TEST REPORT

Application No.:	GZCR2203000262AT
Applicant:	SKULLCANDY, INC.
Address of Applicant:	6301 N Landmark Dr Park City UT 84098, Utah United States of America
Manufacturer:	SKULLCANDY, INC.
Address of Manufacturer:	6301 N Landmark Dr Park City UT 84098, Utah United States of America
Equipment Under Test (EUT):	
EUT Name:	Jib True/Jib True 2/Jib True XT 2
Model No.:	S1JTW
Trade Mark:	Skullcandy
Standard(s) :	47 CFR Part 15, Subpart C 15.247
Date of Receipt:	2022-02-28
Date of Test:	2022-03-01 to 2022-03-17
Date of Issue:	2022-03-18
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Kobe Jian
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		*2022-03-18*		*Original*

Authorized for issue by				
Tested By		 **Curry Wu/Project Engineer**		
Reviewed By		 **Ricky Liu/Reviewer**		

2 Test Summary

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.9.1.3	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density		ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Spurious Emissions		ANSI C63.10 (2013) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Spurious Emissions (Below 1GHz)		ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions (Above 1GHz)		ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

Remark:

Model No.: S1JTW

This test report (Ref. No.: GZCR220300026202) is only valid with the original test report (Ref. No.: SZEM210200210803).

According to the declaration from the applicant, the models in this report and models in original report were identical, only difference on Changing the digital circuit PCB Layout and components the product, Detailed change information is as follows:

1. Delete the R12, R6 and R1 of previous version
a. These components don't affect the entire board's electric parameter
2. Modify the match circuit's parameter
a. previous version: R1_0R; R2_0R; C2_NC; C3_0.5pF
b. current version: Left: Delete R1; R2_1nH; C2_1.2pF; C3_NC Right: Delete R1; R2_1Nh; C2_1pF; C3_NC
3. Change the protection IC and microphone
a. previous version: protection IC---XB6052I2; Microphone---GES2718AB-381A
b. current version: protection IC---WSDF13D2N2H; Microphone---SM2718B381QN3-01

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report Maximum Conducted Output Power, Conducted Spurious Emissions, Radiated Emissions below 1GHz, Radiated Emissions Above 1GHz were fully retested on model S1JTW and shown the data in this report, other test data please refer to the original report SZEM210200210803.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	Left earbuds: Li-Ion Polymer Battery 3.7V 55mAh (Charge by travel case) Right earbuds: Li-Ion Polymer Battery 3.7V 55mAh (Charge by travel case) travel case with backup battery: Li-Ion Polymer Battery 3.7V 500mAh (Charged by micro-usb port)
Cable(s):	Mirco-USB cable: 13cm unshielded
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.0 Dual mode
Modulation Type:	GFSK
Date Rate:	1Mbps
Number of Channels:	40
Channel Spacing:	2MHz
Antenna Type:	FPC Antenna
Antenna Gain:	Left: 1.22dBi; Right: -0.15dBi

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Peak Output Power	± 0.75dB
Power Spectrum Density	± 2.84dB
Conducted Spurious Emissions	± 0.75dB
Radiated Spurious Emissions (Below 1GHz)	±5.00dB (30MHz-1GHz; 3m);±4.38dB (30MHz-1GHz; 10m)
Radiated Spurious Emissions (Above 1GHz)	± 4.52dB (1GHz-6GHz);± 4.54dB (above 6GHz)
Remark: The U_{lab} (lab Uncertainty) is less than U_{cispr} (CISPR Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.	

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.5 Test Facility

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

- **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch Testing Center, EEC Laboratory.
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

5 Equipment List

Conducted Peak Output Power					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2021-05-19	2022-05-18
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Power Spectrum Density					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EXA Signal Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Conducted Spurious Emissions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EXA Signal Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Radiated Spurious Emissions (Below 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver(10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16
Chamber cable	HangTianXing	N/A	EMC0542	2020-09-09	2022-09-08
Trilog Broadband Antenna(25MHz-1GHz)-Lab	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	SEM003-18	2019-02-22	2022-02-22
Amplifier(9kHz-1.3GHz)	HP	8447F	EMC2065	2021-05-19	2022-05-18
High Pass Filter (915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2021-12-17	2022-12-16
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
EMI Test Receiver(1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2220	2021-05-26	2022-05-25

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch Testing Center. EEC Laboratory.
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

Radiated Spurious Emissions (Above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver(20Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16
Chamber cable(Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2020-09-09	2022-09-08
Horn Antenna(1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2021-12-17	2022-12-16
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2021-12-17	2022-12-16
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
MXE EMI Receiver(10Hz-8.4GHz)	Keysight	N9038A	EMC2139	2021-11-01	2022-10-31
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2021-09-16	2022-09-15
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2021-07-29	2022-07-28
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2021-08-30	2022-08-29

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DMM	Fluke	73	EMC0006	2021-07-05	2022-07-05
DMM	Fluke	73	EMC0007	2021-07-05	2022-07-05

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch Testing Center, EEC Laboratory
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

6 Radio Spectrum Matter Test Results

6.1 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)

Test Method: ANSI C63.10 (2013) Section 11.9.1.3

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥50 hopping channels
	0.25 for 25≤ hopping channels <50
	1 for digital modulation
2400-2483.5	1 for ≥75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

6.1.1 E.U.T. Operation

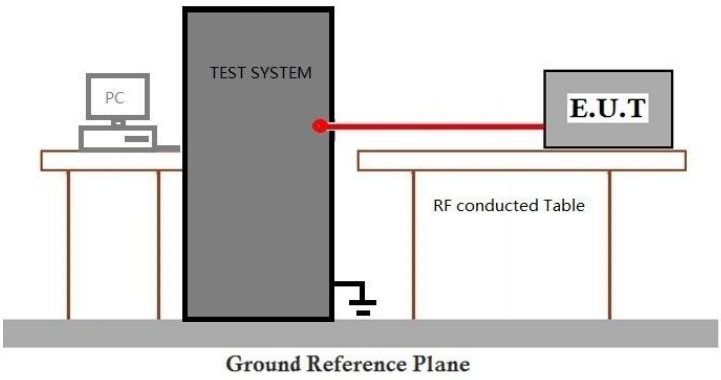
Operating Environment:

Temperature: 21.5 °C Humidity: 52.7 % RH Atmospheric Pressure: 1020 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode(Left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	03	TX mode(Right earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

cable loss=0.9dB

Please Refer to Appendix for Details

6.2 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)

Test Method: ANSI C63.10 (2013) Section 11.10.2

Limit:

≤8dBm in any 3 kHz band during any time interval of continuous transmission

6.2.1 E.U.T. Operation

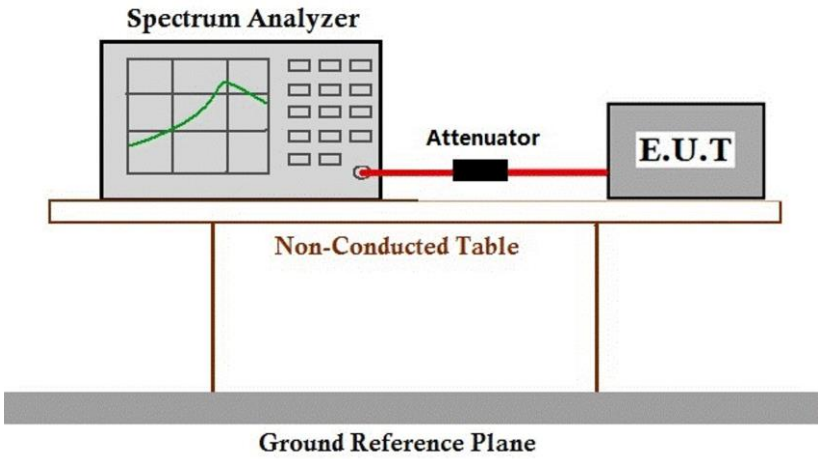
Operating Environment:

Temperature: 21.5 °C Humidity: 52.7 % RH Atmospheric Pressure: 1020 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode(Left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	03	TX mode(Right earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

cable loss=0.9dB

Please Refer to Appendix for Details

6.3 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 11.11

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

6.3.1 E.U.T. Operation

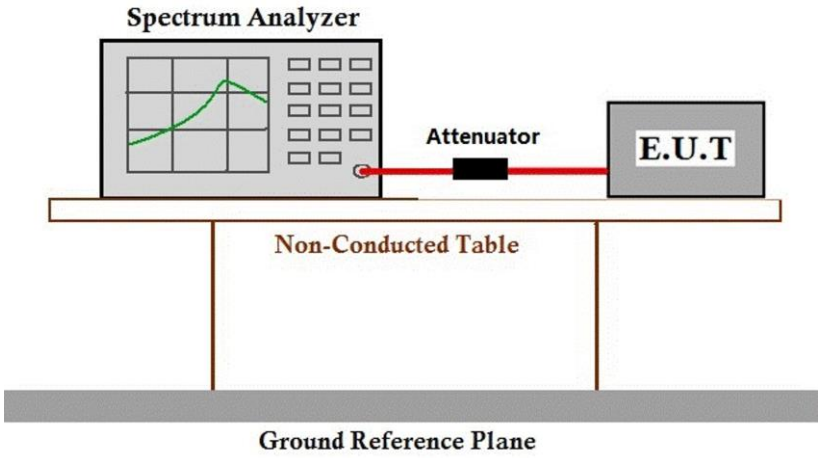
Operating Environment:

Temperature: 21.5 °C Humidity: 52.7 % RH Atmospheric Pressure: 1020 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode(Left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	03	TX mode(Right earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

cable loss=0.9dB

Please Refer to Appendix for Details

6.4 Radiated Spurious Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6
Measurement Distance: 10m
Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

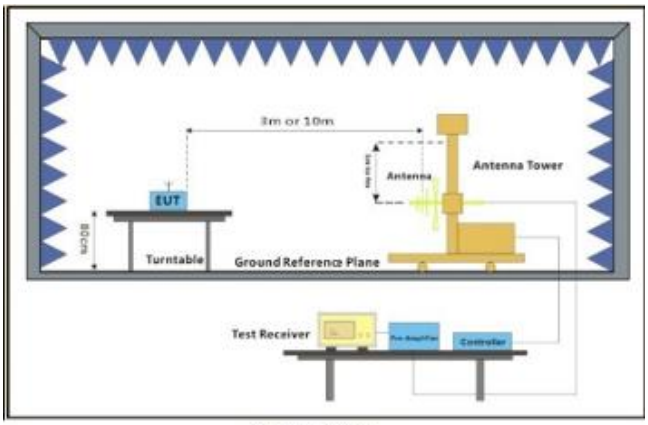
6.4.1 E.U.T. Operation

Operating Environment:
Temperature: 22.6 °C Humidity: 50.1 % RH Atmospheric Pressure: 1020 mbar

6.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode(Left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	03	TX mode(Right earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.4.3 Test Setup Diagram



30MHz-1GHz

6.4.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

g. Test the EUT in the lowest channel, the middle channel, the Highest channel.

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

i. Repeat above procedures until all frequencies measured was complete.

Remark:

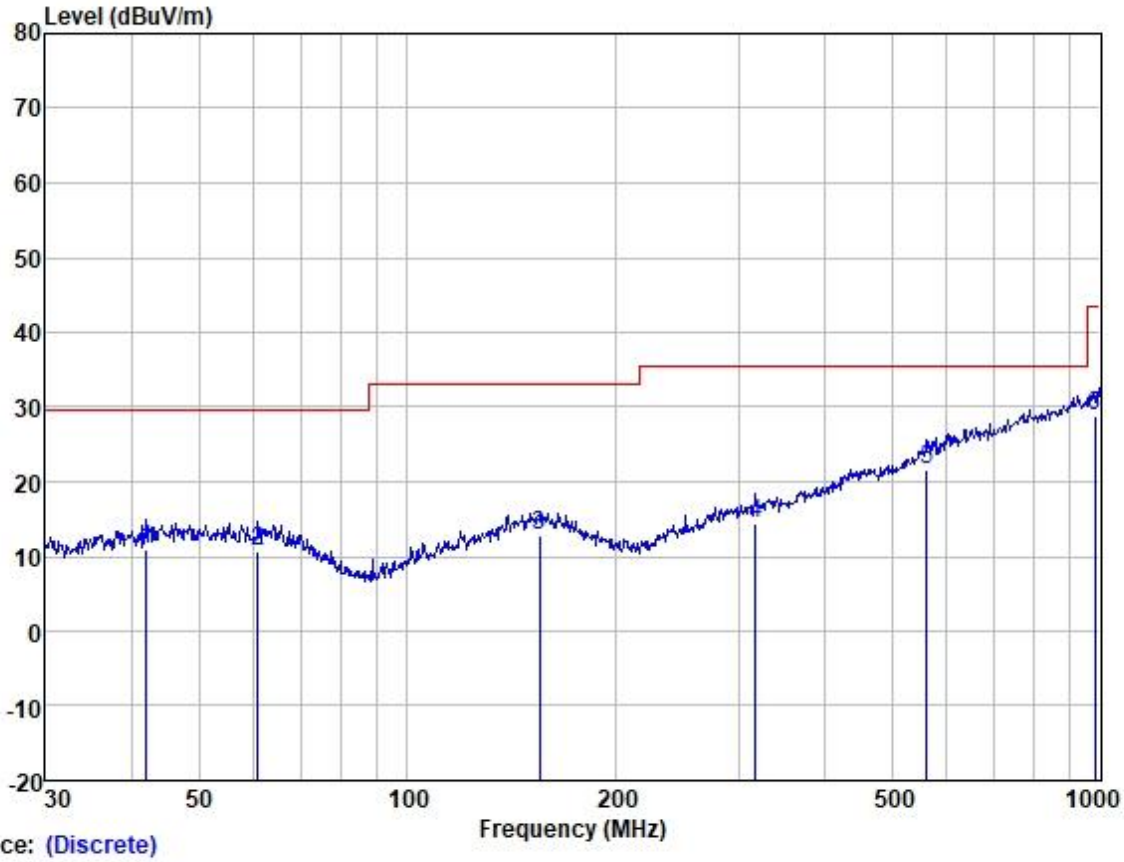
1) Through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

3) Scan from 9kHz to 1 GHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

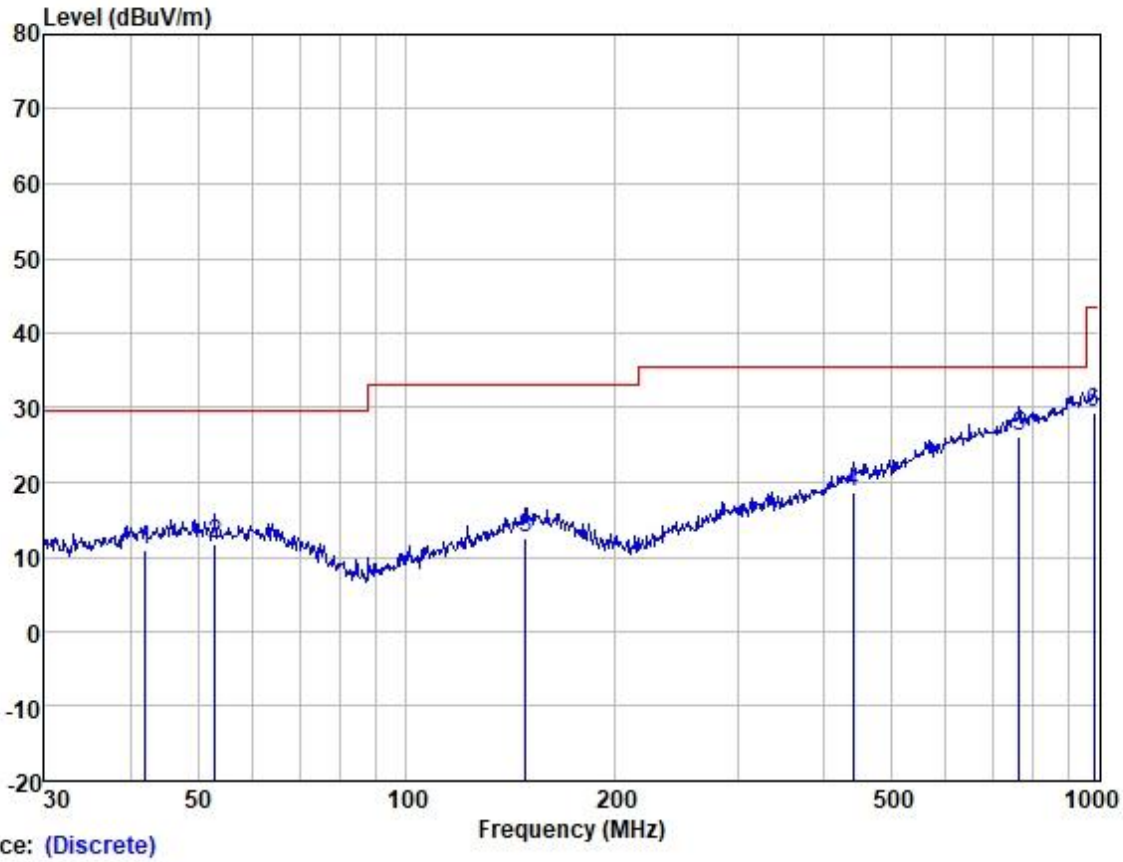
Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; ; Channel:Low



Trace: (Discrete)
Site : SGS
Condition:
Job :
Model :
Power :
Test Mode: L

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	42.007	23.55	13.50	1.11	27.17	10.99	29.50	-18.51	HORIZONTAL	QP
2	60.704	23.48	13.10	1.27	27.16	10.69	29.50	-18.81	HORIZONTAL	QP
3	154.821	23.95	13.45	2.28	26.81	12.87	33.10	-20.23	HORIZONTAL	QP
4	317.701	23.79	13.91	3.29	26.65	14.34	35.60	-21.26	HORIZONTAL	QP
5	560.693	26.38	18.50	4.88	28.14	21.62	35.60	-13.98	HORIZONTAL	QP
6	982.620	25.34	23.82	7.31	27.68	28.79	43.50	-14.71	HORIZONTAL	QP

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; ; Channel:Low



Trace: (Discrete)
Site : SGS
Condition:
Job :
Model :
Power :
Test Mode: L

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	42.007	23.57	13.50	1.11	27.17	11.01	29.50	-18.49	VERTICAL	QP
2	52.945	23.92	13.70	1.17	27.17	11.62	29.50	-17.88	VERTICAL	QP
3	148.441	23.84	13.45	2.22	26.84	12.67	33.10	-20.43	VERTICAL	QP
4	441.743	25.20	16.85	4.16	27.59	18.62	35.60	-16.98	VERTICAL	QP
5	766.057	25.99	22.12	6.05	28.06	26.10	35.60	-9.50	VERTICAL	QP
6	982.620	25.81	23.82	7.31	27.68	29.26	43.50	-14.24	VERTICAL	QP

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
42.007	11.01	3.55	11.84	21.47	40.00	-18.53	V
52.945	11.62	3.81	12.70	22.08	40.00	-17.92	V
148.441	12.67	4.30	14.33	23.13	43.50	-20.37	V
441.743	18.62	8.53	28.44	29.08	46.00	-16.92	V
766.057	26.10	20.18	67.28	36.56	46.00	-9.44	V
982.620	29.26	29.04	96.80	39.72	54.00	-14.28	V
42.007	10.99	3.54	11.81	21.45	40.00	-18.55	H
60.704	10.69	3.42	11.41	21.15	40.00	-18.85	H
154.821	12.87	4.40	14.67	23.33	43.50	-20.17	H
317.701	14.34	5.21	17.37	24.80	46.00	-21.20	H
560.693	21.62	12.05	40.17	32.08	46.00	-13.92	H
982.620	28.79	27.51	91.70	39.25	54.00	-14.75	H

The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

$L_3 / L_{10} = D_{10} / D_3$

Note:

L_3: Level @ 3m distance. Unit: uV/m;

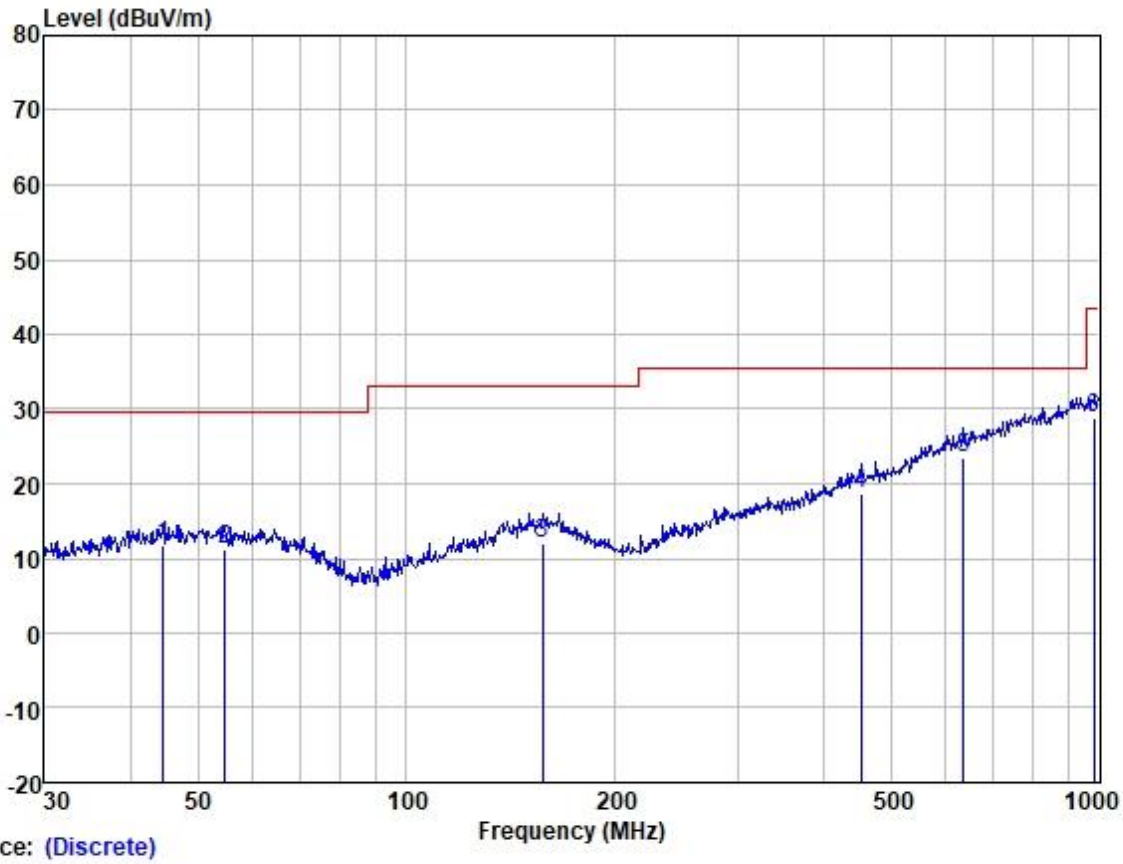
L_{10}: Level @ 10m distance. Unit: uV/m;

D_3: 3m distance. Unit: m

D_{10}: 10m distance. Unit: m

The level at 3m test distance is below:

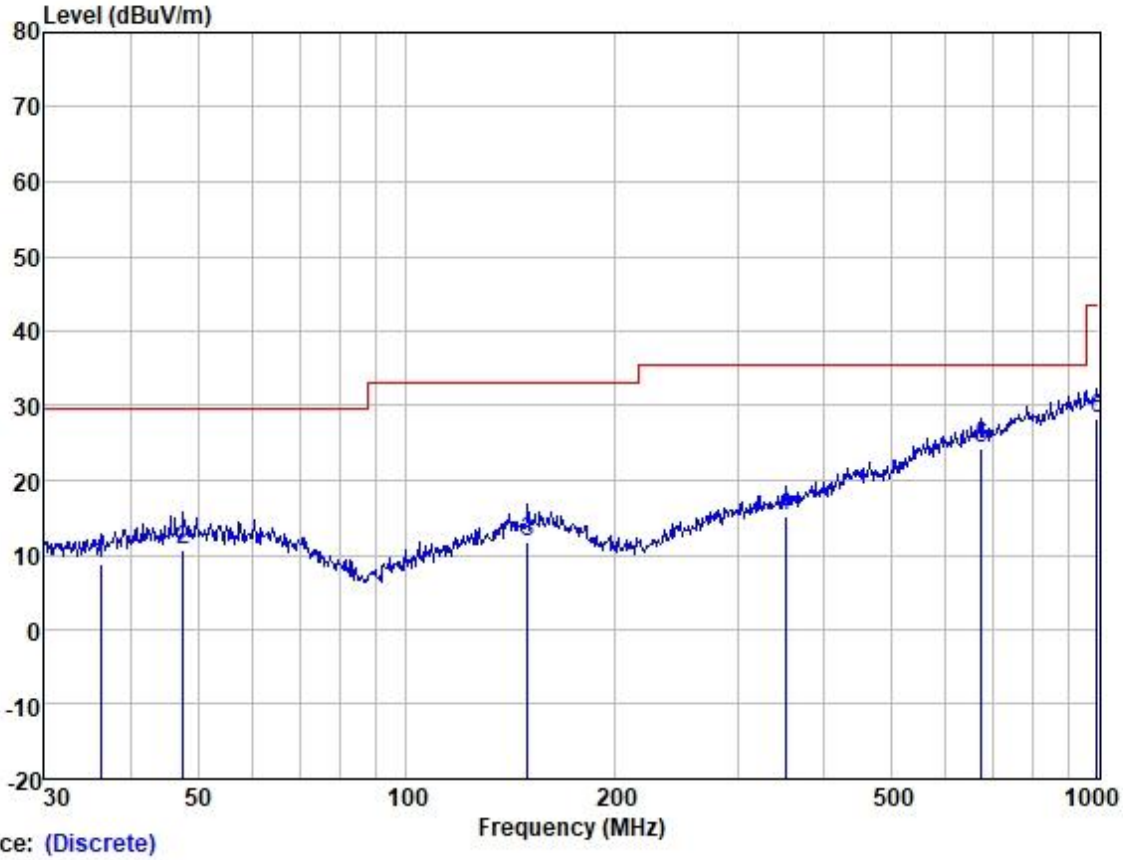
Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; ; Channel:Low



Trace: (Discrete)
Site : SGS
Condition:
Job :
Model :
Power :
Test Mode: R

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	44.587	24.09	13.63	1.12	27.17	11.67	29.50	-17.83	HORIZONTAL	QP
2	54.643	23.68	13.62	1.19	27.16	11.33	29.50	-18.17	HORIZONTAL	QP
3	157.007	23.20	13.42	2.31	26.81	12.12	33.10	-20.98	HORIZONTAL	QP
4	452.720	25.20	17.10	4.22	27.72	18.80	35.60	-16.80	HORIZONTAL	QP
5	636.134	26.24	20.00	5.39	28.19	23.44	35.60	-12.16	HORIZONTAL	QP
6	982.620	25.30	23.82	7.31	27.68	28.75	43.50	-14.75	HORIZONTAL	QP

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; ; Channel:Low



Trace: (Discrete)
Site : SGS
Condition:
Job :
Model :
Power :
Test Mode: R

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	36.127	22.27	12.51	1.07	27.18	8.67	29.50	-20.83	VERTICAL	QP
2	47.659	23.08	13.70	1.13	27.17	10.74	29.50	-18.76	VERTICAL	QP
3	149.486	22.99	13.49	2.22	26.84	11.86	33.10	-21.24	VERTICAL	QP
4	351.708	24.34	14.23	3.63	27.02	15.18	35.60	-20.42	VERTICAL	QP
5	675.208	26.41	20.45	5.65	28.17	24.34	35.60	-11.26	VERTICAL	QP
6	993.011	24.61	23.87	7.37	27.67	28.18	43.50	-15.32	VERTICAL	QP

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
36.127	8.67	2.71	9.04	19.13	40.00	-20.87	V
47.659	10.74	3.44	11.48	21.20	40.00	-18.80	V
149.486	11.86	3.92	13.06	22.32	43.50	-21.18	V
351.708	15.18	5.74	19.14	25.64	46.00	-20.36	V
675.208	24.34	16.48	54.94	34.80	46.00	-11.20	V
993.011	28.18	25.64	85.48	38.64	54.00	-15.36	V
44.587	11.67	3.83	12.78	22.13	40.00	-17.87	H
54.643	11.33	3.69	12.29	21.79	40.00	-18.21	H
157.007	12.12	4.04	13.45	22.58	43.50	-20.92	H
452.720	18.80	8.71	29.03	29.26	46.00	-16.74	H
636.134	23.44	14.86	49.53	33.90	46.00	-12.10	H
982.620	28.75	27.38	91.28	39.21	54.00	-14.79	H

The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

$L_3 / L_{10} = D_{10} / D_3$

Note:

L_3: Level @ 3m distance. Unit: uV/m;

L_{10}: Level @ 10m distance. Unit: uV/m;

D_3: 3m distance. Unit: m

D_{10}: 10m distance. Unit: m

The level at 3m test distance is below:

6.5 Radiated Spurious Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6
Measurement Distance: 3m
Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

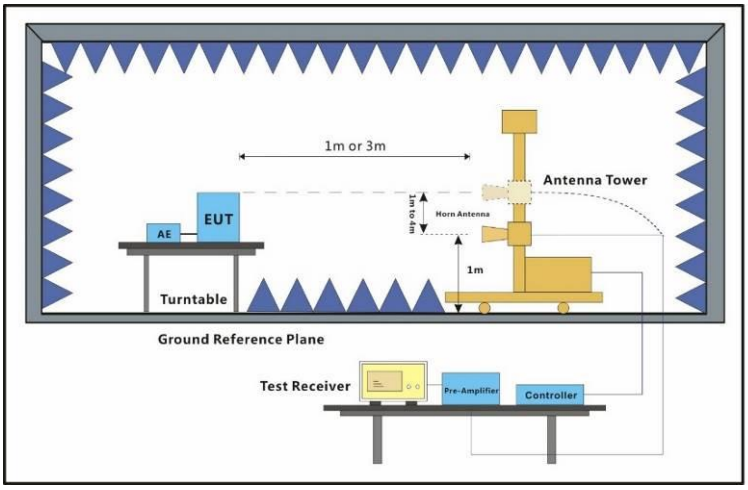
6.5.1 E.U.T. Operation

Operating Environment:
Temperature: 20.8 °C Humidity: 52.9 % RH Atmospheric Pressure: 1003 mbar

6.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode(Left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	03	TX mode(Right earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.5.3 Test Setup Diagram



6.5.4 Measurement Procedure and Data

a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

g. Test the EUT in the lowest channel, the middle channel, the Highest channel.

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

i. Repeat above procedures until all frequencies measured was complete.

Remark:

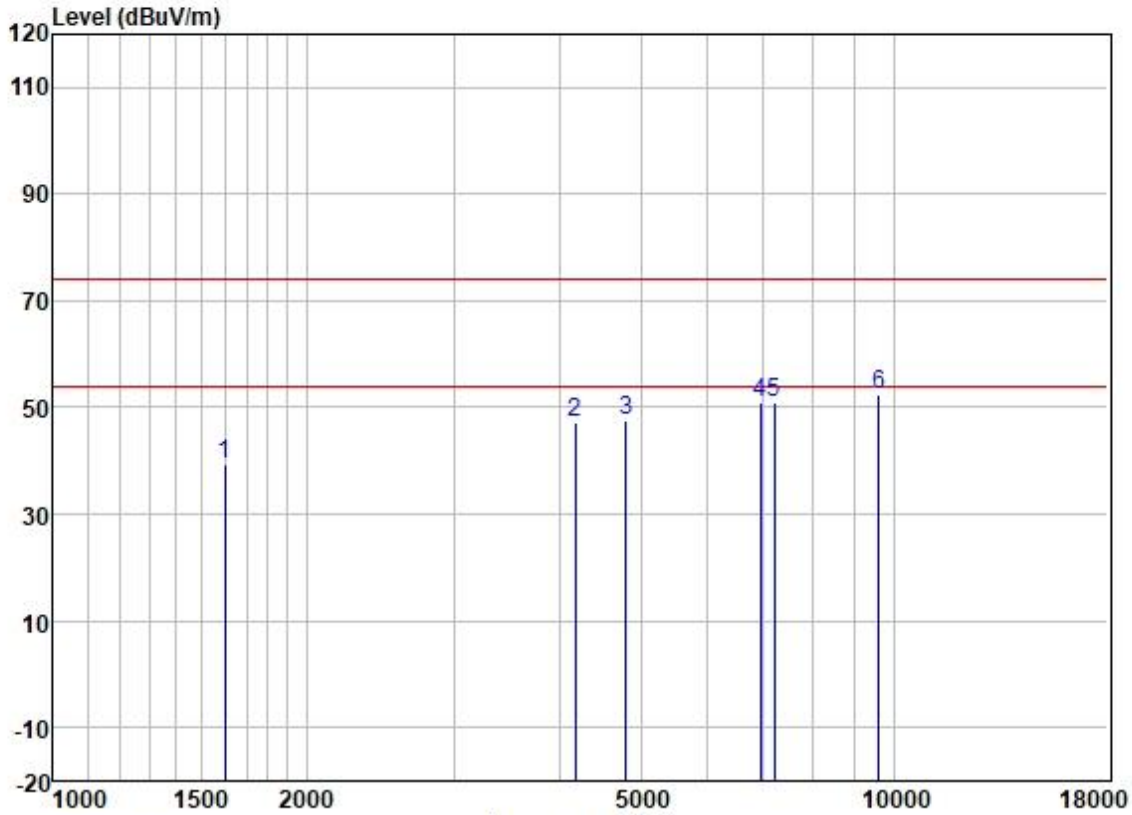
1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

2) Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3) The field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

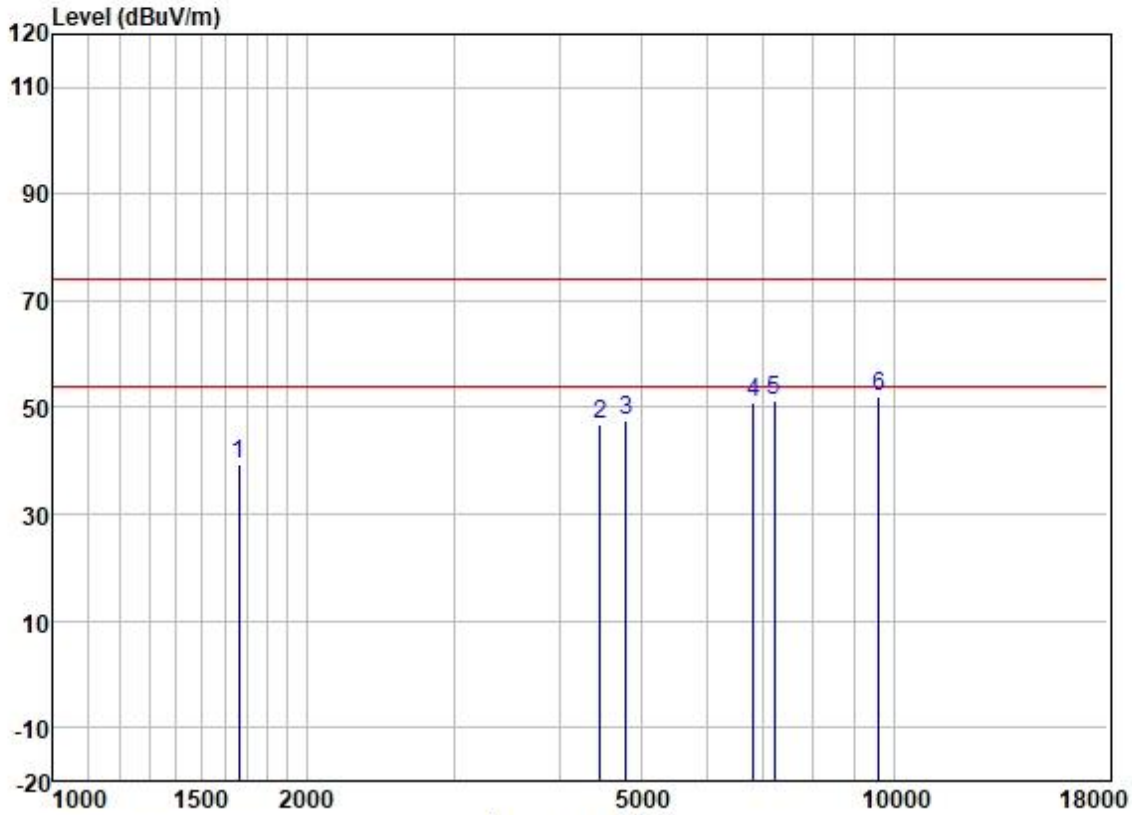
Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; ; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1601.804	49.05	25.58	2.80	37.98	39.45	74.00	-34.55	HORIZONTAL	Peak
2	4181.768	49.16	30.12	4.60	36.80	47.08	74.00	-26.92	HORIZONTAL	Peak
3	4804.000	47.58	31.42	5.40	36.83	47.57	74.00	-26.43	HORIZONTAL	Peak
4	6934.778	47.31	34.92	5.81	37.19	50.85	74.00	-23.15	HORIZONTAL	Peak
5	7206.000	46.62	35.54	5.98	37.38	50.76	74.00	-23.24	HORIZONTAL	Peak
6	9608.000	44.33	38.37	7.07	37.42	52.35	74.00	-21.65	HORIZONTAL	Peak

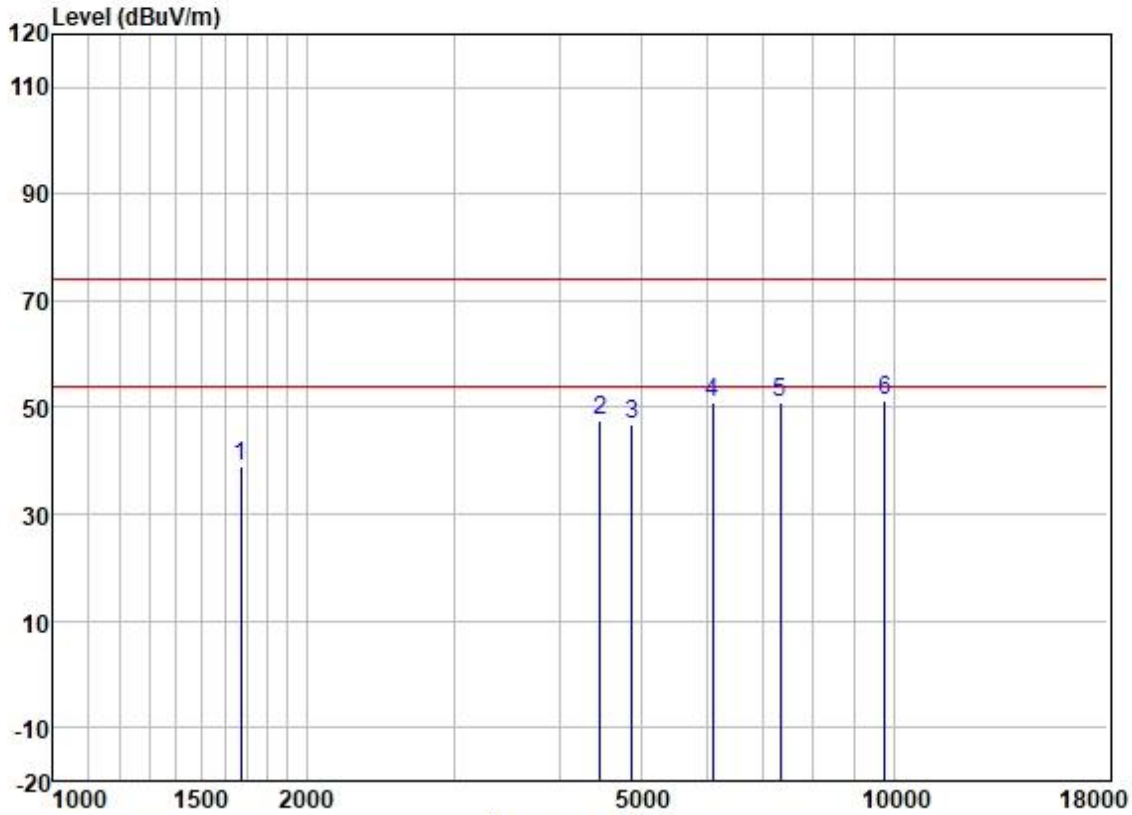
Test Mode: 02; Polarity: Vertical; Modulation:GFSK; ; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1663.137	48.75	25.65	2.80	37.91	39.29	74.00	-34.71	VERTICAL	Peak
2	4469.214	47.97	30.77	4.93	36.81	46.86	74.00	-27.14	VERTICAL	Peak
3	4804.000	47.71	31.42	5.40	36.83	47.70	74.00	-26.30	VERTICAL	Peak
4	6815.551	47.57	34.70	5.82	37.13	50.96	74.00	-23.04	VERTICAL	Peak
5	7206.000	47.10	35.54	5.98	37.38	51.24	74.00	-22.76	VERTICAL	Peak
6	9608.000	43.91	38.37	7.07	37.42	51.93	74.00	-22.07	VERTICAL	Peak

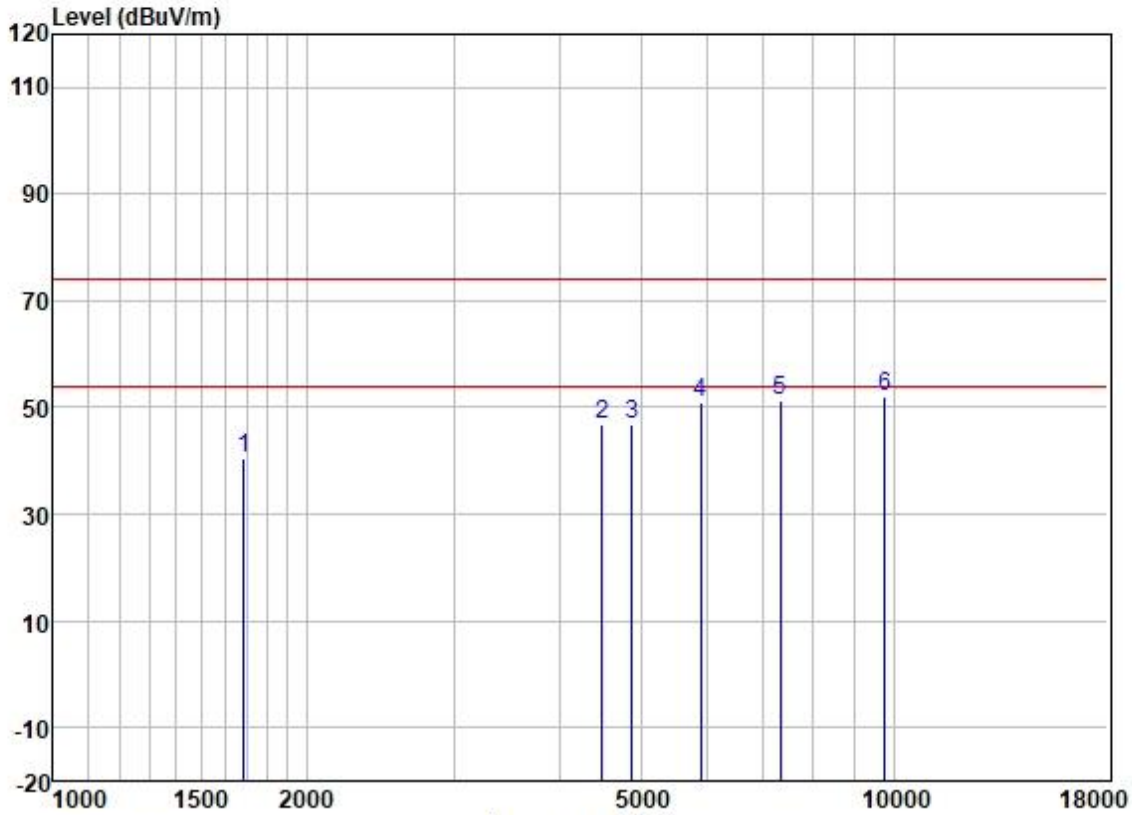
Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; ; Channel:middle



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1672.779	48.46	25.67	2.80	37.91	39.02	74.00	-34.98	HORIZONTAL	Peak
2	4469.214	48.71	30.77	4.93	36.81	47.60	74.00	-26.40	HORIZONTAL	Peak
3	4880.000	46.75	31.54	5.50	36.84	46.95	74.00	-27.05	HORIZONTAL	Peak
4	6088.991	49.08	32.61	6.15	36.92	50.92	74.00	-23.08	HORIZONTAL	Peak
5	7320.000	46.24	36.00	6.13	37.43	50.94	74.00	-23.06	HORIZONTAL	Peak
6	9760.000	43.33	38.50	7.02	37.41	51.44	74.00	-22.56	HORIZONTAL	Peak

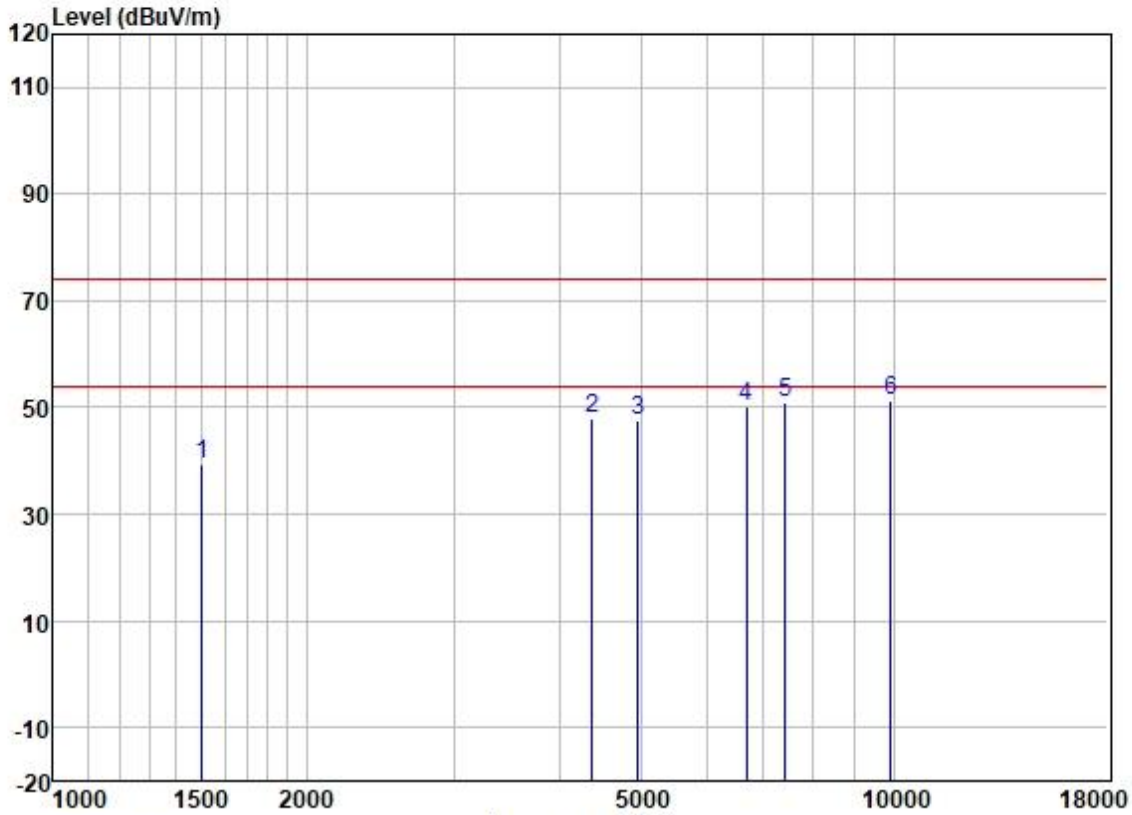
Test Mode: 02; Polarity: Vertical; Modulation:GFSK; ; Channel:middle



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1687.347	50.08	25.69	2.80	37.91	40.66	74.00	-33.34	VERTICAL	Peak
2	4495.125	47.69	30.80	5.05	36.82	46.72	74.00	-27.28	VERTICAL	Peak
3	4880.000	46.69	31.54	5.50	36.84	46.89	74.00	-27.11	VERTICAL	Peak
4	5898.442	49.79	32.31	5.90	36.90	51.10	74.00	-22.90	VERTICAL	Peak
5	7320.000	46.69	36.00	6.13	37.43	51.39	74.00	-22.61	VERTICAL	Peak
6	9760.000	44.03	38.50	7.02	37.41	52.14	74.00	-21.86	VERTICAL	Peak

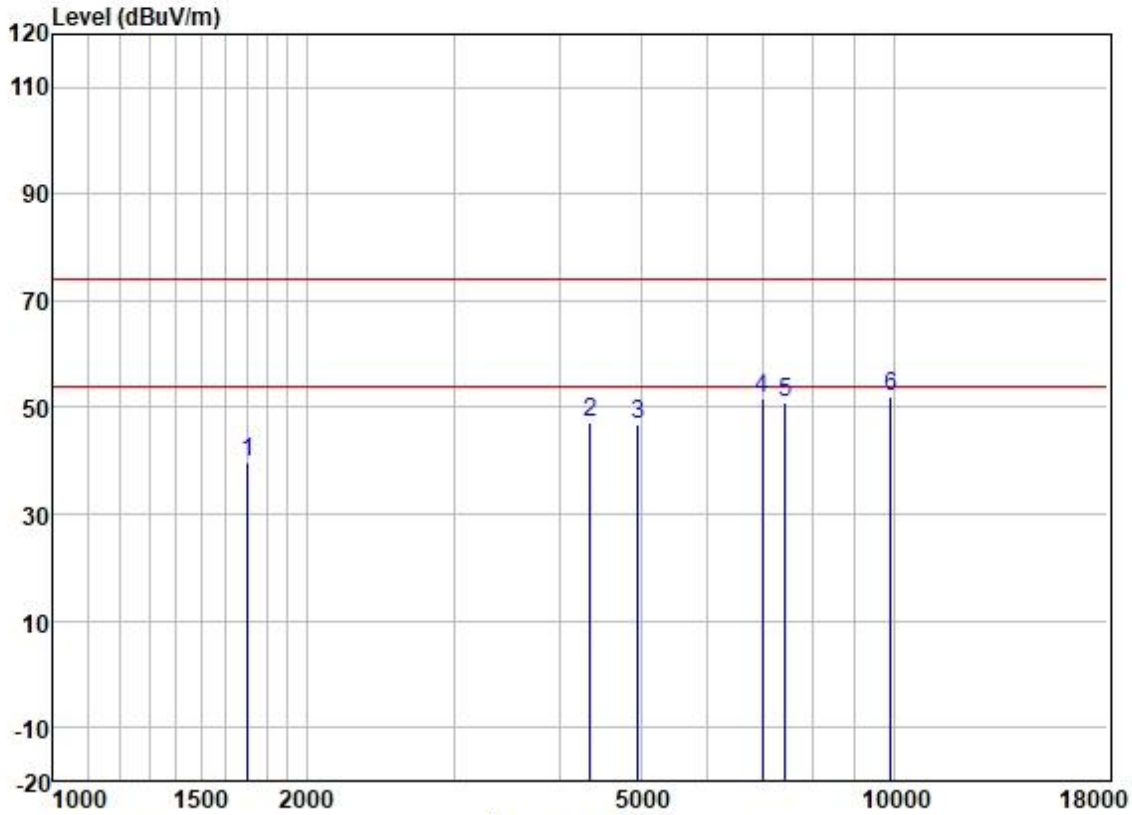
Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; ; Channel:High



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1503.119	48.98	25.50	2.80	38.10	39.18	74.00	-34.82	HORIZONTAL	Peak
2	4379.699	49.30	30.64	4.69	36.81	47.82	74.00	-26.18	HORIZONTAL	Peak
3	4960.000	47.17	31.65	5.65	36.84	47.63	74.00	-26.37	HORIZONTAL	Peak
4	6679.040	47.21	34.33	5.83	37.07	50.30	74.00	-23.70	HORIZONTAL	Peak
5	7440.000	45.86	36.27	6.22	37.47	50.88	74.00	-23.12	HORIZONTAL	Peak
6	9920.000	43.23	38.65	6.96	37.40	51.44	74.00	-22.56	HORIZONTAL	Peak

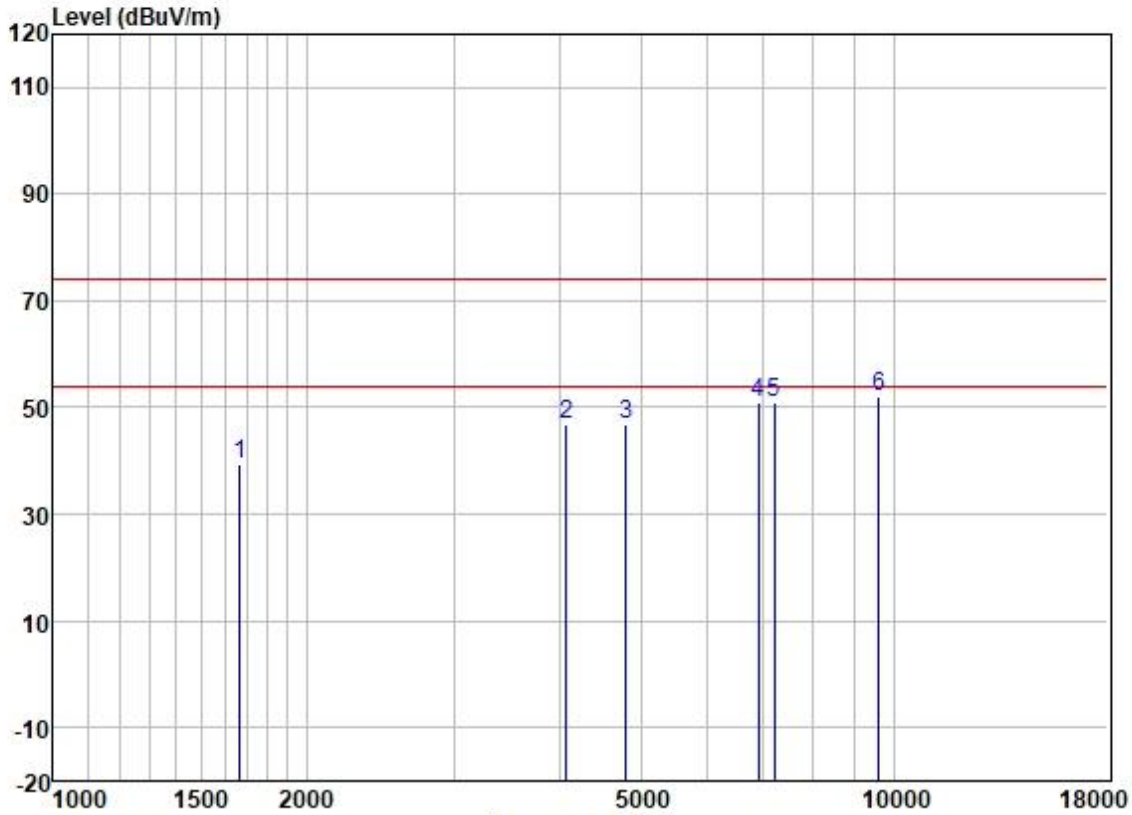
Test Mode: 02; Polarity: Vertical; Modulation:GFSK; ; Channel:High



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1702.042	49.01	25.72	2.80	37.89	39.64	74.00	-34.36	VERTICAL	Peak
2	4354.454	48.59	30.59	4.68	36.81	47.05	74.00	-26.95	VERTICAL	Peak
3	4960.000	46.35	31.65	5.65	36.84	46.81	74.00	-27.19	VERTICAL	Peak
4	6974.982	48.12	34.97	5.81	37.23	51.67	74.00	-22.33	VERTICAL	Peak
5	7440.000	46.06	36.27	6.22	37.47	51.08	74.00	-22.92	VERTICAL	Peak
6	9920.000	44.02	38.65	6.96	37.40	52.23	74.00	-21.77	VERTICAL	Peak

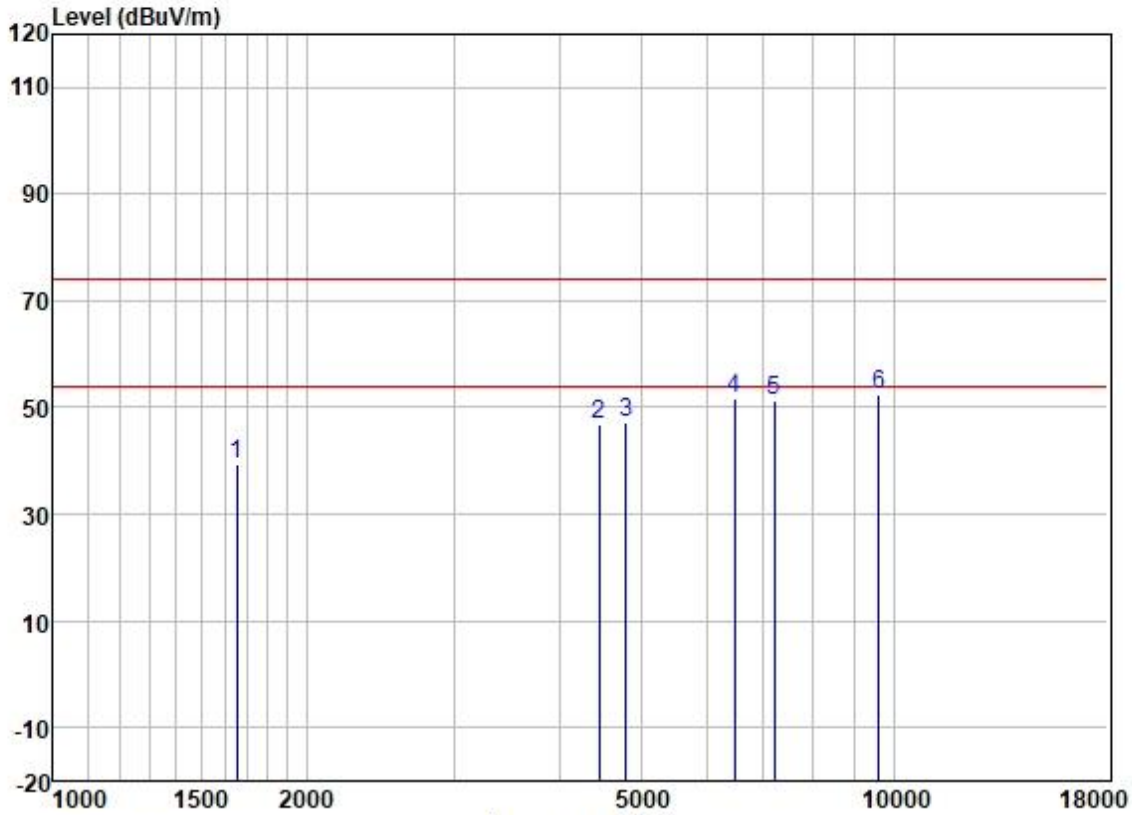
Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; ; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1667.951	48.87	25.66	2.80	37.91	39.42	74.00	-34.58	HORIZONTAL	Peak
2	4074.388	48.96	29.90	4.60	36.80	46.66	74.00	-27.34	HORIZONTAL	Peak
3	4804.000	46.97	31.42	5.40	36.83	46.96	74.00	-27.04	HORIZONTAL	Peak
4	6894.806	47.57	34.85	5.81	37.18	51.05	74.00	-22.95	HORIZONTAL	Peak
5	7206.000	46.91	35.54	5.98	37.38	51.05	74.00	-22.95	HORIZONTAL	Peak
6	9608.000	44.00	38.37	7.07	37.42	52.02	74.00	-21.98	HORIZONTAL	Peak

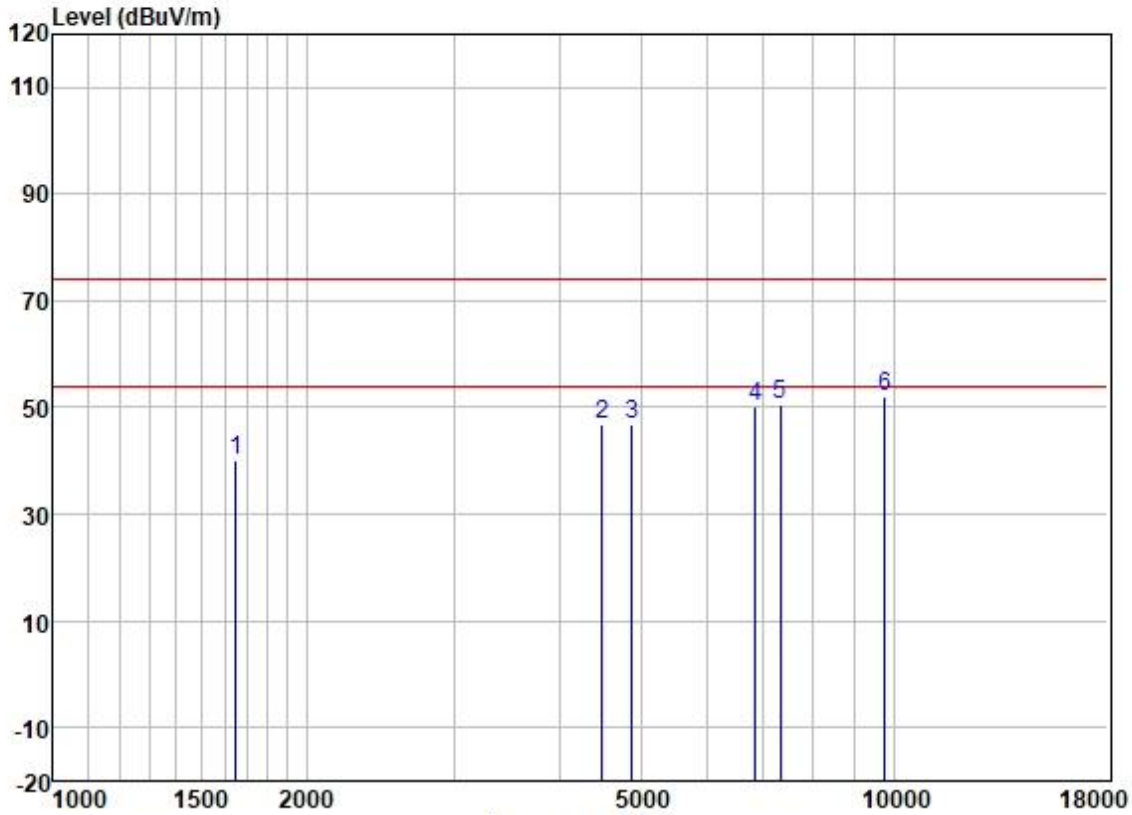
Test Mode: 03; Polarity: Vertical; Modulation:GFSK; ; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1653.550	48.85	25.64	2.80	37.93	39.36	74.00	-34.64	VERTICAL	Peak
2	4456.315	47.88	30.75	4.88	36.81	46.70	74.00	-27.30	VERTICAL	Peak
3	4804.000	47.14	31.42	5.40	36.83	47.13	74.00	-26.87	VERTICAL	Peak
4	6470.026	48.90	33.92	5.86	37.00	51.68	74.00	-22.32	VERTICAL	Peak
5	7206.000	47.13	35.54	5.98	37.38	51.27	74.00	-22.73	VERTICAL	Peak
6	9608.000	44.42	38.37	7.07	37.42	52.44	74.00	-21.56	VERTICAL	Peak

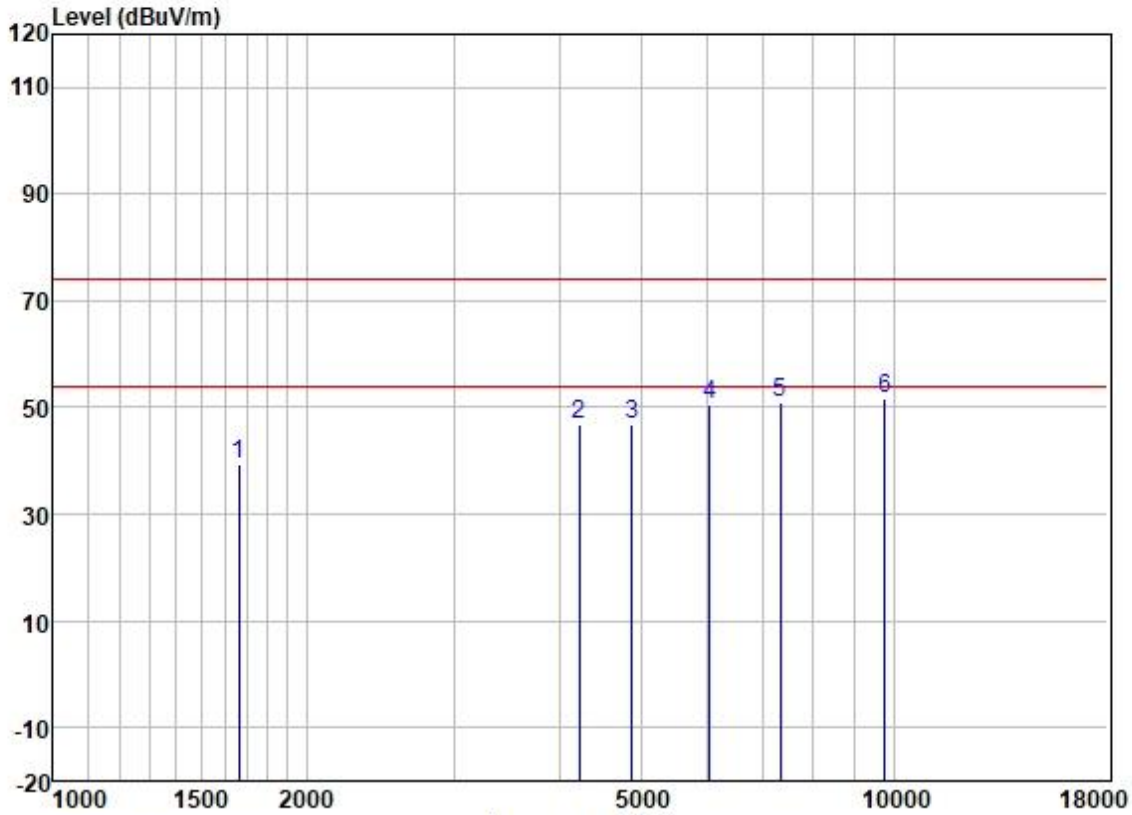
Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; ; Channel:middle



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1648.778	49.56	25.63	2.80	37.93	40.06	74.00	-33.94	HORIZONTAL	Peak
2	4495.125	47.88	30.80	5.05	36.82	46.91	74.00	-27.09	HORIZONTAL	Peak
3	4880.000	46.51	31.54	5.50	36.84	46.71	74.00	-27.29	HORIZONTAL	Peak
4	6855.063	46.65	34.78	5.82	37.15	50.10	74.00	-23.90	HORIZONTAL	Peak
5	7320.000	45.92	36.00	6.13	37.43	50.62	74.00	-23.38	HORIZONTAL	Peak
6	9760.000	44.02	38.50	7.02	37.41	52.13	74.00	-21.87	HORIZONTAL	Peak

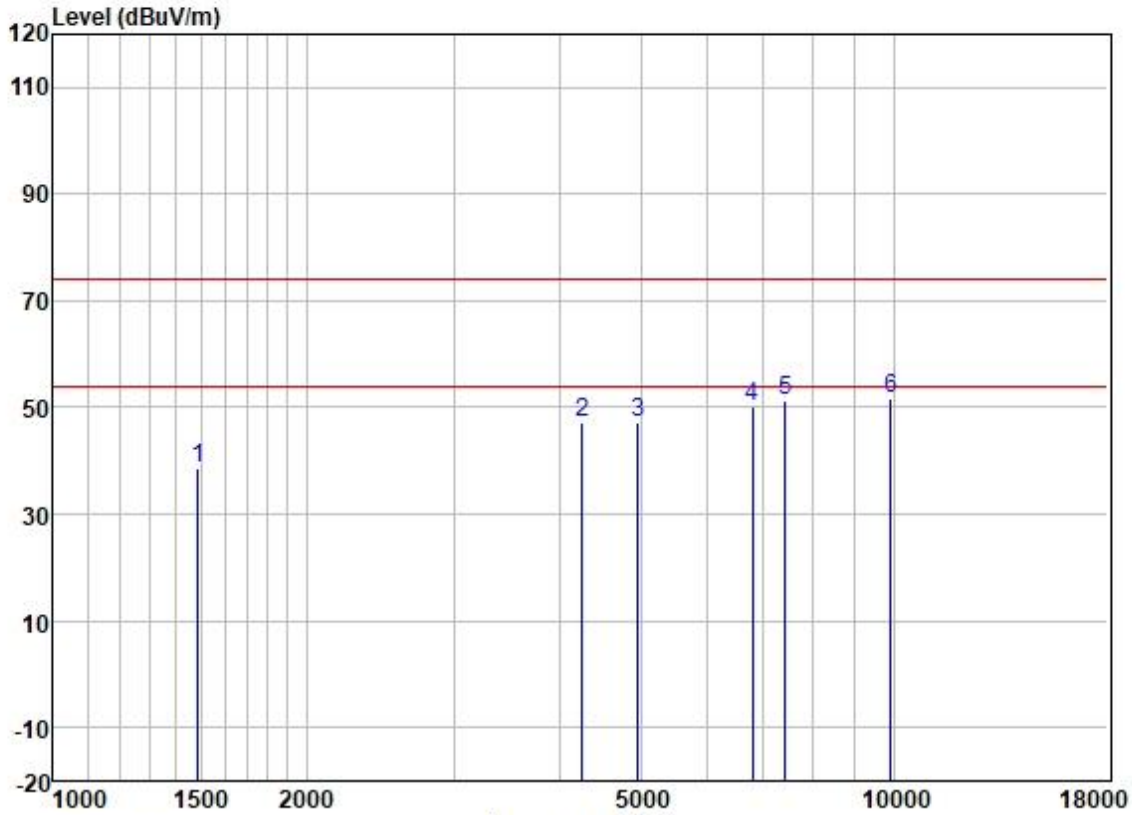
Test Mode: 03; Polarity: Vertical; Modulation:GFSK; ; Channel:middle



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1663.137	48.92	25.65	2.80	37.91	39.46	74.00	-34.54	VERTICAL	Peak
2	4230.396	48.64	30.26	4.61	36.81	46.70	74.00	-27.30	VERTICAL	Peak
3	4880.000	46.79	31.54	5.50	36.84	46.99	74.00	-27.01	VERTICAL	Peak
4	6036.421	48.65	32.48	6.18	36.90	50.41	74.00	-23.59	VERTICAL	Peak
5	7320.000	46.12	36.00	6.13	37.43	50.82	74.00	-23.18	VERTICAL	Peak
6	9760.000	43.68	38.50	7.02	37.41	51.79	74.00	-22.21	VERTICAL	Peak

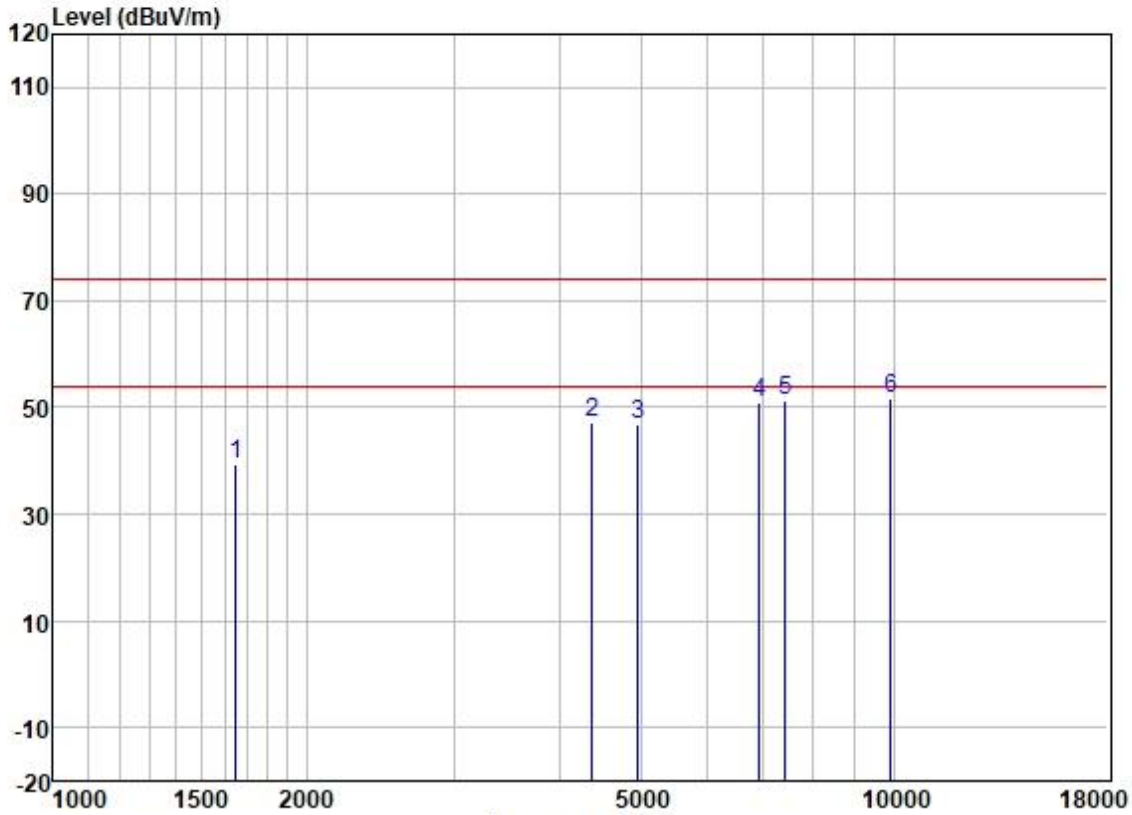
Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; ; Channel:High



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1485.841	48.59	25.49	2.78	38.13	38.73	74.00	-35.27	HORIZONTAL	Peak
2	4254.921	49.01	30.34	4.62	36.81	47.16	74.00	-26.84	HORIZONTAL	Peak
3	4960.000	46.84	31.65	5.65	36.84	47.30	74.00	-26.70	HORIZONTAL	Peak
4	6795.879	47.01	34.66	5.82	37.12	50.37	74.00	-23.63	HORIZONTAL	Peak
5	7440.000	46.23	36.27	6.22	37.47	51.25	74.00	-22.75	HORIZONTAL	Peak
6	9920.000	43.57	38.65	6.96	37.40	51.78	74.00	-22.22	HORIZONTAL	Peak

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; ; Channel:High



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1648.778	48.69	25.63	2.80	37.93	39.19	74.00	-34.81	VERTICAL	Peak
2	4379.699	48.72	30.64	4.69	36.81	47.24	74.00	-26.76	VERTICAL	Peak
3	4960.000	46.55	31.65	5.65	36.84	47.01	74.00	-26.99	VERTICAL	Peak
4	6914.763	47.27	34.89	5.81	37.19	50.78	74.00	-23.22	VERTICAL	Peak
5	7440.000	46.20	36.27	6.22	37.47	51.22	74.00	-22.78	VERTICAL	Peak
6	9920.000	43.36	38.65	6.96	37.40	51.57	74.00	-22.43	VERTICAL	Peak

7 Test Setup Photo

Refer to Appendix –Setup Photos for GZCR2203000262AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for GZCR2203000262AT

9 Appendix

For Right earbuds:

1. Maximum Conducted Output Power

1.1 Power

1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			Ant1	Limit	
1M	SISO	2402	3.17	<=30	Pass
		2440	3.64	<=30	Pass
		2480	3.68	<=30	Pass
Note1: Antenna Gain: Ant1: -0.15dBi;					

2. Maximum Power Spectral Density

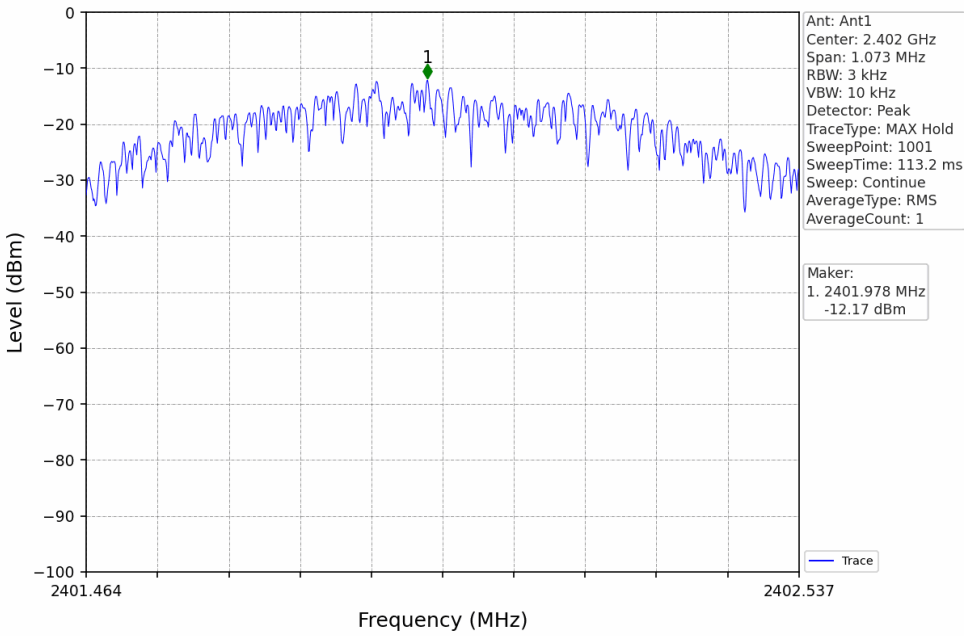
2.1 PSD

2.1.1 Test Result

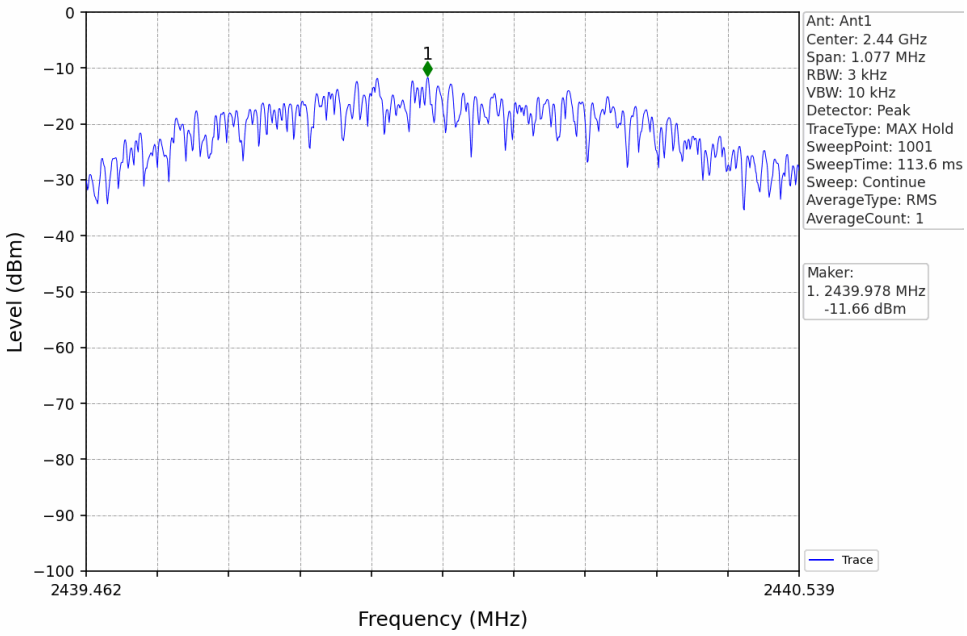
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
1M	SISO	2402	-12.17	<=8	Pass
		2440	-11.66	<=8	Pass
		2480	-11.64	<=8	Pass
Note1: Antenna Gain: Ant1: -0.15dBi;					

2.1.2 Test Graph

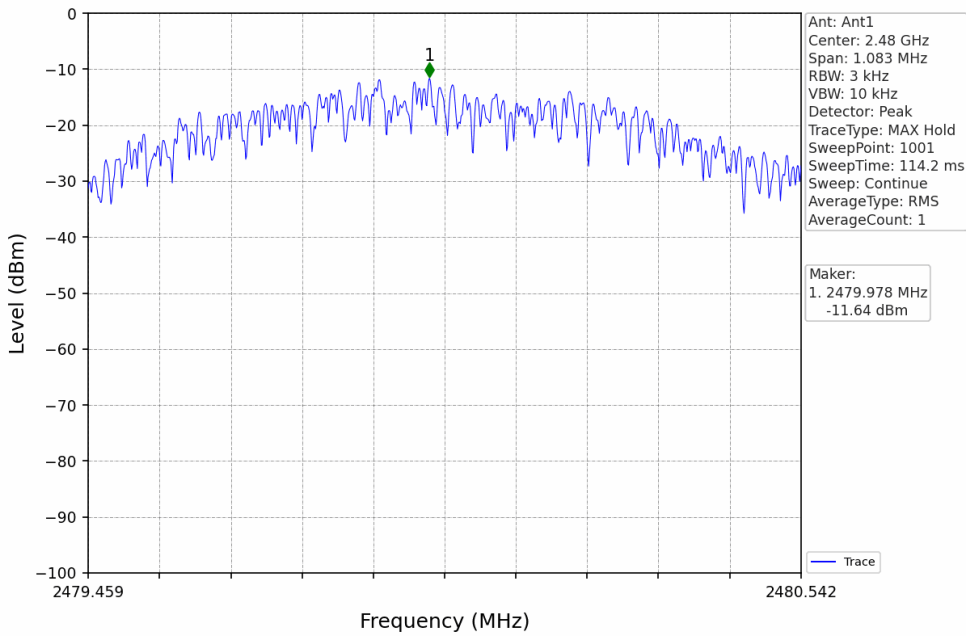
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



3. Unwanted Emissions In Non-restricted Frequency Bands

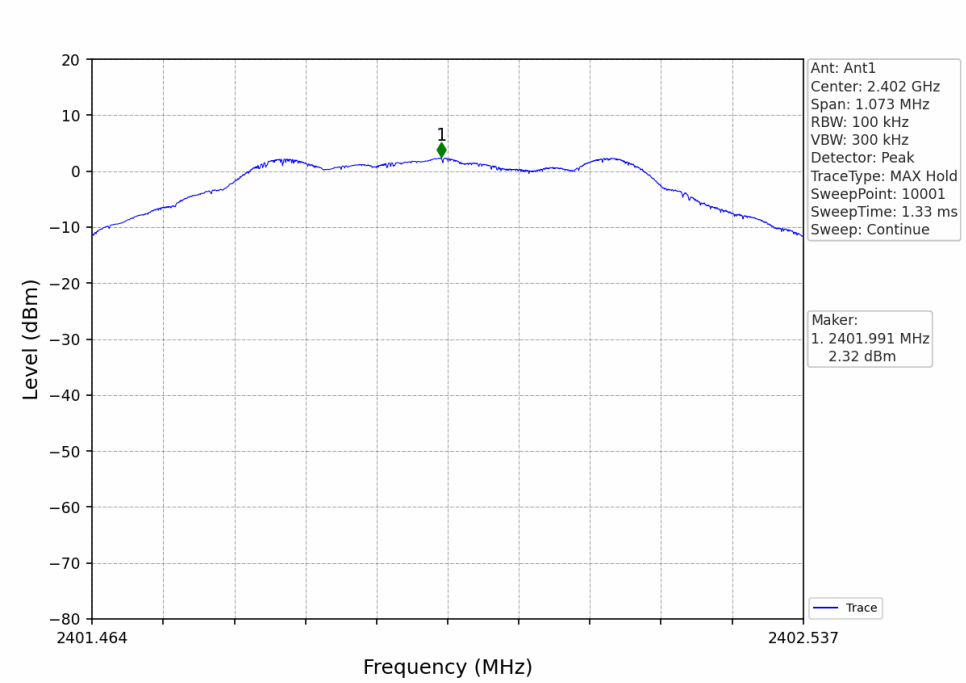
3.1 Ref

3.1.1 Test Result

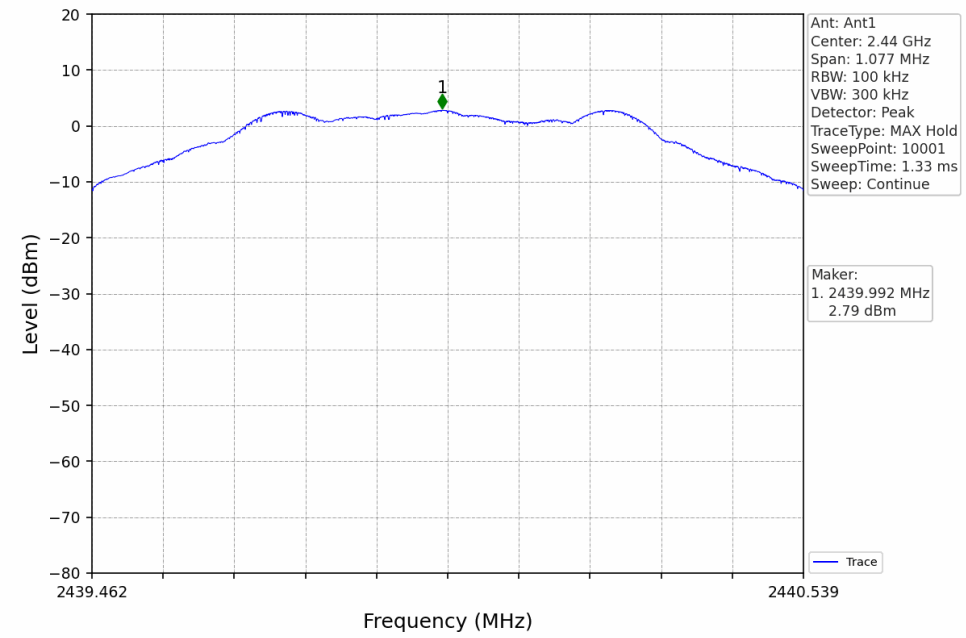
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
1M	SISO	2402	1	2.32
		2440	1	2.79
		2480	1	2.83
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. Note2: RBW = 1MHz was used during the pre-test. The final test will be performed at RBW=100kHz while the margin is less than 3dB.				

3.1.2 Test Graph

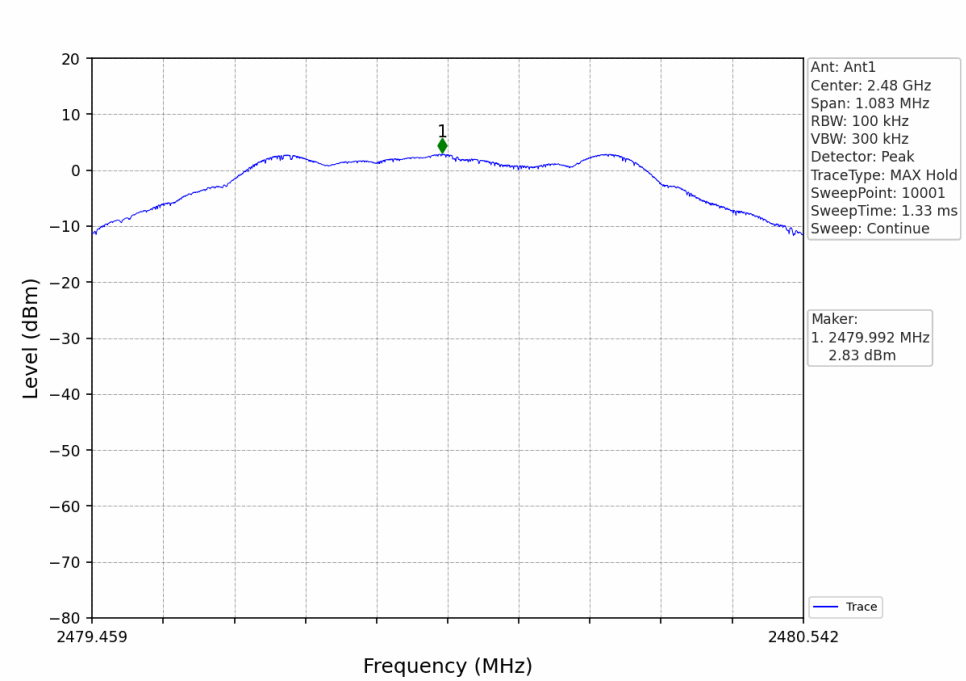
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



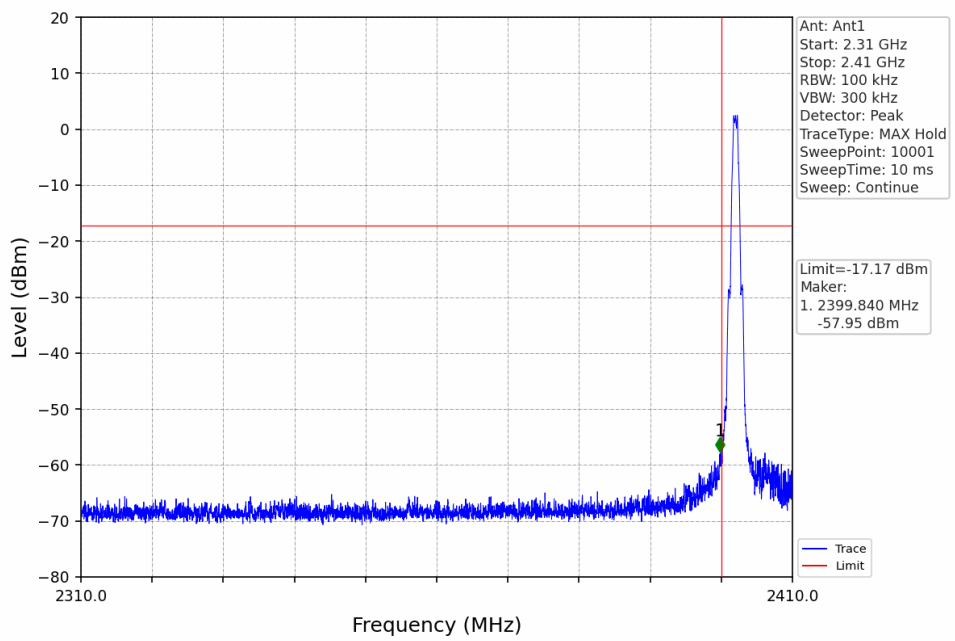
3.2 CSE

3.2.1 Test Result

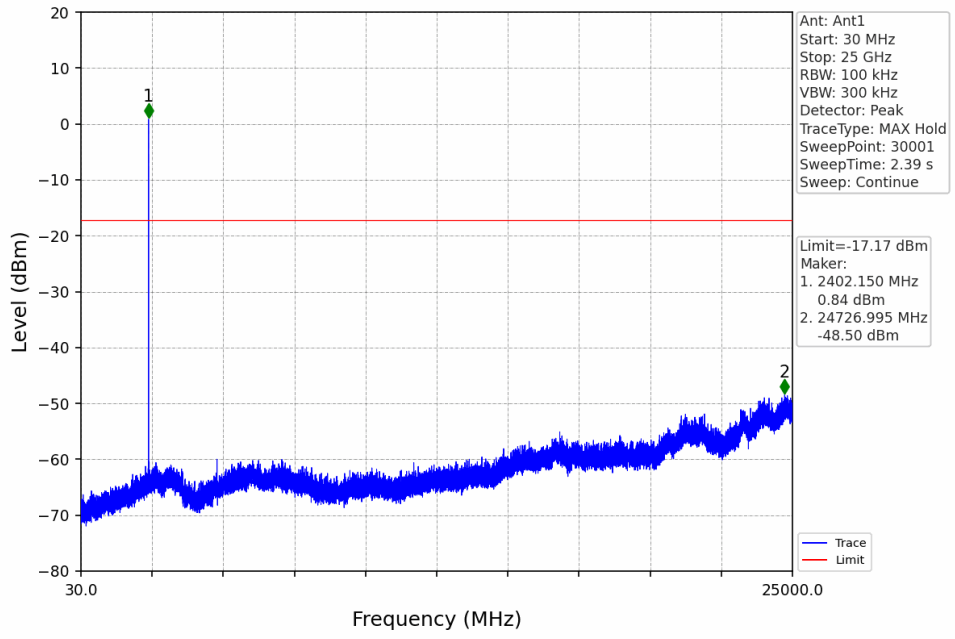
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	2.83	-17.17	Pass
		2440	1	2.83	-17.17	Pass
		2480	1	2.83	-17.17	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. Note2: RBW = 1MHz was used during the pre-test. The final test will be performed at RBW=100kHz while the margin is less than 3dB.						

3.2.2 Test Graph

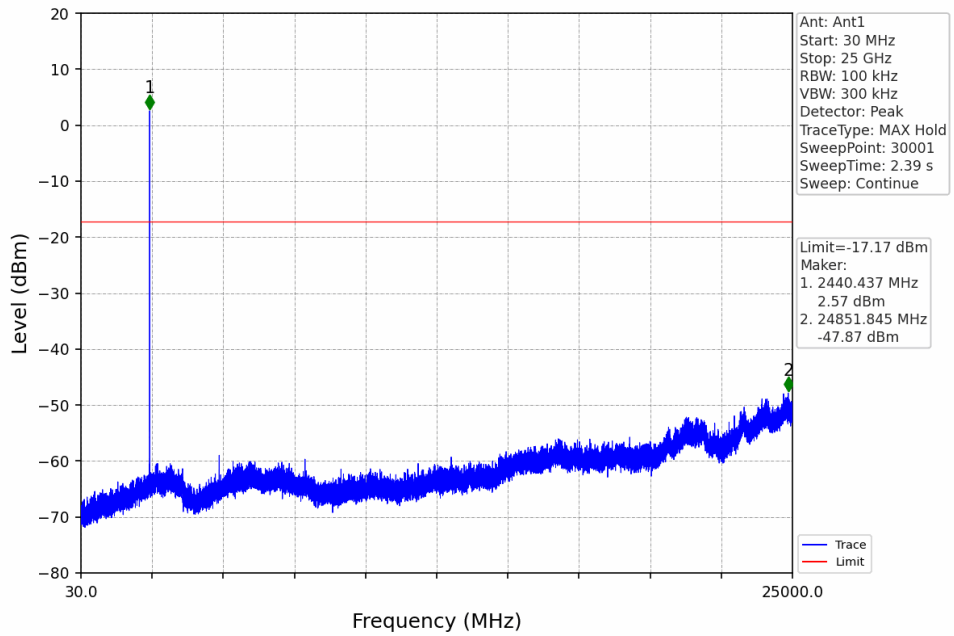
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



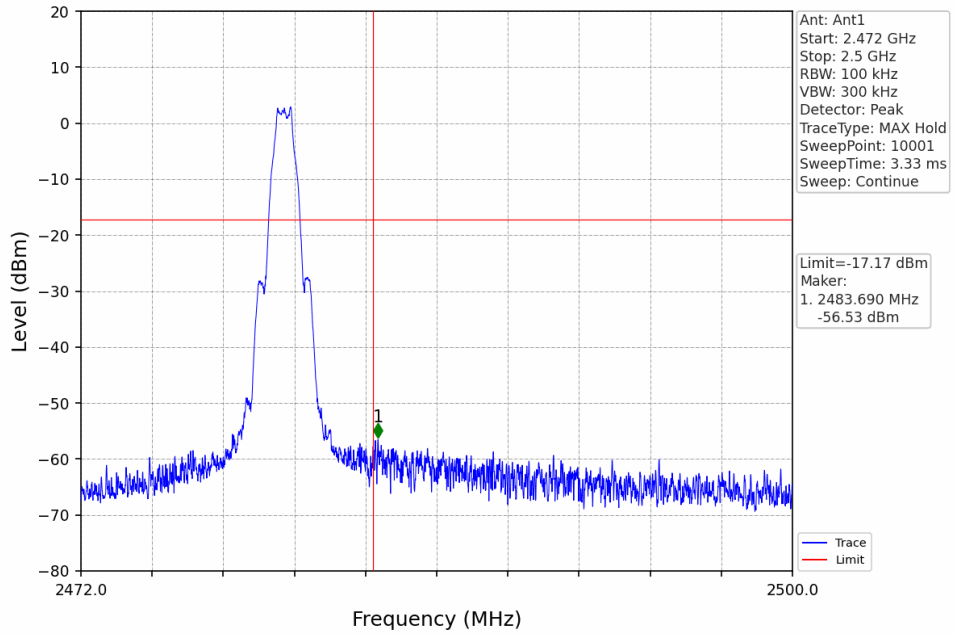
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



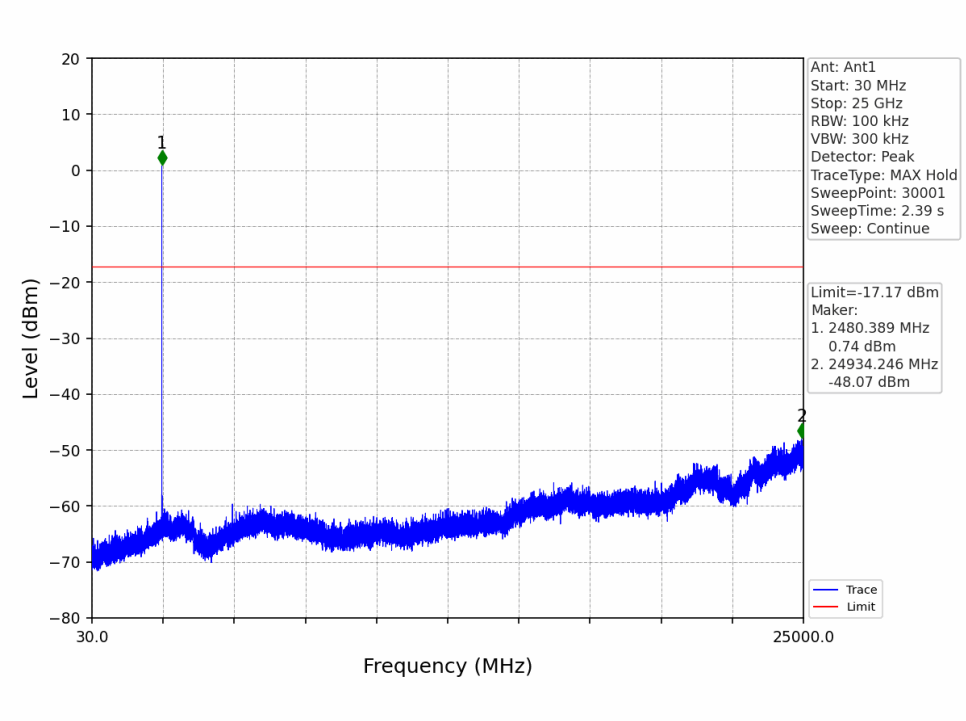
1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



For Left earbuds:

1. Maximum Conducted Output Power

1.1 Power

1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			Ant1	Limit	
1M	SISO	2402	4.81	<=30	Pass
		2440	5.25	<=30	Pass
		2480	5.57	<=30	Pass
Note1: Antenna Gain: Ant1: 1.22dBi;					

2. Maximum Power Spectral Density

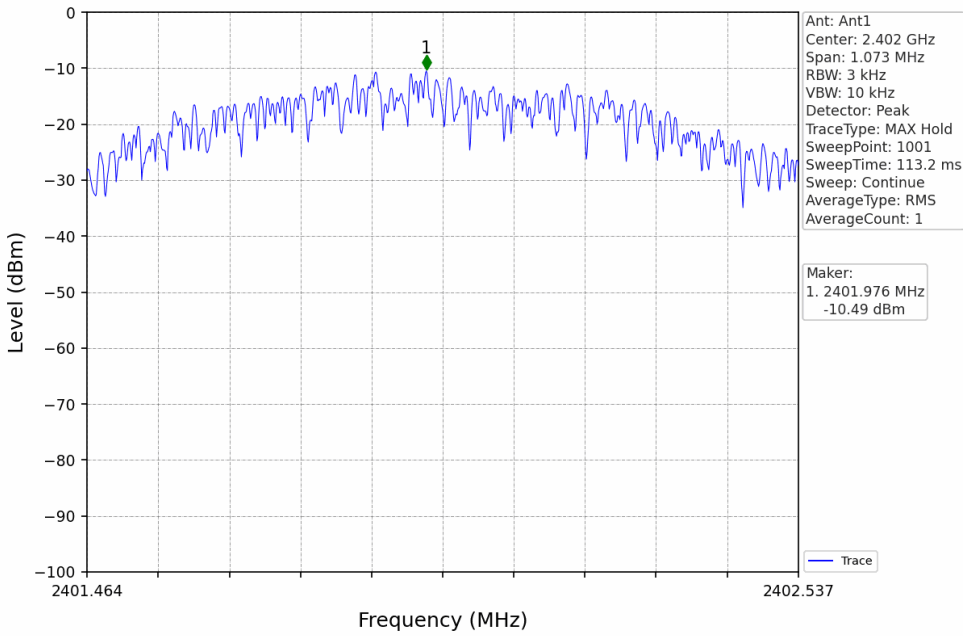
2.1 PSD

2.1.1 Test Result

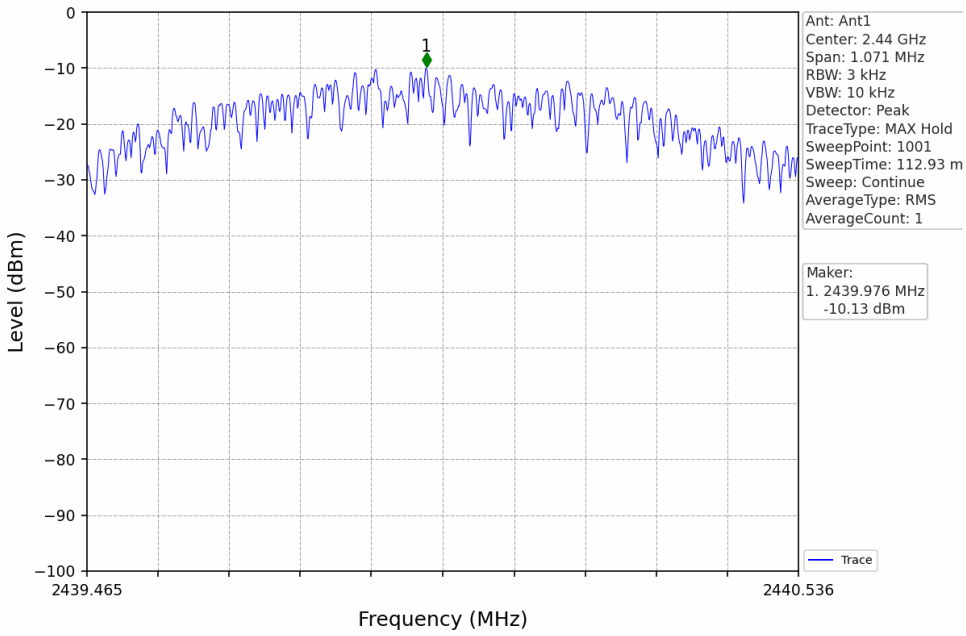
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
1M	SISO	2402	-10.49	<=8	Pass
		2440	-10.13	<=8	Pass
		2480	-9.78	<=8	Pass
Note1: Antenna Gain: Ant1: 1.22dBi;					

2.1.2 Test Graph

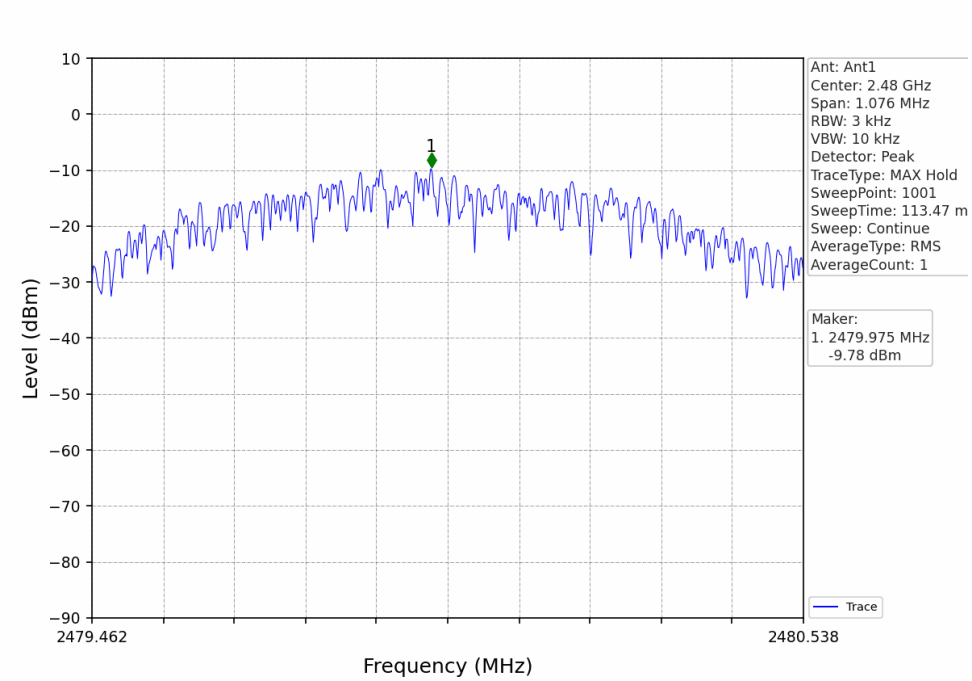
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



3. Unwanted Emissions In Non-restricted Frequency Bands

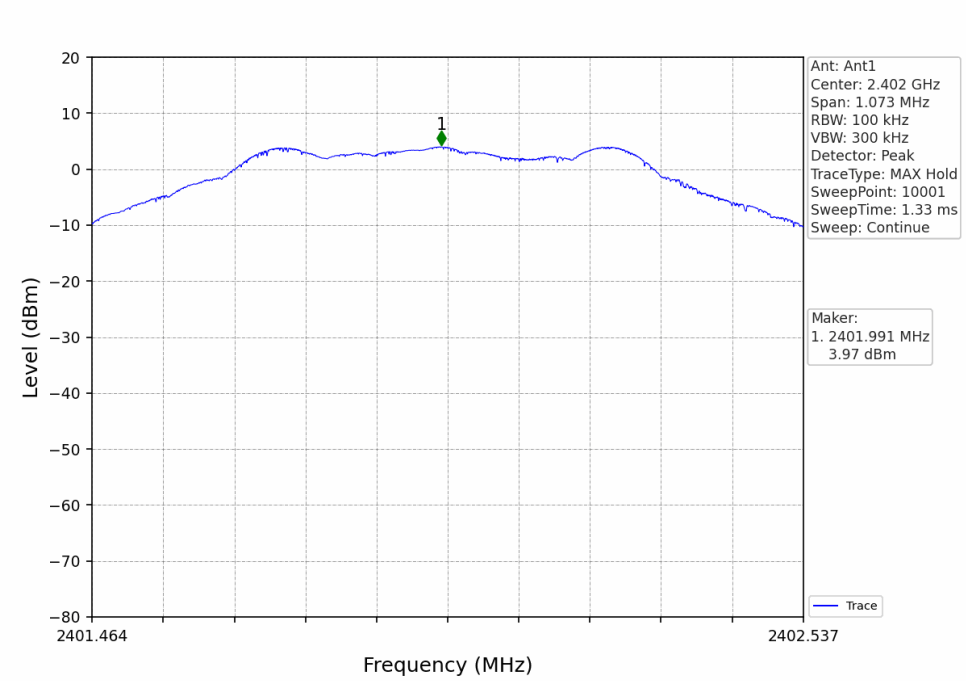
3.1 Ref

3.1.1 Test Result

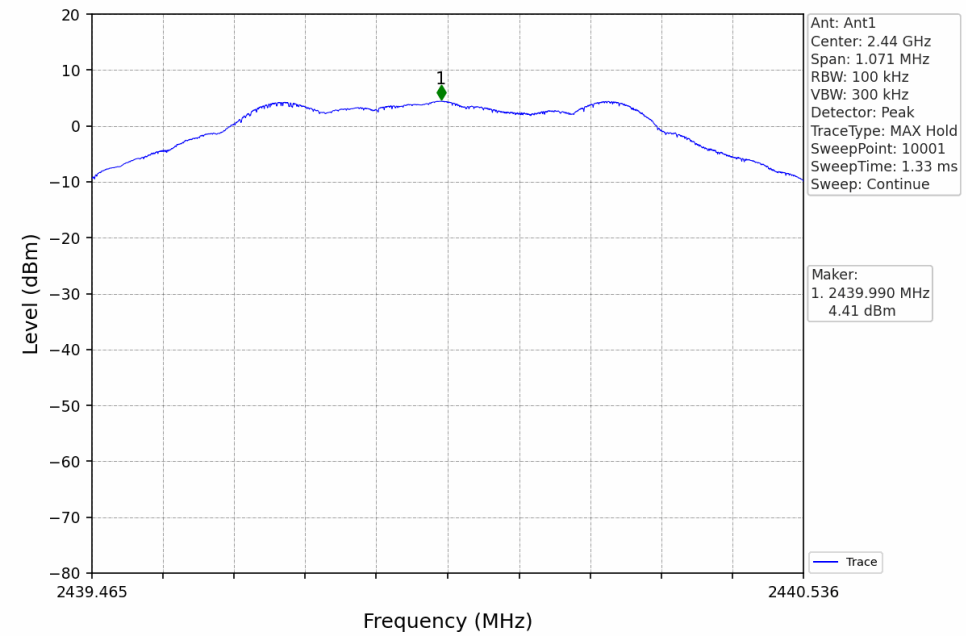
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
1M	SISO	2402	1	3.97
		2440	1	4.41
		2480	1	4.73
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. Note2: RBW = 1MHz was used during the pre-test. The final test will be performed at RBW=100kHz while the margin is less than 3dB.				

3.1.2 Test Graph

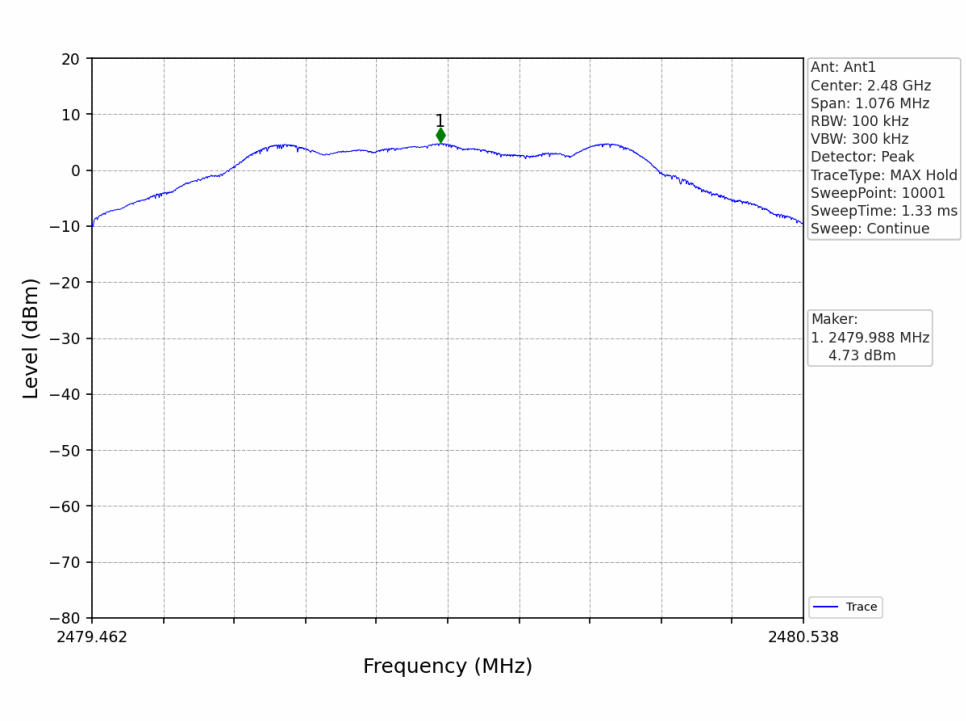
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



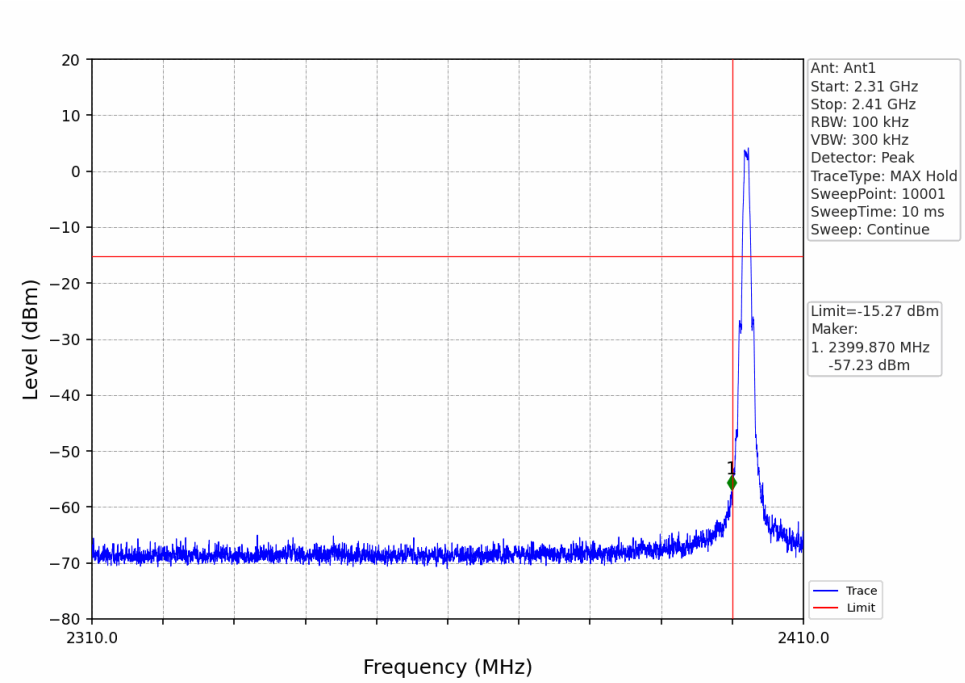
3.2 CSE

3.2.1 Test Result

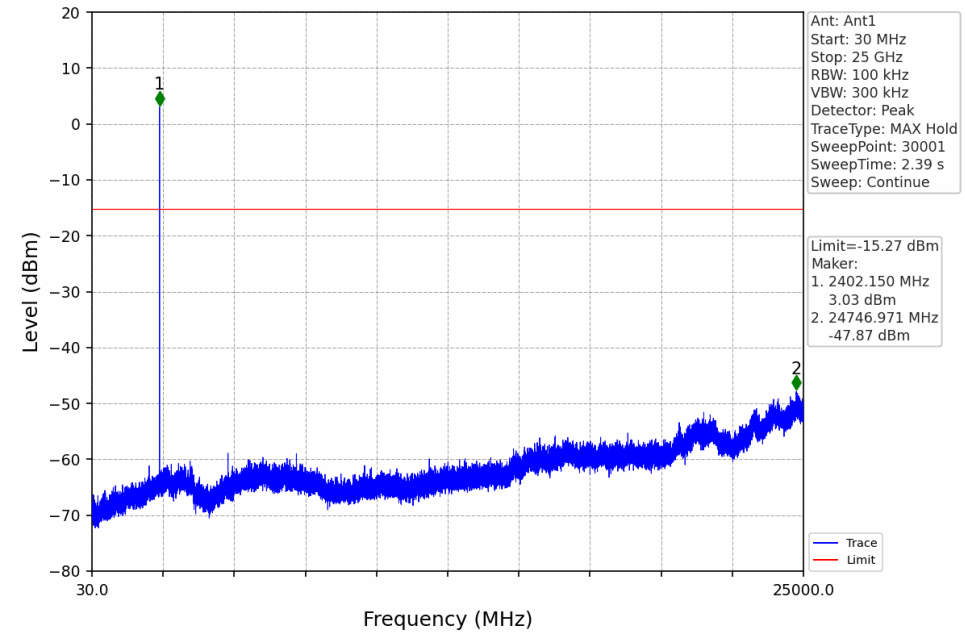
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	4.73	-15.27	Pass
		2440	1	4.73	-15.27	Pass
		2480	1	4.73	-15.27	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. Note2: RBW = 1MHz was used during the pre-test. The final test will be performed at RBW=100kHz while the margin is less than 3dB.						

3.2.2 Test Graph

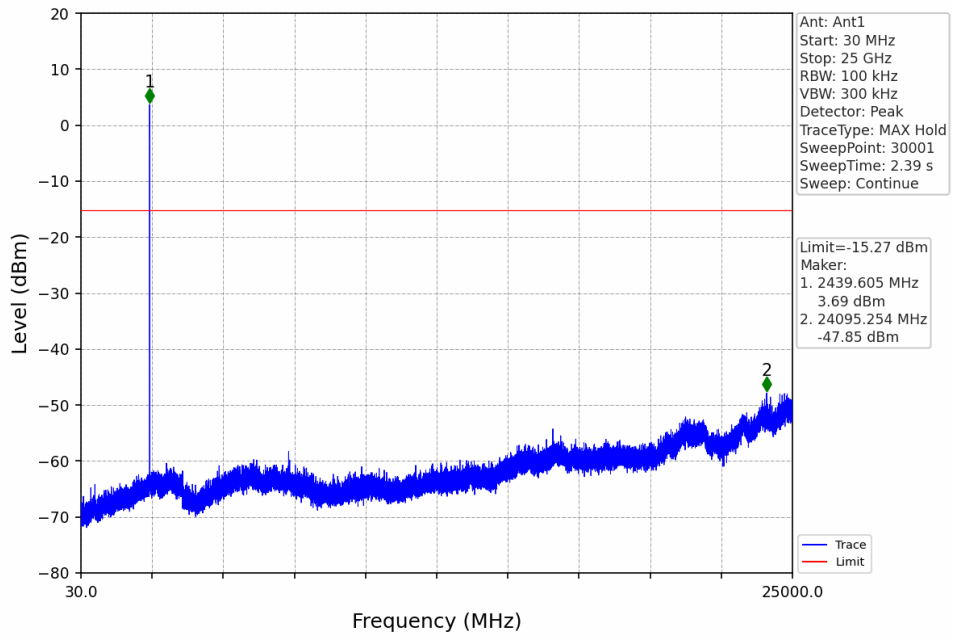
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



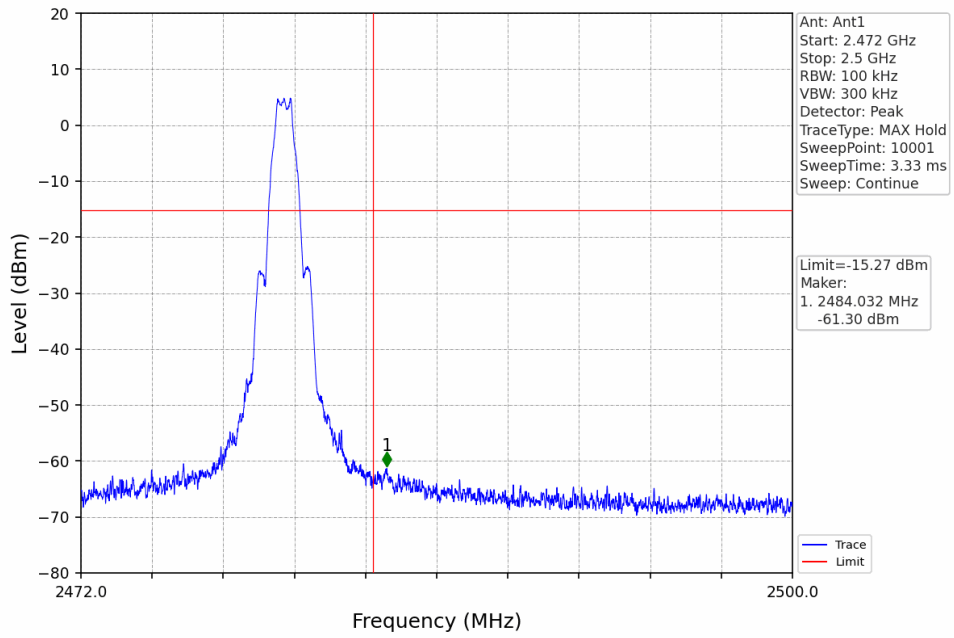
1M_LCH_2402MHz_DataRate=_Ant1_NTNV



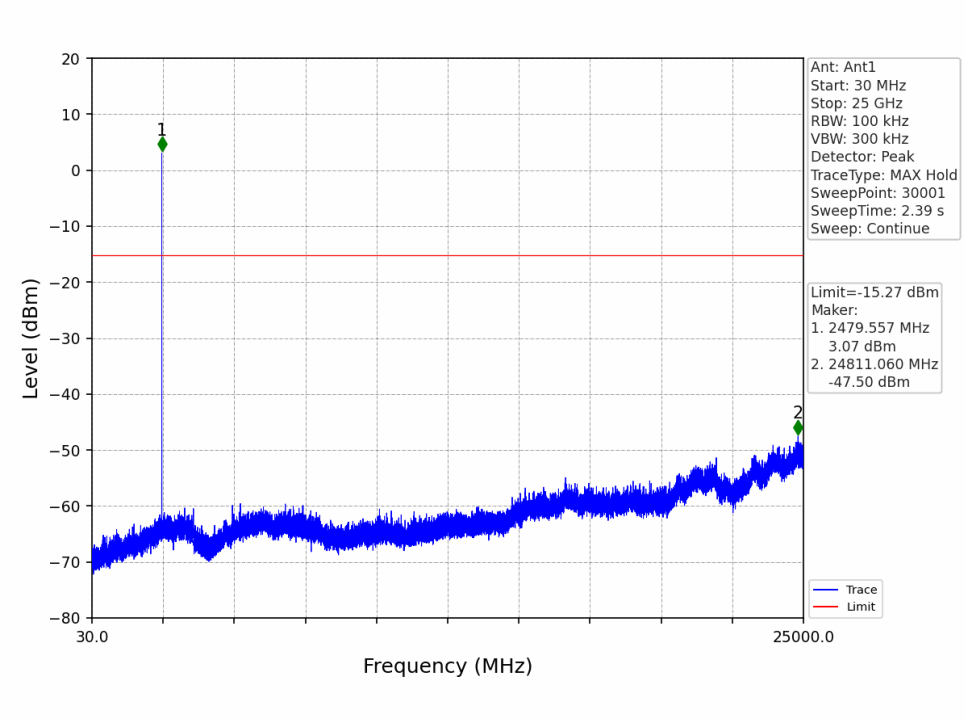
1M_MCH_2440MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



1M_HCH_2480MHz_DataRate=_Ant1_NTNV



- End of the Report -