

TEST REPORT

Applicant: SIMCom Wireless Solutions Limited
Address: SIMCom Headquarters Building, Building 3, No.289
Linhong Road, Changning District, Shanghai, China
Equipment Type: SIMCom Module
Model Name: SIM8262E-M2
Brand Name: SIMCom
Test Standard: Ordinance of MPT No.37 of 1981:
Article 2 Paragraph 1 of Item 11-3
Article 2 Paragraph 1 of Item 11-7
Sample Arrival Date: Nov. 24, 2022
Test Date: Nov. 24, 2022 – Dec. 11, 2022
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ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Zhong Weiqiang**Checked by:** Wu Huihui**Approved by:** Wei Yanquan
(Chief Engineer)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jan. 04, 2023</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	SIMCom Wireless Solutions Limited
Address	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China

2.2 Manufacturer Information

Manufacturer	SIMCom Wireless Solutions Limited
Address	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	SIMCom Module
Model Name Under Test	SIM8262E-M2
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V1.02
Software Version	2212B02V06X62M44A-M2
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Technical Information

Note: The information provided by the applicant.

All Network and Wireless connectivity for EUT	WCDMA/HSDPA/HSUPA 2.0GHz/ 900MHz; FDD LTE 2.0GHz/ 1.7GHz/ 900MHz/ 800MHz/ 700MHz; TDD LTE 1.9 GHz/ 2.6GHz/ 3.5GHz FDD NR 2.0GHz/ 1.7GHz/ 900MHz/ 800MHz/ 700MHz; TDD NR 2.6GHz/ 3.7GHz/ 4.5GHz
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The requirement for the following technical information of the EUT was tested in this report.

UTRA-FDD Operating Bands	<input type="checkbox"/> 700MHz Band	<input type="checkbox"/> Band 28	
	<input type="checkbox"/> 800MHz Band	<input type="checkbox"/> Band 6	<input type="checkbox"/> Band 19 <input type="checkbox"/> Band 26
	<input checked="" type="checkbox"/> 900MHz Band	<input checked="" type="checkbox"/> Band 8	
	<input type="checkbox"/> 1.5GHz Band	<input type="checkbox"/> Band 11	<input type="checkbox"/> Band 21
	<input type="checkbox"/> 1.7GHz Band	<input type="checkbox"/> Band 3	
	<input checked="" type="checkbox"/> 2.0GHz Band	<input checked="" type="checkbox"/> Band 1	
Modulation Type	QPSK/16QAM		
WCDMA Release Version	R99		
HSDPA Release Version	Category10/Rel.5; Category14/Rel.7; Category24/Rel.8		
HSUPA Release Version	Category6/Rel.6		
Antenna Type	Please refer to Note2		
Antenna Gain	Please refer to Note2		
Band	Power Class	Tx Frequency Range	Rx Frequency Range
1	3	1920 MHz ~ 1980 MHz	2110 MHz ~ 2170 MHz
8	3	900 MHz ~ 915 MHz	945 MHz ~ 960 MHz

Note 1: The EUT information provided by the applicant. For more detailed band specifications and features description, please refer to the manufacturer's specifications or user's manual.

Note 2: There are 73 antennas for WWAN, all of them meet antenna gain requirements. please refer to the "Antenna list".

3 SUMMARY OF TEST RESULTS

3.1 Test Verdict

The EUT has been tested according to the following specifications:

Test Items Section	Test Description	Verdict
5.1	Vibration Test	Pass
5.2	Temperature-humidity Test	Pass
5.3	Frequency Tolerance	Pass
5.4	Occupied Bandwidth	Pass
5.5	Unwanted Emission Strength	Pass
5.6	Adjacent Channel Leakage Power	Pass
5.7	Output Power Tolerance	Pass
5.8	Leak Power at No-Carrier Transmission	Pass
5.9	Transmission Data Rate	Pass
5.10	Secondary Radiated Emission Strength	Pass
5.11	System Operation Test	Pass
5.12	Construction Protection Confirmation	Pass

3.2 Measurement Uncertainty

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

Test Description	Uncertainty
Vibration test	12Hz
Temperature-humidity test	12Hz
Frequency tolerance	12Hz
Occupied bandwidth	30kHz
Unwanted Emission Strength SEM(offset≤12.5MHz)	1.50dB
Co-existence bands for results ≥ -60 dBm	1.56dB
Co-existence bands for results < -60 dBm	2.00dB
Outside above: $f \leq 2.2$ GHz	1.22dB
Outside above: 2.2 GHz $< f \leq 4$ GHz	1.48dB
Outside above: $f > 4$ GHz	2.56dB
Adjacent Channel Leakage Power	0.80dB
Output Power Tolerance	0.68dB
Leak power at no-carrier transmission	0.78dB
Secondary Radiated Emission Strength for UE receive band and UE transmit band (-60dBm)	2.00dB

Test Description	Uncertainty
Outside above: $f \leq 2.2\text{GHz}$	1.22dB
Outside above: $2.2\text{GHz} < f \leq 4\text{GHz}$	1.48dB
Outside above: $f > 4\text{GHz}$	2.56dB
Downlink signal \hat{I}_{or}	2.00dB
Temperature	0.6°C
Humidity	4.0%

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity		20% to 75%
Atmospheric Pressure		98 kPa to 102 kPa
Test Voltage of the EUT	NV (Normal Voltage)	3.8V
	LV (Low Voltage)	3.135V
	HV (High Voltage)	4.4V
Test Temperature of the EUT	NT (Normal Temperature)	15 °C to 35 °C
	LT (Low Temperature)	-30°C
	HT (High Temperature)	+70°C
Note1: When the input voltage to receiver RF circuit varies below $\pm 1\%$ as the input voltage from the external power supply to the receiver varies $\pm 10\%$ (excluding power supply), the tests are performed only at rated voltage (normal voltage).		

4.2 Test Equipment and Test Software List

Description	Manufacturer	Model	Serial No.	Version	Cal. Date	Cal. Due
2/3/4/5G RF Test System						
BL410 Test Software	BALUN	BL410R	N/A	2.1.1.496	N/A	N/A
Analog Signal Generator	R&S	SMB100A	182396	3.20.390.24	2022.09.06	2023.09.05
Temperature Chamber	AHK	SP20	1412	N/A	2022.09.20	2023.09.19
Vibration Table	GAOXIN	G-600-ZD	1901064	N/A	2022.01.05	2023.01.04
Wideband Radio Communication Tester	R&S	CMW 500	167190	V4.0.60	2022.05.19	2023.05.18
Wideband Radio Communication Tester	R&S	CMW 500	102318	V3.2.71	2022.05.19	2023.05.18
Spectrum Analyzer	keysight	N9020A	MY505316 28	A.16.09	2022.05.23	2023.05.22
DC Power Supply	ITECH	IT6863A	800014020 757120005	N/A	2022.09.09	2023.09.08

4.3 Test Configurations

Table for Carrier Frequency

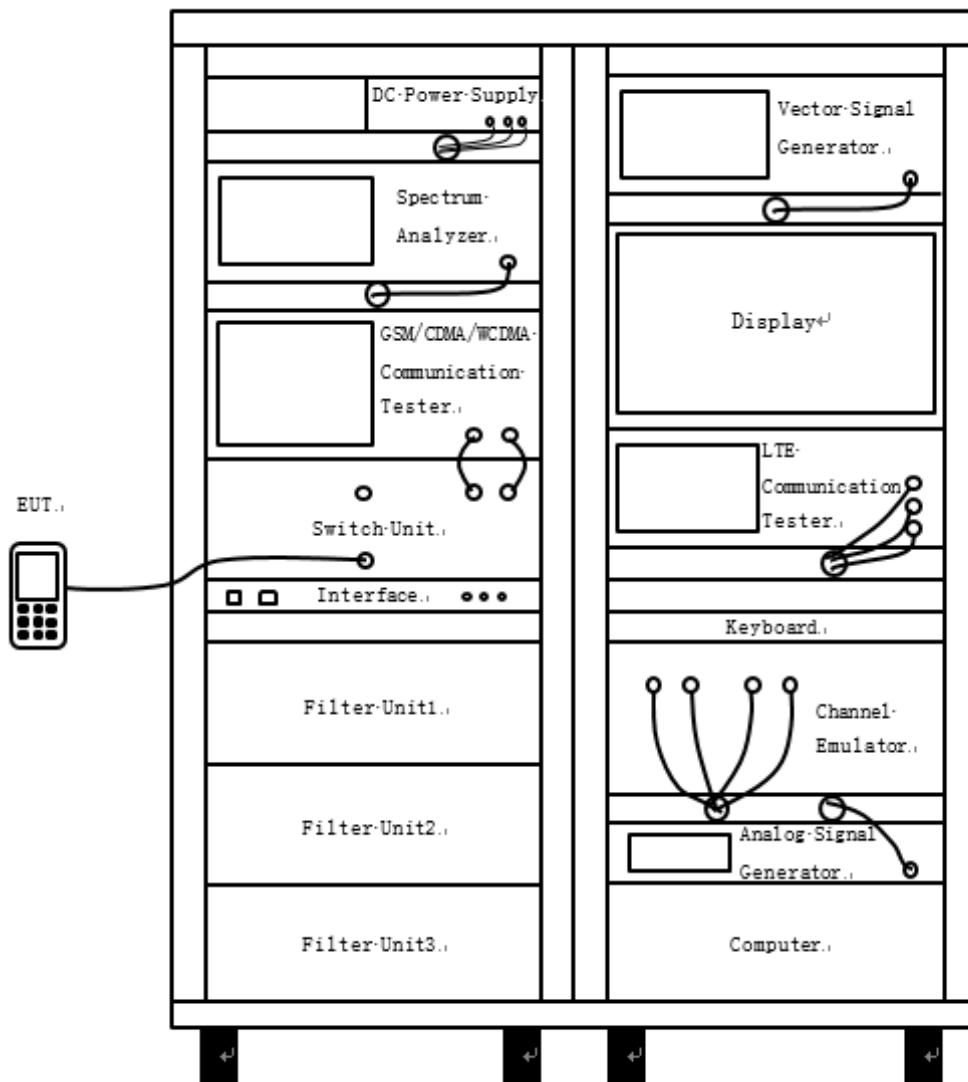
Operating Bands	UL Frequency Range	Channel No.	Frequency (MHz)
2.0GHz (band 1)	1920 MHz~1980 MHz	9612	1922.4
		9613	1922.6
		9614	1922.8
		:	:
		9750	1950
		:	:
		9887	1977.4
		9888	1977.6
900MHz (band 8)	900 MHz~ 915 MHz	2812	902.4
		2813	902.6
		2814	902.8
		:	:
		2837	907.4
		:	:
		2862	912.4
		2863	912.6

The test channel corresponding to the frequency list:

Operating Bands	UL Channel	UL Channel No.	UL Frequency (MHz)
2.0GHz (band 1)	Low Channel	9613	1922.6
	Middle Channel	9750	1950
	High Channel	9887	1977.4
900MHz (band 8)	Low Channel	2813	902.6
	Middle Channel	2837	907.4
	High Channel	2862	912.4

4.4 Test Setup

4.4.1 For Antenna Port Test



(Diagram 1)

5 TEST ITEMS

5.1 Vibration Test

5.1.1 Limit

Item	Limits
Frequency Tolerance	$\leq \pm(0.1 \times f \times 10^{-6} + 10)$ Hz

5.1.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

- 1 Start the Vibration Test System, and keep the EUT power off during the vibration.
- 2 Connect the BS to the EUT antenna connector.
- 3 A call is set up and enter the EUT into test mode.
- 4 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 5 Measure and record the frequency with MHz and tolerance with Hz of the EUT. Display the positive or negative value.
- 6 For all measurements, the frequency tolerance, derived in step 5), shall not exceed the test limits in section 5.1.1.

5.1.4 Test Results

Please refer to ANNEX A.1.

5.2 Temperature-humidity Test

5.2.1 Limit

Item	Limits
Frequency Tolerance	$\leq \pm(0.1 \times f \times 10^{-6} + 10)$ Hz

5.2.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

- 1 Setting the temperature of the Temperature Chamber for 0°C, and keep the EUT power off for 1 hour.
- 2 Connect the BS to the EUT antenna connector.
- 3 A call is set up and enter the EUT into test mode.
- 4 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 5 Measure and record the frequency with MHz and tolerance with Hz of the EUT. Display the positive or negative value.
- 6 Setting the temperature is -10°C, -20°C, 40°C, 50°C, and 60°C, respectively, use the minimum value and maximum value within the range of the specification of the device to be tested, then repeat the step 2) to 5).
- 7 Setting the temperature is 35°C, and the humidity is 95%, or the maximum humidity in the specification of the device to be tested in the temperature and humidity test tank, then repeat the step 2) to 5).
- 8 For all measurements, the frequency tolerance, derived in step 5) to 7), shall not exceed the test limits in section 5.2.1.

5.2.4 Test Results

Please refer to ANNEX A.2.

5.3 Frequency Tolerance

5.3.1 Limit

Item	Limits
Frequency Tolerance	$\leq \pm(0.1 \times f \times 10^{-6} + 10)$ Hz

5.3.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

- 1 Frequency accuracy of test equipment shall be less than 10% of limits.
- 2 Connect the BS to the EUT antenna connector.
- 3 A call is set up and enter the EUT into test mode.
- 4 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 5 Measure and record the frequency with MHz and tolerance with Hz of the EUT. Display the positive or negative value.
- 6 For all measurements, the frequency tolerance, derived in step 5), shall not exceed the test limits in section 5.3.1.

5.3.4 Test Results

Please refer to ANNEX A.3.

5.4 Occupied Bandwidth

5.4.1 Limit

Item	Limits
Occupied Bandwidth	Less than 5MHz

5.4.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

- 1 Connect the BS to the EUT antenna connector
- 2 A call is set up and enter the EUT into test mode.
- 3 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 4 Set the configuration of SA as following:

Span	2~3.5 times of channel bandwidth
RBW	$\leq 1\%$ of the channel bandwidth
VBW	Three times of RBW
Sweep Point	≥ 400
Sweep Time	The minimum time required to ensure measurement accuracy
Sweep Type	Single Sweep
Detector	Positive peak
Trace	Max hold

- 5 Measure and record the occupied bandwidth with MHz.
- 6 For all measurements, the occupied bandwidth, derived in step 5), shall not exceed the test limits in section 5.4.1.

5.4.4 Test Results

Please refer to ANNEX A.4.

5.5 Unwanted Emission Strength

5.5.1 Limit

General spurious emissions test requirements

Items	Limits
Cf ± 2.5 - 3.5 MHz	-48.5dBm/3.84MHz or $-\lceil 33.5 + 15 \times (\Delta f - 2.5) \rceil$ dBc/30kHz
Cf ± 3.5 - 7.5 MHz	-48.5dBm/3.84MHz or $-\lceil 33.5 + 1 \times (\Delta f - 3.5) \rceil$ dBc/MHz
Cf ± 7.5 - 8.5 MHz	-48.5dBm/3.84MHz or $-\lceil 37.5 + 10 \times (\Delta f - 7.5) \rceil$ dBc/MHz
Cf ± 8.5 - 12.5 MHz	-48.5dBm/3.84MHz or -47.5 dBc/MHz
	(700MHz Band) and 470 - 710 MHz: -26.2 dBm/6MHz
Cf ± 12.5 MHz over	Refer to the table below.

Frequency range	800 MHz Band (815 ~ 845 MHz)	900 MHz Band (900 ~ 915 MHz)	2 GHz Band (1,920.0 ~ 1,980.0 MHz)
9 kHz – 150 kHz	-36dBm/1kHz		
150 kHz – 30 MHz	-36dBm/10kHz		
30 – 1,000 MHz (except as below)	-36dBm/100kHz		
470 – 710 MHz	---	---	---
773 – 803 MHz	---	---	---
860 – 890 MHz	---	-37dBm/MHz	---
925 – 935 MHz	---	---	-67dBm/100kHz for 51 channels of 200kHz -36dBm/100kHz for any 5 channels out of 51 channels
935 – 960 MHz	---	---	-79dBm/100kHz for 125 channels of 200kHz -36dBm/100kHz for any 5 channels out of 125 channels
945 – 960 MHz	---	---	--
1,000 – 12,750 MHz (except as below)	-30dBm/MHz		
1,475.9 – 1,510.9 MHz	---	-60dBm/3.84MHz	--
1,805.0 – 1,880.0 MHz	---	---	-71dBm/100kHz for 376 channels of 200kHz -30dBm/1MHz for any 5 channels out of 376 channels
1,839.9 – 1,844.9 MHz	---	---	---
1,844.9 – 1,879.9 MHz	---	-60dBm/3.84MHz	---
1,884.5 – 1,915.7 MHz	-41dBm/300kHz		
2,110.0 – 2,170.0 MHz	---	-60dBm/3.84MHz	---

Cf: Center frequency of channel (MHz)

5.5.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

- 1 Connect the BS to the EUT antenna connector.
- 2 A call is set up and enter the EUT into test mode.
- 3 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 4 Setting of SA as following:

Span	Refer to Section 5.5.1
RBW	Refer to Section 5.5.1
VBW	Equal to RBW
Sweep Point	≥400
Sweep Time	The minimum time required to ensure measurement accuracy
Sweep Type	Single Sweep
Detector	Positive peak
Trace	Max hold

- 5 Measure and record the absolute value with dBm.
- 6 For all measurements, the Unwanted Emission, derived in step 5), shall not exceed the test limits in section 5.5.1.

5.5.4 Test Results

Please refer to ANNEX A.5.

5.6 Adjacent Channel Leakage Power

5.6.1 Limit

Item	ACLR Limits
Cf \pm 5 MHz	-32.2dBc/3.84MHz or -50dBm/3.84MHz
Cf \pm 10 MHz	-42.2dBc/3.84MHz or -50dBm/3.84MHz

Cf: Center frequency of channel (MHz)

5.6.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.6.3 Test Procedure

- 1 Connect the BS to the EUT antenna connector.
- 2 A call is set up and enter the EUT into test mode.
- 3 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 4 Setting of SA as following:

Span	Refer to Section 5.6.1
RBW	30kHz
VBW	300kHz
Sweep Point	≥ 400
Sweep Time	The minimum time required to ensure measurement accuracy
Sweep Type	Continuous Sweep
Detector	Sample
Trace	Max hold

- 5 Measure and record the absolute value with dBm or relative value with dBc.
- 6 For all measurements, the Adjacent Channel Leakage Power derived in step 5), shall not exceed the test limits in section 5.6.1.

5.6.4 Test Results

Please refer to ANNEX A.6.

5.7 Output Power Tolerance

5.7.1 Limit

Item	Limits
Output Power	24 dBm
Output Power Tolerance	23dBm over: +48% -58%, (700MHz Band) +48% -67% 23dBm or less: +87% -47%, (700MHz Band) +87% -58% (Base on declared output power by manufacturer)

5.7.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

- 1 Connect the BS to the EUT antenna connector.
- 2 A call is set up and enter the EUT into test mode.
- 3 Set and send continuously Up power control commands to the EUT until the EUT reaches its maximum output power.
- 4 Measure and record output power with dBm and tolerance with %.
- 5 For all measurements, the measured output power and tolerance, derived in step 4), shall not exceed the test limits in section 5.7.1.

5.7.4 Test Result

Please refer to ANNEX A.7.

5.8 Leak Power at No-Carrier Transmission

5.8.1 Limit

Item	Limits
Leak power at carrier off condition	-55dBm / 3.84MHz

5.8.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.8.3 Test Procedure

- 1 Keep the EUT transmitting off.
- 2 Setting of SA for test as following:

Span	Refer to Section 5.9.1
RBW	1MHz
VBW	Equal to RBW
Sweep Point	≥400
Sweep Time	The minimum time required to ensure measurement accuracy
Sweep Type	Single Sweep
Detector	Positive peak
Trace	Max hold

- 3 Measure and record the absolute value with dBm.
- 4 For all measurements, the leak power, derived in step 3), shall not exceed the test limits in section 5.8.1.

5.8.4 Test Results

Please refer to ANNEX A.8.

5.9 Transmission Data Rate

5.9.1 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.9.2 Test Procedure

- 1 Transmitting data from the data terminal 1 to the data terminal 2, measure the data transmission speed.
- 2 If the conditions of the above 2 are not satisfied, confirm it by the installation design.

5.9.3 Test Results

Please refer to ANNEX A.10.

5.10 Secondary Radiated Emission Strength

5.10.1 Limit

Frequency range	800 MHz Band (815 ~ 845 MHz)	900 MHz Band (900 ~ 915 MHz)	2 GHz Band (1,920.0 ~ 1,980.0 MHz)
30 – 1,000 MHz (except as below)	-57dBm/100kHz		
718 – 748 MHz 773 – 803 MHz	--	--	--
815 – 845 MHz 860 – 890 MHz	-60dBm/3.84MHz	--	--
900 – 915 MHz 945 – 960 MHz	--	-60dBm/3.84MHz	--
1,000 – 12,750 MHz (except as below)	-47dBm/1MHz		
1,427.9 – 1,462.9 MHz 1,475.9 – 1,510.9 MHz	--	--	--
1,744.9 – 1,784.9 MHz 1,839.9 – 1,879.9 MHz	--	--	--
1,920.0 – 1,980.0MHz 2,110.0 – 2,170.0 MHz	--	--	-60dBm/3.84MHz

5.10.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.10.3 Test Procedure

- 1 Connect the BS to the EUT antenna connector
- 2 Enter the EUT into receiver mode.
- 3 Setting of SA for test as following:

Span	Refer to Section 5.10.1
RBW	Refer to Section 5.10.1
VBW	Three times of RBW
Sweep Point	≥400
Sweep Time	The minimum time required to ensure measurement accuracy
Sweep Type	Single Sweep
Detector	Sample
Trace	Max hold

- 4 Measure and record the absolute value with dBm.

5 For all measurements, the secondary radiated emission, derived in step 4), shall not exceed the test limits in section 5.10.1.

5.10.4 Test Results

Please refer to ANNEX A.9.

5.11 System Operation Test

5.11.1 Test Setup

The photo of test setup please refer to ANNEX B.

5.11.2 Test Procedure

Connect the equipment to be tested with the external test equipment and confirm the following items.

- (1) Calling or receiving operation (including channel switching during communication.)
- (2) Reading operation of the own mobile station number.
- (3) Suppressing operation of antenna power (An automatic control function to minimize the antenna power as low as necessary by means of measuring receiving power of radiowave from base station.)

5.11.3 Test Results

Please refer to ANNEX A.10.

5.12 Construction Protection Confirmation Method

5.12.1 Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

5.12.2 Test Results

Please refer to ANNEX A.11.

ANNEX A TEST RESULTS

A.1 Vibration Test

Normal Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	4.38	Pass
9750	1950	-205	205	-7.95	Pass
9887	1977.4	-207.74	207.74	-22.42	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-1.17	Pass
2837	907.4	-100.74	100.74	-2.83	Pass
2862	912.4	-101.24	101.24	-3.28	Pass

High Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	11.84	Pass
9750	1950	-205	205	-4.7	Pass
9887	1977.4	-207.74	207.74	-22.66	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-1.84	Pass
2837	907.4	-100.74	100.74	-3.38	Pass
2862	912.4	-101.24	101.24	-4.46	Pass

Low Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	11.97	Pass
9750	1950	-205	205	-2.98	Pass
9887	1977.4	-207.74	207.74	-20.71	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-1.74	Pass
2837	907.4	-100.74	100.74	-3.55	Pass
2862	912.4	-101.24	101.24	-4.32	Pass

A.2 Temperature-humidity Test

Normal Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)					Verdict
				-30℃	-20℃	60℃	70℃	35℃ 95%	
WCDMA Band1									
9613	1922.6	-202.26	202.26	6.61	6.53	9.95	10.99	11.54	Pass
9750	1950	-205	205	-6.42	-7.84	-6.07	-3.68	-3.56	Pass
9887	1977.4	-207.74	207.74	-22.62	-23.36	-22.58	-22.24	-21.43	Pass
WCDMA Band8									
2813	902.6	-100.26	100.26	-1.64	-2.7	-1.85	-1.71	-2.07	Pass
2837	907.4	-100.74	100.74	-3	-3.5	-3.62	-3.29	-3.1	Pass
2862	912.4	-101.24	101.24	-3.24	-4.25	-4.88	-4.45	-4.11	Pass

High Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)					Verdict
				-30℃	-20℃	60℃	70℃	35℃ 95%	
WCDMA Band1									
9613	1922.6	-202.26	202.26	12.04	12.5	12.98	13.73	13.15	Pass
9750	1950	-205	205	-2.83	-2.63	-2.4	-2.58	-2.83	Pass
9887	1977.4	-207.74	207.74	-21.36	-20.74	-20.62	-20	-21.51	Pass
WCDMA Band8									
2813	902.6	-100.26	100.26	-2.83	-2.26	-2.52	-2.1	-1.94	Pass
2837	907.4	-100.74	100.74	-3.38	-3.11	-3.47	-3.66	-3.1	Pass
2862	912.4	-101.24	101.24	-4.45	-4.23	-4.61	-4.6	-4.08	Pass

Low Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)					Verdict
				-30℃	-20℃	60℃	70℃	35℃ 95%	
WCDMA Band1									
9613	1922.6	-202.26	202.26	12.1	12.37	11	11.09	11.68	Pass
9750	1950	-205	205	-2.97	-3.99	-3.38	-3.46	-3.29	Pass
9887	1977.4	-207.74	207.74	-20.77	-21.5	-20.93	-21.74	-21.07	Pass
WCDMA Band8									
2813	902.6	-100.26	100.26	-1.17	-1.18	-1.88	-1.37	-1.66	Pass
2837	907.4	-100.74	100.74	-3.1	-3.14	-3.17	-3.25	-3.45	Pass
2862	912.4	-101.24	101.24	-4.13	-3.73	-4.13	-3.86	-3.74	Pass

A.3 Frequency Tolerance

Normal Voltage

UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	9.63	Pass
9750	1950	-205	205	-5.57	Pass
9887	1977.4	-207.74	207.74	-22.29	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-2.59	Pass
2837	907.4	-100.74	100.74	-3.04	Pass
2862	912.4	-101.24	101.24	-3.86	Pass

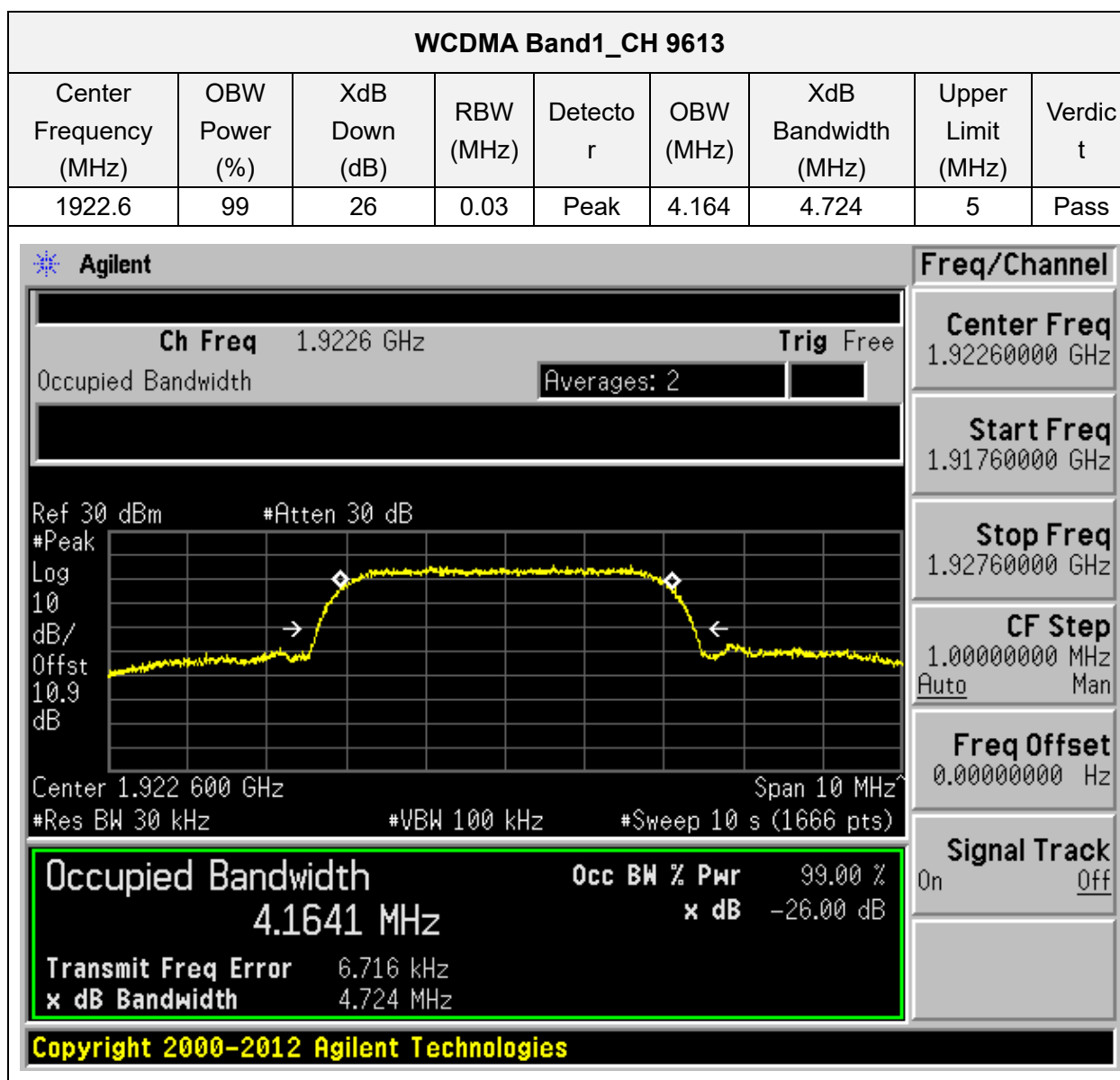
High Voltage

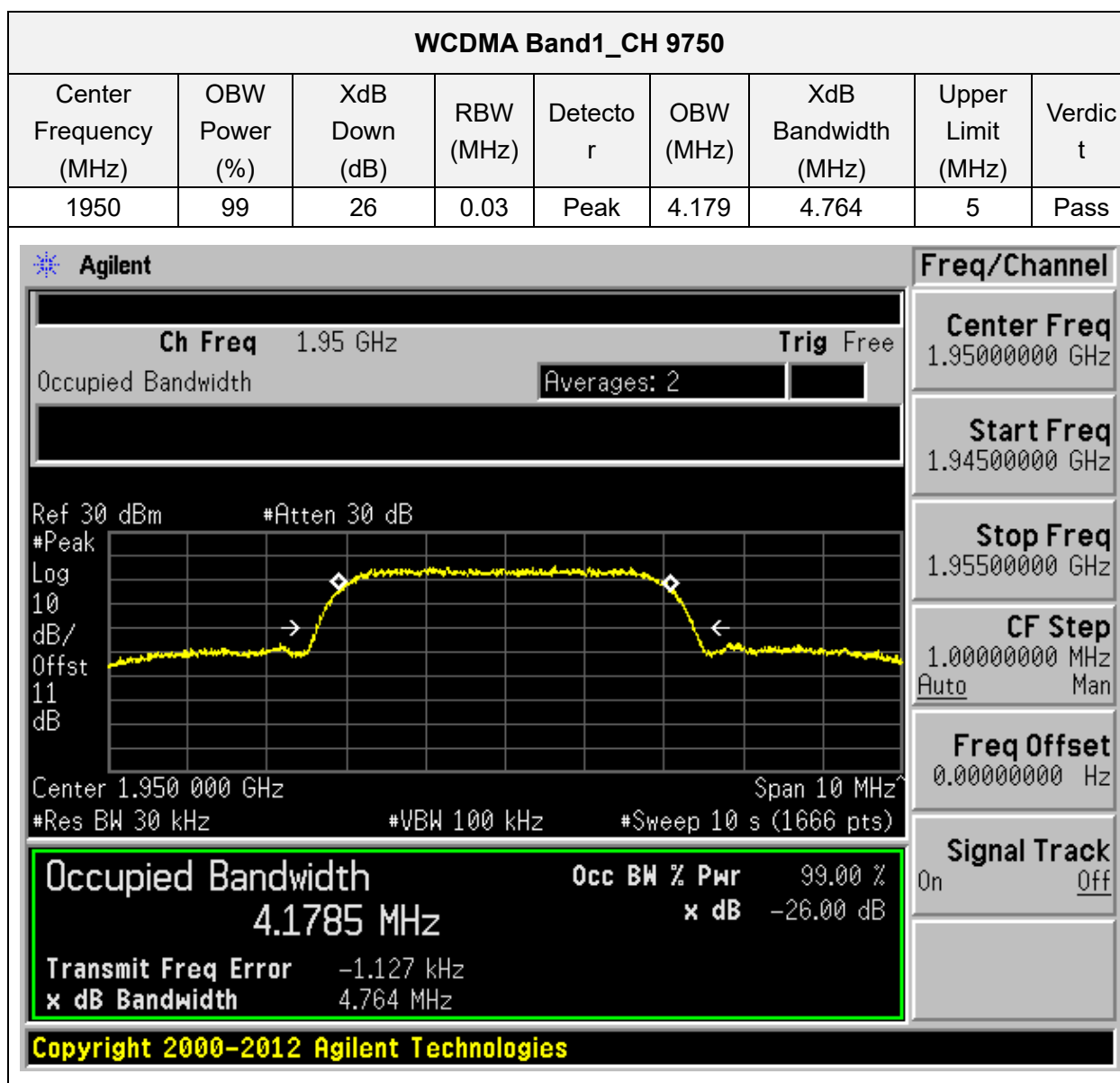
UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	12.67	Pass
9750	1950	-205	205	-2.62	Pass
9887	1977.4	-207.74	207.74	-21.41	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-1.79	Pass
2837	907.4	-100.74	100.74	-3.39	Pass
2862	912.4	-101.24	101.24	-4.94	Pass

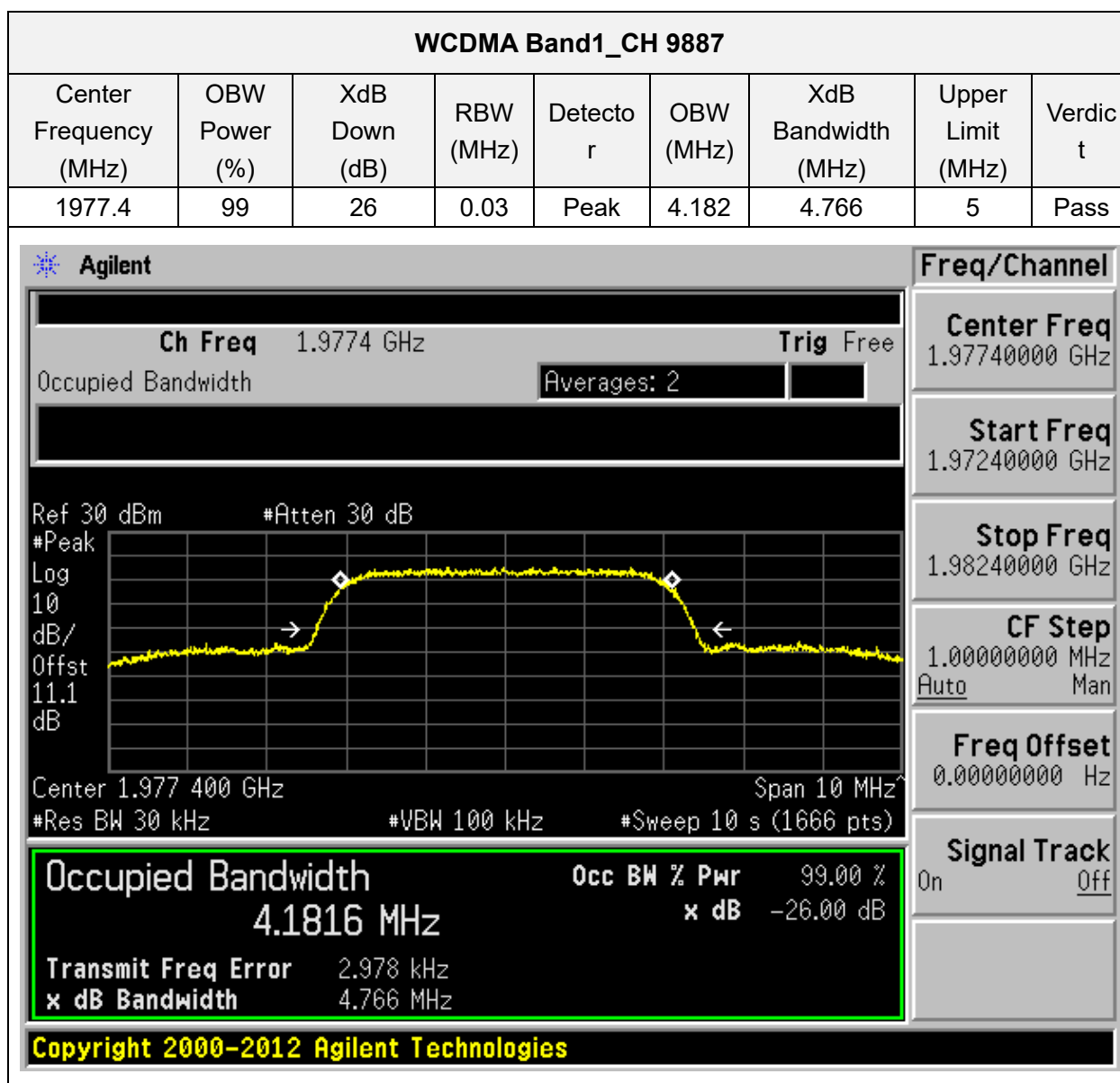
Low Voltage

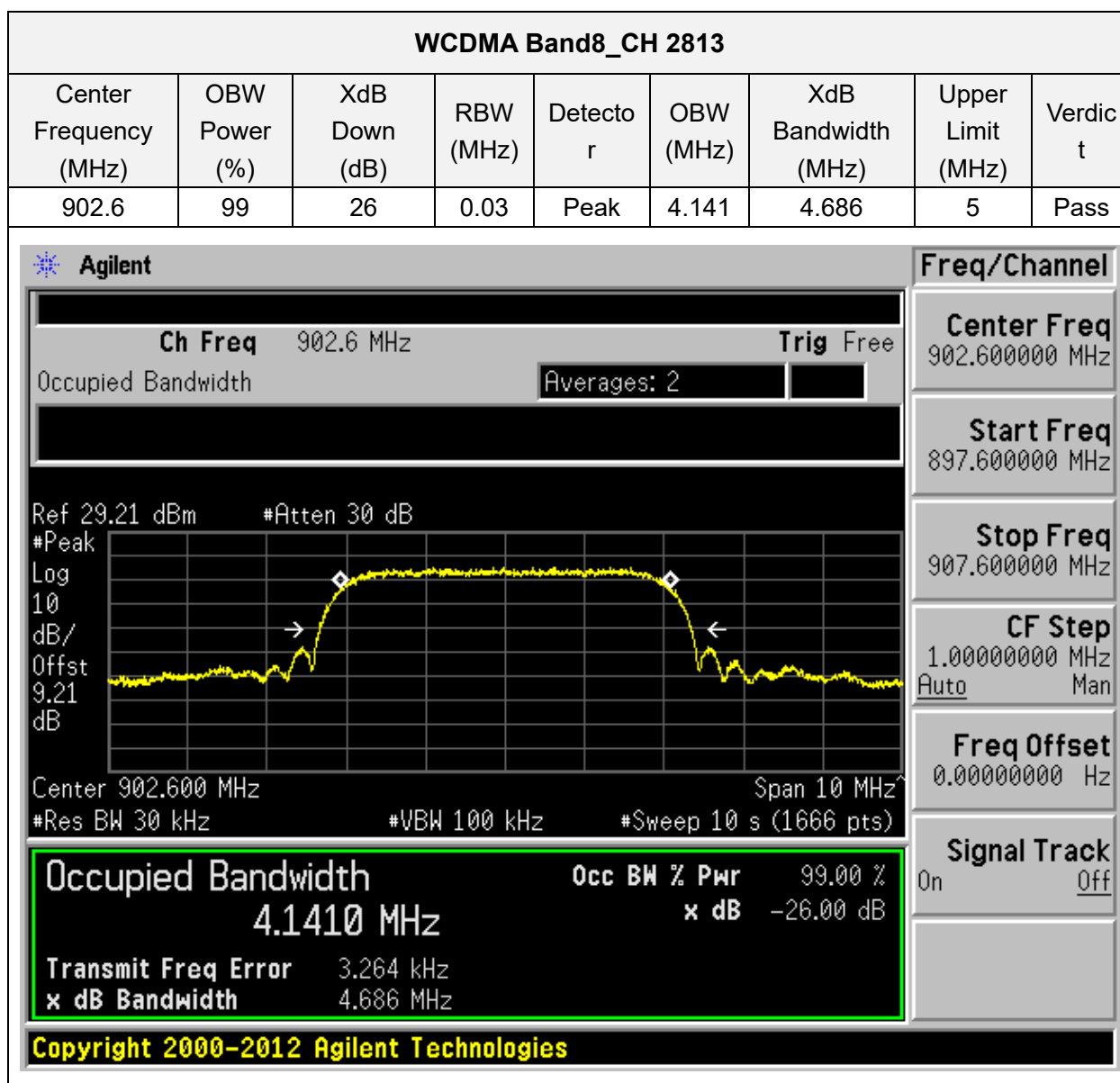
UL Channel	Frequency (MHz)	Lower Limit (Hz)	Upper Limit (Hz)	Measured Frequency Tolerance (Hz)	Verdict
WCDMA Band1					
9613	1922.6	-202.26	202.26	13.58	Pass
9750	1950	-205	205	-2.8	Pass
9887	1977.4	-207.74	207.74	-21.3	Pass
WCDMA Band8					
2813	902.6	-100.26	100.26	-2.42	Pass
2837	907.4	-100.74	100.74	-3.42	Pass
2862	912.4	-101.24	101.24	-4.65	Pass

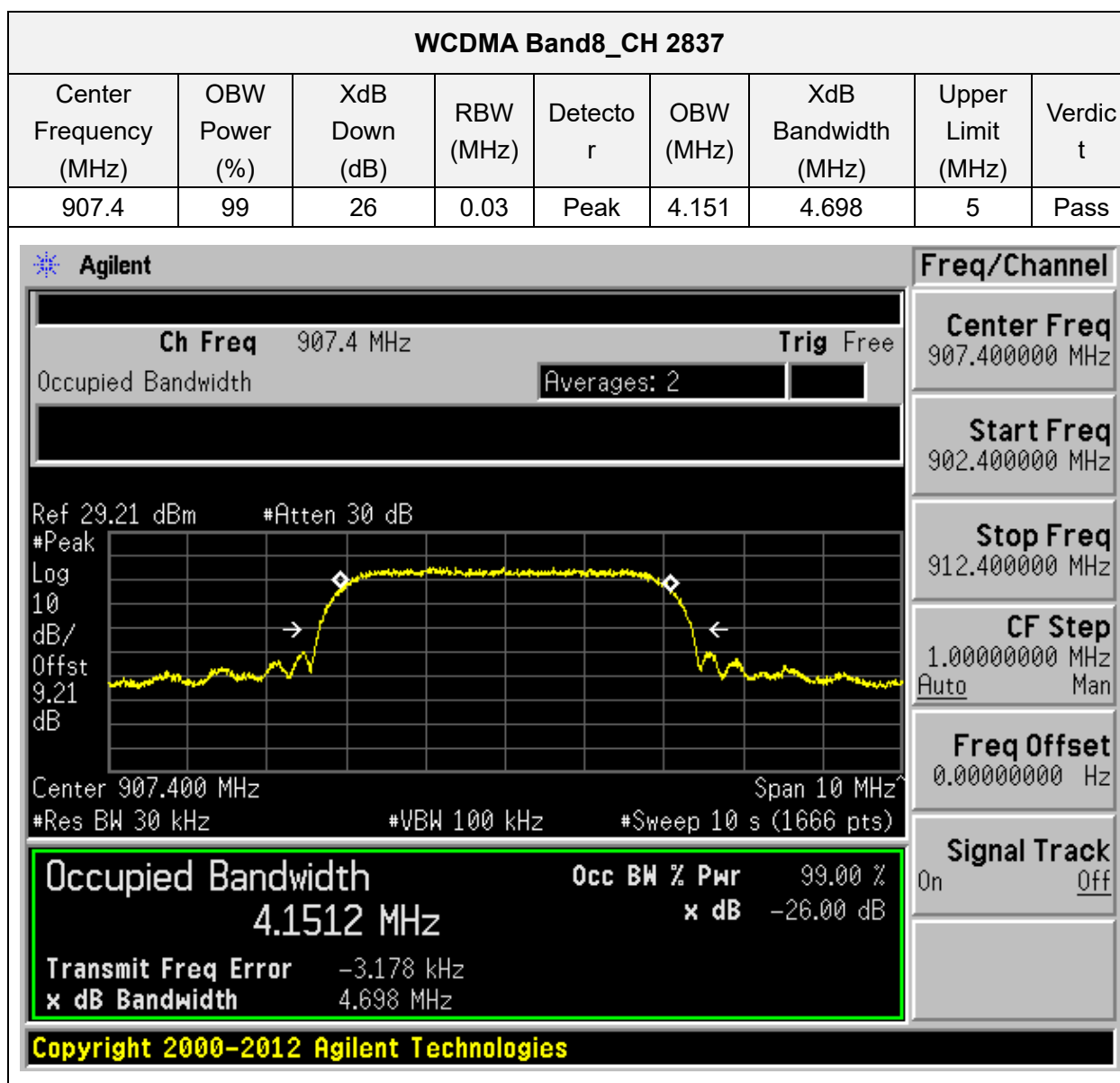
A.4 Occupied Bandwidth

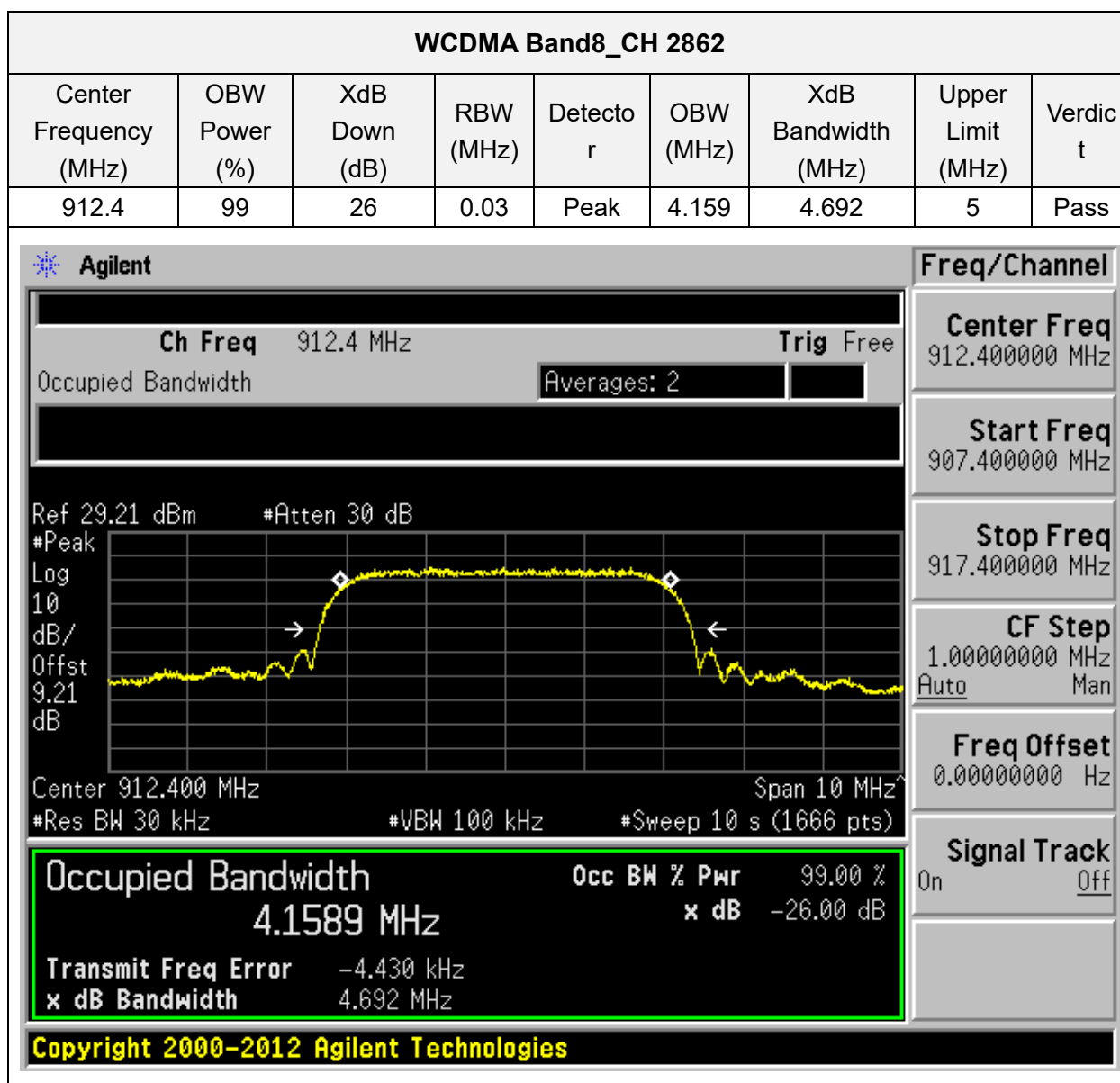






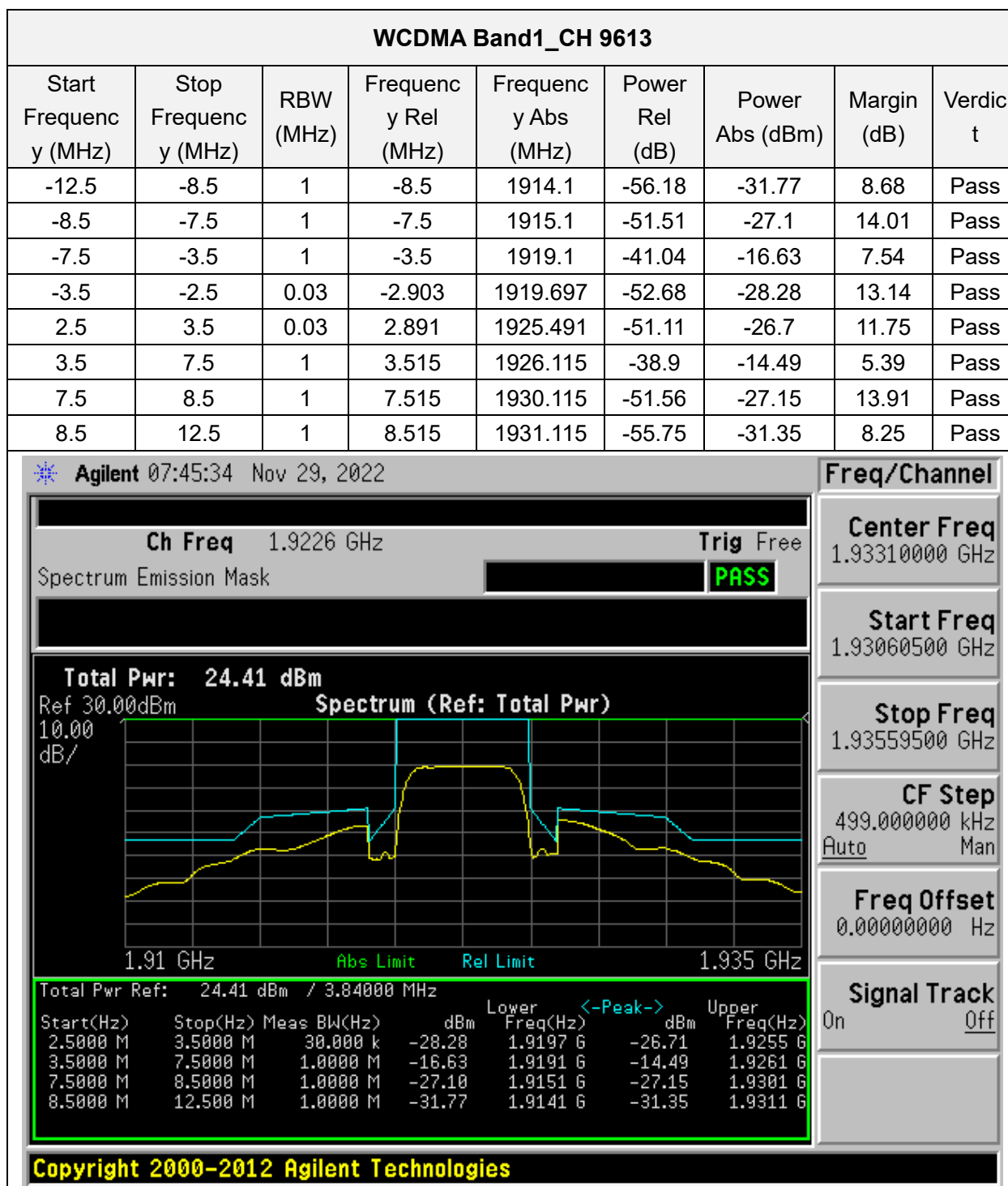






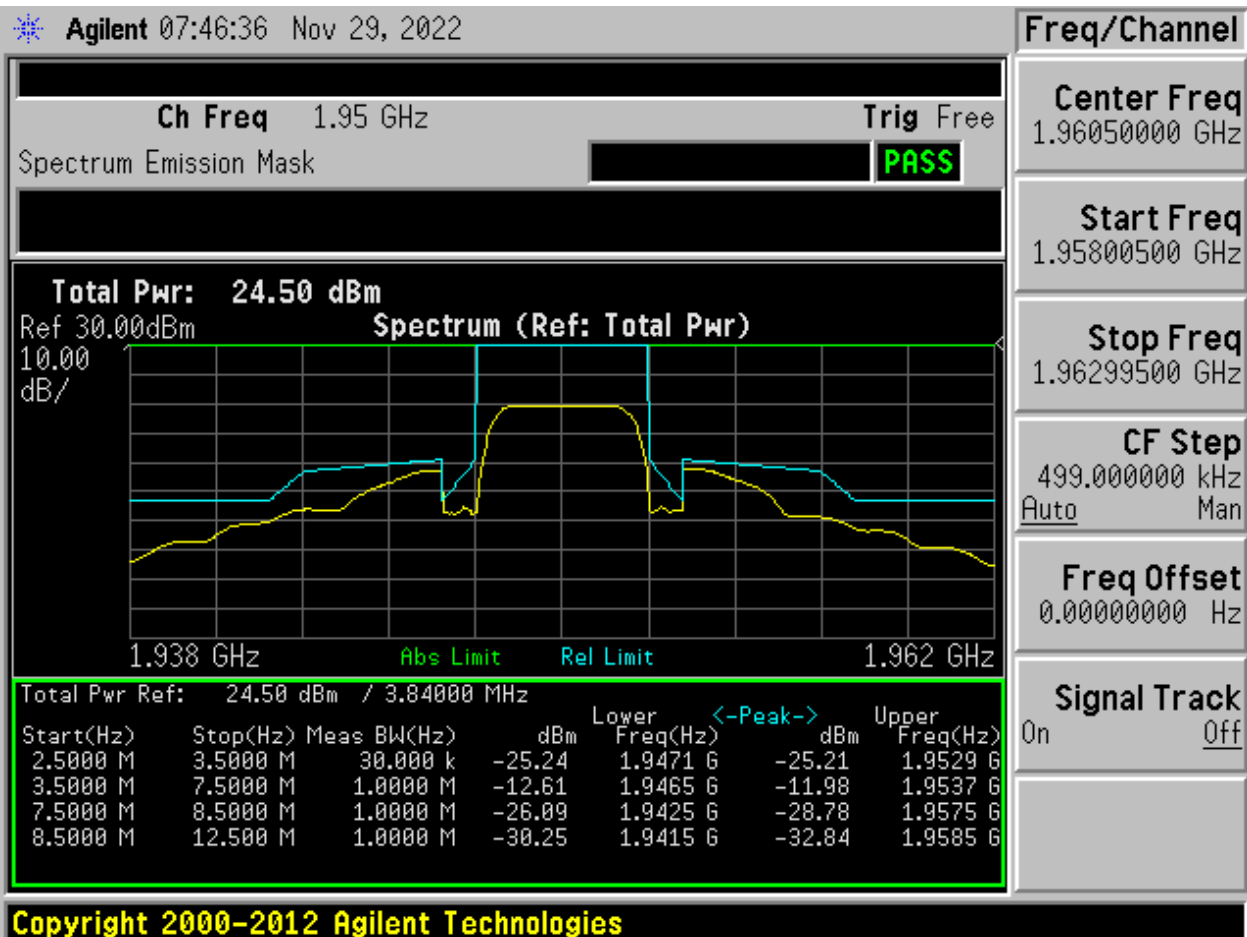
A.5 Unwanted Emission Strength

A.5.1 Out-band Area



WCDMA Band1_CH 9750

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency Rel (MHz)	Frequency Abs (MHz)	Power Rel (dB)	Power Abs (dBm)	Margin (dB)	Verdict
-12.5	-8.5	1	-8.5	1941.5	-54.75	-30.25	7.25	Pass
-8.5	-7.5	1	-7.5	1942.5	-50.58	-26.09	13.08	Pass
-7.5	-3.5	1	-3.5	1946.5	-37.11	-12.61	3.61	Pass
-3.5	-2.5	0.03	-2.895	1947.105	-49.74	-25.24	10.31	Pass
2.5	3.5	0.03	2.863	1952.863	-49.7	-25.21	10.76	Pass
3.5	7.5	1	3.665	1953.665	-36.48	-11.98	2.82	Pass
7.5	8.5	1	7.515	1957.515	-53.28	-28.78	15.63	Pass
8.5	12.5	1	8.515	1958.515	-57.33	-32.84	9.83	Pass



WCDMA Band1_CH 9887

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency Rel (MHz)	Frequency Abs (MHz)	Power Rel (dB)	Power Abs (dBm)	Margin (dB)	Verdict
-12.5	-8.5	1	-8.5	1968.9	-56.8	-32.31	9.3	Pass
-8.5	-7.5	1	-7.5	1969.9	-52.46	-27.98	14.96	Pass
-7.5	-3.5	1	-3.5	1973.9	-36.33	-11.85	2.83	Pass
-3.5	-2.5	0.03	-2.504	1974.896	-49.58	-25.1	16.02	Pass
2.5	3.5	0.03	2.841	1980.241	-48.93	-24.45	10.32	Pass
3.5	7.5	1	3.685	1981.085	-35.65	-11.17	1.96	Pass
7.5	8.5	1	7.515	1984.915	-53.77	-29.29	16.12	Pass
8.5	12.5	1	8.515	1985.915	-57.61	-33.13	10.11	Pass

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Total Pwr: 24.48 dBm

Ref 30.00dBm

10.00
dB/

Spectrum (Ref: Total Pwr)

1.965 GHz

Abs Limit

Rel Limit

1.99 GHz

Total Pwr Ref: 24.48 dBm / 3.84000 MHz

Start(Hz)	Stop(Hz)	Meas BW(Hz)	dBm	Lower Freq(Hz)	<-Peak-> dBm	Upper Freq(Hz)
2.5000 M	3.5000 M	30.000 k	-25.10	1.9749 G	-24.45	1.9802 G
3.5000 M	7.5000 M	1.0000 M	-11.85	1.9739 G	-11.17	1.9811 G
7.5000 M	8.5000 M	1.0000 M	-27.98	1.9699 G	-29.29	1.9849 G
8.5000 M	12.500 M	1.0000 M	-32.31	1.9689 G	-33.13	1.9859 G

Freq/Channel

Center Freq

1.98790000 GHz

Start Freq

1.98540500 GHz

Stop Freq

1.99039500 GHz

CF Step

499.000000 kHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

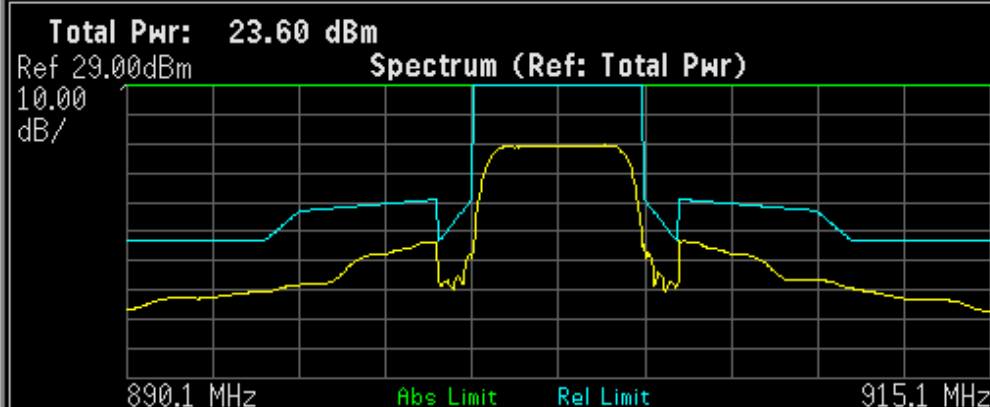
On Off

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WCDMA Band8_CH 2813

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency Rel (MHz)	Frequency Abs (MHz)	Power Rel (dB)	Power Abs (dBm)	Margin (dB)	Verdict
-12.5	-8.5	1	-8.5	894.1	-64.98	-41.39	17.48	Pass
-8.5	-7.5	1	-7.5	895.1	-62.77	-39.17	25.27	Pass
-7.5	-3.5	1	-3.5	899.1	-48.03	-24.44	14.53	Pass
-3.5	-2.5	0.03	-2.5798	900.0202	-52.16	-28.57	17.47	Pass
2.5	3.5	0.03	2.5765	905.1765	-51.9	-28.3	17.26	Pass
3.5	7.5	1	3.625	906.225	-47.9	-24.3	14.28	Pass
7.5	8.5	1	7.515	910.115	-61.08	-37.48	23.43	Pass
8.5	12.5	1	8.515	911.115	-64.04	-40.44	16.54	Pass

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Total Pwr Ref: 23.60 dBm / 3.84000 MHz

Start(Hz)	Stop(Hz)	Meas BW(Hz)	dBm	Lower Freq(Hz)	dBm	Upper Freq(Hz)
2.5000 M	3.5000 M	30.000 k	-28.57	900.02 M	-28.31	905.18 M
3.5000 M	7.5000 M	1.0000 M	-24.44	899.10 M	-24.30	906.23 M
7.5000 M	8.5000 M	1.0000 M	-39.17	895.10 M	-37.48	910.12 M
8.5000 M	12.500 M	1.0000 M	-41.39	894.10 M	-40.44	911.12 M

Freq/Channel

Center Freq
913.100000 MHzStart Freq
910.605000 MHzStop Freq
915.595000 MHzCF Step
499.000000 kHz
Auto ManFreq Offset
0.00000000 HzSignal Track
On Off

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WCDMA Band8_CH 2837

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency Rel (MHz)	Frequency Abs (MHz)	Power Rel (dB)	Power Abs (dBm)	Margin (dB)	Verdict
-12.5	-8.5	1	-8.5	898.9	-61.37	-37.79	13.87	Pass
-8.5	-7.5	1	-7.5	899.9	-57.7	-34.12	20.2	Pass
-7.5	-3.5	1	-3.5	903.9	-48.3	-24.72	14.8	Pass
-3.5	-2.5	0.03	-2.5722	904.8278	-54.46	-30.88	19.87	Pass
2.5	3.5	0.03	2.5942	909.9942	-54.56	-30.98	19.64	Pass
3.5	7.5	1	3.515	910.915	-48.1	-24.52	14.58	Pass
7.5	8.5	1	7.515	914.915	-58.19	-34.61	20.54	Pass
8.5	12.5	1	8.515	915.915	-62.05	-38.47	14.55	Pass

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Total Pwr: 23.58 dBm

Ref 29.01dBm

Spectrum (Ref: Total Pwr)

10.00
dB/

894.9 MHz

Abs Limit

Rel Limit

919.9 MHz

Total Pwr Ref: 23.58 dBm / 3.84000 MHz

Start(Hz)	Stop(Hz)	Meas BW(Hz)	dBm	Lower Freq(Hz)	<-Peak-> dBm	Upper Freq(Hz)
2.5000 M	3.5000 M	30.000 k	-30.88	904.83 M	-30.98	909.99 M
3.5000 M	7.5000 M	1.0000 M	-24.72	903.90 M	-24.52	910.92 M
7.5000 M	8.5000 M	1.0000 M	-34.12	899.90 M	-34.61	914.92 M
8.5000 M	12.500 M	1.0000 M	-37.79	898.90 M	-38.47	915.92 M

Freq/Channel

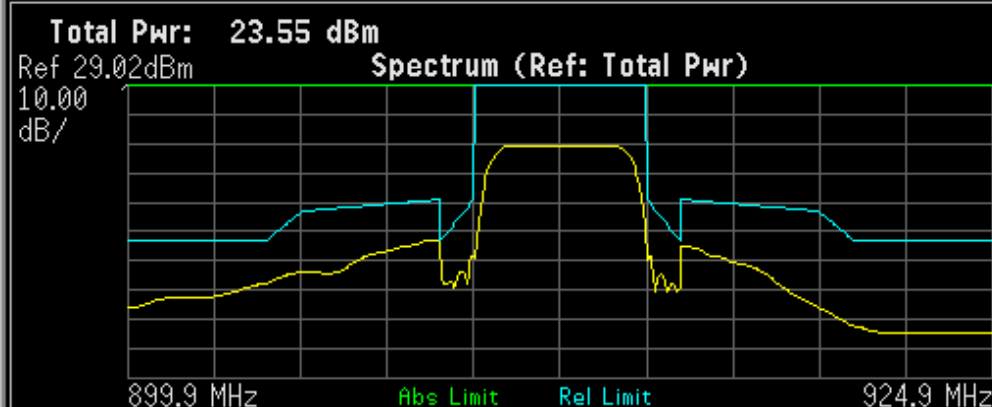
Center Freq
917.900000 MHzStart Freq
915.405000 MHzStop Freq
920.395000 MHzCF Step
499.000000 kHz
Auto ManFreq Offset
0.00000000 HzSignal Track
On Off

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WCDMA Band8_CH 2862

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency Rel (MHz)	Frequency Abs (MHz)	Power Rel (dB)	Power Abs (dBm)	Margin (dB)	Verdict
-12.5	-8.5	1	-8.5	903.9	-62.05	-38.5	14.55	Pass
-8.5	-7.5	1	-7.5	904.9	-58.35	-34.8	20.85	Pass
-7.5	-3.5	1	-3.5	908.9	-47.41	-23.86	13.91	Pass
-3.5	-2.5	0.03	-2.5401	909.8599	-52.96	-29.41	18.86	Pass
2.5	3.5	0.03	2.5561	914.9561	-52.9	-29.35	18.56	Pass
3.5	7.5	1	3.515	915.915	-49.44	-25.89	15.93	Pass
7.5	8.5	1	7.515	919.915	-70.82	-47.27	33.17	Pass
8.5	12.5	1	8.515	920.915	-76.8	-53.25	29.3	Pass

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Total Pwr Ref: 23.55 dBm / 3.84000 MHz

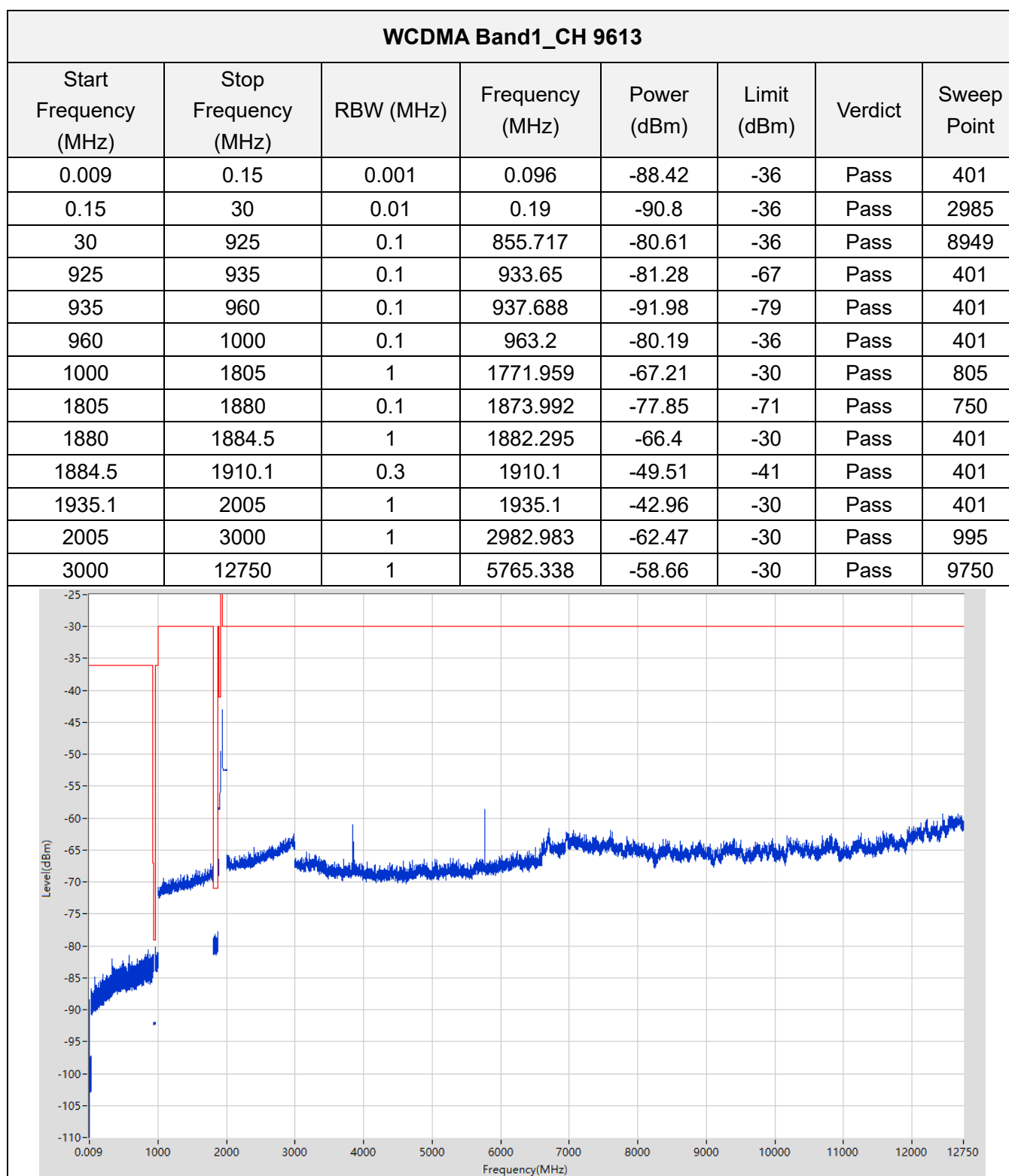
Start(Hz)	Stop(Hz)	Meas BW(Hz)	dBm	Lower Freq(Hz)	<-Peak-> dBm	Upper Freq(Hz)
2.5000 M	3.5000 M	30.000 k	-29.42	909.86 M	-29.35	914.96 M
3.5000 M	7.5000 M	1.0000 M	-23.86	908.90 M	-25.89	915.92 M
7.5000 M	8.5000 M	1.0000 M	-34.80	904.90 M	-47.27	919.92 M
8.5000 M	12.500 M	1.0000 M	-38.50	903.90 M	-53.25	920.92 M

Freq/Channel

Center Freq
922.900000 MHzStart Freq
920.405000 MHzStop Freq
925.395000 MHzCF Step
499.000000 kHz
Auto ManFreq Offset
0.00000000 HzSignal Track
On Off

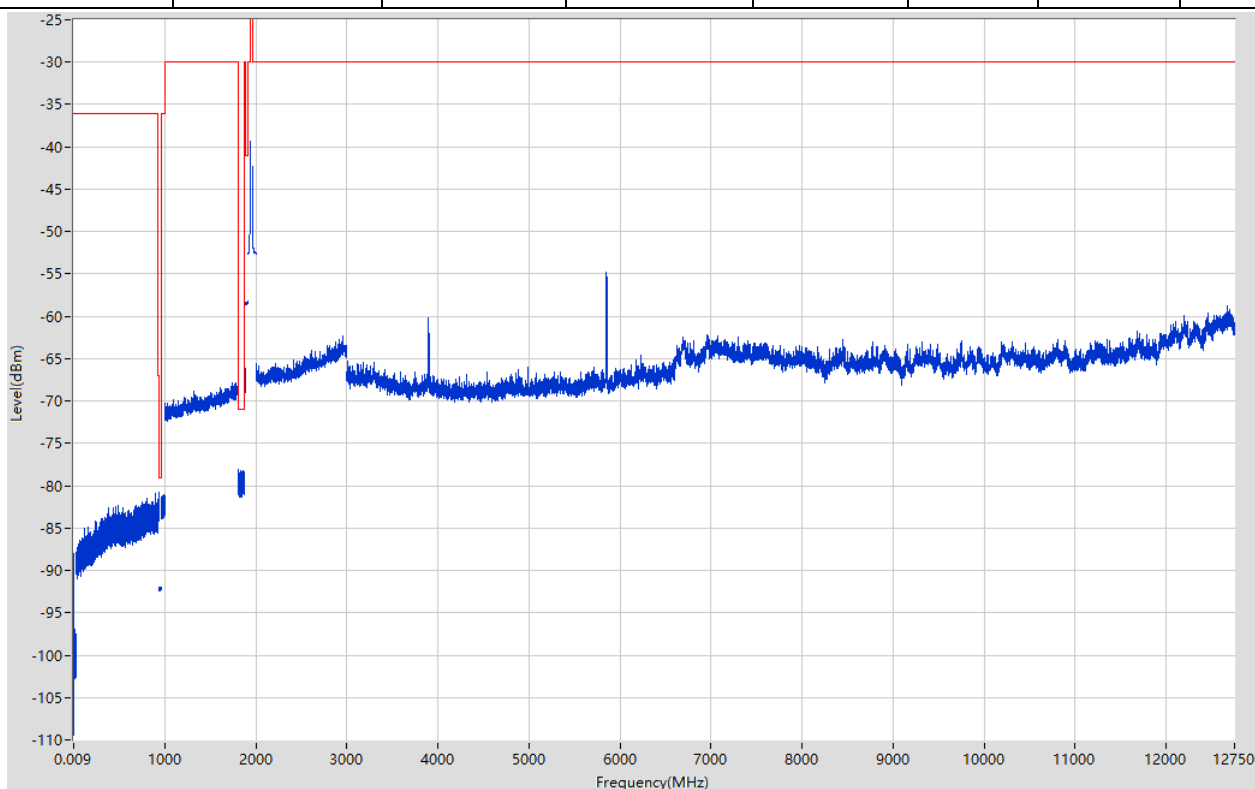
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A.5.2 Spurious Area



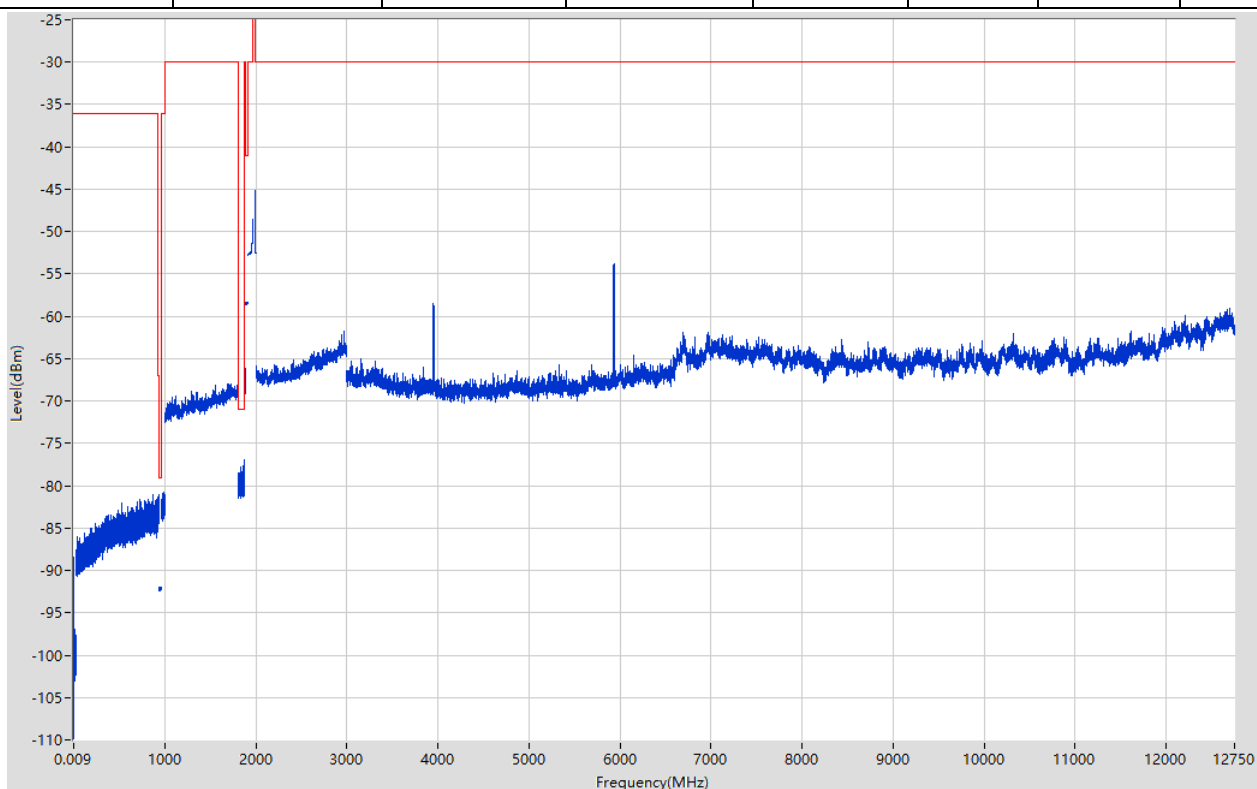
WCDMA Band1_CH 9750

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	0.096	-88.07	-36	Pass	401
0.15	30	0.01	0.19	-93.07	-36	Pass	2985
30	925	0.1	895.322	-80.93	-36	Pass	8949
925	935	0.1	931.575	-80.79	-67	Pass	401
935	960	0.1	957.438	-91.95	-79	Pass	401
960	1000	0.1	993	-81.04	-36	Pass	401
1000	1805	1	1783.974	-67.8	-30	Pass	805
1805	1880	0.1	1814.813	-78.08	-71	Pass	750
1880	1884.5	1	1881.98	-66.21	-30	Pass	401
1884.5	1915.7	0.3	1915.388	-58.25	-41	Pass	401
1915.7	1937.5	1	1937.5	-39.31	-30	Pass	401
1962.5	2005	1	1962.5	-42.33	-30	Pass	401
2005	3000	1	2960.961	-62.36	-30	Pass	995
3000	12750	1	5853.348	-54.81	-30	Pass	9750



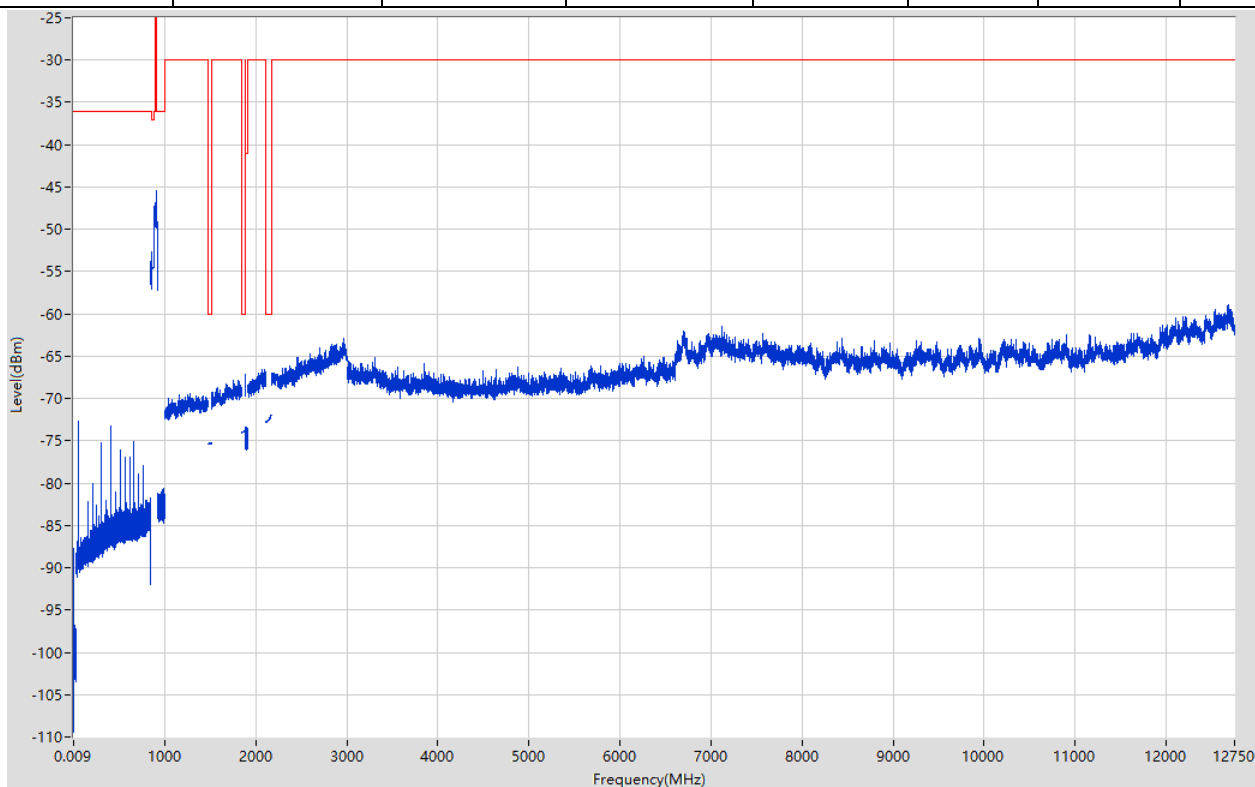
WCDMA Band1_CH 9887

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	0.096	-88.39	-36	Pass	401
0.15	30	0.01	0.19	-91.7	-36	Pass	2985
30	925	0.1	871.258	-81.05	-36	Pass	8949
925	935	0.1	932.95	-81.07	-67	Pass	401
935	960	0.1	953.813	-91.94	-79	Pass	401
960	1000	0.1	996.3	-80.79	-36	Pass	401
1000	1805	1	1726.903	-67.94	-30	Pass	805
1805	1880	0.1	1878.097	-76.98	-71	Pass	750
1880	1884.5	1	1881.328	-66.17	-30	Pass	401
1884.5	1915.7	0.3	1915.232	-58.29	-41	Pass	401
1915.7	1964.9	1	1964.9	-48.52	-30	Pass	401
1989.9	2005	1	1989.9	-45.1	-30	Pass	401
2005	3000	1	2967.968	-61.8	-30	Pass	995
3000	12750	1	5936.358	-53.75	-30	Pass	9750



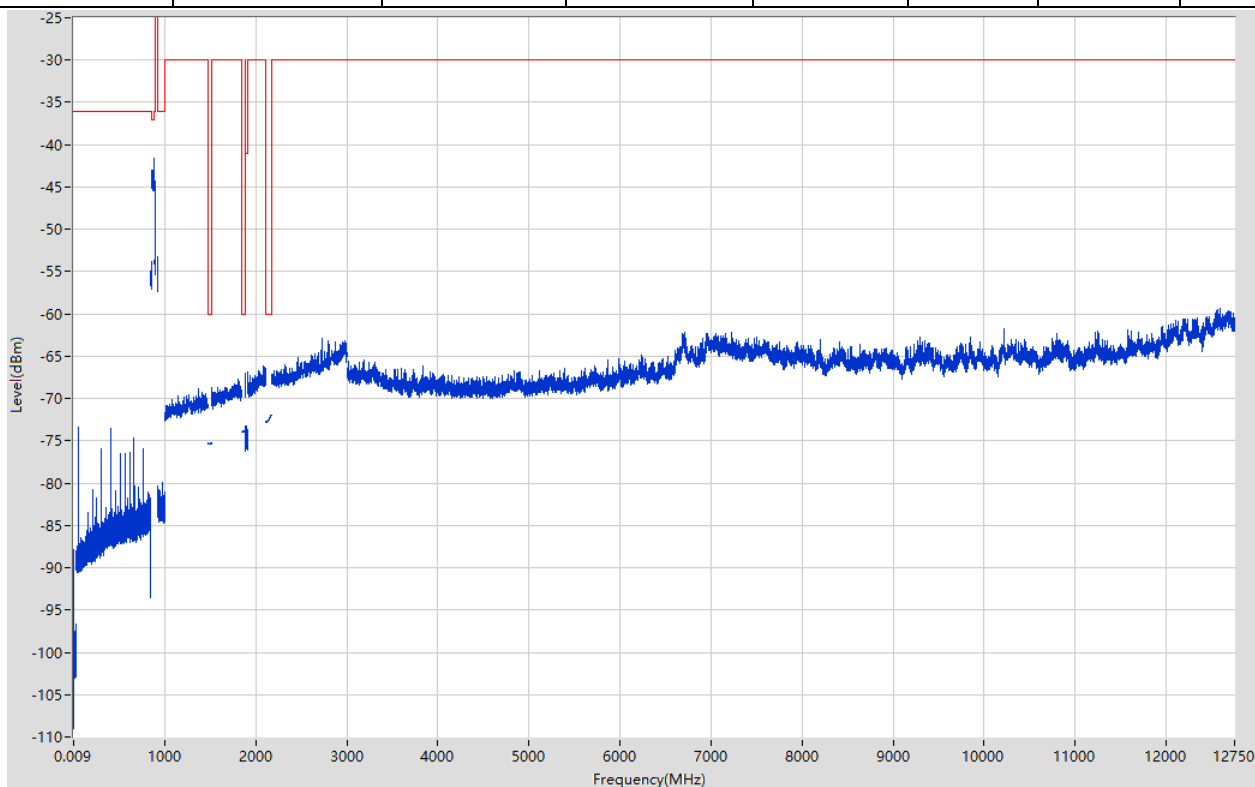
WCDMA Band8_CH 2813

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	0.096	-87.7	-36	Pass	401
0.15	30	0.01	0.15	-91.23	-36	Pass	2985
30	850	0.1	51.203	-72.69	-36	Pass	8593
850	860	0.1	857.05	-52.73	-36	Pass	401
860	890	1	890	-47.25	-37	Pass	401
890	890.1	0.1	890.089	-46.84	-36	Pass	401
915.1	925	0.1	916.065	-45.48	-36	Pass	401
925	1000	0.1	986.182	-80.62	-36	Pass	750
1000	1475.9	1	1285.138	-69.36	-30	Pass	475
1475.9	1510.9	4	1510.55	-75.29	-60	Pass	401
1510.9	1844.9	1	1749.71	-67.79	-30	Pass	401
1844.9	1879.9	4	1870.538	-73.82	-60	Pass	401
1879.9	1884.5	1	1882.005	-67.19	-30	Pass	401
1884.5	1915.7	0.3	1889.102	-73.34	-41	Pass	401
1915.7	2110	1	2093.485	-66.55	-30	Pass	401
2110	2170	4	2169.85	-71.98	-60	Pass	401
2170	3000	1	2967.961	-62.91	-30	Pass	830
3000	12750	1	12679.955	-58.86	-30	Pass	9750



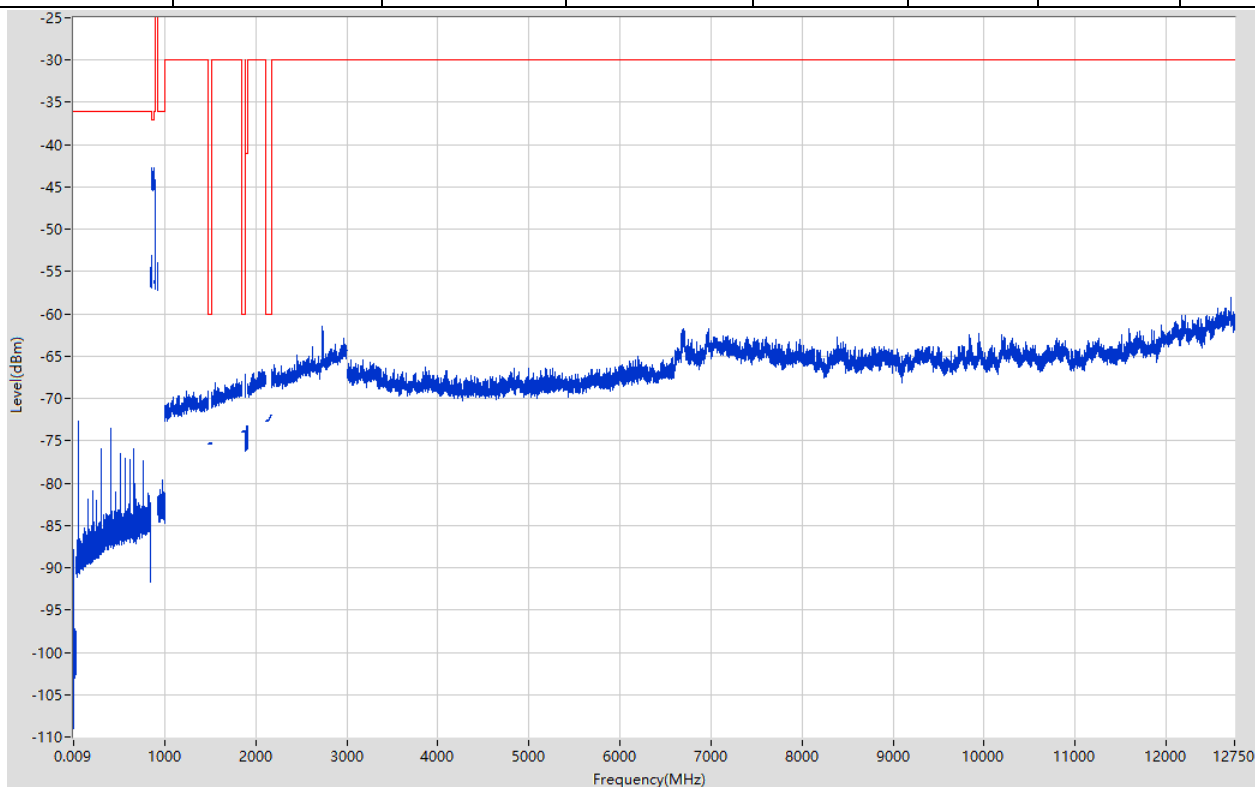
WCDMA Band8_CH 2837

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	0.096	-87.82	-36	Pass	401
0.15	30	0.01	0.15	-90.59	-36	Pass	2985
30	850	0.1	51.203	-73.4	-36	Pass	8593
850	860	0.1	857.6	-53.82	-36	Pass	401
860	890	1	889.7	-41.56	-37	Pass	401
890	894.9	0.1	894.275	-44.33	-36	Pass	401
919.9	925	0.1	920.831	-53.2	-36	Pass	401
925	1000	0.1	972.864	-79.9	-36	Pass	750
1000	1475.9	1	1373.491	-68.89	-30	Pass	475
1475.9	1510.9	4	1510.55	-75.29	-60	Pass	401
1510.9	1844.9	1	1811.5	-67.77	-30	Pass	401
1844.9	1879.9	4	1870.975	-73.82	-60	Pass	401
1879.9	1884.5	1	1880.866	-67.07	-30	Pass	401
1884.5	1915.7	0.3	1888.4	-73.19	-41	Pass	401
1915.7	2110	1	2080.855	-66.19	-30	Pass	401
2110	2170	4	2170	-71.97	-60	Pass	401
2170	3000	1	2725.669	-62.93	-30	Pass	830
3000	12750	1	12591.899	-59.37	-30	Pass	9750

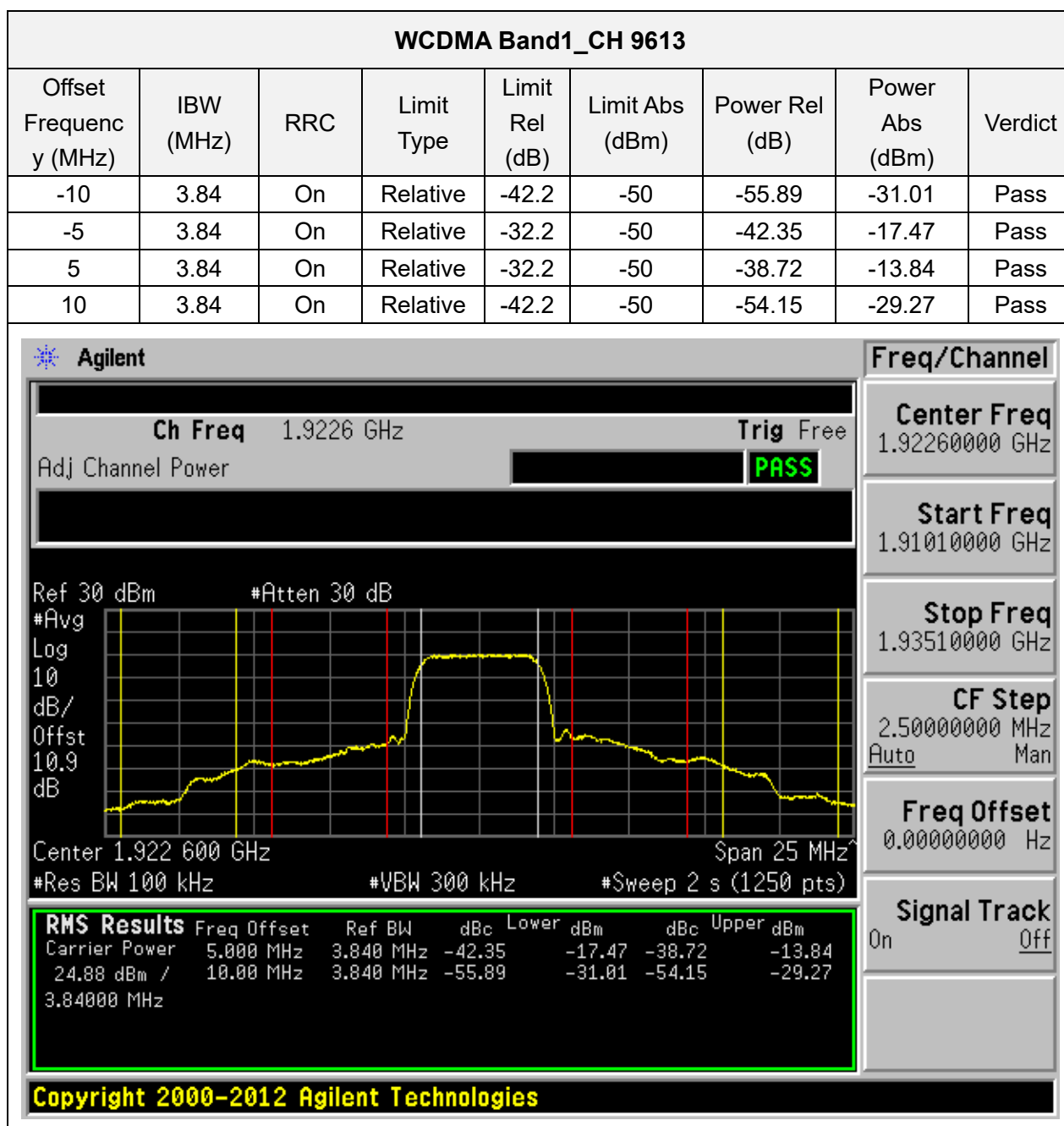


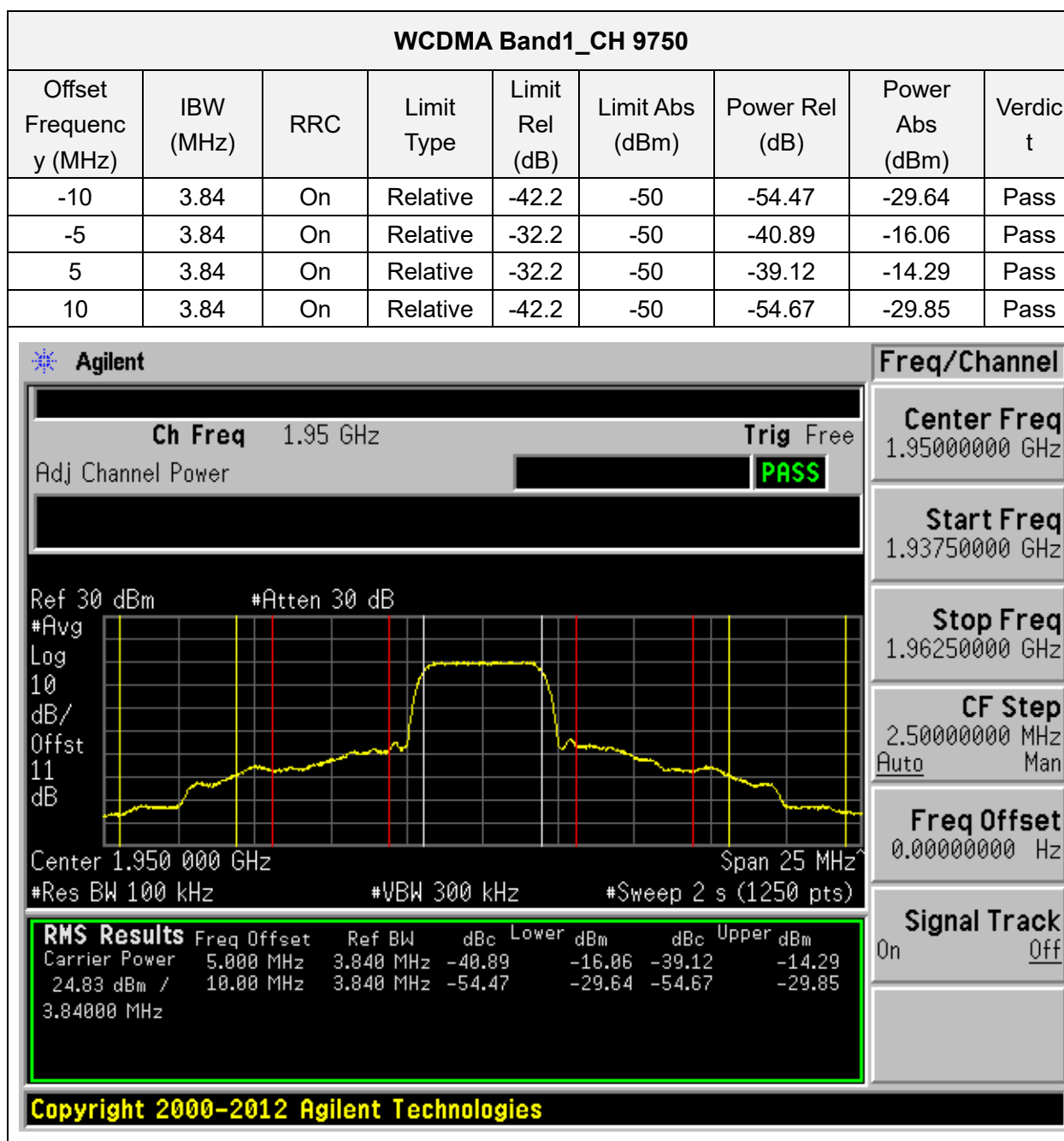
WCDMA Band8_CH 2862

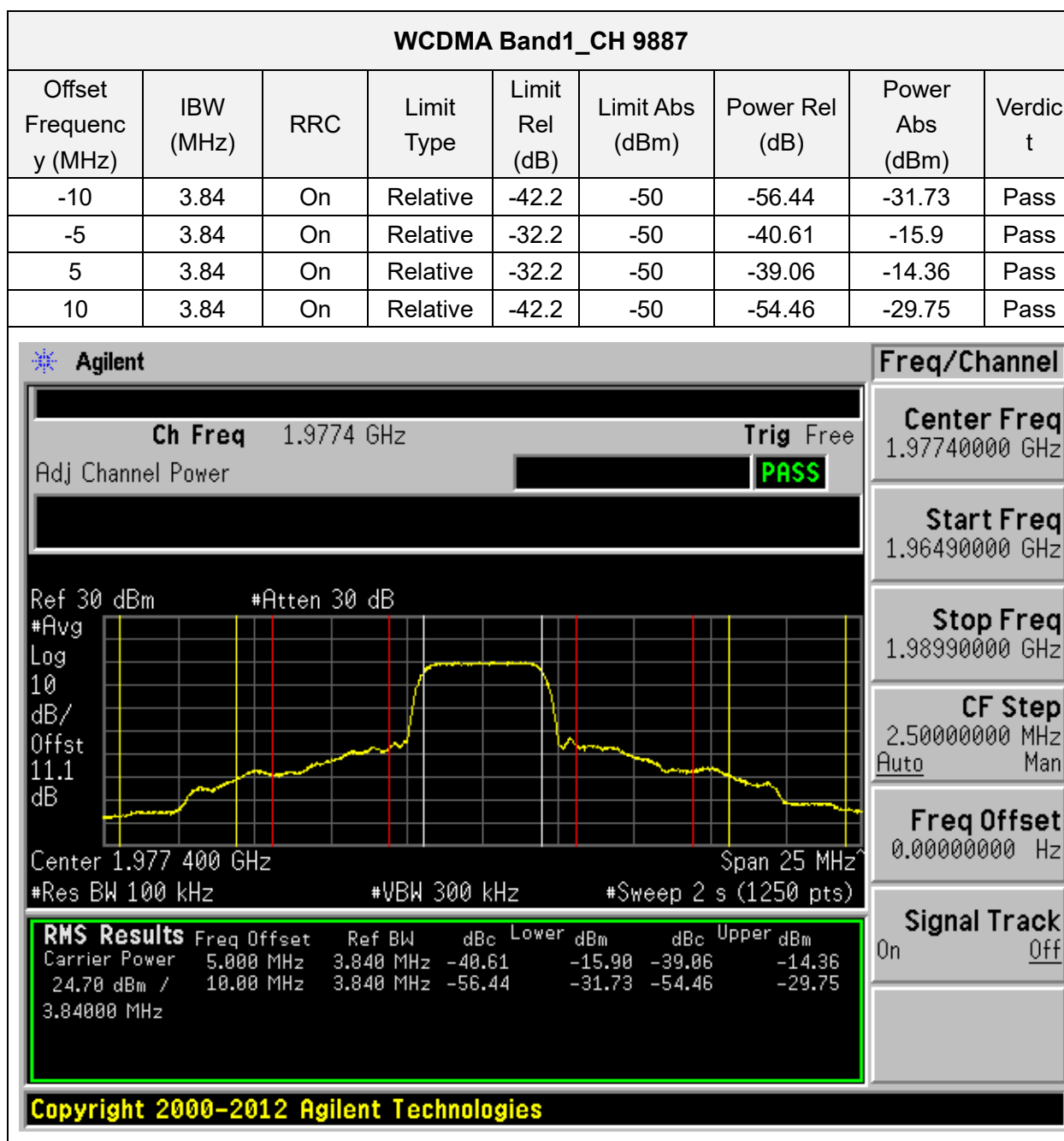
Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	0.096	-87.82	-36	Pass	401
0.15	30	0.01	0.15	-92.02	-36	Pass	2985
30	850	0.1	51.203	-72.7	-36	Pass	8593
850	860	0.1	857.95	-53.07	-36	Pass	401
860	890	1	862.55	-42.72	-37	Pass	401
890	899.9	0.1	899.281	-44.19	-36	Pass	401
924.9	925	0.1	924.901	-53.92	-36	Pass	401
925	1000	0.1	972.864	-79.64	-36	Pass	750
1000	1475.9	1	1236.946	-69.1	-30	Pass	475
1475.9	1510.9	4	1510.638	-75.27	-60	Pass	401
1510.9	1844.9	1	1793.965	-67.69	-30	Pass	401
1844.9	1879.9	4	1872.288	-73.8	-60	Pass	401
1879.9	1884.5	1	1883.281	-67.12	-30	Pass	401
1884.5	1915.7	0.3	1913.36	-73.25	-41	Pass	401
1915.7	2110	1	2073.083	-66.56	-30	Pass	401
2110	2170	4	2169.4	-71.95	-60	Pass	401
2170	3000	1	2733.679	-61.53	-30	Pass	830
3000	12750	1	12704.971	-58.05	-30	Pass	9750

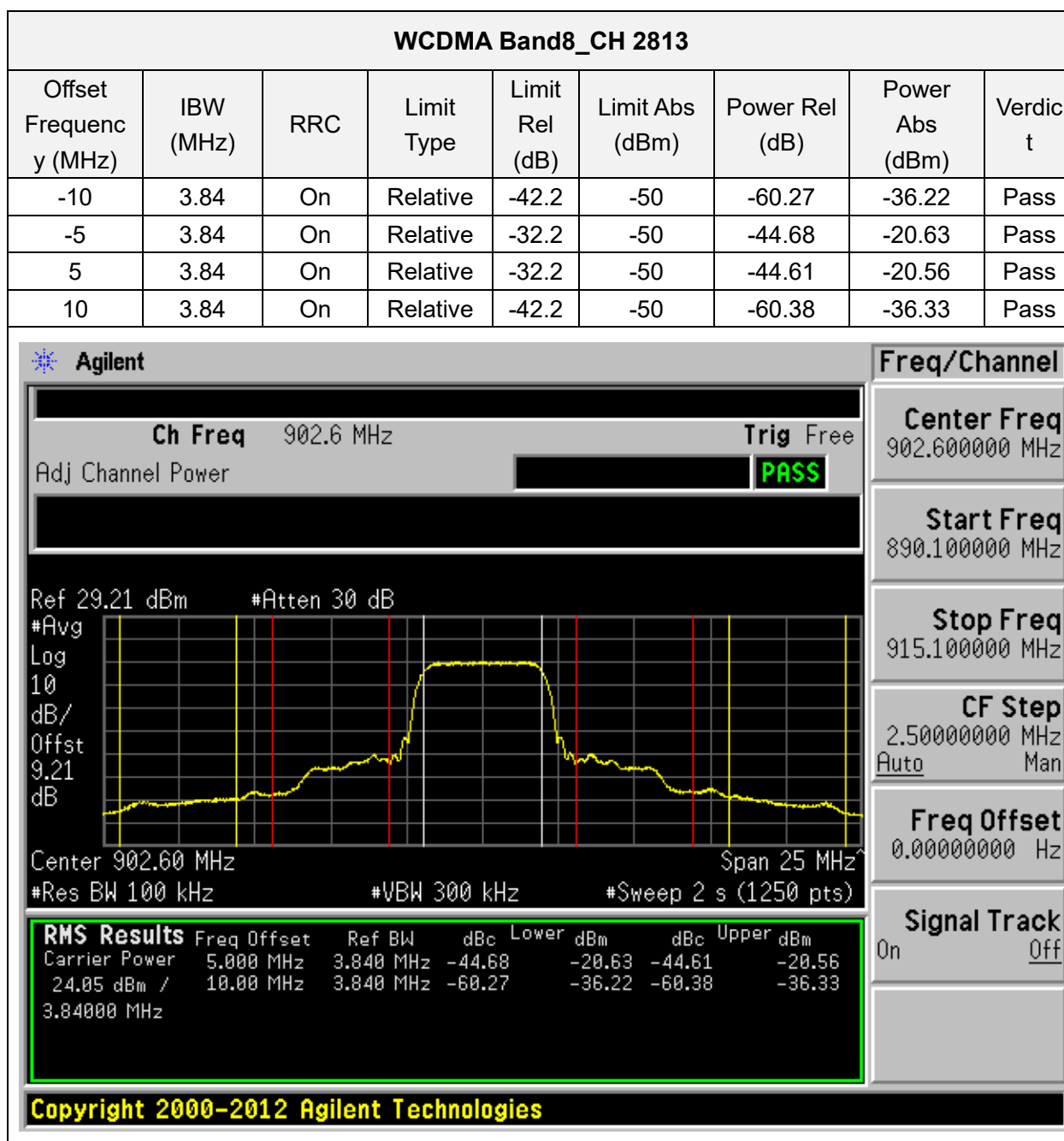


A.6 Adjacent Channel Leakage Power

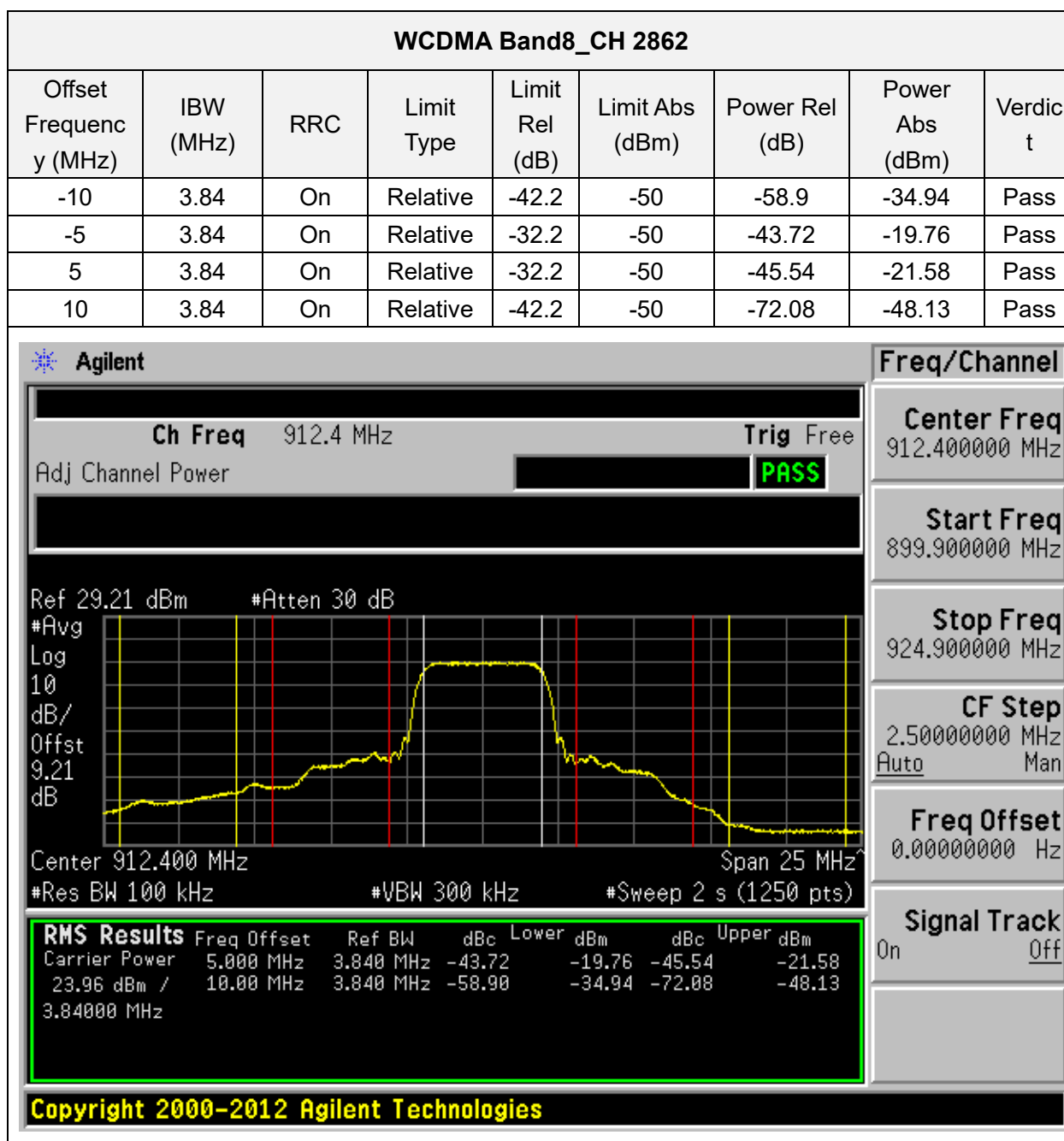












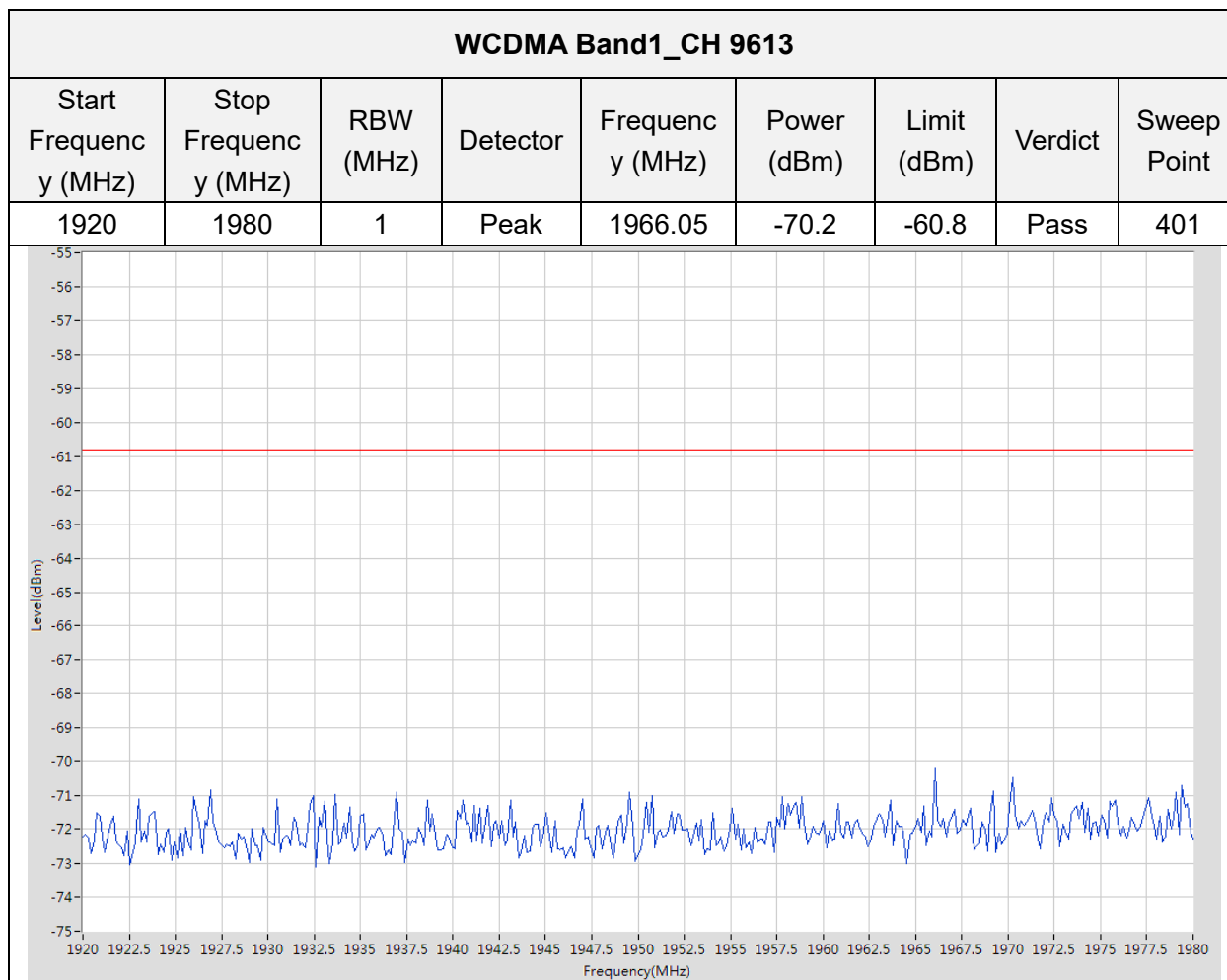
A.7 Output Power Tolerance

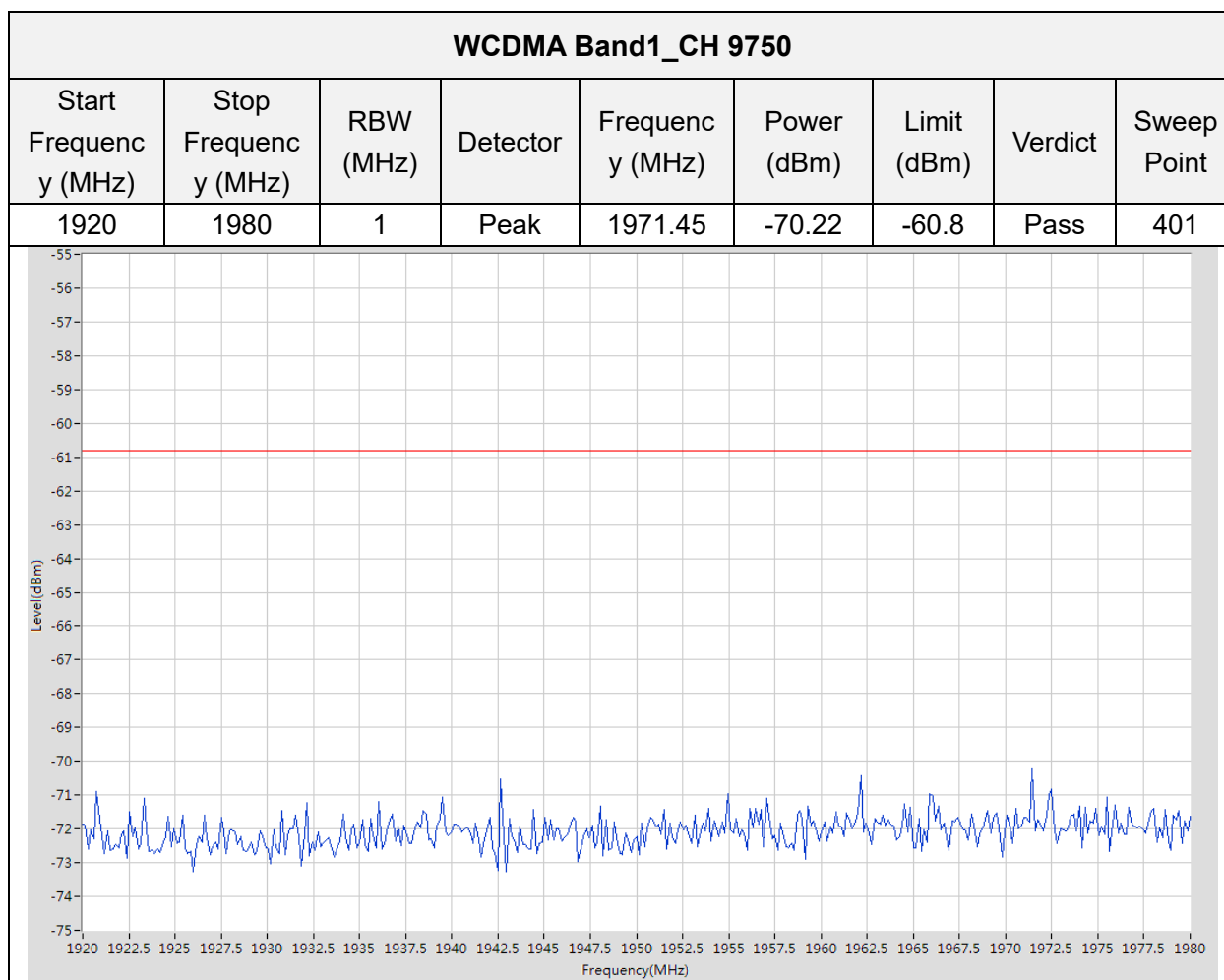
Rated output power declared by manufacture is 23dBm (199.53mW) for WCDMA.

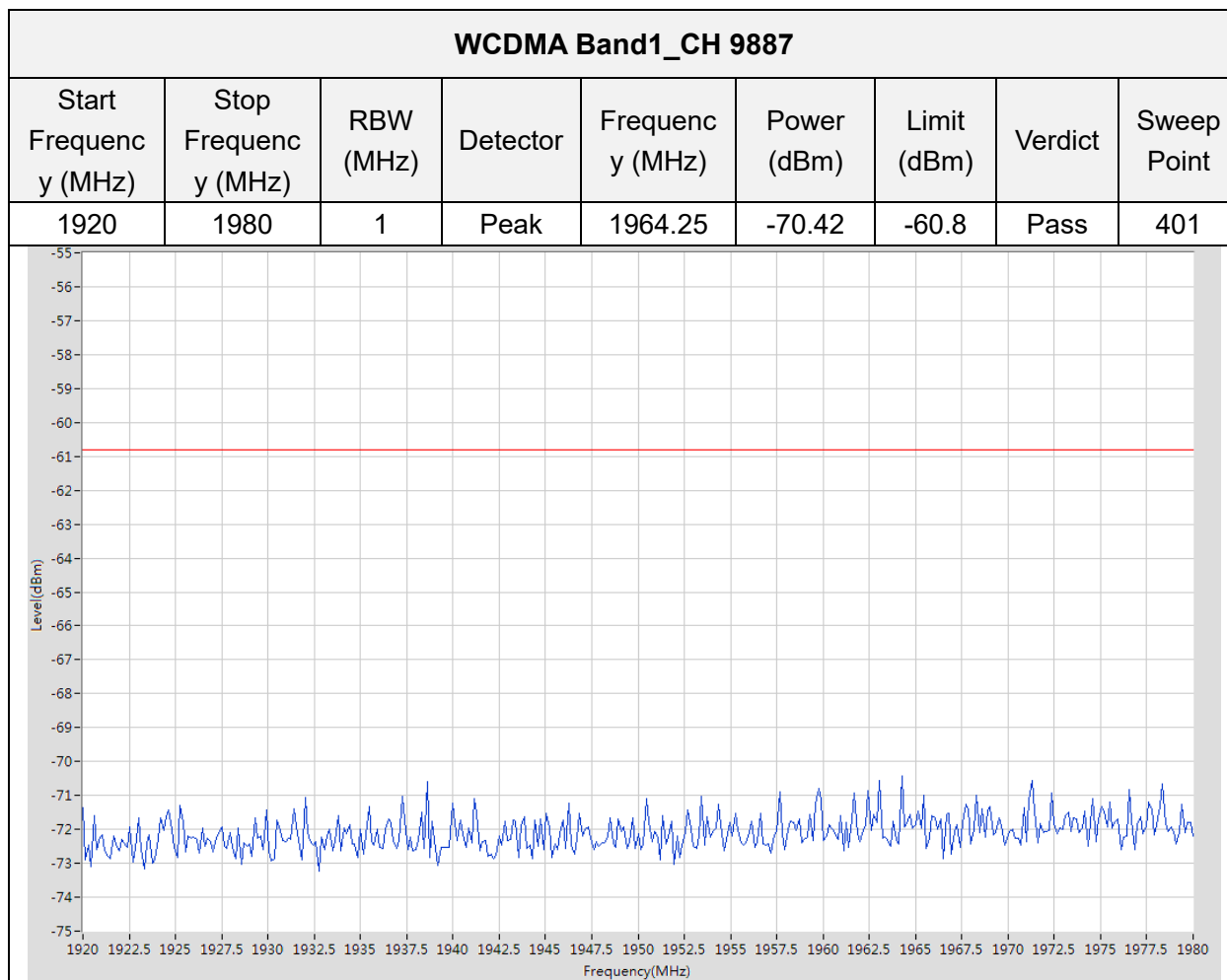
Test Mode	WCDMA Band1					
	9613	9750	9887	9613	9750	9887
	Measured Power (dBm)			Tolerance (%)		
WCDMA	24.7	24.66	24.6	47.91%	46.55%	44.54%
HSDPA	23.75	23.65	23.61	18.85%	16.14%	15.08%
HSUPA	23.78	23.68	23.53	19.67%	16.95%	12.98%
Test Mode	WCDMA Band8					
	2813	2837	2862	2813	2837	2862
	Measured Power (dBm)			Tolerance (%)		
WCDMA	23.68	23.68	23.66	16.95%	16.95%	16.41%
HSDPA	22.71	22.67	22.67	-6.46%	-7.32%	-7.32%
HSUPA	22.71	22.7	22.66	-6.46%	-6.68%	-7.53%

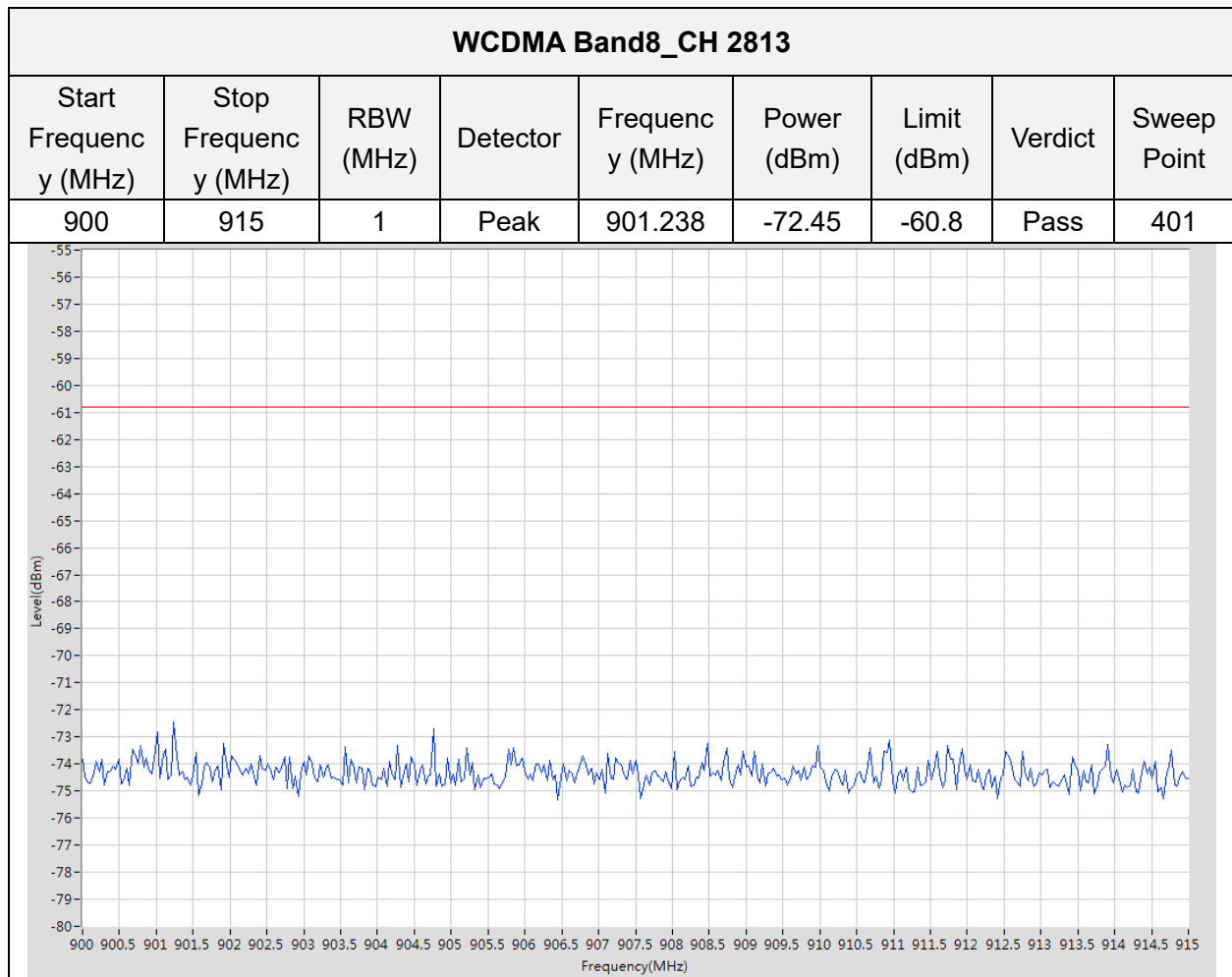
A.8 Leak Power at Carrier off Condition

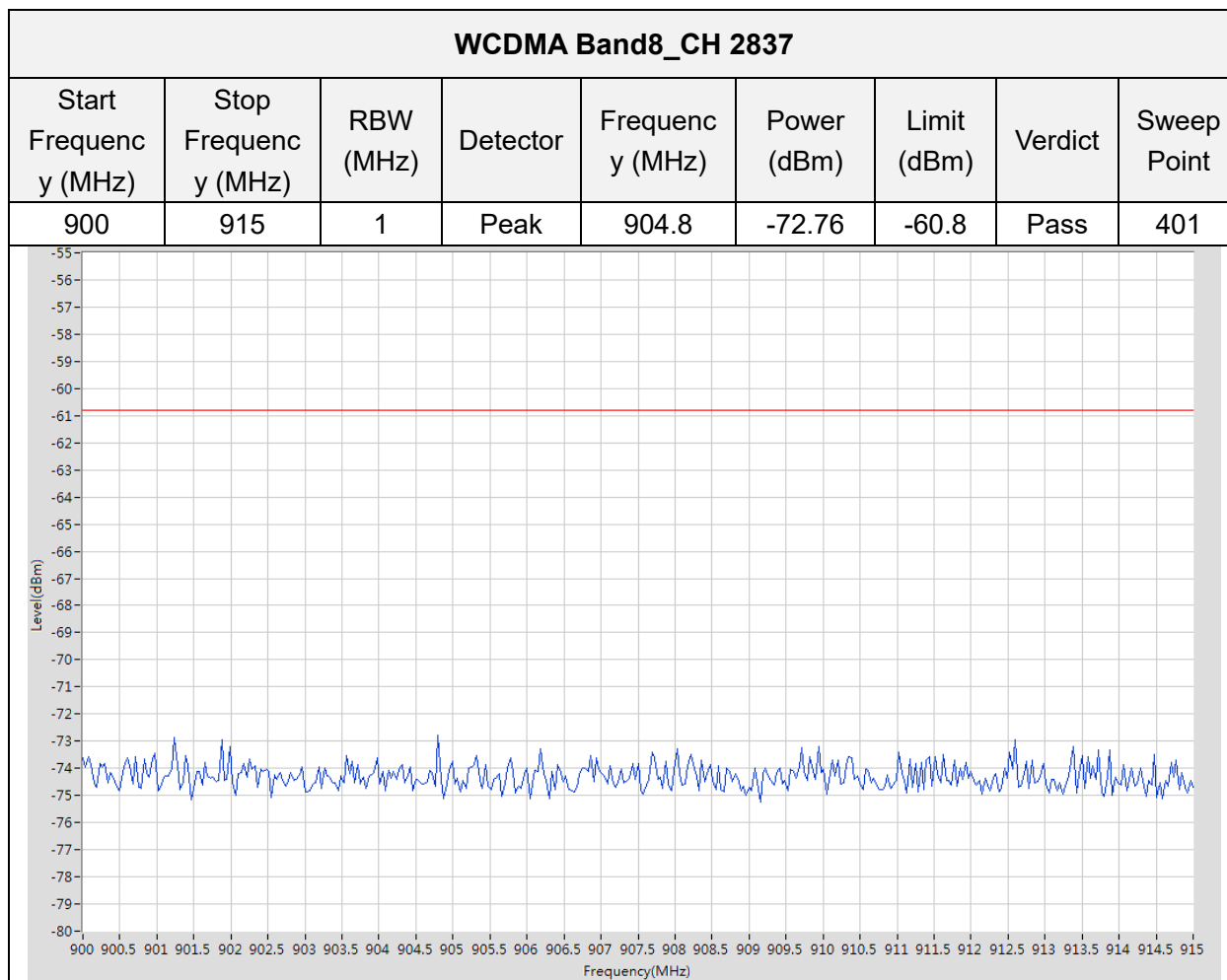
UL Channel	Frequency (MHz)	Leak power at carrier off condition (dBm)	Limit	Verdict
WCDMA Band1				
9613	1922.6	-64.36	-55dBm / 3.84MHz	Pass
9750	1950	-64.38	-55dBm / 3.84MHz	Pass
9887	1977.4	-64.58	-55dBm / 3.84MHz	Pass
WCDMA Band8				
2813	902.6	-66.61	-55dBm / 3.84MHz	Pass
2837	907.4	-66.92	-55dBm / 3.84MHz	Pass
2862	912.4	-67.02	-55dBm / 3.84MHz	Pass

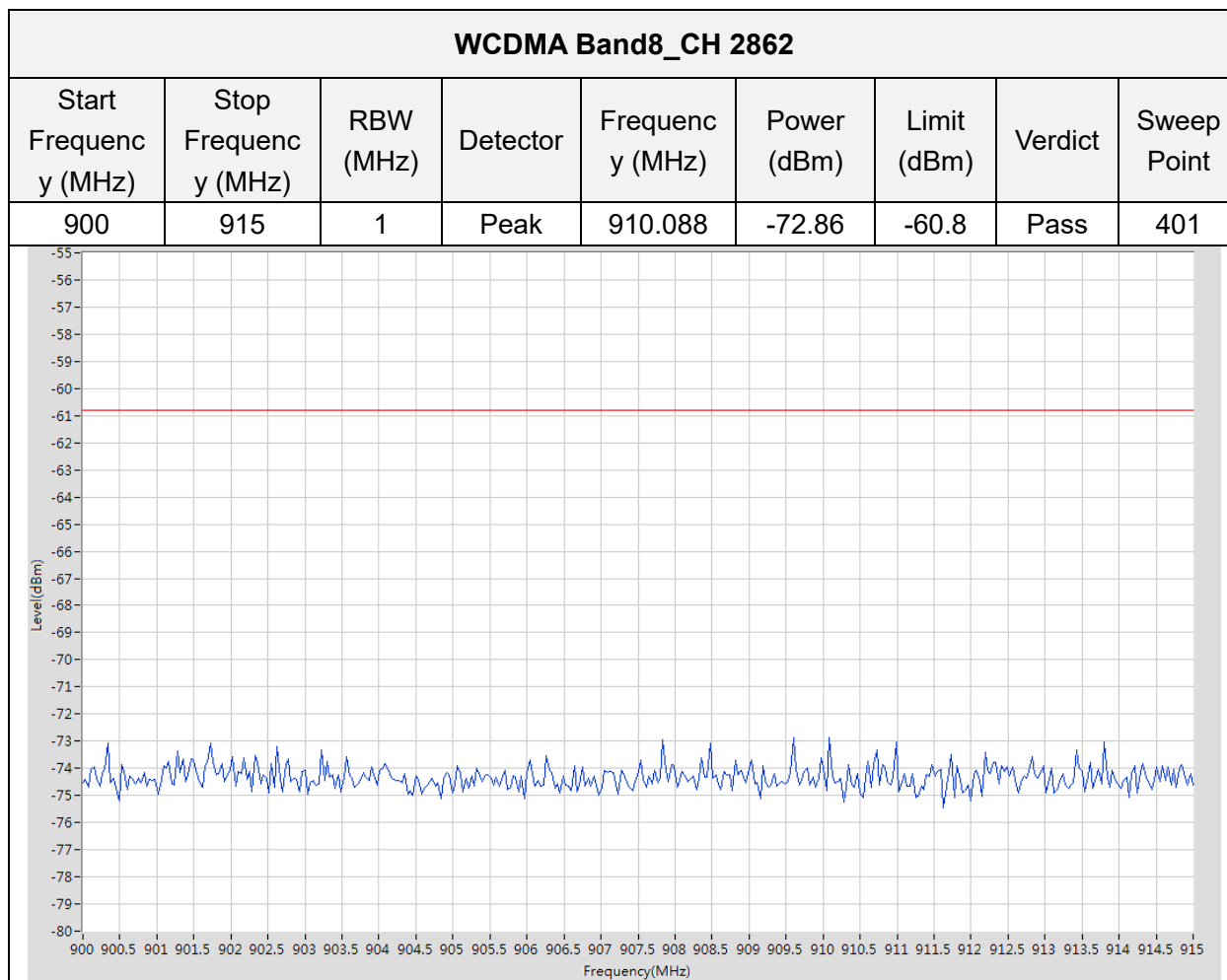




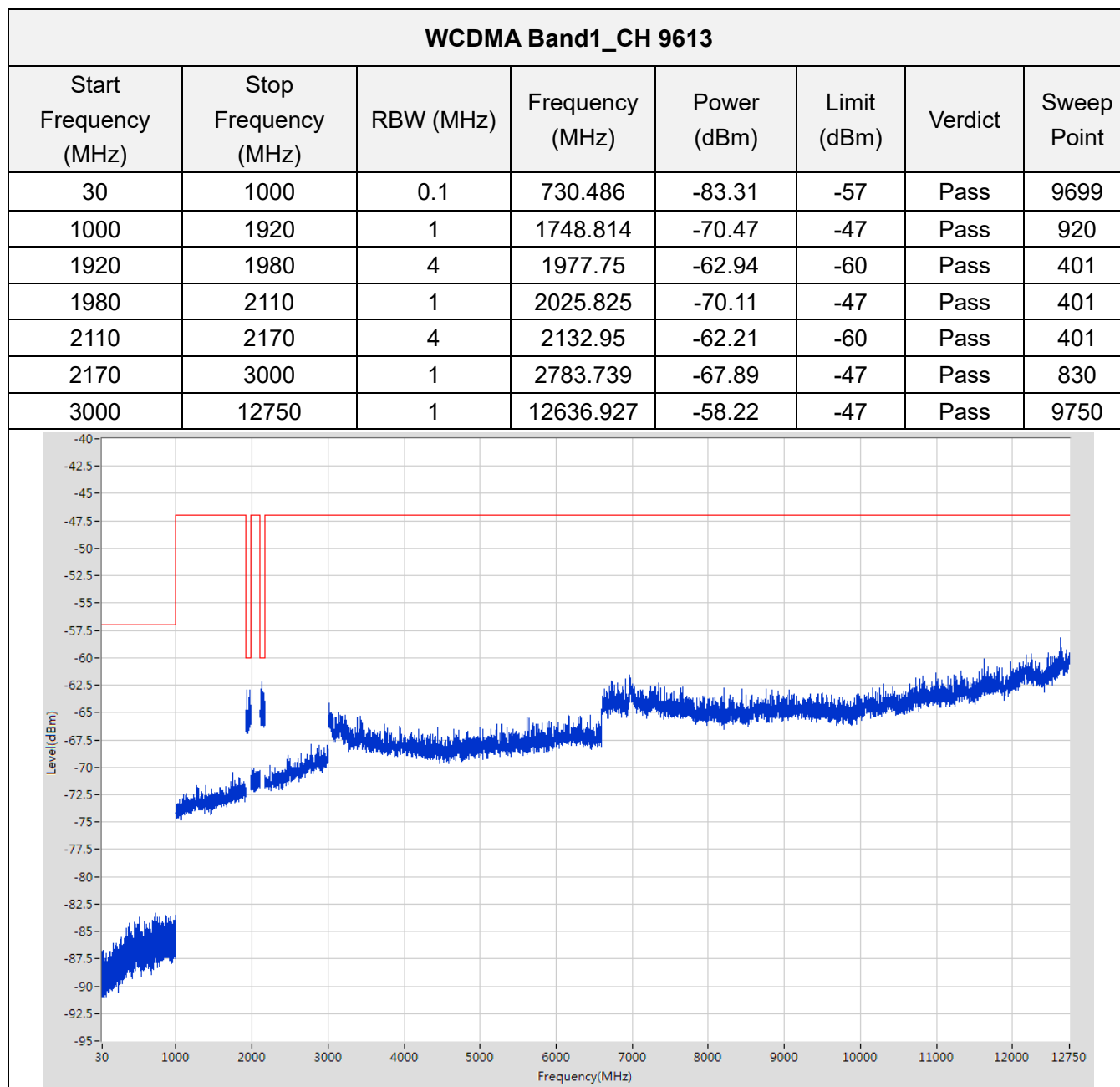






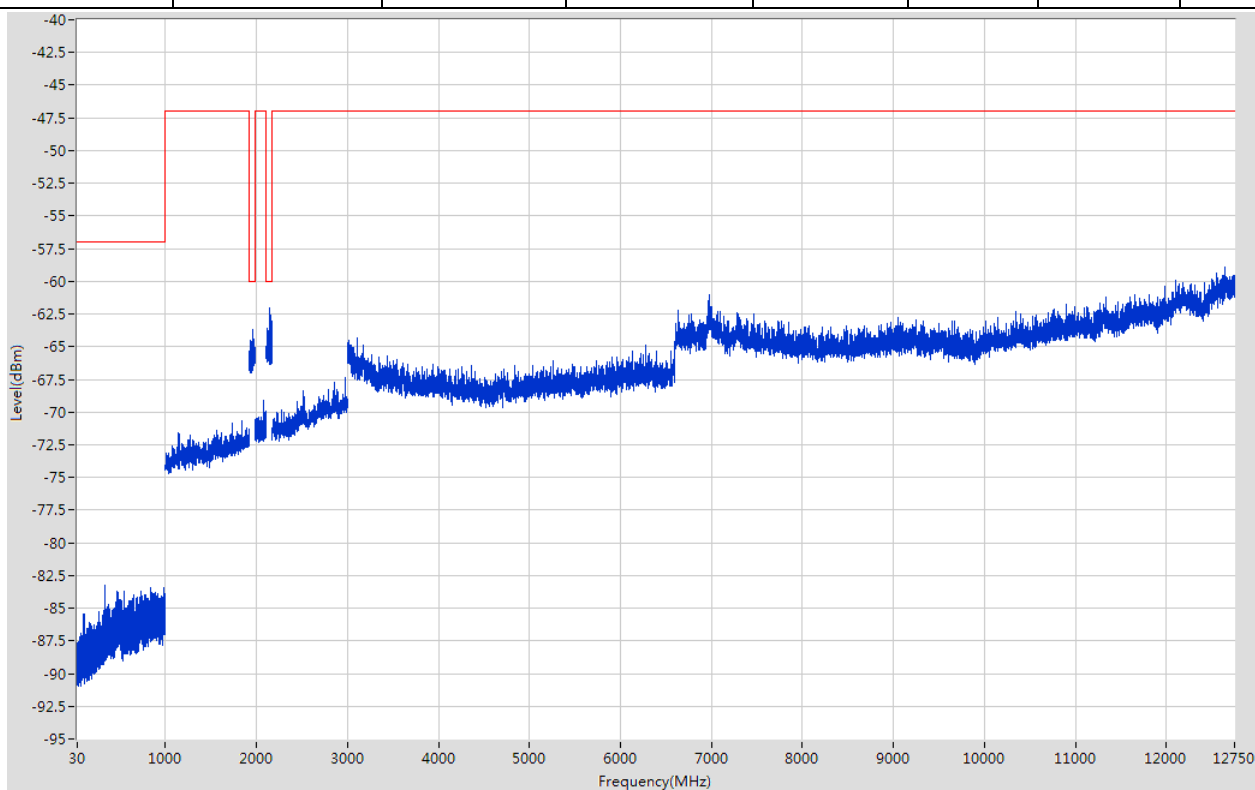


A.9 Secondary Radiated Emission Strength



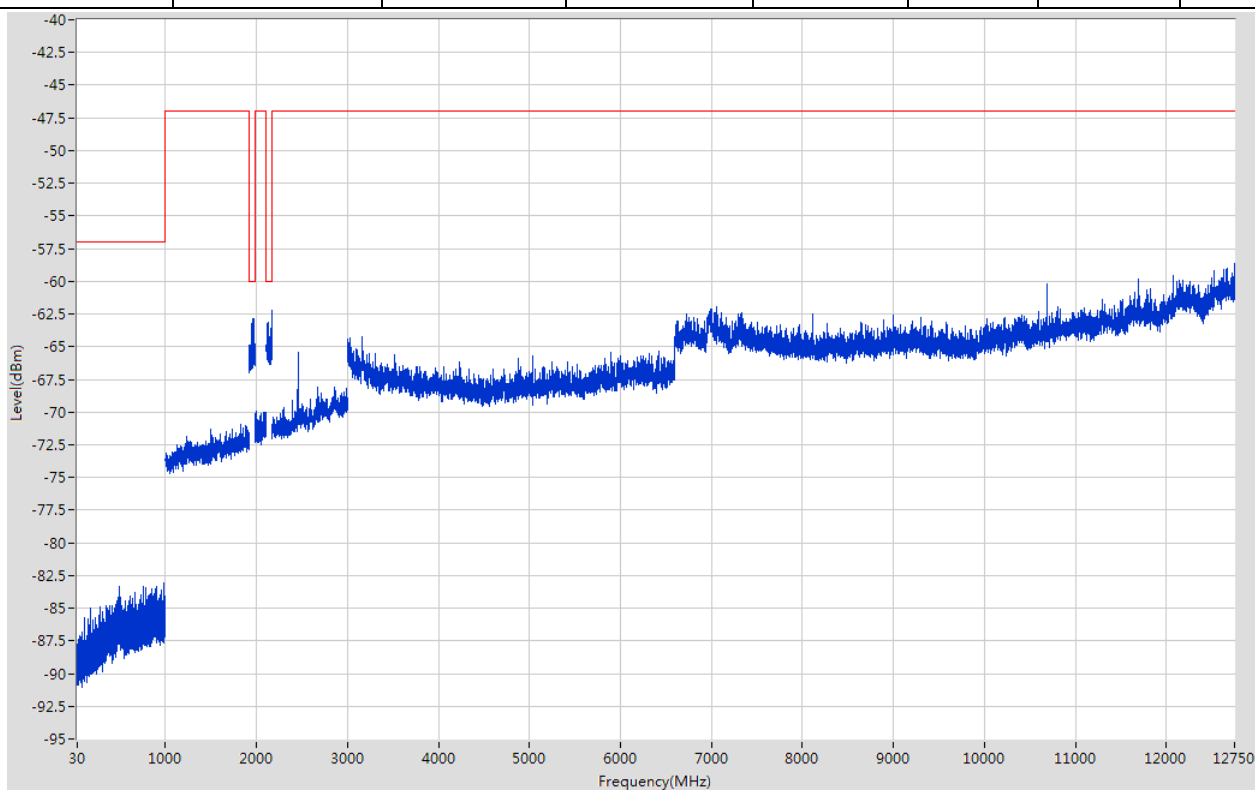
WCDMA Band1_CH 9750

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	1000	0.1	332.937	-83.28	-57	Pass	9699
1000	1920	1	1835.909	-70.68	-47	Pass	920
1920	1980	4	1963.35	-63.73	-60	Pass	401
1980	2110	1	2075.55	-69.13	-47	Pass	401
2110	2170	4	2141.05	-62.05	-60	Pass	401
2170	3000	1	2980.977	-67.34	-47	Pass	830
3000	12750	1	12642.931	-58.87	-47	Pass	9750



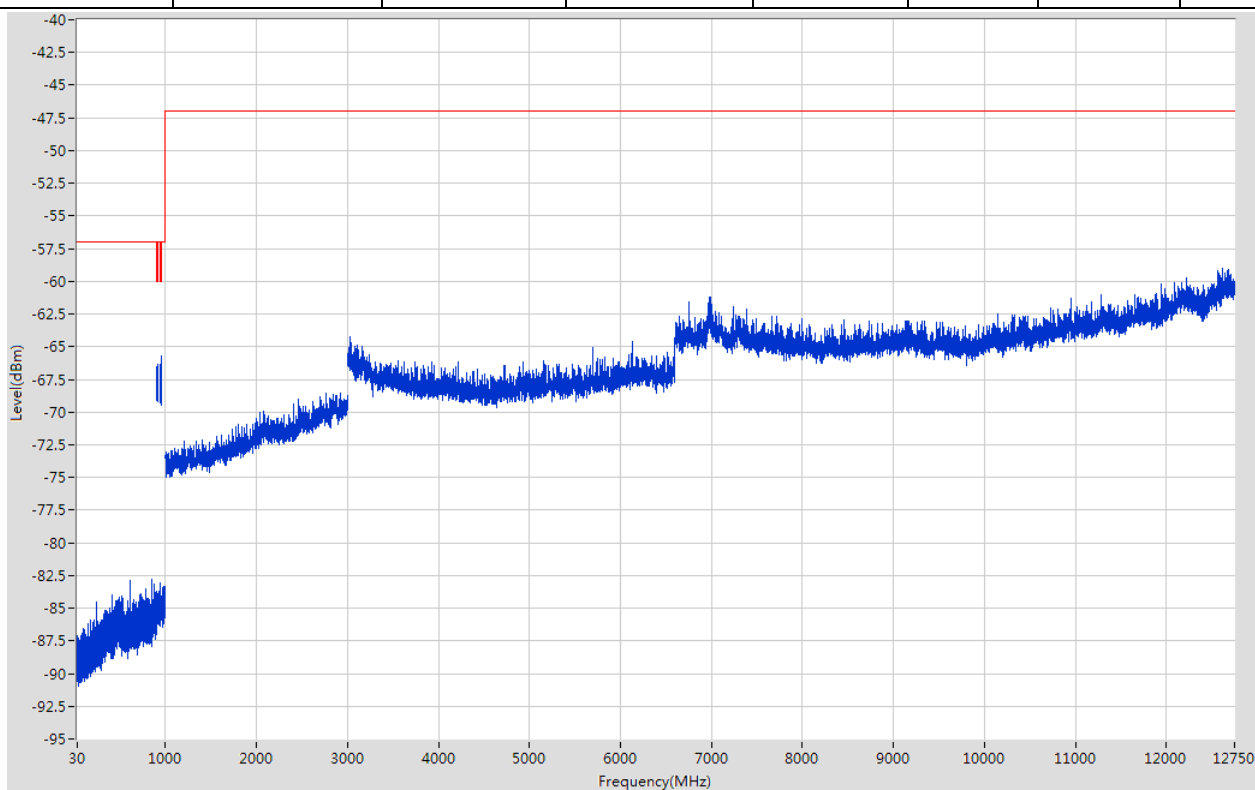
WCDMA Band1_CH 9887

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	1000	0.1	985.481	-83.02	-57	Pass	9699
1000	1920	1	1829.902	-70.93	-47	Pass	920
1920	1980	4	1960.8	-62.84	-60	Pass	401
1980	2110	1	1996.9	-69.91	-47	Pass	401
2110	2170	4	2167.45	-62.2	-60	Pass	401
2170	3000	1	2454.343	-65.42	-47	Pass	830
3000	12750	1	12747.999	-58.66	-47	Pass	9750



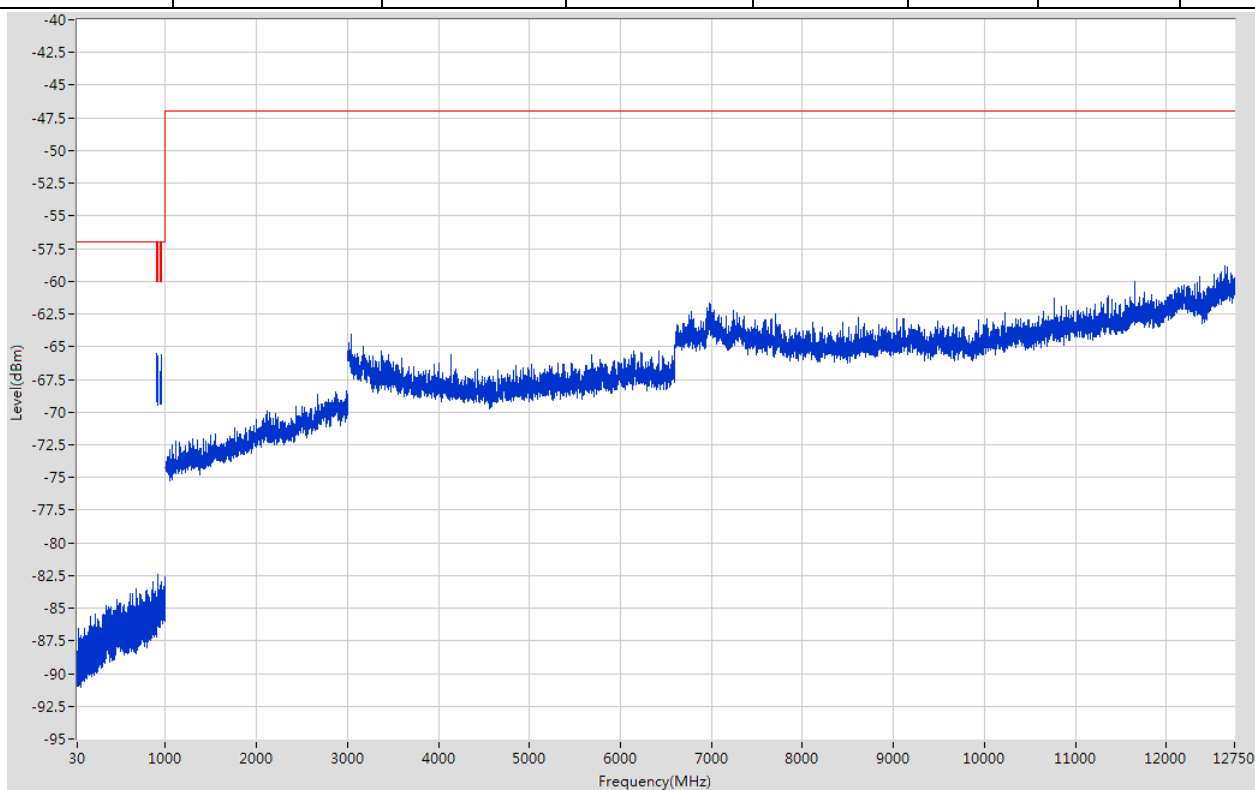
WCDMA Band8_CH 2813

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	900	0.1	850.505	-82.8	-57	Pass	8699
900	915	4	910.95	-66.31	-60	Pass	401
915	945	0.1	935.625	-83.04	-57	Pass	401
945	960	4	955.05	-65.69	-60	Pass	401
960	1000	0.1	981.9	-83.34	-57	Pass	401
1000	3000	1	2922.961	-68.59	-47	Pass	2000
3000	12750	1	12615.914	-59.01	-47	Pass	9750



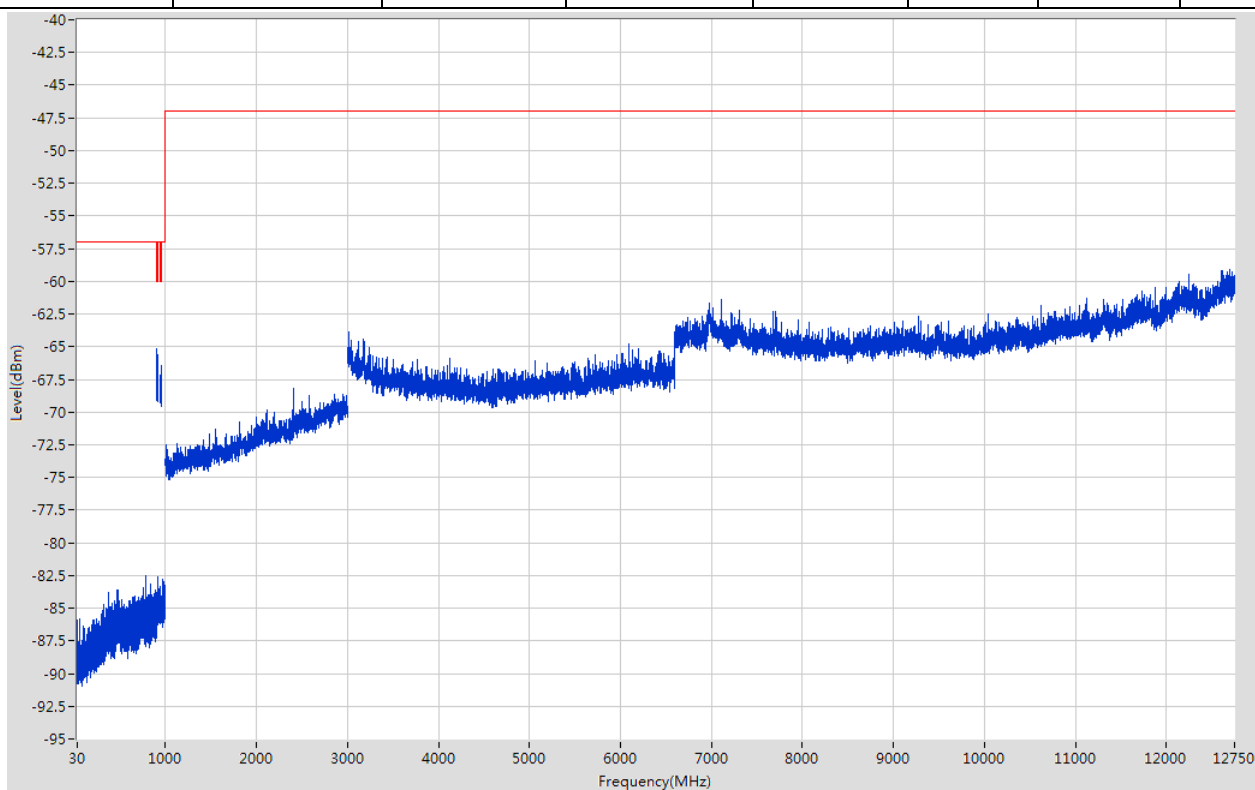
WCDMA Band8_CH 2837

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	900	0.1	858.738	-82.97	-57	Pass	8699
900	915	4	904.463	-65.52	-60	Pass	401
915	945	0.1	919.125	-82.39	-57	Pass	401
945	960	4	952.65	-65.62	-60	Pass	401
960	1000	0.1	995.1	-82.64	-57	Pass	401
1000	3000	1	2983.992	-68.35	-47	Pass	2000
3000	12750	1	12637.928	-58.84	-47	Pass	9750



WCDMA Band8_CH 2862

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	900	0.1	789.093	-82.52	-57	Pass	8699
900	915	4	900.3	-65.17	-60	Pass	401
915	945	0.1	917.25	-82.57	-57	Pass	401
945	960	4	956.4	-66.46	-60	Pass	401
960	1000	0.1	967.3	-82.77	-57	Pass	401
1000	3000	1	2401.701	-68.17	-47	Pass	2000
3000	12750	1	12699.968	-59.06	-47	Pass	9750



A.10 Transmission speed and System operation test

Test Items	Verdict
Transmission Speed	GOOD
System operation	GOOD

A.11 Construction Protection Confirmation Method

The RF and modulation portions are protected against illegal modification as following method:

Protected Method	Description
Structure protection	The red area has an external shield to protect the circuit, can't be easily modified
Reference Photo	
	

ANNEX B TEST SETUP PHOTOS

Please refer to the document “BL-SZ22B0865-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer to the document “BL-SZ22B0865-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer to the document “BL-SZ22B0865-AI.PDF”.

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