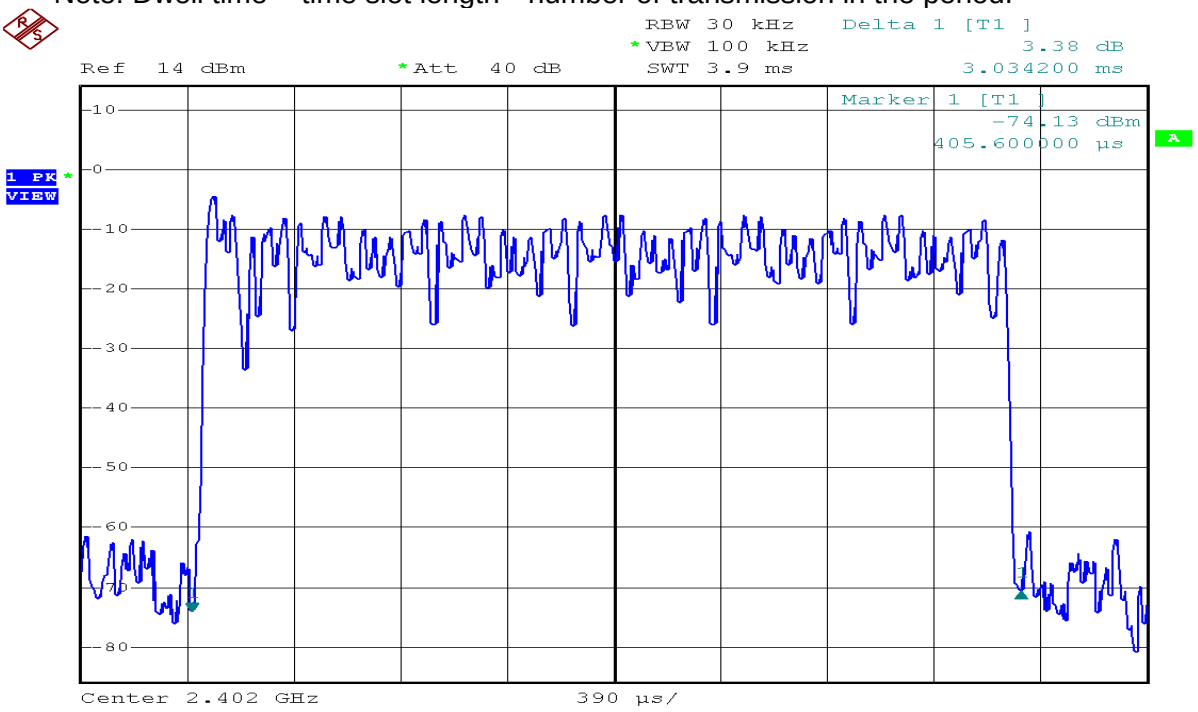


Date: 21.APR.2014 09:39:45

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3034.2 (μs) = 0.0030342 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030342(sec) × 107 (times) = 0.3246594 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



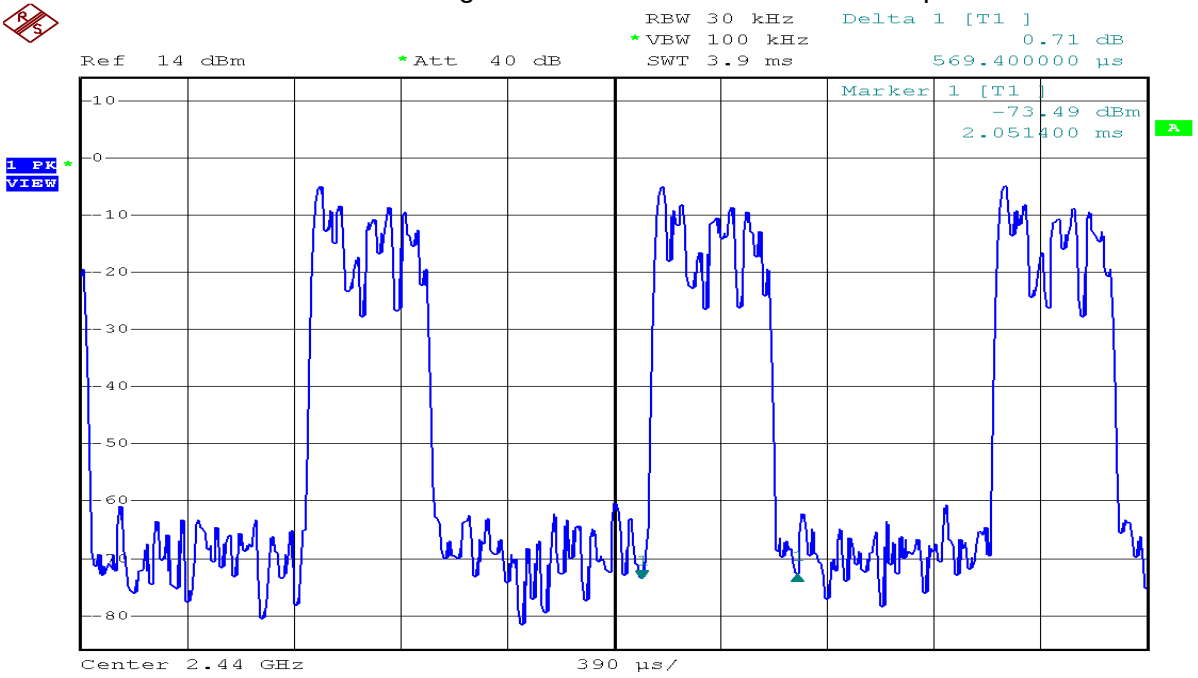
Date: 21.APR.2014 09:41:49

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	π /4 PSK	**Test Frequency Range**	2440 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 569.4 (μs) = 0.0005694 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005694 (sec) x 320 (times) = 0.182208 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

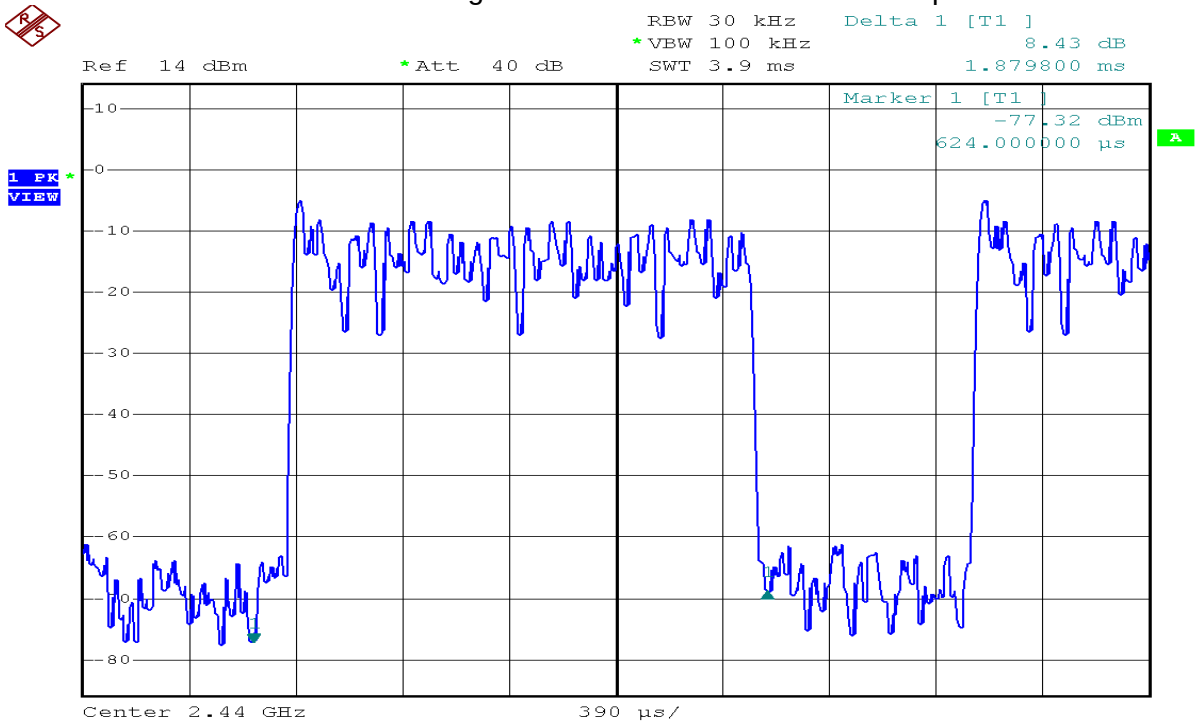


Date: 21.APR.2014 09:33:00

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1879.8 (μs) = 0.0018798 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018798 (sec) × 160 (times) = 0.300768 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

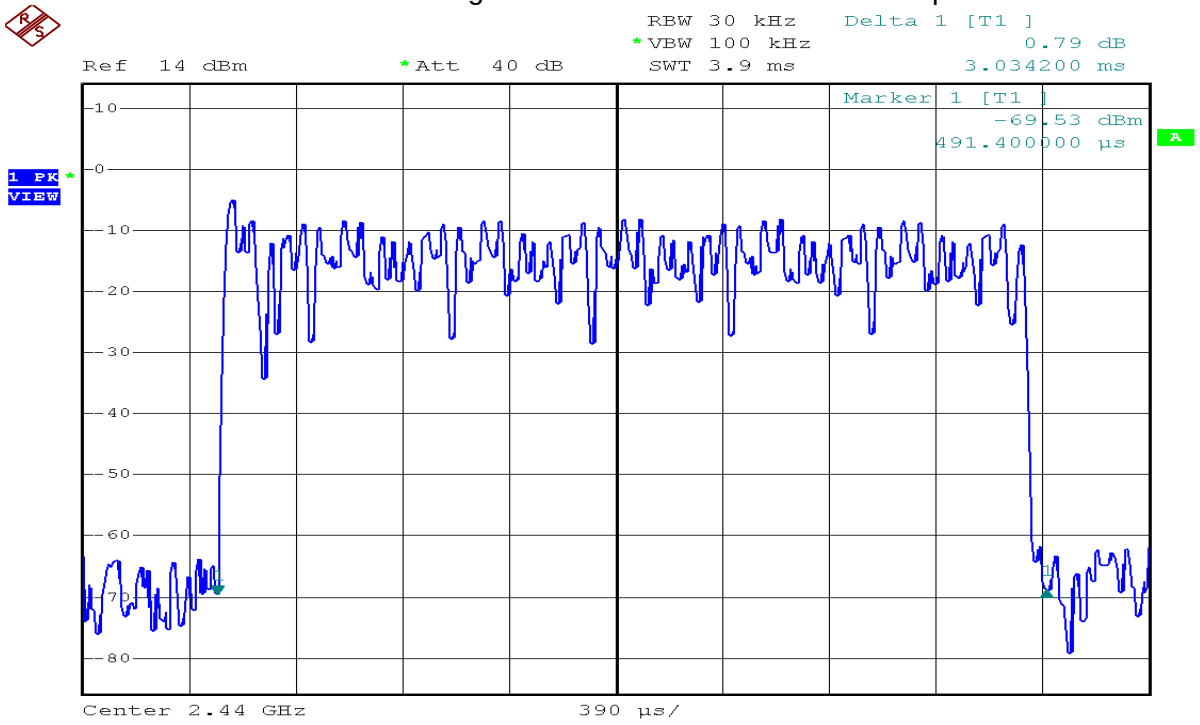


Date: 21.APR.2014 09:35:10

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3034.20 (μs) = 0.0030342 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030342 (sec) × 107 (times) = 0.3246594 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



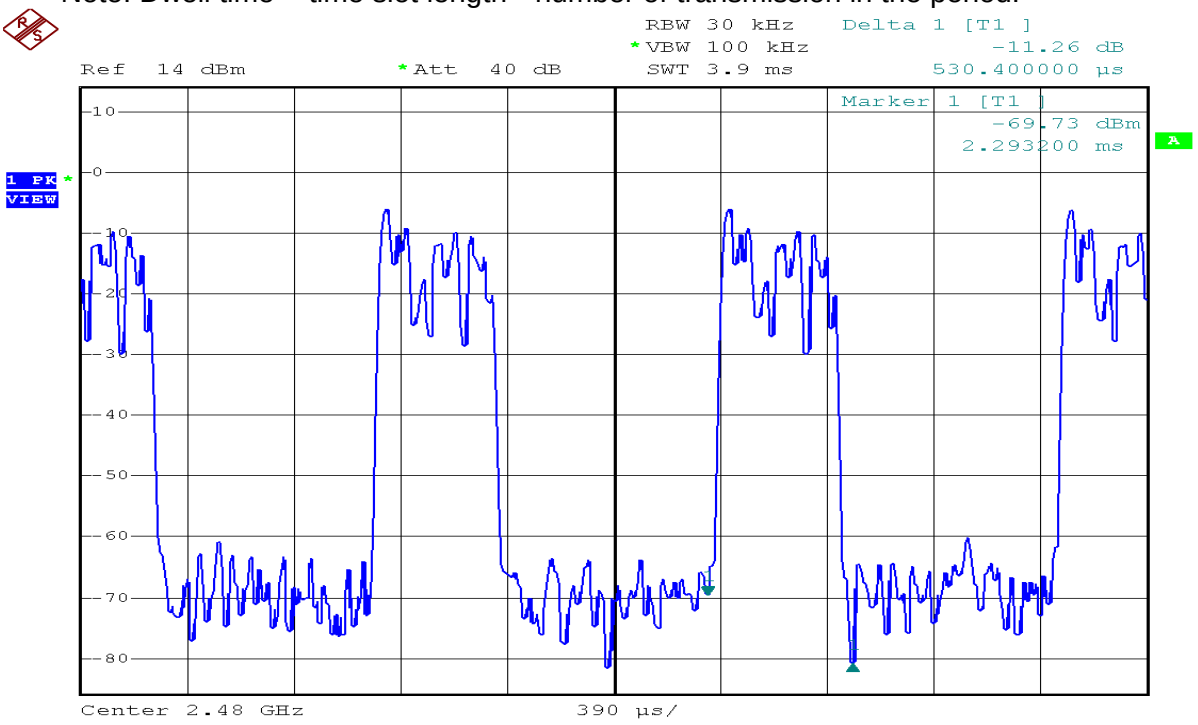
Date: 21.APR.2014 09:35:59

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	π /4 PSK	**Test Frequency Range**	2480 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 530.4 (μs) = 0.0005304 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005304 (sec) x 320 (times) = 0.169728 (sec)		

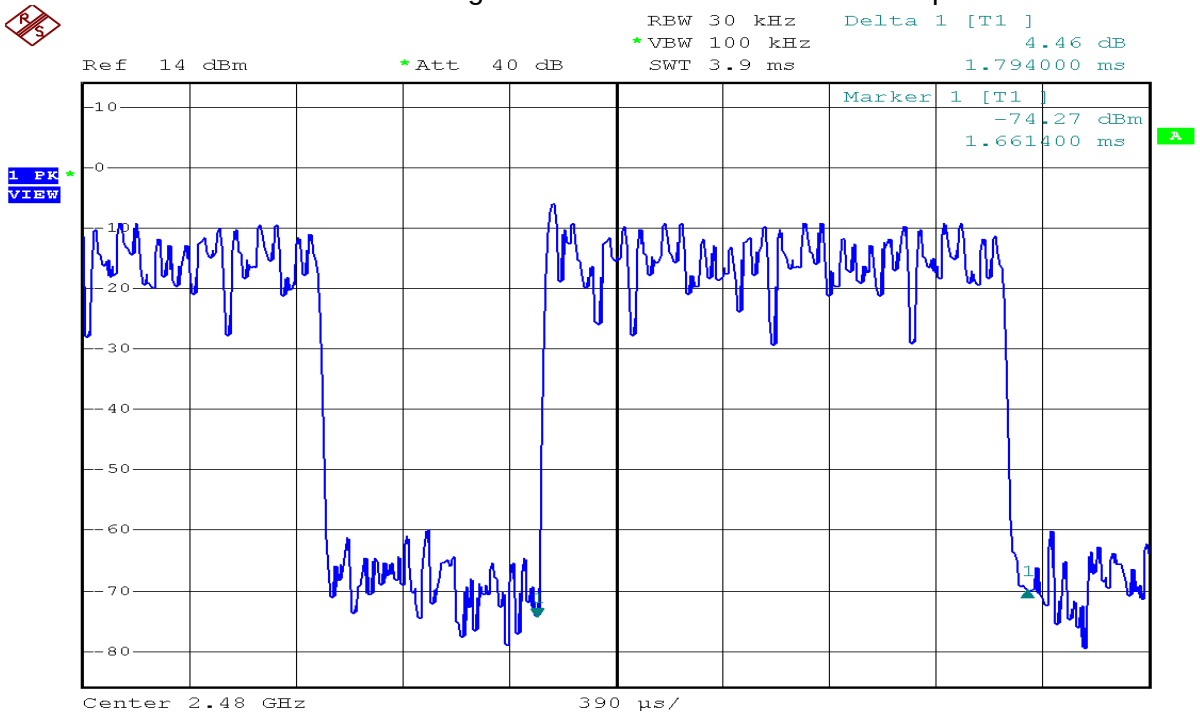
Note: Dwell time = time slot length * number of transmission in the period.



DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1794.0 (μs) = 0.001794 (sec)	< 0.4	Pass
※ Dwell Time = 0.001794 (sec) × 160 (times) = 0.28704 (sec)		

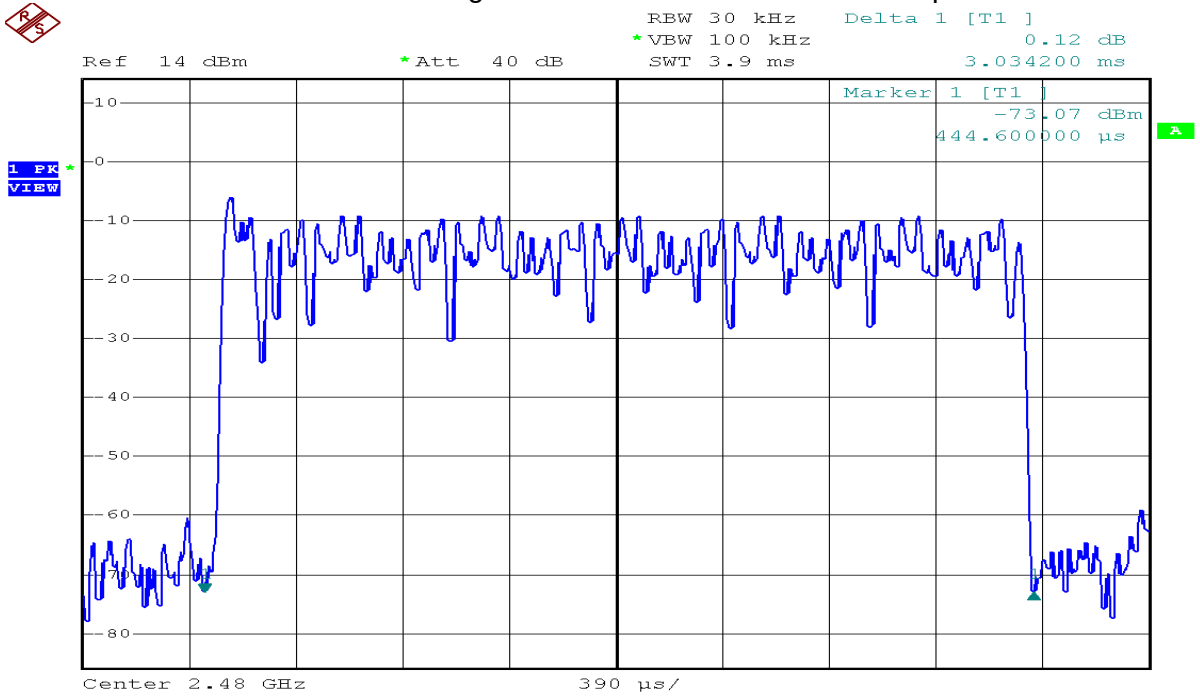
Note: Dwell time = time slot length * number of transmission in the period.



DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length =3034.20 (μs) = 0.0030342 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030342 (sec) × 107 (times) = 0.3246594 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



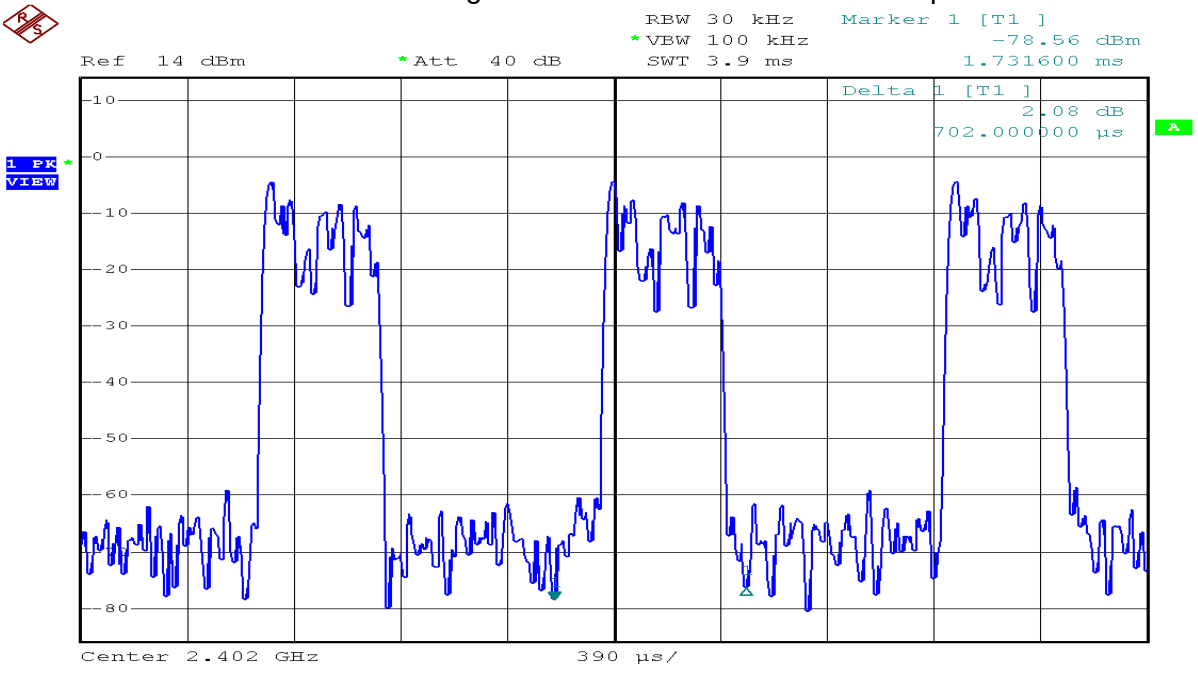
Date: 21.APR.2014 09:30:55

Date of Test	April 23, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	8DPSK	**Test Frequency Range**	2402 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 702.0 (μs) = 0.000702 (sec)	< 0.4	Pass
※ Dwell Time = 0. 000702 (sec) x 320 (times) = 0.22464 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

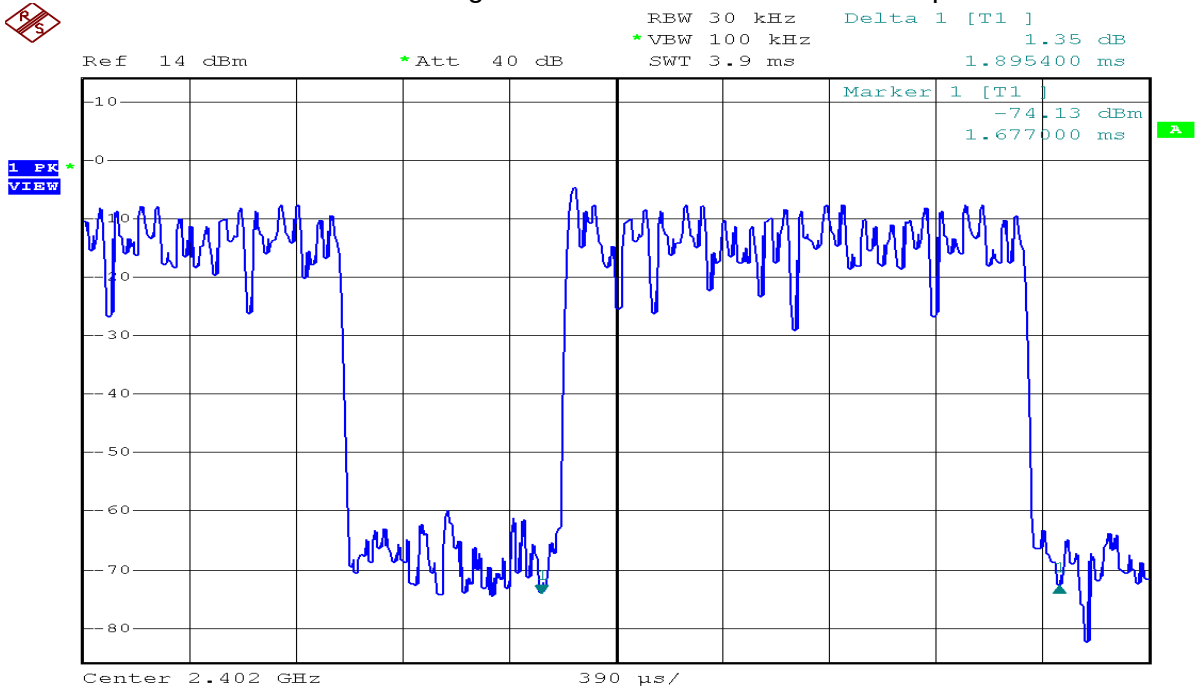


Date: 21.APR.2014 09:43:22

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1895.40 (μs) = 0.0018954 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018954 (sec) × 160 (times) = 0.303264 (sec)		

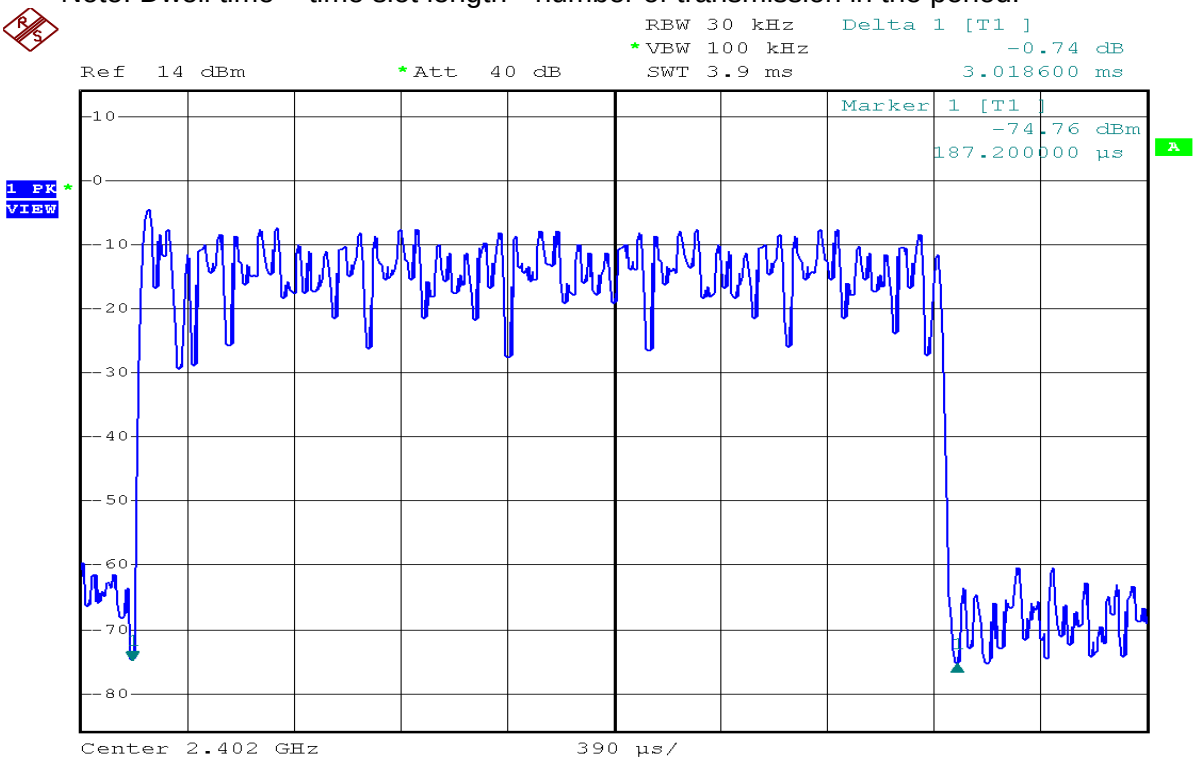
Note: Dwell time = time slot length * number of transmission in the period.



DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3018.6 (μs) = 0.0030186 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030186 (sec) × 107 (times) = 0.3229902 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



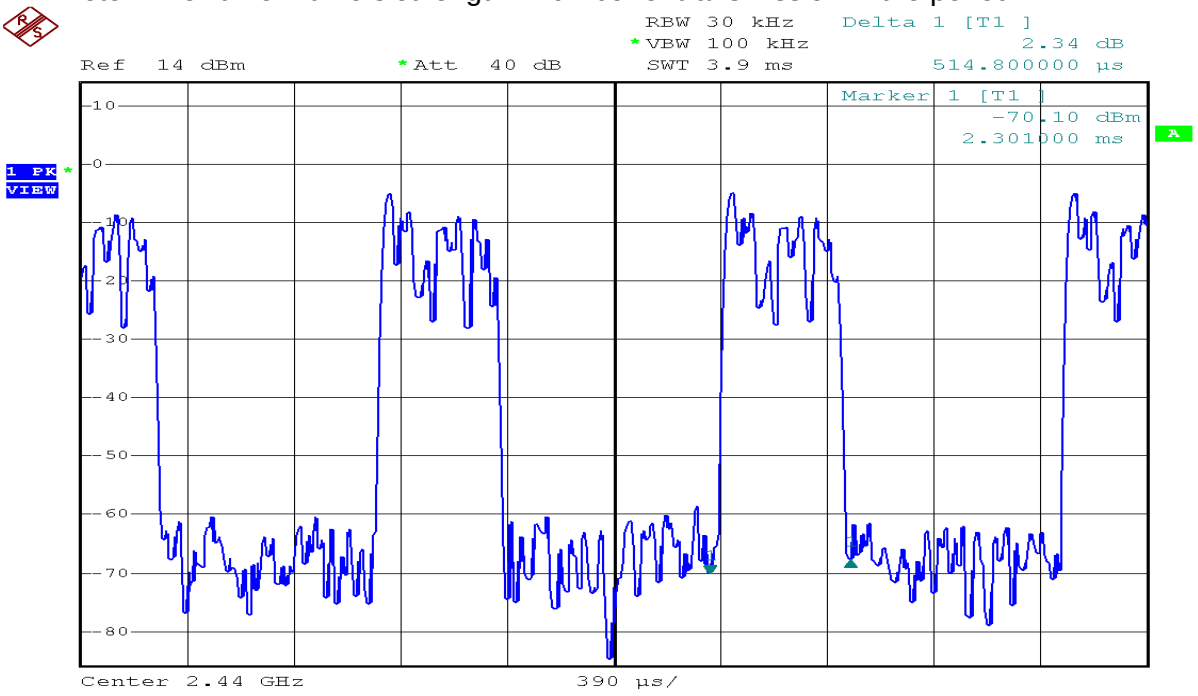
Date: 21.APR.2014 09:46:53

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	8DPSK	**Test Frequency Range**	2440 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 514.8 (μs) = 0.0005148 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005148 (sec) x 320 (times) = 0.164736 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

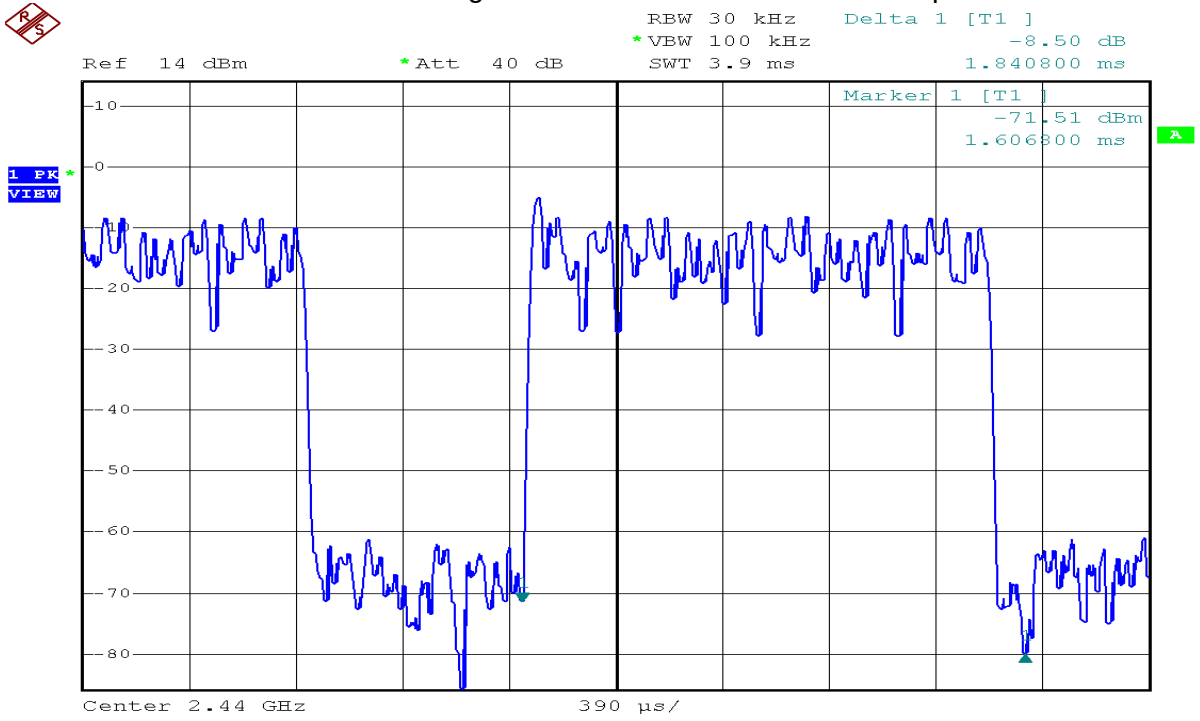


Date: 21.APR.2014 09:49:31

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1840.8 (μs) = 0.0018408 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018408 (sec) × 160 (times) = 0.294528 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

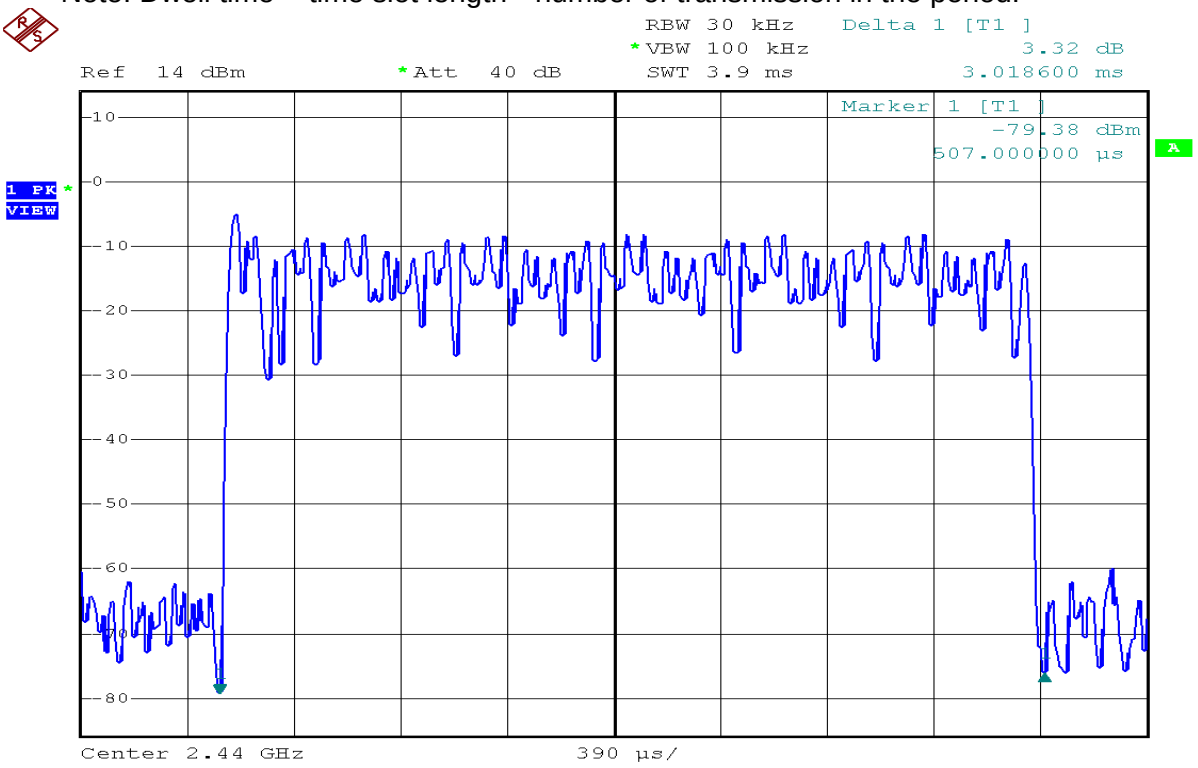


Date: 21.APR.2014 09:50:11

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3018.6 (μs) = 0.0030186 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030186 (sec) × 107 (times) = 0.3229902 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



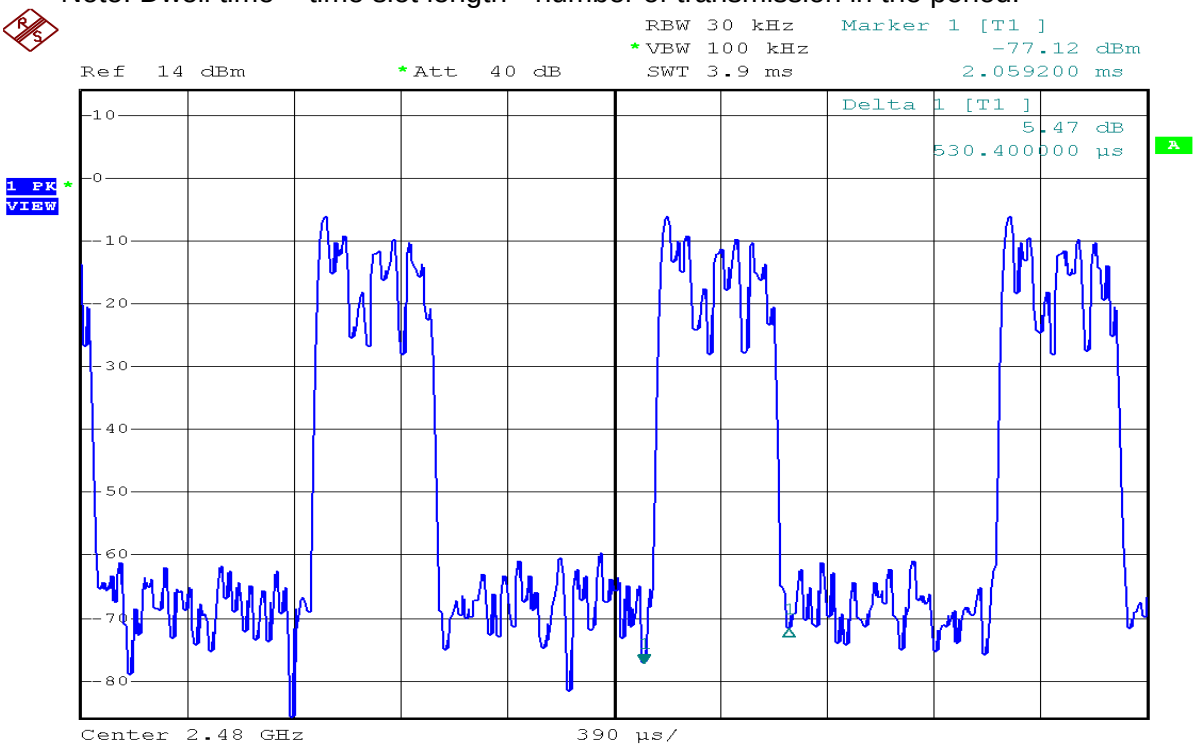
Date: 21.APR.2014 09:52:07

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	8DPSK	**Test Frequency Range**	2480 MHz

DH1

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 2/ 79) x (0.4 * 79) = 320 (times) Time slot length = 530.4 (μs) = 0.0005304 (sec)	< 0.4	Pass
※ Dwell Time = 0. 0005304 (sec) x 320 (times) = 0.169728 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

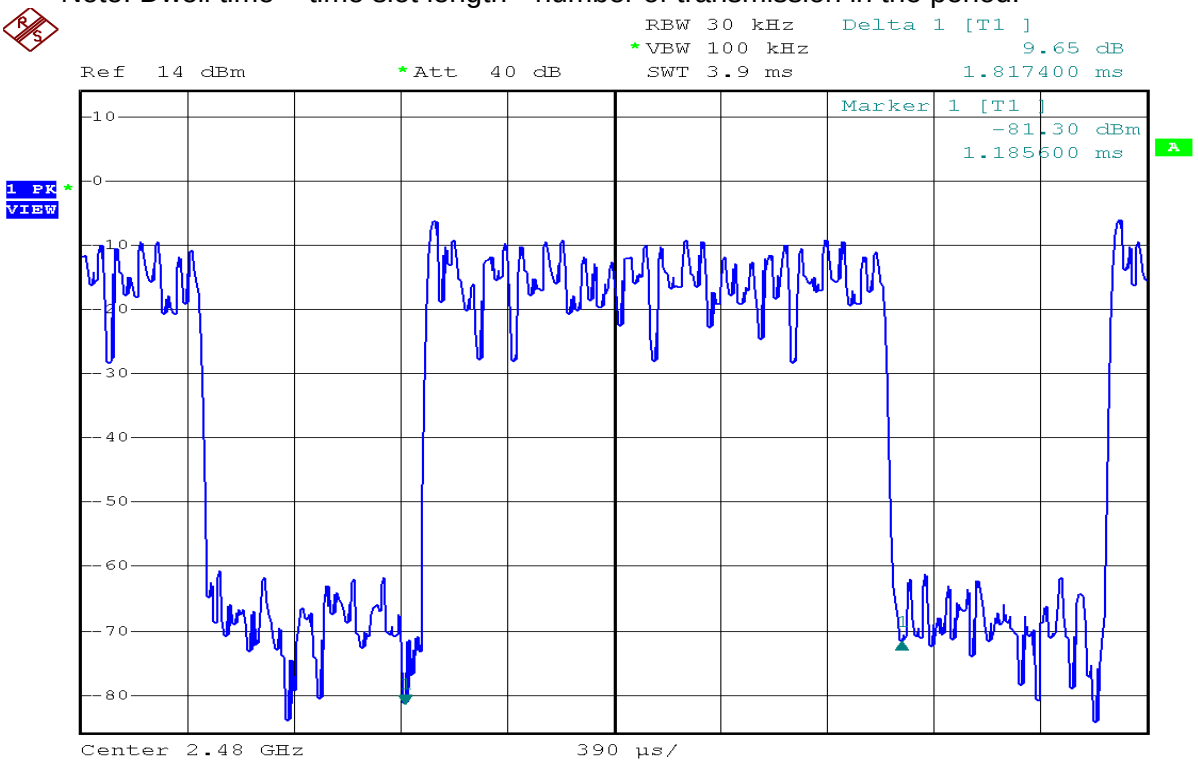


Date: 21.APR.2014 09:54:18

DH3

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 4/ 79) x (0.4 * 79) = 160 (times) Time slot length = 1817.4 (μs) = 0.0018174 (sec)	< 0.4	Pass
※ Dwell Time = 0.0018174 (sec) × 160 (times) = 0.290784 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.

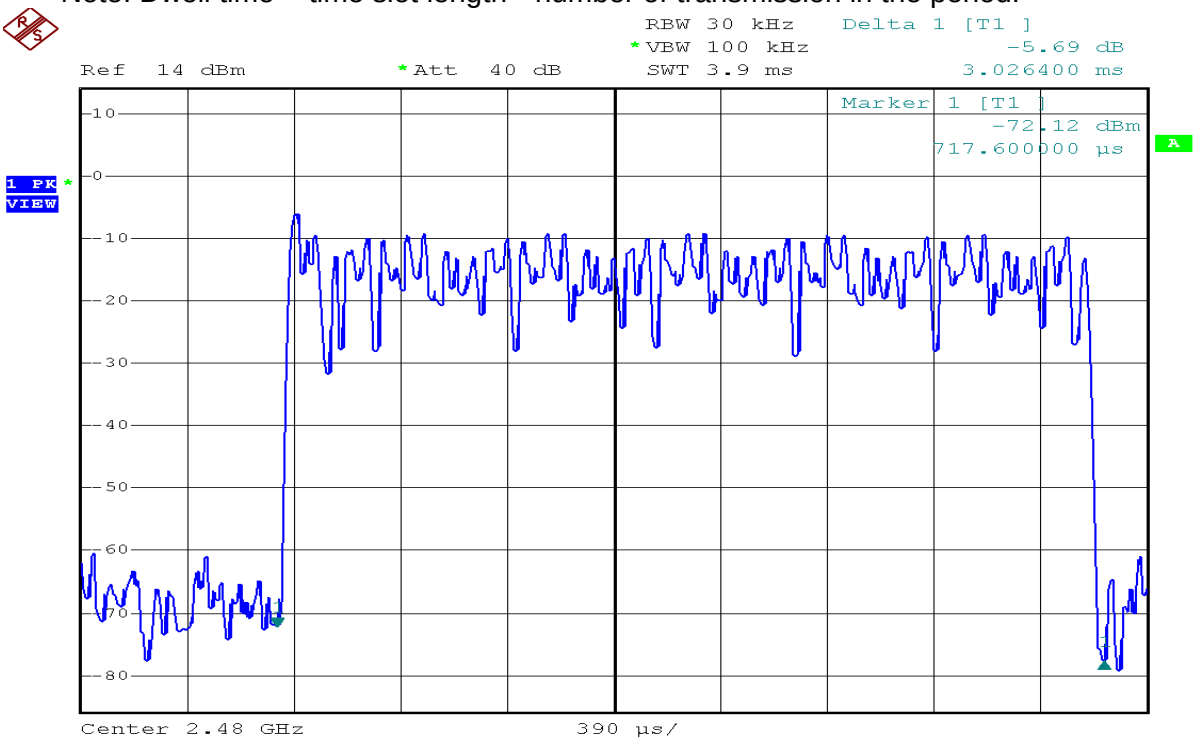


Date: 21.APR.2014 09:56:02

DH5

Measurement Level (sec)	Required Limit (sec)	Result
Period = 0.4 (sec) * 79 (number of channel) = 31.6 (sec) Hop rate = (1600/ 6/ 79) x (0.4 * 79) = 107(times) Time slot length = 3026.4 (μs) = 0.0030264 (sec)	< 0.4	Pass
※ Dwell Time = 0.0030264 (sec) × 107 (times) = 0.3238248 (sec)		

Note: Dwell time = time slot length * number of transmission in the period.



Date: 21.APR.2014 09:56:42

10. HOPPING CHANNEL

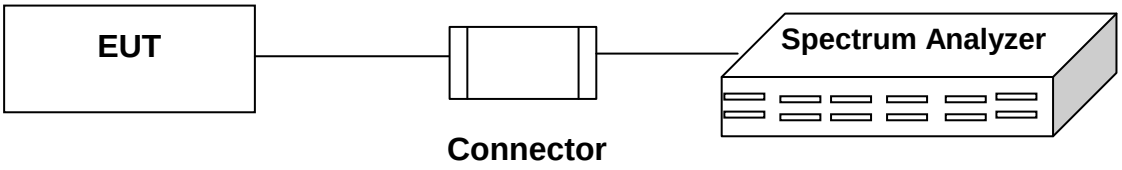
10.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

Item	Instrument	Manufacturer	Model	S/N or Version	Next Cal. Date
1	Spectrum Analyzer	RS	FSL6	100517	2014.08.14

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

10.2 BLOCK DIAGRAM OF TEST SETUP



10.3 LIMIT

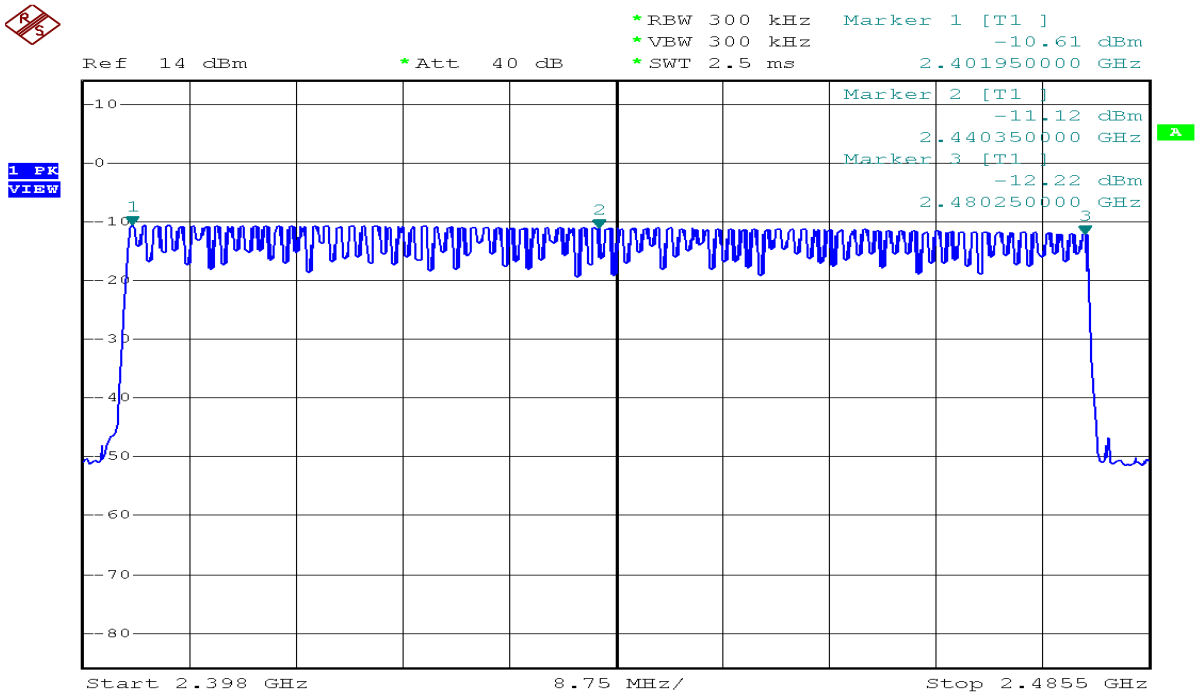
Frequency hopping systems operating in the 2400-2483.5 MHz bands shall use at least 75 non-overlapping hopping channels.

10.4 TEST RELULT

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 1-GFSK	**Display Pattern**	Program

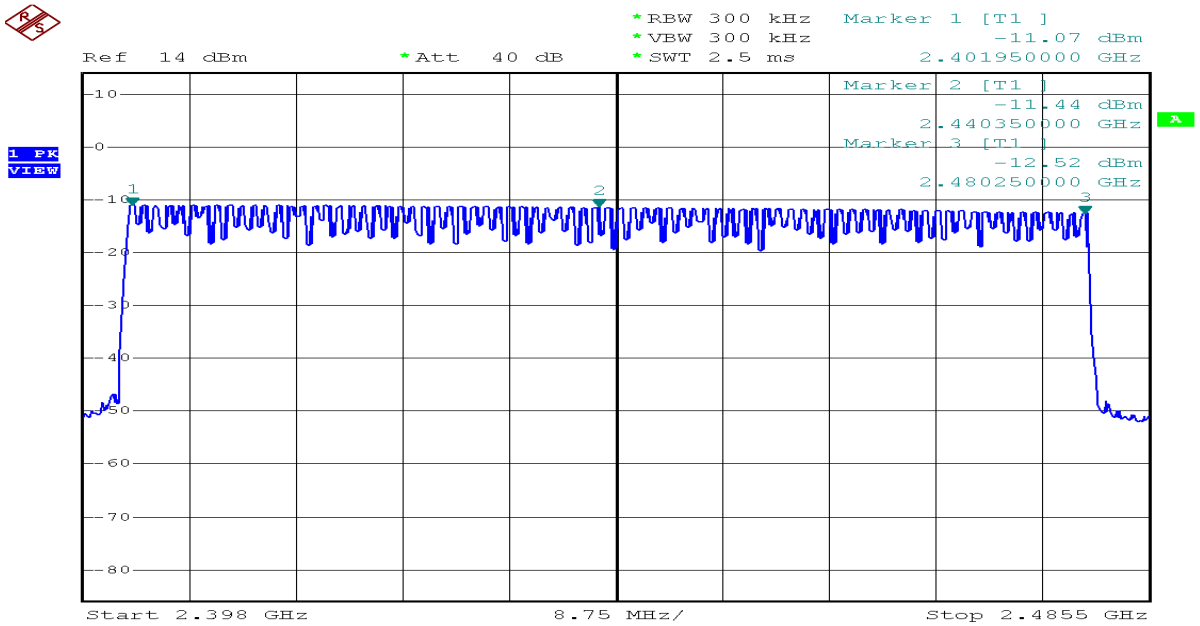
Frequency Range (MHz)	Measurement (Hopping Channel)	Limit (Hopping Channel)	Result
2402 ~ 2480	79 Channel	>75 Channel	Pass

DH1



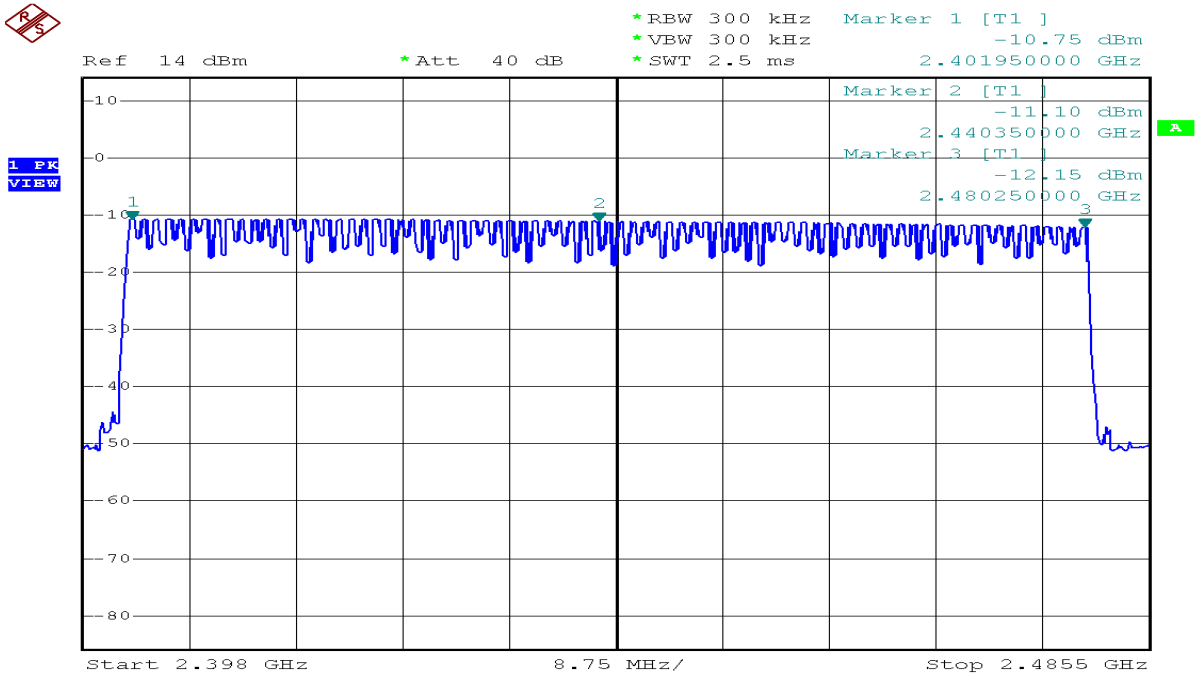
Date: 21.APR.2014 08:25:47

DH3



Date: 21.APR.2014 08:27:47

DH5

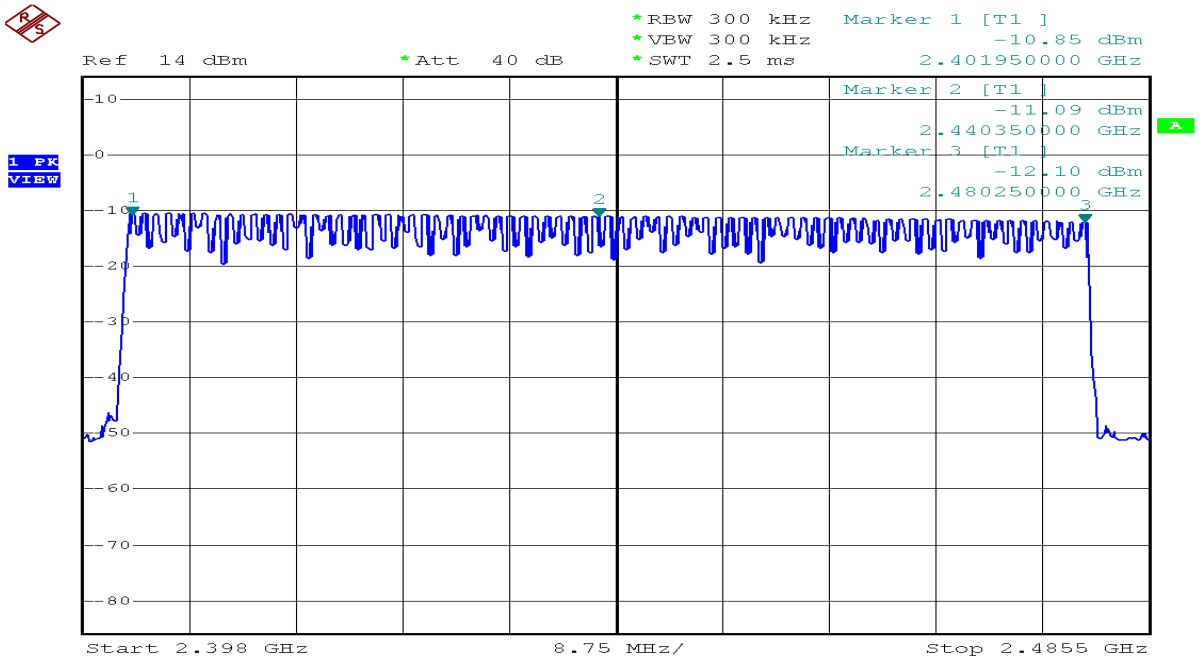


Date: 21.APR.2014 08:32:11

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 2-π/4 PSK	**Display Pattern**	Program

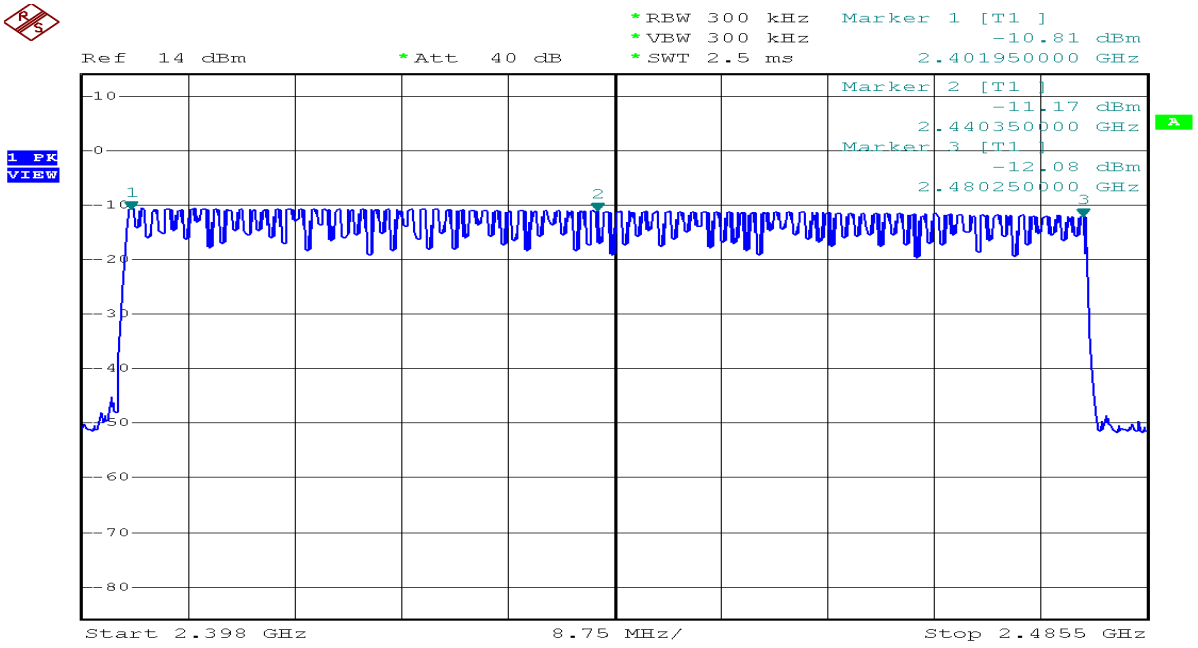
Frequency Range (MHz)	Measurement (Hopping Channel)	Limit (Hopping Channel)	Result
2402 ~ 2480	79 Channel	>75 Channel	Pass

DH1



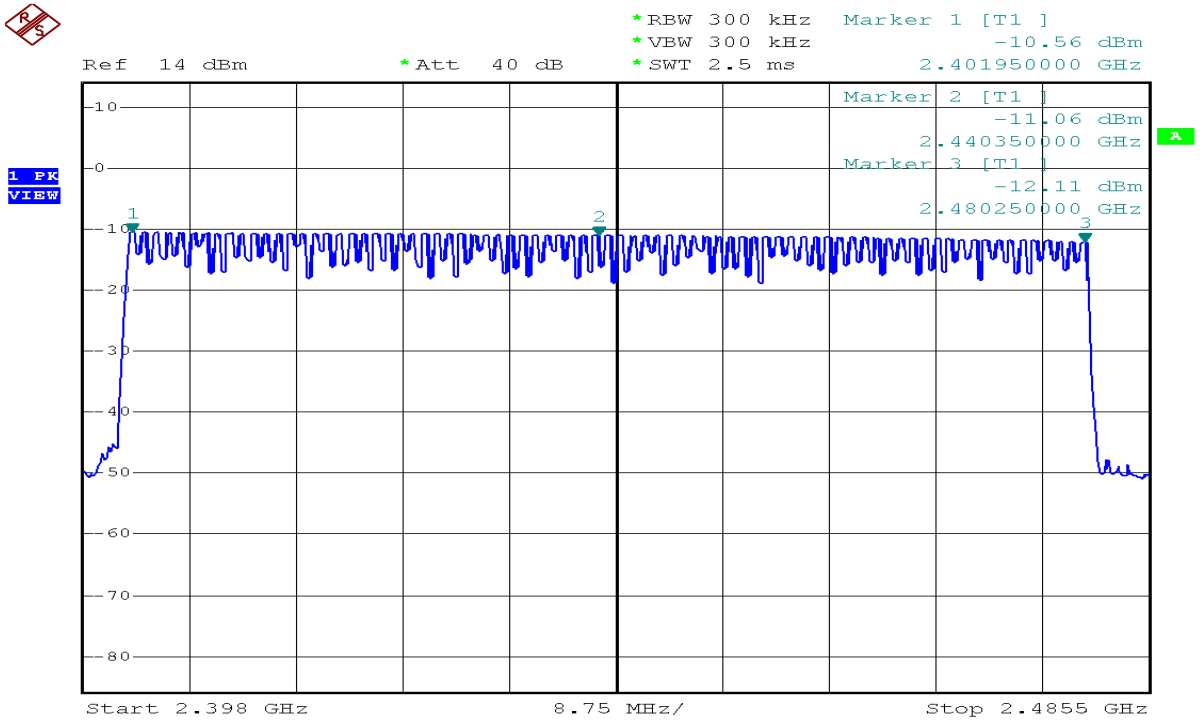
Date: 21.APR.2014 08:53:09

DH3



Date: 21.APR.2014 08:51:09

DH5

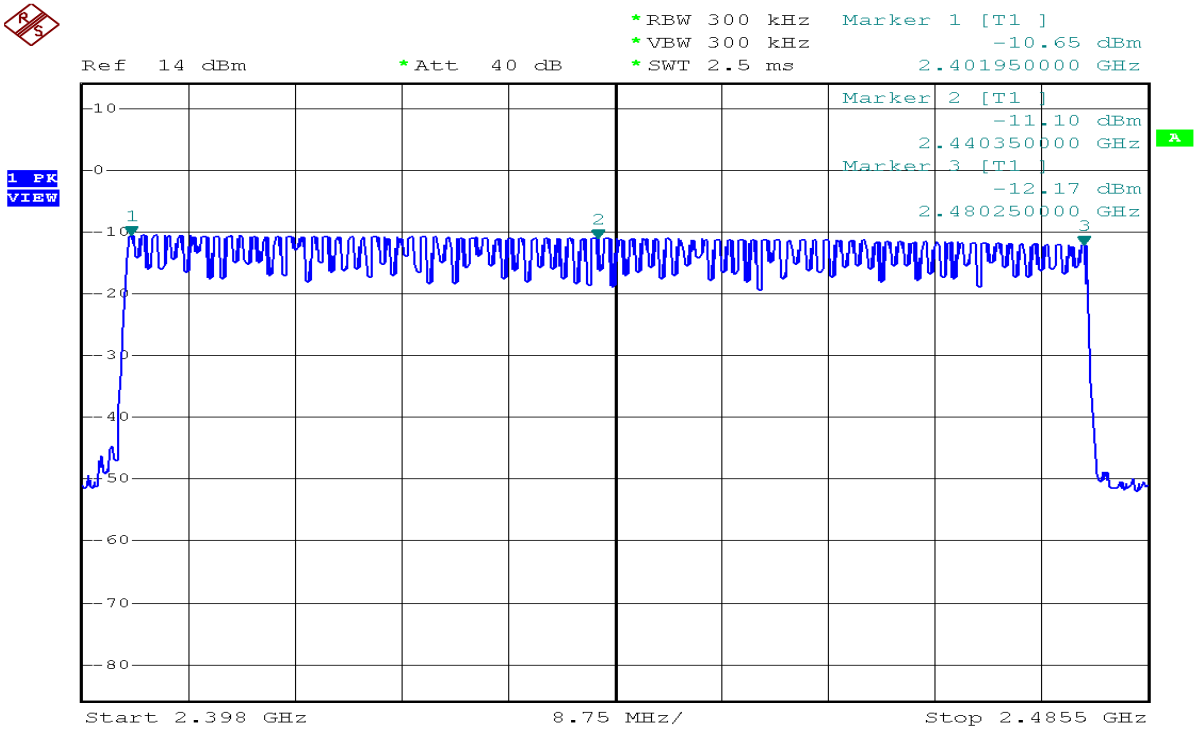


Date: 21.APR.2014 08:49:43

Date of Test	April 21, 2014	**Temperature**	25 deg/C
EUT	BLUETOOTH TRANSCEIVER	**Humidity**	60 %RH
Working Cond.	Mode 3-8DPSK	**Display Pattern**	Program

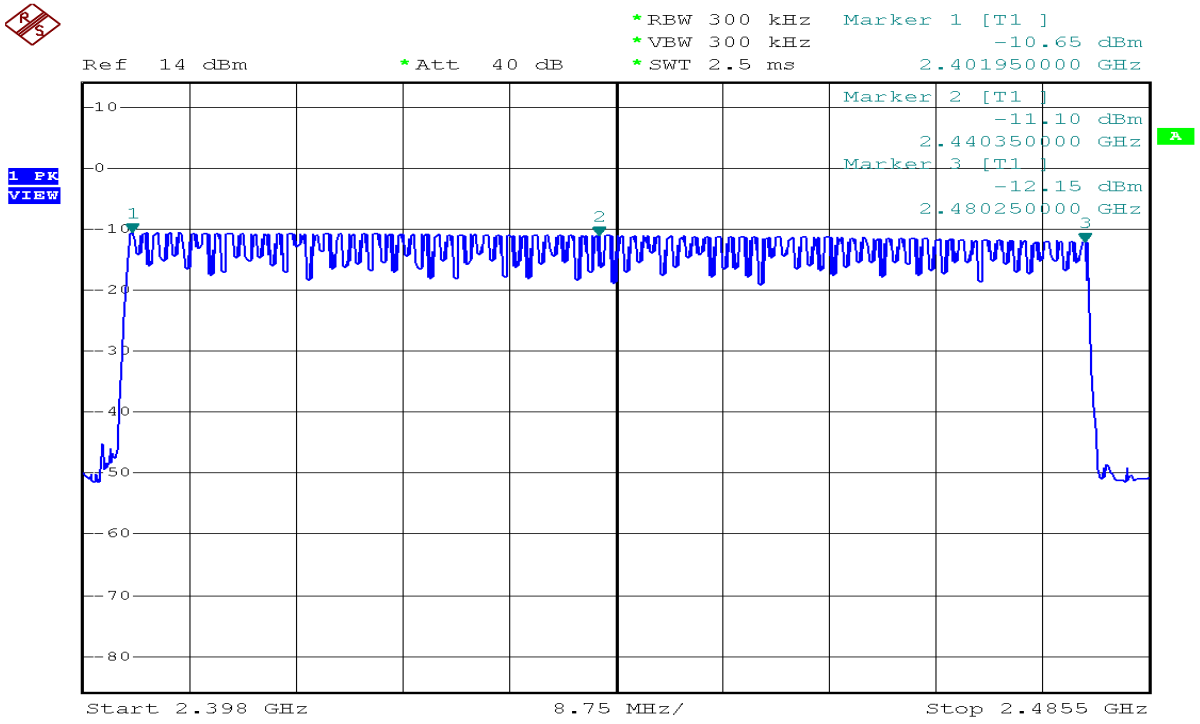
Frequency Range (MHz)	Measurement (Hopping Channel)	Limit (Hopping Channel)	Result
2402 ~ 2480	79 Channel	>75 Channel	Pass

DH1



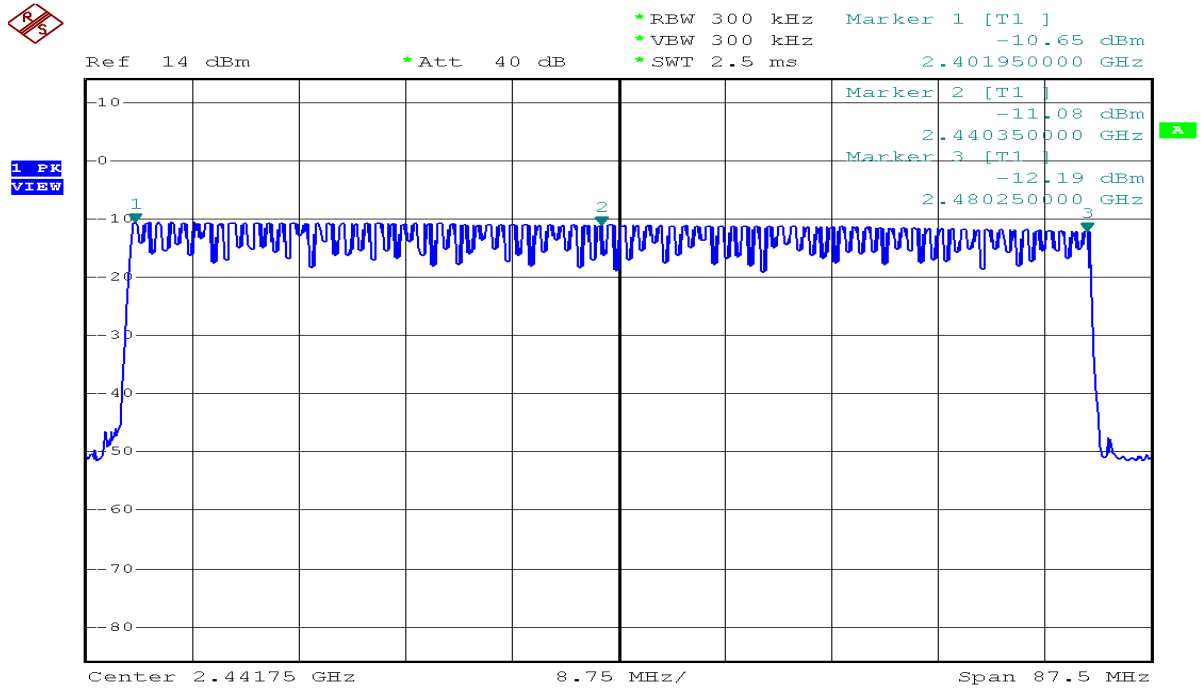
Date: 21.APR.2014 08:55:18

DH3



Date: 21.APR.2014 08:57:23

DH5



Date: 21.APR.2014 08:59:38

11. EMI REDUCTION METHOD DURING COMPLIANCE TESTING

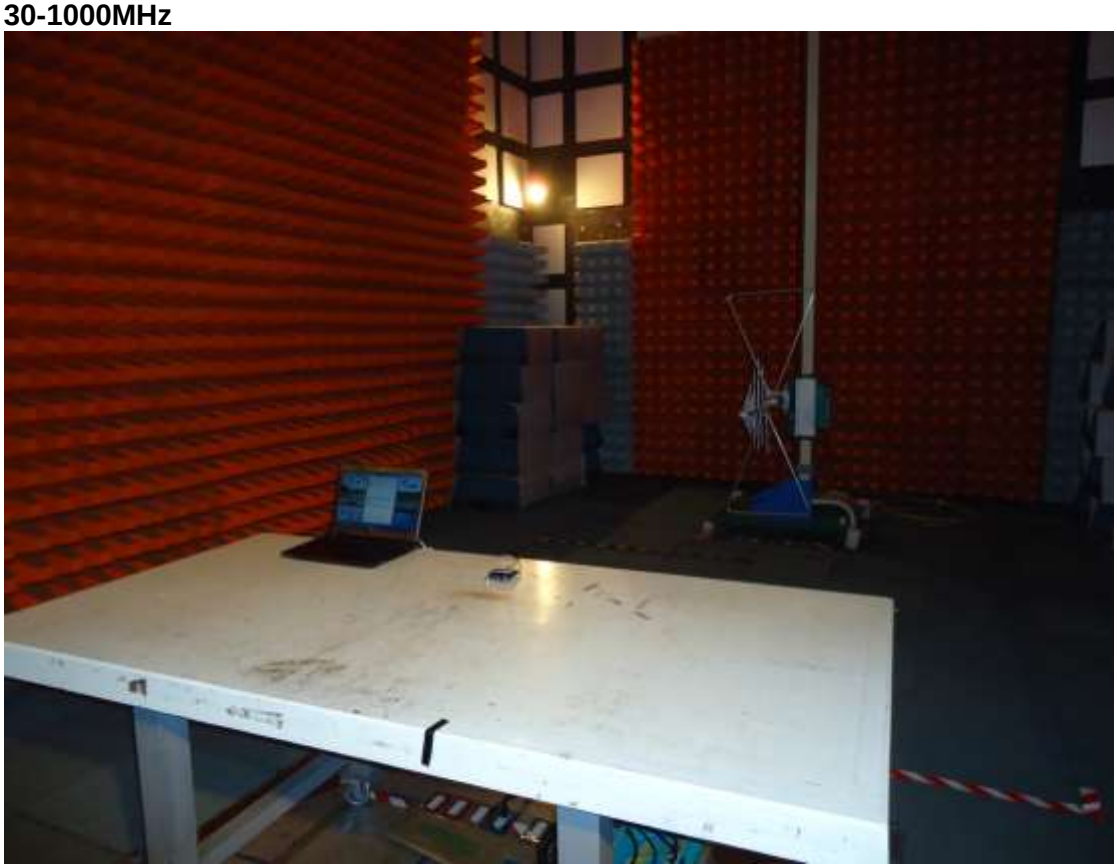
No modification was made during testing.

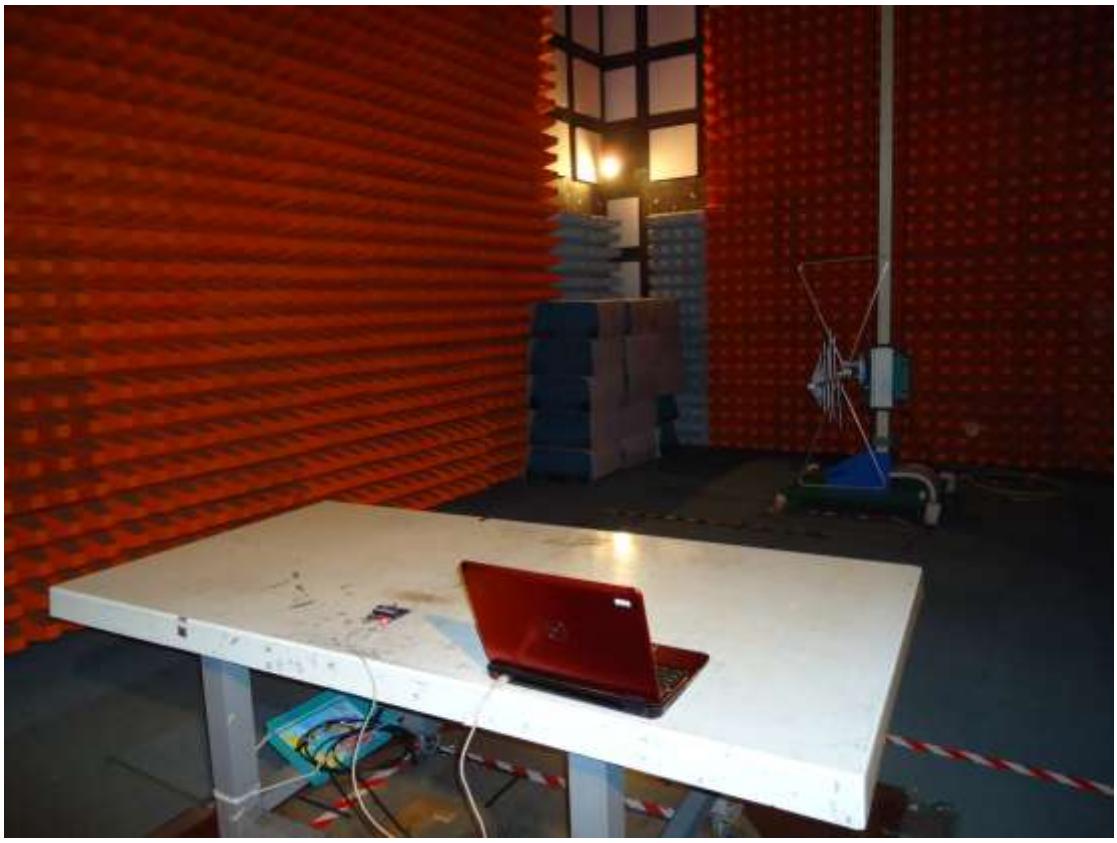
12. PHOTOGRAPHS FOR TEST

12.1 TEST PHOTOGRAPHS FOR CONDUCTION

12.2 TEST PHOTOGRAPHS FOR RADIATION

30-1000MHz





Above 1GHz