

Seebo Interactive Ltd.**Application
For
Certification****FCC ID: 2ABHHTA001****Electronic Board Game****Model: 910000****Brand Name: Toys Alive****Bluetooth 4.0 Transceiver****Report No.: 131204025SZN-001**

We hereby certify that the sample of the above item is considered to comply with the requirements of FCC Part 15, Subpart C for Intentional Radiator, mention 47 CFR [10-1-12]

Prepared and Checked by:

Approved by:

Sign on file

Harry Wu
Assistant Engineer

Billy Li
Supervisor
Date: December 09, 2013

- The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
- This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
- For Terms And Conditions of the services, it can be provided upon request.
- The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF no.: FCC 15C_Tx_b

INTERTEK TESTING SERVICE

LIST OF EXHIBITS

INTRODUCTION

<i>EXHIBIT 1:</i>	Summary of Tests
<i>EXHIBIT 2:</i>	General Description
<i>EXHIBIT 3:</i>	System Test Configuration
<i>EXHIBIT 4:</i>	Measurement Results
<i>EXHIBIT 5:</i>	Equipment Photographs
<i>EXHIBIT 6:</i>	Product Labeling
<i>EXHIBIT 7:</i>	Technical Specifications
<i>EXHIBIT 8:</i>	Instruction Manual
<i>EXHIBIT 9:</i>	Confidentiality Request
<i>EXHIBIT 10:</i>	Miscellaneous Information
<i>EXHIBIT 11:</i>	Test Equipment List

INTERTEK TESTING SERVICES

MEASUREMENT/TECHNICAL REPORT

Seebo Interactive Ltd. - MODEL: 910000

FCC ID: 2ABHHTA001

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

Equipment Type: DTS - Part 15 Digital Transmission Systems (Bluetooth 4.0 transmitter portion)

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes No

If yes, defer until : date

Company Name agrees to notify the Commission by: date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes No

If no, assumed Part 15, Subpart C for intentional radiator - the new 47 CFR [10-01-12 Edition] provision.

Report prepared by:

Harry Wu
Intertek Testing Services Shenzhen Ltd.
Kejiyuan Branch
6F, Block D, Huahan Building, Langshan Road,
Nanshan District, Shenzhen, P. R. China
Phone: (86 755) 8614 0716
Fax: (86 755) 8614 6751

INTERTEK TESTING SERVICES

Table of Contents

1.0 <u>Summary of test results</u>	2
2.0 <u>General Description</u>	4
2.1 Product Description	4
2.2 Related Submittal(s) Grants	5
2.3 Test Methodology.....	5
2.4 Test Facility	5
3.0 <u>System Test Configuration</u>	7
3.1 Justification	7
3.2 EUT Exercising Software.....	7
3.3 Details of EUT and Description of Peripherals	8
3.4 Measurement Uncertainty.....	8
3.5 Equipment Modification	8
3.6 Support Equipment List and Description.....	8
4.0 <u>Measurement Results</u>	10
4.1 Maximum Conducted Output Power at Antenna Terminals.....	10
4.2 Minimum 6dB RF Bandwidth	13
4.3 Maximum Power Density	16
4.4 Out of Band Conducted Emissions	19
4.5 Out of Band Radiated Emissions.....	29
4.6 Transmitter Radiated Emissions in Restricted Bands.....	30
4.7 Field Strength Calculation.....	31
4.8 Radiated Spurious Emission.....	32
4.9 Radiated Emission from Digital Section of Transceiver.....	37
4.10 Transmitter Duty Cycle Calculation and Measurements.....	38
5.0 <u>Equipment Photographs</u>	40
6.0 <u>Product Labelling</u>	42
7.0 <u>Technical Specifications</u>	44
8.0 <u>Instruction Manual</u>	46
9.0 <u>Confidentiality Request</u>	48
10.0 <u>Miscellaneous Information</u>	50
11.0 <u>Test Equipment List</u>	52

INTERTEK TESTING SERVICES

List of attached file

Exhibit type	File Description	Filename
Test Report	Test Report	report.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
Operation Description	Technical Description	descri.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Cover Letter	Confidentiality Letter	request.pdf
RF Exposure report	RF exposure	RF exposure.pdf
Cover Letter	Letter of Agency	agency.pdf
Cover Letter	Certification Agreement	agreement.pdf

INTERTEK TESTING SERVICES

EXHIBIT 1

SUMMARY OF TEST RESULTS

INTERTEK TESTING SERVICES

1.0 Summary of Test

Seebo Interactive Ltd. - MODEL: 910000

FCC ID: 2ABHHTA001

TEST	REFERENCE	RESULTS
Max. Output power	15.247(b)(3)	Pass
6 dB Bandwidth	15.247(a)(2)	Pass
Max. Power Density	15.247(e)	Pass
Out of Band Antenna Conducted Emission	15.247(d)	Pass
Radiated Emission in Restricted Bands	15.247(d)	Pass
AC Conducted Emission	15.207	N/A
Antenna Requirement	15.203	Pass (See Notes)

Notes: The EUT uses Integral Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

INTERTEK TESTING SERVICES

EXHIBIT 2

GENERAL DESCRIPTION

INTERTEK TESTING SERVICES

2.0 General Description

2.1 Product Description

The Equipment Under Test (EUT) is a Electronic Board Game, Model: 910000 with internal Bluetooth 4.0 function operating at 2402-2480MHz, 40 channels with 2MHz channel spacing. The EUT was powered by 3Vdc (2 x AA batteries). For more detailed features description, please refer to the user's manual.

Type of Modulation: GFSK.

Antenna Type: Integral Antenna.

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

INTERTEK TESTING SERVICES

2.2 Related Submittal(s) Grants

This is an application for certification of:
DTS- Part 15 Digital Transmission Systems (Bluetooth 4.0 transmitter portion)

2.3 Test Methodology

Radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009) and KDB 558074. Radiated emission measurement was performed in semi-anechoic chamber. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the “Justification Section” of this Application. All other measurements were made in accordance with the procedures in part 2 of CFR 47.

2.4 Test Facility

The Semi-Anechoic chamber used to collect the radiated data is **Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, Block D, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC (Registration Number: 242492).

INTERTEK TESTING SERVICES

EXHIBIT 3

SYSTEM TEST CONFIGURATION

INTERTEK TESTING SERVICES

3.0 System Test Configuration

3.1 Justification

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. The EUT was powered new 3Vdc (2 x AA batteries) during the test. Only the worst case data was reported.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

3.2 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated testing was designed to exercise the various system components in a manner similar to a typical use. The worst case configuration is used in all specified testing.

The parameters of test software setting:

During the test, Channel and power controlling software provided by the applicant was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the application and is going to be fixed on the firmware of the end product.

Power Parameters of Bluetooth 4.0

Channel No.	Output Power (dBm)	Data rate	Modulation type
0	6	1Mbps	GFSK
17	6	1Mbps	GFSK
39	6	1Mbps	GFSK

Note: only one antenna is used for transmission.

INTERTEK TESTING SERVICES

3.3 Special Accessories

N/A

3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

Uncertainty and Compliance – Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

3.5 Equipment Modification

Any modifications installed previous to testing by Seebo Interactive Ltd. will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch.

3.6 Support Equipment List and Description

Description	Manufacturer	Model No.
iPad Mini	Apple	A1432

INTERTEK TESTING SERVICES

EXHIBIT 4

MEASUREMENT RESULTS

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.0 Measurement Results

4.1 Maximum Conducted Output Power at Antenna Terminals, FCC Rules 15.247(b)(3):

- The antenna power of the EUT was connected to the input of a spectrum analyzer. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.
- The antenna port of the EUT was connected to the input of a spectrum analyzer. The analyzer was set according to the FCC KDB 558074 spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges and power was read directly in dBm. External attenuation and cable loss were compensated from the measured value.

For antennas with gains of 6 dBi or less, maximum allowed Transmitter output is 1 watt (+30 dBm).

Bluetooth 4.0 (Antenna Gain =0.0dBi) (GFSK, 1Mbps)		
Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2402	5.92	3.91
Middle Channel: 2440	5.96	3.94
High Channel: 2480	5.27	3.37

Cable loss: 0.3 dB External Attenuation: 0 dB

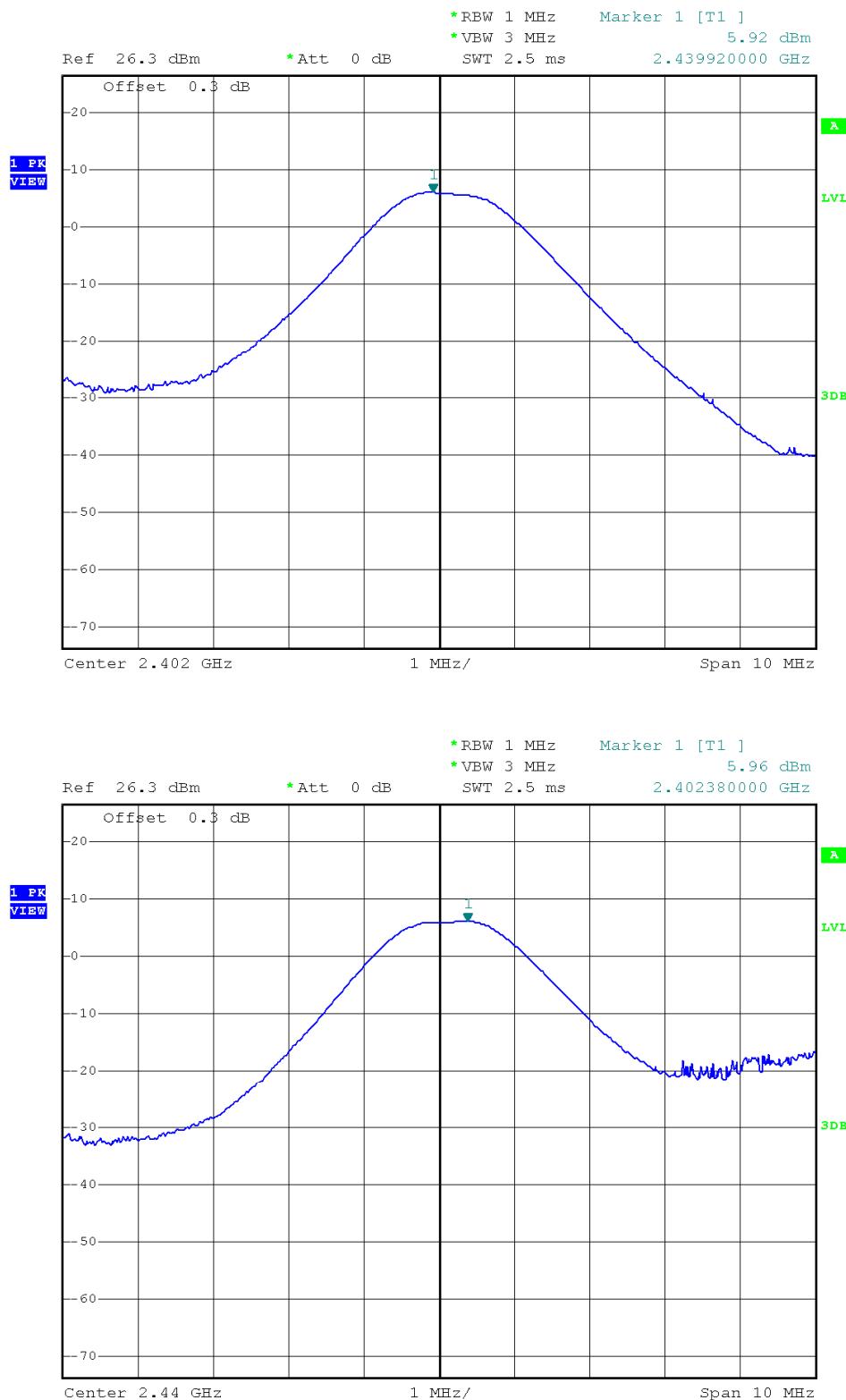
Cable loss, external attenuation has been included in OFFSET function

EUT max. output level = 5.96dBm

For RF Exposure, the information is saved with filename: RF exposure.pdf.

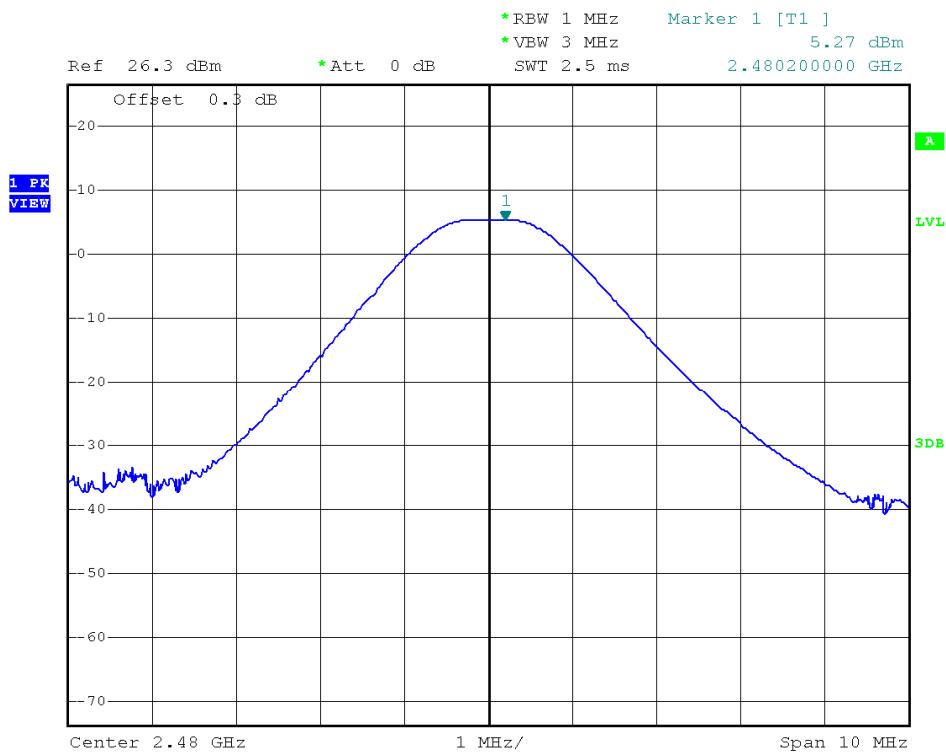
The test plots are attached as below.

INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
 FCC ID: 2ABHHTA001
 Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES



INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.2 Minimum 6 dB RF Bandwidth, FCC Rule 15.247(a)(2):

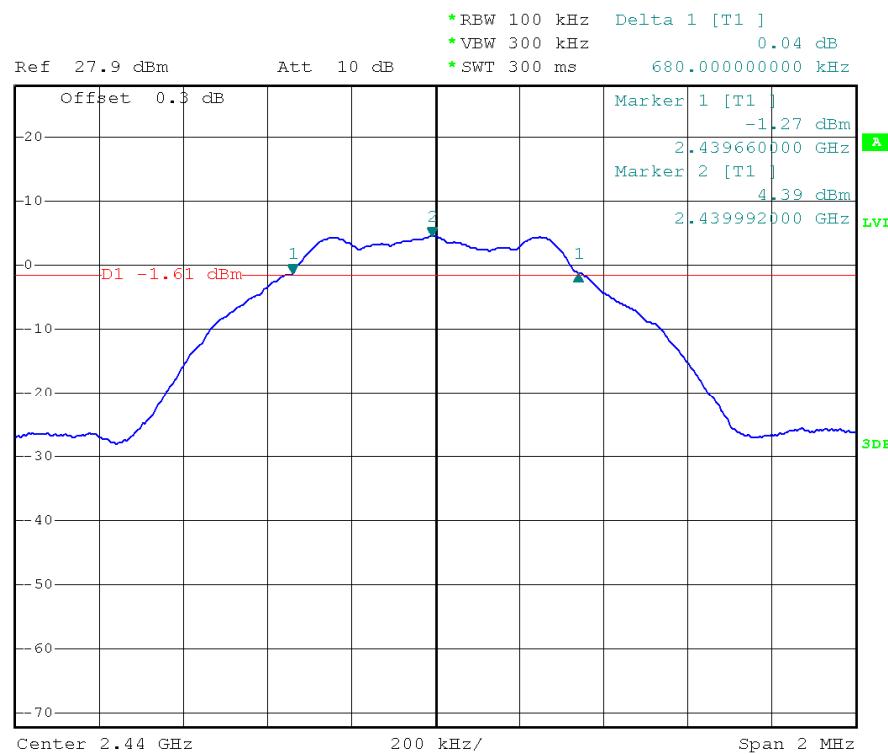
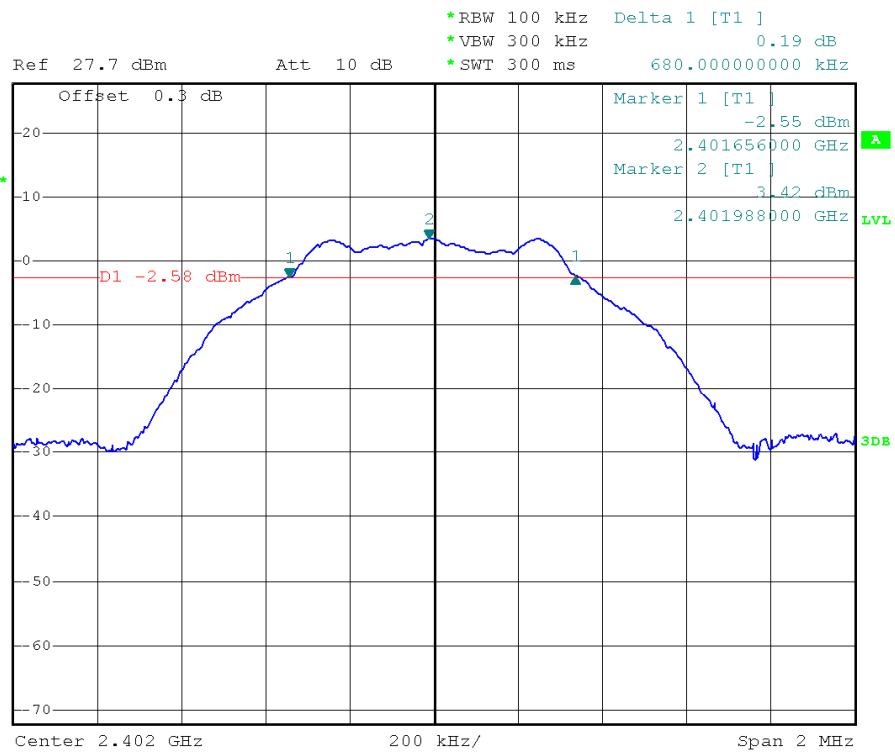
The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 KHz according to FCC KDB 558074. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

Limit: The 6 dB Bandwidth is at least 500 kHz.

Bluetooth 4.0 (GFSK, 1Mbps)	
Frequency (MHz)	6 dB Bandwidth (MHz)
Low Channel: 2402	0.680
Middle Channel: 2440	0.680
High Channel: 2480	0.680

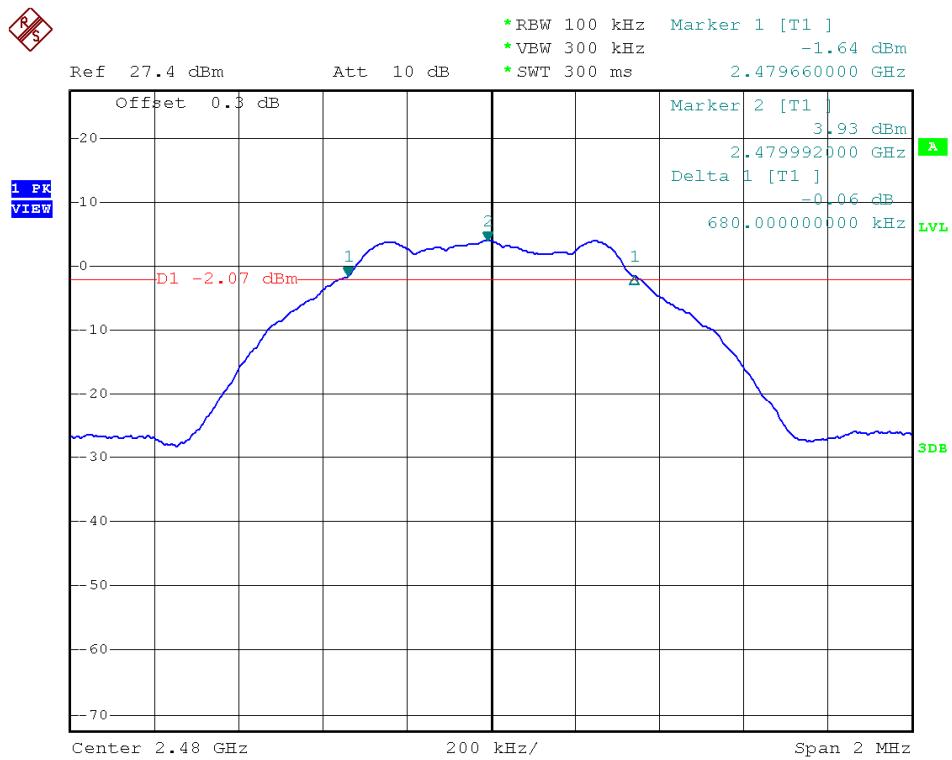
The test plots are attached as below.

INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
 FCC ID: 2ABHHTA001
 Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
 FCC ID: 2ABHHTA001
 Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.3 Maximum Power Density Reading, FCC Rule 15.247(e):

The Measurement Procedure PKPSD was set according to the FCC KDB 558074.

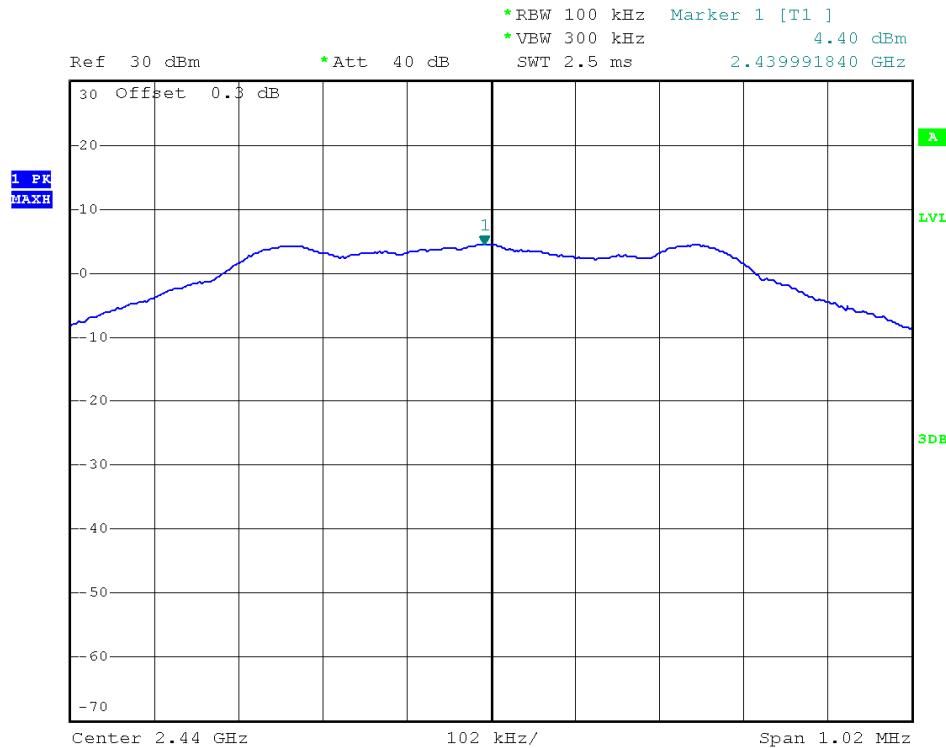
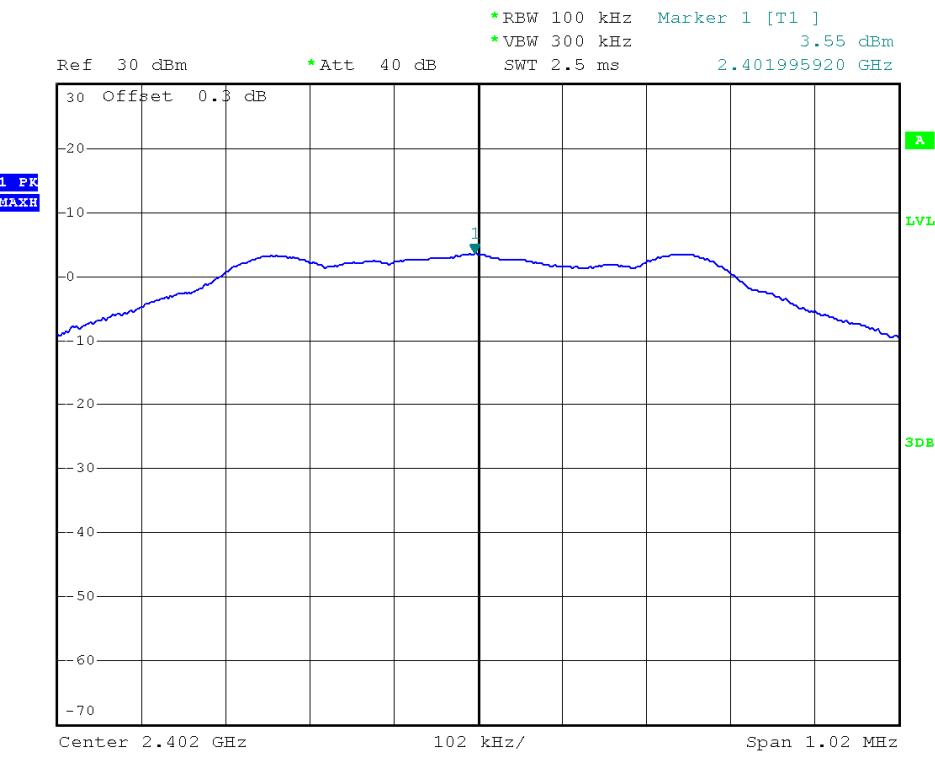
Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

Limit: The Power Density does not exceed 8dBm/ 3 kHz.

Bluetooth 4.0 (GFSK, 1Mbps)	
Frequency (MHz)	Power Density with RBW 100KHz (dBm)
Low Channel: 2402	3.55
Middle Channel: 2440	4.40
High Channel: 2480	4.00

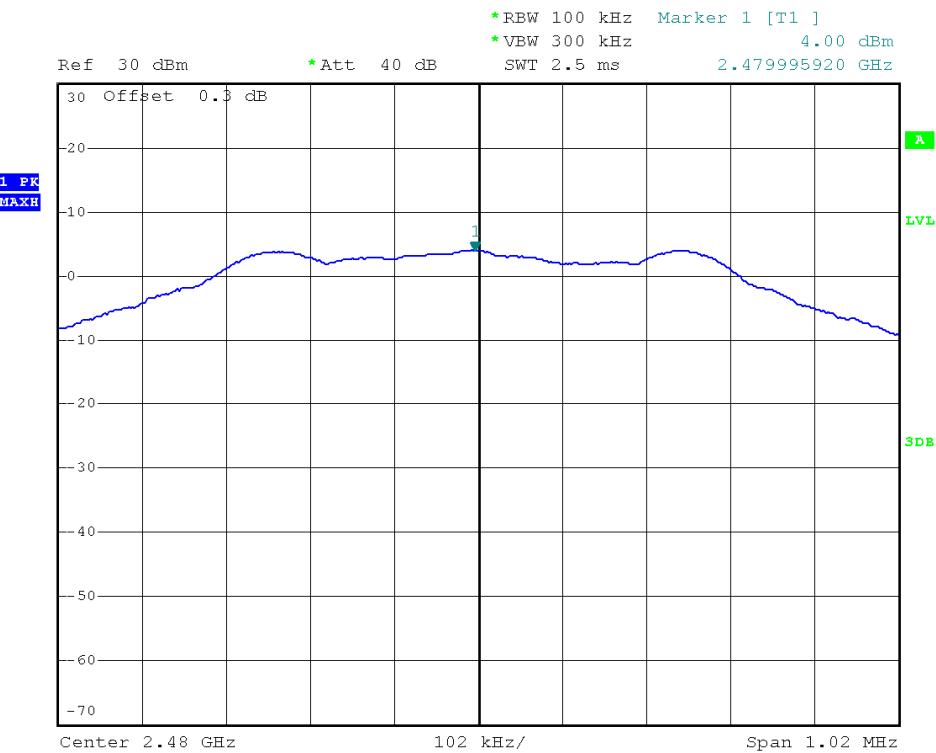
The test plots are attached as below.

INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
FCC ID: 2ABHHTA001
Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
FCC ID: 2ABHHTA001
Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.4 Out of Band Conducted Emissions, FCC Rule 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. The Measurement Procedure was set according to the FCC KDB 558074.

Refer to the attached test plots for out of band conducted emissions data with rate of 1Mbps for Bluetooth 4.0.

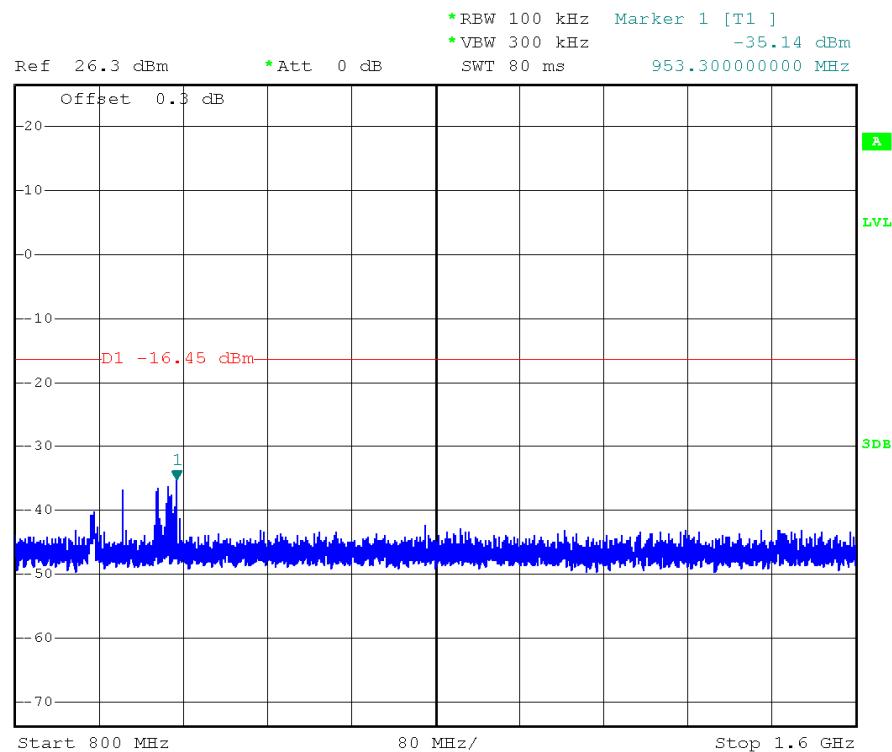
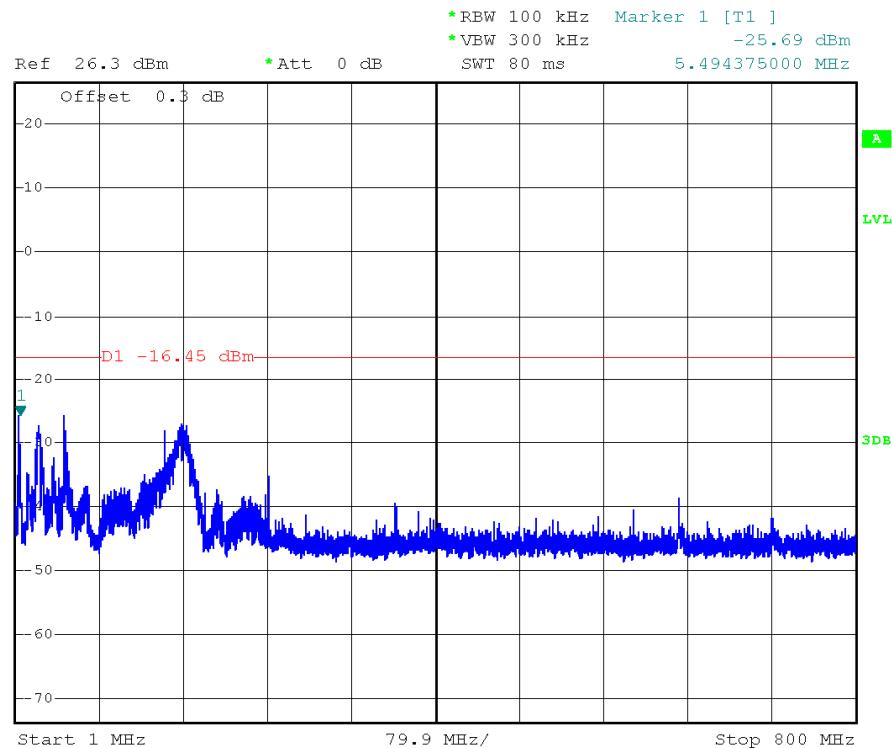
The test plots showed all spurious emission up to the tenth harmonic was measured and they were found to be at least 20 dB below the highest level of the desired power in the passband.

Note: the RBW was set to 1MHz rather than 100KHz in order to increase the measurement speed, if found out fail point at 1MHz RBW, we will use reduce the RBW to 100KHz determine the final result.

The test plots are attached as below.

INTERTEK TESTING SERVICES

Channel 0 (2402MHz) Reference Level: 3.55dBm

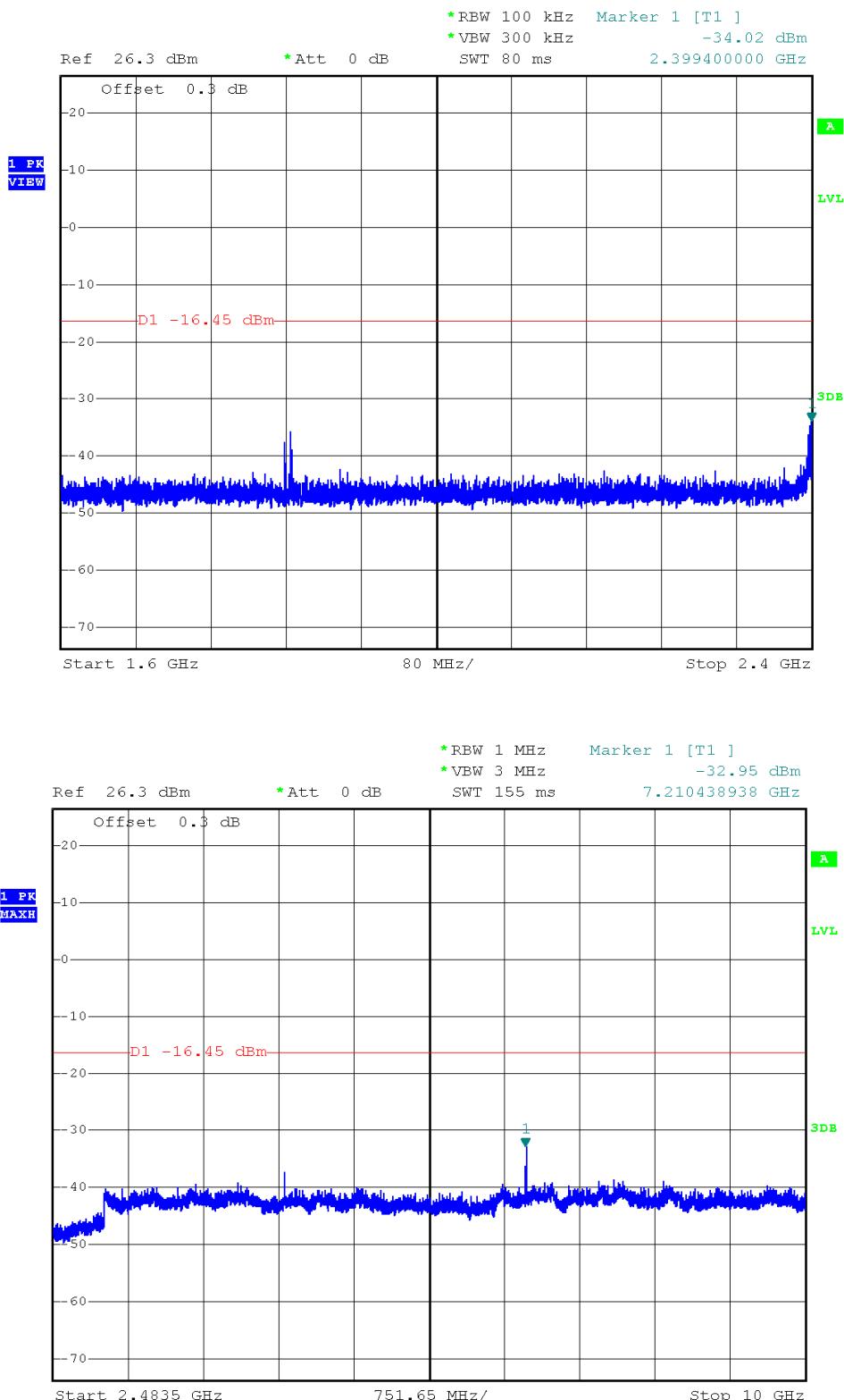


TRF no.: FCC 15C_TX_b

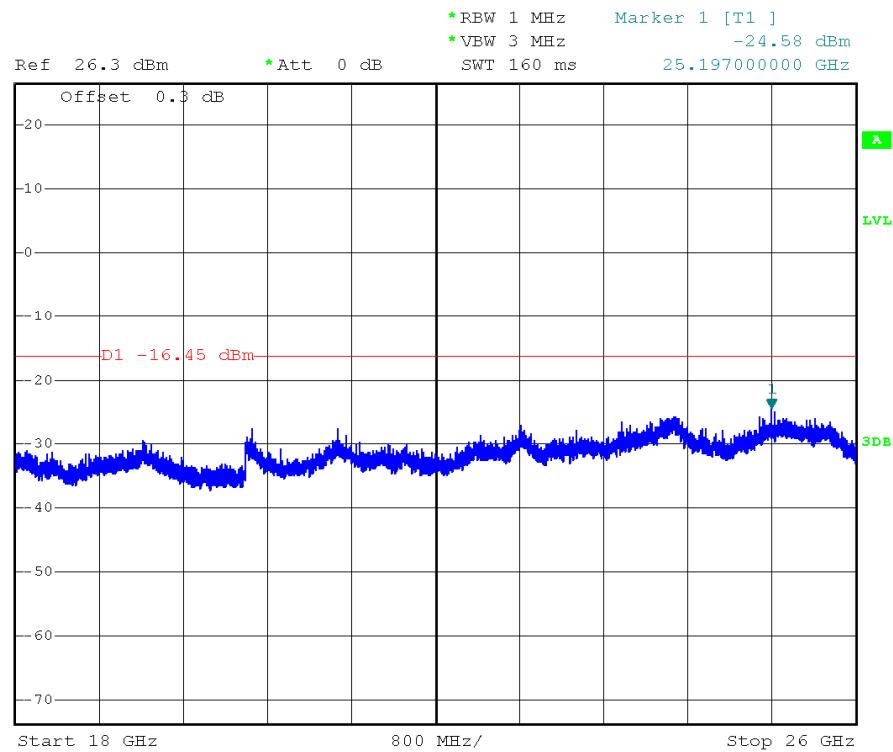
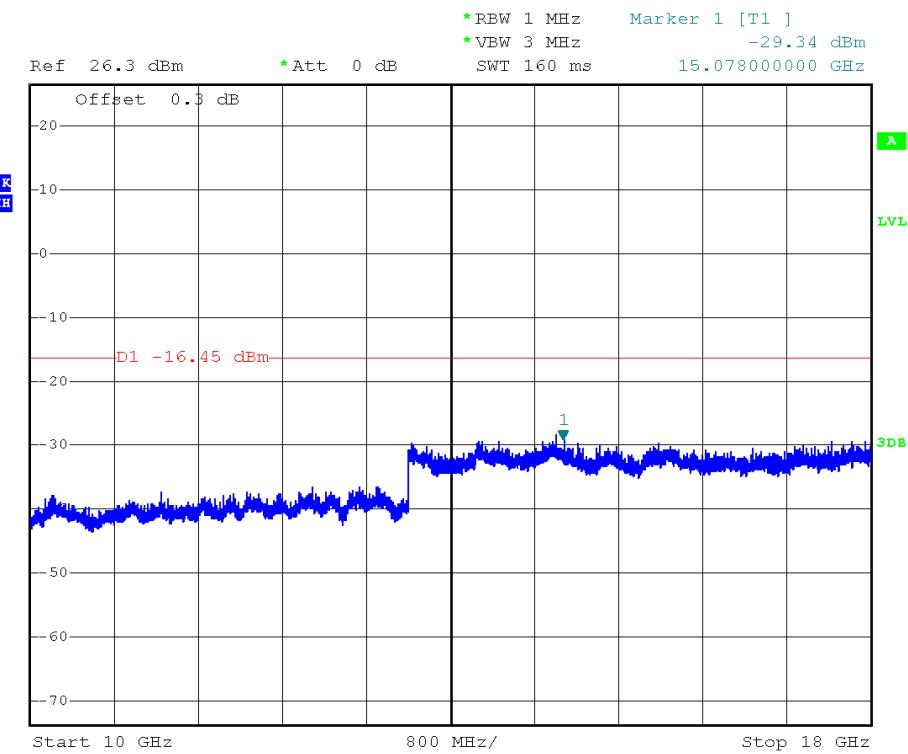
FCC ID: 2ABHHTA001

Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES

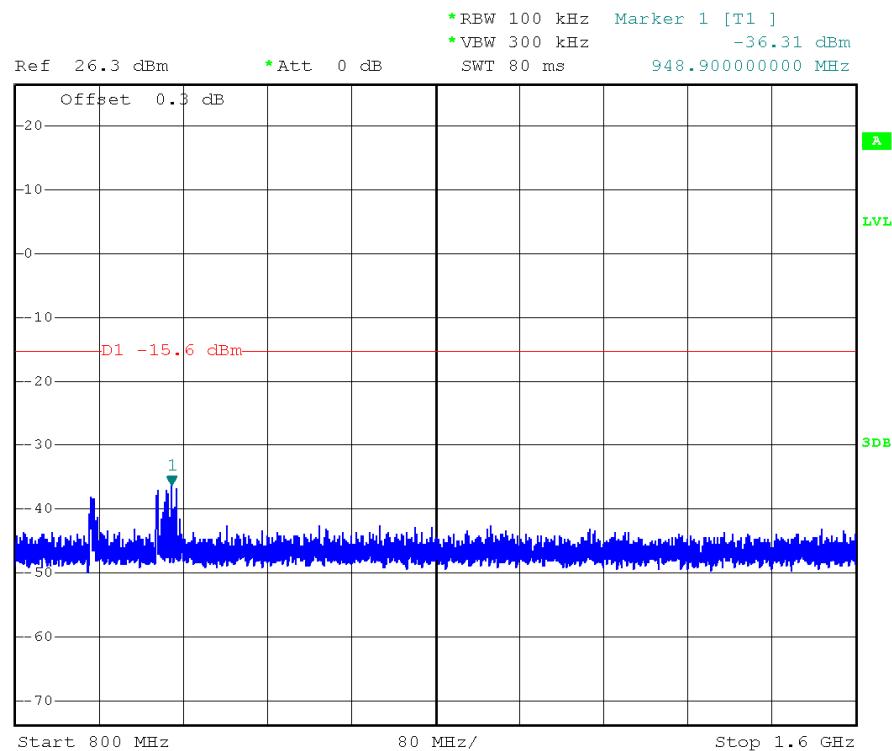
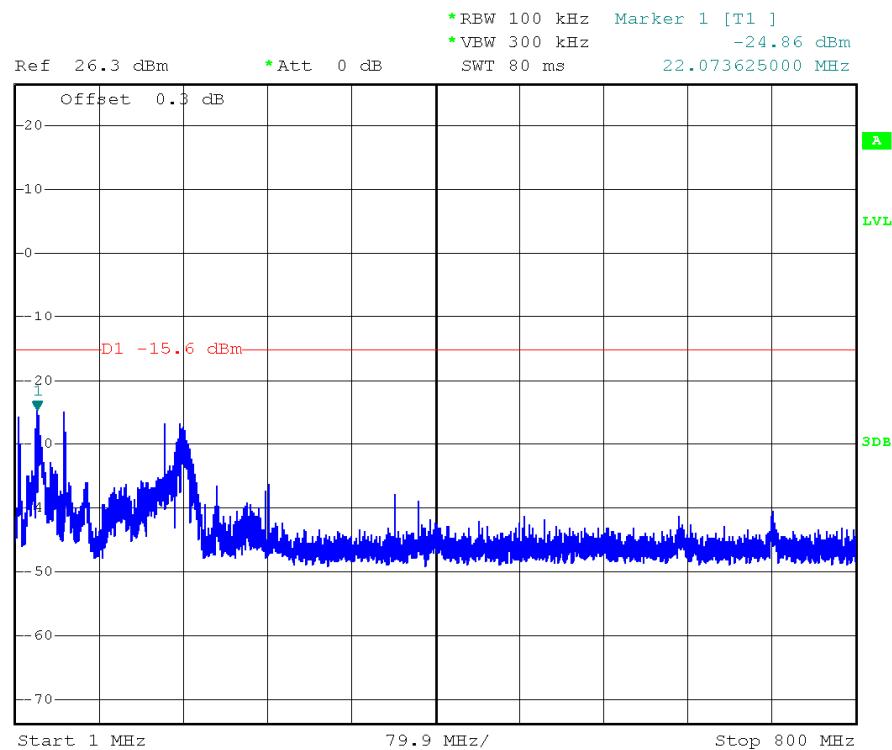


INTERTEK TESTING SERVICES

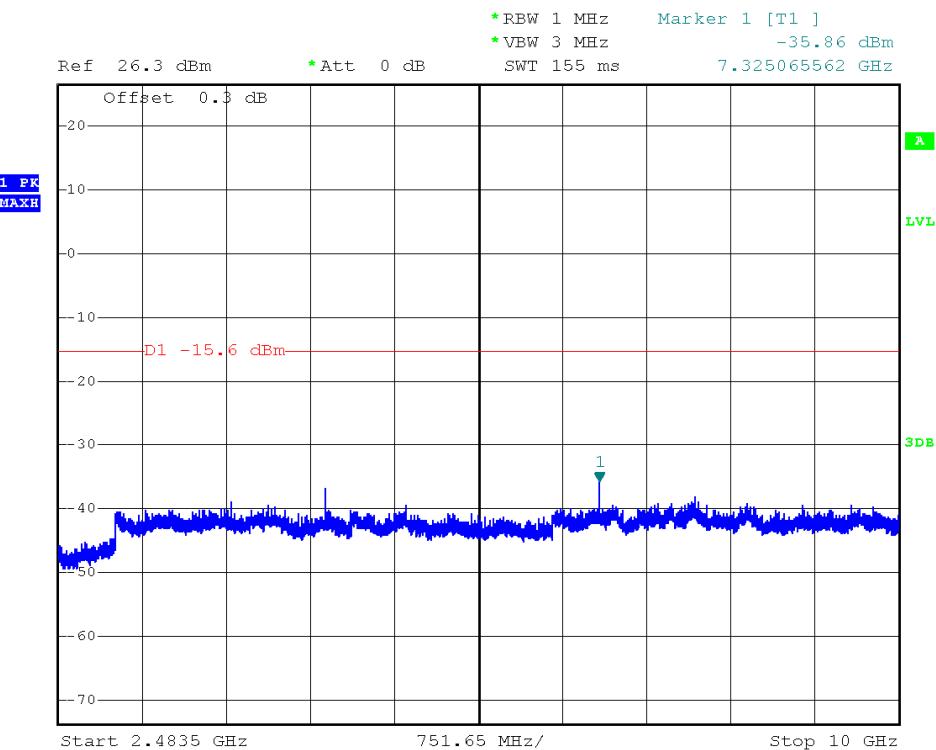
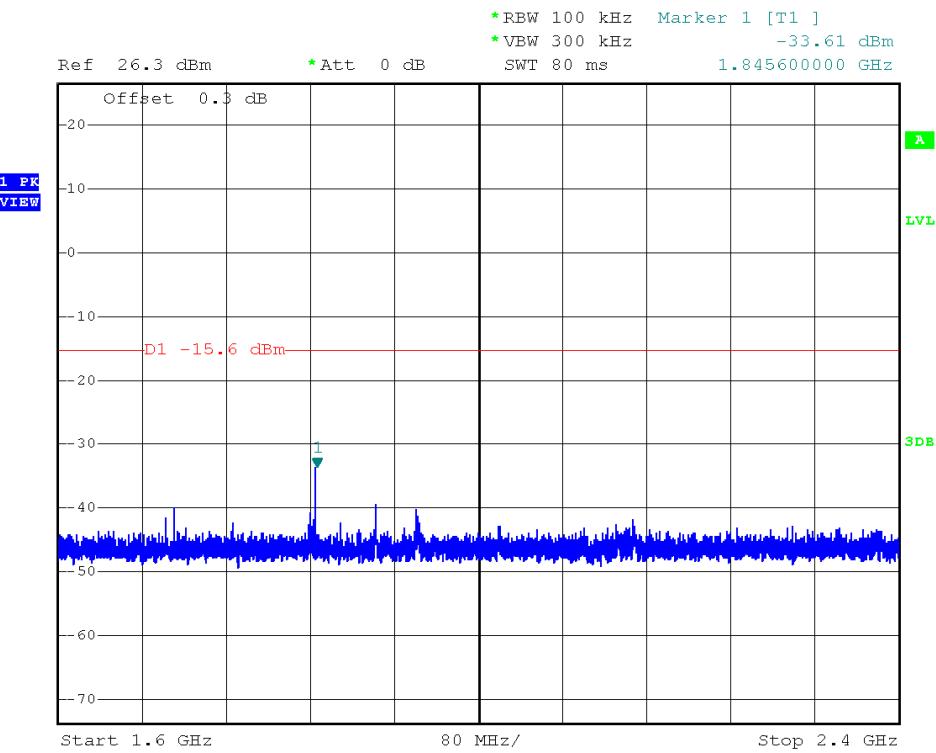


INTERTEK TESTING SERVICES

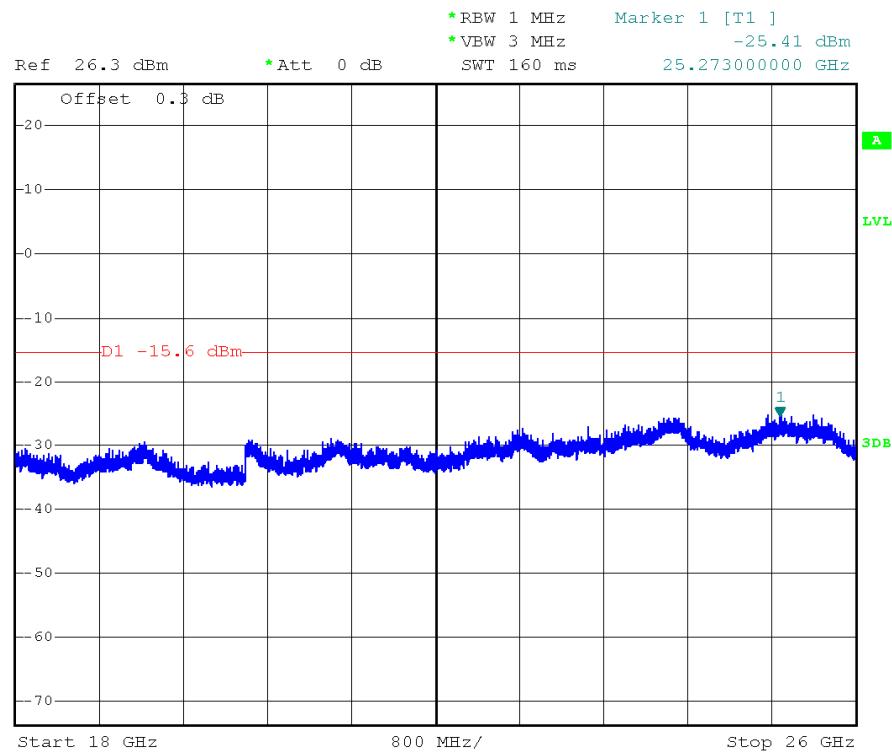
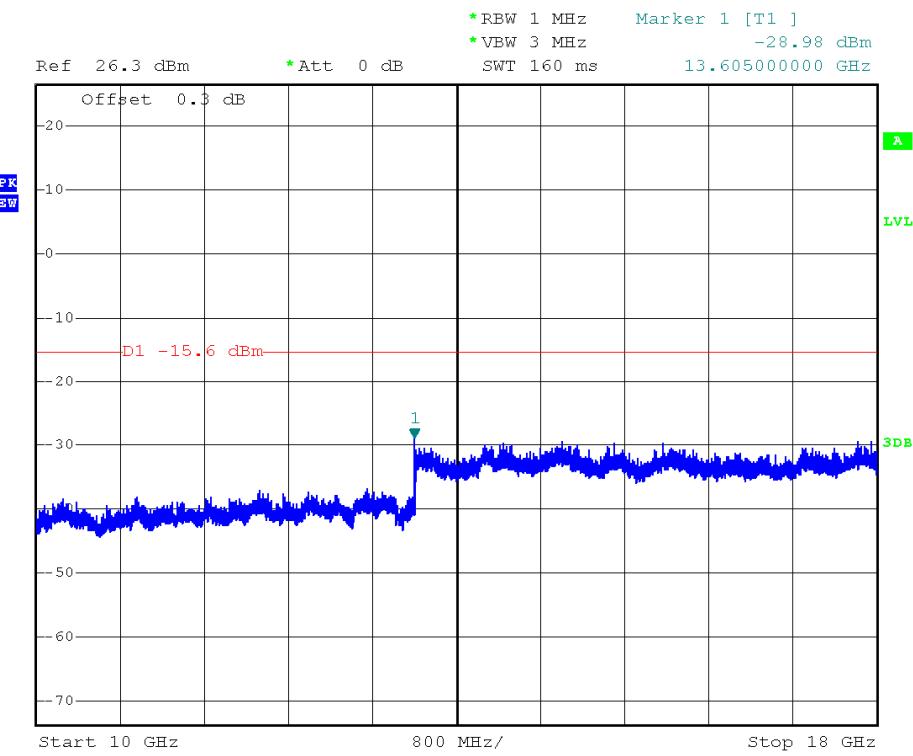
Channel 17 (2440MHz) Reference Level: 4.40dBm



INTERTEK TESTING SERVICES

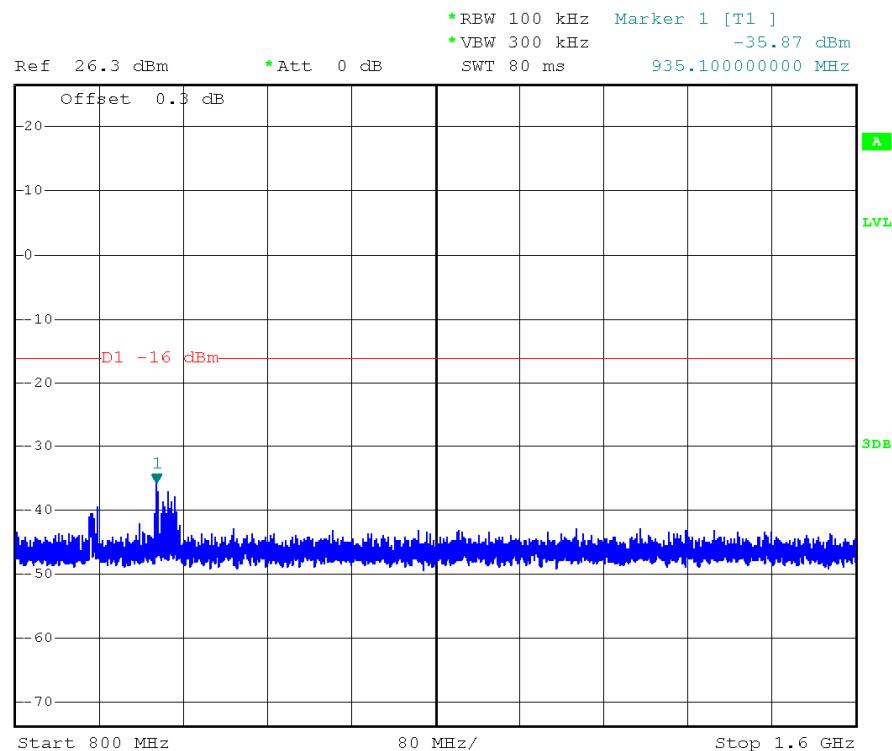
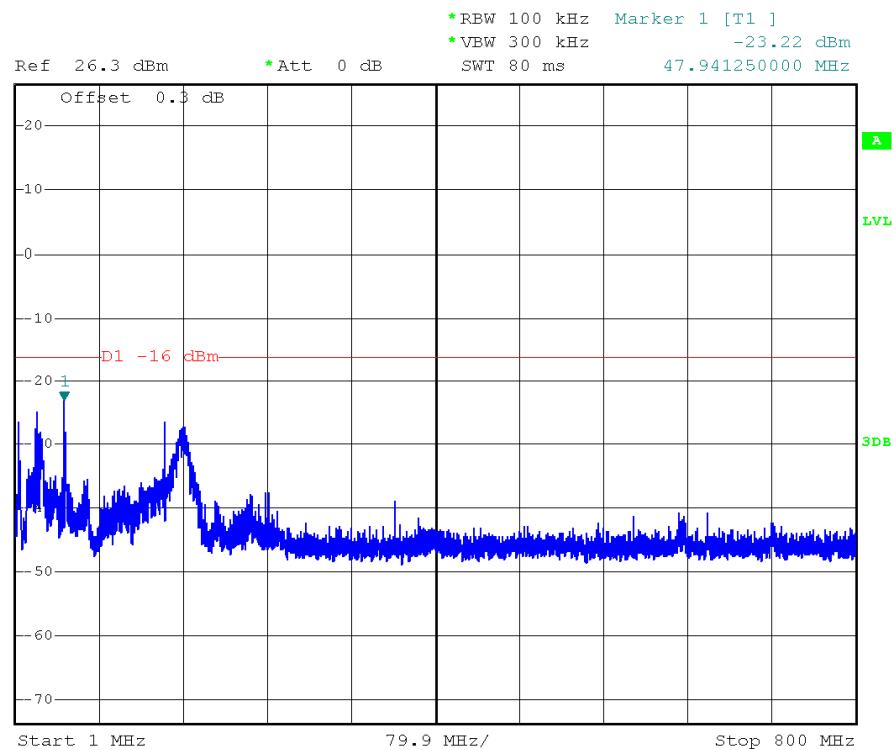


INTERTEK TESTING SERVICES

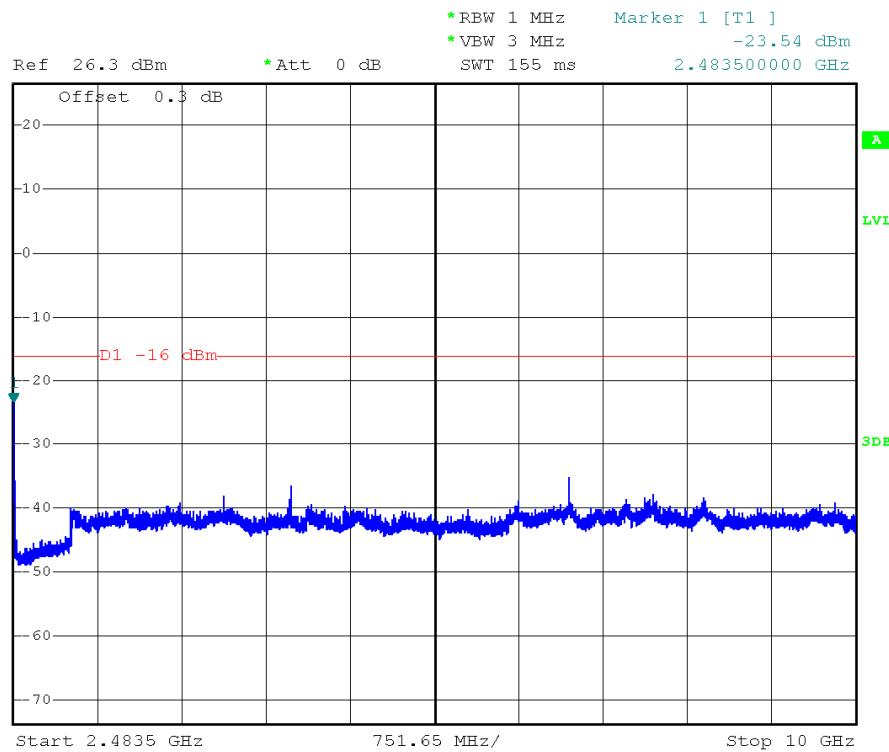
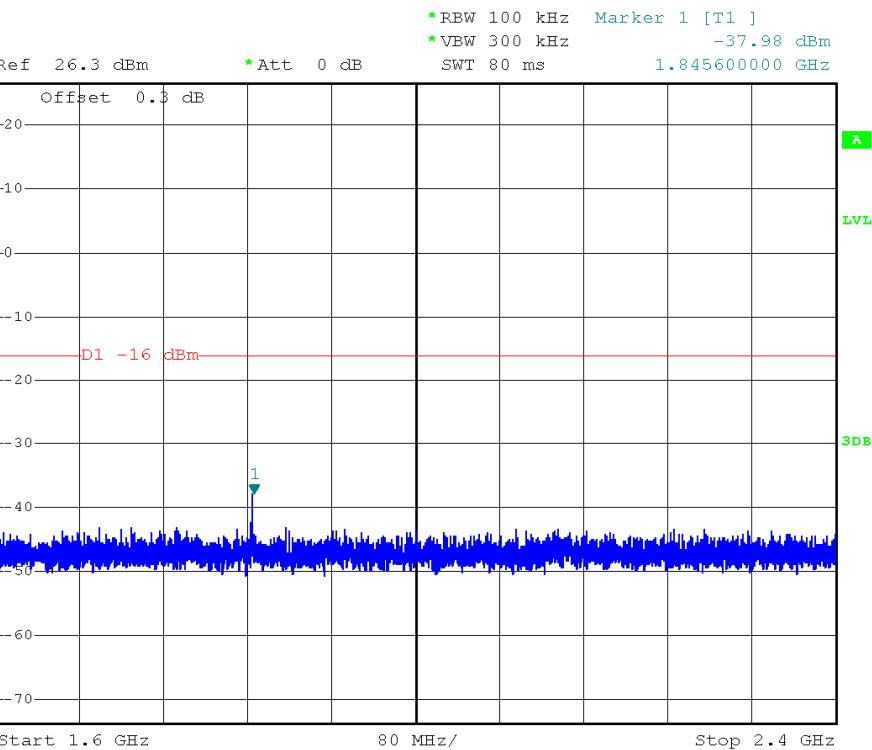


INTERTEK TESTING SERVICES

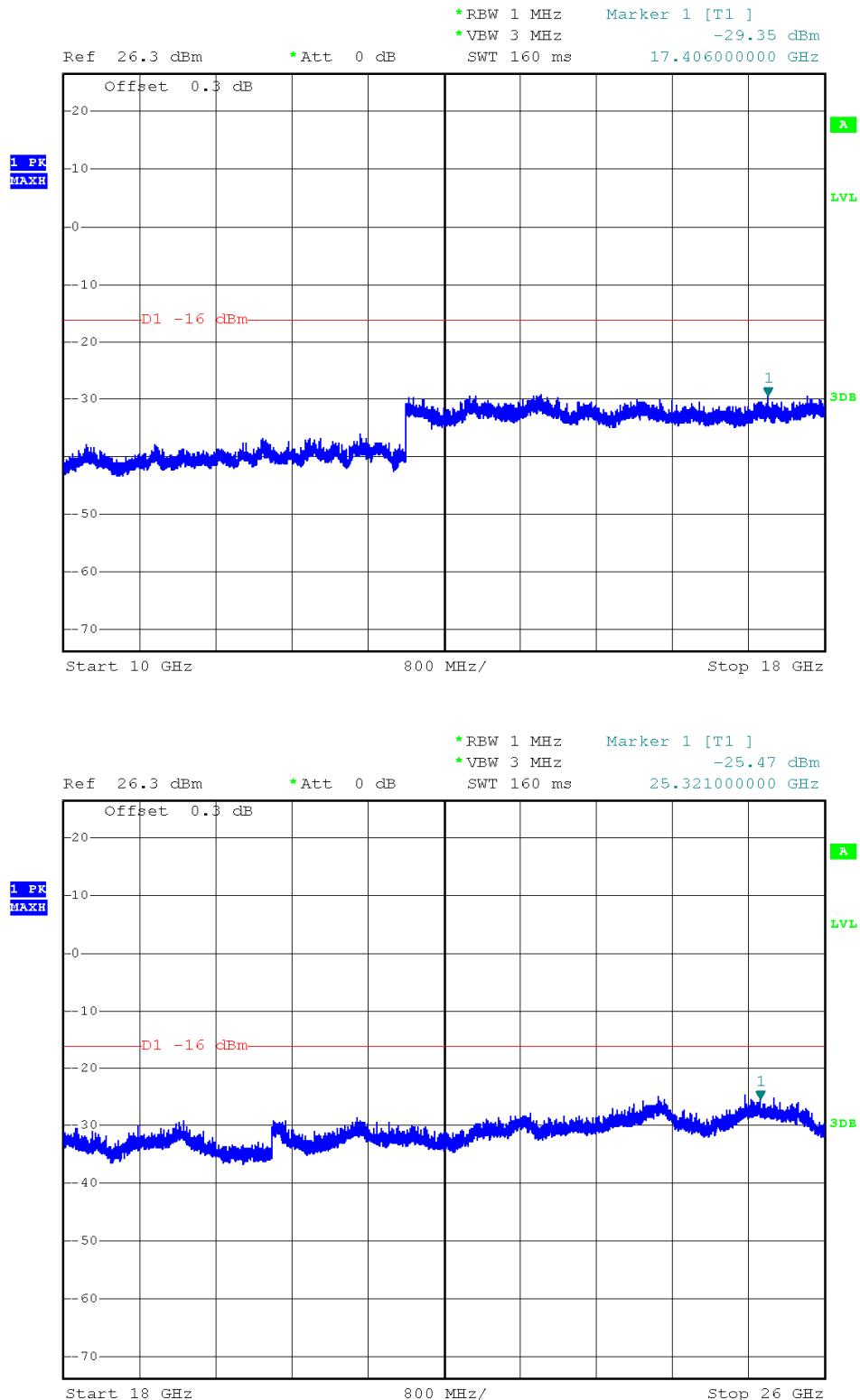
Channel 39 (2480MHz) Reference Level: 4.00dBm



INTERTEK TESTING SERVICES



INTERTEK TESTING SERVICES



TRF no.: FCC 15C_TX_b
 FCC ID: 2ABHHTA001
 Report No.: 131204025SZN-001

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.5 Out of Band Radiated Emissions (for emissions in 4.4 above that are less than 20dB below carrier), FCC Rule 15.247(d):

For out of band emissions that are close to or that exceed the 20dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

- Not required, since all emissions are more than 20dB below fundamental
- See attached data sheet

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.6 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b), (c):

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.7 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

$$FS = RA + AF + CF - AG + PD$$

Where FS = Field Strength in dB μ V/m
RA = Receiver Amplitude (including preamplifier) in dB μ V
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

$$FS = RA + AF + CF - AG + PD$$

Example

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB. The net field strength for comparison to the appropriate emission limit is 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$\begin{aligned} RA &= 62.0 \text{ dB}\mu\text{V} \\ AF &= 7.4 \text{ dB} \\ CF &= 1.6 \text{ dB} \\ AG &= 29.0 \text{ dB} \\ PD &= 0 \text{ dB} \\ FS &= 62 + 7.4 + 1.6 - 29 + 0 = 42 \text{ dB}\mu\text{V/m} \end{aligned}$$

$$\text{Level in mV/m} = \text{Common Antilogarithm} [(42 \text{ dB}\mu\text{V/m})/20] = 125.9 \mu\text{V/m}$$

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.8 Radiated Spurious Emission

Worst Case Radiated Spurious Emission at 4804.000MHz is passed by 1.0 dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.

Date of Test: December 05, 2013

Model: 910000

Worst Case Operating Mode: Tx (Channel 0)

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	168.012	33.0	20.0	9.8	22.8	43.5	-20.7
Horizontal	207.998	37.6	20.0	9.8	27.4	43.5	-16.1
Horizontal	900.086	25.1	20.0	21.1	26.2	46.0	-19.8
Vertical	41.155	29.0	20.0	9.8	18.8	40.0	-21.2
Vertical	135.245	33.4	20.0	7.8	21.2	43.5	-22.3
Vertical	918.520	25.0	20.0	24.3	29.3	46.0	-16.7

NOTES: 1. Quasi-Peak detector is used except for others stated.

2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. All emissions are below the QP limit.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000
Mode: Tx (Channel 0)

Date of Test: December 05, 2013

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4804.000	60.9	36.7	35.5	59.7	74.0	-14.3
Horizontal	7206.000	53.5	36.1	37.0	54.4	74.0	-19.6
Horizontal	*2388.934	67.9	36.7	28.1	59.3	74.0	-14.7

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4804.000	54.2	36.7	35.5	53.0	54.0	-1.0
Horizontal	7206.000	45.3	36.1	37.0	46.2	54.0	-7.8
Horizontal	*2388.934	57.2	36.7	28.1	48.6	54.0	-5.4

NOTES: 1. Peak detector is used for the emission measurement (RBW=1MHz, VBW=3MHz for Peak data, RBW=1MHz, VBW=10Hz for Average data).

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000
Mode: Tx (Channel 17)

Date of Test: December 05, 2013

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4880.000	59.5	36.7	35.5	58.3	74.0	-15.7
Horizontal	7320.000	52.3	36.1	37.0	53.2	74.0	-20.8

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4880.000	53.6	36.7	35.5	52.4	54.0	-1.6
Horizontal	7320.000	43.0	36.1	37.0	43.9	54.0	-10.1

NOTES: 1. Peak detector is used for the emission measurement (RBW=1MHz, VBW=3MHz for Peak data, RBW=1MHz, VBW=10Hz for Average data).

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.

Date of Test: December 05, 2013

Model: 910000

Mode: Tx (Channel 39)

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4960.000	53.3	36.1	35.5	52.7	74.0	-21.3
Horizontal	7440.000	53.0	36.1	37.0	53.9	74.0	-20.1
Horizontal	*2483.694	67.9	36.7	28.1	59.3	74.0	-14.7

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
Horizontal	4960.000	47.2	36.1	35.5	46.6	54.0	-7.4
Horizontal	7440.000	44.1	36.1	37.0	45.0	54.0	-9.0
Horizontal	*2483.694	57.5	36.7	28.1	48.9	54.0	-5.1

NOTES: 1. Peak detector is used for the emission measurement (RBW=1MHz, VBW=3MHz for Peak data, RBW=1MHz, VBW=10Hz for Average data).

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.9 Radiated Emissions from Digital Section of Transceiver, FCC Ref: 15.109

- [] Not required - No digital part
- [] Test results are attached
- [x] Included in the separated report.

INTERTEK TESTING SERVICES

Applicant: Seebo Interactive Ltd.
Model: 910000

Date of Test: December 05, 2013

4.10 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The Transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for Transmitter timing
	See Transmitter timing diagram provided by manufacturer
x	Not applicable, duty cycle was not used.

INTERTEK TESTING SERVICES

EXHIBIT 5

EQUIPMENT PHOTOGRAPHS

INTERTEK TESTING SERVICES

5.0 Equipment Photographs

For electronic filing, the photographs are saved with filename: external photos.doc & internal photos.pdf.

INTERTEK TESTING SERVICES

EXHIBIT 6

PRODUCT LABELLING

INTERTEK TESTING SERVICES

6.0 Product Labeling

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf.

INTERTEK TESTING SERVICES

EXHIBIT 7

TECHNICAL SPECIFICATIONS

INTERTEK TESTING SERVICES

7.0 Technical Specifications

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

INTERTEK TESTING SERVICES

EXHIBIT 8

INSTRUCTION MANUAL

INTERTEK TESTING SERVICES

8.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf & safety info.

This manual will be provided to the end-user with each unit sold/leased in the United States.

INTERTEK TESTING SERVICES

EXHIBIT 9

CONFIDENTIALITY REQUEST

INTERTEK TESTING SERVICES

9.0 Confidentiality Request

For electronic filing, the confidentiality request of the tested EUT is saved with filename: request.pdf.

INTERTEK TESTING SERVICES

EXHIBIT 10

MISCELLANEOUS INFORMATION

INTERTEK TESTING SERVICES

10.0 Discussion of Pulse Desensitization

The determination of pulse desensitivity was made in accordance with Hewlett Packard Application Note 150-2, *Spectrum Analysis ... Pulsed RF*.

Pulse desensitivity is not applicable for this device since the transmitter transmits the RF signal continuously.

INTERTEK TESTING SERVICES

EXHIBIT 11

TEST EQUIPMENT LIST

INTERTEK TESTING SERVICES

11.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ061-03	BiConiLog Antenna	ETS	3142C	00066460	20-Jul-13	20-Jan-14
SZ185-01	EMI Receiver	R&S	ESCI	100547	20-Jul-13	20-Jan-14
SZ061-09	Horn Antenna	ETS	3115	00092346	17-Oct-13	17-Apr-14
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	00083067	20-Jul-13	20-Jan-14
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	17-Oct-13	17-Apr-14
SZ056-03	Spectrum Analyzer	R&S	FSP 30	101148	20-Jul-13	20-Jan-14
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	18-Oct-13	18-Apr-14
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	18-Oct-13	18-Apr-14
SZ062-02	RF Cable	RADIALL	RG 213U	--	20-Jul-13	20-Jan-14
SZ062-06	RF Cable	RADIALL	0.04-26.5GHz	--	20-Jul-13	20-Jan-14
SZ062-12	RF Cable	RADIALL	0.04-26.5GHz	--	17-Oct-13	17-Apr-14
SZ067-04	Notch Filter	Micro-Tronics	BRM5070 2-02	--	20-Jul-13	20-Jan-14

TRF no.: FCC 15C_TX_b

FCC ID: 2ABHHTA001

Report No.: 131204025SZN-001