



RF TEST REPORT

Report No.: SET2021-09173

Product: Dash Cam

FCC ID: NCI-M360-D700-1

Model No.: Mobile360 D700

Dates of Testing: 07/01/2021 —07/19/2021

Applicant: VIA Technologies, Inc

Address: 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City, Taiwan

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street,
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Test Report

Product : Dash Cam

Brand Name..... : VIA

Trade Name : VIA

Applicant : VIA Technologies, Inc

Applicant Address : 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City,
Taiwan

Manufacturer : VIA Technologies, Inc

Manufacturer Address : 8F, 535 Zhongzheng Rd. Xindian Dist. New Taipei City,
Taiwan

Test Standards : FCC:47 CFR Part 2/22/24/27/90

Test Result..... : PASS

Tested by :

Vincent

2021.07.19

Vincent, Test Engineer

Reviewed by..... :

Chris You

2021.07.19

Chris You, Senior Engineer

Approved by..... :

Shuangwen Zhang

2021.07.19

Shuangwen Zhang, Manager

Table of Contents

1.	GENERAL INFORMATION	4
1.1	EUT Description.....	4
1.2	Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator	5
1.3	Test Standards and Results	6
1.4	Test Configuration of Equipment Under Test	7
1.5	Measurement Results Explanation Example.....	7
1.6	Facilities and Accreditations	8
2.	TEST REQUIREMENTS	9
2.1	Conducted RF Output Power.....	9
2.2	Peak to Average Ratio	10
2.3	99% Occupied Bandwidth and 26dB Bandwidth	12
2.4	Frequency Stability	14
2.5	Conducted Out of Band Emissions.....	17
2.6	Conducted Band Edge	20
2.7	Transmitter Radiated Power (EIRP/ERP)	22
2.8	Radiated Out of Band Emissions	25
3.	LIST OF MEASURING EQUIPMENT	30
4.	UNCERTAINTY OF EVALUATION	31
	APPENDIX A	32
	Conducted RF (Average) Output Power	32
	99% Occupied Bandwidth.....	38
	26dB Bandwidth.....	41
	Frequency Stability	44
	Conducted Out of Band Emissions.....	45
	Conducted Band Edge	48

Change History		
Issue	Date	Reason for change
1.0	2021.07.19	First edition



1. GENERAL INFORMATION

1.1 EUT Description

EUT Type	Dash Cam
Hardware Version	RA
Software Version	V2.1.0
EUT supports Radios application	LTE Band 71
Frequency Range(Tx)	LTE Band 71: 665.5 MHz~695.5MHz
Maximum Output Power to Antenna	LTE Band 71: 23.75 dBm
Bandwidth	LTE Band 71: 5MHz/10MHz/15MHz/20MHz
Modulation Type	QPSK/16QAM/64QAM(downlink only)
Antenna Type	Internal Antenna(3.54dBi Maximum)
Power supply	DC 12V

1.2 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP(W)
LTE Band 71	QPSK	5	4M49G7D	—	0.160
LTE Band 71	16QAM	5	4M49W7D	—	0.102
LTE Band 71	QPSK	10	8M90G7D	0.051	0.158
LTE Band 71	16QAM	10	8M89W7D	—	0.107
LTE Band 71	QPSK	15	13M4G7D	—	0.164
LTE Band 71	16QAM	15	13M4W7D	—	0.107
LTE Band 71	QPSK	20	17M8G7D	—	0.151
LTE Band 71	16QAM	20	17M8W7D	—	0.193

1.3 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2/22/24/27/90 and RSS-130, issue 2RSS-132, Issue 3RSS-133, Issue 6RSS-139, issue 3for the EUT FCC ID and IC Certification:

1. ANSI/TIA/EIA-603-D-2010
2. FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01

Test detailed items/section required by FCC/IC rules and results are as below:

No.	FCC Rule	Description	Limit	Result
1	2.1046	Conducted RF Output Power	Reporting Only	PASS
	§90.541	Effective Radiated Power (Band 71)	Reporting Only	PASS
4	2.1049	Occupied Bandwidth	Reporting Only	PASS
5	2.1051	Conducted Band Edge Measurement (Band 71)	FCC: $< 43 + 10\log_{10}(P[\text{watt}])$	PASS
6	90.543(c)	Conducted Spurious Emission Measurement (Band 71)	FCC: $< 43 + 10\log_{10}(P[\text{watt}])$	PASS
7	90.543(c)	Radiated Spurious Emission (Band 71)	FCC: $< 43 + 10\log_{10}(P[\text{watt}])$	PASS
8	90.539	Frequency Stability	$< 2.5\text{ppm}$ Within the Authorized Band	PASS

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

1.4 Test Configuration of Equipment Under Test

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth(MHz)						Modulation		RB#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	71			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peak-to-Average Ratio	71						✓		✓	✓		✓	✓	✓	✓
26dB and 99% Bandwidth	71			✓	✓	✓	✓	✓	✓			✓		✓	
Conducted Band Edge	71														
Conducted Spurious Emission	71			✓	✓	✓	✓	✓		✓			✓	✓	✓
Frequency Stability	71				✓			✓				✓		✓	
ERP/EIRP	71			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
Radiated Spurious Emission	71	Worst case												✓	

Note:1. The mark “ ✓ ” means that this configuration is chosen for testing.

1.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 7dB and 10dB attenuator.

Example:

$$\begin{aligned}\text{Offset (dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 7 + 10 = 17 \text{ (dB)}\end{aligned}$$



1.6 Facilities and Accreditations

1.6.1 Test Facilities

CNAS-Lab Code: L1659

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CAB identifier: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until April 19th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.6.2 Test Environment Conditions

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

Temperature (°C):	15°C - 35°C
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

2. TEST REQUIREMENTS

2.1 Conducted RF Output Power

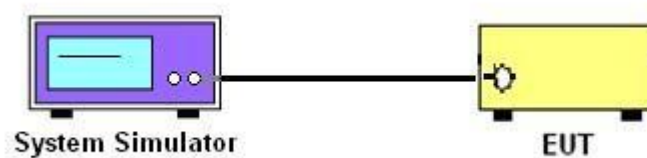
2.1.1 Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

2.1.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.3 Test Setup



2.1.4 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

2.1.5 Test Results

Please refer to Appendix A for detail

2.2 Peak to Average Ratio

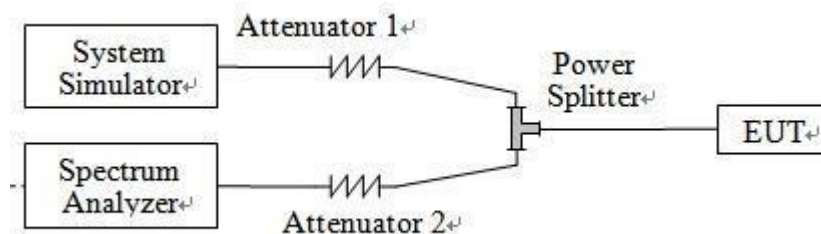
2.2.1 Definition

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

2.2.3 Test Description



2.2.4 Test Procedures

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.



2.2.5 Test Results of Peak-to-Average Ratio

Please refer to Appendix A for detail

2.3 99% Occupied Bandwidth and 26dB Bandwidth

2.3.1 Definition

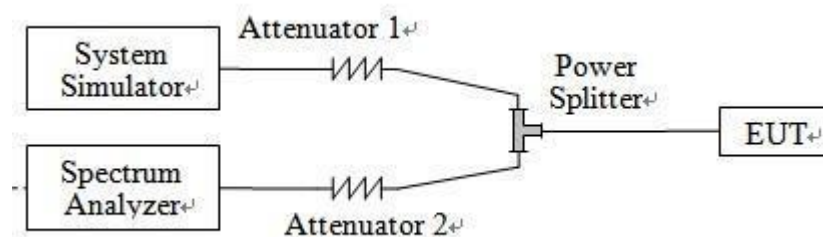
According to RSS GEN6.7, the occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

2.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

2.3.3 Test Setup



2.3.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.



2.3.5 Test Result of 99% Occupied Bandwidth and 26dB Bandwidth

Please refer to Appendix A for detail

2.4 Frequency Stability

2.4.1 Requirement

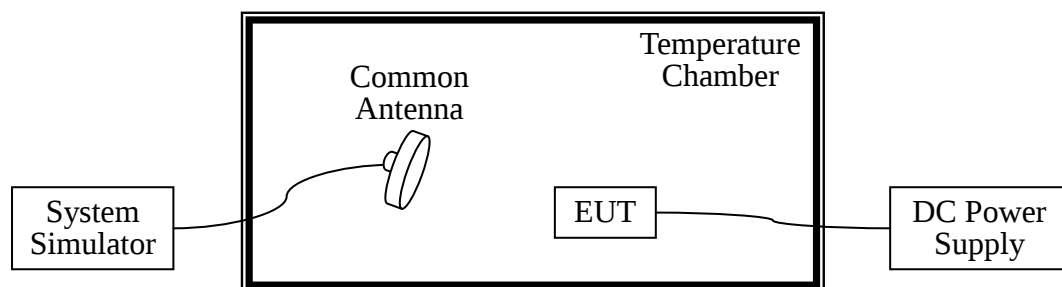
According to IC requirement, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency. the test conditions are:

- (a) The temperature is varied from $-30\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$ at intervals of not more than $10\text{ }^{\circ}\text{C}$.
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

2.4.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3 Test Setup



2.4.4 Test Procedures

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to $-30\text{ }^{\circ}\text{C}$ and the EUT was stabilized

before testing. Power was applied and the maximum change in frequency was recorded within one minute.

3. With power OFF, the temperature was raised in 10 °C step up to 50 °C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. The nominal, highest and lowest extreme voltages were tested, which are specified by the applicant; the normal temperature here used is 25 °C.
5. The variation in frequency was measured for the worst case.



2.4.5 Test Result of Frequency Stability

Please refer to Appendix A for detail

2.5 Conducted Out of Band Emissions

2.5.1 Requirement

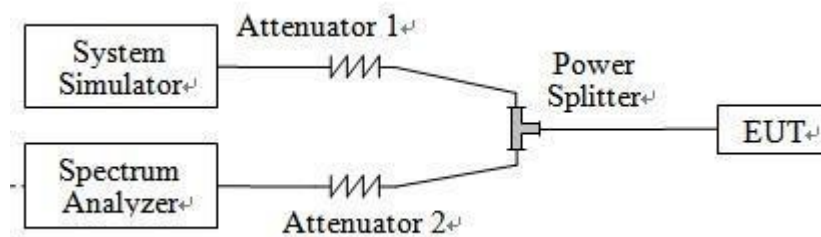
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

2.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

2.5.3 Test Setup



2.5.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating

frequency band.

7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$

8. For 9KHz to 30MHz: the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



2.5.5 Test Result of Conducted Spurious Emission

Please refer to Appendix A for detail

2.6 Conducted Band Edge

2.6.1 Description of Conducted Band Edge Measurement

22.917(a)

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

24.238(a)

For operations in the 1850 -1910 MHz band, the FCC limit is $43 + 10\log_{10}(P [\text{Watts}])$ dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(g)

For operations in the 698 – 746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100kHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least 30kHz may be employed.

27.53(c)(2)

For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

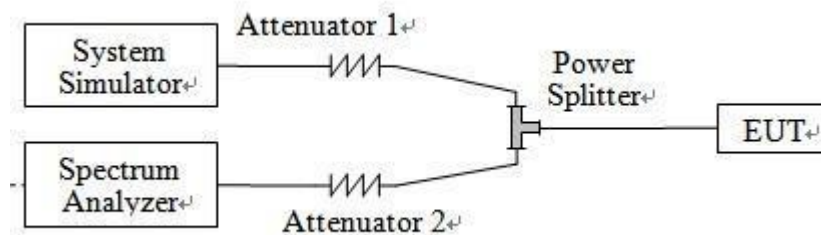
(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

IC rule:for Band13 refer to RSS-130,4.6, other band the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

2.6.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.6.3 Test Setup



2.6.4 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

2.6.5 Test Result of Conducted Band Edge

Please refer to Appendix A for detail

2.7 Transmitter Radiated Power (EIRP/ERP)

2.7.1 Requirement

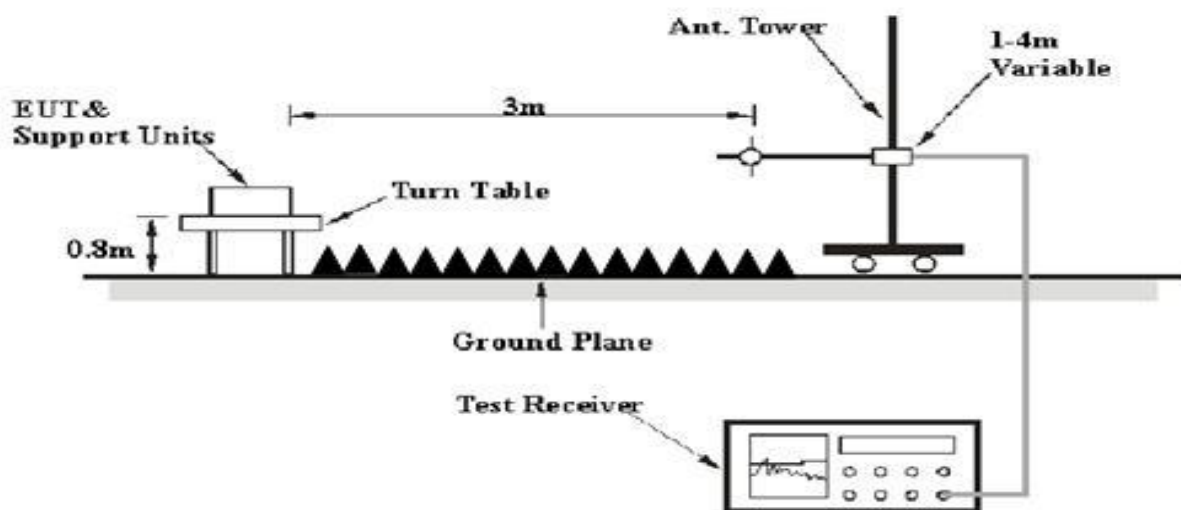
Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-D-2010, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03r01. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts (FCC)/11.5 watts (IC) with LTE band 5 and 3 watts with LTE band 12/13/71. For IC :5 watts with LTE Band 12/13/71.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-D-2010, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03r01. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 and 1 watt with LTE band 4 and 66.

2.7.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3 Test Setup



2.7.4 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer which used a channel power option across EUT's signal bandwidth per section 4.0 of KDB 971168 D01v03r01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm): Input power to substitution antenna.

G_s (dBi or dBd): Substitution antenna Gain.

$E_t = R_t + AF$

$E_s = R_s + AF$

AF (dB/m): Receive antenna factor

R_t : The highest received signal in spectrum analyzer for EUT.

R_s : The highest received signal in spectrum analyzer for substitution antenna.



2.7.5 Test Result of ERP/EIRP

LTE Band 71 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
71	5	QPSK	1	0	665.5	21.93	PASS
71	5	QPSK	1	0	680.5	21.97	PASS
71	5	QPSK	1	0	695.5	22.03	PASS
71	5	16QAM	1	0	665.5	20.09	PASS
71	5	16QAM	1	0	680.5	20.02	PASS
71	5	16QAM	1	0	695.5	20.07	PASS
71	10	QPSK	1	0	668	22.00	PASS
71	10	QPSK	1	0	680.5	21.95	PASS
71	10	QPSK	1	0	693	21.90	PASS
71	10	16QAM	1	24	668	20.31	PASS
71	10	16QAM	1	24	680.5	20.24	PASS
71	10	16QAM	1	24	693	20.22	PASS
71	15	QPSK	1	74	670.5	22.12	PASS
71	15	QPSK	1	74	680.5	22.14	PASS
71	15	QPSK	1	74	690.5	22.08	PASS
71	15	16QAM	1	74	670.5	20.25	PASS
71	15	16QAM	1	74	680.5	20.30	PASS
71	15	16QAM	1	74	690.5	20.28	PASS
71	20	QPSK	1	0	673	21.72	PASS
71	20	QPSK	1	0	683	21.80	PASS
71	20	QPSK	1	0	688	21.78	PASS
71	20	16QAM	1	0	673	22.83	PASS
71	20	16QAM	1	0	683	22.77	PASS
71	20	16QAM	1	0	688	22.86	PASS

2.8 Radiated Out of Band Emissions

2.8.1 Requirement

The radiated spurious emission was measured by substitution method according to ANSI / TIA /EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

Additional requirement for IC Rule: RSS130, 4.6

equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

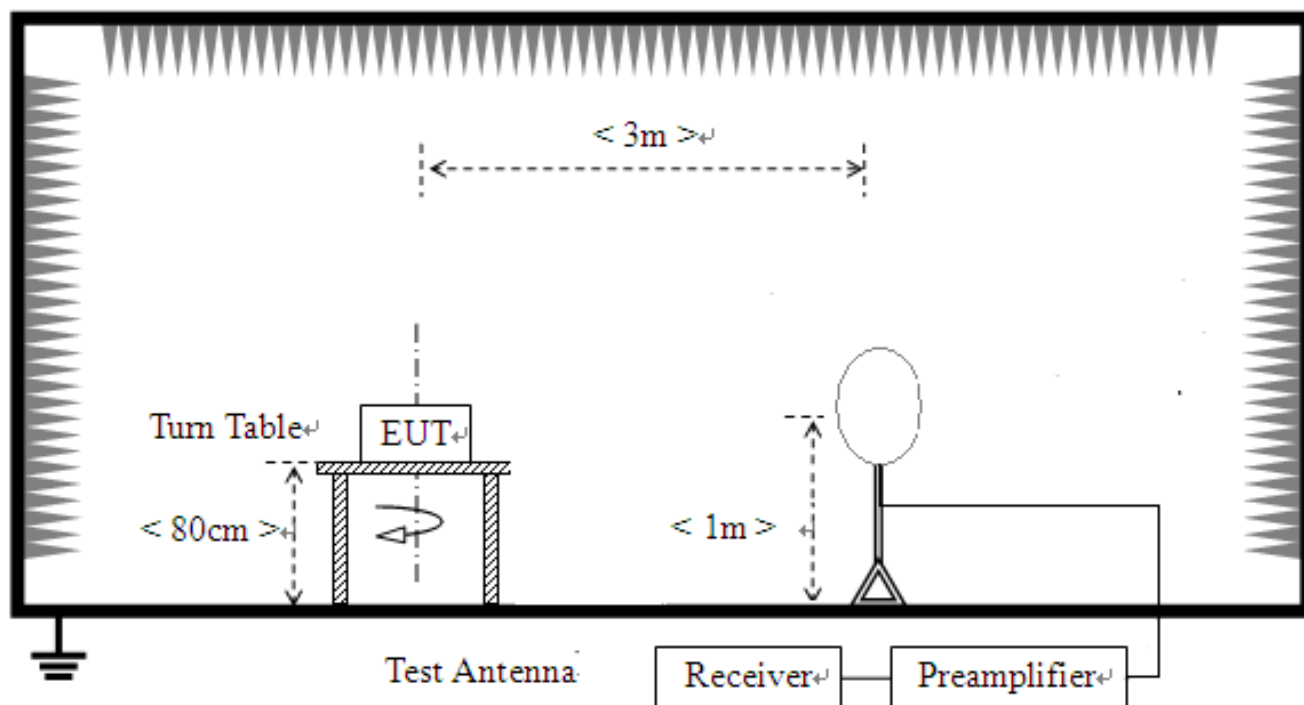
- (a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:
 - (i) $76 + 10 \log_{10} p(\text{watts})$, dB, for base and fixed equipment, and
 - (ii) $65 + 10 \log_{10} p(\text{watts})$, dB, for mobile and portable equipment.
- (b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz.

2.8.2 Measuring Instruments

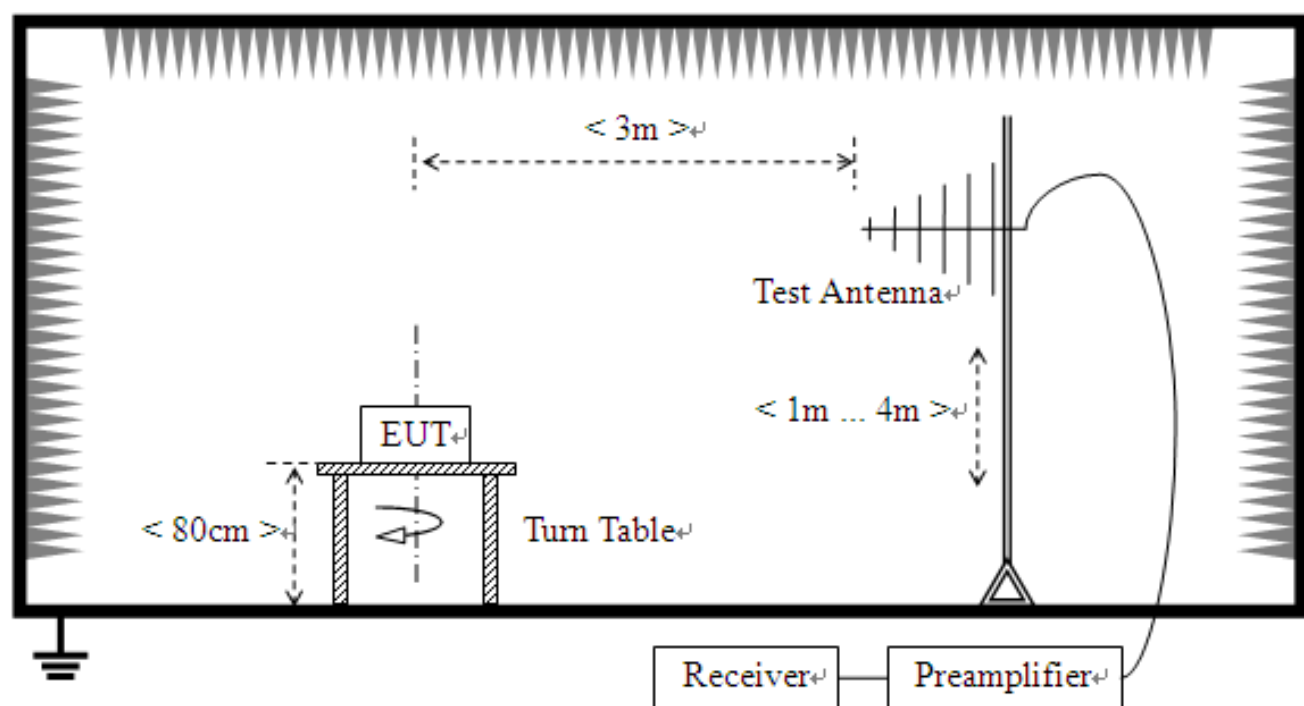
The measuring equipment is listed in the section 3 of this test report.

2.8.3 Test Setup

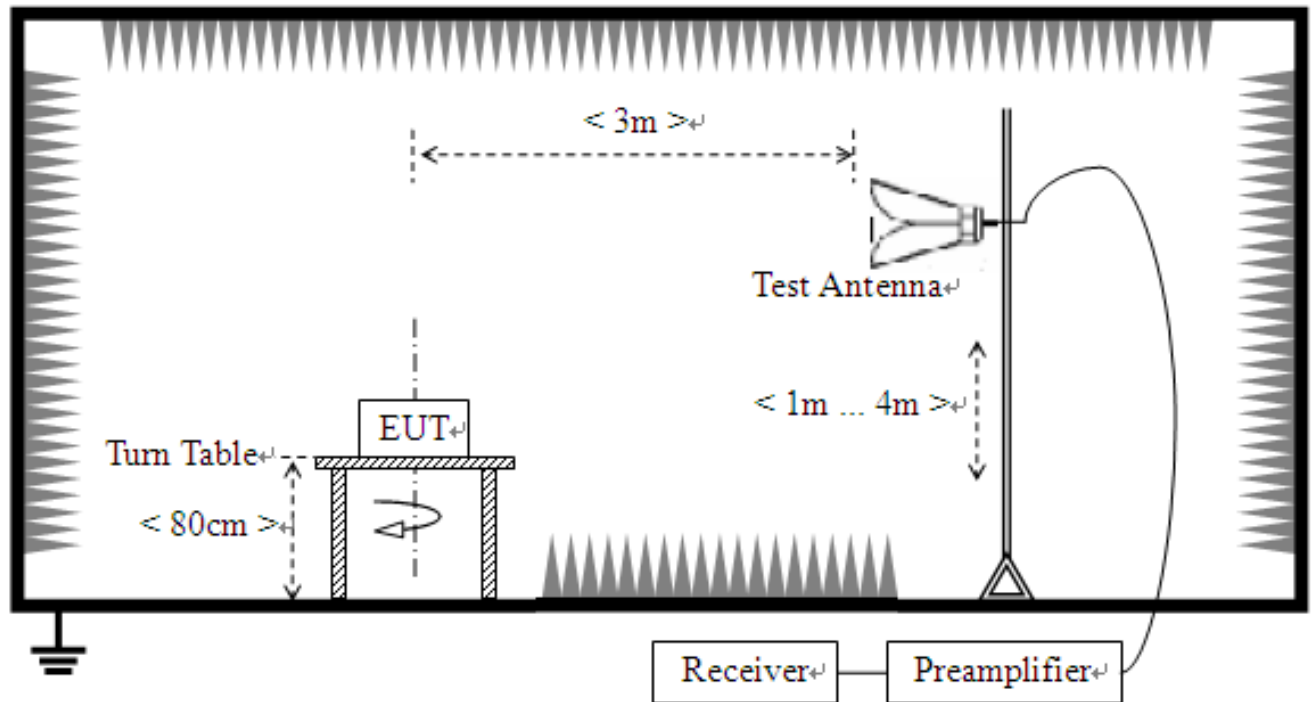
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.8.4 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.

10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
The limit line is derived from $43 + 10\log(P)\text{dB}$ below the transmitter power $P(\text{Watts})$
 $= P(\text{W}) - [43 + 10\log(P)] (\text{dB})$
 $= [30 + 10\log(P)] (\text{dBm}) - [43 + 10\log(P)] (\text{dB})$
 $= -13\text{dBm}.$
11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 KHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
13. The maximum RB configurations of the Radiated Spurious Emissions as RB Size 1, RB Offset 0

2.8.5 Test Result (Plots) of Radiated Spurious Emission

Note: 1. within 30MHz-1GHz were found more than 20dB below limit line

Note: 2. Absolute Level=Reading Level + Factor

LTE Band 71 QPSK 20MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-86.43	-63.92	-13.00	50.92	22.51	Horizontal
2	48.4392	-90.81	-71.00	-13.00	58.00	19.81	Horizontal
3	121.710	-101.43	-81.02	-13.00	68.02	20.41	Horizontal
4	1414.20	-50.76	-53.11	-13.00	40.11	-2.35	Horizontal
5	3210.10	-58.89	-49.85	-13.00	36.85	9.04	Horizontal
6	9093.04	-61.77	-41.04	-13.00	28.04	20.73	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-84.96	-64.21	-13.00	51.21	20.75	Vertical
2	47.9540	-90.81	-71.50	-13.00	58.50	19.31	Vertical
3	90.1701	-101.22	-77.60	-13.00	64.60	23.62	Vertical
4	1415.20	-56.88	-59.54	-13.00	46.54	-2.66	Vertical
5	3150.07	-58.43	-49.82	-13.00	36.82	8.61	Vertical
6	8822.91	-61.58	-42.18	-13.00	29.18	19.40	Vertical



3. LIST OF MEASURING EQUIPMENT

Description	Manufacturer	Model	Serial No.	Cal. Date	Due Date	Remark
EMI Test Receiver	R&S	ESW26	A180502935	2020.08.13	2021.08.12	Radiation
Loop Antenna	Schwarz beck	HFH2-Z2	100047	2019.04.26	2022.04.25	Radiation
Broadband antenna (30MHz~1GHz)	Schwarbeck	BBHA 9120 J	A190503537	2019.01.07	2022.01.06	Radiation
Broadband antenna (30MHz~1GHz)	R&S	VULB9160	A0805560	2019.05.24	2022.05.23	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100150	2019.04.27	2022.04.26	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100149	2019.04.17	2022.04.16	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2020.06.19	2023.06.18	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4003A	0329293	2020.09.17	2021.09.16	Radiation
Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2020.09.22	2023.09.21	Radiation
Amplifier 1G~18GHz	MILMEGA	AS0104R-800/40 0	A160302517	2021.01.26	2022.01.25	Radiation
Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25	Conducted
Test Receiver	R&S	ESIB7	A0501375	2020.06.24	2021.06.23	Conducted
Temperature chamber	TABAI	PS-232	A8708054	2020.10.30	2021.10.29	Conducted
Wideband Radio Communication tester	R&S	CMW500	A130101034	2019.07.30	2021.07.29	Conducted
Power Supply	R&S	WYJ-60100	A141102031	2020.01.16	2023.01.15	Conducted
Test software	ECIT	Eagle	V2.0	N/A	N/A	Conducted

4. UNCERTAINTY OF EVALUATION

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150KHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	2.8dB
---	-------

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	3.91dB
---	--------

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.9dB
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**APPENDIX A****Conducted RF (Average) Output Power****Test Result and Data**

LTE Band 71

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (dBm)	Upper Limit (dBm)	Measured (dBm)	Verdict
133147	5	QPSK	1	LOW	0	34.77	23.18	Pass
133147	5	QPSK	1	MID	0	34.77	23.22	Pass
133147	5	QPSK	1	HIGH	0	34.77	23.07	Pass
133147	5	QPSK	12	LOW	0	34.77	22.3	Pass
133147	5	QPSK	12	MID	0	34.77	22.43	Pass
133147	5	QPSK	12	HIGH	0	34.77	22.47	Pass
133147	5	QPSK	25	LOW	0	34.77	22.29	Pass
133147	5	Q16	1	LOW	0	34.77	22.02	Pass
133147	5	Q16	1	MID	0	34.77	22.02	Pass
133147	5	Q16	1	HIGH	0	34.77	21.92	Pass
133147	5	Q16	12	LOW	0	34.77	21.18	Pass
133147	5	Q16	12	MID	0	34.77	21.42	Pass
133147	5	Q16	12	HIGH	0	34.77	21.28	Pass
133147	5	Q16	25	LOW	0	34.77	21.59	Pass
133297	5	QPSK	1	LOW	0	34.77	22.99	Pass
133297	5	QPSK	1	MID	0	34.77	23.3	Pass
133297	5	QPSK	1	HIGH	0	34.77	23.18	Pass
133297	5	QPSK	12	LOW	0	34.77	22.22	Pass
133297	5	QPSK	12	MID	0	34.77	22.34	Pass
133297	5	QPSK	12	HIGH	0	34.77	22.35	Pass
133297	5	QPSK	25	LOW	0	34.77	22.2	Pass
133297	5	Q16	1	LOW	0	34.77	22.35	Pass
133297	5	Q16	1	MID	0	34.77	22.42	Pass
133297	5	Q16	1	HIGH	0	34.77	22	Pass
133297	5	Q16	12	LOW	0	34.77	21.17	Pass
133297	5	Q16	12	MID	0	34.77	21.39	Pass
133297	5	Q16	12	HIGH	0	34.77	21.38	Pass
133297	5	Q16	25	LOW	0	34.77	21.31	Pass
133447	5	QPSK	1	LOW	0	34.77	22.99	Pass
133447	5	QPSK	1	MID	0	34.77	23.41	Pass



UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (dBm)	Upper Limit (dBm)	Measured (dBm)	Verdict
133447	5	QPSK	1	HIGH	0	34.77	23.24	Pass
133447	5	QPSK	12	LOW	0	34.77	22.22	Pass
133447	5	QPSK	12	MID	0	34.77	22.33	Pass
133447	5	QPSK	12	HIGH	0	34.77	22.3	Pass
133447	5	QPSK	25	LOW	0	34.77	22.31	Pass
133447	5	Q16	1	LOW	0	34.77	22.09	Pass
133447	5	Q16	1	MID	0	34.77	22.06	Pass
133447	5	Q16	1	HIGH	0	34.77	21.9	Pass
133447	5	Q16	12	LOW	0	34.77	21.24	Pass
133447	5	Q16	12	MID	0	34.77	21.32	Pass
133447	5	Q16	12	HIGH	0	34.77	21.43	Pass
133447	5	Q16	25	LOW	0	34.77	21.26	Pass
133172	10	QPSK	1	LOW	0	34.77	23.37	Pass
133172	10	QPSK	1	MID	0	34.77	23.26	Pass
133172	10	QPSK	1	HIGH	0	34.77	23.2	Pass
133172	10	QPSK	25	LOW	0	34.77	22.41	Pass
133172	10	QPSK	25	MID	0	34.77	22.56	Pass
133172	10	QPSK	25	HIGH	0	34.77	22.41	Pass
133172	10	QPSK	50	LOW	0	34.77	22.46	Pass
133172	10	Q16	1	LOW	0	34.77	22.46	Pass
133172	10	Q16	1	MID	0	34.77	22.8	Pass
133172	10	Q16	1	HIGH	0	34.77	21.95	Pass
133172	10	Q16	25	LOW	0	34.77	21.43	Pass
133172	10	Q16	25	MID	0	34.77	21.4	Pass
133172	10	Q16	25	HIGH	0	34.77	21.43	Pass
133172	10	Q16	50	LOW	0	34.77	21.36	Pass
133297	10	QPSK	1	LOW	0	34.77	23.28	Pass
133297	10	QPSK	1	MID	0	34.77	23.75	Pass
133297	10	QPSK	1	HIGH	0	34.77	23.25	Pass
133297	10	QPSK	25	LOW	0	34.77	22.29	Pass
133297	10	QPSK	25	MID	0	34.77	22.39	Pass
133297	10	QPSK	25	HIGH	0	34.77	22.42	Pass
133297	10	QPSK	50	LOW	0	34.77	22.29	Pass
133297	10	Q16	1	LOW	0	34.77	22.12	Pass
133297	10	Q16	1	MID	0	34.77	22.19	Pass
133297	10	Q16	1	HIGH	0	34.77	21.68	Pass
133297	10	Q16	25	LOW	0	34.77	21.26	Pass



UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (dBm)	Upper Limit (dBm)	Measured (dBm)	Verdict
133297	10	Q16	25	MID	0	34.77	21.6	Pass
133297	10	Q16	25	HIGH	0	34.77	21.33	Pass
133297	10	Q16	50	LOW	0	34.77	21.25	Pass
133422	10	QPSK	1	LOW	0	34.77	23.56	Pass
133422	10	QPSK	1	MID	0	34.77	23.65	Pass
133422	10	QPSK	1	HIGH	0	34.77	23.3	Pass
133422	10	QPSK	25	LOW	0	34.77	22.45	Pass
133422	10	QPSK	25	MID	0	34.77	22.47	Pass
133422	10	QPSK	25	HIGH	0	34.77	22.46	Pass
133422	10	QPSK	50	LOW	0	34.77	22.38	Pass
133422	10	Q16	1	LOW	0	34.77	22.17	Pass
133422	10	Q16	1	MID	0	34.77	22.29	Pass
133422	10	Q16	1	HIGH	0	34.77	21.73	Pass
133422	10	Q16	25	LOW	0	34.77	21.34	Pass
133422	10	Q16	25	MID	0	34.77	21.45	Pass
133422	10	Q16	25	HIGH	0	34.77	21.4	Pass
133422	10	Q16	50	LOW	0	34.77	21.3	Pass
133197	15	QPSK	1	LOW	0	34.77	23.23	Pass
133197	15	QPSK	1	MID	0	34.77	23.47	Pass
133197	15	QPSK	1	HIGH	0	34.77	23.12	Pass
133197	15	QPSK	36	LOW	0	34.77	22.42	Pass
133197	15	QPSK	36	MID	0	34.77	22.4	Pass
133197	15	QPSK	36	HIGH	0	34.77	22.26	Pass
133197	15	QPSK	75	LOW	0	34.77	22.32	Pass
133197	15	Q16	1	LOW	0	34.77	22.43	Pass
133197	15	Q16	1	MID	0	34.77	23.06	Pass
133197	15	Q16	1	HIGH	0	34.77	22.03	Pass
133197	15	Q16	36	LOW	0	34.77	21.42	Pass
133197	15	Q16	36	MID	0	34.77	21.23	Pass
133197	15	Q16	36	HIGH	0	34.77	21.26	Pass
133197	15	Q16	75	LOW	0	34.77	21.34	Pass
133297	15	QPSK	1	LOW	0	34.77	23.03	Pass
133297	15	QPSK	1	MID	0	34.77	23.09	Pass
133297	15	QPSK	1	HIGH	0	34.77	23.18	Pass
133297	15	QPSK	36	LOW	0	34.77	22.28	Pass
133297	15	QPSK	36	MID	0	34.77	22.32	Pass
133297	15	QPSK	36	HIGH	0	34.77	22.31	Pass



UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (dBm)	Upper Limit (dBm)	Measured (dBm)	Verdict
133297	15	QPSK	75	LOW	0	34.77	22.15	Pass
133297	15	Q16	1	LOW	0	34.77	22.3	Pass
133297	15	Q16	1	MID	0	34.77	22.28	Pass
133297	15	Q16	1	HIGH	0	34.77	21.64	Pass
133297	15	Q16	36	LOW	0	34.77	21.27	Pass
133297	15	Q16	36	MID	0	34.77	21.27	Pass
133297	15	Q16	36	HIGH	0	34.77	21.23	Pass
133297	15	Q16	75	LOW	0	34.77	21.18	Pass
133397	15	QPSK	1	LOW	0	34.77	23.07	Pass
133397	15	QPSK	1	MID	0	34.77	23.05	Pass
133397	15	QPSK	1	HIGH	0	34.77	22.92	Pass
133397	15	QPSK	36	LOW	0	34.77	22.25	Pass
133397	15	QPSK	36	MID	0	34.77	22.38	Pass
133397	15	QPSK	36	HIGH	0	34.77	22.36	Pass
133397	15	QPSK	75	LOW	0	34.77	22.33	Pass
133397	15	Q16	1	LOW	0	34.77	22.7	Pass
133397	15	Q16	1	MID	0	34.77	22.78	Pass
133397	15	Q16	1	HIGH	0	34.77	22.83	Pass
133397	15	Q16	36	LOW	0	34.77	21.3	Pass
133397	15	Q16	36	MID	0	34.77	21.36	Pass
133397	15	Q16	36	HIGH	0	34.77	21.32	Pass
133397	15	Q16	75	LOW	0	34.77	21.34	Pass
133222	20	QPSK	1	LOW	0	34.77	22.99	Pass
133222	20	QPSK	1	MID	0	34.77	23.49	Pass
133222	20	QPSK	1	HIGH	0	34.77	23.13	Pass
133222	20	QPSK	50	LOW	0	34.77	22.36	Pass
133222	20	QPSK	50	MID	0	34.77	22.46	Pass
133222	20	QPSK	50	HIGH	0	34.77	22.29	Pass
133222	20	QPSK	100	LOW	0	34.77	22.35	Pass
133222	20	Q16	1	LOW	0	34.77	22.55	Pass
133222	20	Q16	1	MID	0	34.77	22.16	Pass
133222	20	Q16	1	HIGH	0	34.77	21.98	Pass
133222	20	Q16	50	LOW	0	34.77	21.21	Pass
133222	20	Q16	50	MID	0	34.77	21.32	Pass
133222	20	Q16	50	HIGH	0	34.77	21.15	Pass
133222	20	Q16	100	LOW	0	34.77	21.29	Pass
133322	20	QPSK	1	LOW	0	34.77	23.47	Pass

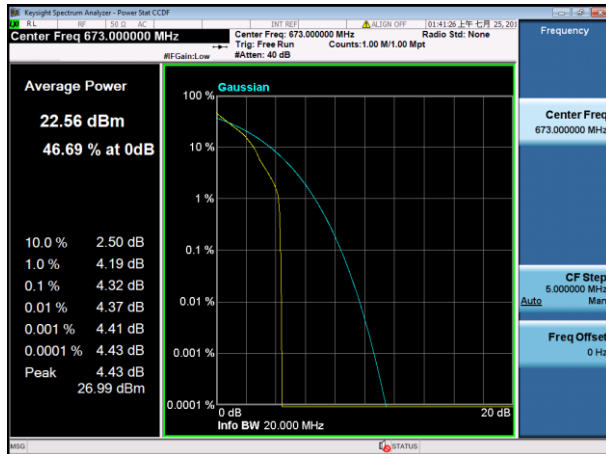


UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (dBm)	Upper Limit (dBm)	Measured (dBm)	Verdict
133322	20	QPSK	1	MID	0	34.77	23.64	Pass
133322	20	QPSK	1	HIGH	0	34.77	23.33	Pass
133322	20	QPSK	50	LOW	0	34.77	22.27	Pass
133322	20	QPSK	50	MID	0	34.77	22.31	Pass
133322	20	QPSK	50	HIGH	0	34.77	22.37	Pass
133322	20	QPSK	100	LOW	0	34.77	22.37	Pass
133322	20	Q16	1	LOW	0	34.77	22.3	Pass
133322	20	Q16	1	MID	0	34.77	22.67	Pass
133322	20	Q16	1	HIGH	0	34.77	21.66	Pass
133322	20	Q16	50	LOW	0	34.77	21.13	Pass
133322	20	Q16	50	MID	0	34.77	21.22	Pass
133322	20	Q16	50	HIGH	0	34.77	21.28	Pass
133322	20	Q16	100	LOW	0	34.77	21.38	Pass
133372	20	QPSK	1	LOW	0	34.77	22.92	Pass
133372	20	QPSK	1	MID	0	34.77	23.43	Pass
133372	20	QPSK	1	HIGH	0	34.77	23.02	Pass
133372	20	QPSK	50	LOW	0	34.77	22.34	Pass
133372	20	QPSK	50	MID	0	34.77	22.45	Pass
133372	20	QPSK	50	HIGH	0	34.77	22.34	Pass
133372	20	QPSK	100	LOW	0	34.77	22.31	Pass
133372	20	Q16	1	LOW	0	34.77	22.59	Pass
133372	20	Q16	1	MID	0	34.77	22.13	Pass
133372	20	Q16	1	HIGH	0	34.77	21.88	Pass
133372	20	Q16	50	LOW	0	34.77	21.23	Pass
133372	20	Q16	50	MID	0	34.77	21.33	Pass
133372	20	Q16	50	HIGH	0	34.77	21.33	Pass
133372	20	Q16	100	LOW	0	34.77	21.3	Pass

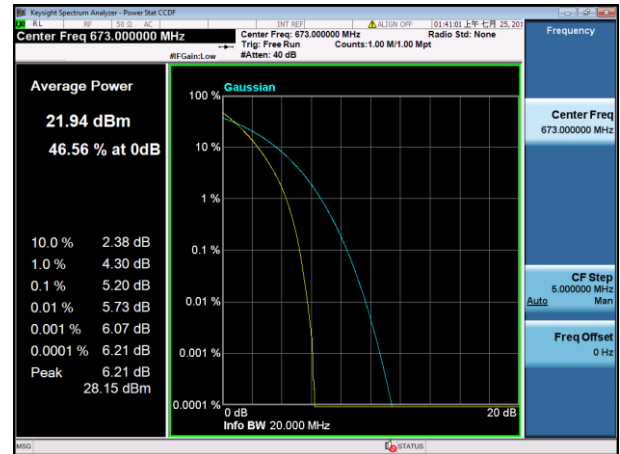
Peak To Average Ratio

Test Result and Data

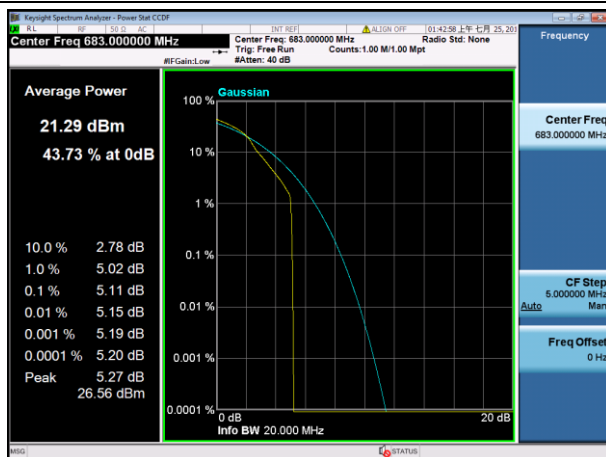
FDD71_LowRange_20MHz_673_OneRB
_high_Q16



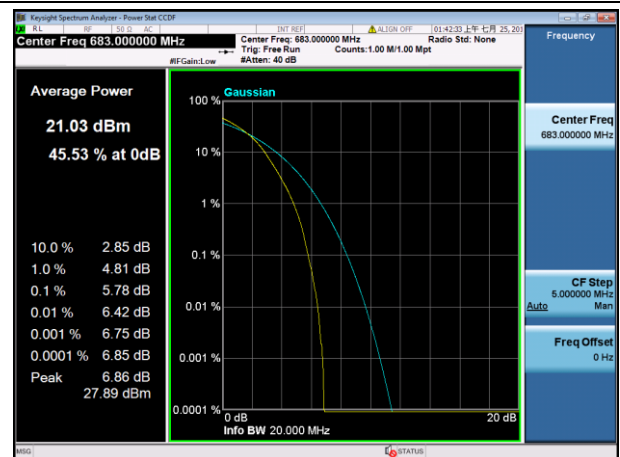
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_Q16



FDD71_MidRange_20MHz_683_OneRB
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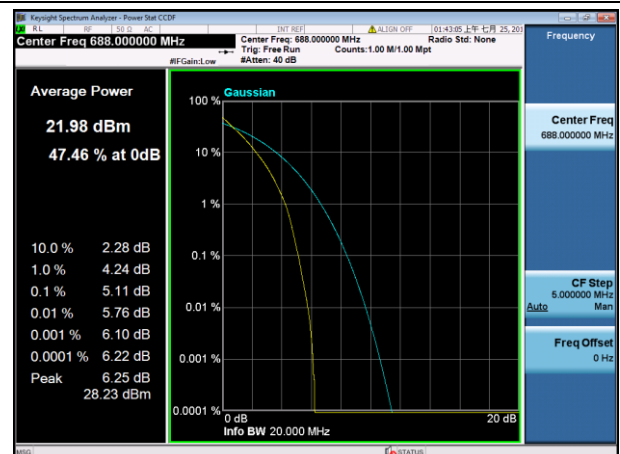
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FDD71_HighRange_20MHz_688_fullRB
_Q16





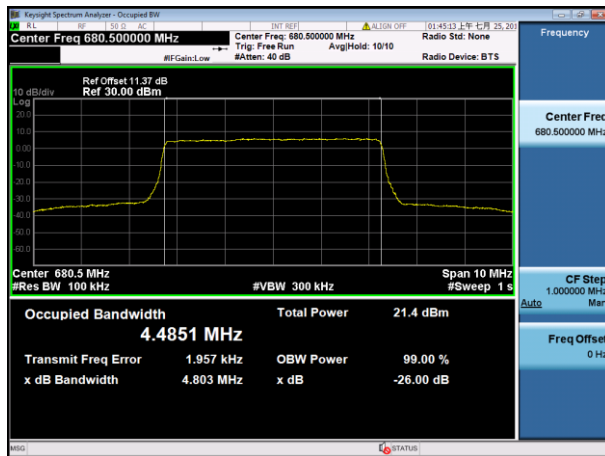
99% Occupied Bandwidth

Test Result and Data

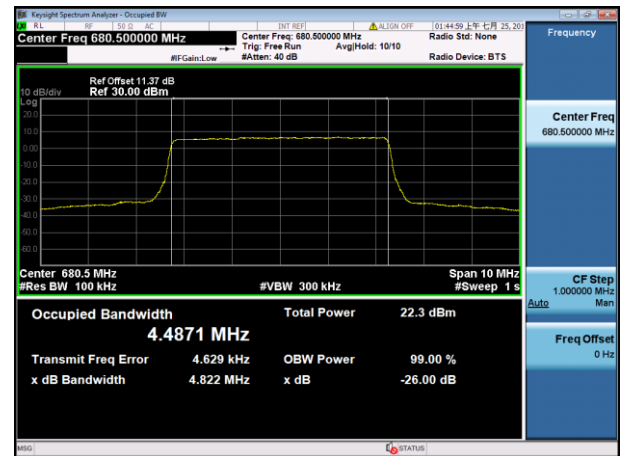
Occupied Bandwidth NormalTC_NormalVol					
Band	Range	BandWidth	Frequency (MHz)	Modulation	Occupied Bandwidth(99%) (MHz)
FDD71	MidRange	5	680.5	QPSK	4.49
FDD71	MidRange	5	680.5	Q16	4.49
FDD71	MidRange	10	680.5	QPSK	8.9
FDD71	MidRange	10	680.5	Q16	8.89
FDD71	MidRange	15	680.5	QPSK	13.4
FDD71	MidRange	15	680.5	Q16	13.39
FDD71	MidRange	20	683	QPSK	17.8
FDD71	MidRange	20	683	Q16	17.79



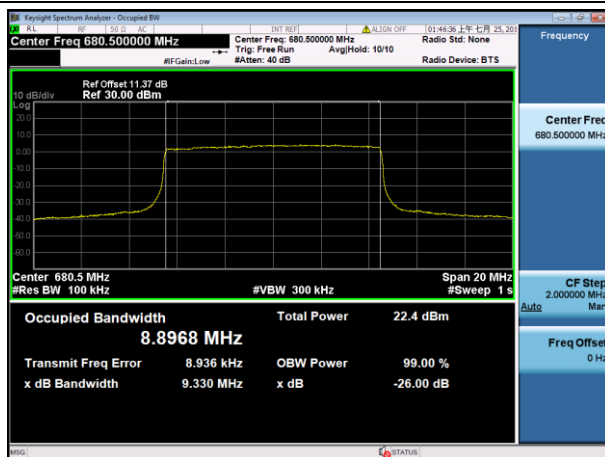
FDD71_MidRange_5_680.5_QPSK



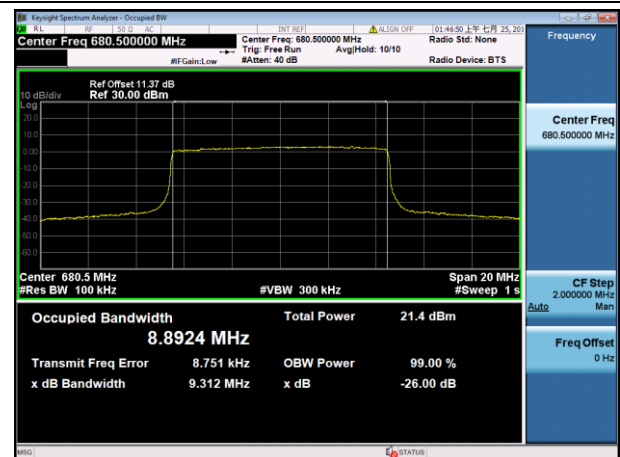
FDD71_MidRange_5_680.5_Q16



FDD71_MidRange_10_680.5_QPSK

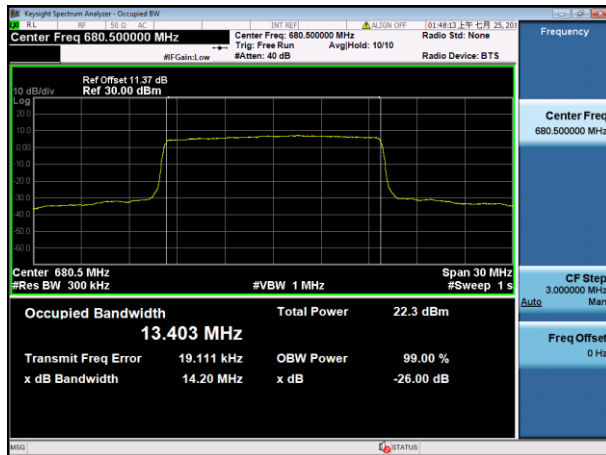


FDD71_MidRange_10_680.5_Q16

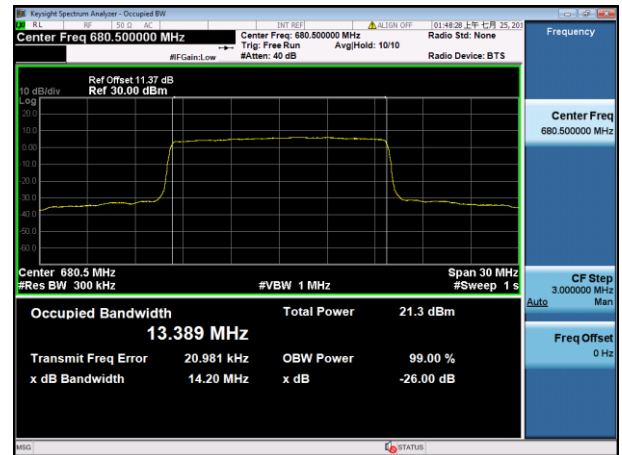




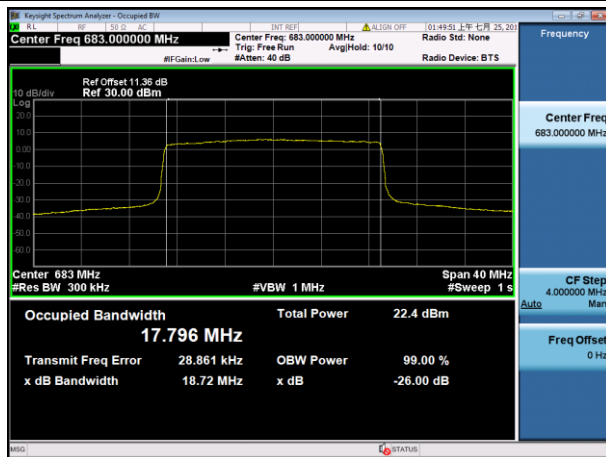
FDD71_MidRange_15_680.5_QPSK



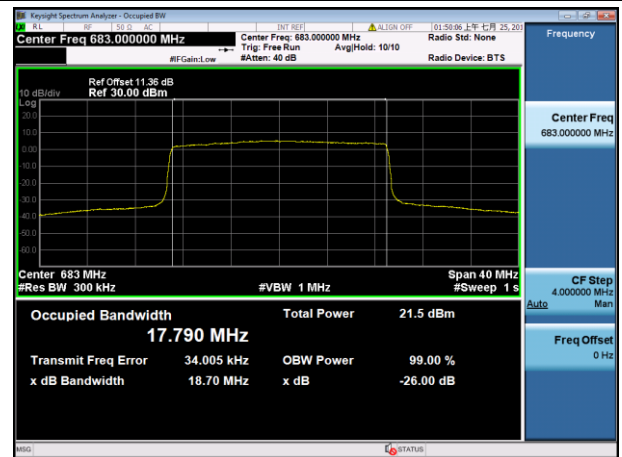
FDD71_MidRange_15_680.5_Q16



FDD71_MidRange_20_683_QPSK



FDD71_MidRange_20_683_Q16

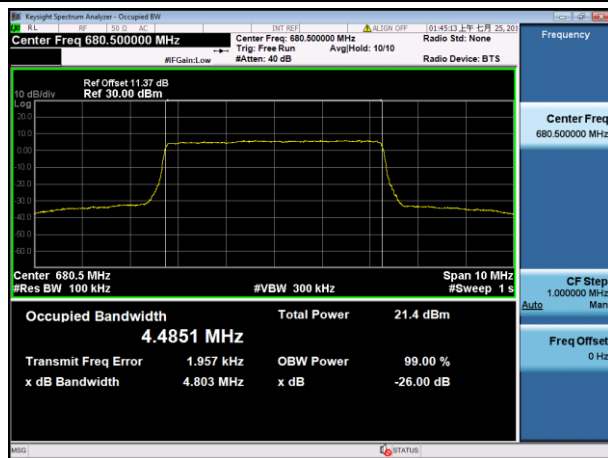


**26dB Bandwidth****Test Result and Data**

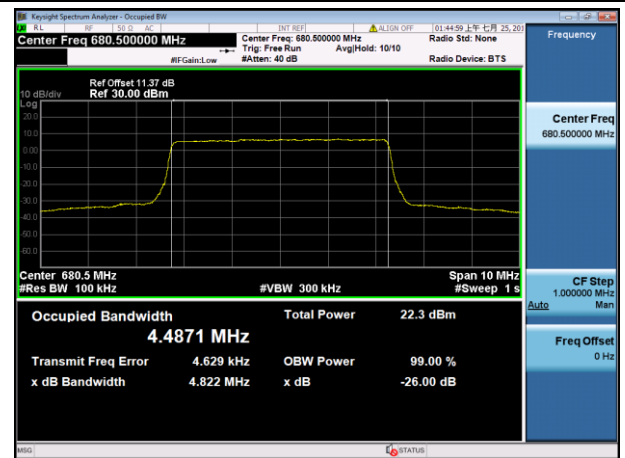
Emission Bandwidth NormalTC_NormalVol					
Band	Range	BandWidth	Frequency (MHz)	Modulation	EmissionBandwidth (MHz)
FDD71	MidRange	5	680.5	QPSK	4.80
FDD71	MidRange	5	680.5	Q16	4.82
FDD71	MidRange	10	680.5	QPSK	9.33
FDD71	MidRange	10	680.5	Q16	9.31
FDD71	MidRange	15	680.5	QPSK	14.2
FDD71	MidRange	15	680.5	Q16	14.2
FDD71	MidRange	20	683	QPSK	18.72
FDD71	MidRange	20	683	Q16	18.70



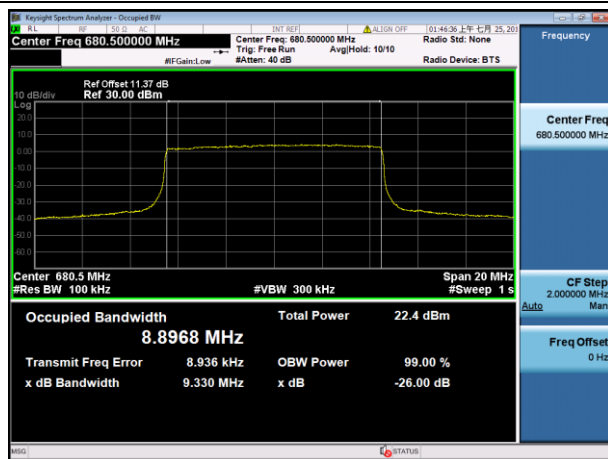
FDD71_MidRange_5_680.5_QPSK



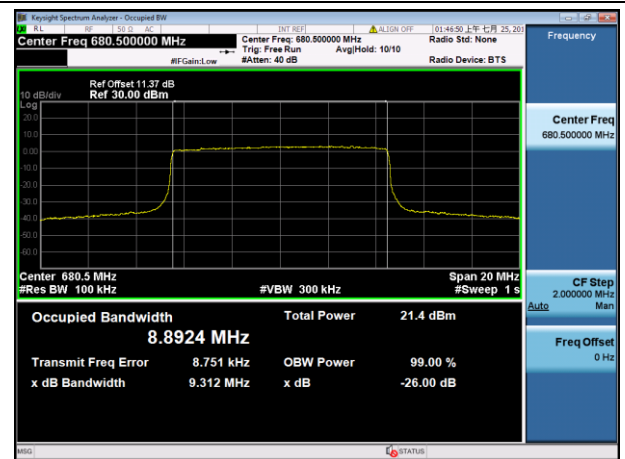
FDD71_MidRange_5_680.5_Q16



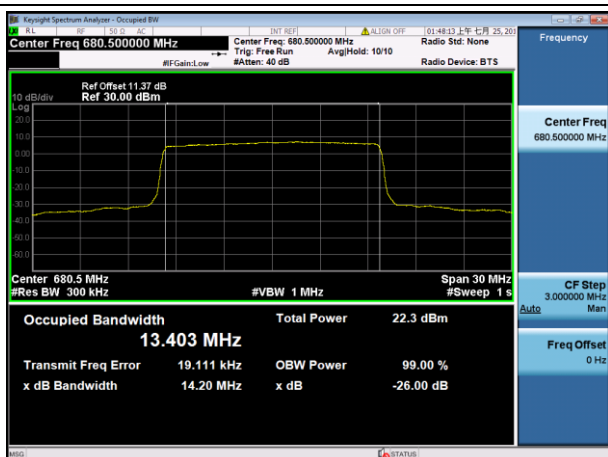
FDD71_MidRange_10_680.5_QPSK



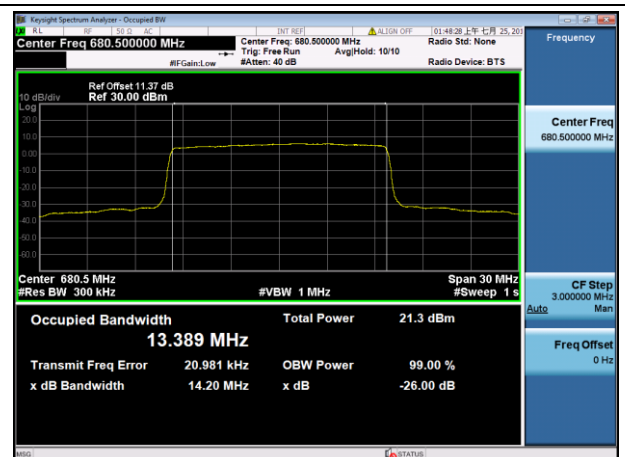
FDD71_MidRange_10_680.5_Q16



FDD71_MidRange_15_680.5_QPSK

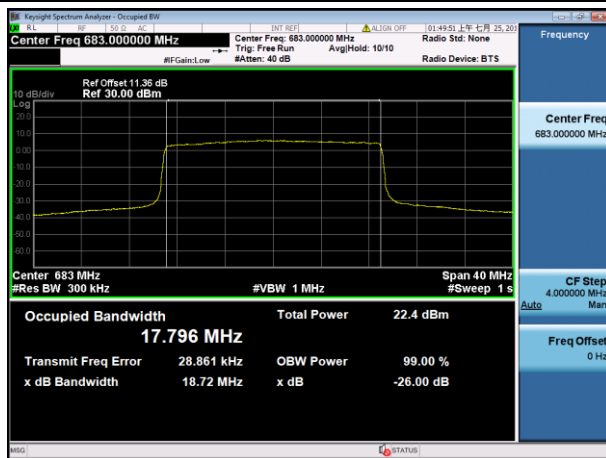


FDD71_MidRange_15_680.5_Q16

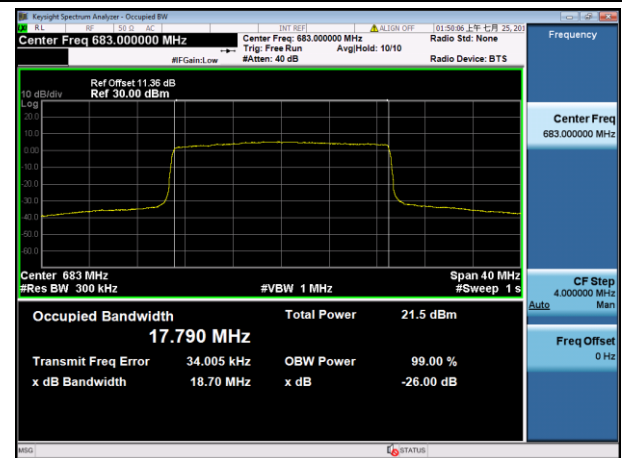




FDD71_MidRange_20_683_QPSK



FDD71_MidRange_20_683_Q16





Frequency Stability

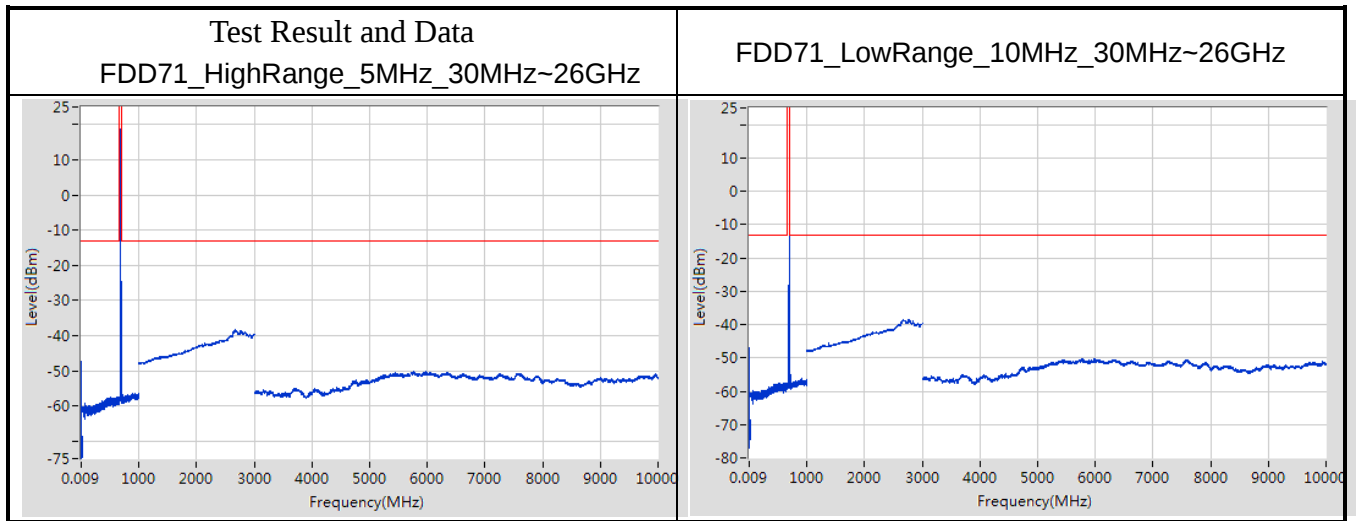
Test Result and Data

Temperature	Voltage	Band	BandWidth (MHz)	RbMode	Modulation	Frequency Error (ppm)	Limit (ppm)	Result
Normal	Low	FDD71	10	fullRB	QPSK	0.020	± 2.5	Pass
Normal	Normal	FDD71	10	fullRB	QPSK	0.014	± 2.5	Pass
Normal	High	FDD71	10	fullRB	QPSK	0.008	± 2.5	Pass
50	Normal	FDD71	10	fullRB	QPSK	0.012	± 2.5	Pass
40	Normal	FDD71	10	fullRB	QPSK	0.021	± 2.5	Pass
30	Normal	FDD71	10	fullRB	QPSK	0.012	± 2.5	Pass
20	Normal	FDD71	10	fullRB	QPSK	0.008	± 2.5	Pass
10	Normal	FDD71	10	fullRB	QPSK	0.051	± 2.5	Pass
0	Normal	FDD71	10	fullRB	QPSK	0.014	± 2.5	Pass
-10	Normal	FDD71	10	fullRB	QPSK	0.026	± 2.5	Pass
-20	Normal	FDD71	10	fullRB	QPSK	0.031	± 2.5	Pass
-30	Normal	FDD71	10	fullRB	QPSK	0.017	± 2.5	Pass

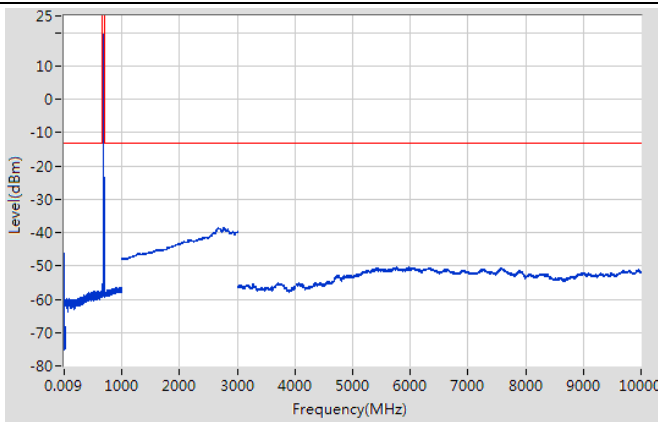
Note: 1.Normal=12V, Low=9V, High=36V

2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

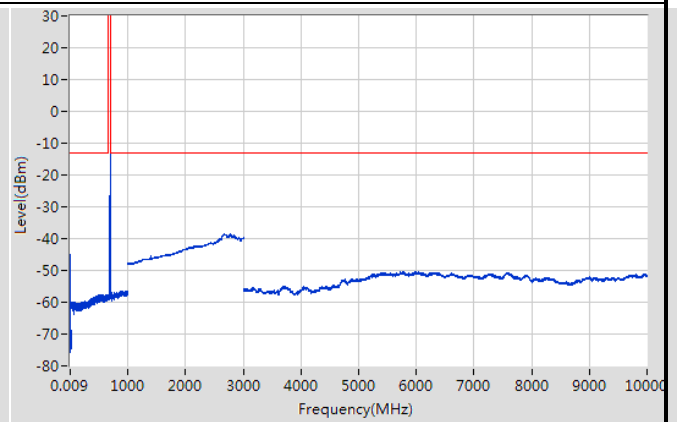
Conducted Out of Band Emissions



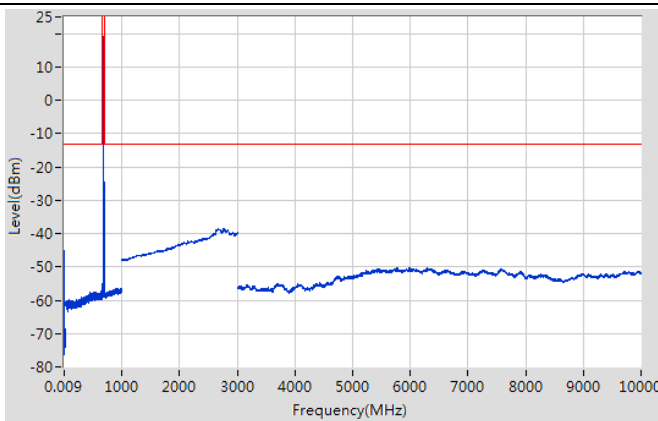
FDD71_LowRange_15MHz_30MHz~26GHz



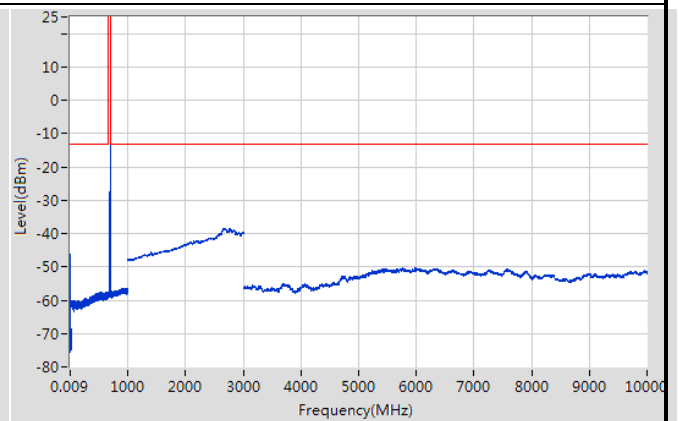
FDD71_LowRange_20MHz_30MHz~26GHz



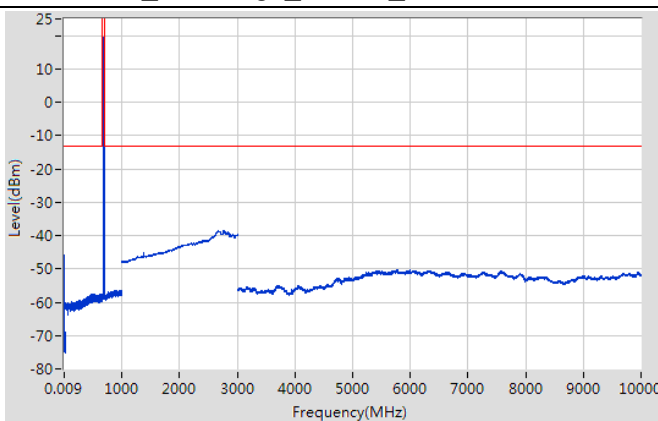
FDD71_LowRange_5MHz_30MHz~26GHz



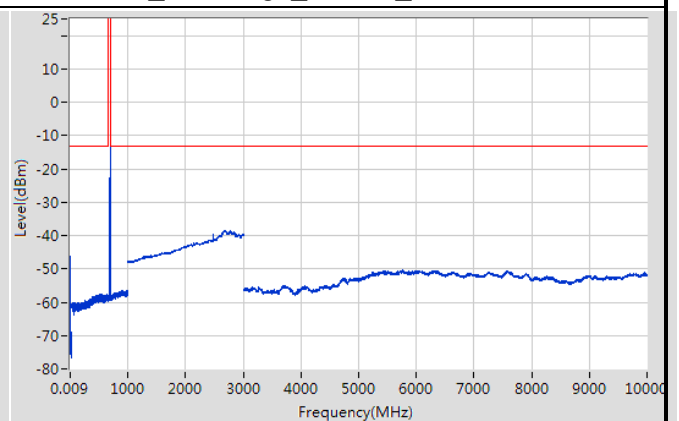
FDD71_MidRange_5MHz_30MHz~26GHz



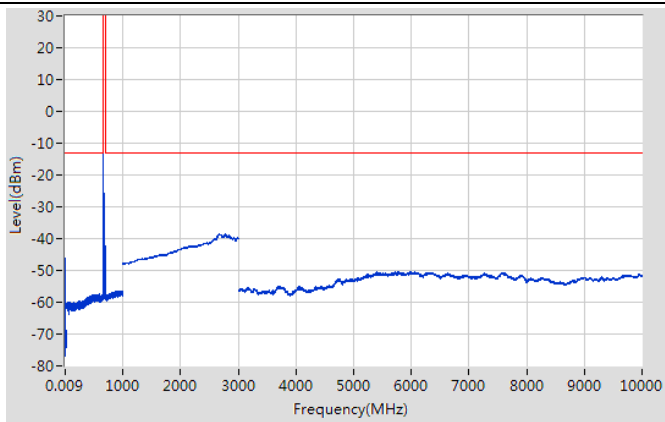
FDD71_MidRange_10MHz_30MHz~26GHz



FDD71_MidRange_15MHz_30MHz~26GHz



FDD71_MidRange_20MHz_30MHz~26GHz





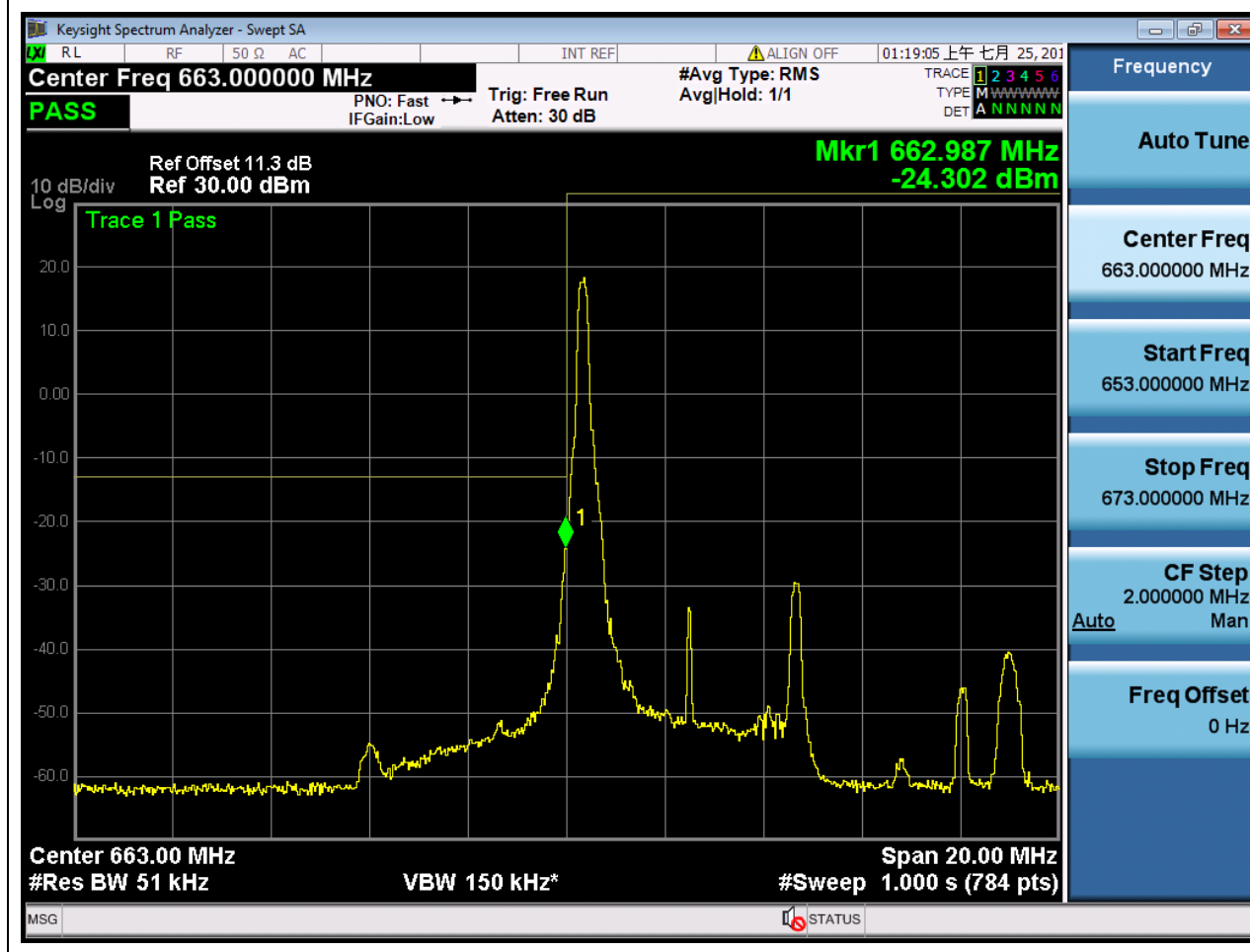
Conducted Band Edge

Test Result and Data

LTE_Band71 Bandedge

LTE Band Edge(NTNV)(Subtest:1, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number:1, RB Position:LOW)

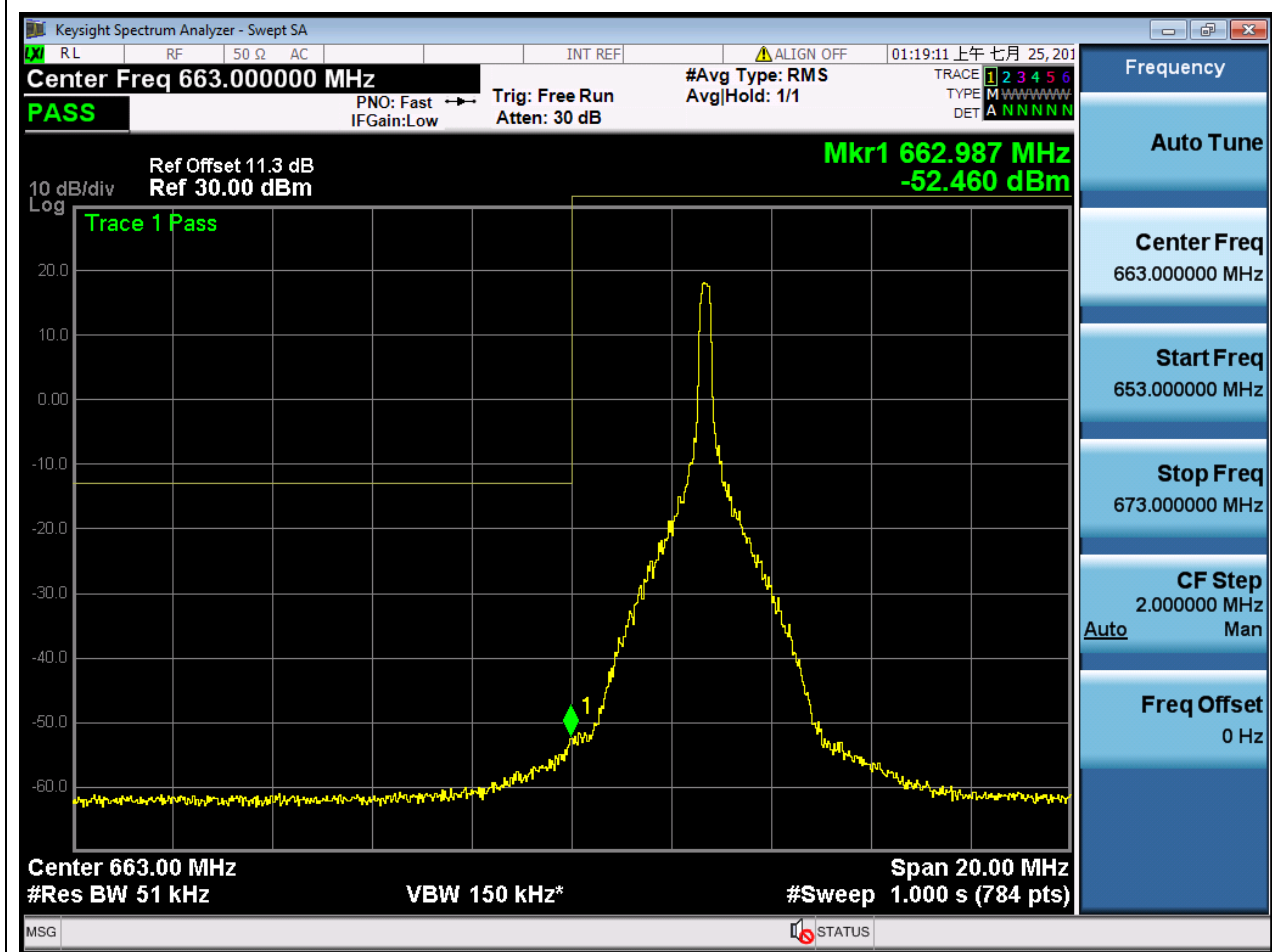
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-24.3	Pass	784





1.2. LTE Band Edge(NTNV)(Subtest:2, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:MID)

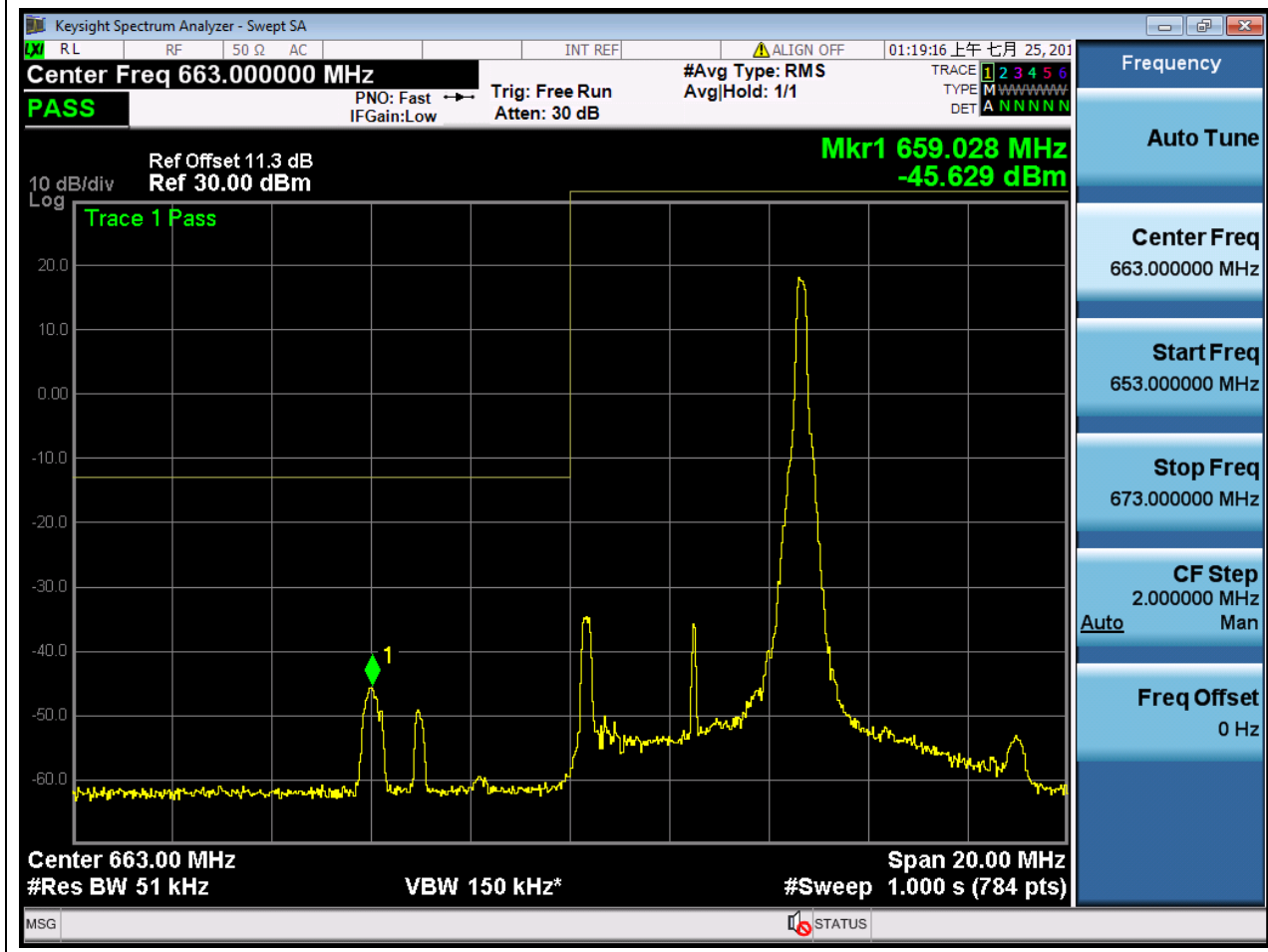
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-52.46	Pass	784





1.3. LTE Band Edge(NTNV)(Subtest:3, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

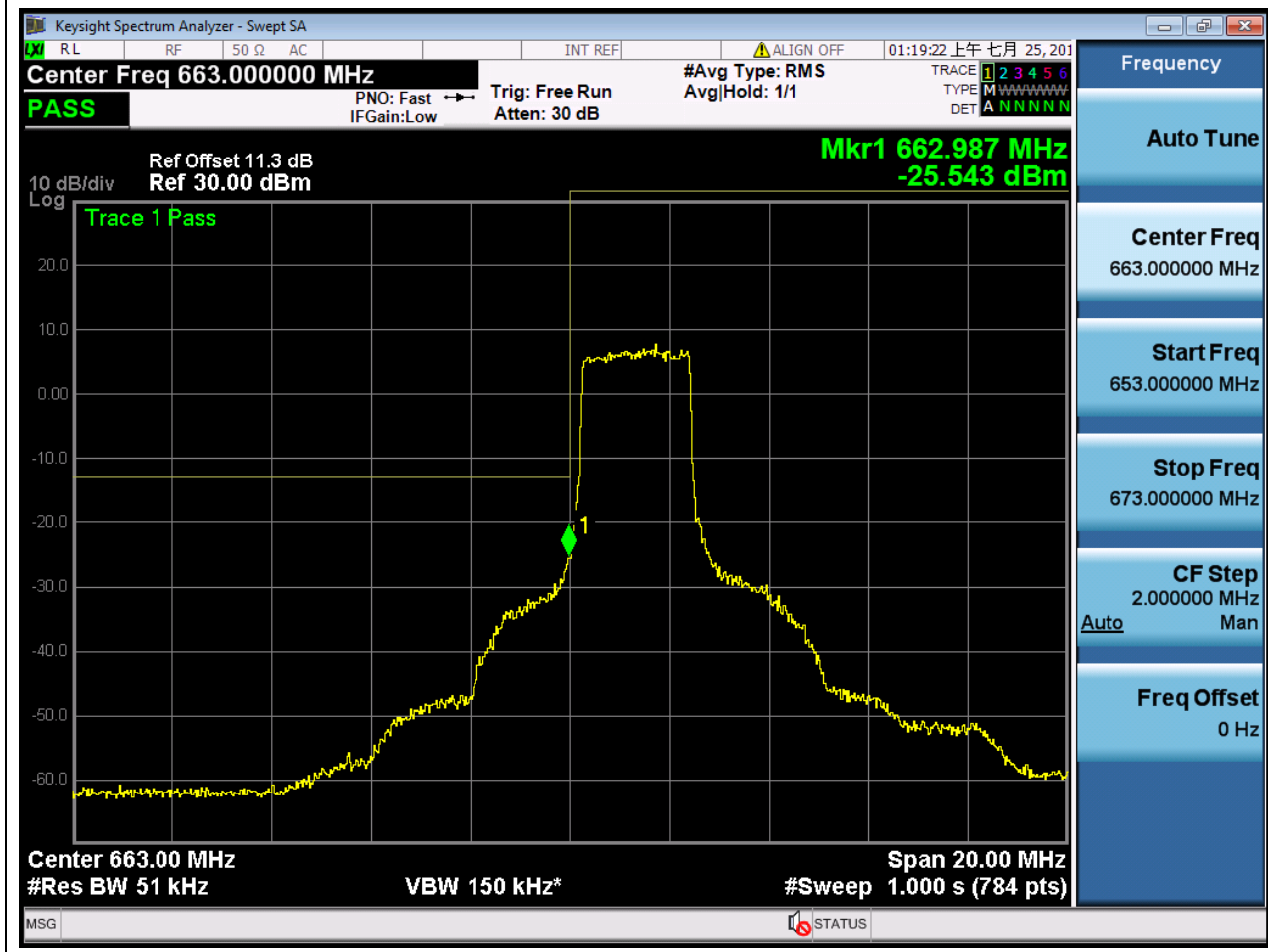
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	659.028	-45.63	Pass	784





1.4. LTE Band Edge(NTNV)(Subtest:4, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:LOW)

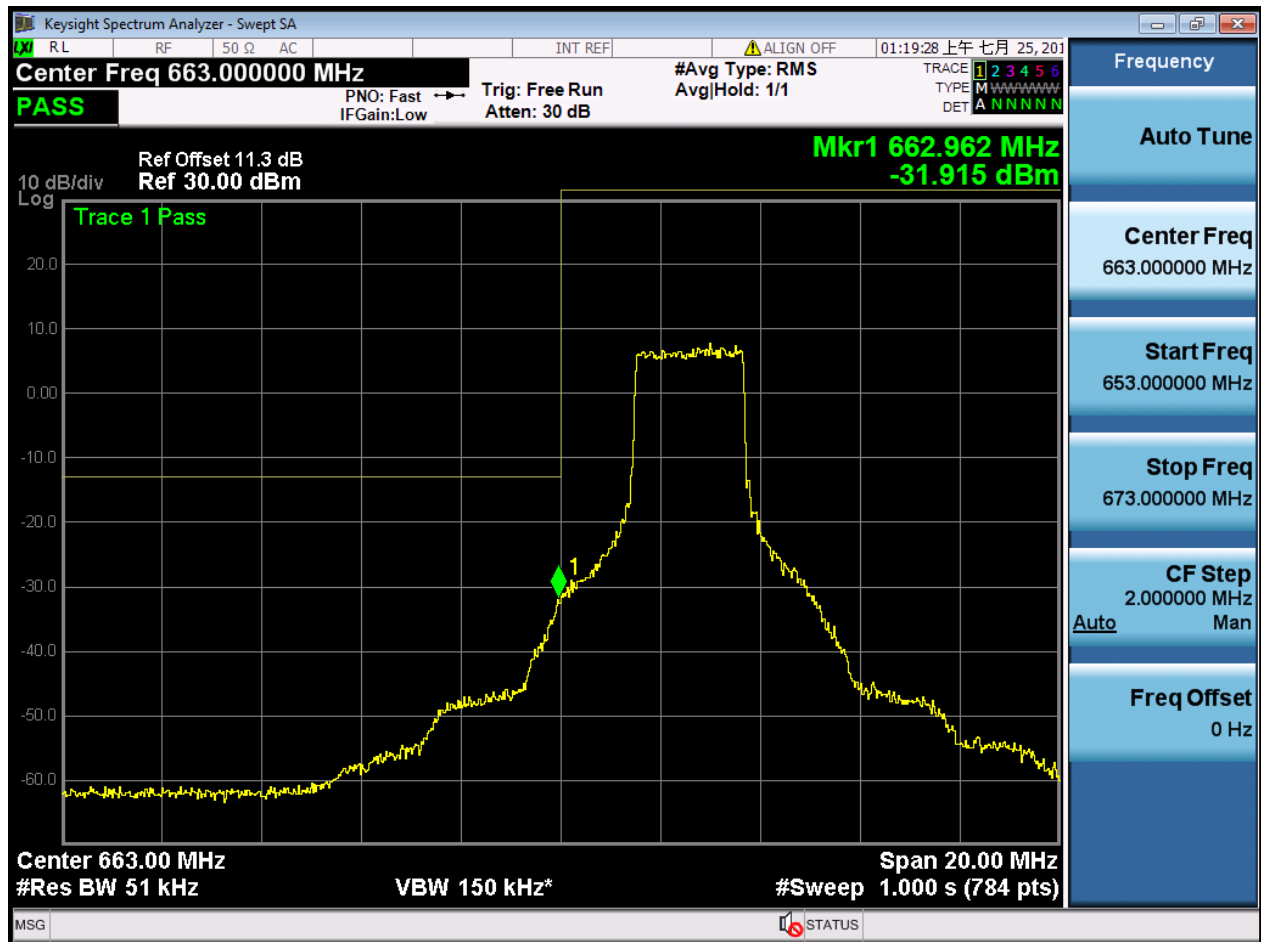
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-25.54	Pass	784





1.5. LTE Band Edge(NTNV)(Subtest:5, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:MID)

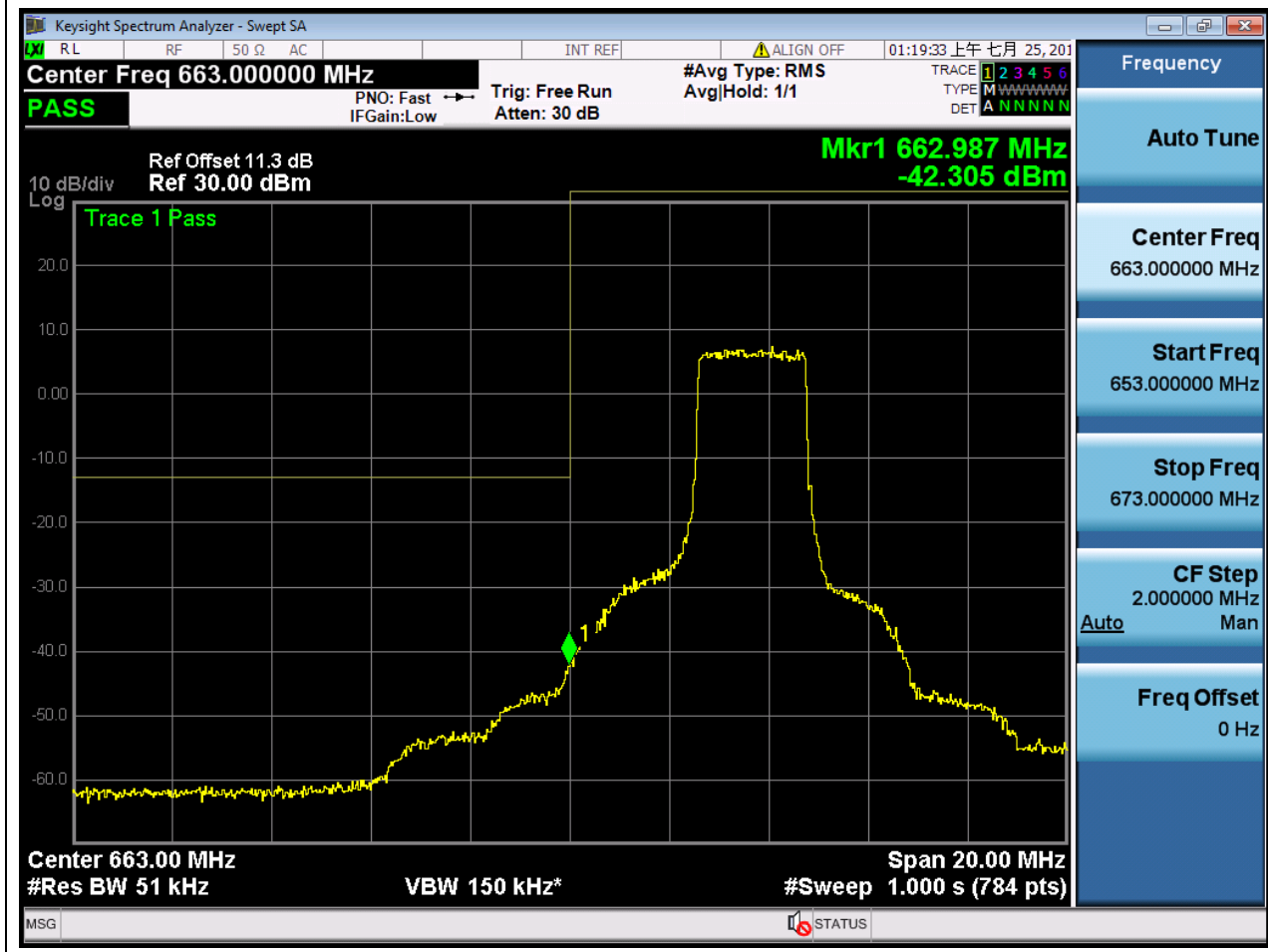
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.962	-31.92	Pass	784





1.6. LTE Band Edge(NTNV)(Subtest:6, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:HIGH)

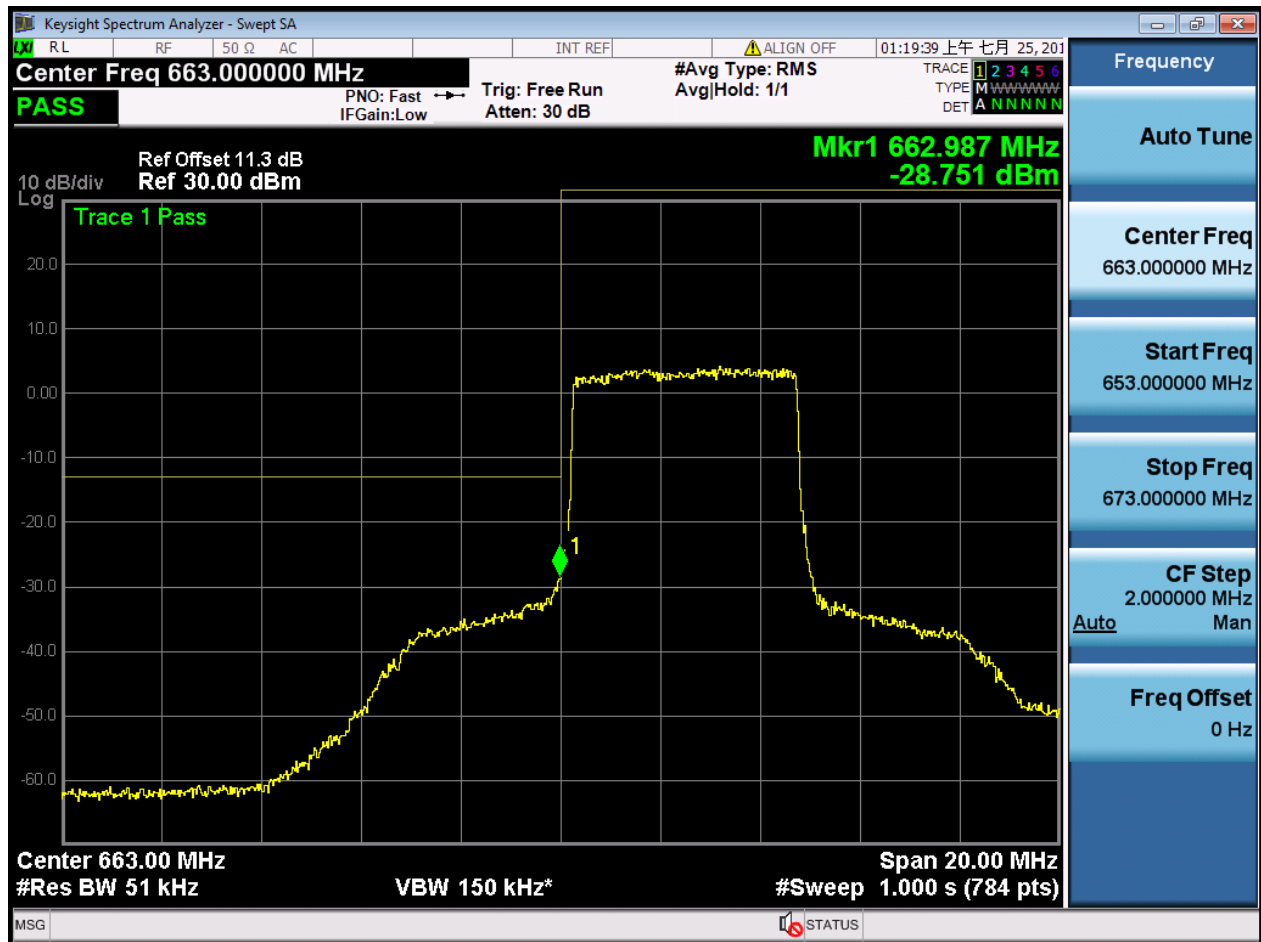
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-42.31	Pass	784





1.7. LTE Band Edge(NTNV)(Subtest:7, Channel:133147, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)

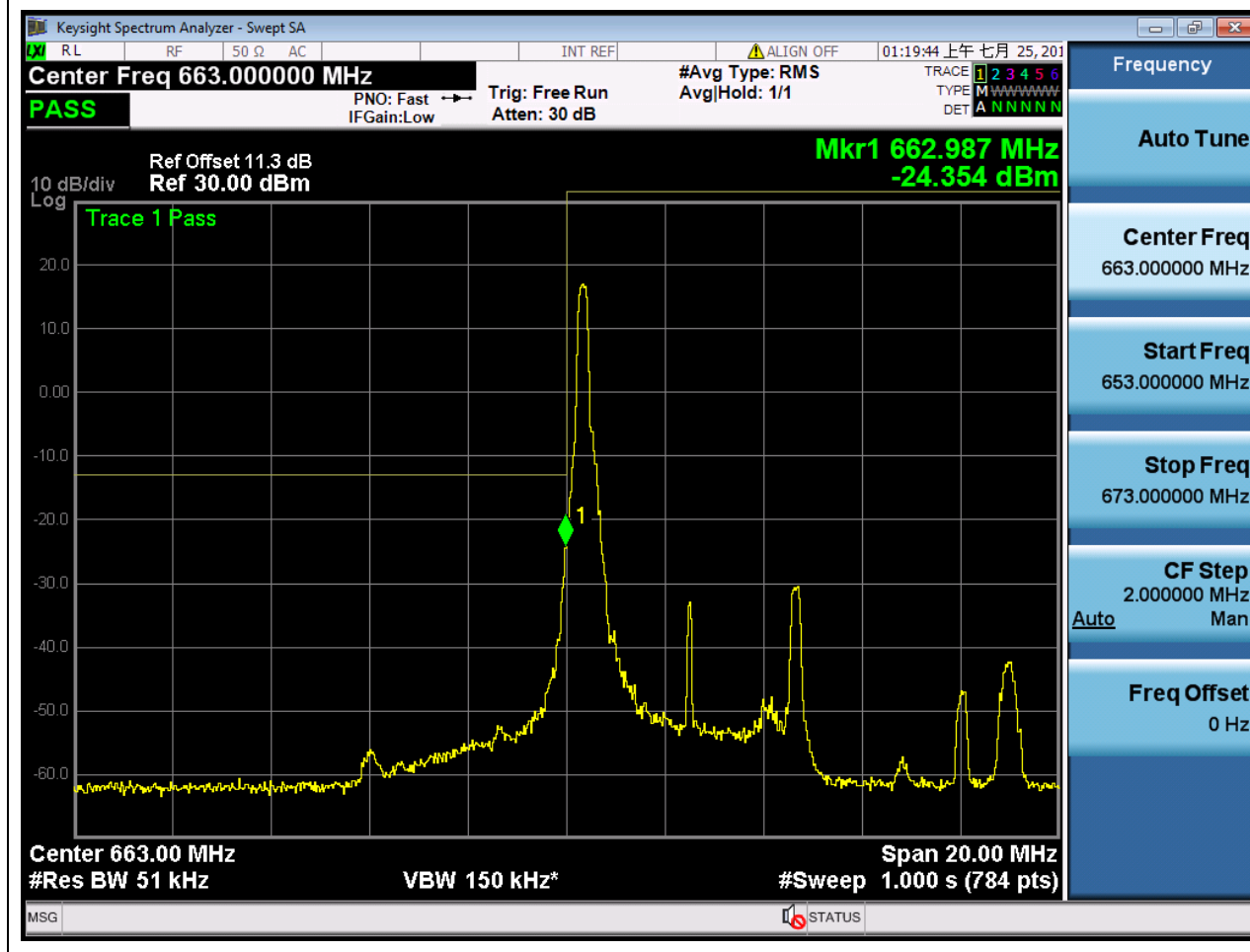
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-28.75	Pass	784





1.8. LTE Band Edge(NTNV)(Subtest:8, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:LOW)

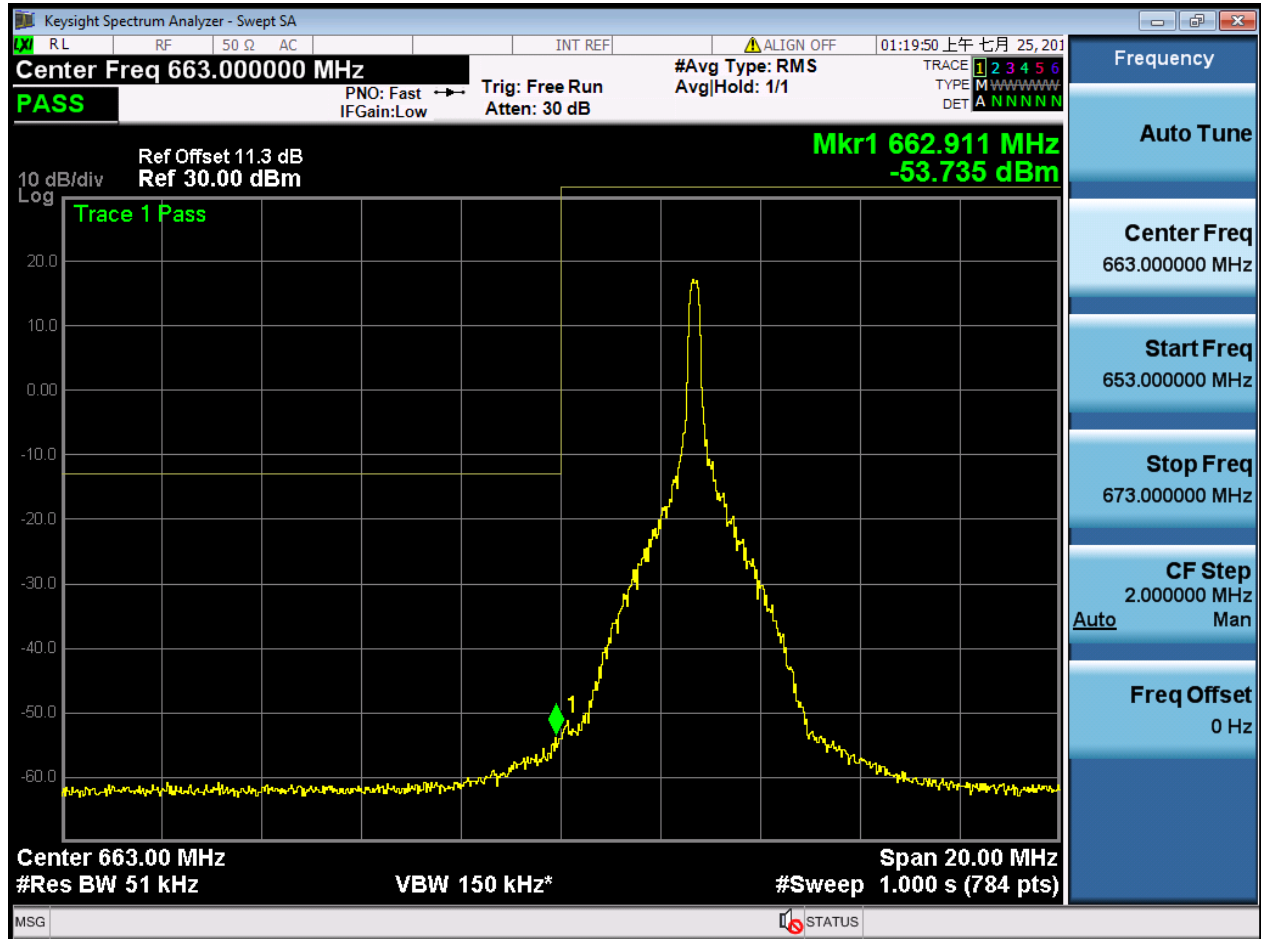
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-24.35	Pass	784





1.9. LTE Band Edge(NTNV)(Subtest:9, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:MID)

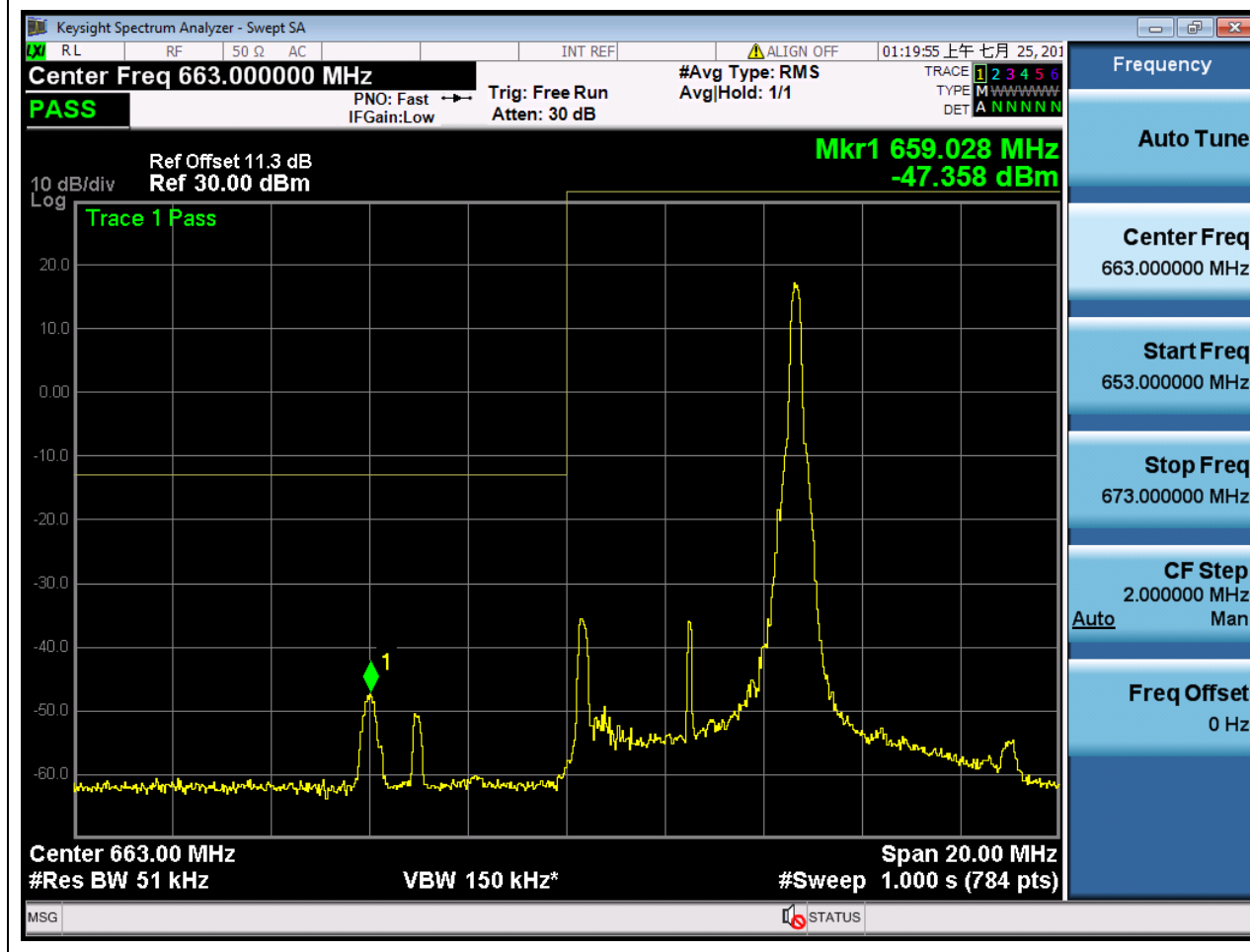
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.911	-53.74	Pass	784





1.10. LTE Band Edge(NTNV)(Subtest:10, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:HIGH)

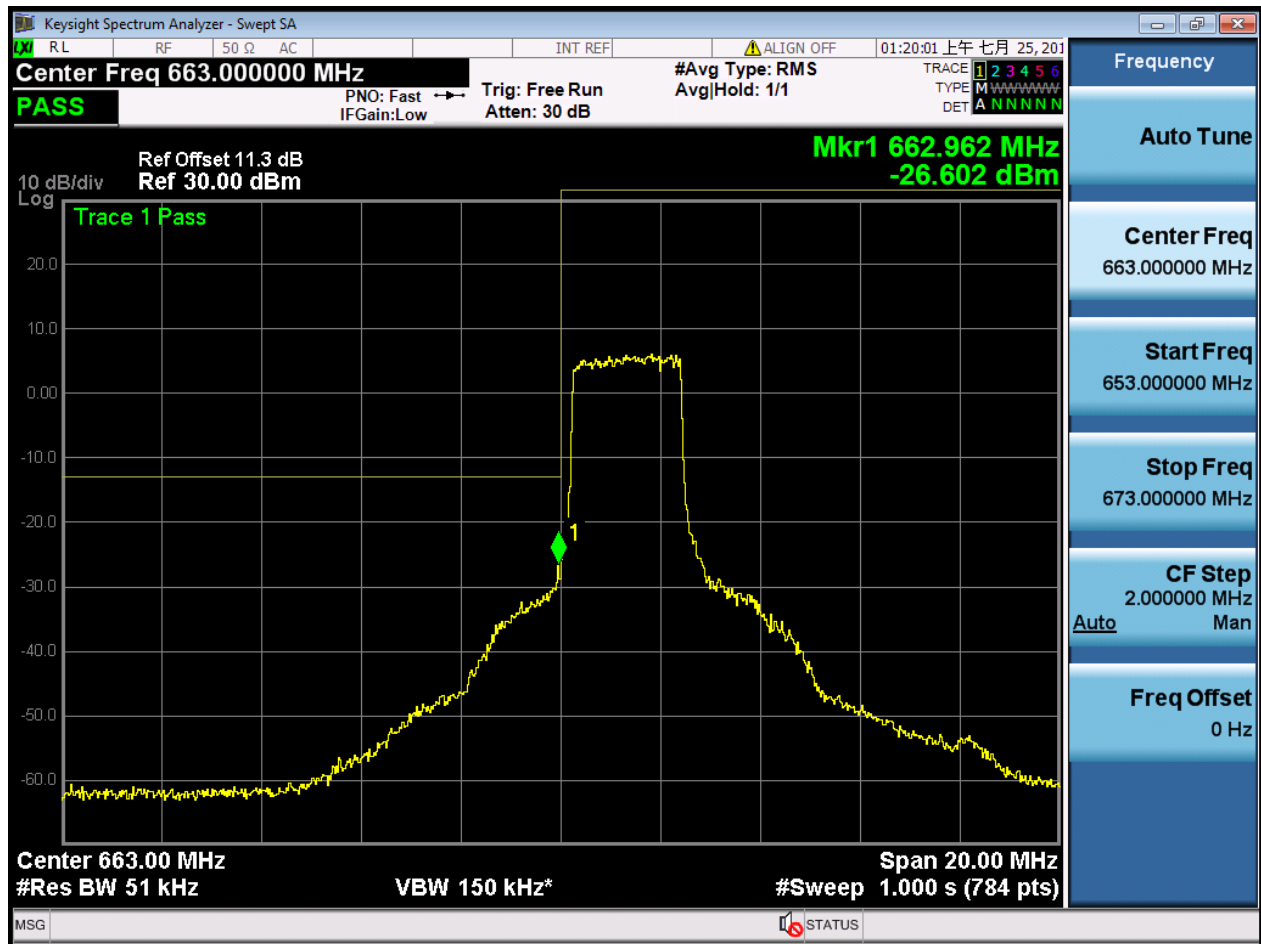
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	659.028	-47.36	Pass	784





1.11. LTE Band Edge(NTNV)(Subtest:11, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:LOW)

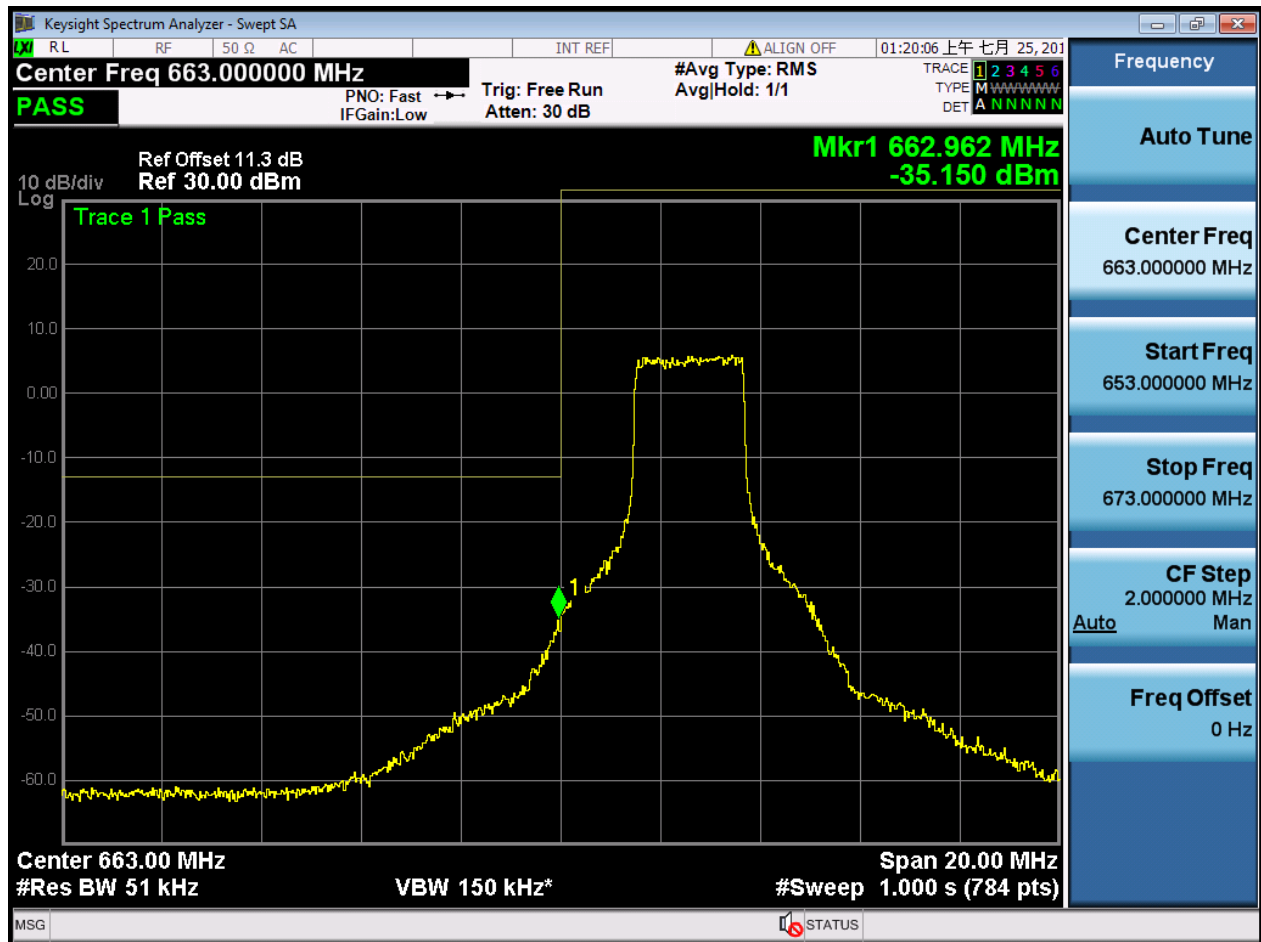
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.962	-26.6	Pass	784





1.12. LTE Band Edge(NTNV)(Subtest:12, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:MID)

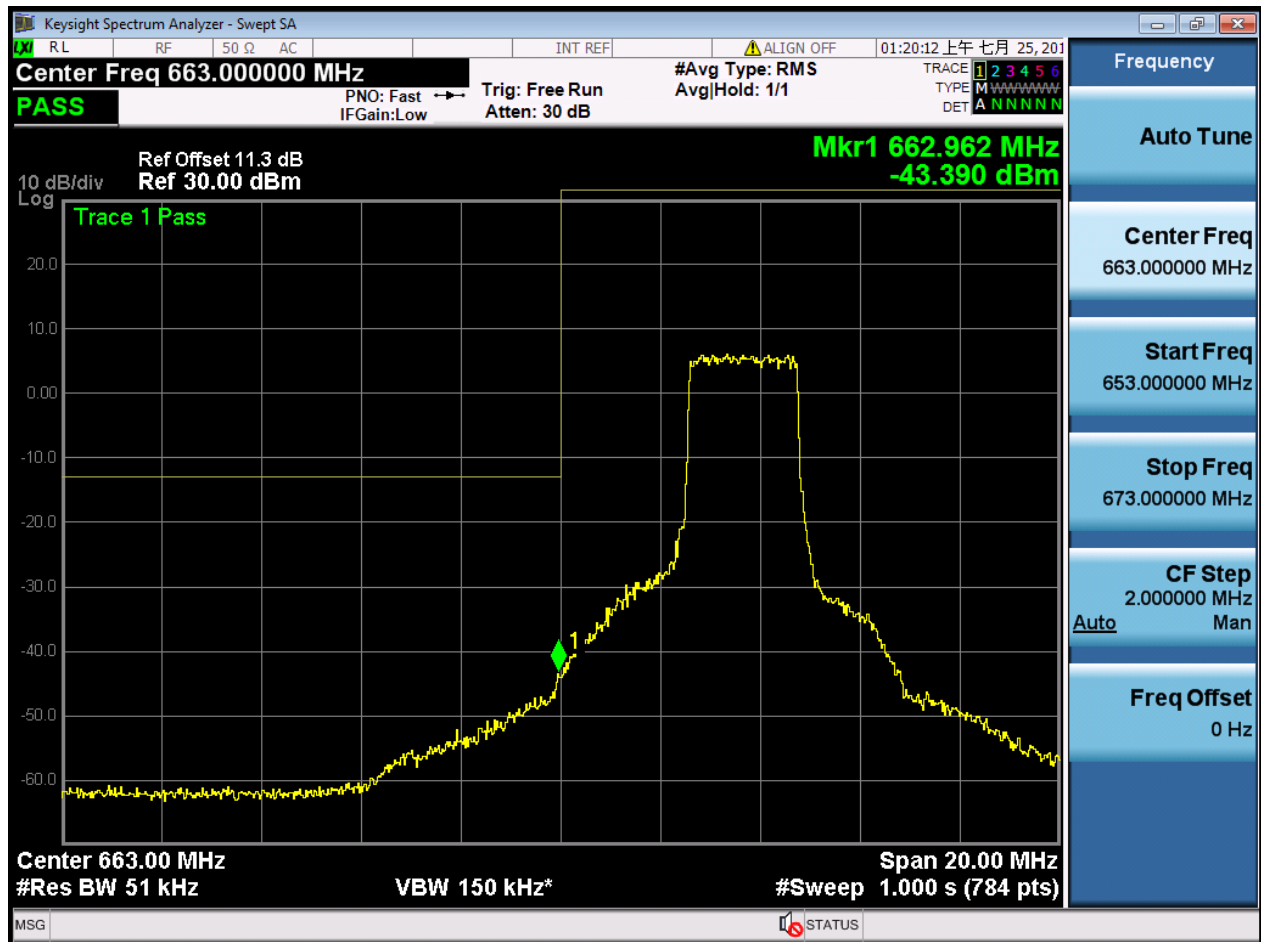
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.962	-35.15	Pass	784





1.13. LTE Band Edge(NTNV)(Subtest:13, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:HIGH)

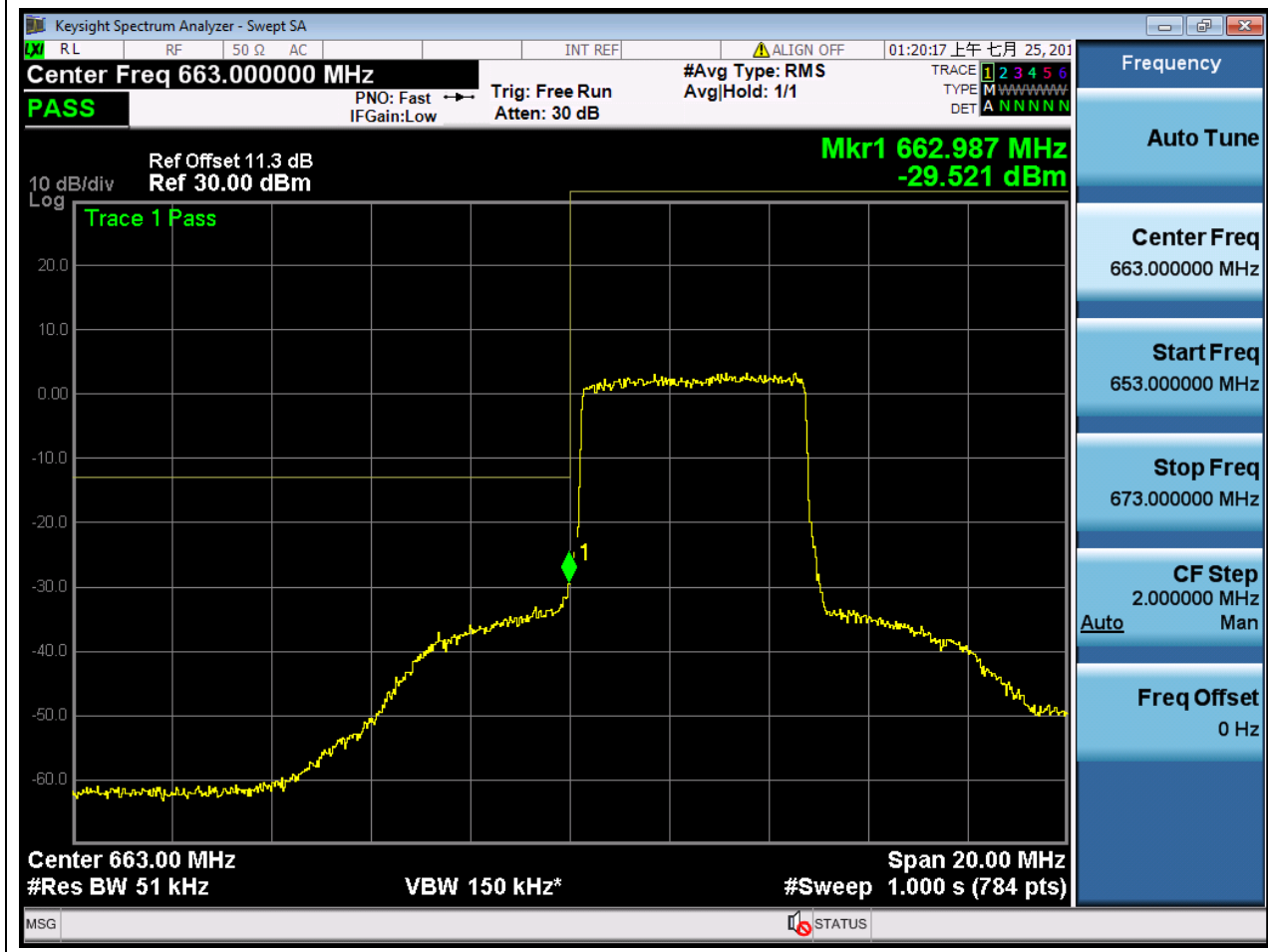
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.962	-43.39	Pass	784





1.14. LTE Band Edge(NTNV)(Subtest:14, Channel:133147, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)

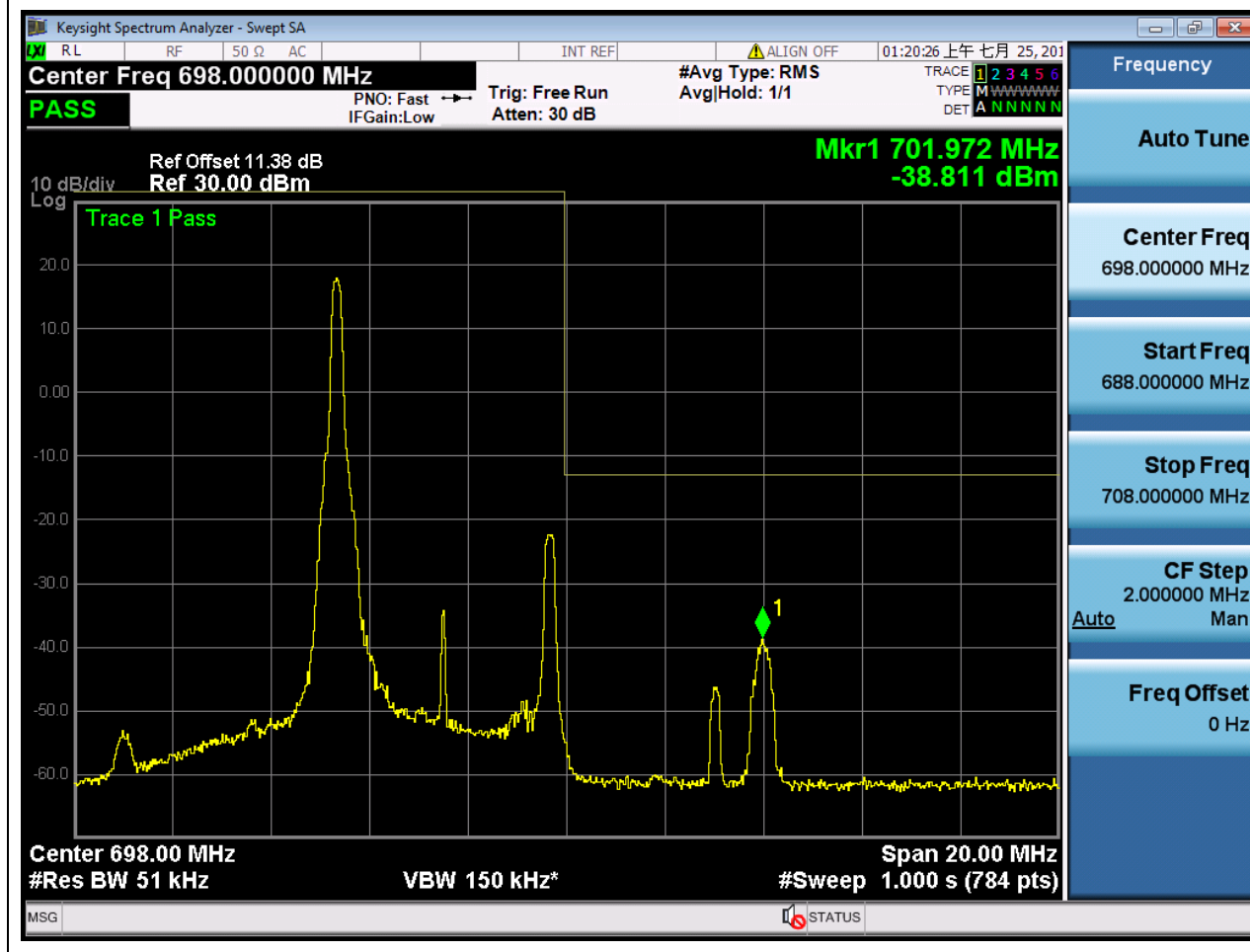
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	20	0.051	RMS	662.987	-29.52	Pass	784





1.15. LTE Band Edge(NTNV)(Subtest:15, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

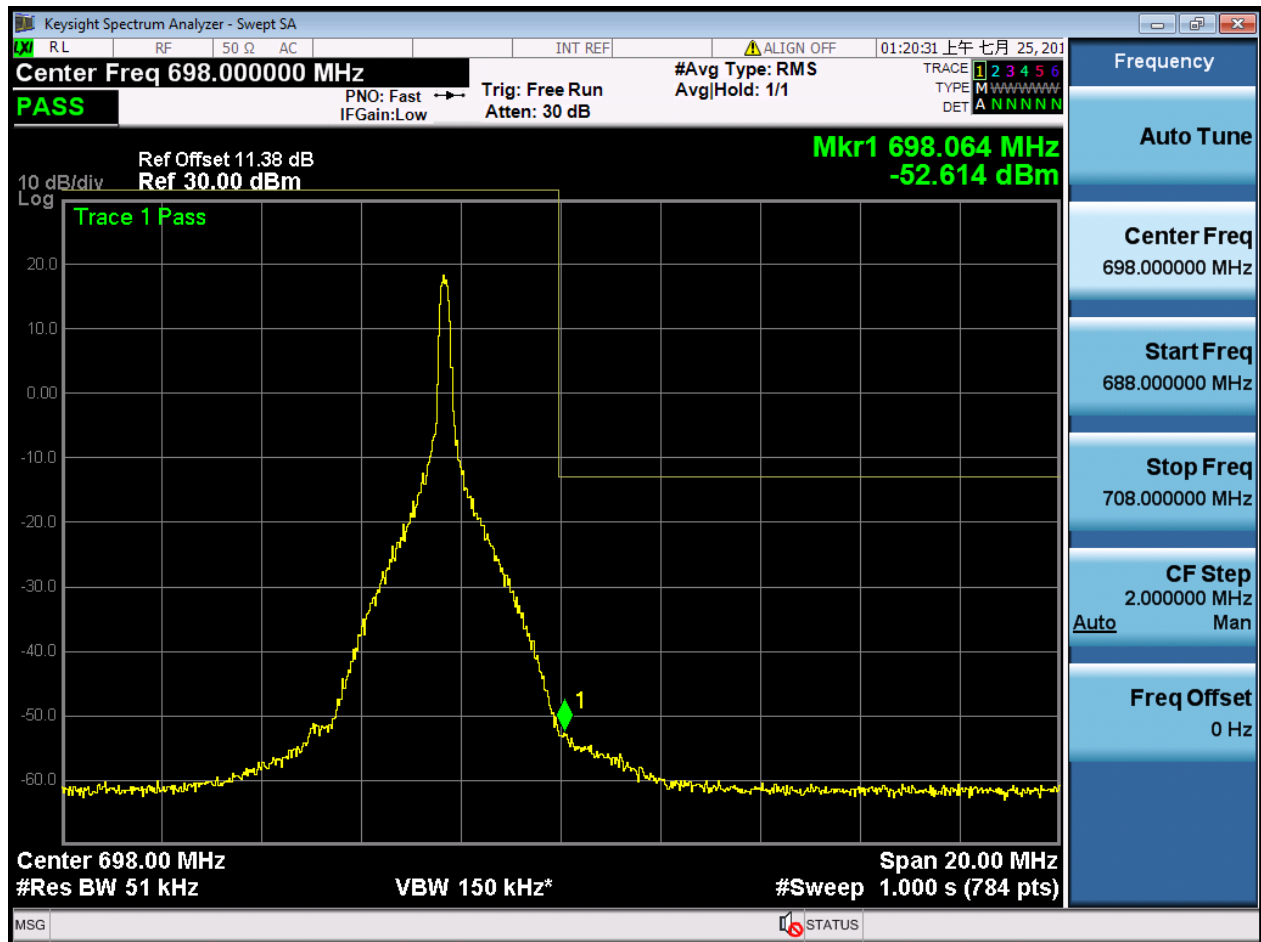
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	701.972	-38.81	Pass	784





1.16. LTE Band Edge(NTNV)(Subtest:16, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:MID)

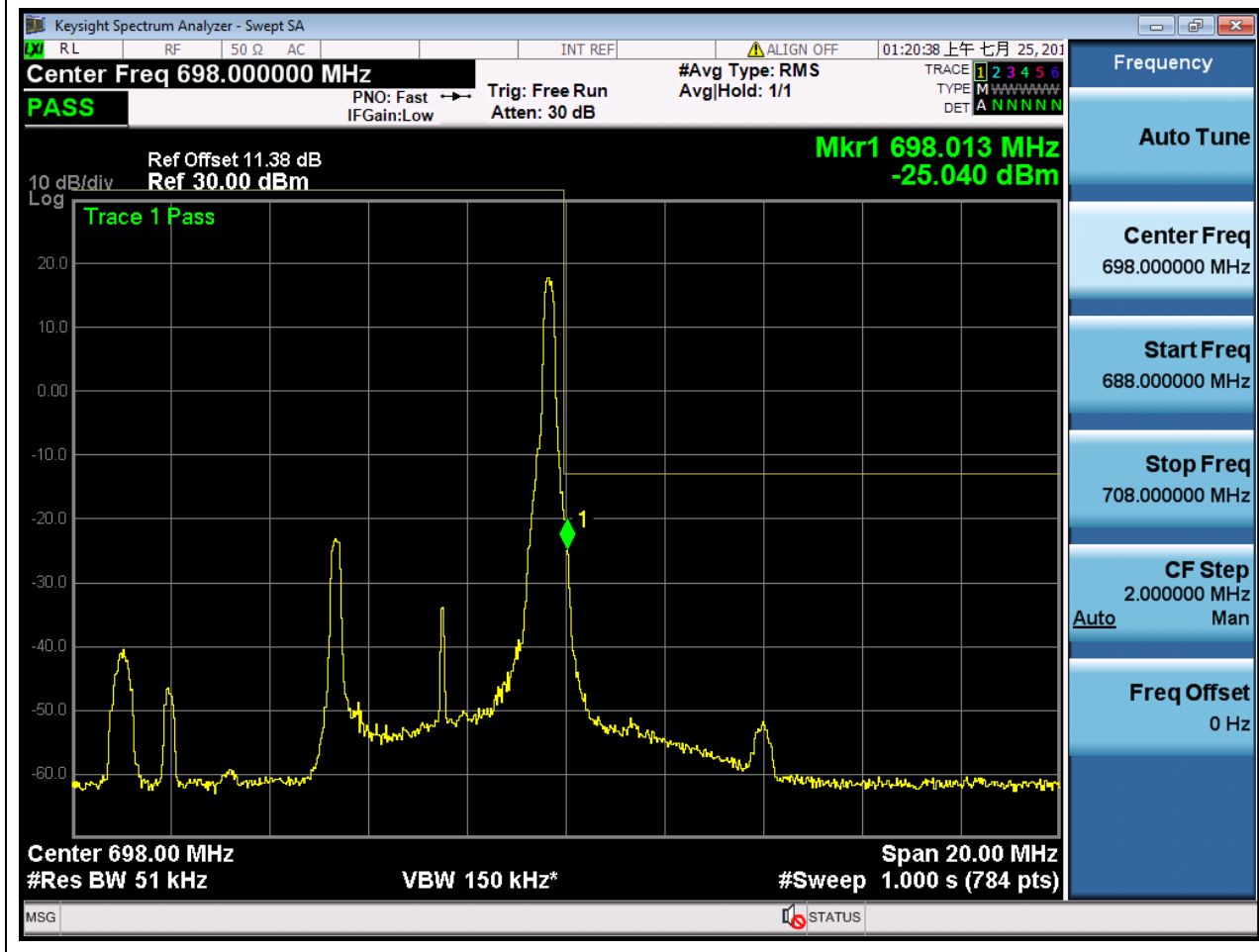
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.064	-52.61	Pass	784





1.17. LTE Band Edge(NTNV)(Subtest:17, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

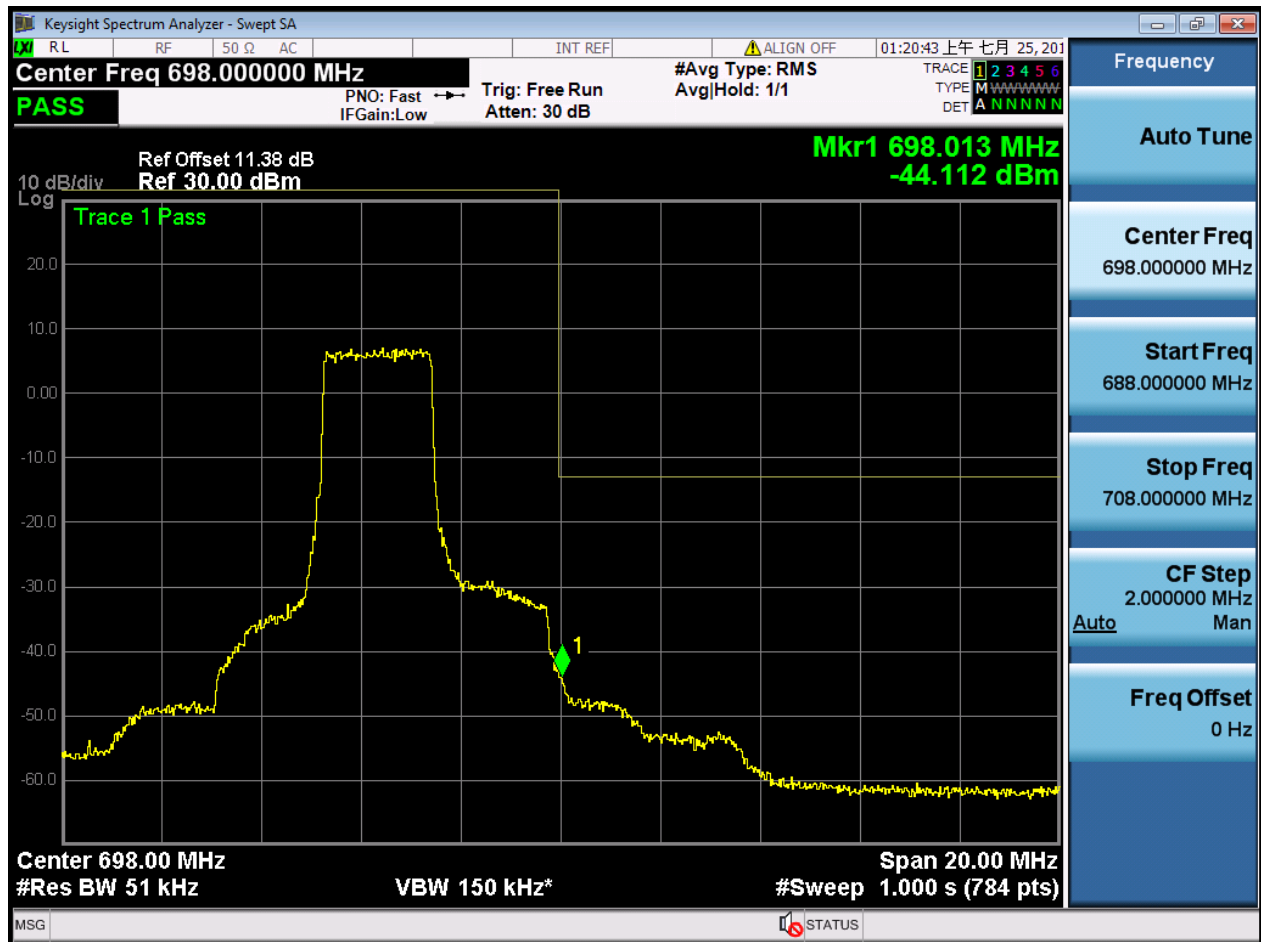
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-25.04	Pass	784





1.18. LTE Band Edge(NTNV)(Subtest:18, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:LOW)

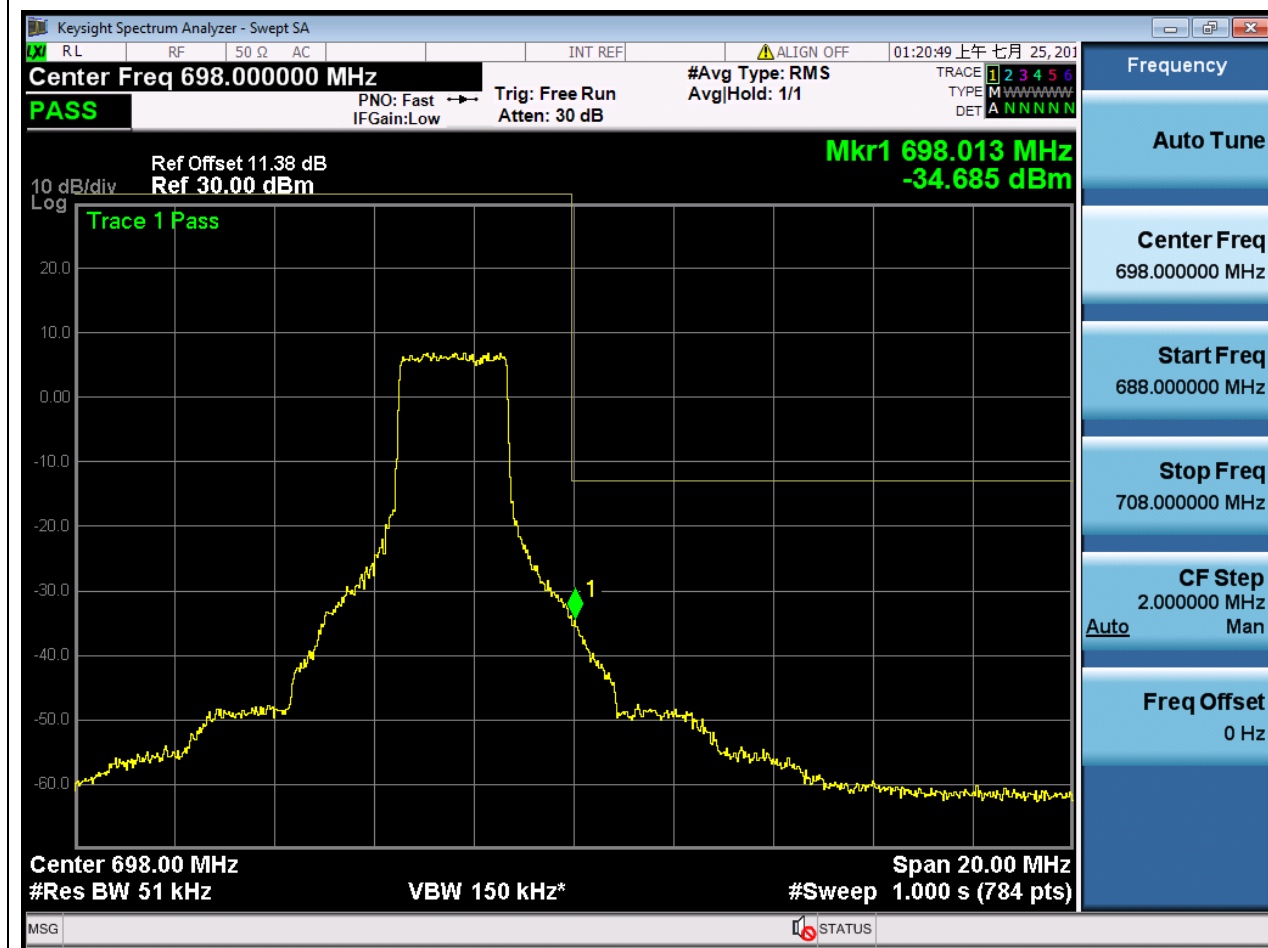
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-44.11	Pass	784





1.19. LTE Band Edge(NTNV)(Subtest:19, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:MID)

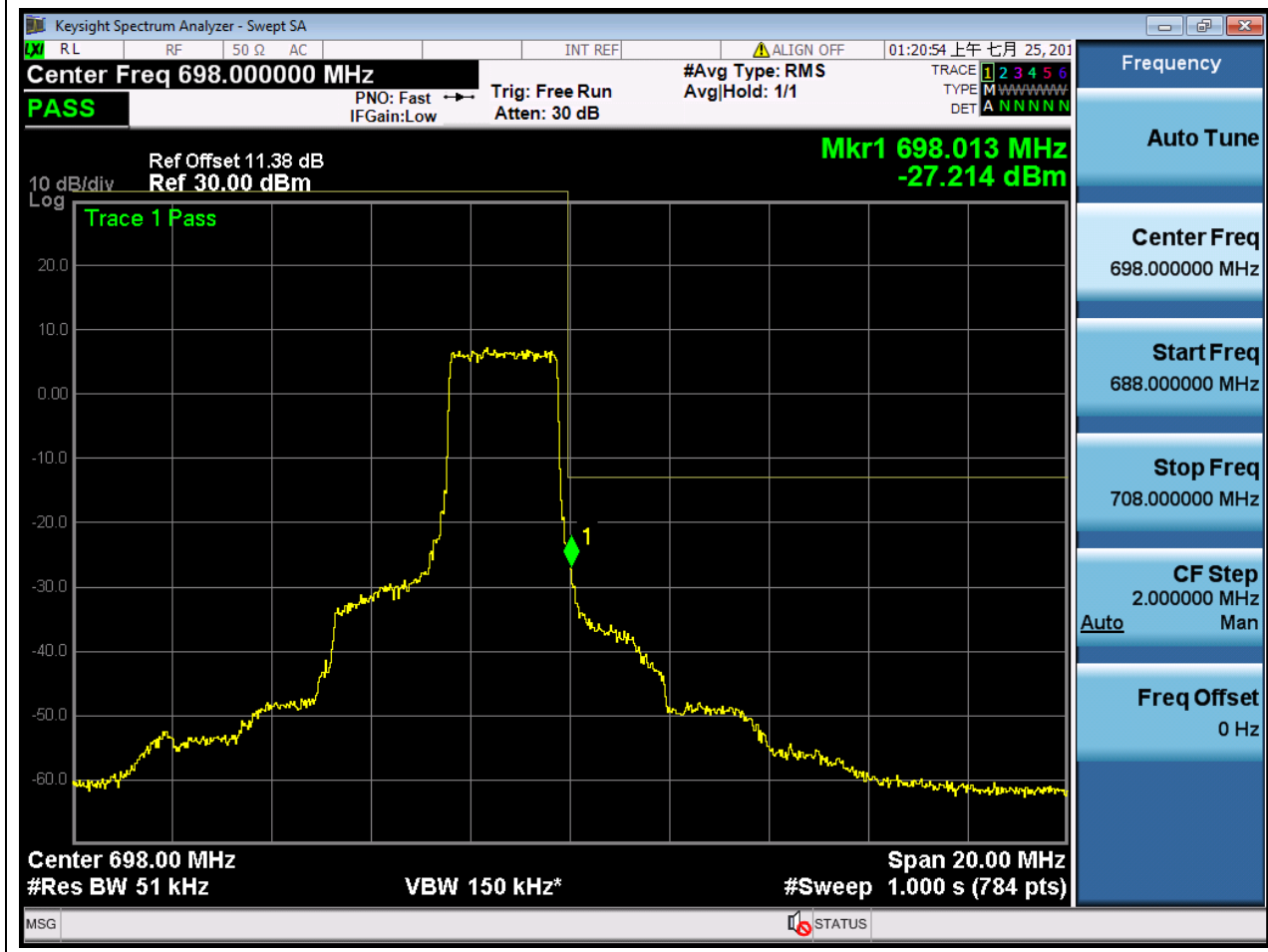
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-34.69	Pass	784





1.20. LTE Band Edge(NTNV)(Subtest:20, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-27.21	Pass	784





1.21. LTE Band Edge(NTNV)(Subtest:21, Channel:133447, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)

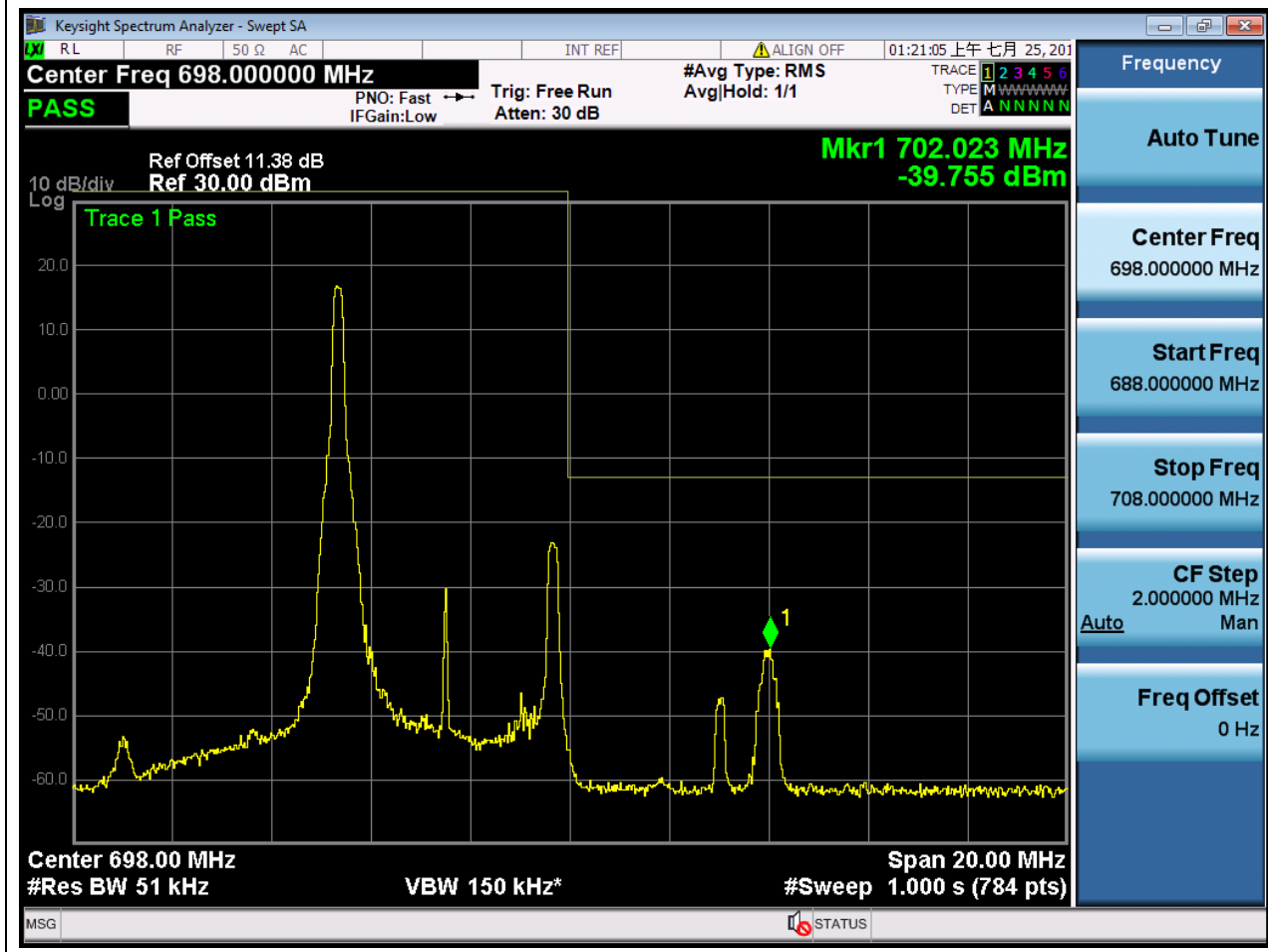
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-29.16	Pass	784





1.22. LTE Band Edge(NTNV)(Subtest:22, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:LOW)

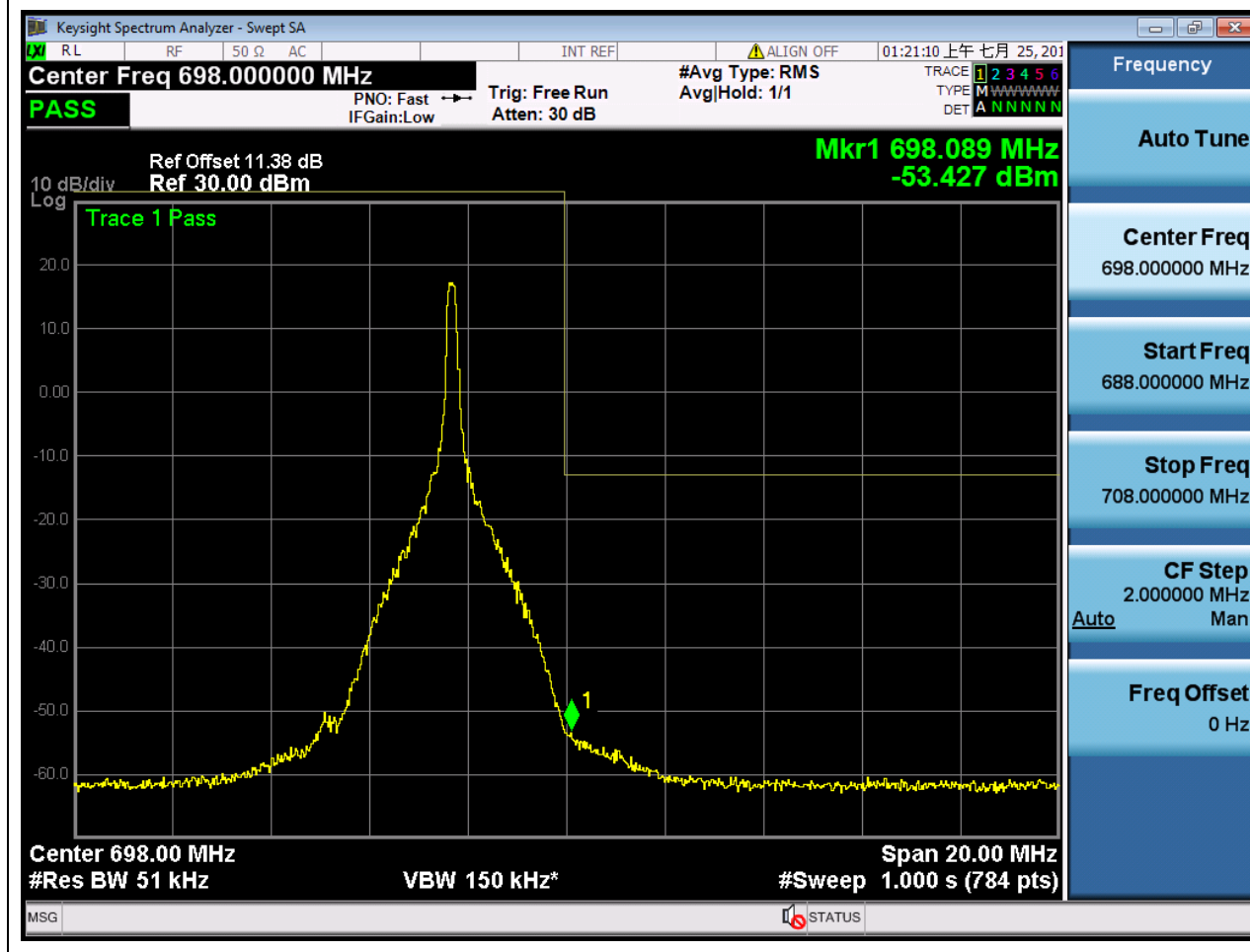
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	702.023	-39.76	Pass	784





1.23. LTE Band Edge(NTNV)(Subtest:23, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:MID)

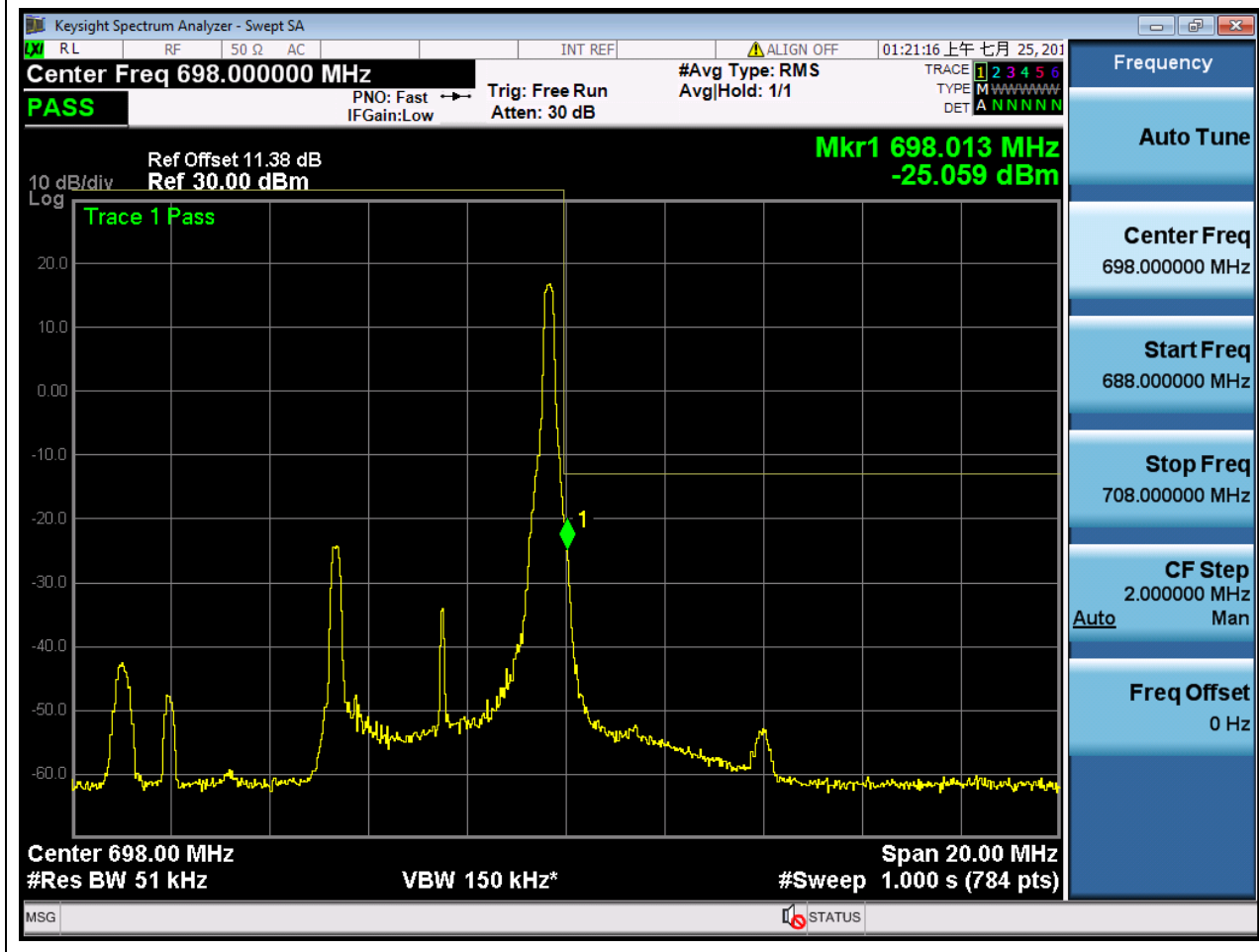
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.089	-53.43	Pass	784





1.24. LTE Band Edge(NTNV)(Subtest:24, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:HIGH)

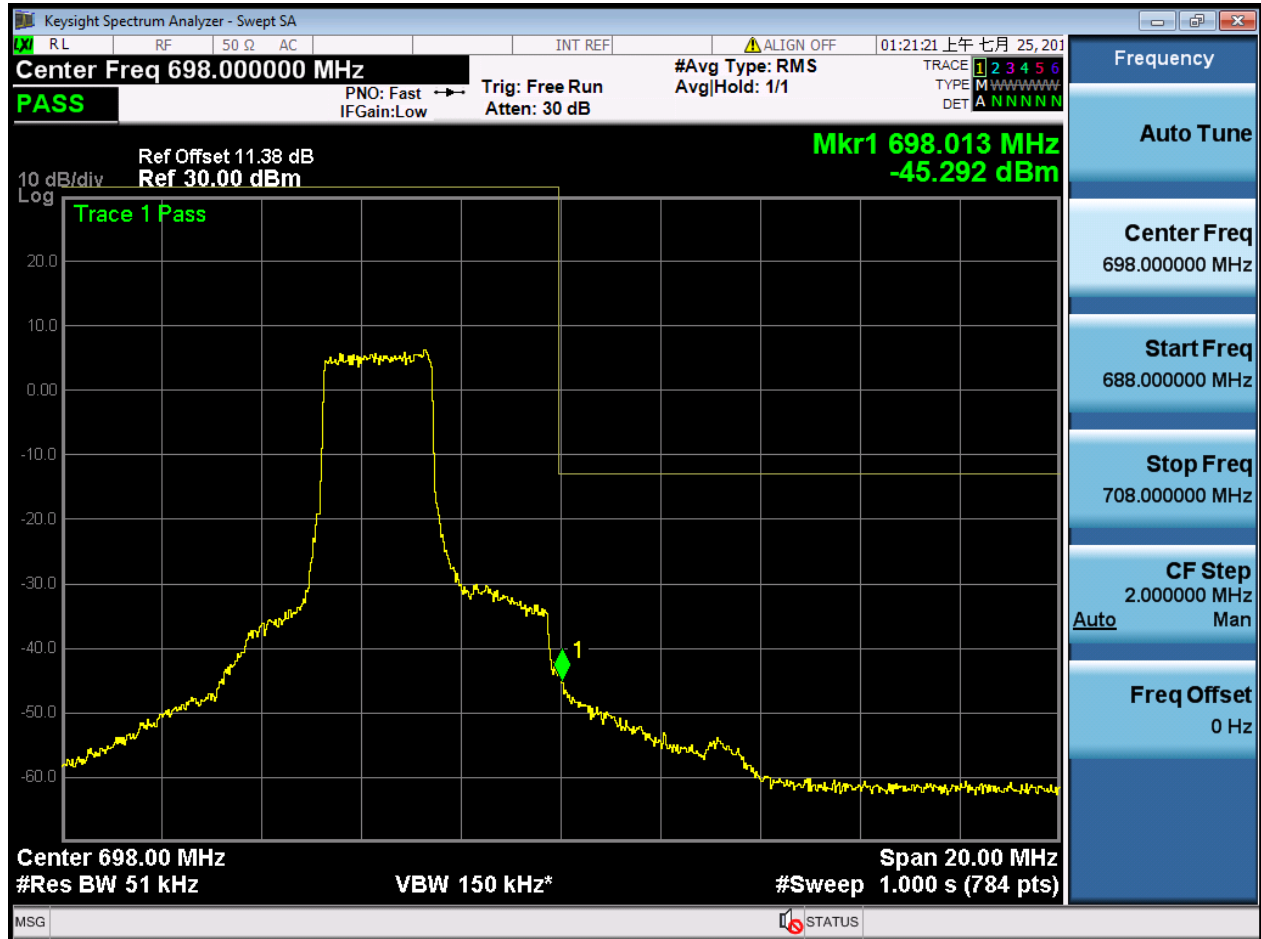
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-25.06	Pass	784





1.25. LTE Band Edge(NTNV)(Subtest:25, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:LOW)

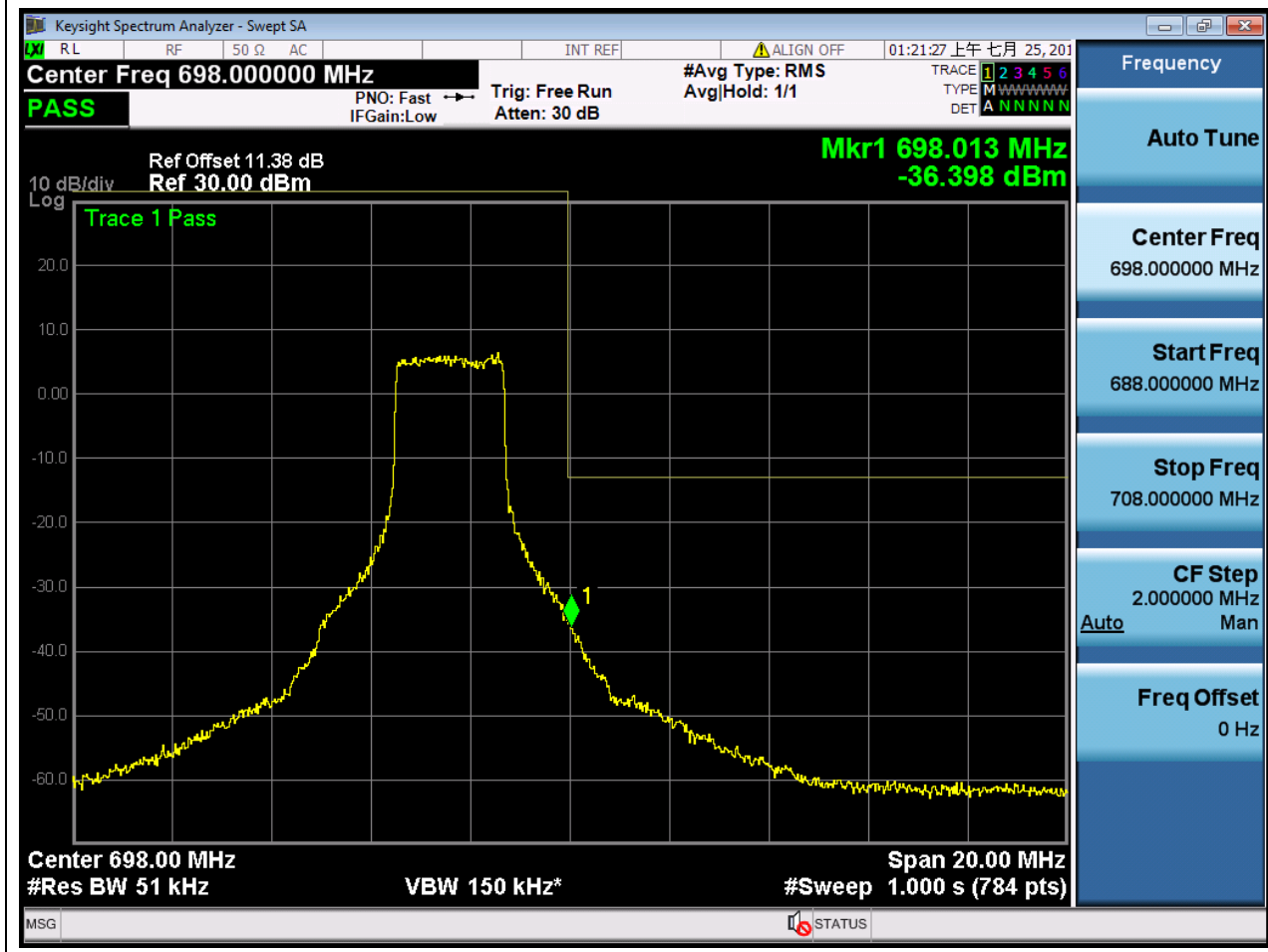
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-45.29	Pass	784





1.26. LTE Band Edge(NTNV)(Subtest:26, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:MID)

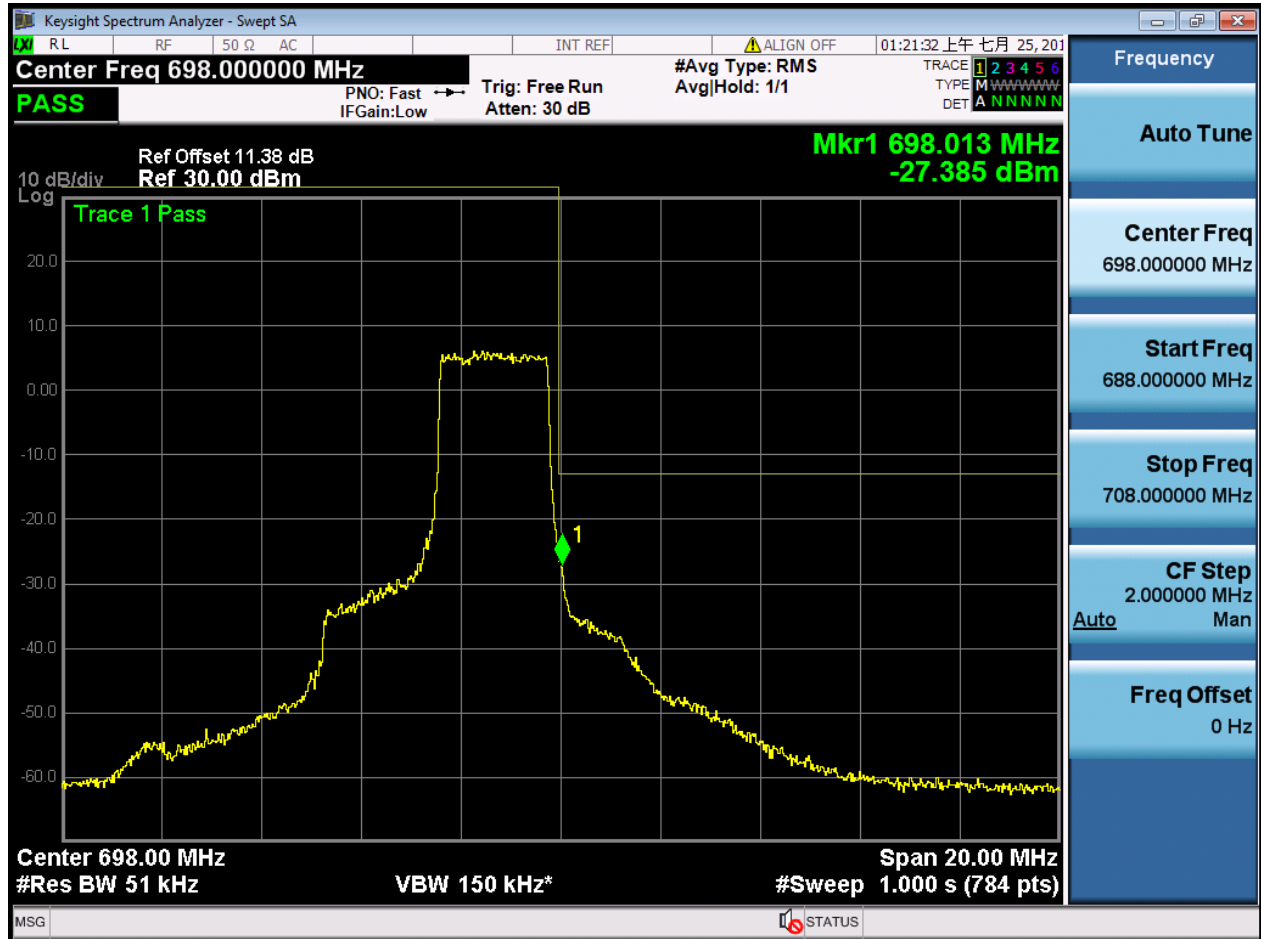
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-36.4	Pass	784





1.27. LTE Band Edge(NTNV)(Subtest:27, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 12, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-27.39	Pass	784





1.28. LTE Band Edge(NTNV)(Subtest:28, Channel:133447, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)

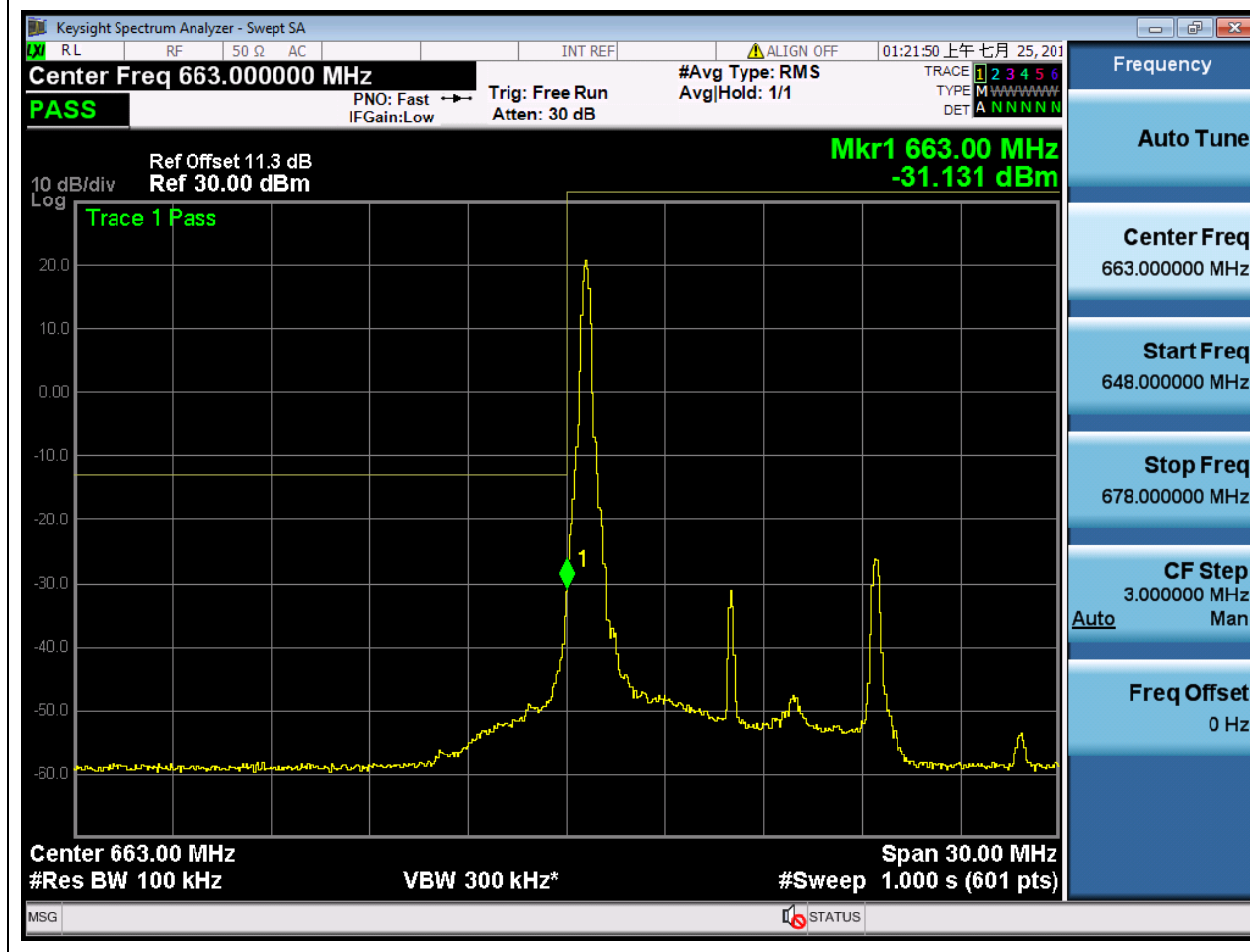
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	20	0.051	RMS	698.013	-32.59	Pass	784





1.29. LTE Band Edge(NTNV)(Subtest:29, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

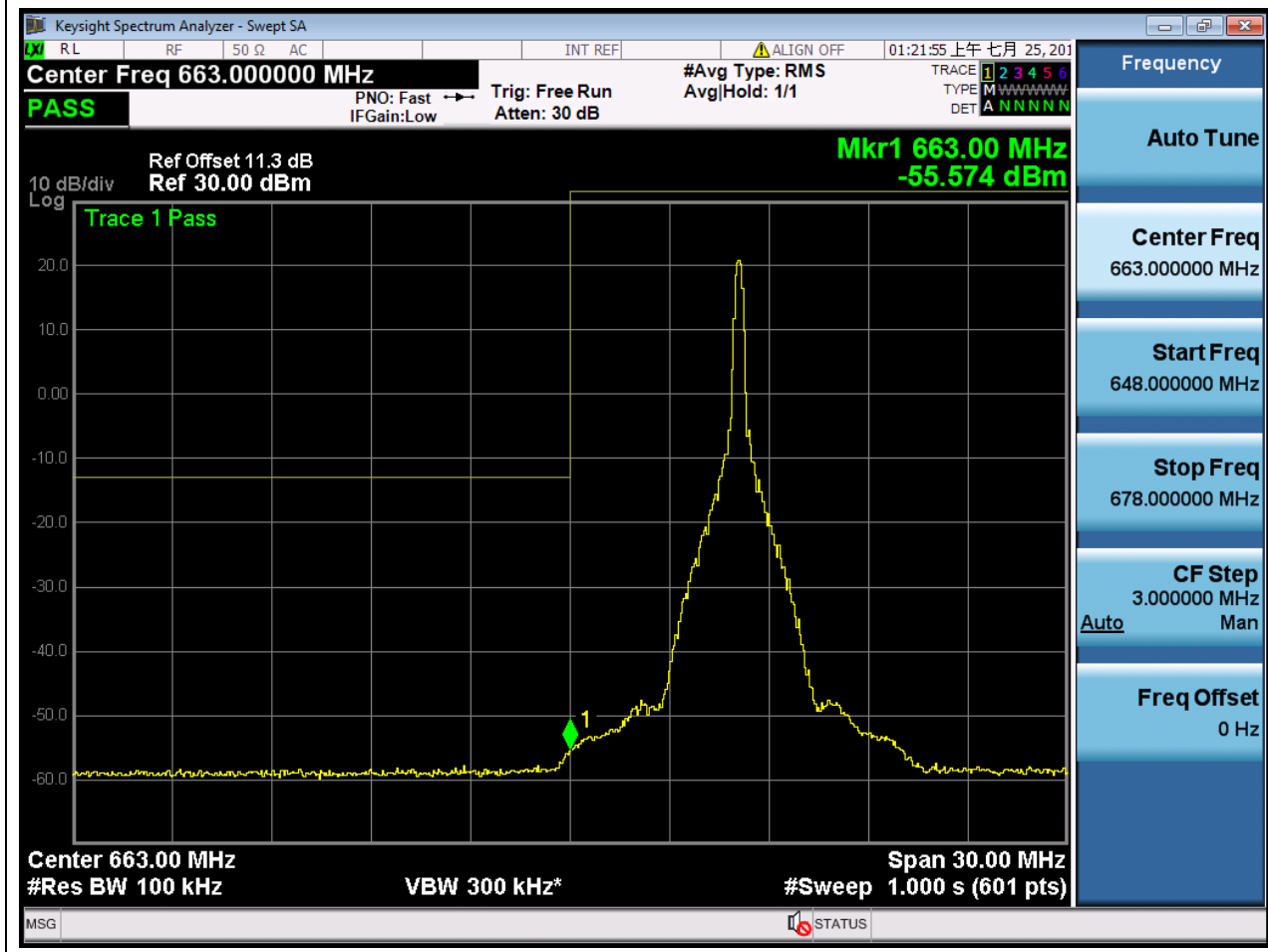
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-31.13	Pass	601





1.30. LTE Band Edge(NTNV)(Subtest:30, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:MID)

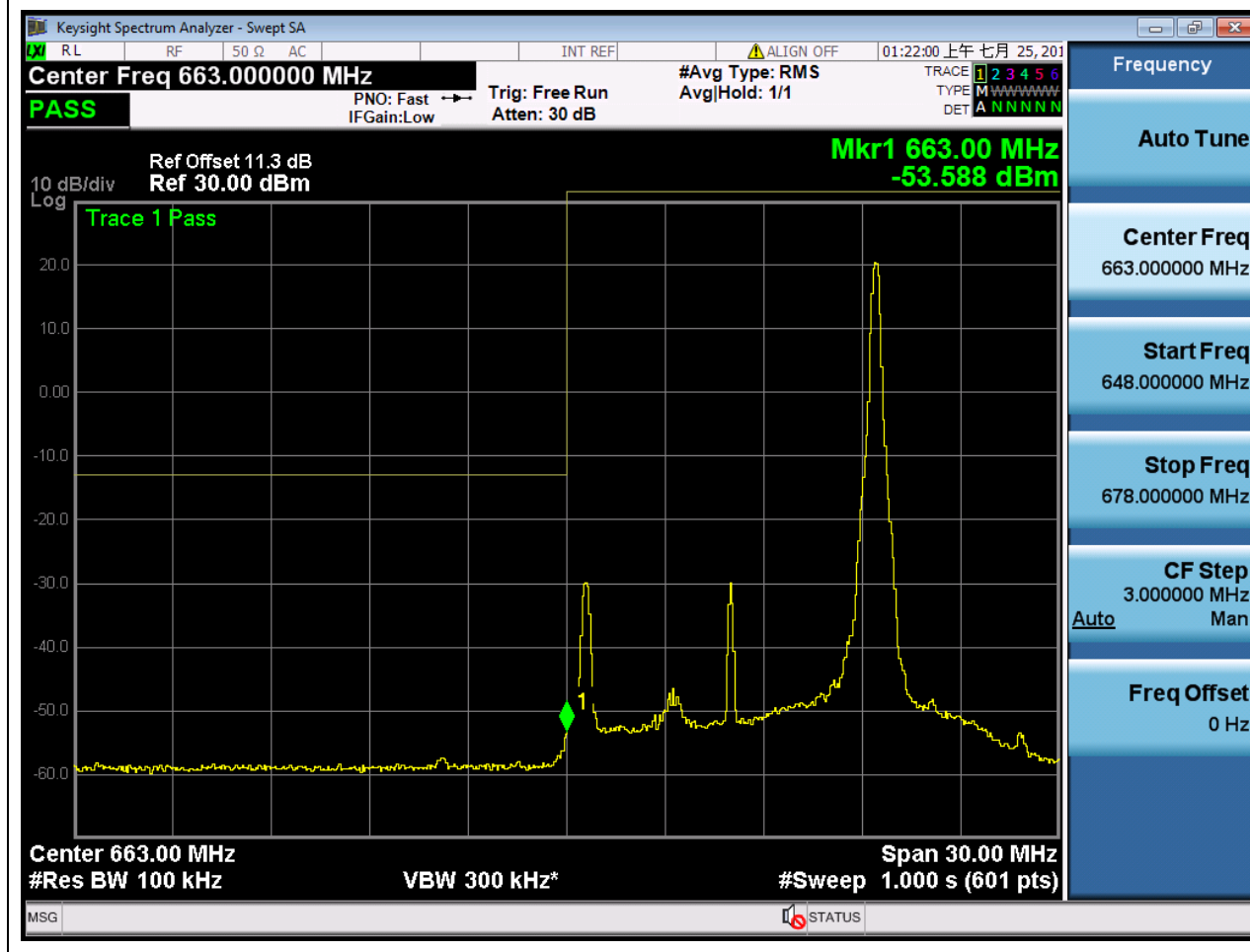
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-55.57	Pass	601





1.31. LTE Band Edge(NTNV)(Subtest:31, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

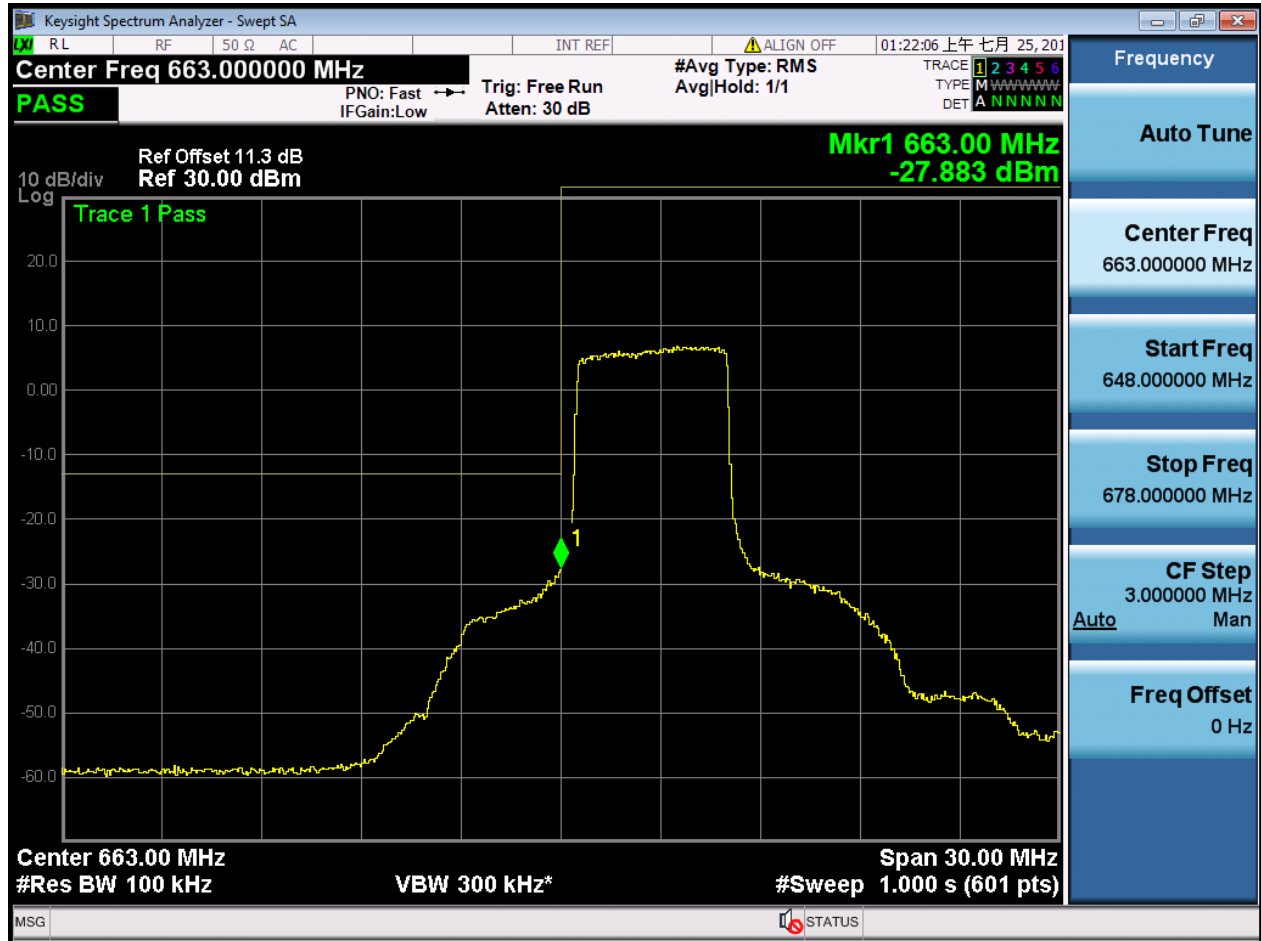
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-53.59	Pass	601





1.32. LTE Band Edge(NTNV)(Subtest:32, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:LOW)

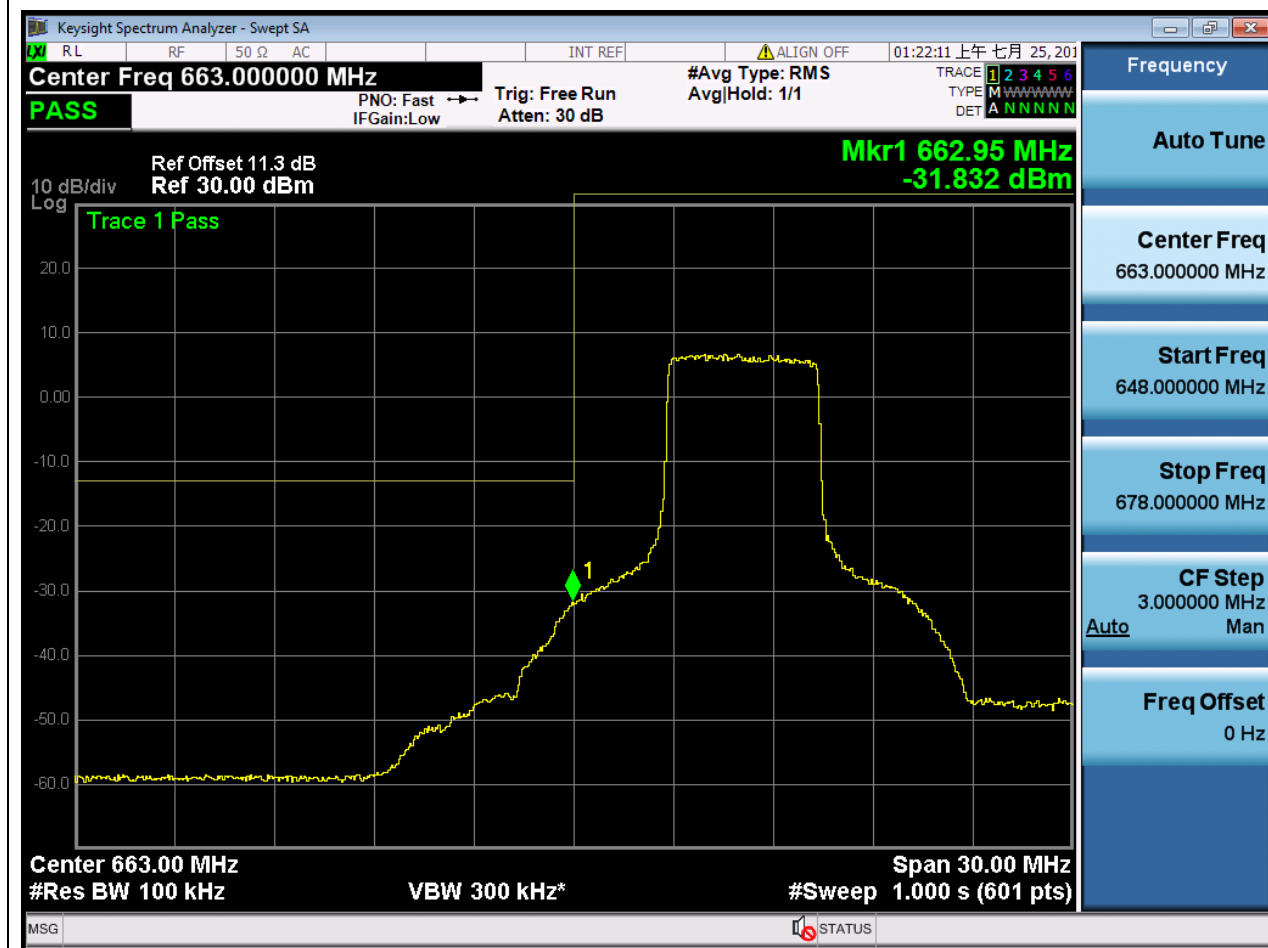
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-27.88	Pass	601





1.33. LTE Band Edge(NTNV)(Subtest:33, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:MID)

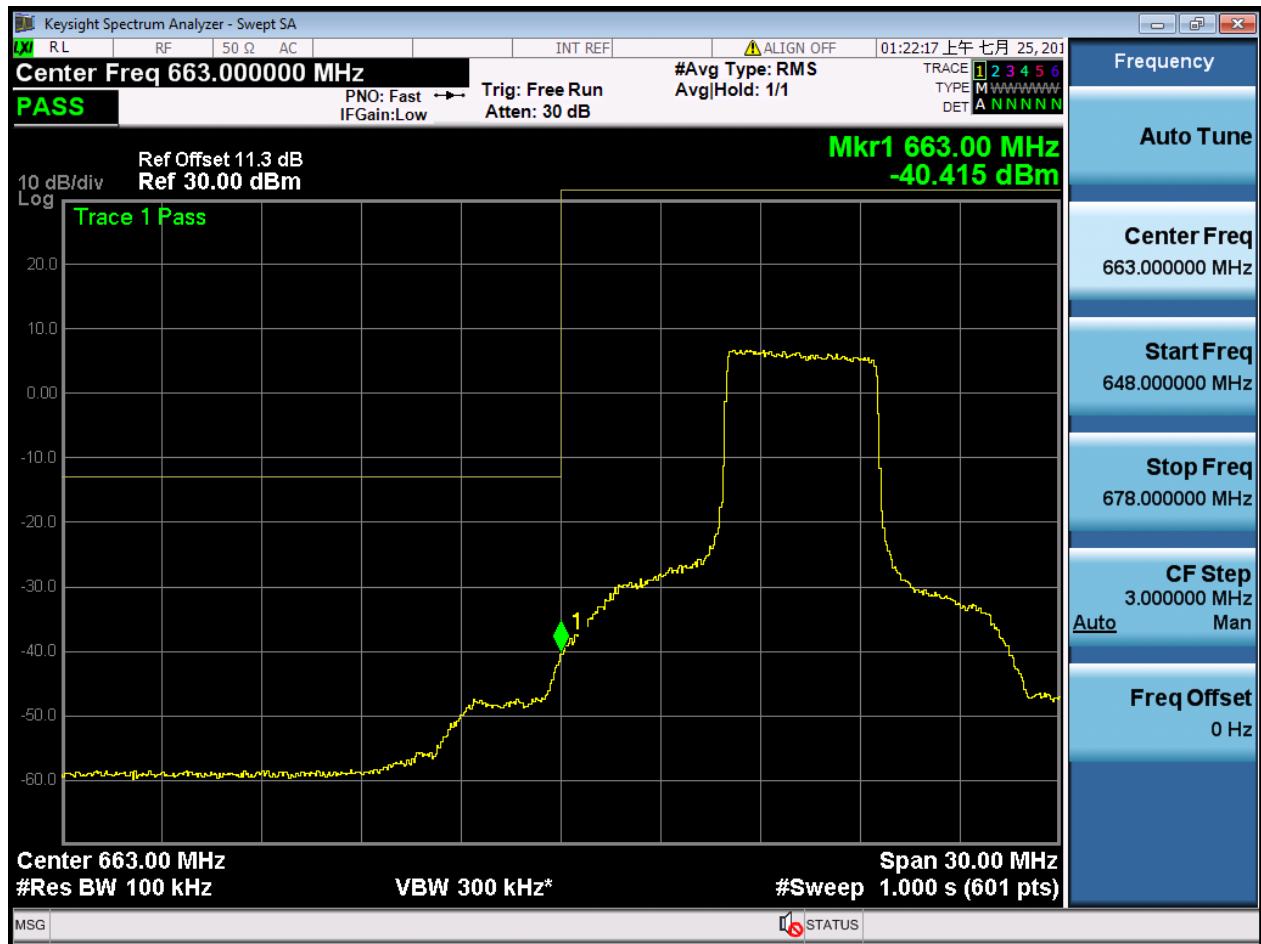
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	662.95	-31.83	Pass	601





1.34. LTE Band Edge(NTNV)(Subtest:34, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:HIGH)

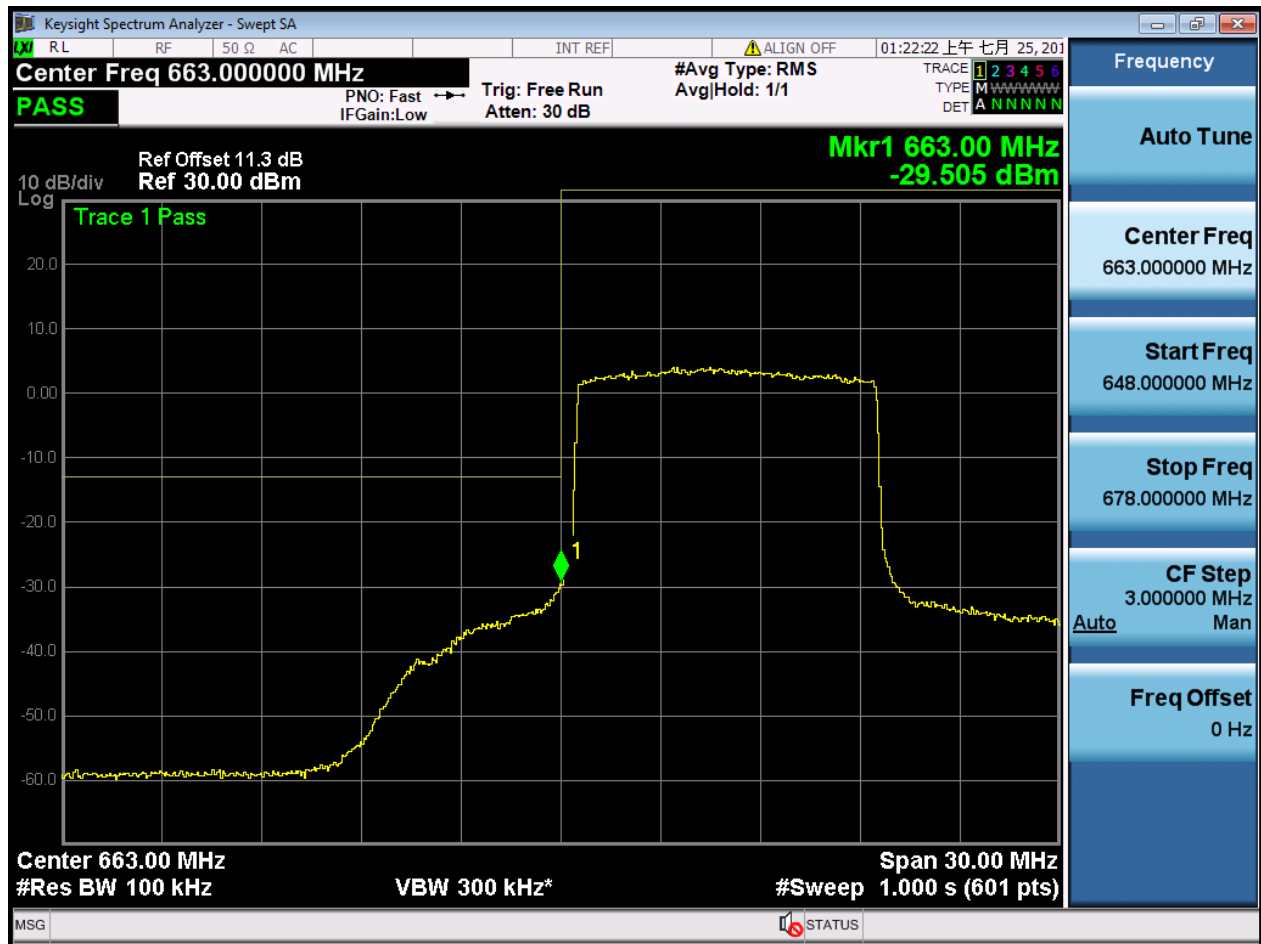
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-40.42	Pass	601





1.35. LTE Band Edge(NTNV)(Subtest:35, Channel:133172, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)

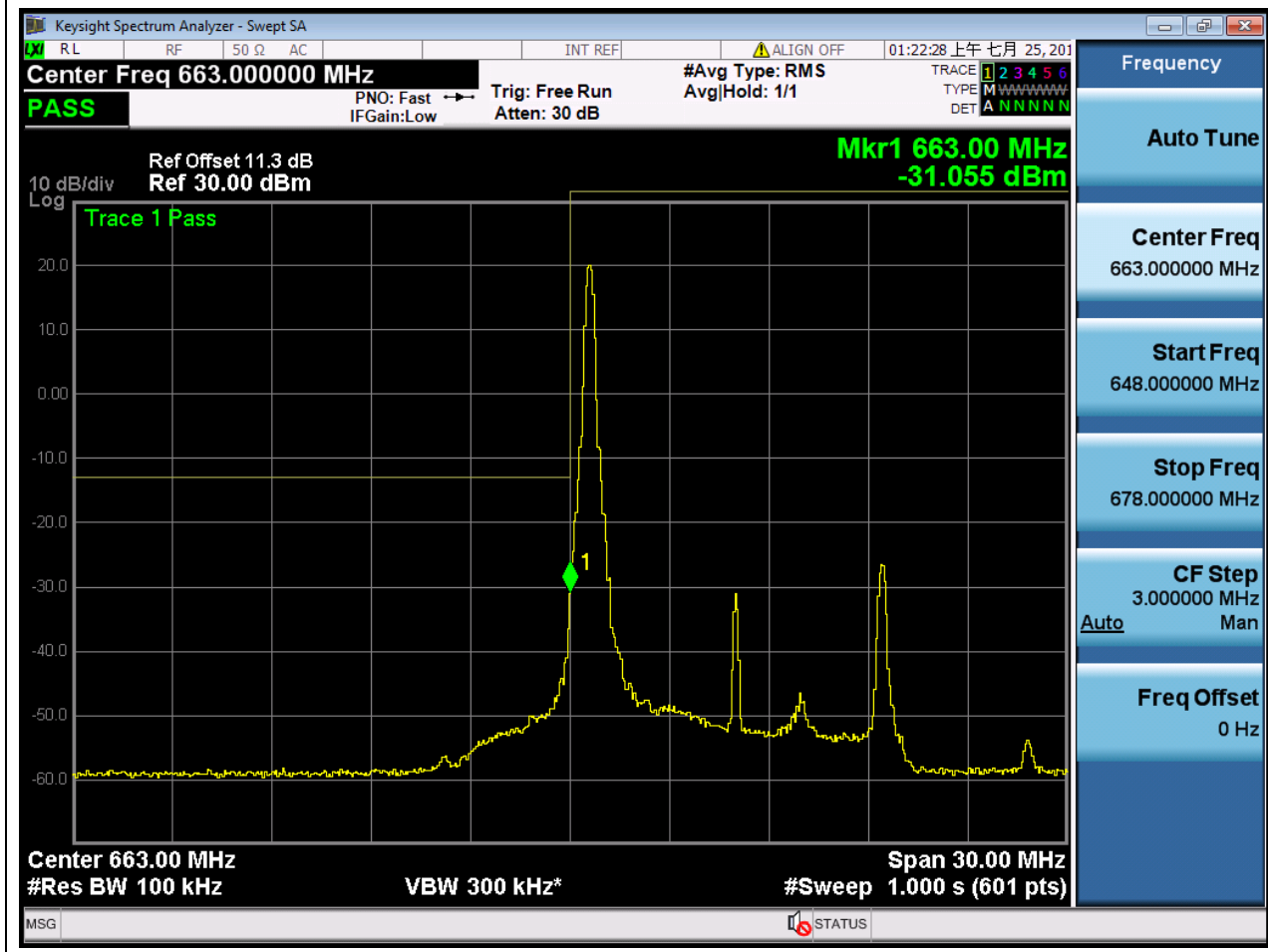
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-29.5	Pass	601





1.36. LTE Band Edge(NTNV)(Subtest:36, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

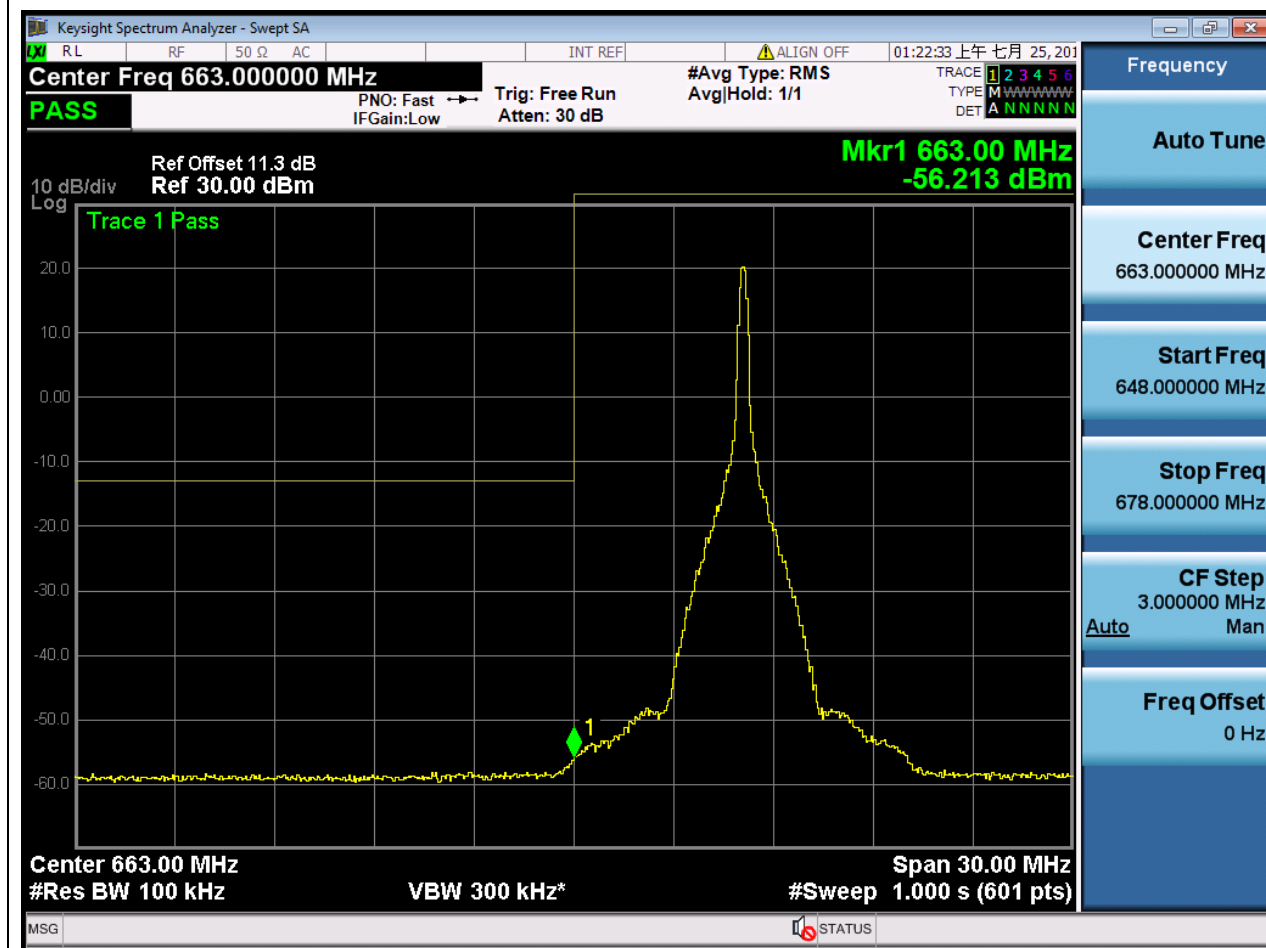
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-31.06	Pass	601





1.37. LTE Band Edge(NTNV)(Subtest:37, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:MID)

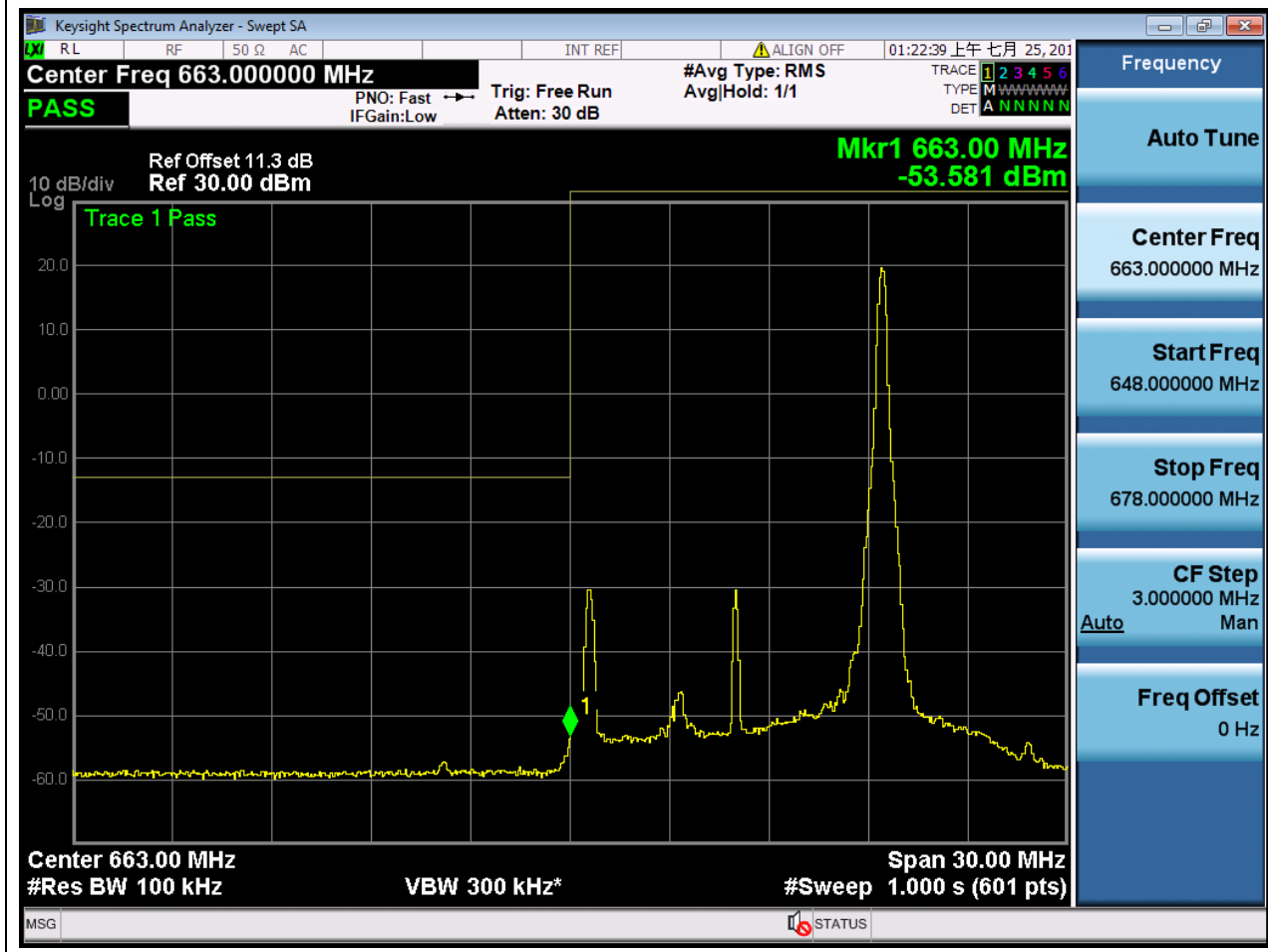
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-56.21	Pass	601





1.38. LTE Band Edge(NTNV)(Subtest:38, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:HIGH)

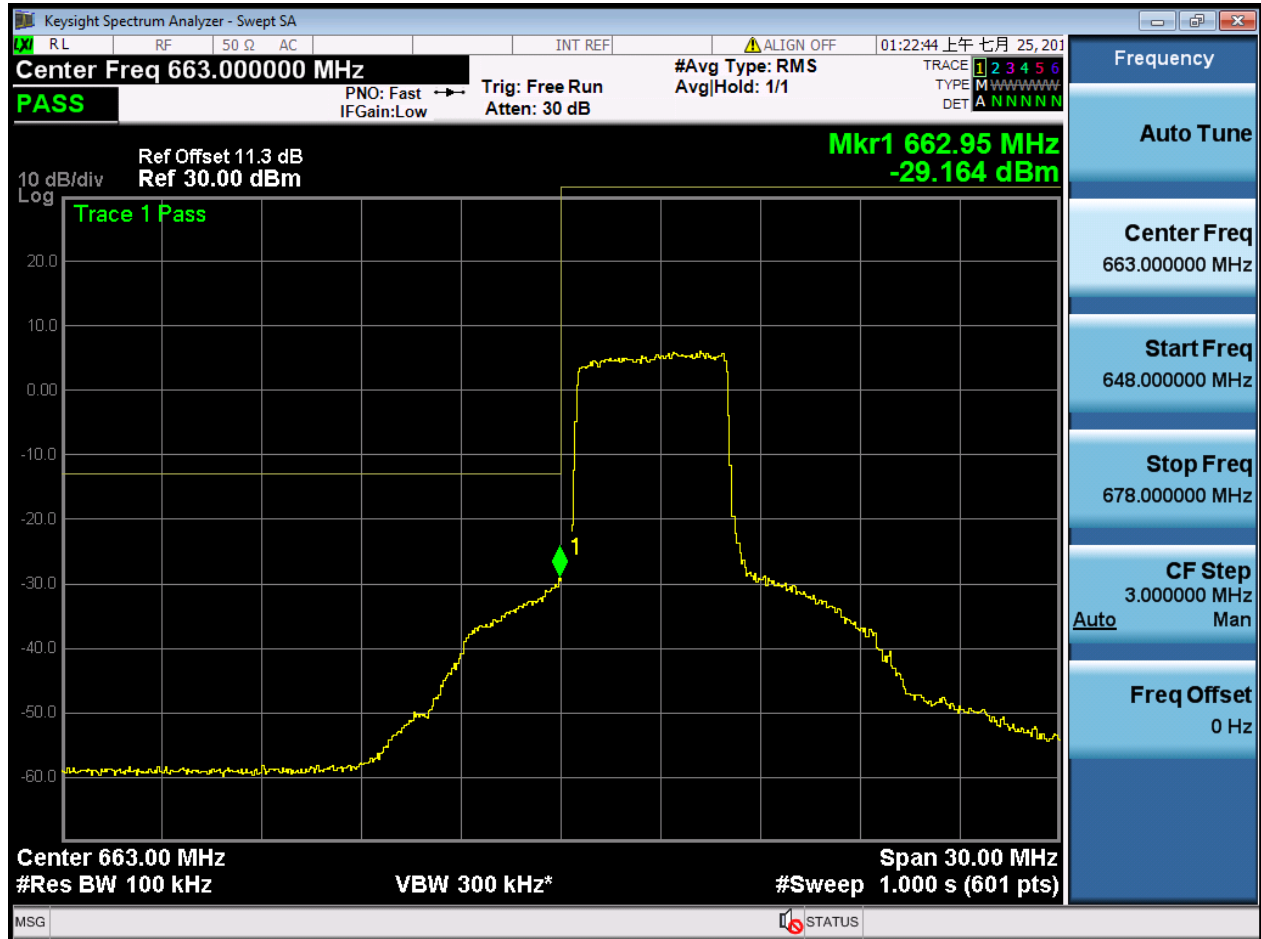
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-53.58	Pass	601





1.39. LTE Band Edge(NTNV)(Subtest:39, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:LOW)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	662.95	-29.16	Pass	601





1.40. LTE Band Edge(NTNV)(Subtest:40, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:MID)

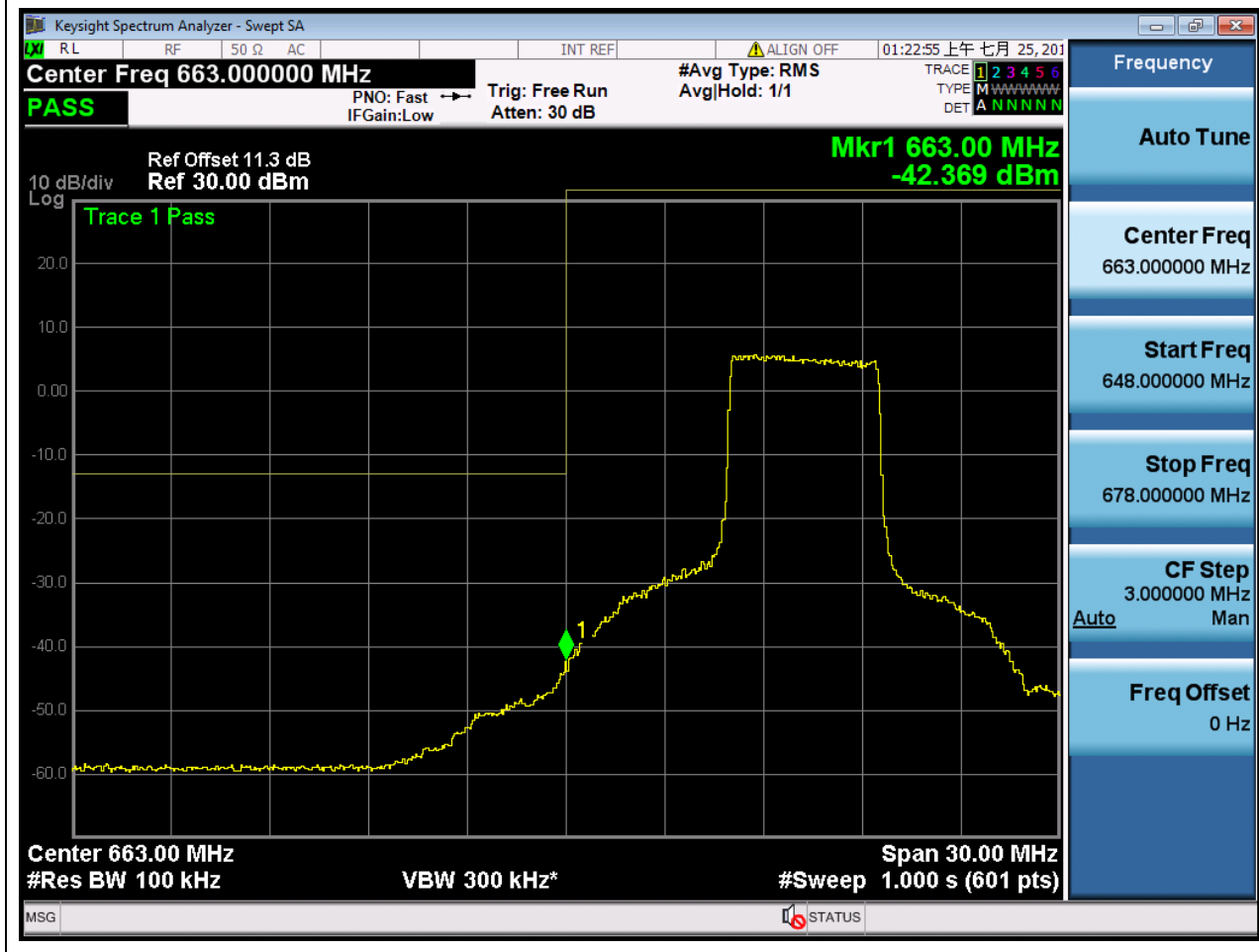
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	662.95	-34.33	Pass	601





1.41. LTE Band Edge(NTNV)(Subtest:41, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:HIGH)

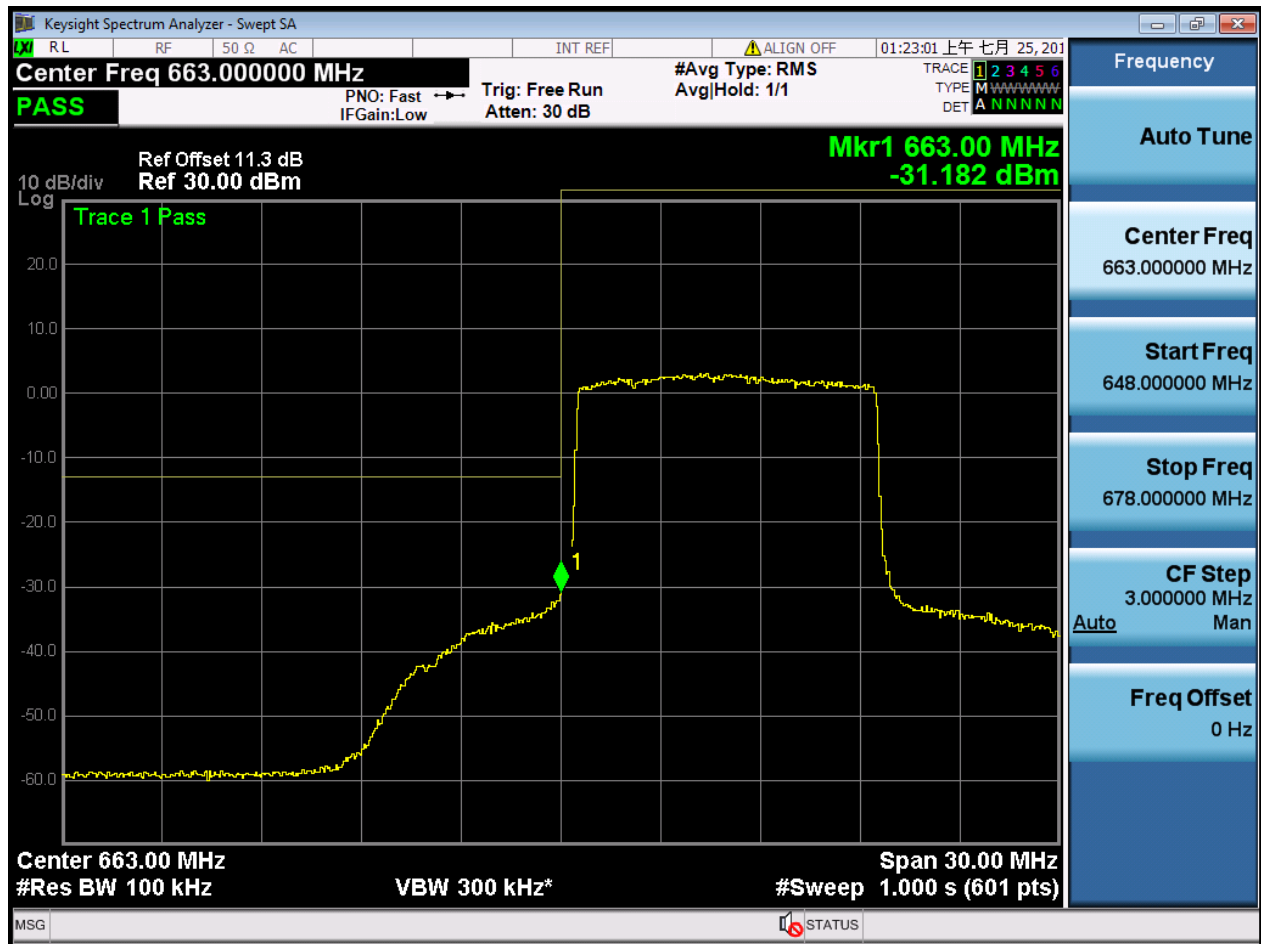
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-42.37	Pass	601





1.42. LTE Band Edge(NTNV)(Subtest:42, Channel:133172, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

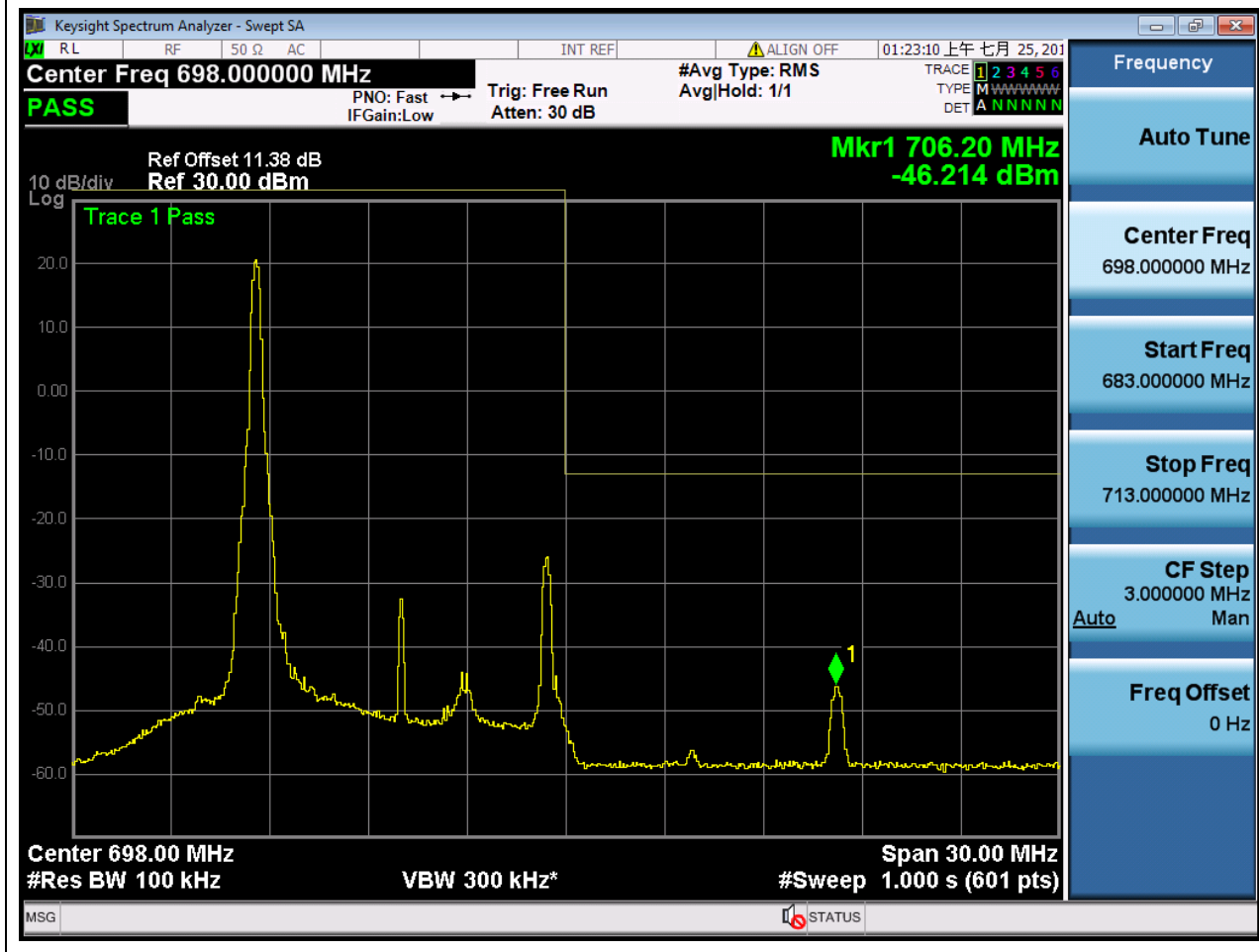
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	30	0.1	RMS	663	-31.18	Pass	601





1.43. LTE Band Edge(NTNV)(Subtest:43, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

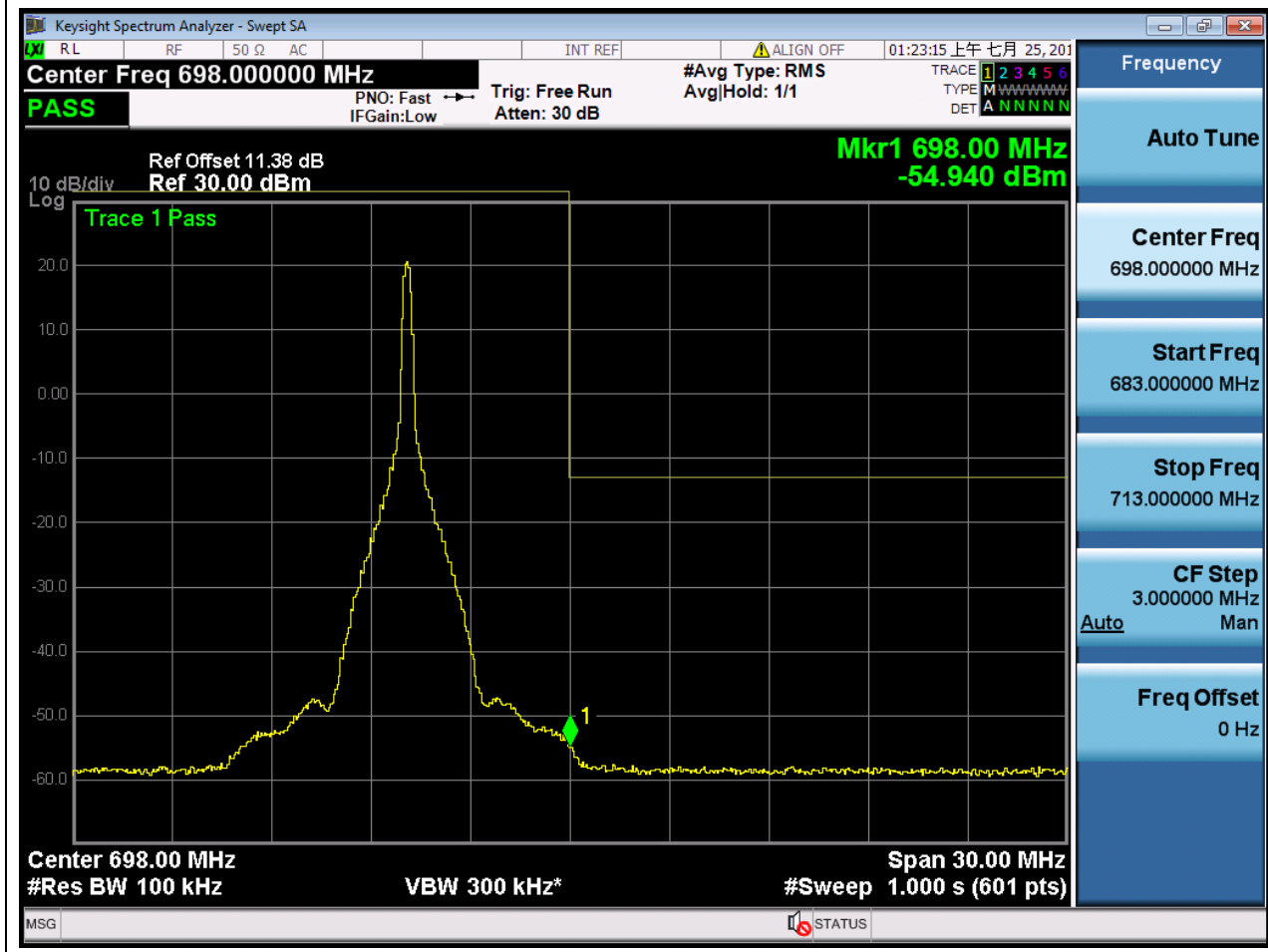
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	706.2	-46.21	Pass	601





1.44. LTE Band Edge(NTNV)(Subtest:44, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:MID)

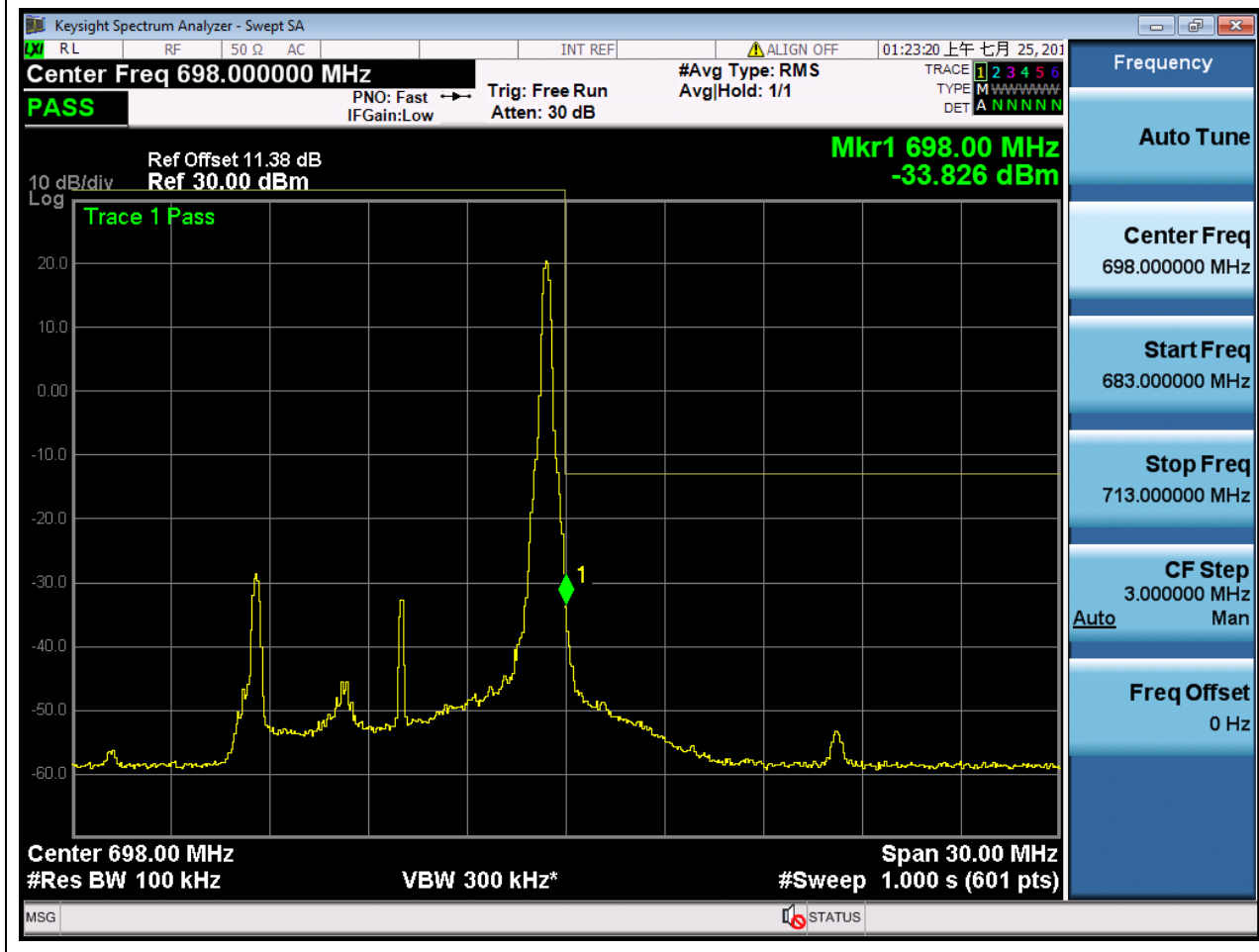
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-54.94	Pass	601





1.45. LTE Band Edge(NTNV)(Subtest:45, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-33.83	Pass	601





1.46. LTE Band Edge(NTNV)(Subtest:46, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:LOW)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698.05	-41.49	Pass	601





1.47. LTE Band Edge(NTNV)(Subtest:47, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:MID)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-34.04	Pass	601





1.48. LTE Band Edge(NTNV)(Subtest:48, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-29.71	Pass	601





1.49. LTE Band Edge(NTNV)(Subtest:49, Channel:133422, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)

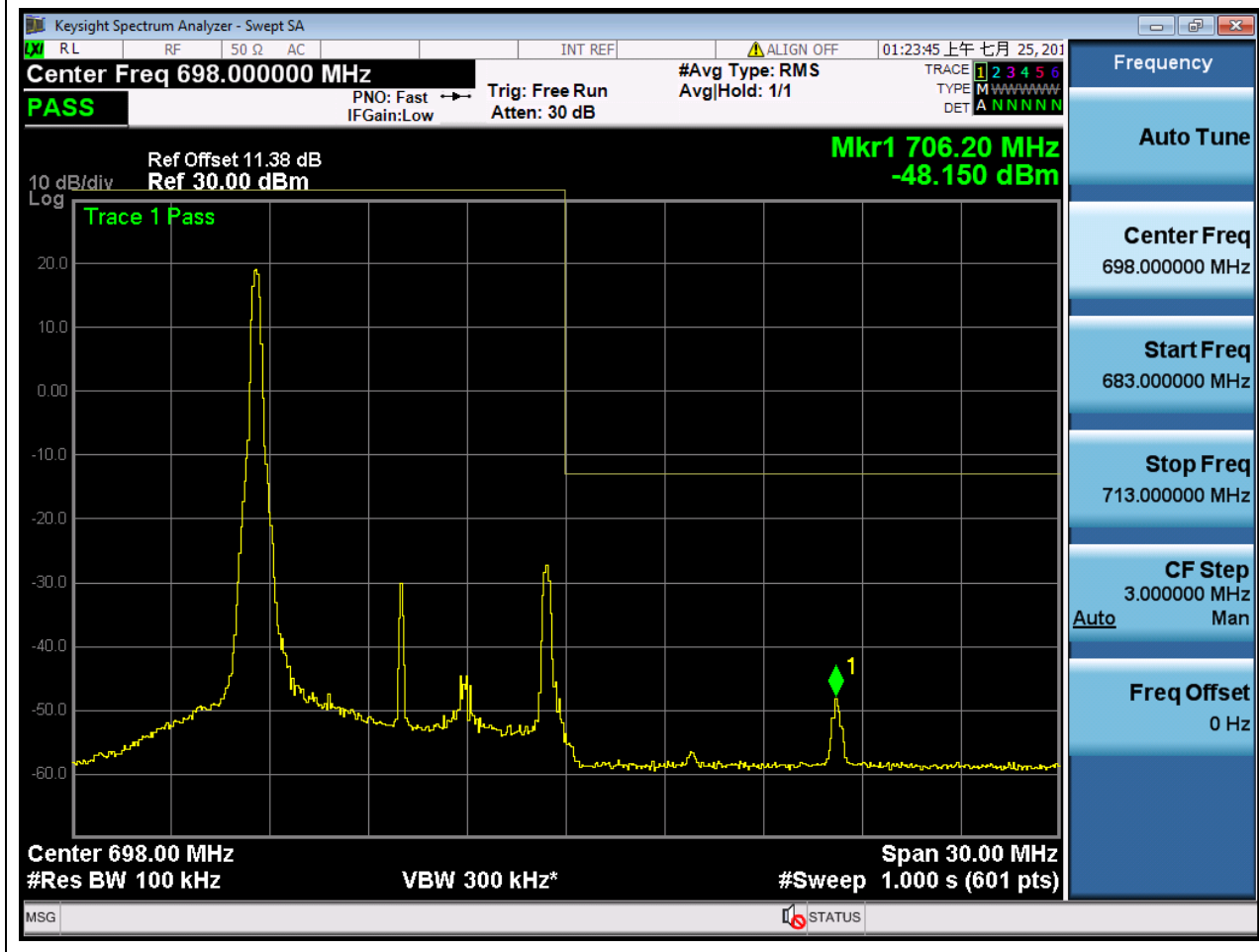
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698.05	-31.07	Pass	601





1.50. LTE Band Edge(NTNV)(Subtest:50, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

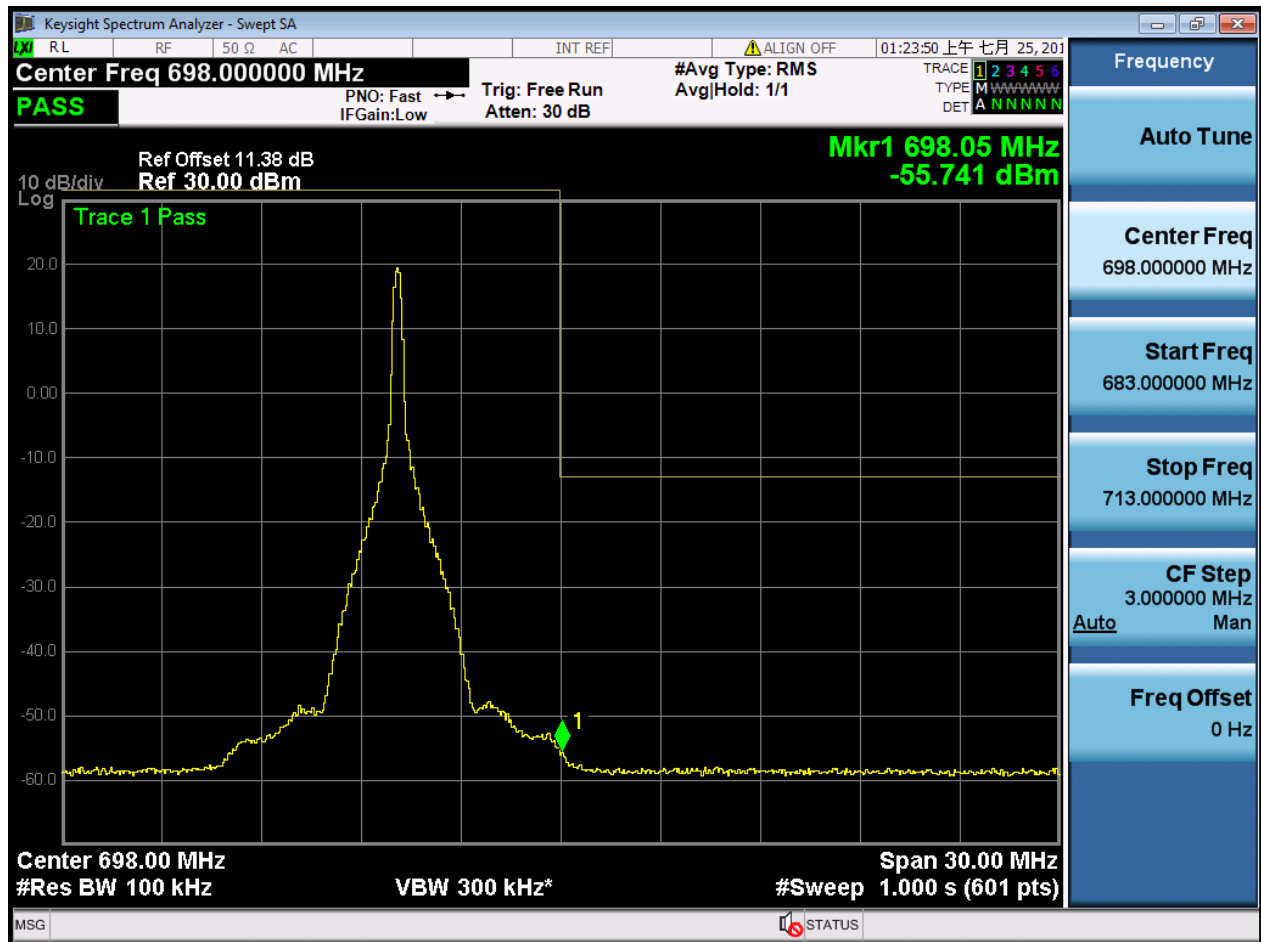
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	706.2	-48.15	Pass	601





1.51. LTE Band Edge(NTNV)(Subtest:51, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:MID)

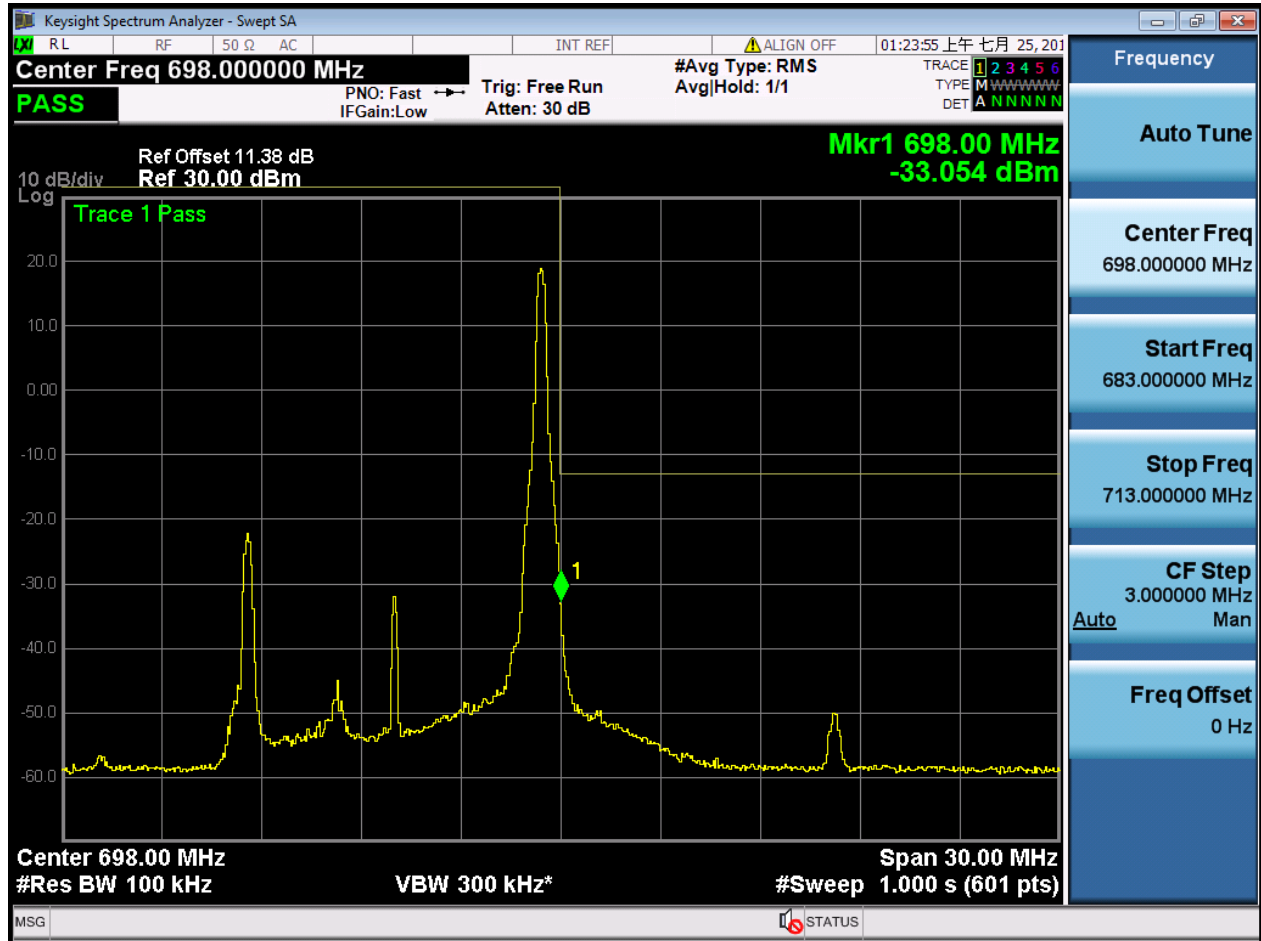
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698.05	-55.74	Pass	601





1.52. LTE Band Edge(NTNV)(Subtest:52, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-33.05	Pass	601





1.53. LTE Band Edge(NTNV)(Subtest:53, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:LOW)

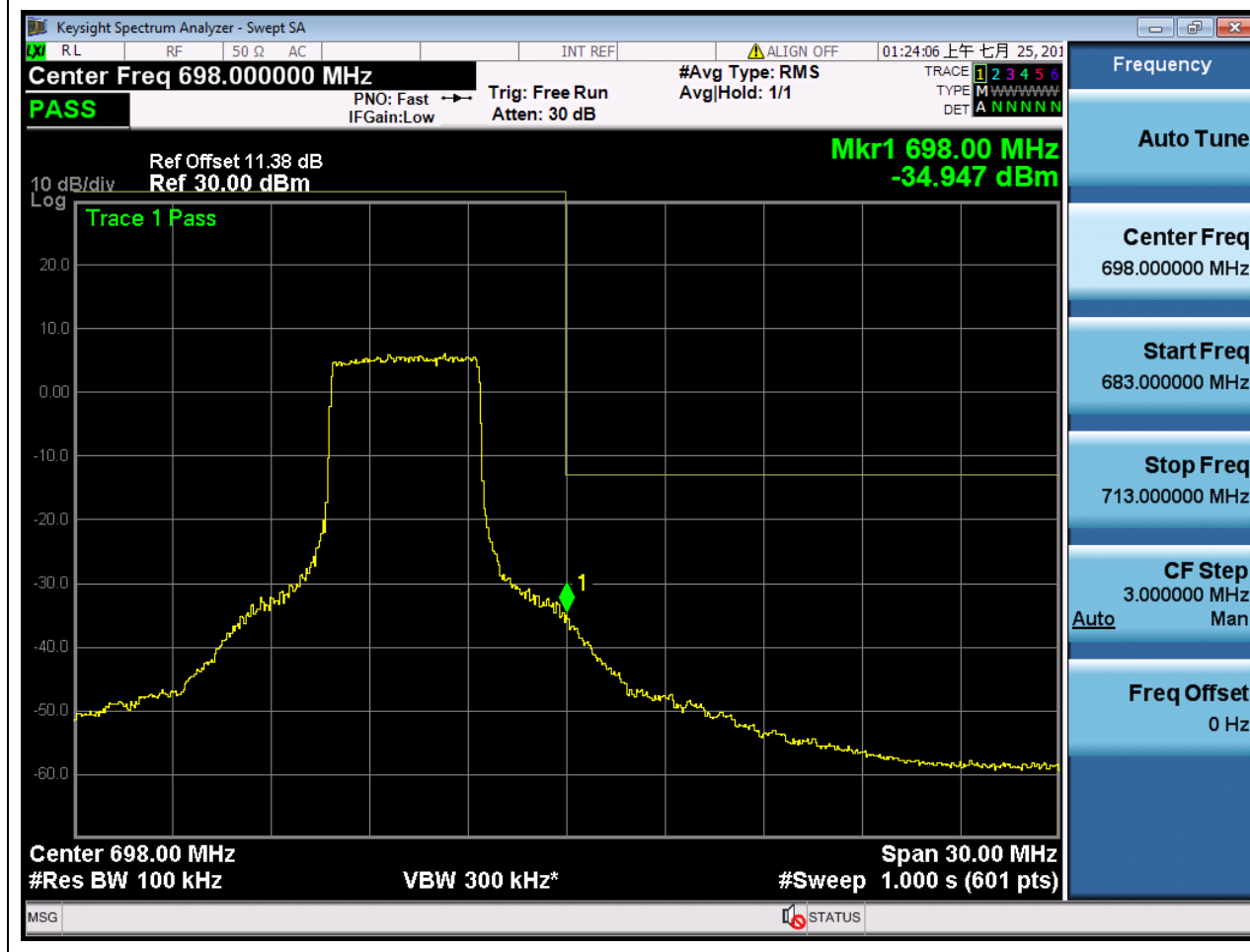
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-42.19	Pass	601





1.54. LTE Band Edge(NTNV)(Subtest:54, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:MID)

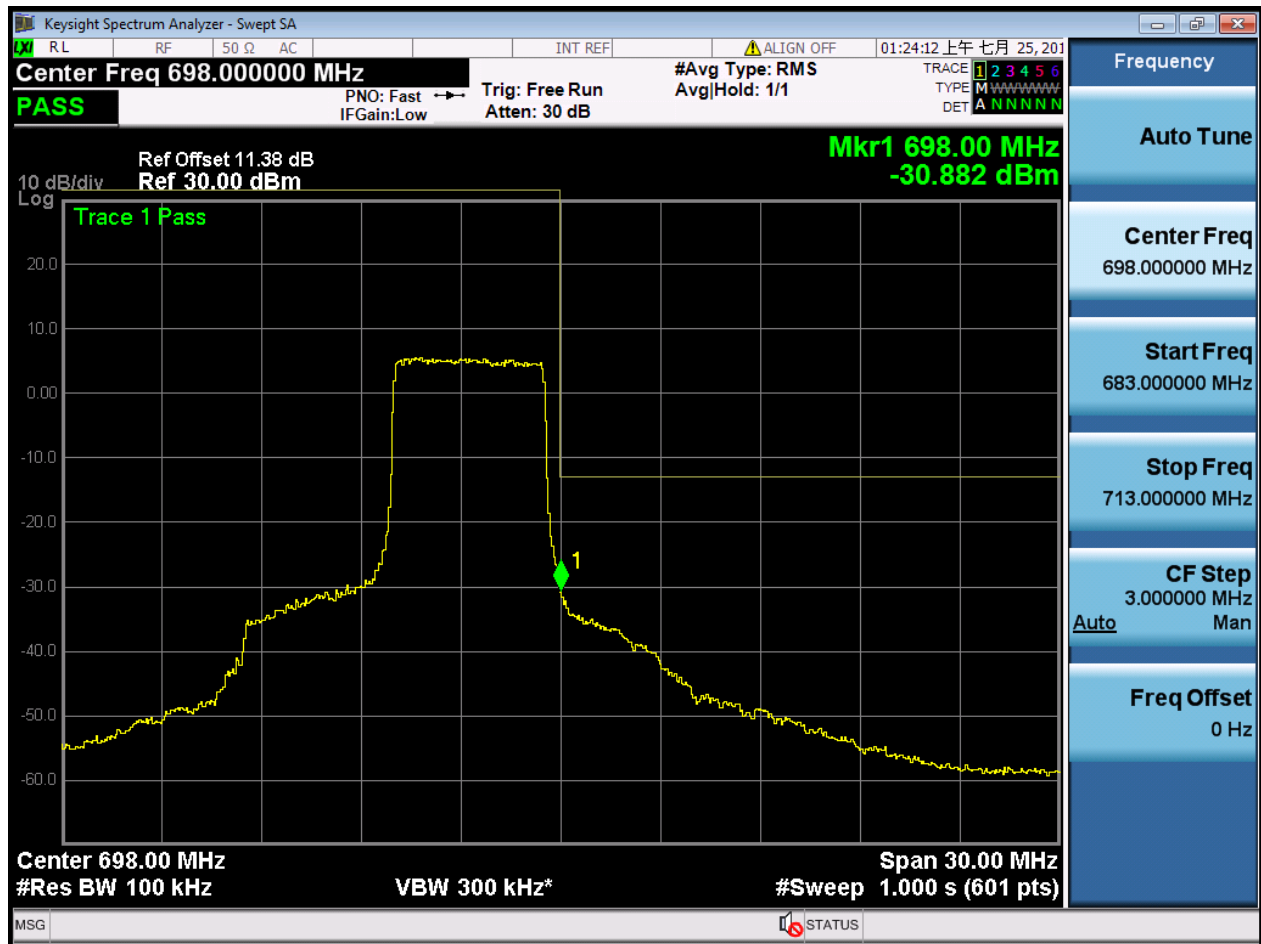
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-34.95	Pass	601





1.55. LTE Band Edge(NTNV)(Subtest:55, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 25, RB Position:HIGH)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698	-30.88	Pass	601





1.56. LTE Band Edge(NTNV)(Subtest:56, Channel:133422, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

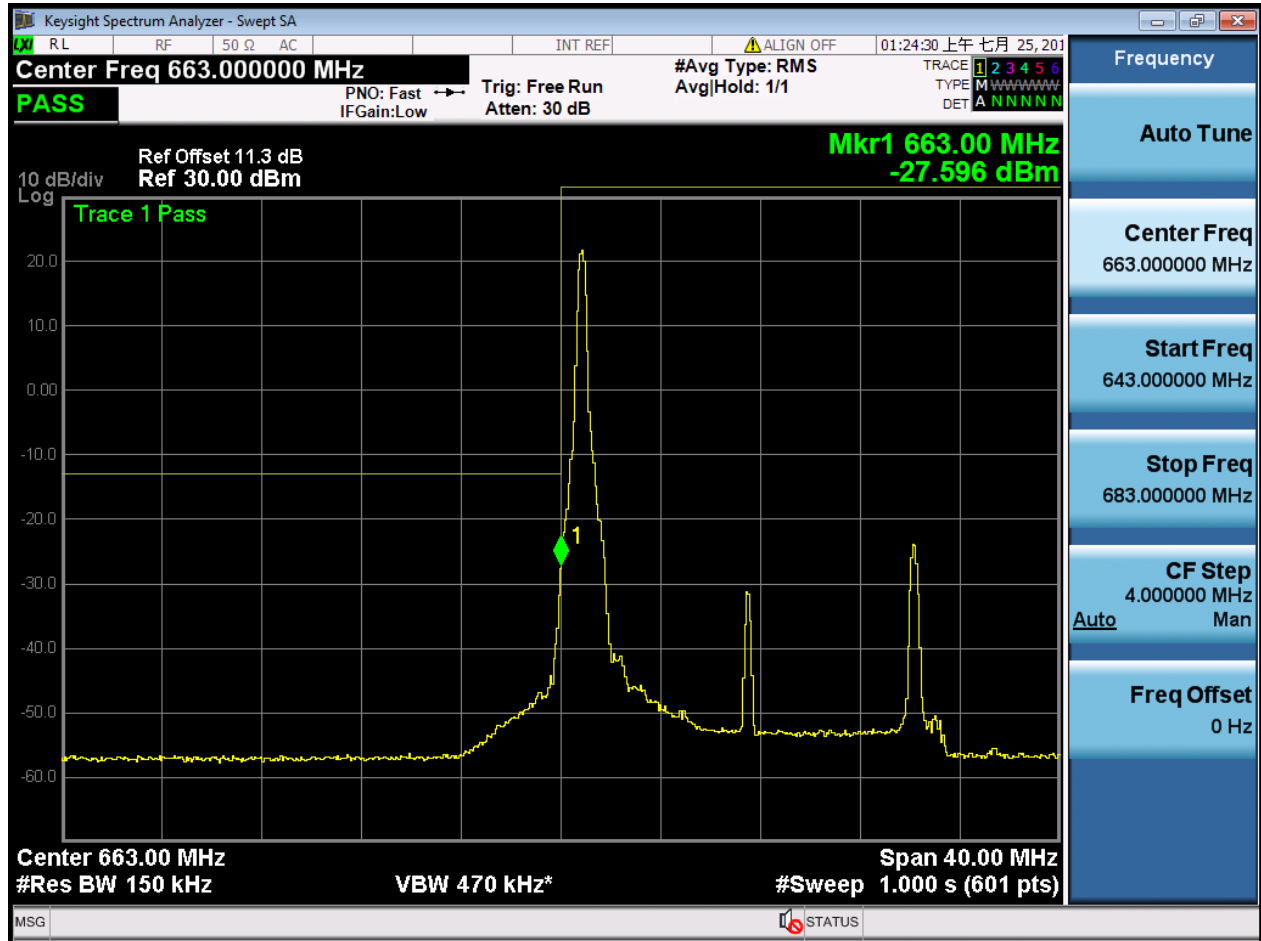
Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
698	30	0.1	RMS	698.05	-33.28	Pass	601





1.57. LTE Band Edge(NTNV)(Subtest:57, Channel:133197, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	40	0.15	RMS	663	-27.6	Pass	601





1.58. LTE Band Edge(NTNV)(Subtest:58, Channel:133197, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:MID)

Center Frequency (MHz)	Span (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Verdict	Sweep Point
663	40	0.15	RMS	663	-55.56	Pass	601

