FCC RF TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Mobile Phone

ISSUED TO
GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD

NO.18 HAIBIN ROAD, WUSHA, CHANG'AN, DONGGUAN, GUANGDONG, CHINA

Prepared by: Zhang Yanqing
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Date May. 8, 2015

Approved by: Wei Yanquan
Wei Yanquan
(Chief Engineer)
Date May 8, 2015

Report No.:	BL-SZ1540056-604
EUT Type:	Mobile Phone
Model Name:	OPPO 1206
Brand Name:	OPPO
Test Standard:	47 CFR Part 2
	47 CFR Part 22 Subpart H
	47 CFR Part 24 Subpart E
	47 CFR Part 27 Subpart L
	47 CFR Part 27 Subpart M
FCC ID:	R9C-1206
Test conclusion:	Pass
Test Date:	Apr. 10, 2015 ~ Apr. 28, 2015
Date of Issue:	May. 8, 2015

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Revision History

Version	Issue Date	Revisions
Rev. 01	Apr. 29, 2015	Initial Issue
Rev. 02	May. 8, 2015	The Second Issue

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province,P. R. China
Phone Number	+86 755 6683 3402
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province,P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625. The laboratory has met the requirements of the IAS Accreditation Criteria for Testing Laboratories (AC89), has demonstrated compliance with ISO/IEC Standard 17025:2005. The accreditation certificate number is TL-588. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Announce

(1) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(2) The test report is invalid if there is any evidence and/or falsification.

(3) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(4) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.

(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD
Address	NO.18 HAIBIN ROAD, WUSHA, CHANG'AN, DONGGUAN, GUANGDONG, CHINA

2.2 Manufacturer

Manufacturer	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD
Address	NO.18 HAIBIN ROAD, WUSHA, CHANG'AN, DONGGUAN, GUANGDONG, CHINA

2.3 General Description for Equipment under Test (EUT)

EUT Type	Mobile Phone
Model Name	OPPO 1206
Hardware Version	11
Software Version	ColorOS V2.0.1i
Network and Wireless connectivity	2G Network GSM/GPRS/EGPRS 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/Band 5 4G Network LTE FDD Band 4/Band 7 WIFI Bluetooth
About the Product	The equipment is smart phone, intended for used with information technology equipment.

2.4 Technical Information

Frequency Bands	GSM/GPRS/EGPRS 850/1900 WCDMA/HSDPA/HSUPA Band 2/Band 5 LTE FDD Band 4/Band 7	
Modulation Type	GSM	GMSK
	GPRS	GMSK
	EGPRS	8PSK
	WCDMA	QPSK
	HSDPA	QPSK
		16QAM
	HSUPA	QPSK
		16QAM
	LTE	QPSK
		16QAM
TX Frequency Range	GSM/GPRS/EGPRS 850: 824.20 - 848.80 MHz GSM/GPRS/EGPRS 1900: 1850.20 - 1909.80 MHz WCDMA/HSDPA/HSUPA Band 2: 1852.4 -1907.6 MHz WCDMA/HSDPA/HSUPA Band 5: 826.4 - 846.6 MHz LTE Band 4: 1710 - 1755 MHz	

	LTE Band 7: 2500 - 2570 MHz
Rx Frequency Range	GSM/GPRS/EGPRS 850: 869.20 - 893.80 MHz GSM/GPRS/EGPRS 1900: 1930.20 - 1989.80 MHz WCDMA/HSDPA/HSUPA Band 2: 1932.4 - 1987.6 MHz WCDMA/HSDPA/HSUPA Band 5: 871.4 - 891.6 MHz LTE Band 4: 2110-2155 MHz LTE Band 7: 2620-2690 MHz
Power Class	GSM/GPRS 850: 4 GSM/GPRS 1900: 1 EGPRS 850: E2 EGPRS 1900: E2 WCDMA/HSDPA/HSUPA Band 2: 3 WCDMA/HSDPA/HSUPA Band 5: 3 LTE Band 4: 3 LTE Band 7: 3
Multislot Class	GPRS: 12, EGPRS: 12
Antenna Type	PIFA Antenna
Antenna Gain	GSM/GPRS/EGPRS 850: 0.5 dBi GSM/GPRS/EGPRS 1900: 1.1 dBi WCDMA/HSDPA/HSUPA Band 2: 1.1 dBi WCDMA/HSDPA/HSUPA Band 5: 0.5 dBi LTE Band 4: 1.1 dBi LTE Band 7: 1.1 dBi

Note: The above EUT information in section 2.3 and 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	OPPO
	Model No.	BLP593
	Serial No.	N/A
	Capacitance	2000 mAh
	Rated Voltage	3.8 V
	Extreme Voltage	Low: 3.6 V / High:4.35 V
Ancillary Equipment 2	Charger 1	
	Brand Name	OPPO
	Model No.	AK901
	Rated Input	~ 100-240 V, 0.2 A, 50/60 Hz
	Rated Output	⎓ 5 V, 1 A
Ancillary Equipment 3	Charger 2	
	Brand Name	OPPO
	Model No.	S01A22
	Rated Input	~ 100-240 V, 0.2 A, 50/60 Hz
	Rated Output	⎓ 5 V, 1 A
Ancillary Equipment 4	Charger 3	
	Brand Name	OPPO
	Model No.	S005SU0500100
	Rated Input	~ 100-240 V, 0.15 A, 50/60 Hz
	Rated Output	⎓ 5V, 1 A
Ancillary Equipment 5	Earphone	
	Length	1.2 m
Ancillary Equipment 6	USB Cable	
	Length	1.0 m

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2 (10–1–14 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 (10–1–14 Edition)	Public Mobile Services
3	47 CFR Part 24 (10–1–14 Edition)	Personal Communications Services
4	47 CFR Part 27 (10–1–14 Edition)	Miscellaneous Wireless Communications Services
5	TIA/EIA 603.D-2010	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
6	KDB 971168 D01 v02r02	Measurement Guidance For Certification of Licensed Digital Transmitters

3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Conducted RF Output Power	2.1046	Reporting only (Show in ANNEX A.1)	Pass
2	Effective (Isotropic) Radiated Power	2.1046 22.913 24.232 27.50(d) 27.50(h)	ANNEX A.1	Pass
3	Peak to average radio	2.0146 24.232 27.50(d)	ANNEX A.2	Pass
4	Occupied Bandwidth	2.1049 22.917 24.238 27.53(h) 27.53(m)	ANNEX A.3	Pass
5	Frequency Stability	2.1055 22.355 24.235 27.54	ANNEX A.4	Pass

6	Spurious Emission at Antenna Terminals	2.1051 22.917 24.238 27.53(h) 27.53(m)	ANNEX A.5	Pass
7	Band Edge	2.1051 22.917 24.238 27.53(h) 27.53(m)	ANNEX A.6	Pass
8	Field Strength of Spurious Radiation	2.1053 22.917 24.238 27.53(h) 27.53(m)	ANNEX A.7	Pass

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	45% - 55%	
Atmospheric Pressure	100 kPa -102 kPa	
Temperature	NT (Normal Temperature)	+22 to +25°C
Working Voltage of the EUT	NV (Normal Voltage)	3.8 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2014.07.10	2015.07.09
Vector Signal Generator	ROHDE&SCHWARZ	SMBV100A	177746	2014.07.09	2015.07.08
Signal Generator	ROHDE&SCHWARZ	SMB100A	260592	2014.07.21	2015.07.20
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2014.07.23	2015.07.22
Spectrum Analyzer	AGILENT	E4440A	MY45304434	2014.10.18	2015.10.17
Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU 200	123666	2014.10.18	2015.10.17
Wireless Communications Test Set	ROHDE&SCHWARZ	CMW 500	138884	2014.07.07	2015.07.06
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2014.07.07	2015.07.06
LISN	SCHWARZBECK	NSLK 8127	8127-687	2014.07.07	2015.07.06
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2014.07.07	2015.07.06
Power Splitter	KMW	DCPD-LDC	1305003215	2014.07.07	2015.07.06
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2014.07.07	2015.07.06
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2014.07.09	2015.07.08
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2014.07.07	2015.07.06
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2013.07.02	2015.07.01
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2013.07.03	2015.07.02
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2013.07.02	2015.07.01
Test Antenna-Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2013.07.02	2015.07.01
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2014.10.07	2015.10.06
Shielded Enclosure	ChangNing	CN-130701	130703	--	--

4.3 Test Configurations

Test Items	Test Mode	Test Channel		
		LCH	MCH	HCH
E.R.P/E.I.R.P	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 5	v	v	v
	HSUPA Band 2	v	v	v
	HSUPA Band 5	v	v	v
	HSDPA Band 2	v	v	v
	HSDPA Band 5	v	v	v
Peak to Average Ratio	GSM 850	--	--	--
	GSM 1900	--	--	--
	GPRS 850	--	--	--
	GPRS 1900	--	--	--
	EGPRS 850	--	--	--
	EGPRS 1900	--	--	--
	WCDMA Band 2	v	v	v
	WCDMA Band 5	--	--	--
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--
Occupied Bandwidth	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 5	v	v	v
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--
Frequency Stability	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v

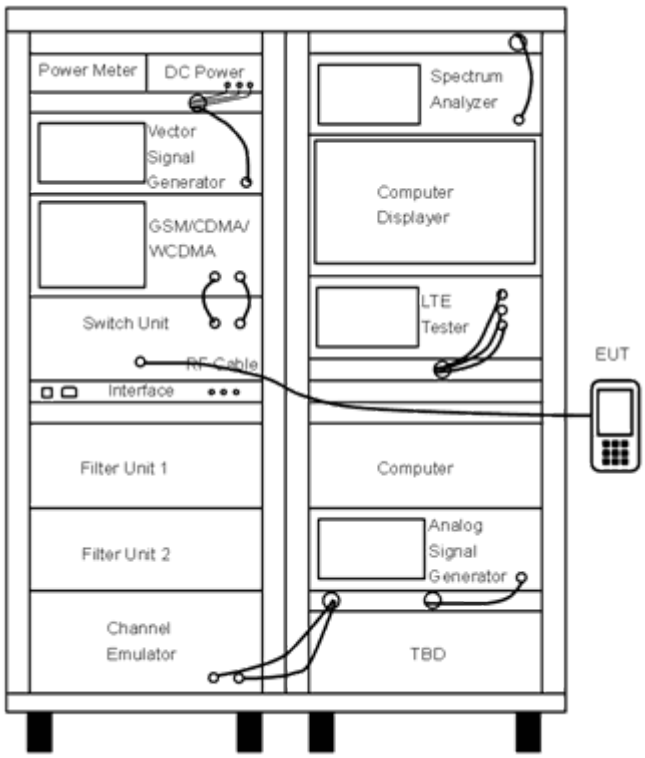
Test Items	Test Mode	Test Channel		
		LCH	MCH	HCH
	EGPRS 1900	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 5	v	v	v
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--
Spurious Emission at Antenna Terminals	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 5	v	v	v
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--
Band Edge	GSM 850	v	--	v
	GSM 1900	v	--	v
	GPRS 850	v	--	v
	GPRS 1900	v	--	v
	EGPRS 850	v	--	v
	EGPRS 1900	v	--	v
	WCDMA Band 2	v	--	v
	WCDMA Band 5	v	--	v
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--
Field Strength of Spurious Radiation	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 5	v	v	v
	HSUPA Band 2	--	--	--
	HSUPA Band 5	--	--	--
	HSDPA Band 2	--	--	--
	HSDPA Band 5	--	--	--

Test Items	Test Mode	Test Channel		
		LCH	MCH	HCH
Note 1: The mark “v” means that this configuration is chosen for testing.				

Test Items	LTE Band	Bandwidth (MHz)						Modulation		RB#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16-QAM	1	Half	Full	LCH	MCH	HCH
E.R.P/E.I.R.P	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	7	n	n	v	v	v	v	v	v	v	v	v	v	v	v
Peak to Average Ratio	4	--	--	--	--	--	v	--	v	v	--	v	v	v	v
	7	n	n	--	--	--	v	--	v	v	--	v	v	v	v
Occupied Bandwidth	4	v	v	v	v	v	v	v	v	--	--	v	v	v	v
	7	n	n	v	v	v	v	v	v	--	--	v	v	v	v
Frequency Stability	4	v	v	v	v	v	v	v	v	--	--	v	v	v	v
	7	n	n	v	v	v	v	v	v	--	--	v	v	v	v
Spurious Emission at Antenna Terminals	4	v	v	v	v	v	v	v	v	v	--	--	v	v	v
	7	n	n	v	v	v	v	v	v	v	--	--	v	v	v
Band Edge	4	v	v	v	v	v	v	v	v	v	v	v	v	--	v
	7	n	n	v	v	v	v	v	v	v	v	v	v	--	v
Field Strength of Spurious Radiation	4	v	v	v	v	v	v	v	v	v	--	--	v	v	v
	7	n	n	v	v	v	v	v	v	v	--	--	v	v	v
Note 1: The mark “v” means that this configuration is chosen for testing. Note 2: The mark “n” means that this bandwidth is not supported.															

4.4 Description of Test Setup

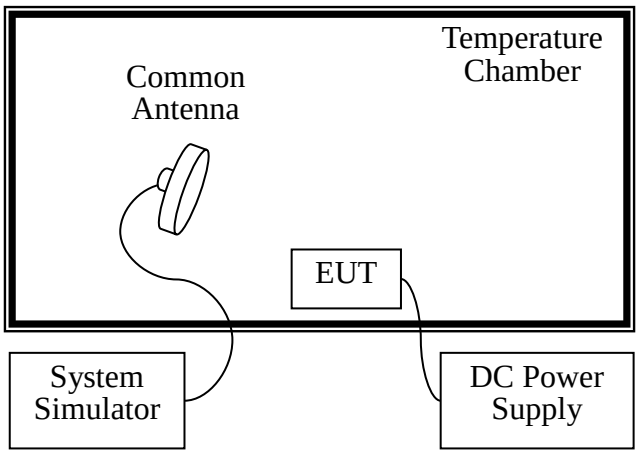
4.4.1 For Antenna Port Test



5

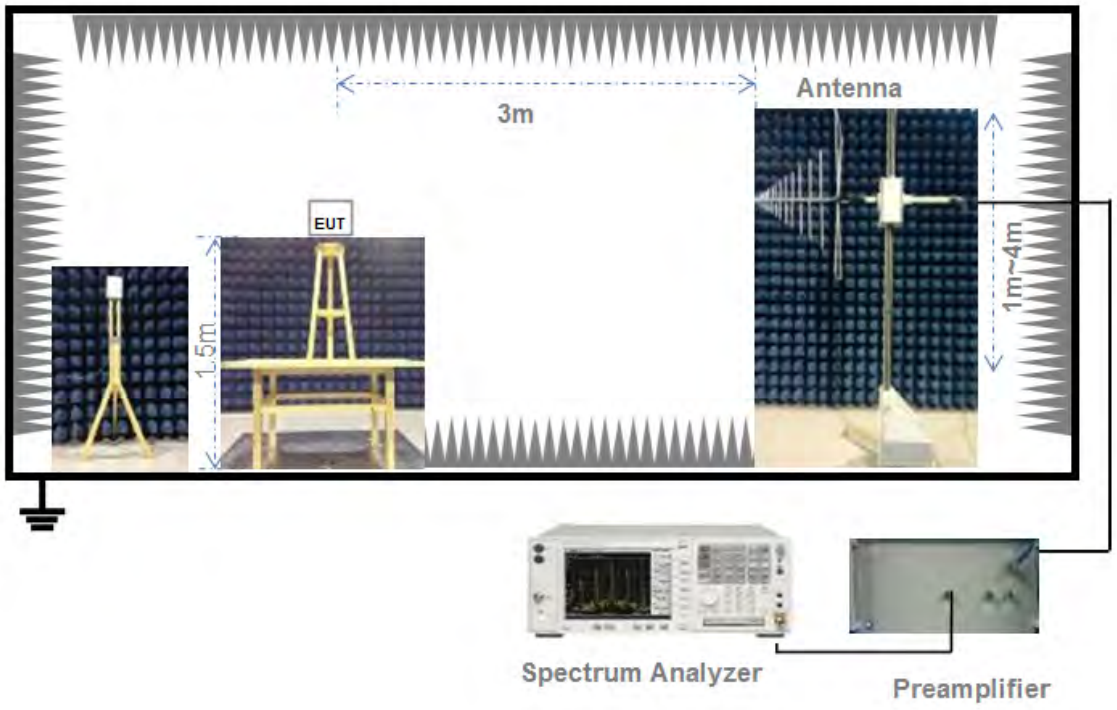
(Diagram 1)

5.1.1 For Frequency Stability Test



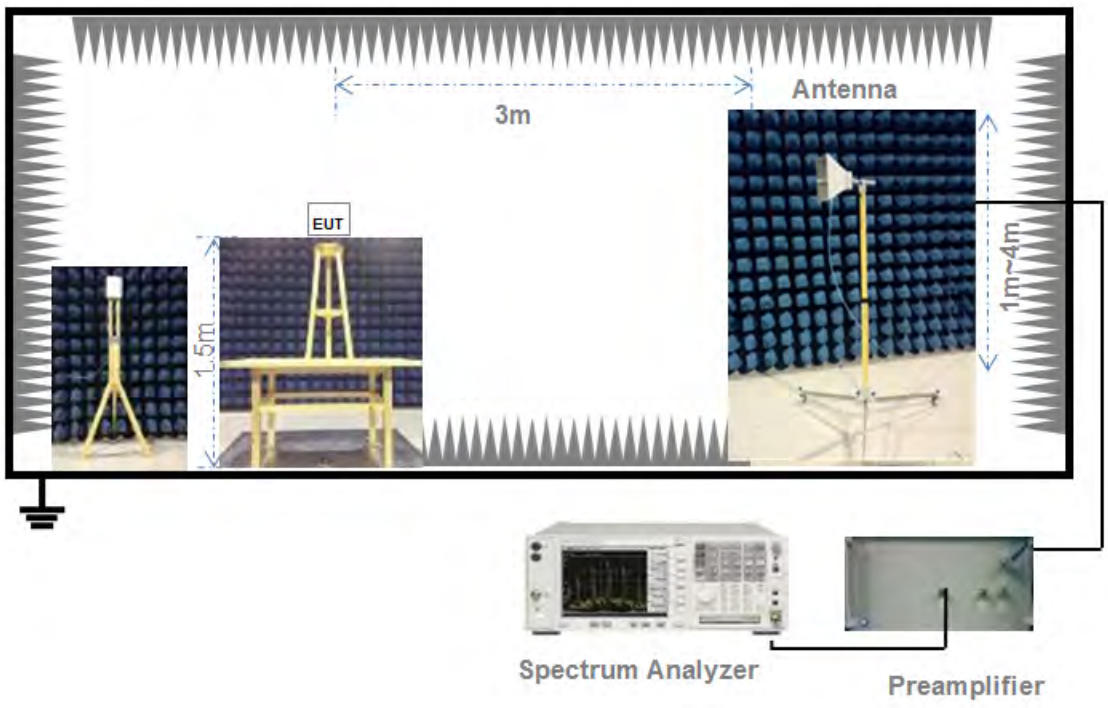
(Diagram 2)

5.1.2 For Radiated Test (30 MHz-1 GHz)



(Diagram 3)

5.1.3 For Radiated Test (Above 1 GHz)



(Diagram 4)

6 TEST ITEMS

6.1 Transmitter Radiated Power (EIRP/ERP)

6.1.1 Limit

FCC §2.1046(a) & 22.913 & 24.232 & 27.50(d) & 27.50(h)

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts, FCC section 24.232, Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications. FCC section 27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications, and FCC section 27.50(h) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

6.1.2 Test Procedure

Description of the Conducted Output Power Measurement

A system simulator was used to estabilish communication with the EUT, Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output teminals shall be reported.

Note: Reference test setup 4.4.1 (Diagram 1)

Description of the Transmitter Radiated Power Measurement

In many cases, the RF output power limits for licensed digital transmission devices is specified in terms of effective radiated power (ERP) or equivalent isotropic radiated power (EIRP). Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are determined by adding the transmit antenna gain to the conducted RF output power with the primary difference between the two being that when determining the ERP, the transmit antenna gain is referenced to a dipole antenna (i.e., dBd) whereas when determining the EIRP, the transmit antenna gain is referenced to an isotropic antenna (dBi).

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP/EIRP = PMeas + GT − LC

where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

dBd (ERP)=dBi-2.15

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

Note: Reference test setup 4.4.3 and 4.4.4 (Diagram 3, 4)

6.2 Peak to average ratio

6.2.1 Limit

FCC § 2.1046 & 24.232 & 27.50(d)

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved verage power technique or in compliance with 24.232 (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of § 24.51. 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.

Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

6.2.2 Test Procedure

Here the lowest, middle and highest channels are selected to perform testing to verify the peak-to-average ratio.

Test procedures:

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

Use one of the procedures presented in 4.1 to measure the total peak power and record as PPk. Use one of the applicable procedures presented 4.2 to measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

PAPR (dB) = PPk (dBm) - PAvg (dBm).

Note: Reference test setup 4.4.1 (Diagram 1).

6.3 Occupied Bandwidth

6.3.1 Limit

FCC § 2.1049

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as the 99% emission bandwidth

6.3.2 Test Procedure

The following procedure shall be used for measuring (99 %) power bandwidth

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.

e) Set the detection mode to peak, and the trace mode to max hold..

f) Use the 99 % power bandwidth function of the spectrum analyzer (if available) and report the measured bandwidth.

g) If the instrument does not have a 99 % power bandwidth function, the trace data points are to be recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % power bandwidth is the difference between these two frequencies.

h) The OBW shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Note: Reference test setup 4.4.1 (Diagram 1).

6.4 Frequency Stability

6.4.1 Limit

FCC § 2.1055 & 22.355 & 24.235 &27.54

§ 22.355

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Table C-1—Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency range (MHz)	Base, fixed (ppm)	Mobile > 3 watts (ppm)	Mobile ≤ 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

& 24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

&27.54

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

The test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°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.

6.4.2 Test Procedure

1. The test is performed in a Temperature Chamber.
2. The EUT is configured as MS + DC Power Supply.

Note: Reference test setup 4.4.2 (Diagram 2).

6.5 Spurious Emission at Antenna Terminals

6.5.1 Limit

FCC §2.1051 & 22.917(a) & 24.238(a) & 27.53(h) & 27.53(m)

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. This calculated to be -13 dBm.

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}$ (P) dB.

6.5.2 Test Procedure

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee’s frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

Note: Reference test setup 4.4.1 (Diagram 1).

6.6 Band Edge

6.6.1 Limit

FCC § 2.1051 & 22.917(b) & 24.238(b) & 27.53(h) & 27.53(m)
The power of any emission outside of the authorized operating frequency must be attenuated below the transmitting (P) by a factor of at least 43+10log(P) dB.
In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26 dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

6.6.2 Test Procedure

The EUT, which is powered by the Battery, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading.

1. The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.
2. The center of the spectrum analyzer was set to block edge frequency.

Note: Reference test setup 4.4.1 (Diagram 1).

6.7 Field Strength of Spurious Radiation

6.7.1 Limit

FCC § 2.1053 & 22.917 & 24.238 & 27.53(h) & 27.53(m)

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. This calculated to be -13 dBm.

6.7.2 Test Procedure

1. On a test site, the EUT shall be placed at 80cm height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. During the measurement of the EUT, the resolution bandwidth was to 1 MHz and the average bandwidth was set to 1 MHz.
5. The transmitter shall be switched on; the measuring receiver shall be tuned to the frequency of the transmitter under test.
6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
9. The maximum signal level detected by the measuring receiver shall be noted.
10. The EUT was replaced by half-wave dipole (824 ~ 849 MHz) or horn antenna (1 850 ~ 1 910 MHz) connected to a signal generator.
11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
14. The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

Note: Reference test setup 4.4.3 and 4.4.4 (Diagram 3, 4)

ANNEX A TEST RESULT

A.1 Transmitter Radiated Power (EIRP/ERP)

GSM Mode Test Data

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Verdict
GSM 850	LCH	34.12	0.5	-1.65	32.47	38.5	Pass
	MCH	34.18	0.5	-1.65	32.53	38.5	Pass
	HCH	34.29	0.5	-1.65	32.64	38.5	Pass
GPRS 850	LCH	33.88	0.5	-1.65	32.23	38.5	Pass
	MCH	34.16	0.5	-1.65	32.51	38.5	Pass
	HCH	34.20	0.5	-1.65	32.55	38.5	Pass
EGPRS 850	LCH	31.53	0.5	-1.65	29.88	38.5	Pass
	MCH	31.51	0.5	-1.65	29.86	38.5	Pass
	HCH	31.45	0.5	-1.65	29.80	38.5	Pass

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
GSM 1900	LCH	30.67	1.1	31.77	33	Pass
	MCH	30.63	1.1	31.73	33	Pass
	HCH	30.69	1.1	31.79	33	Pass
GPRS 1900	LCH	30.90	1.1	32.00	33	Pass
	MCH	30.90	1.1	32.00	33	Pass
	HCH	30.94	1.1	32.04	33	Pass
EGPRS 1900	LCH	29.41	1.1	30.51	33	Pass
	MCH	29.43	1.1	30.53	33	Pass
	HCH	29.47	1.1	30.57	33	Pass

Note 1: ERP is specified when the operating frequency below 1 GHz, Antenna Gain: dBd (ERP) = dBi-2.15.

Note 2: For the GPRS and EGPRS mode, all the slots were tested and just the worst data was record in this table.

GPRS Conducted output power

Band	Channel	Conducted Output Peak Power (dBm)			
		Slot 1	Slot 2	Slot 3	Slot 4
GPRS 850	LCH	33.88	32.35	31.04	29.42
	MCH	34.16	32.61	30.99	29.30
	HCH	34.20	32.48	30.86	29.11
GPRS 1900	LCH	30.90	28.33	27.16	25.63
	MCH	30.90	28.25	27.08	25.47
	HCH	30.94	28.39	27.35	25.74

EGPRS Conducted output power

Band	Channel	Conducted Output Peak Power (dBm)			
		Slot 1	Slot 2	Slot 3	Slot 4
EGPRS 850	LCH	31.53	31.42	28.38	28.27
	MCH	31.51	31.41	28.40	28.29
	HCH	31.45	31.34	28.37	28.28
EGPRS 1900	LCH	29.41	29.33	27.21	26.18
	MCH	29.43	29.24	27.10	26.09
	HCH	29.47	29.33	27.28	26.31

WCDMA Mode Test data:

Test Band	Test Channel	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
WCDMA Band 2	LCH	23.72	1.1	24.82	33	Pass
	MCH	23.71	1.1	24.81	33	Pass
	HCH	23.66	1.1	24.76	33	Pass
HSDPA Band 2	LCH	22.57	1.1	23.67	33	Pass
	MCH	22.62	1.1	23.72	33	Pass
	HCH	22.49	1.1	23.59	33	Pass
HSUPA Band 2	LCH	22.37	1.1	23.47	33	Pass
	MCH	22.46	1.1	23.56	33	Pass
	HCH	22.52	1.1	23.62	33	Pass

Test Band	Test Channel	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Verdict
WCDMA Band 5	LCH	23.23	0.5	-1.65	21.58	38.5	Pass
	MCH	23.29	0.5	-1.65	21.64	38.5	Pass
	HCH	23.28	0.5	-1.65	21.63	38.5	Pass
HSDPA Band 5	LCH	22.25	0.5	-1.65	20.60	38.5	Pass
	MCH	22.23	0.5	-1.65	20.58	38.5	Pass
	HCH	22.24	0.5	-1.65	20.59	38.5	Pass
HSUPA Band 5	LCH	22.20	0.5	-1.65	20.55	38.5	Pass
	MCH	22.21	0.5	-1.65	20.56	38.5	Pass
	HCH	22.24	0.5	-1.65	20.59	38.5	Pass

Note 1: ERP is specified when the operating frequency below 1 GHz, Antenna Gain: dBd (ERP) = dBi-2.15.

Note 2: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data was record in this table.

HSDPA Conducted output power

Band	Channel	Conducted Output Average Power (dBm)			
		Subtest 1	Subtest 2	Subtest 3	Subtest 4
HSDPA Band 2	LCH	22.57	22.32	21.99	21.95
	MCH	22.62	22.53	22.01	22.01
	HCH	22.49	22.51	21.75	22.00
HSDPA Band 5	LCH	22.25	22.04	21.78	21.54
	MCH	22.23	22.23	21.85	21.84
	HCH	22.24	22.24	21.53	21.83

HSUPA Conducted output power

Band	Channel	Conducted Output Average Power (dBm)				
		Subtest 1	Subtest 2	Subtest 3	Subtest 4	Subtest 5
HSUPA Band 2	LCH	21.97	20.83	21.18	21.80	22.37
	MCH	21.84	21.39	21.01	21.67	22.46
	HCH	21.92	21.33	21.50	21.33	22.52
HSUPA Band 5	LCH	21.97	20.72	21.29	21.13	22.20
	MCH	21.92	20.73	21.22	21.81	22.21
	HCH	21.90	21.32	21.22	21.76	22.24

LTE Mode Test data:

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
Band 4	QPSK	1.4 MHz	LCH	RB1#0	**22.69**	1.1	**23.79**	30	Pass
				RB1#3	22.66	1.1	23.76	30	Pass
				RB1#5	22.68	1.1	23.78	30	Pass
				RB3#0	22.66	1.1	23.76	30	Pass
				RB3#2	22.67	1.1	23.77	30	Pass
				RB3#3	22.64	1.1	23.74	30	Pass
				RB6#0	21.61	1.1	22.71	30	Pass
			MCH	RB1#0	**22.63**	1.1	**23.73**	30	Pass
				RB1#3	22.46	1.1	23.56	30	Pass
				RB1#5	22.49	1.1	23.59	30	Pass
				RB3#0	22.62	1.1	23.72	30	Pass
				RB3#2	22.61	1.1	23.71	30	Pass
				RB3#3	22.54	1.1	23.64	30	Pass
				RB6#0	21.62	1.1	22.72	30	Pass
			HCH	RB1#0	**22.37**	1.1	**23.47**	30	Pass
				RB1#3	22.32	1.1	23.42	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB1#5	22.37	1.1	23.47	30	Pass
				RB3#0	22.31	1.1	23.41	30	Pass
				RB3#2	22.37	1.1	23.47	30	Pass
				RB3#3	22.37	1.1	23.47	30	Pass
				RB6#0	21.41	1.1	22.51	30	Pass
		3 MHz	LCH	RB1#0	**22.66**	1.1	**23.76**	30	Pass
				RB1#7	22.47	1.1	23.57	30	Pass
				RB1#14	22.52	1.1	23.62	30	Pass
				RB8#0	21.63	1.1	22.73	30	Pass
				RB8#4	21.66	1.1	22.76	30	Pass
				RB8#7	21.51	1.1	22.61	30	Pass
				RB15#0	21.65	1.1	22.75	30	Pass
			MCH	RB1#0	**22.47**	1.1	**23.57**	30	Pass
				RB1#7	22.42	1.1	23.52	30	Pass
				RB1#14	22.45	1.1	23.55	30	Pass
				RB8#0	21.63	1.1	22.73	30	Pass
				RB8#4	21.70	1.1	22.80	30	Pass
				RB8#7	21.55	1.1	22.65	30	Pass
				RB15#0	21.63	1.1	22.73	30	Pass
			HCH	RB1#0	**22.30**	1.1	**23.40**	30	Pass
				RB1#7	22.27	1.1	23.37	30	Pass
				RB1#14	22.28	1.1	23.38	30	Pass
				RB8#0	21.25	1.1	22.35	30	Pass
				RB8#4	21.26	1.1	22.36	30	Pass
				RB8#7	21.40	1.1	22.50	30	Pass
				RB15#0	21.34	1.1	22.44	30	Pass
		5 MHz	LCH	RB1#0	**22.72**	1.1	**23.82**	30	Pass
				RB1#13	22.27	1.1	23.37	30	Pass
				RB1#24	22.61	1.1	23.71	30	Pass
				RB12#0	22.50	1.1	23.60	30	Pass
				RB12#6	22.49	1.1	23.59	30	Pass
				RB12#13	21.64	1.1	22.74	30	Pass
				RB25#0	21.50	1.1	22.60	30	Pass
			MCH	RB1#0	**21.61**	1.1	**22.71**	30	Pass
				RB1#13	21.54	1.1	22.64	30	Pass
				RB1#24	22.49	1.1	23.59	30	Pass
				RB12#0	22.41	1.1	23.51	30	Pass
				RB12#6	22.50	1.1	23.60	30	Pass
				RB12#13	21.60	1.1	22.70	30	Pass
				RB25#0	21.59	1.1	22.69	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
			HCH	RB1#0	**22.32**	1.1	**23.42**	30	Pass
				RB1#13	22.16	1.1	23.26	30	Pass
				RB1#24	22.30	1.1	23.40	30	Pass
				RB12#0	21.25	1.1	22.35	30	Pass
				RB12#6	21.27	1.1	22.37	30	Pass
				RB12#13	21.26	1.1	22.36	30	Pass
				RB25#0	21.28	1.1	22.38	30	Pass
		10 MHz	LCH	RB1#0	**22.57**	1.1	**23.67**	30	Pass
				RB1#25	22.46	1.1	23.56	30	Pass
				RB1#49	22.51	1.1	23.61	30	Pass
				RB25#0	21.48	1.1	22.58	30	Pass
				RB25#13	21.50	1.1	22.60	30	Pass
				RB25#25	21.54	1.1	22.64	30	Pass
				RB50#0	21.51	1.1	22.61	30	Pass
			MCH	RB1#0	**22.43**	1.1	**23.53**	30	Pass
				RB1#25	22.33	1.1	23.43	30	Pass
				RB1#49	22.41	1.1	23.51	30	Pass
				RB25#0	21.57	1.1	22.67	30	Pass
				RB25#13	21.62	1.1	22.72	30	Pass
				RB25#25	21.55	1.1	22.65	30	Pass
				RB50#0	21.53	1.1	22.63	30	Pass
			HCH	RB1#0	**22.31**	1.1	**23.41**	30	Pass
				RB1#25	22.24	1.1	23.34	30	Pass
				RB1#49	22.16	1.1	23.26	30	Pass
				RB25#0	21.40	1.1	22.50	30	Pass
				RB25#13	21.28	1.1	22.38	30	Pass
				RB25#25	21.21	1.1	22.31	30	Pass
				RB50#0	21.21	1.1	22.31	30	Pass
		15 MHz	LCH	RB1#0	**22.53**	1.1	**23.63**	30	Pass
				RB1#38	22.52	1.1	23.62	30	Pass
				RB1#74	22.46	1.1	23.56	30	Pass
				RB36#0	21.51	1.1	22.61	30	Pass
				RB36#19	21.47	1.1	22.57	30	Pass
				RB36#39	21.52	1.1	22.62	30	Pass
				RB75#0	21.44	1.1	22.54	30	Pass
			MCH	RB1#0	**22.52**	1.1	**23.62**	30	Pass
				RB1#38	22.38	1.1	23.48	30	Pass
				RB1#74	22.52	1.1	23.62	30	Pass
				RB36#0	21.48	1.1	22.58	30	Pass
				RB36#19	21.57	1.1	22.67	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB36#39	21.49	1.1	22.59	30	Pass
				RB75#0	21.48	1.1	22.58	30	Pass
			HCH	RB1#0	**22.44**	1.1	**23.54**	30	Pass
				RB1#38	22.32	1.1	23.42	30	Pass
				RB1#74	22.24	1.1	23.34	30	Pass
				RB36#0	21.34	1.1	22.44	30	Pass
				RB36#19	21.36	1.1	22.46	30	Pass
				RB36#39	21.24	1.1	22.34	30	Pass
				RB75#0	21.33	1.1	22.43	30	Pass
		20 MHz	LCH	RB1#0	**22.67**	1.1	**23.77**	30	Pass
				RB1#50	22.60	1.1	23.70	30	Pass
				RB1#99	22.49	1.1	23.59	30	Pass
				RB50#0	21.48	1.1	22.58	30	Pass
				RB50#25	21.51	1.1	22.61	30	Pass
				RB50#50	21.41	1.1	22.51	30	Pass
				RB100#0	21.47	1.1	22.57	30	Pass
			MCH	RB1#0	**22.54**	1.1	**23.64**	30	Pass
				RB1#50	22.51	1.1	23.61	30	Pass
				RB1#99	22.50	1.1	23.60	30	Pass
				RB50#0	21.44	1.1	22.54	30	Pass
				RB50#25	21.52	1.1	22.62	30	Pass
				RB50#50	21.46	1.1	22.56	30	Pass
				RB100#0	21.58	1.1	22.68	30	Pass
			HCH	RB1#0	**22.51**	1.1	**23.61**	30	Pass
				RB1#50	22.38	1.1	23.48	30	Pass
				RB1#99	22.29	1.1	23.39	30	Pass
				RB50#0	21.51	1.1	22.61	30	Pass
				RB50#25	21.37	1.1	22.47	30	Pass
				RB50#50	21.19	1.1	22.29	30	Pass
				RB100#0	21.33	1.1	22.43	30	Pass
	16-QAM	1.4 MHz	LCH	RB1#0	**21.62**	1.1	**22.72**	30	Pass
				RB1#3	21.44	1.1	22.54	30	Pass
				RB1#5	21.44	1.1	22.54	30	Pass
				RB3#0	21.56	1.1	22.66	30	Pass
				RB3#2	21.52	1.1	22.62	30	Pass
				RB3#3	21.53	1.1	22.63	30	Pass
				RB6#0	20.79	1.1	21.89	30	Pass
			MCH	RB1#0	**21.37**	1.1	**22.47**	30	Pass
				RB1#3	21.21	1.1	22.31	30	Pass
				RB1#5	21.30	1.1	22.40	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB3#0	21.35	1.1	22.45	30	Pass
				RB3#2	21.37	1.1	22.47	30	Pass
				RB3#3	21.34	1.1	22.34	30	Pass
				RB6#0	20.73	1.1	21.83	30	Pass
			HCH	RB1#0	**21.87**	1.1	**22.97**	30	Pass
				RB1#3	20.94	1.1	22.04	30	Pass
				RB1#5	20.91	1.1	22.01	30	Pass
				RB3#0	21.53	1.1	22.63	30	Pass
				RB3#2	21.60	1.1	22.70	30	Pass
				RB3#3	21.53	1.1	22.63	30	Pass
				RB6#0	20.60	1.1	21.70	30	Pass
		3 MHz	LCH	RB1#0	**21.18**	1.1	**22.28**	30	Pass
				RB1#7	21.05	1.1	22.15	30	Pass
				RB1#14	21.12	1.1	22.22	30	Pass
				RB8#0	20.65	1.1	21.75	30	Pass
				RB8#4	20.69	1.1	21.79	30	Pass
				RB8#7	20.58	1.1	21.68	30	Pass
				RB15#0	20.73	1.1	21.83	30	Pass
			MCH	RB1#0	**21.12**	1.1	**22.22**	30	Pass
				RB1#7	21.03	1.1	22.13	30	Pass
				RB1#14	21.03	1.1	22.13	30	Pass
				RB8#0	20.62	1.1	21.72	30	Pass
				RB8#4	20.61	1.1	21.71	30	Pass
				RB8#7	20.56	1.1	21.66	30	Pass
				RB15#0	20.64	1.1	21.74	30	Pass
			HCH	RB1#0	**20.98**	1.1	**22.08**	30	Pass
				RB1#7	20.90	1.1	22.00	30	Pass
				RB1#14	20.96	1.1	22.06	30	Pass
				RB8#0	20.38	1.1	21.48	30	Pass
				RB8#4	20.35	1.1	21.45	30	Pass
				RB8#7	20.50	1.1	21.60	30	Pass
				RB15#0	20.43	1.1	21.53	30	Pass
		5 MHz	LCH	RB1#0	**21.43**	1.1	**22.53**	30	Pass
				RB1#13	21.37	1.1	22.47	30	Pass
				RB1#24	21.35	1.1	22.45	30	Pass
				RB12#0	20.61	1.1	21.71	30	Pass
				RB12#6	20.58	1.1	21.68	30	Pass
				RB12#13	20.54	1.1	21.64	30	Pass
				RB25#0	20.57	1.1	21.67	30	Pass
			MCH	RB1#0	**21.36**	1.1	**22.46**	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB1#13	21.31	1.1	22.41	30	Pass
				RB1#24	21.35	1.1	22.45	30	Pass
				RB12#0	20.57	1.1	21.67	30	Pass
				RB12#6	20.62	1.1	21.72	30	Pass
				RB12#13	20.52	1.1	21.62	30	Pass
				RB25#0	20.61	1.1	21.71	30	Pass
			HCH	RB1#0	**21.24**	1.1	**22.34**	30	Pass
				RB1#13	21.22	1.1	22.32	30	Pass
				RB1#24	21.31	1.1	22.41	30	Pass
				RB12#0	20.36	1.1	21.46	30	Pass
				RB12#6	20.37	1.1	21.47	30	Pass
				RB12#13	20.31	1.1	21.41	30	Pass
				RB25#0	20.40	1.1	21.50	30	Pass
		10 MHz	LCH	RB1#0	**21.17**	1.1	**22.27**	30	Pass
				RB1#25	21.01	1.1	22.11	30	Pass
				RB1#49	21.08	1.1	22.18	30	Pass
				RB25#0	20.51	1.1	21.61	30	Pass
				RB25#13	20.48	1.1	21.58	30	Pass
				RB25#25	20.52	1.1	21.62	30	Pass
				RB50#0	20.63	1.1	21.73	30	Pass
			MCH	RB1#0	**21.09**	1.1	**22.19**	30	Pass
				RB1#25	21.03	1.1	22.13	30	Pass
				RB1#49	21.09	1.1	22.19	30	Pass
				RB25#0	20.47	1.1	21.57	30	Pass
				RB25#13	20.54	1.1	21.64	30	Pass
				RB25#25	20.48	1.1	21.58	30	Pass
				RB50#0	20.56	1.1	21.66	30	Pass
			HCH	RB1#0	**21.01**	1.1	**22.11**	30	Pass
				RB1#25	20.96	1.1	22.06	30	Pass
				RB1#49	20.91	1.1	22.01	30	Pass
				RB25#0	20.43	1.1	21.53	30	Pass
				RB25#13	20.34	1.1	21.44	30	Pass
				RB25#25	20.23	1.1	21.33	30	Pass
				RB50#0	20.27	1.1	21.37	30	Pass
		15 MHz	LCH	RB1#0	**21.18**	1.1	**22.28**	30	Pass
				RB1#38	21.08	1.1	22.18	30	Pass
				RB1#74	20.98	1.1	22.08	30	Pass
				RB36#0	20.60	1.1	21.70	30	Pass
				RB36#19	20.47	1.1	21.57	30	Pass
				RB36#39	20.58	1.1	21.68	30	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB75#0	20.50	1.1	21.60	30	Pass
			MCH	RB1#0	**21.07**	1.1	**22.17**	30	Pass
				RB1#38	21.03	1.1	22.13	30	Pass
				RB1#74	21.01	1.1	22.11	30	Pass
				RB36#0	20.45	1.1	21.55	30	Pass
				RB36#19	20.53	1.1	21.63	30	Pass
				RB36#39	20.51	1.1	21.61	30	Pass
				RB75#0	20.53	1.1	21.63	30	Pass
			HCH	RB1#0	**21.15**	1.1	**22.25**	30	Pass
				RB1#38	20.99	1.1	22.09	30	Pass
				RB1#74	20.90	1.1	22.00	30	Pass
				RB36#0	20.48	1.1	21.58	30	Pass
				RB36#19	20.36	1.1	21.46	30	Pass
				RB36#39	20.33	1.1	21.43	30	Pass
				RB75#0	20.41	1.1	21.51	30	Pass
		20 MHz	LCH	RB1#0	**21.65**	1.1	**22.75**	30	Pass
				RB1#50	21.61	1.1	22.71	30	Pass
				RB1#99	21.42	1.1	22.52	30	Pass
				RB50#0	20.44	1.1	21.54	30	Pass
				RB50#25	20.47	1.1	21.57	30	Pass
				RB50#50	20.36	1.1	21.46	30	Pass
				RB100#0	20.43	1.1	21.53	30	Pass
			MCH	RB1#0	**21.54**	1.1	**22.64**	30	Pass
				RB1#50	21.45	1.1	22.55	30	Pass
				RB1#99	21.51	1.1	22.61	30	Pass
				RB50#0	20.39	1.1	21.49	30	Pass
				RB50#25	20.42	1.1	21.52	30	Pass
				RB50#50	20.42	1.1	21.52	30	Pass
				RB100#0	20.56	1.1	21.66	30	Pass
			HCH	RB1#0	**21.59**	1.1	**22.69**	30	Pass
				RB1#50	21.45	1.1	22.55	30	Pass
				RB1#99	21.33	1.1	22.43	30	Pass
				RB50#0	20.50	1.1	21.60	30	Pass
				RB50#25	20.34	1.1	21.44	30	Pass
				RB50#50	20.22	1.1	21.32	30	Pass
				RB100#0	20.46	1.1	21.56	30	Pass
Band 7	QPSK	5 MHz	LCH	RB1#0	**22.48**	1.1	**23.58**	33	Pass
				RB1#13	22.46	1.1	23.56	33	Pass
				RB1#24	22.38	1.1	23.48	33	Pass
				RB12#0	21.43	1.1	22.53	33	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB12#6	21.35	1.1	22.45	33	Pass
				RB12#13	21.47	1.1	22.57	33	Pass
				RB25#0	21.36	1.1	22.46	33	Pass
			MCH	RB1#0	**22.64**	1.1	**23.74**	33	Pass
				RB1#13	22.61	1.1	23.71	33	Pass
				RB1#24	22.58	1.1	23.68	33	Pass
				RB12#0	21.55	1.1	22.65	33	Pass
				RB12#6	21.54	1.1	22.64	33	Pass
				RB12#13	21.56	1.1	22.66	33	Pass
				RB25#0	21.54	1.1	22.64	33	Pass
			HCH	RB1#0	**22.36**	1.1	**23.46**	33	Pass
				RB1#13	22.32	1.1	23.42	33	Pass
				RB1#24	22.28	1.1	23.38	33	Pass
				RB12#0	21.35	1.1	22.45	33	Pass
				RB12#6	21.41	1.1	22.51	33	Pass
				RB12#13	21.21	1.1	22.31	33	Pass
				RB25#0	21.27	1.1	22.37	33	Pass
		10 MHz	LCH	RB1#0	**22.42**	1.1	**23.52**	33	Pass
				RB1#25	22.31	1.1	23.41	33	Pass
				RB1#49	22.40	1.1	23.50	33	Pass
				RB25#0	21.37	1.1	22.47	33	Pass
				RB25#13	21.48	1.1	22.58	33	Pass
				RB25#25	21.58	1.1	22.68	33	Pass
				RB50#0	21.39	1.1	22.49	33	Pass
			MCH	RB1#0	**22.62**	1.1	**23.72**	33	Pass
				RB1#25	22.55	1.1	23.65	33	Pass
				RB1#49	22.51	1.1	23.61	33	Pass
				RB25#0	21.57	1.1	22.67	33	Pass
				RB25#13	21.58	1.1	22.68	33	Pass
				RB25#25	21.54	1.1	22.64	33	Pass
				RB50#0	21.53	1.1	22.63	33	Pass
			HCH	RB1#0	**22.52**	1.1	**23.62**	33	Pass
				RB1#25	22.35	1.1	23.45	33	Pass
				RB1#49	22.26	1.1	23.36	33	Pass
				RB25#0	21.42	1.1	22.52	33	Pass
				RB25#13	21.36	1.1	22.46	33	Pass
				RB25#25	21.23	1.1	22.33	33	Pass
				RB50#0	21.29	1.1	22.39	33	Pass
		15 MHz	LCH	RB1#0	**22.33**	1.1	**23.73**	33	Pass
				RB1#38	22.45	1.1	23.55	33	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB1#74	22.57	1.1	23.67	33	Pass
				RB36#0	21.43	1.1	22.53	33	Pass
				RB36#19	21.46	1.1	22.56	33	Pass
				RB36#39	21.64	1.1	22.74	33	Pass
				RB75#0	21.39	1.1	22.49	33	Pass
			MCH	RB1#0	**22.51**	1.1	**23.61**	33	Pass
				RB1#38	22.49	1.1	23.59	33	Pass
				RB1#74	22.42	1.1	23.52	33	Pass
				RB36#0	21.49	1.1	22.59	33	Pass
				RB36#19	21.51	1.1	22.61	33	Pass
				RB36#39	21.47	1.1	22.57	33	Pass
				RB75#0	21.48	1.1	22.58	33	Pass
			HCH	RB1#0	**22.51**	1.1	**23.61**	33	Pass
				RB1#38	22.51	1.1	23.61	33	Pass
				RB1#74	22.38	1.1	23.48	33	Pass
				RB36#0	21.32	1.1	22.42	33	Pass
				RB36#19	21.34	1.1	22.44	33	Pass
				RB36#39	21.14	1.1	22.24	33	Pass
				RB75#0	21.23	1.1	22.33	33	Pass
		20 MHz	LCH	RB1#0	**22.73**	1.1	**23.83**	33	Pass
				RB1#50	22.62	1.1	23.72	33	Pass
				RB1#99	22.64	1.1	23.74	33	Pass
				RB50#0	21.49	1.1	22.59	33	Pass
				RB50#25	21.50	1.1	22.60	33	Pass
				RB50#50	21.46	1.1	22.56	33	Pass
				RB100#0	21.53	1.1	22.63	33	Pass
			MCH	RB1#0	**22.60**	1.1	**23.70**	33	Pass
				RB1#50	22.59	1.1	23.69	33	Pass
				RB1#99	22.35	1.1	23.45	33	Pass
				RB50#0	21.54	1.1	22.64	33	Pass
				RB50#25	21.49	1.1	22.59	33	Pass
				RB50#50	21.46	1.1	22.56	33	Pass
				RB100#0	21.51	1.1	22.61	33	Pass
			HCH	RB1#0	**22.61**	1.1	**23.71**	33	Pass
				RB1#50	22.53	1.1	23.63	33	Pass
				RB1#99	22.23	1.1	23.33	33	Pass
				RB50#0	21.52	1.1	22.62	33	Pass
				RB50#25	21.46	1.1	22.56	33	Pass
				RB50#50	21.29	1.1	22.39	33	Pass
				RB100#0	21.29	1.1	22.39	33	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
	16QAM	5 MHz	LCH	RB1#0	**21.44**	1.1	**22.54**	33	Pass
				RB1#13	21.32	1.1	22.42	33	Pass
				RB1#24	21.32	1.1	22.42	33	Pass
				RB12#0	20.42	1.1	21.52	33	Pass
				RB12#6	20.39	1.1	21.49	33	Pass
				RB12#13	20.44	1.1	21.54	33	Pass
				RB25#0	20.33	1.1	21.43	33	Pass
			MCH	RB1#0	**21.55**	1.1	**22.65**	33	Pass
				RB1#13	21.47	1.1	22.57	33	Pass
				RB1#24	21.49	1.1	22.59	33	Pass
				RB12#0	20.54	1.1	21.64	33	Pass
				RB12#6	20.55	1.1	21.65	33	Pass
				RB12#13	20.51	1.1	21.61	33	Pass
				RB25#0	20.52	1.1	21.62	33	Pass
			HCH	RB1#0	**21.41**	1.1	**22.51**	33	Pass
				RB1#13	21.27	1.1	22.37	33	Pass
				RB1#24	21.25	1.1	22.35	33	Pass
				RB12#0	20.37	1.1	21.47	33	Pass
				RB12#6	20.32	1.1	21.42	33	Pass
				RB12#13	20.31	1.1	21.41	33	Pass
				RB25#0	20.27	1.1	21.37	33	Pass
		10 MHz	LCH	RB1#0	**21.50**	1.1	**22.60**	33	Pass
				RB1#25	20.91	1.1	22.01	33	Pass
				RB1#49	21.04	1.1	22.14	33	Pass
				RB25#0	20.34	1.1	21.44	33	Pass
				RB25#13	20.38	1.1	21.48	33	Pass
				RB25#13	19.62	1.1	20.72	33	Pass
				RB25#25	20.34	1.1	21.44	33	Pass
			MCH	RB1#0	**21.22**	1.1	**22.32**	33	Pass
				RB1#25	21.14	1.1	22.24	33	Pass
				RB1#49	21.10	1.1	22.20	33	Pass
				RB25#0	20.53	1.1	21.63	33	Pass
				RB25#13	20.54	1.1	21.64	33	Pass
				RB25#13	20.55	1.1	21.65	33	Pass
				RB25#25	20.41	1.1	21.51	33	Pass
			HCH	RB1#0	**21.14**	1.1	**22.24**	33	Pass
				RB1#25	20.97	1.1	22.07	33	Pass
				RB1#49	20.86	1.1	21.96	33	Pass
				RB25#0	20.36	1.1	21.46	33	Pass
				RB25#13	20.39	1.1	21.49	33	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB25#13	20.33	1.1	21.43	33	Pass
				RB25#25	20.23	1.1	21.33	33	Pass
		15 MHz	LCH	RB1#0	**21.46**	1.1	**22.56**	33	Pass
				RB1#38	21.05	1.1	22.15	33	Pass
				RB1#74	21.32	1.1	22.42	33	Pass
				RB36#0	20.41	1.1	21.51	33	Pass
				RB36#19	20.43	1.1	21.53	33	Pass
				RB36#39	20.50	1.1	21.60	33	Pass
				RB75#0	20.37	1.1	21.47	33	Pass
			MCH	RB1#0	**21.20**	1.1	**22.30**	33	Pass
				RB1#38	21.17	1.1	22.27	33	Pass
				RB1#74	20.64	1.1	21.74	33	Pass
				RB36#0	20.51	1.1	21.61	33	Pass
				RB36#19	20.49	1.1	21.59	33	Pass
				RB36#39	20.52	1.1	21.62	33	Pass
				RB75#0	20.48	1.1	21.58	33	Pass
			HCH	RB1#0	**21.04**	1.1	**22.14**	33	Pass
				RB1#38	21.02	1.1	22.12	33	Pass
				RB1#74	20.84	1.1	21.94	33	Pass
				RB36#0	20.53	1.1	21.63	33	Pass
				RB36#19	20.38	1.1	21.48	33	Pass
				RB36#39	20.30	1.1	21.40	33	Pass
				RB75#0	20.31	1.1	21.41	33	Pass
		20 MHz	LCH	RB1#0	**21.89**	1.1	**22.99**	33	Pass
				RB1#50	21.61	1.1	22.71	33	Pass
				RB1#99	21.70	1.1	22.80	33	Pass
				RB50#0	20.41	1.1	21.51	33	Pass
				RB50#25	20.43	1.1	21.53	33	Pass
				RB50#50	20.40	1.1	21.50	33	Pass
				RB100#0	20.48	1.1	21.58	33	Pass
			MCH	RB1#0	**21.76**	1.1	**22.86**	33	Pass
				RB1#50	20.99	1.1	22.09	33	Pass
				RB1#99	21.42	1.1	22.52	33	Pass
				RB50#0	20.49	1.1	21.59	33	Pass
				RB50#25	20.47	1.1	21.57	33	Pass
				RB50#50	20.42	1.1	21.52	33	Pass
				RB100#0	20.50	1.1	21.60	33	Pass
			HCH	RB1#0	**21.43**	1.1	**22.53**	33	Pass
				RB1#50	21.38	1.1	22.48	33	Pass
				RB1#99	21.24	1.1	22.34	33	Pass

Test Band	Test Model	Test Bandwidth	Test Channel	Test RB (Size#Offset)	Conducted Output Average Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Verdict
				RB50#0	20.33	1.1	21.43	33	Pass
				RB50#25	20.37	1.1	21.47	33	Pass
				RB50#50	20.30	1.1	21.40	33	Pass
				RB100#0	20.43	1.1	21.53	33	Pass

A.2 Peak to Average Ratio

Note: 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. For GSM 1900, GPRS 1900 and EGPRS 1900 were used peak power to demonstrate compliance, a PAPR measurement is not required.

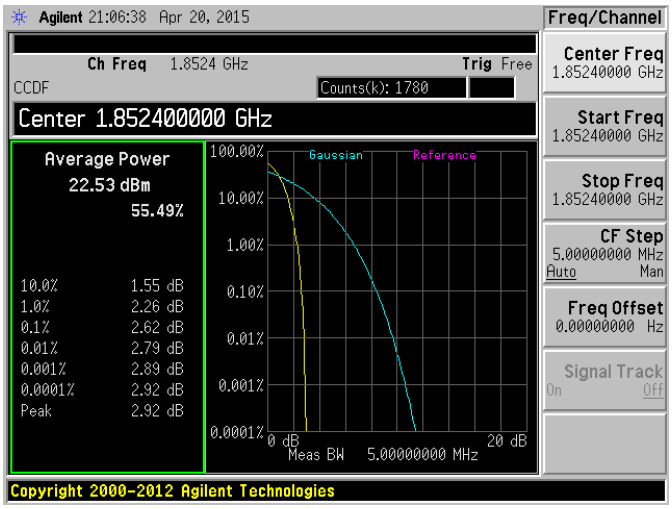
Test Data

Band	Test Channel	Peak to Average ratio (dBm)	Limit (dBm)	Verdict
WCDMA 1900	LCH	2.62	13	Pass
	MCH	2.76	13	Pass
	HCH	2.28	13	Pass

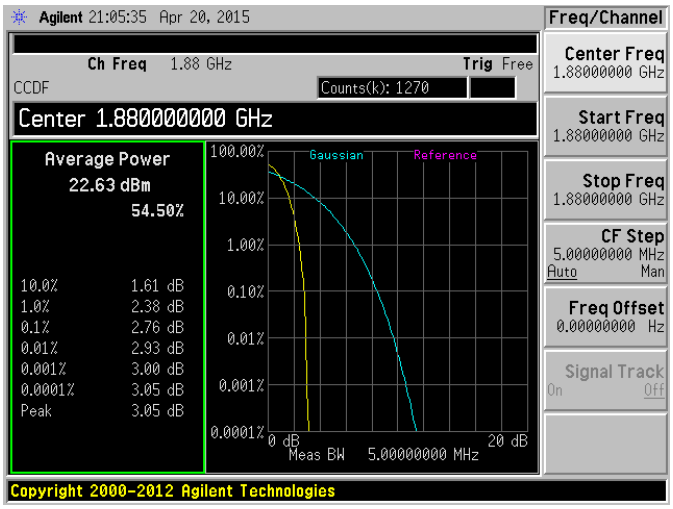
Test Band	Test Model	Test Bandwidth	Test Channel	Test RB(Size#Offset)	Peak to Average ratio (dBm)	Limit (dBm)	Verdict
Band 4	16-QAM	20 MHz	LCH	RB1#0	4.70	13	Pass
				RB100#0	5.86	13	Pass
			MCH	RB1#0	5.48	13	Pass
				RB100#0	6.17	13	Pass
			HCH	RB1#0	4.12	13	Pass
				RB100#0	5.13	13	Pass
Band 7	16-QAM	20 MHz	LCH	RB1#0	4.29	13	Pass
				RB100#0	4.14	13	Pass
			MCH	RB1#0	4.14	13	Pass
				RB100#0	5.71	13	Pass
			HCH	RB1#0	4.78	13	Pass
				RB100#0	5.30	13	Pass

Test Plots

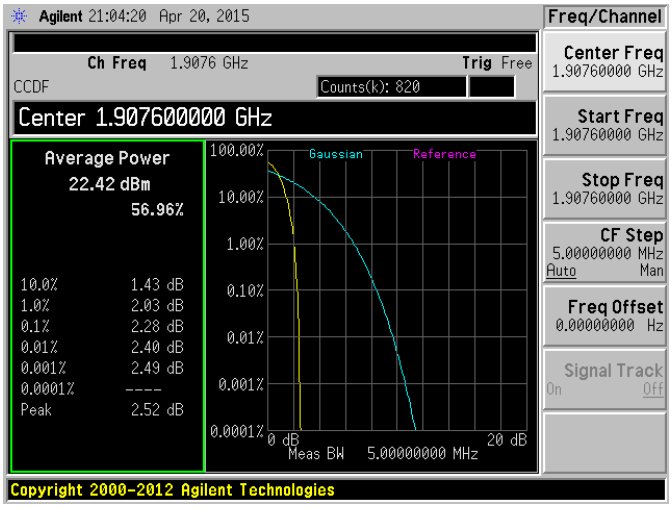
WCDMA 1900 MHz LCH



WCDMA 1900 MHz MCH



WCDMA 1900 MHz HCH



LTE Band 4 16-QAM 20 MHz LCH RB1#0

Date: 27.APR.2015 20:25:53

LTE Band 4 16-QAM 20 MHz MCH RB1#0

Date: 27.APR.2015 20:19:59

LTE Band 4 16-QAM 20 MHz HCH RB1#0

Date: 27.APR.2015 20:31:37

LTE Band 4 16-QAM 20 MHz LCH RB100#0

Date: 27.APR.2015 20:25:32

LTE Band 4 16-QAM 20 MHz MCH RB100#0

Date: 27.APR.2015 20:20:15

LTE Band 4 16-QAM 20 MHz HCH RB100#0

Date: 27.APR.2015 20:30:28

LTE Band 7 16-QAM 20 MHz LCH RB1#0

Date: 28.APR.2015 09:53:23

LTE Band 7 16-QAM 20 MHz MCH RB1#0

Date: 28.APR.2015 09:47:12

LTE Band 7 16-QAM 20 MHz HCH RB1#0

Date: 28.APR.2015 09:57:50

LTE Band 7 16-QAM 20 MHz LCH RB100#0

Date: 28.APR.2015 09:53:34

LTE Band 7 16-QAM 20 MHz MCH RB100#0

Date: 28.APR.2015 09:46:04

LTE Band 7 16-QAM 20 MHz HCH RB100#0

Date: 28.APR.2015 09:57:01

A.3 Occupied Bandwidth

GSM Mode Test Data

Test Band	Test Channel	Measured 99% Occupied Bandwidth (kHz)	Measured -26 dB Occupied Bandwidth (kHz)
GSM 850	LCH	246.7383	316.554
	MCH	249.4260	318.013
	HCH	247.9305	314.254
GSM 1900	LCH	245.1974	317.758
	MCH	246.2383	320.891
	HCH	242.1331	319.390
GPRS 850	LCH	247.1675	318.770
	MCH	241.2293	320.521
	HCH	243.8442	314.565
GPRS 1900	LCH	245.1774	320.332
	MCH	245.8740	319.291
	HCH	245.7790	320.876
EGPRS 850	LCH	243.1302	316.124
	MCH	245.7740	316.404
	HCH	247.4199	318.767
EGPRS 1900	LCH	252.7760	318.917
	MCH	241.7532	320.250
	HCH	241.9936	316.467
WCDMA 850	LCH	4145.9	4605
	MCH	4152.9	4628
	HCH	4148.5	4617
WCDMA 1900	LCH	4157.9	4670
	MCH	4144.7	4623
	HCH	4172.3	4680

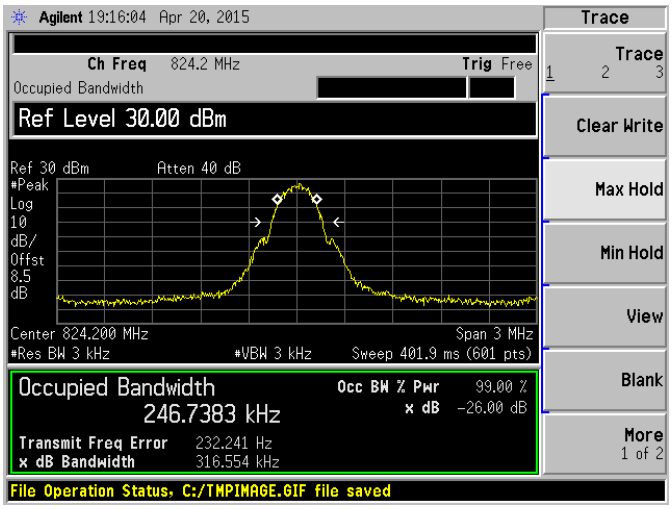
LTE Mode Test Data

Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB(Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)
Band 4	QPSK	1.4 MHz	LCH	RB6#0	1.0883	1.269
			MCH	RB6#0	1.0914	1.254
			HCH	RB6#0	1.0935	1.260
		3 MHz	LCH	RB15#0	2.7034	2.925
			MCH	RB15#0	2.6967	2.919
			HCH	RB15#0	2.6996	2.923
		5 MHz	LCH	RB25#0	4.4911	4.850
			MCH	RB25#0	4.4923	4.880
			HCH	RB25#0	4.4858	4.847
		10 MHz	LCH	RB50#0	8.9497	9.558
			MCH	RB50#0	8.9725	9.573
			HCH	RB50#0	8.9615	9.556
		15 MHz	LCH	RB75#0	13.4352	14.254
			MCH	RB75#0	13.4484	14.334
			HCH	RB75#0	13.3940	14.233
		20 MHz	LCH	RB100#0	17.8960	18.949
			MCH	RB100#0	17.9010	18.971
			HCH	RB100#0	17.8140	18.951
	16-QAM	1.4 MHz	LCH	RB6#0	1.0876	1.237
			MCH	RB6#0	1.0893	1.266
			HCH	RB6#0	1.0884	1.261
		3 MHz	LCH	RB15#0	2.6952	2.912
			MCH	RB15#0	2.6932	2.940
			HCH	RB15#0	2.6978	2.936
		5 MHz	LCH	RB25#0	4.4910	4.837
			MCH	RB25#0	4.4902	4.836
			HCH	RB25#0	4.4879	4.893
		10 MHz	LCH	RB50#0	8.9485	9.553
			MCH	RB50#0	8.9531	9.549
			HCH	RB50#0	8.9677	9.548
		15 MHz	LCH	RB75#0	13.4224	14.278
			MCH	RB75#0	13.4209	14.254
			HCH	RB75#0	13.4002	14.248
		20 MHz	LCH	RB100#0	17.8905	18.947
			MCH	RB100#0	17.9024	18.978
			HCH	RB100#0	17.8407	18.951
Band 7	QPSK	5 MHz	LCH	RB25#0	4.4868	4.838
			MCH	RB25#0	4.4887	4.855
			HCH	RB25#0	4.4826	4.845
		10 MHz	LCH	RB50#0	8.9600	9.550

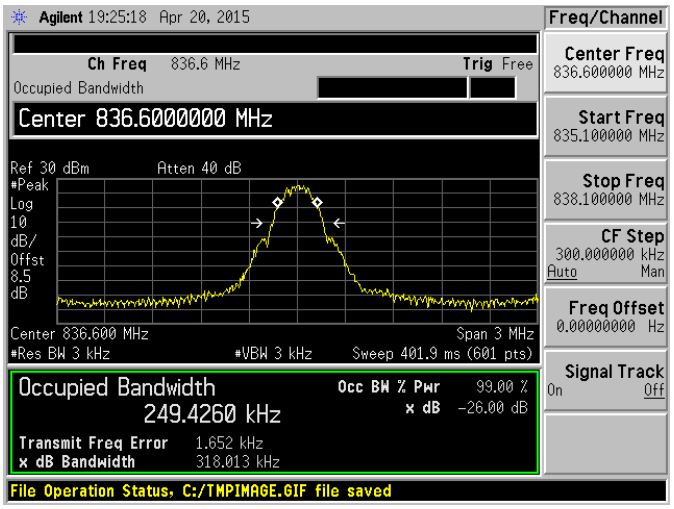
Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB(Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)
			MCH	RB50#0	8.9506	9.553
			HCH	RB50#0	8.9580	9.540
		15 MHz	LCH	RB75#0	13.4240	14.259
			MCH	RB75#0	13.4028	14.241
			HCH	RB75#0	13.4522	14.289
		20 MHz	LCH	RB100#0	17.8734	18.969
			MCH	RB100#0	17.8630	18.929
			HCH	RB100#0	17.8848	19.012
	16-QAM	5 MHz	LCH	RB25#0	4.4858	4.850
			MCH	RB25#0	4.4953	4.839
			HCH	RB25#0	4.4810	4.875
		10 MHz	LCH	RB50#0	8.9571	9.558
			MCH	RB50#0	8.9460	9.555
			HCH	RB50#0	8.9673	9.552
		15 MHz	LCH	RB75#0	13.4170	14.238
			MCH	RB75#0	13.4141	14.263
			HCH	RB75#0	13.4262	14.277
		20 MHz	LCH	RB100#0	17.8652	18.946
			MCH	RB100#0	17.8569	18.947
			HCH	RB100#0	17.9101	18.958

GSM Mode Test Plots

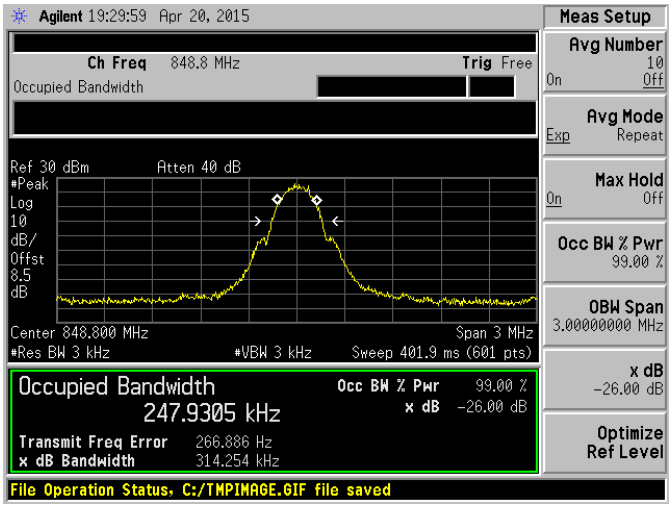
GSM 850 MHz LCH



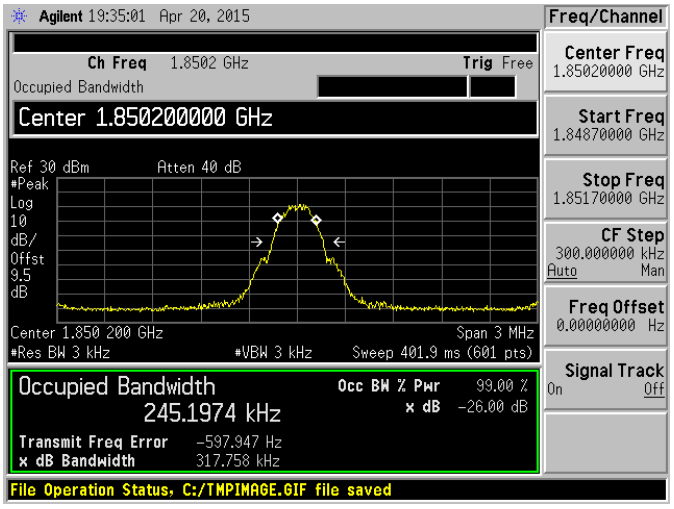
GSM 850 MHz MCH



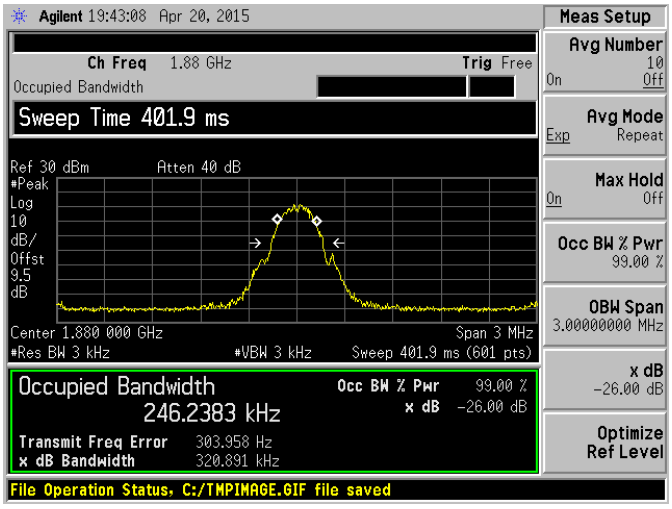
GSM 850 MHz HCH



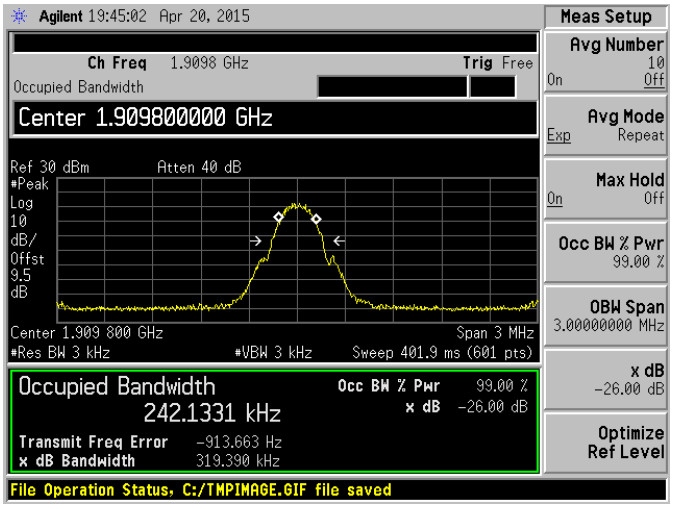
GSM 1900 MHz LCH



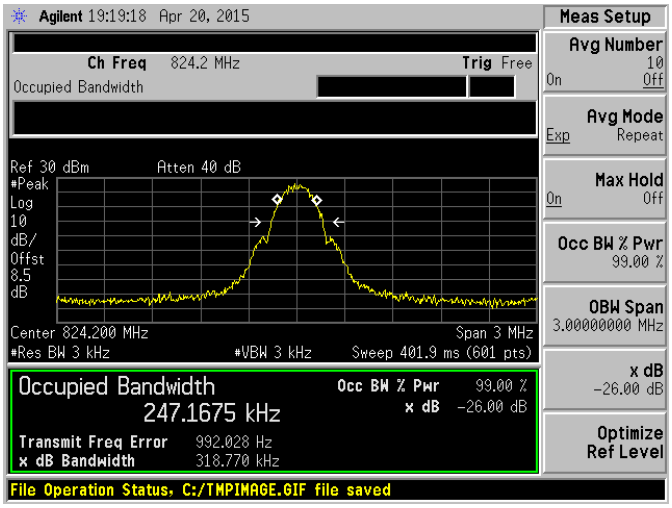
GSM 1900 MHz MCH



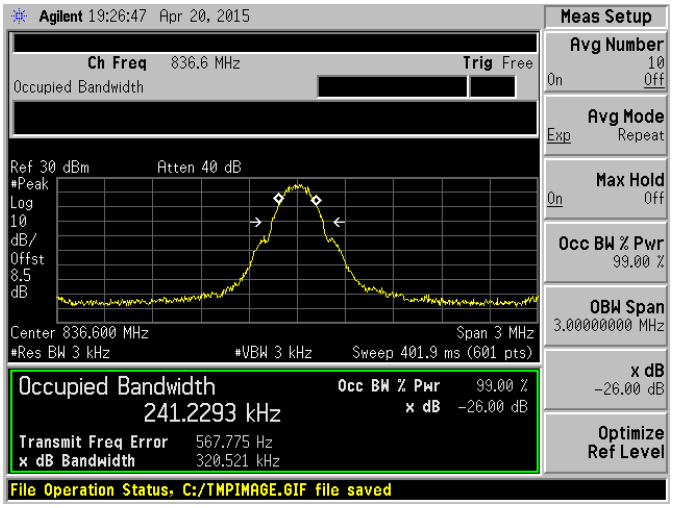
GSM 1900 MHz HCH



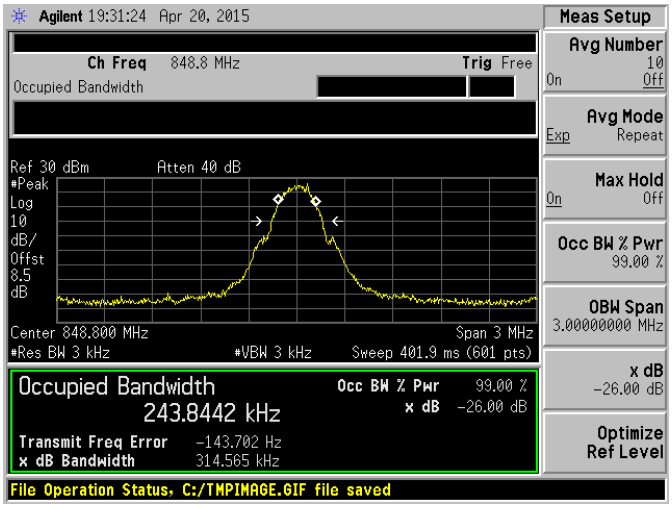
GPRS 850 MHz LCH



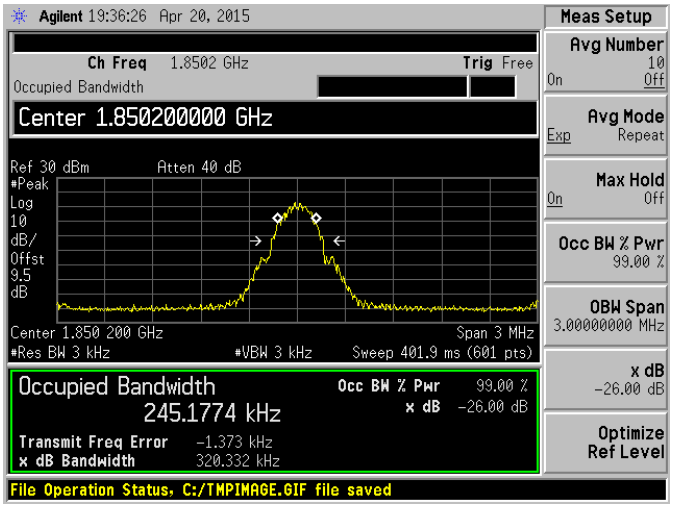
GPRS 850 MHz MCH



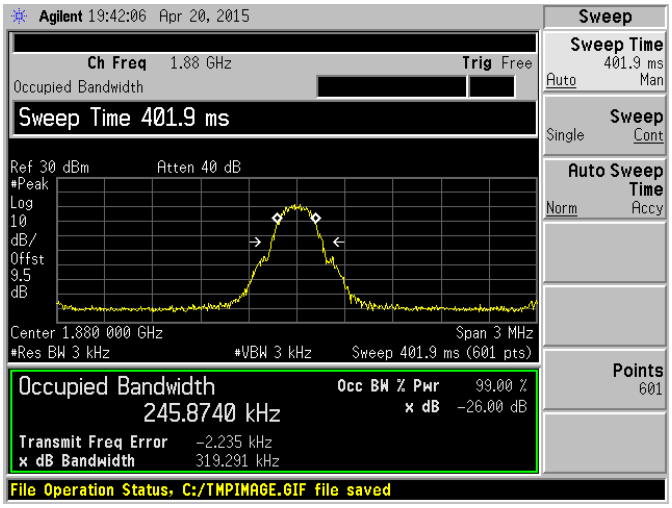
GPRS 850 MHz HCH



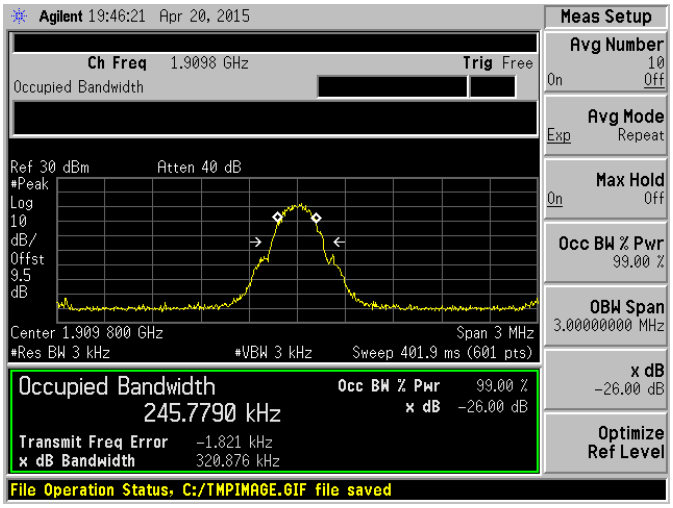
GPRS 1900 MHz LCH



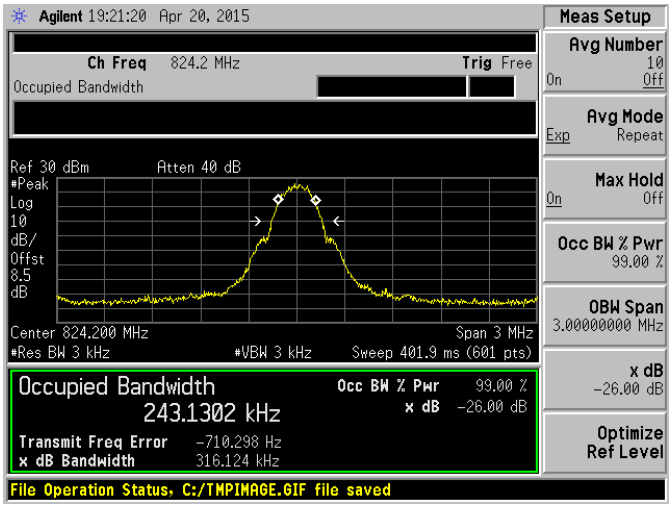
GPRS 1900 MHz MCH



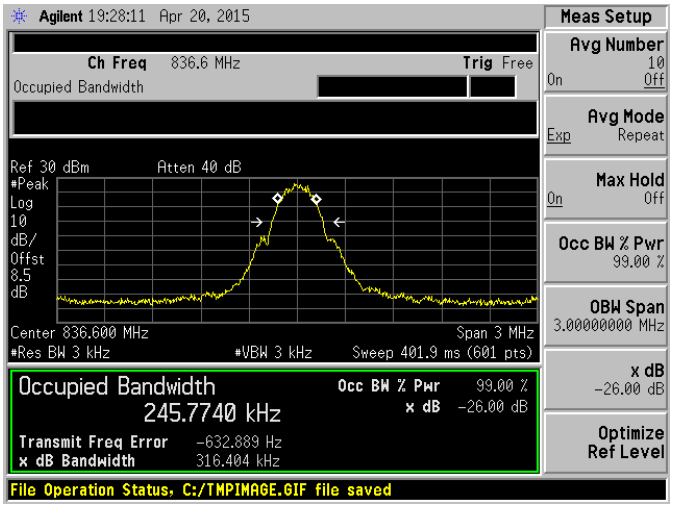
GPRS 1900 MHz HCH



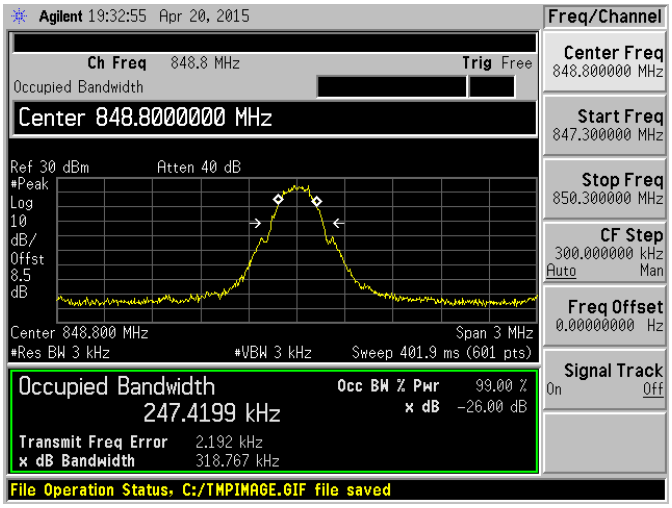
EGPRS 850 MHz LCH



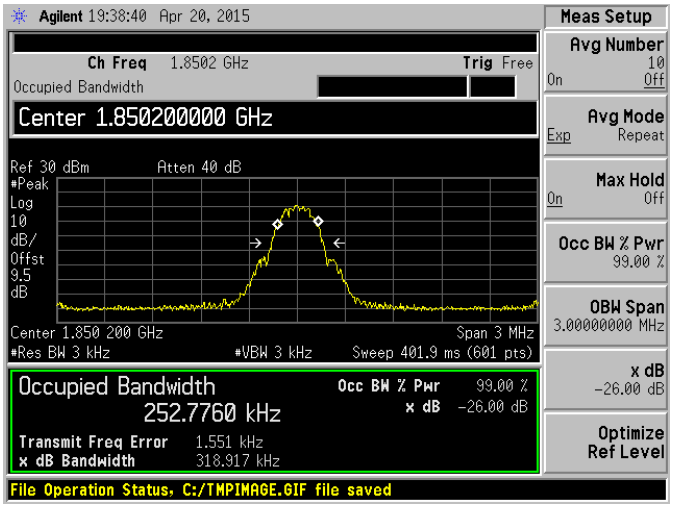
EGPRS 850 MHz MCH



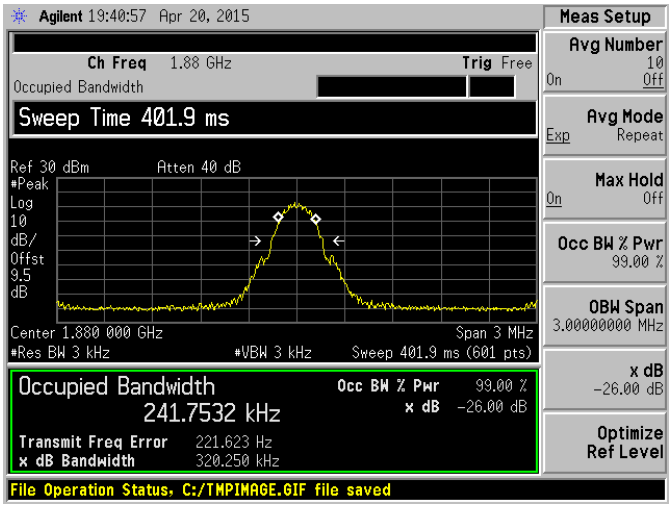
EGPRS 850 MHz HCH



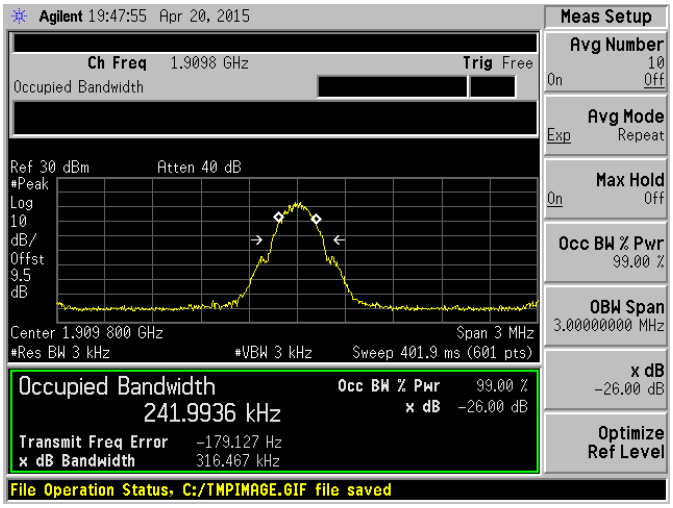
EGPRS 1900 MHz LCH



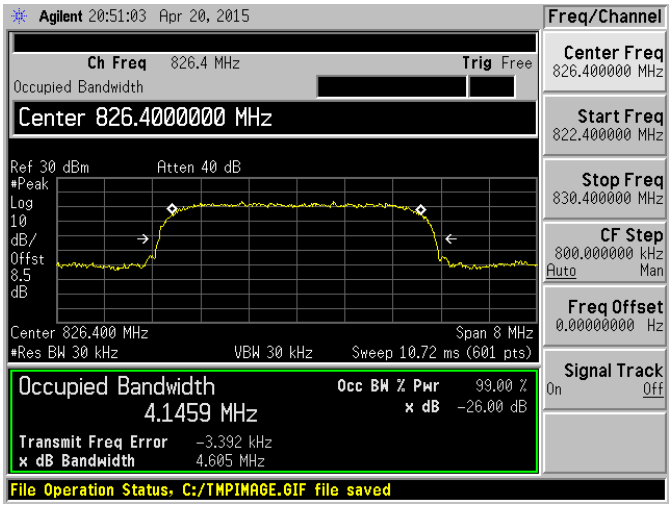
EGPRS 1900 MHz MCH



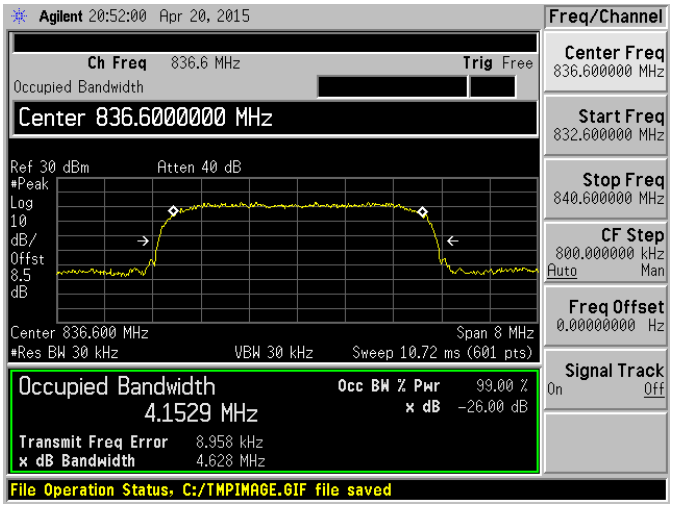
EGPRS 1900 MHz HCH



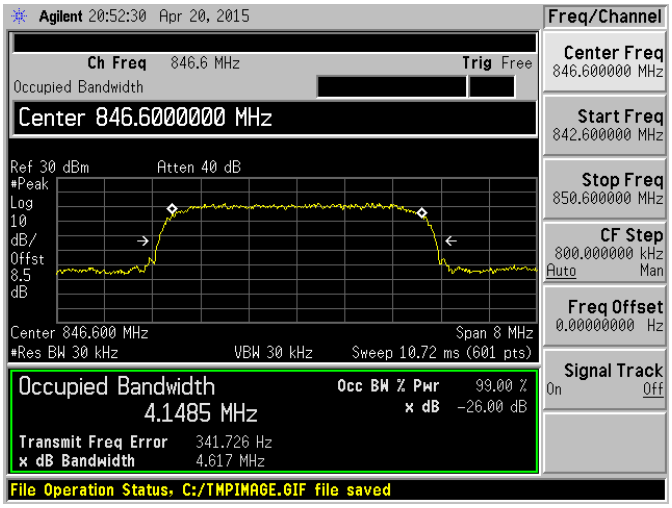
WCDMA 850 MHz LCH



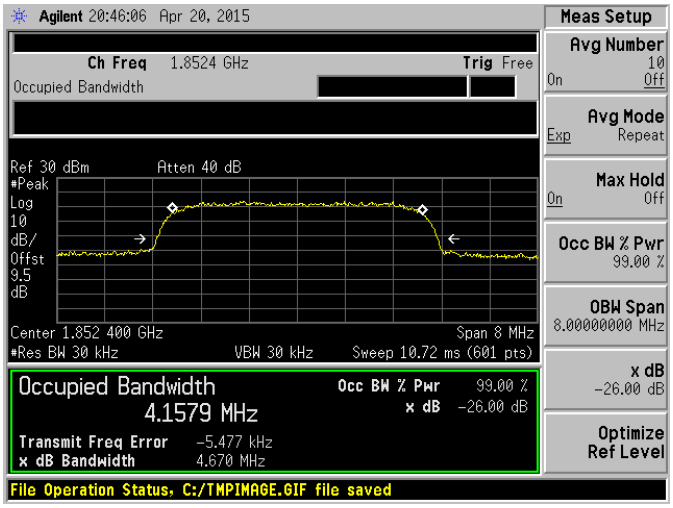
WCDMA 850 MHz MCH



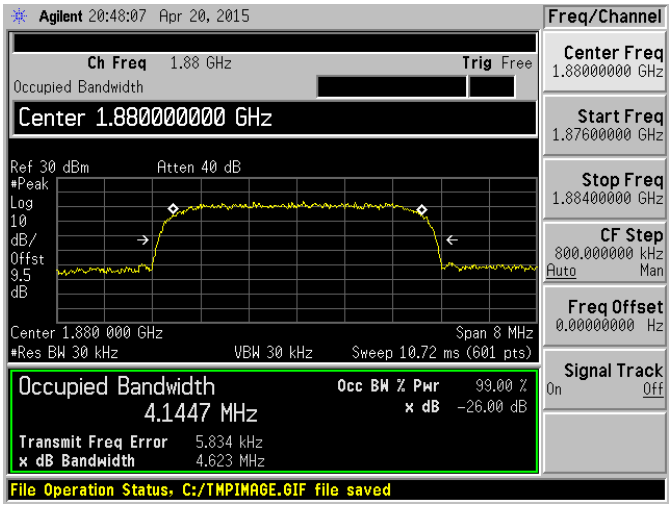
WCDMA 850 MHz HCH



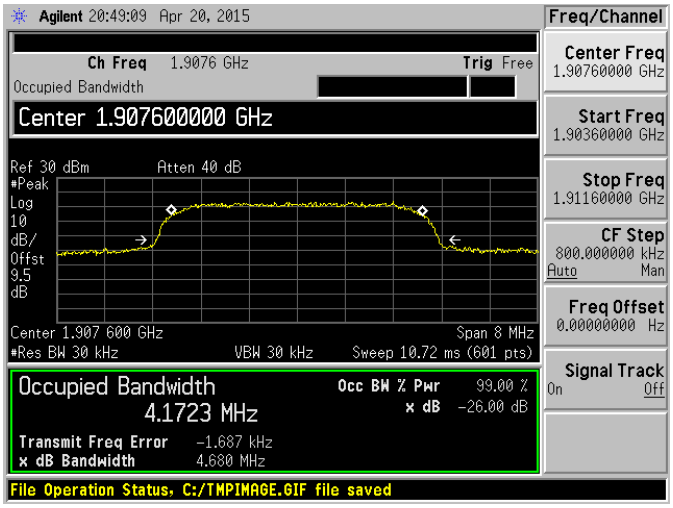
WCDMA 1900 MHz LCH



WCDMA 1900 MHz MCH

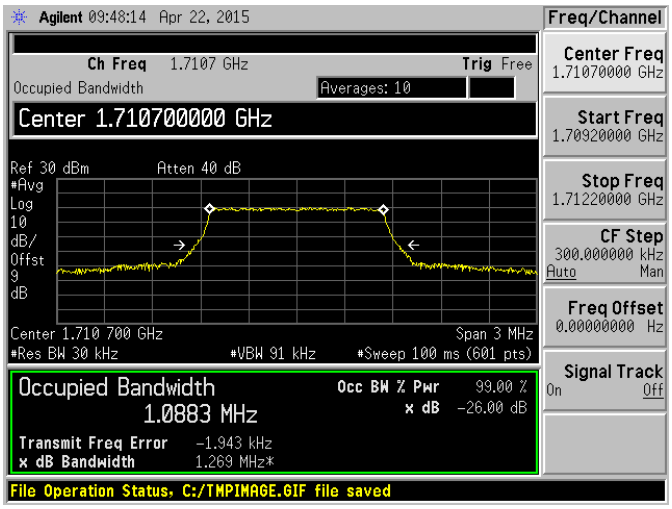


WCDMA 1900 MHz HCH

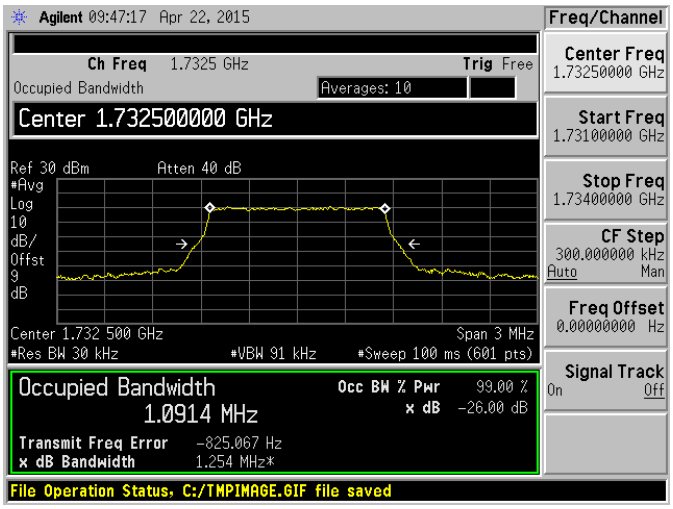


LTE Mode Test Plots

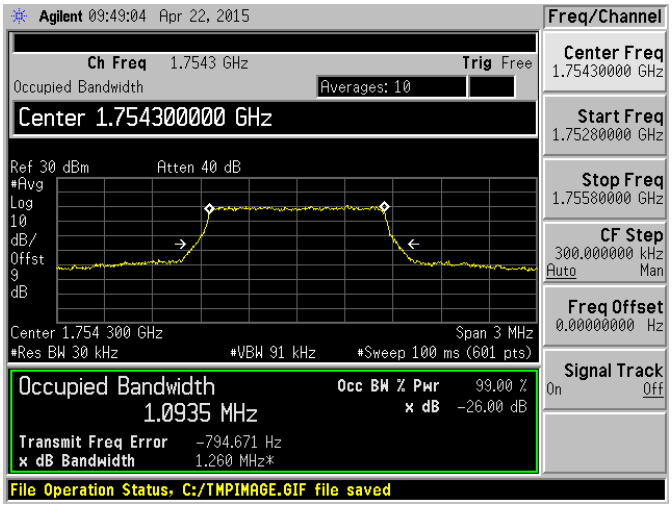
Band 4 QPSK 1.4 MHz Bandwidth RB6#0 LCH



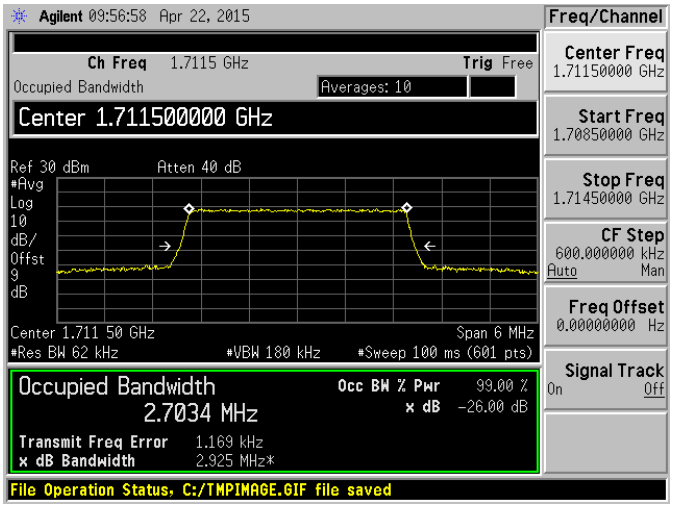
Band 4 QPSK 1.4 MHz Bandwidth RB6#0 MCH



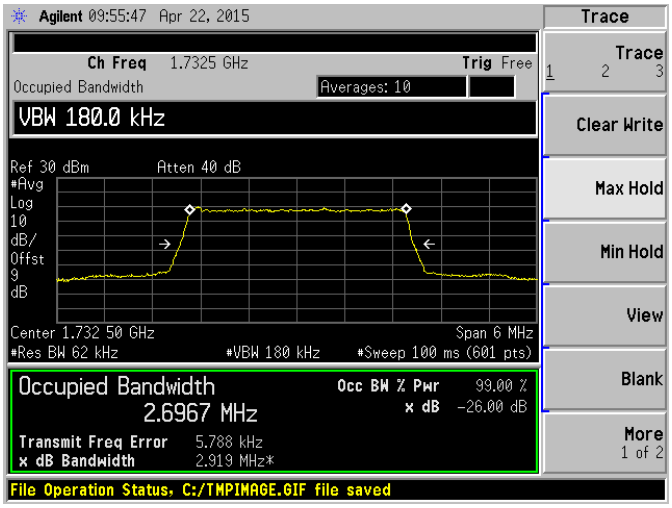
Band 4 QPSK 1.4 MHz Bandwidth RB6#0 HCH



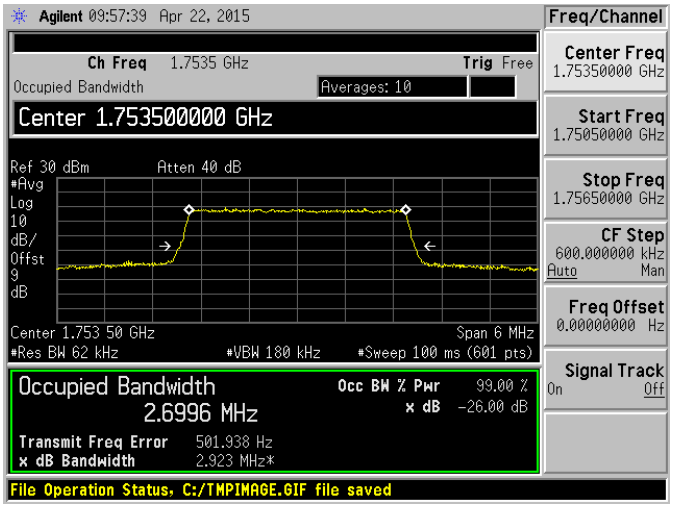
Band 4 QPSK 3 MHz Bandwidth RB6#0 LCH



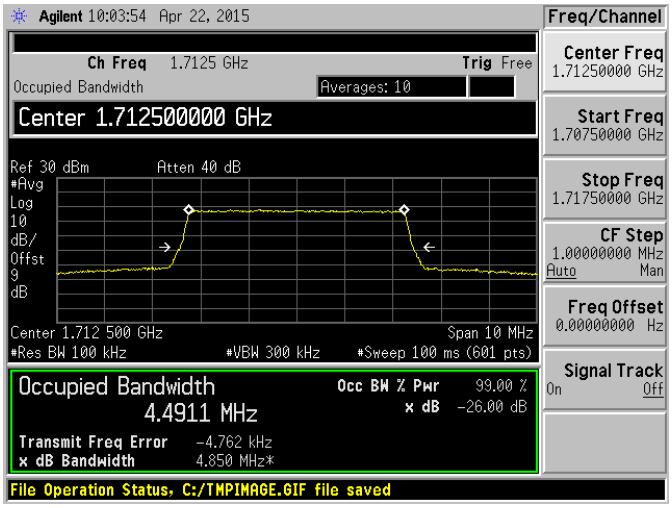
Band 4 QPSK 3 MHz Bandwidth RB6#0 MCH



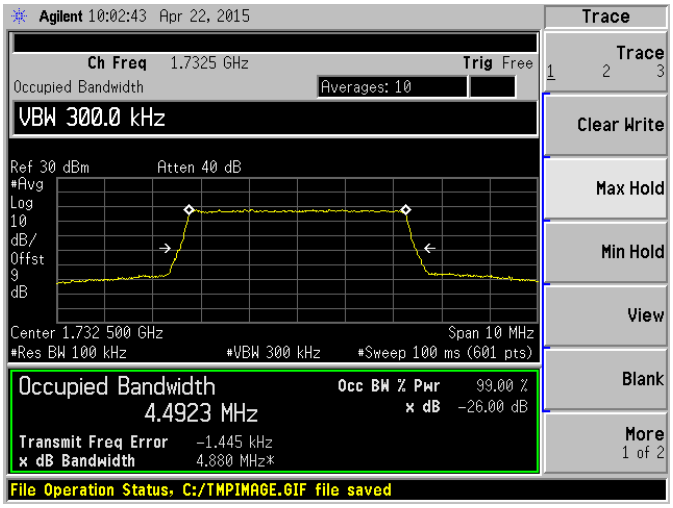
Band 4 QPSK 3 MHz Bandwidth RB6#0 HCH



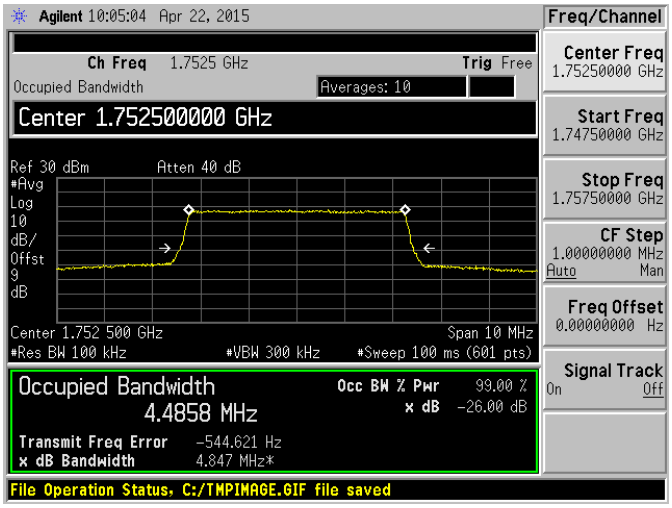
Band 4 QPSK 5 MHz Bandwidth RB6#0 LCH



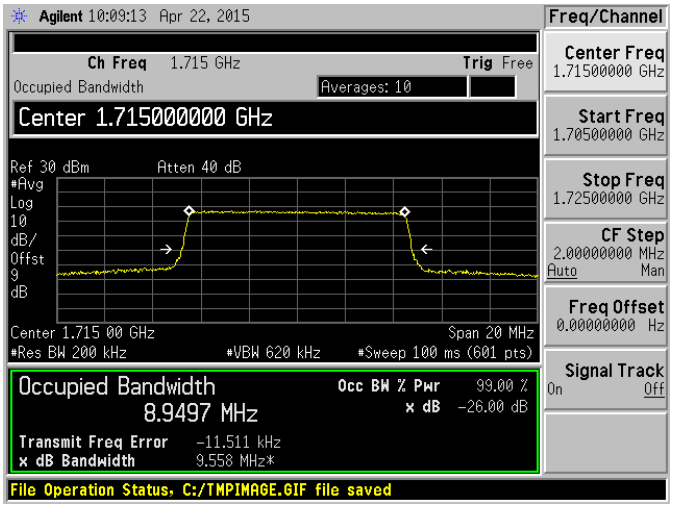
Band 4 QPSK 5 MHz Bandwidth RB6#0 MCH



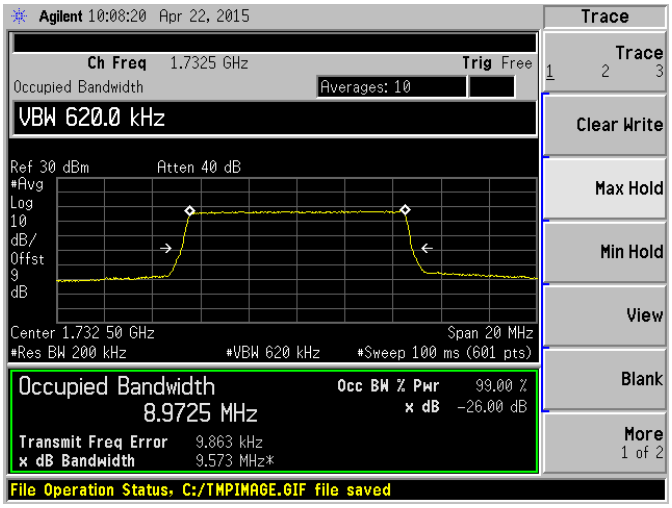
Band 4 QPSK 5 MHz Bandwidth RB6#0 HCH



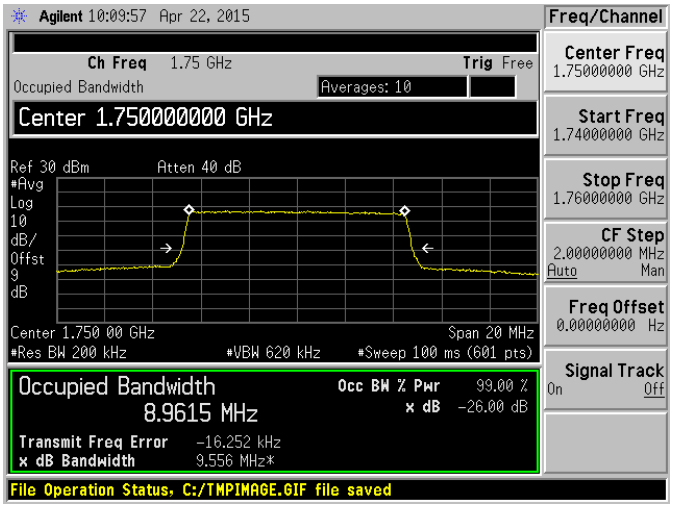
Band 4 QPSK 10 MHz Bandwidth RB6#0 LCH



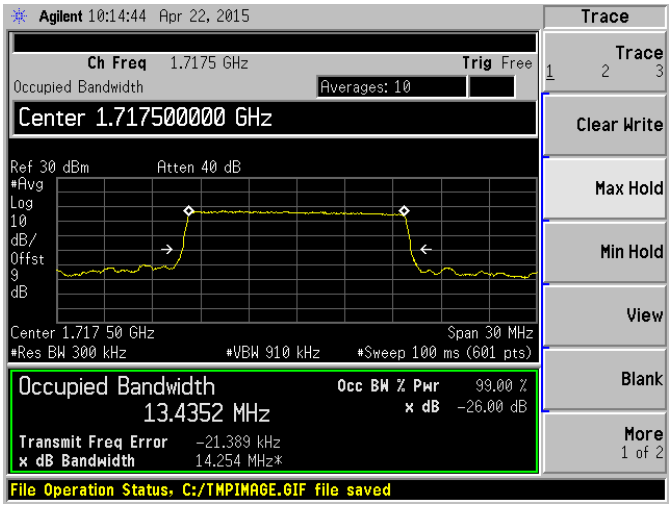
Band 4 QPSK 10 MHz Bandwidth RB6#0 MCH



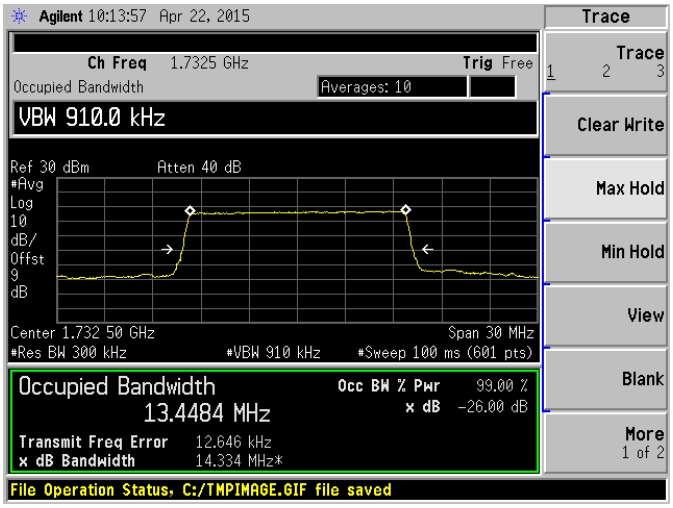
Band 4 QPSK 10 MHz Bandwidth RB6#0 HCH



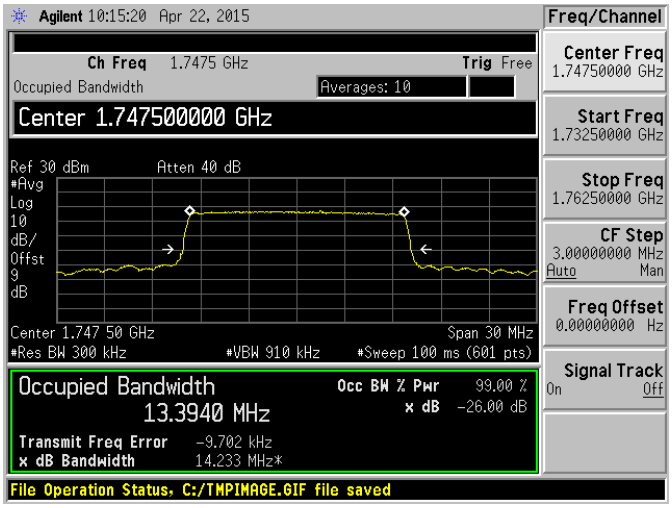
Band 4 QPSK 15 MHz Bandwidth RB6#0 LCH



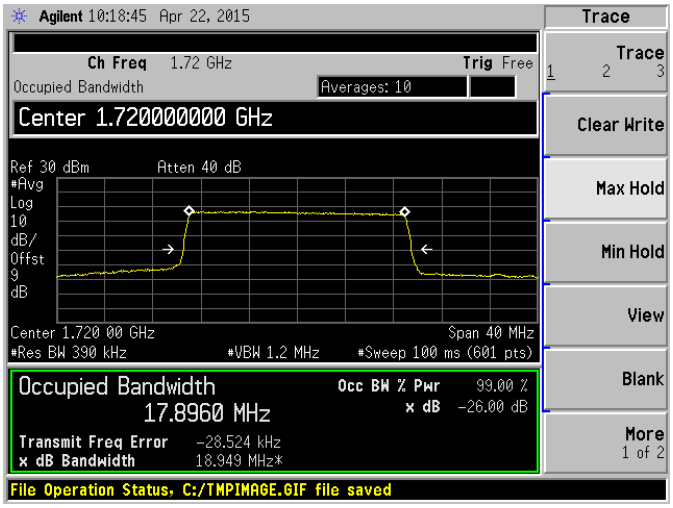
Band 4 QPSK 15 MHz Bandwidth RB6#0 MCH



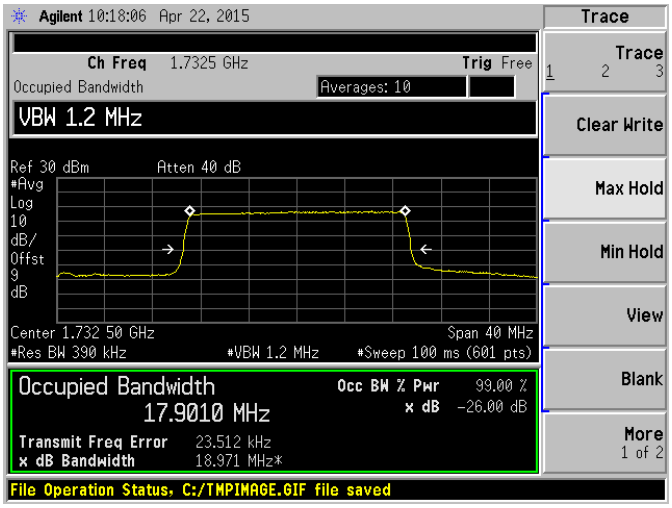
Band 4 QPSK 15 MHz Bandwidth RB6#0 HCH



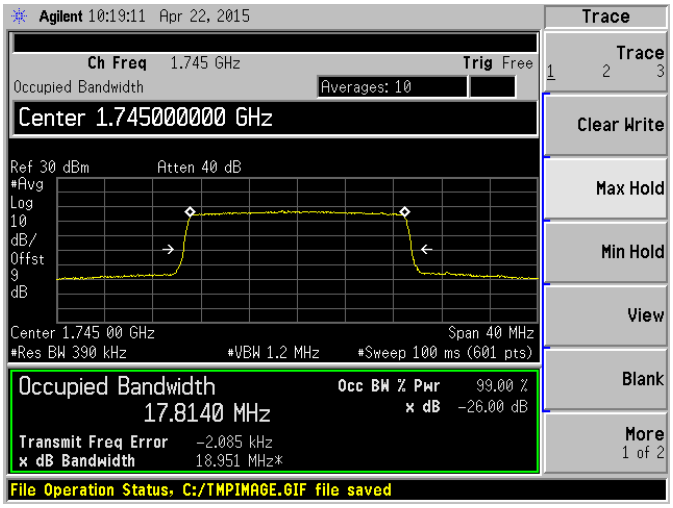
Band 4 QPSK 20 MHz Bandwidth RB6#0 LCH



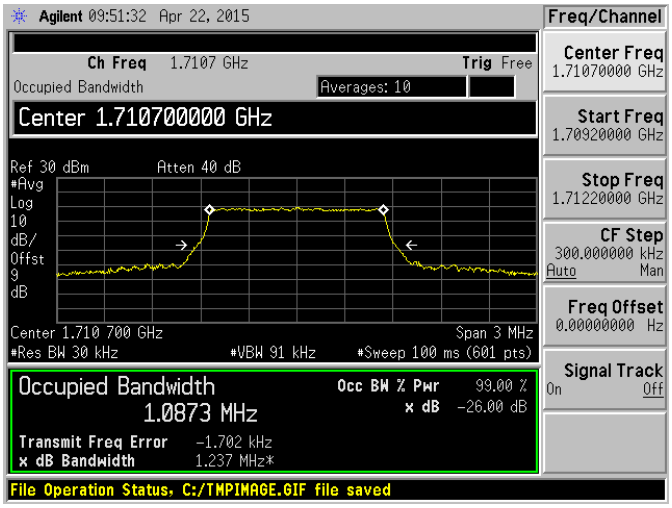
Band 4 QPSK 20 MHz Bandwidth RB6#0 MCH



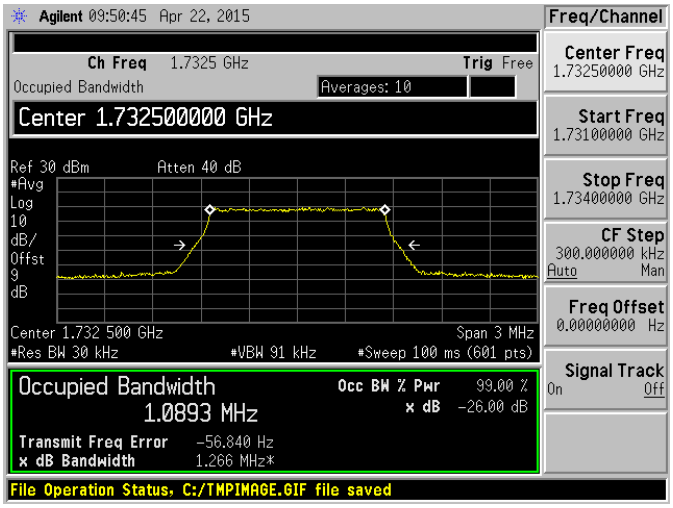
Band 4 QPSK 20 MHz Bandwidth RB6#0 HCH



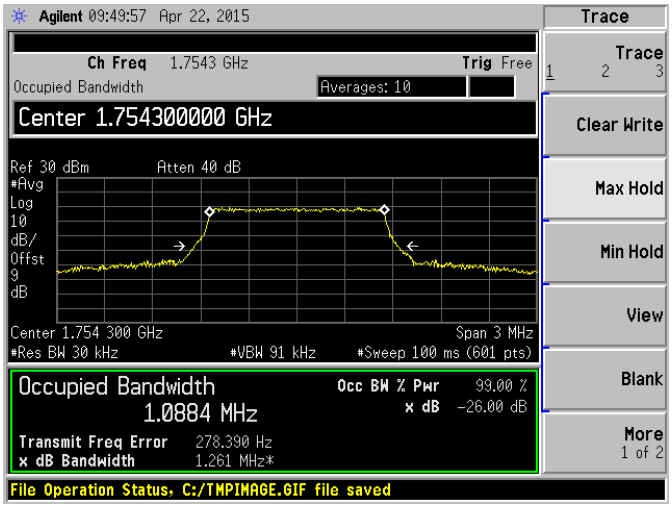
Band 4 16-QAM 1.4 MHz Bandwidth RB6#0 LCH



Band 4 16-QAM 1.4 MHz Bandwidth RB6#0 MCH



Band 4 16-QAM 1.4 MHz Bandwidth RB6#0 HCH



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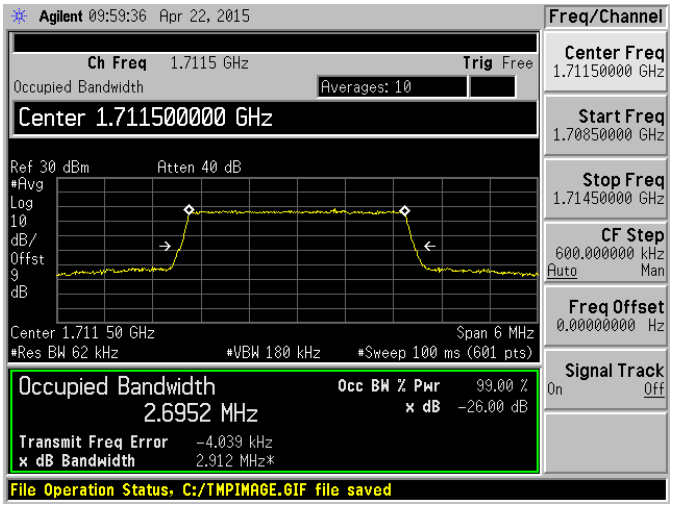
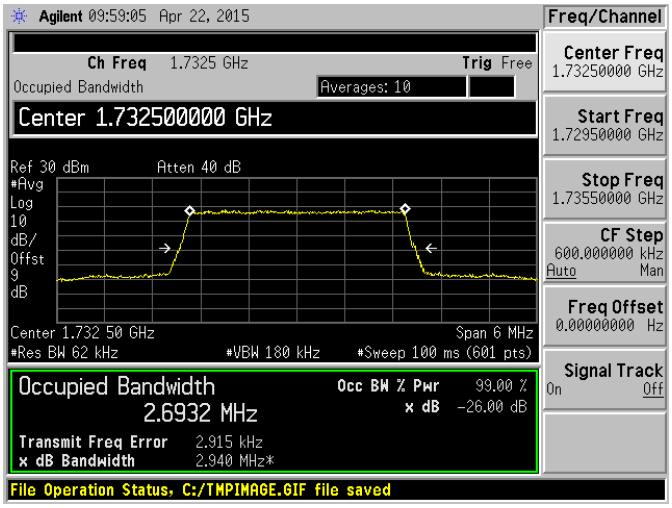
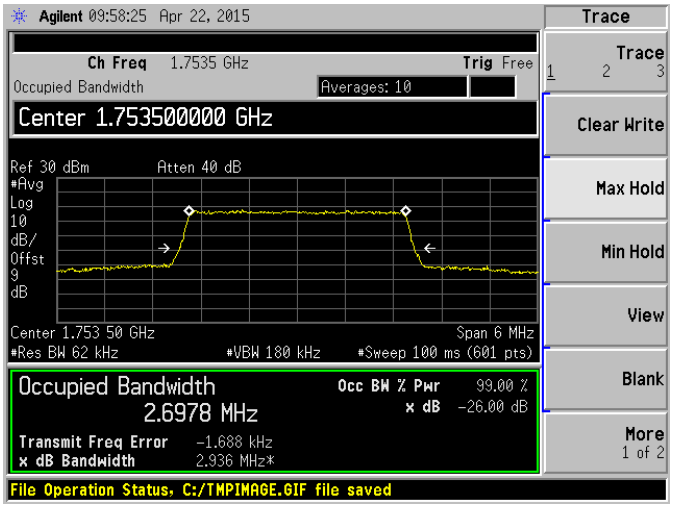


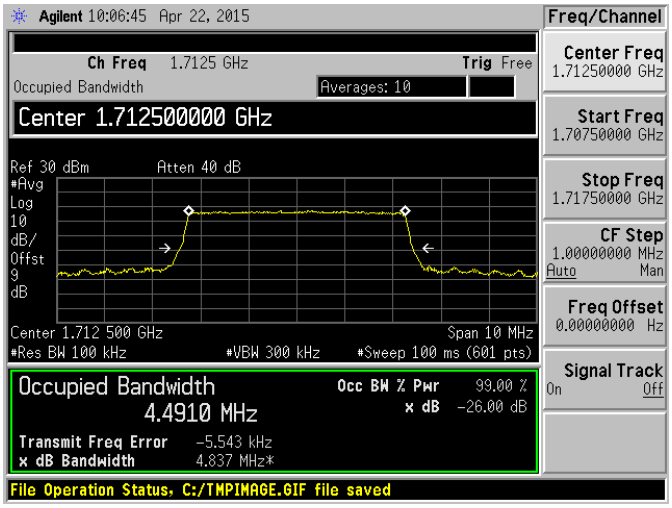
Band 4 16-QAM 3 MHz Bandwidth RB6#0 MCH



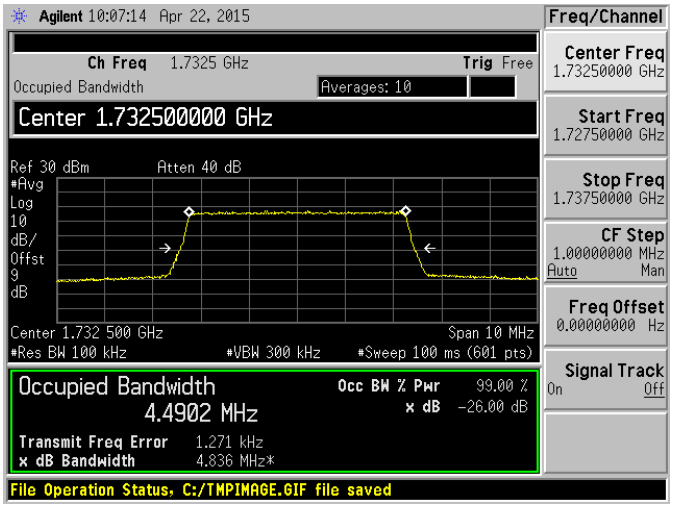
Band 4 16-QAM 3 MHz Bandwidth RB6#0 HCH



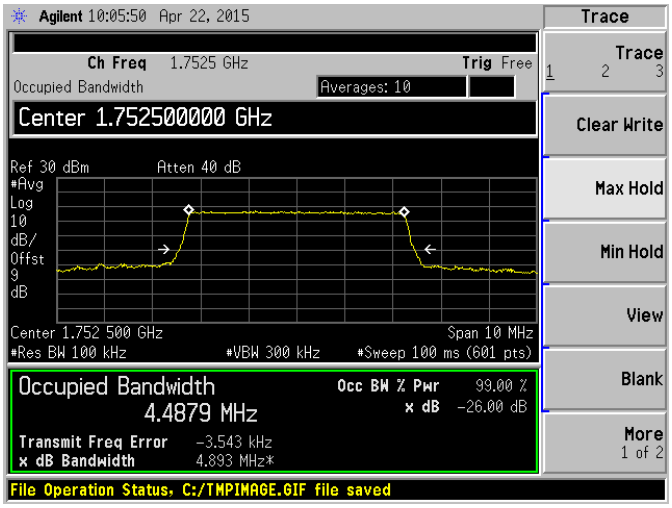
Band 4 16-QAM 5 MHz Bandwidth RB6#0 LCH



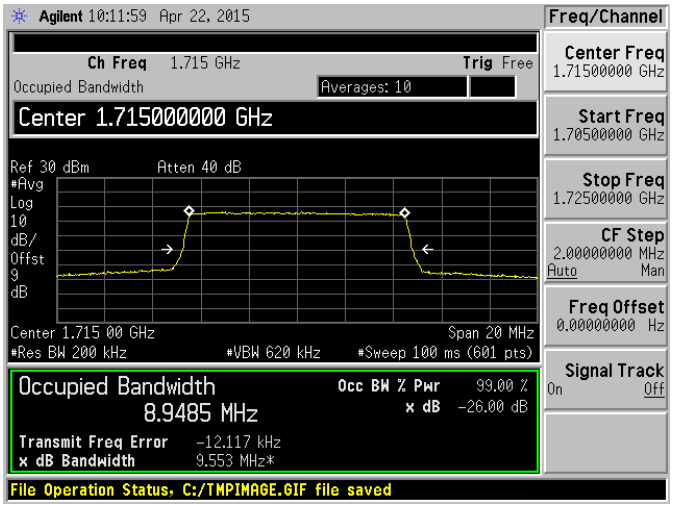
Band 4 16-QAM 5 MHz Bandwidth RB6#0 MCH



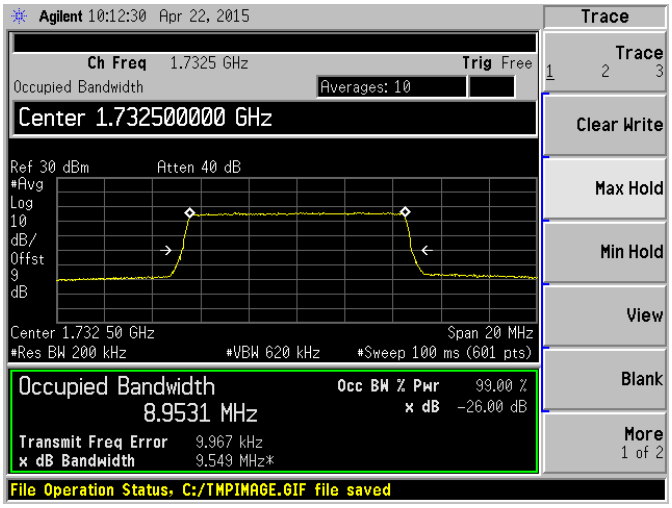
Band 4 16-QAM 5 MHz Bandwidth RB6#0 HCH



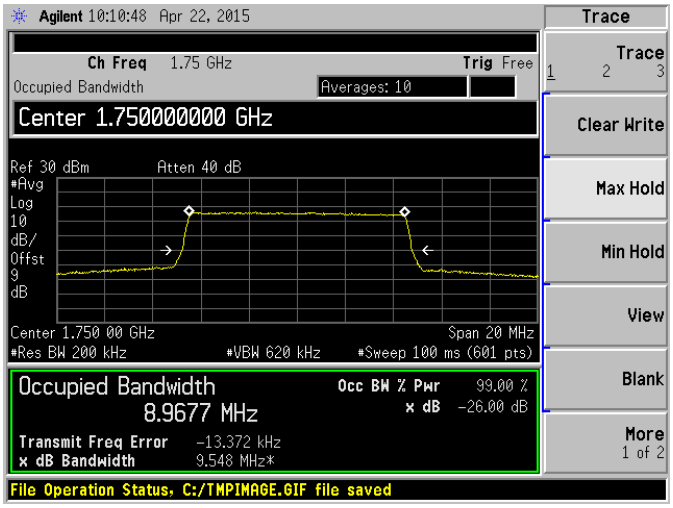
Band 4 16-QAM 10 MHz Bandwidth RB6#0 LCH



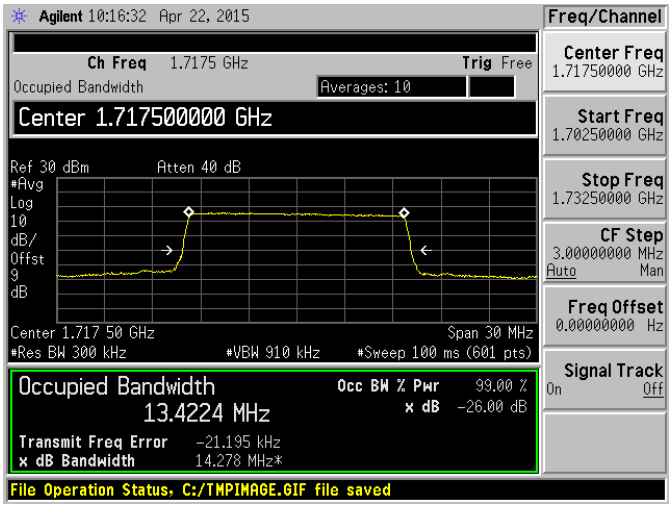
Band 4 16-QAM 10 MHz Bandwidth RB6#0 MCH



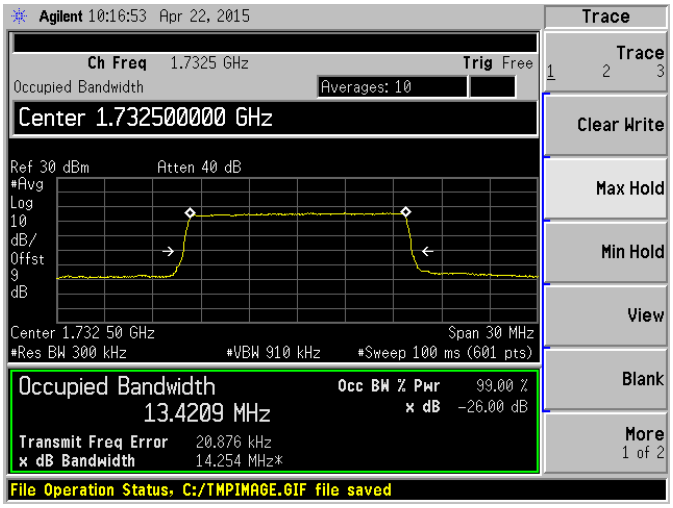
Band 4 16-QAM 10 MHz Bandwidth RB6#0 HCH



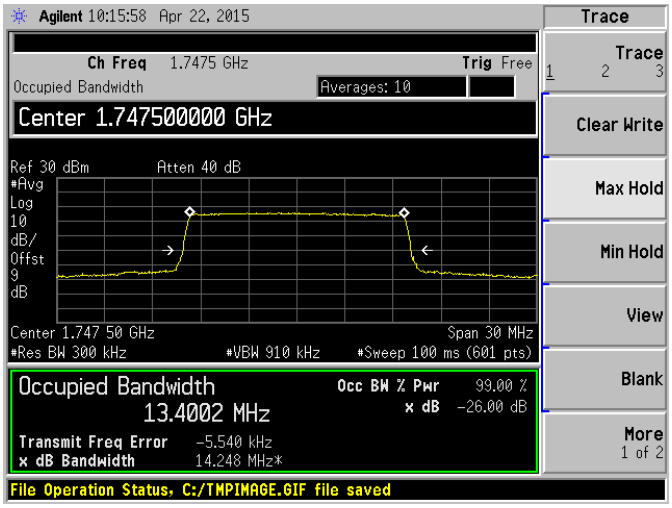
Band 4 16-QAM 15 MHz Bandwidth RB6#0 LCH



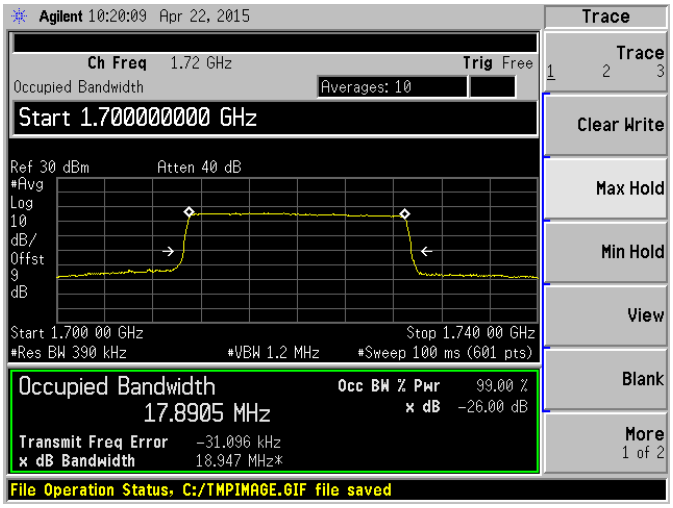
Band 4 16-QAM 15 MHz Bandwidth RB6#0 MCH



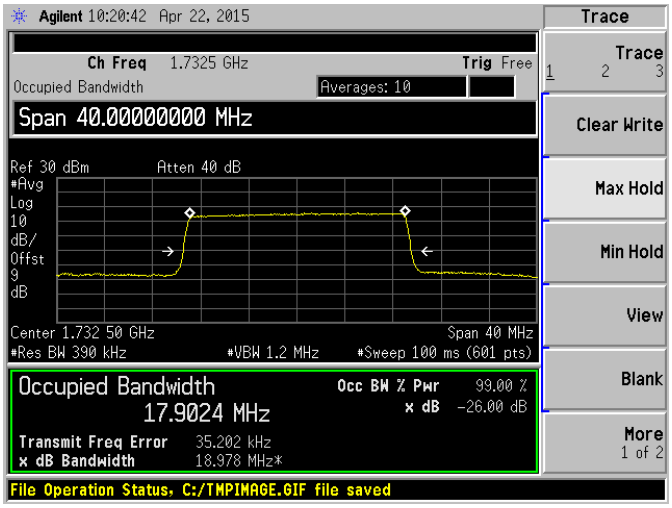
Band 4 16-QAM 15 MHz Bandwidth RB6#0 HCH



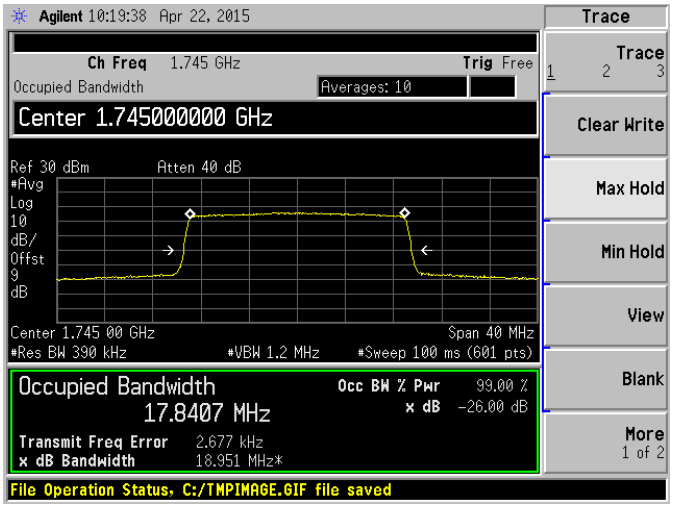
Band 4 16-QAM 20 MHz Bandwidth RB6#0 LCH



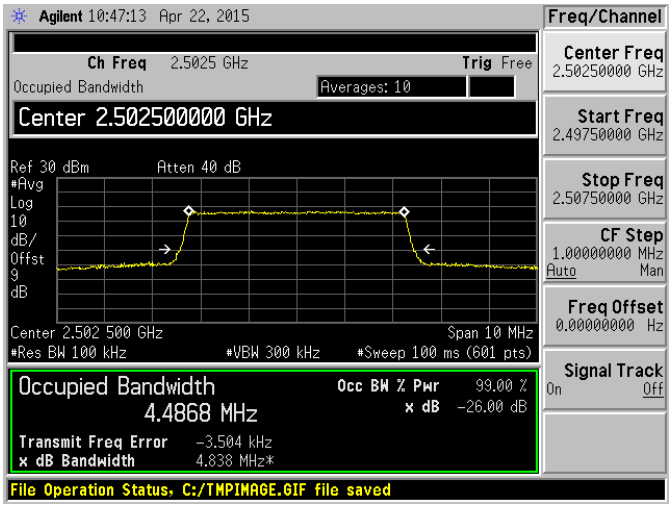
Band 4 16-QAM 20 MHz Bandwidth RB6#0 MCH



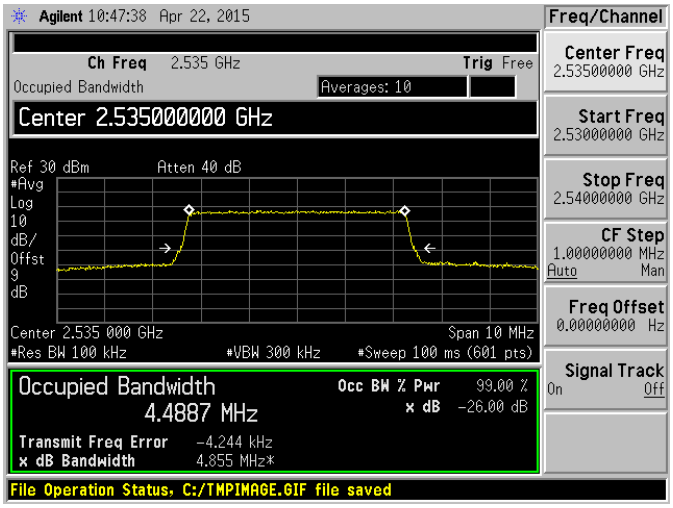
Band 4 16-QAM 20 MHz Bandwidth RB6#0 HCH



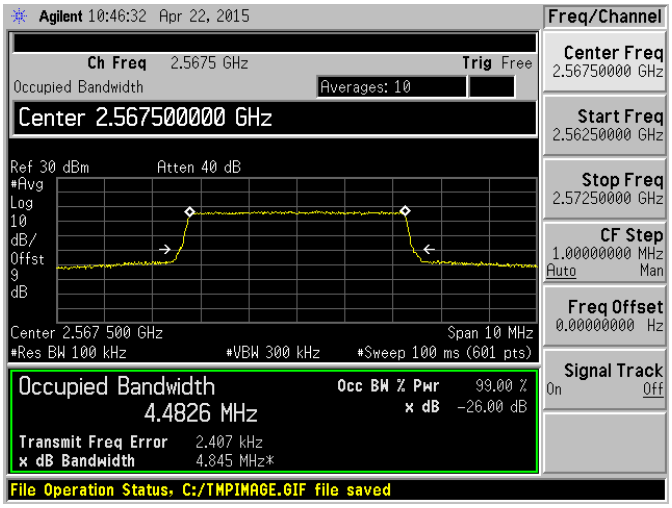
Band 7 QPSK 5 MHz Bandwidth RB6#0 LCH



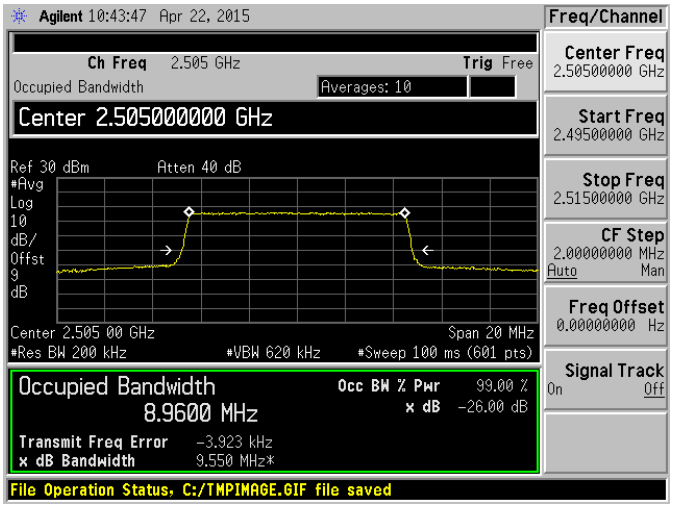
Band 7 QPSK 5 MHz Bandwidth RB6#0 MCH



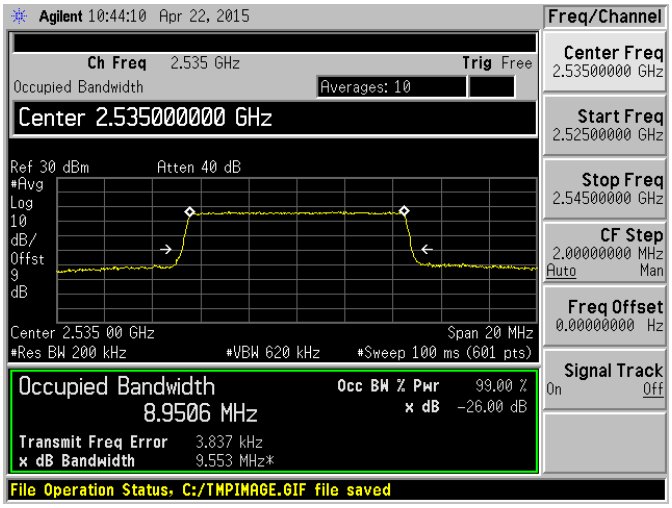
Band 7 QPSK 5 MHz Bandwidth RB6#0 HCH



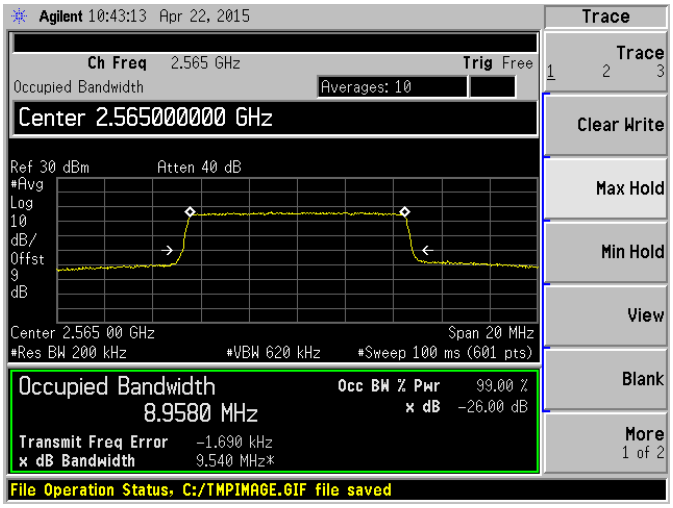
Band 7 QPSK 10 MHz Bandwidth RB6#0 LCH



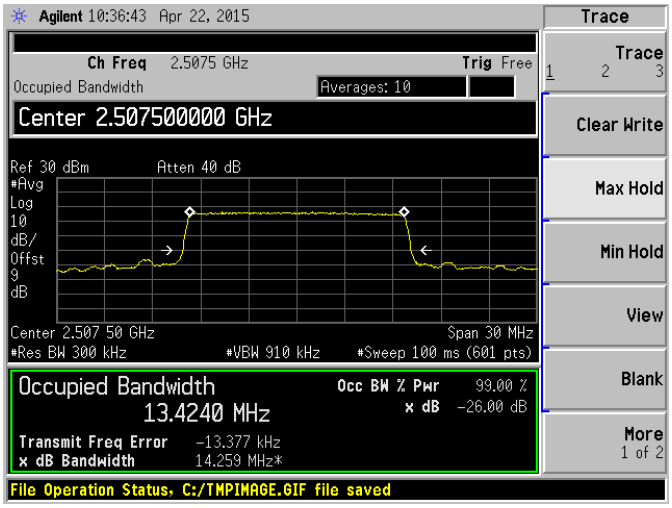
Band 7 QPSK 10 MHz Bandwidth RB6#0 MCH



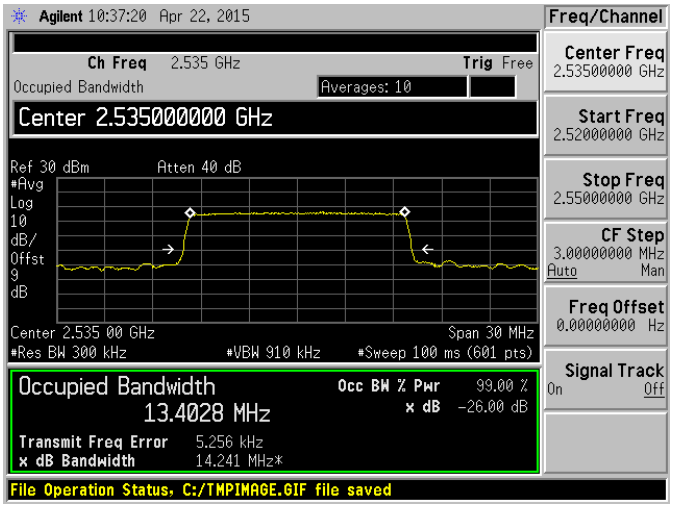
Band 7 QPSK 10 MHz Bandwidth RB6#0 HCH



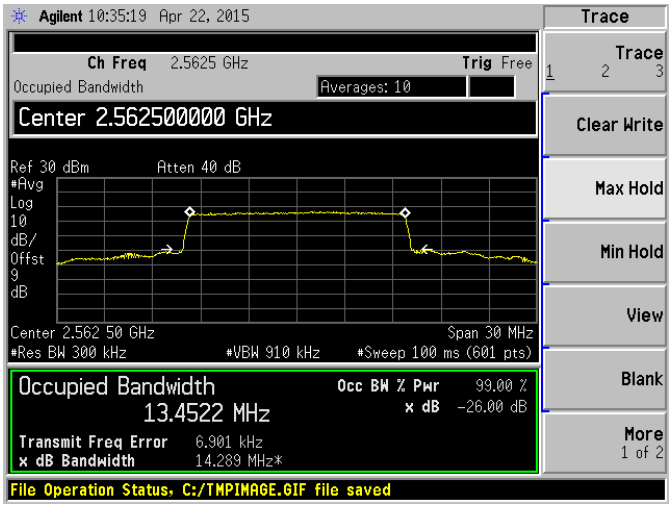
Band 7 QPSK 15 MHz Bandwidth RB6#0 LCH



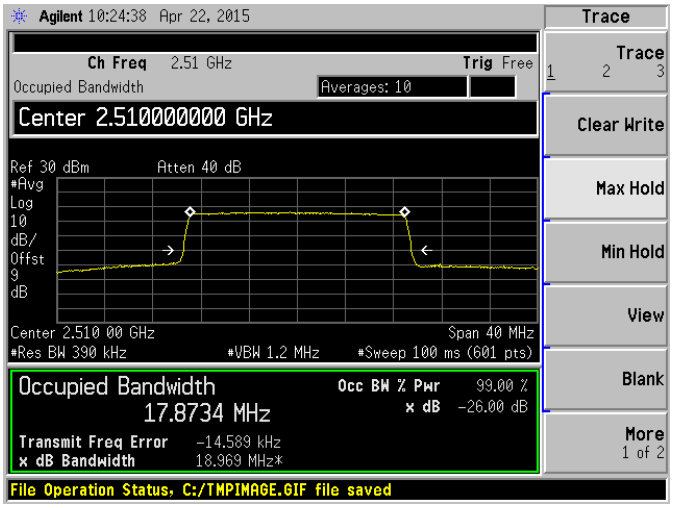
Band 7 QPSK 15 MHz Bandwidth RB6#0 MCH



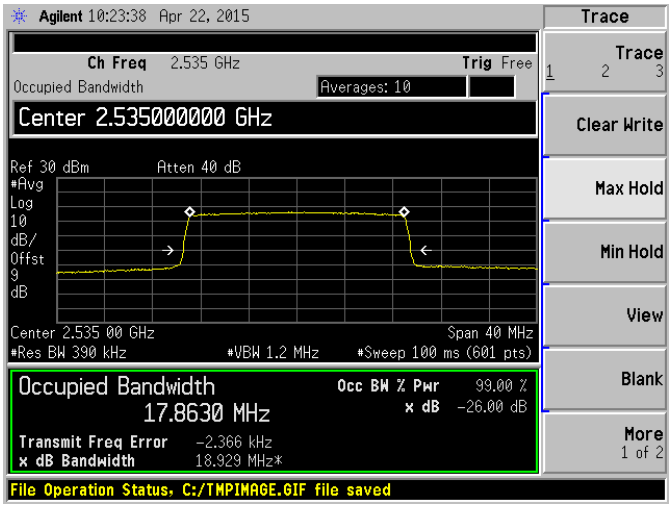
Band 7 QPSK 15 MHz Bandwidth RB6#0 HCH



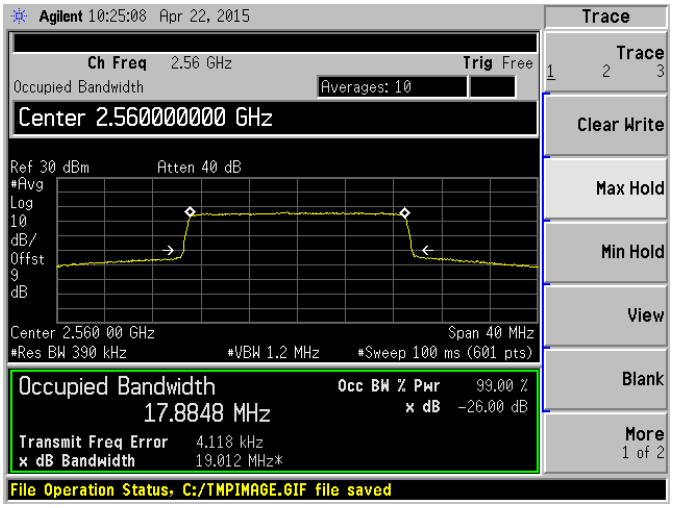
Band 7 QPSK 20 MHz Bandwidth RB6#0 LCH



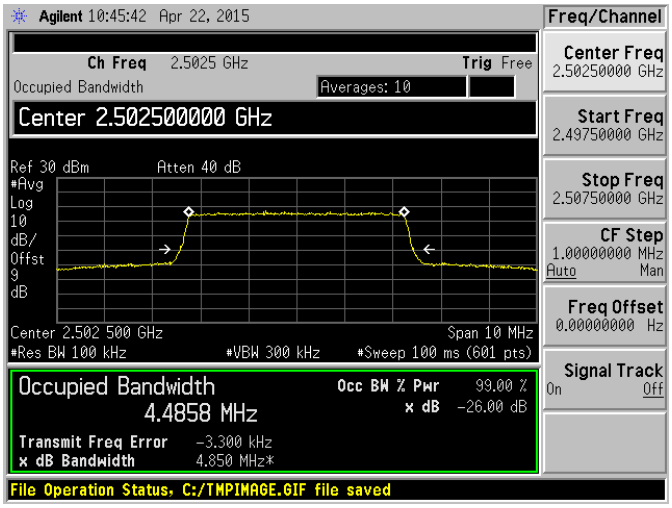
Band 7 QPSK 20 MHz Bandwidth RB6#0 MCH



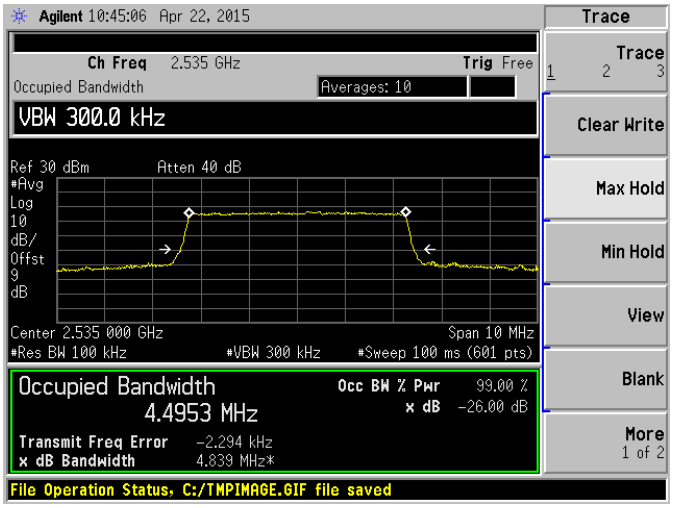
Band 7 QPSK 20 MHz Bandwidth RB6#0 HCH



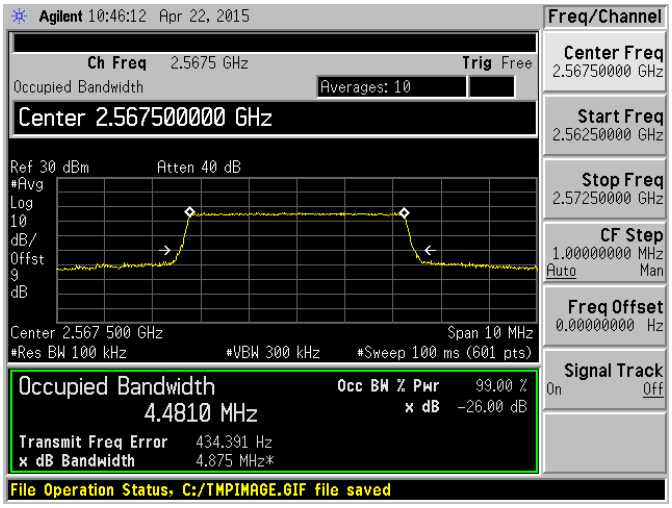
Band 7 16-QAM 5 MHz Bandwidth RB6#0 LCH



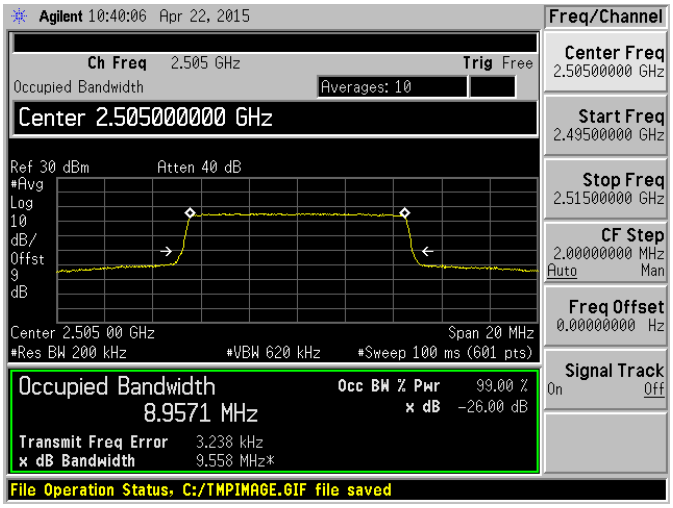
Band 7 16-QAM 5 MHz Bandwidth RB6#0 MCH



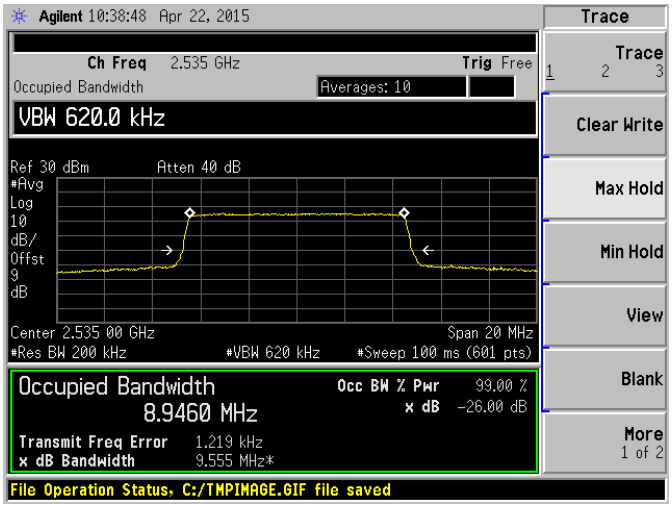
Band 7 16-QAM 5 MHz Bandwidth RB6#0 HCH



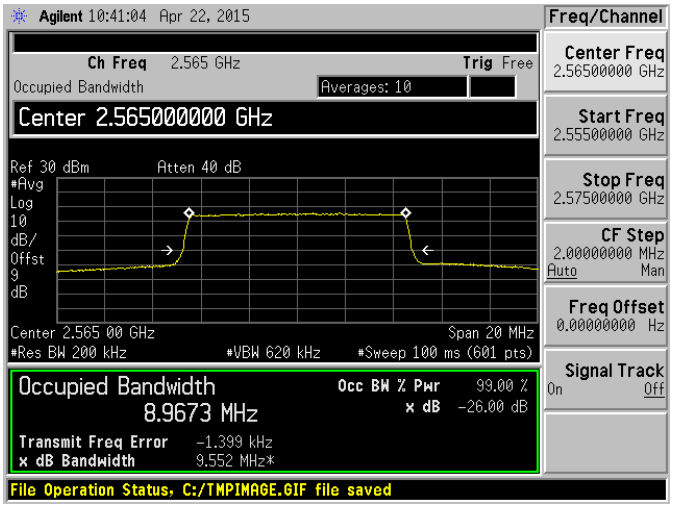
Band 7 16-QAM 10 MHz Bandwidth RB6#0 LCH



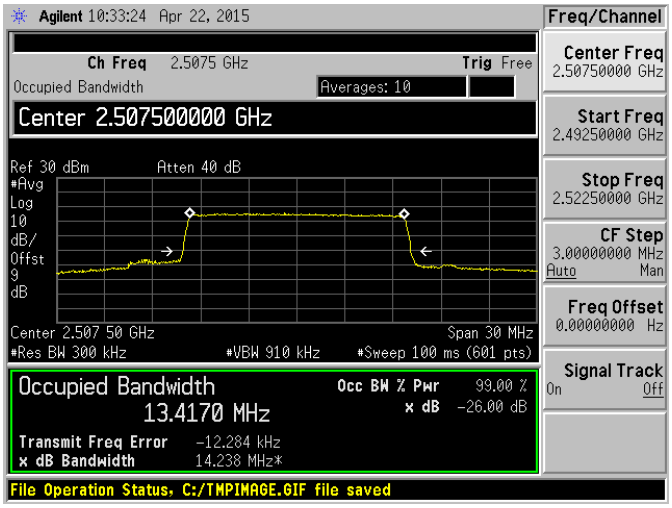
Band 7 16-QAM 10 MHz Bandwidth RB6#0 MCH



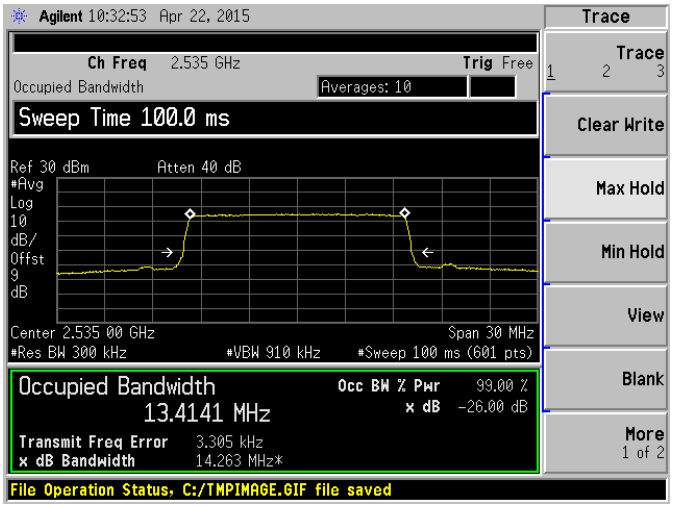
Band 7 16-QAM 10 MHz Bandwidth RB6#0 HCH



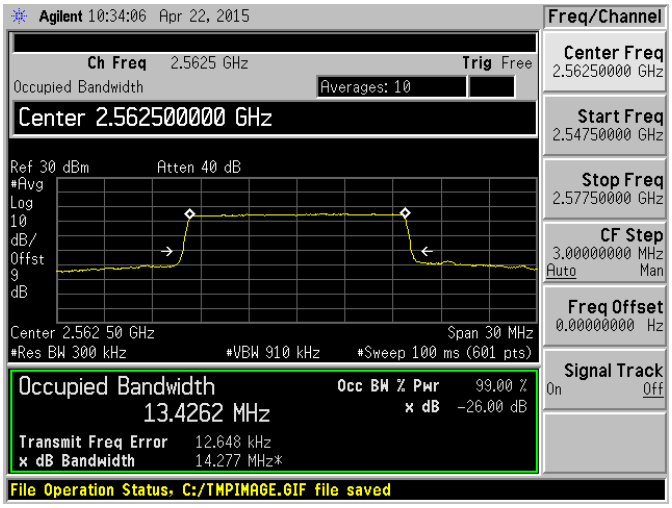
Band 7 16-QAM 15 MHz Bandwidth RB6#0 LCH



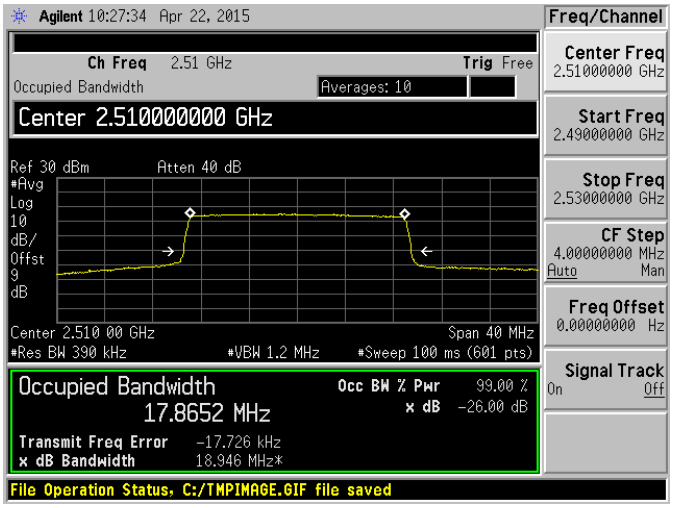
Band 7 16-QAM 15 MHz Bandwidth RB6#0 MCH



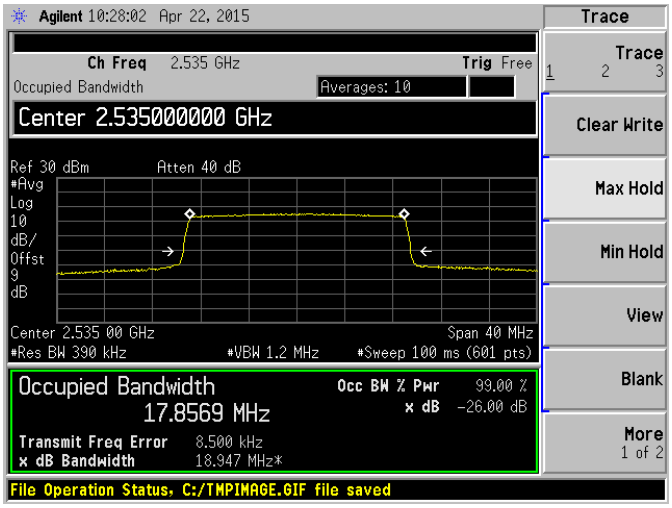
Band 7 16-QAM 15 MHz Bandwidth RB6#0 HCH



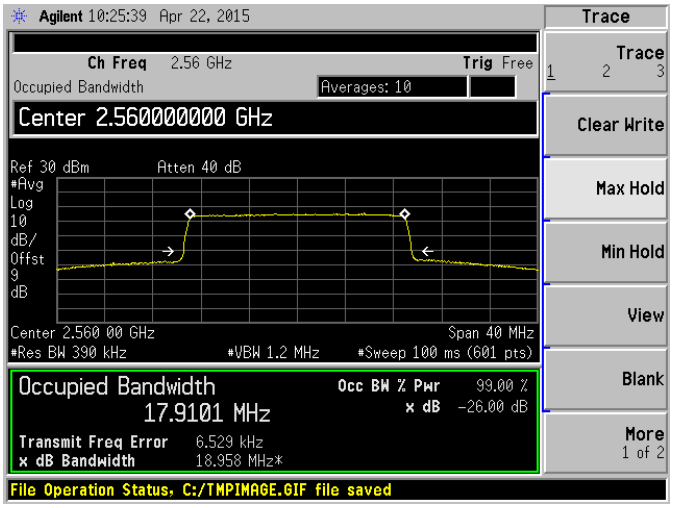
Band 7 16-QAM 20 MHz Bandwidth RB6#0 LCH



Band 7 16-QAM 20 MHz Bandwidth RB6#0 MCH



Band 7 16-QAM 20 MHz Bandwidth RB6#0 HCH



A.4 Frequency Stability

GSM 850 MHz

Test Conditions		Frequency Deviation						Verdict
		LCH		MCH		HCH		
Power (VDC)	Temperature (°C)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	-21.65	±2060.5	-20.82	±2091.5	8.87	±2122	Pass
	-20	-5.66		0.02		5.71		
	-10	18.73		2.27		-5.22		
	0	-19.68		-0.19		9.37		
	+10	20.47		9.81		13.97		
	+20	23.05		0.28		22.42		
	+30	18.00		16.39		18.57		
	+40	-12.80		21.06		-19.93		
	+50	-9.55		31.36		23.76		
4.35	+25	-11.22		-13.27		-10.20		
3.6	+25	29.91		-9.00		-9.09		

GSM 1900 MHz

Test Conditions		Frequency Deviation						Verdict
		LCH		MCH		HCH		
Power (VDC)	Temperature (°C)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	2.93	±4625.5	8.88	±4700.0	7.05	±4774.5	Pass
	-20	6.08		8.65		-8.96		
	-10	1.27		-0.16		1.81		
	0	-8.13		-3.43		-5.72		
	+10	16.06		0.18		2.43		
	+20	-1.70		-16.88		-4.76		
	+30	-13.17		4.93		-12.63		
	+40	-11.06		-4.84		-14.65		
	+50	3.57		6.62		-2.60		
4.35	+25	-3.25		-6.22		6.56		
3.6	+25	-10.53		-16.46		13.05		

GPRS 850 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	54.22	±2060.5	23.41	±2091.5	7.86	±2122	Pass
	-20	42.78		37.93		29.51		
	-10	47.18		58.18		-7.86		
	0	0.81		-4.56		-9.17		
	+10	37.41		76.18		7.31		
	+20	18.65		69.90		31.29		
	+30	7.86		66.07		-7.54		
	+40	-1.46		76.85		64.57		
	+50	63.59		79.91		8.53		
4.35	+25	48.45		44.99		77.46		
3.6	+25	25.64		-8.66		68.75		

GPRS 1900 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	3.89	±4625.5	-0.46	±4700.0	2.47	±4774.5	Pass
	-20	9.44		2.79		10.18		
	-10	6.69		0.25		6.54		
	0	3.27		0.97		-6.18		
	+10	-6.31		-0.50		0.45		
	+20	-0.46		4.30		-3.78		
	+30	0.78		-4.20		10.38		
	+40	-2.08		-5.95		7.41		
	+50	5.71		-2.49		7.15		
4.35	+25	8.58		10.61		-2.15		
3.6	+25	1.29		9.35		9.53		

EGPRS 850 MHz

Test Conditions		Frequency Deviation						Verdict
		LCH		MCH		HCH		
Power (VDC)	Temperature (°C)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	1.63	±2060.5	-5.89	±2091.5	13.97	±2122	Pass
	-20	9.34		17.78		-19.32		
	-10	11.71		6.33		18.71		
	0	14.68		11.88		11.82		
	+10	-3.31		9.90		1.23		
	+20	-18.77		-11.42		-3.60		
	+30	17.72		16.32		-7.78		
	+40	21.28		-1.84		22.21		
	+50	-4.65		11.96		-11.57		
4.35	+25	-23.06		16.99		1.97		
3.6	+25	16.09		13.49		11.40		

EGPRS 1900 MHz

Test Conditions		Frequency Deviation						Verdict
		LCH		MCH		HCH		
Power (VDC)	Temperature (°C)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	-3.14	±4625.5	-2.43	±4700.0	-2.50	±4774.5	Pass
	-20	0.06		-4.67		0.30		
	-10	-3.58		-4.69		-0.39		
	0	-4.78		-4.20		-1.05		
	+10	-3.45		-0.03		-3.76		
	+20	-3.66		-2.01		-1.34		
	+30	-1.42		-4.41		0.57		
	+40	-2.74		-2.95		-4.77		
	+50	0.26		-2.09		-2.59		
4.35	+25	0.50		-3.52		-1.73		
3.6	+25	-4.74		-0.19		-2.23		

WCDMA 850 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	-28.69	±2066	-27.66	±2091.5	-28.33	±2116.5	Pass
	-20	-28.75		-28.57		-27.88		
	-10	-27.72		-28.62		-28.48		
	0	-27.70		-27.71		-28.38		
	+10	-28.11		-28.72		-27.59		
	+20	-28.61		-28.97		-28.52		
	+30	-28.10		-28.43		-28.04		
	+40	-27.89		-27.93		-28.72		
	+50	-28.91		-28.63		-28.70		
4.35	+25	-27.54		-28.73		-28.02		
3.6	+25	-27.64		-28.59		-28.62		

WCDMA 1900 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	33.26	±4631	15.73	±4700	52.17	±4769	Pass
	-20	42.12		-8.20		28.14		
	-10	-0.56		43.40		33.27		
	0	8.20		-13.79		24.72		
	+10	-13.04		28.82		1.91		
	+20	-14.56		25.83		19.59		
	+30	21.86		41.20		48.08		
	+40	-5.39		-10.03		31.98		
	+50	38.99		2.69		41.83		
4.35	+25	36.56		7.29		22.23		
3.6	+25	6.44		17.60		14.12		

LTE Band 4 QPSK 1.4 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	24.89	±4276.75	4.43	±4331.25	5.30	±4385.75	Pass
	-20	38.66		-15.01		37.67		
	-10	41.47		34.03		-12.80		
	0	13.21		44.86		39.77		
	+10	10.35		51.87		45.48		
	+20	-12.03		51.00		9.68		
	+30	21.03		38.12		-12.23		
	+40	25.80		17.07		5.04		
	+50	27.93		29.71		2.61		
4.35	+25	3.71		42.55		42.18		
3.6	+25	25.57		53.57		48.27		

LTE Band 4 QPSK 3 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	63.12	±4278.75	26.32	±4331.25	18.24	±4383.75	Pass
	-20	75.27		49.22		48.85		
	-10	30.81		0.87		42.82		
	0	54.90		74.76		67.61		
	+10	-5.95		41.21		74.98		
	+20	30.97		53.40		37.51		
	+30	38.53		33.93		24.02		
	+40	28.67		16.43		-2.96		
	+50	14.09		80.68		-2.48		
4.35	+25	27.35		25.06		36.37		
3.6	+25	6.10		34.97		15.30		

LTE Band 4 QPSK 5 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	20.79	±4281.25	46.68	±4331.25	22.69	±4381.25	Pass
	-20	44.54		28.10		2.39		
	-10	10.45		-4.27		64.53		
	0	10.88		36.69		12.66		
	+10	54.76		13.61		50.37		
	+20	2.46		12.15		-5.39		
	+30	27.07		23.94		35.13		
	+40	-8.66		13.56		-0.53		
	+50	14.23		47.64		37.40		
4.35	+25	63.35		52.86		31.75		
3.6	+25	35.82		3.68		58.60		

LTE Band 4 QPSK 10 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	54.22	±4287.5	23.41	±4331.25	7.86	±4368.75	Pass
	-20	42.78		37.93		29.51		
	-10	47.18		58.18		-7.86		
	0	0.81		-4.56		-9.17		
	+10	37.41		76.18		7.31		
	+20	18.65		69.90		31.29		
	+30	7.86		66.07		-7.54		
	+40	-1.46		76.85		64.57		
	+50	63.59		79.91		8.53		
4.35	+25	48.45		44.99		77.46		
3.6	+25	25.64		-8.66		68.75		

LTE Band 4 QPSK 15 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	73.22	±4300	1.31	±4331.25	91.33	±4368.75	Pass
	-20	94.63		64.25		64.18		
	-10	14.52		14.06		91.40		
	0	64.87		83.44		9.42		
	+10	11.69		23.36		0.08		
	+20	28.65		85.07		20.40		
	+30	65.45		78.14		5.49		
	+40	76.92		76.35		16.75		
	+50	7.15		57.93		4.40		
4.35	+25	57.82		42.07		89.09		
3.6	+25	15.84		26.08		56.26		

LTE Band 4 QPSK 20 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	4.70	±4300	43.65	±4331.25	4.67	±4362.5	Pass
	-20	10.55		43.75		41.98		
	-10	25.51		7.06		-16.33		
	0	29.06		-16.77		-27.80		
	+10	-1.97		22.20		1.66		
	+20	29.89		18.77		-3.47		
	+30	-9.69		9.44		9.22		
	+40	3.48		55.87		0.97		
	+50	2.69		54.97		-2.52		
4.35	+25	-5.55		-8.03		28.81		
3.6	+25	16.56		51.53		10.54		

LTE Band 4 16-QAM 1.4 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	33.79	±4276.75	20.98	±4331.25	-17.63	±4385.75	Pass
	-20	22.89		39.13		42.95		
	-10	20.77		14.55		28.99		
	0	-5.91		18.99		11.57		
	+10	12.50		2.31		0.50		
	+20	-1.89		7.79		34.24		
	+30	2.49		-15.64		22.03		
	+40	22.17		30.71		7.62		
	+50	-18.88		7.90		31.16		
4.35	+25	15.79		12.00		34.59		
3.6	+25	12.89		36.31		2.92		

LTE Band 4 16-QAM 3 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	5.72	±4281.25	-3.34	±4331.25	-1.39	±4381.25	Pass
	-20	12.66		25.63		1.77		
	-10	11.79		5.69		14.49		
	0	-12.91		3.36		-8.41		
	+10	30.65		30.10		32.83		
	+20	18.14		-13.42		16.21		
	+30	1.10		31.69		-5.97		
	+40	20.14		28.49		2.60		
	+50	-12.28		18.03		6.13		
4.35	+25	11.40		-8.23		32.62		
3.6	+25	0.32		33.09		31.99		

LTE Band 4 16-QAM 5 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	39.77	±4281.25	21.14	±4331.25	35.12	±4381.25	Pass
	-20	25.85		-3.38		13.55		
	-10	7.56		36.27		18.40		
	0	42.14		12.16		4.40		
	+10	4.46		10.63		43.79		
	+20	-6.00		35.20		-5.80		
	+30	-0.30		4.47		26.83		
	+40	24.61		26.52		1.53		
	+50	-3.41		9.24		48.60		
4.35	+25	22.38		45.03		22.27		
3.6	+25	25.67		-2.05		-4.03		

LTE Band 4 16-QAM 10 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	40.66	±4287.5	47.05	±4331.25	5.71	±4368.75	Pass
	-20	47.17		39.47		33.20		
	-10	45.30		24.62		-18.89		
	0	26.29		51.94		-7.23		
	+10	-14.11		13.15		33.50		
	+20	22.93		-10.98		30.11		
	+30	-6.06		-18.79		35.30		
	+40	1.47		-15.83		26.55		
	+50	13.76		29.75		26.37		
4.35	+25	42.73		-11.45		-18.75		
3.6	+25	-15.84		27.90		41.95		

LTE Band 4 16-QAM 15 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	17.28	±4300	40.43	±4331.25	30.26	±4368.75	Pass
	-20	29.52		-13.54		7.16		
	-10	41.18		37.92		33.14		
	0	27.31		-3.63		20.20		
	+10	16.54		0.69		19.74		
	+20	14.32		37.01		5.95		
	+30	-0.62		43.99		-2.87		
	+40	-6.70		28.32		-0.71		
	+50	19.90		33.49		18.28		
4.35	+25	13.51		39.96		40.68		
3.6	+25	-9.97		13.05		11.30		

LTE Band 4 16-QAM 20 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	-17.69	±4300	29.30	±4331.25	54.44	±4362.5	Pass
	-20	12.83		53.05		46.16		
	-10	56.05		53.11		-1.41		
	0	32.83		21.15		46.39		
	+10	16.83		6.24		38.97		
	+20	21.93		25.64		16.69		
	+30	9.05		40.21		28.41		
	+40	37.18		62.79		3.91		
	+50	53.85		54.45		21.49		
4.35	+25	29.00		28.50		3.17		
3.6	+25	41.95		31.63		30.24		

LTE Band 7 QPSK 5 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	-0.82	±6256.25	7.68	±6337.5	47.46	±6418.75	Pass
	-20	38.38		60.42		43.93		
	-10	-2.04		28.61		39.78		
	0	41.86		60.04		5.07		
	+10	30.40		18.47		-6.70		
	+20	13.61		55.05		46.35		
	+30	12.31		56.75		33.31		
	+40	41.22		24.99		46.27		
	+50	1.45		35.15		56.59		
4.35	+25	8.52		40.78		2.90		
3.6	+25	-6.69		-1.83		-7.85		

LTE Band 7 QPSK 10 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	37.96	±6262.5	50.36	±6337.5	21.78	±6412.5	Pass
	-20	40.79		15.90		62.27		
	-10	21.68		25.00		57.06		
	0	48.30		43.90		35.64		
	+10	29.41		63.93		-0.85		
	+20	36.28		10.46		44.67		
	+30	12.81		0.51		47.69		
	+40	16.07		12.76		58.35		
	+50	9.87		31.28		62.09		
4.35	+25	6.97		37.72		54.12		
3.6	+25	55.89		2.09		68.25		

LTE Band 7 QPSK 15 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	23.87	±6268.75	-1.15	±6337.5	-2.13	±6406.25	Pass
	-20	32.94		33.36		25.86		
	-10	3.73		7.99		-2.34		
	0	-5.90		-3.12		9.28		
	+10	15.40		32.92		2.36		
	+20	25.02		28.42		18.25		
	+30	33.58		30.10		18.56		
	+40	-4.52		29.71		29.04		
	+50	23.52		35.51		-1.79		
4.35	+25	14.56		19.96		6.29		
3.6	+25	24.62		34.61		11.74		

LTE Band 7 QPSK 20 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	41.30	±6275	9.55	±6337.5	34.92	±6400	Pass
	-20	16.79		-15.42		5.40		
	-10	0.27		-13.78		-16.64		
	0	12.04		-10.15		7.36		
	+10	42.21		1.92		54.12		
	+20	25.41		35.93		42.69		
	+30	31.54		33.03		-8.92		
	+40	40.85		23.28		43.97		
	+50	18.19		18.79		3.57		
4.35	+25	11.39		41.69		42.34		
3.6	+25	36.94		-14.65		-10.49		

LTE Band 7 16-QAM 5 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	15.25	±6256.25	6.15	±6337.5	0.89	±6418.75	Pass
	-20	34.41		4.22		16.87		
	-10	6.75		28.76		33.81		
	0	16.12		25.98		7.37		
	+10	-1.25		2.36		7.46		
	+20	19.45		25.14		16.34		
	+30	5.78		29.60		27.78		
	+40	35.12		34.09		10.50		
	+50	13.55		30.78		4.14		
4.35	+25	6.48		6.93		0.12		
3.6	+25	24.82		12.99		23.96		

LTE Band 7 16-QAM 10 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	41.14	±6262.5	2.91	±6337.5	35.33	±6412.5	Pass
	-20	14.38		29.14		-0.06		
	-10	16.51		9.44		0.87		
	0	69.34		40.49		5.57		
	+10	76.93		-0.82		45.63		
	+20	48.23		43.45		2.21		
	+30	18.78		37.30		40.55		
	+40	55.89		74.14		69.45		
	+50	31.50		6.94		56.64		
4.35	+25	56.98		36.46		27.37		
3.6	+25	75.45		28.90		56.29		

LTE Band 7 16-QAM 15 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	17.98	±6268.75	40.30	±6337.5	69.23	±6406.25	Pass
	-20	34.77		33.77		38.68		
	-10	32.66		58.09		12.32		
	0	53.27		4.02		41.16		
	+10	7.77		22.27		20.25		
	+20	12.00		55.75		15.95		
	+30	28.60		37.93		74.05		
	+40	75.02		64.96		73.50		
	+50	12.27		68.17		68.34		
4.35	+25	57.46		20.60		28.46		
3.6	+25	20.92		28.92		24.83		

LTE Band 7 16-QAM 20 MHz

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH		MCH		HCH		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8	-30	20.12	±6275	12.58	±6337.5	28.00	±6400	Pass
	-20	30.65		44.08		-1.70		
	-10	38.73		47.89		47.36		
	0	26.77		41.67		39.88		
	+10	22.04		16.20		35.89		
	+20	-2.31		30.13		-12.27		
	+30	24.43		25.55		44.29		
	+40	42.95		19.19		13.50		
	+50	-8.22		44.30		-1.10		
4.35	+25	13.60		1.75		-0.82		
3.6	+25	7.84		6.40		42.65		

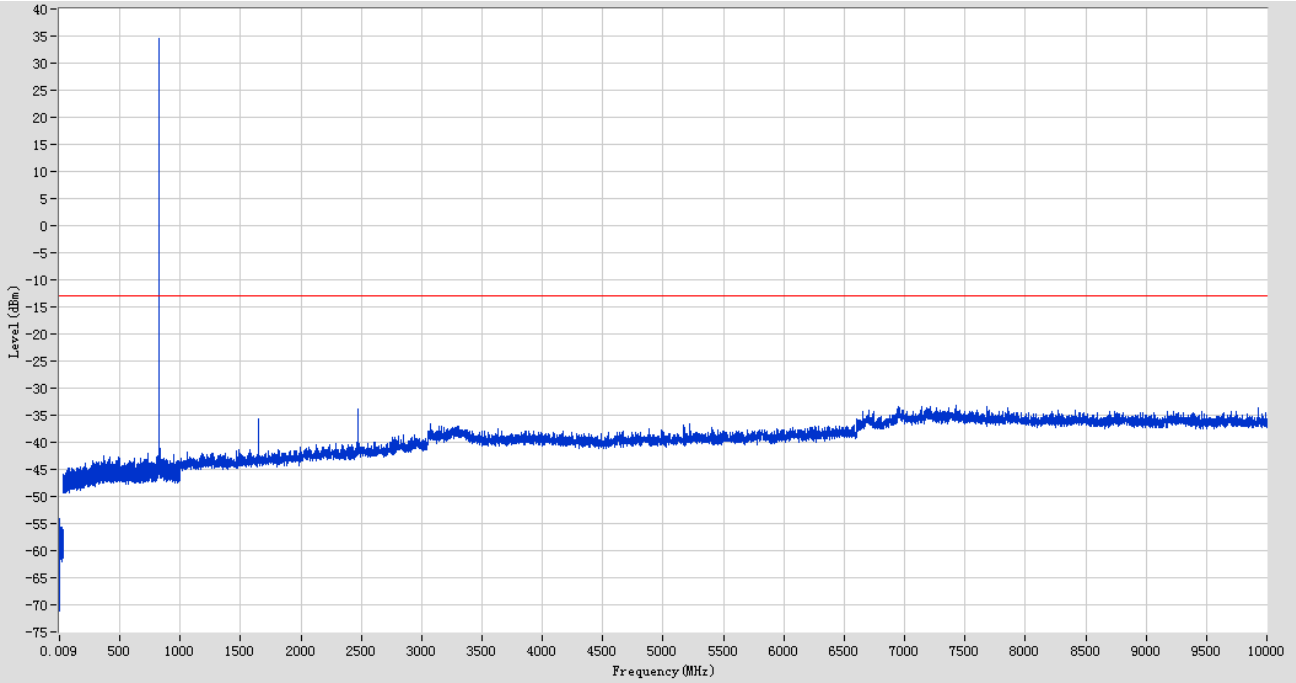
A.5 Spurious Emission at Antenna Terminals

Note 1: GSM and GPRS, EGPRS modes have been verified, Only the worst data with different data bandwidth show here.

Note 2: This frequency which near test frequency with circle should be ignored because they are MS carrier frequency

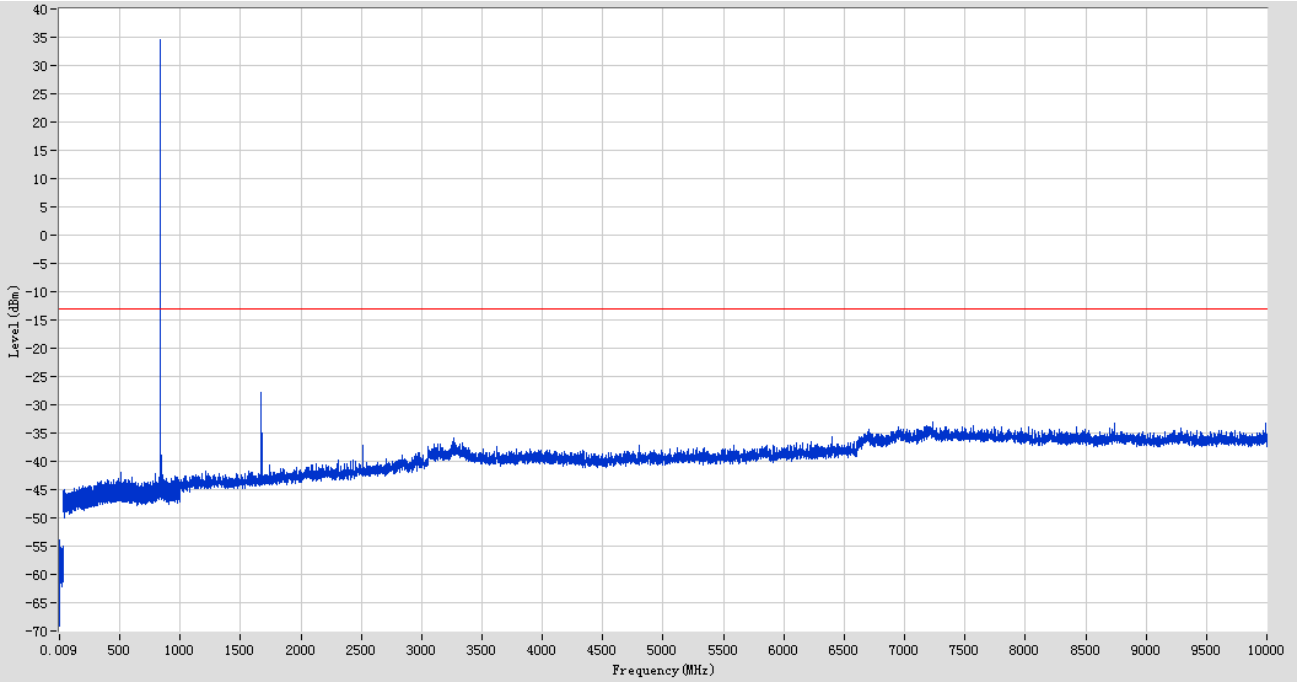
Test Data

GSM 850 MHz LCH



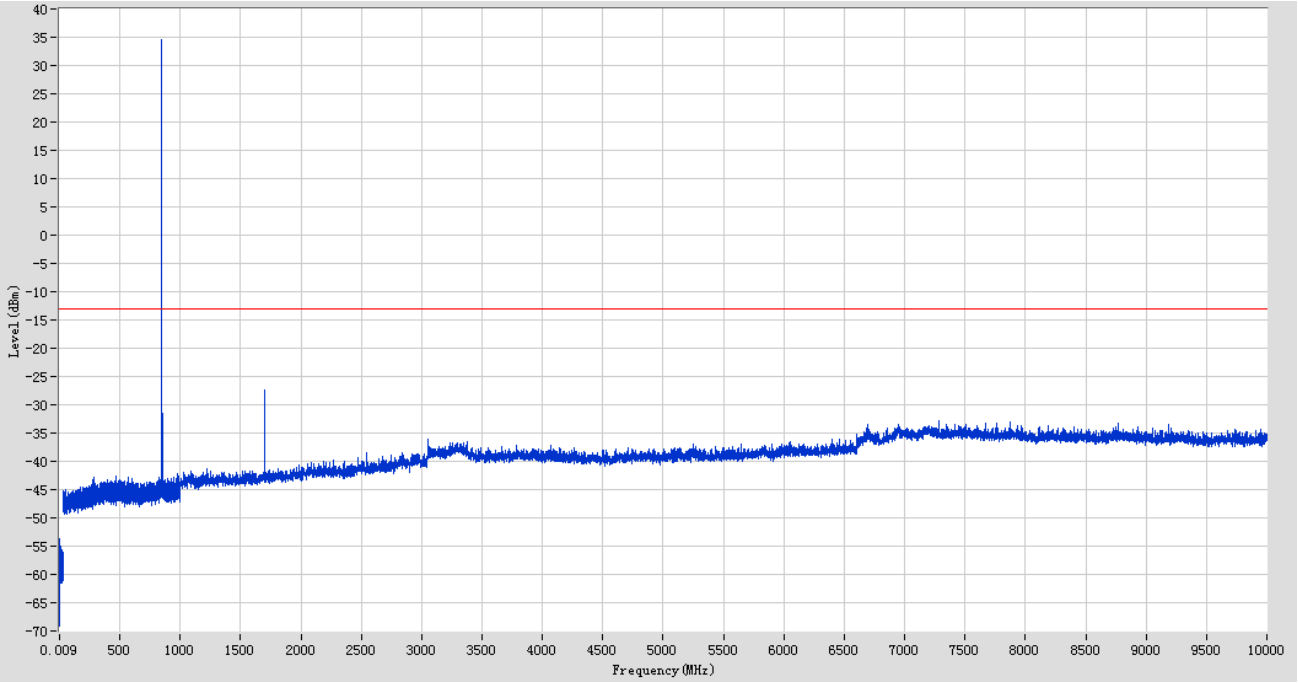
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.010175	-55.7284	-13	42.7284	Pass
0.15	30	0.01	Peak	0.250034	-54.0306	-13	41.0306	Pass
30	500	0.1	Peak	364.8712	-42.5545	-13	29.5545	Pass
500	1000	0.1	Peak	824.1648	34.4366	N/A	N/A	N/A
1000	10000	1	Peak	7429.785	-33.2345	-13	20.2345	Pass

GSM 850 MHz MCH



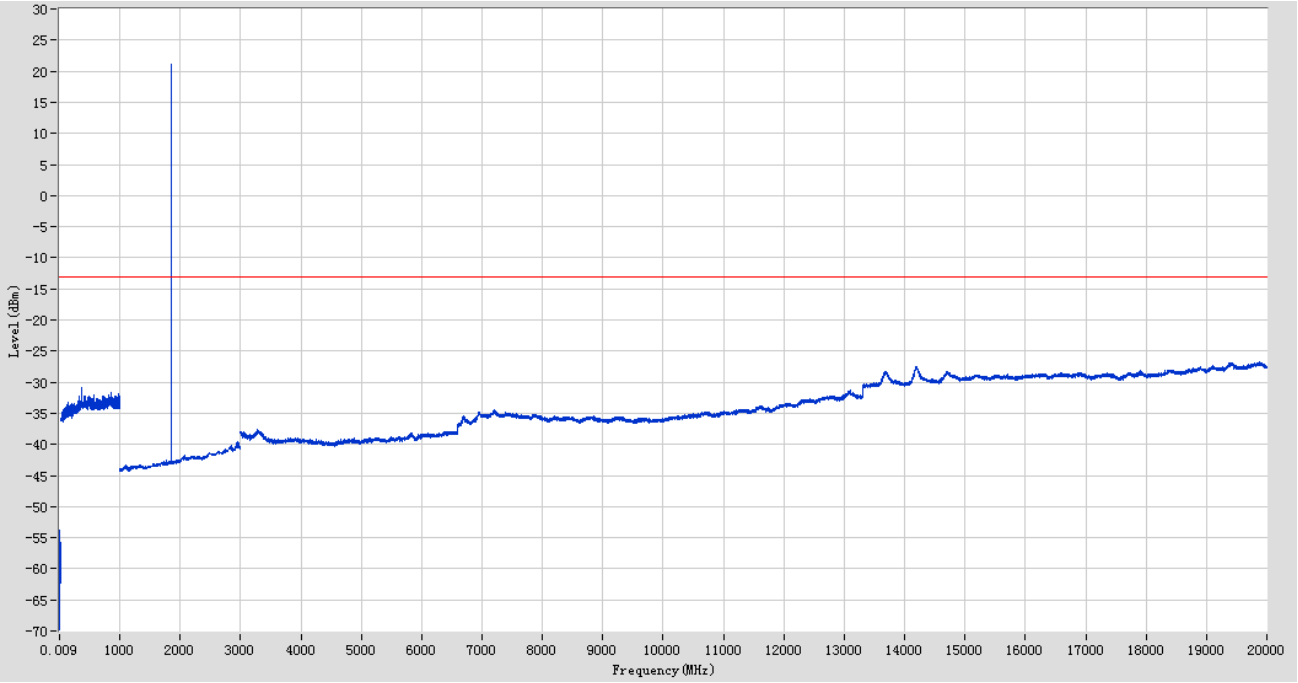
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.01135	-57.3019	-13	44.3019	Pass
0.15	30	0.01	Peak	0.170007	-53.8919	-13	40.8919	Pass
30	500	0.1	Peak	491.2981	-43.1230	-13	30.1230	Pass
500	1000	0.1	Peak	836.5673	34.6169	N/A	N/A	N/A
1000	10000	1	Peak	1673.082	-27.8795	-13	14.8795	Pass

GSM 850 MHz HCH



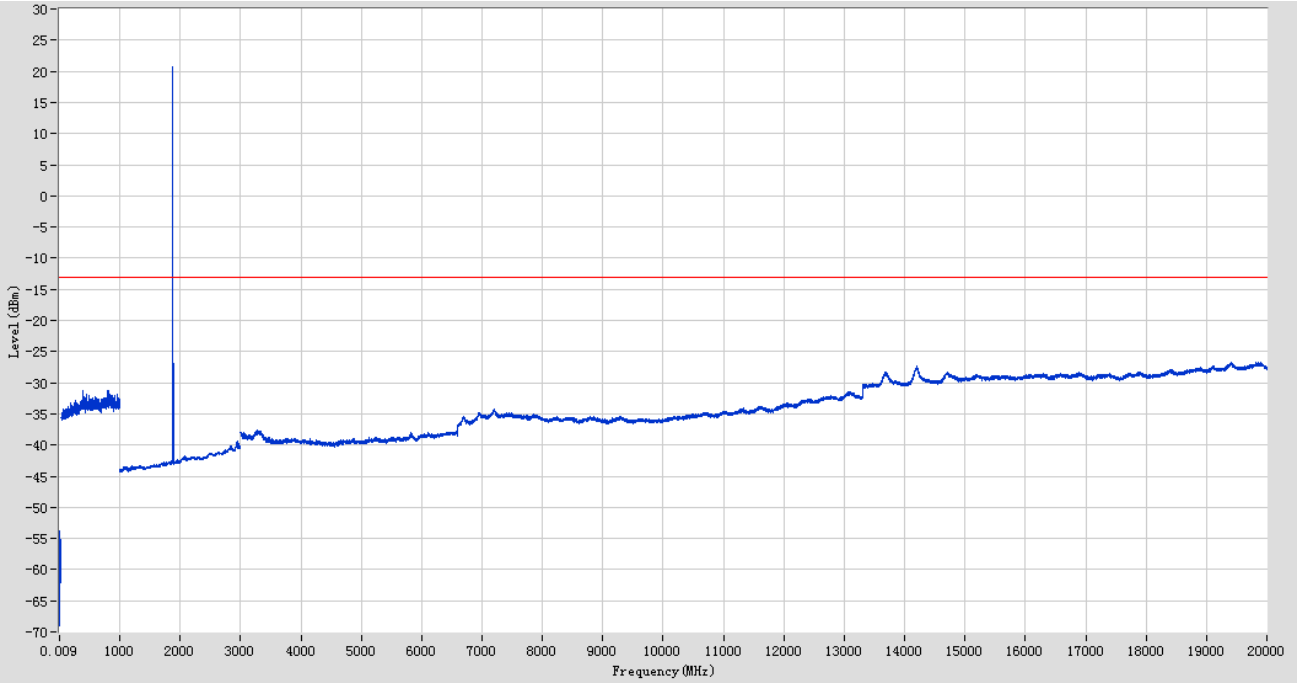
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.010645	-56.0592	-13	43.0592	Pass
0.15	30	0.01	Peak	0.15	-53.6155	-13	40.6155	Pass
30	500	0.1	Peak	472.6942	-42.5016	-13	29.5016	Pass
500	1000	0.1	Peak	848.7698	34.6662	N/A	N/A	N/A
1000	10000	1	Peak	1698.085	-27.3711	-13	14.3711	Pass

GSM 1900 MHz LCH



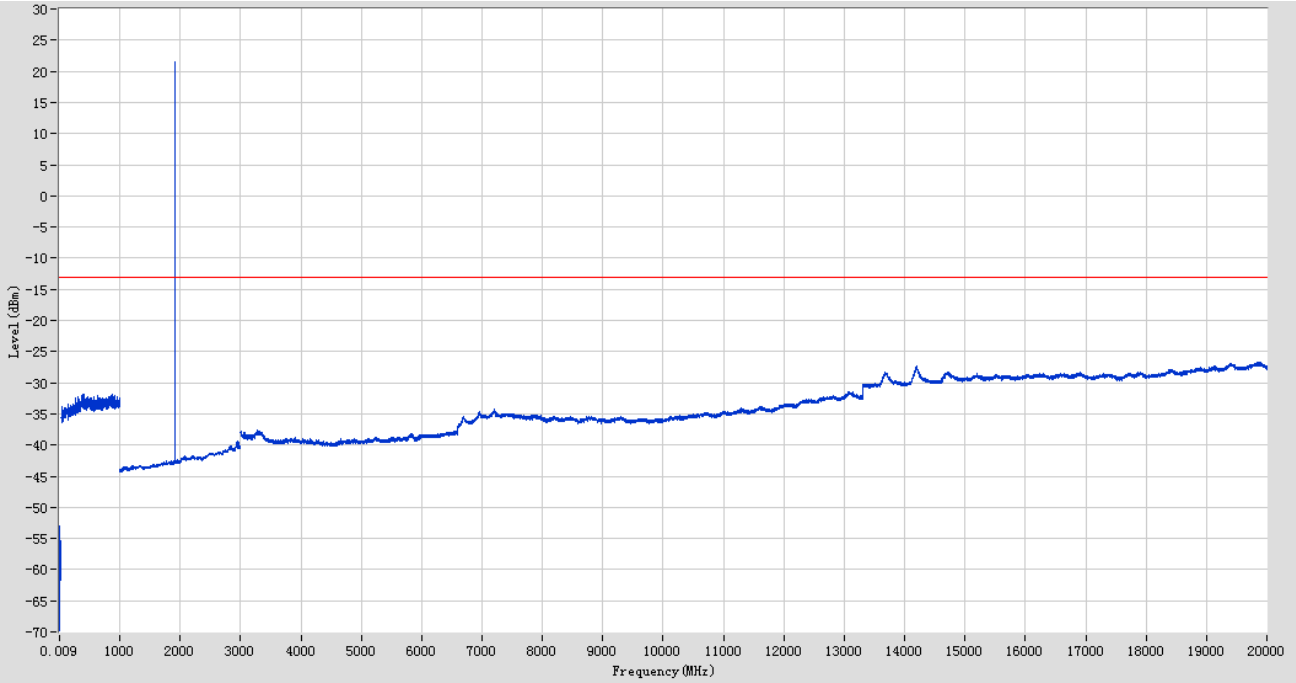
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.010645	-55.9692	-13	42.9692	Pass
0.15	30	0.01	Peak	0.160003	-53.8927	-13	40.8927	Pass
30	1000	1	Peak	360.3406	-30.7723	-13	17.7723	Pass
1000	3000	1	RMS	1849.425	21.0491	N/A	N/A	N/A
3000	20000	1	RMS	19883.81	-26.7484	-13	13.7484	Pass

GSM 1900 MHz MCH



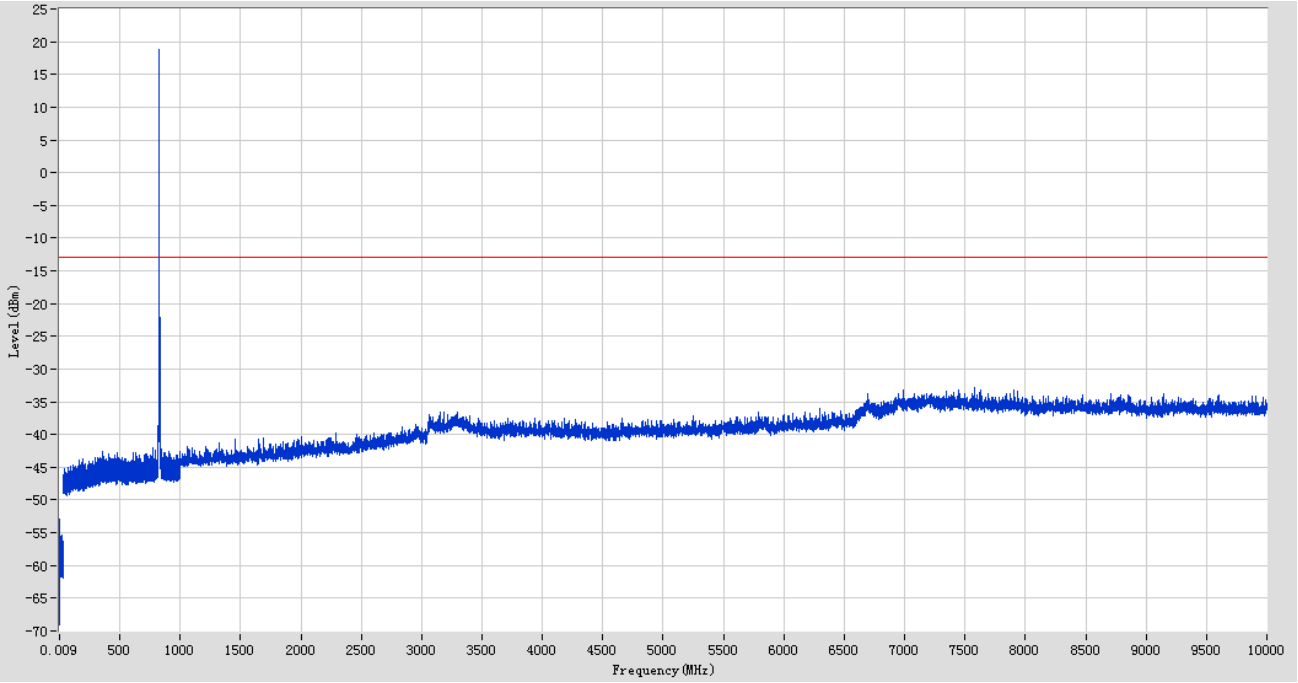
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.017225	-56.9701	-13	43.9701	Pass
0.15	30	0.01	Peak	0.510121	-53.7071	-13	40.7071	Pass
30	1000	1	Peak	794.7884	-31.1748	-13	18.1748	Pass
1000	3000	1	RMS	1879.44	20.7296	N/A	N/A	N/A
3000	20000	1	RMS	19818.71	-26.7494	-13	13.7494	Pass

GSM 1900 MHz HCH



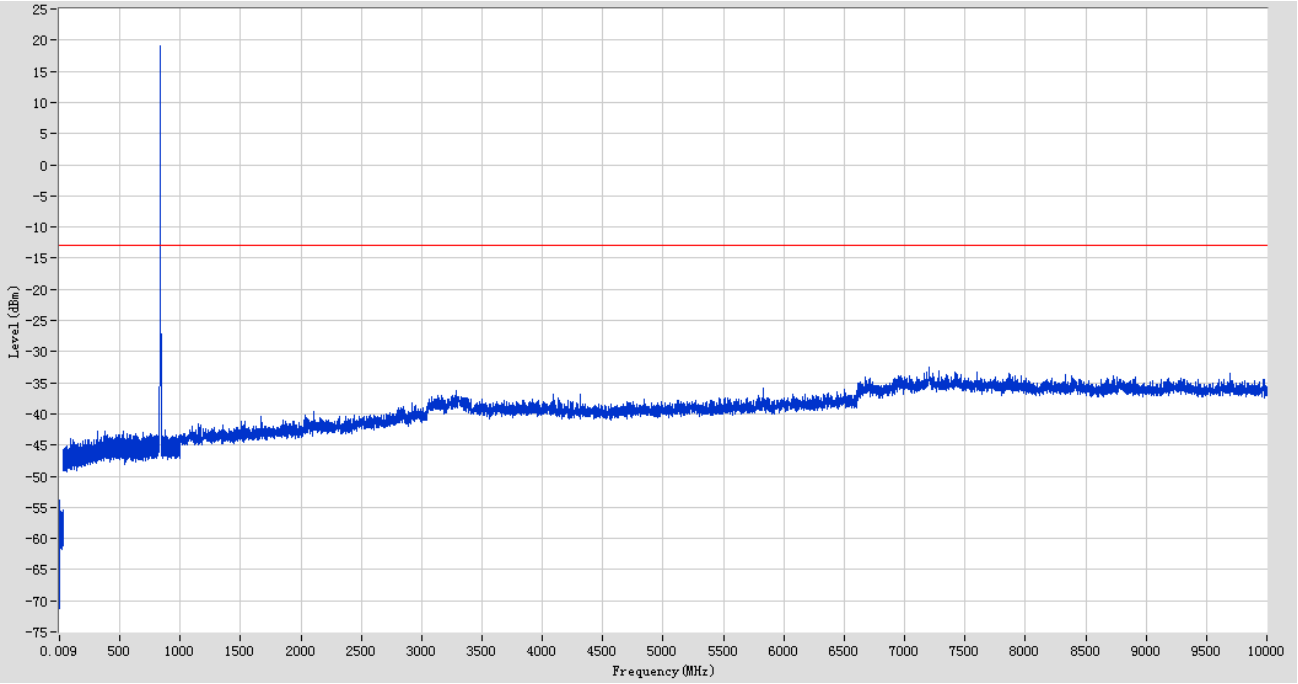
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.009235	-56.8609	-13	43.8609	Pass
0.15	30	0.01	Peak	0.170007	-53.0849	-13	40.0849	Pass
30	1000	1	Peak	401.3829	-31.8654	-13	18.8654	Pass
1000	3000	1	RMS	1909.455	21.4078	N/A	N/A	N/A
3000	20000	1	RMS	19847.75	-26.7835	-13	13.7835	Pass

WCDMA 850 MHz LCH



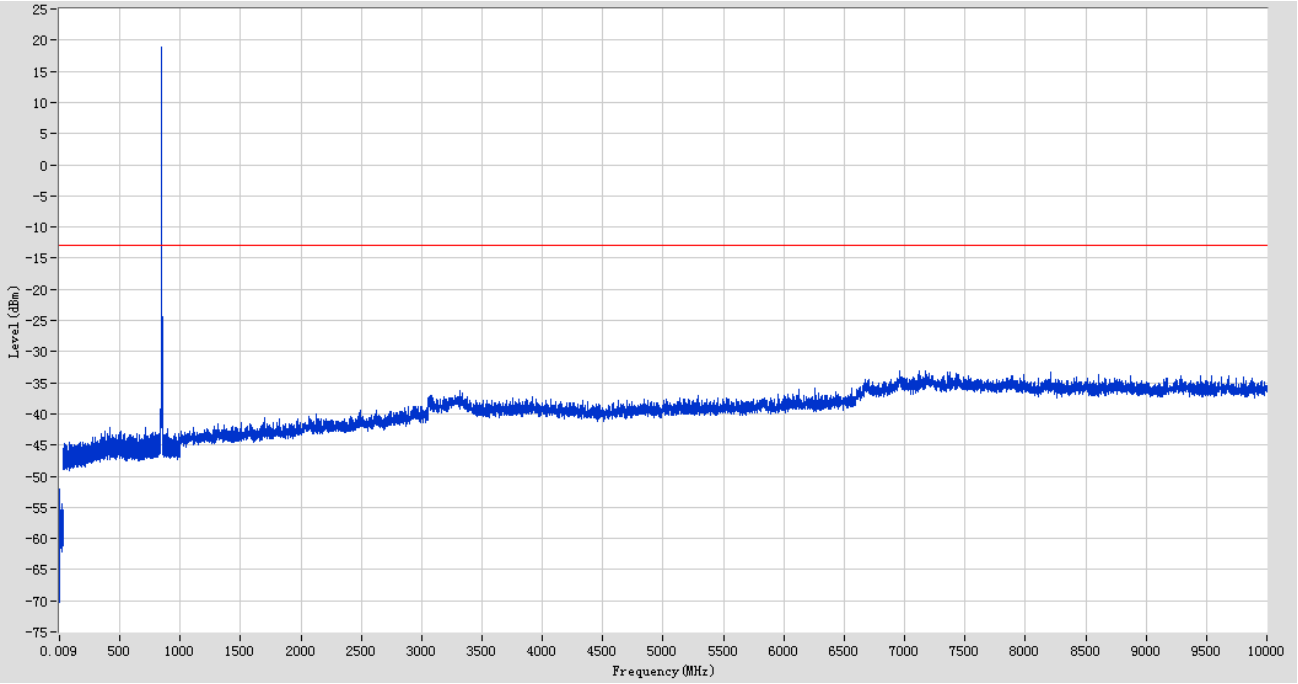
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.009705	-56.6247	-13	43.6247	Pass
0.15	30	0.01	Peak	0.190013	-52.9104	-13	39.9104	Pass
30	500	0.1	Peak	359.7702	-42.6016	-13	29.6016	Pass
500	1000	0.1	Peak	825.065	18.8146	N/A	N/A	N/A
1000	10000	1	Peak	7573.802	-32.8561	-13	19.8561	Pass

WCDMA 850 MHz MCH



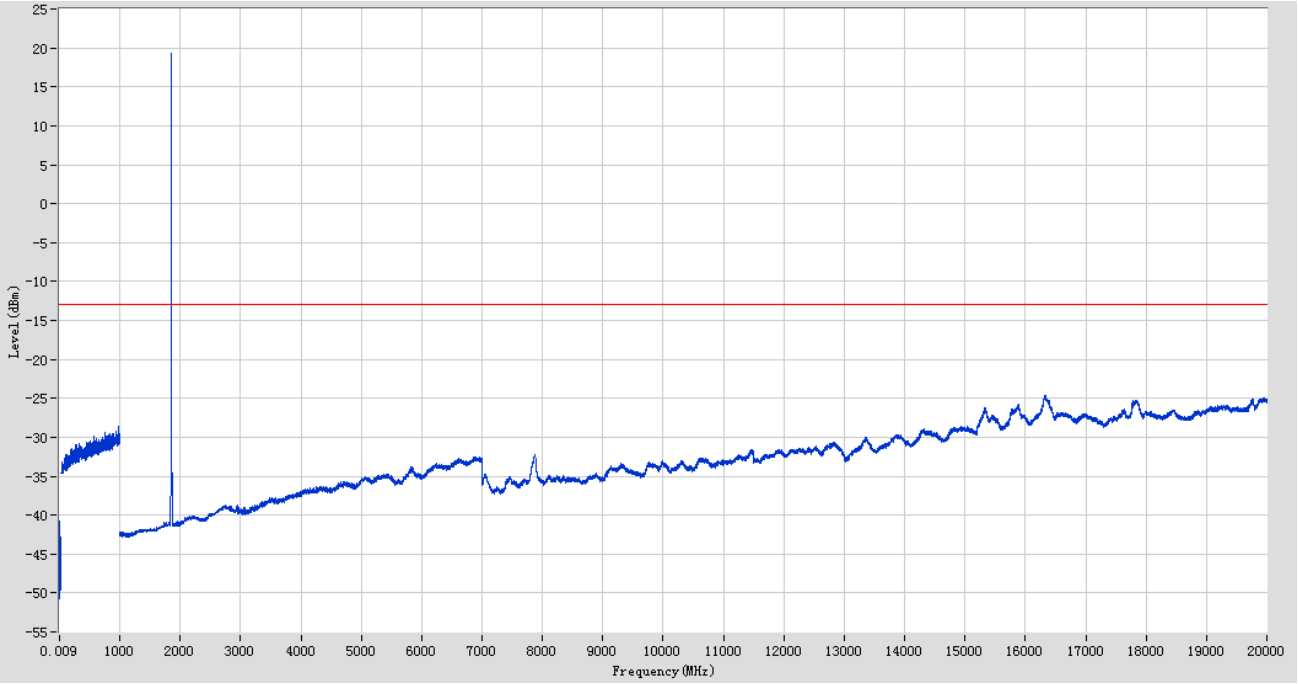
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.012055	-56.7475	-13	43.7475	Pass
0.15	30	0.01	Peak	0.15	-53.8075	-13	40.8075	Pass
30	500	0.1	Peak	378.8742	-42.8192	-13	29.8192	Pass
500	1000	0.1	Peak	835.6671	19.13594	N/A	N/A	N/A
1000	10000	1	Peak	7200.757	-32.6081	-13	19.6081	Pass

WCDMA 850 MHz HCH



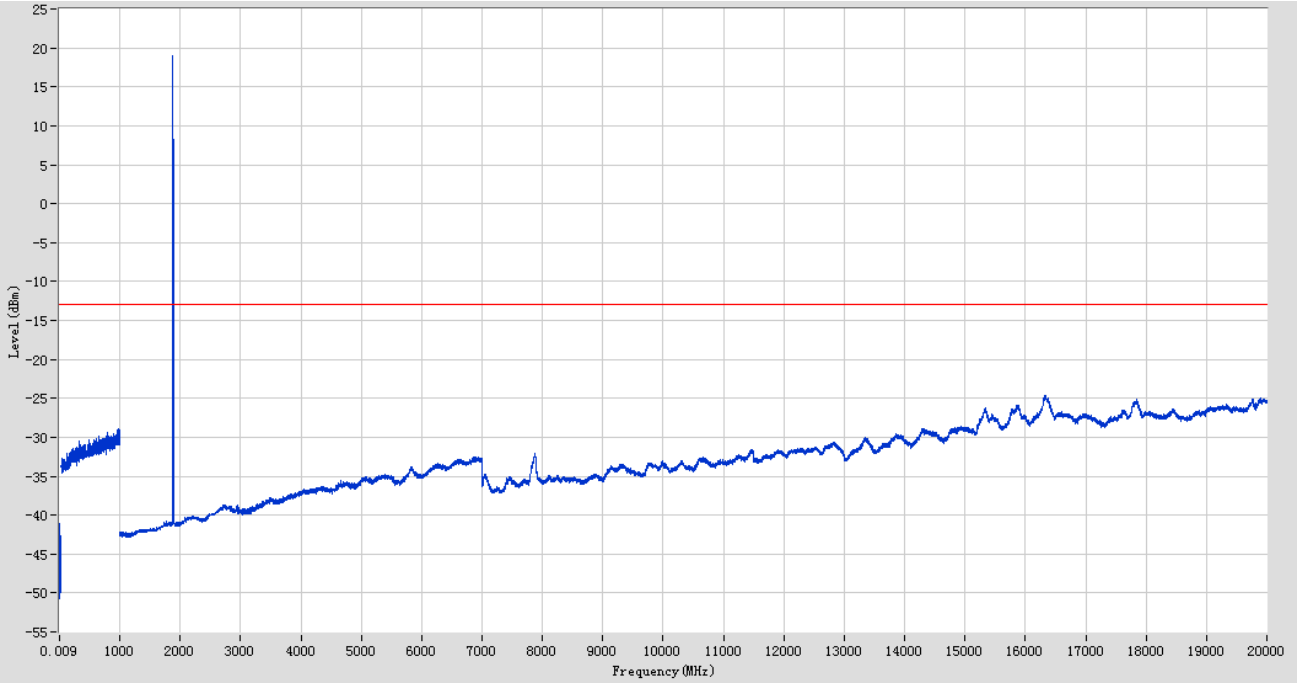
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.010645	-56.7082	-13	43.7082	Pass
0.15	30	0.01	Peak	0.15	-52.1355	-13	39.1355	Pass
30	500	0.1	Peak	420.083	-42.1456	-13	29.1456	Pass
500	1000	0.1	Peak	845.7692	18.92977	N/A	N/A	N/A
1000	10000	1	Peak	6955.727	-33.0965	-13	20.0965	Pass

WCDMA 1900 MHz LCH



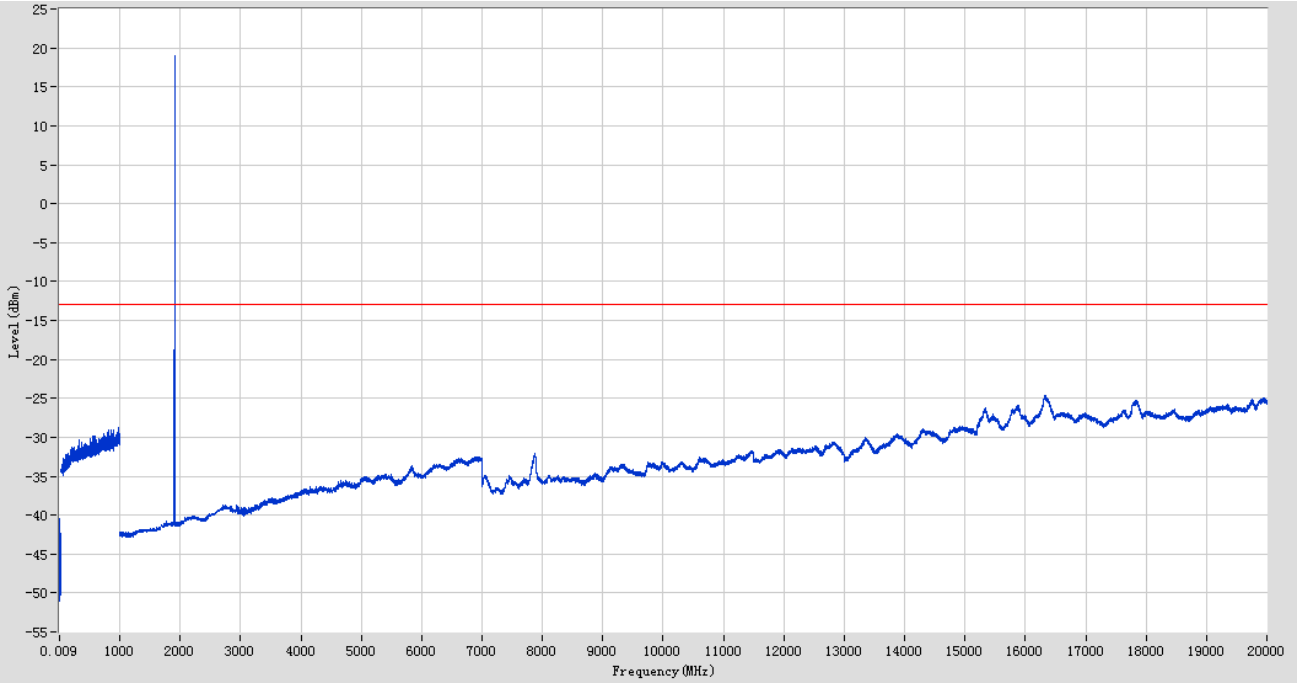
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.009	-43.8766	-13	30.8766	Pass
0.15	30	0.01	Peak	0.2495	-40.7879	-13	27.7879	Pass
30	1000	1	Peak	984.48	-28.6567	-13	15.6567	Pass
1000	3000	1	RMS	1852	19.25496	N/A	N/A	N/A
3000	20000	1	RMS	16327	-24.5901	-13	11.5901	Pass

WCDMA 1900 MHz MCH



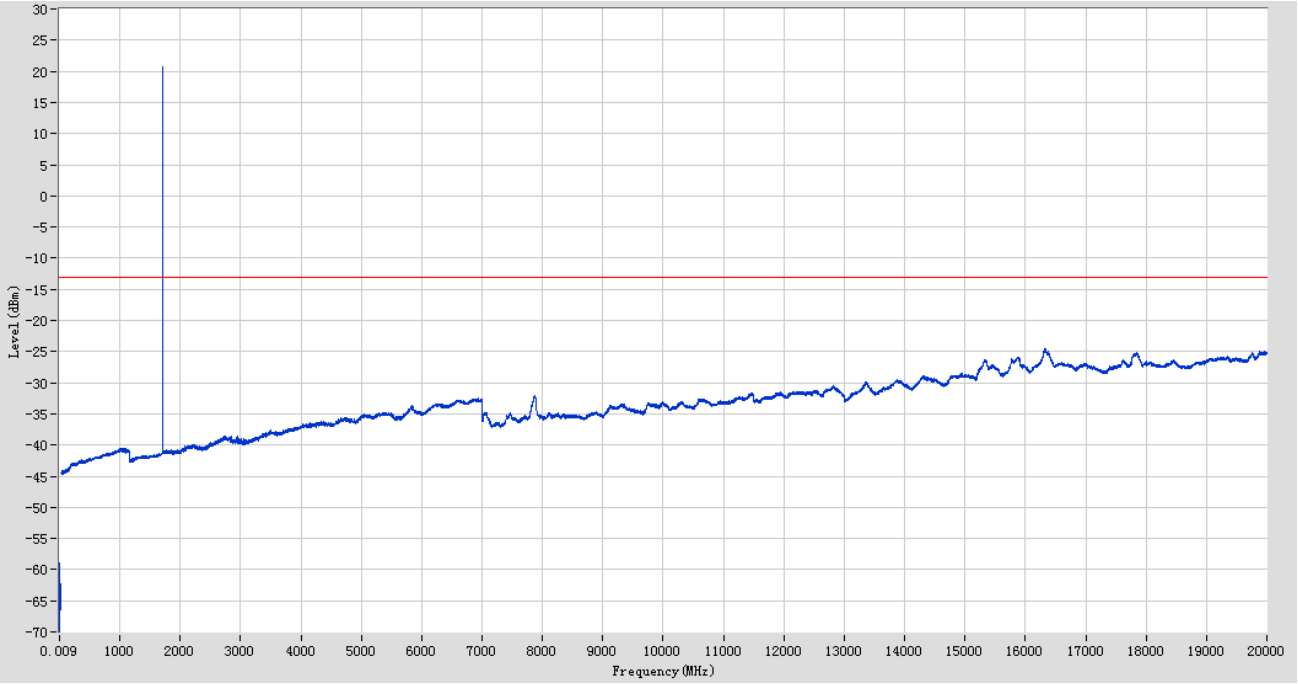
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.009226	-43.0291	-13	30.0291	Pass
0.15	30	0.01	Peak	0.2097	-41.1031	-13	28.1031	Pass
30	1000	1	Peak	983.51	-28.9025	-13	15.9025	Pass
1000	3000	1	RMS	1880	18.92	N/A	N/A	N/A
3000	20000	1	RMS	16323	-24.5752	-13	11.5752	Pass

WCDMA 1900 MHz HCH



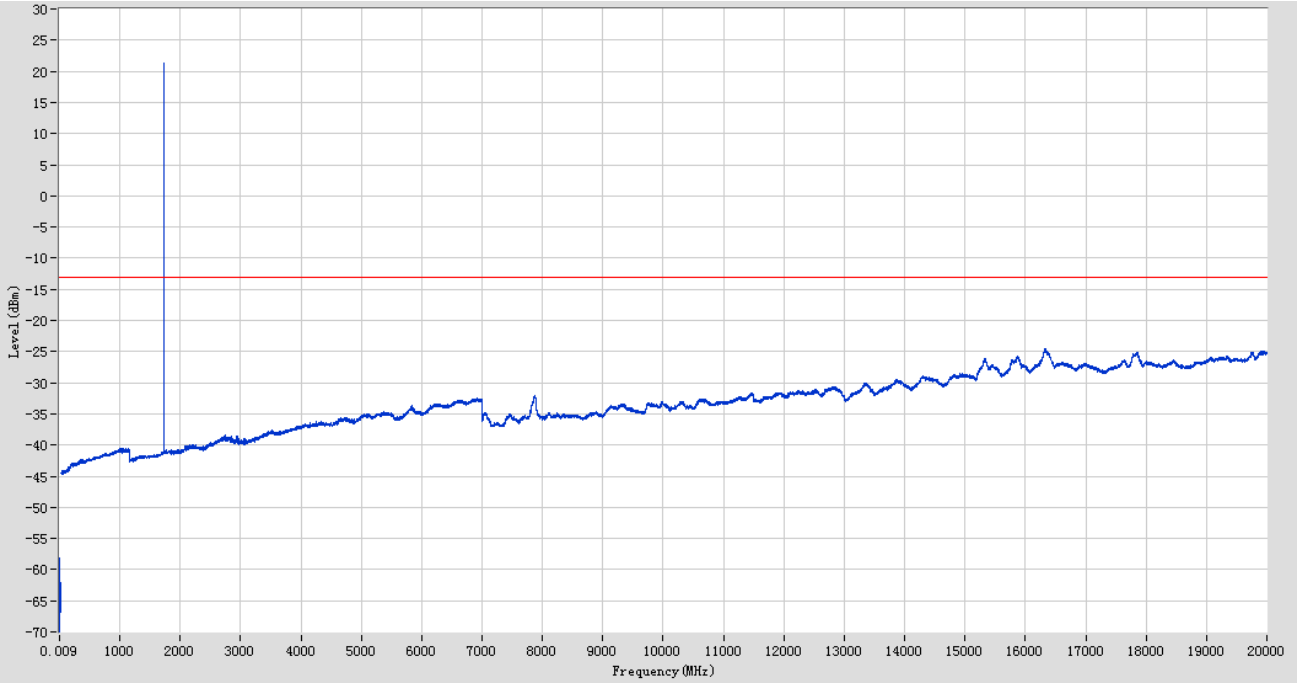
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	Peak	0.010808	-43.3373	-13	30.3373	Pass
0.15	30	0.01	Peak	0.17985	-40.4046	-13	27.4046	Pass
30	1000	1	Peak	986.42	-28.7588	-13	15.7588	Pass
1000	3000	1	RMS	1907	19.02411	N/A	N/A	N/A
3000	20000	1	RMS	16333	-24.6183	-13	11.6183	Pass

LTE Band 4 QPSK 1.4 MHz LCH



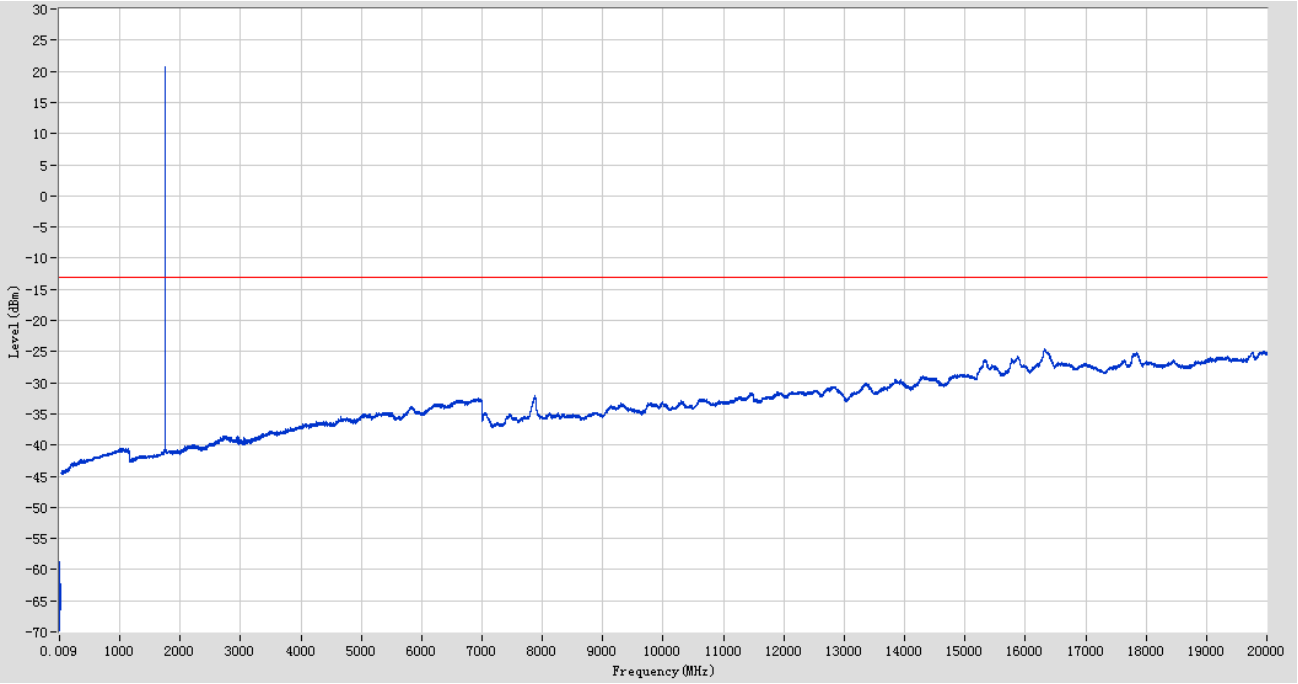
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9570	-13	50.9570	Pass
0.15	30	0.01	RMS	0.15	-58.8514	-13	45.8514	Pass
30	2000	1	RMS	1710.12	20.79490	N/A	N/A	N/A
2000	20000	1	RMS	16327	-24.5509	-13	11.5509	Pass

LTE Band 4 QPSK 1.4 MHz MCH



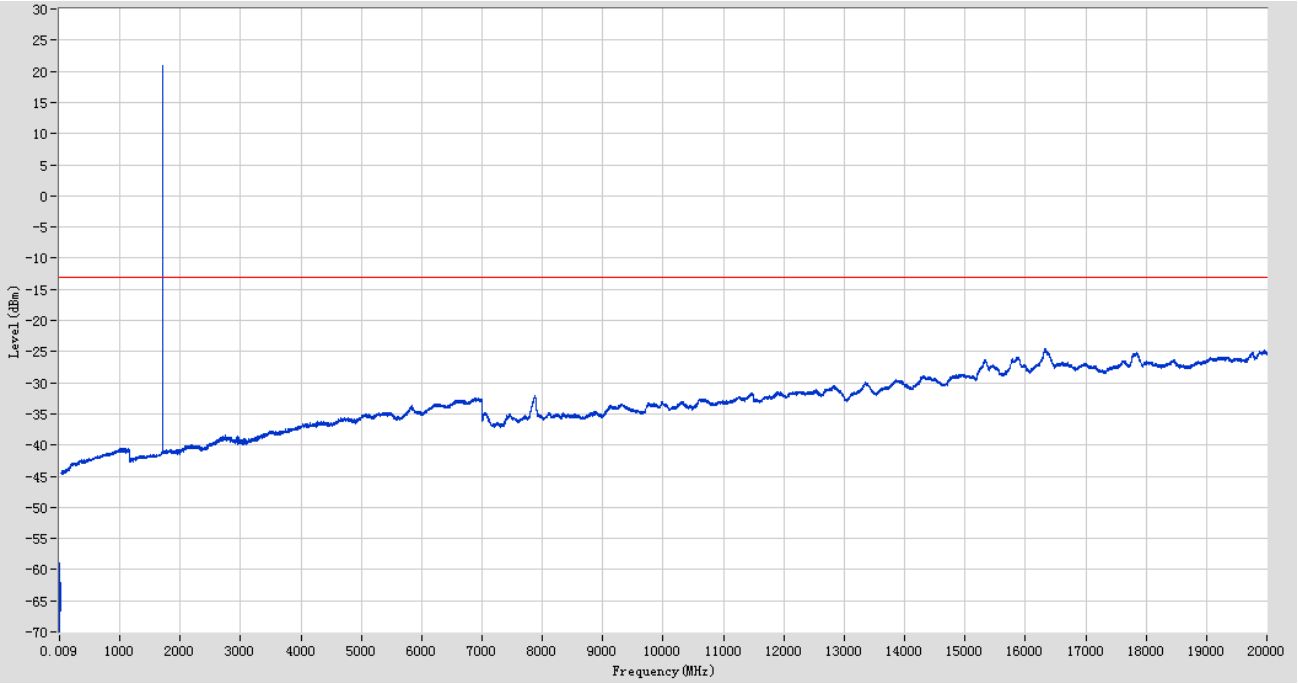
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9226	-13	50.9226	Pass
0.15	30	0.01	RMS	0.15	-58.1619	-13	45.1619	Pass
30	2000	1	RMS	1732.798	21.3239	N/A	N/A	N/A
2000	20000	1	RMS	16323	-24.5722	-13	11.5723	Pass

LTE Band 4 QPSK 1.4 MHz HCH



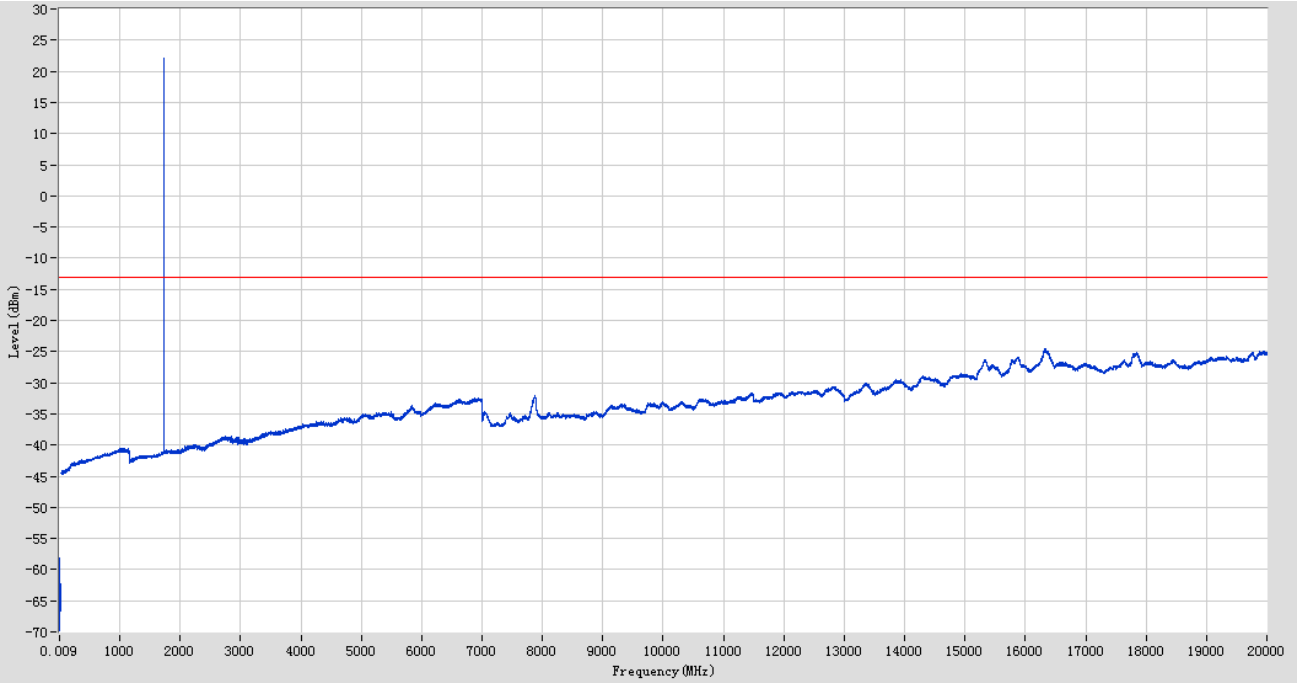
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9776	-13	50.9776	Pass
0.15	30	0.01	RMS	0.15	-58.8294	-13	45.8294	Pass
30	2000	1	RMS	1754.489	20.7055	N/A	N/A	N/A
2000	20000	1	RMS	16314	-24.5263	-13	11.5263	Pass

LTE Band 4 QPSK 3 MHz LCH



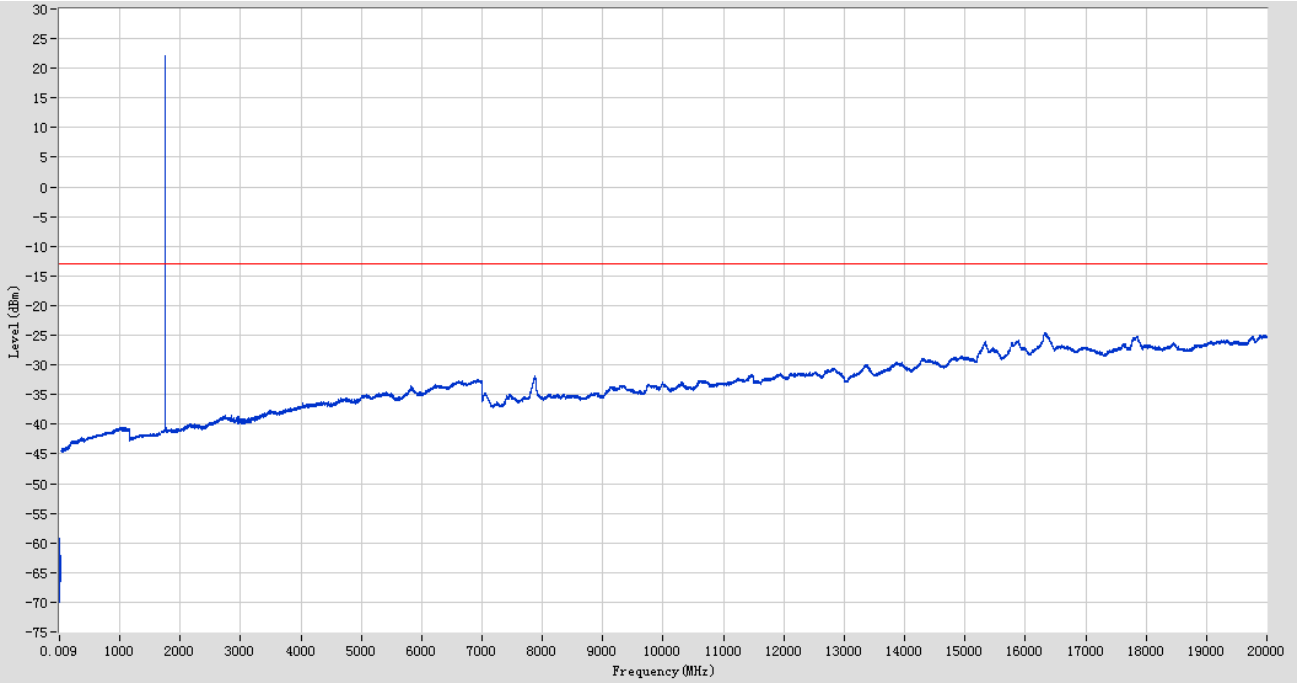
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9662	-13	50.9662	Pass
0.15	30	0.01	RMS	0.15	-59.0096	-13	46.0096	Pass
30	2000	1	RMS	1710.12	20.8961	N/A	N/A	N/A
2000	20000	1	RMS	16327	-24.5659	-13	11.5659	Pass

LTE Band 4 QPSK 3 MHz MCH



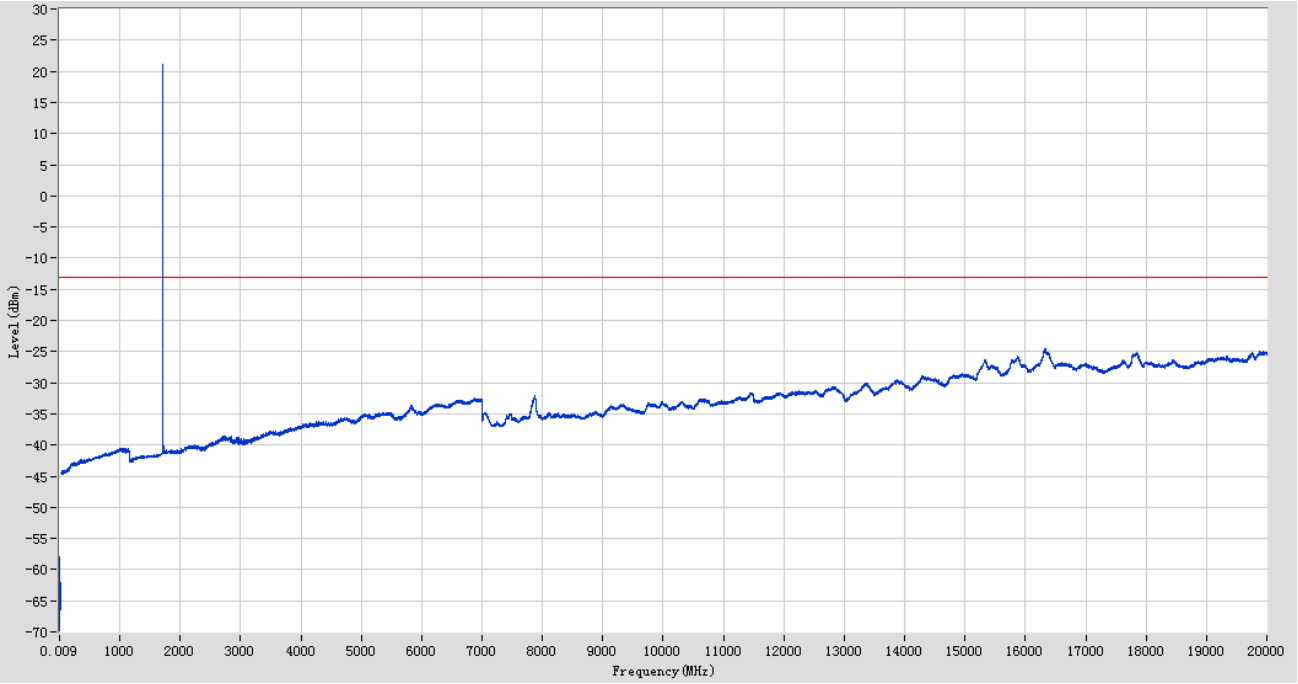
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-64.0142	-13	51.0142	Pass
0.15	30	0.01	RMS	0.15	-58.1951	-13	45.1951	Pass
30	2000	1	RMS	1731.812	22.1256	N/A	N/A	N/A
2000	20000	1	RMS	16322	-24.5620	-13	11.5620	Pass

LTE Band 4 QPSK 3 MHz HCH



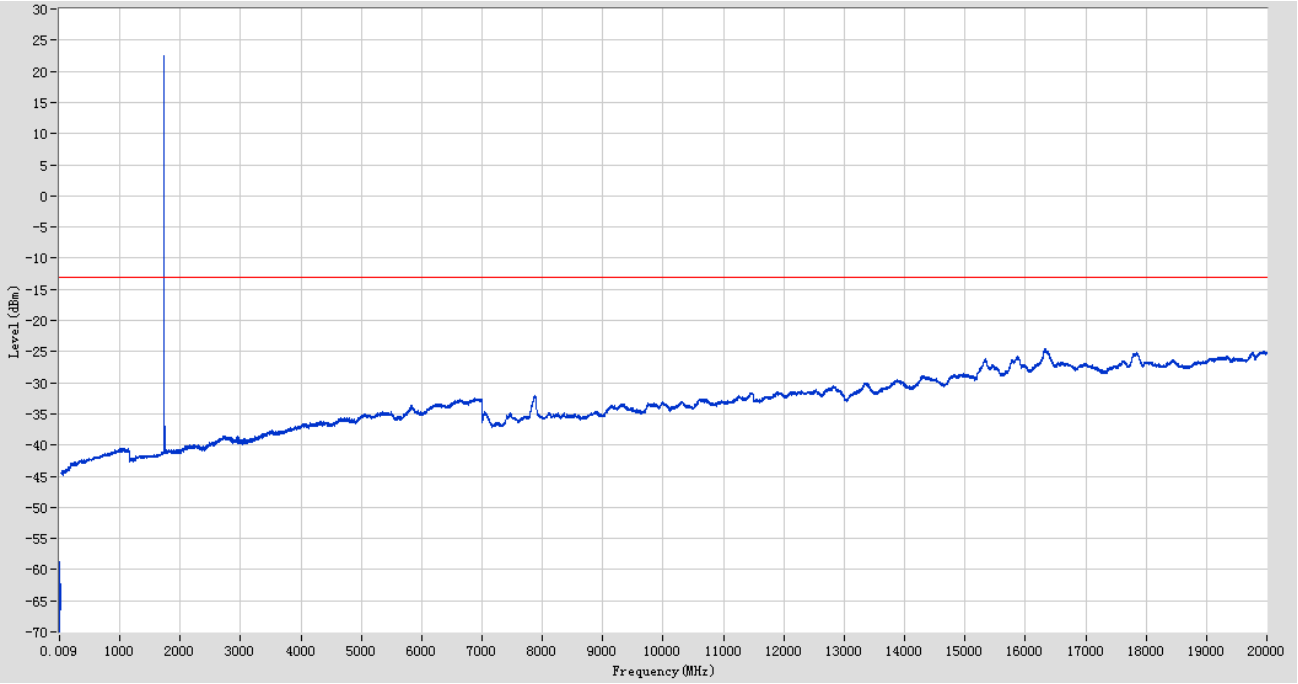
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9551	-13	50.9551	Pass
0.15	30	0.01	RMS	0.15	-59.1855	-13	46.1855	Pass
30	2000	1	RMS	1752.518	22.16412	N/A	N/A	N/A
2000	20000	1	RMS	16324	-24.5567	-13	11.5567	Pass

LTE Band 4 QPSK 5 MHz LCH



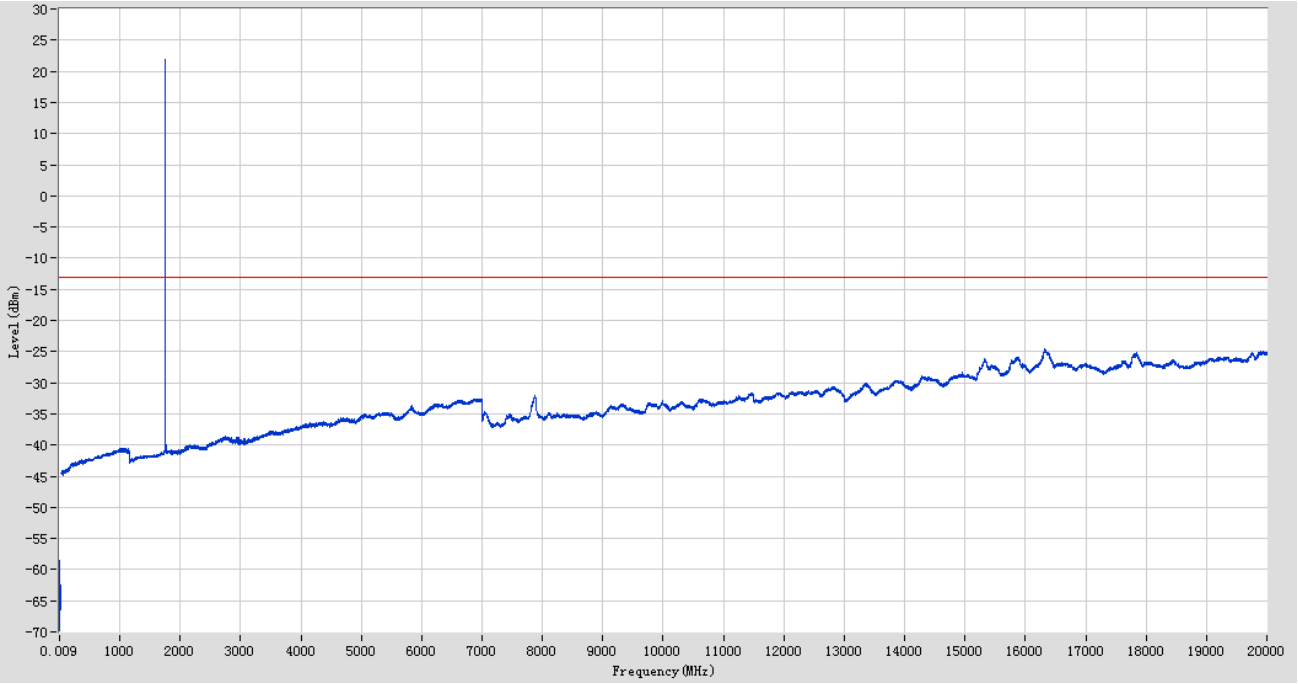
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8946	-13	50.8946	Pass
0.15	30	0.01	RMS	0.15	-57.9180	-13	44.9180	Pass
30	2000	1	RMS	1711.106	21.1892	N/A	N/A	N/A
2000	20000	1	RMS	16328	-24.6262	-13	11.6262	Pass

LTE Band 4 QPSK 5 MHz MCH



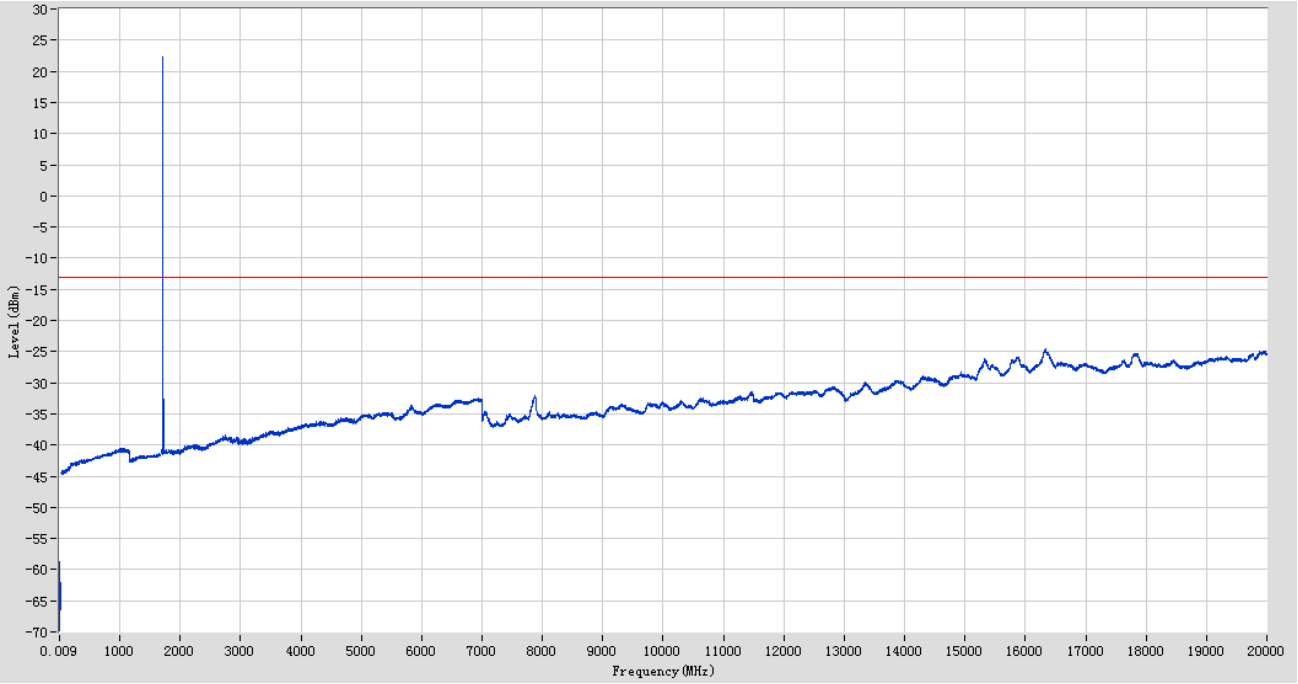
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9468	-13	50.9468	Pass
0.15	30	0.01	RMS	0.15	-58.7003	-13	45.7003	Pass
30	2000	1	RMS	1730.826	22.5450	N/A	N/A	Fail
2000	20000	1	RMS	16332	-24.4878	-13	11.4878	Pass

LTE Band 4 QPSK 5 MHz HCH



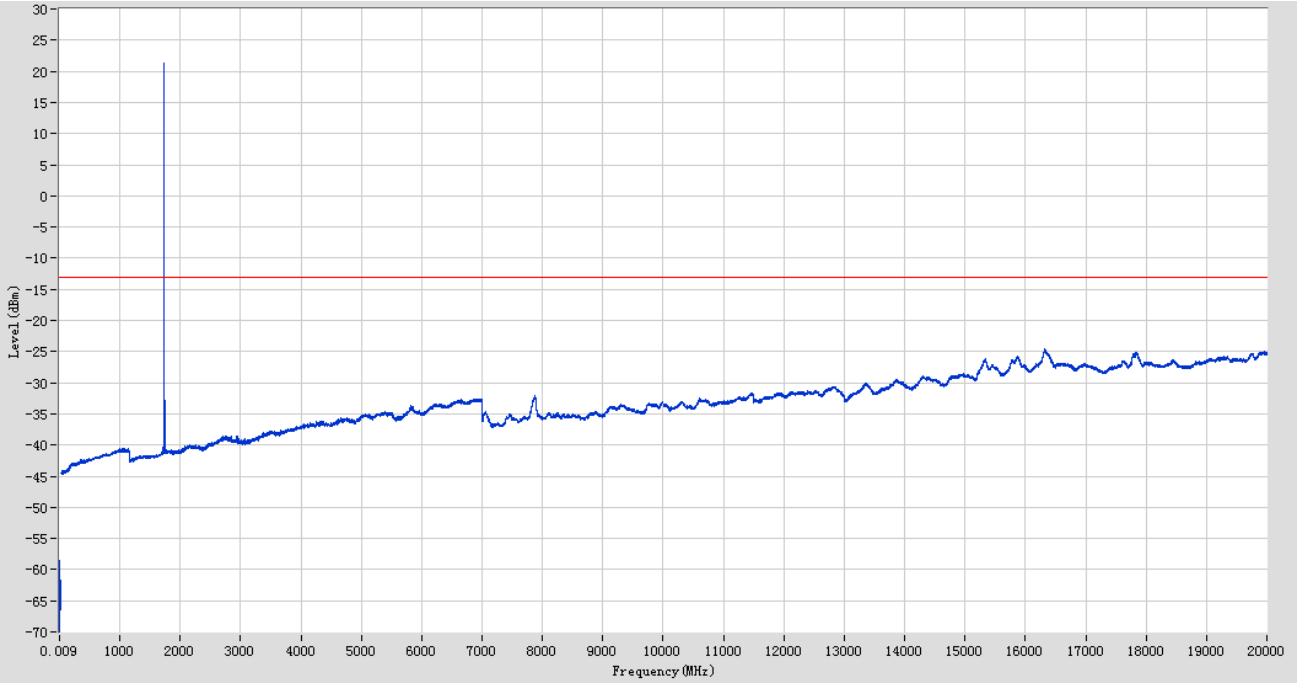
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9853	-13	50.9853	Pass
0.15	30	0.01	RMS	0.15	-58.5179	-13	45.5179	Pass
30	2000	1	RMS	1750.546	21.93678	N/A	N/A	N/A
2000	20000	1	RMS	16320	-24.5478	-13	11.5478	Pass

LTE Band 4 QPSK 10 MHz LCH



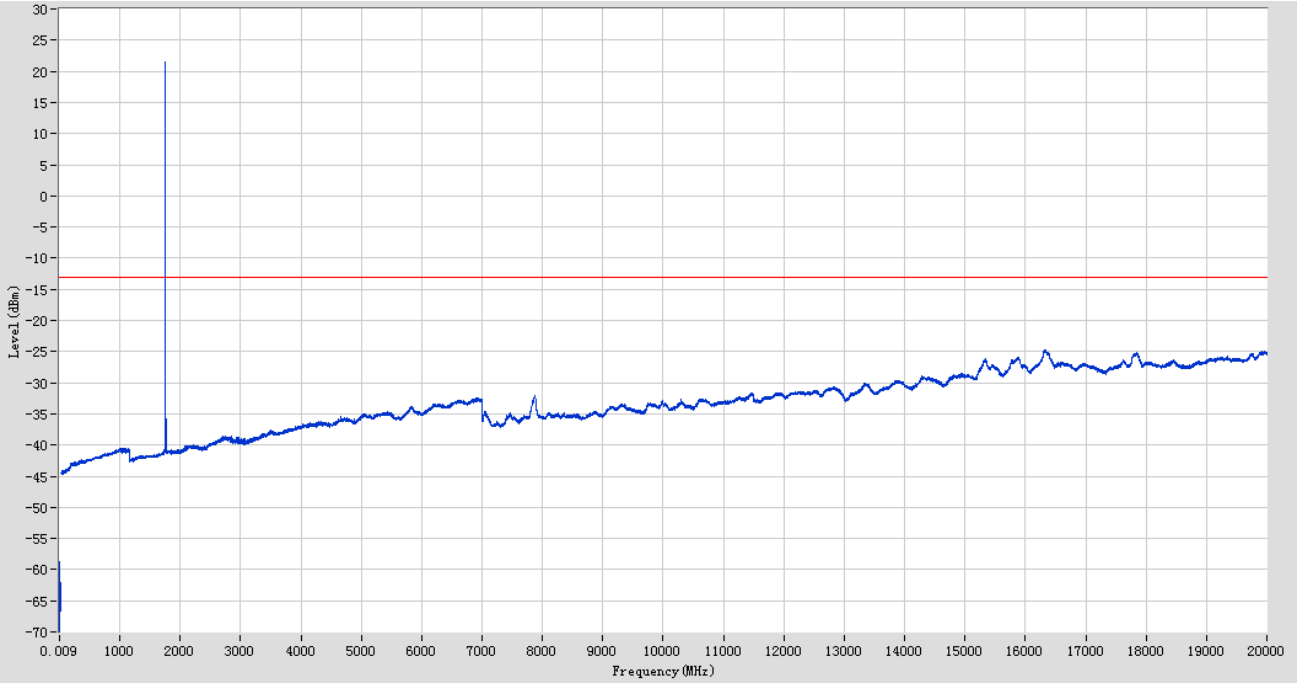
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9422	-13	50.9422	Pass
0.15	30	0.01	RMS	0.15	-58.7484	-13	45.7484	Pass
30	2000	1	RMS	1711.106	22.2453	N/A	N/A	N/A
2000	20000	1	RMS	16330	-24.6245	-13	11.6245	Pass

LTE Band 4 QPSK 10 MHz MCH



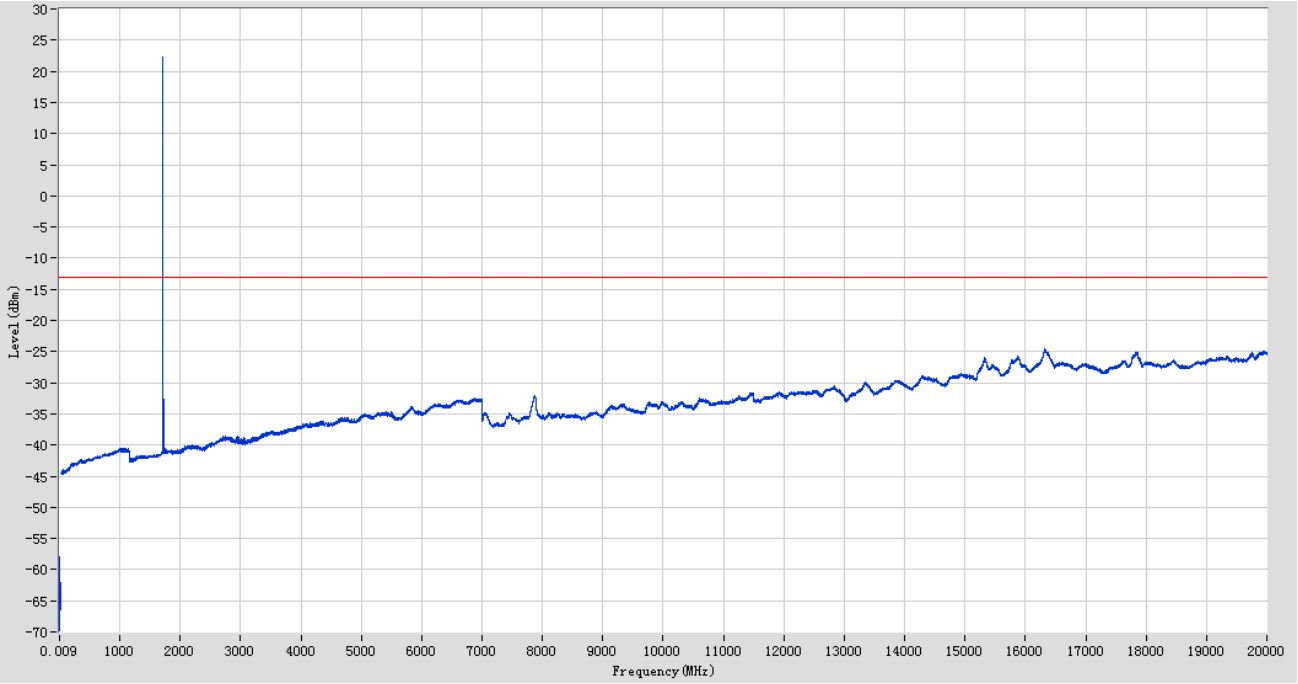
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9498	-13	50.9498	Pass
0.15	30	0.01	RMS	0.15	-58.6081	-13	45.6081	Pass
30	2000	1	RMS	1728.854	21.2337	N/A	N/A	N/A
2000	20000	1	RMS	16319	-24.6325	-13	11.6325	Pass

LTE Band 4 QPSK 10 MHz HCH



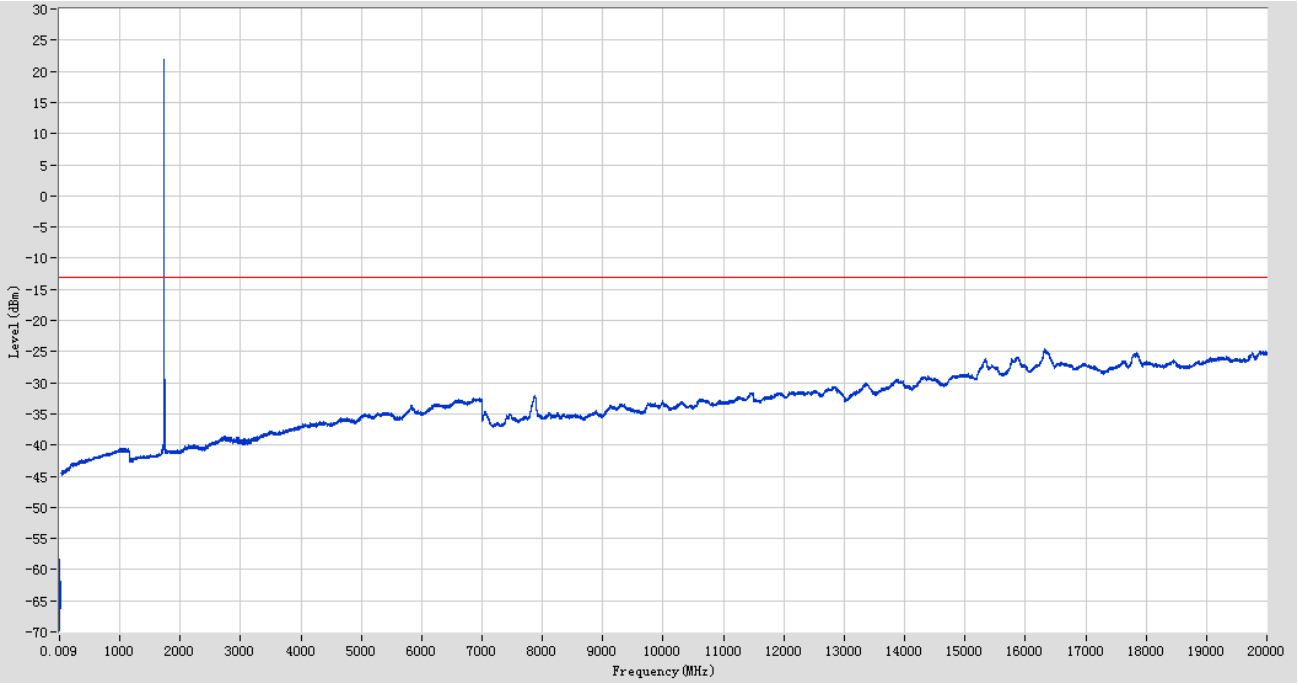
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9626	-13	50.9626	Pass
0.15	30	0.01	RMS	0.15	-58.7930	-13	45.7930	Pass
30	2000	1	RMS	1745.616	21.4915	N/A	N/A	N/A
2000	20000	1	RMS	16332	-24.6974	-13	11.6974	Pass

LTE Band 4 QPSK 15 MHz LCH



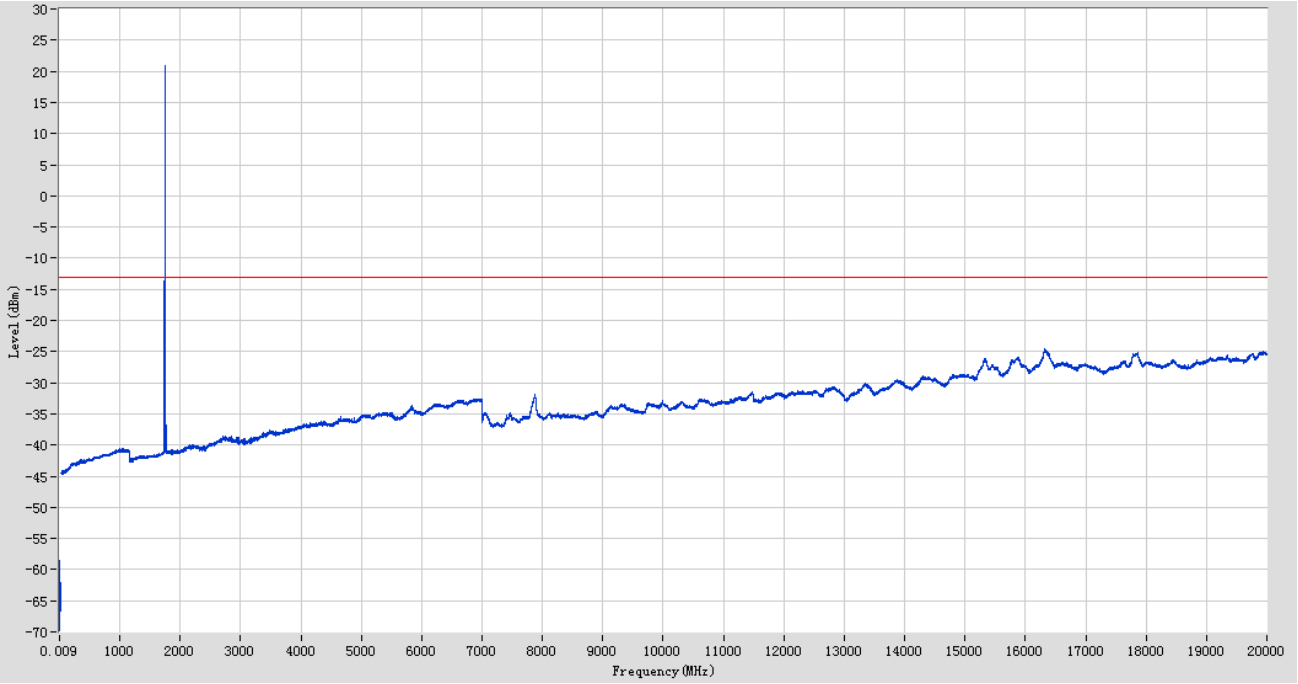
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.7157	-13	50.7157	Pass
0.15	30	0.01	RMS	0.15	-57.9924	-13	44.9924	Pass
30	2000	1	RMS	1711.106	22.3649	N/A	N/A	N/A
2000	20000	1	RMS	16321	-24.6100	-13	11.6100	Pass

LTE Band 4 QPSK 15 MHz MCH



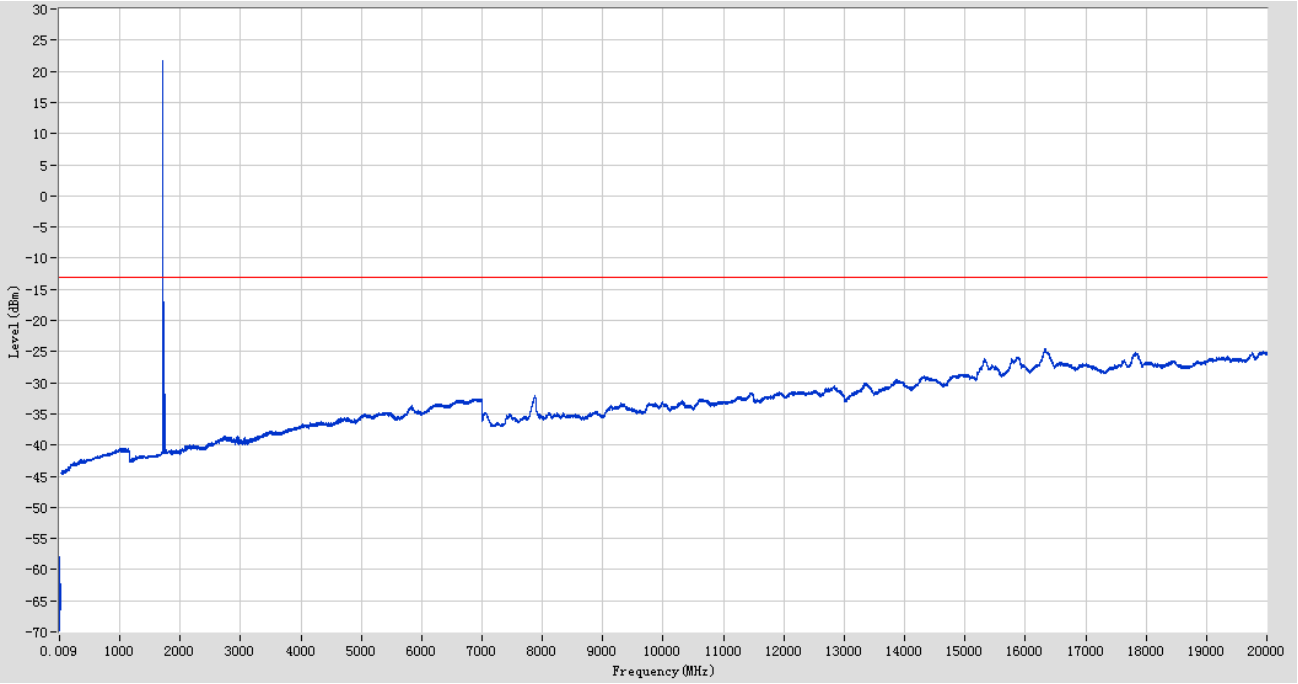
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8752	-13	50.8752	Pass
0.15	30	0.01	RMS	0.15	-58.4098	-13	45.4098	Pass
30	2000	1	RMS	1725.896	21.8702	N/A	N/A	N/A
2000	20000	1	RMS	16322	-24.5841	-13	11.5841	Pass

LTE Band 4 QPSK 15 MHz HCH



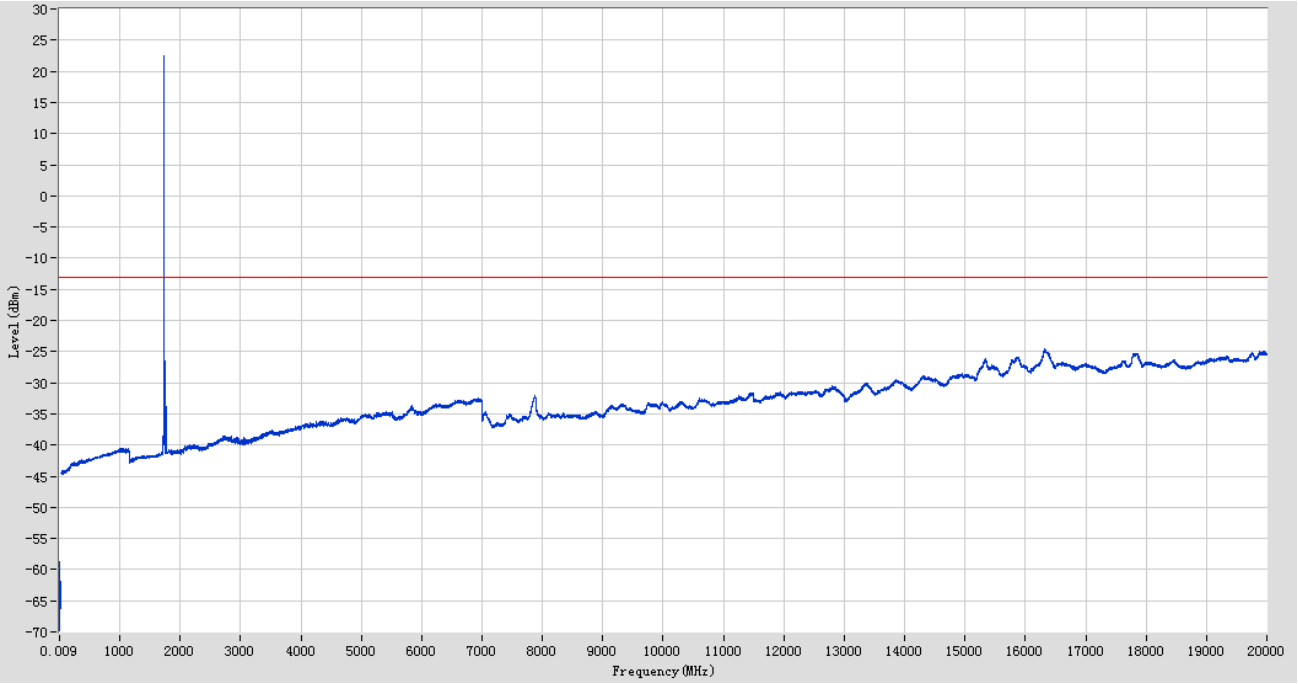
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8375	-13	50.8375	Pass
0.15	30	0.01	RMS	0.15	-58.5310	-13	45.5310	Pass
30	2000	1	RMS	1741.672	20.8507	N/A	N/A	N/A
2000	20000	1	RMS	16323	-24.6350	-13	11.6350	Pass

LTE Band 4 QPSK 20 MHz LCH



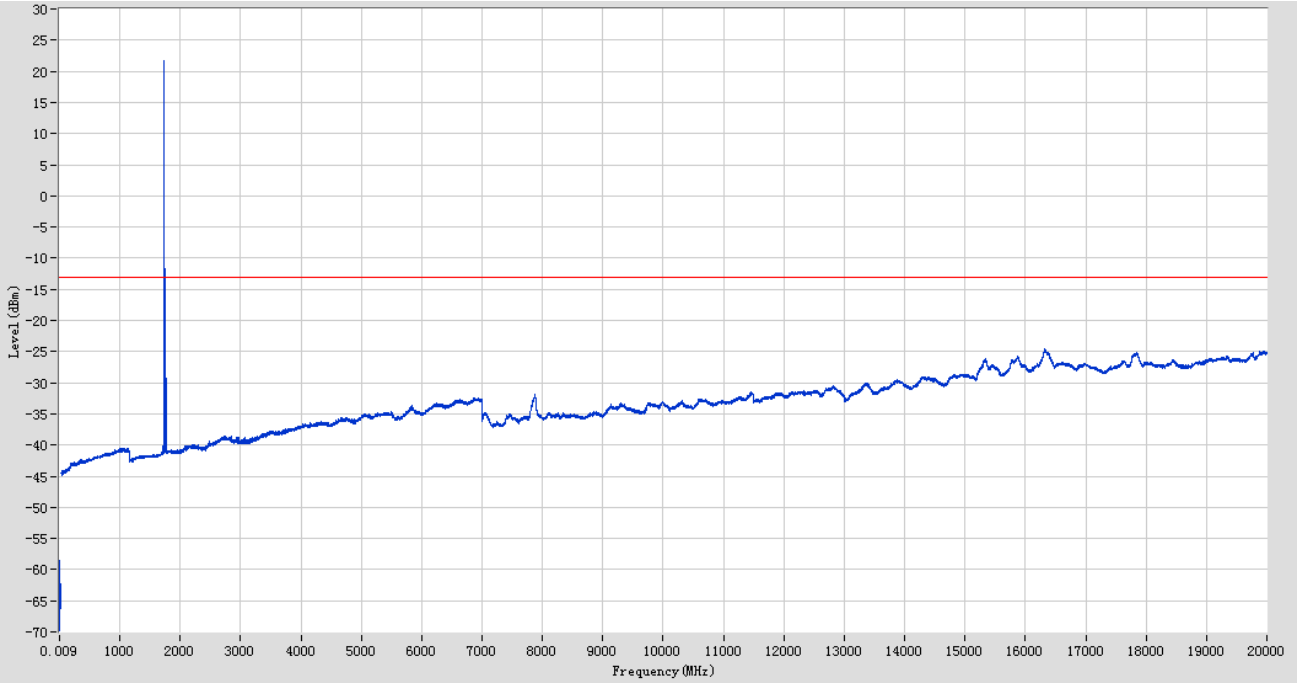
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.7927	-13	50.7927	Pass
0.15	30	0.01	RMS	0.15	-57.8977	-13	44.8977	Pass
30	2000	1	RMS	1711.106	21.6576	N/A	N/A	N/A
2000	20000	1	RMS	16323	-24.5456	-13	11.5456	Pass

LTE Band 4 QPSK 20 MHz MCH



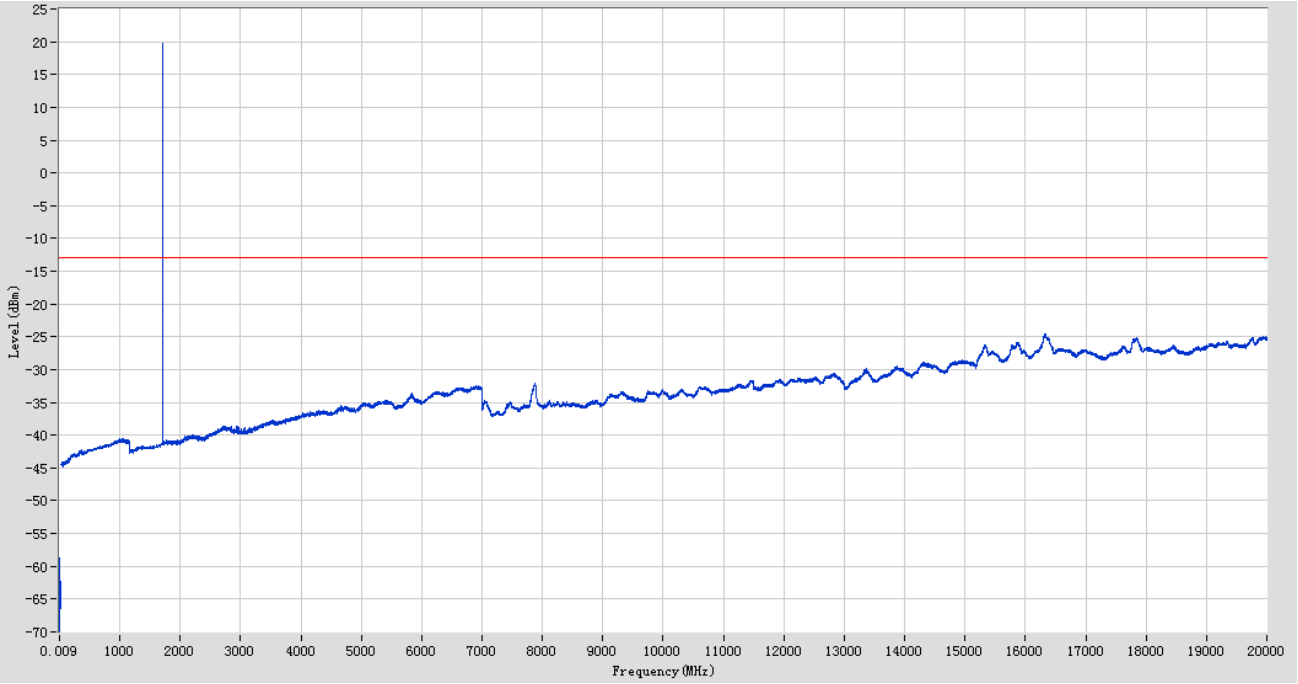
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9114	-13	50.9114	Pass
0.15	30	0.01	RMS	0.15	-58.6708	-13	45.6708	Pass
30	2000	1	RMS	1723.924	22.4267	N/A	N/A	N/A
2000	20000	1	RMS	16325	-24.6001	-13	11.6001	Pass

LTE Band 4 QPSK 20 MHz HCH



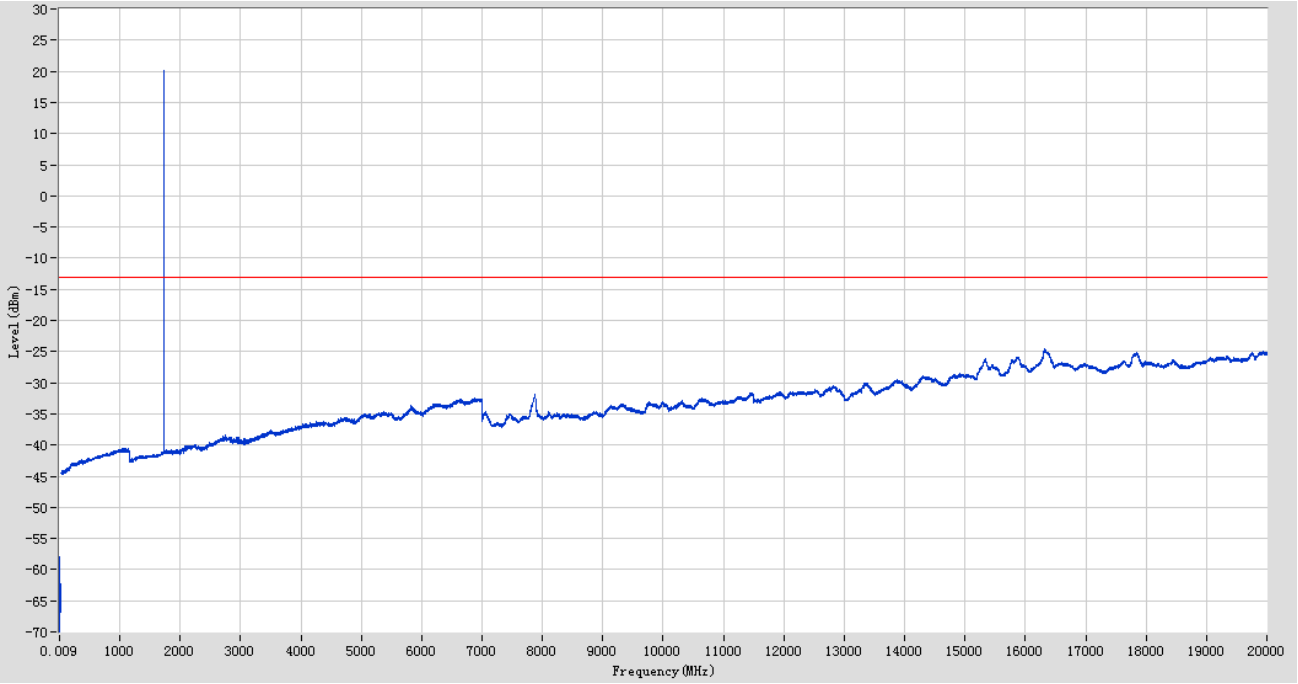
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9598	-13	50.9598	Pass
0.15	30	0.01	RMS	0.15	-58.5712	-13	45.5712	Pass
30	2000	1	RMS	1736.742	21.7674	N/A	N/A	N/A
2000	20000	1	RMS	16316	-24.5465	-13	11.5465	Pass

LTE Band 4 16-QAM 1.4 MHz LCH



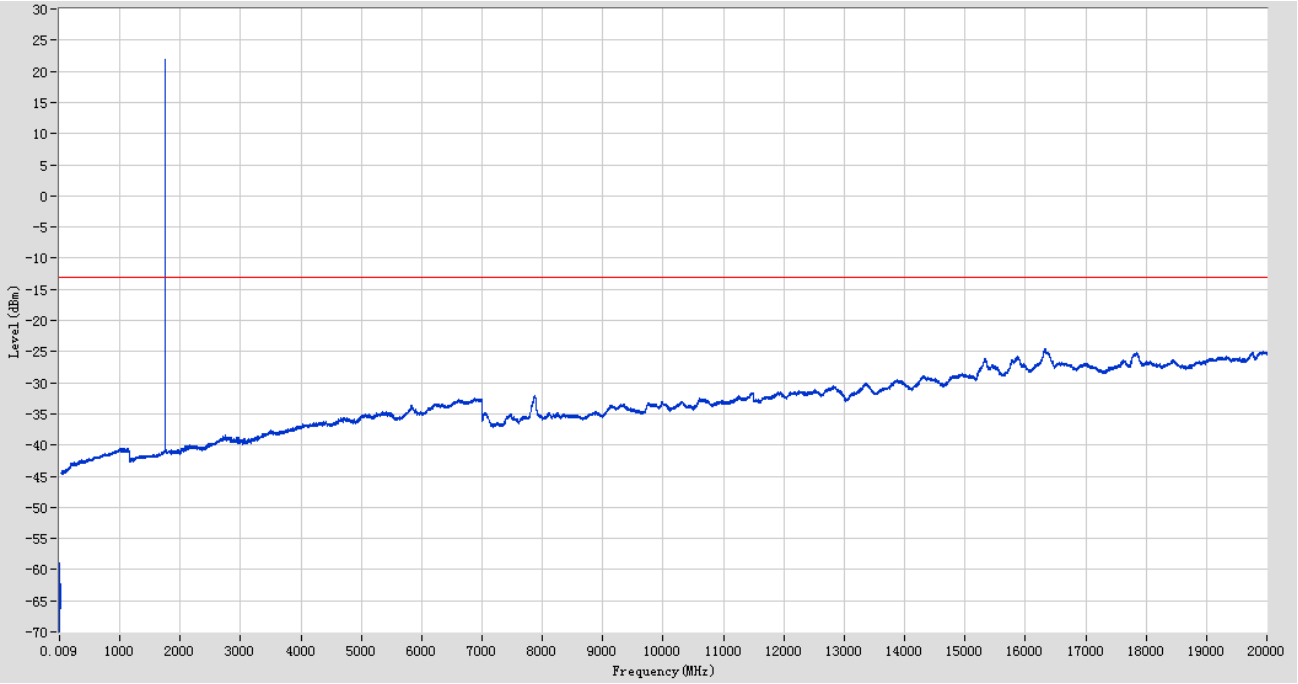
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9514	-13	50.9514	Pass
0.15	30	0.01	RMS	0.15	-58.7111	-13	45.7111	Pass
30	2000	1	RMS	1710.12	19.7722	N/A	N/A	N/A
2000	20000	1	RMS	16323	-24.5666	-13	11.5666	Pass

LTE Band 4 Q16-QAM 1.4 MHz MCH



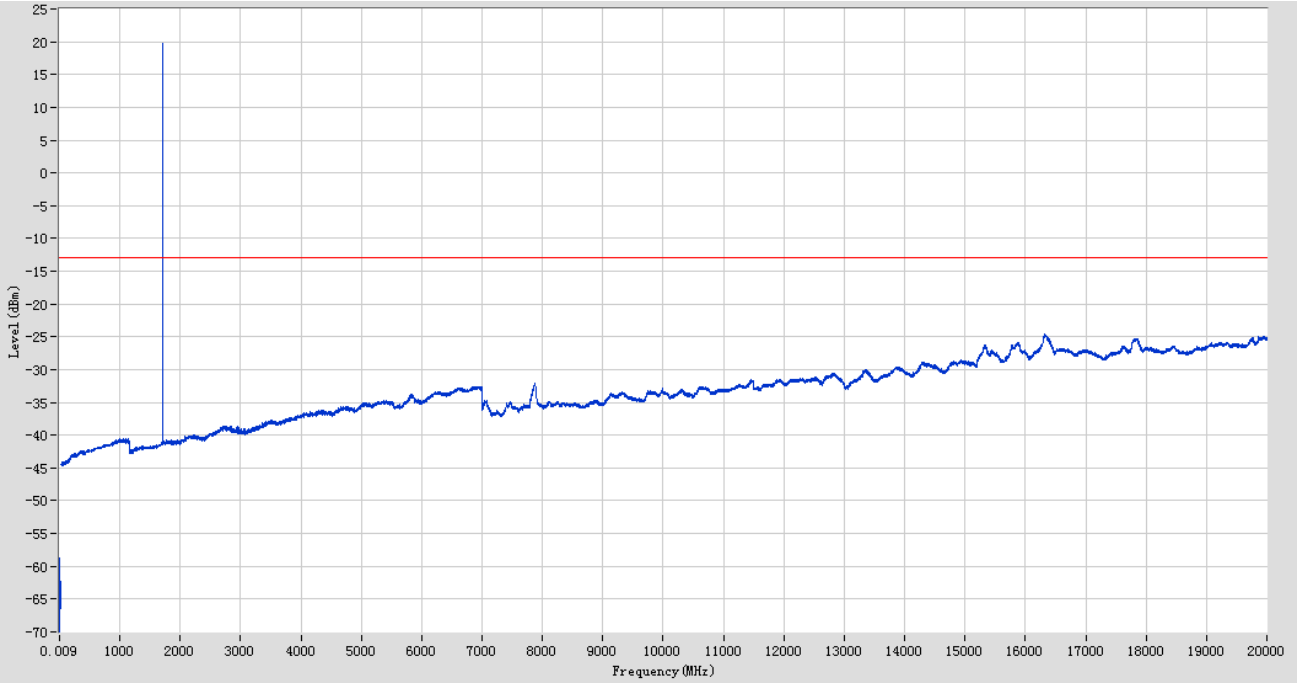
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9020	-13	50.9020	Pass
0.15	30	0.01	RMS	0.15	-58.0291	-13	45.0291	Pass
30	2000	1	RMS	1732.798	20.1771	N/A	N/A	N/A
2000	20000	1	RMS	16324	-24.5366	-13	11.5366	Pass

LTE Band 4 16-QAM 1.4 MHz HCH



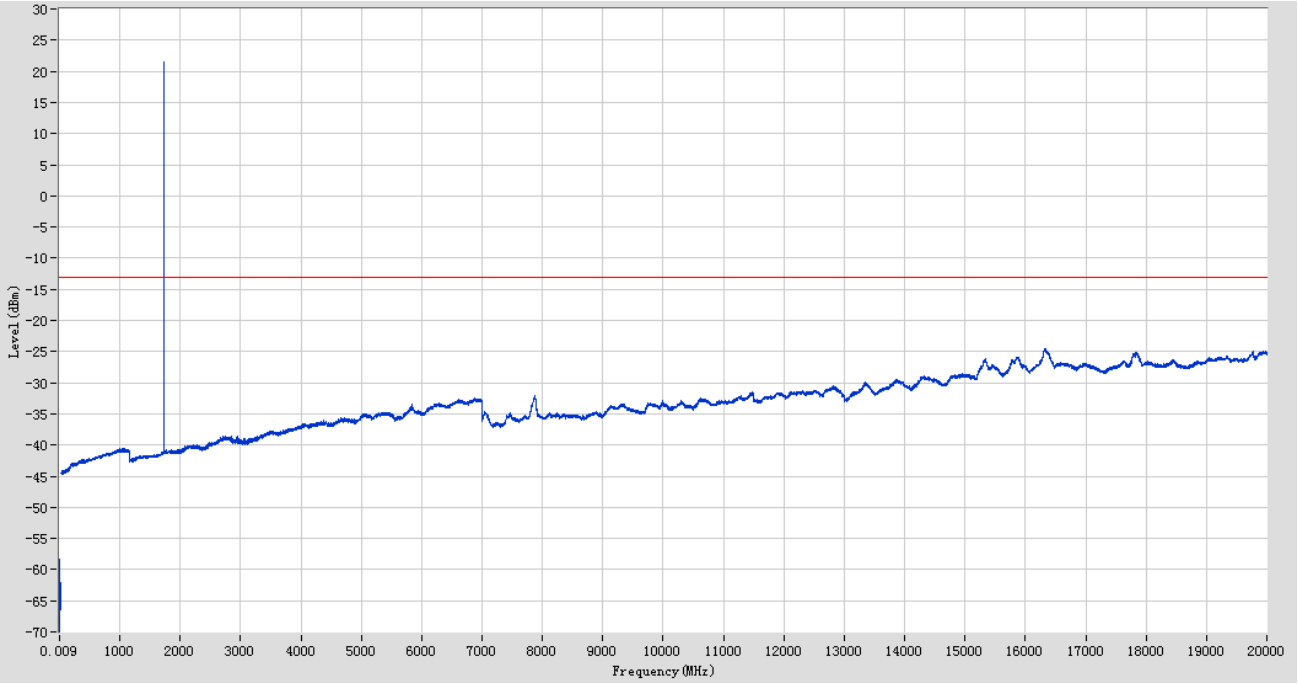
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8548	-13	50.8548	Pass
0.15	30	0.01	RMS	0.15995	-59.0066	-13	46.0066	Pass
30	2000	1	RMS	1754.489	21.8744	N/A	N/A	N/A
2000	20000	1	RMS	16325	-24.6117	-13	11.6117	Pass

LTE Band 4 16-QAM 3 MHz LCH



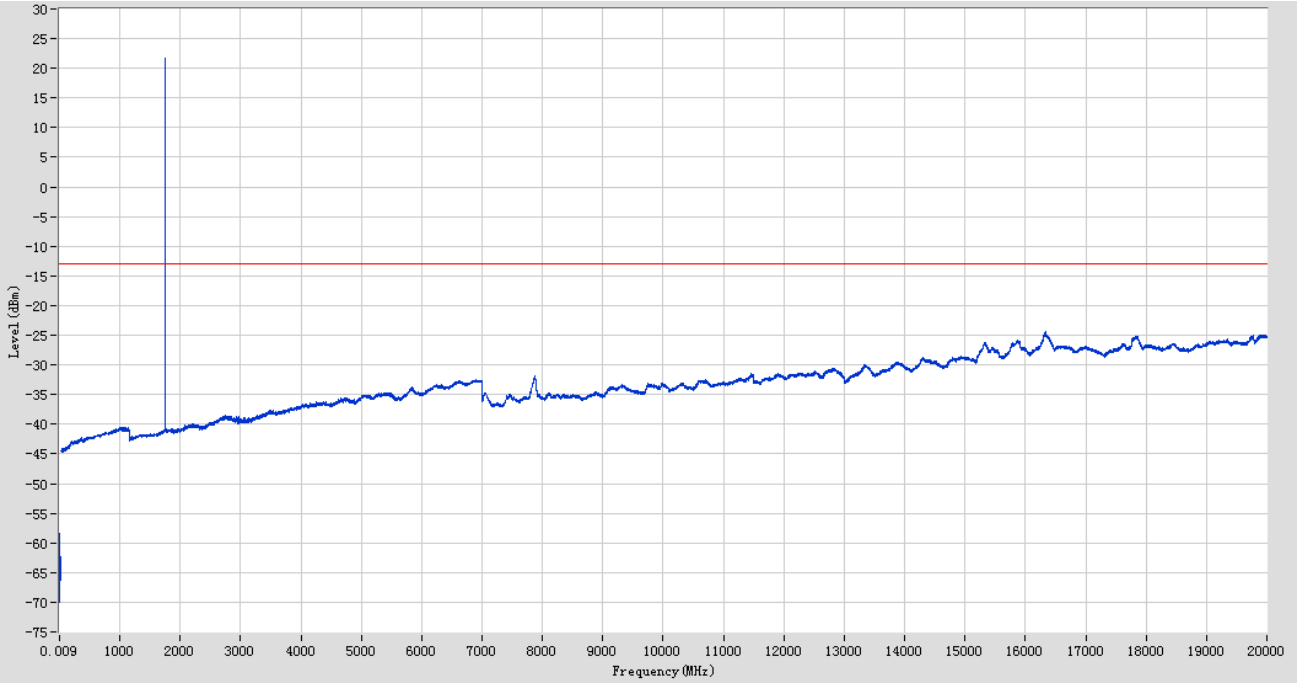
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9347	-13	50.9347	Pass
0.15	30	0.01	RMS	0.15	-58.7407	-13	45.7407	Pass
30	2000	1	RMS	1710.12	19.7310	N/A	N/A	N/A
2000	20000	1	RMS	16321	-24.5349	-13	11.5349	Pass

LTE Band 4 16-QAM 3 MHz MCH



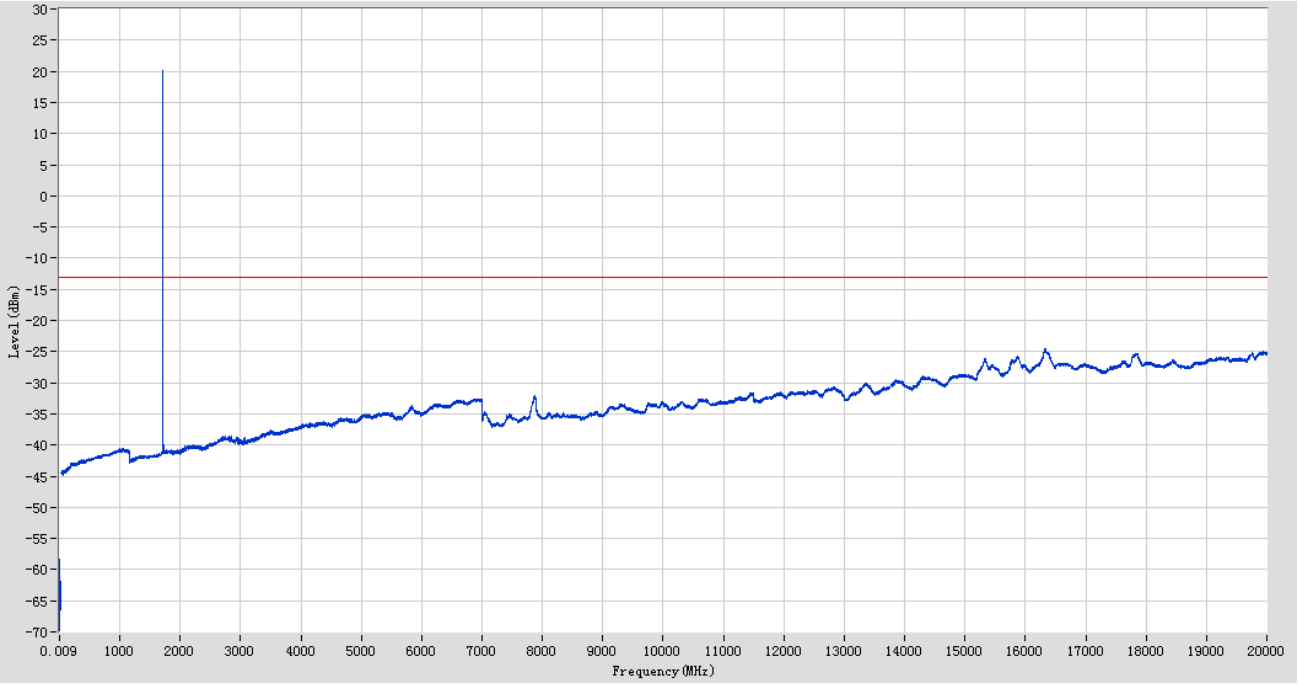
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8781	-13	50.8781	Pass
0.15	30	0.01	RMS	0.15	-58.3686	-13	45.3686	Pass
30	2000	1	RMS	1731.812	21.4615	N/A	N/A	N/A
2000	20000	1	RMS	16318	-24.5996	-13	11.5996	Pass

LTE Band 4 16-QAM 3 MHz HCH



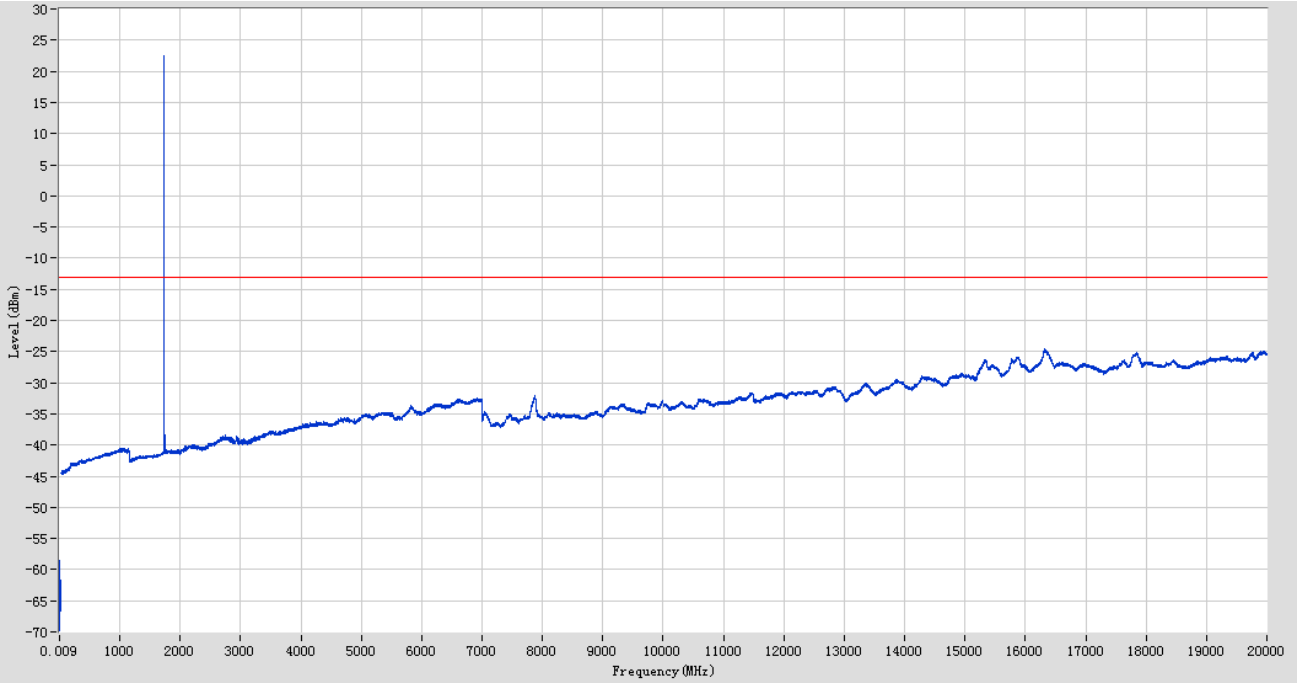
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-64.0547	-13	51.0547	Pass
0.15	30	0.01	RMS	0.15	-58.4526	-13	45.4526	Pass
30	2000	1	RMS	1752.518	21.6035	N/A	N/A	N/A
2000	20000	1	RMS	16330	-24.4349	-13	11.4349	Pass

LTE Band 4 16-QAM 5 MHz LCH



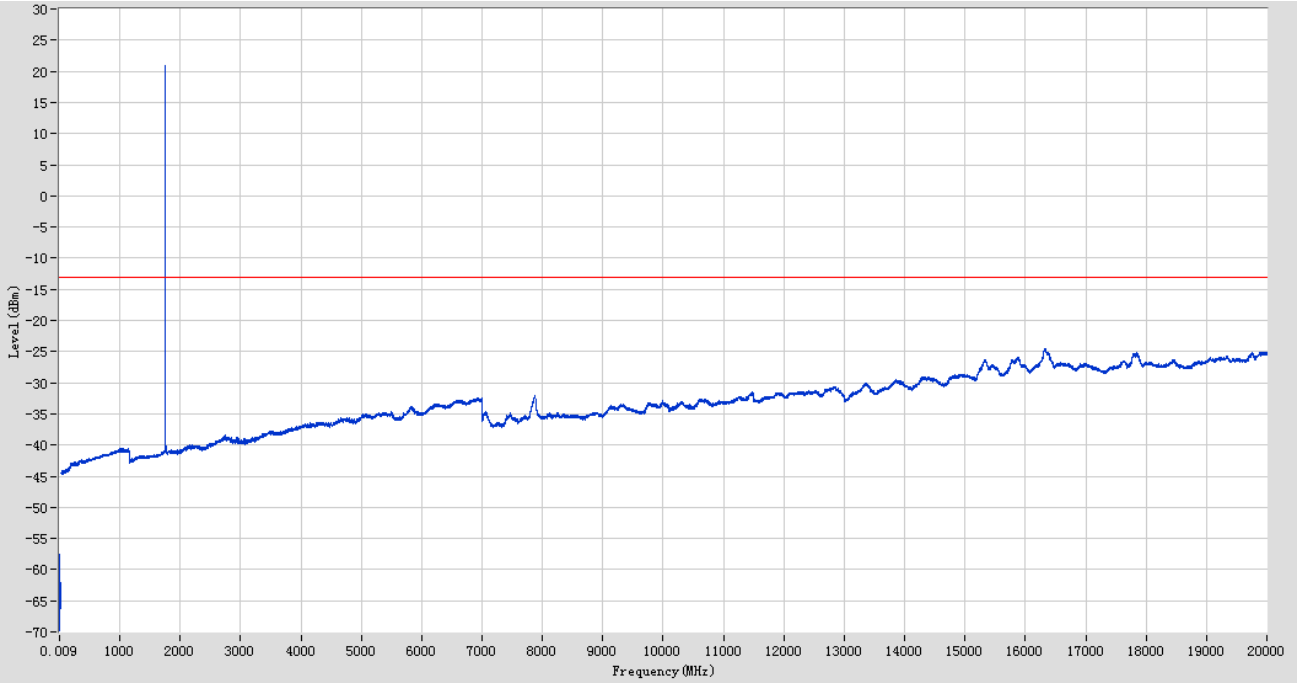
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8043	-13	50.8043	Pass
0.15	30	0.01	RMS	0.15	-58.3557	-13	45.3557	Pass
30	2000	1	RMS	1711.106	20.14222	N/A	N/A	N/A
2000	20000	1	RMS	16334	-24.5671	-13	11.5671	Pass

LTE Band 4 16-QAM 5 MHz MCH



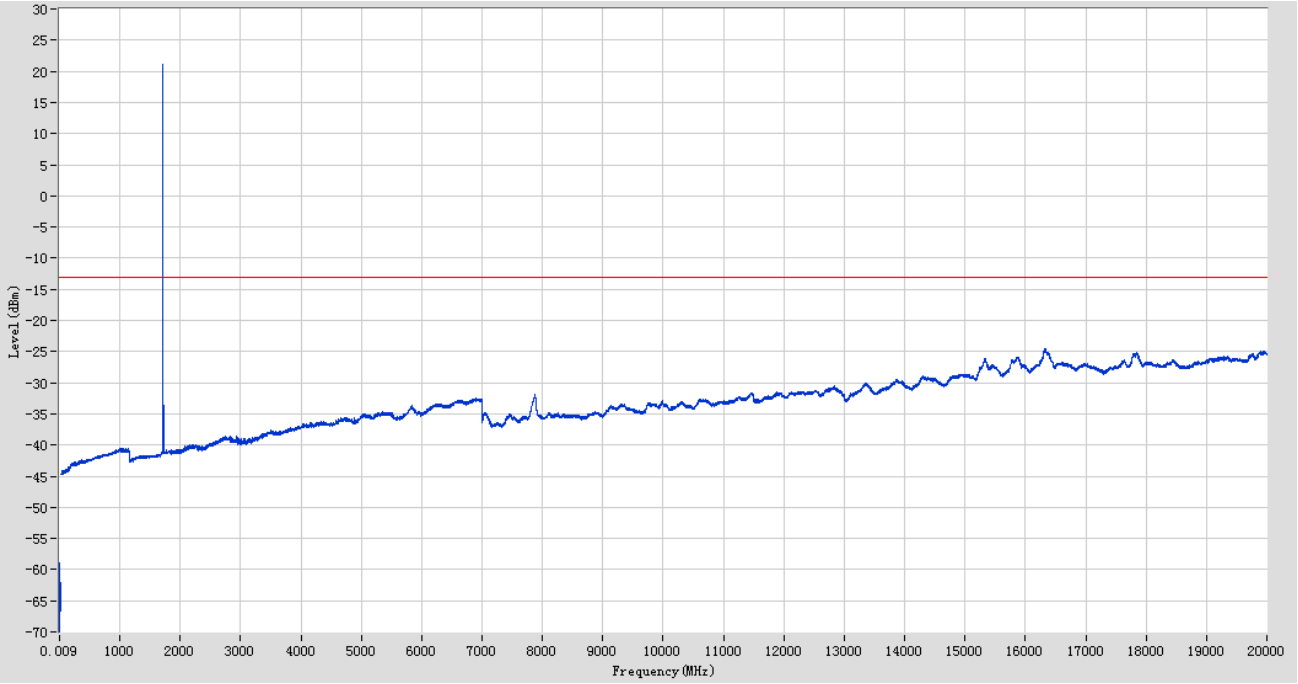
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9728	-13	50.9728	Pass
0.15	30	0.01	RMS	0.15	-58.5468	-13	45.5468	Pass
30	2000	1	RMS	1730.826	22.5038	N/A	N/A	N/A
2000	20000	1	RMS	16326	-24.5441	-13	11.5441	Pass

LTE Band 4 16-QAM 5 MHz HCH



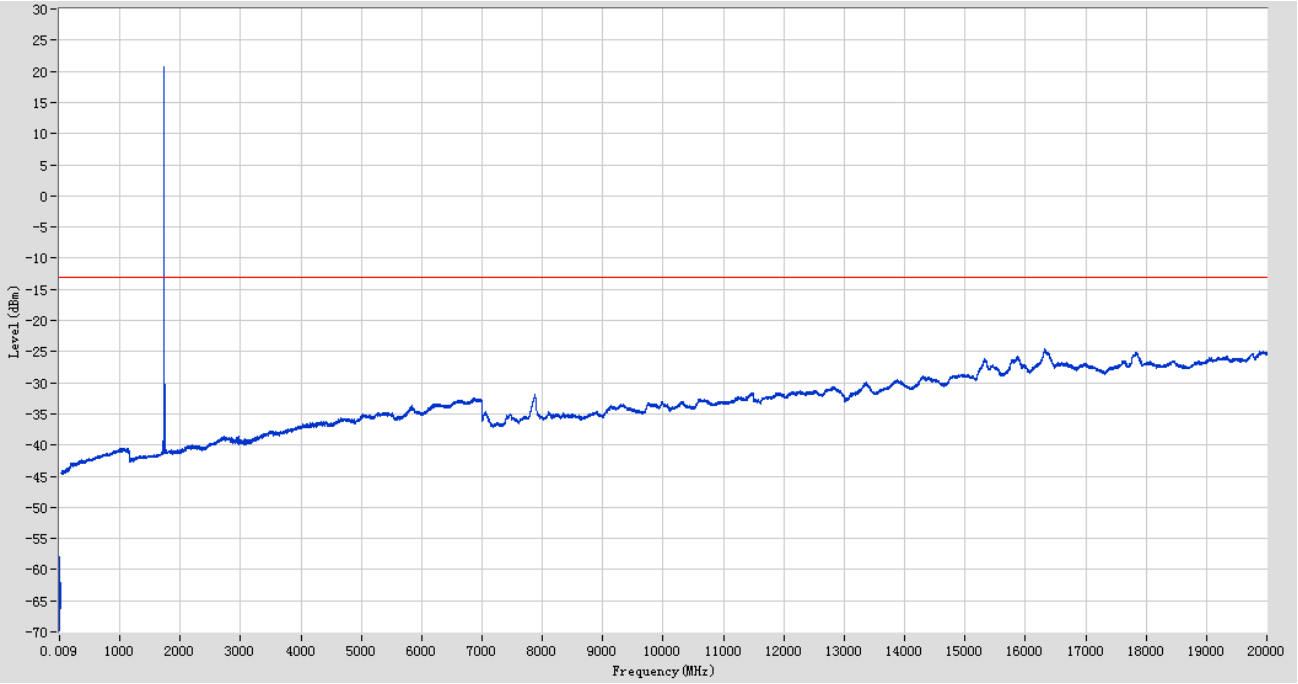
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-64.0076	-13	51.0076	Pass
0.15	30	0.01	RMS	0.15	-57.5382	-13	44.5382	Pass
30	2000	1	RMS	1750.546	20.9939	N/A	N/A	N/A
2000	20000	1	RMS	16332	-24.6159	-13	11.6159	Pass

LTE Band 4 16-QAM 10 MHz LCH



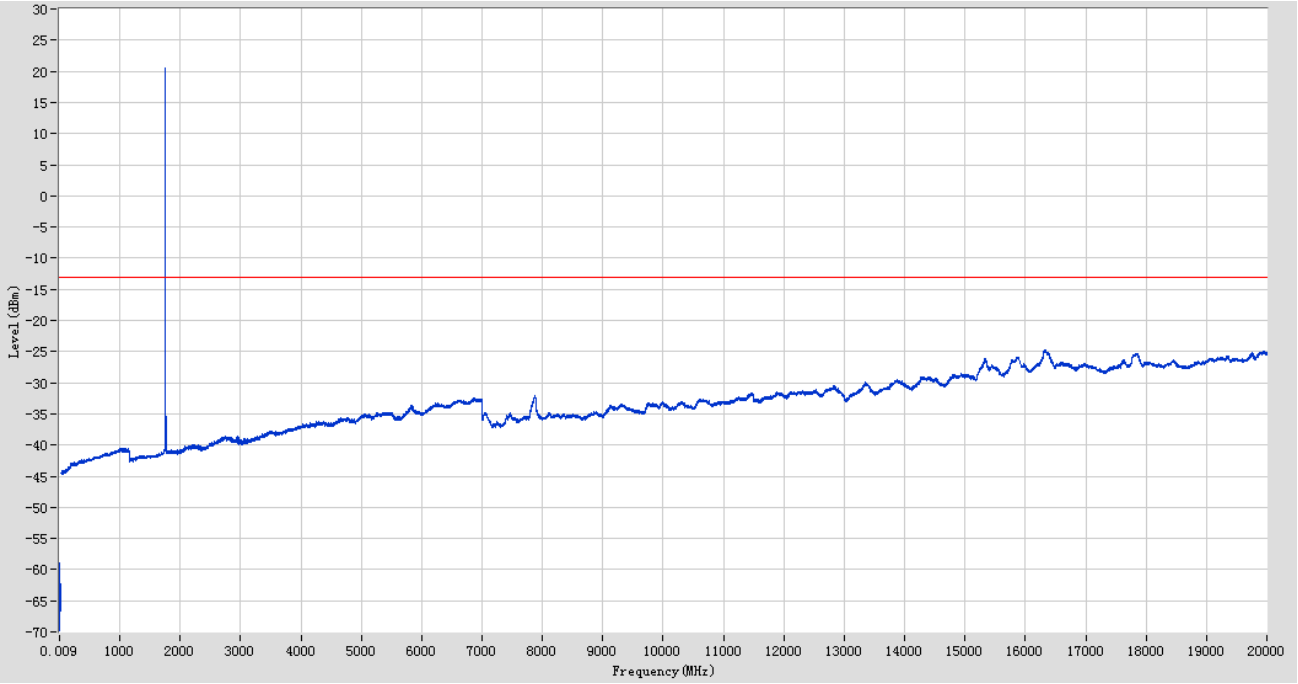
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-64.0557	-13	51.0557	Pass
0.15	30	0.01	RMS	0.15	-59.0289	-13	46.0289	Pass
30	2000	1	RMS	1711.106	21.0586	N/A	N/A	N/A
2000	20000	1	RMS	16328	-24.6135	-13	11.6135	Pass

LTE Band 4 16-QAM 10 MHz MCH



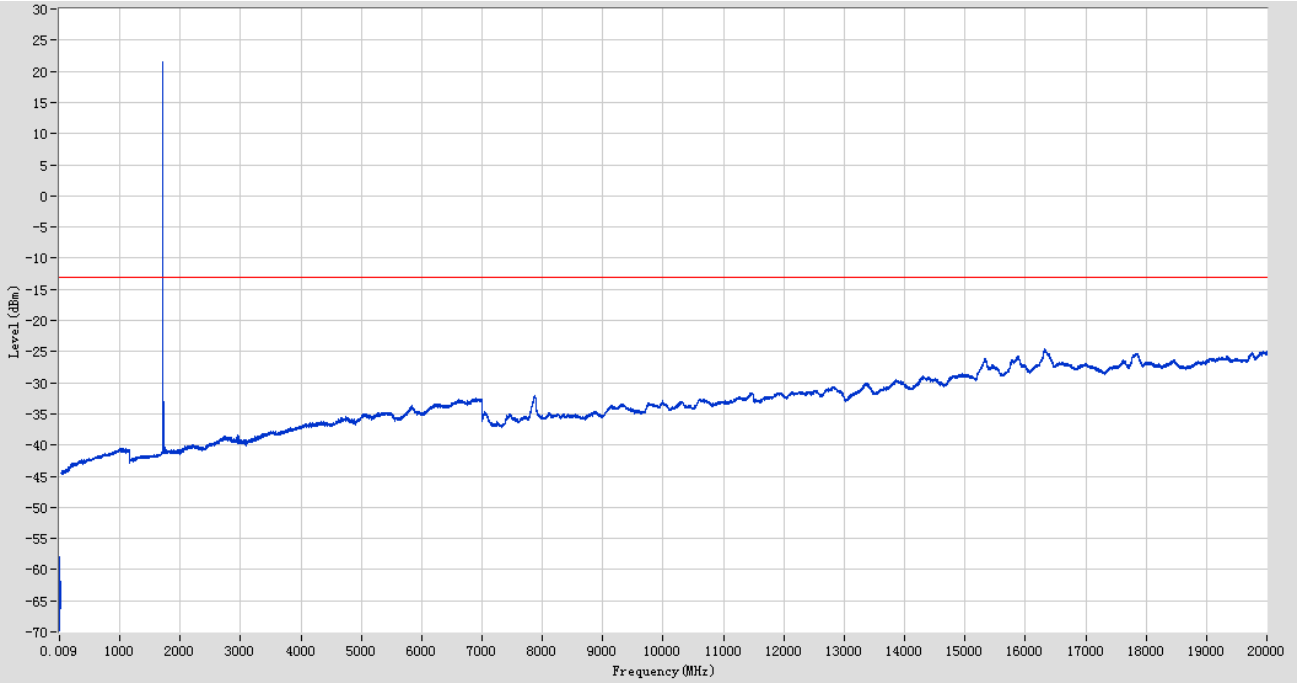
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.881	-13	50.8810	Pass
0.15	30	0.01	RMS	0.15	-57.9239	-13	44.9239	Pass
30	2000	1	RMS	1728.854	20.7001	N/A	N/A	N/A
2000	20000	1	RMS	16321	-24.5939	-13	11.5939	Pass

LTE Band 4 16-QAM 10 MHz HCH



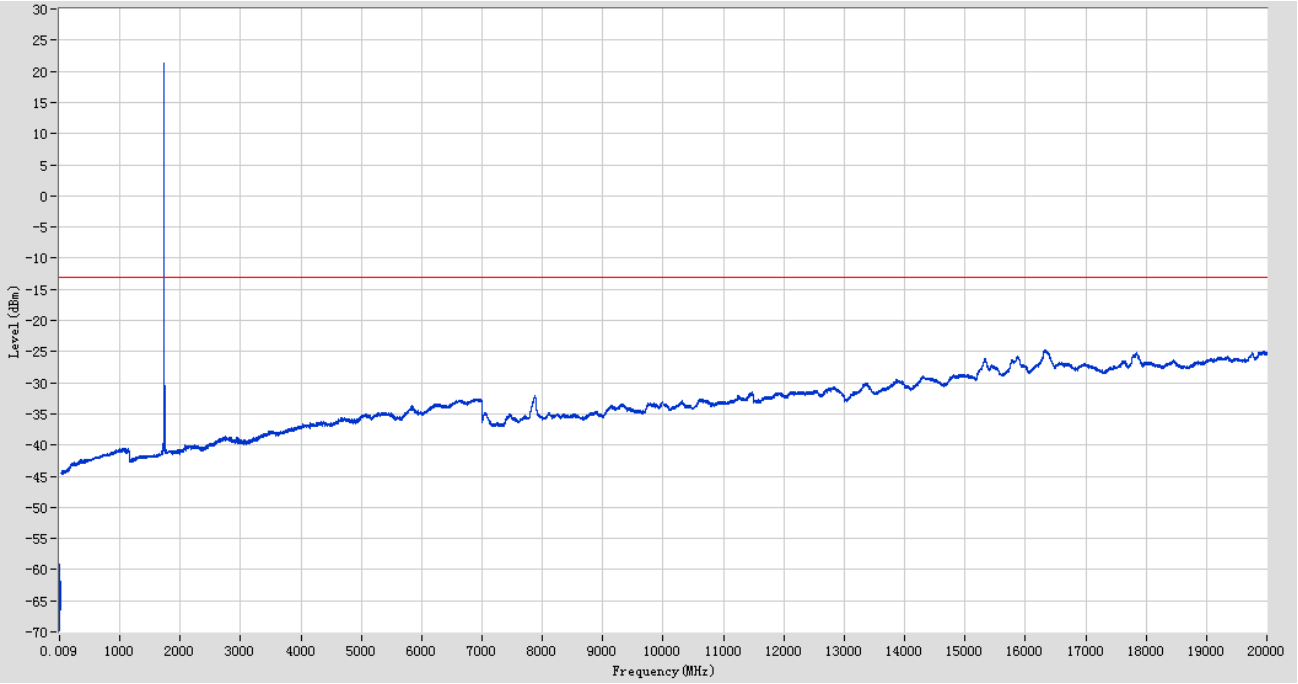
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8778	-13	50.8778	Pass
0.15	30	0.01	RMS	0.15	-58.8633	-13	45.8633	Pass
30	2000	1	RMS	1745.616	20.4731	N/A	N/A	N/A
2000	20000	1	RMS	16334	-24.6776	-13	11.6776	Pass

LTE Band 4 16-QAM 15 MHz LCH



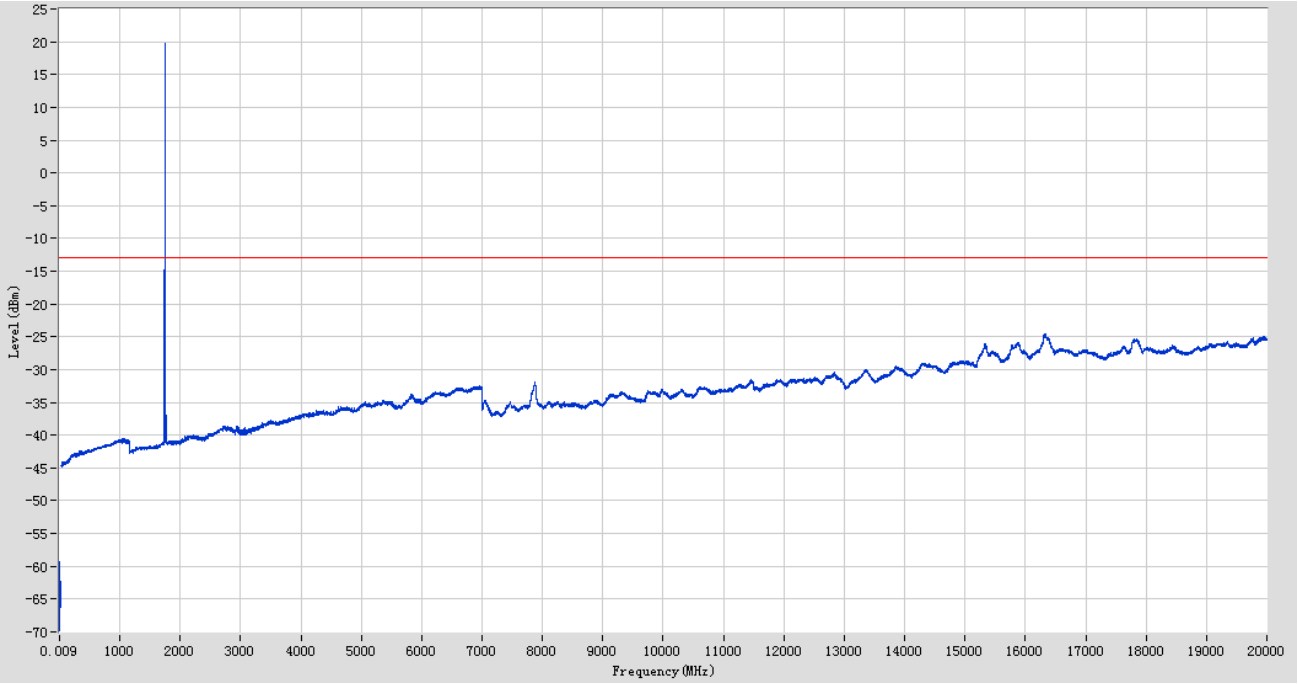
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8149	-13	50.8149	Pass
0.15	30	0.01	RMS	0.15	-58.019	-13	45.0189	Pass
30	2000	1	RMS	1711.106	21.5428	N/A	N/A	N/A
2000	20000	1	RMS	16316	-24.5144	-13	11.5144	Pass

LTE Band 4 16-QAM 15 MHz MCH



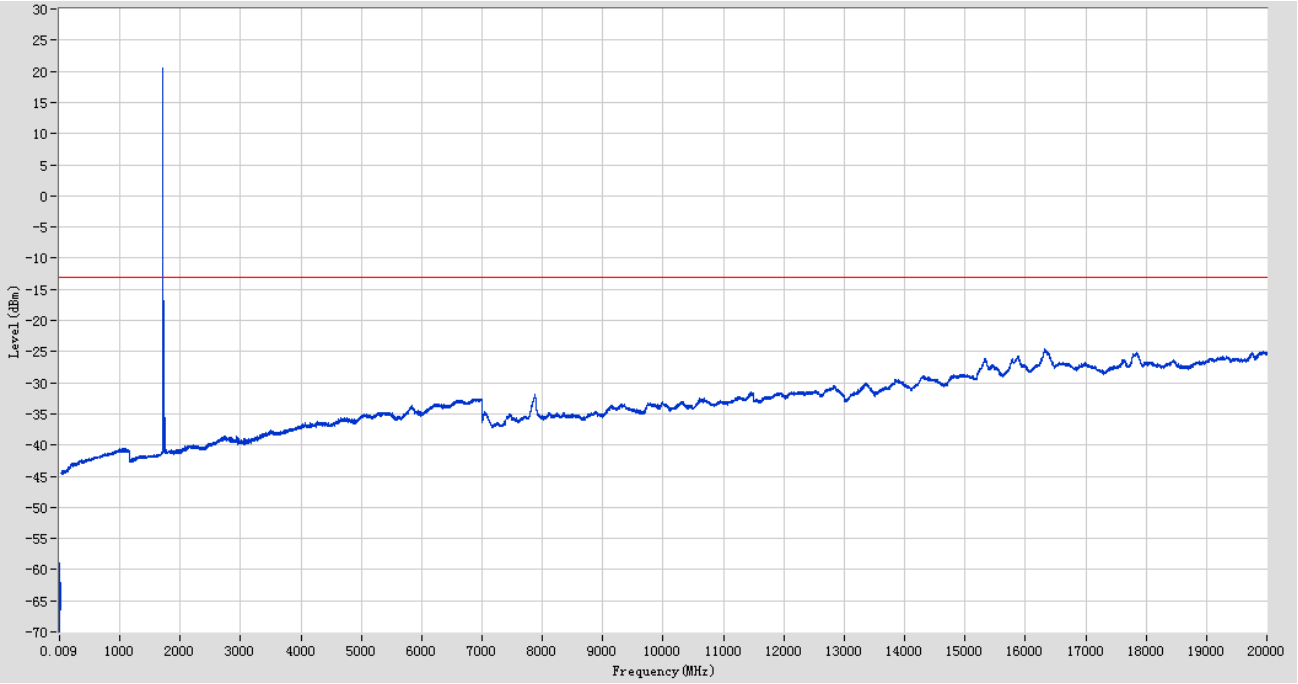
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8204	-13	50.8204	Pass
0.15	30	0.01	RMS	0.15995	-59.0744	-13	46.0744	Pass
30	2000	1	RMS	1725.896	21.3054	N/A	N/A	N/A
2000	20000	1	RMS	16328	-24.6582	-13	11.6582	Pass

LTE Band 4 16-QAM 15 MHz HCH



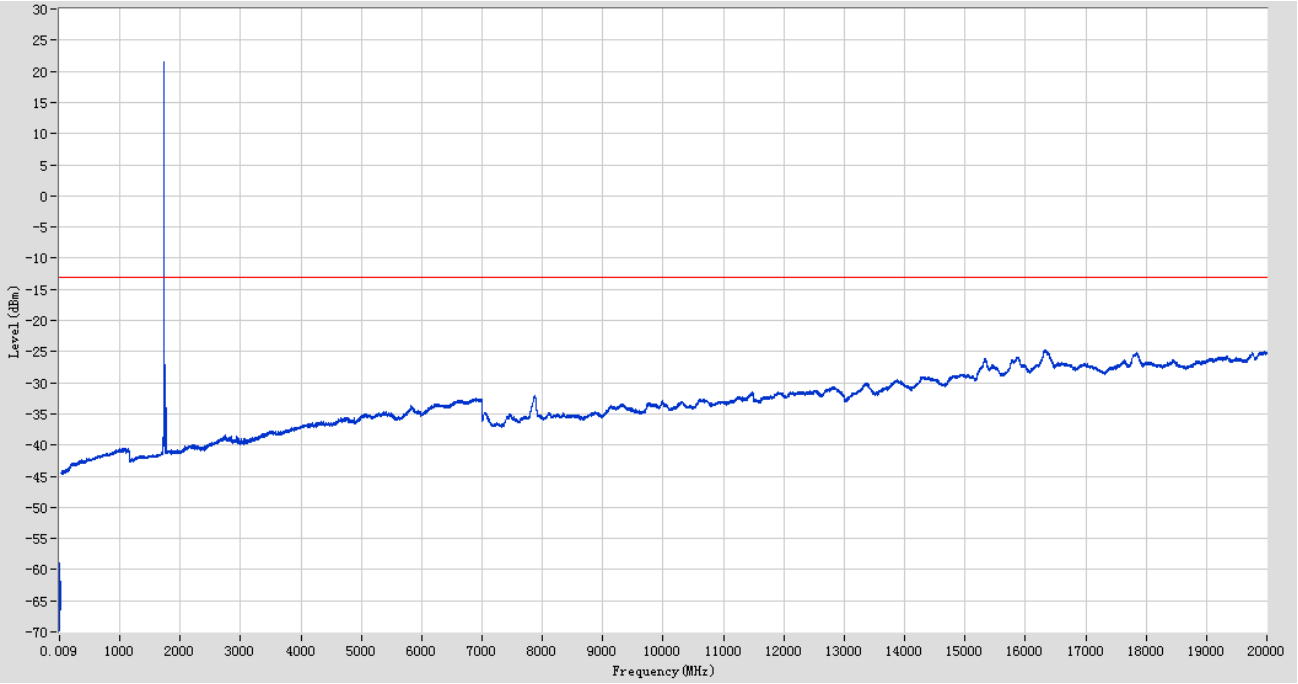
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8672	-13	50.8672	Pass
0.15	30	0.01	RMS	0.15	-59.3075	-13	46.3075	Pass
30	2000	1	RMS	1741.672	19.793	N/A	N/A	N/A
2000	20000	1	RMS	16328	-24.6151	-13	11.6151	Pass

LTE Band 4 16-QAM 20 MHz LCH



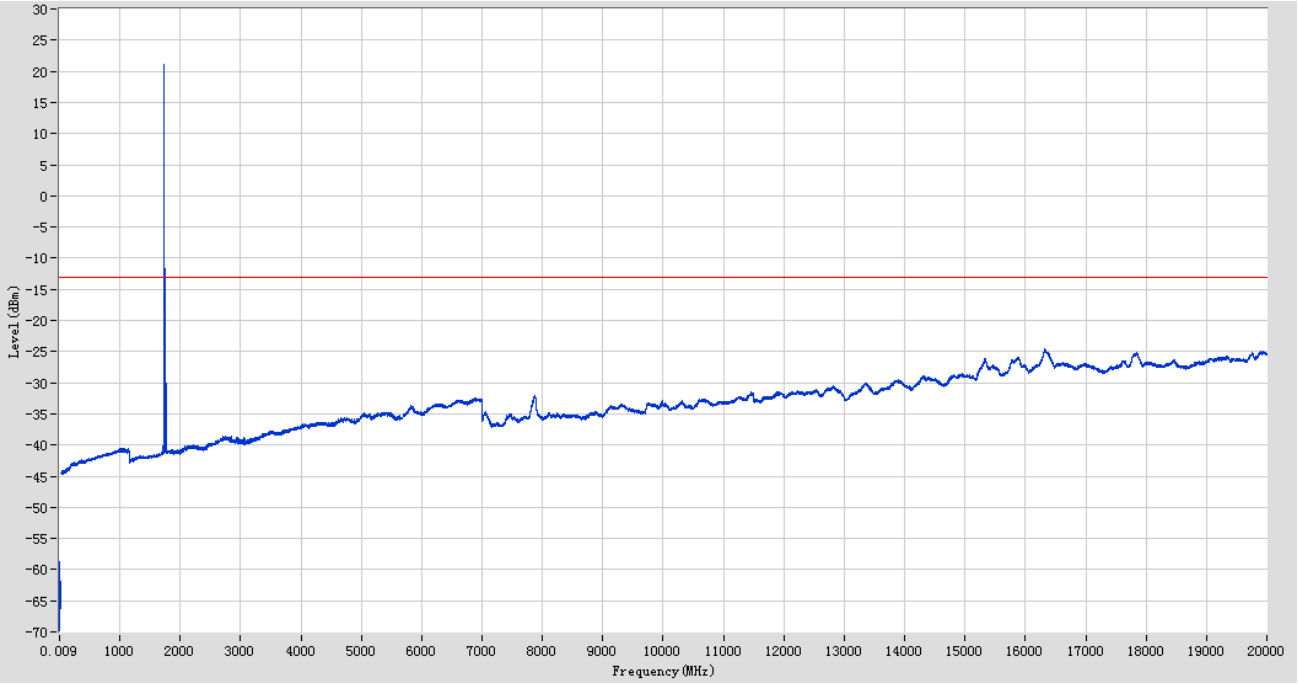
Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8853	-13	50.8853	Pass
0.15	30	0.01	RMS	0.15	-58.8544	-13	45.8544	Pass
30	2000	1	RMS	1711.106	20.5941	N/A	N/A	N/A
2000	20000	1	RMS	16323	-24.6014	-13	11.60143	Pass

LTE Band 4 16-QAM 20 MHz MCH



Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.8344	-13	50.8344	Pass
0.15	30	0.01	RMS	0.15	-58.978	-13	45.9780	Pass
30	2000	1	RMS	1723.924	21.4770	N/A	N/A	N/A
2000	20000	1	RMS	16317	-24.7122	-13	11.7122	Pass

LTE Band 4 16-QAM 20 MHz HCH



Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-63.9143	-13	50.9143	Pass
0.15	30	0.01	RMS	0.15	-58.6427	-13	45.6427	Pass
30	2000	1	RMS	1736.742	21.1158	N/A	N/A	N/A
2000	20000	1	RMS	16325	-24.5607	-13	11.5607	Pass

LTE Band 7 QPSK 5 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.2376	-25	48.2376	Pass
0.15	30	0.01	RMS	0.15	-67.6991	-25	42.6991	Pass
30	1500	1	RMS	1003.14	-50.1284	-25	25.1284	Pass
1500	3000	1	RMS	2501	20.3509	N/A	N/A	N/A
3000	26500	1	RMS	26279	-32.2905	-25	7.2905	Pass

LTE Band 7 QPSK 5 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.0242	-25	48.0242	Pass
0.15	30	0.01	RMS	0.15	-67.551	-25	42.551	Pass
30	1500	1	RMS	1008.04	-50.2383	-25	25.2383	Pass
1500	3000	1	RMS	2533	22.9080	N/A	N/A	N/A
3000	26500	1	RMS	26317	-32.3012	-25	7.3012	Pass

LTE Band 7 QPSK 5 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.215	-25	48.2150	Pass
0.15	30	0.01	RMS	0.15	-68.0917	-25	43.0917	Pass
30	1500	1	RMS	1085.46	-50.2577	-25	25.2577	Pass
1500	3000	1	RMS	2566	20.8851	N/A	N/A	N/A
3000	26500	1	RMS	26318	-32.2013	-25	7.2013	Pass

LTE Band 7 QPSK 10 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.6566	-25	48.6566	Pass
0.15	30	0.01	RMS	0.15	-67.2406	-25	42.2406	Pass
30	1500	1	RMS	1005.1	-50.3467	-25	25.3467	Pass
1500	3000	1	RMS	2501	22.24885	N/A	N/A	N/A
3000	26500	1	RMS	26328	-32.2495	-25	7.2495	Pass

LTE Band 7 QPSK 10 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.3962	-25	48.3962	Pass
0.15	30	0.01	RMS	0.15	-67.8717	-25	42.8717	Pass
30	1500	1	RMS	1099.18	-50.3108	-25	25.3108	Pass
1500	3000	1	RMS	2531	22.1180	N/A	N/A	N/A
3000	26500	1	RMS	26336	-32.3291	-25	7.3291	Pass

LTE Band 7 QPSK 10 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.5339	-25	48.5339	Pass
0.15	30	0.01	RMS	0.15	-68.4186	-25	43.4186	Pass
30	1500	1	RMS	1097.22	-50.2952	-25	25.2952	Pass
1500	3000	1	RMS	2561	21.6466	N/A	N/A	N/A
3000	26500	1	RMS	26298	-32.2653	-25	7.2653	Pass

LTE Band 7 QPSK 15 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.7187	-25	48.7187	Pass
0.15	30	0.01	RMS	0.15	-67.6735	-25	42.6735	Pass
30	1500	1	RMS	1053.12	-50.3783	-25	25.3783	Pass
1500	3000	1	RMS	2501	22.3954	N/A	N/A	N/A
3000	26500	1	RMS	25938	-32.3256	-25	7.3256	Pass

LTE Band 7 QPSK 15 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.5903	-25	48.5903	Pass
0.15	30	0.01	RMS	0.15	-68.9467	-25	43.9467	Pass
30	1500	1	RMS	1021.76	-50.1891	-25	25.1891	Pass
1500	3000	1	RMS	2536	11.6059	N/A	N/A	N/A
3000	26500	1	RMS	26321	-32.1066	-25	7.1066	Pass

LTE Band 7 QPSK 15 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.4025	-25	48.4025	Pass
0.15	30	0.01	RMS	0.15	-68.0884	-25	43.0884	Pass
30	1500	1	RMS	1005.1	-50.3206	-25	25.3206	Pass
1500	3000	1	RMS	2556	21.49846	N/A	N/A	N/A
3000	26500	1	RMS	25873	-32.2670	-25	7.2670	Pass

LTE Band 7 QPSK 20 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.4246	-25	48.4246	Pass
0.15	30	0.01	RMS	0.15	-68.0345	-25	43.0345	Pass
30	1500	1	RMS	1083.5	-50.3665	-25	25.3665	Pass
1500	3000	1	RMS	2501	21.7552	N/A	N/A	N/A
3000	26500	1	RMS	26338	-32.3400	-25	7.3400	Pass

LTE Band 7 QPSK 20 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.4850	-25	48.4850	Pass
0.15	30	0.01	RMS	0.15	-68.3883	-25	43.3883	Pass
30	1500	1	RMS	1116.82	-50.3204	-25	25.3204	Pass
1500	3000	1	RMS	2534	10.7313	N/A	N/A	N/A
3000	26500	1	RMS	26305	-32.2545	-25	7.2545	Pass

LTE Band 7 QPSK 20 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.2564	-25	48.2564	Pass
0.15	30	0.01	RMS	0.15	-68.1953	-25	43.1953	Pass
30	1500	1	RMS	1066.84	-50.2539	-25	25.2539	Pass
1500	3000	1	RMS	2551	20.6375	N/A	N/A	N/A
3000	26500	1	RMS	26350	-32.2627	-25	7.2627	Pass

LTE Band 7 16-QAM 5 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-72.9775	-25	47.9775	Pass
0.15	30	0.01	RMS	0.15	-67.5421	-25	42.5421	Pass
30	1500	1	RMS	1054.1	-50.2199	-25	25.2199	Pass
1500	3000	1	RMS	2501	19.5709	N/A	N/A	N/A
3000	26500	1	RMS	26279	-32.3239	-25	7.3239	Pass

LTE Band 7 16-QAM 5 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.010356	-72.7575	-25	47.7575	Pass
0.15	30	0.01	RMS	0.15	-67.4287	-25	42.4287	Pass
30	1500	1	RMS	897.3	-45.6899	-25	20.6899	Pass
1500	3000	1	RMS	2533	21.7199	N/A	N/A	N/A
3000	26500	1	RMS	26369	-32.0557	-25	7.0557	Pass

LTE Band 7 16-QAM 5 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.3005	-25	48.3005	Pass
0.15	30	0.01	RMS	0.15	-68.1814	-25	43.1814	Pass
30	1500	1	RMS	1054.1	-50.2227	-25	25.2227	Pass
1500	3000	1	RMS	2566	20.0660	N/A	N/A	N/A
3000	26500	1	RMS	26380	-32.2216	-25	7.2216	Pass

LTE Band 7 16-QAM 10 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.3256	-25	48.3256	Pass
0.15	30	0.01	RMS	0.15	-67.9253	-25	42.9253	Pass
30	1500	1	RMS	1006.08	-50.3443	-25	25.3443	Pass
1500	3000	1	RMS	2501	20.7708	N/A	N/A	N/A
3000	26500	1	RMS	26324	-32.2734	-25	7.2734	Pass

LTE Band 7 16-QAM 10 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.010808	-73.213	-25	48.2130	Pass
0.15	30	0.01	RMS	0.15	-67.6392	-25	42.6392	Pass
30	1500	1	RMS	1020.78	-50.3237	-25	25.3237	Pass
1500	3000	1	RMS	2531	21.5722	N/A	N/A	N/A
3000	26500	1	RMS	26324	-32.1880	-25	7.1880	Pass

LTE Band 7 16-QAM 10 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.0623	-25	48.0623	Pass
0.15	30	0.01	RMS	0.15	-68.1375	-25	43.1375	Pass
30	1500	1	RMS	1052.14	-50.3297	-25	25.3297	Pass
1500	3000	1	RMS	2561	21.2430	N/A	N/A	N/A
3000	26500	1	RMS	26336	-32.2021	-25	7.2021	Pass

LTE Band 7 16-QAM 15 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.3417	-25	48.3417	Pass
0.15	30	0.01	RMS	0.15	-67.8328	-25	42.8328	Pass
30	1500	1	RMS	1050.18	-50.3447	-25	25.3447	Pass
1500	3000	1	RMS	2501	21.4932	N/A	N/A	N/A
3000	26500	1	RMS	26347	-32.2735	-25	7.2735	Pass

LTE Band 7 16-QAM 15 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.010808	-73.2349	-25	48.2349	Pass
0.15	30	0.01	RMS	0.15	-68.3795	-25	43.3795	Pass
30	1500	1	RMS	1050.18	-50.3420	-25	25.3420	Pass
1500	3000	1	RMS	2529	20.1872	N/A	N/A	N/A
3000	26500	1	RMS	26318	-32.1556	-25	7.1556	Pass

LTE Band 7 16-QAM 15 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.1255	-25	48.1255	Pass
0.15	30	0.01	RMS	0.15	-68.6054	-25	43.6054	Pass
30	1500	1	RMS	1115.84	-50.2526	-25	25.2526	Pass
1500	3000	1	RMS	2556	20.9394	N/A	N/A	N/A
3000	26500	1	RMS	26306	-32.1526	-25	7.1526	Pass

LTE Band 7 16-QAM 20 MHz LCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.1822	-25	48.1822	Pass
0.15	30	0.01	RMS	0.15	-68.4188	-25	43.4188	Pass
30	1500	1	RMS	1144.26	-50.2869	-25	25.2869	Pass
1500	3000	1	RMS	2509	9.70259	N/A	N/A	N/A
3000	26500	1	RMS	26289	-32.2772	-25	7.2772	Pass

LTE Band 7 16-QAM 20 MHz MCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-73.4070	-25	48.4070	Pass
0.15	30	0.01	RMS	0.15	-68.1373	-25	43.1373	Pass
30	1500	1	RMS	1067.82	-50.3405	-25	25.3405	Pass
1500	3000	1	RMS	2534	9.6943	N/A	N/A	N/A
3000	26500	1	RMS	26260	-32.3239	-25	7.3239	Pass

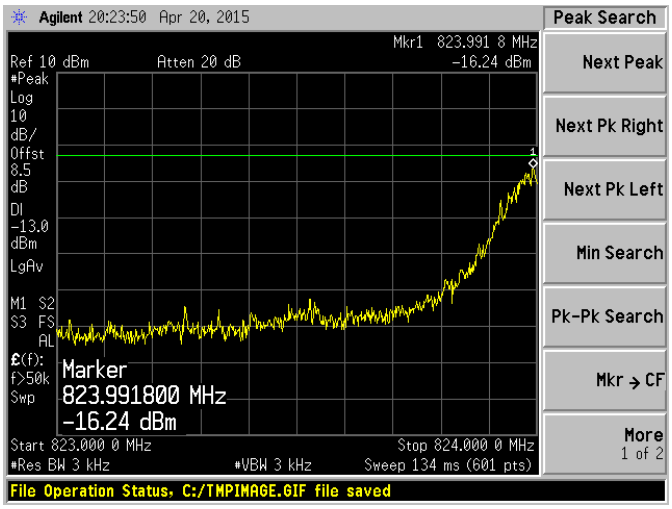
LTE Band 7 16-QAM 20 MHz HCH

Start Frequency[MHz]	Stop Frequency[MHz]	RBW [MHz]	Detector	Frequency [MHz]	Emission[dBm]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	0.009	-72.7286	-25	47.7286	Pass
0.15	30	0.01	RMS	0.15	-67.7792	-25	42.7792	Pass
30	1500	1	RMS	1034.5	-50.3765	-25	25.3765	Pass
1500	3000	1	RMS	2551	20.5617	N/A	N/A	N/A
3000	26500	1	RMS	26327	-32.1851	-25	7.1851	Pass

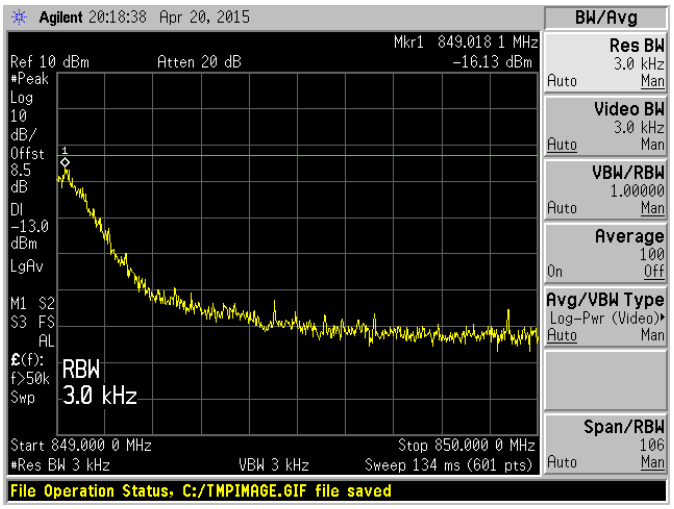
A.6 Band Edge

Test Resutl of Plots

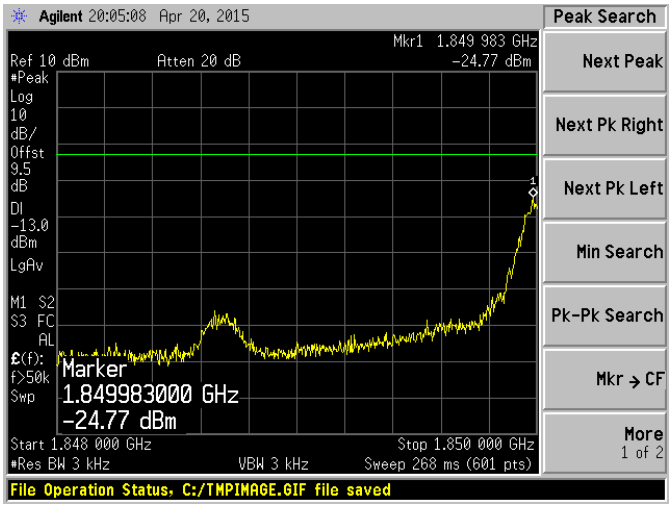
GSM 850 MHz LCH



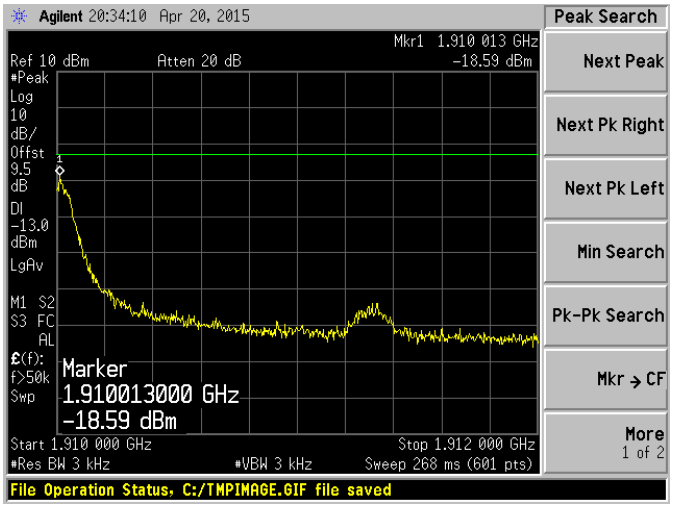
GSM 850 MHz HCH



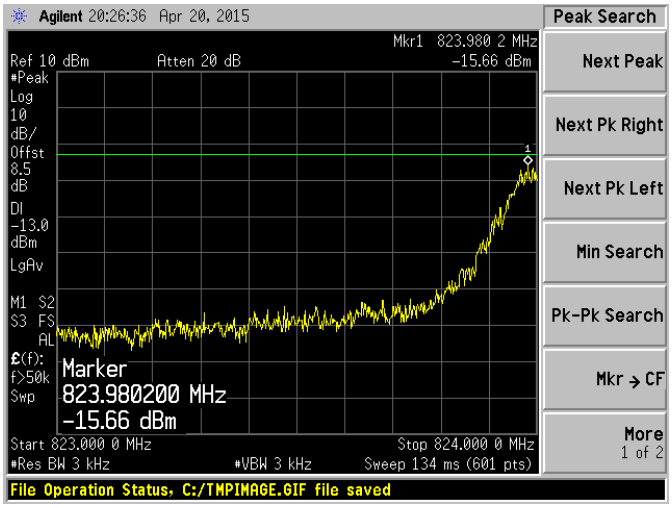
GSM 1900 MHz LCH



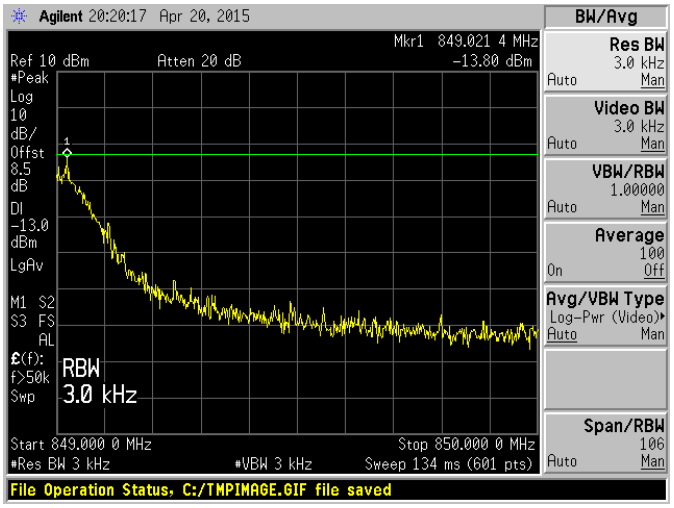
GSM 1900 MHz HCH



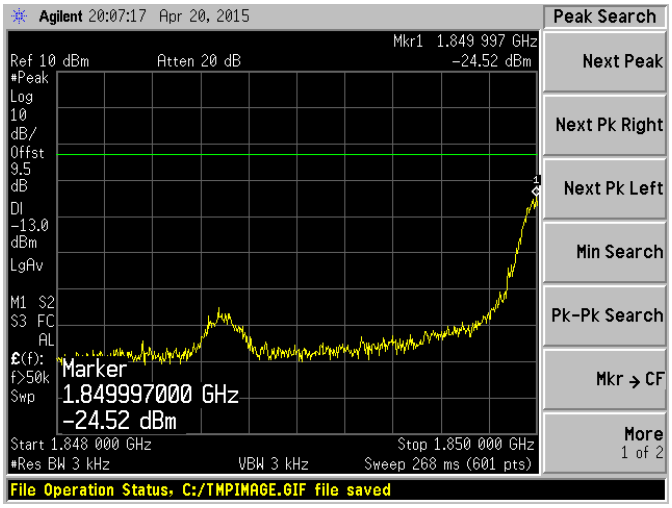
GPRS 850 MHz LCH



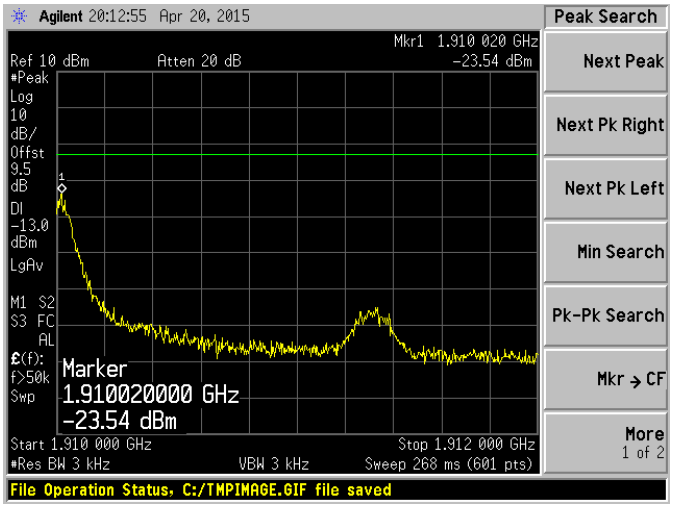
GPRS 850 MHz HCH



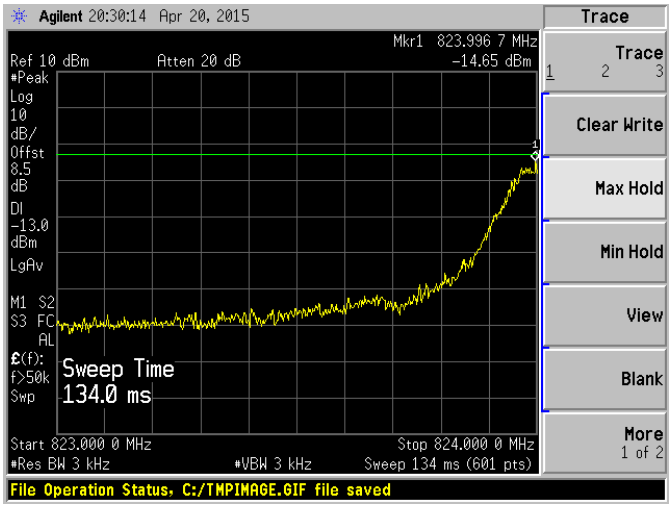
GPRS 1900 MHz LCH



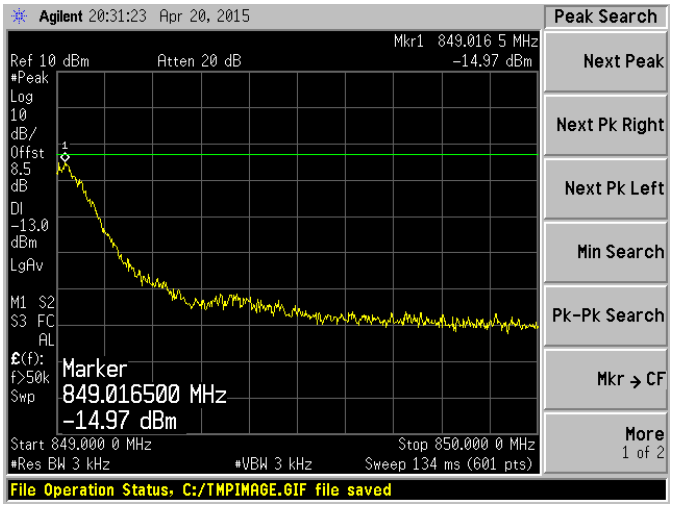
GPRS 1900 MHz HCH



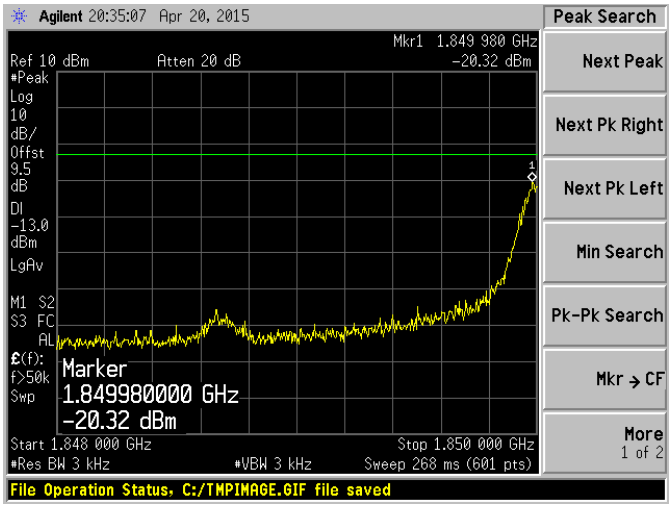
EGPRS 850 MHz LCH



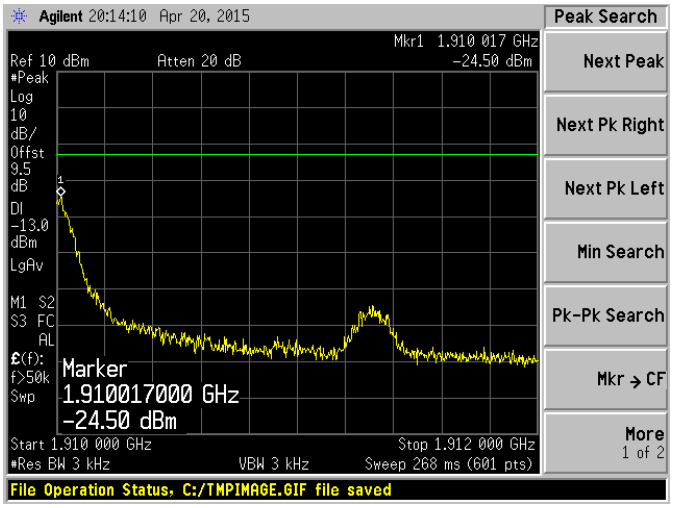
EGPRS 850 MHz HCH



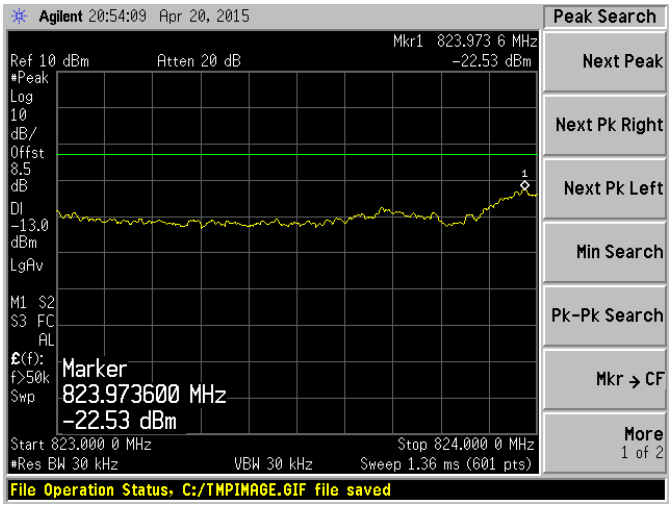
EGPRS 1900 MHz LCH



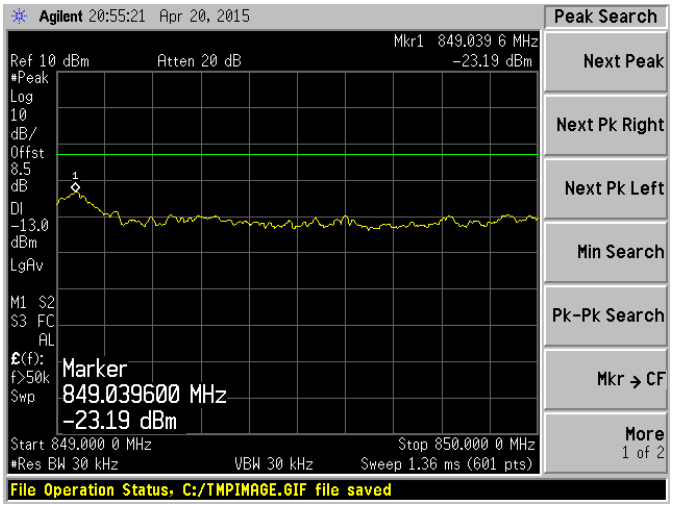
EGPRS 1900 MHz HCH



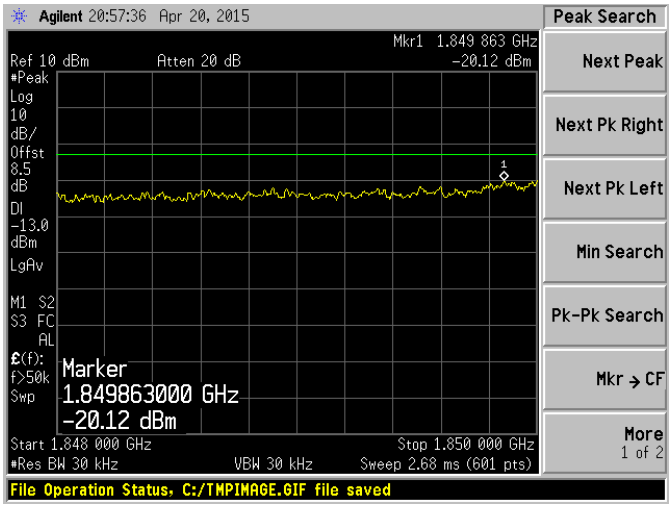
WCDMA 850 MHz LCH



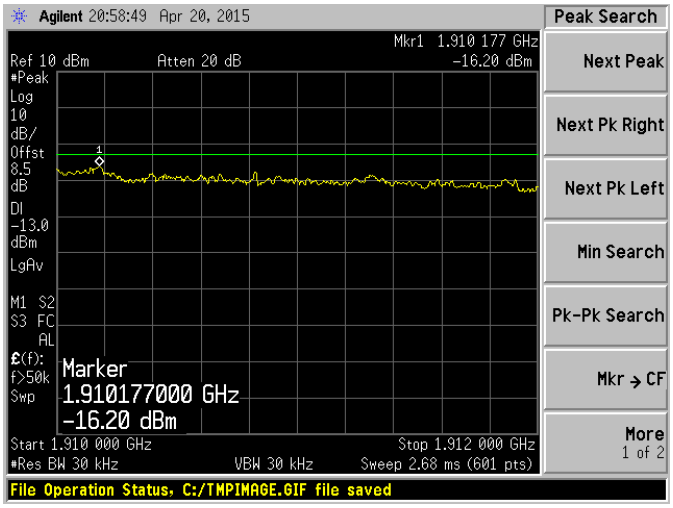
WCDMA 850 MHz HCH



WCDMA 1900 MHz LCH

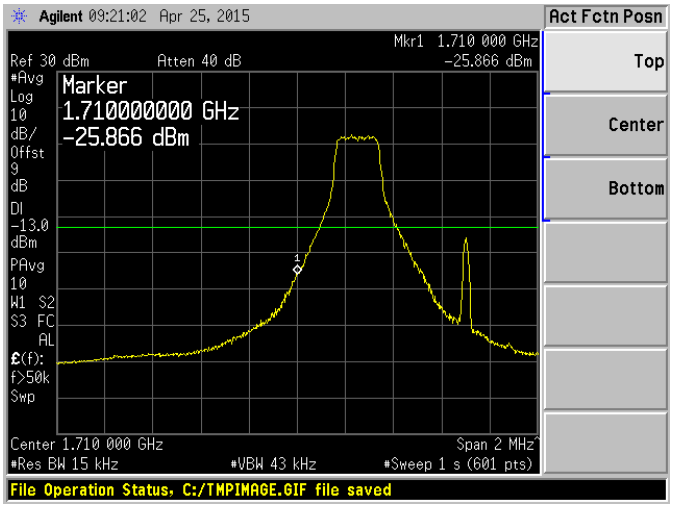


WCDMA 1900 MHz HCH

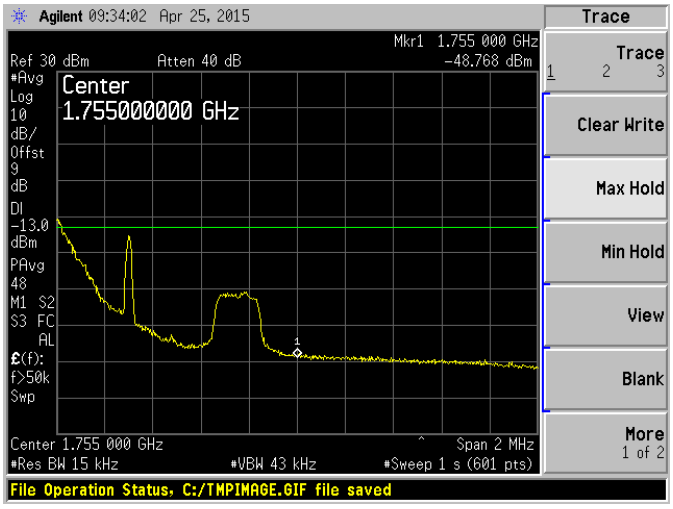


LTE Test Plots

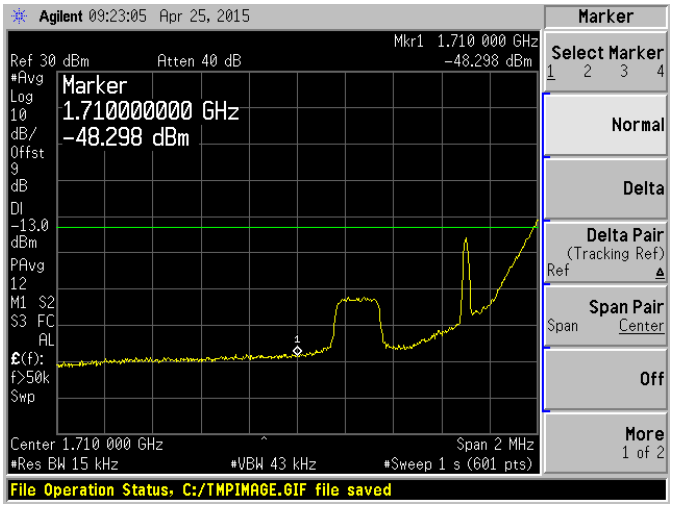
Band 4 QPSK 1.4 MHz RB1#0 LCH



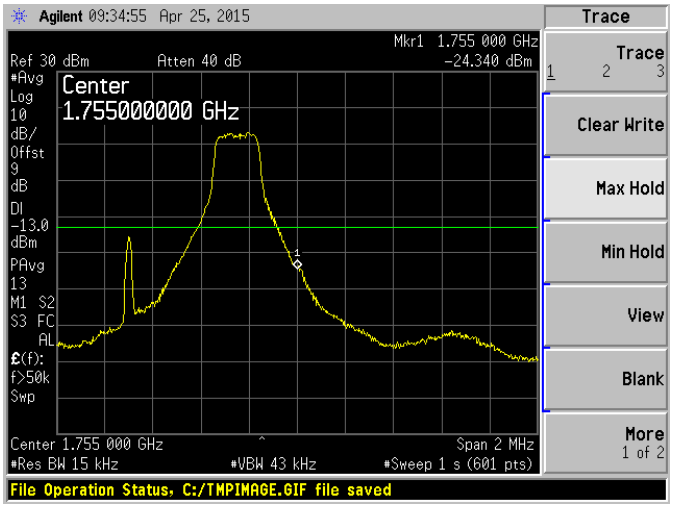
Band 4 QPSK 1.4 MHz RB1#0 HCH



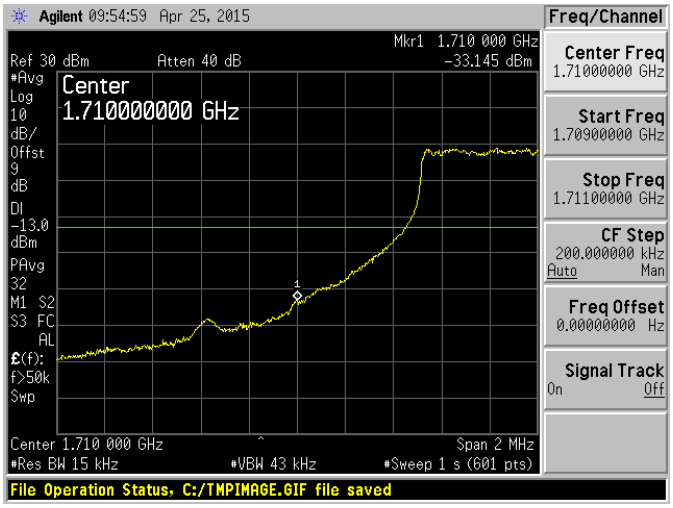
Band 4 QPSK 1.4 MHz RB1#5 LCH



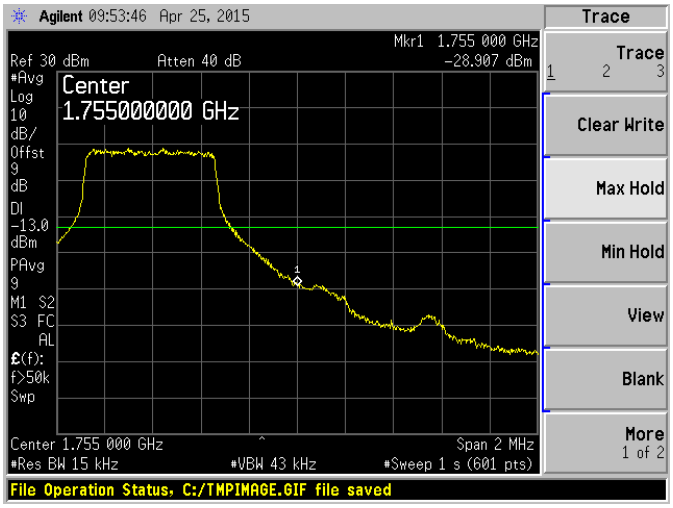
Band 4 QPSK 1.4 MHz RB1#5 HCH



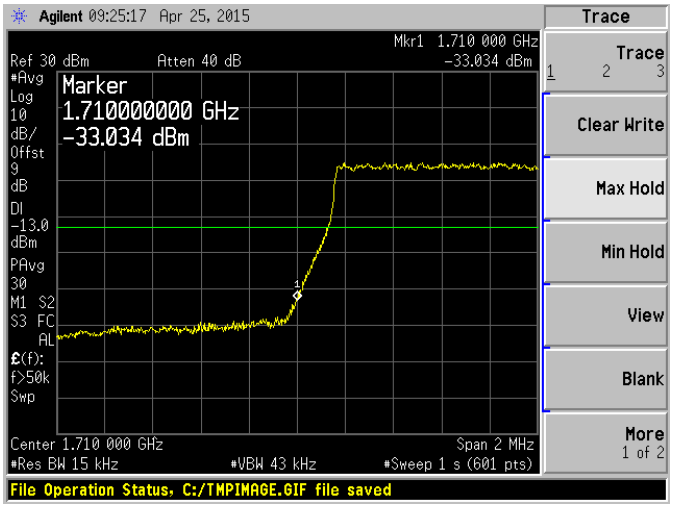
Band 4 QPSK 1.4 MHz RB3#2 LCH



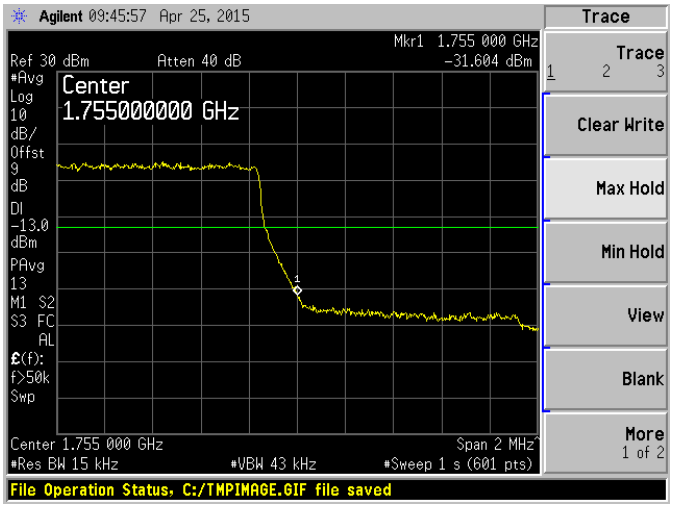
Band 4 QPSK 1.4 MHz RB3#2 HCH



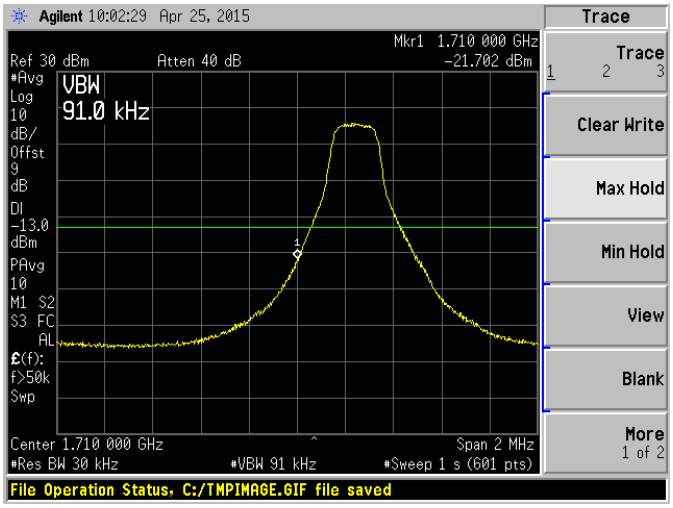
Band 4 QPSK 1.4 MHz RB6#0 LCH



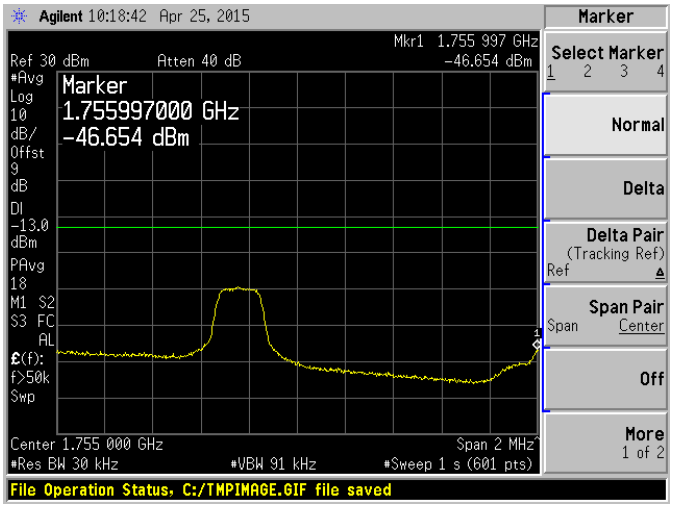
Band 4 QPSK 1.4 MHz RB6#0 HCH



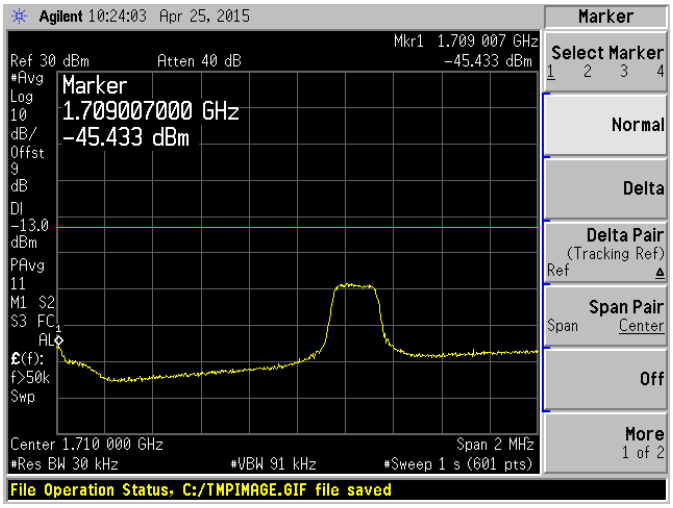
Band 4 QPSK 3 MHz RB1#0 LCH



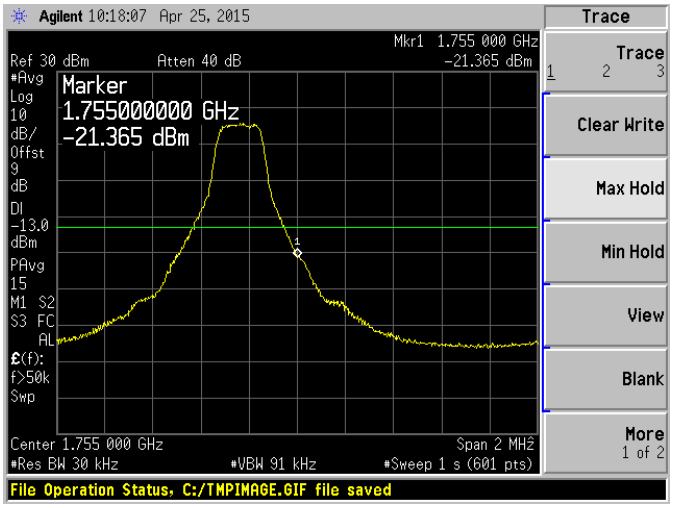
Band 4 QPSK 3 MHz RB1#0 HCH



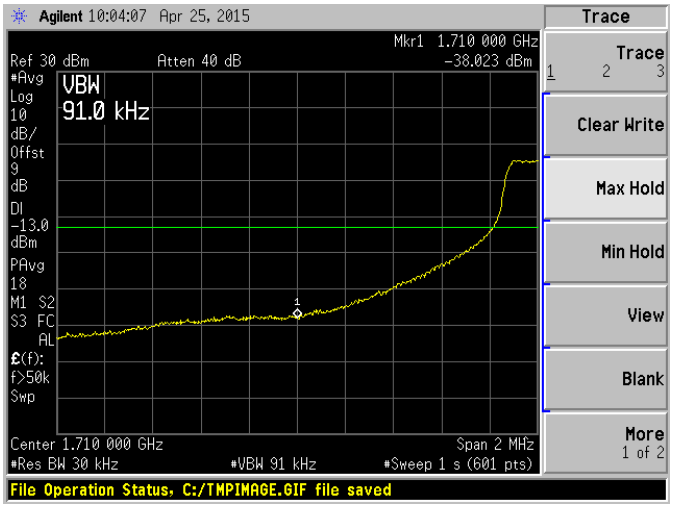
Band 4 QPSK 3 MHz RB1#14 LCH



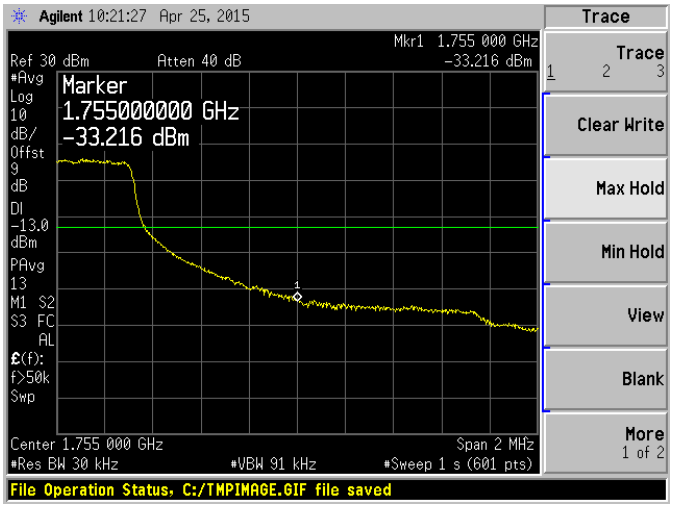
Band 4 QPSK 3 MHz RB1#4 HCH



Band 4 QPSK 3 MHz RB8#4 LCH



Band 4 QPSK 3 MHz RB8#4 HCH



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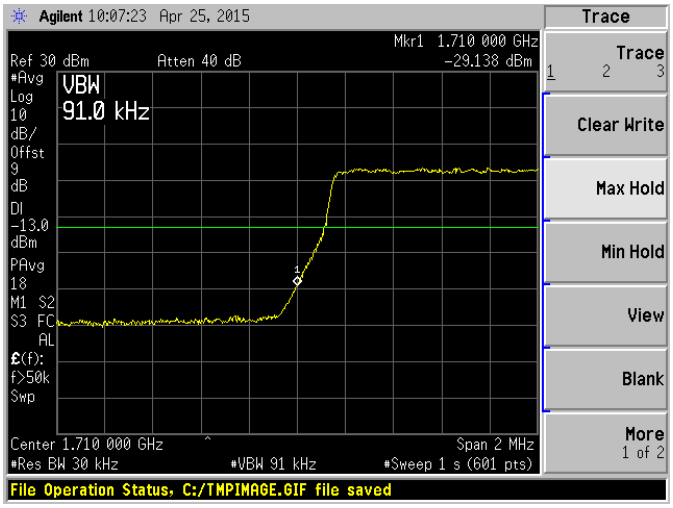

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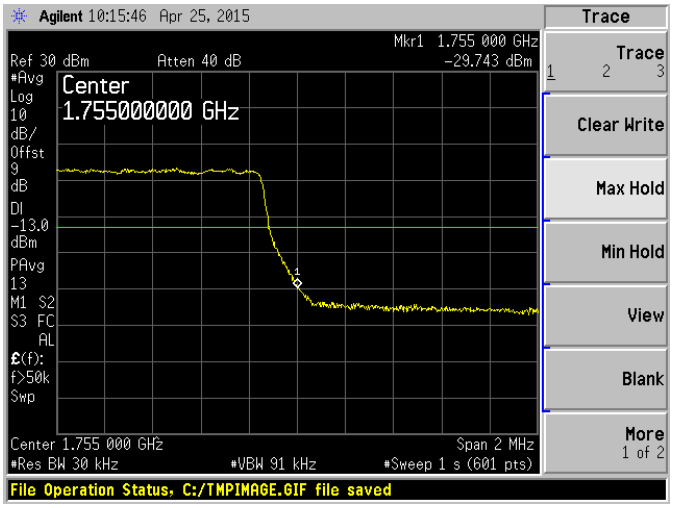
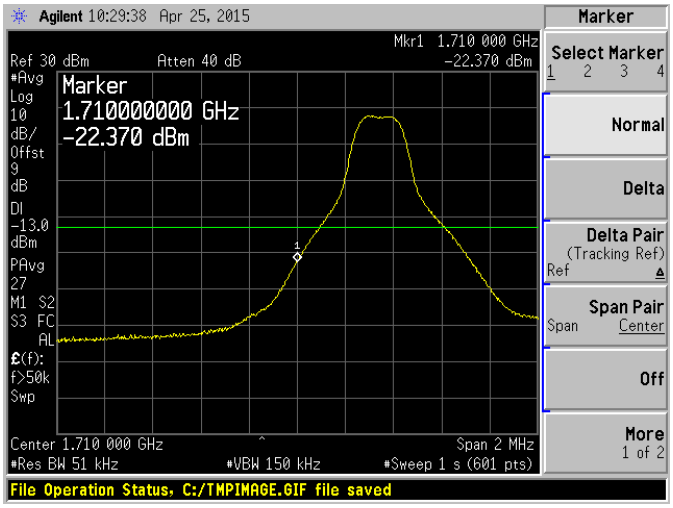
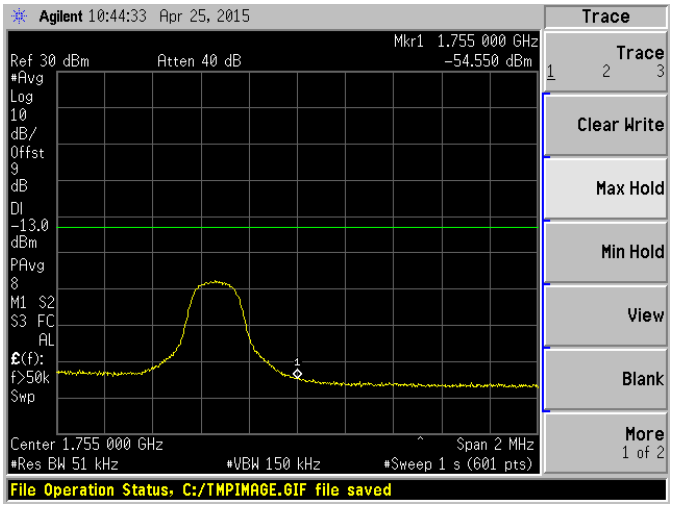


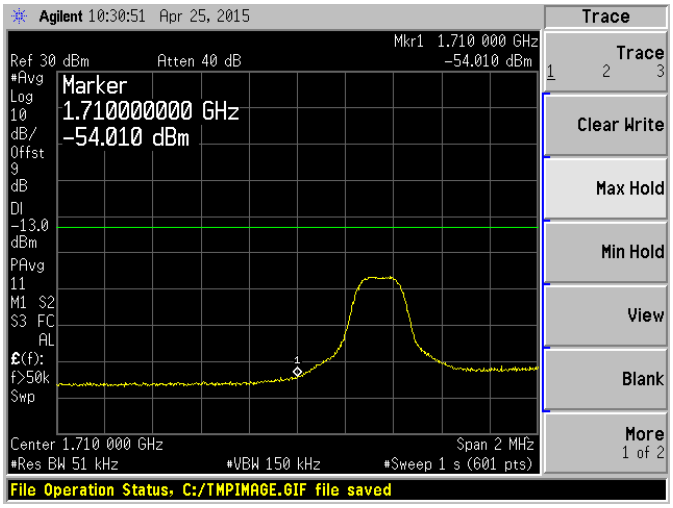
Band 4 QPSK 5 MHz RB1#0 LCH



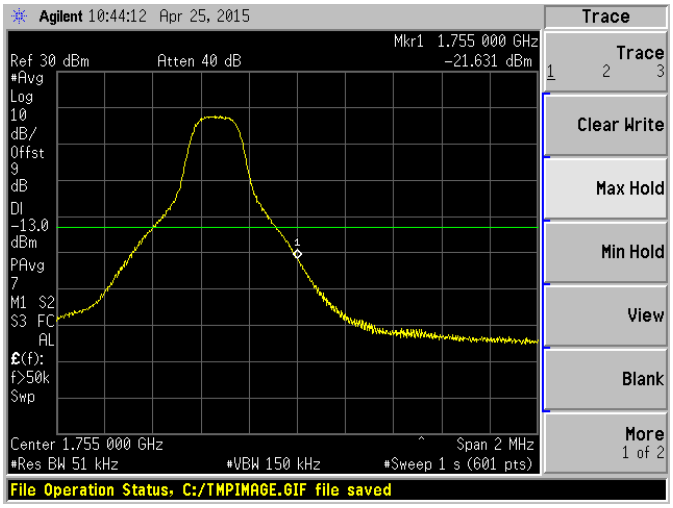
Band 4 QPSK 5 MHz RB1#0 HCH



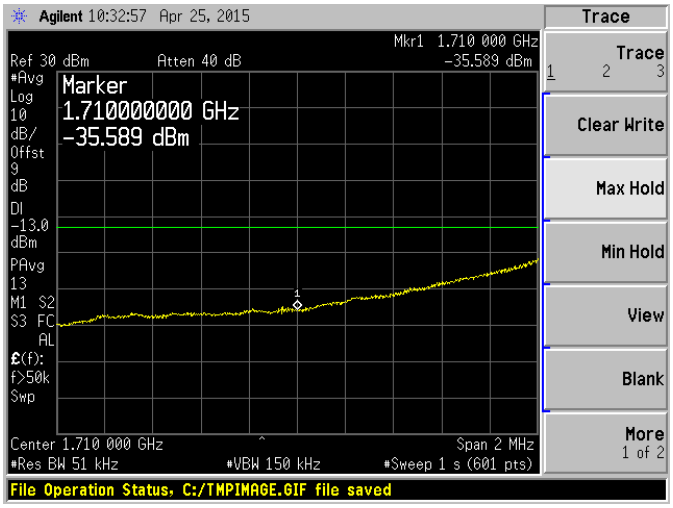
Band 4 QPSK 5 MHz RB1#24 LCH



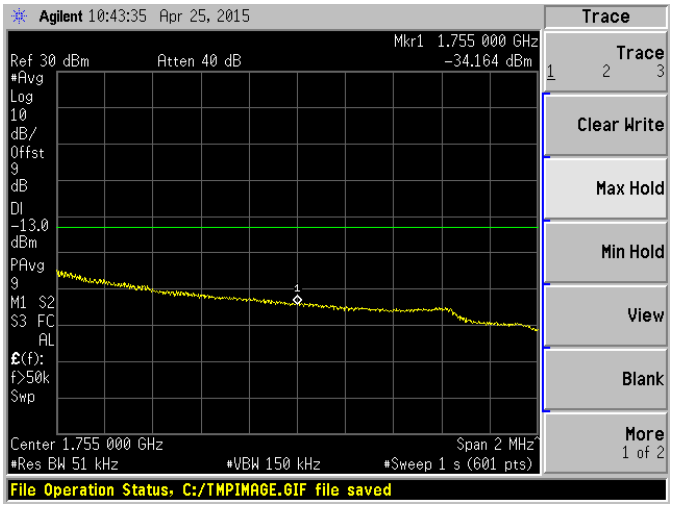
Band 4 QPSK 5 MHz RB1#24 HCH



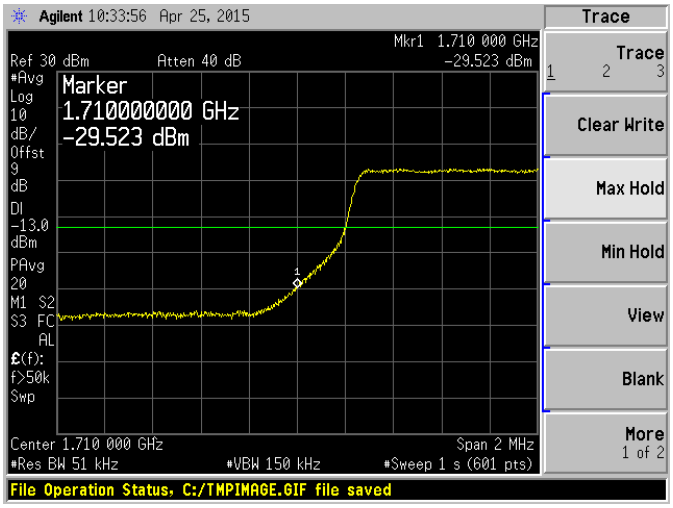
Band 4 QPSK 5 MHz RB12#6 LCH



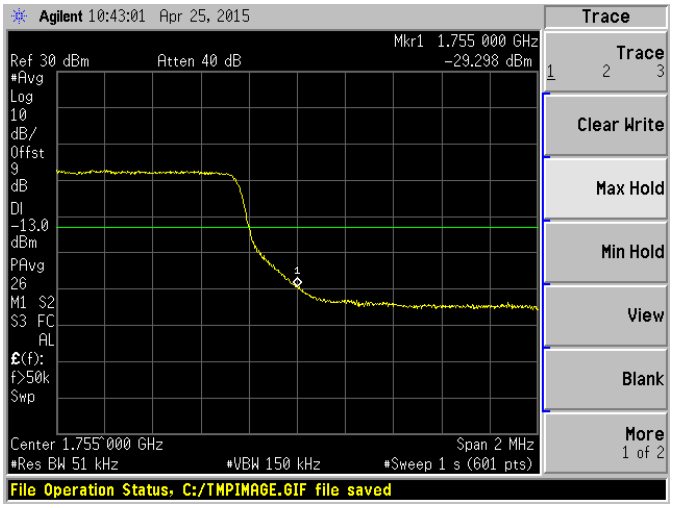
Band 4 QPSK 5 MHz RB12#6 HCH



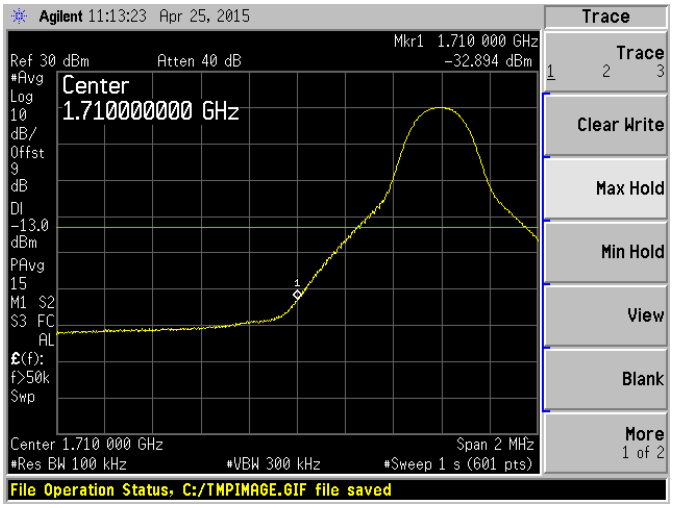
Band 4 QPSK 5 MHz RB25#0 LCH



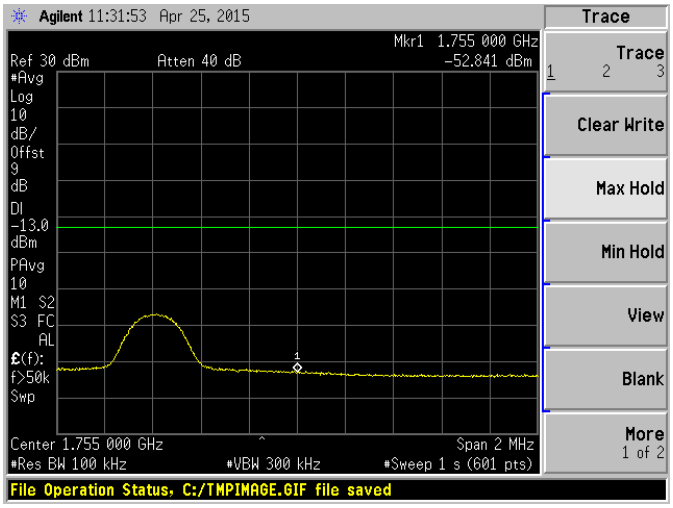
Band 4 QPSK 5 MHz RB25#0 HCH



Band 4 QPSK 10 MHz RB1#0 LCH



Band 4 QPSK 10 MHz RB1#0 HCH



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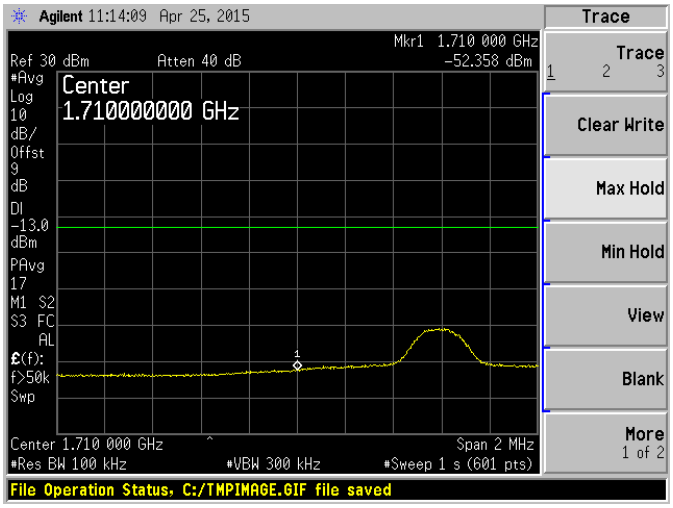
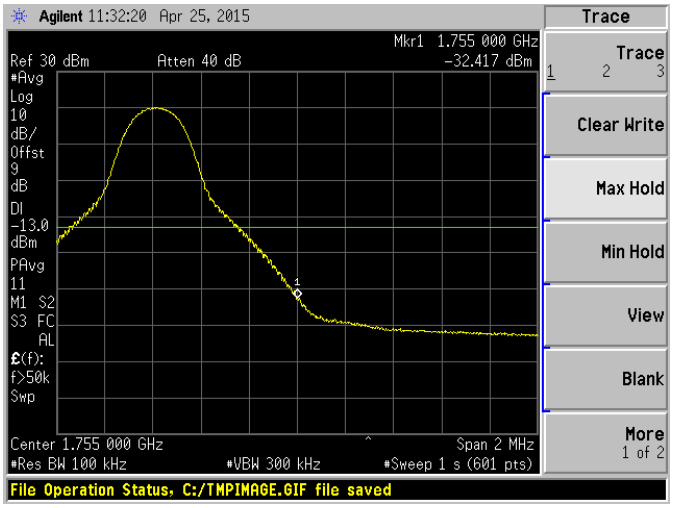


Band 4 QPSK 10 MHz RB1#49 HCH



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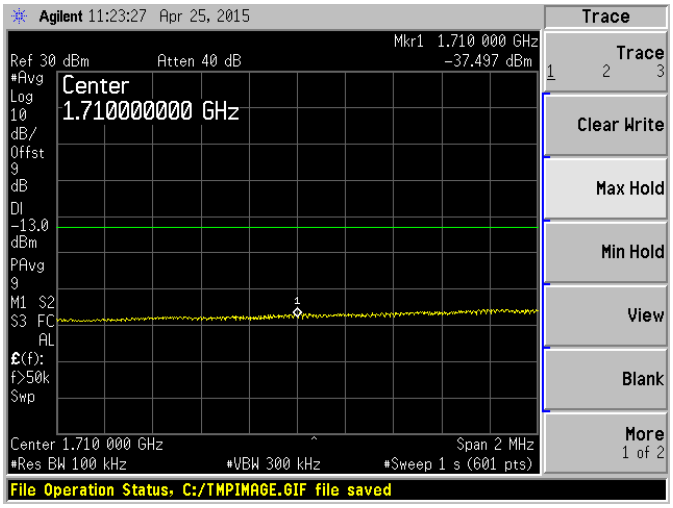
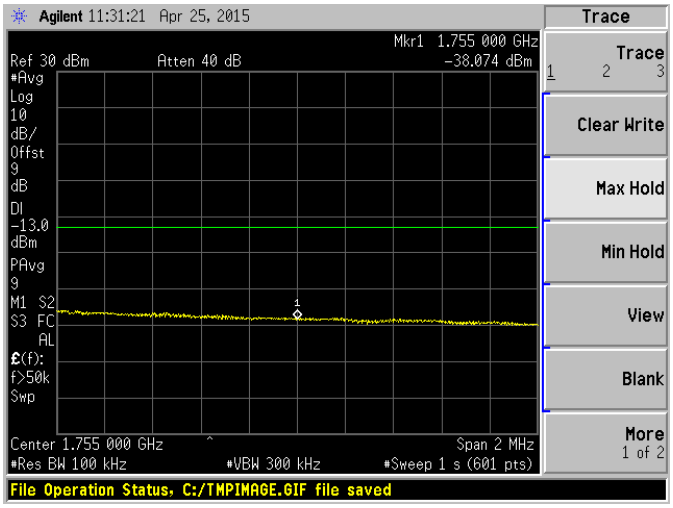
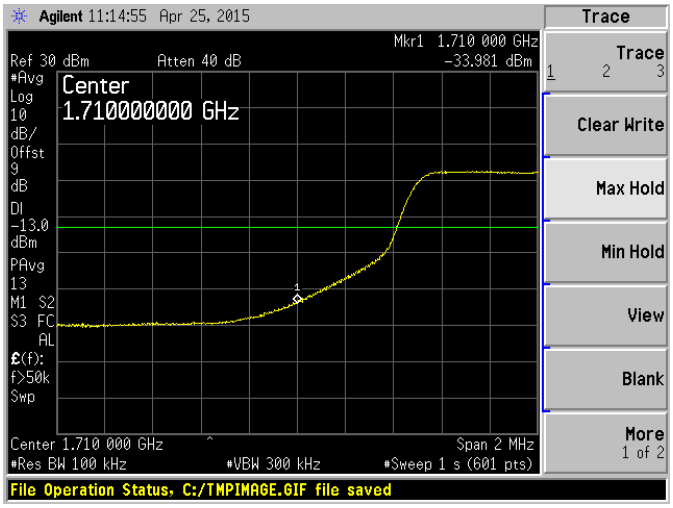


Band 4 QPSK 10 MHz RB25#13 HCH



Band 4 QPSK 10 MHz RB50#0 LCH



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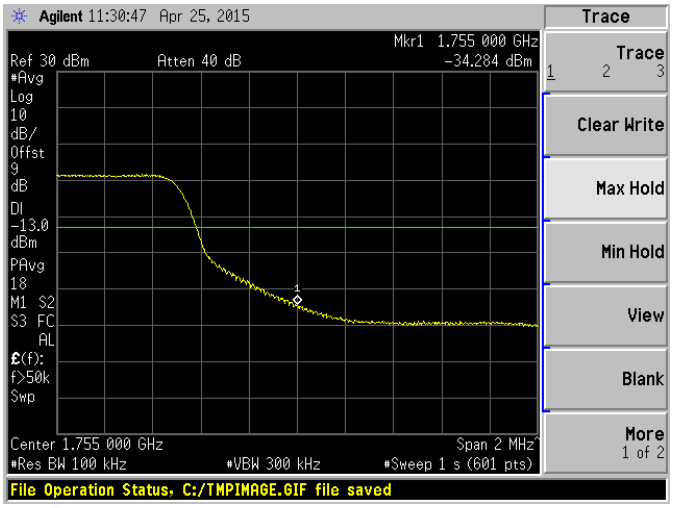
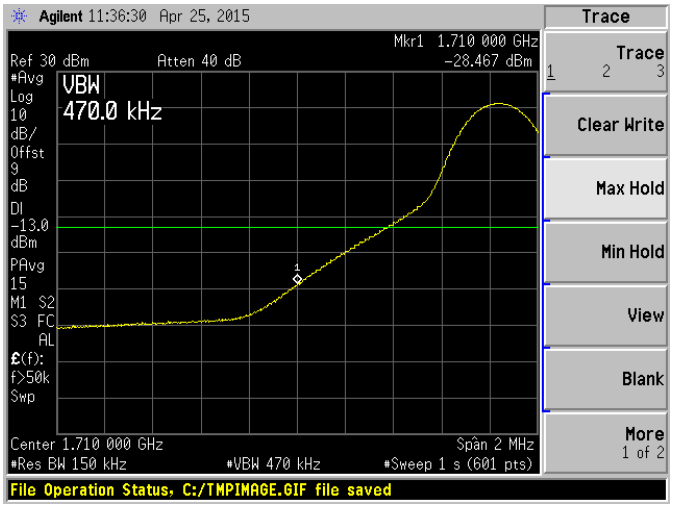


Band 4 QPSK 15 MHz RB1#0 LCH



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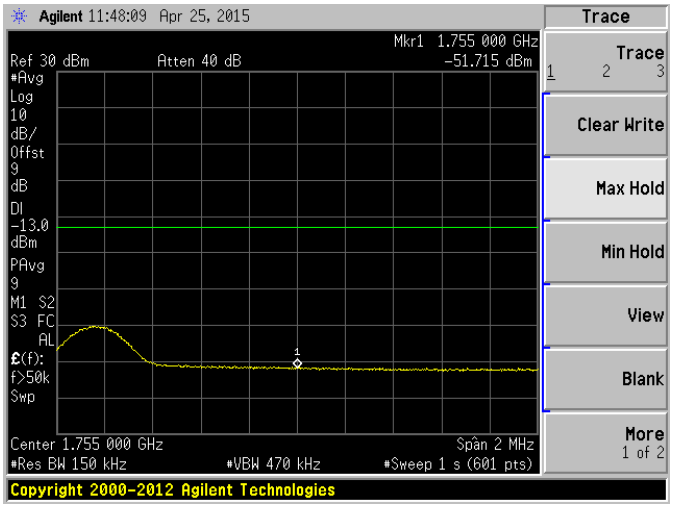

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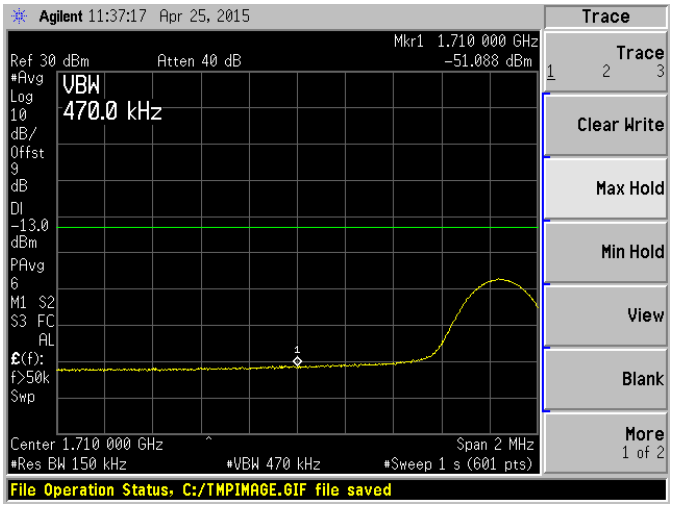
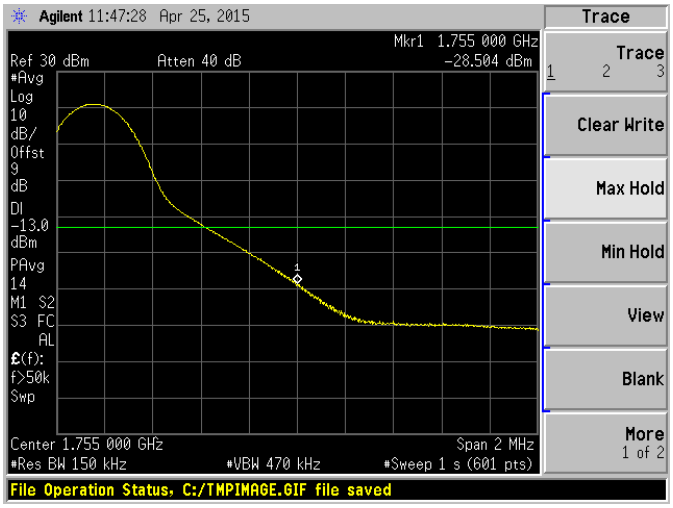
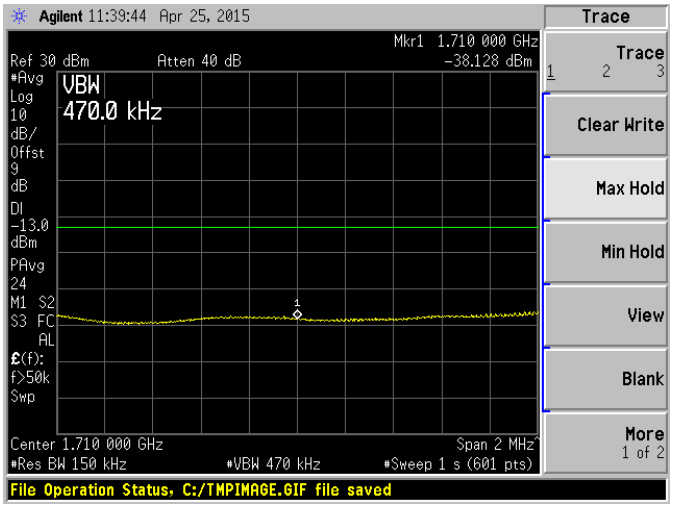


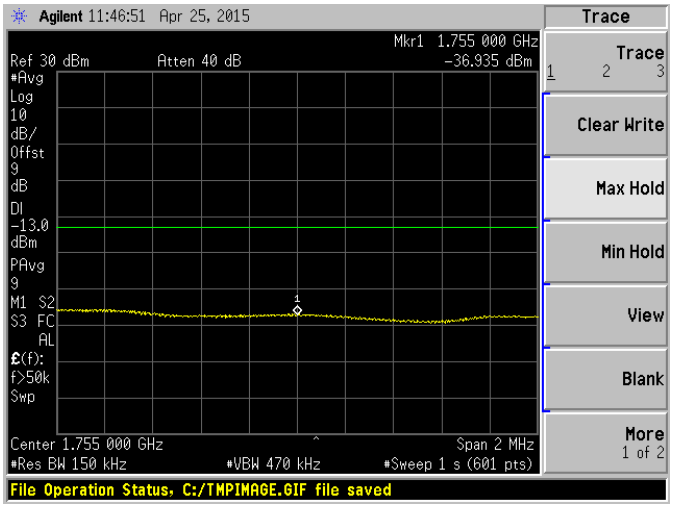
Band 4 QPSK 15 MHz RB1#74 HCH



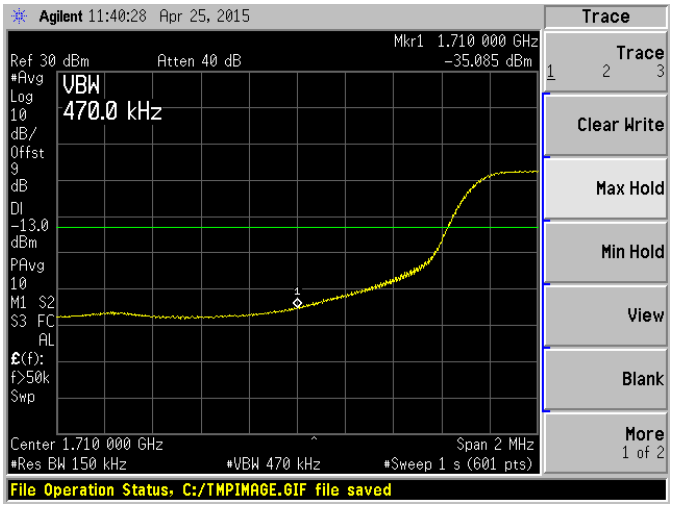
Band 4 QPSK 15 MHz RB36#19 LCH



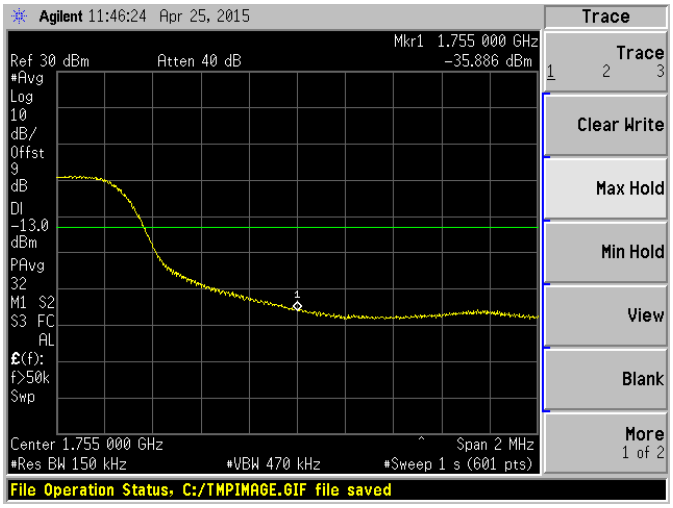
Band 4 QPSK 15 MHz RB36#19 HCH



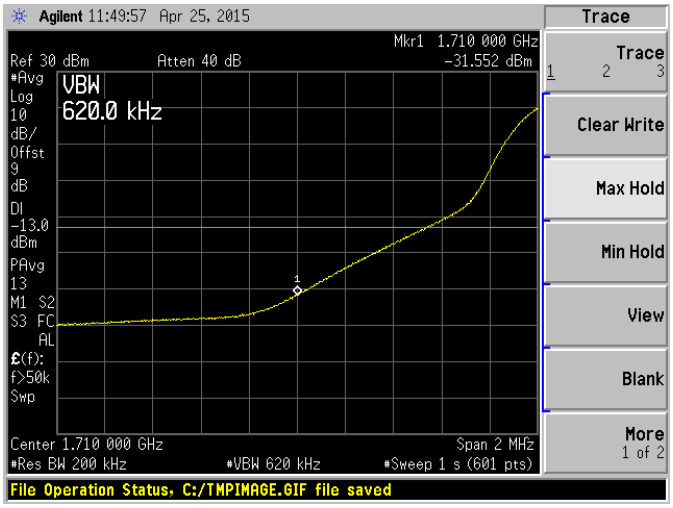
Band 4 QPSK 15 MHz RB75#0 LCH



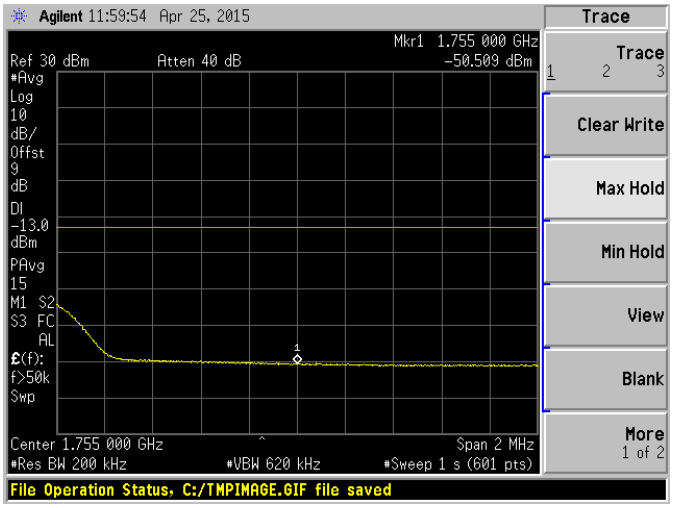
Band 4 QPSK 15 MHz RB75#0 HCH



Band 4 QPSK 20 MHz RB1#0 LCH



Band 4 QPSK 20 MHz RB1#0 HCH



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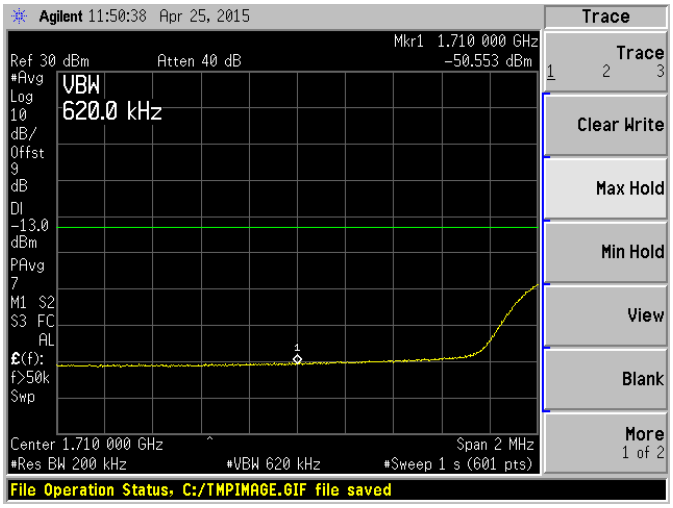

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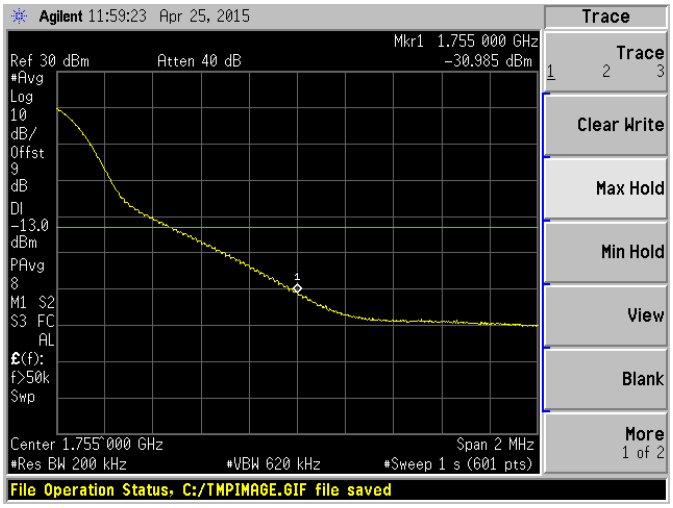

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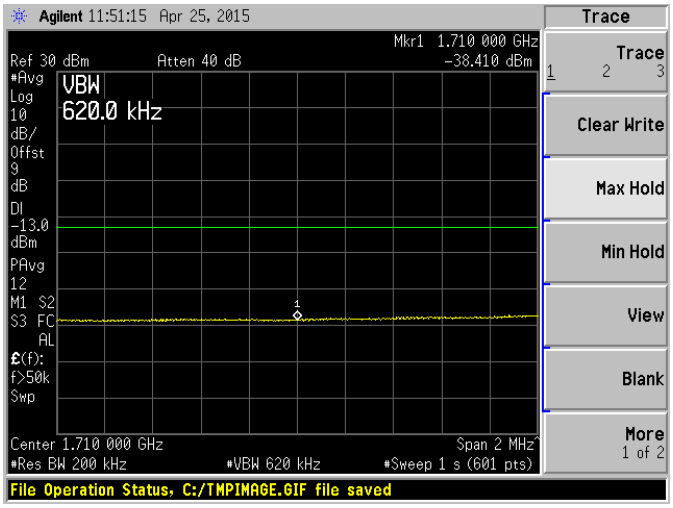

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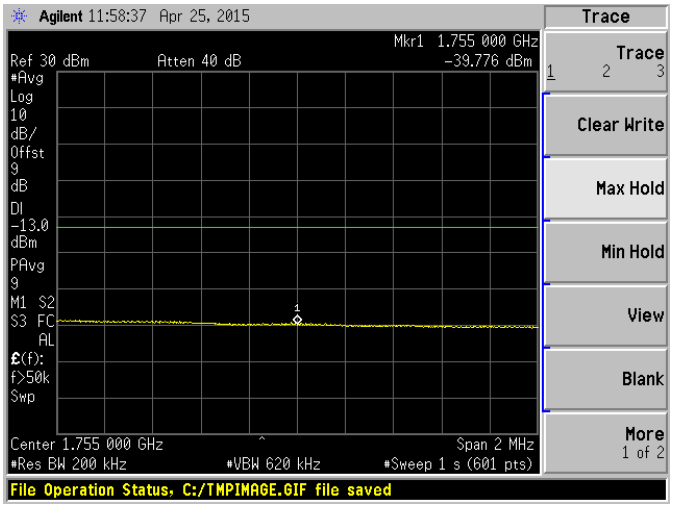

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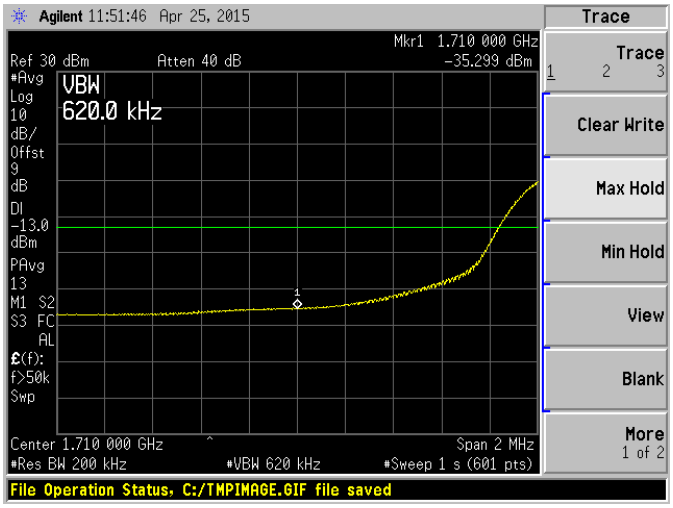

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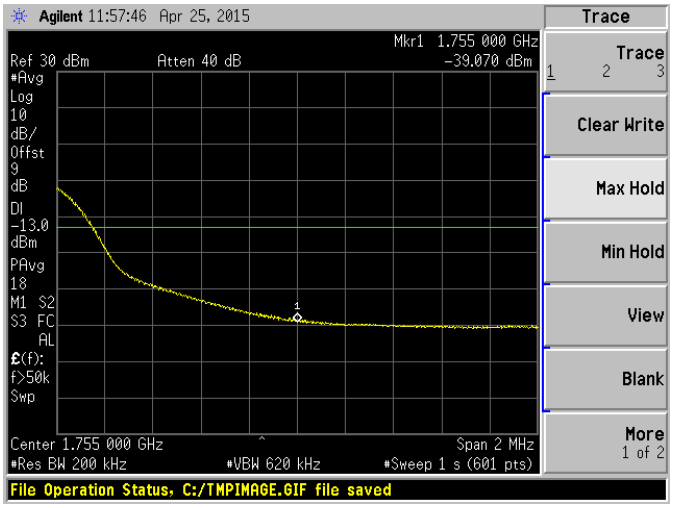
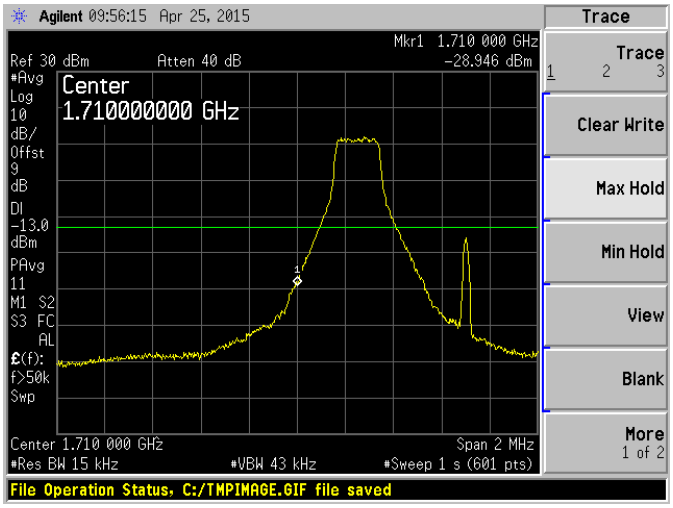
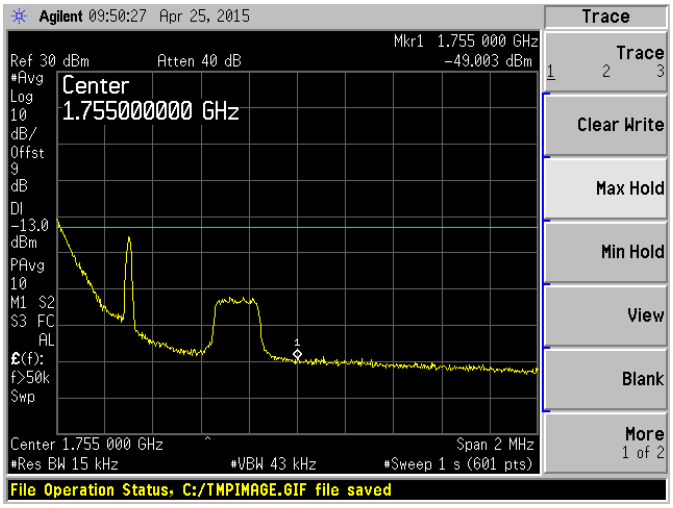


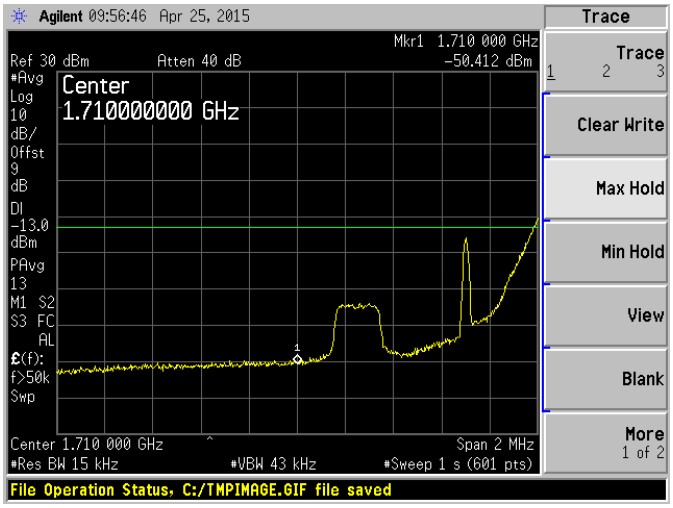
Band 4 16-QAM 1.4 MHz RB1#0 LCH



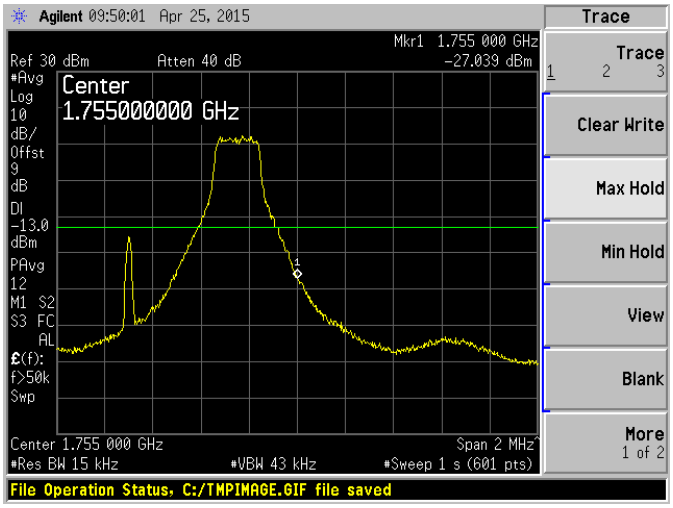
Band 4 16-QAM 1.4 MHz RB1#0 HCH



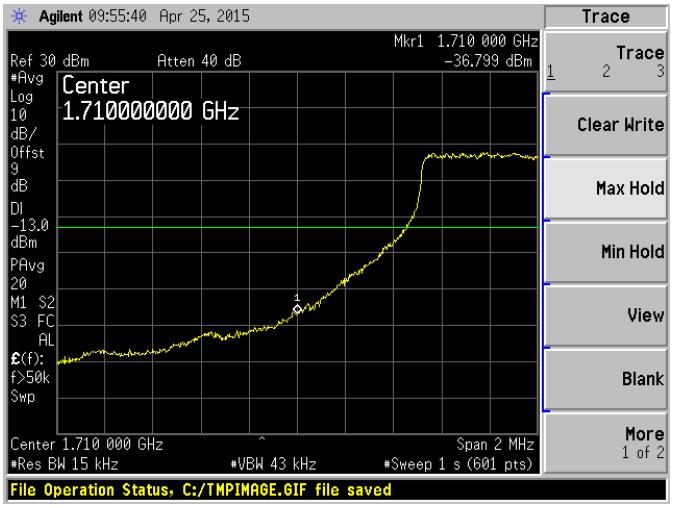
Band 4 16-QAM 1.4 MHz RB1#5 LCH



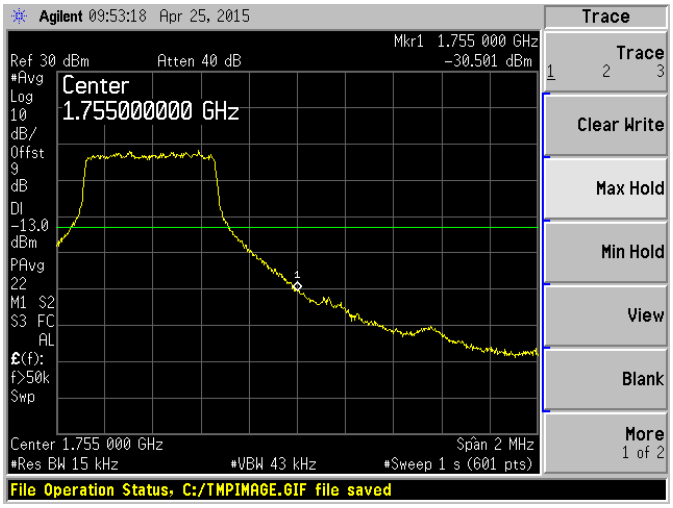
Band 4 16-QAM 1.4 MHz RB1#5 HCH



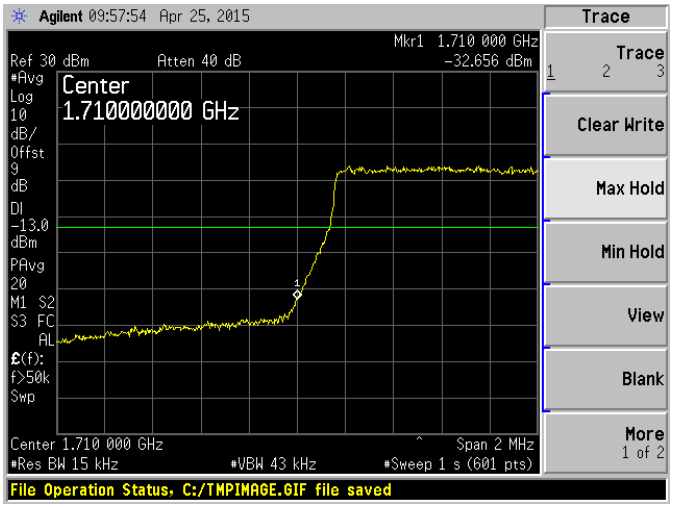
Band 4 16-QAM 1.4 MHz RB3#2 LCH



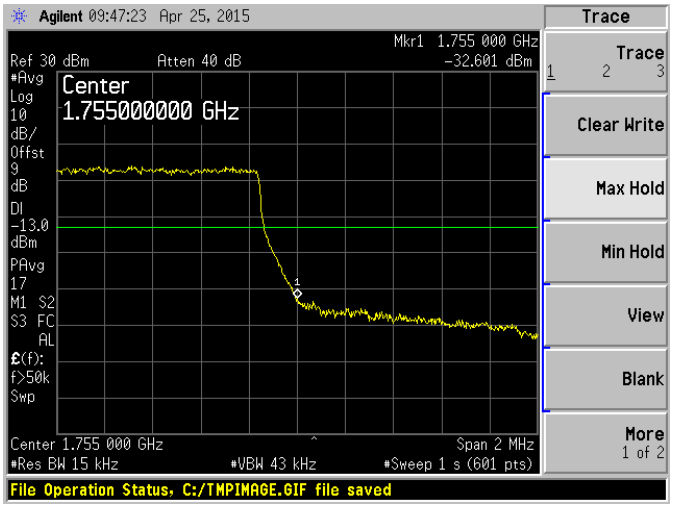
Band 4 16-QAM 1.4 MHz RB3#2 HCH



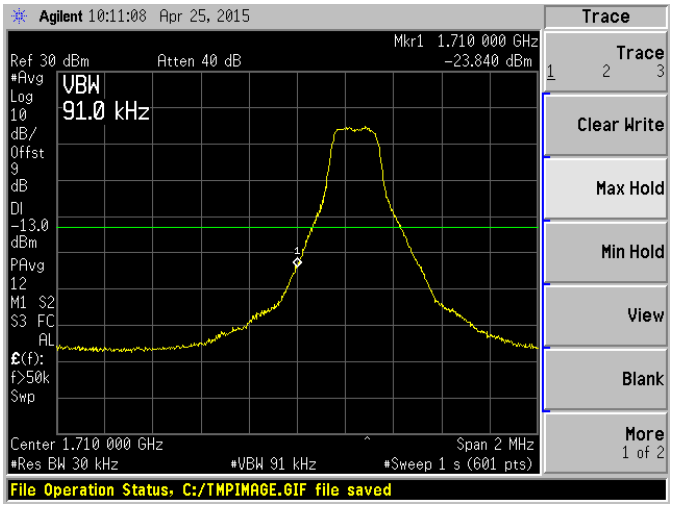
Band 4 16-QAM 1.4 MHz RB6#0 LCH



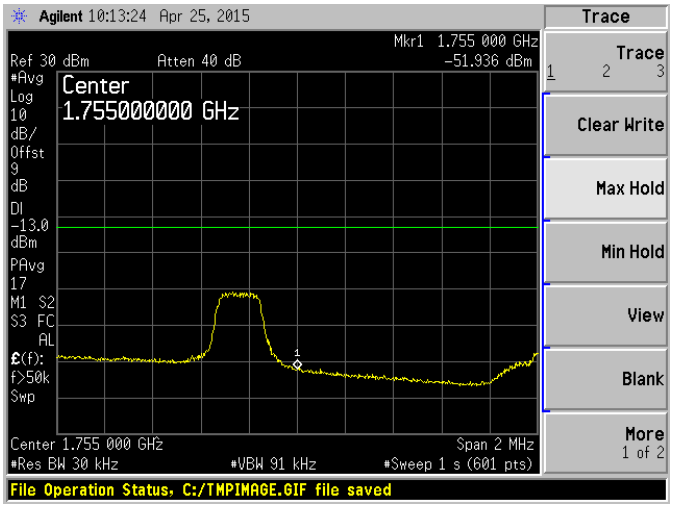
Band 4 16-QAM 1.4 MHz RB6#0 HCH



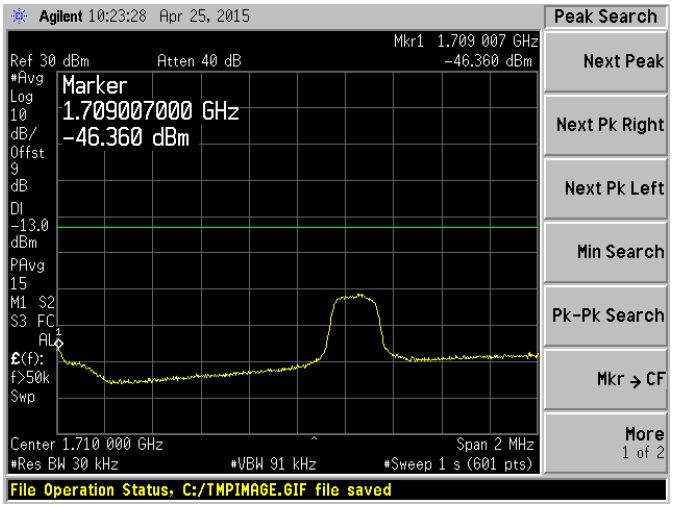
Band 4 16-QAM 3 MHz RB1#0 LCH



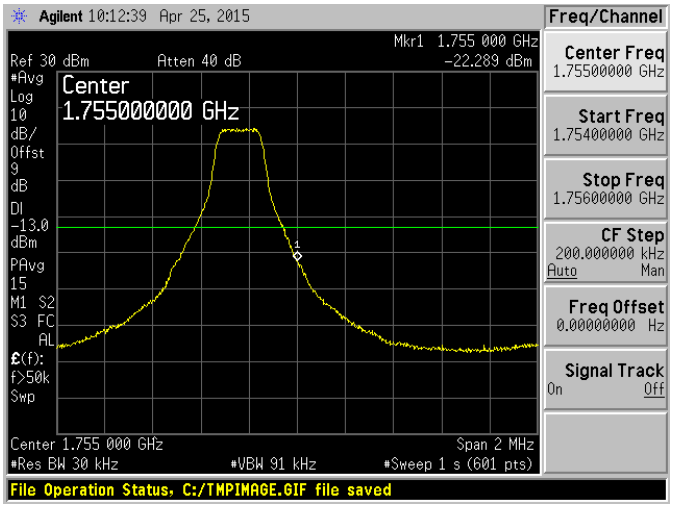
Band 4 16-QAM 3 MHz RB1#0 HCH



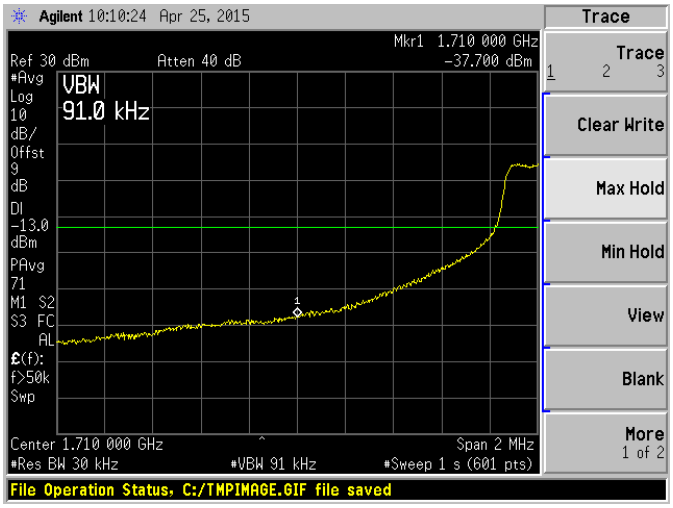
Band 4 16-QAM 3 MHz RB1#14 LCH



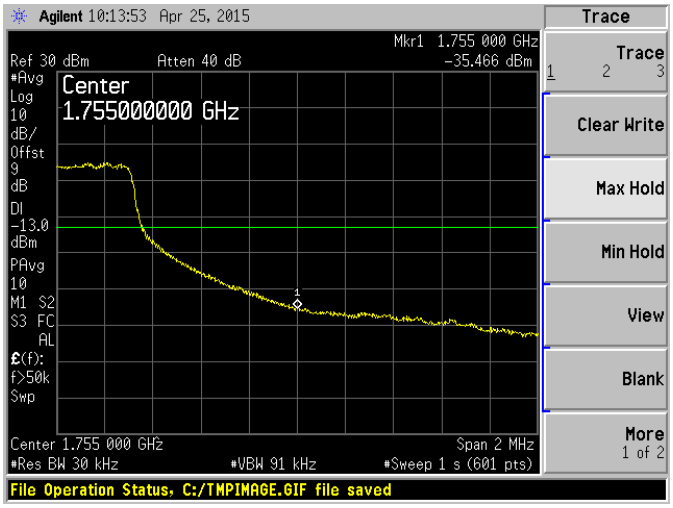
Band 4 16-QAM 3 MHz RB1#4 HCH



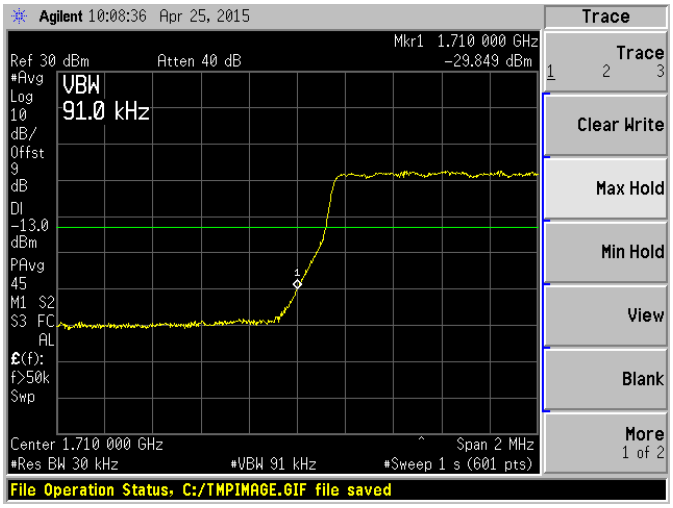
Band 4 16-QAM 3 MHz RB8#4 LCH



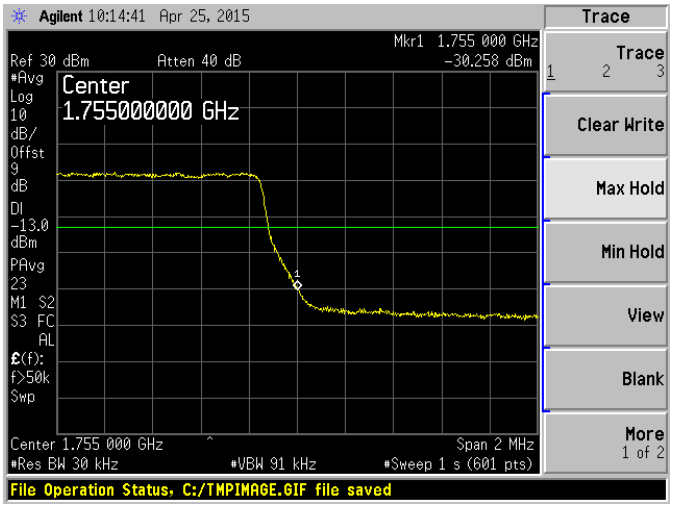
Band 416-QAM 3 MHz RB8#4 HCH



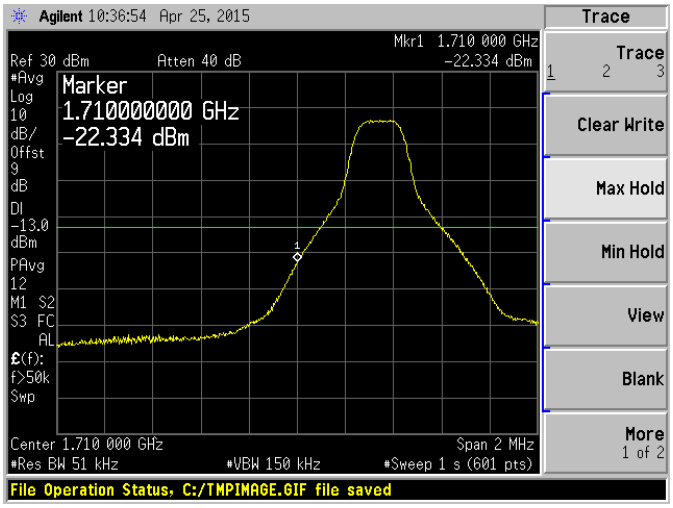
Band 4 16-QAM 3 MHz RB15#0 LCH



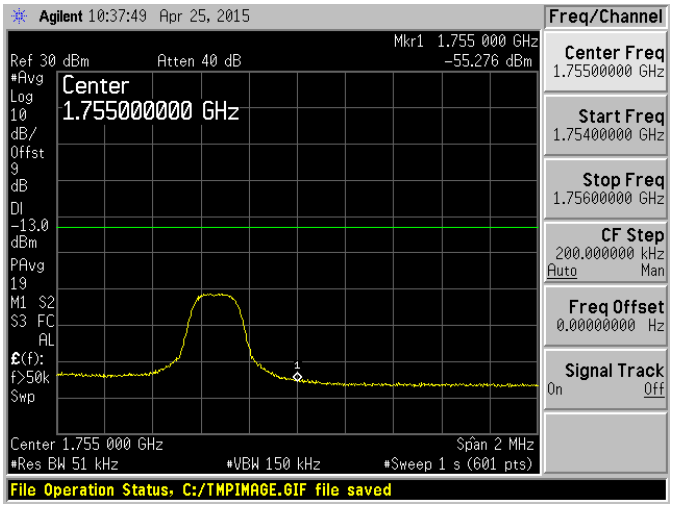
Band 4 16-QAM 3 MHz RB15#0 HCH



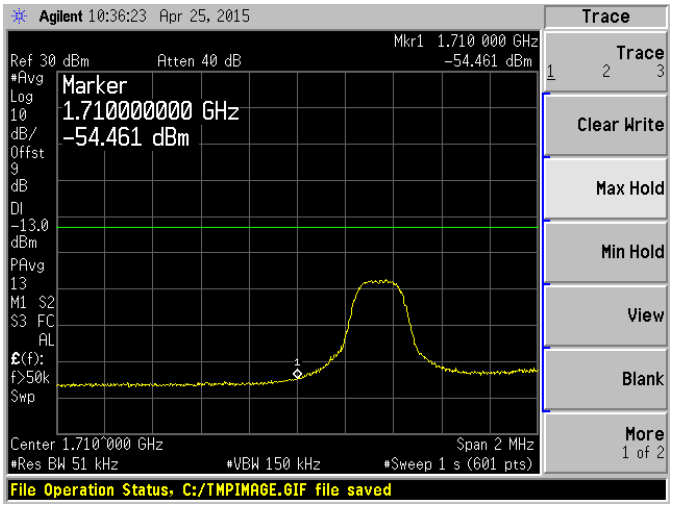
Band 4 16-QAM 5 MHz RB1#0 LCH



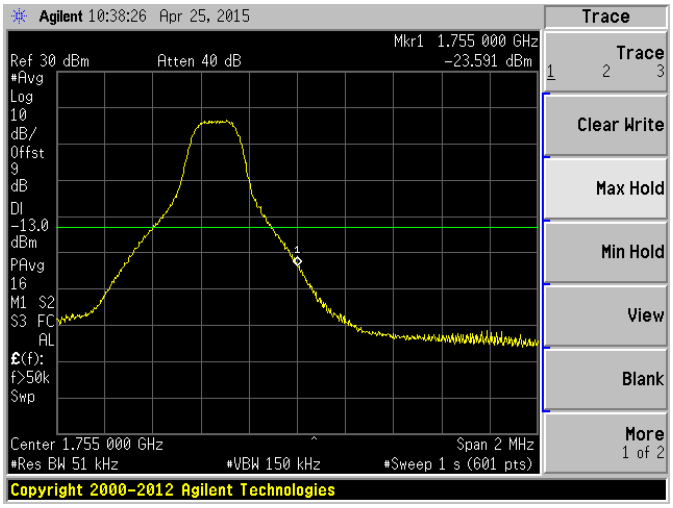
Band 4 16-QAM 5 MHz RB1#0 HCH



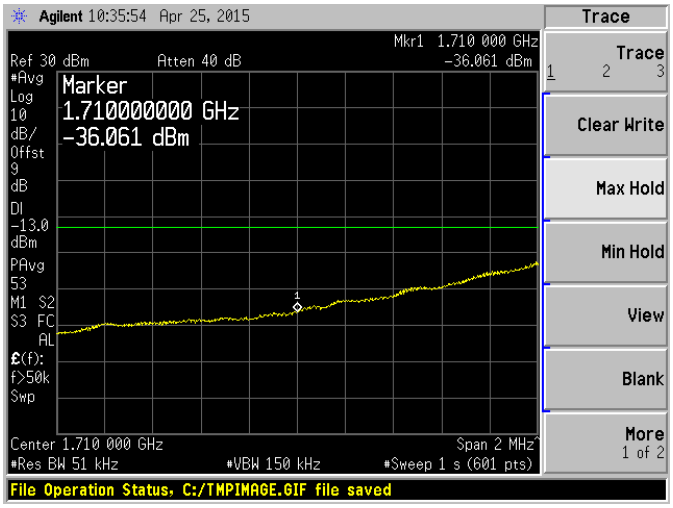
Band 4 16-QAM 5 MHz RB1#24 LCH



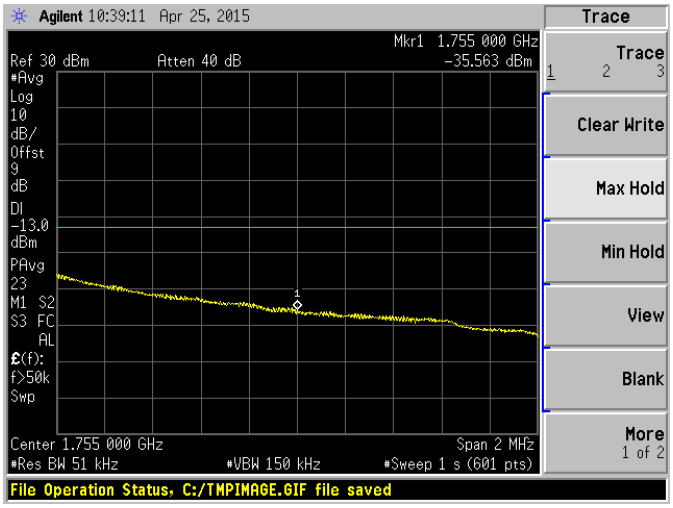
Band 4 16-QAM 5 MHz RB1#24 HCH



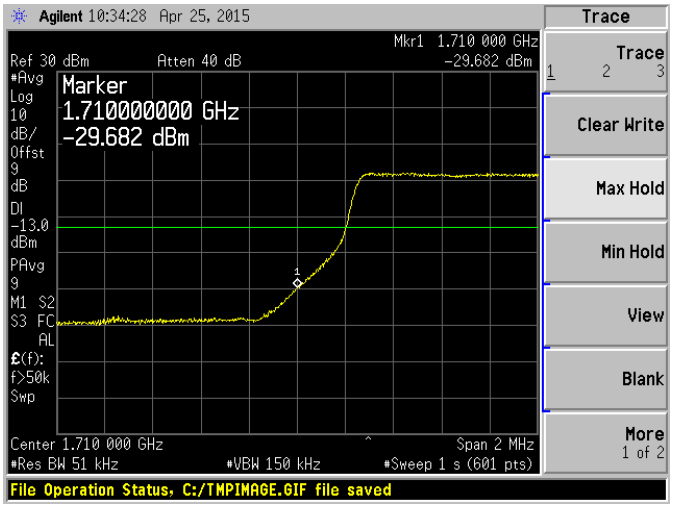
Band 4 16-QAM 5 MHz RB12#6 LCH



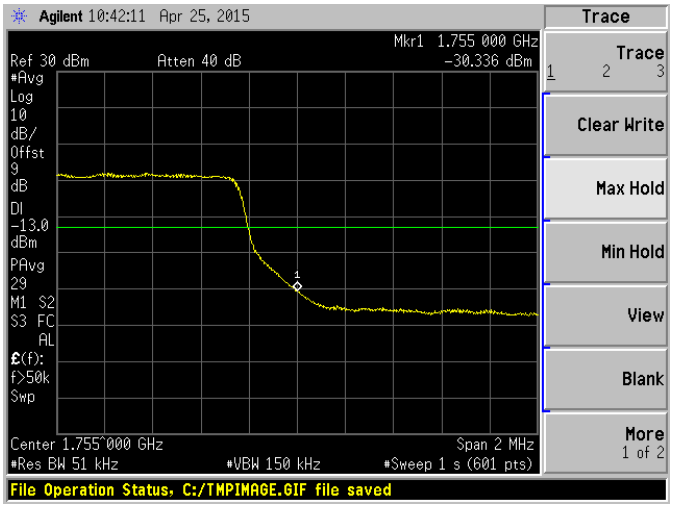
Band 4 16-QAM 5 MHz RB12#6 HCH



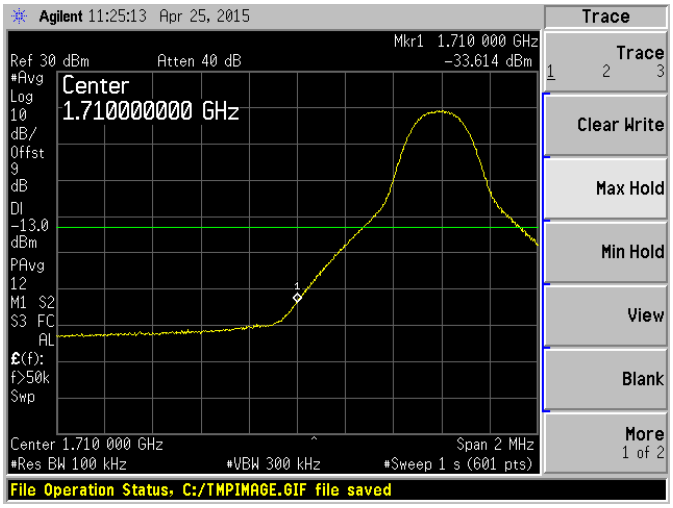
Band 4 16-QAM 5 MHz RB25#0 LCH



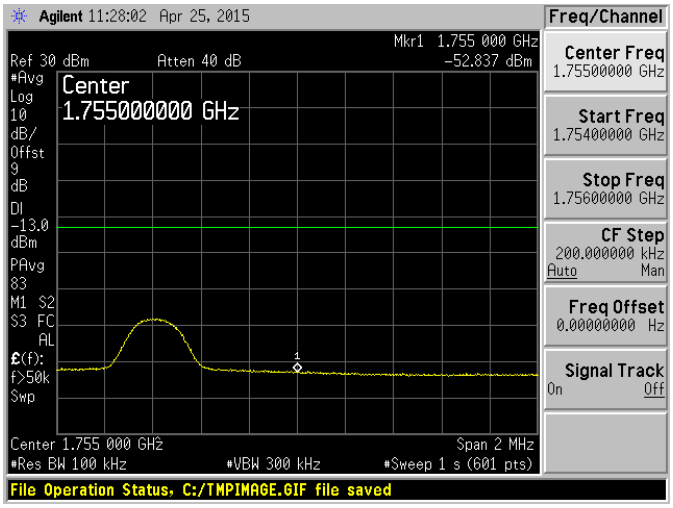
Band 4 16-QAM 5 MHz RB25#0 HCH



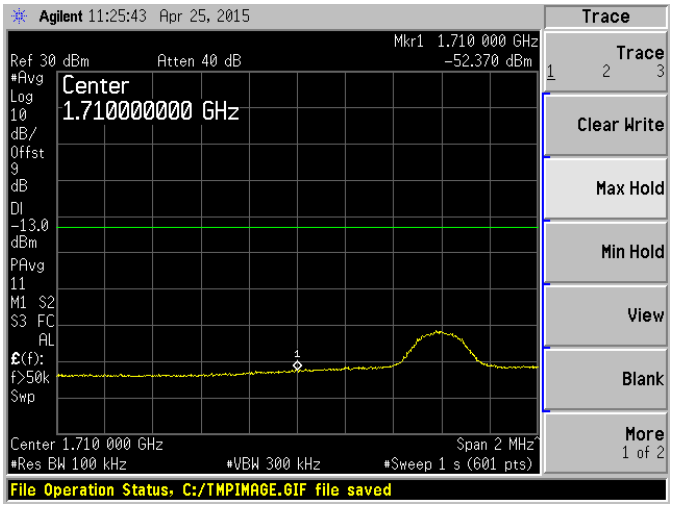
Band 4 16-QAM 10 MHz RB1#0 LCH



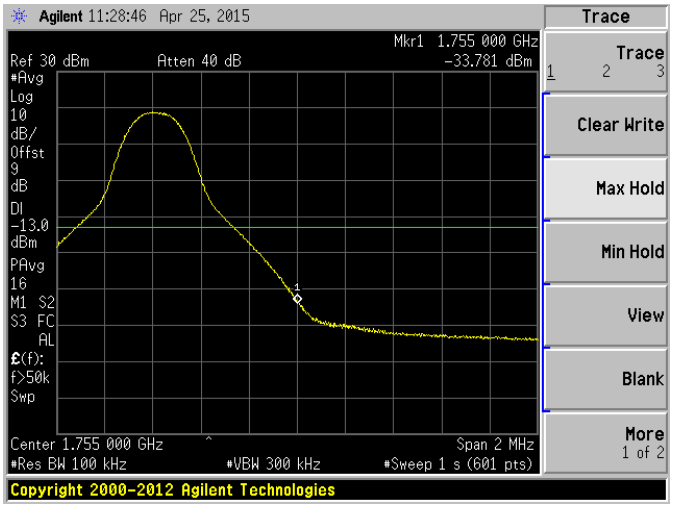
Band 4 16-QAM 10 MHz RB1#0 HCH



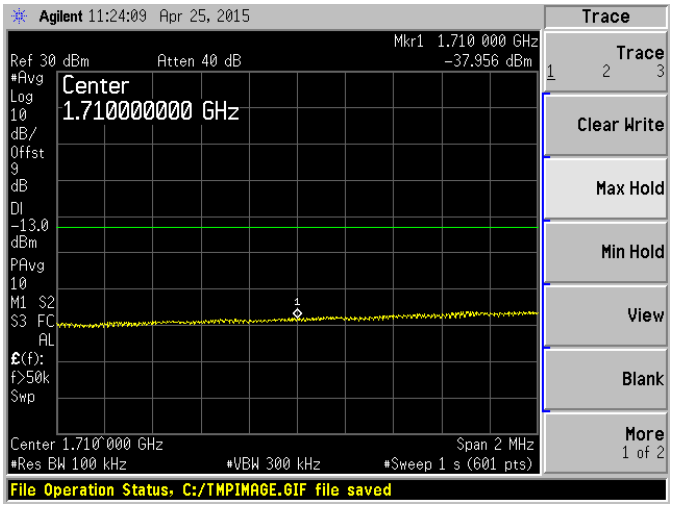
Band 4 16-QAM 10 MHz RB1#49 LCH



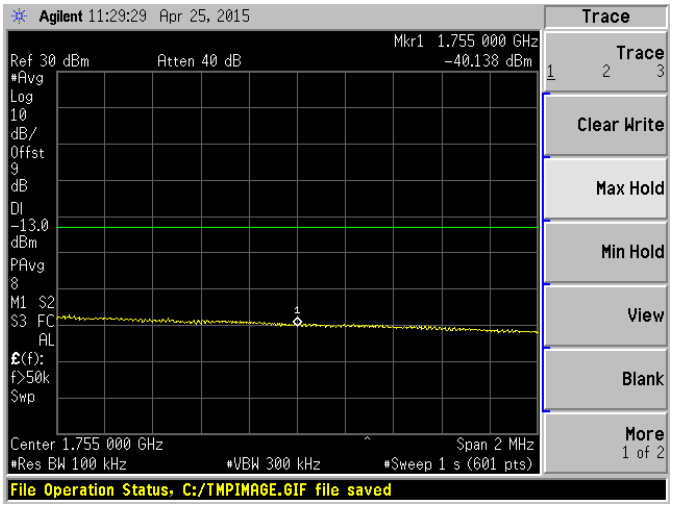
Band 4 16-QAM 10 MHz RB1#49 HCH



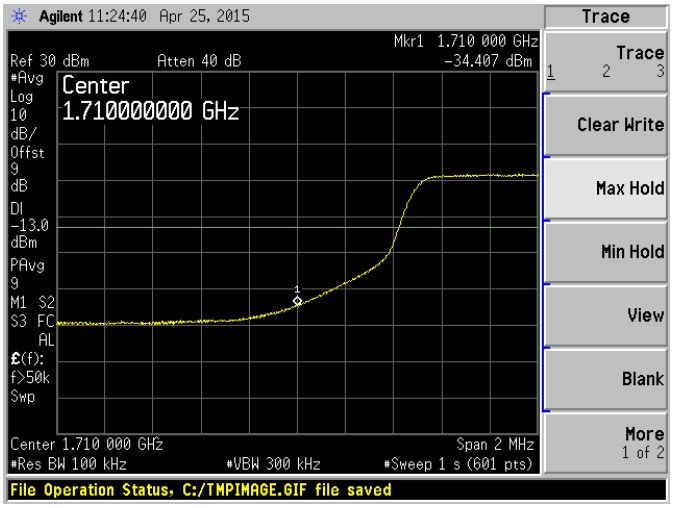
Band 4 16-QAM 10 MHz RB25#13 LCH



Band 4 16-QAM 10 MHz RB25#13 HCH



Band 4 16-QAM 10 MHz RB50#0 LCH



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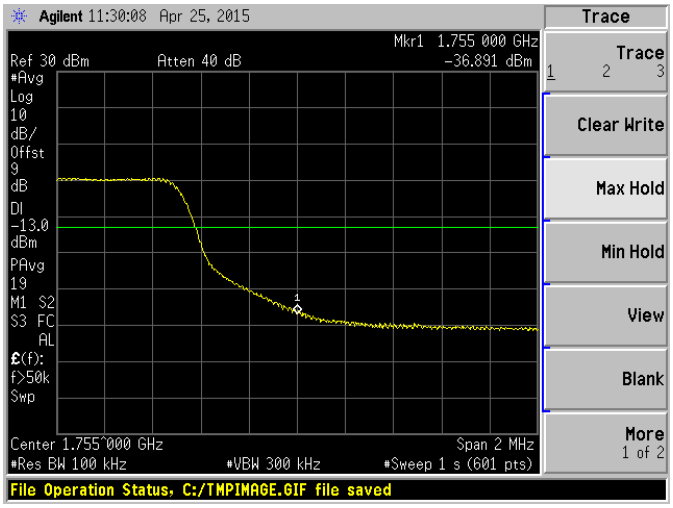
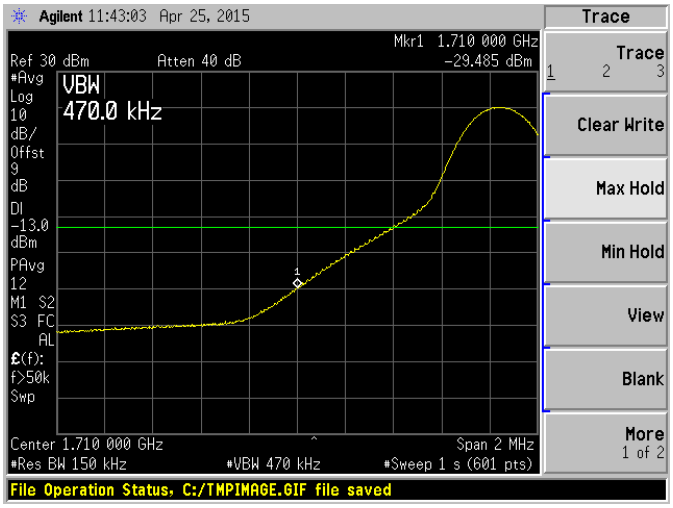
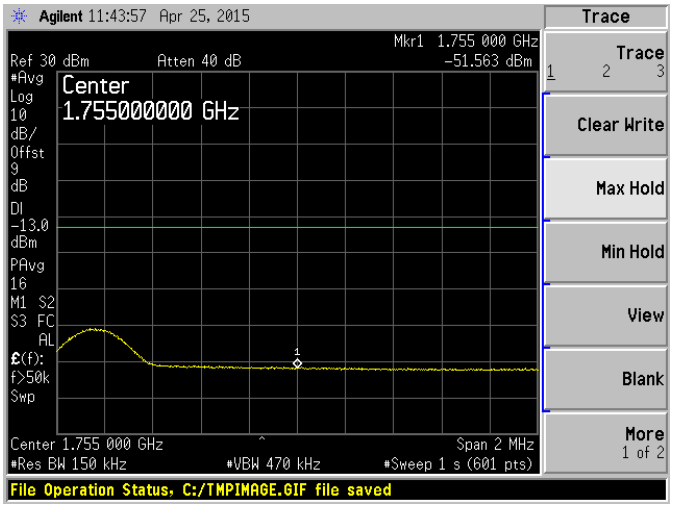


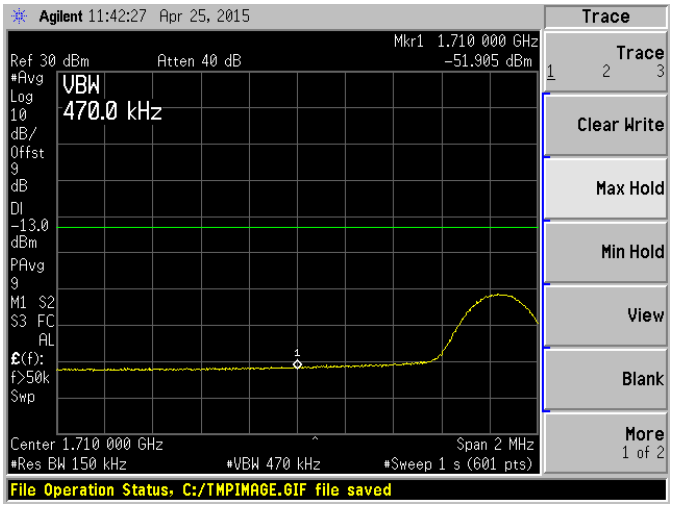
Band 4 16-QAM 15 MHz RB1#0 LCH



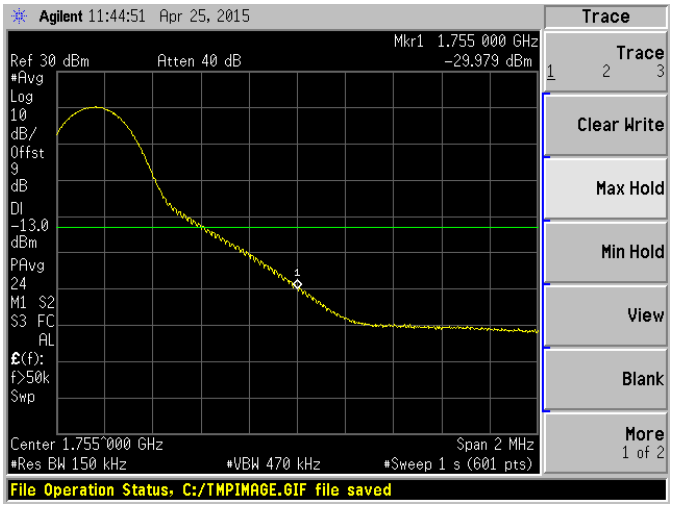
Band 4 16-QAM 15 MHz RB1#0 HCH



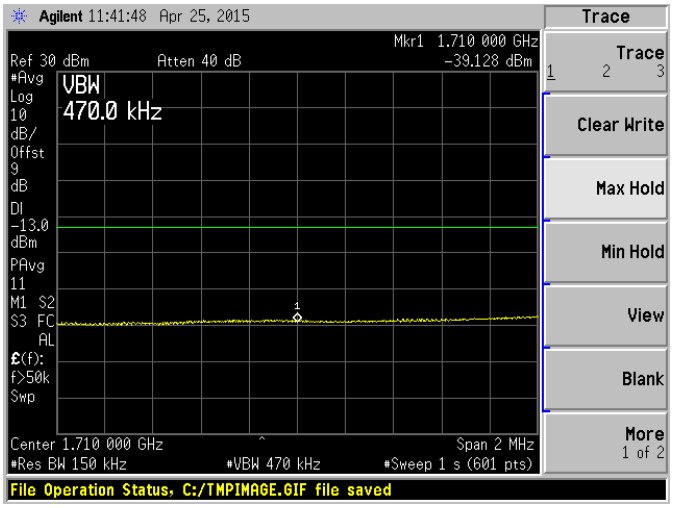
Band 4 16-QAM 15 MHz RB1#74 LCH



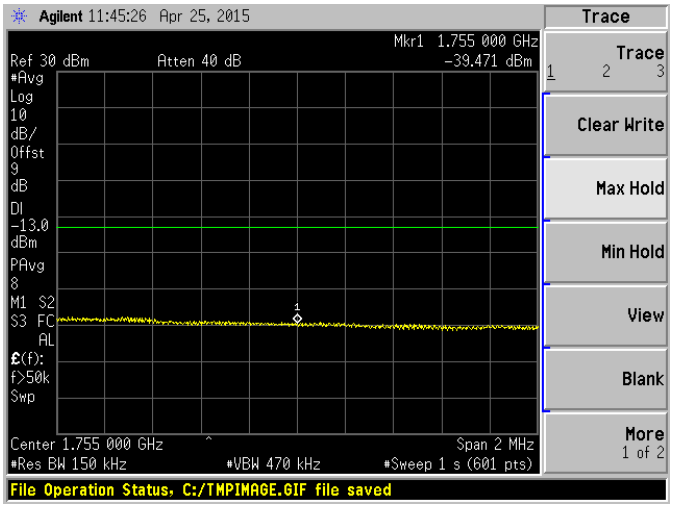
Band 4 16-QAM 15 MHz RB1#74 HCH



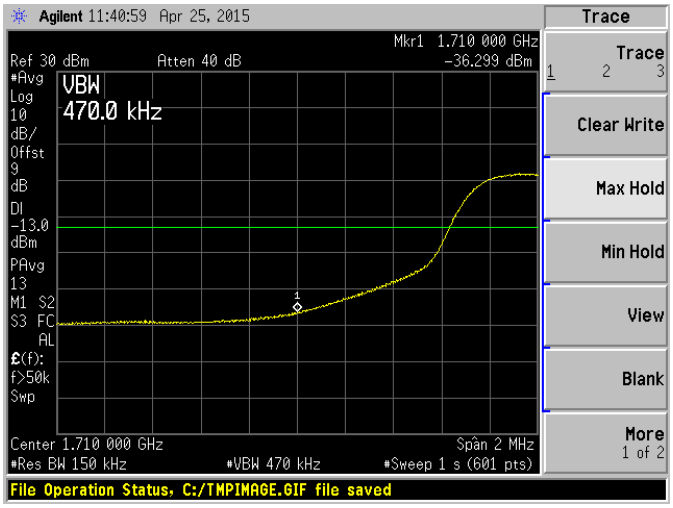
Band 4 16-QAM 15 MHz RB36#19 LCH



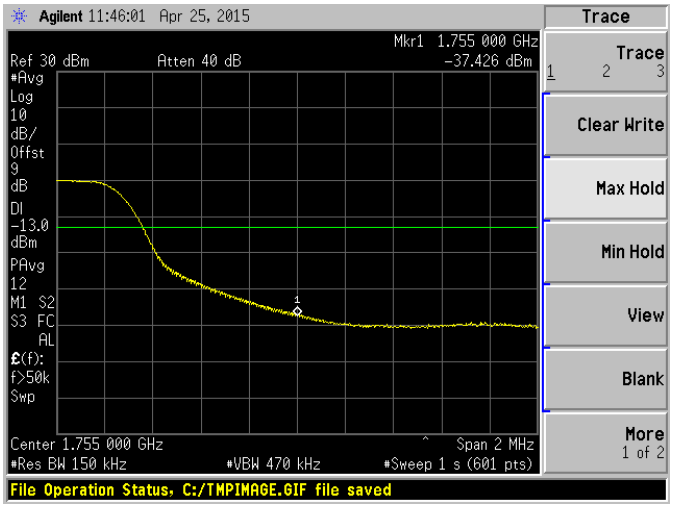
Band 4 16-QAM 15 MHz RB36#19 HCH



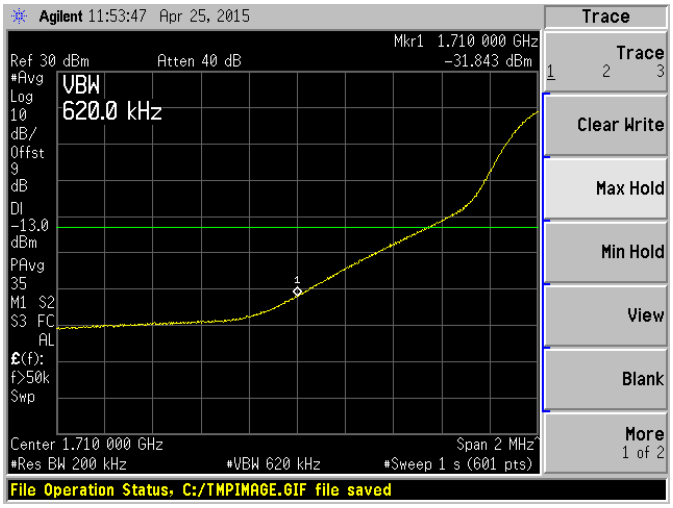
Band 4 16-QAM 15 MHz RB75#0 LCH



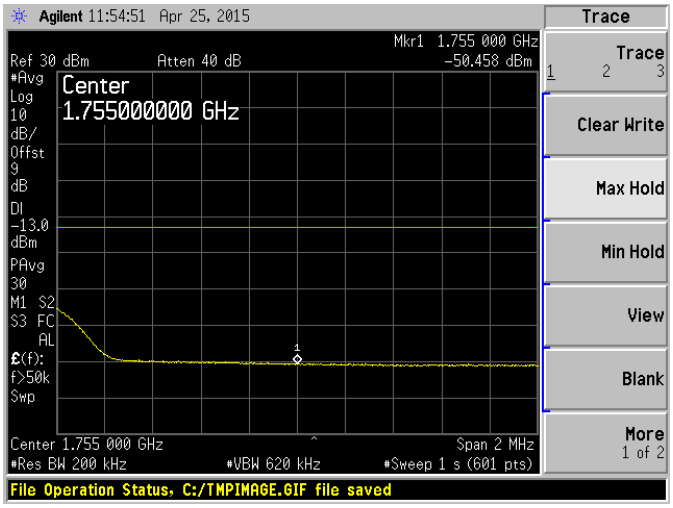
Band 4 16-QAM 15 MHz RB75#0 HCH



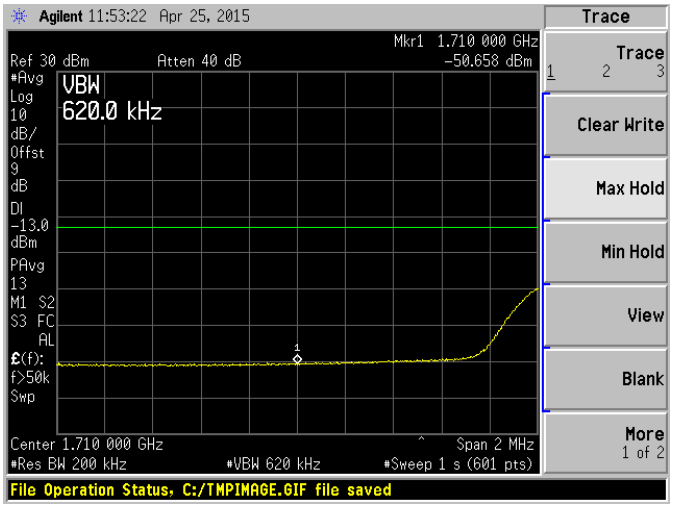
Band 4 16-QAM 20 MHz RB1#0 LCH



Band 4 16-QAM 20 MHz RB1#0 HCH

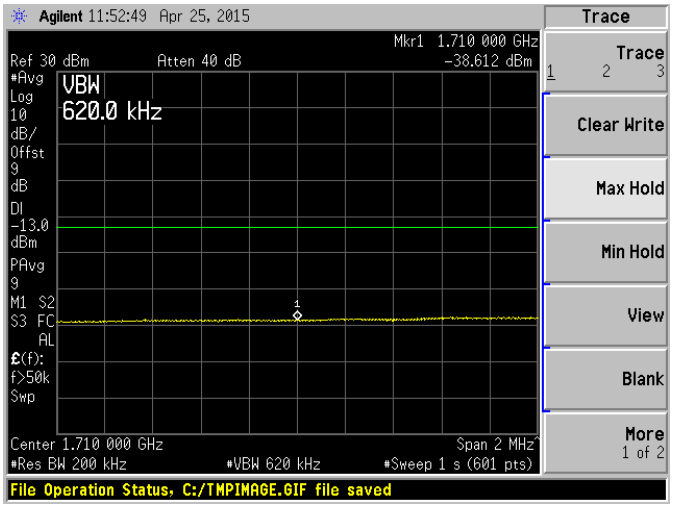


Band 4 16-QAM 20 MHz RB1#99 LCH

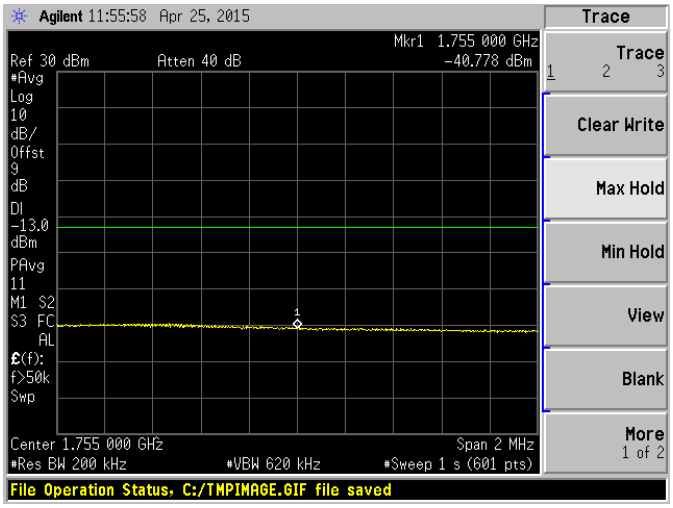


Band 4 16-QAM 20 MHz RB1#99 HCH

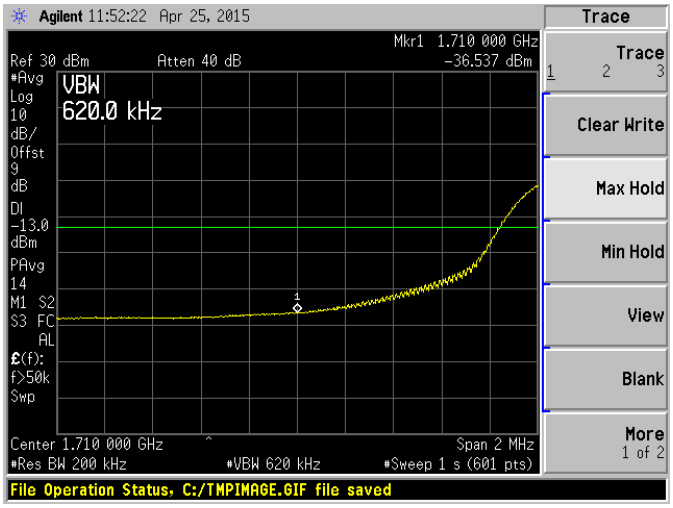
Band 4 16-QAM 20 MHz RB50#25 LCH



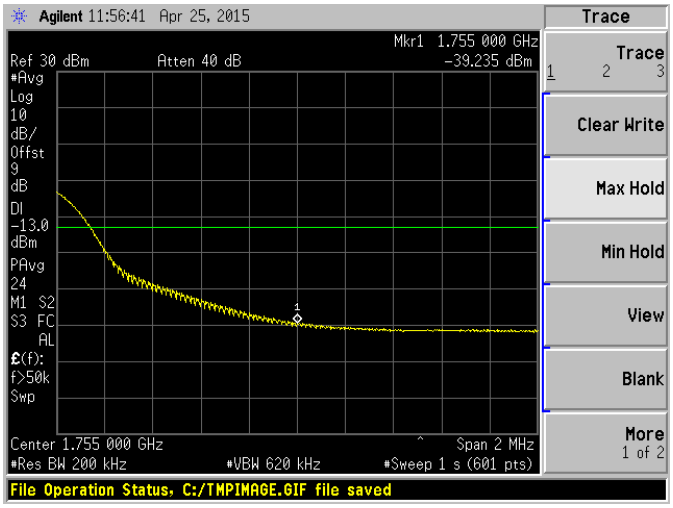
Band 4 16-QAM 20 MHz RB50#25 HCH



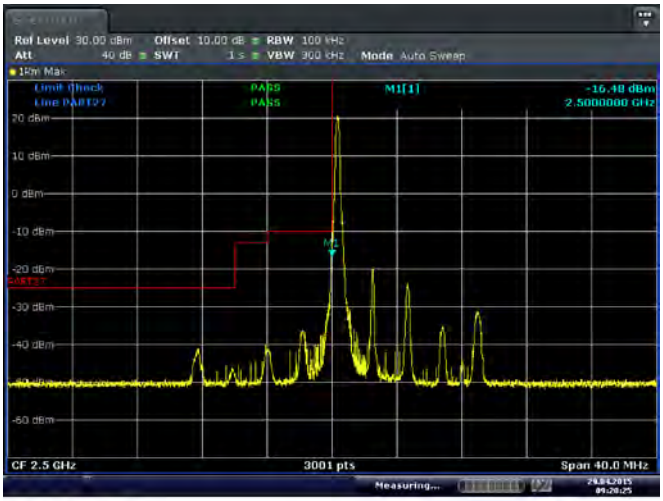
Band 4 16-QAM 20 MHz RB100#0 LCH



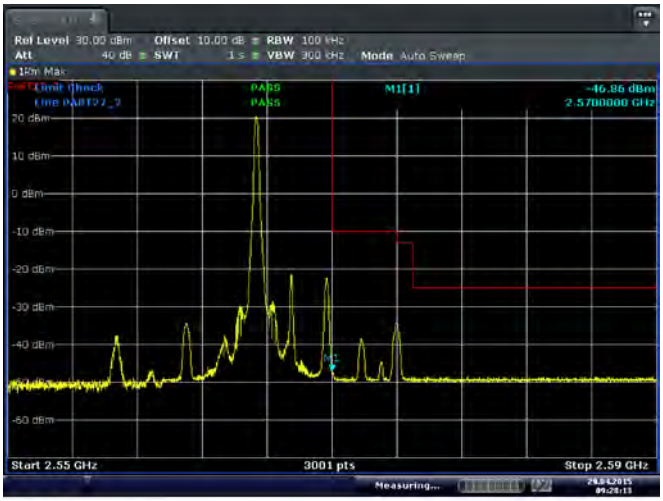
Band 4 16-QAM 20 MHz RB100#0 HCH



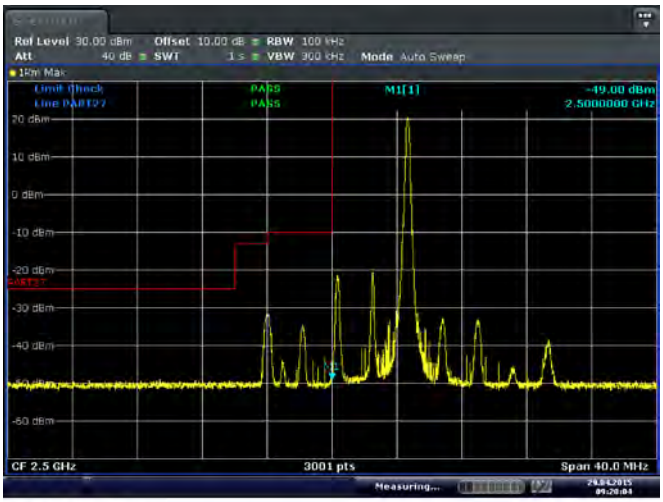
Band 7 QPSK 5 MHz RB1#0 LCH



Band 7 QPSK 5 MHz RB1#0 HCH



Band 7 QPSK 5 MHz RB1#24 LCH



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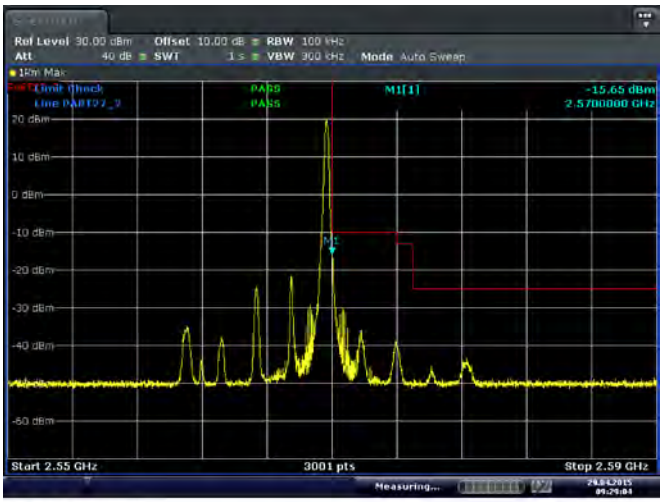
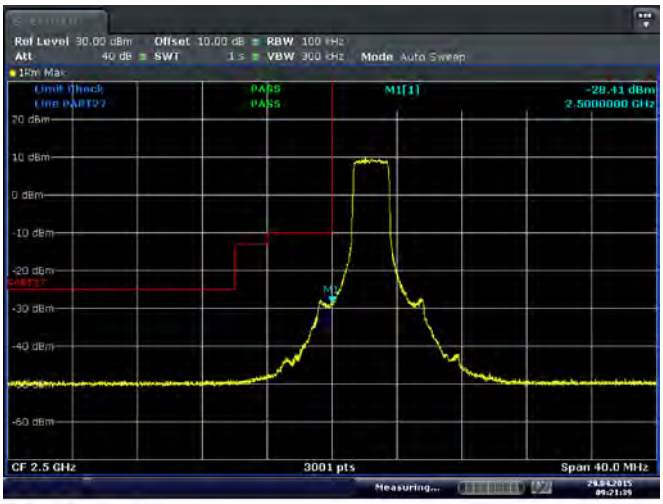
Band 7 QPSK 5 MHz RB1#24 HCH



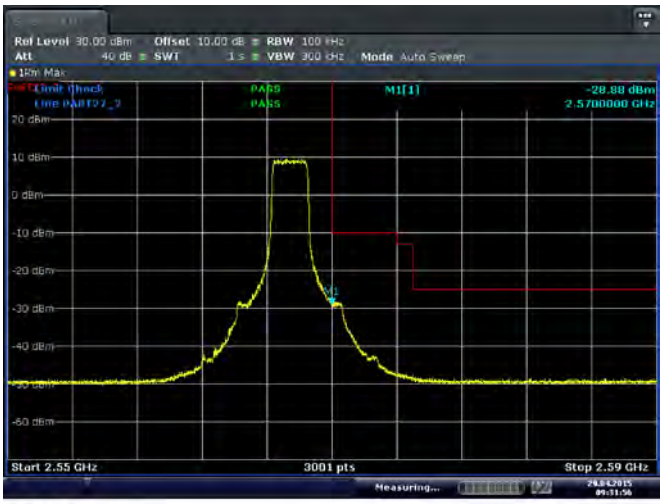
Date: 29.APR.2015 09:29:03

Band 7 QPSK 5 MHz RB12#6 LCH



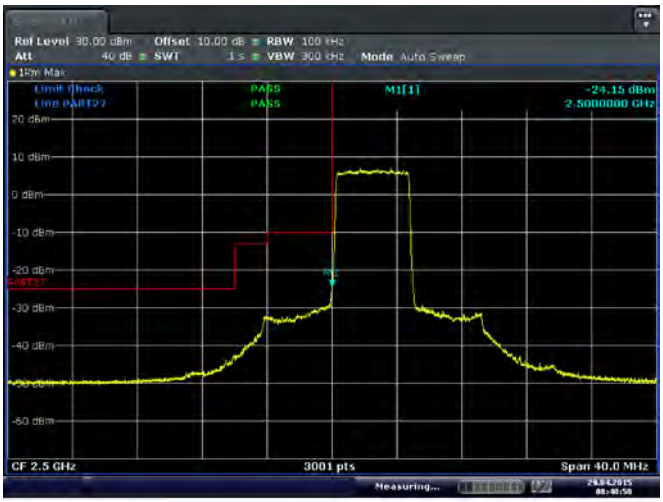
Date: 29.APR.2015 09:21:39

Band 7 QPSK 5 MHz RB12#6 HCH



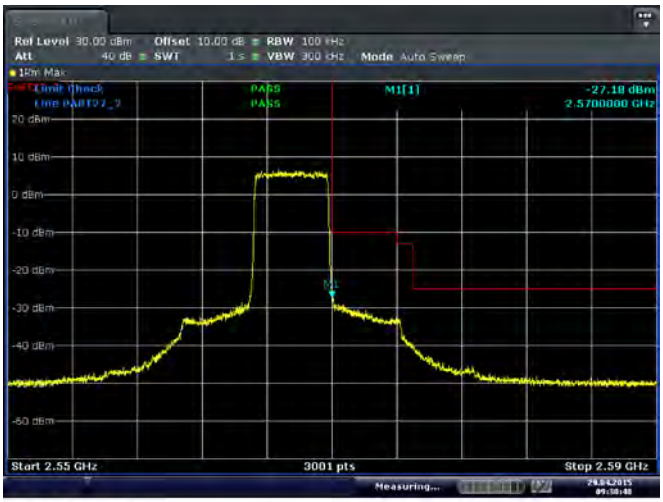
Date: 29.APR.2015 09:31:56

Band 7 QPSK 5 MHz RB25#0 LCH



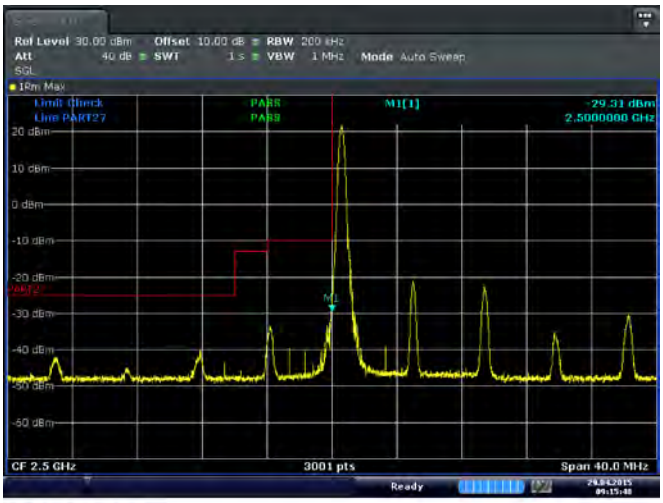
Date: 29.APR.2015 08:40:49

Band 7 QPSK 5 MHz RB25#0 HCH



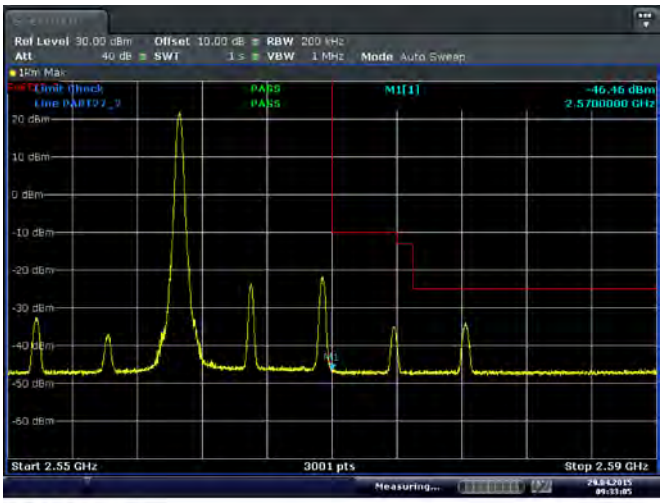
Date: 29.APR.2015 09:30:48

Band 7 QPSK 10 MHz RB1#0 LCH



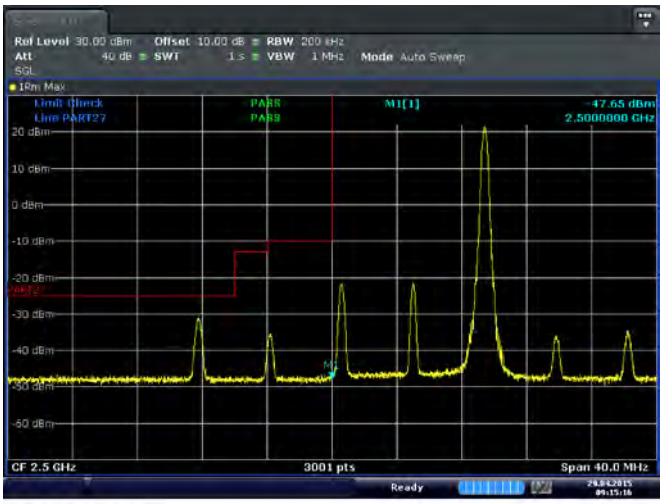
Date: 29.APR.2015 09:15:47

Band 7 QPSK 10 MHz RB1#0 HCH



Date: 29.APR.2015 09:33:05

Band 7 QPSK 10 MHz RB1#49 LCH



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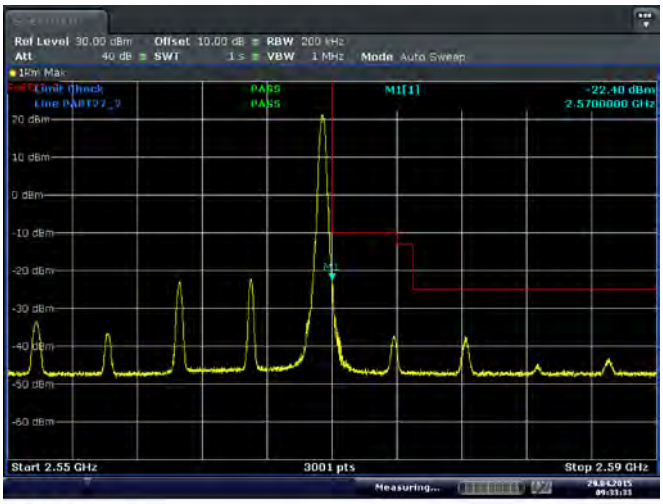
Band 7 QPSK 10 MHz RB1#49 HCH



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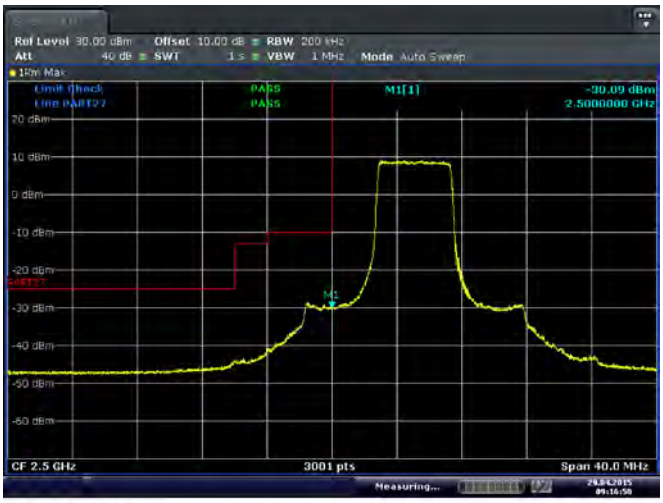
Band 7 QPSK 10 MHz RB25#13 LCH



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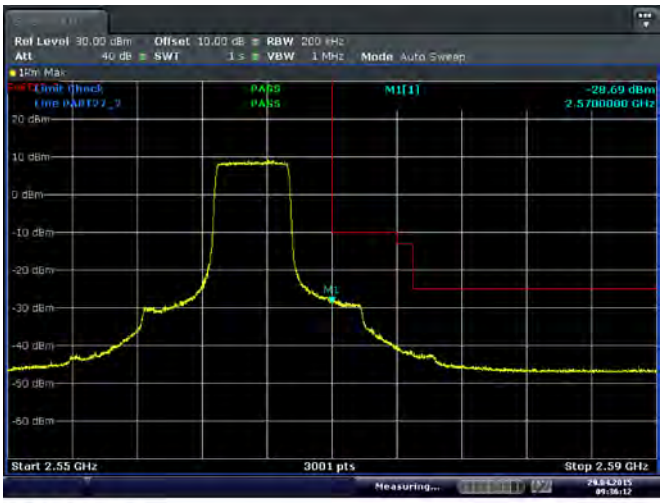
Band 7 QPSK 10 MHz RB25#13 HCH



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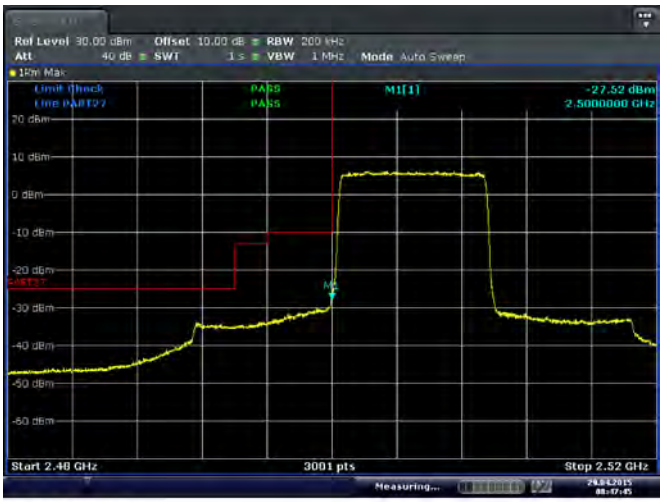
Band 7 QPSK 10 MHz RB50#0 LCH



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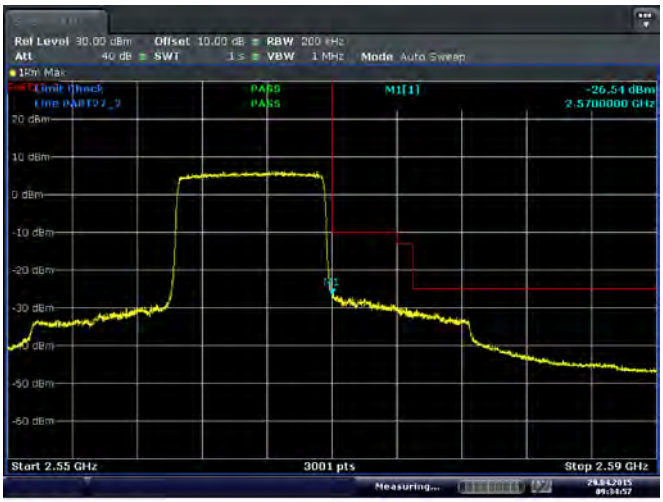
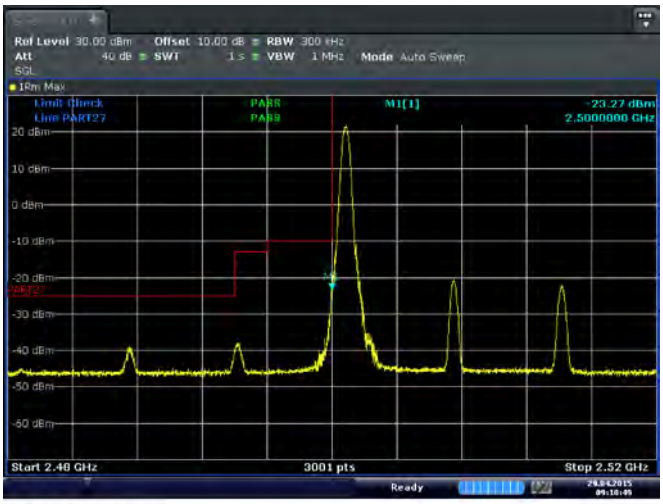
Band 7 QPSK 10 MHz RB50#0 HCH



Date: 29.APR.2015 09:34:57

Band 7 QPSK 15 MHz RB1#0 LCH



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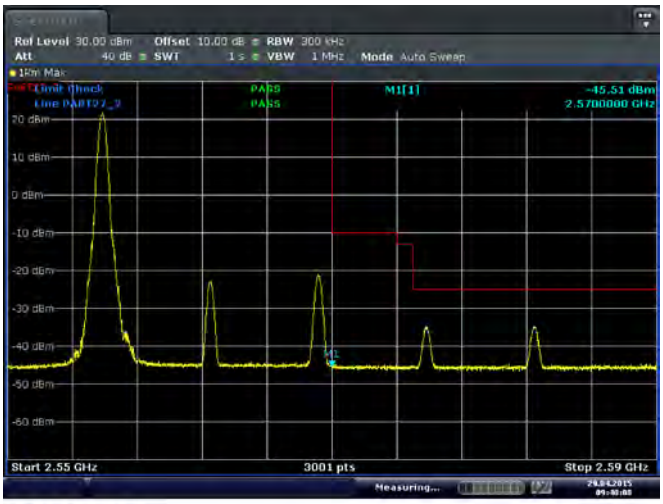
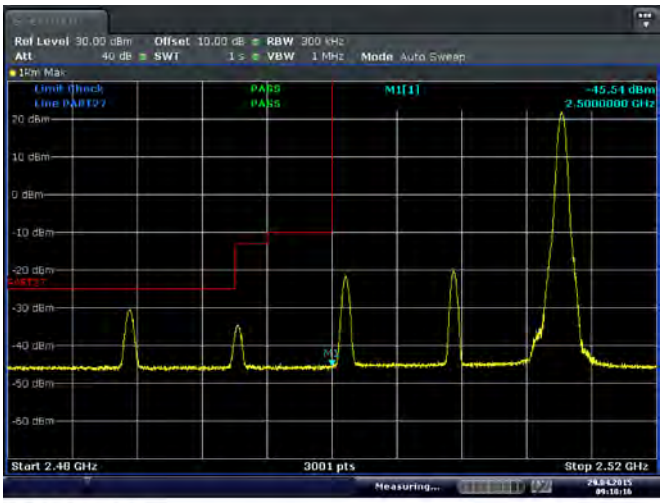
Band 7 QPSK 15 MHz RB1#0 HCH



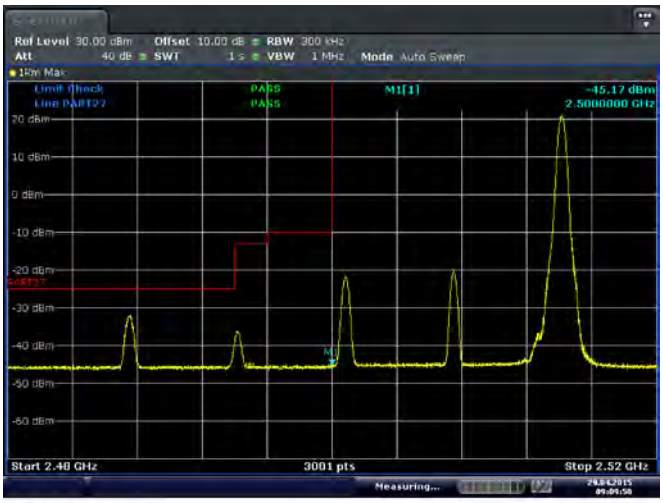
Date: 29.APR.2015 09:40:08

Band 7 QPSK 15 MHz RB1#74 LCH



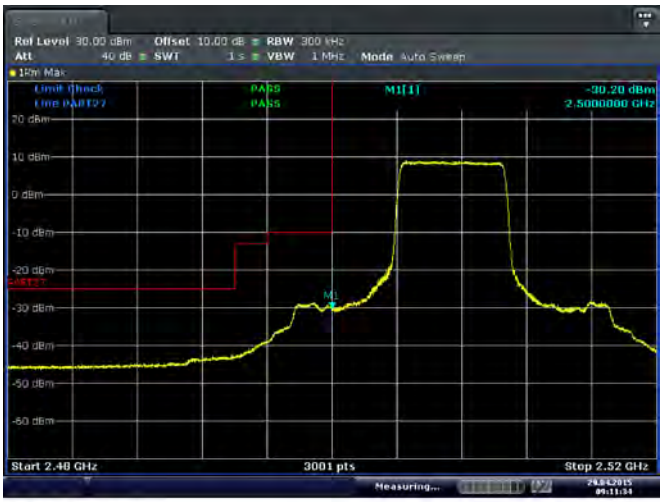
Date: 29.APR.2015 09:10:16

Band 7 QPSK 15 MHz RB1#74 HCH



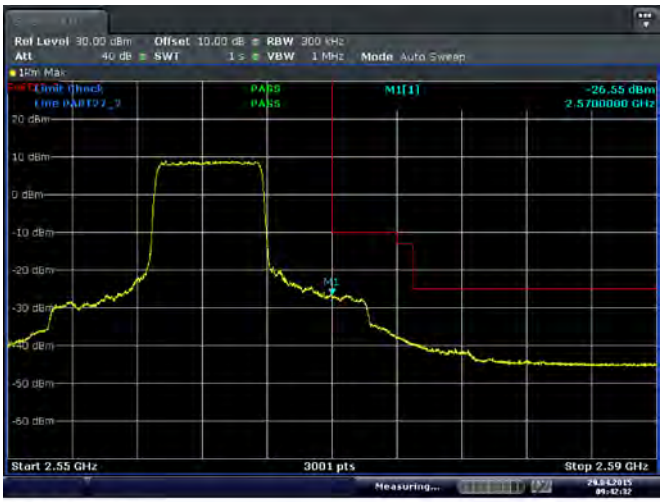
Date: 29.APR.2015 09:09:50

Band 7 QPSK 15 MHz RB36#19 LCH



Date: 29.APR.2015 09:11:35

Band 7 QPSK 15 MHz RB36#19 HCH

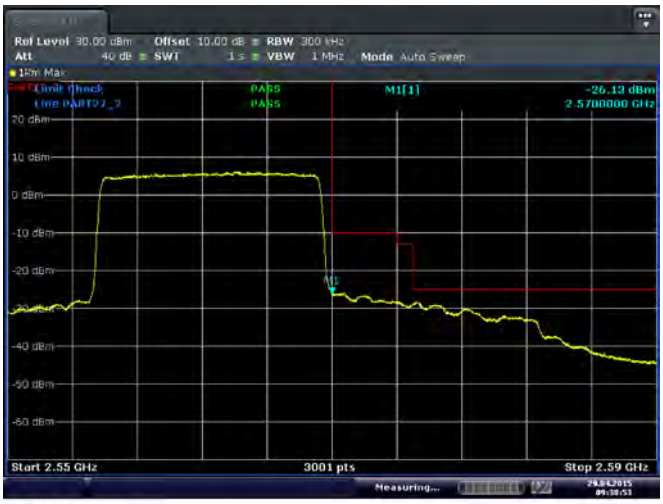


Date: 29.APR.2015 09:42:32

Band 7 QPSK 15 MHz RB75#0 LCH

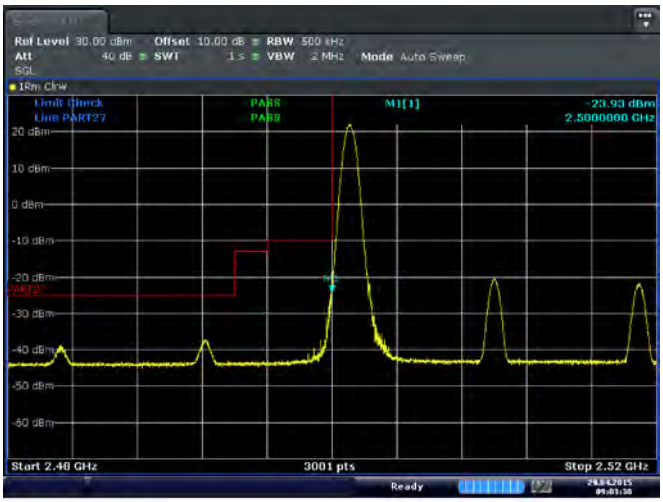
Date: 29.APR.2015 08:53:19

Band 7 QPSK 15 MHz RB75#0 HCH



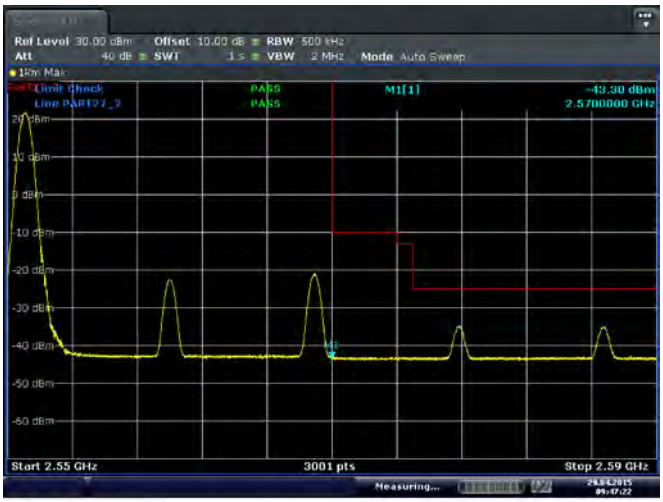
Date: 29.APR.2015 09:38:52

Band 7 QPSK 20 MHz RB1#0 LCH



Date: 29.APR.2015 09:03:31

Band 7 QPSK 20 MHz RB1#0 HCH



Date: 29.APR.2015 09:47:22

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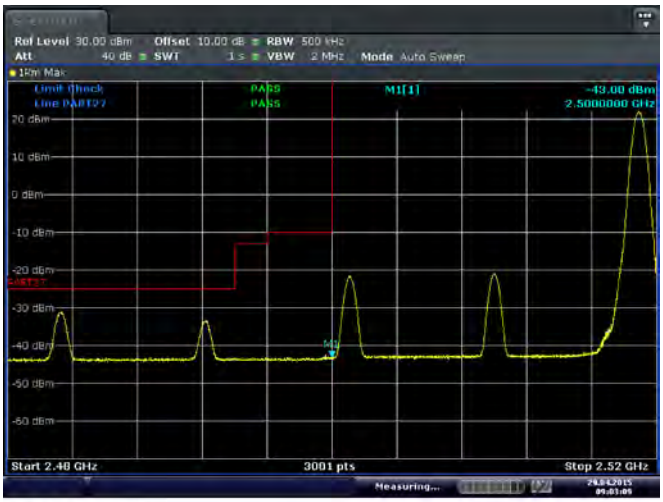
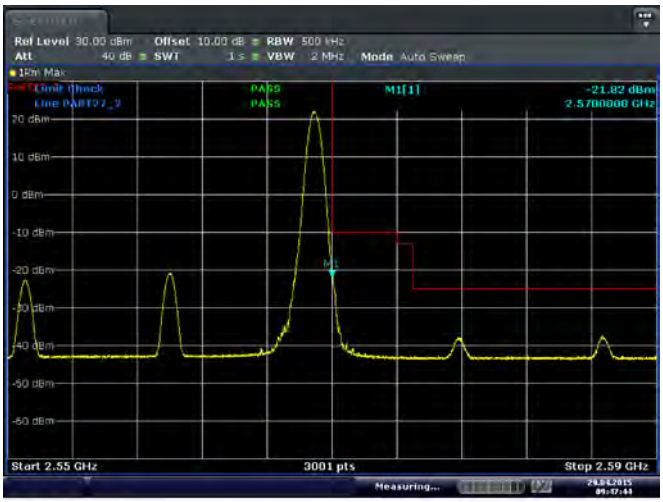


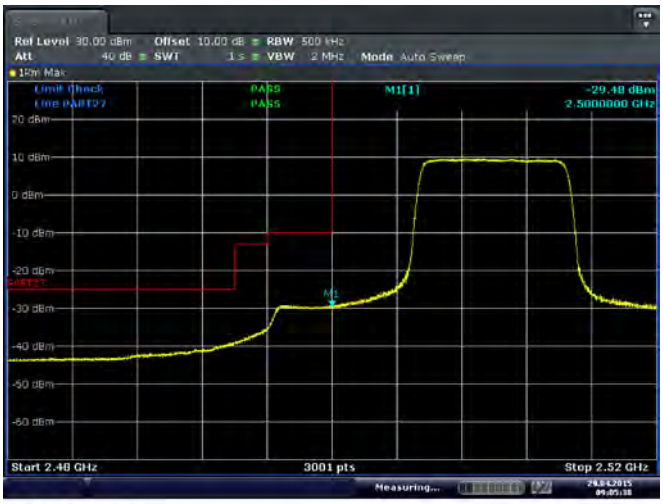
Date: 29 APR 2015 09:03:09

Band 7 QPSK 20 MHz RB1#99 HCH



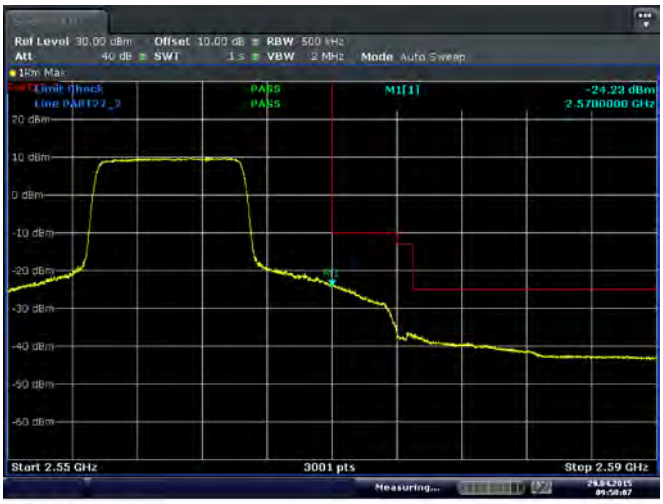
Date: 29 APR 2015 09:47:44

Band 7 QPSK 20 MHz RB50#25 LCH



Date: 29 APR 2015 09:05:38

Band 7 QPSK 20 MHz RB50#25 HCH



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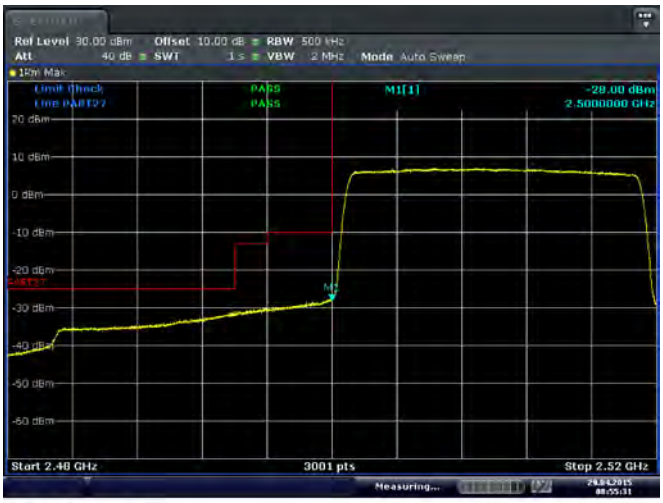
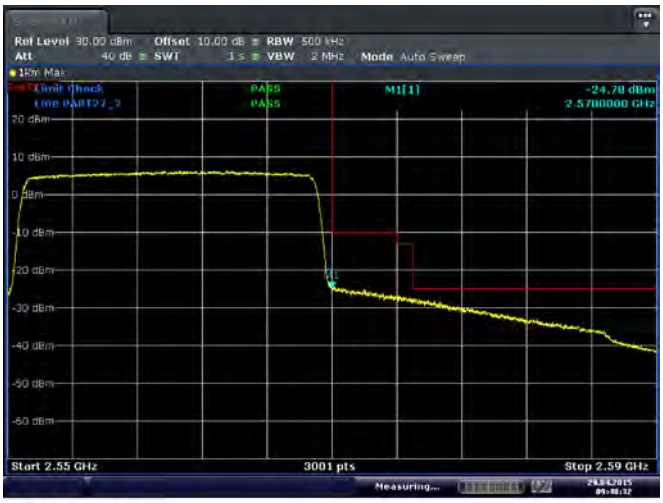
Band 7 QPSK 20 MHz RB100#0 LCH



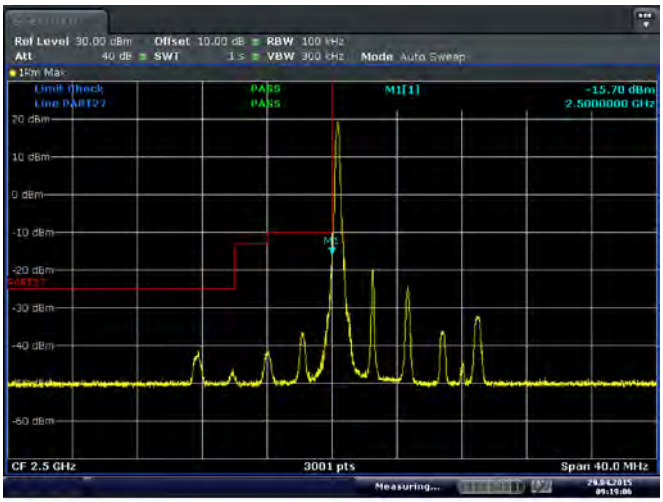
Date: 29 APR 2015 08:55:31

Band 7 QPSK 20 MHz RB100#0 HCH



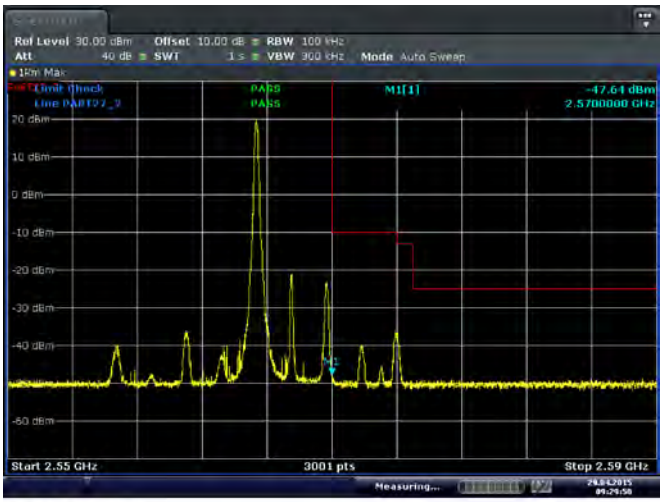
Date: 29 APR 2015 09:48:32

Band 7 16-QAM 5 MHz RB1#0 LCH



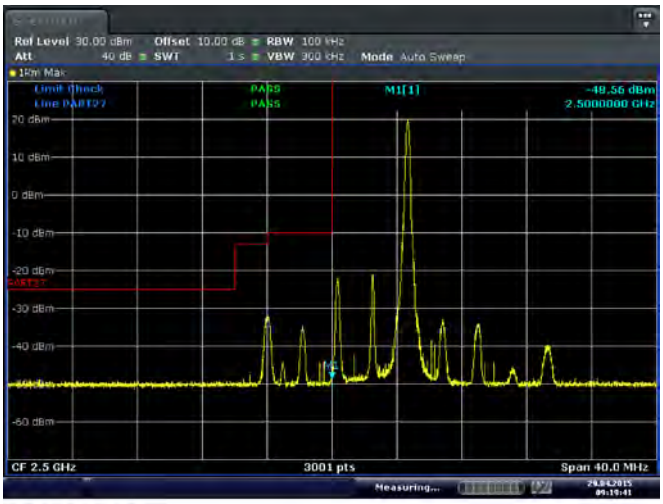
Date: 29 APR 2015 09:19:06

Band 7 16-QAM 5 MHz RB1#0 HCH



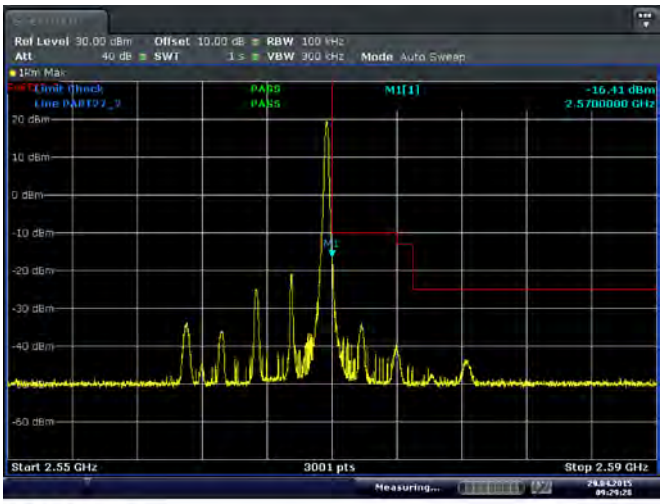
Date: 29 APR 2015 09:29:51

Band 7 16-QAM 5 MHz RB1#24 LCH



Date: 29 APR 2015 09:19:41

Band 7 16-QAM 5 MHz RB1#24 HCH



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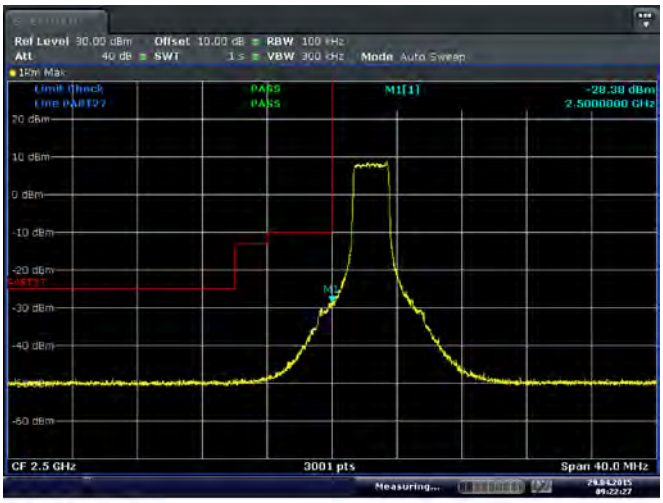
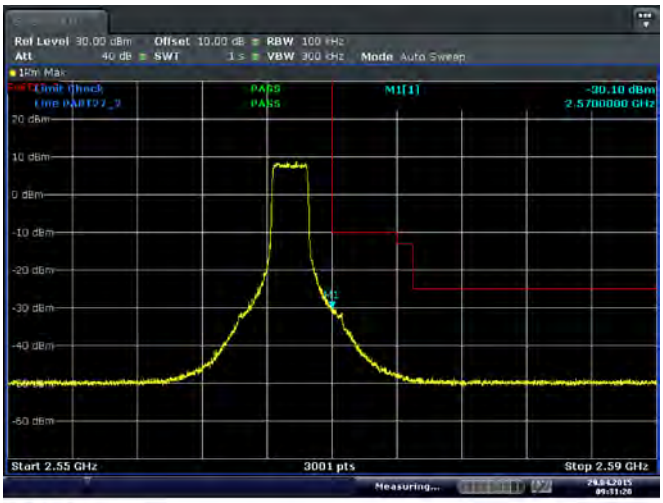
Band 7 16-QAM 5 MHz RB12#6 LCH



Date: 29 APR 2015 09:22:27

Band 7 16-QAM 5 MHz RB12#6 HCH



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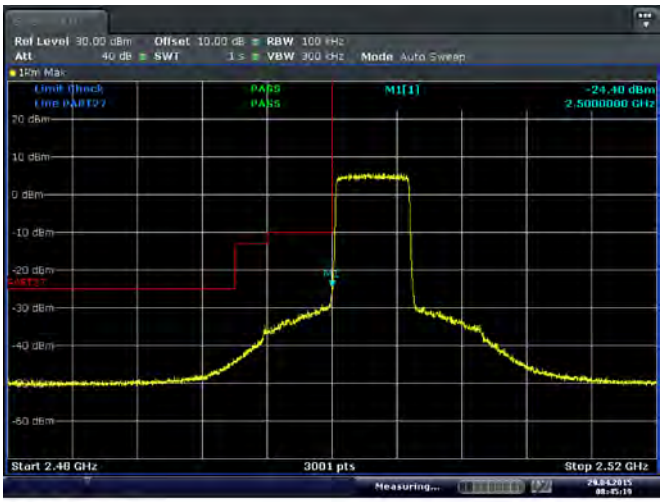
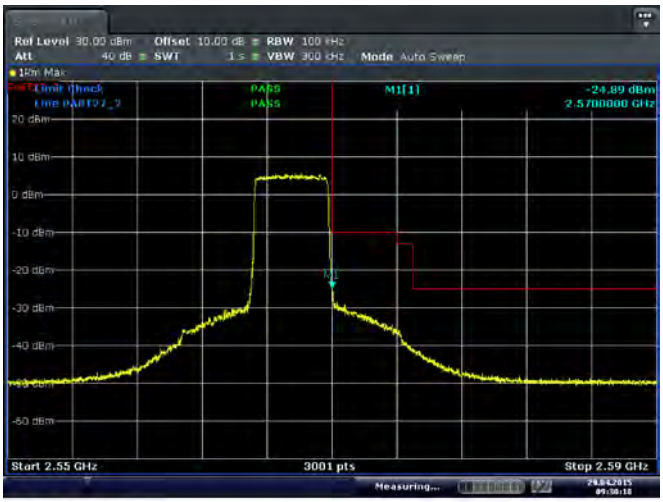
Band 7 16-QAM 5 MHz RB25#0 LCH



Date: 29.APR.2015 08:45:20

Band 7 16-QAM 5 MHz RB25#0 HCH



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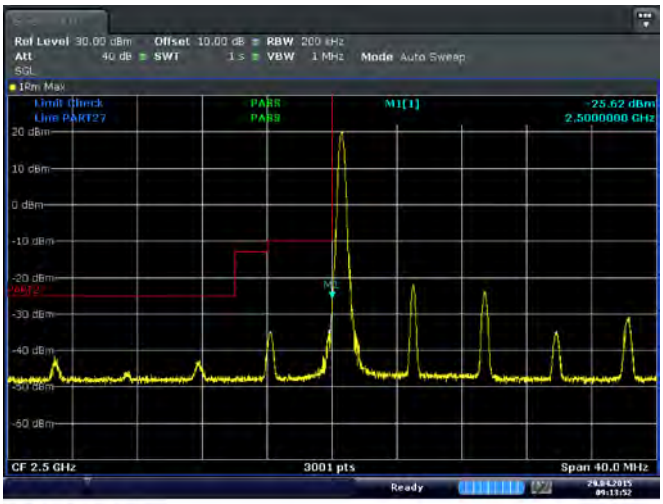
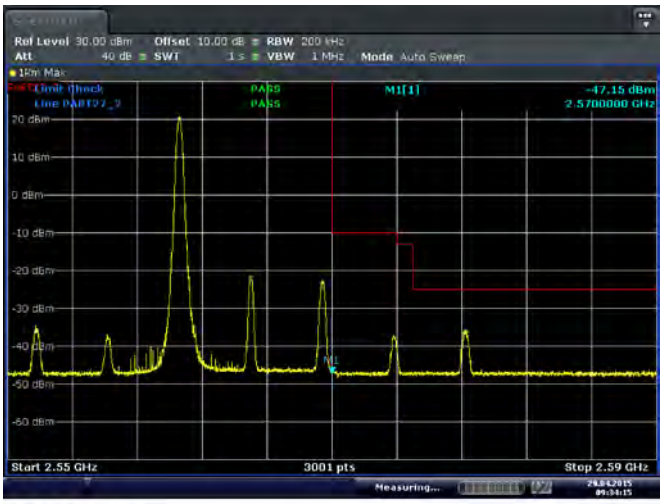
Band 7 16-QAM 10 MHz RB1#0 LCH



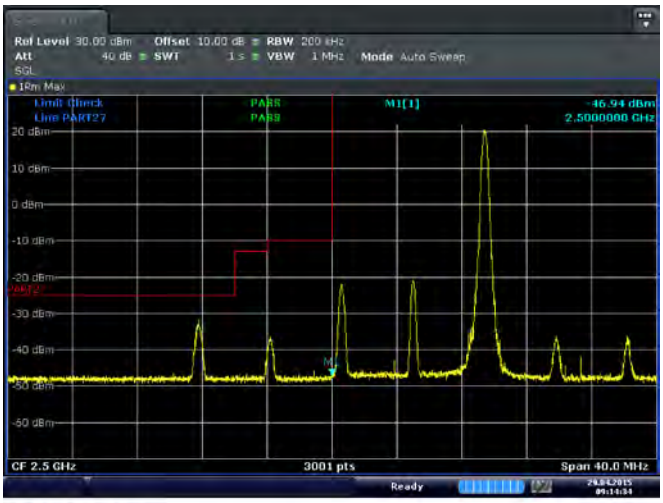
Date: 29.APR.2015 09:13:52

Band 7 16-QAM 10 MHz RB1#0 HCH



Date: 29.APR.2015 09:34:15

Band 7 16-QAM 10 MHz RB1#49 LCH



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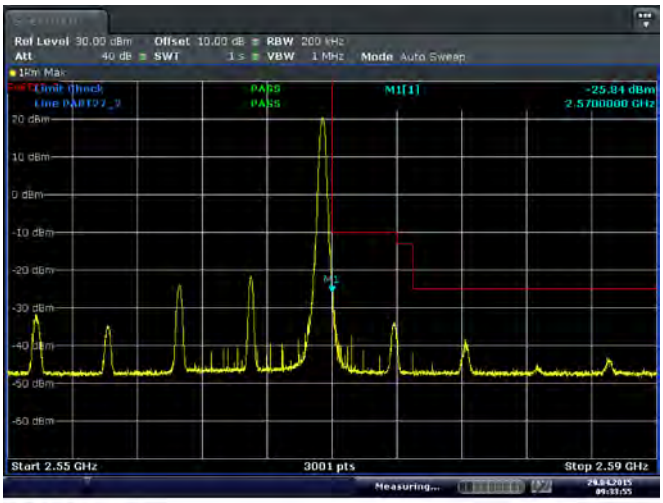
Band 7 16-QAM 10 MHz RB1#49 HCH



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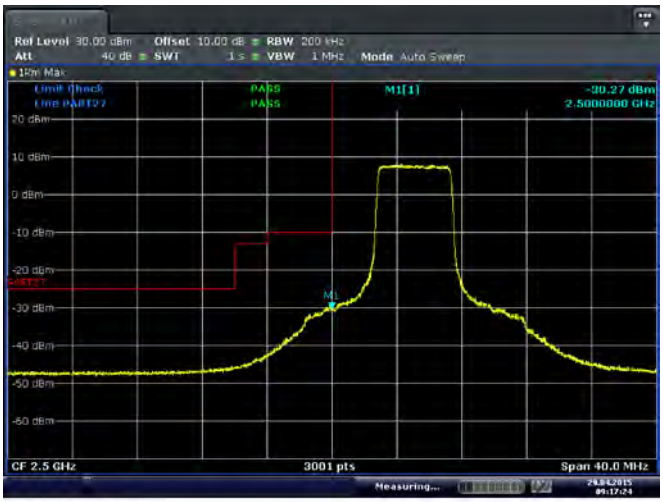
Band 7 16-QAM 10 MHz RB25#13 LCH



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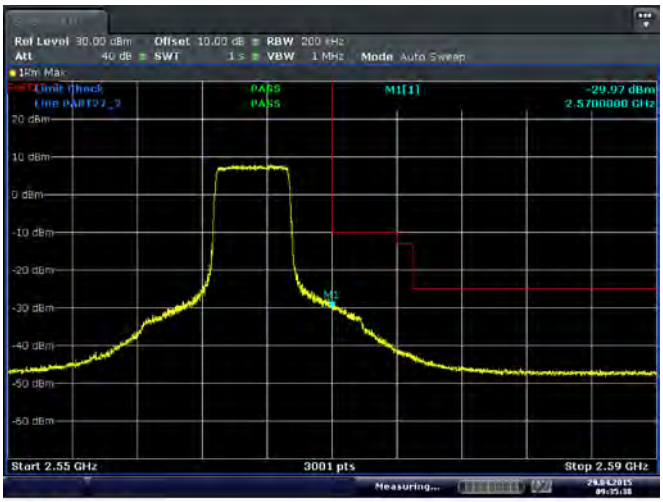
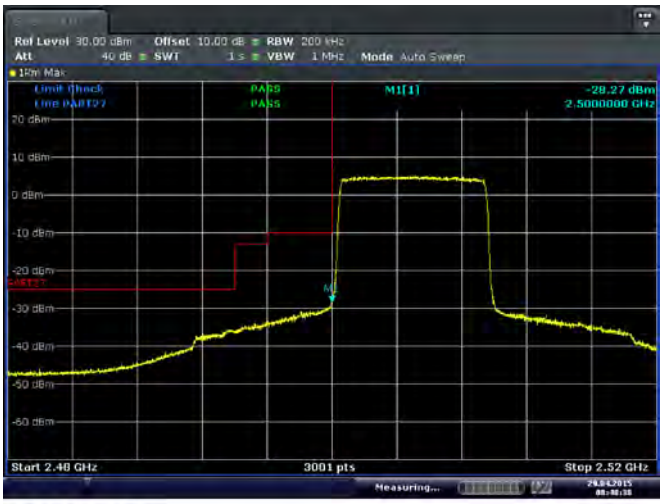
Band 7 16-QAM 10 MHz RB25#13 HCH



Date: 29.APR.2015 09:35:38

Band 7 16-QAM 10 MHz RB50#0 LCH



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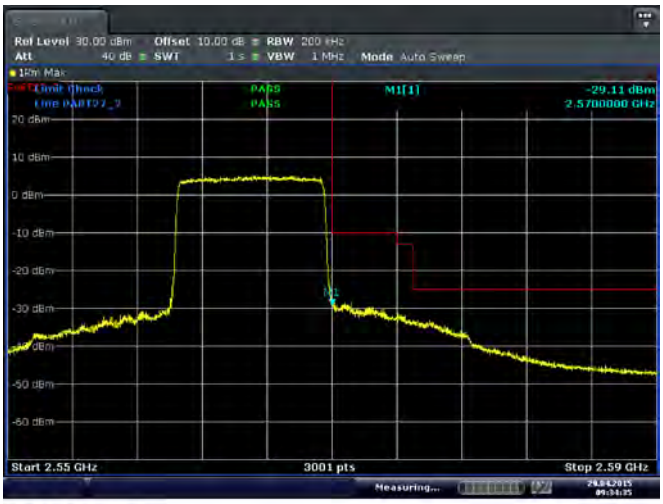
Band 7 16-QAM 10 MHz RB50#0 HCH



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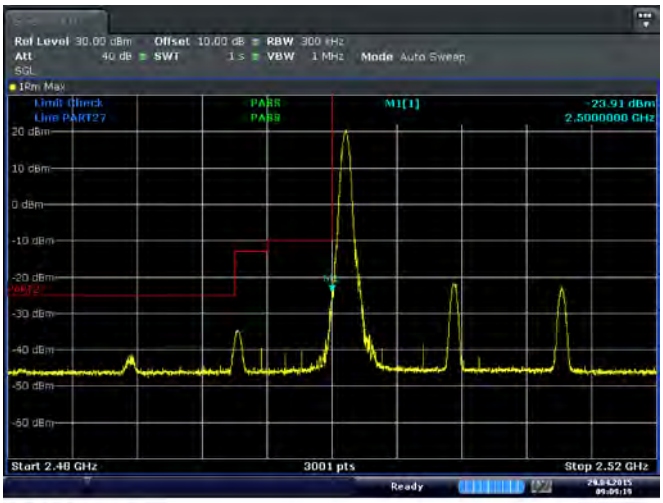
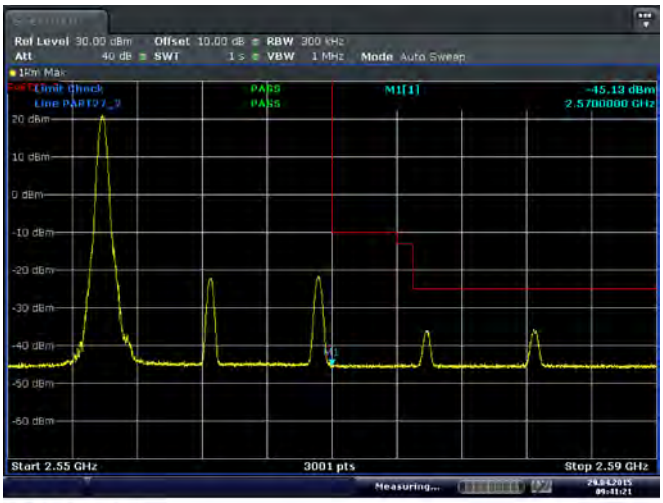
Band 7 16-QAM 15 MHz RB1#0 LCH



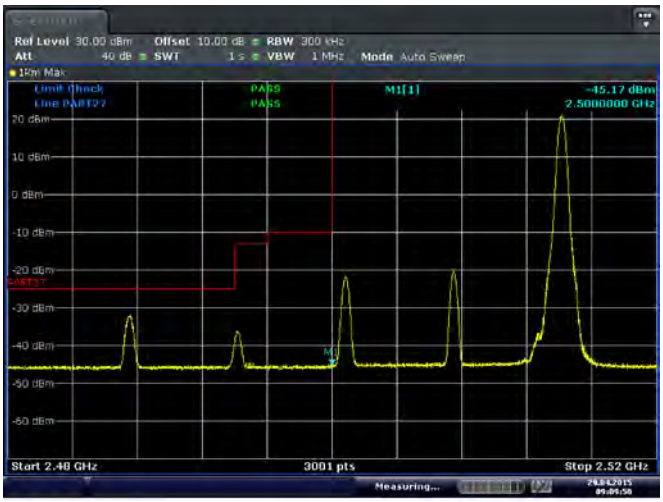
Date: 29.APR.2015 09:09:20

Band 7 16-QAM 15 MHz RB1#0 HCH



Date: 29.APR.2015 09:41:20

Band 7 16-QAM 15 MHz RB1#74 LCH



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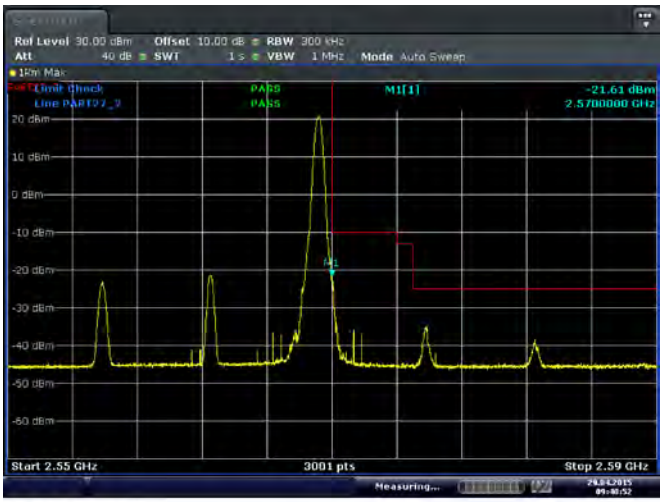
Band 7 16-QAM 15 MHz RB1#74 HCH



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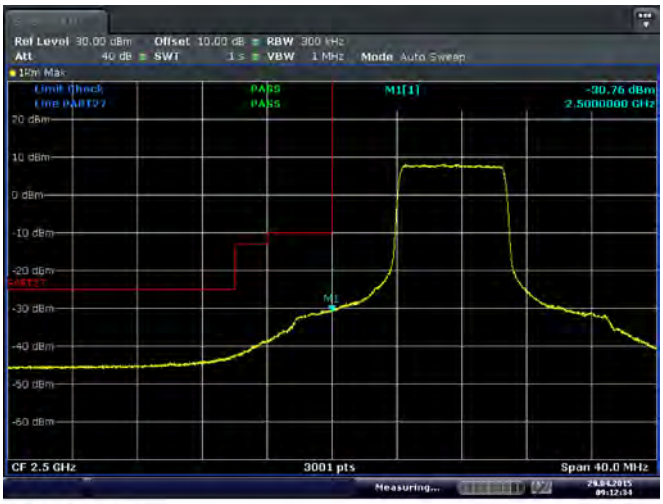
Band 7 16-QAM 15 MHz RB36#19 LCH



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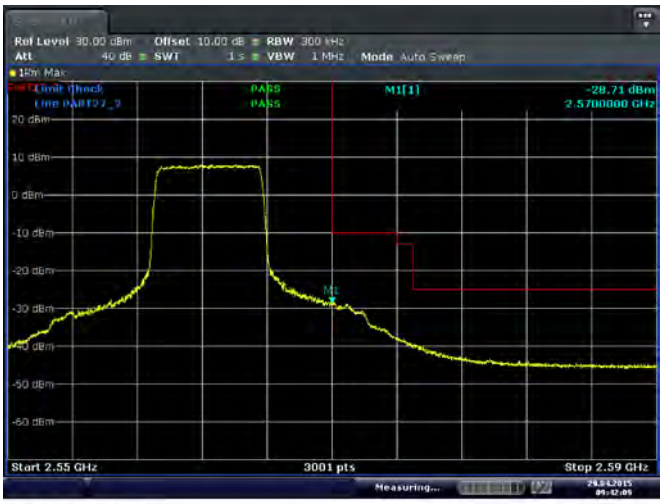
Band 7 16-QAM 15 MHz RB36#19 HCH



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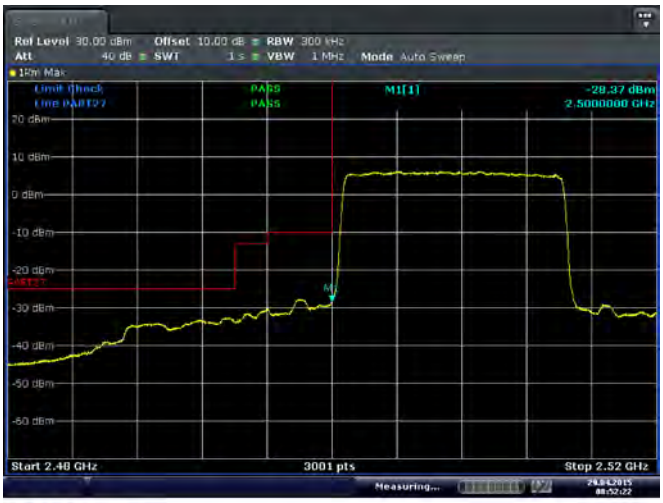
Band 7 16-QAM 15 MHz RB75#0 LCH



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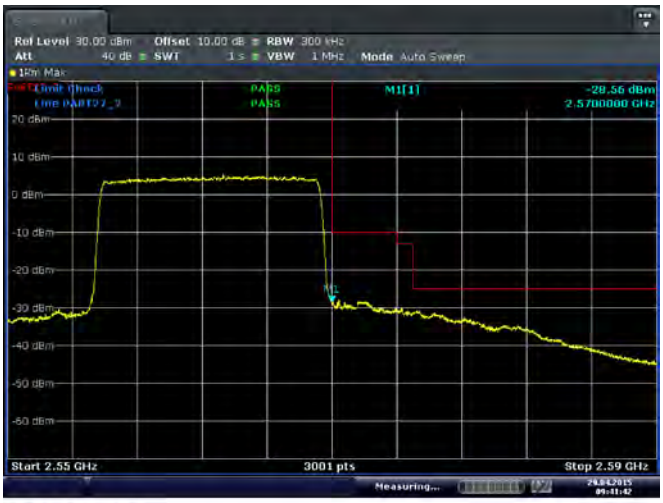
Band 7 16-QAM 15 MHz RB75#0 HCH



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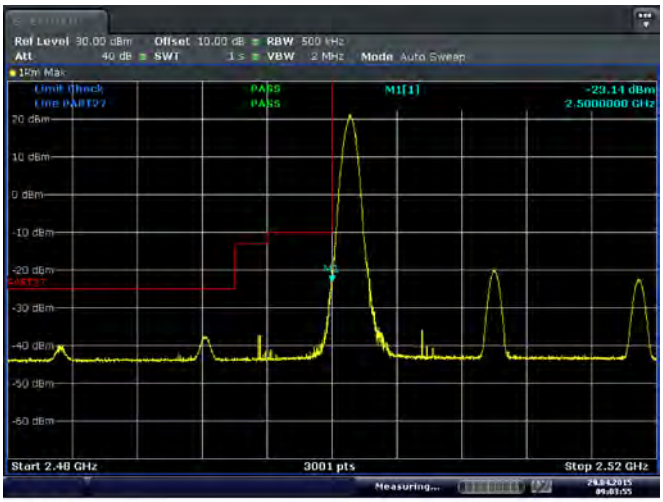
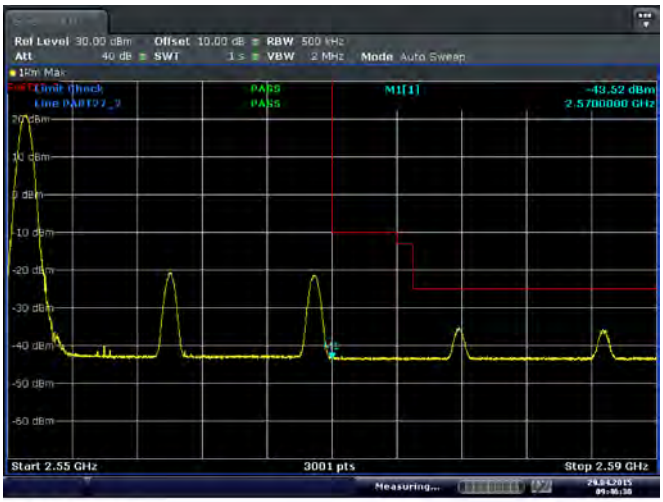
Band 7 16-QAM 20 MHz RB1#0 LCH



Date: 29 APR 2015 09:03:55

Band 7 16-QAM 20 MHz RB1#0 HCH

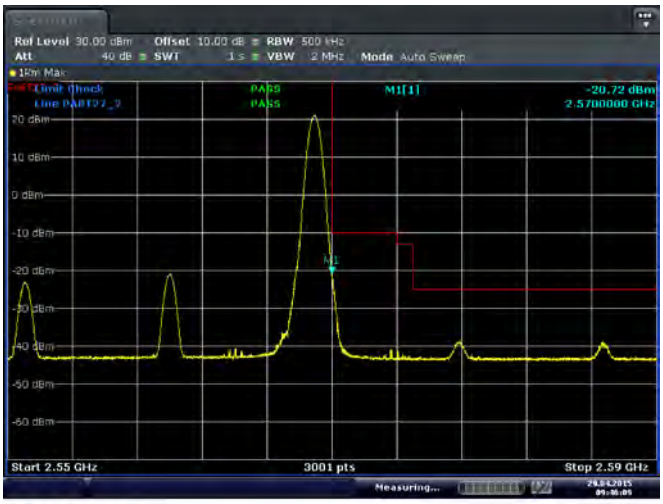


Date: 29 APR 2015 09:46:30

Band 7 16-QAM 20 MHz RB1#99 LCH

Date: 29 APR 2015 09:04:28

Band 7 16-QAM 20 MHz RB1#99 HCH



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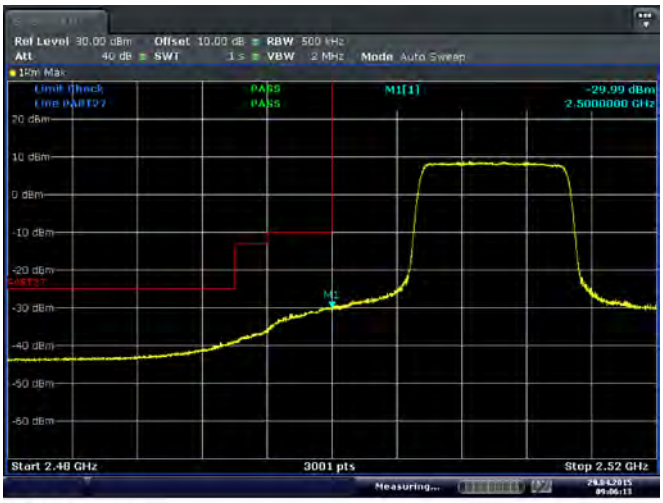
Band 7 16-QAM 20 MHz RB50#25 LCH



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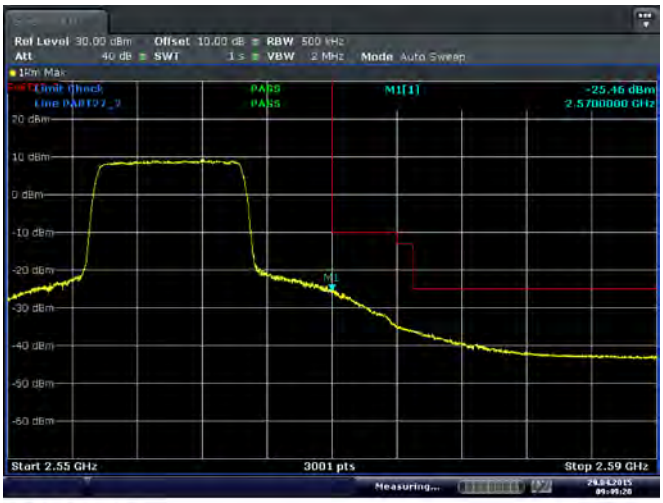
Band 7 16-QAM 20 MHz RB50#25 HCH



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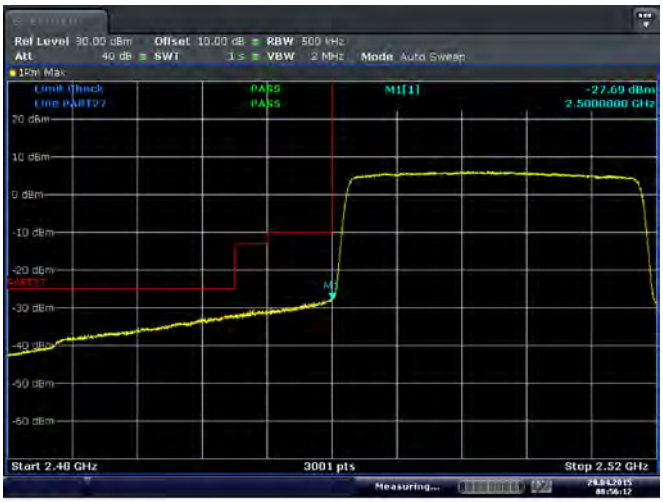
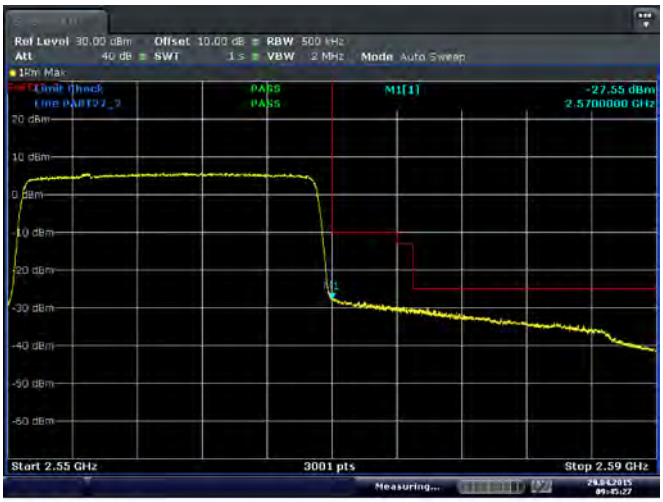
Band 7 16-QAM 20 MHz RB100#0 LCH	Band 7 16-QAM 20 MHz RB100#0 HCH
	
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