RF TEST REPORT

For

HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.

Product Name: Photovoltaic energy storage DC integrated machine

Test Model(s).: DA802

Report Reference No.	:	**DACE240718006RL005**
Applicant's Name	:	HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.
Address	:	Building No.6, Foryou Industrial Park Area B,No.1 North Shangxia Road,Dongjiang High-tech Industry Park, Huizhou, Guangdong,China.
Testing Laboratory	:	Shenzhen DACE Testing Technology Co., Ltd.
Address	:	102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Connunity, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Test Specification Standard	:	**ETSI EN 300 440 V2.2.1 (2018-07)**
Date of Receipt	:	July 18, 2024
Date of Test	:	July 18, 2024 to July 29, 2024
Data of Issue	:	July 29, 2024
Result	:	**Pass**

Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE240718006RL005	July 29, 2024

NOTE1:

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EU Directives.

CE

NOTE2:

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

Compiled by:	Supervised by:	Approved by:
Ben Tang	Stone Yin	Tom Chen
Ben Tang / Test Engineer	Stone Yin / Project Engineer	Tom Chen / Manager

Shenzhen DACE Testing Technology Co., Ltd. APPROVED

CONTENTS

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

ETSI EN 300 440 V2.2.1 (2018-07): Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard for access to radio spectrum

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Equivalent isotropically radiated power (e.i.r.p.)	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.2.2.3.1.2	Clause 4.2.2.1	Pass
Permitted range of operating frequencies	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.2.3.3	Clause 4.2.3.1	Pass
Duty cycle	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.2.5..3	Clause 4.2.5.1	Pass
Adjacent channel selectivity	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.3.3.3	Clause 4.3.3.1	Pass
Blocking or desensitization	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.3.4.3	Clause 4.3.4.1	Pass
Unwanted emissions in the spurious domain (25MHz to 1GHz)	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.2.4.3.1 & Clause 4.2.4.3.2	Clause 4.2.4.1	Pass
Unwanted emissions in the spurious domain (above 1GHz)	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.2.4.3.1 & Clause 4.2.4.3.2	Clause 4.2.4.1	Pass
Receiver spurious radiations (25MHz to 1GHz)	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.3.5.3.1 & Clause 4.3.5.3.2	Clause 4.3.5.1	Pass
Receiver spurious radiations (above 1GHz)	ETSI EN 300 440 V2.2.1 (2018-07)	Clause 4.3.5.3.1 & Clause 4.3.5.3.2	Clause 4.3.5.1	Pass

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.

Address : Building No.6, Foryou Industrial Park Area B,No.1 North Shangxia Road,Dongjiang High-tech Industry Park, Huizhou, Guangdong,China.

Manufacturer : HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.

Address : Building No.6, Foryou Industrial Park Area B,No.1 North Shangxia Road,Dongjiang High-tech Industry Park, Huizhou, Guangdong,China.

2.2 Description of Device (EUT)

Product Name:	Photovoltaic energy storage DC integrated machine
Model/Type reference:	DA802
Series Model:	N/A
Trade Mark:	ADAYO
Power Supply:	DC60V14*2A
Operation Frequency:	2402 MHz ~ 2480MHz
Number of Channels:	16
Modulation Type:	GFSK
Antenna Type:	Internal
Antenna Gain:	0dBi
Hardware Version:	V1.0
Software Version:	V1.0

2.3 Description of Test Modes

No	Title	Description
TM1	802.11a mode	Keep the EUT in continuously transmitting at 802.11a mode.
TM2	802.11n(HT20) mode	Keep the EUT in continuously transmitting at 802.11n(HT20) mode.
TM3	802.11n(HT40) mode	Keep the EUT in continuously transmitting at 802.11n(HT40) mode.
TM4	802.11ac(VHT20) mode	Keep the EUT in continuously transmitting at 802.11ac(VHT20) mode.
TM5	802.11ac(VHT40) mode	Keep the EUT in continuously transmitting at 802.11ac(VHT40) mode.
TM6	802.11ac(VHT80) mode	Keep the EUT in continuously transmitting at 802.11ac(VHT80) mode.
TM7	Receiving mode (20MHz)	Keep the EUT in receiving mode with 20MHz bandwidth.
TM8	Receiving mode (40MHz)	Keep the EUT in receiving mode with 40MHz bandwidth.
TM9	Receiving mode (80MHz)	Keep the EUT in receiving mode with 80MHz bandwidth.
TM10	Normal mode	Keep the EUT in normal communication with pairing device mode.

2.4 Description of Support Units

The EUT was tested as an independent device.

2.5 Equipments Used During The Test

Equivalent isotropically radiated power (e.i.r.p.) **Permitted range of operating frequencies** **Duty cycle** **Adjacent channel selectivity** **Blocking or desensitization**					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
RF Test Software	TACHOY	RTS-01	V2.0.0.0	/	/
High Pass filter	ZHINAN	OQHPF1-M1.5-18G-224	6210075	/	/
Power divider	MIDEWEST	PWD-2533	SMA-79	2023-05-11	2026-05-10
RF Sensor Unit	Tachoy Information Technology(shenzhen) Co.,Ltd.	TR1029-2	000001	/	/
Wideband radio communication tester	R&S	CMW500	113410	2024-06-12	2025-06-11
Vector signal generator	Keysight	N5181A	MY48180415	2023-11-09	2024-11-08
Signal generator	Keysight	N5182A	MY50143455	2023-11-09	2024-11-08
Spectrum Analyzer	Keysight	N9020A	MY53420323	2023-12-12	2024-12-11

2.6 Statement Of The Measurement Uncertainty

Test Item	**Measurement Uncertainty**
RF conducted power	±0.733dB
Radio Frequency	$\pm 2\times10^{-7}$
Duty cycle	±3.1%
Radiated Emission (Below 1GHz)	±5.79dB
Radiated Emission (Above 1GHz)	±5.46dB
Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3 Radio Spectrum Matter Test Results (RF)

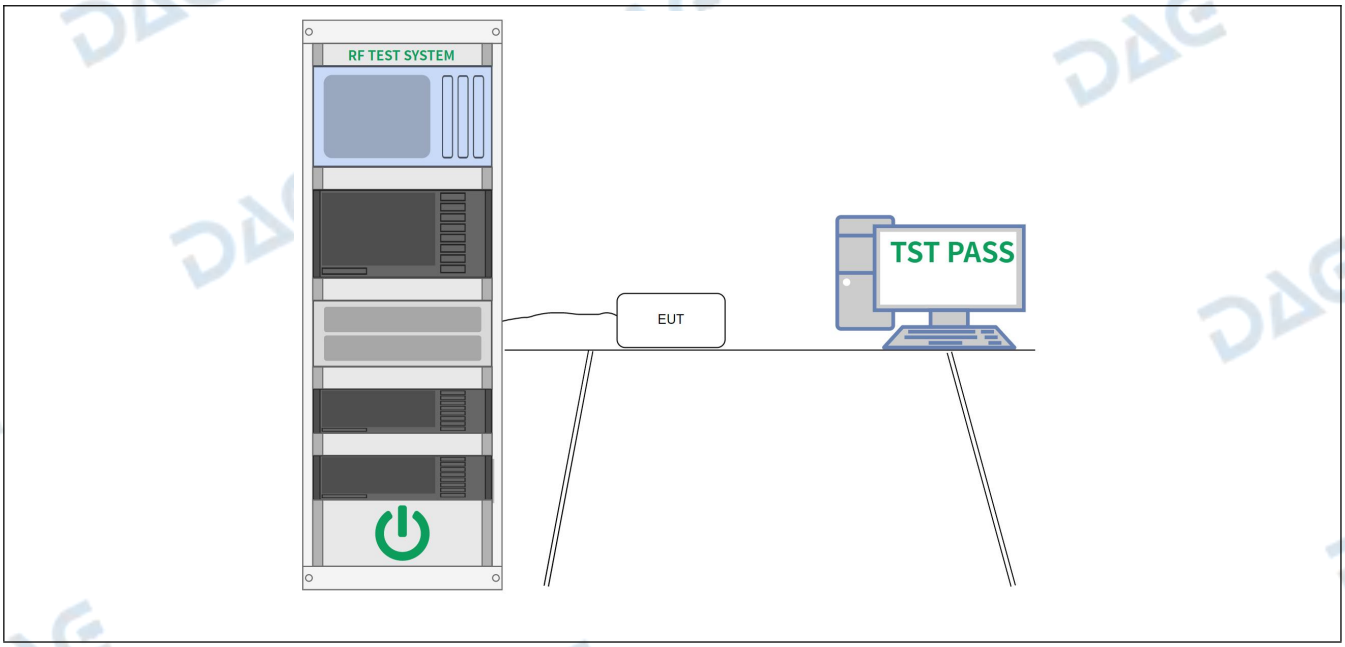
3.1 Equivalent isotropically radiated power (e.i.r.p.)

Test Requirement:	Clause 4.2.2.1
Test Limit:	25 mW e.i.r.p.
Test Method:	Clause 4.2.2.3.2
Procedure:	The test procedure shall be as follows: **Step 1:** · using a suitable means, the output of the transmitter shall be coupled to a matched diode detector; · the output of the diode detector shall be connected to the vertical channel of an oscilloscope; · the combination of the diode detector and the oscilloscope shall be capable of faithfully reproducing the envelope peaks and the duty cycle of the transmitter output signal; · the observed duty cycle of the transmitter (Tx on/(Tx on + Tx off)) shall be noted as x, (0 < x < 1) and recorded. **Step 2:** · the average output power of the transmitter shall be determined using a wideband, calibrated RF power meter with a matched thermocouple detector or an equivalent thereof and, where applicable, with an integration period that exceeds the repetition period of the transmitter by a factor 5 or more. The observed value shall be recorded as "A" (in dBm); · the e.i.r.p. shall be calculated from the above measured power output A, the observed duty cycle x, and the applicable antenna assembly gain "G" in dBi, according to the formula: - P = A + G + 10 log (1/x); - P shall not exceed the value specified in clause 4.2.2.4. The measurement shall be repeated at the lowest, the middle, and the highest frequency of the stated frequency range. These frequencies shall be recorded. FHSS equipment shall be made to hop continuously to each of these three frequencies separately.

3.1.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa
Pretest mode:	TM1, TM2, TM3, TM4, TM5				
Final test mode:	TM1, TM2, TM3, TM4, TM5				

3.1.2 Test Setup Diagram:



3.1.3 Test Data:

Please Refer to Appendix for Details.

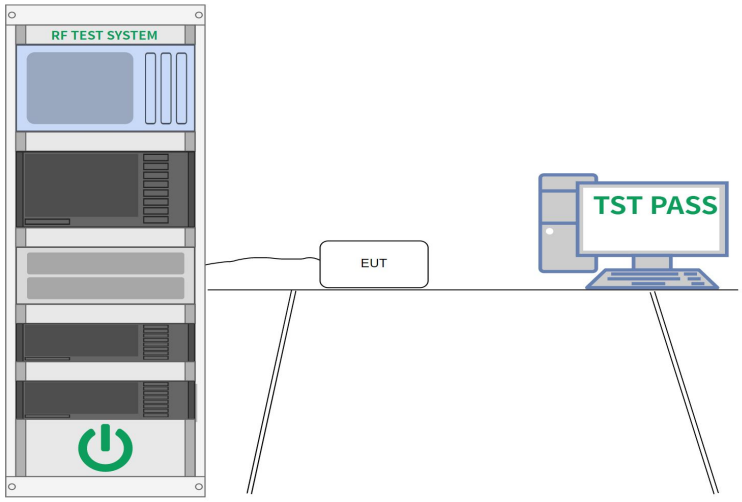
3.2 Permitted range of operating frequencies

Test Requirement:	Clause 4.2.3.1
Test Limit:	The width of the power spectrum envelope is fH -fL for a given operating frequency. In equipment that allows adjustment or selection of different operating frequencies, the power envelope takes up different positions in the allowed band. The frequency range is determined by the lowest value of fL and the highest value of fH resulting from the adjustment of the equipment to the lowest and highest operating frequencies. The occupied bandwidth (i.e. the bandwidth in which 99 % of the wanted emission is contained) of the transmitter shall fall within the assigned frequency band. For all equipment the frequency range shall lie within the frequency band given by clause 4.2.2.4, table 2. For non- harmonized frequency bands the available frequency range may differ between national administrations.
Test Method:	Clause 4.2.3.3
Procedure:	The measurement procedure shall be as follows: a) put the spectrum analyser in video averaging mode with a minimum of 50 sweeps selected; b) select the lowest operating frequency of the equipment under test and activate the transmitter with modulation applied. The RF emission of the equipment shall be displayed on the spectrum analyser; c) using the marker of the spectrum analyser, find the lowest frequency below the operating frequency at which the spectral power density drops below the level given in clause 4.2.3.2. This frequency shall be recorded in the test report; d) select the highest operating frequency of the equipment under test and find the highest frequency at which the spectral power density drops below the value given in clause 4.2.3.2. This frequency shall be recorded in the test report; the difference between the frequencies measured in steps c) and d) is the operating frequency range. It shall be recorded in the test report.

3.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa
Pretest mode:	TM1, TM2, TM3, TM4, TM5				
Final test mode:	TM1, TM2, TM3, TM4, TM5				

3.2.2 Test Setup Diagram:



3.2.3 Test Data:

Please Refer to Appendix for Details.

3.3 Blocking or desensitization

Test Requirement:	Clause 4.3.4.1
Test Limit:	The blocking level, for any frequency within the specified ranges, shall not be less than the values given in table 6, except at frequencies on which spurious responses are found. Table 6: Limits for blocking or desensitization

Receiver category	Limit
1	-30 dBm + k
2	-45 dBm + k
3	-60 dBm + k

The correction factor, k, is as follows:

$$k = -20 * log_{10}^{f} - 10 * log_{10}^{BW}$$

Where:
- *f* is the frequency in GHz;
- *BW* is the occupied bandwidth in MHz.

The factor *k* is limited within the following:
- -40 dB < k < 0 dB.

The measured blocking level shall be stated in the test report.

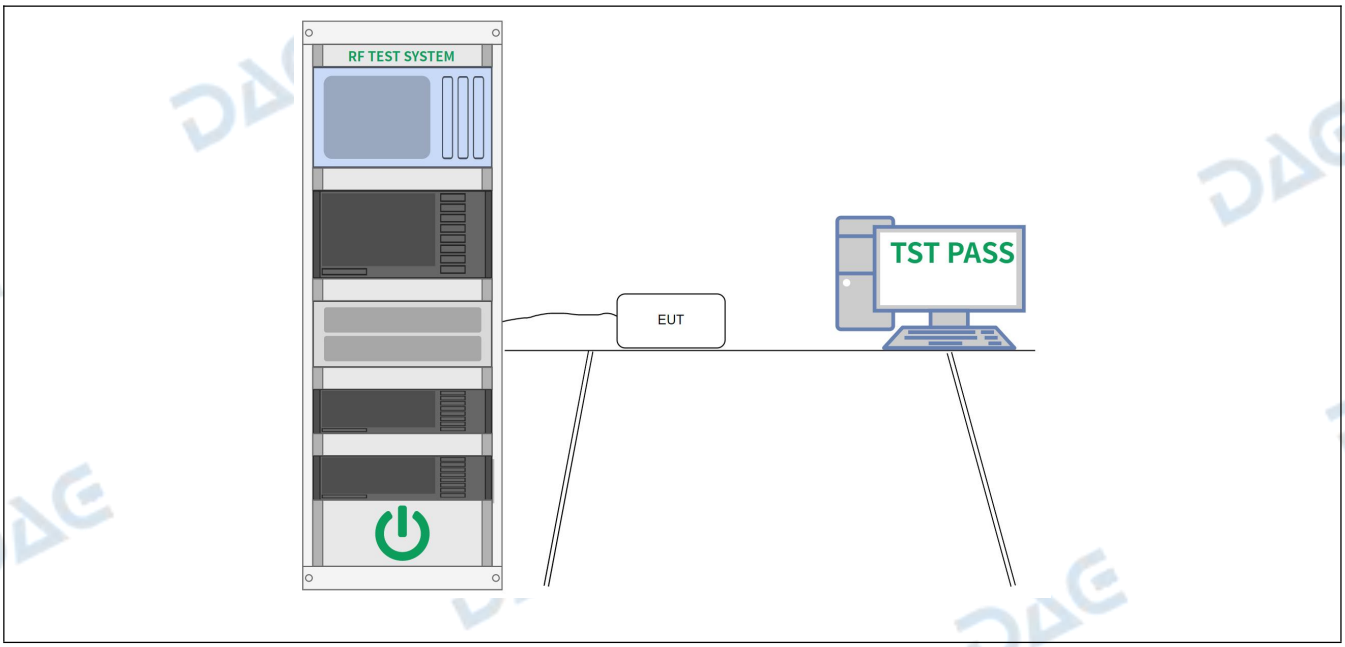
Test Method:	Clause 4.3.4.3
Procedure:	This measurement shall be conducted under normal conditions. Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either: a) via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or b) directly to the receiver permanent or temporary antenna connector. The method of coupling to the receiver shall be stated in the test report. Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal. Signal generator B shall be unmodulated and shall be adjusted to a test frequency at approximately 10 times, 20 times and 50 times of the occupied bandwidth above upper band edge of occupied bandwidth. Initially signal generator B shall be switched off and using signal generator A the level which still gives sufficient response shall be established. The output level of generator A shall then be increased by 3 dB. Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded. The measurement shall be repeated with the test frequency for signal generator B at 10 times, 20 times and 50 times of the occupied bandwidth below the lower band edge of the occupied bandwidth. The blocking or desensitization shall be recorded as the level in dBm of lowest level of the unwanted signal (generator B). For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of lowest level of the unwanted signal (generator B) resulting in a non-read of the tag. to the declared sensitivity of the receiver +3 dB.

3.3.1 E.U.T. Operation:

Operating Environment:

Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa
Pretest mode:	TM8				
Final test mode:	TM8				

3.3.2 Test Setup Diagram:



3.3.3 Test Data:

Please Refer to Appendix for Details.

3.4 Unwanted emissions in the spurious domain (25MHz to 1GHz)

<table>
<tr><td>Test Requirement:</td><td>Clause 4.2.4.1</td></tr>
<tr><td>Test Limit:</td><td>Table 3: Spurious emissions
<table>
<tr><th>Frequency ranges
State</th><th>47 MHz to 74 MHz
87,5 MHz to 108 MHz
174 MHz to 230 MHz
470 MHz to 862 MHz</th><th>Other frequencies
<= 1 000 MHz</th><th>Frequencies
> 1 000 MHz</th></tr>
<tr><td>Operating</td><td>4 nW</td><td>250 nW</td><td>1 uW</td></tr>
<tr><td>Standby</td><td>2 nW</td><td>2 nW</td><td>20 nW</td></tr>
</table></td></tr>
<tr><td>Test Method:</td><td>Clause 4.2.4.3.1 & Clause 4.2.4.3.2</td></tr>
<tr><td>Procedure:</td><td>Conducted spurious emission:
a) The transmitter shall be connected to a measuring receiver through a test load, 50 W power attenuator, and if necessary, an appropriate filter to avoid overload of the measuring receiver. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in table 3, see clause 4.2.4.4. This bandwidth shall be recorded in the test report.
For the measurement of spurious emissions below the second harmonic of the carrier frequency, the filter used shall be a high "Q" (notch) filter centred on the transmitter carrier frequency, which attenuates this signal by at least 30 dB.
For the measurement of spurious emissions at and above the second harmonic of the carrier frequency the filter used shall be a high pass filter with a stop band rejection exceeding 40 dB. The cut-off frequency of the high pass filter shall be approximately 1,5 times the transmitter carrier frequency.
Precautions may be required to ensure that the test load does not generate or that the high pass filter does not attenuate, the harmonics of the carrier.
b) The transmitter shall be unmodulated and operating at the maximum limit of its specified power range. If modulation cannot be inhibited then the test shall be carried out with modulation (see clause 5.8.1) and this fact shall be recorded in the test report.
c) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency, not exceeding 66 GHz. The frequency and level of every spurious emission found shall be noted. The emissions within the channel occupied by the transmitter carrier and, for channelized systems its adjacent channels, shall not be recorded.
d) If the measuring receiver has not been calibrated in terms of power level at the transmitter output, the level of any detected components shall be determined by replacing the transmitter by the signal generator and adjusting it to reproduce the frequency and level of every spurious emission noted in step c). The absolute power level of each of the emissions shall be noted.
e) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report.
f) If a user accessible power adjustment is provided then the tests in steps c) to e) shall be repeated at the lowest power setting available.
The measurement in steps c) to f) shall be repeated with the transmitter in the standby condition if this option is available.

cabinet spurious radiation:
a) A test site selected from Annex E which fulfils the requirements of the specified frequency range of this measurement shall be used. The test antenna shall be oriented initially for vertical polarization and connected to a measuring receiver. The</td></tr>
</table>

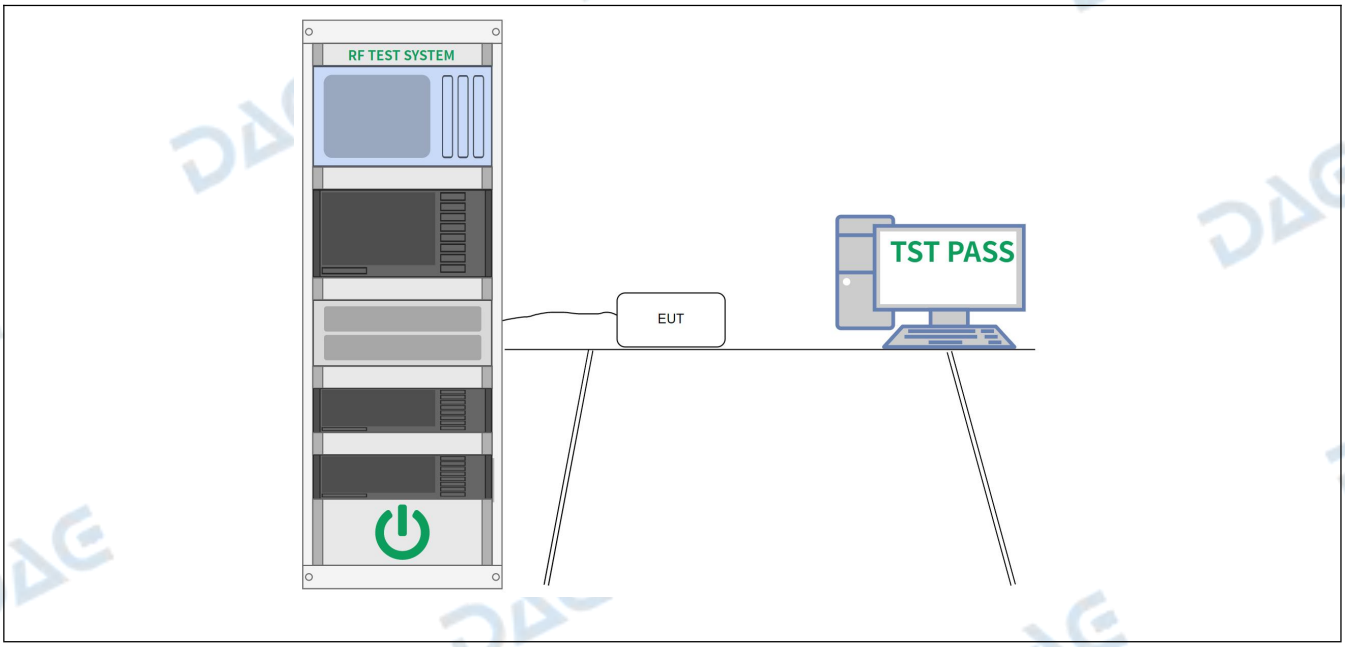
	bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver, after allowing for the coupling loss, is at least 6 dB below the spurious emission limit given in table 3, see clause 4.2.4.4. This bandwidth shall be recorded in the test report. The transmitter under test shall be placed on the support in its standard position, connected to an artificial antenna (see clause 5.8.2) and switched on without modulation. If modulation cannot be inhibited then the test shall be carried out with modulation, (see clause 5.8.1), and this fact shall be recorded in the test report. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency, not exceeding 66 GHz, except for the channel on which the transmitter is intended to operate and for channelized systems, its adjacent channels. The frequency of each spurious emission detected shall be noted. If the test site is disturbed by interference coming from outside the site, this qualitative search may be performed in a screened room, with a reduced distance between the transmitter and the test antenna. c) At each frequency at which an emission has been detected, the measuring receiver shall be tuned and the test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. d) The transmitter shall be rotated through 360° about a vertical axis, to maximize the received signal. e) The test antenna shall be raised or lowered again through the specified height range until a maximum is obtained. This level shall be noted. f) The substitution antenna (see clause E.3.2) shall replace the transmitter antenna in the same position and in vertical polarization. It shall be connected to the signal generator. g) At each frequency at which an emission has been detected, the signal generator, substitution antenna, and measuring receiver shall be tuned. The test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. The level of the signal generator giving the same signal level on the measuring receiver as in item e) shall be noted. After corrections due to the gain of the substitution antenna and the cable loss between the signal generator and the substitution antenna, is the radiated spurious emission at this frequency. h) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. i) Steps c) to h) shall be repeated with the test antenna oriented in horizontal polarization. j) If a user accessible power adjustment is provided then the tests in steps c) to h) shall be repeated at the lowest power setting available. Steps c) to i) shall be repeated with the transmitter in the standby condition if this option is available. Additional requirements for equipment employing FHSS modulation Measurements shall be carried out while the equipment is hopping between two frequencies separated by the maximum hop frequency change declared by the manufacturer, one of which is the lowest hop frequency. The measurements shall be repeated on two frequencies separated by the maximum hop frequency change declared by the manufacturer, one of which is the highest hop frequency.

3.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa

Pretest mode:	TM1, TM2, TM3, TM4, TM5
Final test mode:	TM1, TM2, TM3, TM4, TM5

3.4.2 Test Setup Diagram:



3.4.3 Test Data:

Please Refer to Appendix for Details.

3.5 Unwanted emissions in the spurious domain (above 1GHz)

<table>
<tr><td>Test Requirement:</td><td>Clause 4.2.4.1</td></tr>
<tr><td>Test Limit:</td><td>Table 3: Spurious emissions
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<tr><td>Standby</td><td>2 nW</td><td>2 nW</td><td>20 nW</td></tr>
</table></td></tr>
<tr><td>Test Method:</td><td>Clause 4.2.4.3.1 & Clause 4.2.4.3.2</td></tr>
<tr><td>Procedure:</td><td>Conducted spurious emission:
a) The transmitter shall be connected to a measuring receiver through a test load, 50 W power attenuator, and if necessary, an appropriate filter to avoid overload of the measuring receiver. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in table 3, see clause 4.2.4.4. This bandwidth shall be recorded in the test report.
For the measurement of spurious emissions below the second harmonic of the carrier frequency, the filter used shall be a high "Q" (notch) filter centred on the transmitter carrier frequency, which attenuates this signal by at least 30 dB.
For the measurement of spurious emissions at and above the second harmonic of the carrier frequency the filter used shall be a high pass filter with a stop band rejection exceeding 40 dB. The cut-off frequency of the high pass filter shall be approximately 1,5 times the transmitter carrier frequency.
Precautions may be required to ensure that the test load does not generate or that the high pass filter does not attenuate, the harmonics of the carrier.
b) The transmitter shall be unmodulated and operating at the maximum limit of its specified power range. If modulation cannot be inhibited then the test shall be carried out with modulation (see clause 5.8.1) and this fact shall be recorded in the test report.
c) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency, not exceeding 66 GHz. The frequency and level of every spurious emission found shall be noted. The emissions within the channel occupied by the transmitter carrier and, for channelized systems its adjacent channels, shall not be recorded.
d) If the measuring receiver has not been calibrated in terms of power level at the transmitter output, the level of any detected components shall be determined by replacing the transmitter by the signal generator and adjusting it to reproduce the frequency and level of every spurious emission noted in step c). The absolute power level of each of the emissions shall be noted.
e) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report.
f) If a user accessible power adjustment is provided then the tests in steps c) to e) shall be repeated at the lowest power setting available.
The measurement in steps c) to f) shall be repeated with the transmitter in the standby condition if this option is available.

cabinet spurious radiation:
a) A test site selected from Annex E which fulfils the requirements of the specified frequency range of this measurement shall be used. The test antenna shall be oriented initially for vertical polarization and connected to a measuring receiver. The</td></tr>
</table>

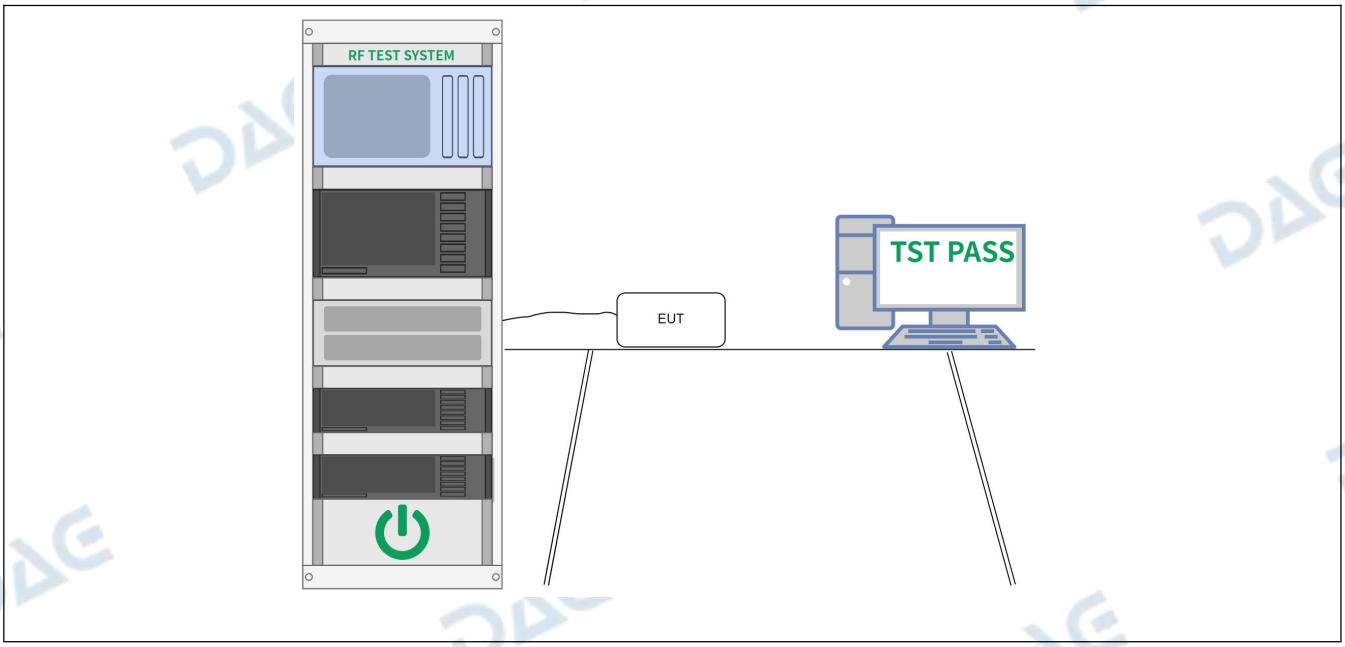
	bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver, after allowing for the coupling loss, is at least 6 dB below the spurious emission limit given in table 3, see clause 4.2.4.4. This bandwidth shall be recorded in the test report. The transmitter under test shall be placed on the support in its standard position, connected to an artificial antenna (see clause 5.8.2) and switched on without modulation. If modulation cannot be inhibited then the test shall be carried out with modulation, (see clause 5.8.1), and this fact shall be recorded in the test report. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency, not exceeding 66 GHz, except for the channel on which the transmitter is intended to operate and for channelized systems, its adjacent channels. The frequency of each spurious emission detected shall be noted. If the test site is disturbed by interference coming from outside the site, this qualitative search may be performed in a screened room, with a reduced distance between the transmitter and the test antenna. c) At each frequency at which an emission has been detected, the measuring receiver shall be tuned and the test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. d) The transmitter shall be rotated through 360° about a vertical axis, to maximize the received signal. e) The test antenna shall be raised or lowered again through the specified height range until a maximum is obtained. This level shall be noted. f) The substitution antenna (see clause E.3.2) shall replace the transmitter antenna in the same position and in vertical polarization. It shall be connected to the signal generator. g) At each frequency at which an emission has been detected, the signal generator, substitution antenna, and measuring receiver shall be tuned. The test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. The level of the signal generator giving the same signal level on the measuring receiver as in item e) shall be noted. After corrections due to the gain of the substitution antenna and the cable loss between the signal generator and the substitution antenna, is the radiated spurious emission at this frequency. h) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. i) Steps c) to h) shall be repeated with the test antenna oriented in horizontal polarization. j) If a user accessible power adjustment is provided then the tests in steps c) to h) shall be repeated at the lowest power setting available. Steps c) to i) shall be repeated with the transmitter in the standby condition if this option is available. Additional requirements for equipment employing FHSS modulation Measurements shall be carried out while the equipment is hopping between two frequencies separated by the maximum hop frequency change declared by the manufacturer, one of which is the lowest hop frequency. The measurements shall be repeated on two frequencies separated by the maximum hop frequency change declared by the manufacturer, one of which is the highest hop frequency.

3.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa

Pretest mode:	TM1, TM2, TM3, TM4, TM5
Final test mode:	TM1, TM2, TM3, TM4, TM5

3.5.2 Test Setup Diagram:



3.5.3 Test Data:

Please Refer to Appendix for Details.

3.6 Receiver spurious radiations (25MHz to 1GHz)

Test Requirement:	Clause 4.3.5.1
Test Limit:	The power of any spurious emission shall not exceed 2 nW in the range 25 MHz to 1 GHz and shall not exceed 20 nW on frequencies above 1 GHz.
Test Method:	Clause 4.3.5.3.1 & Clause 4.3.5.3.2
Procedure:	Method of measurement conducted spurious components This requirement applies to all receivers. Spurious emission levels from a transmitter and receiver of full duplex equipment using a common port are measured simultaneously and the test only needs to be conducted once (see clause 4.2.4)."A test load, 50 W power attenuator, may be used to protect the measuring receiver (see clause 5.8.5) against damage when testing a receiver combined in one unit with a transmitter. The measuring receiver used shall have sufficient dynamic range and sensitivity to achieve the required measurement accuracy at the specified limit. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in clause 4.3.5.4. This bandwidth shall be recorded in the test report: a) The receiver input terminals shall be connected to a measuring receiver having an input impedance of 50 W and the receiver is switched on. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency not exceeding 66 GHz. The frequency and the absolute power level of each of the spurious components found shall be noted. c) If the detecting device is not calibrated in terms of power input, the level of any detected components shall be determined by replacing the receiver by the signal generator and adjusting it to reproduce the frequency and level of every spurious component noted in step b). The absolute power level of each spurious component shall be noted. d) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. Method of measurement cabinet radiation This method of measurement applies to receivers having a permanent antenna connector: a) A test site selected from Annex E which fulfils the requirements of the specified frequency range of this measurement shall be used. The test antenna shall be oriented initially for vertical polarization and connected to a measuring receiver. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in clause 4.3.5.4. This bandwidth shall be recorded in the test report. The receiver under test shall be placed on the support in its standard position and connected to an artificial antenna, see clause 5.8.2. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency not exceeding 66 GHz. The frequency of each spurious component shall be noted. If the test site is disturbed by radiation coming from outside the site, this qualitative search may be performed in a screened room with reduced distance between the transmitter and the test antenna. c) At each frequency at which a component has been detected, the measuring receiver shall be tuned and the test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. d) The receiver shall be rotated up to 360° about a vertical axis, to maximize the received signal. e) The test antenna shall be raised or lowered again through the specified height

	range until a maximum is obtained. This level shall be noted. f) The substitution antenna (see clause E.3.2) shall replace the receiver antenna in the same position and in vertical polarization. It shall be connected to the signal generator. g) At each frequency at which a component has been detected, the signal generator, substitution antenna and measuring receiver shall be tuned. The test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. The level of the signal generator giving the same signal level on the measuring receiver as in step e) shall be noted. This level, after correction due to the gain of the substitution antenna and the cable loss, is the radiated spurious component at this frequency. h) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. Measurements b) to h) shall be repeated with the test antenna oriented in horizontal polarization.

3.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa
Pretest mode:	TM6, TM7				
Final test mode:	TM6, TM7				

3.6.2 Test Data:

Please Refer to Appendix for Details.

3.7 Receiver spurious radiations (above 1GHz)

Test Requirement:	Clause 4.3.5.1
Test Limit:	The power of any spurious emission shall not exceed 2 nW in the range 25 MHz to 1 GHz and shall not exceed 20 nW on frequencies above 1 GHz.
Test Method:	Clause 4.3.5.3.1 & Clause 4.3.5.3.2
Procedure:	Method of measurement conducted spurious components This requirement applies to all receivers. Spurious emission levels from a transmitter and receiver of full duplex equipment using a common port are measured simultaneously and the test only needs to be conducted once (see clause 4.2.4)."A test load, 50 W power attenuator, may be used to protect the measuring receiver (see clause 5.8.5) against damage when testing a receiver combined in one unit with a transmitter. The measuring receiver used shall have sufficient dynamic range and sensitivity to achieve the required measurement accuracy at the specified limit. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in clause 4.3.5.4. This bandwidth shall be recorded in the test report: a) The receiver input terminals shall be connected to a measuring receiver having an input impedance of 50 W and the receiver is switched on. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency not exceeding 66 GHz. The frequency and the absolute power level of each of the spurious components found shall be noted. c) If the detecting device is not calibrated in terms of power input, the level of any detected components shall be determined by replacing the receiver by the signal generator and adjusting it to reproduce the frequency and level of every spurious component noted in step b). The absolute power level of each spurious component shall be noted. d) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. Method of measurement cabinet radiation This method of measurement applies to receivers having a permanent antenna connector: a) A test site selected from Annex E which fulfils the requirements of the specified frequency range of this measurement shall be used. The test antenna shall be oriented initially for vertical polarization and connected to a measuring receiver. The bandwidth of the measuring receiver shall be adjusted until the sensitivity of the measuring receiver is at least 6 dB below the spurious emission limit given in clause 4.3.5.4. This bandwidth shall be recorded in the test report. The receiver under test shall be placed on the support in its standard position and connected to an artificial antenna, see clause 5.8.2. b) For carrier frequencies in the range 1 GHz to 20 GHz the frequency of the measuring receiver shall be adjusted over the frequency range 25 MHz to 10 times the carrier frequency, not exceeding 40 GHz. For carrier frequencies above 20 GHz the measuring receiver shall be tuned over the range 25 MHz up to twice the carrier frequency not exceeding 66 GHz. The frequency of each spurious component shall be noted. If the test site is disturbed by radiation coming from outside the site, this qualitative search may be performed in a screened room with reduced distance between the transmitter and the test antenna. c) At each frequency at which a component has been detected, the measuring receiver shall be tuned and the test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. d) The receiver shall be rotated up to 360° about a vertical axis, to maximize the received signal. e) The test antenna shall be raised or lowered again through the specified height

	range until a maximum is obtained. This level shall be noted. f) The substitution antenna (see clause E.3.2) shall replace the receiver antenna in the same position and in vertical polarization. It shall be connected to the signal generator. g) At each frequency at which a component has been detected, the signal generator, substitution antenna and measuring receiver shall be tuned. The test antenna shall be raised or lowered through the specified height range until the maximum signal level is detected on the measuring receiver. The level of the signal generator giving the same signal level on the measuring receiver as in step e) shall be noted. This level, after correction due to the gain of the substitution antenna and the cable loss, is the radiated spurious component at this frequency. h) The frequency and level of each spurious emission measured and the bandwidth of the measuring receiver shall be recorded in the test report. Measurements b) to h) shall be repeated with the test antenna oriented in horizontal polarization.

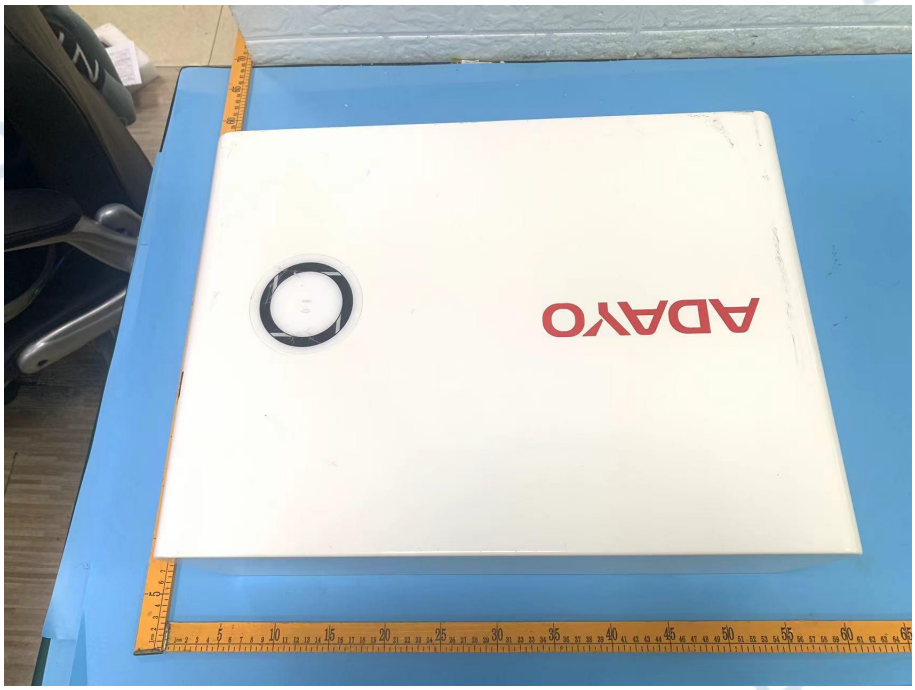
3.7.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	53.1 %	Atmospheric Pressure:	102 kPa
Pretest mode:	TM6, TM7				
Final test mode:	TM6, TM7				

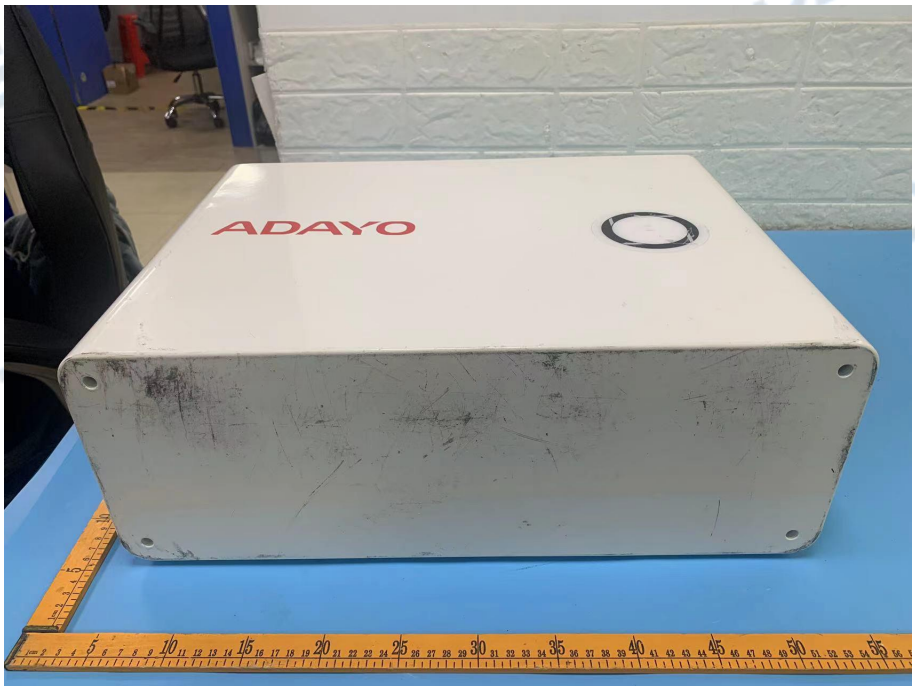
3.7.2 Test Data:

Please Refer to Appendix for Details.

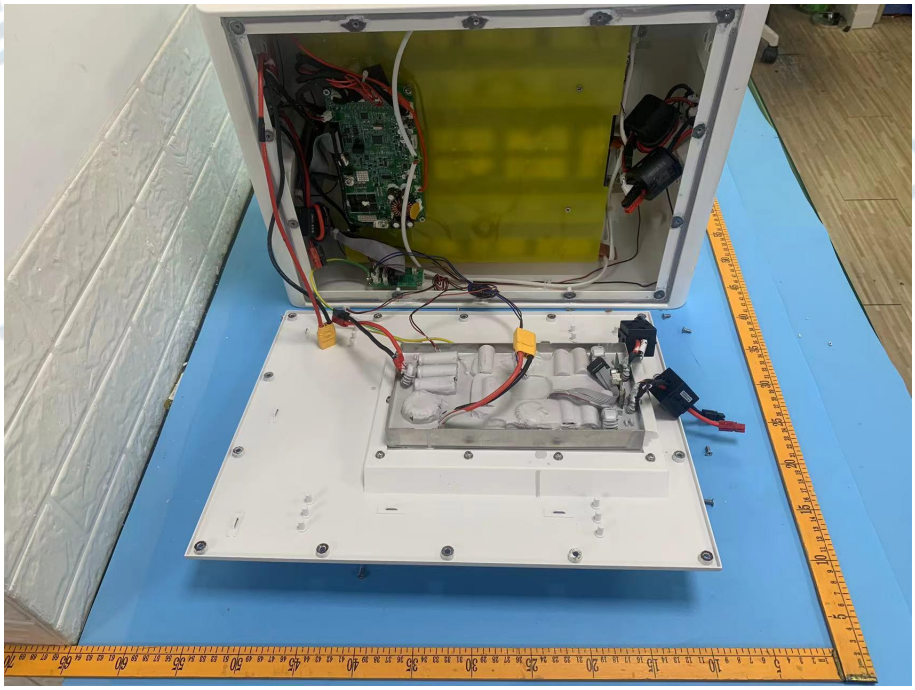
4 PHOTOS OF THE EUT

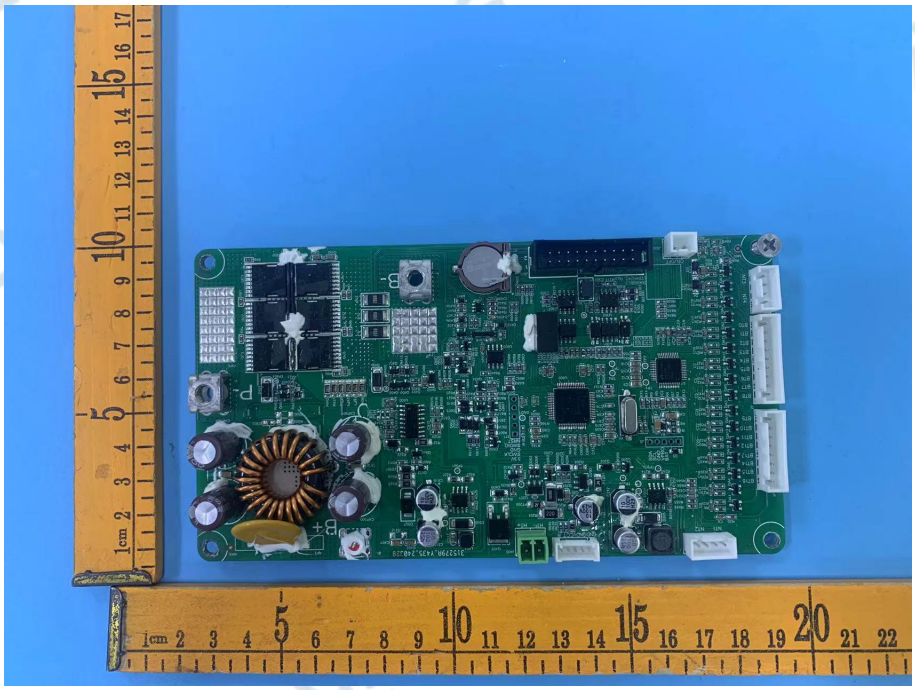
External


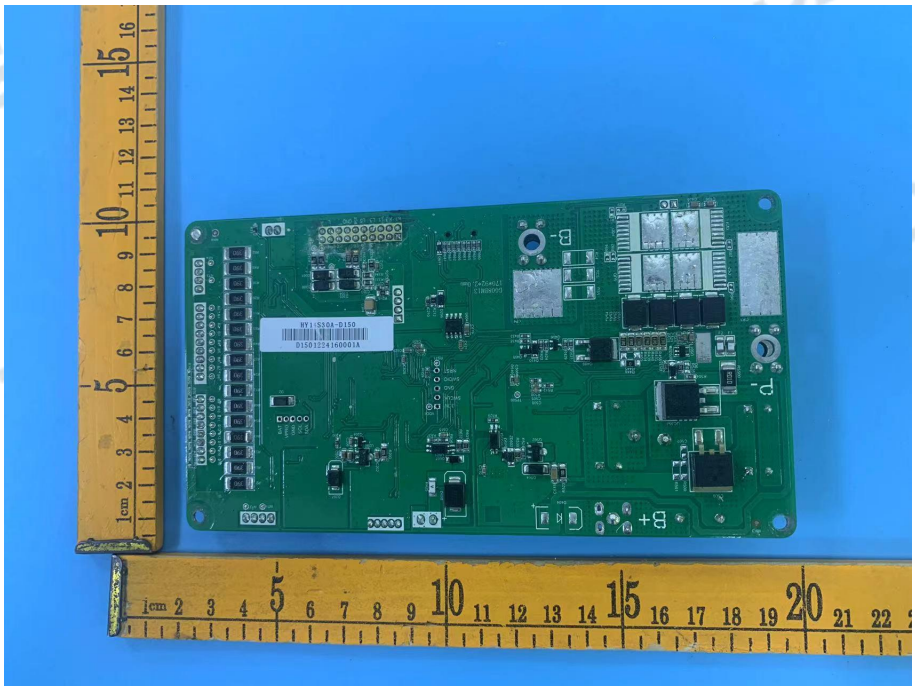

ADAYO
WIFI
PV OUT PUT
ON/OFF
RESET

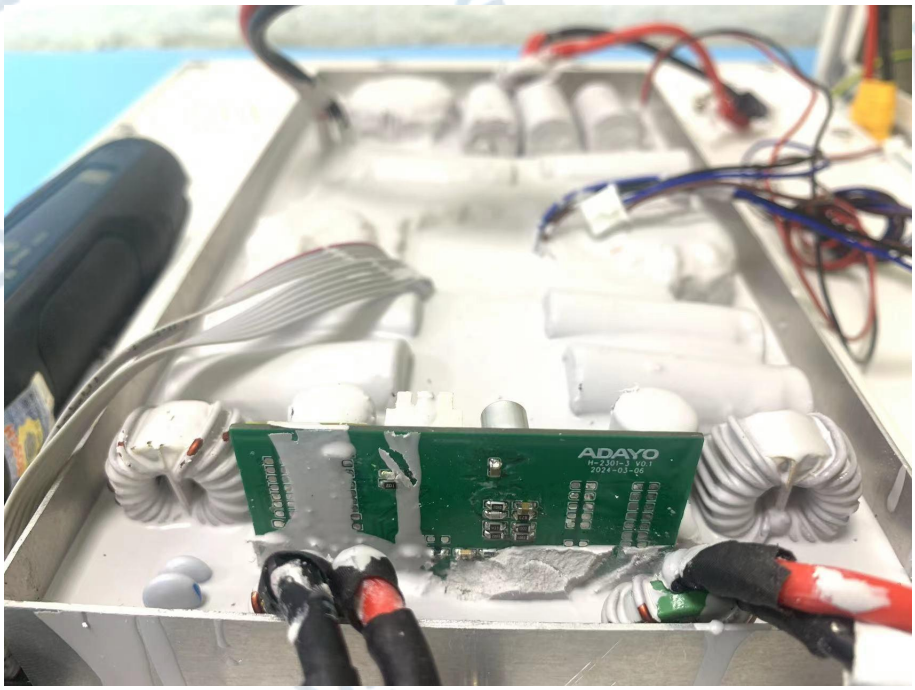

ADAYO

Internal





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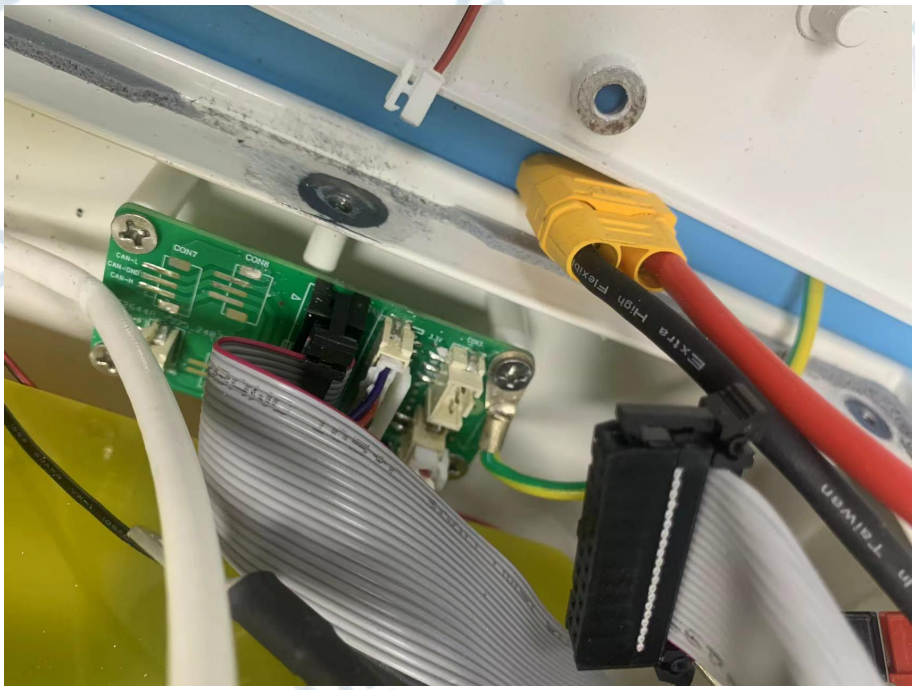
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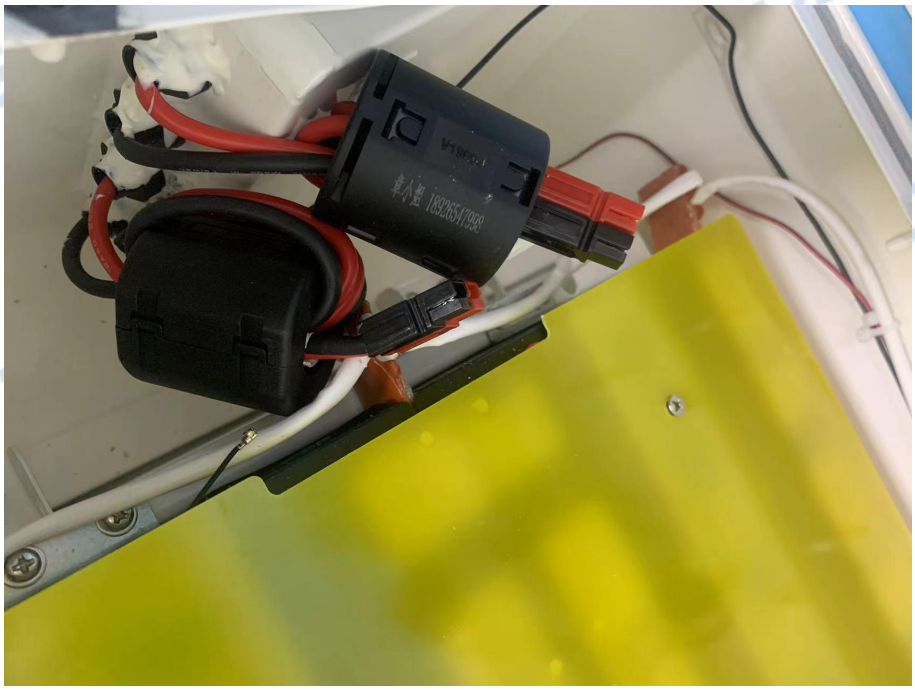
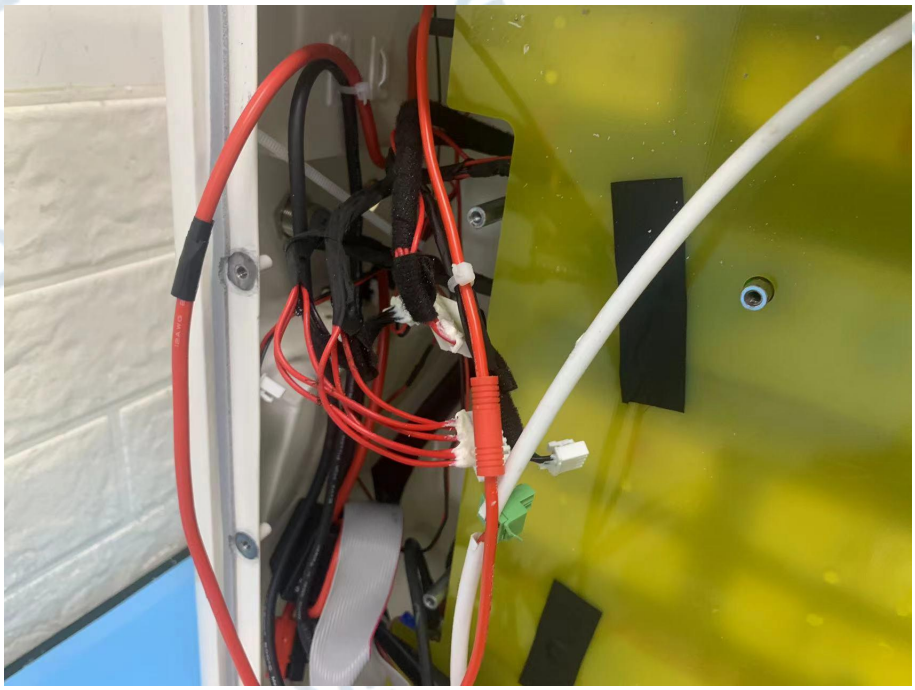
CON8
CAN-L
CAN-GND
CAN-H





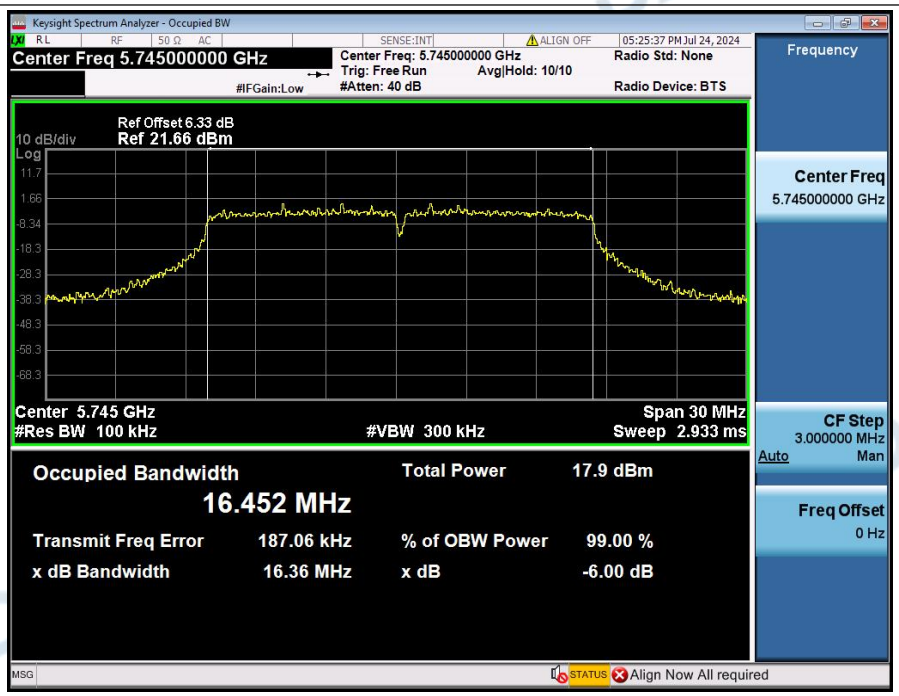
Appendix

HT240718003--DA802--5.8G--CE
CE_5.8G_WIFI (EN 300440 V2.1.1_2017-03) Test Data

1. -6dB Emission Bandwidth

Condition	Antenna	Mode	Frequency(MHz)	-6dB_Emission_Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	802.11a	5745.00	16.365	0.500	Pass
NVNT	ANT1	802.11a	5785.00	16.336	0.500	Pass
NVNT	ANT1	802.11a	5825.00	16.341	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	17.564	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	17.296	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	17.327	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	35.142	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	35.149	0.500	Pass

NVNT_ANT1_802_11a_5745



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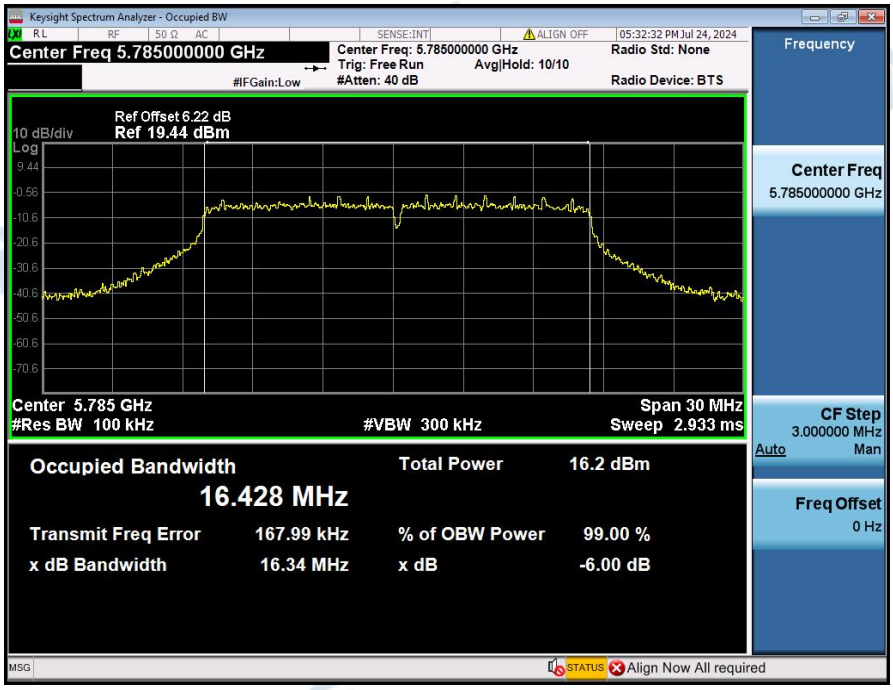

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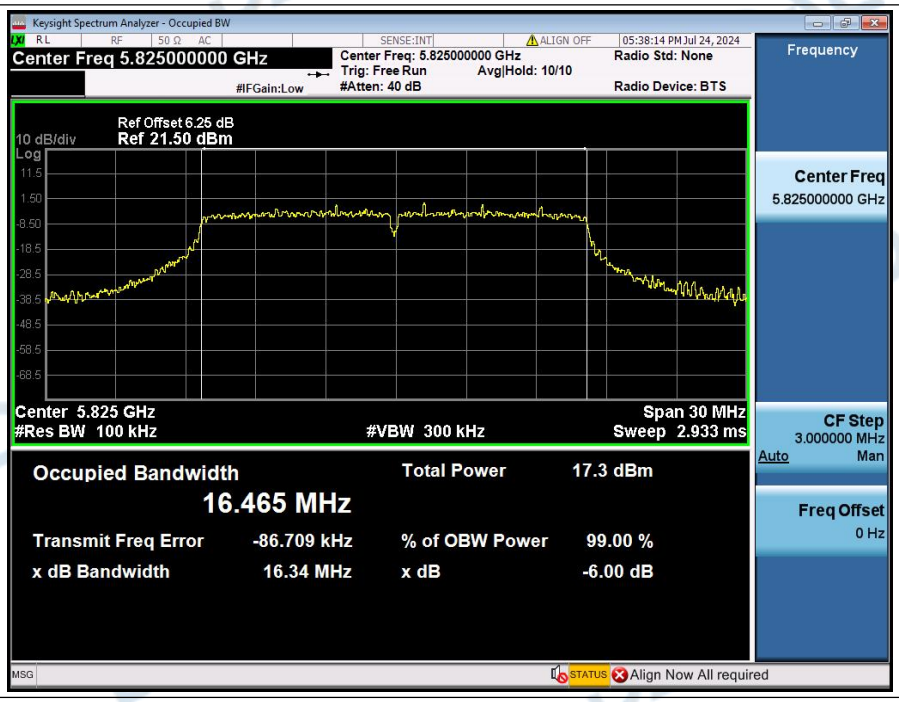

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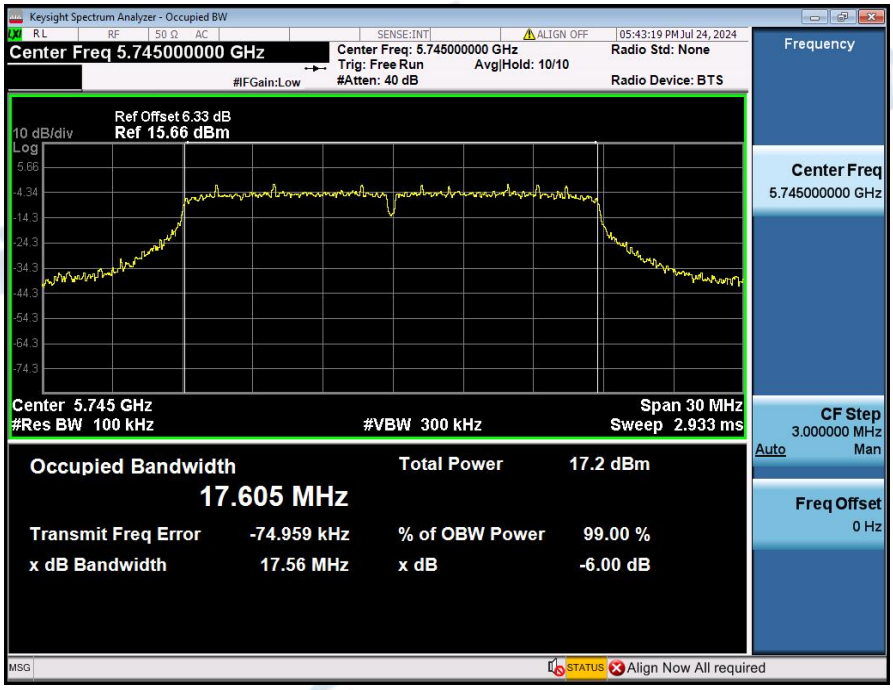

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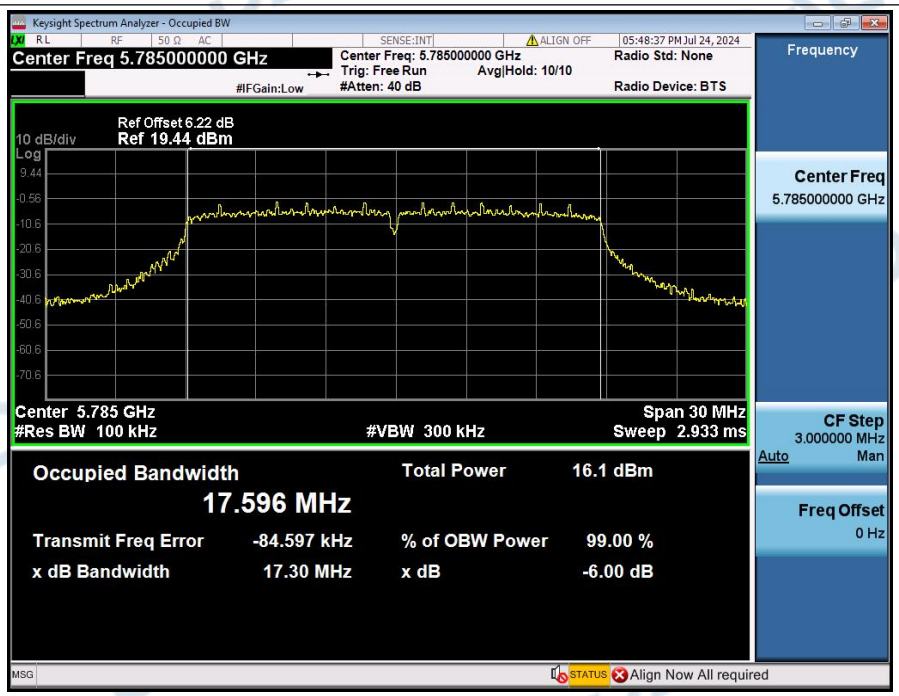

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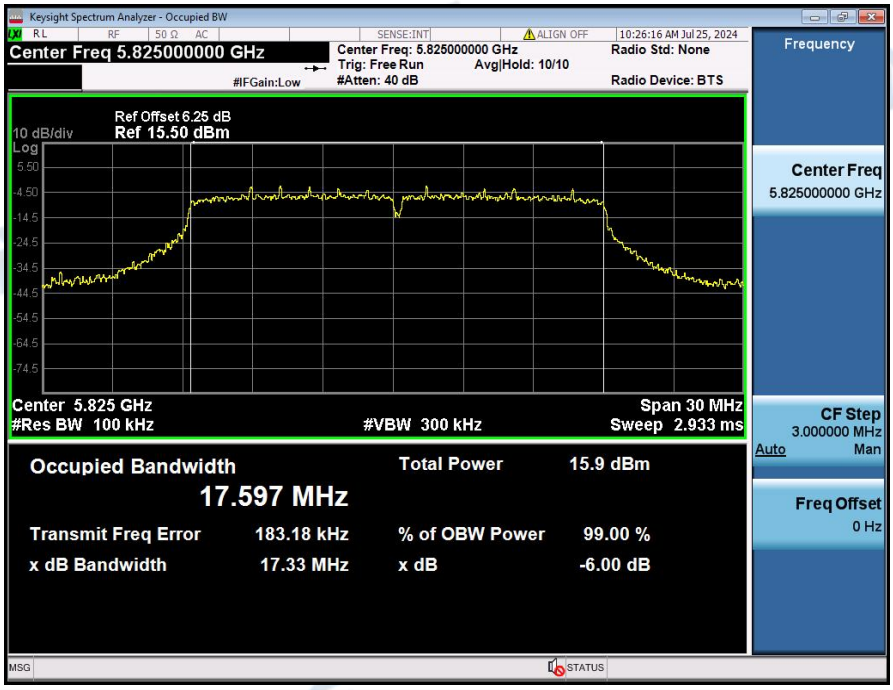

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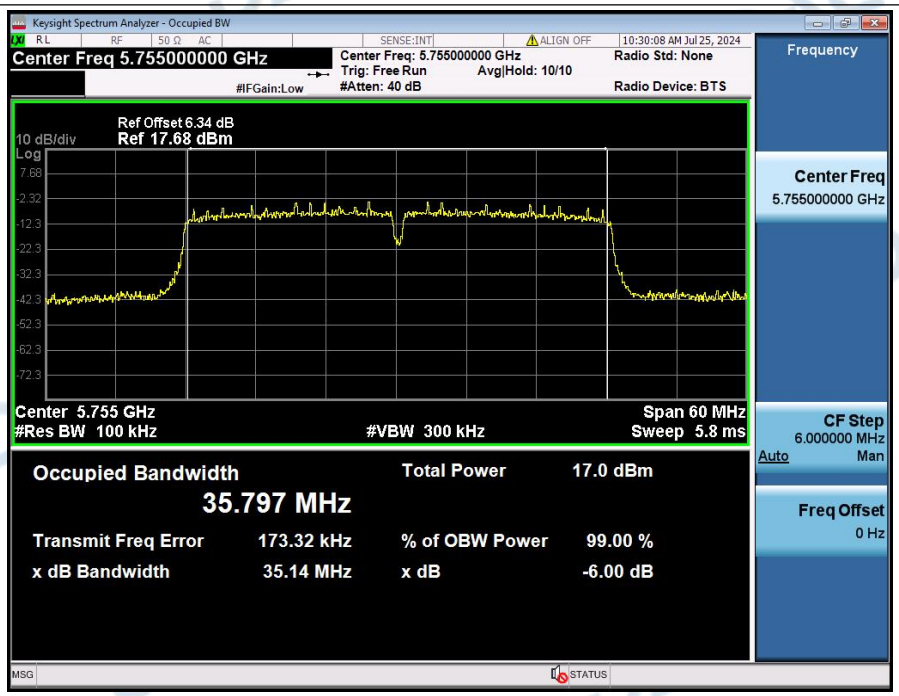

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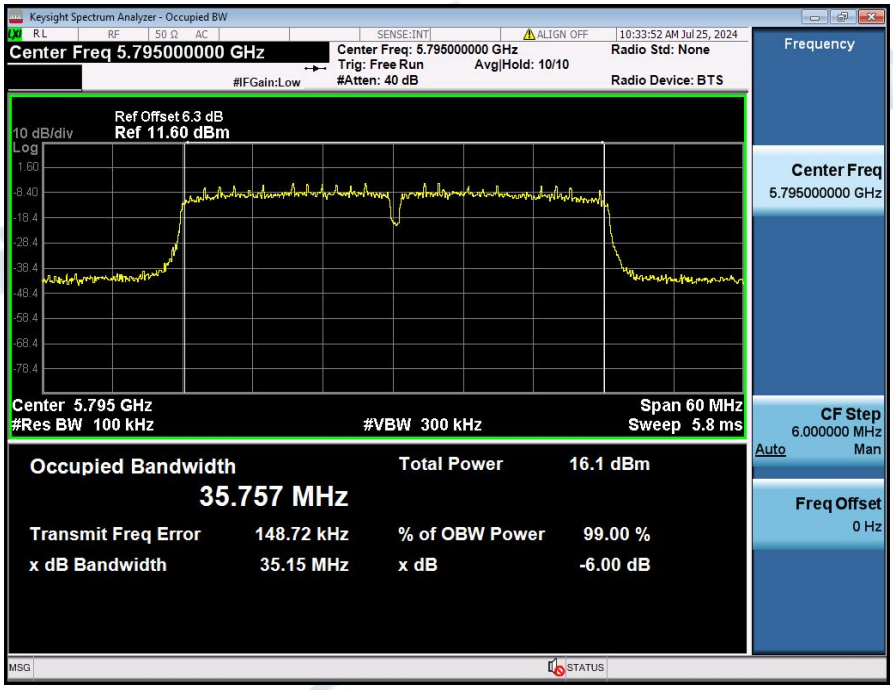
Keysight Spectrum Analyzer - Occupied BW
RL
RF
50 Ω AC
SENSE:INT
ALIGN OFF
10:33:52 AM Jul 25, 2024
Center Freq 5.795000000 GHz
Center Freq: 5.795000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#IFGain:Low
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 6.3 dB
10 dB/div
Ref 11.60 dBm
Log
1.60
-8.40
-18.4
-28.4
-38.4
-48.4
-58.4
-68.4
-78.4
Center Freq
5.795000000 GHz
Center 5.795 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 60 MHz
Sweep 5.8 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
35.757 MHz
Total Power
16.1 dBm
Transmit Freq Error
148.72 kHz
% of OBW Power
99.00 %
x dB Bandwidth
35.15 MHz
x dB
-6.00 dB
Freq Offset
0 Hz
MSG
STATUS

2. RF output power

Condition	Antenna	Mode	Frequency (MHz)	ANT_Gain(dBi)	Max Burst RMS Power (dBm)	Burst Number	Max EIRP (dBm)	Limit (dBm)	Result
NVNT	ANT1	802.11a	5745.00	0.00	6.02	47	6.02	13.98	Pass
LVLT	ANT1	802.11a	5745.00	0.00	5.89	46	5.89	13.98	Pass
LVHT	ANT1	802.11a	5745.00	0.00	5.77	47	5.77	13.98	Pass
HVLT	ANT1	802.11a	5745.00	0.00	5.70	46	5.70	13.98	Pass
HVHT	ANT1	802.11a	5745.00	0.00	5.59	47	5.59	13.98	Pass
NVNT	ANT1	802.11a	5785.00	0.00	4.25	47	4.25	13.98	Pass
LVLT	ANT1	802.11a	5785.00	0.00	4.24	46	4.24	13.98	Pass
LVHT	ANT1	802.11a	5785.00	0.00	4.29	46	4.29	13.98	Pass
HVLT	ANT1	802.11a	5785.00	0.00	4.29	46	4.29	13.98	Pass
HVHT	ANT1	802.11a	5785.00	0.00	4.29	46	4.29	13.98	Pass
NVNT	ANT1	802.11a	5825.00	0.00	5.51	47	5.51	13.98	Pass
LVLT	ANT1	802.11a	5825.00	0.00	5.45	46	5.45	13.98	Pass
LVHT	ANT1	802.11a	5825.00	0.00	5.40	47	5.40	13.98	Pass
HVLT	ANT1	802.11a	5825.00	0.00	5.30	47	5.30	13.98	Pass
HVHT	ANT1	802.11a	5825.00	0.00	5.27	47	5.27	13.98	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	0.00	5.20	50	5.20	13.98	Pass
LVLT	ANT1	802.11n(HT20)	5745.00	0.00	5.18	49	5.18	13.98	Pass
LVHT	ANT1	802.11n(HT20)	5745.00	0.00	5.13	49	5.13	13.98	Pass
HVLT	ANT1	802.11n(HT20)	5745.00	0.00	5.09	49	5.09	13.98	Pass
HVHT	ANT1	802.11n(HT20)	5745.00	0.00	5.08	50	5.08	13.98	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	0.00	4.25	50	4.25	13.98	Pass
LVLT	ANT1	802.11n(HT20)	5785.00	0.00	4.23	50	4.23	13.98	Pass
LVHT	ANT1	802.11n(HT20)	5785.00	0.00	4.24	50	4.24	13.98	Pass
HVLT	ANT1	802.11n(HT20)	5785.00	0.00	4.26	50	4.26	13.98	Pass
HVHT	ANT1	802.11n(HT20)	5785.00	0.00	4.25	49	4.25	13.98	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	0.00	4.14	50	4.14	13.98	Pass
LVLT	ANT1	802.11n(HT20)	5825.00	0.00	3.97	50	3.97	13.98	Pass
LVHT	ANT1	802.11n(HT20)	5825.00	0.00	3.86	50	3.86	13.98	Pass
HVLT	ANT1	802.11n(HT20)	5825.00	0.00	3.75	50	3.75	13.98	Pass
HVHT	ANT1	802.11n(HT20)	5825.00	0.00	3.68	50	3.68	13.98	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	0.00	4.89	94	4.89	13.98	Pass
LVLT	ANT1	802.11n(HT40)	5755.00	0.00	4.86	94	4.86	13.98	Pass
LVHT	ANT1	802.11n(HT40)	5755.00	0.00	4.81	94	4.81	13.98	Pass
HVLT	ANT1	802.11n(HT40)	5755.00	0.00	4.76	94	4.76	13.98	Pass
HVHT	ANT1	802.11n(HT40)	5755.00	0.00	4.73	94	4.73	13.98	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	0.00	3.89	94	3.89	13.98	Pass
LVLT	ANT1	802.11n(HT40)	5795.00	0.00	3.92	94	3.92	13.98	Pass
LVHT	ANT1	802.11n(HT40)	5795.00	0.00	3.90	94	3.90	13.98	Pass
HVLT	ANT1	802.11n(HT40)	5795.00	0.00	3.91	94	3.91	13.98	Pass
HVHT	ANT1	802.11n(HT40)	5795.00	0.00	3.90	94	3.90	13.98	Pass

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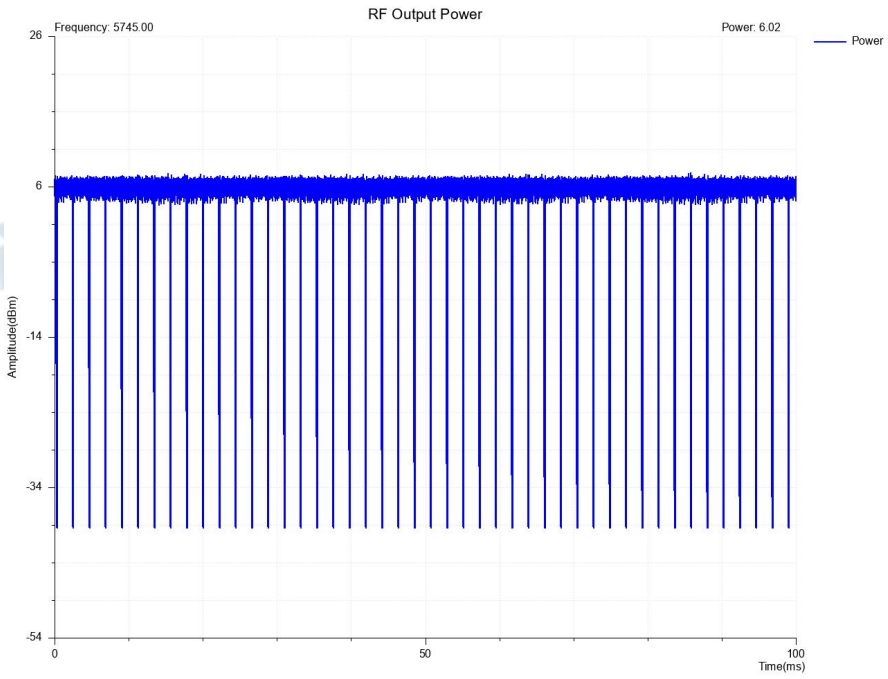

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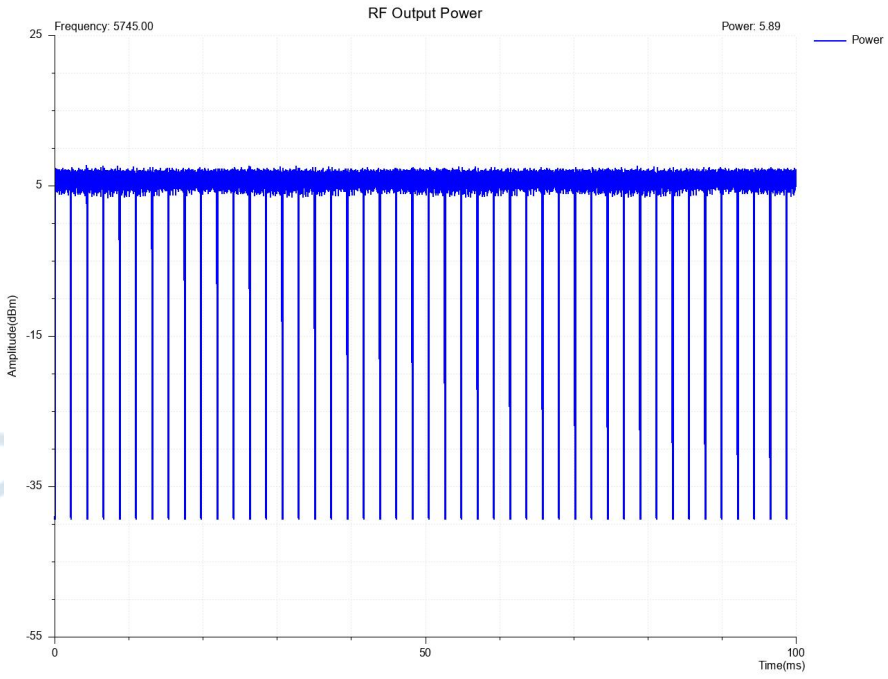

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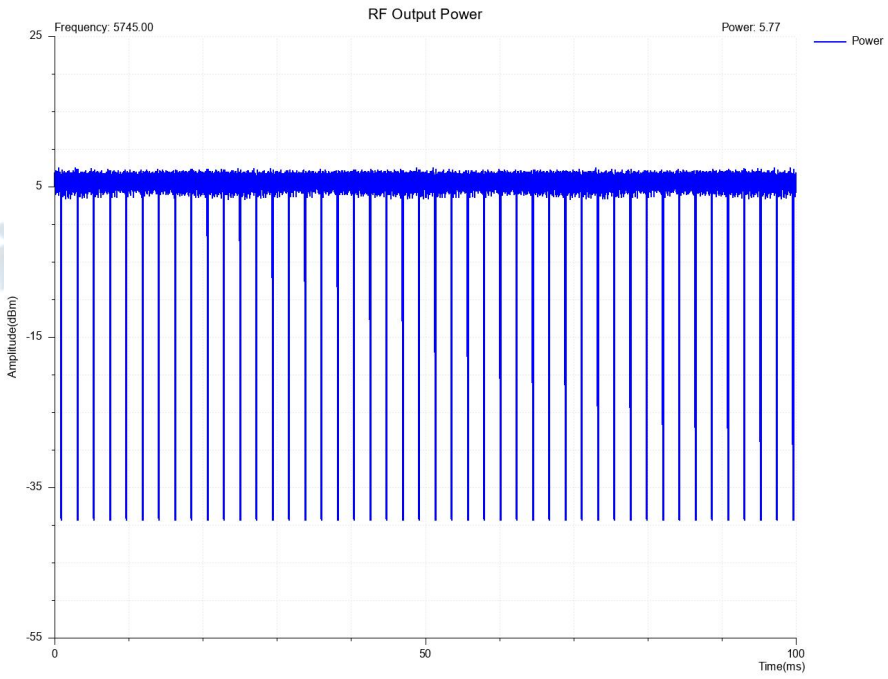

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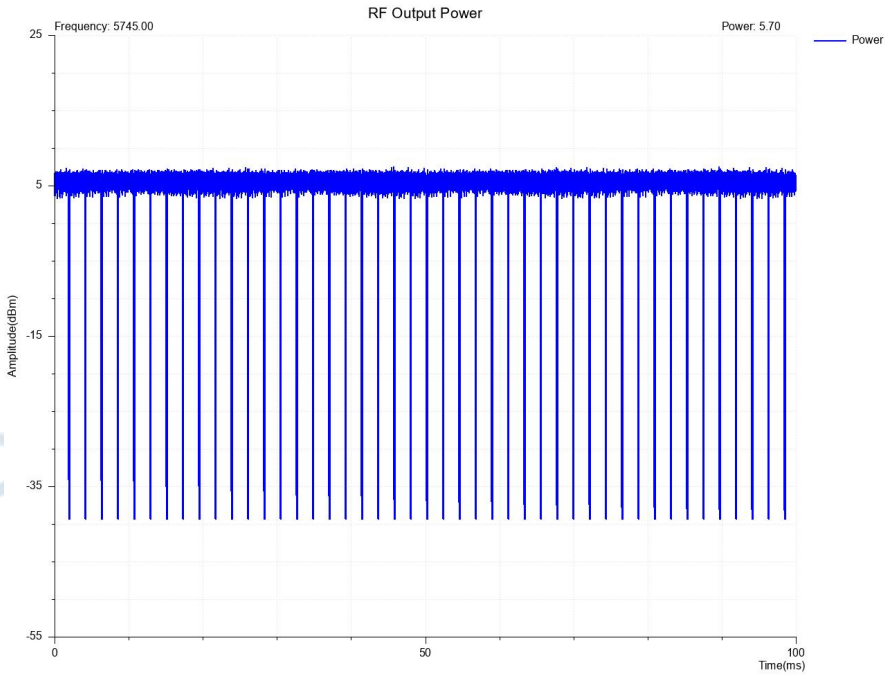

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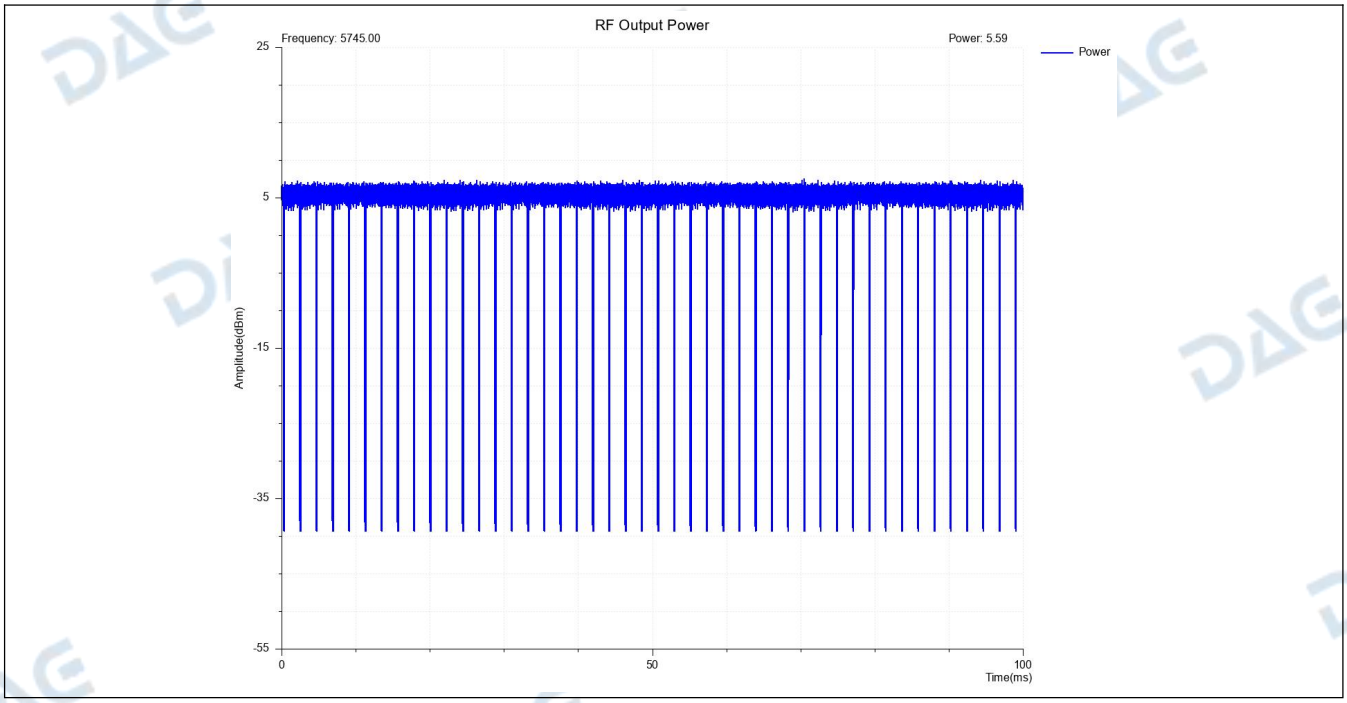

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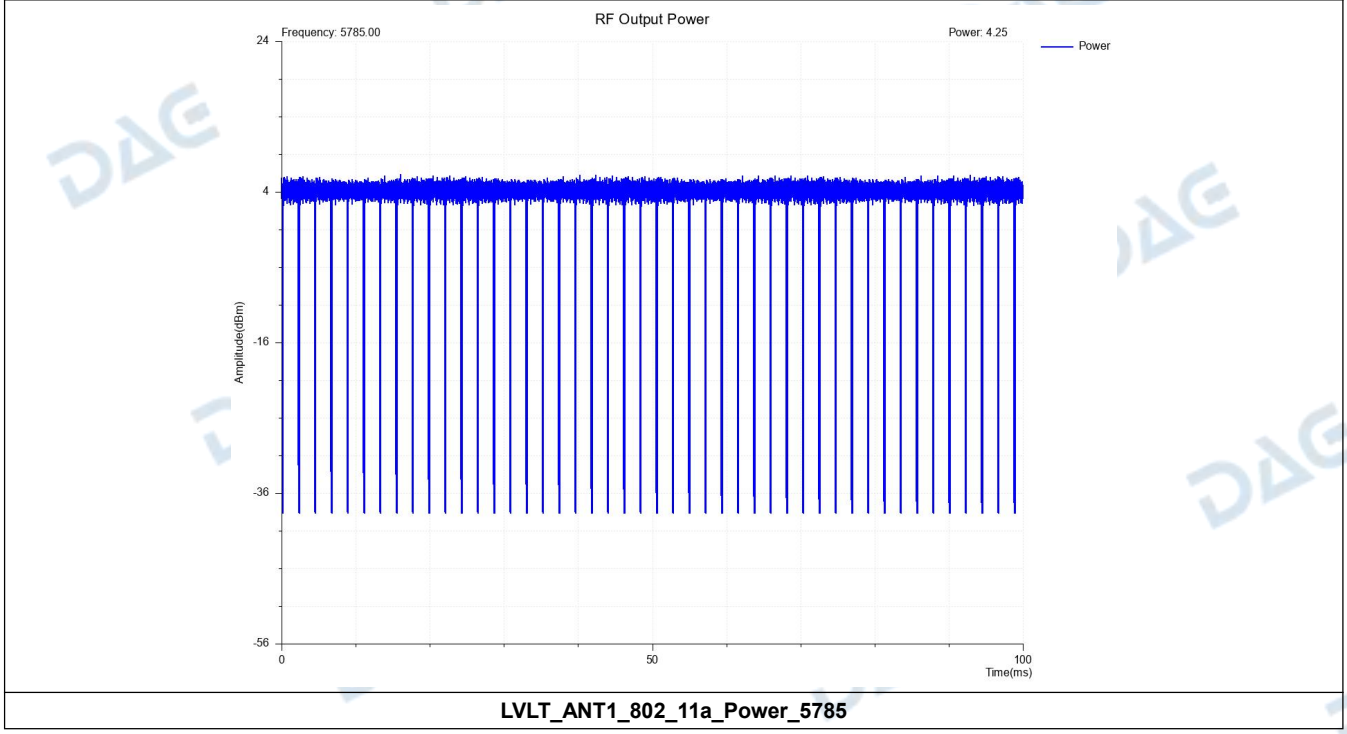
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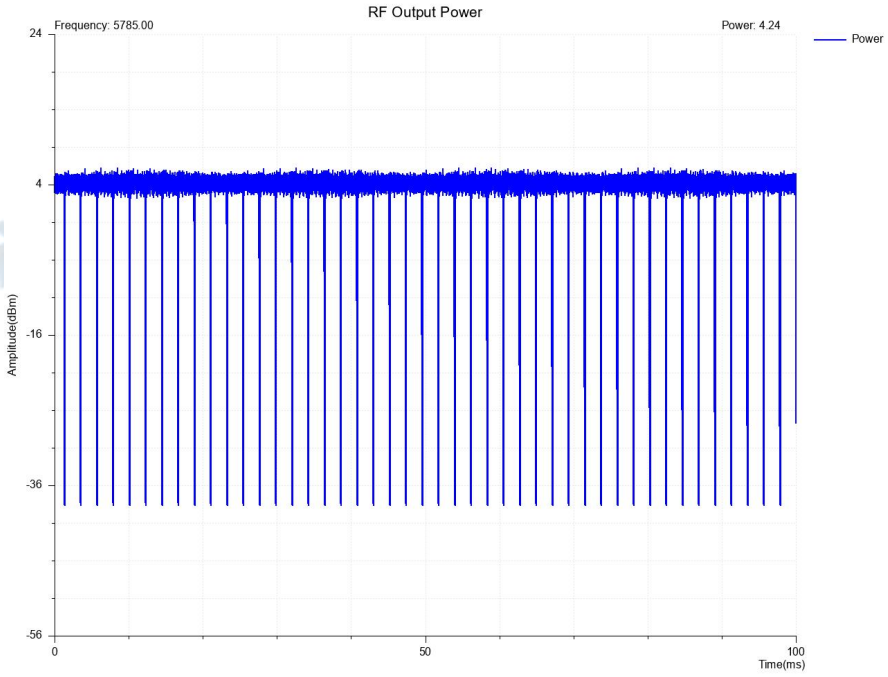

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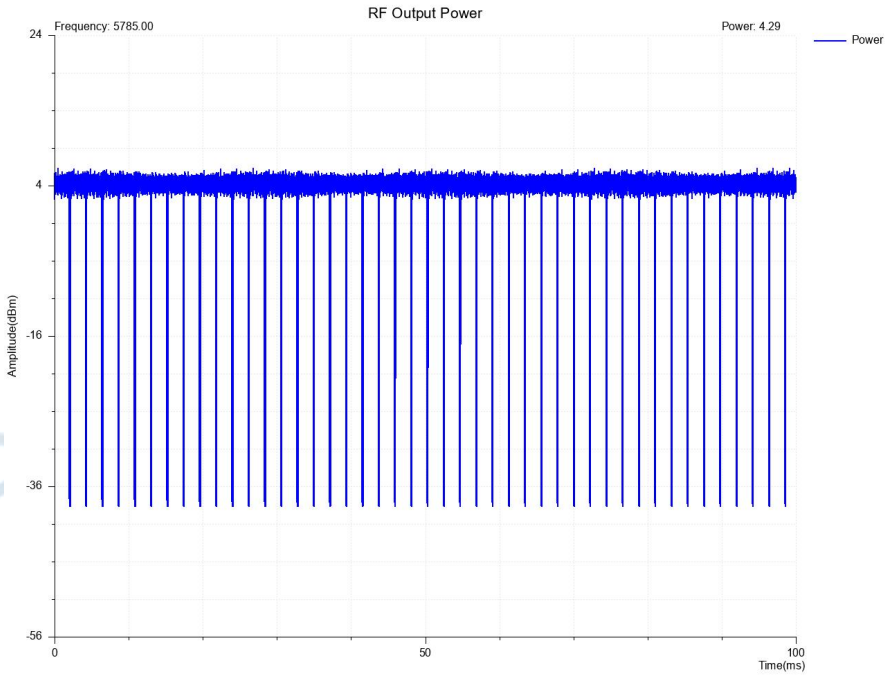
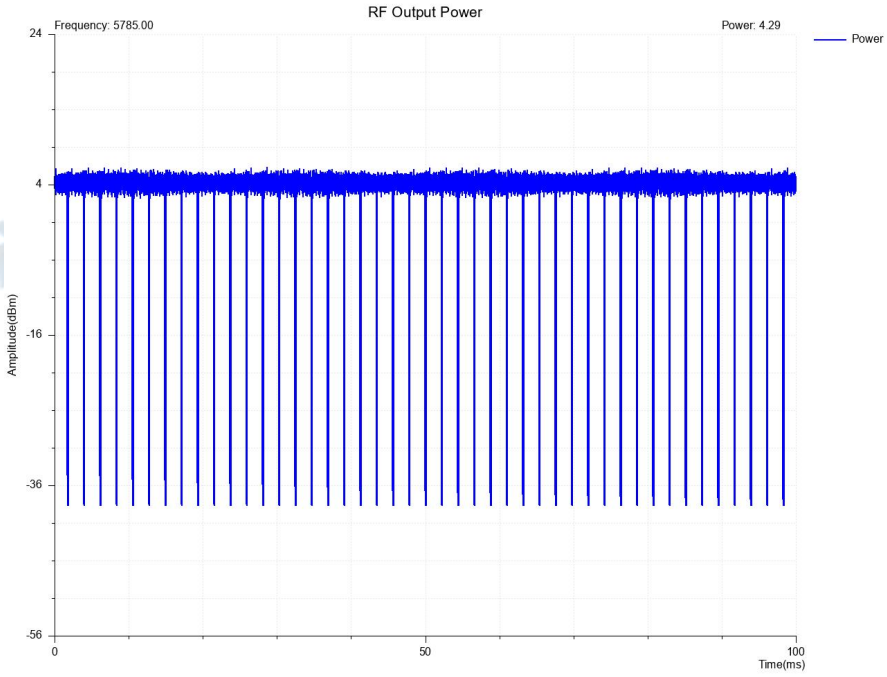
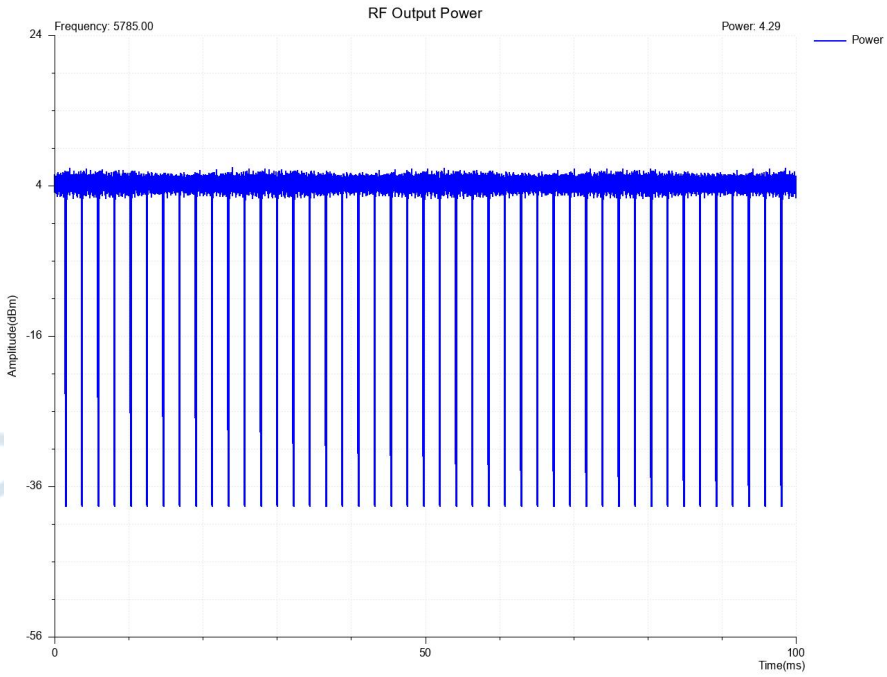


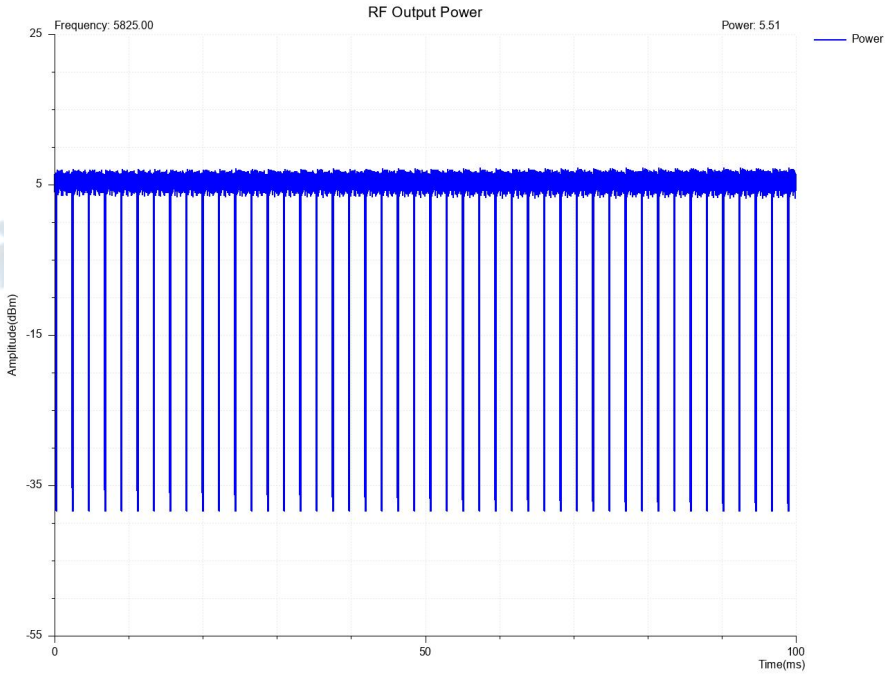
HVLT_ANT1_802_11a_Power_5785



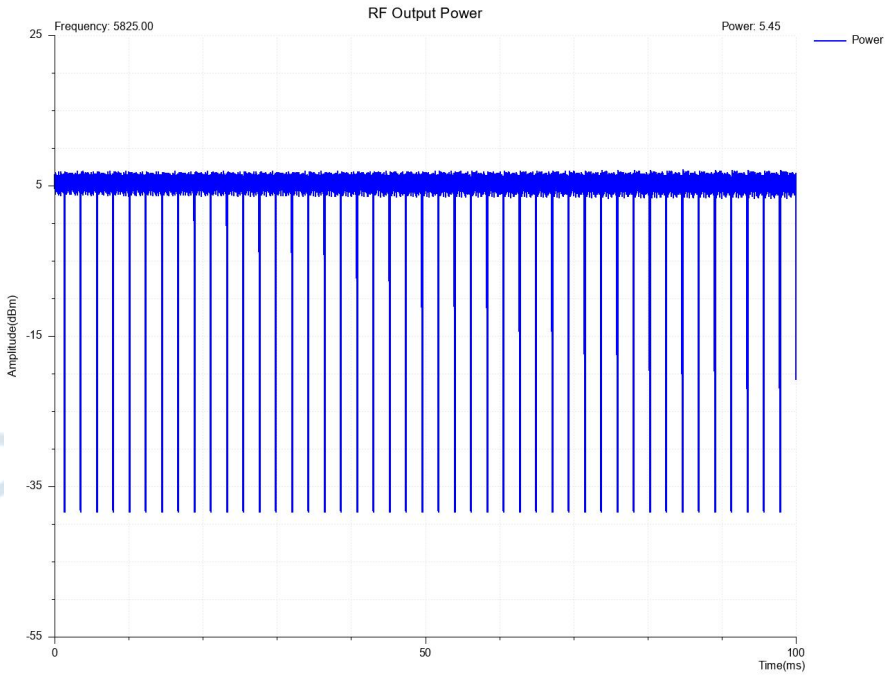
HVHT_ANT1_802_11a_Power_5785



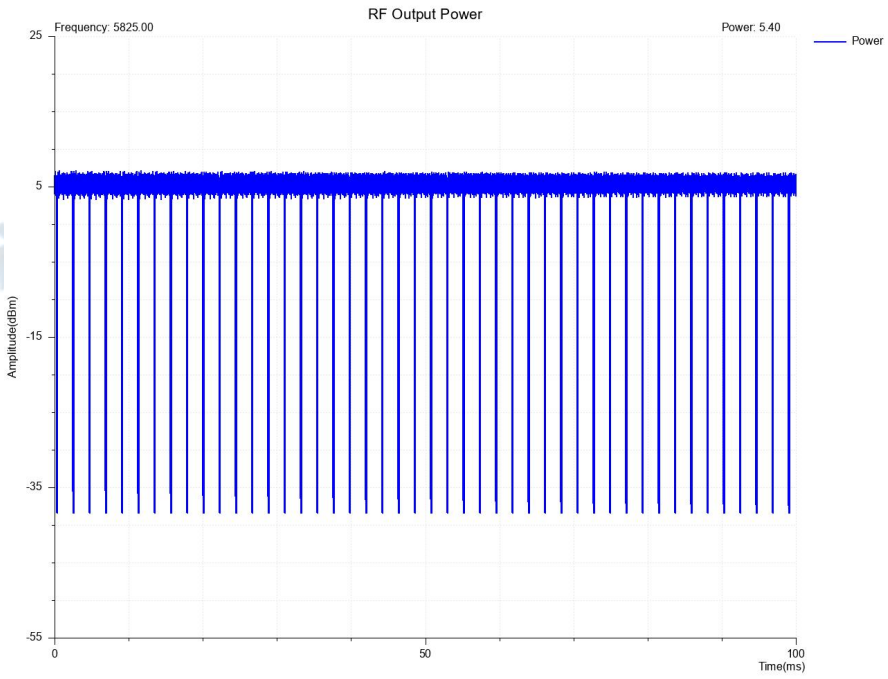
NVNT_ANT1_802_11a_Power_5825



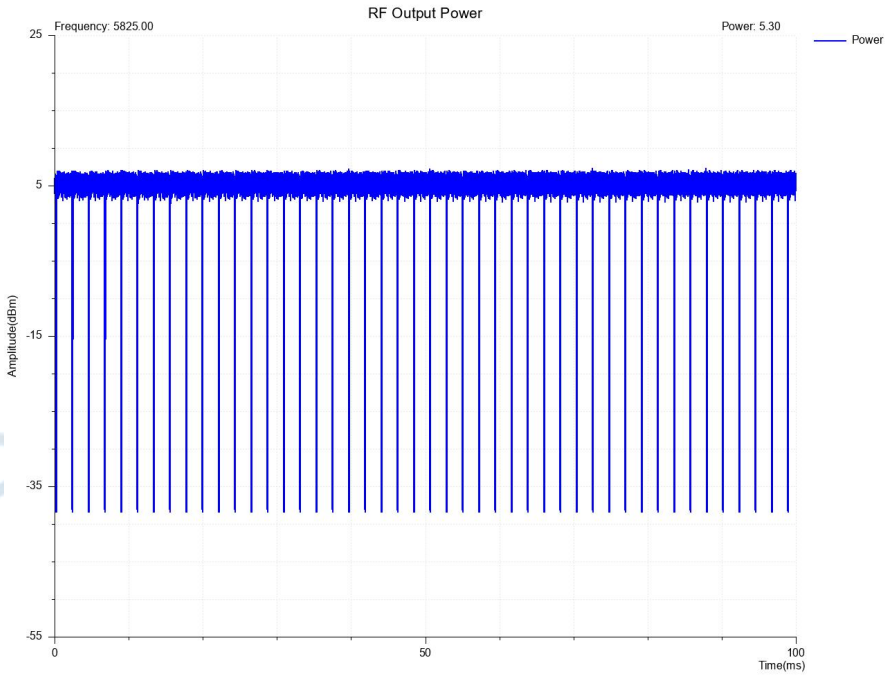
LVLT_ANT1_802_11a_Power_5825



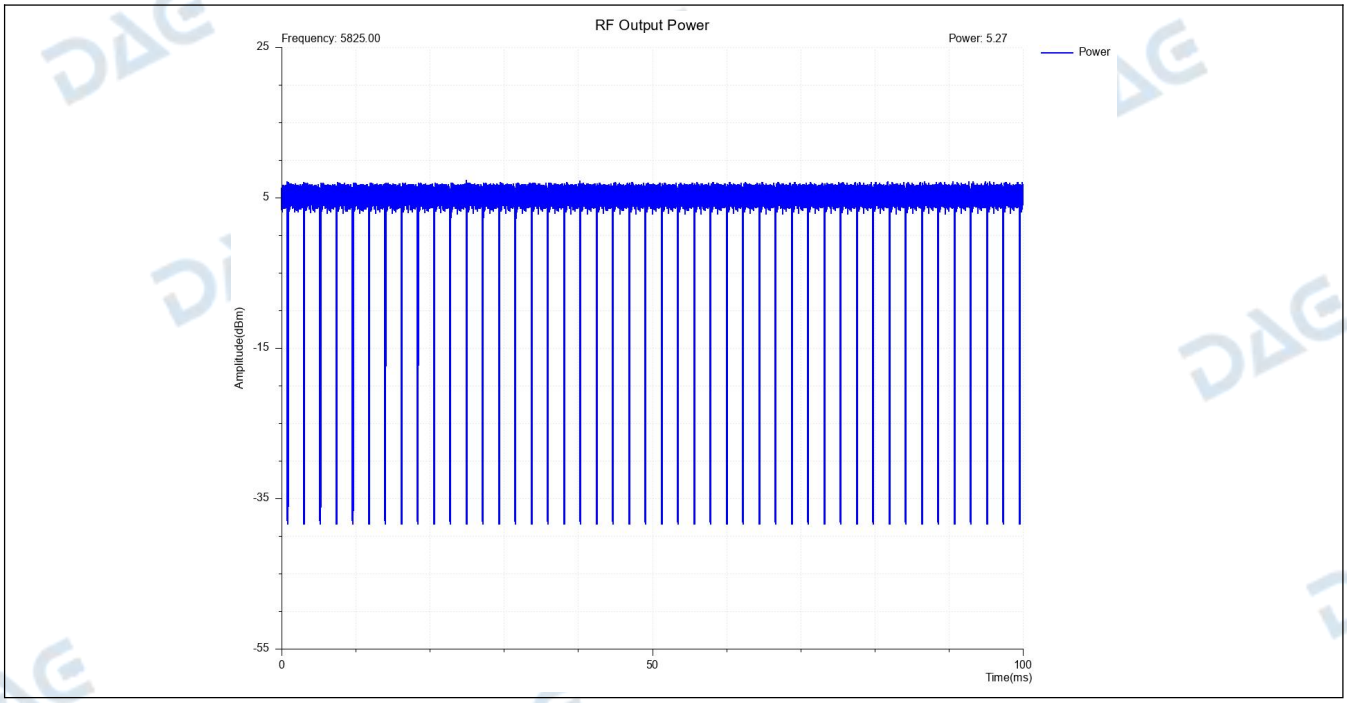
LVHT_ANT1_802_11a_Power_5825



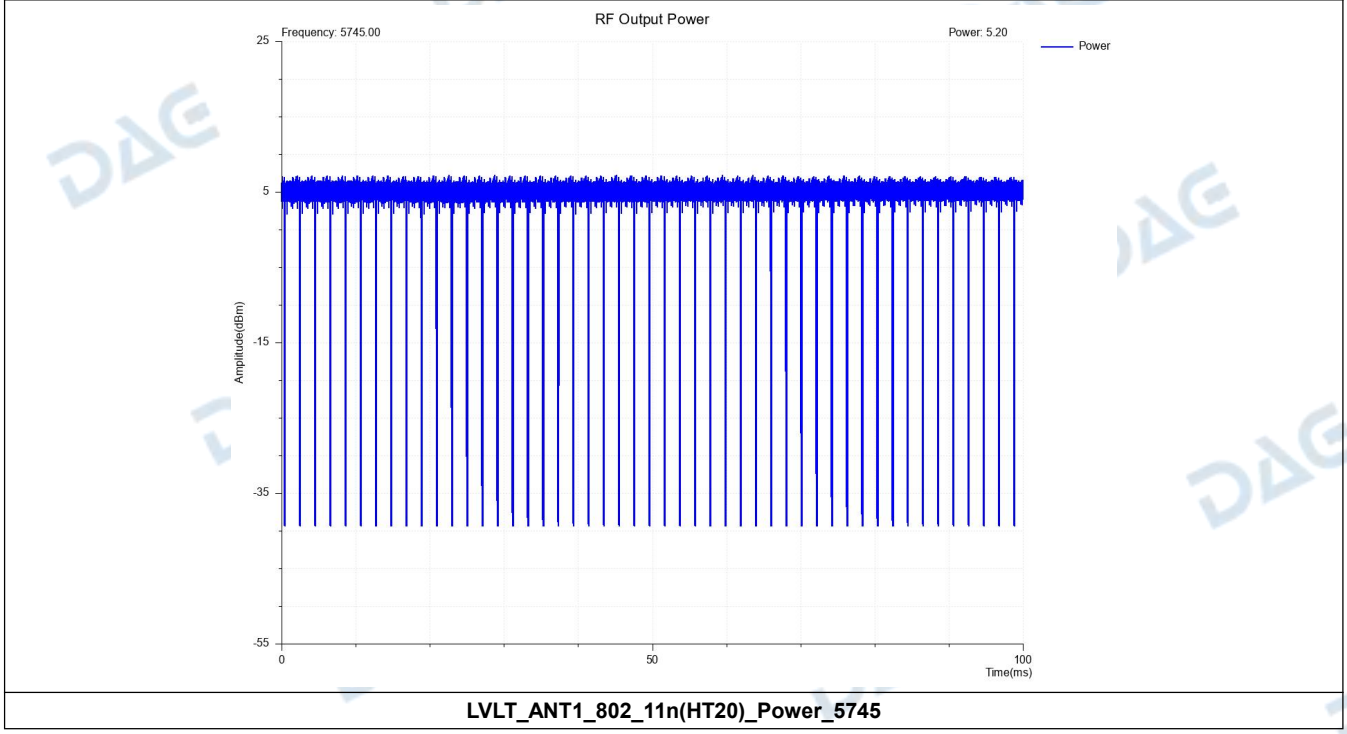
HVLT_ANT1_802_11a_Power_5825



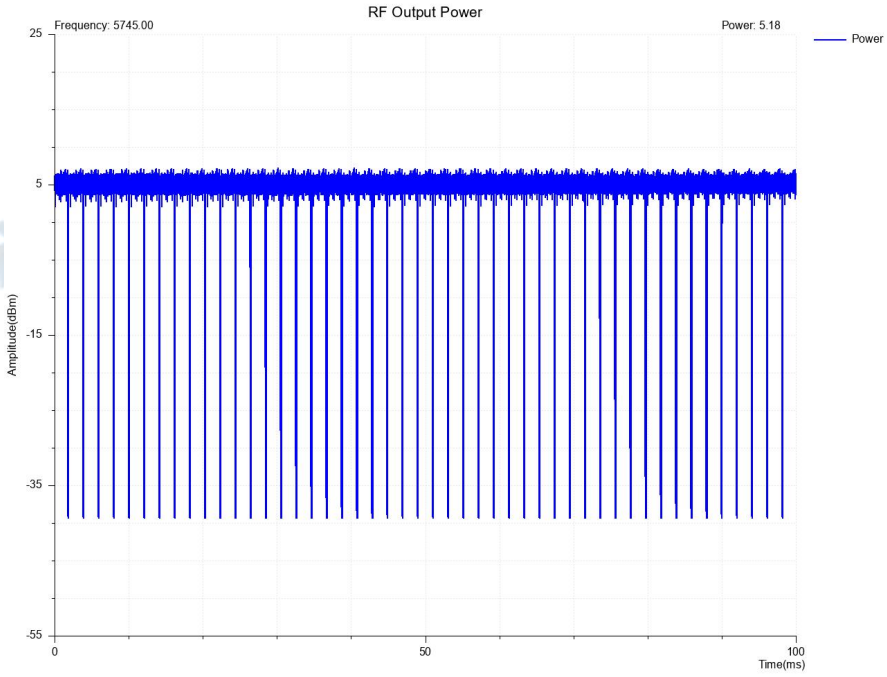
HVHT_ANT1_802_11a_Power_5825



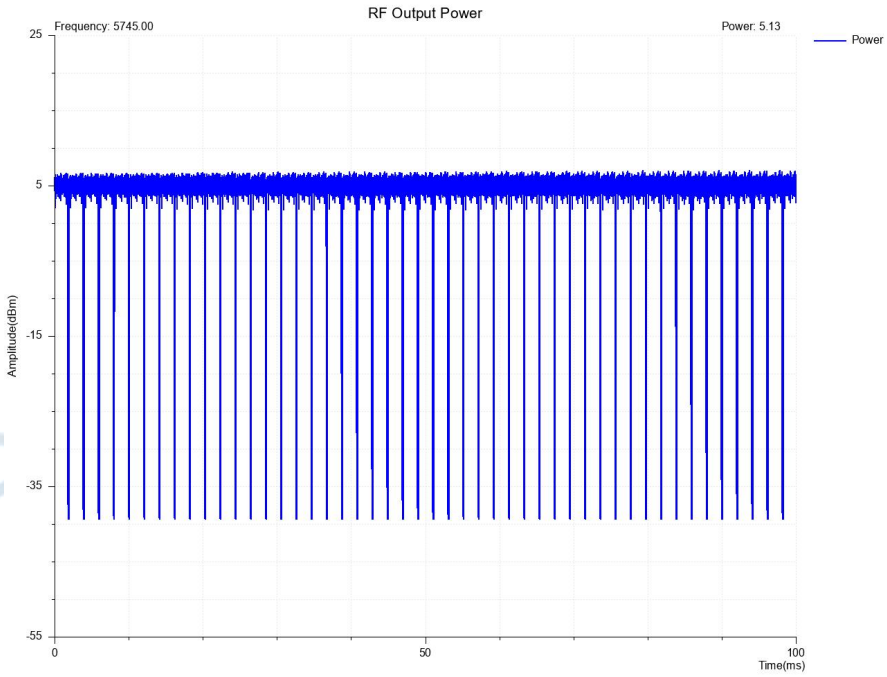
NVNT_ANT1_802_11n(HT20)_Power_5745



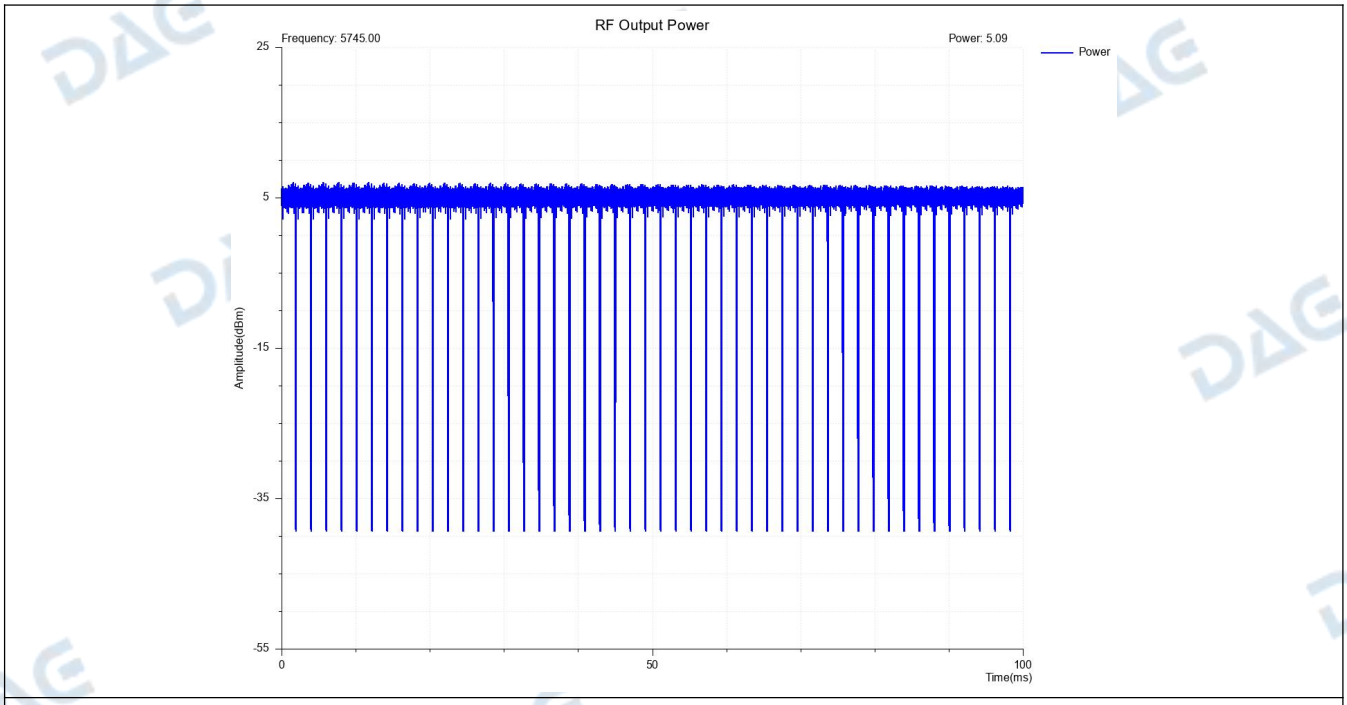
LVLT_ANT1_802_11n(HT20)_Power_5745



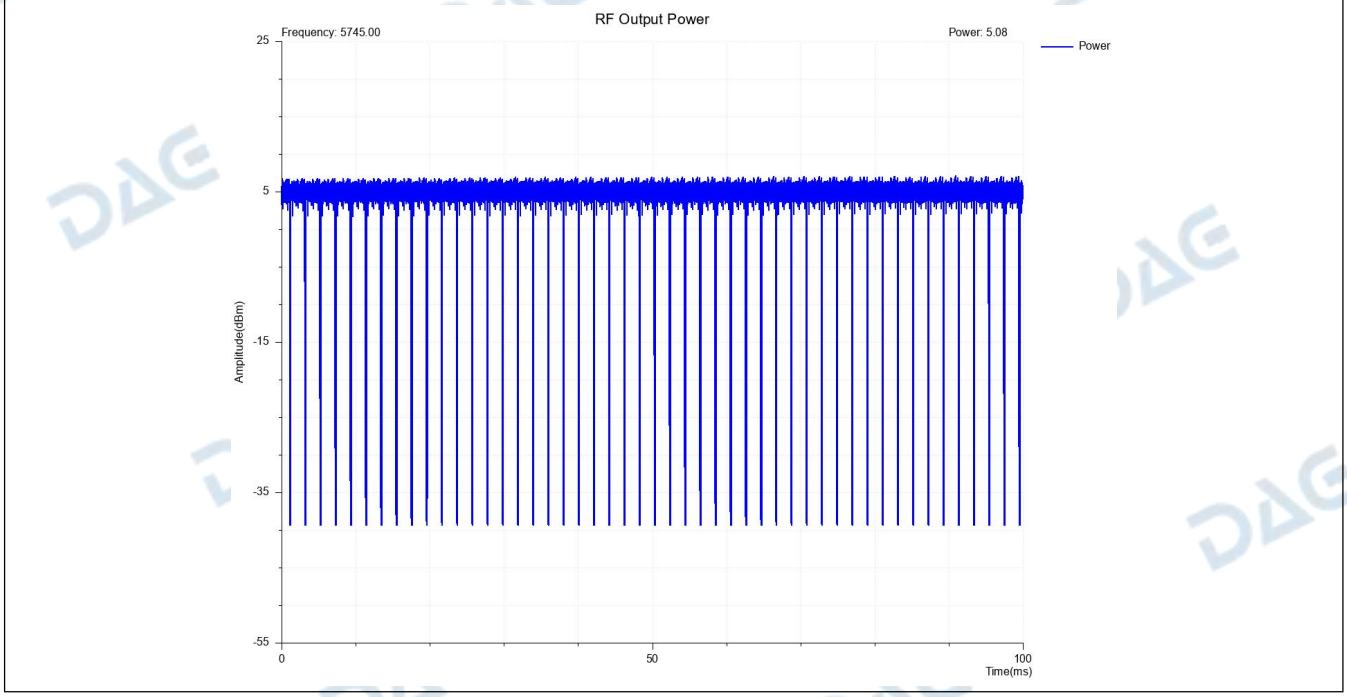
LVHT_ANT1_802_11n(HT20)_Power_5745



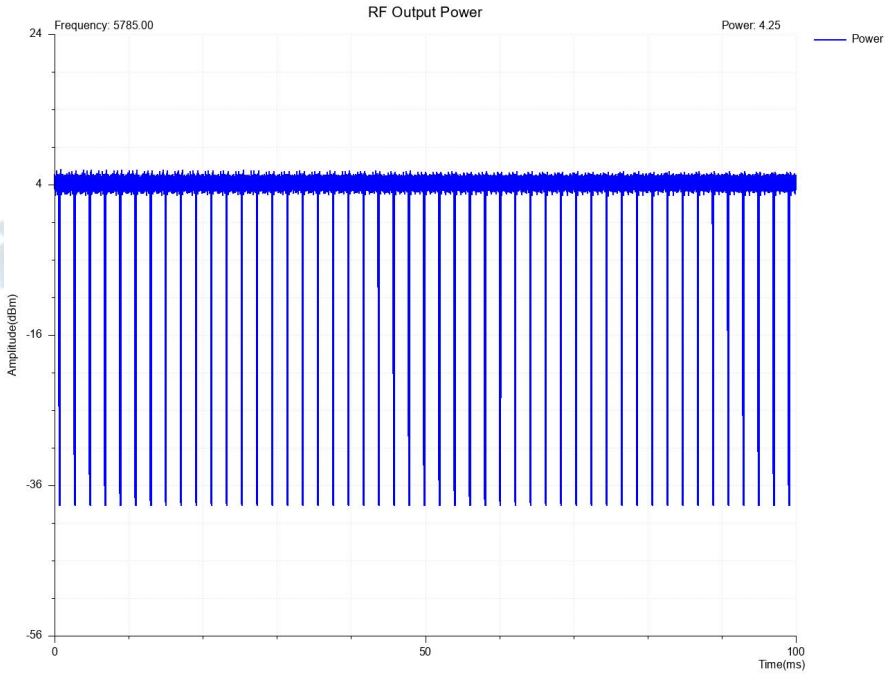
HVLT_ANT1_802_11n(HT20)_Power_5745



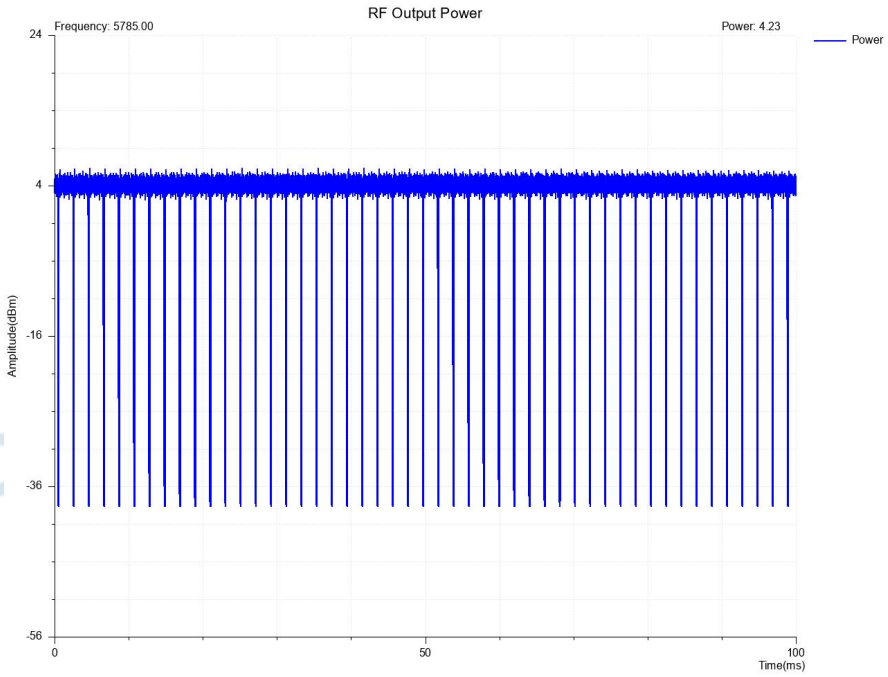
HVHT_ANT1_802_11n(HT20)_Power_5745



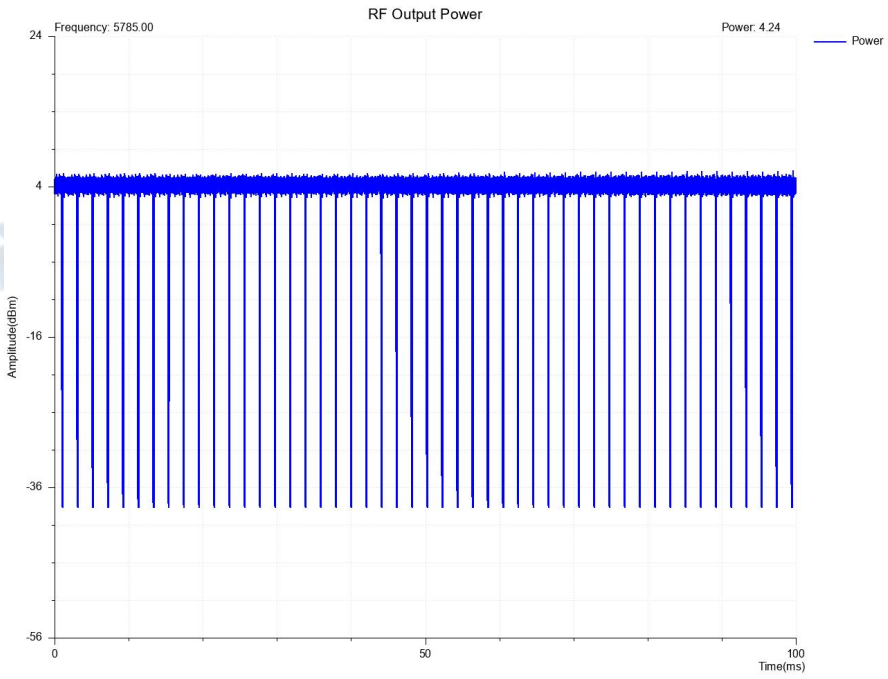
NVNT_ANT1_802_11n(HT20)_Power_5785



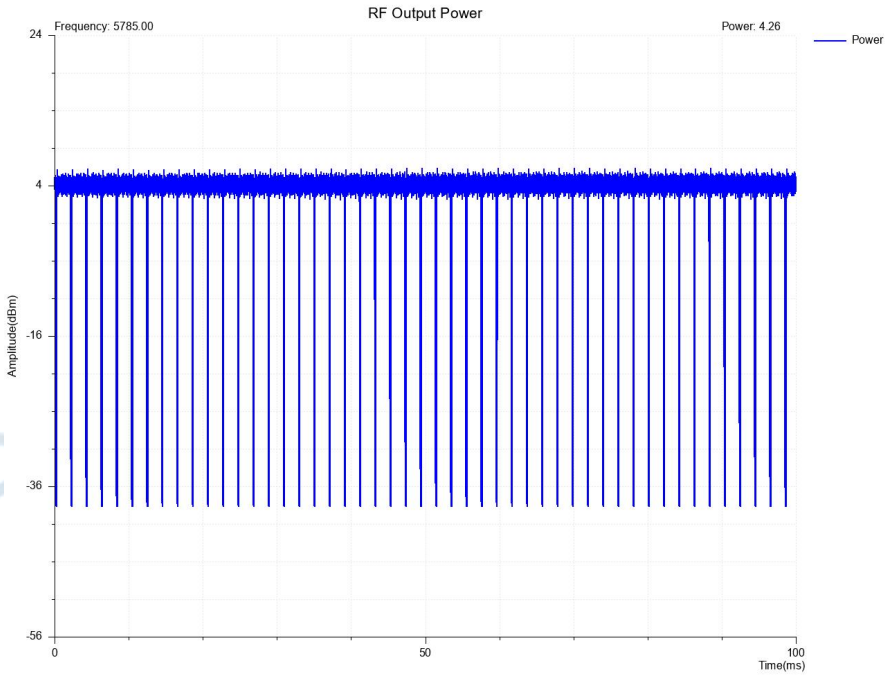
LVLT_ANT1_802_11n(HT20)_Power_5785



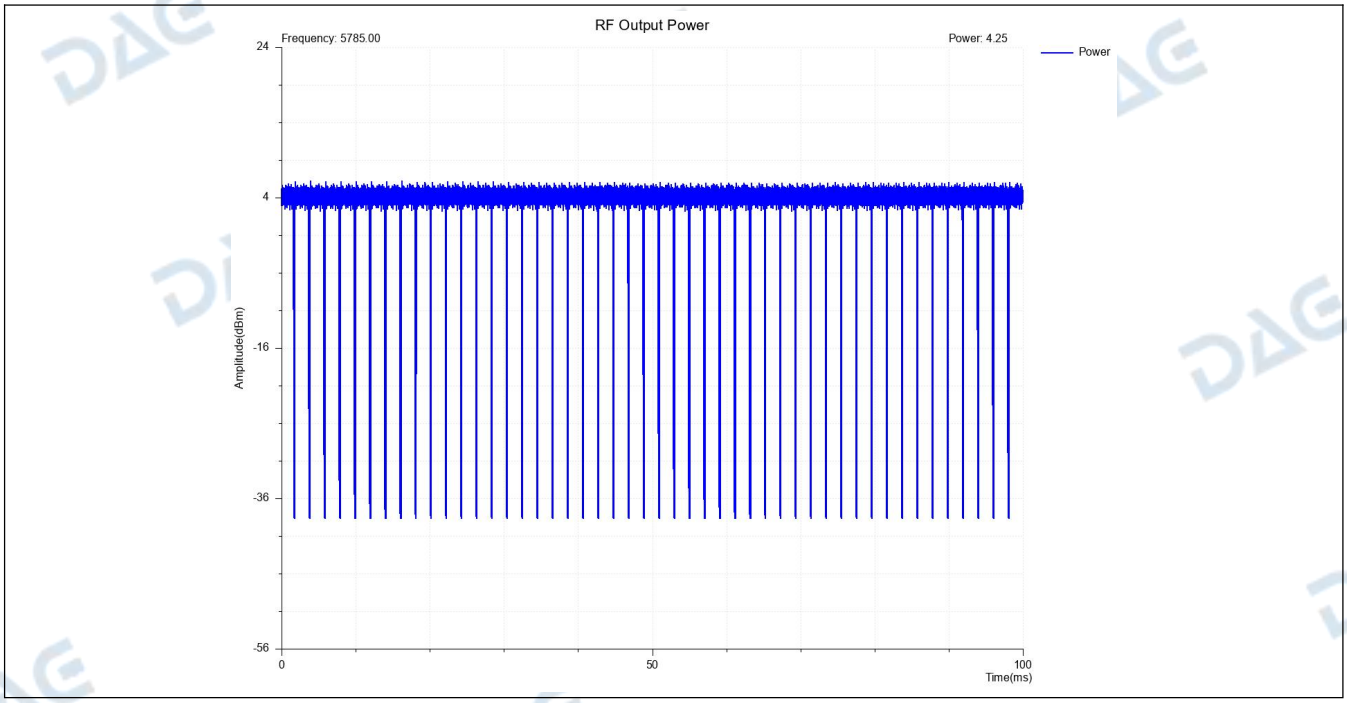
LVHT_ANT1_802_11n(HT20)_Power_5785



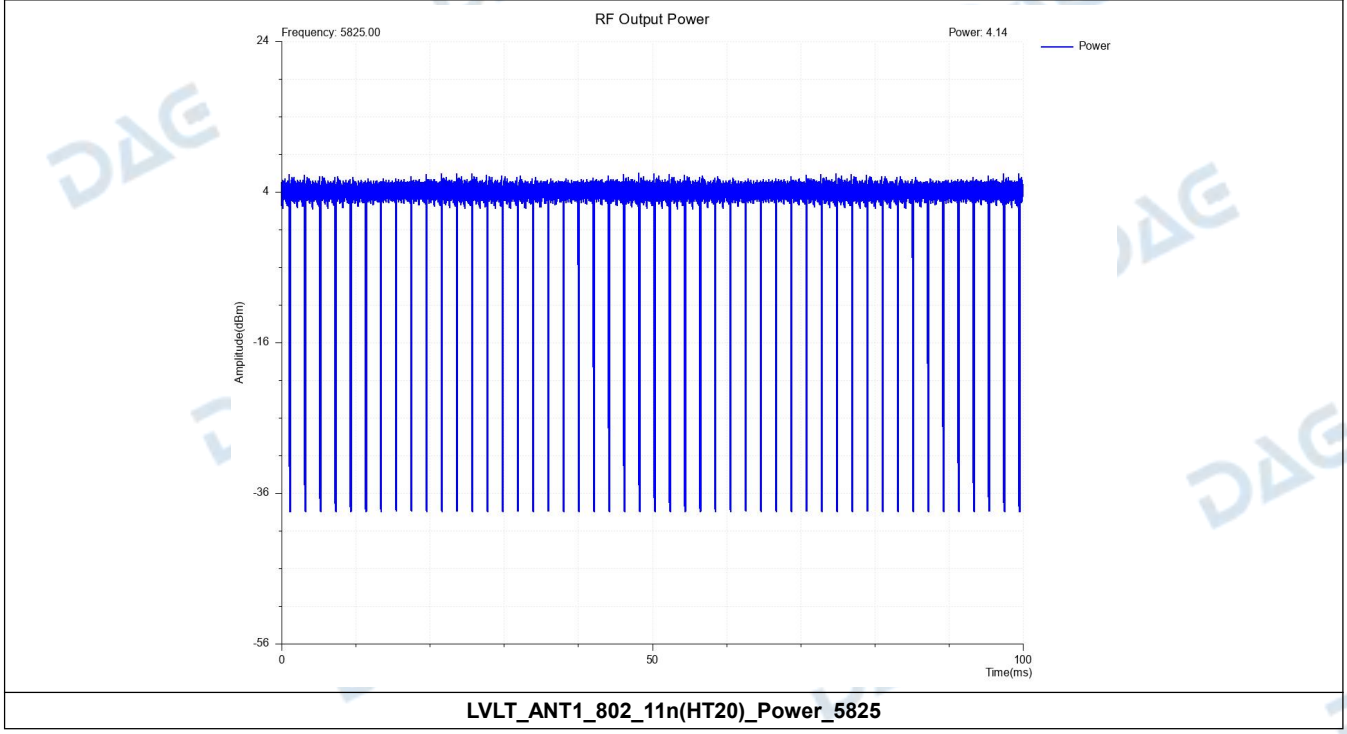
HVLT_ANT1_802_11n(HT20)_Power_5785



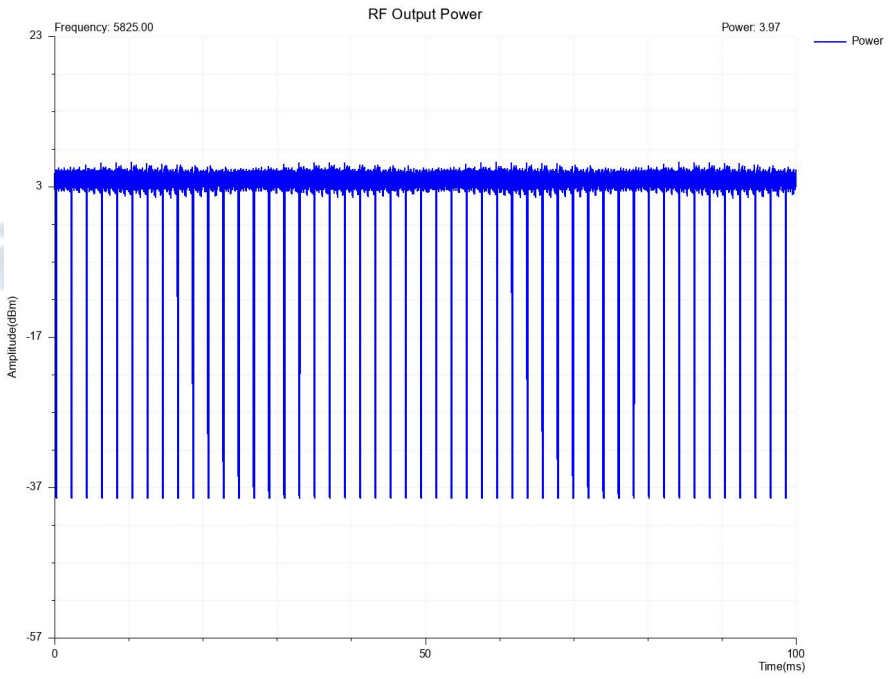
HVHT_ANT1_802_11n(HT20)_Power_5785



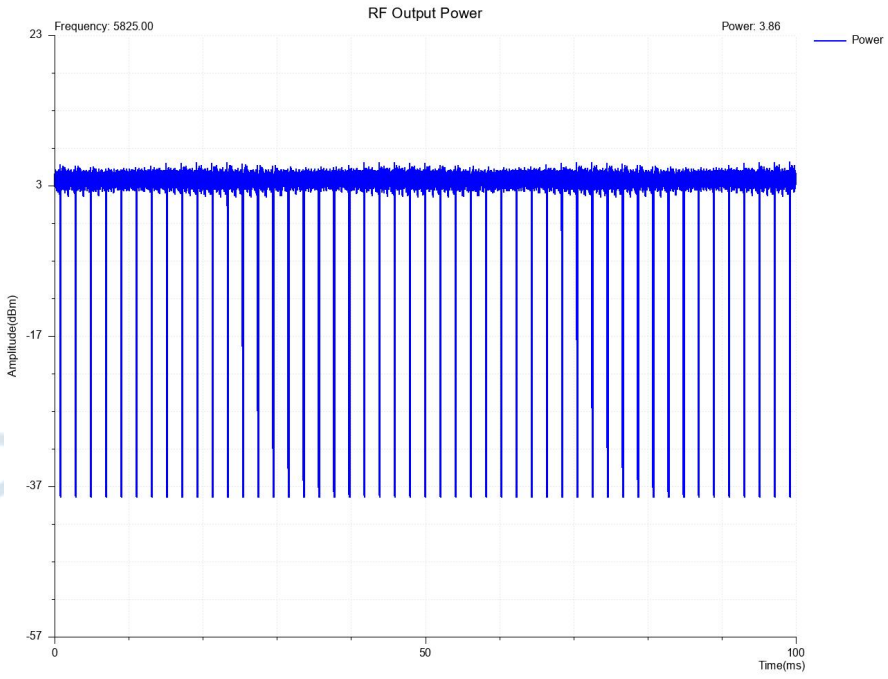
NVNT_ANT1_802_11n(HT20)_Power_5825



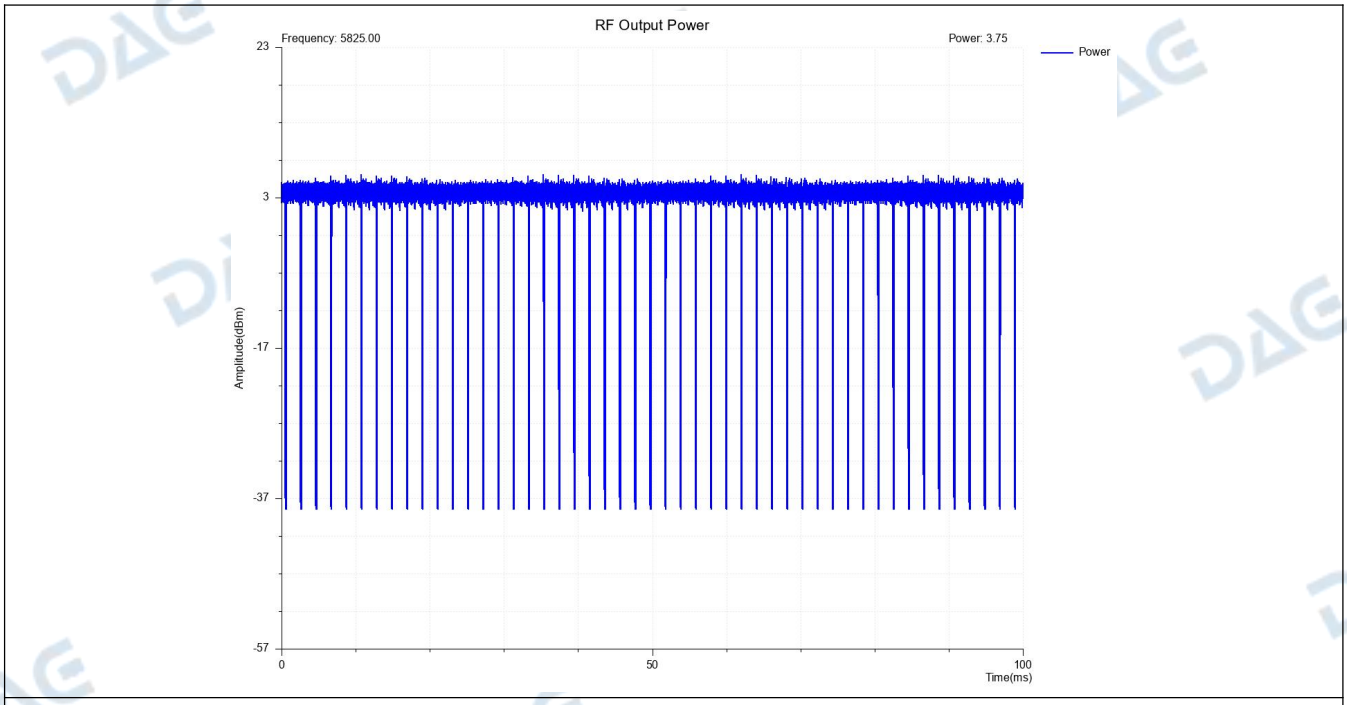
LVLT_ANT1_802_11n(HT20)_Power_5825



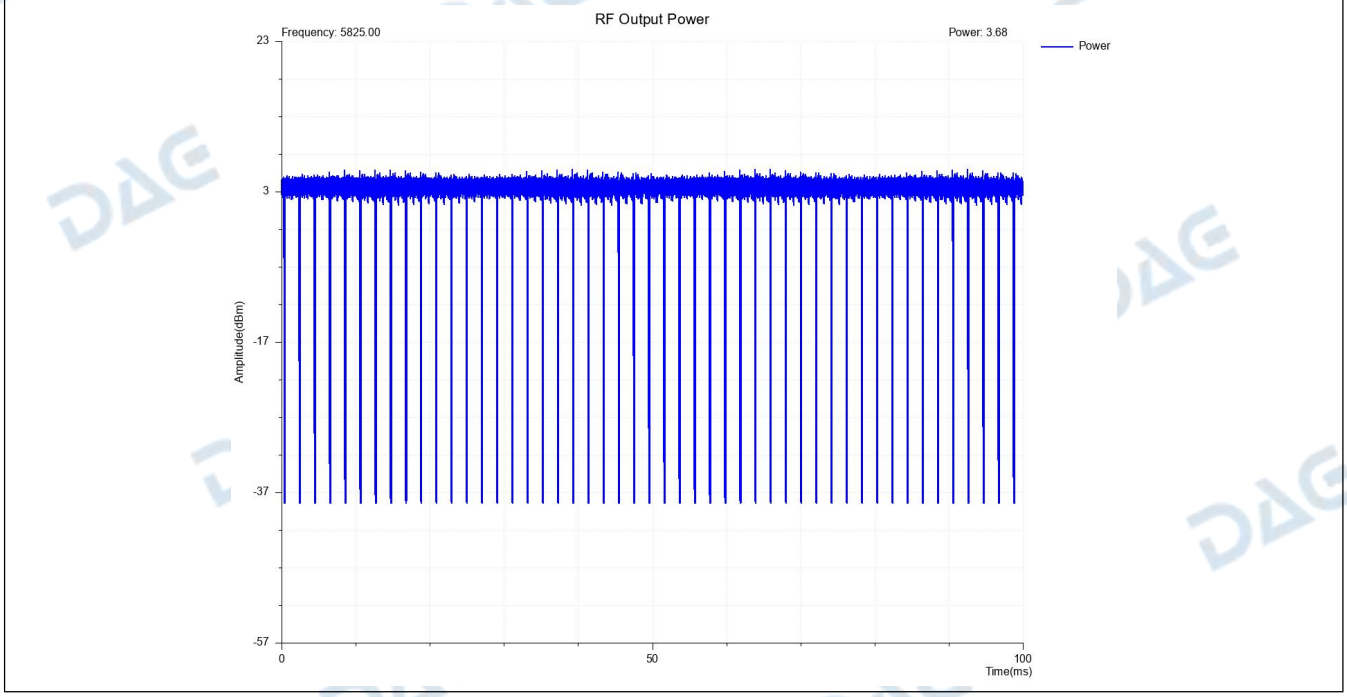
LVHT_ANT1_802_11n(HT20)_Power_5825



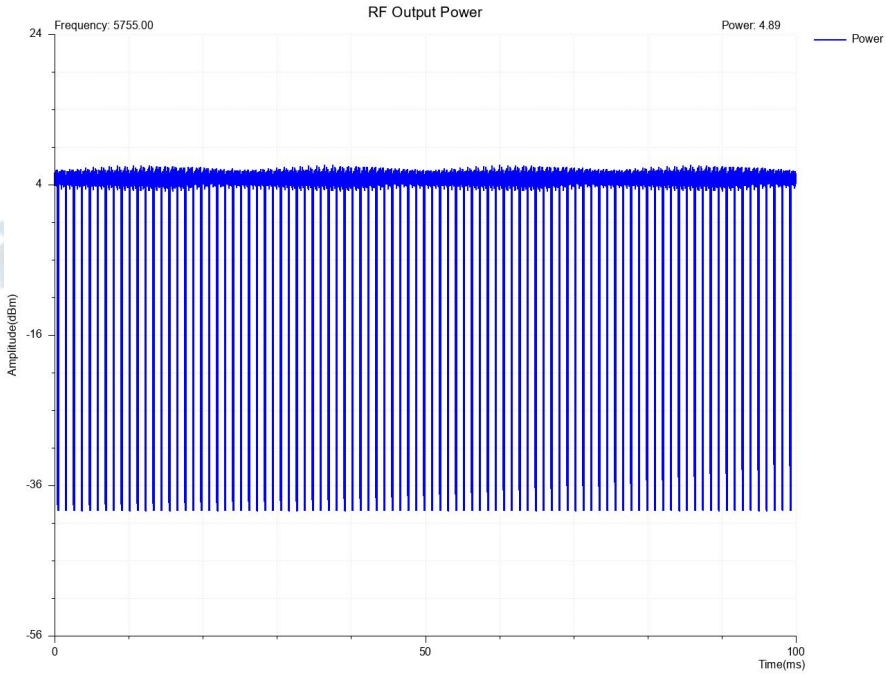
HVLT_ANT1_802_11n(HT20)_Power_5825



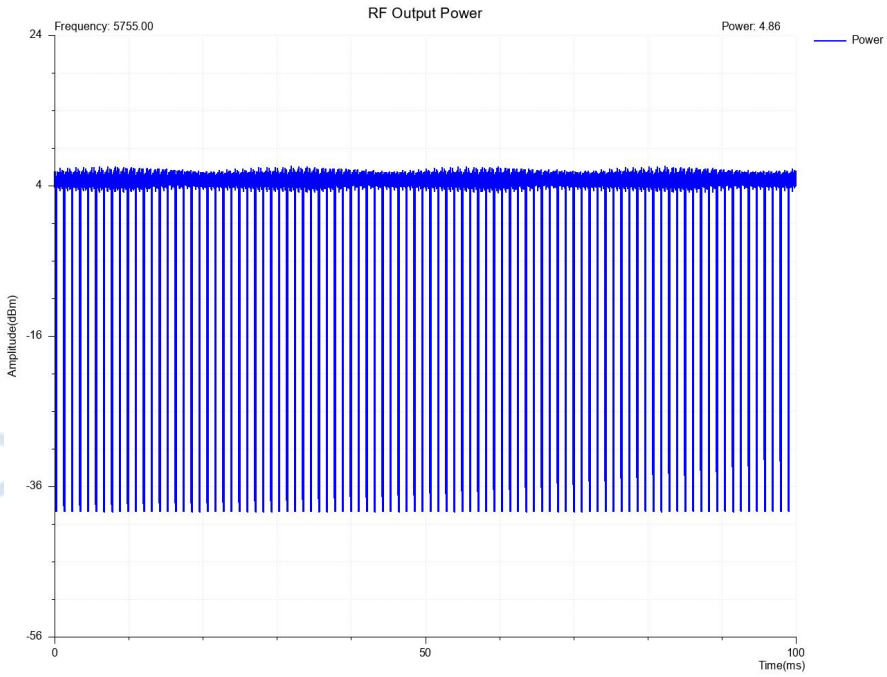
HVHT_ANT1_802_11n(HT20)_Power_5825



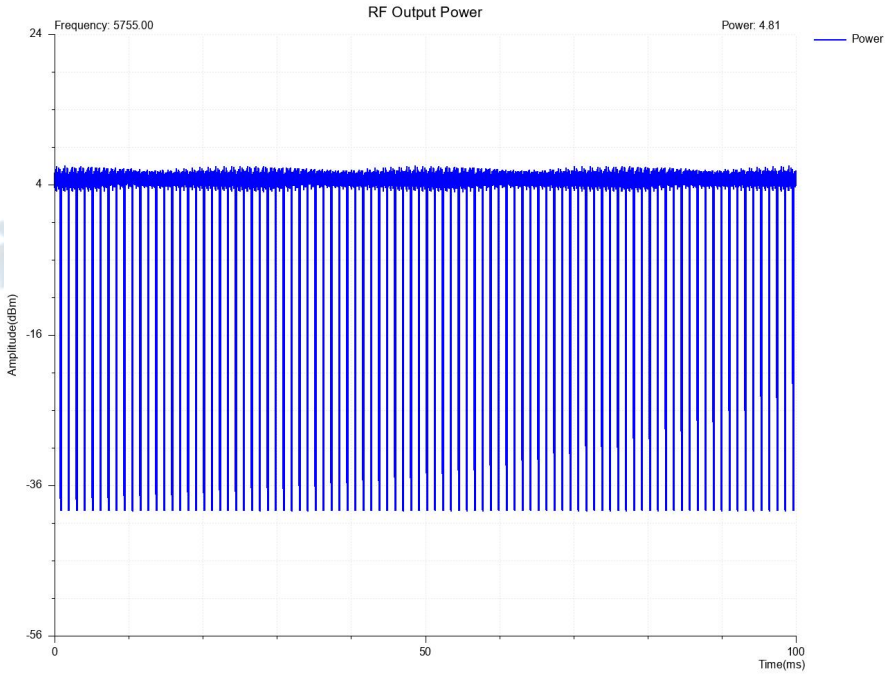
NVNT_ANT1_802_11n(HT40)_Power_5755



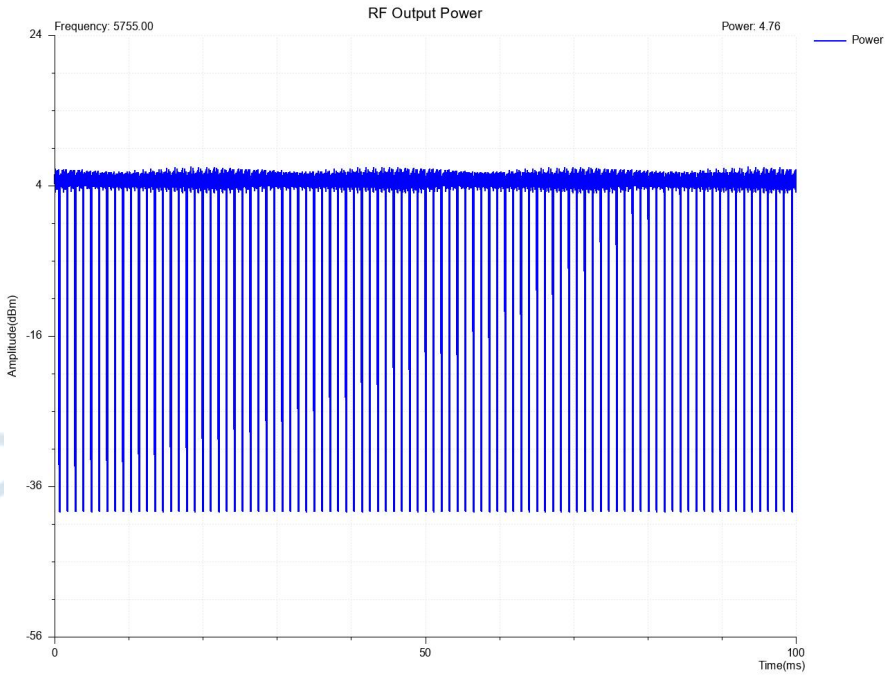
LVLT_ANT1_802_11n(HT40)_Power_5755



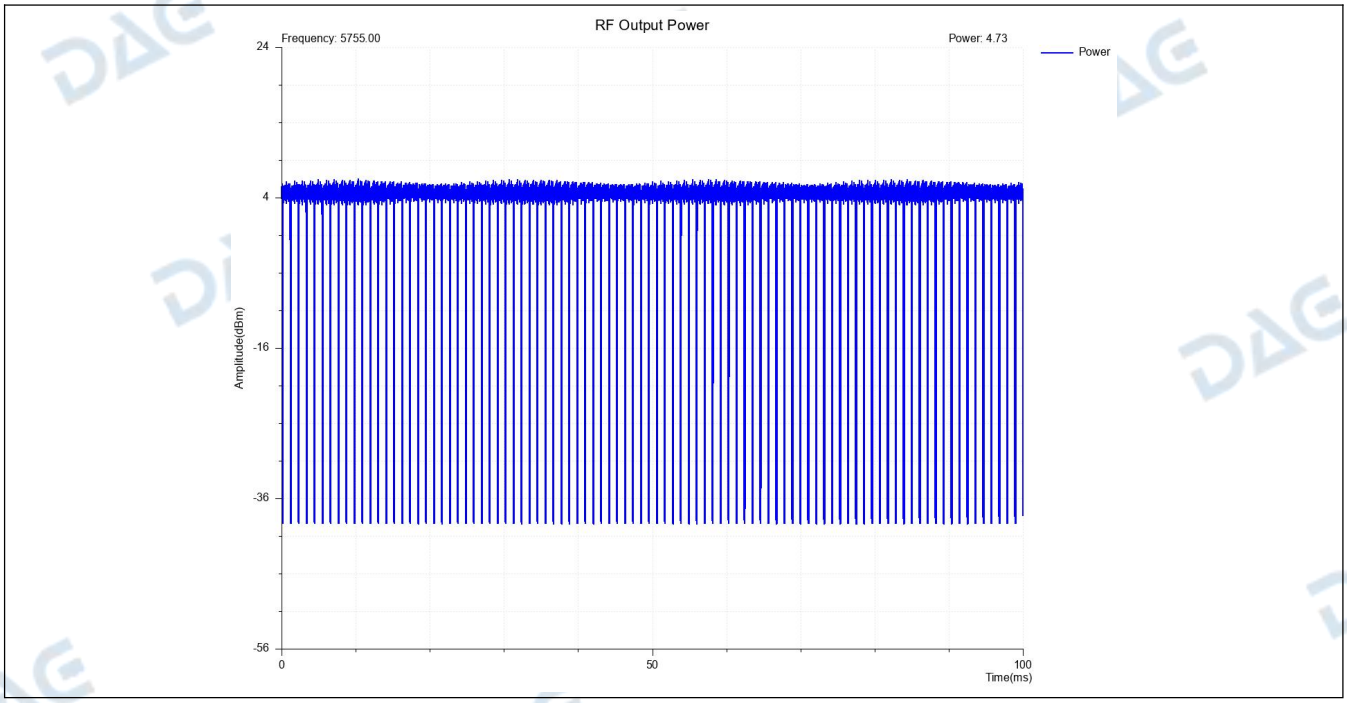
LVHT_ANT1_802_11n(HT40)_Power_5755



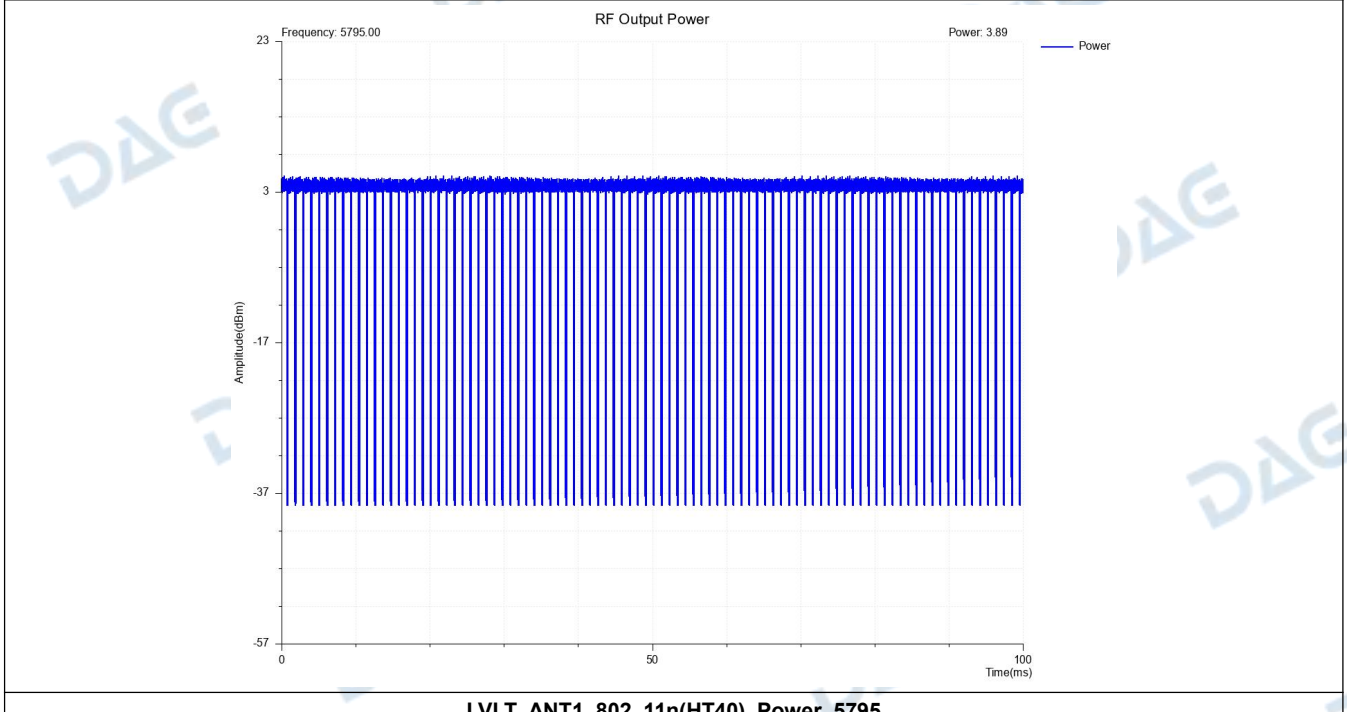
HVLT_ANT1_802_11n(HT40)_Power_5755



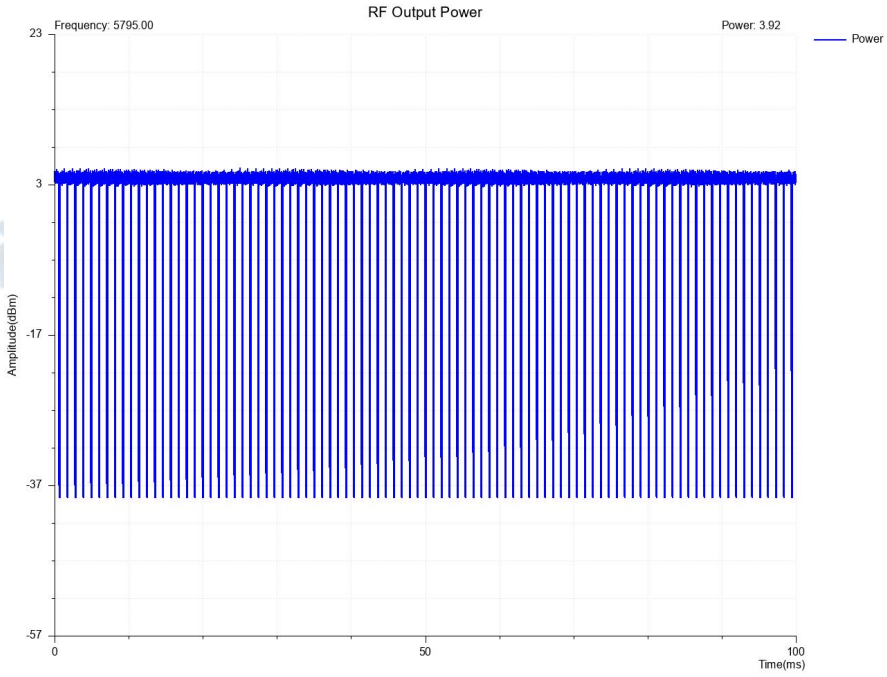
HVHT_ANT1_802_11n(HT40)_Power_5755



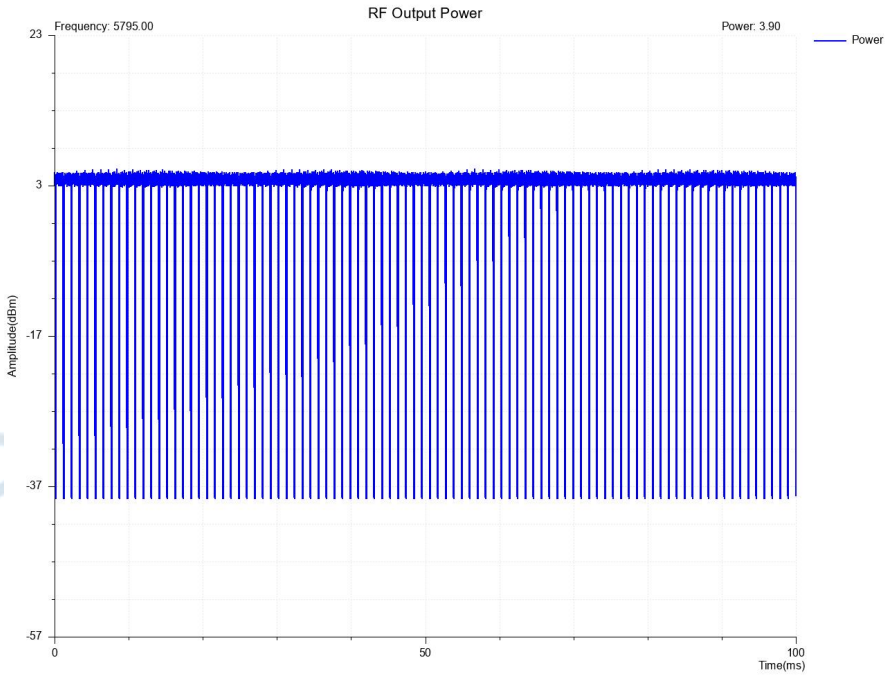
NVNT_ANT1_802_11n(HT40)_Power_5795



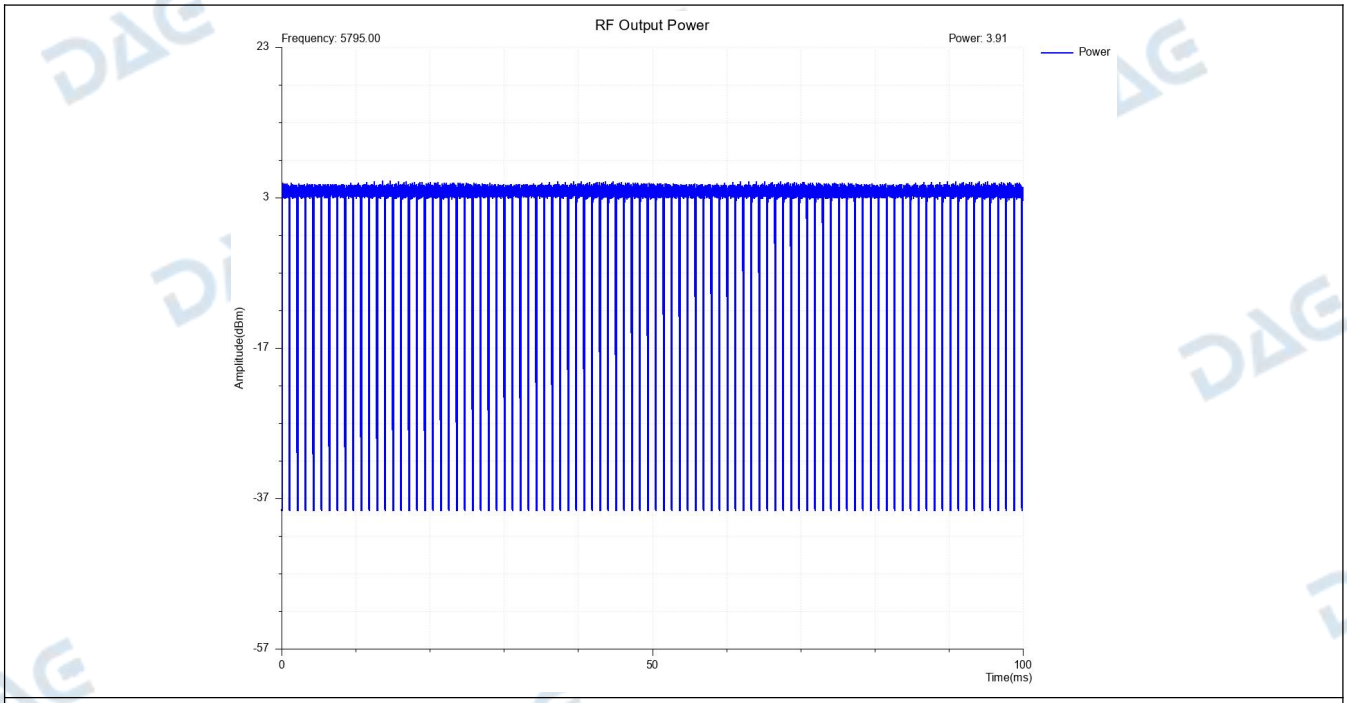
LVLT_ANT1_802_11n(HT40)_Power_5795



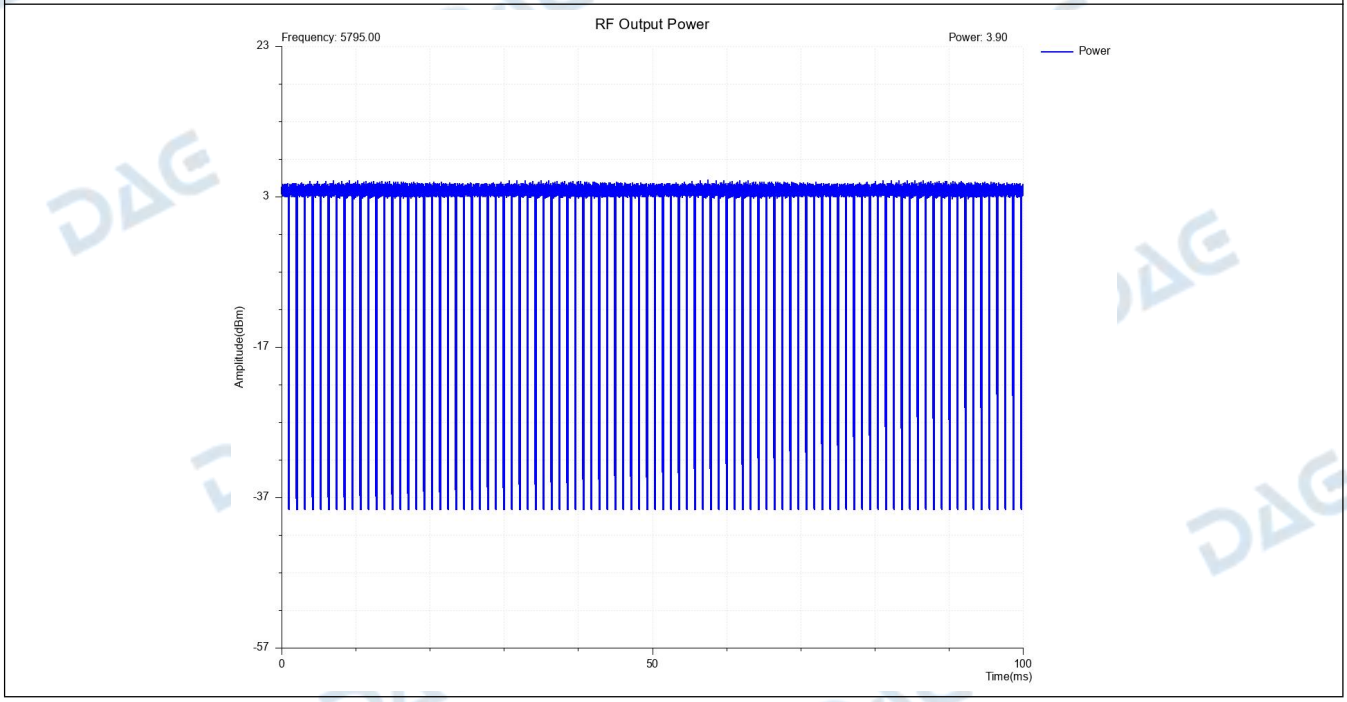
LVHT_ANT1_802_11n(HT40)_Power_5795



HVLT_ANT1_802_11n(HT40)_Power_5795



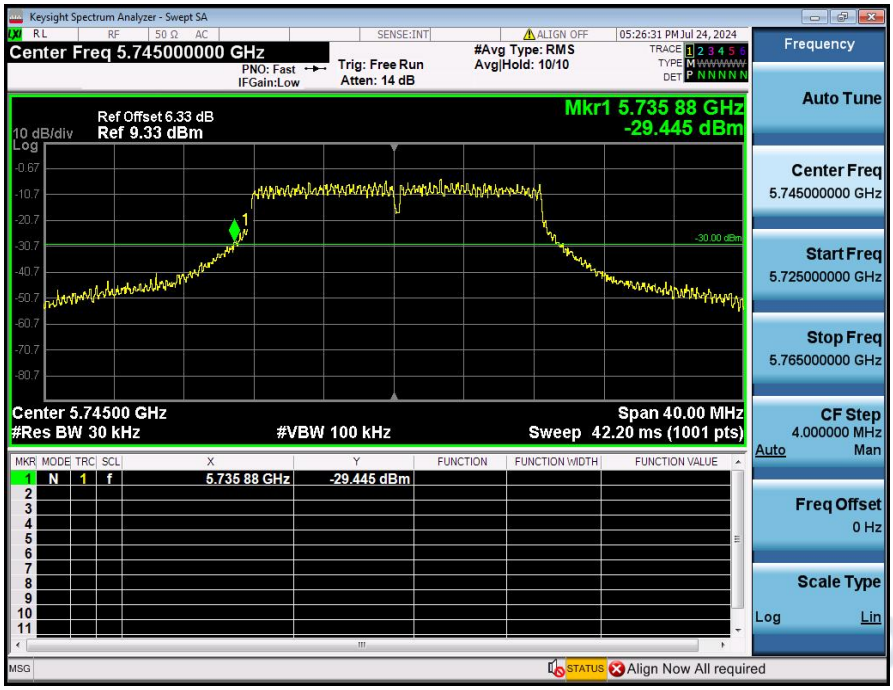
HVHT_ANT1_802_11n(HT40)_Power_5795



3. Permitted range of operating frequencies

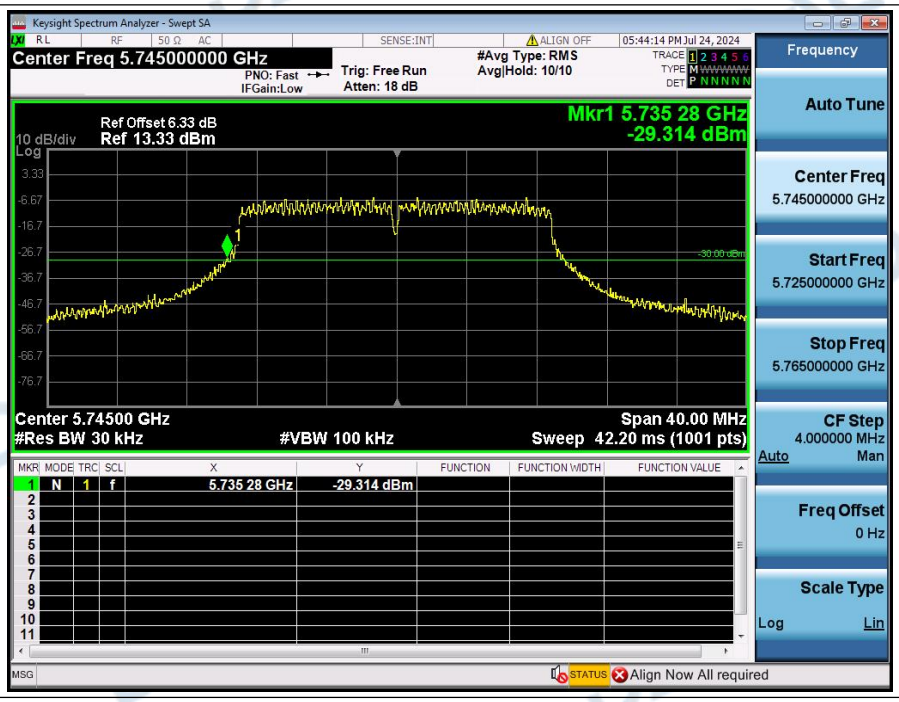
Condition	Antenna	Modulation	Frequency(MHz)	Measured Frequency (MHz)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	5735.880	>=5725	Pass
NVNT	ANT1	802.11a	5825.00	5834.200	<=5875	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	5735.280	>=5725	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	5834.840	<=5875	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	5736.680	>=5725	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	5813.720	<=5875	Pass

NVNT_ANT1_802_11a_5745

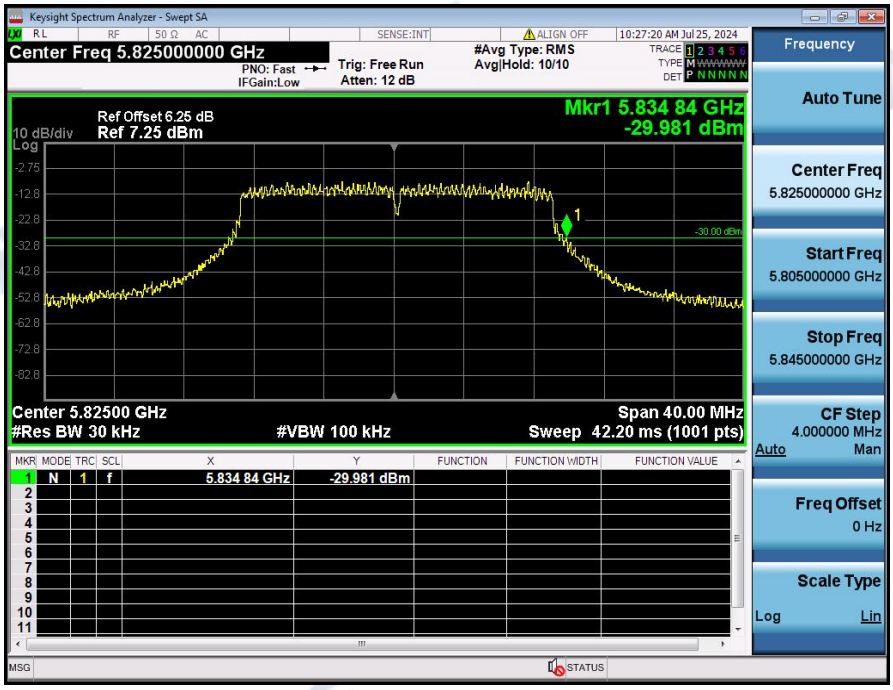


NVNT_ANT1_802_11a_5825

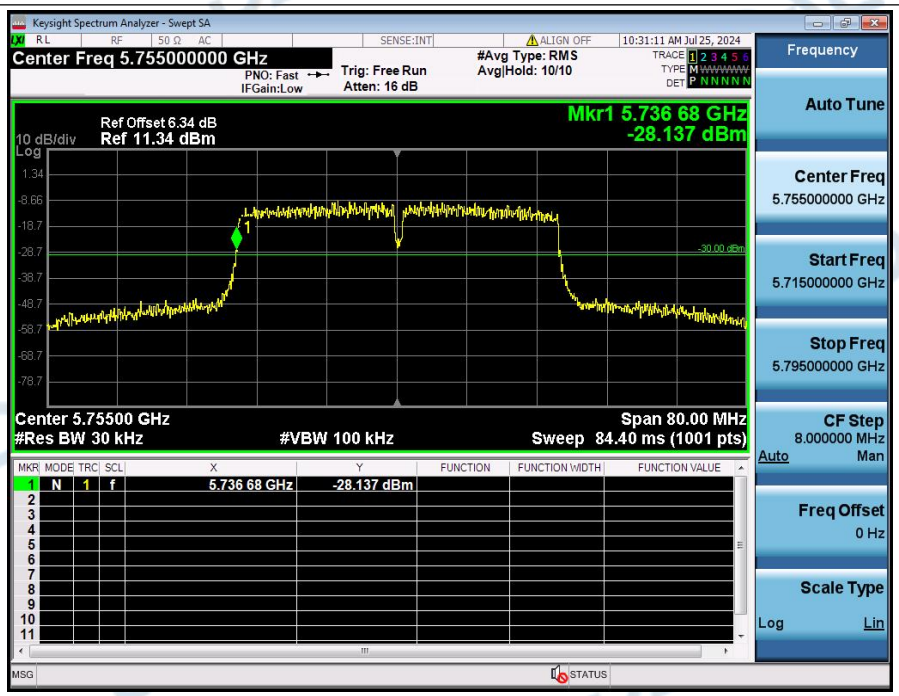
NVNT_ANT1_802_11n(HT20)_5745



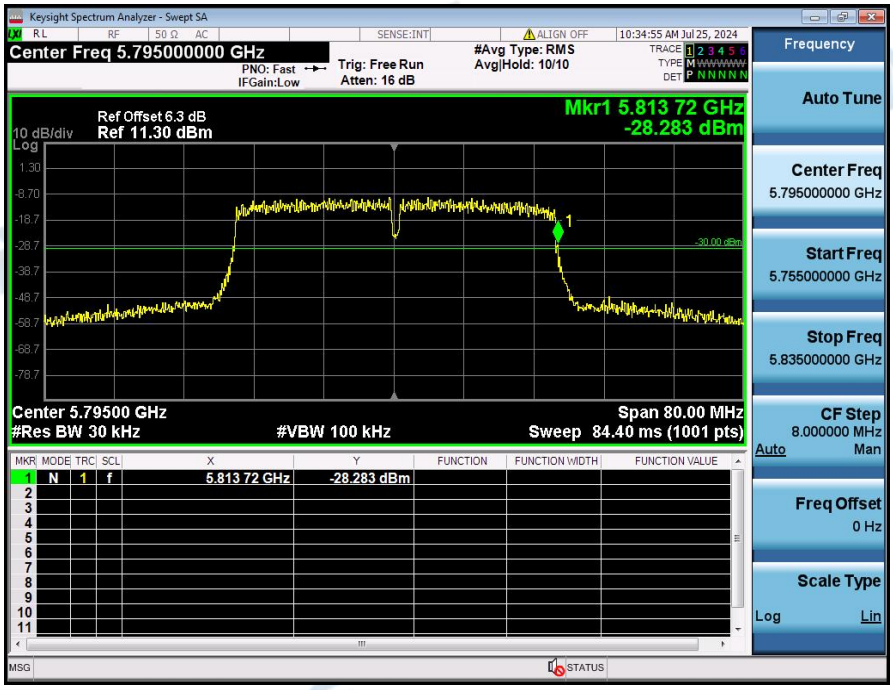
NVNT_ANT1_802_11n(HT20)_5825



NVNT_ANT1_802_11n(HT40)_5755



NVNT_ANT1_802_11n(HT40)_5795

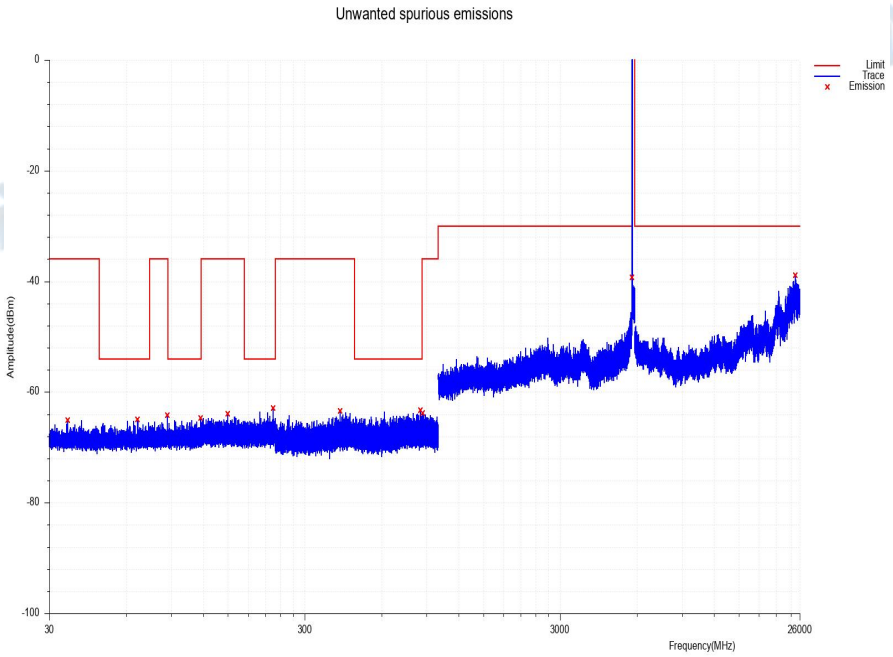

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 16 dB
#Avg Type: RMS
Avg|Hold: 10/10
10:34:55 AM Jul 25, 2024
Ref Offset 6.3 dB
10 dB/div
Ref 11.30 dBm
Log
Mkr1 5.813 72 GHz
-28.283 dBm
-30.00 dBm
Center 5.79500 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 80.00 MHz
Sweep 84.40 ms (1001 pts)
1 N 1 f 5.813 72 GHz -28.283 dBm
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.755000000 GHz
Stop Freq
5.835000000 GHz
CF Step
8.000000 MHz
Auto Man
Freq Offset
0 Hz
Scale Type
Log Lin
MSG
STATUS

4. spurious emissions

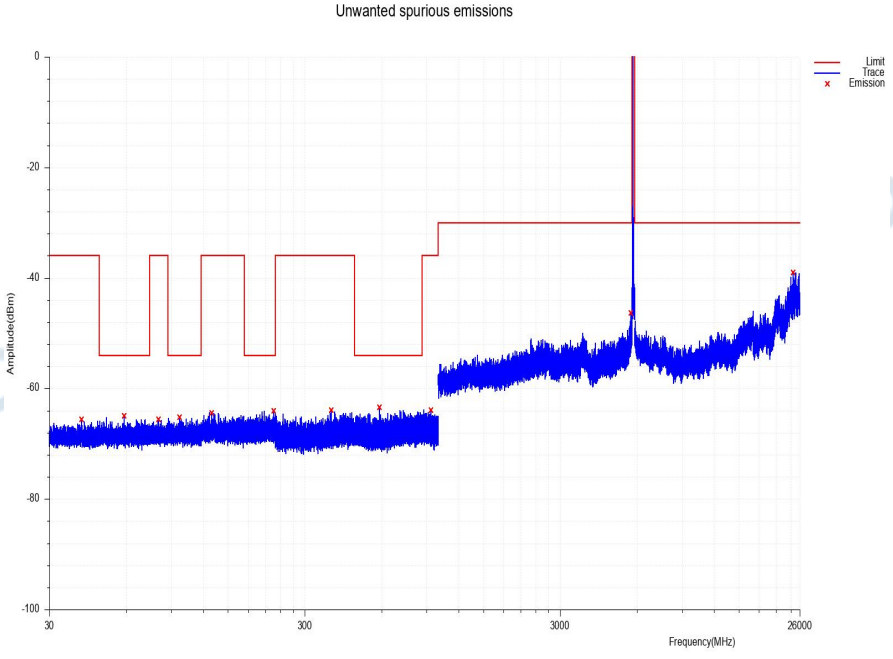
Condition	Antenna	Mode	Frequency (MHz)	Range	Spur Freq(MHz)	Spur Freq Peak(dBm)	Spur Level RMS(dBm)	Limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	30.00~47.00	35.35	-65.08	N/A	-36	Pass
NVNT	ANT1	802.11a	5745.00	47.00~74.00	66.25	-64.97	N/A	-54	Pass
NVNT	ANT1	802.11a	5745.00	74.00~87.50	86.71	-64.22	N/A	-36	Pass
NVNT	ANT1	802.11a	5745.00	87.50~118.00	117.39	-64.74	N/A	-54	Pass
NVNT	ANT1	802.11a	5745.00	118.00~174.00	149.78	-63.90	N/A	-36	Pass
NVNT	ANT1	802.11a	5745.00	174.00~230.00	225.10	-62.90	N/A	-54	Pass
NVNT	ANT1	802.11a	5745.00	230.00~470.00	413.04	-63.46	N/A	-36	Pass
NVNT	ANT1	802.11a	5745.00	470.00~862.00	849.52	-63.35	N/A	-54	Pass
NVNT	ANT1	802.11a	5745.00	862.00~1000.00	866.19	-63.78	N/A	-36	Pass
NVNT	ANT1	802.11a	5745.00	1000.00~5725.00	5725.00	-39.29	N/A	-30	Pass
NVNT	ANT1	802.11a	5745.00	5725.00~5875.00	5744.10	6.50	/	/	/
NVNT	ANT1	802.11a	5745.00	5875.00~26000.00	25003.14	-38.95	N/A	-30	Pass
NVNT	ANT1	802.11a	5785.00	30.00~47.00	40.02	-65.63	N/A	-36	Pass
NVNT	ANT1	802.11a	5785.00	47.00~74.00	58.84	-64.98	N/A	-54	Pass
NVNT	ANT1	802.11a	5785.00	74.00~87.50	80.19	-65.65	N/A	-36	Pass
NVNT	ANT1	802.11a	5785.00	87.50~118.00	96.95	-65.21	N/A	-54	Pass
NVNT	ANT1	802.11a	5785.00	118.00~174.00	129.54	-64.39	N/A	-36	Pass
NVNT	ANT1	802.11a	5785.00	174.00~230.00	227.06	-64.03	N/A	-54	Pass
NVNT	ANT1	802.11a	5785.00	230.00~470.00	380.44	-63.87	N/A	-36	Pass
NVNT	ANT1	802.11a	5785.00	470.00~862.00	586.69	-63.36	N/A	-54	Pass
NVNT	ANT1	802.11a	5785.00	862.00~1000.00	935.80	-63.91	N/A	-36	Pass
NVNT	ANT1	802.11a	5785.00	1000.00~5725.00	5672.71	-46.40	N/A	-30	Pass
NVNT	ANT1	802.11a	5785.00	5725.00~5875.00	5790.02	6.50	/	/	/
NVNT	ANT1	802.11a	5785.00	5875.00~26000.00	24528.19	-39.03	N/A	-30	Pass
NVNT	ANT1	802.11a	5825.00	30.00~47.00	34.41	-65.83	N/A	-36	Pass
NVNT	ANT1	802.11a	5825.00	47.00~74.00	47.81	-65.66	N/A	-54	Pass
NVNT	ANT1	802.11a	5825.00	74.00~87.50	83.73	-65.48	N/A	-36	Pass
NVNT	ANT1	802.11a	5825.00	87.50~118.00	109.36	-63.68	N/A	-54	Pass
NVNT	ANT1	802.11a	5825.00	118.00~174.00	136.22	-64.41	N/A	-36	Pass
NVNT	ANT1	802.11a	5825.00	174.00~230.00	203.16	-63.71	N/A	-54	Pass
NVNT	ANT1	802.11a	5825.00	230.00~470.00	429.47	-64.07	N/A	-36	Pass
NVNT	ANT1	802.11a	5825.00	470.00~862.00	847.04	-63.62	N/A	-54	Pass
NVNT	ANT1	802.11a	5825.00	862.00~1000.00	907.35	-63.70	N/A	-36	Pass
NVNT	ANT1	802.11a	5825.00	1000.00~5725.00	5683.26	-47.10	N/A	-30	Pass
NVNT	ANT1	802.11a	5825.00	5725.00~5875.00	5823.44	6.53	/	/	/
NVNT	ANT1	802.11a	5825.00	5875.00~26000.00	25505.60	-38.62	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	30.00~47.00	36.29	-65.31	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	47.00~74.00	72.30	-65.25	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	74.00~87.50	85.68	-65.04	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	87.50~118.00	103.55	-65.40	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	118.00~174.00	148.90	-64.09	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	174.00~230.00	223.81	-63.39	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	230.00~470.00	417.25	-63.77	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	470.00~862.00	835.04	-63.53	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	862.00~1000.00	877.46	-63.60	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	1000.00~5725.00	5725.00	-38.73	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	5725.00~5875.00	5748.28	6.26	/	/	/

NVNT	ANT1	802.11n(HT20)	5745.00	5875.00~26000.00	25082.30	-39.15	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	30.00~47.00	32.29	-65.94	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	47.00~74.00	59.87	-65.25	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	74.00~87.50	80.01	-64.64	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	87.50~118.00	103.39	-65.03	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	118.00~174.00	162.52	-63.61	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	174.00~230.00	178.73	-64.20	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	230.00~470.00	394.74	-64.11	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	470.00~862.00	730.60	-63.64	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	862.00~1000.00	932.81	-63.71	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	1000.00~5725.00	5725.00	-46.16	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	5725.00~5875.00	5788.03	5.41	/	/	/
NVNT	ANT1	802.11n(HT20)	5785.00	5875.00~26000.00	25066.87	-38.37	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	30.00~47.00	34.53	-65.32	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	47.00~74.00	63.07	-65.32	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	74.00~87.50	80.00	-65.37	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	87.50~118.00	93.61	-65.54	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	118.00~174.00	125.22	-64.21	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	174.00~230.00	219.21	-64.26	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	230.00~470.00	448.16	-64.47	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	470.00~862.00	535.56	-64.25	N/A	-54	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	862.00~1000.00	863.76	-63.59	N/A	-36	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	1000.00~5725.00	5707.52	-48.14	N/A	-30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	5725.00~5875.00	5827.62	4.11	/	/	/
NVNT	ANT1	802.11n(HT20)	5825.00	5875.00~26000.00	24556.37	-39.41	N/A	-30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	30.00~47.00	44.18	-65.00	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	47.00~74.00	73.62	-64.34	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	74.00~87.50	77.48	-65.07	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	87.50~118.00	91.95	-65.69	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	118.00~174.00	139.52	-64.21	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	174.00~230.00	200.00	-63.62	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	230.00~470.00	448.63	-64.37	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	470.00~862.00	696.35	-63.72	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	862.00~1000.00	876.45	-63.51	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	1000.00~5725.00	5723.58	-35.49	N/A	-30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	5725.00~5875.00	5761.87	4.81	/	/	/
NVNT	ANT1	802.11n(HT40)	5755.00	5875.00~26000.00	25023.94	-38.75	N/A	-30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	30.00~47.00	35.94	-65.59	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	47.00~74.00	57.82	-64.18	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	74.00~87.50	83.02	-64.94	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	87.50~118.00	95.39	-65.76	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	118.00~174.00	133.58	-63.86	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	174.00~230.00	212.88	-64.14	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	230.00~470.00	450.34	-63.99	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	470.00~862.00	803.45	-63.00	N/A	-54	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	862.00~1000.00	884.75	-64.24	N/A	-36	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	1000.00~5725.00	5717.28	-47.09	N/A	-30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	5725.00~5875.00	5786.98	3.14	/	/	/
NVNT	ANT1	802.11n(HT40)	5795.00	5875.00~26000.00	25058.82	-39.63	N/A	-30	Pass

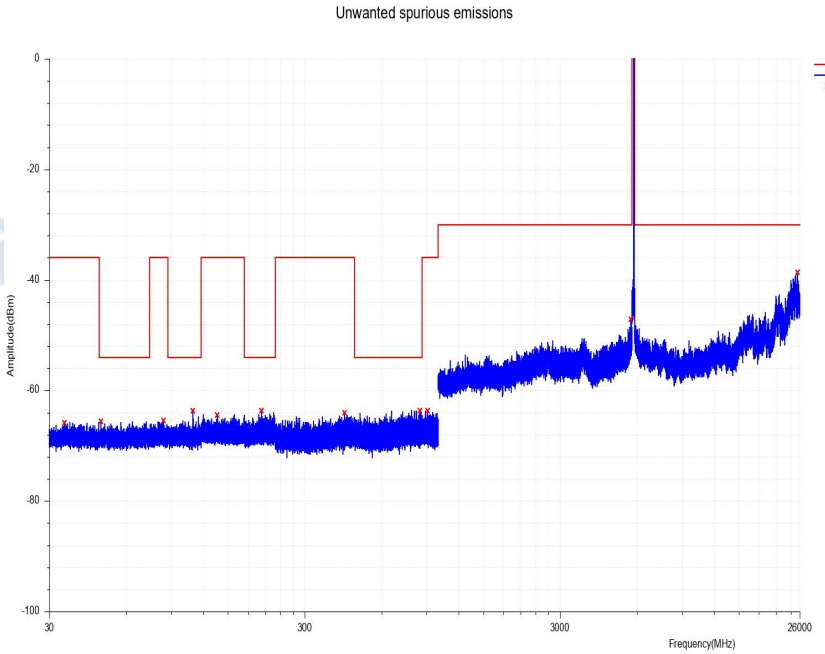
NVNT_ANT1_802_11a_5745



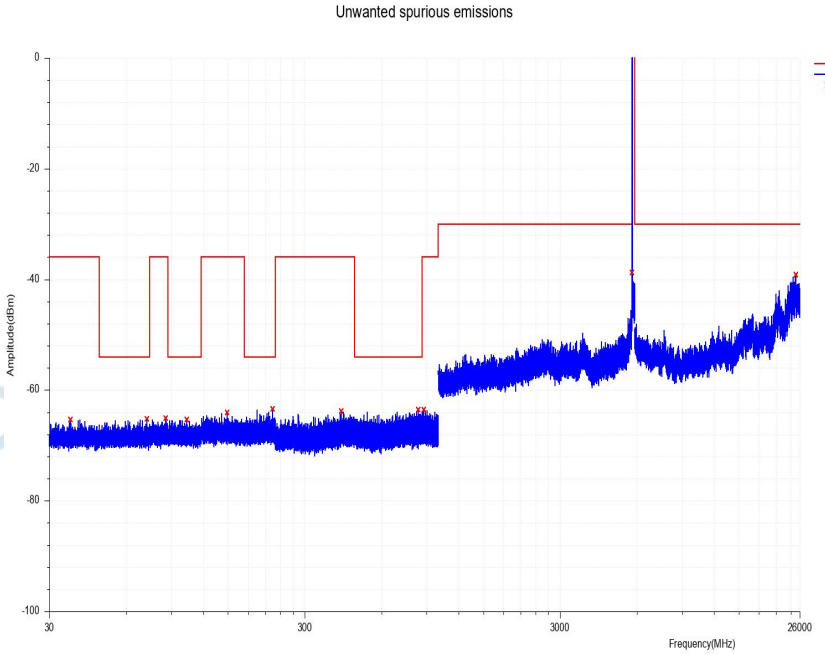
NVNT_ANT1_802_11a_5785



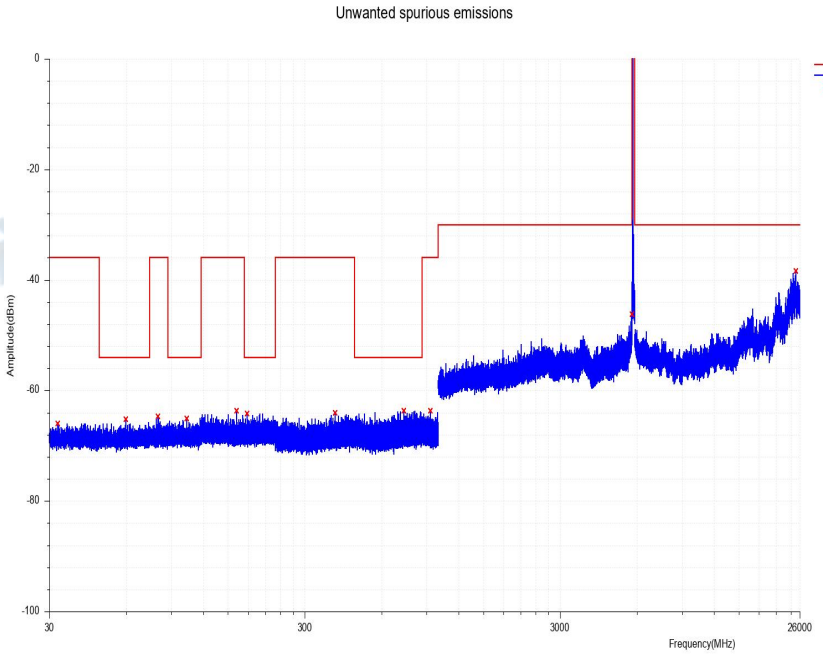
NVNT_ANT1_802_11a_5825



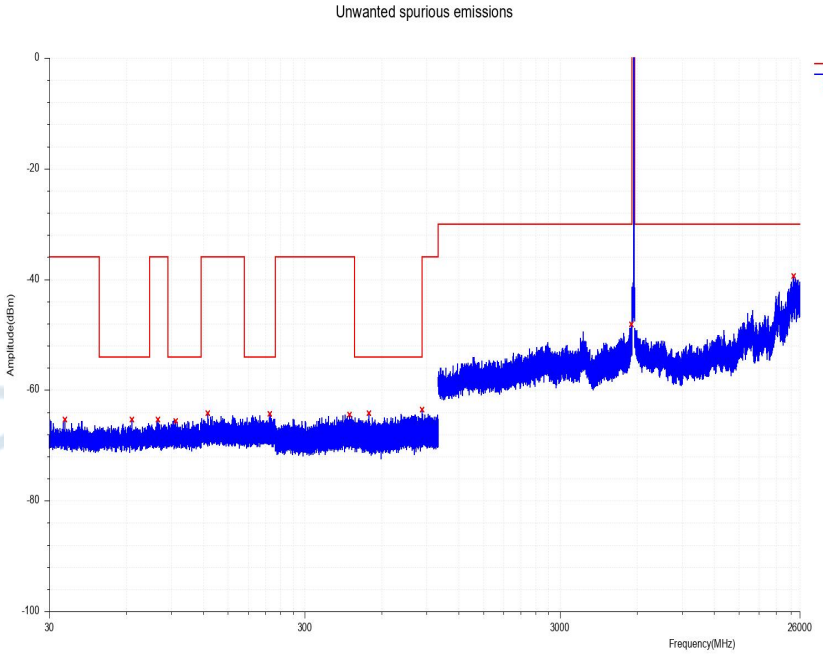
NVNT_ANT1_802_11n(HT20)_5745



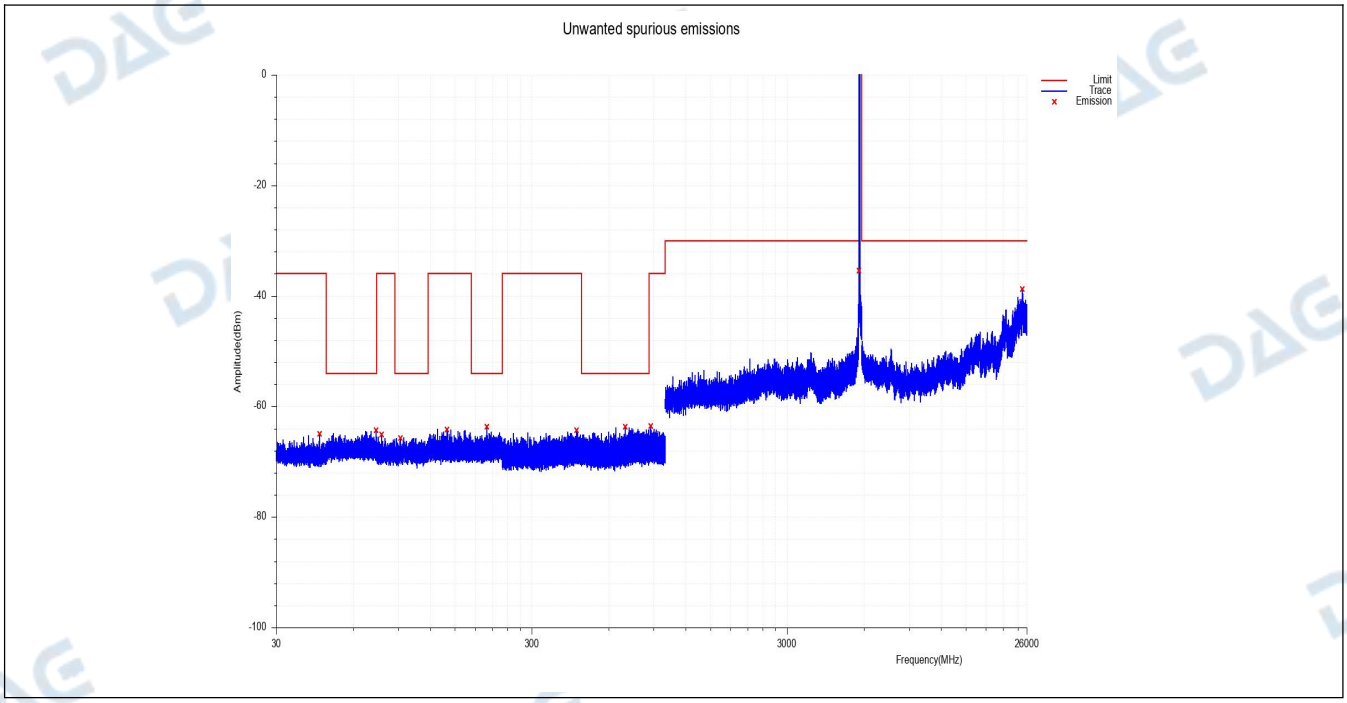
NVNT_ANT1_802_11n(HT20)_5785



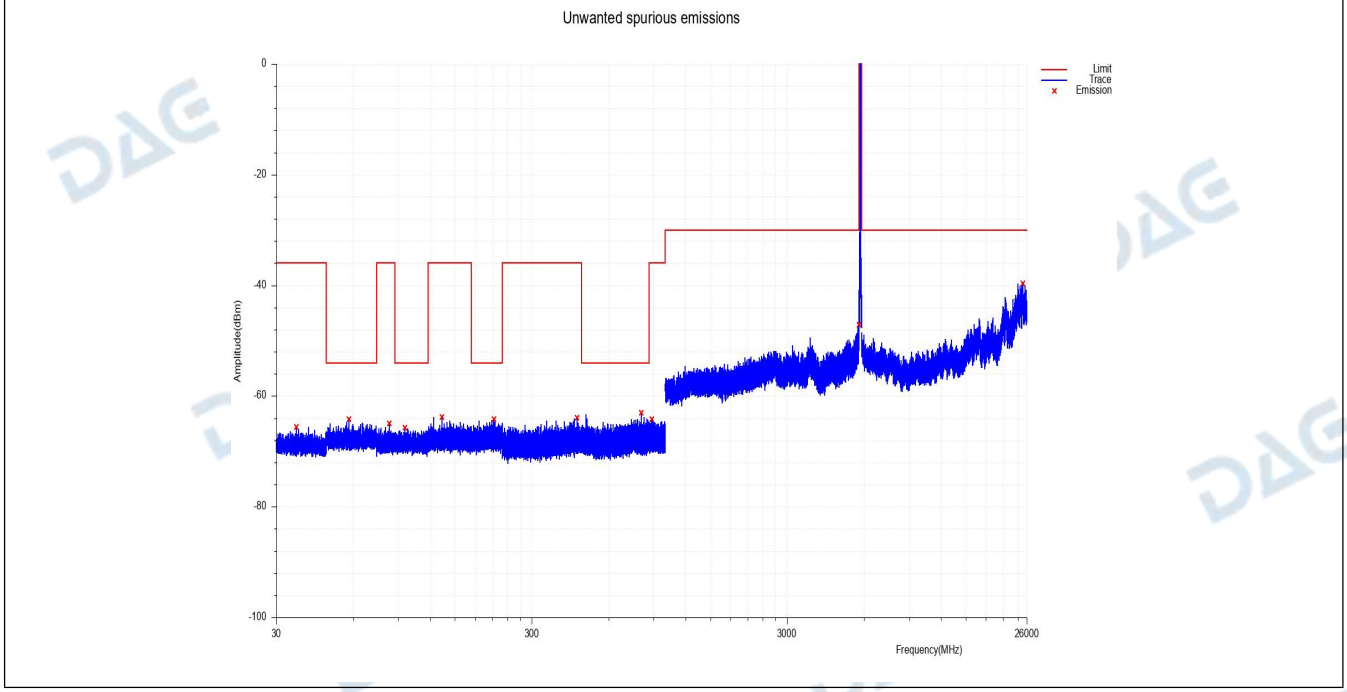
NVNT_ANT1_802_11n(HT20)_5825



NVNT_ANT1_802_11n(HT40)_5755



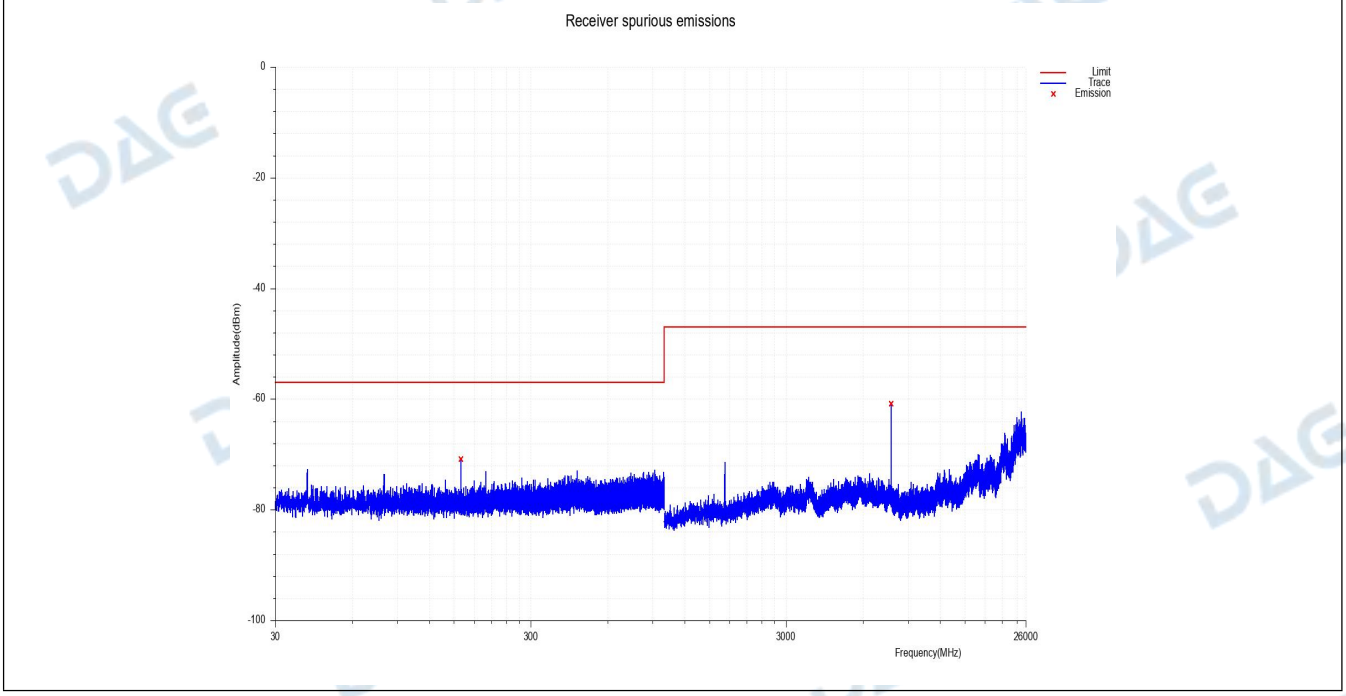
NVNT_ANT1_802_11n(HT40)_5795



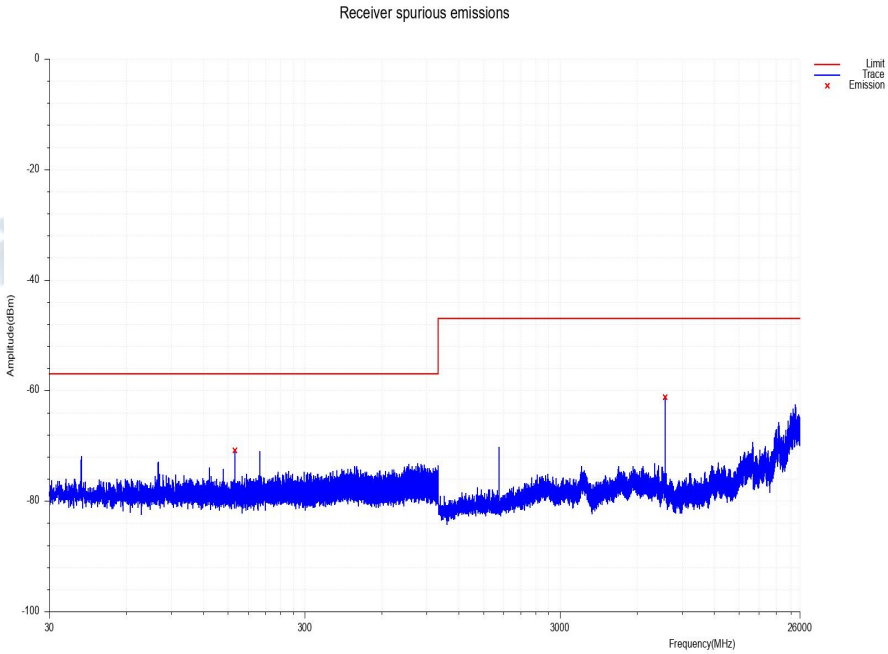
5. Receiver spurious emissions

Condition	Antenna	Mode	Frequency (MHz)	Range	Spur Freq(MHz)	Spur Freq Peak(dBm)	Spur Level RMS(dBm)	Limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	30.00~1000.00	159.98	-70.91	N/A	-57	Pass
NVNT	ANT1	802.11a	5745.00	1000.00~26000.00	7726.67	-60.89	N/A	-47	Pass
NVNT	ANT1	802.11a	5785.00	30.00~1000.00	160.01	-70.87	N/A	-57	Pass
NVNT	ANT1	802.11a	5785.00	1000.00~26000.00	7726.67	-61.20	N/A	-47	Pass
NVNT	ANT1	802.11a	5825.00	30.00~1000.00	39.99	-71.23	N/A	-57	Pass
NVNT	ANT1	802.11a	5825.00	1000.00~26000.00	7726.67	-60.72	N/A	-47	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	30.00~1000.00	160.01	-71.01	N/A	-57	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	1000.00~26000.00	7726.67	-60.83	N/A	-47	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	30.00~1000.00	160.01	-70.46	N/A	-57	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	1000.00~26000.00	7726.67	-60.45	N/A	-47	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	30.00~1000.00	159.98	-70.49	N/A	-57	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	1000.00~26000.00	7726.67	-60.95	N/A	-47	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	30.00~1000.00	159.98	-70.97	N/A	-57	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	1000.00~26000.00	1726.67	-60.39	N/A	-47	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	30.00~1000.00	160.01	-70.16	N/A	-57	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	1000.00~26000.00	7726.67	-60.84	N/A	-47	Pass

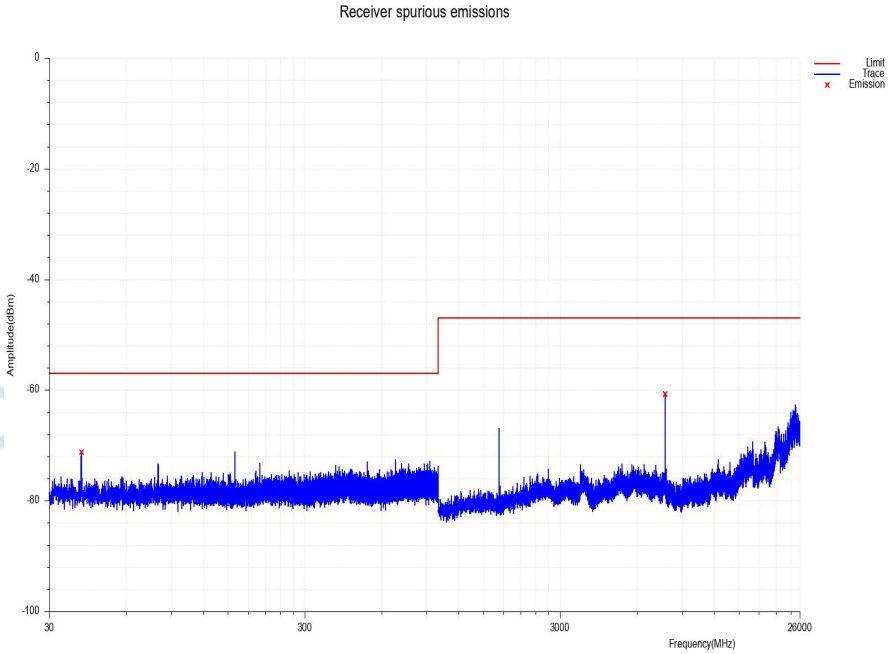
NVNT_ANT1_802_11a_5745



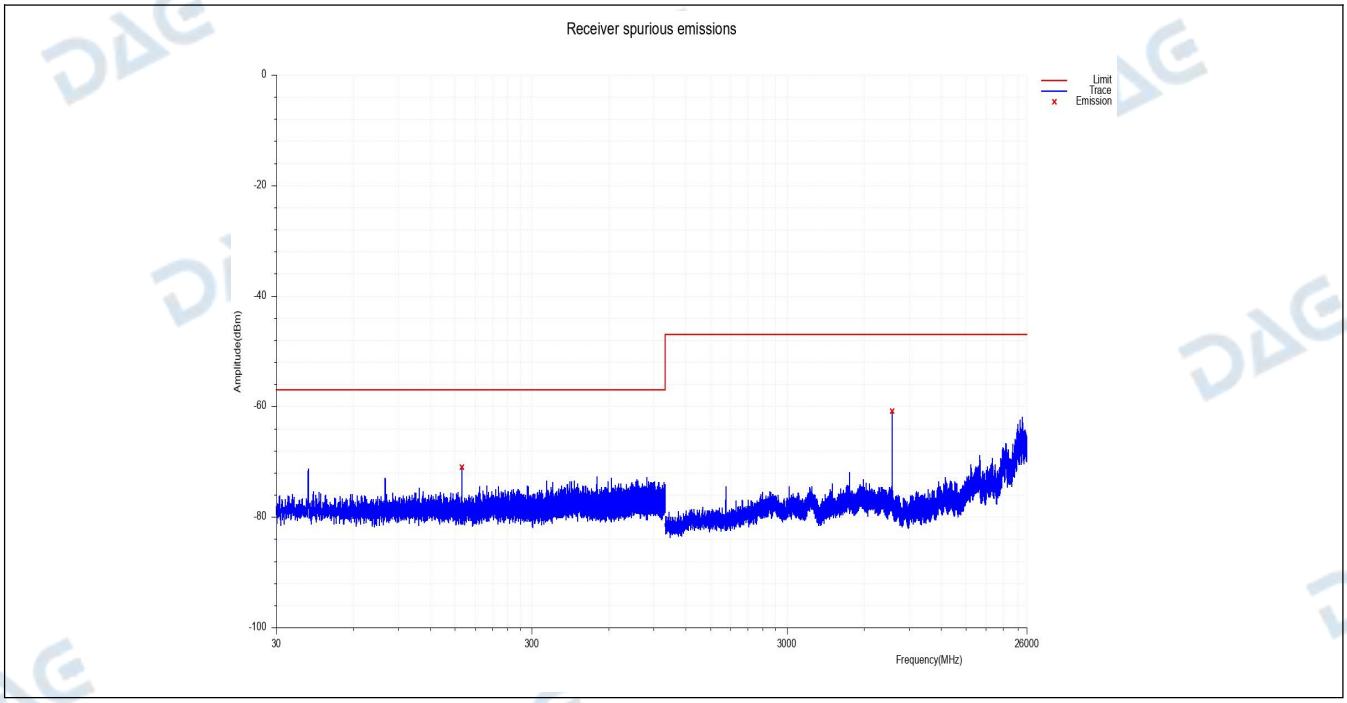
NVNT_ANT1_802_11a_5785



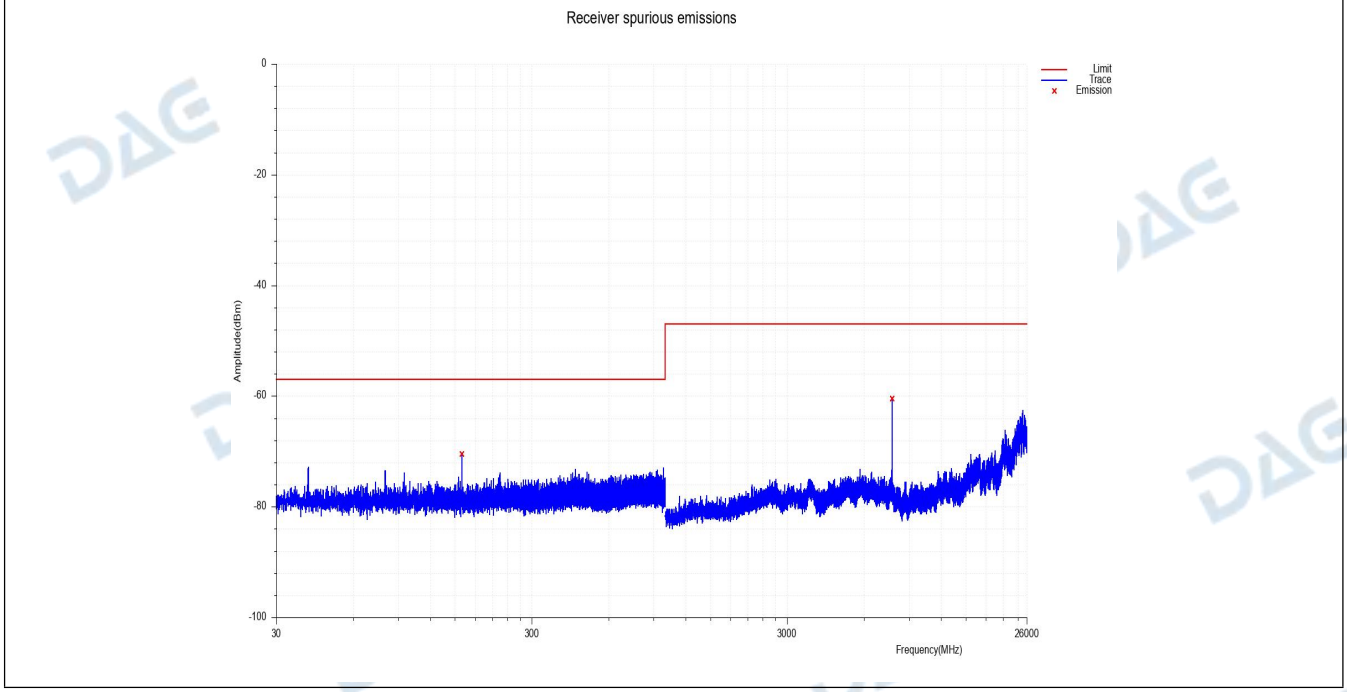
NVNT_ANT1_802_11a_5825



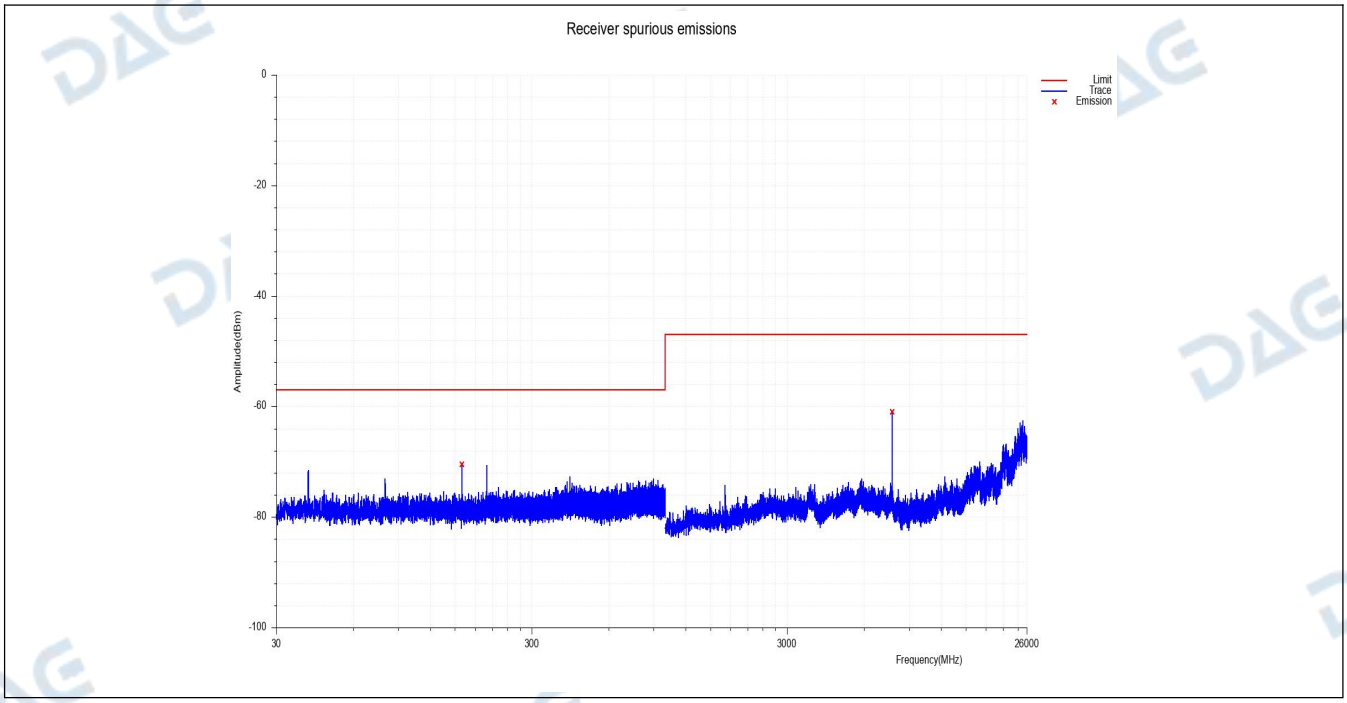
NVNT_ANT1_802_11n(HT20)_5745



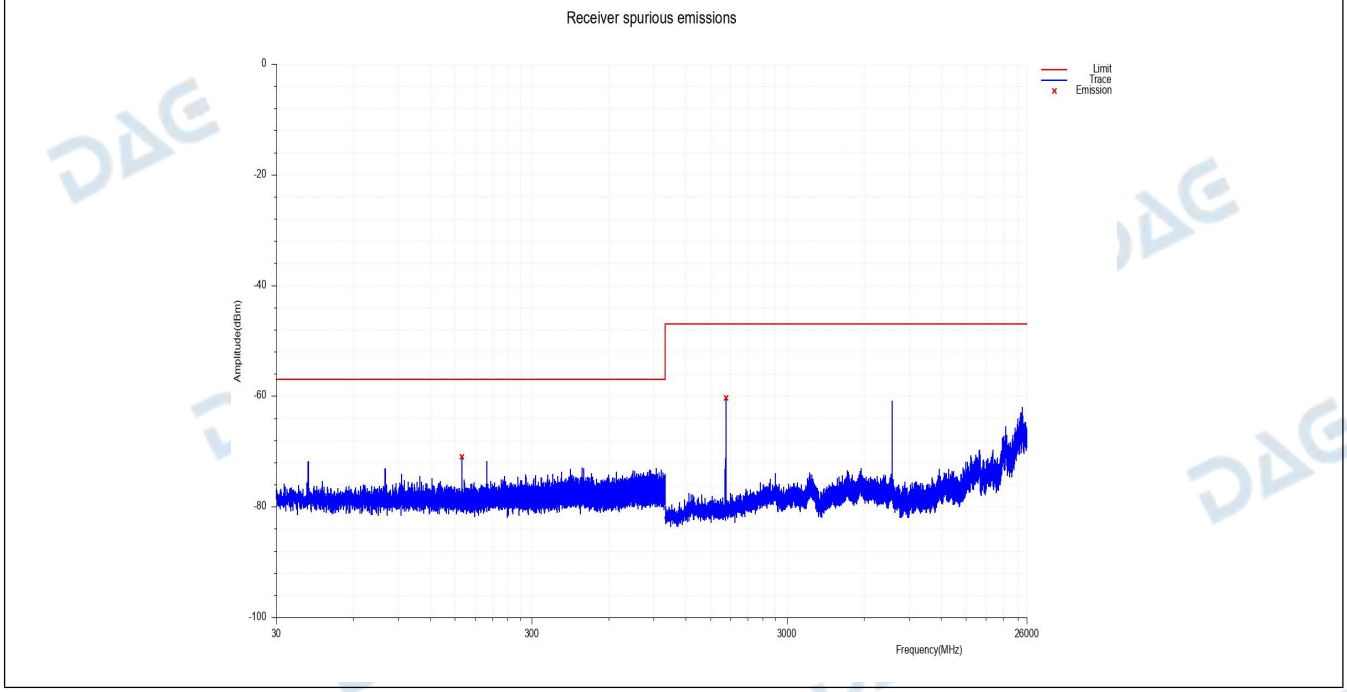
NVNT_ANT1_802_11n(HT20)_5785



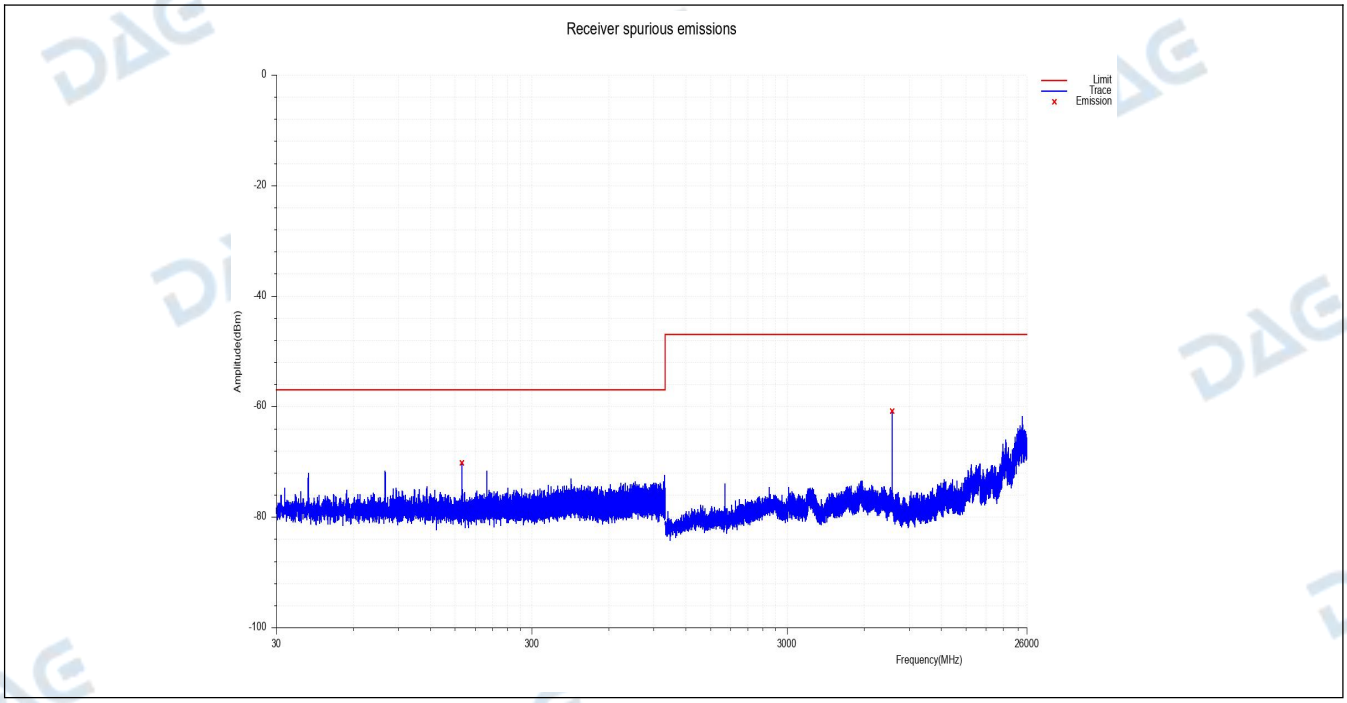
NVNT_ANT1_802_11n(HT20)_5825



NVNT_ANT1_802_11n(HT40)_5755



NVNT_ANT1_802_11n(HT40)_5795


Receiver spurious emissions
Limit
Trace
Emission
Amplitude(dBm)
0
-20
-40
-60
-80
-100
30
300
3000
26000
Frequency(MHz)

6. Receiver Blocking

Condition	Antenna	Modulation	Frequency (MHz)	Wanted Power (dBm)	Blocking Frequency (MHz)	Blocking Power (dBm)	PER(%)	Limit(%)	Result
NVNT	ANT1	802.11a	5745	-68	5545	-34	2.05	≤10	Pass
NVNT	ANT1	802.11a	5745	-68	5945	-34	2.64	≤10	Pass
NVNT	ANT1	802.11a	5745	-68	5345	-34	2.88	≤10	Pass
NVNT	ANT1	802.11a	5745	-68	6145	-34	2.63	≤10	Pass
NVNT	ANT1	802.11a	5745	-68	4745	-34	1.26	≤10	Pass
NVNT	ANT1	802.11a	5745	-68	6745	-34	1.92	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	5625	-34	1.66	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	6025	-34	1.86	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	5425	-34	2.01	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	6225	-34	2.05	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	4825	-34	2.64	≤10	Pass
NVNT	ANT1	802.11a	5825	-68	6825	-34	2.88	≤10	Pass

********** End of Report **********