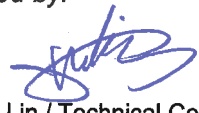


Prüfbericht-Nr.: <i>Test report No.:</i>	17057648 001	Auftrags-Nr.: <i>Order No.:</i>	164051708	Seite 1 von 30 Page 1 of 30
Kunden-Referenz-Nr.: <i>Client reference No.:</i>	636964	Auftragsdatum: <i>Order date.:</i>	17.12.2015	
Auftraggeber: <i>Client:</i>	Saide Tekstil San ve Tic A.S. Saide Is Merkezi Yenibosna Merkez Mah Yalcin Kores Cad Arifaga Sok No:25 34197 Istanbul Turkey			
Prüfgegenstand: <i>Test item:</i>	Speaker with LED lights			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	1492301, 1492302, 1492303, 1492304, 8091401, 8091402, 8091403			
Auftrags-Inhalt: <i>Order content:</i>	FCC approval			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 FCC KDB Publication 447498 v06 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109			
Wareneingangsdatum: <i>Date of receipt:</i>	24.12.2015			
Prüfmuster-Nr.: <i>Test sample No.:</i>	1600241 - 1600243			
Prüfzeitraum: <i>Testing period:</i>	25.01.2016 - 30.01.2016			
Ort der Prüfung: <i>Place of testing:</i>	Accurate Technology Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
 15.03.2016 Ryan Yang / Senior Project Engineer		 15.03.2016 Sam Lin / Technical Certifier		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>
Sonstiges / Other:				
FCC ID: 2AHIT-14923				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhaft N/T = nicht getestet
Legend: 1 = very good P(ass) = passed a.m. test specifications(s)	2 = good F(ail) = failed a.m. test specifications(s)	3 = satisfactory F(ail) = failed a.m. test specifications(s)	4 = sufficient N/A = not applicable	5 = poor N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines.				
<i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

V04

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.4 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.5 20dB BANDWIDTH

RESULT: Pass

5.1.6 CARRIER FREQUENCY SEPARATION

RESULT: Pass

5.1.7 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.8 TIME OF OCCUPANCY

RESULT: Pass

5.1.9 CONDUCTED EMISSION

RESULT: Pass

5.1.10 RADIATED EMISSION

RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS

RESULT: Pass

Contents

1	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
2	TEST SITES	5
2.1	TEST FACILITIES	5
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	6
2.3	TRACEABILITY	7
2.4	CALIBRATION	7
2.5	MEASUREMENT UNCERTAINTY.....	7
2.6	LOCATION OF ORIGINAL DATA.....	7
2.7	STATUS OF FACILITY USED FOR TESTING.....	7
3	GENERAL PRODUCT INFORMATION	8
3.1	PRODUCT FUNCTION AND INTENDED USE.....	8
3.2	RATINGS AND SYSTEM DETAILS	8
3.3	INDEPENDENT OPERATION MODES	10
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS.....	11
3.5	SUBMITTED DOCUMENTS.....	11
4	TEST SET-UP AND OPERATION MODES	12
4.1	PRINCIPLE OF CONFIGURATION SELECTION	12
4.2	TEST OPERATION AND TEST SOFTWARE.....	12
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT.....	12
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	12
4.5	TEST SETUP DIAGRAM	13
5	TEST RESULTS	15
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	15
5.1.1	<i>Antenna Requirement</i>	<i>15</i>
5.1.2	<i>Maximum Peak Conducted Output Power</i>	<i>16</i>
5.1.3	<i>Conducted Spurious Emissions Measured in 100 kHz Bandwidth</i>	<i>17</i>
5.1.4	<i>Radiated Spurious Emission</i>	<i>18</i>
5.1.5	<i>20dB Bandwidth</i>	<i>19</i>
5.1.6	<i>Carrier Frequency Separation.....</i>	<i>20</i>
5.1.7	<i>Number of Hopping Frequency</i>	<i>21</i>
5.1.8	<i>Time of Occupancy</i>	<i>22</i>
5.1.9	<i>Conducted Emission</i>	<i>23</i>
5.1.10	<i>Radiated Emission</i>	<i>24</i>
6	SAFETY HUMAN EXPOSURE	25
6.1	RADIO FREQUENCY EXPOSURE COMPLIANCE	25
6.1.1	<i>Electromagnetic Fields</i>	<i>25</i>
7	PHOTOGRAPHS OF THE TEST SET-UP	26

Prüfbericht - Nr.: 17057648 001
*Test Report No.*Seite 4 von 30
Page 4 of 30

8	LIST OF TABLES.....	30
9	LIST OF PHOTOGRAPHS	30

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Bluetooth 2.1+ EDR of Conducted Testing

Appendix B: Test Results of Bluetooth 2.1+ EDR of Radiated Testing

2 Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Accurate Technology Co., Ltd.

Radio Spectrum Test				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	ESPI3	100396/003	09.01.2017
Spectrum Analyzer	Agilent	E7405A	MY45115511	09.01.2017
Temp. & Humid. Chamber	Gongwen	HSD-500	0109	09.01.2017
Conducted Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Test Receiver	R&S	ESCS30	100307	09.01.2017
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	09.01.2017
Pulse Limiter	R&S	ESH3-Z2	100815	09.01.2017
50_ Coaxial Switch	Anritsu Corp	MP59B	6200283933	09.01.2017
Radiated Emission & Spurious Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	FSV40	101495	01.01.2017
Test Receiver	R&S	ESCS30	100307	01.01.2017
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	01.01.2017
Loop Antenna	Schwarzbeck	FMZB1516	1516131	01.01.2017
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	01.01.2017
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	01.01.2017
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	01.01.2017
Pre-Amplifier	R&S	CBLU11835 40-01	3791	01.01.2017
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	01.01.2017
RF Coaxial Cable	SUHNER	N-3m	No.8	01.01.2017
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	01.01.2017
RF Coaxial Cable	SUHNER	N-6m	No.10	01.01.2017
RF Coaxial Cable	RESENBERGER	N-12m	No.11	01.01.2017
50_ Coaxial Switch	Anritsu Corp	MP59B	6200283933	01.01.2017

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Item		Extended Uncertainty
Conducted Emission	Disturbance Voltage (dB μ V)	U=1.94dB, k=2, σ =95%
Radiated Emission (9kHz-30MHz)	Field strength (dB μ V/m)	U=3.08dB, k=2, σ =95%
Radiated Emission (30-1000MHz)	Field strength (dB μ V/m)	U=4.42dB, k=2, σ =95%
Radiated Emission (above 1000MHz)	Field strength (dB μ V/m)	U=4.06dB, k=2, σ =95%
Radio Spectrum		± 0.60 dB
Ambient Temperature		25 °C
Relative Humidity		56 %
Atmospheric Pressure		101 kPa

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Accurate Technology Co., Ltd. Test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is Speaker with LED lights. It supports Bluetooth 2.1 + EDR wireless technology.

According to the declaration of the applicant, the electrical circuit design, PCB layout and components used are identical for all models, only the model No. and colour of enclosure are different.

Model Difference:

Model No.	Colour
1492301	White
1492302	Pink
1492303	Blue
1492304	Black
8091401	White
8091402	Pink
8091403	Black

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment	Speaker with LED lights
Type Designation	1492301, 1492302, 1492303, 1492304, 8091401, 8091402, 8091403
FCC ID	2AHIT-14923
Operating Frequency	2402-2480 MHz
Operating Temperature Range	-40 °C ~ +40 °C
Operating Voltage	DC 3.7V, 400mAh via Internal rechargeable lithium battery
Testing Voltage	DC 3.7V, 400mAh via Internal rechargeable lithium battery DC 5.0V via USB port for charging
Type of Modulation	GFSK, $\pi/4$ DQPSK
Channel Number	79 channels
Channel Separation	1MHz
Wireless Technology	Bluetooth 2.1 + EDR
Antenna Type	PCB Antenna
Antenna Gain	-0.68 dBi

Table 3: RF Channel and Frequency of Bluetooth

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	2402.00	20	2422.00	40	2442.00	60	2462.00
01	2403.00	21	2423.00	41	2443.00	61	2463.00
02	2404.00	22	2424.00	42	2444.00	62	2464.00
03	2405.00	23	2425.00	43	2445.00	63	2465.00
04	2406.00	24	2426.00	44	2446.00	64	2466.00
05	2407.00	25	2427.00	45	2447.00	65	2467.00
06	2408.00	26	2428.00	46	2448.00	66	2468.00
07	2409.00	27	2429.00	47	2449.00	67	2469.00
08	2410.00	28	2430.00	48	2450.00	68	2470.00
09	2411.00	29	2431.00	49	2451.00	69	2471.00
10	2412.00	30	2432.00	50	2452.00	70	2472.00
11	2413.00	31	2433.00	51	2453.00	71	2473.00
12	2414.00	32	2434.00	52	2454.00	72	2474.00
13	2415.00	33	2435.00	53	2455.00	73	2475.00
14	2416.00	34	2436.00	54	2456.00	74	2476.00
15	2417.00	35	2437.00	55	2457.00	75	2477.00
16	2418.00	36	2438.00	56	2458.00	76	2478.00
17	2419.00	37	2439.00	57	2459.00	77	2479.00
18	2420.00	38	2440.00	58	2460.00	78	2480.00
19	2421.00	39	2441.00	59	2461.00	/	/

Table 4: Frequency Hopping Information

Technical Specification	Description
Hopping Range	Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1 + EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	Example of a 79 hopping sequence in data mode: 33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43,15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings. Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth transmitting mode (BDR & EDR mode)
 - 1. Transmitting
 - a. Low Channel
 - b. Middle Channel
 - c. High Channel
 - 2. Receiving
- B. On, Transmitting on Hopping channel
- C. On, Bluetooth connecting mode
- D. On, Charging mode via USB port
- E. On, Aux in mode
- F. On, MicroSD card mode
- G. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|-----------------------------|-------------------------|
| - Application Form | - Bill of Material |
| - Block Diagram | - Circuit Diagram |
| - FCC/IC Label and Location | - Operation Description |
| - Photo Document | - User Manual |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013 and ANSI C63.4: 2014

According to clause 3.1, all tests were performed on model 1492304 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
iPhone 6	Apple	MG4J2 CH/A	F17NTK2QG5MV	N/A
Notebook PC	Lenovo	ThinkPad X240	N/A	N/A
Printer	HP	HP laserjet 1015	CNFG030424	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

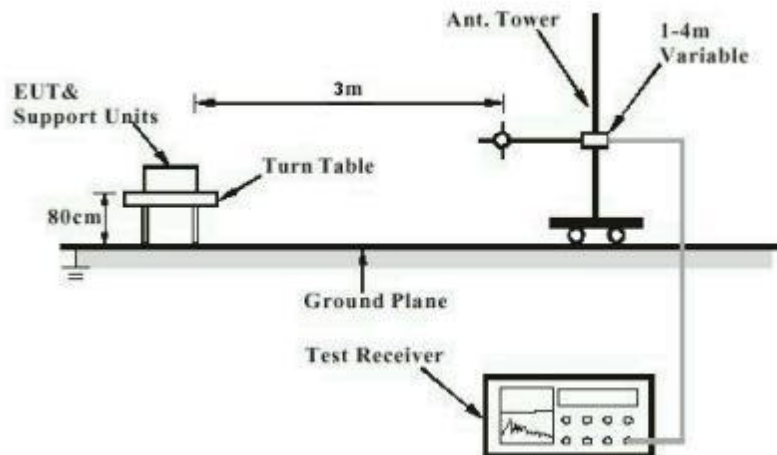


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

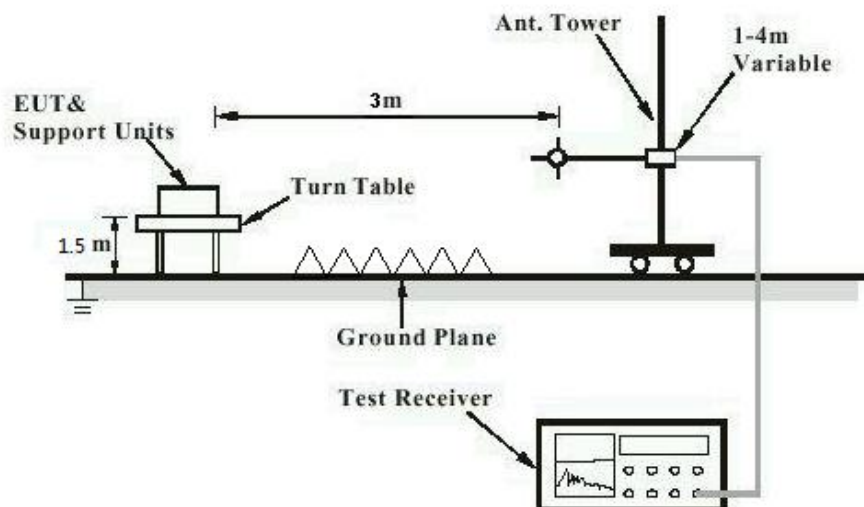


Diagram of Measurement Configuration for Mains Conduction Measurement

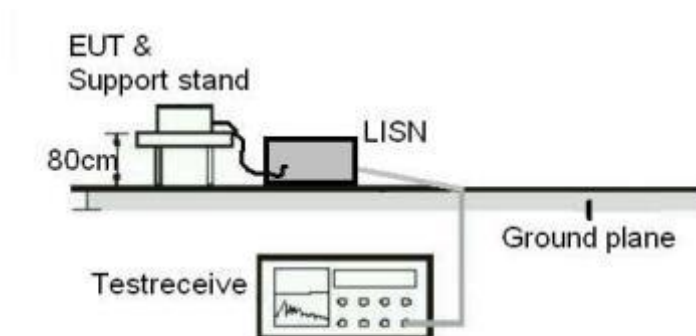
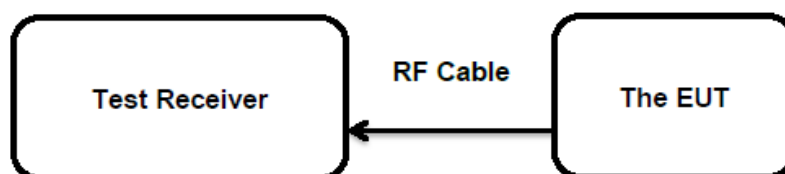


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is -0.68 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(b)(1)
 Basic standard : ANSI C63.10: 2013
 Limits : < 0.125 Watts
 Kind of test site : Shielded Room

Test Setup

Date of testing : 29.01.2016
 Input voltage : DC 3.7V, 400mAh via Internal rechargeable lithium battery
 Operation mode : A.1
 Test channel : Low / Middle / High
 Ambient temperature : 25 °C
 Relative humidity : 56 %
 Atmospheric pressure : 101 kPa

Table 6: Test Result of Maximum Peak Conducted Output Power

Test Mode	Channel Frequency (MHz)	Measured Peak Output Power		Limit (W)
		(dBm)	(W)	
BDR	2402	2.80	0.00191	< 0.125
	2441	1.96	0.00157	
	2480	1.35	0.00136	
EDR	2402	1.12	0.00129	< 0.125
	2441	0.21	0.00105	
	2480	-0.43	0.00091	
Maximum Measured Value		2.80	0.00191	/

Note: The cable loss is taken into account in results.

For the measurement records, refer to the appendix A.

5.1.3 Conducted Spurious Emissions Measured in 100 kHz Bandwidth**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.247(d)
Basic standard	: ANSI C63.10: 2013
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 29.01.2016
Input voltage	: DC 3.7V, 400mAh via Internal rechargeable lithium battery
Operation mode	: A.1
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to following test plot, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

5.1.4 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) & FCC Part 15.205
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	: 3m Semi-anechoic Chamber & 3m Full-anechoic Chamber

Test Setup

Date of testing	: 30.01.2016
Input voltage	: DC 3.7V, 400mAh via Internal rechargeable lithium battery
Operation mode	: A.1
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Remark:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test set-up photos.

Pre-test the EUT in continuous transmitting mode at the low (2402 MHz), middle (2441 MHz) and high (2480 MHz) channel with different data packet. Compliance test in continuous transmitting mode with BDR mode (DH5) as the worst case was found.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For the measurement records, refer to the appendix A.

5.1.5 20dB Bandwidth

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(a)(1)
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded Room

Test Setup

Date of testing : 29.01.2016
 Input voltage : DC 3.7V, 400mAh via Internal rechargeable lithium battery
 Operation mode : A.1
 Test channel : Low / Middle / High
 Ambient temperature : 25 °C
 Relative humidity : 56 %
 Atmospheric pressure : 101 kPa

Table 7: Test Result of 20dB Bandwidth

Test Mode	Channel Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
BDR	2402	950.80	633.867	/
	2441	955.10	636.733	
	2480	950.80	633.867	
EDR	2402	1341.50	894.333	/
	2441	1341.50	894.333	
	2480	1341.60	894.400	
Maximum Measured Value		1341.60	894.400	/

For the measurement records, refer to the appendix A.

5.1.6 Carrier Frequency Separation

RESULT:
Pass
Test Specification

Test standard	: FCC Part 15.247(a)(1)
Basic standard	: ANSI C63.10: 2013
Limits	: $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 29.01.2016
Input voltage	: DC 3.7V, 400mAh via Internal rechargeable lithium battery
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Table 8: Test Result of Carrier Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (KHz)	Limit (kHz)	Result
Low Channel	2402	1002.9	≥ 25kHz or 2/3 of 20dB bandwidth	Pass
Adjacency Channel	2403			
Middle Channel	2441	1002.9		Pass
Adjacency Channel	2442			
High Channel	2480	1002.9		Pass
Adjacency Channel	2479			

Note:

The limit is maximum $2/3$ of the 20 dB bandwidth: 894.400 KHz.

For the measurement records, refer to the appendix A.

5.1.7 Number of Hopping Frequency

RESULT:

Pass

Test Specification

Test standard : FCC part 15.247(a)(1)(iii)
Basic standard : ANSI C63.10: 2013
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shielded Room

Test Setup

Date of testing : 29.01.2016
Input voltage : DC 3.7V, 400mAh via Internal rechargeable lithium battery
Operation mode : B
Ambient temperature : 25 °C
Relative humidity : 56 %
Atmospheric pressure : 101 kPa

Table 9: Test Result of Number of Hopping Frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480 MHz	79	≥ 15	Pass

For the measurement records, refer to the appendix A.

5.1.8 Time of Occupancy

RESULT:
Pass
Test Specification

Test standard : FCC part 15.247(a)(1)(iii)
 Basic standard : ANSI C63.10: 2013
 Limits : < 0.4s
 Kind of test site : Shielded Room

Test Setup

Date of testing : 29.01.2016
 Input voltage : DC 3.7V, 400mAh via Internal rechargeable lithium battery
 Operation mode : B
 Test channel : Low / Middle / High
 Ambient temperature : 25 °C
 Relative humidity : 56 %
 Atmospheric pressure : 101 kPa

Table 10: Test Result of Time of Occupancy

Test Mode	Data Packet	Pulse width (ms)	Measured Dwell time(s)	Limit (s)	Result
BDR mode	DH1	0.393	0.126	< 0.4s	Pass
	DH3	1.647	0.264		
	DH5	2.893	0.309		
EDR mode	2DH1	0.393	0.126		
	2DH3	1.647	0.264		
	2DH5	2.887	0.308		

Note:

$$\text{Dwell time} = \text{Pulse width} \times (\text{Hopping rate} / \text{Number of channels}) \times \text{Period}$$

$$\text{Period} = 0.4 \text{ (seconds/ channel)} \times 79 \text{ (channel)} = 31.6 \text{ seconds}$$

For the measurement records, refer to the appendix A.

5.1.9 Conducted Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.207(a) & FCC Part 15.107(a)
Basic standard	: ANSI C63.10: 2013 & ANSI C63.4: 2014
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a) & FCC Part 15.107(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 30.01.2016
Input voltage	: DC 5.0V via USB port for charging
Operation mode	: C, D
Earthing	: Not connected
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

5.1.10 Radiated Emission**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.109(a)
Basic standard	: ANSI C63.4: 2014
Frequency range	: 30 - 6000MHz
Classification	: Class B
Limits	: FCC Part 15.109(a)
Kind of test site	: 3m Semi-anechoic Chamber & 3m Full-anechoic Chamber

Test Setup

Date of testing	: 30.01.2016
Input voltage	: DC 5.0V via USB port for charging
Operation mode	: D, E, F
Earthing	: Not connected
Ambient temperature	: 23 °C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:

Pass

Test Specification

Test standard : FCC KDB Publication 447498 v06

Measurement Record:

The minimum distance for the EUT is less than 5mm.

Since maximum peak output power of the transmitter is 2.80 dBm $\approx$ 1.91 mW <10 mW.

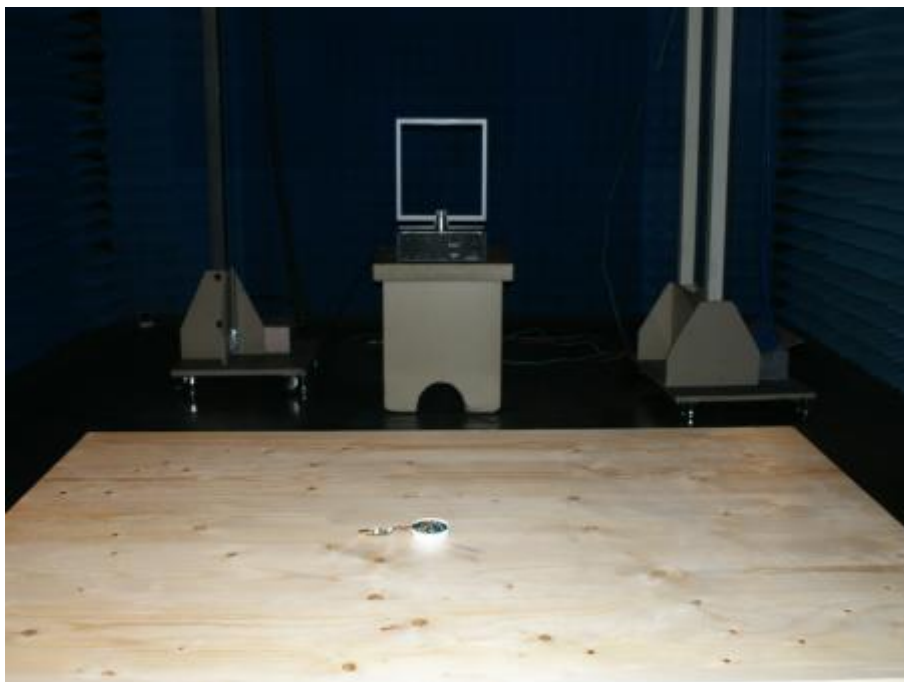
Hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01 General RF Exposure Guidance v06.

7 Photographs of the Test Set-Up

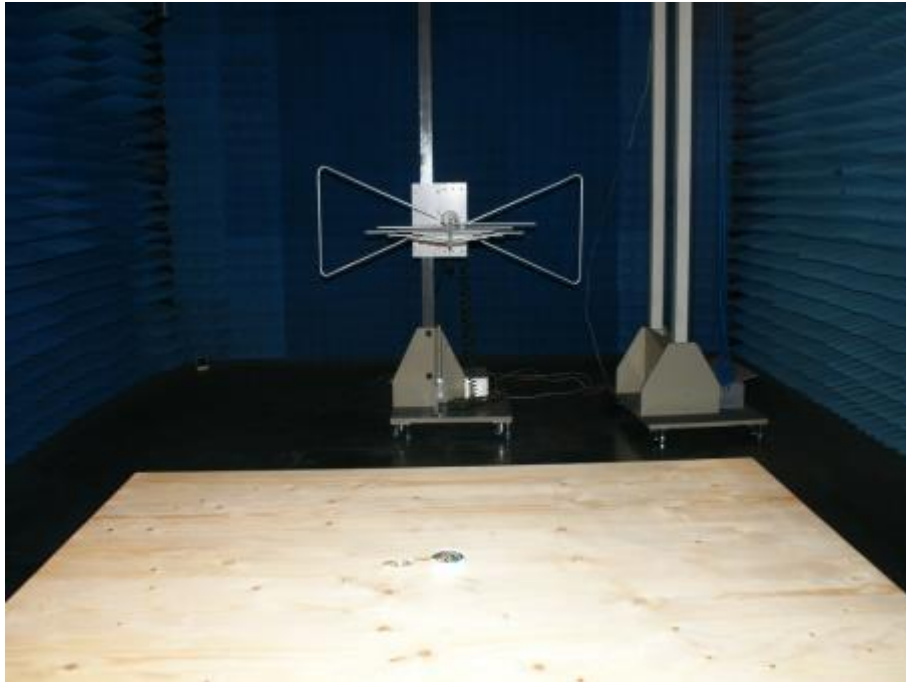
Photograph 1: Set-up for Conducted Testing



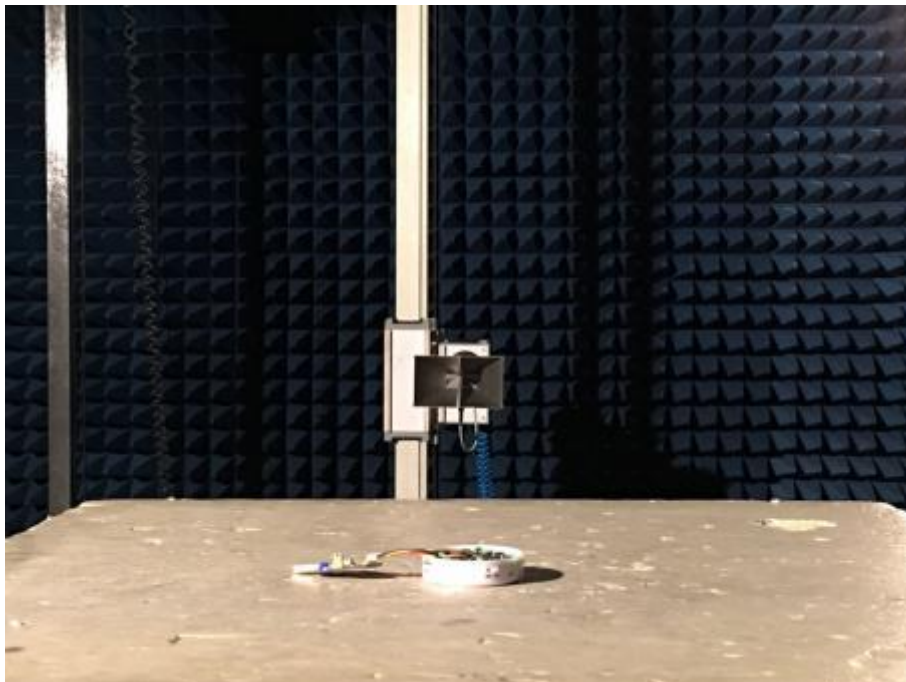
Photograph 2: Set-up for Radiated Spurious Emission (9kHz ~ 30MHz)



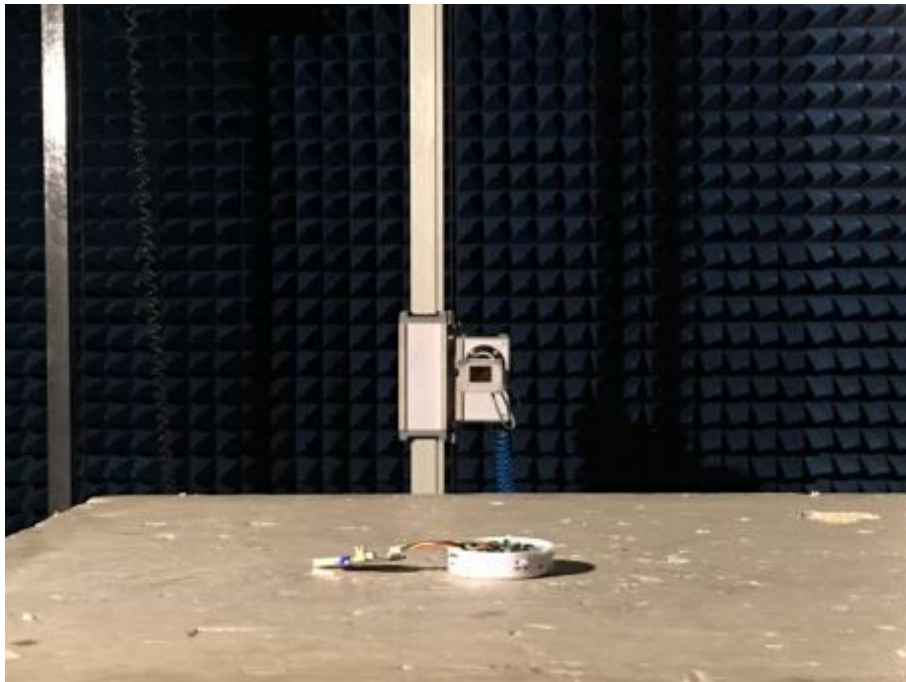
Photograph 3: Set-up for Radiated Spurious Emission (30MHz~1GHz)



Photograph 4: Set-up for Radiated Spurious Emission (1GHz ~ 18GHz)



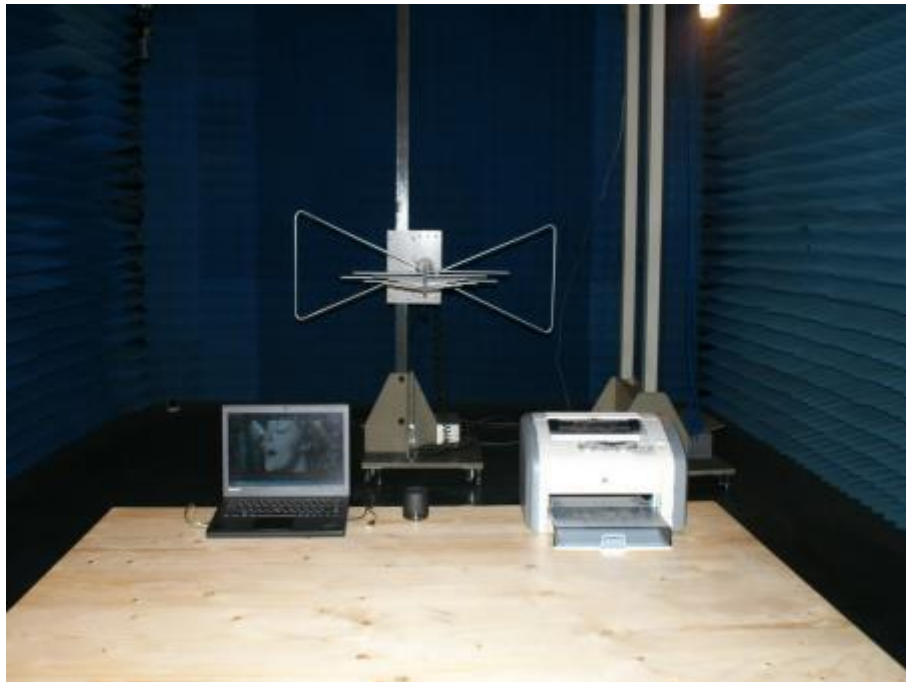
Photograph 5: Set-up for Radiated Spurious Emission (18GHz ~ 26GHz)



Photograph 6: Set-up for Conducted Emission



Photograph 7: Set-up for Radiated Emission (30MHz ~ 1GHz)



Photograph 8: Set-up for Radiated Emission (1GHz ~ 6GHz)



8 List of Tables

Table 1: List of Test and Measurement Equipment.....	6
Table 2: Technical Specification of EUT	8
Table 3: RF Channel and Frequency of Bluetooth	9
Table 4: Frequency Hopping Information.....	10
Table 5: List of Accessories and Auxiliary Equipment.....	12
Table 6: Test Result of Maximum Peak Conducted Output Power.....	16
Table 7: Test Result of 20dB Bandwidth.....	19
Table 8: Test Result of Carrier Frequency Separation	20
Table 9: Test Result of Number of Hopping Frequency	21
Table 10: Test Result of Time of Occupancy	22

9 List of Photographs

Photograph 1: Set-up for Conducted Testing.....	26
Photograph 2: Set-up for Radiated Spurious Emission (9kHz ~ 30MHz)	26
Photograph 3: Set-up for Radiated Spurious Emission (30MHz~1GHz)	27
Photograph 4: Set-up for Radiated Spurious Emission (1GHz ~ 18GHz).....	27
Photograph 5: Set-up for Radiated Spurious Emission (18GHz ~ 26GHz).....	28
Photograph 6: Set-up for Conducted Emission	28
Photograph 7: Set-up for Radiated Emission (30MHz ~ 1GHz)	29
Photograph 8: Set-up for Radiated Emission (1GHz ~ 6GHz).....	29

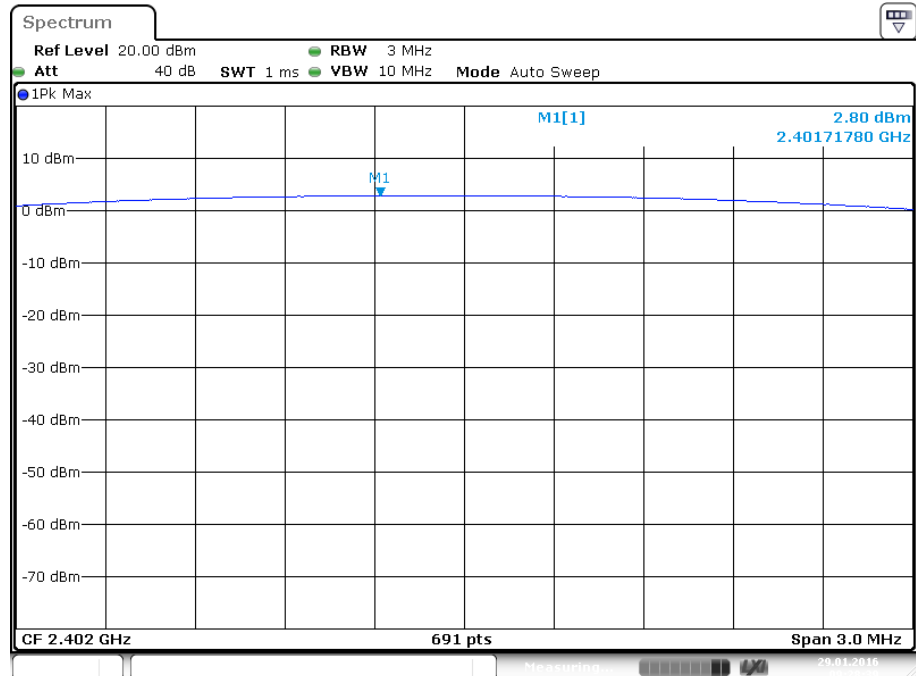
Appendix A

Test Results of Bluetooth 2.1+ EDR of Conducted Testing

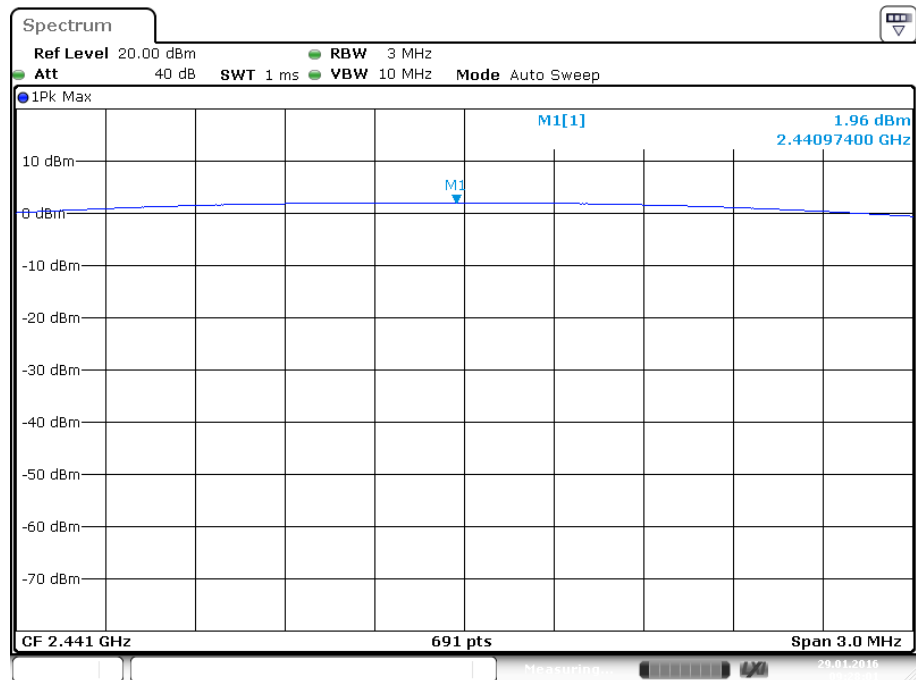
APPENDIX A.1: MAXIMUM PEAK CONDUCTED OUTPUT POWER	2
BDR MODE, DH1	2
EDR MODE, 2DH1	3
APPENDIX A.2: CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH	5
BDR MODE, DH1	5
EDR MODE, 2DH1	6
BDR MODE, BAND EDGE	8
EDR MODE, BAND EDGE	9
APPENDIX A.3: 20DB BANDWIDTH	10
BDR MODE, DH1	10
EDR MODE, 2DH1	11
APPENDIX A.4: CARRIER FREQUENCY SEPARATION	13
HOPPING MODE	13
APPENDIX A.5: NUMBER OF HOPPING FREQUENCY	15
HOPPING MODE	15
APPENDIX A.6: TIME OF OCCUPANCY	16
BDR MODE, DH1	16
BDR MODE, DH3	16
BDR MODE, DH5	17
EDR MODE, 2DH1	17
EDR MODE, 2DH3	18
EDR MODE, 2DH5	18

Appendix A.1: Maximum Peak Conducted Output Power

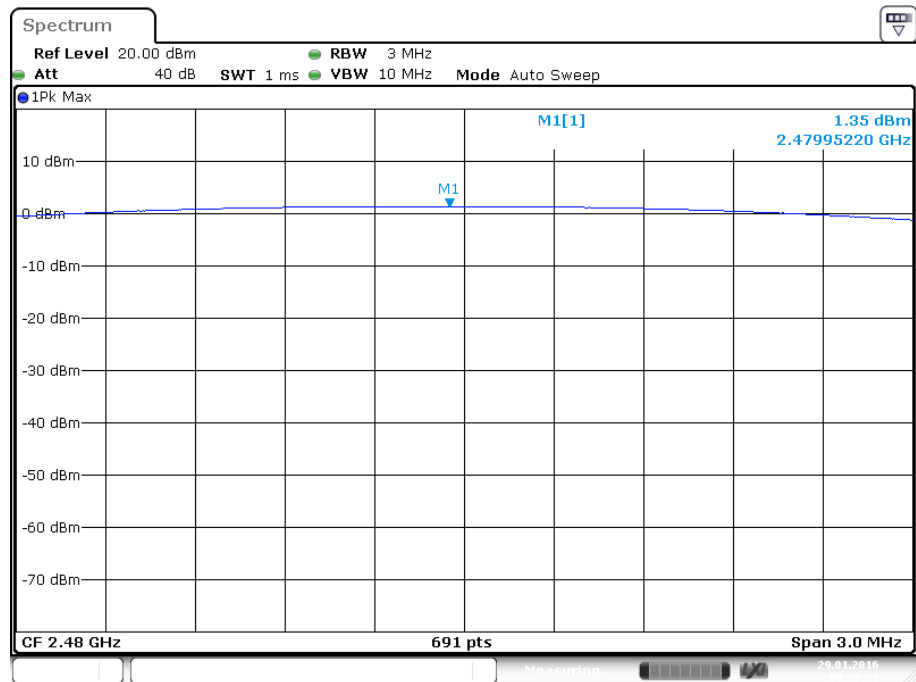
BDR Mode, DH1



Date: 29.JAN.2016 09:28:39

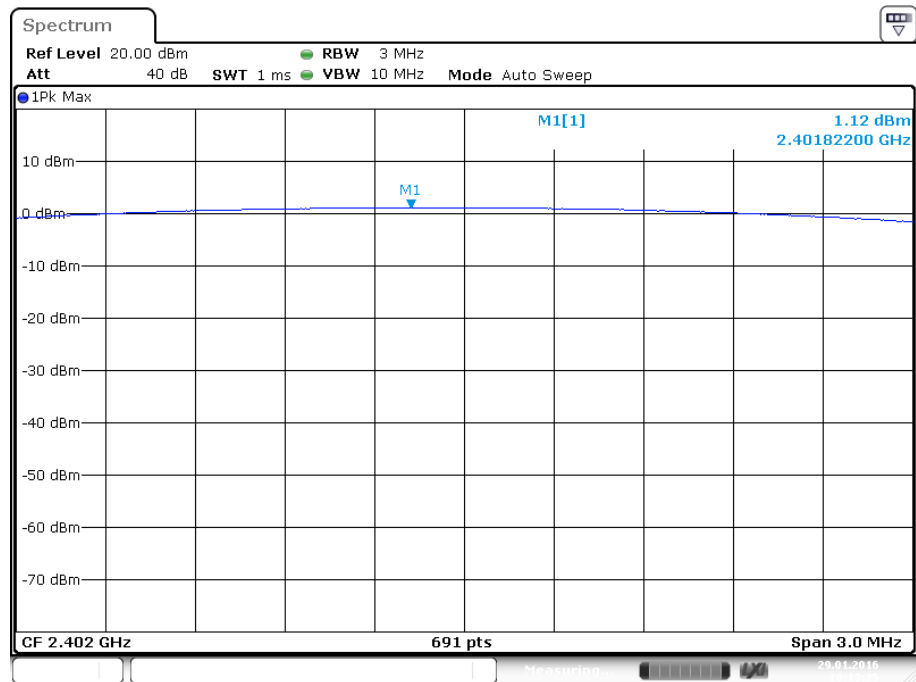


Date: 29.JAN.2016 09:28:01

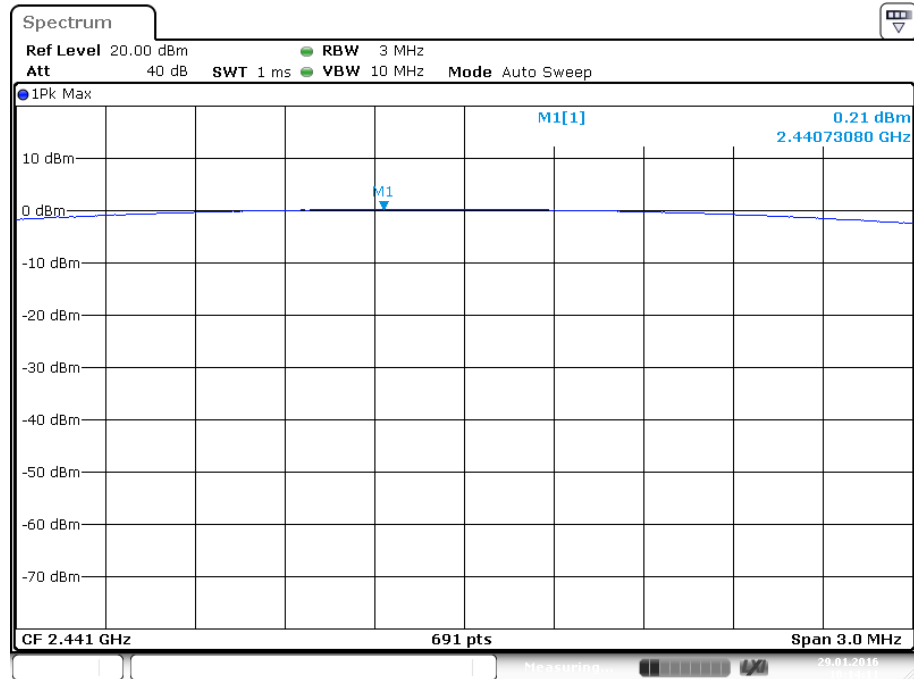


Date: 29.JAN.2016 09:27:21

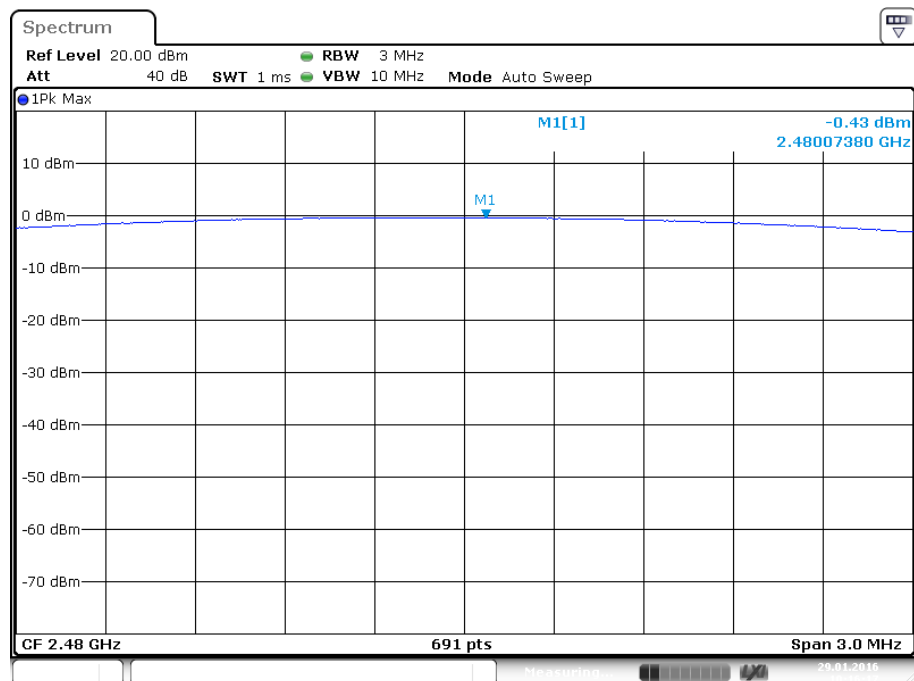
EDR Mode, 2DH1



Date: 29.JAN.2016 10:13:25



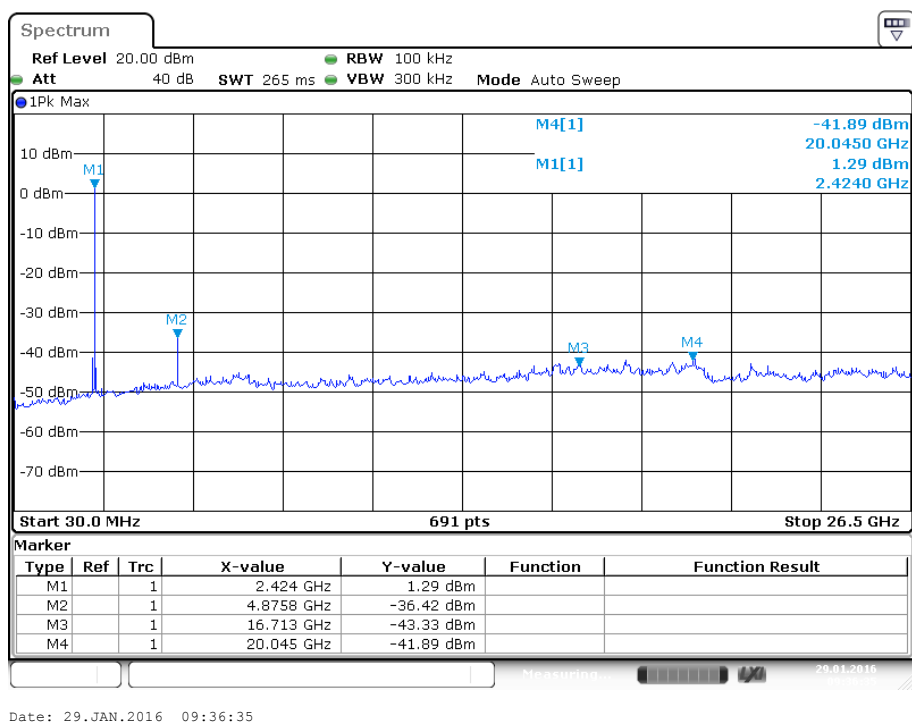
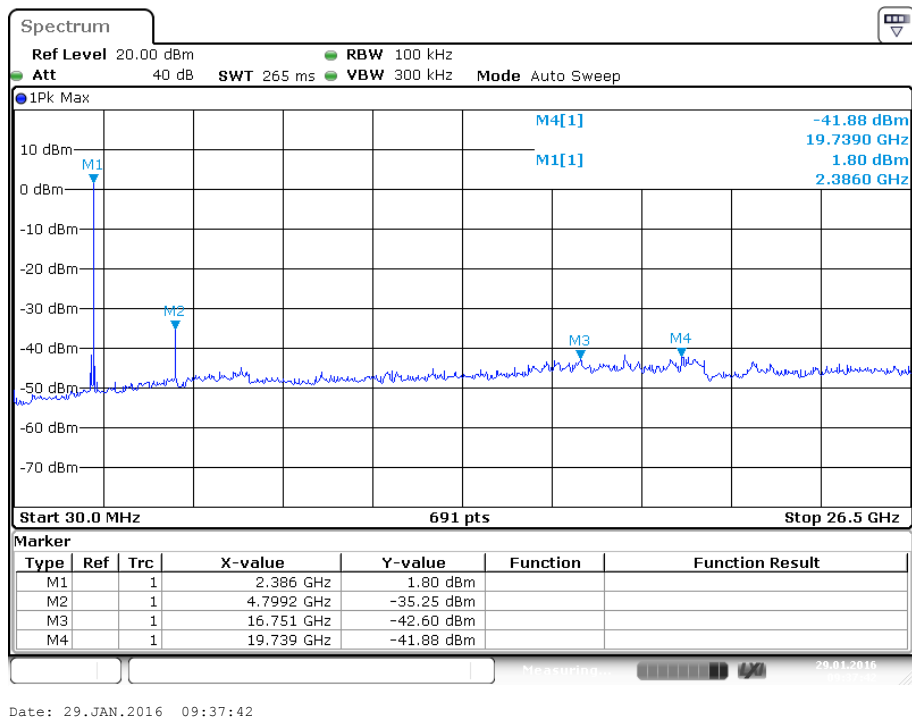
Date: 29.JAN.2016 10:14:11

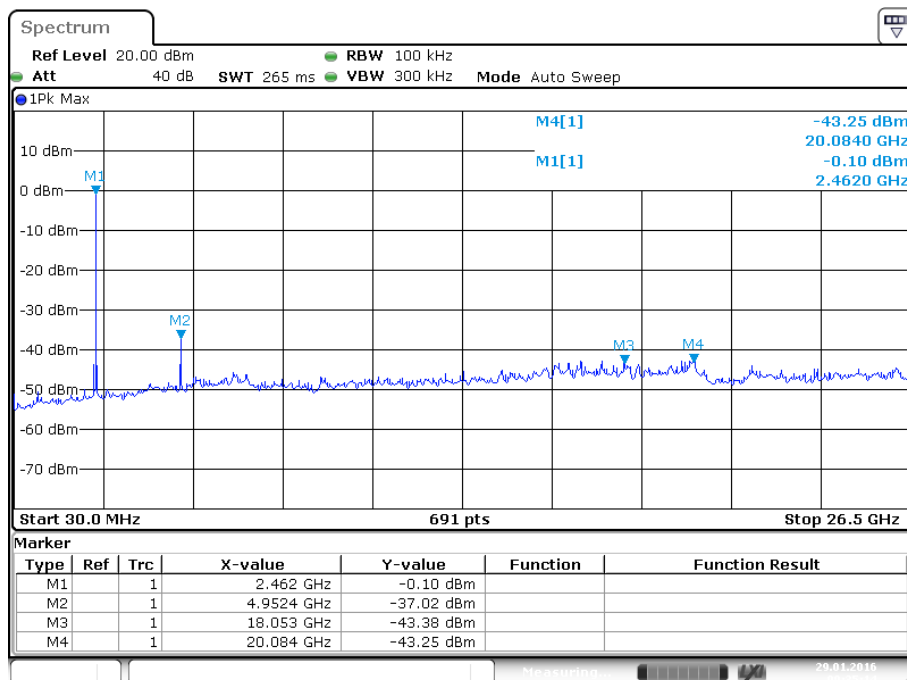


Date: 29.JAN.2016 10:16:17

Appendix A.2: Conducted Spurious Emissions Measured in 100 kHz Bandwidth

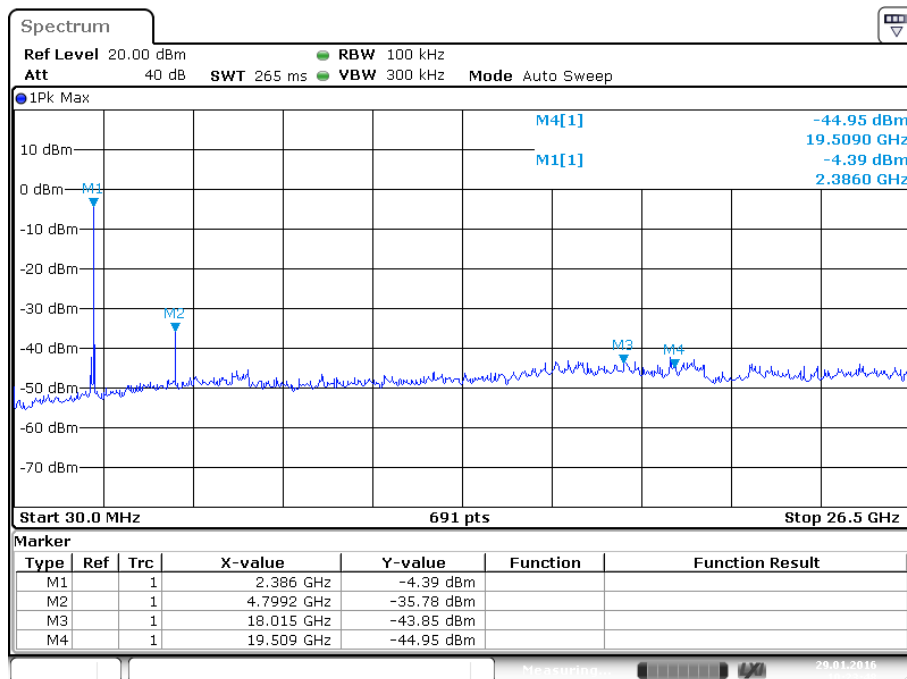
BDR Mode, DH1



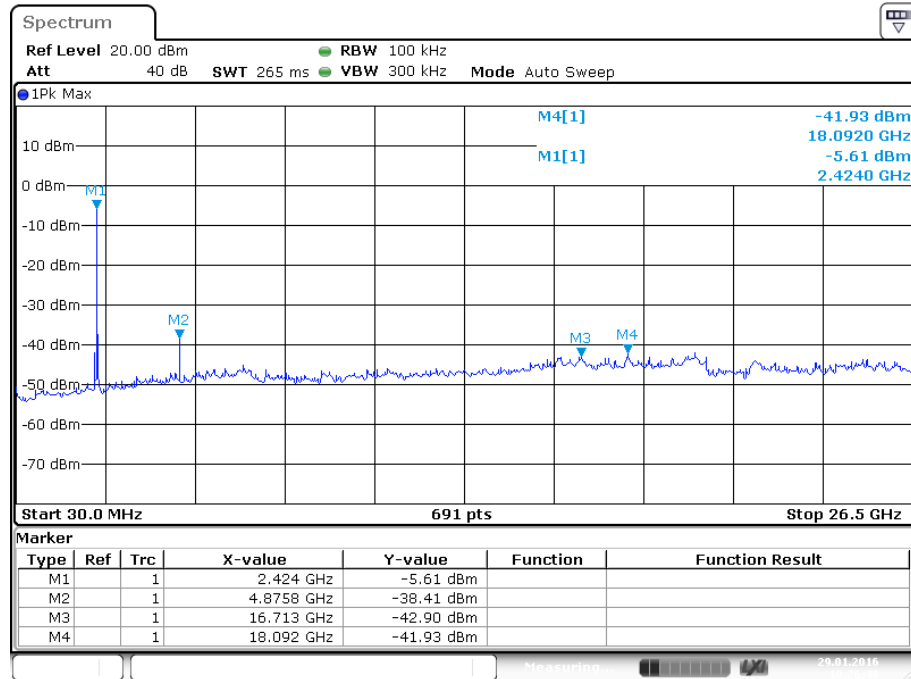


Date: 29.JAN.2016 09:35:14

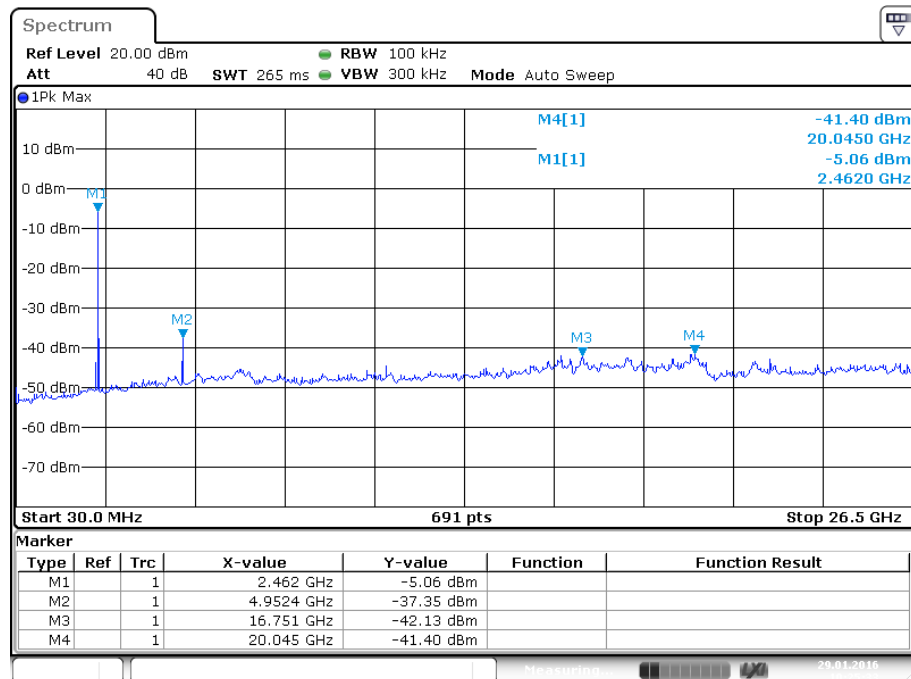
EDR Mode, 2DH1



Date: 29.JAN.2016 10:23:48

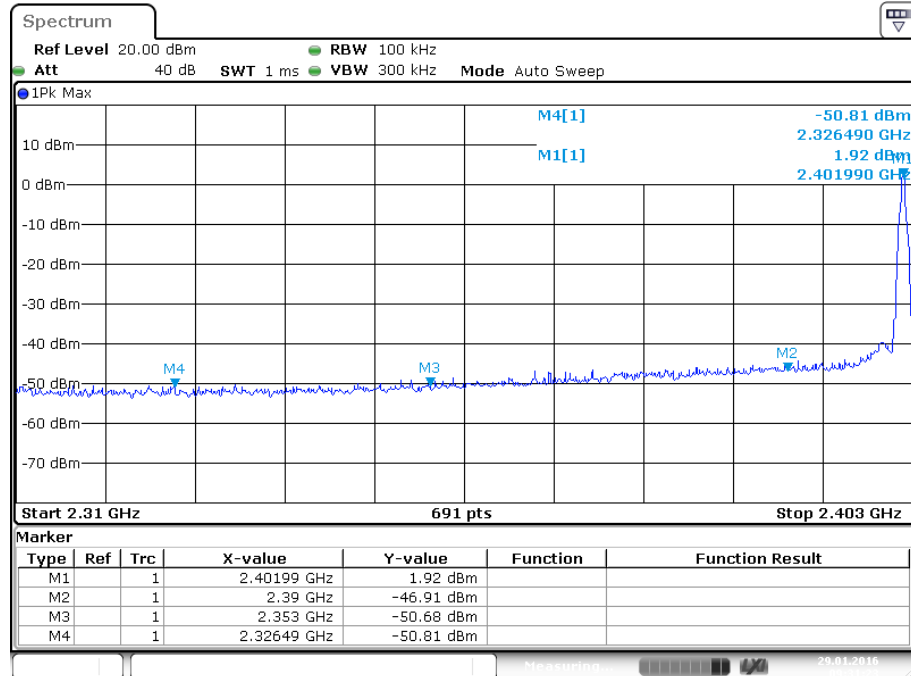


Date: 29.JAN.2016 10:26:48

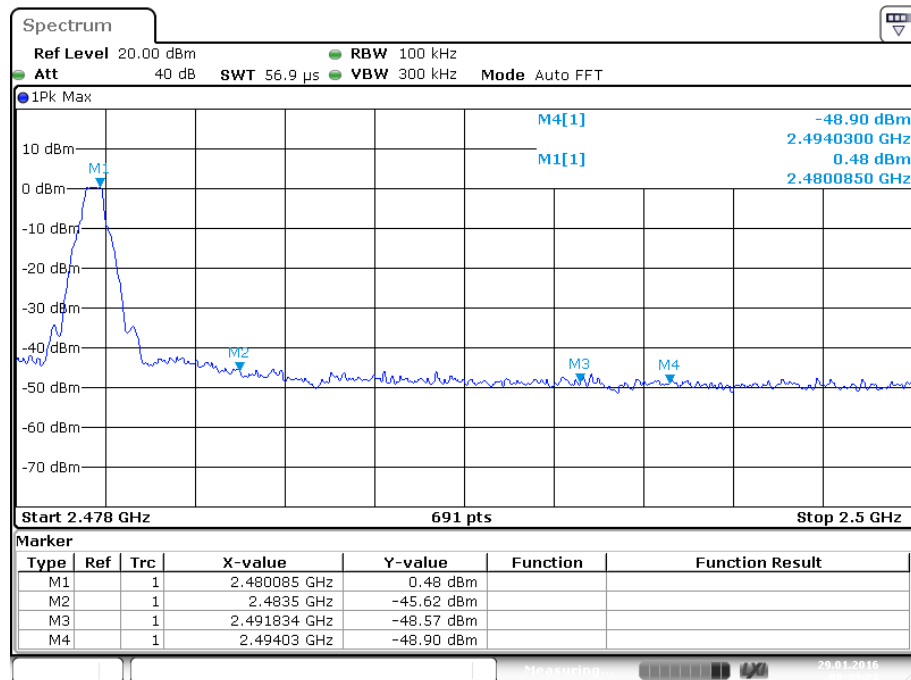


Date: 29.JAN.2016 10:25:33

BDR Mode, Band Edge

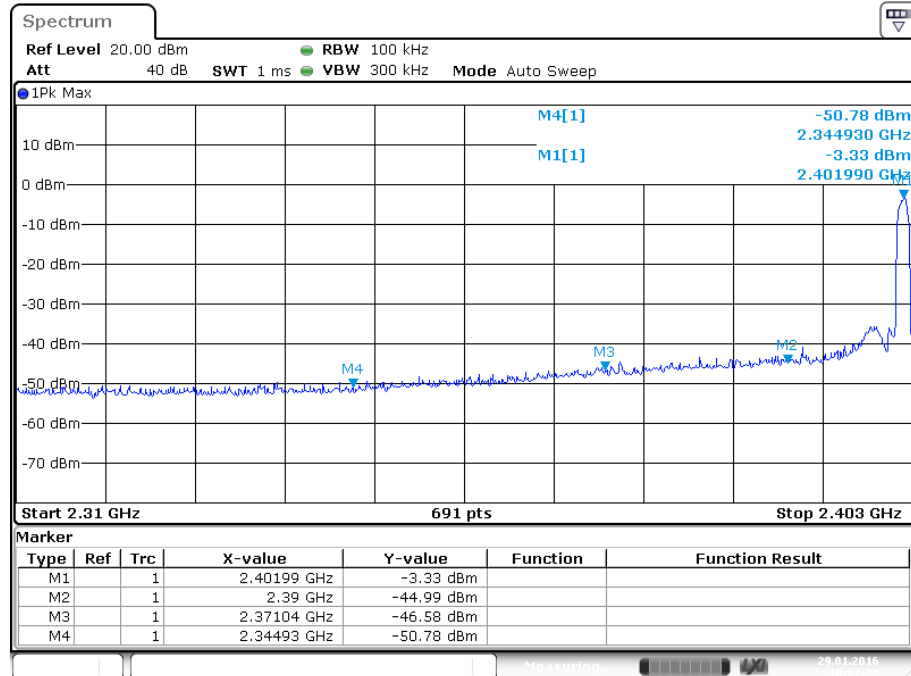


Date: 29.JAN.2016 09:31:23

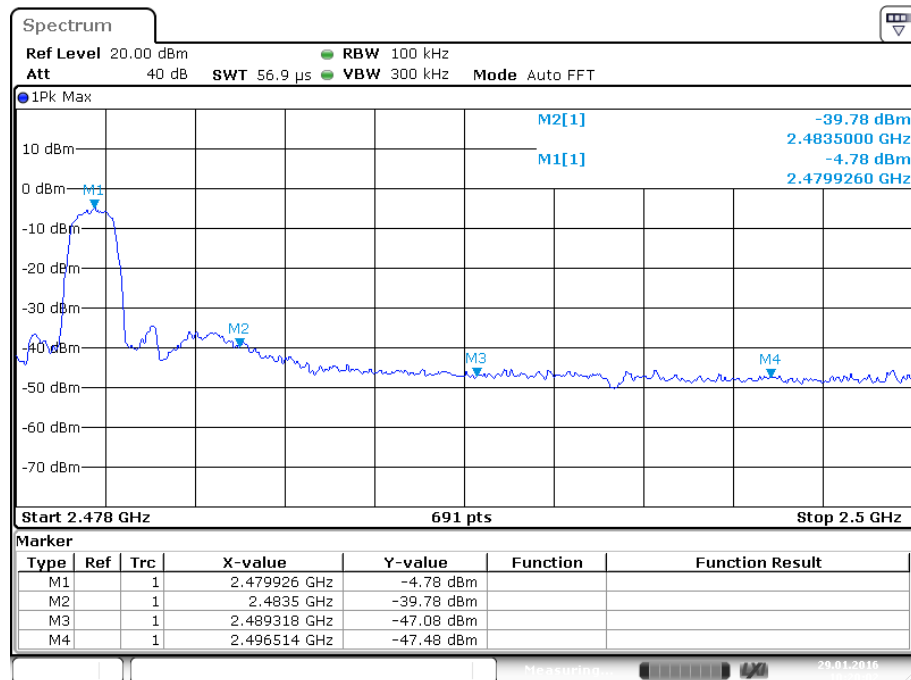


Date: 29.JAN.2016 09:33:23

EDR Mode, Band Edge



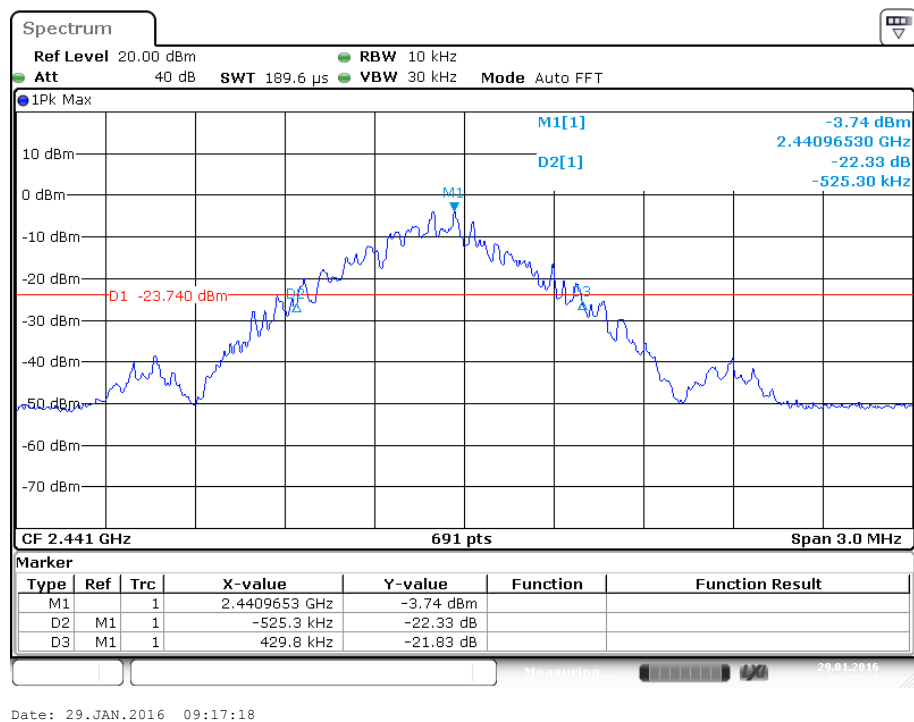
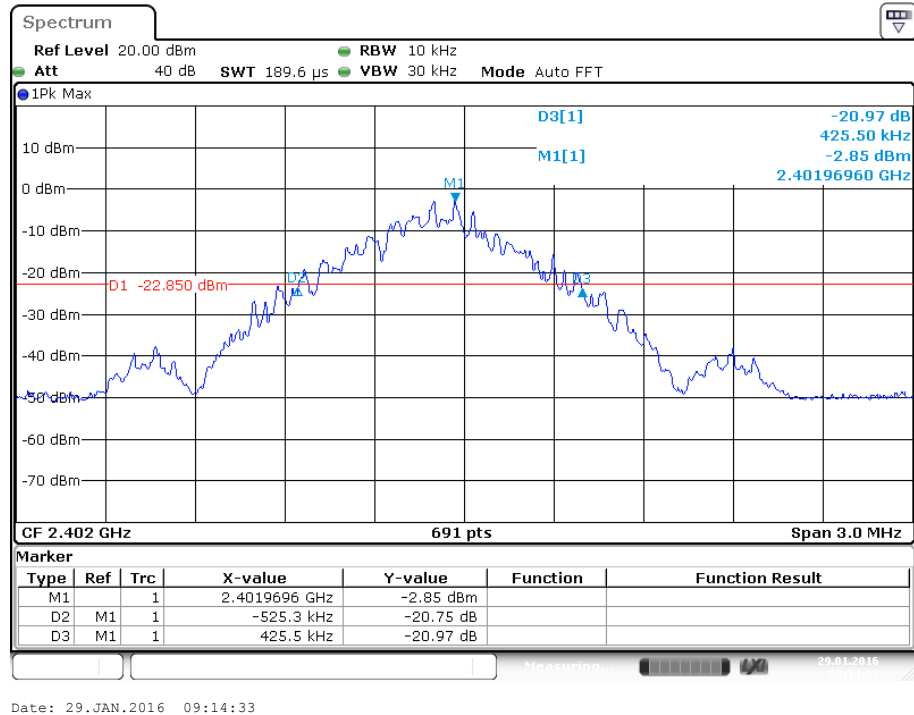
Date: 29.JAN.2016 10:21:28

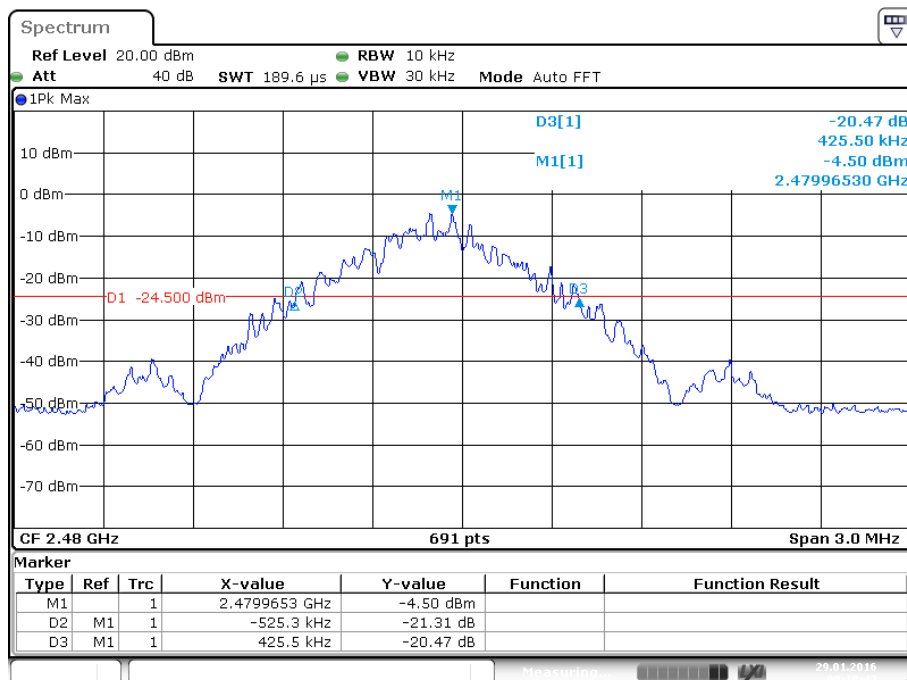


Date: 29.JAN.2016 10:20:02

Appendix A.3: 20dB Bandwidth

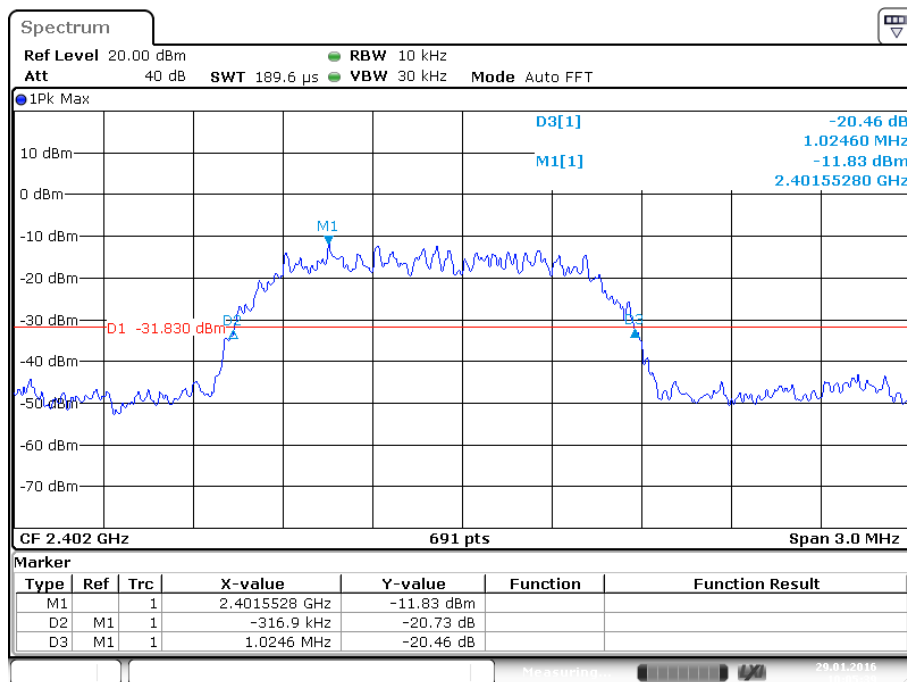
BDR Mode, DH1



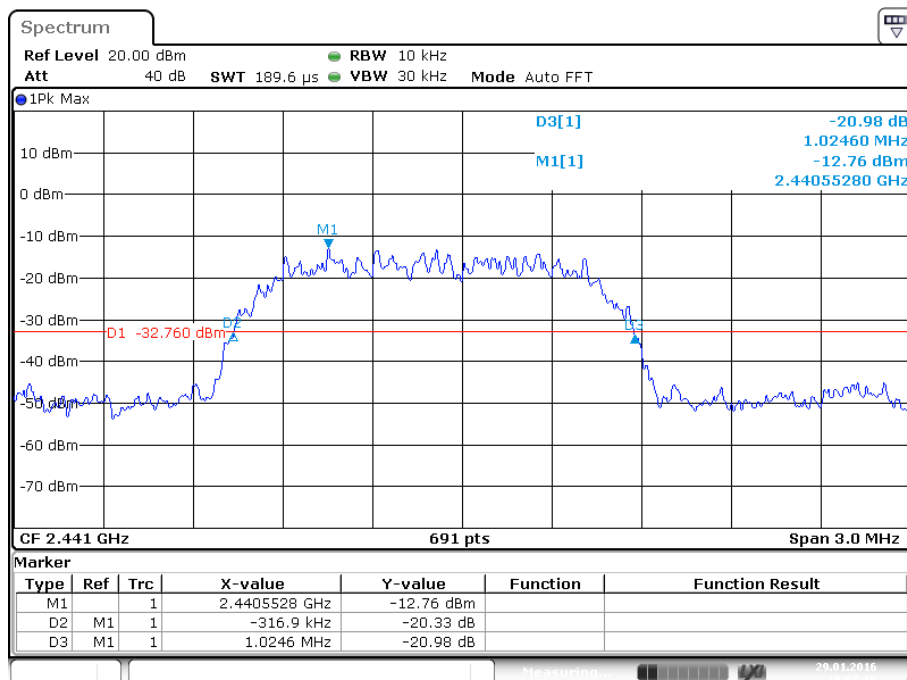


Date: 29.JAN.2016 09:18:42

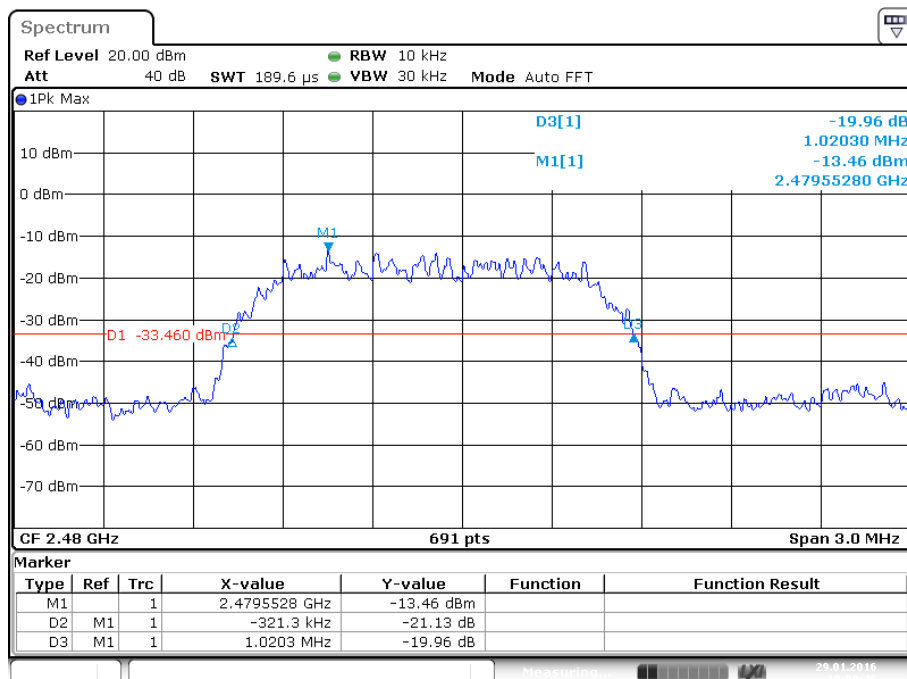
EDR Mode, 2DH1



Date: 29.JAN.2016 10:05:39



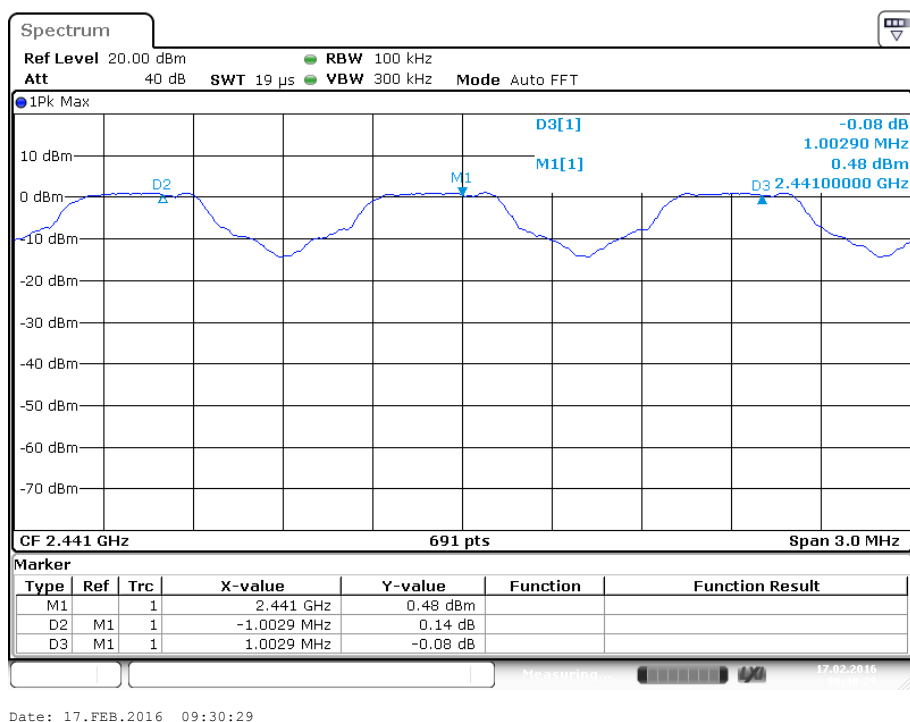
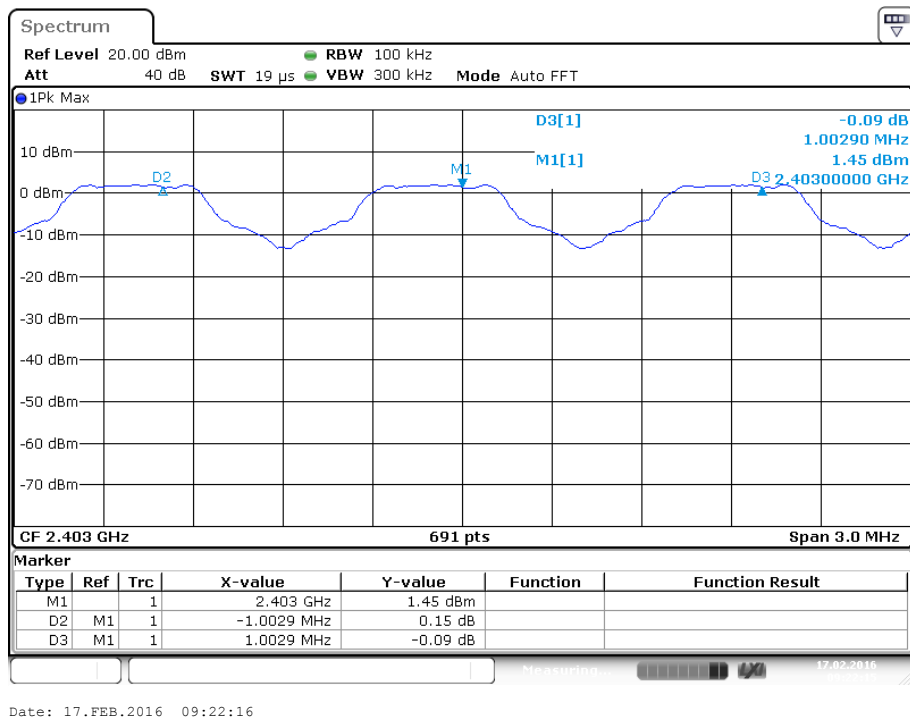
Date: 29.JAN.2016 10:07:16

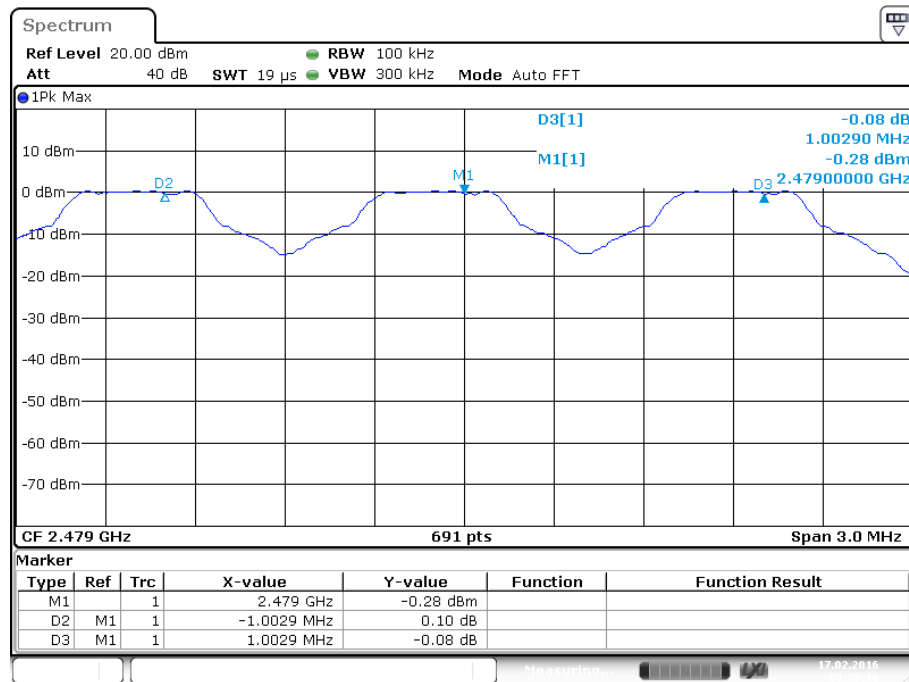


Date: 29.JAN.2016 10:08:46

Appendix A.4: Carrier Frequency Separation

Hopping Mode

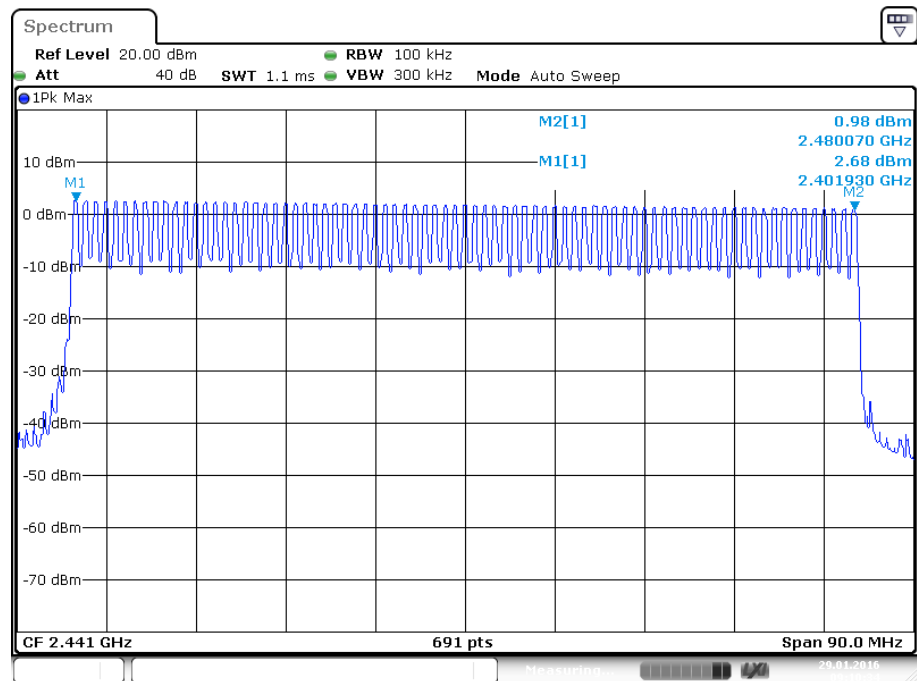




Date: 17.FEB.2016 09:36:17

Appendix A.5: Number of Hopping Frequency

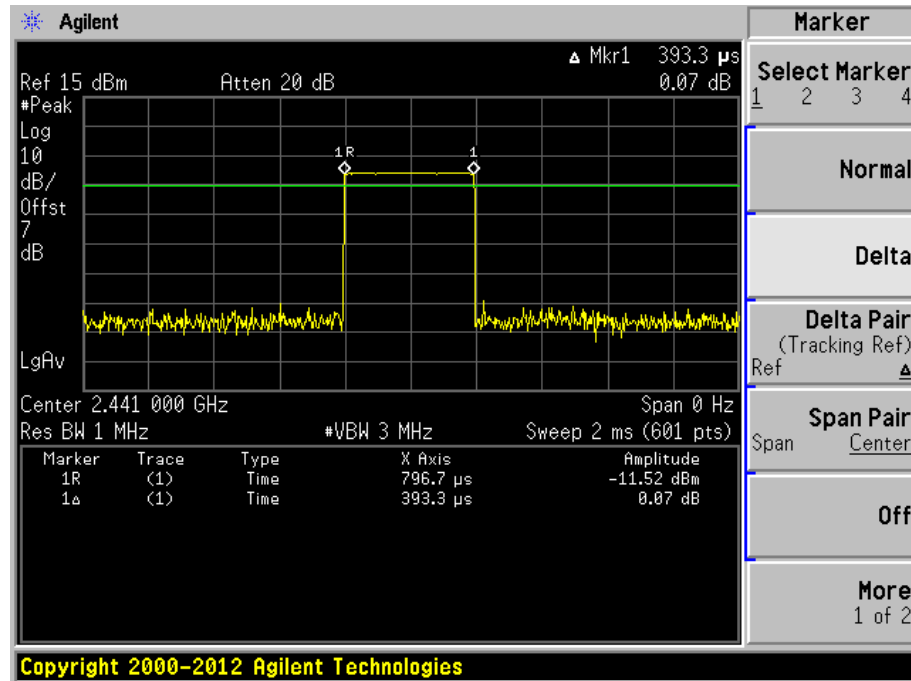
Hopping Mode



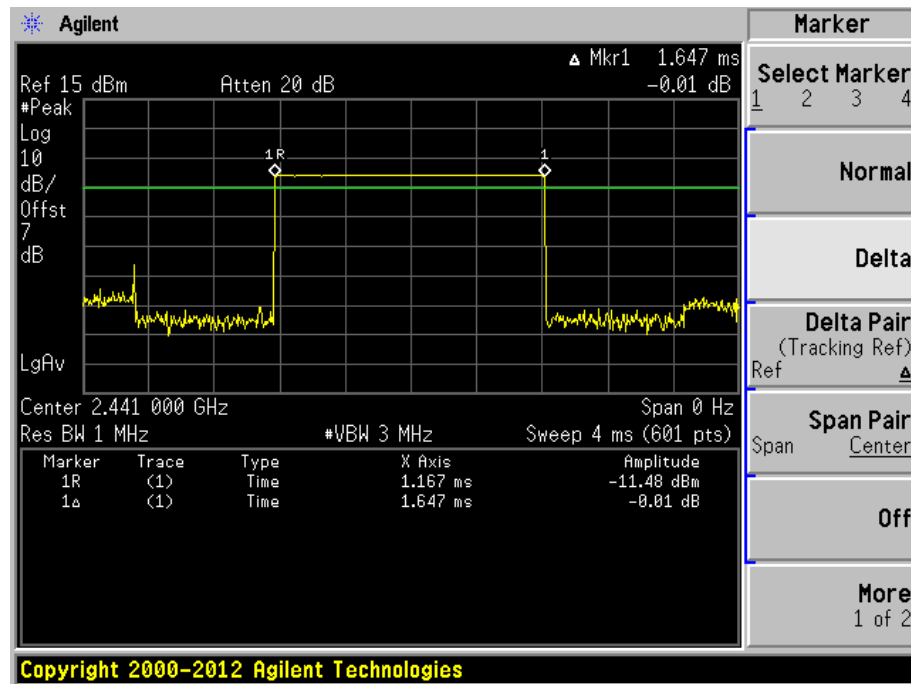
Date: 29.JAN.2016 09:10:35

Appendix A.6: Time of Occupancy

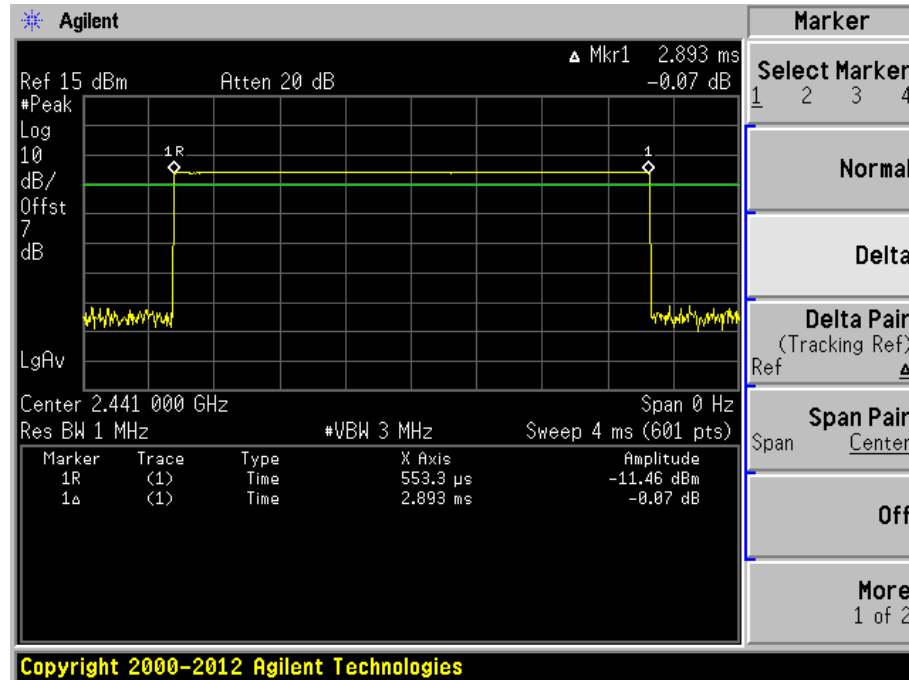
BDR Mode, DH1



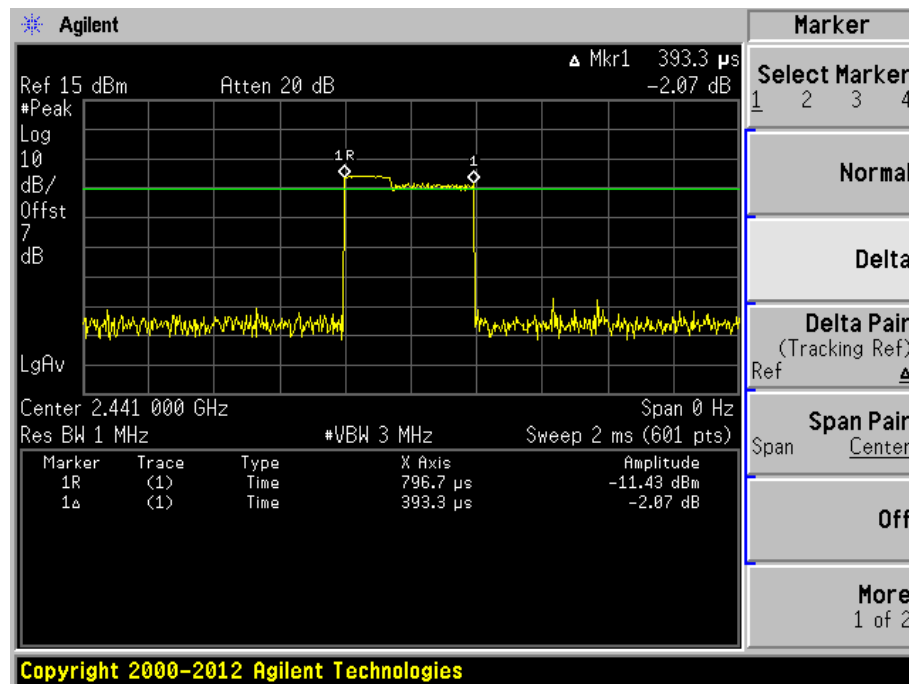
BDR Mode, DH3



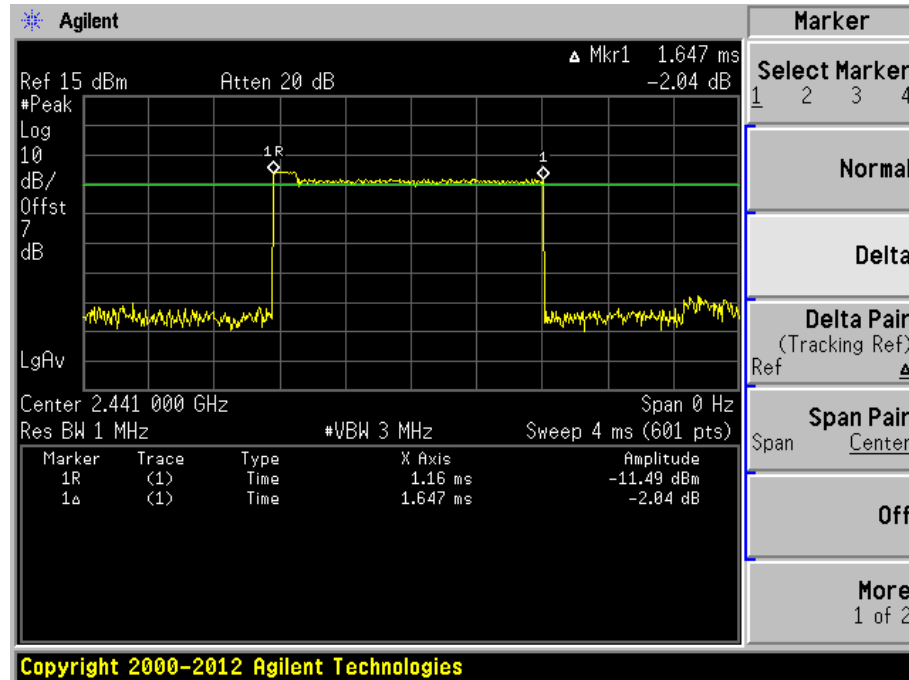
BDR Mode, DH5



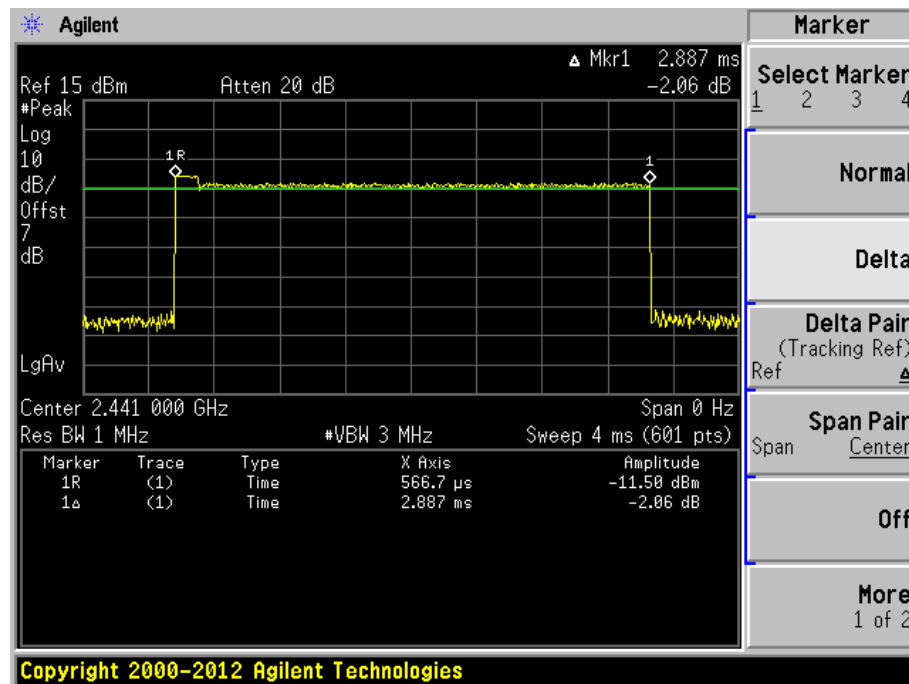
EDR Mode, 2DH1



EDR Mode, 2DH3



EDR Mode, 2DH5



Appendix B

Test Results of Bluetooth 2.1+ EDR of Radiated Testing

APPENDIX B.1: TEST PLOTS OF RADIATED SPURIOUS EMISSION	2
9KHz - 30MHz.....	2
30MHz - 1GHz	11
1GHz - 18GHz	17
18GHz - 26.5GHz	23
APPENDIX B.2: TEST PLOTS OF BAND EDGE (RADIATED)	29
LOW CHANNEL	29
HIGH CHANNEL.....	31
APPENDIX B.3: TEST PLOTS OF CONDUCTED EMISSION	33
C MODE.....	33
D MODE.....	35
APPENDIX B.4: TEST PLOTS OF RADIATED EMISSION	37
D MODE.....	37
E MODE	41
F MODE	45

Note: The measurements with active loop antenna were greater than 20dB below the limit, so Radiated Spurious Emissions (9kHz – 30MHz) tests were applied on BDR mode only.

Appendix B.1: Test Plots of Radiated Spurious Emission

9KHz - 30MHz

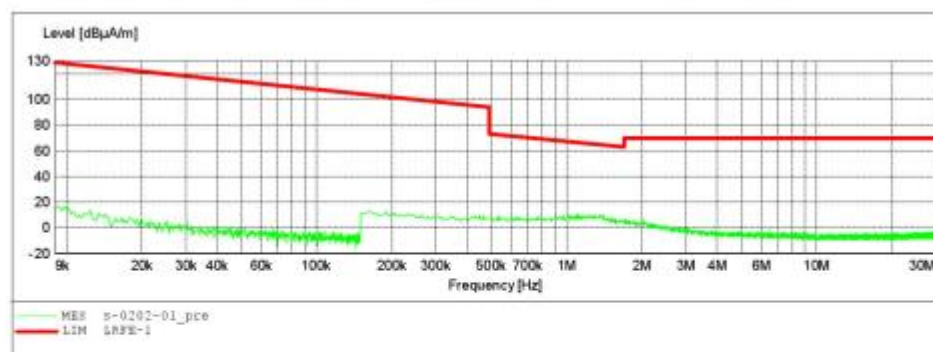
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO., LTD

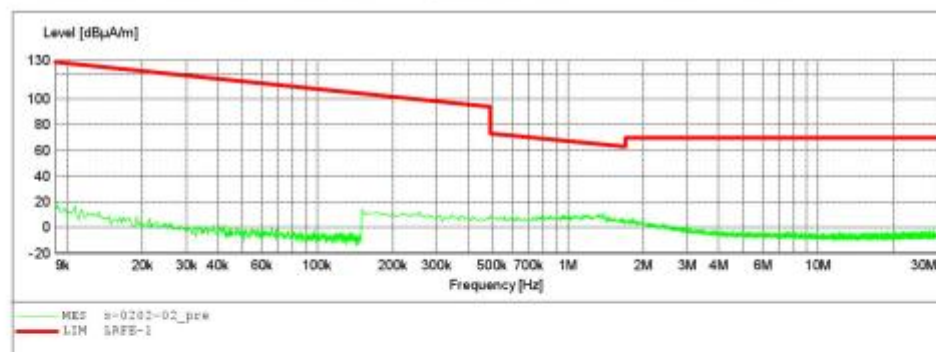
FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



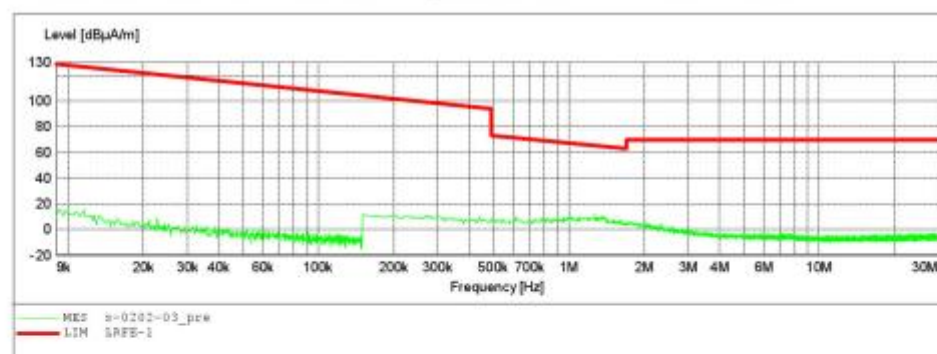
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



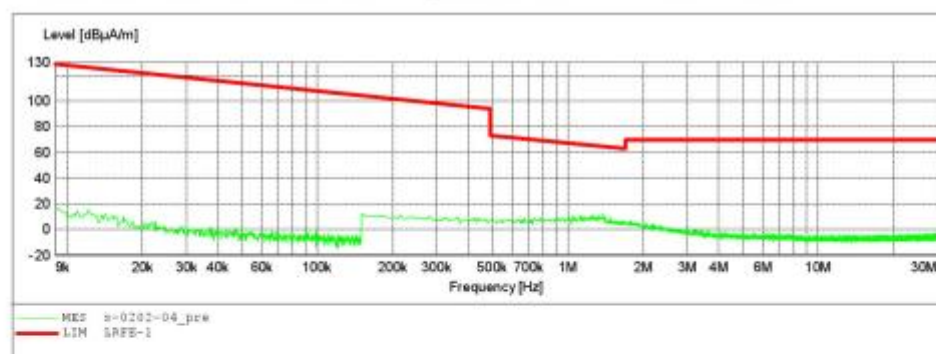
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



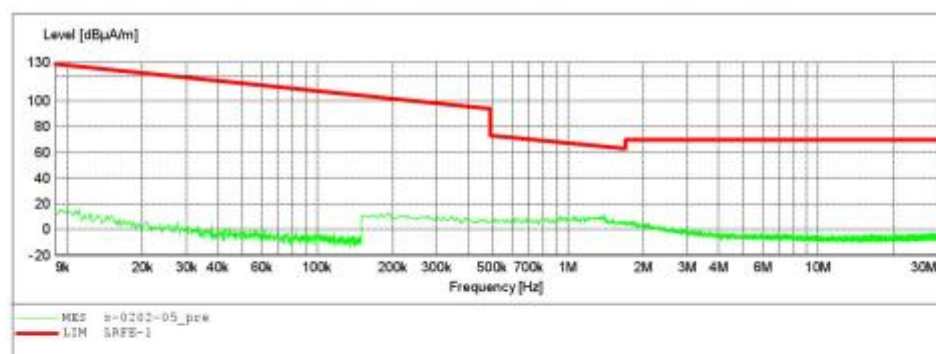
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



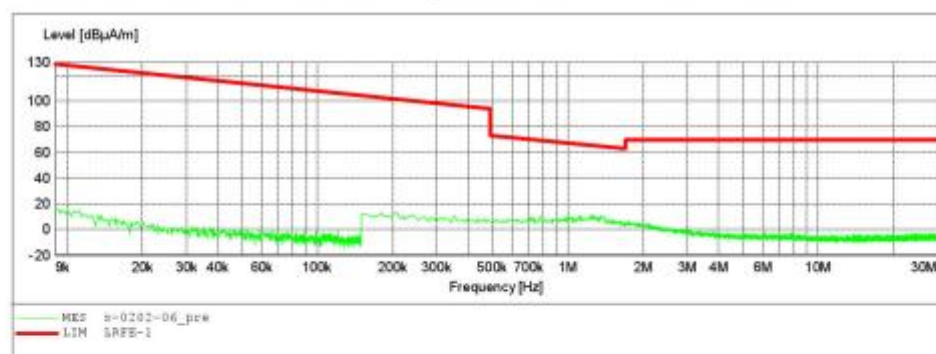
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



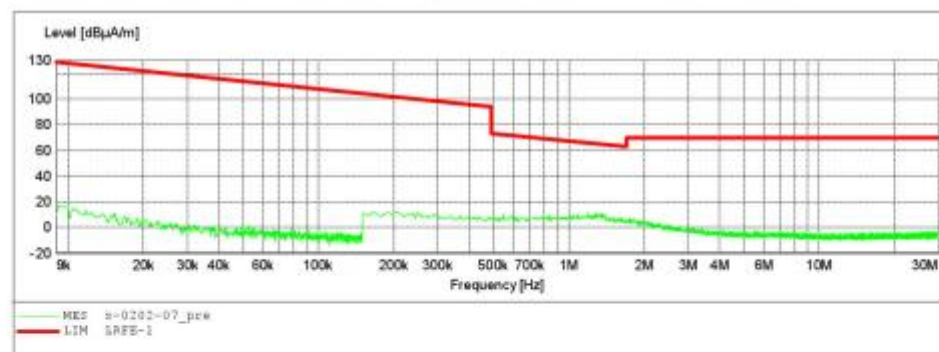
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2480MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



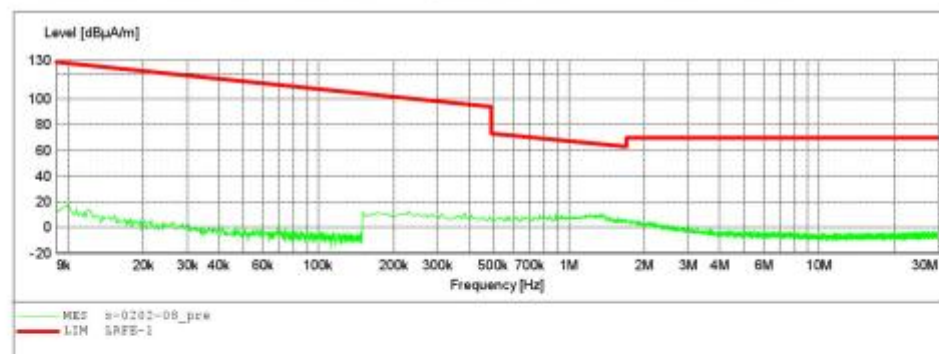
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2480MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



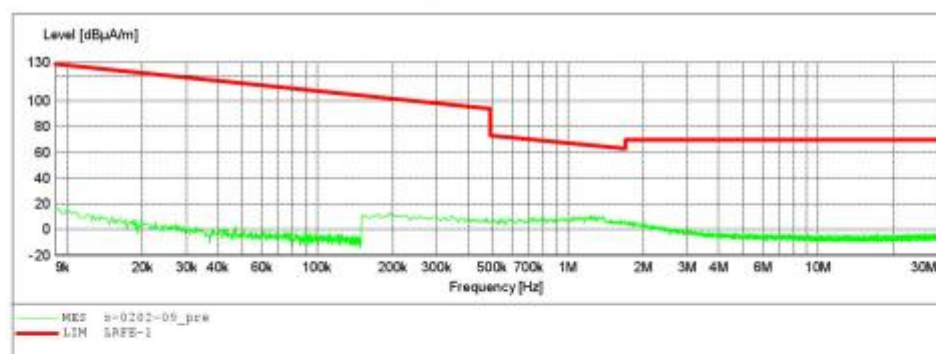
ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: TX 2480MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Z
 Start of Test: 2016-2-2 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



30MHz - 1GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #762

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

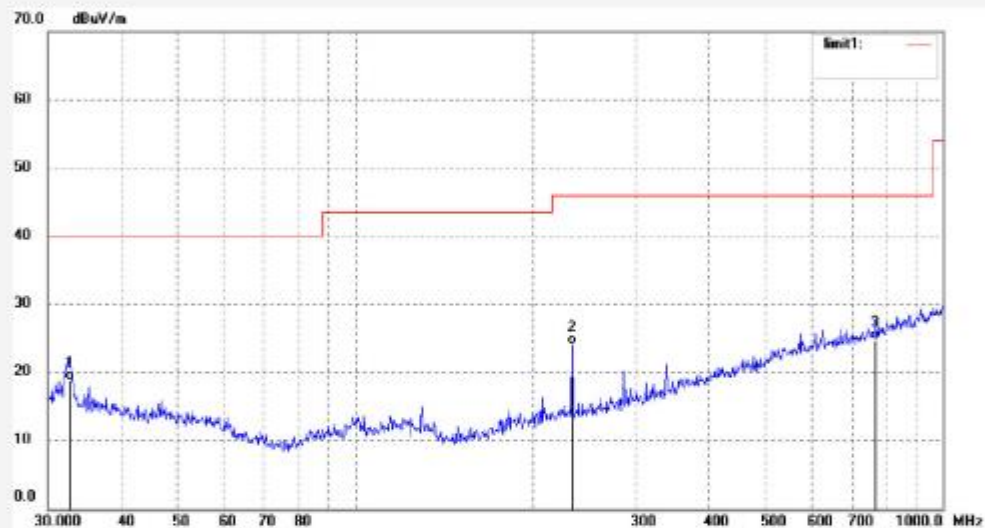
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.7486	28.16	-9.35	18.81	40.00	-21.19	QP			
2	234.1682	35.06	-10.96	24.10	46.00	-21.90	QP			
3	768.7481	25.42	-0.72	24.70	46.00	-21.30	QP			



ACCURATE TECHNOLOGY CO., LTD.

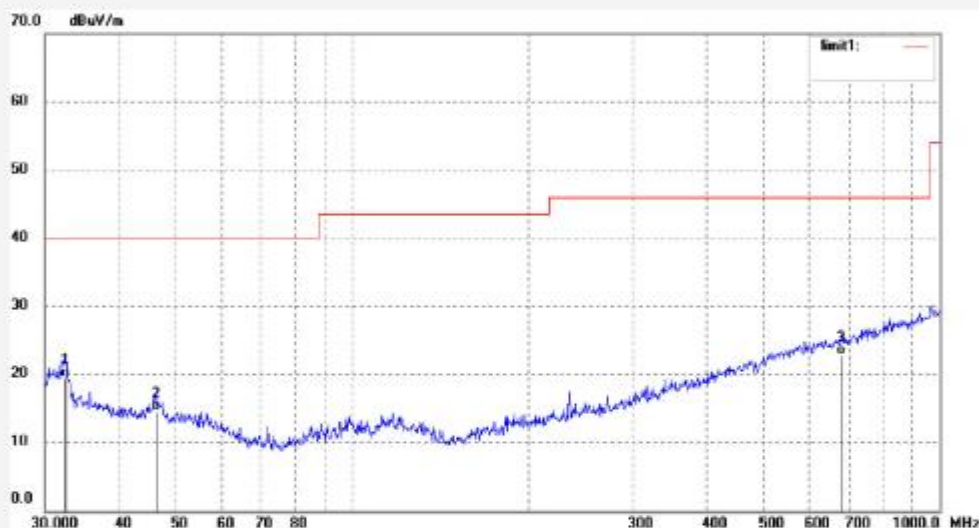
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #763
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2402MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.5197	28.33	-8.83	19.50	40.00	-20.50	QP			
2	46.3402	26.54	-11.88	14.66	40.00	-25.34	QP			
3	679.9600	24.84	-2.02	22.82	46.00	-23.18	QP			



ACCURATE TECHNOLOGY CO., LTD.

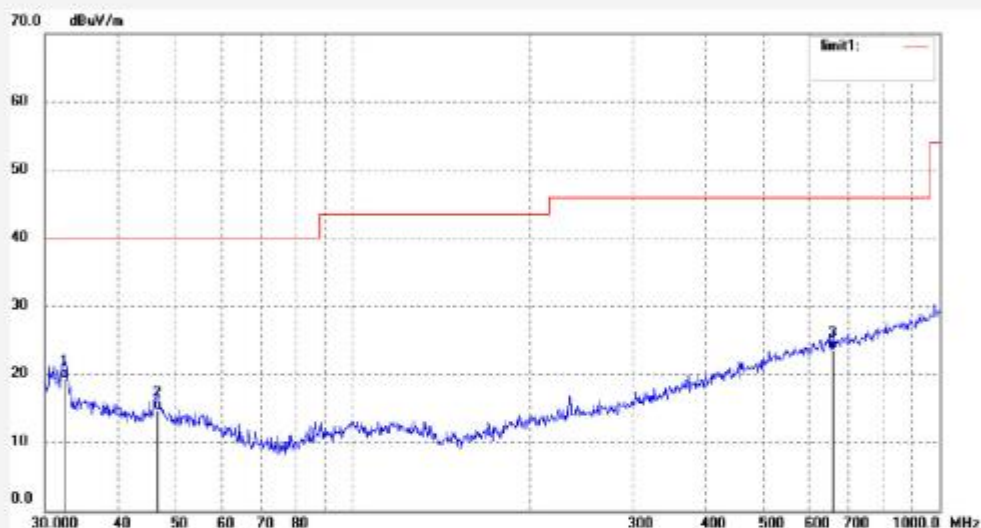
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #764
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2441MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.4059	28.20	-8.80	19.40	40.00	-20.60	QP			
2	46.6664	26.64	-11.87	14.77	40.00	-25.23	QP			
3	656.5298	25.89	-2.31	23.58	46.00	-22.42	QP			



ACCURATE TECHNOLOGY CO., LTD.

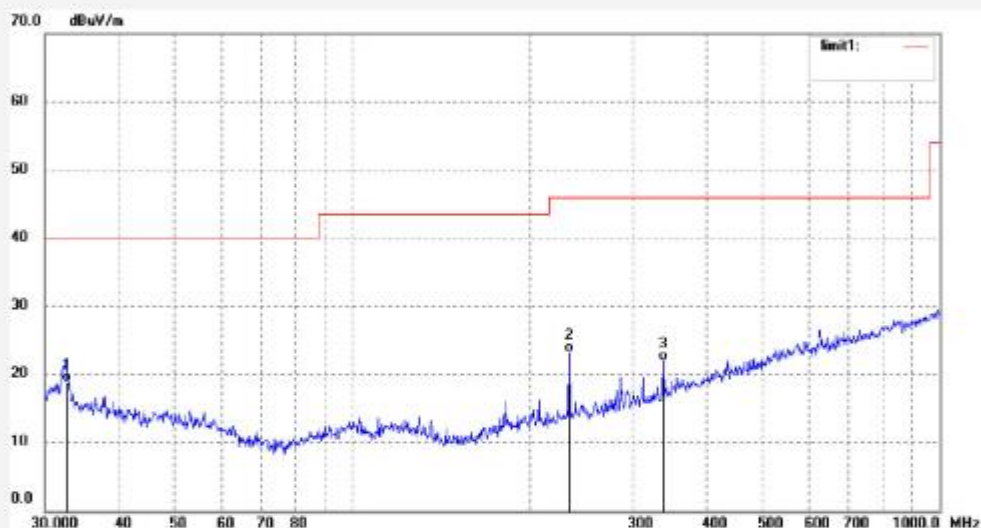
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #765
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2441MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.6340	28.12	-9.34	18.78	40.00	-21.22	QP			
2	234.1682	34.23	-10.96	23.27	46.00	-22.73	QP			
3	338.4001	30.11	-8.13	21.98	46.00	-24.02	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #766

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2480MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

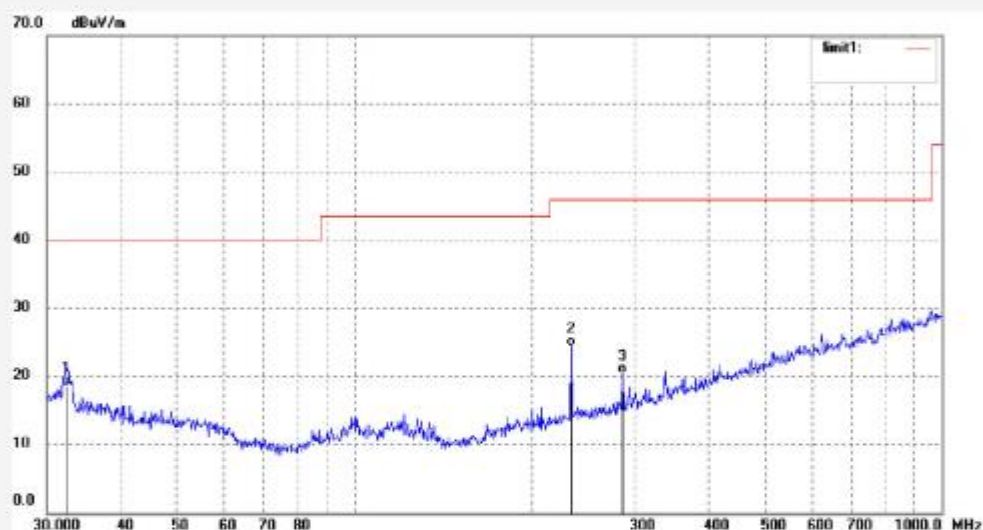
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.4059	27.90	-9.32	18.58	40.00	-21.42	QP			
2	234.1682	35.43	-10.96	24.47	46.00	-21.53	QP			
3	285.9778	30.07	-9.62	20.45	46.00	-25.55	QP			



ACCURATE TECHNOLOGY CO., LTD.

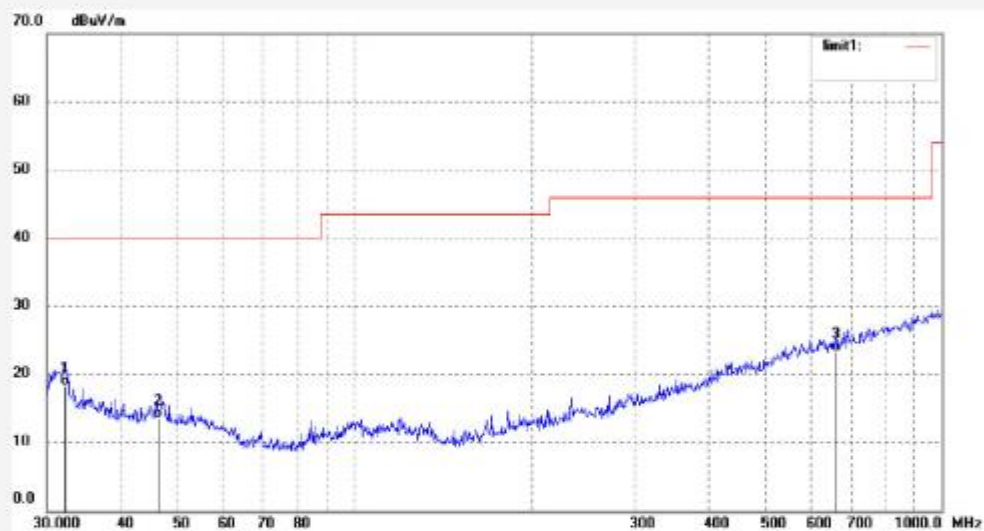
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #767
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2480MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.2924	27.12	-8.76	18.36	40.00	-21.64	QP			
2	46.6664	25.44	-11.87	13.57	40.00	-26.43	QP			
3	661.1503	25.54	-2.24	23.30	46.00	-22.70	QP			

1GHz - 18GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #734

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

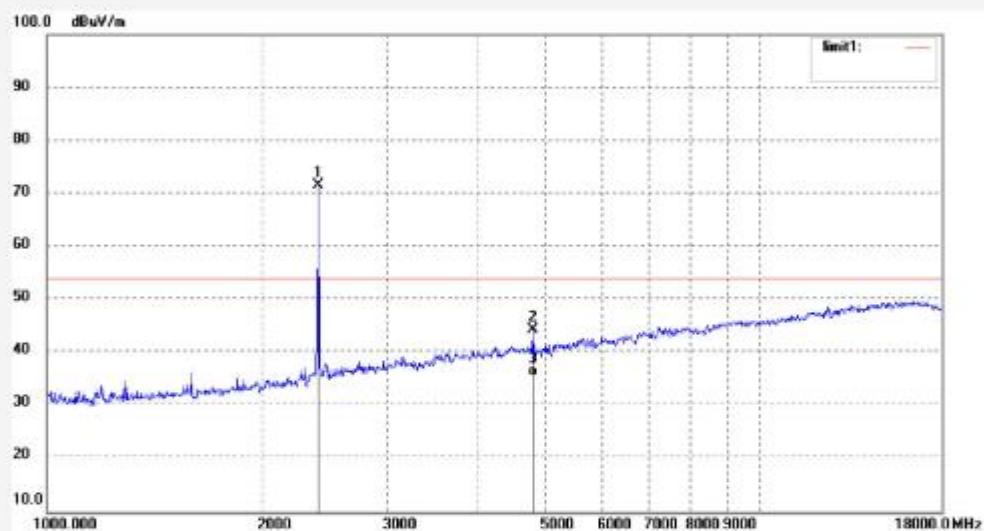
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	78.93	-7.45	71.48	/	/	peak			
2	4804.023	44.71	-0.30	44.41	74.00	-29.59	peak			
3	4804.023	35.89	-0.30	35.59	54.00	-18.41	AVG			



ACCURATE TECHNOLOGY CO., LTD.

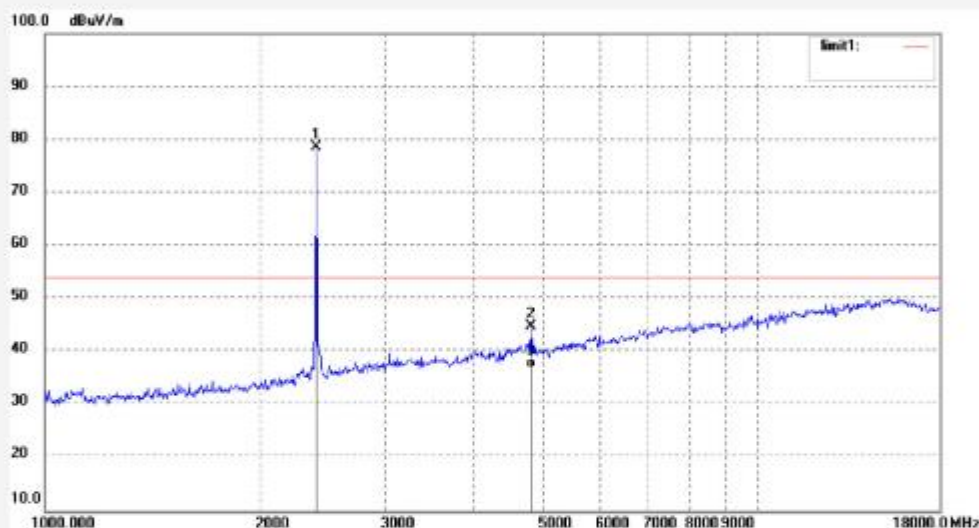
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #735
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2402MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	85.93	-7.45	78.48	/	/	peak			
2	4804.022	45.06	-0.30	44.76	74.00	-29.24	peak			
3	4804.022	37.23	-0.30	36.93	54.00	-17.07	AVG			



ACCURATE TECHNOLOGY CO., LTD.

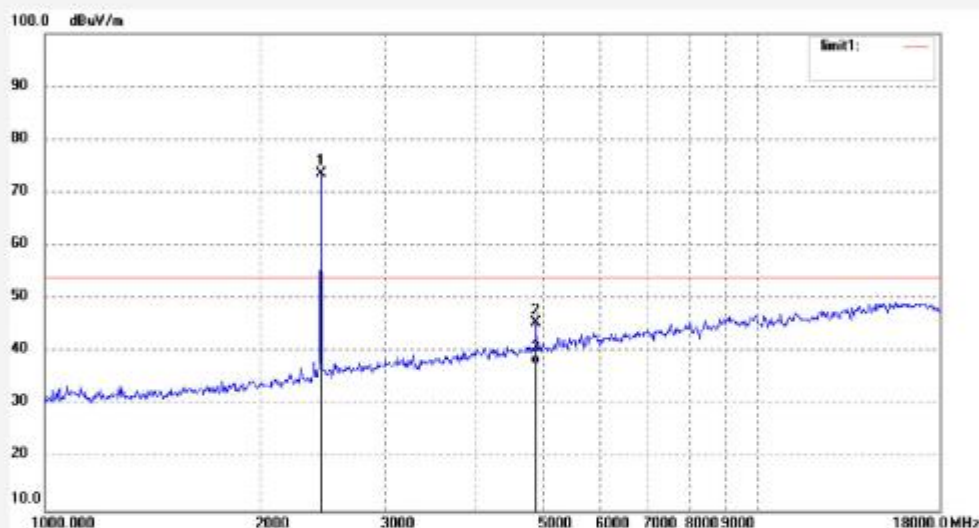
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #738
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2441MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	80.81	-7.35	73.46	/	/	peak			
2	4882.026	45.39	0.14	45.53	74.00	-28.47	peak			
3	4882.026	37.45	0.14	37.59	54.00	-16.41	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #739

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2441MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

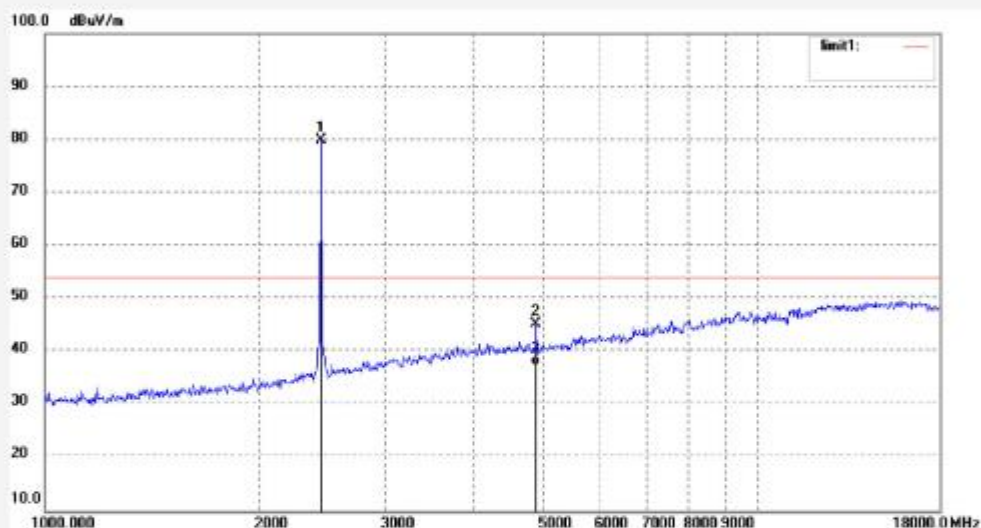
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	87.24	-7.35	79.89	/	/	peak			
2	4882.029	45.12	0.14	45.26	74.00	-28.74	peak			
3	4882.029	37.28	0.14	37.42	54.00	-16.58	AVG			



ACCURATE TECHNOLOGY CO., LTD.

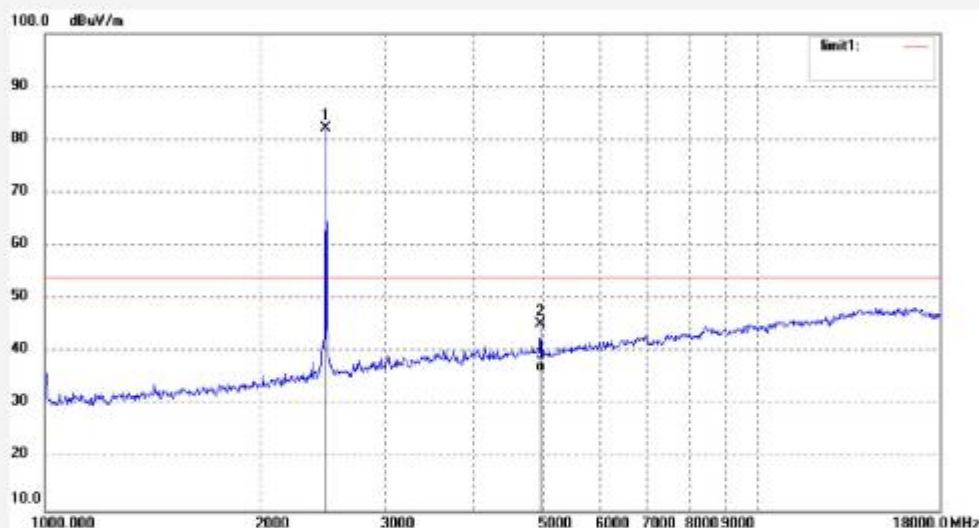
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #740
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2480MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	89.50	-7.37	82.13	/	/	peak			
2	4960.028	44.61	0.52	45.13	74.00	-28.87	peak			
3	4960.028	35.78	0.52	36.30	54.00	-17.70	AVG			



ACCURATE TECHNOLOGY CO., LTD.

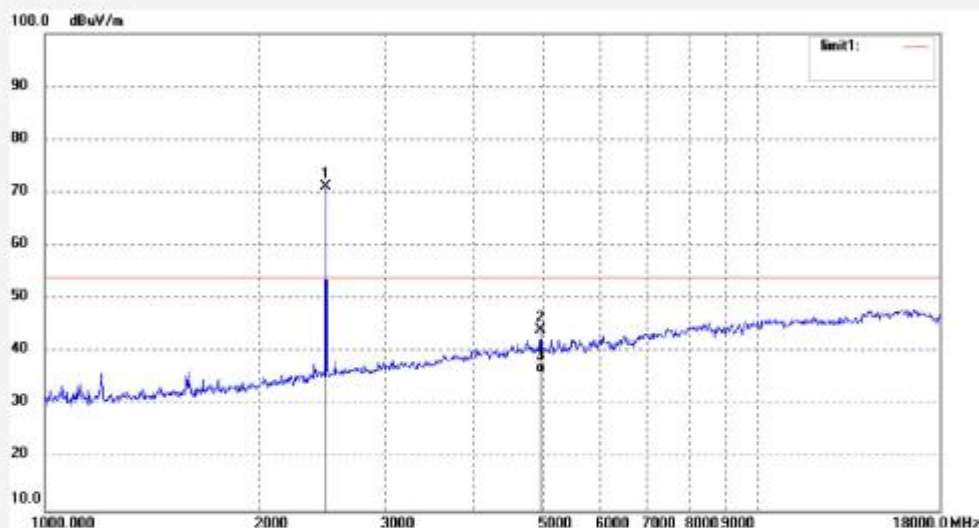
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #741
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2480MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	78.36	-7.37	70.99	/	/	peak			
2	4960.023	43.48	0.52	44.00	74.00	-30.00	peak			
3	4960.023	35.56	0.52	36.08	54.00	-17.92	AVG			

18GHz - 26.5GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #744

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

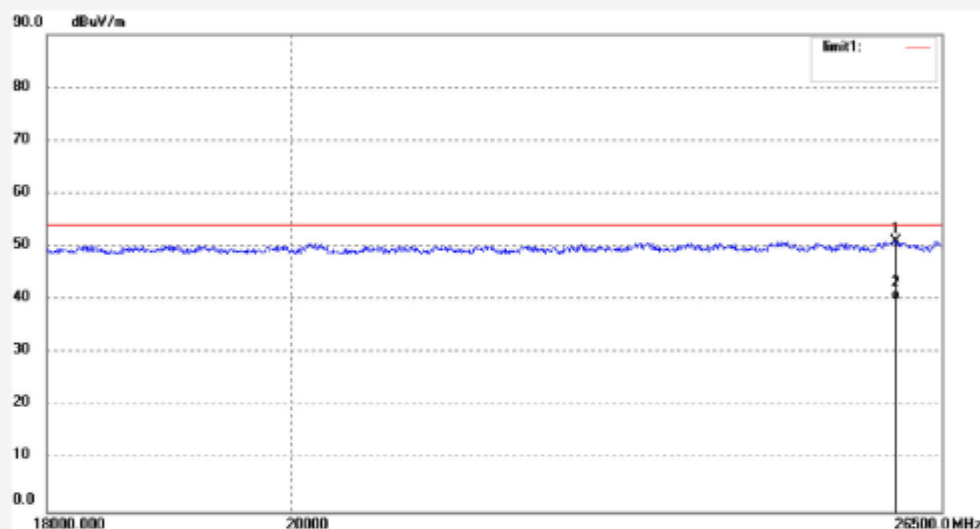
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25982.398	33.64	17.24	50.88	74.00	-23.12	peak			
2	25982.398	22.78	17.24	40.02	54.00	-13.98	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #745

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

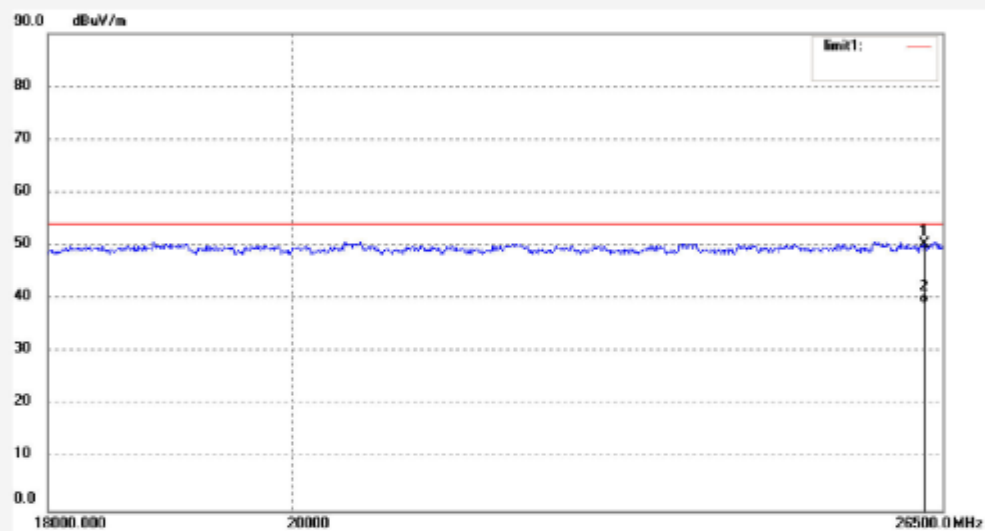
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26285.633	33.72	16.50	50.22	74.00	-23.78	peak			
2	26285.633	22.45	16.50	38.95	54.00	-15.05	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #746

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2441MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

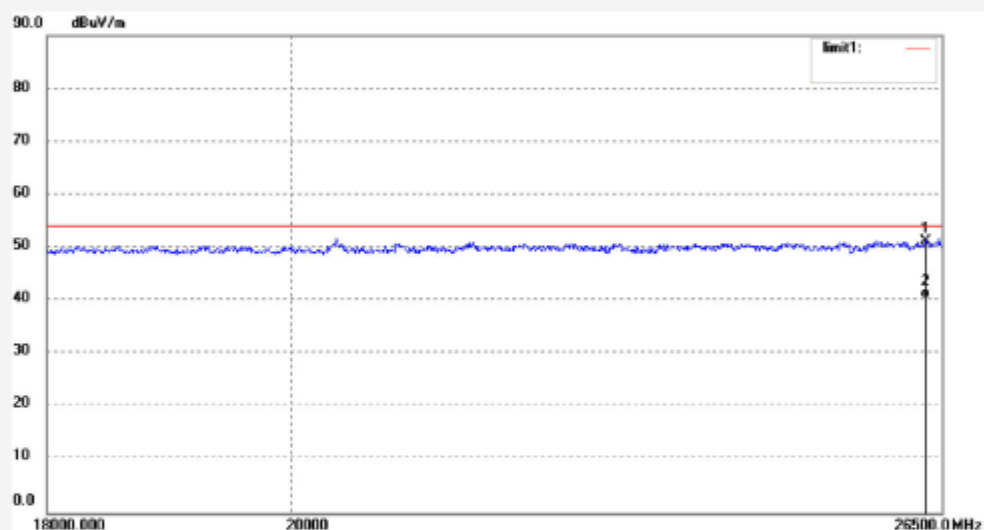
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26316.150	34.80	16.50	51.30	74.00	-22.70	peak			
2	26316.150	23.95	16.50	40.45	54.00	-13.55	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

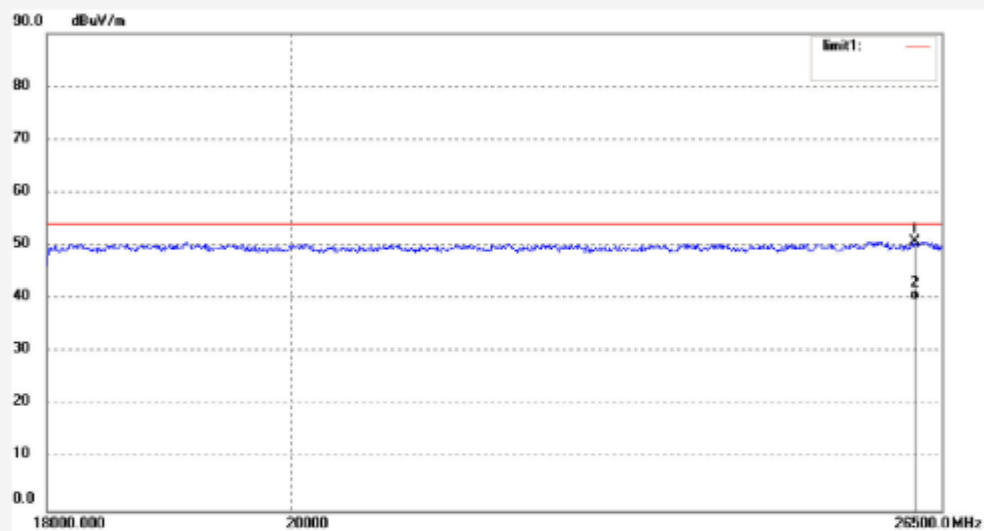
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #747
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2441MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26194.292	33.62	17.10	50.72	74.00	-23.28	peak			
2	26194.292	22.71	17.10	39.81	54.00	-14.19	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

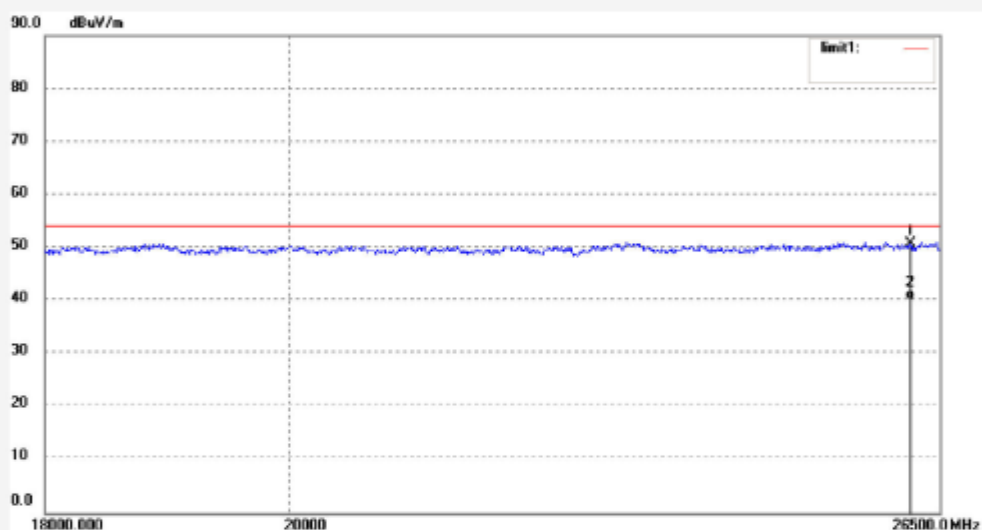
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #748
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: TX 2480MHz
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26163.916	33.56	17.12	50.68	74.00	-23.32	peak			
2	26163.916	22.96	17.12	40.08	54.00	-13.92	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #749

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2480MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

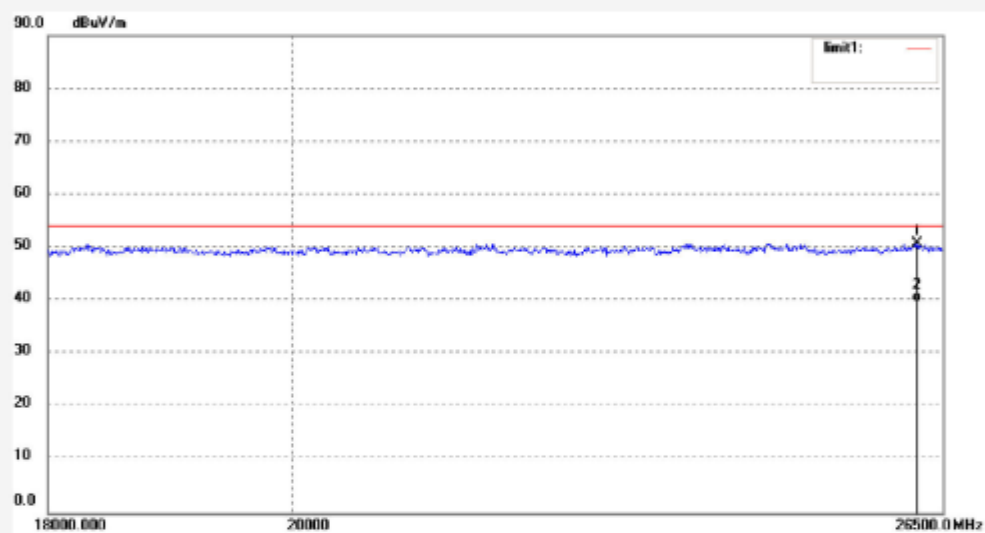
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26204.426	34.13	16.50	50.63	74.00	-23.37	peak			
2	26204.426	23.25	16.50	39.75	54.00	-14.25	AVG			

Appendix B.2: Test Plots of Band Edge (Radiated)

Low Channel



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #736

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

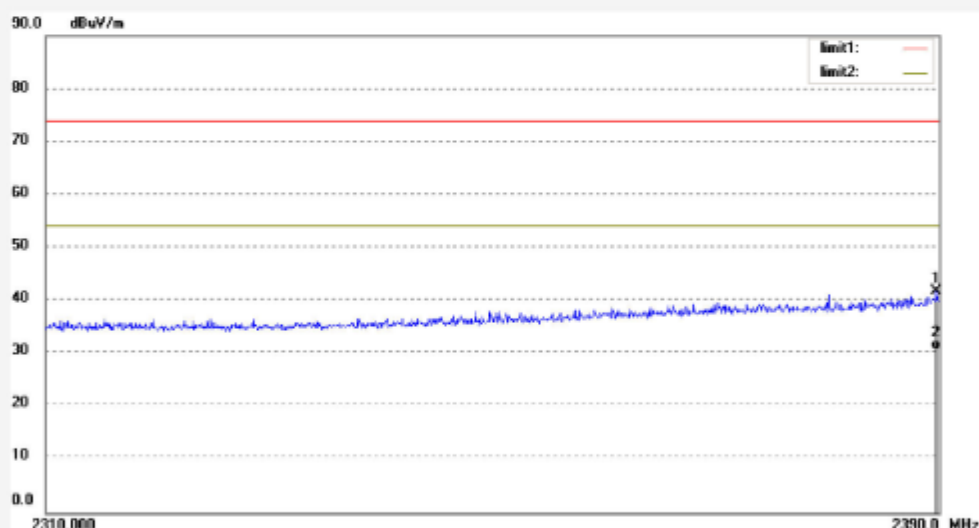
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.760	49.27	-7.53	41.74	74.00	-32.26	peak			
2	2389.760	38.25	-7.53	30.72	54.00	-23.28	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #737

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2402MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

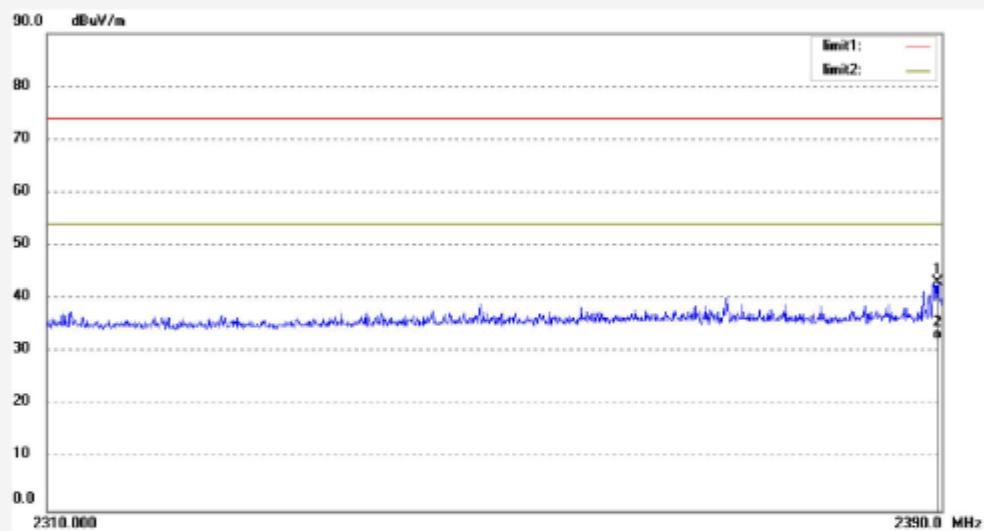
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.600	50.71	-7.53	43.18	74.00	-30.82	peak			
2	2389.600	39.89	-7.53	32.36	54.00	-21.64	AVG			

High Channel



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #742

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2480MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

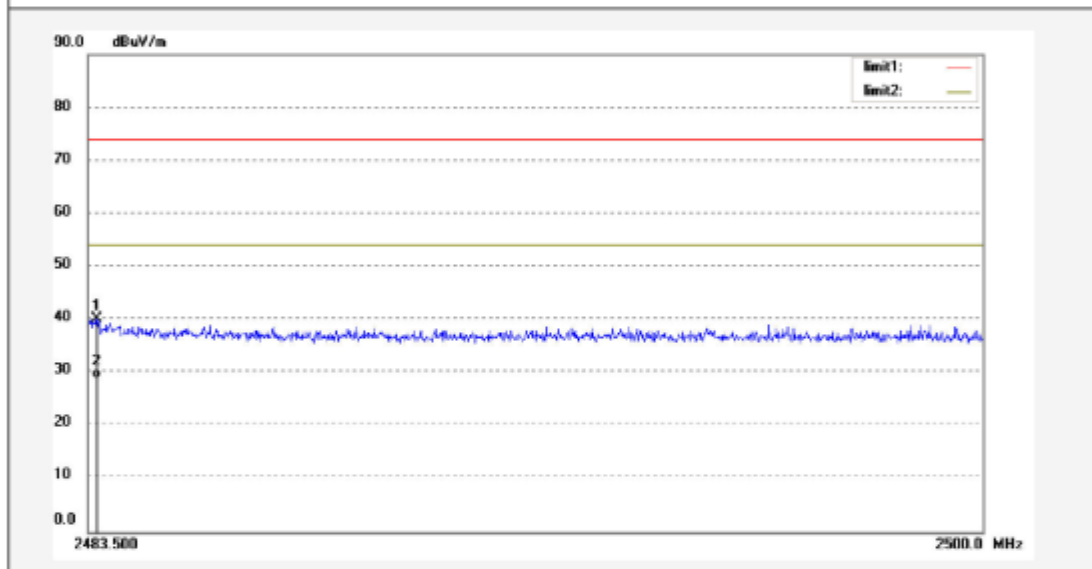
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.665	47.50	-7.37	40.13	74.00	-33.87	peak			
2	2483.665	36.23	-7.37	28.86	54.00	-25.14	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #743

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: TX 2480MHz

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

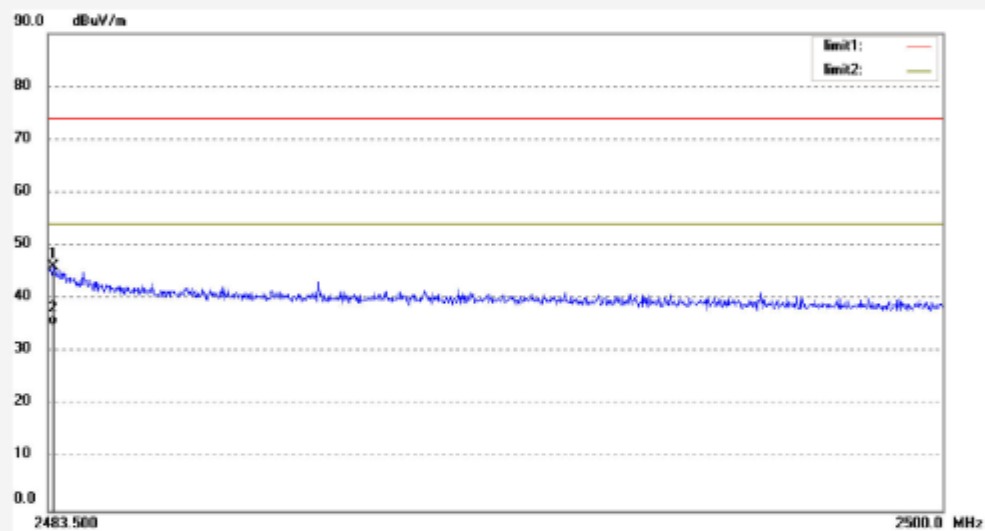
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.599	53.38	-7.37	46.01	74.00	-27.99	peak			
2	2483.599	42.35	-7.37	34.98	54.00	-19.02	AVG			

Appendix B.3: Test Plots of Conducted Emission

C Mode

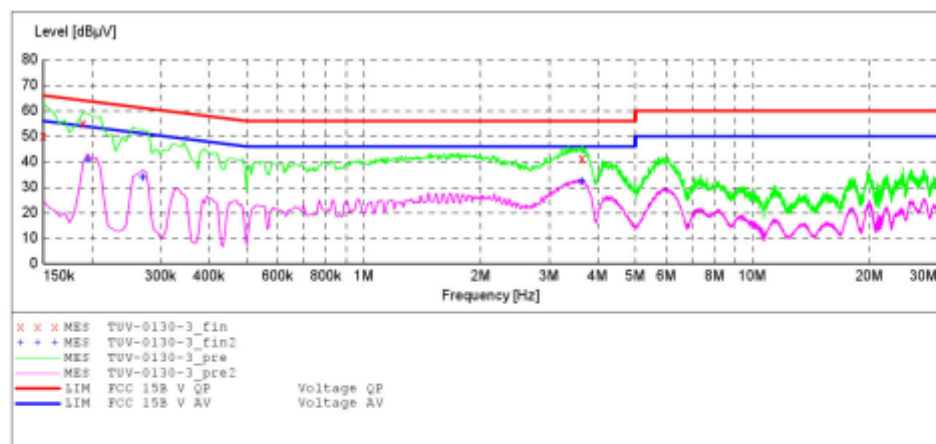
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Speaker with LED lights M/N:1492301
Manufacturer: Saide Tekstil San ve Tic A.S.
Operating Condition: BT
Test Site: 1#Shielding Room
Operator: LGWADE
Test Specification: N 120V/60Hz
Comment:
Start of Test: 1/30/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "TUV-0130-3_fin"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	50.20	10.5	66	15.8	QP	N	GND
0.190000	54.90	10.5	64	9.1	QP	N	GND
3.650000	41.10	11.1	56	14.9	QP	N	GND

MEASUREMENT RESULT: "TUV-0130-3_fin2"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	40.60	10.5	54	13.2	AV	N	GND
0.270000	33.70	10.6	51	17.4	AV	N	GND
3.640000	32.30	11.1	46	13.7	AV	N	GND

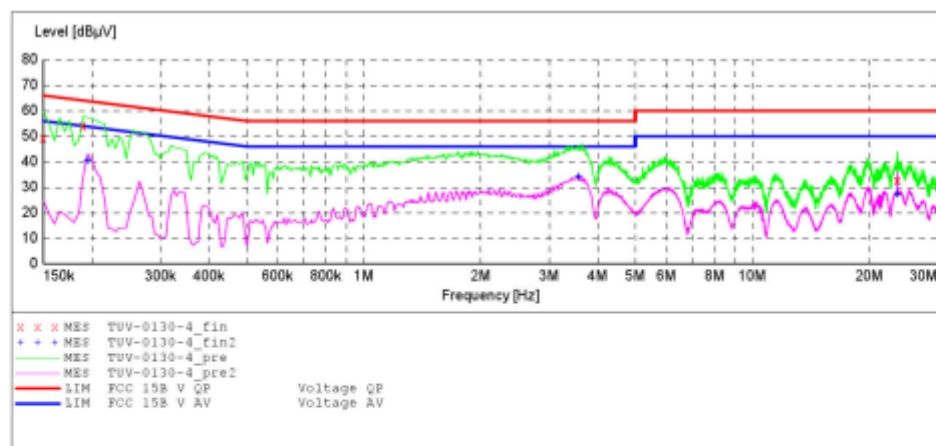
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Speaker with LED lights M/N:1492301
Manufacturer: Saide Tekstil San ve Tic A.S.
Operating Condition: BT
Test Site: 1#Shielding Room
Operator: LGWADE
Test Specification: L 120V/60Hz
Comment:
Start of Test: 1/30/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK6126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK6126 2008
Average



MEASUREMENT RESULT: "TUV-0130-4_fin"

1/30/2016

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	49.20	10.5	66	16.8	QP	L1	GND
0.190000	54.00	10.5	64	10.0	QP	L1	GND
23.650000	32.70	11.5	60	27.3	QP	L1	GND

MEASUREMENT RESULT: "TUV-0130-4_fin2"

1/30/2016

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	40.20	10.5	54	13.6	AV	L1	GND
3.570000	34.00	11.1	46	12.0	AV	L1	GND
23.650000	27.10	11.5	50	22.9	AV	L1	GND

D Mode

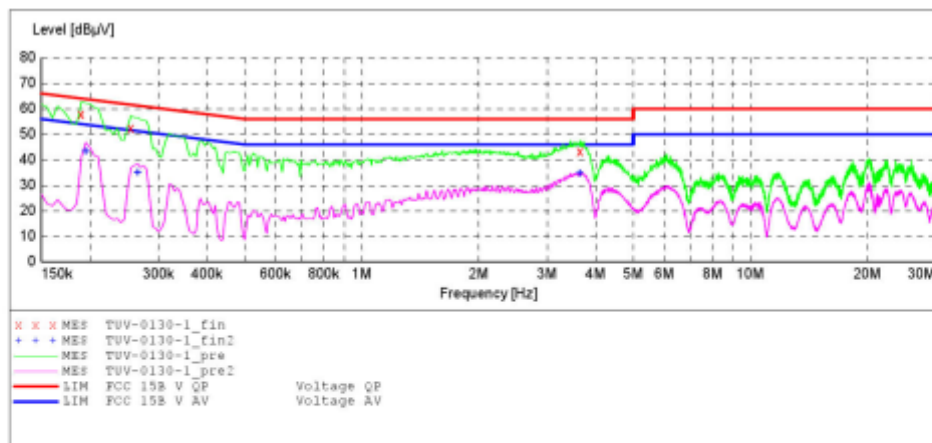
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Speaker with LED lights M/N:1492301
Manufacturer: Saide Tekstil San ve Tic A.S.
Operating Condition: Charging
Test Site: 1#Shielding Room
Operator: LGWADE
Test Specification: L 120V/60Hz
Comment:
Start of Test: 1/30/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK6126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK6126 2008
Average



MEASUREMENT RESULT: "TUV-0130-1_fin"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.190000	57.80	10.5	64	6.2	QP	L1	GND
0.255000	52.40	10.6	62	9.2	QP	L1	GND
3.650000	43.10	11.1	56	12.9	QP	L1	GND

MEASUREMENT RESULT: "TUV-0130-1_fin2"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	43.10	10.5	54	10.7	AV	L1	GND
0.265000	34.80	10.6	51	16.5	AV	L1	GND
3.640000	34.60	11.1	46	11.4	AV	L1	GND

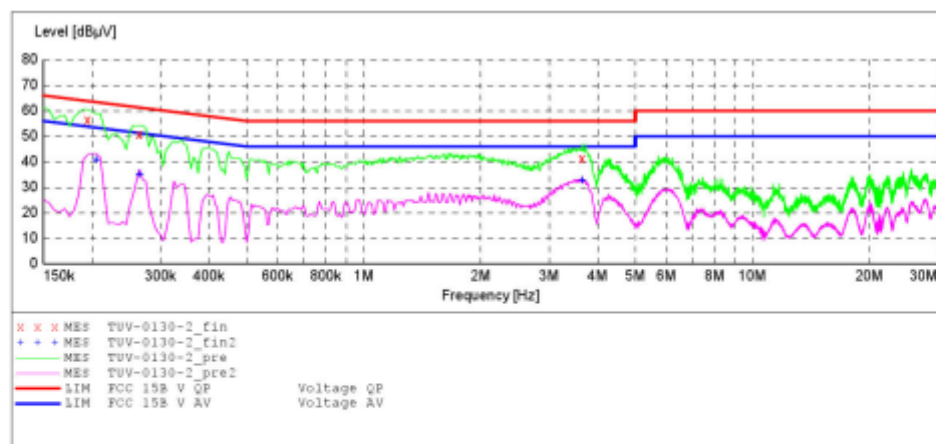
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Speaker with LED lights M/N:1492301
 Manufacturer: Saide Tekstil San ve Tic A.S.
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment:
 Start of Test: 1/30/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description:			SUB_STD_VTERM2 1.70				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK6126 2008	
			Average				
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK6126 2008	
			Average				



MEASUREMENT RESULT: "TUV-0130-2_fin"

1/30/2016							
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195000	56.40	10.5	64	7.4	QP	N	GND
0.265000	50.60	10.6	61	10.7	QP	N	GND
3.650000	41.30	11.1	56	14.7	QP	N	GND

MEASUREMENT RESULT: "TUV-0130-2_fin2"

1/30/2016							
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.205000	40.50	10.5	53	12.9	AV	N	GND
0.265000	34.90	10.6	51	16.4	AV	N	GND
3.650000	32.70	11.1	46	13.3	AV	N	GND

Appendix B.4: Test Plots of Radiated Emission

D Mode



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A, Changyuan New Material Port Keyuan Rd,
Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber

Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: LGWADE #780

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Charging

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 5V

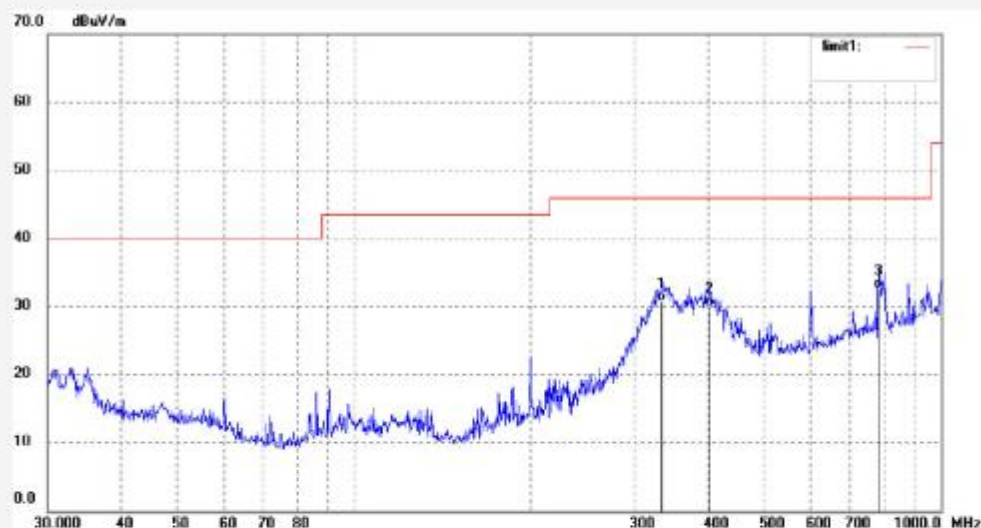
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	333.6865	38.92	-8.28	30.64	46.00	-15.36	QP			
2	403.2500	36.84	-6.76	30.08	46.00	-15.92	QP			
3	782.3451	33.06	-0.37	32.69	46.00	-13.31	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #781

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Charging

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 5V

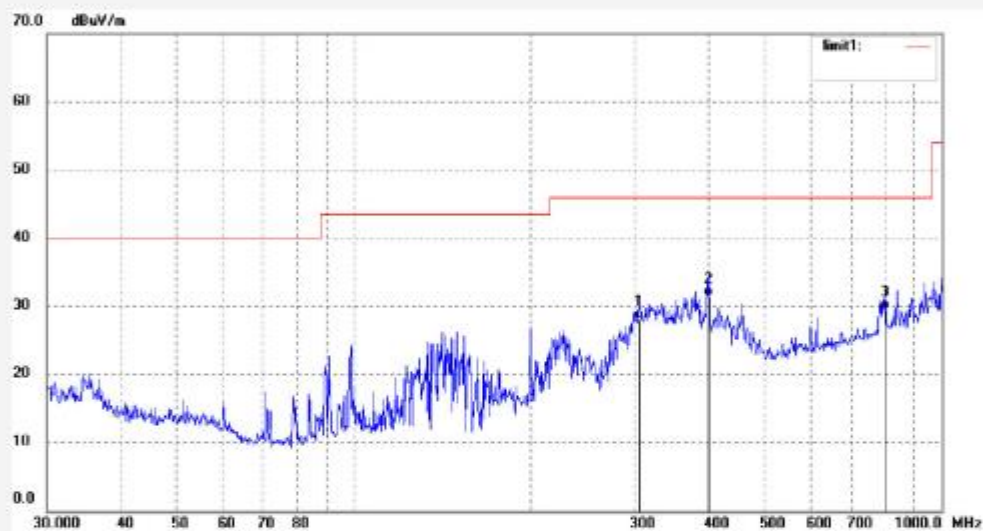
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	305.6800	37.34	-9.18	28.16	46.00	-17.84	QP			
2	400.4318	38.31	-6.81	31.50	46.00	-14.50	QP			
3	801.7862	29.35	0.07	29.42	46.00	-16.58	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #810

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Charging

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 5V

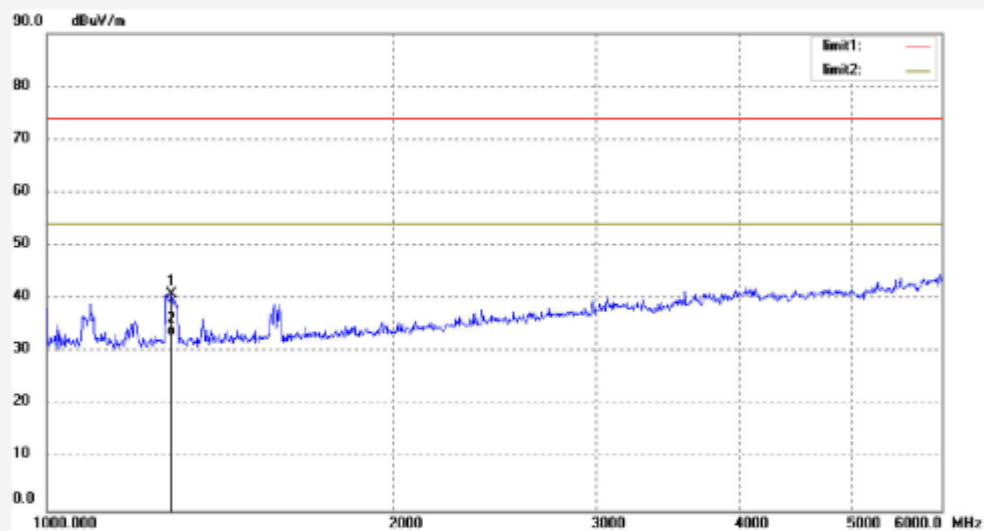
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1282.812	53.03	-12.23	40.80	74.00	-33.20	peak			
2	1282.812	45.12	-12.23	32.89	54.00	-21.11	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

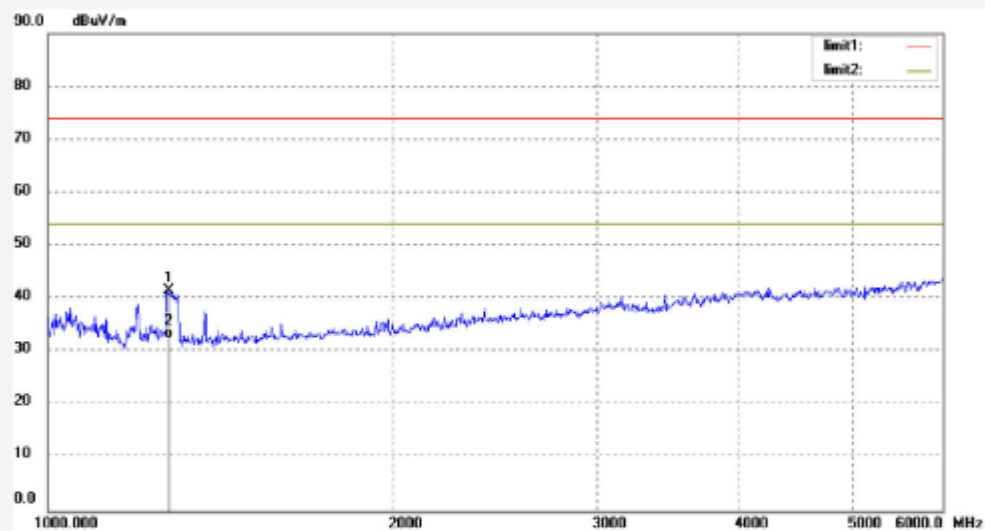
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #811
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: Charging
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 5V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1273.651	53.67	-12.25	41.42	74.00	-32.58	peak			
2	1273.651	44.78	-12.25	32.53	54.00	-21.47	AVG			

E Mode



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #782

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Aux in

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

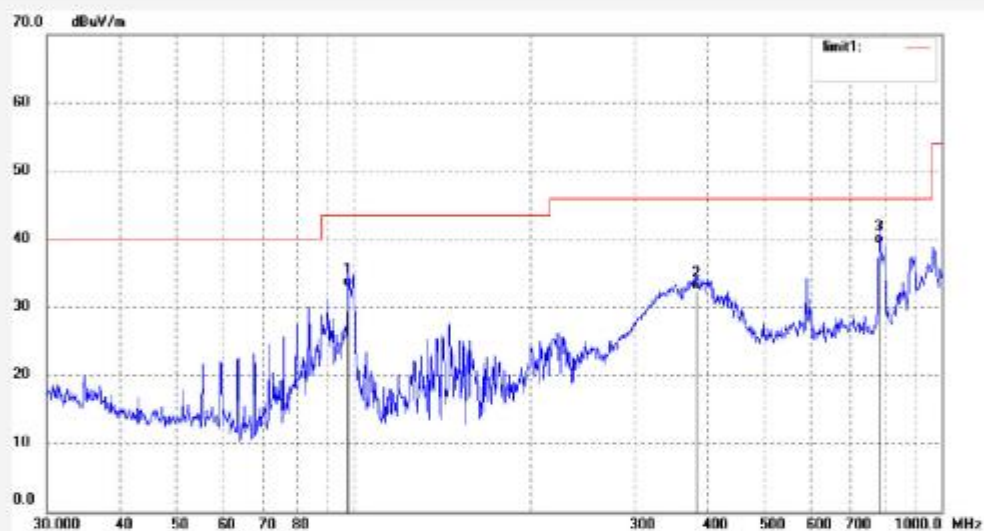
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.7980	46.49	-13.45	33.04	43.50	-10.46	QP			
2	382.5878	39.78	-7.30	32.48	46.00	-13.52	QP			
3	782.3451	39.63	-0.37	39.26	46.00	-6.74	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #783

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Aux in

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

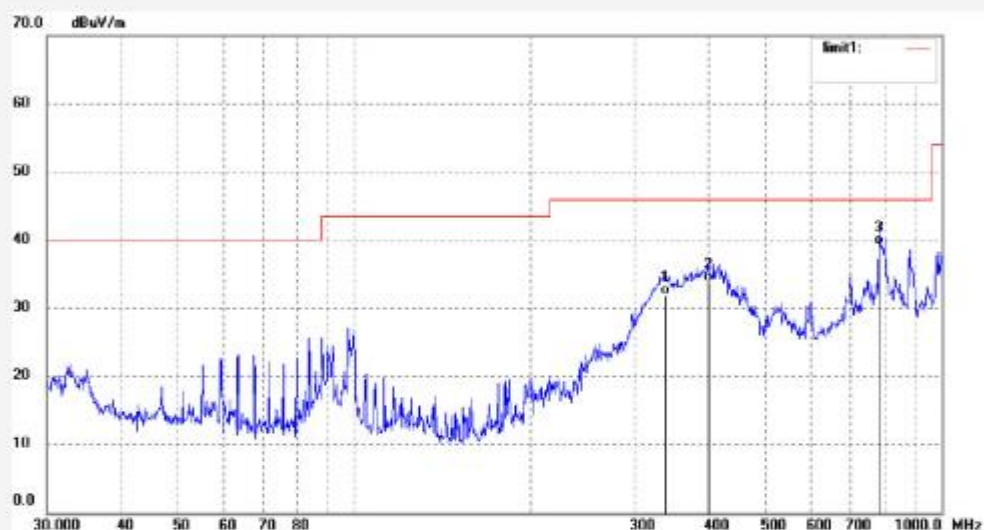
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	338.4001	40.10	-8.13	31.97	46.00	-14.03	QP			
2	400.4318	40.59	-6.81	33.78	46.00	-12.22	QP			
3	782.3451	39.61	-0.37	39.24	46.00	-6.76	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #808

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Aux in

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

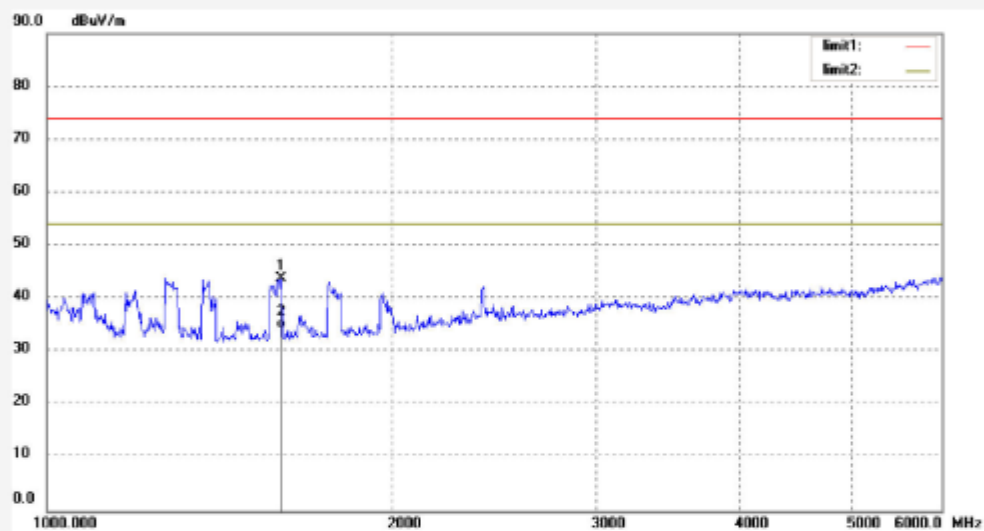
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1599.100	54.78	-11.07	43.71	74.00	-30.29	peak			
2	1599.100	45.36	-11.07	34.29	54.00	-19.71	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #809

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: Aux in

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

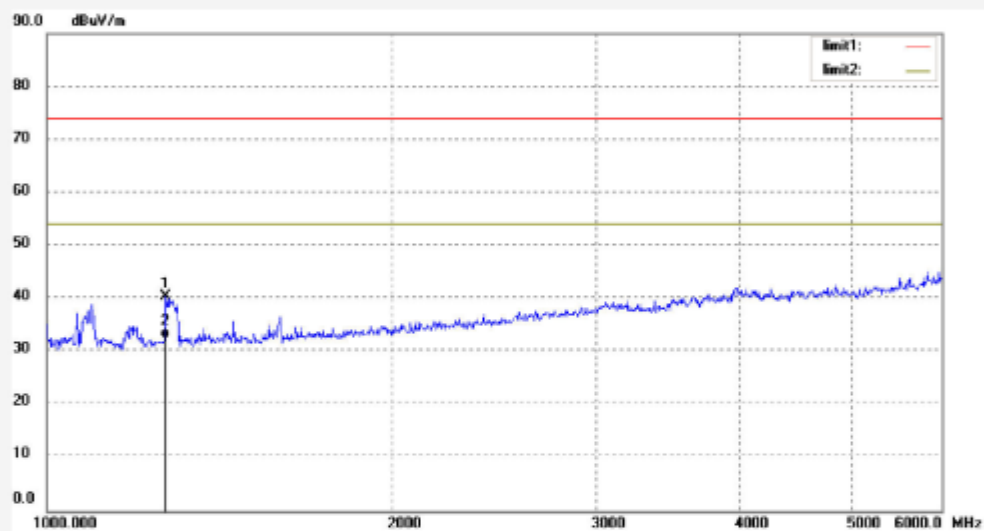
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1269.095	52.67	-12.26	40.41	74.00	-33.59	peak			
2	1269.095	44.78	-12.26	32.52	54.00	-21.48	AVG			

F Mode



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #786

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: microSD Card

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

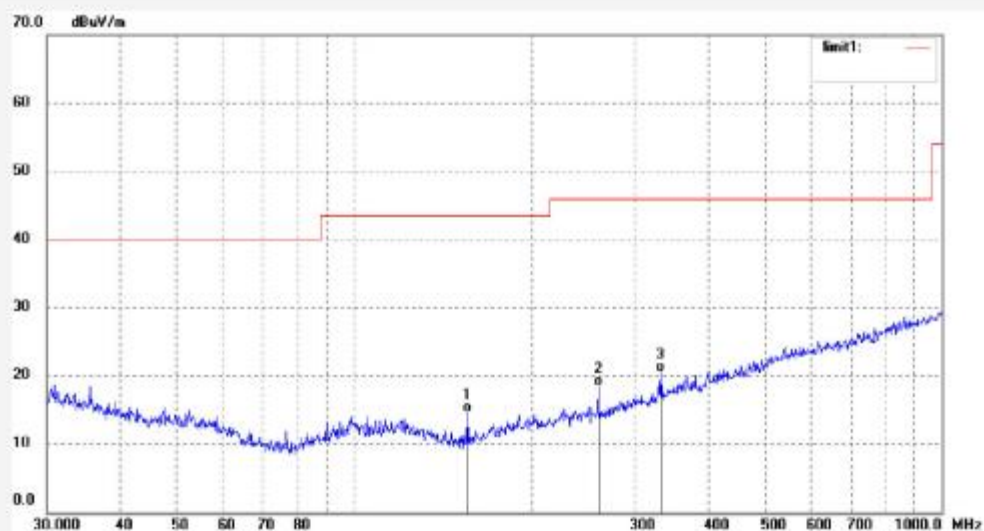
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	155.9099	29.41	-14.71	14.70	43.50	-28.80	QP			
2	260.1444	29.12	-10.63	18.49	46.00	-27.51	QP			
3	332.5187	28.78	-8.30	20.48	46.00	-25.52	QP			



ACCURATE TECHNOLOGY CO., LTD.

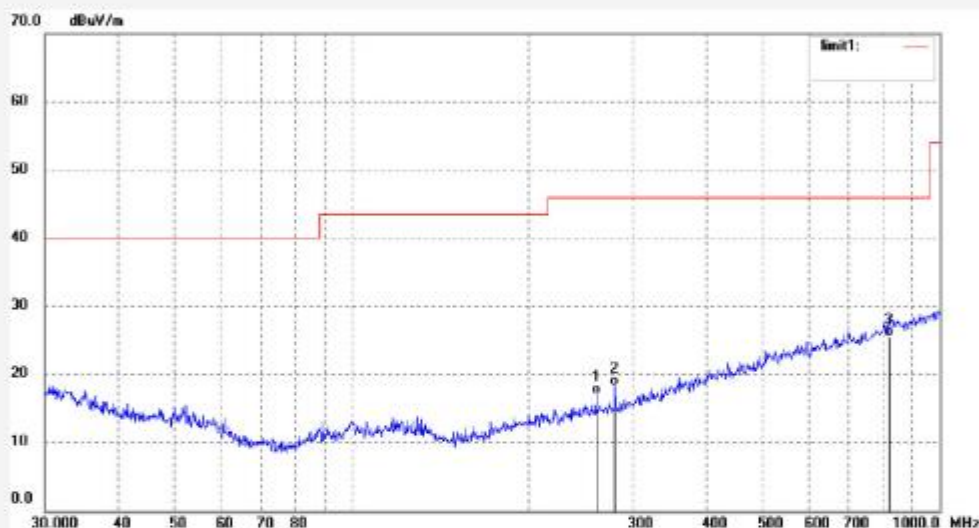
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #787
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Speaker with LED lights
Mode: microSD Card
Model: 1492301
Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical
Power Source: DC 3.7V
Date: 16/01/30/
Time:
Engineer Signature: LGWADE
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	260.1444	27.61	-10.63	16.98	46.00	-29.02	QP			
2	280.0237	28.08	-9.81	18.27	46.00	-27.73	QP			
3	818.8341	25.12	0.30	25.42	46.00	-20.58	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #804

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: microSD Card

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Vertical

Power Source: DC 3.7V

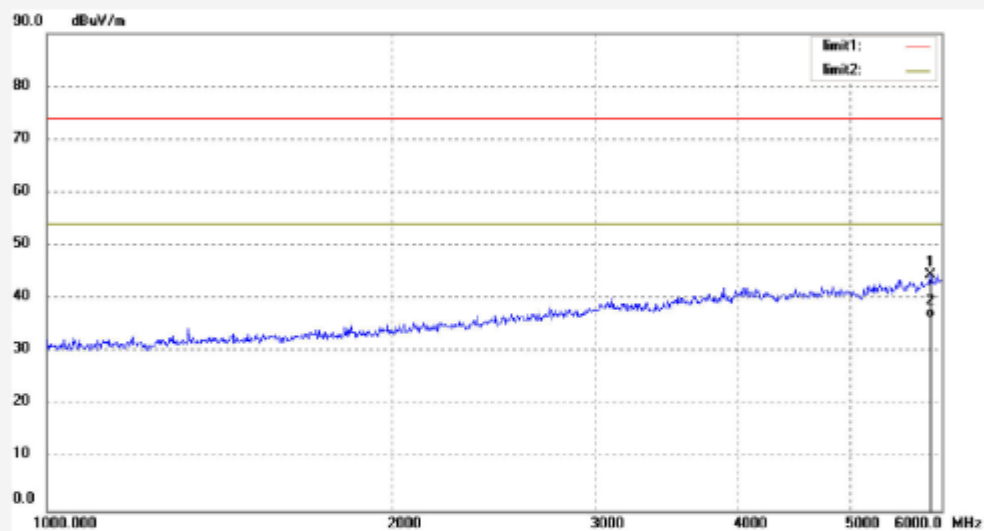
Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5861.858	42.38	1.95	44.33	74.00	-29.67	peak			
2	5861.858	34.45	1.95	36.40	54.00	-17.60	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGWADE #805

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Speaker with LED lights

Mode: microSD Card

Model: 1492301

Manufacturer: Saide Tekstil San ve Tic A.S.

Polarization: Horizontal

Power Source: DC 3.7V

Date: 16/01/30/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5861.858	42.62	1.95	44.57	74.00	-29.43	peak			
2	5861.858	34.74	1.95	36.69	54.00	-17.31	AVG			