
Radio Test Report

Report No.: AGC05443260712ER02

PRODUCT DESIGNATION : Double wall bottle speaker

BRAND NAME : N/A

MODEL NAME : M02312

APPLICANT : MID OCEAN BRANDS B.V.

DATE OF ISSUE : Jul. 24, 2026

STANDARD(S) : ETSI EN 300 328 V2.2.2 (2019-07)

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>



Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 24, 2026	Valid	Initial Release

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Table of Contents

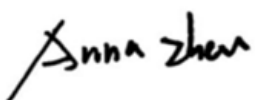
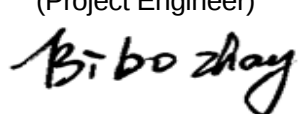
1. General Information	4
2. Product Information	5
2.1 Product Technical Description	5
2.2 Test Frequency List	6
2.3 Objective.....	7
2.4 Test Items and The Results.....	7
2.5 Description of Test Modes	8
3. Setup of Equipment Under Test.....	9
3.1 Setup Configuration of EUT	9
3.2 Support Equipment.....	9
4. Test Environment	10
4.1 Address of The Test Laboratory	10
4.2 Test Facility	10
4.3 Environmental Conditions	11
4.4 Measurement Uncertainty	11
4.5 List of Equipment Used	12
5. ETSI EN 300 328 Requirements for Transmitter	14
5.1 RF Output Power.....	14
5.2 Accumulated Transmit Time, Frequency Occupation and Hopping Sequence	19
5.3 Hopping Frequency Separation	27
5.4 Occupied Channel Bandwidth.....	29
5.5 Adaptivity (Adaptive Frequency Hopping).....	34
5.6 Transmitter Unwanted Emissions in the Out-of-Band Domain	36
5.7 Transmitter Unwanted Emissions in the Spurious Domain.....	40
6. ETSI EN 300 328 Requirements for Receiver	49
6.1 Receiver Unwanted Emissions in the Spurious Domain	49
6.2 Receiver Blocking.....	58
Appendix I: Photographs of Test Setup.....	62
Appendix II: Photographs of Test EUT	64

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

1. General Information

Applicant	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Factory	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Product Designation	Double wall bottle speaker
Brand Name	N/A
Test Model	MO2312
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Jul. 09, 2026
Date of Test	Jul. 09, 2026 to Jul. 24, 2026
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-EU-BR_EDR-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By		
	Anna Zhou (Project Engineer)	Jul. 24, 2026
Reviewed By		
	Bibo Zhang (Reviewer)	Jul. 24, 2026
Approved By		
	Angela Li (Authorized Officer)	Jul. 24, 2026

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

2. Product Information

2.1 Product Technical Description

Equipment Type	FHSS adaptive equipment
Supported Technologies	Classic Bluetooth
Operation Frequency Range	2.4G ISM band (2402MHz-2480MHz)
Bluetooth Version	V5.3
Hardware Version	Y03-V1.2
Software Version	V12
Modulation Type	☒ BR: GFSK ☒ EDR: $\pi/4$ -DQPSK ☒ EDR: 8DPSK
Data Rate	☒ 1Mbps ☒ 2Mbps ☒ 3Mbps
Number of Channels	79 of Hopping Channels
Maximum RF Output Power	-1.48dBm (E.I.R.P.)
Antenna Designation	☒ PCB Antenna (Temporary RF connector provided by manufacturer)
	☐ Dedicated Antenna
Antenna Gain	0dBi
Receiver Category	☐ Category 1 ☐ Category 2 ☒ Category 3
Power Supply	DC 3.7V by battery or DC 5V 0.35A by adapter
Geo-location capability	☐ Yes ☒ No
Extreme Operating Conditions	Lowest temperature range (LT): 0°C
	Normal temperature range (NT): 25°C
	Highest temperature range (HT): 40°C

Note:

1. The above information was declared by the manufacturer.
2. The equipment submitted are representative production models.
3. For more details, please refer to the User's manual of the EUT.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

2.2 Test Frequency List

Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	42	2443
02	2403	43	2444
03	2404	44	2445
04	2405	45	2446
05	2406	46	2447
06	2407	47	2448
07	2408	48	2449
08	2409	49	2450
09	2410	50	2451
10	2411	51	2452
11	2412	52	2453
12	2413	53	2454
13	2414	54	2455
14	2415	55	2456
15	2416	56	2457
16	2417	57	2458
17	2418	58	2459
18	2419	59	2460
19	2420	60	2461
20	2421	61	2462
21	2422	62	2463
22	2423	63	2464
23	2424	64	2465
24	2420	65	2466
25	2426	66	2467
26	2427	67	2468
27	2428	68	2469
28	2429	69	2470
29	2430	70	2471
30	2431	71	2472
31	2432	72	2473
32	2433	73	2474
33	2434	74	2475
34	2435	75	2476
35	2436	76	2477
36	2437	77	2478
37	2438	78	2479
38	2439	79	2480
39	2440		
40	2441		
41	2442		

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

2.3 Objective

Perform Radio Spectrum tests for CE Marking according to the provisions of article 3.2 of the Radio Equipment Directive (2014/53/EU) for the Bluetooth function of the EUT.

2.4 Test Items and The Results

The tests were performed according to following standards:

ETSI EN 300 328 V2.2.2 (2019-07)	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonized Standard for access to radio spectrum
----------------------------------	--

ETSI EN 300 328 test items and the results are as bellow:

No.	Test Item	Standard Require	Result
Transmitter Requirement			
1	RF Output Power	sub-clause 4.3.1.2	Pass
2	Duty Cycle, Tx-sequence, Tx-gap	sub-clause 4.3.1.3	N/A (See Note1,2)
3	Accumulated transmit time, Frequency Occupation and hopping Sequence	sub-clause 4.3.1.4	Pass
4	Hopping Frequency Separation	sub-clause 4.3.1.4	Pass
6	Medium Utilisation (MU) Factor	sub-clause 4.3.2.5	N/A (See Note1,2)
7	Adaptivity (Adaptive Frequency Hopping)	sub-clause 4.3.2.6	N/A (See Note1,3)
8	Occupied Channel Bandwidth	sub-clause 4.3.2.7	Pass
9	Transmitter Unwanted Emissions in the Out-of-Band Domain	sub-clause 4.3.2.8	Pass
10	Transmitter Unwanted Emissions in the Spurious Domain	sub-clause 4.3.2.9	Pass
Receiver Requirement			
11	Receiver Spurious Emissions	sub-clause 4.3.2.10	Pass
12	Receiver Blocking	sub-clause 4.3.2.11	Pass

Note:

1. "N/A" means not applicable.
2. This device is a FHSS adaptive device and is not applicable to this test item.
3. The maximum RF output power of this device is less than 10dBm, so this test item is not applicable

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

2.5 Description of Test Modes

Test Mode	Description
BR_TX_2402_1Mbps	Bluetooth BR Transmitting mode (Channel: 2402, Rate: 1Mbps)
BR_TX_2480_1Mbps	Bluetooth BR Transmitting mode (Channel: 2480, Rate: 1Mbps)
EDR_TX_2402_2Mbps	Bluetooth EDR Transmitting mode (Channel: 2402, Rate: 2Mbps)
EDR_TX_2480_2Mbps	Bluetooth EDR Transmitting mode (Channel: 2480, Rate: 2Mbps)
EDR_TX_2402_3Mbps	Bluetooth EDR Transmitting mode (Channel: 2402, Rate: 3Mbps)
EDR_TX_2480_3Mbps	Bluetooth EDR Transmitting mode (Channel: 2480, Rate: 3Mbps)
BR_HOP_NA_1Mbps	Bluetooth BR Hopping mode (Rate: 1Mbps)
EDR_HOP_NA_2Mbps	Bluetooth EDR Hopping mode (Rate: 2Mbps)
EDR_HOP_NA_3Mbps	Bluetooth EDR Hopping mode (Rate: 3Mbps)
BR_RX_2402_1Mbps	Bluetooth BR Receiving mode (Channel: 2402, Rate: 1Mbps)
BR_RX_2480_1Mbps	Bluetooth BR Receiving mode (Channel: 2480, Rate: 1Mbps)
EDR_RX_2402_2Mbps	Bluetooth EDR Receiving mode (Channel: 2402, Rate: 2Mbps)
EDR_RX_2480_2Mbps	Bluetooth EDR Receiving mode (Channel: 2480, Rate: 2Mbps)
EDR_RX_2402_3Mbps	Bluetooth EDR Receiving mode (Channel: 2402, Rate: 3Mbps)
EDR_RX_2480_3Mbps	Bluetooth EDR Receiving mode (Channel: 2480, Rate: 3Mbps)
Note: All modes have been tested and the worst mode test data recording in the test report, if no any other data.	

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

3. Setup of Equipment Under Test

3.1 Setup Configuration of EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

3.2 Support Equipment

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?				
☒ Yes ☐ No				
Item	Equipment	Trade Name	Model No.	Specification
1	Control Box	RISYM	USB-TTL	--

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

4. Test Environment

4.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

4.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

4.3 Environmental Conditions

	Normal Conditions
Temperature range (°C)	15 - 35
Relative humidity range	45 % - 85 %
Pressure range (kPa)	86 - 106

4.4 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the “Guide to the Expression of Uncertainty in Measurement” (GUM) published by ISO.

Test Item	Measurement Uncertainty
Uncertainty of Radio Frequency	$U_c = \pm 1 \times 10^{-7}$
Uncertainty of Total RF power, Conducted	$U_c = \pm 0.8\text{dB}$
Uncertainty of RF Power Density, Conducted	$U_c = \pm 2.6\text{dB}$
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2 \%$
Uncertainty of spurious Emissions, Conducted	$U_c = \pm 2.7\text{dB}$
Uncertainty of Spurious Emissions, Radiated	$U_c = \pm 5.4\text{dB}$
Uncertainty of Dwell Time	$U_c = \pm 2\%$
Uncertainty of Temperature	$U_c = 0.5^\circ \text{C}$
Uncertainty of Humidity	$U_c = \pm 1 \%$
Uncertainty of DC and Low Frequency Voltages	$U_c = \pm 2 \%$

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

4.5 List of Equipment Used

● RF Conducted Test System							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-ER-E036	Spectrum Analyzer	Agilent	N9020A	MY49100060	2026-05-20	2027-05-19
☐	AGC-ER-E041	Spectrum Analyzer	Agilent	N9020A	W1312-60196	2026-05-20	2027-05-19
☐	AGC-ER-E061	Spectrum Analyzer	Agilent	N9020A	MY52090123	2026-05-20	2027-05-19
☒	AGC-ER-E062	Power Sensor	Agilent	U2021XA	MY54110007	2026-01-14	2027-01-13
☐	AGC-ER-E063	Power Sensor	Agilent	U2021XA	MY54110009	2026-01-14	2027-01-13
☐	AGC-ER-E027	Power Sensor	Agilent	U2021XA	MY5411000B	2026-01-13	2027-01-12
☒	AGC-ER-A001	6dB Attenuator	SAIGE	SMA-JK	N/A	2025-09-05	2027-09-04
☒	AGC-ER-E079	Wireless Connectivity Tester	R&S	CMW270	101933	2026-05-20	2027-05-19
☒	AGC-ER-E075	Small Environmental Tester	SH-242	ESPEC	93008290	2024-07-24	2026-07-23
☒	AGC-ER-E075	Small Environmental Tester	SH-242	ESPEC	93008290	2026-07-21	2028-07-20
☒	AGC-ER-E059	Signal Generator	Agilent	N5182B	MY53050647	2026-01-14	2027-01-13
☒	AGC-ER-E060	Signal Generator	Agilent	N5171B	MY53050474	2026-05-20	2027-05-19
☒	AGC-ER-E083	Signal Generator	Agilent	E4421B	US39340815	2026-05-19	2027-05-18
☒	--	RF Connection Cable	N/A	1#	N/A	Each time	N/A
☒	--	RF Connection Cable	N/A	2#	N/A	Each time	N/A

● Radiated Spurious Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☐	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2026-01-13	2027-01-12
☒	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2026-05-20	2027-05-19
☒	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2026-05-20	2027-05-19
☒	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2025-03-14	2027-03-13
☒	AGC-EM-E005	Wideband Antenna	SCHWARZBECK	VULB9168	VULB9168-494	2025-01-15	2027-01-14
☒	AGC-EM-E029	Broadband Ridged Horn Antenna	ETS	3117	00034609	2026-03-14	2027-03-13
☒	AGC-EM-E102	Broadband Ridged Horn Antenna	ETS	3117	00154520	2026-05-22	2027-05-21
☐	AGC-EM-E082	Horn Antenna	SCHWARZBECK	BBHA 9170	#768	2025-09-10	2027-09-09
☒	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2024-07-24	2026-07-23
☒	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2026-07-14	2028-07-13
☒	AGC-EM-A119	2.4GHz Filter	SongYi	N/A	N/A	2026-05-19	2027-05-18
☒	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2025-05-16	2027-05-15

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

● Test Software					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information
☒	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0
☒	AGC-ER-S012	BT/WIFI Test System	Tonscend	JS1120-2	2.6
☐	AGC-ER-S009	BT/WIFI Test System	Tonscend	JS1120-3	2.6.77.0518

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

5. ETSI EN 300 328 Requirements for Transmitter

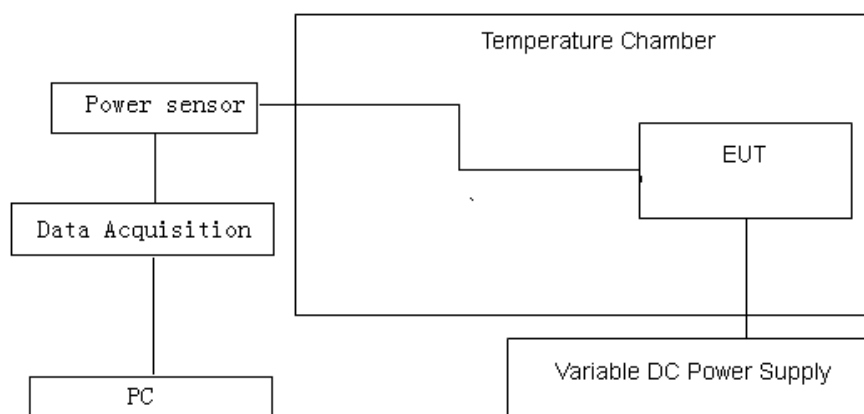
5.1 RF Output Power

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

Test Limit

RF Output Power $\leq$ 100mW (20dBm) over Normal and Extreme conditions.

Test Setup



Test Procedure

- 1) Use a fast power sensor and set the samples speed 1MS/s or faster.
- 2) Connect one power sensor to each transmit port, Trigger the power sensors so that they start sampling at the same time. For each instant in time, sum the power of the individual samples of all ports and store them. Use these stored samples in all following steps.
- 3) Find the start and stop times of each burst in the stored measurement samples.
- 4) Between the start and stop times of each individual burst calculate the RMS power over the burst. Save these P burst values, as well as the start and stop times for each burst.
- 5) The highest of all P burst values (Value "A" in dBm) will be used for maximum e.i.r.p calculations.
- 6) The cable loss factor shall be considered to the value "A".
- 7) Add the (stated) antenna assembly gain "G" in dBi of the individual antenna. If applicable, add the additional beamforming gain "Y" in dB.
- 8) The RF output power (P) shall be calculated using the formula: $P=A+G+Y$

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

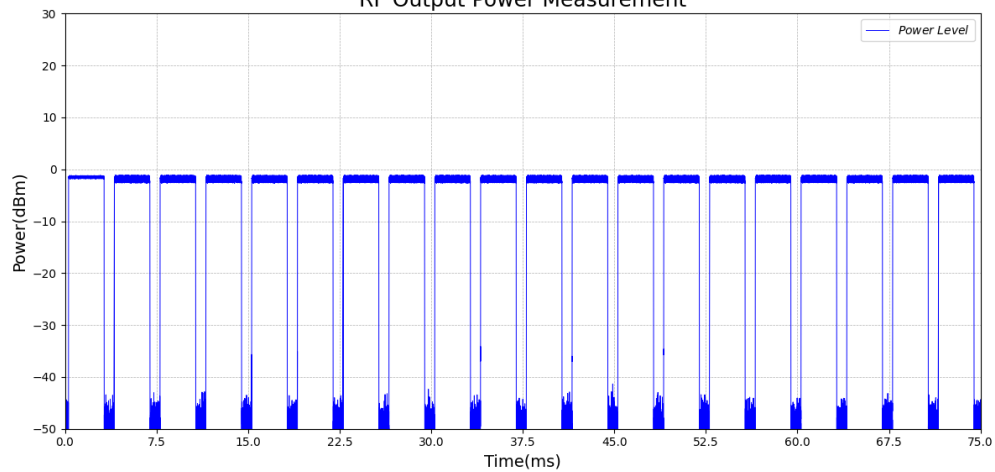
Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of RF Output Power					
Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
BR_HOP_1Mbps	-1.48	-1.48	-1.53	20	Pass
EDR_HOP_2Mbps	-2.18	-2.55	-2.37	20	Pass
EDR_HOP_3Mbps	-2.21	-2.40	-2.25	20	Pass

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

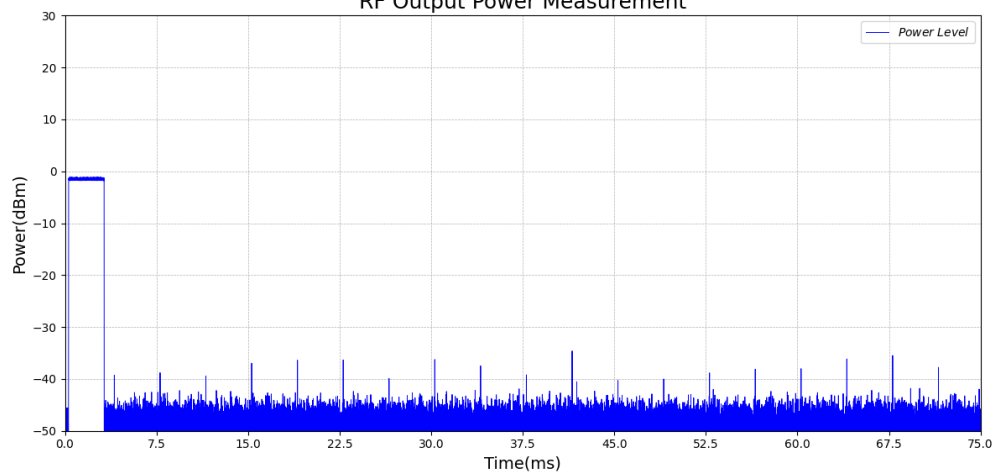
Test Graphs of RF Output Power

RF Output Power Measurement



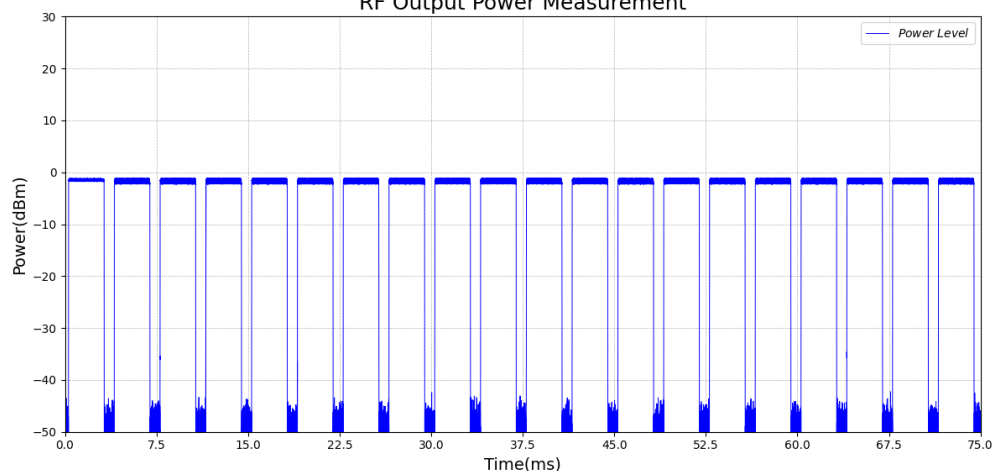
Test_Graph_BR_HOP_ANT1_NA_1Mbps_Power_HT

RF Output Power Measurement



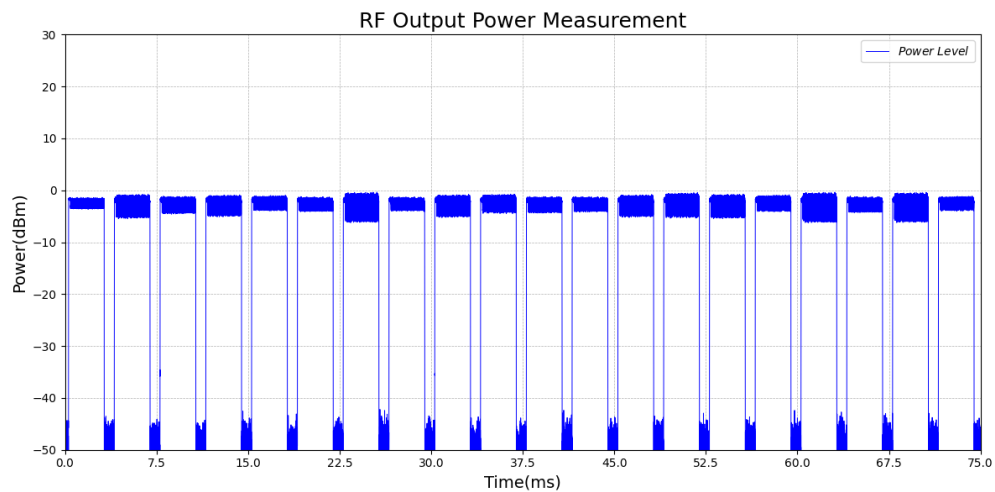
Test_Graph_BR_HOP_ANT1_NA_1Mbps_Power_LT

RF Output Power Measurement

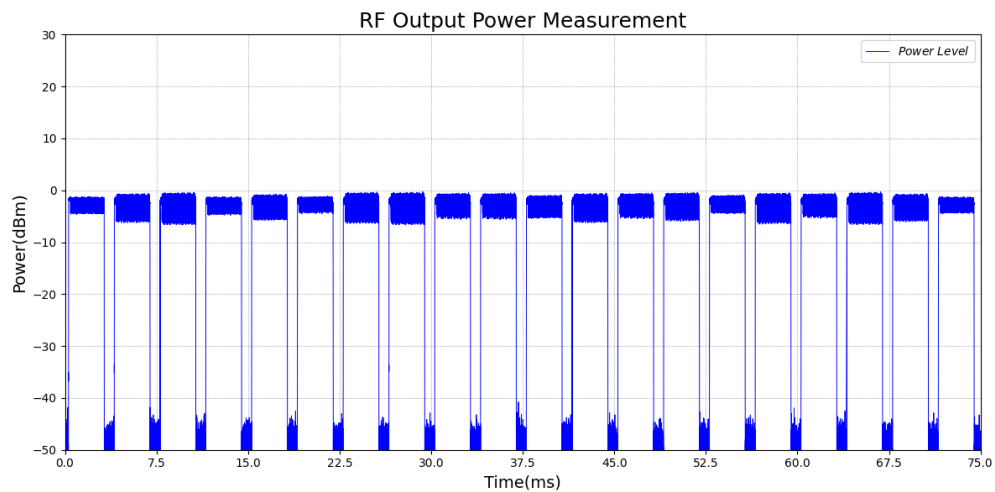


Test_Graph_BR_HOP_ANT1_NA_1Mbps_Power_NT

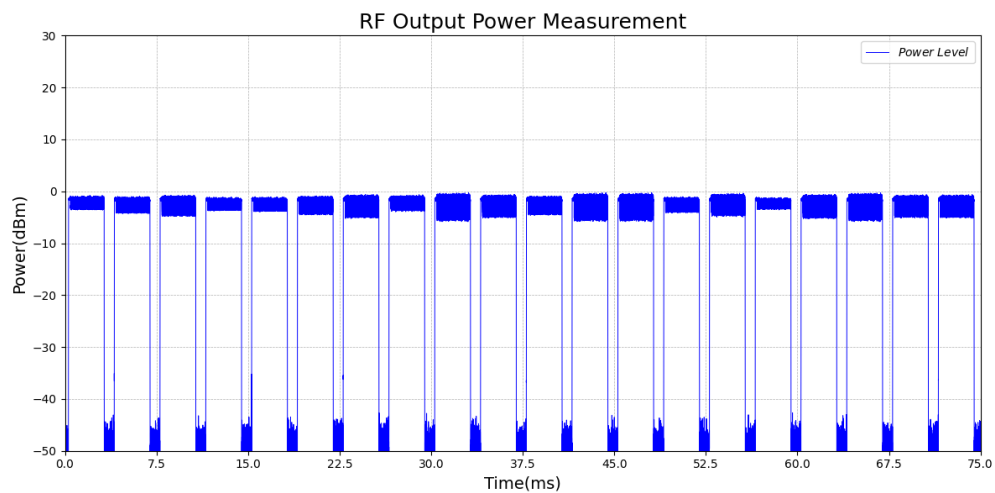
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.



Test_Graph_EDR_HOP_ANT1_NA_2Mbps_Power_HT

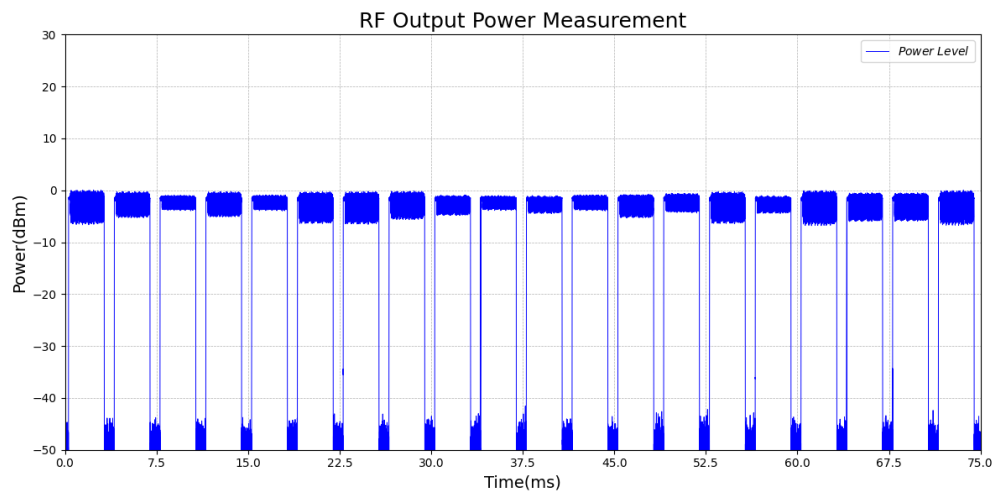


Test_Graph_EDR_HOP_ANT1_NA_2Mbps_Power_LT

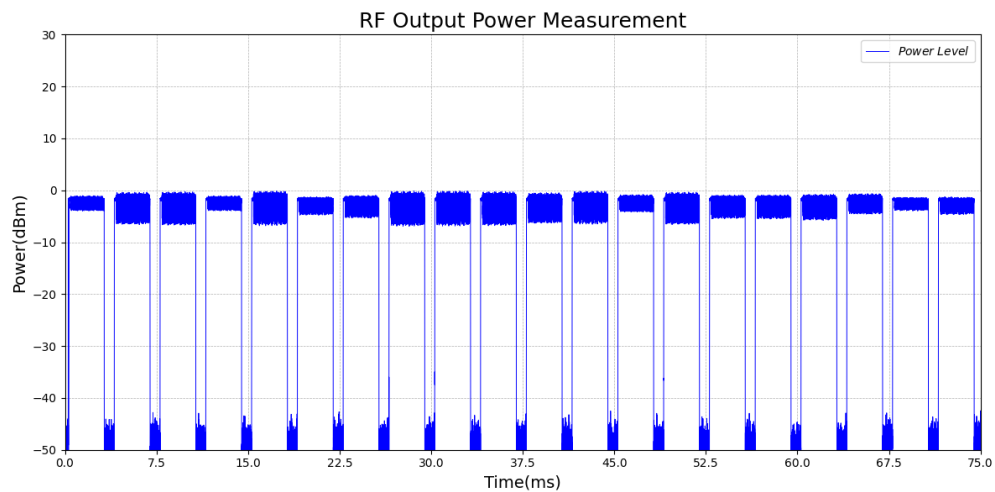


Test_Graph_EDR_HOP_ANT1_NA_2Mbps_Power_NT

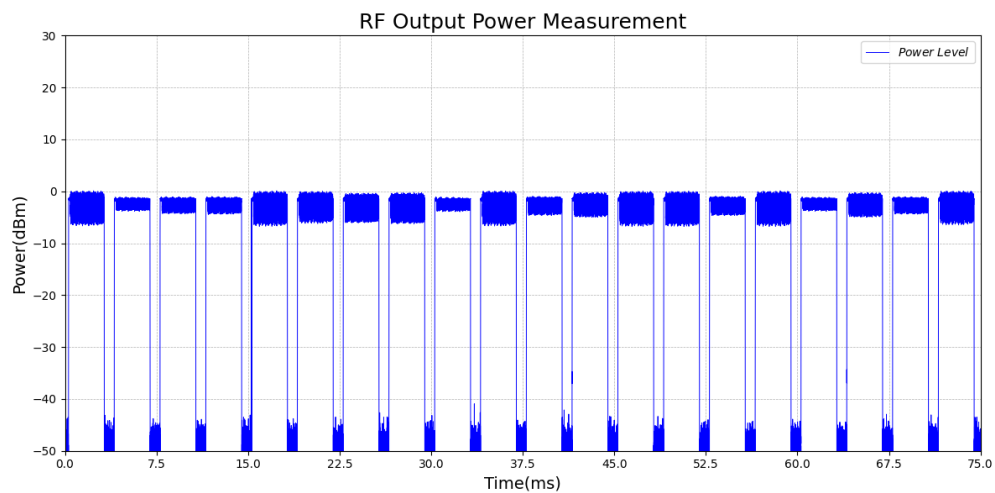
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.



Test_Graph_EDR_HOP_ANT1_NA_3Mbps_Power_HT



Test_Graph_EDR_HOP_ANT1_NA_3Mbps_Power_LT



Test_Graph_EDR_HOP_ANT1_NA_3Mbps_Power_NT

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

5.2 Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

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

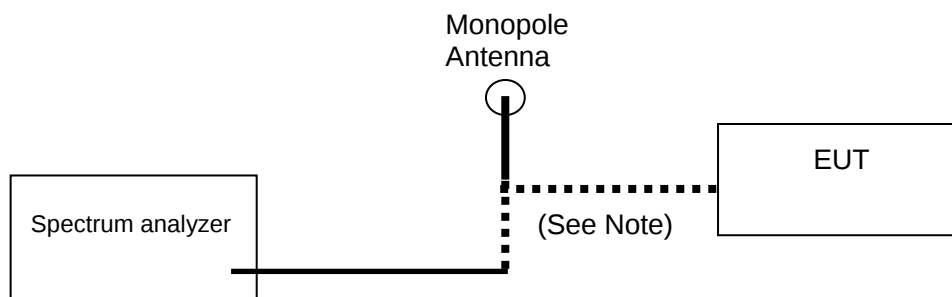
The Frequency Occupation is the number of times that each hopping frequency is occupied within a given period. A hopping frequency is considered to be occupied when the equipment selects that frequency from the Hopping Sequence. FHSS equipment may be transmitting, receiving or stay idle during the dwell time spent on that hopping frequency.

The Hopping Sequence of a FHSS equipment is the pattern of the hopping frequencies used by the equipment

Test Limit

Accumulated Transmit Time	
Condition	Limit
☐ Non-adaptive frequency hopping systems	≤ 15ms
☒ Adaptive frequency hopping systems	≤ 400ms
Frequency Occupation	
Condition	Limit (Option 1)
☐ Non-adaptive frequency hopping systems	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.
☒ Adaptive frequency hopping systems	
Hopping Sequence	
Condition	Limit
☐ Non-adaptive frequency hopping systems	≥5 hopping frequencies or 5/minimum Hopping Frequency Separation in MHz, whichever is the greater.
☒ Adaptive frequency hopping systems	Operating frequency band ≥58.45MHz (Operating over a minimum of 70 % of the operating in the band 2,4 GHz to 2,4835 GHz)
	≥15 hopping frequencies or 15/minimum Hopping Frequency Separation in MHz, whichever is the greater.

Test Setup



Remarks:

EUT was direct connected to test equipment through coupling device.

Test Procedure

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

The test procedure refers to the requirements of EN 300 328 Section 5.4.4 as follows:

Step 1:

- The output of the transmitter shall be connected to a spectrum analyzer or equivalent.
- The analyzer shall be set as follows:
 - Centre Frequency: Equal to the hopping frequency being investigated
 - Frequency Span: 0 Hz - RBW: ~ 50 % of the Occupied Channel Bandwidth
 - VBW: $\geq$ RBW - Detector Mode: RMS
 - Sweep time: Equal to the applicable observation period (see clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2)
 - Number of sweep points: 30 000
 - Trace mode: Clear/Write
 - Trigger: Free Run

Step 2:

- Save the trace data to a file for further analysis by a computing device using an appropriate software application or program.

Step 3:

- Identify the data points related to the frequency being investigated by applying a threshold.

The data points resulting from transmissions on the hopping frequency being investigated are assumed to have much higher levels compared to data points resulting from transmissions on adjacent hopping frequencies. If a clear determination between these transmissions is not possible, the RBW in step 1 shall be further reduced. In addition, a channel filter may be used.
- Count the number of data points identified as resulting from transmissions on the frequency being investigated and multiply this number by the time difference between two consecutive data points.

Step 4:

- The result in step 3 is the Accumulated Transmit Time which shall comply with the limit provided in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2 and which shall be recorded in the test report.

Step 5:

This step is only applicable for equipment implementing Option 1 in clause 4.3.1.4.3.1 or Option 1 in clause 4.3.1.4.3.2 for complying with the Frequency Occupation requirement.

- Make the following changes on the analyzer and repeat step 2 and step 3.

Sweep time: $4 \times \text{dwell time} \times \text{Actual number of hopping frequencies in use}$.

The hopping frequencies occupied by the equipment without having transmissions during the dwell time (blacklisted frequencies) should be taken into account in the actual number of hopping frequencies in use. If this number cannot be determined (number of blacklisted frequencies unknown) it shall be assumed that the equipment uses the maximum possible number of hopping frequencies.
- The result shall be compared to the limit for the Frequency Occupation defined in clause 4.3.1.4.3.1, Option 1 or clause 4.3.1.4.3.2, Option 1. The result of this comparison shall be recorded in the test report.

Step 6:

- Make the following changes on the analyzer:
 - Start Frequency: 2 400 MHz
 - Stop Frequency: 2 483,5 MHz
 - RBW: ~ 50 % of the Occupied Channel Bandwidth (single hopping frequency)
 - VBW: ≥ RBW
 - Detector Mode: Peak
 - Sweep time: 1 s; this setting may result in long measuring times. To avoid such long measuring times, an FFT analyzer may be used
 - Number of sweep points: ~ 400 / Occupied Channel Bandwidth (MHz); the number of sweep points may need to be further increased in case of overlapping channels
 - Trace Mode: Max Hold
 - Trigger: Free Run
- Wait for the trace to stabilize. Identify the number of hopping frequencies used by the Hopping Sequence.
- The result shall be compared to the limit (value N) defined in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2. This value shall be recorded in the test report.

For equipment with blacklisted frequencies, it might not be possible to verify the number of hopping frequencies in use. However, they shall comply with the requirement for Accumulated Transmit Time and Frequency Occupation assuming the minimum number of hopping frequencies (N) defined in clause 4.3.1.4.3.1 or clause 4.3.1.4.3.2 is used.

Step 7:

- For adaptive FHSS equipment, it shall be verified whether the equipment uses 70 % of the band specified in table 1. This verification can be done using the lowest and highest -20 dB points from the total spectrum envelope obtained in step 6. The result shall be recorded in the test report.

Test Result

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of Accumulated Transmit Time, Frequency Occupation						
Test Mode	Channel (MHz)	Accumulated transmit time (ms)	Limit (ms)	Frequency Occupation (pcs)	Limit (pcs)	Verdict
BR_HOP_1Mbps	2402	320.430	≤400	3	≥1	Pass
BR_HOP_1Mbps	2480	291.300	≤400	5	≥1	Pass

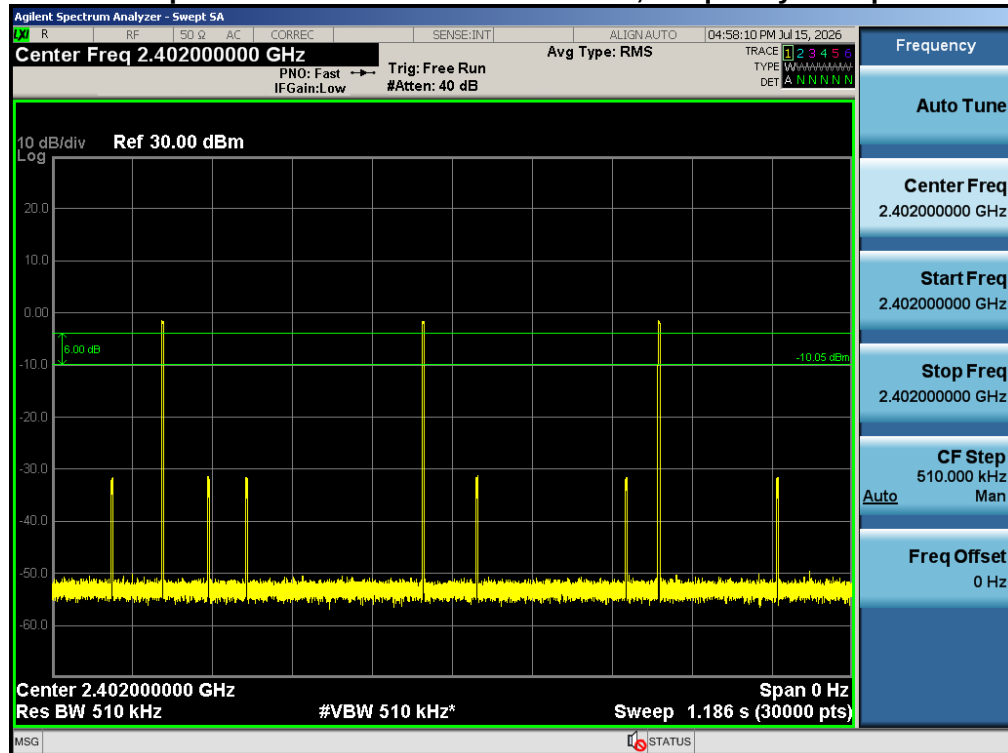
Note:

- 1) All the modes had been tested, but only the worst data recorded in the report.
- 2) The Accumulated transmit time and Dwell Time are calculated by a computing device using an appropriate software application or program.
- 3) Sweep time for Frequency Occupation= Dwell Time*4*79.

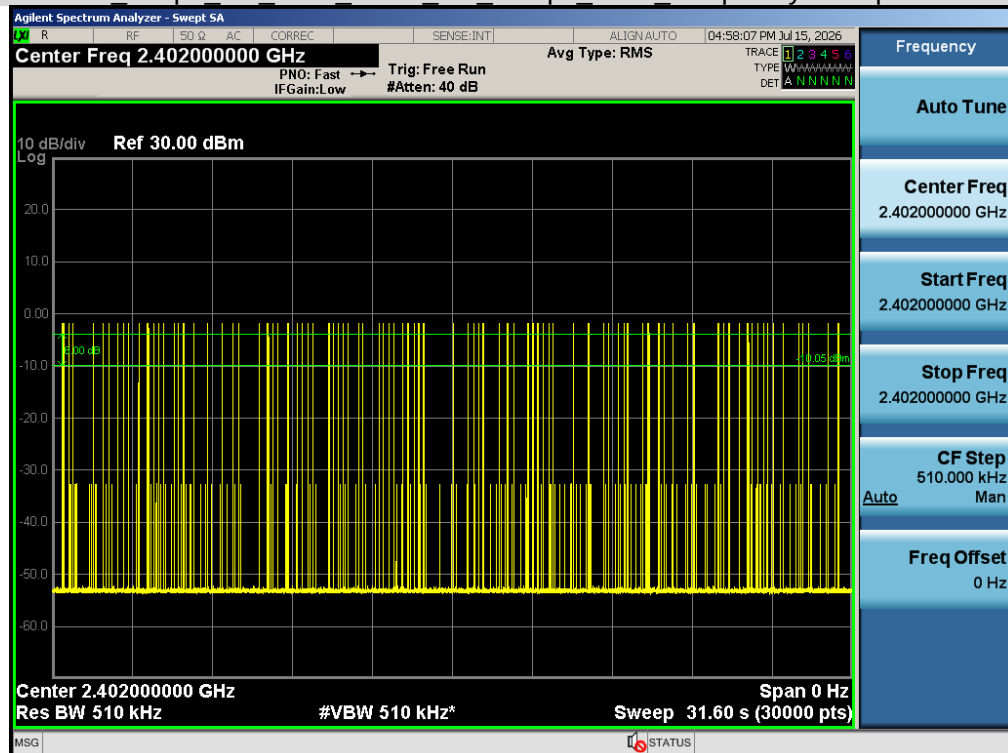
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Test Graphs of Accumulated Transmit Time, Frequency Occupation

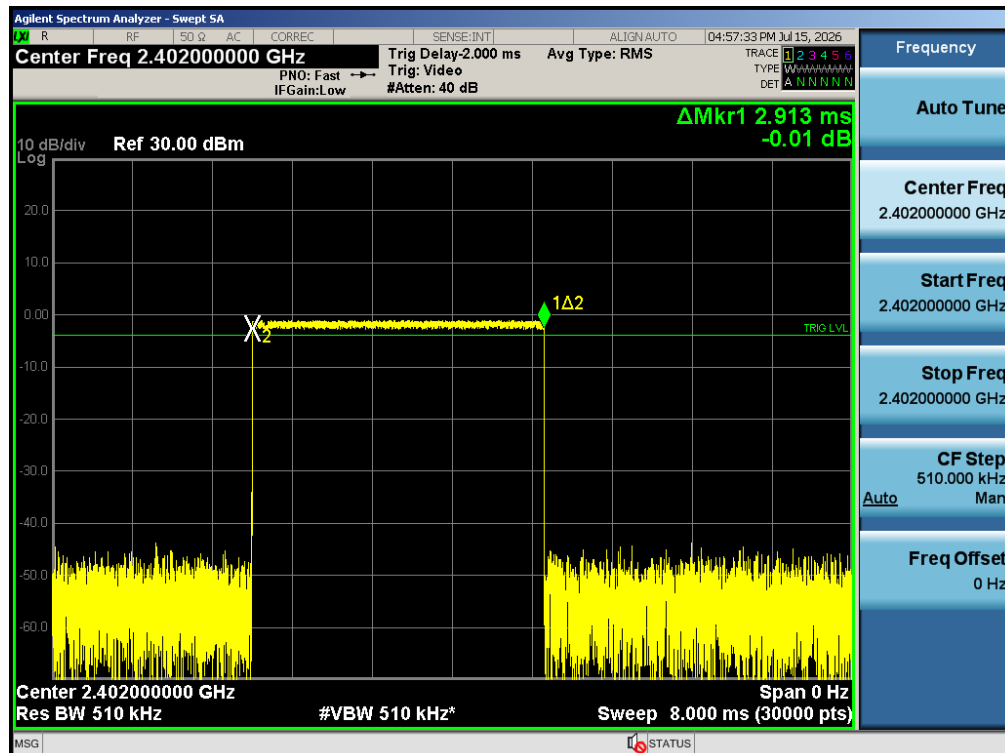


Test Graph BR HOP ANT1 NA 1Mbps 2402 Frequency Occupation

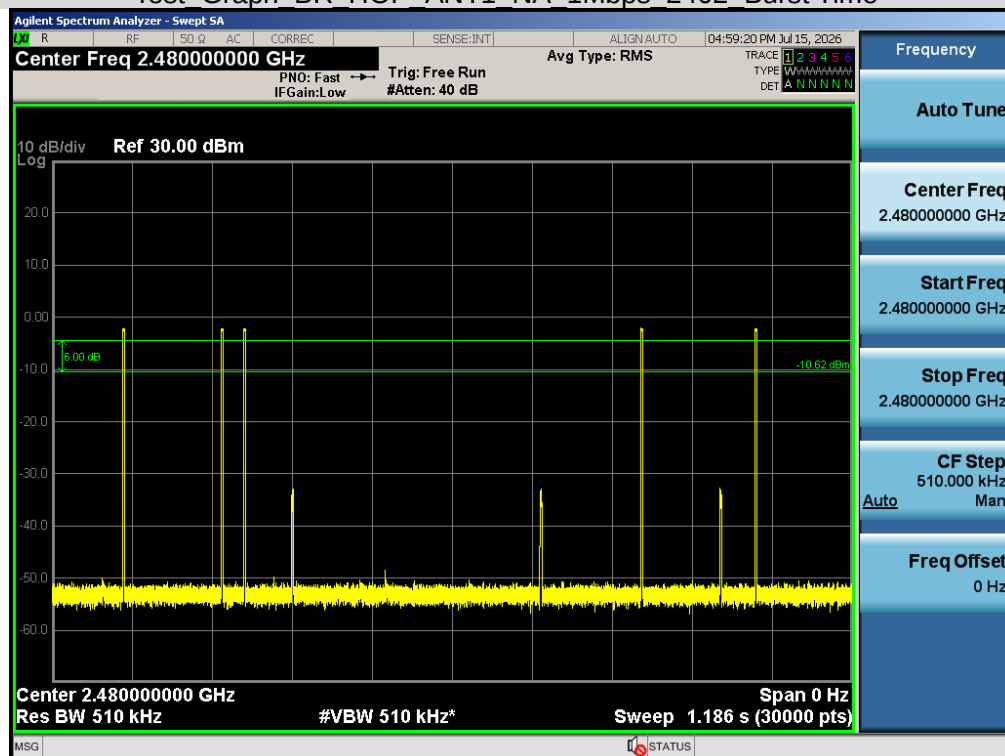


Test_Graph_BR_HOP_ANT1_NA_1Mbps_2402_Accumulated Transmit Time

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.



Test Graph BR HOP ANT1 NA 1Mbps 2402 Burst Time



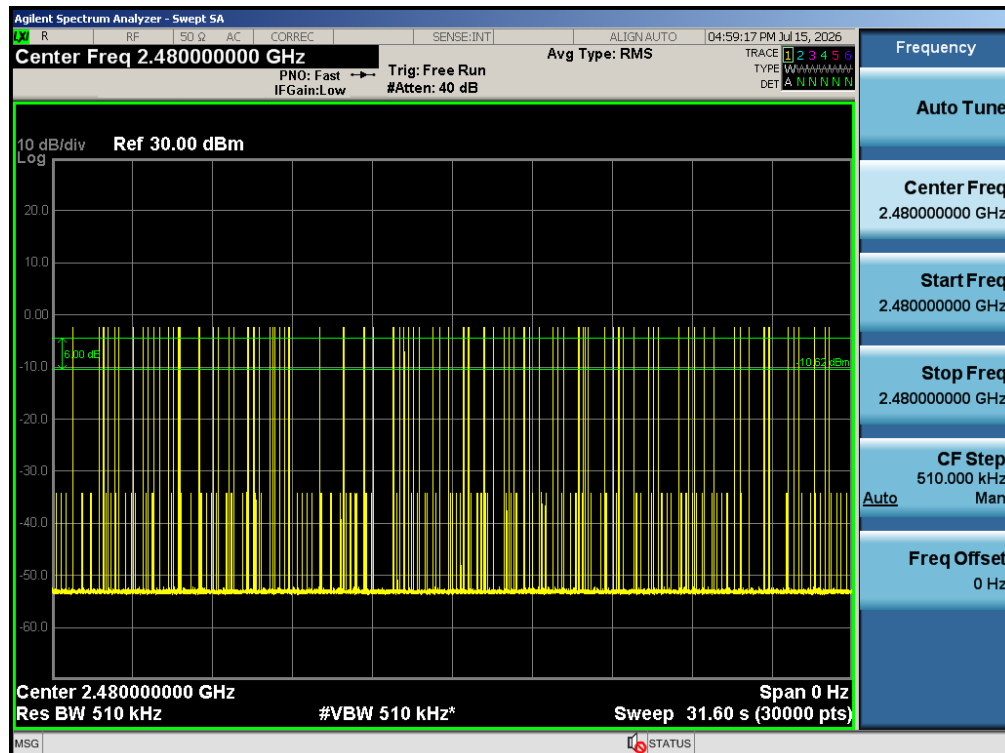
Test_Graph_BR_HOP_ANT1_NA_1Mbps_2480_Frequency Occupation

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

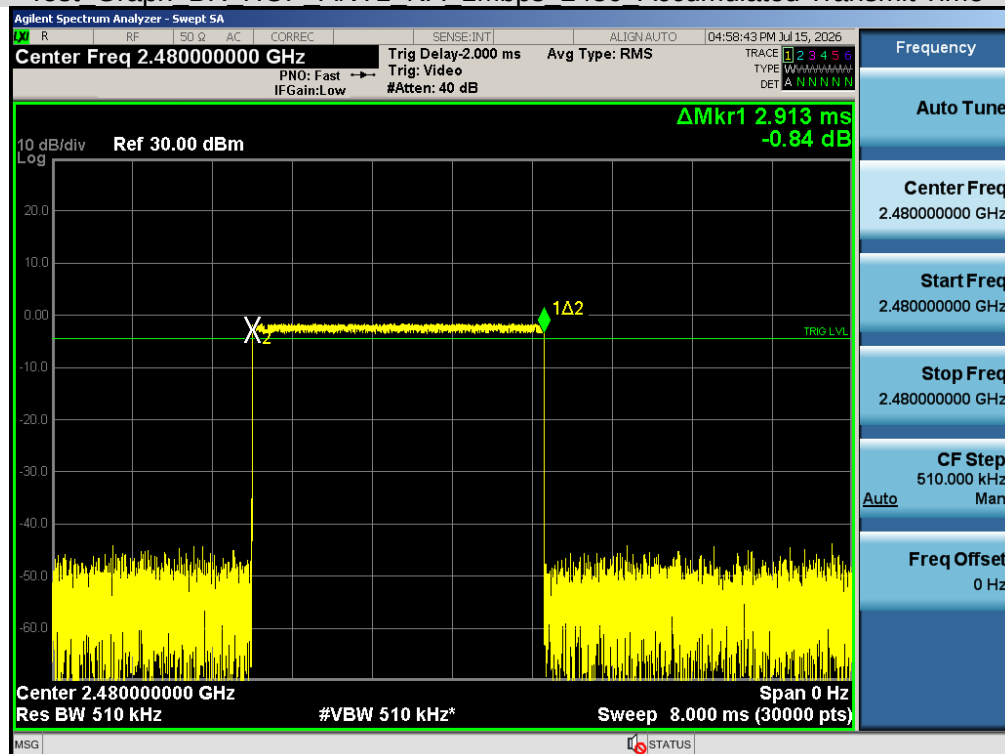
Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



Test Graph BR HOP ANT1 NA 1Mbps 2480 Accumulated Transmit Time



Test_Graph_BR_HOP_ANT1_NA_1Mbps_2480_Burst Time

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

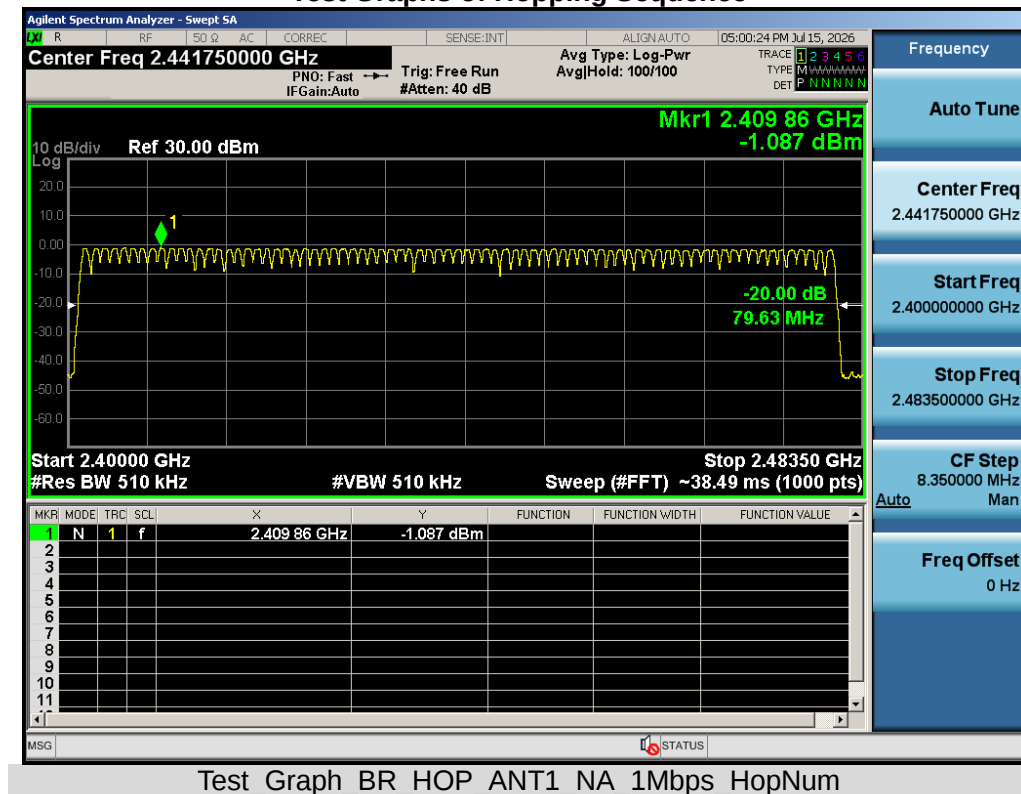
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Test Data of Hopping Sequence					
Test Mode	Number of hopping frequencies	Limit	-20dBc Hopping BW [MHz]	Limit [MHz]	Verdict
BR_HOP_1Mbps	78	≥ 15	79.630	≥ 58.45	Pass

Note: The modulation used during test is GFSK and this is the worst case.

Test Graphs of Hopping Sequence



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

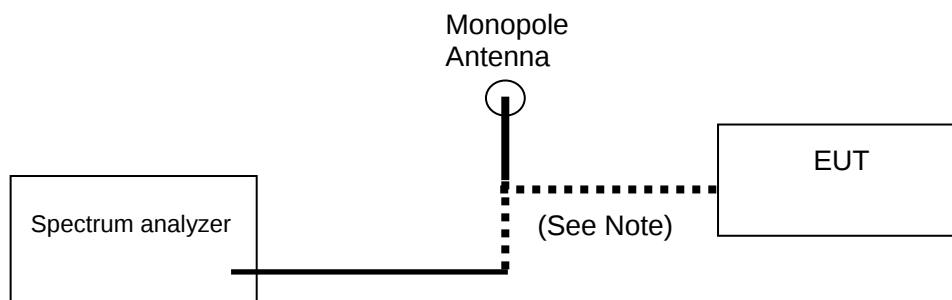
5.3 Hopping Frequency Separation

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

Test Limit

- For Non-adaptive frequency hopping systems:
The minimum Hopping Frequency Separation shall be equal to Occupied Channel Bandwidth (see clause 4.3.1.7) of a single hop, with a minimum separation of 100 kHz.
- For Adaptive frequency hopping systems:
The minimum Hopping Frequency Separation shall be 100 kHz.

Test Setup



Remarks:

EUT was direct connected to test equipment through coupling device.

Test Procedure

Refer as EN 300 328, clause 5.4.5 for the test conditions and the measurement method.
The test procedure shall be as follows:

Step 1:

- The output of the transmitter shall be connected to a spectrum analyzer or equivalent.
- The analyzer shall be set as follows:
 - Centre Frequency: Centre of the two adjacent hopping frequencies
 - Frequency Span: Sufficient to see the complete power envelope of both hopping frequencies
 - RBW: 1 % of the span (30KHz)
 - VBW: 3 × RBW (100KHz)
 - Detector Mode: Max Peak
 - Trace Mode: Max Hold
 - Sweep Time: Auto

Step 2:

- Wait for the trace to stabilize.
- Use the marker-delta function to determine the Hopping Frequency Separation between the center of the two adjacent hopping frequencies (e.g. by identifying peaks or notches at the center of the power envelope for the two adjacent signals). This value shall be compared with the limits defined in clause 4.3.1.5.3 and shall be recorded in the test report.

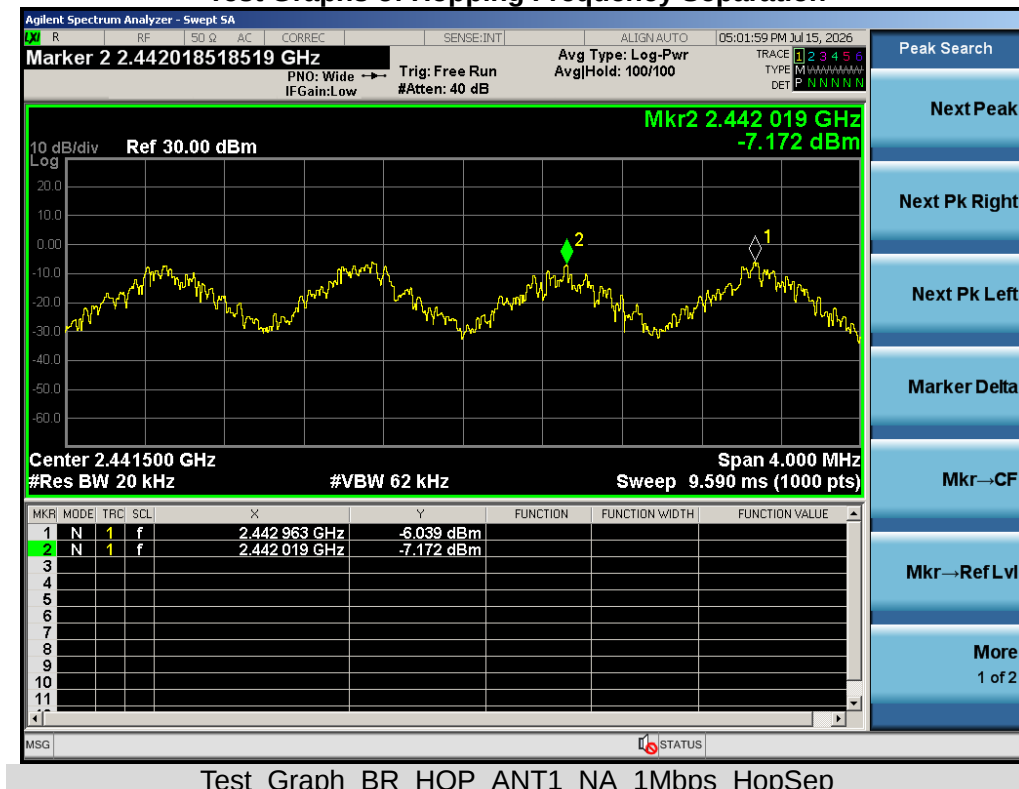
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of Hopping Frequency Separation			
Test Mode	Hopping Frequency Separation [MHz]	Limit [MHz]	Verdict
BR_HOP_1Mbps	0.945	≥0.1	Pass

Test Graphs of Hopping Frequency Separation



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

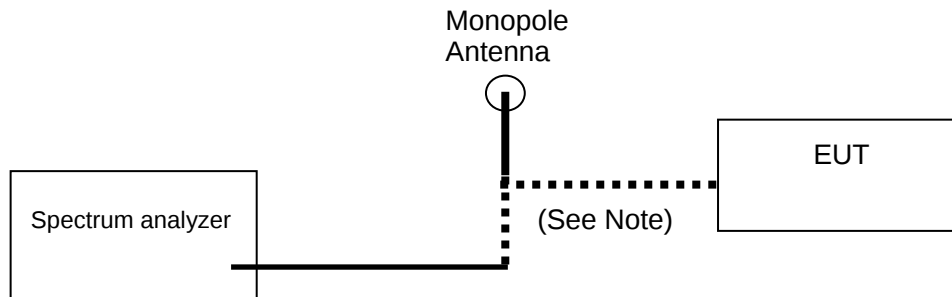
5.4 Occupied Channel Bandwidth

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

Test Limit

The Occupied Channel Bandwidth shall fall completely within the band 2400MHz to 2483.5MHz.

Test Setup



Remarks:

EUT was direct connected to test equipment through coupling device.

Test Procedure

- 1) The spectrum analyser shall be used the following settings:
- 2) Centre Frequency: The centre frequency of the channel under test
 - Resolution BW: ~1% of the span without going below 1%
 - Video BW: 3×RBW
 - Span: 2×OBW
 - Detector: RMS
 - Trace mode: Max Hold
- 3) Wait until the trace is completed, find the peak value of the trace and place the analyser marker on this peak.
- 4) Use the 99 % bandwidth function of the spectrum analyser to measure the Occupied Channel Bandwidth of the UUT. This value shall be recorded.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

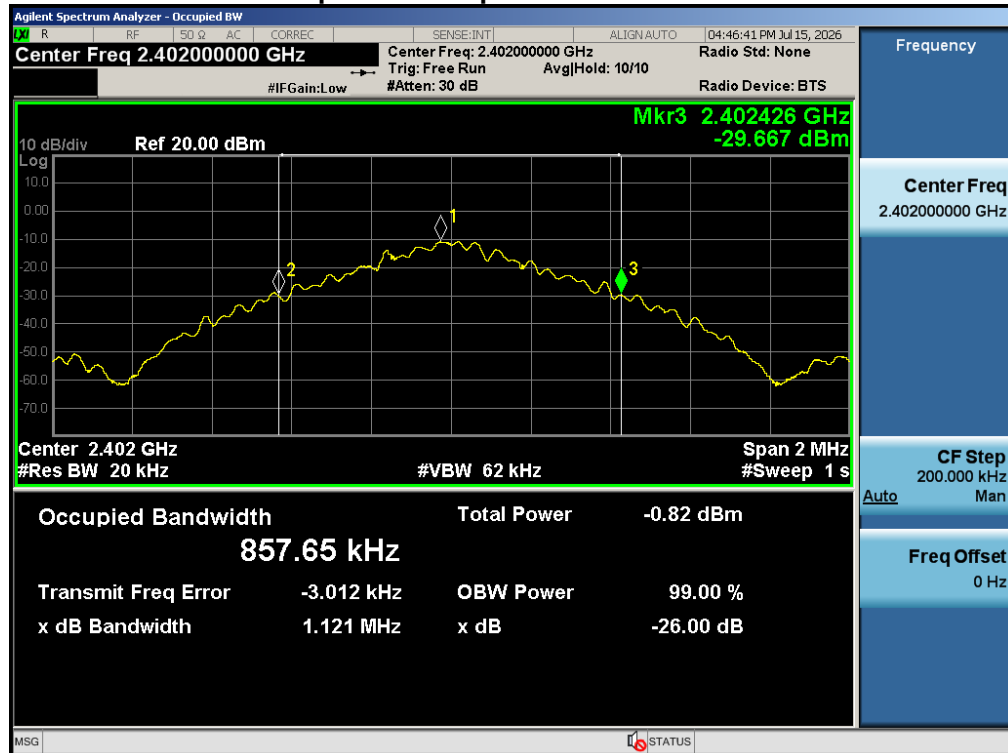
Test Result

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

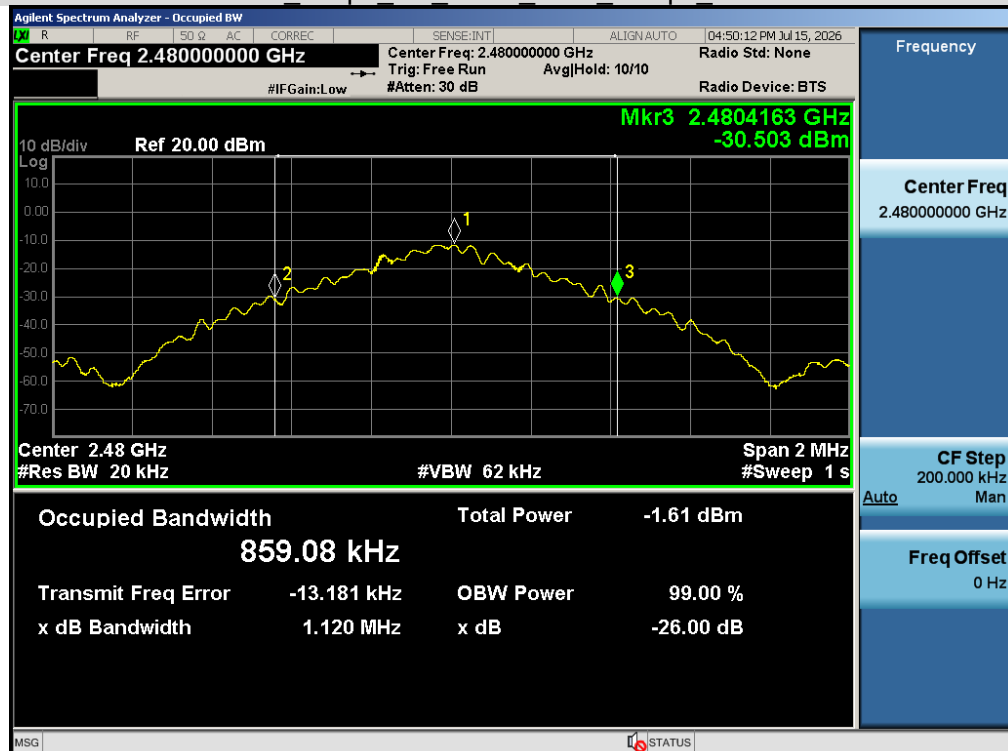
Test Data of Occupied Channel Bandwidth					
Test Mode	Occupied Channel Bandwidth [MHz]			Limit [MHz]	Verdict
	OCB	FL	FH		
BR_2402_1Mbps	0.858	2401.568	2402.426	2400 to 2483.5	Pass
BR_2480_1Mbps	0.859	2479.557	2480.416	2400 to 2483.5	Pass
EDR_2402_2Mbps	1.193	2401.400	2402.593	2400 to 2483.5	Pass
EDR_2480_2Mbps	1.193	2479.394	2480.587	2400 to 2483.5	Pass
EDR_2402_3Mbps	1.198	2401.397	2402.595	2400 to 2483.5	Pass
EDR_2480_3Mbps	1.198	2479.391	2480.589	2400 to 2483.5	Pass

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Graphs of Occupied Channel Bandwidth

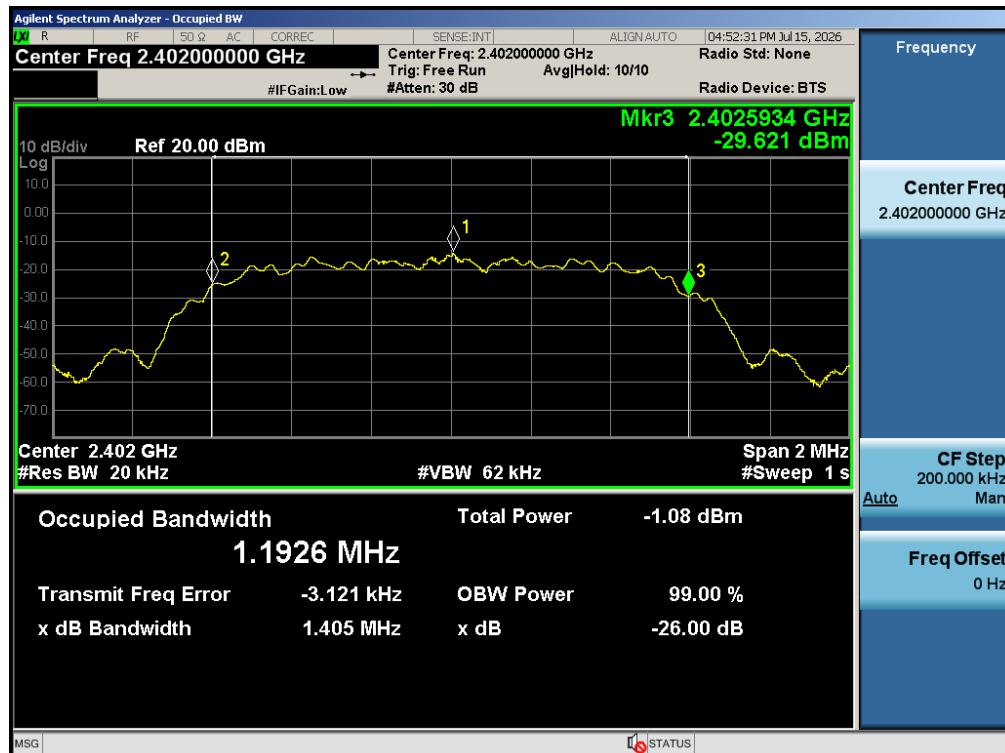


Test Graph BR ANT1 2402 1Mbps OBW

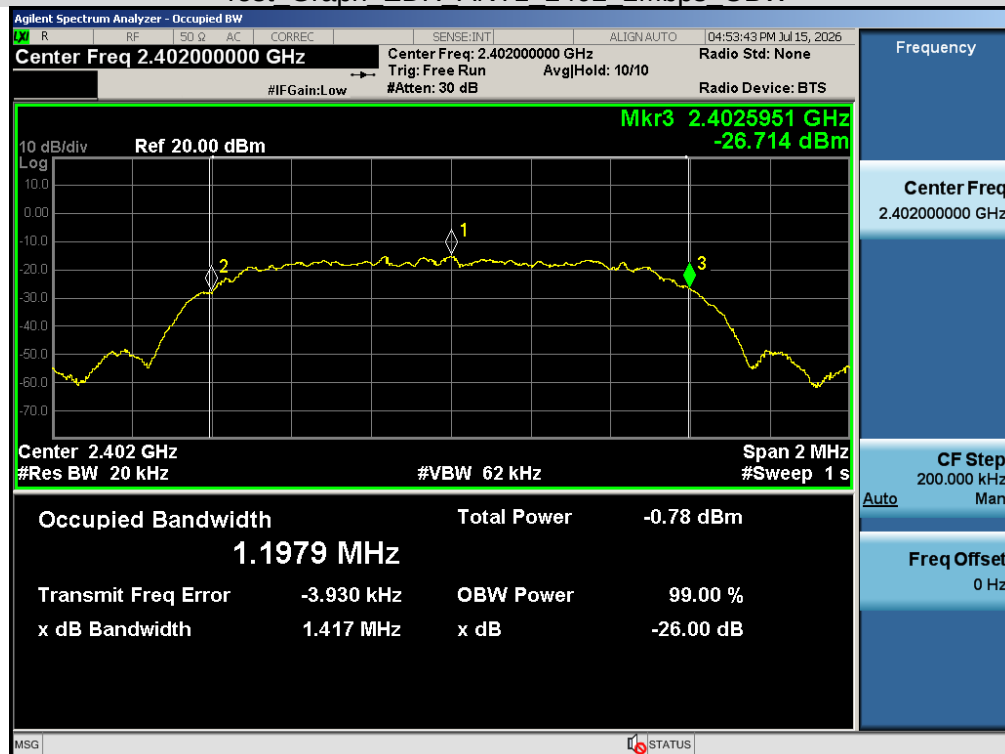


Test_Graph_BR_ANT1_2480_1Mbps_OBW

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.



Test Graph EDR ANT1 2402 2Mbps OBW



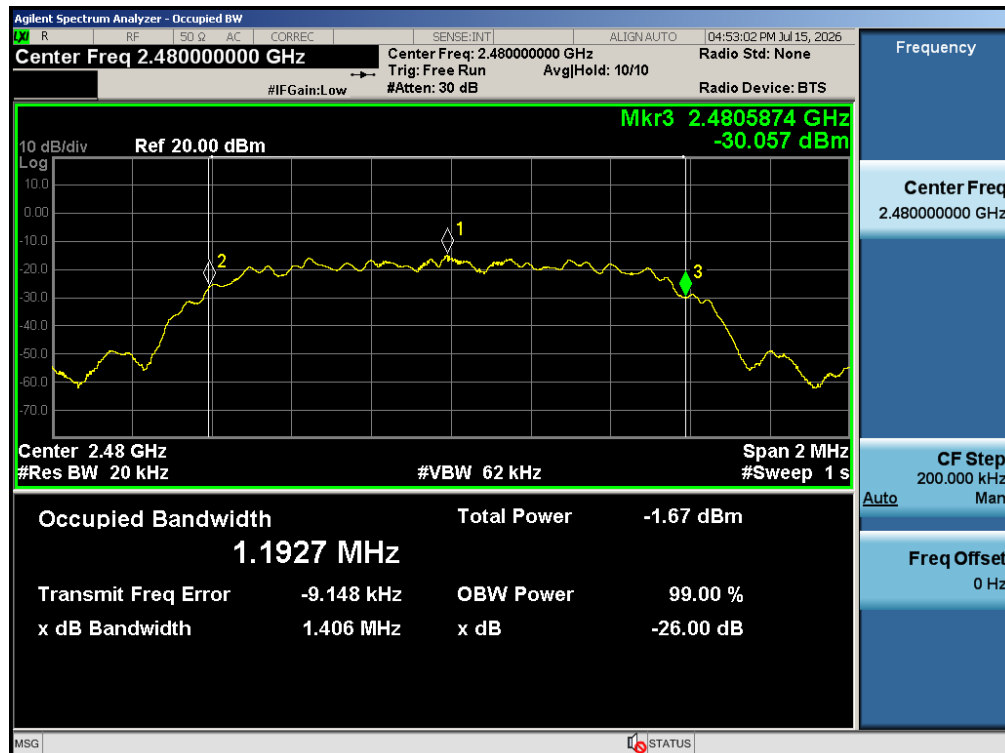
Test_Graph_EDR_ANT1_2402_3Mbps_OBW

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

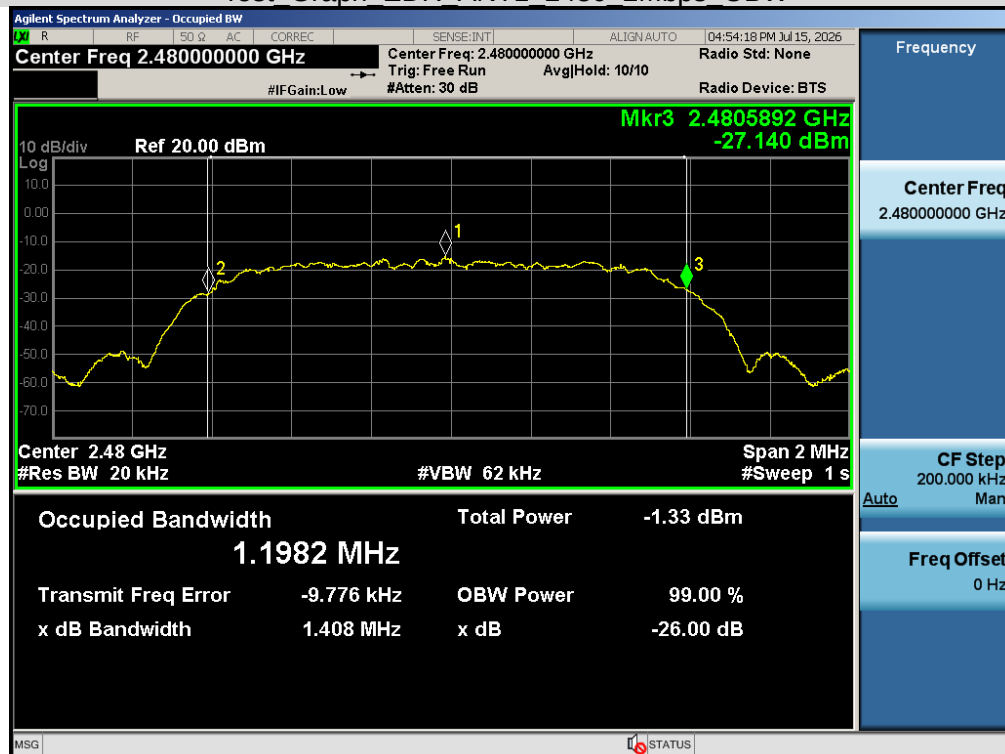
Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



Test Graph EDR ANT1 2480 2Mbps OBW



Test_Graph_EDR_ANT1_2480_3Mbps_OBW

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

5.5 Adaptivity (Adaptive Frequency Hopping)

The method of adaptivity is using LBT based on LBE.

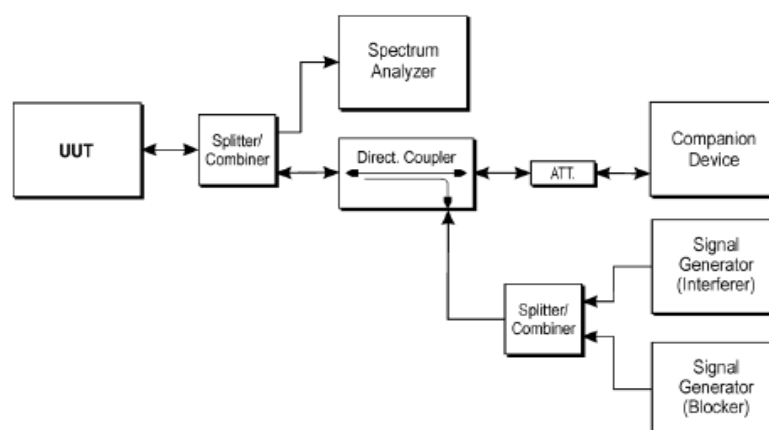
Adaptive FHSS using LBT is a mechanism by which FHSS adaptive equipment avoids transmissions in a channel in the presence of an interfering signal in that channel. This mechanism shall operate as intended in the presence of an unwanted signal on frequencies other than those of the operating band.

Test Limit

- The Channel Occupancy Time shall be less than 13ms.
- If implemented, short control signaling transmissions for adaptive devices using wideband modulation of FHSS shall have a maximum duty cycle of 10% within an observation period of 50 ms.
- For power levels less than 20 dBm e.i.r.p., the CCA threshold level (TL) may be relaxed to:
- $TL = -70 \text{ dBm/MHz} + 10 \times \log_{10} (100\text{mW} / P_{out})$ (P_{out} in mW e.i.r.p.)
- An unwanted CW signal as defined in the below table.

Wanted signal mean power from companion device (dBm)	Unwanted signal frequency (MHz)	Unwanted CW signal power (dBm)
-30 (see note 2)	2 395 or 2 488,5 (see note 1)	-35 (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).		

Test Setup



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Procedure

- 1) The EUT connect to a companion device during the test. Adjust the received signal level at the EUT to the value of -50dBm/MHz.
- 2) the analyzer shall be set as below: RBW $\geq$ Occupied Channel Bandwidth (if the analyser does not support this setting, the highest available setting shall be used) and VBW $\geq$ 3 $\times$ RBW.
- 3) Configure the EUT for normal transmission with a sufficiently high payload to allow demonstration of compliance of the adaptive mechanism on the channel being tested.
- 4) Adding the interference signal and verification of reaction to the interference signal.
- 5) Adding the unwanted signal and verification of reaction to the unwanted signal.
- 6) Removing the interference and unwanted signal.

Test Result

Note: The EIRP of the EUT is less than 10dBm, So the adaptivity test is not applicable for the EUT.

5.6 Transmitter Unwanted Emissions in the Out-of-Band Domain

In the present document, transmitter unwanted emissions in the out-of-band domain are emissions when the equipment is in Transmit mode, on frequencies immediately outside the allocated band, but excluding unwanted emissions in the spurious domain.

Test Limit

The transmitter unwanted emissions in the out-of-band domain shall not exceed the values provided by the mask in figure 3.

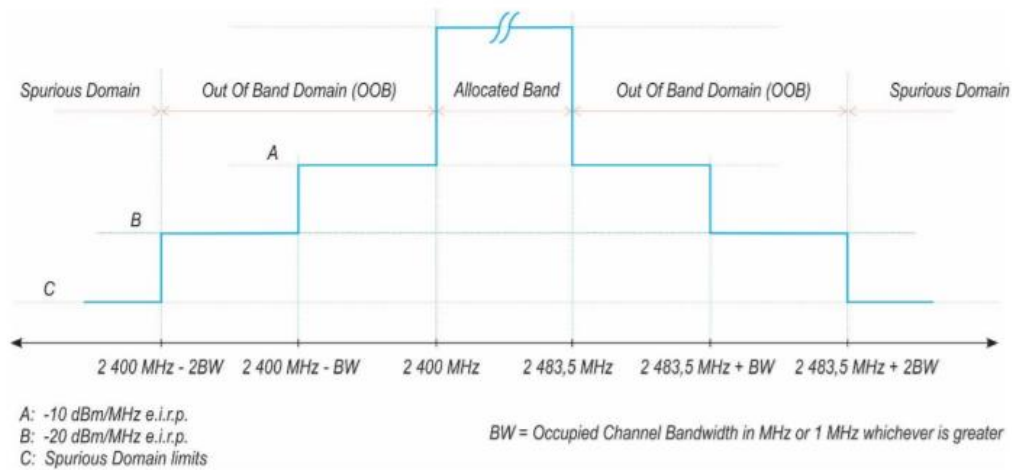
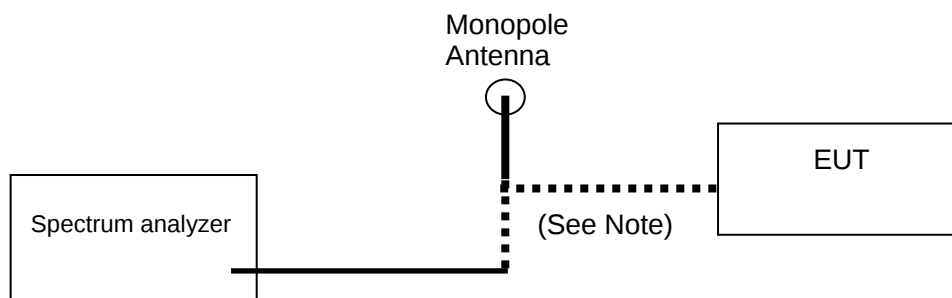


Figure 3: Transmit mask

Test Setup



Remarks:

EUT was direct connected to test equipment through coupling device.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Procedure

- 1) The spectrum analyzer shall be used the following settings:
 - ◆ Centre Frequency: 2484MHz
 - ◆ Resolution BW: 1MHz; Video BW: 3MHz; Span: 0Hz; Detector: RMS
 - ◆ Trace mode: Max Hold; Sweep Points: 5000
- 2) Segment 2 483.5 MHz to 2 483.5 MHz + BW
 - ◆ Adjust the trigger level to select the transmissions with the highest power level.
 - ◆ Increase the center frequency in steps of 1 MHz and repeat this measurement for every 1 MHz segment within the range 2 483.5 MHz to 2 483.5 MHz + BW.
- 3) Segment 2 483.5 MHz + BW to 2 483.5 MHz + 2BW
 - ◆ Change the center frequency of the analyzer to 2 484 MHz + BW and perform the measurement for the first 1 MHz segment within range 2 483.5 MHz + BW to 2 483.5 MHz + 2BW. Increase the center frequency in 1 MHz steps and repeat the measurements to cover this whole range. The center frequency of the last 1 MHz segment shall be set to 2 483,5 MHz + 2 BW – 0.5MHz.
- 4) Segment 2 400 MHz - BW to 2 400 MHz
 - ◆ Change the center frequency of the analyzer to 2 399.5 MHz and perform the measurement for the first 1 MHz segment within range 2 400 MHz - BW to 2 400 MHz Reduce the center frequency in 1 MHz steps and repeat the measurements to cover this whole range. The center frequency of the last 1 MHz segment shall be set to 2 400 MHz - 2BW + 0.5MHz.
- 5) Segment 2 400 MHz - 2BW to 2 400 MHz - BW
 - ◆ Change the center frequency of the analyzer to 2 399,5 MHz - BW and perform the measurement for the first 1 MHz segment within range 2 400 MHz - 2BW to 2 400 MHz - BW. Reduce the center frequency in 1 MHz steps and repeat the measurements to cover this whole range. The center frequency of the last 1 MHz segment shall be set to 2 400 MHz - 2BW + 0.5MHz.
- 6) The cable loss and attenuator factor shall be considered to the test result.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

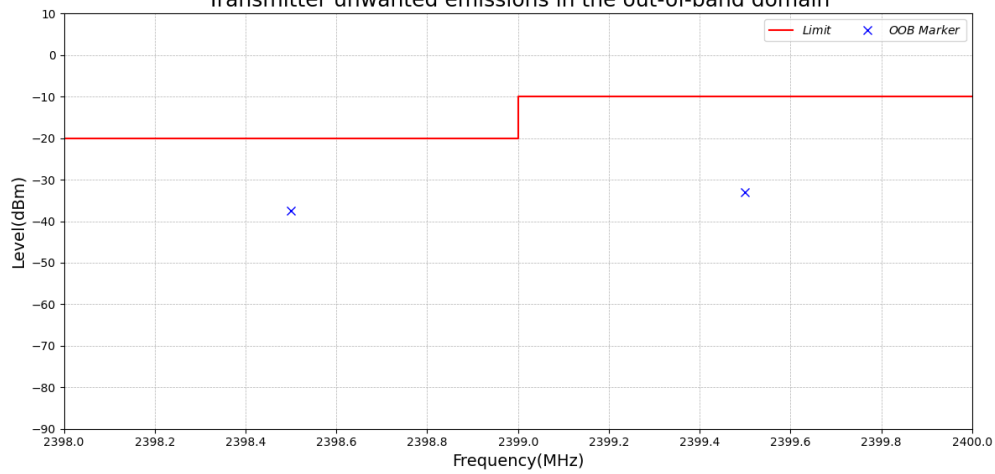
Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of OOB Emissions				
Test Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Verdict
BR_HOP_1Mbps	2399.5	-33.09	-10	Pass
BR_HOP_1Mbps	2398.5	-37.42	-20	Pass
BR_HOP_1Mbps	2484	-41.04	-10	Pass
BR_HOP_1Mbps	2485	-45.30	-20	Pass

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

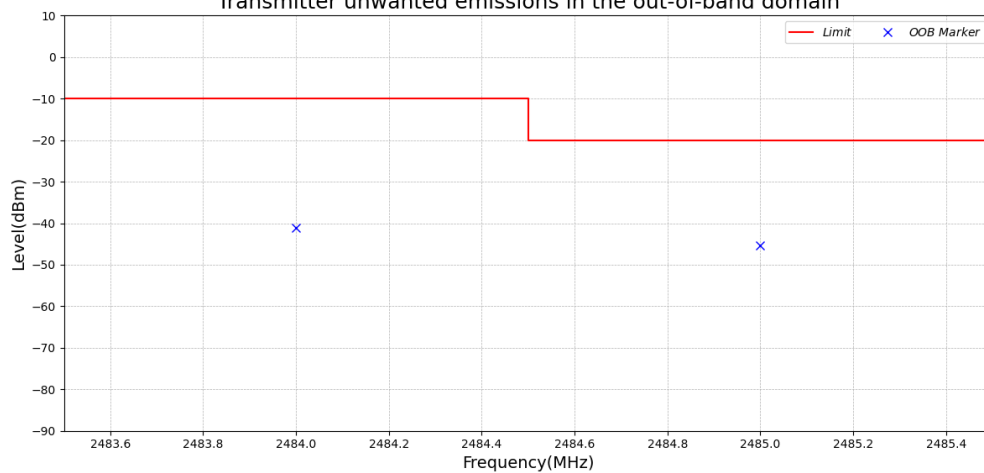
Test Graphs of OOB Emissions

Transmitter unwanted emissions in the out-of-band domain



Test_Graph_BR_HOP_ANT1_NA_1Mbps_OOB_L

Transmitter unwanted emissions in the out-of-band domain



Test_Graph_BR_HOP_ANT1_NA_1Mbps_OOB_R

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

5.7 Transmitter Unwanted Emissions in the Spurious Domain

In the present document, transmitter unwanted emissions in the spurious domain are emissions outside the allocated band and outside the Out-of-band Domain as indicated in figure 3 when the equipment is in Transmit mode.

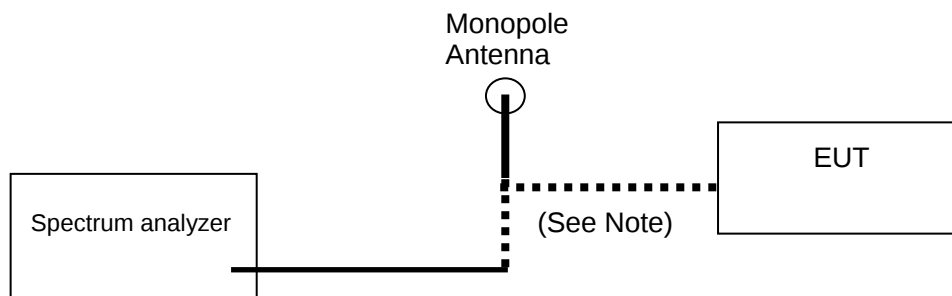
Test Limit

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

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
118 MHz 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

Test Setup

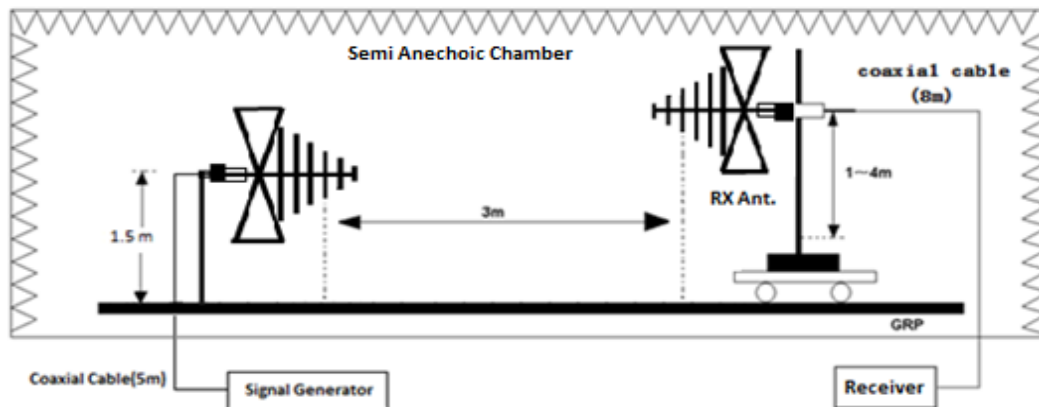
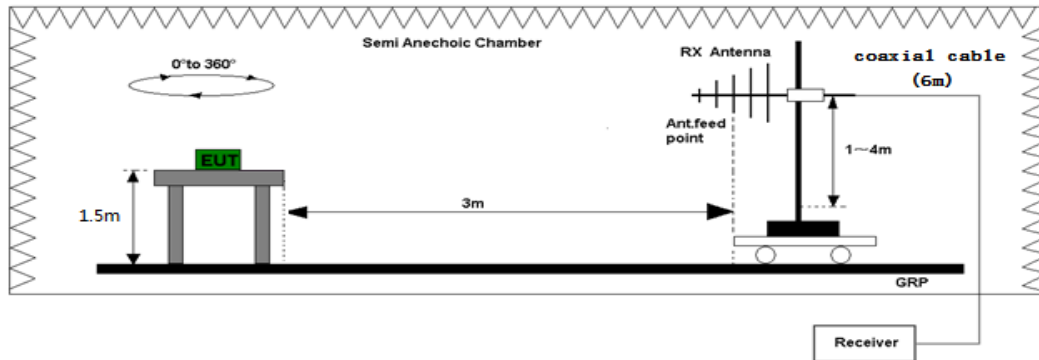
☒ **Conducted Measurement Method:**



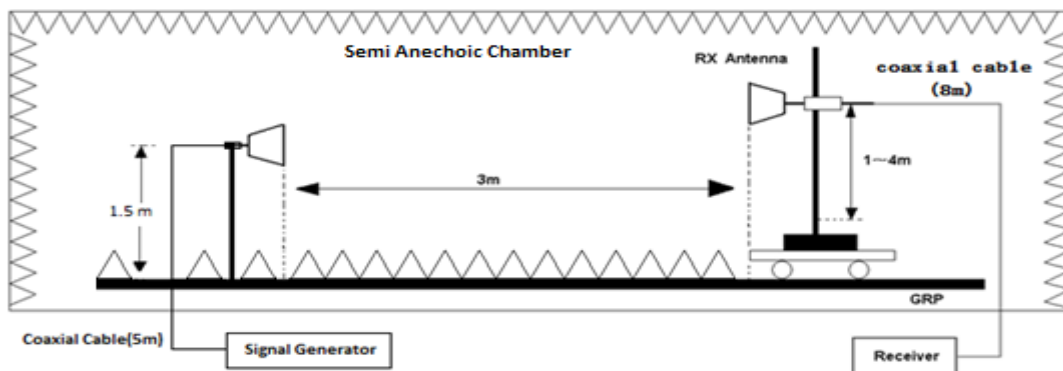
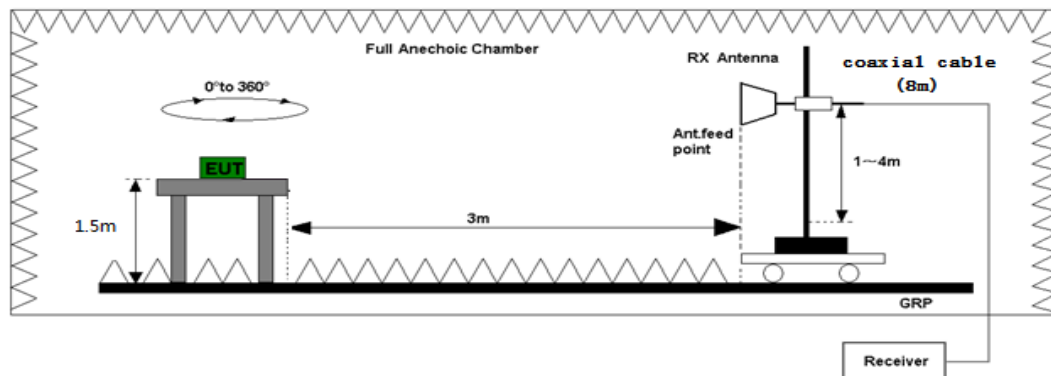
Remarks:

EUT was direct connected to test equipment through coupling device.

☒ Radiated Measurement Method:



Radiated Emission Test Set-Up Frequency 30 MHz ~ 1 GHz



Radiated Emission Test Set-Up Frequency Above 1 GHz

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Procedure

- 1) The emissions over the range 30 MHz to 1 000 MHz shall be identified.
- 2) Spectrum analyzer settings:
 - Resolution bandwidth: 100 kHz
 - Video bandwidth: 300 kHz
 - Detector mode: Peak
 - Sweep Points: ≥19 400
 - Trace Mode: Max Hold
 - Allow the trace to stabilize. Any emissions identified during the sweeps above and that fall within the 6 dB range below the applicable limit or above, shall be individually measured using RMS detector and compared to the limits.
- 3) The emissions over the range 1 GHz to 12,75 GHz shall be identified.
 - Resolution bandwidth: 1 MHz
 - Video bandwidth: 3 MHz
 - Detector mode: Peak
 - Trace Mode: Max Hold
 - Sweep Points: ≥23 500
 - Allow the trace to stabilize. Any emissions identified during the sweeps above and that fall within the 6 dB range below the applicable limit or above, shall be individually measured using RMS detector and compared to the limits.
- 4) For radiated method, the applicable measurement procedures as described in the EN 300 328 V2.2.2 annex C.2 and C.4 are used.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

☒ Conducted Measurement Method:

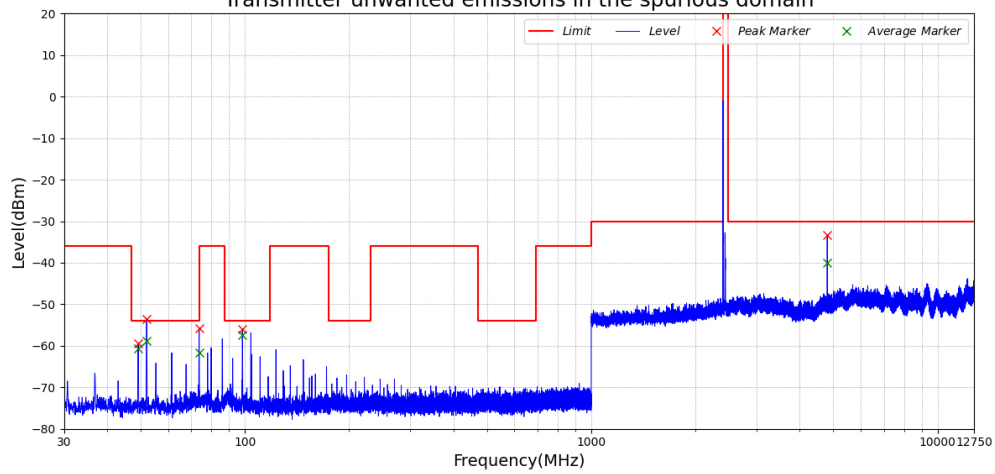
Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of Transmitter Spurious Emissions				
Test Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Verdict
BR_2402_1Mbps	49.142	-60.62	-54.00	Pass
BR_2402_1Mbps	52.02	-58.82	-54.00	Pass
BR_2402_1Mbps	73.716	-61.69	-54.00	Pass
BR_2402_1Mbps	98.323	-57.45	-54.00	Pass
BR_2402_1Mbps	4804.777	-40.07	-30.00	Pass
BR_2480_1Mbps	49.174	-61.26	-54.00	Pass
BR_2480_1Mbps	51.987	-58.57	-54.00	Pass
BR_2480_1Mbps	73.748	-57.19	-54.00	Pass
BR_2480_1Mbps	98.323	-57.45	-54.00	Pass
BR_2480_1Mbps	4960.274	-35.92	-30.00	Pass

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

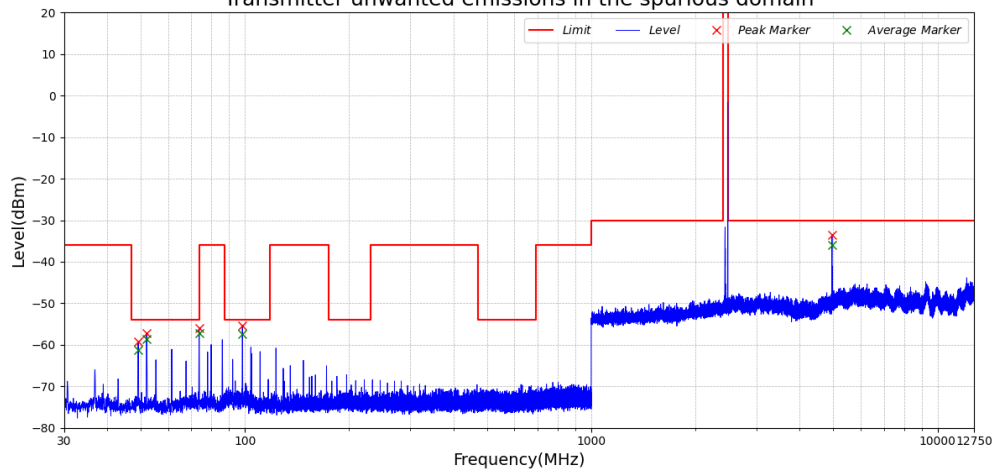
Test Graphs of Transmitter Spurious Emissions

Transmitter unwanted emissions in the spurious domain



Test_Graph_BR_ANT1_2402_1Mbps_TX

Transmitter unwanted emissions in the spurious domain



Test_Graph_BR_ANT1_2480_1Mbps_TX

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

☒ **Radiated Measurement Method:**

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15
Worst Mode	BR_TX_2402_1Mbps		
Verdict	Pass		

■ Transmitter Spurious Emission below 1GHz (30MHz-1GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
85.05	30.55	-59.06	0.48	0.70	-58.84	-36.00	22.84
130.41	30.70	-60.84	0.49	0.10	-61.23	-36.00	25.23
239.53	31.62	-65.02	0.52	6.60	-58.94	-36.00	22.94
325.80	30.32	-67.14	0.53	6.10	-61.57	-36.00	25.57
334.54	30.95	-64.76	0.53	5.94	-59.35	-36.00	23.35
827.87	32.11	-66.20	0.66	6.45	-60.41	-36.00	24.41
Other (30-1000)	--	--	--	--	--	-36.00/-54.00	--
Antenna Polarity: Horizontal							
83.97	32.23	-60.60	0.48	0.38	-60.70	-36.00	24.70
131.82	30.97	-60.77	0.49	0.08	-61.18	-36.00	25.18
242.32	30.30	-66.13	0.52	6.72	-59.93	-36.00	23.93
325.43	30.81	-66.81	0.53	6.10	-61.24	-36.00	25.24
735.27	30.99	-66.90	0.59	6.60	-60.89	-36.00	24.89
827.88	31.00	-66.87	0.66	6.45	-61.08	-36.00	25.08
Other (30-1000)	--	--	--	--	--	-36.00/-54.00	--

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

■ Transmitter Spurious Emission above 1GHz (1GHz-12.75GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
4804	45.52	-48.29	2.64	9.30	-41.63	-30.00	11.63
7206	31.31	-57.22	3.11	11.45	-48.89	-30.00	18.89
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-30.00	--
Antenna Polarity: Horizontal							
4804	41.18	-49.24	2.64	9.30	-42.58	-30.00	12.58
7206	30.99	-58.36	3.11	11.34	-50.14	-30.00	20.14
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-30.00	--

Note:

1. The margins of the other spectrum are not exceeding the minimum value of margin, and this part of the results without recording in the test report.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "--" remark, if no specific emission from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Emission Level=S.G.+ Ant.Gain- Cable Loss, Margin= Limit- Emission Level

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15
Worst Mode	BR_TX_2480_1Mbps		
Verdict	Pass		

■ Transmitter Spurious Emission below 1GHz (30MHz-1GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
84.81	30.77	-61.76	0.48	0.54	-61.70	-36.00	25.70
130.56	30.41	-62.21	0.49	0.10	-62.60	-36.00	26.60
240.35	30.76	-67.06	0.52	6.60	-60.98	-36.00	24.98
326.12	30.90	-64.26	0.53	6.10	-58.69	-36.00	22.69
334.57	31.60	-64.86	0.53	5.94	-59.45	-36.00	23.45
827.95	31.68	-64.12	0.66	6.45	-58.33	-36.00	22.33
Other (30-1000)	--	--	--	--	--	-36.00/-54.00	--
Antenna Polarity: Horizontal							
84.20	31.69	-59.46	0.48	0.54	-59.40	-36.00	23.40
131.67	30.69	-58.13	0.49	0.08	-58.54	-36.00	22.54
243.18	29.56	-68.43	0.52	6.78	-62.17	-36.00	26.17
325.39	30.65	-65.24	0.53	6.10	-59.67	-36.00	23.67
735.65	30.89	-66.70	0.59	6.60	-60.69	-36.00	24.69
828.02	31.45	-64.41	0.66	6.40	-58.67	-36.00	22.67
Other (30-1000)	--	--	--	--	--	-36.00/-54.00	--

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

■ Transmitter Spurious Emission above 1GHz (1GHz-12.75GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
4960	46.09	-48.29	2.64	9.30	-41.62	-30.00	11.62
7440	31.11	-68.42	3.09	11.60	-59.91	-30.00	29.91
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-30.00	--
Antenna Polarity: Horizontal							
4960	41.21	-48.72	2.64	9.30	-42.06	-30.00	12.06
7440	41.22	-60.05	3.09	11.46	-51.68	-30.00	21.68
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-30.00	--

Note:

1. The margins of the other spectrum are not exceeding the minimum value of margin, and this part of the results without recording in the test report.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "--" remark, if no specific emission from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Emission Level=S.G.+ Ant.Gain- Cable Loss, Margin= Limit- Emission Level

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

6. ETSI EN 300 328 Requirements for Receiver

6.1 Receiver Unwanted Emissions in the Spurious Domain

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

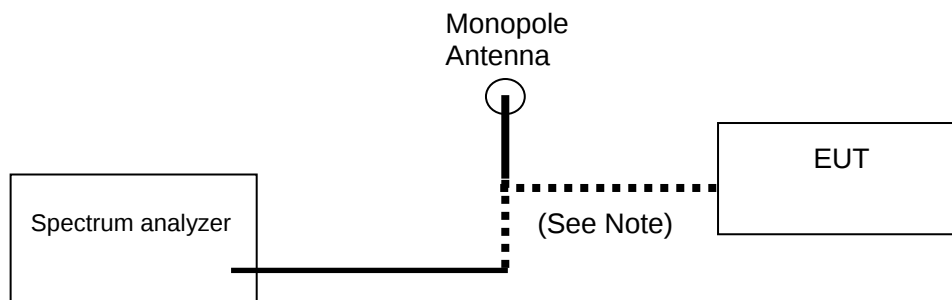
Test Limit

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

Frequency Range	Maximum Power	Bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 12.75 GHz	-47 dBm	1 MHz

Test Setup

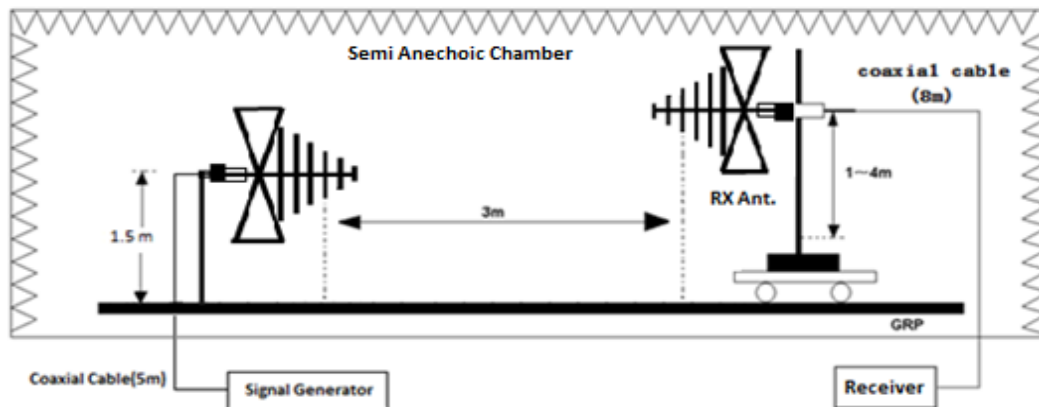
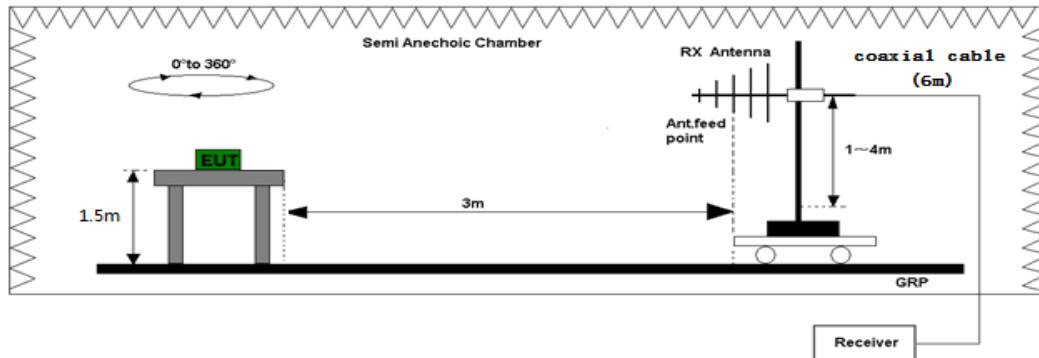
☒ Conducted Measurement Method:



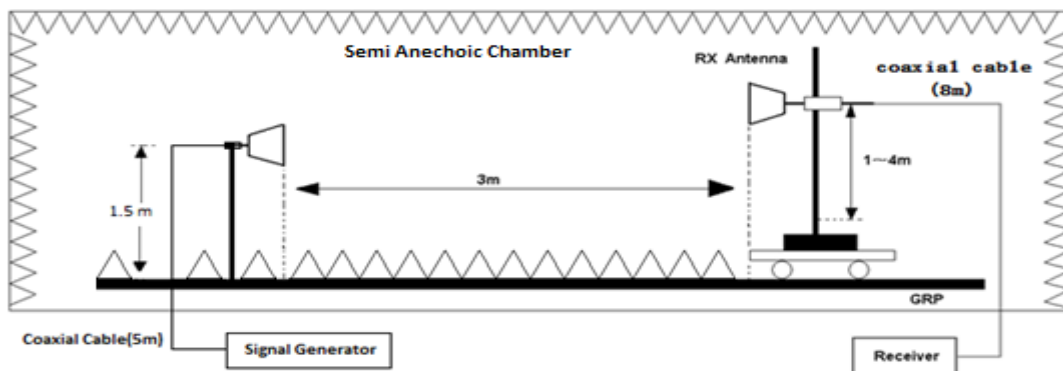
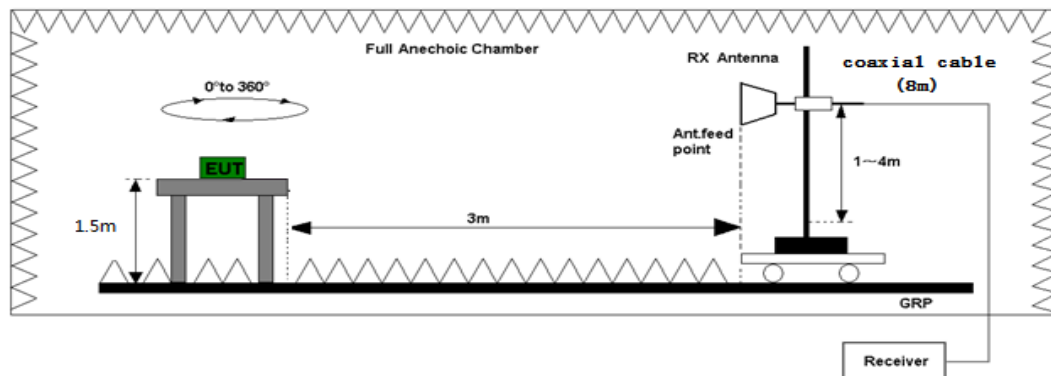
Remarks:

EUT was direct connected to test equipment through coupling device.

☒ Radiated Measurement Method:



Radiated Emission Test Set-Up Frequency 30 MHz ~ 1 GHz



Radiated Emission Test Set-Up Frequency Above 1 GHz

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Procedure

- 1) The emissions over the range 30 MHz to 1 000 MHz shall be identified.
- 2) Spectrum analyzer settings:
 - Resolution bandwidth: 100 kHz
 - Video bandwidth: 300 kHz
 - Detector mode: Peak
 - Sweep Points: ≥19 400
 - Trace Mode: Max Hold
 - Allow the trace to stabilize. Any emissions identified during the sweeps above and that fall within the 6 dB range below the applicable limit or above, shall be individually measured using RMS detector and compared to the limits.
- 3) The emissions over the range 1 GHz to 12,75 GHz shall be identified.
 - Resolution bandwidth: 1 MHz
 - Video bandwidth: 3 MHz
 - Detector mode: Peak
 - Trace Mode: Max Hold
 - Sweep Points: ≥23 500
 - Allow the trace to stabilize. Any emissions identified during the sweeps above and that fall within the 6 dB range below the applicable limit or above, shall be individually measured using RMS detector and compared to the limits.
- 4) For radiated method, the applicable measurement procedures as described in the EN 300 328 V2.2.2 annex C.2 and C.4 are used.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

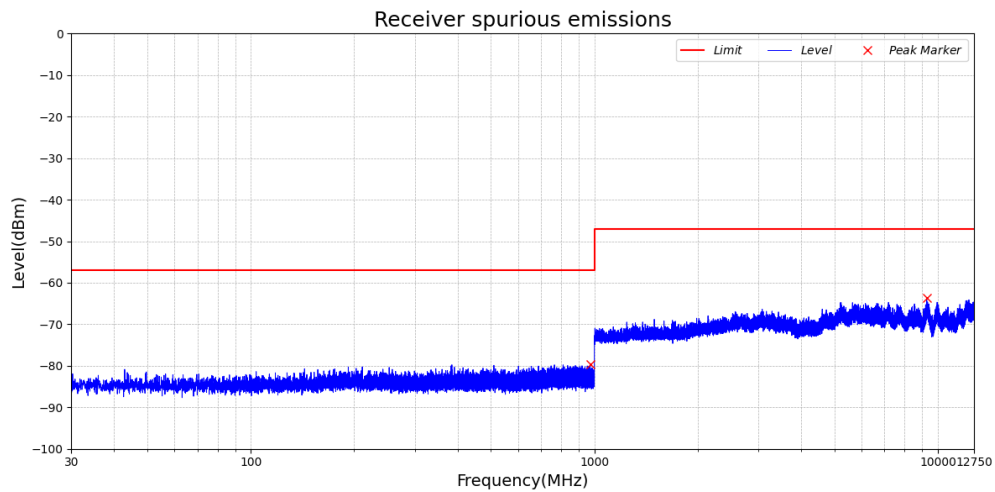
☒ Conducted Measurement Method:

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

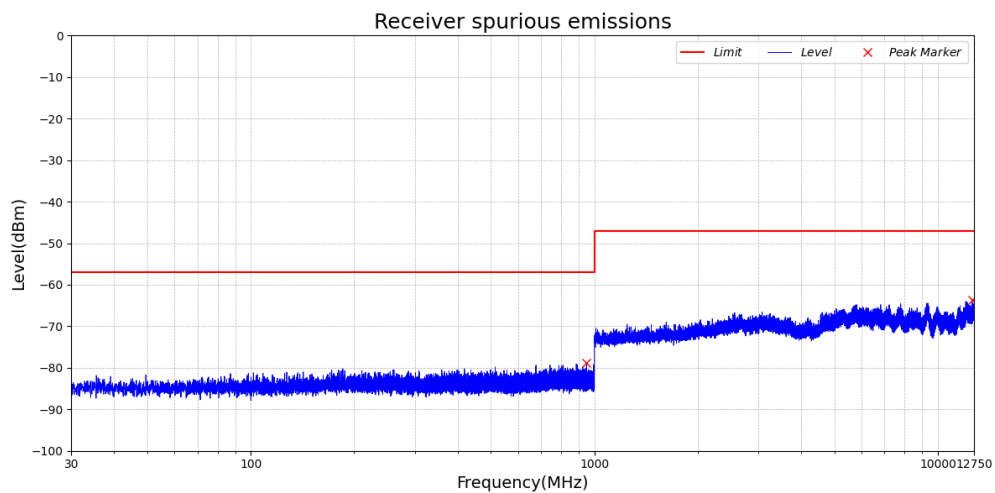
Test Data of Receiver Spurious Emissions				
Test Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Verdict
BR_2402_1Mbps	972.517	-79.70	-57.00	Pass
BR_2402_1Mbps	9285.708	-63.67	-47.00	Pass
BR_2480_1Mbps	949.592	-78.73	-57.00	Pass
BR_2480_1Mbps	12584.325	-63.72	-47.00	Pass

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Graphs of Receiver Spurious Emissions



Test_Graph_RX_ANT1_2402_1Mbps



Test_Graph_RX_ANT1_2480_1Mbps

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

☒ **Radiated Measurement Method:**

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15
Worst Mode	BR_RX_2402_1Mbps		
Verdict	Pass		

■ Receiver Spurious Emission below 1GHz (30MHz-1GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
115.09	30.99	-72.44	0.48	1.40	-71.52	-57.00	14.52
176.98	32.22	-73.58	0.51	2.88	-71.21	-57.00	14.21
229.88	30.09	-77.29	0.52	6.84	-70.97	-57.00	13.97
496.32	30.31	-77.58	0.56	7.04	-71.10	-57.00	14.10
665.01	30.60	-76.77	0.59	6.95	-70.41	-57.00	13.41
880.07	30.42	-76.00	0.69	5.90	-70.80	-57.00	13.80
Other (30-1000)	--	--	--	--	--	-57.00	--
Antenna Polarity: Horizontal							
84.26	31.53	-71.52	0.48	0.54	-71.46	-57.00	14.46
109.74	30.92	-71.96	0.48	1.28	-71.16	-57.00	14.16
218.68	31.23	-78.12	0.52	7.46	-71.18	-57.00	14.18
484.62	31.15	-77.11	0.56	6.98	-70.69	-57.00	13.69
554.73	31.15	-80.17	0.57	6.78	-73.96	-57.00	16.96
634.66	31.08	-78.60	0.58	7.22	-71.96	-57.00	14.96
Other (30-1000)	--	--	--	--	--	-57.00	--

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

■ Receiver Spurious Emission above 1GHz (1GHz-12.75GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
4947.70	29.20	-70.28	2.74	9.58	-63.44	-47.00	16.44
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-47.00	--
Antenna Polarity: Horizontal							
4952.45	29.71	-69.23	2.74	9.60	-62.37	-47.00	15.37
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-47.00	--

Note:

1. The margins of the other spectrum are not exceeding the minimum value of margin, and this part of the results without recording in the test report.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "--" remark, if no specific emission from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Emission Level=S.G.+ Ant.Gain- Cable Loss, Margin= Limit- Emission Level

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Temperature	24℃	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15
Worst Mode	BR_RX_2480_1Mbps		
Verdict	Pass		

■ Receiver Spurious Emission below 1GHz (30MHz-1GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
115.22	30.81	-72.21	0.48	1.40	-71.29	-57.00	14.29
176.69	32.18	-73.10	0.51	2.88	-70.73	-57.00	13.73
229.30	29.41	-77.12	0.52	6.84	-70.80	-57.00	13.80
495.87	30.92	-77.68	0.56	7.05	-71.19	-57.00	14.19
664.93	30.55	-77.36	0.59	6.98	-70.97	-57.00	13.97
879.95	30.59	-76.05	0.69	5.87	-70.87	-57.00	13.87
Other (30-1000)	--	--	--	--	--	-57.00	--
Antenna Polarity: Horizontal							
83.85	31.68	-70.93	0.48	0.38	-71.03	-57.00	14.03
110.25	30.58	-71.94	0.48	1.40	-71.02	-57.00	14.02
218.93	31.41	-78.10	0.52	7.46	-71.16	-57.00	14.16
485.40	30.35	-77.76	0.56	7.00	-71.32	-57.00	14.32
554.87	30.44	-79.85	0.57	6.78	-73.64	-57.00	16.64
635.61	31.24	-79.02	0.58	7.20	-72.40	-57.00	15.40
Other (30-1000)	--	--	--	--	--	-57.00	--

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

■ Receiver Spurious Emission above 1GHz (1GHz-12.75GHz)

Frequency (MHz)	Reading Level (dBμV/m)	S.G. (dBm)	Cable Loss (dB)	Ant.Gain (dBi)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
Antenna Polarity: Vertical							
4948.35	28.99	-67.09	2.74	9.58	-60.25	-47.00	13.25
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-47.00	--
Antenna Polarity: Horizontal							
4953.13	30.27	-67.89	2.74	9.60	-61.03	-47.00	14.03
--	--	--	--	--	--	--	--
Other (1000-12750)	--	--	--	--	--	-47.00	--

Note:

1. The margins of the other spectrum are not exceeding the minimum value of margin, and this part of the results without recording in the test report.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "--" remark, if no specific emission from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Emission Level=S.G.+ Ant.Gain- Cable Loss, Margin= Limit- Emission Level

6.2 Receiver Blocking

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.

Test Limit

☐ 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 dBm + 10 × log10(OCBW)) or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
(-139 dBm + 10 × log10(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 $P_{\text{min}} + 26 \text{ dB}$ where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.2.11.3 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 $P_{\text{min}} + 20 \text{ dB}$ where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.2.11.3 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.

☐ 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)	2 380 2 504 2 300 2 584	-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 $P_{\text{min}} + 26 \text{ dB}$ where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.2.11.3 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.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

☒ Receiver Blocking parameters for Receiver Category 3 equipment

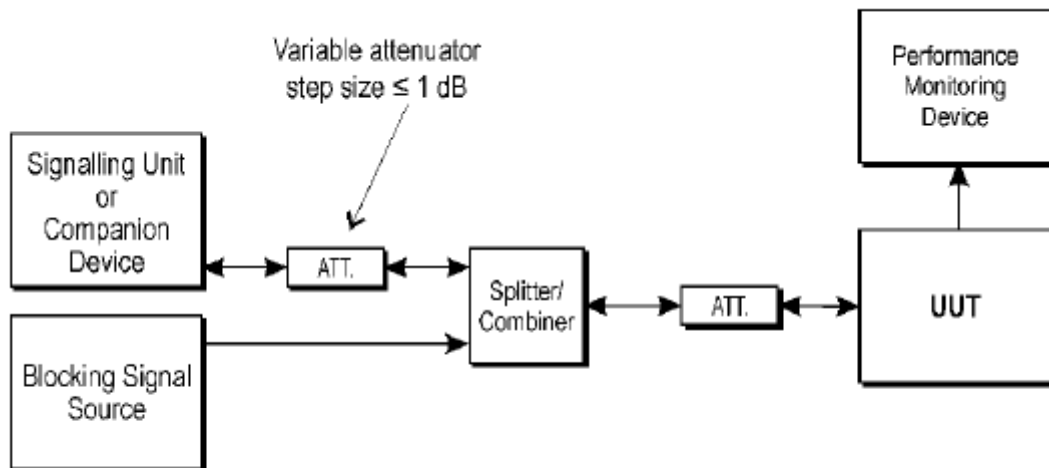
Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking signal
$(-139 \text{ dBm} + 10 \times \log_{10}(\text{OCBW}) + 20 \text{ dB})$ or $(-74 \text{ dBm} + 20 \text{ dB})$ whichever is less (see note 2)	2 380 2 504 2 300 2 584	-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 4.3.2.11.3 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.

Test Setup



Test Set-up for receiver blocking

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Procedure

- For non-FHSS equipment, having more than one operating channel, the operating channels on which the testing has to be performed shall be selected as follows:
 - For testing blocking frequencies less than 2 400 MHz, the equipment shall operate on the lowest operating channel.
 - For testing blocking frequencies greater than 2 500 MHz, the equipment shall operate on the highest operating channel.
- The simplified conducted measure procedures are as follows:
 - 1) For non-FHSS equipment, the UUT shall be set to the lowest operating channel on which the blocking test has to be performed.
 - 2) The blocking signal generator is set to the first frequency as defined in the appropriate table corresponding to the receiver category and type of equipment.
 - 3) With the blocking signal generator switched off, a communication link is established between the UUT and the associated companion device using the test setup. The level of the wanted signal shall be set to the value provided in the table corresponding to the receiver category and type of equipment. This level may be measured directly at the output of the companion device and a correction is made for the coupling loss into the UUT. The actual level for the wanted signal shall be recorded in the test report.
 - 4) The blocking signal at the UUT is set to the level provided in the table corresponding to the receiver category and type of equipment. It shall be verified and recorded in the test report that the performance criteria is met.
 - 5) Repeat step 4 for each remaining combination of frequency and level for the blocking signal as provided in the table corresponding to the receiver category and type of equipment.
 - 6) Repeat step 2 to step 5 with the UUT operating at the highest operating channel.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Test Result

Test Temperature	24°C	Relative Humidity	52.0%
Test Engineer	Vicky Huang	Testing Time	2026-07-15

Test Data of Receiver Blocking						
Test Condition	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
GFSK Hopping Mode	2 300	-34.00	-59.67	1.09%	10%	Pass
	2 380	-34.00	-59.67	0.79%	10%	Pass
	2 504	-34.00	-59.66	1.49%	10%	Pass
	2 584	-34.00	-59.66	0.56%	10%	Pass

Test Data of Receiver Blocking						
Test Condition	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
π /4-DQPSK Hopping Mode	2 300	-34.00	-58.23	1.17%	10%	Pass
	2 380	-34.00	-58.23	1.15%	10%	Pass
	2 504	-34.00	-58.23	1.69%	10%	Pass
	2 584	-34.00	-58.23	0.88%	10%	Pass

Test Data of Receiver Blocking						
Test Condition	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
8DPSK Hopping Mode	2 300	-34.00	-58.22	1.18%	10%	Pass
	2 380	-34.00	-58.22	0.79%	10%	Pass
	2 504	-34.00	-58.22	1.62%	10%	Pass
	2 584	-34.00	-58.22	0.93%	10%	Pass

Note: The levels of the blocking signal and wanted signal have to be corrected for the (in-band) antenna assembly gain.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

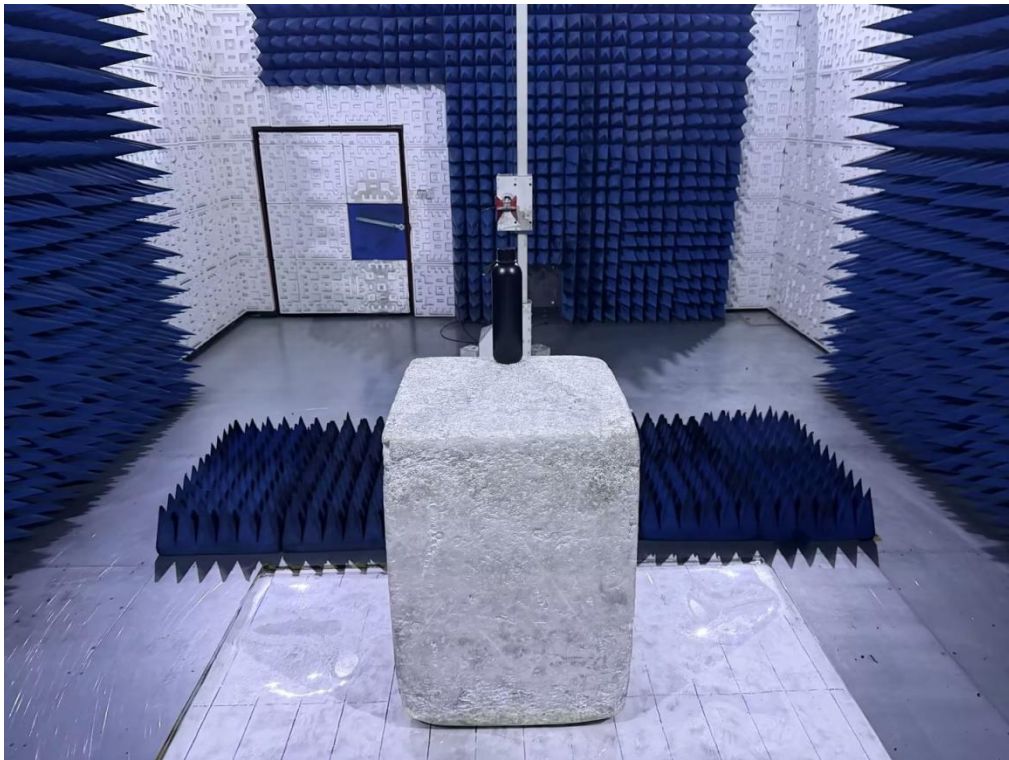
Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

Appendix I: Photographs of Test Setup

Radiated Spurious Emissions Below 1GHz Test Setup



Radiated Spurious Emissions Above 1GHz Test Setup



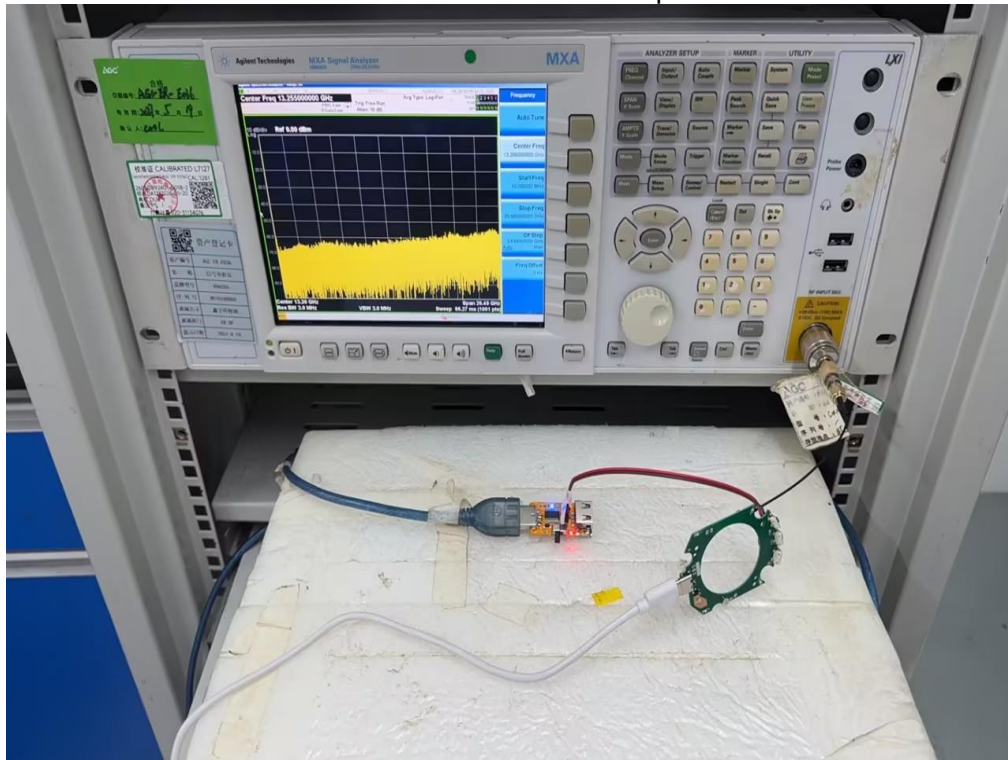
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

RF Conducted Test Setup



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC05443260712AP01

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

----End of Report----

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Health Test Report

Report No.: AGC05443260712EH01

PRODUCT DESIGNATION : Double wall bottle speaker

BRAND NAME : N/A

MODEL NAME : M02312

APPLICANT : MID OCEAN BRANDS B.V.

DATE OF ISSUE : Jul. 24, 2026

STANDARD(S) : EN 62479:2010
EN 50663:2017

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>



Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 24, 2026	Valid	Initial Release

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Table of Contents

1. General Information	4
2. Product Information.....	5
2.1 Product Technical Description	5
3. Test Environment	6
3.1 Address of The Test Laboratory	6
3.2 Test Facility	6
4. EN 62479 Requirements for Exemption Assessment	7
4.1 Evaluation Methodology	7
4.2 Evaluation Conclusion.....	7

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

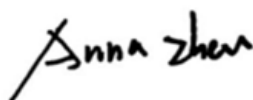
Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

1. General Information

Applicant	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Factory	MID OCEAN BRANDS B.V.
Address	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Product Designation	Double wall bottle speaker
Brand Name	N/A
Test Model	MO2312
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Jul. 09, 2026
Date of Test	Jul. 09, 2026 to Jul. 24, 2026
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-EU-Health/1-V1

Note: The test results of this report relate only to the tested sample identified in this report.

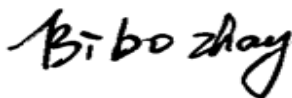
Prepared By



Anna Zhou
(Project Engineer)

Jul. 24, 2026

Reviewed By



Bibo Zhang
(Reviewer)

Jul. 24, 2026

Approved By



Angela Li
(Authorized Officer)

Jul. 24, 2026

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

2. Product Information

2.1 Product Technical Description

Product Designation	Double wall bottle speaker
Test Model	MO2312
Hardware Version	Y03-V1.2
Software Version	V12
Power Supply	DC 3.7V by battery or DC 5V 0.35A by adapter
Classic Bluetooth Technical Parameters	
Operating Frequency	2402MHz-2480MHz
Bluetooth Version	V5.3
Modulation Type	☒ BR: GFSK ☒ EDR: π /4-DQPSK ☒ EDR: 8DPSK
Number of channels	79 channels
Antenna Designation	PCB Antenna
Antenna Gain	0dBi

Note:

1. The above information was declared by the manufacturer.
2. The equipment submitted are representative production models.
3. For more details, please refer to the User's manual of the EUT.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

3. Test Environment

3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

4. EN 62479 Requirements for Exemption Assessment

4.1 Evaluation Methodology

Test Mode	Maximum Output Power (dBm)	Maximum Output Power (mW)	Limit (mW)	Verdict
BT_BR	-1.48	-1.48	≤20	Pass

Note: The above maximum output power comes from the test report (Report No.: AGC05443260712ER02)

4.2 Evaluation Conclusion

Remark: EUT meets the basic requirements in the standard.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

-----End of Report-----

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15 days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: <http://www.agccert.com/>