

RF TEST REPORT

Report No.....: 20260702W26301X-W2
Product Name.....: Smart Watch
Model No.....: U2
Applicant.....: Shenzhen Huafurui Technology Co., Ltd.
Applicant Address.....: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building,
No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street,
Longgang District, Shenzhen, P.R. China
Dates of Testing.....: 2026-05-20 to 2026-06-01
Issued by.....: CCIC Southern Testing Co., Ltd.
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Test Report

Product Name.....: Smart Watch
Trade Name.....: CUBOT
Applicant.....: Shenzhen Huafurui Technology Co., Ltd.
Applicant Address.....: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building,
 No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street,
 Longgang District, Shenzhen, P.R. China
Manufacturer.....: Shenzhen Huafurui Technology Co., Ltd.
Manufacturer Address.....: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building,
 No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street,
 Longgang District, Shenzhen, P.R. China
Test Standards.....: ETSI EN 300 328 V2.2.2 (2019-07) Wideband transmission systems;
 Data transmission equipment operating in the 2,4 GHz band
 Harmonised Standard for access to radio spectrum.
Test Result.....: Pass

Tested by.....: Chuiwang Zhang 2026-07-09
 Chuiwang Zhang, Test Engineer

Reviewed by.....: Sun Jiaohui 2026-07-09
 Sun Jiaohui, Senior Engineer

Approved by.....: Wang Shijie 2026-07-09
 Wang Shijie, Manager



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Change History		
Issue	Date	Reason for change
1.0	2026-07-09	First edition



1. General Information

1.1. Description of EUT

Product Name	Smart Watch	
Power Supply	Rechargeable Li-ion Polymer Battery DC3.8V/220mAh	
Temperature operating range	0°C to +55°C	
EUT supports Radios application	Bluetooth BR/EDR/LE	
Modulation technology	Bluetooth BR/EDR	FHSS
Modulation Type	Bluetooth BR/EDR	GFSK, $\pi/4$ -DQPSK, 8DPSK
	BLE	GFSK
Transfer Rate	Bluetooth BR/EDR	1/2/3Mbps
	BLE	1/2Mbps
Number of channel	Bluetooth BR/EDR	79
	BLE	40
Frequency Range	Bluetooth BR/EDR/LE	2402~2480MHz
Max. EIRP	Bluetooth BR/EDR	9.32dBm
	BLE	7.80dBm
Antenna Type	Internal antenna	
Antenna Gain	0.17 dBi	

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

Note 2: This report is based on the original report 20260502W18940X-W2. EUT changed the applicant, applicant address, manufacturer, manufacturer address and product model. Based on these changes, there is no need to retest



1.2. Test Standards and Results

The EUT has been tested according to ETSI EN 300 328 V2.2.2 (2019-07).

No.	Identity	Document Title
1	ETSI EN 300 328 V2.2.2 (2019-07)	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band Harmonised Standard for access to radio spectrum.

Test items and the results are as bellow:

Bluetooth BR/EDR

EN Reference		EN 300 328 V2.2.2	Result
No.	Sub clause	Test Items	
1	4.3.1.2	RF Output Power	PASS
2	4.3.2.3	Power Spectral Density	N/A ^{Note 2}
3	4.3.1.3	Duty cycle, Tx-sequence, Tx-gap	N/A ^{Note 1}
4	4.3.1.4	Accumulated Transmit Time, Frequency Occupation & Hopping Sequence	PASS
5	4.3.1.5	Hopping Frequency Separation	PASS
6	4.3.1.6	Medium Utilization	N/A ^{Note 1}
7	4.3.1.7	Adaptivity	N/A ^{Note 3}
8	4.3.1.8	Occupied Channel Bandwidth	PASS
9	4.3.1.9	Transmitter unwanted emissions in the OOB domain	PASS
10	4.3.1.10	Transmitter unwanted emissions in the spurious domain	PASS
11	4.3.1.11	Receiver spurious emissions	PASS
12	4.3.1.12	Receiver Blocking	PASS
13	4.3.1.13	Geo-location capability	N/A ^{Note 4}

Note 1: The EUT is an adaptive frequency hopping equipment and can't work in a non-adaptive mode.

Note 2: The EUT is using FHSS modulation.

Note 3: This requirement does not apply for equipment with a maximum RF Output power level of less than 10 dBm e.i.r.p.

Note 4: EUT without Geo-location capability.

Bluetooth LE

EN Reference		EN 300 328 V2.2.2	Result
No.	Sub clause	Test Items	
1	4.3.2.2	RF Output Power	PASS
2	4.3.2.3	Power Spectral Density	PASS
3	4.3.2.4	Duty cycle, Tx-sequence, Tx-gap	N/A ^{Note 1}
4	4.3.1.4	Accumulated Transmit Time, Frequency Occupation & Hopping Sequence	N/A ^{Note 2}
5	4.3.1.5	Hopping Frequency Separation	N/A ^{Note 2}
6	4.3.2.5	Medium Utilisation	N/A ^{Note 1}
7	4.3.2.6	Adaptivity	N/A ^{Note 3}
8	4.3.2.7	Occupied Channel Bandwidth	PASS
9	4.3.2.8	Transmitter unwanted emissions in the OOB domain	PASS
10	4.3.2.9	Transmitter unwanted emissions in the spurious domain	PASS
11	4.3.2.10	Receiver spurious emissions	PASS
12	4.3.2.11	Receiver Blocking	PASS
13	4.3.1.13	Geo-location capability	N/A ^{Note 4}

Note 1: The EUT is an adaptive Equipment using Modulations Other Than FHSS and can't work in a non-adaptive mode.

Note 2: The EUT is using other types of wide band modulation (DSSS, OFDM).

Note 3: This requirement does not apply for equipment with a maximum RF Output power level of less than 10 dBm e.i.r.p.

Note 4: EUT without Geo-location capability.



1.3. Description of test modes

79 channels are provided for Bluetooth BR/EDR.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
0	2402	27	2429	54	2456
1	2403	28	2430	55	2457
2	2404	29	2431	56	2458
3	2405	30	2432	57	2459
4	2406	31	2433	58	2460
5	2407	32	2434	59	2461
...	...	...	...	...	...
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454	/	/
26	2428	53	2455	/	/

Note 1: $F(\text{MHz}) = 2402 + 1 \cdot n$ ($0 \leq n \leq 78$).

Note 2: Channels 0, 39 and 78 were selected for GFSK, $\pi/4$ -DQPSK and 8DPSK as the low, mid and high channels for testing.

40 channels are provided for Bluetooth LE.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	/	/
13	2428	27	2456	/	/

Note: Channels 0, 19 and 39 were selected for GFSK as the low, mid and high channels for testing.

1.4. Test Equipments Utilized

☒ CCIC-SET Lab 1

List of Test and Measurement Equipment (Conducted)

JS1120 Test System						
No.	Equipment Name	Serial No.	Model No.	Manufacturer	Cal Date	Due Date
1	Spectrum Analyzer	A140801886	FSV-40	R&S	2025.07.16	2026.07.15
2	Vector Signal Generator	A240604406	SMBV100B	R&S	2025.08.20	2026.08.19
3	Signal Generator	A140801888	SMB100A	R&S	2026.01.08	2027.01.07
4	Wideband radio communication tester	A180402916	CMW270	R&S	2025.07.16	2026.07.15
5	Wi-Fi 7GHz Band Extender	A240604417	TS-WF7U2-CV	Tonscend	2025.12.02	2026.12.01
6	Automatic Control Unit	A240604416	JS0806-2	Tonscend	2025.12.02	2026.12.01

Climate Chamber

No.	Equipment Name	Serial No.	Model No.	Manufacturer	Cal. Date	Due Date
1	Constant Temperature Humidity Chamber	A150802409	SU-642	ESPEC	2026.01.08	2027.01.07

List of Test and Measurement Equipment (Radiation)

No.	Equipment Name	Serial No.	Model No.	Manufacturer	Cal. Date	Due Date
1	EMI Test Receiver	A180502935	ESW26	R&S	2026.04.15	2027.04.14
2	Broadband Antenna (30MHz-1GHz)	A0304224	HL562	R&S	2024.07.04	2027.07.03
3	Horn Ant. (1GHz-18GHz)	A150402241	MCTD-1209	ETC	2025.05.10	2028.05.09

Note 1: Equipments listed above have been calibrated and are in the period of validation.

1.5. Environmental Conditions

Ambient temperature:	Normal: 15°C ~ 35°C, Extreme: 0°C ~ +55°C
Relative humidity:	20% to 75%
Atmosphere pressure:	86 kPa to 106 kPa
Operating Voltage:	Nominal: 3.8Vdc

Note: “NTNV” means Normal Temperature Normal Voltage, “LTNV” means Low Temperature Normal Voltage, “HTNV” means High Temperature Normal Voltage.

1.6. Measurement Uncertainty

PARAMETER	UNCERTAINTY
Radio Frequency	$\pm 1 \times 10^{-5}$ Hz
RF Output Power, conducted	± 0.8 dB
Power Spectral Density, conducted	± 0.8 dB
Spurious Emissions, conducted	± 2.7 dB
Spurious Emissions, Radiated	± 2.8 dB
Occupied channel bandwidth	$\pm 1.5\%$
Duty Cycle	$\pm 3\%$
Humidity	$\pm 3\%$
Temperature	$\pm 0.8^{\circ}\text{C}$
DC and low frequency voltages	$\pm 2.5\%$
Time	$\pm 1\%$

For the test methods, according to the present document, the measurement uncertainty figures shall be calculated in according with TR 100 028-1[2] and shall correspond to an expansion to expansion factor (coverage factor) $k=1.96$ or $k=2$ (which provide confidence levels of respectively 95% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).



1.7. Accreditation Certificate

☒ CCIC-SET Lab 1

Address: Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China

ISED Registration: 11185A, CAB number: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

CNAS L1659

CCIC Southern Testing Co., Ltd. CCIC is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

☐ CCIC-SET Lab 3

Address: No.125, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan City, Guangdong Province, China

CNAS L1659

CCIC Southern Testing Co., Ltd. CCIC is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.



2. Transmitter Parameters (For Bluetooth BR/EDR)

2.1. EN 300 328 §4.3.1.2 - RF Output power

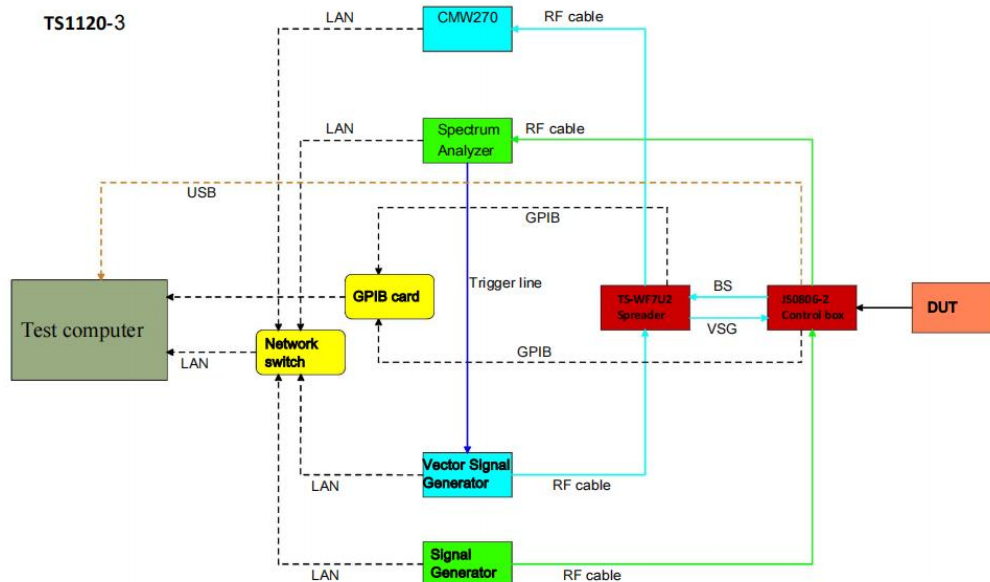
2.1.1. Definition

The RF output power is defined as the mean equivalent isotropic radiated power (e.i.r.p.) of the equipment during a transmission burst.

2.1.2. Limits

For adaptive equipment using wide band modulations other than FHSS, the maximum RF output power shall be 20 dBm.

2.1.3. Test Configuration



2.1.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.2 for the measurement method.

2.1.5. Test Result

Please refer to Annex C for Bluetooth BR/EDR test result for detail.

2.2. EN 300 328 §4.3.1.4 - Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

2.2.1. Definition

The Accumulated Transmit Time is the total of the transmitter 'on' times, during an observation period, on a particular hopping frequency.

The Frequency Occupation is the number of times that each hopping frequency is occupied within a given period. A hopping frequency is considered to be occupied when the equipment selects that frequency from the hopping sequence.

The equipment may be transmitting, receiving or stay idle during the Dwell Time spent on that hopping frequency.

The Hopping Sequence of a Frequency Hopping system is the unrepeated pattern of the hopping frequencies used by the equipment.

2.2.2. Limits

Adaptive Frequency Hopping systems shall be capable of operating over a minimum of 70 % of the band specified in clause 1.

The Accumulated Transmit Time on any hopping frequency shall not be greater than 400 ms within any observation period of 400 ms multiplied by the minimum number of hopping frequencies (N) that have to be used.

In order for the equipment to comply with the Frequency Occupation requirement, it shall meet either of the following two options:

Option 1: Each hopping frequency of the hopping sequence shall be occupied at least once within a period not exceeding four times the product of the dwell time and the number of hopping frequencies in use.

Option 2: The occupation probability for each frequency shall be between $((1 / U) \times 25 \%)$ and 77 % where U is the number of hopping frequencies in use.

The hopping sequence(s) shall contain at least N hopping frequencies at all times, where N is 15 or 15 divided by the minimum Hopping Frequency Separation in MHz, whichever is the greater.

2.2.3. Test Configuration

Please refer to 2.1.3.

2.2.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.4 for the measurement method.

2.2.5. Test Result

Please refer to Annex C for Bluetooth BR/EDR test result for detail.



2.3. EN 300 328 §4.3.1.5 - Hopping Frequency Separation

2.3.1. Definition

The Hopping Frequency Separation is the frequency separation between 2 adjacent hopping frequencies.

2.3.2. Limits

Adaptive frequency hopping systems: The minimum Hopping Frequency Separation shall be 100 kHz.

2.3.3. Test Configuration

Please refer to 2.1.3.

2.3.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.5 for the measurement method.

2.3.5. Test Result

Please refer to Annex C for Bluetooth BR/EDR test result for detail.



2.4. EN 300 328 §4.3.1.7 - Adaptivity

2.4.1. Adaptive FHSS using DAA

2.4.1.1. Definition

Adaptive FHSS using DAA is a mechanism by which a given hopping frequency is made 'unavailable' because an interfering signal was reported after transmissions on that frequency. This mechanism shall operate as intended in the presence of an unwanted signal on frequencies other than those of the operating band.

2.4.1.2. Limits

Adaptive FHSS equipment using DAA, shall comply with the following minimum set of requirements:

- 1) During normal operation, the equipment shall evaluate the presence of a signal for each of its hopping frequencies. If it is determined that a signal is present with a level above the detection threshold defined in step 5 the hopping frequency shall be marked as 'unavailable'.
- 2) The hopping frequency shall remain unavailable for a minimum time equal to 1 second or 5 times the actual number of hopping frequencies in the current (adapted) channel map used by the equipment, multiplied with the Channel Occupancy Time whichever is greater. There shall be no transmissions during this silent period on this hopping frequency. After this, the hopping frequency may be considered again as an 'available' frequency.
- 3) The total time during which an equipment has transmissions on a given hopping frequency without re-evaluating the availability of that hopping frequency is defined as the Channel Occupancy Time.

The Channel Occupancy Time for a given hopping frequency shall be less than 40 ms. For equipment using a dwell time > 40 ms that wants to have other transmissions during the same hop (dwell time) an Idle Period (no transmissions) of minimum 5 % of the Channel Occupancy Period with a minimum of 100 μ s shall be implemented.

After the Idle Period has expired, the equipment may continue its normal operation as explained in step 1.

EXAMPLE: An equipment with a dwell time of 400 ms can have 9 transmission sequences of 40 ms each, separated with an Idle Period of 2 ms.

For FHSS equipment using DAA with a dwell time < 40 ms, the maximum Channel Occupancy Time may be non-contiguous, i.e. spread over a number of Hopping Sequences (equal to 40 ms divided by the dwell time [ms]).

- 4) In case the 'unavailable' channels remain in the Hopping Sequence, apart from the Short

Control Signalling Transmissions referred to in clause 4.3.1.7.4, there shall be no transmissions on these 'unavailable' channels. In case the 'unavailable channels' are removed from the Hopping Sequence, a minimum of N hopping frequencies as defined in clause 4.3.1.4.3.2 shall always be maintained.

- 5) The detection threshold shall be proportional to the transmit power of the transmitter: for a 20 dBm e.i.r.p. transmitter the detection threshold level (TL) shall be equal to or less than -70 dBm/MHz at the input to the receiver assuming a 0 dBi (receive) antenna assembly. This threshold level (TL) may be corrected for the (receive) antenna assembly gain (G); however, beamforming gain (Y) shall not be taken into account. For power levels below 20 dBm e.i.r.p., the detection threshold level may be relaxed to:

$$TL = -70 \text{ dBm/MHz} + 10 \times \log_{10} (100 \text{ mW} / P_{out}) \quad (P_{out} \text{ in mW e.i.r.p.})$$

- 6) The equipment shall comply with the requirements defined in step 1 to step 4 of the present clause in the presence of an unwanted CW signal as defined in table 3.

Table 3: Unwanted Signal parameters

Wanted signal mean power from companion device (dBm)	Unwanted signal frequency (MHz)	Unwanted CW signal power (dBm)
-130 (see note 2)	2395 or 2488.5 (see note 1)	-34 (see note 2)
NOTE 1: The highest frequency shall be used for testing operating channels within the range 2 400 MHz to 2 442 MHz, while the lowest frequency shall be used for testing operating channels within the range 2 442 MHz to 2 483,5 MHz. See clause 5.4.6.1.		
NOTE 2: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density in front of the UUT antenna (see example below).		

2.4.2. Short Control Signalling Transmissions

2.4.2.1. Definition

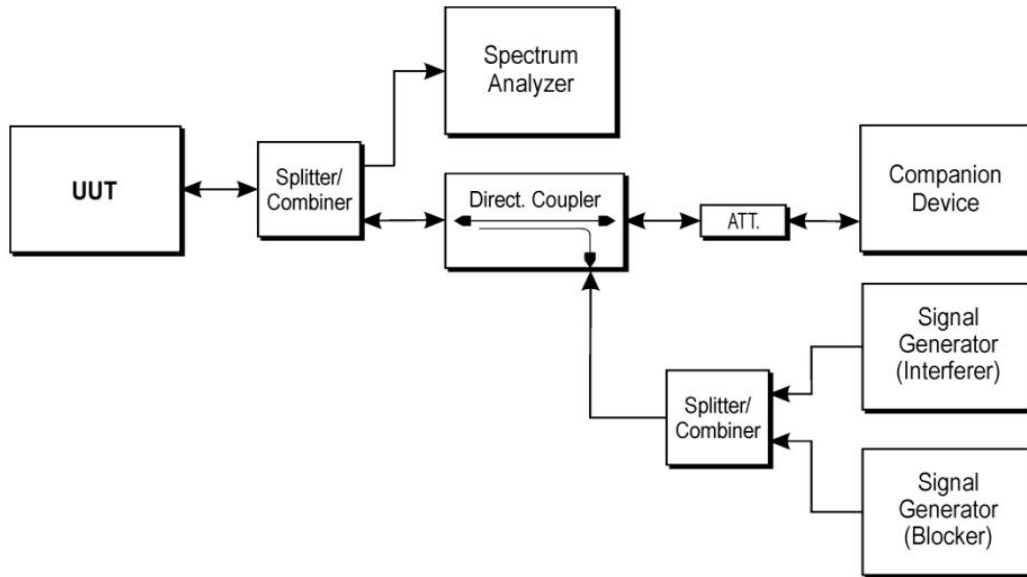
Short Control Signalling Transmissions are transmissions used by Adaptive FHSS equipment to send management and control signals without sensing the hopping frequency for the presence of other signals.

Adaptive equipment may have Short Control Signalling Transmissions.

2.4.2.2. Limits

If implemented, Short Control Signalling Transmissions shall have a maximum TxOn / (TxOn + TxOff) ratio of 10 % within any observation period of 50 ms or within an observation period equal to the dwell time, whichever is less.

2.4.3. Test Configuration



2.4.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.6.2.1.2 for the measurement method.

2.4.5. Support Unit used in test configuration

Item	Instrument	Manufacturer	Model No.
1	Mobile phone	ZTE	ZTE 9100N

2.4.6. Test Result

Not applicable.

2.5. EN 300 328 §4.3.1.8 - Occupied Channel Bandwidth

2.5.1. Definition

The Occupied Channel Bandwidth is the bandwidth that contains 99 % of the power of the signal when considering a single hopping frequency.

2.5.2. Limits

The Occupied Channel Bandwidth for each hopping frequency shall fall completely within the band given in clause 1(2.4 GHz to 2.4835 GHz).

2.5.3. Test Configuration

Please refer to 2.1.3.

2.5.4. Test procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.7 for the measurement method.

2.5.5. Test Result

Please refer to Annex C for Bluetooth BR/EDR test result for detail.



2.6. EN 300 328 §4.3.1.9 - Transmitter unwanted emissions in the out-of-band domain

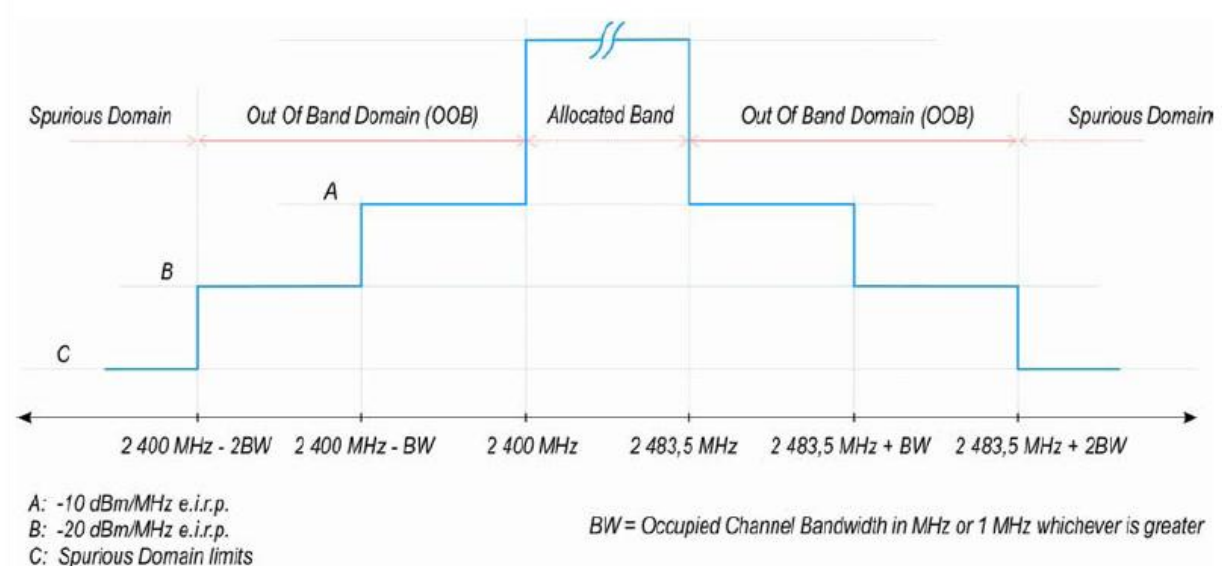
2.6.1. Definition

Transmitter unwanted emissions in the out-of-band domain are emissions when the equipment is in Transmit mode, on frequencies immediately outside the necessary bandwidth which results from the modulation process, but excluding spurious.

2.6.2. Limits

The transmitter unwanted emissions in the out-of-band domain but outside the allocated band, shall not exceed the values provided by the mask in figure 1.

NOTE: Within the 2 400 MHz to 2 483,5 MHz band, the Out-of-band emissions are fulfilled by compliance with the Occupied Channel Bandwidth requirement in §2.4 in this report.



2.6.3. Test Configuration

Please refer to 2.1.3.

2.6.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.8 for the measurement method.

2.6.5. Test Results

Please refer to Annex C for Bluetooth BR/EDR test result for detail.

2.7. EN 300 328 §4.3.1.10 - Transmitter unwanted emissions in the spurious domain

2.7.1. Definition

Transmitter unwanted emissions in the spurious domain are emissions outside the allocated band and outside the out-of-band domain as indicated in figure 1 when the equipment is in Transmit mode.

2.7.2. Limits

The transmitter unwanted emissions in the spurious domain shall not exceed the values given in table 4.

In case of equipment with antenna connectors, these limits apply to emissions at the antenna port (conducted). For emissions radiated by the cabinet or emissions radiated by integral antenna equipment (without antenna connectors), these limits are e.r.p. for emissions up to 1 GHz and as e.i.r.p. for emissions above 1 GHz.

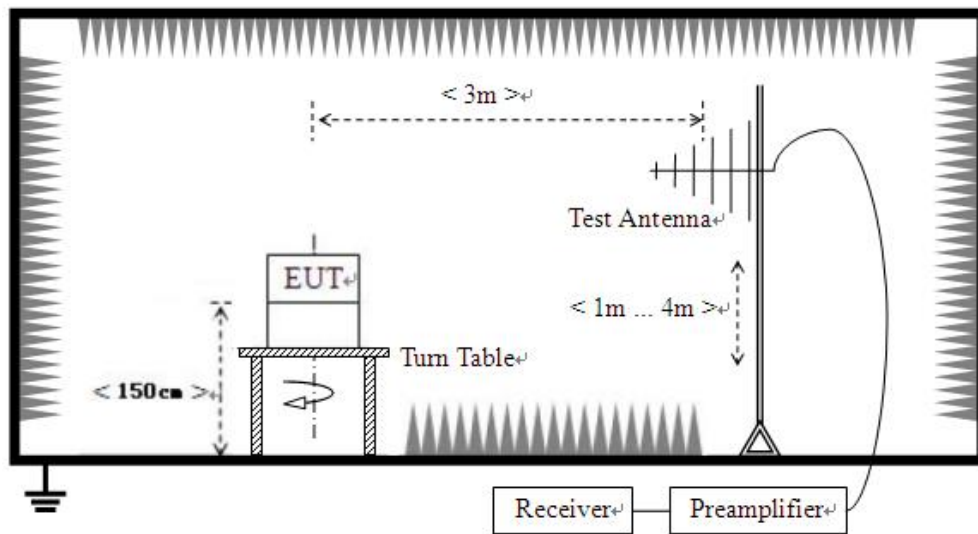
Table 4: Transmitter limits for spurious emissions

Frequency range	Maximum power	Bandwidth
30 MHz to 47 MHz	-36 dBm	100 kHz
47 MHz to 74 MHz	-54 dBm	100 kHz
74 MHz to 87.5 MHz	-36 dBm	100 kHz
87.5 MHz to 118 MHz	-54 dBm	100 kHz
118MHz to 174 MHz	-36 dBm	100 kHz
174 MHz to 230 MHz	-54 dBm	100 kHz
230 MHz to 470 MHz	-36 dBm	100 kHz
470 MHz to 694 MHz	-54 dBm	100 kHz
694 MHz to 1 GHz	-36 dBm	100 kHz
1 GHz to 12.75 GHz	-30 dBm	1 MHz

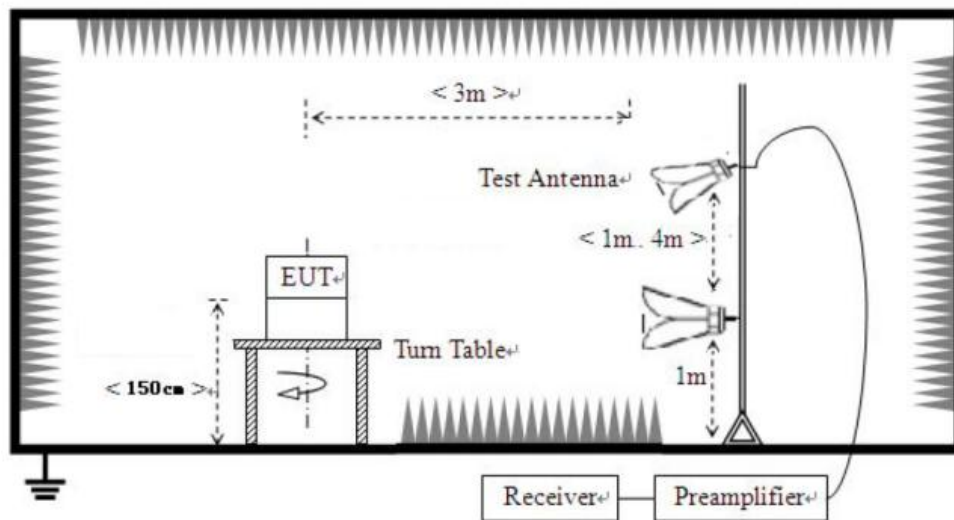
2.7.3. Test Configuration

For conducted emissions please refer to 2.1.3.

For radiated emissions from 30MHz to 1GHz:



For radiated emissions above 1GHz:



2.7.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.9 for the measurement method.

2.7.5. Test Results

Please refer to Annex C for Bluetooth BR/EDR test result for detail.

2.8. EN 300 328 §4.3.1.11 - Receiver spurious emissions

2.8.1. Definition

Receiver spurious emissions are emissions at any frequency when the equipment is in receive mode.

2.8.2. Limits

The spurious emissions of the receiver shall not exceed the values given in table 5.

In case of FHSS equipment with antenna connectors, these limits apply to emissions at the antenna port (conducted). For emissions radiated by the cabinet or for emissions radiated by integral antenna equipment (without antenna connectors), these limits are e.r.p. for emissions up to 1 GHz and e.i.r.p. for emissions above 1 GHz.

Table 5: Spurious emission limits for receivers

Frequency range	Maximum power	Bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 12.75 GHz	-47 dBm	1 MHz

2.8.3. Test Configuration

Please refer to 2.6.3.

2.8.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.10 for the measurement method.

2.8.5. Test Results

Please refer to Annex C for Bluetooth BR/EDR test result for detail.

2.9. EN 300 328 §4.3.1.12 - Receiver Blocking

2.9.1. Definition

Receiver blocking is a measure of the ability of the equipment to receive a wanted signal on its operating channel without exceeding a given degradation due to the presence of an unwanted input signal (blocking signal) on frequencies other than those of the operating band and spurious responses.

2.9.2. Limits

While maintaining the minimum performance criteria as defined in clause 4.3.1.12.3, the blocking levels at specified frequency offsets shall be equal to or greater than the limits defined for the applicable receiver category provided in table 6, table 7 or table 8.

Table 6: Receiver blocking parameters for Receiver Category 1 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 4)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 4)	Type of blocking Signal
$(-133 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}))$ or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}))$ or -74 dBm whichever is less (see note 3)	2 300 2 330 2 360 2 524 2 584 2 674		

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 26 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 20 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 4: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Table 7: Receiver blocking parameters for Receiver Category 2 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking Signal
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}) + 10 \text{ dB})$ or $-74 \text{ dBm} + 10 \text{ dB}$ whichever is less (see note 2)	2380 2504 2300 2584	-34	CW

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 26 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Table 8: Receiver blocking parameters for Receiver Category 3 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking Signal
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}) + 20 \text{ dB})$ or $-74 \text{ dBm} + 20 \text{ dB}$ whichever is less (see note 2)	2380 2504 2300 2584	-34	CW

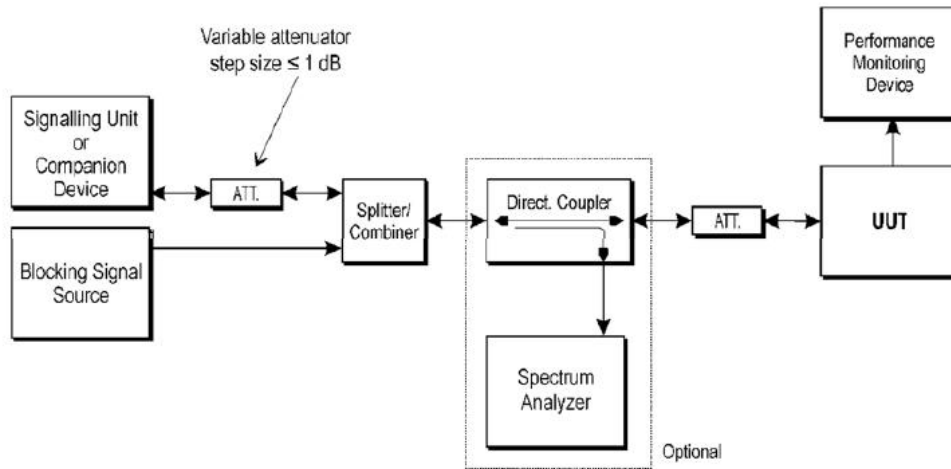
NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 30 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.



2.9.3. Test Configuration



2.9.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) clause 5.4.11.1 for the test conditions.

Please refer to ETSI EN 300 328 (V2.2.2) clause 5.4.11.2 for the measurement method.

2.9.5. Test Results

Please refer to Annex C for Bluetooth BR/EDR test result for detail.

3. Transmitter Parameters (For Bluetooth LE)

3.1. EN 300 328 §4.3.2.2 - RF Output power

3.1.1. Definition

The RF output power is defined as the mean equivalent isotropic radiated power (e.i.r.p.) of the equipment during a transmission burst.

3.1.2. Limits

For adaptive equipment using wide band modulations other than FHSS, the maximum RF output power shall be 20 dBm.

3.1.3. Test Configuration

Please refer to 2.1.3.

3.1.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.2 for the measurement method.

3.1.5. Result

Please refer to Annex D for Bluetooth LE test result for detail.



3.2. EN 300 328 §4.3.2.3 - Power Spectral Density

3.2.1. Definition

The Power Spectral Density is the mean equivalent isotropically radiated power (e.i.r.p.) spectral density in a 1 MHz bandwidth during a transmission burst.

3.2.2. Limits

For equipment using wide band modulations other than FHSS, the maximum Power Spectral Density is limited to 10 dBm per MHz.

3.2.3. Test Configuration

Please refer to 2.1.3.

3.2.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.3 for the measurement method.

3.2.5. Test Results

Please refer to Annex D for Bluetooth LE test result for detail.

3.3. EN 300 328 §4.3.2.7 - Occupied Channel Bandwidth

3.3.1. Definition

The Occupied Channel Bandwidth is the bandwidth that contains 99 % of the power of the signal.

3.3.2. Limits

The Occupied Channel Bandwidth for each hopping frequency shall fall completely within the band 2400MHz to 2483.5MHz.

3.3.3. Test Configuration

Please refer to 2.1.3.

3.3.4. Test procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.7 for the measurement method.

3.3.5. Test Result

Please refer to Annex D for Bluetooth LE test result for detail.



3.4. EN 300 328 §4.3.2.8 - Transmitter unwanted emissions in the out-of-band domain

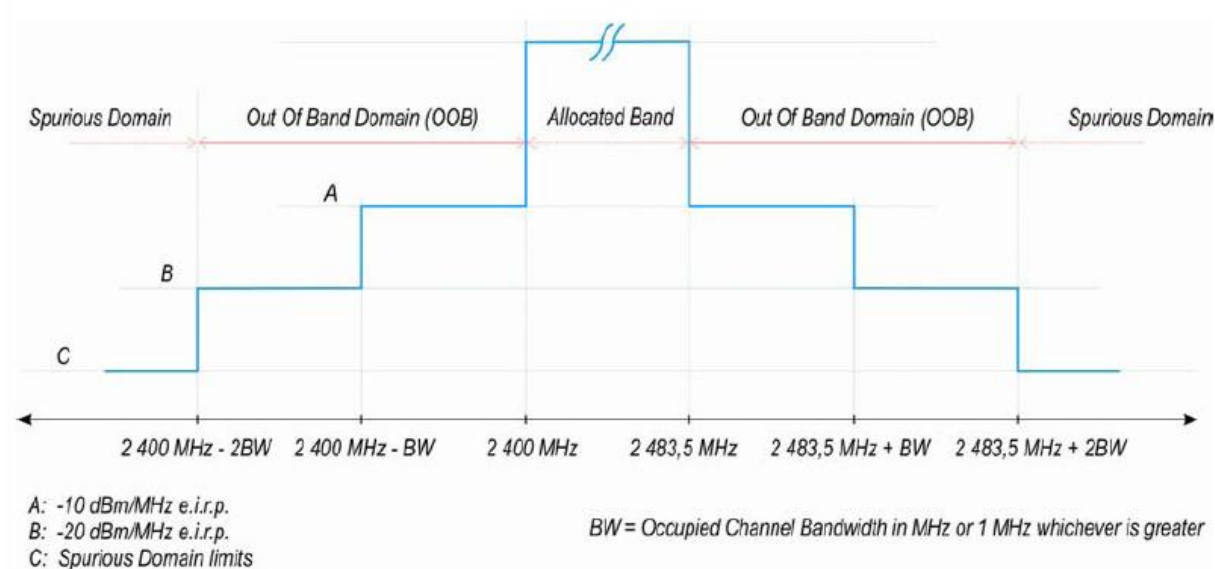
3.4.1. Definition

Transmitter unwanted emissions in the out-of-band domain are emissions when the equipment is in Transmit mode, on frequencies immediately outside the necessary bandwidth which results from the modulation process, but excluding spurious.

3.4.2. Limits

The transmitter unwanted emissions in the out-of-band domain but outside the allocated band, shall not exceed the values provided by the mask in figure 1.

NOTE: Within the 2 400 MHz to 2 483,5 MHz band, the Out-of-band emissions are fulfilled by compliance with the Occupied Channel Bandwidth requirement.



3.4.3. Test Configuration

Please refer to 2.1.3.

3.4.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.8 for the measurement method.

3.4.5. Test Results

Please refer to Annex D for Bluetooth LE test result for detail.

3.5. EN 300 328 §4.3.2.9 - Transmitter unwanted emissions in the spurious domain

3.5.1. Definition

Transmitter unwanted emissions in the spurious domain are emissions outside the allocated band and outside the out-of-band domain as indicated in figure 1 when the equipment is in Transmit mode.

3.5.2. Limits

The transmitter unwanted emissions in the spurious domain shall not exceed the values given in table 12.

In case of equipment with antenna connectors, these limits apply to emissions at the antenna port (conducted). For emissions radiated by the cabinet or emissions radiated by integral antenna equipment (without antenna connectors), these limits are e.r.p. for emissions up to 1 GHz and as e.i.r.p. for emissions above 1 GHz.

Table 12: Transmitter limits for spurious emissions

Frequency range	Maximum power	Bandwidth
30 MHz to 47 MHz	-36 dBm	100 kHz
47 MHz to 74 MHz	-54 dBm	100 kHz
74 MHz to 87.5 MHz	-36 dBm	100 kHz
87.5 MHz to 118 MHz	-54 dBm	100 kHz
118MHz to 174 MHz	-36 dBm	100 kHz
174 MHz to 230 MHz	-54 dBm	100 kHz
230 MHz to 470 MHz	-36 dBm	100 kHz
470 MHz to 694 MHz	-54 dBm	100 kHz
694 MHz to 1 GHz	-36 dBm	100 kHz
1 GHz to 12.75 GHz	-30 dBm	1 MHz

3.5.3. Test Configuration

Please refer to 2.7.3.

3.5.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.9 for the measurement method.

3.5.5. Test Results

Please refer to Annex D for Bluetooth LE test result for detail.

3.6. EN 300 328 §4.3.2.10 - Receiver spurious emissions

3.6.1. Definition

Receiver spurious emissions are emissions at any frequency when the equipment is in receive mode.

3.6.2. Limits

The spurious emissions of the receiver shall not exceed the values given in table 13.

In case of non-FHSS equipment with antenna connectors, these limits apply to emissions at the antenna port (conducted). For emissions radiated by the cabinet or for emissions radiated by integral antenna equipment (without antenna connectors), these limits are e.r.p. for emissions up to 1 GHz and e.i.r.p. for emissions above 1 GHz.

Table 13: Spurious emission limits for receivers

Frequency range	Maximum power	Bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 12.75 GHz	-47 dBm	1 MHz

3.6.3. Test Configuration

Please refer to 2.7.3.

3.6.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) Sub-clause 5.4.10 for the measurement method.

3.6.5. Test Results

Please refer to Annex D for Bluetooth LE test result for detail.

3.7. EN 300 328 §4.3.2.11 - Receiver Blocking

3.7.1. Definition

Receiver blocking is a measure of the ability of the equipment to receive a wanted signal on its operating channel without exceeding a given degradation due to the presence of an unwanted input signal (blocking signal) at frequencies other than those of the operating band and spurious responses.

3.7.2. Limits

While maintaining the minimum performance criteria as defined in clause 4.3.2.11.3, the blocking levels at specified frequency offsets shall be equal to or greater than the limits defined for the applicable receiver category provided in table 14, table 15 or table 16.

Table 14: Receiver blocking parameters for Receiver Category 1 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 4)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 4)	Type of blocking Signal
$(-133 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}))$ or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}))$ or -74 dBm whichever is less (see note 3)	2 300 2 330 2 360 2 524 2 584 2 674		

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 26 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 20 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 4: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Table 15: Receiver blocking parameters for Receiver Category 2 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking Signal
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}) + 10 \text{ dB})$ or $-74 \text{ dBm} + 10 \text{ dB}$ whichever is less (see note 2)	2380 2504 2300 2584	-34	CW

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 26 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Table 16: Receiver blocking parameters for Receiver Category 3 equipment

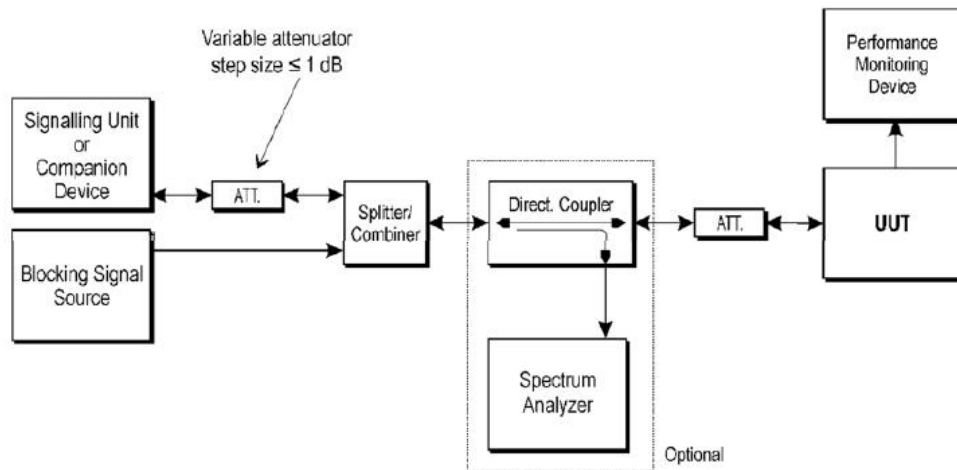
Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking Signal
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}) + 20 \text{ dB})$ or $-74 \text{ dBm} + 20 \text{ dB}$ whichever is less (see note 2)	2380 2504 2300 2584	-34	CW

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{\min} + 30 \text{ dB}$ where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

3.7.3. Test Configuration



3.7.4. Test Procedure

Please refer to ETSI EN 300 328 (V2.2.2) clause 5.4.11.1 for the test conditions.

Please refer to ETSI EN 300 328 (V2.2.2) clause 5.4.11.2 for the measurement method.

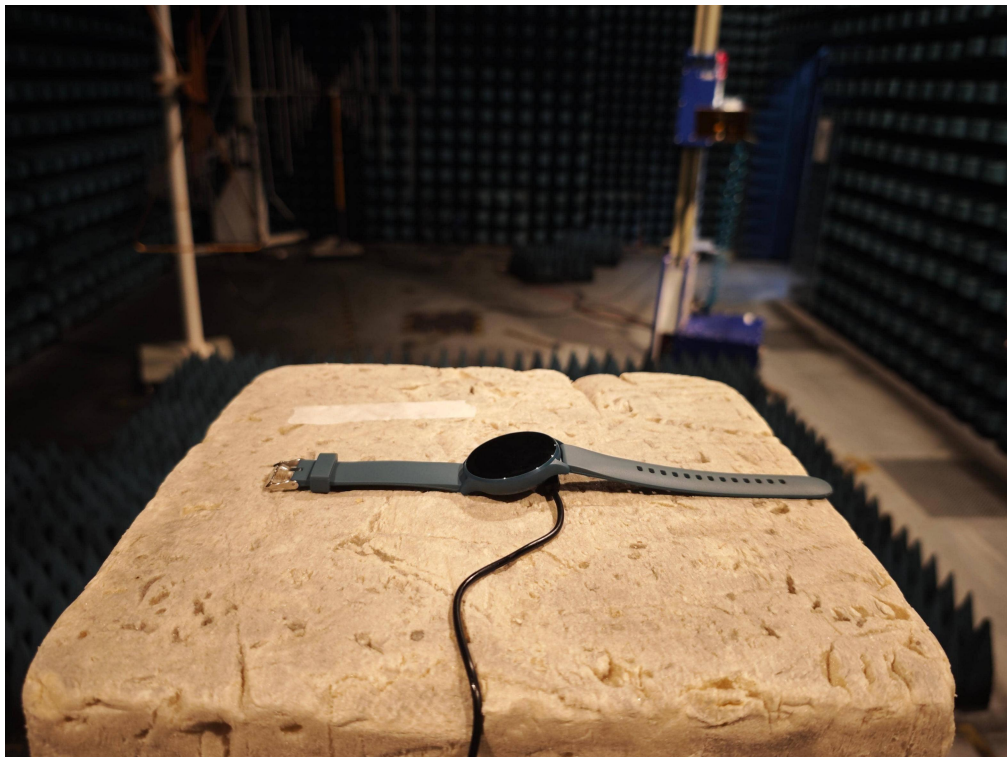
3.7.5. Test Results

Please refer to Annex D for Bluetooth LE test result for detail.

Annex A Photos of The EUT



Annex B Photos of Test Setup



Annex C Bluetooth BR/EDR TEST RESULT**RF Output Power****Test Result and Data**

Test Condition	Test Mode	Antenna	Frequency [MHz]	Burst Power [dBm]	Gain [dBi]	EIRP [dBm]	Number of Bursts	EIRP Limit [dBm]	Verdict
LTNV	DH5	Ant1	Hop	9.14	0.17	9.31	> 10	20	PASS
NTNV	DH5	Ant1	Hop	9.15	0.17	9.32	> 10	20	PASS
HTNV	DH5	Ant1	Hop	9.13	0.17	9.30	> 10	20	PASS
LTNV	2DH5	Ant1	Hop	7.87	0.17	8.04	> 10	20	PASS
NTNV	2DH5	Ant1	Hop	7.90	0.17	8.07	> 10	20	PASS
HTNV	2DH5	Ant1	Hop	7.91	0.17	8.08	> 10	20	PASS
LTNV	3DH5	Ant1	Hop	7.91	0.17	8.08	> 10	20	PASS
NTNV	3DH5	Ant1	Hop	7.89	0.17	8.06	> 10	20	PASS
HTNV	3DH5	Ant1	Hop	7.90	0.17	8.07	> 10	20	PASS

Accumulated Transmit Time, Min Frequency Occupation and Hopping Sequence Test Result and Data

Accumulated Transmit Time:

Test Mode	Antenna	Frequency[MHz]	Result [ms]	Limit[ms]	Verdict
DH5	Ant1	Hop_2402	281.231	400	PASS
DH5	Ant1	Hop_2480	273.858	400	PASS
2DH5	Ant1	Hop_2402	258.059	400	PASS
2DH5	Ant1	Hop_2480	314.937	400	PASS
3DH5	Ant1	Hop_2402	273.858	400	PASS
3DH5	Ant1	Hop_2480	260.165	400	PASS

Frequency Occupation:

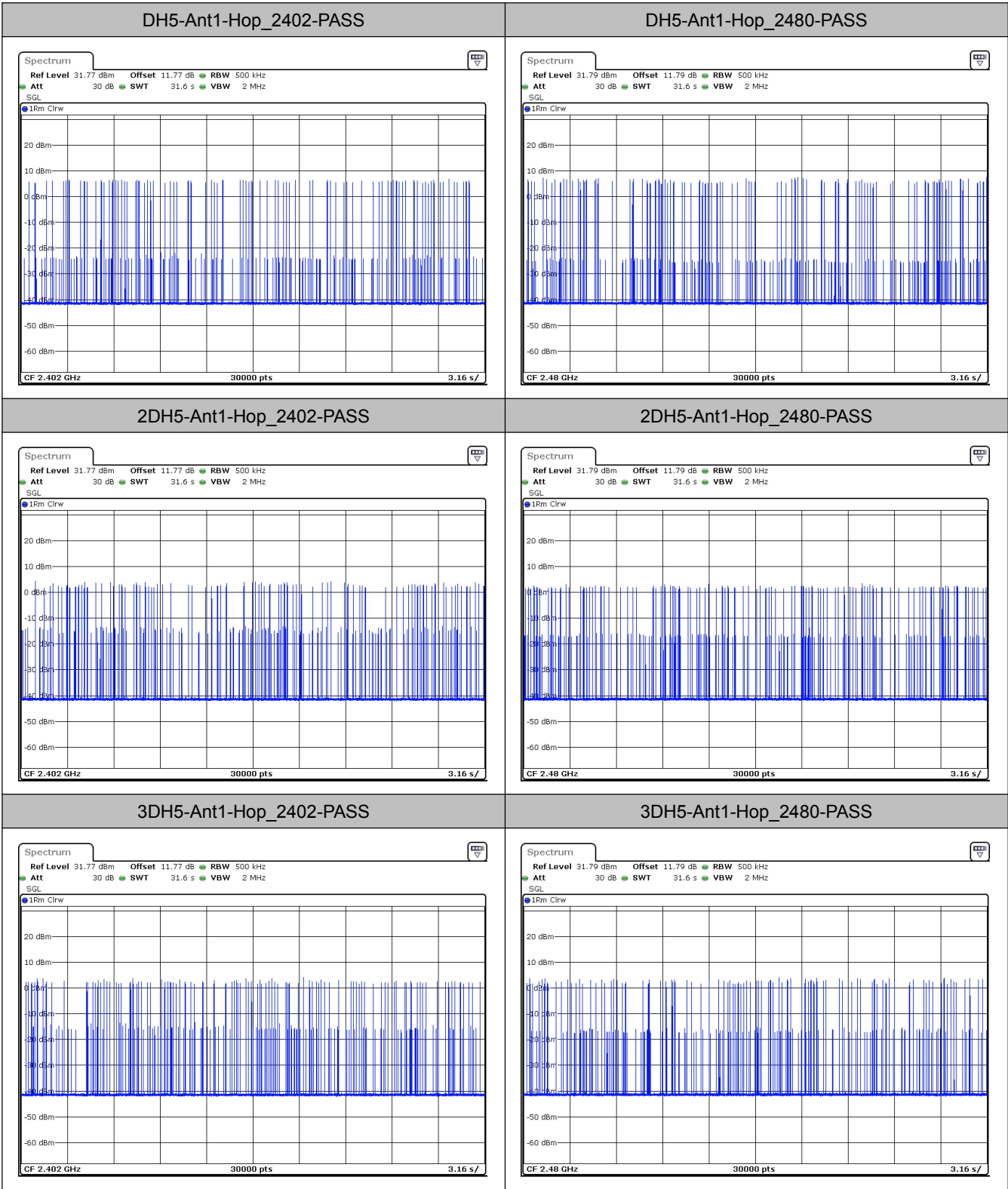
Test Mode	Antenna	Frequency[MHz]	Result [Num.]	Limit [Num.]	Verdict
DH5	Ant1	Hop_2402	2	1	PASS
DH5	Ant1	Hop_2480	5	1	PASS
2DH5	Ant1	Hop_2402	2	1	PASS
2DH5	Ant1	Hop_2480	4	1	PASS
3DH5	Ant1	Hop_2402	2	1	PASS
3DH5	Ant1	Hop_2480	2	1	PASS

Hopping Sequence:

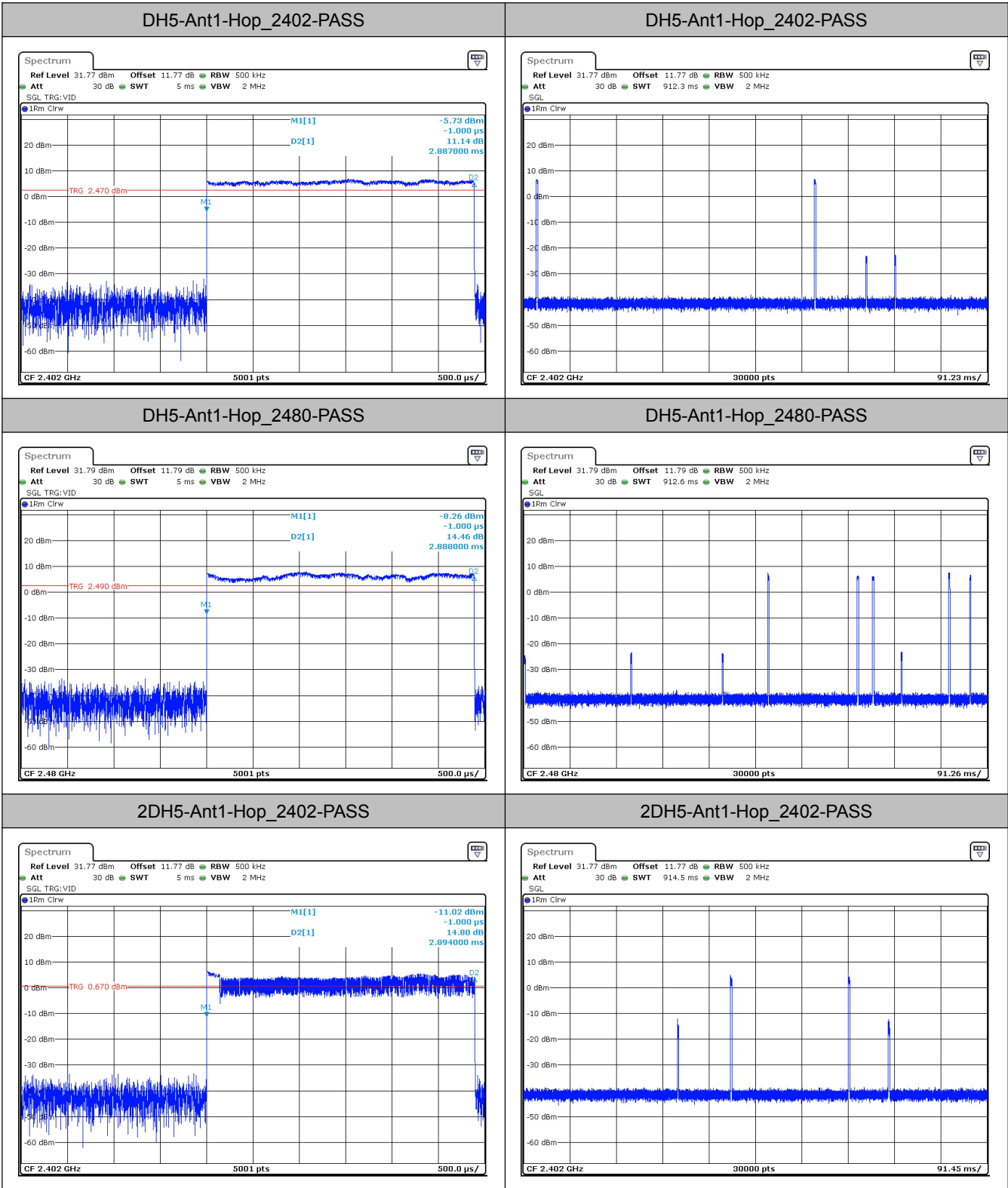
Test Mode	Antenna	Channel	Hop. [Num.]	Limit[Num.]	Band Use [%]	Limit [%]	Verdict
DH5	Ant1	Hop_2402	79	15	95.70	70	PASS
2DH5	Ant1	Hop_2402	79	15	96.20	70	PASS
3DH5	Ant1	Hop_2402	79	15	96.20	70	PASS

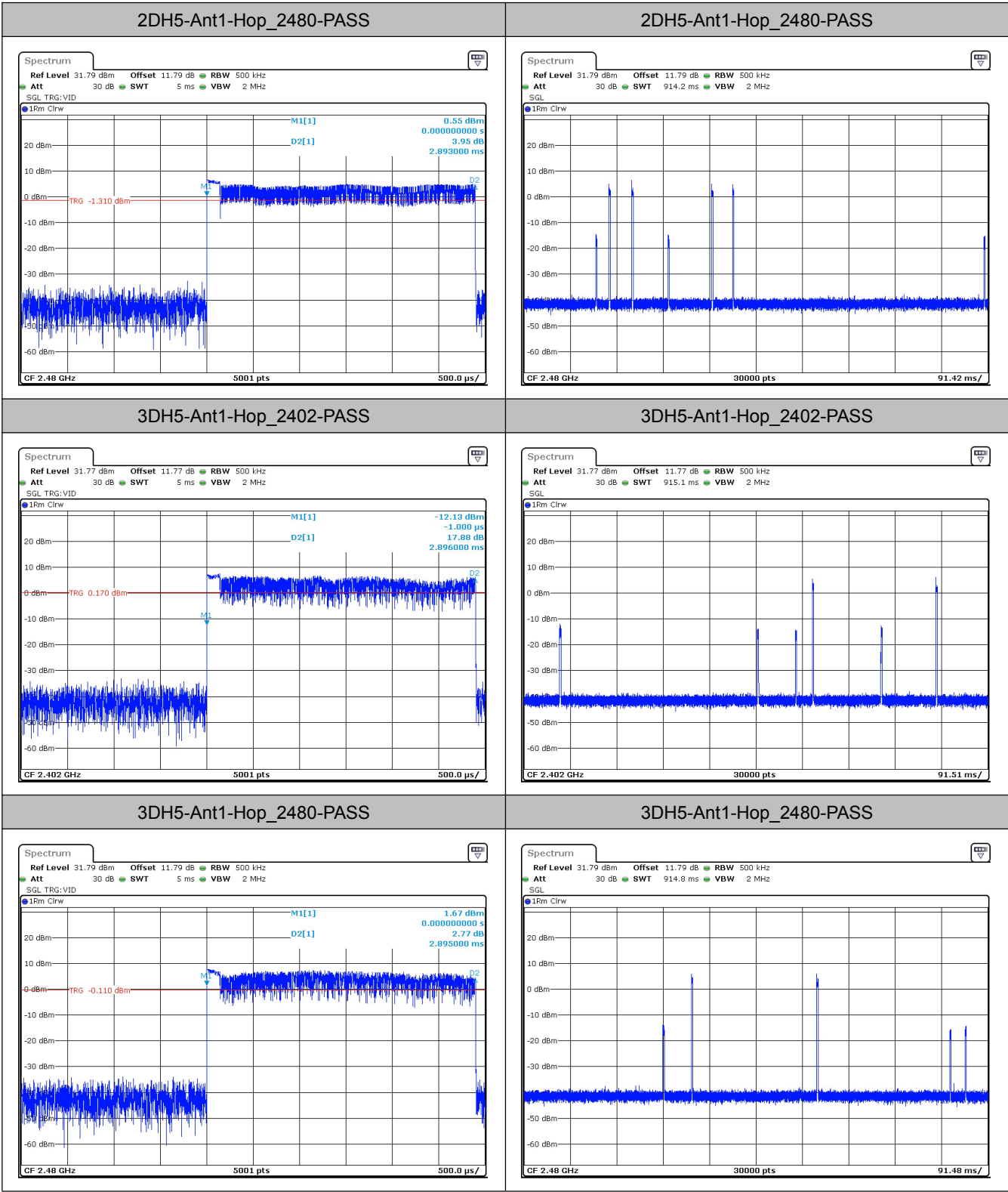
Test Graphs

Accumulated Transmit Time:



Frequency Occupation:





Hopping Sequence:



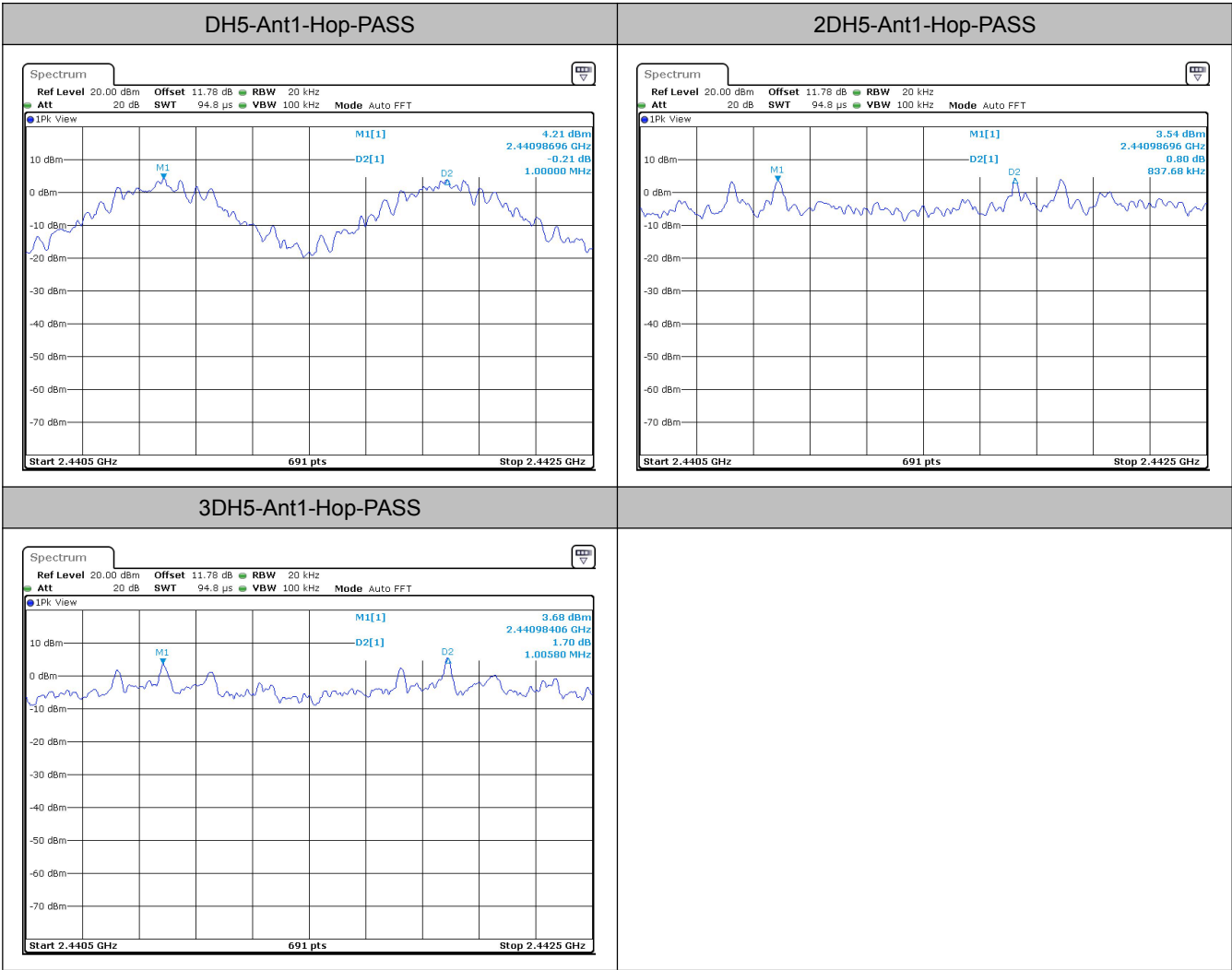
Hopping Frequency Separation

Test Result and Data

Test Mode	Antenna	Frequency[MHz]	Result [MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	0.100	PASS
2DH5	Ant1	Hop	0.838	0.100	PASS
3DH5	Ant1	Hop	1.006	0.100	PASS



Test Graphs

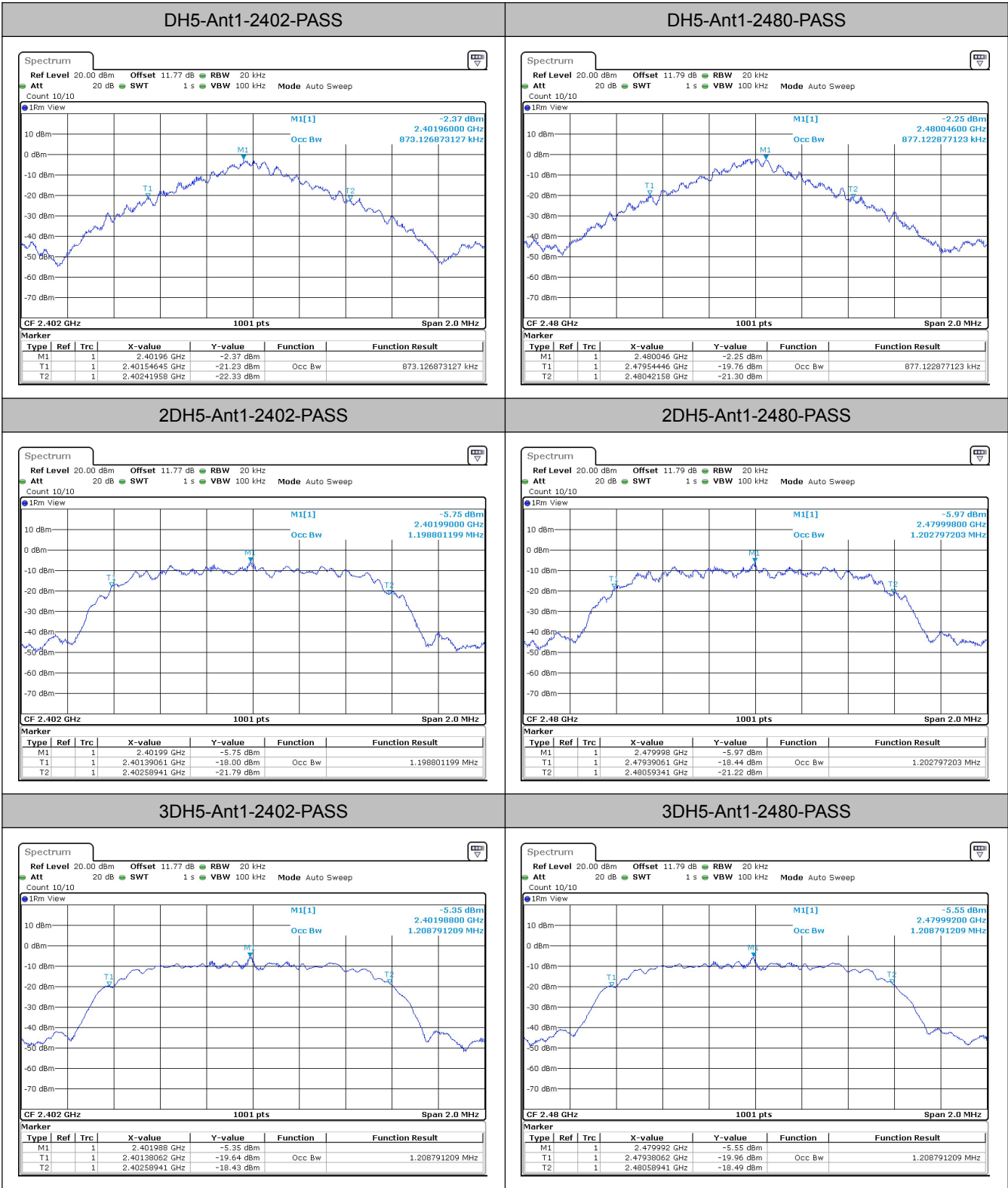


Occupied Channel Bandwidth**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	OCB[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.873	2401.5465	2402.4196	2400 to 2483.5	PASS
DH5	Ant1	2480	0.877	2479.5445	2480.4216	2400 to 2483.5	PASS
2DH5	Ant1	2402	1.199	2401.3906	2402.5894	2400 to 2483.5	PASS
2DH5	Ant1	2480	1.203	2479.3906	2480.5934	2400 to 2483.5	PASS
3DH5	Ant1	2402	1.209	2401.3806	2402.5894	2400 to 2483.5	PASS
3DH5	Ant1	2480	1.209	2479.3806	2480.5894	2400 to 2483.5	PASS



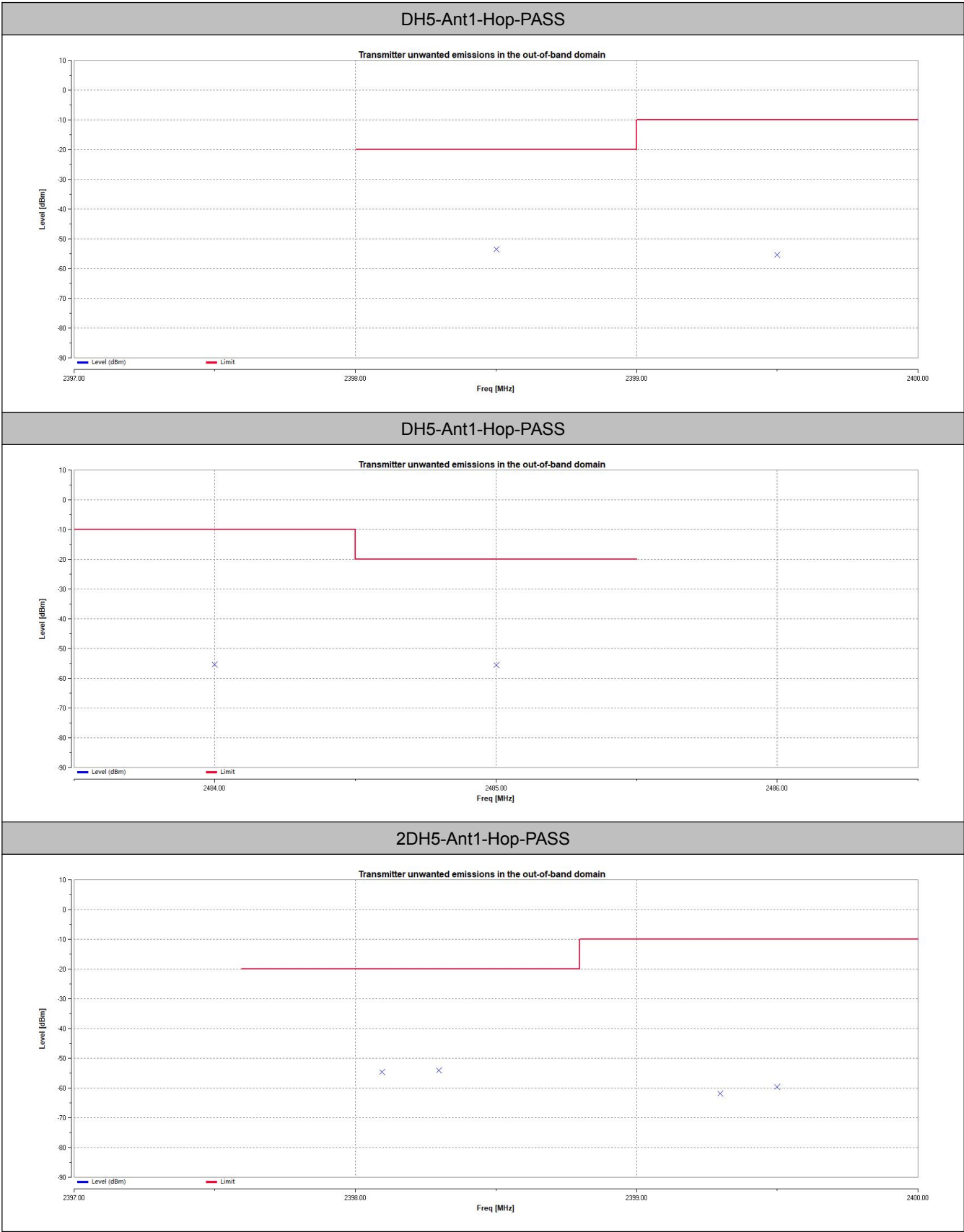
Test Graphs

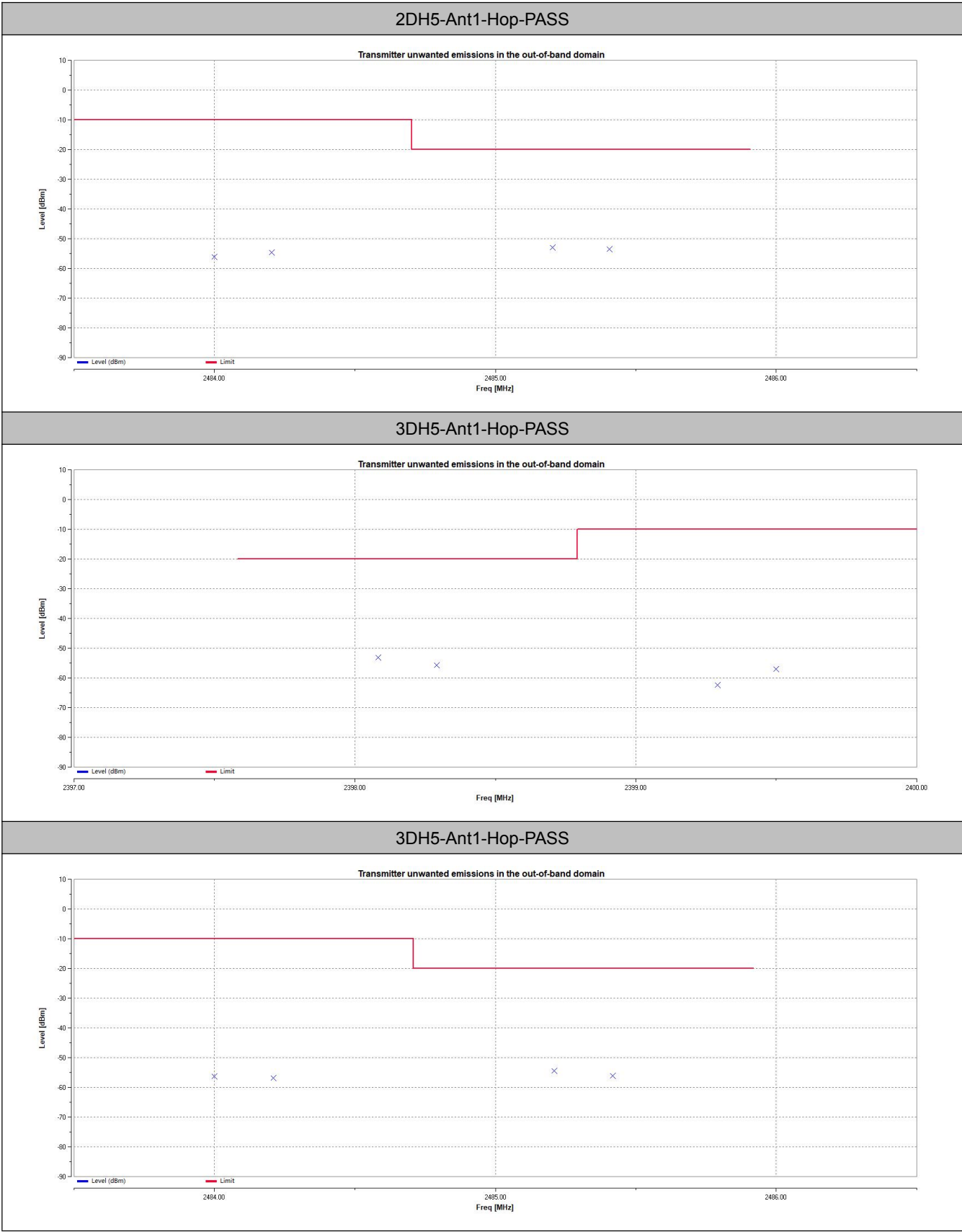


Transmitter unwanted emissions in the out-of-band domain**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	2398.5	-53.56	-20.00	PASS
DH5	Ant1	Hop	2399.5	-55.37	-10.00	PASS
DH5	Ant1	Hop	2484	-55.32	-10.00	PASS
DH5	Ant1	Hop	2485	-55.63	-20.00	PASS
2DH5	Ant1	Hop	2398.3	-54.1	-20.00	PASS
2DH5	Ant1	Hop	2399.5	-59.7	-10.00	PASS
2DH5	Ant1	Hop	2484.2	-54.72	-10.00	PASS
2DH5	Ant1	Hop	2485.2	-53.05	-20.00	PASS
3DH5	Ant1	Hop	2398.08	-53.13	-20.00	PASS
3DH5	Ant1	Hop	2399.5	-57.03	-10.00	PASS
3DH5	Ant1	Hop	2484	-56.36	-10.00	PASS
3DH5	Ant1	Hop	2485.21	-54.52	-20.00	PASS

Test Graphs





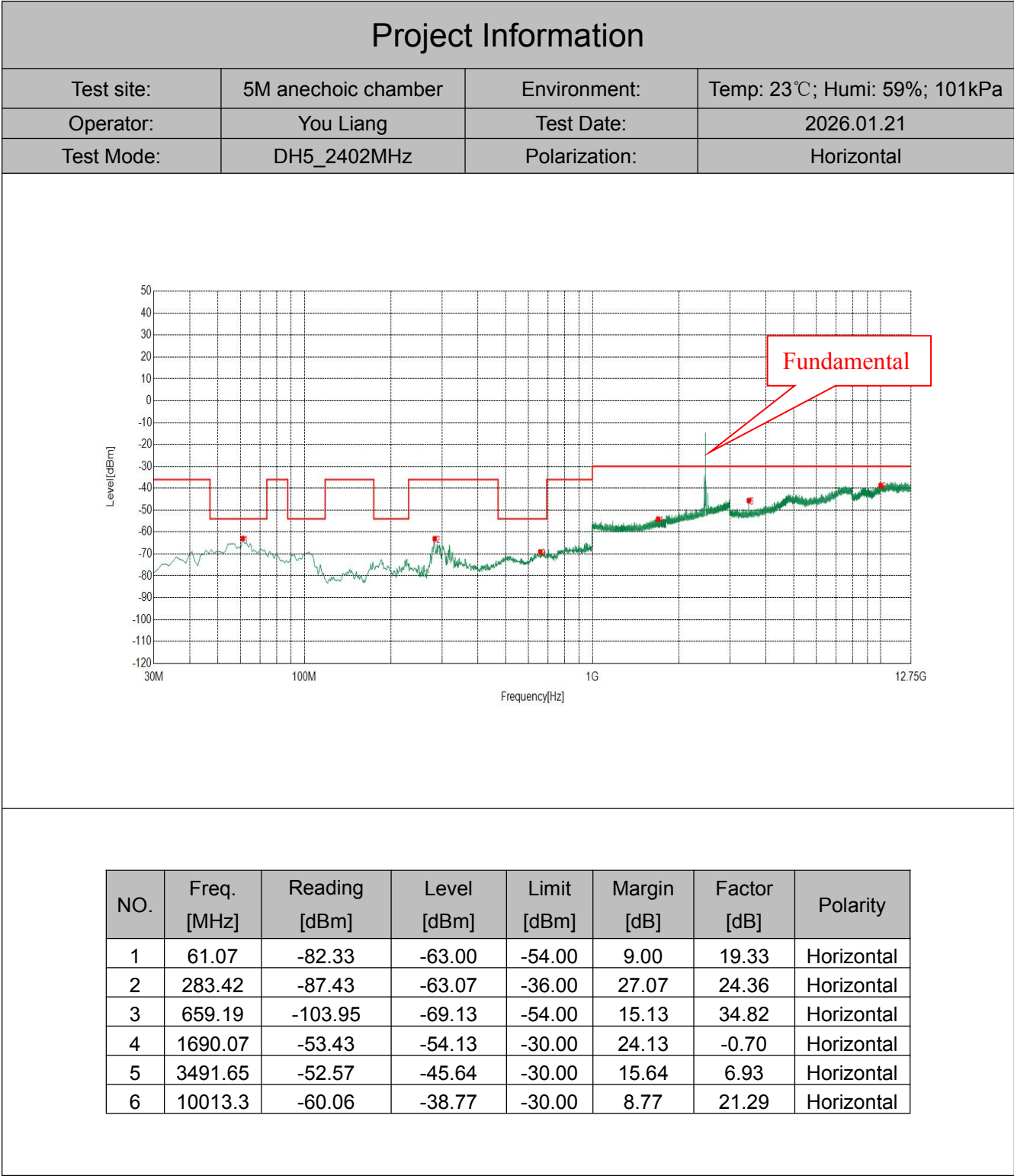
Transmitter unwanted emissions in the spurious domain**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Verdict
DH5	Ant1	2402	PASS
DH5	Ant1	2480	PASS
2DH5	Ant1	2402	PASS
2DH5	Ant1	2480	PASS
3DH5	Ant1	2402	PASS
3DH5	Ant1	2480	PASS

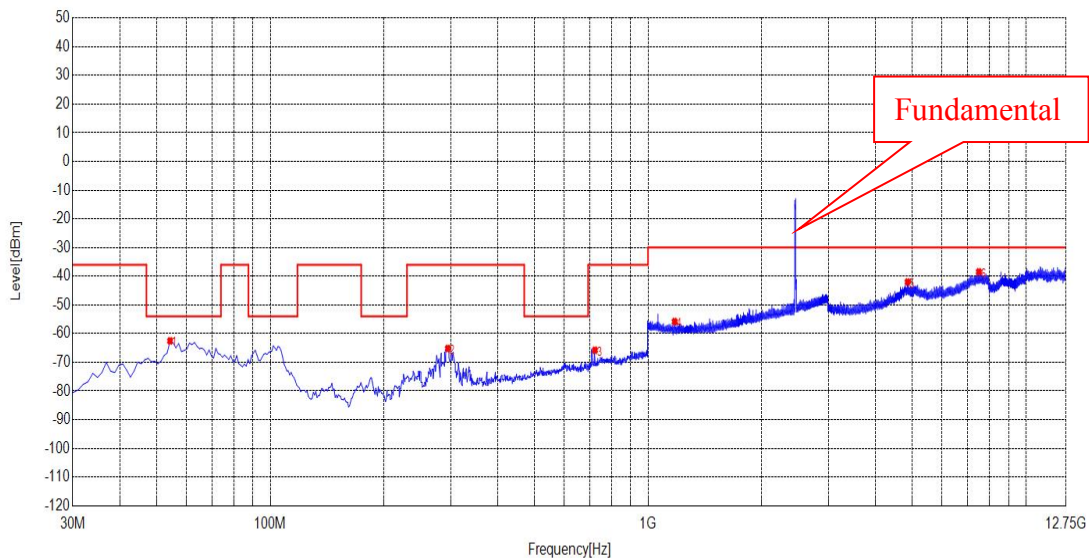
Note: All of the EUT Configure mode were tested and found DH5 mode is the worst mode, the worst case is recorded in this report.



Test Graphs

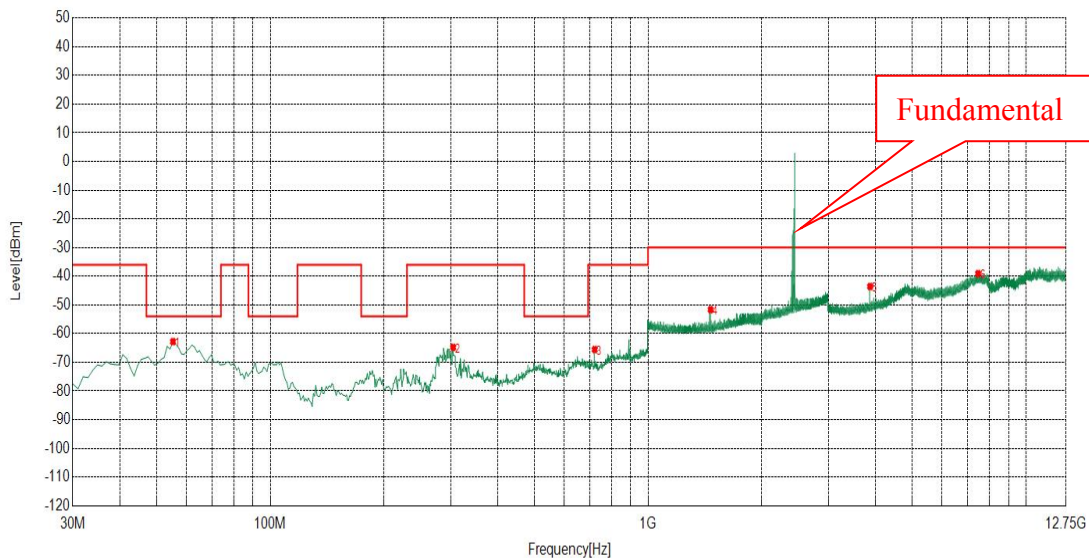


Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2402MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	54.27	-81.91	-62.55	-54.00	8.55	19.36	Vertical
2	295.08	-90.41	-65.18	-36.00	29.18	25.23	Vertical
3	723.27	-100.47	-65.81	-36.00	29.81	34.66	Vertical
4	1176.22	-53.60	-55.82	-30.00	25.82	-2.22	Vertical
5	4864.99	-56.77	-42.03	-30.00	12.03	14.74	Vertical
6	7512.95	-58.15	-38.49	-30.00	8.49	19.66	Vertical

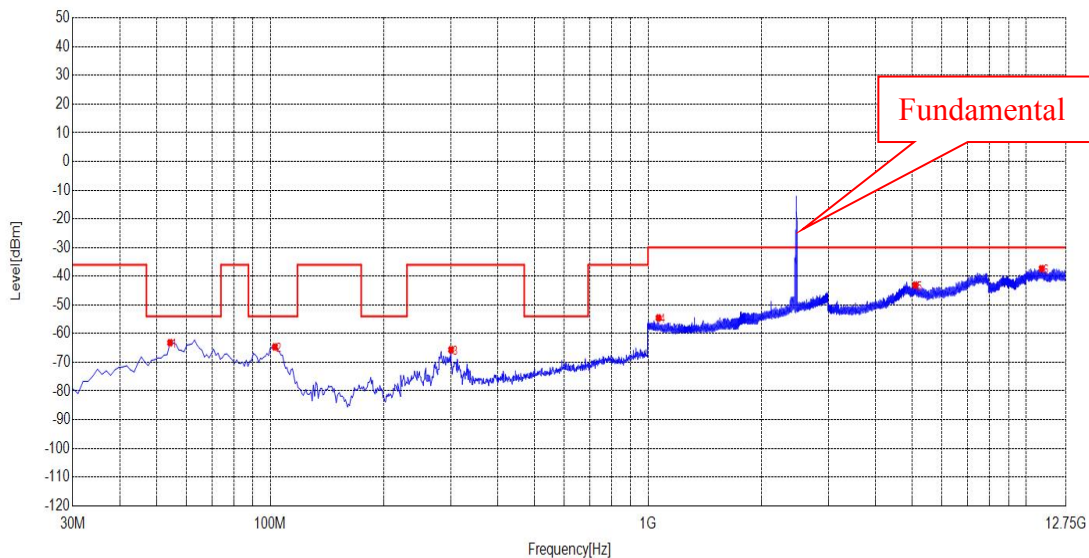
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2480MHz	Polarization:	Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	55.25	-82.08	-62.80	-54.00	8.80	19.28	Horizontal
2	304.78	-90.97	-64.79	-36.00	28.79	26.18	Horizontal
3	722.30	-99.51	-65.56	-36.00	29.56	33.95	Horizontal
4	1464.45	-49.56	-51.66	-30.00	21.66	-2.10	Horizontal
5	3869.29	-52.01	-43.59	-30.00	13.59	8.42	Horizontal
6	7476.72	-58.80	-39.12	-30.00	9.12	19.68	Horizontal



Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2480MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	54.27	-82.55	-63.19	-54.00	9.19	19.36	Vertical
2	102.82	-88.82	-64.65	-54.00	10.65	24.17	Vertical
3	300.90	-90.99	-65.64	-36.00	29.64	25.35	Vertical
4	1066.01	-52.75	-54.54	-30.00	24.54	-1.79	Vertical
5	5096.61	-57.71	-43.11	-30.00	13.11	14.60	Vertical
6	11013.9	-60.08	-37.37	-30.00	7.37	22.71	Vertical



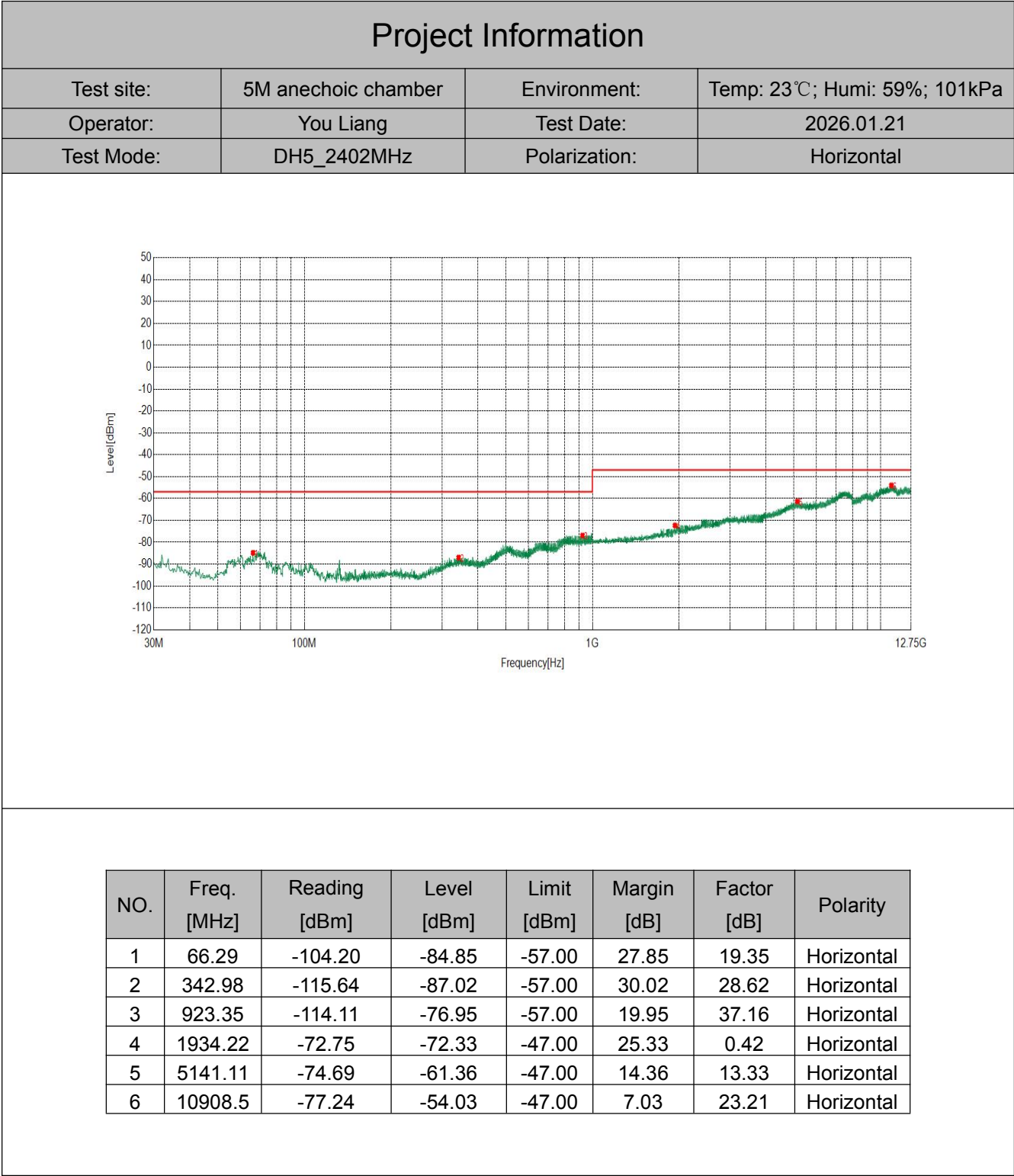
Receiver spurious emissions**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Verdict
DH5	Ant1	2402	PASS
DH5	Ant1	2480	PASS
2DH5	Ant1	2402	PASS
2DH5	Ant1	2480	PASS
3DH5	Ant1	2402	PASS
3DH5	Ant1	2480	PASS

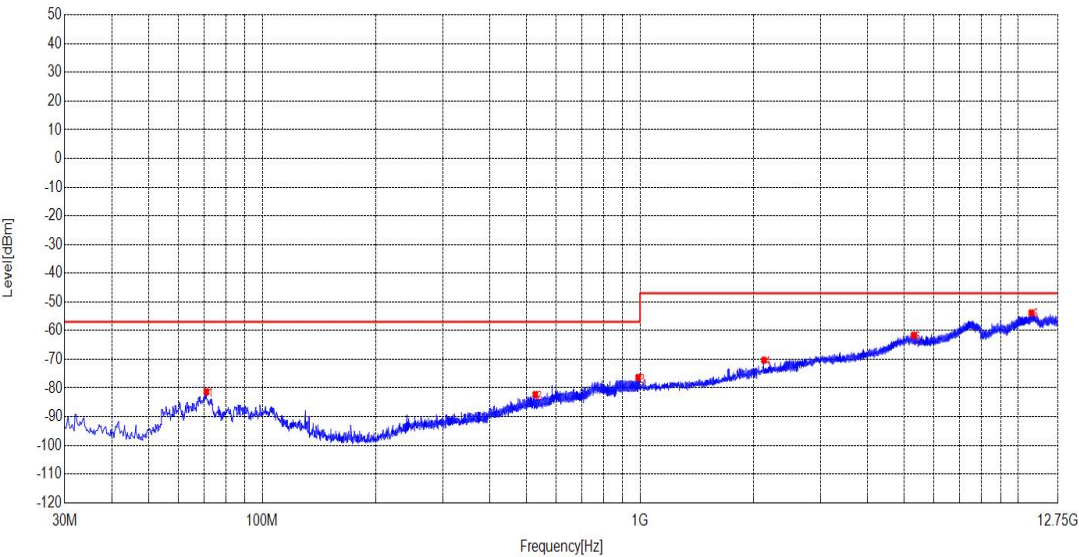
Note: All of the EUT Configure mode were tested and found DH5 mode is the worst mode, the worst case is recorded in this report.



Test Graphs

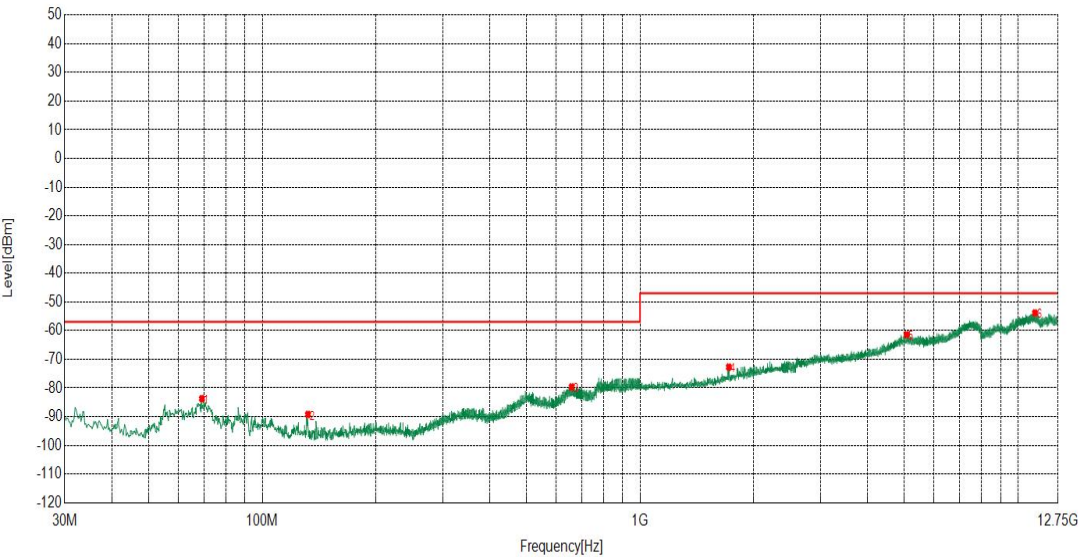


Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2402MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	71.14	-102.69	-81.38	-57.00	24.38	21.31	Vertical
2	527.90	-113.43	-82.32	-57.00	25.32	31.11	Vertical
3	988.75	-114.05	-76.35	-57.00	19.35	37.70	Vertical
4	2128.11	-71.67	-70.32	-47.00	23.32	1.35	Vertical
5	5296.23	-74.85	-61.64	-47.00	14.64	13.21	Vertical
6	10856.8	-76.88	-53.85	-47.00	6.85	23.03	Vertical

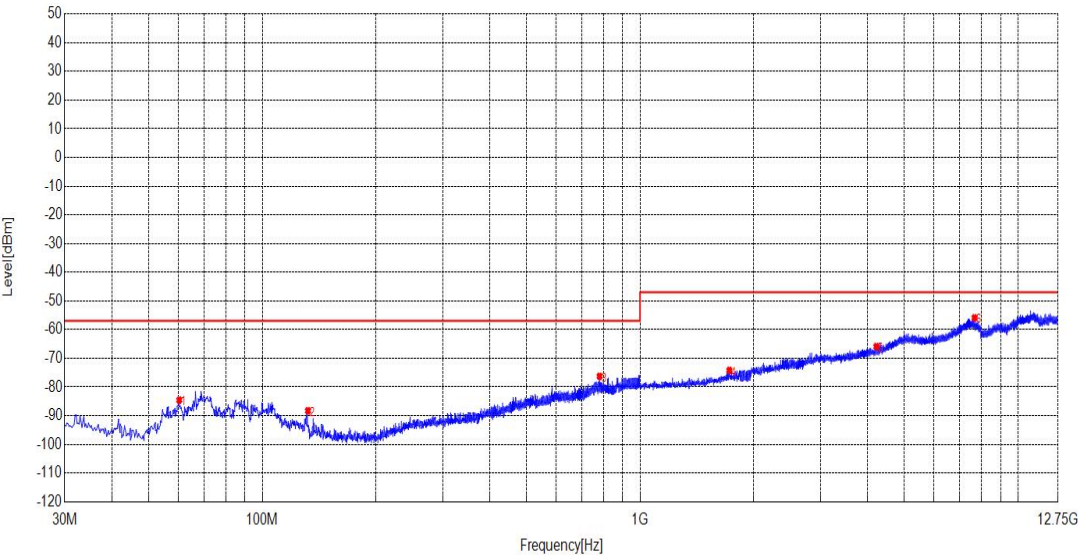
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2480MHz	Polarization:	Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	69.20	-103.09	-83.73	-57.00	26.73	19.36	Horizontal
2	132.06	-109.62	-89.24	-57.00	32.24	20.38	Horizontal
3	659.27	-114.46	-79.64	-57.00	22.64	34.82	Horizontal
4	1718.00	-71.50	-72.73	-47.00	25.73	-1.23	Horizontal
5	5078.83	-74.64	-61.43	-47.00	14.43	13.21	Horizontal
6	11102.4	-77.19	-53.86	-47.00	6.86	23.33	Horizontal



Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	DH5_2480MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.27	-104.67	-84.59	-57.00	27.59	20.08	Vertical
2	132.06	-109.84	-88.32	-57.00	31.32	21.52	Vertical
3	781.51	-112.35	-76.29	-57.00	19.29	36.06	Vertical
4	1723.87	-73.03	-74.21	-47.00	27.21	-1.18	Vertical
5	4221.00	-74.45	-65.94	-47.00	18.94	8.51	Vertical
6	7681.72	-74.61	-55.91	-47.00	8.91	18.70	Vertical



Receiver Blocking**Test Result and Data**

Test Mode	Antenna	Frequency [MHz]	Wanted Signal [dBm]	Freq[MHz]	CW[dBm]	PER [%]	Limit [%]	Verdict
DH5	Ant1	Hop	-69.57	2300	-34	0.20	≤10	PASS
DH5	Ant1	Hop	-69.57	2380	-34	0.30	≤10	PASS
DH5	Ant1	Hop	-69.57	2504	-34	0.60	≤10	PASS
DH5	Ant1	Hop	-69.57	2584	-34	0.10	≤10	PASS



Annex D Bluetooth LE TEST RESULT

RF Output Power

Test Result and Data

Test Condition	Test Mode	Antenna	Frequency [MHz]	Burst Power [dBm]	Gain [dBi]	EIRP [dBm]	Number of Bursts	EIRP Limit [dBm]	Verdict
LTNV	BLE_1M	Ant1	2402	7.59	0.17	7.76	> 10	20	PASS
NTNV	BLE_1M	Ant1	2402	7.56	0.17	7.73	> 10	20	PASS
HTNV	BLE_1M	Ant1	2402	7.56	0.17	7.73	> 10	20	PASS
LTNV	BLE_1M	Ant1	2440	7.35	0.17	7.52	> 10	20	PASS
NTNV	BLE_1M	Ant1	2440	7.32	0.17	7.49	> 10	20	PASS
HTNV	BLE_1M	Ant1	2440	7.34	0.17	7.51	> 10	20	PASS
LTNV	BLE_1M	Ant1	2480	7.09	0.17	7.26	> 10	20	PASS
NTNV	BLE_1M	Ant1	2480	7.08	0.17	7.25	> 10	20	PASS
HTNV	BLE_1M	Ant1	2480	7.07	0.17	7.24	> 10	20	PASS
LTNV	BLE_2M	Ant1	2402	7.63	0.17	7.80	> 10	20	PASS
NTNV	BLE_2M	Ant1	2402	7.62	0.17	7.79	> 10	20	PASS
HTNV	BLE_2M	Ant1	2402	7.61	0.17	7.78	> 10	20	PASS
LTNV	BLE_2M	Ant1	2440	7.44	0.17	7.61	> 10	20	PASS
NTNV	BLE_2M	Ant1	2440	7.41	0.17	7.58	> 10	20	PASS
HTNV	BLE_2M	Ant1	2440	7.41	0.17	7.58	> 10	20	PASS
LTNV	BLE_2M	Ant1	2480	7.12	0.17	7.29	> 10	20	PASS
NTNV	BLE_2M	Ant1	2480	7.13	0.17	7.30	> 10	20	PASS
HTNV	BLE_2M	Ant1	2480	7.13	0.17	7.30	> 10	20	PASS

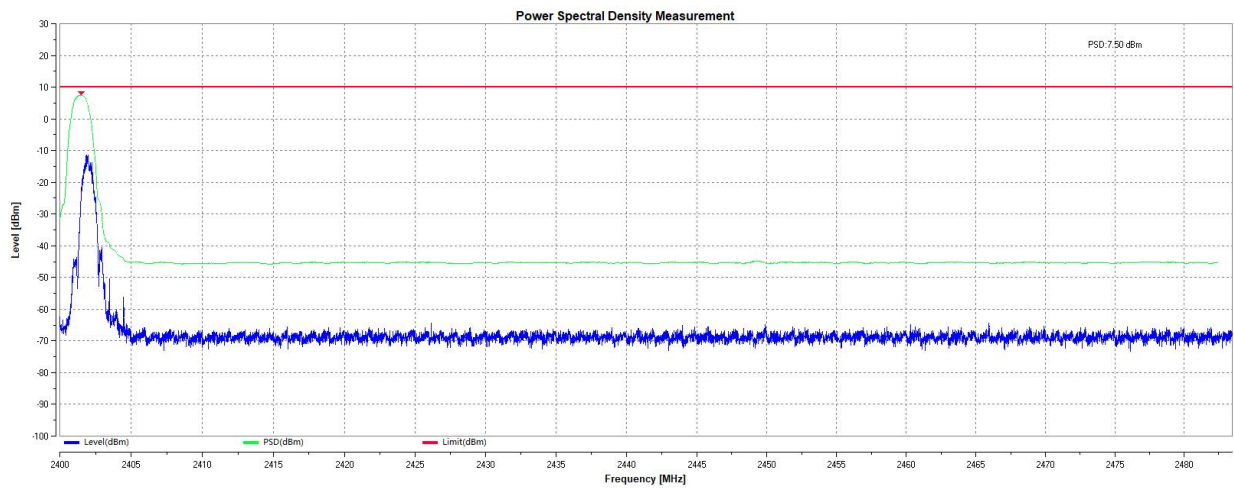


Power Spectral Density**Test Result and Data**

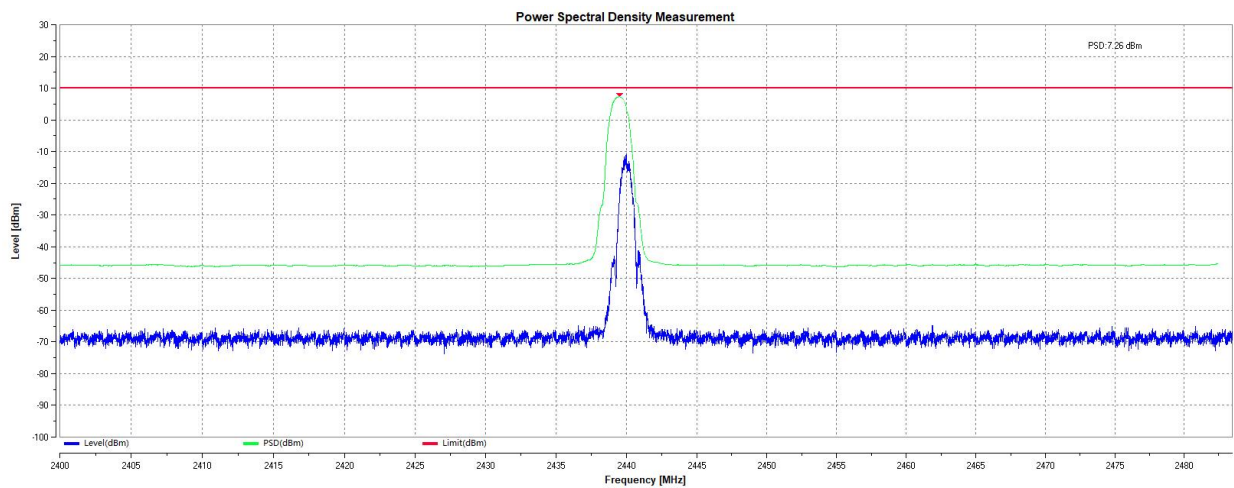
Test Mode	Antenna	Frequency[MHz]	EIRP PSD[dBm/MHz]	Limit[dBm/MHz]	Verdict
BLE_1M	Ant1	2402	7.50	10	PASS
BLE_1M	Ant1	2440	7.26	10	PASS
BLE_1M	Ant1	2480	7.02	10	PASS
BLE_2M	Ant1	2402	7.51	10	PASS
BLE_2M	Ant1	2440	7.31	10	PASS
BLE_2M	Ant1	2480	7.03	10	PASS

Test Graphs

BLE_1M-Ant1-2402-PASS



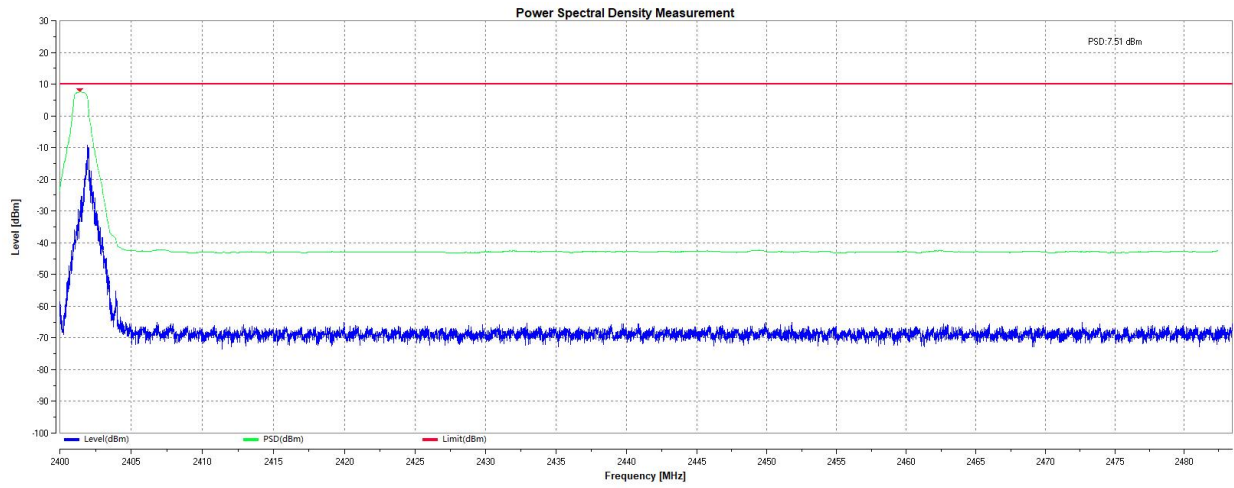
BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS



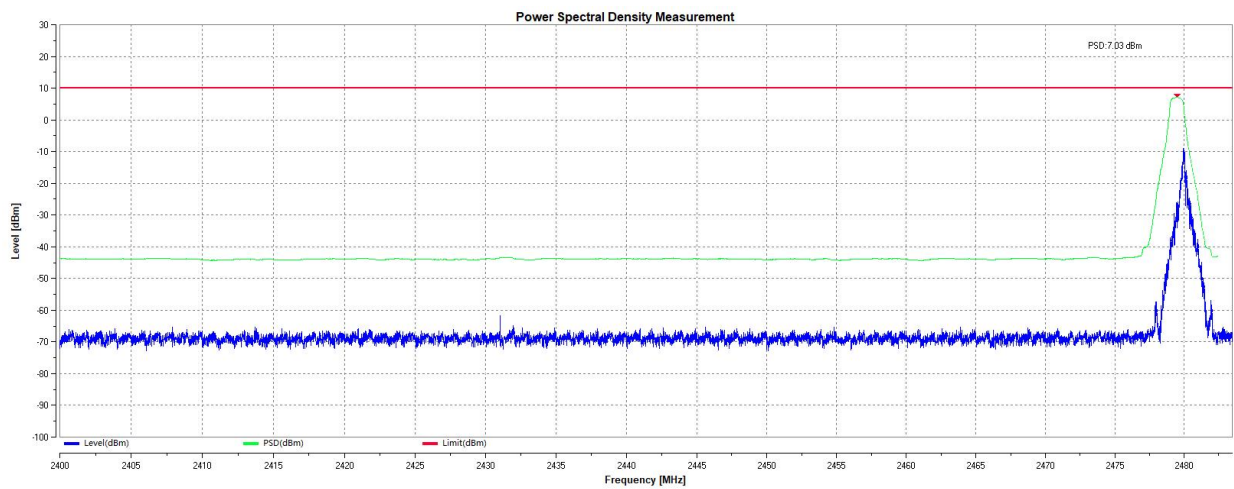
BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



BLE_2M-Ant1-2480-PASS

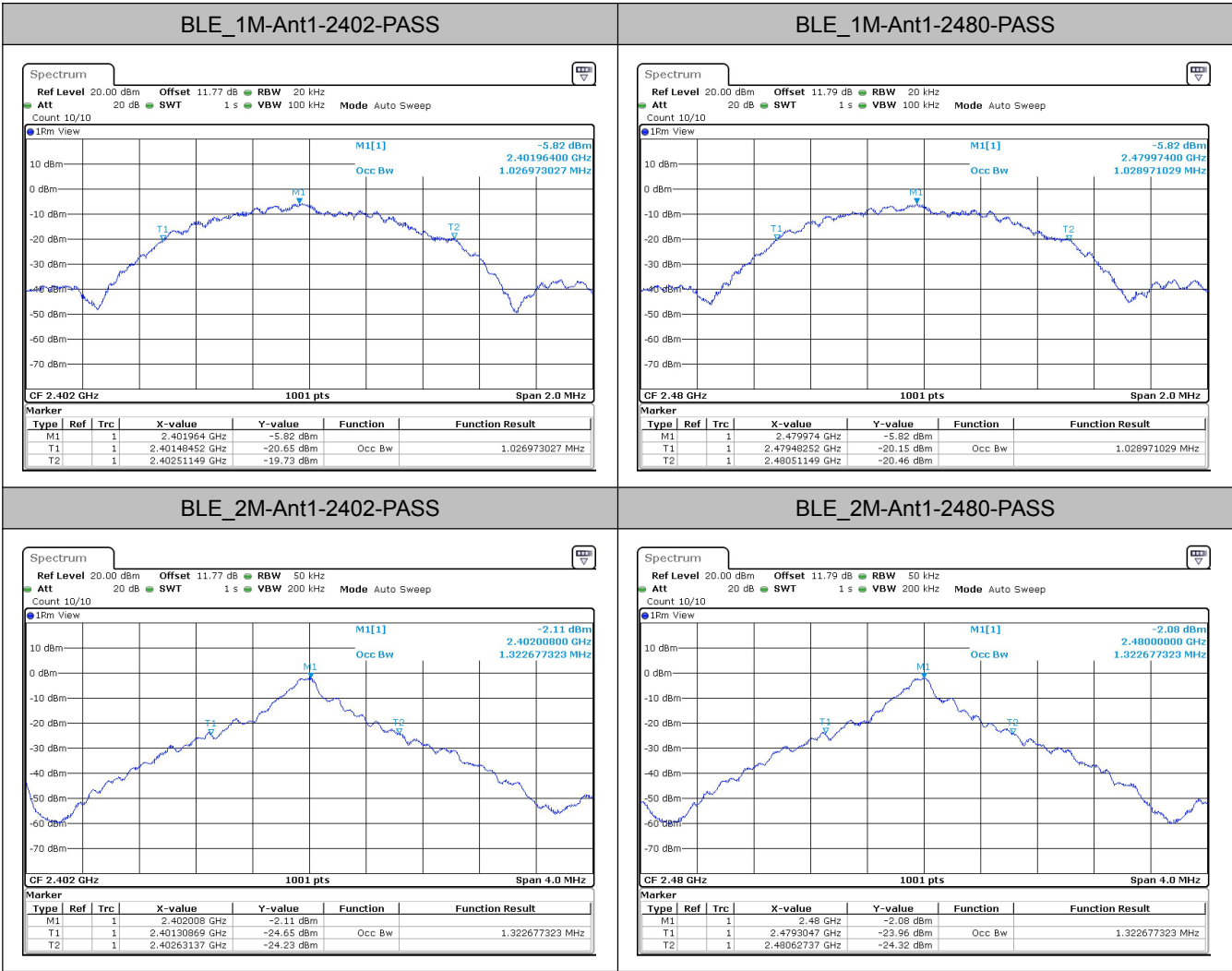


Occupied Channel Bandwidth**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	OCB[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.027	2401.4845	2402.5115	2400 to 2483.5	PASS
BLE_1M	Ant1	2480	1.029	2479.4825	2480.5115	2400 to 2483.5	PASS
BLE_2M	Ant1	2402	1.323	2401.3087	2402.6314	2400 to 2483.5	PASS
BLE_2M	Ant1	2480	1.323	2479.3047	2480.6274	2400 to 2483.5	PASS



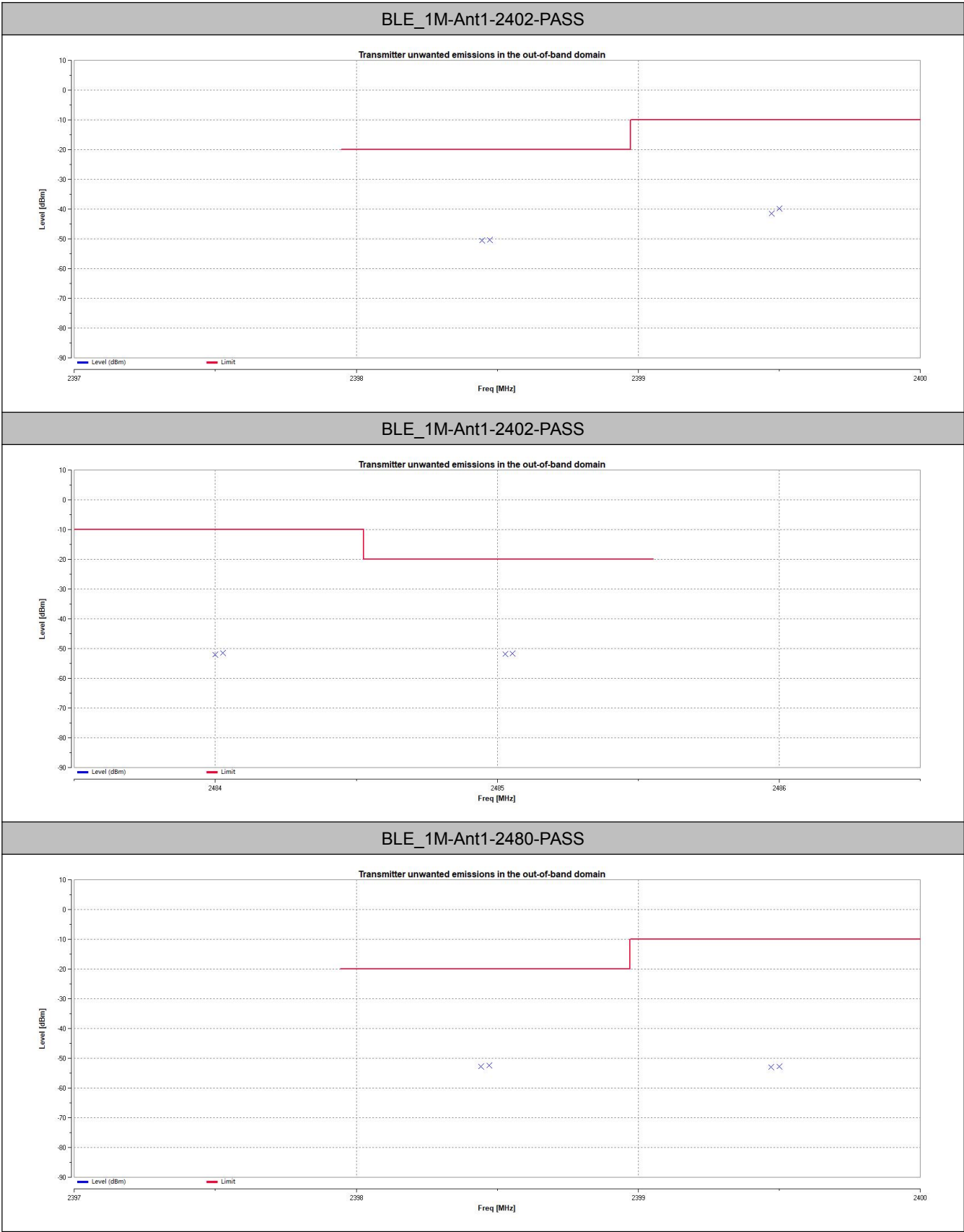
Test Graphs

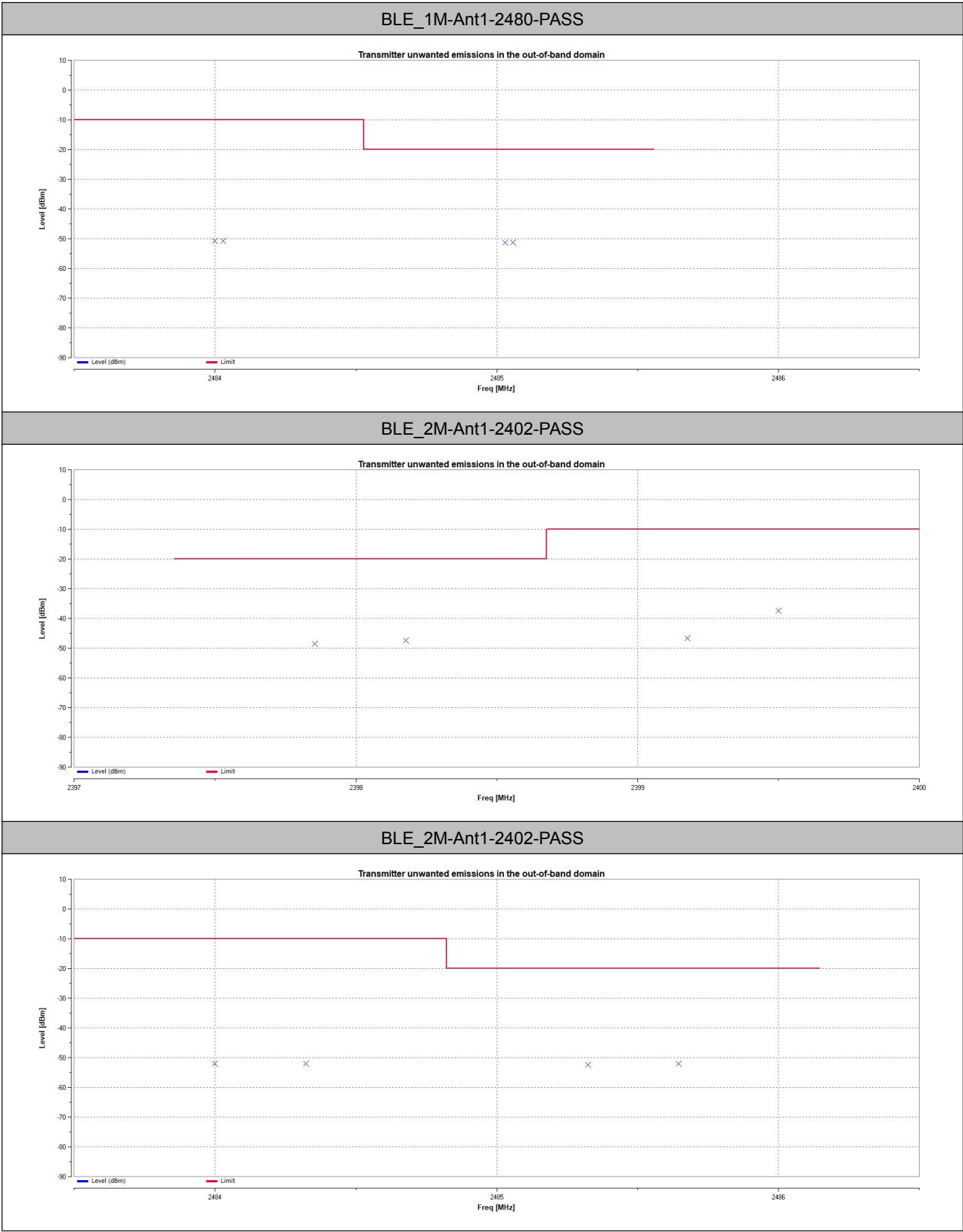


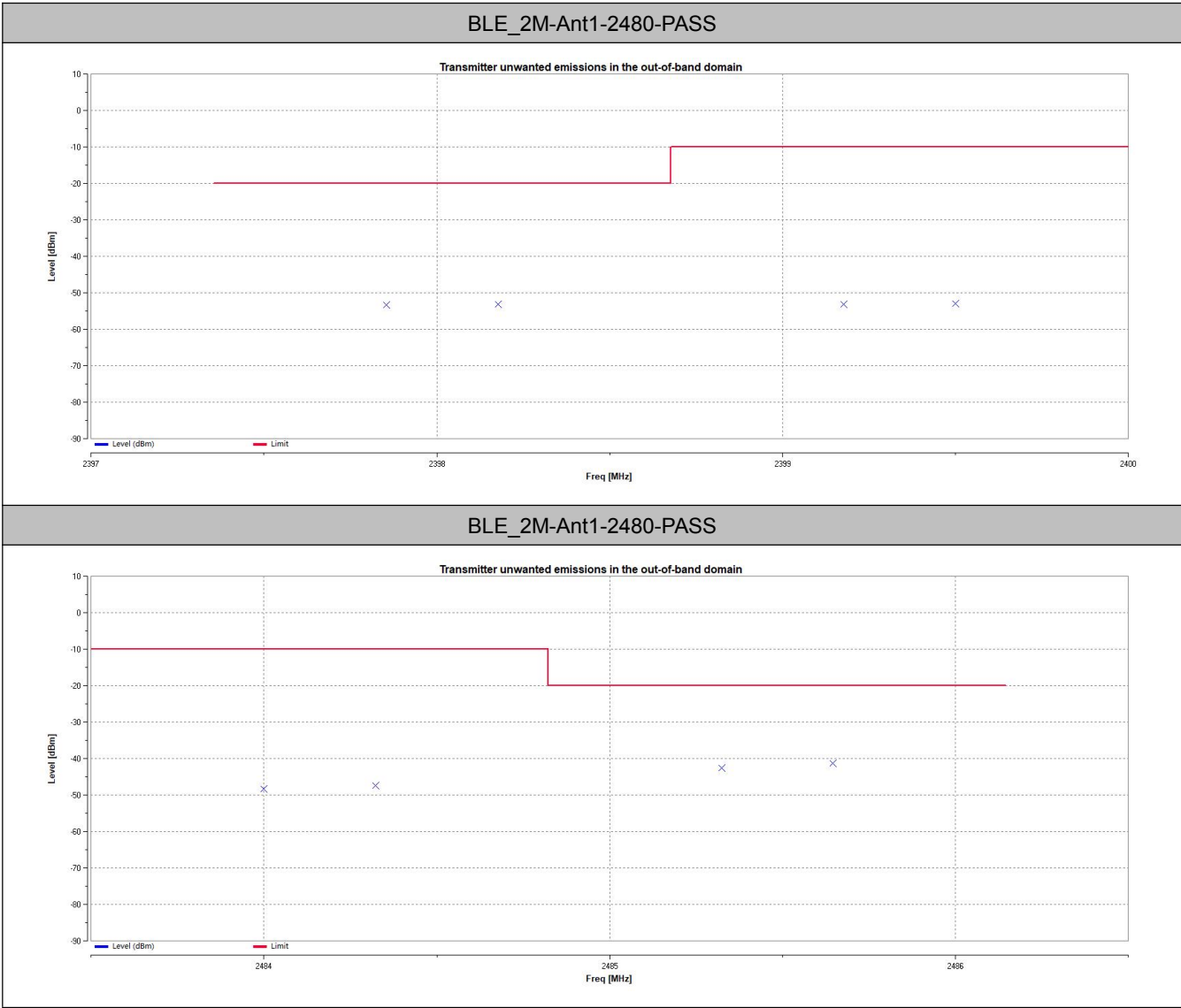
Transmitter unwanted emissions in the out-of-band domain**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2398.446	-50.58	-20.00	PASS
BLE_1M	Ant1	2402	2398.473	-50.43	-20.00	PASS
BLE_1M	Ant1	2402	2399.473	-41.48	-10.00	PASS
BLE_1M	Ant1	2402	2399.5	-39.89	-10.00	PASS
BLE_1M	Ant1	2402	2484	-51.99	-10.00	PASS
BLE_1M	Ant1	2402	2484.027	-51.43	-10.00	PASS
BLE_1M	Ant1	2402	2485.027	-51.84	-20.00	PASS
BLE_1M	Ant1	2402	2485.054	-51.75	-20.00	PASS
BLE_1M	Ant1	2480	2398.442	-52.82	-20.00	PASS
BLE_1M	Ant1	2480	2398.471	-52.36	-20.00	PASS
BLE_1M	Ant1	2480	2399.471	-53.04	-10.00	PASS
BLE_1M	Ant1	2480	2399.5	-52.86	-10.00	PASS
BLE_1M	Ant1	2480	2484	-50.81	-10.00	PASS
BLE_1M	Ant1	2480	2484.029	-50.73	-10.00	PASS
BLE_1M	Ant1	2480	2485.029	-51.31	-20.00	PASS
BLE_1M	Ant1	2480	2485.058	-51.22	-20.00	PASS
BLE_2M	Ant1	2402	2397.854	-48.49	-20.00	PASS
BLE_2M	Ant1	2402	2398.177	-47.34	-20.00	PASS
BLE_2M	Ant1	2402	2399.177	-46.61	-10.00	PASS
BLE_2M	Ant1	2402	2399.5	-37.49	-10.00	PASS
BLE_2M	Ant1	2402	2484	-51.98	-10.00	PASS
BLE_2M	Ant1	2402	2484.323	-52.01	-10.00	PASS
BLE_2M	Ant1	2402	2485.323	-52.40	-20.00	PASS
BLE_2M	Ant1	2402	2485.646	-52.11	-20.00	PASS
BLE_2M	Ant1	2480	2397.854	-53.25	-20.00	PASS
BLE_2M	Ant1	2480	2398.177	-53.09	-20.00	PASS
BLE_2M	Ant1	2480	2399.177	-53.19	-10.00	PASS
BLE_2M	Ant1	2480	2399.5	-52.91	-10.00	PASS
BLE_2M	Ant1	2480	2484	-48.38	-10.00	PASS
BLE_2M	Ant1	2480	2484.323	-47.44	-10.00	PASS
BLE_2M	Ant1	2480	2485.323	-42.52	-20.00	PASS
BLE_2M	Ant1	2480	2485.646	-41.33	-20.00	PASS

Test Graphs







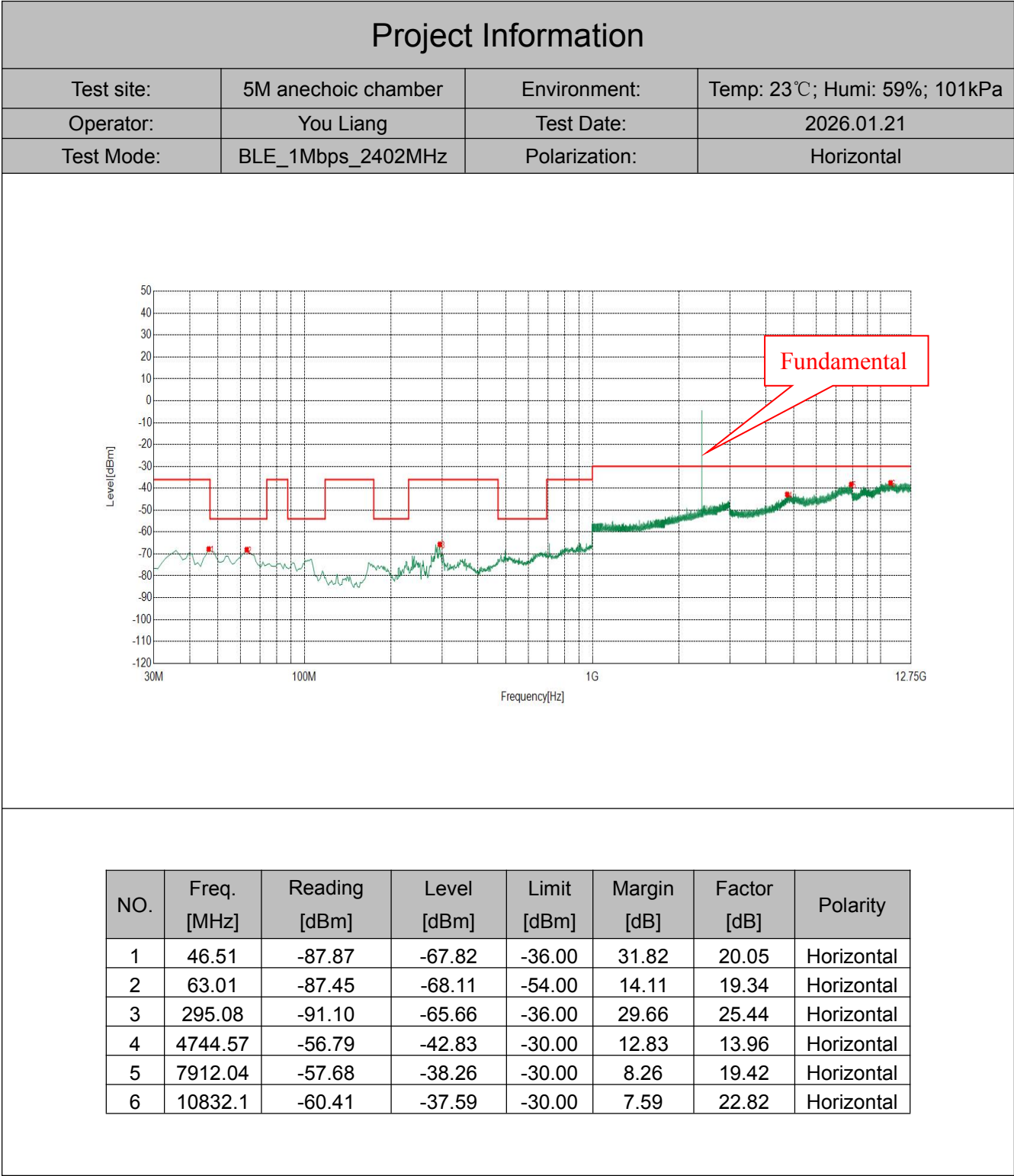
Transmitter unwanted emissions in the spurious domain**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Verdict
BLE_1M	Ant1	2402	PASS
BLE_1M	Ant1	2480	PASS
BLE_2M	Ant1	2402	PASS
BLE_2M	Ant1	2480	PASS

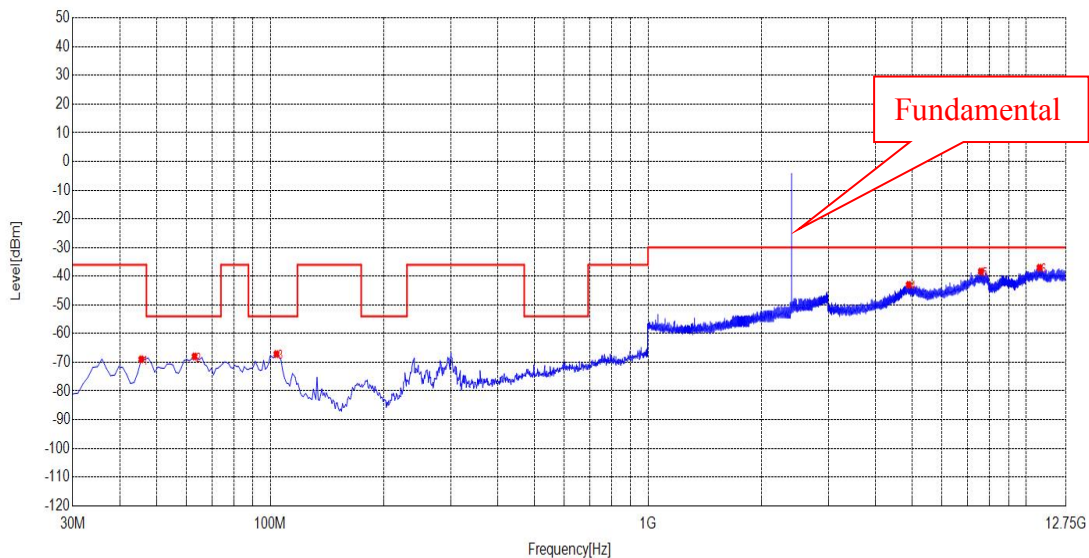
Note: All of the EUT Configure mode were tested and found 1Mbps is the worst mode, the worst case is recorded in this report.



Test Graphs



Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	BLE_1Mbps_2402MHz	Polarization:	Vertical

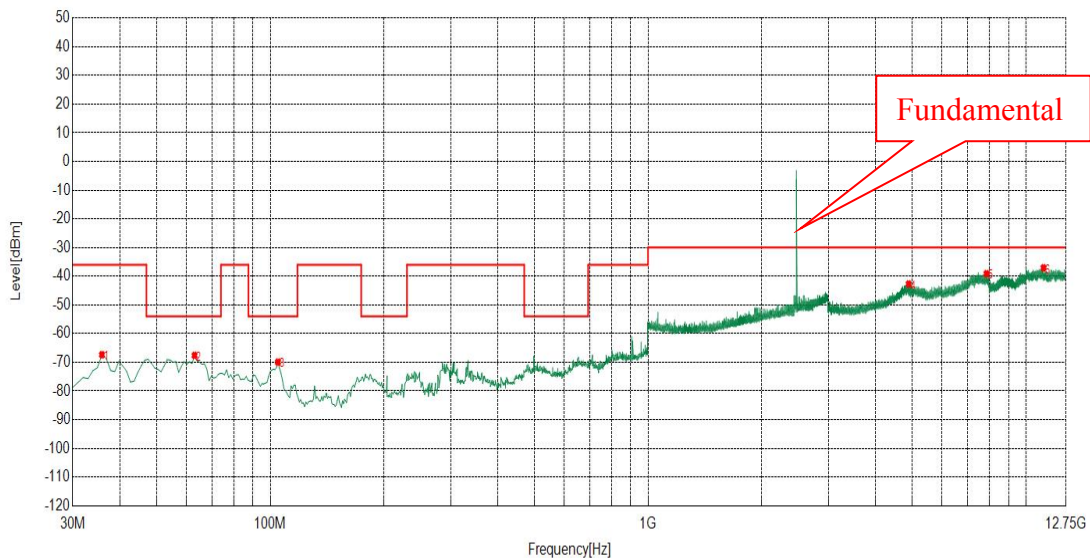


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	45.54	-88.39	-68.98	-36.00	32.98	19.41	Vertical
2	63.01	-88.36	-67.96	-54.00	13.96	20.40	Vertical
3	103.79	-91.23	-67.14	-54.00	13.14	24.09	Vertical
4	4898.19	-57.75	-43.00	-30.00	13.00	14.75	Vertical
5	7602.66	-57.98	-38.36	-30.00	8.36	19.62	Vertical
6	10873.0	-60.01	-37.03	-30.00	7.03	22.98	Vertical



Project Information

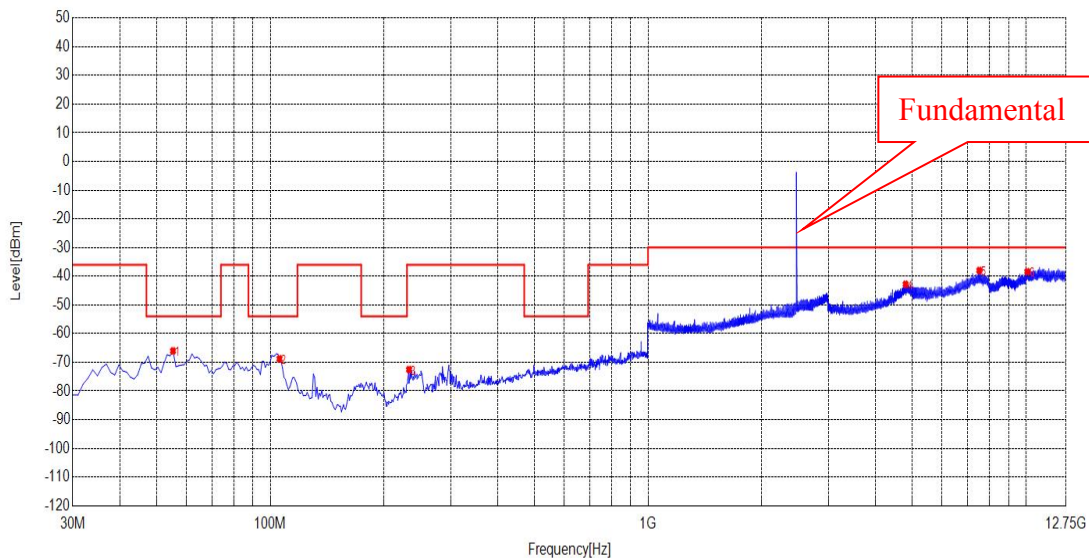
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	BLE_1Mbps_2480MHz	Polarization:	Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.83	-89.96	-67.37	-36.00	31.37	22.59	Horizontal
2	63.01	-86.94	-67.60	-54.00	13.60	19.34	Horizontal
3	104.76	-89.32	-69.95	-54.00	15.95	19.37	Horizontal
4	4896.59	-57.48	-42.73	-30.00	12.73	14.75	Horizontal
5	7868.34	-58.60	-39.15	-30.00	9.15	19.45	Horizontal
6	11135.2	-59.77	-37.10	-30.00	7.10	22.67	Horizontal



Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	BLE_1Mbps_2480MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	55.25	-85.53	-66.06	-54.00	12.06	19.47	Vertical
2	105.74	-92.70	-68.79	-54.00	14.79	23.91	Vertical
3	232.93	-95.53	-72.55	-36.00	36.55	22.98	Vertical
4	4806.18	-57.54	-42.81	-30.00	12.81	14.73	Vertical
5	7531.35	-57.66	-38.01	-30.00	8.01	19.65	Vertical
6	10092.6	-60.56	-38.45	-30.00	8.45	22.11	Vertical



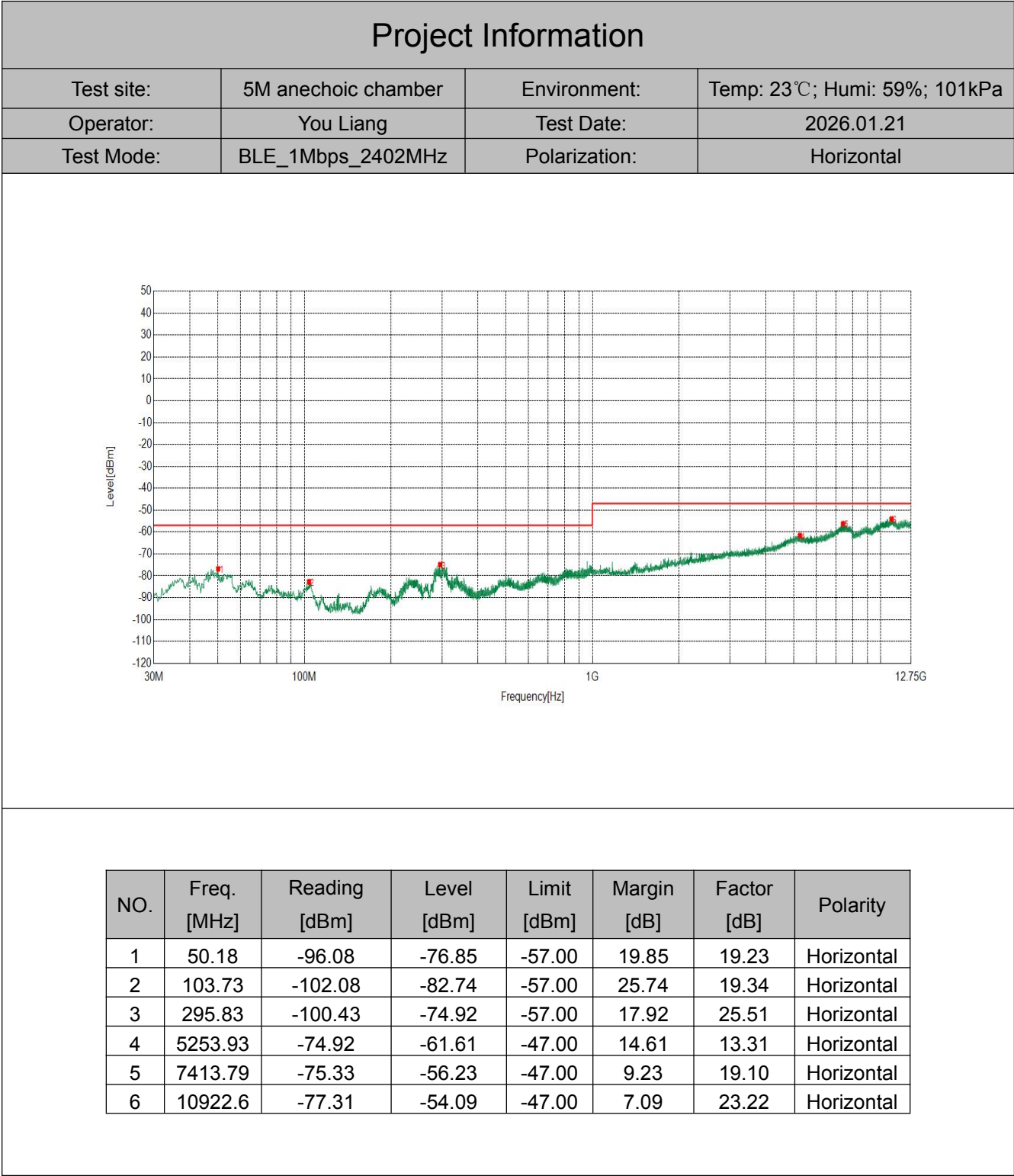
Receiver spurious emissions**Test Result and Data**

Test Mode	Antenna	Frequency[MHz]	Verdict
BLE_1M	Ant1	2402	PASS
BLE_1M	Ant1	2480	PASS
BLE_2M	Ant1	2402	PASS
BLE_2M	Ant1	2480	PASS

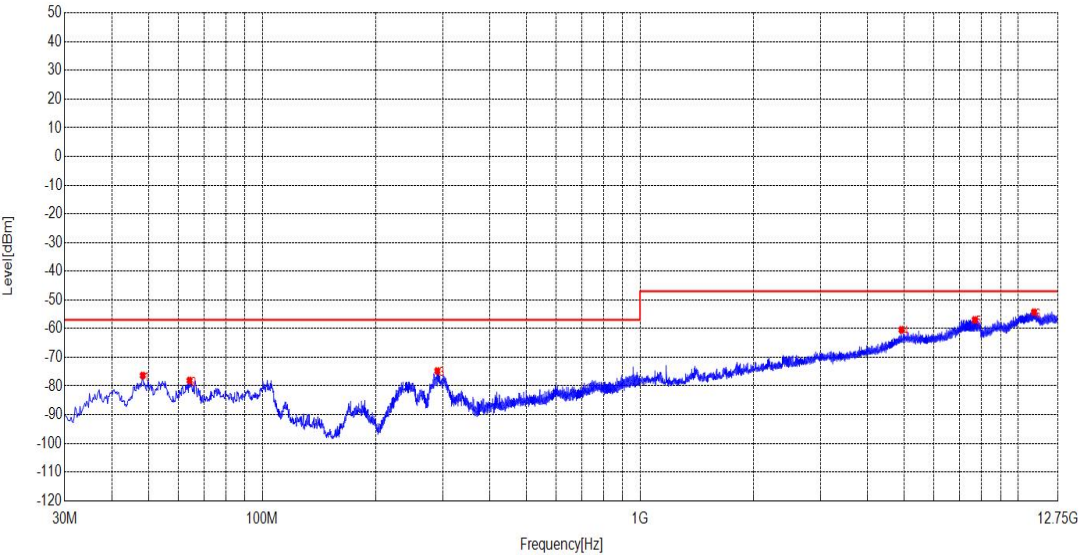
Note: All of the EUT Configure mode were tested and found 1Mbps is the worst mode, the worst case is recorded in this report.



Test Graphs



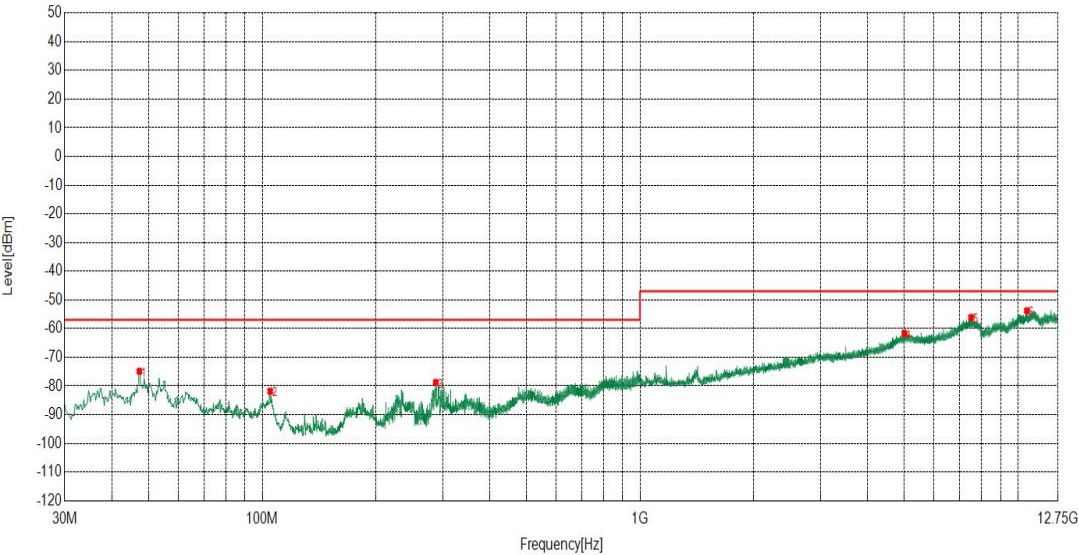
Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	BLE_1Mbps_2402MHz	Polarization:	Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	48.24	-95.42	-76.35	-57.00	19.35	19.07	Vertical
2	64.15	-98.62	-78.08	-57.00	21.08	20.54	Vertical
3	290.59	-99.91	-74.78	-57.00	17.78	25.13	Vertical
4	4919.02	-73.05	-60.43	-47.00	13.43	12.62	Vertical
5	7689.94	-75.64	-56.97	-47.00	9.97	18.67	Vertical
6	11034.3	-77.60	-54.28	-47.00	7.28	23.32	Vertical

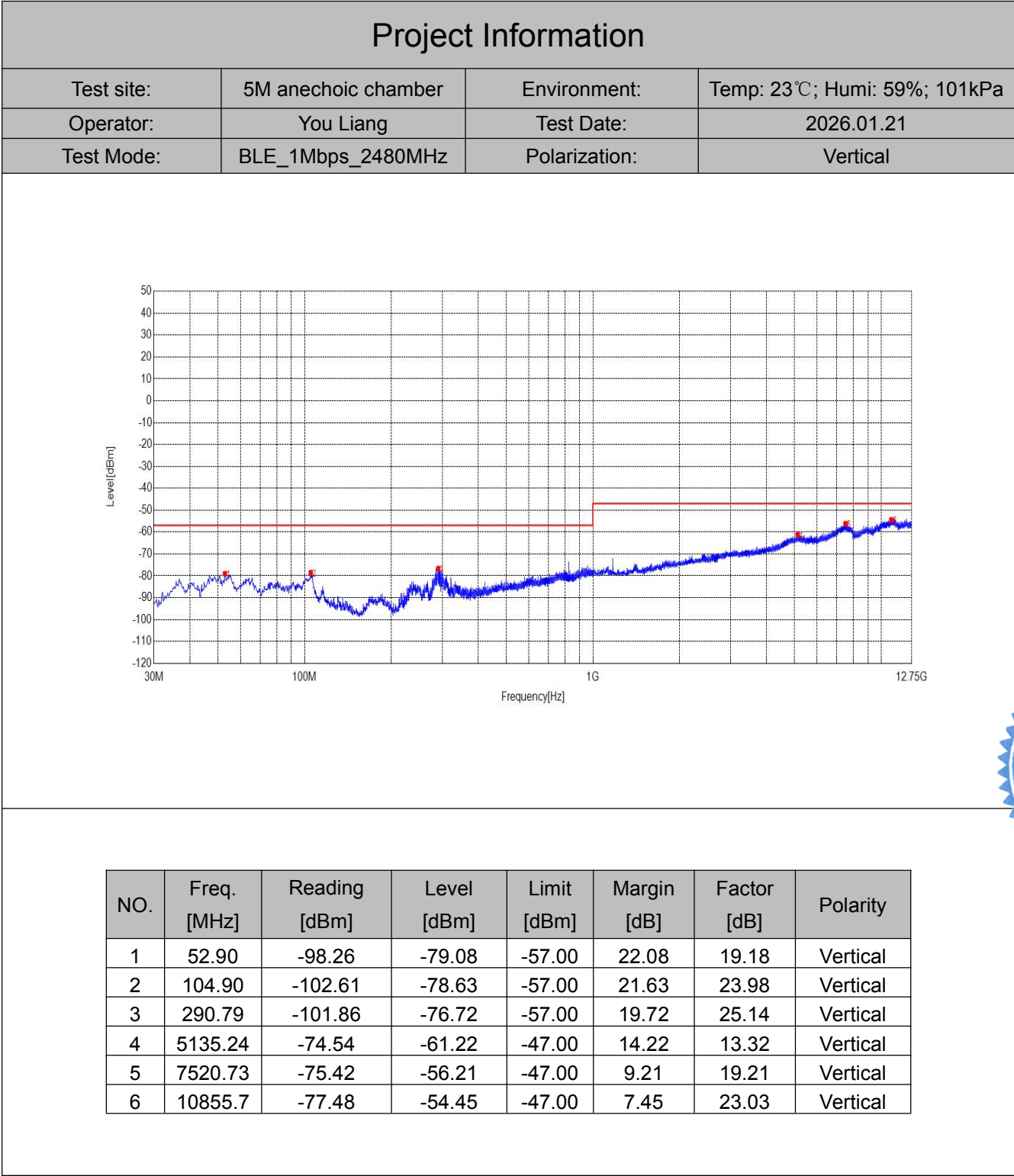


Project Information			
Test site:	5M anechoic chamber	Environment:	Temp: 23℃; Humi: 59%; 101kPa
Operator:	You Liang	Test Date:	2026.01.21
Test Mode:	BLE_1Mbps_2480MHz	Polarization:	Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	47.27	-94.77	-74.90	-57.00	17.90	19.87	Horizontal
2	104.90	-101.22	-81.84	-57.00	24.84	19.38	Horizontal
3	287.88	-103.57	-78.79	-57.00	21.79	24.78	Horizontal
4	5009.50	-74.69	-61.61	-47.00	14.61	13.08	Horizontal
5	7520.73	-75.34	-56.13	-47.00	9.13	19.21	Horizontal
6	10566.6	-76.34	-53.79	-47.00	6.79	22.55	Horizontal





Receiver Blocking**Test Result and Data**

Test Mode	Antenna	Frequency [MHz]	Wanted Signal [dBm]	Freq[MHz]	CW[dBm]	PER [%]	Limit [%]	Verdict
BLE_1M	Ant1	2402	-68.88	2300	-34	0.30	≤10	PASS
BLE_1M	Ant1	2402	-68.88	2380	-34	0.50	≤10	PASS
BLE_1M	Ant1	2480	-68.88	2504	-34	0.90	≤10	PASS
BLE_1M	Ant1	2480	-68.88	2584	-34	0.20	≤10	PASS
BLE_2M	Ant1	2402	-67.78	2300	-34	0.50	≤10	PASS
BLE_2M	Ant1	2402	-67.78	2380	-34	0.70	≤10	PASS
BLE_2M	Ant1	2480	-67.78	2504	-34	0.30	≤10	PASS
BLE_2M	Ant1	2480	-67.78	2584	-34	0.70	≤10	PASS

****END OF REPORT****