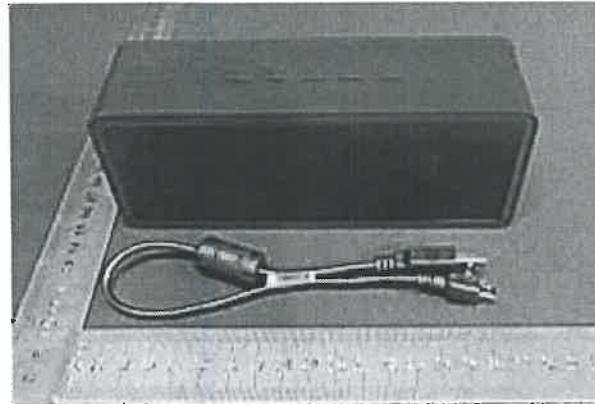


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Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	466337	Auftragsdatum: <i>Order date.:</i>	17.07.2015		
Auftraggeber: <i>Client:</i>	Lightcomm Technology Co., Ltd. RM1708-10, 17/F, PROSPERITY CENTRE, 25 CHONG YIP STREET, KWUN TONG, HONG KONG				
Prüfgegenstand: <i>Test item:</i>	Bluetooth Stereo Speaker with Power bank				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	BTD01A-A, NS-SPBTBRICK-R, NS-SPBTBRICK-CS, NS-SPBTBRICK-C, NS-SPBTBRICK-SB				
Auftrags-Inhalt: <i>Order content:</i>	FCC/IC 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 FCC KDB Publication 447498 D01 v05r02	RSS-247 Issue 1 May 2015 RSS-Gen Issue 4 November 2014 ICES-003 Issue 5 August 2012 RSS-102 Issue 5 March 2015			
Wareneingangsdatum: <i>Date of receipt:</i>	19.07.2015				
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000228680-001 A000228680-002				
Prüfzeitraum: <i>Testing period:</i>	19.07.2015 - 22.07.2015				
Ort der Prüfung: <i>Place of testing:</i>	Shenzhen Emtek 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:				
12.08.2015	Ryan Yang	Senior Project Engineer	20.08.2015	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>	Unterschrift <i>Signature</i>
<b>Sonstiges / Other:</b>					
<p>This test report is for approval of 2.4G band operation.</p> <p>FCC ID: XMF-BTD01 Application NO.: BTD01A-A, NS-SPBTBRICK-R, NS-SPBTBRICK-CS, NS-SPBTBRICK-C, NS-SPBTBRICK-SB      IC: 20064-BTD01 Application NO.: NS-SPBTBRICK-R, NS-SPBTBRICK-CS, NS-SPBTBRICK-C, NS-SPBTBRICK-SB</p>					
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <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(all) = entspricht nicht o.g. Prüfgrundlage(n) Legend: 1 = very good      2 = good      3 = satisfactory      4 = sufficient      5 = poor P(ass) = passed a.m. test specifications(s)      F(all) = failed a.m. test specifications(s) N/A = nicht anwendbar      N/T = nicht getestet N/A = not applicable      N/T = not tested					
<p><b>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</b></p> <p><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></p>					

## **Test Summary**

**5.1.1 ANTENNA REQUIREMENT**

RESULT: Pass

**5.1.2 PEAK CONDUCTED OUTPUT POWER**

RESULT: Pass

**5.1.3 CONDUCTED POWER SPECTRAL DENSITY**

RESULT: Pass

**5.1.4 6dB BANDWIDTH**

RESULT: Pass

**5.1.5 99% BANDWIDTH**

RESULT: Pass

**5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH**

RESULT: Pass

**5.1.7 RADIATED SPURIOUS EMISSION**

RESULT: Pass

**5.1.8 20dB BANDWIDTH**

RESULT: Pass

**5.1.9 CARRIER FREQUENCY SEPARATION**

RESULT: Pass

**5.1.10 NUMBER OF HOPPING FREQUENCY**

RESULT: Pass

**5.1.11 TIME OF OCCUPANCY**

RESULT: Pass

**5.1.12 CONDUCTED EMISSIONS**

RESULT: Pass

**5.1.13 RADIATED EMISSION**

RESULT: Pass

**6.1.1 ELECTROMAGNETIC FIELDS**

RESULT: Pass

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## 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 Emtek Co., Ltd.**

Bldg. 69, Majialong Industry Zone, Nanshan District, Shenzhen, China

FCC Registration No.: 406365

Test site Industry Canada No.: 4480A-4

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**

**Shenzhen Emtek Co., Ltd.**

<b>Radio Spectrum Test</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Spectrum Analyzer	R&S	FSV40	132.1-3008K39-100967-AP	17.05.2016
Spectrum Analyzer	Agilent	E4407B	88156318	17.05.2016
Spectrum Analyzer	Agilent	N9010A	My53470879	17.05.2016
<b>Conducted Emissions</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Test Receiver	R&S	ESCI	26115-010-0027	17.05.2016
L.I.S.N.	R&S	ENV216	101161	17.05.2016
50Ω Coaxial Switch	Anritsu	MP59B	6100175589	17.05.2016
Voltage Probe	R&S	ESH2-Z3	100122	17.05.2016
<b>Spurious Emission &amp; Radiated Emission</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
EMI Test Receiver	R&S	ESU	1302.6005.26	17.05.2016
Loop Antenna	Schwarzbeck	FMZB 1519	1519-012	17.05.2016
Pre-Amplifier	HP	8447F	2944A07999	17.05.2016
Bilog Antenna	Schwarzbeck	VULB9163	142	17.05.2016
Pre-Amplifier	A.H.	PAM-0126	1415261	17.05.2016
Horn Antenna	Schwarzbeck	BBHA 9120	707	17.05.2016
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170399	17.05.2016
Cable	N/A	3M SF104-26.5	295838/4	17.05.2016
Cable	N/A	6M SF104-26.5	295840/4	17.05.2016
Cable	Schwarzbeck	AK9513	ACRX1	17.05.2016
Cable	Rosenberger	N/A	FP2RX2	17.05.2016
Cable	Schwarzbeck	AK9513	CRPX1	17.05.2016
Cable	Schwarzbeck	AK9513	CRRX2	17.05.2016
Cable	H+B	0.5M SF104-26.5	289147/4	17.05.2016
Cable	H+B	3M SF104-26.5	295838/4	17.05.2016
Cable	H+B	6M SF104-26.5	295840/4	17.05.2016

## 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

Parameter	Uncertainty
Radio Spectrum	± 1.0 dB
All emission, radiated	± 3.0 dB
Conducted Emission	± 2.0 dB
Radiated Emission	± 2.0 dB
Antenna Port Emission	± 3.0 dB
Temperature	± 0.5 °C
Humidity	± 3.0 %

## 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

Shenzhen Emtek Co., Ltd. Test facility located at Bldg. 69, Majialong Industry Zone, Nanshan District, Shenzhen, 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 a “Bluetooth Speaker” with Bluetooth 4.0 dual mode, which is intended to enable Bluetooth connectivity with Notebook or smart phone, and play the music from Bluetooth device.

According to the declaration of the applicant, the electrical circuit design, PCB layout, components used and internal structure are identical for all models, only difference being the model No. and appearance.

Refer to User Manual for further details.

### 3.2 Ratings and System Details

Table 2: Technical Specification of EUT

Technical Specification	Value	
Product Name	Bluetooth Stereo Speaker with Power bank	
Model Number	<b>BTD01A-A</b> , NS-SPBTBRICK-R, NS-SPBTBRICK-CS, NS-SPBTBRICK-C, NS-SPBTBRICK-SB	
Operating Frequency	2402-2480MHz	
Extreme Temperature Range	-20°C ~ +55°C	
Operation Voltage	DC 5.0V	From USB for charging
	DC 3.7V	From Internal rechargeable lithium battery
Modulation	BDR mode	GFSK
	EDR mode	$\pi/4$ DQPSK, 8DPSK
	Low Energy mode	GFSK
Number of Channel	BDR & EDR mode:79 channels; Low Energy mode:40 channels	
Channel Spacing	BDR & EDR mode: 1MHz; Low Energy mode: 2MHz;	
Bluetooth Version	Bluetooth 4.0 (dual mode)	
Antenna Type and Gain	PCB Antenna, 0 dBi	

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**Table 3: RF Channel and Frequency of Bluetooth**

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: RF Channel and Frequency of Bluetooth Low Energy**

RF Channel	Frequency (MHz)						
00	2402.00	10	2424.00	20	2444.00	30	2464.00
01	2404.00	11	2426.00	21	2446.00	31	2466.00
02	2406.00	12	2428.00	22	2448.00	32	2468.00
03	2408.00	13	2430.00	23	2450.00	33	2470.00
04	2410.00	14	2432.00	24	2452.00	34	2472.00
05	2412.00	15	2434.00	25	2454.00	35	2474.00
06	2414.00	16	2436.00	26	2456.00	36	2476.00
07	2416.00	17	2438.00	27	2458.00	37	2478.00
08	2418.00	18	2440.00	28	2460.00	38	2480.00
09	2420.00	19	2442.00	29	2462.00	39	2464.00

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On,
  - 1. Bluetooth mode (BDR & EDR mode)
    - a. Transmitting
      - 1) Low Channel
      - 2) Middle Channel
      - 3) High Channel
    - b. Receiving
  - 2. Bluetooth mode (Low Energy mode)
    - a. Transmitting
      - 1) Low Channel
      - 2) Middle Channel
      - 3) High Channel
    - b. Receiving
- B. On, Transmitting on Hopping channel
- C. On, Bluetooth connecting mode
- D. AUX input
- E. Charging
- F. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Model Difference Letter
- Circuit Diagram
- PCB Layout
- Bill of Material
- Operation Description
- FCC label and location
- User Manual
- Block Diagram
- Instruction Manual
- Rating Label
- Photo Document
- Application form

## 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 C63.10: 2013 and ANSI C63.4: 2014

According to clause 3.1, all tests were performed on model **BTD01A-A** in this report.

### 4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N
PC	LENOVO	9702	100-240Vac, 50/60Hz
LCD Monitor	LENOVO	9227-AE6	100-240Vac, 50/60Hz
Keyboard	LENOVO	KU-0225	USB Operated
Mouse	LENOVO	MO28UOL	USB Operated
AC/DC Adapter	HUONIU	HNEB050200EU	100-240Vac, 50/60Hz

### 4.4 Countermeasures to Achieve EMC Compliance

Additional countermeasures to the submitted test sample(s) for Radiated Emission were employed to achieve compliance.

## 4.5 Test Setup Diagram

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

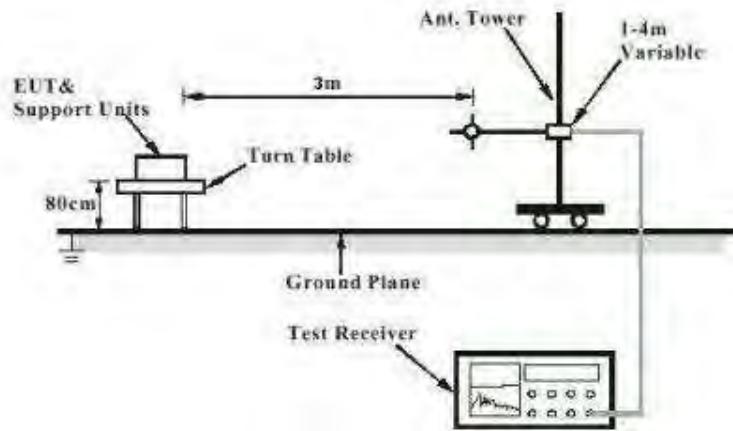
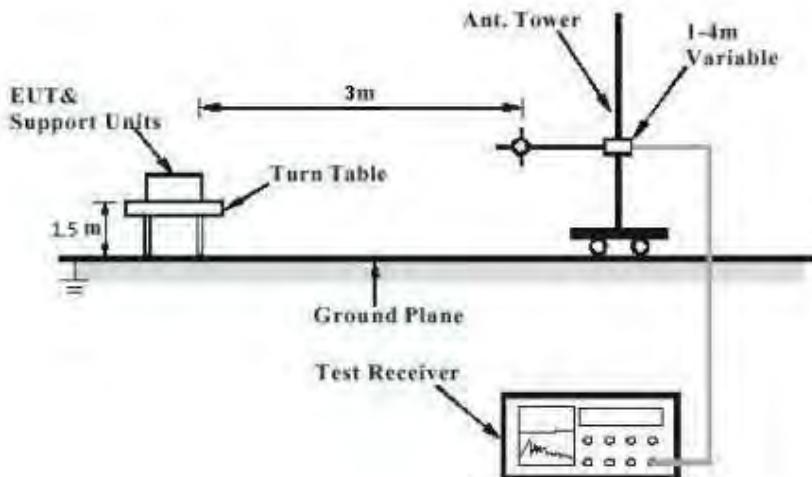
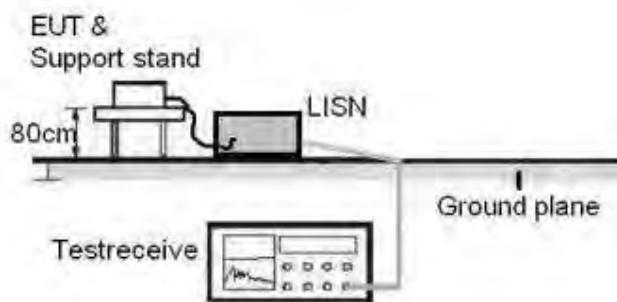


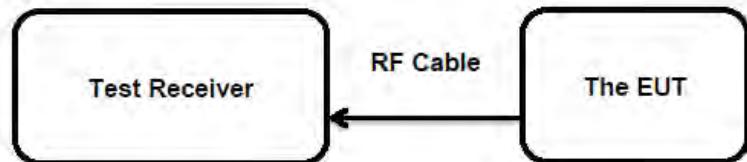
Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



**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 RSS-Gen 6.7
Limits	:	the use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0 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.

## 5.1.2 Peak Conducted Output Power

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

Test standard	:	FCC Part 15.247(b)(1)&(3) RSS-247 Clause 5.4(2)&(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	BDR & EDR: 0.125 Watts      Low Energy: 1.0 Watts
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	23.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.1.a, A.2.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

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**Table 5: Test Result of Peak Conducted Output Power, BDR**

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	3.128	0.00205	0.125
Middle Channel	2441	5.529	0.00357	0.125
High Channel	2480	6.286	0.00425	0.125

**Table 6: Test Result of Peak Conducted Output Power, EDR**

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	1.381	0.00137	0.125
Middle Channel	2441	3.905	0.00246	0.125
High Channel	2480	4.781	0.00301	0.125

**Table 7: Test Result of Peak Conducted Output Power, Low Energy**

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	5.085	0.00322	1.0
Middle Channel	2440	6.493	0.00446	1.0
High Channel	2480	7.160	0.00520	1.0

For the measurement records, refer to following test plot:

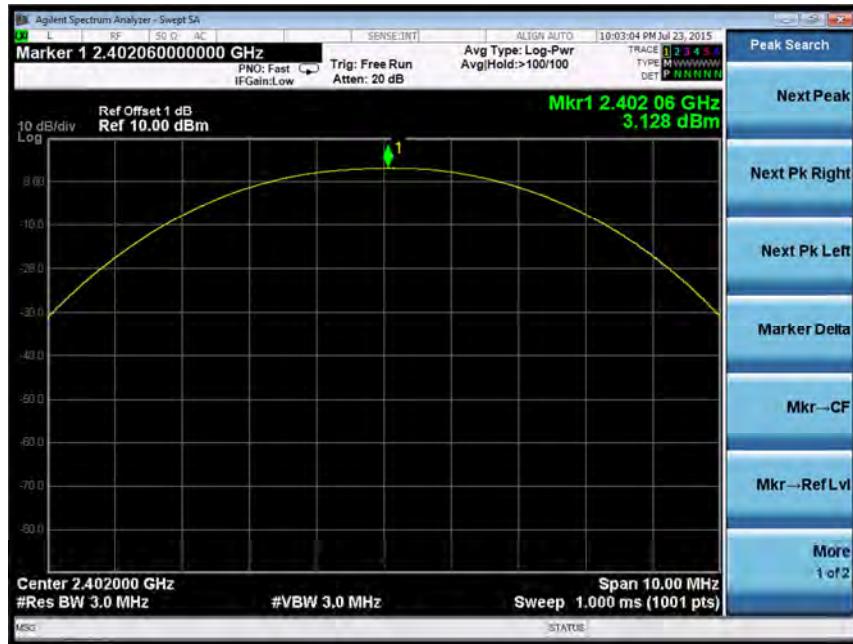
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## Test Plot of Peak Conducted Output Power, BDR

Low channel:



Middle channel:

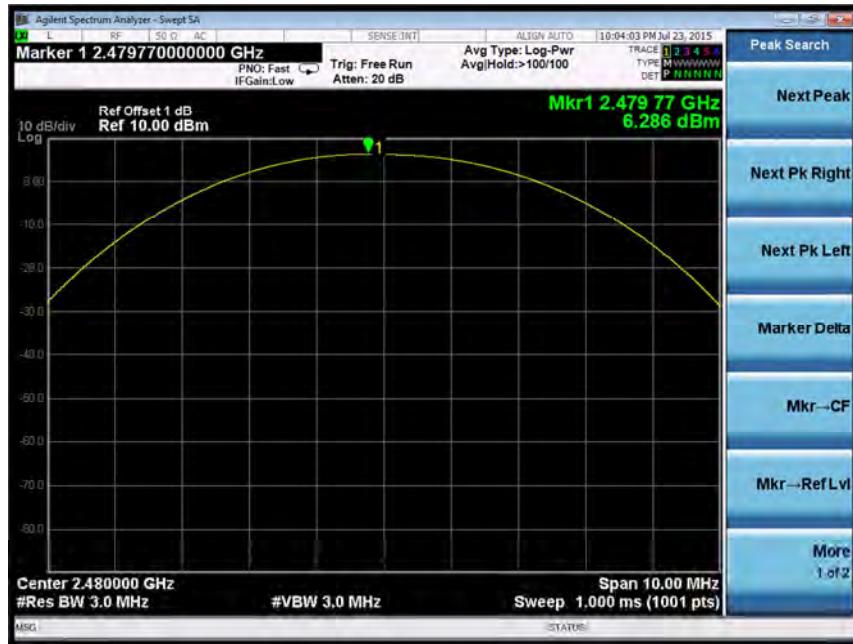


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High channel:



## Test Plot of Peak Conducted Output Power, EDR

Low channel:

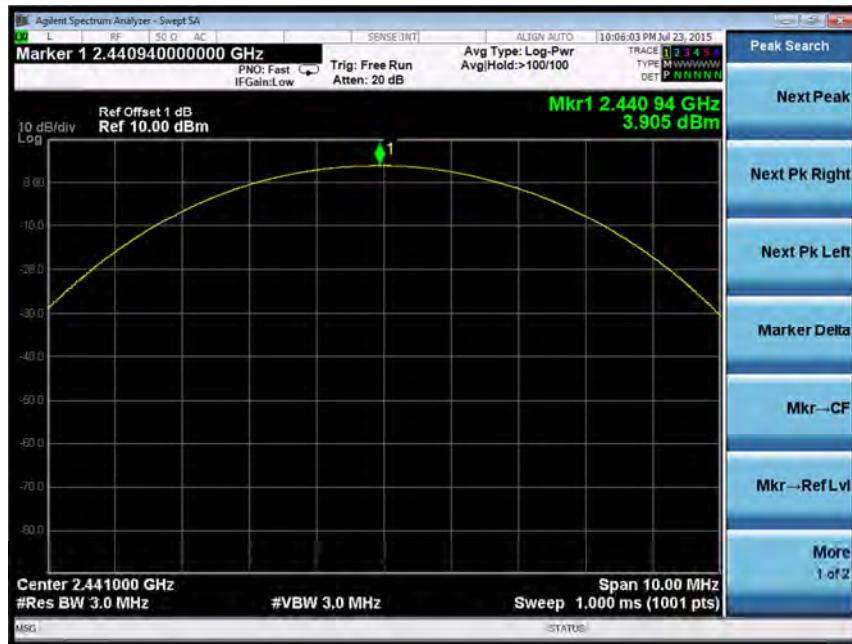


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Middle channel:



High channel:



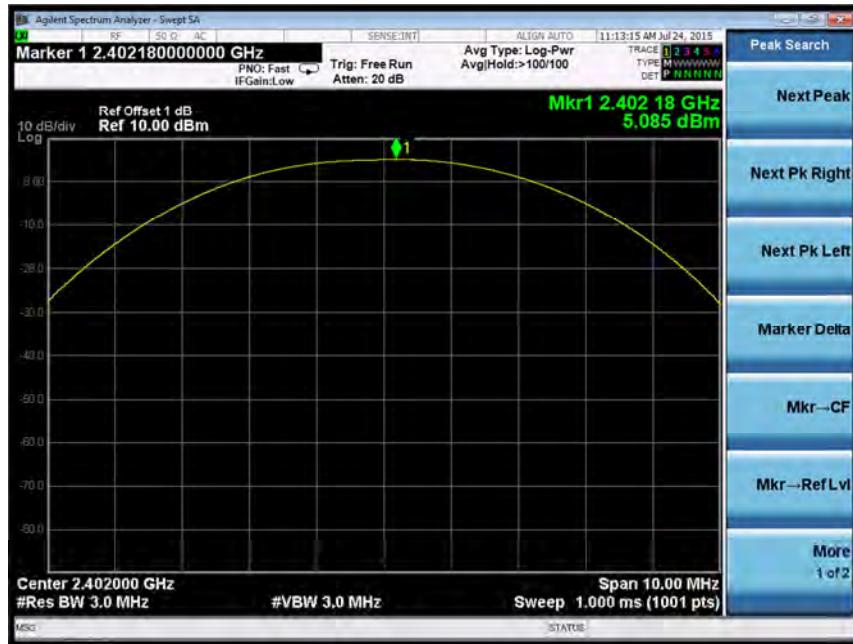
# Prüfbericht - Nr.: 17051282 001

Test Report No.

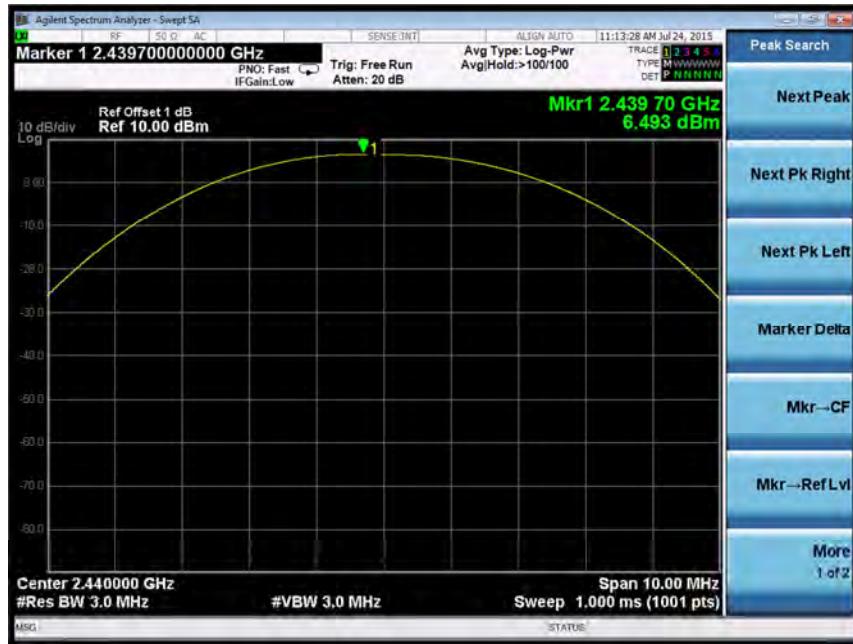
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## Test Plot of Peak Conducted Output Power, Low Energy

Low channel:



Middle channel:



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High channel:



### 5.1.3 Conducted Power Spectral Density

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

Test standard	:	FCC Part 15.247(e) RSS-247 Clause 5.2(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	8 dBm/3kHz
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	24.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.2.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

**Table 8: Test Result of Power Spectral Density, Low Energy**

Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Low Channel	2402	-10.722	8.0
Middle Channel	2440	-9.051	8.0
High Channel	2480	-8.324	8.0

For the measurement records, refer to following test plot:

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## Test Plot of Power Spectral Density, Low Energy

Low channel:

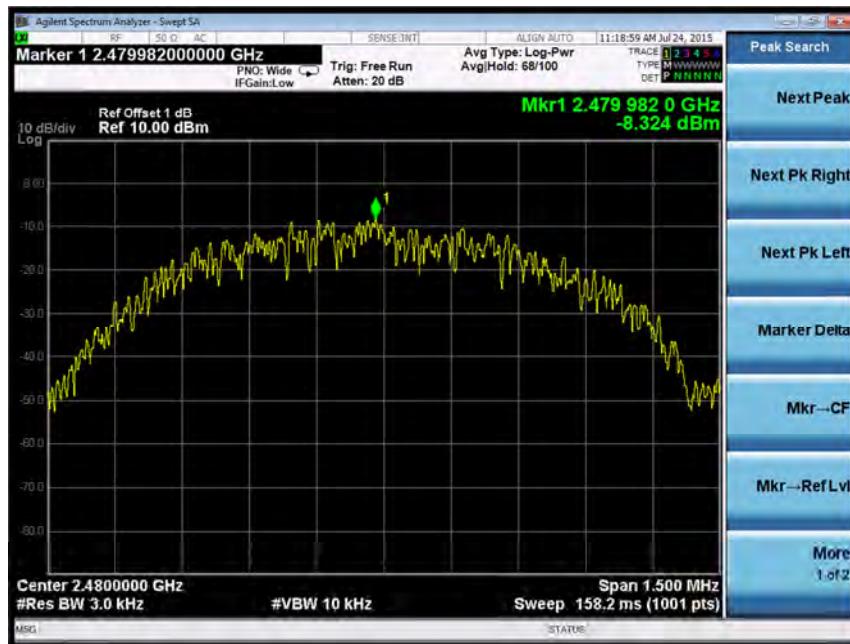


Middle channel:



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High channel:



### 5.1.4 6dB Bandwidth

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

Test standard	:	FCC Part 15.247(a)(2) RSS-247 Clause 5.2(1)
Basic standard	:	ANSI C63.10: 2013
Limits	:	More than 500 KHz
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	24.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.2.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

**Table 9: Test Result of 6dB Bandwidth, Low Energy**

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	697.6	500	Pass
Middle Channel	2440	699.5	500	Pass
High Channel	2480	695.4	500	Pass

For the measurement records, refer to following test plot:

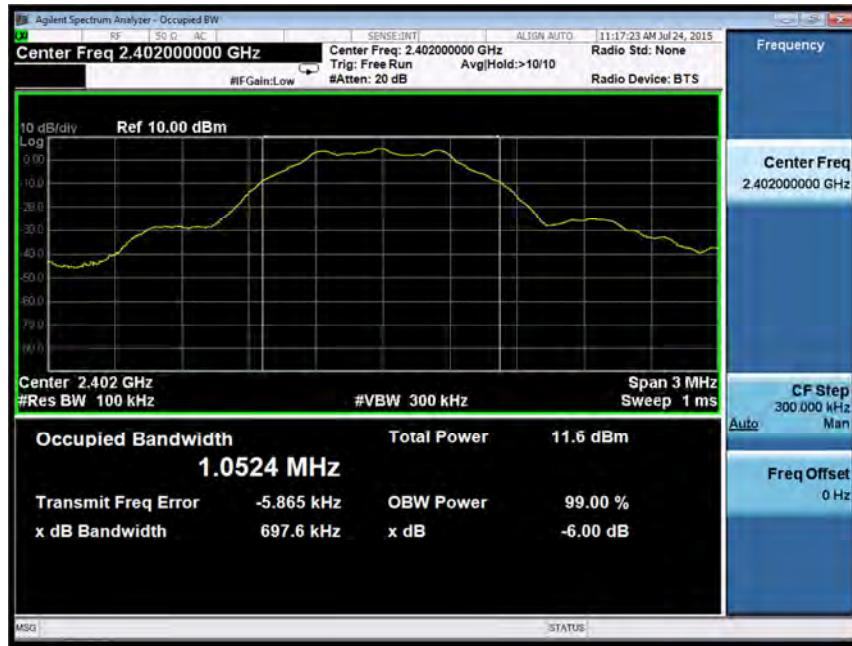
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## Test Plot of 6dB Bandwidth, Low Energy

Low channel:



Middle channel:



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High channel:



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### 5.1.5 99% Bandwidth

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

Test standard	:	RSS-Gen Clause 6.6
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	24.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.1.a , A.2.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

**Table 10: Test Result of 99% Bandwidth, BDR mode**

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	843.40	/	Pass
Middle Channel	2441	834.87	/	Pass
High Channel	2480	836.50	/	Pass

**Table 11: Test Result of 99% Bandwidth, EDR mode**

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	1145.80	/	Pass
Middle Channel	2441	1141.10	/	Pass
High Channel	2480	1141.60	/	Pass

**Table 12: Test Result of 99% Bandwidth, Low Energy**

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	1030.00	/	Pass
Middle Channel	2440	1025.20	/	Pass
High Channel	2480	1023.50	/	Pass

For the measurement records, refer to following test plot:

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## Test Plot of 99% Bandwidth, BDR

Low channel:



Middle channel:



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High channel:



## Test Plot of 99% Bandwidth, EDR

Low channel:



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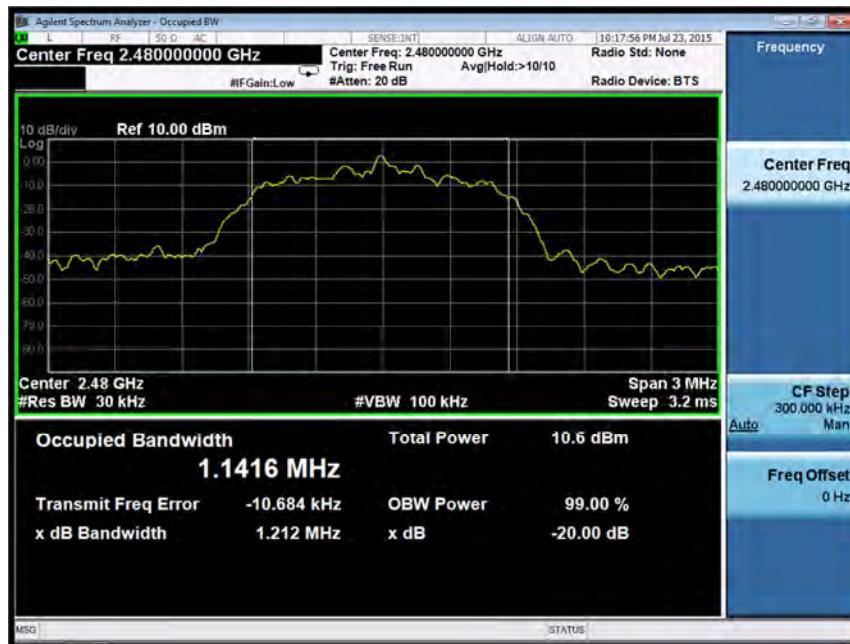
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Middle channel:



High channel:



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## Test Plot of 99% Bandwidth, Low Energy

Low channel:



Middle channel:



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High channel:



## 5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

**RESULT:** Pass

### Test Specification

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.5
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	: 24.07.2015
Input voltage	: AC 120V, 60Hz via AC input of Notebook
Operation mode	: A.1.a, A.2.a (see 3.3)
Test channel	: Low / Middle/ High
Ambient temperature	: 25°C
Relative humidity	: 56%
Atmospheric pressure	: 101 kPa

All emissions are more than 20dB below fundamental, compliance is achieved as well.

For the measurement records, refer to following test plot:

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## Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of BDR mode

Low channel:



Middle channel:



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High channel:



## Test Plot of 100 kHz Bandwidth of Frequency Band Edge

Low channel:

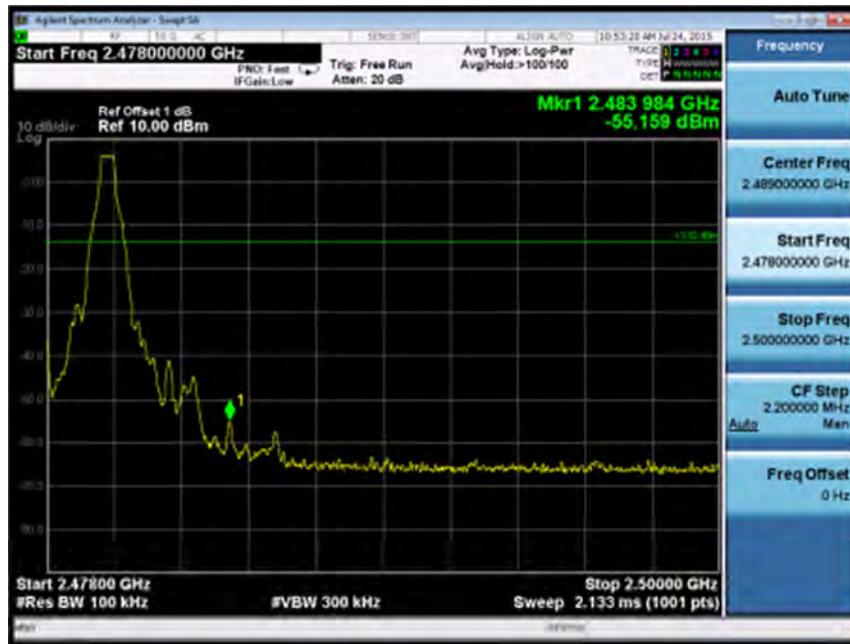


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High channel:



## Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of EDR mode

Low channel:



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Middle channel:



High channel:



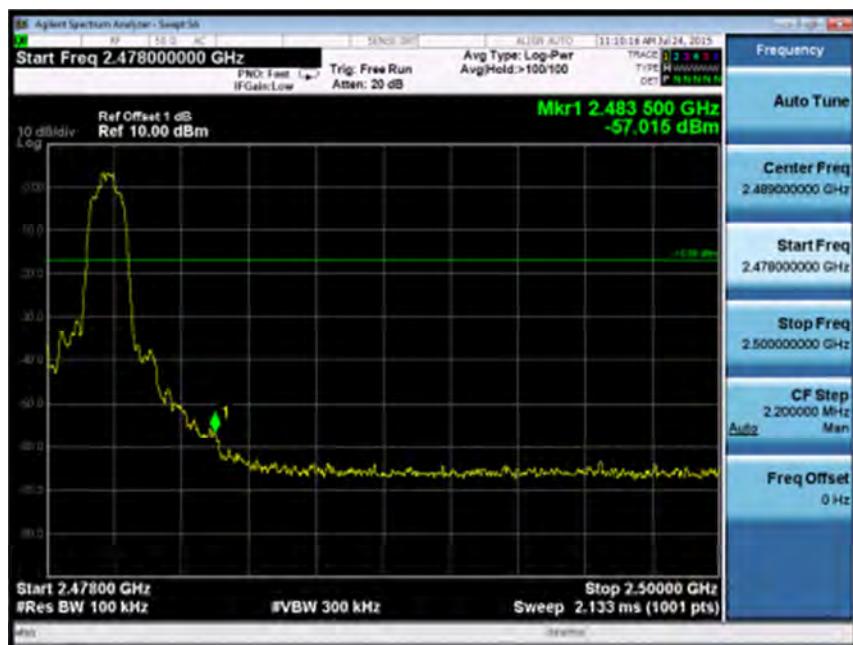
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## Test Plot of 100 kHz Bandwidth of Frequency Band Edge

Low channel:



High channel:



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## Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of Low Energy

Low channel:



Middle channel:



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High channel:



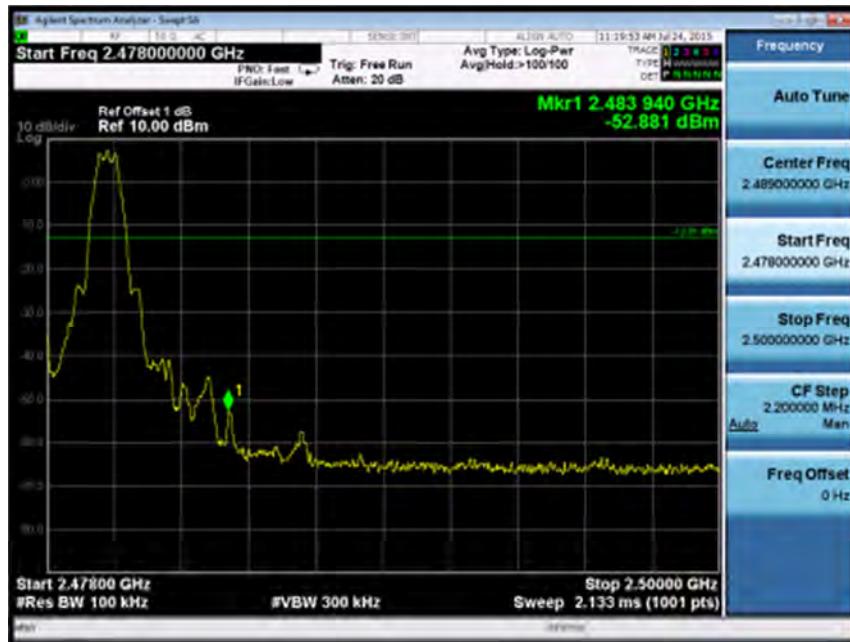
## Test Plot of 100 kHz Bandwidth of Frequency Band Edge

Low channel:



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High channel:



## 5.1.7 Radiated Spurious Emission

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

Test standard	:	FCC Part 15.247(d), FCC Part 15.205 RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 4
Kind of test site	:	3m Semi-anechoic chamber

**Test Setup**

Date of testing	:	24.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.1.a, A.2.a (see 3.3)
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.

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

For the measurement records, refer to the appendix 1.

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### 5.1.8 20dB Bandwidth

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

Test standard	:	FCC Part 15.247(a)(1)
		RSS-247 Clause 5.1(1)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	23.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.1.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

**Table 13: Test Result of 20dB Bandwidth, BDR mode**

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	843.40	562.267	/	Pass
Middle Channel	2441	834.87	556.580	/	Pass
High Channel	2480	836.50	557.667	/	Pass

**Table 14: Test Result of 20dB Bandwidth, EDR mode**

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1145.80	763.867	/	Pass
Middle Channel	2441	1141.11	760.740	/	Pass
High Channel	2480	1141.60	761.067	/	Pass

For the measurement records, refer to following test plot:

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## Test Plot of 20dB Bandwidth, BDR

Low channel:



Middle channel:



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High channel:



## Test Plot of 20dB Bandwidth, EDR

Low channel:



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Middle channel:



High channel:



### 5.1.9 Carrier Frequency Separation

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

Test standard	:	FCC Part 15.247(a)(1) RSS-247 Clause 5.1(2)
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	:	23.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	A.1.a (see 3.3)
Test channel	:	Low / Middle/ High
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

**Table 15: Test Result of Carrier Frequency Separation**

Channel	Channel Frequency (MHz)	Measured Channel Separation (KHz)	Limit (kHz)	Result
Low Channel	2402	999.0	$\geq 25\text{kHz}$ or 2/3 of 20dB bandwidth	Pass
Adjacency Channel	2403	1002.0		
Middle Channel	2441	990.0		
Adjacency Channel	2442			
High Channel	2480			
Adjacency Channel	2479			

Note:

The limit is maximum 2/3 of the 20 dB bandwidth: 763.867 KHz.

For the measurement records, refer to following test plot:

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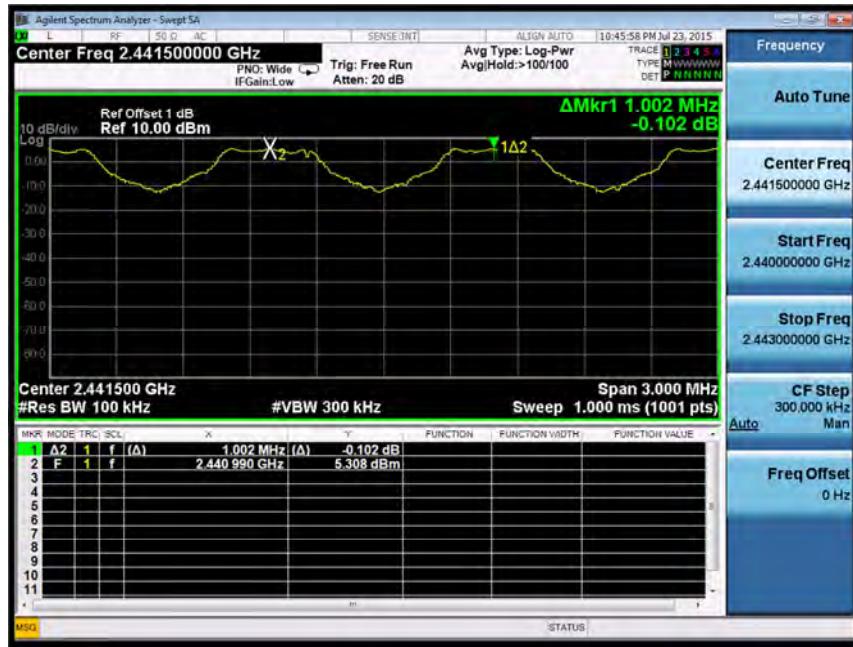
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## Test Plot of Carrier Frequency Separation

Low channel:



Middle channel:



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High channel:



### 5.1.10 Number of Hopping Frequency

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

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	$\geq 15$ non-overlapping channels
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	22.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation mode	:	B (see 3.3)
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

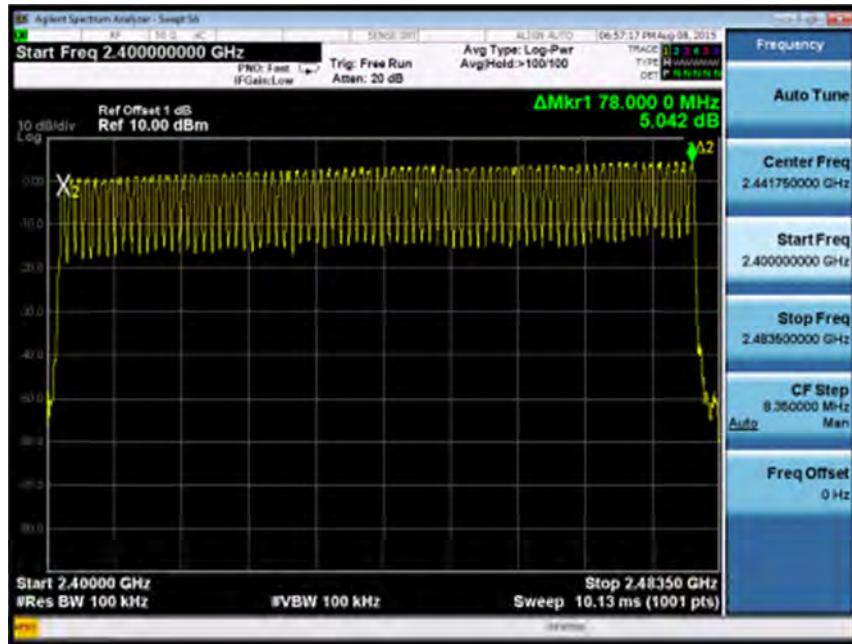
**Table 16: Test Result of Number of Hopping Frequency**

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

For the measurement records, refer to following test plot:

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## Test Plot of Number of hopping frequency



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*Page 53 of 70***5.1.11 Time of Occupancy****RESULT:****Pass****Test Specification**

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	0.4s
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	23.07.2015
Input voltage	:	AC 120V, 60Hz via AC input of Notebook
Test channel	:	Low / Middle/ High
Operation mode	:	A.1.a (see 3.3)
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101 kPa

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**Table 17: Test Result of Time of Occupancy, BDR mode**

Channel	Data Mode	Pulse width (ms)	Measured Dwell time(s)	Limit (s)	Result
Low Channel	DH1	0.420	0.134	0.4	Pass
	DH3	1.680	0.269	0.4	Pass
	DH5	2.930	0.313	0.4	Pass
Middle Channel	DH1	0.424	0.136	0.4	Pass
	DH3	1.680	0.269	0.4	Pass
	DH5	2.930	0.313	0.4	Pass
High Channel	DH1	0.424	0.136	0.4	Pass
	DH3	1.680	0.269	0.4	Pass
	DH5	2.930	0.313	0.4	Pass

**Table 18: Test Result of Time of Occupancy, EDR mode**

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	3DH1	0.440	0.141	0.4	Pass
	3DH3	1.687	0.270	0.4	Pass
	3DH5	2.930	0.313	0.4	Pass
Middle Channel	3DH1	0.440	0.141	0.4	Pass
	3DH3	1.687	0.270	0.4	Pass
	3DH5	2.940	0.314	0.4	Pass
High Channel	3DH1	0.440	0.141	0.4	Pass
	3DH3	1.687	0.270	0.4	Pass
	3DH5	2.950	0.315	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

For the measurement records, refer to following test plot:

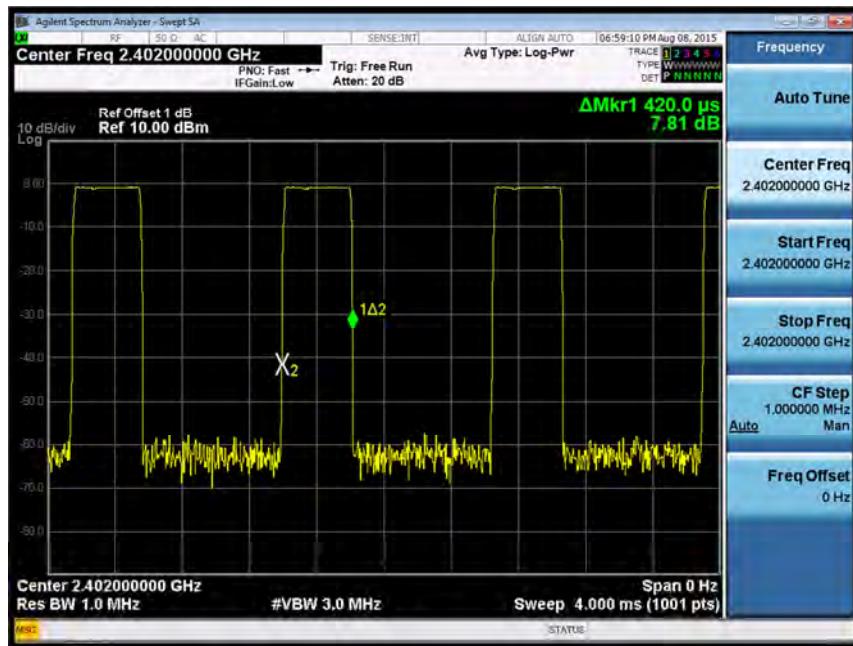
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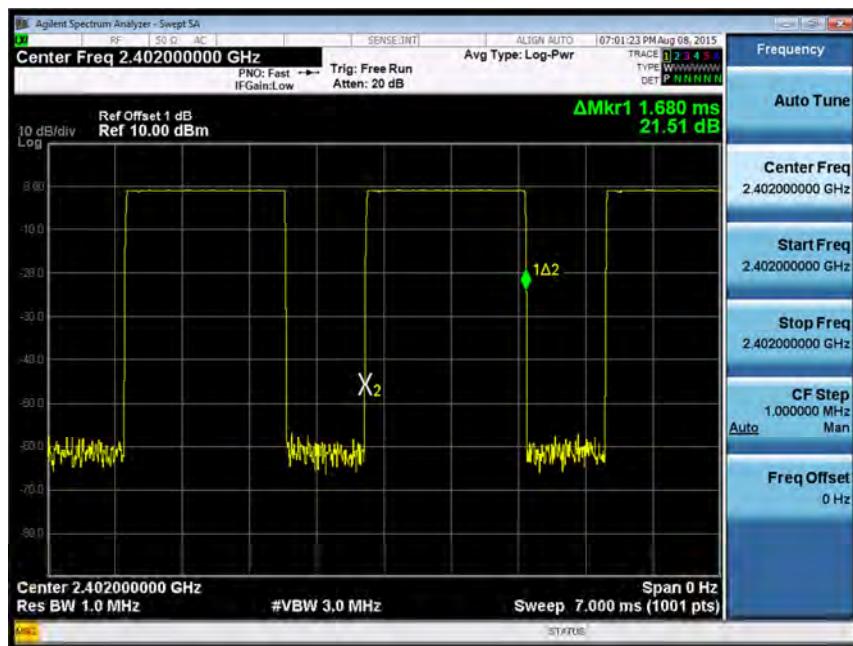
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## Test Plot of Time of Occupancy, BDR

Low channel: DH1



Low channel: DH3

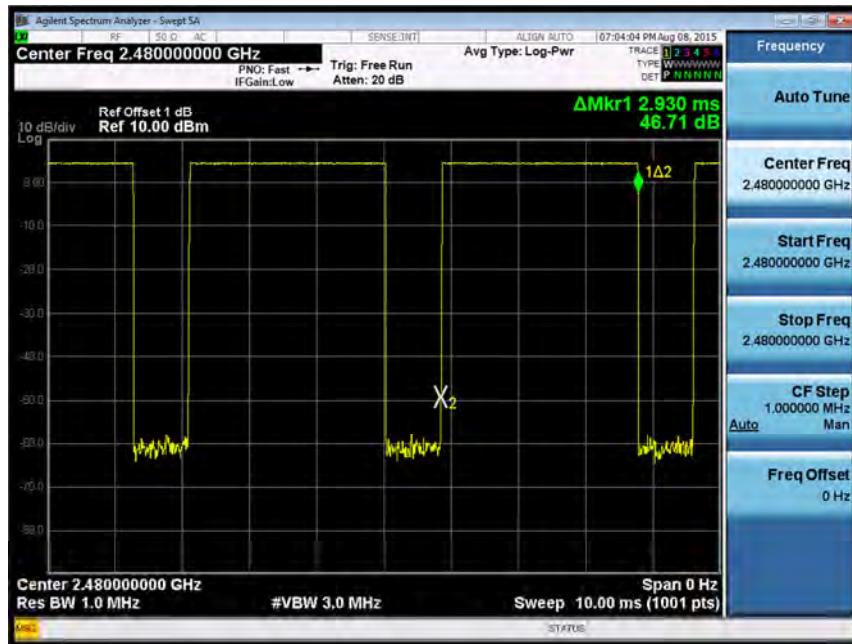


# Prüfbericht - Nr.: 17051282 001

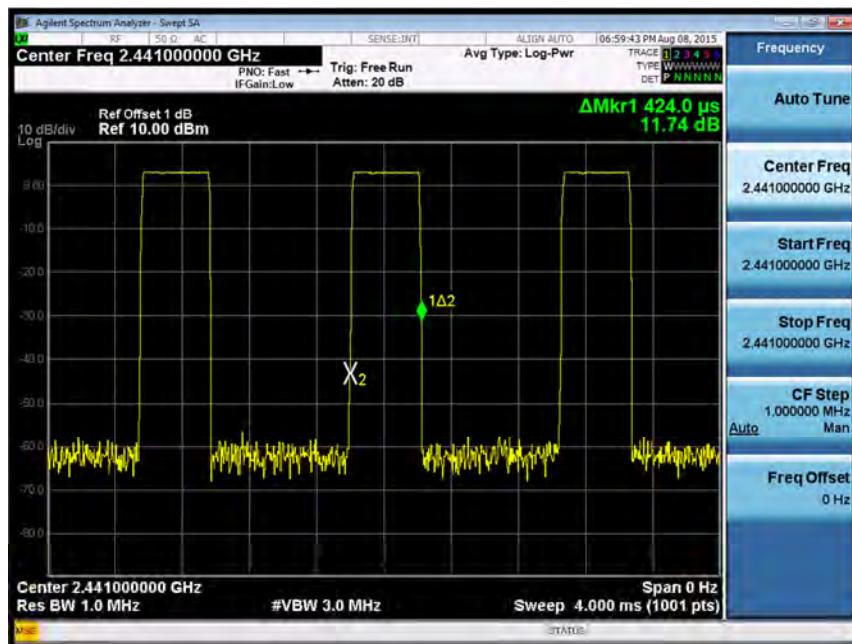
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Low channel: DH5



Middle channel: DH1

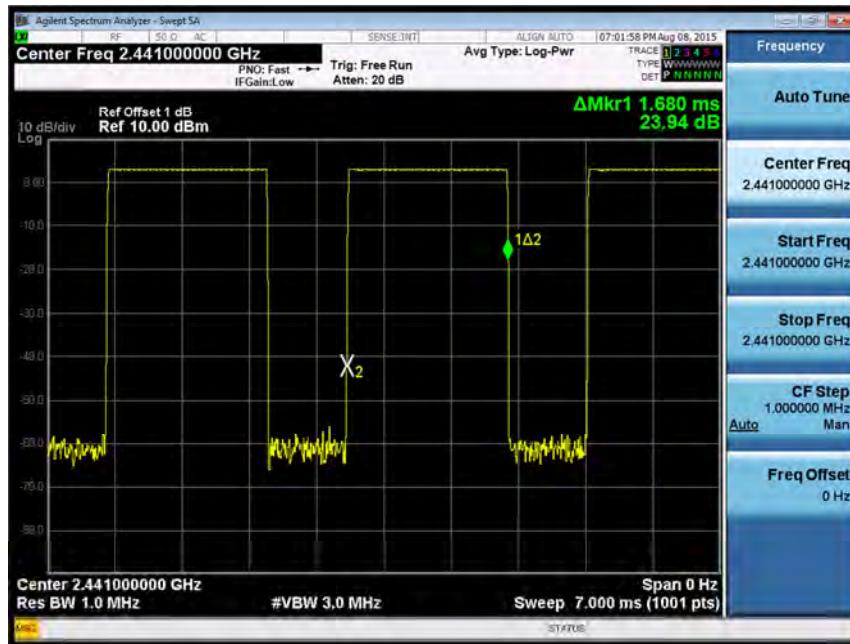


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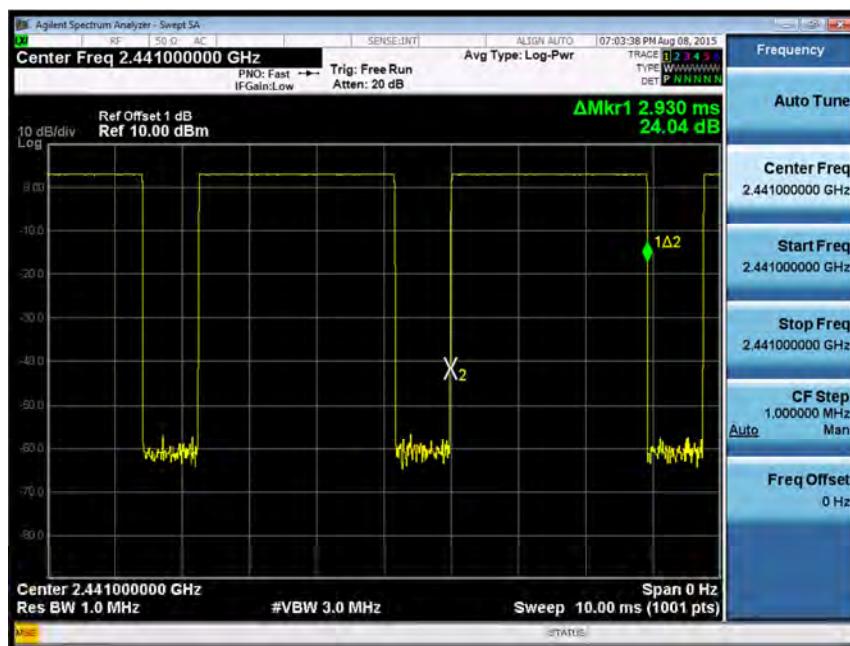
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Middle channel: DH3

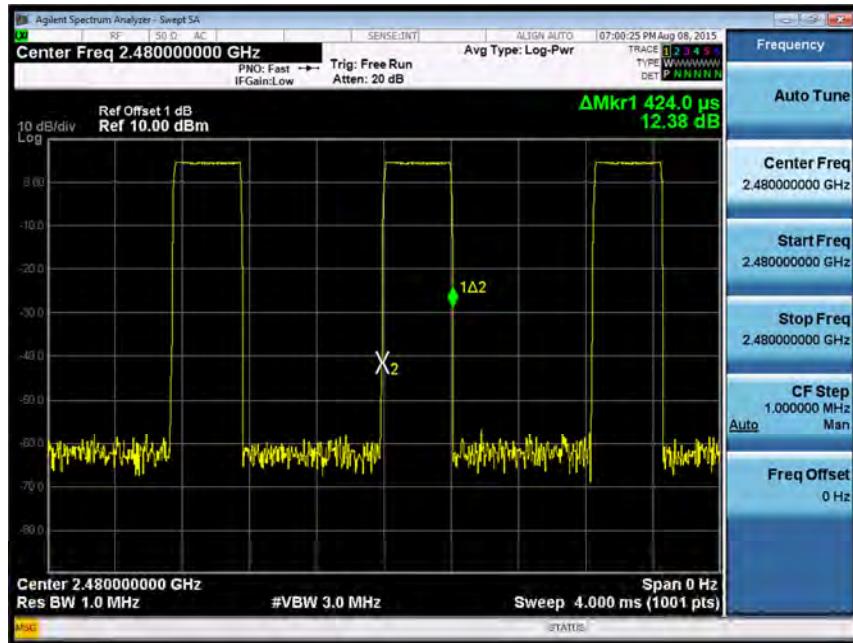


Middle channel: DH5

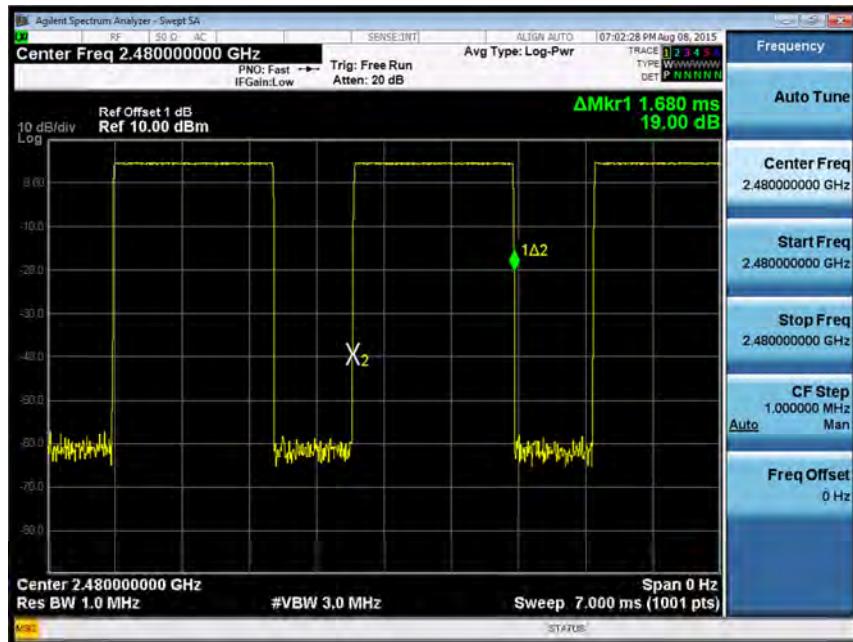


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High channel: DH1



High channel: DH3

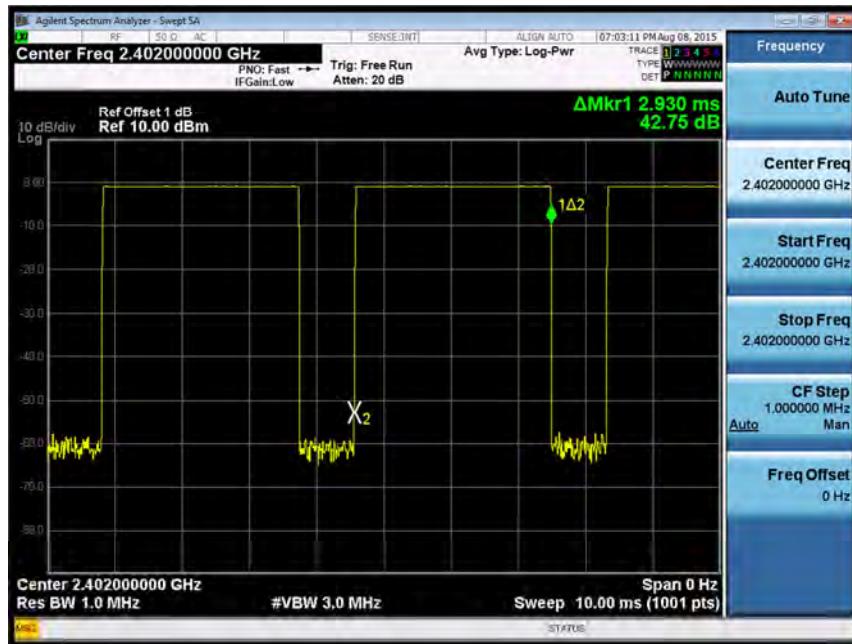


# Prüfbericht - Nr.: 17051282 001

Test Report No.

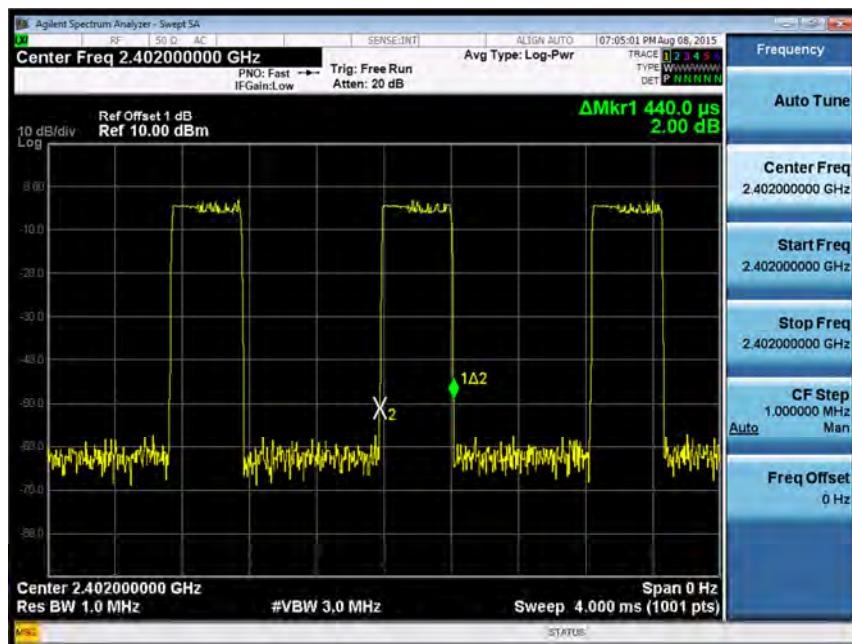
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High channel: DH5



Test Plot of Time of Occupancy, EDR

Low channel: 3DH1

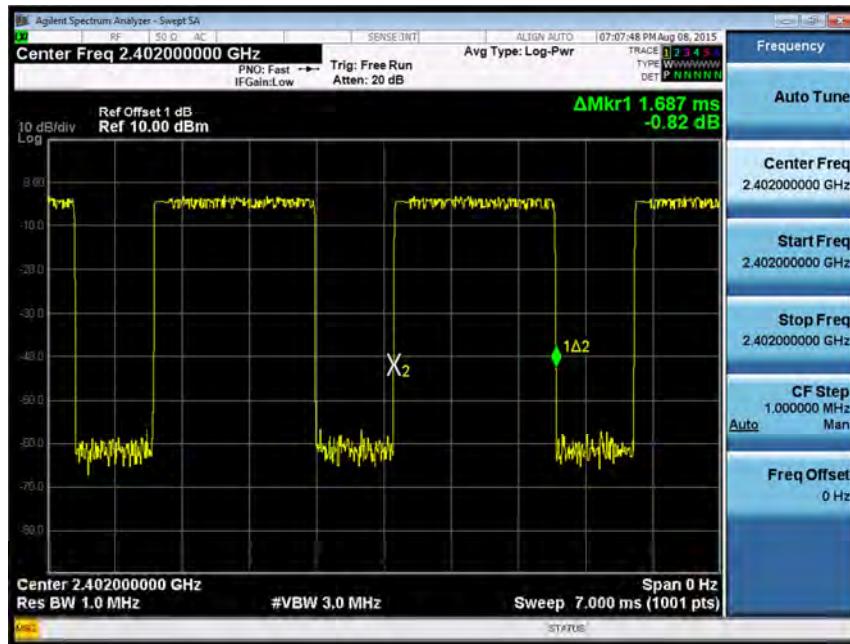


# Prüfbericht - Nr.: 17051282 001

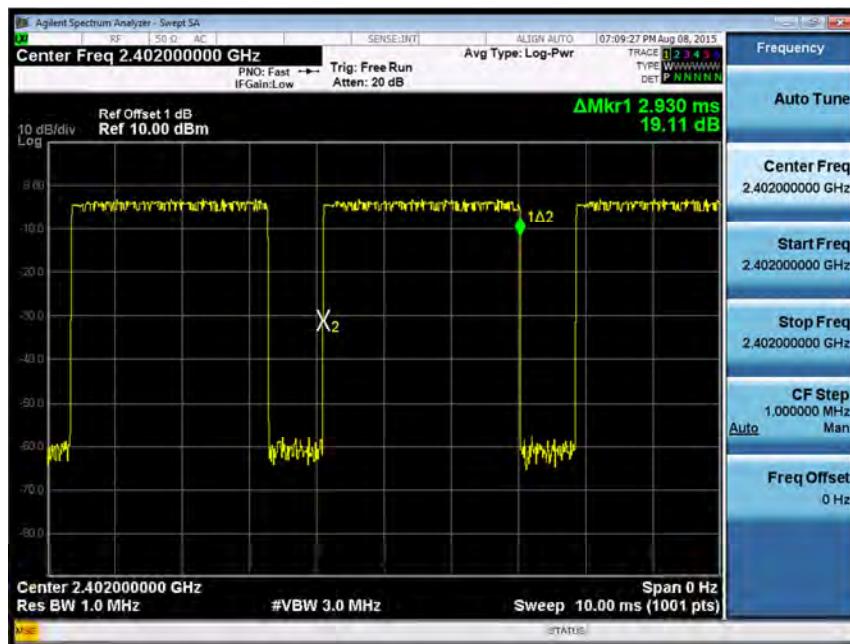
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Low channel: 3DH3



Low channel: 3DH5

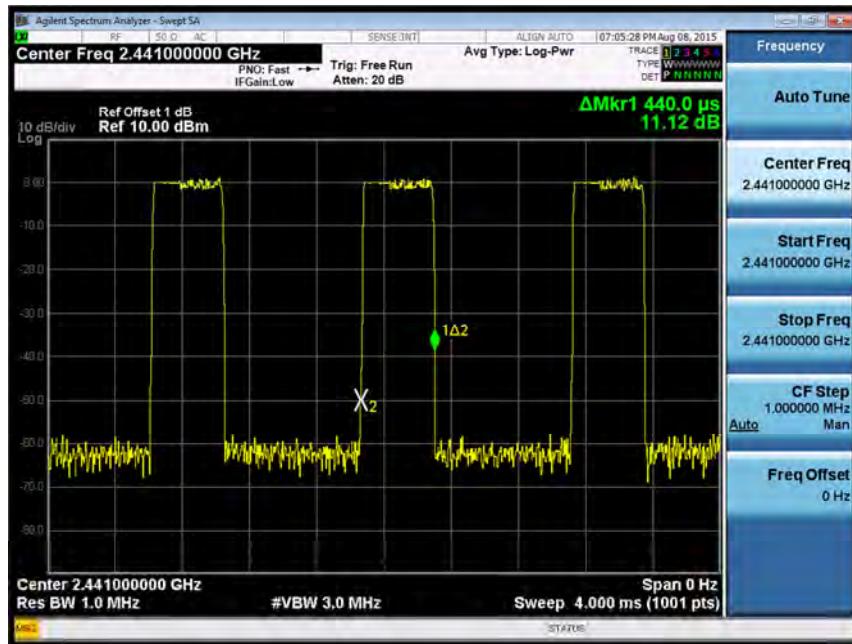


# Prüfbericht - Nr.: 17051282 001

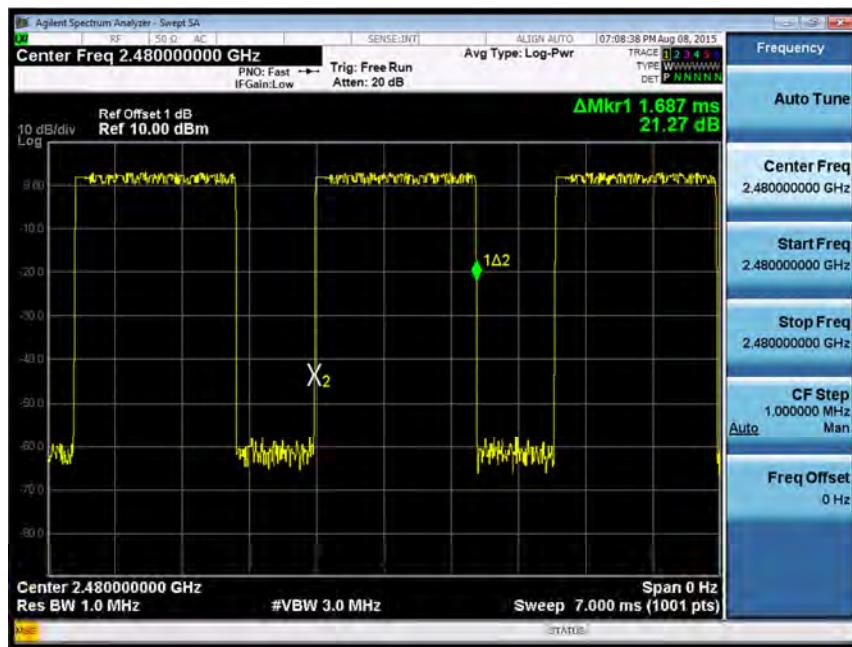
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Middle channel: 3DH1



Middle channel: 3DH3

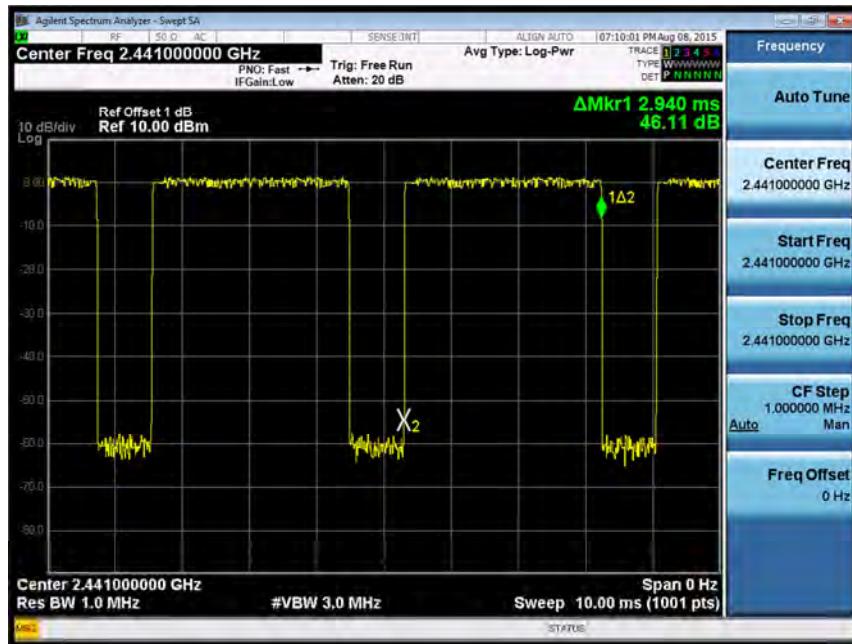


# Prüfbericht - Nr.: 17051282 001

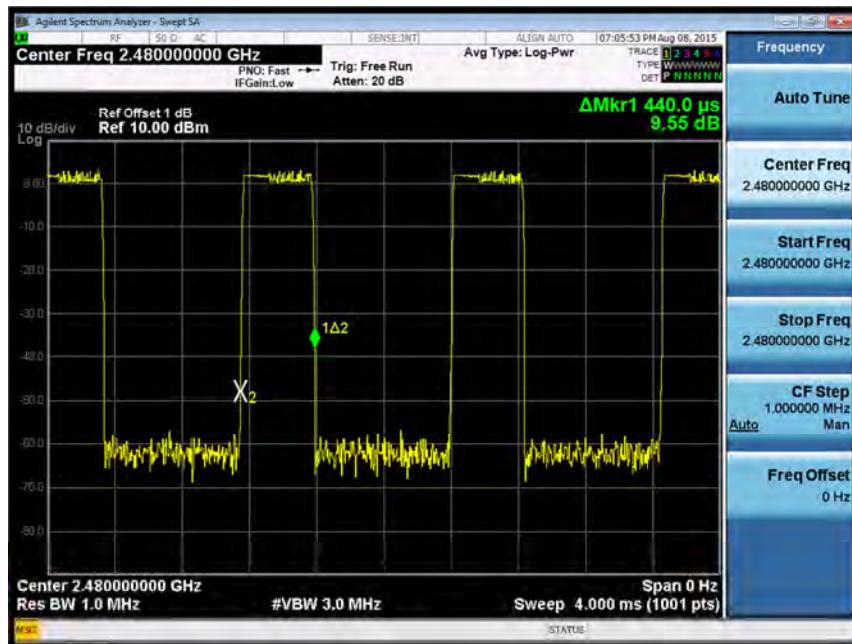
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Middle channel: 3DH5



High channel: 3DH1

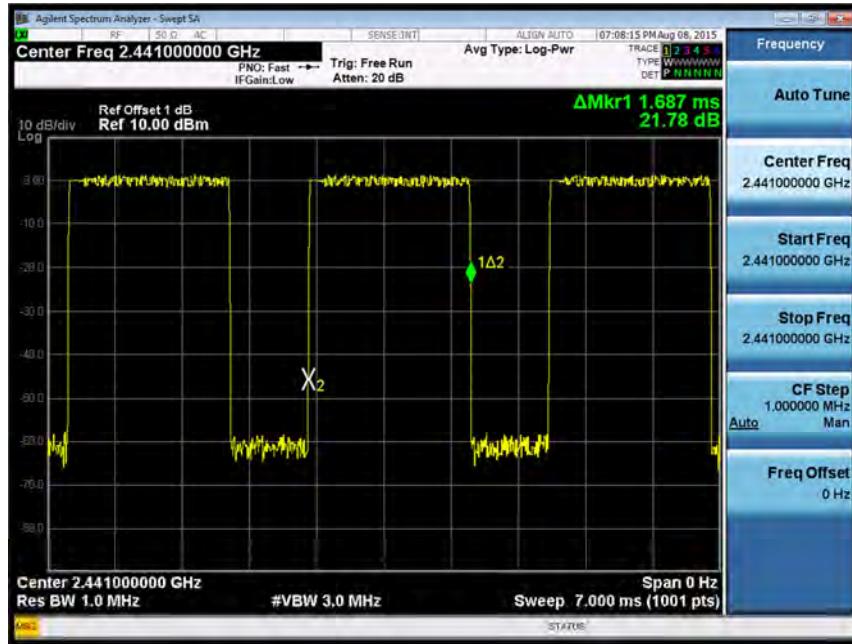


# Prüfbericht - Nr.: 17051282 001

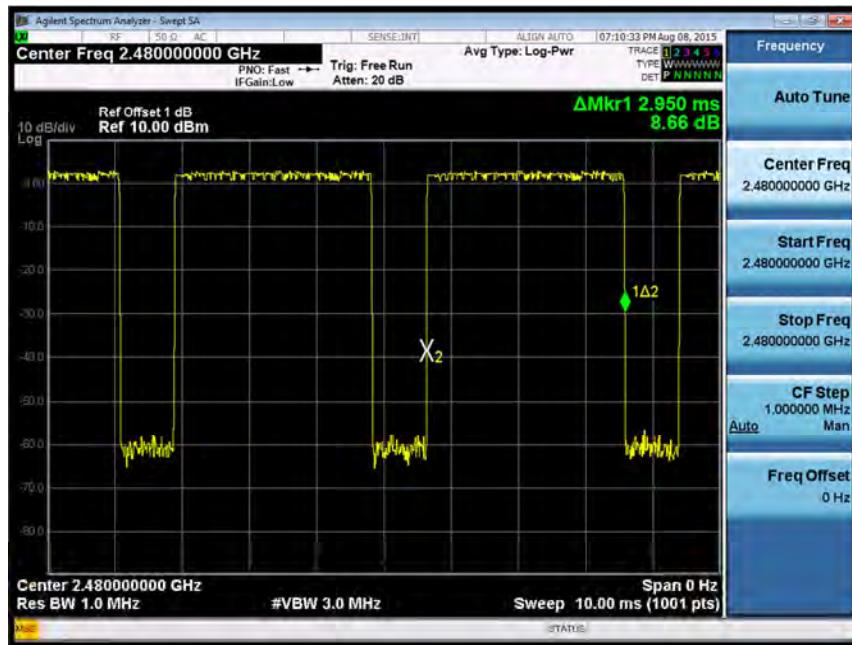
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High channel: 3DH3



High channel: 3DH5



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Page 64 of 70**5.1.12 Conducted Emissions****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.207(a) & FCC Part 15.107(a) RSS-Gen 8.8 Issue 4 & ICES-003 Issue 5
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) RSS-Gen Issue 4 Table 3 & ICES-003 Issue 5 Table 2
Kind of test site	: Shielded Room

**Test Setup**

Date of testing	: 29.07.2015
Input voltage	: AC 120V, 60Hz via AC/DC adapter
Operation mode	: C,D,E (see 3.3)
Earthing	: Not connected
Ambient temperature	: 25°C
Relative humidity	: 56%
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix 1.

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Test standard	:	FCC Part 15.109(a) ICES-003 Issue 5
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	30 - 6000MHz
Classification	:	Class B
Limits	:	FCC Part 15.109(a) ICES-003 Issue 5 Table 5 & Table 7
Kind of test site	:	3m Semi-anechoic chamber

**Test Setup**

Date of testing	:	27.07.2015
Input voltage	:	AC 120V, 60Hz via AC/DC adapter
Operation mode	:	C,D,E (see 3.3)
Earthing	:	Not connected
Ambient temperature	:	23°C
Relative humidity	:	48%
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix 1.

## 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 v05r02  
RSS-102 Issue 5 March 2015

The minimum distance for the EUT is 5mm, since maximum peak output power of the transmitter is 5.20 mW <10 mW, hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01 General RF Exposure Guidance v05r02

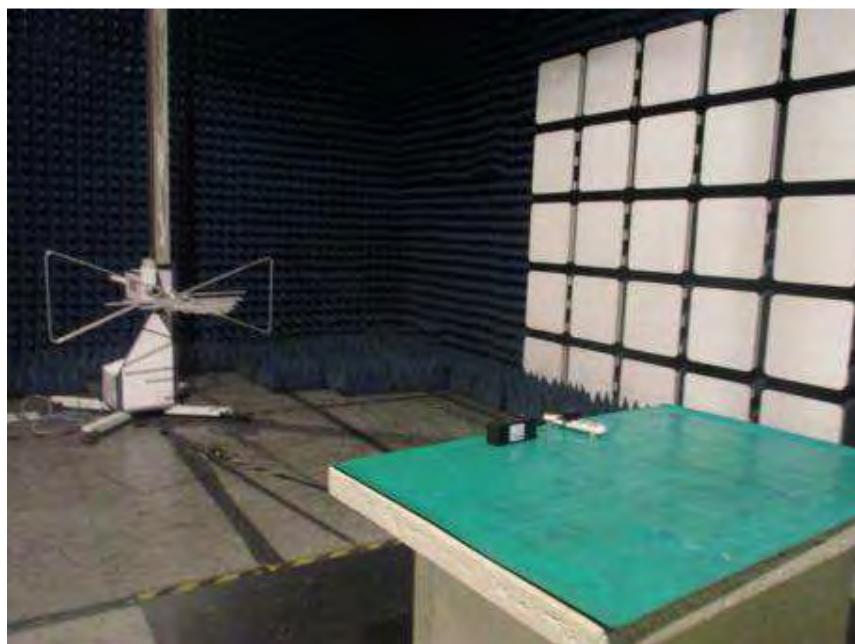
The maximum peak output power of the transmitter is 5.20 mW (7.16 dBm), only, which less than 20mW. Hence the EUT is exempted from routine evaluation limits (SAR Evaluation) according to clause 2.5.1 of RSS-102 Issue 5.

## 7 Photographs of the Test Set-Up

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



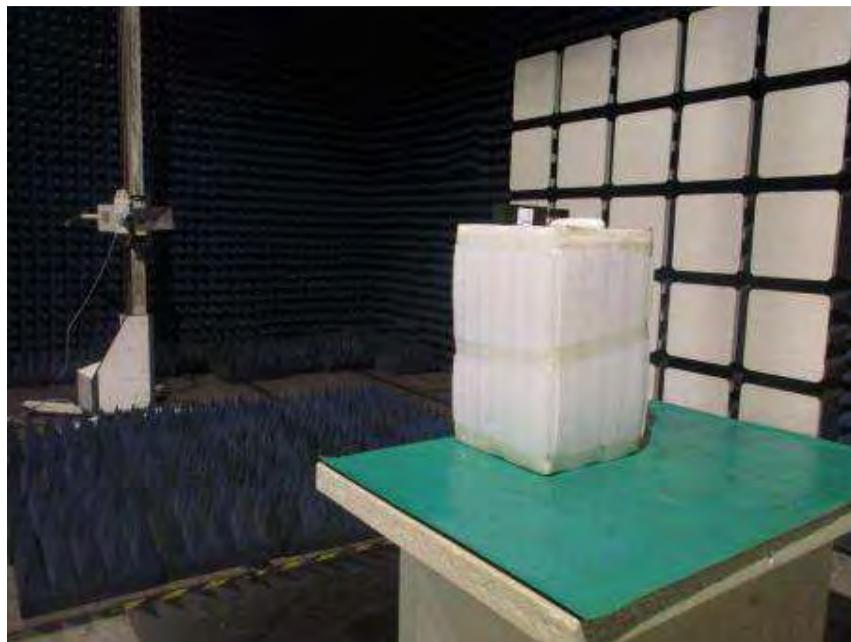
Photograph 2: Set-up for Radiated Spurious Emissions (30MHz-1GHz)



**Prüfbericht - Nr.: 17051282 001**  
*Test Report No.*

Seite 68 von 70  
Page 68 of 70

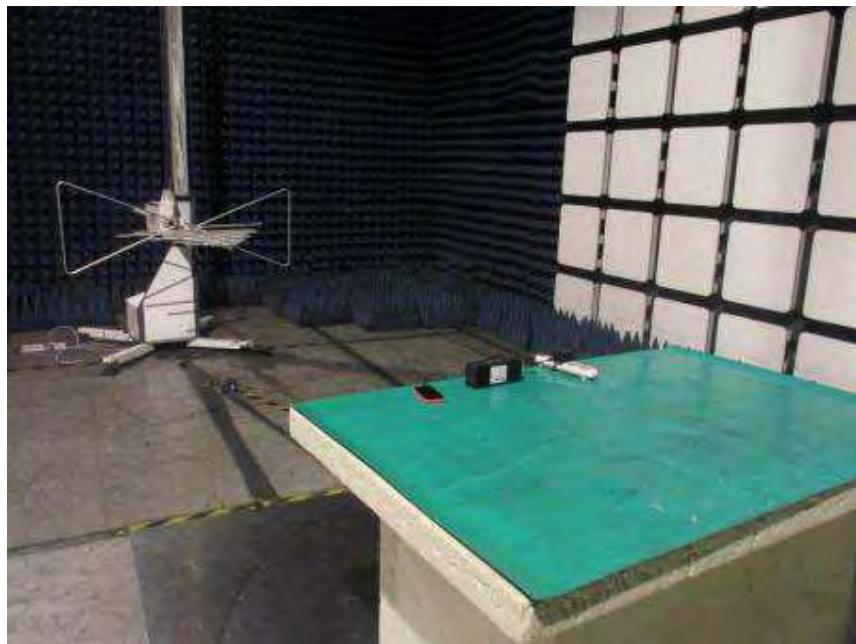
**Photograph 3: Set-up for Radiated Spurious Emissions (Above 1GHz)**



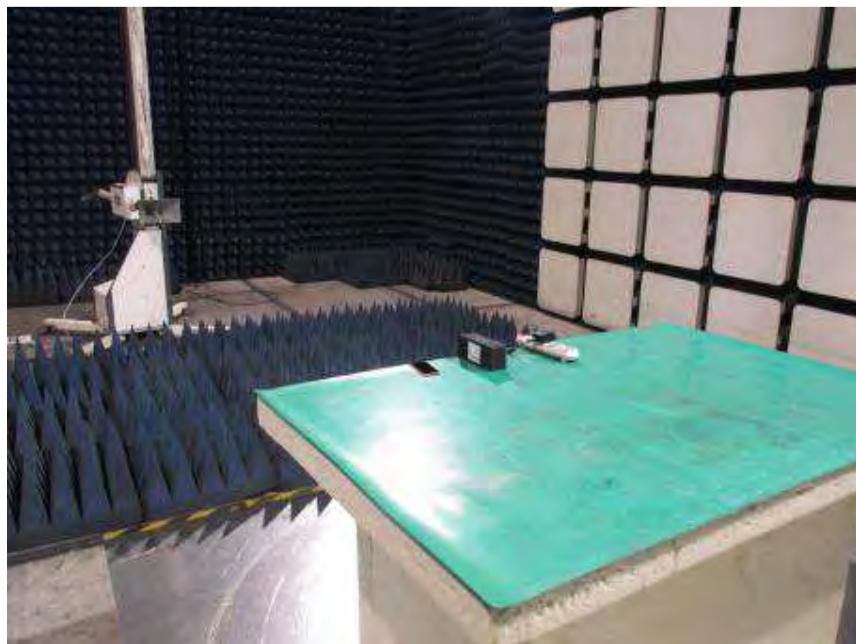
**Photograph 4: Set-up for Conducted Emissions**



**Photograph 5: Set-up for Radiated Emission (Below 1GHz)**



**Photograph 6: Set-up for Radiated Emission (Above 1GHz)**



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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.

Figure 1: Test figure of Radiated Spurious Emissions (9kHz – 30MHz), BDR (Low)

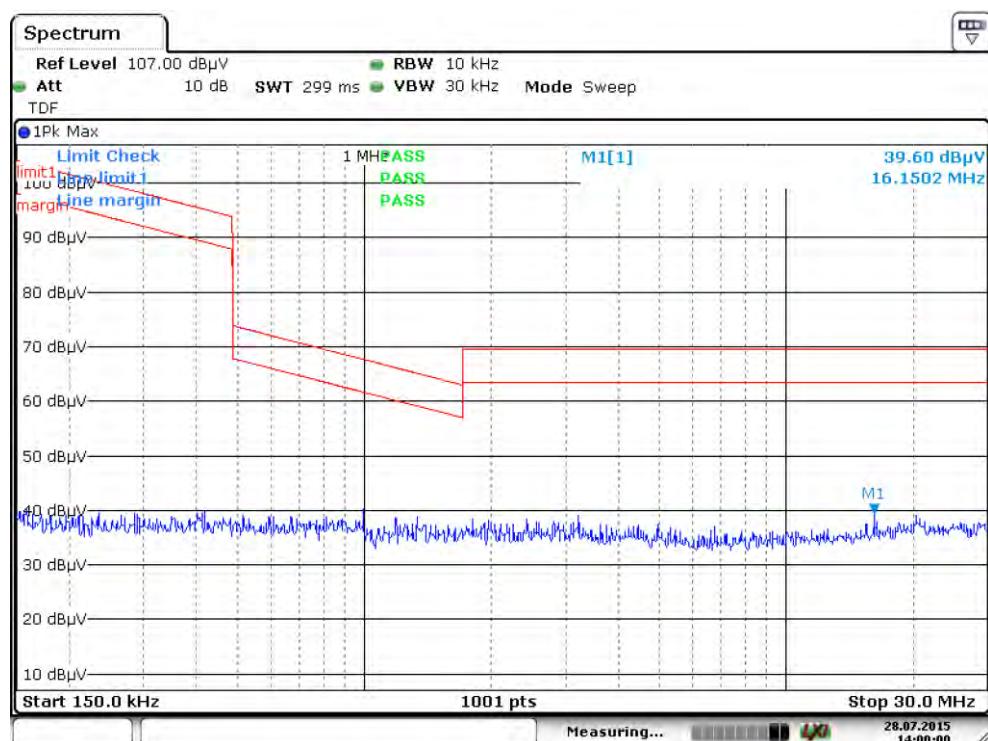
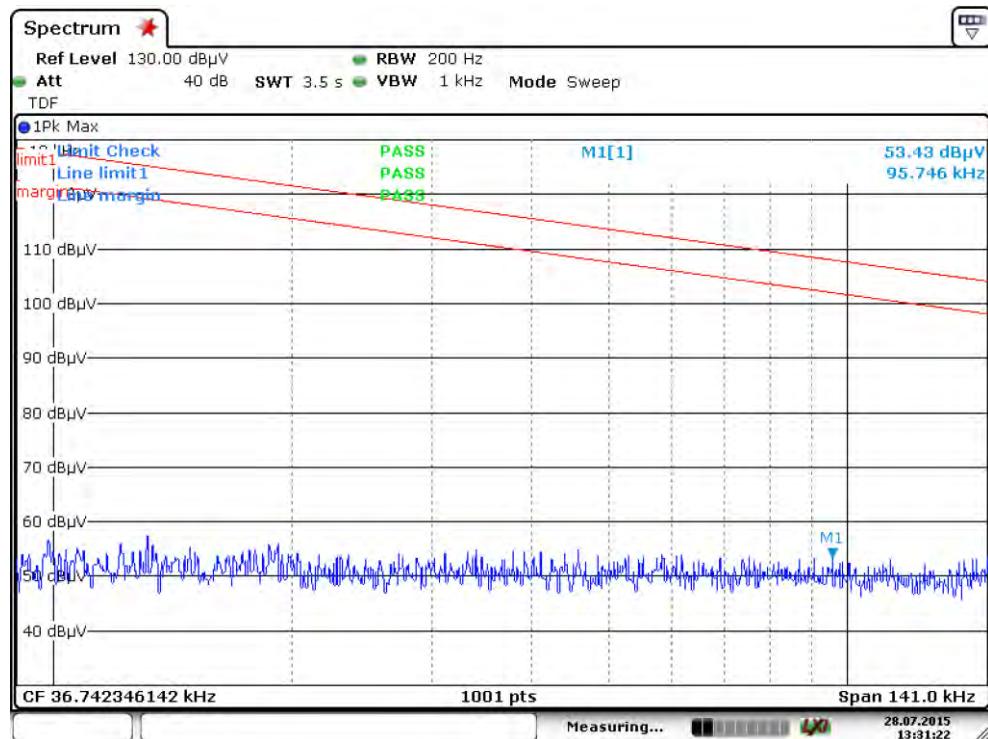
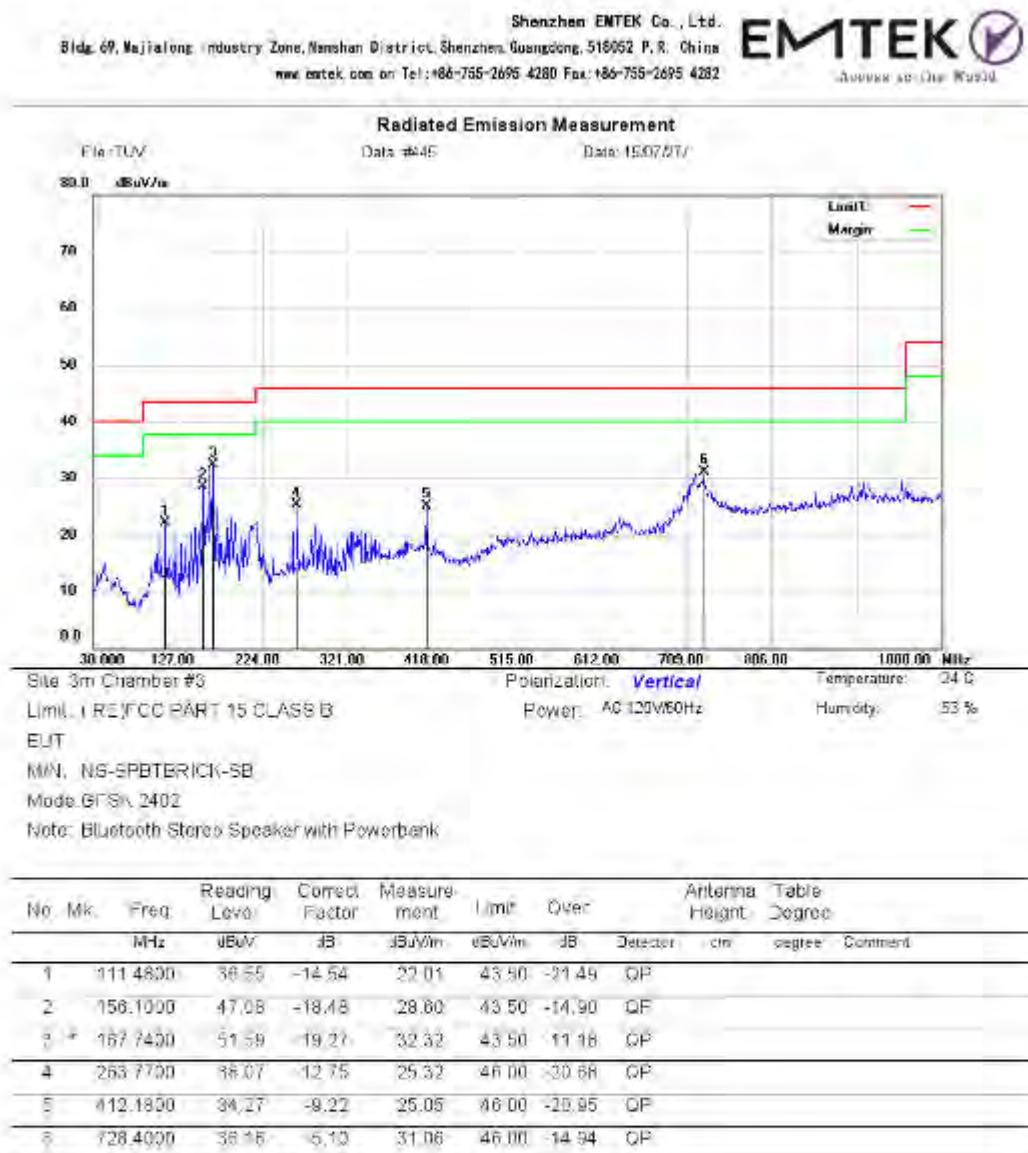


Figure 2: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), BDR (Low)



\*Maximum data    x:Overs limit    L:Lowest margin

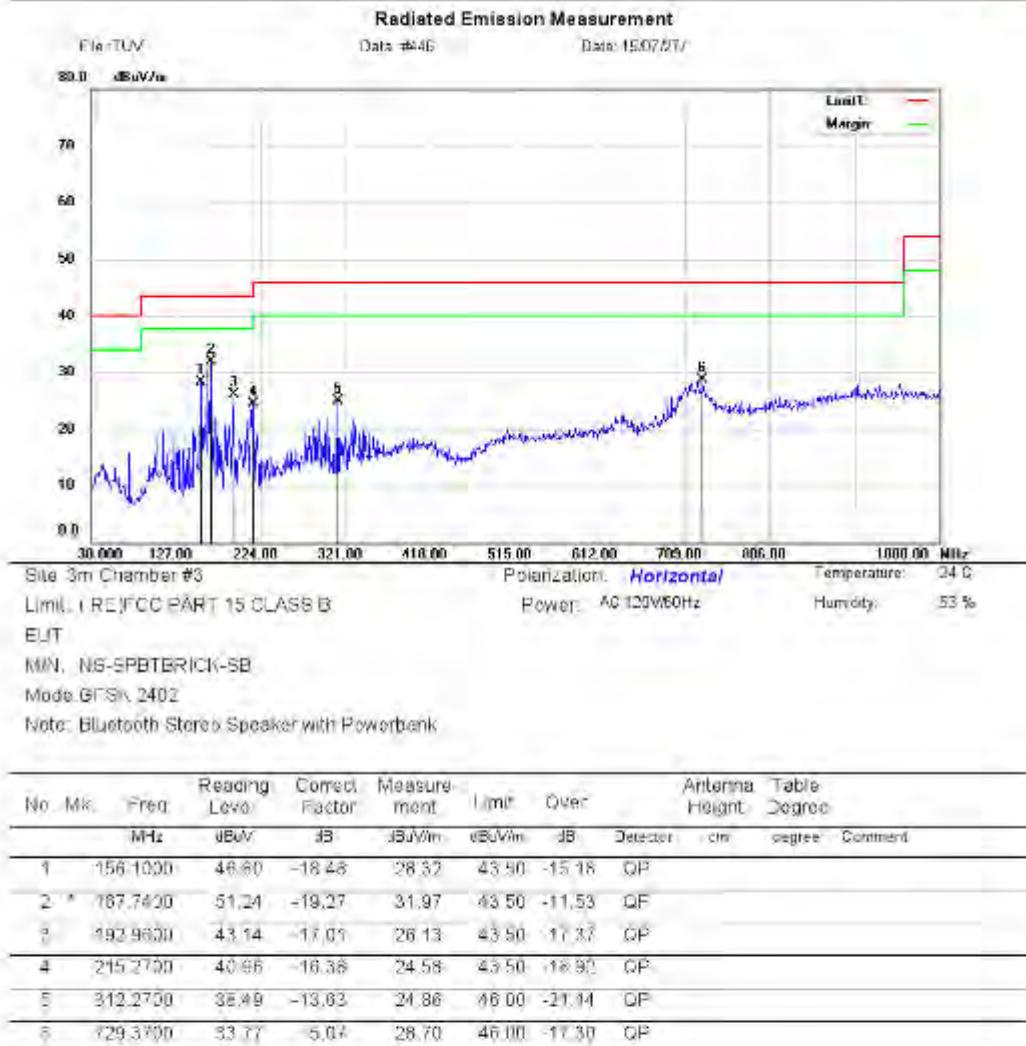
Operator: JV

File: TUV\Data #445

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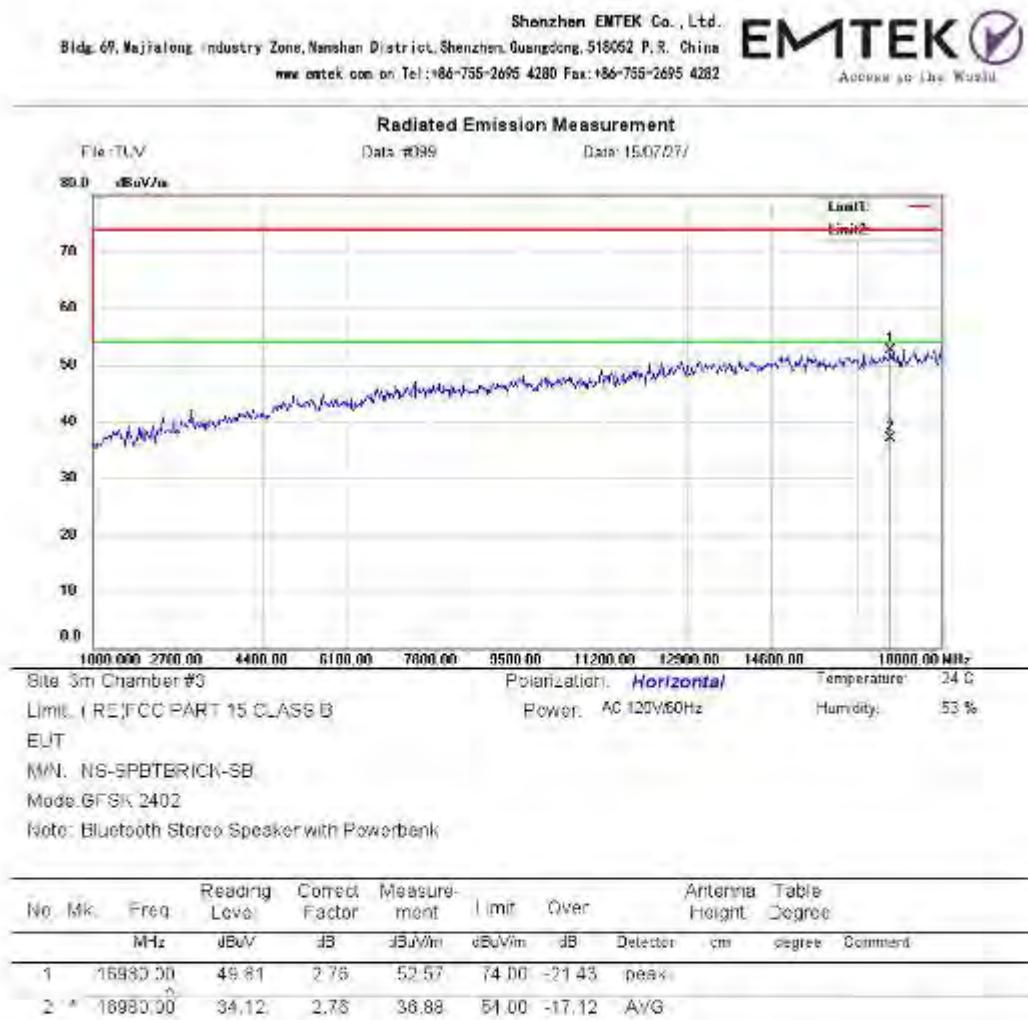
\*Maximum data    x:Over limit    L:over margin

Operator: JV

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Figure 3: Test figure of Radiated Spurious Emissions (1GHz –25GHz), BDR (Low)



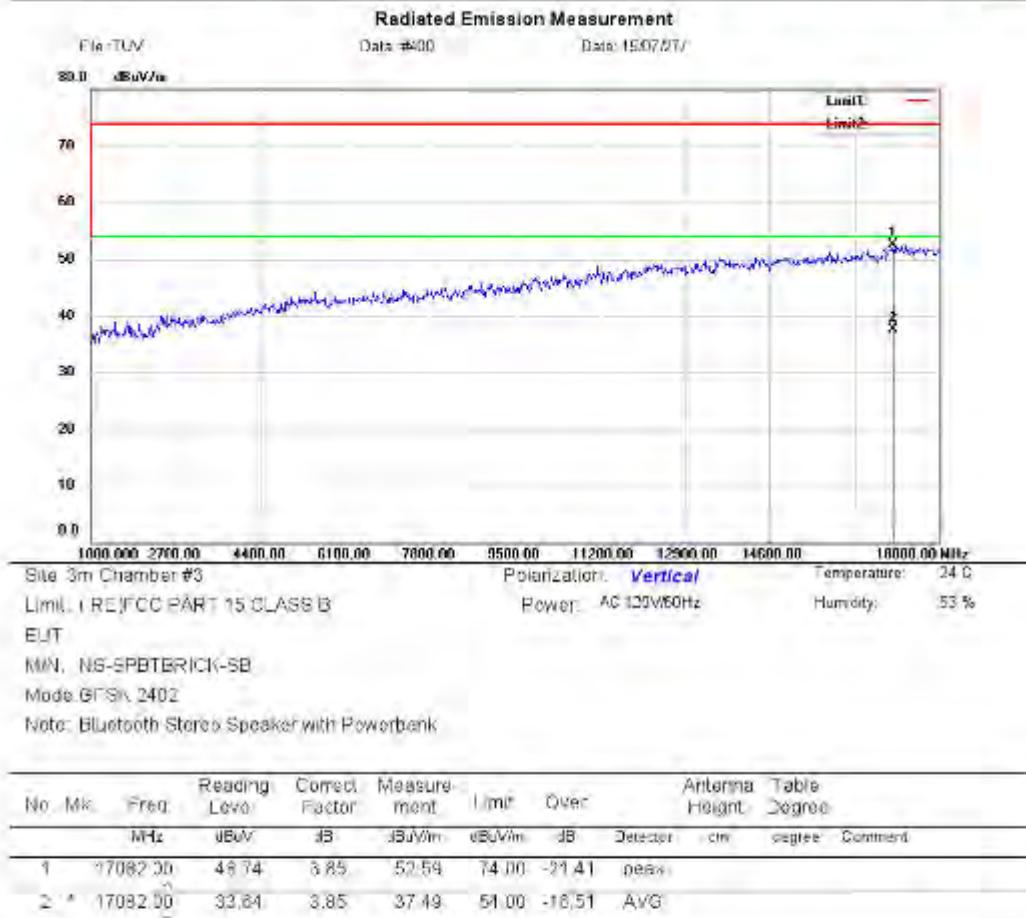
\*Maximum data    x:Over limit    L:over margin

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\*Maximum data    x:Over limit    L:over margin

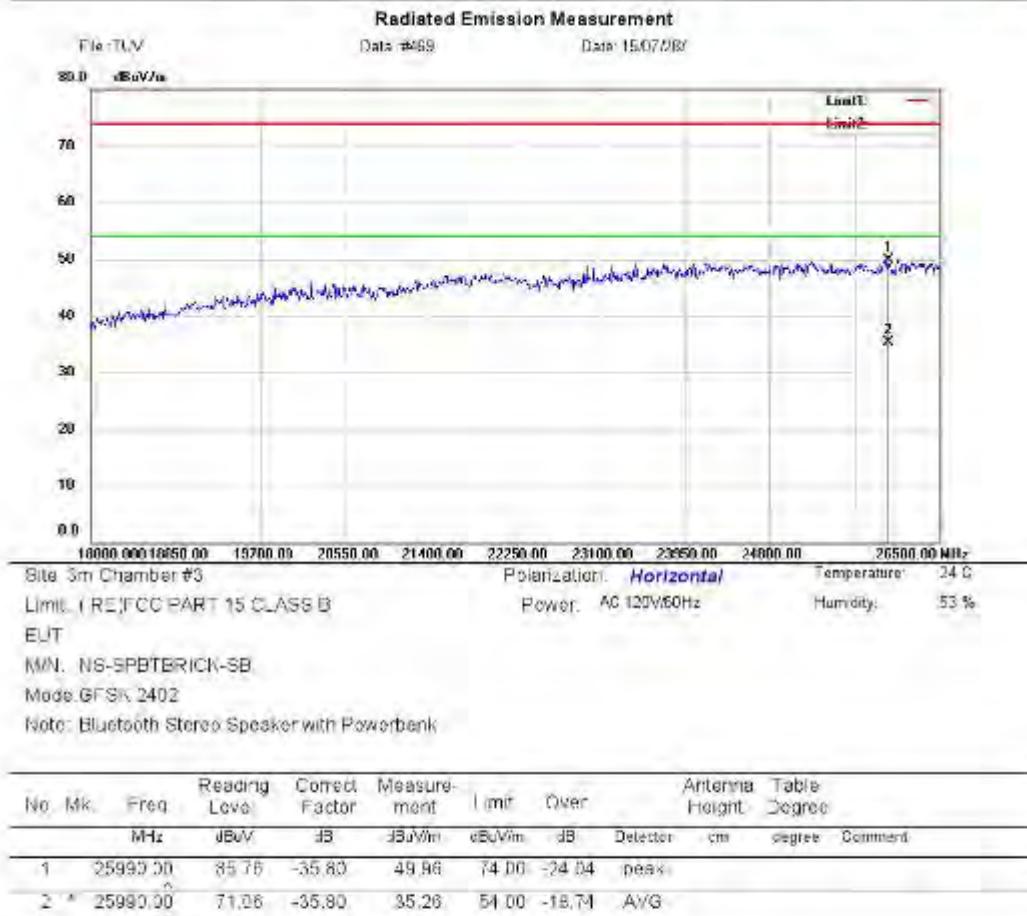
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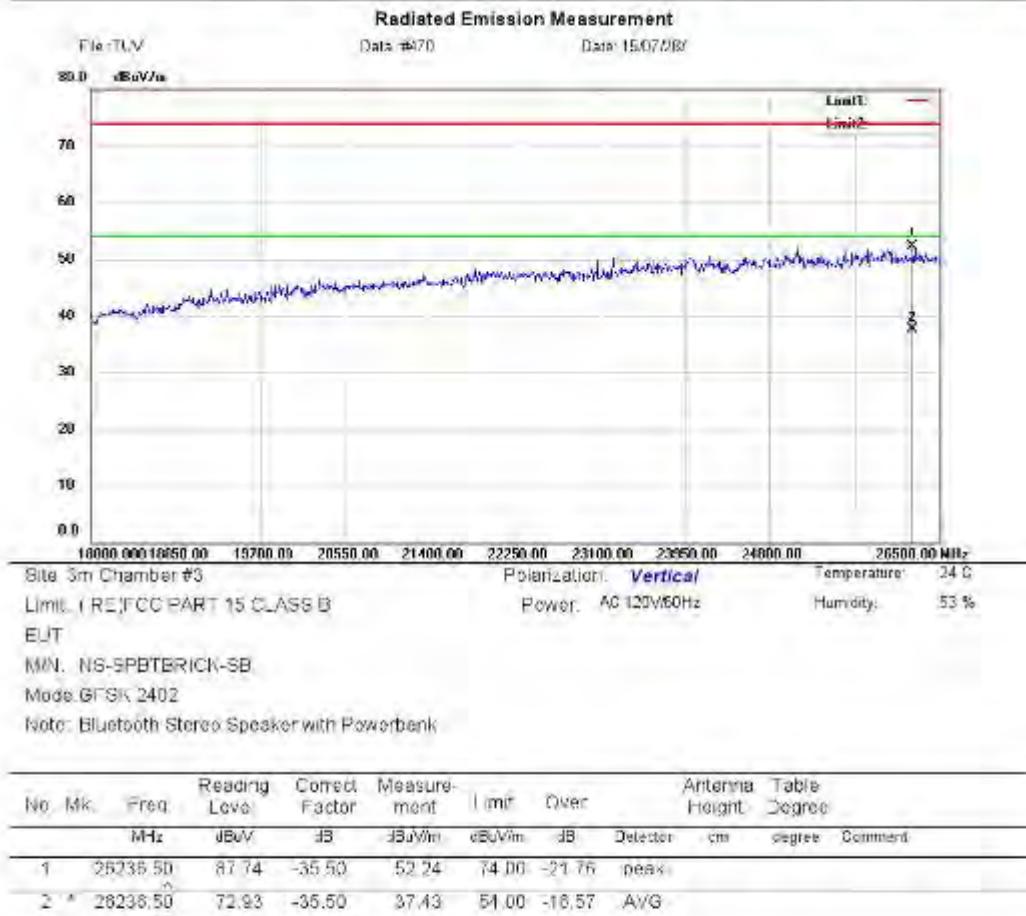
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\* Maximum data - x:Over limit - L:over margin

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File:TUV/Data #470

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Figure 4: Test figure of Radiated Spurious Emissions (9kHz – 30MHz), BDR (Mid)

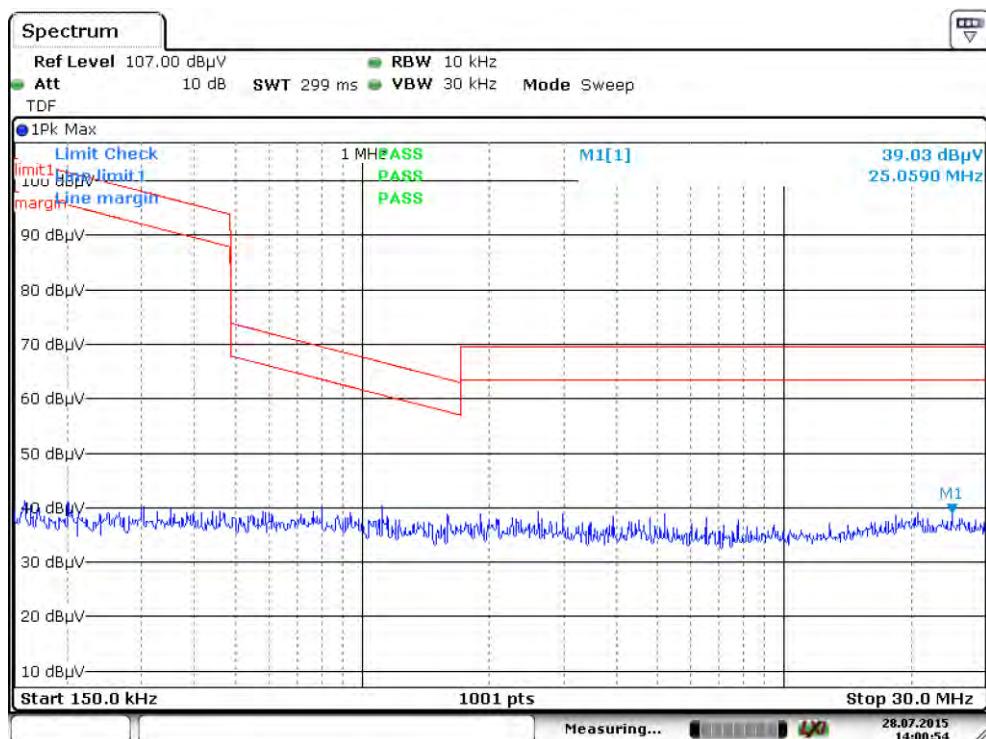
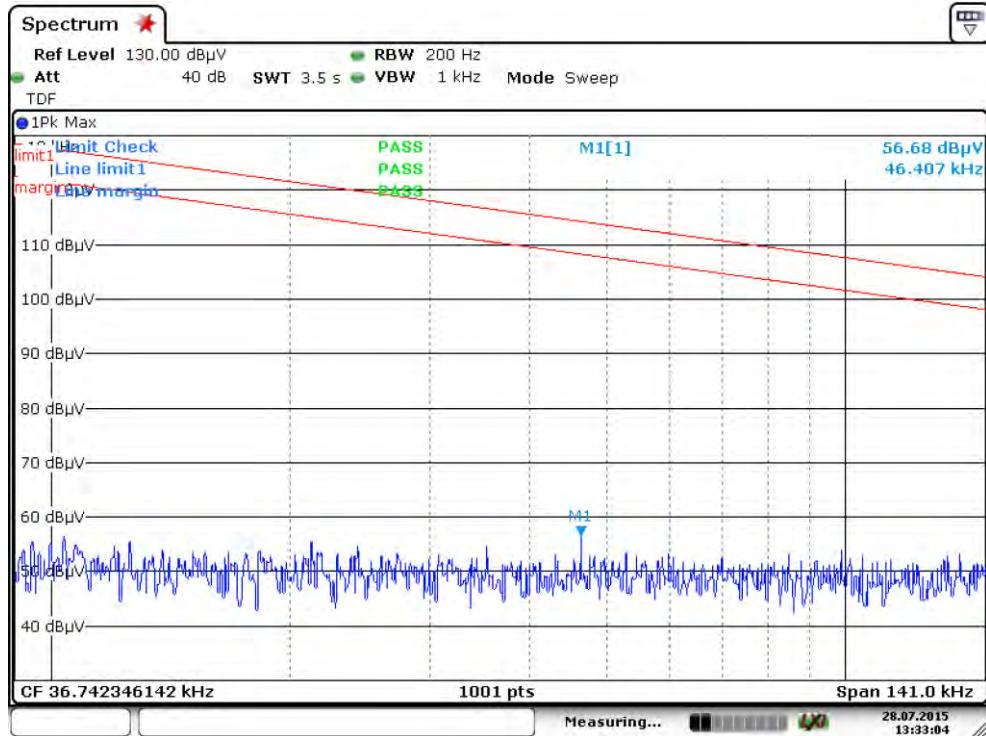
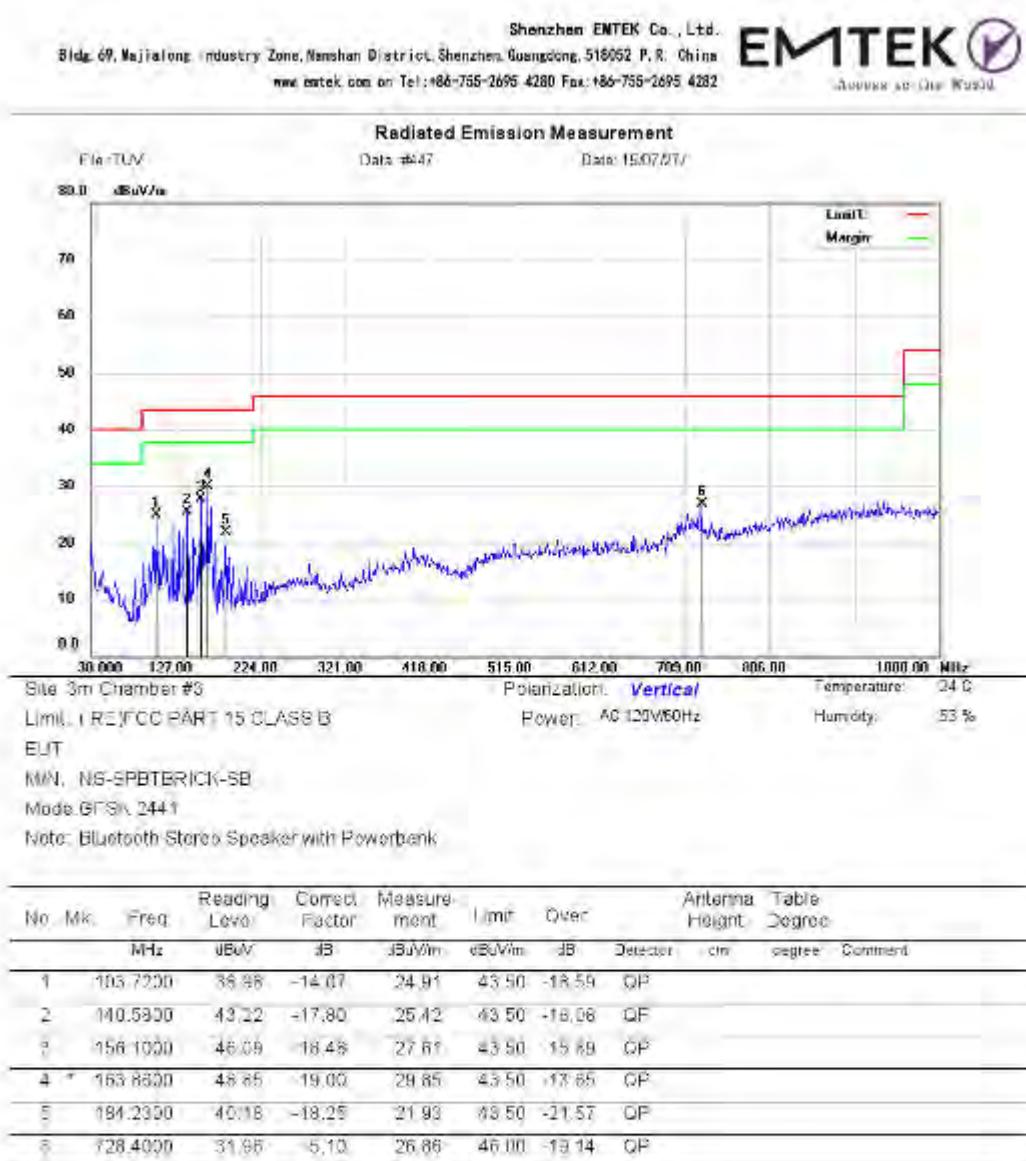


Figure 5: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), BDR (Mid)



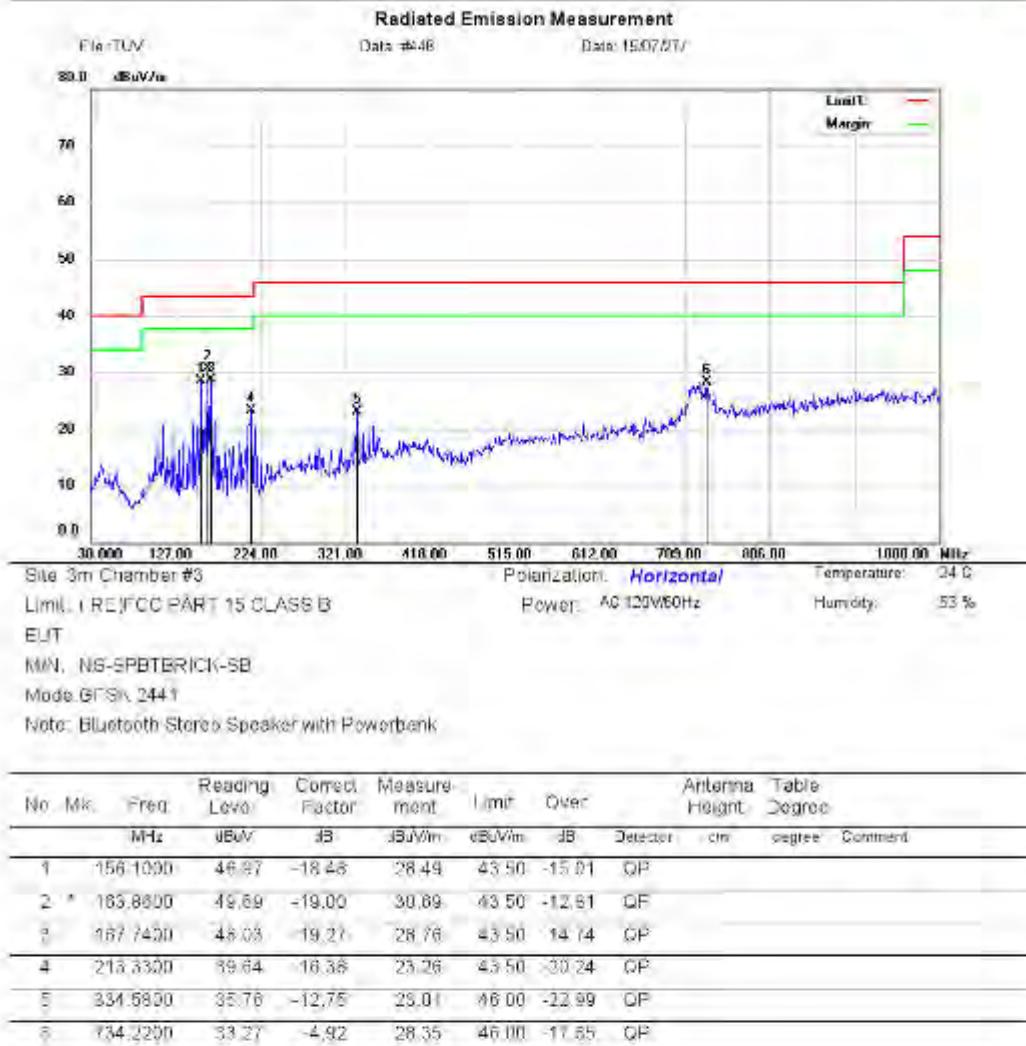
\*Maximum data    x:Over limit    L:Lowest margin

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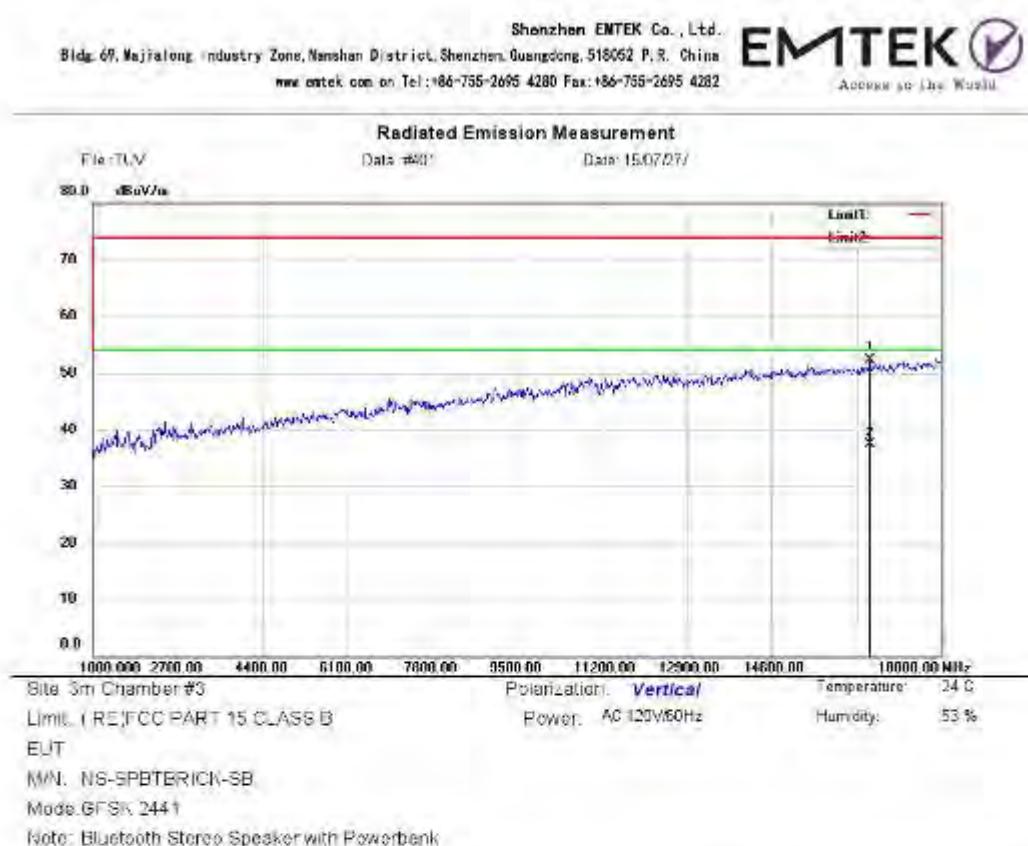
\*Maximum data    x:Over limit    L:over margin

Operator: JV

File: TUV/Data #448

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Figure 6: Test figure of Radiated Spurious Emissions (1GHz –25GHz), BDR (Mid)



\* Maximum data    x:Over limit    L:over margin

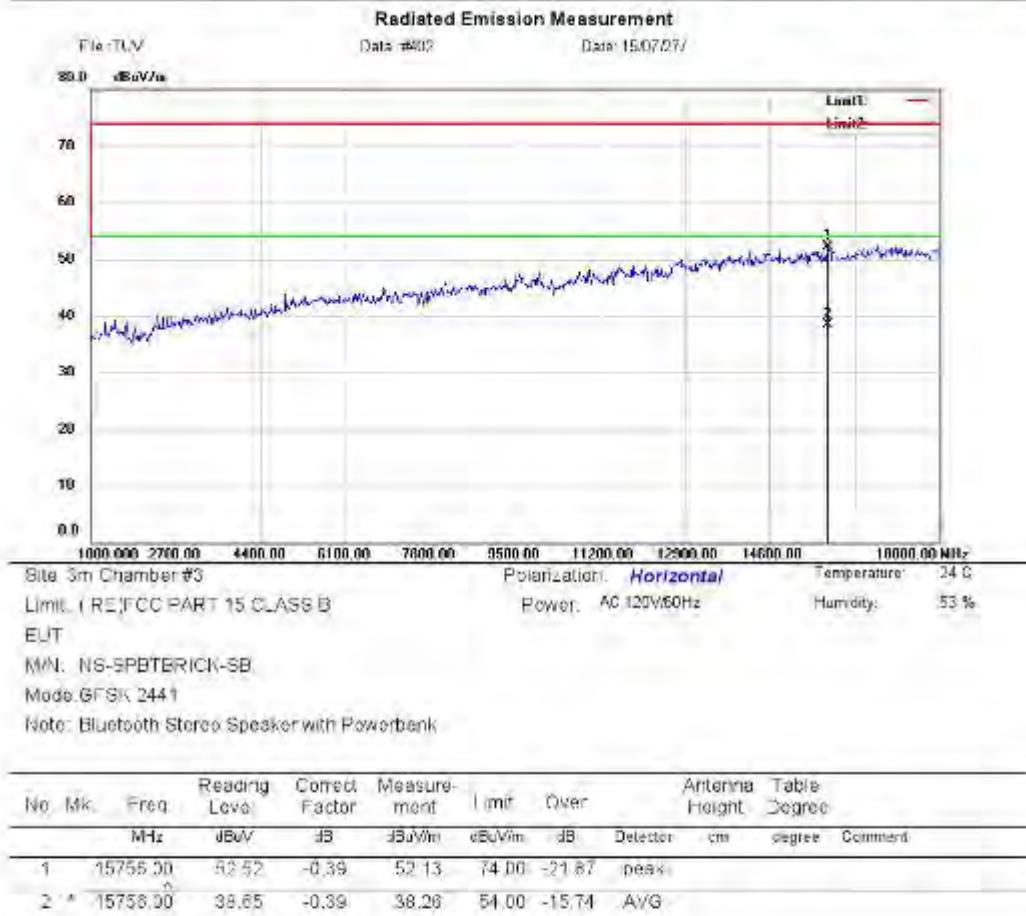
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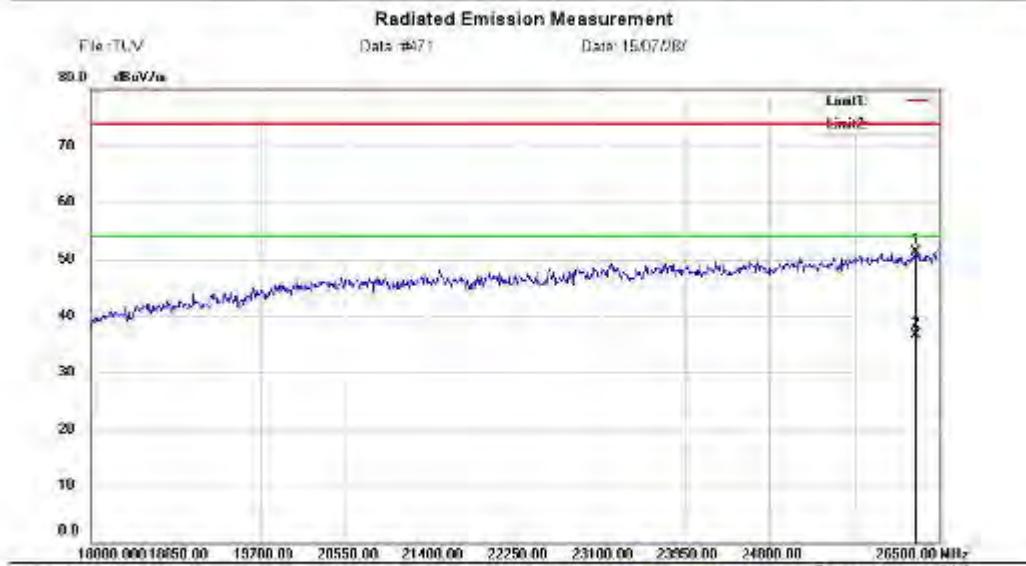
\*Maximum data - x:Over limit - L:over margin

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Overs	Antenna Height	Table Degree	Comment	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	
1	26270.50	86.67	-35.46	51.21	74.00	-22.79	peak				
2	*	26270.50	71.88	-35.46	36.42	54.00	-17.58	Avg			

\* Maximum data - x:Over limit - Lower margin

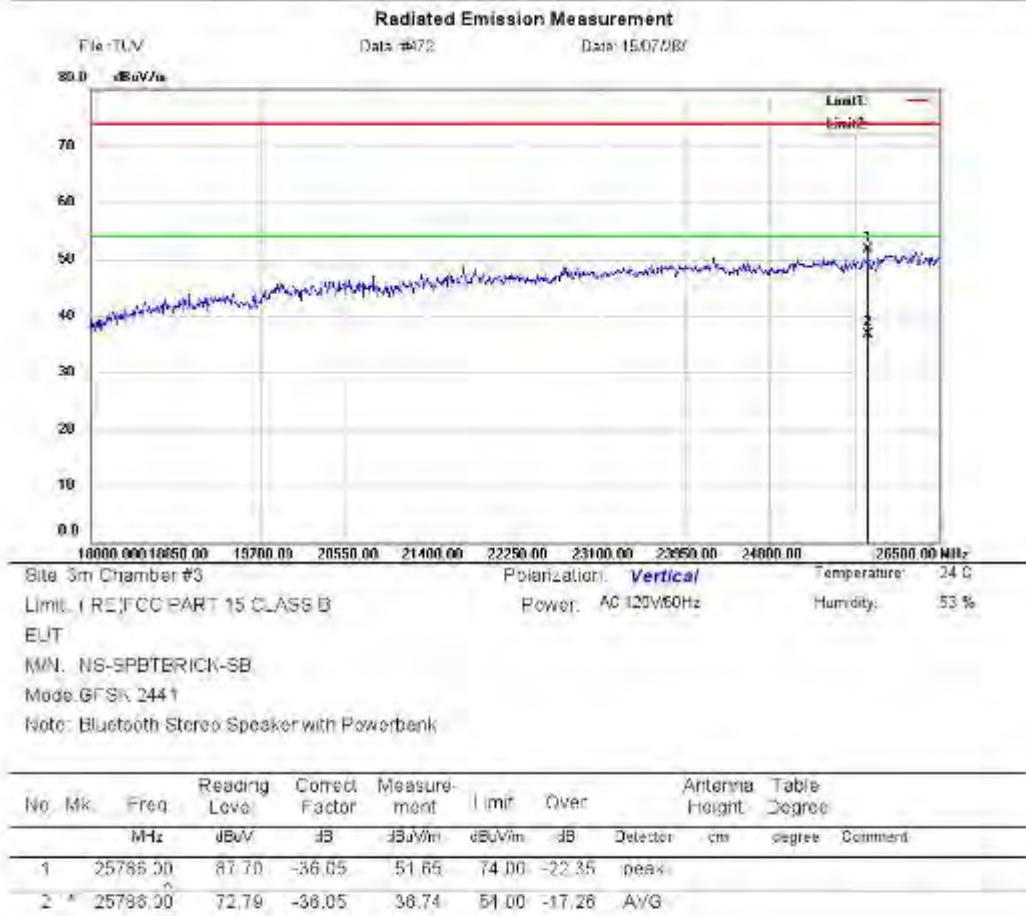
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\*Maximum data - x:Over limit - Lower margin

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Figure 7: Test figure of Radiated Spurious Emissions (9kHz – 30MHz), BDR (High)

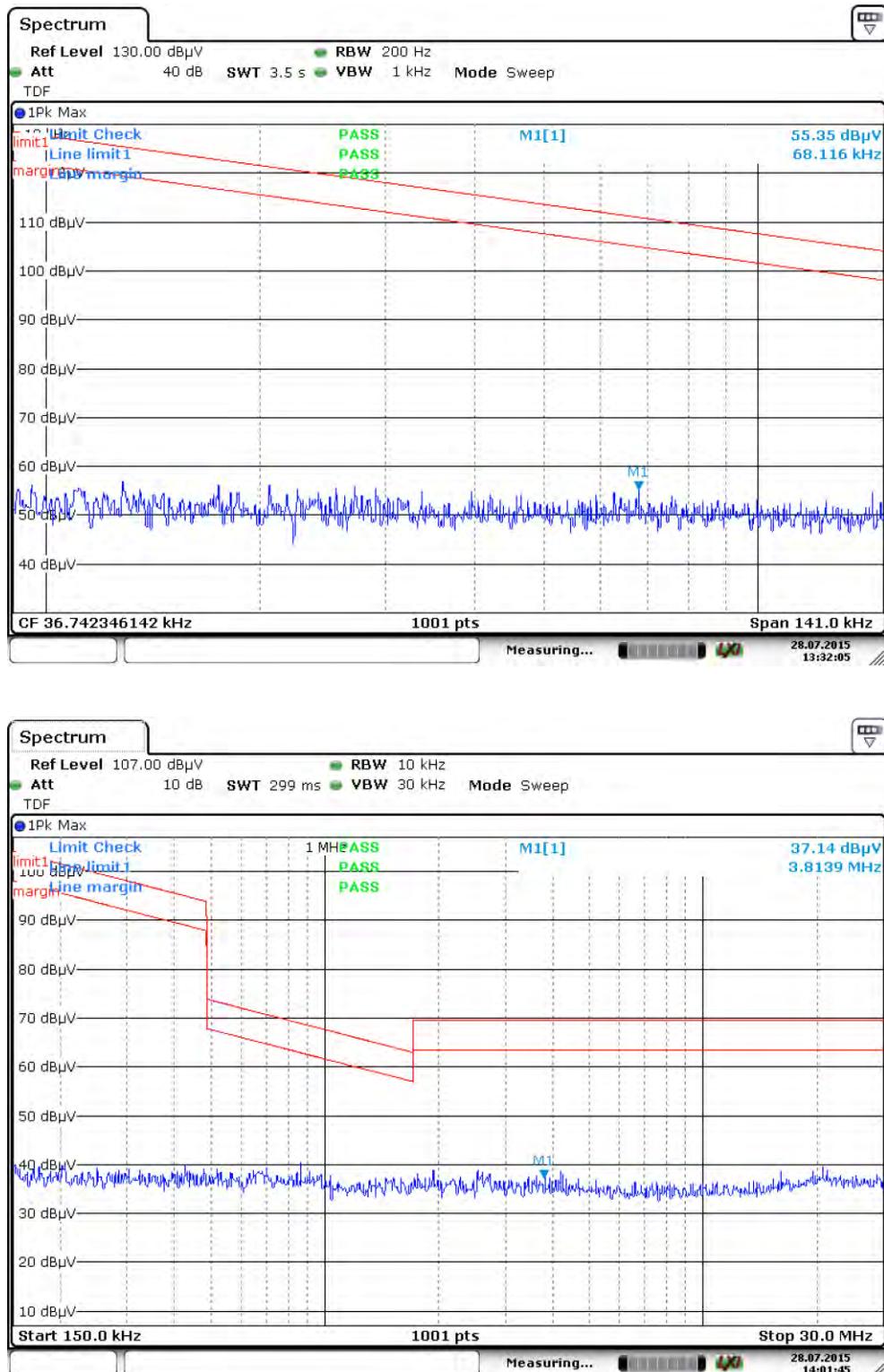
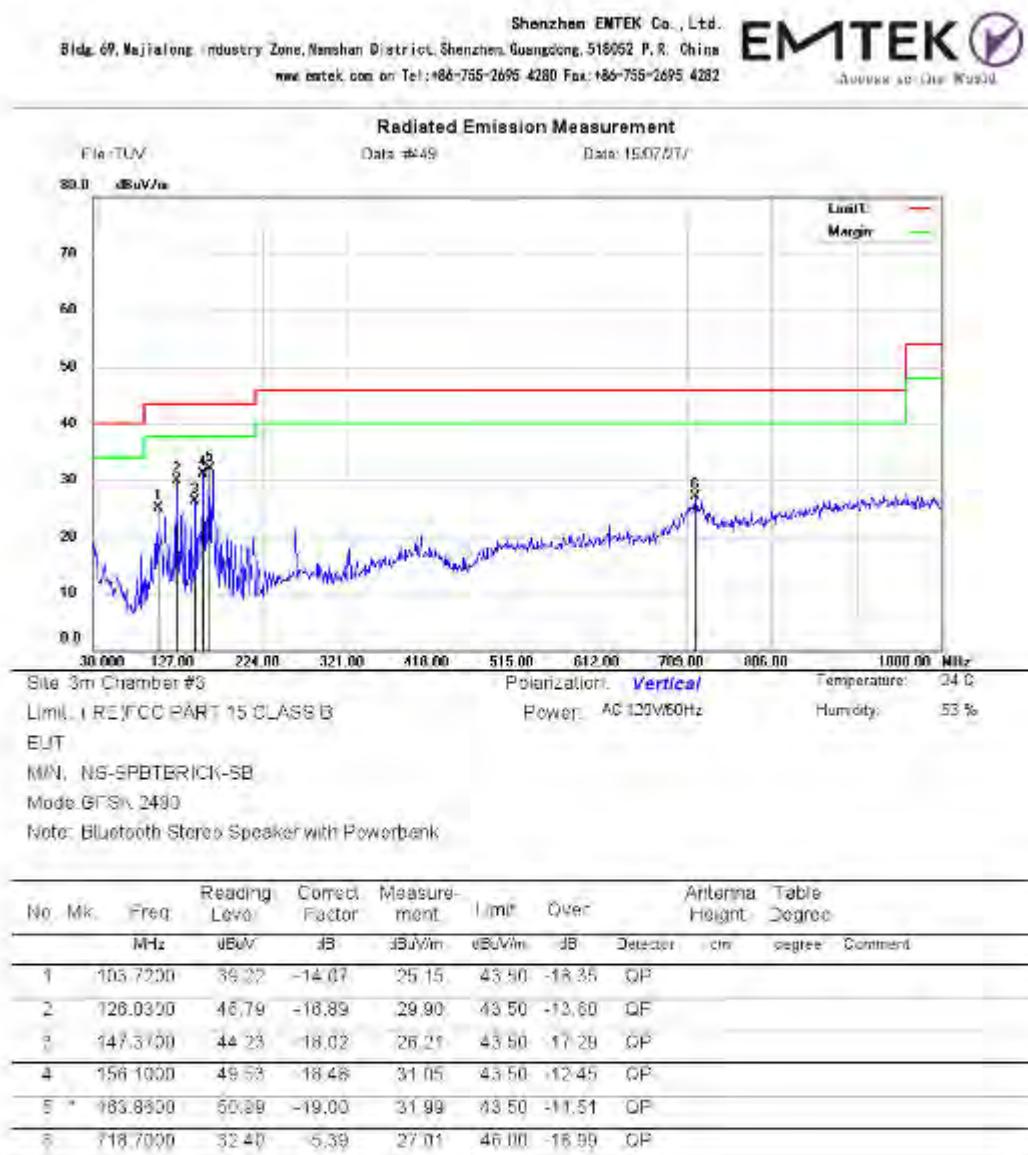


Figure 8: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), BDR (High)



\*Maximum data    x:Overs limit    L:Lowest margin

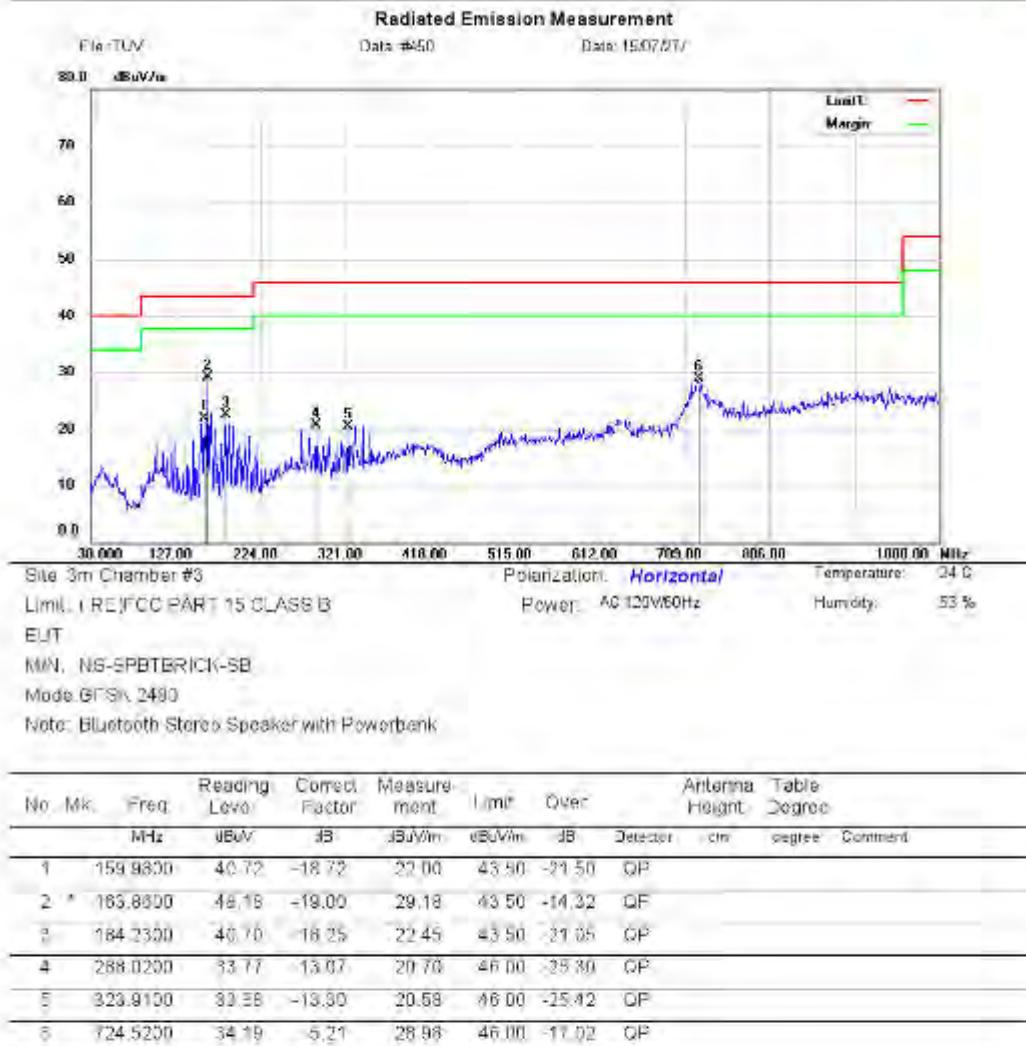
Operator: TUV

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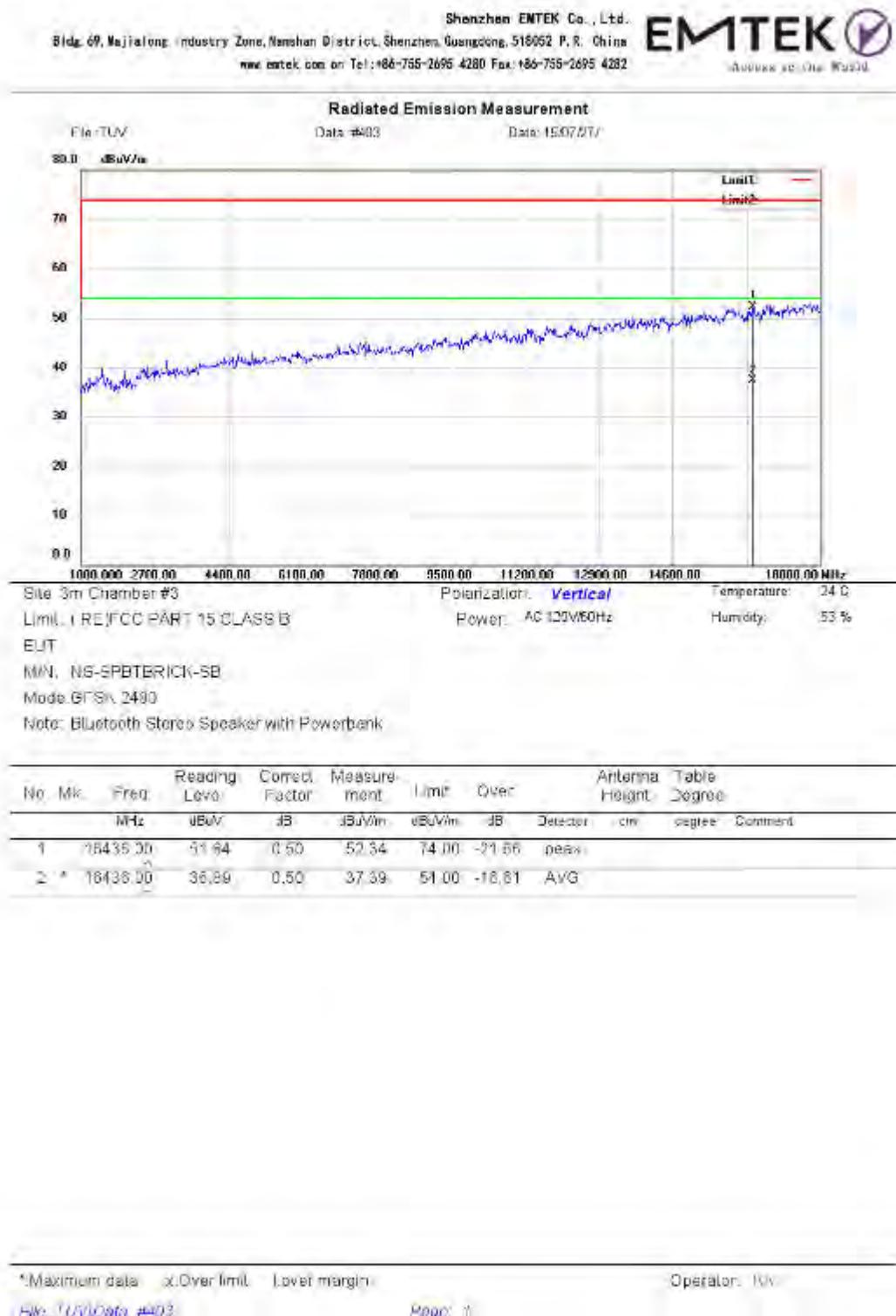
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Operator: JV

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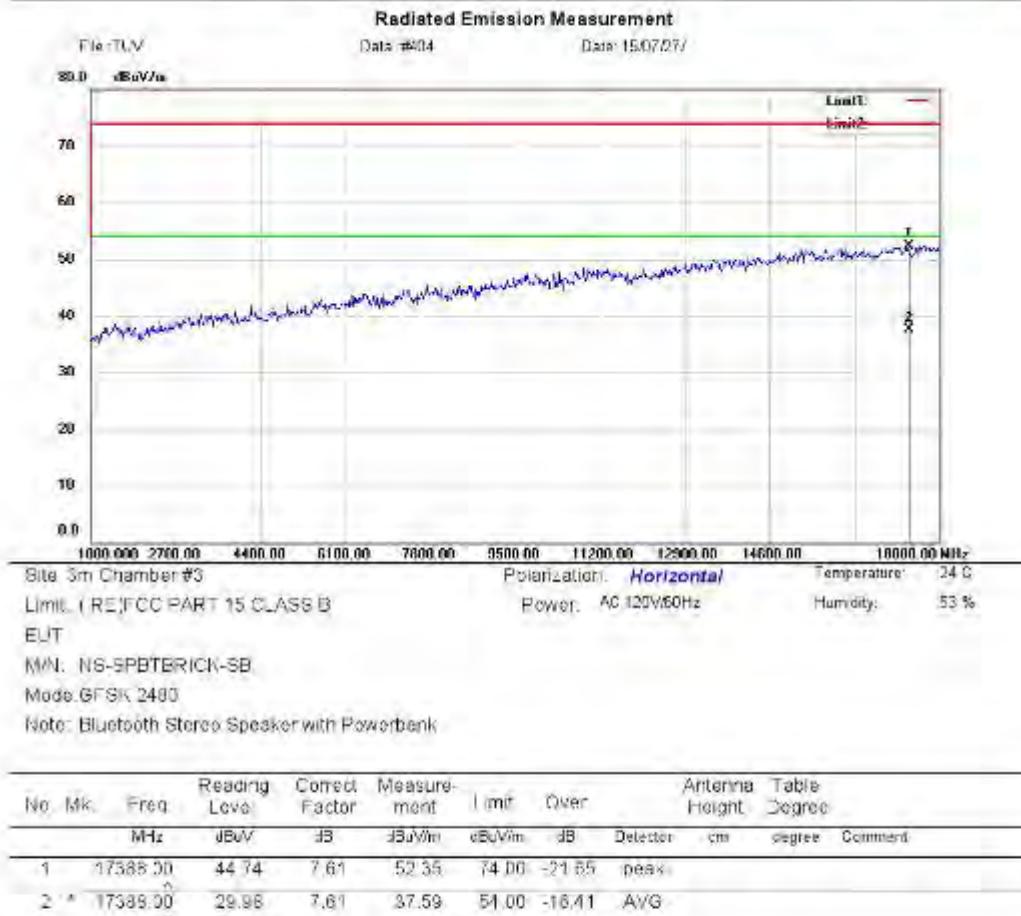
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Figure 9: Test figure of Radiated Spurious Emissions (1GHz –25GHz), BDR (High)



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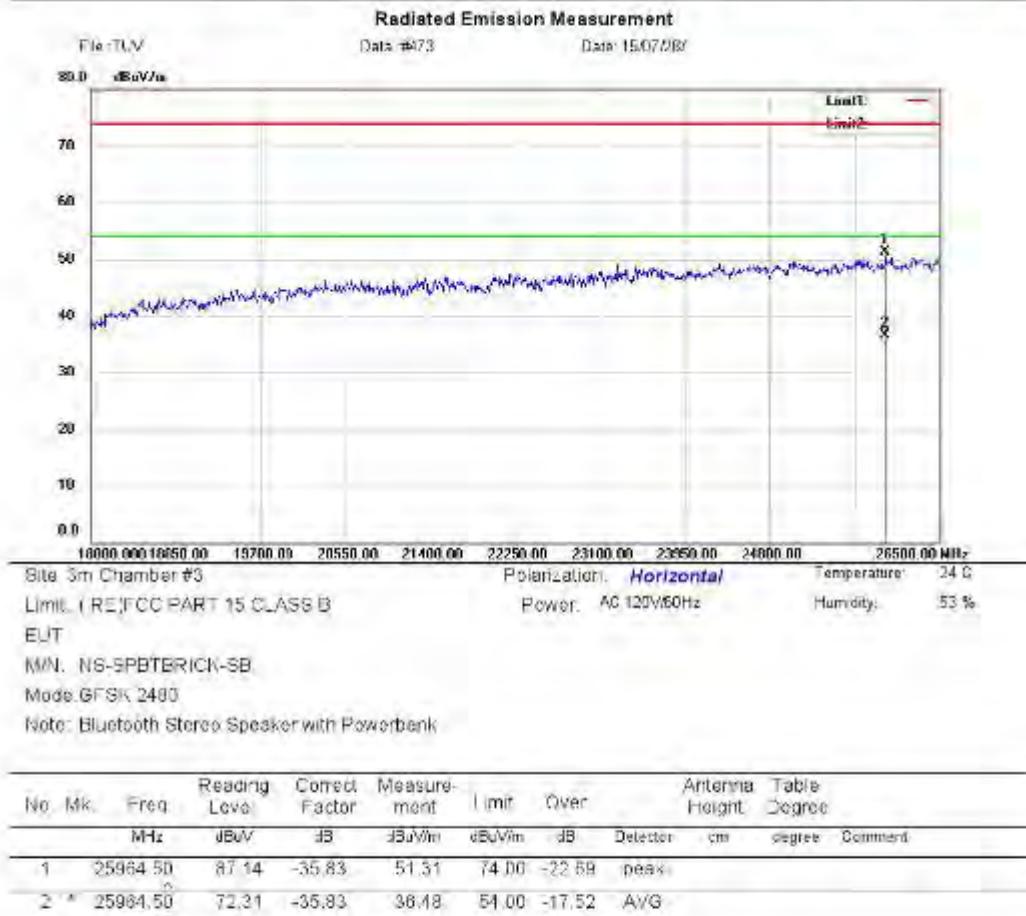
\* Maximum data - x:Over limit - L:over margin

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\*Maximum data - x:Over limit - L:over margin

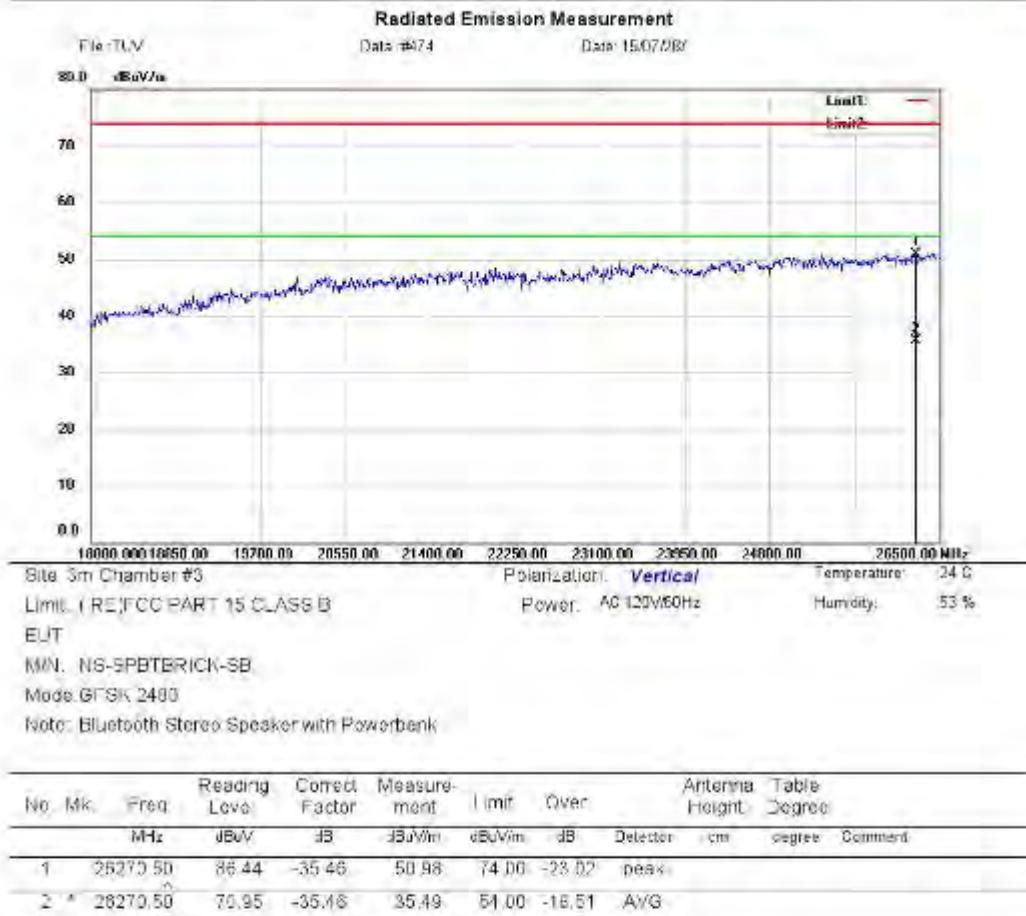
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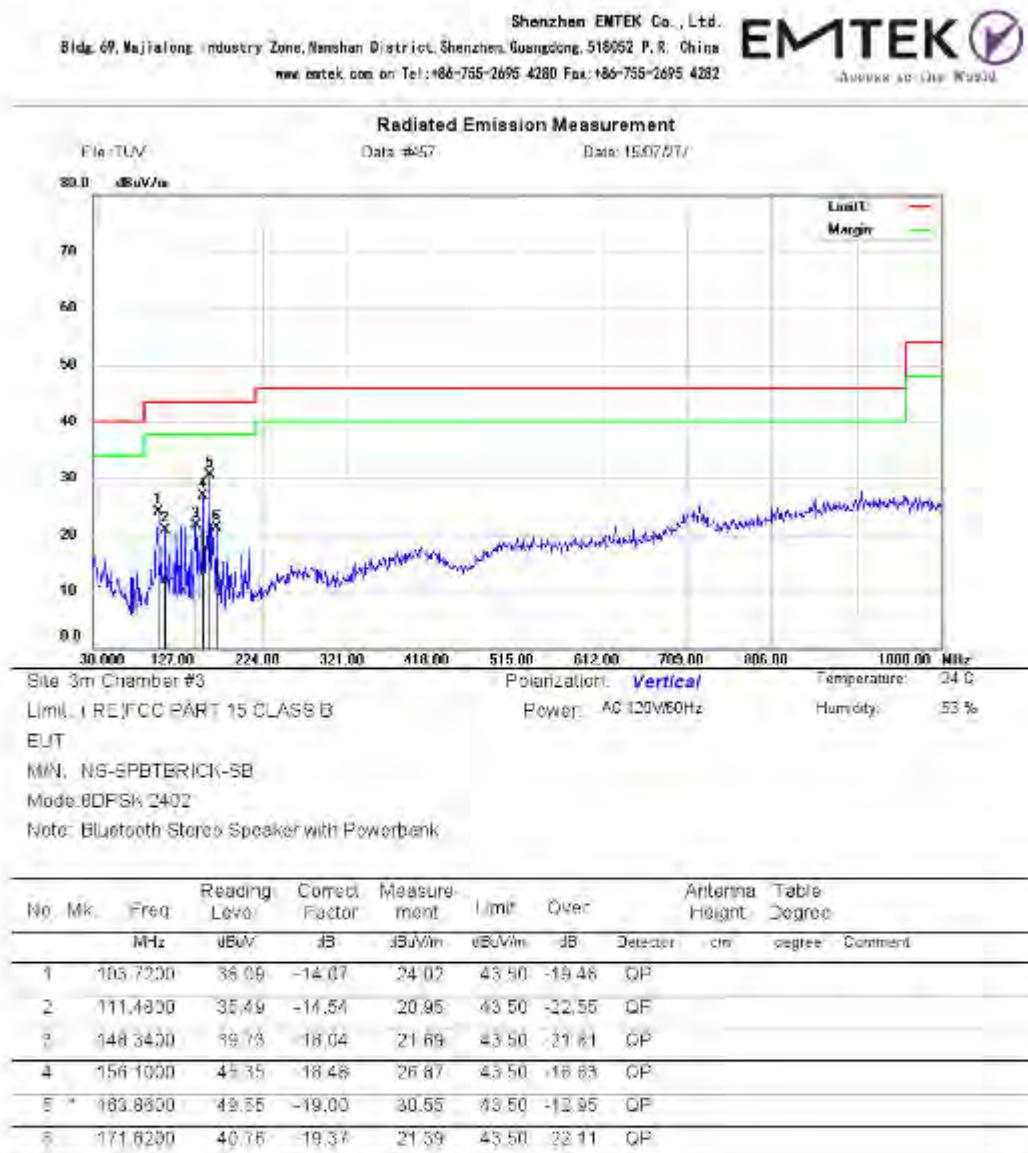
\* Maximum data - x:Over limit - L:over margin

Operator: 101

File:TUV/Data #474

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Figure 10: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), EDR (Low)



\*Maximum data    x:Over limit    L:Lowest margin

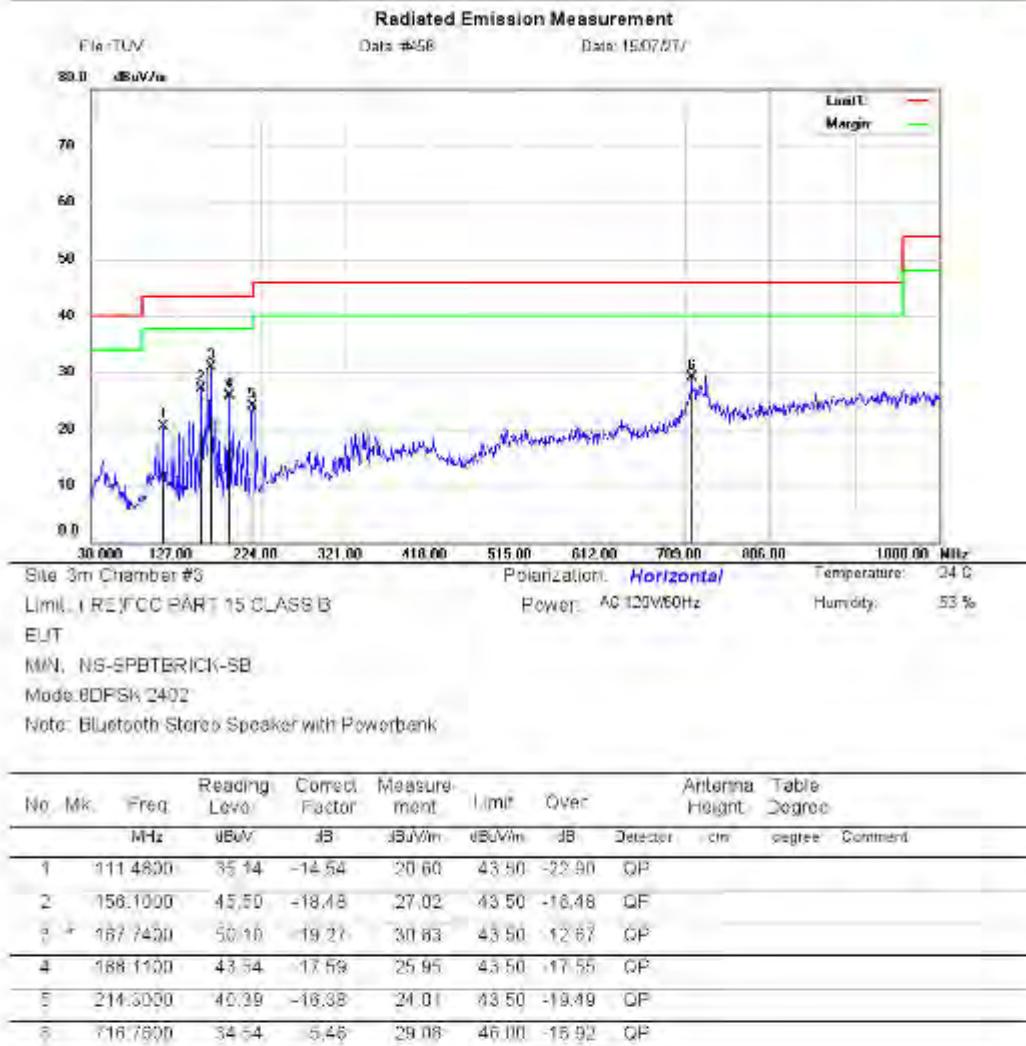
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\*Maximum data  Over limit  Lower margin 

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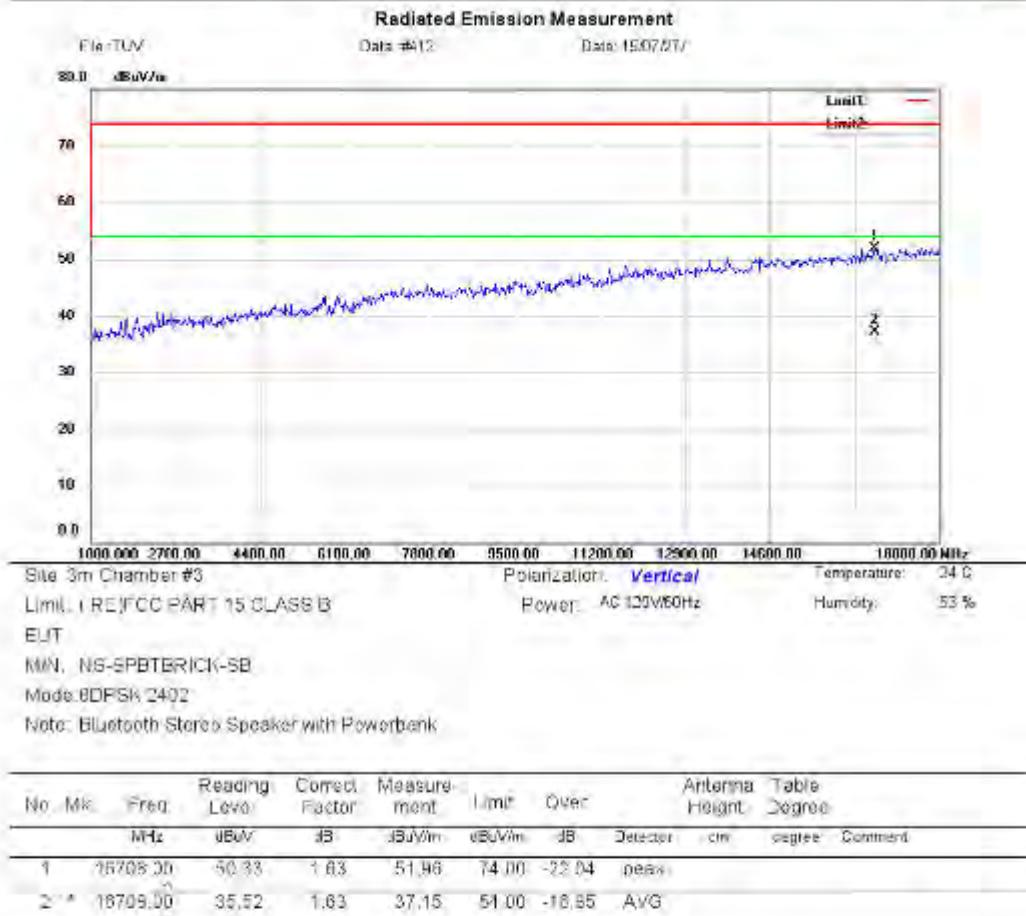
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Figure 11: Test figure of Radiated Spurious Emissions (1GHz –25GHz), EDR (Low)



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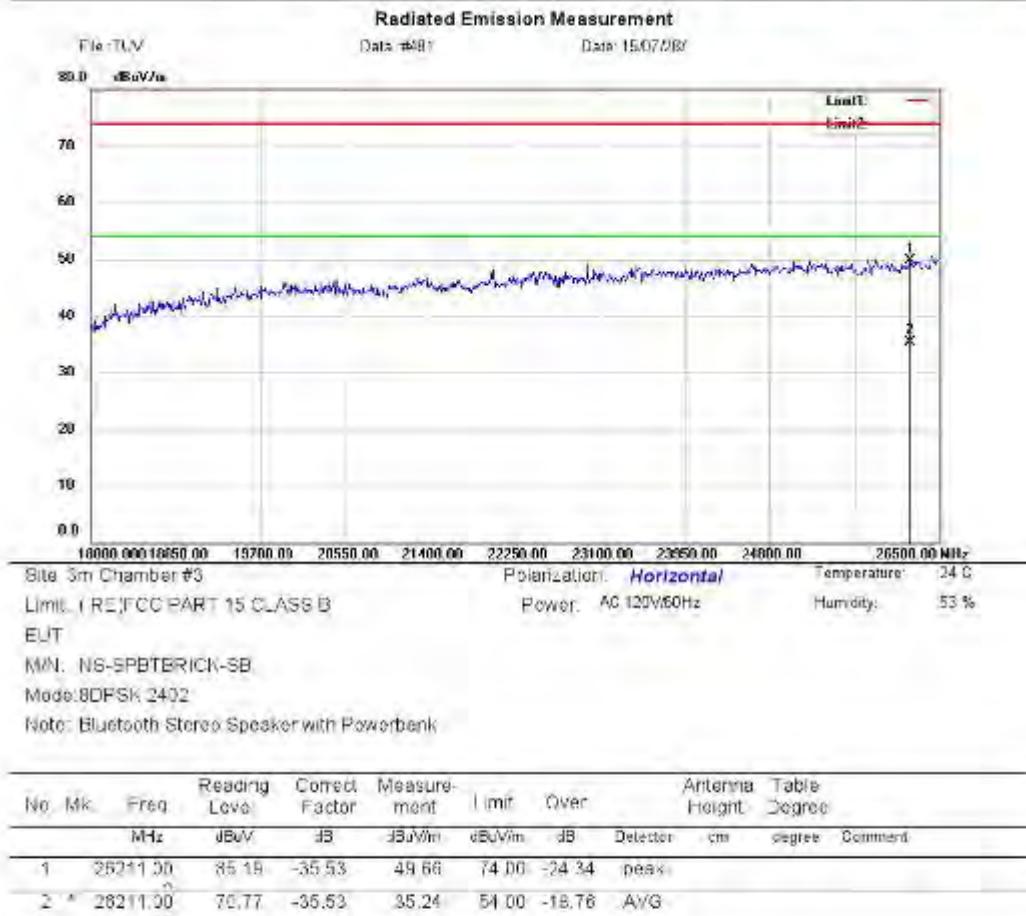
\*Maximum data = x; Over limit = lower margin

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\*Maximum data - x:Over limit - L:over margin

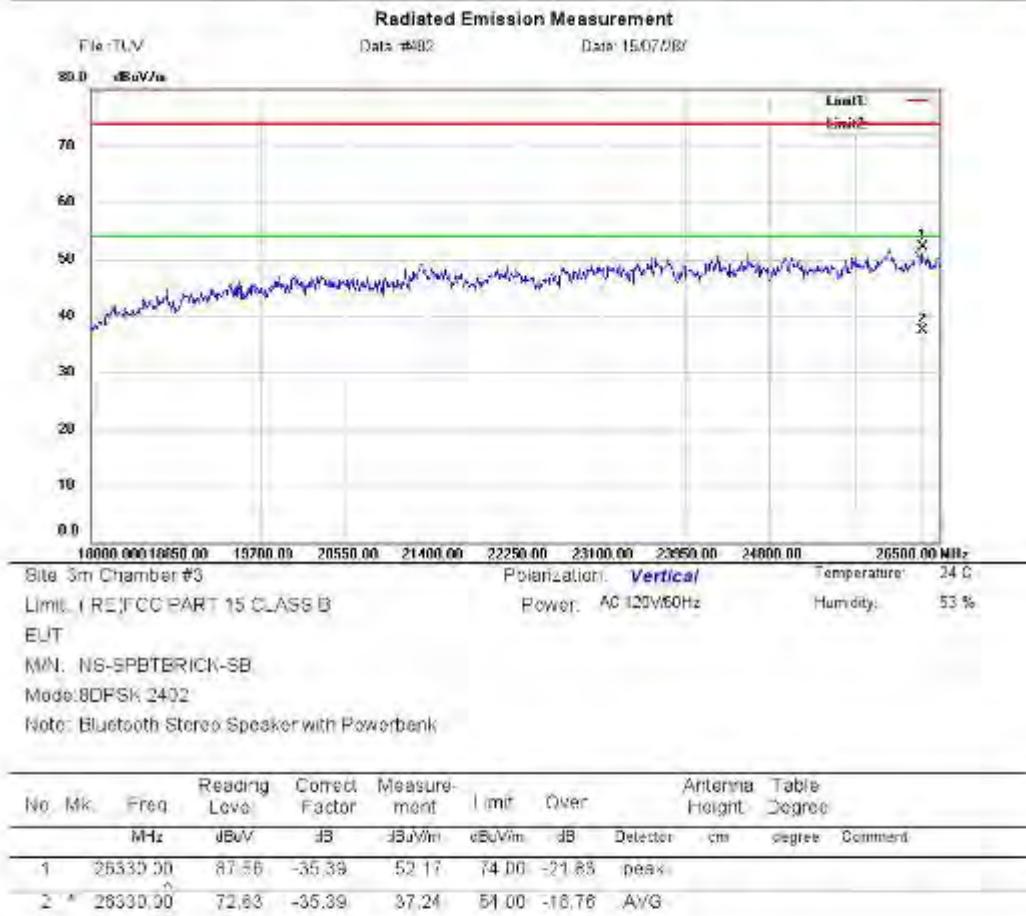
Operator: 100

File: TU/VI Data #481

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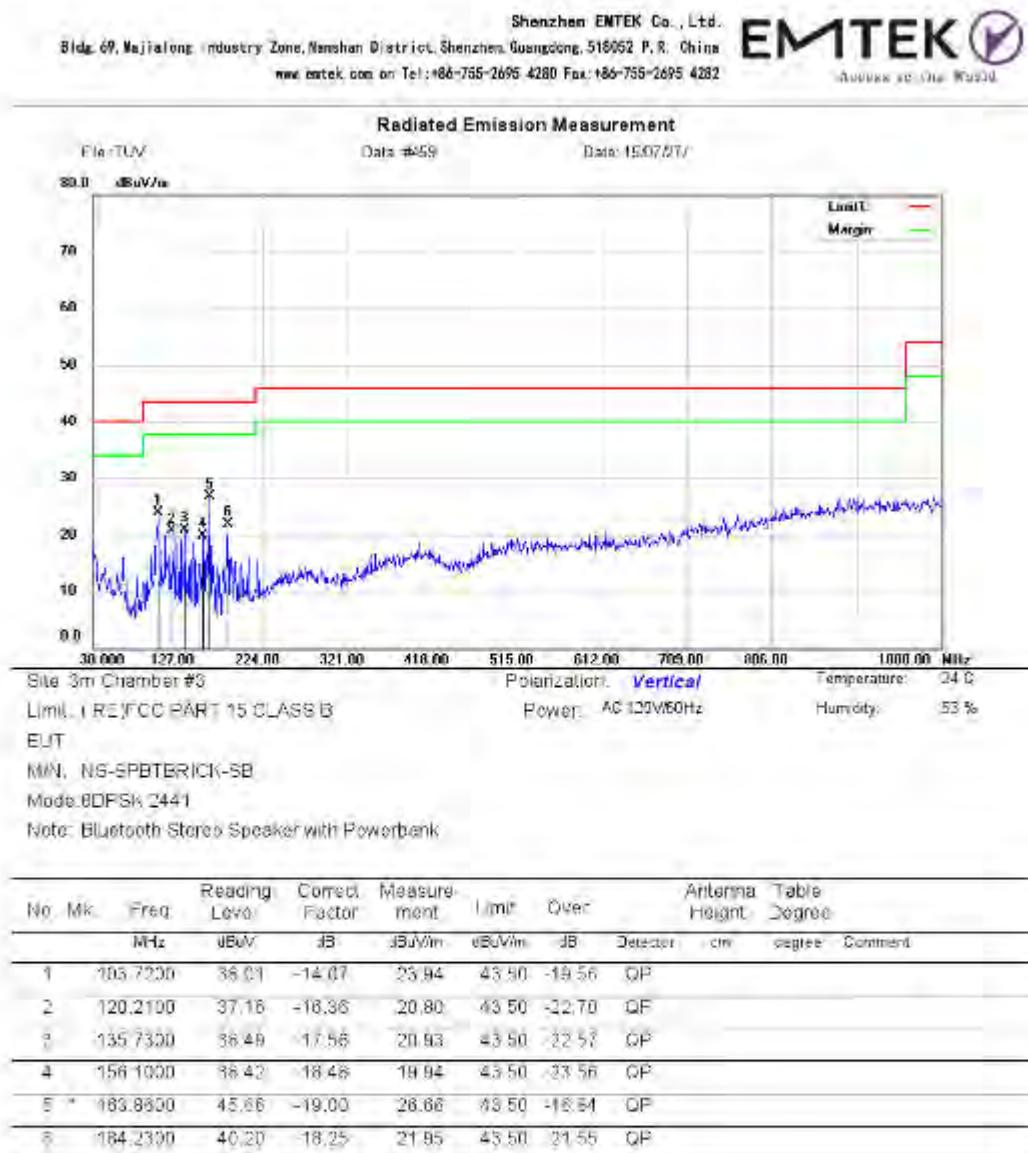
\*Maximum data - x:Over limit - L:over margin

Operator: 101

File:TUV/Data #482

Page: 1

Figure 12: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), EDR (Mid)



\*Maximum data    x:Over limit    L:level margin

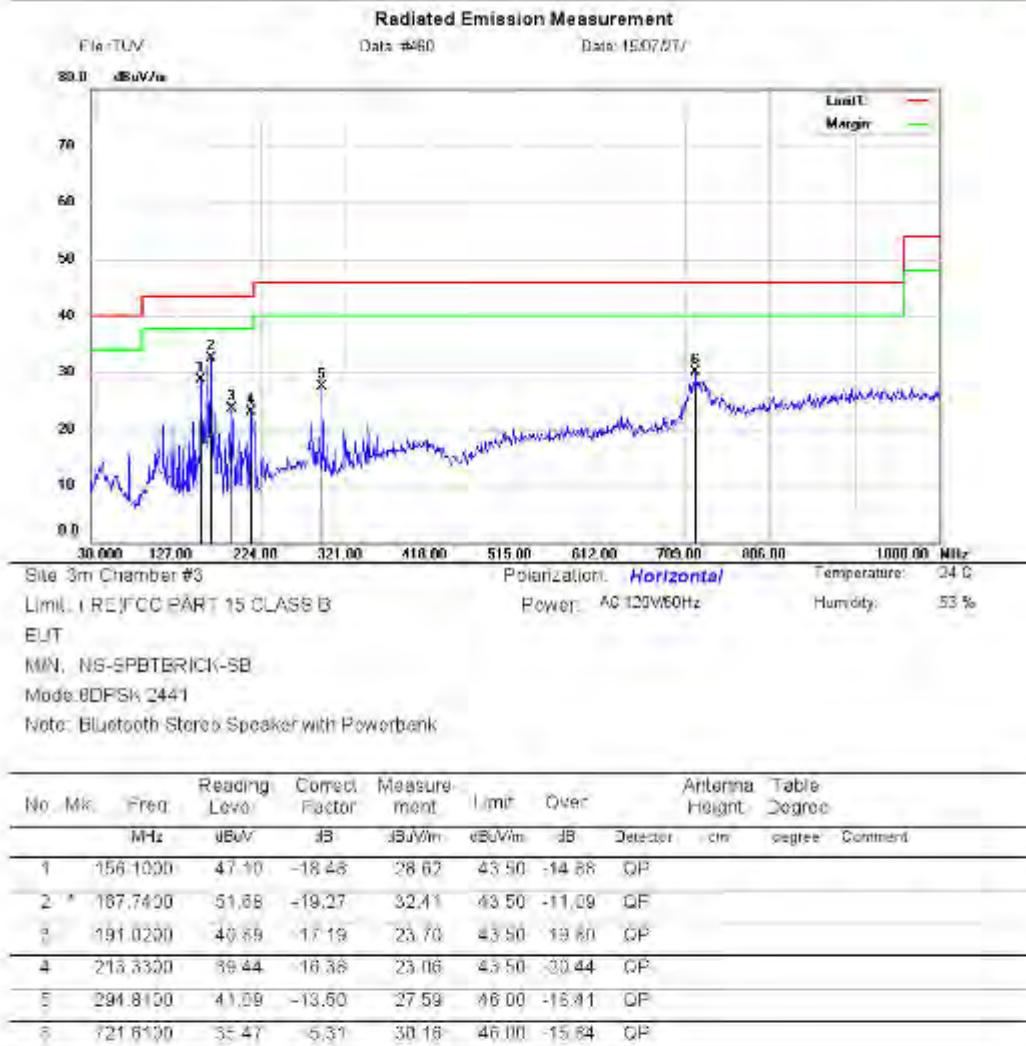
File: TUV\Date #459

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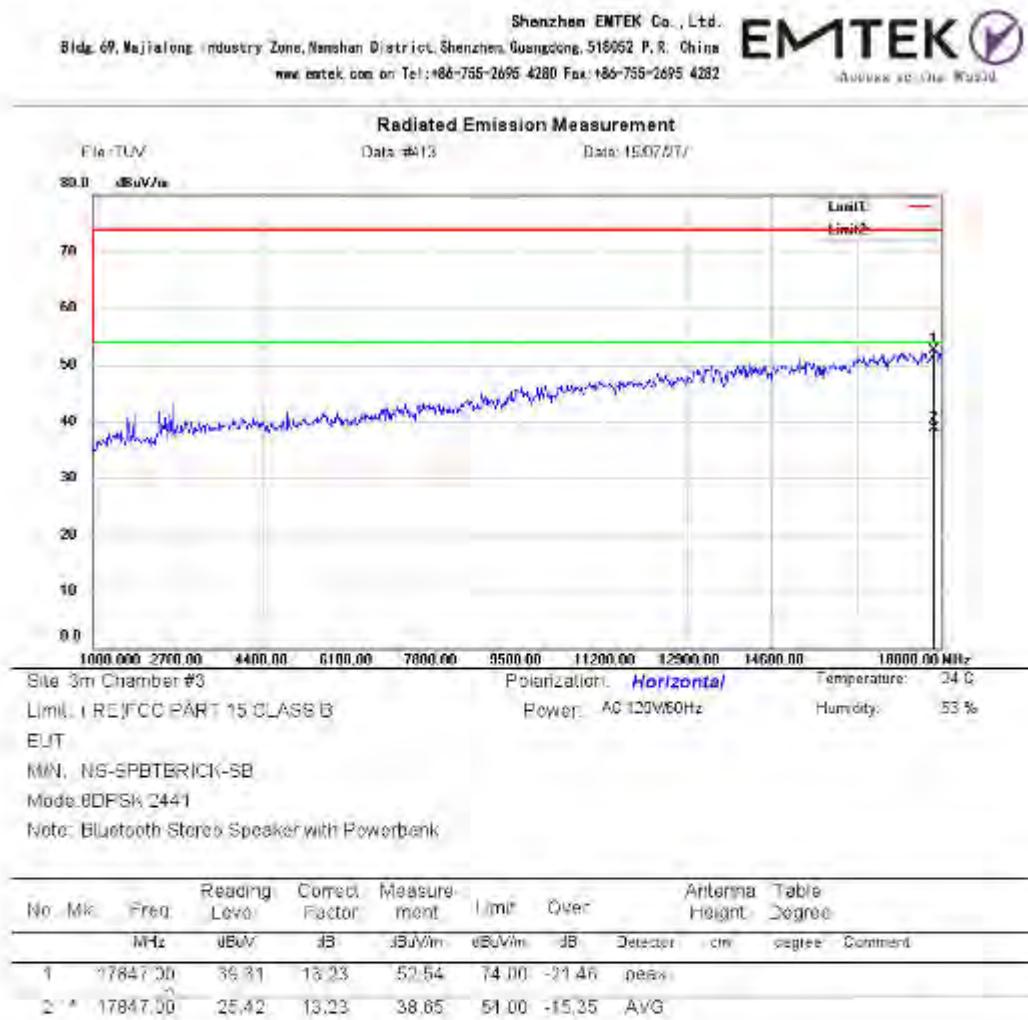
\*Maximum data    x:Over limit    L:over margin

Operator: JV

File: TUV/Data #460

P0001

Figure 13: Test figure of Radiated Spurious Emissions (1GHz –25GHz), EDR (Mid),



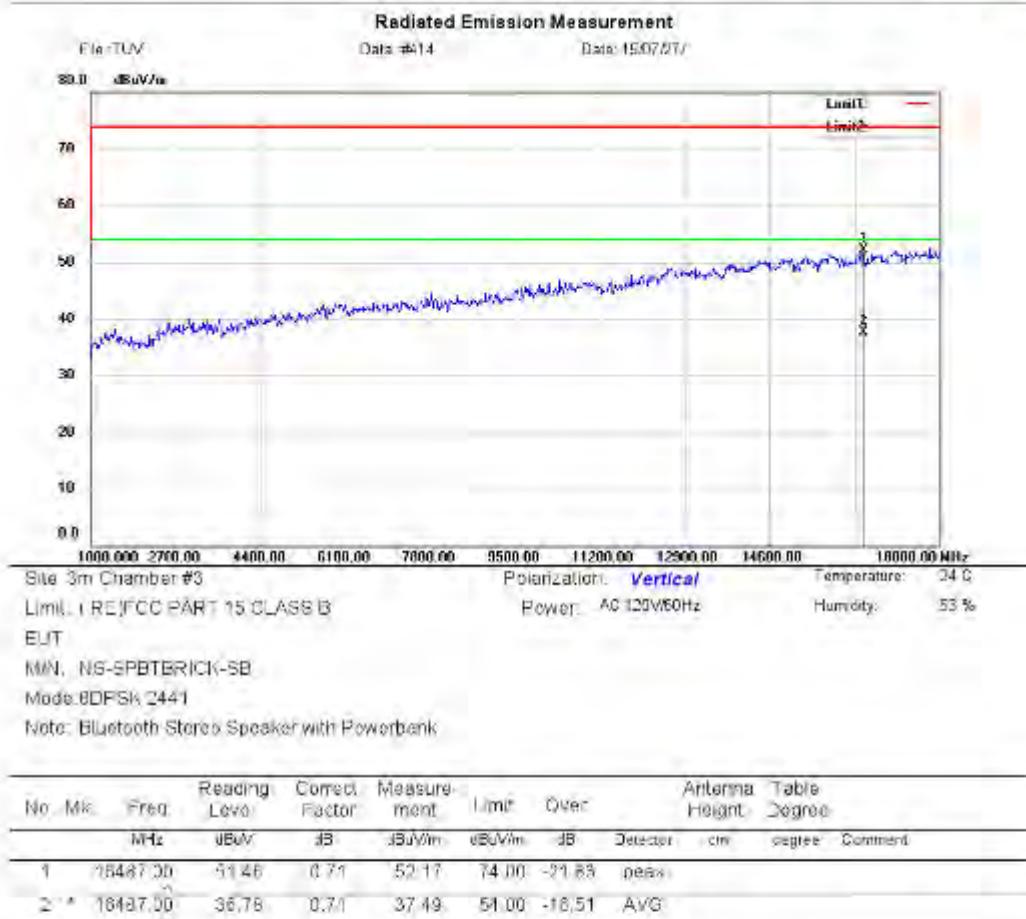
\*Maximum data    x:Overs limit    L:level margin

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\*Maximum data - x:Over limit - L:over margin

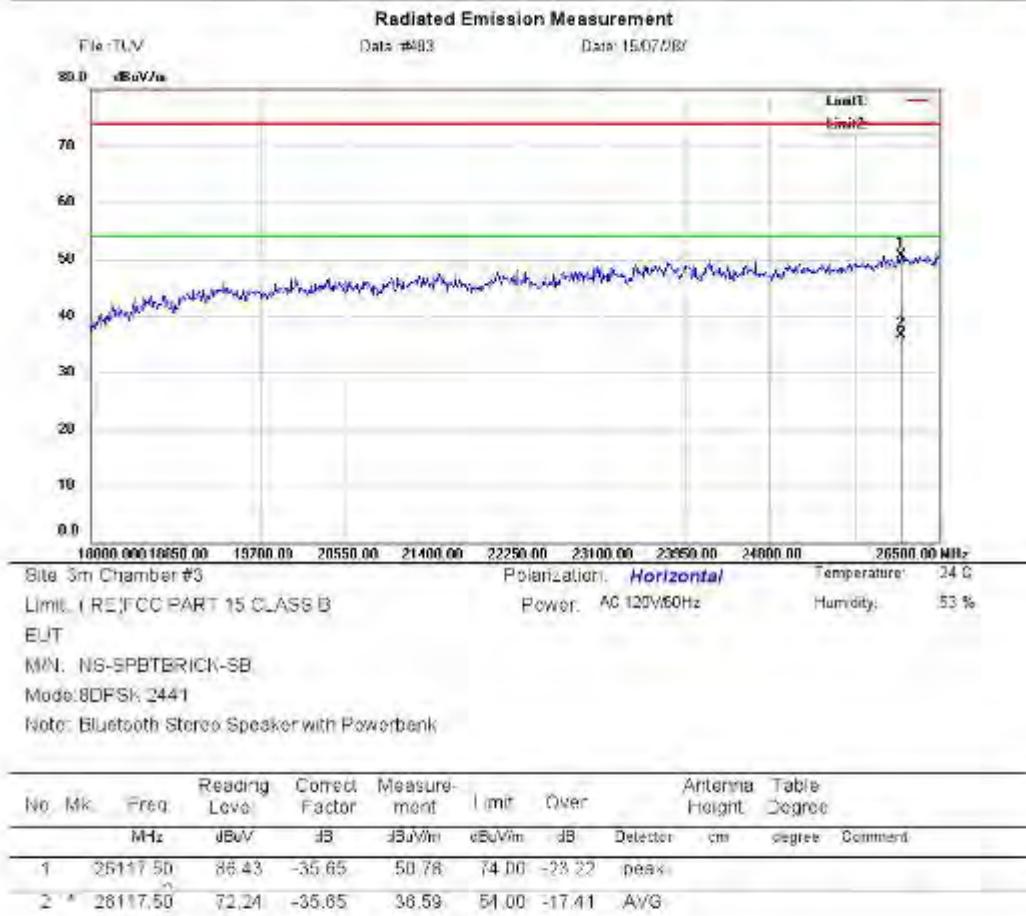
Operator: JV

File: TUV/Date: #414

Page: 1

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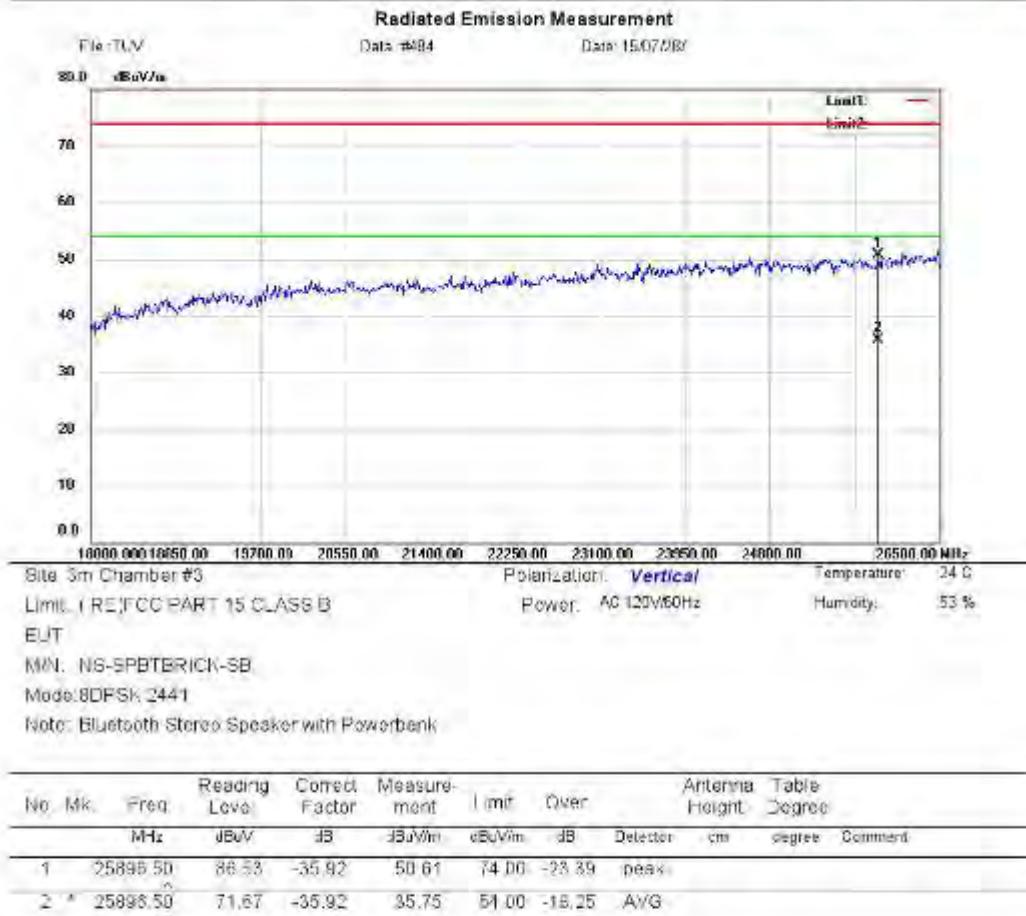
\*Maximum data - x:Over limit - L:over margin

Operator: 100

File: TUV Data #483

P000: #

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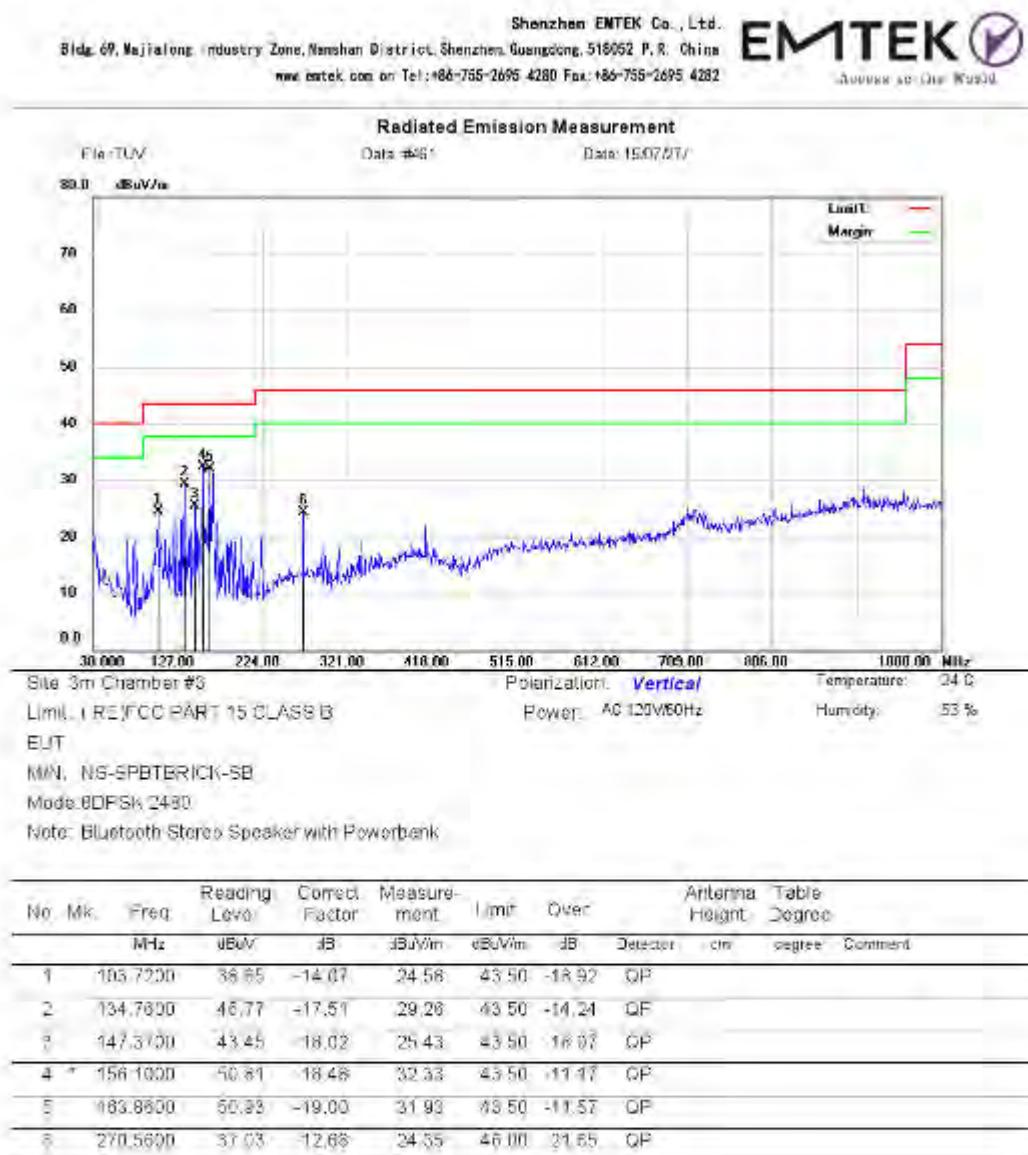
\* Maximum data    x:Over limit    L:over margin

Operator: 101

File: TUV/Data #484

P000: #

Figure 14: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), EDR (High)



\*Maximum data    x:Over limit    L:Lowest margin

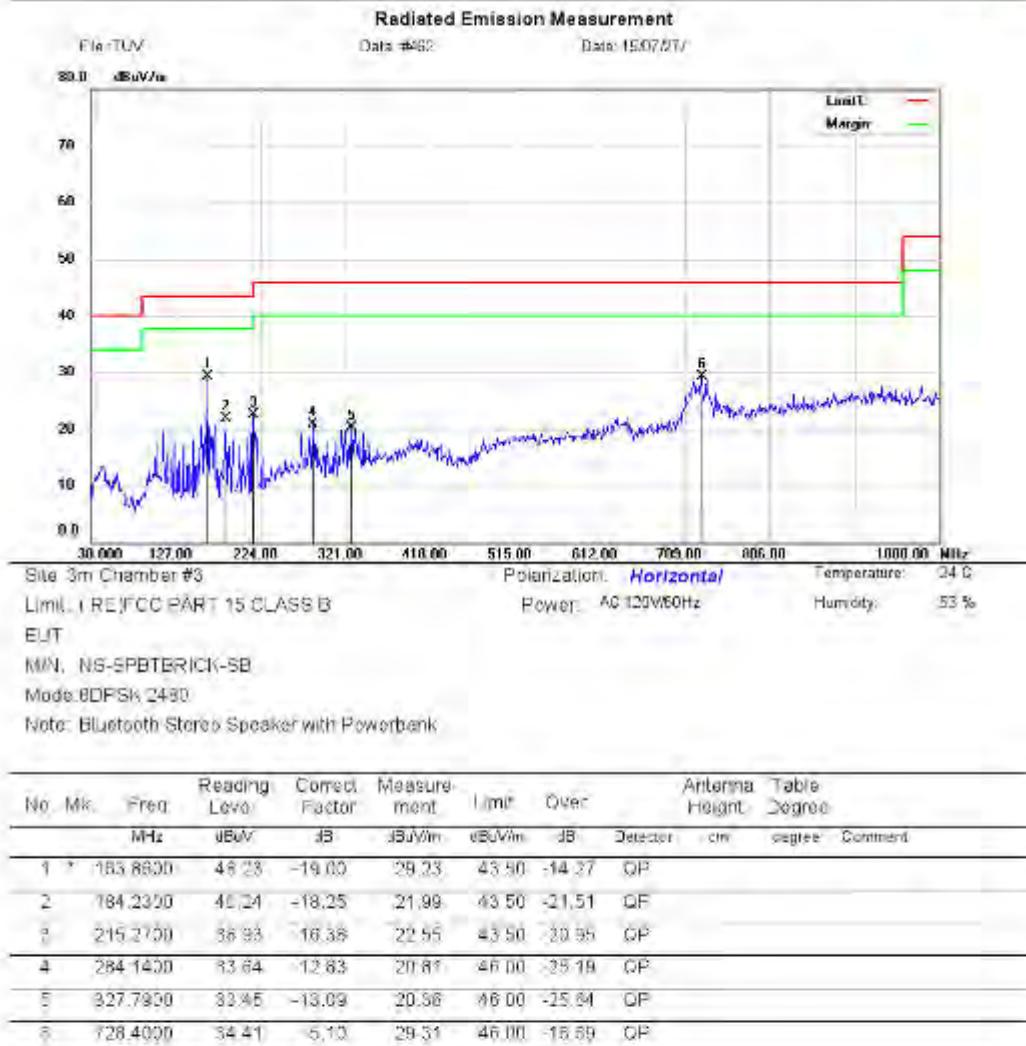
File: TUV\Data #461

Power: 1W

Operator: IV

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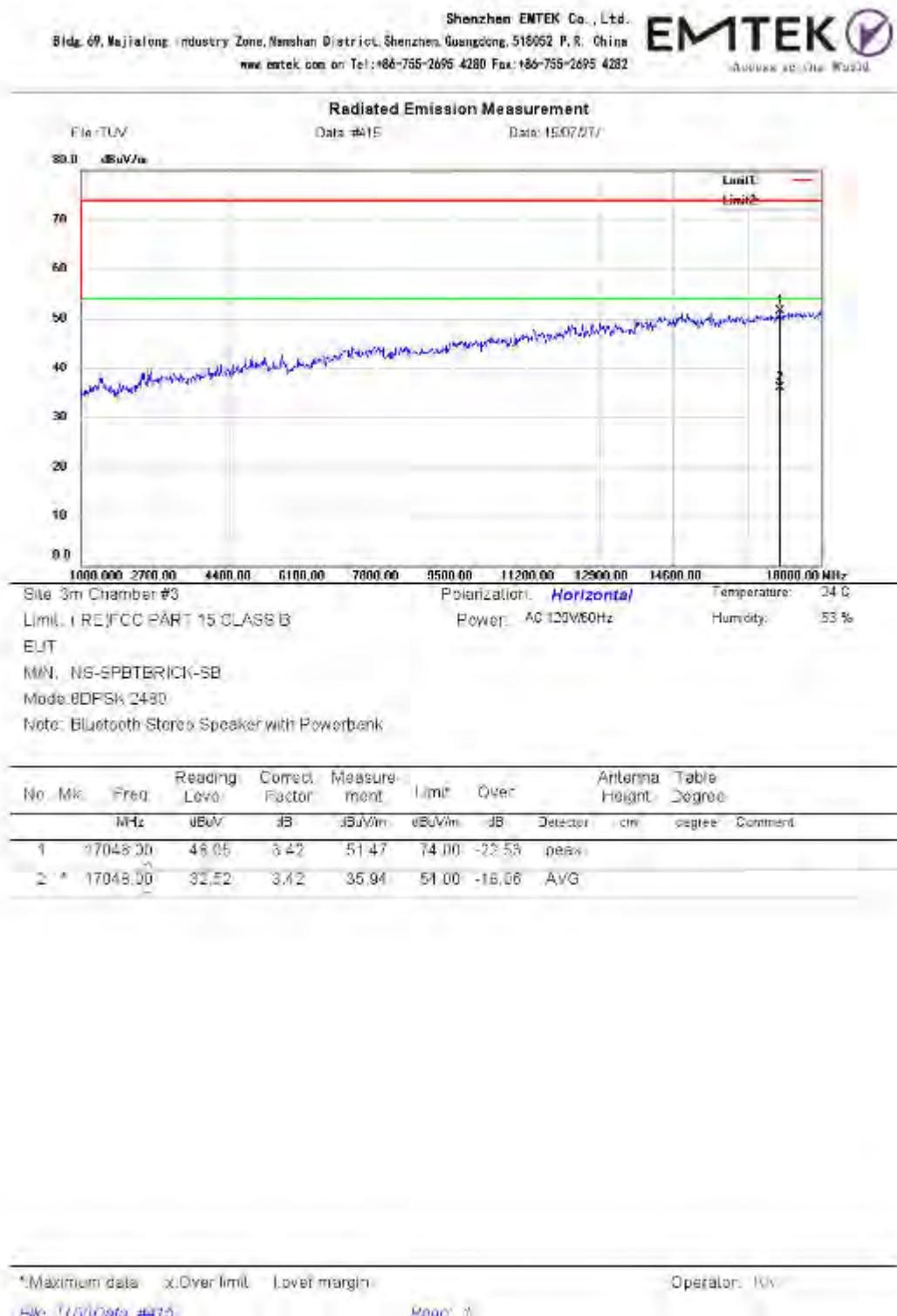
\*Maximum data    x:Over limit    L:over margin

Operator: JV

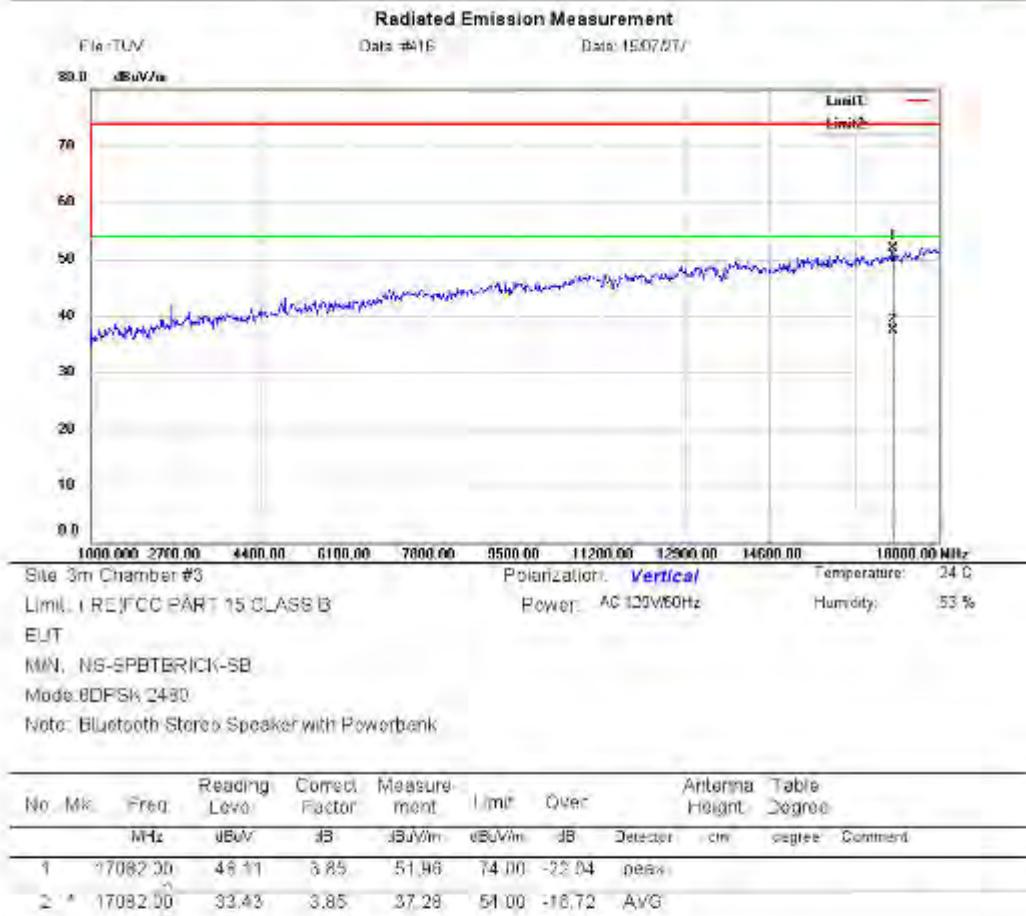
File: TUV/Data #452

Page: 1

Figure 15: Test figure of Radiated Spurious Emissions (1GHz –25GHz), EDR (High)



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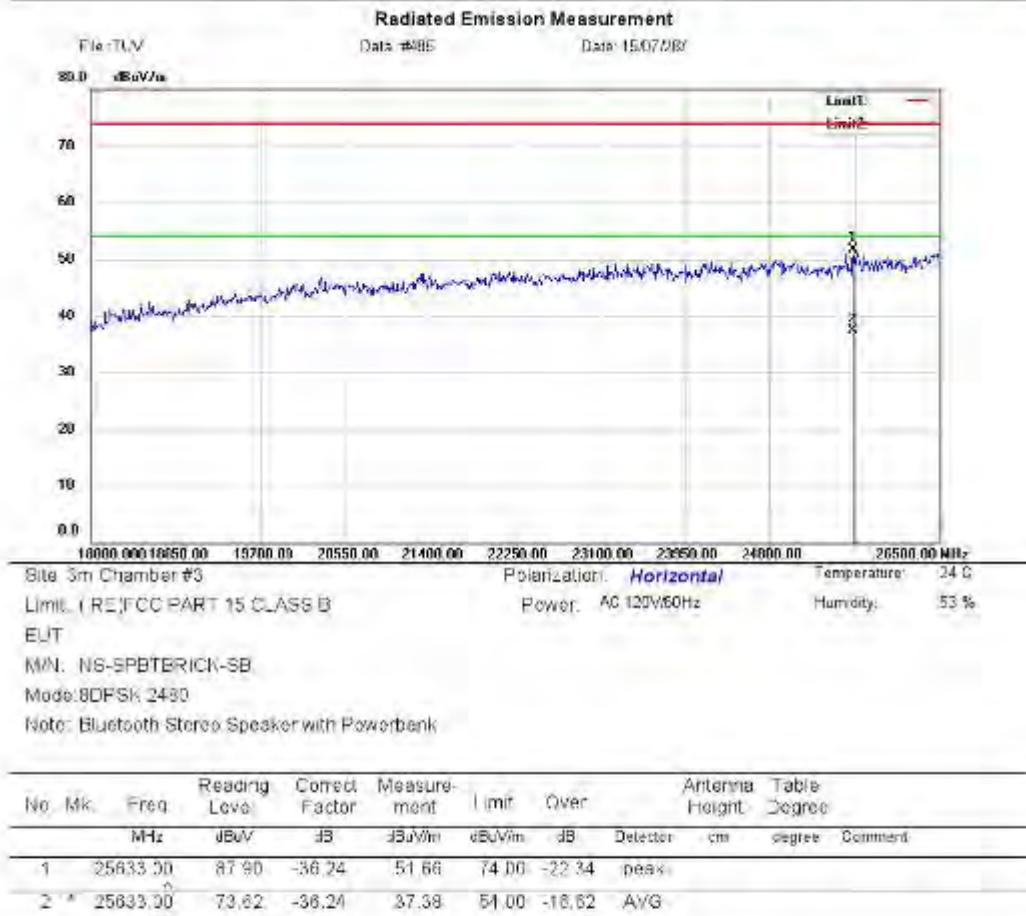
\*Maximum data = x; Over limit = lower margin

Operator: JV

File: TUV/Date: #416

Page: 1

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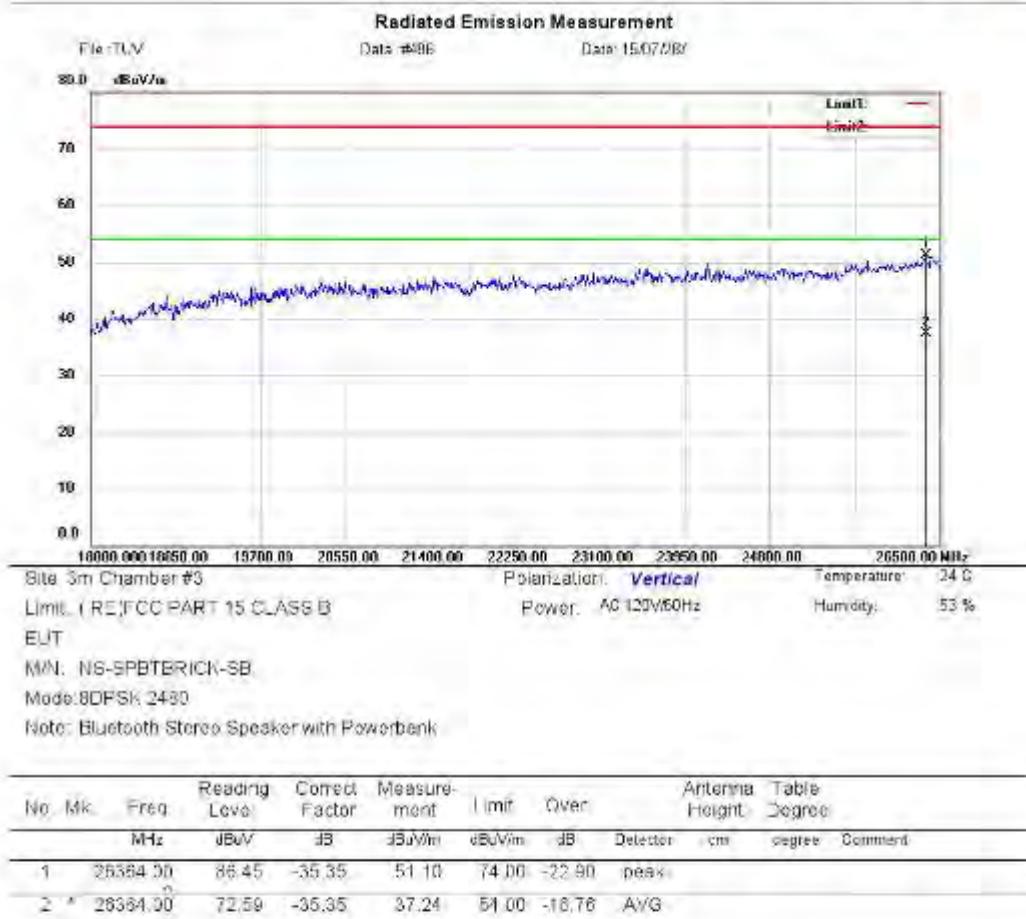
\* Maximum data - x:Over limit - L:over margin

Operator: 100

File:TUV/Data #485

P000: #

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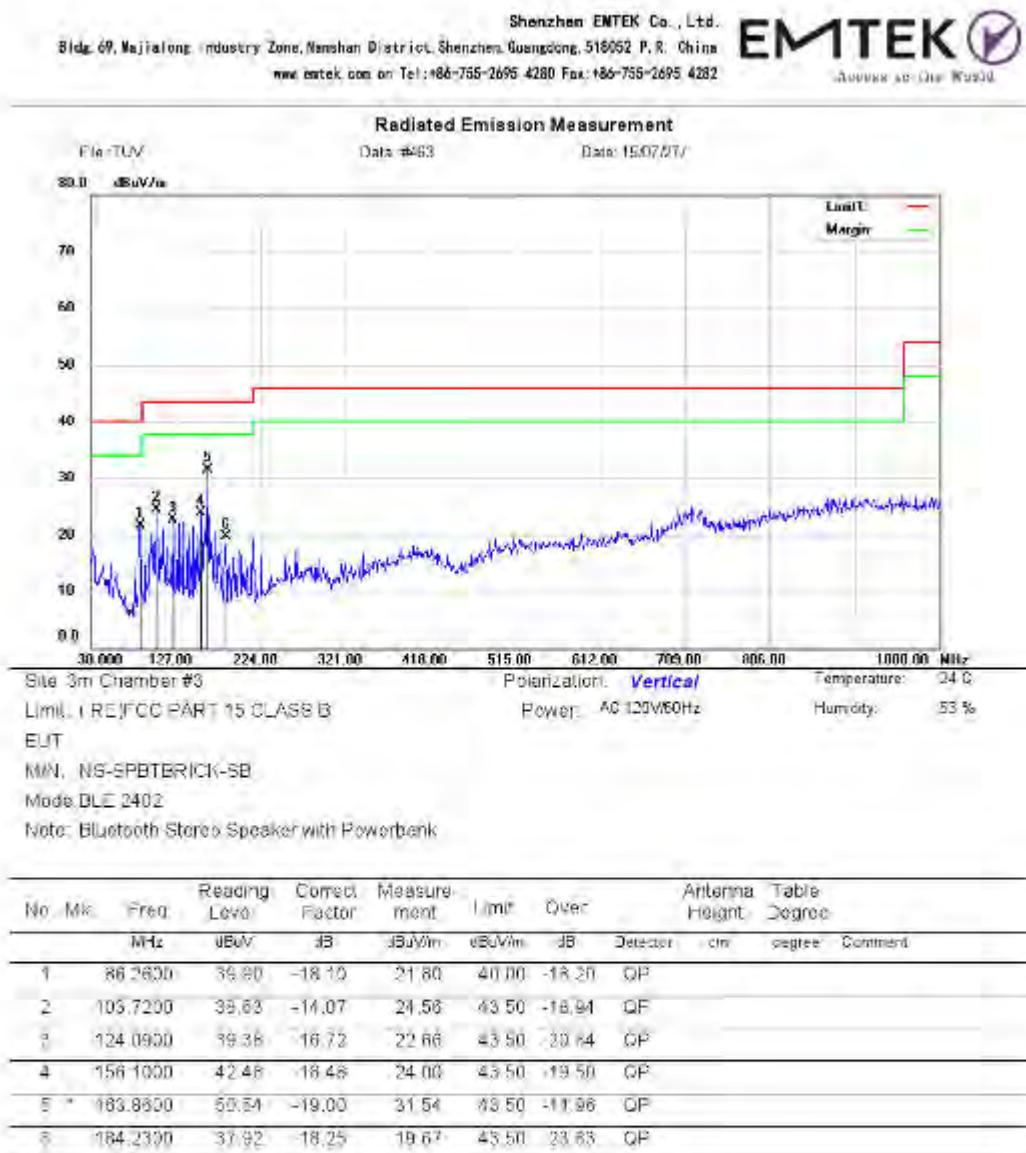
\* Maximum data    x:Over limit    L:over margin

Operator: 100

File : TUV/Data #486

P000: #

Figure 16: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), Low Energy (Low)



\*Maximum data    x:Overs limit    L:Over margin

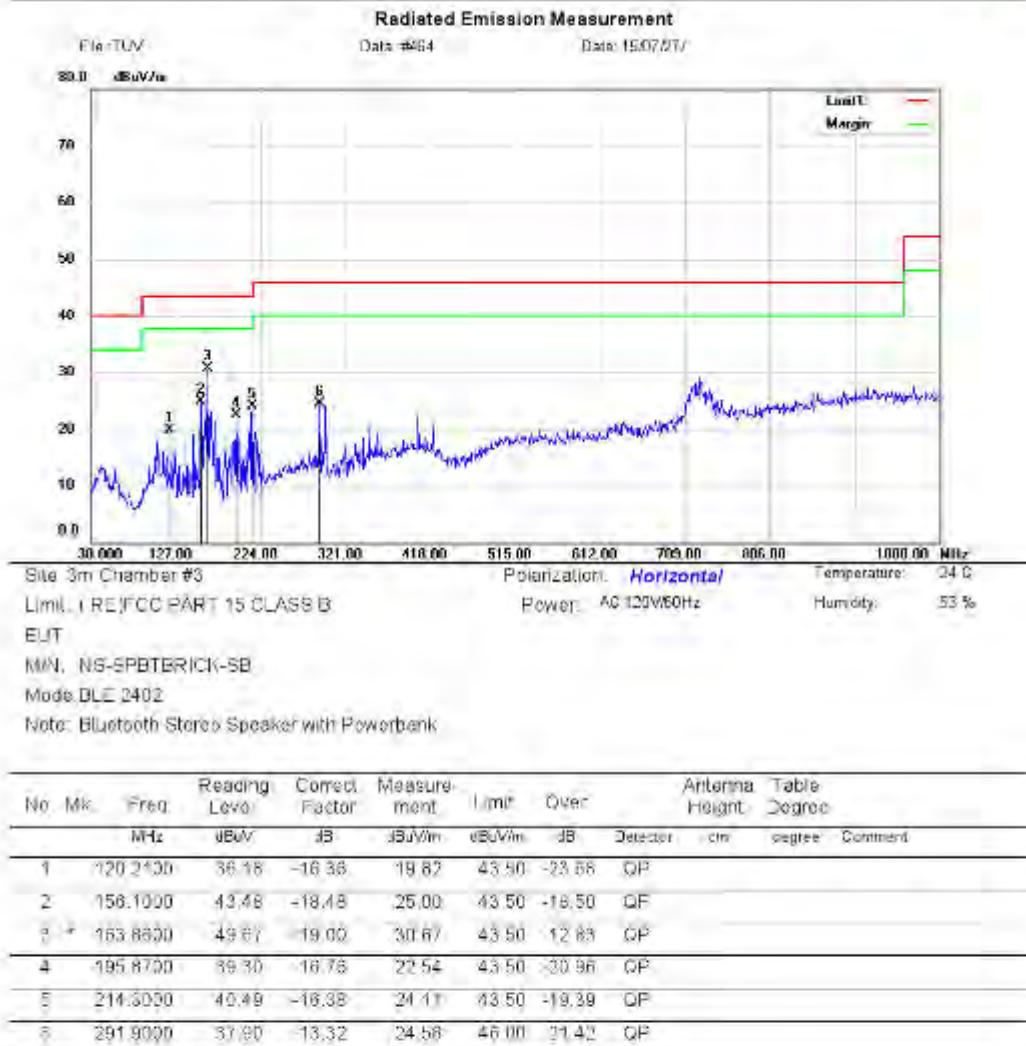
File: TUV\Data #463

Operator: JV

Power: 0

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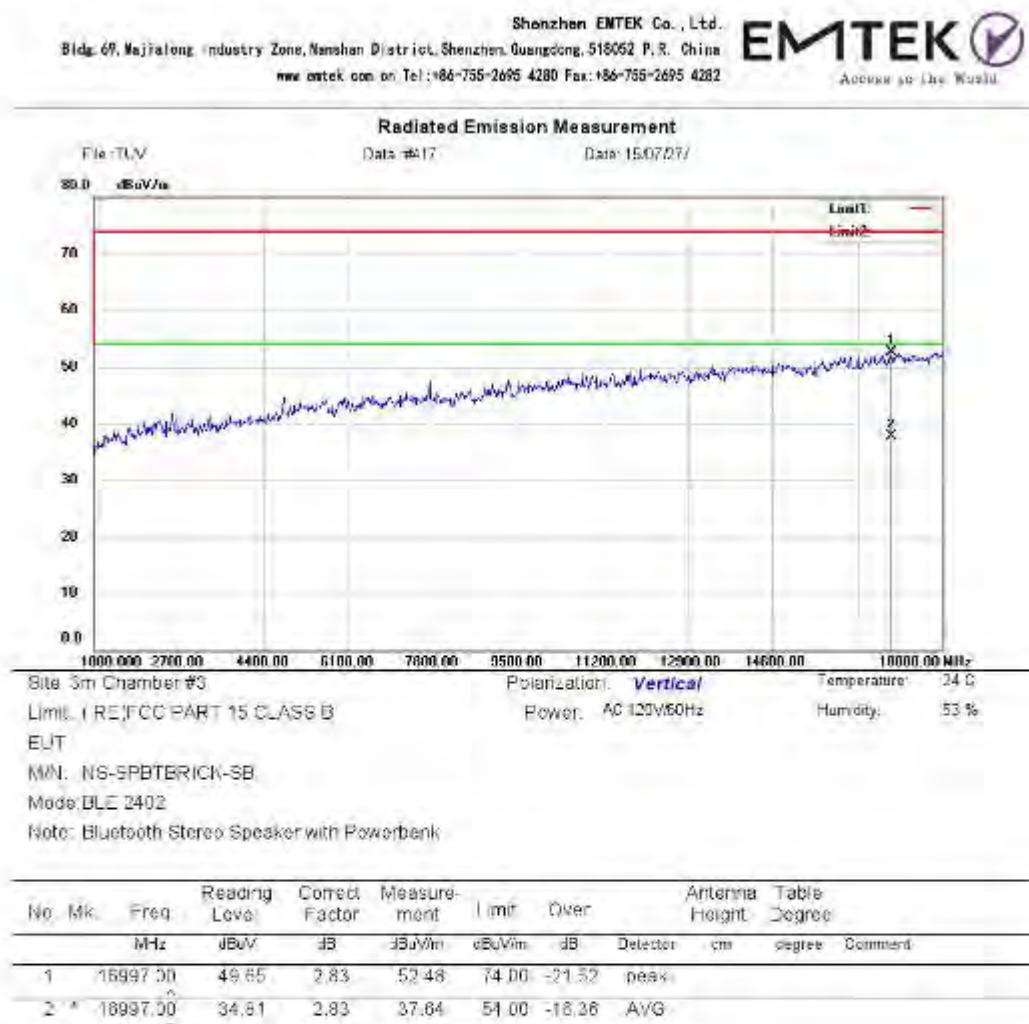
\*Maximum data x:Over limit -:Lower margin

Operator: JV

File: TUV\Data #464

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Figure 17: Test figure of Radiated Spurious Emissions (1GHz –25GHz), Low Energy (Low)



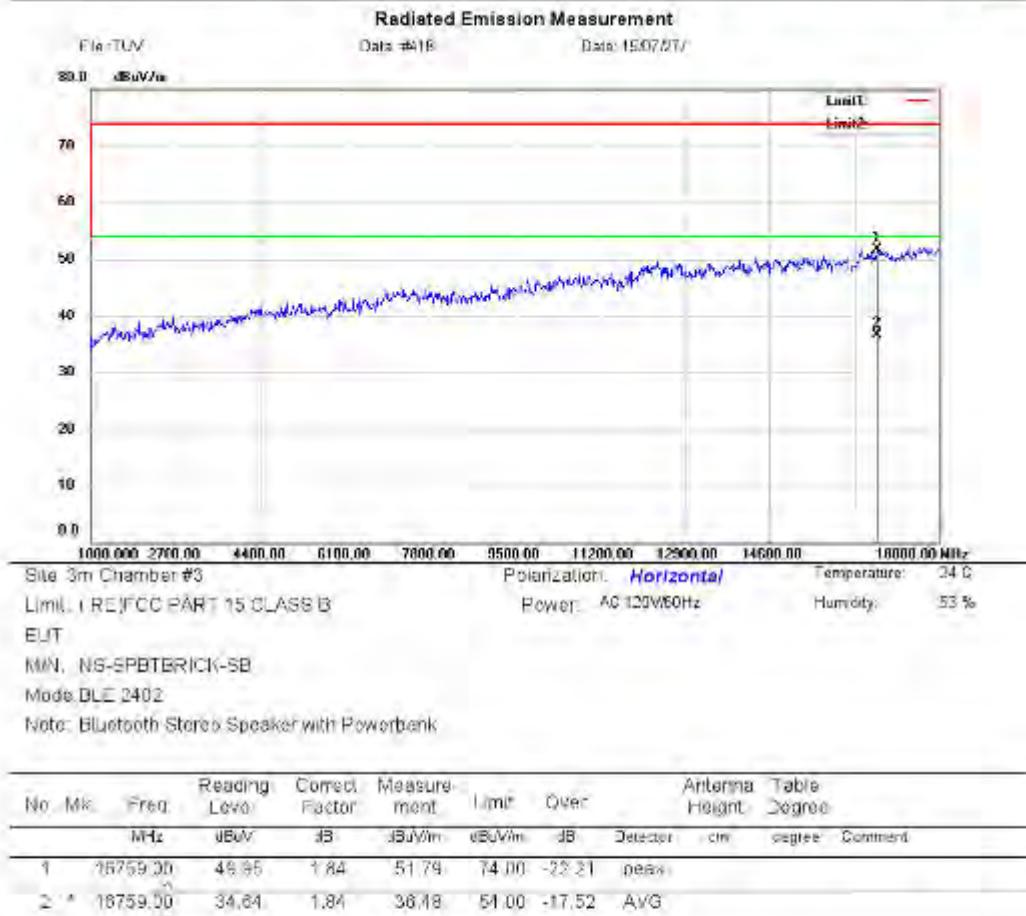
\*Maximum data    x:Over limit    L:over margin

Operator: 101

File:TUV/Data #417

P000: #

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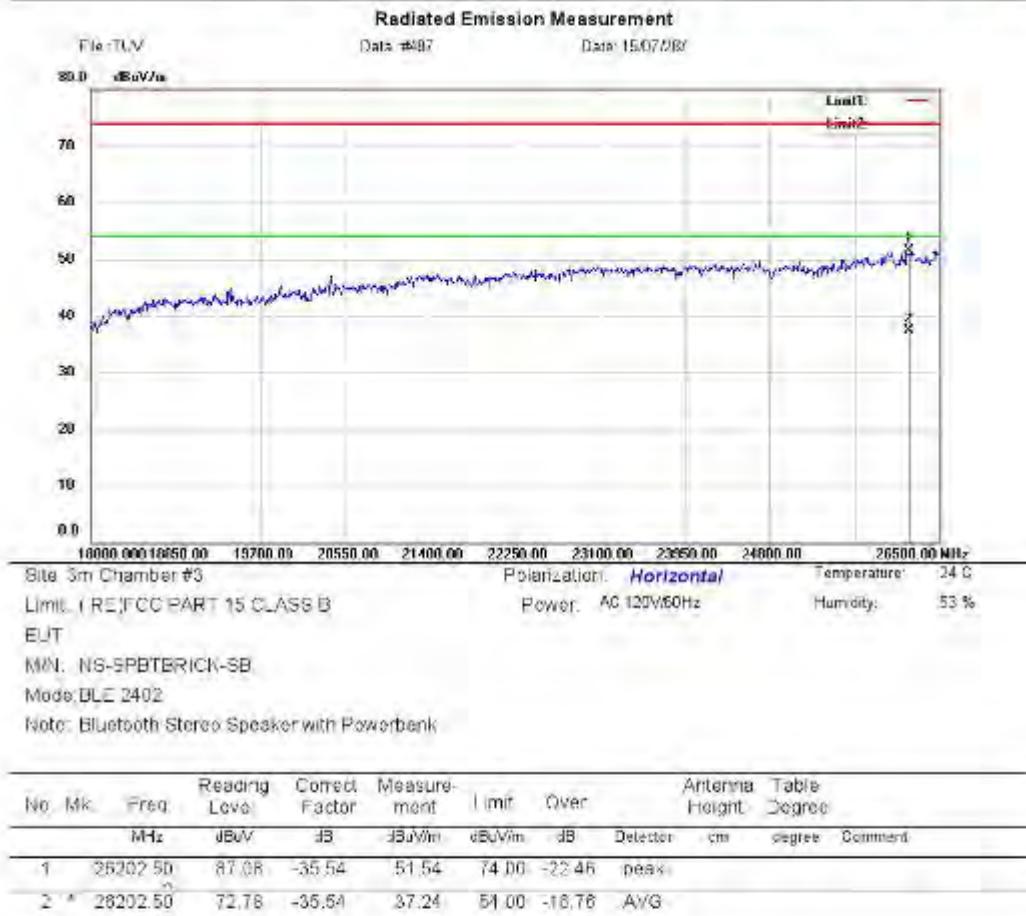
\*Maximum data - x:Over limit - L:over margin

Operator: JV

File: TUV/Data #416

Page: 1

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\* Maximum data - x:Over limit - L:over margin

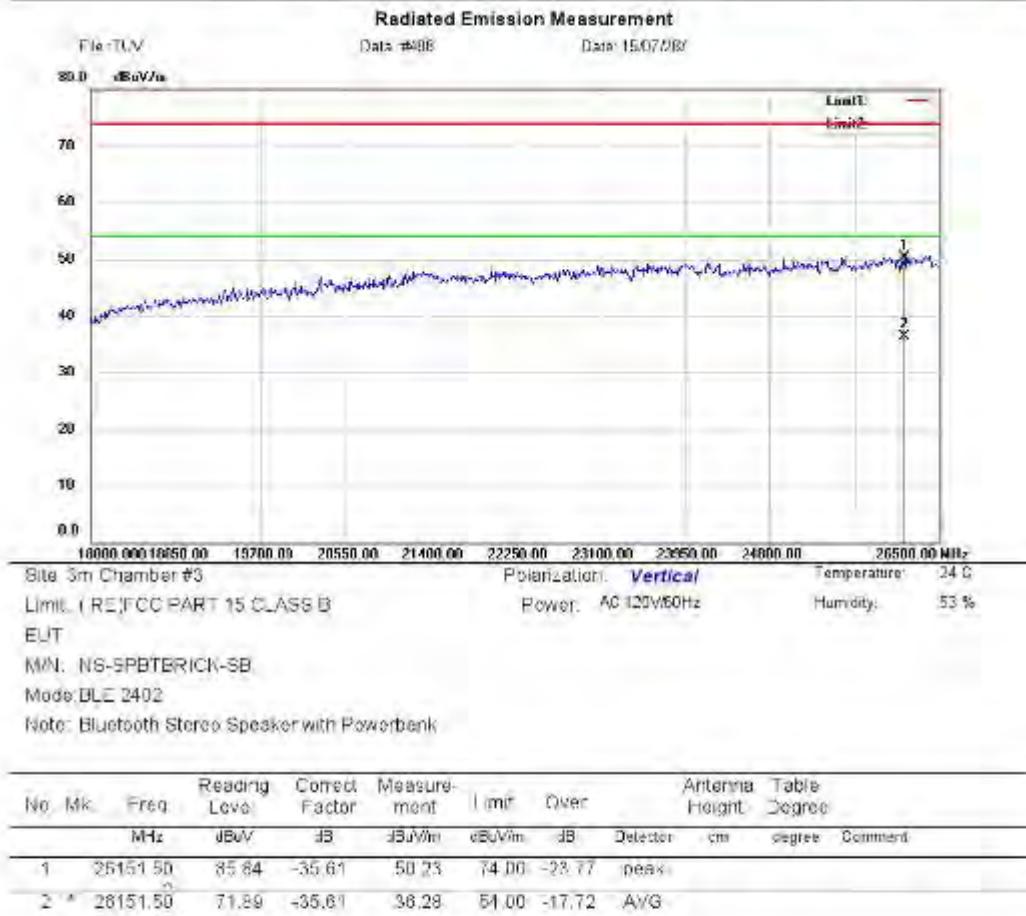
Operator: 100

File: TUV/Data #487

Page: 1

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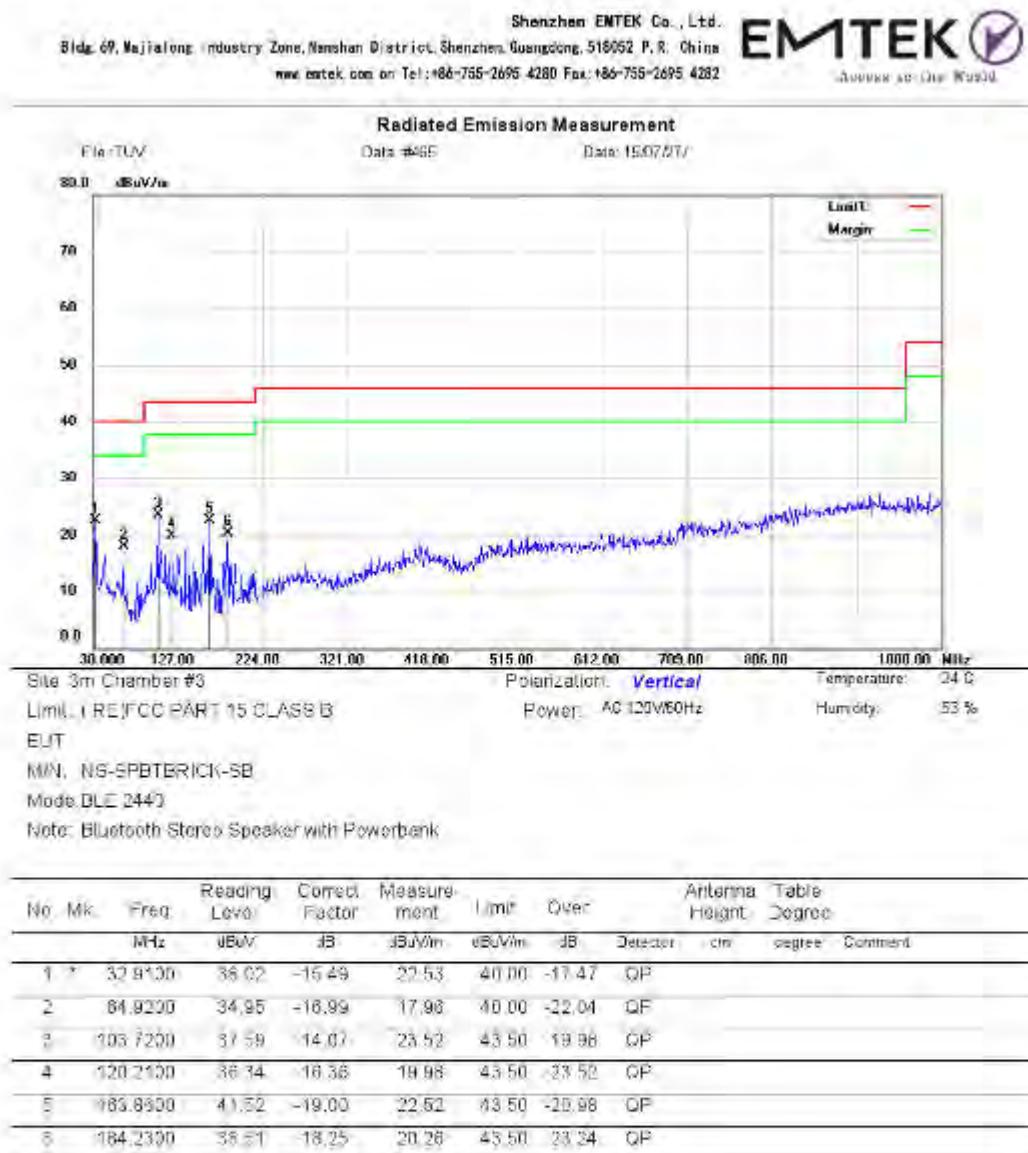
\* Maximum data - x:Over limit - L:over margin

Operator: 101

File:TUV/Data #486

P000: #

Figure 18: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), Low Energy (Mid)



\*Maximum data    x:Overshoot    L:Level margin

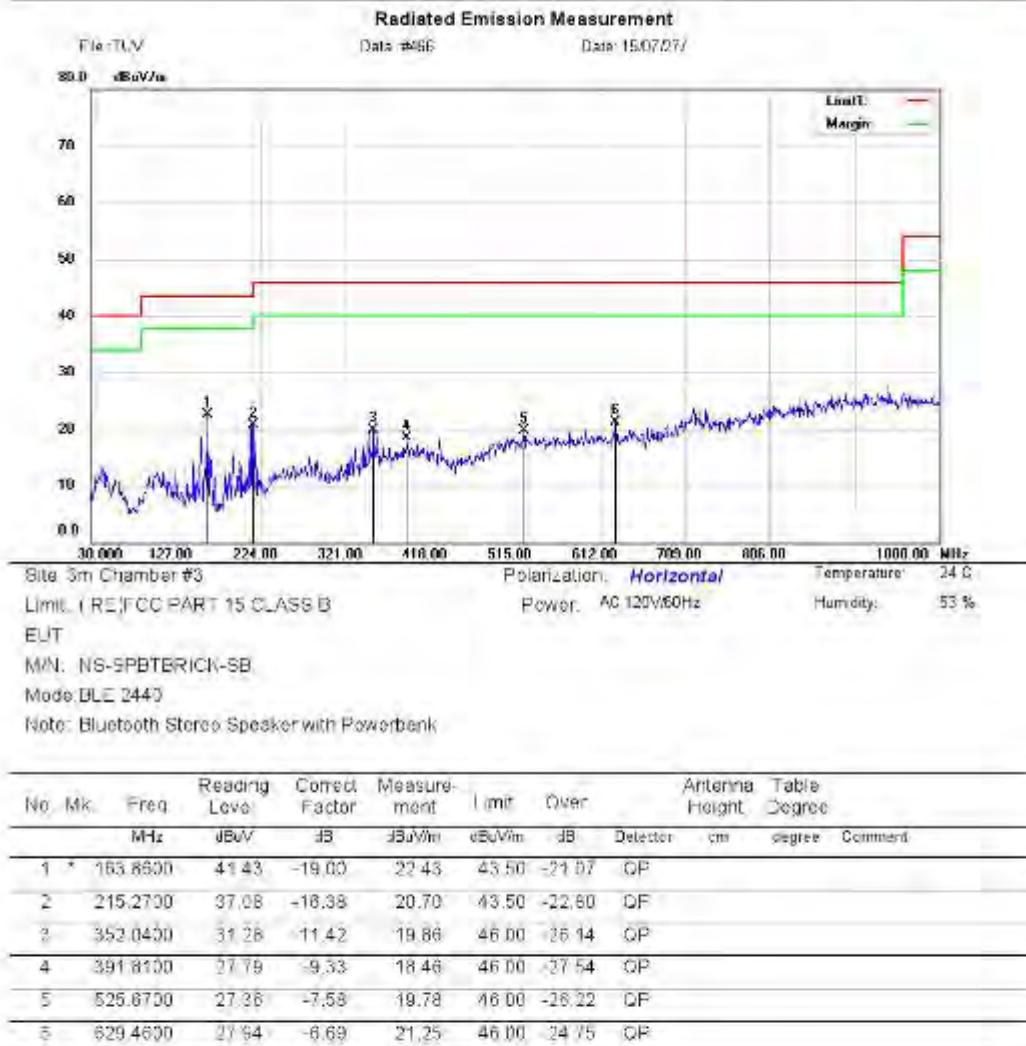
Operator: Flair

File: TUV/Data #465

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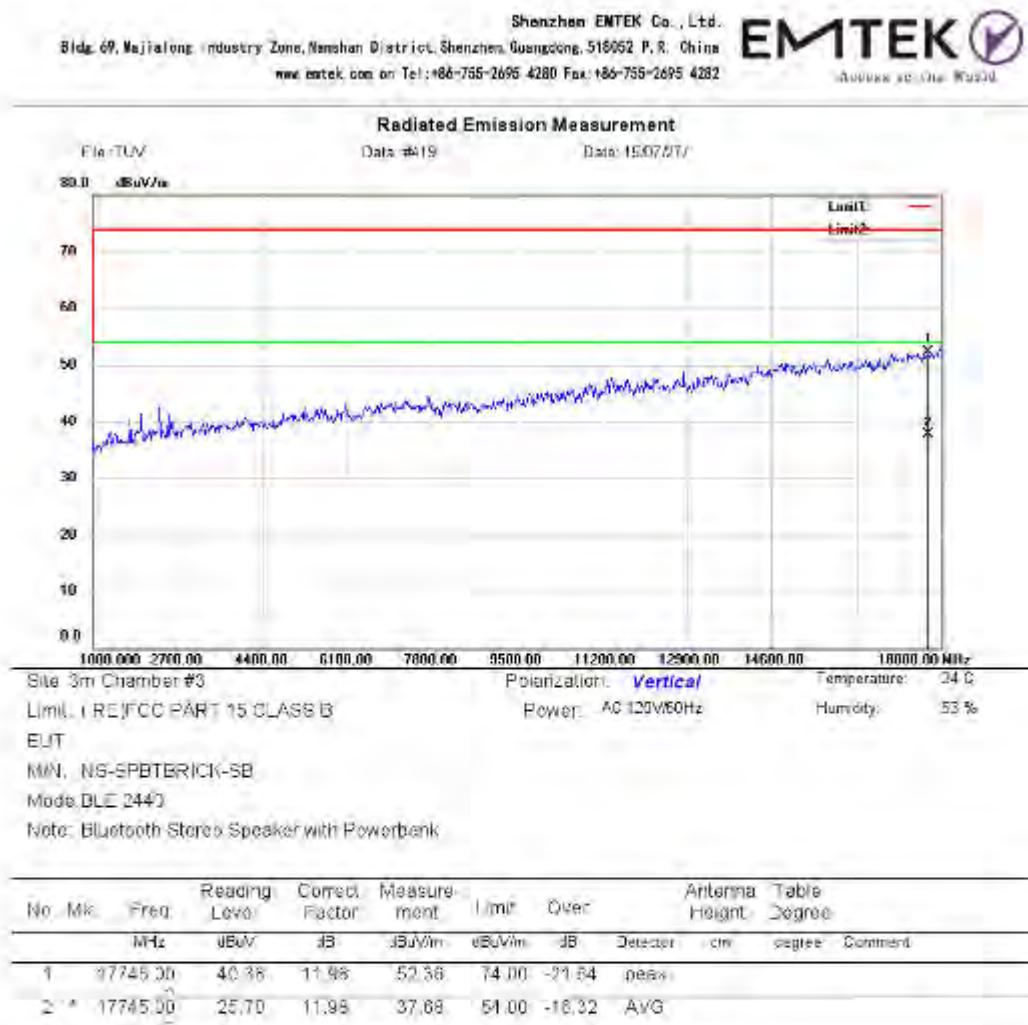
\*Maximum data - x:Over limit - L:over margin

Operator: 100

File:TUV/Data #466

Page: 48

Figure 19: Test figure of Radiated Spurious Emissions (1GHz –25GHz), Low Energy (Mid)



\*Maximum data    x:Over limit    L:Loct margin

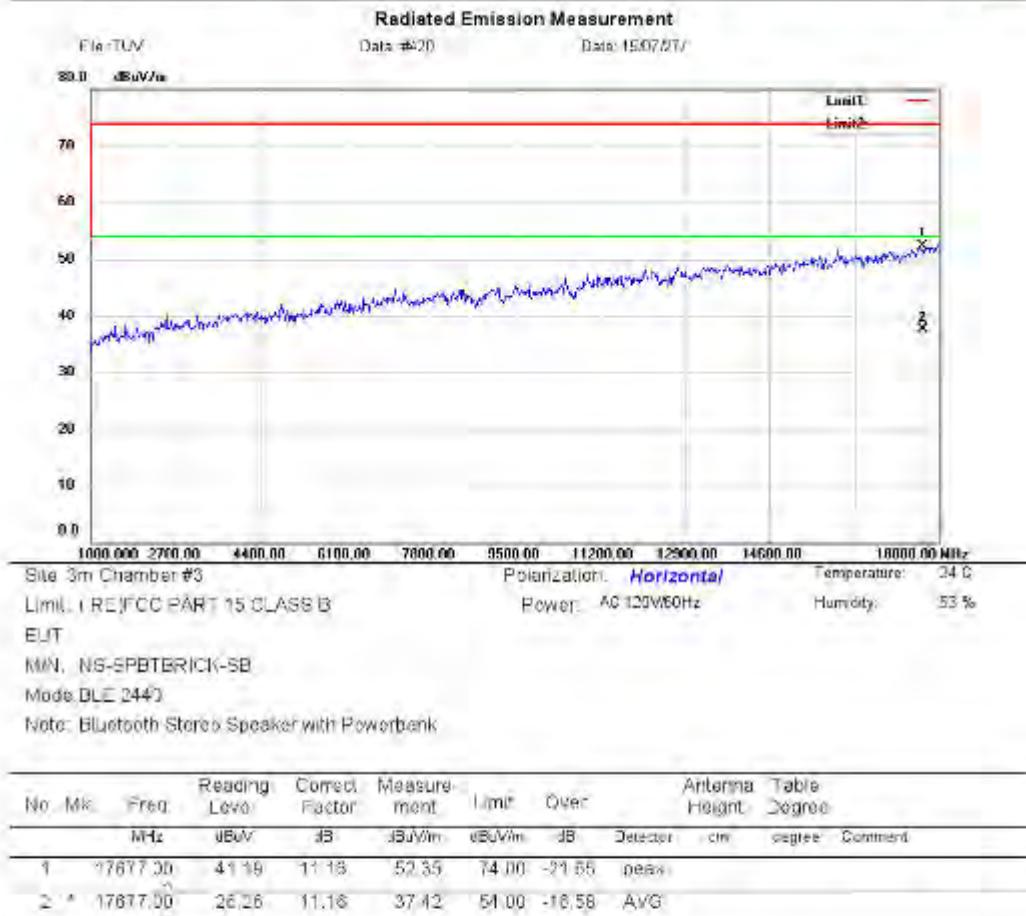
Operator: JV

File: TUV/Data #419

Report:

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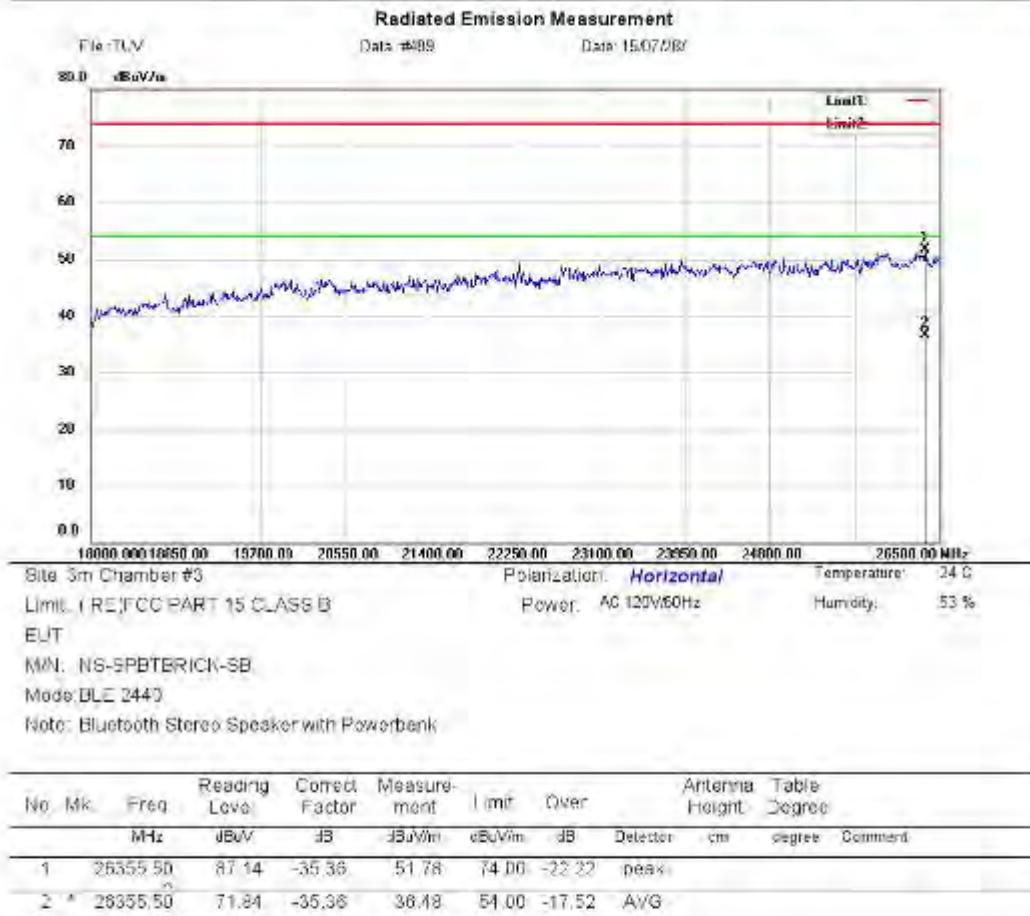
\*Maximum data    x:Over limit    L:over margin

Operator: JV

File: TUV/Data #420

Page: 1

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\* Maximum data - x:Over limit - L:over margin

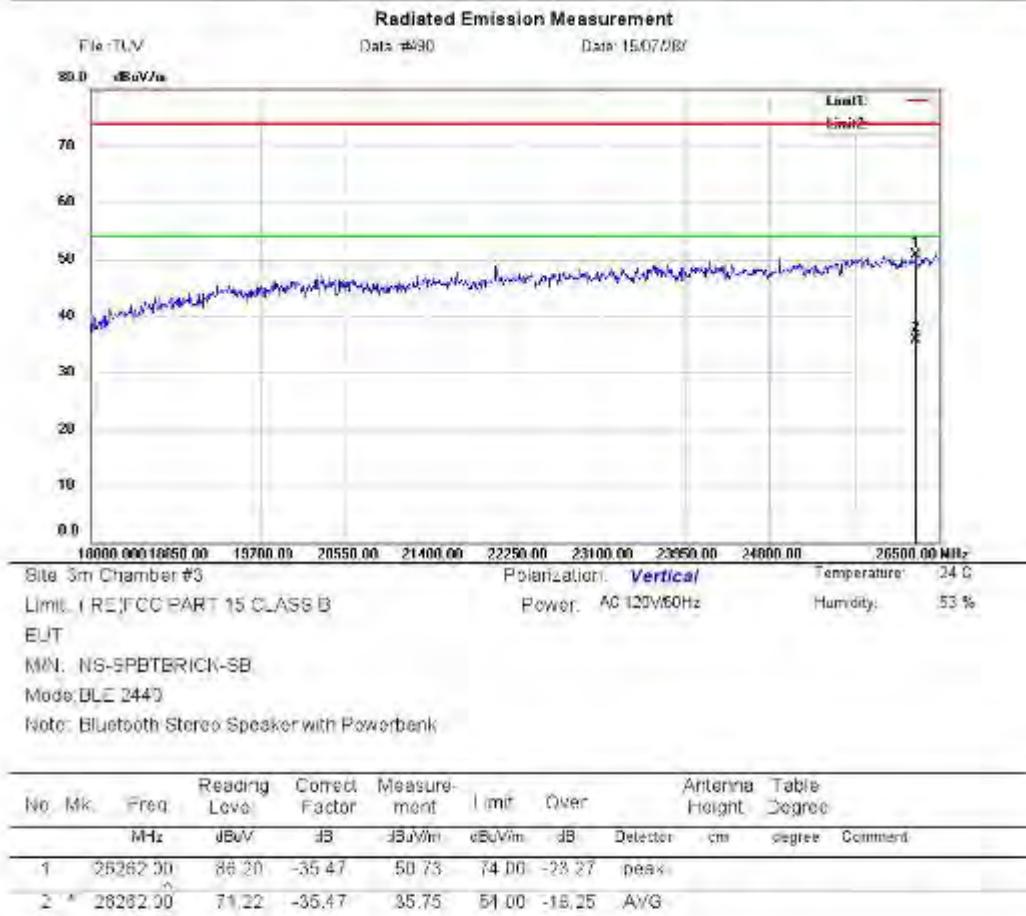
Operator: 101

File:TUV/Data #489

Page: 1

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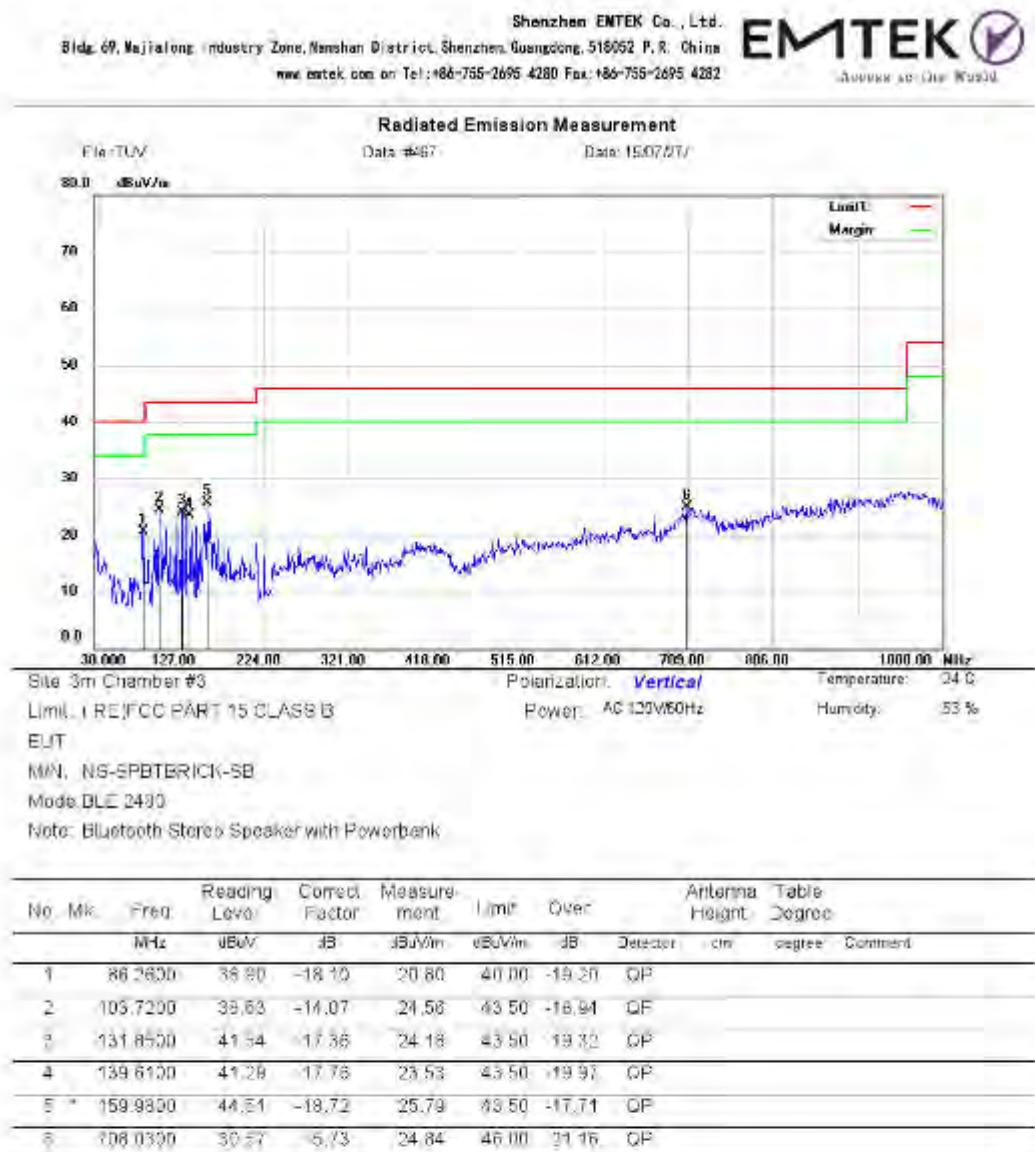
\*Maximum data - x:Over limit - Lower margin

Operator: 101

File: TU/V Data #490

P000: #

**Figure 20: Test figure of Radiated Spurious Emissions (30MHz – 1GHz), Low Energy (High)**



\*Maximum data - x.Over limit - L over margin

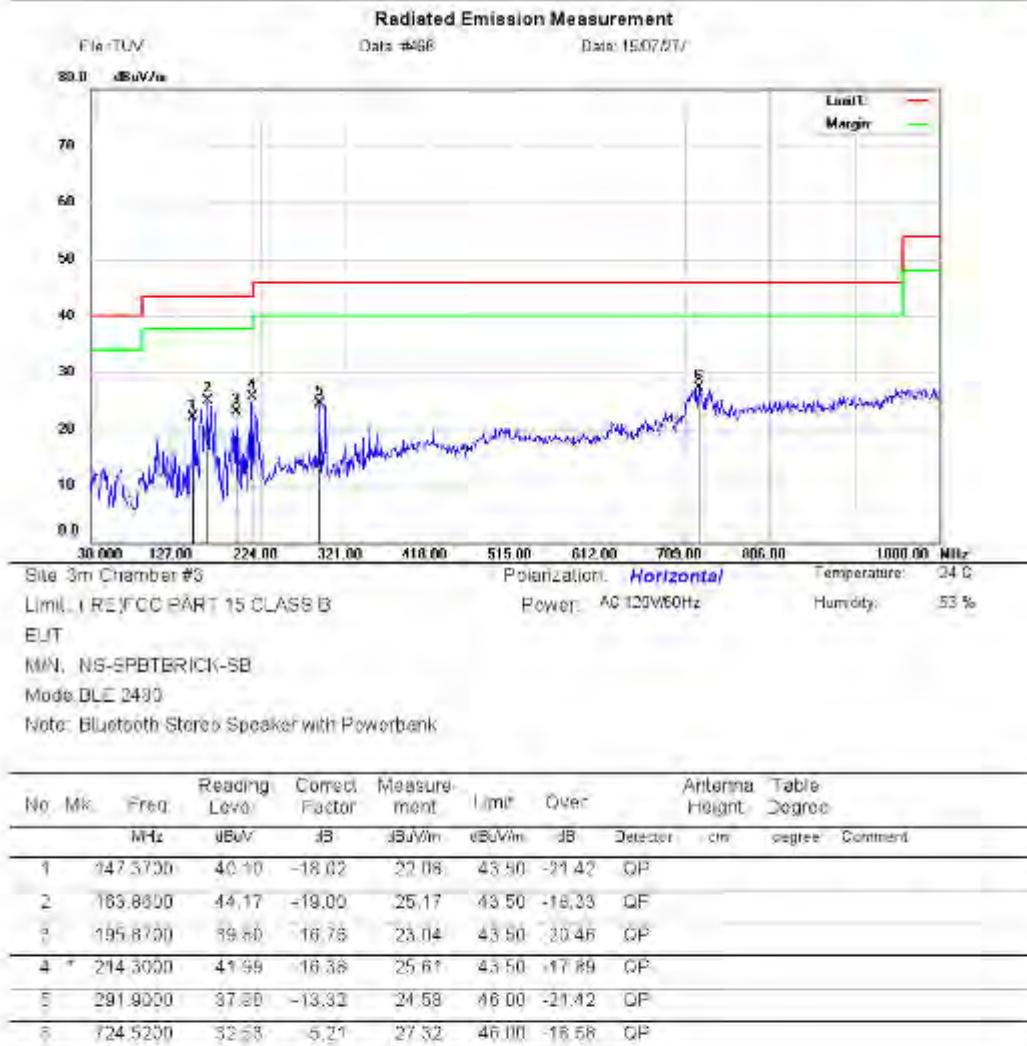
Operator: JV

File:TUV/Data #467

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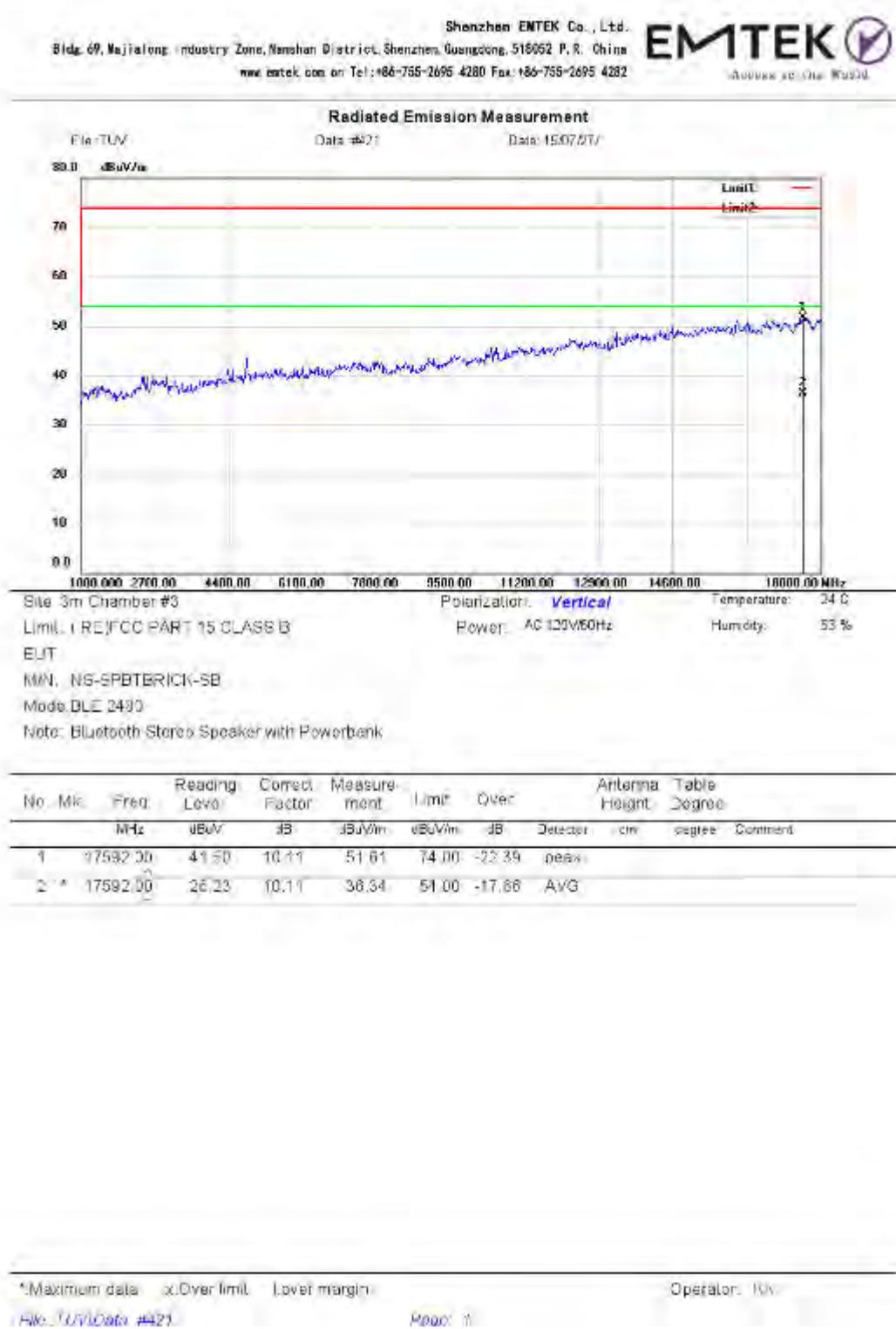
\*Maximum data    x:Over limit    L:over margin

Operator: JV

File: TUV/Data #466

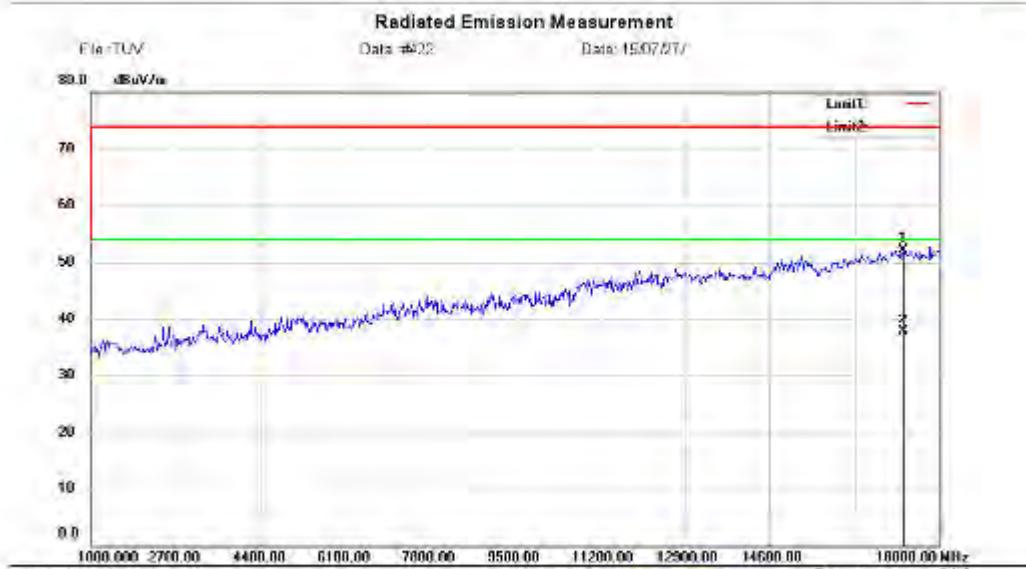
Page: 54

Figure 21: Test figure of Radiated Spurious Emissions (1GHz –25GHz), Low Energy (High)



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No.	Mfr.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Ovcr	Antenna Height	Table Degree	Comment	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		17285.00	45.64	6.36	52.20	74.00	-21.80	peak			
2 *		17288.00	31.26	6.36	37.64	51.00	-16.26	Avg			

\*Maximum data = o/Over limit = Lower margin

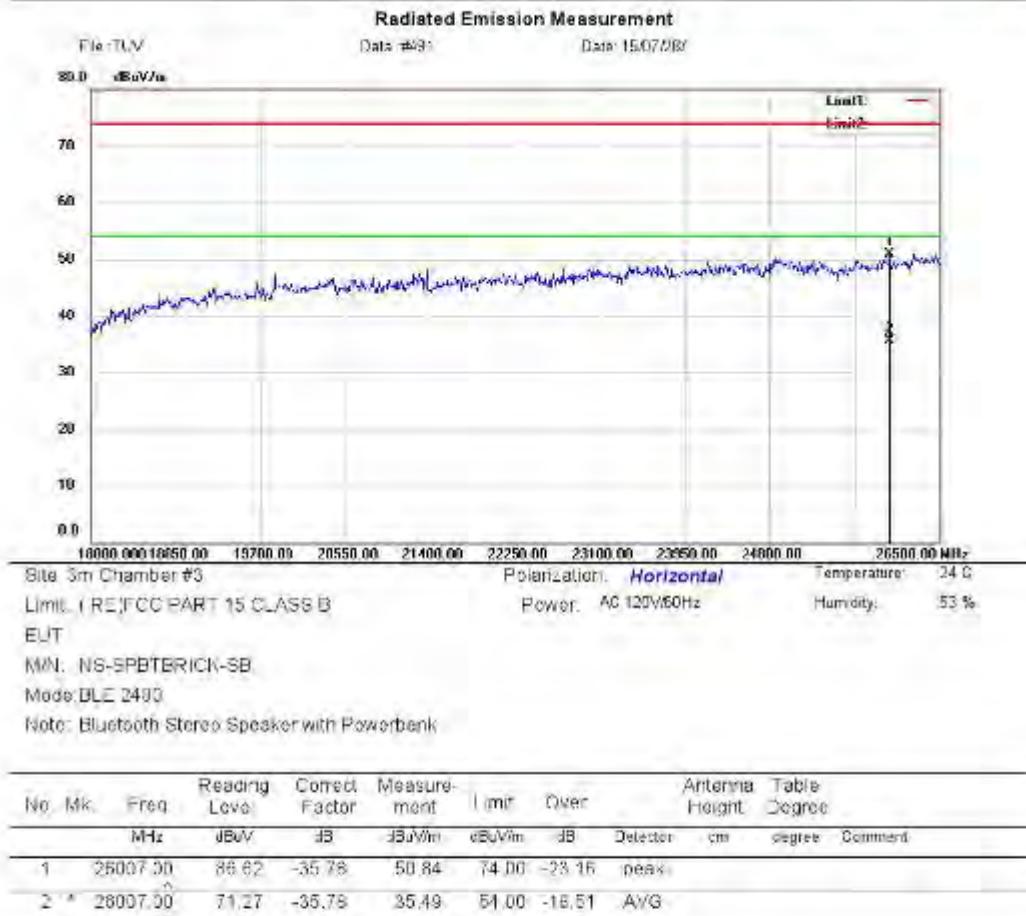
Operator: JV

File: TUV/Data #422

Page: 1

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\* Maximum data - x:Over limit - L:over margin

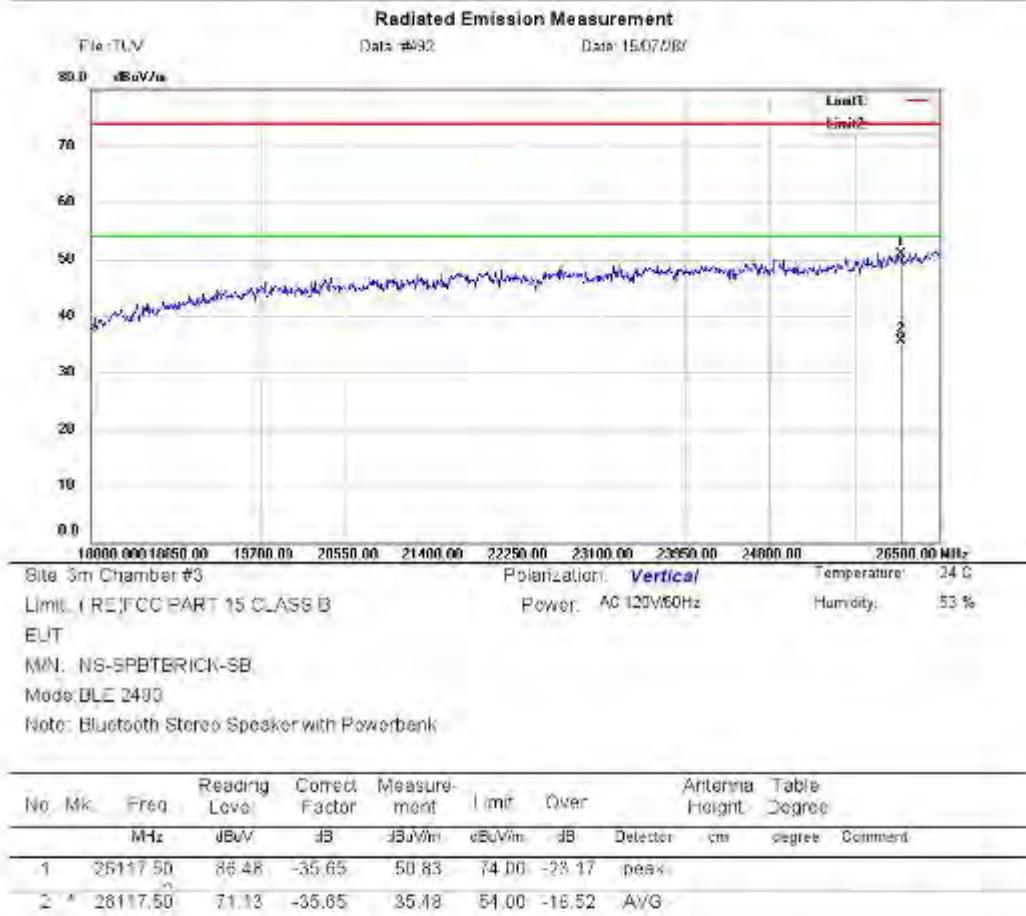
Operator: 101

File: TU/VI Data #491

P000: #

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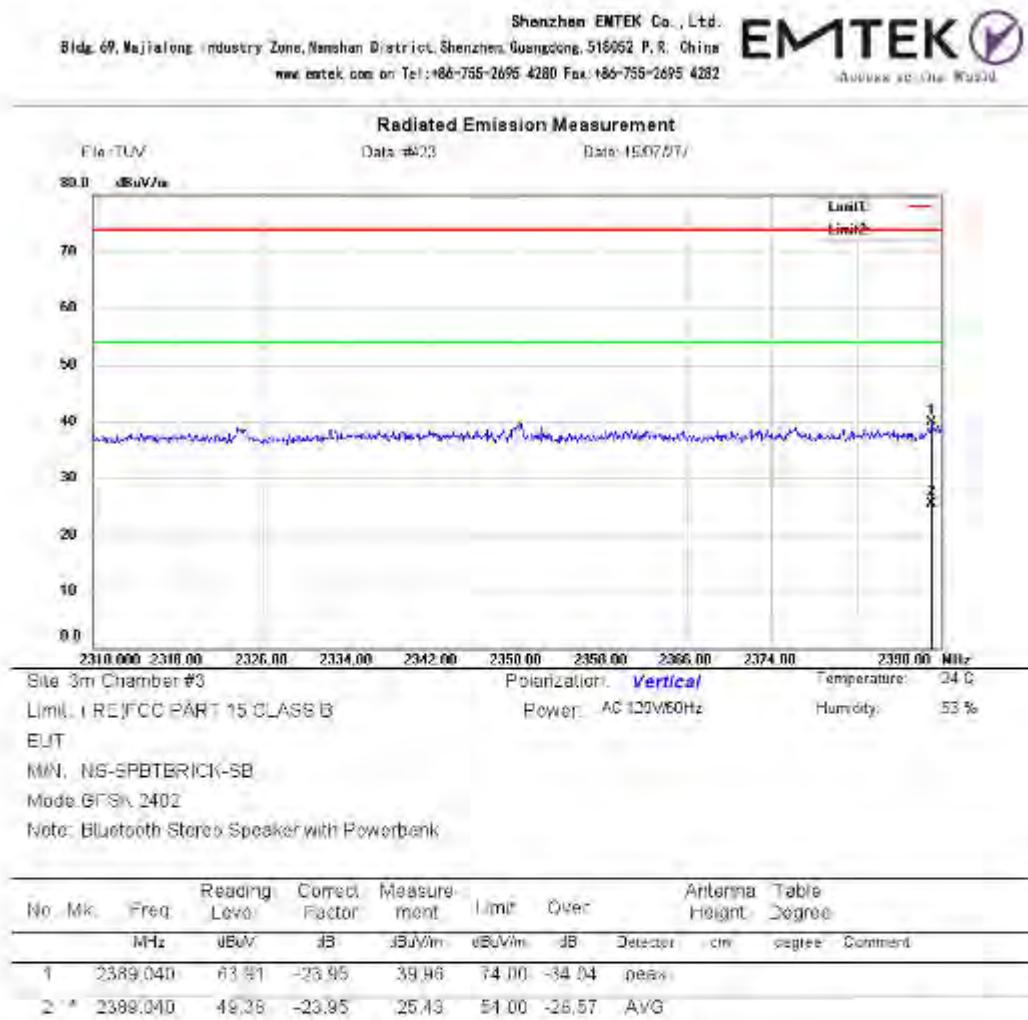
\*Maximum data - x:Over limit - L:over margin

Operator: 100

File #TUV Data #492

P000: %

Figure 22: Test figure of Radiated Emissions in Restricted Bands, BDR (Low)



\*Maximum data x.Overs limit L:level margin

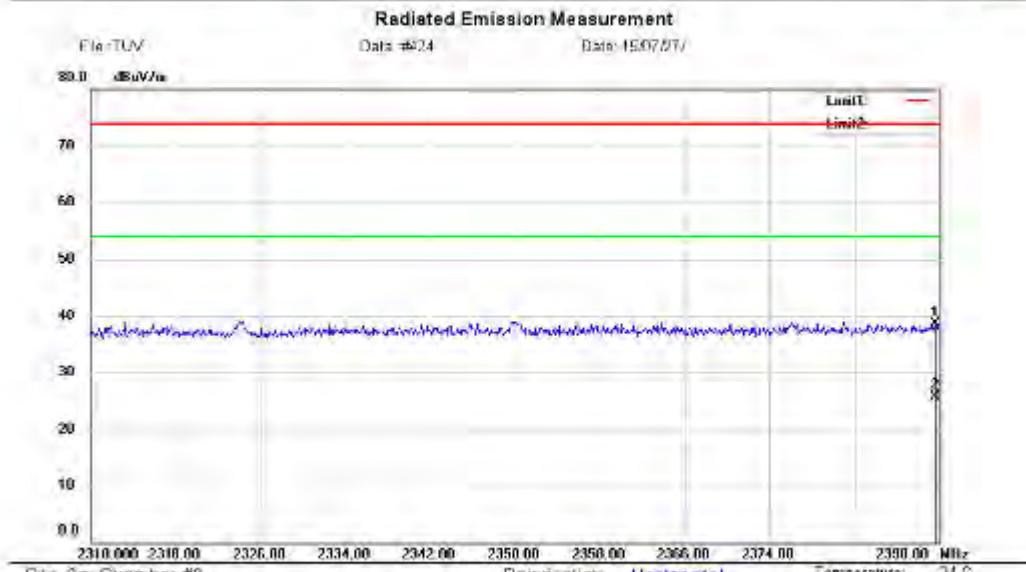
Operator: JV

File: TUV/Data #423

Page: 1

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No.	Mfr.	Freq:	Reading Level	Correct Factor	Measure- ment	Limit	Ovver	Antenna Height	Table Degree	Comment	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	
1		2389.600	62.40	-23.95	38.45	74.00	-35.55	peak			
2 *		2399.600	49.57	-23.95	25.62	51.00	-26.28	Avg			

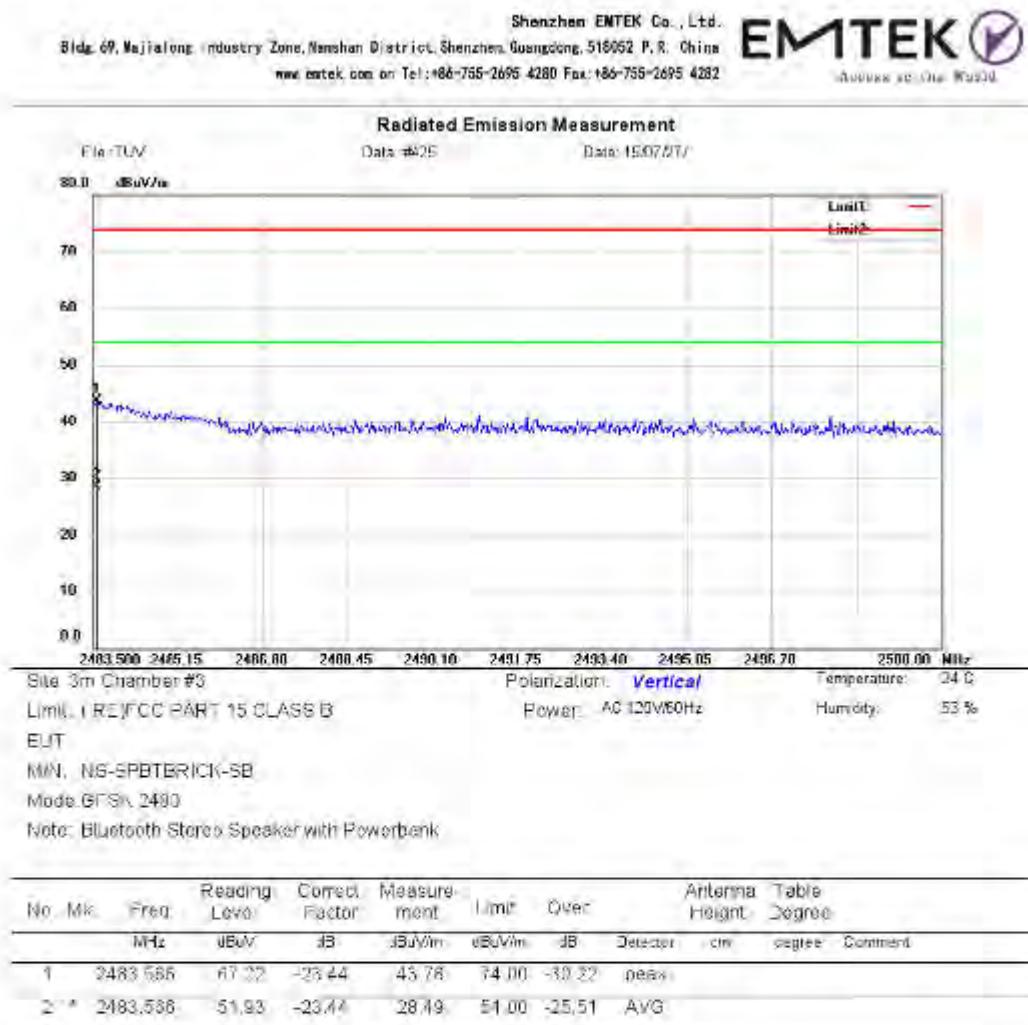
\*Maximum data  $\alpha$ :Over limit  $\beta$ :Lower margin

Operator: JV

File: TUV/Data #424

Page: 1

Figure 23: Test figure of Radiated Emissions in Restricted Bands, BDR (High)



\*Maximum data - x:Over limit - L:Loct margin

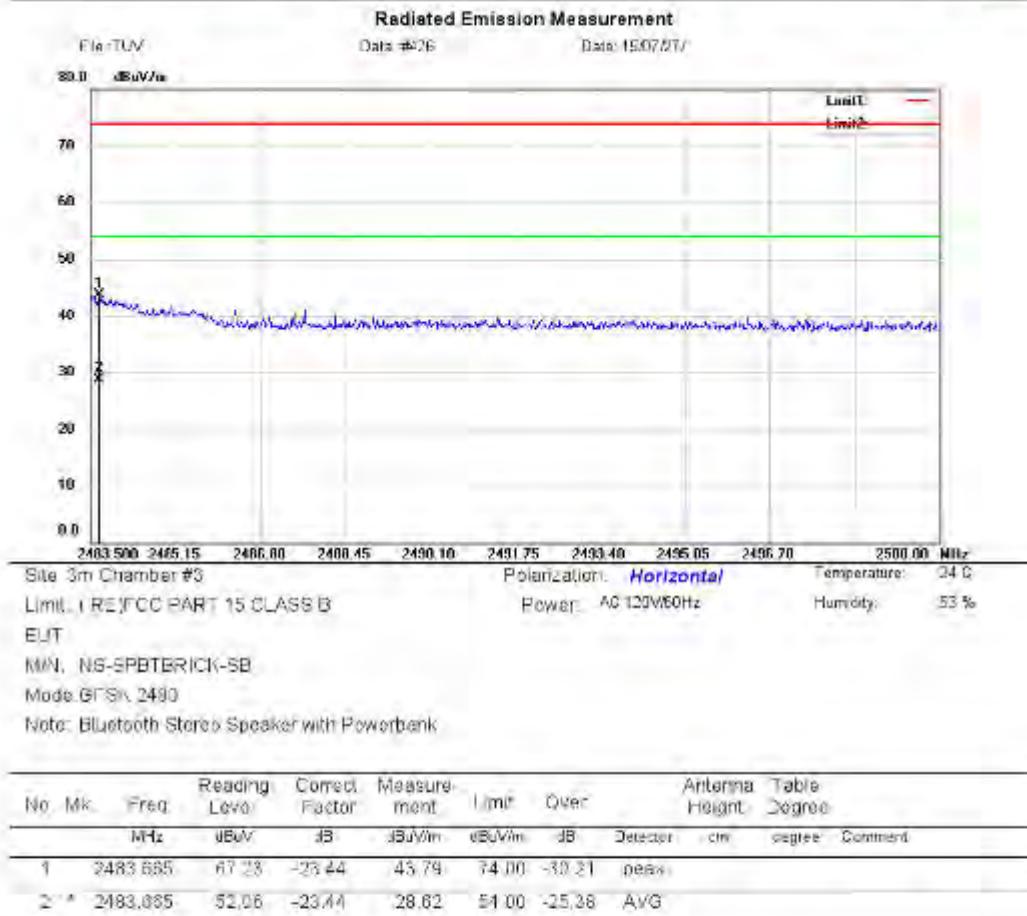
Operator: JV

File: TUV/Data #425

Page: 1

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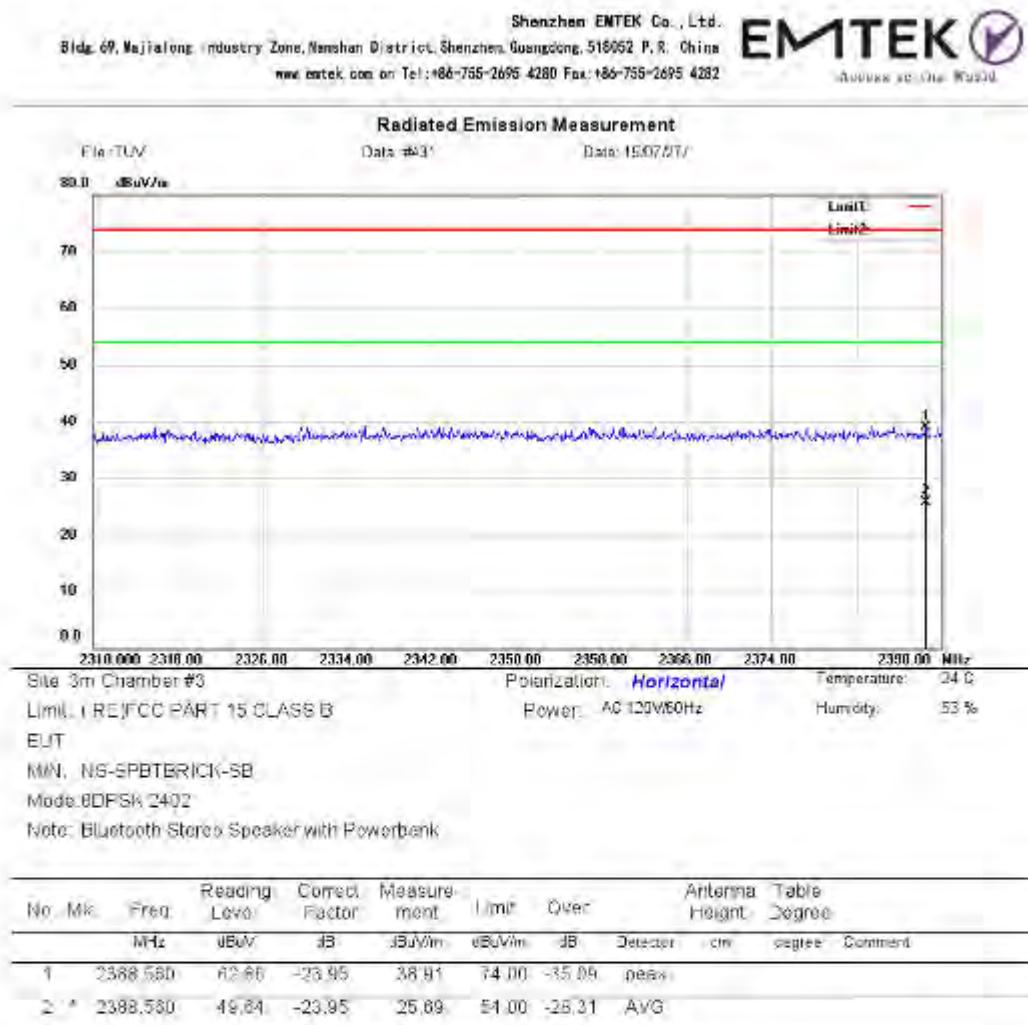
\*Maximum data = o:Over limit L:lower margin

Operator: TUV

File: TUV\A426

Page: 1

Figure 24: Test figure of Radiated Emissions in Restricted Bands, EDR (Low),



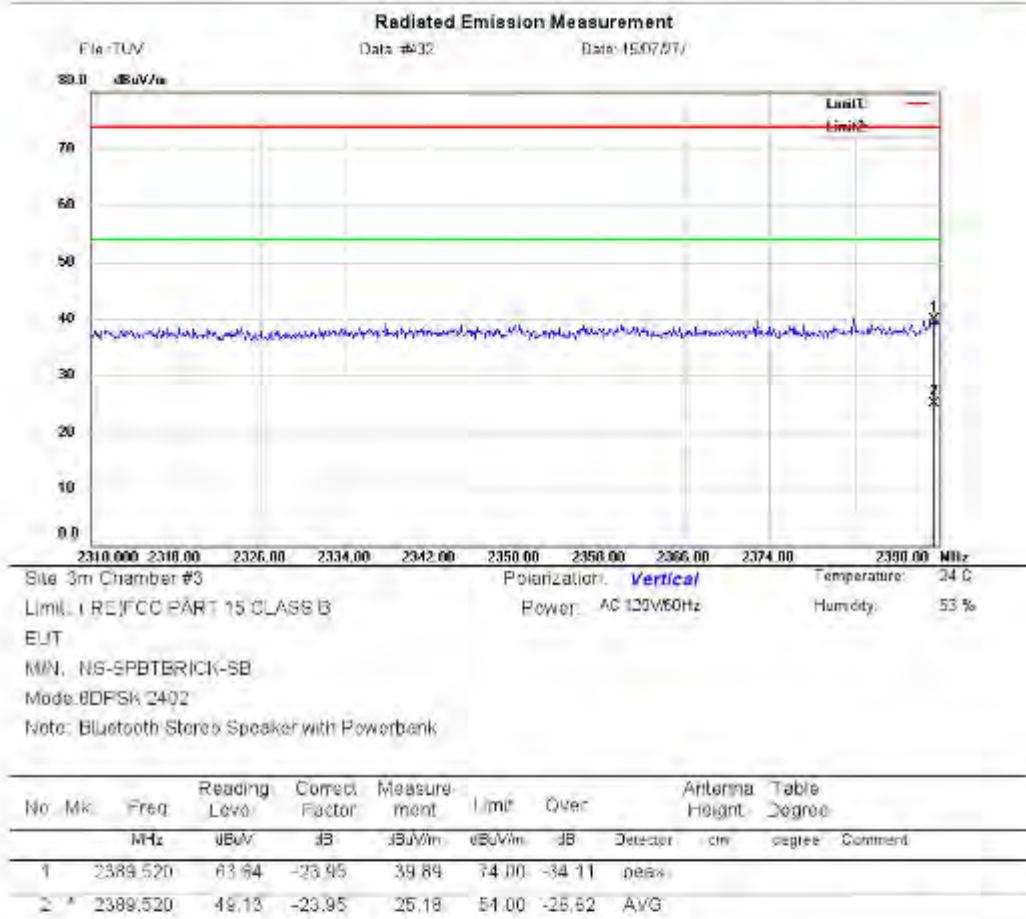
\*Maximum data    x:Over limit    L:Loct margin  
File: TUV\Data #431

Operator: JV

Page: 1

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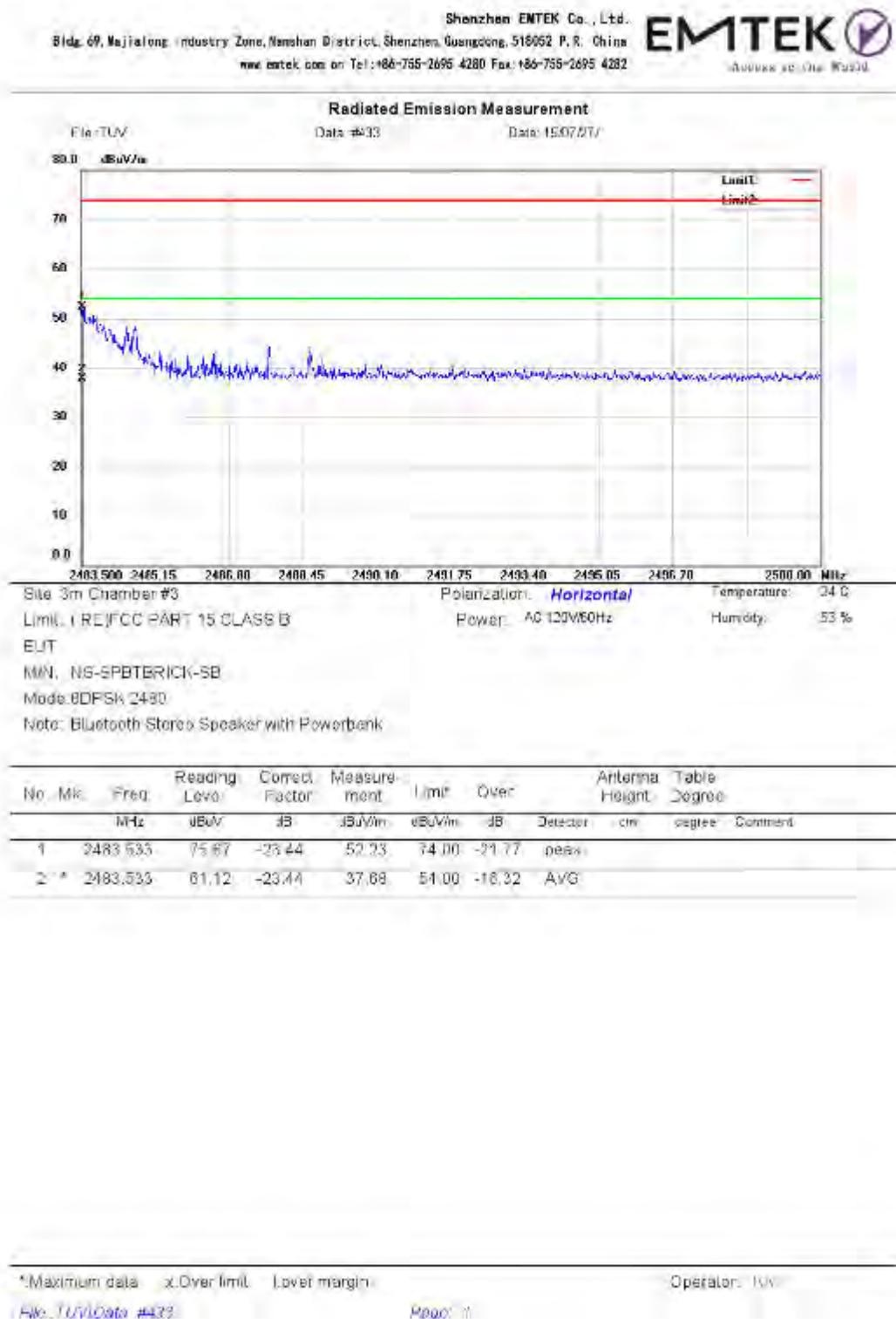
\*Maximum data - α:Over limit - β:over margin

Operator: JV

File: TUV/Data #432

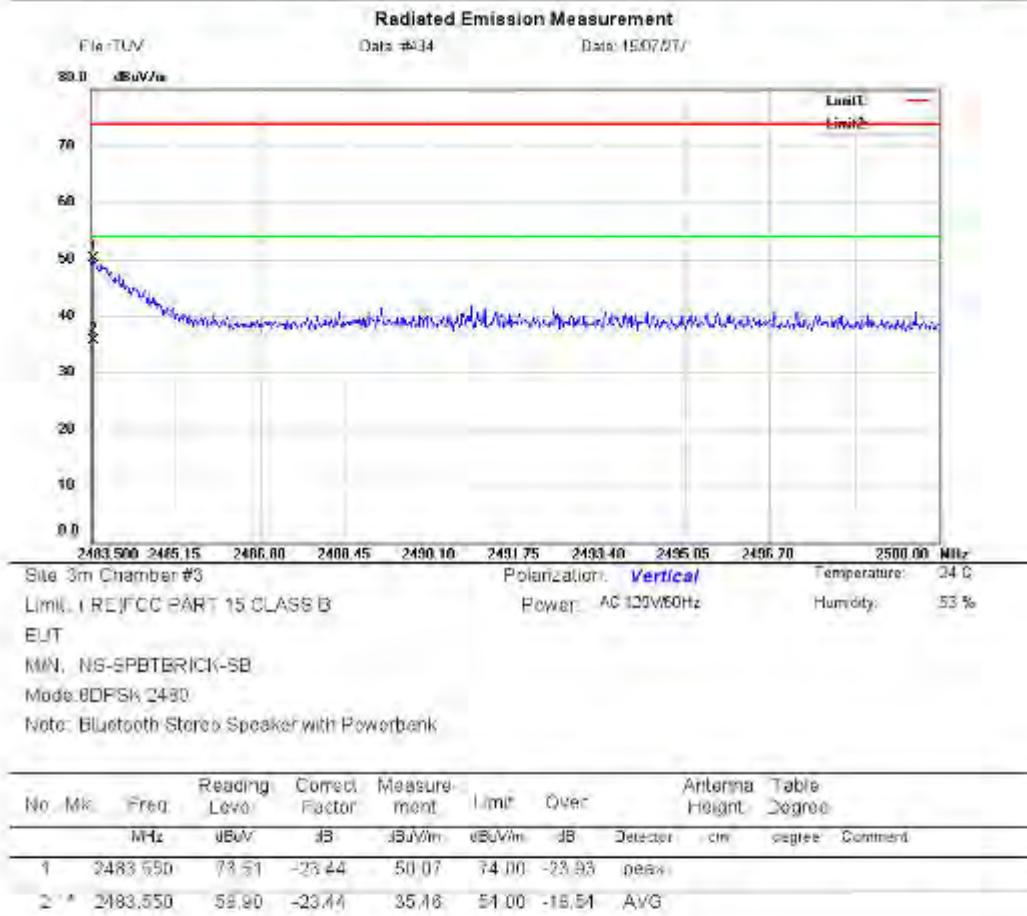
Page: 1

Figure 25: Test figure of Radiated Emissions in Restricted Bands, EDR (High)



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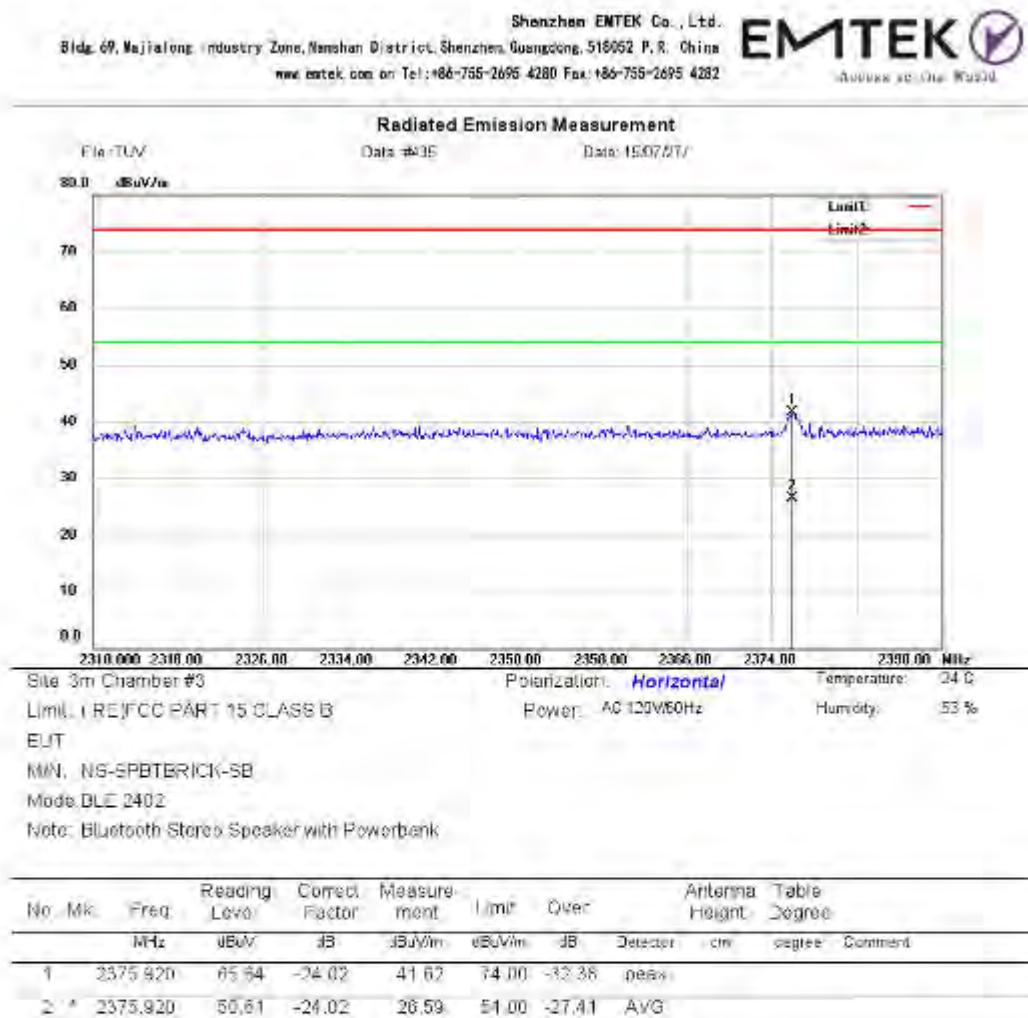
\*Maximum data - x:Over limit - L:over margin

Operator: JV

File: TUV\Date: #434

Page: 1

Figure 26: Test figure of Radiated Emissions in Restricted Bands, Low Energy (Low),



\*Maximum data    x:Over limit    L:over margin

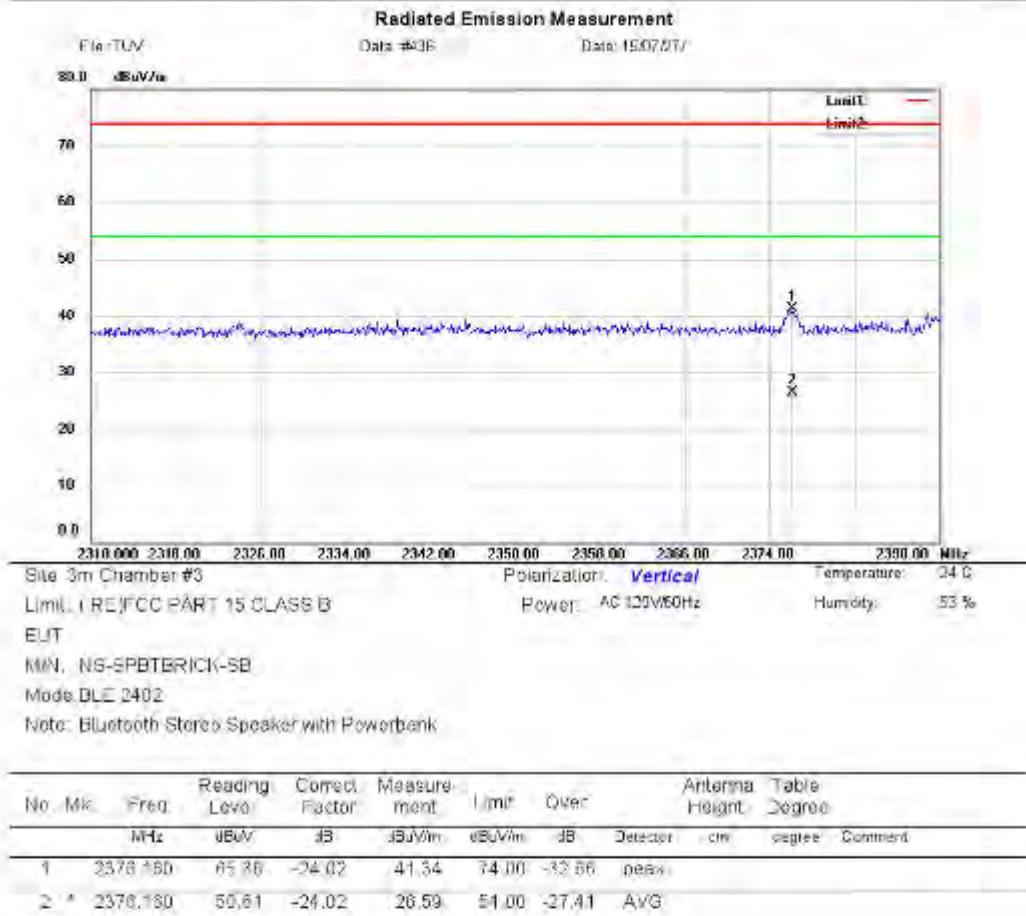
Operator: JV

File: TUV/Data #435

Page: 1

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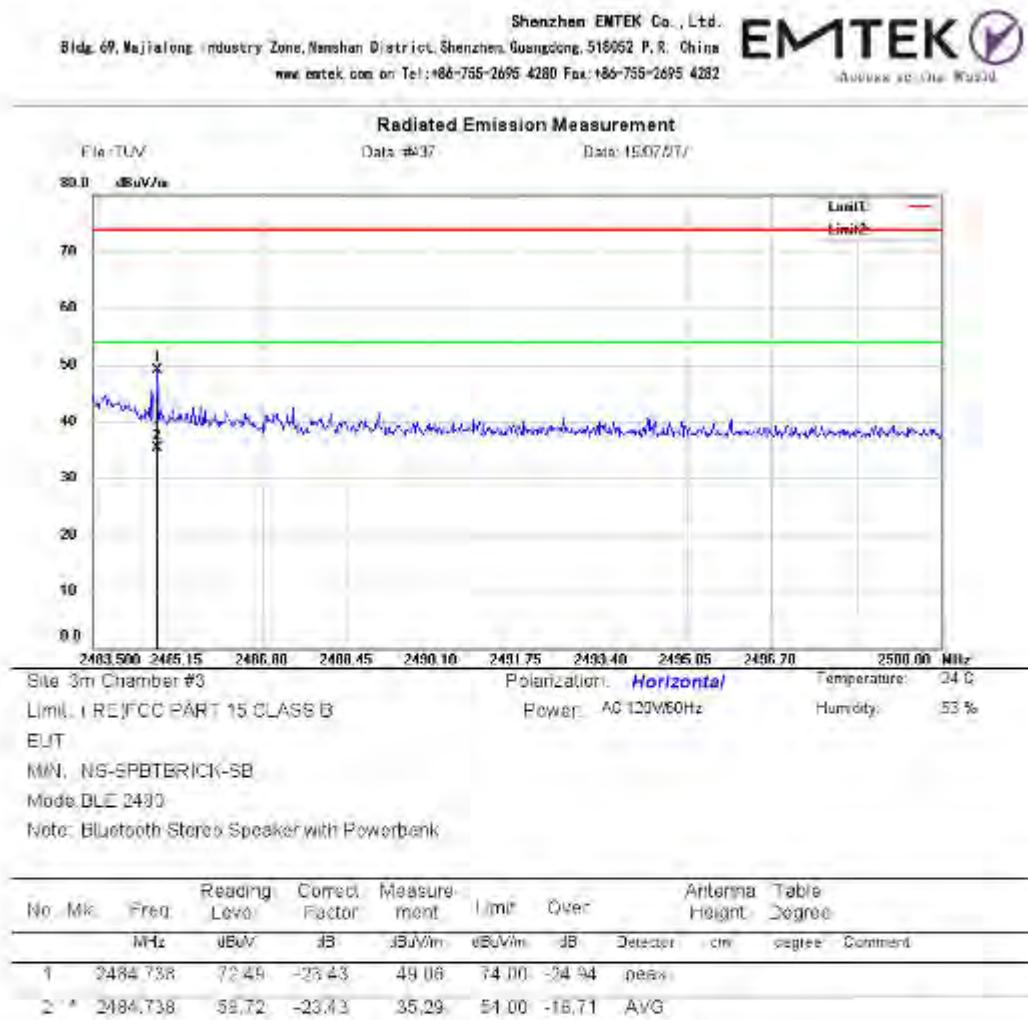
\*Maximum data = <<Over limit>> lower margin

Operator: JV

File: TUV\Data #436

Page: 1

Figure 27: Test figure of Radiated Emissions in Restricted Bands, Low Energy (High)



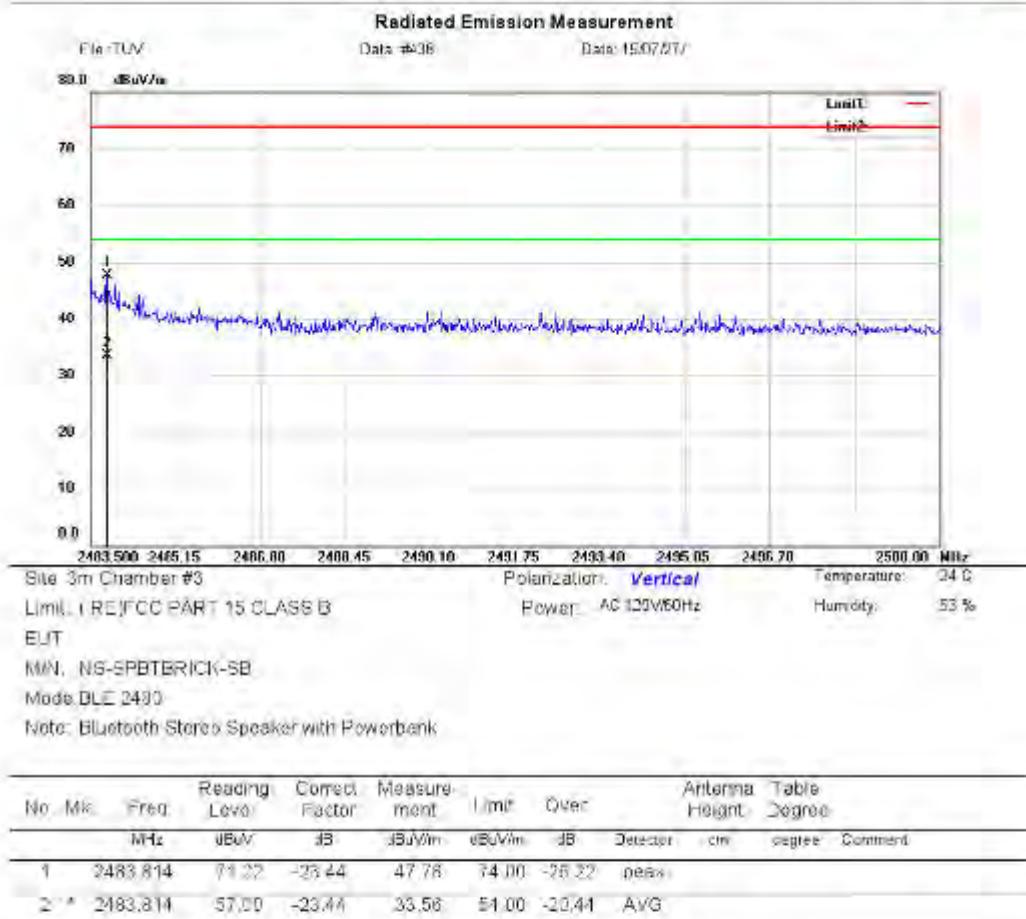
\*Maximum data    x:Overshoot    L:level margin

Operator: HV

File: TUV/ Data #437

Page: 1

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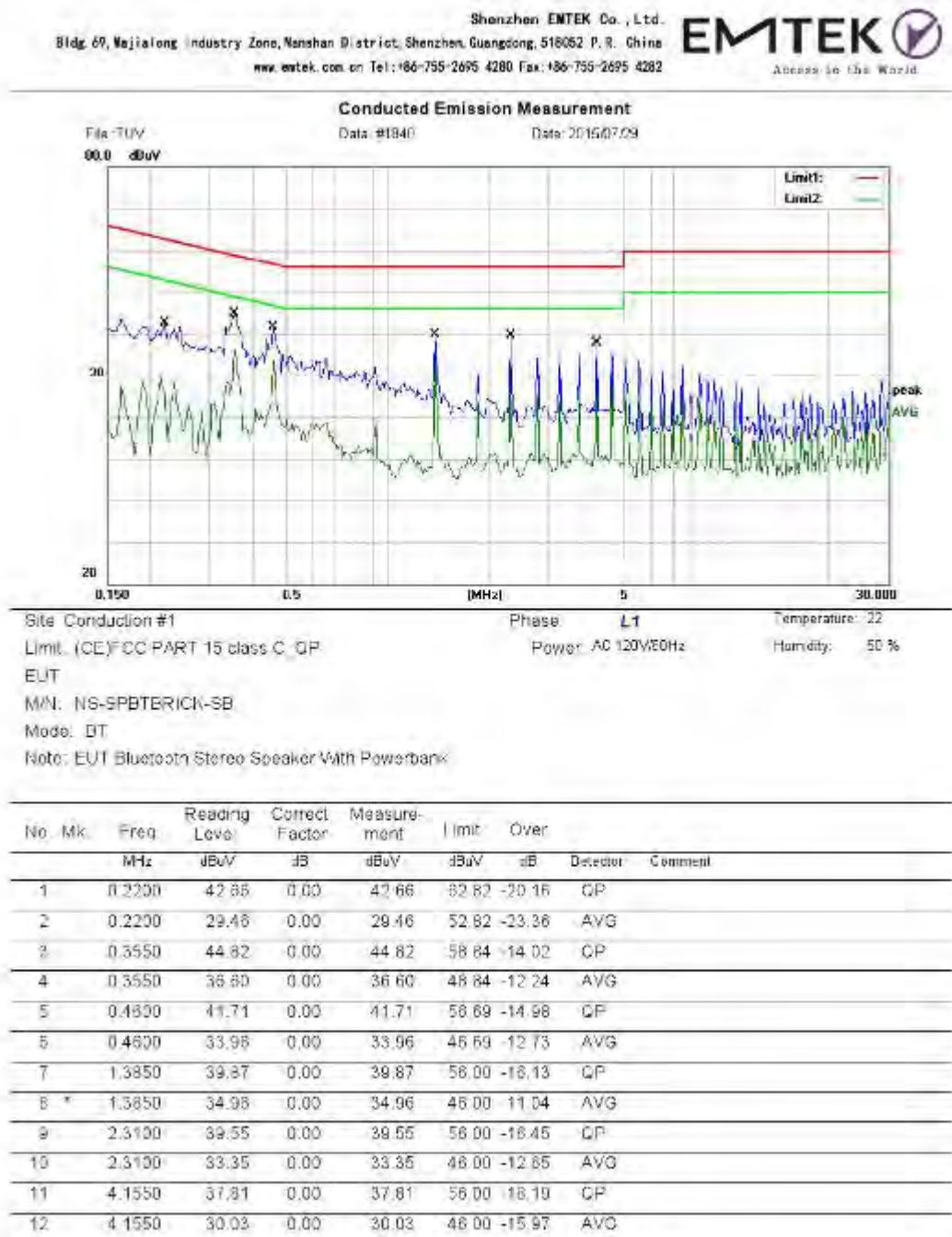
\*Maximum data    x:Over limit    L:over margin

Operator: JV

File: TUV\Data #436

Page: 1

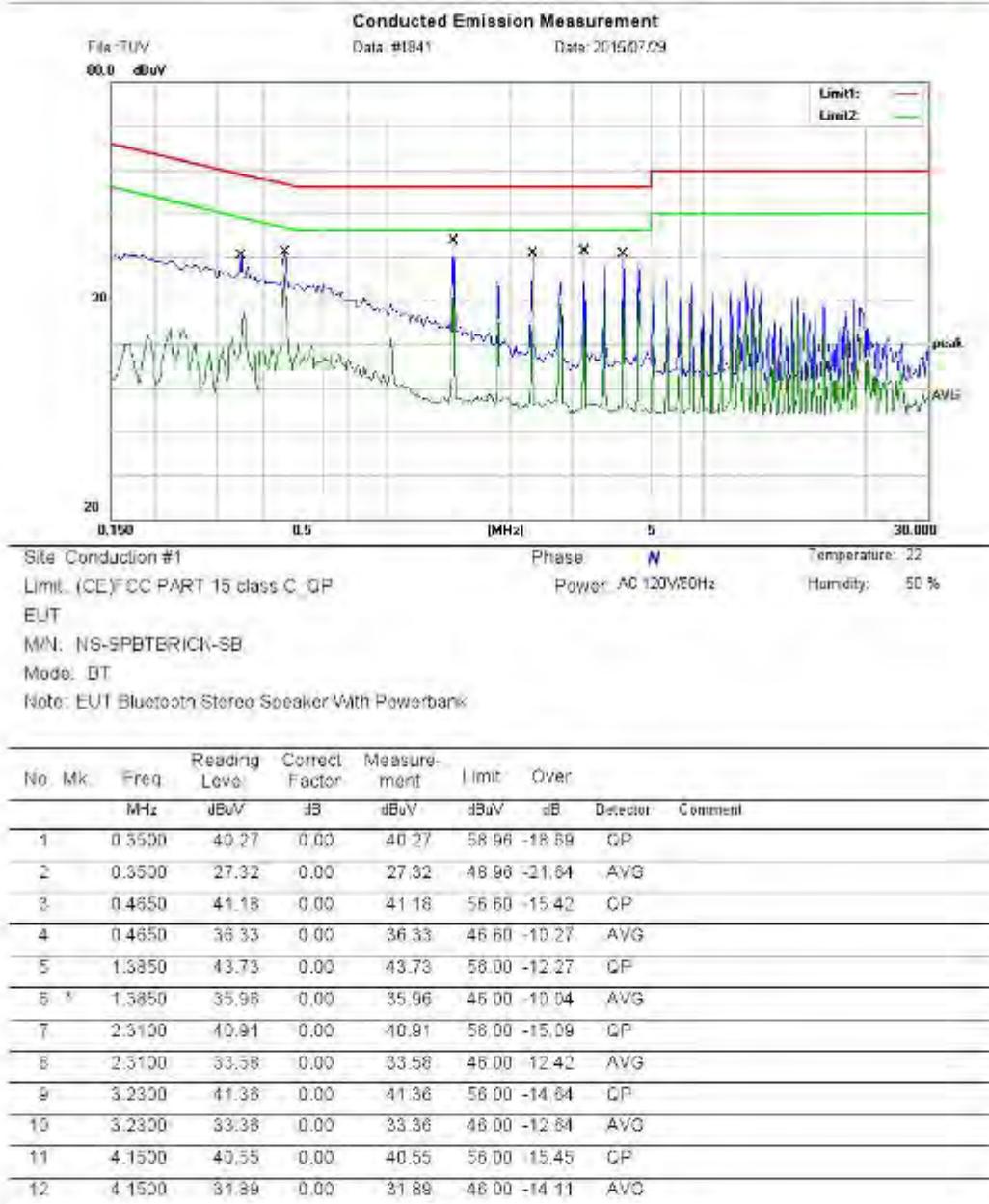
Figure 28: Test figure of Conducted Emissions



\*Maximum data    x:Over limit    l:over margin    Comment: Factor build in receiver.    Operator: Neo  
File: TUV/Data #1840    Page: 1

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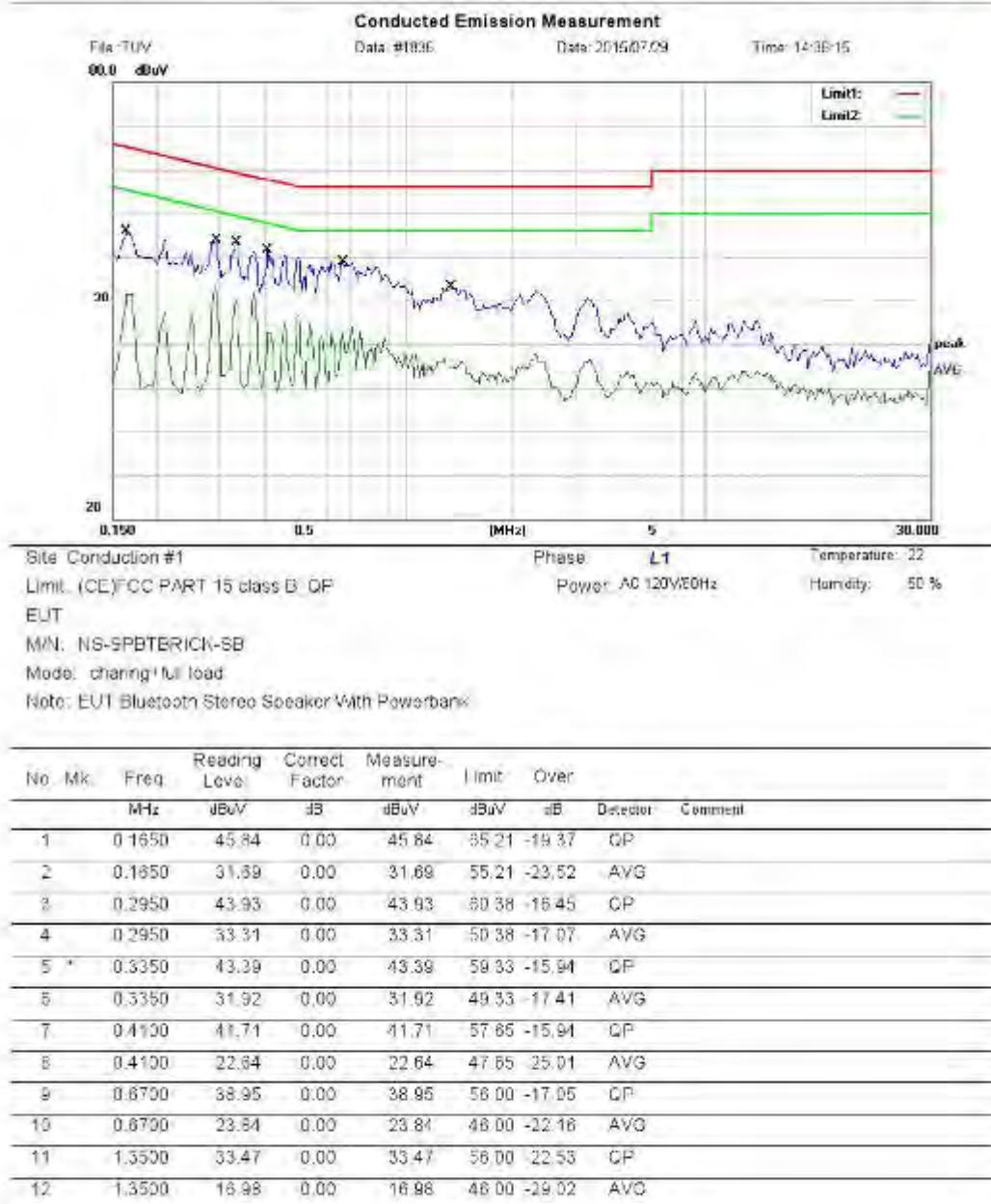
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\*Maximum data | x:Over limit | :over margin | Comment: Factor build in receiver. | Operator: Neo  
File: TUVData #1841 | Page: 1

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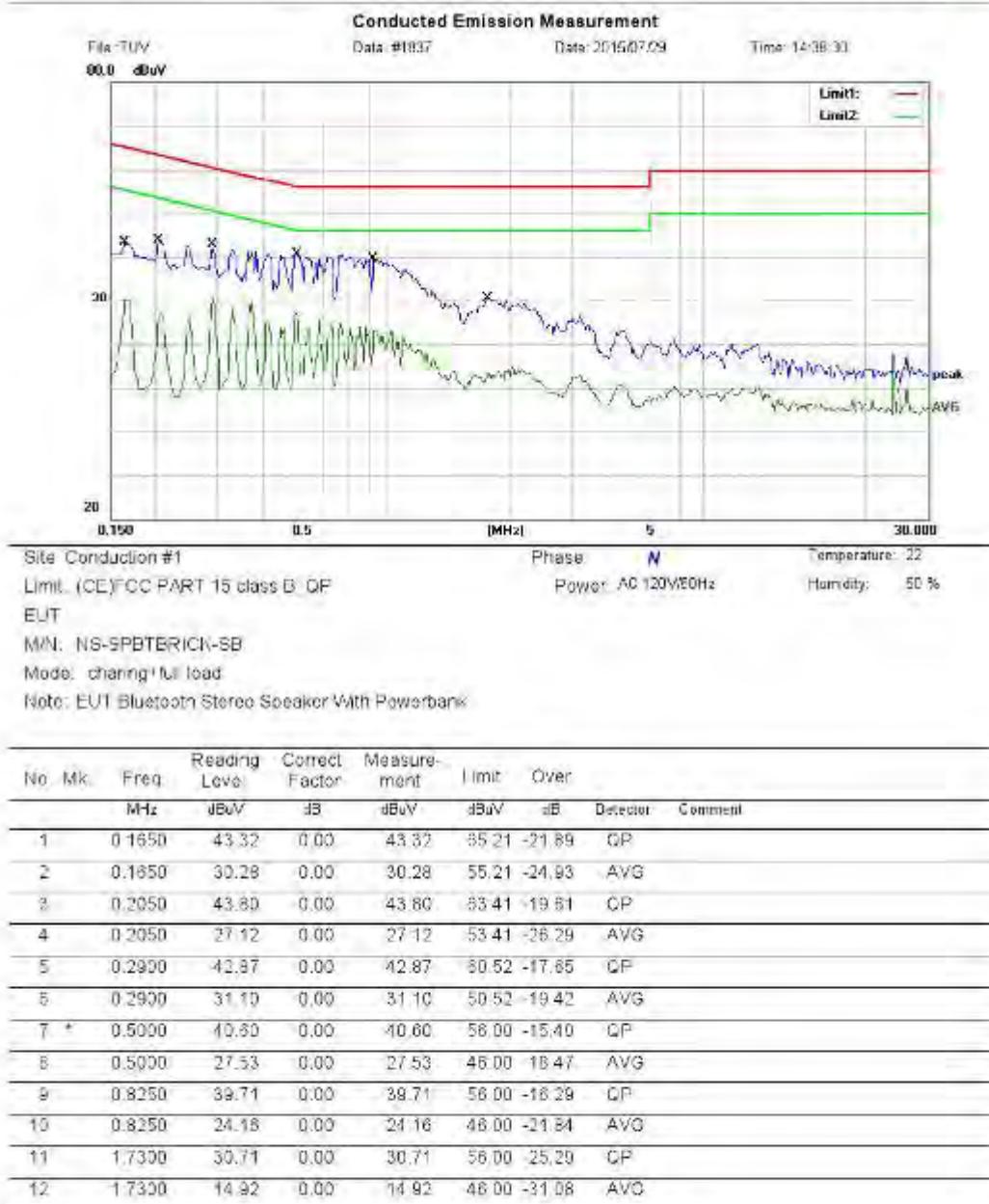
  
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\*Maximum data x Over limit - Lower margin Comment: Factor build in receiver. Operator: Neo  
File: TUV1Data #1836 Page: 1

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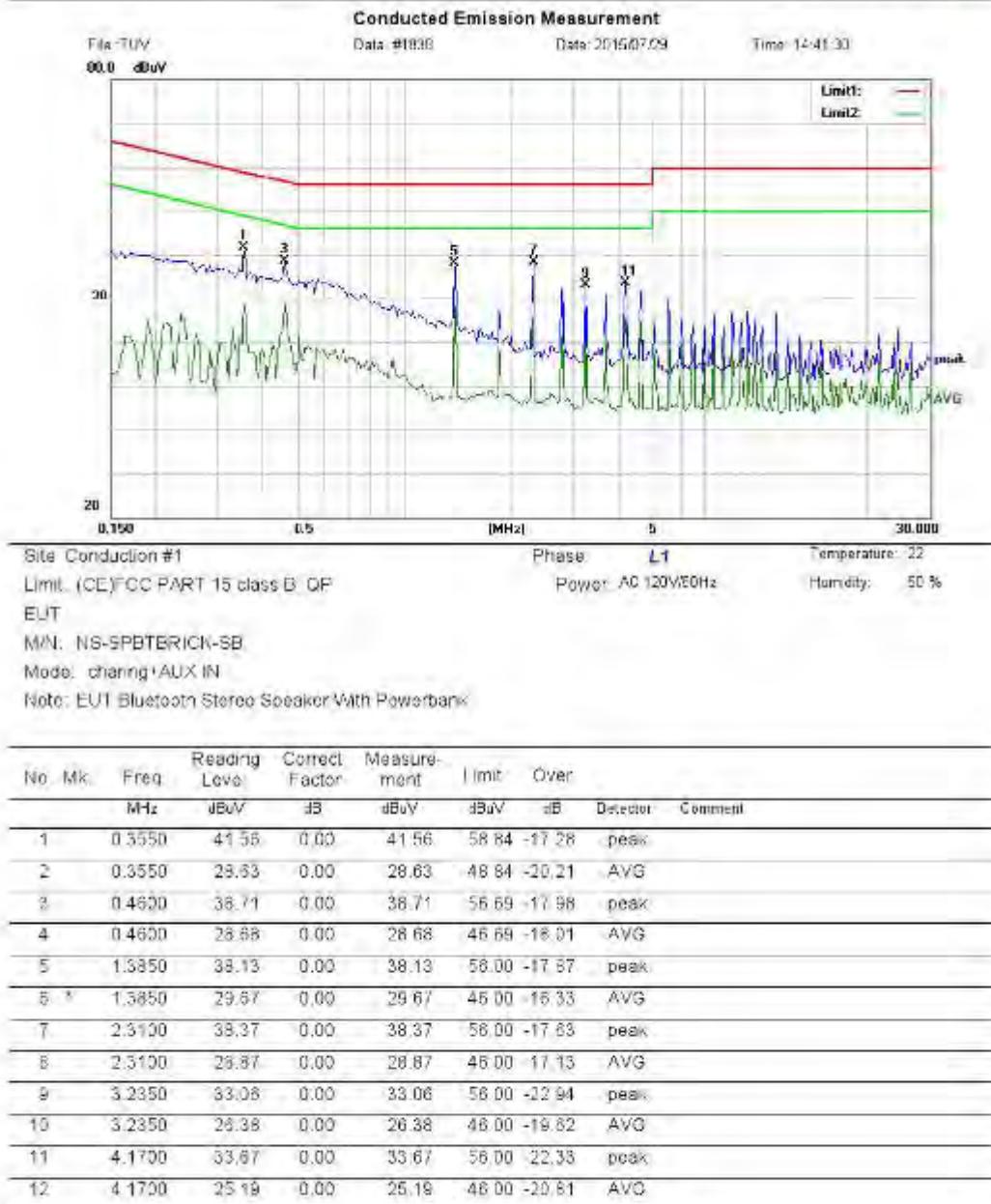
  
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\*Maximum data    x.Over limit    l.Over margin    Comment: Factor build in receiver.    Operator: Neo  
File: TUVData.#1837    Page: 1

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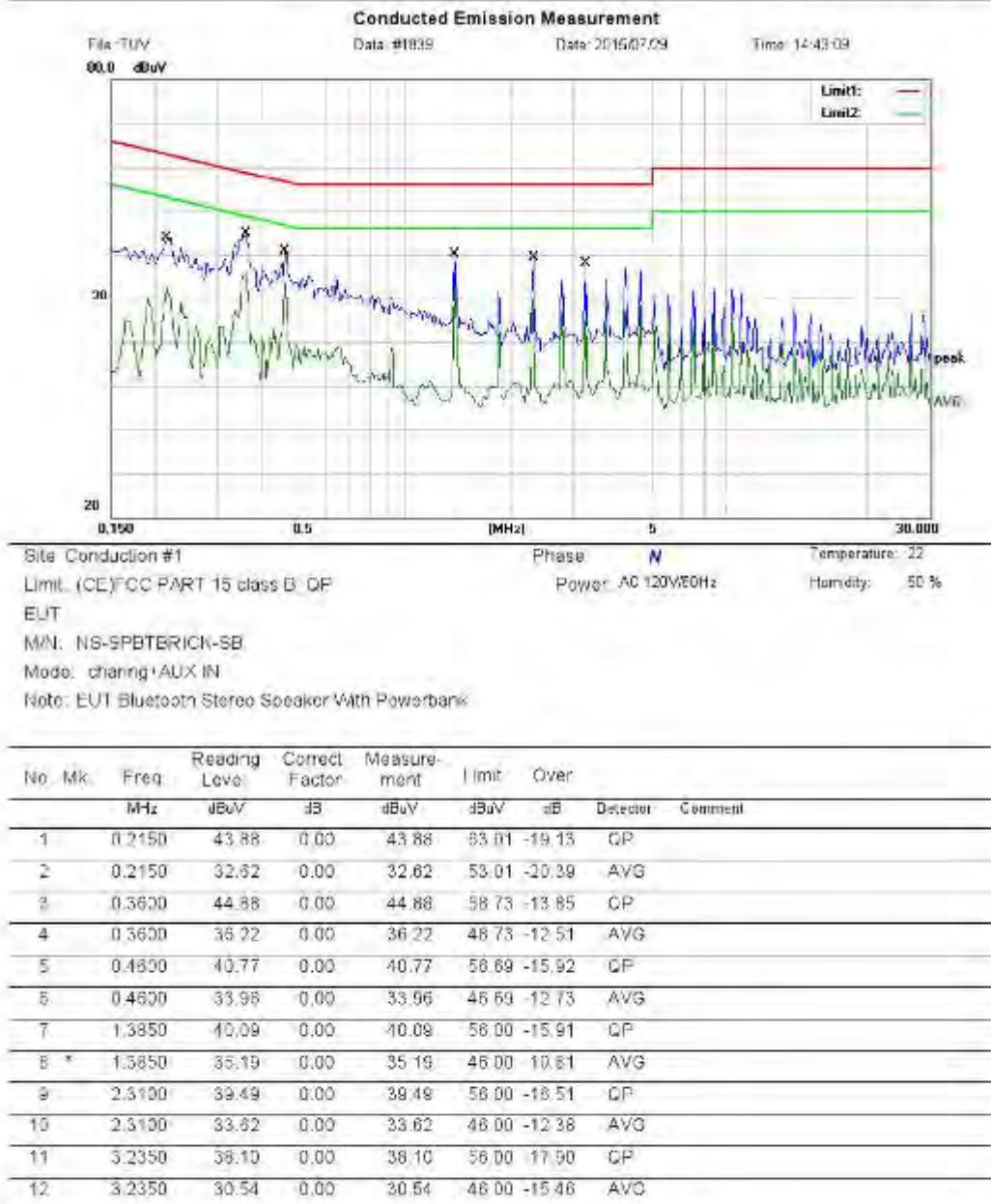
  
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\*Maximum data    x.Over limit    !over margin    Comment: Factor build in receiver.    Operator: Neo  
File: TUV1Data.#1838    Page: 1

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\*Maximum data x/Over limit -/over margin Comment: Factor build in receiver Operator: Neo  
File: TUVData #1039 Page: 1

Figure 29: Test figure of Radiated Emissions



\*Maximum data    x:Over limit    L:Lowest margin

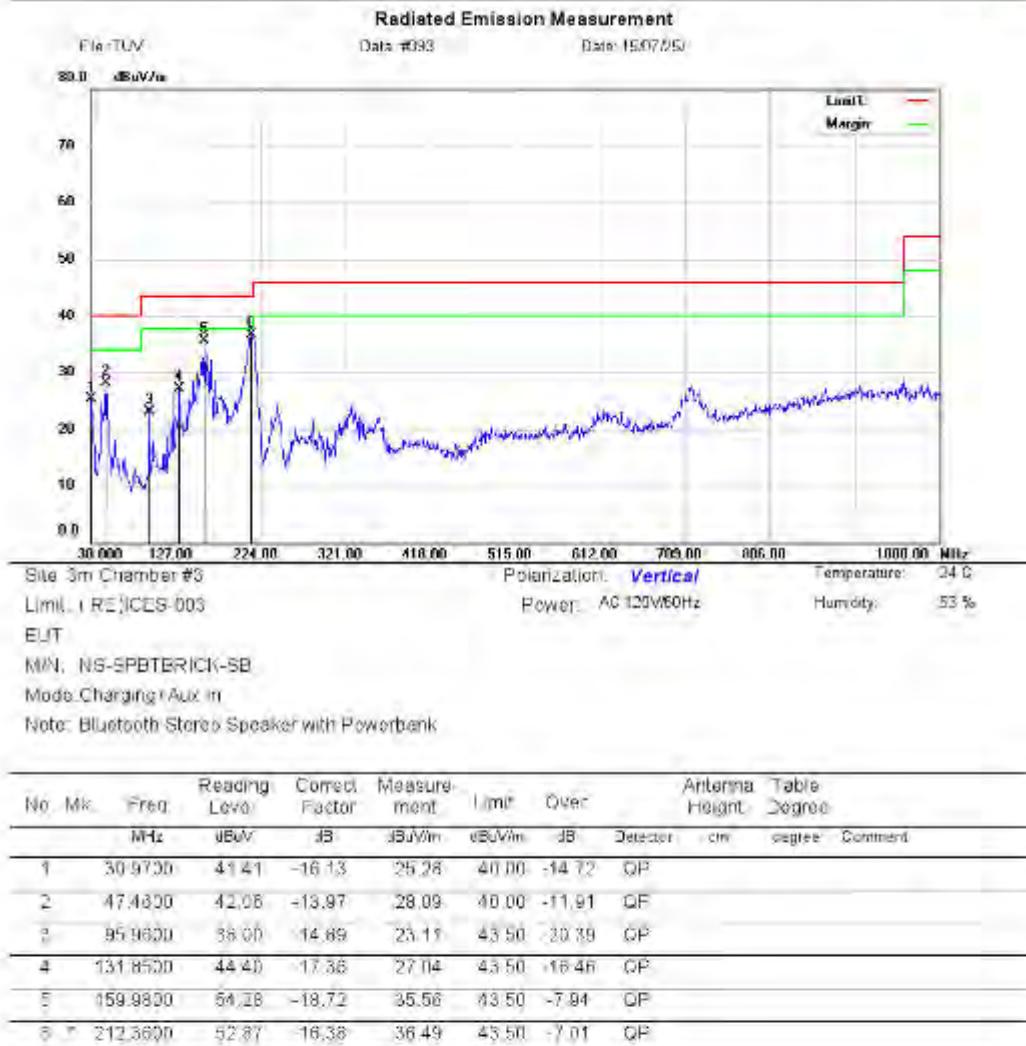
Operator: RV

File#TUV Data #092

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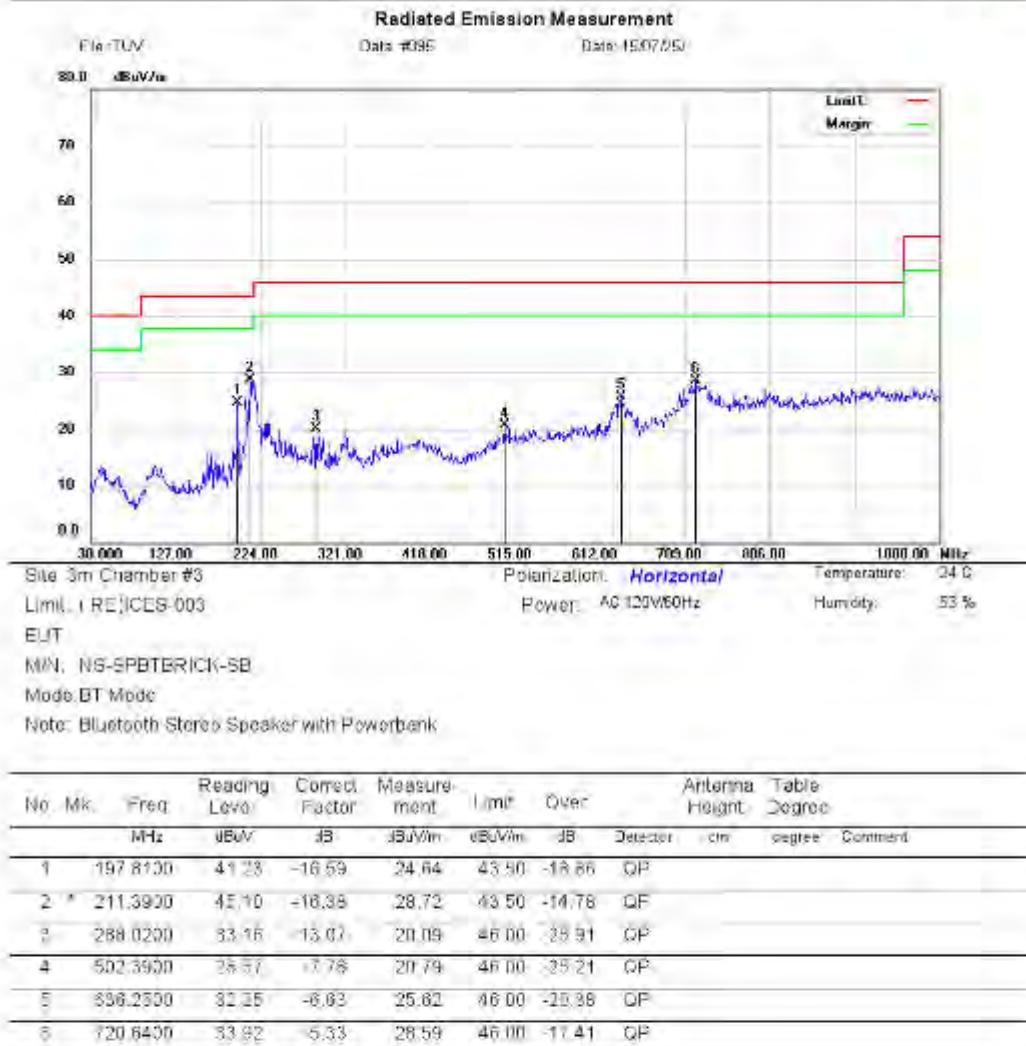
Operator: JV

File: TUV/Data #093

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\*Maximum data    x:Over limit    L:over margin

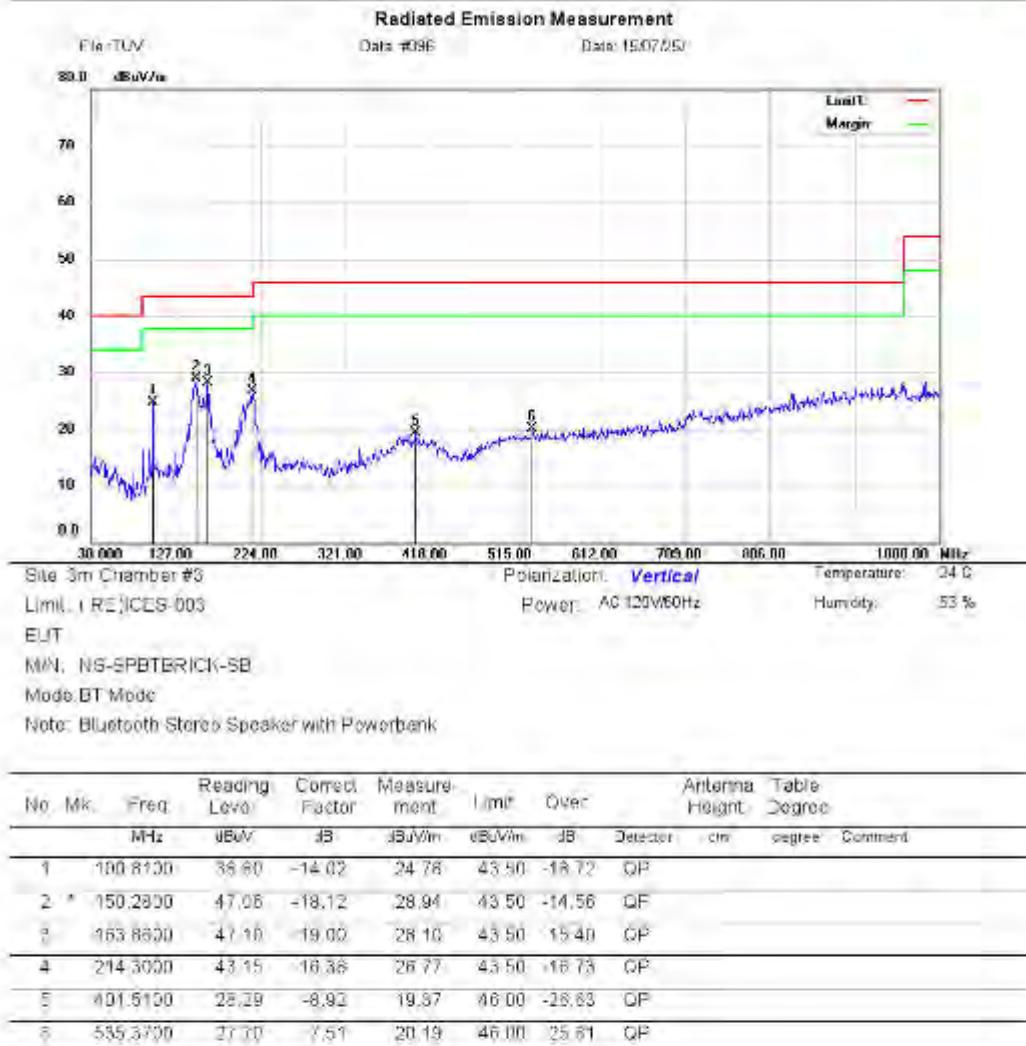
Operator: JV

File: TUV/Data #095

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\*Maximum data — Over limit — Lower margin —

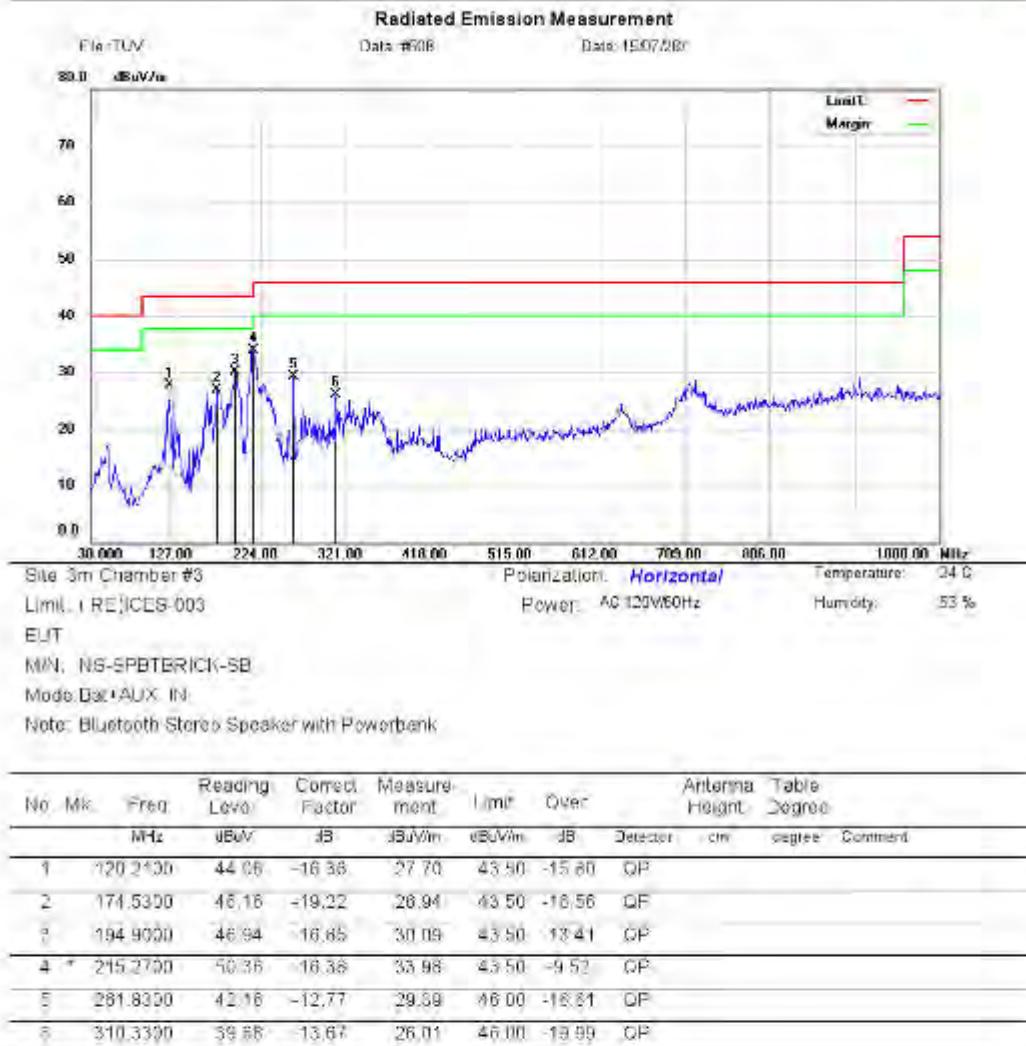
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File: TUV/Data #096

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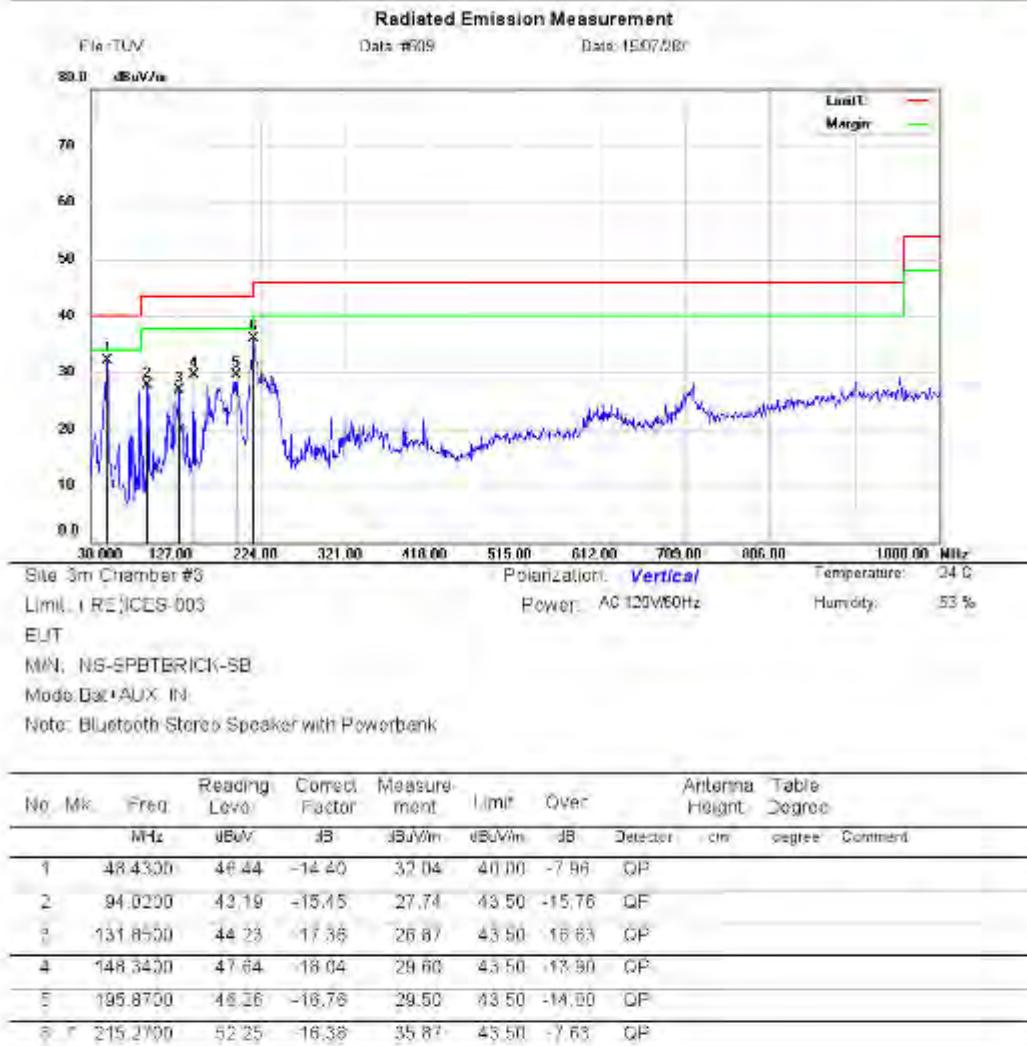
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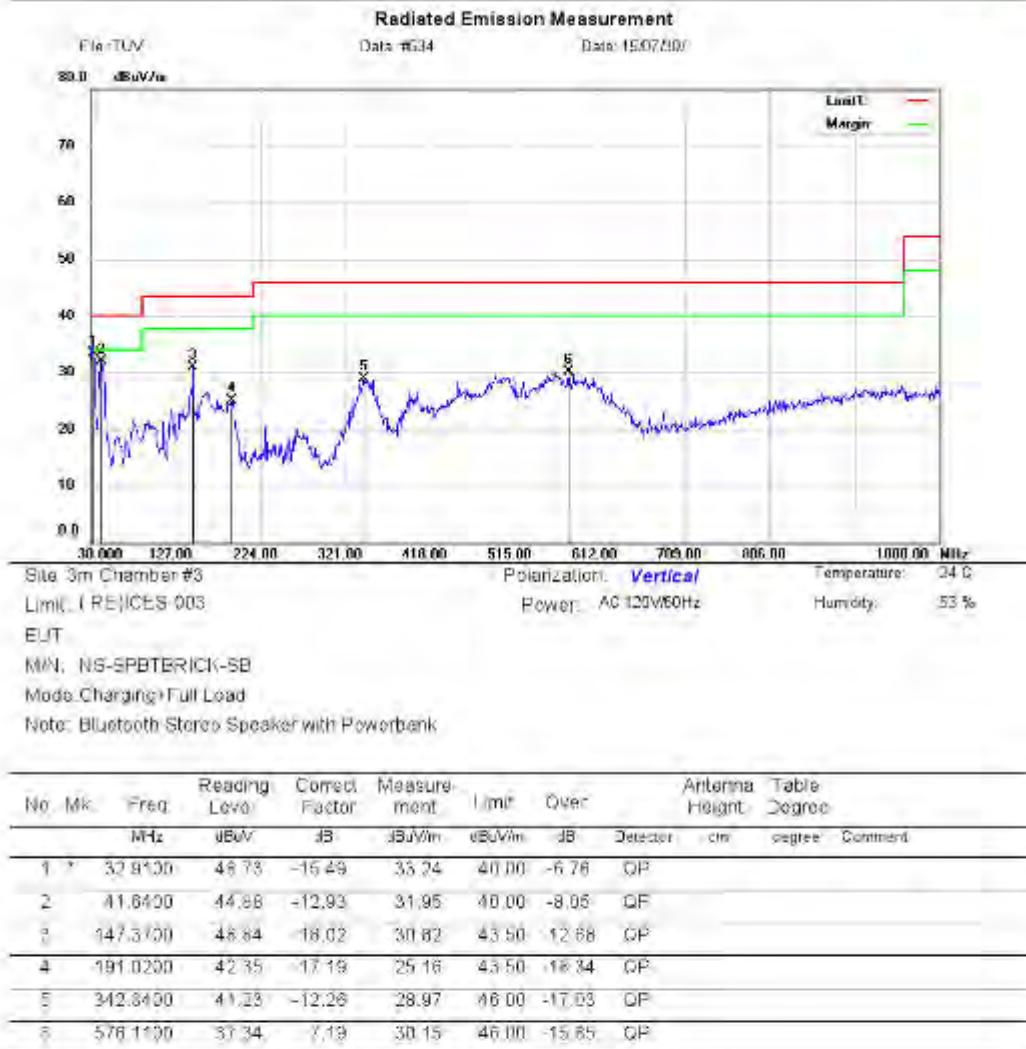
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File: TUV/Data #609

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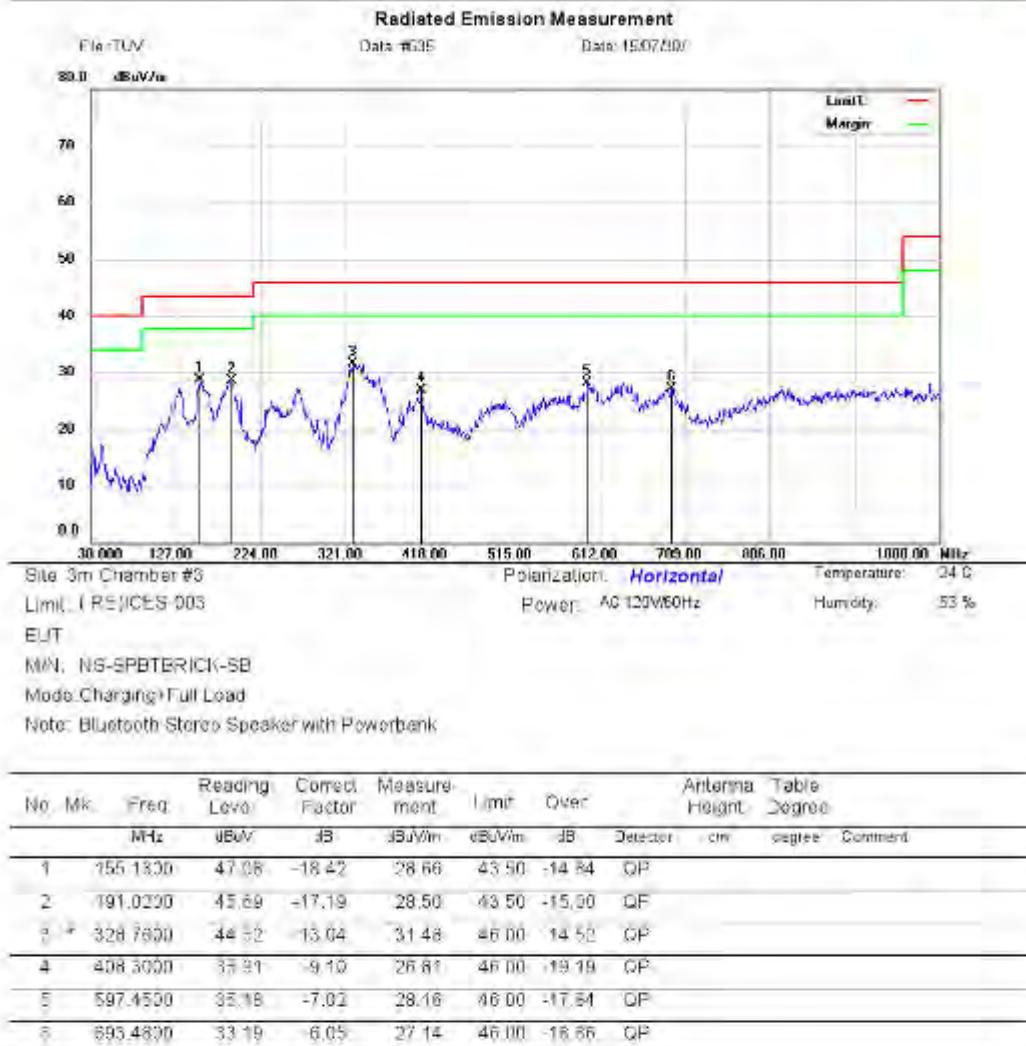
Operator: JV

File: TUV/Data #634

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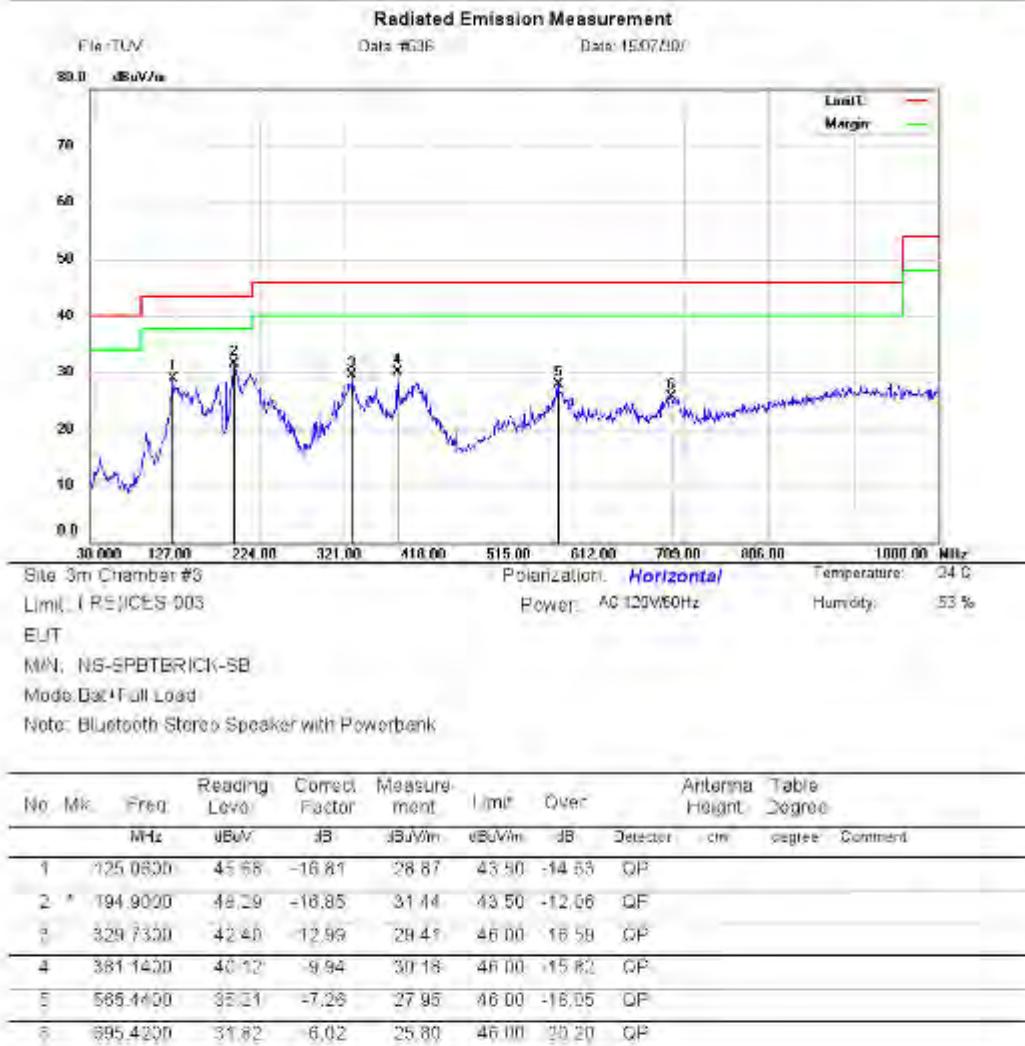
Operator: JV

File: TUV/Data #635

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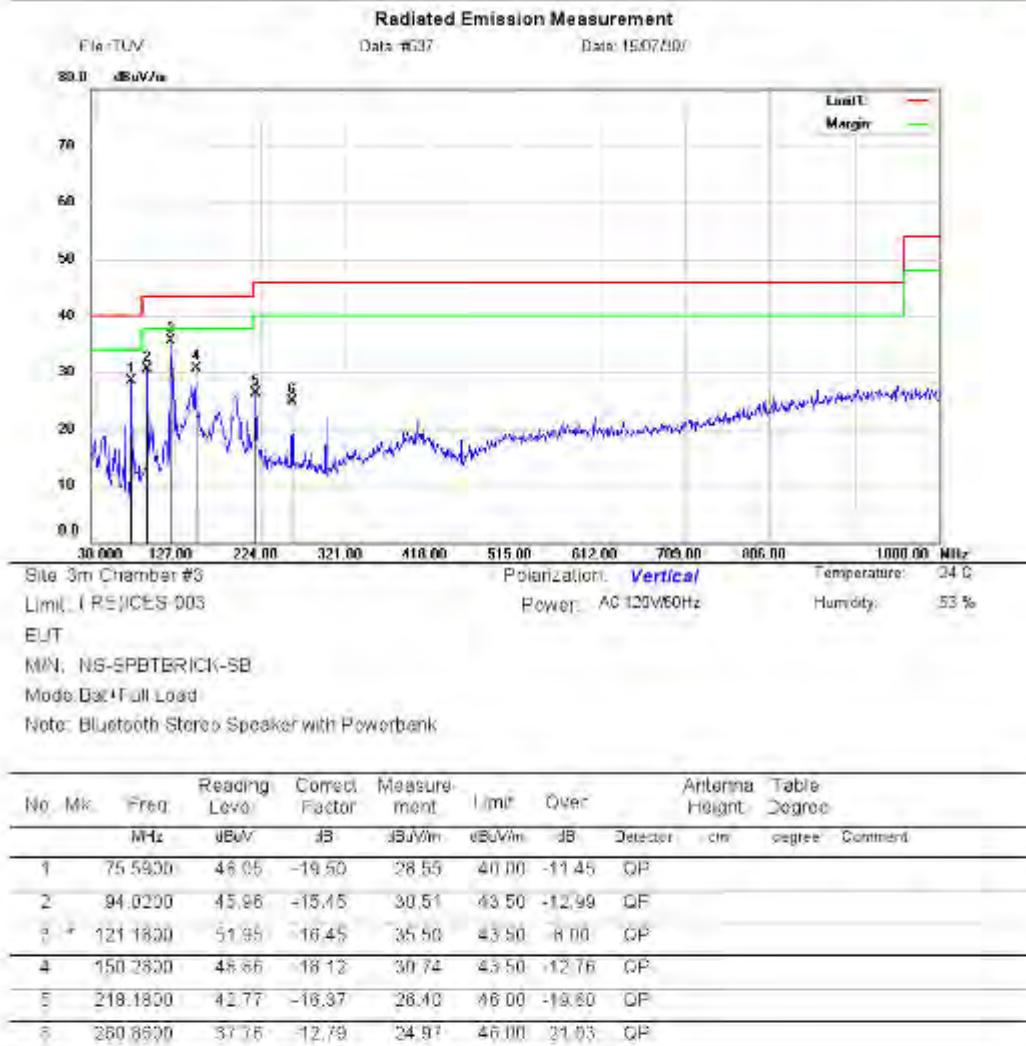
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