



CERTIFICATE #5473.01

Test Report No.:
FCC2021-0042-2

RF Test Report

Product Name	:	iPulseOx Pulse Oximeter
FCC ID	:	2AHYZ-SMPO1000-US
Model Number	:	SMPO1000-US
Technology Tested	:	LTE cat M1
Client	:	Smart Meter Corporation
Classification Of Test	:	Commission Test

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Client	Name : Smart Meter Corporation Address : 201 E. Kennedy Blvd., Suite 880, Tampa, FL 33602				
Manufacturer	Name : Shanghai Berry Electronic Tech Co., Ltd. Address : Unit 104, 1st Floor, 7th Building, NO.1188 Lianhang Road, Minhang District, 201112 Shanghai, China.				
Equipment under Test	Product Name : Pulse Oximeter Model/Type : SMPO1000-US Trademark :  Serial no. : — Sampling : —				
Date of Receipt.	2021.12.01	Date of Testing	2021.12.29		
Test Specification		Test Result			
FCC Part 27, Subpart C(2020) ANSI C63.26(2015) FCC KDB 971168 v03r01		PASS			
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied.				
	Seal of CVC Issue Date: 2021.12.29				
Tested by:  Lu Weiji <input type="checkbox"/> Name Signature	Reviewed by:  Xu Zhenfei <input type="checkbox"/> Name Signature	Approved by (title):  Chen Huawei <input type="checkbox"/> Name Signature			
Other Aspects: NONE.					
Abbreviations:OK, <input type="checkbox"/>		Pass= passed <input type="checkbox"/>	Fail = failed <input type="checkbox"/>		
N/A= not applicable <input type="checkbox"/>		EUT= equipment, sample(s) under tested <input type="checkbox"/>			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.					

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1. General Product Information

1.1 General information

EUT Description						
Product Type	Pulse Oximeter					
Model Number	SMPO1000-US					
IMEI	351358819125151					
Power Supply	DC 3V(2*AA*1.5V) From battery					
Antenna Type	Internal Antenna					
Antenna Connector	A permanently attached antenna					
Antenna Gain	Antenna 1: 0.7 dBi					
additional beamforming gain	0 dB					
Operating Frequency Range	Band	Tx (MHz)	Rx (MHz)			
	<input type="checkbox"/> WCDMA Band IV	1710~1755	2110~2155			
	<input type="checkbox"/> LTE Band 4	1710~1755	2110~2155			
	<input type="checkbox"/> LTE Band 7	2500~2570	2620~2690			
	<input checked="" type="checkbox"/> LTE Band 12	699~716	729~746			
	<input type="checkbox"/> LTE Band 13	777~787	746~756			
	<input type="checkbox"/> LTE Band 38	2570~2620	2570~2620			
	<input type="checkbox"/> LTE Band 41	2496~2690	2496~2690			
	<input type="checkbox"/> LTE Band 66	1710~1780	2110~2200			
	<input type="checkbox"/> LTE Band 71	663~698	617~652			
Modulation Type	<input type="checkbox"/> (GSM) GMSK <input type="checkbox"/> 8PSK <input type="checkbox"/> (WCDMA) QPSK <input checked="" type="checkbox"/> (LTE) QPSK 16QAM					
Rated Power Supply Voltage	3.0V					
Extreme Voltage	Minimum: 2.2V Maximum: 3.4V					
Extreme Temperature	Lowest: +5 °C Highest: +40 °C					
EUT Accessory						
Battery	DC 3V(2*AA*1.5V) From battery					
Adapter	-					
Note:						
1. The information of the EUT is declared by the manufacturer.						

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2. Test Sites

2.1 Test Facilities

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Certification & Testing Co., Ltd.

Add.: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, 510663, P. R. China

Telephone : +86-20-32293888

Fax : +86-20-32293889

FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

2.3 List of Test and Measurement Instruments

Refer to **Appendix I**.

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3. Test Configuration

3.1 Test Mode

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

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

The following testing in LTE is set based on the maximum RF Output Power.

Test modes are chosen to be reported as the worst case configuration below:

Test modes are chosen to be reported as the worst case configuration below for LTE Band 2

Test items	Bandwidth (MHz)						Modulation		RB			Test Channel		
	1.4	3	5	10	15	20	QPSK	16QAM	1	50%	100%	L	M	H
RF power output	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effective Isotropic Radiated power	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Band Edge Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Occupied Bandwidth	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peak-to-Average Power Ratio	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frequency Stability	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conducted Spurious Emissions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiates Spurious Emission	O	O	O	O	O	O	O	-	O	-	-	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.													

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4. Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Radiates Spurious Emission	2.1053 /27.53(g)	PASS

NOTE: The device SMPO1000-US is built with LTE Module (Mode No.Nrf9160).And the 4G module has been certified.Only radiated spurious emission was tested in the report, other test items and test data will refer to the LTE module's report(FCC ID: 2ANPO00NRF9160)

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5. Measurement results

5.1 Radiates Spurious Emission

Ambient condition:

Temperature	Relative humidity	Pressure
24.5 °C	50.1%	101.0kPa

Method of Measurement:

1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26 (2015).
2. Above 30MHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0 ° to 360 °, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0 ° to 360 °, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz for above 1GHz and RBW=100kHz, VBW=300kHz for 30MHz to 1GHz,, And the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$

The measurement results are amend as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$

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8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dBi}$.

The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

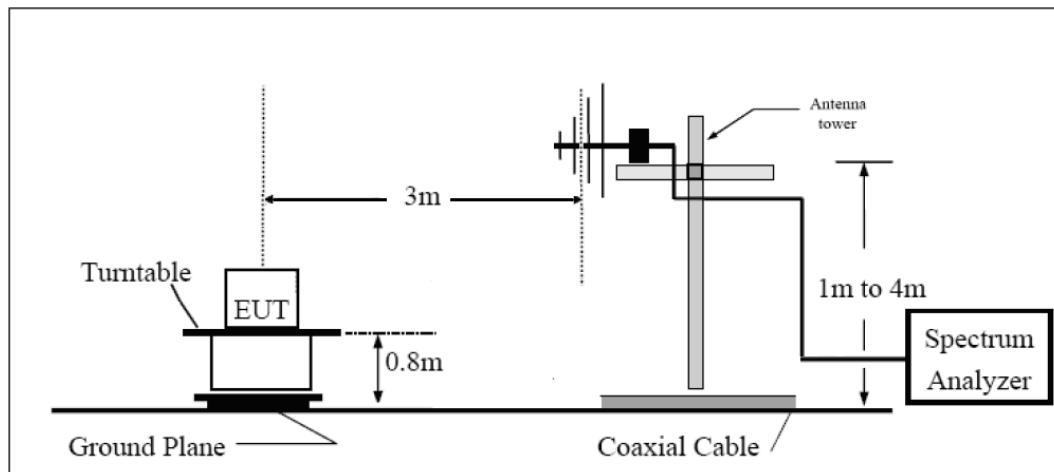
Limits:

Rule Part 27.53 (g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

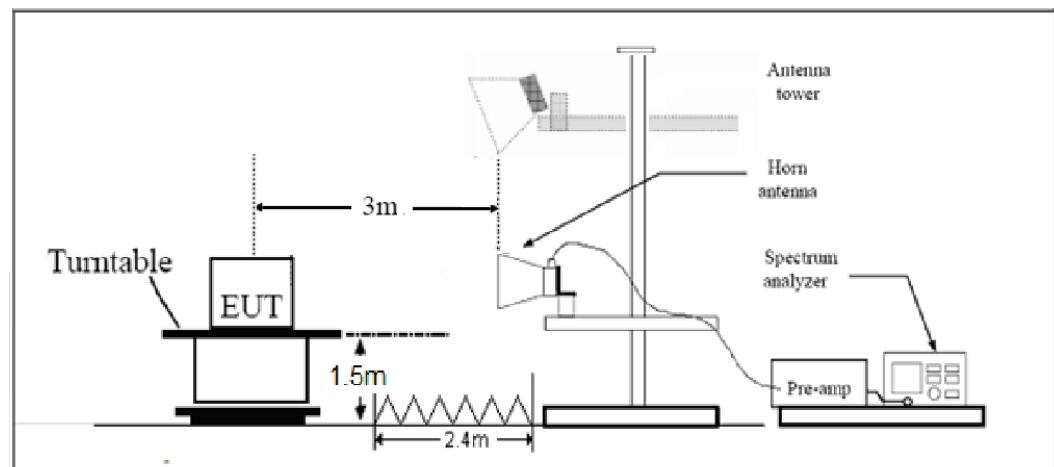
Limit	-13 dBm
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Test Setup:

30MHz ~ 1GHz:



Above 1GHz:



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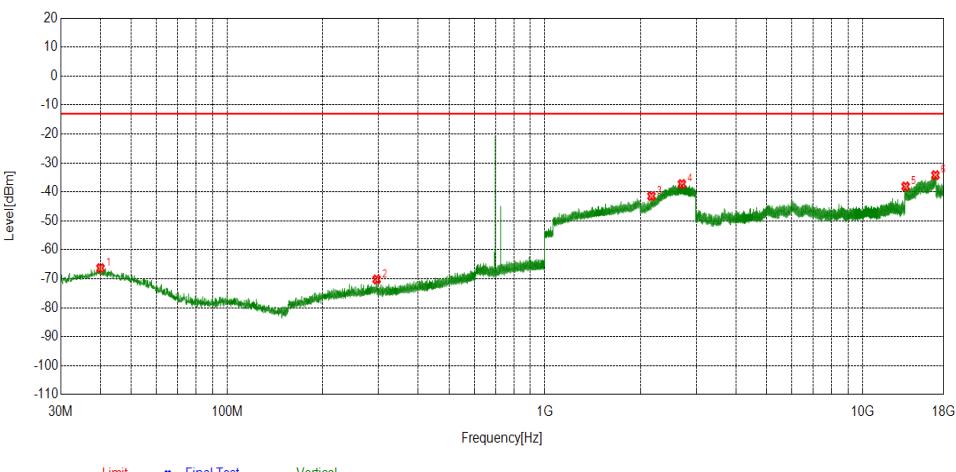
Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 3.55$ dB.

Test Results:

Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

Results:

Test Mode	Band 12							
Range	30MHz~18GHz							
Test Environment	Normal							
Test Frequencies	Low Channel							
Test Channel Bandwidths	1.4MHz							
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	
1	39.9920	-99.20	-66.32	-13.00	53.32	32.88	Vertical	
2	295.8066	-96.26	-70.21	-13.00	57.21	26.05	Vertical	
3	2167.3167	-85.97	-41.46	-13.00	28.46	44.51	Vertical	
4	2701.3701	-85.62	-37.27	-13.00	24.27	48.35	Vertical	
5	13665.8555	-40.87	-38.10	-13.00	25.10	2.77	Vertical	
6	16962.4654	-38.05	-34.21	-13.00	21.21	3.84	Vertical	
								

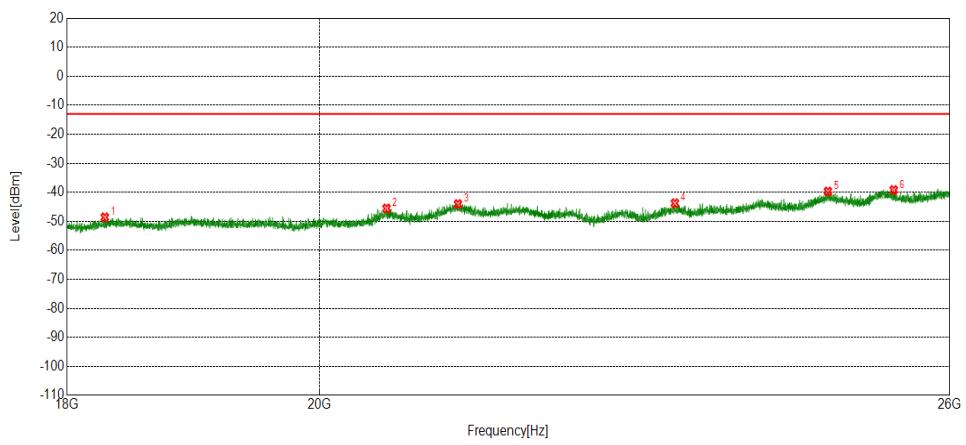
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	1.4MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18287.0359	-12.06	-48.62	-13.00	35.62	-36.56	Vertical
2	20564.3205	-9.34	-45.56	-13.00	32.56	-36.22	Vertical
3	21185.3982	-7.92	-44.04	-13.00	31.04	-36.12	Vertical
4	23188.6486	-8.47	-43.76	-13.00	30.76	-35.29	Vertical
5	24714.8394	-5.06	-39.72	-13.00	26.72	-34.66	Vertical
6	25401.9252	-4.68	-39.20	-13.00	26.20	-34.52	Vertical

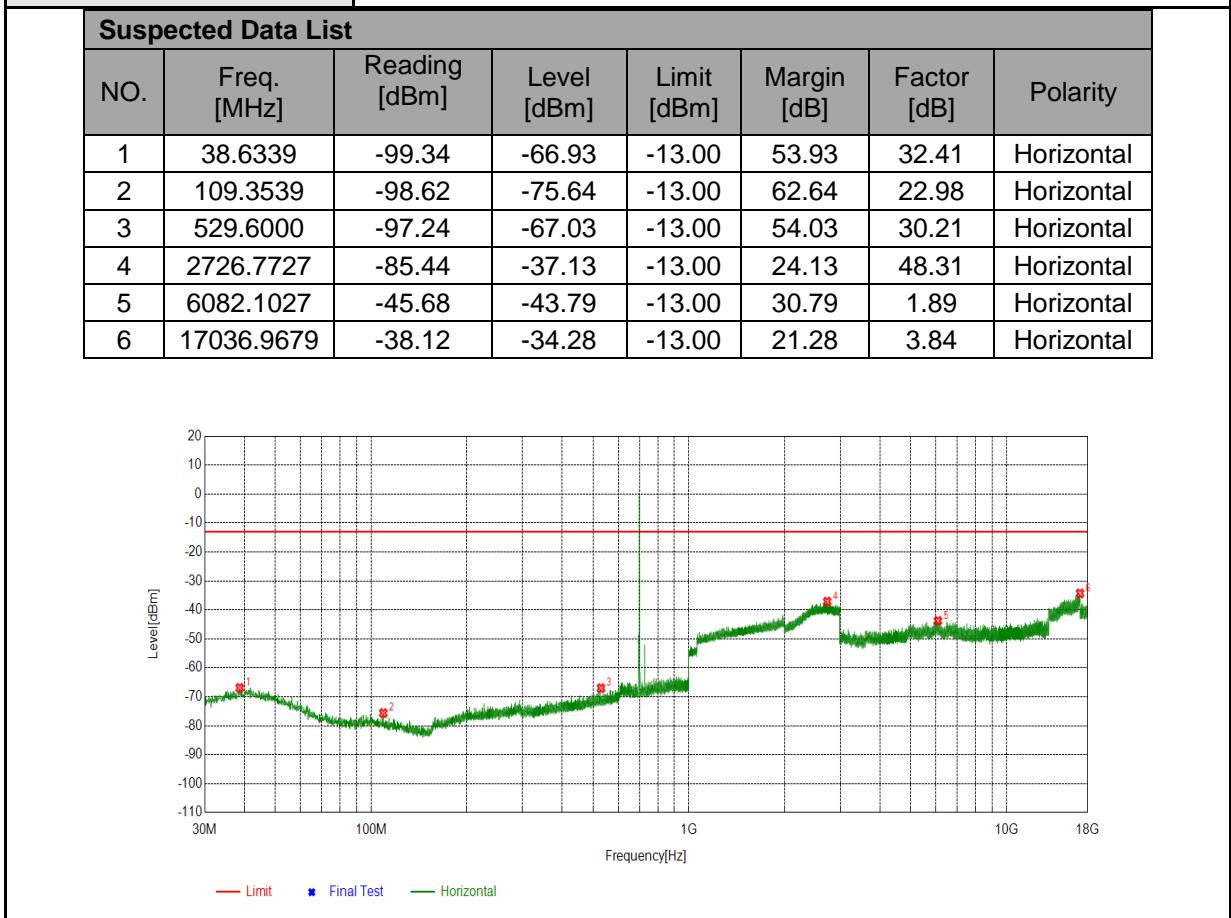


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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	1.4MHz



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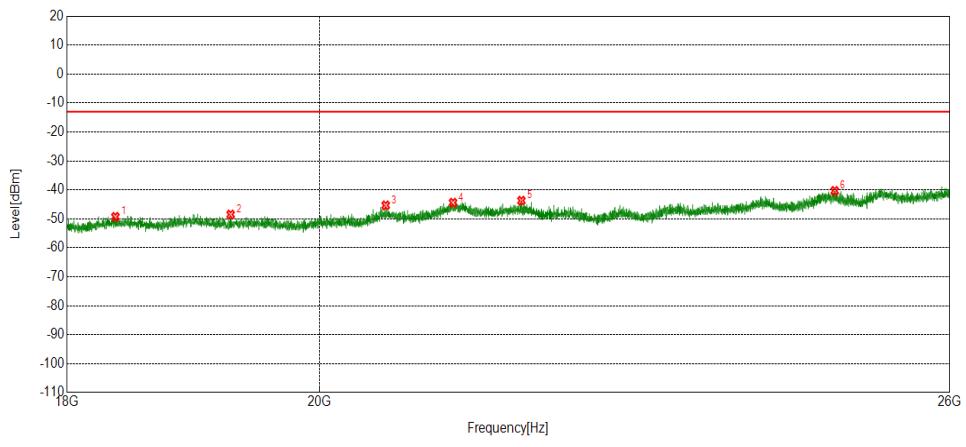
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	1.4MHz

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18368.0460	-12.75	-49.29	-13.00	36.29	-36.54	Horizontal
2	19271.1589	-12.07	-48.48	-13.00	35.48	-36.41	Horizontal
3	20557.3197	-9.11	-45.33	-13.00	32.33	-36.22	Horizontal
4	21141.3927	-8.28	-44.41	-13.00	31.41	-36.13	Horizontal
5	21752.4691	-7.67	-43.71	-13.00	30.71	-36.04	Horizontal
6	24784.8481	-5.68	-40.32	-13.00	27.32	-34.64	Horizontal



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Test Mode	Band 12																																																													
Range	30MHz~18GHz																																																													
Test Environment	Normal																																																													
Test Frequencies	Mid Channel																																																													
Test Channel Bandwidths	1.4MHz																																																													
Suspected Data List <table border="1"> <thead> <tr> <th>NO.</th> <th>Freq. [MHz]</th> <th>Reading [dBm]</th> <th>Level [dBm]</th> <th>Limit [dBm]</th> <th>Margin [dB]</th> <th>Factor [dB]</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>40.8651</td> <td>-98.05</td> <td>-65.35</td> <td>-13.00</td> <td>52.35</td> <td>32.70</td> <td>Vertical</td> </tr> <tr> <td>2</td> <td>92.8623</td> <td>-98.09</td> <td>-74.90</td> <td>-13.00</td> <td>61.90</td> <td>23.19</td> <td>Vertical</td> </tr> <tr> <td>3</td> <td>448.5969</td> <td>-98.90</td> <td>-70.27</td> <td>-13.00</td> <td>57.27</td> <td>28.63</td> <td>Vertical</td> </tr> <tr> <td>4</td> <td>1987.4988</td> <td>-85.20</td> <td>-42.80</td> <td>-13.00</td> <td>29.80</td> <td>42.40</td> <td>Vertical</td> </tr> <tr> <td>5</td> <td>8540.6847</td> <td>-46.26</td> <td>-44.03</td> <td>-13.00</td> <td>31.03</td> <td>2.23</td> <td>Vertical</td> </tr> <tr> <td>6</td> <td>17022.4674</td> <td>-37.45</td> <td>-33.56</td> <td>-13.00</td> <td>20.56</td> <td>3.89</td> <td>Vertical</td> </tr> </tbody> </table>							NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	1	40.8651	-98.05	-65.35	-13.00	52.35	32.70	Vertical	2	92.8623	-98.09	-74.90	-13.00	61.90	23.19	Vertical	3	448.5969	-98.90	-70.27	-13.00	57.27	28.63	Vertical	4	1987.4988	-85.20	-42.80	-13.00	29.80	42.40	Vertical	5	8540.6847	-46.26	-44.03	-13.00	31.03	2.23	Vertical	6	17022.4674	-37.45	-33.56	-13.00	20.56	3.89	Vertical
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity																																																							
1	40.8651	-98.05	-65.35	-13.00	52.35	32.70	Vertical																																																							
2	92.8623	-98.09	-74.90	-13.00	61.90	23.19	Vertical																																																							
3	448.5969	-98.90	-70.27	-13.00	57.27	28.63	Vertical																																																							
4	1987.4988	-85.20	-42.80	-13.00	29.80	42.40	Vertical																																																							
5	8540.6847	-46.26	-44.03	-13.00	31.03	2.23	Vertical																																																							
6	17022.4674	-37.45	-33.56	-13.00	20.56	3.89	Vertical																																																							

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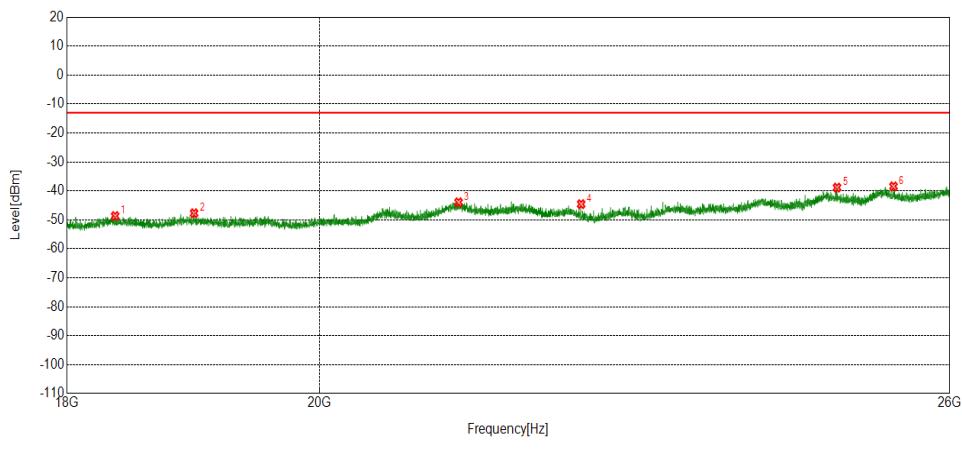
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	1.4MHz

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18366.0458	-12.11	-48.66	-13.00	35.66	-36.55	Vertical
2	18980.1225	-11.25	-47.70	-13.00	34.70	-36.45	Vertical
3	21190.3988	-7.81	-43.93	-13.00	30.93	-36.12	Vertical
4	22300.5376	-8.74	-44.56	-13.00	31.56	-35.82	Vertical
5	24808.8511	-4.21	-38.85	-13.00	25.85	-34.64	Vertical
6	25398.9249	-3.90	-38.42	-13.00	25.42	-34.52	Vertical

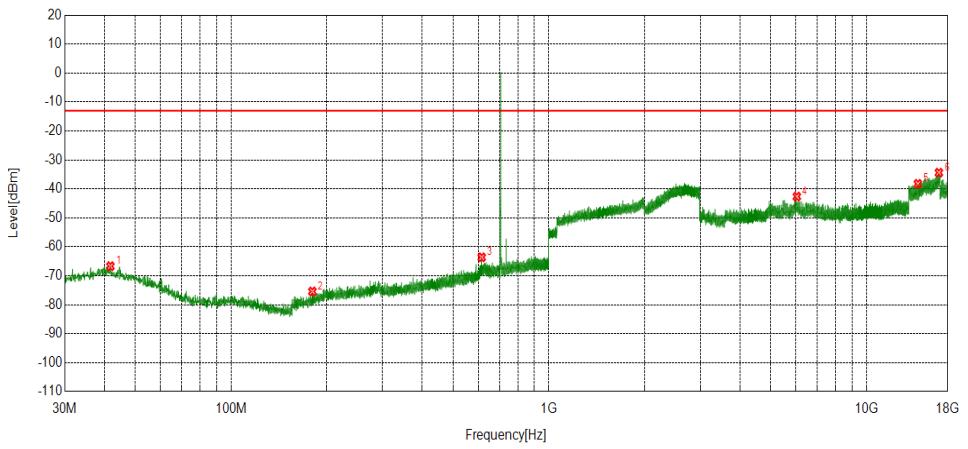


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Test Mode	Band 12						
Range	30MHz~18GHz						
Test Environment	Normal						
Test Frequencies	Mid Channel						
Test Channel Bandwidths	1.4MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	41.7382	-99.20	-66.69	-13.00	53.69	32.51	Horizontal
2	180.3650	-97.21	-75.42	-13.00	62.42	21.79	Horizontal
3	615.2595	-95.31	-63.61	-13.00	50.61	31.70	Horizontal
4	6036.1012	-44.51	-42.65	-13.00	29.65	1.86	Horizontal
5	14506.3835	-41.18	-38.24	-13.00	25.24	2.94	Horizontal
6	16896.9632	-38.00	-34.39	-13.00	21.39	3.61	Horizontal



The graph shows the spectral level in dBm versus frequency in Hz. The x-axis is logarithmic, spanning from 30 MHz to 18 GHz. The y-axis represents Level in dBm, ranging from -110 to 20. A red horizontal line at -13 dBm indicates the emission limit. A green curve represents the measured data. Red asterisks mark specific frequencies where the signal level exceeds the limit. The plot shows a general upward trend in level as frequency increases, with a notable peak around 1 GHz.

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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Mid Channel						
Test Channel Bandwidths	1.4MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18327.0409	-12.52	-49.07	-13.00	36.07	-36.55	Horizontal
2	18885.1106	-11.68	-48.15	-13.00	35.15	-36.47	Horizontal
3	19926.2408	-12.66	-48.97	-13.00	35.97	-36.31	Horizontal
4	21117.3897	-7.32	-43.45	-13.00	30.45	-36.13	Horizontal
5	22227.5284	-9.07	-44.93	-13.00	31.93	-35.86	Horizontal
6	24040.7551	-6.81	-41.60	-13.00	28.60	-34.79	Horizontal

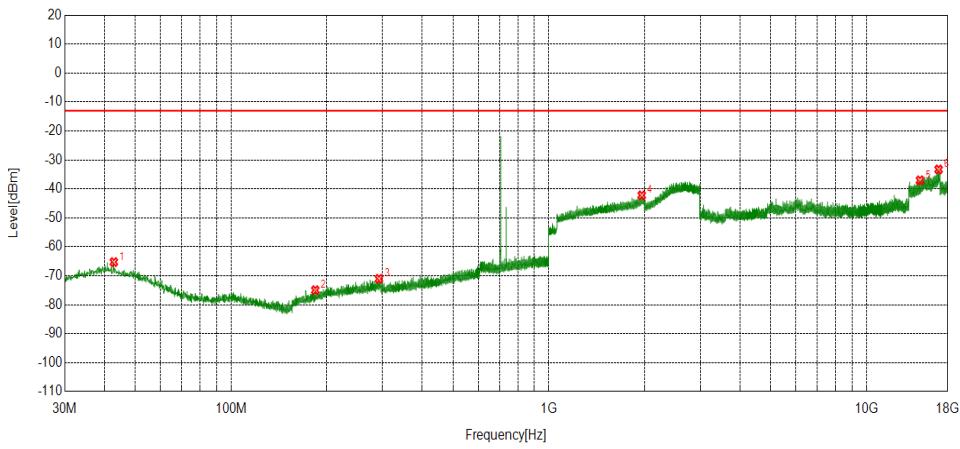
The figure is a line graph titled "Spectral Plot". The vertical axis is labeled "Level[dBm]" and ranges from -110 to 20 in increments of 10. The horizontal axis is labeled "Frequency[Hz]" and has markers at 18G, 20G, and 26G. A solid red horizontal line represents the "Limit". A green line represents the "Horizontal" level. Six red asterisks, labeled 1 through 6, mark specific frequency points where the signal level exceeds the limit. The plot shows a general upward trend in signal level as frequency increases, with significant fluctuations around the limit line.

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Range	30MHz~18GHz						
Test Environment	Normal						
Test Frequencies	Hig Channel						
Test Channel Bandwidths	1.4MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	42.8053	-97.55	-65.26	-13.00	52.26	32.29	Vertical
2	184.2454	-97.03	-74.96	-13.00	61.96	22.07	Vertical
3	292.3142	-96.98	-71.04	-13.00	58.04	25.94	Vertical
4	1962.0962	-84.55	-42.22	-13.00	29.22	42.33	Vertical
5	14731.3910	-40.14	-37.05	-13.00	24.05	3.09	Vertical
6	16860.4620	-36.75	-33.27	-13.00	20.27	3.48	Vertical



The graph shows a spectral analysis plot with the following details:

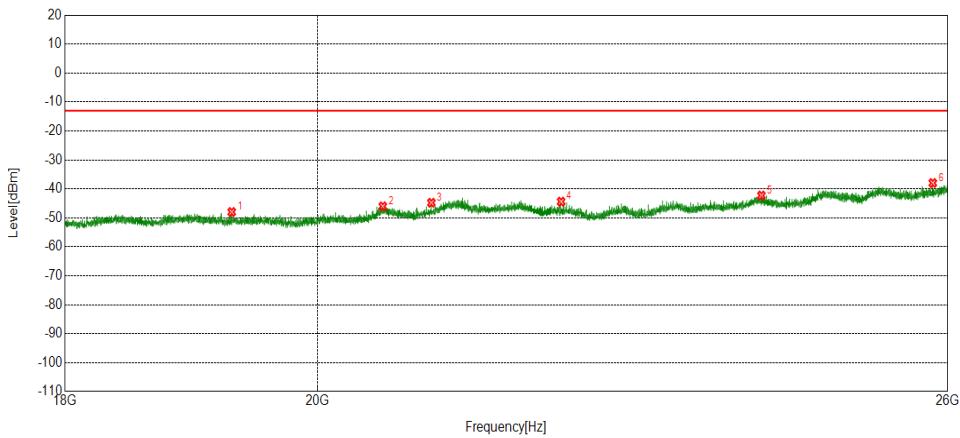
- X-axis:** Frequency [Hz], ranging from 30M to 18G.
- Y-axis:** Level [dBm], ranging from -110 to 20 dBm.
- Red Line:** Limit (Maximum allowed level).
- Green Line:** Vertical (Reference level).
- Blue Asterisks:** Final Test (Actual measured data points).

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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Hig Channel						
Test Channel Bandwidths	1.4MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19296.1620	-11.56	-47.97	-13.00	34.97	-36.41	Vertical
2	20549.3187	-9.80	-46.02	-13.00	33.02	-36.22	Vertical
3	20969.3712	-8.63	-44.78	-13.00	31.78	-36.15	Vertical
4	22133.5167	-8.47	-44.39	-13.00	31.39	-35.92	Vertical
5	24059.7575	-7.48	-42.27	-13.00	29.27	-34.79	Vertical
6	25839.9800	-3.53	-37.96	-13.00	24.96	-34.43	Vertical

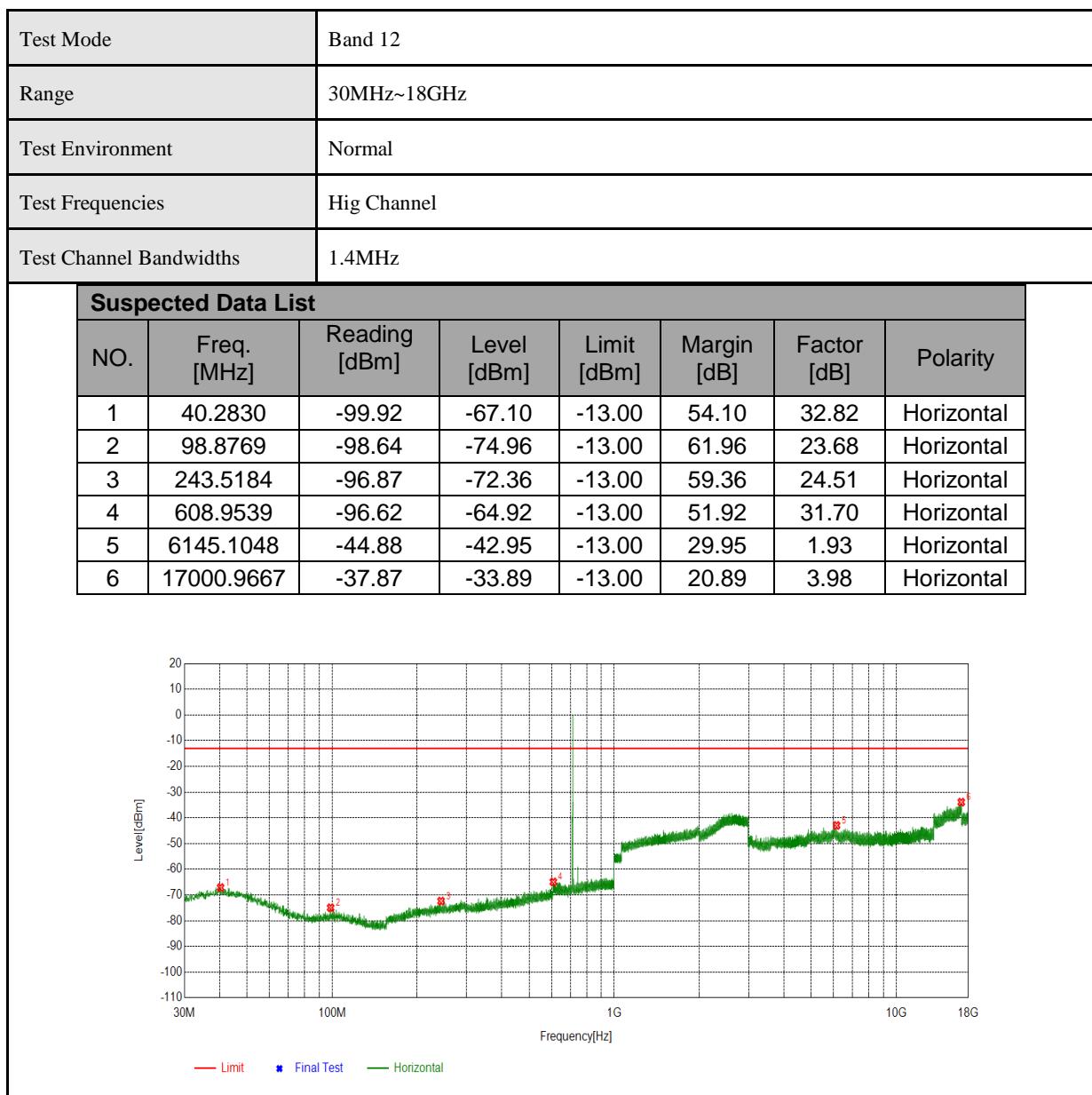


The figure is a line graph titled "Spectral Plot". The vertical axis is labeled "Level[dBm]" and ranges from -110 to 20 in increments of 10. The horizontal axis is labeled "Frequency[Hz]" and shows markers for 18G, 20G, and 26G. A solid red horizontal line is drawn at -13.00 dBm, representing the limit. A green line represents the final test data, which is noisy and stays mostly below the -13 dBm limit. Six red asterisks labeled 1 through 6 are placed on the green line at specific frequencies: approximately 19.296 GHz, 20.549 GHz, 20.969 GHz, 22.133 GHz, 24.059 GHz, and 25.839 GHz. These points indicate where the signal level is closest to the -13 dBm limit.

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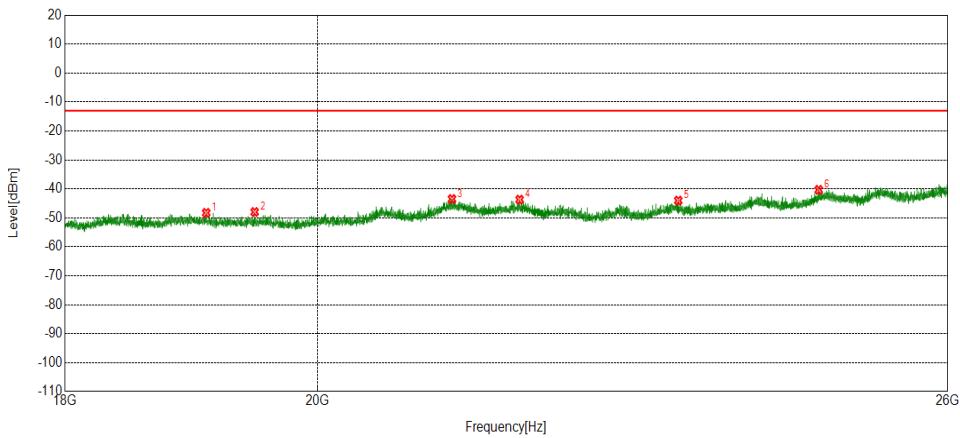


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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Hig Channel						
Test Channel Bandwidths	1.4MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19092.1365	-11.82	-48.26	-13.00	35.26	-36.44	Horizontal
2	19481.1851	-11.58	-47.96	-13.00	34.96	-36.38	Horizontal
3	21150.3938	-7.35	-43.48	-13.00	30.48	-36.13	Horizontal
4	21754.4693	-7.66	-43.70	-13.00	30.70	-36.04	Horizontal
5	23240.6551	-8.75	-44.01	-13.00	31.01	-35.26	Horizontal
6	24640.8301	-5.64	-40.31	-13.00	27.31	-34.67	Horizontal



The figure is a line graph titled "Spectral Plot". The vertical axis is labeled "Level[dBm]" and ranges from -110 to 20 in increments of 10. The horizontal axis is labeled "Frequency[Hz]" and has markers at 18G, 20G, and 26G. A solid red line represents the "Limit", which is constant at approximately -13 dBm. A solid green line represents the "Horizontal" level, which fluctuates around -45 dBm. Blue asterisks with superscripts (e.g., *1, *2, *3, *4, *5) mark specific data points along the green line. The plot shows several peaks above the -13 dBm limit, particularly between 20G and 26G.

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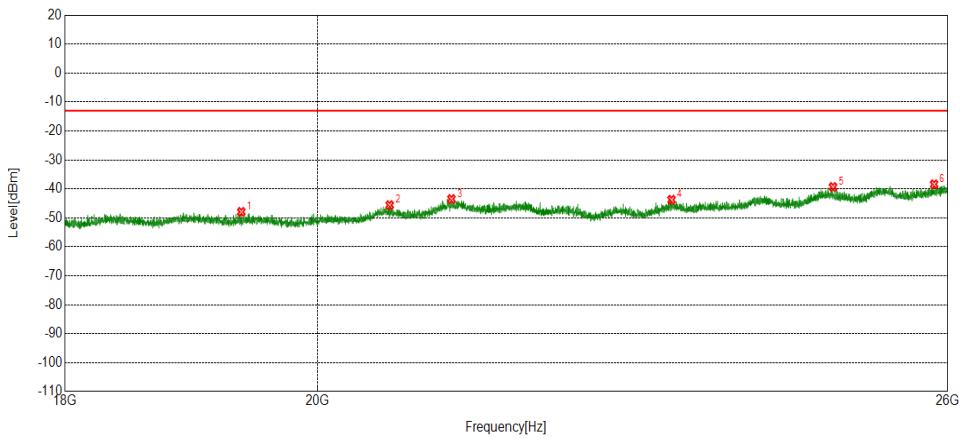
Test Mode	Band 12																																																													
Range	30MHz~18GHz																																																													
Test Environment	Normal																																																													
Test Frequencies	Low Channel																																																													
Test Channel Bandwidths	3MHz																																																													
Suspected Data List <table border="1"> <thead> <tr> <th>NO.</th> <th>Freq. [MHz]</th> <th>Reading [dBm]</th> <th>Level [dBm]</th> <th>Limit [dBm]</th> <th>Margin [dB]</th> <th>Factor [dB]</th> <th>Polarity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>48.2378</td> <td>-97.98</td> <td>-66.84</td> <td>-13.00</td> <td>53.84</td> <td>31.14</td> <td>Vertical</td> </tr> <tr> <td>2</td> <td>124.8755</td> <td>-98.38</td> <td>-76.68</td> <td>-13.00</td> <td>63.68</td> <td>21.70</td> <td>Vertical</td> </tr> <tr> <td>3</td> <td>488.8559</td> <td>-96.72</td> <td>-67.28</td> <td>-13.00</td> <td>54.28</td> <td>29.44</td> <td>Vertical</td> </tr> <tr> <td>4</td> <td>2930.7931</td> <td>-84.84</td> <td>-36.83</td> <td>-13.00</td> <td>23.83</td> <td>48.01</td> <td>Vertical</td> </tr> <tr> <td>5</td> <td>6015.1005</td> <td>-45.22</td> <td>-43.37</td> <td>-13.00</td> <td>30.37</td> <td>1.85</td> <td>Vertical</td> </tr> <tr> <td>6</td> <td>17080.9694</td> <td>-37.41</td> <td>-33.74</td> <td>-13.00</td> <td>20.74</td> <td>3.67</td> <td>Vertical</td> </tr> </tbody> </table>							NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	1	48.2378	-97.98	-66.84	-13.00	53.84	31.14	Vertical	2	124.8755	-98.38	-76.68	-13.00	63.68	21.70	Vertical	3	488.8559	-96.72	-67.28	-13.00	54.28	29.44	Vertical	4	2930.7931	-84.84	-36.83	-13.00	23.83	48.01	Vertical	5	6015.1005	-45.22	-43.37	-13.00	30.37	1.85	Vertical	6	17080.9694	-37.41	-33.74	-13.00	20.74	3.67	Vertical
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity																																																							
1	48.2378	-97.98	-66.84	-13.00	53.84	31.14	Vertical																																																							
2	124.8755	-98.38	-76.68	-13.00	63.68	21.70	Vertical																																																							
3	488.8559	-96.72	-67.28	-13.00	54.28	29.44	Vertical																																																							
4	2930.7931	-84.84	-36.83	-13.00	23.83	48.01	Vertical																																																							
5	6015.1005	-45.22	-43.37	-13.00	30.37	1.85	Vertical																																																							
6	17080.9694	-37.41	-33.74	-13.00	20.74	3.67	Vertical																																																							

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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Low Channel						
Test Channel Bandwidths	3MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19373.1716	-11.53	-47.92	-13.00	34.92	-36.39	Vertical
2	20608.3260	-9.39	-45.60	-13.00	32.60	-36.21	Vertical
3	21145.3932	-7.35	-43.48	-13.00	30.48	-36.13	Vertical
4	23175.6470	-8.45	-43.74	-13.00	30.74	-35.29	Vertical
5	24787.8485	-4.69	-39.33	-13.00	26.33	-34.64	Vertical
6	25853.9817	-3.96	-38.39	-13.00	25.39	-34.43	Vertical



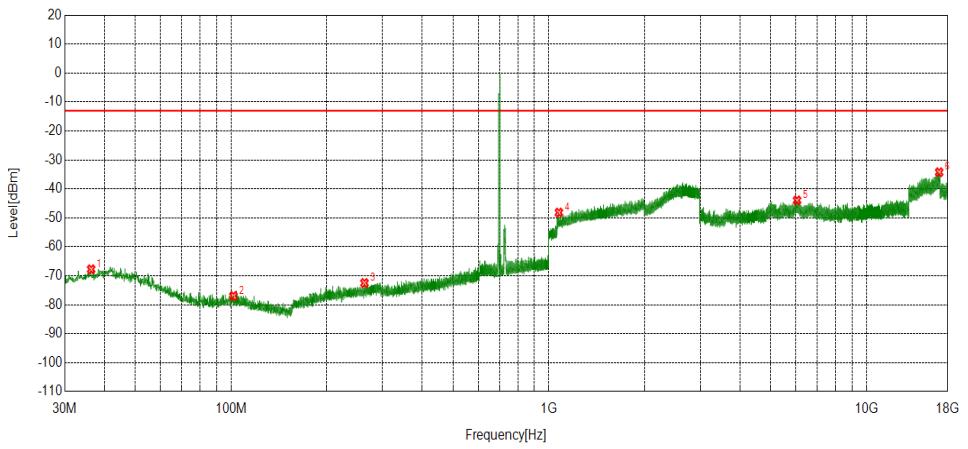
The figure is a spectral plot with the Y-axis labeled 'Level[dBm]' ranging from -110 to 20 in increments of 10. The X-axis is labeled 'Frequency[Hz]' with markers at 18G, 20G, and 26G. A solid red horizontal line at approximately -13 dBm represents the 'Limit'. A green line with small dots represents the 'Final Test' data. Six red asterisks labeled 1 through 6 are placed on the green line at specific frequencies: ~19.37 GHz, ~20.60 GHz, ~21.14 GHz, ~23.17 GHz, ~24.78 GHz, and ~25.85 GHz. These points indicate where the signal level is closest to the -13 dBm limit.

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Test Mode	Band 12						
Range	30MHz~18GHz						
Test Environment	Normal						
Test Frequencies	Low Channel						
Test Channel Bandwidths	3MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.3056	-99.37	-67.75	-13.00	54.75	31.62	Horizontal
2	101.7872	-100.60	-76.98	-13.00	63.98	23.62	Horizontal
3	263.1143	-97.57	-72.48	-13.00	59.48	25.09	Horizontal
4	1076.6077	-84.35	-48.17	-13.00	35.17	36.18	Horizontal
5	6046.1015	-45.82	-43.95	-13.00	30.95	1.87	Horizontal
6	16931.9644	-37.98	-34.24	-13.00	21.24	3.74	Horizontal



The graph shows a plot of Level [dBm] on the Y-axis (ranging from -110 to 20) against Frequency [Hz] on the X-axis (logarithmic scale from 30M to 18G). A red horizontal line at -13 dBm represents the limit. A green line represents the final test results. Red asterisks labeled 1 through 6 indicate specific frequency points of interest. The test results generally stay below the -13 dBm limit, with some deviations at higher frequencies.

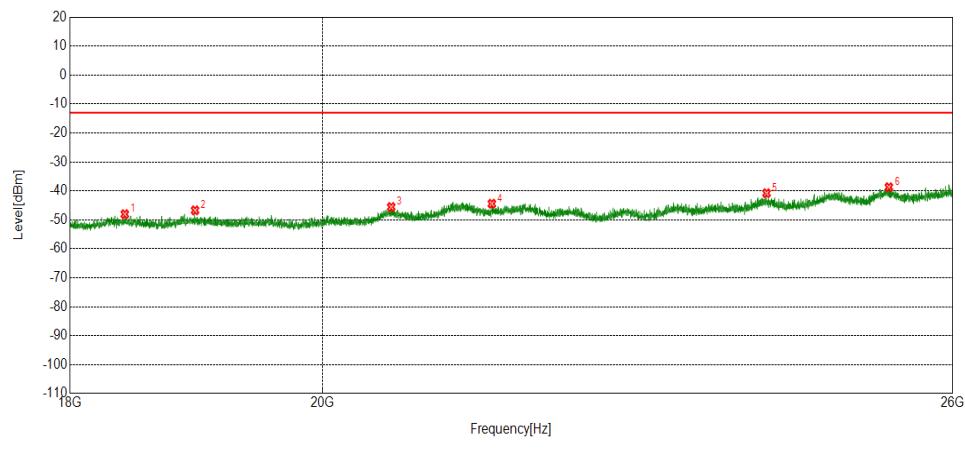
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	3MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18417.0521	-11.48	-48.02	-13.00	35.02	-36.54	Horizontal
2	18964.1205	-10.24	-46.70	-13.00	33.70	-36.46	Horizontal
3	20578.3223	-9.35	-45.56	-13.00	32.56	-36.21	Horizontal
4	21459.4324	-8.33	-44.41	-13.00	31.41	-36.08	Horizontal
5	24060.7576	-6.00	-40.79	-13.00	27.79	-34.79	Horizontal
6	25318.9149	-4.17	-38.71	-13.00	25.71	-34.54	Horizontal



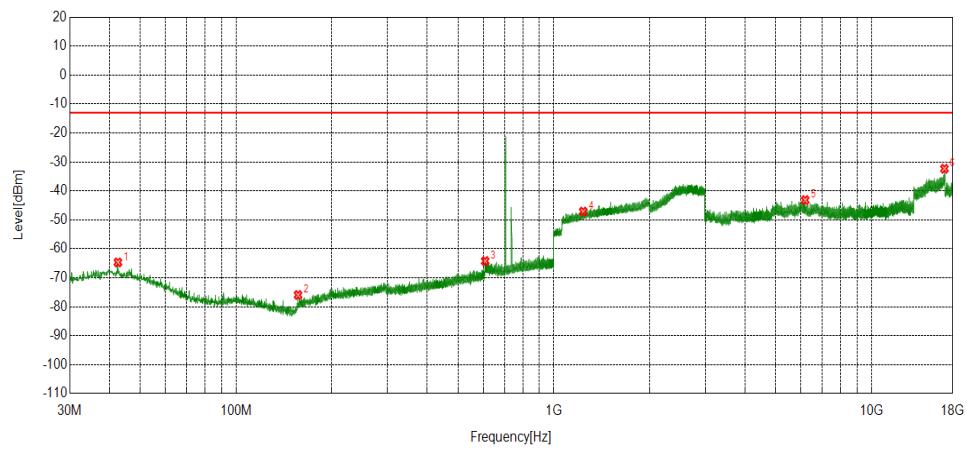
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	3MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	42.5143	-97.03	-64.68	-13.00	51.68	32.35	Vertical
2	156.7917	-96.02	-75.94	-13.00	62.94	20.08	Vertical
3	608.5659	-95.93	-64.23	-13.00	51.23	31.70	Vertical
4	1237.8238	-84.93	-47.13	-13.00	34.13	37.80	Vertical
5	6186.6062	-45.11	-43.16	-13.00	30.16	1.95	Vertical
6	16963.9655	-36.18	-32.33	-13.00	19.33	3.85	Vertical

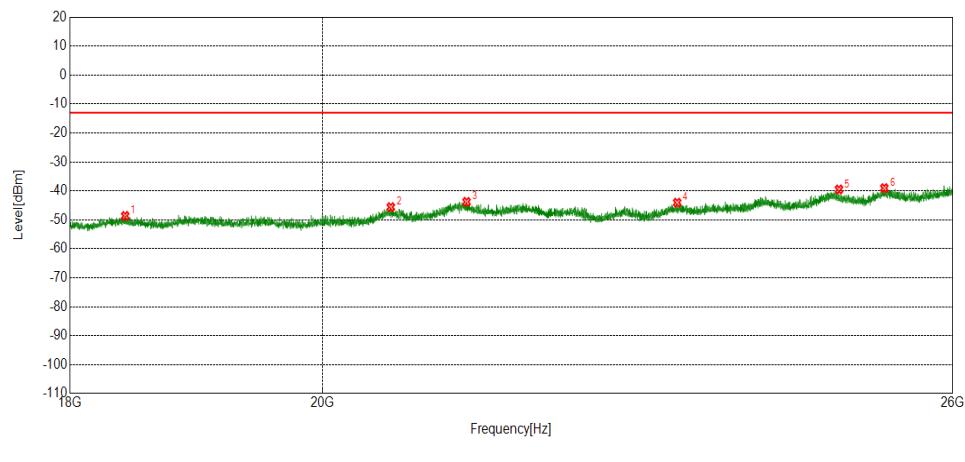


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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Mid Channel						
Test Channel Bandwidths	3MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18420.0525	-12.08	-48.62	-13.00	35.62	-36.54	Vertical
2	20575.3219	-9.39	-45.60	-13.00	32.60	-36.21	Vertical
3	21234.4043	-7.67	-43.78	-13.00	30.78	-36.11	Vertical
4	23181.6477	-8.76	-44.05	-13.00	31.05	-35.29	Vertical
5	24797.8497	-4.85	-39.49	-13.00	26.49	-34.64	Vertical
6	25270.9089	-4.49	-39.04	-13.00	26.04	-34.55	Vertical



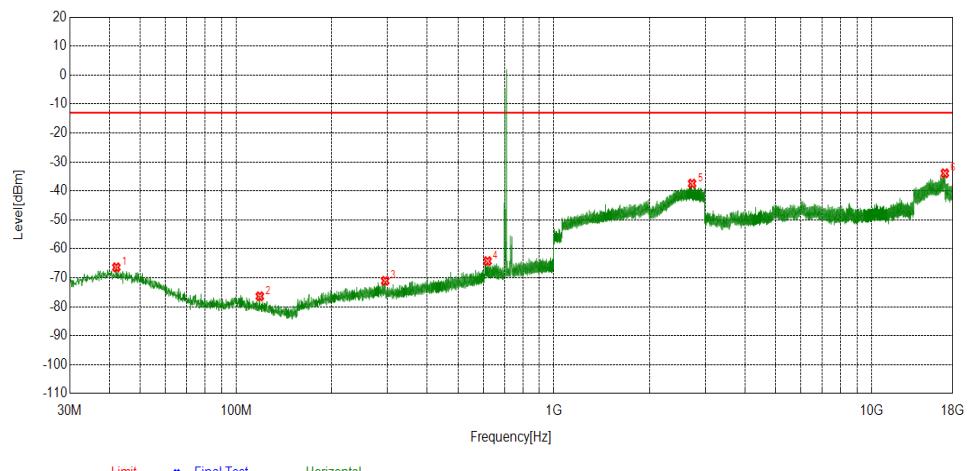
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	3MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	42.0292	-98.83	-66.38	-13.00	53.38	32.45	Horizontal
2	118.8609	-98.60	-76.40	-13.00	63.40	22.20	Horizontal
3	294.9335	-97.07	-71.05	-13.00	58.05	26.02	Horizontal
4	619.0429	-95.93	-64.24	-13.00	51.24	31.69	Horizontal
5	2724.3724	-85.77	-37.46	-13.00	24.46	48.31	Horizontal
6	17015.4672	-37.82	-33.90	-13.00	20.90	3.92	Horizontal



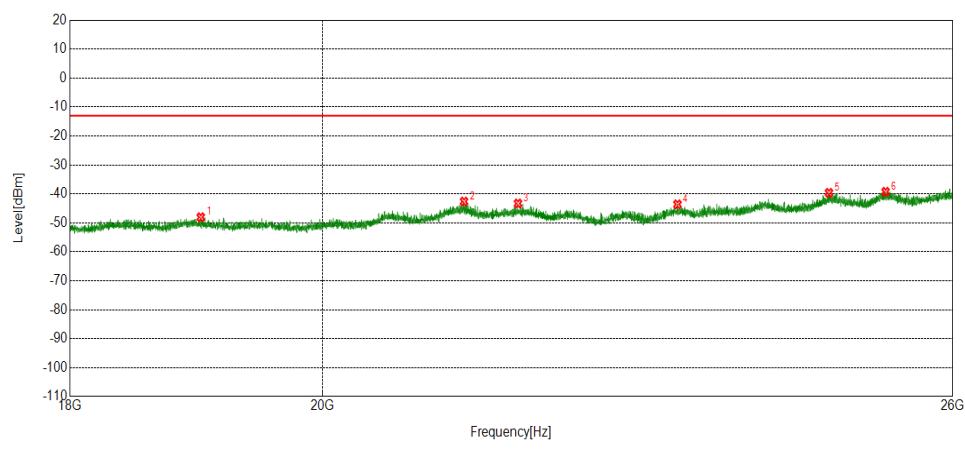
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	3MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19009.1261	-11.60	-48.05	-13.00	35.05	-36.45	Horizontal
2	21212.4016	-6.51	-42.63	-13.00	29.63	-36.12	Horizontal
3	21694.4618	-7.25	-43.30	-13.00	30.30	-36.05	Horizontal
4	23184.6481	-8.31	-43.60	-13.00	30.60	-35.29	Horizontal
5	24694.8369	-4.96	-39.62	-13.00	26.62	-34.66	Horizontal
6	25283.9105	-4.72	-39.26	-13.00	26.26	-34.54	Horizontal

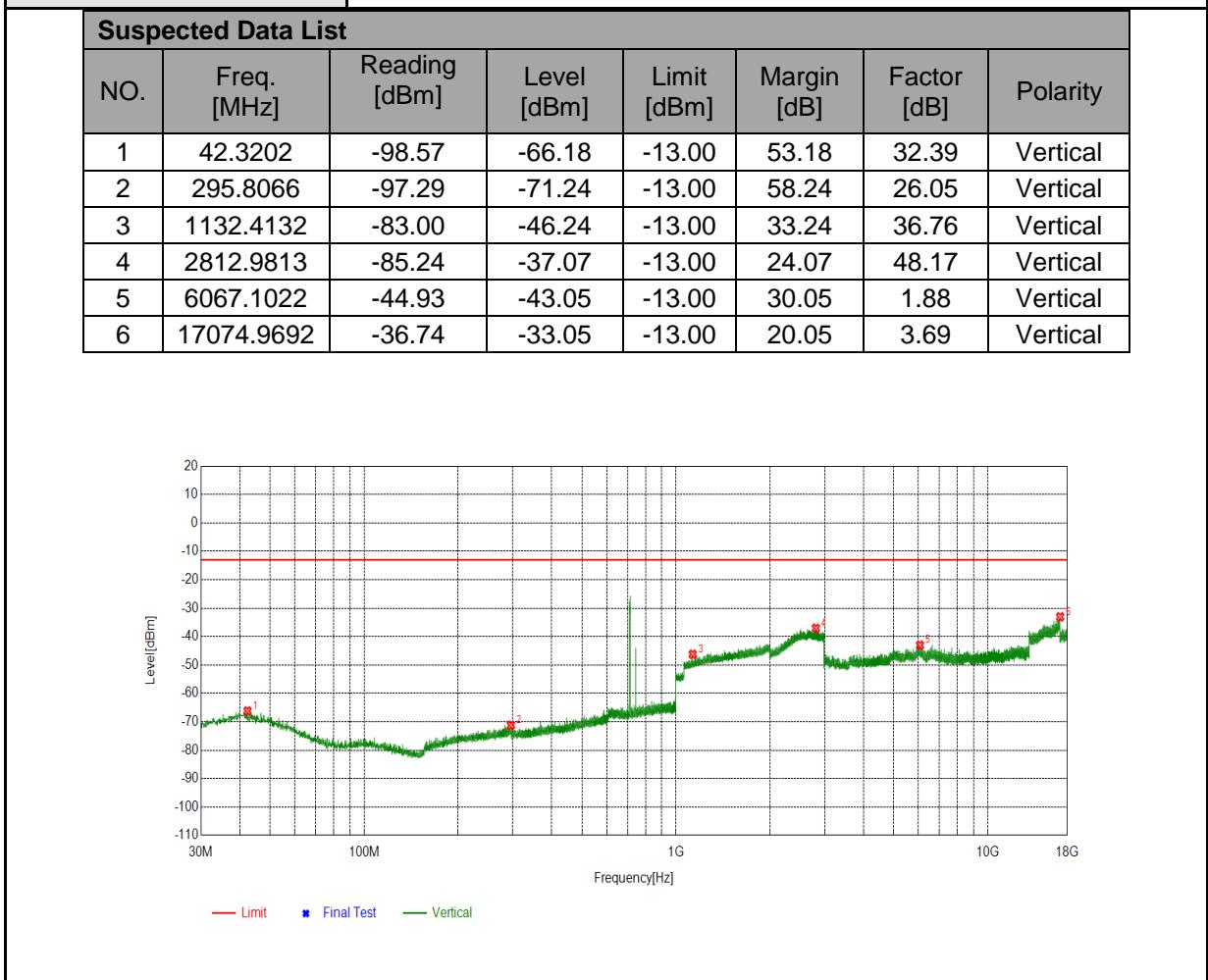


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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	3MHz



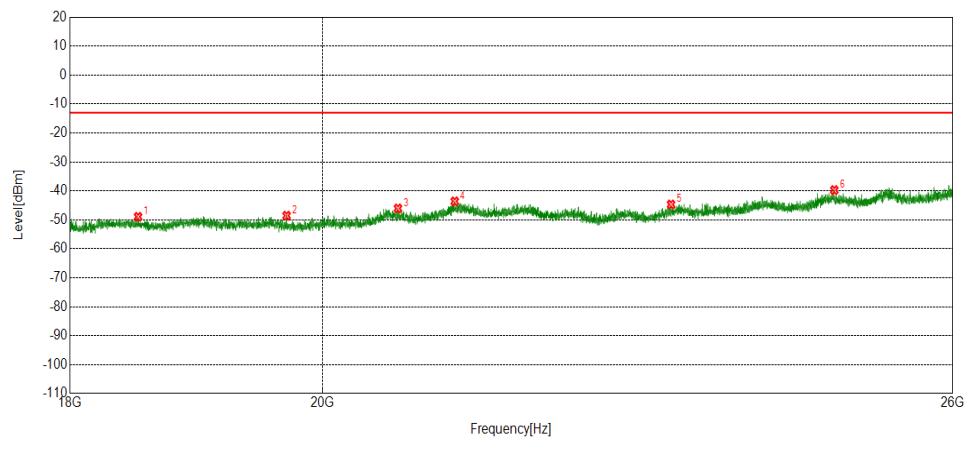
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	3MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18519.0649	-12.41	-48.93	-13.00	35.93	-36.52	Vertical
2	19701.2127	-12.20	-48.54	-13.00	35.54	-36.34	Vertical
3	20636.3295	-9.84	-46.04	-13.00	33.04	-36.20	Vertical
4	21130.3913	-7.47	-43.60	-13.00	30.60	-36.13	Vertical
5	23122.6403	-9.35	-44.68	-13.00	31.68	-35.33	Vertical
6	24749.8437	-5.06	-39.71	-13.00	26.71	-34.65	Vertical



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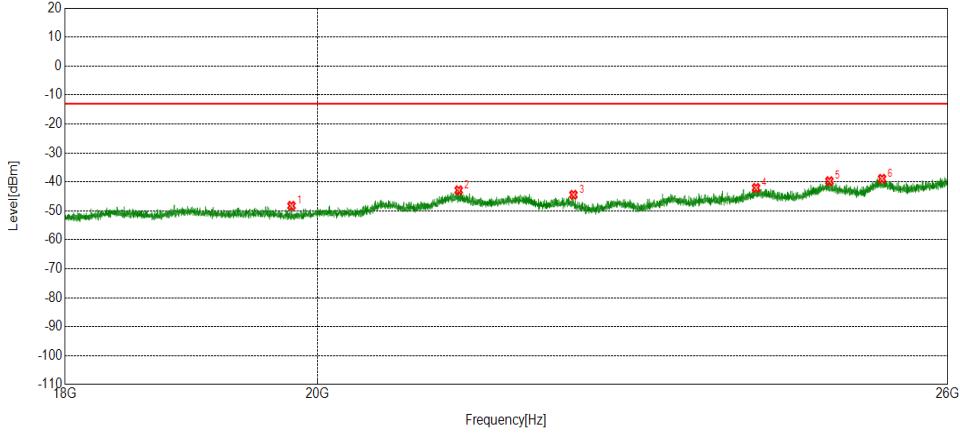
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NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity																																																							
1	40.6711	-98.88	-66.14	-13.00	53.14	32.74	Horizontal																																																							
2	53.1853	-98.02	-68.31	-13.00	55.31	29.71	Horizontal																																																							
3	288.0458	-95.94	-70.13	-13.00	57.13	25.81	Horizontal																																																							
4	359.7360	-97.05	-69.96	-13.00	56.96	27.09	Horizontal																																																							
5	2528.9529	-86.20	-37.57	-13.00	24.57	48.63	Horizontal																																																							
6	16966.4655	-37.48	-33.62	-13.00	20.62	3.86	Horizontal																																																							

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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Hig Channel						
Test Channel Bandwidths	3MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19782.2228	-11.91	-48.24	-13.00	35.24	-36.33	Horizontal
2	21209.4012	-6.76	-42.88	-13.00	29.88	-36.12	Horizontal
3	22247.5309	-8.59	-44.44	-13.00	31.44	-35.85	Horizontal
4	24005.7507	-7.27	-42.07	-13.00	29.07	-34.80	Horizontal
5	24750.8439	-5.08	-39.73	-13.00	26.73	-34.65	Horizontal
6	25298.9124	-4.36	-38.90	-13.00	25.90	-34.54	Horizontal



The figure is a spectral plot with the Y-axis labeled 'Level[dBm]' ranging from -110 to 20 in increments of 10, and the X-axis labeled 'Frequency[Hz]' with markers at 18G, 20G, and 26G. A solid red horizontal line at approximately -13 dBm represents the technical limit. A solid green horizontal line at approximately -50 dBm represents the noise floor. Six red asterisks labeled 1 through 6 are placed on the plot, corresponding to the data points listed in the Suspected Data List table above. The asterisks are located at frequencies of 19782.2228 MHz, 21209.4012 MHz, 22247.5309 MHz, 24005.7507 MHz, 24750.8439 MHz, and 25298.9124 MHz, with their respective signal levels being -11.91 dBm, -6.76 dBm, -8.59 dBm, -7.27 dBm, -5.08 dBm, and -4.36 dBm.

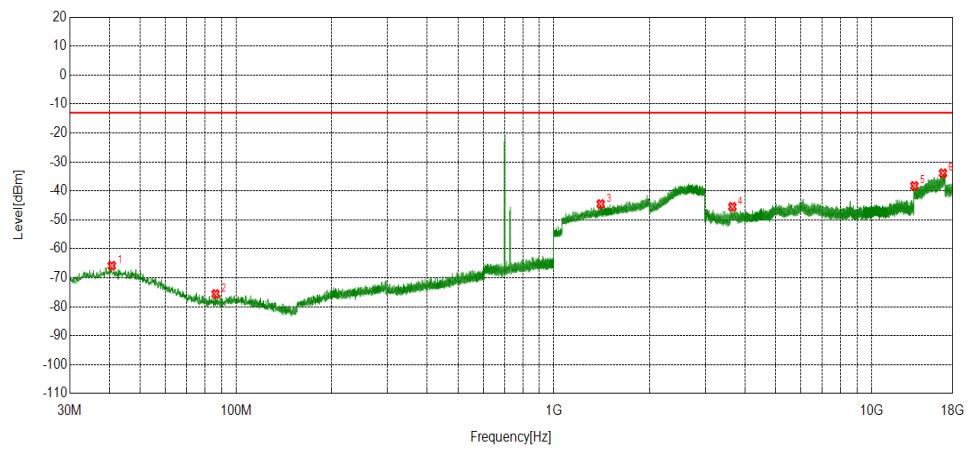
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	40.6711	-98.58	-65.84	-13.00	52.84	32.74	Vertical
2	86.2656	-98.61	-75.60	-13.00	62.60	23.01	Vertical
3	1405.4405	-83.86	-44.52	-13.00	31.52	39.34	Vertical
4	3649.5217	-47.03	-45.50	-13.00	32.50	1.53	Vertical
5	13648.3549	-41.02	-38.26	-13.00	25.26	2.76	Vertical
6	16787.9596	-37.17	-33.91	-13.00	20.91	3.26	Vertical



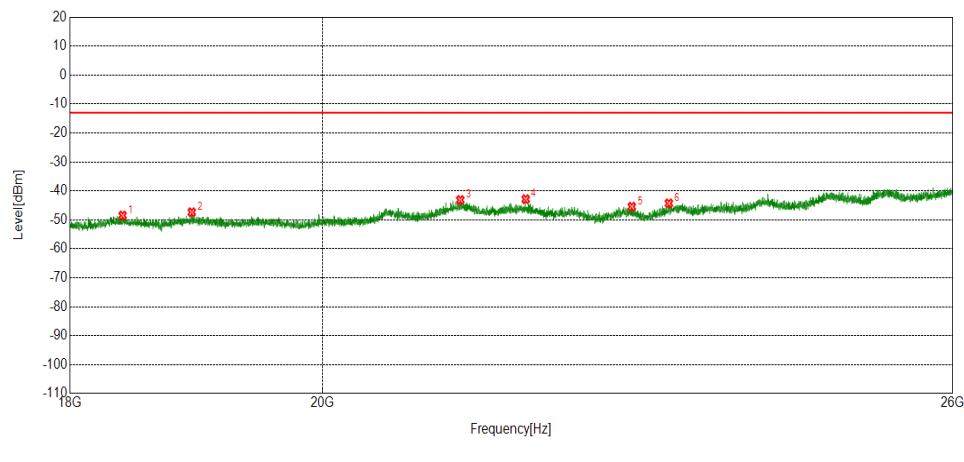
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18400.0500	-11.94	-48.48	-13.00	35.48	-36.54	Vertical
2	18938.1173	-10.91	-47.37	-13.00	34.37	-36.46	Vertical
3	21179.3974	-7.00	-43.12	-13.00	30.12	-36.12	Vertical
4	21764.4706	-6.82	-42.86	-13.00	29.86	-36.04	Vertical
5	22747.5934	-9.89	-45.44	-13.00	32.44	-35.55	Vertical
6	23101.6377	-8.95	-44.29	-13.00	31.29	-35.34	Vertical

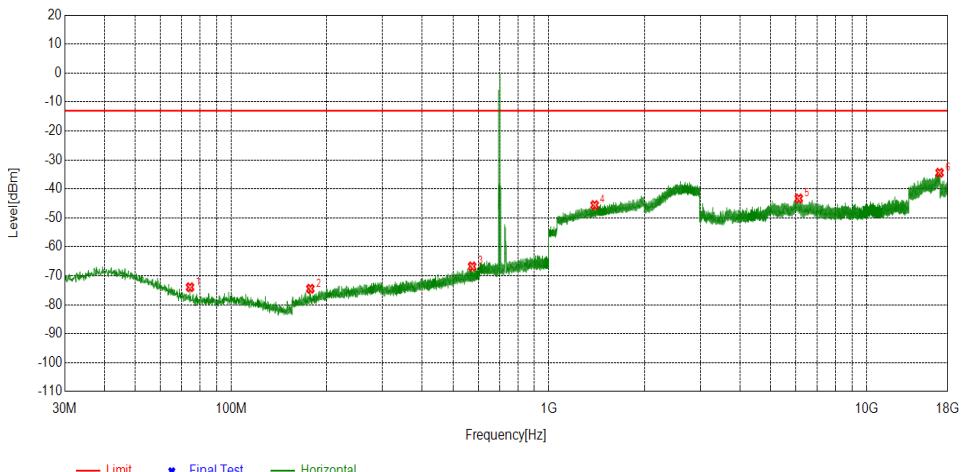


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Test Mode	Band 12						
Range	30MHz~18GHz						
Test Environment	Normal						
Test Frequencies	Low Channel						
Test Channel Bandwidths	5MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.3334	-97.48	-73.94	-13.00	60.94	23.54	Horizontal
2	177.7458	-96.07	-74.47	-13.00	61.47	21.60	Horizontal
3	574.0304	-97.88	-66.76	-13.00	53.76	31.12	Horizontal
4	1394.4394	-84.84	-45.60	-13.00	32.60	39.24	Horizontal
5	6120.1040	-45.20	-43.29	-13.00	30.29	1.91	Horizontal
6	16981.9661	-38.33	-34.41	-13.00	21.41	3.92	Horizontal



The graph shows a signal level (green line) fluctuating between -70 dBm and -40 dBm across the frequency range. A horizontal red line at -13 dBm indicates the emission limit. Red asterisks mark specific test points along the signal curve. The x-axis is logarithmic, with major ticks at 30M, 100M, 1G, 10G, and 18G. The y-axis is linear, ranging from -110 to 20 dBm.

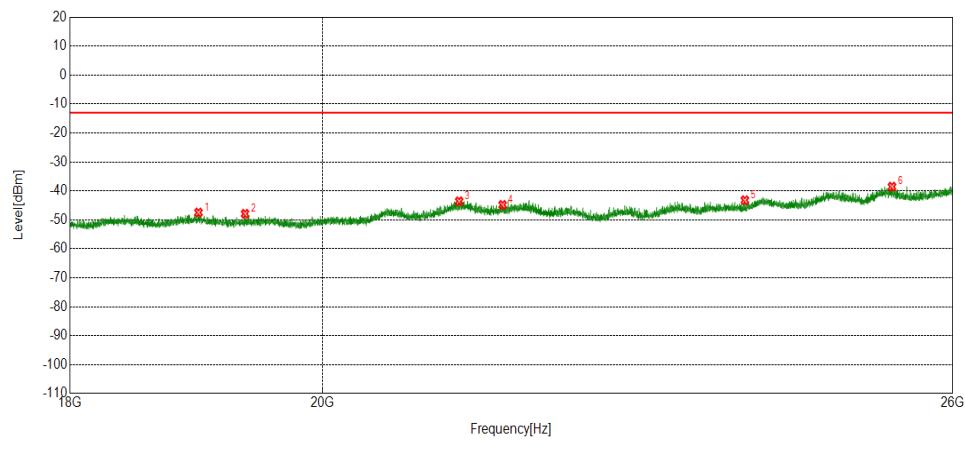
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18991.1239	-11.02	-47.47	-13.00	34.47	-36.45	Horizontal
2	19363.1704	-11.49	-47.89	-13.00	34.89	-36.40	Horizontal
3	21169.3962	-7.46	-43.58	-13.00	30.58	-36.12	Horizontal
4	21555.4444	-8.75	-44.82	-13.00	31.82	-36.07	Horizontal
5	23844.7306	-8.33	-43.22	-13.00	30.22	-34.89	Horizontal
6	25351.9190	-4.01	-38.54	-13.00	25.54	-34.53	Horizontal



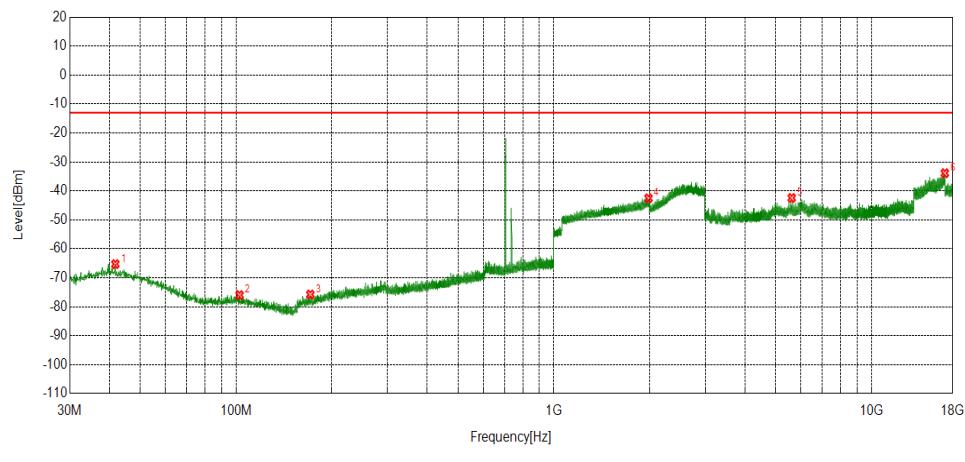
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	41.7382	-97.77	-65.26	-13.00	52.26	32.51	Vertical
2	102.6603	-99.53	-75.98	-13.00	62.98	23.55	Vertical
3	171.4401	-96.90	-75.76	-13.00	62.76	21.14	Vertical
4	1987.6988	-84.94	-42.54	-13.00	29.54	42.40	Vertical
5	5609.0870	-44.16	-42.42	-13.00	29.42	1.74	Vertical
6	17012.9671	-37.81	-33.88	-13.00	20.88	3.93	Vertical



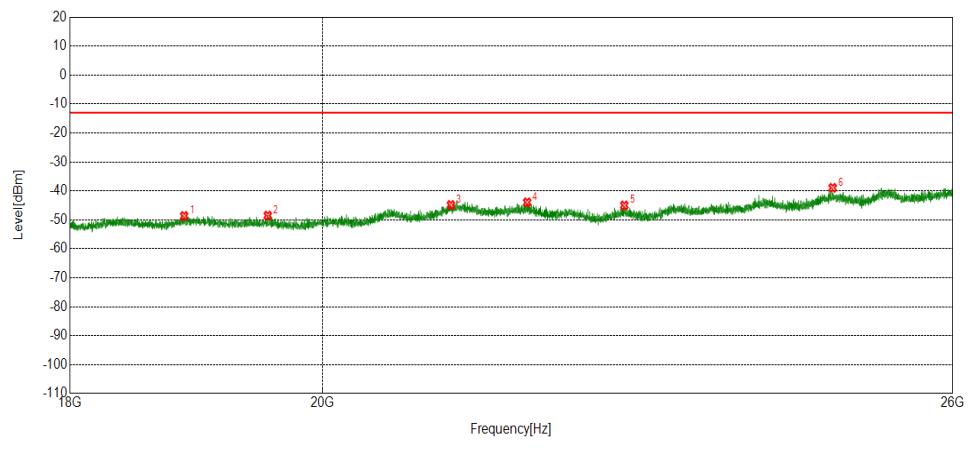
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18878.1098	-12.17	-48.64	-13.00	35.64	-36.47	Vertical
2	19547.1934	-12.14	-48.51	-13.00	35.51	-36.37	Vertical
3	21096.3870	-8.71	-44.85	-13.00	31.85	-36.14	Vertical
4	21777.4722	-7.92	-43.95	-13.00	30.95	-36.03	Vertical
5	22676.5846	-9.42	-45.01	-13.00	32.01	-35.59	Vertical
6	24732.8416	-4.29	-38.94	-13.00	25.94	-34.65	Vertical



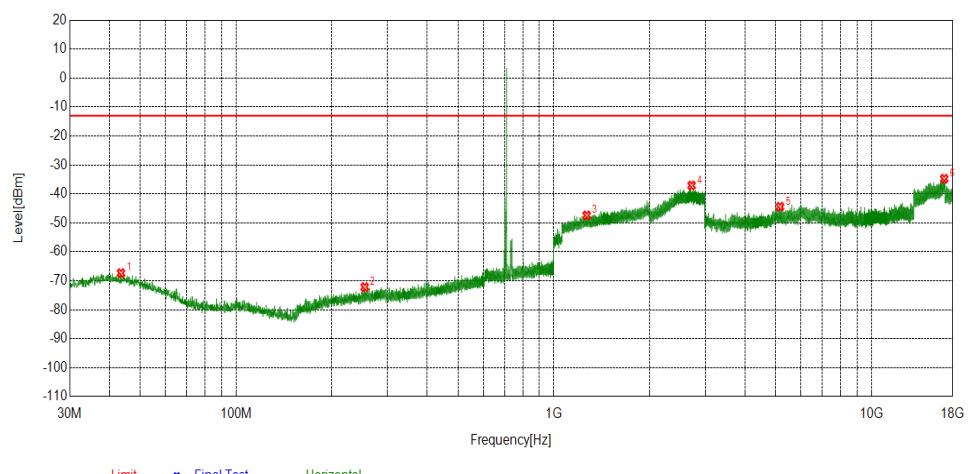
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	43.4843	-99.49	-67.35	-13.00	54.35	32.14	Horizontal
2	254.1894	-97.02	-72.19	-13.00	59.19	24.83	Horizontal
3	1269.2269	-85.51	-47.42	-13.00	34.42	38.09	Horizontal
4	2715.1715	-85.42	-37.09	-13.00	24.09	48.33	Horizontal
5	5154.5718	-46.24	-44.43	-13.00	31.43	1.81	Horizontal
6	16940.9647	-38.52	-34.75	-13.00	21.75	3.77	Horizontal



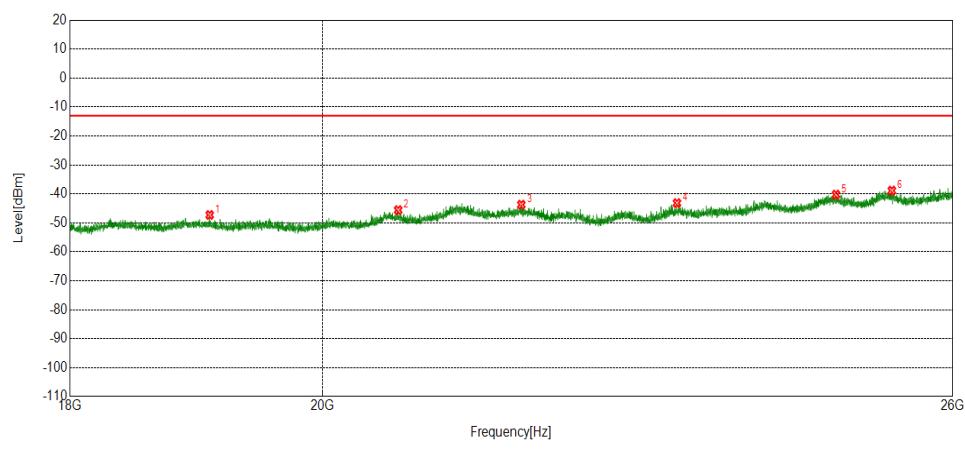
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	19080.1350	-10.82	-47.26	-13.00	34.26	-36.44	Horizontal
2	20638.3298	-9.40	-45.60	-13.00	32.60	-36.20	Horizontal
3	21724.4656	-7.68	-43.72	-13.00	30.72	-36.04	Horizontal
4	23179.6475	-7.87	-43.16	-13.00	30.16	-35.29	Horizontal
5	24766.8459	-5.58	-40.23	-13.00	27.23	-34.65	Horizontal
6	25349.9187	-4.33	-38.86	-13.00	25.86	-34.53	Horizontal



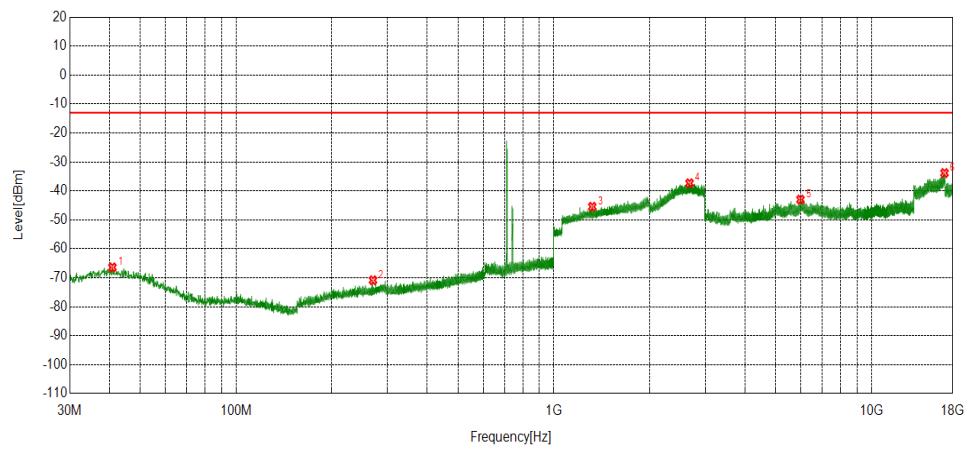
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	40.8651	-99.09	-66.39	-13.00	53.39	32.70	Vertical
2	269.9050	-96.12	-70.84	-13.00	57.84	25.28	Vertical
3	1322.2322	-84.03	-45.45	-13.00	32.45	38.58	Vertical
4	2675.1675	-85.73	-37.34	-13.00	24.34	48.39	Vertical
5	5976.0992	-44.81	-42.98	-13.00	29.98	1.83	Vertical
6	16972.4657	-37.70	-33.82	-13.00	20.82	3.88	Vertical



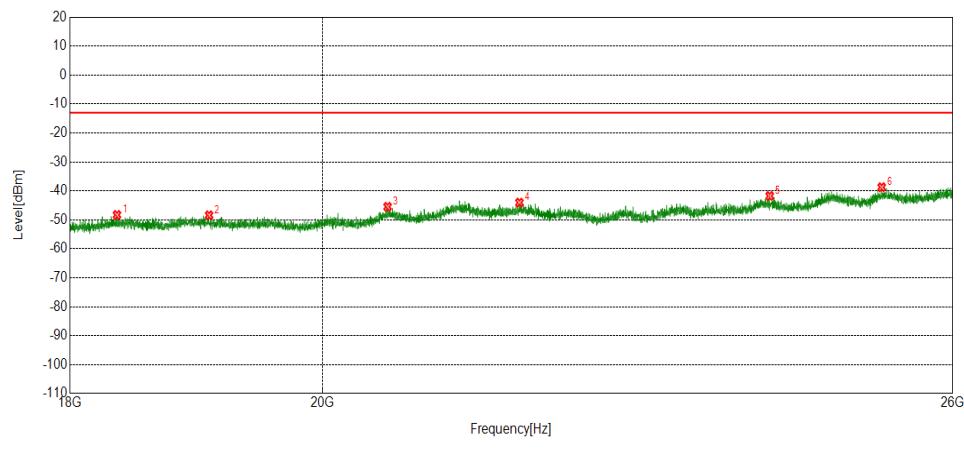
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18357.0446	-11.74	-48.29	-13.00	35.29	-36.55	Vertical
2	19075.1344	-11.97	-48.41	-13.00	35.41	-36.44	Vertical
3	20547.3184	-9.26	-45.48	-13.00	32.48	-36.22	Vertical
4	21707.4634	-7.99	-44.03	-13.00	31.03	-36.04	Vertical
5	24092.7616	-6.96	-41.74	-13.00	28.74	-34.78	Vertical
6	25242.9054	-4.17	-38.72	-13.00	25.72	-34.55	Vertical



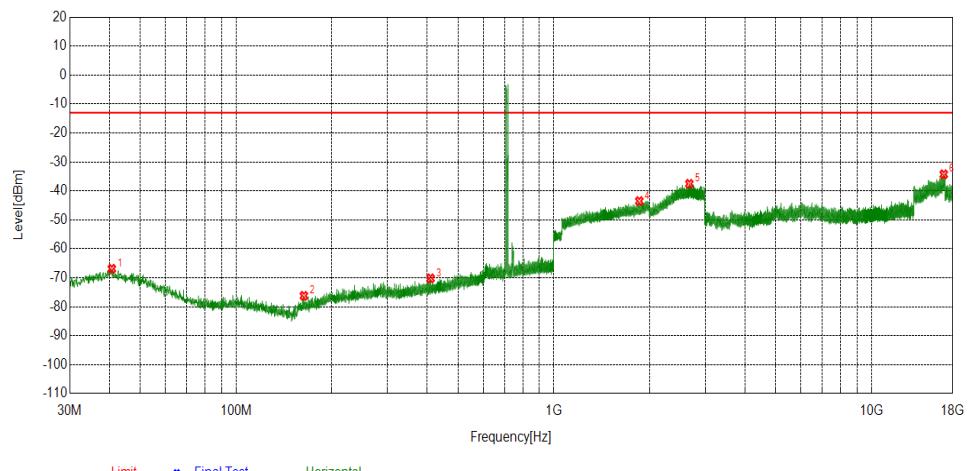
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	40.6711	-99.64	-66.90	-13.00	53.90	32.74	Horizontal
2	163.5824	-96.79	-76.22	-13.00	63.22	20.57	Horizontal
3	409.5990	-98.09	-70.20	-13.00	57.20	27.89	Horizontal
4	1859.0859	-85.56	-43.52	-13.00	30.52	42.04	Horizontal
5	2671.5672	-85.95	-37.55	-13.00	24.55	48.40	Horizontal
6	16878.4626	-37.81	-34.27	-13.00	21.27	3.54	Horizontal



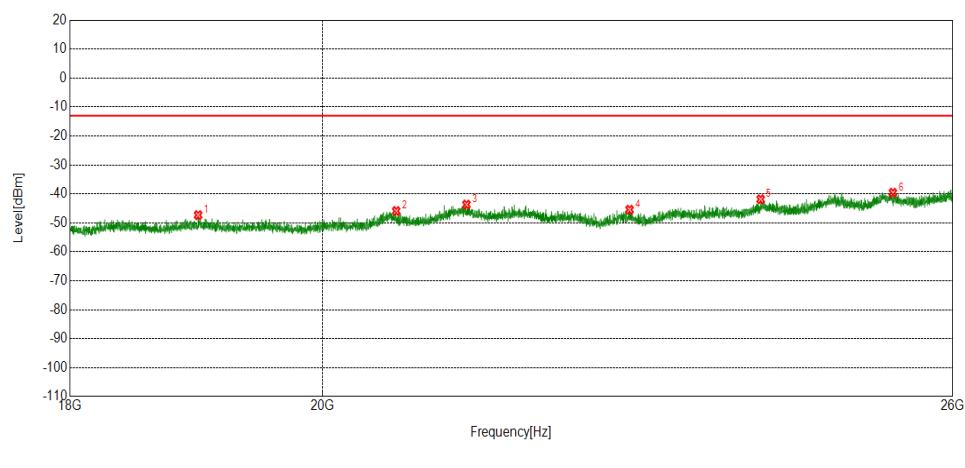
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	5MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18988.1235	-10.86	-47.31	-13.00	34.31	-36.45	Horizontal
2	20621.3277	-9.68	-45.89	-13.00	32.89	-36.21	Horizontal
3	21233.4042	-7.56	-43.67	-13.00	30.67	-36.11	Horizontal
4	22726.5908	-9.88	-45.44	-13.00	32.44	-35.56	Horizontal
5	24001.7502	-7.04	-41.84	-13.00	28.84	-34.80	Horizontal
6	25360.9201	-5.06	-39.59	-13.00	26.59	-34.53	Horizontal



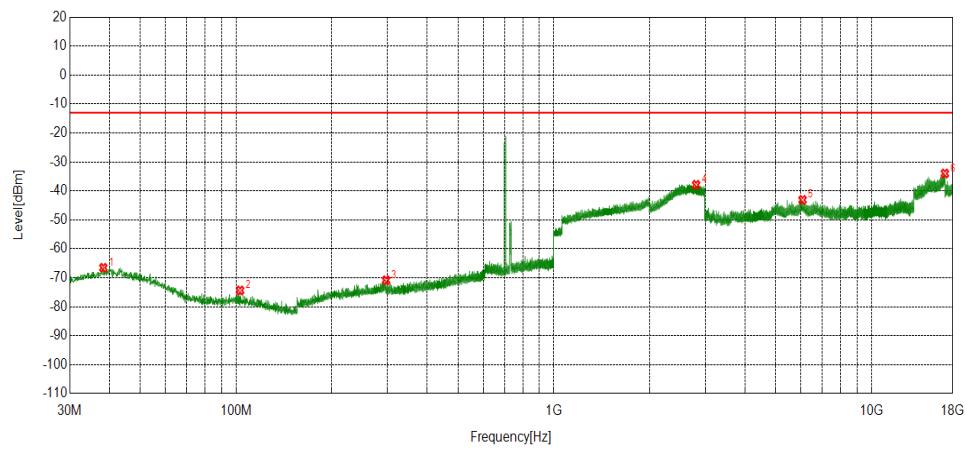
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	38.2458	-98.83	-66.55	-13.00	53.55	32.28	Vertical
2	103.0483	-97.87	-74.36	-13.00	61.36	23.51	Vertical
3	296.7767	-96.94	-70.86	-13.00	57.86	26.08	Vertical
4	2805.5806	-86.07	-37.89	-13.00	24.89	48.18	Vertical
5	6068.6023	-44.98	-43.10	-13.00	30.10	1.88	Vertical
6	17018.9673	-37.89	-33.98	-13.00	20.98	3.91	Vertical



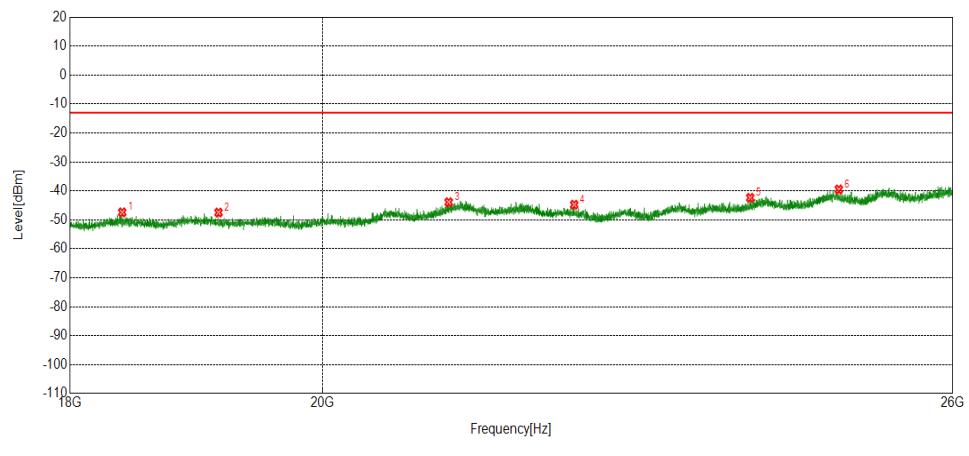
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	10MHz

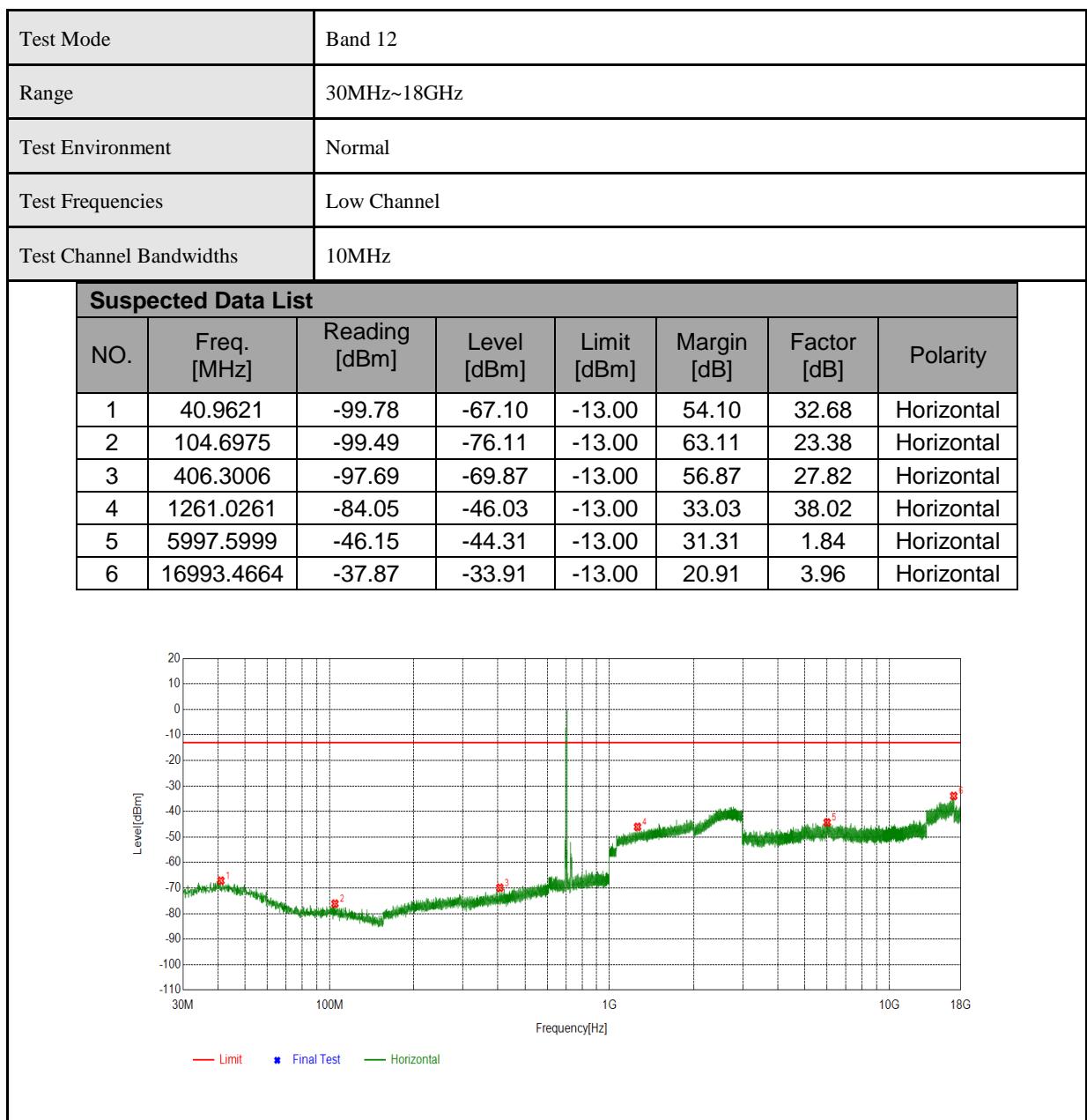
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18397.0496	-10.86	-47.40	-13.00	34.40	-36.54	Vertical
2	19150.1438	-11.04	-47.47	-13.00	34.47	-36.43	Vertical
3	21077.3847	-7.77	-43.91	-13.00	30.91	-36.14	Vertical
4	22208.5261	-8.88	-44.75	-13.00	31.75	-35.87	Vertical
5	23897.7372	-7.51	-42.37	-13.00	29.37	-34.86	Vertical
6	24795.8495	-4.85	-39.49	-13.00	26.49	-34.64	Vertical



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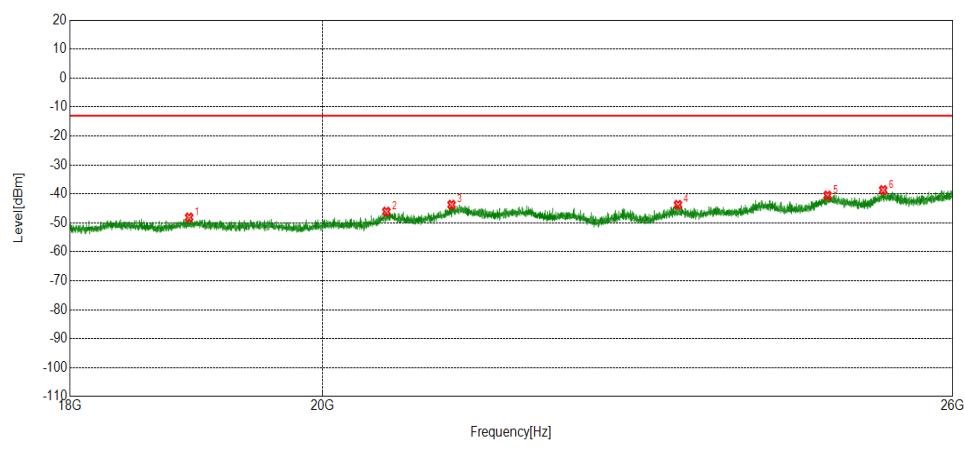
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Low Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18917.1146	-11.65	-48.11	-13.00	35.11	-36.46	Horizontal
2	20537.3172	-9.89	-46.11	-13.00	33.11	-36.22	Horizontal
3	21102.3878	-7.60	-43.73	-13.00	30.73	-36.13	Horizontal
4	23189.6487	-8.46	-43.75	-13.00	30.75	-35.29	Horizontal
5	24679.8350	-5.88	-40.54	-13.00	27.54	-34.66	Horizontal
6	25258.9074	-4.10	-38.65	-13.00	25.65	-34.55	Horizontal



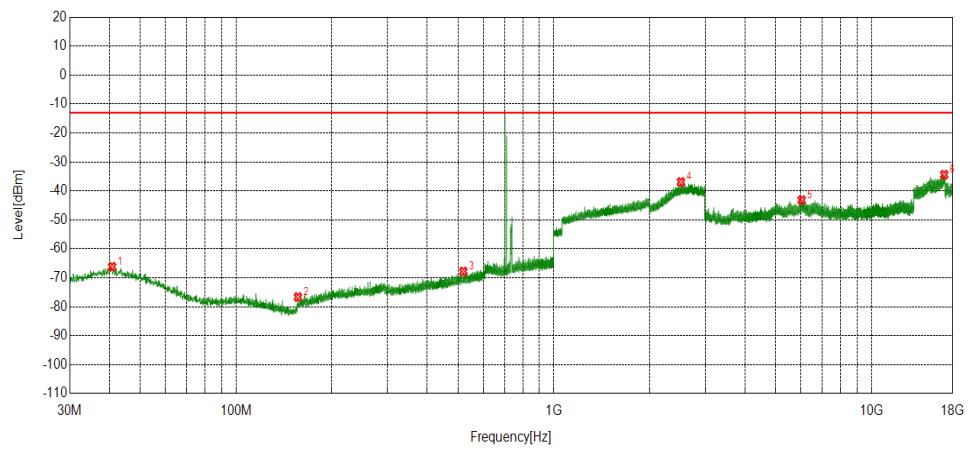
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	40.7681	-98.90	-66.18	-13.00	53.18	32.72	Vertical
2	156.6947	-96.72	-76.65	-13.00	63.65	20.07	Vertical
3	519.5110	-97.86	-67.82	-13.00	54.82	30.04	Vertical
4	2513.9514	-85.58	-36.93	-13.00	23.93	48.65	Vertical
5	6027.1009	-45.04	-43.18	-13.00	30.18	1.86	Vertical
6	16934.9645	-38.15	-34.40	-13.00	21.40	3.75	Vertical

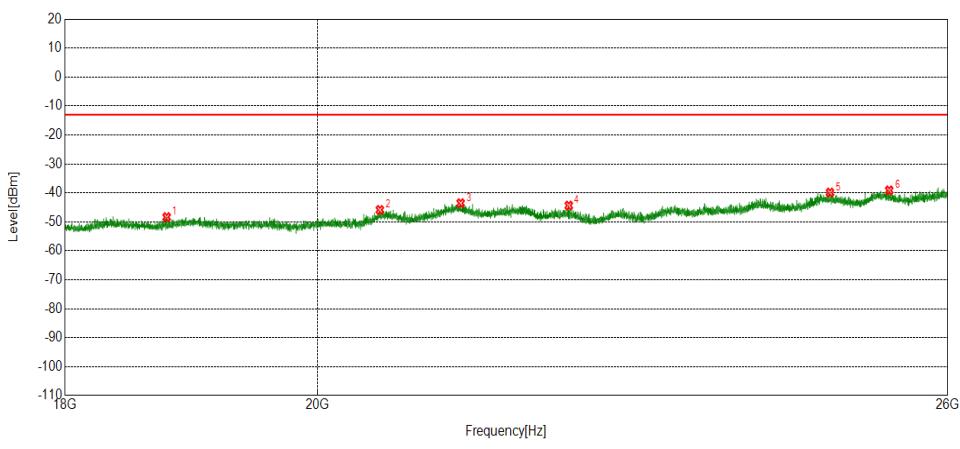


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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Mid Channel						
Test Channel Bandwidths	10MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18780.0975	-11.87	-48.35	-13.00	35.35	-36.48	Vertical
2	20524.3155	-9.65	-45.87	-13.00	32.87	-36.22	Vertical
3	21226.4033	-7.42	-43.54	-13.00	30.54	-36.12	Vertical
4	22204.5256	-8.47	-44.35	-13.00	31.35	-35.88	Vertical
5	24756.8446	-5.22	-39.87	-13.00	26.87	-34.65	Vertical
6	25374.9219	-4.59	-39.12	-13.00	26.12	-34.53	Vertical



The figure is a spectral plot with 'Frequency[Hz]' on the x-axis (ranging from 18G to 26G) and 'Level[dBm]' on the y-axis (ranging from -110 to 20). A red horizontal line at approximately -13.00 dBm represents the limit. A green line shows the signal level, which stays below the limit except for several peaks marked with red asterisks labeled 1 through 6. Asterisk 1 is at ~18.8 GHz, asterisk 2 is at ~20.5 GHz, asterisk 3 is at ~21.2 GHz, asterisk 4 is at ~22.2 GHz, asterisk 5 is at ~24.7 GHz, and asterisk 6 is at ~25.37 GHz.

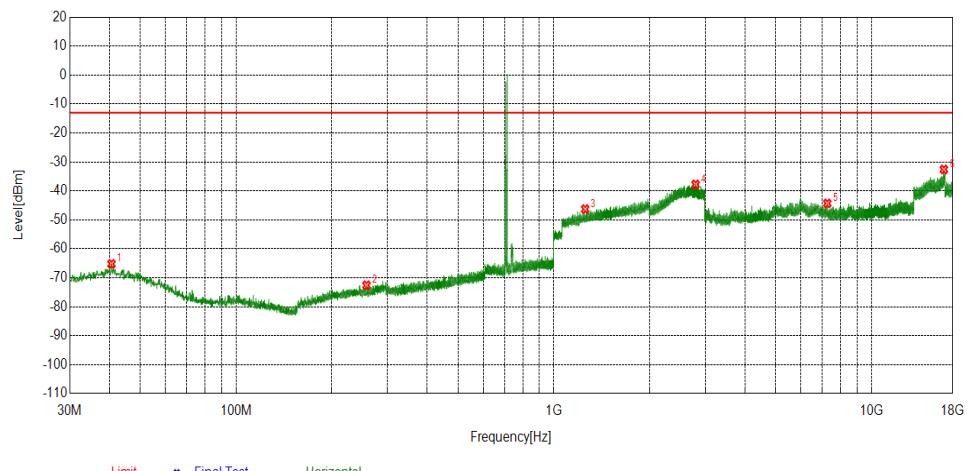
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	40.5741	-97.96	-65.20	-13.00	52.20	32.76	Horizontal
2	257.4877	-97.52	-72.59	-13.00	59.59	24.93	Horizontal
3	1255.8256	-84.25	-46.28	-13.00	33.28	37.97	Horizontal
4	2795.3795	-85.97	-37.77	-13.00	24.77	48.20	Horizontal
5	7259.1420	-46.38	-44.32	-13.00	31.32	2.06	Horizontal
6	16892.4631	-36.18	-32.59	-13.00	19.59	3.59	Horizontal



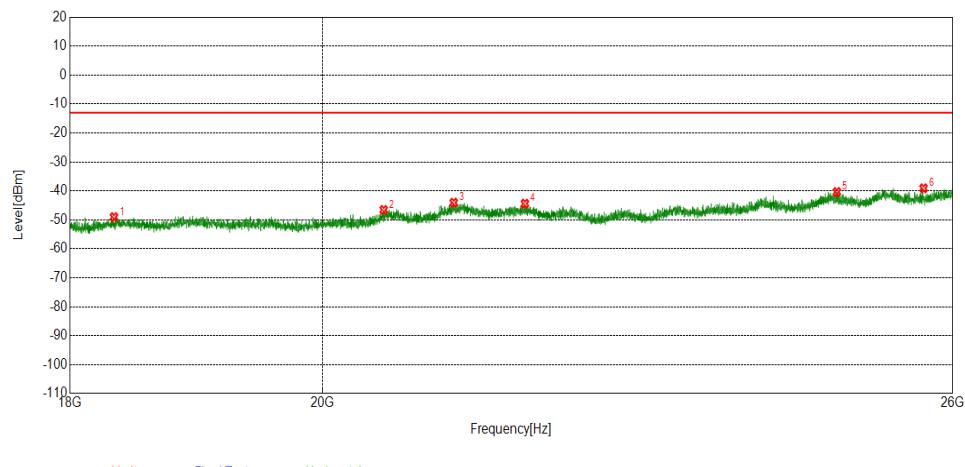
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Mid Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18334.0418	-12.48	-49.03	-13.00	36.03	-36.55	Horizontal
2	20514.3143	-10.34	-46.56	-13.00	33.56	-36.22	Horizontal
3	21121.3902	-7.92	-44.05	-13.00	31.05	-36.13	Horizontal
4	21757.4697	-8.34	-44.38	-13.00	31.38	-36.04	Horizontal
5	24775.8470	-5.70	-40.34	-13.00	27.34	-34.64	Horizontal
6	25686.9609	-4.64	-39.10	-13.00	26.10	-34.46	Horizontal



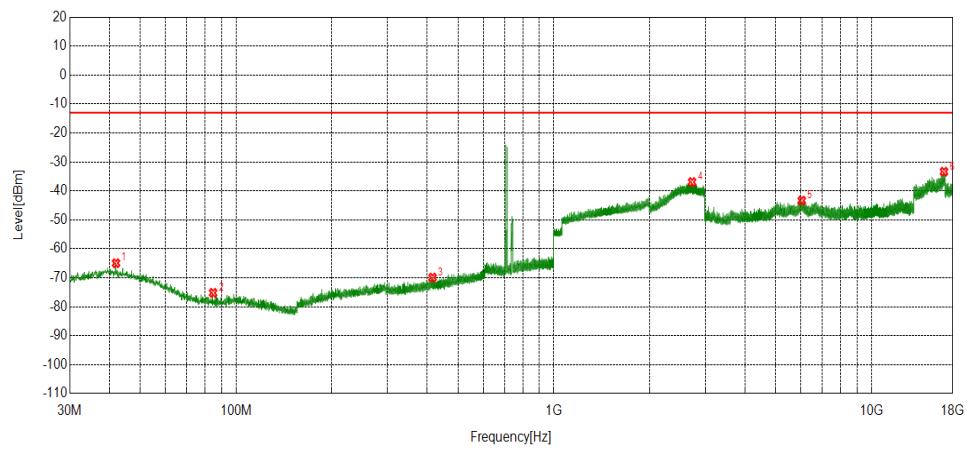
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	41.9322	-97.42	-64.95	-13.00	51.95	32.47	Vertical
2	84.7135	-98.23	-75.20	-13.00	62.20	23.03	Vertical
3	415.6136	-97.92	-69.92	-13.00	56.92	28.00	Vertical
4	2725.5726	-85.25	-36.94	-13.00	23.94	48.31	Vertical
5	6033.6011	-45.20	-43.34	-13.00	30.34	1.86	Vertical
6	16910.4637	-37.02	-33.36	-13.00	20.36	3.66	Vertical



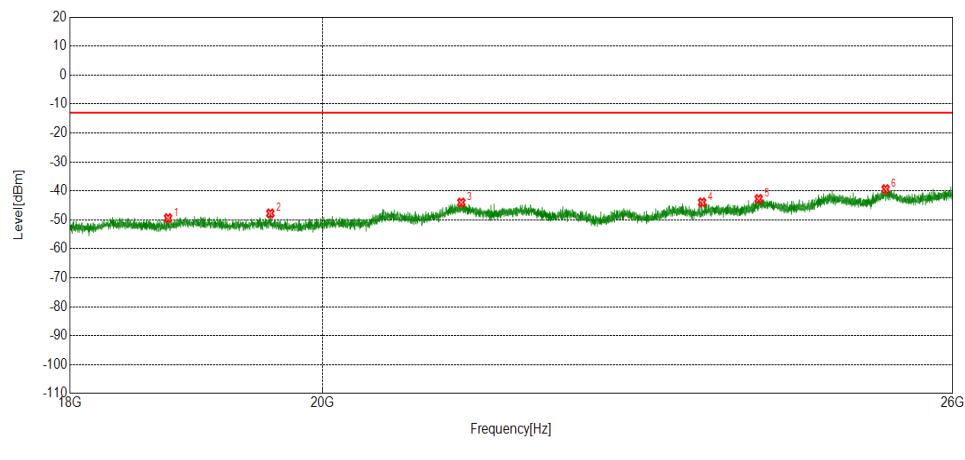
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Test Mode	Band 12
Range	18GHz~26GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18752.0940	-12.90	-49.39	-13.00	36.39	-36.49	Vertical
2	19568.1960	-11.39	-47.75	-13.00	34.75	-36.36	Vertical
3	21188.3986	-7.88	-44.00	-13.00	31.00	-36.12	Vertical
4	23423.6780	-8.80	-43.95	-13.00	30.95	-35.15	Vertical
5	23981.7477	-7.95	-42.76	-13.00	29.76	-34.81	Vertical
6	25283.9105	-4.83	-39.37	-13.00	26.37	-34.54	Vertical



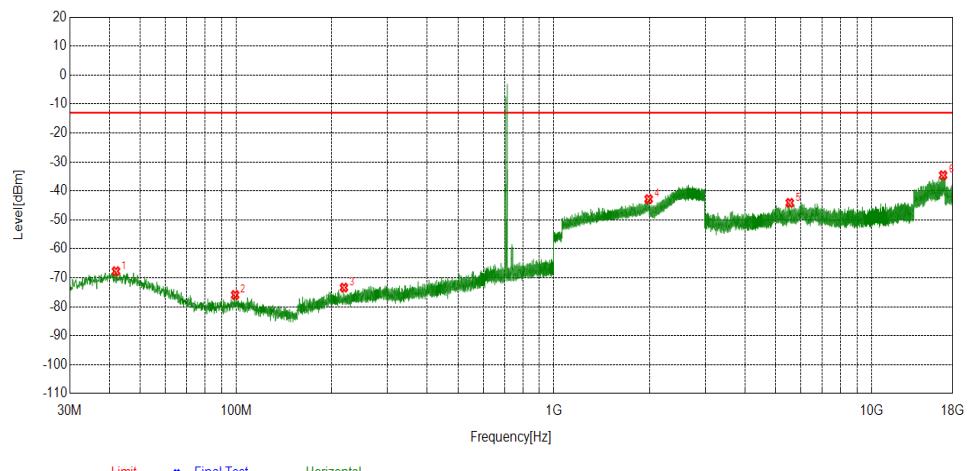
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Test Mode	Band 12
Range	30MHz~18GHz
Test Environment	Normal
Test Frequencies	Hig Channel
Test Channel Bandwidths	10MHz

Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	41.9322	-100.19	-67.72	-13.00	54.72	32.47	Horizontal
2	99.3619	-99.64	-75.92	-13.00	62.92	23.72	Horizontal
3	218.6839	-97.18	-73.39	-13.00	60.39	23.79	Horizontal
4	1989.4990	-85.22	-42.82	-13.00	29.82	42.40	Horizontal
5	5532.0844	-45.86	-44.12	-13.00	31.12	1.74	Horizontal
6	16799.9600	-37.83	-34.57	-13.00	21.57	3.26	Horizontal



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Test Mode	Band 12						
Range	18GHz~26GHz						
Test Environment	Normal						
Test Frequencies	Hig Channel						
Test Channel Bandwidths	10MHz						
Suspected Data List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	18396.0495	-11.82	-48.36	-13.00	35.36	-36.54	Horizontal
2	18919.1149	-11.88	-48.34	-13.00	35.34	-36.46	Horizontal
3	21136.3920	-7.46	-43.59	-13.00	30.59	-36.13	Horizontal
4	23193.6492	-7.57	-42.85	-13.00	29.85	-35.28	Horizontal
5	24724.8406	-4.75	-39.41	-13.00	26.41	-34.66	Horizontal
6	25287.9110	-4.33	-38.87	-13.00	25.87	-34.54	Horizontal

The figure is a spectral plot with the Y-axis labeled 'Level[dBm]' ranging from -110 to 20 in increments of 10, and the X-axis labeled 'Frequency[Hz]' with markers at 18G, 20G, and 26G. A red horizontal line at approximately -13 dBm represents the limit. A green line represents the signal level, which stays below the limit except for six specific frequency points marked with red asterisks and labeled 1 through 6. These points correspond to the test frequencies listed in the Suspected Data List.

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6. 6 Key components list

Key components relative with EMC performance				
Component	Manufacture	Type	Parameter	Certification
PCB	Shanghai Berry Electronic Tech Co., Ltd.	BM1000B_V 5.4	/	/
4G module	/	nRF9160	/	/
4G ANT	Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.	FPC	690~850MHz 1710~2200MHz	/

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7. Glossary

AVG - Average

DUT - Device under test

EMC - Electromagnetic Compatibility

EN - European Standard

EUT - Equipment under test

ETSI - European Telecommunications Standard Institute

FCC - Federal Communication Commission

FCC ID - Company Identifier at FCC

HW - Hardware

IC - Industry Canada

Inv. No. - Inventory number

N/A - Not applicable

PP - Positive peak

QP - Quasi peak

S/N - Serial number

SW – Software

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8. Appendix I.

Equipment list

Equipment list	Test Equipment	Type/Mode	Equipment No.	ManuFacturer	Cal. Due
Radiates Spurious Emission(30MHz~26GHz)					
3m Semi-Anechoic Chamber	FACT-4	WKNA-0024	ETS	2024.12.12	
Spectrum Analyzer	N9010B	DZ-000174	KEYSIGHT	2022.03.04	
EMI Test Receiver	N9038A-508	EM-000397	Agilent	2022.03.05	
Broadband Antenna	VULB 9163	EM-000342	SCHWARZBECK	2022.06.26	
Waveguide Horn Antenna	HF906	WKNA-0024-8	R&S	2022.03.05	
Waveguide Horn Antenna	BBHA9170	DZ-000209-2	SCHWARZBECK	2022.08.27	
Preamplifier	BBV 9721	DZ-000209-1	SCHWARZBECK	2022.06.30	
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	DZ-000186	WI	2022.12.20	
Comprehensive tester	CMW500	DZ-000240-2	R&S	2022.12.20	

test software

Software name	Software version	Software Developer
JS36-RSE Radiation spurious measurement system	2.5.1.2	Shenzhen JS tonsend co.,ltd

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Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Approval and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “—” or “N” means “not applicable”, “ / ” means “not test”, “P” means “pass” and “F” means “fail”.

The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented.

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