

TEST REPORT

Applicant: Innovative Eyewear Inc.
Address: 11900 Biscayne Blvd Suite 630 North Miami, Florida 33181
Equipment Type: Reebok Nautica Eddie Bauer Lucyd Smart Eyewear
Model Name: LCD011 (refer to section 2.3)
Brand Name: Lucyd
Test Standard: ETSI EN 300 328 V2.2.2 (2019-07)
Sample Arrival Date: Dec. 08, 2025
Test Date: Dec. 14, 2025 - Dec. 23, 2025
Date of Issue: Apr. 09, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

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Checked by: Ye Hongji

Approved by: Tolan Tu
(Testing Director)



Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Apr. 09, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☒ Building 2, Intelligent Connected Vehicle Industrial Park, No. 55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong Province, China

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Innovative Eyewear Inc.
Address	11900 Biscayne Blvd Suite 630North Miami, Florida 33181

2.2 Manufacturer Information

Manufacturer	Innovative Eyewear Inc.
Address	11900 Biscayne Blvd Suite 630North Miami, Florida 33181

2.3 General Description for Equipment under Test (EUT)

EUT Name	Reebok Nautica Eddie Bauer Lucyd Smart Eyewear
Model Name Under Test	LCD011
Series Model Name	LCD011-10, LCD011-11, LCD011-20, LCD011-21, LCD011-30, LCD011-40, LCD011-XX
Description of Model name differentiation	All models are same with electrical parameters and internal circuit structure, but only differ in color and size of frame. (this information provided by the applicant)
Hardware Version	v3.0
Software Version	v2.2
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

EUT Type	Stand-alone equipment
Network and Wireless connectivity	Bluetooth (BR+EDR+BLE)

The requirement for the following technical information of the EUT was tested in this report:

Modulation Technology		Bluetooth(For Classic): FHSS Bluetooth Low Energy: Wide band modulations other than FHSS
Modulation Type		Bluetooth(For Classic): GFSK, $\pi/4$ -DQPSK, 8-DPSK Bluetooth Low Energy: GFSK
Transfer Rate		DH5: 1 Mbps 2DH5: 2 Mbps 3DH5: 3 Mbps BLE: 1 Mbps BLE: 2 Mbps
Frequency Range		The frequency range used is 2402 MHz – 2480 MHz; The frequency block is 2400 MHz to 2483.5 MHz.
Number of Channel		Bluetooth(For Classic): 79 (at intervals of 1 MHz) Bluetooth Low Energy: 40 (at intervals of 2 MHz) ^{Note 1}
Tested Channel		Bluetooth(For Classic): 0 (2402 MHz), 39 (2441 MHz), 78 (2480 MHz) Bluetooth Low Energy: 1 Mbps: 0 (2402 MHz), 19 (2440 MHz), 39 (2480 MHz) 2 Mbps: 1 (2404 MHz), 19 (2440 MHz), 38 (2478 MHz)
Nominal Channel Bandwidth		1 MHz, 2 MHz
Antenna Type	Left Ear	Ceramic Antenna
	Right Ear	
Antenna Gain	Left Ear	2.7 dBi (In test items related to antenna gain, the final results reflect this figure. This value is provided by the applicant.)
	Right Ear	
Beamforming Gain		N/A
Adaptive or Non-Adaptive		Adaptive
LBT Based		Non-LBT
The Max RF Output power	Left Ear	Bluetooth (For Classic): 7.9 dBm Bluetooth Low Energy: 8.4 dBm
	Right Ear	Bluetooth (For Classic): 8.6 dBm Bluetooth Low Energy: 8.9 dBm
Receiver Category	Left Ear	Bluetooth (For Classic): 2 Bluetooth Low Energy: 2
	Right Ear	Bluetooth (For Classic): 2 Bluetooth Low Energy: 2
Note 1: 2 Mbps does not support Channel 0, Channel 12, and Channel 39.		

Description	Modulation Type (BT for Classic)	Modulation Type (BLE)	Transfer Rate (BT for Classic)	Transfer Rate (BLE)
Transmitter Parameters				
RF output power	GFSK, $\pi/4$ -DQPSK, 8-DPSK	GFSK	DH5: 1 Mbps 2DH5: 2 Mbps 3DH5: 3 Mbps	1 Mbps, 2 Mbps
Power Spectral Density	N/A	GFSK	N/A	1 Mbps, 2 Mbps
Duty Cycle, Tx-sequence, Tx-gap	N/A	N/A	N/A	N/A
Accumulated Transmit Time, Frequency Occupation and Hopping Sequence	GFSK, 8-DPSK	N/A	DH5: 1 Mbps 3DH5: 3 Mbps	N/A
Hopping Frequency Separation	GFSK, 8-DPSK	N/A	DH5: 1 Mbps 3DH5: 3 Mbps	N/A
Medium Utilization (MU) factor	N/A	N/A	N/A	N/A
Adaptivity	GFSK N/A	--	DH5: 1 Mbps N/A	N/A
Occupied Channel Bandwidth	GFSK, 8-DPSK	GFSK	DH5: 1 Mbps 3DH5: 3 Mbps	1 Mbps, 2 Mbps
Transmitter unwanted emissions in the out-of-band domain	GFSK, 8-DPSK	GFSK	DH5: 1 Mbps 3DH5: 3 Mbps	1 Mbps, 2 Mbps
Transmitter unwanted emissions in the spurious domain	GFSK, 8-DPSK	GFSK	DH5: 1 Mbps 3DH5: 3 Mbps	1 Mbps, 2 Mbps
Receiver Parameters				
Receiver Spurious Emissions	GFSK, 8-DPSK	GFSK	DH5: 1 Mbps 3DH5: 3 Mbps	1 Mbps, 2 Mbps
Receiver Blocking	GFSK	GFSK	DH1: 1 Mbps	1 Mbps
Other Parameters				
Geo-location capability	N/A	N/A	N/A	N/A
Note: $\pi/4$ -DQPSK is the EDR 2M rate mode, 8-DPSK is the EDR 3M rate mode. The consistency of test results in $\pi/4$ -DQPSK and 8-DPSK is very high. So that 8-DPSK is chosen as a typical representative to appear on the report. Another all the modes on the RF output power test item will be shown.				

3 SUMMARY OF TEST RESULTS

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

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

Test items and the results are as follows:

Report Section	Standard Rule	Description	Channel (BT for Classic)	Channel (BLE)	Test Result	Verdict	Remark
Transmitter Parameters							
5.1.1	4.3.1.2 4.3.2.2	RF output power	Hopping Mode	Low/Middle/High	ANNEX A.1	Pass	--
5.1.2	4.3.2.3	Power Spectral Density	N/A	Low/Middle/High	ANNEX A.2	Pass	Note ⁴
5.1.3	4.3.1.3 4.3.2.4	Duty Cycle, Tx-sequence, Tx-gap	N/A	N/A	ANNEX A.3	N/A	Note ² , Note ⁷
5.1.4	4.3.1.4	Accumulated Transmit Time, Frequency Occupation and Hopping Sequence	Hopping Mode	N/A	ANNEX A.4	Pass	Note ⁵
5.1.5	4.3.1.5	Hopping Frequency Separation	Hopping Mode	N/A	ANNEX A.5	Pass	Note ⁵
5.1.6	4.3.1.6 4.3.2.5	Medium Utilization (MU) factor	N/A	N/A	ANNEX A.6	N/A	Note ² , Note ⁷
5.1.7	4.3.1.7 4.3.2.6	Adaptivity	N/A	N/A	ANNEX A.7	N/A	Note ² , Note ³
5.1.8	4.3.1.8 4.3.2.7	Occupied Channel Bandwidth	Low/High	Low/High	ANNEX A.8	Pass	--
5.1.9	4.3.1.9 4.3.2.8	Transmitter unwanted emissions in the out-of-band domain	Low/High	Low/High	ANNEX A.9	Pass	--
5.1.10	4.3.1.10 4.3.2.9	Transmitter unwanted emissions in the spurious domain	Low/High	Low/High	ANNEX A.10	Pass	--
Receiver Parameters							
5.2.1	4.2.3.2	Receiver categories	--	--	--	--	--
5.2.2	4.3.1.11 4.3.2.10	Receiver Spurious Emissions	Low/High	Low/High	ANNEX A.11	Pass	--
5.2.3	4.3.1.12 4.3.2.11	Receiver Blocking	Hopping Mode	Low/High	ANNEX A.12	Pass	--
Other Parameters							
5.3.1	4.3.1.13 4.3.2.12	Geo-location capability	N/A	N/A	N/A	N/A	Note ⁶

Note ¹: This requirement does not apply to adaptive equipment unless operating in a non-adaptive mode.

Note ²: This test doesn't apply for the EUT which has the RF Output power is less than 10 dBm e.i.r.p.

Note ³: This requirement does not apply to non-adaptive equipment or adaptive equipment operating in a non-adaptive mode.

Note ⁴: This requirement apply to the equipment is using wide band modulations other than FHSS.

Note ⁵: This requirement apply to the equipment is using FHSS.

Note ⁶: This requirement does not apply to devices that do not support Geo-location capability.

Note ⁷: These requirements apply to non-adaptive frequency hopping equipment or to adaptive frequency hopping equipment operating in a non-adaptive mode.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	42% to 68%	
Atmospheric Pressure	98 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+20.6°C to +25.4°C
	LT (Low Temperature)	0.0°C
	HT (High Temperature)	+45.0°C
Working Voltage of the EUT	NV (Normal Voltage)	3.8 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2025.06.16	2026.06.15
Vector Signal Generator	ROHDE&SCHWARZ	SMBV100A	260592	2025.10.30	2026.10.29
Signal Generator	ROHDE&SCHWARZ	SMB100A	182396	2025.06.16	2026.06.15
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2025.04.28	2026.04.27
Signaling Unit	ROHDE&SCHWARZ	CMW500	171150	2025.04.28	2026.04.27
Temperature Chamber	AHK	NTH64-40A	1310	2024.11.28	2025.11.27
Spectrum Analyzer	KEYSIGHT	N9020A	MY46471071	2025.06.16	2026.06.15
Spectrum Analyzer	KEYSIGHT	N9020A	MY52510065	2025.06.16	2026.06.15
Signaling Unit	ROHDE&SCHWARZ	CMW500	171150	2025.04.28	2026.04.27
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	00884	2025.03.01	2028.02.29
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	01631	2025.02.22	2028.02.21
Anechoic Chamber	RAINFORD	9m*6m*6m	144	2025.01.04	2028.01.03
Amplifier	COM-MV	ZT30-1000M	18110850	2025.06.17	2026.06.16
Amplifier	COM-MV	LSCX_LNA1 -12G-01	180602	2025.06.17	2026.06.16
Amplifier	COM-MV	XKu_LNA7-18G-01	180601	2025.06.17	2026.06.16

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.
TS8997 EMC32	ROHDE&SCHWARZ	V10.01.00	N/A
BL410R	BALUN	V3.0.1.528	N/A
BL410E	BALUN	V22.930	N/A

4.4 Measurement Uncertainty

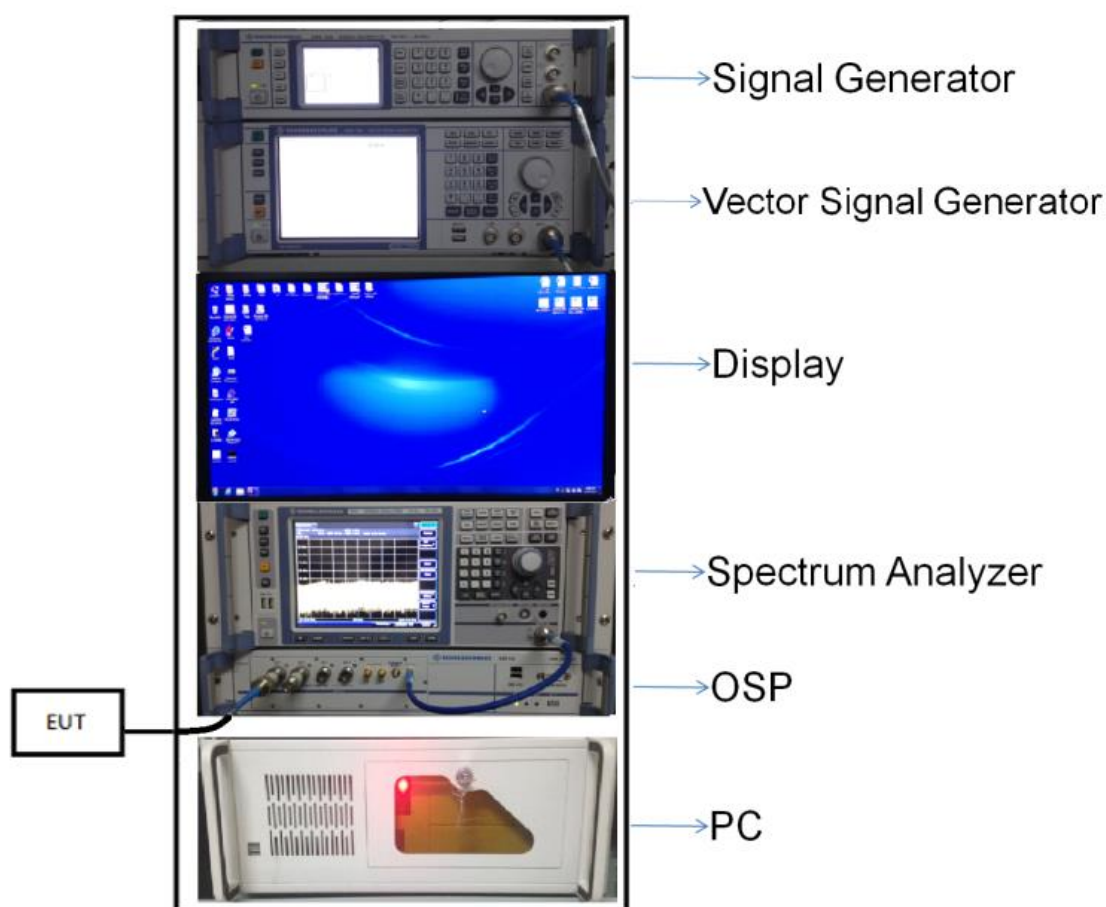
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Parameters	Uncertainty
Occupied Channel Bandwidth	3.6 %
RF output power, conducted	0.66 dB
Power Spectral Density, conducted	0.90 dB
Unwanted Emissions, conducted	1.78 dB
All emissions, radiated	5.36 dB
Temperature	0.8 °C
Humidity	4 %

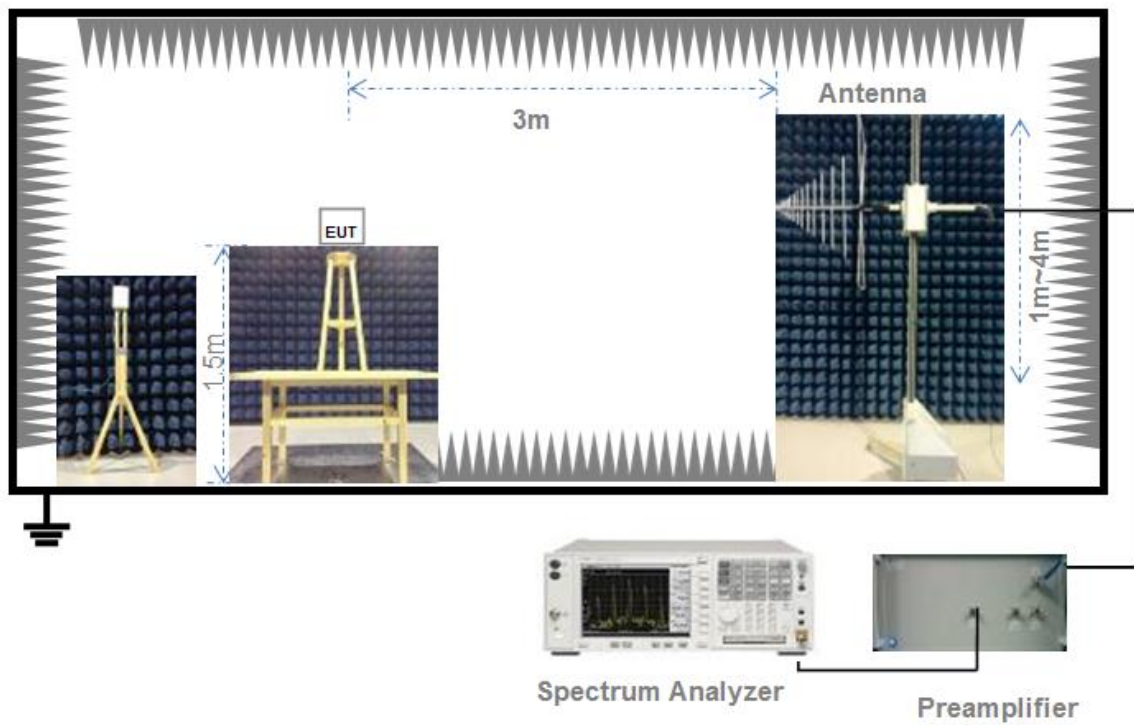
4.5 Description of Test Setup

4.5.1 For Conducted Test

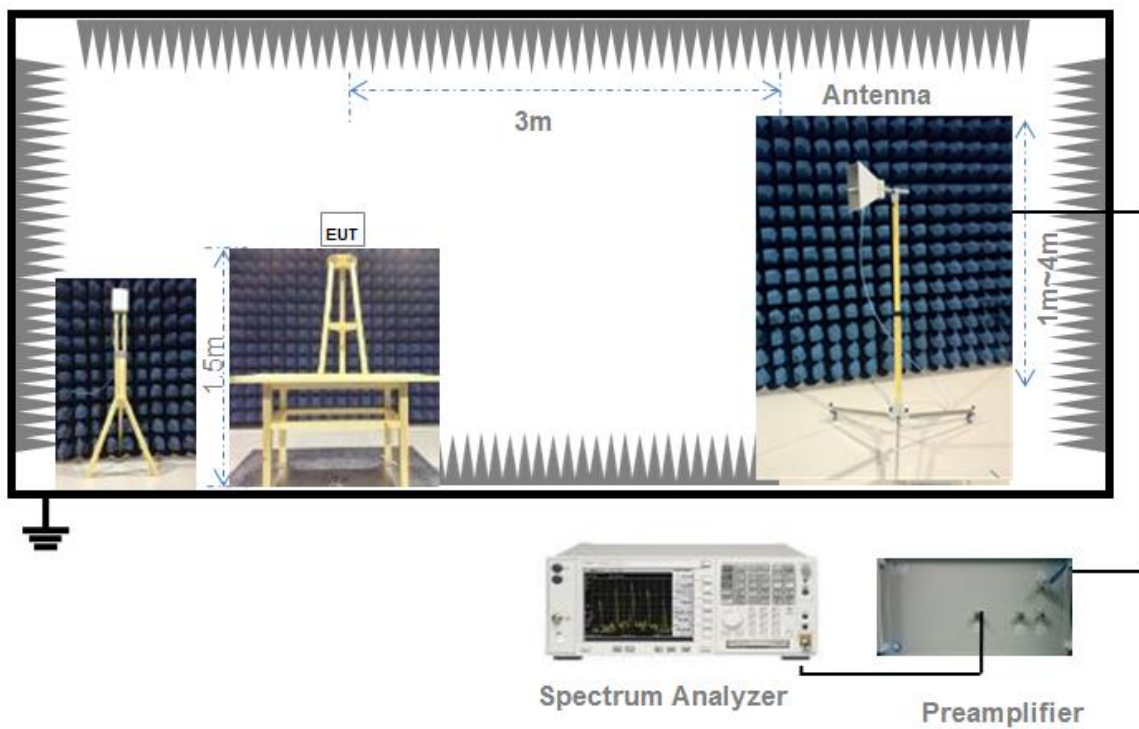


(Diagram 1)

4.5.2 For Radiated Test

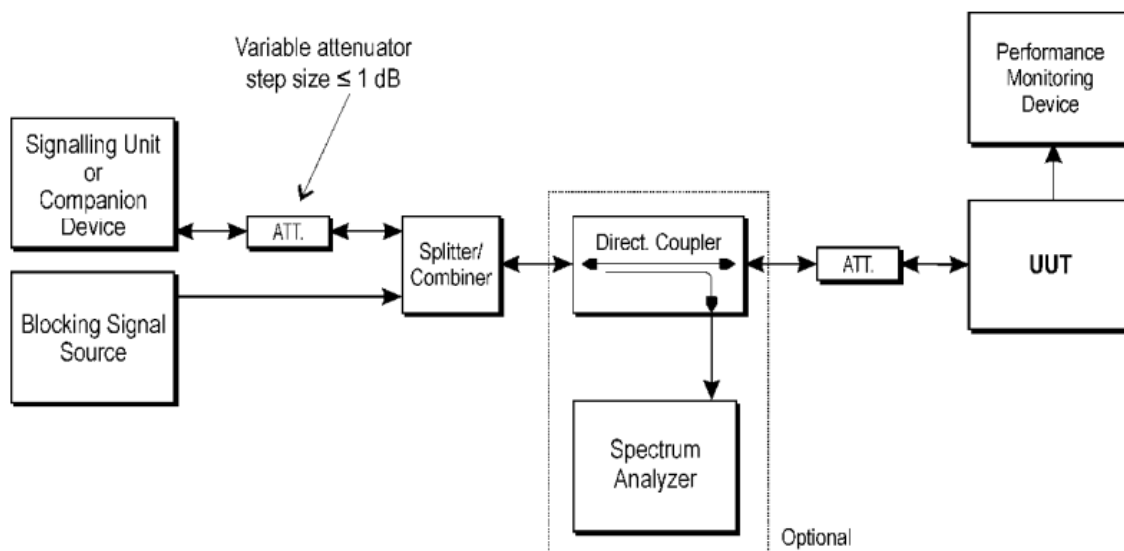


(Diagram 2)



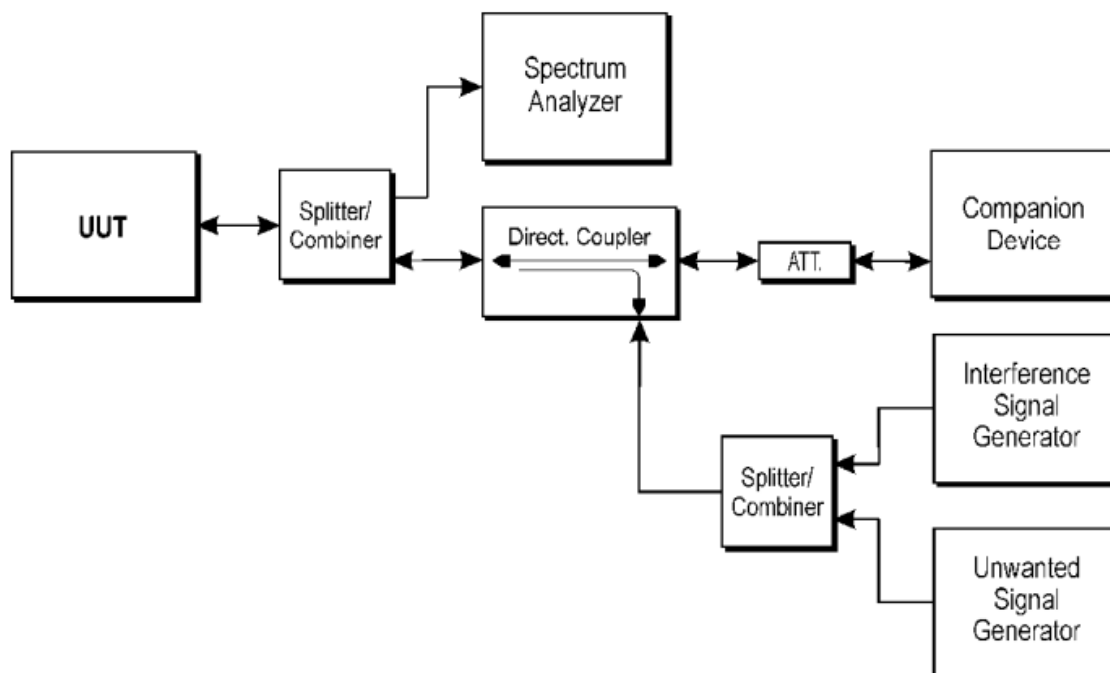
(Diagram 3)

4.5.3 For Receiver Blocking Test



(Diagram 4)

4.5.4 For Adaptivity Test



(Diagram 5)

5 Test Type and Test Results

5.1 Transmitter Parameters

5.1.1 RF output power

5.1.1.1 Limit

The maximum RF output power shall be equal to or less than 20 dBm.

5.1.1.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.1.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.2.2.

5.1.1.4 Test Result

Please refer to ANNEX A.1.

5.1.2 Power Spectral Density

5.1.2.1 Limit

The maximum Power Spectral Density for non-FHSS equipment is 10 dBm per MHz.

5.1.2.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.2.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.3.2.

5.1.2.4 Test Result

Please refer to ANNEX A.2.

5.1.3 Duty Cycle, Tx-sequence, Tx-gap

5.1.3.1 Limit

The Duty Cycle shall be equal to or less than the maximum value declared by the manufacturer.

The Tx-sequence time shall be equal to or less than 10 ms.

The minimum Tx-gap time following a Tx-sequence shall be equal to the duration of that proceeding Tx-sequence with a minimum of 3,5 ms.

5.1.3.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.3.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.2.2.

5.1.3.4 Test Result

Please refer to ANNEX A.3.

5.1.4 Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

5.1.4.1 Limit

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

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

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

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

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

5.1.4.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.4.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.4.2.

5.1.4.4 Test Result

Please refer to ANNEX A.4.

5.1.5 Hopping Frequency Separation

5.1.5.1 Limit

For adaptive frequency hopping systems, the minimum Hopping Frequency Separation shall be 100 kHz.

5.1.5.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.5.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.5.2.

5.1.5.4 Test Result

Please refer to ANNEX A.5.

5.1.6 Medium Utilization (MU) factor

5.1.6.1 Limit

The maximum Medium Utilization factor for non-adaptive equipment shall be 10 %.

5.1.6.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.6.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.2.2.

5.1.6.4 Test Result

Please refer to ANNEX A.6.

5.1.7 Adaptivity

5.1.7.1 Limit

Adaptive Frequency Hopping

Requirement	Operational Mode	
	Non-LBT based Detect and Avoid	LBT based Detect and Avoid
Minimum Clear Channel Assessment (CCA) Time	NA	18 us (see note 1)
Maximum Channel Occupancy (COT) Time	40 ms	60 ms
Minimum Idle Period	5% of COT	5% of COT
Extended CCA check	NA	NA
Short Control Signalling Transmissions	Maximum duty cycle of 10 % within an observation period of 50 ms (see note 2)	
NOTE 1: The CCA time used by the equipment shall be declared by the supplier.		
NOTE 2: Adaptive equipment may or may not have Short Control Signalling Transmissions.		
NOTE 3: The Idle Period is considered to be equal to the CCA or Extended CCA time defined in clause 4.3.2.6.3.2.3, step 1 and step 2.		
NOTE 4: The Idle Period in between transmissions is considered to be the CCA or the Extended CCA check as there are no transmissions during this period.		

Interference threshold level:

Maximum transmit power (P_H) EIRP dBm	Threshold level (TL) (see notes 1 and 2)
20	-70 dBm / MHz
NOTE 1: $TL = -70 \text{ dBm/MHz} + 10 \times \log_{10} (100 \text{ mW} / P_{out})$ (P_{out} in mW e.i.r.p.).	
NOTE 2: Transmitter the CCA threshold level (TL) shall be equal or lower than -70 dBm/MHz at the input to the receiver (assuming a 0 dBi receive antenna).	

Unwanted Signal parameters

Wanted signal mean power from companion device	Unwanted signal frequency (MHz)	Unwanted CW signal power (dBm)
sufficient to maintain the link (see note 2)	2 395 or 2 488,5 (see note 1)	-35 (see note 3)
NOTE 1: The highest frequency shall be used for testing operating channels within the range 2400 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: A typical value which can be used in most cases is -50 dBm/MHz.		
NOTE 3: The level specified is the level in front of the UUT antenna. In case of conducted measurements, this level has to be corrected by the actual antenna assembly gain.		

Adaptive equipment using modulations other than FHSS

Requirement	Operational Mode			
	Non-LBT based Detect and Avoid	LBT based Detect and Avoid		
		Frame Based Equipment	Load Based Equipment (CCA using 'energy detect')	Load Based Equipment (CCA not using any of the mechanisms referenced as note 2)
Minimum Clear Channel Assessment (CCA) Time	NA	18 us (see note 1)	(see note 2)	18 us (see note 1)
Maximum Channel Occupancy (COT) Time	40 ms	1 ms to 10 ms	(see note 2)	13 ms
Minimum Idle Period	5% of COT	5% of COT	(see note 2)	NA
Extended CCA check	NA	NA	(see note 2)	a random duration in the range between 18 μs and at least 160 μs
Short Control Signalling Transmissions	Maximum duty cycle of 10 % within an observation period of 50 ms (see note 3)			
NOTE 1: The CCA time used by the equipment shall be declared by the supplier.				
NOTE 2: Load Based Equipment may implement an LBT based spectrum sharing mechanism based on the Clear Channel Assessment (CCA) mode using energy detect, as described in IEEE 802.11™-2012 [i.3] clause 9, clause 10, clause 16, clause 17, clause 19 and clause 20, or in IEEE 802.15.4™-2011 [i.4], clause 4, clause 5 and clause 8.				
NOTE 3: Adaptive equipment may or may not have Short Control Signalling Transmissions.				
NOTE 4: The Idle Period is considered to be equal to the CCA or Extended CCA time defined in clause 4.3.2.6.3.2.3, step 1 and step 2.				
NOTE 5: The Idle Period in between transmissions is considered to be the CCA or the Extended CCA check as there are no transmissions during this period.				

Interference threshold level:

Maximum transmit power (P_H) EIRP dBm	Threshold level (TL) (see notes 1 and 2)
20	-70 dBm / MHz
NOTE 1: $TL = -70 \text{ dBm/MHz} + 10 \times \log_{10} (100 \text{ mW} / P_{out})$ (P_{out} in mW e.i.r.p.).	
NOTE 2: transmitter the CCA threshold level (TL) shall be equal or lower than -70 dBm/MHz at the input to the receiver (assuming a 0 dBi receive antenna).	

Unwanted Signal parameters

Wanted signal mean power from companion device	Unwanted signal frequency (MHz)	Unwanted CW signal power (dBm)
sufficient to maintain the link (see note 2)	2 395 or 2 488,5 (see note 1)	-35 (see note 3)
NOTE 1: The highest frequency shall be used for testing operating channels within the range 2400 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: A typical value which can be used in most cases is -50 dBm/MHz. NOTE 3: The level specified is the level in front of the UUT antenna. In case of conducted measurements, this level has to be corrected by the actual antenna assembly gain.		

5.1.7.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.7.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.6.2.

5.1.7.4 Test Result

Please refer to ANNEX A.7.

5.1.8 Occupied Channel Bandwidth

5.1.8.1 Limit

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

In addition, for non-adaptive FHSS equipment with e.i.r.p. greater than 10 dBm, the Occupied Channel Bandwidth for every occupied hopping frequency shall be equal to or less than 5 MHz.

In addition, for non-adaptive non-FHSS equipment with e.i.r.p. greater than 10 dBm, the Occupied Channel Bandwidth shall be equal to or less than 20 MHz.

5.1.8.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.8.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.7.2.

5.1.8.4 Test Result

Please refer to ANNEX A.8.

5.1.9 Transmitter unwanted emissions in the out-of-band domain

5.1.9.1 Limit

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

Note: Within the 2400 MHz to 2483,5 MHz band, the Out-of-band emissions are fulfilled by compliance with the Occupied Channel Bandwidth requirement in §2.4 in this report.

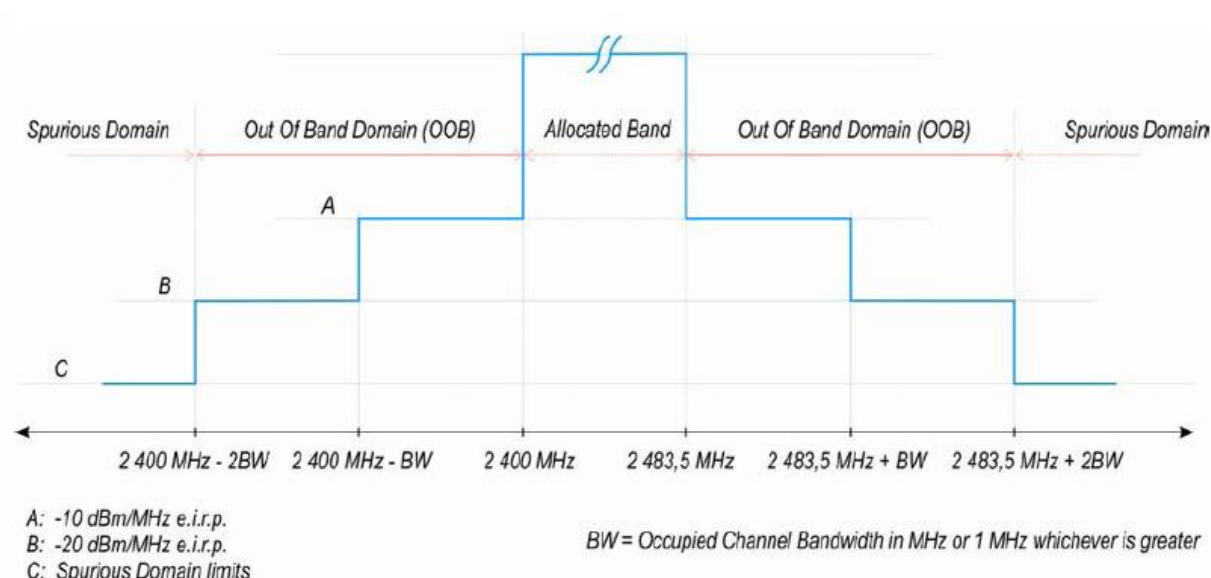


Figure 1: Transmit mask

5.1.9.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.9.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.8.2.

5.1.9.4 Test Result

Please refer to ANNEX A.9.

5.1.10 Transmitter unwanted emissions in the spurious domain

5.1.10.1 Limit

The transmitter unwanted emissions in the spurious domain shall not exceed the values in following tables:

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

5.1.10.2 Test Setup

The section 4.5.1 and 4.5.2 (Diagram 1, 2, 3) for test setup description. The photo of test setup please refer to ANNEX B.

5.1.10.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.9.2.

5.1.10.4 Test Result

Please refer to ANNEX A.10.

5.2 Receiver Parameters

5.2.1 Receiver categories

There have three different receiver categories for which different receiver requirements and/or corresponding limits apply.

Receiver Category

Receiver Category	Definition
Category 1	Adaptive equipment with a maximum RF output power greater than 10 dBm e.i.r.p.
Category 2	Non-adaptive equipment with a Medium Utilization (MU) factor greater than 1 % and less than or equal to 10 % or adaptive equipment and non-adaptive with a maximum RF output power of 10 dBm e.i.r.p.
Category 3	Non-adaptive equipment with a maximum Medium Utilization (MU) factor of 1 % or adaptive equipment and non-adaptive with a maximum RF output power of 0 dBm e.i.r.p.

5.2.2 Receiver Spurious Emissions

5.2.2.1 Limit

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

The spurious emissions of the transmitter shall not exceed the values in following tables for the EUT in this report.

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

5.2.2.2 Test Setup

The section 4.5.1 (Diagram 1) for test setup description. The photo of test setup please refer to ANNEX B.

5.2.2.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.10.2.

5.2.2.4 Test Result

Please refer to ANNEX A.11.

5.2.3 Receiver Blocking

5.2.3.1 Limit

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

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 × log ₁₀ (OCBW)) or -68 dBm whichever is less (see note 2)	2 380	-34	CW
	2 504	-34	CW
(-139 dBm + 10 × log ₁₀ (OCBW)) or -74 dBm whichever is less (see note 3)	2 300	-34	CW
	2 330	-34	CW
	2 360	-34	CW
	2 524	-34	CW
	2 584	-34	CW
	2 674	-34	CW

NOTE 1: OCBW is in Hz.

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

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

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

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 dBm + $10 \times \log_{10}(\text{OCBW})$ + 10 dB) or (-74 dBm + 10 dB) whichever is less (see note 2)	2 380	-34	CW
	2 504	-34	CW
	2 300	-34	CW
	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 $P_{\min} + 26$ dB where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

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

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 dBm + $10 \times \log_{10}(\text{OCBW})$ + 20 dB) or (-74 dBm + 20 dB) whichever is less (see note 2)	2 380	-34	CW
	2 504	-34	CW
	2 300	-34	CW
	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 $P_{\min} + 30$ dB where $P_{\min}$ is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

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

Categorization

Receiver category	Definition
1	Adaptive equipment with a maximum RF output power greater than 10 dBm e.i.r.p. shall be considered as receiver category 1 equipment.
2	Non-adaptive equipment with a Medium Utilization (MU) factor greater than 1 % and less than or equal to 10 % or adaptive equipment with a maximum RF output power of 10 dBm e.i.r.p. shall be considered as receiver category 2 equipment.
3	Non-adaptive equipment with a maximum Medium Utilization (MU) factor of 1 % or adaptive equipment with a maximum RF output power of 0 dBm e.i.r.p. shall be considered as receiver category 3 equipment.

5.2.3.2 Test Setup

See the section 4.5.3 (Diagram 4) for test setup description. The photo of test setup please refer to ANNEX B.

5.2.3.3 Test Procedure

Reference to ETSI EN 300 328 V2.2.2 clause 5.4.11.2.

5.2.3.4 Test Result

Please refer to ANNEX A.12.

5.3 Other Parameters

5.3.1 Geo-location capability

5.3.1.1 Requirements

The geographical location determined by the equipment as defined in following section (5.3.1.2) shall not be accessible to the user.

5.3.1.2 Definition

Geo-location capability is a feature of the equipment to determine its geographical location with the purpose to configure itself according to the regulatory requirements applicable at the geographical location where it operates.

The geo-location capability may be present in the equipment or in an external device (temporary) associated with the equipment operating at the same geographical location during the initial power up of the equipment. The geographical location may also be available in equipment already installed and operating at the same geographical location.

5.3.1.3 Test Result

Note: Not applicable.

ANNEX A TEST RESULT

A.1 RF output power

Test Data

Left Ear

Modulation Mode			GFSK	$\pi/4$ -DQPSK	8-DPSK
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	7.8	7.8	7.8
		LT	7.7	7.9	7.7
		HT	7.4	7.5	7.6
Test Verdict			Pass		

Modulation Mode			GFSK (BLE 1Mbps)		
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	8.2	8.0	8.0
		LT	8.1	8.1	7.8
		HT	8.4	7.6	8.2
Test Verdict			Pass		

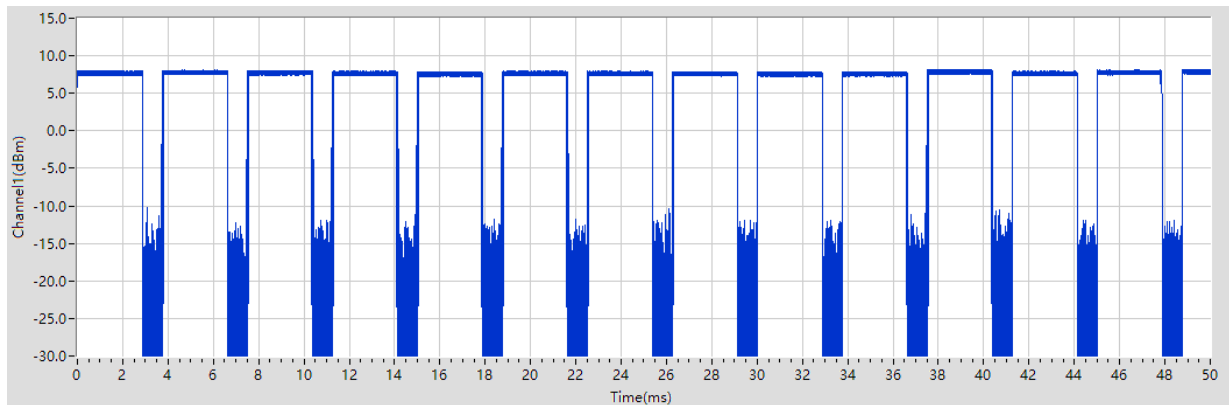
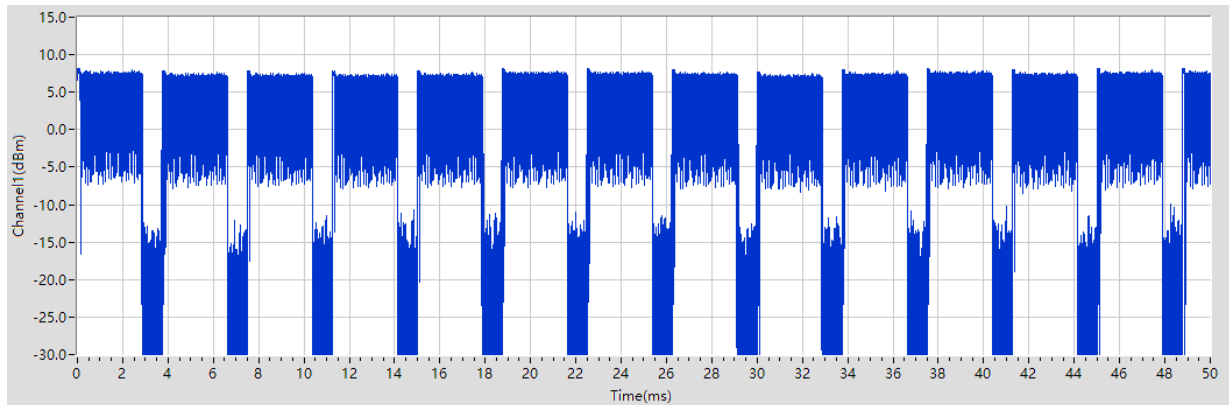
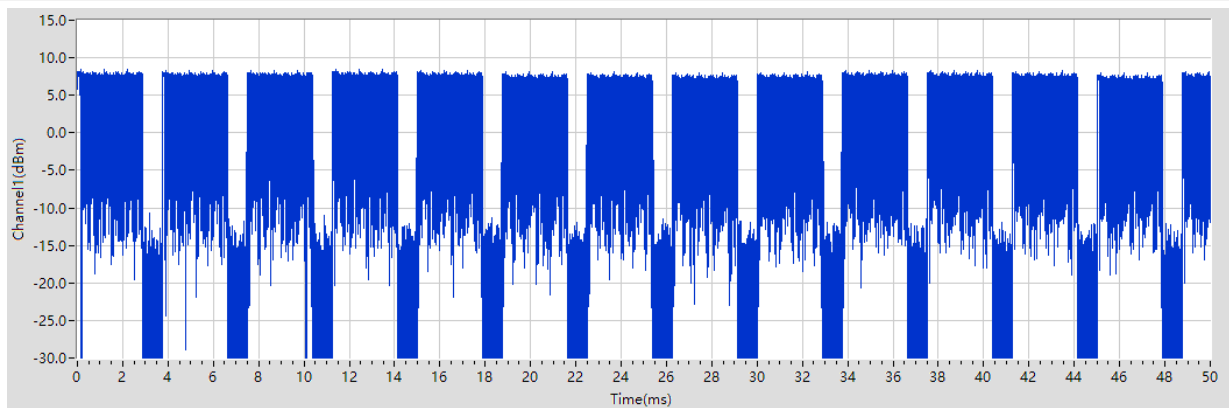
Modulation Mode			GFSK (BLE 2Mbps)		
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	8.0	7.8	7.8
		LT	8.0	7.6	7.4
		HT	8.1	7.9	7.7
Test Verdict			Pass		

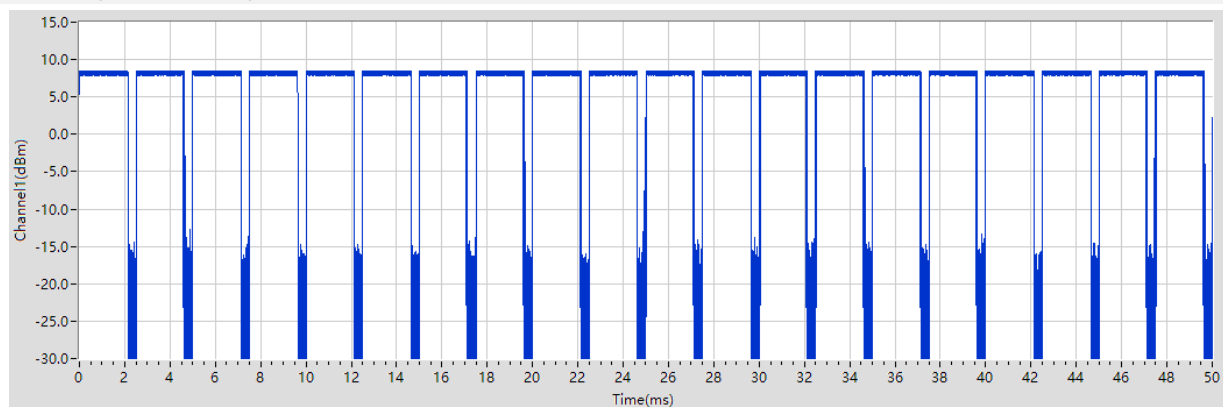
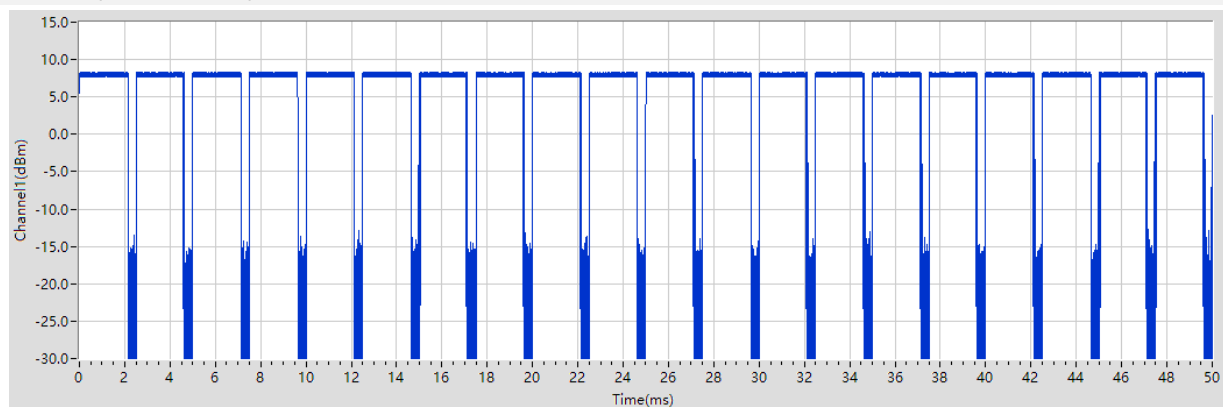
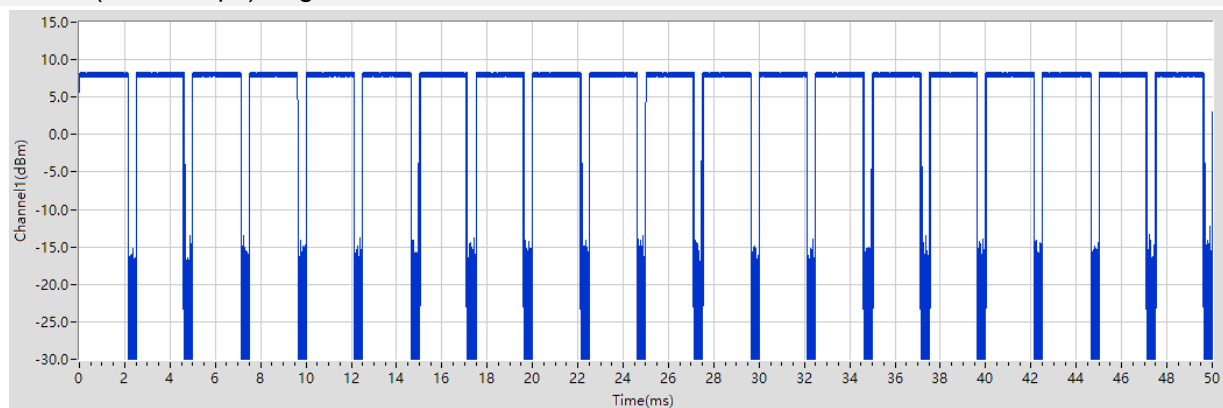
Right Ear

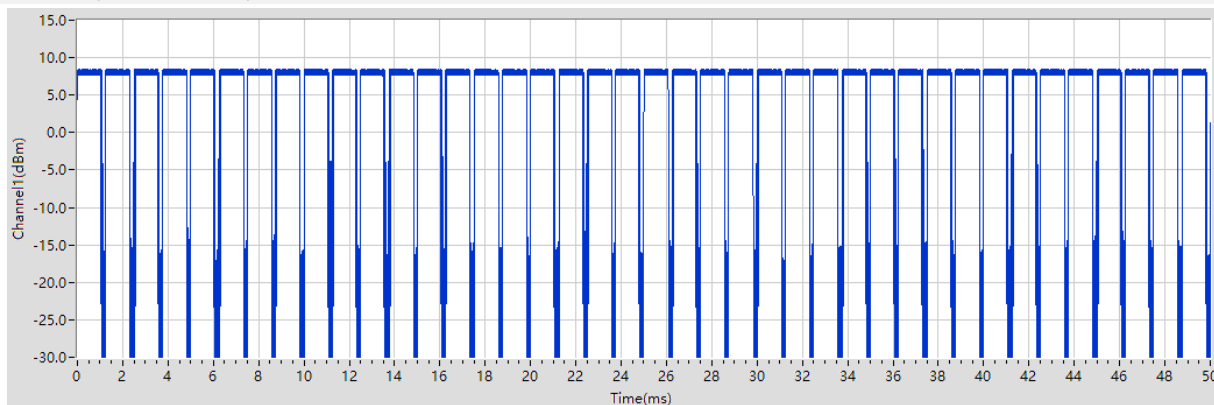
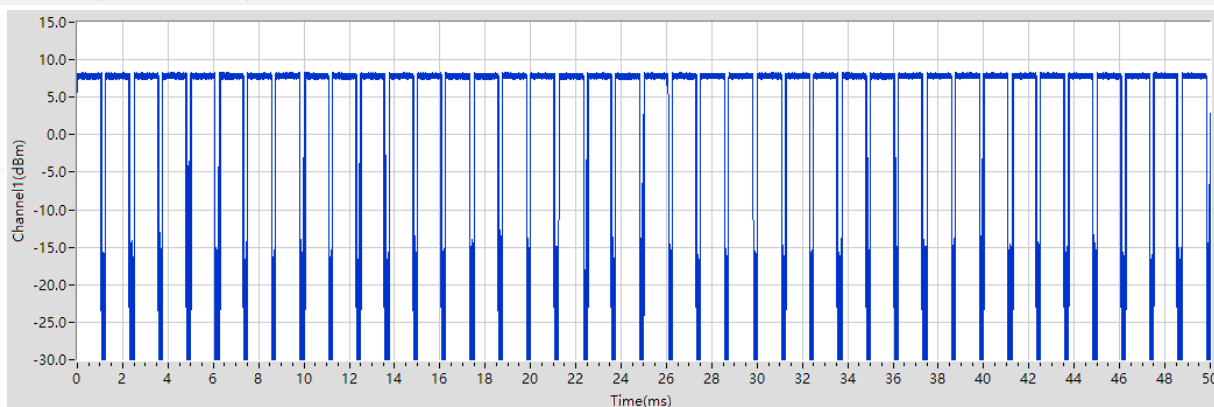
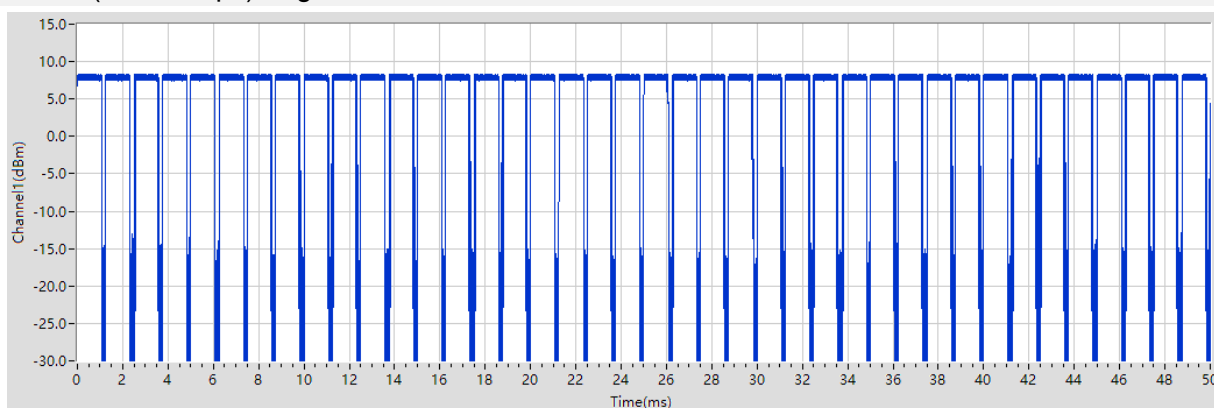
Modulation Mode			GFSK	$\pi/4$ -DQPSK	8-DPSK
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	8.6	7.9	8.5
		LT	8.6	7.5	8.4
		HT	8.4	7.7	8.3
Test Verdict			Pass		

Modulation Mode			GFSK (BLE 1Mbps)		
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	8.0	8.0	8.7
		LT	8.2	8.0	8.9
		HT	7.9	8.2	8.9
Test Verdict			Pass		

Modulation Mode			GFSK (BLE 2Mbps)		
Limit			20 dBm		
Test Result					
Test Method	Test Conditions		Transmitter Power Level (dBm)		
☐ Radiated ☒ Conducted	Voltage	Temperature	Low Channel	Middle Channel	High Channel
			EIRP	EIRP	EIRP
	NV	NT	7.7	7.8	8.5
		LT	7.8	7.4	8.3
		HT	7.9	8.0	8.4
Test Verdict			Pass		

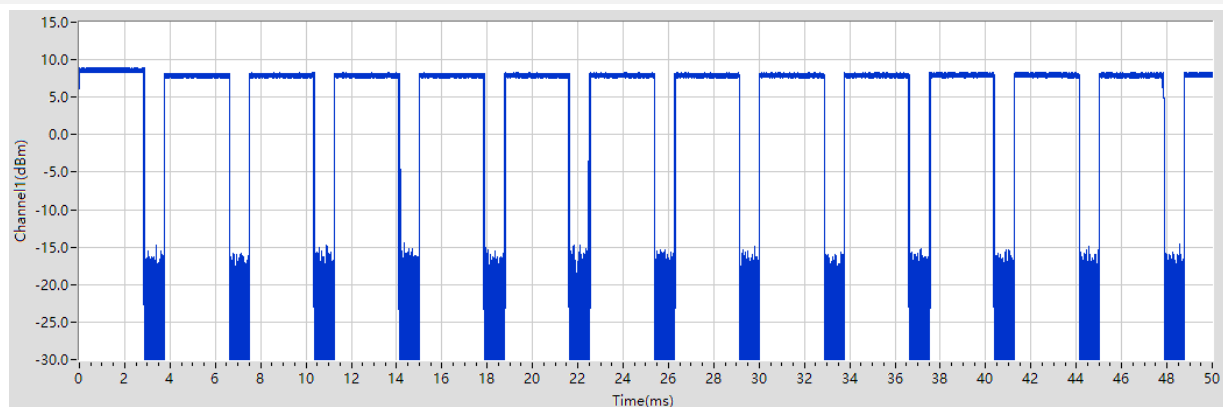
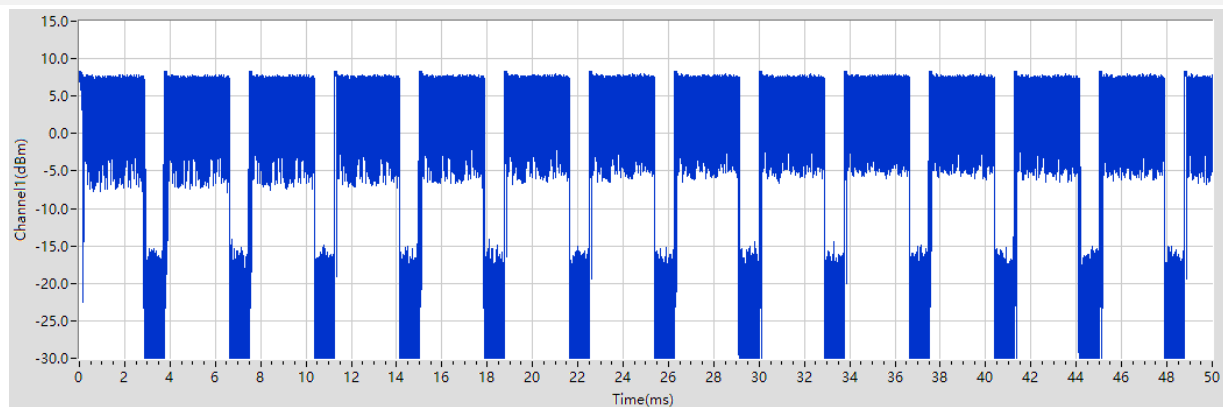
Test PlotsLeft Ear**GFSK MODE** **$\pi/4$ -DQPSK MODE****8-DPSK MODE**

GFSK (BLE 1Mbps): Low Channel**GFSK (BLE 1Mbps): Middle Channel****GFSK (BLE 1Mbps): High Channel**

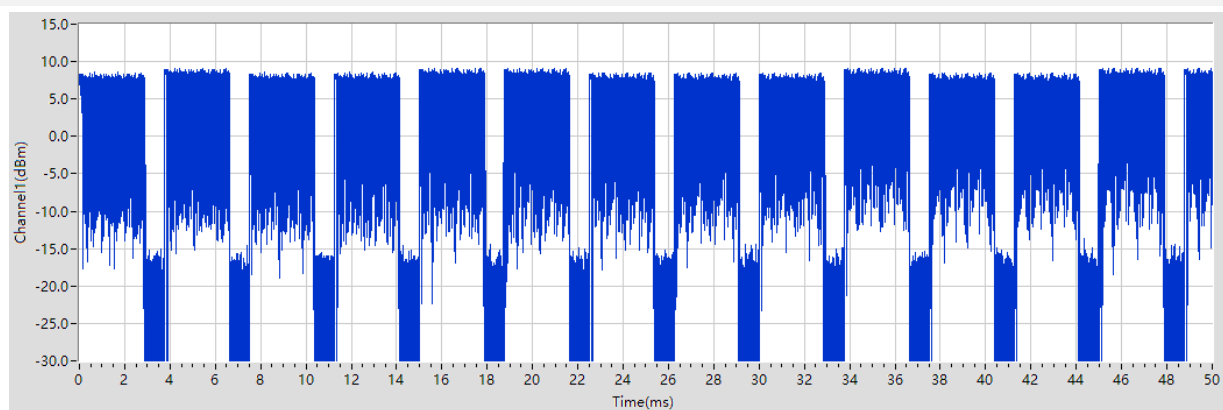
GFSK (BLE 2Mbps): Low Channel**GFSK (BLE 2Mbps): Middle Channel****GFSK (BLE 2Mbps): High Channel**

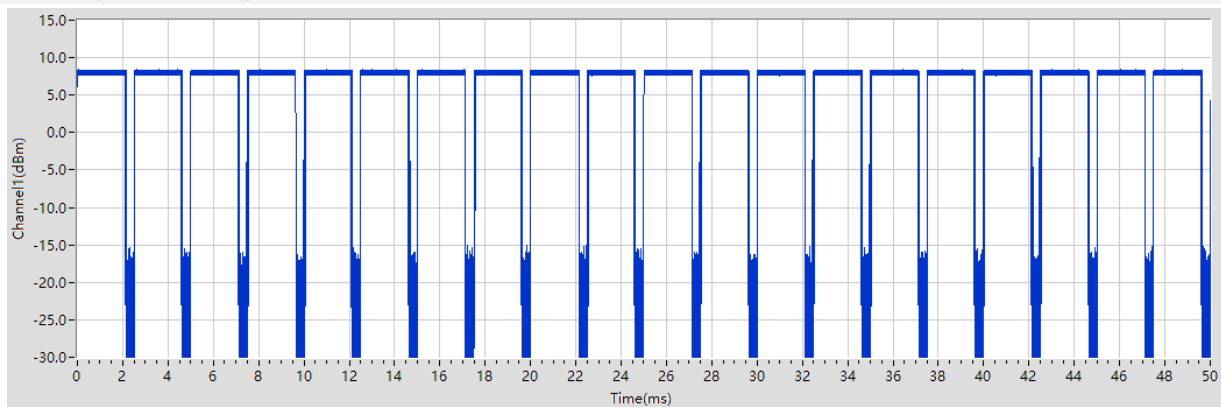
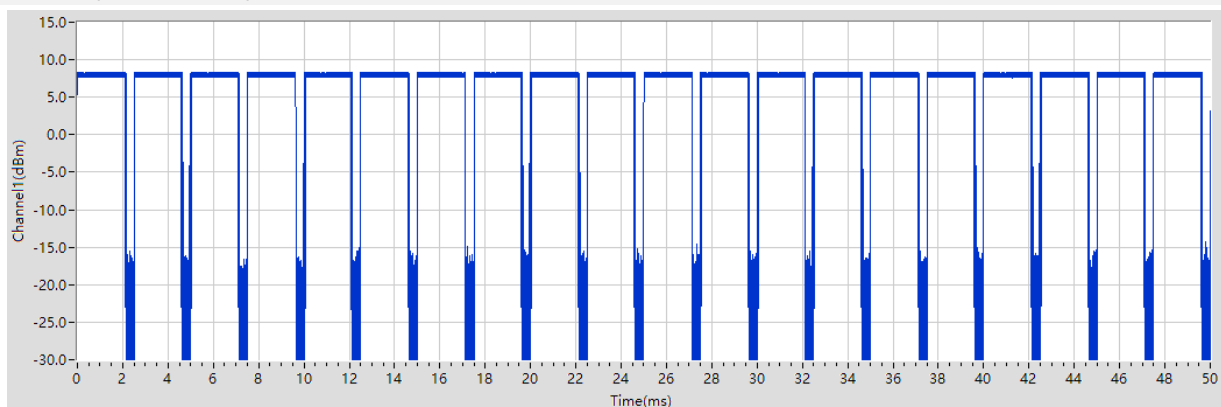
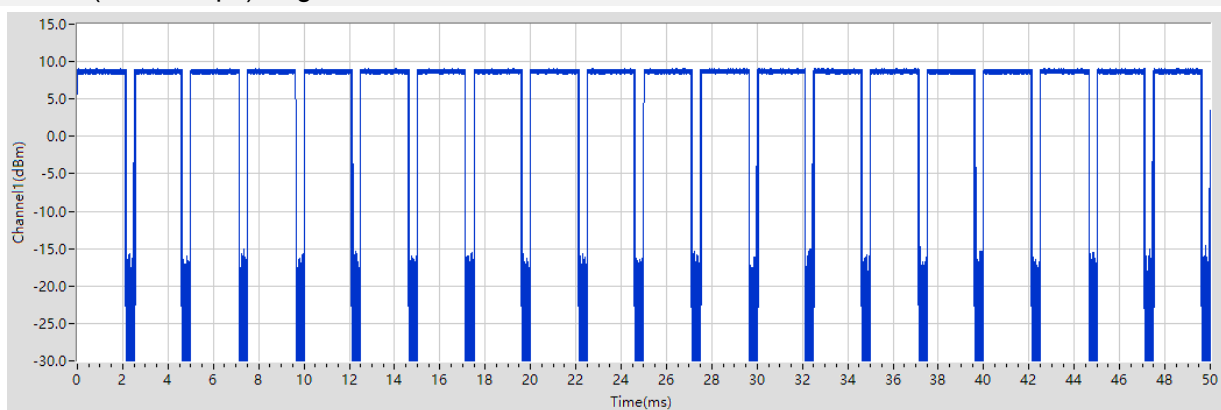
Right Ear

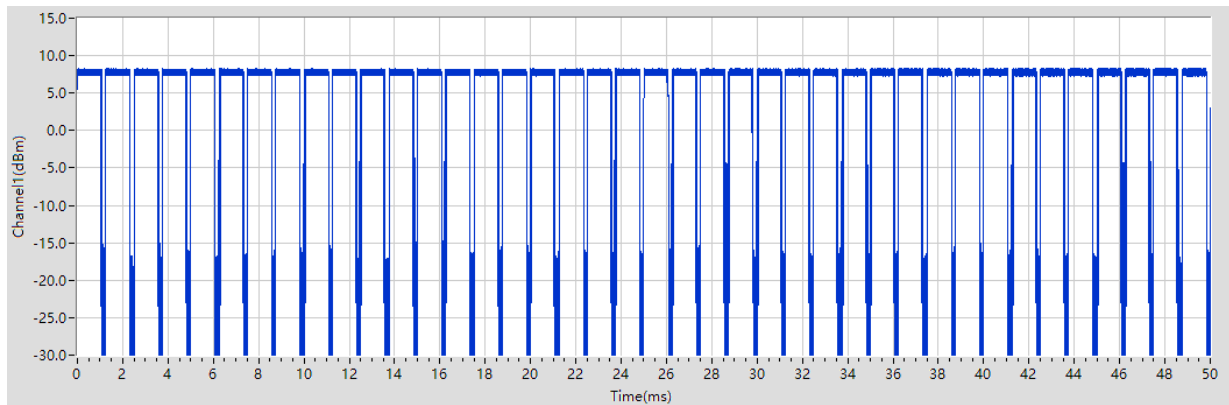
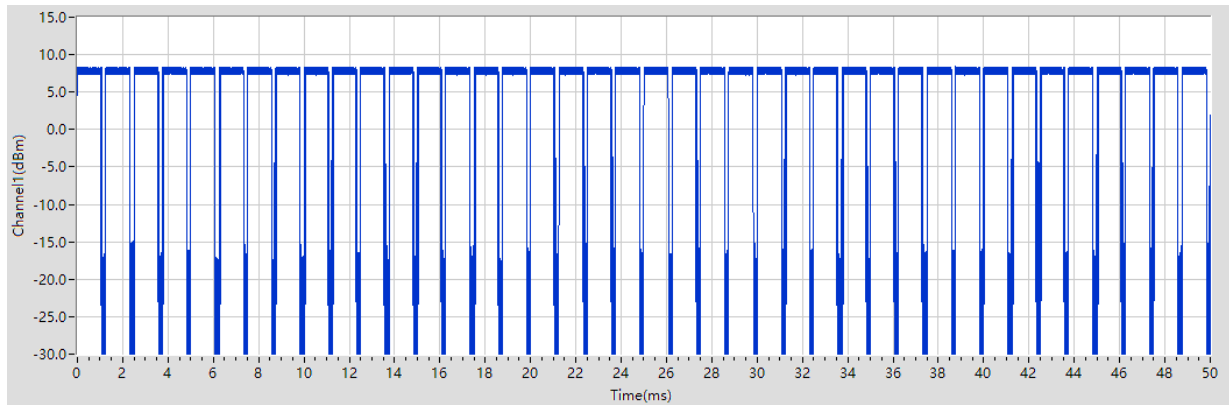
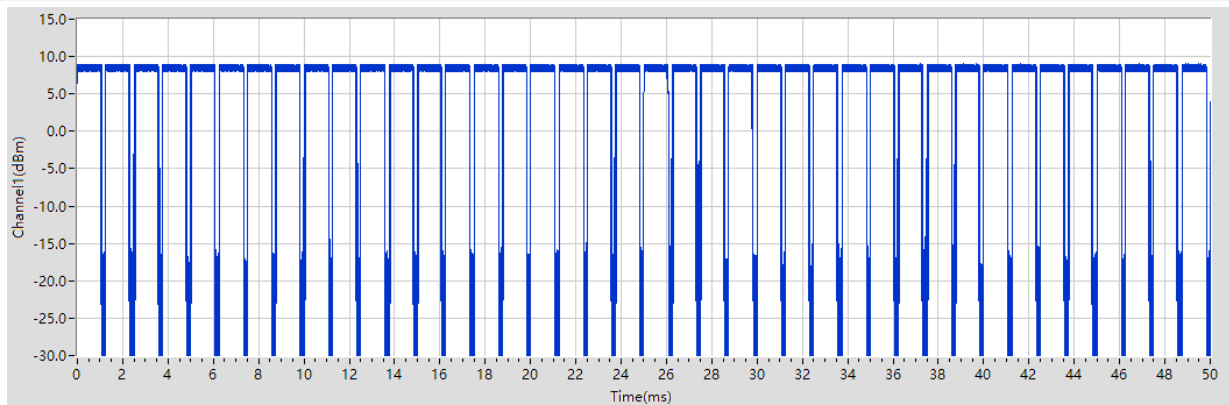
GFSK MODE

 $\pi/4$ -DQPSK MODE

8-DPSK MODE



GFSK (BLE 1Mbps): Low Channel**GFSK (BLE 1Mbps): Middle Channel****GFSK (BLE 1Mbps): High Channel**

GFSK (BLE 2Mbps): Low Channel**GFSK (BLE 2Mbps): Middle Channel****GFSK (BLE 2Mbps): High Channel**

A.2 Power spectral density

Measuring Parameter

Frequency Range		
2400 MHz to 2483.5 MHz	RBW (MHz)	10 kHz
	VBW (MHz)	30 kHz
	Sweep points	8351
	Detector mode	RMS
	Trace mode	Max Hold
	Sweep time	Auto

Note: The Power density is EIRP Power density, which is contain antenna gain.

Test Data

Left Ear

ESD-Edr

Modulation Mode			GFSK (BLE 1Mbps)		
Limit			10 dBm/MHz		
Test Result					
Test Method	Test Conditions		Power density (dBm/MHz)		
☐ Radiated ☒ Conducted	Temperature	Voltage	Low Channel	Middle Channel	High Channel
			Power Spectral density	Power Spectral density	Power Spectral density
		NT	NV	8.13	7.9
Test Verdict			Pass		

Modulation Mode			GFSK (BLE 2Mbps)		
Limit			10 dBm/MHz		
Test Result					
Test Method	Test Conditions		Power density (dBm/MHz)		
☐ Radiated ☒ Conducted	Temperature	Voltage	Low Channel	Middle Channel	High Channel
			Power Spectral density	Power Spectral density	Power Spectral density
		NT	NV	6.84	6.65
Test Verdict			Pass		

Right Ear

Modulation Mode			GFSK (BLE 1Mbps)		
Limit			10 dBm/MHz		
Test Result					
Test Method	Test Conditions		Power density (dBm/MHz)		
☐ Radiated ☒ Conducted	Temperature	Voltage	Low Channel	Middle Channel	High Channel
			Power Spectral density	Power Spectral density	Power Spectral density
	NT	NV	7.86	7.89	8.59
Test Verdict			Pass		

Modulation Mode			GFSK (BLE 2Mbps)		
Limit			10 dBm/MHz		
Test Result					
Test Method	Test Conditions		Power density (dBm/MHz)		
☐ Radiated ☒ Conducted	Temperature	Voltage	Low Channel	Middle Channel	High Channel
			Power Spectral density	Power Spectral density	Power Spectral density
		NT	NV	6.57	6.62
Test Verdict			Pass		

A.3 Duty Cycle, Tx-sequence, Tx-gap

Note: The maximum value of Duty Cycle declared by the supplier.

Test Data

Duty Cycle (%)	Limit Duty Cycle (%) ^{Note1}	Number of Bursts	Minimum Tx-On (ms)	Maximum Tx-On (ms)	Minimum Tx-Off (ms)	Maximum Tx-Off (ms)	Measurement Time (ms)	Comment
--	--	--	--	--	--	--	--	--

Note: Not applicable.

A.4 Accumulated Transmit Time, Frequency Occupation and Hopping Sequence

Left Ear

Test Data (Dwell Time)

Test Condition			Temperature NT, Voltage NV		
Test Method	Modulation Mode	Channel	Total of Dwell (ms)	Measurement Time (s)	Limit (ms)
☐ Radiated ☒ Conducted	GFSK	Low Channel	306.1552	31.6	400
		High Channel	306.1552	31.6	400
	8-DPSK	Low Channel	307.3278	31.6	400
		High Channel	307.3278	31.6	400
Test Verdict			Pass		

Test Data (Minimum Frequency Occupation)

Test Condition			Temperature NT, Voltage NV		
Test Method	Modulation Mode	Channel	Minimum Frequency Occupation (ms)	Measurement Time (ms)	Limit (ms)
☐ Radiated ☒ Conducted	GFSK	Low Channel	9.318	907.552	2.872
		High Channel	9.227	907.552	2.872
	8-DPSK	Low Channel	9.323	911.028	2.883
		High Channel	8.807	911.028	2.883
Test Verdict			Pass		

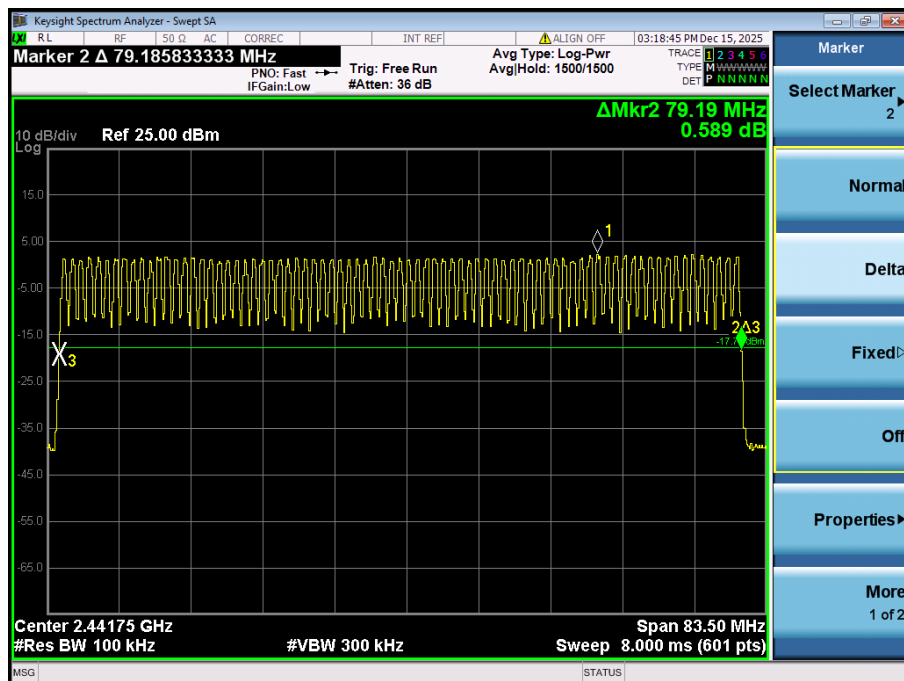
Note: The Minimum Frequency Occupation Time shall be equal to one dwell time within a period not exceeding four times the product of the dwell time per hop and the number of hopping frequencies in use. And the minimum of one dwell time have showed out at the ANNEX A.1 Test Bursts Power List.

Test Data (Hopping Sequence)

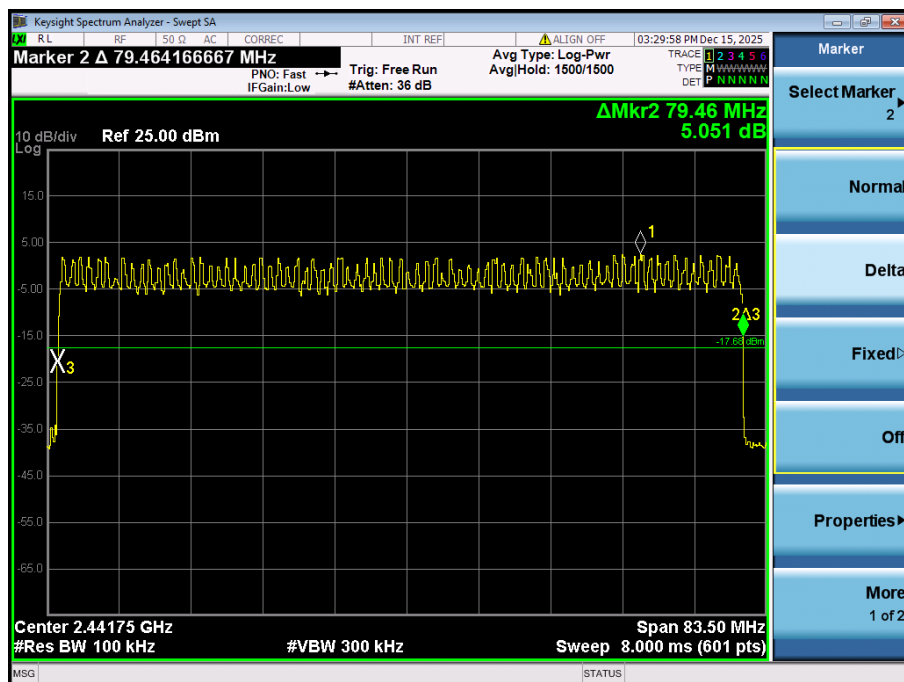
Test Condition		Temperature NT, Voltage NV				
Test Method	Test Mode	Number of Hopping Frequencies	Limit of the Min. Channel	Band Allocation (%)	Limit Band Allocation (%)	Verdict
☐ Radiated	GFSK	79	≥ 15	94.84	≥ 70	Pass
☒ Conducted	8-DPSK	79	≥ 15	95.16	≥ 70	Pass

Test Plots

Hopping Sequence: GFSK



Hopping Sequence: 8-DPSK



Right EarTest Data (Dwell Time)

Test Condition			Temperature NT, Voltage NV		
Test Method	Modulation Mode	Channel	Total of Dwell (ms)	Measurement Time (s)	Limit (ms)
☐ Radiated ☒ Conducted	GFSK	Low Channel	305.942	31.6	400
		High Channel	305.942	31.6	400
	8-DPSK	Low Channel	307.3278	31.6	400
		High Channel	307.3278	31.6	400
Test Verdict			Pass		

Test Data (Minimum Frequency Occupation)

Test Condition			Temperature NT, Voltage NV		
Test Method	Modulation Mode	Channel	Minimum Frequency Occupation (ms)	Measurement Time (ms)	Limit (ms)
☐ Radiated ☒ Conducted	GFSK	Low Channel	8.616	906.920	2.87
		High Channel	9.221	906.920	2.87
	8-DPSK	Low Channel	9.323	911.028	2.883
		High Channel	9.293	911.028	2.883
Test Verdict			Pass		

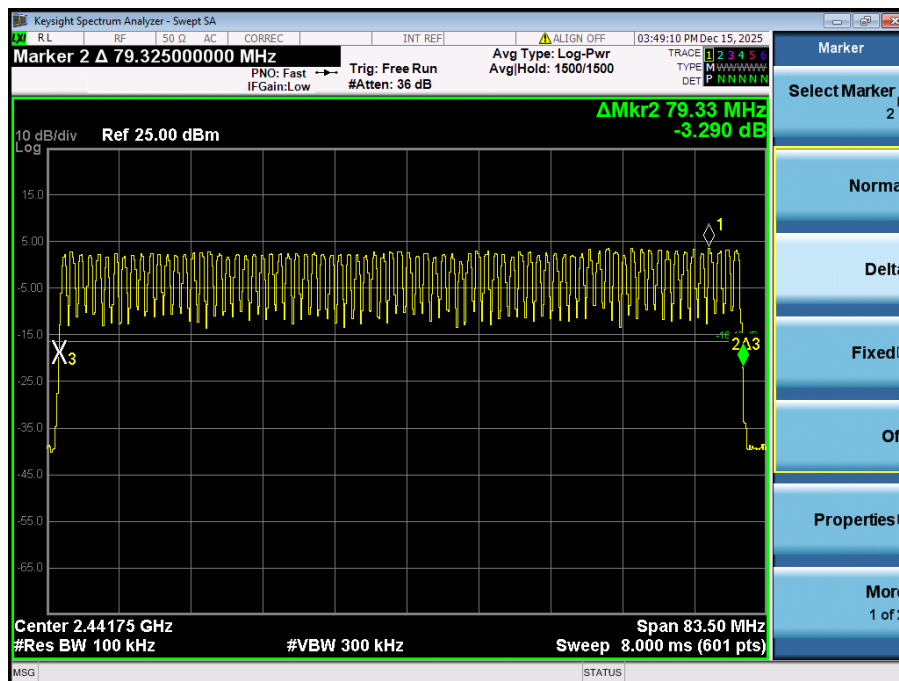
Note: The Minimum Frequency Occupation Time shall be equal to one dwell time within a period not exceeding four times the product of the dwell time per hop and the number of hopping frequencies in use. And the minimum of one dwell time have showed out at the ANNEX A.1 Test Bursts Power List.

Test Data (Hopping Sequence)

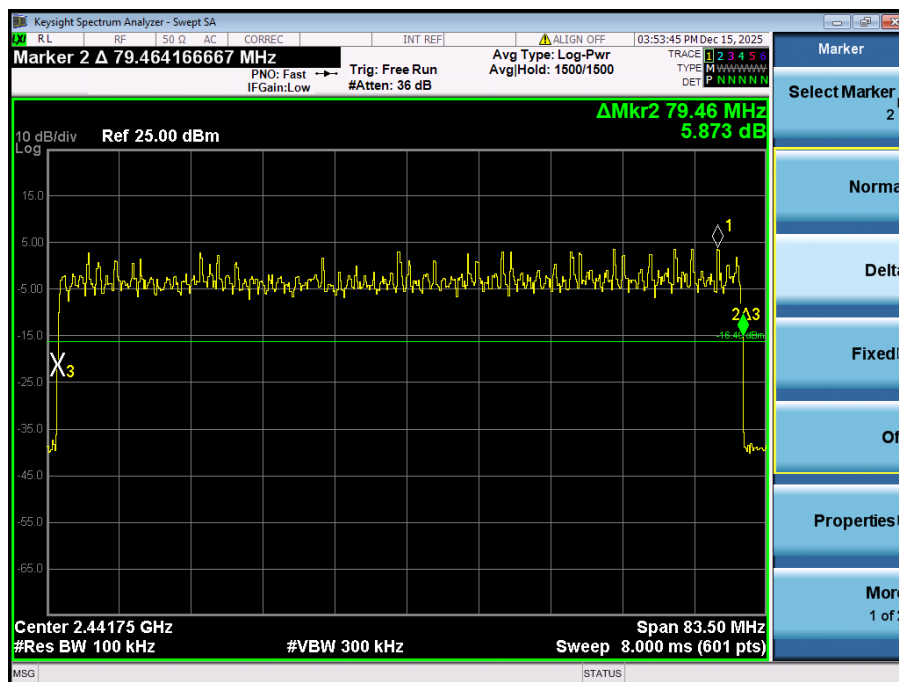
Test Condition		Temperature NT, Voltage NV				
Test Method	Test Mode	Number of Hopping Frequencies	Limit of the Min. Channel	Band Allocation (%)	Limit Band Allocation (%)	Verdict
☐ Radiated	GFSK	79	≥ 15	95.01	≥ 70	Pass
☒ Conducted	8-DPSK	79	≥ 15	95.16	≥ 70	Pass

Test Plots

Hopping Sequence: GFSK



Hopping Sequence: 8-DPSK



A.5 Hopping Frequency Separation

Test Data

Left Ear

Test Method	Test Conditions		Test Result		
☐ Radiated ☒ Conducted	Temperature	Voltage	Modulation Mode	Channel Separation (MHz)	Limit (MHz)
	NT	NV	GFSK	1.000	≧ 0.1
			8-DPSK	1.000	≧ 0.1
Test Verdict			Pass		

Right Ear

Test Method	Test Conditions		Test Result		
☐ Radiated ☒ Conducted	Temperature	Voltage	Modulation Mode	Channel Separation (MHz)	Limit (MHz)
	NT	NV	GFSK	1.000	≧ 0.1
			8-DPSK	1.000	≧ 0.1
Test Verdict			Pass		

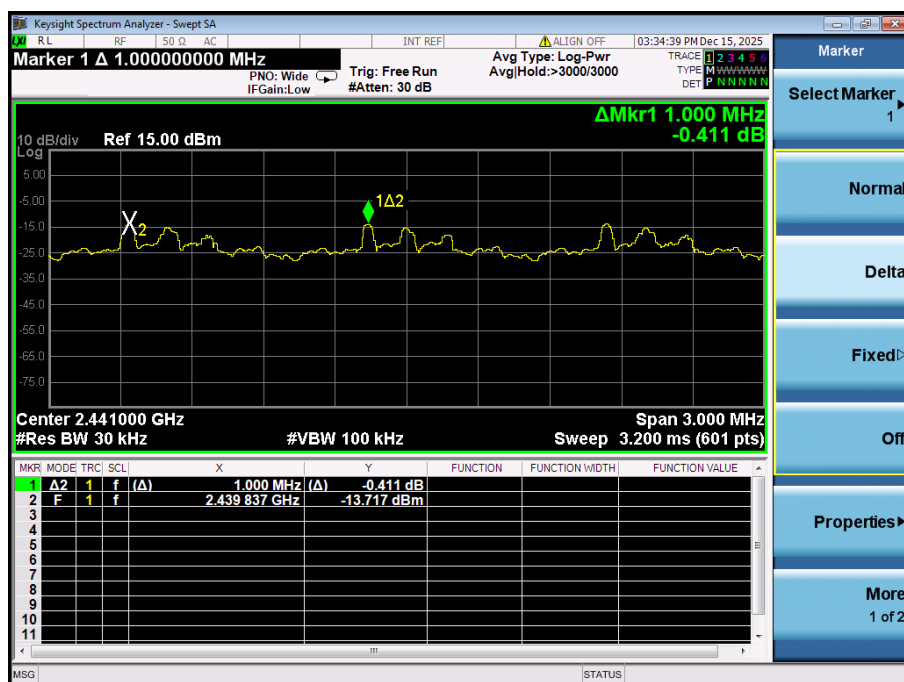
Test Plots

Left Ear

GFSK

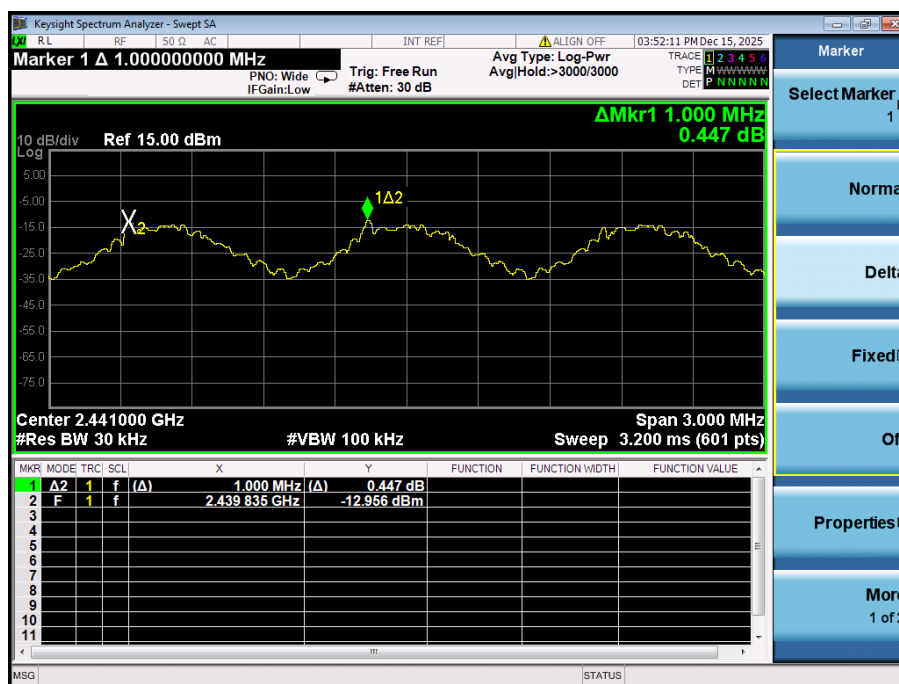


8-DPSK

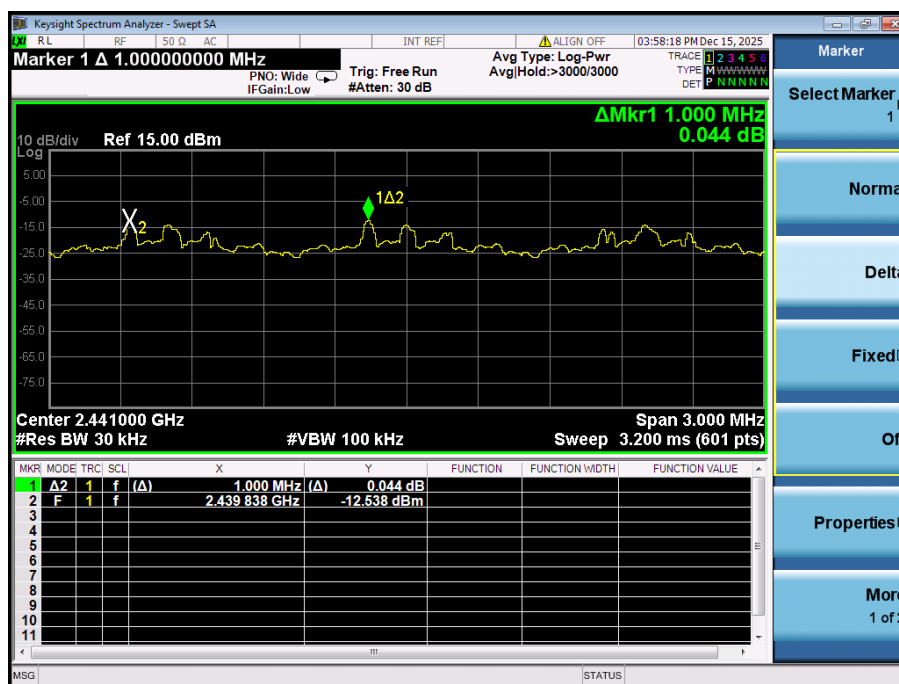


Right Ear

GFSK



8-DPSK



A.6 Medium Utilization (MU) factor

Medium Utilization (MU) (%)	Limit Medium Utilization (MU) (%)	Verdict
--	10	--

Note: Not applicable.

A.7 Adaptivity

Note: Not applicable.

A.8 Occupied Channel Bandwidth

Measuring Parameter

Centre Frequency	The centre frequency of the channel under test
RBW	~ 1 % of the span without going below 1 %
VBW	3 × RBW
Span	2 × Nominal Channel Bandwidth
Detector mode	RMS
Trace mode	Max Hold
Sweep time	Auto
Test Method	☐ Radiated ☒ Conducted

Test Data

Left Ear

Test Conditions		Test Mode	DUT Frequency (MHz)	Occupied Channel Bandwidth (MHz)	Lower Band Edge (MHz)	Upper Band Edge (MHz)	Limit (MHz)
Temperature	Voltage						
NT	NV	GFSK	2402	0.91	2401.548	2402.458	Within The Band 2400 MHz to 2483.5 MHz
			2480	0.91	2479.55	2480.46	
		8-DPSK	2402	1.184	2401.412	2402.596	
			2480	1.186	2479.412	2480.598	
Test Verdict		Pass					

Test Conditions		Test Mode	DUT Frequency (MHz)	Occupied Channel Bandwidth (MHz)	Lower Band Edge (MHz)	Upper Band Edge (MHz)	Limit (MHz)
Temperature	Voltage						
NT	NV	GFSK (BLE 1Mbps)	2402	1.048	2401.478	2402.526	Within The Band 2400 MHz to 2483.5 MHz
			2480	1.048	2479.478	2480.526	
		GFSK (BLE 2Mbps)	2404	2.036	2402.984	2405.02	
			2478	2.036	2476.984	2479.02	
Test Verdict		Pass					

Right Ear

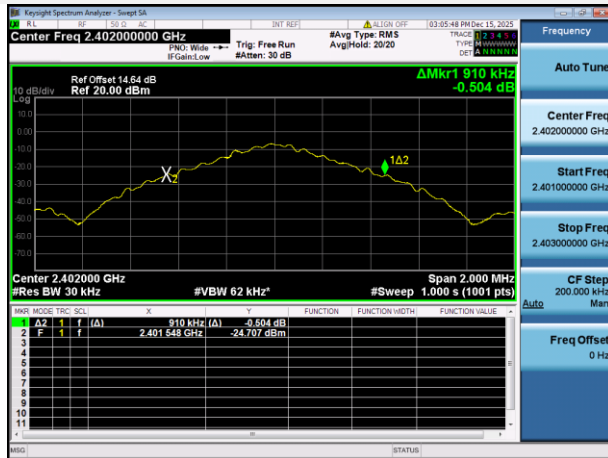
Test Conditions		Test Mode	DUT Frequency (MHz)	Occupied Channel Bandwidth (MHz)	Lower Band Edge (MHz)	Upper Band Edge (MHz)	Limit (MHz)
Temperature	Voltage						
NT	NV	GFSK	2402	0.906	2401.554	2402.46	Within The Band 2400 MHz to 2483.5 MHz
			2480	0.906	2479.554	2480.46	
		8-DPSK	2402	1.188	2401.412	2402.6	
			2480	1.186	2479.414	2480.6	
Test Verdict		Pass					

Test Conditions		Test Mode	DUT Frequency (MHz)	Occupied Channel Bandwidth (MHz)	Lower Band Edge (MHz)	Upper Band Edge (MHz)	Limit (MHz)
Temperature	Voltage						
NT	NV	GFSK (BLE 1Mbps)	2402	1.054	2401.478	2402.532	Within The Band 2400 MHz to 2483.5 MHz
			2480	1.054	2479.478	2480.532	
		GFSK (BLE 2Mbps)	2404	2.052	2402.98	2405.032	
			2478	2.048	2476.98	2479.028	
Test Verdict		Pass					

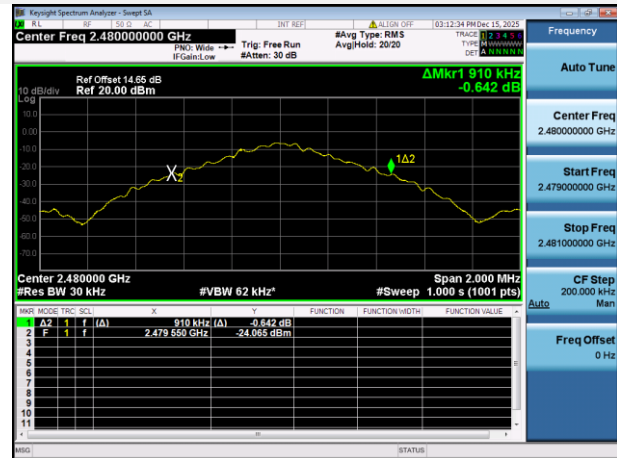
Test Plots

Left Ear

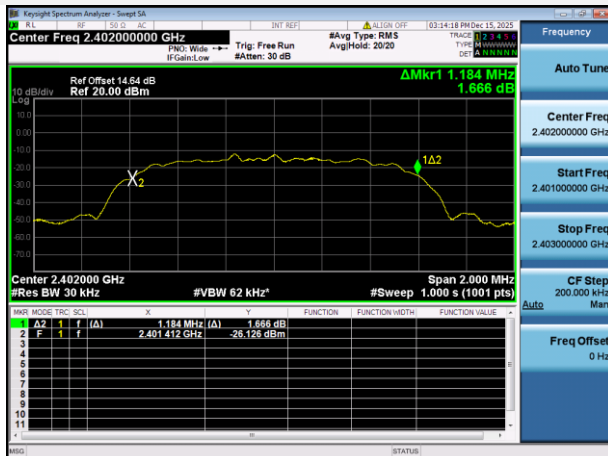
GFSK: Low Channel



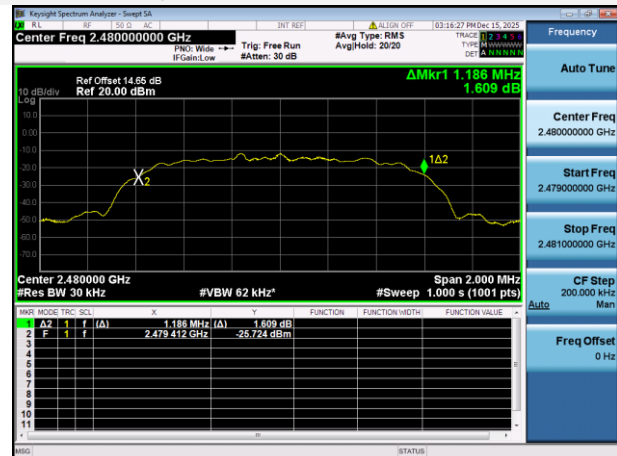
GFSK: High Channel



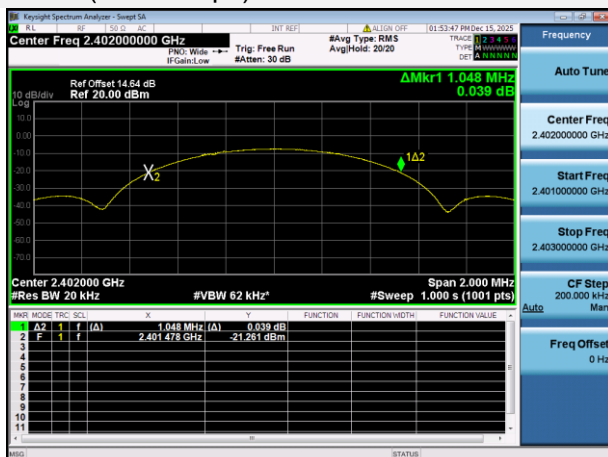
8-DPSK: Low Channel



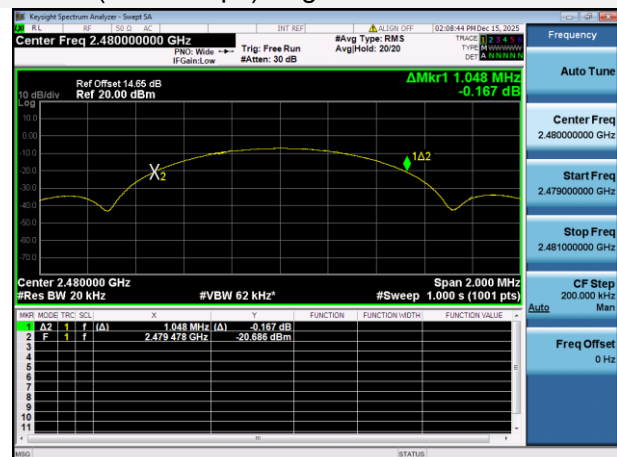
8-DPSK: High Channel



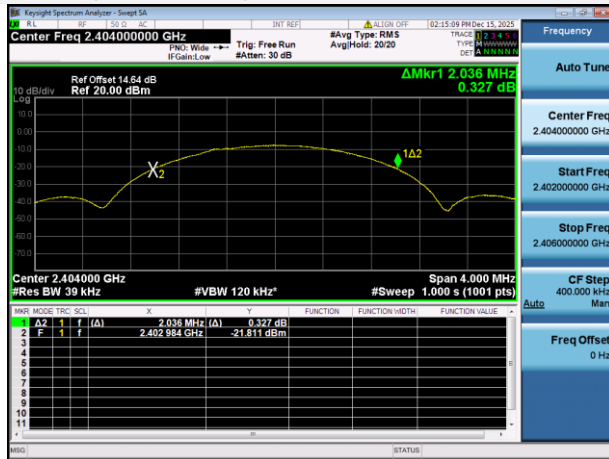
GFSK (BLE 1Mbps): Low Channel



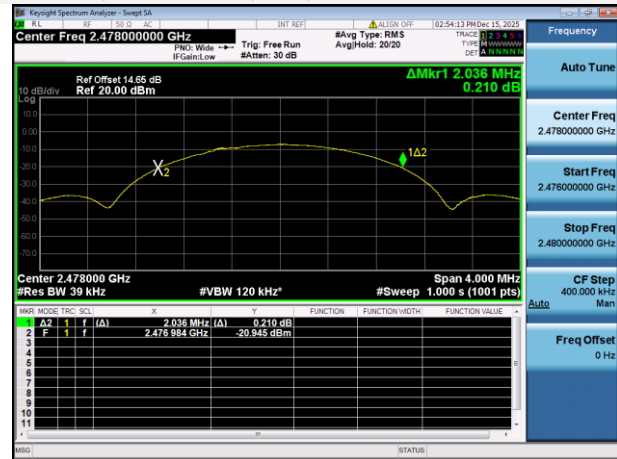
GFSK (BLE 1Mbps): High Channel



GFSK (BLE 2Mbps): Low Channel



GFSK (BLE 2Mbps): High Channel



Right Ear

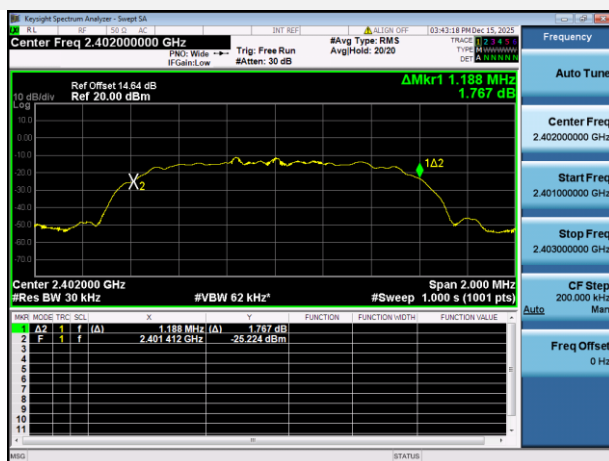
GFSK: Low Channel



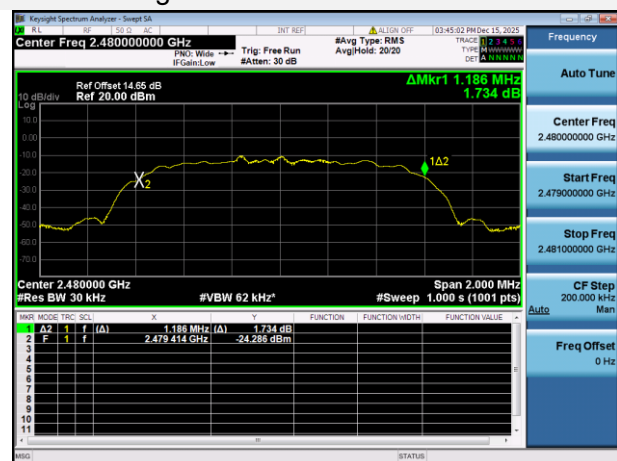
GFSK: High Channel



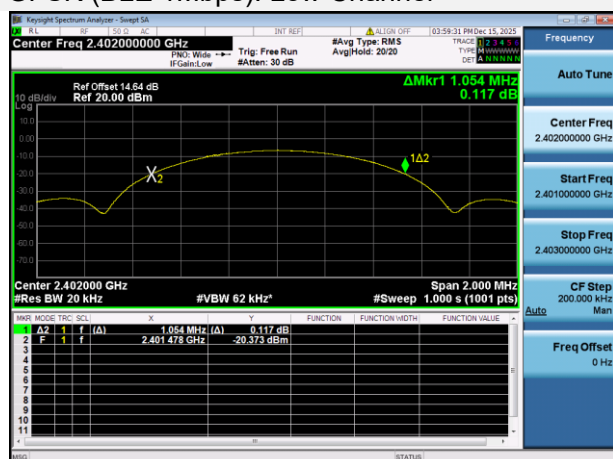
8-DPSK: Low Channel



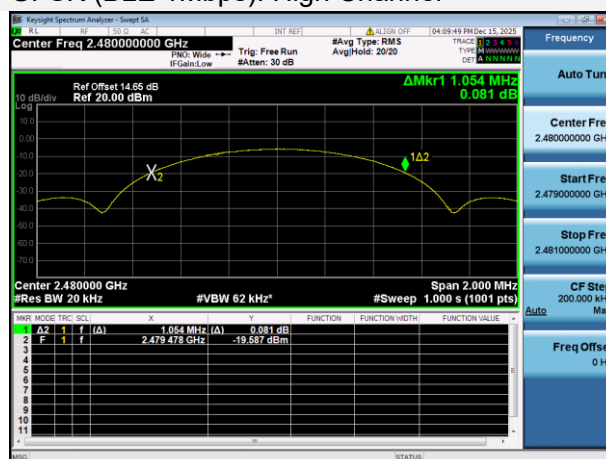
8-DPSK: High Channel



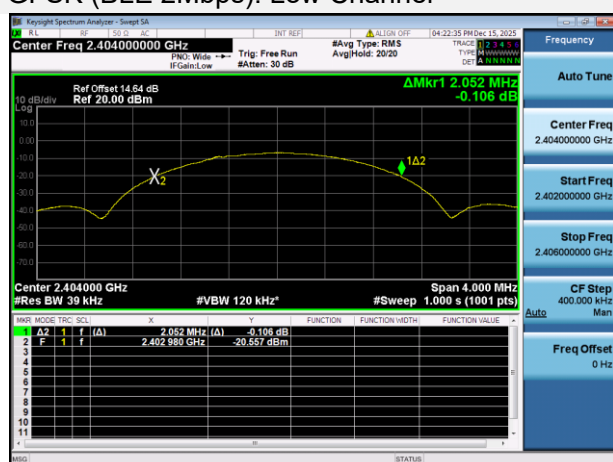
GFSK (BLE 1Mbps): Low Channel



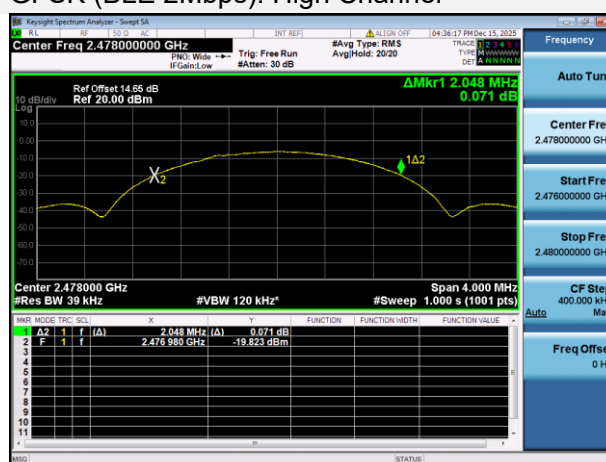
GFSK (BLE 1Mbps): High Channel



GFSK (BLE 2Mbps): Low Channel



GFSK (BLE 2Mbps): High Channel



A.9 Transmitter unwanted emissions in the out-of-band domain

Test Data

Left Ear

GFSK

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.50	-38.702	-20	Pass
2402	1	2399.50	-38.487	-10	Pass
2480	1	2484.00	-38.332	-10	Pass
2480	1	2485.00	-37.448	-20	Pass

8-DPSK

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.13	-39.102	-20	Pass
2402	1	2398.32	-38.316	-20	Pass
2402	1	2399.32	-38.409	-10	Pass
2402	1	2399.50	-38.144	-10	Pass
2480	1	2484.00	-38.096	-10	Pass
2480	1	2484.19	-37.957	-10	Pass
2480	1	2485.19	-37.700	-20	Pass
2480	1	2485.37	-38.503	-20	Pass

GFSK (BLE 1Mbps)

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.40	-38.661	-20	Pass
2402	1	2398.45	-38.549	-20	Pass
2402	1	2399.45	-37.813	-10	Pass
2402	1	2399.50	-38.532	-10	Pass
2480	1	2484.00	-38.203	-10	Pass
2480	1	2484.05	-37.928	-10	Pass
2480	1	2485.05	-37.722	-20	Pass
2480	1	2485.10	-37.746	-20	Pass

GFSK (BLE 2Mbps)

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	2	2396.43	-37.283	-20	Pass
2402	2	2396.46	-38.660	-20	Pass
2402	2	2397.46	-38.639	-20	Pass
2402	2	2398.46	-38.708	-10	Pass
2402	2	2398.50	-37.886	-10	Pass
2402	2	2399.50	-38.556	-10	Pass
2480	2	2484.00	-37.891	-10	Pass
2480	2	2485.00	-37.590	-10	Pass
2480	2	2485.04	-38.235	-10	Pass
2480	2	2486.04	-38.370	-20	Pass
2480	2	2487.04	-37.980	-20	Pass
2480	2	2487.07	-38.439	-20	Pass

Right Ear

GFSK

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.50	-37.777	-20	Pass
2402	1	2399.50	-37.780	-10	Pass
2480	1	2484.00	-37.955	-10	Pass
2480	1	2485.00	-37.727	-20	Pass

8-DPSK

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.12	-38.886	-20	Pass
2402	1	2398.31	-38.548	-20	Pass
2402	1	2399.31	-38.045	-10	Pass
2402	1	2399.50	-38.142	-10	Pass
2480	1	2484.00	-38.226	-10	Pass
2480	1	2484.19	-38.370	-10	Pass
2480	1	2485.19	-38.454	-20	Pass
2480	1	2485.37	-38.523	-20	Pass

GFSK (BLE 1Mbps)

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	1	2398.39	-38.166	-20	Pass
2402	1	2398.45	-37.733	-20	Pass
2402	1	2399.45	-37.114	-10	Pass
2402	1	2399.50	-37.563	-10	Pass
2480	1	2484.00	-38.028	-10	Pass
2480	1	2484.05	-37.876	-10	Pass
2480	1	2485.05	-37.860	-20	Pass
2480	1	2485.11	-38.225	-20	Pass

GFSK (BLE 2Mbps)

DUT Frequency (MHz)	Nominal Bandwidth (MHz)	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
2402	2	2396.40	-39.107	-20	Pass
2402	2	2396.45	-38.442	-20	Pass
2402	2	2397.45	-38.485	-20	Pass
2402	2	2398.45	-38.460	-10	Pass
2402	2	2398.50	-37.693	-10	Pass
2402	2	2399.50	-37.396	-10	Pass
2480	2	2484.00	-37.850	-10	Pass
2480	2	2485.00	-37.878	-10	Pass
2480	2	2485.05	-37.980	-10	Pass
2480	2	2486.05	-38.301	-20	Pass
2480	2	2487.05	-37.639	-20	Pass
2480	2	2487.10	-38.203	-20	Pass

A.10 Transmitter unwanted emissions in the spurious domain

Note: The Frequency band was pre-scanned, the harmonic and other spurious which worst frequency are recorded in the report.

Measuring Parameter

Frequency Range		
30 MHz to 1 000 MHz	RBW (MHz)	100 kHz
	VBW (MHz)	300 kHz
	Sweep points	19400
	Detector mode	Peak
	Trace mode	Max Hold
1 GHz to 12.75 GHz	RBW (MHz)	1 MHz
	VBW (MHz)	3 MHz
	Sweep points	23500
	Detector mode	Peak
	Trace mode	Max Hold

Radiated Test Data**Left Ear****GFSK 30 MHz to 12.75 GHz, Low Channel, ANT H**

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.694	-76.57	-36.0	40.57	253.00	Horizontal	Horizontal	Pass
980.957	-70.59	-36.0	34.59	55.00	Horizontal	Horizontal	Pass
1877.879	-62.56	-30.0	32.56	194.00	Horizontal	Horizontal	Pass
2784.863	-59.06	-30.0	29.06	181.00	Horizontal	Horizontal	Pass
6896.436	-46.88	-30.0	16.88	203.00	Horizontal	Horizontal	Pass
8837.963	-45.32	-30.0	15.32	349.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.710	-66.24	-36.0	30.24	172.00	Vertical	Horizontal	Pass
989.774	-72.30	-36.0	36.30	14.00	Vertical	Horizontal	Pass
1448.958	-63.17	-30.0	33.17	141.00	Vertical	Horizontal	Pass
2348.726	-54.04	-30.0	24.04	83.00	Vertical	Horizontal	Pass
5048.669	-68.03	-30.0	38.03	117.00	Vertical	Horizontal	Pass
9416.659	-57.05	-30.0	27.05	160.00	Vertical	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
40.141	-75.35	-36.0	39.35	246.00	Horizontal	Horizontal	Pass
985.443	-70.05	-36.0	34.05	245.00	Horizontal	Horizontal	Pass
1875.283	-58.40	-30.0	28.40	159.00	Horizontal	Horizontal	Pass
2788.966	-60.34	-30.0	30.34	99.00	Horizontal	Horizontal	Pass
6898.660	-46.37	-30.0	16.37	95.00	Horizontal	Horizontal	Pass
8839.980	-48.54	-30.0	18.54	286.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.784	-68.00	-36.0	32.00	236.00	Vertical	Horizontal	Pass
990.212	-69.72	-36.0	33.72	174.00	Vertical	Horizontal	Pass
1449.134	-62.87	-30.0	32.87	247.00	Vertical	Horizontal	Pass
2349.137	-53.77	-30.0	23.77	205.00	Vertical	Horizontal	Pass
5052.182	-70.47	-30.0	40.47	165.00	Vertical	Horizontal	Pass
9415.747	-60.31	-30.0	30.31	212.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
40.719	-75.67	-36.0	39.67	55.00	Horizontal	Horizontal	Pass
983.240	-70.19	-36.0	34.19	227.00	Horizontal	Horizontal	Pass
1876.220	-56.79	-30.0	26.79	360.00	Horizontal	Horizontal	Pass
2789.324	-60.15	-30.0	30.15	311.00	Horizontal	Horizontal	Pass
6900.327	-49.54	-30.0	19.54	95.00	Horizontal	Horizontal	Pass
8841.587	-48.65	-30.0	18.65	54.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.637	-68.51	-36.0	32.51	354.00	Vertical	Horizontal	Pass
984.741	-68.00	-36.0	32.00	277.00	Vertical	Horizontal	Pass
1450.150	-63.49	-30.0	33.49	239.00	Vertical	Horizontal	Pass
2348.962	-55.86	-30.0	25.86	111.00	Vertical	Horizontal	Pass
5049.466	-67.73	-30.0	37.73	48.00	Vertical	Horizontal	Pass
9419.985	-58.43	-30.0	28.43	358.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.490	-77.99	-36.0	41.99	353.00	Horizontal	Horizontal	Pass
983.235	-66.42	-36.0	30.42	349.00	Horizontal	Horizontal	Pass
1876.388	-56.82	-30.0	26.82	11.00	Horizontal	Horizontal	Pass
2786.528	-57.96	-30.0	27.96	314.00	Horizontal	Horizontal	Pass
6895.870	-50.71	-30.0	20.71	232.00	Horizontal	Horizontal	Pass
8840.659	-49.30	-30.0	19.30	55.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
44.056	-65.93	-36.0	29.93	223.00	Vertical	Horizontal	Pass
988.001	-70.26	-36.0	34.26	270.00	Vertical	Horizontal	Pass
1449.545	-61.89	-30.0	31.89	170.00	Vertical	Horizontal	Pass
2350.917	-54.68	-30.0	24.68	237.00	Vertical	Horizontal	Pass
5049.986	-65.87	-30.0	35.87	240.00	Vertical	Horizontal	Pass
9415.199	-58.89	-30.0	28.89	235.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.529	-75.50	-36.0	39.50	96.00	Horizontal	Horizontal	Pass
988.855	-66.85	-36.0	30.85	101.00	Horizontal	Horizontal	Pass
1877.236	-62.81	-30.0	32.81	260.00	Horizontal	Horizontal	Pass
2785.536	-56.09	-30.0	26.09	80.00	Horizontal	Horizontal	Pass
6899.931	-50.89	-30.0	20.89	310.00	Horizontal	Horizontal	Pass
8838.824	-47.32	-30.0	17.32	24.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.113	-67.31	-36.0	31.31	254.00	Vertical	Horizontal	Pass
988.876	-66.19	-36.0	30.19	247.00	Vertical	Horizontal	Pass
1870.244	-58.87	-30.0	28.87	147.00	Vertical	Horizontal	Pass
2785.030	-64.29	-30.0	34.29	175.00	Vertical	Horizontal	Pass
6897.135	-48.06	-30.0	18.06	227.00	Vertical	Horizontal	Pass
8839.898	-44.40	-30.0	14.40	108.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.738	-78.82	-36.0	42.82	56.00	Horizontal	Horizontal	Pass
990.282	-67.05	-36.0	31.05	36.00	Horizontal	Horizontal	Pass
1879.768	-58.97	-30.0	28.97	321.00	Horizontal	Horizontal	Pass
2786.695	-59.16	-30.0	29.16	67.00	Horizontal	Horizontal	Pass
6898.336	-51.05	-30.0	21.05	123.00	Horizontal	Horizontal	Pass
8836.568	-47.38	-30.0	17.38	270.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.112	-67.75	-36.0	31.75	21.00	Vertical	Horizontal	Pass
986.859	-62.81	-36.0	26.81	38.00	Vertical	Horizontal	Pass
1873.201	-57.59	-30.0	27.59	332.00	Vertical	Horizontal	Pass
2787.649	-62.89	-30.0	32.89	201.00	Vertical	Horizontal	Pass
6897.946	-49.73	-30.0	19.73	287.00	Vertical	Horizontal	Pass
8842.217	-42.60	-30.0	12.60	107.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.179	-75.33	-36.0	39.33	357.00	Horizontal	Horizontal	Pass
991.296	-65.65	-36.0	29.65	131.00	Horizontal	Horizontal	Pass
1876.611	-61.74	-30.0	31.74	239.00	Horizontal	Horizontal	Pass
2785.569	-58.27	-30.0	28.27	234.00	Horizontal	Horizontal	Pass
6900.559	-45.93	-30.0	15.93	18.00	Horizontal	Horizontal	Pass
8836.335	-46.75	-30.0	16.75	70.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.357	-66.41	-36.0	30.41	360.00	Vertical	Horizontal	Pass
988.601	-64.46	-36.0	28.46	310.00	Vertical	Horizontal	Pass
1873.561	-59.22	-30.0	29.22	350.00	Vertical	Horizontal	Pass
2786.465	-62.82	-30.0	32.82	245.00	Vertical	Horizontal	Pass
6898.238	-48.77	-30.0	18.77	101.00	Vertical	Horizontal	Pass
8838.748	-47.28	-30.0	17.28	299.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.612	-77.49	-36.0	41.49	326.00	Horizontal	Horizontal	Pass
987.302	-66.35	-36.0	30.35	325.00	Horizontal	Horizontal	Pass
1877.267	-57.44	-30.0	27.44	343.00	Horizontal	Horizontal	Pass
2785.315	-58.56	-30.0	28.56	328.00	Horizontal	Horizontal	Pass
6900.672	-48.19	-30.0	18.19	156.00	Horizontal	Horizontal	Pass
8837.541	-47.23	-30.0	17.23	277.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.187	-66.31	-36.0	30.31	239.00	Vertical	Horizontal	Pass
986.853	-68.49	-36.0	32.49	207.00	Vertical	Horizontal	Pass
1870.495	-59.07	-30.0	29.07	253.00	Vertical	Horizontal	Pass
2788.187	-59.96	-30.0	29.96	119.00	Vertical	Horizontal	Pass
6896.023	-47.73	-30.0	17.73	258.00	Vertical	Horizontal	Pass
8838.596	-44.00	-30.0	14.00	16.00	Vertical	Horizontal	Pass

Right Ear**GFSK 30 MHz to 12.75 GHz, Low Channel, ANT H**

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
40.450	-77.64	-36.0	41.64	264.00	Horizontal	Horizontal	Pass
980.310	-69.24	-36.0	33.24	305.00	Horizontal	Horizontal	Pass
1876.077	-59.56	-30.0	29.56	56.00	Horizontal	Horizontal	Pass
2786.678	-60.80	-30.0	30.80	355.00	Horizontal	Horizontal	Pass
6898.170	-49.56	-30.0	19.56	193.00	Horizontal	Horizontal	Pass
8839.035	-44.61	-30.0	14.61	265.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.569	-68.82	-36.0	32.82	19.00	Vertical	Horizontal	Pass
986.482	-69.82	-36.0	33.82	231.00	Vertical	Horizontal	Pass
1451.417	-64.09	-30.0	34.09	261.00	Vertical	Horizontal	Pass
2348.352	-58.90	-30.0	28.90	66.00	Vertical	Horizontal	Pass
5050.161	-68.17	-30.0	38.17	26.00	Vertical	Horizontal	Pass
9416.147	-61.23	-30.0	31.23	0.00	Vertical	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.551	-77.70	-36.0	41.70	284.00	Horizontal	Horizontal	Pass
985.458	-68.11	-36.0	32.11	26.00	Horizontal	Horizontal	Pass
1878.471	-61.24	-30.0	31.24	293.00	Horizontal	Horizontal	Pass
2786.121	-61.21	-30.0	31.21	224.00	Horizontal	Horizontal	Pass
6896.872	-46.61	-30.0	16.61	142.00	Horizontal	Horizontal	Pass
8842.790	-43.93	-30.0	13.93	322.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.220	-64.60	-36.0	28.60	4.00	Vertical	Horizontal	Pass
985.528	-68.46	-36.0	32.46	116.00	Vertical	Horizontal	Pass
1450.240	-61.77	-30.0	31.77	14.00	Vertical	Horizontal	Pass
2346.210	-58.59	-30.0	28.59	233.00	Vertical	Horizontal	Pass
5050.220	-69.16	-30.0	39.16	80.00	Vertical	Horizontal	Pass
9420.592	-56.29	-30.0	26.29	68.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.301	-79.28	-36.0	43.28	100.00	Horizontal	Horizontal	Pass
981.733	-70.61	-36.0	34.61	38.00	Horizontal	Horizontal	Pass
1876.520	-61.23	-30.0	31.23	318.00	Horizontal	Horizontal	Pass
2789.960	-59.83	-30.0	29.83	62.00	Horizontal	Horizontal	Pass
6898.488	-47.79	-30.0	17.79	263.00	Horizontal	Horizontal	Pass
8839.331	-44.12	-30.0	14.12	84.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.892	-68.42	-36.0	32.42	139.00	Vertical	Horizontal	Pass
987.941	-70.45	-36.0	34.45	277.00	Vertical	Horizontal	Pass
1452.790	-65.20	-30.0	35.20	204.00	Vertical	Horizontal	Pass
2347.860	-56.86	-30.0	26.86	263.00	Vertical	Horizontal	Pass
5047.382	-67.45	-30.0	37.45	147.00	Vertical	Horizontal	Pass
9419.548	-55.70	-30.0	25.70	197.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.077	-75.66	-36.0	39.66	106.00	Horizontal	Horizontal	Pass
980.832	-68.84	-36.0	32.84	161.00	Horizontal	Horizontal	Pass
1879.275	-60.09	-30.0	30.09	36.00	Horizontal	Horizontal	Pass
2789.631	-59.01	-30.0	29.01	33.00	Horizontal	Horizontal	Pass
6899.130	-47.66	-30.0	17.66	7.00	Horizontal	Horizontal	Pass
8840.719	-48.41	-30.0	18.41	180.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.006	-66.39	-36.0	30.39	294.00	Vertical	Horizontal	Pass
989.254	-70.88	-36.0	34.88	324.00	Vertical	Horizontal	Pass
1448.768	-62.68	-30.0	32.68	301.00	Vertical	Horizontal	Pass
2345.356	-55.78	-30.0	25.78	336.00	Vertical	Horizontal	Pass
5048.741	-69.37	-30.0	39.37	15.00	Vertical	Horizontal	Pass
9418.990	-58.47	-30.0	28.47	84.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.236	-75.41	-36.0	39.41	348.00	Horizontal	Horizontal	Pass
989.616	-64.70	-36.0	28.70	263.00	Horizontal	Horizontal	Pass
1880.244	-62.27	-30.0	32.27	30.00	Horizontal	Horizontal	Pass
2785.178	-54.73	-30.0	24.73	206.00	Horizontal	Horizontal	Pass
6898.200	-47.49	-30.0	17.49	157.00	Horizontal	Horizontal	Pass
8839.604	-45.99	-30.0	15.99	158.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.772	-65.99	-36.0	29.99	65.00	Vertical	Horizontal	Pass
990.456	-64.16	-36.0	28.16	186.00	Vertical	Horizontal	Pass
1873.179	-63.34	-30.0	33.34	103.00	Vertical	Horizontal	Pass
2786.859	-62.32	-30.0	32.32	199.00	Vertical	Horizontal	Pass
6894.914	-47.46	-30.0	17.46	294.00	Vertical	Horizontal	Pass
8841.156	-47.01	-30.0	17.01	179.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.659	-80.90	-36.0	44.90	89.00	Horizontal	Horizontal	Pass
988.794	-68.97	-36.0	32.97	321.00	Horizontal	Horizontal	Pass
1874.572	-61.15	-30.0	31.15	116.00	Horizontal	Horizontal	Pass
2786.721	-55.11	-30.0	25.11	100.00	Horizontal	Horizontal	Pass
6899.287	-47.11	-30.0	17.11	58.00	Horizontal	Horizontal	Pass
8836.757	-44.59	-30.0	14.59	297.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.576	-64.75	-36.0	28.75	229.00	Vertical	Horizontal	Pass
990.371	-68.68	-36.0	32.68	278.00	Vertical	Horizontal	Pass
1869.882	-63.29	-30.0	33.29	163.00	Vertical	Horizontal	Pass
2788.286	-61.47	-30.0	31.47	321.00	Vertical	Horizontal	Pass
6898.909	-47.00	-30.0	17.00	312.00	Vertical	Horizontal	Pass
8841.517	-42.71	-30.0	12.71	155.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.812	-80.76	-36.0	44.76	150.00	Horizontal	Horizontal	Pass
988.945	-68.83	-36.0	32.83	6.00	Horizontal	Horizontal	Pass
1877.051	-60.87	-30.0	30.87	90.00	Horizontal	Horizontal	Pass
2784.776	-55.56	-30.0	25.56	320.00	Horizontal	Horizontal	Pass
6896.259	-45.88	-30.0	15.88	266.00	Horizontal	Horizontal	Pass
8841.876	-47.14	-30.0	17.14	333.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.741	-68.23	-36.0	32.23	120.00	Vertical	Horizontal	Pass
986.683	-65.25	-36.0	29.25	264.00	Vertical	Horizontal	Pass
1870.229	-60.41	-30.0	30.41	38.00	Vertical	Horizontal	Pass
2783.948	-62.88	-30.0	32.88	345.00	Vertical	Horizontal	Pass
6896.441	-51.05	-30.0	21.05	283.00	Vertical	Horizontal	Pass
8842.807	-47.42	-30.0	17.42	325.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
41.974	-80.75	-36.0	44.75	158.00	Horizontal	Horizontal	Pass
990.193	-65.52	-36.0	29.52	138.00	Horizontal	Horizontal	Pass
1877.674	-61.71	-30.0	31.71	274.00	Horizontal	Horizontal	Pass
2789.536	-54.82	-30.0	24.82	299.00	Horizontal	Horizontal	Pass
6902.106	-51.64	-30.0	21.64	263.00	Horizontal	Horizontal	Pass
8842.034	-43.74	-30.0	13.74	6.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.762	-68.48	-36.0	32.48	320.00	Vertical	Horizontal	Pass
989.813	-64.18	-36.0	28.18	290.00	Vertical	Horizontal	Pass
1868.793	-62.63	-30.0	32.63	124.00	Vertical	Horizontal	Pass
2787.810	-63.01	-30.0	33.01	198.00	Vertical	Horizontal	Pass
6898.639	-49.56	-30.0	19.56	227.00	Vertical	Horizontal	Pass
8841.655	-47.52	-30.0	17.52	140.00	Vertical	Horizontal	Pass

A.11 Receiver Spurious Emissions

Note: The Frequency band was pre-scanned, the harmonic and other spurious which worst frequency are recorded in the report.

Measuring Parameter

Frequency Range		
30 MHz to 1 000 MHz	RBW (MHz)	100 kHz
	VBW (MHz)	300 kHz
	Sweep points	19400
	Detector mode	Peak
	Trace mode	Max Hold
1 GHz to 12.75 GHz	RBW (MHz)	1 MHz
	VBW (MHz)	3 MHz
	Sweep points	23500
	Detector mode	Peak
	Trace mode	Max Hold

Radiated Test Data**Left Ear****GFSK 30 MHz to 12.75 GHz, Low Channel, ANT H**

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.672	-80.39	-57.0	23.39	190.00	Horizontal	Horizontal	Pass
987.421	-66.61	-57.0	9.61	337.00	Horizontal	Horizontal	Pass
1879.528	-62.65	-47.0	15.65	297.00	Horizontal	Horizontal	Pass
2786.483	-57.69	-47.0	10.69	8.00	Horizontal	Horizontal	Pass
6901.405	-55.81	-47.0	8.81	36.00	Horizontal	Horizontal	Pass
8839.498	-54.35	-47.0	7.35	196.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.199	-64.96	-57.0	7.96	327.00	Vertical	Horizontal	Pass
986.149	-70.97	-57.0	13.97	52.00	Vertical	Horizontal	Pass
1450.707	-65.23	-47.0	18.23	346.00	Vertical	Horizontal	Pass
2348.100	-55.32	-47.0	8.32	51.00	Vertical	Horizontal	Pass
5051.202	-66.30	-47.0	19.30	101.00	Vertical	Horizontal	Pass
9417.885	-55.53	-47.0	8.53	291.00	Vertical	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.542	-79.60	-57.0	22.60	185.00	Horizontal	Horizontal	Pass
988.728	-67.30	-57.0	10.30	213.00	Horizontal	Horizontal	Pass
1879.193	-61.37	-47.0	14.37	222.00	Horizontal	Horizontal	Pass
2784.229	-55.85	-47.0	8.85	359.00	Horizontal	Horizontal	Pass
6897.008	-53.74	-47.0	6.74	319.00	Horizontal	Horizontal	Pass
8840.758	-56.32	-47.0	9.32	171.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
46.330	-64.78	-57.0	7.78	342.00	Vertical	Horizontal	Pass
985.791	-72.40	-57.0	15.40	5.00	Vertical	Horizontal	Pass
1452.920	-62.35	-47.0	15.35	268.00	Vertical	Horizontal	Pass
2348.010	-57.32	-47.0	10.32	8.00	Vertical	Horizontal	Pass
5052.067	-68.55	-47.0	21.55	201.00	Vertical	Horizontal	Pass
9420.536	-59.87	-47.0	12.87	110.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.213	-75.95	-57.0	18.95	173.00	Horizontal	Horizontal	Pass
983.403	-66.70	-57.0	9.70	213.00	Horizontal	Horizontal	Pass
1875.010	-61.60	-47.0	14.60	127.00	Horizontal	Horizontal	Pass
2786.848	-60.37	-47.0	13.37	355.00	Horizontal	Horizontal	Pass
6897.289	-54.60	-47.0	7.60	222.00	Horizontal	Horizontal	Pass
8839.254	-56.62	-47.0	9.62	103.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.326	-65.40	-57.0	8.40	129.00	Vertical	Horizontal	Pass
988.525	-68.64	-57.0	11.64	122.00	Vertical	Horizontal	Pass
1450.481	-66.06	-47.0	19.06	250.00	Vertical	Horizontal	Pass
2348.030	-57.32	-47.0	10.32	246.00	Vertical	Horizontal	Pass
5050.187	-71.67	-47.0	24.67	5.00	Vertical	Horizontal	Pass
9420.837	-58.47	-47.0	11.47	202.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.818	-79.61	-57.0	22.61	125.00	Horizontal	Horizontal	Pass
983.813	-68.45	-57.0	11.45	40.00	Horizontal	Horizontal	Pass
1877.826	-61.88	-47.0	14.88	246.00	Horizontal	Horizontal	Pass
2787.047	-55.37	-47.0	8.37	345.00	Horizontal	Horizontal	Pass
6898.748	-55.75	-47.0	8.75	108.00	Horizontal	Horizontal	Pass
8840.002	-56.30	-47.0	9.30	241.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
44.072	-63.63	-57.0	6.63	284.00	Vertical	Horizontal	Pass
984.815	-67.33	-57.0	10.33	94.00	Vertical	Horizontal	Pass
1453.447	-65.75	-47.0	18.75	183.00	Vertical	Horizontal	Pass
2349.556	-57.21	-47.0	10.21	24.00	Vertical	Horizontal	Pass
5050.352	-68.23	-47.0	21.23	174.00	Vertical	Horizontal	Pass
9419.324	-59.35	-47.0	12.35	279.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.747	-81.25	-57.0	24.25	203.00	Horizontal	Horizontal	Pass
984.053	-64.12	-57.0	7.12	86.00	Horizontal	Horizontal	Pass
1877.574	-59.70	-47.0	12.70	113.00	Horizontal	Horizontal	Pass
2783.773	-55.31	-47.0	8.31	165.00	Horizontal	Horizontal	Pass
6899.291	-54.50	-47.0	7.50	266.00	Horizontal	Horizontal	Pass
8843.728	-58.43	-47.0	11.43	354.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.126	-60.39	-57.0	3.39	66.00	Vertical	Horizontal	Pass
986.939	-69.96	-57.0	12.96	40.00	Vertical	Horizontal	Pass
1866.421	-58.20	-47.0	11.20	274.00	Vertical	Horizontal	Pass
2785.425	-60.09	-47.0	13.09	139.00	Vertical	Horizontal	Pass
6893.409	-58.99	-47.0	11.99	353.00	Vertical	Horizontal	Pass
8839.950	-57.93	-47.0	10.93	308.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
44.760	-78.08	-57.0	21.08	146.00	Horizontal	Horizontal	Pass
987.250	-64.98	-57.0	7.98	285.00	Horizontal	Horizontal	Pass
1875.448	-63.69	-47.0	16.69	120.00	Horizontal	Horizontal	Pass
2785.014	-56.45	-47.0	9.45	104.00	Horizontal	Horizontal	Pass
6898.713	-59.43	-47.0	12.43	337.00	Horizontal	Horizontal	Pass
8842.097	-58.36	-47.0	11.36	242.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.681	-64.61	-57.0	7.61	108.00	Vertical	Horizontal	Pass
989.410	-69.81	-57.0	12.81	295.00	Vertical	Horizontal	Pass
1868.420	-60.00	-47.0	13.00	16.00	Vertical	Horizontal	Pass
2782.099	-63.99	-47.0	16.99	238.00	Vertical	Horizontal	Pass
6895.502	-60.33	-47.0	13.33	341.00	Vertical	Horizontal	Pass
8839.566	-55.42	-47.0	8.42	14.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
47.230	-76.91	-57.0	19.91	273.00	Horizontal	Horizontal	Pass
982.344	-67.92	-57.0	10.92	188.00	Horizontal	Horizontal	Pass
1877.308	-63.45	-47.0	16.45	279.00	Horizontal	Horizontal	Pass
2782.397	-55.31	-47.0	8.31	132.00	Horizontal	Horizontal	Pass
6899.615	-58.80	-47.0	11.80	43.00	Horizontal	Horizontal	Pass
8839.655	-54.39	-47.0	7.39	42.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
46.705	-62.45	-57.0	5.45	131.00	Vertical	Horizontal	Pass
991.132	-70.45	-57.0	13.45	57.00	Vertical	Horizontal	Pass
1869.483	-62.44	-47.0	15.44	358.00	Vertical	Horizontal	Pass
2781.051	-60.56	-47.0	13.56	13.00	Vertical	Horizontal	Pass
6896.779	-57.24	-47.0	10.24	228.00	Vertical	Horizontal	Pass
8841.102	-56.89	-47.0	9.89	5.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.954	-77.15	-57.0	20.15	118.00	Horizontal	Horizontal	Pass
986.891	-66.65	-57.0	9.65	111.00	Horizontal	Horizontal	Pass
1875.716	-64.47	-47.0	17.47	204.00	Horizontal	Horizontal	Pass
2787.472	-56.08	-47.0	9.08	356.00	Horizontal	Horizontal	Pass
6899.961	-58.31	-47.0	11.31	149.00	Horizontal	Horizontal	Pass
8840.936	-57.61	-47.0	10.61	169.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.133	-62.12	-57.0	5.12	341.00	Vertical	Horizontal	Pass
988.285	-67.58	-57.0	10.58	141.00	Vertical	Horizontal	Pass
1867.907	-62.59	-47.0	15.59	256.00	Vertical	Horizontal	Pass
2784.556	-58.77	-47.0	11.77	49.00	Vertical	Horizontal	Pass
6896.421	-58.58	-47.0	11.58	130.00	Vertical	Horizontal	Pass
8838.532	-59.16	-47.0	12.16	209.00	Vertical	Horizontal	Pass

Right Ear**GFSK 30 MHz to 12.75 GHz, Low Channel, ANT H**

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
48.142	-77.61	-57.0	20.61	0.00	Horizontal	Horizontal	Pass
985.570	-65.41	-57.0	8.41	157.00	Horizontal	Horizontal	Pass
1874.867	-57.35	-47.0	10.35	7.00	Horizontal	Horizontal	Pass
2784.365	-59.51	-47.0	12.51	262.00	Horizontal	Horizontal	Pass
6901.004	-55.48	-47.0	8.48	43.00	Horizontal	Horizontal	Pass
8836.836	-57.24	-47.0	10.24	340.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
46.136	-67.21	-57.0	10.21	270.00	Vertical	Horizontal	Pass
987.528	-68.56	-57.0	11.56	169.00	Vertical	Horizontal	Pass
1452.642	-62.92	-47.0	15.92	75.00	Vertical	Horizontal	Pass
2348.271	-57.28	-47.0	10.28	22.00	Vertical	Horizontal	Pass
5051.532	-67.52	-47.0	20.52	13.00	Vertical	Horizontal	Pass
9417.371	-60.07	-47.0	13.07	20.00	Vertical	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
47.409	-80.56	-57.0	23.56	344.00	Horizontal	Horizontal	Pass
988.689	-66.89	-57.0	9.89	286.00	Horizontal	Horizontal	Pass
1878.449	-57.48	-47.0	10.48	328.00	Horizontal	Horizontal	Pass
2788.323	-56.58	-47.0	9.58	14.00	Horizontal	Horizontal	Pass
6900.761	-54.69	-47.0	7.69	224.00	Horizontal	Horizontal	Pass
8836.742	-54.98	-47.0	7.98	143.00	Horizontal	Horizontal	Pass

GFSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
46.978	-63.58	-57.0	6.58	354.00	Vertical	Horizontal	Pass
987.505	-68.39	-57.0	11.39	77.00	Vertical	Horizontal	Pass
1453.216	-63.72	-47.0	16.72	189.00	Vertical	Horizontal	Pass
2350.751	-54.57	-47.0	7.57	296.00	Vertical	Horizontal	Pass
5049.879	-66.37	-47.0	19.37	265.00	Vertical	Horizontal	Pass
9420.012	-60.55	-47.0	13.55	351.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
47.962	-79.41	-57.0	22.41	357.00	Horizontal	Horizontal	Pass
985.347	-69.18	-57.0	12.18	194.00	Horizontal	Horizontal	Pass
1880.113	-61.89	-47.0	14.89	4.00	Horizontal	Horizontal	Pass
2789.360	-54.88	-47.0	7.88	153.00	Horizontal	Horizontal	Pass
6897.826	-59.22	-47.0	12.22	14.00	Horizontal	Horizontal	Pass
8839.265	-55.67	-47.0	8.67	95.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.797	-68.70	-57.0	11.70	341.00	Vertical	Horizontal	Pass
988.507	-70.59	-57.0	13.59	32.00	Vertical	Horizontal	Pass
1452.628	-60.89	-47.0	13.89	347.00	Vertical	Horizontal	Pass
2349.433	-53.81	-47.0	6.81	54.00	Vertical	Horizontal	Pass
5048.546	-69.43	-47.0	22.43	215.00	Vertical	Horizontal	Pass
9420.132	-60.22	-47.0	13.22	210.00	Vertical	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.730	-79.06	-57.0	22.06	43.00	Horizontal	Horizontal	Pass
988.598	-67.65	-57.0	10.65	240.00	Horizontal	Horizontal	Pass
1876.205	-61.92	-47.0	14.92	312.00	Horizontal	Horizontal	Pass
2789.330	-54.71	-47.0	7.71	190.00	Horizontal	Horizontal	Pass
6896.802	-57.70	-47.0	10.70	291.00	Horizontal	Horizontal	Pass
8841.541	-58.47	-47.0	11.47	120.00	Horizontal	Horizontal	Pass

8-DPSK 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.655	-65.37	-57.0	8.37	293.00	Vertical	Horizontal	Pass
986.931	-72.45	-57.0	15.45	41.00	Vertical	Horizontal	Pass
1453.134	-62.55	-47.0	15.55	55.00	Vertical	Horizontal	Pass
2348.464	-59.36	-47.0	12.36	80.00	Vertical	Horizontal	Pass
5047.375	-70.81	-47.0	23.81	149.00	Vertical	Horizontal	Pass
9416.250	-55.61	-47.0	8.61	42.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
45.830	-81.04	-57.0	24.04	132.00	Horizontal	Horizontal	Pass
983.687	-64.81	-57.0	7.81	102.00	Horizontal	Horizontal	Pass
1878.863	-62.82	-47.0	15.82	208.00	Horizontal	Horizontal	Pass
2782.018	-52.85	-47.0	5.85	30.00	Horizontal	Horizontal	Pass
6902.097	-55.37	-47.0	8.37	306.00	Horizontal	Horizontal	Pass
8841.906	-53.34	-47.0	6.34	170.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
42.348	-62.84	-57.0	5.84	341.00	Vertical	Horizontal	Pass
987.352	-65.02	-57.0	8.02	146.00	Vertical	Horizontal	Pass
1866.049	-60.26	-47.0	13.26	272.00	Vertical	Horizontal	Pass
2786.082	-62.22	-47.0	15.22	137.00	Vertical	Horizontal	Pass
6897.561	-57.33	-47.0	10.33	272.00	Vertical	Horizontal	Pass
8835.714	-54.06	-47.0	7.06	343.00	Vertical	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
44.207	-81.43	-57.0	24.43	8.00	Horizontal	Horizontal	Pass
984.805	-62.34	-57.0	5.34	48.00	Horizontal	Horizontal	Pass
1873.947	-60.97	-47.0	13.97	163.00	Horizontal	Horizontal	Pass
2782.511	-52.57	-47.0	5.57	167.00	Horizontal	Horizontal	Pass
6898.866	-55.85	-47.0	8.85	318.00	Horizontal	Horizontal	Pass
8842.315	-54.83	-47.0	7.83	206.00	Horizontal	Horizontal	Pass

GFSK (BLE 1Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
47.098	-61.61	-57.0	4.61	168.00	Vertical	Horizontal	Pass
991.031	-66.32	-57.0	9.32	128.00	Vertical	Horizontal	Pass
1870.759	-61.32	-47.0	14.32	224.00	Vertical	Horizontal	Pass
2784.146	-59.24	-47.0	12.24	134.00	Vertical	Horizontal	Pass
6895.362	-59.12	-47.0	12.12	34.00	Vertical	Horizontal	Pass
8840.682	-54.40	-47.0	7.40	210.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.205	-80.57	-57.0	23.57	192.00	Horizontal	Horizontal	Pass
981.420	-65.55	-57.0	8.55	279.00	Horizontal	Horizontal	Pass
1875.831	-64.45	-47.0	17.45	219.00	Horizontal	Horizontal	Pass
2783.997	-52.81	-47.0	5.81	258.00	Horizontal	Horizontal	Pass
6898.318	-54.88	-47.0	7.88	247.00	Horizontal	Horizontal	Pass
8840.511	-54.42	-47.0	7.42	6.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, Low Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
44.546	-65.96	-57.0	8.96	151.00	Vertical	Horizontal	Pass
991.973	-70.34	-57.0	13.34	154.00	Vertical	Horizontal	Pass
1869.754	-62.62	-47.0	15.62	43.00	Vertical	Horizontal	Pass
2783.547	-62.66	-47.0	15.66	248.00	Vertical	Horizontal	Pass
6893.487	-59.90	-47.0	12.90	49.00	Vertical	Horizontal	Pass
8839.883	-58.76	-47.0	11.76	93.00	Vertical	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT H

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.409	-82.67	-57.0	25.67	67.00	Horizontal	Horizontal	Pass
985.080	-67.35	-57.0	10.35	216.00	Horizontal	Horizontal	Pass
1877.436	-60.36	-47.0	13.36	69.00	Horizontal	Horizontal	Pass
2786.664	-54.40	-47.0	7.40	223.00	Horizontal	Horizontal	Pass
6898.326	-55.82	-47.0	8.82	28.00	Horizontal	Horizontal	Pass
8839.056	-58.12	-47.0	11.12	230.00	Horizontal	Horizontal	Pass

GFSK (BLE 2Mbps) 30 MHz to 12.75 GHz, High Channel, ANT V

Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)	Table (o)	ANT	EUT	Verdict
43.765	-63.08	-57.0	6.08	328.00	Vertical	Horizontal	Pass
991.298	-70.47	-57.0	13.47	332.00	Vertical	Horizontal	Pass
1870.547	-57.43	-47.0	10.43	0.00	Vertical	Horizontal	Pass
2784.002	-61.89	-47.0	14.89	43.00	Vertical	Horizontal	Pass
6895.538	-60.14	-47.0	13.14	234.00	Vertical	Horizontal	Pass
8836.693	-57.65	-47.0	10.65	255.00	Vertical	Horizontal	Pass

A.12 Receiver Blocking

Left Ear

For Bluetooth (For Classic)

Note 1: Blocking signal levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels corrected by the actual antenna assembly gain.

Note 2: During the Blocking test, the number of packets sent by the system is 1000.

Test Data:

Receiver Category 2 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal Frequency (MHz)	Blocking signal power (dBm) (see note 1)	PER Result	Limit	Verdict
			Hopping Channel		
-139 dBm + 10 × log ₁₀ (OCBW) + 10 dB	2 380	-34	0.00%	≤10%	Pass
	2 504	-34	0.00%		
	2 300	-34	0.00%		
	2 584	-34	0.00%		

For Bluetooth Low Energy

Note 1: The combination of the smallest channel bandwidth and the lowest data rate was reported.

Note 2: Blocking signal levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels corrected by the actual antenna assembly gain.

Note 3: During the Blocking test, the number of packets sent by the system is 1500.

Test Data

Receiver Category 2 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal Frequency (MHz)	Blocking signal power (dBm) (see note 2)	PER Result		Limit	Verdict
			Low Channel	High Channel		
(-139 dBm + 10 × log ₁₀ (OCBW) + 10 dB) or (-74 dBm + 10 dB) whichever is less	2 380	-34	0.00%	0.00%	≤10%	Pass
	2 504	-34	0.20%	0.00%		
	2 300	-34	0.00%	0.10%		
	2 584	-34	0.00%	0.00%		

Right EarFor Bluetooth (For Classic)

Note 1: Blocking signal levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels corrected by the actual antenna assembly gain.

Note 2: During the Blocking test, the number of packets sent by the system is 1000.

Test Data:Receiver Category 2 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal Frequency (MHz)	Blocking signal power (dBm) (see note 1)	PER Result	Limit	Verdict
			Hopping Channel		
-139 dBm + 10 × log ₁₀ (OCBW) + 10 dB	2 380	-34	0.00%	≤10%	Pass
	2 504	-34	0.00%		
	2 300	-34	0.00%		
	2 584	-34	0.00%		

For Bluetooth Low Energy

Note 1: The combination of the smallest channel bandwidth and the lowest data rate was reported.

Note 2: Blocking signal levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels corrected by the actual antenna assembly gain.

Note 3: During the Blocking test, the number of packets sent by the system is 1500.

Test DataReceiver Category 2 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal Frequency (MHz)	Blocking signal power (dBm) (see note 2)	PER Result		Limit	Verdict
			Low Channel	High Channel		
(-139 dBm + 10 × log ₁₀ (OCBW) + 10 dB) or (-74 dBm + 10 dB) whichever is less	2 380	-34	0.00%	0.00%	≤10%	Pass
	2 504	-34	0.00%	0.00%		
	2 300	-34	0.30%	0.00%		
	2 584	-34	0.00%	0.10%		

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ25C0717-AR.pdf”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ25C0717-AW.pdf”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ25C0717-AI.pdf”.

ANNEX E EUT DECLARATION TECHNOLOGY TYPE

Application form for testing please refer to the document “BL-SZ25C0717-AM.pdf”.

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--END OF REPORT--