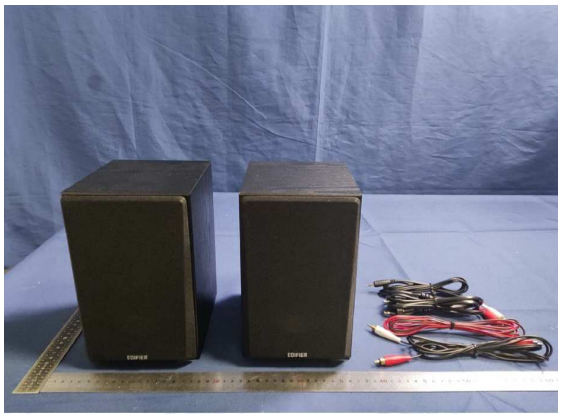
Prüfbericht - Produkte
Test Report - Products

TÜVRheinland®

Prüfbericht-Nr.: *Test report no.:*	**CN24WHUB 001**	**Auftrags-Nr.:** *Order no.:*	168471970	Seite 1 von 28 *Page 1 of 28*
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2024-01-04	
Auftraggeber: *Client:*	**Edifier International Limited** P.O. Box 6264 General Post Office Hong Kong			
Prüfgegenstand: *Test item:*	Multimedia Speaker			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	EDF100082 （Trademark: EDIFIER）			
Auftrags-Inhalt: *Order content:*	Type test			
Prüfgrundlage: *Test specification:*	EN 62479:2010 EN 300 328 V2.2.2 (2019-07)	BS EN 62479:2010 ETSI EN 300 328 V2.2.2 (2019-07)		

Wareneingangsdatum: *Date of sample receipt:*	2024-01-09
Prüfmuster-Nr.: *Test sample no.:*	DDT-Q24011017
Prüfzeitraum: *Testing period:*	2024-01-10 - 2024-01-30
Ort der Prüfung: *Place of testing:*	Guangdong Dongdian Testing Service Co.,Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result*:*	Pass



geprüft von: *tested by:*	x Signed by: Harry W. C. Wu	**genehmigt von:** *authorized by:*	x Signed by: Alex Lan
Datum: *Date:* 2024-03-18		**Ausstellungsdatum:** *Issue date:* 2024-03-18	
Stellung / Position	Project Manager	**Stellung** / Position	Reviewer

Sonstiges / *Other:* This report is for Article 3.2 Radio Spectrum and Article 3.1a Health requirements only.

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:* Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged:*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*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.

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.

V05

Anmerkungen
Remarks

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. *Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.* *Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.*
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3	Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report. *Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.*
4	The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019. *Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.*

Test Summary

5.1.1 RF OUTPUT POWER
RESULT: Pass

5.1.2 POWER SPECTRAL DENSITY
RESULT: Pass

5.1.3 DUTY CYCLE, TX-SEQUENCE, TX-GAP
RESULT: Not applicable

5.1.4 ACCUMULATED TRANSMIT TIME, FREQUENCY OCCUPATION AND HOPPING SEQUENCE
RESULT: Pass

5.1.5 HOPPING FREQUENCY SEPARATION
RESULT: Pass

5.1.6 MEDIUM UTILISATION (MU) FACTOR
RESULT: Not applicable

5.1.7 ADAPTIVITY
RESULT: Not applicable

5.1.8 OCCUPIED CHANNEL BANDWIDTH
RESULT: Pass

5.1.9 TRANSMITTER UNWANTED EMISSIONS IN THE OUT-OF-BAND DOMAIN
RESULT: Pass

5.1.10 TRANSMITTER UNWANTED EMISSIONS IN THE SPURIOUS DOMAIN
RESULT: Pass

5.2.1 RECEIVER SPURIOUS EMISSIONS
RESULT: Pass

5.2.2 RECEIVER BLOCKING
RESULT: Pass

5.2.3 GEO-LOCATION CAPABILITY
RESULT: Not applicable

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 A: Test Results of Classical Bluetooth.
Appendix B: Test Results of Bluetooth Low Energy.

2 Test Sites

2.1 Test Facilities

Guangdong Dongdian Testing Service Co.,Ltd.
Unit 2, Building 1, No.17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

CNAS No.: L6451

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

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☒Radiation 3#Chamber				
EMI TEST RECEIVER	R&S	ESU26	100472	2024/04/22
PSA Series Spectrum Analyzer	Agilent	E4447A	MY50180031	2024/04/22
Active Loop Antenna	Schwarzbeck	FMZB-1519	1519-038	2024/09/10
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	01429	2024/07/11
Double Ridged Horn Antenna	Schwarzbeck	BBHA 9120 D	02468	2024/09/17
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	2024/04/25
Pre-amplifier	COM-POWER	PAM-118A	18040084	2024/07/14
Pre-amplifier	COM-POWER	PAM-840A	461369	2024/04/26
RE Cable	N/A	W23.02 CP1-X2 + W23.09 AP1-X8+ JCT26S-NJ-NJ-1.5M	4.5M+8M+1.5 M	2024/04/20
RF Cable	Yuhu	JCTB810-NJ-NJ-9M+ ZT26S-SMAJ-SMAJ-1M	21123964	2024/04/22
Band Reject Filter(2400-2500 MHz)	REBES	BRM50702	G555	N/A
Test Software	Tonscend	JS32-RE	V 5.0.0.1	N/A

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☒RF Connected Test (RF Measurement System 3#)				
SIGNAL ANALYZER	R&S	FSV40	101407	2024/07/11
Wideband Radio Communication Tester	R&S	CMW500	117491	2024/04/26
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY62153058	2024/07/11
MXG Vector Signal Generator	Agilent	N5182A	MY48180912	2024/04/22
RF Control Unit	Tonscend	JS0806-2	20C8060230	2024/04/26
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2024/05/14
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A

2.3 Uncertainty of Measurement

The value of the measurement uncertainty of each parameter is listed as below:

Table 2: Maximum Measurement Uncertainty

Test Item	Uncertainty
Occupied Channel Bandwidth	1.1%
RF Output power, conducted	0.74 dB
Power Spectral Density, Conducted	0.74 dB
Unwanted Emissions, Conducted	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.40 dB (3.6 GHz ≤ f < 8 GHz)
	1.66 dB (8 GHz ≤ f < 26.5 GHz)
Temperature	0.4 ℃
Humidity	2%
DC and Low frequency voltage	1.0%
Time	0.6%
Duty Cycle	0.6%
Radiated Spurious Emissions (Substitution method)	3.57 dB
Radiated Spurious Emissions (Pre-correction method)	4.14 dB (30 MHz - 1 GHz)
	5.32 dB (1 GHz - 18 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a Multimedia Speaker with Bluetooth dual mdoe and used for audio entertainment in house or similar environment.

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

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	Multimedia Speaker
Type Designation	EDF100082
Trade Mark	EDIFIER
Extreme Temperature Range	0°C - +35°C
Operating Voltage	AC 100-240V, 50/60Hz, 225mA
Technical Specification of Bluetooth (BDR & EDR)	
Operating Frequency Channel	2402 – 2480 MHz
Bluetooth Core Version	5.4
Channel Number	79 channels
Channel separation	1MHz
Modulation	GFSK, π/4DQPSK
Antenna Type	PCB antenna
Antenna Gain	2.59 dBi (Provide by the Client)
Technical Specification of Bluetooth (Bluetooth Low Energy)	
Operating Frequency Channel	2402 – 2480 MHz for data rate 1Mbps 2404 – 2478 MHz for data rate 2Mbps
Bluetooth Core Version	5.4
Data rate	1Mbps, 2Mbps
Channel Number	40 channels for data rate 1Mbps 37 channels for data rate 2Mbps Note: 2402MHz/2426MHz/2480MHz will be disable via software for date rate 2Mbps.
Channel separation	2MHz
Modulation	GFSK
Antenna Type	PCB antenna
Antenna Gain	2.59 dBi (Provide by the Client)

Table 4: RF Channel and Frequency of Classical Bluetooth

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	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: RF Channel and Frequency of Bluetooth Low Energy

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402.00**	10	2422.00	20	2442.00	30	2462.00
01	2404.00	11	2424.00	21	2444.00	31	2464.00
02	2406.00	12	2426.00	22	2446.00	32	2466.00
03	2408.00	13	2428.00	23	2448.00	33	2468.00
04	2410.00	14	2430.00	24	2450.00	34	2470.00
05	2412.00	15	2432.00	25	2452.00	35	2472.00
06	2414.00	16	2434.00	26	2454.00	36	2474.00
07	2416.00	17	2436.00	27	2456.00	37	2476.00
08	2418.00	18	2438.00	28	2458.00	38	2478.00
09	2420.00	**19**	**2440.00**	29	2460.00	**39**	**2480.00**

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Bluetooth mode (BDR & EDR & BLE)
   1. Transmitting mode
      a. Low channel
      b. Middle channel
      c. High channel
   2. Receiving mode
      a. Low channel
      d. Middle channel
      b. High channel

B. On, Bluetooth playing

C. Off

3.4 Noise Generating and Noise Suppressing Parts

For details refer to the Circuit Diagram.

3.5 Submitted Documents

- Block Diagram
- Schematics
- User Manual
- Rating Label

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

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

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

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5 and chapter 7.

4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Notebook	Lenovo	ThinkPad X2502	2014AP6082

4.4 Countermeasures to Achieve EMC Compliance

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

No additional measures were employed to achieve compliance.

5 Test Results ERM

5.1 Transmitter Requirement & Test Suites

5.1.1 RF Output Power

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.2 of EN 300 328 Clause 4.3.2.2 of EN 300 328
Limit	:	Clause 4.3.1.2.3 of EN 300 328 Clause 4.3.2.2.3 of EN 300 328
Test suites	:	Clause 5.4.2 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal and extreme temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B.

5.1.2 Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.2.3 of EN 300 328
Limit	:	Clause 4.3.2.3.3 of EN 300 328
Test suites	:	Clause 5.4.3 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix B.

5.1.3 Duty Cycle, TX-sequence, TX-gap

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.3 of EN 300 328
Limit	:	Clause 4.3.1.3.3 of EN 300 328
Test suites	:	Clause 5.4.2 of EN 300 328

Exemption Condition(s):

☒ These requirements apply to non-adaptive equipment or to adaptive equipment when operating in non-adaptive mode. The equipment is using wide band modulations other than FHSS.

Conclusion:

The EUT is adaptive equipment and does not support non-adaptive mode, hence this requirement is not applicable.

5.1.4 Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.4 of EN 300 328
Limit	:	Clause 4.3.1.4.3 of EN 300 328
Test suites	:	Clause 5.4.4 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A.

5.1.5 Hopping Frequency Separation

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.5 of EN 300 328
Limit	:	Clause 4.3.1.5.3 of EN 300 328
Test suites	:	Clause 5.4.5 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A.

5.1.6 Medium Utilisation (MU) Factor

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.6 of EN 300 328
		Clause 4.3.2.5 of EN 300 328
Limit	:	Clause 4.3.1.6.3 of EN 300 328
		Clause 4.3.2.5.3 of EN 300 328
Test suites	:	Clause 5.4.2 of EN 300 328

Exemption Condition(s):
☒ These requirements apply to non-adaptive equipment or to adaptive equipment when operating in non-adaptive mode. The equipment is using wide band modulations other than FHSS.

Conclusion:
The EUT is adaptive equipment and does not support non-adaptive mode, hence this requirement is not applicable.

5.1.7 Adaptivity

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.7.2 of EN 300 328
		Clause 4.3.2.6.3 of EN 300 328
Limit	:	Clause 4.3.1.7.2.2 of EN 300 328
		Clause 4.3.2.6.3.2 of EN 300 328
Test suites	:	Clause 5.4.6 of EN 300 328

Exemption Conditions:

☒ These requirements do not apply for equipment with a maximum declared RF Output power of less than 10 dBm e.i.r.p. or for equipment when operating in a mode where the RF Output power is less than 10 dBm e.i.r.p.

Conclusion:

The maximum declared RF output power is less than 10dBm e.i.r.p., hence this requirement is not applicable.

5.1.8 Occupied Channel Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.8 of EN 300 328
		Clause 4.3.2.7 of EN 300 328
Limit	:	Clause 4.3.1.8.3 of EN 300 328
		Clause 4.3.2.7.3 of EN 300 328
Test suites	:	Clause 5.4.7 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B.

5.1.9 Transmitter Unwanted Emissions in the Out-of-band Domain

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.9 of EN 300 328
		Clause 4.3.2.8 of EN 300 328
Limit	:	Clause 4.3.1.9.3 of EN 300 328
		Clause 4.3.2.8.3 of EN 300 328
Test suites	:	Clause 5.4.8 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B.

5.1.10 Transmitter Unwanted Emissions in the Spurious Domain

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.10 of EN 300 328
		Clause 4.3.2.9 of EN 300 328
Limit	:	Clause 4.3.1.10.3 of EN 300 328
		Clause 4.3.2.9.3 of EN 300 328
Test suites	:	Clause 5.4.9 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	Refer to test data
Relative humidity	:	Refer to test data
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B

5.2 Receiver Requirement & Test Suites

5.2.1 Receiver Spurious Emissions

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.11 of EN 300 328 Clause 4.3.2.10 of EN 300 328
Limit	:	Clause 4.3.1.11.3 of EN 300 328 Clause 4.3.2.10.3 of EN 300 328
Test suites	:	Clause 5.4.10 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.2
Ambient temperature	:	Refer to test data
Relative humidity	:	Refer to test data
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B.

5.2.2 Receiver Blocking

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.12 of EN 300 328
		Clause 4.3.2.11 of EN 300 328
Limit	:	Clause 4.3.1.12.4 of EN 300 328
		Clause 4.3.2.11.3 of EN 300 328
Test suites	:	Clause 5.4.11 of EN 300 328

Test Setup

Date of testing	:	2024-01-10 to 2024-01-30
Test voltage	:	AC 230V, 50Hz
Test environment	:	Normal temperature
Operation mode	:	A.2
Ambient temperature	:	19.1 ℃
Relative humidity	:	37.4 %
Atmospheric pressure	:	101.4 kPa

For the measurement records, refer to the appendix A & B.

For Bluetooth-BDR: the maximum RF output power is -0.84dBm.
For Bluetooth-EDR: the maximum RF output power is -1.80dBm.
For Bluetooth-BLE: the maximum RF output power is 7.01dBm.

Hence according to the 4.2.3.2, the Bluetooth-BDR/EDR of EUT is belong category 3 receiver and Bluetooth-BLE is belong category 2 receiver.

5.2.3 Geo-location Capability

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 328 V2.2.2
Test requirement	:	Clause 4.3.1.13 of EN 300 328 Clause 4.3.2.12 of EN 300 328

Exemption Conditions:
This requirement only applies to equipment with geo-location capability as defined in clause 4.3.1.13.2 and 4.3.2.12.2.

Conclusion:

The EUT is adaptive equipment and does not support geo-location capability, hence this requirement is not applicable.

6 Safety Human Exposure

6.1 Human Exposure to Electromagnetic Fields 0MHz-300GHz

6.1.1 Electromagnetic Fields

RESULT: **Pass**

Test Specification

Test standard : EN 62479: 2010

The maximum measured peak power of EUT is only 7.01 dBm (5.023mW).

According to EN 62479:2010 clause 4.2, if the average total radiated power emitted by apparatus operating in the frequency range 10MHz-300GHz is less than or equal to 13.01dBm(20mW), then the apparatus is deemed to comply with the basic restrictions without testing.

7 Photographs of the Test Set-Up

Photograph 1: Set-up for Radio Spectrum Testing



Photograph 2: Set-up for Transmitter & Receiver Spurious Emissions, below 1GHz



Photograph 3: Set-up for Transmitter & Receiver Spurious Emissions, Above 1GHz



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Appendix A

Test Results of Classical Bluetooth

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1 Appendix A.1 : RF output power

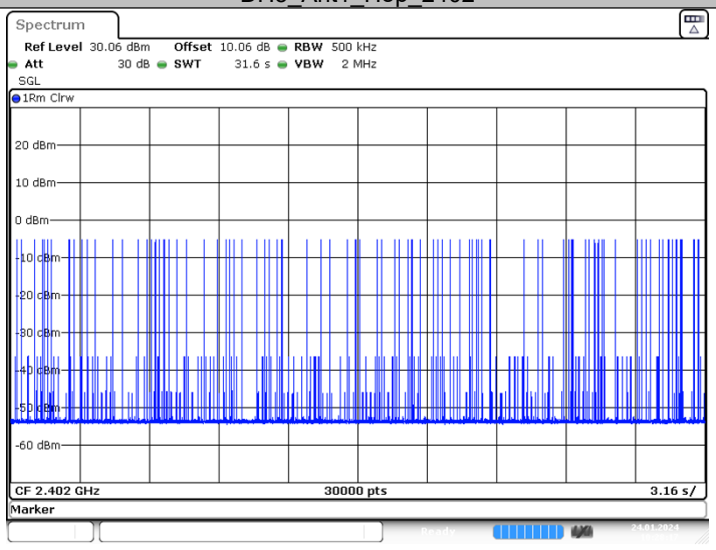
The RF output power is the mean equivalent isotropically radiated power (EIRP) during a transmission burst. Only the worst case for all test modes reported.

Test Condition	Test Mode	Antenna	Frequency[MHz]	Burst Power [dBm]	EIRP[dBm]	Limit[dBm]	Verdict
NTNV	DH1	Ant1	Hop	-3.43	-0.84	20	PASS
	DH5	Ant1	Hop	-3.54	-0.95	20	PASS
	2DH1	Ant1	Hop	-4.42	-1.83	20	PASS
	2DH5	Ant1	Hop	-4.95	-2.36	20	PASS
LTNV	DH1	Ant1	Hop	-3.45	-0.86	20	PASS
	DH5	Ant1	Hop	-3.51	-0.92	20	PASS
	2DH1	Ant1	Hop	-4.40	-1.81	20	PASS
	2DH5	Ant1	Hop	-5.00	-2.41	20	PASS
HTNV	DH1	Ant1	Hop	-3.44	-0.85	20	PASS
	DH5	Ant1	Hop	-3.51	-0.92	20	PASS
	2DH1	Ant1	Hop	-4.39	-1.80	20	PASS
	2DH5	Ant1	Hop	-4.97	-2.38	20	PASS

2 Appendix A.2 : Accumulated Transmit Time

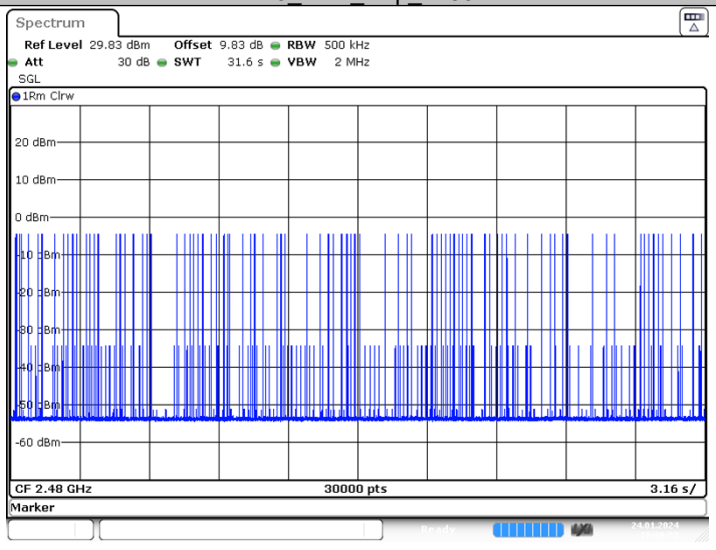
Test Mode	Antenna	Channel	Result [ms]	Limit [ms]	Verdict
DH5	Ant1	Hop_2402	288.604	400	PASS
		Hop_2480	313.883	400	PASS
2DH5	Ant1	Hop_2402	320.203	400	PASS
		Hop_2480	321.257	400	PASS

DH5_Ant1_Hop_2402



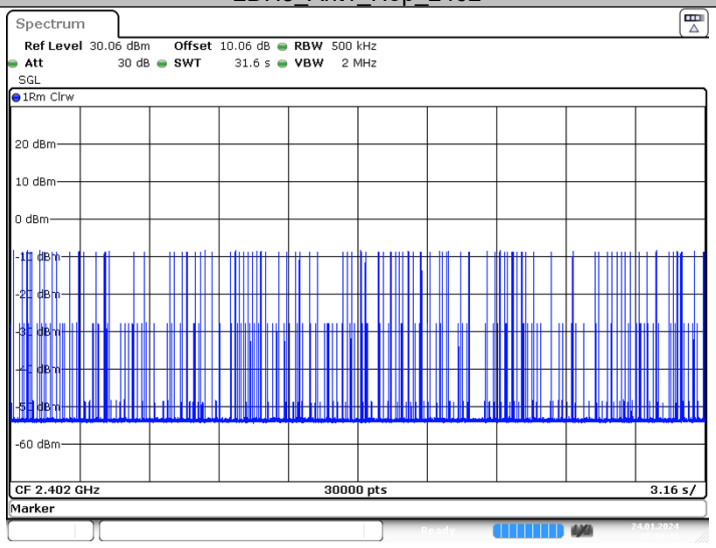
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DH5_Ant1_Hop_2480



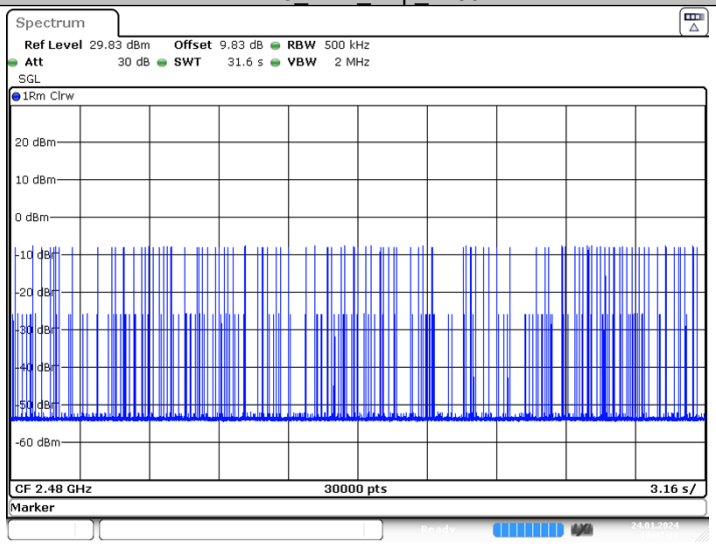
Date: 24.JAN.2024 10:30:53

2DH5_Ant1_Hop_2402



Date: 24.JAN.2024 10:39:41

2DH5_Ant1_Hop_2480

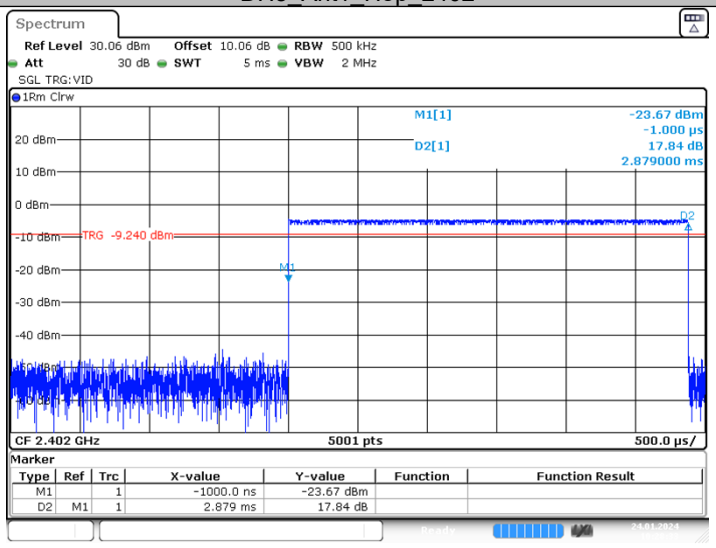


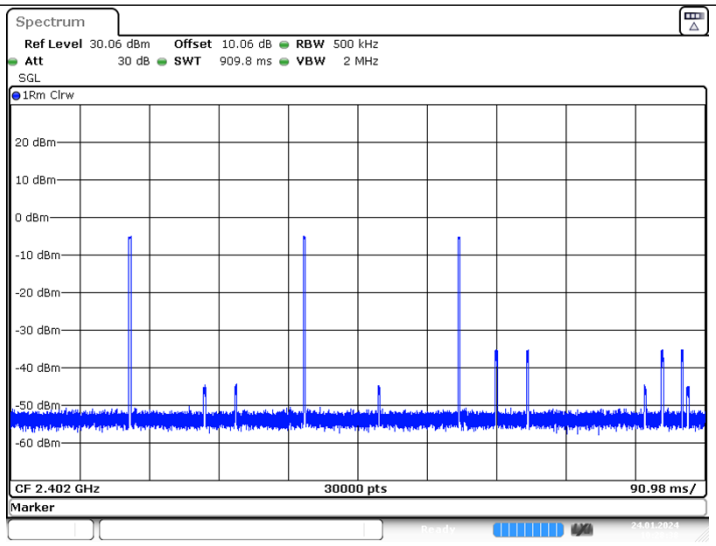
Date: 24.JAN.2024 10:42:13

3 Appendix A.3 : Frequency Occupation

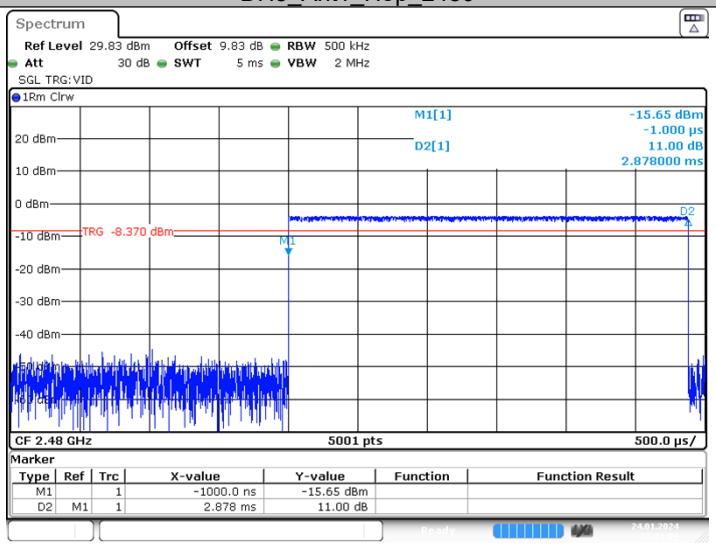
Test Mode	Antenna	Channel	Result [Num.]	Limit [Num.]	Verdict
DH5	Ant1	Hop_2402	3	1	PASS
		Hop_2480	3	1	PASS
2DH5	Ant1	Hop_2402	2	1	PASS
		Hop_2480	3	1	PASS

DH5_Ant1_Hop_2402

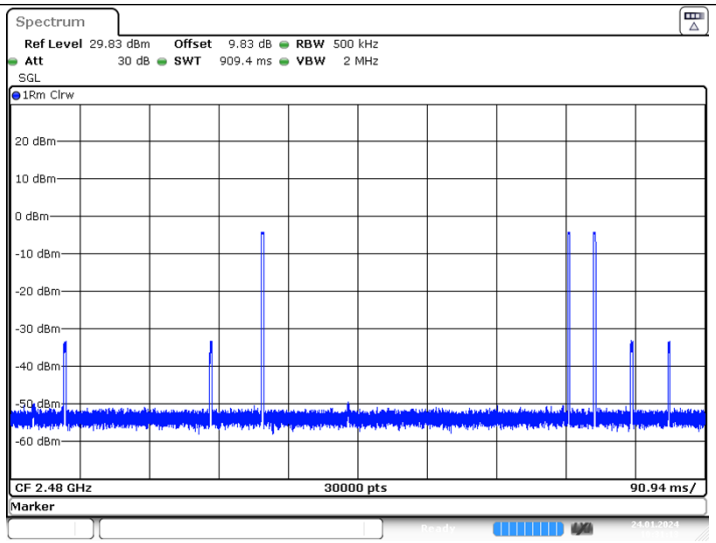




DH5_Ant1_Hop_2480

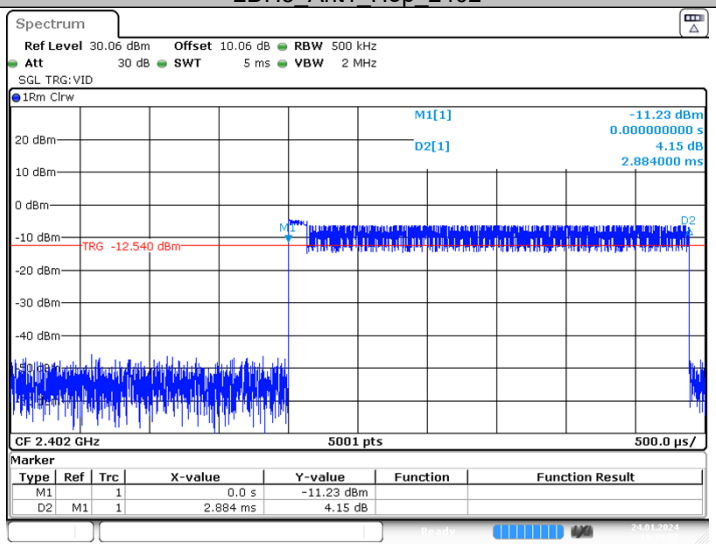


Date: 24.JAN.2024 10:31:09

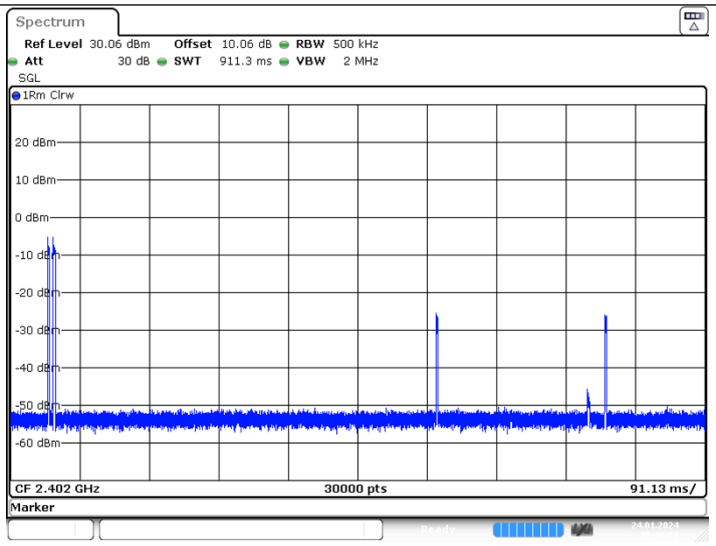


Date: 24.JAN.2024 10:31:13

2DH5_Ant1_Hop_2402

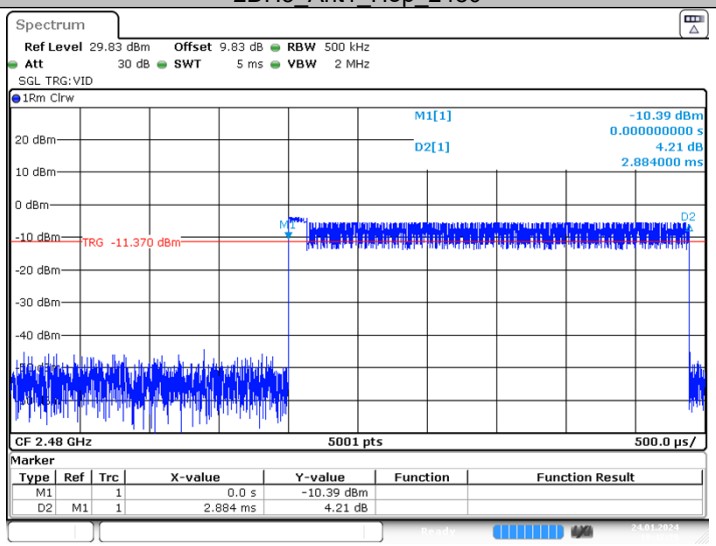


Date: 24.JAN.2024 10:39:58

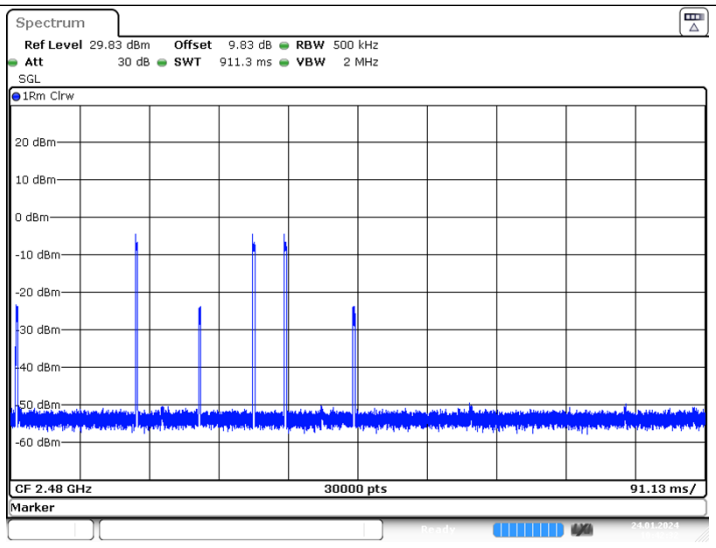


Date: 24.JAN.2024 10:40:01

2DH5_Ant1_Hop_2480



Date: 24.JAN.2024 10:42:29

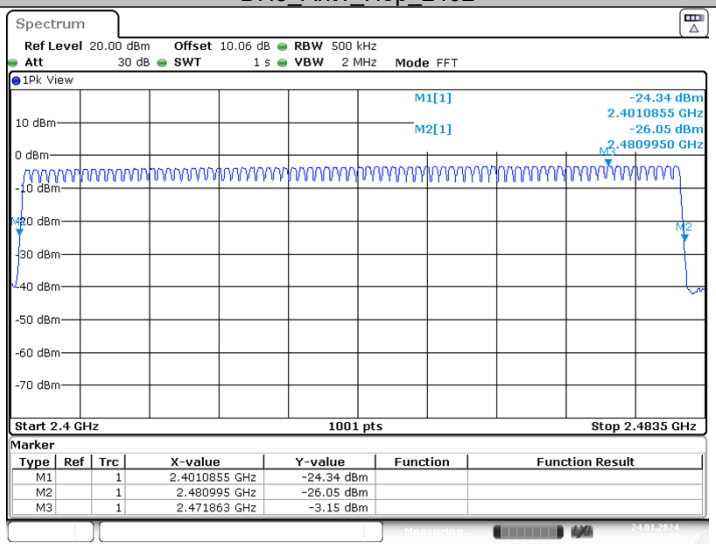


Date: 24.JAN.2024 10:42:33

4 Appendix A.4 : Hopping Sequence

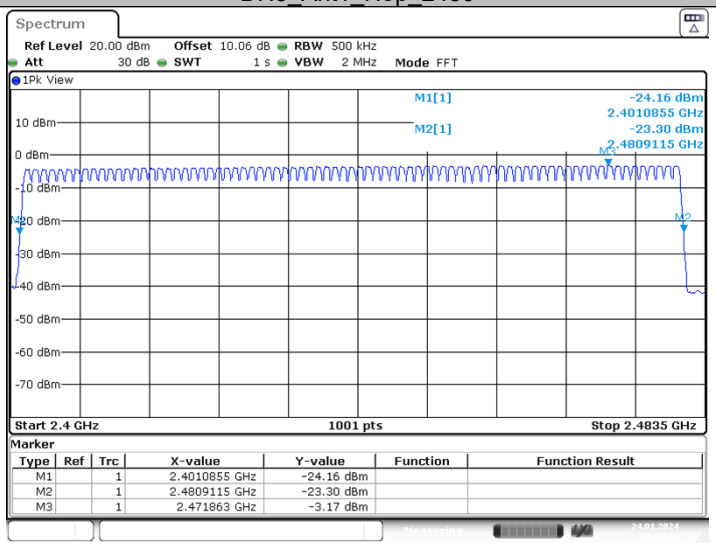
Test Mode	Antenna	Channel	Hop. [Num.]	Limit [Num.]	Band Use [%]	Limit [%]	Verdict
DH5	Ant1	Hop_2402	79	15	95.70	70	PASS
		Hop_2480	79	15	95.60	70	PASS
2DH5	Ant1	Hop_2402	79	15	96.20	70	PASS
		Hop_2480	79	15	96.20	70	PASS

DH5_Ant1_Hop_2402



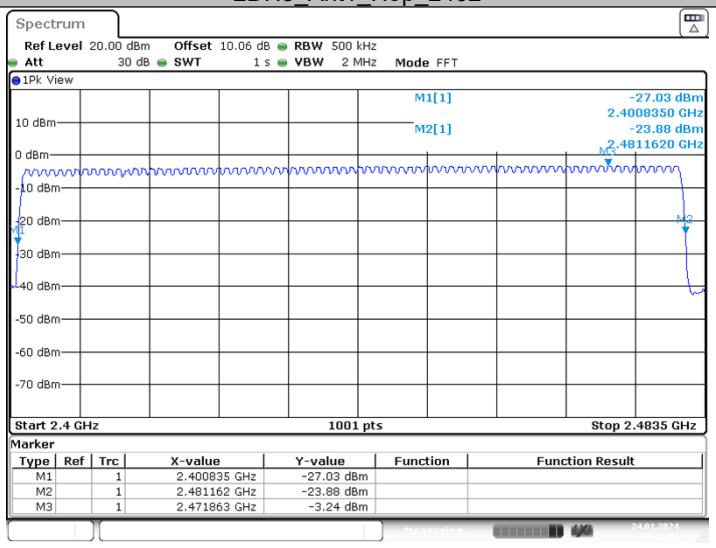
Date: 24.JAN.2024 10:29:45

DH5_Ant1_Hop_2480



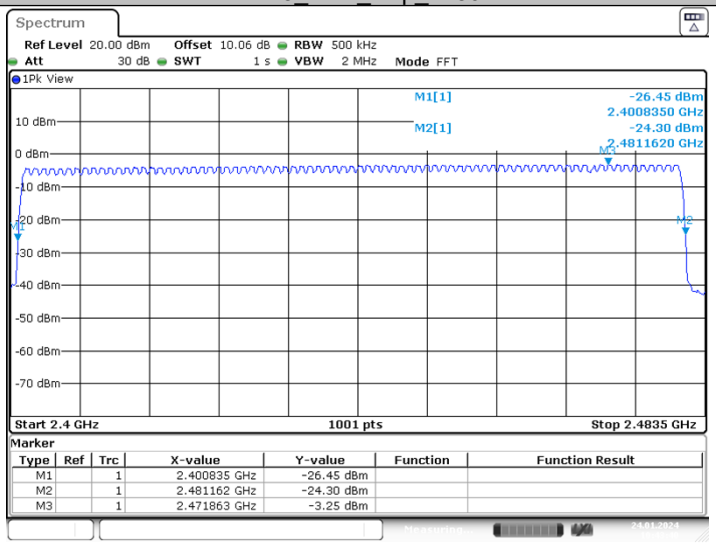
Date: 24.JAN.2024 10:32:21

2DH5_Ant1_Hop_2402



Date: 24.JAN.2024 10:41:09

2DH5_Ant1_Hop_2480

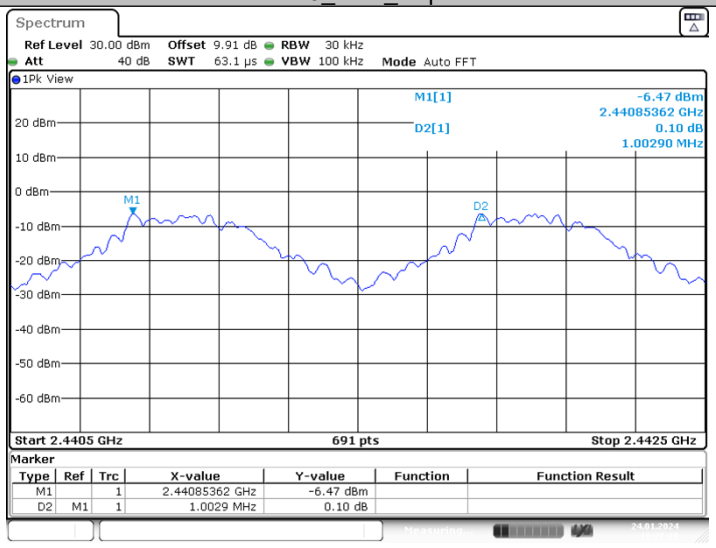


Date: 24.JAN.2024 10:43:40

5 Appendix A.5: Hopping Frequency Separation

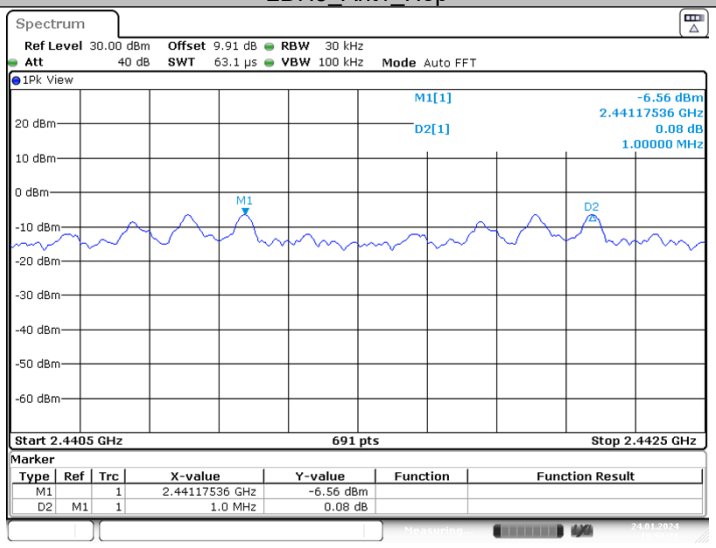
Test Mode	Antenna	Channel	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	1.003	0.100	PASS
2DH5	Ant1	Hop	1	0.100	PASS

DH5_Ant1_Hop



Date: 24.JAN.2024 10:27:29

2DH5_Ant1_Hop

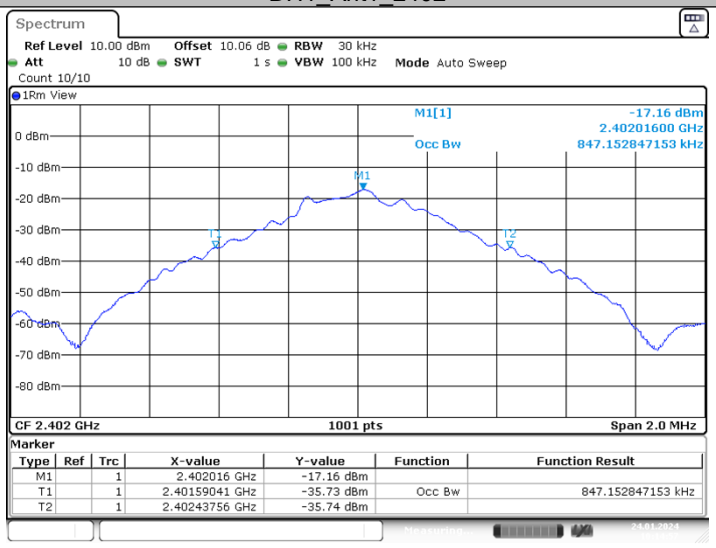


Date: 24.JAN.2024 10:50:31

6 Appendix A.6: Occupied Channel Bandwidth

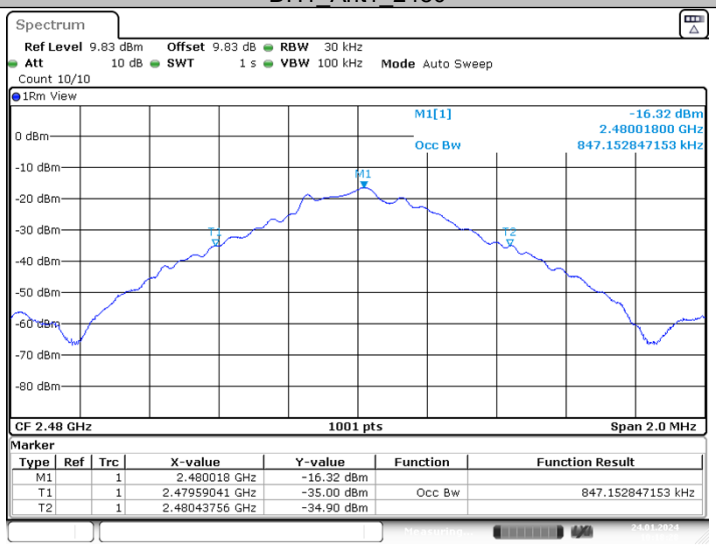
Test Mode	Antenna	Channel	OCB[MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
DH1	Ant1	2402	0.847	2401.5904	2402.4376	2400 to 2483.5	PASS
		2480	0.847	2479.5904	2480.4376	2400 to 2483.5	PASS
DH5	Ant1	2402	0.869	2401.5764	2402.4456	2400 to 2483.5	PASS
		2480	0.871	2479.5764	2480.4476	2400 to 2483.5	PASS
2DH1	Ant1	2402	1.159	2401.4226	2402.5814	2400 to 2483.5	PASS
		2480	1.159	2479.4226	2480.5814	2400 to 2483.5	PASS
2DH5	Ant1	2402	1.195	2401.4166	2402.6114	2400 to 2483.5	PASS
		2480	1.199	2479.4166	2480.6154	2400 to 2483.5	PASS

DH1_Ant1_2402



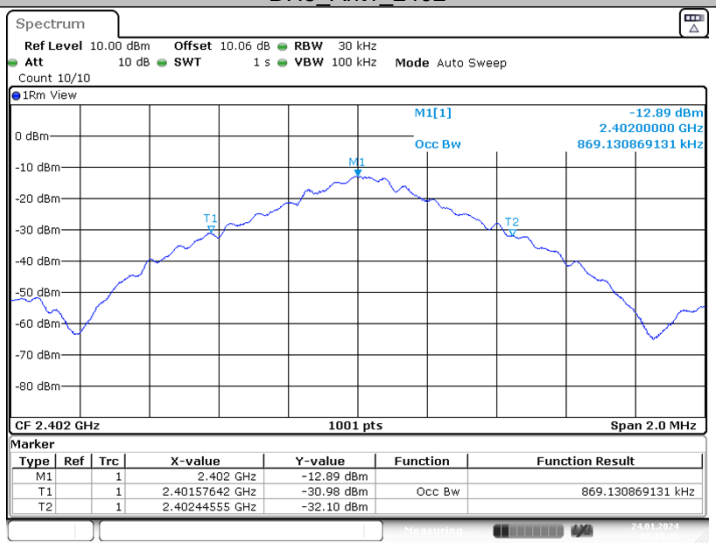
Date: 24.JAN.2024 10:14:57

DH1_Ant1_2480



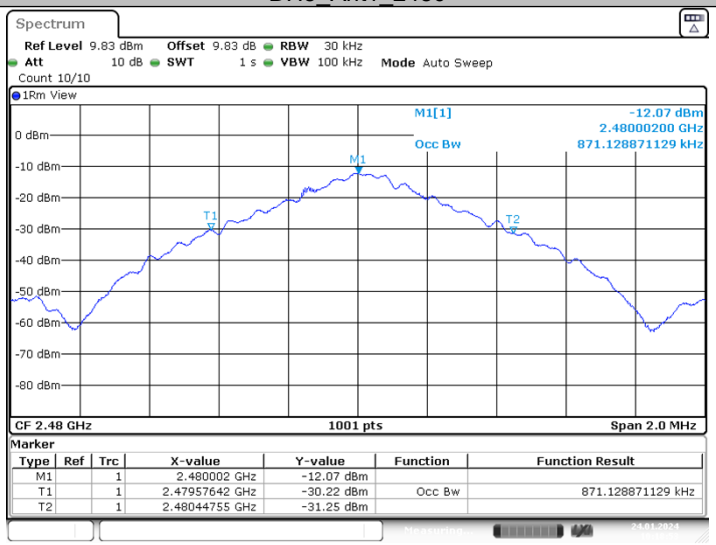
Date: 24.JAN.2024 10:18:28

DH5_Ant1_2402



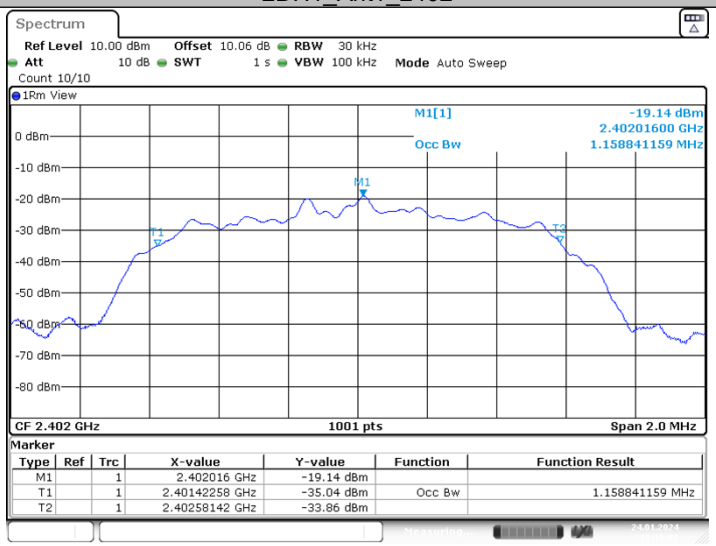
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DH5_Ant1_2480



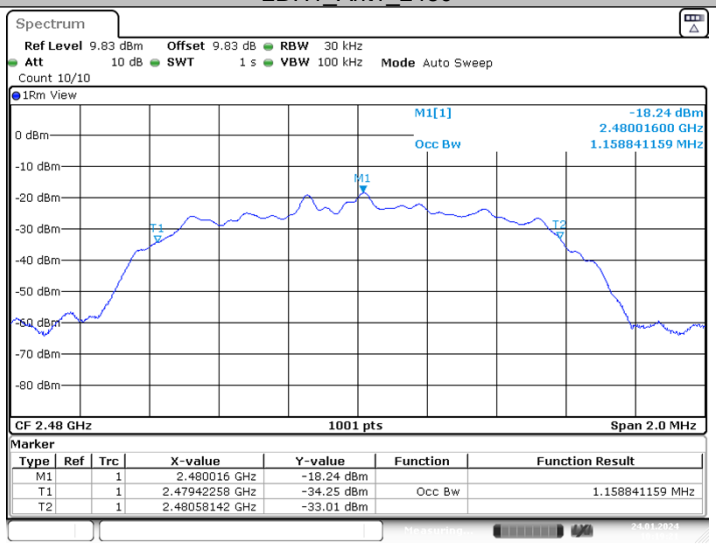
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2DH1_Ant1_2402



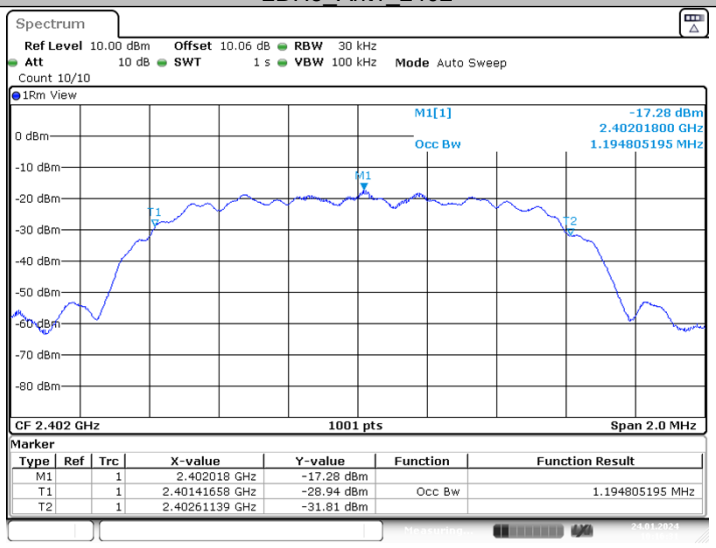
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2DH1_Ant1_2480



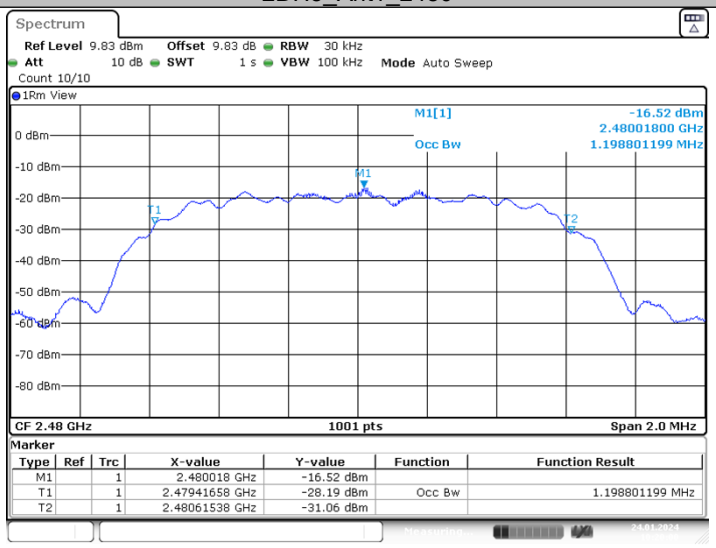
Date: 24.JAN.2024 10:19:21

2DH5_Ant1_2402



Date: 24.JAN.2024 10:16:32

2DH5_Ant1_2480



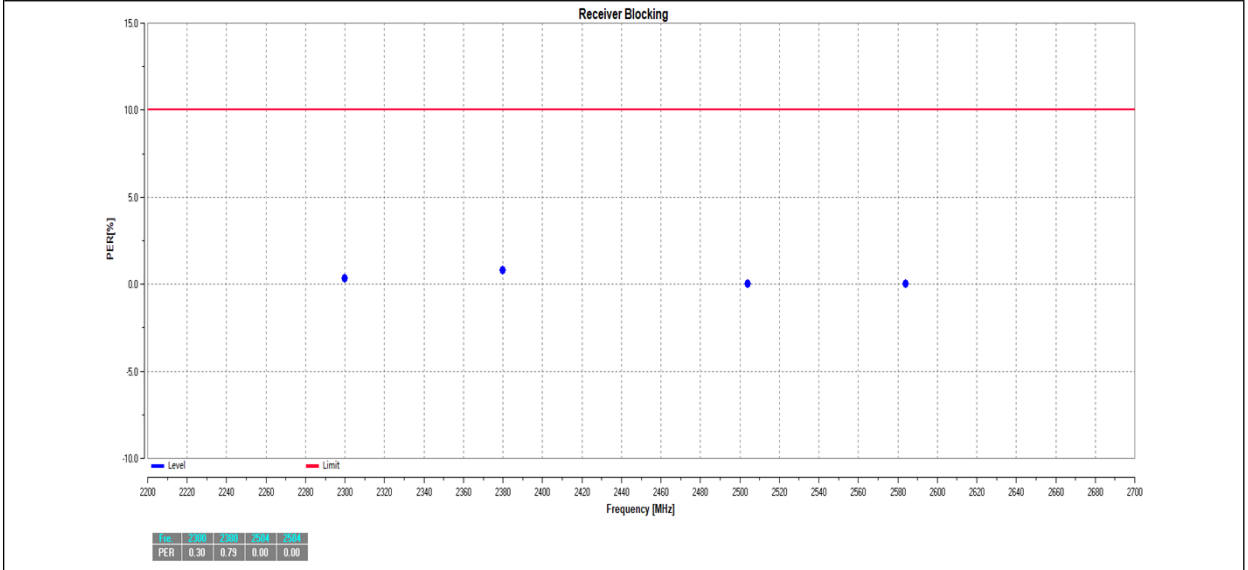
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7 Appendix A.7: Receiver Blocking

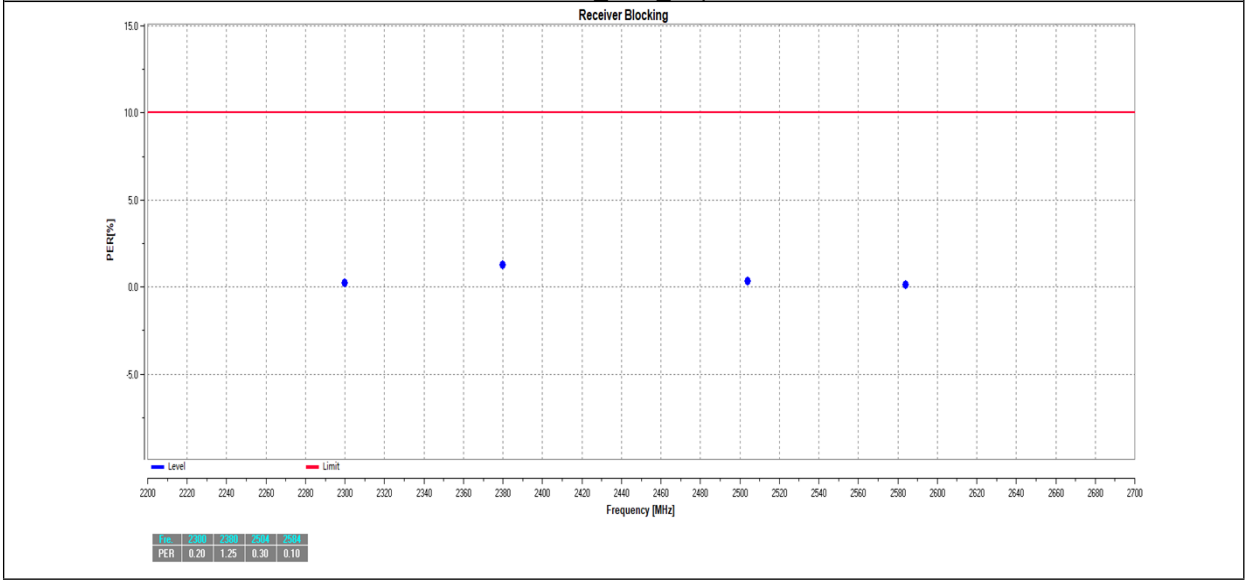
Note: The EUT is category 3 receiver.

Test Mode	Antenna	Channel	Pmin [dBm]	Wanted signal [dBm]	Freq. [MHz]	CW [dBm]	PER [%]	Limit [%]	Verdict
DH1	Ant1	Hop	---	-57.13	2300	-31.41	0.30	≤10	PASS
			---	-57.13	2380	-31.41	0.79	≤10	PASS
			---	-57.13	2504	-31.41	0.00	≤10	PASS
			---	-57.13	2584	-31.41	0.00	≤10	PASS
2DH1	Ant1	Hop	---	-55.77	2300	-31.41	0.20	≤10	PASS
			---	-55.77	2380	-31.41	1.25	≤10	PASS
			---	-55.77	2504	-31.41	0.30	≤10	PASS
			---	-55.77	2584	-31.41	0.10	≤10	PASS

DH1_Ant1_Hop



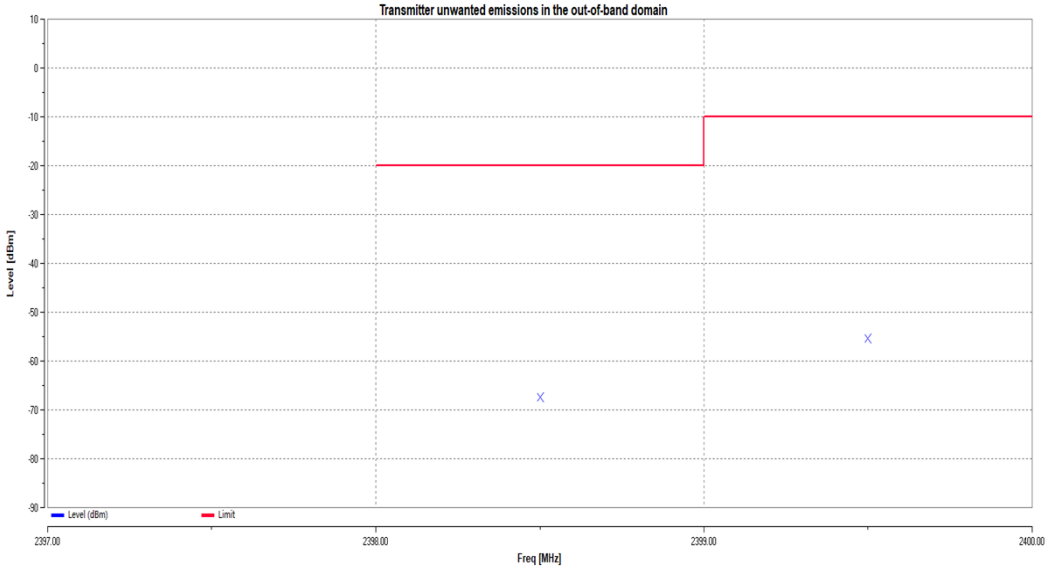
2DH1_Ant1_Hop



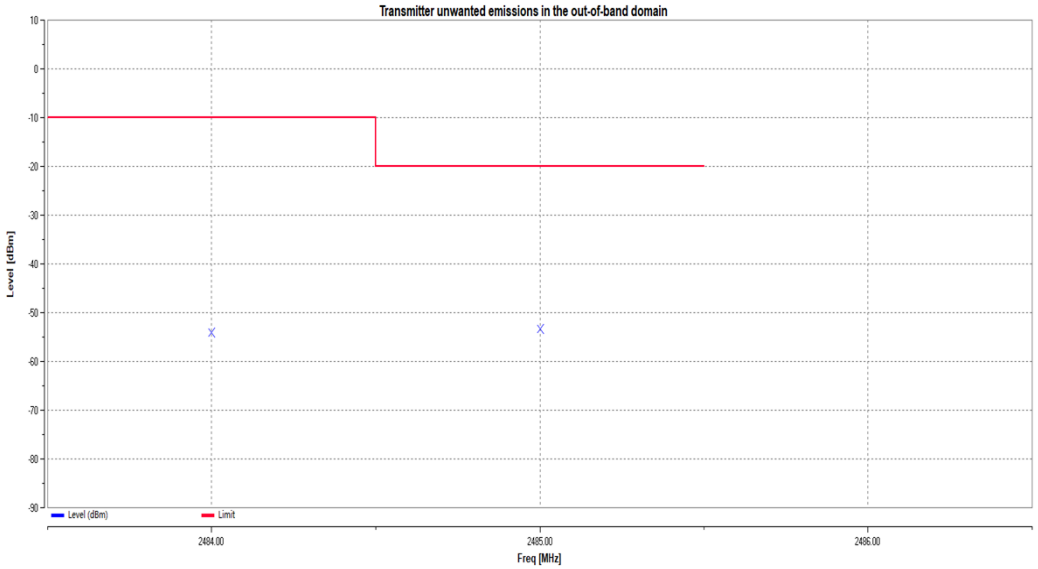
8 Appendix A.8 : Tx unwanted emissions in the out-of-band domain

Test Mode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	2398.5	-67.40	-20.00	PASS
			2399.5	-55.42	-10.00	PASS
			2484	-54.01	-10.00	PASS
			2485	-53.33	-20.00	PASS
2DH5	Ant1	Hop	2398.102	-47.42	-20.00	PASS
			2398.301	-50.98	-20.00	PASS
			2399.301	-42.22	-10.00	PASS
			2399.5	-42.25	-10.00	PASS
			2484	-51.14	-10.00	PASS
			2484.199	-50.78	-10.00	PASS
			2485.199	-51.87	-20.00	PASS
			2485.398	-51.09	-20.00	PASS

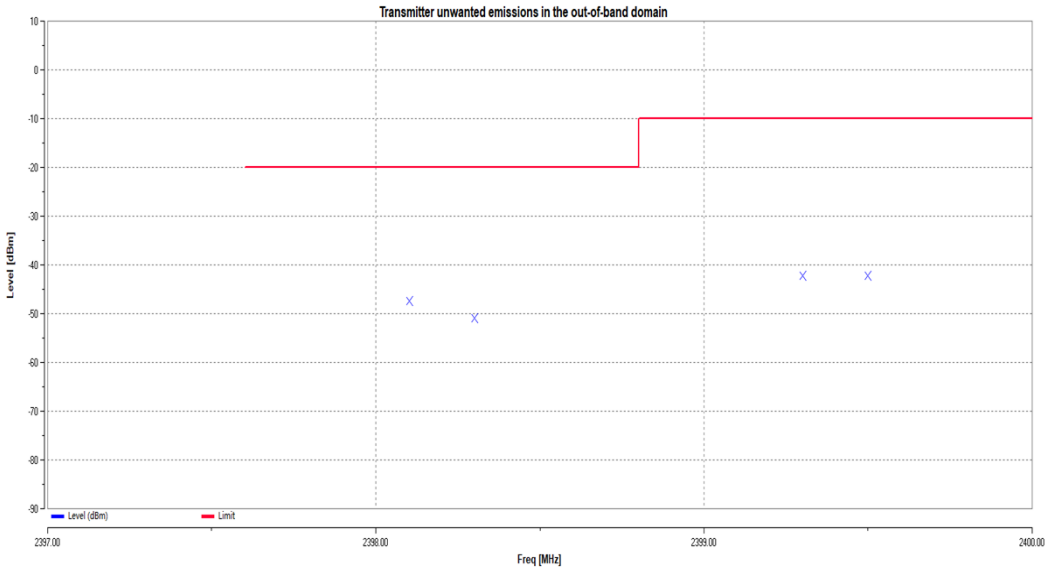
DH5_Ant1_Hop_2400MHz-2BW to 2400MHz



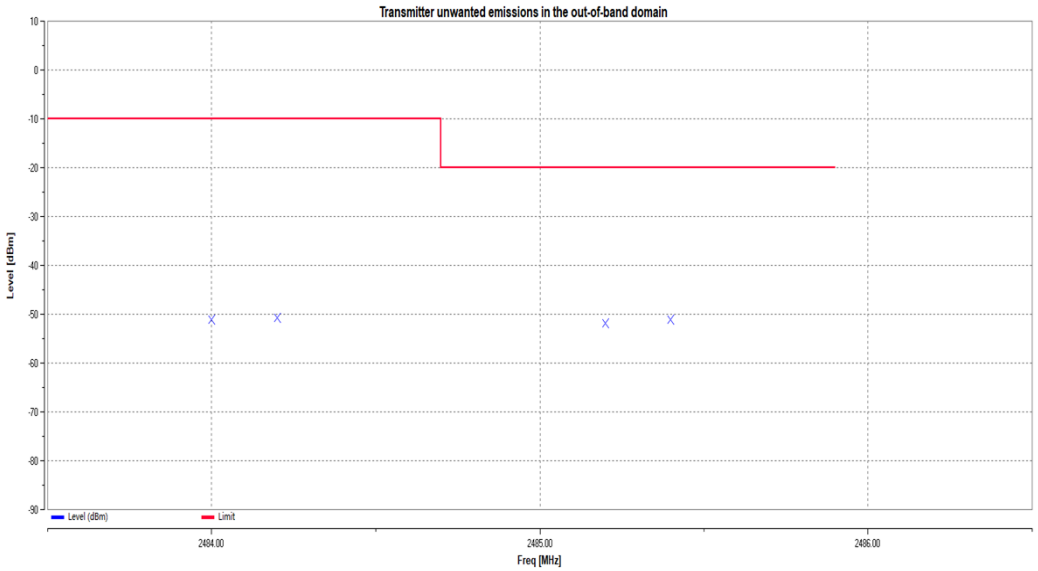
DH5_Ant1_Hop_2483.5MHz to 2483.5MHz+2BW



2DH5_Ant1_Hop_2400MHz-2BW to 2400MHz



2DH5_Ant1_Hop_2483.5MHz to 2483.5MHz+2BW

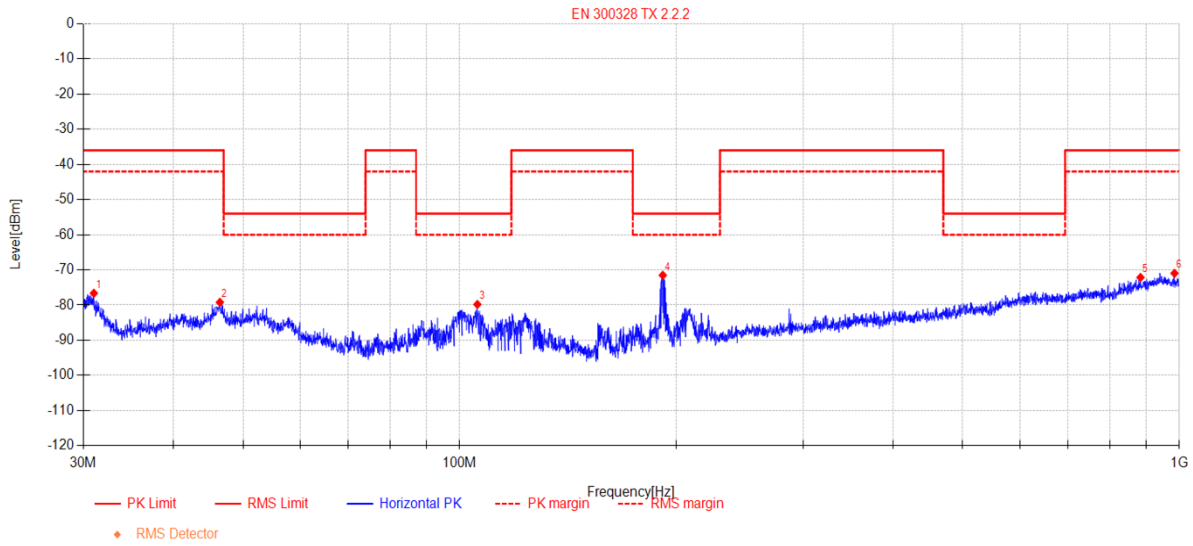


9 Appendix A.9: Test Plots of Transmitter Unwanted Emission in the spurious domain

Note: The EUT without antenna connector.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\1		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



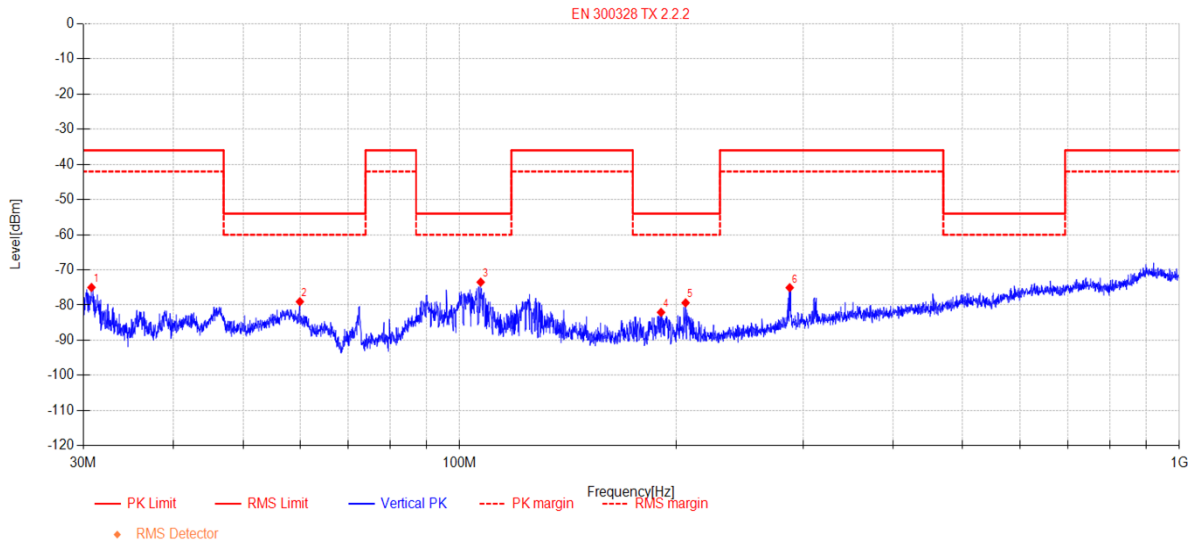
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	31.03	36.78	-113.41	-76.63	-36.00	40.63	PK	Horizontal	ERP
2	46.43	31.64	-110.83	-79.19	-36.00	43.19	PK	Horizontal	ERP
3	105.84	35.92	-115.72	-79.80	-54.00	25.80	PK	Horizontal	ERP
4	191.54	44.32	-115.84	-71.52	-54.00	17.52	PK	Horizontal	ERP
5	883.29	27.58	-99.72	-72.14	-36.00	36.14	PK	Horizontal	ERP
6	984.69	26.98	-97.95	-70.97	-36.00	34.97	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\2		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



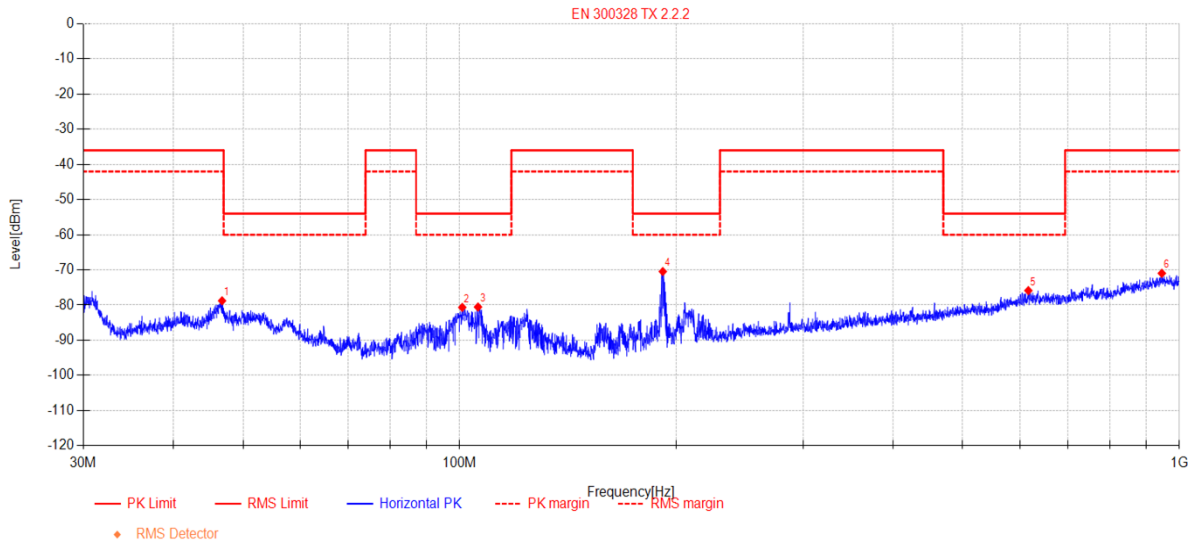
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	30.79	42.10	-117.08	-74.98	-36.00	38.98	PK	Vertical	ERP
2	59.98	36.08	-115.11	-79.03	-54.00	25.03	PK	Vertical	ERP
3	106.96	37.39	-110.87	-73.48	-54.00	19.48	PK	Vertical	ERP
4	190.47	31.62	-113.69	-82.07	-54.00	28.07	PK	Vertical	ERP
5	206.03	34.11	-113.46	-79.35	-54.00	25.35	PK	Vertical	ERP
6	287.46	34.85	-109.91	-75.06	-36.00	39.06	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\3		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



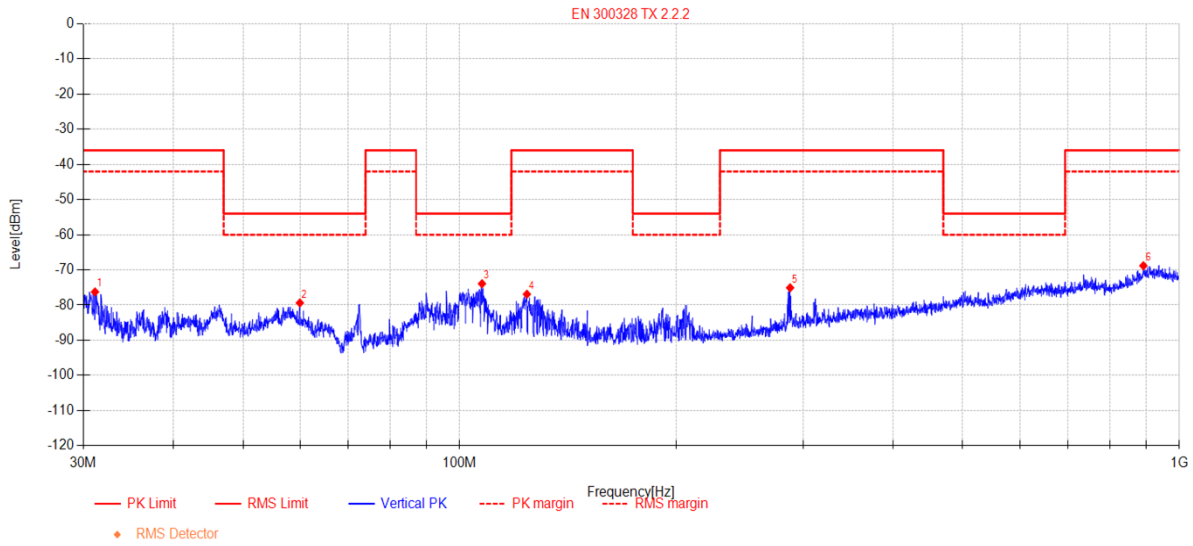
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	46.76	32.01	-110.78	-78.77	-36.00	42.77	PK	Horizontal	ERP
2	100.84	34.77	-115.42	-80.65	-54.00	26.65	PK	Horizontal	ERP
3	106.06	35.18	-115.73	-80.55	-54.00	26.55	PK	Horizontal	ERP
4	191.54	45.38	-115.84	-70.46	-54.00	16.46	PK	Horizontal	ERP
5	616.86	27.77	-103.66	-75.89	-54.00	21.89	PK	Horizontal	ERP
6	945.45	26.77	-97.74	-70.97	-36.00	34.97	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\4		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



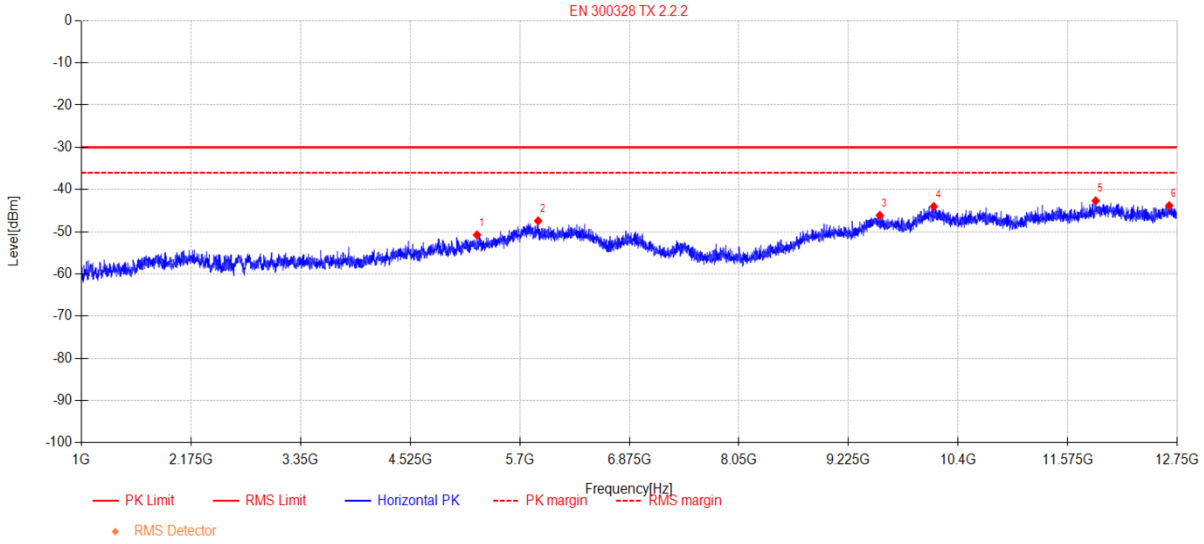
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	31.14	40.80	-117.05	-76.25	-36.00	40.25	PK	Vertical	ERP
2	59.98	35.73	-115.11	-79.38	-54.00	25.38	PK	Vertical	ERP
3	107.41	36.98	-110.90	-73.92	-54.00	19.92	PK	Vertical	ERP
4	124.01	35.14	-112.05	-76.91	-36.00	40.91	PK	Vertical	ERP
5	287.86	34.81	-109.89	-75.08	-36.00	39.08	PK	Vertical	ERP
6	891.37	27.37	-96.18	-68.81	-36.00	32.81	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\1		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



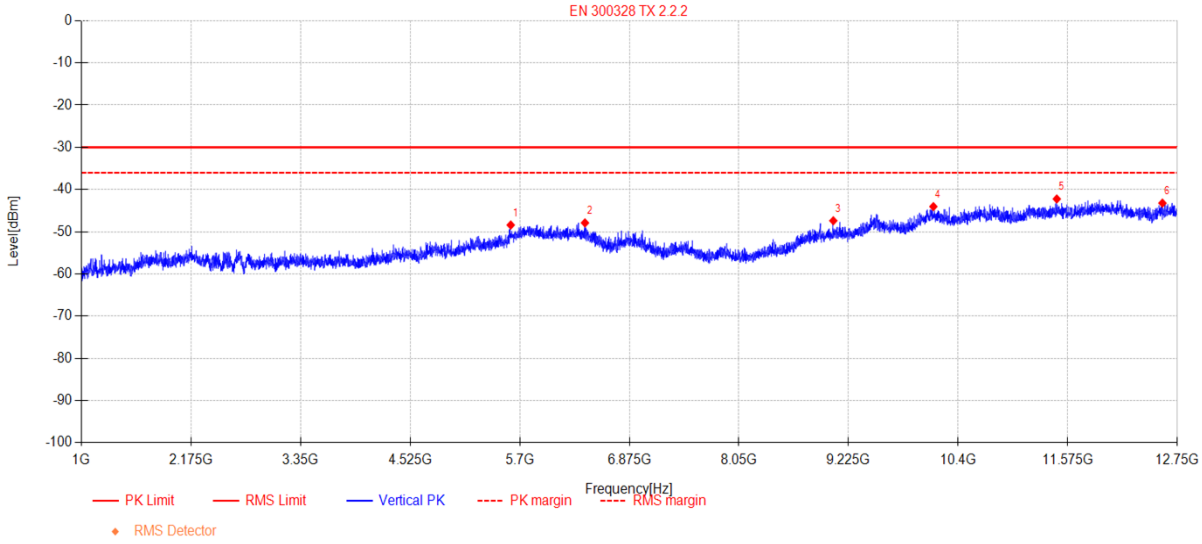
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	5241.75	44.00	-94.75	-50.75	-30.00	20.75	PK	Horizontal	EIRP
2	5897.40	43.90	-91.33	-47.43	-30.00	17.43	PK	Horizontal	EIRP
3	9559.88	40.60	-86.74	-46.14	-30.00	16.14	PK	Horizontal	EIRP
4	10139.15	41.90	-85.92	-44.02	-30.00	14.02	PK	Horizontal	EIRP
5	11874.63	43.12	-85.79	-42.67	-30.00	12.67	PK	Horizontal	EIRP
6	12663.05	42.61	-86.44	-43.83	-30.00	13.83	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\2		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



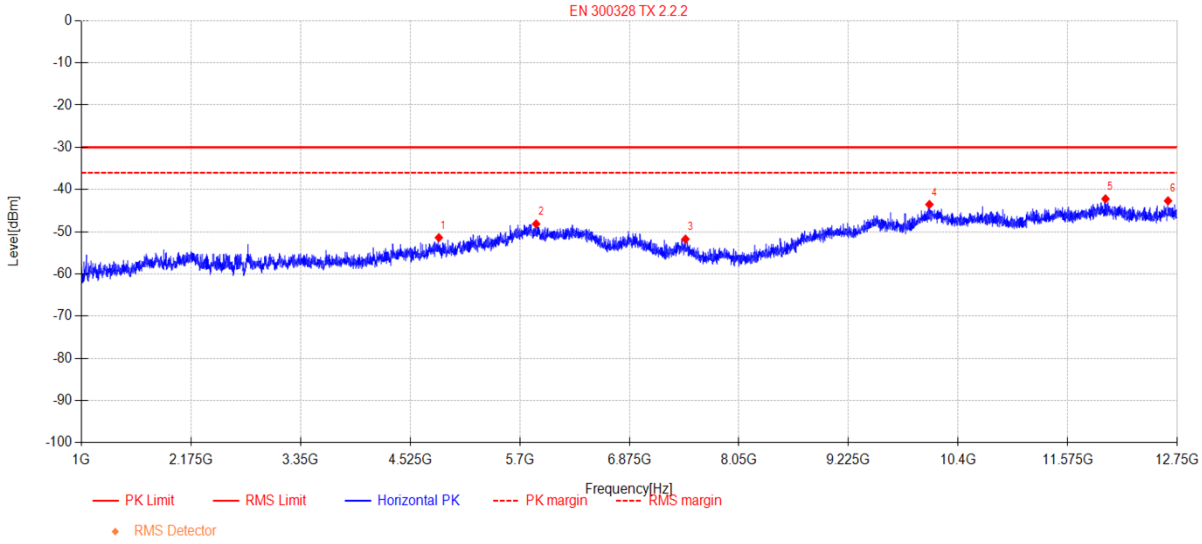
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	5603.65	44.62	-93.03	-48.41	-30.00	18.41	PK	Vertical	EIRP
2	6399.13	44.01	-91.91	-47.90	-30.00	17.90	PK	Vertical	EIRP
3	9061.68	40.75	-88.15	-47.40	-30.00	17.40	PK	Vertical	EIRP
4	10134.45	42.13	-86.17	-44.04	-30.00	14.04	PK	Vertical	EIRP
5	11457.50	42.98	-85.22	-42.24	-30.00	12.24	PK	Vertical	EIRP
6	12590.20	42.80	-86.02	-43.22	-30.00	13.22	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\3		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



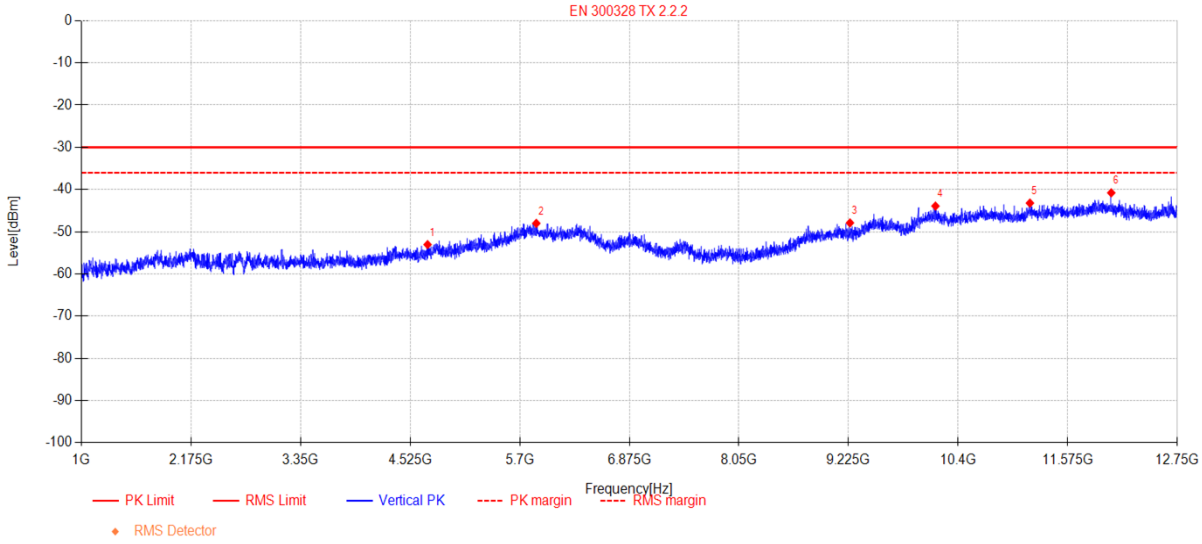
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4832.85	45.37	-96.76	-51.39	-30.00	21.39	PK	Horizontal	EIRP
2	5876.25	43.28	-91.44	-48.16	-30.00	18.16	PK	Horizontal	EIRP
3	7476.60	42.53	-94.28	-51.75	-30.00	21.75	PK	Horizontal	EIRP
4	10092.15	42.34	-85.88	-43.54	-30.00	13.54	PK	Horizontal	EIRP
5	11979.20	43.48	-85.69	-42.21	-30.00	12.21	PK	Horizontal	EIRP
6	12650.13	43.73	-86.42	-42.69	-30.00	12.69	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\4		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4711.83	44.63	-97.68	-53.05	-30.00	23.05	PK	Vertical	EIRP
2	5877.43	43.44	-91.46	-48.02	-30.00	18.02	PK	Vertical	EIRP
3	9240.28	39.89	-87.79	-47.90	-30.00	17.90	PK	Vertical	EIRP
4	10156.78	42.23	-86.15	-43.92	-30.00	13.92	PK	Vertical	EIRP
5	11169.63	42.05	-85.26	-43.21	-30.00	13.21	PK	Vertical	EIRP
6	12041.48	44.42	-85.20	-40.78	-30.00	10.78	PK	Vertical	EIRP

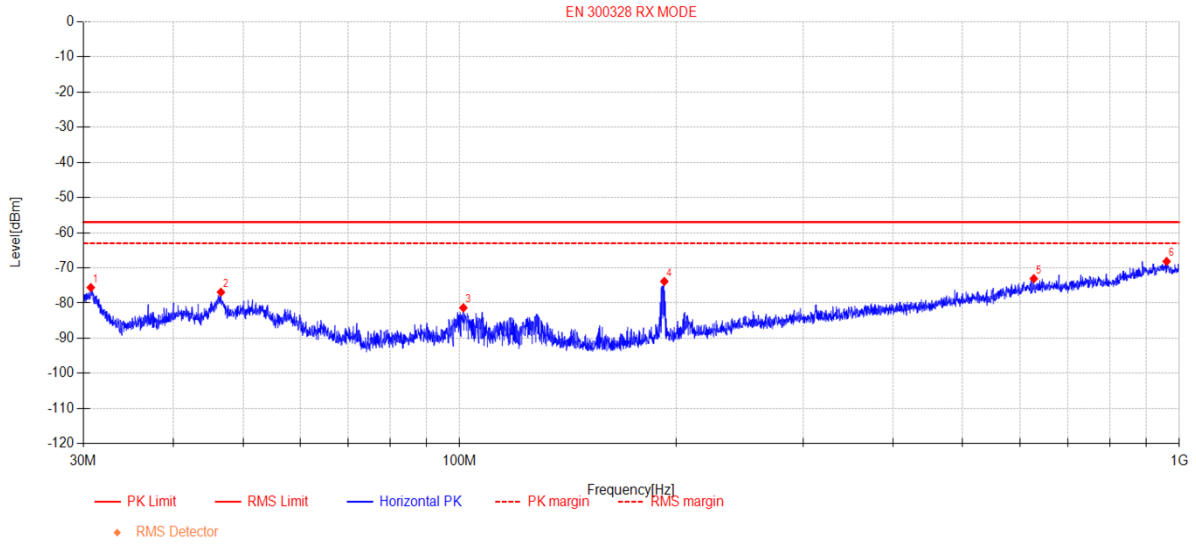
Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

10 Appendix A.10: Test Plots of Receiver Spurious Emission

Note: The EUT without antenna connector.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\5		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



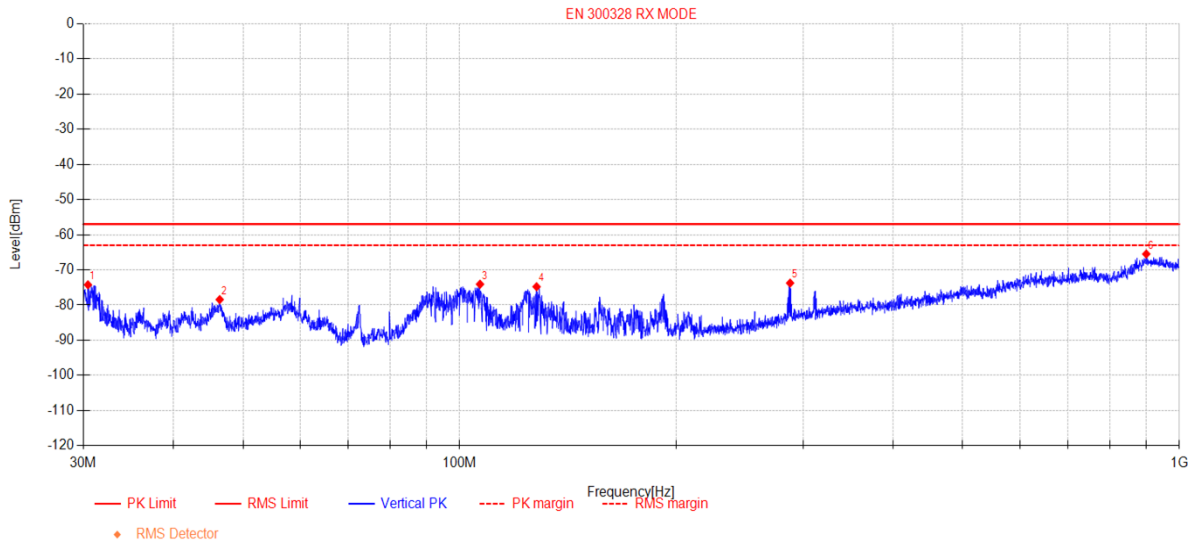
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	30.72	36.57	-112.16	-75.59	-57.00	18.59	PK	Horizontal	ERP
2	46.60	32.35	-109.27	-76.92	-57.00	19.92	PK	Horizontal	ERP
3	101.19	32.75	-114.09	-81.34	-57.00	24.34	PK	Horizontal	ERP
4	192.48	40.30	-114.14	-73.84	-57.00	16.84	PK	Horizontal	ERP
5	627.77	27.66	-100.72	-73.06	-57.00	16.06	PK	Horizontal	ERP
6	960.15	26.47	-94.62	-68.15	-57.00	11.15	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\6		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



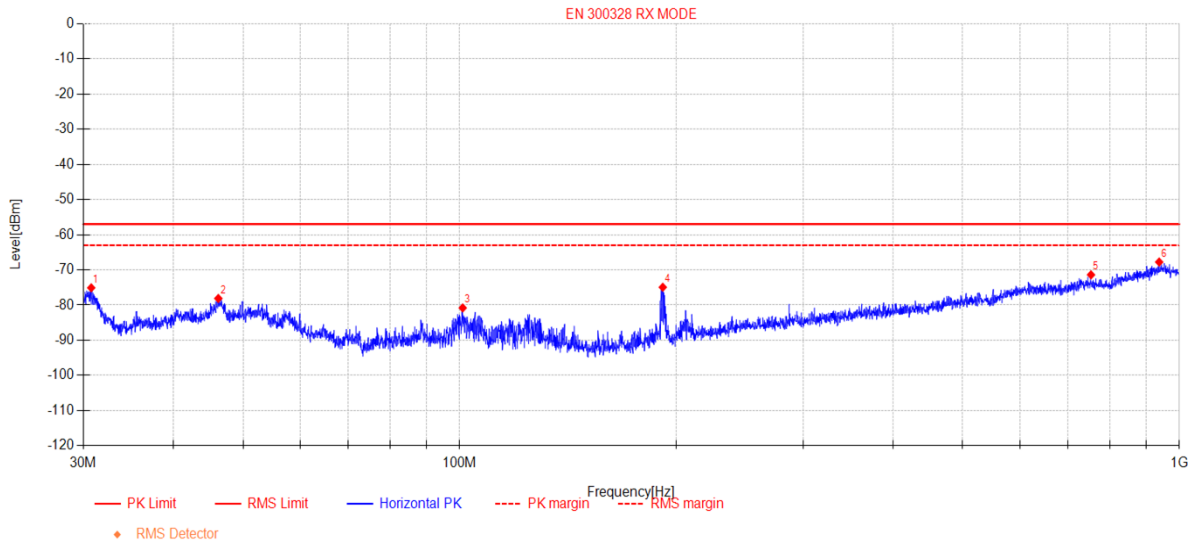
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	30.45	41.58	-115.81	-74.23	-57.00	17.23	PK	Vertical	ERP
2	46.40	35.54	-113.97	-78.43	-57.00	21.43	PK	Vertical	ERP
3	106.73	35.44	-109.51	-74.07	-57.00	17.07	PK	Vertical	ERP
4	127.90	36.15	-110.93	-74.78	-57.00	17.78	PK	Vertical	ERP
5	287.86	34.20	-107.94	-73.74	-57.00	16.74	PK	Vertical	ERP
6	899.54	26.94	-92.42	-65.48	-57.00	8.48	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\7		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



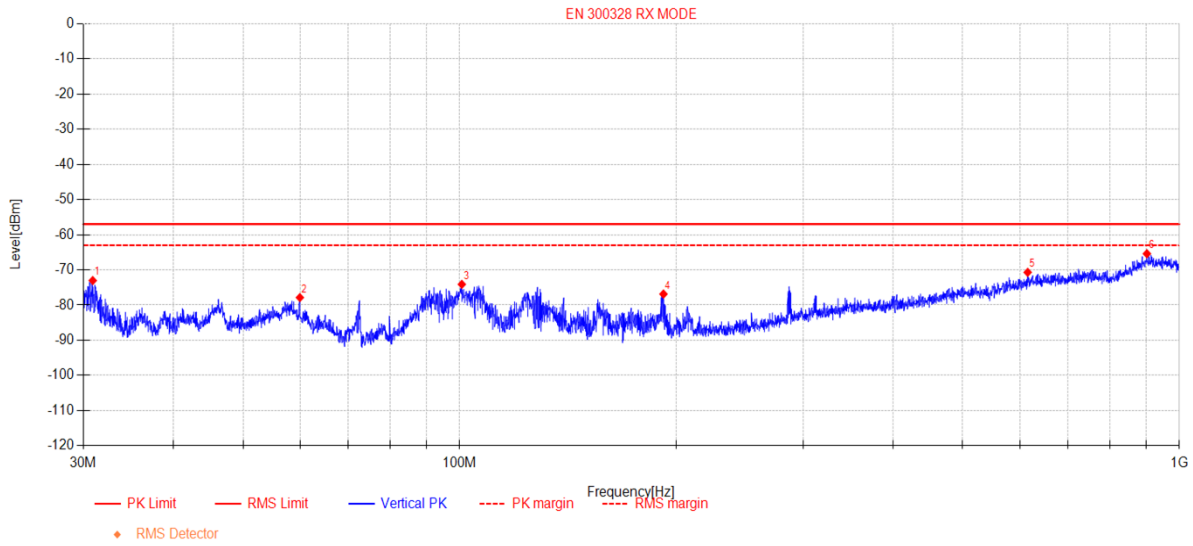
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	30.77	37.06	-112.15	-75.09	-57.00	18.09	PK	Horizontal	ERP
2	46.21	31.23	-109.34	-78.11	-57.00	21.11	PK	Horizontal	ERP
3	100.98	33.28	-114.09	-80.81	-57.00	23.81	PK	Horizontal	ERP
4	191.54	39.28	-114.21	-74.93	-57.00	17.93	PK	Horizontal	ERP
5	753.84	27.72	-99.11	-71.39	-57.00	14.39	PK	Horizontal	ERP
6	937.53	27.14	-94.90	-67.76	-57.00	10.76	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\8		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



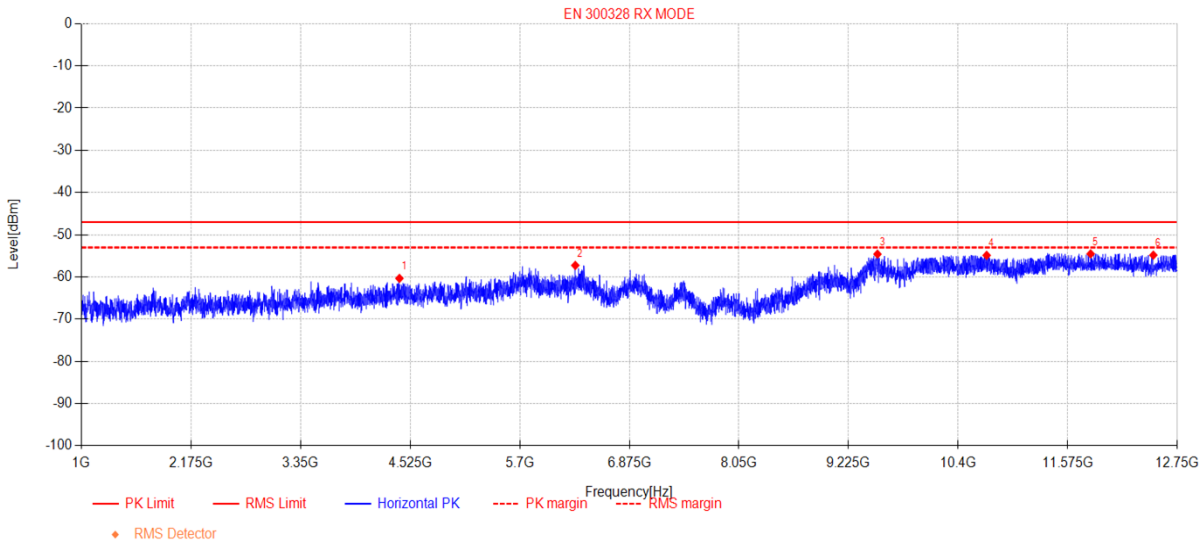
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	30.92	42.75	-115.77	-73.02	-57.00	16.02	PK	Vertical	ERP
2	59.98	35.61	-113.47	-77.86	-57.00	20.86	PK	Vertical	ERP
3	100.70	35.00	-109.10	-74.10	-57.00	17.10	PK	Vertical	ERP
4	191.94	35.18	-112.04	-76.86	-57.00	19.86	PK	Vertical	ERP
5	615.57	27.90	-98.59	-70.69	-57.00	13.69	PK	Vertical	ERP
6	901.43	27.00	-92.40	-65.40	-57.00	8.40	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\5		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



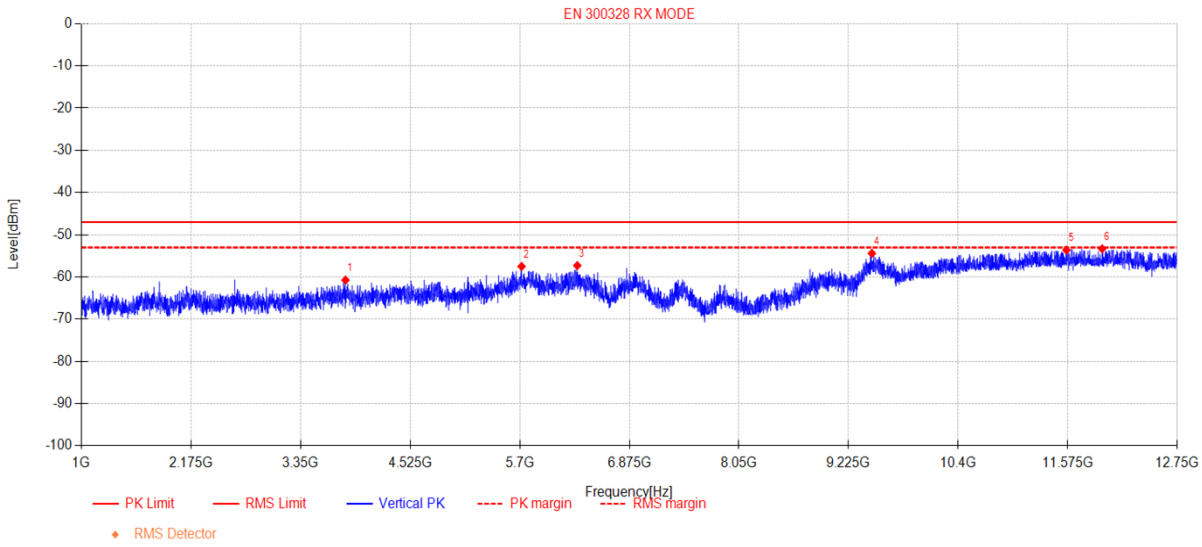
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4409.85	39.80	-100.14	-60.34	-47.00	13.34	PK	Horizontal	EIRP
2	6295.73	36.94	-94.20	-57.26	-47.00	10.26	PK	Horizontal	EIRP
3	9535.20	33.13	-87.72	-54.59	-47.00	7.59	PK	Horizontal	EIRP
4	10705.50	32.19	-87.07	-54.88	-47.00	7.88	PK	Horizontal	EIRP
5	11820.58	32.33	-86.86	-54.53	-47.00	7.53	PK	Horizontal	EIRP
6	12492.68	32.39	-87.22	-54.83	-47.00	7.83	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\6		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



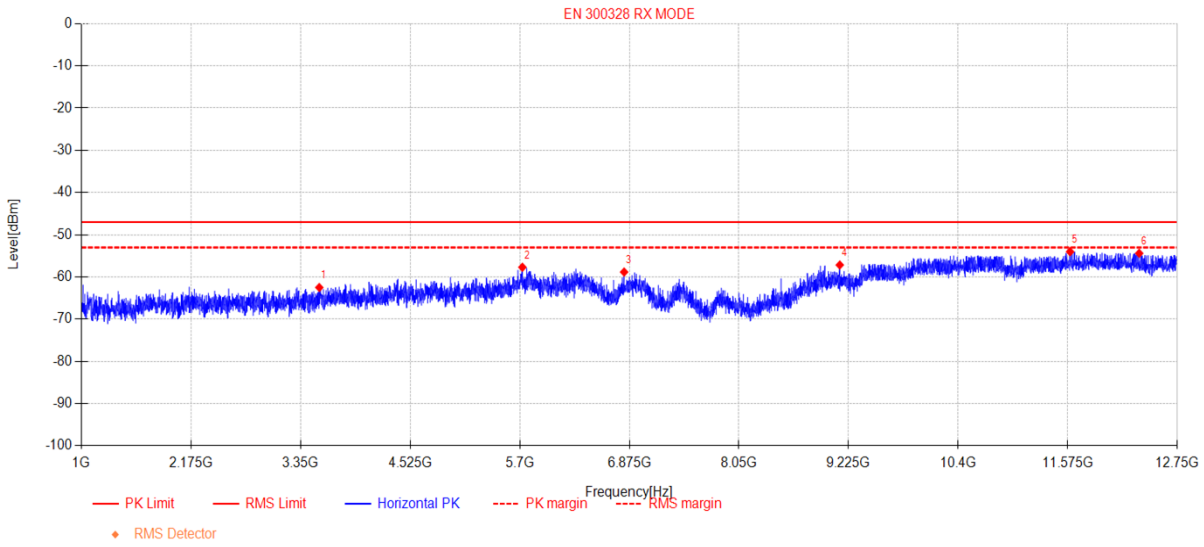
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3831.75	40.97	-101.72	-60.75	-47.00	13.75	PK	Vertical	EIRP
2	5719.98	37.88	-95.39	-57.51	-47.00	10.51	PK	Vertical	EIRP
3	6316.88	36.94	-94.24	-57.30	-47.00	10.30	PK	Vertical	EIRP
4	9475.28	33.89	-88.30	-54.41	-47.00	7.41	PK	Vertical	EIRP
5	11560.90	32.47	-86.11	-53.64	-47.00	6.64	PK	Vertical	EIRP
6	11943.95	32.86	-86.20	-53.34	-47.00	6.34	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\7		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



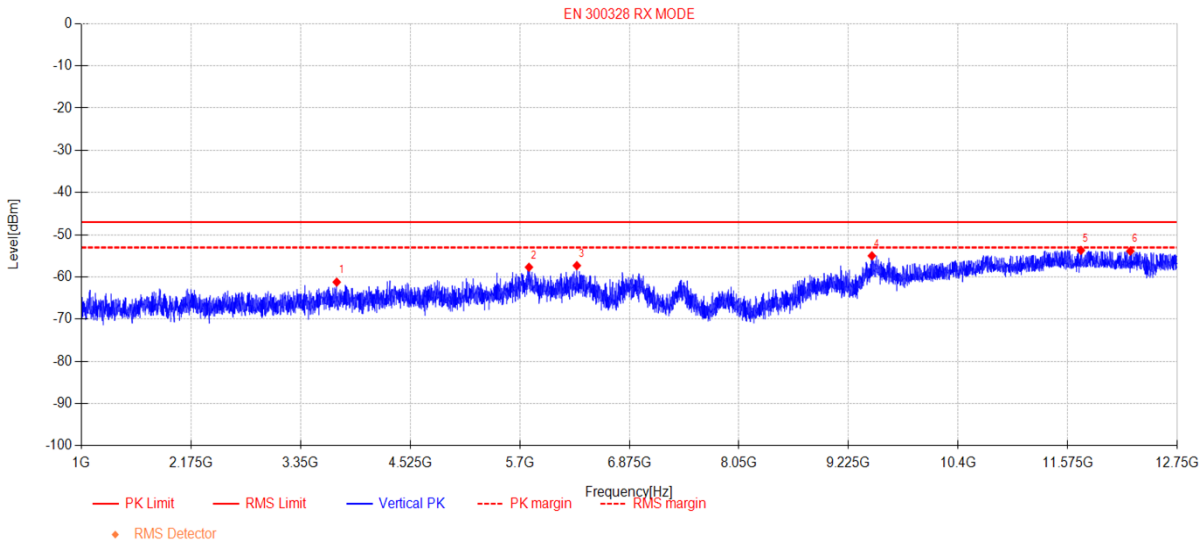
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3550.93	39.76	-102.26	-62.50	-47.00	15.50	PK	Horizontal	EIRP
2	5728.20	37.54	-95.24	-57.70	-47.00	10.70	PK	Horizontal	EIRP
3	6818.60	35.59	-94.43	-58.84	-47.00	11.84	PK	Horizontal	EIRP
4	9131.00	31.64	-88.81	-57.17	-47.00	10.17	PK	Horizontal	EIRP
5	11599.68	32.96	-86.98	-54.02	-47.00	7.02	PK	Horizontal	EIRP
6	12341.10	32.67	-87.07	-54.40	-47.00	7.40	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	DH5 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\8		
Memo:	Sample Number:S24011017-07 Power Setting:10		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3737.75	40.67	-101.90	-61.23	-47.00	14.23	PK	Vertical	EIRP
2	5798.70	37.31	-95.01	-57.70	-47.00	10.70	PK	Vertical	EIRP
3	6312.18	36.91	-94.23	-57.32	-47.00	10.32	PK	Vertical	EIRP
4	9475.28	33.31	-88.30	-54.99	-47.00	7.99	PK	Vertical	EIRP
5	11716.00	32.45	-86.15	-53.70	-47.00	6.70	PK	Vertical	EIRP
6	12245.93	32.67	-86.54	-53.87	-47.00	6.87	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Appendix B

Test Results of Bluetooth Low Energy

Content

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1 Appendix B.1 : RF output power

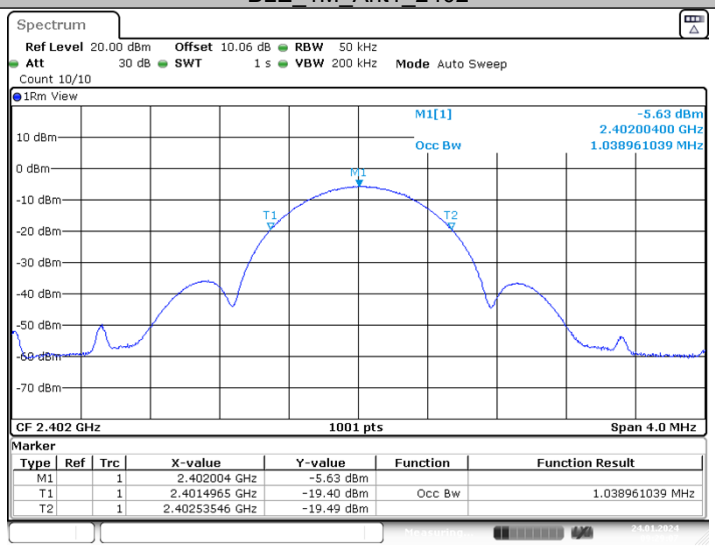
The RF output power is the mean equivalent isotropically radiated power (EIRP) during a transmission burst. Only the worst case for all test modes reported.

Test Condition	Test Mode	Antenna	Frequency [MHz]	Burst Power [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
NTNV	BLE_1M	Ant1	2402	4.36	6.95	20	PASS
			2440	4.33	6.92	20	PASS
			2480	4.33	6.92	20	PASS
	BLE_2M	Ant1	2404	4.42	7.01	20	PASS
			2440	4.39	6.98	20	PASS
			2478	4.41	7.00	20	PASS
LTNV	BLE_1M	Ant1	2402	4.37	6.96	20	PASS
			2440	4.33	6.92	20	PASS
			2480	4.33	6.92	20	PASS
	BLE_2M	Ant1	2404	4.41	7.00	20	PASS
			2440	4.39	6.98	20	PASS
			2478	4.42	7.01	20	PASS
HTNV	BLE_1M	Ant1	2402	4.36	6.95	20	PASS
			2440	4.33	6.92	20	PASS
			2480	4.33	6.92	20	PASS
	BLE_2M	Ant1	2404	4.43	7.02	20	PASS
			2440	4.39	6.98	20	PASS
			2478	4.41	7.00	20	PASS

2 Appendix B.2 : Occupied Channel Bandwidth

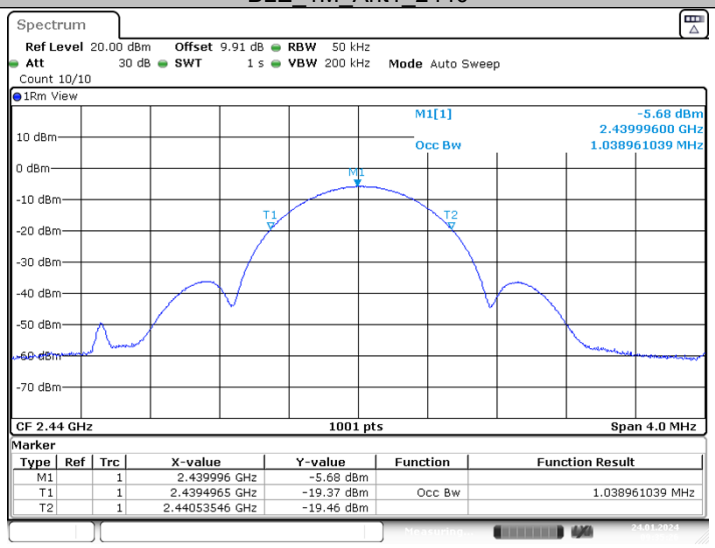
Test Mode	Antenna	Frequency [MHz]	OCB[MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.039	2401.4965	2402.5355	2400 to 2483.5	PASS
		2440	1.039	2439.4965	2440.5355	2400 to 2483.5	PASS
		2480	1.039	2479.4965	2480.5355	2400 to 2483.5	PASS
BLE_2M	Ant1	2404	2.062	2402.9810	2405.0430	2400 to 2483.5	PASS
		2440	2.058	2438.9850	2441.0430	2400 to 2483.5	PASS
		2478	2.062	2476.9810	2479.0430	2400 to 2483.5	PASS

BLE_1M_Ant1_2402



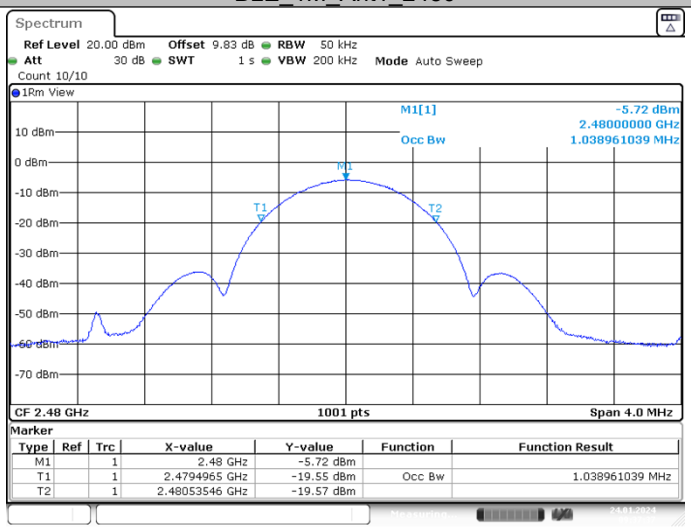
Date: 24.JAN.2024 09:29:07

BLE_1M_Ant1_2440



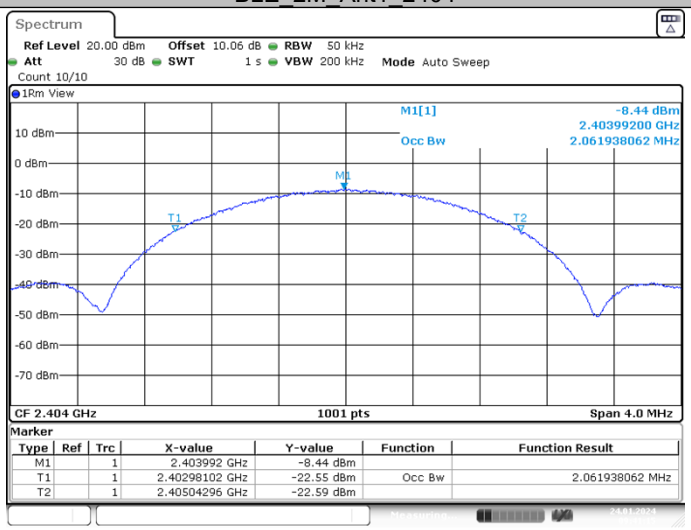
Date: 24.JAN.2024 09:35:27

BLE_1M_Ant1_2480



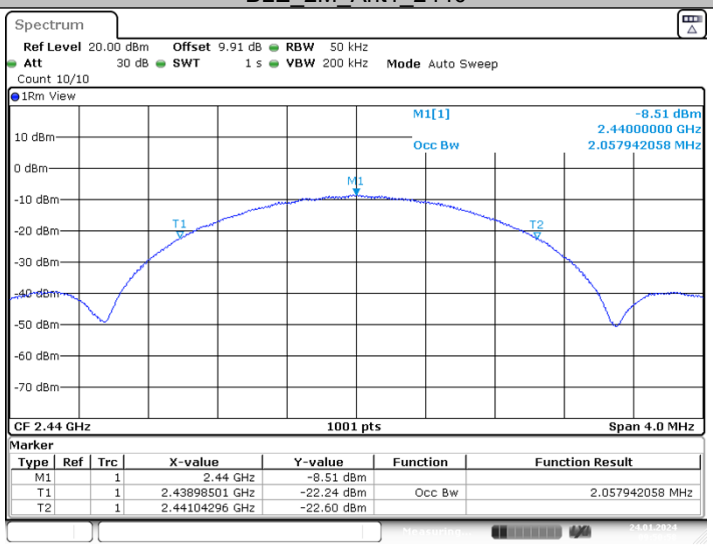
Date: 24.JAN.2024 09:37:38

BLE_2M_Ant1_2404



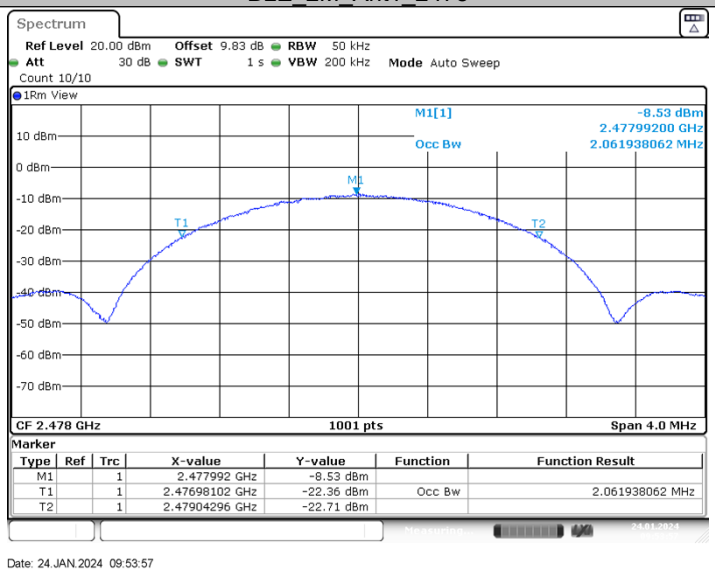
Date: 24.JAN.2024 09:41:15

BLE_2M_Ant1_2440



Date: 24.JAN.2024 09:50:58

BLE_2M_Ant1_2478

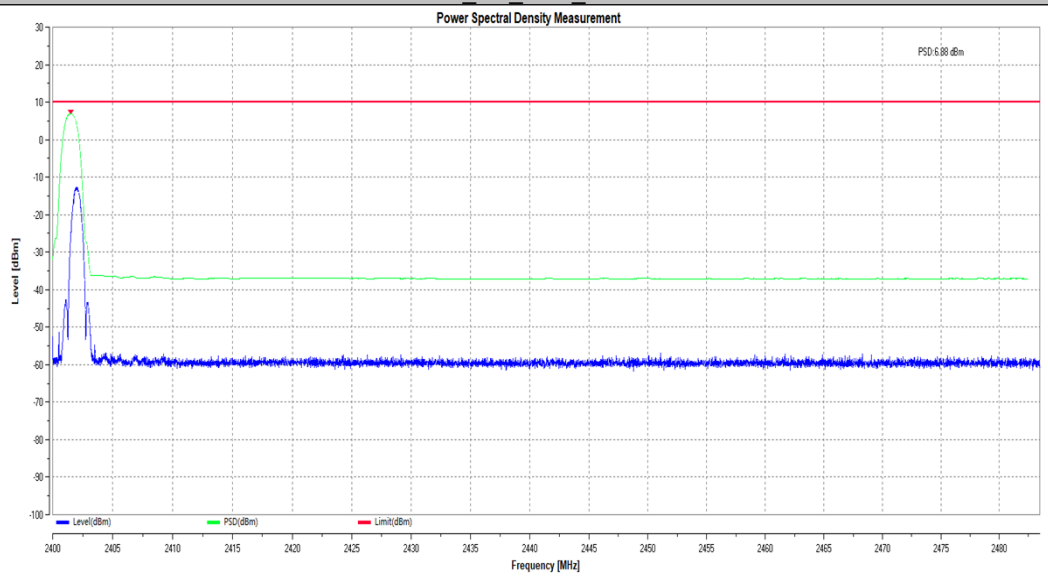


3 Appendix B.3: Power density

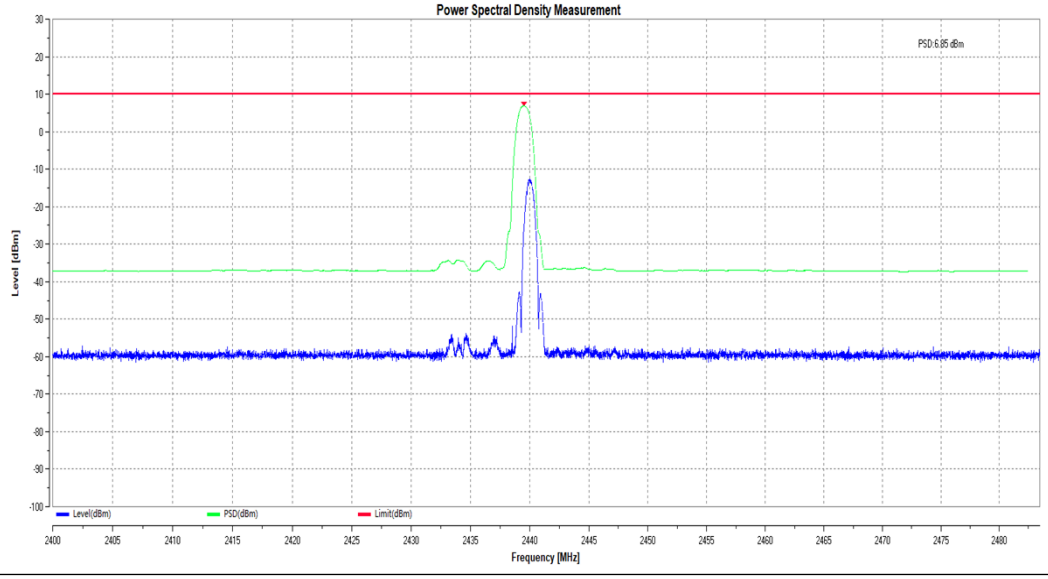
The power density is the mean Equivalent Isotropically Radiated Power (EIRP) density during a transmission burst. Only the worst case for all test modes reported.

Test Mode	Antenna	Frequency [MHz]	EIRP PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
BLE_1M	Ant1	2402	6.88	10	PASS
		2440	6.85	10	PASS
		2480	6.85	10	PASS
BLE_2M	Ant1	2404	5.82	10	PASS
		2440	5.80	10	PASS
		2478	5.82	10	PASS

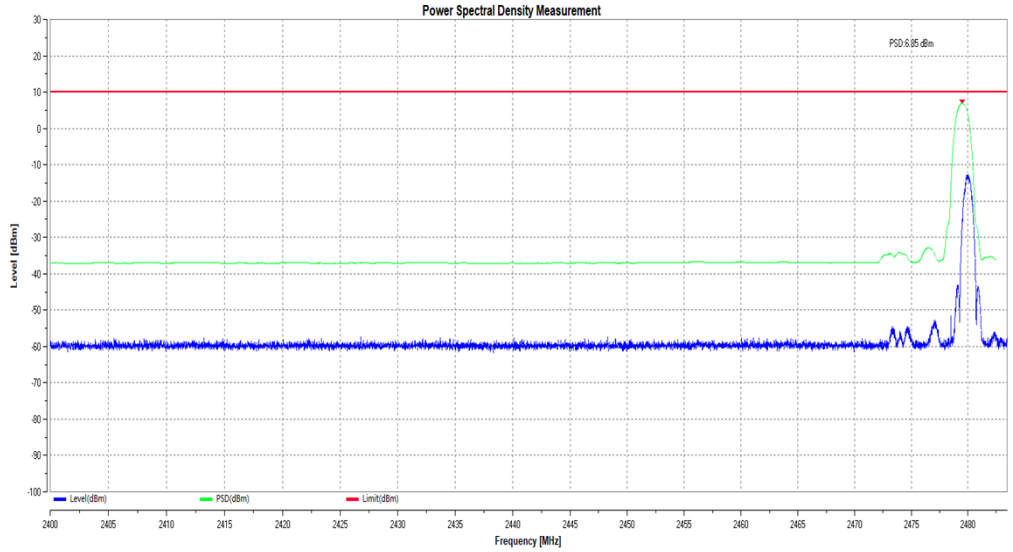
BLE_1M_Ant1_2402



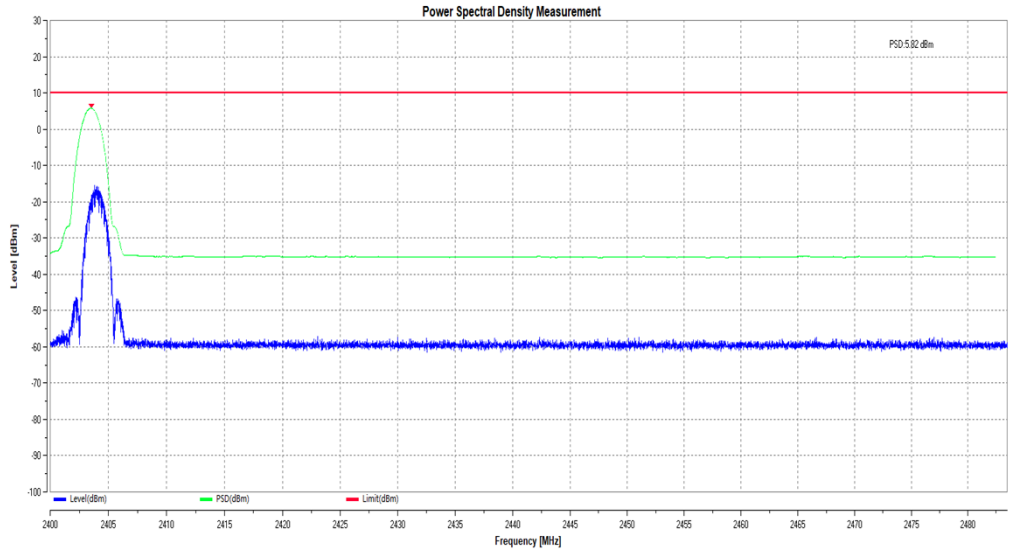
BLE_1M_Ant1_2440



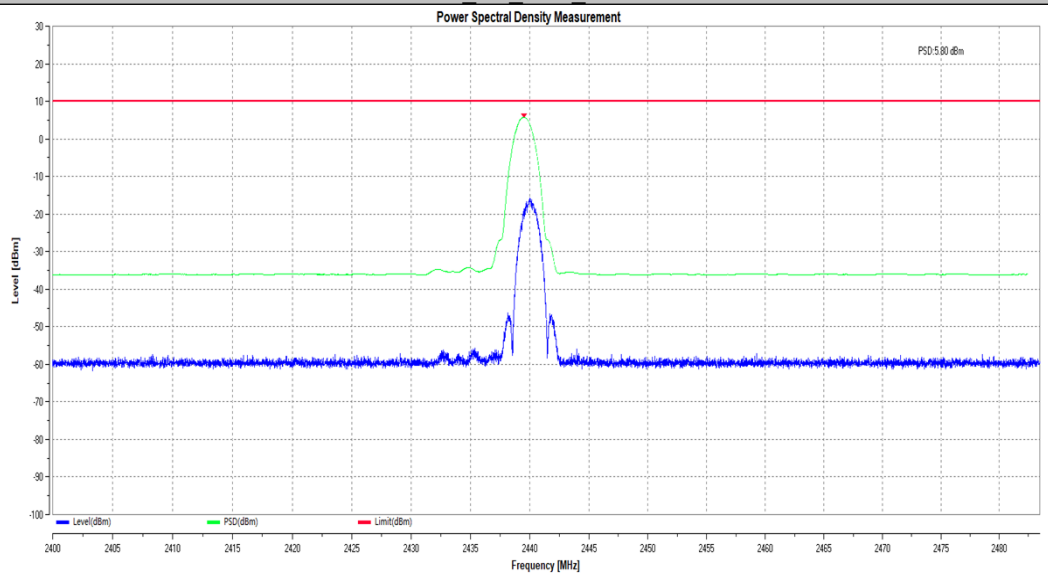
BLE_1M_Ant1_2480



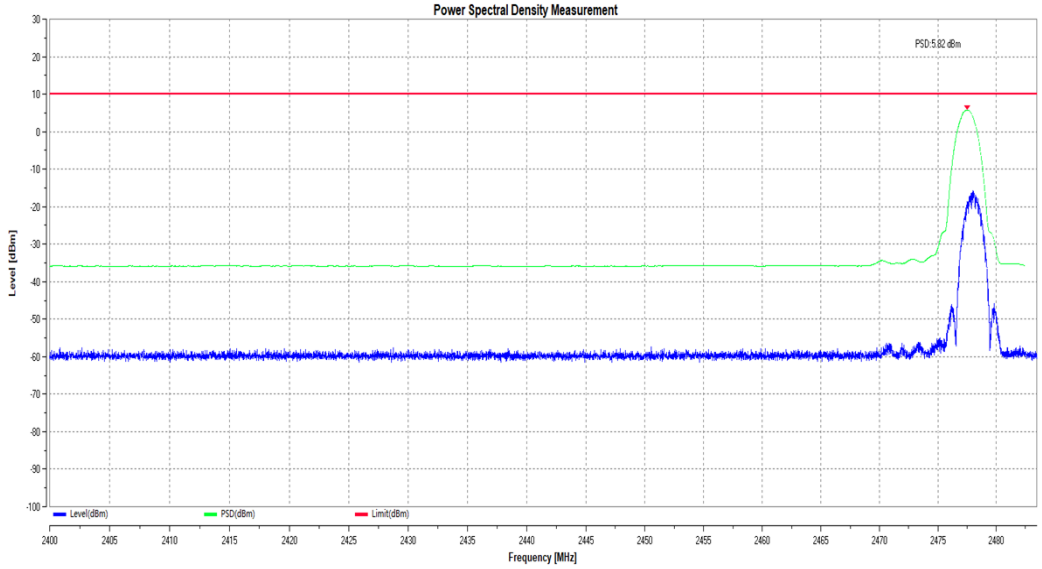
BLE_2M_Ant1_2404



BLE_2M_Ant1_2440



BLE_2M_Ant1_2478

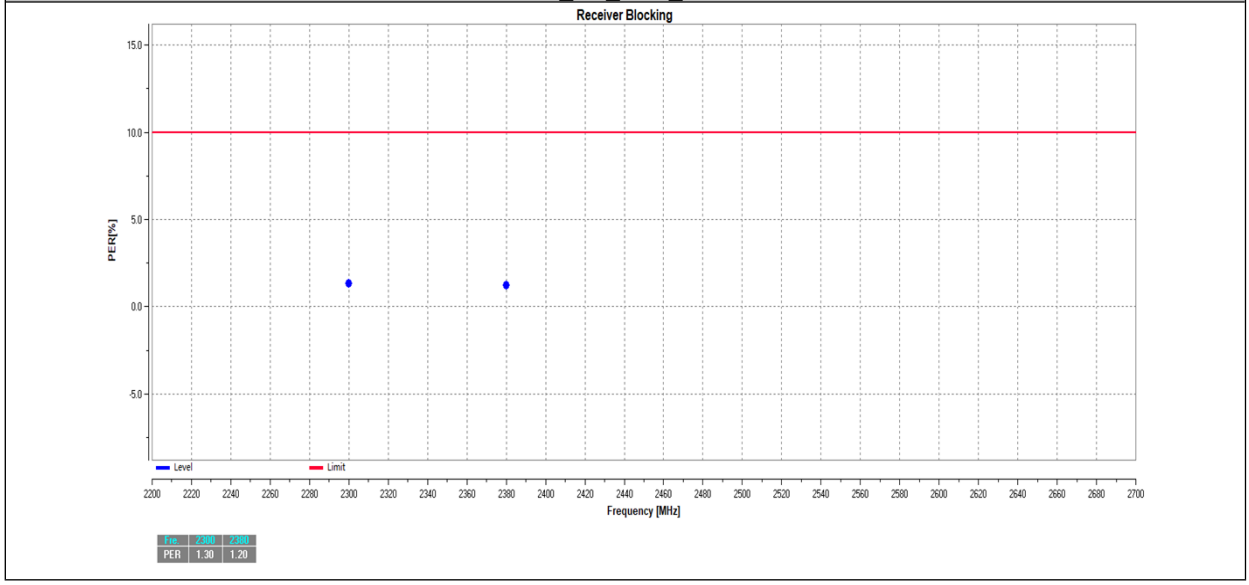


4 Appendix B.4: Receiver Blocking

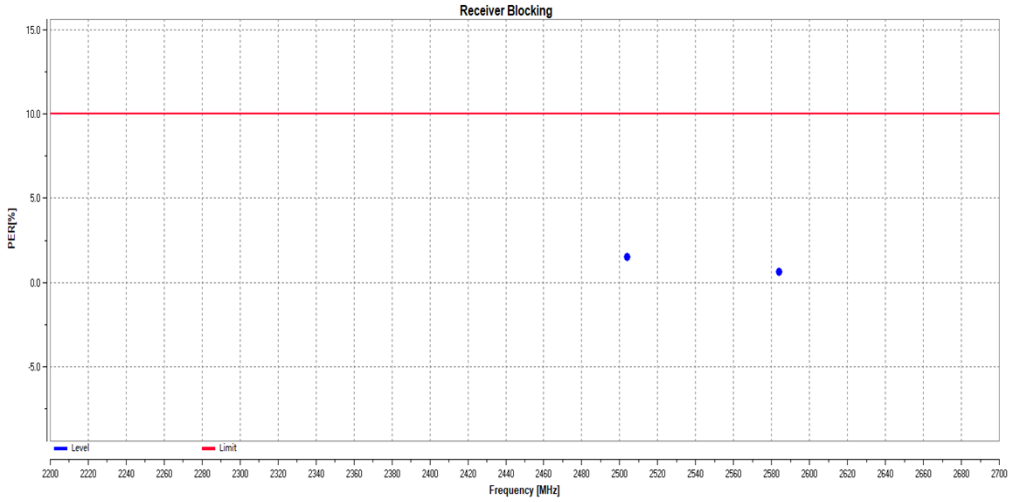
Note: The EUT is category 2 receiver.

TestMode	Antenna	Frequency[MHz]	Pmin [dBm]	Wanted signal [dBm]	Freq. [MHz]	CW [dBm]	PER [%]	Limit [%]	Verdict
BLE_1M	Ant1	2402	---	-66.24	2300	-31.41	1.30	≤10	PASS
			---	-66.24	2380	-31.41	1.20	≤10	PASS
		2480	---	-66.24	2504	-31.41	1.50	≤10	PASS
			---	-66.24	2584	-31.41	0.60	≤10	PASS
BLE_2M	Ant1	2404	---	-63.27	2300	-31.41	0.07	≤10	PASS
			---	-63.27	2380	-31.41	0.00	≤10	PASS
		2478	---	-63.27	2504	-31.41	0.60	≤10	PASS
			---	-63.27	2584	-31.41	0.27	≤10	PASS

BLE_1M_Ant1_2402

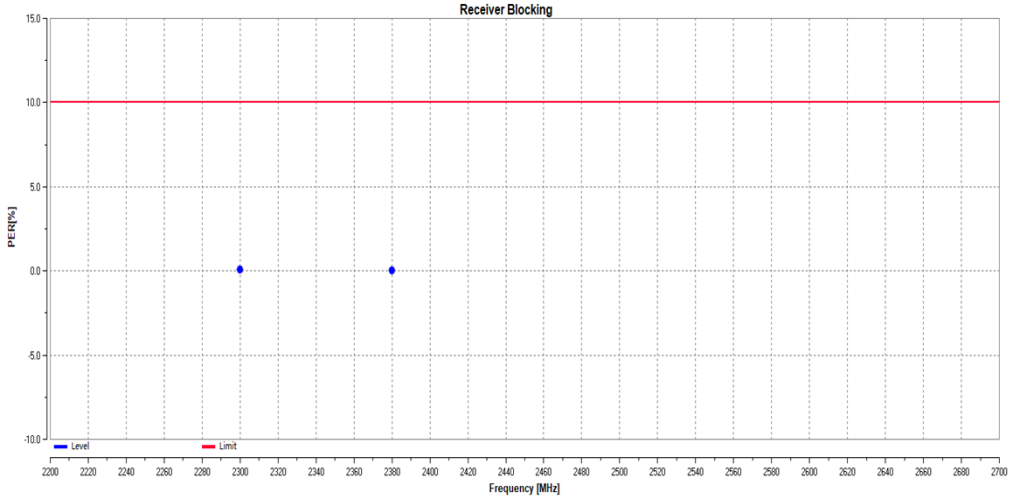


BLE_1M_Ant1_2480



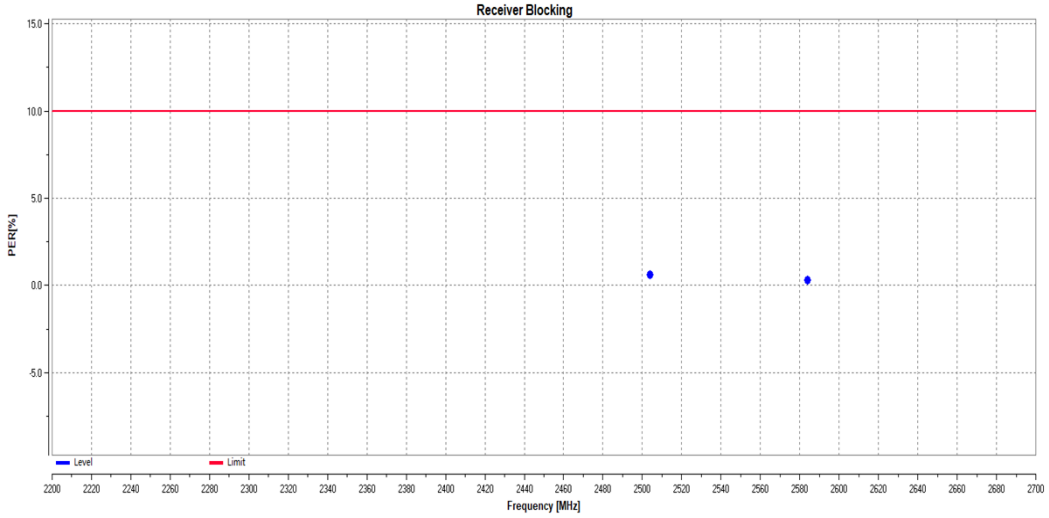
Fre	2504	2484
PER	1.50	0.60

BLE_2M_Ant1_2404



Fre	2380	2380
PER	0.07	0.00

BLE_2M_Ant1_2478

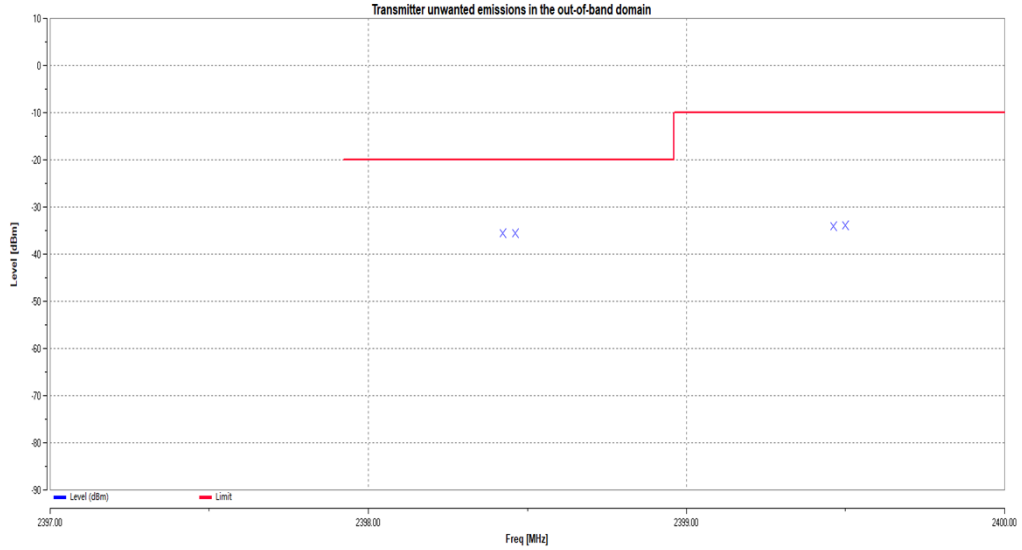


Fre	2504	2484
PER	0.60	0.27

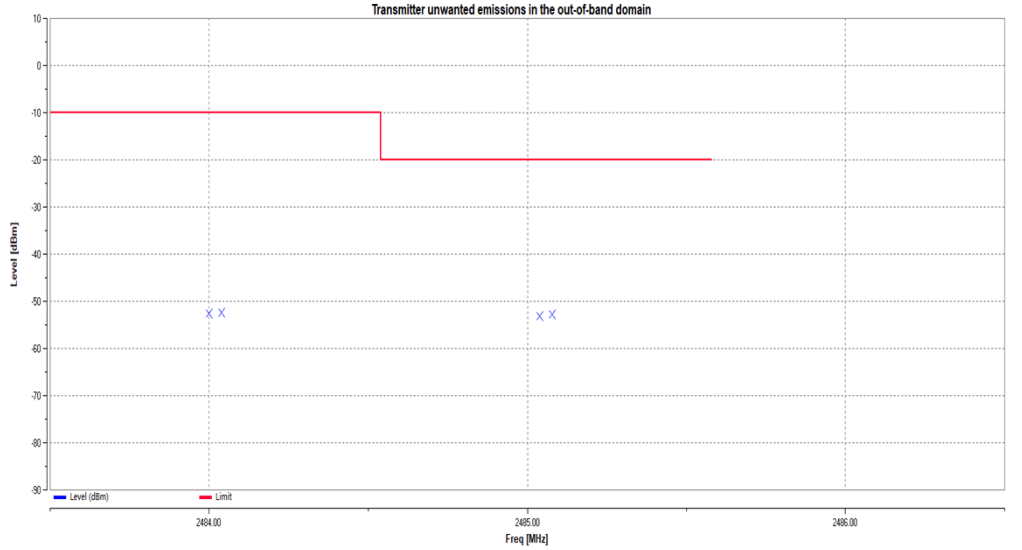
5 Appendix B.5 : Tx unwanted emissions in the out-of-band domain

Test Mode	Antenna	Frequency[MHz]	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2398.422	-35.57	-20.00	PASS
			2398.461	-35.57	-20.00	PASS
			2399.461	-34.00	-10.00	PASS
			2399.5	-33.94	-10.00	PASS
			2484	-52.55	-10.00	PASS
			2484.039	-52.49	-10.00	PASS
			2485.039	-53.17	-20.00	PASS
			2485.078	-52.82	-20.00	PASS
		2480	2398.422	-52.38	-20.00	PASS
			2398.461	-52.66	-20.00	PASS
			2399.461	-52.28	-10.00	PASS
			2399.5	-52.81	-10.00	PASS
			2484	-38.42	-10.00	PASS
			2484.039	-38.22	-10.00	PASS
			2485.039	-40.71	-20.00	PASS
			2485.078	-40.82	-20.00	PASS
BLE_2M	Ant1	2404	2396.376	-35.57	-20.00	PASS
			2396.438	-35.44	-20.00	PASS
			2397.438	-33.87	-20.00	PASS
			2398.438	-33.59	-10.00	PASS
			2398.5	-33.82	-10.00	PASS
			2399.5	-33.84	-10.00	PASS
			2484	-52.58	-10.00	PASS
			2485	-53.01	-10.00	PASS
			2485.062	-52.62	-10.00	PASS
			2486.062	-52.61	-20.00	PASS
			2487.062	-52.85	-20.00	PASS
			2487.124	-52.88	-20.00	PASS
		2478	2396.376	-52.91	-20.00	PASS
			2396.438	-52.82	-20.00	PASS
			2397.438	-52.60	-20.00	PASS
			2398.438	-52.71	-10.00	PASS
			2398.5	-52.37	-10.00	PASS
			2399.5	-52.86	-10.00	PASS
			2484	-44.82	-10.00	PASS
			2485	-45.05	-10.00	PASS
			2485.062	-45.11	-10.00	PASS
			2486.062	-42.99	-20.00	PASS
			2487.062	-45.32	-20.00	PASS
			2487.124	-45.46	-20.00	PASS

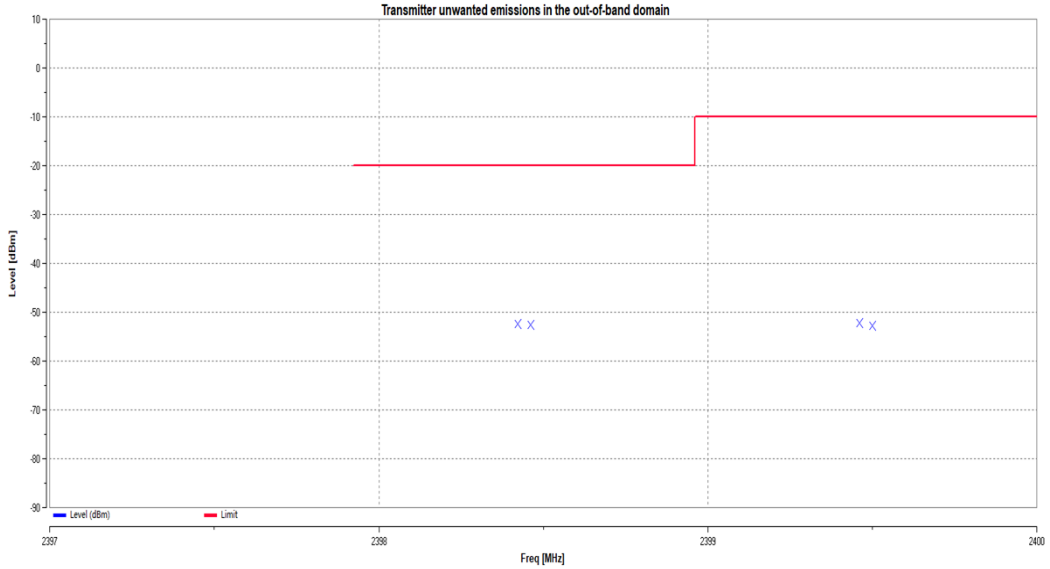
BLE_1M_Ant1_2402_2400MHz-2BW to 2400MHz



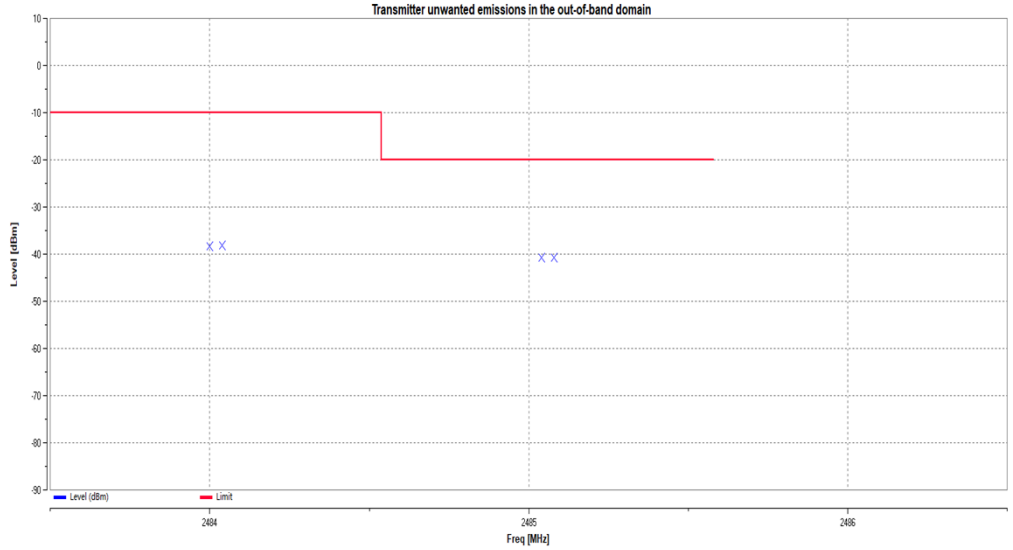
BLE_1M_Ant1_2402_2483.5MHz to 2483.5MHz+2BW



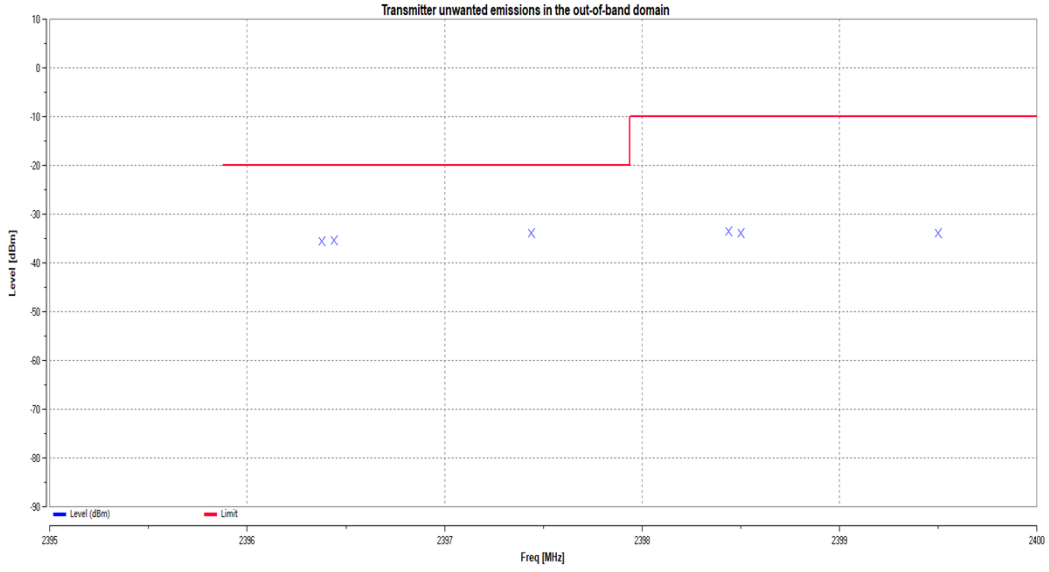
BLE_1M_Ant1_2480_2400MHz-2BW to 2400MHz



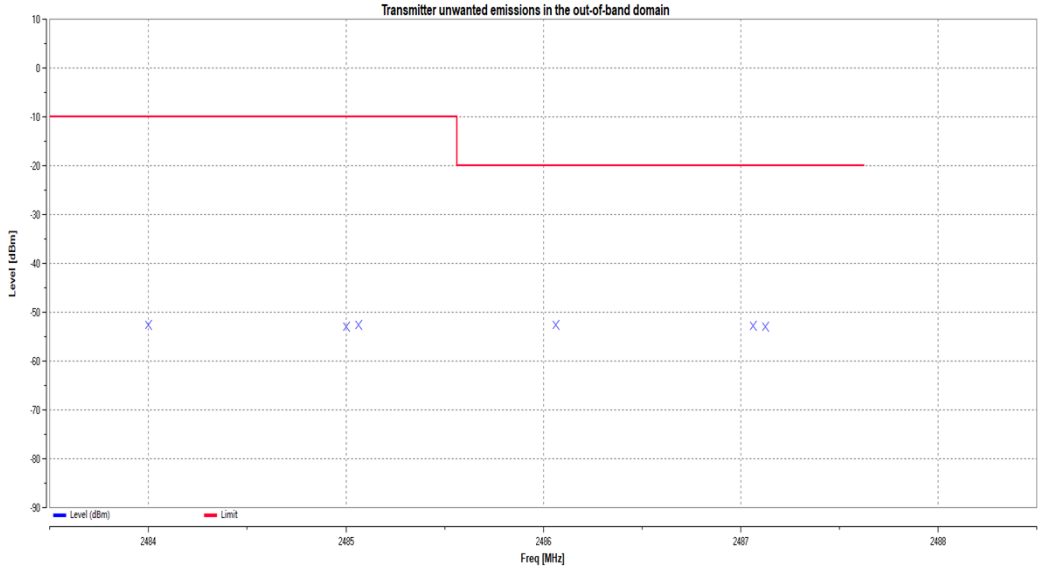
BLE_1M_Ant1_2480_2483.5MHz to 2483.5MHz+2BW



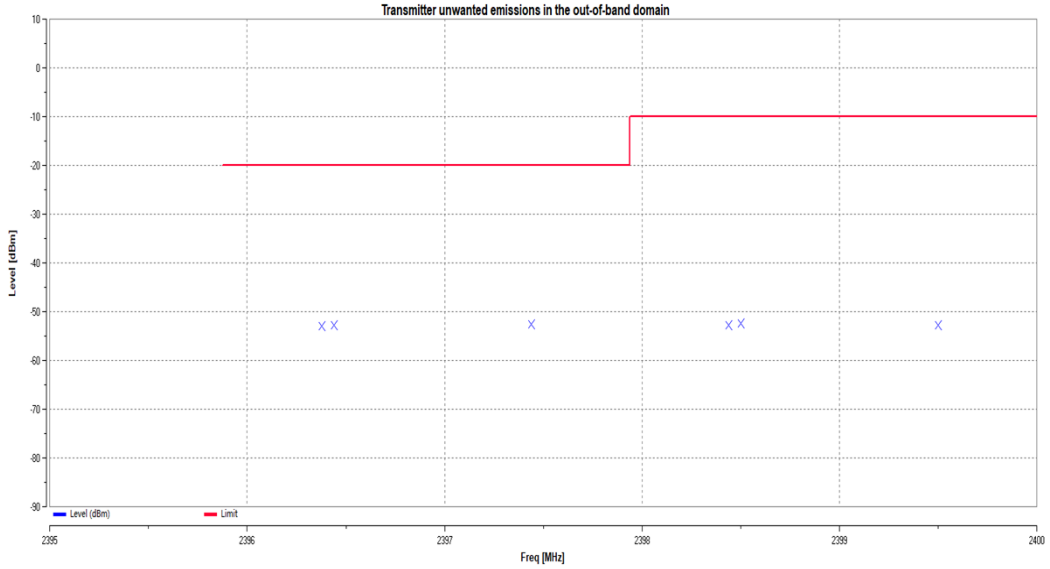
BLE_2M_Ant1_2404_2400MHz-2BW to 2400MHz



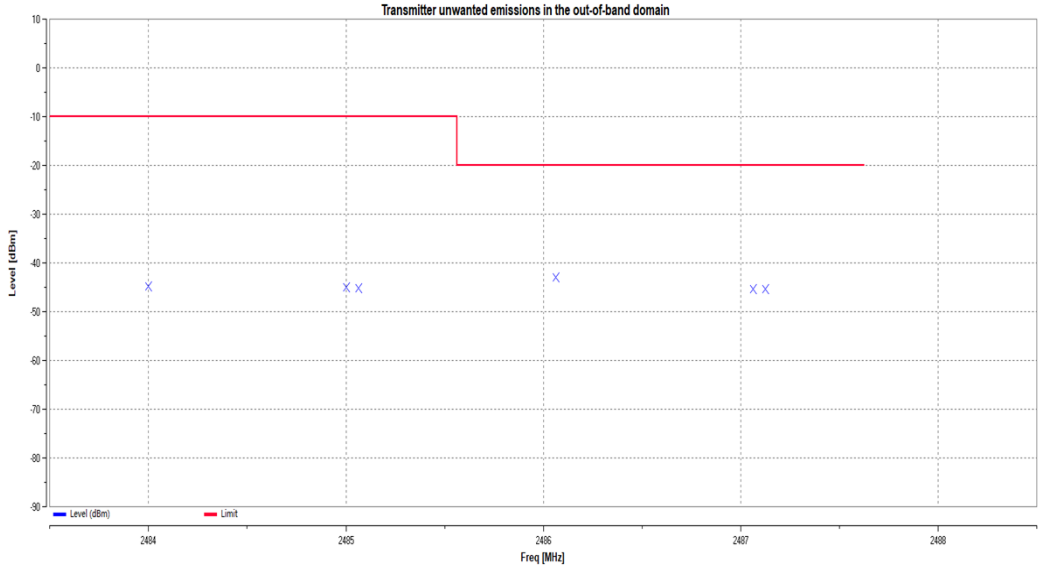
BLE_2M_Ant1_2404_2483.5MHz to 2483.5MHz+2BW



BLE_2M_Ant1_2478_2400MHz-2BW to 2400MHz



BLE_2M_Ant1_2478_2483.5MHz to 2483.5MHz+2BW

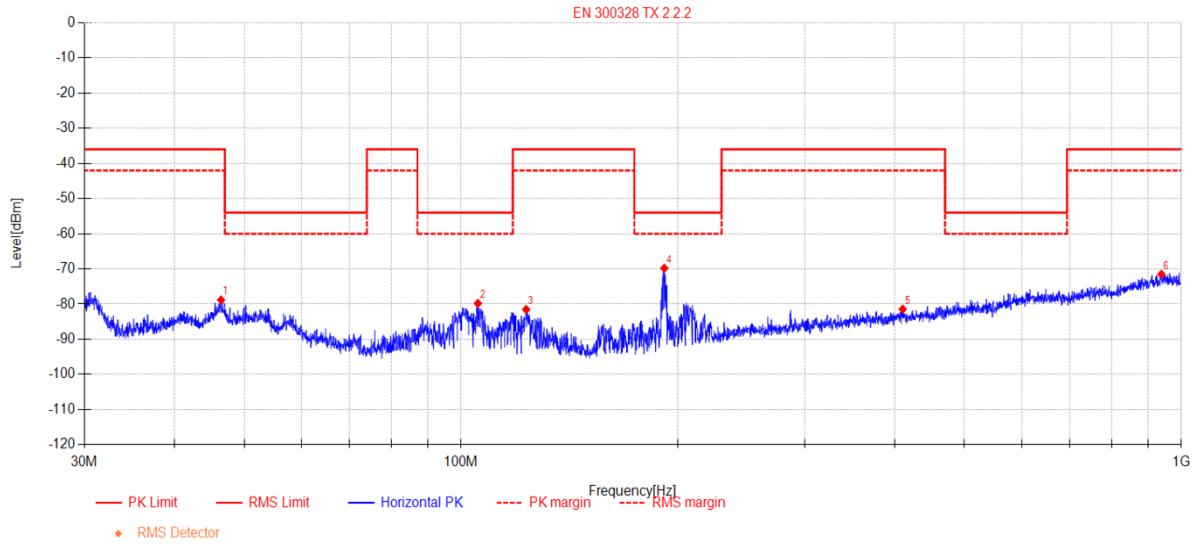


6 Appendix B.6 : Transmitter unwanted emissions

Note: The EUT without antenna connectors.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\9		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



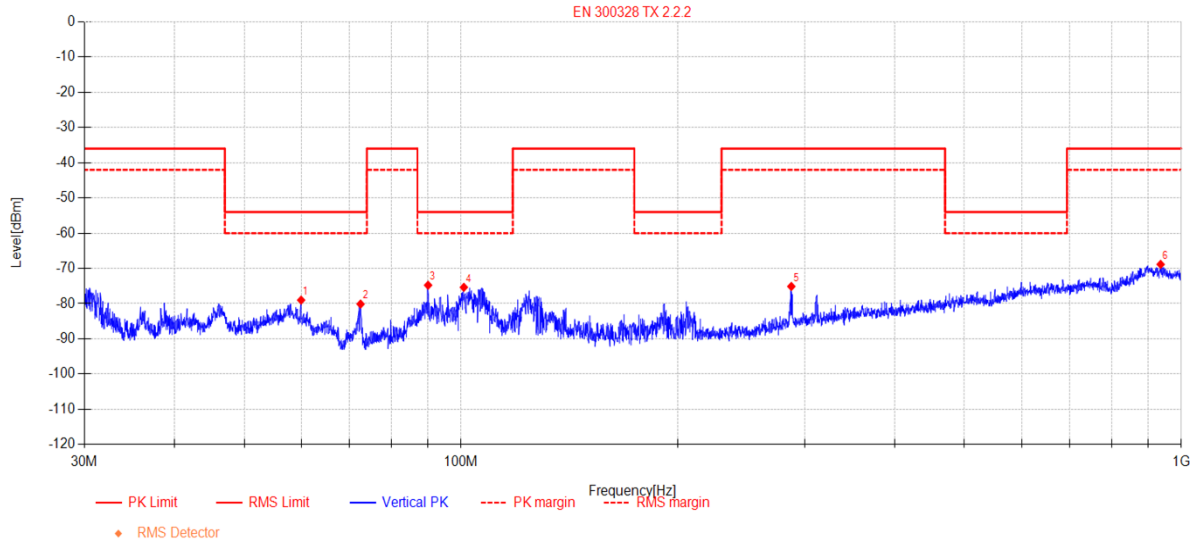
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	46.43	32.00	-110.83	-78.83	-36.00	42.83	PK	Horizontal	ERP
2	105.54	35.89	-115.70	-79.81	-54.00	25.81	PK	Horizontal	ERP
3	123.14	35.24	-116.78	-81.54	-36.00	45.54	PK	Horizontal	ERP
4	191.54	46.03	-115.84	-69.81	-54.00	15.81	PK	Horizontal	ERP
5	410.46	26.74	-108.20	-81.46	-36.00	45.46	PK	Horizontal	ERP
6	938.19	26.49	-98.01	-71.52	-36.00	35.52	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\10		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

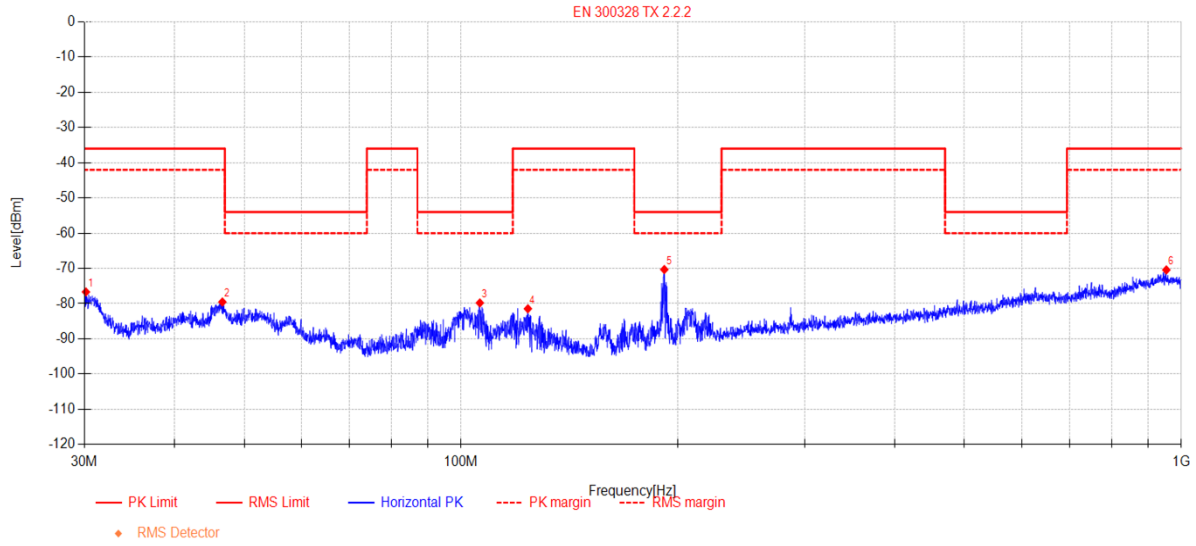


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	59.98	36.12	-115.11	-78.99	-54.00	24.99	PK	Vertical	ERP
2	72.53	37.71	-117.82	-80.11	-54.00	26.11	PK	Vertical	ERP
3	90.01	37.55	-112.32	-74.77	-54.00	20.77	PK	Vertical	ERP
4	100.91	35.10	-110.46	-75.36	-54.00	21.36	PK	Vertical	ERP
5	287.46	34.79	-109.91	-75.12	-36.00	39.12	PK	Vertical	ERP
6	936.22	26.99	-95.85	-68.86	-36.00	32.86	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\11		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

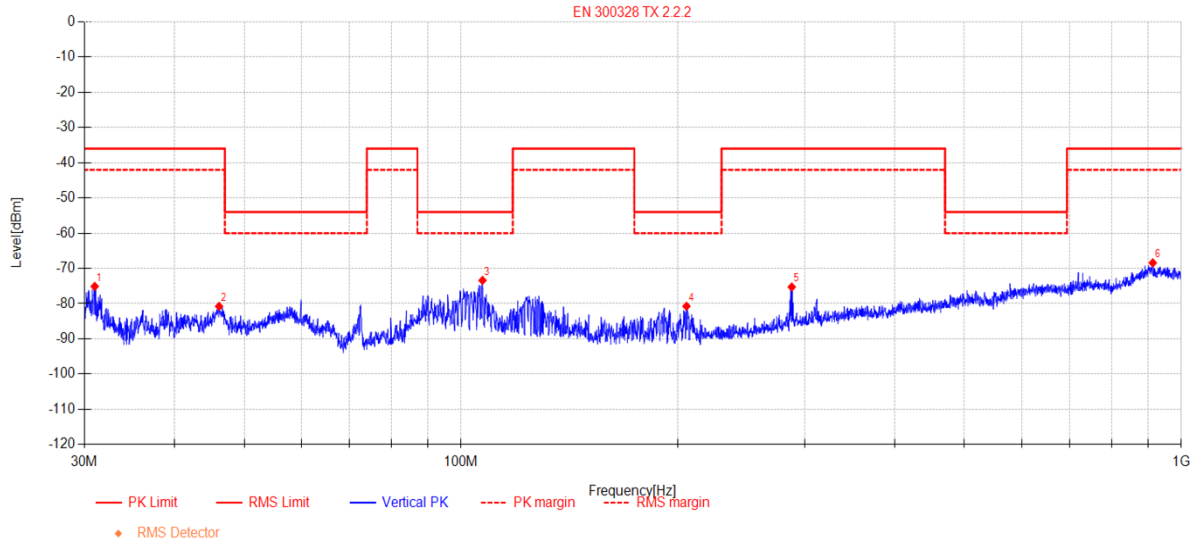


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.15	36.89	-113.57	-76.68	-36.00	40.68	PK	Horizontal	ERP
2	46.63	31.27	-110.80	-79.53	-36.00	43.53	PK	Horizontal	ERP
3	106.21	35.95	-115.74	-79.79	-54.00	25.79	PK	Horizontal	ERP
4	123.84	35.39	-116.83	-81.44	-36.00	45.44	PK	Horizontal	ERP
5	191.54	45.52	-115.84	-70.32	-54.00	16.32	PK	Horizontal	ERP
6	953.44	27.18	-97.61	-70.43	-36.00	34.43	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\12		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

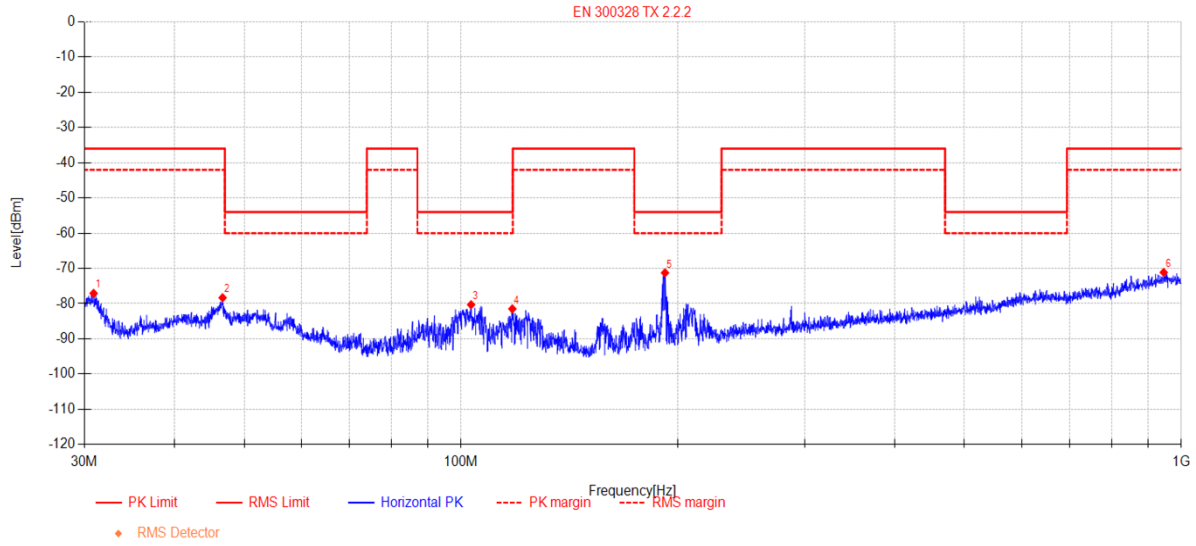


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	31.01	41.96	-117.06	-75.10	-36.00	39.10	PK	Vertical	ERP
2	46.14	34.76	-115.52	-80.76	-36.00	44.76	PK	Vertical	ERP
3	107.11	37.47	-110.87	-73.40	-54.00	19.40	PK	Vertical	ERP
4	205.60	32.75	-113.48	-80.73	-54.00	26.73	PK	Vertical	ERP
5	287.86	34.62	-109.89	-75.27	-36.00	39.27	PK	Vertical	ERP
6	912.88	27.28	-95.70	-68.42	-36.00	32.42	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\13		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

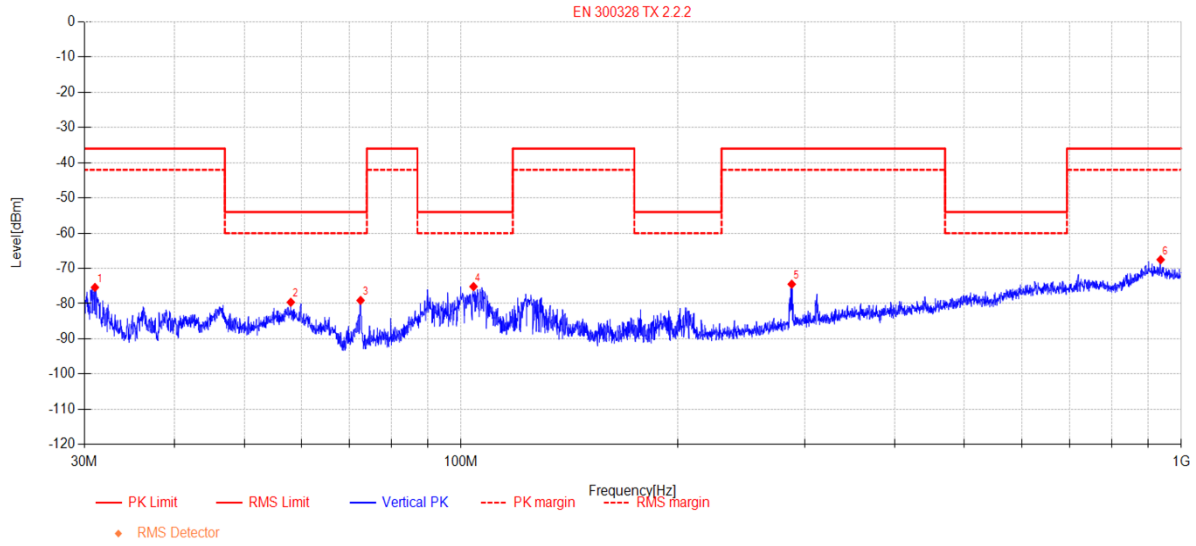


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.90	36.35	-113.43	-77.08	-36.00	41.08	PK	Horizontal	ERP
2	46.66	32.46	-110.79	-78.33	-36.00	42.33	PK	Horizontal	ERP
3	103.27	35.27	-115.56	-80.29	-54.00	26.29	PK	Horizontal	ERP
4	117.82	34.97	-116.46	-81.49	-54.00	27.49	PK	Horizontal	ERP
5	191.94	44.56	-115.82	-71.26	-54.00	17.26	PK	Horizontal	ERP
6	945.45	26.61	-97.74	-71.13	-36.00	35.13	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\14		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

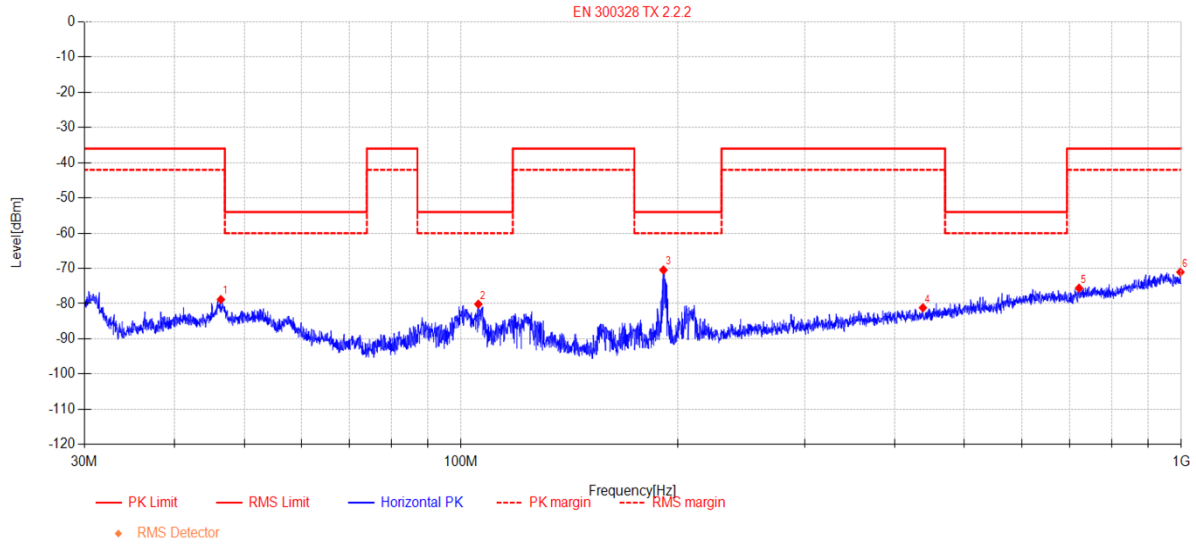


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	31.03	41.68	-117.06	-75.38	-36.00	39.38	PK	Vertical	ERP
2	58.03	35.51	-115.12	-79.61	-54.00	25.61	PK	Vertical	ERP
3	72.53	38.74	-117.82	-79.08	-54.00	25.08	PK	Vertical	ERP
4	104.07	35.52	-110.68	-75.16	-54.00	21.16	PK	Vertical	ERP
5	287.86	35.40	-109.89	-74.49	-36.00	38.49	PK	Vertical	ERP
6	936.22	28.32	-95.85	-67.53	-36.00	31.53	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\15		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

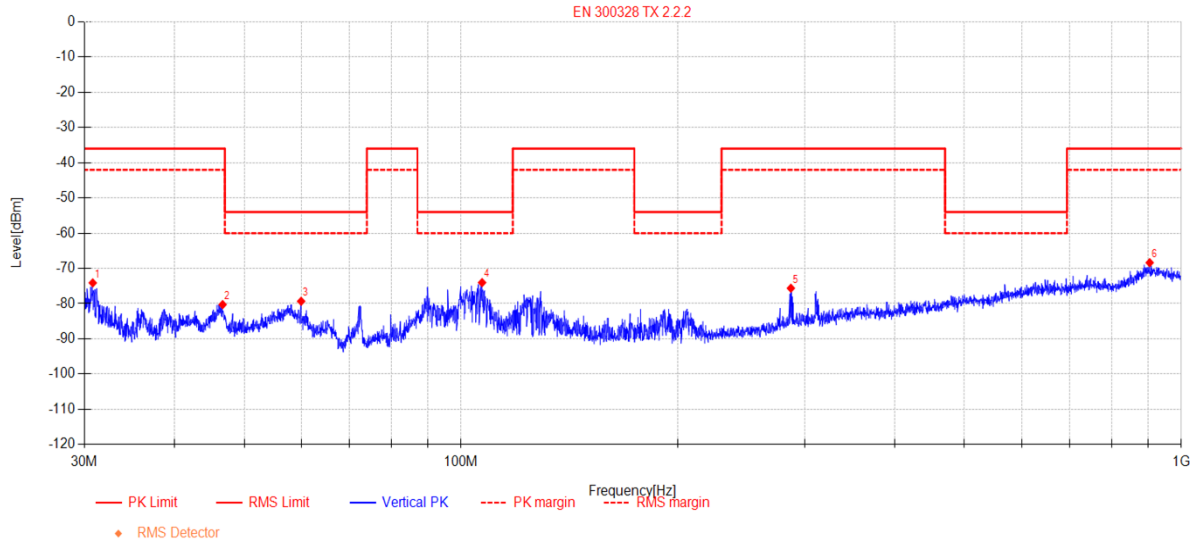


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	46.40	32.01	-110.84	-78.83	-36.00	42.83	PK	Horizontal	ERP
2	105.69	35.56	-115.71	-80.15	-54.00	26.15	PK	Horizontal	ERP
3	191.00	45.41	-115.87	-70.46	-54.00	16.46	PK	Horizontal	ERP
4	437.81	26.80	-107.98	-81.18	-36.00	45.18	PK	Horizontal	ERP
5	721.27	27.30	-102.91	-75.61	-36.00	39.61	PK	Horizontal	ERP
6	997.20	27.04	-98.09	-71.05	-36.00	35.05	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\16		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

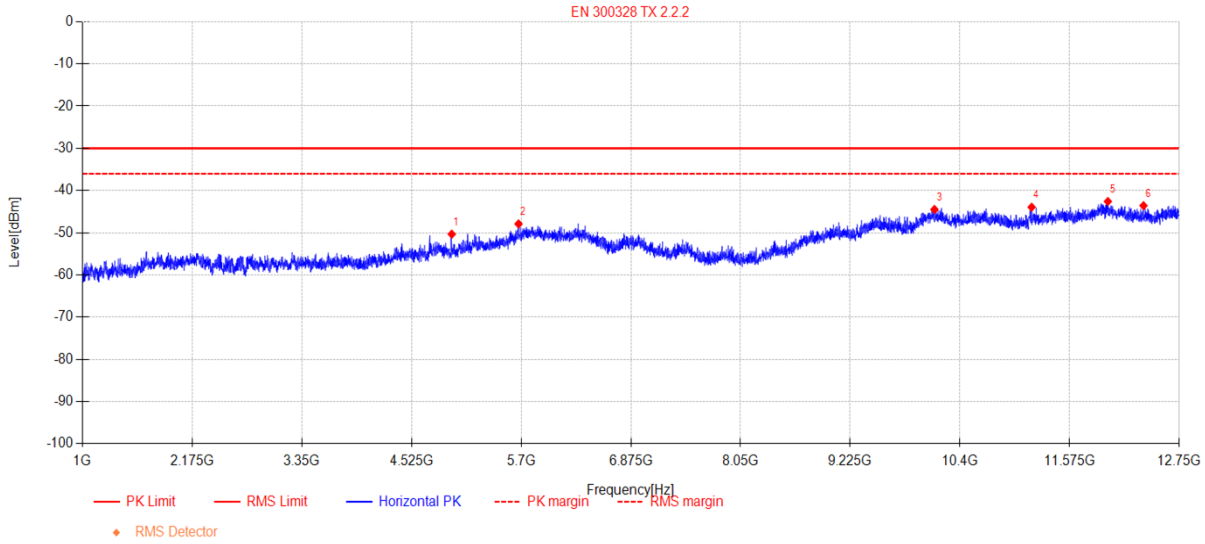


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.81	42.97	-117.08	-74.11	-36.00	38.11	PK	Vertical	ERP
2	46.66	35.20	-115.47	-80.27	-36.00	44.27	PK	Vertical	ERP
3	59.98	35.78	-115.11	-79.33	-54.00	25.33	PK	Vertical	ERP
4	106.96	36.84	-110.87	-74.03	-54.00	20.03	PK	Vertical	ERP
5	287.05	34.31	-109.93	-75.62	-36.00	39.62	PK	Vertical	ERP
6	903.96	27.28	-95.65	-68.37	-36.00	32.37	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\9		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



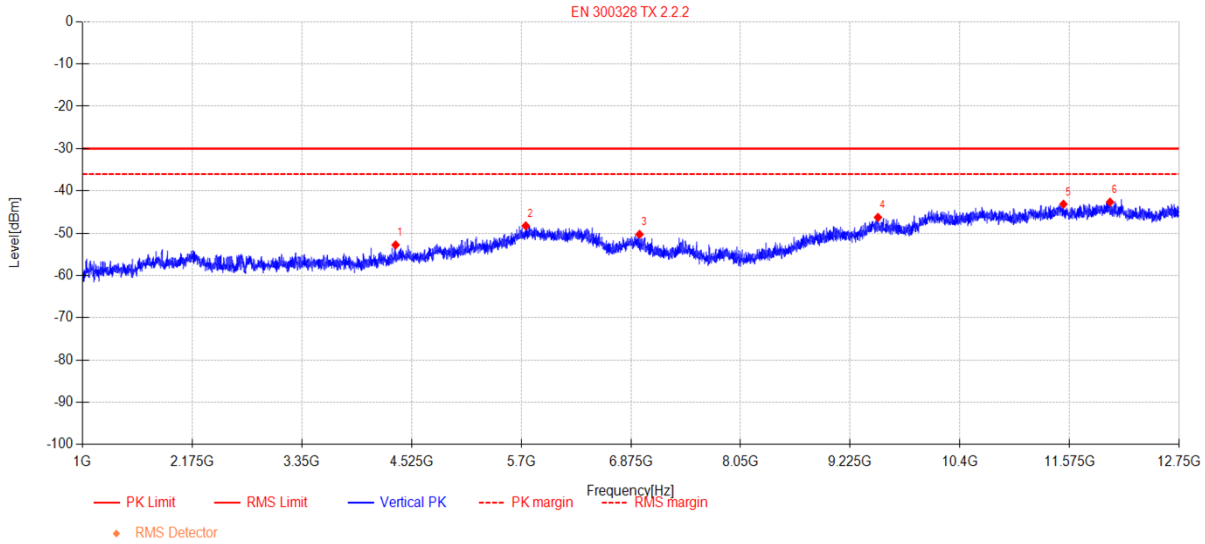
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4956.23	45.87	-96.20	-50.33	-30.00	20.33	PK	Horizontal	EIRP
2	5671.80	44.59	-92.50	-47.91	-30.00	17.91	PK	Horizontal	EIRP
3	10127.40	41.43	-85.92	-44.49	-30.00	14.49	PK	Horizontal	EIRP
4	11168.45	42.55	-86.49	-43.94	-30.00	13.94	PK	Horizontal	EIRP
5	11985.08	43.09	-85.68	-42.59	-30.00	12.59	PK	Horizontal	EIRP
6	12366.95	42.50	-86.09	-43.59	-30.00	13.59	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\10		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



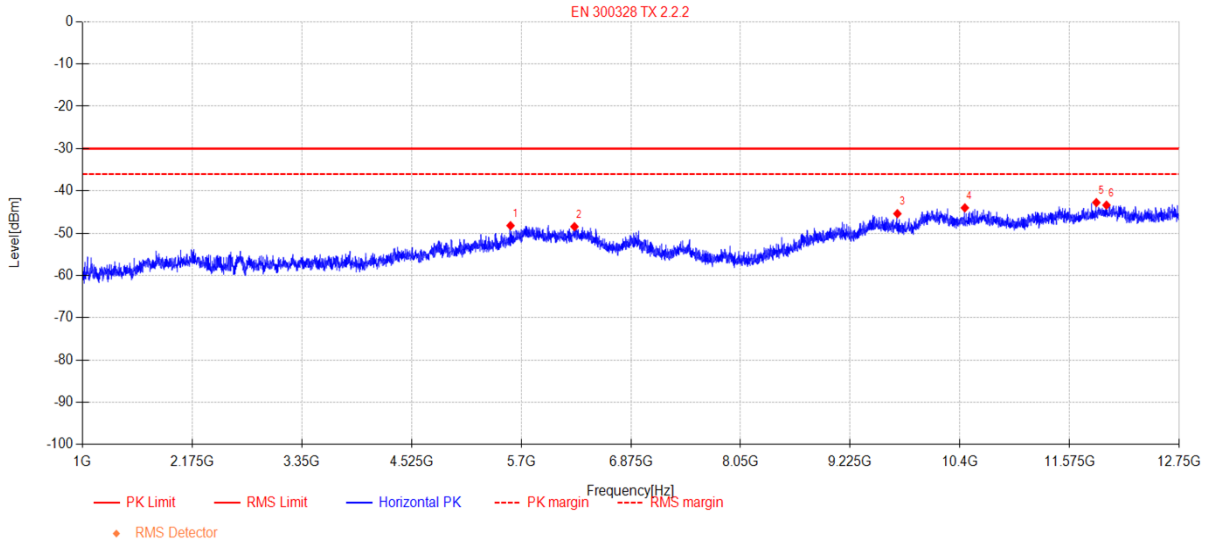
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4354.63	46.35	-99.14	-52.79	-30.00	22.79	PK	Vertical	EIRP
2	5749.35	43.92	-92.20	-48.28	-30.00	18.28	PK	Vertical	EIRP
3	6967.83	43.29	-93.57	-50.28	-30.00	20.28	PK	Vertical	EIRP
4	9522.28	40.97	-87.24	-46.27	-30.00	16.27	PK	Vertical	EIRP
5	11509.20	42.06	-85.21	-43.15	-30.00	13.15	PK	Vertical	EIRP
6	12008.58	42.49	-85.14	-42.65	-30.00	12.65	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\11		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



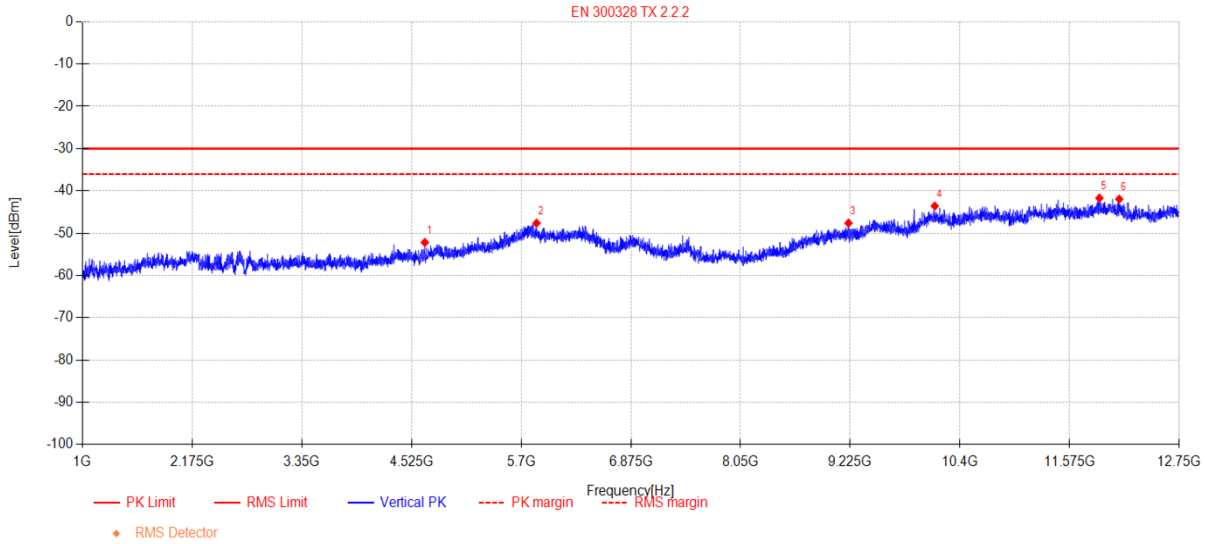
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	5586.03	44.73	-92.95	-48.22	-30.00	18.22	PK	Horizontal	EIRP
2	6271.05	43.07	-91.53	-48.46	-30.00	18.46	PK	Horizontal	EIRP
3	9730.25	40.98	-86.38	-45.40	-30.00	15.40	PK	Horizontal	EIRP
4	10452.88	42.18	-86.19	-44.01	-30.00	14.01	PK	Horizontal	EIRP
5	11861.70	43.04	-85.80	-42.76	-30.00	12.76	PK	Horizontal	EIRP
6	11969.80	42.33	-85.71	-43.38	-30.00	13.38	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\12		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



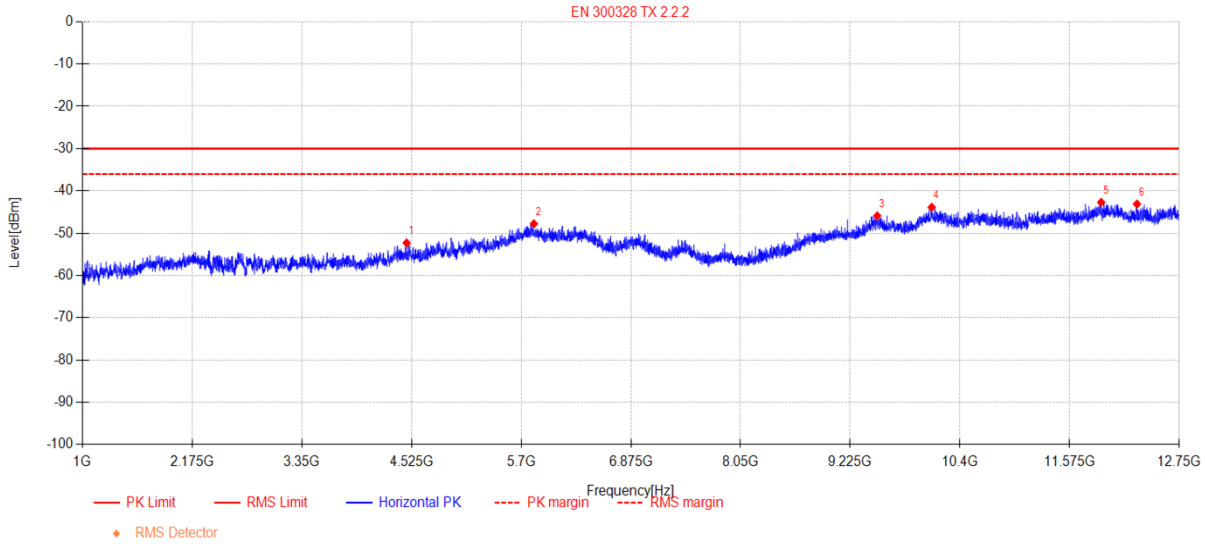
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4668.35	45.65	-97.85	-52.20	-30.00	22.20	PK	Vertical	EIRP
2	5864.50	43.92	-91.54	-47.62	-30.00	17.62	PK	Vertical	EIRP
3	9206.20	40.25	-87.87	-47.62	-30.00	17.62	PK	Vertical	EIRP
4	10130.93	42.59	-86.18	-43.59	-30.00	13.59	PK	Vertical	EIRP
5	11894.60	43.43	-85.14	-41.71	-30.00	11.71	PK	Vertical	EIRP
6	12107.28	43.35	-85.29	-41.94	-30.00	11.94	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\13		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



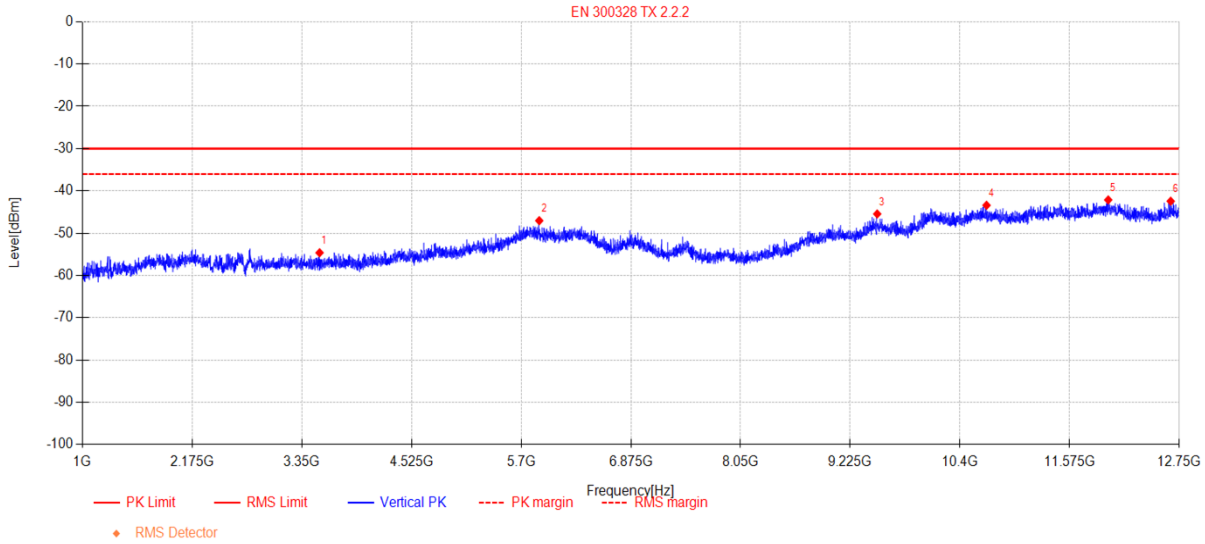
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4473.30	46.08	-98.39	-52.31	-30.00	22.31	PK	Horizontal	EIRP
2	5836.30	43.86	-91.64	-47.78	-30.00	17.78	PK	Horizontal	EIRP
3	9514.05	40.92	-86.83	-45.91	-30.00	15.91	PK	Horizontal	EIRP
4	10098.03	42.03	-85.90	-43.87	-30.00	13.87	PK	Horizontal	EIRP
5	11913.40	43.06	-85.76	-42.70	-30.00	12.70	PK	Horizontal	EIRP
6	12297.63	42.90	-86.02	-43.12	-30.00	13.12	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\14		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



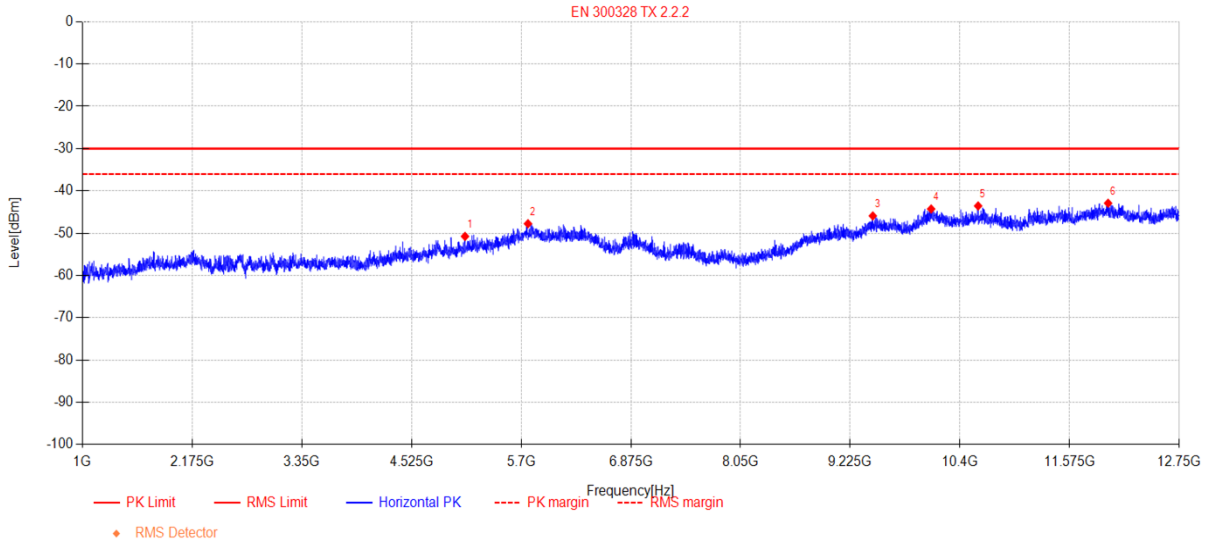
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3540.35	46.60	-101.23	-54.63	-30.00	24.63	PK	Vertical	EIRP
2	5893.88	44.31	-91.36	-47.05	-30.00	17.05	PK	Vertical	EIRP
3	9514.05	41.80	-87.25	-45.45	-30.00	15.45	PK	Vertical	EIRP
4	10685.53	42.20	-85.60	-43.40	-30.00	13.40	PK	Vertical	EIRP
5	11988.60	42.99	-85.13	-42.14	-30.00	12.14	PK	Vertical	EIRP
6	12658.35	43.69	-86.13	-42.44	-30.00	12.44	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\15		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



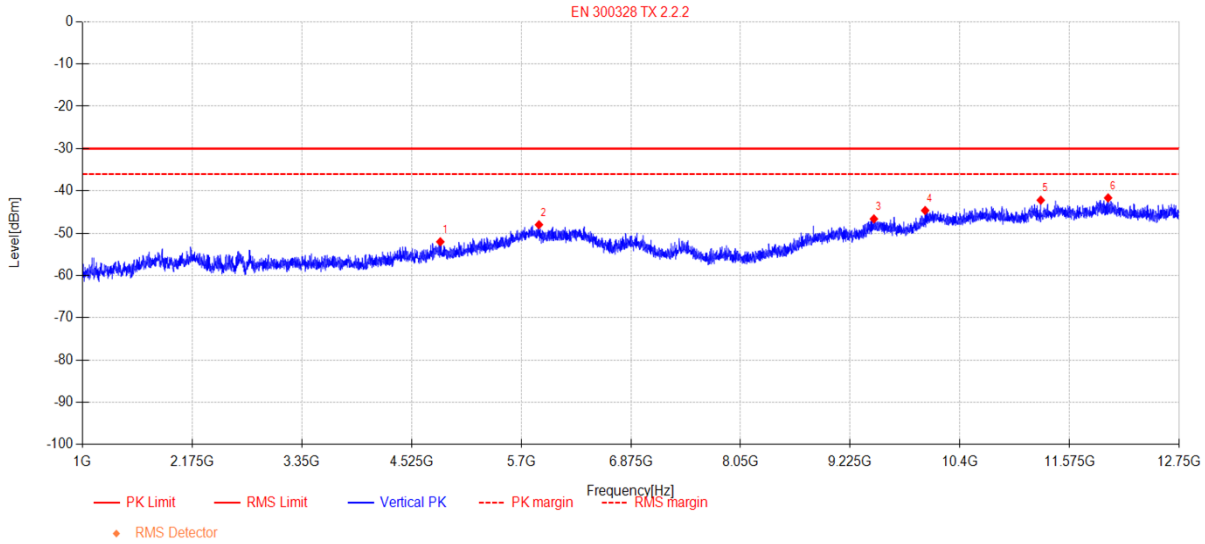
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	5098.40	44.73	-95.49	-50.76	-30.00	20.76	PK	Horizontal	EIRP
2	5772.85	44.21	-91.97	-47.76	-30.00	17.76	PK	Horizontal	EIRP
3	9467.05	41.02	-86.94	-45.92	-30.00	15.92	PK	Horizontal	EIRP
4	10092.15	41.60	-85.88	-44.28	-30.00	14.28	PK	Horizontal	EIRP
5	10595.05	42.75	-86.31	-43.56	-30.00	13.56	PK	Horizontal	EIRP
6	11987.43	42.77	-85.68	-42.91	-30.00	12.91	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz TX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\16		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4834.03	45.14	-97.18	-52.04	-30.00	22.04	PK	Vertical	EIRP
2	5890.35	43.38	-91.39	-48.01	-30.00	18.01	PK	Vertical	EIRP
3	9478.80	40.70	-87.33	-46.63	-30.00	16.63	PK	Vertical	EIRP
4	10027.53	41.64	-86.28	-44.64	-30.00	14.64	PK	Vertical	EIRP
5	11265.98	43.05	-85.25	-42.20	-30.00	12.20	PK	Vertical	EIRP
6	11987.43	43.47	-85.13	-41.66	-30.00	11.66	PK	Vertical	EIRP

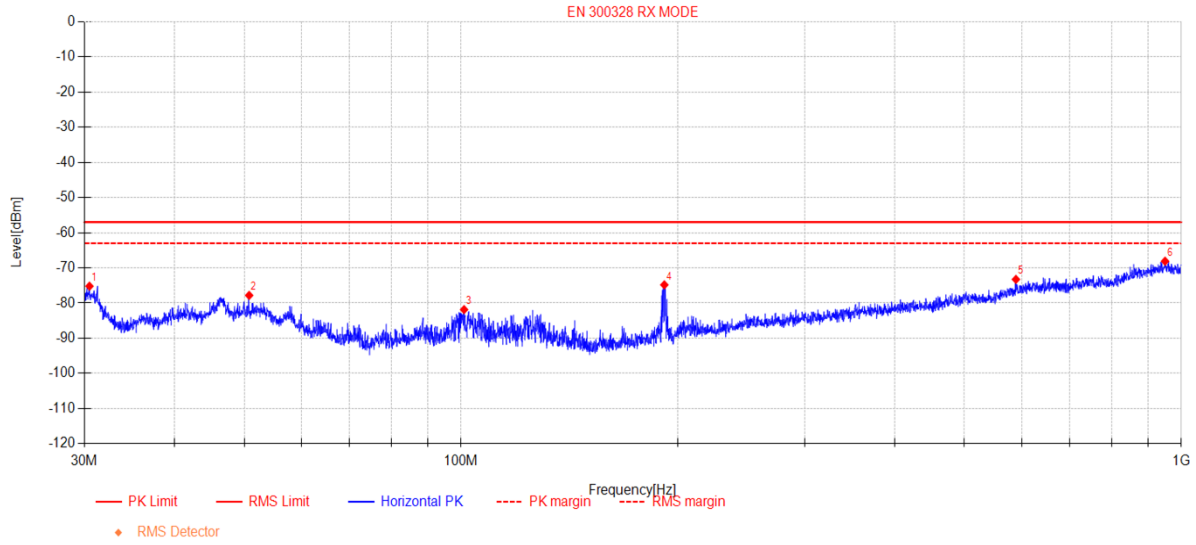
Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

7 Appendix B.7 : Receiver spurious emissions

Note: The EUT without antenna connectors.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\17		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

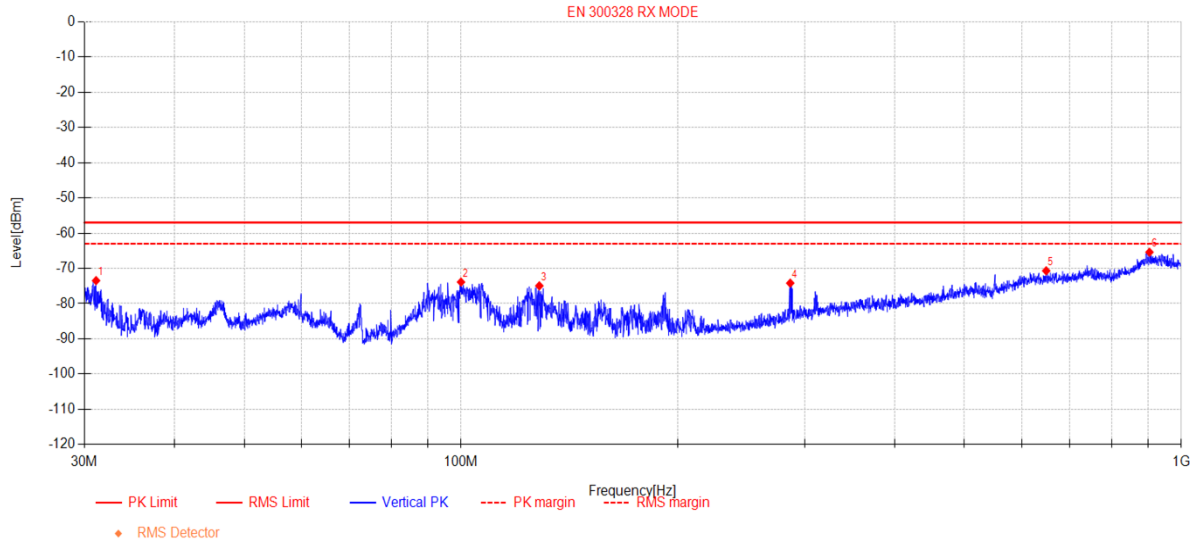


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.49	37.01	-112.20	-75.19	-57.00	18.19	PK	Horizontal	ERP
2	50.79	31.15	-108.96	-77.81	-57.00	20.81	PK	Horizontal	ERP
3	100.98	32.24	-114.09	-81.85	-57.00	24.85	PK	Horizontal	ERP
4	191.54	39.39	-114.21	-74.82	-57.00	17.82	PK	Horizontal	ERP
5	589.38	28.20	-101.47	-73.27	-57.00	16.27	PK	Horizontal	ERP
6	949.44	26.40	-94.51	-68.11	-57.00	11.11	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\18		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

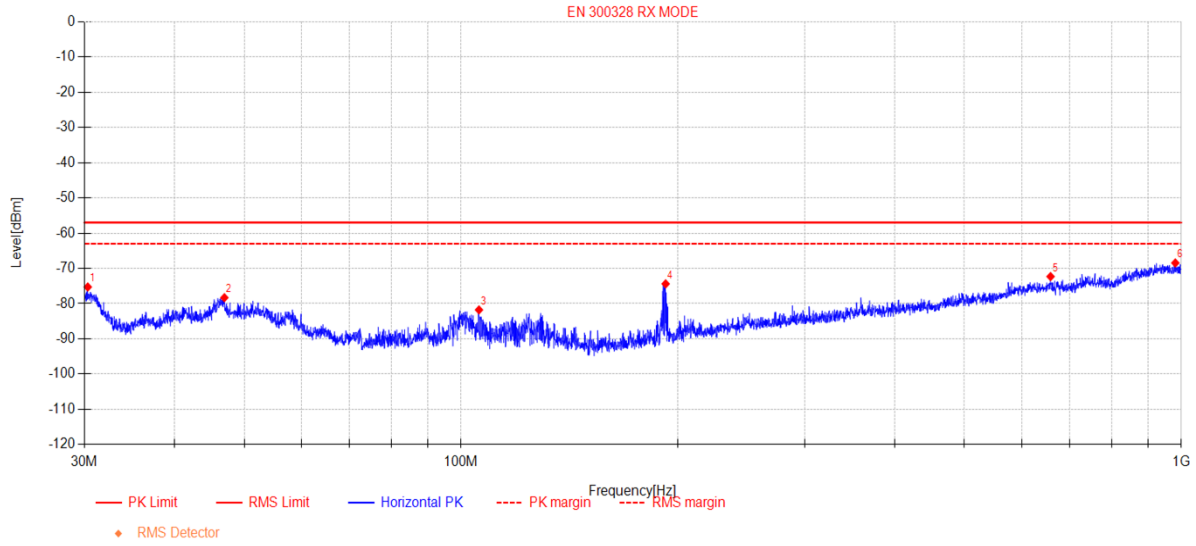


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	31.14	42.28	-115.74	-73.46	-57.00	16.46	PK	Vertical	ERP
2	99.99	35.17	-109.05	-73.88	-57.00	16.88	PK	Vertical	ERP
3	128.44	36.02	-110.96	-74.94	-57.00	17.94	PK	Vertical	ERP
4	286.45	33.85	-108.03	-74.18	-57.00	17.18	PK	Vertical	ERP
5	649.26	27.34	-98.03	-70.69	-57.00	13.69	PK	Vertical	ERP
6	903.33	27.02	-92.42	-65.40	-57.00	8.40	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\19		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

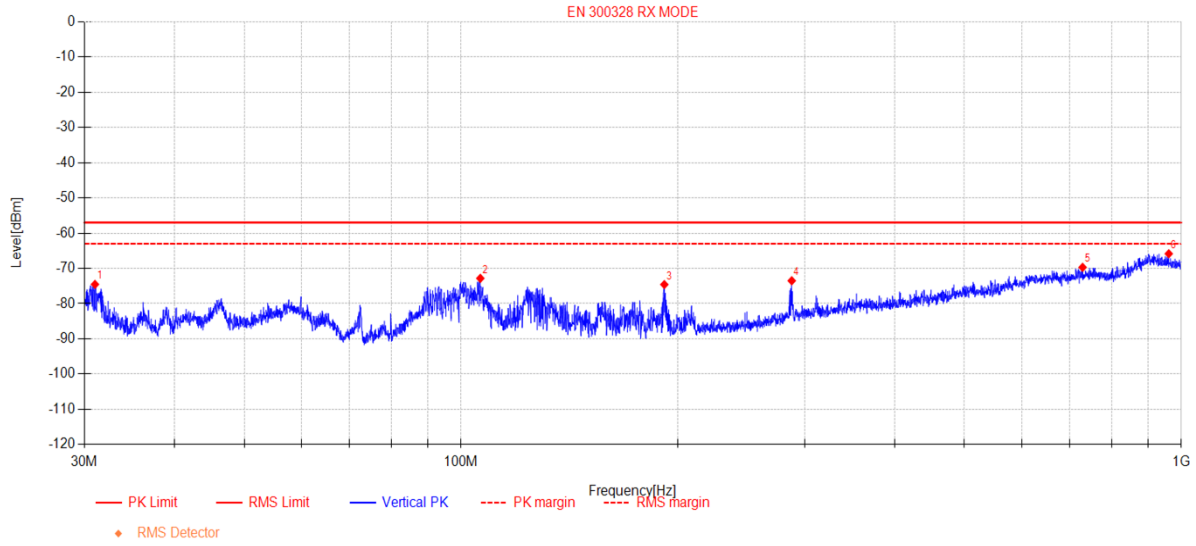


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.32	36.98	-112.25	-75.27	-57.00	18.27	PK	Horizontal	ERP
2	46.92	30.92	-109.23	-78.31	-57.00	21.31	PK	Horizontal	ERP
3	105.91	32.60	-114.37	-81.77	-57.00	24.77	PK	Horizontal	ERP
4	192.35	39.76	-114.14	-74.38	-57.00	17.38	PK	Horizontal	ERP
5	658.43	28.22	-100.54	-72.32	-57.00	15.32	PK	Horizontal	ERP
6	981.25	26.45	-94.91	-68.46	-57.00	11.46	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\20		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

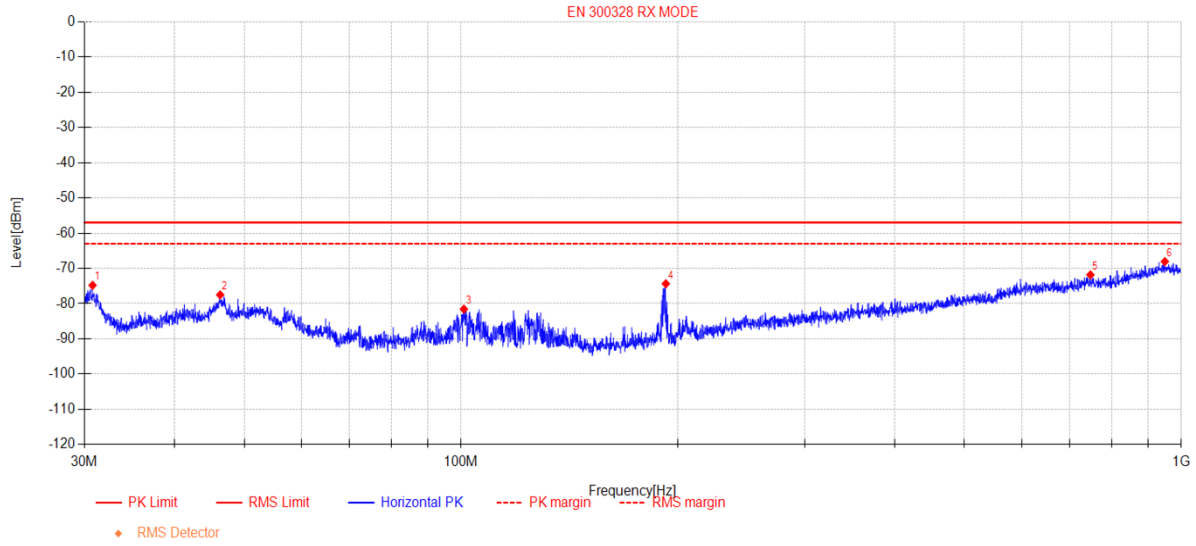


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	31.03	41.22	-115.75	-74.53	-57.00	17.53	PK	Vertical	ERP
2	106.36	36.66	-109.48	-72.82	-57.00	15.82	PK	Vertical	ERP
3	191.54	37.47	-112.05	-74.58	-57.00	17.58	PK	Vertical	ERP
4	287.86	34.43	-107.94	-73.51	-57.00	16.51	PK	Vertical	ERP
5	729.40	27.57	-97.27	-69.70	-57.00	12.70	PK	Vertical	ERP
6	960.82	27.14	-92.97	-65.83	-57.00	8.83	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\21		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

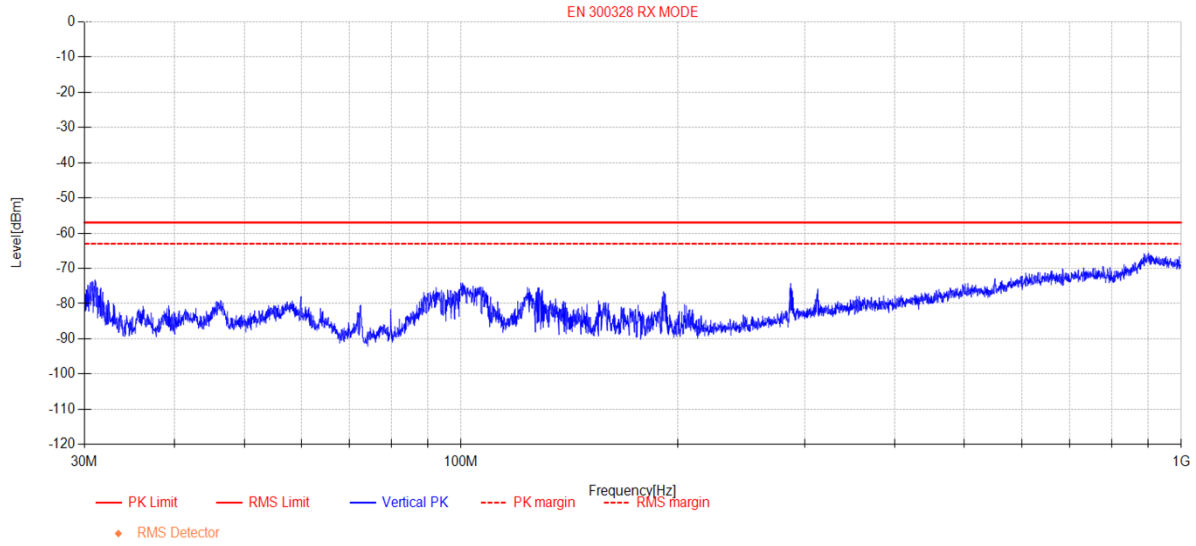


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.79	37.36	-112.15	-74.79	-57.00	17.79	PK	Horizontal	ERP
2	46.30	31.83	-109.33	-77.50	-57.00	20.50	PK	Horizontal	ERP
3	100.91	32.53	-114.08	-81.55	-57.00	24.55	PK	Horizontal	ERP
4	192.48	39.79	-114.14	-74.35	-57.00	17.35	PK	Horizontal	ERP
5	748.05	27.30	-99.12	-71.82	-57.00	14.82	PK	Horizontal	ERP
6	948.77	26.47	-94.53	-68.06	-57.00	11.06	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\22		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

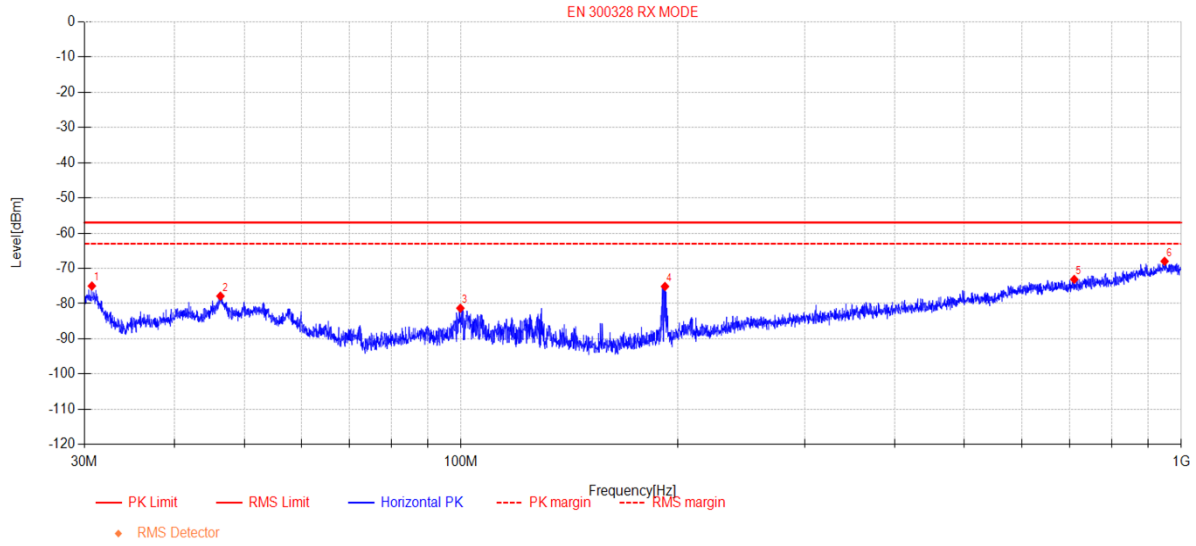
Test Graph



Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\23		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

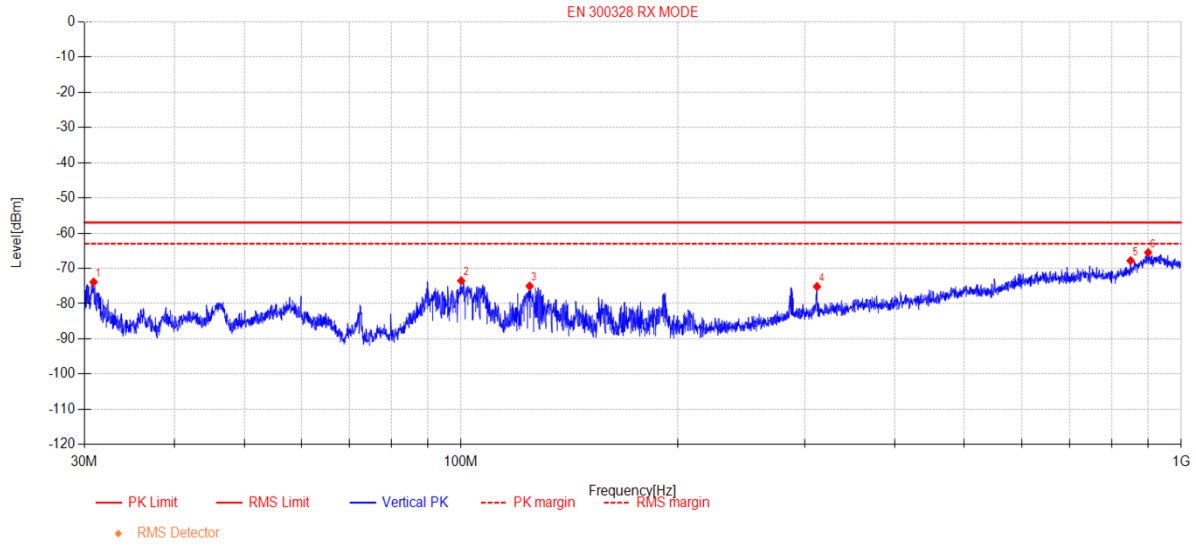


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.72	37.17	-112.16	-74.99	-57.00	17.99	PK	Horizontal	ERP
2	46.34	31.45	-109.31	-77.86	-57.00	20.86	PK	Horizontal	ERP
3	99.78	32.77	-114.06	-81.29	-57.00	24.29	PK	Horizontal	ERP
4	191.94	39.07	-114.18	-75.11	-57.00	18.11	PK	Horizontal	ERP
5	710.23	27.23	-100.33	-73.10	-57.00	16.10	PK	Horizontal	ERP
6	948.11	26.57	-94.55	-67.98	-57.00	10.98	PK	Horizontal	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE BELOW 1G\24		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph

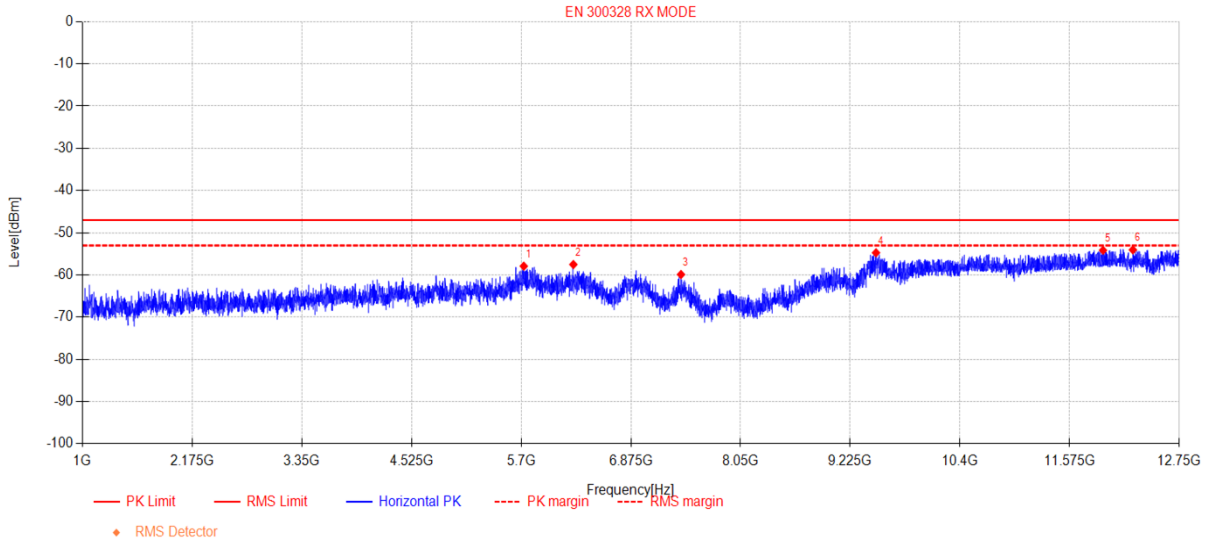


Data List									
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Factor [dB]**	**Level [dBm]**	**Limit [dBm]**	**Margin [dB]**	**Detector**	**Polarity**	**Type**
1	30.90	41.90	-115.77	-73.87	-57.00	16.87	PK	Vertical	ERP
2	100.06	35.52	-109.05	-73.53	-57.00	16.53	PK	Vertical	ERP
3	124.53	35.68	-110.70	-75.02	-57.00	18.02	PK	Vertical	ERP
4	312.03	31.47	-106.63	-75.16	-57.00	18.16	PK	Vertical	ERP
5	850.47	27.96	-95.78	-67.82	-57.00	10.82	PK	Vertical	ERP
6	899.54	26.92	-92.42	-65.50	-57.00	8.50	PK	Vertical	ERP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 100 kHz, VBW: 300 kHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\17		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



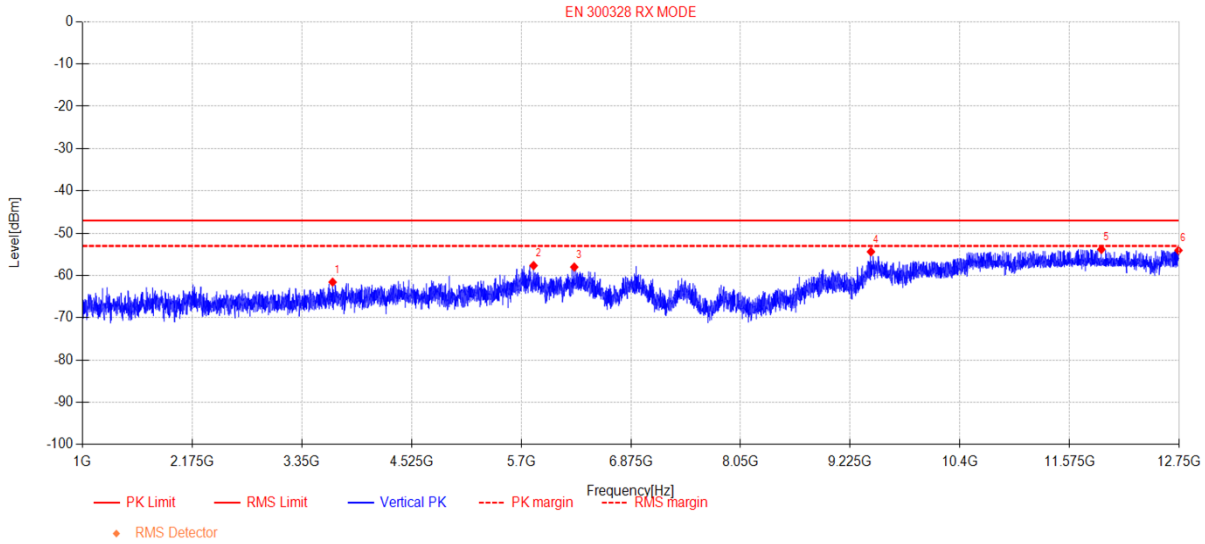
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	5728.20	37.32	-95.24	-57.92	-47.00	10.92	PK	Horizontal	EIRP
2	6259.30	36.65	-94.18	-57.53	-47.00	10.53	PK	Horizontal	EIRP
3	7411.98	35.28	-95.17	-59.89	-47.00	12.89	PK	Horizontal	EIRP
4	9501.13	33.06	-87.80	-54.74	-47.00	7.74	PK	Horizontal	EIRP
5	11933.38	32.63	-86.79	-54.16	-47.00	7.16	PK	Horizontal	EIRP
6	12252.98	32.95	-86.99	-54.04	-47.00	7.04	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2402MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\18		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



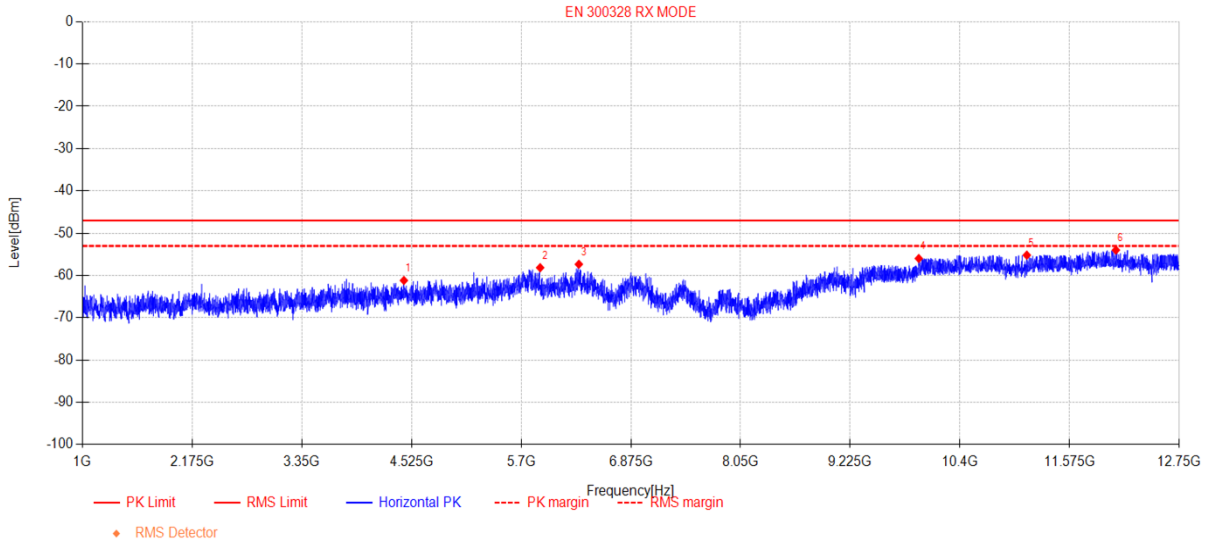
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3680.18	40.42	-102.00	-61.58	-47.00	14.58	PK	Vertical	EIRP
2	5832.78	37.18	-94.84	-57.66	-47.00	10.66	PK	Vertical	EIRP
3	6268.70	36.19	-94.20	-58.01	-47.00	11.01	PK	Vertical	EIRP
4	9447.08	33.97	-88.37	-54.40	-47.00	7.40	PK	Vertical	EIRP
5	11915.75	32.35	-86.19	-53.84	-47.00	6.84	PK	Vertical	EIRP
6	12741.78	33.10	-87.17	-54.07	-47.00	7.07	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\19		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



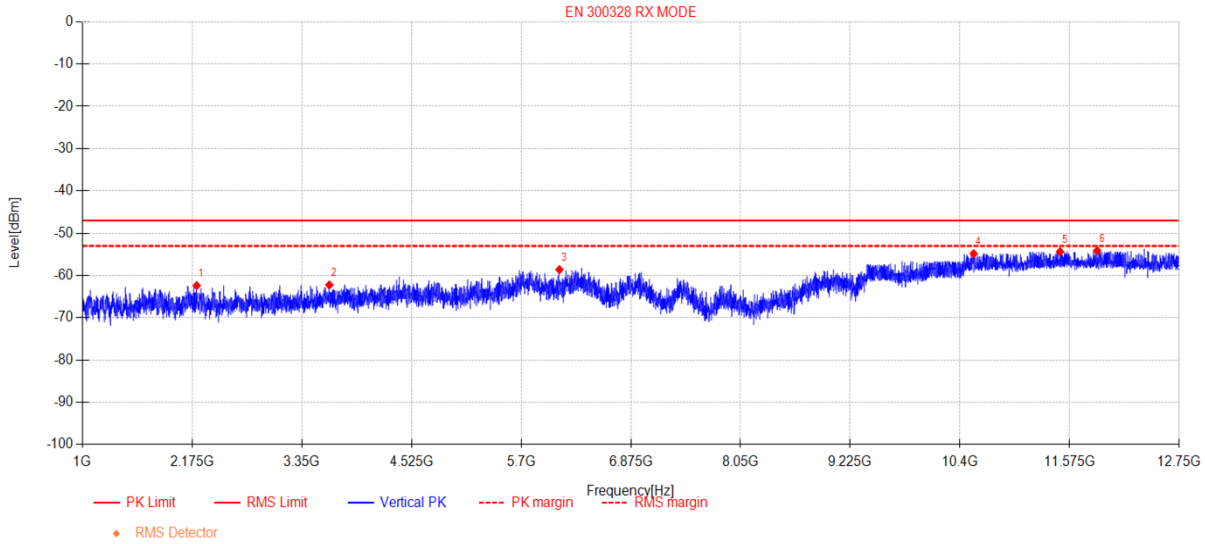
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4443.93	38.85	-100.04	-61.19	-47.00	14.19	PK	Horizontal	EIRP
2	5903.28	36.31	-94.48	-58.17	-47.00	11.17	PK	Horizontal	EIRP
3	6318.05	36.86	-94.21	-57.35	-47.00	10.35	PK	Horizontal	EIRP
4	9959.38	30.59	-86.57	-55.98	-47.00	8.98	PK	Horizontal	EIRP
5	11116.75	32.05	-87.25	-55.20	-47.00	8.20	PK	Horizontal	EIRP
6	12070.85	32.82	-86.82	-54.00	-47.00	7.00	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 1M 2480MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\20		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



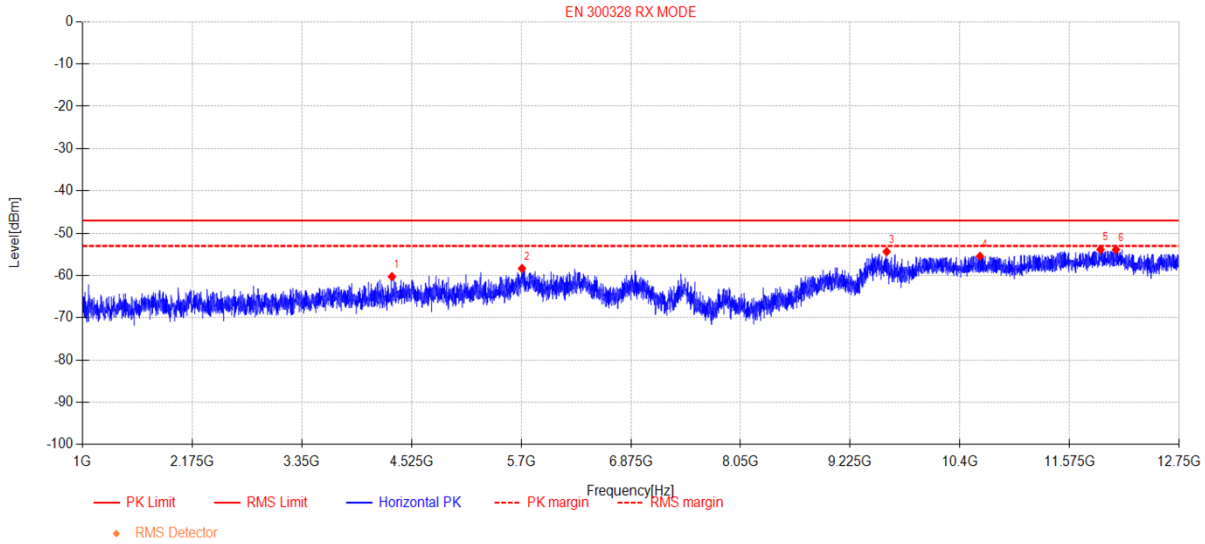
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	2224.35	40.68	-103.08	-62.40	-47.00	15.40	PK	Vertical	EIRP
2	3644.93	39.80	-102.06	-62.26	-47.00	15.26	PK	Vertical	EIRP
3	6110.08	35.49	-94.11	-58.62	-47.00	11.62	PK	Vertical	EIRP
4	10546.88	31.58	-86.42	-54.84	-47.00	7.84	PK	Vertical	EIRP
5	11472.78	31.71	-86.08	-54.37	-47.00	7.37	PK	Vertical	EIRP
6	11869.93	32.05	-86.18	-54.13	-47.00	7.13	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\21		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



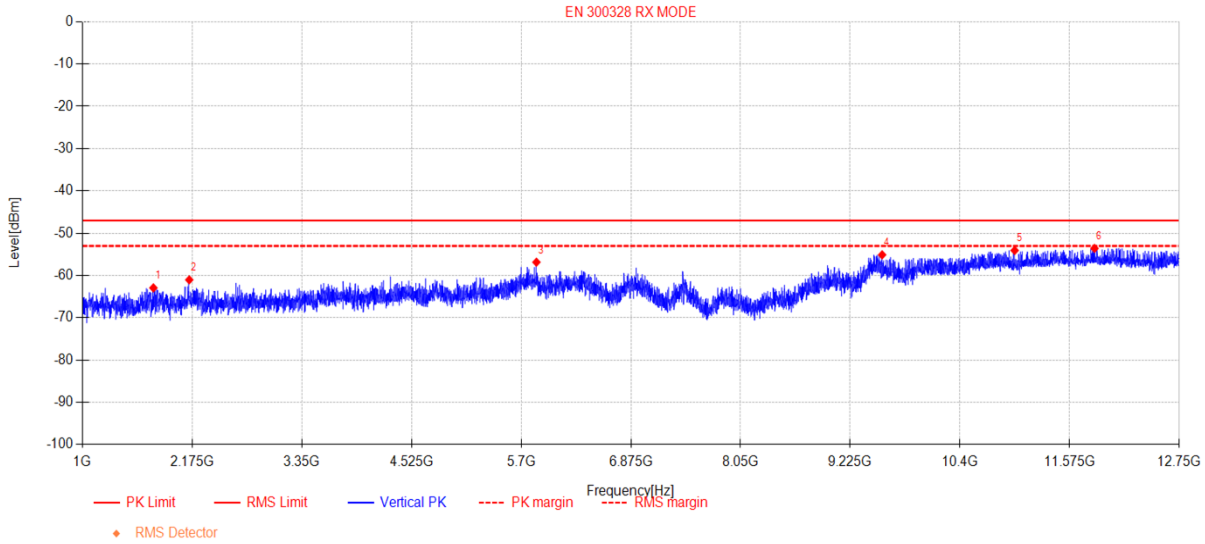
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4315.85	40.13	-100.41	-60.28	-47.00	13.28	PK	Horizontal	EIRP
2	5709.40	36.97	-95.32	-58.35	-47.00	11.35	PK	Horizontal	EIRP
3	9615.10	33.12	-87.50	-54.38	-47.00	7.38	PK	Horizontal	EIRP
4	10615.03	31.57	-87.01	-55.44	-47.00	8.44	PK	Horizontal	EIRP
5	11906.35	32.93	-86.81	-53.88	-47.00	6.88	PK	Horizontal	EIRP
6	12072.03	32.93	-86.82	-53.89	-47.00	6.89	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2404MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\22		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



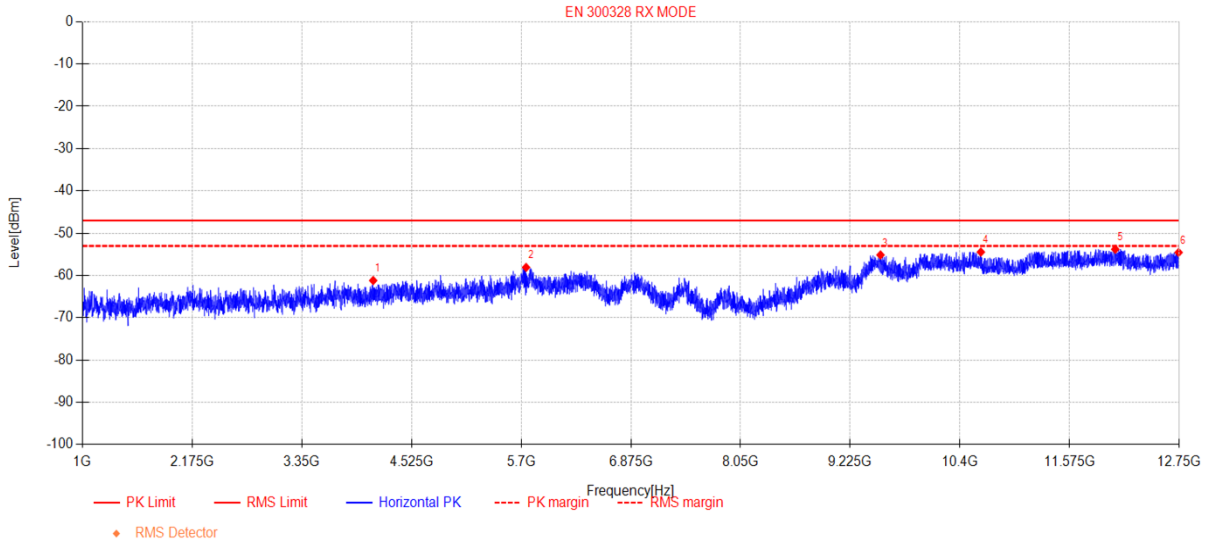
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	1760.23	40.42	-103.36	-62.94	-47.00	15.94	PK	Vertical	EIRP
2	2144.45	42.04	-103.07	-61.03	-47.00	14.03	PK	Vertical	EIRP
3	5863.33	37.84	-94.70	-56.86	-47.00	9.86	PK	Vertical	EIRP
4	9566.93	32.94	-88.06	-55.12	-47.00	8.12	PK	Vertical	EIRP
5	10986.33	31.89	-85.98	-54.09	-47.00	7.09	PK	Vertical	EIRP
6	11841.73	32.58	-86.18	-53.60	-47.00	6.60	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\23		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



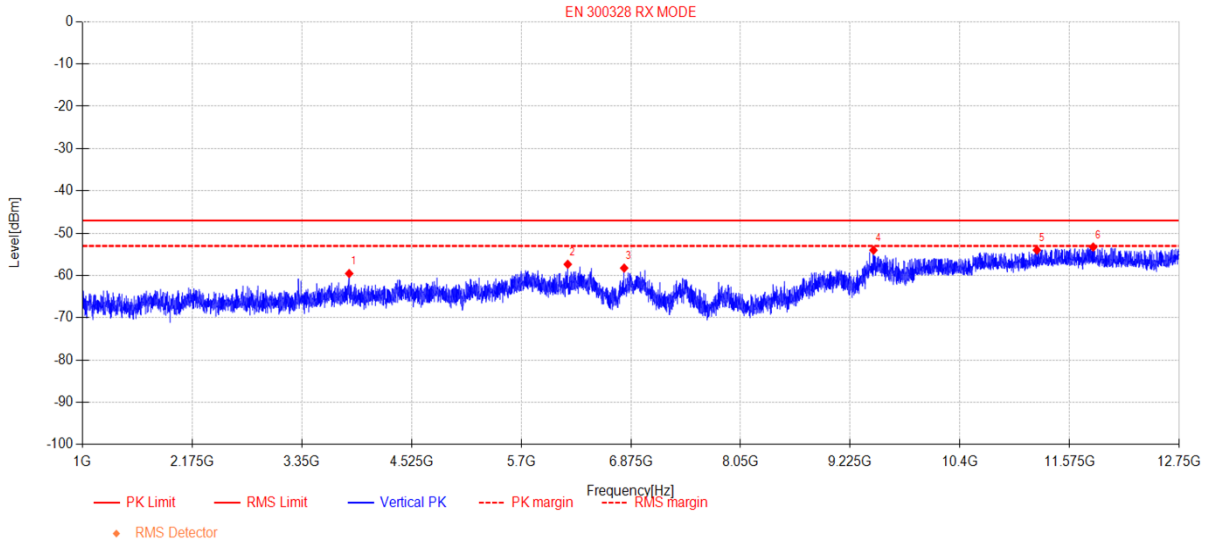
Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	4114.93	39.83	-101.03	-61.20	-47.00	14.20	PK	Horizontal	EIRP
2	5752.88	37.03	-95.12	-58.09	-47.00	11.09	PK	Horizontal	EIRP
3	9549.30	32.53	-87.68	-55.15	-47.00	8.15	PK	Horizontal	EIRP
4	10624.43	32.54	-87.01	-54.47	-47.00	7.47	PK	Horizontal	EIRP
5	12063.80	33.00	-86.81	-53.81	-47.00	6.81	PK	Horizontal	EIRP
6	12742.95	32.89	-87.45	-54.56	-47.00	7.56	PK	Horizontal	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Test Date:	2024-01-23	**Tested By**:	Bairong
EUT:	Multimedia Speaker	**Model Number**:	EDF100082
Test Mode:	BLE 2M 2478MHz RX	**Power Supply**:	AC 230V/50Hz
Condition:	Temp:22.2°C;Humi:41.1%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24011017-1E EDF100082\CE ABOVE 1G\24		
Memo:	Sample Number:S24011017-07 Power Setting:NA		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity	Type
1	3857.60	42.11	-101.66	-59.55	-47.00	12.55	PK	Vertical	EIRP
2	6199.38	36.80	-94.16	-57.36	-47.00	10.36	PK	Vertical	EIRP
3	6803.33	36.29	-94.54	-58.25	-47.00	11.25	PK	Vertical	EIRP
4	9474.10	34.28	-88.31	-54.03	-47.00	7.03	PK	Vertical	EIRP
5	11224.85	32.02	-86.03	-54.01	-47.00	7.01	PK	Vertical	EIRP
6	11827.63	32.89	-86.17	-53.28	-47.00	6.28	PK	Vertical	EIRP

Note:
1. Level = Reading + Factor.
2. Factor = Antenna Factor + Cable Loss + Filter Factor - Preamp Gain + Site Loss Factor - 107.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.