

Prüfbericht-Nr.: <i>Test Report No.:</i>	17046279 001	Auftrags-Nr.: <i>Order No.:</i>	164028608	Seite 1 von 38 <i>Page 1 of 38</i>				
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	05.01.2015					
Auftraggeber: <i>Client:</i>	Compupal (Group) Corporation. No.1555 Jiashan Avenue, Jiashan 314113, Zhejiang, China							
Prüfgegenstand: <i>Test item:</i>	Portable Bluetooth Speaker							
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	NS-CSPBT02, NS-CSPBT03							
Auftrags-Inhalt: <i>Order content:</i>	FCC Certification and Verification							
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 CFR47 FCC Part 15: Subpart C Section 15.107 CFR47 FCC Part 15: Subpart C Section 15.109							
Wareneingangsdatum: <i>Date of receipt:</i>	05.01.2015							
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000151433-001 to 003							
Prüfzeitraum: <i>Testing period:</i>	07.01.2015 - 26.01.2015							
Ort der Prüfung: <i>Place of testing:</i>	Shenzhen Accurate Technology Co., Ltd.							
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.							
Prüfergebnis*: <i>Test result*:</i>	Pass							
geprüft von / tested by: <i>Owen Tian</i>	10.01.2015	Owen Tian / Senior Project Manager	kontrolliert von / reviewed by: <i>Winnie Hou</i>	23.01.2015	Winnie Hou / 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>	Unterschrift <i>Signature</i>			
Sonstiges / Other:								
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 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested								
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <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>								

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 2 von 38
Page 2 of 38

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT

RESULT: Passed

5.1.2 PEAK OUTPUT POWER

RESULT: Passed

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Passed

5.1.4 -6dB BANDWIDTH

RESULT: Passed

5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100kHz BANDWIDTH

RESULT: Passed

5.1.6 SPURIOUS EMISSION

RESULT: Passed

5.1.7 20dB BANDWIDTH

RESULT: Passed

5.1.8 FREQUENCY SEPARATION

RESULT: Passed

5.1.9 NUMBER OF HOPPING FREQUENCY

RESULT: Passed

5.1.10 TIME OF OCCUPANCY

RESULT: Passed

5.1.11 CONDUCTED EMISSIONS

RESULT: Passed

5.1.12 RADIATED EMISSION

RESULT: Passed

Contents

1.	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
2.	TEST SITES	4
2.1	TEST FACILITIES.....	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	6
2.4	CALIBRATION	6
2.5	MEASUREMENT UNCERTAINTY.....	6
2.6	LOCATION OF ORIGINAL DATA.....	6
2.7	STATUS OF FACILITY USED FOR TESTING.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
3.3	INDEPENDENT OPERATION MODES	9
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS	9
4.	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	10
4.5	TEST SETUP DIAGRAM	11
5.	TEST RESULTS	13
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	13
5.1.1	Antenna Requirement	13
5.1.2	Peak Output Power.....	14
5.1.3	Conducted Power Spectral Density	15
5.1.4	-6dB Bandwidth.....	16
5.1.5	Conducted spurious emissions measured in 100kHz Bandwidth.....	17
5.1.6	Spurious Emission	26
5.1.7	20dB Bandwidth	27
5.1.8	Frequency Separation.....	28
5.1.9	Number of hopping frequency.....	29
5.1.10	Time of Occupancy.....	30
5.1.11	Conducted emissions	32
5.1.12	Radiated Emission.....	33
6.	PHOTOGRAPHS OF THE TEST SET-UP	34
7.	LIST OF TABLES	38
8.	LIST OF PHOTOGRAPHS	38

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 4 von 38
Page 4 of 38

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix 1: Test Result

2. Test Sites

2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

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

FCC Registration No.: 752051

The tests at the test site 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

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Spurious emission and Radiated emission				
Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	2016-01-09
Test Receiver	Rohde&Schwarz	ESCS30	100307	2016-01-09
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2016-01-09
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2016-01-09
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2016-01-09
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	2016-01-09
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	2016-01-09
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	2016-01-09
Radio Test Suite				
Spectrum Analyzer	Rohde & Schwarz	FSV40	101495	2016-01-09
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2016-01-09
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2016-01-09
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	2016-01-09
50 ⁻ Coaxial Switch	Anritsu Corp	MP59B	6200283933	2016-01-09

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 6 von 38
Page 6 of 38

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 basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are $\pm 3\text{dB}$.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 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 Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, 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 EUTs are Bluetooth Portable Speakers with Bluetooth 4.0 dual mode. Both models are identical in function, Bluetooth module and components employed except different PCB layout of main board and enclosure. For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Portable Bluetooth Speaker
Type Designation:	NS-CSPBT02, NS-CSPBT03
FCC ID	Z5YNS-CSPBT02

Table 3: Technical Specification of Bluetooth (BDR & EDR)

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.0 Dual mode
Channel separation	1MHz
Extreme Temperature Range	-10°C to +55°C
Operation Voltage	DC3.7V via lithium Battery
Modulation	GFSK, 8DPSK, π/4DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	-0.61dBi
RF Output Power	0.005W (6.72dBm)

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 8 von 38
Page 8 of 38

Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode)

RF Channel	Frequency (MHz)						
0	2402.00	20	2422.00	40	2442.00	60	2462.00
1	2403.00	21	2423.00	41	2443.00	61	2463.00
2	2404.00	22	2424.00	42	2444.00	62	2464.00
3	2405.00	23	2425.00	43	2445.00	63	2465.00
4	2406.00	24	2426.00	44	2446.00	64	2466.00
5	2407.00	25	2427.00	45	2447.00	65	2467.00
6	2408.00	26	2428.00	46	2448.00	66	2468.00
7	2409.00	27	2429.00	47	2449.00	67	2469.00
8	2410.00	28	2430.00	48	2450.00	68	2470.00
9	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 5: Technical Specification of Bluetooth (low energy)

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.0 Dual mode
Channel separation	2MHz
Extreme Temperature Range	-10°C to +55°C
Operation Voltage	DC3.7V via lithium Battery
Modulation	GFSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	-0.61dBi
RF Output Power	0.006W (7.56dBm)

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 9 von 38
Page 9 of 38

Table 6: RF channel and frequency of Bluetooth low energy

RF Channel	Frequency (MHz)						
0	2402.00	10	2422.00	20	2442.00	30	2462.00
1	2404.00	11	2424.00	21	2444.00	31	2464.00
2	2406.00	12	2426.00	22	2446.00	32	2466.00
3	2408.00	13	2428.00	23	2448.00	33	2468.00
4	2410.00	14	2430.00	24	2450.00	34	2470.00
5	2412.00	15	2432.00	25	2452.00	35	2472.00
6	2414.00	16	2434.00	26	2454.00	36	2474.00
7	2416.00	17	2436.00	27	2456.00	37	2476.00
8	2418.00	18	2438.00	28	2458.00	38	2478.00
9	2420.00	19	2440.00	29	2460.00	39	2480.00

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Traditional Bluetooth
 - 1. Transmitting on low channel
 - 2. Transmitting on middle channel
 - 3. Transmitting on high channel
- B. On, Bluetooth low energy
 - 1. Transmitting on low channel
 - 2. Transmitting on middle channel
 - 3. Transmitting on high channel
- C. Charge
- D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description

- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power 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 C63.4: 2003.

Due to models' differences indicated in clause 3.1, RF test was applied on model NS-CSPBT03 only, conducted emission and radiated emission were applied on both models.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories:

Description	Manufacturer	Type	S/N
Personal computer	HP	Compaq dx2040	CNG0231YVS
LCD Monitor	DELL	E178FPC	N/A
Mouse	DELL	M071KC	410042355
Keyboard	DELL	SK-8110	LR86682
Printer	HP	1015	CNFG030424

4.4 Countermeasures to achieve EMC Compliance

The test sample, which has been tested, contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

Prüfbericht - Nr.: 17046279 001
Test Report No.Seite 11 von 38
Page 11 of 38

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

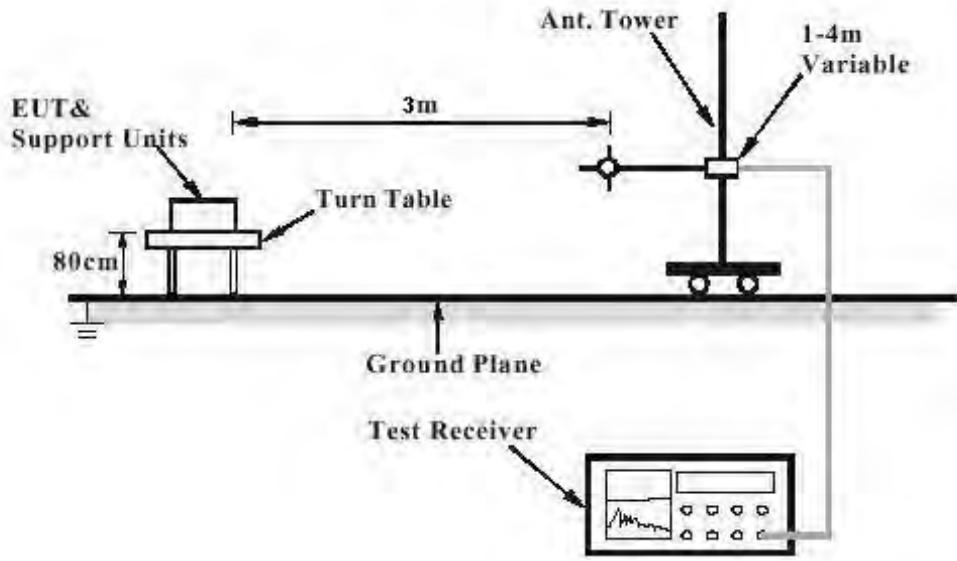
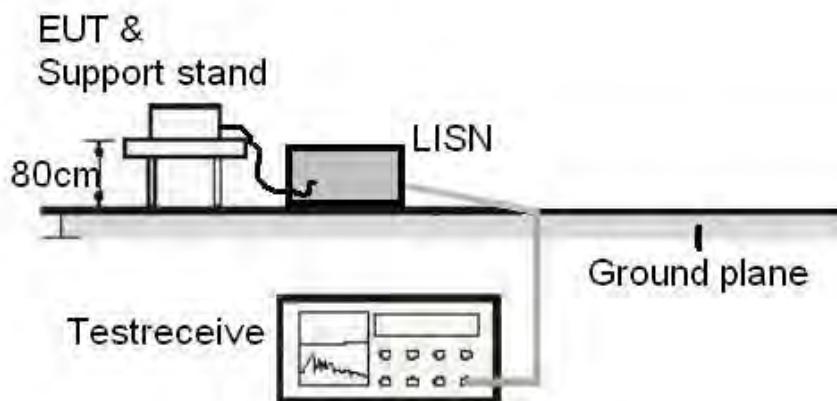


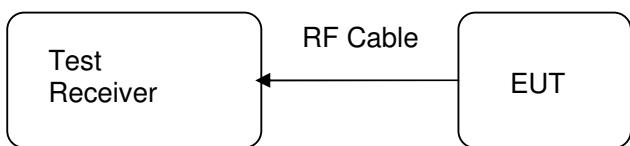
Diagram of Measurement Equipment Configuration for Mains Conduction Measurement



Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 12 von 38
Page 12 of 38

Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 13 von 38
Page 13 of 38

5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2015-01-07
Test standard	:	FCC Part 15.247(b)(4) and Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is -0.61dBi, 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.

Refer to EUT photo for details.

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 14 von 38
Page 14 of 38

5.1.2 Peak Output Power

RESULT:

Passed

Test date	:	2015-01-07
Test standard	:	FCC Part 15.247(b)(3)
Basic standard	:	ANSI C63.4: 2003
Limit	:	1 Watt
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 7: Test result of Peak Output Power, BR

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	
Low Channel	2402	4.42	0.003	1
Middle Channel	2440	6.67	0.005	1
High Channel	2480	6.72	0.005	1

Table 8: Test result of Peak Output Power, EDR

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	
Low Channel	2402	3.03	0.002	1
Middle Channel	2440	5.45	0.004	1
High Channel	2480	5.54	0.004	1

Table 9: Test result of Peak Output Power, low energy

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	
Low Channel	2402	6.12	0.004	1
Middle Channel	2440	7.42	0.006	1
High Channel	2480	7.56	0.006	1

Prüfbericht - Nr.: 17046279 001
Test Report No.Seite 15 von 38
Page 15 of 38

5.1.3 Conducted Power Spectral Density

RESULT:**Passed**

Test date : 2015-01-07
Test standard : FCC Part 15.247(e)
Basic standard : ANSI C63.4: 2003
Limit : 8dBm/3kHz
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 10: Test result of Power Spectral Density, low energy

Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Low Channel	2402	-8.64	8
Middle Channel	2440	-7.14	8
High Channel	2480	-8.10	8

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 16 von 38
Page 16 of 38

5.1.4 -6dB Bandwidth

RESULT:**Passed**

Date of testing : 2015-01-07
Test standard : FCC Part 15.247(a)(2)
Basic standard : ANSI C63.4: 2003
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 11: Test result of 6dB Bandwidth, low energy

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	648	500	Pass
Mid Channel	2440	642	500	Pass
High Channel	2480	642	500	Pass

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 17 von 38
Page 17 of 38

5.1.5 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:

Passed

Date of testing	:	2015-01-07
Test standard	:	FCC part 15.247(d)
Basic standard	:	ANSI C63.4: 2003
Limit	:	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	:	Shield room

Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

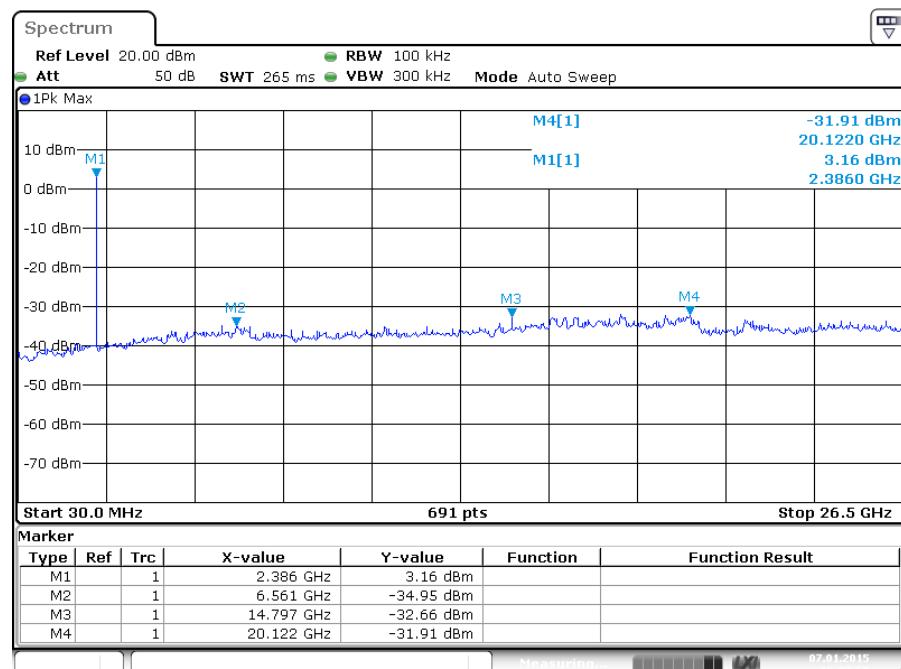
Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 18 von 38
Page 18 of 38

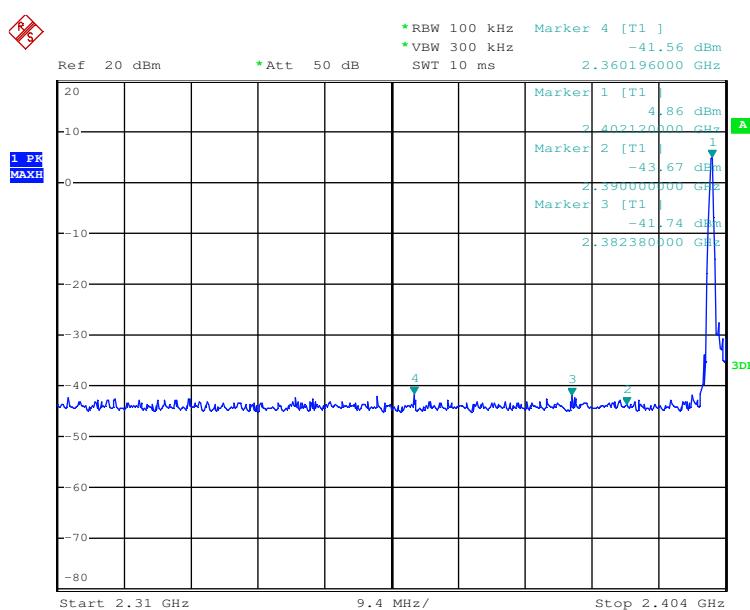
Test Plot of 100kHz Bandwidth of Frequency Band Edge

BDR mode

Low Channel



Low Channel, Band Edge



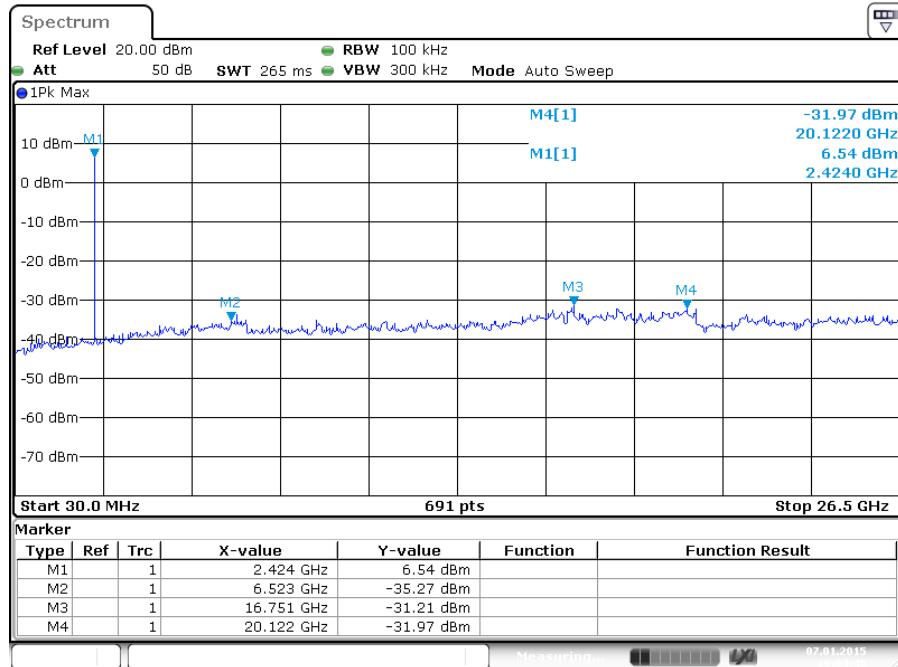
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Prüfbericht - Nr.: 17046279 001

Test Report No.

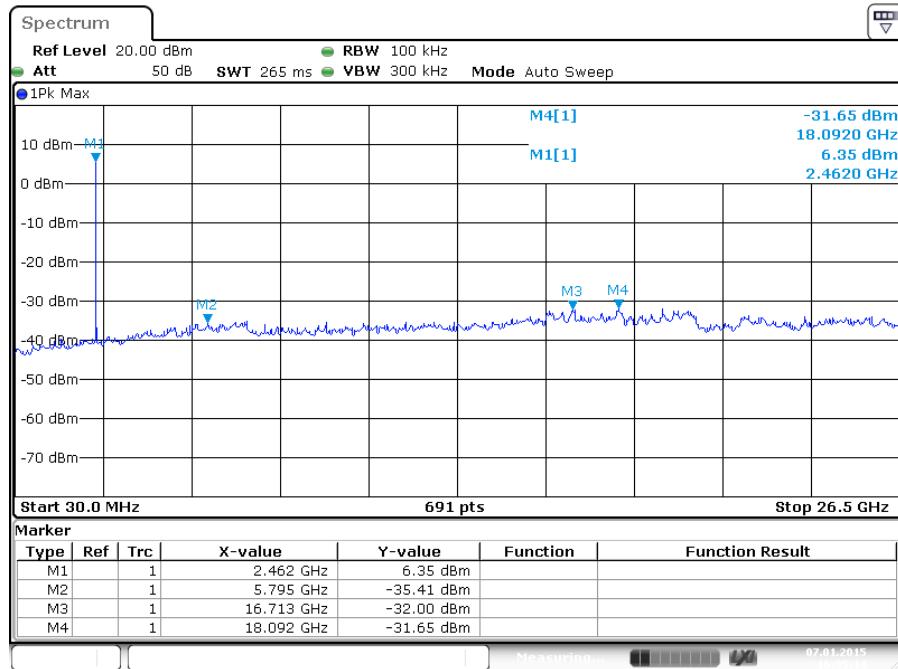
Seite 19 von 38
Page 19 of 38

Middle Channel



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High Channel



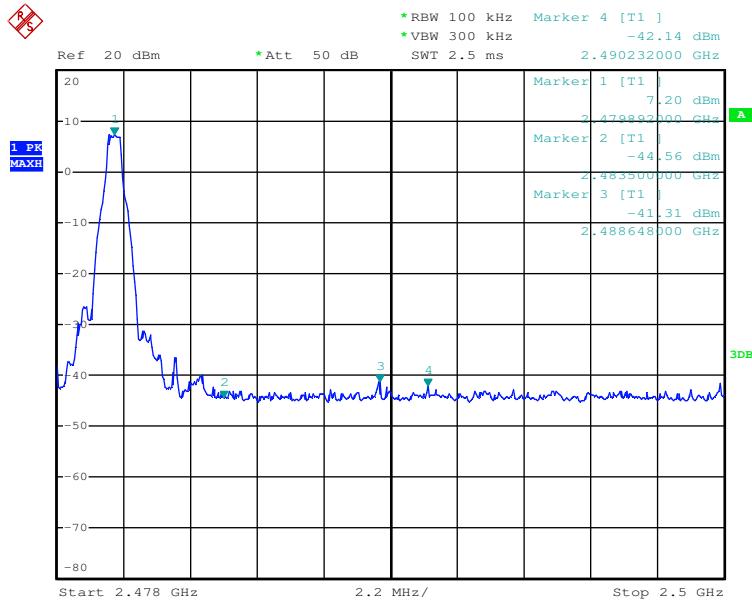
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Prüfbericht - Nr.: 17046279 001

Test Report No.

Seite 20 von 38
Page 20 of 38

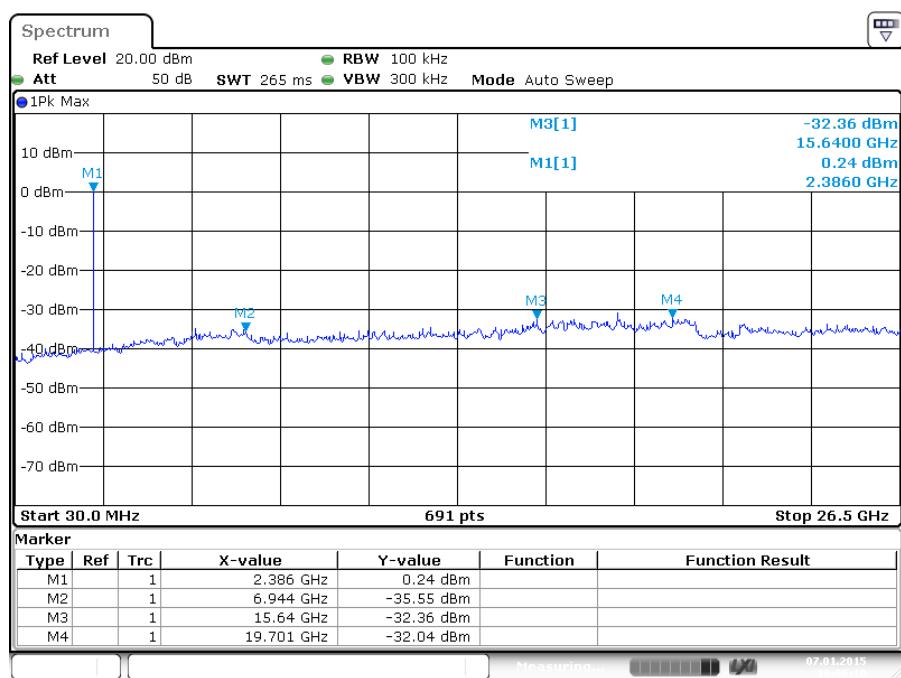
High Channel, Band Edge



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EDR mode

Low Channel

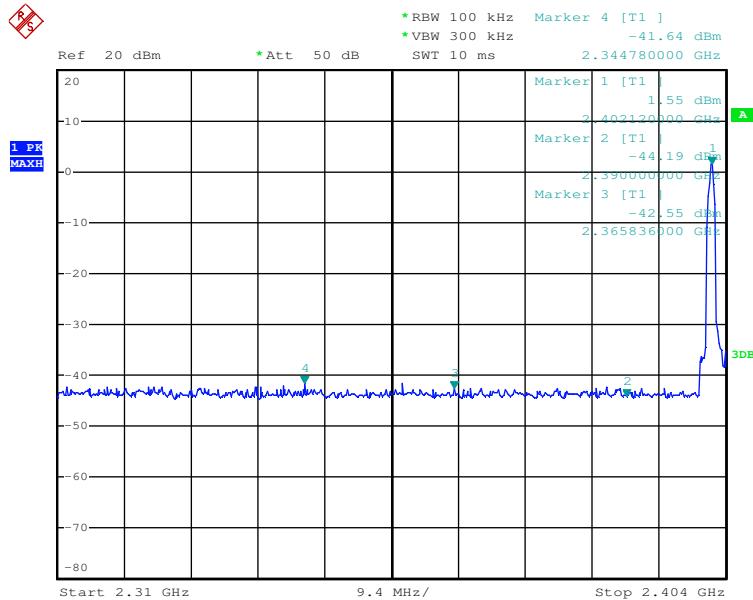


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Prüfbericht - Nr.: 17046279 001
Test Report No.

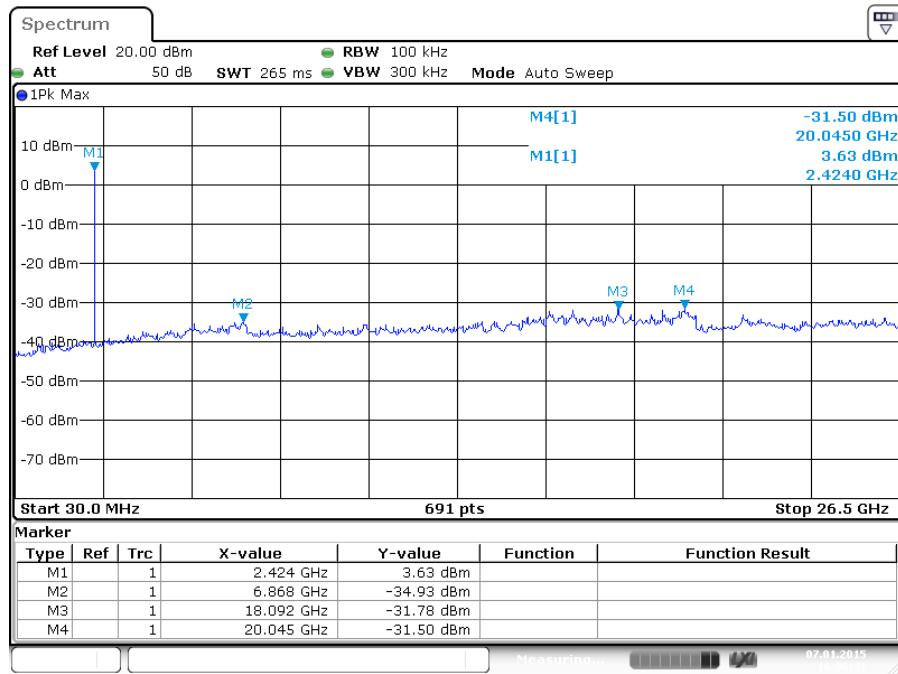
Seite 21 von 38
Page 21 of 38

Low Channel, Band Edge



Date: 7.JAN.2015 14:15:42

Middle Channel



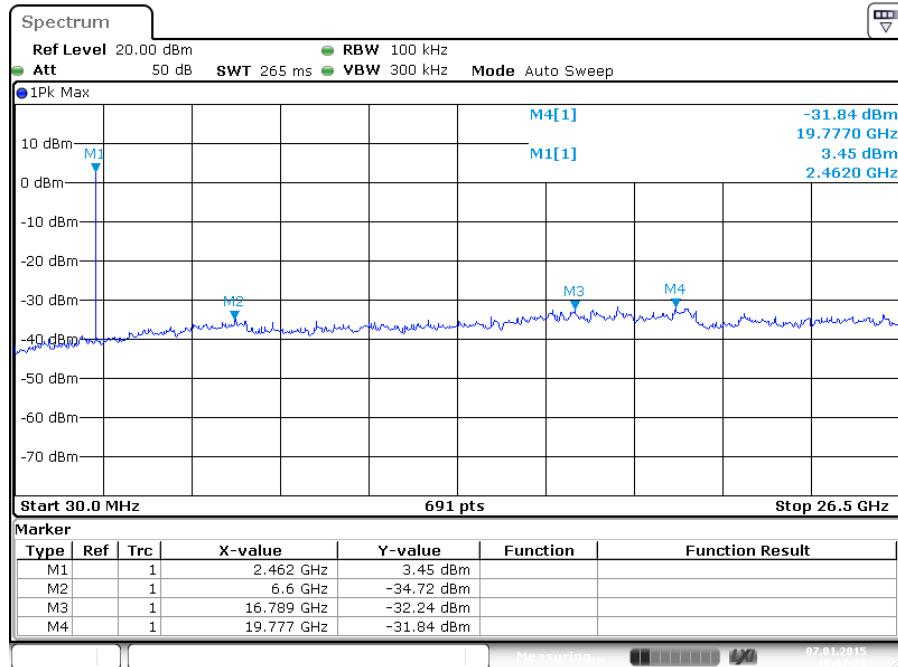
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Prüfbericht - Nr.: 17046279 001

Test Report No.

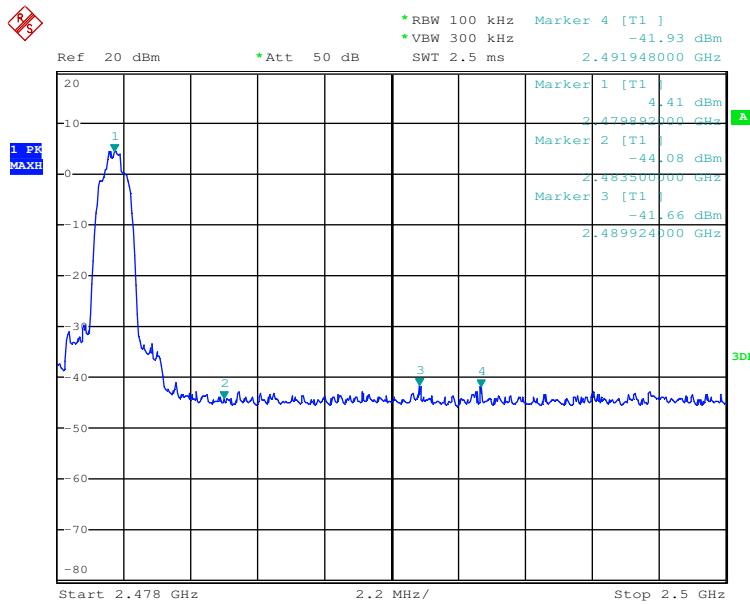
Seite 22 von 38
Page 22 of 38

High Channel



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High Channel, Band Edge



Date: 7.JAN.2015 14:13:40

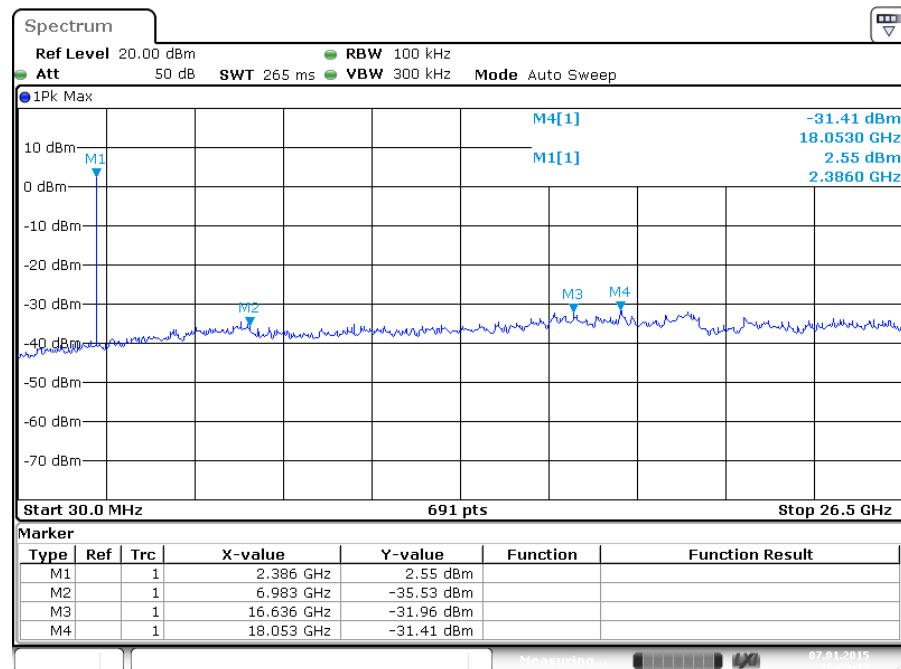
Prüfbericht - Nr.: 17046279 001

Test Report No.

Seite 23 von 38
Page 23 of 38

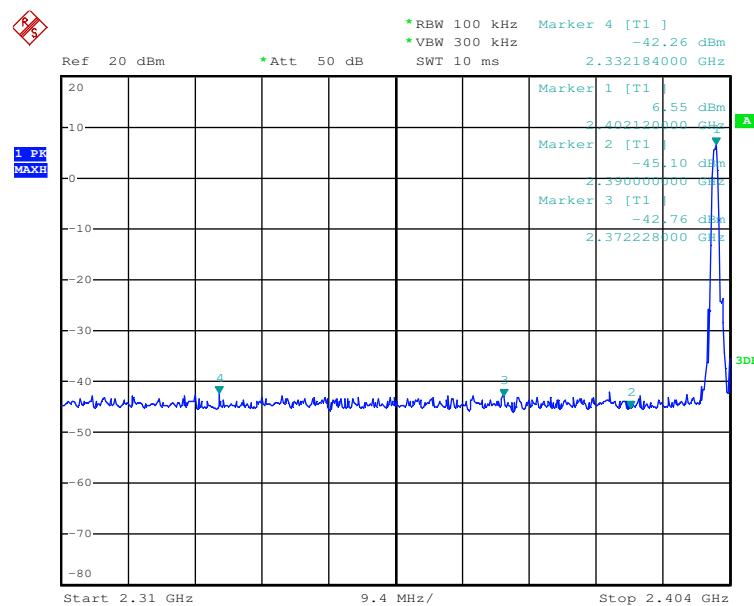
Low energy

Low Channel



Date: 7.JAN.2015 16:08:12

Low Channel, Band Edge



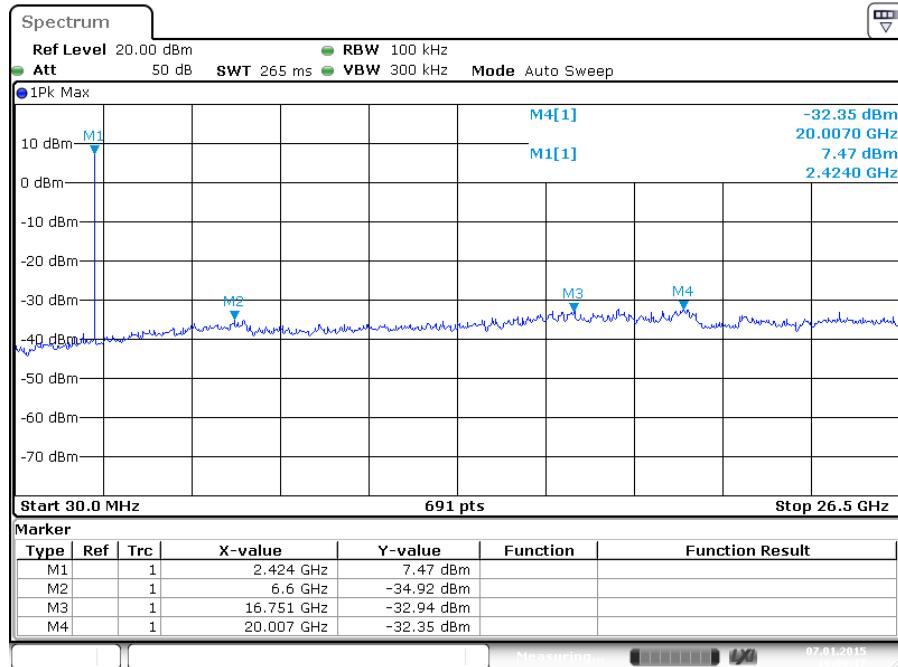
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Prüfbericht - Nr.: 17046279 001

Test Report No.

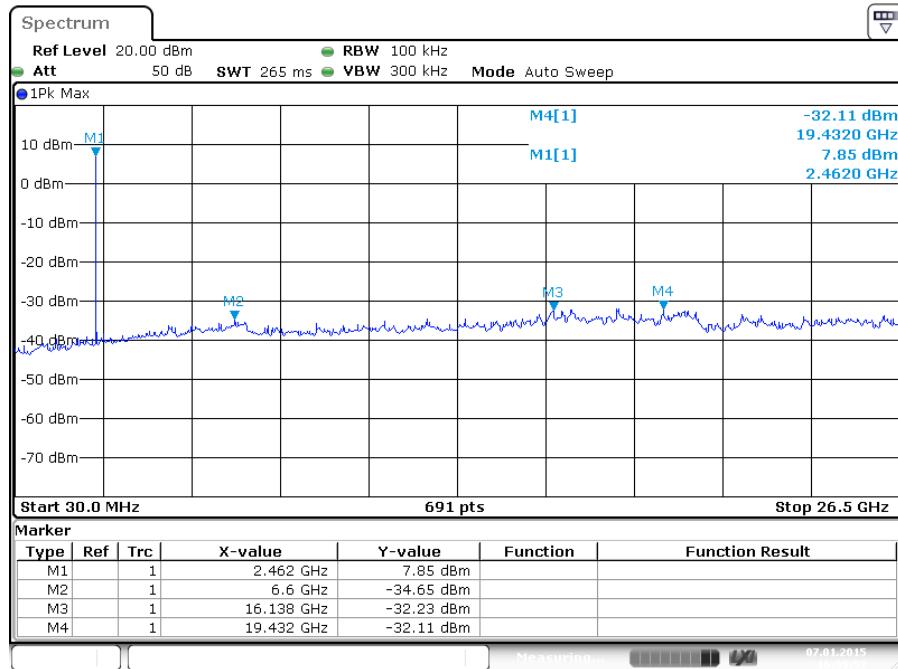
Seite 24 von 38
Page 24 of 38

Middle Channel



Date: 7.JAN.2015 16:09:17

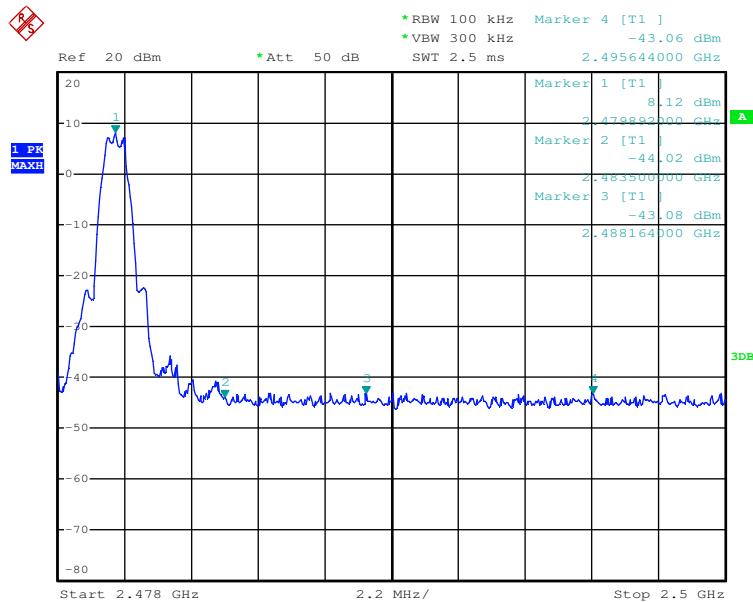
High Channel



Date: 7.JAN.2015 16:09:52

Prüfbericht - Nr.: **17046279 001**
Test Report No.Seite 25 von 38
Page 25 of 38

High Channel, Band Edge



Date: 7.JAN.2015 15:28:06

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 26 von 38
Page 26 of 38

5.1.6 Spurious Emission

RESULT:

Passed

Date of testing	:	2015-01-23 to 2015-01-26
Test standard	:	FCC part 15.247(d) FCC Part 15.205
Basic standard	:	ANSI C63.4: 2003
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
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 setup photos.

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

For details refer to Appendix 1.

Prüfbericht - Nr.: 17046279 001
Test Report No.Seite 27 von 38
Page 27 of 38

5.1.7 20dB Bandwidth

RESULT:**Passed**

Date of testing : 2015-01-07
Test standard : FCC Part 15.247(a)(1)
Basic standard : ANSI C63.4: 2003
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 12: Test result of 20dB Bandwidth, BDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	930	/	Pass
Mid Channel	2441	922	/	Pass
High Channel	2480	930	/	Pass

Table 13: Test result of 20dB Bandwidth, EDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1132	/	Pass
Mid Channel	2441	1212	/	Pass
High Channel	2480	1132	/	Pass

5.1.8 Frequency Separation

RESULT:**Passed**

Date of testing	:	2015-01-07
Test standard	:	FCC part 15.247(a)(1)
Basic standard	:	ANSI C63.4: 2003
Limit	:	≥ 25kHz or 2/3 of 20dB bandwidth, whichever is greater

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 14: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	≥ 25kHz or 2/3 of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	≥ 25kHz or 2/3 of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	≥ 25kHz or 2/3 of 20dB bandwidth	Pass
Adjacency Channel	2479			

Prüfbericht - Nr.: 17046279 001
Test Report No.Seite 29 von 38
Page 29 of 38

5.1.9 Number of hopping frequency

RESULT:**Passed**

Date of testing	:	2015-01-07
Test standard	:	FCC part 15.247(a)(1)(iii)
Basic standard	:	ANSI C63.4: 2003
Limits	:	≥ 15 non-overlapping channels
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 15: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2400 to 2483.5 MHz	79	≥15	Pass

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 30 von 38
Page 30 of 38

5.1.10 Time of Occupancy

RESULT:

Passed

Date of testing	:	2015-01-07
Test standard	:	FCC part 15.247(a)(1)(iii)
Basic standard	:	ANSI C63.4: 2003
Limits	:	0.4s
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 16: Test result of Time of Occupancy, BDR mode

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.44	0.141	0.4	Pass
	DH3	1.73	0.277	0.4	Pass
	DH5	3.0	0.320	0.4	Pass
Mid Channel	DH1	0.45	0.144	0.4	Pass
	DH3	1.71	0.274	0.4	Pass
	DH5	3.0	0.320	0.4	Pass
High Channel	DH1	0.45	0.144	0.4	Pass
	DH3	1.71	0.274	0.4	Pass
	DH5	3.0	0.320	0.4	Pass

Table 17: Test result of Time of Occupancy, EDR mode

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.45	0.144	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	3.0	0.320	0.4	Pass
Mid Channel	DH1	0.45	0.144	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	2.98	0.318	0.4	Pass
High Channel	DH1	0.45	0.144	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	2.98	0.318	0.4	Pass

Note:

Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 32 von 38
Page 32 of 38

5.1.11 Conducted emissions

RESULT:

Passed

Date of testing	:	2015-01-26
Test standard	:	FCC Part 15.207(a)
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz via AC input of PC
Operation Mode	:	C
Earthing	:	Not connected
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 33 von 38
Page 33 of 38

5.1.12 Radiated Emission

RESULT:**Passed**

Date of testing	:	2015-01-23
Test standard	:	FCC Part 15 Per Section 15.209(a)
Frequency range	:	30 - 6000MHz
Classification	:	Class B
Test procedure	:	ANSI C63.4: 2003
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 120V, 60Hz via AC input of PC
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

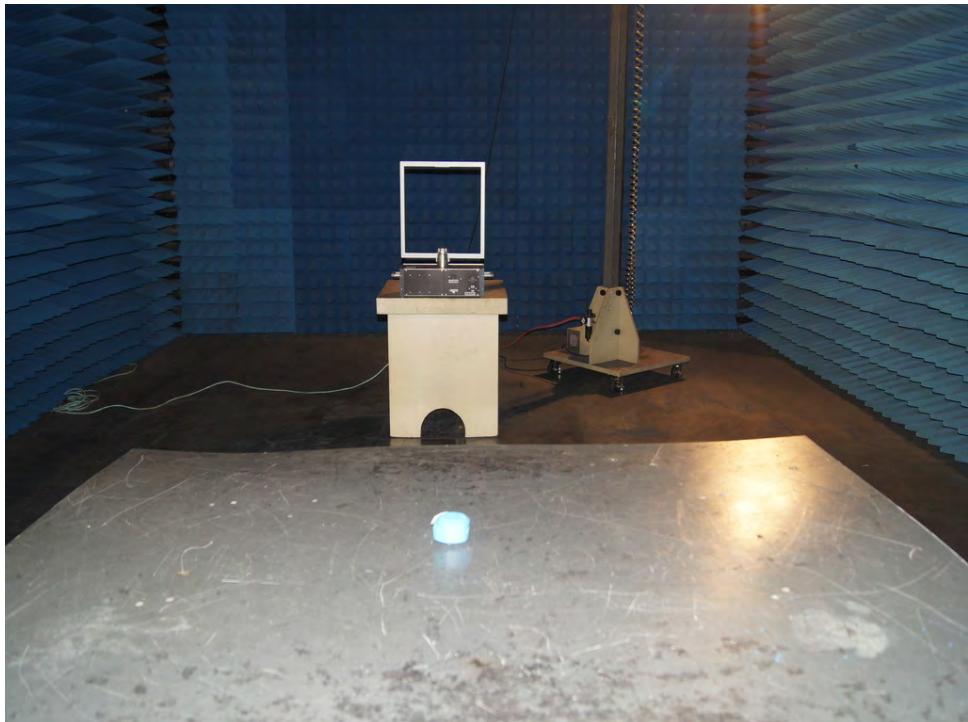
Test data refer to Appendix 1.

Prüfbericht - Nr.: 17046279 001
Test Report No.

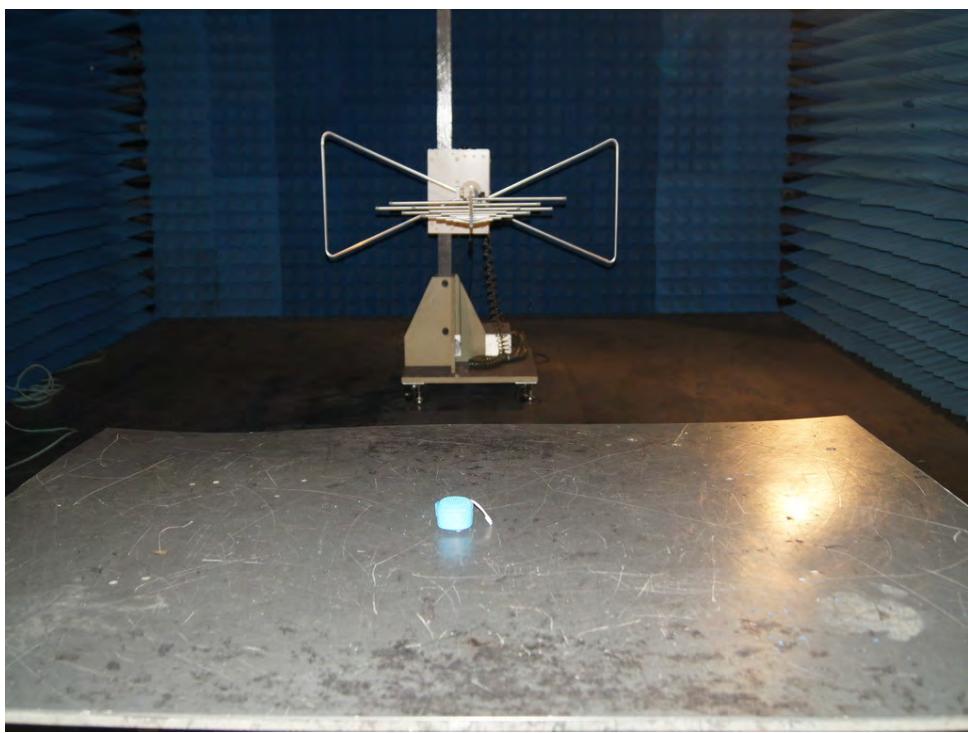
Seite 34 von 38
Page 34 of 38

6. Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)



Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)



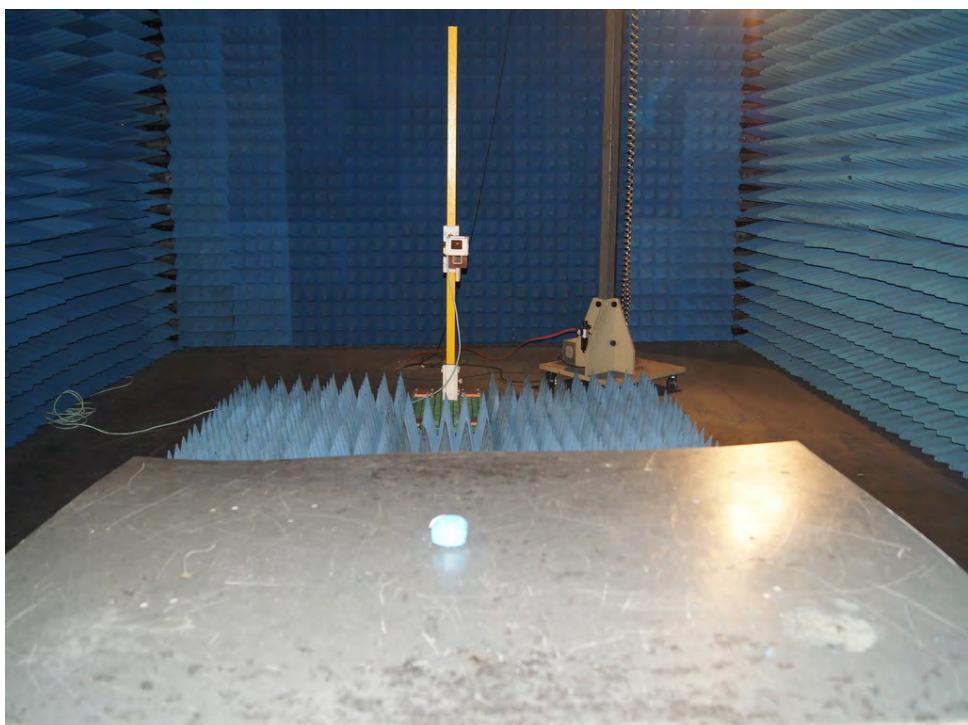
Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 35 von 38
Page 35 of 38

Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)



Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)



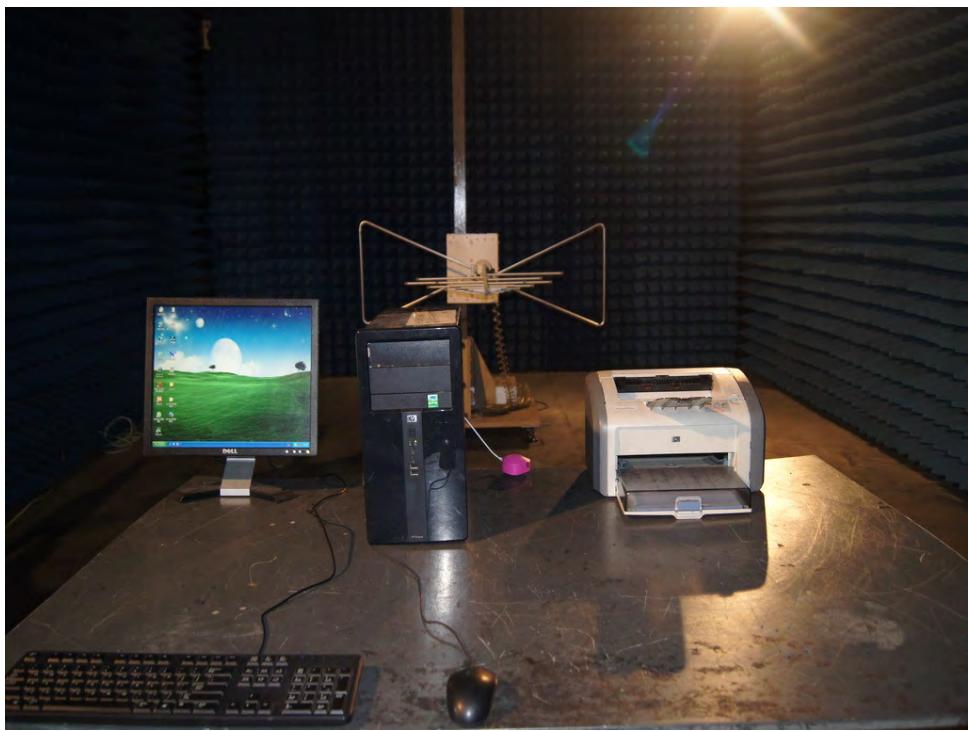
Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 36 von 38
Page 36 of 38

Photograph 5: Set-up for Conducted Emissions



Photograph 6: Set-up for Radiated Emissions, below 1GHz



Prüfbericht - Nr.: 17046279 001
Test Report No.

Seite 37 von 38
Page 37 of 38

Photograph 7: Set-up for Radiated Emissions, above 1GHz



7. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Rating of EUT	7
Table 3: Technical Specification of Bluetooth (BDR & EDR)	7
Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode).....	8
Table 5: Technical Specification of Bluetooth (low energy)	8
Table 6: RF channel and frequency of Bluetooth low energy	9
Table 7: Test result of Peak Output Power, BR	14
Table 8: Test result of Peak Output Power, EDR.....	14
Table 9: Test result of Peak Output Power, low energy	14
Table 10: Test result of Power Spectral Density, low energy.....	15
Table 11: Test result of 6dB Bandwidth, low energy	16
Table 12: Test result of 20dB Bandwidth, BDR mode.....	27
Table 13: Test result of 20dB Bandwidth, EDR mode.....	27
Table 14: Test result of Frequency Separation	28
Table 15: Test result of Number of hopping frequency	29
Table 16: Test result of Time of Occupancy, BDR mode.....	30
Table 17: Test result of Time of Occupancy, EDR mode.....	31

8. List of Photographs

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)	34
Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)	34
Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)	35
Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)	35
Photograph 5: Set-up for Conducted Emissions	36
Photograph 6: Set-up for Radiated Emissions, below 1GHz	36
Photograph 7: Set-up for Radiated Emissions, above 1GHz	37

List of Figures

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz)	3
Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)	3
Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)	4
Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)	5
Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz – 18GHz)	6
Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)	7
Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz – 25GHz)	8
Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)	9
Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz)	10
Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)	10
Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)	11
Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)	12
Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)	13
Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)	14
Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)	15
Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)	16
Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)	17
Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)	17
Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)	18
Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)	19
Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz – 18GHz)	20
Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)	21
Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz – 25GHz)	22
Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)	23
Figure 1: Test figure of spurious emissions, mode B.1, Horizontal polarity (9kHz – 30MHz)	24
Figure 2: Test figure of spurious emissions, mode B.1, Vertical polarity (9kHz – 30MHz)	24
Figure 3: Test figure of spurious emissions, mode B.1, Horizontal polarity (30MHz – 1GHz)	25
Figure 4: Test figure of spurious emissions, mode B.1, Vertical polarity (30MHz – 1GHz)	26
Figure 5: Test figure of spurious emissions, mode B.1, Horizontal polarity (1GHz – 18GHz)	27
Figure 6: Test figure of spurious emissions, mode B.1, Vertical polarity (1GHz – 18GHz)	28
Figure 7: Test figure of spurious emissions, mode B.1, Horizontal polarity (18GHz – 25GHz)	29
Figure 8: Test figure of spurious emissions, mode B.1, Vertical polarity (18GHz – 25GHz)	30
Figure 9: Test figure of spurious emissions, mode B.2, Horizontal polarity (9kHz – 30MHz)	31
Figure 10: Test figure of spurious emissions, mode B.2, Vertical polarity (9kHz – 30MHz)	31
Figure 11: Test figure of spurious emissions, mode B.2, Horizontal polarity (30MHz – 1GHz)	32
Figure 12: Test figure of spurious emissions, mode B.2, Vertical polarity (30MHz – 1GHz)	33
Figure 13: Test figure of spurious emissions, mode B.2, Horizontal polarity (1GHz – 18GHz)	34
Figure 14: Test figure of spurious emissions, mode B.2, Vertical polarity (1GHz – 18GHz)	35
Figure 15: Test figure of spurious emissions, mode B.2, Horizontal polarity (18GHz – 25GHz)	36
Figure 16: Test figure of spurious emissions, mode B.2, Vertical polarity (18GHz – 25GHz)	37
Figure 17: Test figure of spurious emissions, mode B.3, Horizontal polarity (9kHz – 30MHz)	38
Figure 18: Test figure of spurious emissions, mode B.3, Vertical polarity (9kHz – 30MHz)	38
Figure 19: Test figure of spurious emissions, mode B.3, Horizontal polarity (30MHz – 1GHz)	39
Figure 20: Test figure of spurious emissions, mode B.3, Vertical polarity (30MHz – 1GHz)	40
Figure 21: Test figure of spurious emissions, mode B.3, Horizontal polarity (1GHz – 18GHz)	41
Figure 22: Test figure of spurious emissions, mode B.3, Vertical polarity (1GHz – 18GHz)	42
Figure 23: Test figure of spurious emissions, mode B.3, Horizontal polarity (18GHz – 25GHz)	43
Figure 24: Test figure of spurious emissions, mode B.3, Vertical polarity (18GHz – 25GHz)	44
Figure 65: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal	45
Figure 66: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical.....	46
Figure 67: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal	47
Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical.....	48

Figure 25: Test figure of Radiated emissions in restricted bands, Mode B.1, Horizontal	49
Figure 26: Test figure of Radiated emissions in restricted bands, Mode B.1, Vertical.....	50
Figure 27: Test figure of Radiated emissions in restricted bands, Mode B.3, Horizontal	51
Figure 28: Test figure of Radiated emissions in restricted bands, Mode B.3, Vertical.....	52
Figure 29: Test figure of Conducted emissions, model NS-CSPBT02, Mode C, line live.....	53
Figure 30: Test figure of Conducted emissions, model NS-CSPBT02, Mode C, line neutral	54
Figure 29: Test figure of Conducted emissions, model NS-CSPBT03, Mode C, line live	55
Figure 30: Test figure of Conducted emissions, model NS-CSPBT03, Mode C, line neutral	56
Figure 31: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Below 1GHz, Horizontal.....	57
Figure 32: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Below 1GHz, Vertical.....	58
Figure 33: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Above 1GHz, Horizontal.....	59
Figure 34: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Above 1GHz, Vertical.....	60
Figure 31: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Below 1GHz, Horizontal.....	61
Figure 32: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Below 1GHz, Vertical.....	62
Figure 33: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Above 1GHz, Horizontal.....	63
Figure 34: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Above 1GHz, Vertical.....	64

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSFBT03
Manufacturer: Compupal
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2015-1-26 /

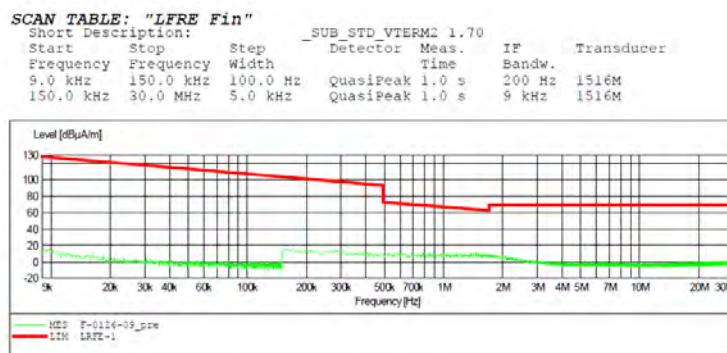


Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSFBT03
Manufacturer: Compupal
Operating Condition: TX 2402MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2015-1-26 /

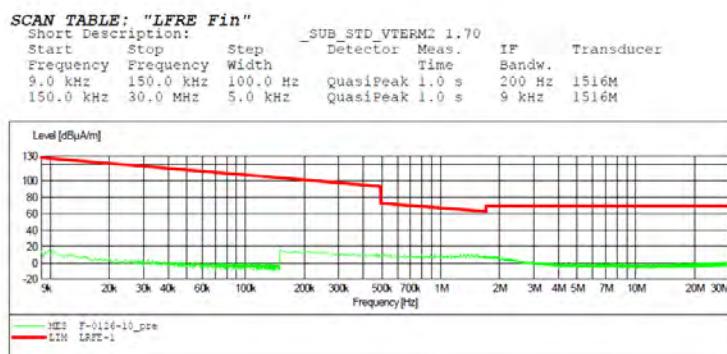


Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)

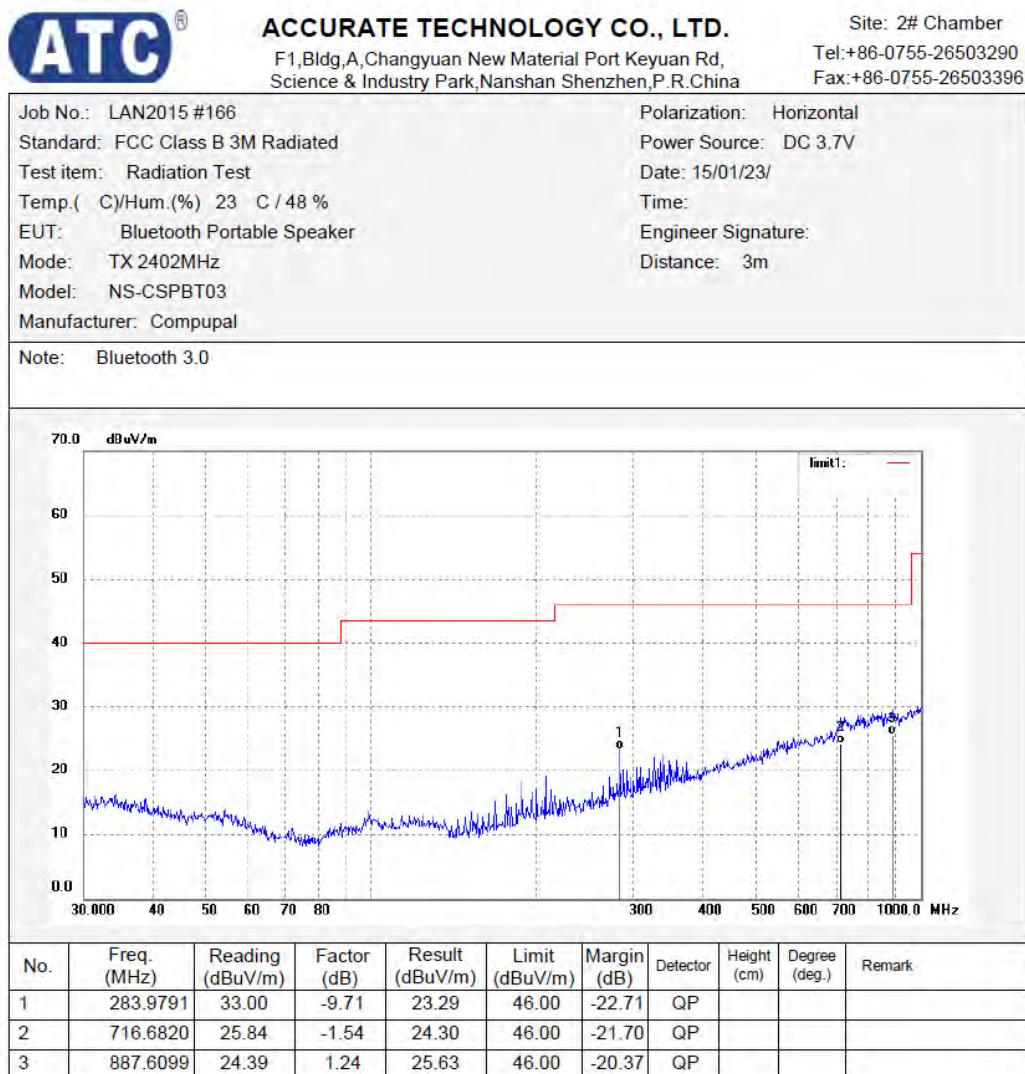


Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)

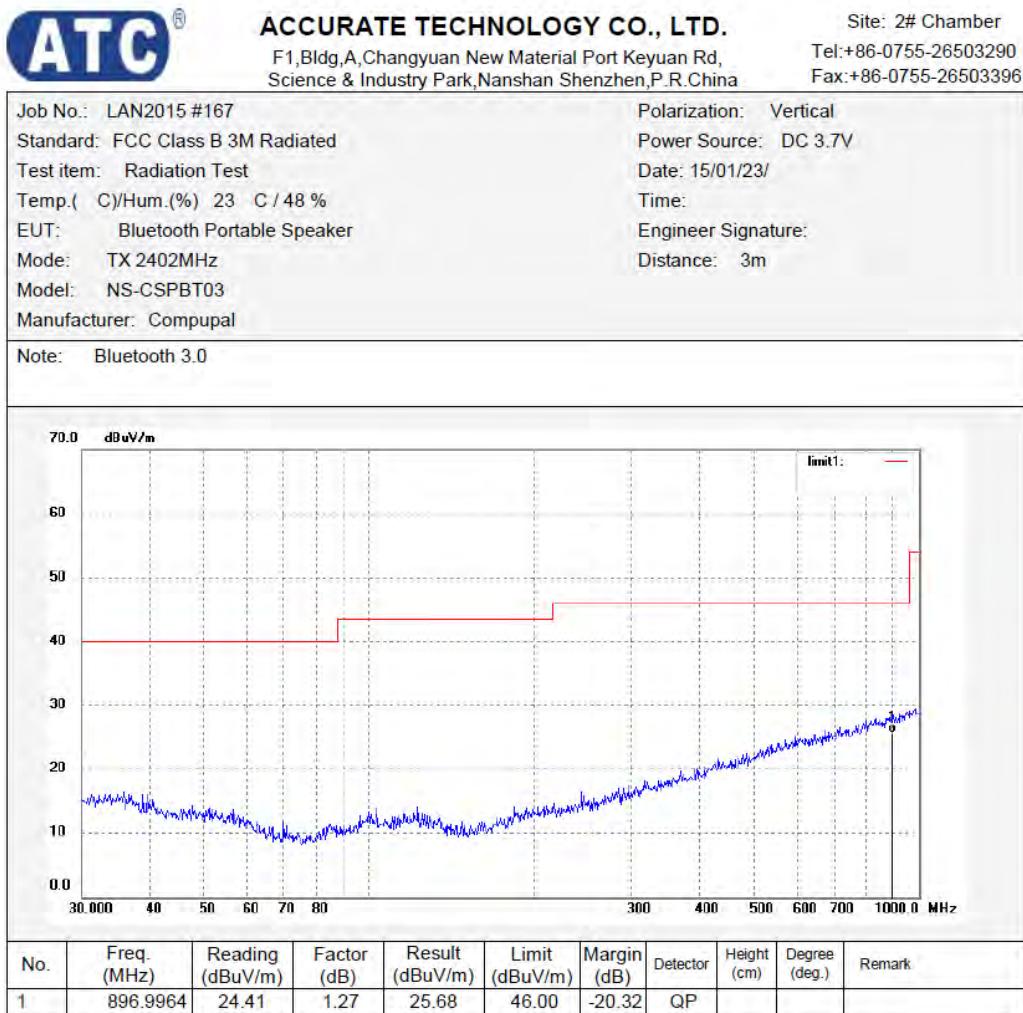


Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz)

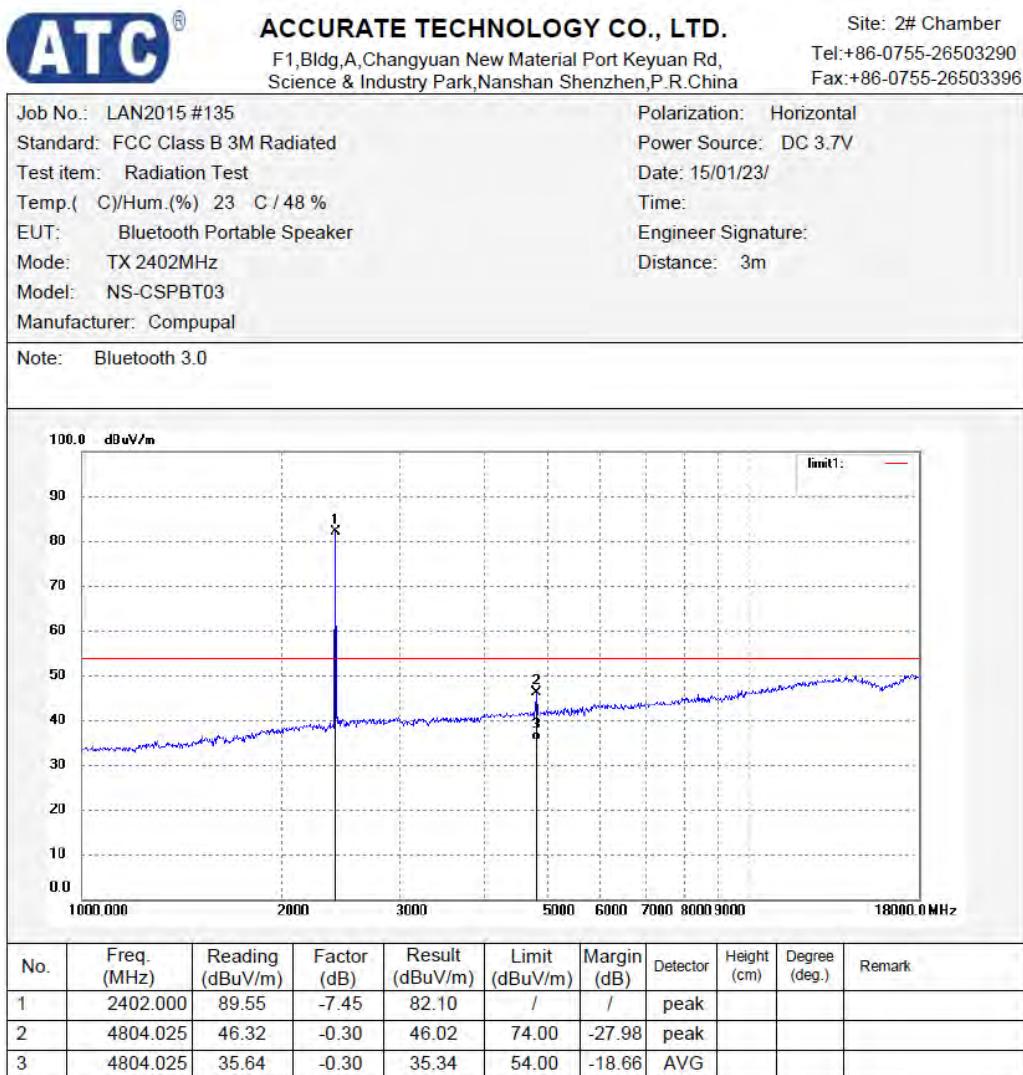


Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)



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

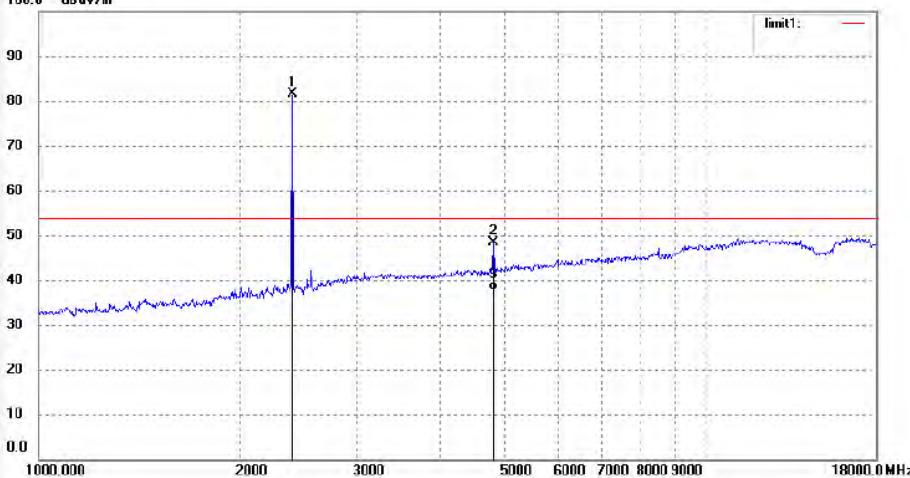
Job No.:	LAN2015 #134	Polarization:	Vertical							
Standard:	FCC Class B 3M Radiated	Power Source:	DC 3.7V							
Test item:	Radiation Test	Date:	15/01/23/							
Temp.(C)/Hum.(%)	23 C / 48 %	Time:								
EUT:	Bluetooth Portable Speaker	Engineer Signature:								
Mode:	TX 2402MHz	Distance:	3m							
Model:	NS-CSPBT03									
Manufacturer:	Compupal									
Note:	Bluetooth 3.0									
										
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	88.99	-7.45	81.54	/	/	peak			
2	4804.031	48.68	-0.30	48.38	74.00	-25.62	peak			
3	4804.031	37.95	-0.30	37.65	54.00	-16.35	AVG			

Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz)

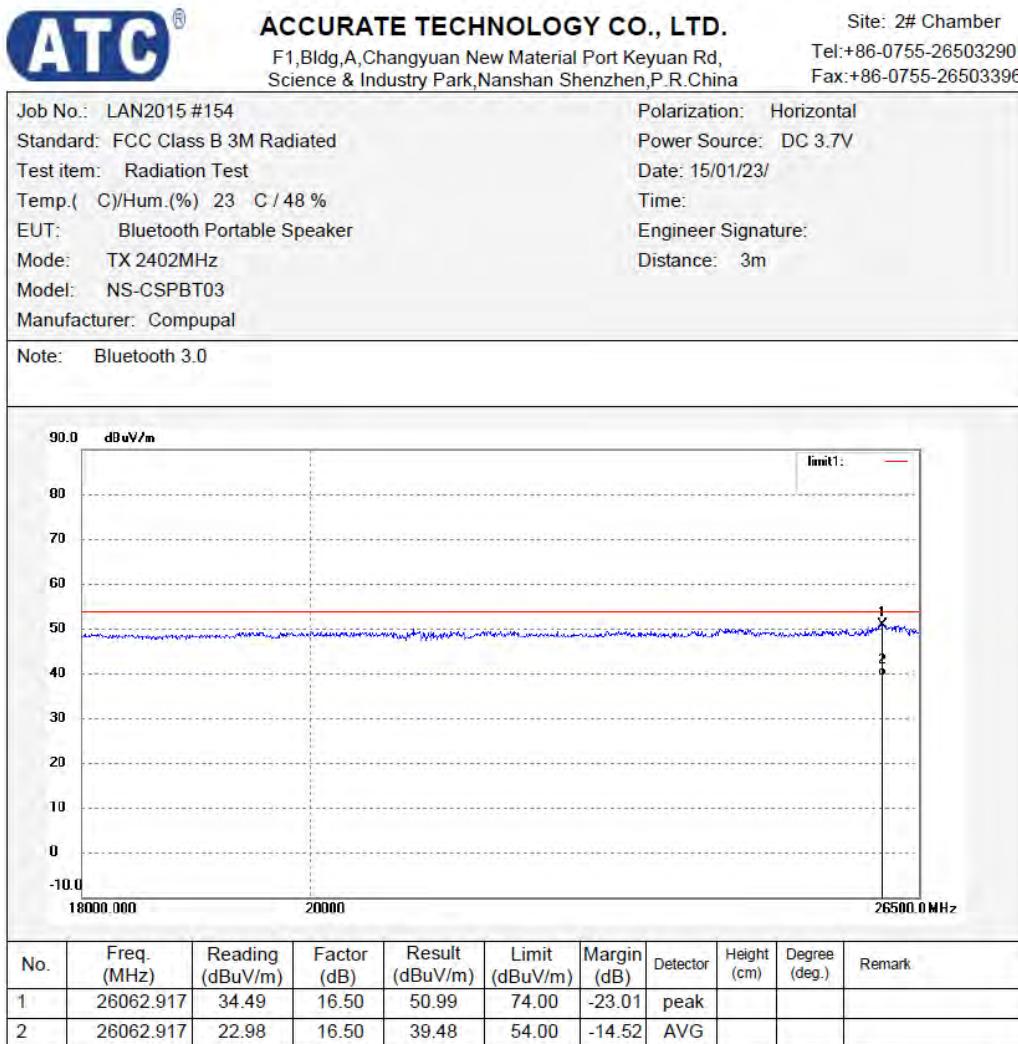


Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)

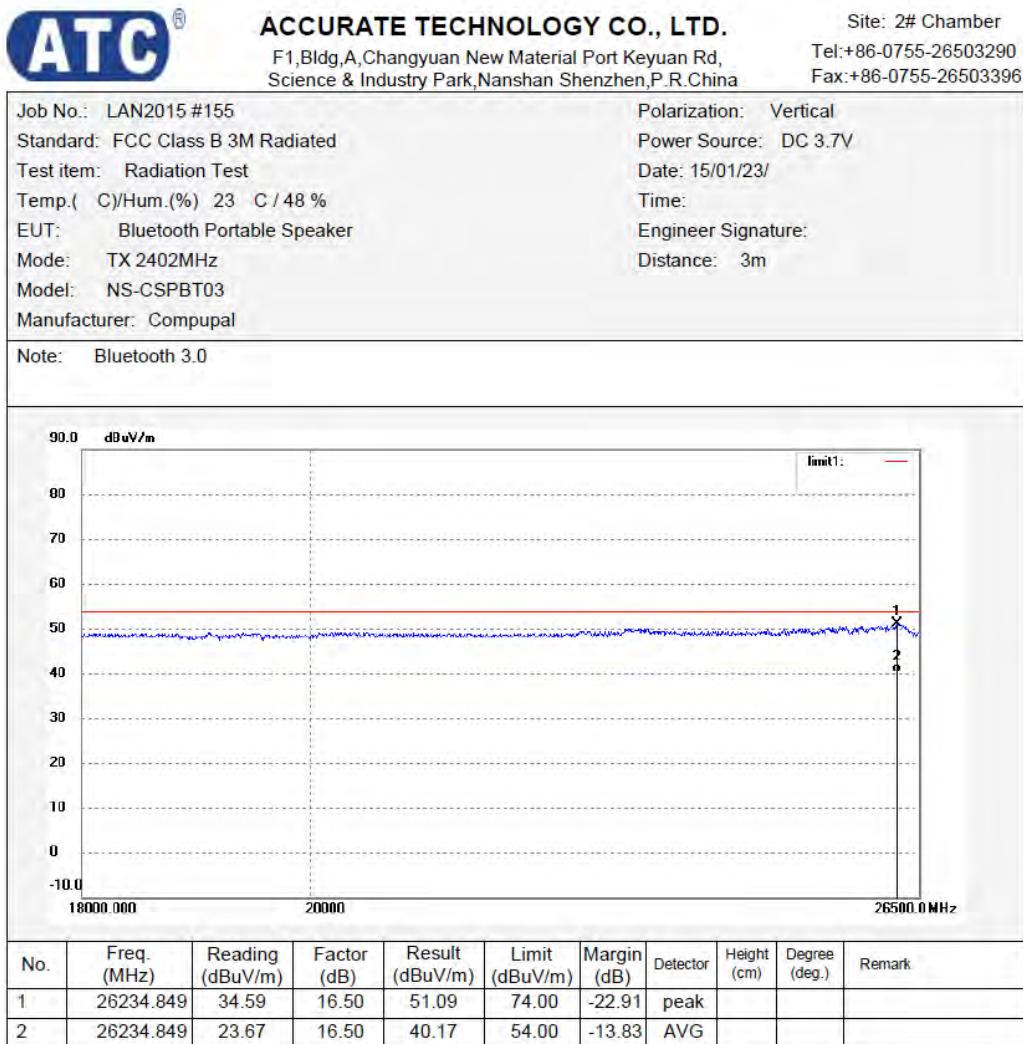


Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSEBT03
Manufacturer: Compupal
Operating Condition: TX 2441MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2015-1-26 /

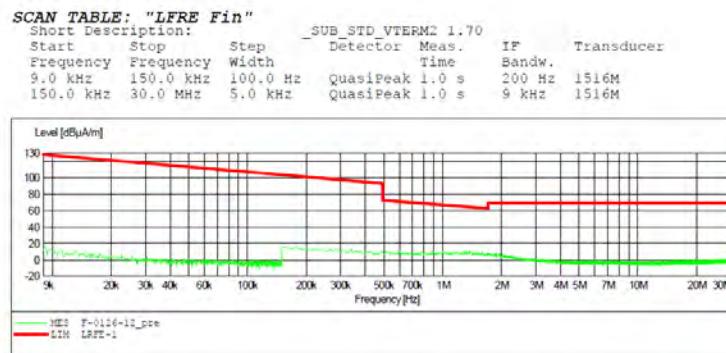


Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSEBT03
Manufacturer: Compupal
Operating Condition: TX 2441MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2015-1-26 /

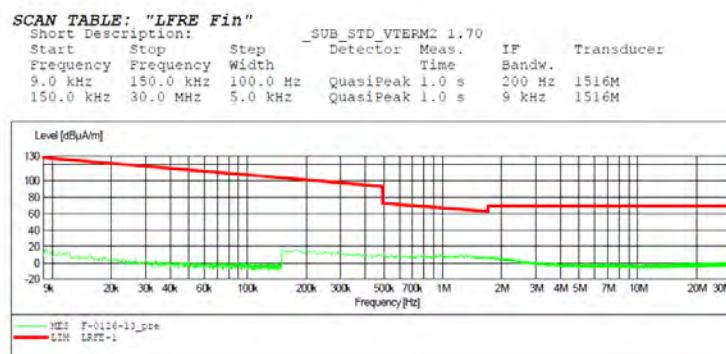


Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

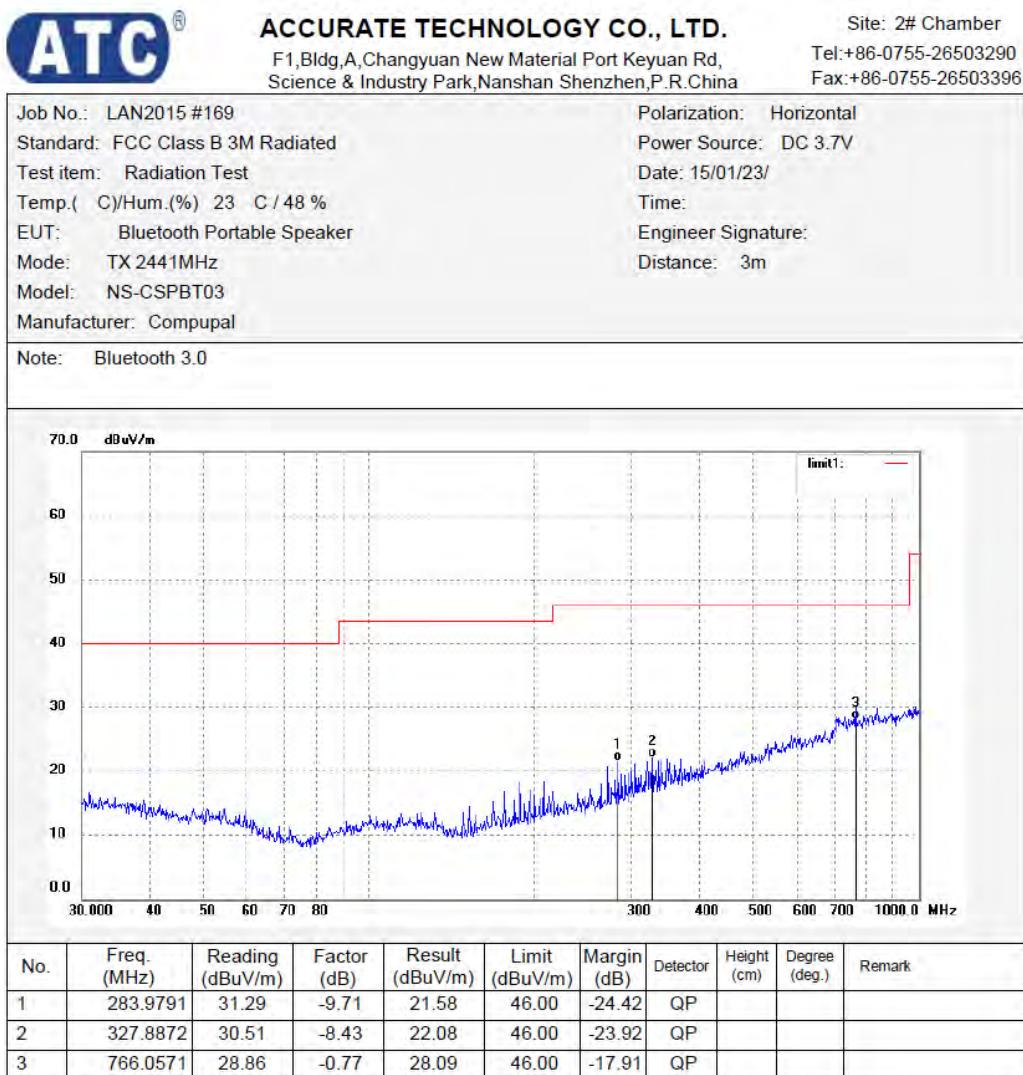


Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)

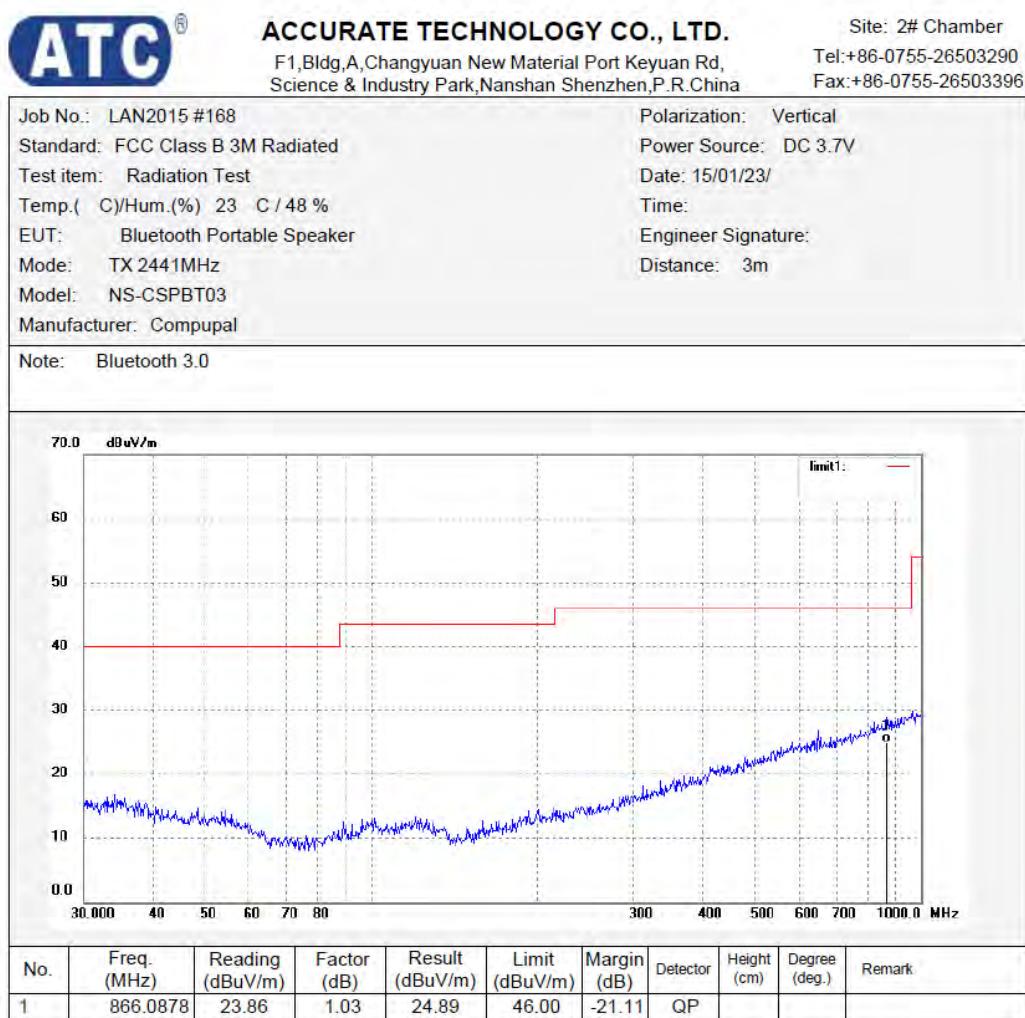


Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)

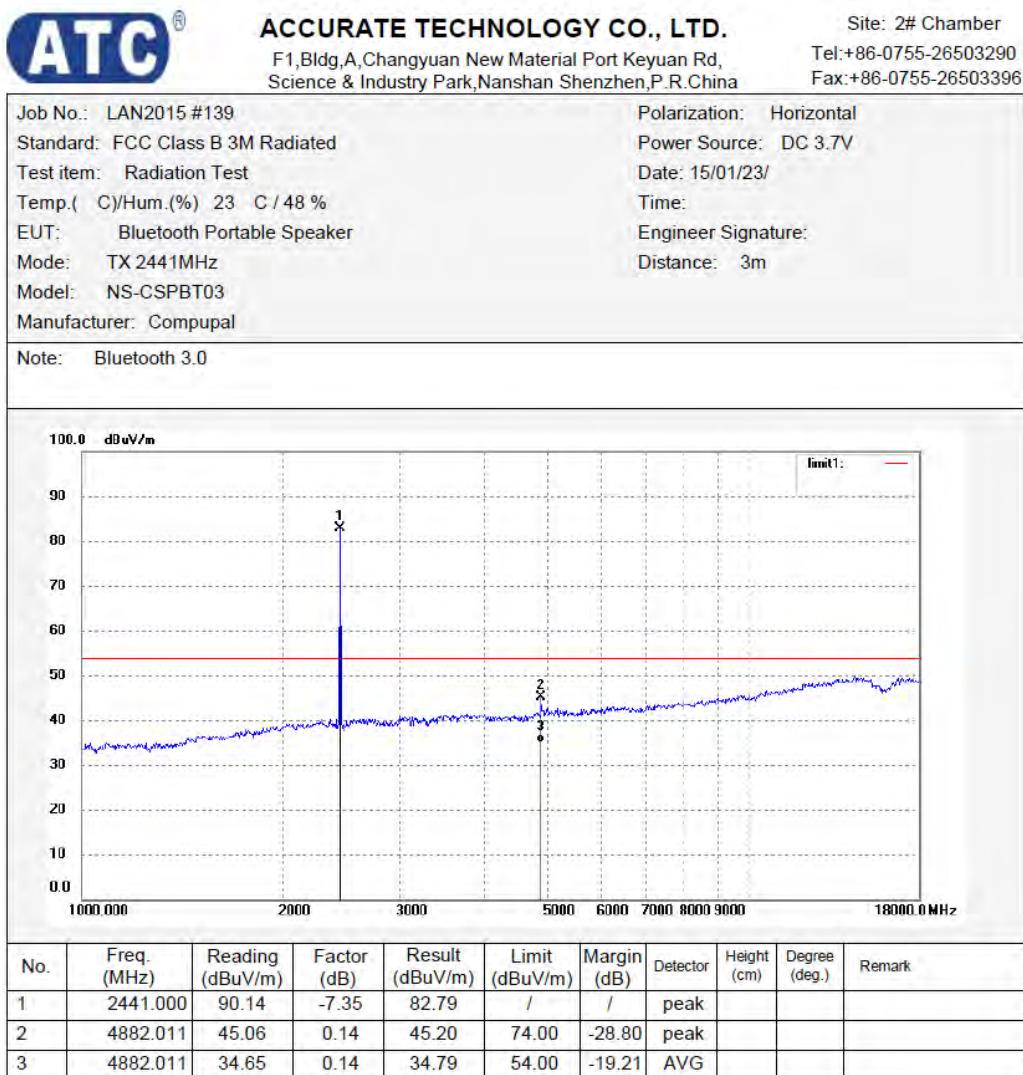


Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)

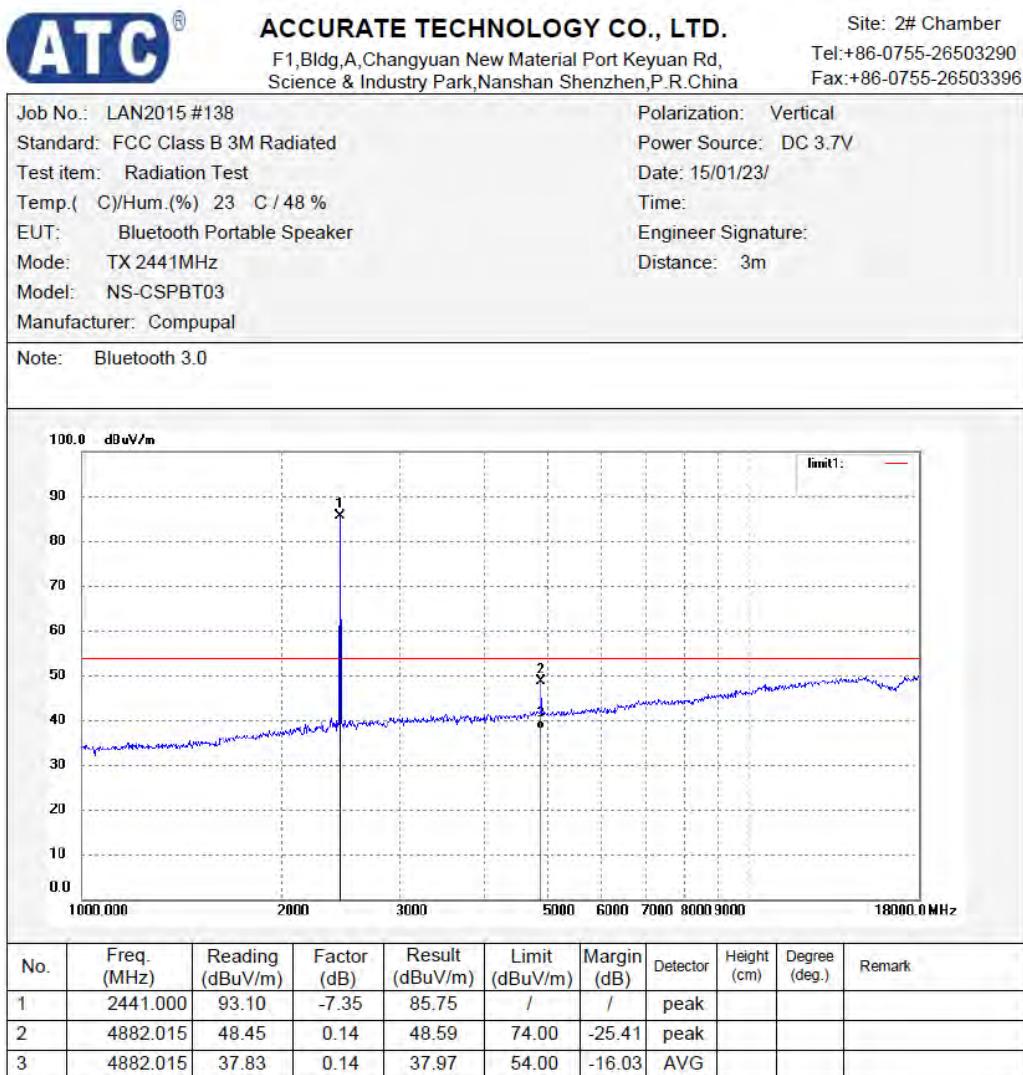


Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)



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

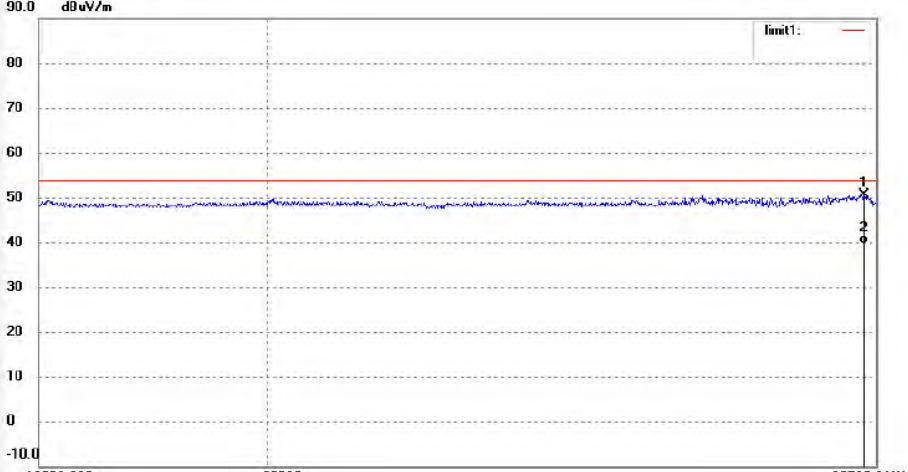
Job No.: LAN2015 #157	Polarization: Horizontal									
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V									
Test item: Radiation Test	Date: 15/01/23/									
Temp.(C)/Hum.(%) 23 C / 48 %	Time:									
EUT: Bluetooth Portable Speaker	Engineer Signature:									
Mode: TX 2441MHz	Distance: 3m									
Model: NS-CSPBT03										
Manufacturer: Compupal										
Note: Bluetooth 3.0										
										
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26356.895	34.08	16.50	50.58	74.00	-23.42	peak			
2	26356.895	23.02	16.50	39.52	54.00	-14.48	AVG			

Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)

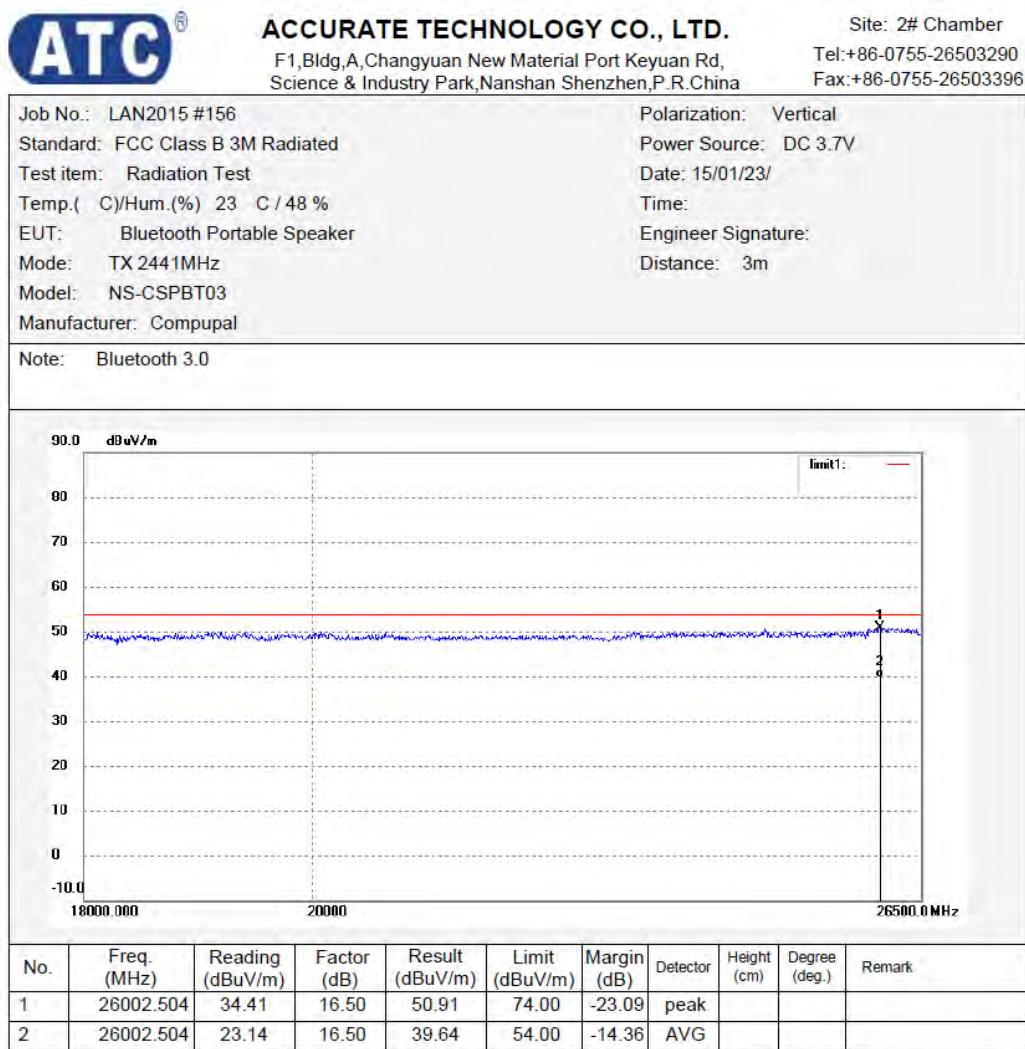


Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSEBT03
Manufacturer: Compupal
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2015-1-26 /

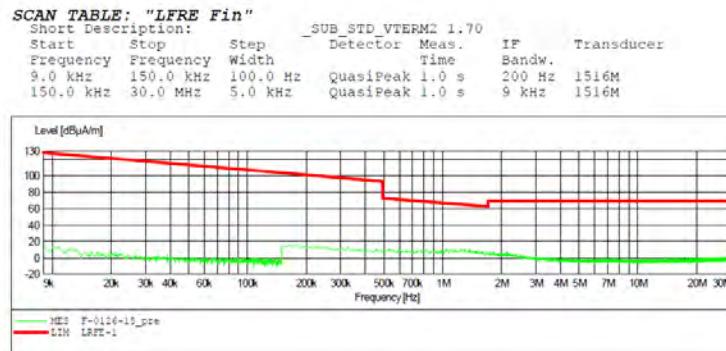


Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated
EUT: Bluetooth Portable Speaker M/N:XNS-CSEBT03
Manufacturer: Compupal
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2015-1-26 /

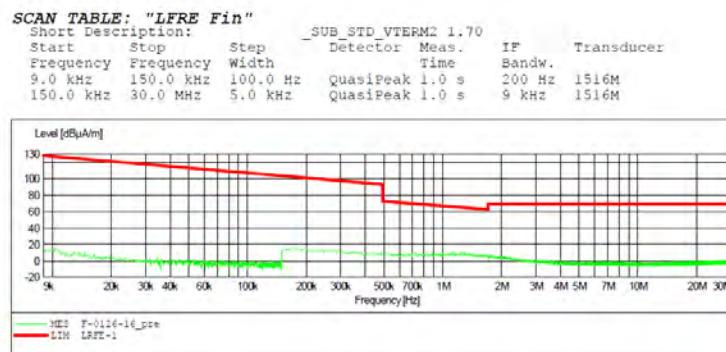


Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)

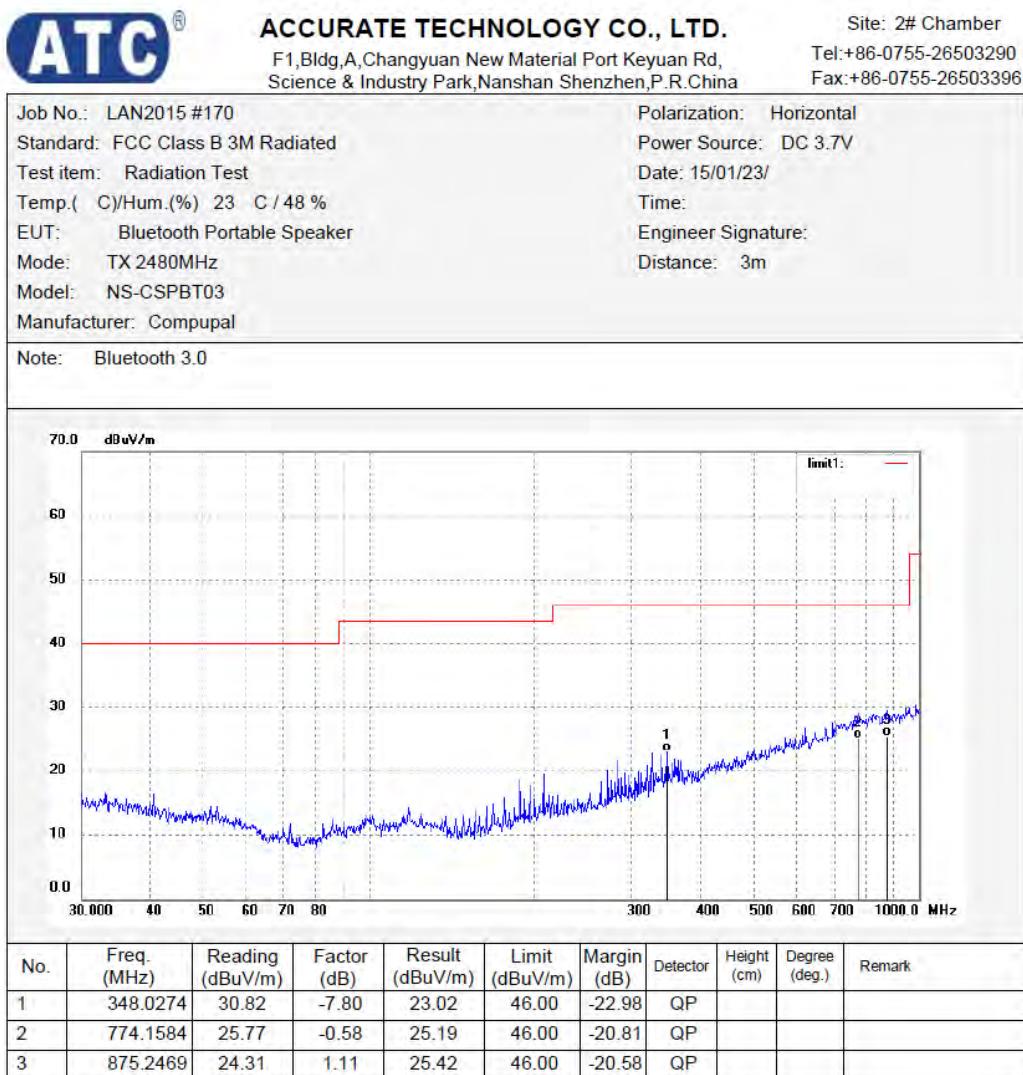


Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)

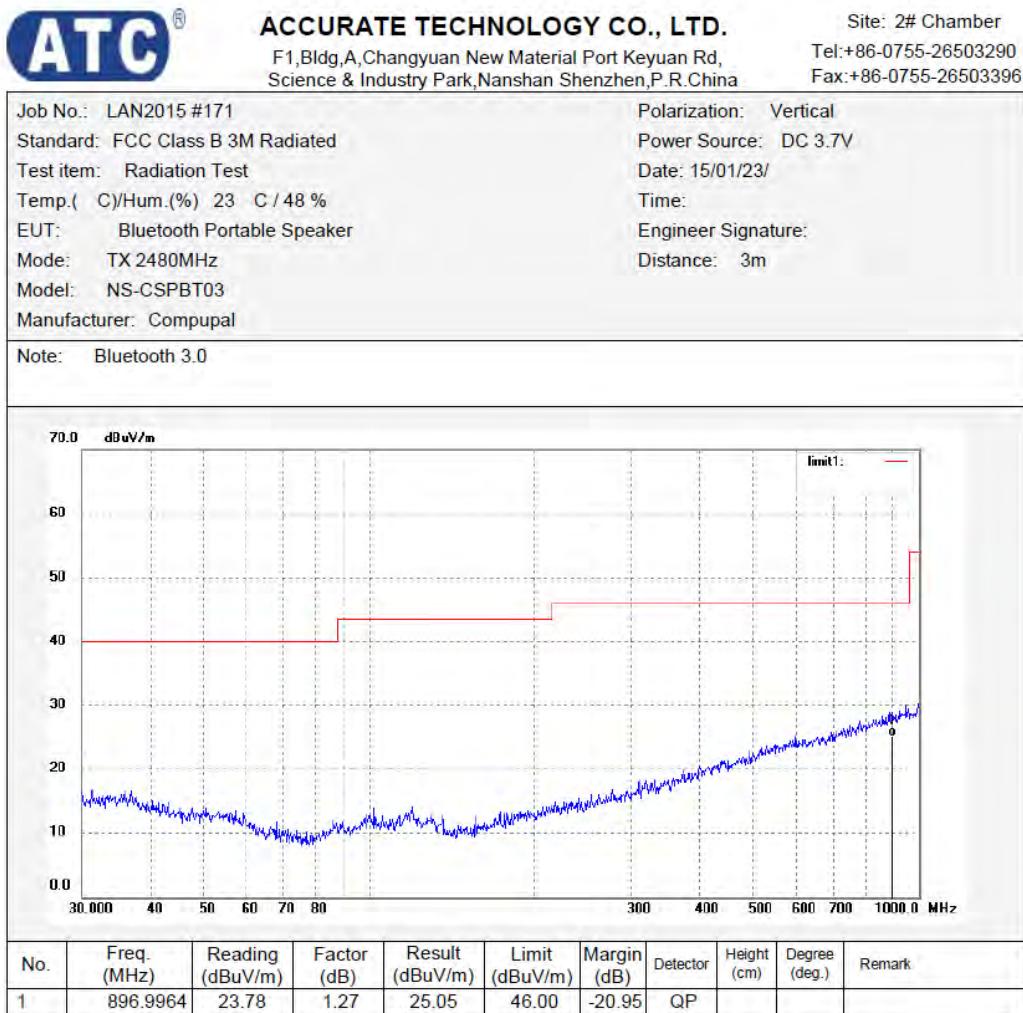


Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)

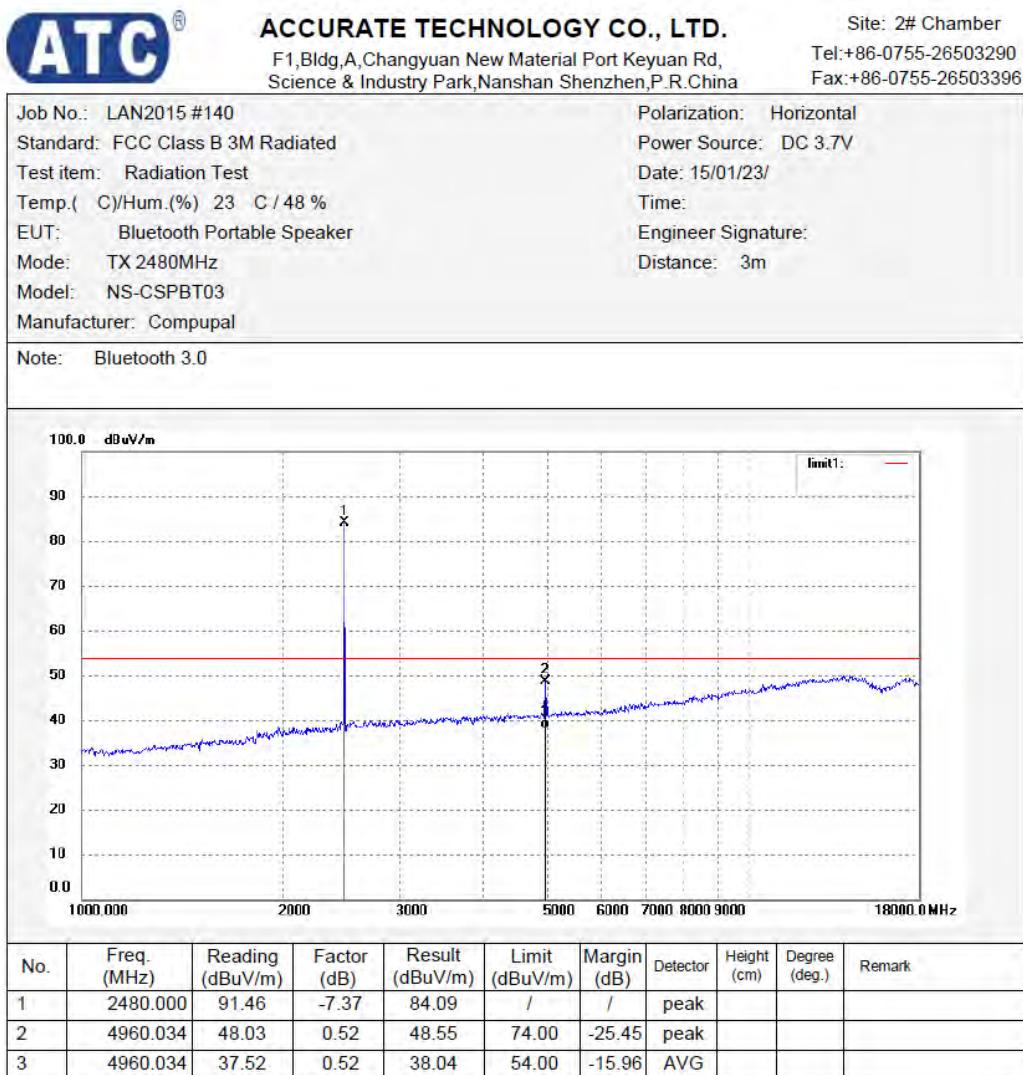


Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)



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.: LAN2015 #141	Polarization: Vertical									
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V									
Test item: Radiation Test	Date: 15/01/23/									
Temp.(C)/Hum.(%) 23 C / 48 %	Time:									
EUT: Bluetooth Portable Speaker	Engineer Signature:									
Mode: TX 2480MHz	Distance: 3m									
Model: NS-CSPBT03										
Manufacturer: Compupal										
Note: Bluetooth 3.0										
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	94.22	-7.37	86.85	/	/	peak			
2	4960.021	48.20	0.52	48.72	74.00	-25.28	peak			
3	4960.021	37.46	0.52	37.98	54.00	-16.02	AVG			

Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)

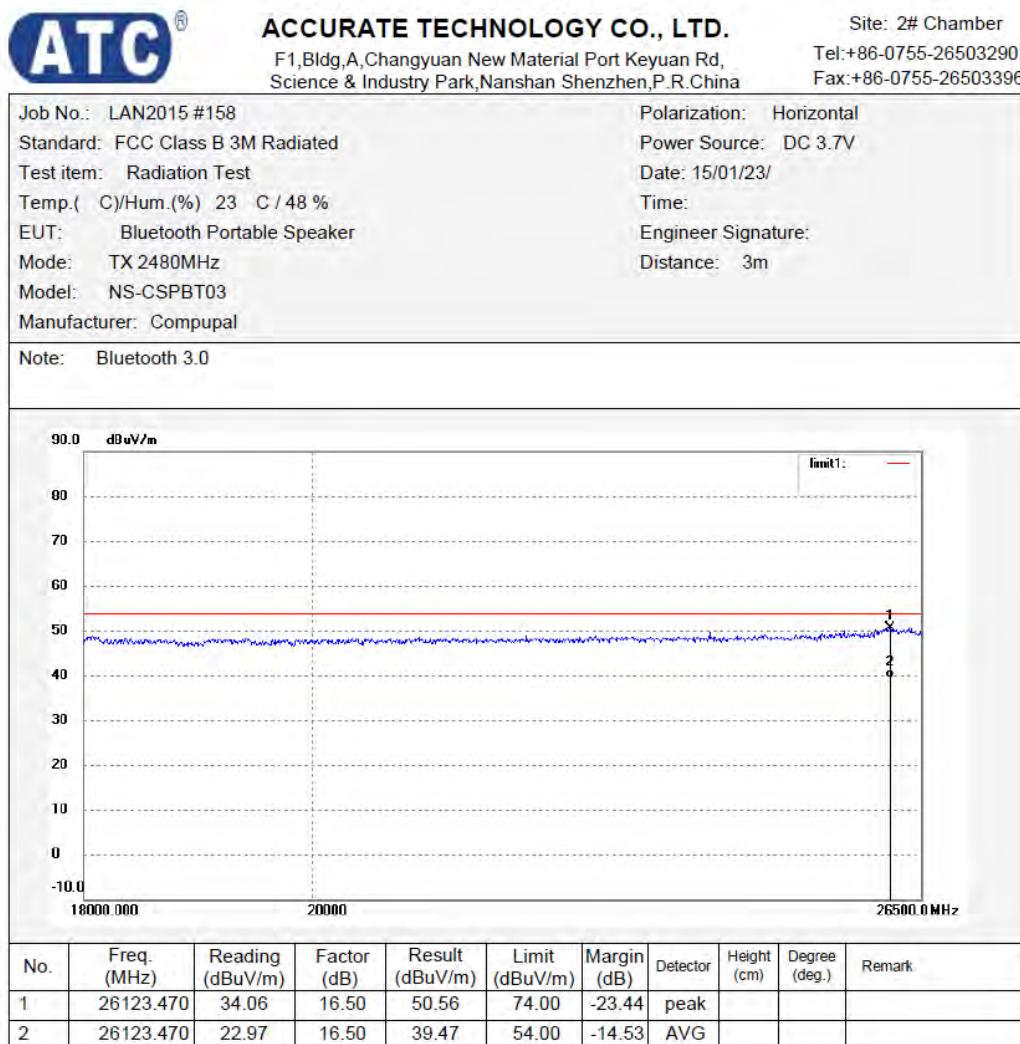


Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)

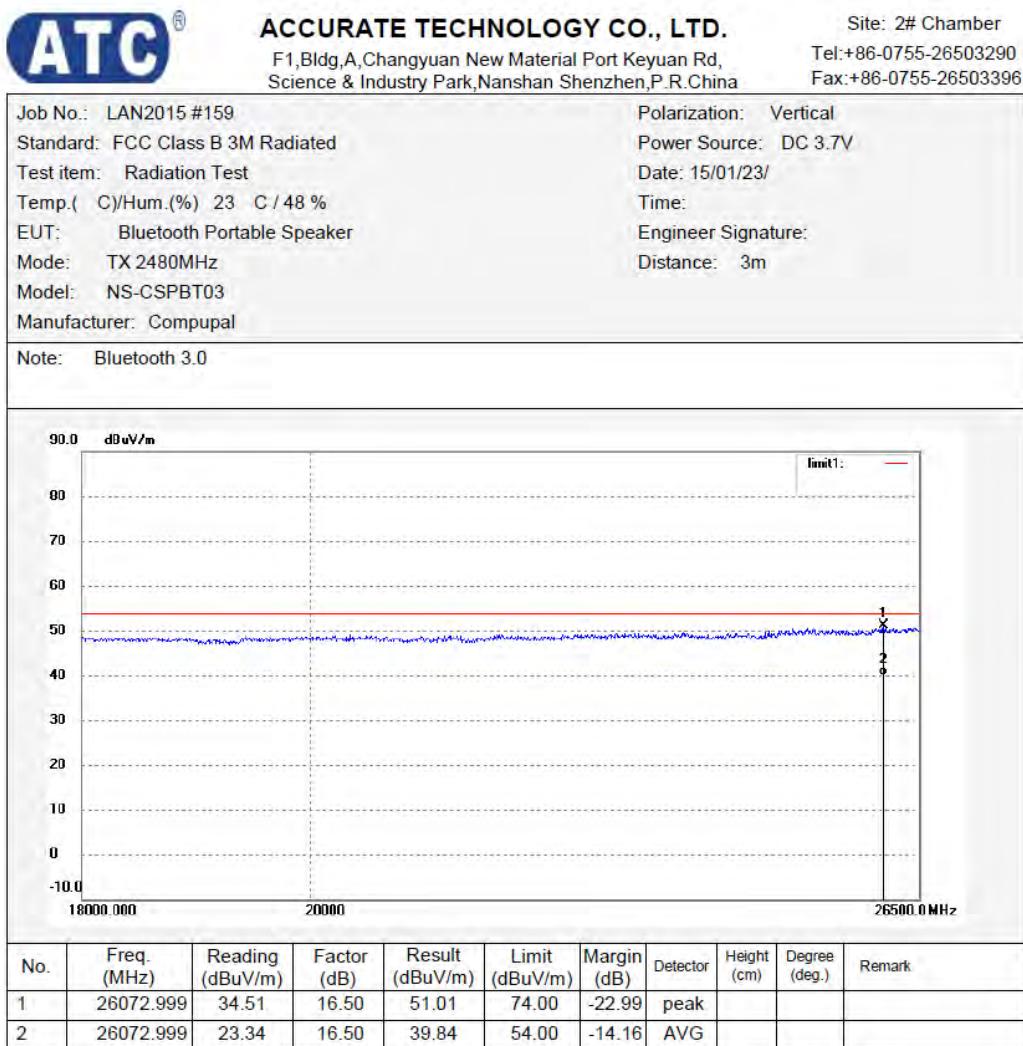


Figure 25: Test figure of spurious emissions, mode B.1, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
 Manufacturer: Compupal
 Operating Condition: TX 2402MHz
 Test Site: 1#Shielding Room
 Operator: LAN
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2015-1-26 /

SCAN TABLE: "LFRE_Fin"

Start	Stop	Step	Detector	Meas.	IF	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

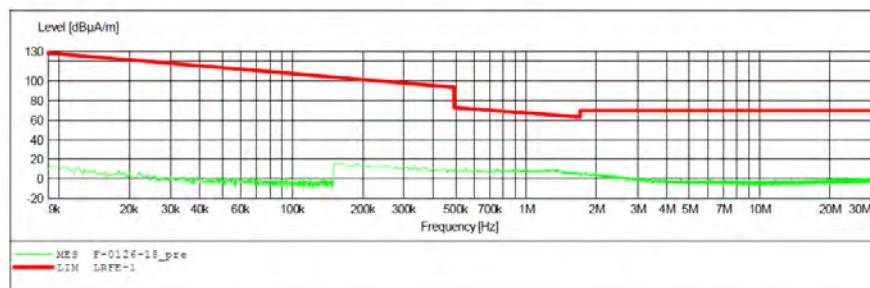


Figure 26: Test figure of spurious emissions, mode B.1, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
 Manufacturer: Compupal
 Operating Condition: TX 2402MHz
 Test Site: 1#Shielding Room
 Operator: LAN
 Test Specification: DC 3.7V
 Comment: Y
 Start of Test: 2015-1-26 /

SCAN TABLE: "LFRE_Fin"

Start	Stop	Step	Detector	Meas.	IF	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

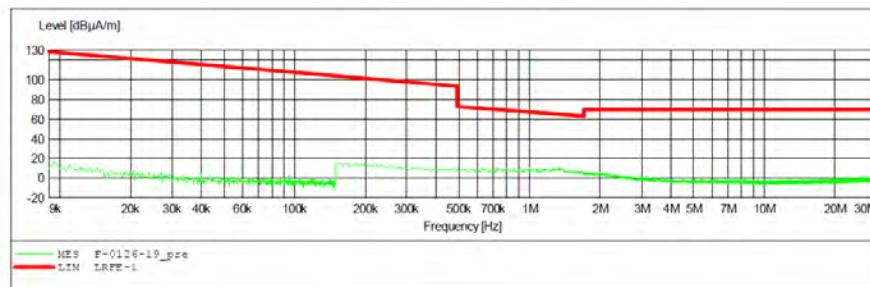


Figure 27: Test figure of spurious emissions, mode B.1, Horizontal polarity (30MHz – 1GHz)

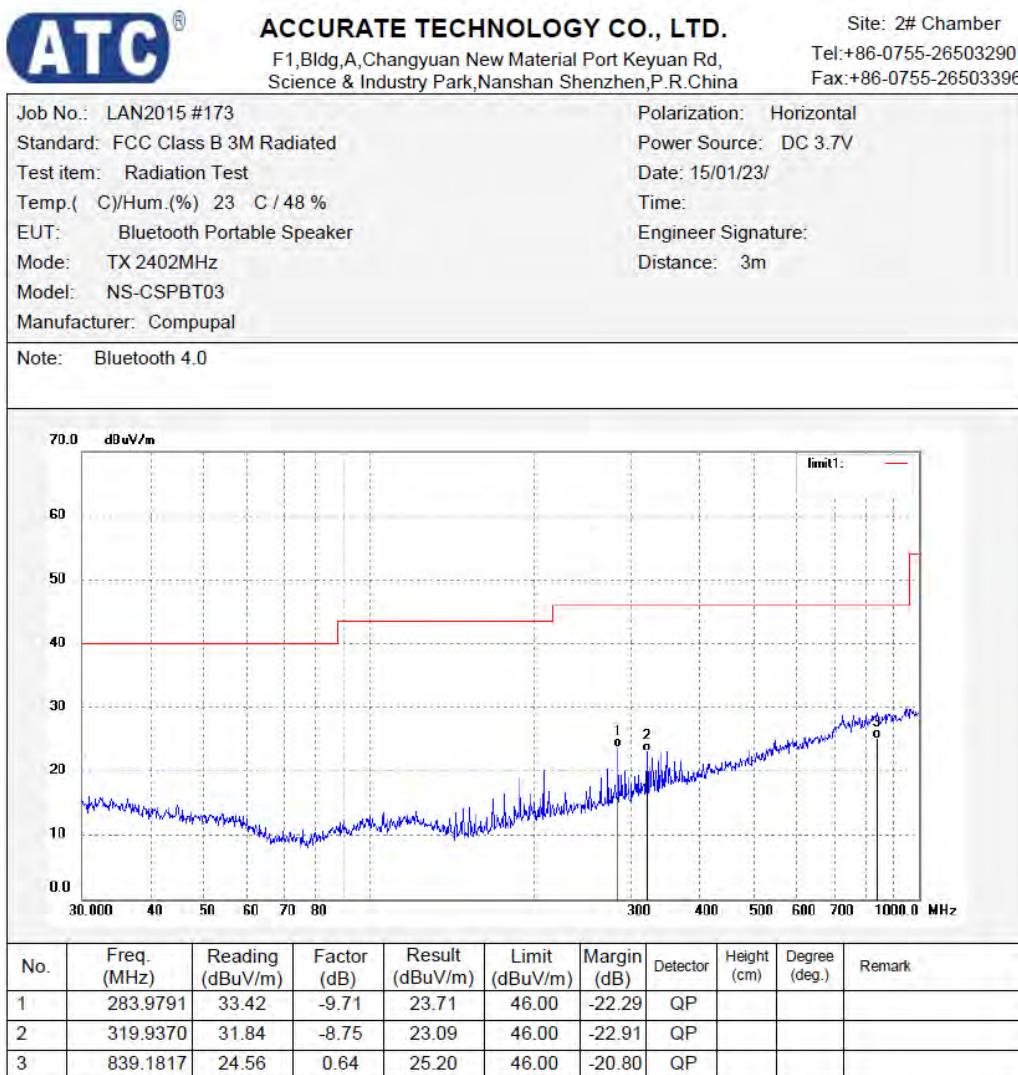


Figure 28: Test figure of spurious emissions, mode B.1, Vertical polarity (30MHz – 1GHz)

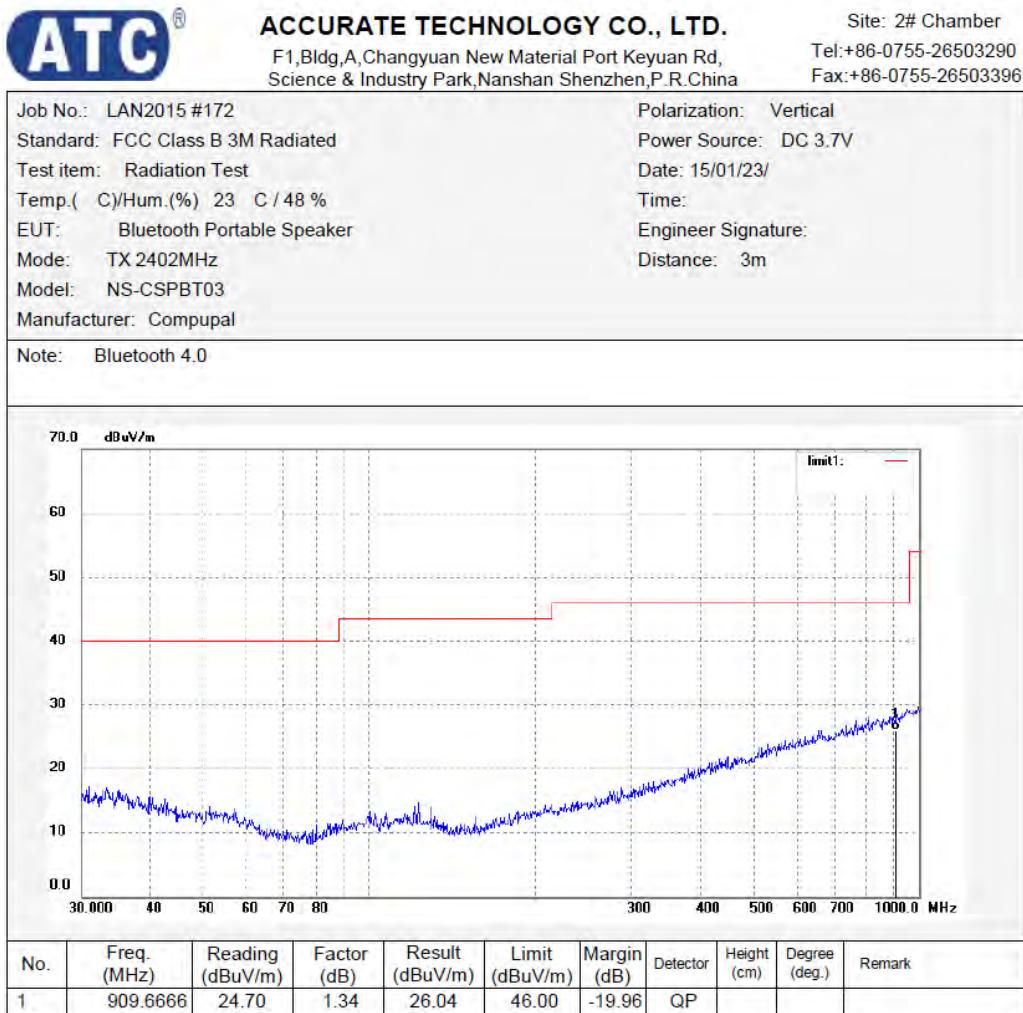


Figure 29: Test figure of spurious emissions, mode B.1, Horizontal polarity (1GHz –18GHz)

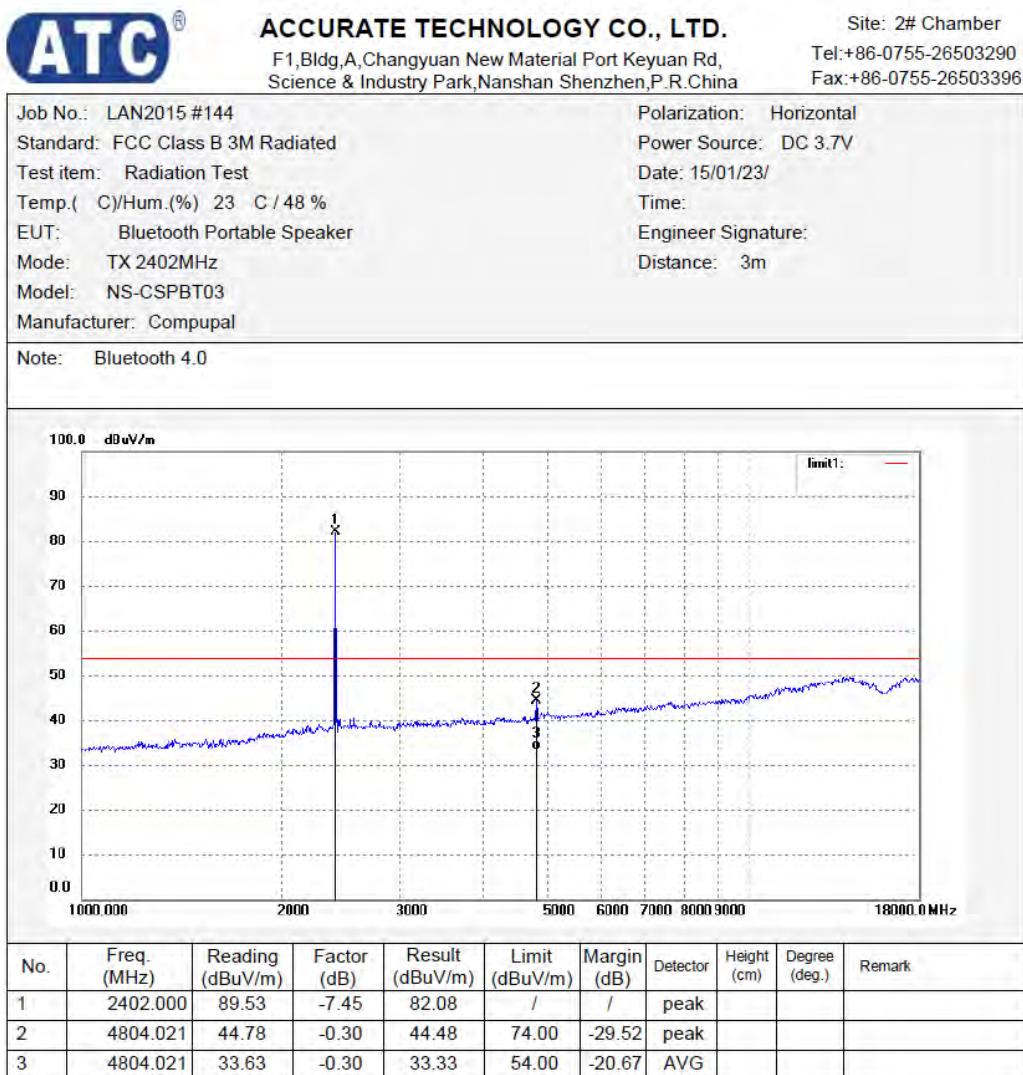


Figure 30: Test figure of spurious emissions, mode B.1, Vertical polarity (1GHz – 18GHz)

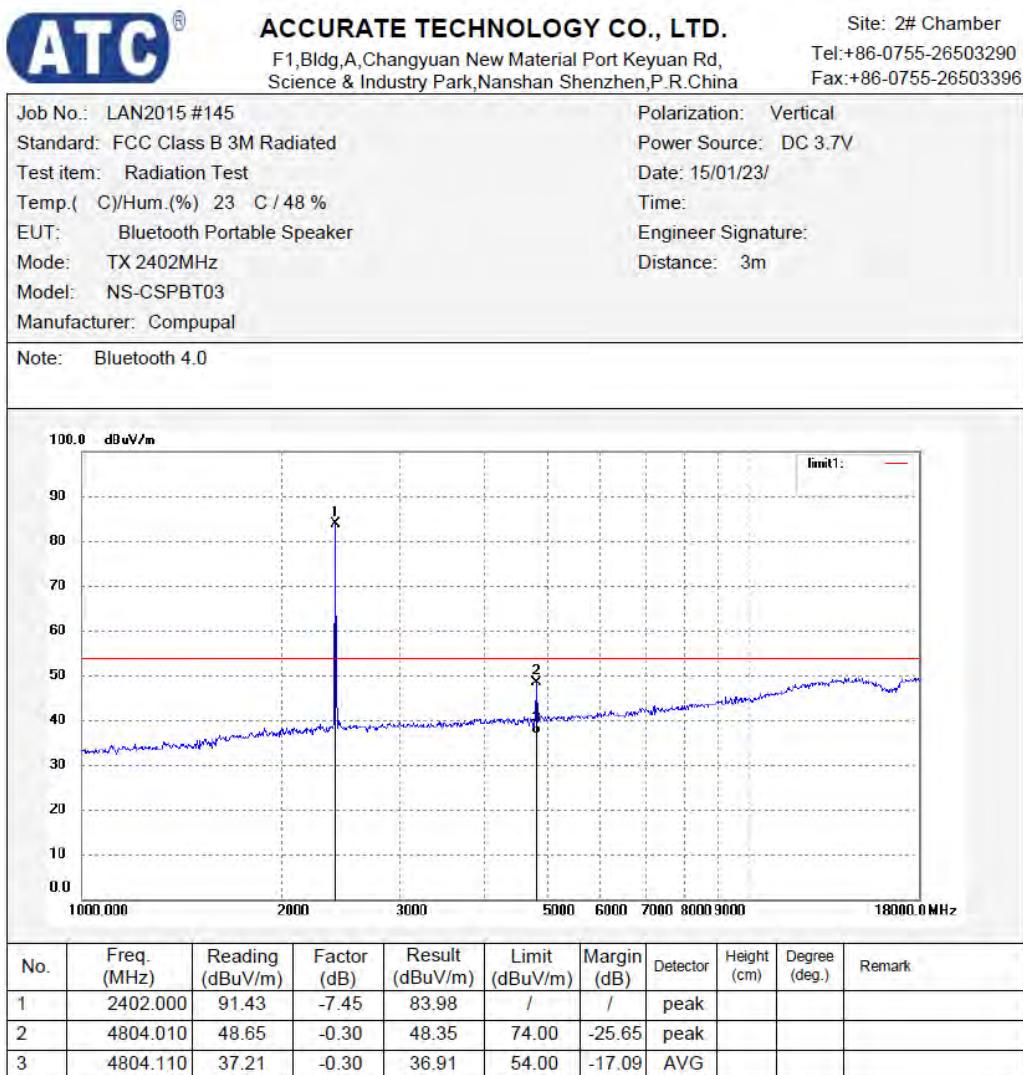


Figure 31: Test figure of spurious emissions, mode B.1, Horizontal polarity (18GHz –25GHz)

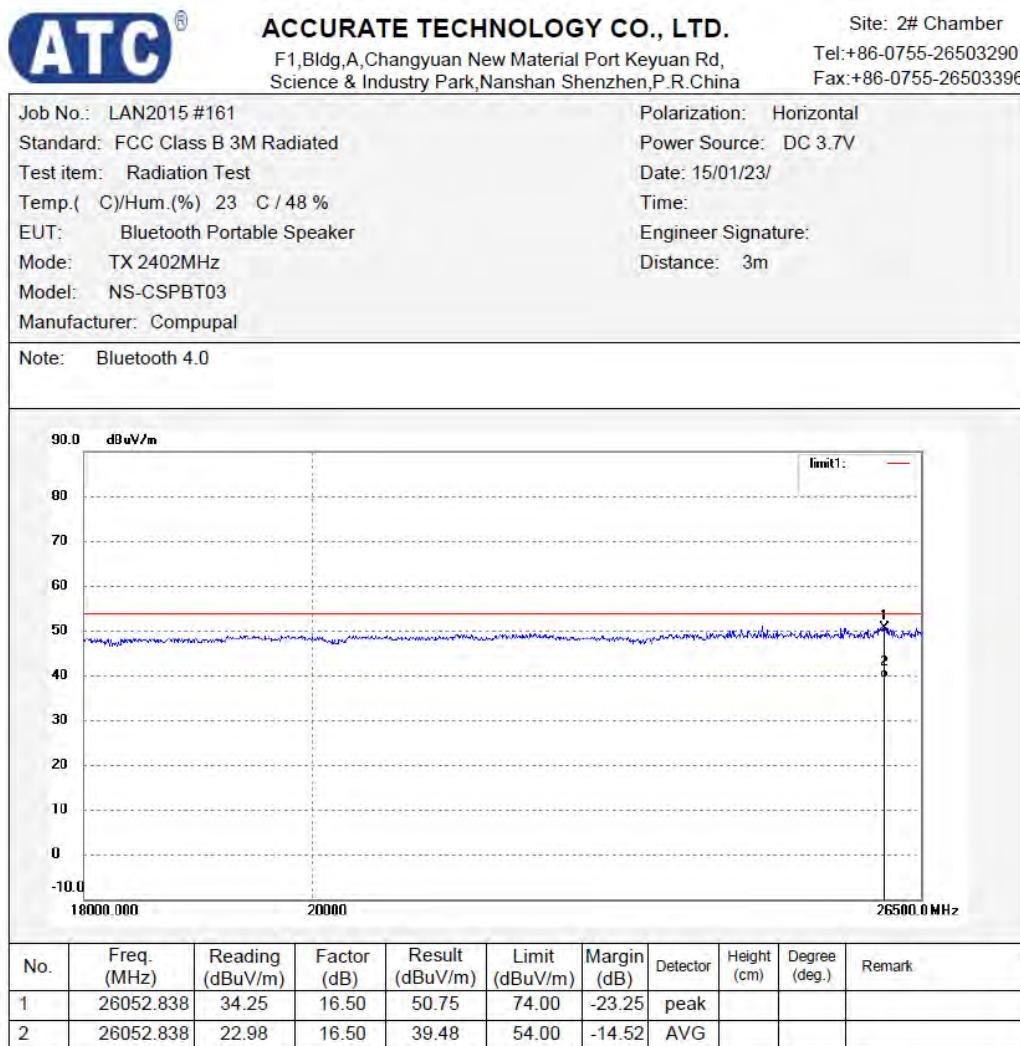


Figure 32: Test figure of spurious emissions, mode B.1, Vertical polarity (18GHz – 25GHz)

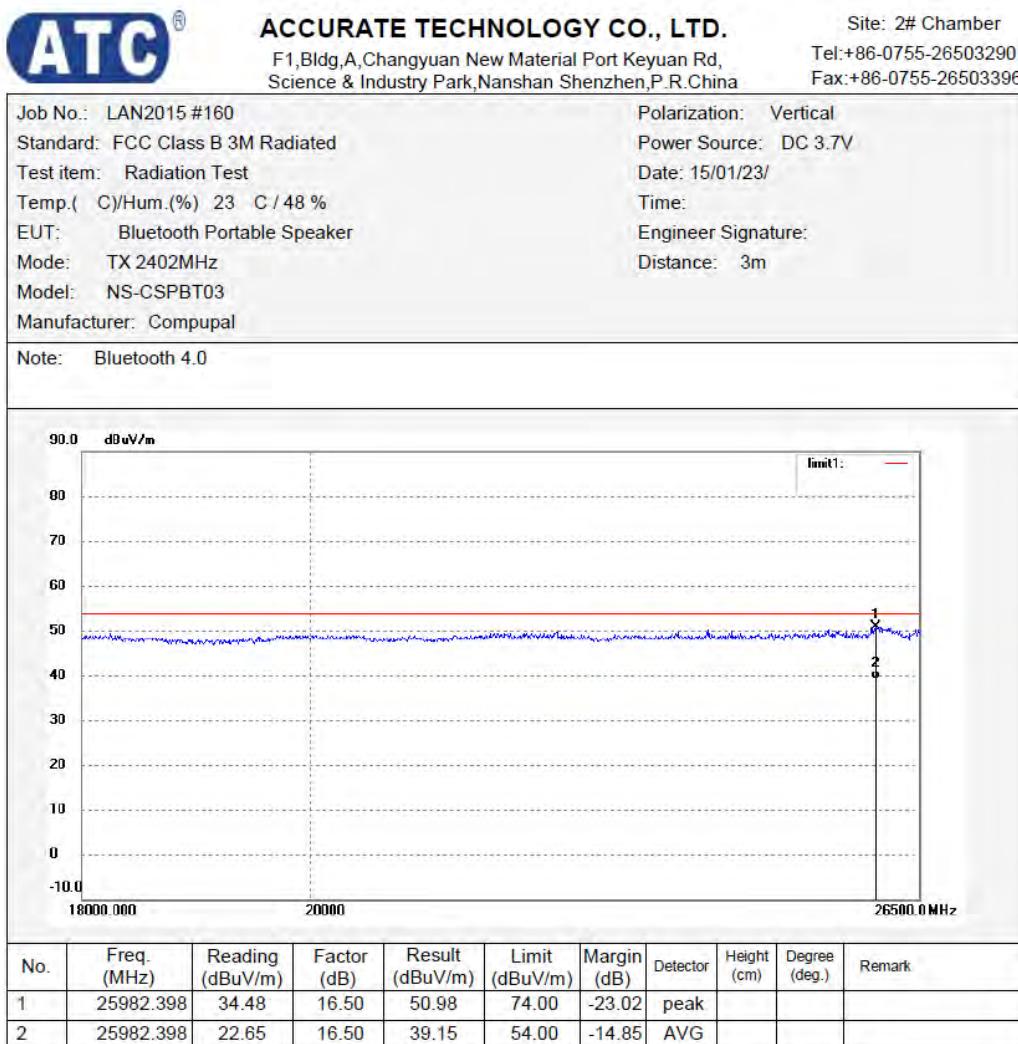


Figure 33: Test figure of spurious emissions, mode B.2, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
Manufacturer: Compupal
Operating Condition: TX 2440MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2015-1-26 /

SCAN TABLE: "LFRE_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 1516M
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M

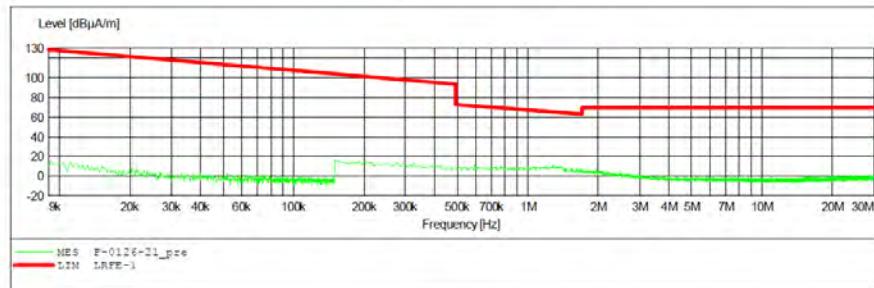


Figure 34: Test figure of spurious emissions, mode B.2, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
Manufacturer: Compupal
Operating Condition: TX 2440MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2015-1-26 /

SCAN TABLE: "LFRE_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 1516M
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M

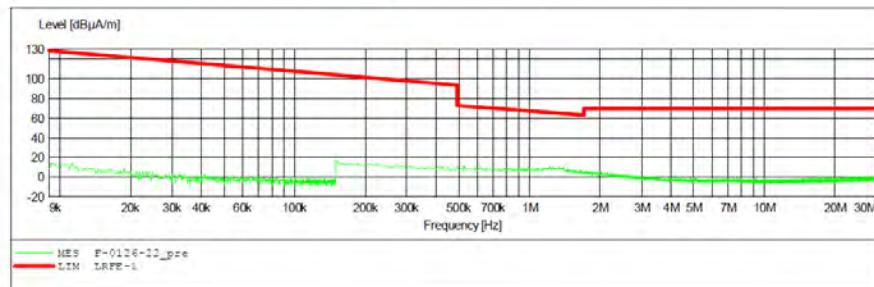


Figure 35: Test figure of spurious emissions, mode B.2, Horizontal polarity (30MHz – 1GHz)

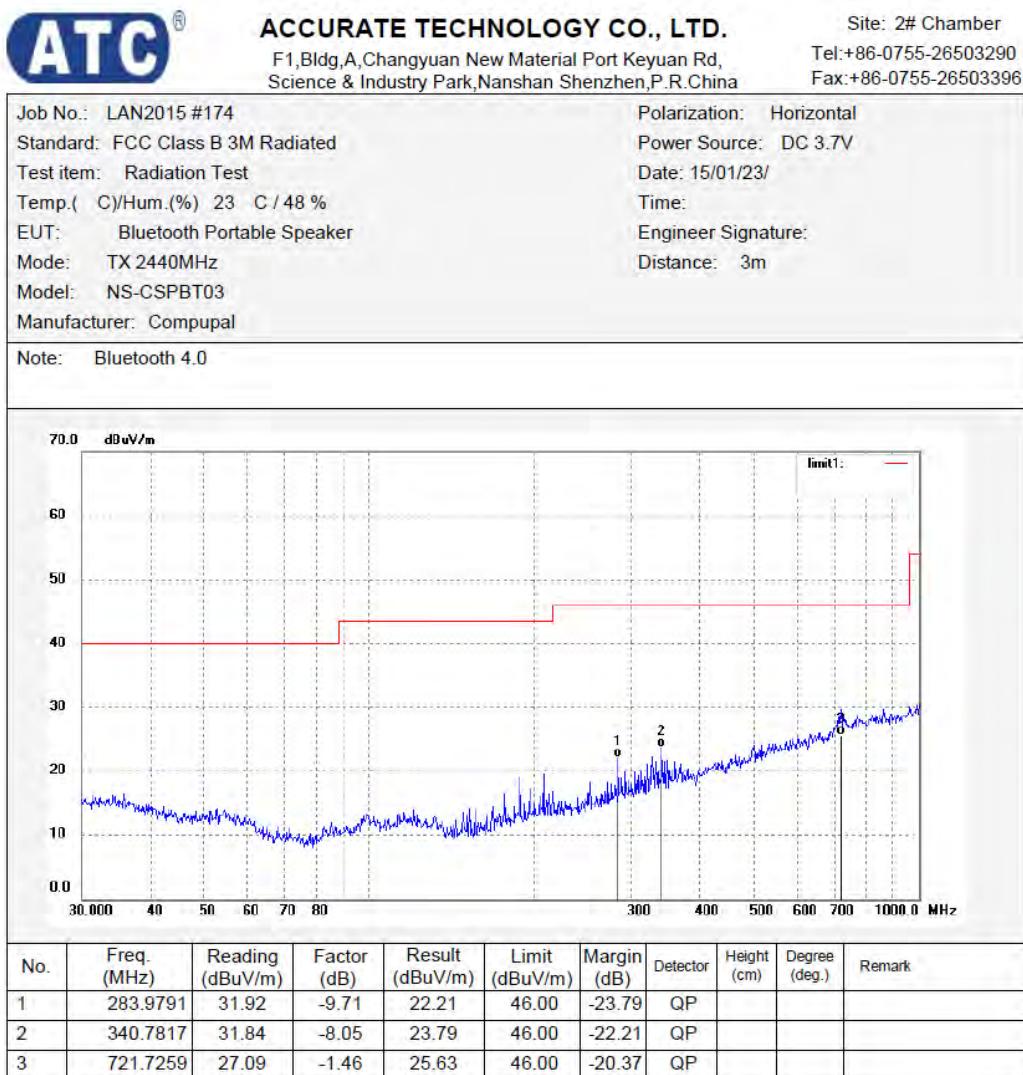


Figure 36: Test figure of spurious emissions, mode B.2, Vertical polarity (30MHz – 1GHz)

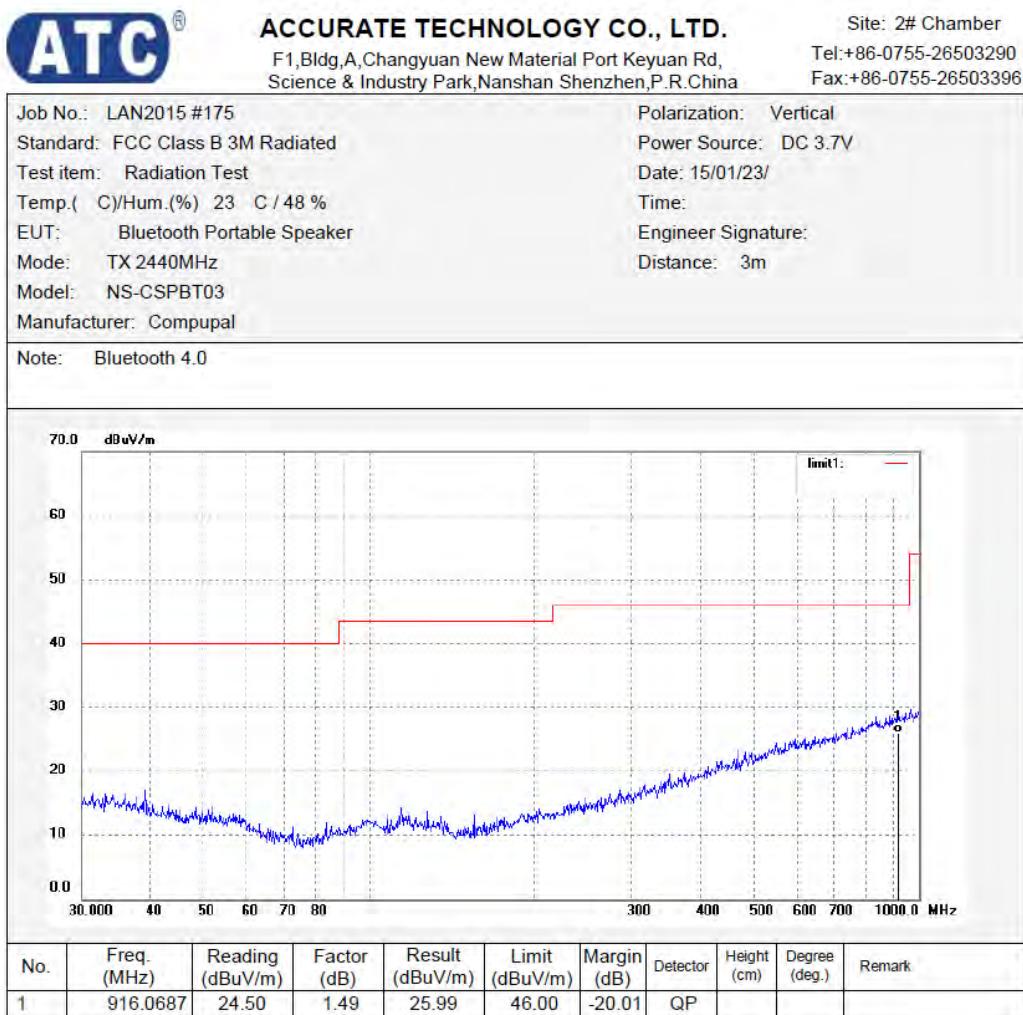


Figure 37: Test figure of spurious emissions, mode B.2, Horizontal polarity (1GHz – 18GHz)

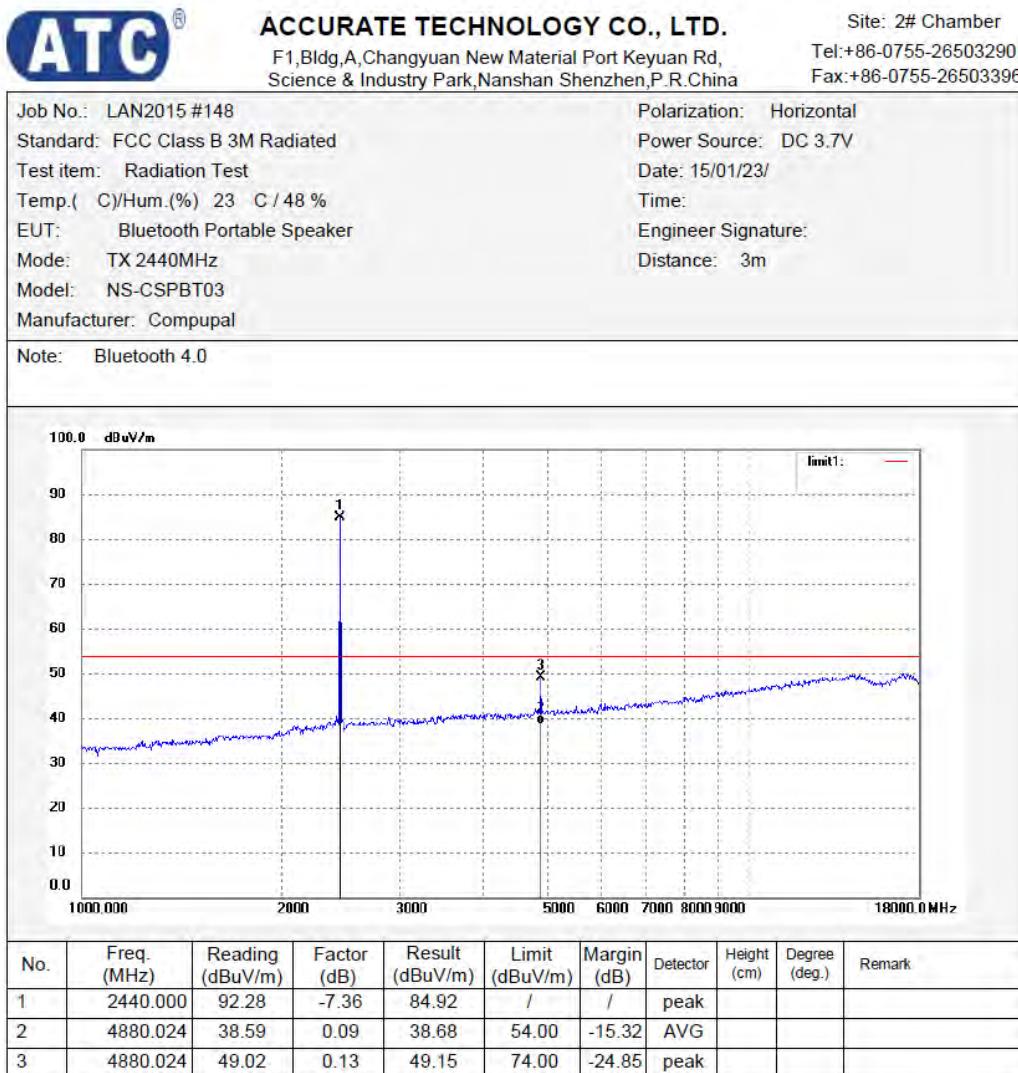


Figure 38: Test figure of spurious emissions, mode B.2, Vertical polarity (1GHz – 18GHz)

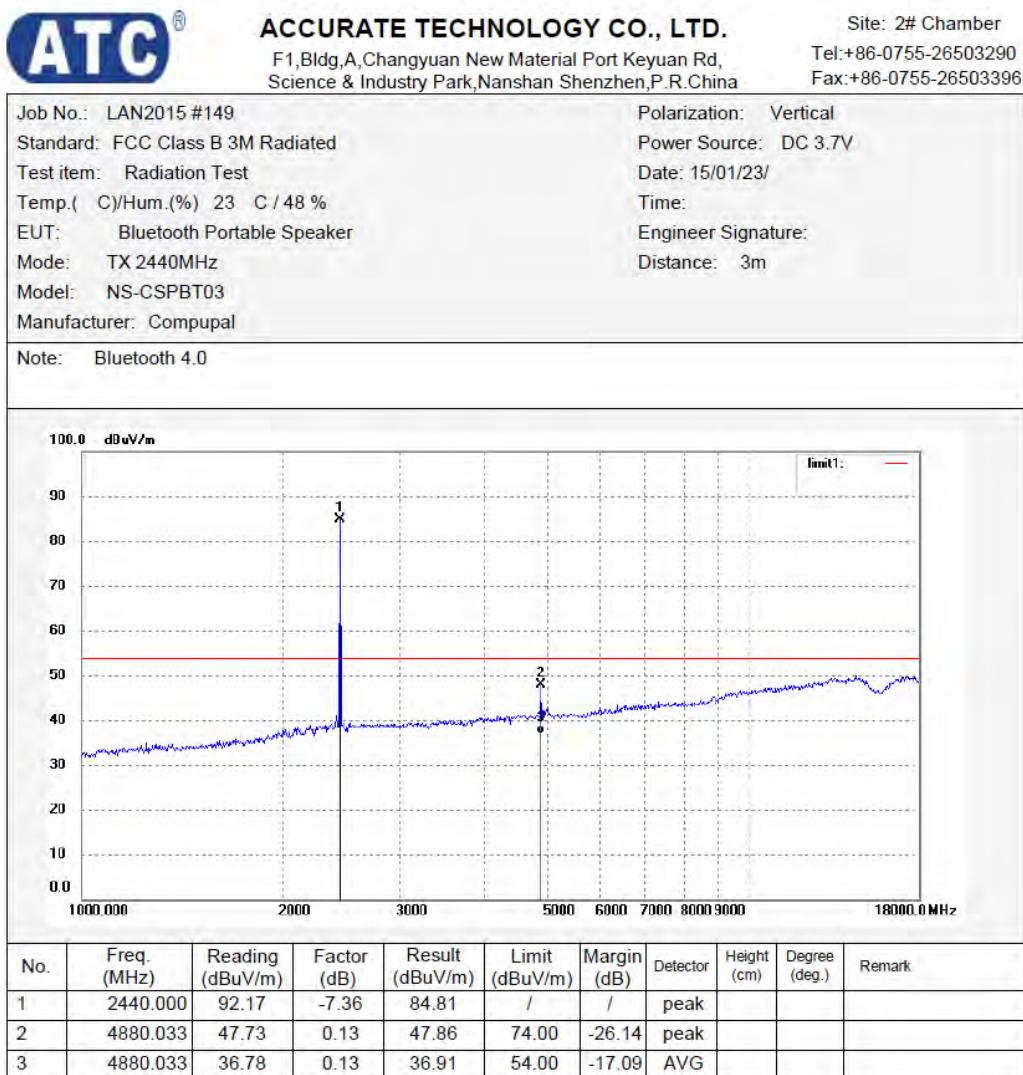


Figure 39: Test figure of spurious emissions, mode B.2, Horizontal polarity (18GHz – 25GHz)

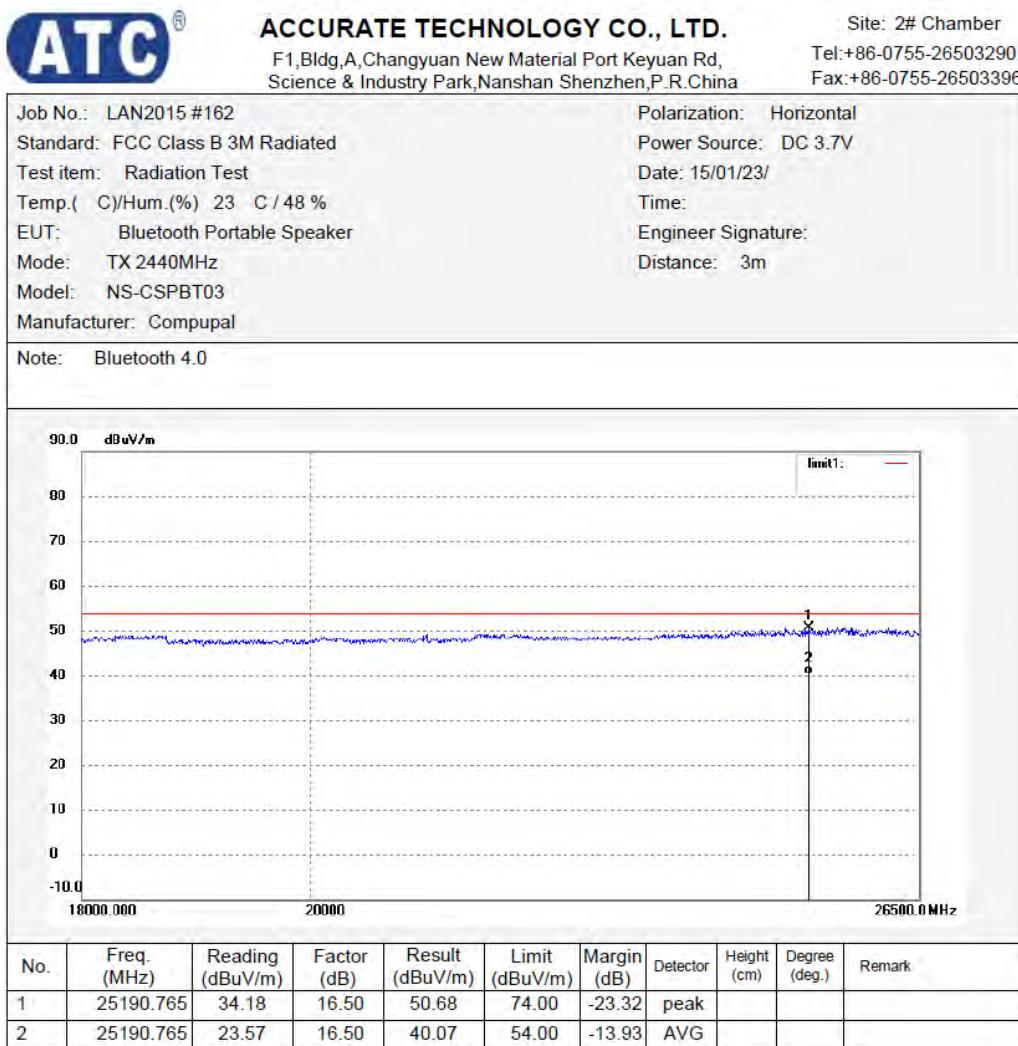


Figure 40: Test figure of spurious emissions, mode B.2, Vertical polarity (18GHz – 25GHz)

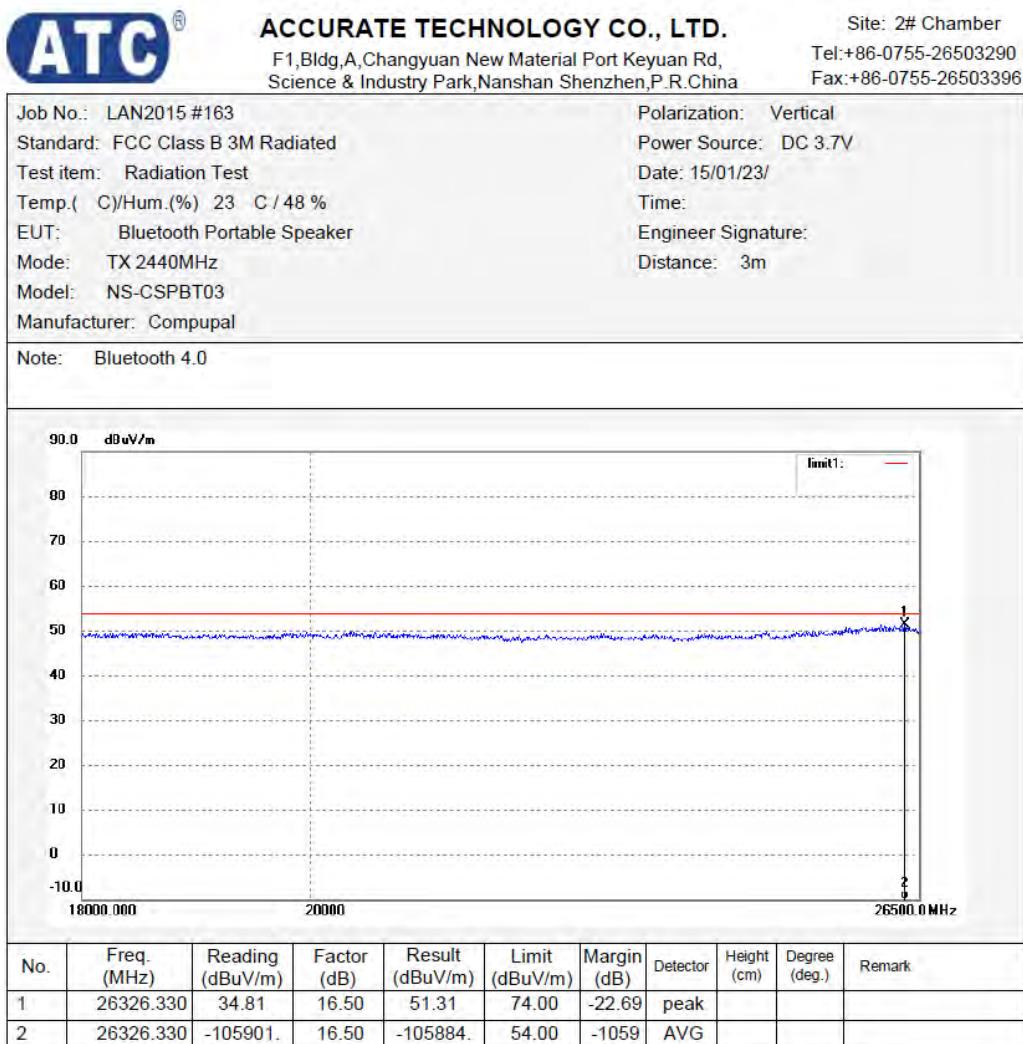
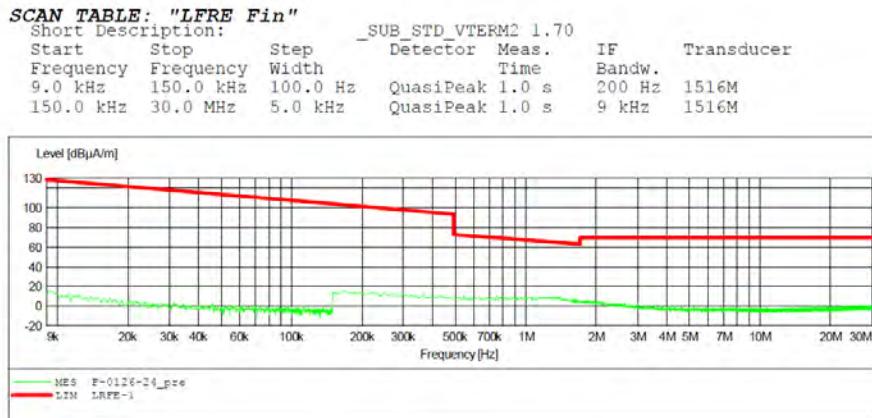


Figure 41: Test figure of spurious emissions, mode B.3, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
Manufacturer: Compupal
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: X
Start of Test: 2015-1-26 /

**Figure 42: Test figure of spurious emissions, mode B.3, Vertical polarity (9kHz – 30MHz)**

ACCURATE TECHNOLOGY CO., LTD
FCC Class B 3m Radiated

EUT: Bluetooth Portable Speaker M/N:XNS-CSPBT03
Manufacturer: Compupal
Operating Condition: TX 2480MHz
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2015-1-26 /

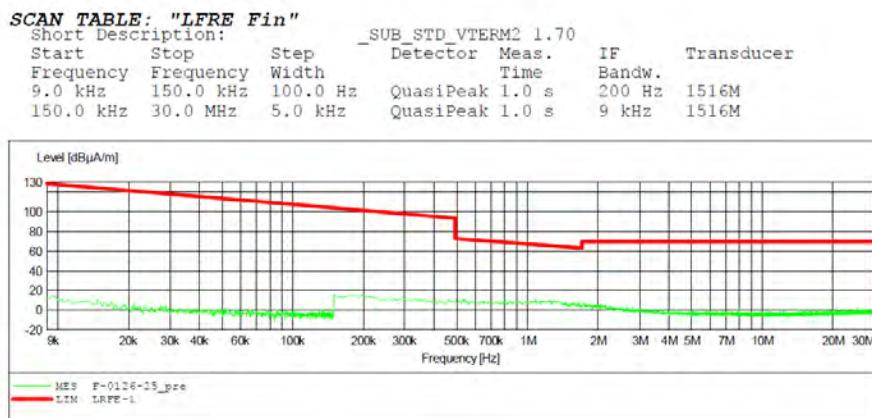


Figure 43: Test figure of spurious emissions, mode B.3, Horizontal polarity (30MHz – 1GHz)



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.: LAN2015 #177	Polarization: Horizontal									
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V									
Test item: Radiation Test	Date: 15/01/23/									
Temp.(C)/Hum.(%) 23 C / 48 %	Time:									
EUT: Bluetooth Portable Speaker	Engineer Signature:									
Mode: TX 2480MHz	Distance: 3m									
Model: NS-CSPBT03										
Manufacturer: Compupal										
Note: Bluetooth 4.0										
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	283.9791	31.95	-9.71	22.24	46.00	-23.76	QP			
2	348.0274	31.12	-7.80	23.32	46.00	-22.68	QP			
3	768.7481	25.92	-0.72	25.20	46.00	-20.80	QP			

Figure 44: Test figure of spurious emissions, mode B.3, Vertical polarity (30MHz – 1GHz)

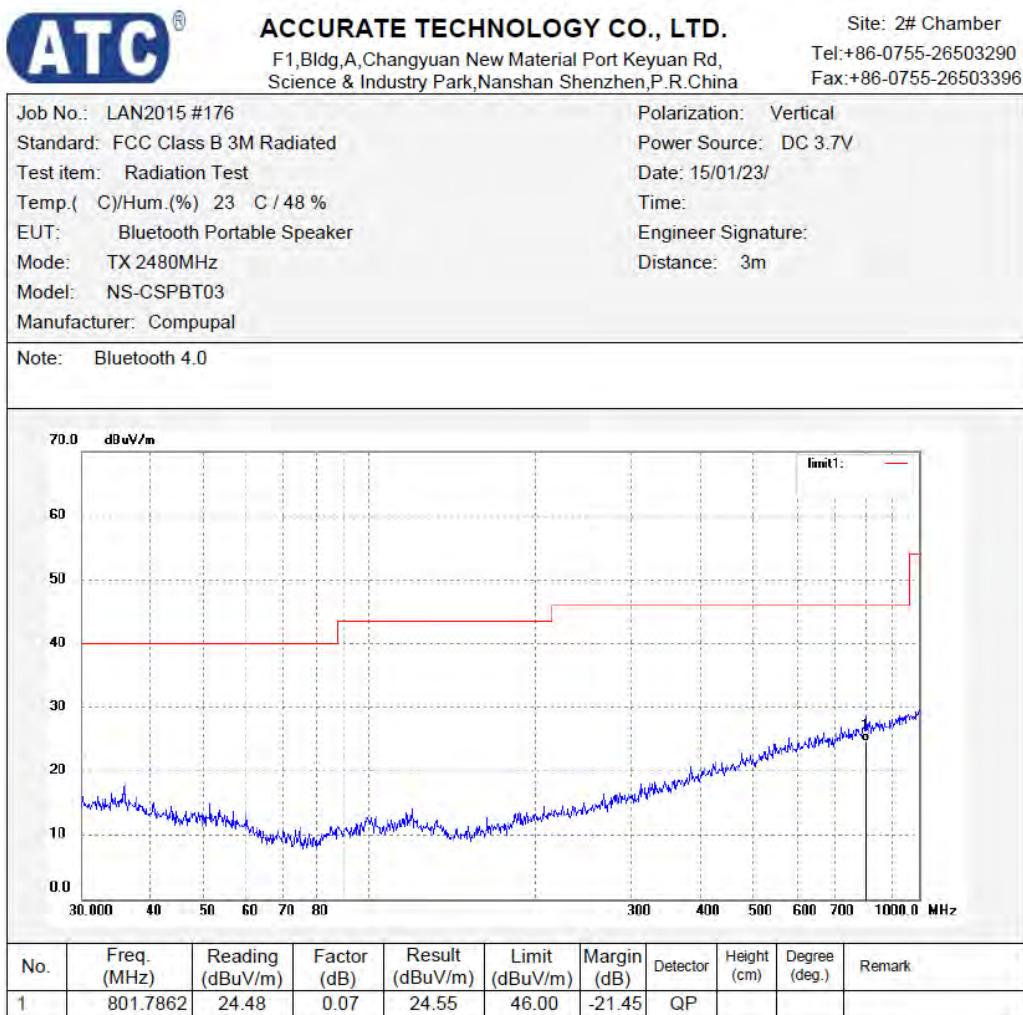


Figure 45: Test figure of spurious emissions, mode B.3, Horizontal polarity (1GHz –18GHz)

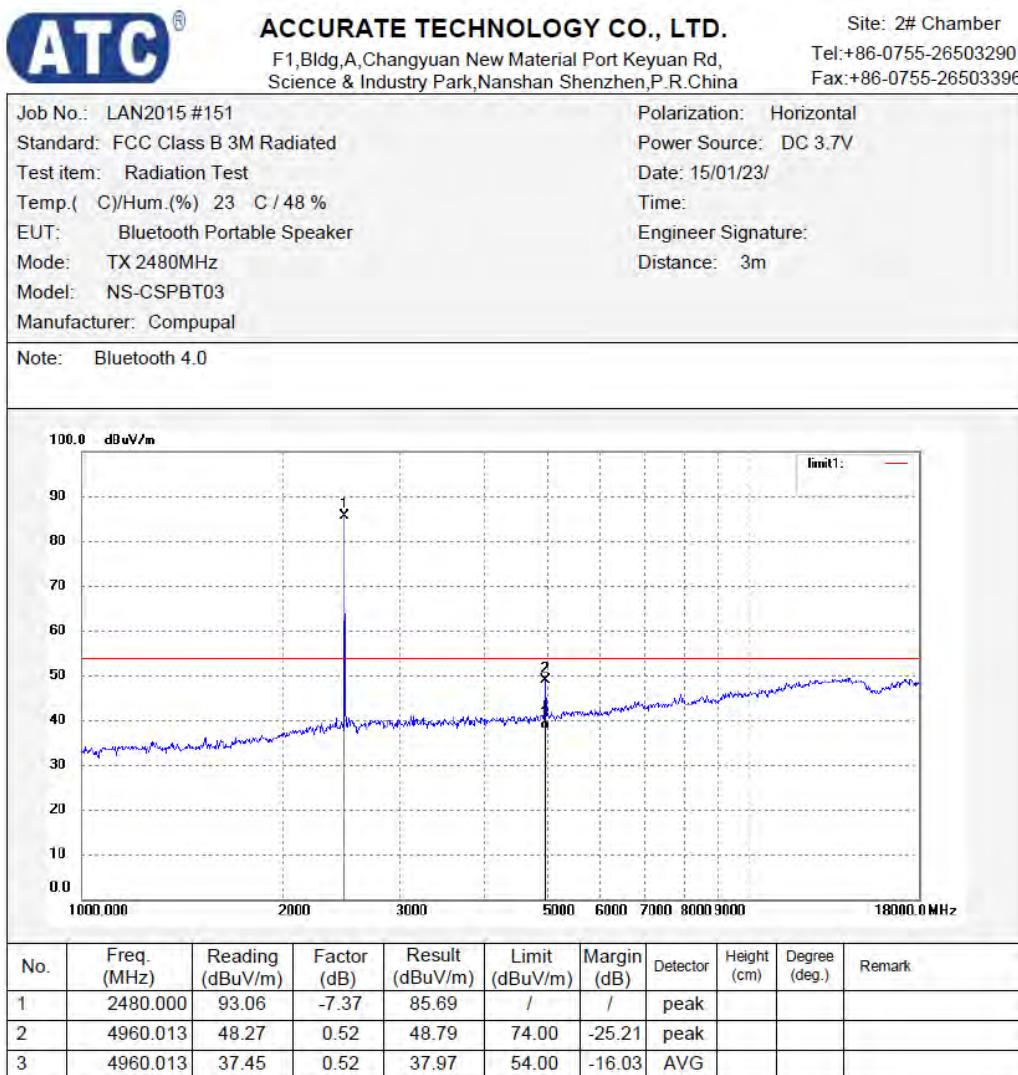


Figure 46: Test figure of spurious emissions, mode B.3, Vertical polarity (1GHz – 18GHz)

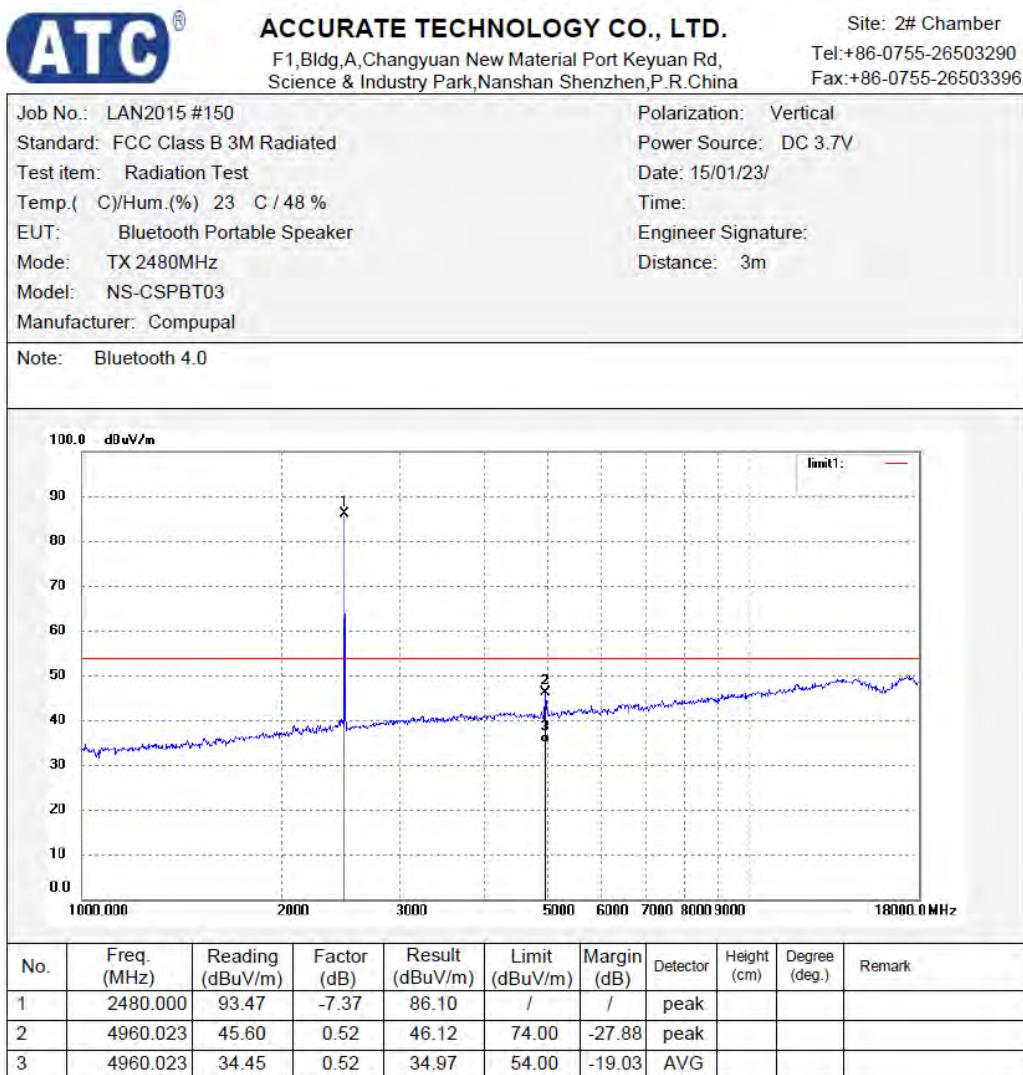


Figure 47: Test figure of spurious emissions, mode B.3, Horizontal polarity (18GHz –25GHz)

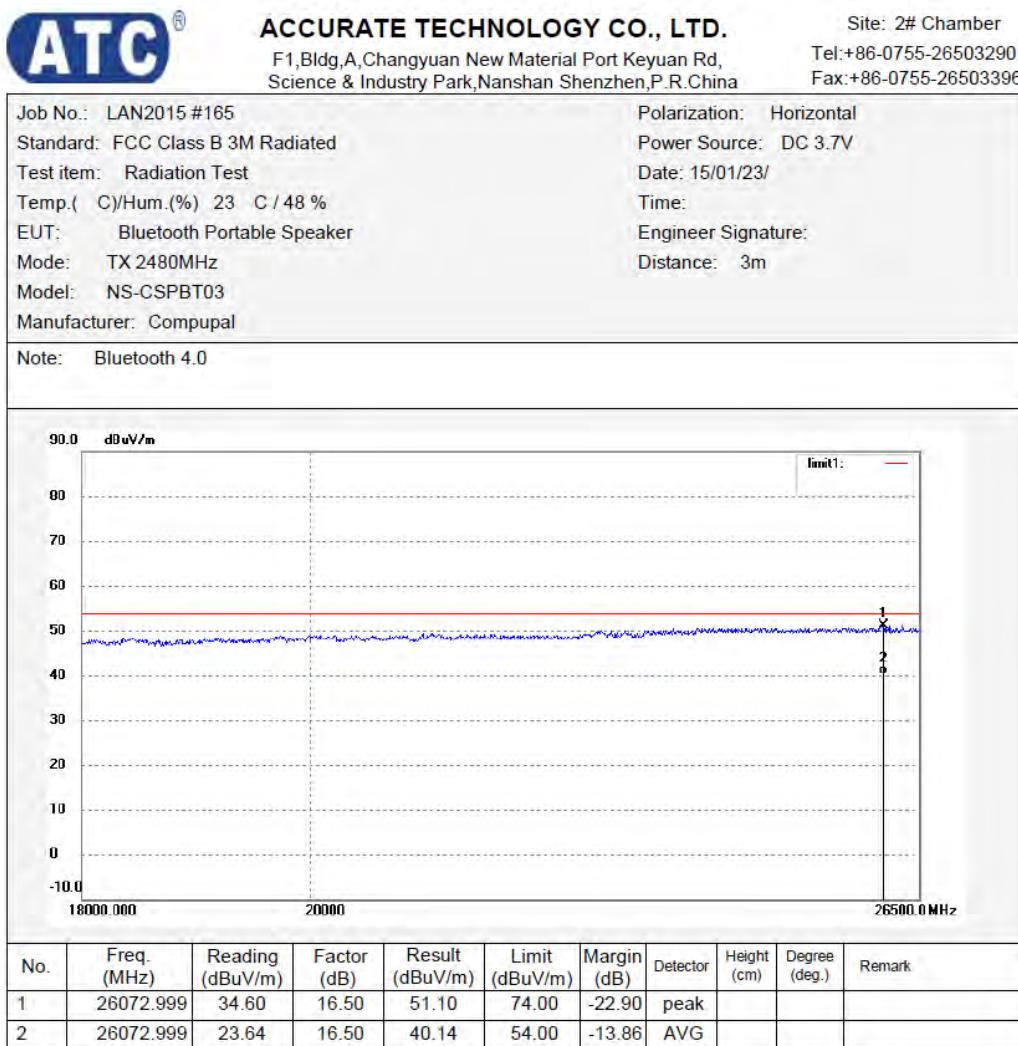


Figure 48: Test figure of spurious emissions, mode B.3, Vertical polarity (18GHz – 25GHz)

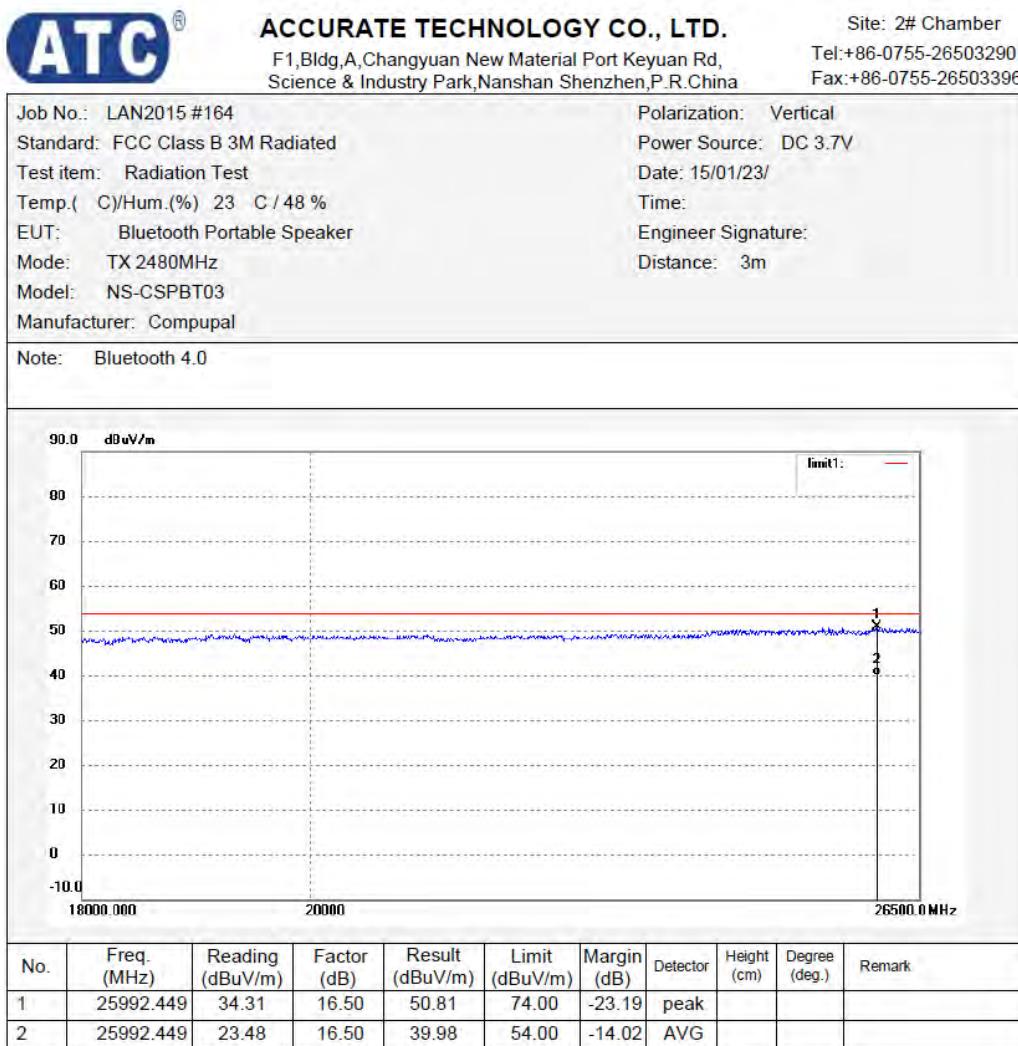


Figure 49: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal

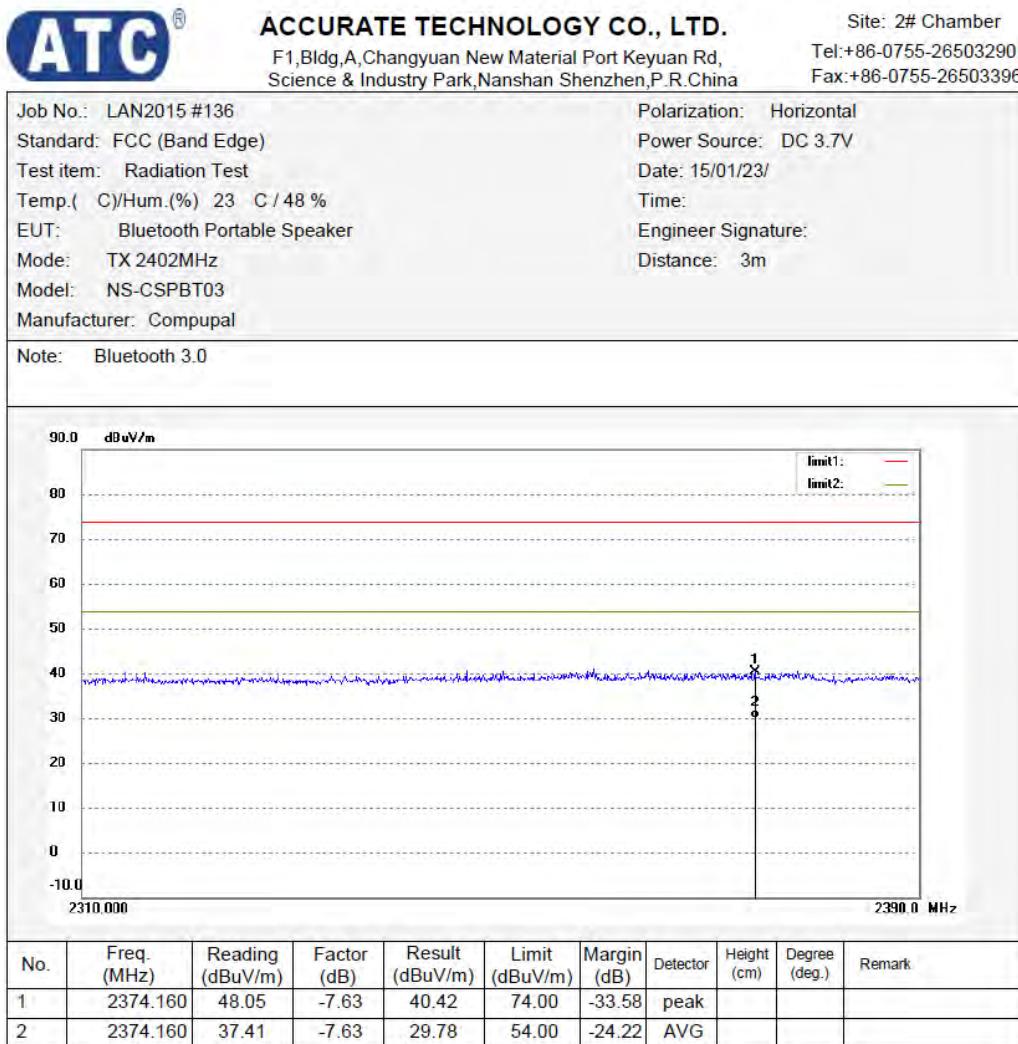


Figure 50: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical

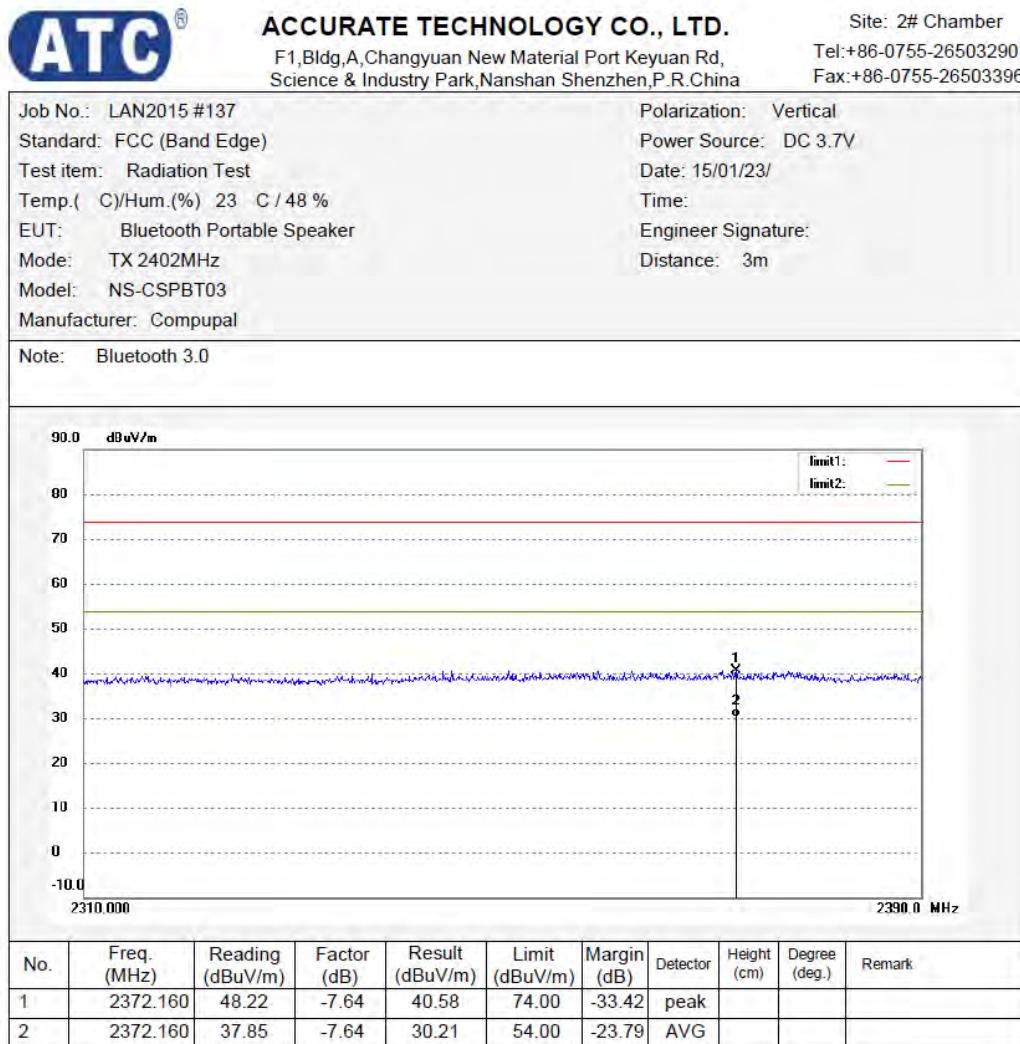


Figure 51: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

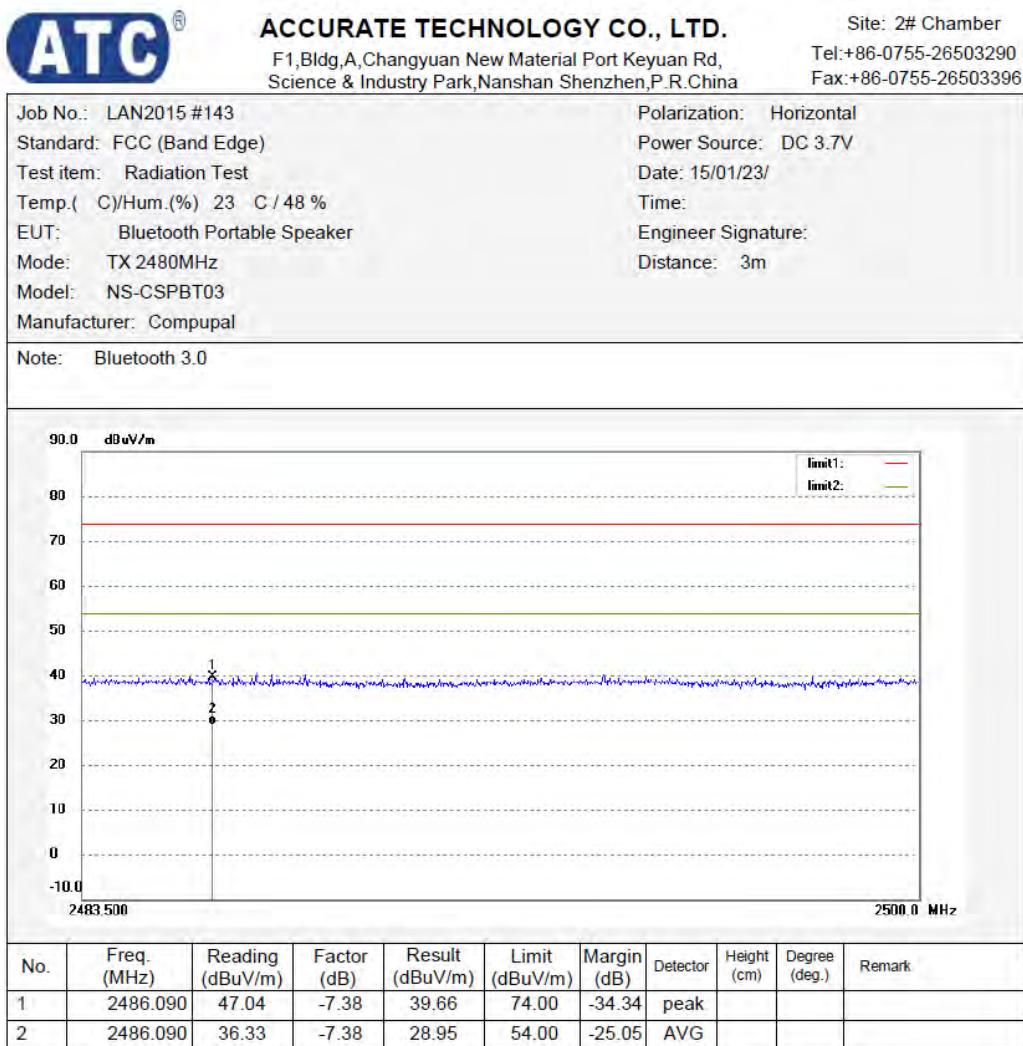


Figure 52: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

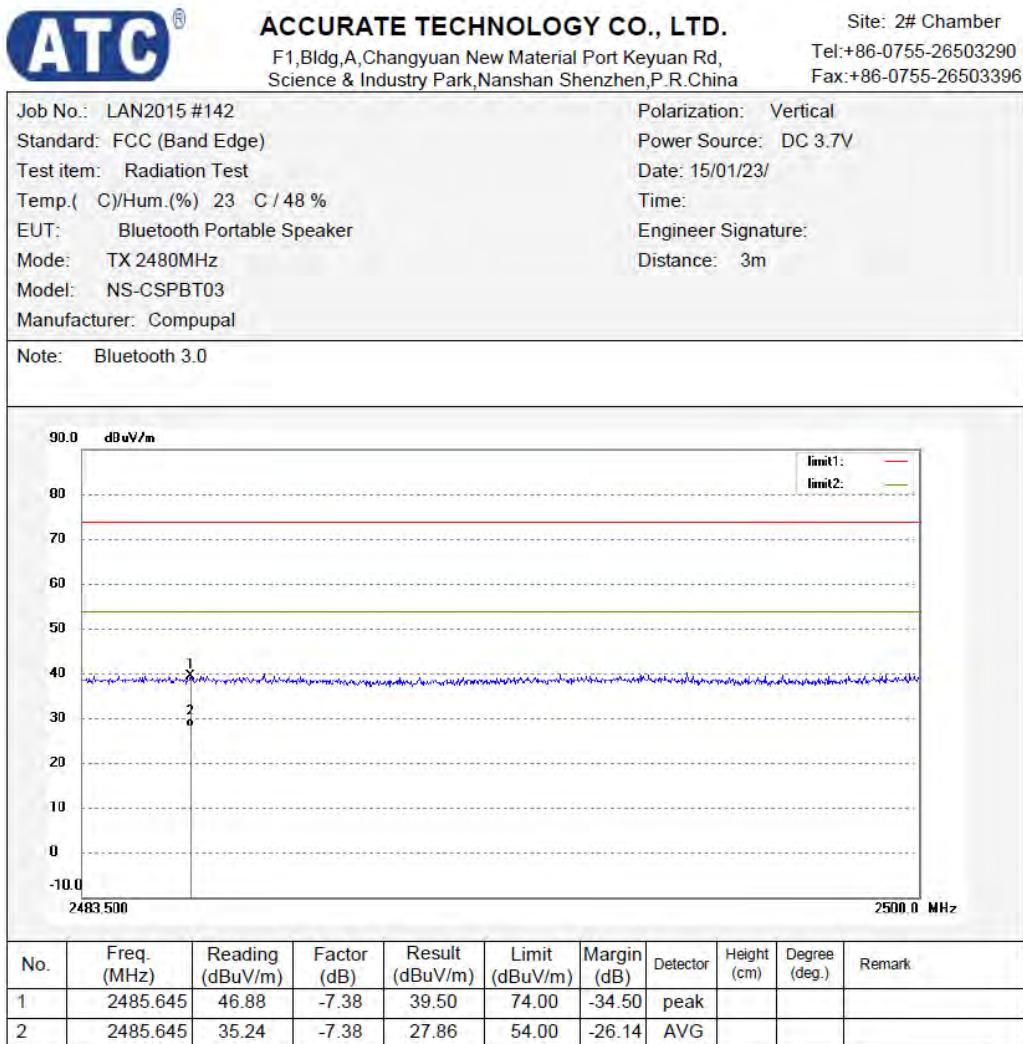


Figure 53: Test figure of Radiated emissions in restricted bands, Mode B.1, Horizontal

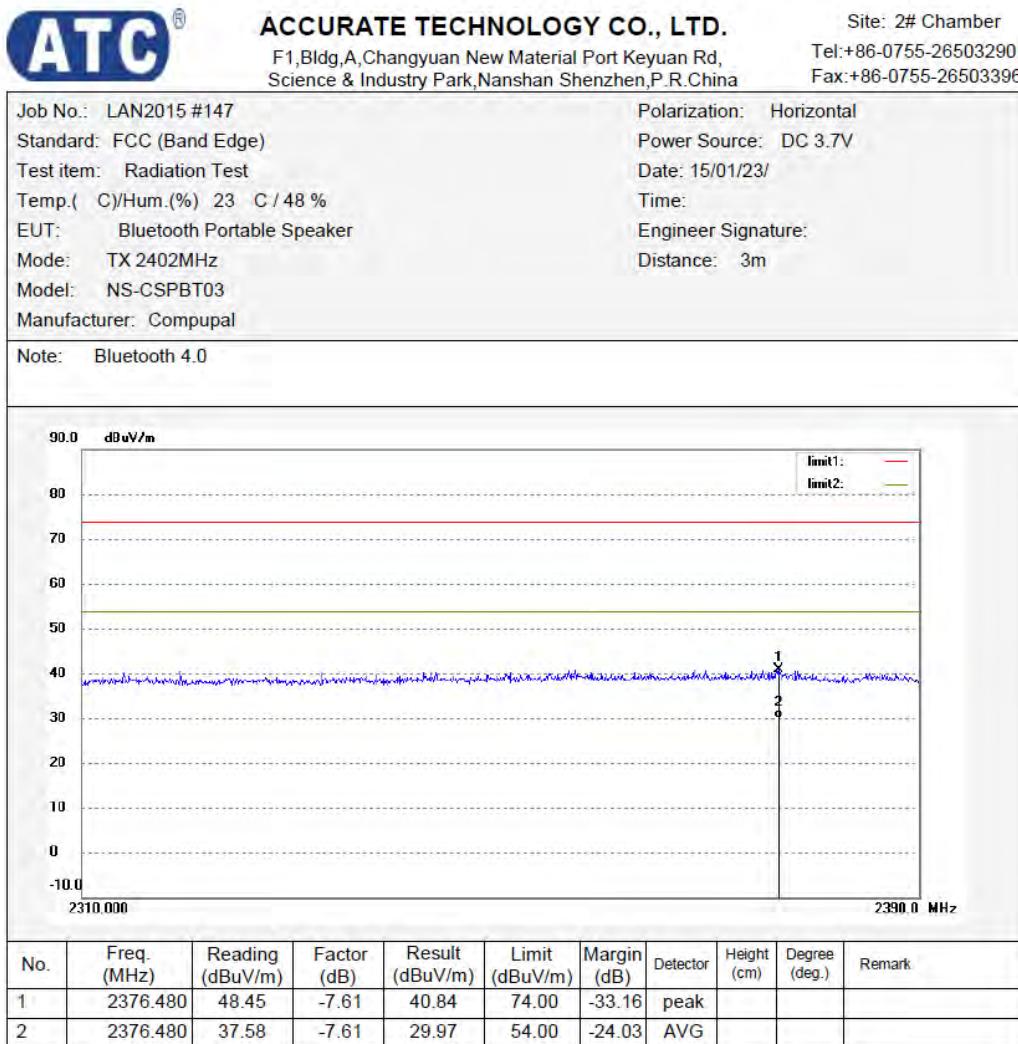


Figure 54: Test figure of Radiated emissions in restricted bands, Mode B.1, Vertical

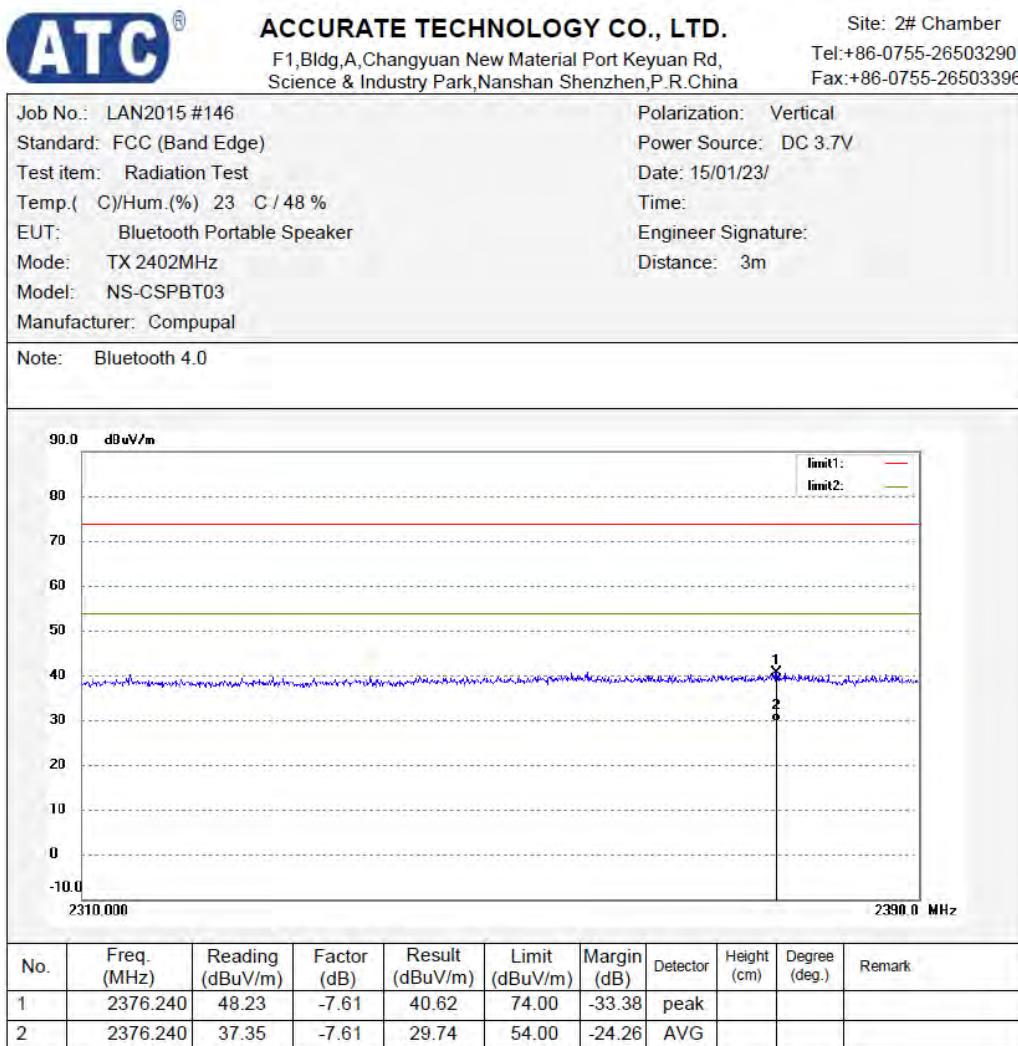


Figure 55: Test figure of Radiated emissions in restricted bands, Mode B.3, Horizontal

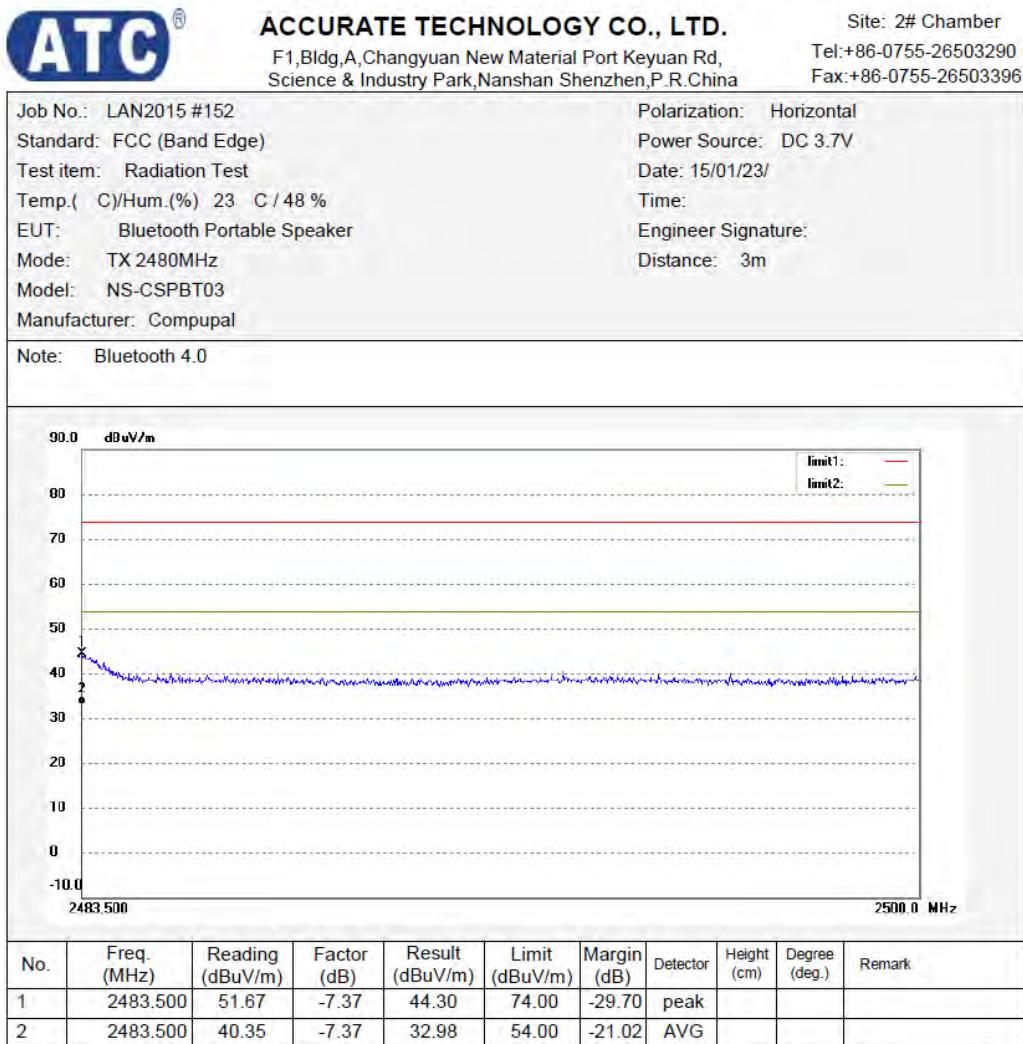


Figure 56: Test figure of Radiated emissions in restricted bands, Mode B.3, Vertical

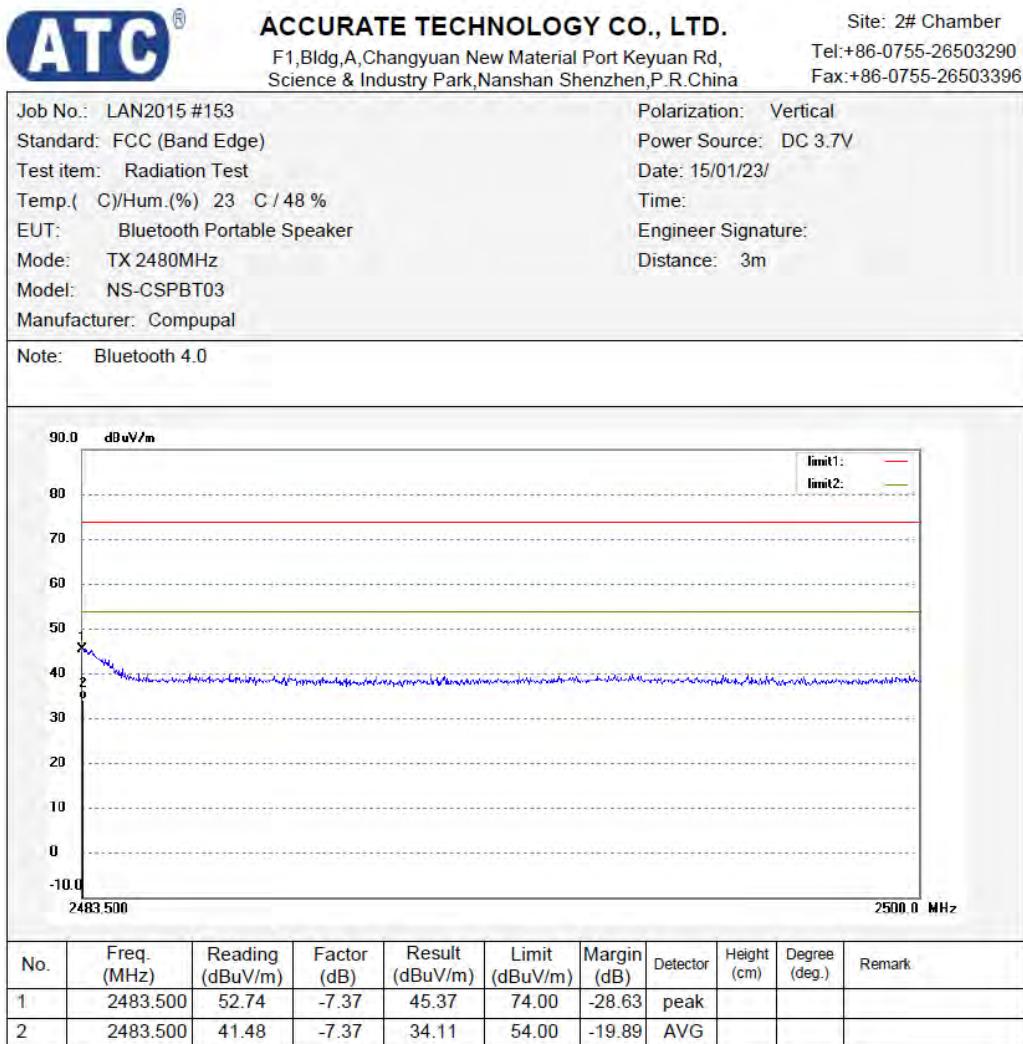


Figure 57: Test figure of Conducted emissions, model NS-CSPBT02, Mode C, line live

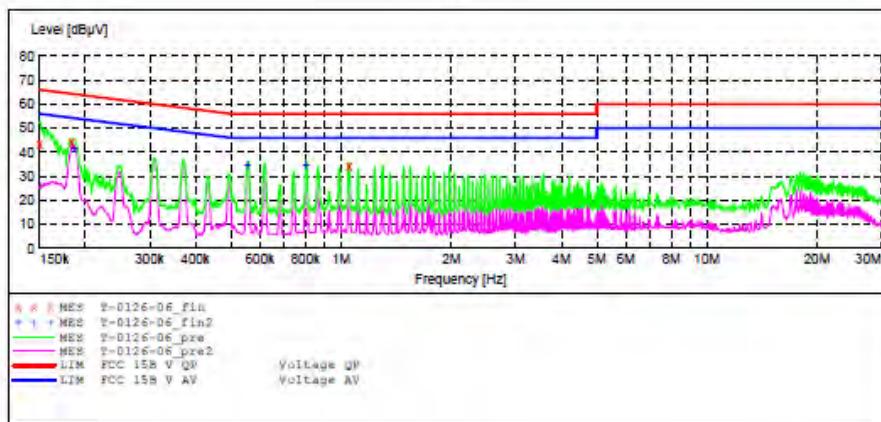
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Portable Speaker M/N: NS-CSPBT02
Manufacturer: Compupal
Operating Condition: Charging
Test Site: 1st Shielding Room
Operator: LAN
Test Specification: L 120V/60Hz
Comment: Mains Port
Start of Test: 1/26/2015 /

SCAN TABLE: "V_150K-30MHz_fin"

Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK6126 2008
Average



MEASUREMENT RESULT: "T-0126-06_fin"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dBµV	dB			
	0.150000	43.40	11.0	66	22.6	QP	L1	GND
	0.183870	43.80	11.2	64	20.5	QP	L1	GND
	1.052309	34.40	11.8	56	21.6	QP	L1	GND

MEASUREMENT RESULT: "T-0126-06_fin2"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dBµV	dB			
	0.186085	42.10	11.2	54	12.1	AV	L1	GND
	0.555583	35.00	12.0	46	11.0	AV	L1	GND
	0.802141	34.70	11.9	46	11.3	AV	L1	GND

Figure 58: Test figure of Conducted emissions, model NS-CSPBT02, Mode C, line neutral

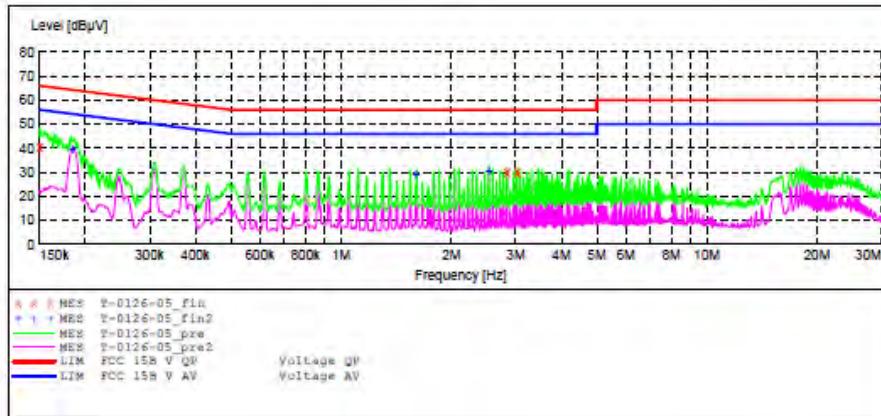
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Portable Speaker M/N: NS-CSPBT02
 Manufacturer: Compupal
 Operating Condition: Charging
 Test Site: It's Shielding Room
 Operator: LAN
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/26/2015 /

SCAN TABLE: "V 150K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Mes.	IF	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
Average						



MEASUREMENT RESULT: "T-0126-05_fin"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.150000	40.20	11.0	66	26.8	QP	N	GND
	2.843398	29.70	11.6	56	26.3	QP	N	GND
	3.030938	29.60	11.6	56	26.2	QP	N	GND

MEASUREMENT RESULT: "T-0126-05_fin2"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.164605	35.70	11.2	54	14.6	AV	N	GND
	1.606633	29.30	11.7	46	16.7	AV	N	GND
	2.532561	30.30	11.6	46	15.7	AV	N	GND

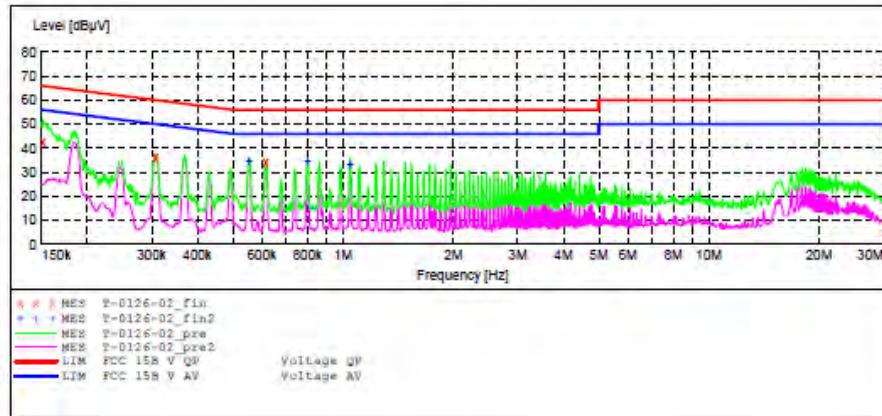
Figure 59: Test figure of Conducted emissions, model NS-CSPBT03, Mode C, line live

ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Portable Speaker M/N: NS-CSPBT03
Manufacturer: Compupal
Operating Condition: Charging
Test Site: It's Shielding Room
Operator: LAN
Test Specification: L 120V/60Hz
Comment: Mains Port
Start of Test: 1/26/2015 /

SCAN TABLE: "V 150K-30MHz fin"
Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0126-02_fin"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.151202	42.50	11.0	66	23.4	QP	L1	GND
	0.306497	36.10	11.6	60	24.0	QP	L1	GND
	0.613892	33.80	11.9	56	22.2	QP	L1	GND

MEASUREMENT RESULT: "T-0126-02_fin2"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.553370	34.70	12.0	46	11.3	AV	L1	GND
	0.798945	34.50	11.9	46	11.5	AV	L1	GND
	1.043940	33.50	11.8	46	12.5	AV	L1	GND

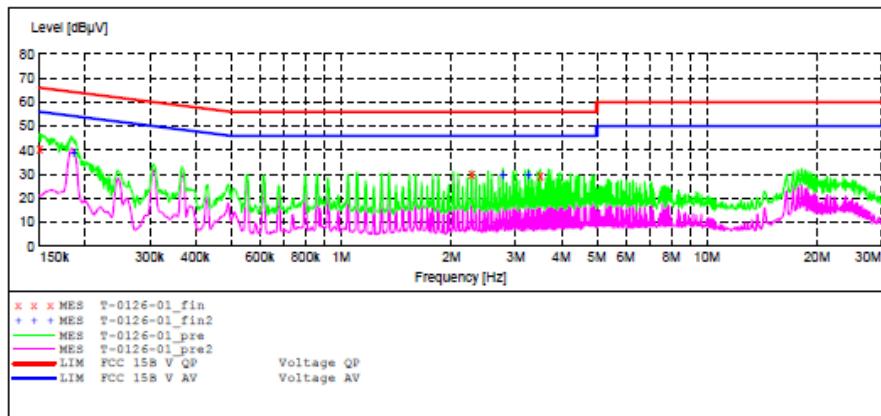
Figure 60: Test figure of Conducted emissions, model NS-CSPBT03, Mode C, line neutral

ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Portable Speaker M/N: NS-CSPBT03
Manufacturer: Compupal
Operating Condition: Charging
Test Site: 1st Shielding Room
Operator: LAN
Test Specification: N 120V/60Hz
Comment: Mains Port
Start of Test: 1/26/2015 /

SCAN TABLE: "V 150K-30MHz fin"
Short Description: -SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0126-01_fin"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.150000	40.20	11.0	66	25.8	QP	N	GND
	2.274000	30.10	11.6	56	25.9	QP	N	GND
	3.502500	29.10	11.5	56	26.9	QP	N	GND

MEASUREMENT RESULT: "T-0126-01_fin2"

1/26/2015	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.186000	39.30	11.2	54	14.9	AV	N	GND
	2.769000	29.60	11.6	46	16.4	AV	N	GND
	3.259500	29.90	11.5	46	16.1	AV	N	GND

Figure 61: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Below 1GHz, Horizontal

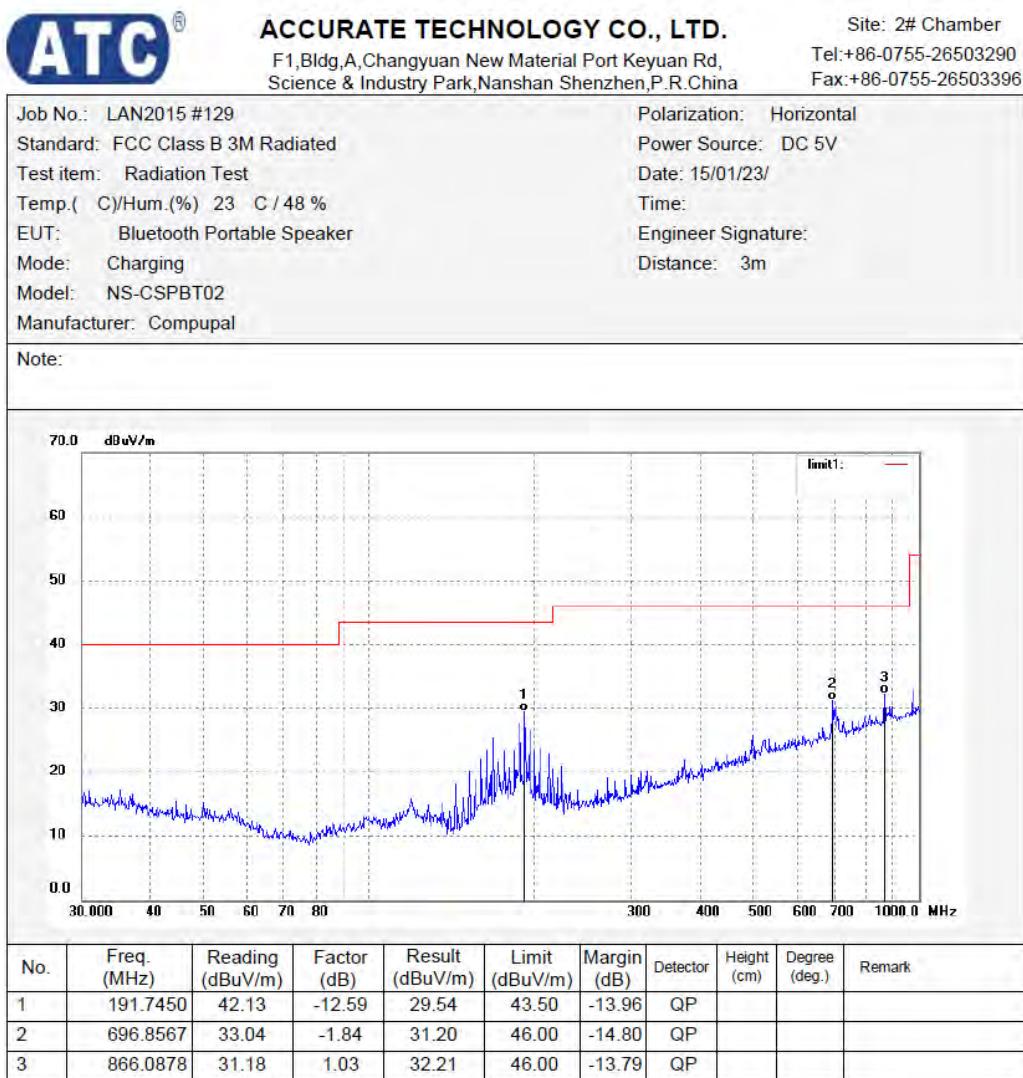


Figure 62: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Below 1GHz, Vertical



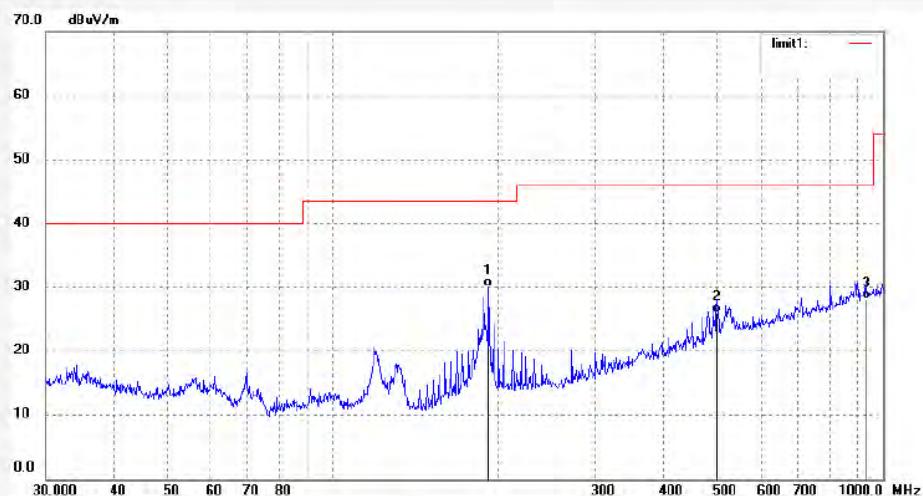
ACCURATE TECHNOLOGY CO., LTD.

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.: LAN2015 #128	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 15/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth Portable Speaker	Engineer Signature:
Mode: Charging	Distance: 3m
Model: NS-CSPBT02	
Manufacturer: Compupal	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	191.7450	42.52	-12.59	29.93	43.50	-13.57	QP			
2	499.4246	30.95	-4.91	26.04	46.00	-19.96	QP			
3	932.2714	26.26	1.85	28.11	46.00	-17.89	QP			

Figure 63: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Above 1GHz, Horizontal

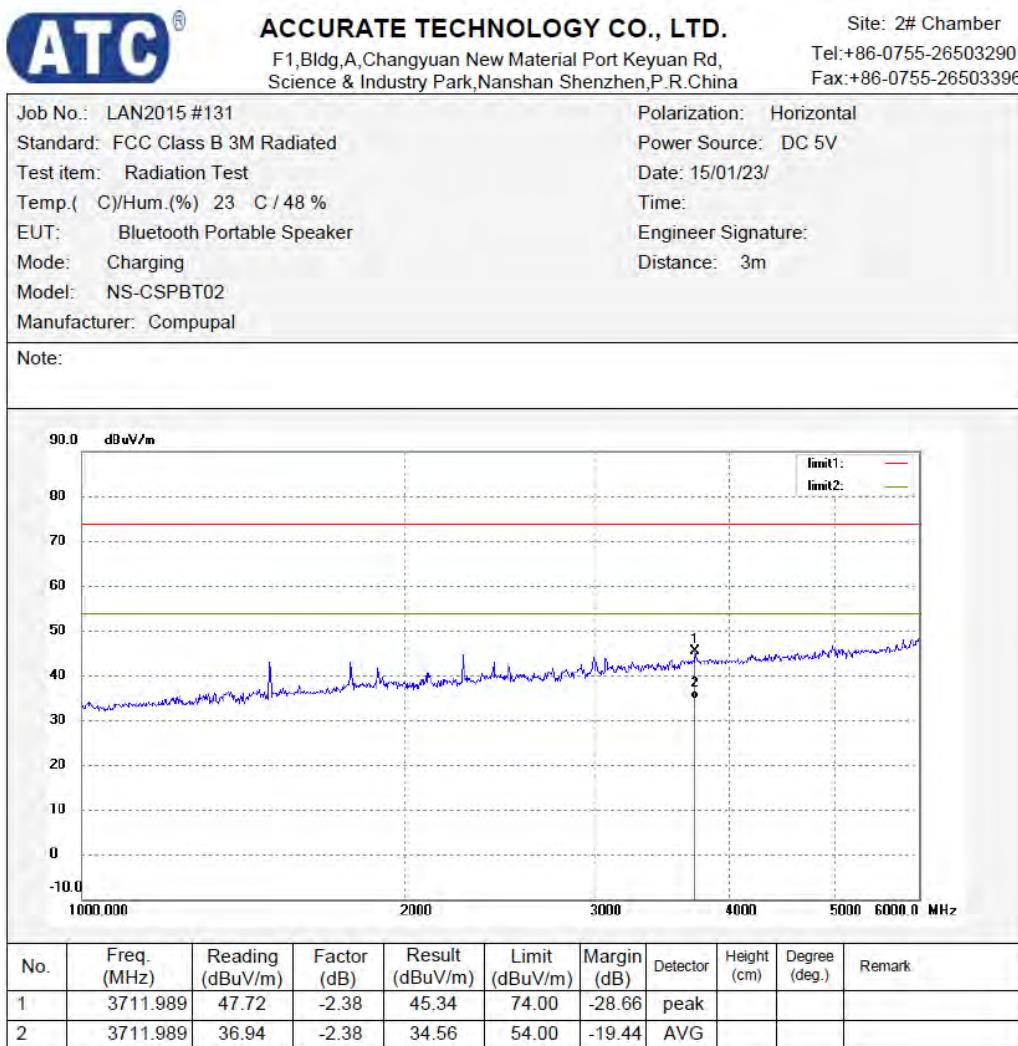


Figure 64: Test figure of Radiated emissions, model NS-CSPBT02, Mode C, Above 1GHz, Vertical

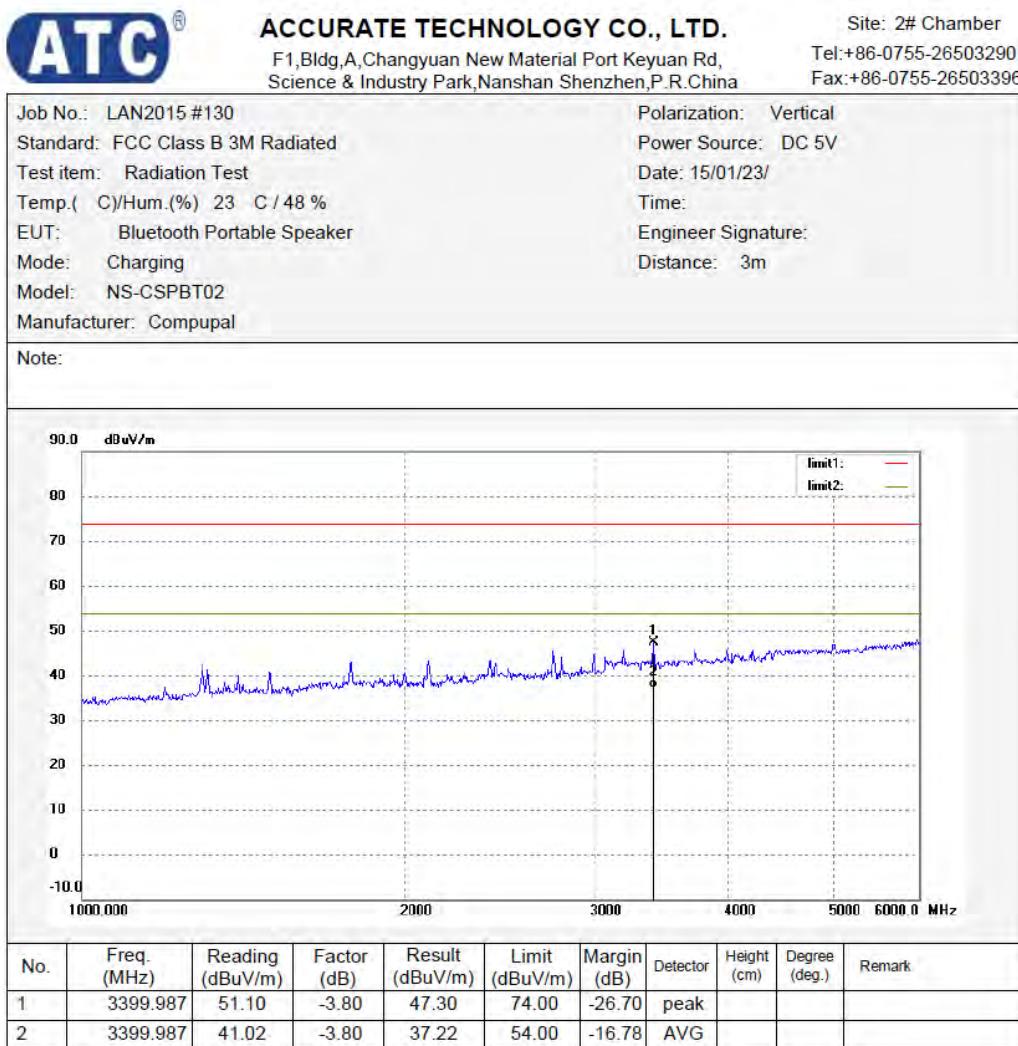


Figure 65: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Below 1GHz, Horizontal

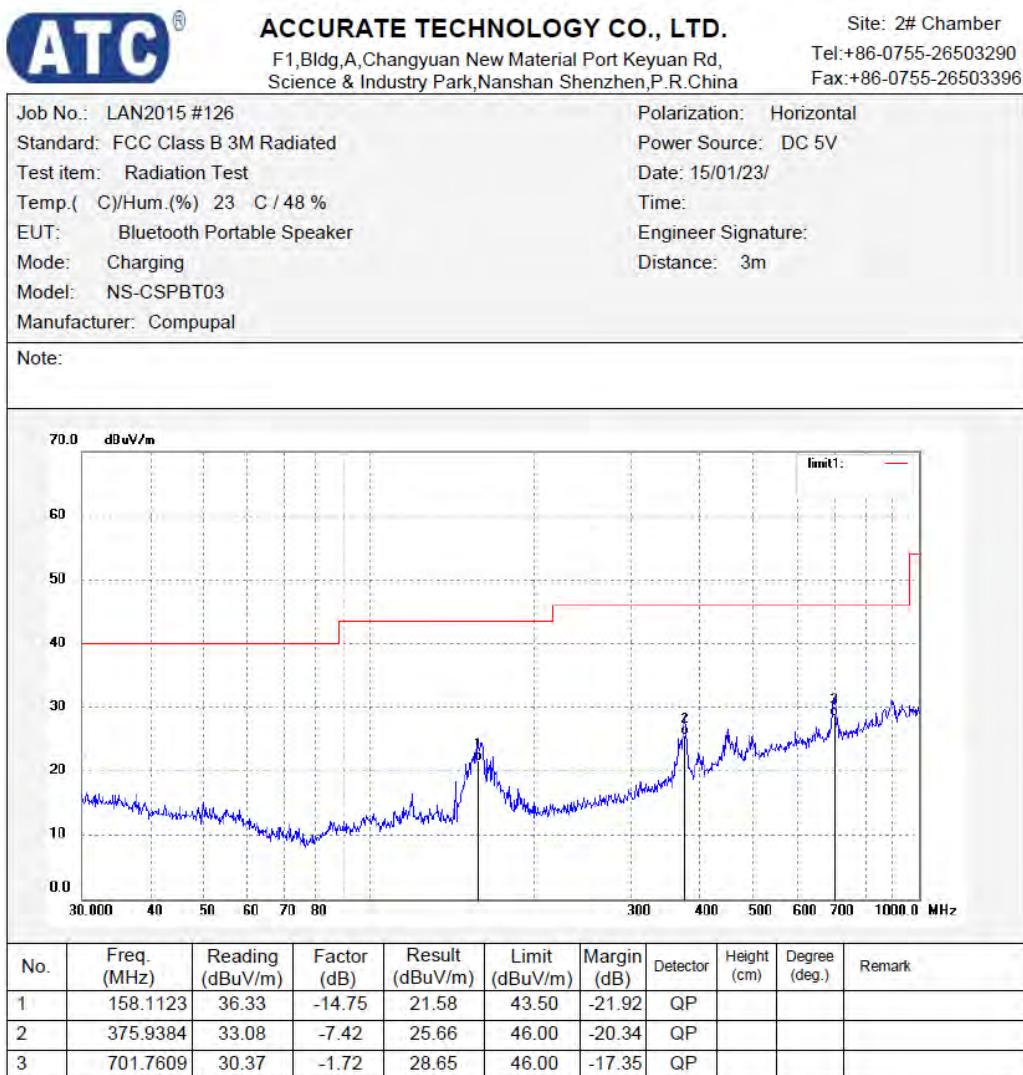


Figure 66: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Below 1GHz, Vertical

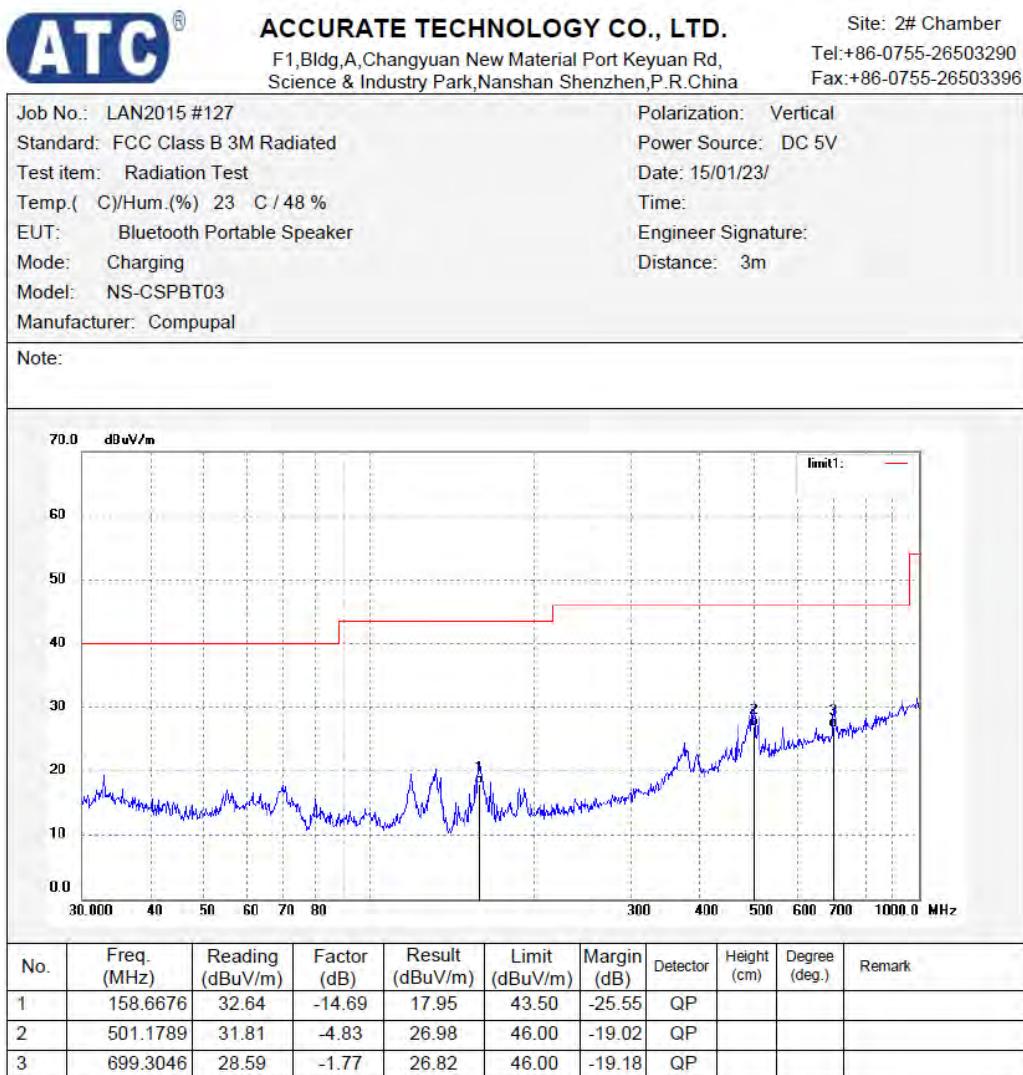


Figure 67: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Above 1GHz, Horizontal

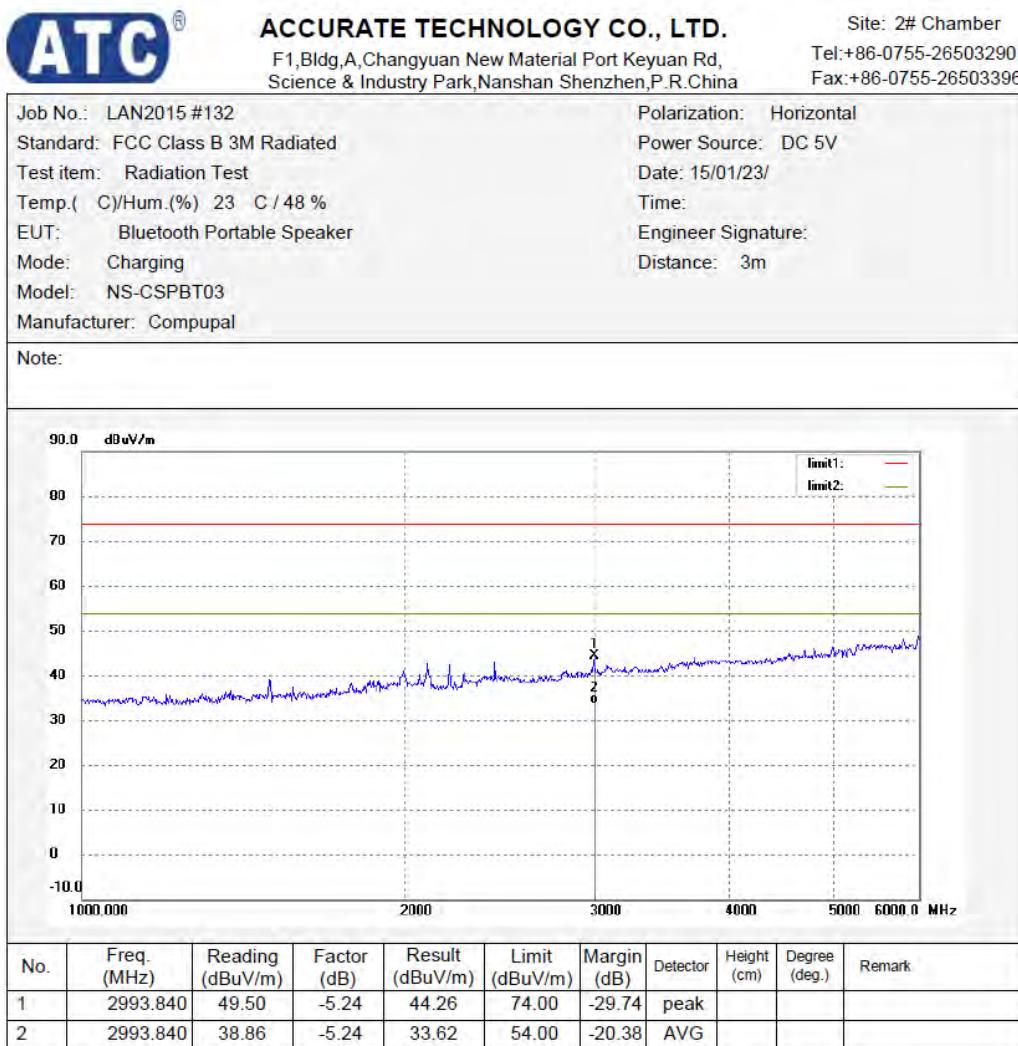


Figure 68: Test figure of Radiated emissions, model NS-CSPBT03, Mode C, Above 1GHz, Vertical

