NVLAP TESTING
NVLAP LAB CODE 600338-0

BACL Bay Area Compliance Labs Corp.

FCC PART 27

FCC PART 22H, PART 24E

TEST REPORT

For

Feitian Technologies Co., Ltd.

Floor 17th, Tower B, Huizhi Mansion, No.9 Xueqing Road, Haidian District, Beijing, China

FCC ID: ZD3FTF310P

Report Type:	**Product Name:**
Original Report	Android POS Terminal

Report Number:	RKSA240112001-00F
Report Date:	2024-07-02
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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA240112001-00F	R1V1	2024-07-02	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Feitian Technologies Co., Ltd.
Tested Model:	F310 P
Series Model:	F310
Model Difference:	The model name, See the declaration letter for details.
Product Name:	Android POS Terminal
Power Supply:	DC 3.8V from battery or DC 5V from adapter
Maximum Conducted Output Power:	GSM 850: 33.24 dBm; EGPRS 850: 26.94 dBm GSM 1900: 28.85 dBm; EGPRS 1900: 25.88 dBm WCDMA Band II: 22.18 dBm; Band IV: 22.38 dBm; Band V: 22.22 dBm LTE: Band 2: 23.59 dBm; Band 4: 22.80 dBm; Band 5: 22.69 dBm; Band 7: 22.69 dBm Band 38: 22.70 dBm
RF Function:	GPRS/EGPRS, WCDMA, LTE
Operating Band/Frequency:	GPRS/EGPRS 850: 824-849 MHz(TX), 869-894 MHz(RX) GPRS/EGPRS 1900: 1850-1910 MHz(TX), 1930-1990 MHz(RX) WCDMA Band II: 1850-1910 MHz(TX), 1930-1990 MHz(RX) WCDMA Band IV: 1710-1755 MHz(TX), 1930-1990 MHz(RX) WCDMA Band V: 824-849 MHz(TX), 869-894 MHz(RX) LTE Band 2: 1850-1910 MHz(TX), 1930-1990 MHz(RX) LTE Band 4: 1710-1755 MHz(TX), 2110-2155 MHz(RX) LTE Band 5: 824-849 MHz(TX), 869-894 MHz(RX) LTE Band 7: 2500-2570 MHz(TX), 2620-2690 MHz(RX) LTE Band 38: 2570-2620 MHz(TX), 2570-2520 MHz(RX)
Modulation Type:	GPRS/EGPRS: GMSK, 8PSK WCDMA: BPSK, QPSK, 16QAM LTE: QPSK, 16QAM
Antenna Type:	FPC Antenna
★Maximum Antenna Gain:	GPRS/EGPRS 850: -1.34 dBi GPRS/EGPRS 1900: -0.35 dBi WCDMA Band II: -0.35 dBi WCDMA Band IV: -1.85 dBi WCDMA Band V: -1.34 dBi LTE Band 2: -0.35 dBi LTE Band 4: -1.85 dBi LTE Band 5: -1.34 dBi LTE Band 7: -0.94 dBi LTE Band 38: -1.14 dBi

Adapter Information
Model: TEKA-UCA20US
Input: 100-240V~50/60Hz, 0.35A, MAX
Output: 5.0V, 2.0A

Note: The maximum antenna gain is provided by the applicant.

All measurement and test data in this report was gathered from production sample serial number: RKSA240112001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-01-12.)

Objective

This type approval report is prepared for *Feitian Technologies Co., Ltd.* in accordance with Part 2, Part 22-Subpart H and Part 24-Subpart E, Part 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability, and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-Part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services
Part 27 – Miscellaneous wireless communications services

Applicable Standards: ANSI C63.26-2015.

Measurement Uncertainty

Item		Uncertainty
RF conducted test		0.9dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	5.91dB
	1GHz~6GHz	4.68dB
	6GHz~18GHz	4.92dB
	18GHz~40GHz	5.21dB
Occupied Bandwidth		0.5kHz
Temperature		1.0℃
Humidity		6%

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN5055.

SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to ANSI C63.26-2015.

The final qualification test was performed with the EUT operating at normal mode.

Channel List

Mode		Channel	Frequency (MHz)
GPRS/EGPRS 850		Low	824.2
		Middle	836.6
		High	848.8
GPRS/EGPRS 1900		Low	1850.2
		Middle	1880.0
		High	1909.8
WCDMA Band II		Low	1852.4
		Middle	1880.0
		High	1907.6
WCDMA Band IV		Low	1712.4
		Middle	1732.6
		High	1752.6
WCDMA Band V		Low	826.4
		Middle	836.6
		High	846.6
LTE Band 2	1.4M	Low	1850.7
		Middle	1880.0
		High	1909.3
	3M	Low	1851.5
		Middle	1880.0
		High	1908.5
	5M	Low	1852.5
		Middle	1880.0
		High	1907.5
	10M	Low	1855.0
		Middle	1880.0
		High	1905.0
	15M	Low	1857.5
		Middle	1880.0
		High	1902.5
	20M	Low	1860.0
		Middle	1880.0
		High	1900.0

Mode		Channel	Frequency (MHz)
LTE Band 4	1.4M	Low	1710.7
		Middle	1732.5
		High	1754.3
	3M	Low	1711.5
		Middle	1732.5
		High	1753.5
	5M	Low	1712.5
		Middle	1732.5
		High	1752.5
	10M	Low	1715.0
		Middle	1732.5
		High	1750.0
	15M	Low	1717.5
		Middle	1732.5
		High	1747.5
	20M	Low	1720.0
		Middle	1732.5
		High	1745.0
LTE Band 5	1.4M	Low	824.7
		Middle	836.5
		High	848.3
	3M	Low	825.5
		Middle	836.5
		High	847.5
	5M	Low	826.5
		Middle	836.5
		High	846.5
	10M	Low	829.0
		Middle	836.5
		High	844.0
LTE Band 7	5M	Low	2502.5
		Middle	2535.0
		High	2567.5
	10M	Low	2505.0
		Middle	2535.0
		High	2565.0
	15M	Low	2507.5
		Middle	2535.0
		High	2562.5
	20M	Low	2510.0
		Middle	2535.0
		High	2560.0

Mode		Channel	Frequency (MHz)
LTE Band 38	5M	Low	2572.5
		Middle	2595.0
		High	2617.5
	10M	Low	2575.0
		Middle	2595.0
		High	2615.0
	15M	Low	2577.5
		Middle	2595.0
		High	2612.5
	20M	Low	2580.0
		Middle	2595.0
		High	2610.0

Equipment Modifications

No modifications were made to the EUT.

Support Equipment List and Details

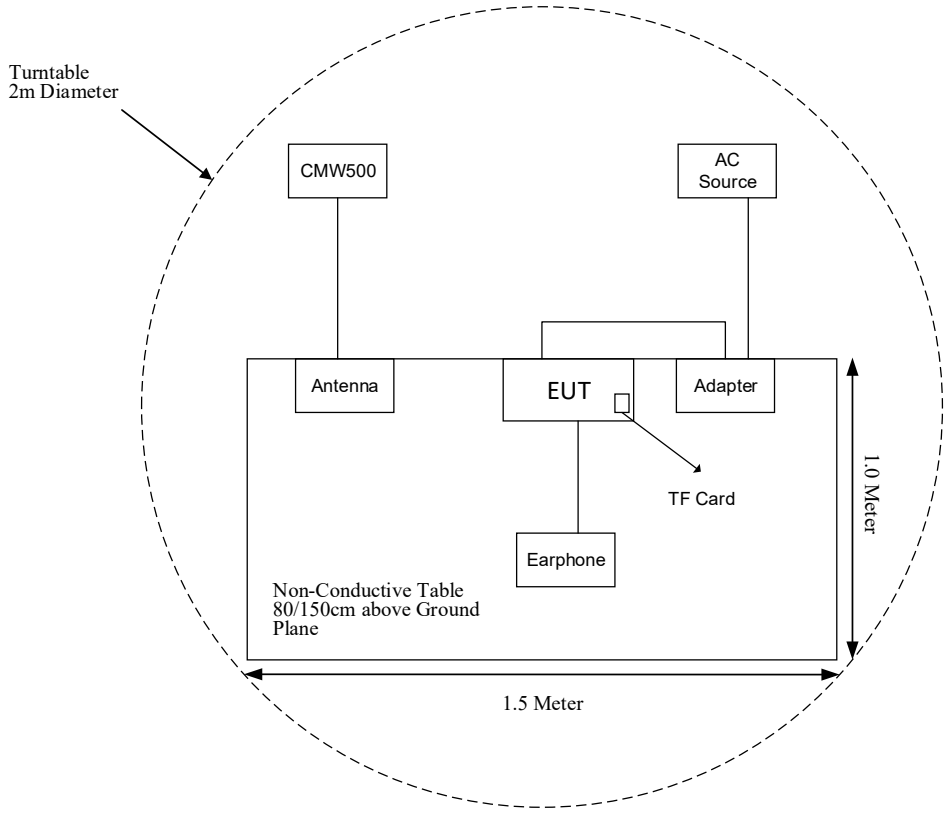
Manufacturer	Description	Model	Serial Number
Unknown	Earphone	Unknown	Unknown
Unknown	TF Card	Unknown	Unknown
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478

External I/O Cable

Cable Description	Length (m)	From Port	To
Power Cable	1.5	AC Source	Adapter
USB Cable	1.0	Adapter	EUT
Audio Cable	1.0	EUT	Earphone

Block Diagram of Test Setup

For Radiated Emissions(Below 1GHz & Above 1 GHz):



TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2023-05-23	2024-05-22
Keysight	Signal Generator	N5183A	MY47420304	2023-05-23	2024-05-22
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
Sunol Sciences	Hybrid Antenna	JB3	A090314-2	2023-01-12	2026-01-11
Sonoma Instrument	Amplifier	310N	171205	2023-05-23	2024-05-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-7	007	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-8	008	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2023-05-23	2024-05-22
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2023-05-22	2024-05-21
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2023-05-19	2024-05-18
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2023-06-27	2026-06-26
ETS-LINDGREN	Horn Antenna	3115	6229	2023-01-16	2026-01-15
ETS-LINDGREN	Horn Antenna	3116	2516	2023-12-08	2024-12-07
ETS-LINDGREN	Horn Antenna	3116	84159	2023-12-08	2024-12-07
A.H.Systems,inc	Amplifier	PAM-0118P	512	2023-05-23	2024-05-22
EM Electronics Corporation	Amplifier	EM18G40G	060726	2023-05-23	2024-05-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-12	012	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-13	013	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCGV5-804-824-849-869-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCGV6-1830-1850-1910-1930-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCGV8-1695-1710-1755-1770-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN3	WRCJV8-2450-2500-2570-2620-40SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCJV8-2550-2570-2620-2640-30SS	2023-05-23	2024-05-22

RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40	103298	2024−04−24	2025−04−23
Rohde & Schwarz	EMI Test Receiver	ESIB26	100146	2023-05-23	2024-05-22
BACL	Temperature & Humidity Chamber	BTH-150	30023	2023-05-23	2024-05-22
EAST	Regulated DC Power Supply	MCH-303D-II	14070562	2023-10-10	2024-10-09
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2023-05-22	2024-05-21
R&S	Wideband Radio Communication Tester	CMW500	104478	2024−04−24	2025−04−23
Narda	Attenuator	10dB	010	2023-05-23	2024-05-22
MACOM	Power Splitter	2090-6214-00	96341	2024-05-23	2025-05-22
MACOM	Power Splitter	2090-6214-00	96341	2023-05-23	2024-05-22
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
Unknown	RF Cable	RF Cable C01	C01	Each Time	N/A

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§2.1046; § 22.913 (a); §24.232 (c); §27.50 (d) (h)	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§2.1049; §22.905; §22.917; §24.238; §27.53;	Occupied Bandwidth	Compliant
§2.1051; §22.917 (a); §24.238 (a); §27.53 (h) (m);	Spurious Emissions at Antenna Terminal	Compliant
§2.1053; §22.917 (a) §24.238 (a); §27.53 (h) (m);	Spurious Radiated Emissions	Compliant
§22.917 (a); §24.238 (a); §27.53 (h) (m);	Band Edge	Compliant
§2.1055; §22.355; §24.235; §27.54;	Frequency stability	Compliant

FCC §2.1046; § 22.913 (a); §24.232 (c); §27.50 (d) (h)(2); RF OUTPUT POWER

Applicable Standards

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts (38.45dBm).

According to FCC §2.1046 and §24.232 (c), mobile and portable stations are limited to 2 watts (33dBm) EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to §27.50(d), the maximum EIRP must not exceed 1Watts (30dBm) for 1710-1780MHz.

According to §27.50(h) (2), 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.

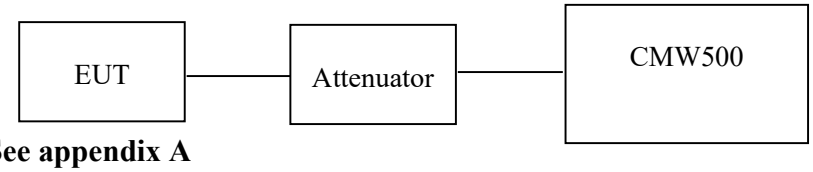
The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

Test Procedure

According to CFR Part 2.1046, ANSI C63.26-2015 Section 5.2.5.5:

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



Test Data: See appendix A

FCC §2.1049, §22.917, §22.905 &§24.238, §27.53, OCCUPIED BANDWIDTH

Applicable Standards

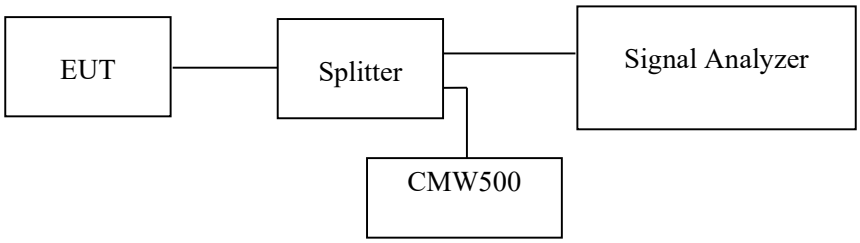
FCC 47 §2.1049, §22.917, §22.905 & §24.238 and §27.53.

Test Procedure

According to CFR Part 2.1049, ANSI C63.26-2015 Section 5.4.4

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 3 kHz (Cellular /PCS) & 50 kHz (WCDMA) & 30 kHz/50 kHz/100 kHz/200 kHz (LTE), and the 26 dB & 99% bandwidth was recorded.



Test Data: See appendix A &appendix C

FCC § 2.1051; § 22.917 (a); § 24.238 (a); §27.53 (h) (m); § 90.691 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standards

FCC §2.1051, §22.917(a), §24.238(a) and §27.53(m) (h).

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

According to §22.917(a),the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

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

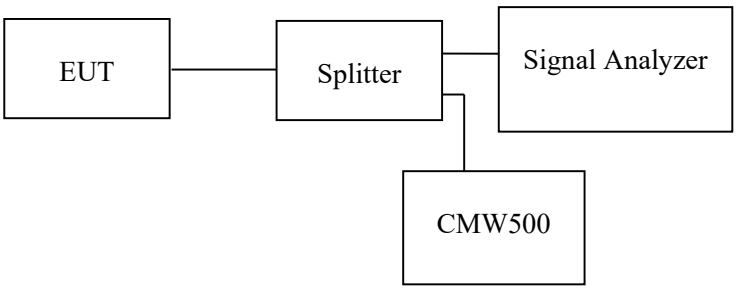
§27.53 (h) AWS emission limits - operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

According to §27.53(m),for mobile digital stations, any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB.

Test Procedure

According to ANSI C63.26-2015 Section 5.7.4:

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz for below 1GHz & 1MHz for above 1GHz. sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Test Data: See Appendix A&D

FCC § 2.1053; § 22.917 (a); § 24.238 (a)& §27.53 (h) (m); SPURIOUS RADIATED EMISSIONS

Applicable Standards

FCC § 2.1053, §22.917(a) ,§ 24.238(a) and § 27.53 (h) (m)

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

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

§27.53 (h)AWS emission limits - 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 log10 (P) dB.

27.53 (m), 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.

Test Procedure

According to ANSI C63.26-2015 Section 5.5.3:

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TX pwr in Watts/0.001) – the absolute level

Spurious attenuation limit in dB = 43 + 10 Log_{10} (power out in Watts)

Test Data: See Appendix A

FCC § 22.917 (a); § 24.238 (a); §27.53 (h) (m); BAND EDGES

Applicable Standards

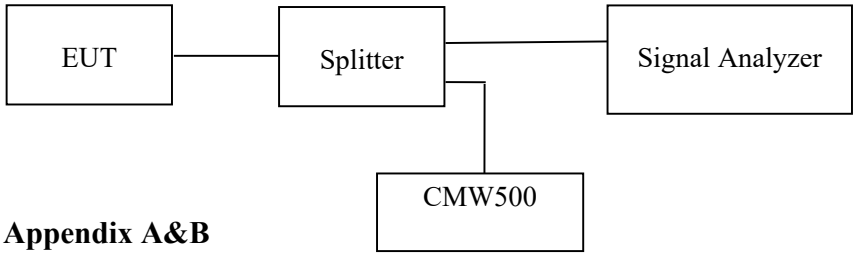
According to § 22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.
§27.53 (h)AWS emission limits - 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 log10 (P) dB.
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.
FCC §2.1051.The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

Test Procedure

According to ANSI C63.26-2015 Section 5.7.3:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Data: See Appendix A&B

FCC § 2.1055; § 22.355; § 24.235; §27.54; §90.213- FREQUENCY STABILITY

Applicable Standards

FCC § 2.1055, §22.355, §24.235 and §27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

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

According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

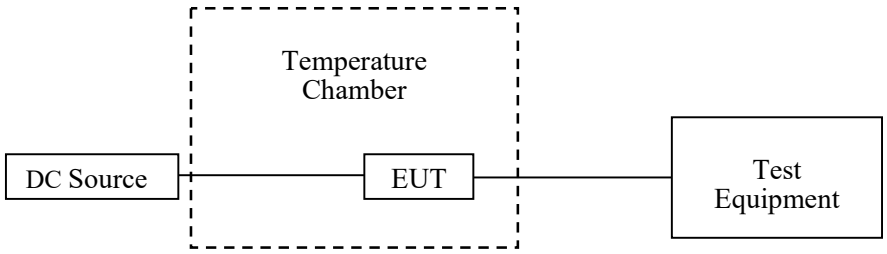
Test Procedure

According to ANSI C63.26-2015 Section 5.6:

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data: See appendix A

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT D-TEST SETUP PHOTOGRAPHS.

APPENDIX A - TEST DATA

Environmental Conditions & Test Information

Test Item:	FREQUENCY STABILITY	TRANSMITTER OUTPUT POWER	OCCUPIED BANDWIDTH	SPURIOUS EMISSIONS AT ANTENNA TERMINALS	SPURIOUS RADIATED EMISSIONS	Band Edge
Test Date:	2024-03-21	2024-03-21	2024-01-30 to 2024-03-26	2024-03-22 to 2024-07-02	2024-01-30 to 2024-03-21	2024-03-21 to 2024-07-02
Temperature:	17.3 ℃	17.3 ℃	17.5-20.2 ℃	17.0-20.5 ℃	17.0-18.5 ℃	17.0-20.5 ℃
Relative Humidity:	51 %	51 %	45-51 %	40-52 %	40-50 %	40-52 %
ATM Pressure:	101.8 kPa	101.8 kPa	101.5-102.0 kPa	101.2-102.0 kPa	101.2-101.5 kPa	101.2-102.0 kPa
Test Result:	Pass	Pass	/	Pass	Pass	Pass
Test Engineer:	Jenny Yang					

RF OUTPUT POWER

GPRS/EGPRS 850 Band

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	33.01	31.87	30.62	29.25	29.52	28.38	27.13	25.76	38.45
	190	836.6	**33.24**	31.96	30.73	29.34	29.75	28.47	27.24	25.85	38.45
	251	848.8	33.19	31.91	30.69	29.32	29.70	28.42	27.20	25.83	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EGPRS	128	824.2	**26.94**	25.08	24.51	22.95	23.45	21.59	21.02	19.46	38.45
	190	836.6	26.81	24.97	24.43	22.87	23.32	21.48	20.94	19.38	38.45
	251	848.8	26.91	25.03	24.47	22.92	23.42	21.54	20.98	19.43	38.45

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
Antenna Gain(dBd) = Antenna Gain(dBi)-2.15

GPRS/EGPRS 1900 Band

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	512	1850.2	28.81	28.15	27.11	25.14	28.46	27.80	26.76	24.79	33
	661	1880	**28.85**	28.19	27.05	25.05	28.50	27.84	26.70	24.70	33
	810	1909.8	28.79	28.13	27.07	25.09	28.44	27.78	26.72	24.74	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EGPRS	512	1850.2	25.71	25.05	23.78	22.64	25.36	24.7	23.43	22.29	33
	661	1880	**25.88**	25.11	23.81	22.68	25.53	24.76	23.46	22.33	33
	810	1909.8	25.57	25.01	23.74	22.61	25.22	24.66	23.39	22.26	33

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)

WCDMA Band II

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		22.12	22.16	21.96	21.77	21.81	21.61
	HSDPA	1	22.09	22.12	22.03	21.74	21.77	21.68
		2	22.13	22.15	21.99	21.78	21.80	21.64
		3	22.12	22.13	21.95	21.77	21.78	21.60
		4	22.13	22.11	21.99	21.78	21.76	21.64
	HSUPA	1	22.15	22.13	22.01	21.80	21.78	21.66
		2	22.15	22.14	22.03	21.80	21.79	21.68
		3	22.14	22.12	22.02	21.79	21.77	21.67
		4	22.14	22.15	21.99	21.79	21.80	21.64
		5	22.15	22.14	21.96	21.80	21.79	21.61
	HSPA+	1	22.16	**22.18**	22.17	21.81	21.83	21.82

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)

WCDMA Band V

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			ERP (dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 5)	RMC12.2k		**22.22**	22.19	22.11	18.73	18.7	18.62
	HSDPA	1	22.21	22.16	22.11	18.72	18.67	18.62
		2	22.19	22.12	22.14	18.7	18.63	18.65
		3	22.18	22.15	22.12	18.69	18.66	18.63
		4	22.18	22.18	22.16	18.69	18.69	18.67
	HSUPA	1	22.09	22.13	22.17	18.6	18.64	18.68
		2	22.12	22.15	22.14	18.63	18.66	18.65
		3	22.17	22.18	22.14	18.68	18.69	18.65
		4	22.06	22.09	22.13	18.57	18.6	18.64
		5	22.11	22.12	22.11	18.62	18.63	18.62
	HSPA+	1	22.12	22.21	22.19	18.63	18.72	18.7

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
Antenna Gain(dBd) = Antenna Gain(dBi)-2.15

WCDMA Band IV

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		**22.38**	22.15	22.24	20.53	20.30	20.39
	HSDPA	1	22.32	22.11	22.28	20.47	20.26	20.43
		2	22.34	22.13	22.26	20.49	20.28	20.41
		3	22.37	22.15	22.21	20.52	20.30	20.36
		4	22.37	22.16	22.26	20.52	20.31	20.41
	HSUPA	1	22.34	22.13	22.23	20.49	20.28	20.38
		2	22.33	22.18	22.24	20.48	20.33	20.39
		3	22.36	22.13	22.28	20.51	20.28	20.43
		4	22.31	22.16	22.21	20.46	20.31	20.36
		5	22.35	22.17	22.26	20.50	20.32	20.41
	HSPA+	1	22.31	22.19	22.31	20.46	20.34	20.46

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	**22.65**	22.55	22.19	22.30	22.20	21.84
		1#3	22.53	22.46	22.27	22.18	22.11	21.92
		1#5	22.51	22.47	22.25	22.16	22.12	21.90
		3#0	22.53	22.56	22.19	22.18	22.21	21.84
		3#3	22.49	22.52	22.35	22.14	22.17	22.00
		6#0	22.56	22.54	22.39	22.21	22.19	22.04
	16QAM	1#0	22.51	**22.59**	22.23	22.16	22.24	21.88
		1#3	**22.59**	22.53	22.17	22.24	22.18	21.82
		1#5	22.57	22.45	22.25	22.22	22.10	21.90
		3#0	22.54	22.43	22.37	22.19	22.08	22.02
		3#3	22.53	22.48	22.26	22.18	22.13	21.91
		6#0	22.51	22.55	22.18	22.16	22.20	21.83
3	QPSK	1#0	23.48	22.54	22.28	23.13	22.19	21.93
		1#8	**23.51**	22.57	22.26	23.16	22.22	21.91
		1#14	23.50	22.58	22.35	23.15	22.23	22.00
		6#0	22.45	22.51	22.37	22.10	22.16	22.02
		6#9	22.46	22.53	22.41	22.11	22.18	22.06
		15#0	22.49	22.56	22.28	22.14	22.21	21.93
	16QAM	1#0	23.16	22.42	22.39	22.81	22.07	22.04
		1#8	23.46	22.39	22.17	23.11	22.04	21.82
		1#14	23.38	22.47	22.42	23.03	22.12	22.07
		6#0	23.45	22.57	22.19	23.10	22.22	21.84
		6#9	**23.51**	22.74	22.54	23.16	22.39	22.19
		15#0	23.00	22.83	22.70	22.65	22.48	22.35

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.61	**22.95**	22.76	22.26	22.60	22.41
		1#13	22.89	22.80	22.68	22.54	22.45	22.33
		1#24	22.75	22.81	22.58	22.40	22.46	22.23
		15#0	22.55	22.90	22.75	22.20	22.55	22.40
		15#10	22.60	22.68	22.51	22.25	22.33	22.16
		25#0	22.57	22.64	22.93	22.22	22.29	22.58
	16QAM	1#0	**22.96**	22.71	22.87	22.61	22.36	22.52
		1#13	22.56	22.76	22.62	22.21	22.41	22.27
		1#24	22.86	22.95	22.62	22.51	22.60	22.27
		15#0	22.82	22.95	22.62	22.47	22.60	22.27
		15#10	22.87	22.83	22.72	22.52	22.48	22.37
		25#0	22.52	22.73	22.91	22.17	22.38	22.56
10	QPSK	1#0	22.81	22.61	22.62	22.46	22.26	22.27
		1#25	22.72	**22.99**	22.55	22.37	22.64	22.20
		1#49	22.75	22.66	22.53	22.40	22.31	22.18
		25#0	22.82	22.91	22.96	22.47	22.56	22.61
		25#25	22.91	22.55	22.65	22.56	22.20	22.30
		50#0	22.71	22.97	22.66	22.36	22.62	22.31
	16QAM	1#0	22.82	22.67	22.57	22.47	22.32	22.22
		1#25	22.79	22.79	22.81	22.44	22.44	22.46
		1#49	**22.96**	22.69	22.51	22.61	22.34	22.16
		25#0	22.52	22.51	22.83	22.17	22.16	22.48
		25#25	22.65	22.79	22.77	22.30	22.44	22.42
		50#0	22.87	22.89	22.71	22.52	22.54	22.36

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.73	22.77	22.85	22.38	22.42	22.50
		1#38	22.84	22.84	22.81	22.49	22.49	22.46
		1#74	22.86	22.93	22.58	22.51	22.58	22.23
		36#0	**22.98**	22.58	22.62	22.63	22.23	22.27
		36#39	22.66	**22.98**	22.64	22.31	22.63	22.29
		75#0	22.95	22.52	22.95	22.60	22.17	22.60
	16QAM	1#0	22.82	22.73	22.52	22.47	22.38	22.17
		1#38	22.85	22.63	22.63	22.50	22.28	22.28
		1#74	22.89	**22.99**	22.73	22.54	22.64	22.38
		36#0	22.51	22.89	22.64	22.16	22.54	22.29
		36#39	22.74	22.93	22.55	22.39	22.58	22.20
		75#0	**22.99**	22.63	22.59	22.64	22.28	22.24
20	QPSK	1#0	**23.59**	22.59	22.23	23.24	22.24	21.88
		1#50	22.64	22.70	22.79	22.29	22.35	22.44
		1#99	22.76	22.88	22.95	22.41	22.53	22.60
		50#0	22.78	22.74	22.52	22.43	22.39	22.17
		50#50	22.52	22.71	22.55	22.17	22.36	22.20
		100#0	22.57	22.90	22.58	22.22	22.55	22.23
	16QAM	1#0	22.83	22.56	22.62	22.48	22.21	22.27
		1#50	22.96	22.70	22.94	22.61	22.35	22.59
		1#99	22.69	22.92	22.60	22.34	22.57	22.25
		50#0	22.93	22.86	22.65	22.58	22.51	22.30
		50#50	22.86	22.58	22.63	22.51	22.23	22.28
		100#0	22.92	22.75	**22.99**	22.57	22.40	22.64

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
Limit: EIRP≤33dBm

LTE Band 4

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	22.71	22.46	**22.76**	20.86	20.61	20.91
		1#3	22.61	22.65	22.49	20.76	20.80	20.64
		1#5	22.43	22.46	22.59	20.58	20.61	20.74
		3#0	22.59	22.68	22.71	20.74	20.83	20.86
		3#3	22.54	22.32	22.51	20.69	20.47	20.66
		6#0	**22.76**	22.51	22.34	20.91	20.66	20.49
	16QAM	1#0	22.49	22.70	22.51	20.64	20.85	20.66
		1#3	22.72	22.64	22.38	20.87	20.79	20.53
		1#5	22.66	22.67	**22.79**	20.81	20.82	20.94
		3#0	22.61	22.68	22.60	20.76	20.83	20.75
		3#3	22.72	**22.79**	22.36	20.87	20.94	20.51
		6#0	22.69	22.69	22.69	20.84	20.84	20.84
3	QPSK	1#0	22.43	22.61	22.57	20.58	20.76	20.72
		1#8	22.72	22.72	22.35	20.87	20.87	20.50
		1#14	22.72	22.32	**22.78**	20.87	20.47	20.93
		6#0	**22.78**	22.69	22.34	20.93	20.84	20.49
		6#9	22.31	22.55	22.77	20.46	20.70	20.92
		15#0	22.47	22.62	22.44	20.62	20.77	20.59
	16QAM	1#0	22.42	22.67	22.74	20.57	20.82	20.89
		1#8	22.69	22.33	22.37	20.84	20.48	20.52
		1#14	22.65	22.70	22.77	20.80	20.85	20.92
		6#0	22.57	**22.79**	22.68	20.72	20.94	20.83
		6#9	22.37	**22.79**	22.51	20.52	20.94	20.66
		15#0	22.60	22.70	22.71	20.75	20.85	20.86

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.56	**22.76**	22.44	20.71	20.91	20.59
		1#13	22.39	22.69	22.59	20.54	20.84	20.74
		1#24	22.73	22.44	22.72	20.88	20.59	20.87
		15#0	22.35	22.43	22.63	20.50	20.58	20.78
		15#10	22.33	22.66	22.66	20.48	20.81	20.81
		25#0	22.48	22.74	22.33	20.63	20.89	20.48
	16QAM	1#0	22.73	22.38	**22.79**	20.88	20.53	20.94
		1#13	22.77	22.50	22.72	20.92	20.65	20.87
		1#24	22.32	22.33	22.74	20.47	20.48	20.89
		15#0	22.66	22.68	22.70	20.81	20.83	20.85
		15#10	22.38	22.54	22.47	20.53	20.69	20.62
		25#0	22.63	22.65	22.71	20.78	20.80	20.86
10	QPSK	1#0	22.75	22.33	**22.79**	20.90	20.48	20.94
		1#25	22.66	22.79	22.56	20.81	20.94	20.71
		1#49	22.57	22.69	22.75	20.72	20.84	20.90
		25#0	22.59	22.32	22.55	20.74	20.47	20.70
		25#25	22.54	22.65	22.35	20.69	20.80	20.50
		50#0	22.55	22.70	22.45	20.70	20.85	20.60
	16QAM	1#0	22.75	22.34	22.69	20.90	20.49	20.84
		1#25	22.57	22.56	22.71	20.72	20.71	20.86
		1#49	22.57	22.31	22.75	20.72	20.46	20.90
		25#0	22.42	22.66	**22.77**	20.57	20.81	20.92
		25#25	22.34	22.35	22.44	20.49	20.50	20.59
		50#0	22.71	22.42	22.39	20.86	20.57	20.54

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.77	22.44	22.74	20.92	20.59	20.89
		1#38	22.49	22.39	22.79	20.64	20.54	20.94
		1#74	22.50	**22.79**	22.44	20.65	20.94	20.59
		36#0	22.36	22.41	22.56	20.51	20.56	20.71
		36#39	22.62	22.66	22.64	20.77	20.81	20.79
		75#0	22.71	22.40	22.64	20.86	20.55	20.79
	16QAM	1#0	22.67	22.36	22.78	20.82	20.51	20.93
		1#38	22.66	22.39	22.37	20.81	20.54	20.52
		1#74	22.45	22.69	22.72	20.60	20.84	20.87
		36#0	22.75	22.56	**22.79**	20.90	20.71	20.94
		36#39	22.59	22.70	22.32	20.74	20.85	20.47
		75#0	22.38	22.32	22.35	20.53	20.47	20.50
20	QPSK	1#0	**22.80**	**22.80**	22.63	20.95	20.95	20.78
		1#50	22.39	22.63	22.67	20.54	20.78	20.82
		1#99	22.58	22.61	22.48	20.73	20.76	20.63
		50#0	22.31	22.51	22.48	20.46	20.66	20.63
		50#50	22.45	22.79	22.73	20.60	20.94	20.88
		100#0	22.48	22.65	22.39	20.63	20.80	20.54
	16QAM	1#0	22.73	22.70	22.31	20.88	20.85	20.46
		1#50	22.48	22.73	22.64	20.63	20.88	20.79
		1#99	22.41	22.36	22.35	20.56	20.51	20.50
		50#0	22.44	**22.79**	22.57	20.59	20.94	20.72
		50#50	22.32	22.72	22.63	20.47	20.87	20.78
		100#0	22.70	22.32	22.35	20.85	20.47	20.50

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
Limit: EIRP≤30dBm

LTE Band 5

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	22.34	22.65	**22.65**	18.85	19.16	19.16
		1#3	22.64	22.44	22.42	19.15	18.95	18.93
		1#5	22.46	22.62	22.45	18.97	19.13	18.96
		3#0	22.51	22.55	22.35	19.02	19.06	18.86
		3#3	22.44	22.26	22.50	18.95	18.77	19.01
		6#0	22.56	22.51	22.60	19.07	19.02	19.11
	16QAM	1#0	22.53	22.31	22.37	19.04	18.82	18.88
		1#3	22.55	22.39	22.58	19.06	18.90	19.09
		1#5	22.48	22.33	22.43	18.99	18.84	18.94
		3#0	22.46	22.55	22.47	18.97	19.06	18.98
		3#3	22.64	22.32	22.60	19.15	18.83	19.11
		6#0	22.47	**22.65**	22.55	18.98	19.16	19.06
3	QPSK	1#0	22.38	22.66	**22.68**	18.89	19.17	19.19
		1#8	22.50	22.38	22.67	19.01	18.89	19.18
		1#14	22.34	22.67	22.36	18.85	19.18	18.87
		6#0	22.68	22.43	22.58	19.19	18.94	19.09
		6#9	22.46	22.42	**22.68**	18.97	18.93	19.19
		15#0	22.56	22.52	22.32	19.07	19.03	18.83
	16QAM	1#0	22.67	22.41	22.60	19.18	18.92	19.11
		1#8	22.51	22.30	22.45	19.02	18.81	18.96
		1#14	**22.68**	22.39	22.52	19.19	18.90	19.03
		6#0	22.46	22.56	22.42	18.97	19.07	18.93
		6#9	22.36	22.49	22.49	18.87	19.00	19.00
		15#0	22.63	22.52	22.39	19.14	19.03	18.90

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.43	22.38	22.14	18.94	18.89	18.65
		1#13	22.36	22.11	22.33	18.87	18.62	18.84
		1#24	**22.50**	22.10	22.42	19.01	18.61	18.93
		15#0	22.34	**22.50**	22.13	18.85	19.01	18.64
		15#10	22.30	22.41	22.30	18.81	18.92	18.81
		25#0	22.36	22.19	22.30	18.87	18.70	18.81
	16QAM	1#0	22.39	22.44	22.32	18.90	18.95	18.83
		1#13	22.21	22.29	22.47	18.72	18.80	18.98
		1#24	22.22	22.42	22.48	18.73	18.93	18.99
		15#0	22.19	22.19	22.37	18.70	18.70	18.88
		15#10	22.16	22.24	**22.49**	18.67	18.75	19.00
		25#0	22.41	**22.49**	22.38	18.92	19.00	18.89
10	QPSK	1#0	**22.69**	22.50	22.47	19.20	19.01	18.98
		1#25	22.47	22.11	22.45	18.98	18.62	18.96
		1#49	22.24	22.39	22.15	18.75	18.90	18.66
		25#0	22.24	22.40	22.49	18.75	18.91	19.00
		25#25	22.35	22.28	22.35	18.86	18.79	18.86
		50#0	22.32	22.23	22.22	18.83	18.74	18.73
	16QAM	1#0	22.35	22.46	**22.47**	18.86	18.97	18.98
		1#25	22.31	22.18	22.27	18.82	18.69	18.78
		1#49	22.28	22.39	22.27	18.79	18.90	18.78
		25#0	22.42	22.13	22.17	18.93	18.64	18.68
		25#25	22.15	22.42	22.34	18.66	18.93	18.85
		50#0	22.28	22.48	22.23	18.79	18.99	18.74

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
Antenna Gain(dBd) = Antenna Gain(dBi)-2.15
Limit: ERP≤38.45dBm

LTE Band 7

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.63	22.46	22.32	21.69	21.52	21.38
		1#13	22.66	**22.68**	22.63	21.72	21.74	21.69
		1#24	22.32	22.61	22.54	21.38	21.67	21.60
		15#0	22.39	22.52	22.39	21.45	21.58	21.45
		15#10	22.55	22.66	22.41	21.61	21.72	21.47
		25#0	22.32	22.59	22.58	21.38	21.65	21.64
	16QAM	1#0	22.46	22.50	22.46	21.52	21.56	21.52
		1#13	22.52	22.65	22.37	21.58	21.71	21.43
		1#24	22.42	22.53	22.33	21.48	21.59	21.39
		15#0	22.45	22.65	22.46	21.51	21.71	21.52
		15#10	**22.66**	22.57	22.52	21.72	21.63	21.58
		25#0	22.33	22.60	22.60	21.39	21.66	21.66
10	QPSK	1#0	22.43	22.55	22.44	21.49	21.61	21.50
		1#25	22.39	22.39	22.57	21.45	21.45	21.63
		1#49	22.37	22.50	22.34	21.43	21.56	21.40
		25#0	22.41	22.40	**22.67**	21.47	21.46	21.73
		25#25	22.33	22.65	22.53	21.39	21.71	21.59
		50#0	22.59	22.48	22.64	21.65	21.54	21.70
	16QAM	1#0	22.39	22.38	**22.68**	21.45	21.44	21.74
		1#25	22.44	22.41	22.38	21.50	21.47	21.44
		1#49	22.37	22.58	22.57	21.43	21.64	21.63
		25#0	22.44	22.58	22.36	21.50	21.64	21.42
		25#25	22.60	22.51	22.38	21.66	21.57	21.44
		50#0	22.50	22.49	**22.68**	21.56	21.55	21.74

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.60	22.41	22.65	21.66	21.47	21.71
		1#38	22.56	22.34	22.49	21.62	21.40	21.55
		1#74	22.35	22.41	22.55	21.41	21.47	21.61
		36#0	22.42	22.44	22.62	21.48	21.50	21.68
		36#39	22.46	22.51	22.55	21.52	21.57	21.61
		75#0	**22.68**	22.63	22.42	21.74	21.69	21.48
	16QAM	1#0	22.41	22.35	22.53	21.47	21.41	21.59
		1#38	22.52	22.41	22.56	21.58	21.47	21.62
		1#74	22.55	22.48	22.50	21.61	21.54	21.56
		36#0	22.49	**22.68**	22.40	21.55	21.74	21.46
		36#39	22.53	**22.68**	**22.68**	21.59	21.74	21.74
		75#0	22.67	22.59	22.56	21.73	21.65	21.62
20	QPSK	1#0	**22.69**	22.61	22.34	21.75	21.67	21.40
		1#50	22.38	22.36	22.45	21.44	21.42	21.51
		1#99	22.31	22.38	22.58	21.37	21.44	21.64
		50#0	22.65	22.45	22.53	21.71	21.51	21.59
		50#50	22.46	22.36	22.57	21.52	21.42	21.63
		100#0	22.42	22.44	22.43	21.48	21.50	21.49
	16QAM	1#0	22.58	22.46	22.43	21.64	21.52	21.49
		1#50	22.66	22.40	**22.68**	21.72	21.46	21.74
		1#99	22.30	22.61	22.39	21.36	21.67	21.45
		50#0	22.57	22.62	22.30	21.63	21.68	21.36
		50#50	22.30	22.45	22.53	21.36	21.51	21.59
		100#0	22.53	22.34	22.59	21.59	21.40	21.65

Note: EIRP (dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
Limit: EIRP≤33dBm

LTE Band 38

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.57	22.45	22.30	21.43	21.31	21.16
		1#13	22.44	22.47	22.63	21.30	21.33	21.49
		1#24	22.32	22.33	22.31	21.18	21.19	21.17
		15#0	22.55	22.32	22.33	21.41	21.18	21.19
		15#10	22.32	**22.59**	22.37	21.18	21.45	21.23
		25#0	22.35	22.41	22.42	21.21	21.27	21.28
	16QAM	1#0	22.46	22.56	22.52	21.32	21.42	21.38
		1#13	22.64	22.35	22.37	21.50	21.21	21.23
		1#24	22.39	22.55	22.41	21.25	21.41	21.27
		15#0	22.35	22.32	22.34	21.21	21.18	21.20
		15#10	**22.68**	22.46	22.61	21.54	21.32	21.47
		25#0	22.63	22.56	22.53	21.49	21.42	21.39
10	QPSK	1#0	22.56	22.58	22.62	21.42	21.44	21.48
		1#25	22.35	22.68	22.55	21.21	21.54	21.41
		1#49	22.56	22.43	22.50	21.42	21.29	21.36
		25#0	22.46	22.62	22.35	21.32	21.48	21.21
		25#25	22.50	22.65	**22.69**	21.36	21.51	21.55
		50#0	22.51	22.53	22.49	21.37	21.39	21.35
	16QAM	1#0	22.51	22.34	22.39	21.37	21.20	21.25
		1#25	22.40	22.59	22.68	21.26	21.45	21.54
		1#49	22.53	22.44	22.63	21.39	21.30	21.49
		25#0	22.45	22.49	22.47	21.31	21.35	21.33
		25#25	22.50	22.63	**22.69**	21.36	21.49	21.55
		50#0	22.54	22.67	22.42	21.40	21.53	21.28

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.63	22.49	22.65	21.49	21.35	21.51
		1#38	22.47	22.32	22.37	21.33	21.18	21.23
		1#74	**22.68**	22.30	22.47	21.54	21.16	21.33
		36#0	22.53	22.63	22.60	21.39	21.49	21.46
		36#39	22.64	22.33	22.57	21.50	21.19	21.43
		75#0	22.34	22.54	22.35	21.20	21.40	21.21
	16QAM	1#0	22.45	22.55	22.57	21.31	21.41	21.43
		1#38	22.38	22.65	**22.68**	21.24	21.51	21.54
		1#74	22.68	22.43	22.61	21.54	21.29	21.47
		36#0	22.33	22.48	22.55	21.19	21.34	21.41
		36#39	22.40	22.40	22.39	21.26	21.26	21.25
		75#0	22.38	22.66	22.33	21.24	21.52	21.19
20	QPSK	1#0	**22.70**	22.52	22.54	21.56	21.38	21.40
		1#50	22.44	22.64	22.35	21.30	21.50	21.21
		1#99	22.62	22.37	22.58	21.48	21.23	21.44
		50#0	22.59	22.52	22.69	21.45	21.38	21.55
		50#50	22.58	22.46	22.51	21.44	21.32	21.37
		100#0	22.38	22.41	22.52	21.24	21.27	21.38
	16QAM	1#0	22.35	22.39	22.63	21.21	21.25	21.49
		1#50	22.32	22.32	22.50	21.18	21.18	21.36
		1#99	**22.69**	22.48	22.38	21.55	21.34	21.24
		50#0	22.46	22.53	22.66	21.32	21.39	21.52
		50#50	22.56	22.39	22.67	21.42	21.25	21.53
		100#0	22.57	22.38	22.60	21.43	21.24	21.46

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
Limit: ERP≤33dBm

Peak-to-average ratio (PAR):

GPRS/EGPRS 850 Band

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	2.27	≤ 13
	Middle	2.17	≤ 13
	High	2.21	≤ 13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	2.62	≤ 13
	Middle	2.35	≤ 13
	High	2.04	≤ 13

WCDMA Band V

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	2.79	≤ 13
	Middle	2.56	≤ 13
	High	2.31	≤ 13
WCDMA (HSDPA)	Low	2.67	≤ 13
	Middle	2.55	≤ 13
	High	2.62	≤ 13
WCDMA (HSUPA)	Low	2.2	≤ 13
	Middle	2.51	≤ 13
	High	2.7	≤ 13
WCDMA (HSPA+)	Low	2.52	≤ 13
	Middle	2.26	≤ 13
	High	2.67	≤ 13

WCDMA Band IV

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	2.32	≤ 13
	Middle	2.66	≤ 13
	High	2.89	≤ 13
WCDMA (HSDPA)	Low	2.88	≤ 13
	Middle	2.14	≤ 13
	High	2.31	≤ 13
WCDMA (HSUPA)	Low	2.27	≤ 13
	Middle	2.64	≤ 13
	High	2.77	≤ 13
WCDMA (HSPA+)	Low	2.35	≤ 13
	Middle	2.58	≤ 13
	High	2.50	≤ 13

PCS 1900

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	2.59	≤ 13
	Middle	2.66	≤ 13
	High	2.16	≤ 13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	2.21	≤ 13
	Middle	2.31	≤ 13
	High	2.42	≤ 13

WCDMA Band II

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	2.82	≤ 13
	Middle	2.25	≤ 13
	High	2.13	≤ 13
WCDMA (HSDPA)	Low	2.1	≤ 13
	Middle	2.61	≤ 13
	High	2.24	≤ 13
WCDMA (HSUPA)	Low	2.53	≤ 13
	Middle	2.76	≤ 13
	High	2.49	≤ 13
WCDMA (HSPA+)	Low	2.73	≤ 13
	Middle	2.13	≤ 13
	High	2.75	≤ 13

LTE Band 2

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit (dB)
QPSK	1 RB	20M	4.38	3.65	3.96	≤ 13
	100 RB		3.98	3.8	3.55	≤ 13
16-QAM	1 RB	20M	4.04	4.18	4.45	≤ 13
	100 RB		4.15	3.85	3.62	≤ 13

LTE Band 4

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	3.65	4.64	4.21	≤ 13
	100 RB		4.45	3.81	4.15	≤ 13
16-QAM	1 RB	20M	3.8	3.95	4.65	≤ 13
	100 RB		4.27	3.91	4.31	≤ 13

LTE Band 5

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	10M	4.5	4.17	4.43	≤ 13
	50 RB		4.55	4.77	4.16	≤ 13
16-QAM	1 RB	10M	4.89	3.99	4.21	≤ 13
	50 RB		4.1	4.01	4.88	≤ 13

LTE Band 7

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	5.13	4.32	4.43	≤ 13
	100 RB		5.36	4.46	4.8	≤ 13
16-QAM	1 RB	20M	4.39	5.07	4.51	≤ 13
	100 RB		5.18	4.72	4.95	≤ 13

LTE Band 38

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	5.11	4.54	4.87	≤ 13
	100 RB		5.28	5.58	4.61	≤ 13
16-QAM	1 RB	20M	5.38	5.41	5.63	≤ 13
	100 RB		4.43	5.51	4.86	≤ 13

OCCUPIED BANDWIDTH

EUT operation mode: Transmitting

GPRS 850 Band

Mode	Frequency (MHz)	26 dB Emission Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
GPRS (GMSK)	824.2	318.64	244.49
	836.6	318.64	242.48
	848.8	318.64	244.49
EGPRS (8PSK)	824.2	320.64	242.48
	836.6	308.62	232.46
	848.8	304.61	240.48

WCDMA Band V

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	826.4	4.13	4.71
	836.6	4.11	4.69
	846.6	4.13	4.71
WCDMA (HSDPA)	826.4	4.13	4.71
	836.6	4.13	4.71
	846.6	4.13	4.71
WCDMA (HSUPA)	826.4	4.13	4.71
	836.6	4.13	4.71
	846.6	4.11	4.69
WCDMA (HSPA+)	826.4	4.11	4.69
	836.6	4.13	4.71
	846.6	4.11	4.71

PCS 1900

Mode	Frequency (MHz)	26 dB Emission Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
GPRS (GMSK)	1850.2	322.65	246.49
	1880	322.65	242.48
	1909.8	316.63	244.49
EGPRS (8PSK)	1850.2	312.63	242.48
	1880	306.61	242.48
	1909.8	312.63	242.48

WCDMA Band II

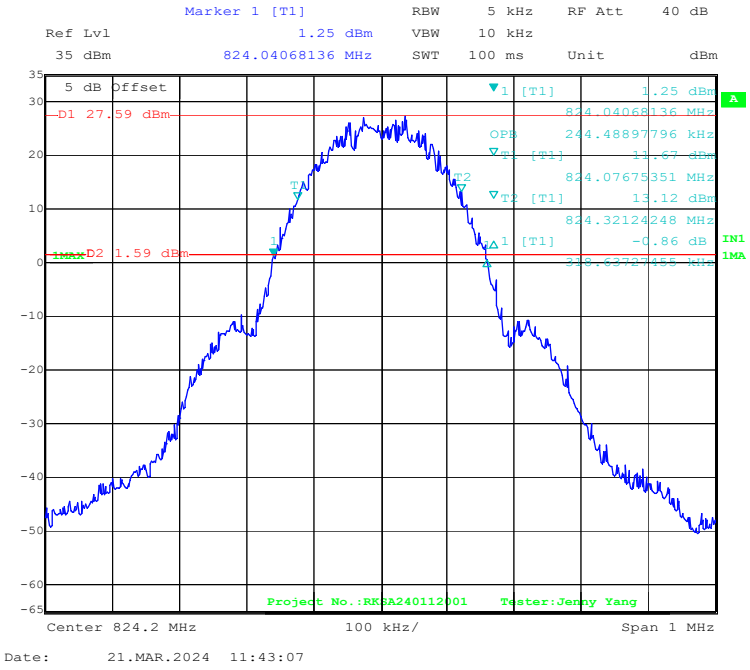
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	1852.4	4.13	4.73
	1880	4.13	4.69
	1907.6	4.11	4.71
WCDMA (HSDPA)	1852.4	4.13	4.71
	1880	4.11	4.71
	1907.6	4.13	4.73
WCDMA (HSUPA)	1852.4	4.11	4.71
	1880	4.11	4.71
	1907.6	4.11	4.71
WCDMA (HSPA+)	1852.4	4.13	4.73
	1880	4.11	4.73
	1907.6	4.11	4.71

WCDMA Band IV

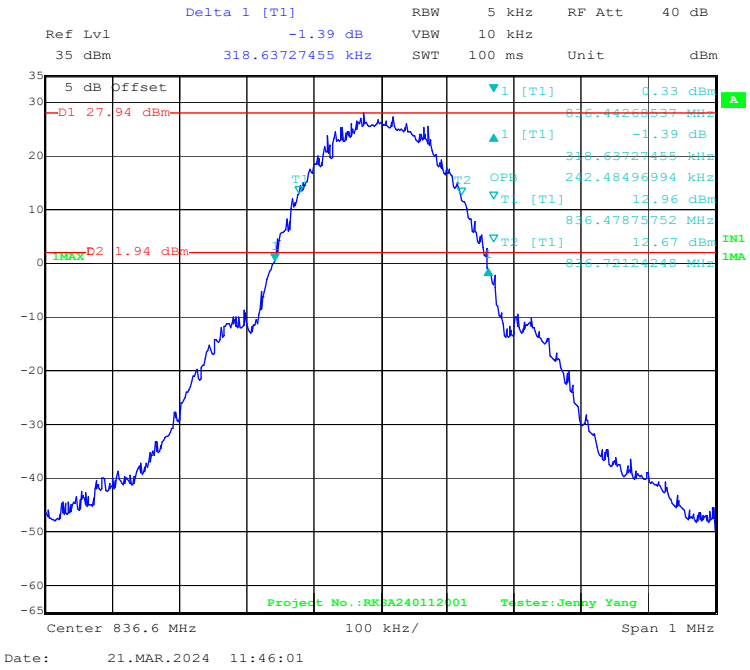
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	1712.4	4.13	4.73
	1732.6	4.13	4.71
	1752.6	4.13	4.73
WCDMA (HSDPA)	1712.4	4.13	4.73
	1732.6	4.13	4.71
	1752.6	4.13	4.73
WCDMA (HSUPA)	1712.4	4.13	4.73
	1732.6	4.11	4.75
	1752.6	4.11	4.71
WCDMA (HSPA+)	1712.4	4.11	4.71
	1732.6	4.11	4.71
	1752.6	4.13	4.71

GPRS 850 Band

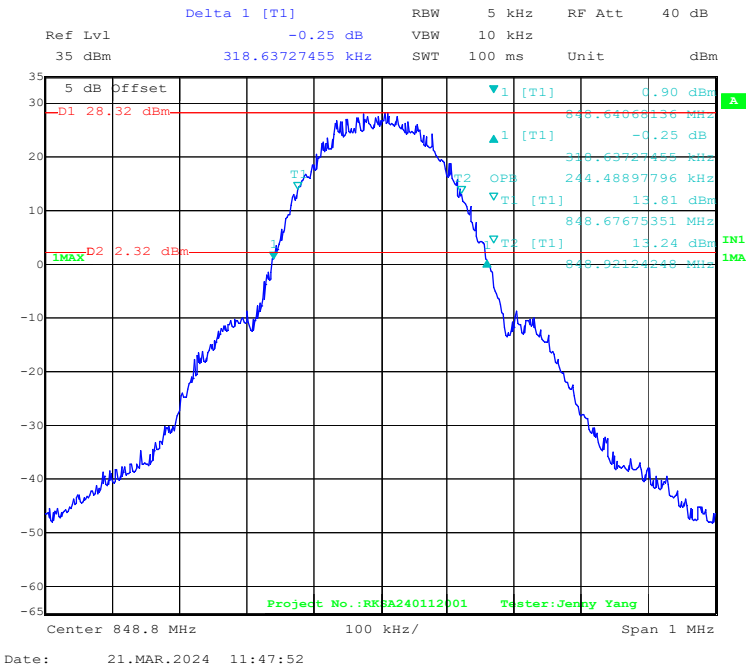
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) Low channel



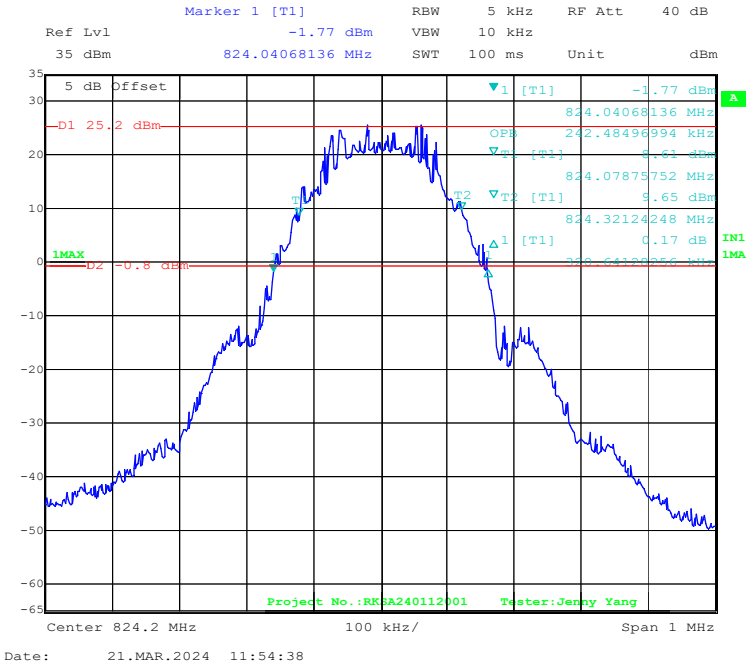
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) Middle channel



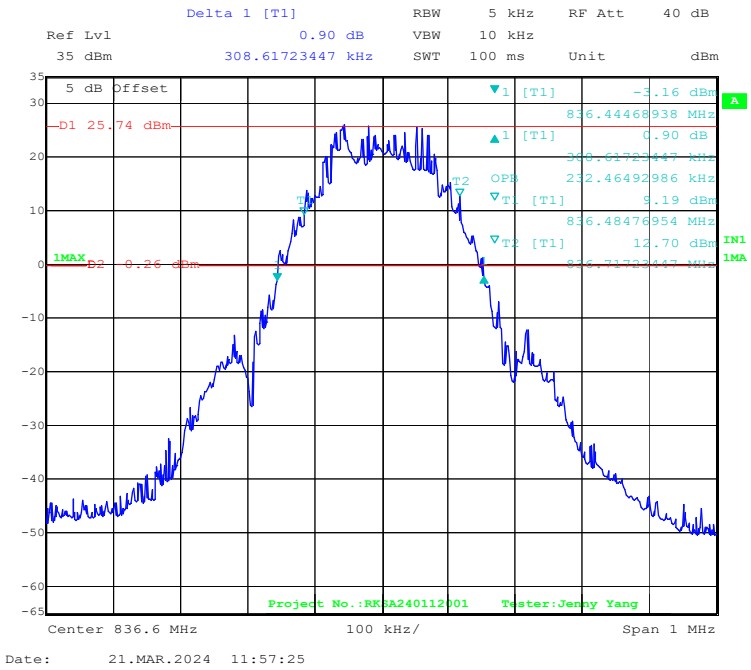
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) High channel



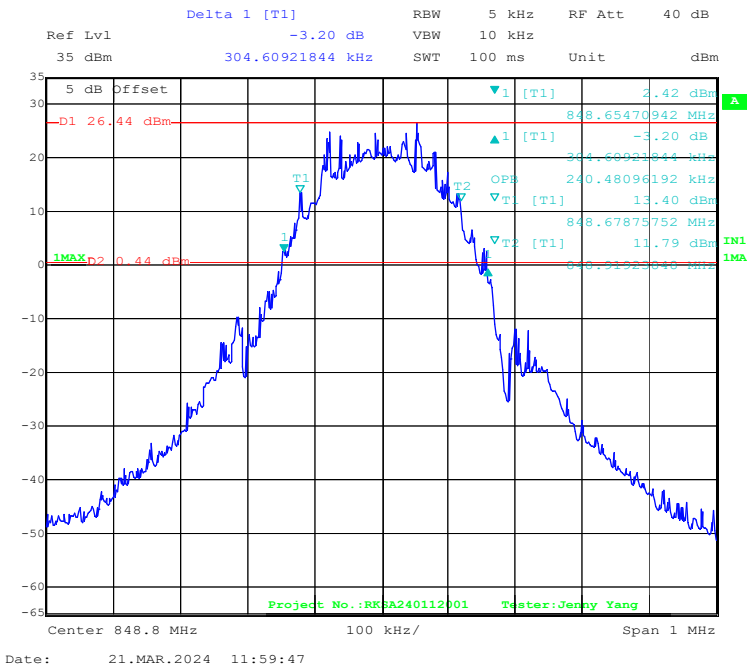
99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) Low channel



99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) Middle channel

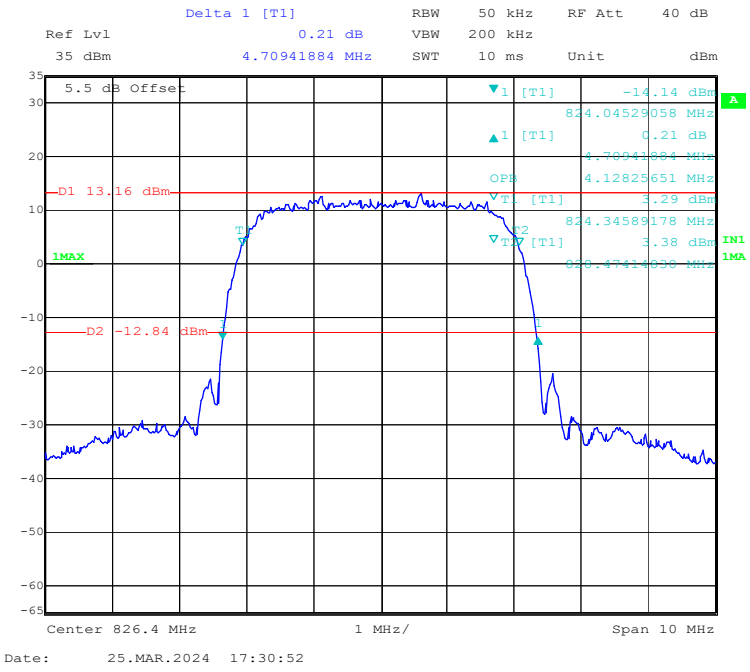


99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) High channel

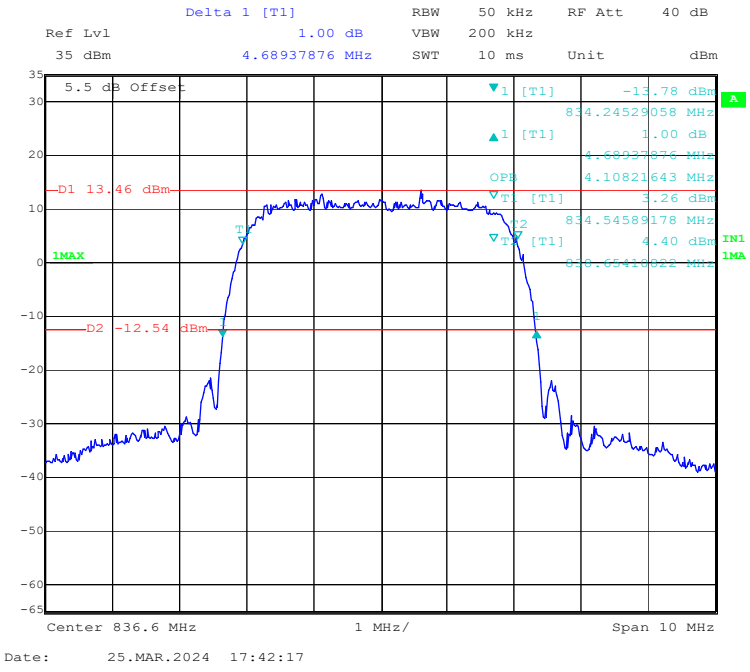


WCDMA Band V

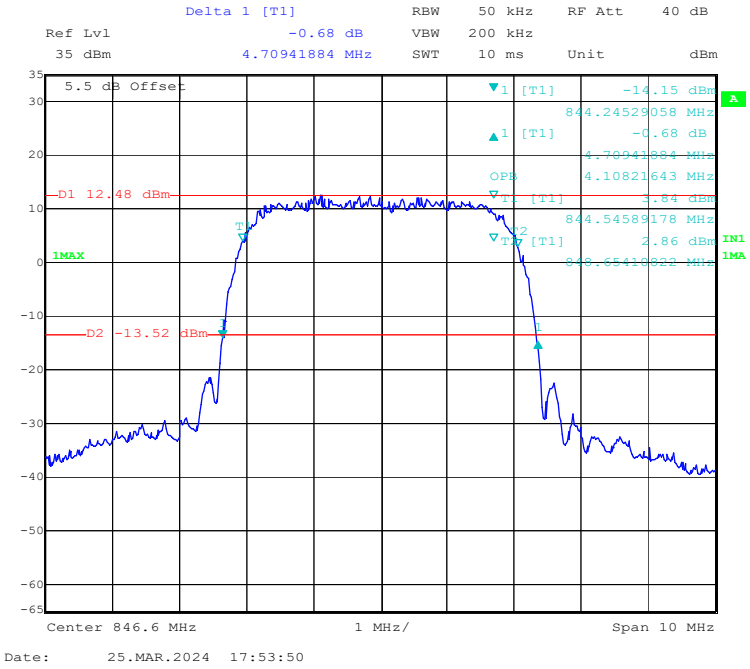
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Low channel



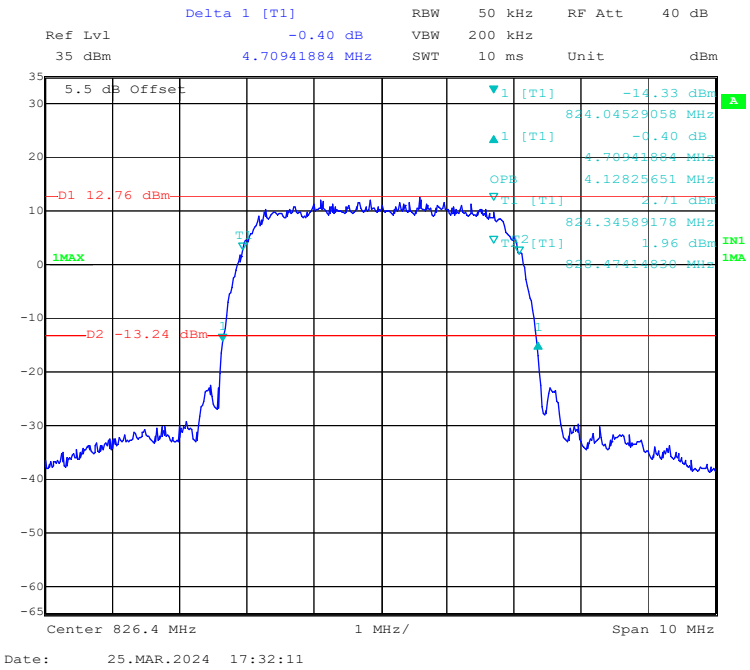
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Middle channel



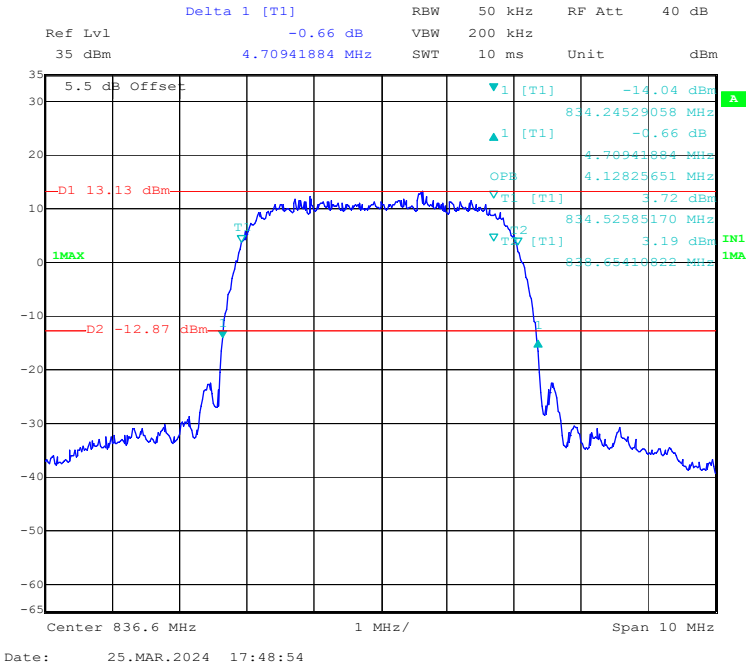
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) High channel



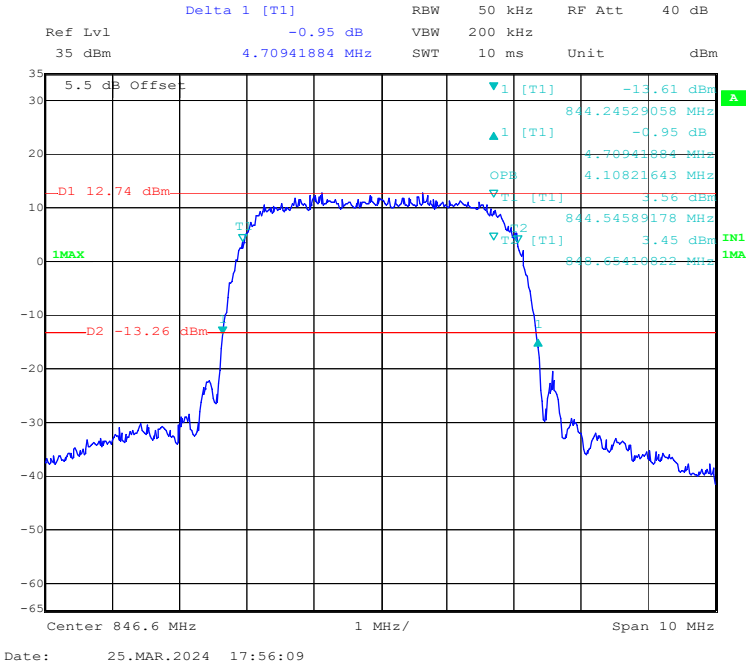
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Low channel



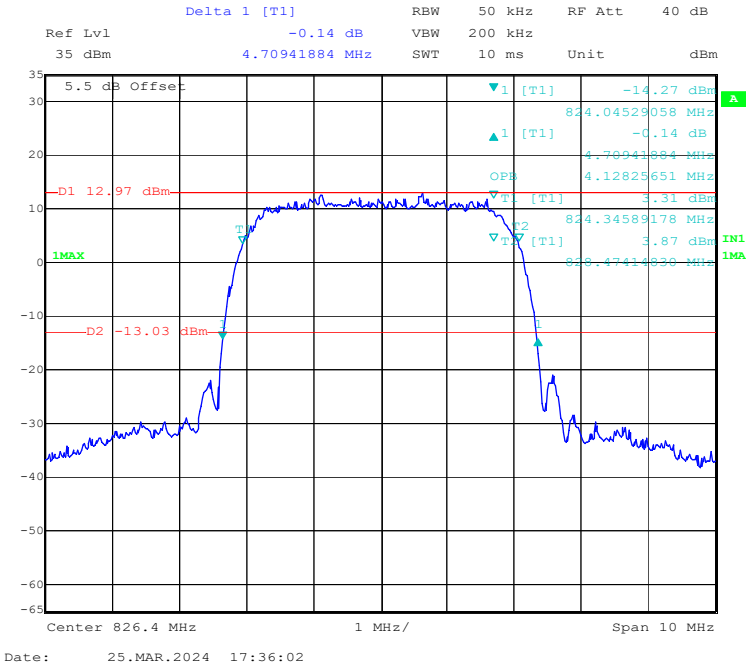
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Middle channel



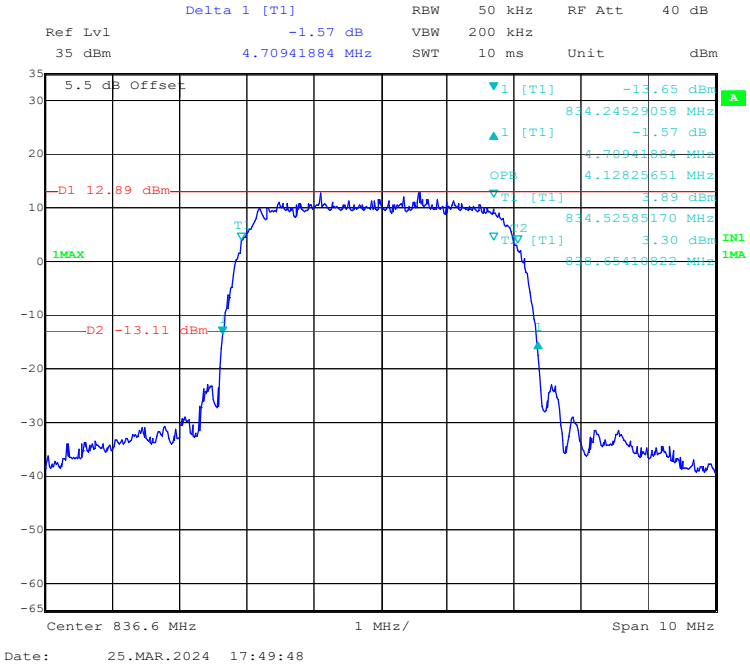
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) High channel



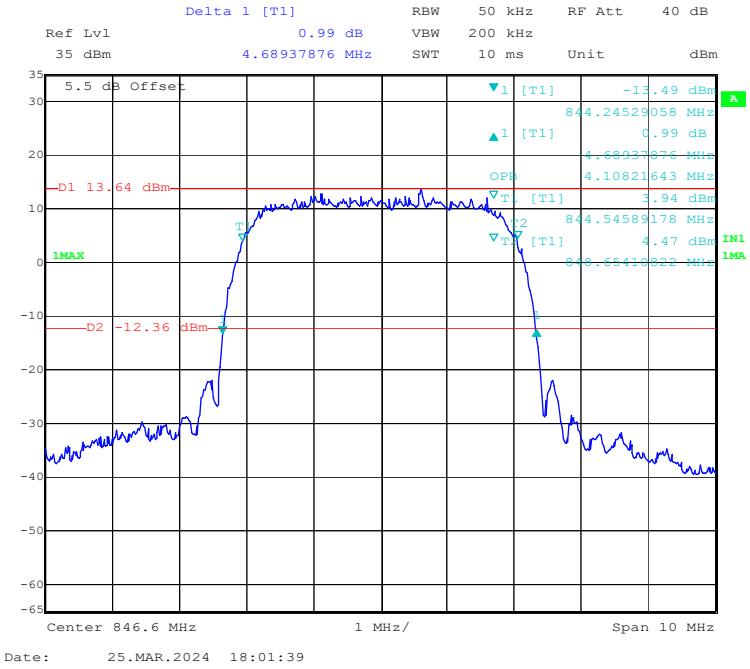
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Low channel



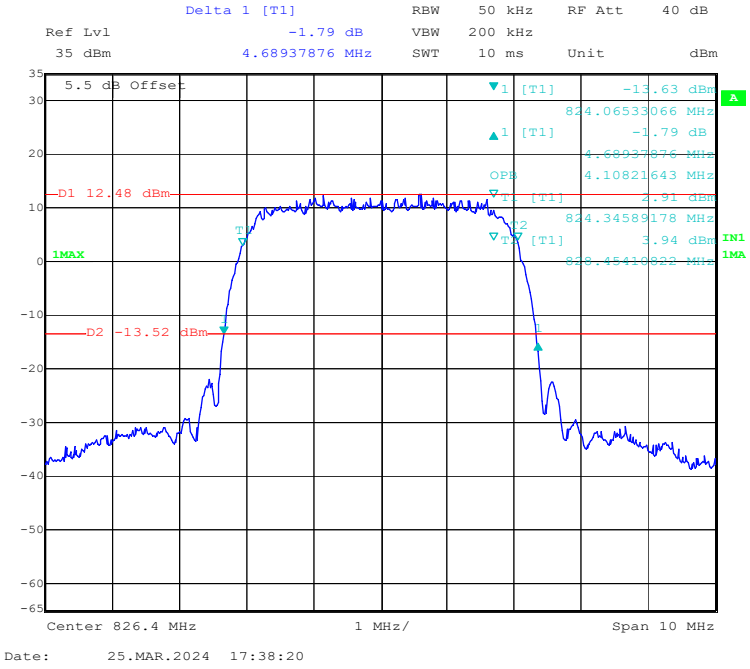
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Middle channel



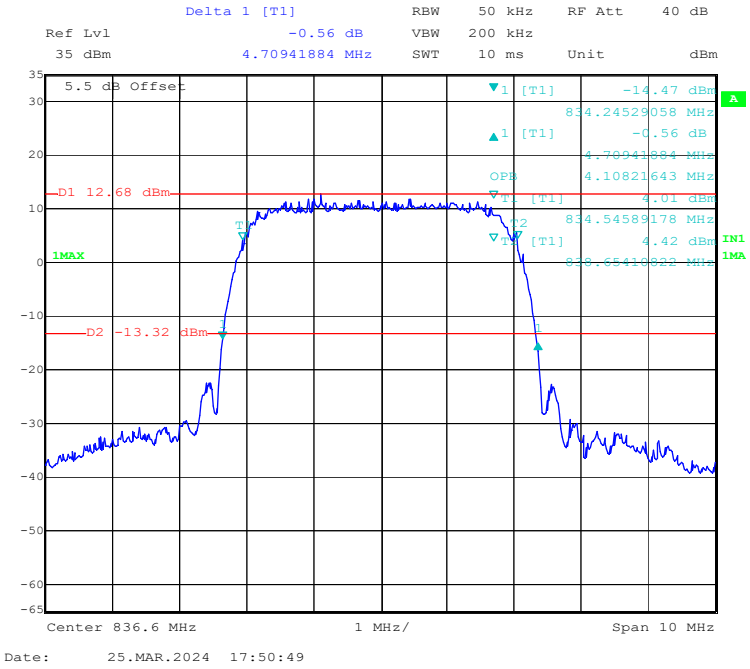
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) High channel



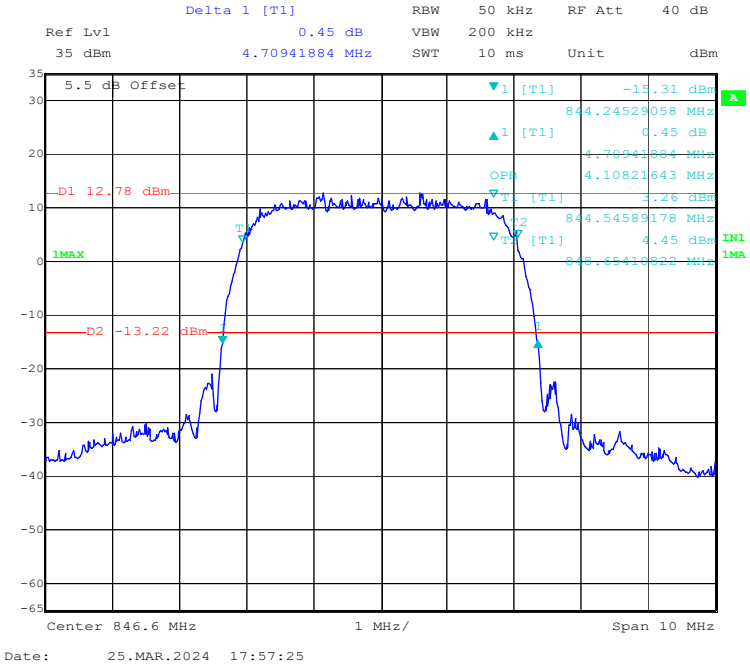
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Low channel



99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Middle channel

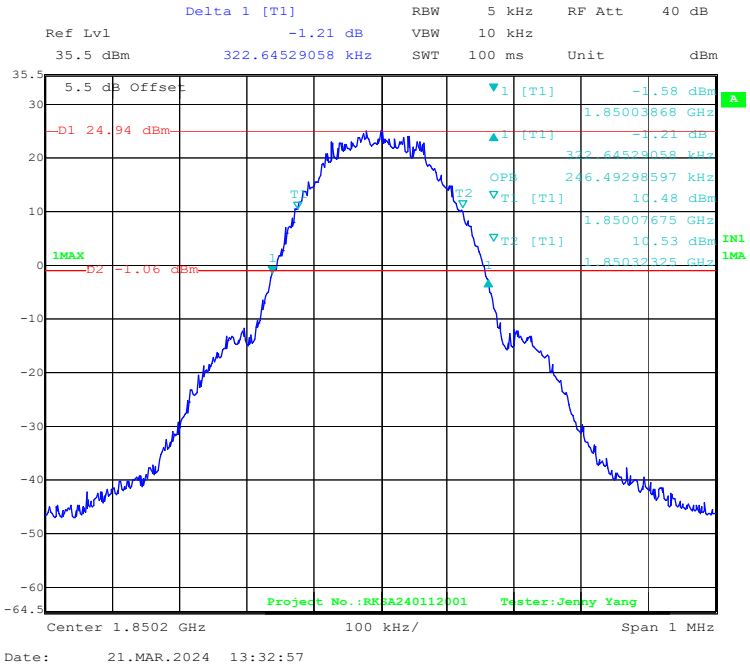


99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) High channel

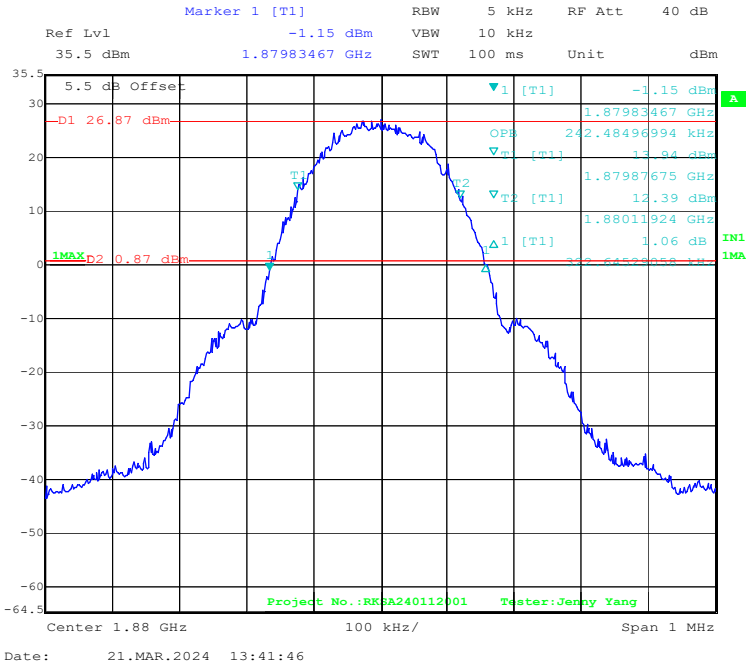


PCS 1900 Band

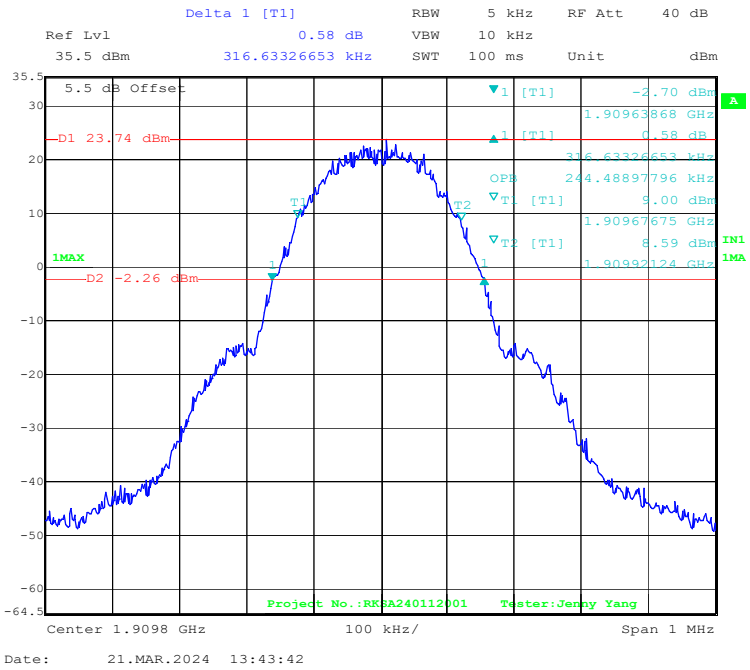
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) Low channel



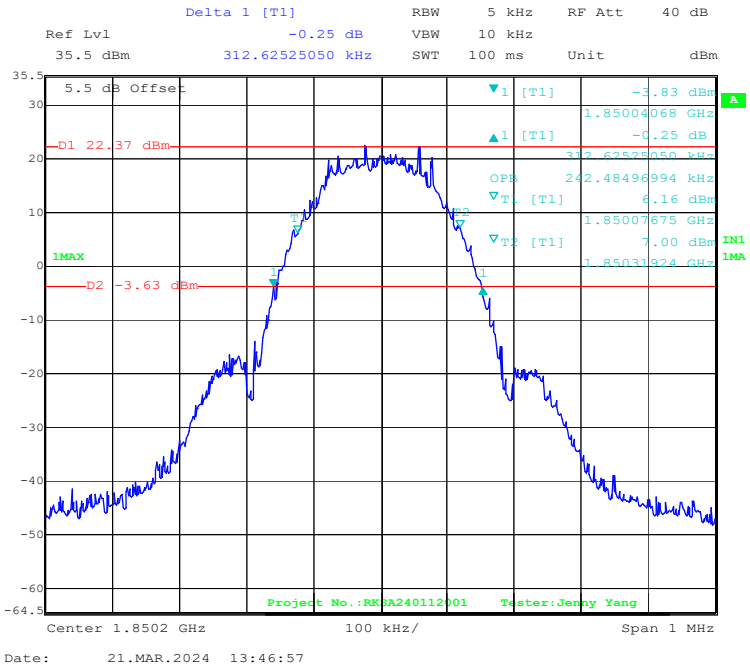
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) Middle channel



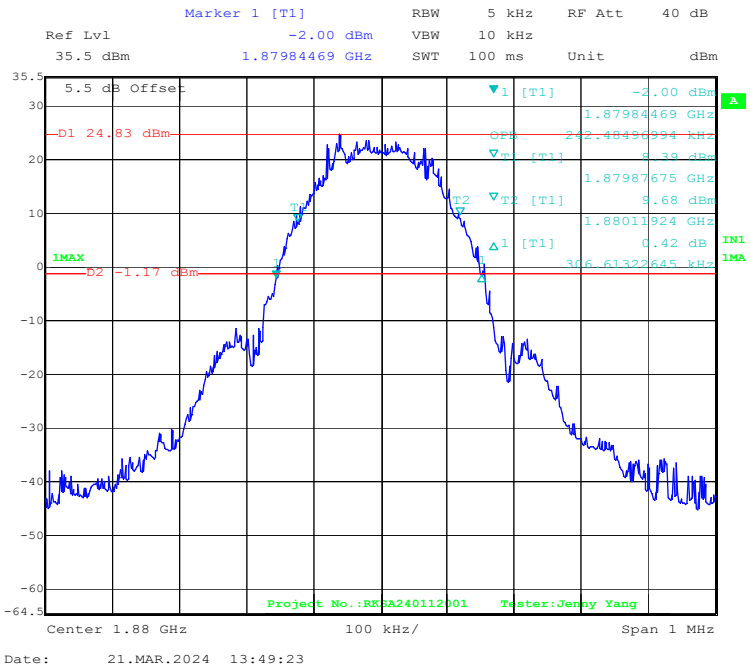
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) High channel



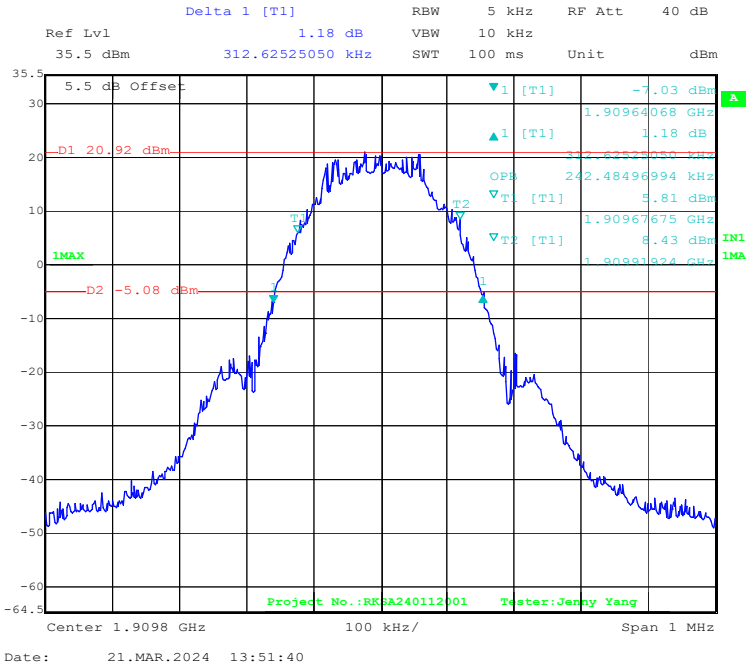
99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) Low channel



99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) Middle channel

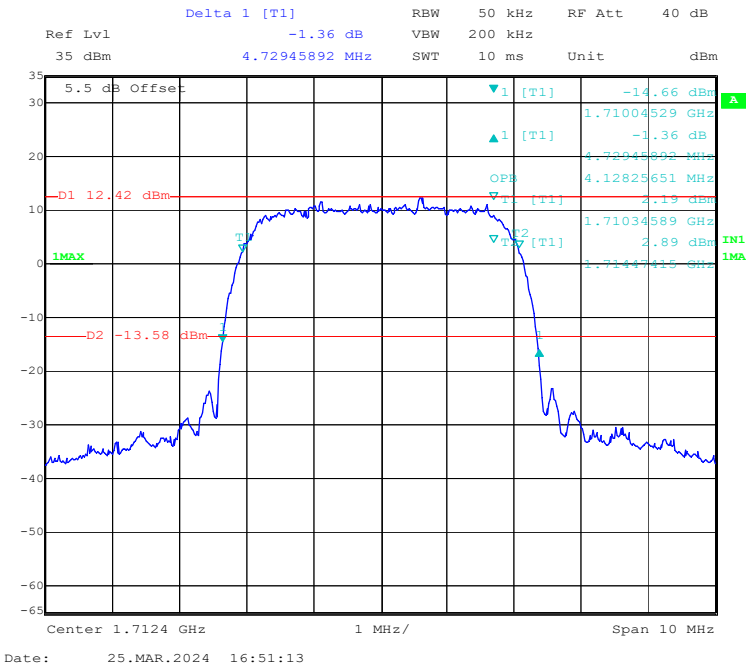


99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) High channel

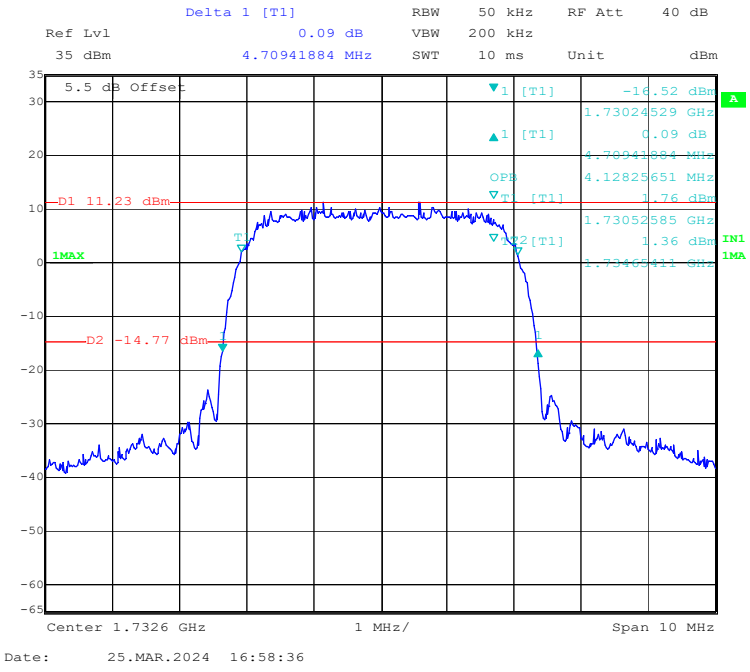


WCDMA Band IV

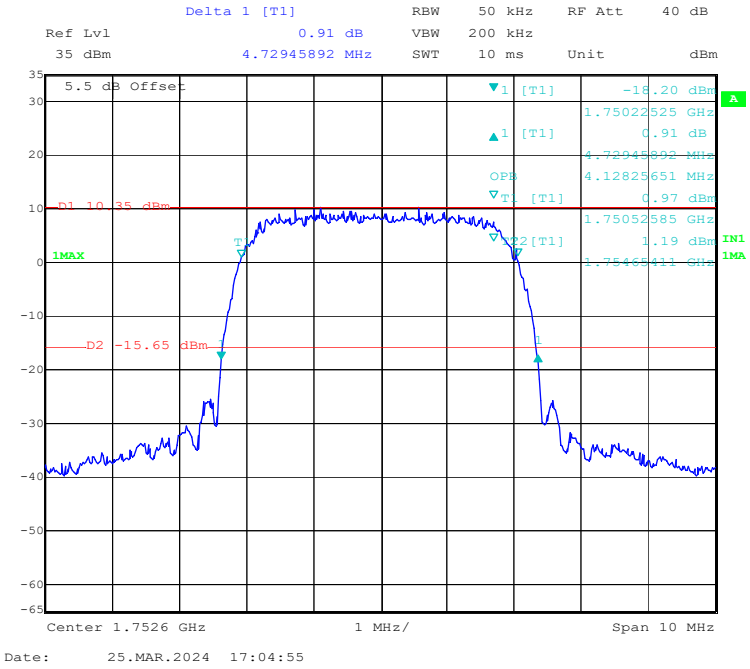
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Low channel



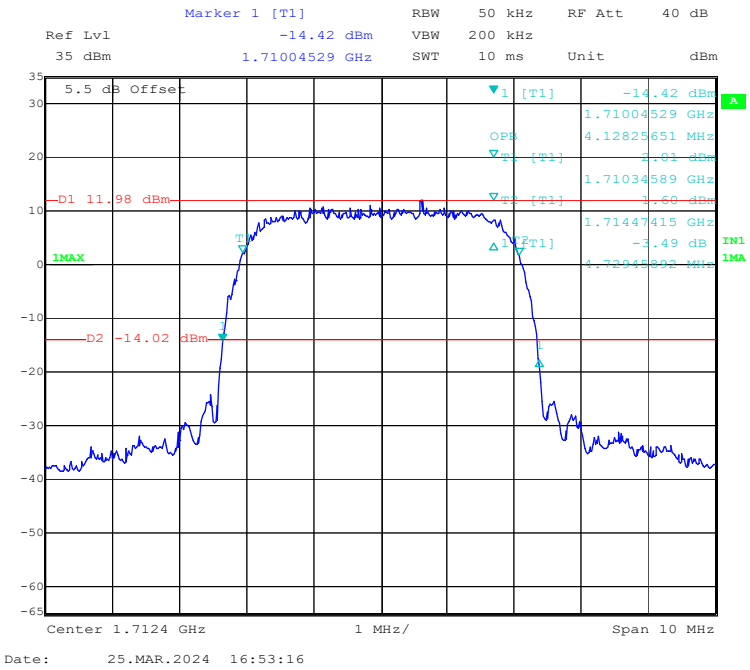
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Middle channel



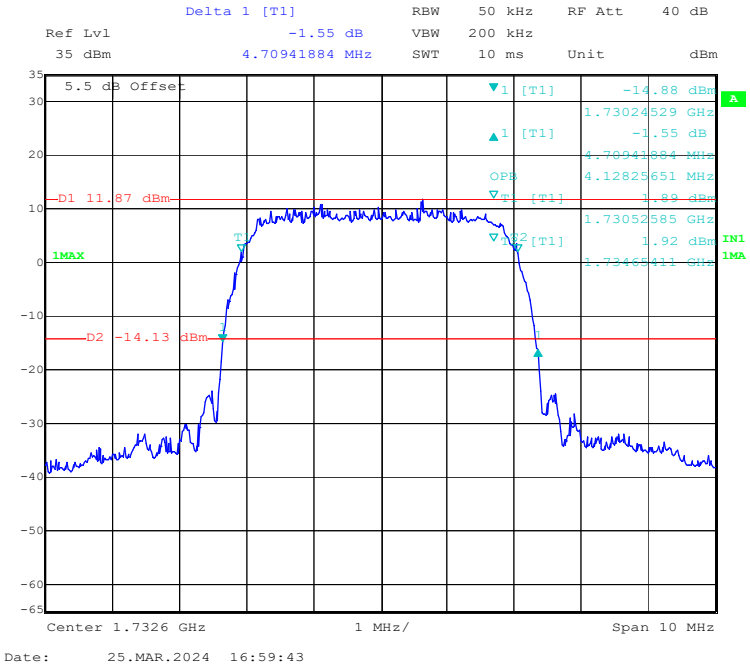
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) High channel



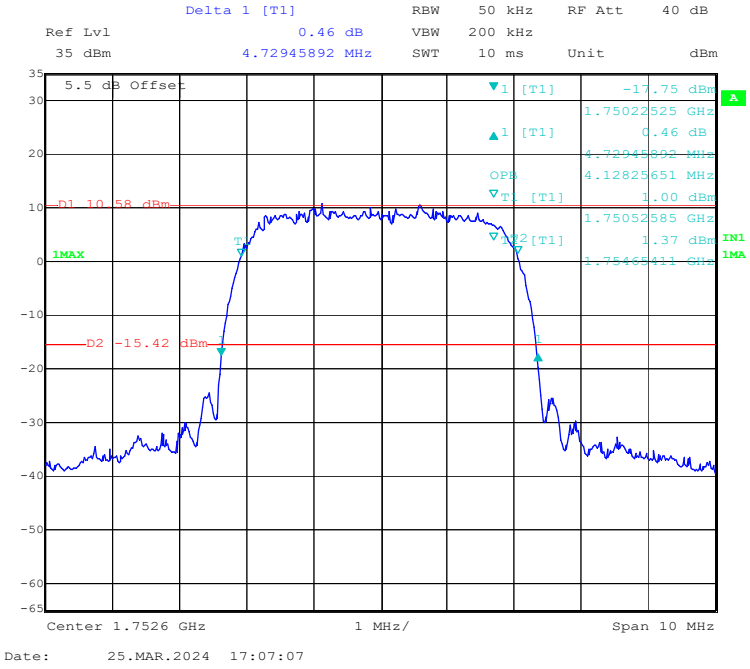
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Low channel



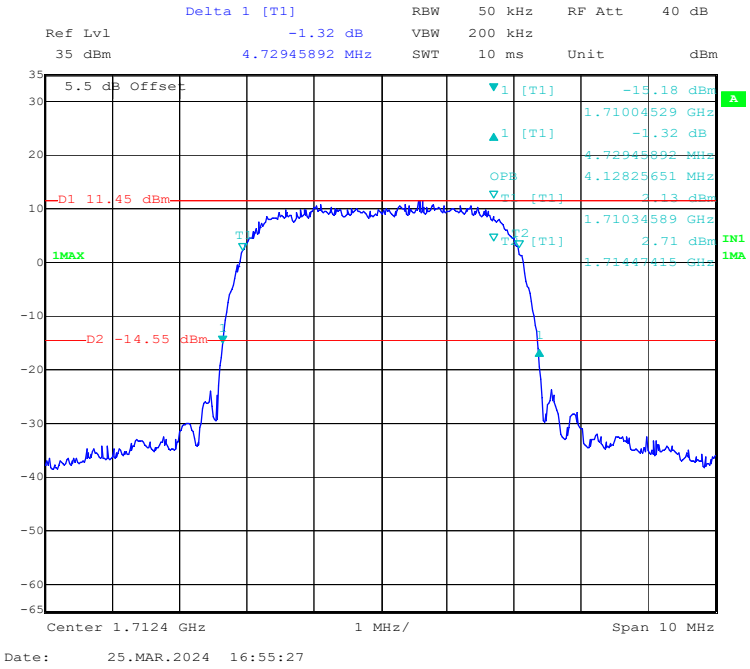
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Middle channel



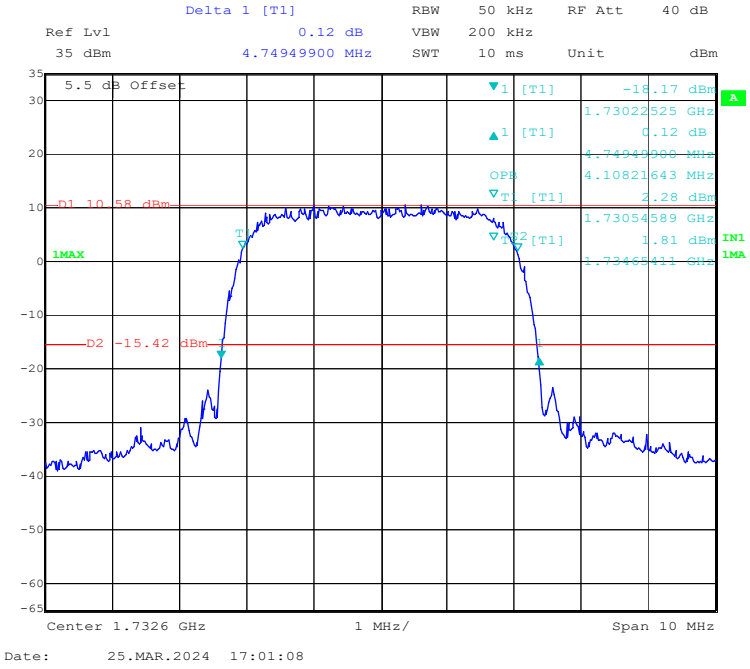
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) High channel



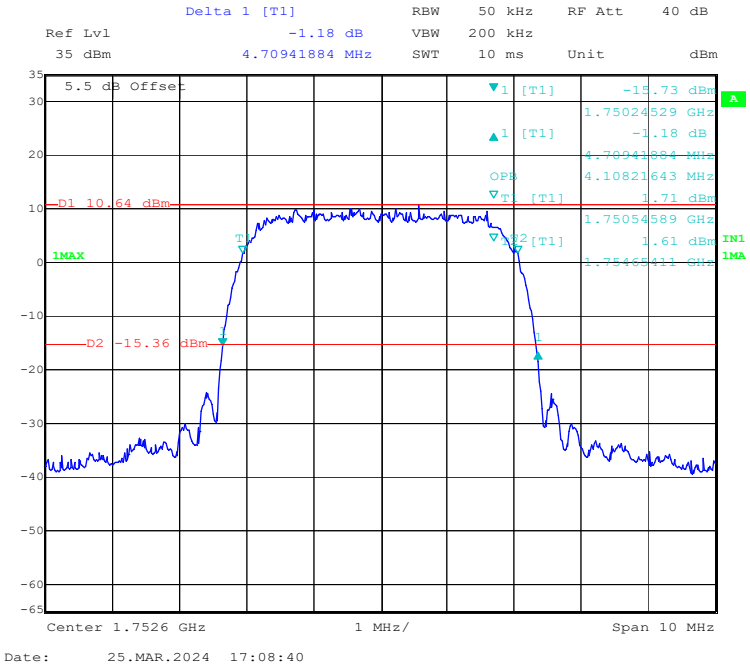
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Low channel



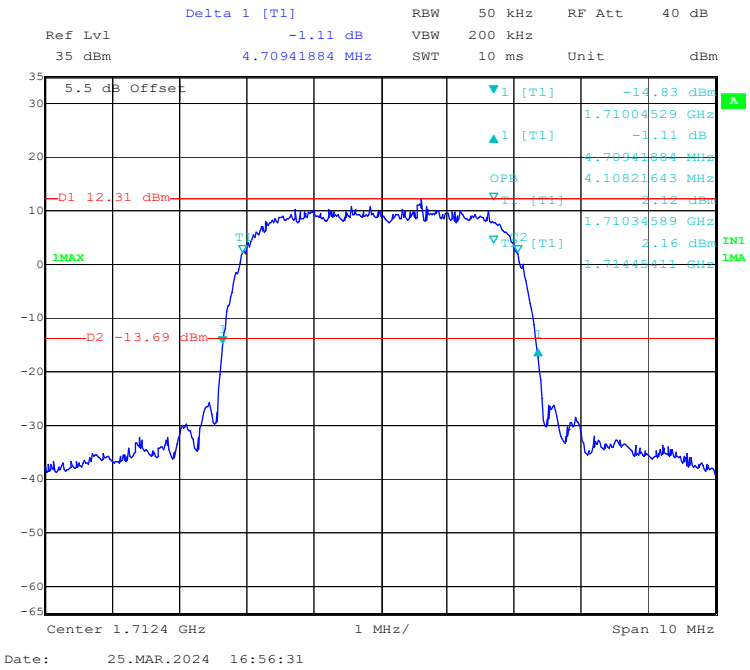
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Middle channel



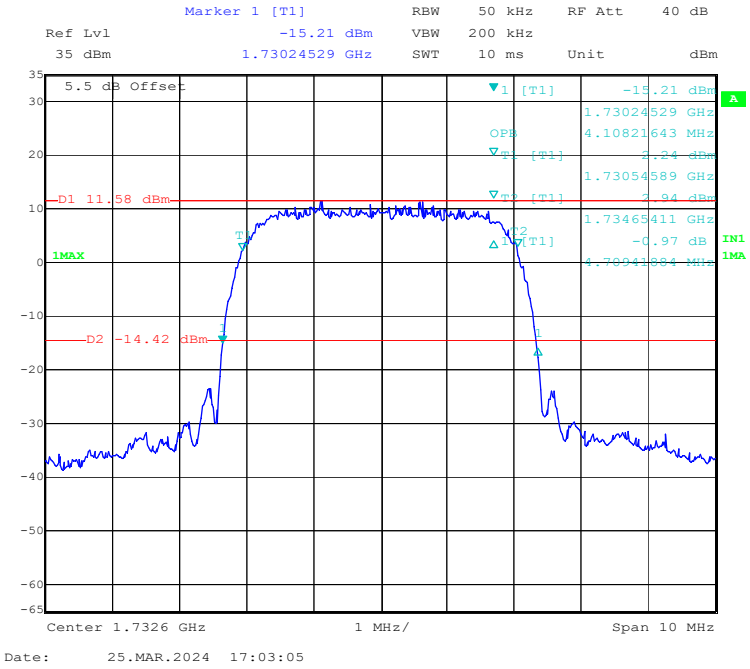
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) High channel



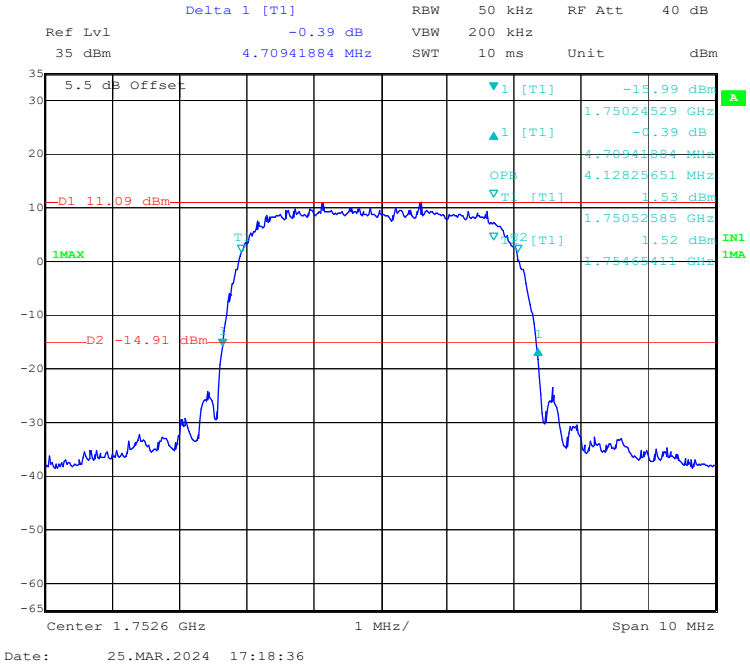
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Low channel



99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Middle channel

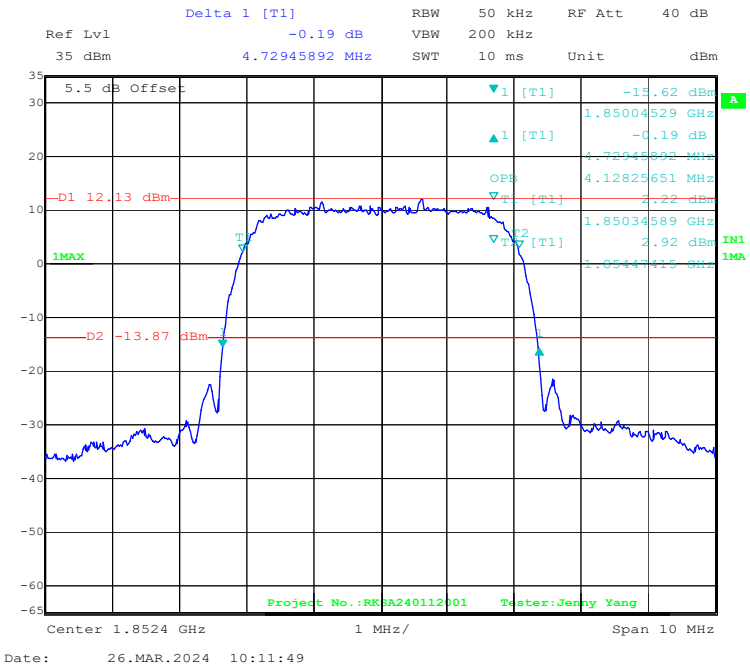


99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) High channel

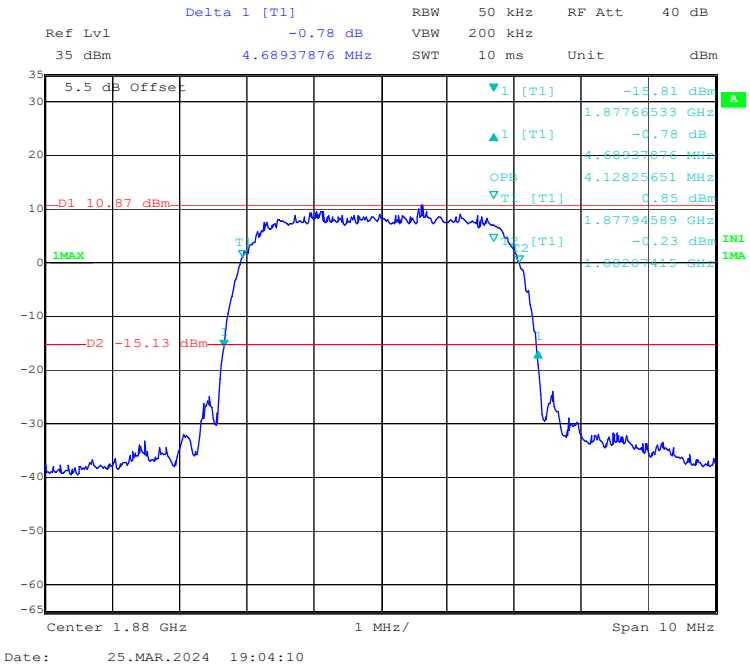


WCDMA Band II

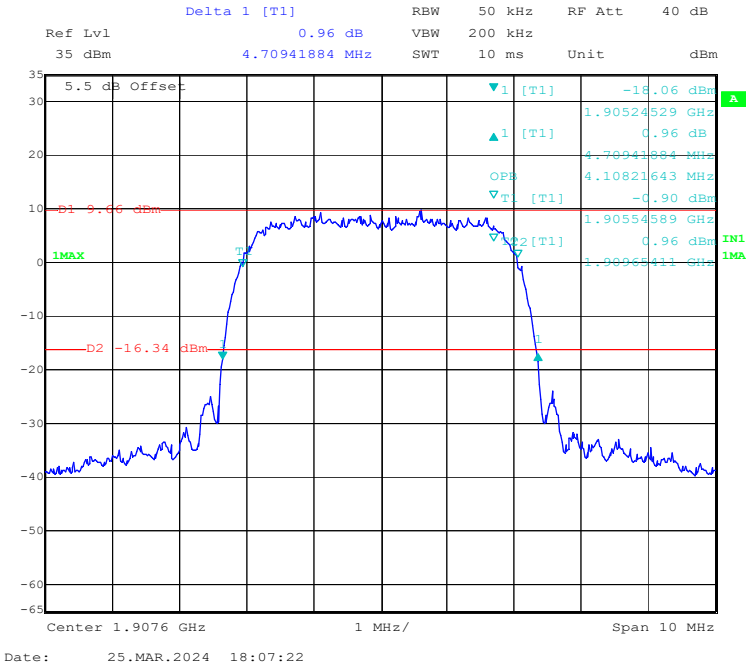
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Low channel



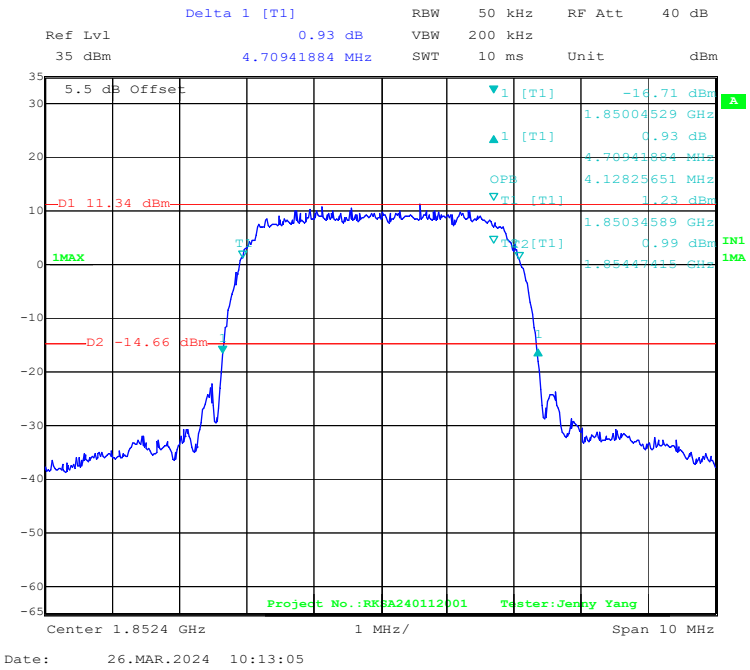
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Middle channel



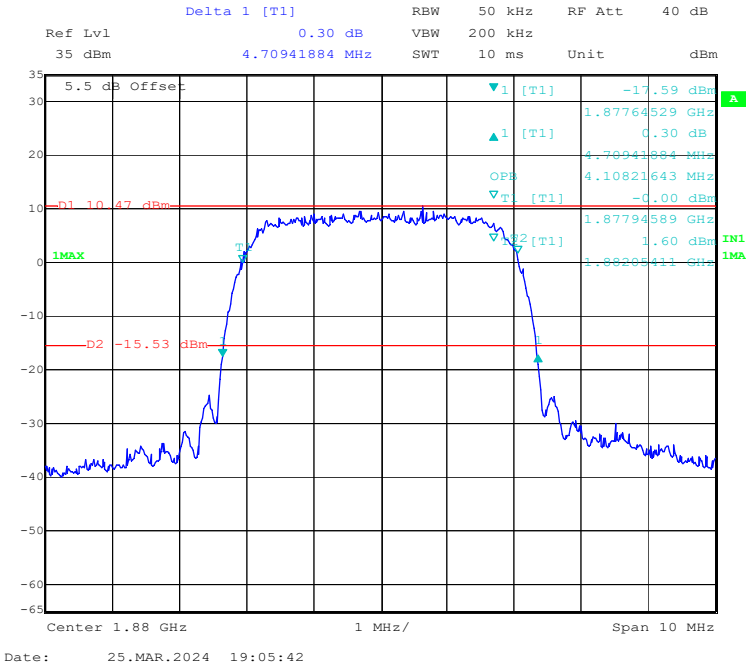
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) High channel



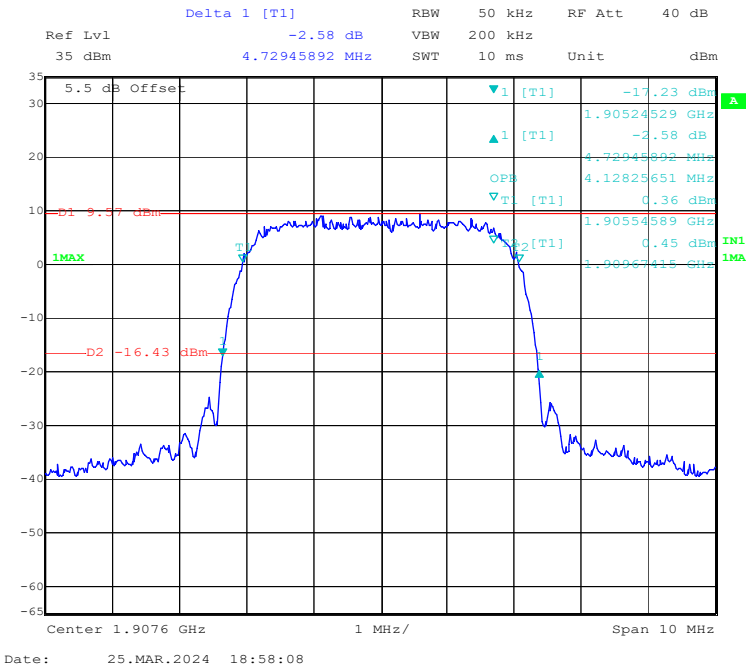
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Low channel



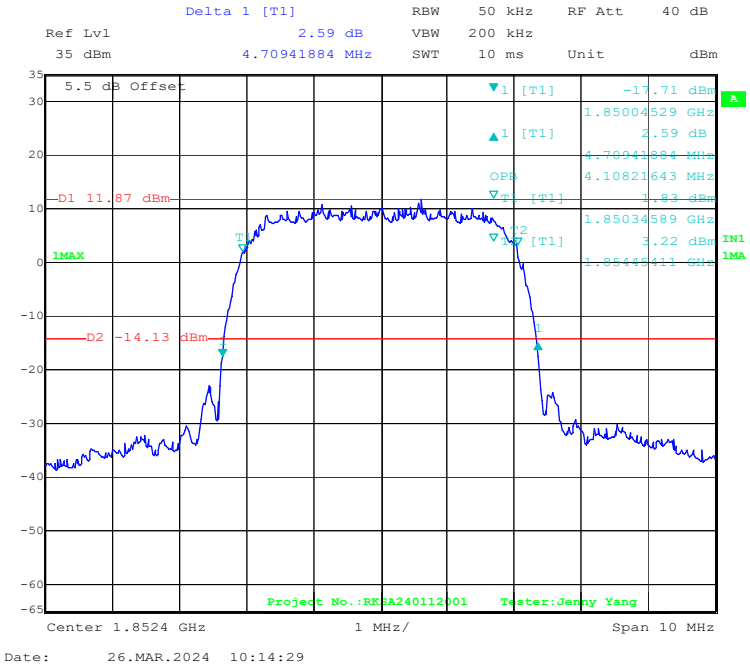
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) Middle channel



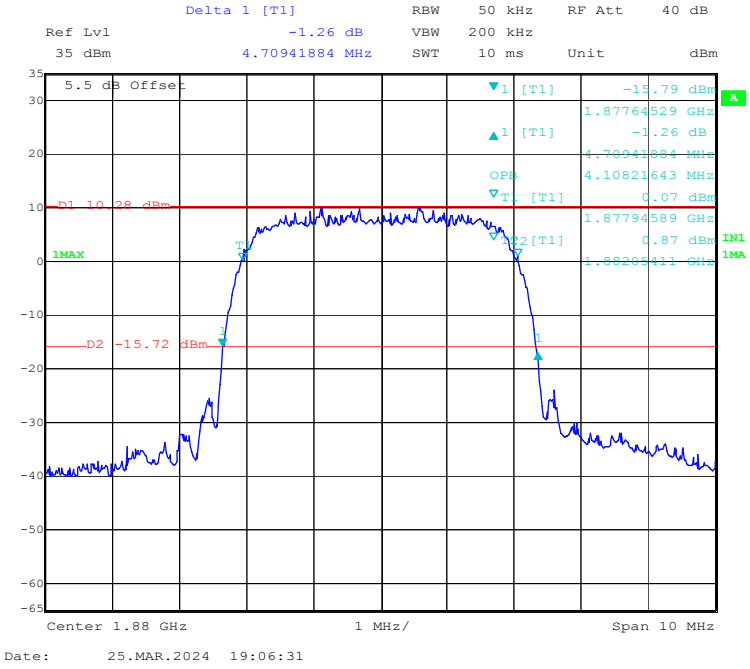
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) High channel



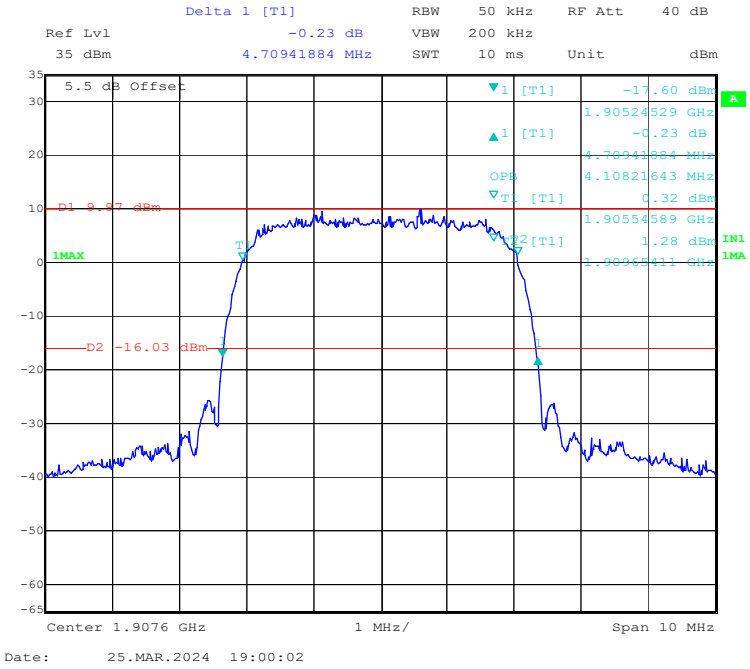
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Low channel



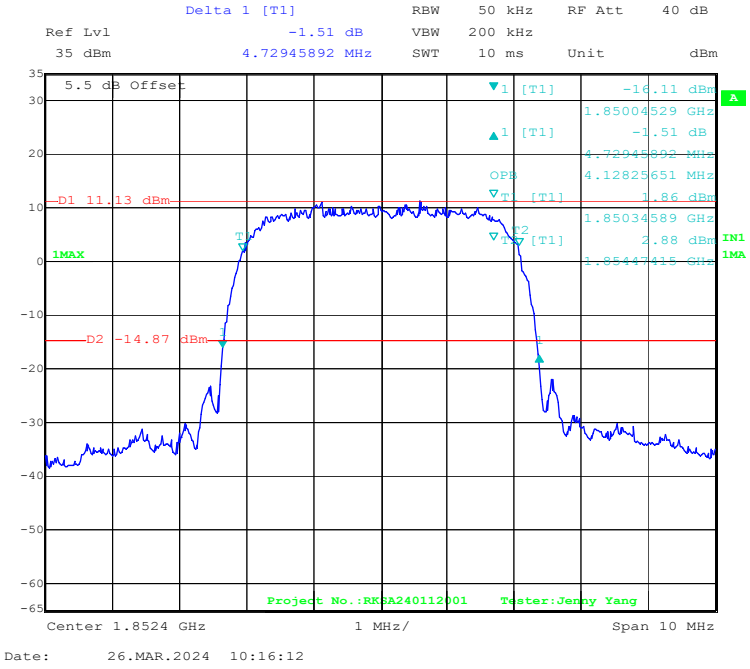
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Middle channel



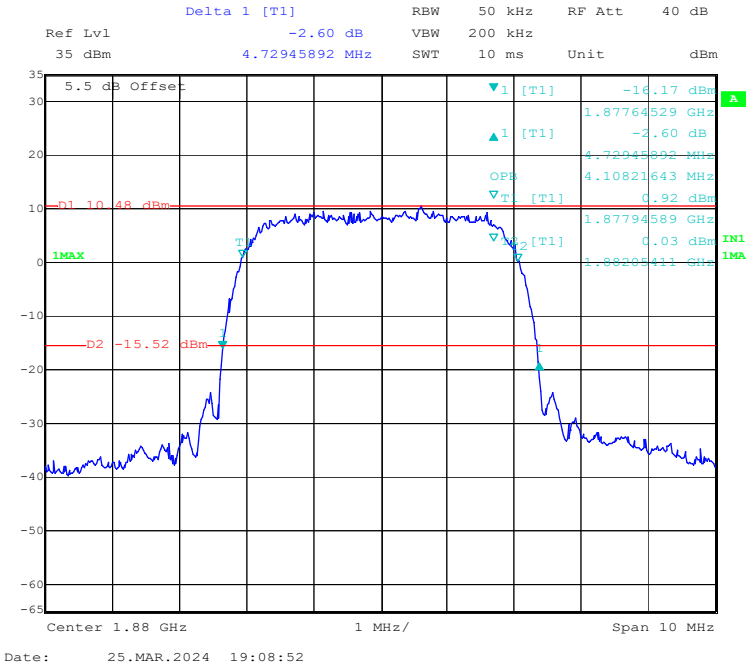
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) High channel



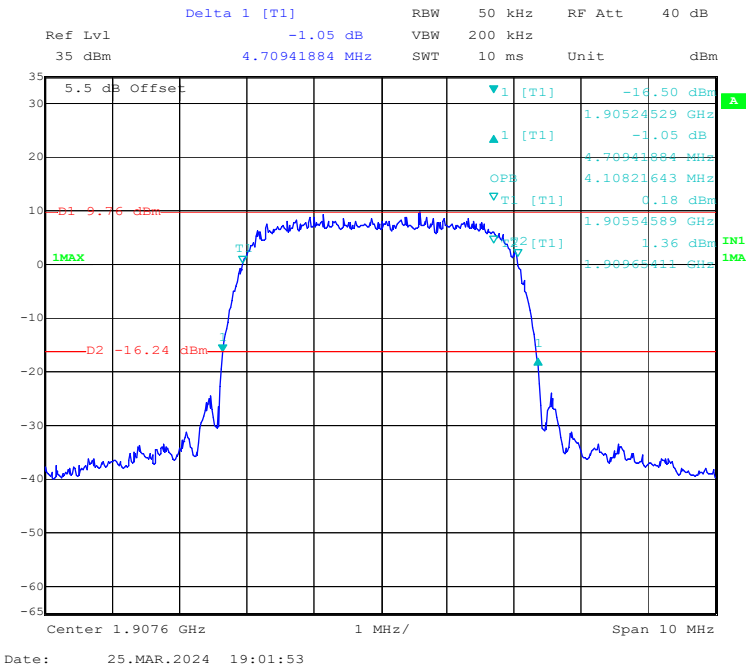
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Low channel



99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Middle channel



99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) High channel



LTE Band 2:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.10	1.30	1.10	1.30	1.10	1.31
	16QAM	1.10	1.30	1.11	1.31	1.10	1.30
3 MHz	QPSK	2.69	2.95	2.70	2.93	2.70	2.96
	16QAM	2.69	2.93	2.69	2.96	2.69	2.95
5 MHz	QPSK	4.50	4.99	4.52	4.99	4.52	4.99
	16QAM	4.54	5.03	4.52	4.97	4.54	5.01
10 MHz	QPSK	8.96	9.70	8.96	9.74	8.96	9.70
	16QAM	8.96	9.70	8.96	9.66	8.96	9.66
15 MHz	QPSK	13.50	14.79	13.50	14.91	13.44	14.73
	16QAM	13.44	14.73	13.44	14.79	13.50	14.79
20 MHz	QPSK	17.92	19.56	17.92	19.24	17.92	19.32
	16QAM	17.92	19.40	18.00	19.32	17.92	19.40

LTE Band 4:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.10	1.30	1.10	1.32	1.11	1.29
	16QAM	1.11	1.31	1.10	1.29	1.10	1.30
3 MHz	QPSK	2.69	2.95	2.70	2.93	2.70	2.95
	16QAM	2.70	2.95	2.69	2.95	2.69	2.93
5 MHz	QPSK	4.48	4.93	4.48	4.95	4.48	4.93
	16QAM	4.50	4.97	4.48	4.93	4.52	4.91
10 MHz	QPSK	8.92	9.54	8.96	9.58	8.96	9.58
	16QAM	8.96	9.50	8.96	9.54	8.96	9.50
15 MHz	QPSK	13.50	14.85	13.44	14.85	13.44	14.73
	16QAM	13.50	14.79	13.44	14.73	13.44	14.67
20 MHz	QPSK	18.00	19.48	17.92	19.32	17.92	19.24
	16QAM	17.84	19.24	17.92	19.24	17.92	19.32

LTE Band 5:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.10	1.30	1.10	1.31	1.11	1.30
	16QAM	1.11	1.30	1.10	1.30	1.10	1.30
3 MHz	QPSK	2.69	2.95	2.69	2.95	2.69	2.96
	16QAM	2.69	2.93	2.69	2.96	2.69	2.93
5 MHz	QPSK	4.50	5.03	4.52	4.95	4.50	4.99
	16QAM	4.52	4.97	4.52	5.01	4.52	5.03
10 MHz	QPSK	8.96	9.62	8.96	9.70	8.96	9.74
	16QAM	8.96	9.66	8.96	9.74	8.96	9.62

LTE Band 7:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.50	4.97	4.50	4.93	4.52	4.95
	16QAM	4.52	5.01	4.54	4.99	4.50	4.95
10 MHz	QPSK	8.92	9.70	8.96	9.78	8.92	9.74
	16QAM	8.92	9.70	8.96	9.66	8.92	9.70
15 MHz	QPSK	13.44	14.67	13.50	14.79	13.44	14.61
	16QAM	13.44	14.67	13.50	14.73	13.44	14.79
20 MHz	QPSK	17.84	19.24	17.92	19.40	17.84	19.24
	16QAM	17.92	19.24	17.92	19.32	17.84	19.40

LTE Band 38:

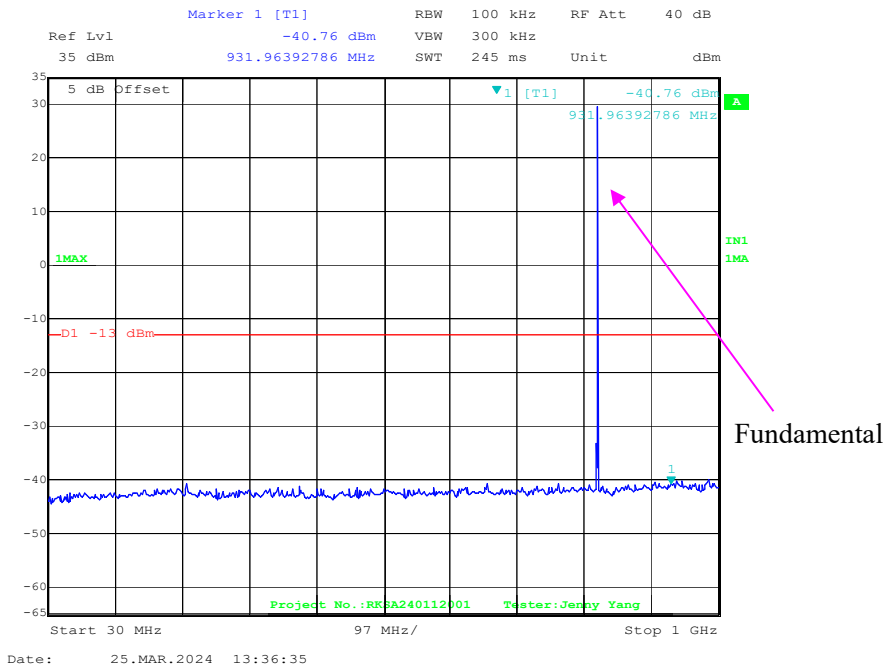
Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.52	4.89	4.50	4.93	4.52	4.99
	16QAM	4.50	4.95	4.50	4.97	4.48	4.97
10 MHz	QPSK	8.96	9.82	8.96	9.62	8.96	9.78
	16QAM	8.96	9.58	8.96	9.66	8.96	9.62
15 MHz	QPSK	13.50	15.09	13.50	14.91	13.50	15.03
	16QAM	13.50	14.85	13.50	15.81	13.56	15.15
20 MHz	QPSK	17.92	19.32	18.00	20.04	17.84	19.16
	16QAM	17.92	20.36	17.92	19.40	17.92	19.32

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

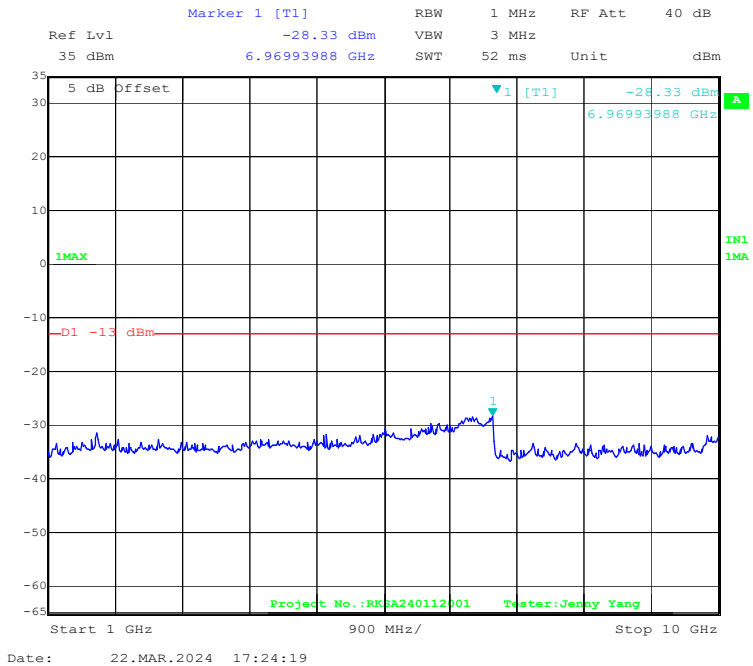
EUT operation mode: Transmitting
Test Result: Compliance

GPRS 850 Band:

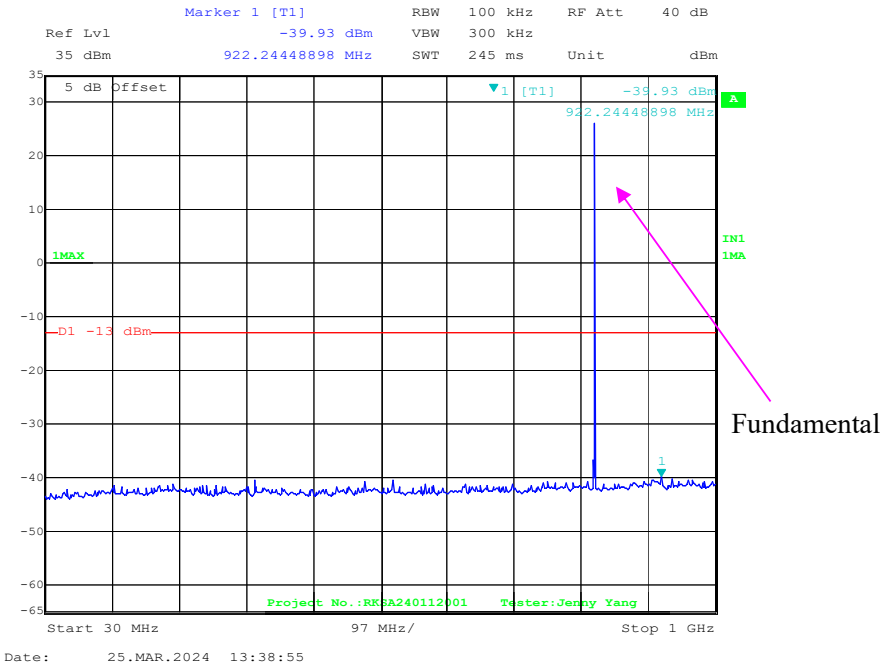
30 MHz – 1GHz (GPRS Mode), Low channel



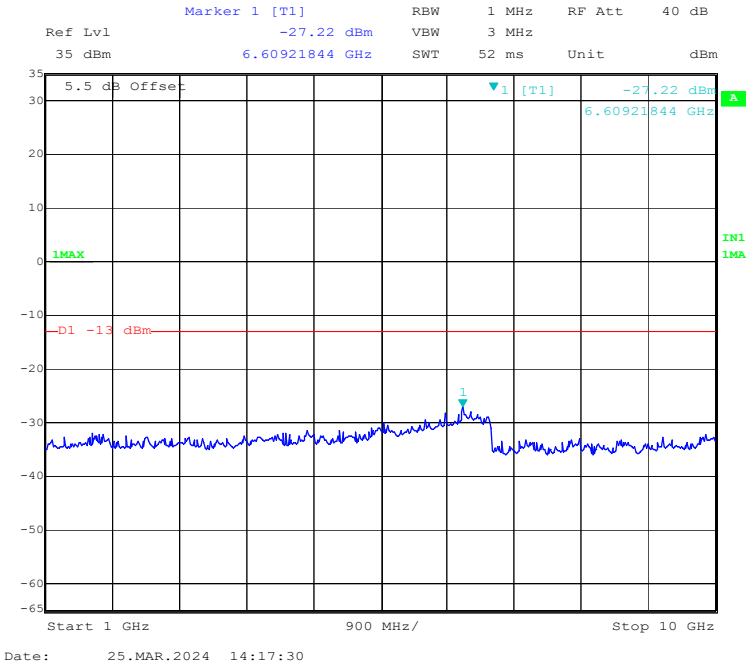
1 GHz – 10 GHz (GPRS Mode), Low channel



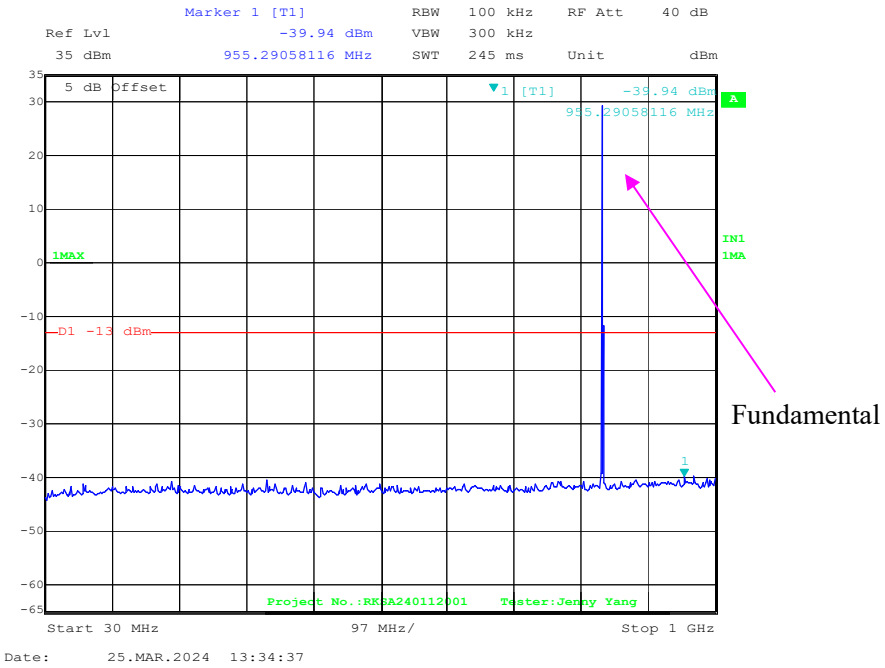
30 MHz – 1GHz (EGPRS Mode), Low channel



1 GHz – 10 GHz (EGPRS Mode), Low channel

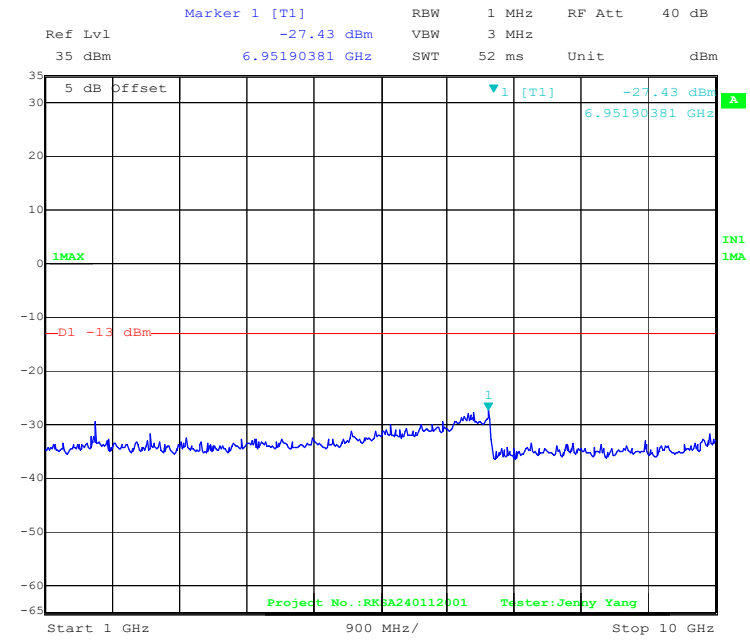


30 MHz – 1GHz (GPRS Mode), Middle channel



Date: 25.MAR.2024 13:34:37

1 GHz – 10 GHz (GPRS Mode), Middle channel



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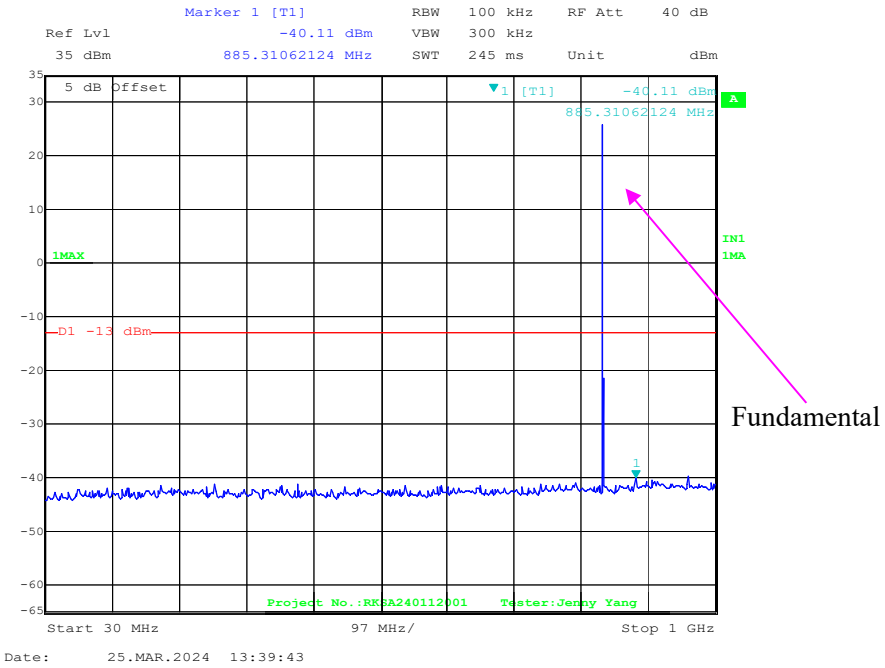
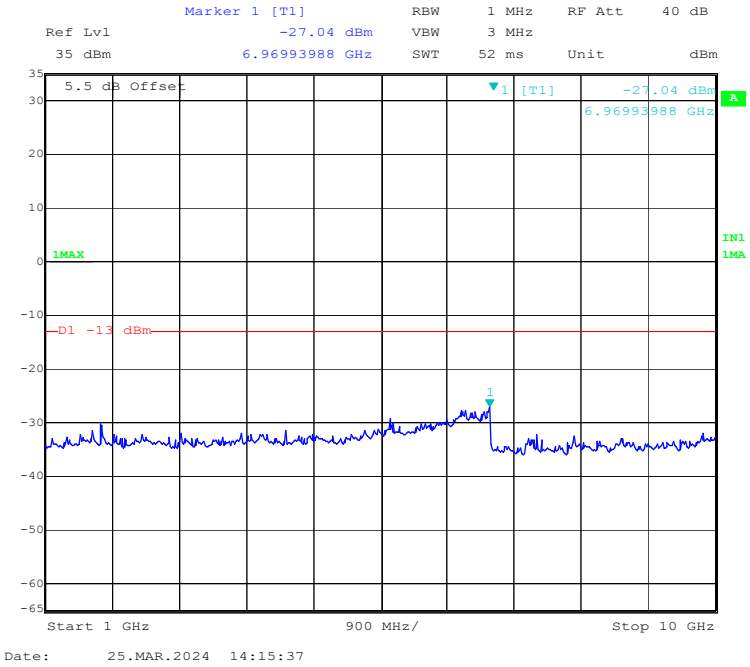
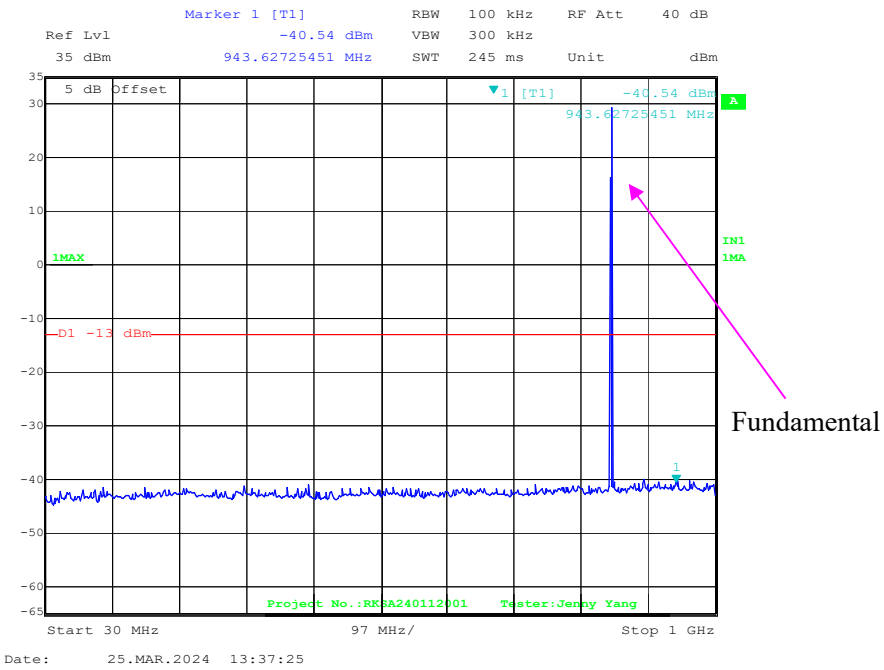
30 MHz – 1GHz (EGPRS Mode), Middle channel



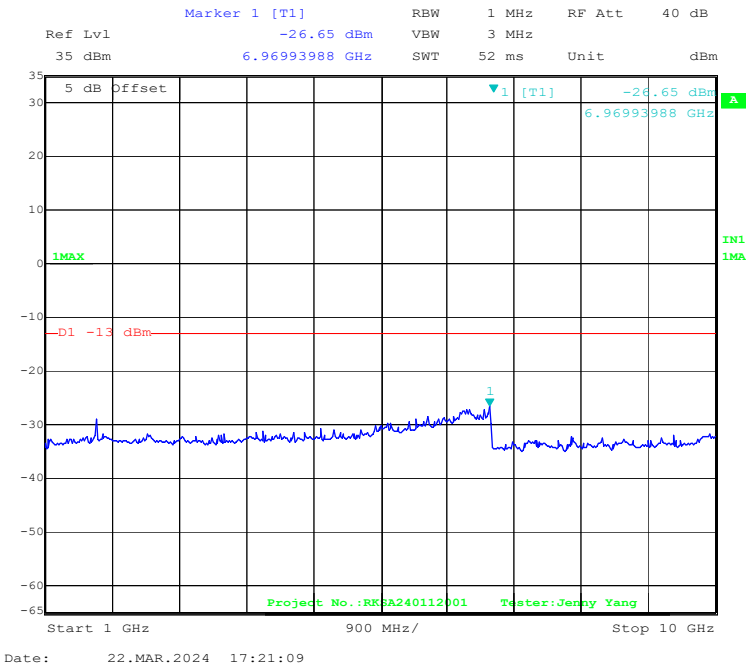
1 GHz – 10 GHz (EGPRS Mode), Middle channel



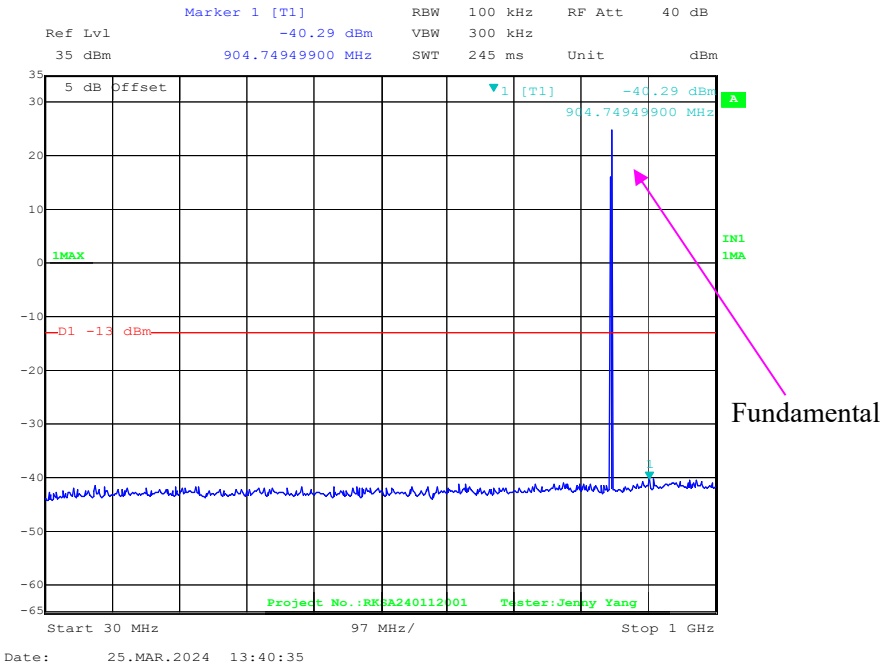
30 MHz – 1GHz (GPRS Mode), High channel



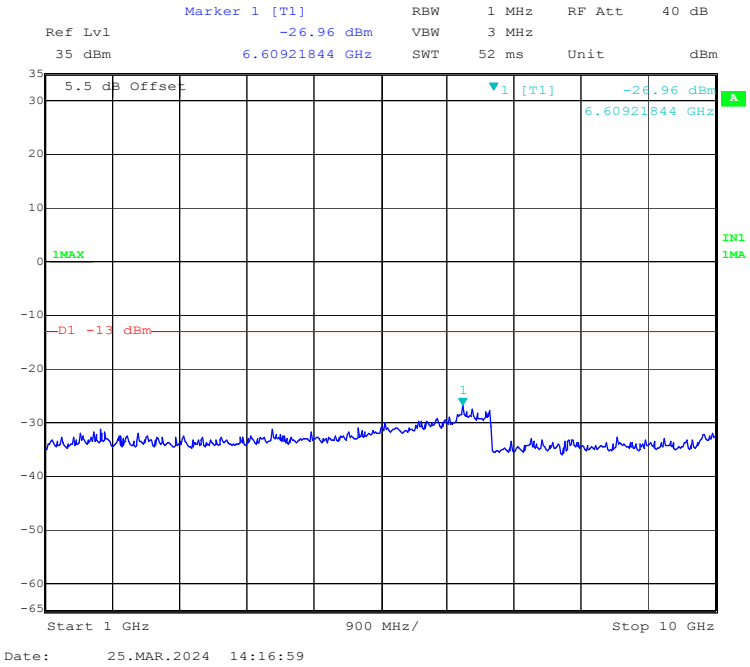
1 GHz – 10 GHz (GPRS Mode), High channel



30 MHz – 1GHz (EGPRS Mode), High channel

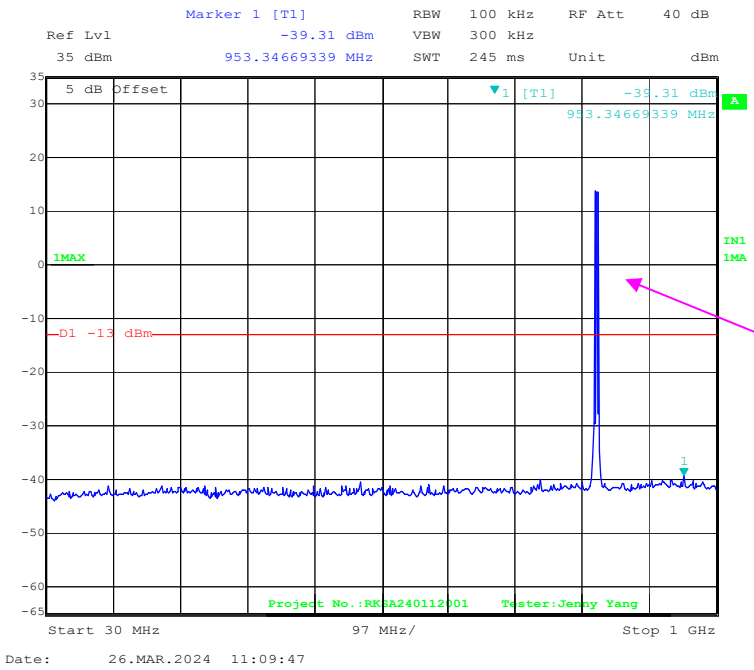


1 GHz – 10 GHz (EGPRS Mode), High channel



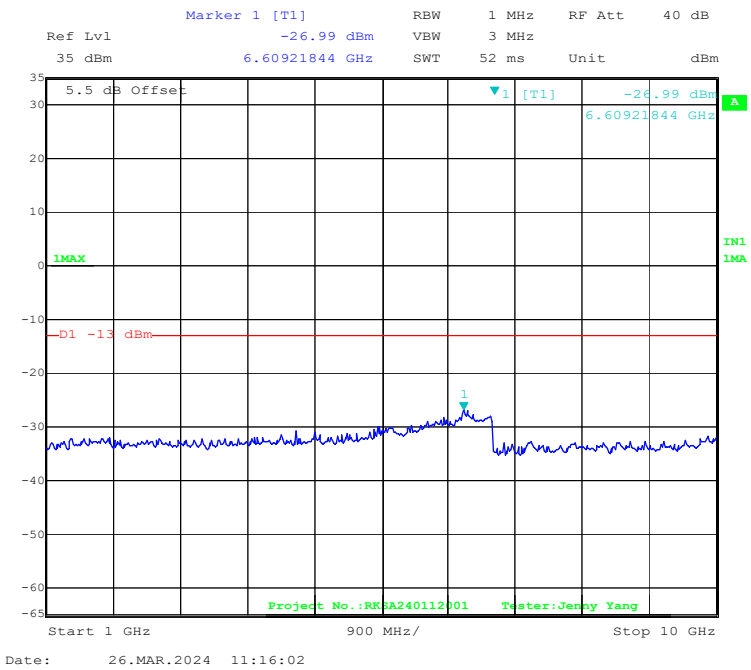
WCDMA Band V:

30 MHz – 1GHz WCDMA (Rel 99) Mode, Low channel

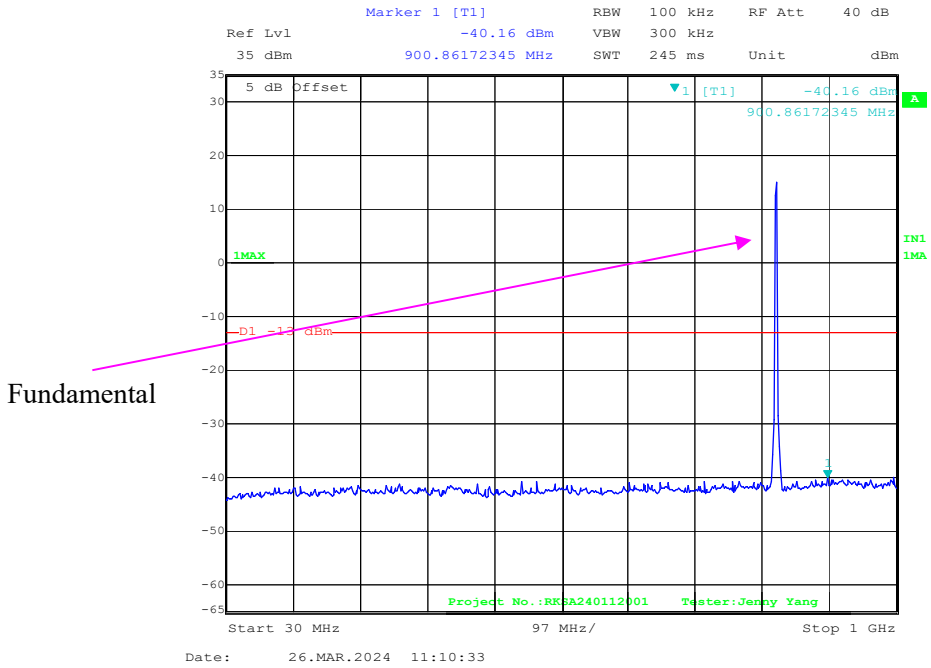


Fundamental

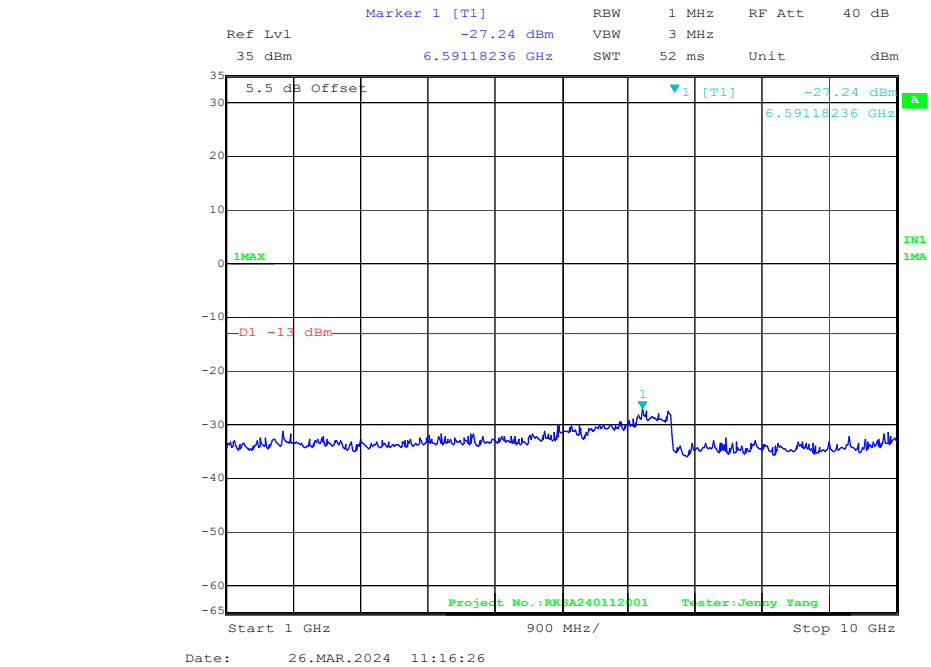
1 GHz – 10 GHz WCDMA (Rel 99) Mode, Low channel



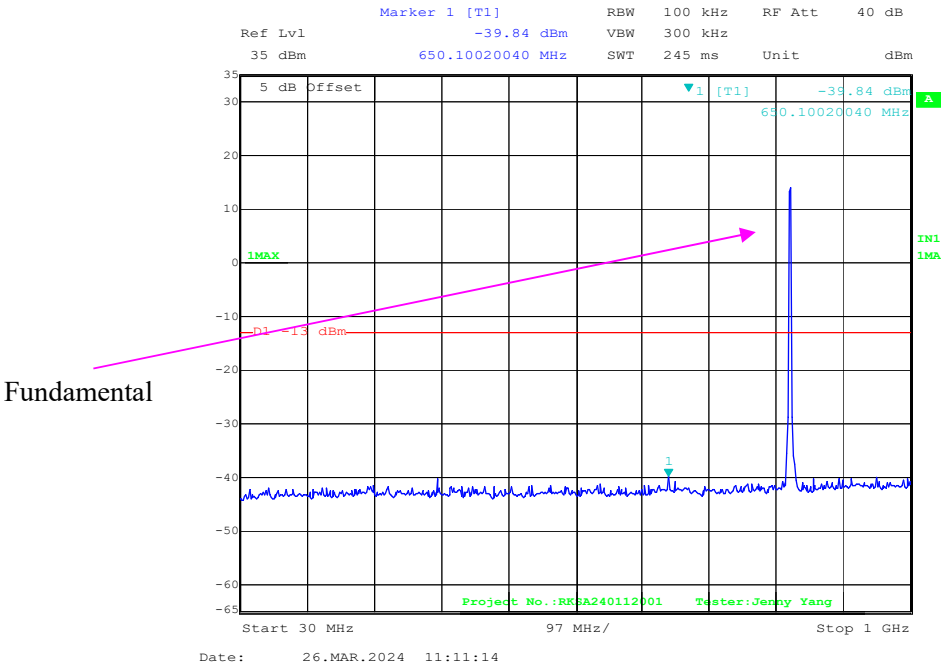
30 MHz – 1GHz WCDMA (HSDPA) Mode, Low channel



1 GHz – 10 GHz WCDMA (HSDPA) Mode, Low channel



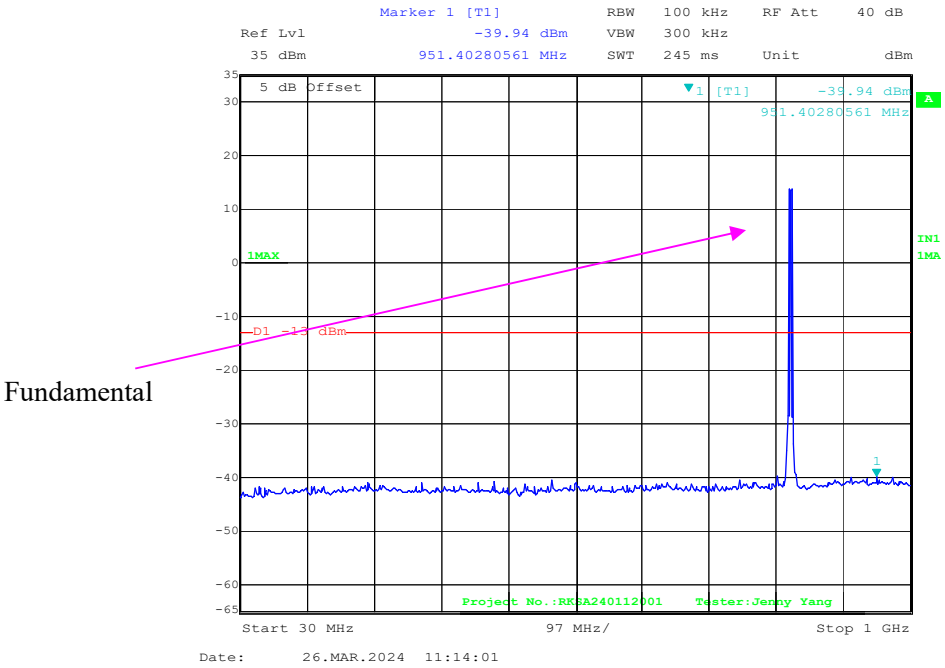
30 MHz – 1GHz WCDMA (HSUPA) Mode, Low channel



Fundamental

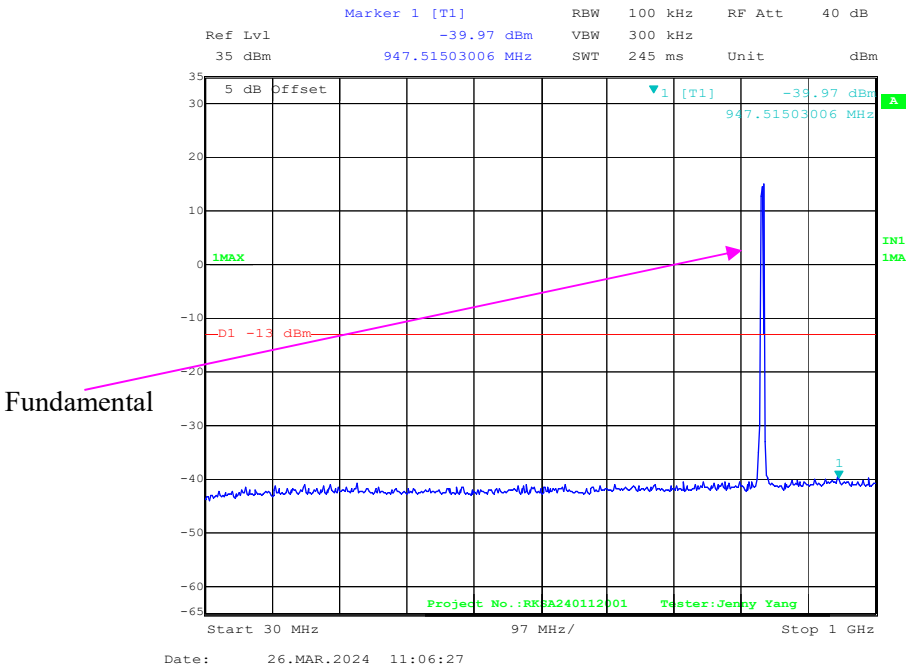
1 GHz – 10 GHz WCDMA (HSUPA) Mode, Low channel

30 MHz – 1GHz WCDMA (HSPA+) Mode, Low channel



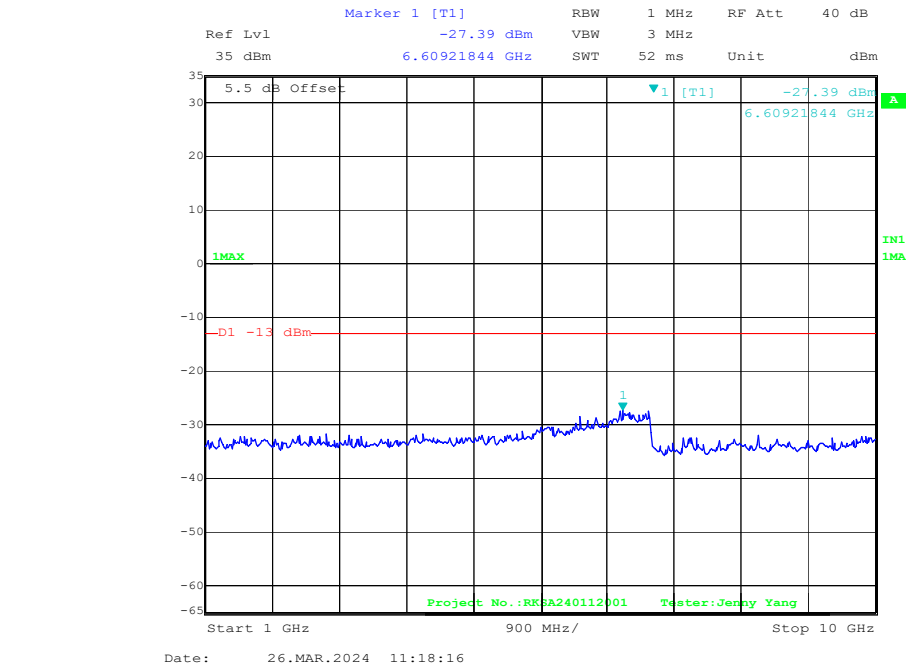
1 GHz – 10 GHz WCDMA (HSPA+) Mode, Low channel

30 MHz – 1GHz WCDMA (Rel 99) Mode, Middle channel

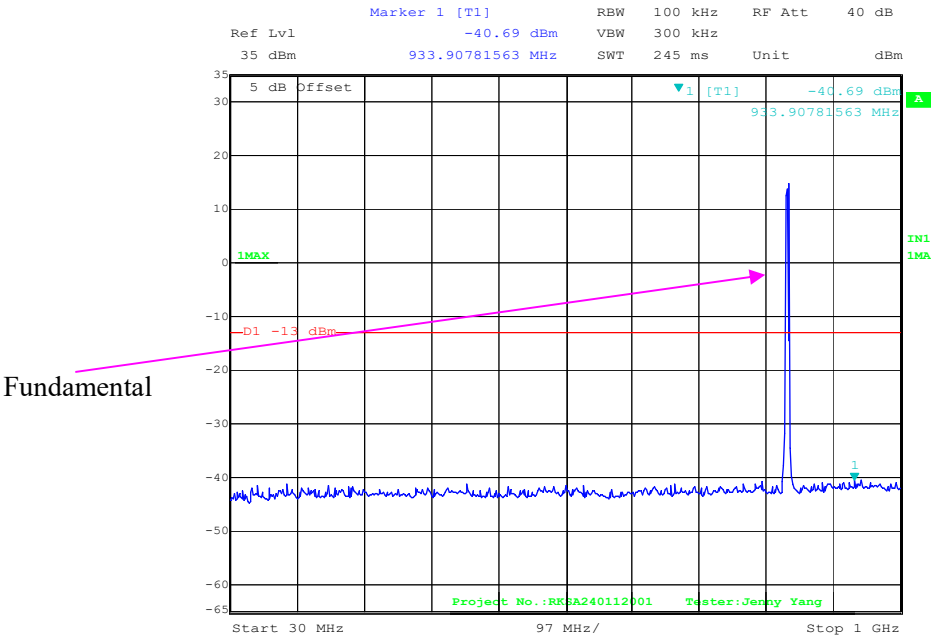


Fundamental

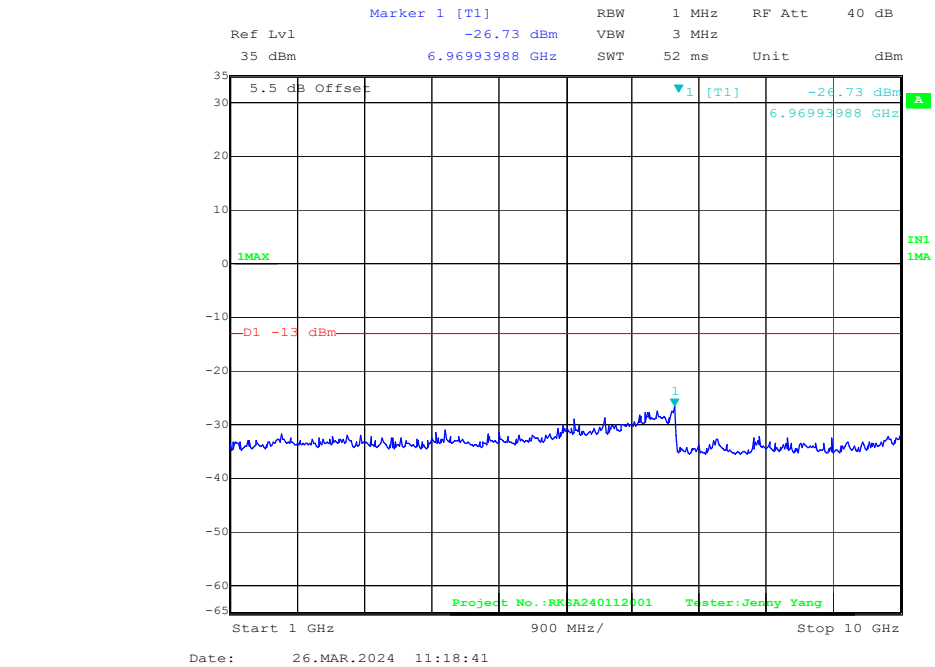
1 GHz – 10 GHz WCDMA (Rel 99) Mode, Middle channel



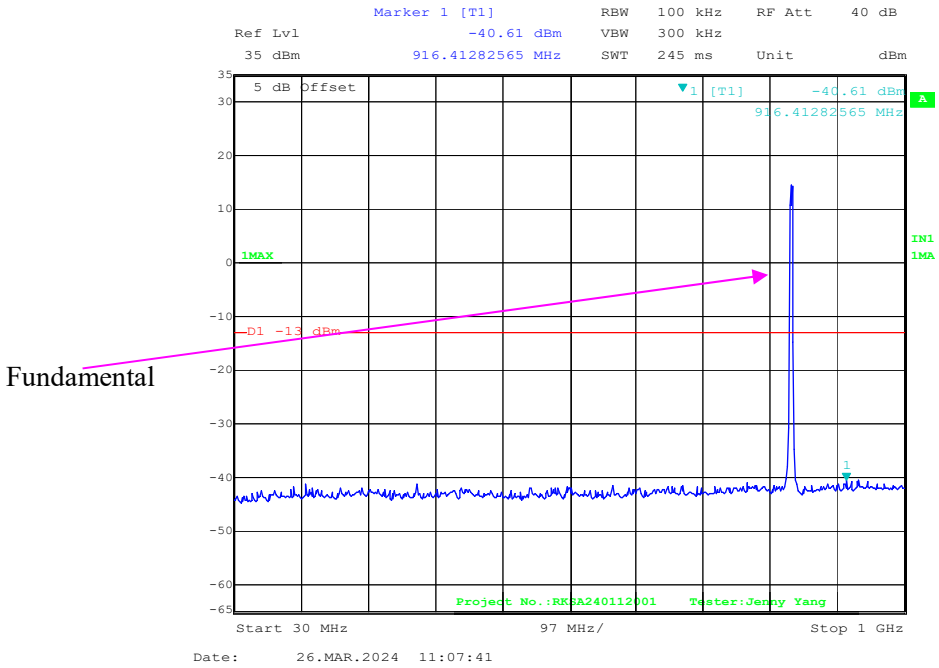
30 MHz – 1GHz WCDMA (HSDPA) Mode, Middle channel



1 GHz – 10 GHz WCDMA (HSDPA) Mode, Middle channel

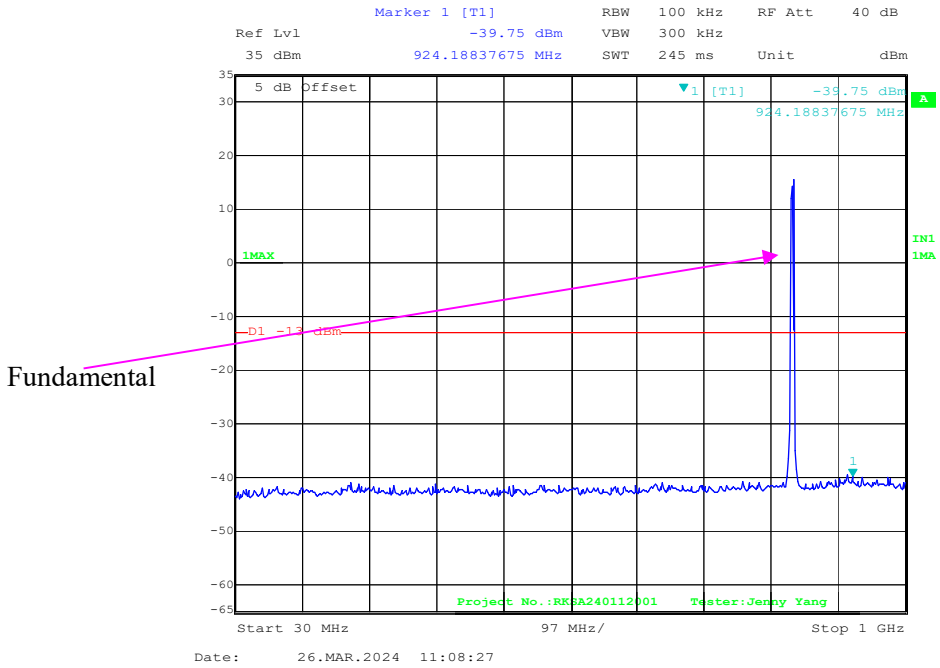


30 MHz – 1GHz WCDMA (HSUPA) Mode, Middle channel

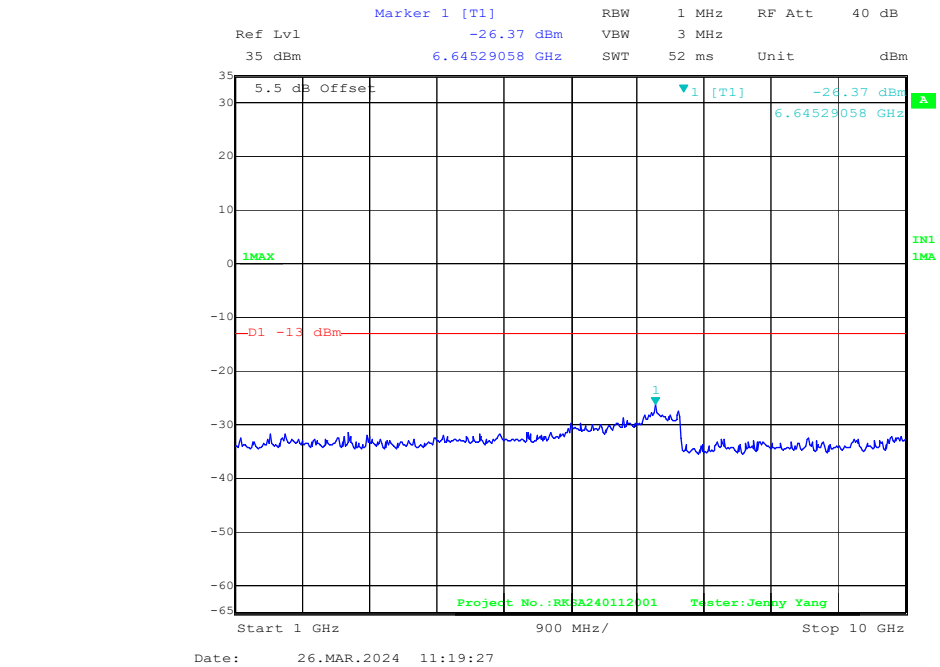


1 GHz – 10 GHz WCDMA (HSUPA) Mode, Middle channel

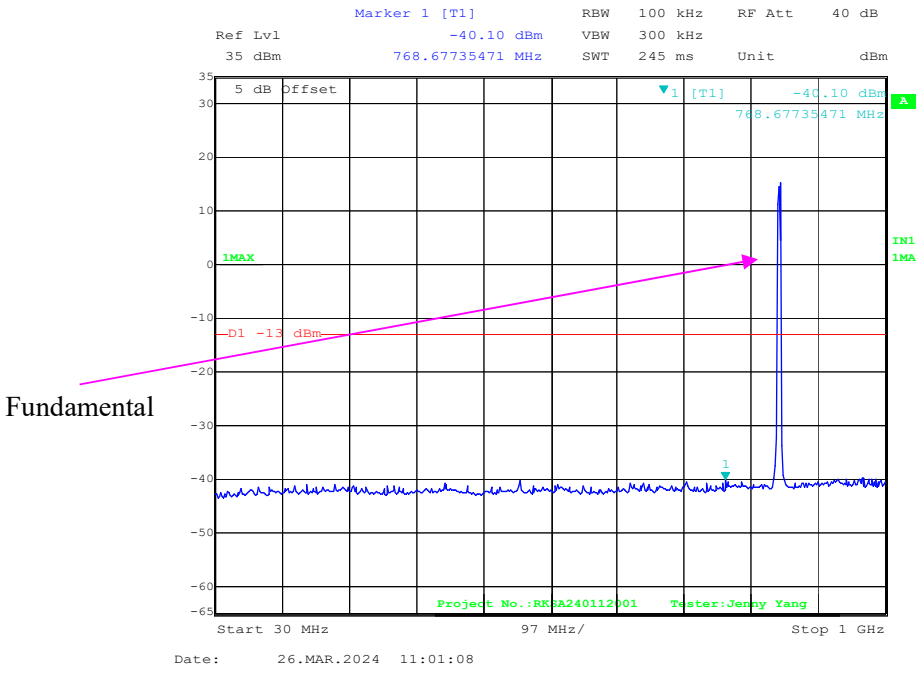
30 MHz – 1GHz WCDMA (HSPA+) Mode, Middle channel



1 GHz – 10 GHz WCDMA (HSPA+) Mode, Middle channel

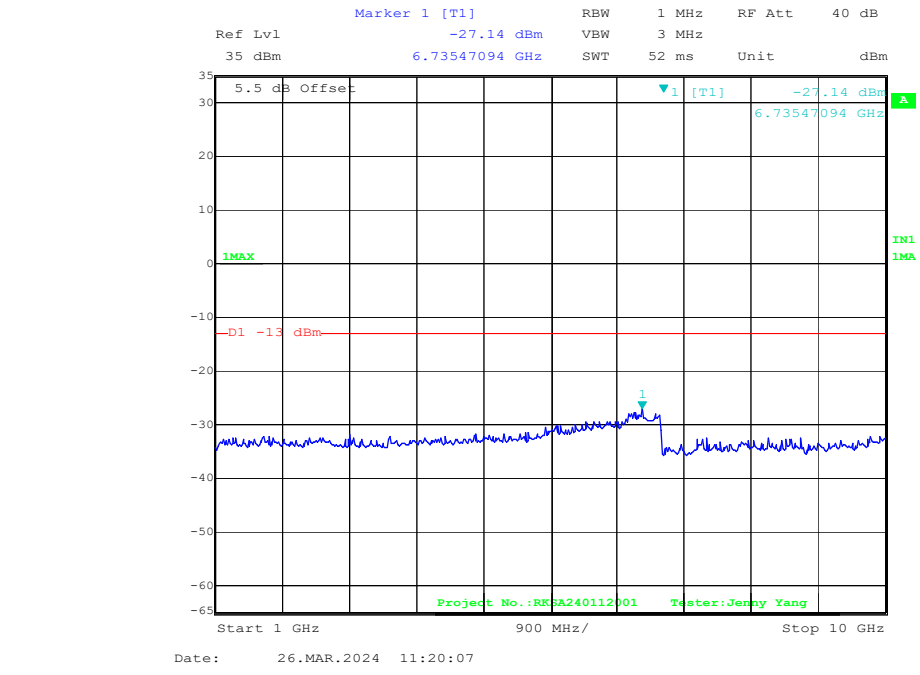


30 MHz – 1GHz WCDMA (Rel 99) Mode, High channel

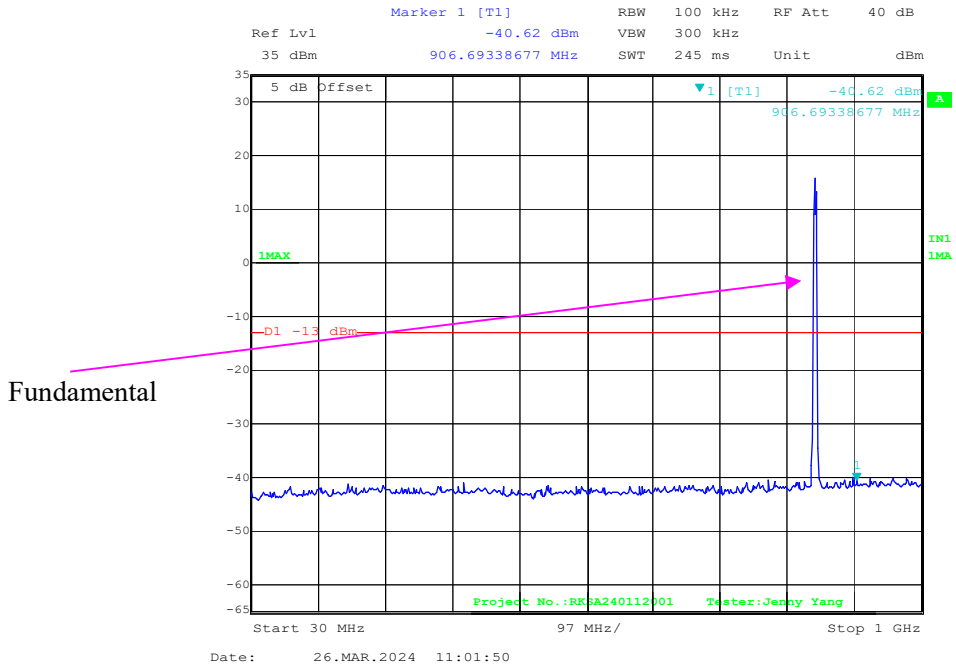


Fundamental

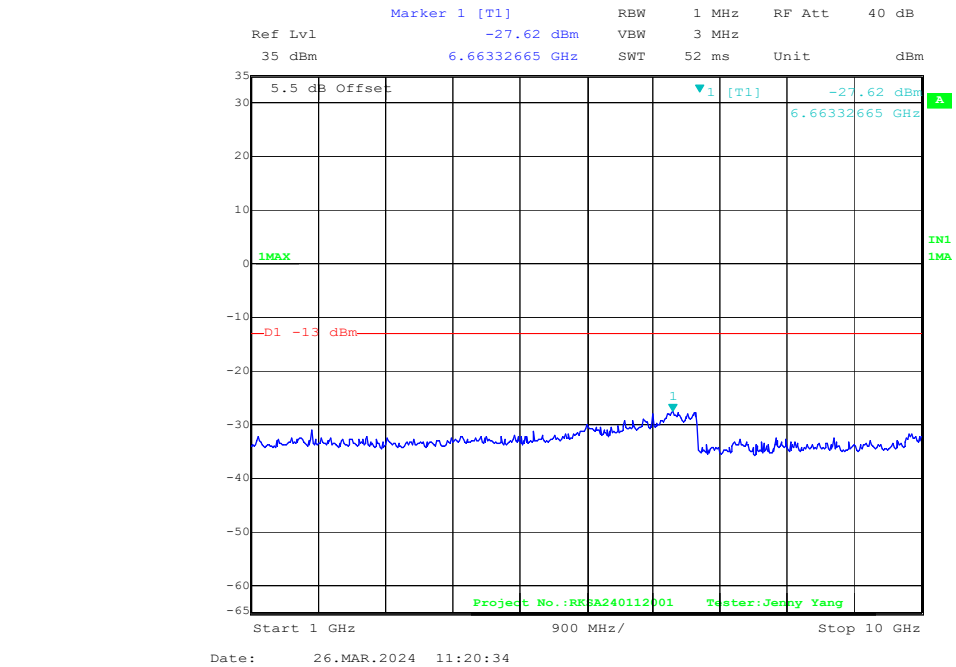
1 GHz – 10 GHz WCDMA (Rel 99) Mode, High channel



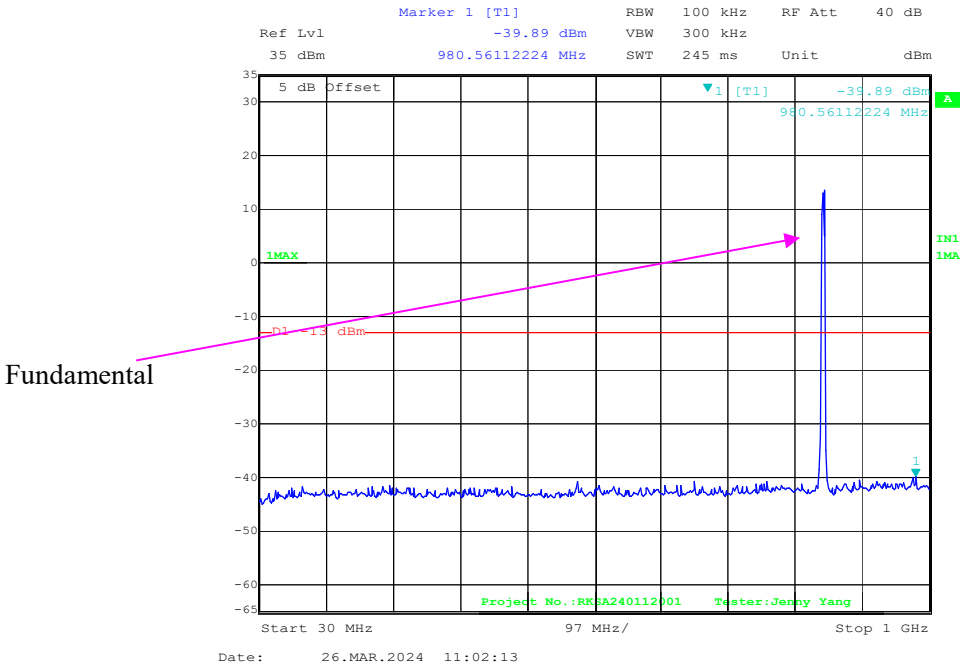
30 MHz – 1GHz WCDMA (HSDPA) Mode, High channel



1 GHz – 10 GHz WCDMA (HSDPA) Mode, High channel

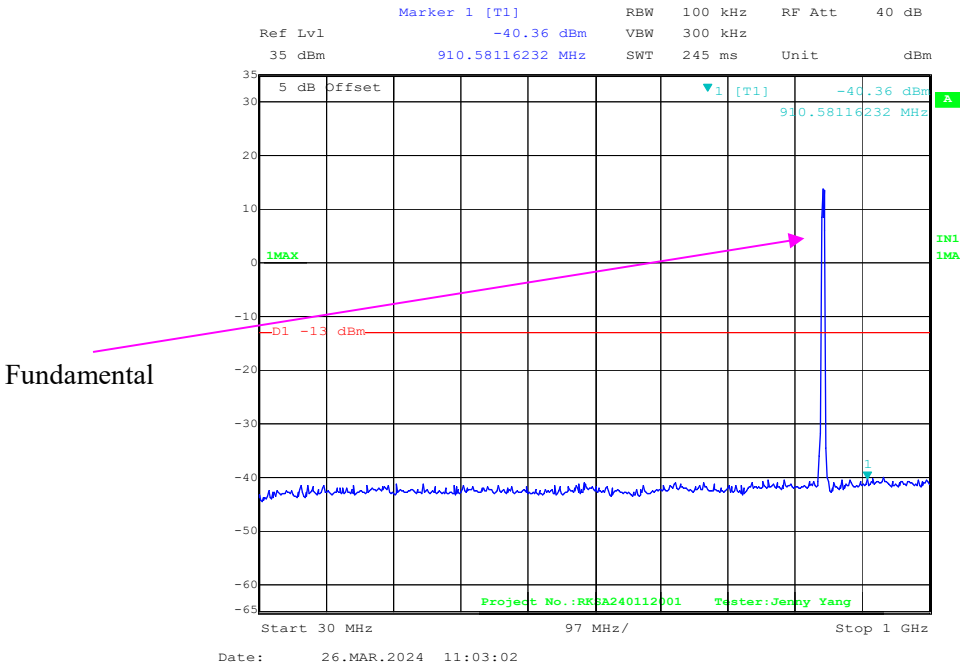


30 MHz – 1GHz WCDMA (HSUPA) Mode, High channel



1 GHz – 10 GHz WCDMA (HSUPA) Mode, High channel

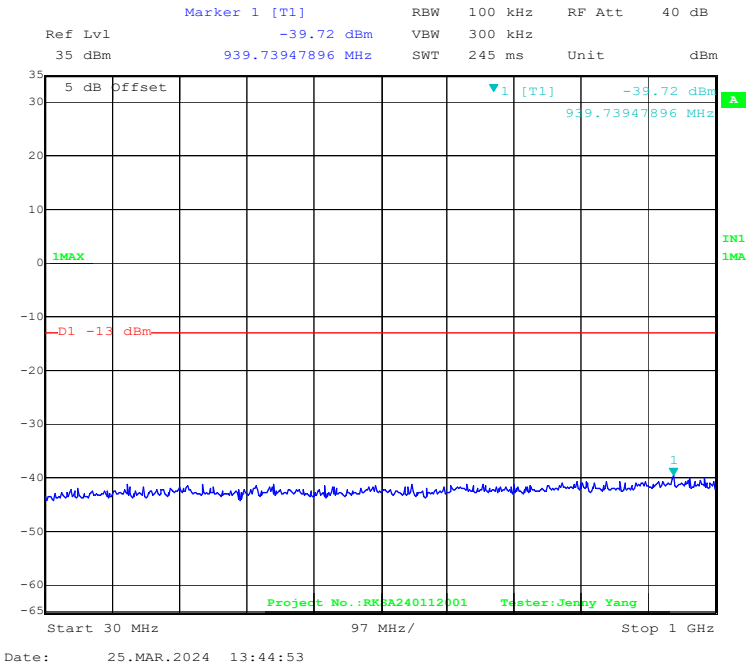
30 MHz – 1GHz WCDMA (HSPA+) Mode, High channel



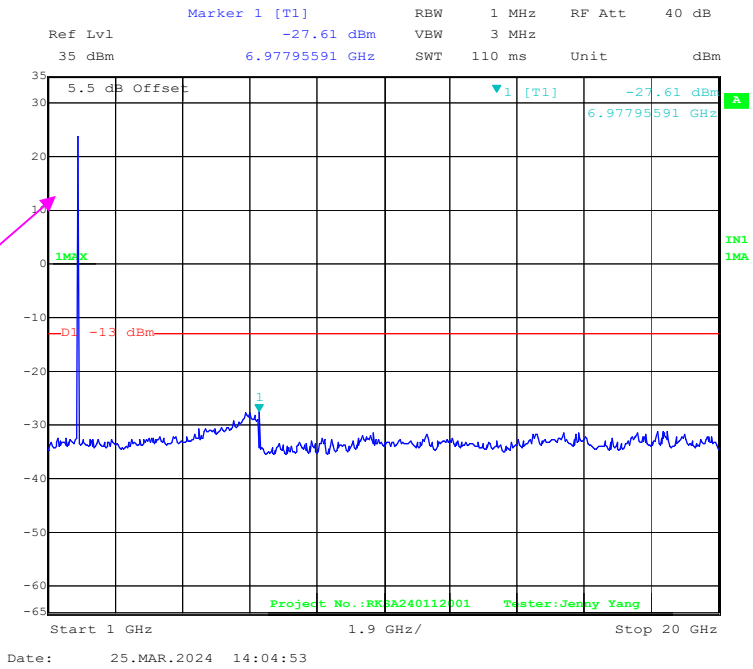
1 GHz – 10 GHz WCDMA (HSPA+) Mode, High channel

PCS 1900 Band:

30 MHz – 1GHz (GPRS Mode), Low channel

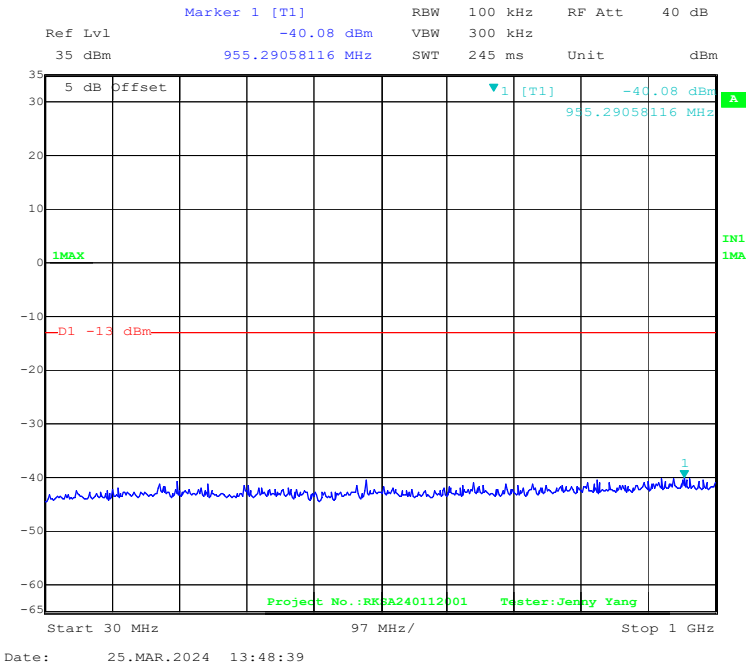


1 GHz – 20 GHz (GPRS Mode), Low channel

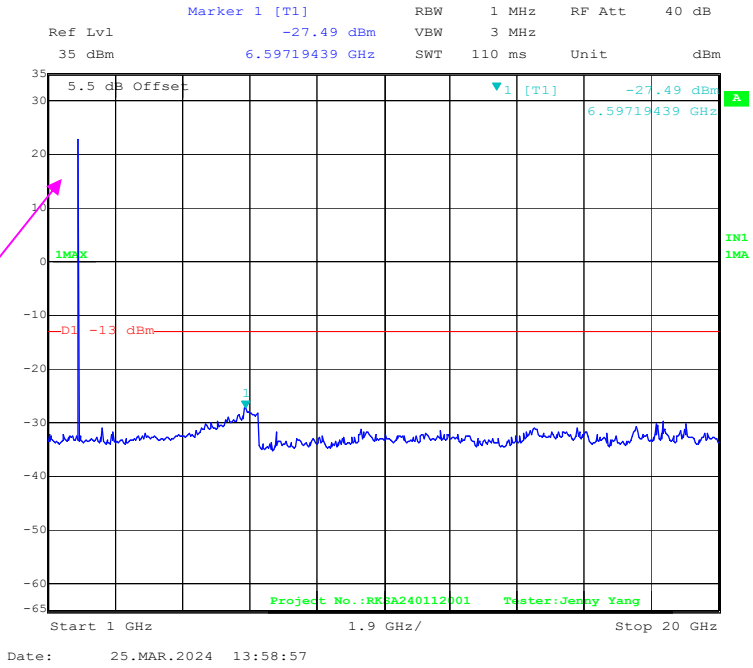


Fundamental

30 MHz – 1GHz (EGPRS Mode), Low channel

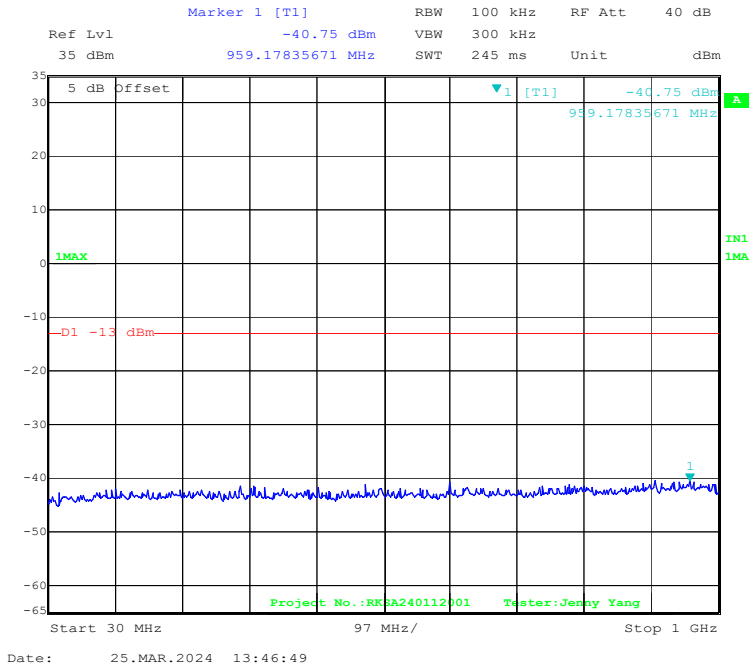


1 GHz – 20 GHz (EGPRS Mode), Low channel

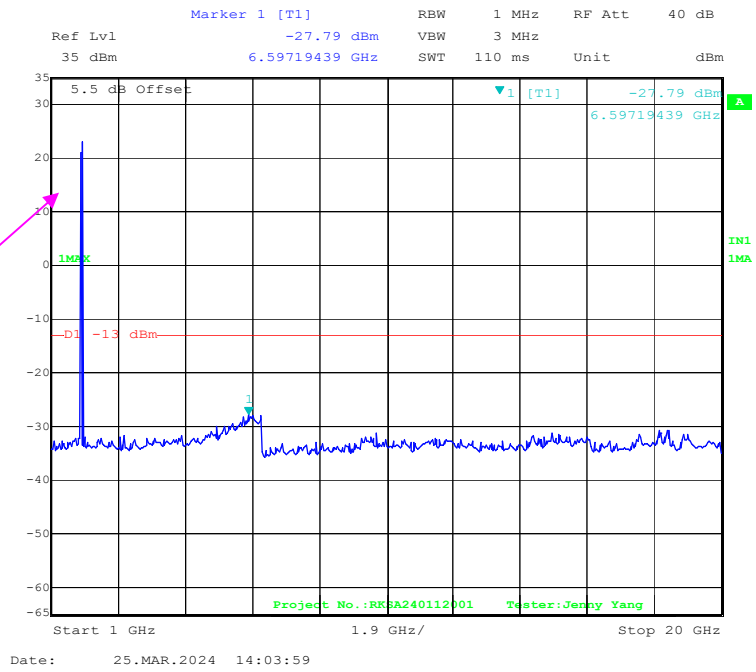


Fundamental

30 MHz – 1GHz (GPRS Mode), Middle channel

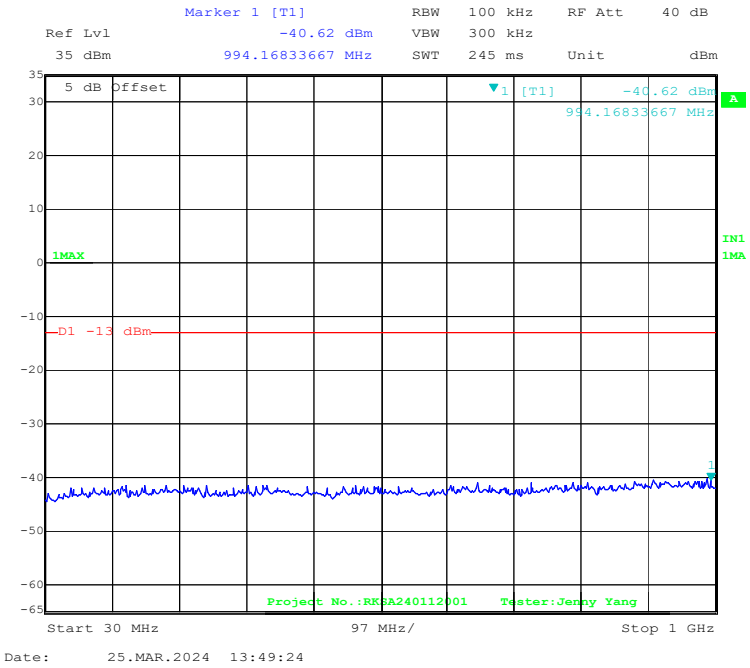


1 GHz – 20 GHz (GPRS Mode), Middle channel

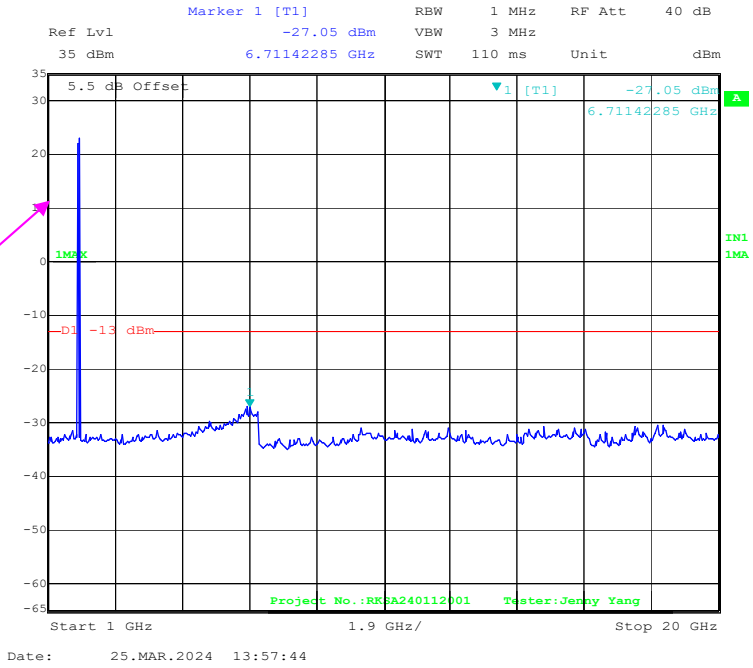


Fundamental

30 MHz – 1GHz (EGPRS Mode), Middle channel

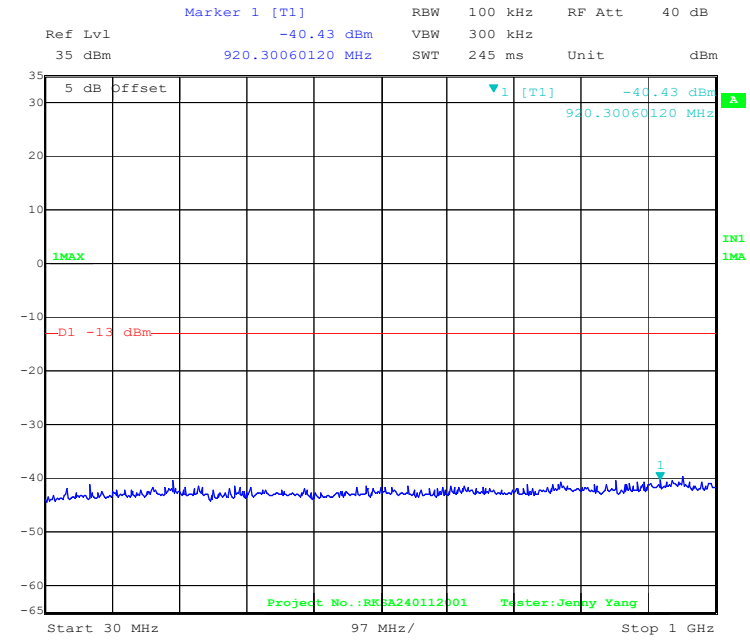


1 GHz – 20 GHz (EGPRS Mode), Middle channel

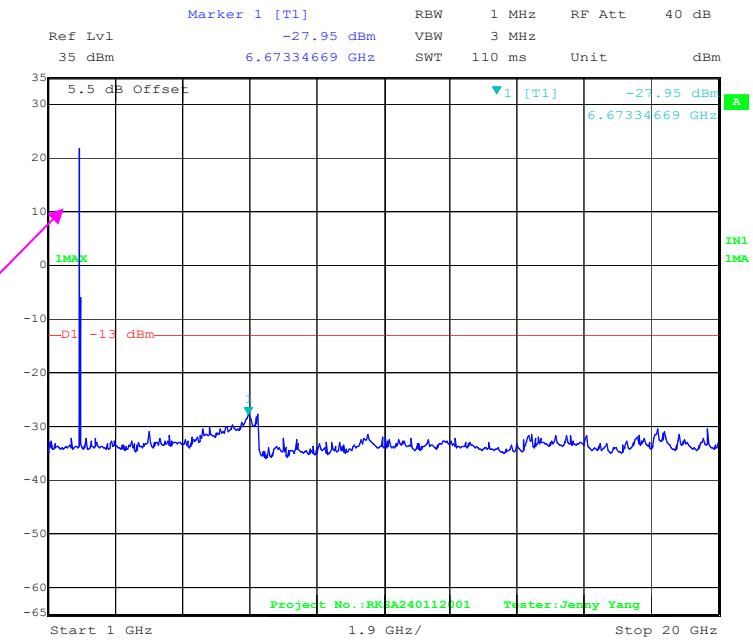


Fundamental

30 MHz – 1GHz (GPRS Mode), High channel

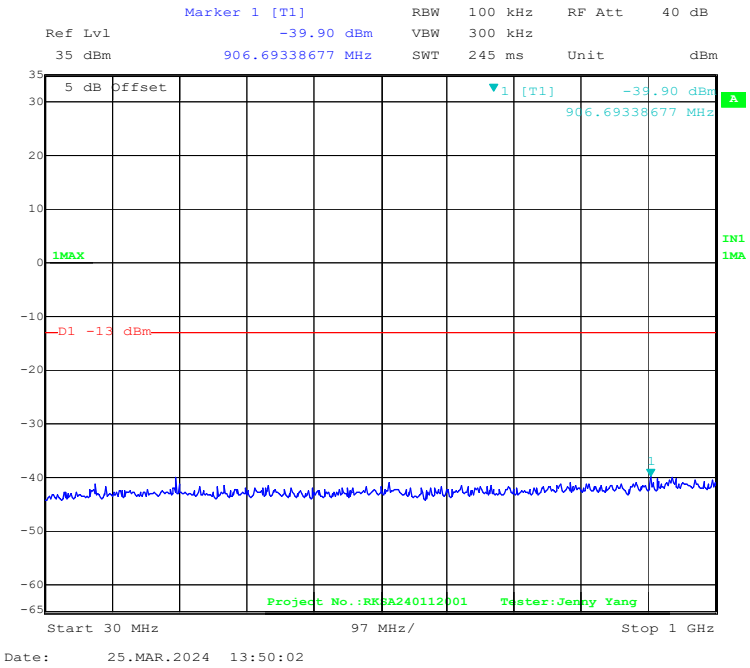


1 GHz – 20 GHz (GPRS Mode), High channel

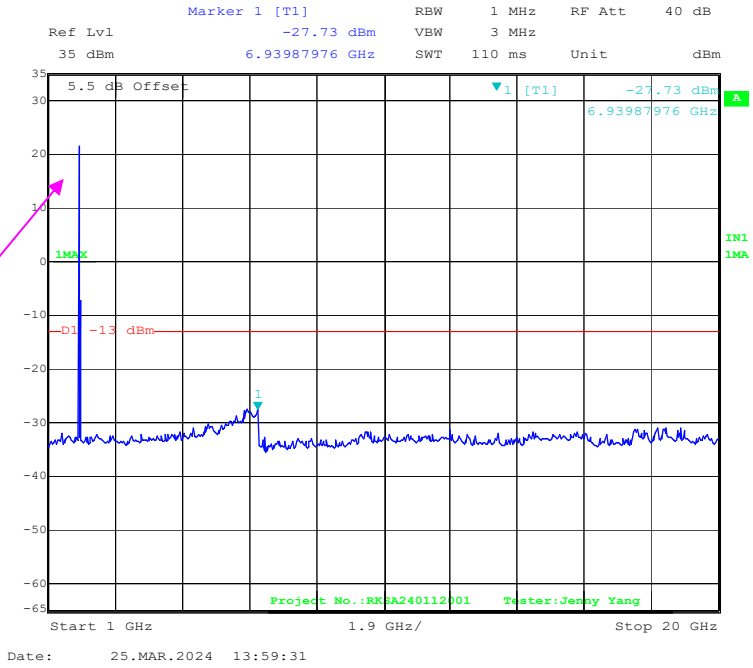


Fundamental

30 MHz – 1GHz(EGPRS Mode), High channel



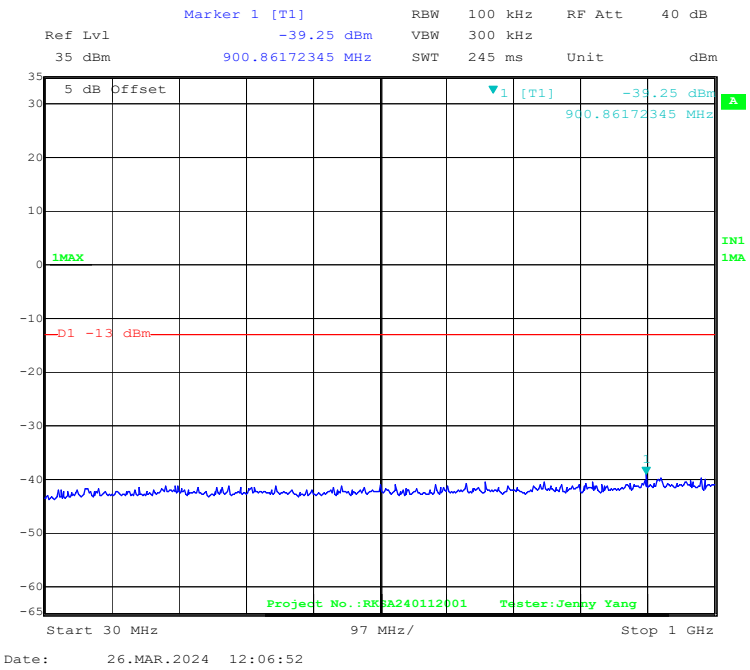
1 GHz – 20 GHz (EGPRS Mode), High channel



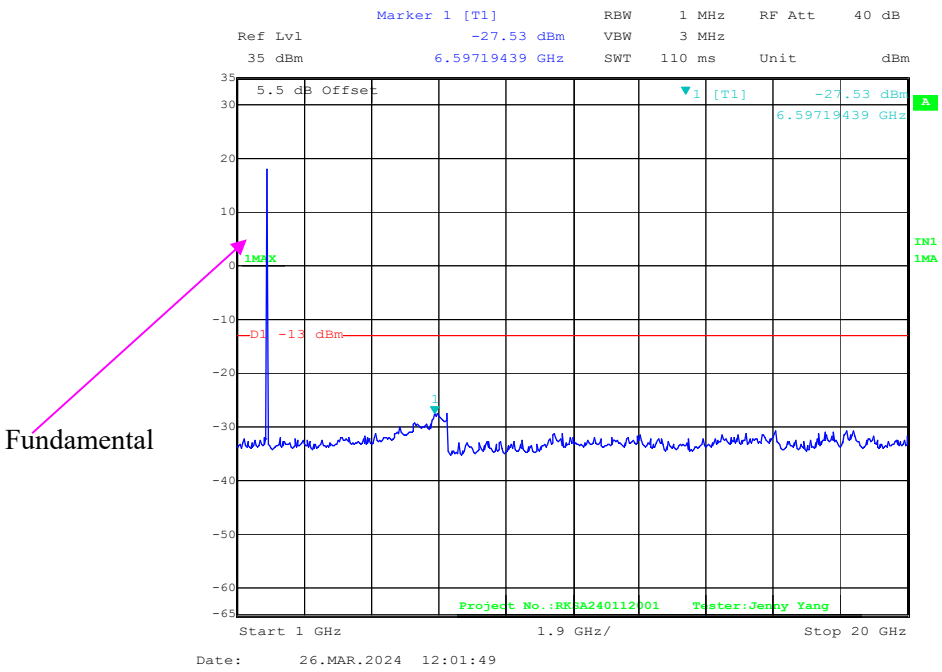
Fundamental

WCDMA Band II:

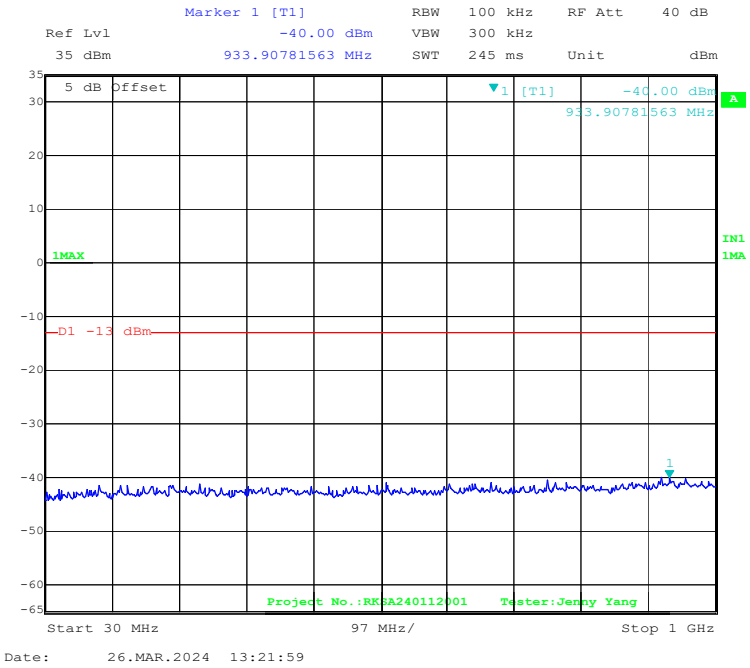
30 MHz – 1GHz WCDMA (Rel 99) Mode, Low channel



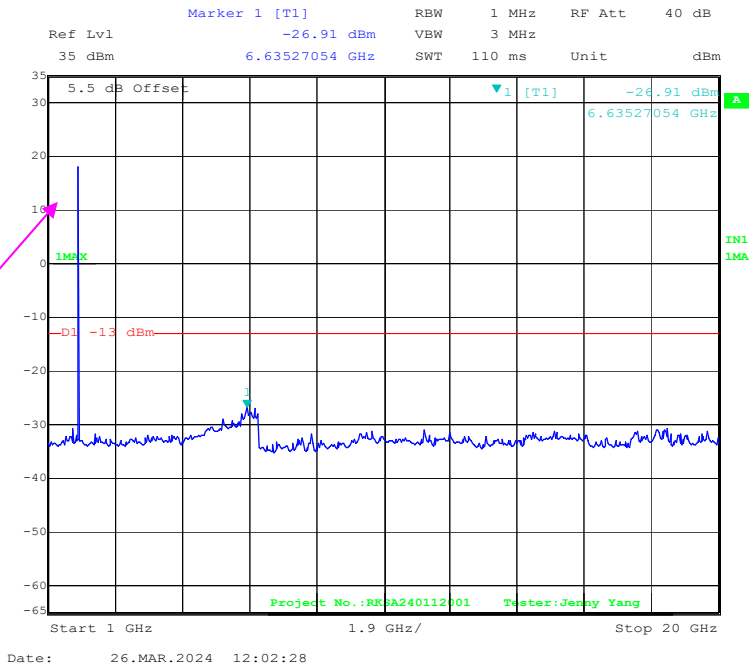
1 GHz – 20 GHz WCDMA (Rel 99) Mode, Low channel



30 MHz – 1GHz WCDMA (HSDPA) Mode, Low channel

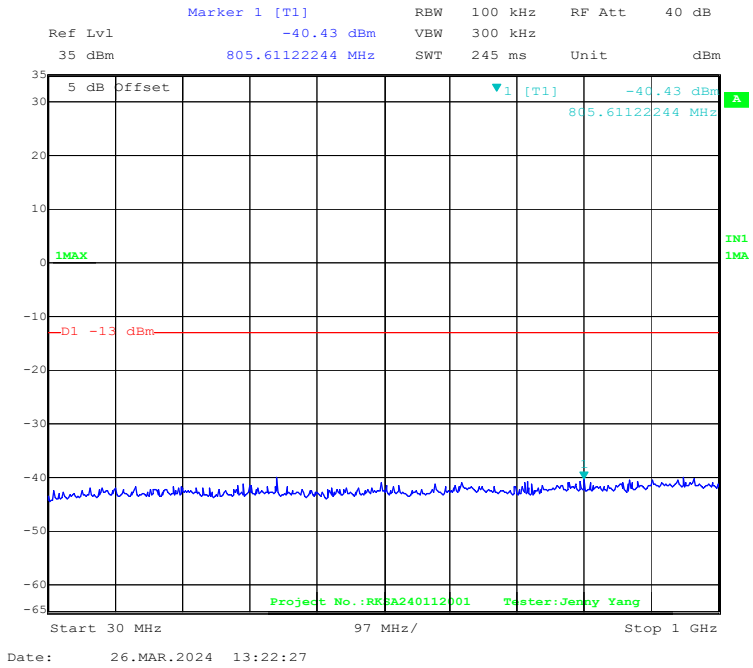


1 GHz – 20 GHz WCDMA (HSDPA) Mode, Low channel

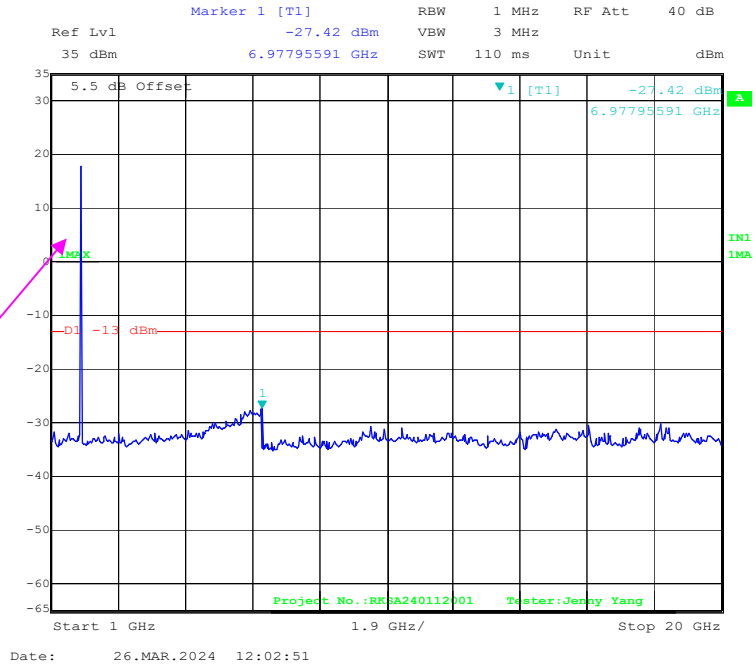


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, Low channel

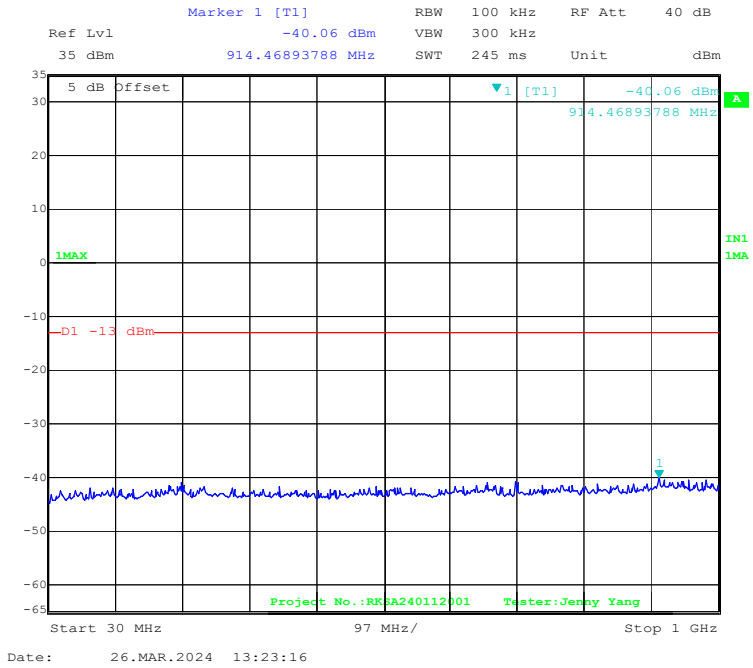


1 GHz – 20 GHz WCDMA (HSUPA) Mode, Low channel

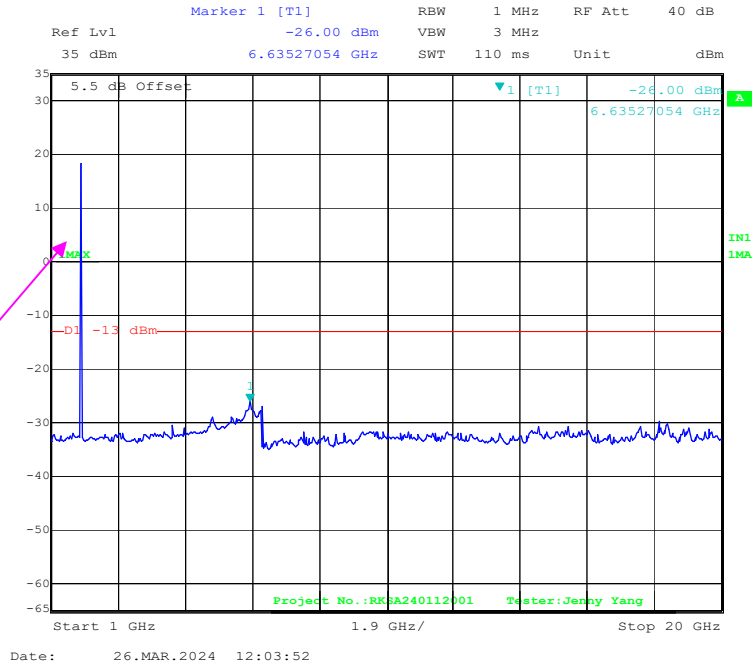


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, Low channel

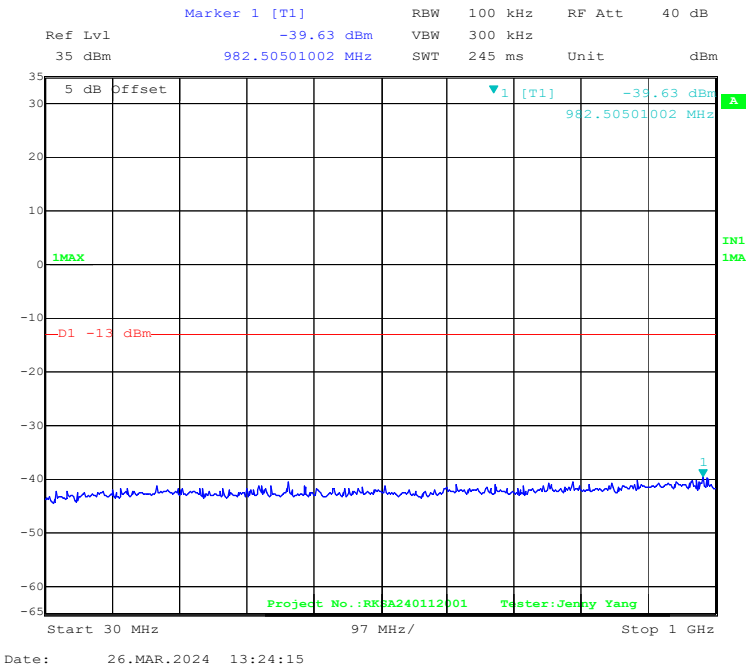


1 GHz – 20 GHz WCDMA (HSPA+) Mode, Low channel

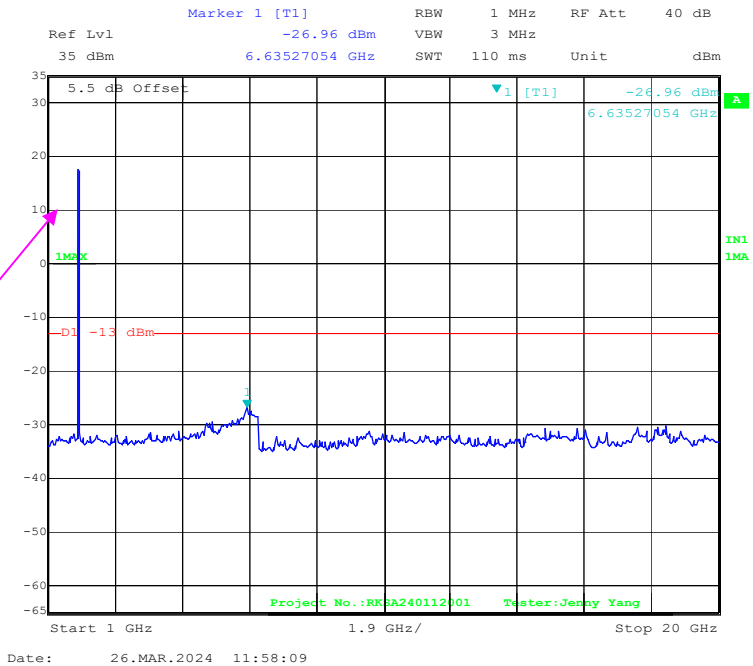


Fundamental

30 MHz – 1GHz WCDMA (Rel 99) Mode, Middle channel

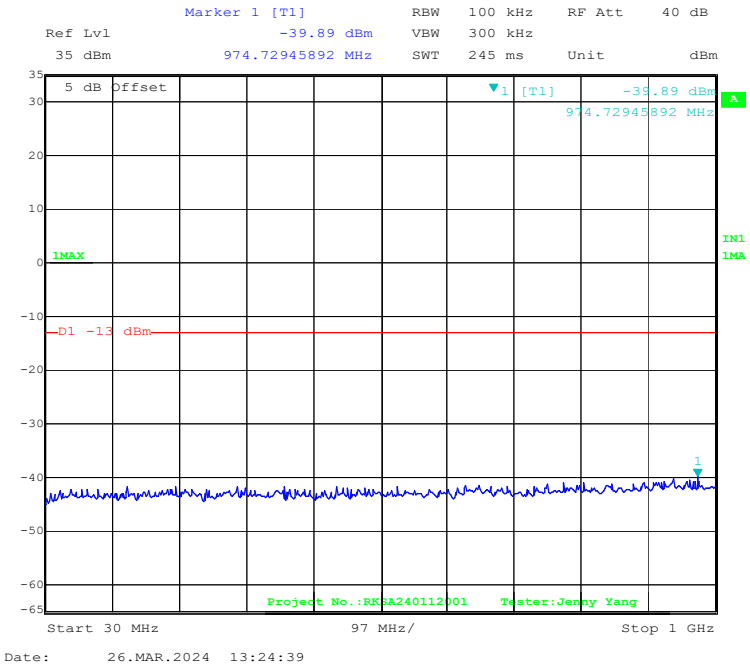


1 GHz – 20 GHz WCDMA (Rel 99) Mode, Middle channel

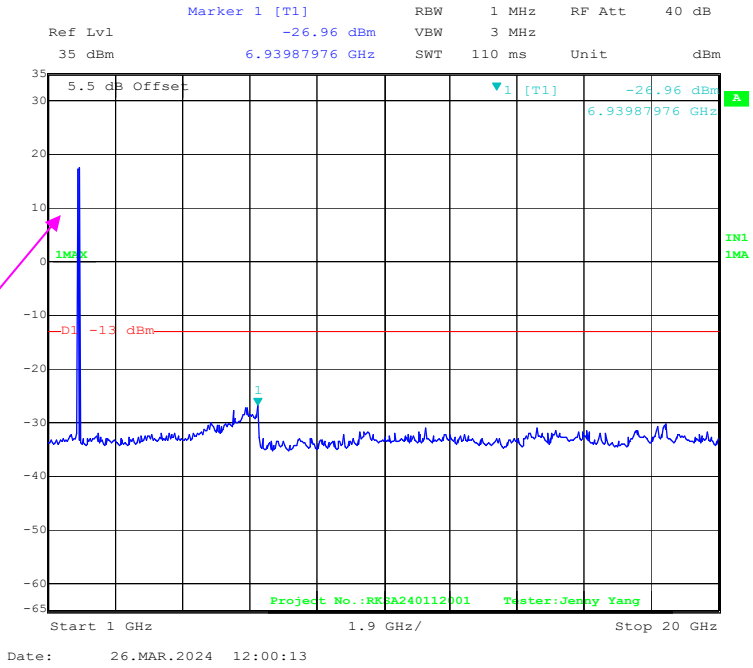


Fundamental

30 MHz – 1GHz WCDMA (HSDPA) Mode, Middle channel

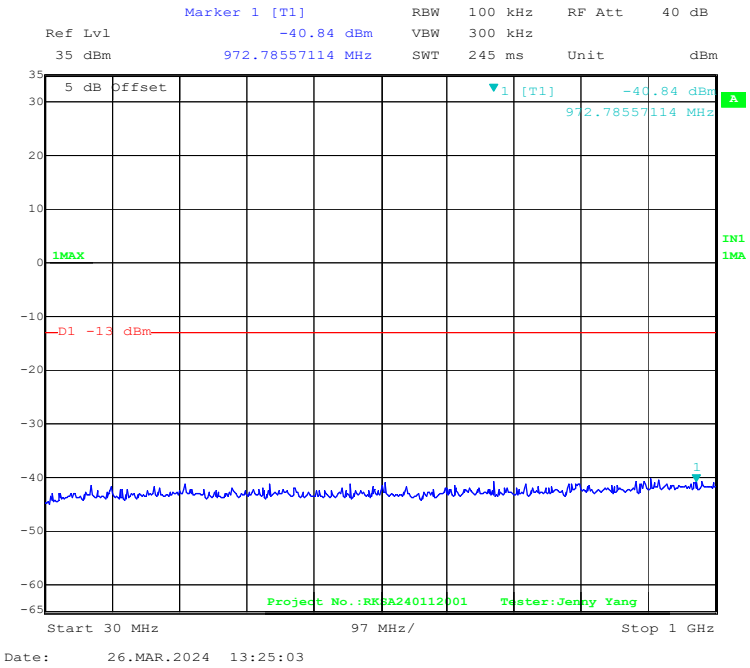


1 GHz – 20 GHz WCDMA (HSDPA) Mode, Middle channel

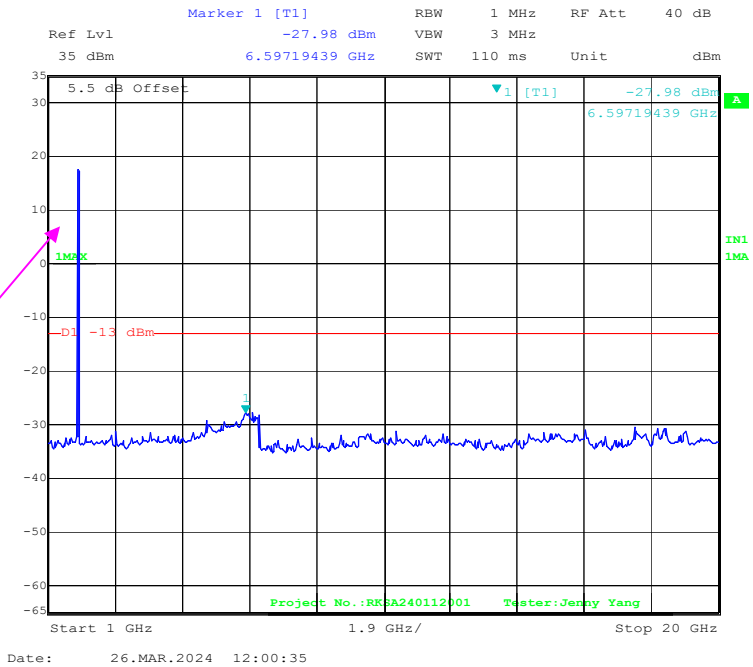


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, Middle channel

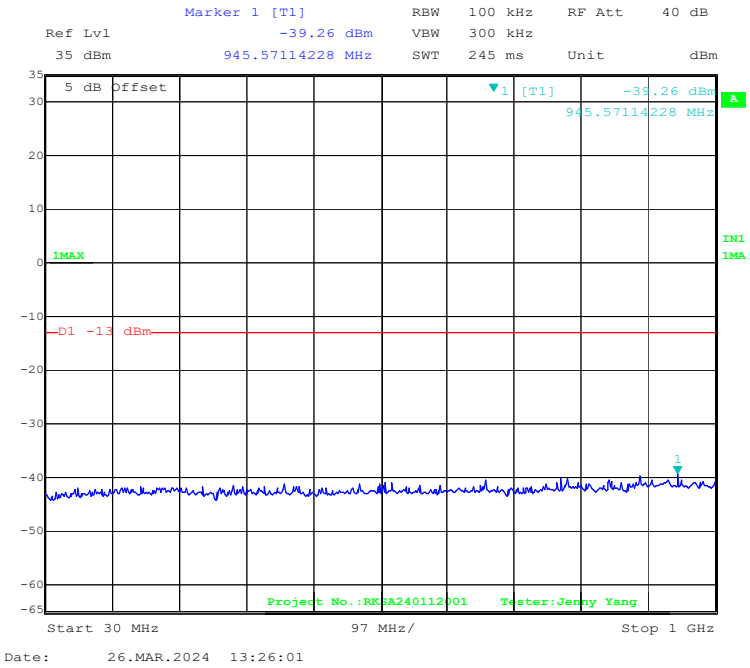


1 GHz – 20 GHz WCDMA (HSUPA) Mode, Middle channel

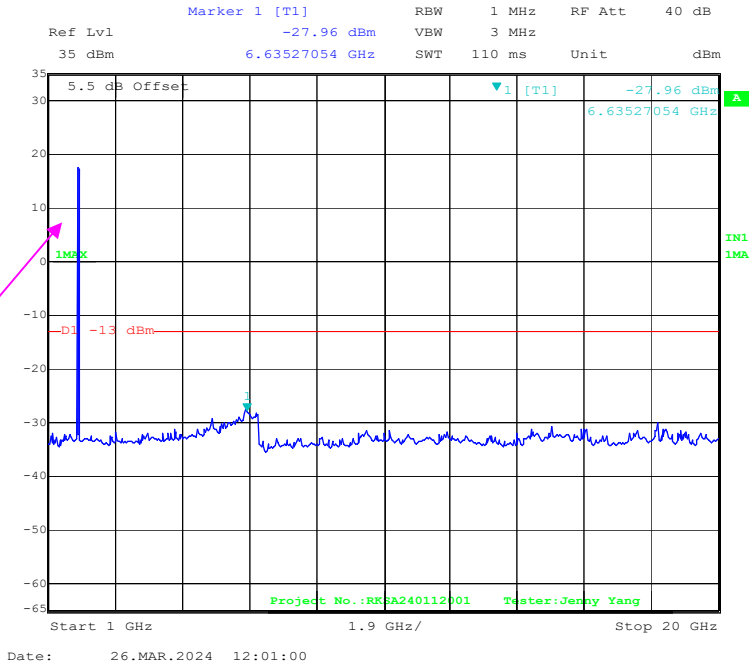


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, Middle channel

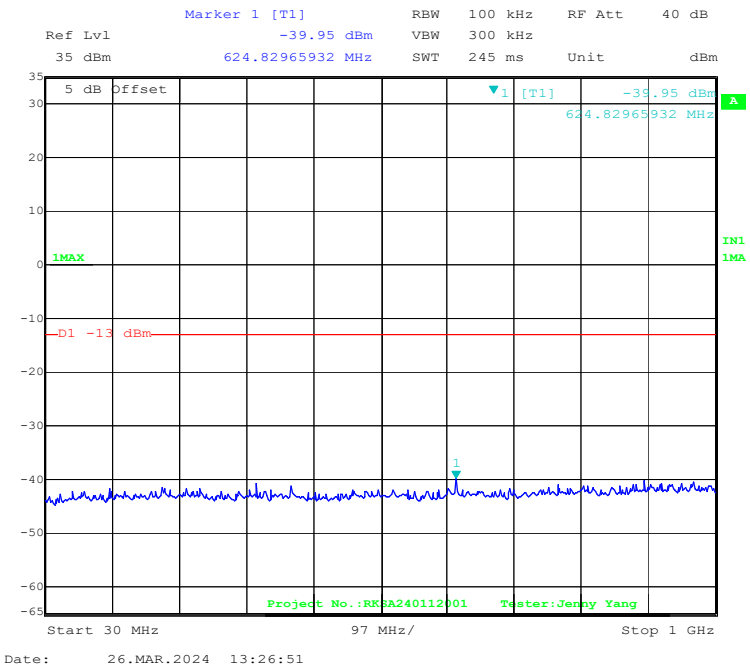


1 GHz – 20 GHz WCDMA (HSPA+) Mode, Middle channel

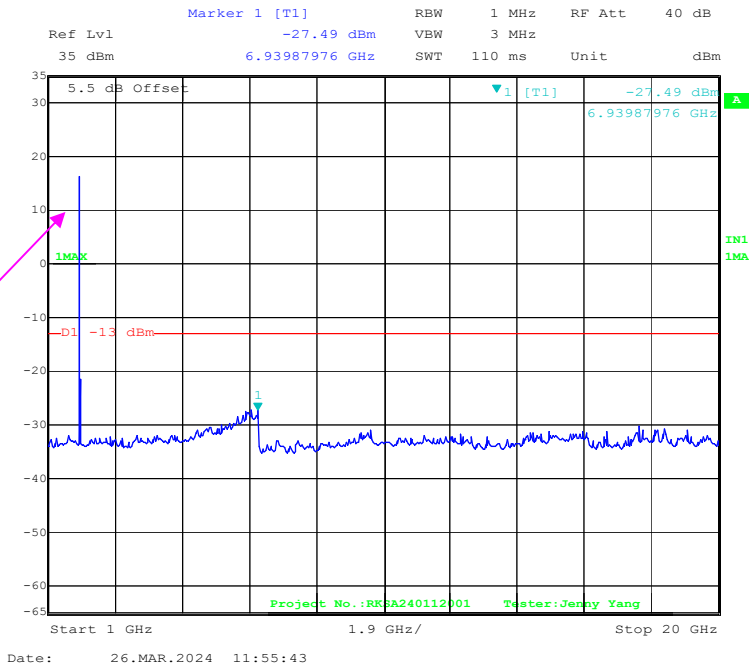


Fundamental

30 MHz – 1GHz WCDMA (Rel 99) Mode, High channel

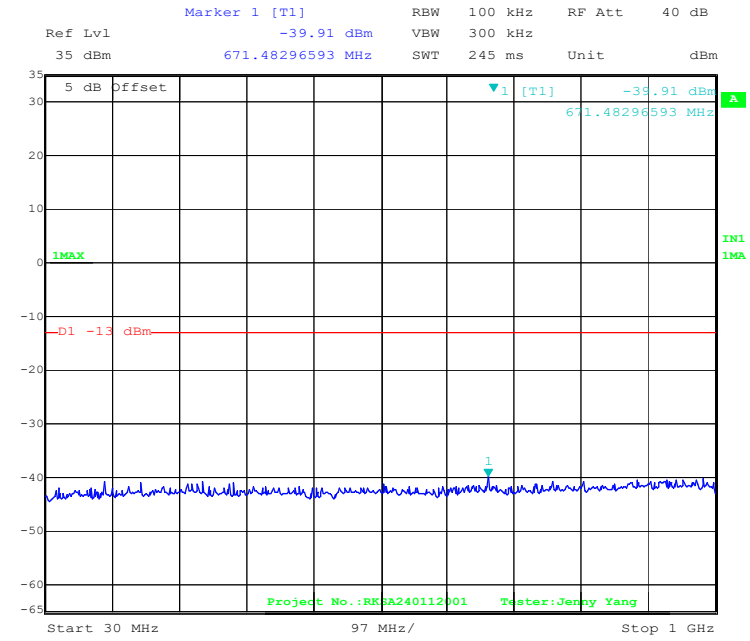


1 GHz – 20 GHz WCDMA (Rel 99) Mode, High channel

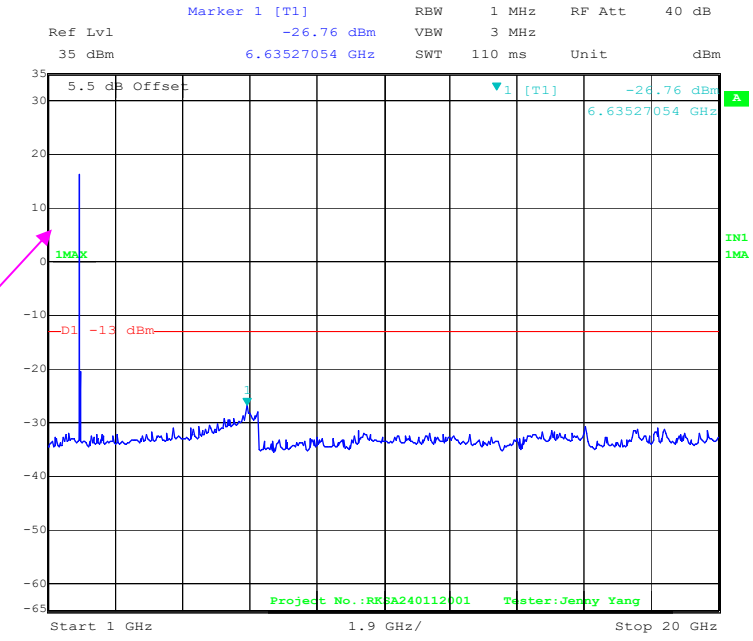


Fundamental

30 MHz – 1GHz WCDMA (HSDPA) Mode, High channel

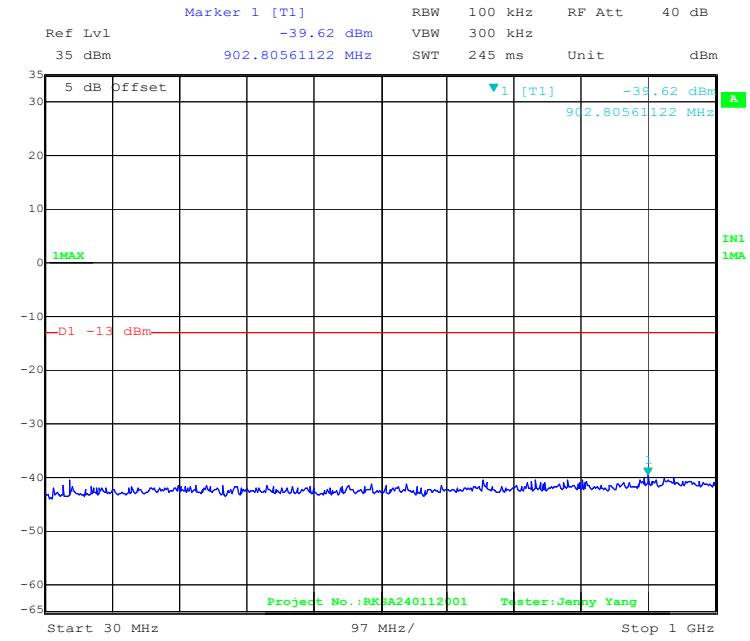


1 GHz – 20 GHz WCDMA (HSDPA) Mode, High channel

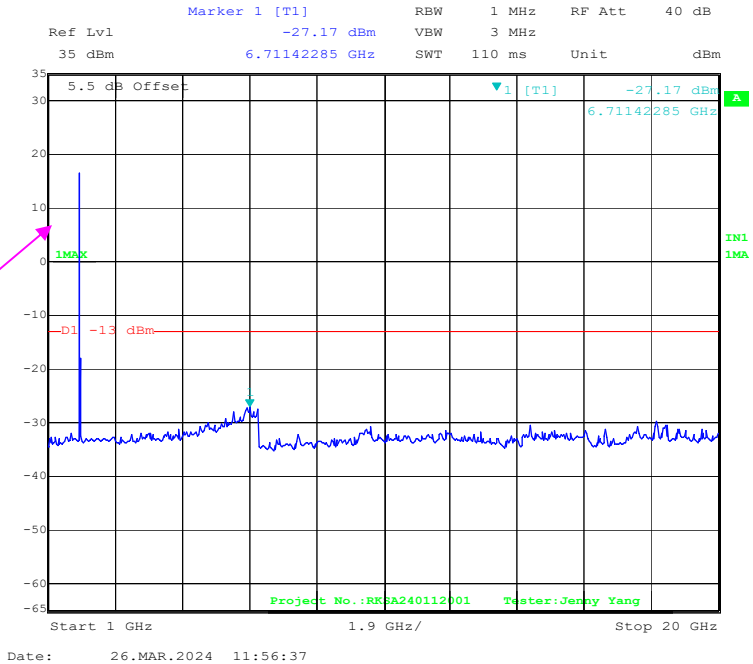


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, High channel

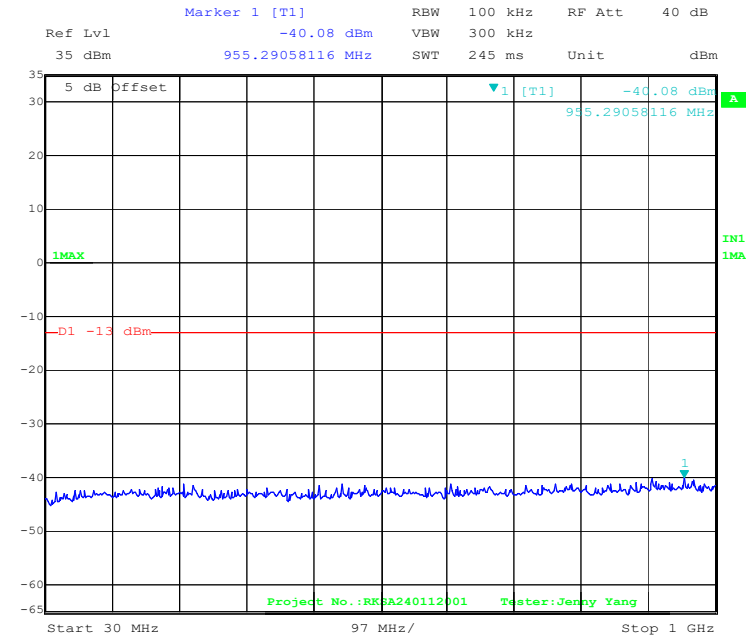


1 GHz – 20 GHz WCDMA (HSUPA) Mode, High channel

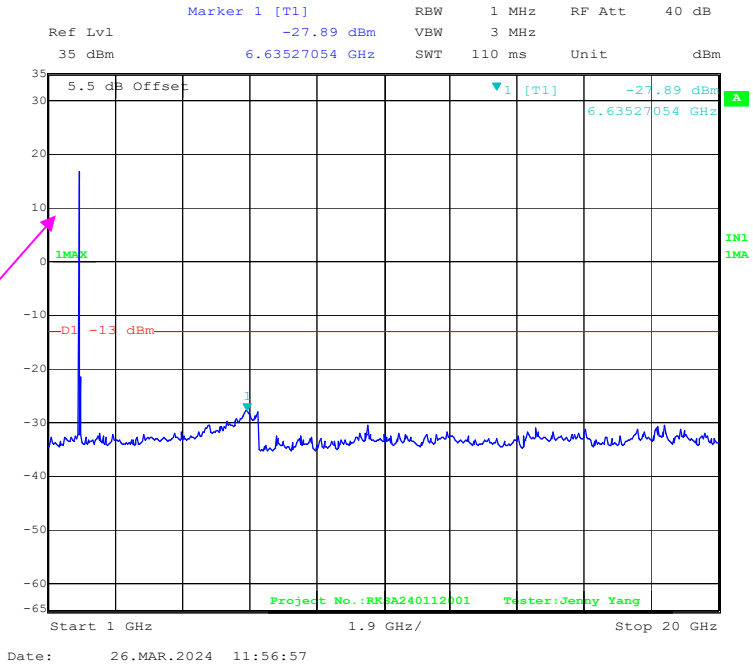


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, High channel



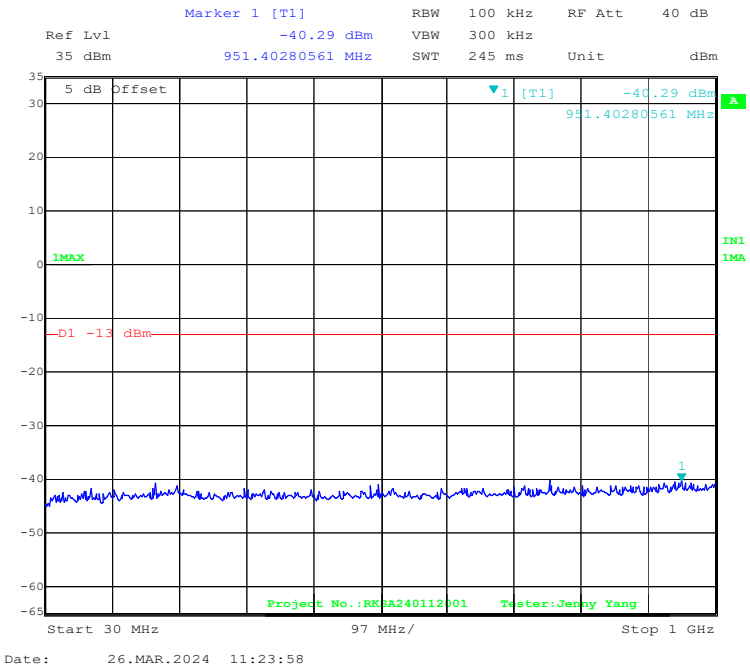
1 GHz – 20 GHz WCDMA (HSPA+) Mode, High channel



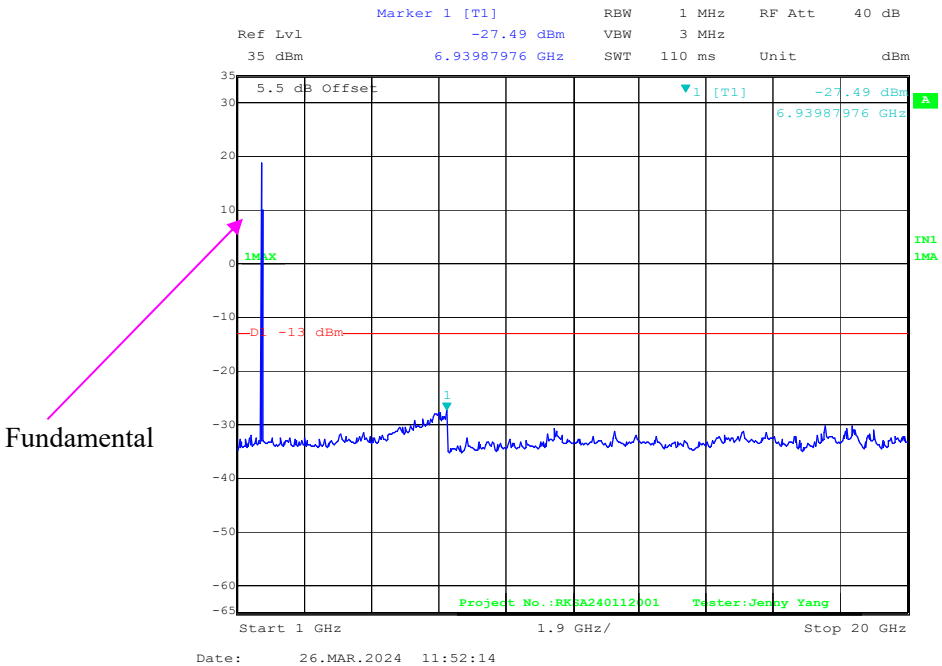
Fundamental

WCDMA Band IV:

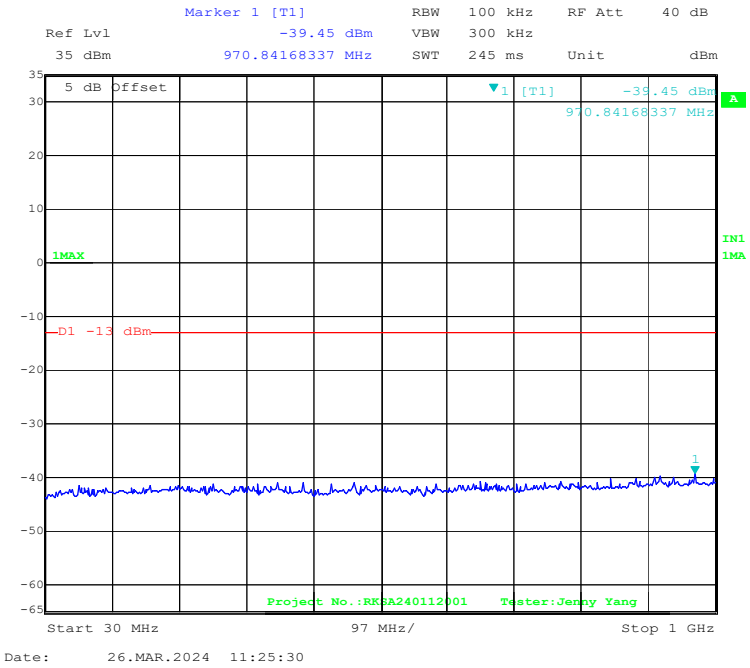
30 MHz – 1GHz WCDMA (Rel 99) Mode, Low channel



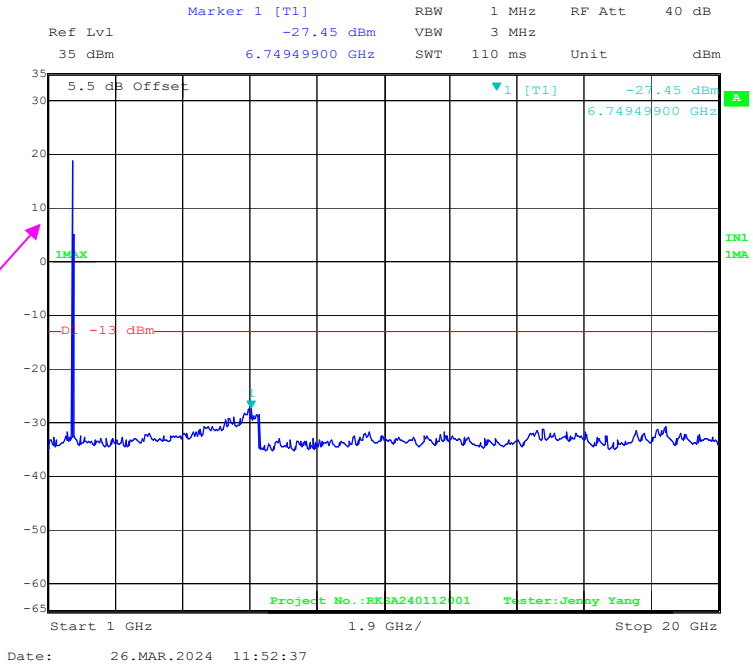
1 GHz – 20 GHz WCDMA (Rel 99) Mode, Low channel



30 MHz – 1GHz WCDMA (HSDPA) Mode, Low channel

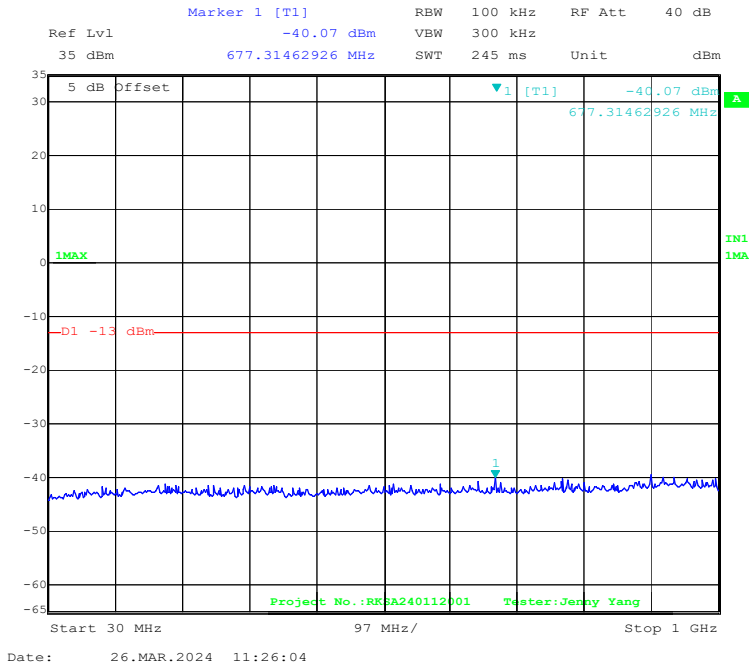


1 GHz – 20 GHz WCDMA (HSDPA) Mode, Low channel

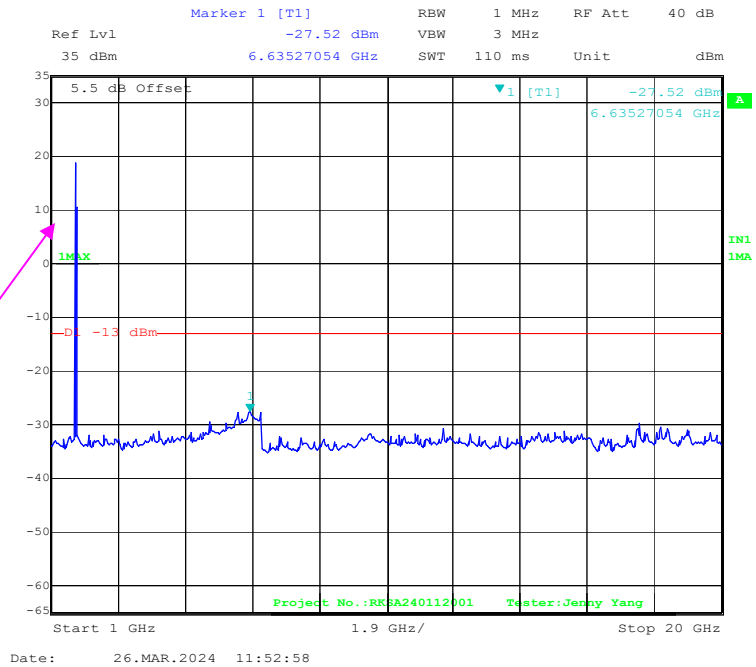


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, Low channel

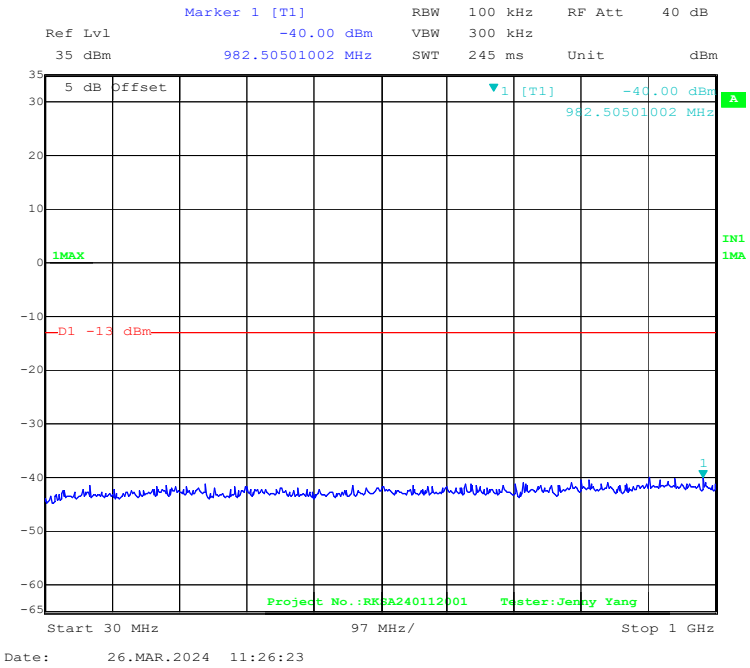


1 GHz – 20 GHz WCDMA (HSUPA) Mode, Low channel

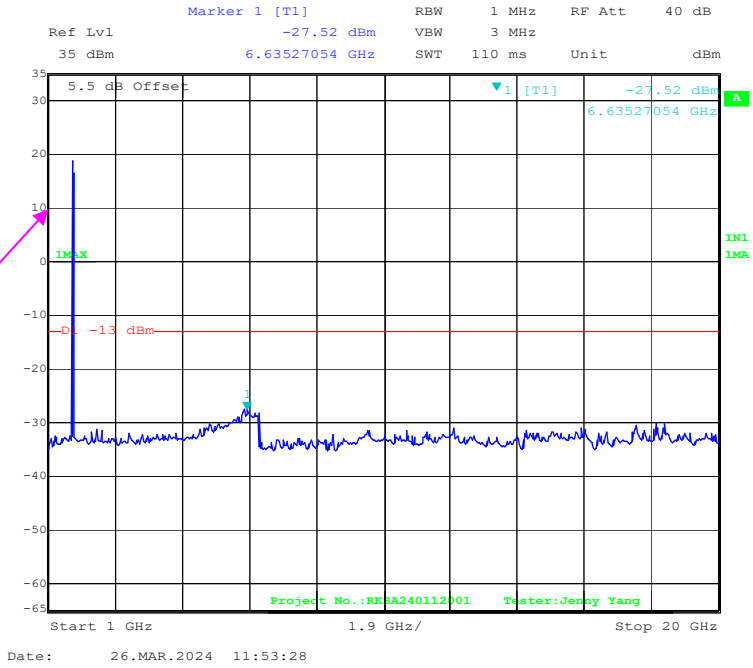


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, Low channel

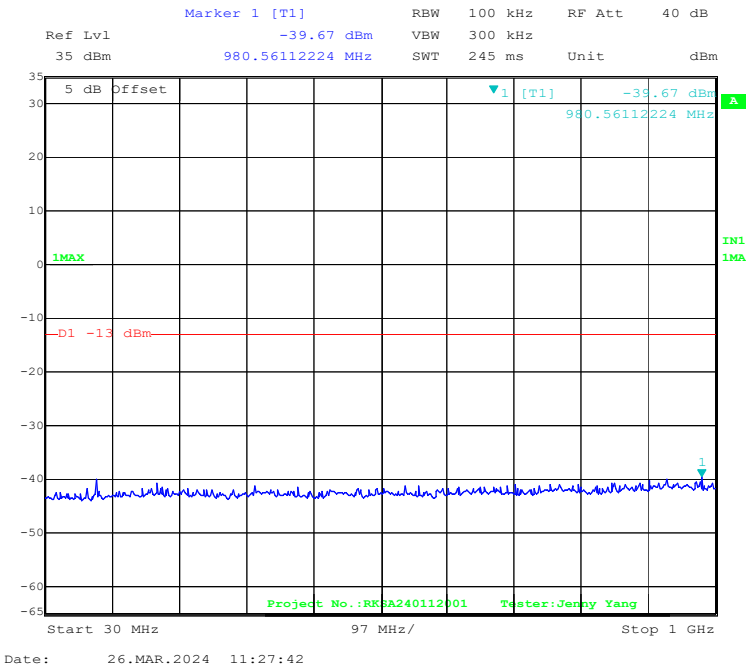


1 GHz – 20 GHz WCDMA (HSPA+) Mode, Low channel

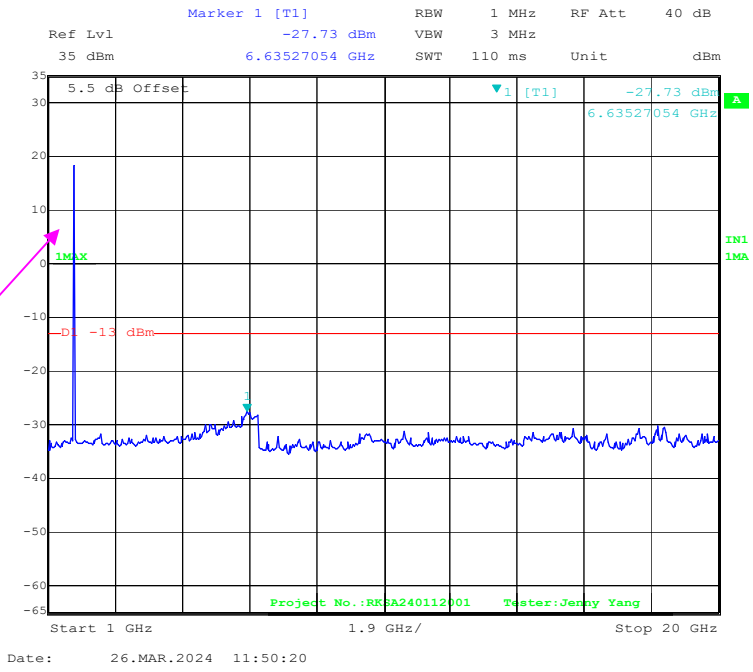


Fundamental

30 MHz – 1GHz WCDMA (Rel 99) Mode, Middle channel

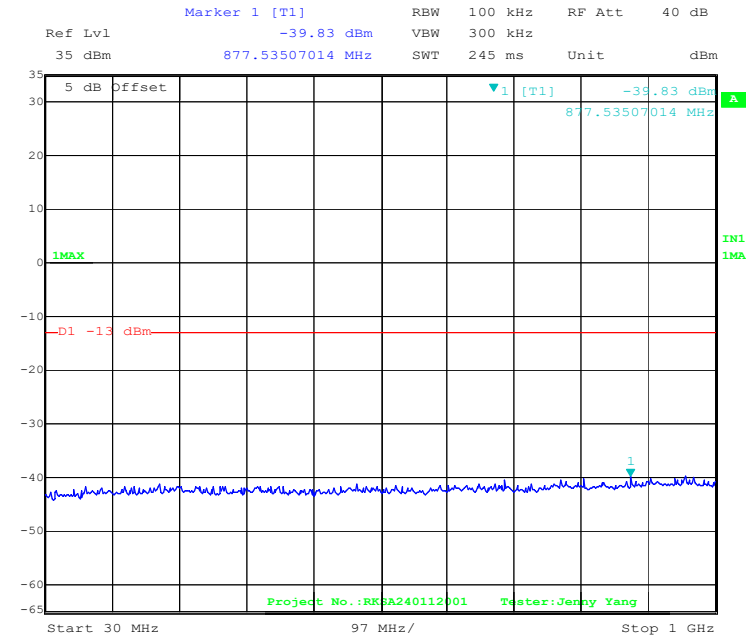


1 GHz – 20 GHz WCDMA (Rel 99) Mode, Middle channel

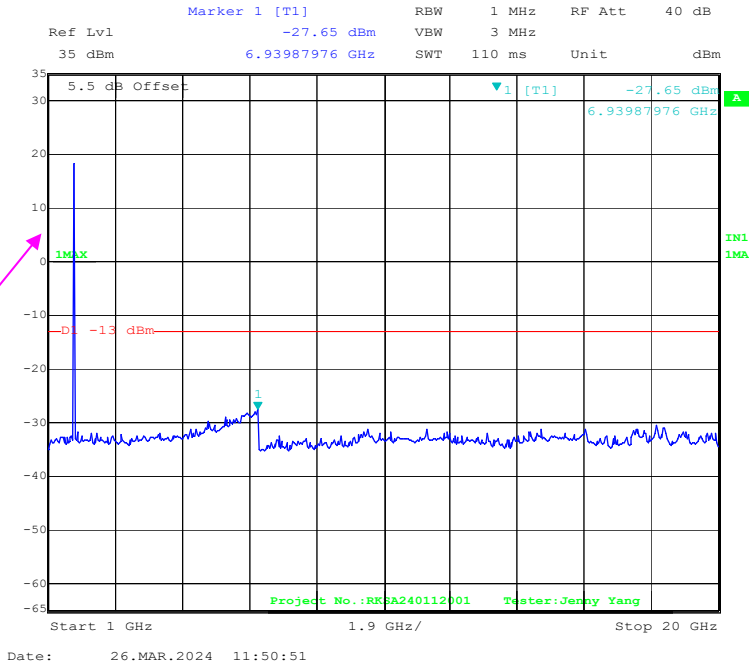


Fundamental

30 MHz – 1GHz WCDMA (HSDPA) Mode, Middle channel

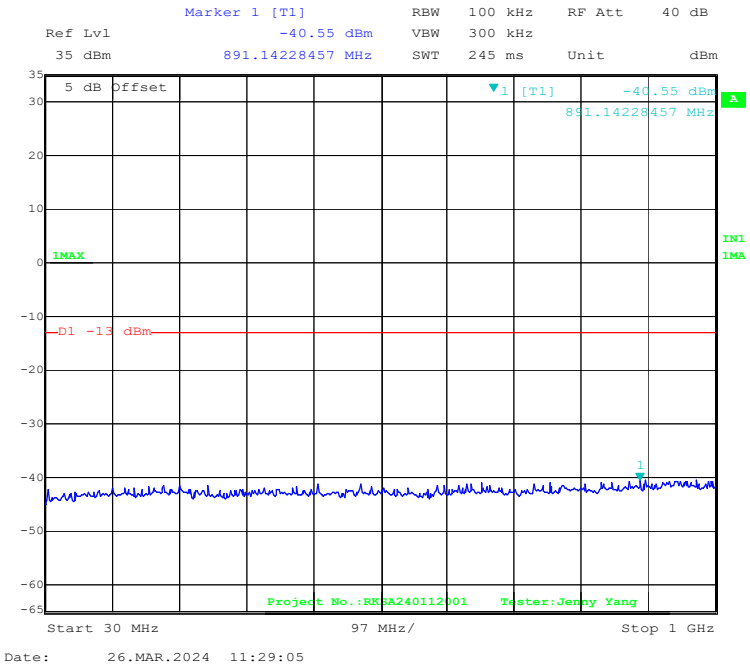


1 GHz – 20 GHz WCDMA (HSDPA) Mode, Middle channel

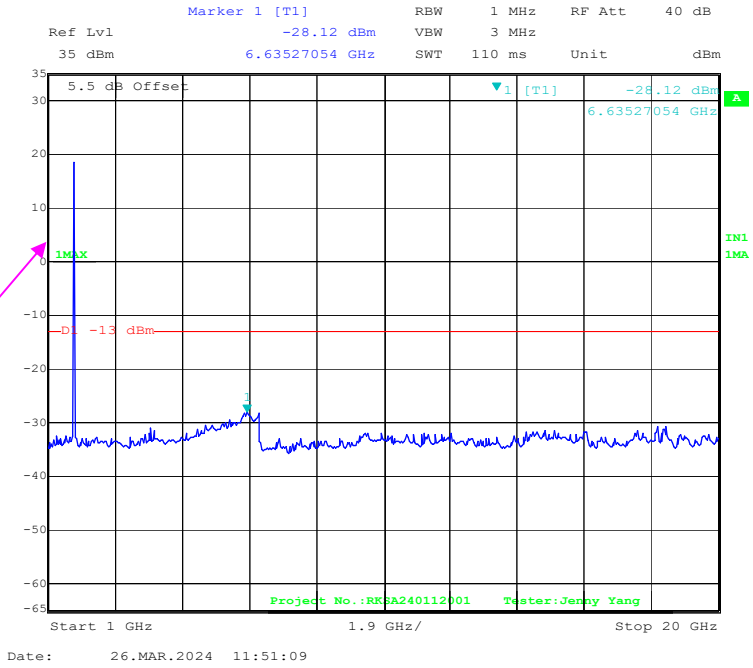


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, Middle channel

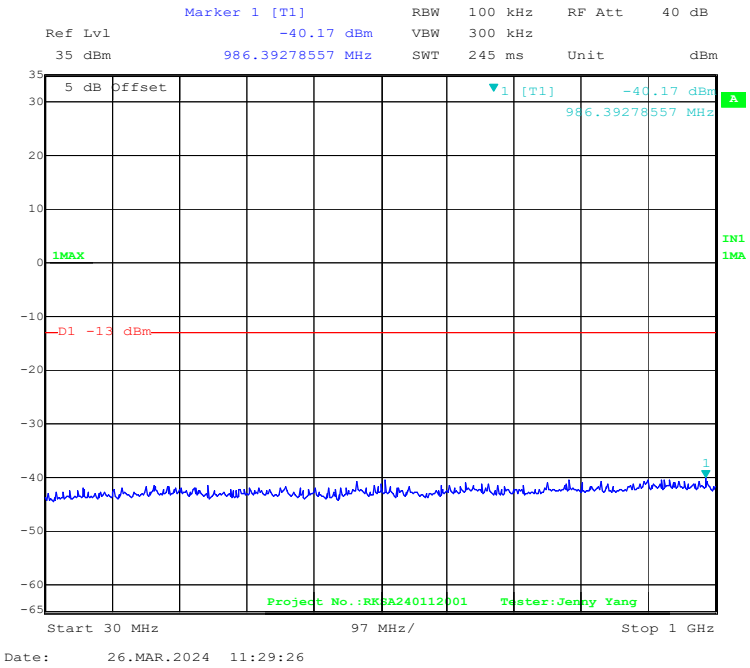


1 GHz – 20 GHz WCDMA (HSUPA) Mode, Middle channel

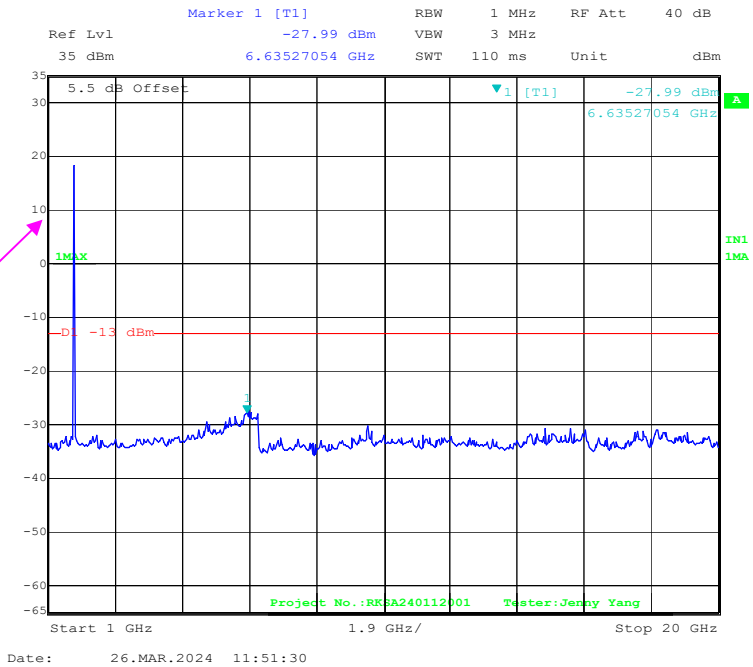


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, Middle channel

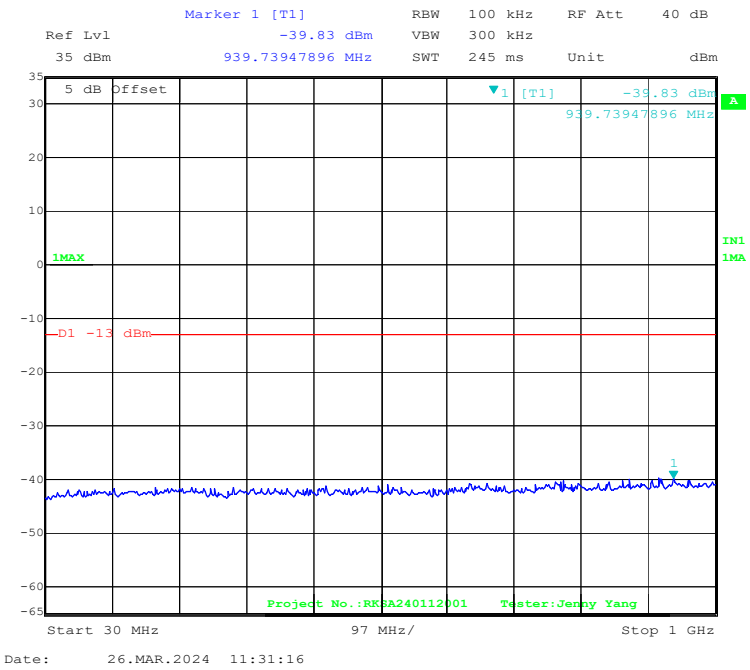


1 GHz – 20 GHz WCDMA (HSPA+) Mode, Middle channel

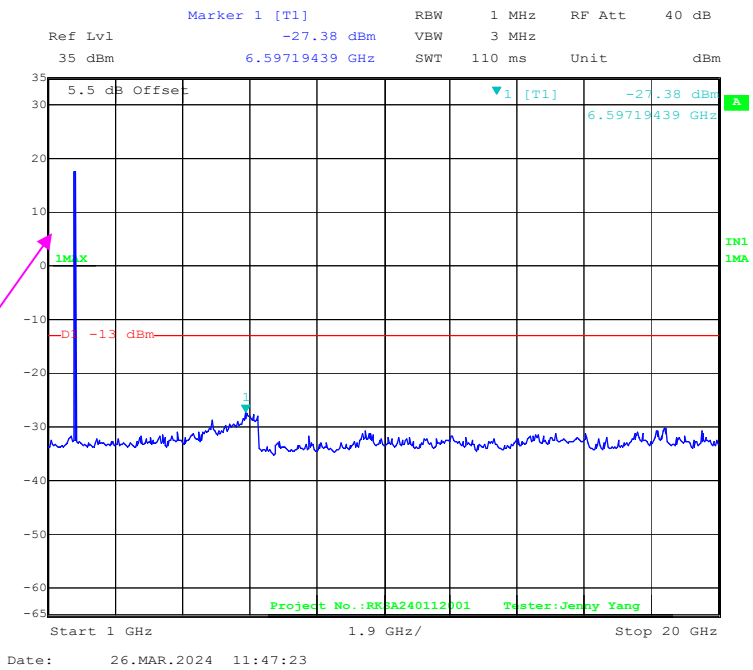


Fundamental

30 MHz – 1GHz WCDMA (Rel 99) Mode, High channel

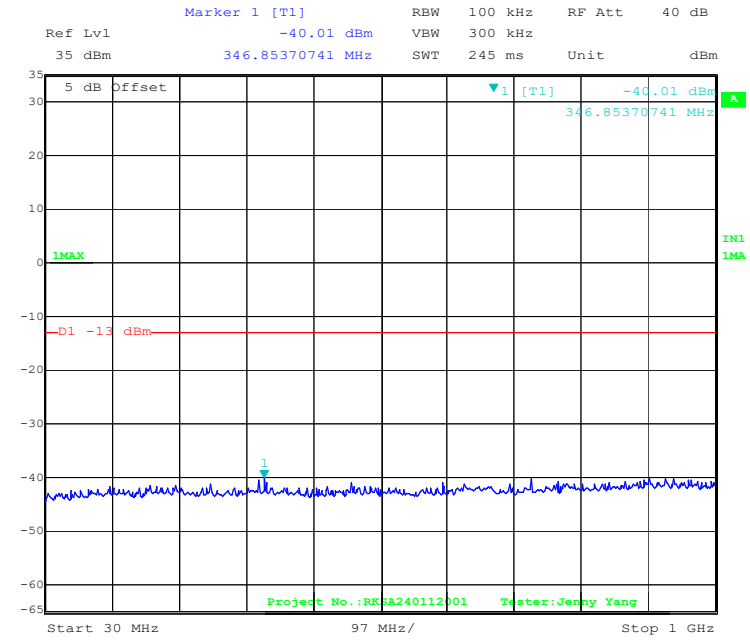


1 GHz – 20 GHz WCDMA (Rel 99) Mode, High channel

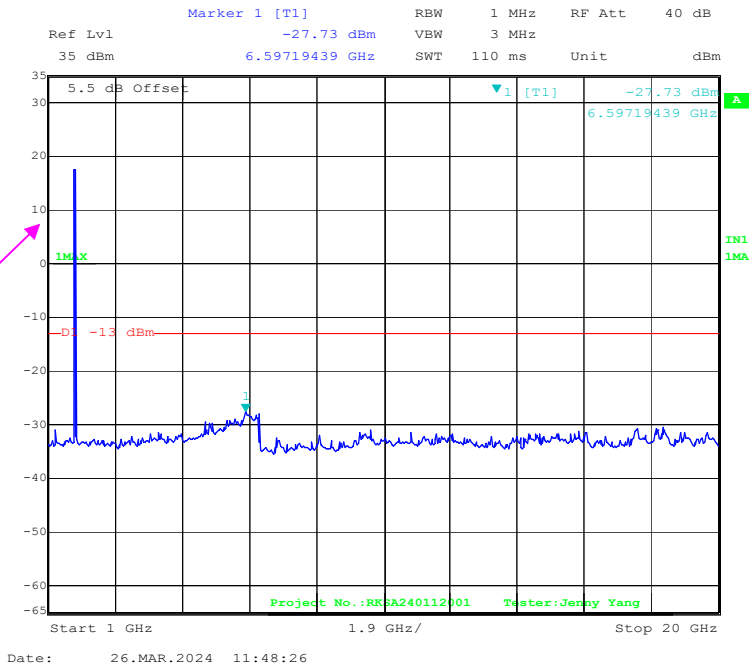


Fundamental

30 MHz – 1GHz WCDMA (HSDPA) Mode, High channel

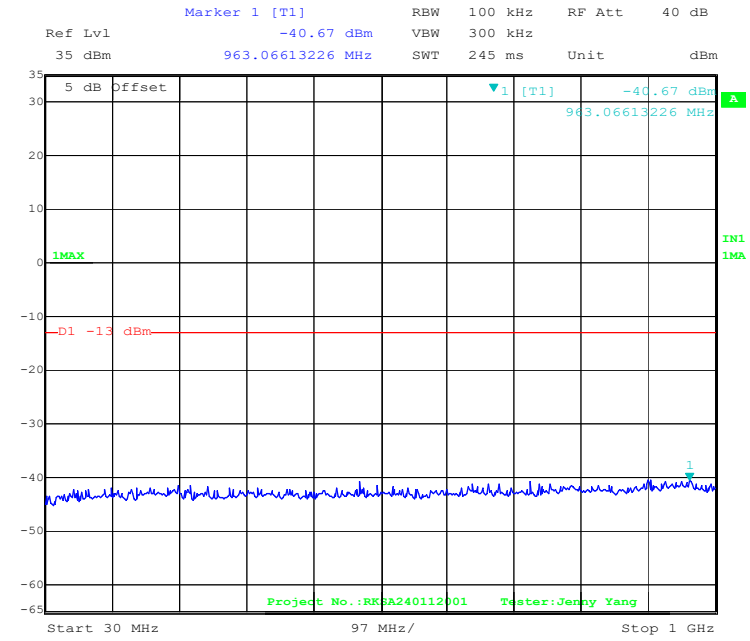


1 GHz – 20 GHz WCDMA (HSDPA) Mode, High channel

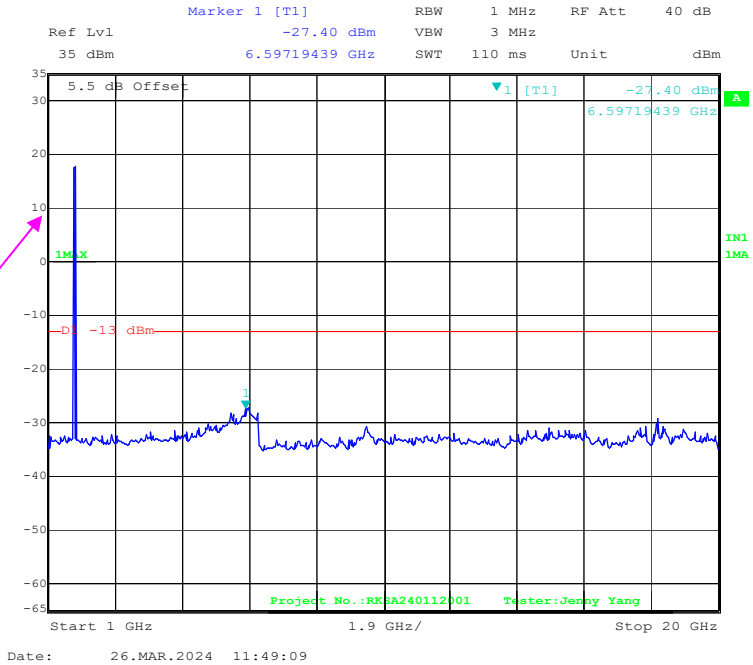


Fundamental

30 MHz – 1GHz WCDMA (HSUPA) Mode, High channel

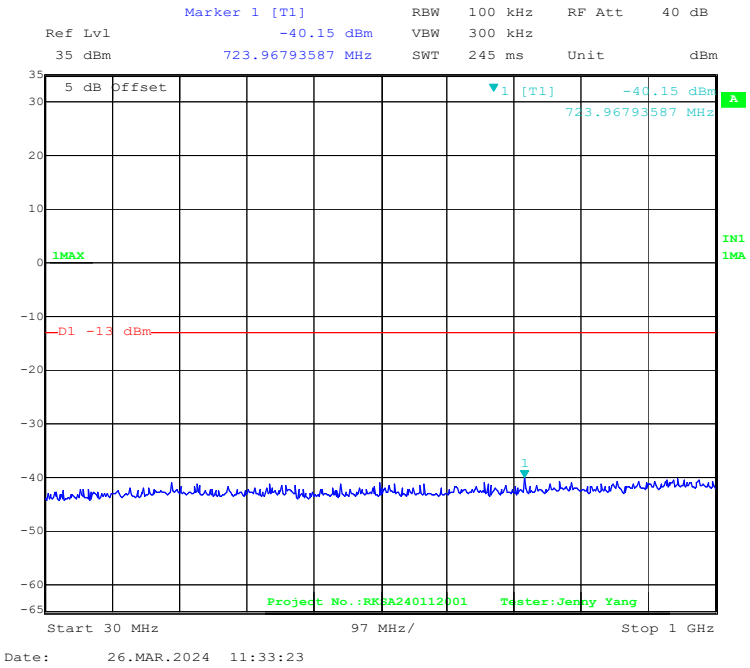


1 GHz – 20 GHz WCDMA (HSUPA) Mode, High channel

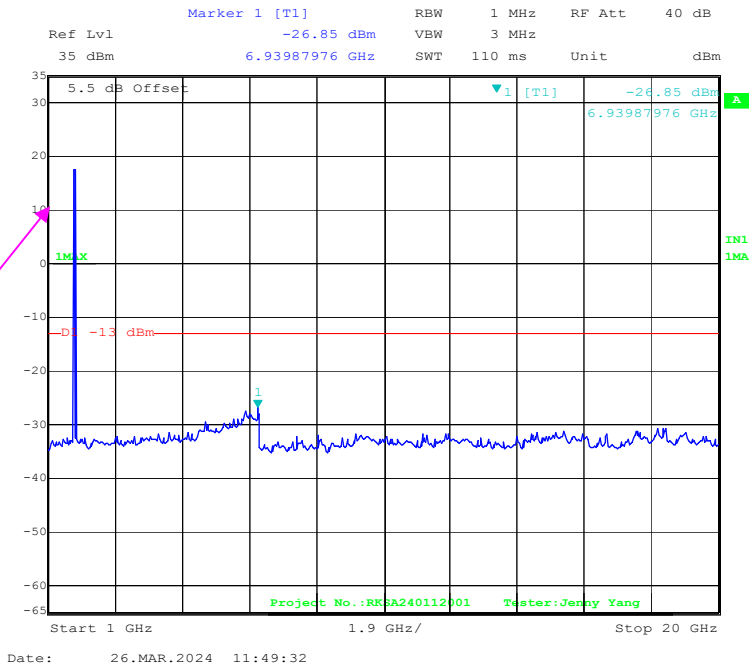


Fundamental

30 MHz – 1GHz WCDMA (HSPA+) Mode, High channel



1 GHz – 20 GHz WCDMA (HSPA+) Mode, High channel



Fundamental

SPURIOUS RADIATED EMISSIONS

Test mode: Transmitting (Pre-scan with all the bandwidth, and worst case as below)

30 MHz - 10 GHz:

GPRS 850 Band

Frequency (MHz)	Receiver Reading (dBµV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
GPRS Mode, Low channel										
517.91	44.38	349	200	H	-59.42	0.58	-1.72	-61.72	-13	48.72
517.91	41.82	258	200	V	-59.69	0.58	-1.72	-61.99	-13	48.99
1648.40	56.30	210	200	H	-57.05	0.84	8.44	-49.45	-13	36.45
1648.40	56.09	32	200	V	-57.26	0.84	8.44	-49.66	-13	36.66
GPRS Mode, Middle channel										
517.91	45.18	161	100	H	-58.62	0.58	-1.72	-60.92	-13	47.92
517.91	42.48	193	100	V	-59.03	0.58	-1.72	-61.33	-13	48.33
1673.20	57.07	339	100	H	-56.10	0.84	8.48	-48.46	-13	35.46
1673.20	56.70	18	150	V	-56.47	0.84	8.48	-48.83	-13	35.83
GPRS Mode, High channel										
517.91	44.86	47	200	H	-58.94	0.58	-1.72	-61.24	-13	48.24
517.91	42.14	98	100	V	-59.37	0.58	-1.72	-61.67	-13	48.67
1697.60	53.57	117	150	H	-59.43	0.84	8.52	-51.75	-13	38.75
1697.60	53.49	161	100	V	-59.51	0.84	8.52	-51.83	-13	38.83

WCDMA Band V

Frequency (MHz)	Receiver Reading (dBµV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
WCDMA Mode, Low channel										
486.75	37.75	147	200	H	-64.14	0.57	-1.87	-66.58	-13	53.58
486.75	38.66	143	100	V	-63.96	0.57	-1.87	-66.40	-13	53.40
1652.80	51.09	56	150	H	-62.22	0.84	8.44	-54.62	-13	41.62
1652.80	51.50	227	200	V	-61.81	0.84	8.44	-54.21	-13	41.21
WCDMA Mode, Middle channel										
486.75	37.40	177	200	H	-64.49	0.57	-1.87	-66.93	-13	53.93
486.75	38.69	198	100	V	-63.93	0.57	-1.87	-66.37	-13	53.37
1673.20	48.66	346	200	H	-64.51	0.84	8.48	-56.87	-13	43.87
1673.20	48.54	235	100	V	-64.63	0.84	8.48	-56.99	-13	43.99
WCDMA Mode, High channel										
486.75	37.47	138	200	H	-64.42	0.57	-1.87	-66.86	-13	53.86
486.75	38.64	117	200	V	-63.98	0.57	-1.87	-66.42	-13	53.42
1693.20	51.50	308	150	H	-61.53	0.84	8.51	-53.86	-13	40.86
1693.20	52.12	26	100	V	-60.91	0.84	8.51	-53.24	-13	40.24

30 MHz ~ 20 GHz:

PCS 1900 Band

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
GPRS Mode, Low channel										
498.75	39.41	51	150	H	-63.59	0.58	-1.94	-66.11	-13	53.11
498.75	38.96	342	100	V	-63.17	0.58	-1.94	-65.69	-13	52.69
3700.40	44.02	168	150	H	-62.95	0.95	9.78	-54.12	-13	41.12
3700.40	44.33	45	150	V	-62.64	0.95	9.78	-53.81	-13	40.81
GPRS Mode, Middle channel										
498.75	39.24	145	150	H	-63.76	0.58	-1.94	-66.28	-13	53.28
498.75	38.88	216	100	V	-63.25	0.58	-1.94	-65.77	-13	52.77
3760.00	41.16	20	100	H	-65.62	0.95	9.74	-56.83	-13	43.83
3760.00	41.02	309	150	V	-65.76	0.95	9.74	-56.97	-13	43.97
GPRS Mode, High channel										
498.75	39.15	203	100	H	-63.85	0.58	-1.94	-66.37	-13	53.37
498.75	38.79	263	150	V	-63.34	0.58	-1.94	-65.86	-13	52.86
3819.60	42.97	162	100	H	-63.62	0.96	9.71	-54.87	-13	41.87
3819.60	43.29	67	150	V	-63.30	0.96	9.71	-54.55	-13	41.55

WCDMA Band II

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
WCDMA Mode, Low channel										
486.75	37.96	28	200	H	-63.93	0.57	-1.87	-66.37	-13	53.37
486.75	39.10	358	150	V	-63.52	0.57	-1.87	-65.96	-13	52.96
3704.80	41.40	54	150	H	-65.55	0.95	9.78	-56.72	-13	43.72
3704.80	41.81	135	200	V	-65.14	0.95	9.78	-56.31	-13	43.31
WCDMA Mode, Middle channel										
486.75	37.50	147	200	H	-64.39	0.57	-1.87	-66.83	-13	53.83
486.75	37.94	129	100	V	-64.68	0.57	-1.87	-67.12	-13	54.12
3760.00	41.51	326	200	H	-65.27	0.95	9.74	-56.48	-13	43.48
3760.00	41.28	183	150	V	-65.50	0.95	9.74	-56.71	-13	43.71
WCDMA Mode, High channel										
486.75	37.45	306	150	H	-64.44	0.57	-1.87	-66.88	-13	53.88
486.75	37.92	203	200	V	-64.70	0.57	-1.87	-67.14	-13	54.14
3815.20	41.49	79	100	H	-65.11	0.96	9.71	-56.36	-13	43.36
3815.20	41.87	101	200	V	-64.73	0.96	9.71	-55.98	-13	42.98

WCDMA Band IV

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
Low channel										
498.63	40.63	332	150	H	-62.36	0.58	-1.94	-64.88	-13	51.88
498.63	40.25	206	150	V	-61.89	0.58	-1.94	-64.41	-13	51.41
3424.80	43.19	245	150	H	-64.73	0.93	9.83	-55.83	-13	42.83
3424.80	42.87	188	200	V	-65.05	0.93	9.83	-56.15	-13	43.15
Middle channel										
498.63	40.78	277	100	H	-62.21	0.58	-1.94	-64.73	-13	51.73
498.63	40.41	145	200	V	-61.73	0.58	-1.94	-64.25	-13	51.25
3465.20	41.88	297	200	H	-65.87	0.93	9.87	-56.93	-13	43.93
3465.20	41.60	360	150	V	-66.15	0.93	9.87	-57.21	-13	44.21
High channel										
498.63	40.33	199	100	H	-62.66	0.58	-1.94	-65.18	-13	52.18
498.63	39.30	157	200	V	-62.84	0.58	-1.94	-65.36	-13	52.36
3505.20	51.33	218	100	H	-56.25	9.90	9.90	-56.25	-13	43.25
3505.20	50.91	307	100	V	-56.67	9.90	9.90	-56.67	-13	43.67

Test mode: Transmitting (Pre-scan with 1RB of all the bandwidth, and worst case as below)

30 MHz ~ 10 GHz:

LTE Band 5:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
266.68	41.13	158	200	H	-62.22	0.45	-2.22	-64.89	-13	51.89
266.68	46.09	326	100	V	-62.39	0.45	-2.22	-65.06	-13	52.06
1649.40	46.01	58	150	H	-67.33	0.84	8.44	-59.73	-13	46.73
1649.40	46.19	279	200	V	-67.15	0.84	8.44	-59.55	-13	46.55
QPSK 1.4MHz Bandwidth Middle Channel										
266.68	41.27	333	150	H	-62.08	0.45	-2.22	-64.75	-13	51.75
266.68	46.17	327	150	V	-62.31	0.45	-2.22	-64.98	-13	51.98
1673.00	46.42	327	200	H	-66.75	0.84	8.48	-59.11	-13	46.11
1673.00	46.15	340	150	V	-67.02	0.84	8.48	-59.38	-13	46.38
QPSK 1.4MHz Bandwidth High Channel										
266.68	40.21	256	150	H	-63.14	0.45	-2.22	-65.81	-13	52.81
266.68	45.18	165	150	V	-63.30	0.45	-2.22	-65.97	-13	52.97
1696.60	46.72	131	200	H	-66.29	0.84	8.52	-58.61	-13	45.61
1696.60	46.36	169	150	V	-66.65	0.84	8.52	-58.97	-13	45.97

30 MHz ~ 20 GHz:

LTE Band 2:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
232.25	41.29	209	200	H	-61.62	0.43	-2.85	-64.90	-13	51.90
232.25	46.13	214	200	V	-61.93	0.43	-2.85	-65.21	-13	52.21
3701.40	50.86	345	100	H	-56.10	0.95	9.78	-47.27	-13	34.27
3701.40	50.30	123	200	V	-56.66	0.95	9.78	-47.83	-13	34.83
QPSK 1.4MHz Bandwidth Middle Channel										
232.25	41.01	160	150	H	-61.90	0.43	-2.85	-65.18	-13	52.18
232.25	46.01	115	150	V	-62.05	0.43	-2.85	-65.33	-13	52.33
3760.00	50.00	10	200	H	-56.78	0.95	9.74	-47.99	-13	34.99
3760.00	49.68	164	100	V	-57.10	0.95	9.74	-48.31	-13	35.31
QPSK 1.4MHz Bandwidth High Channel										
232.25	40.81	93	150	H	-62.10	0.43	-2.85	-65.38	-13	52.38
232.25	45.89	310	100	V	-62.17	0.43	-2.85	-65.45	-13	52.45
3818.60	49.72	341	150	H	-56.87	0.96	9.71	-48.12	-13	35.12
3818.60	49.51	281	150	V	-57.08	0.96	9.71	-48.33	-13	35.33

LTE Band 4:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
234.06	40.10	49	150	H	-62.66	0.43	-2.79	-65.88	-13	52.88
234.06	45.32	249	100	V	-62.91	0.43	-2.79	-66.13	-13	53.13
3421.40	53.43	234	100	H	-54.51	0.93	9.82	-45.62	-13	32.62
3421.40	53.06	169	100	V	-54.88	0.93	9.82	-45.99	-13	32.99
QPSK 1.4MHz Bandwidth Middle Channel										
234.06	40.81	110	100	H	-61.95	0.43	-2.79	-65.17	-13	52.17
234.06	46.20	154	100	V	-62.03	0.43	-2.79	-65.25	-13	52.25
3465.00	53.36	40	150	H	-54.39	0.93	9.87	-45.45	-13	32.45
3465.00	53.22	67	100	V	-54.53	0.93	9.87	-45.59	-13	32.59
QPSK 1.4MHz Bandwidth High Channel										
234.06	40.70	46	200	H	-62.06	0.43	-2.79	-65.28	-13	52.28
234.06	46.01	114	200	V	-62.22	0.43	-2.79	-65.44	-13	52.44
3508.60	52.48	314	150	H	-55.09	0.93	9.89	-46.13	-13	33.13
3508.60	53.12	242	100	V	-54.45	0.93	9.89	-45.49	-13	32.49

30 MHz ~ 26 GHz:

LTE Band 7:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 5MHz Bandwidth Low Channel										
232.12	41.27	55	100	H	-61.66	0.43	-2.86	-64.95	-25	39.95
232.12	46.01	293	200	V	-62.04	0.43	-2.86	-65.33	-25	40.33
5005.00	46.81	174	100	H	-59.18	1.08	10.30	-49.96	-25	24.96
5005.00	46.44	131	100	V	-59.55	1.08	10.30	-50.33	-25	25.33
QPSK 5MHz Bandwidth Middle Channel										
232.12	44.83	251	200	H	-58.10	0.43	-2.86	-61.39	-25	36.39
232.12	49.66	173	100	V	-58.39	0.43	-2.86	-61.68	-25	36.68
5070.00	46.75	155	100	H	-58.88	1.09	10.30	-49.67	-25	24.67
5070.00	47.44	262	150	V	-58.19	1.09	10.30	-48.98	-25	23.98
QPSK 5MHz Bandwidth High Channel										
232.12	42.10	32	200	H	-60.83	0.43	-2.86	-64.12	-25	39.12
232.12	46.99	222	100	V	-61.06	0.43	-2.86	-64.35	-25	39.35
5135.00	48.25	357	200	H	-57.02	1.10	10.30	-47.82	-25	22.82
5135.00	47.66	223	150	V	-57.61	1.10	10.30	-48.41	-25	23.41

LTE Band 38:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 5MHz Bandwidth Low Channel										
236.68	39.43	88	100	H	-63.11	0.43	-2.70	-66.24	-25	41.24
236.68	45.65	309	150	V	-62.82	0.43	-2.70	-65.95	-25	40.95
5145.00	43.83	211	150	H	-61.38	1.10	10.30	-52.18	-25	27.18
5145.00	43.62	183	200	V	-61.59	1.10	10.30	-52.39	-25	27.39
QPSK 5MHz Bandwidth Middle Channel										
236.68	40.04	42	150	H	-62.50	0.43	-2.70	-65.63	-25	40.63
236.68	45.66	38	200	V	-62.81	0.43	-2.70	-65.94	-25	40.94
5190.00	35.38	8	150	H	-69.58	1.10	10.30	-60.38	-25	35.38
5190.00	36.09	341	200	V	-68.87	1.10	10.30	-59.67	-25	34.67
QPSK 5MHz Bandwidth High Channel										
236.68	39.43	360	150	H	-63.11	0.43	-2.70	-66.24	-25	41.24
236.68	44.97	72	200	V	-63.50	0.43	-2.70	-66.63	-25	41.63
5235.00	40.56	293	100	H	-64.15	1.11	10.30	-54.96	-25	29.96
5235.00	40.81	93	200	V	-63.90	1.11	10.30	-54.71	-25	29.71

BAND EDGES

EUT operation mode: Transmitting
Test Result: Compliant.

GPRS 850 Band:

GPRS Mode, Left Band Edge

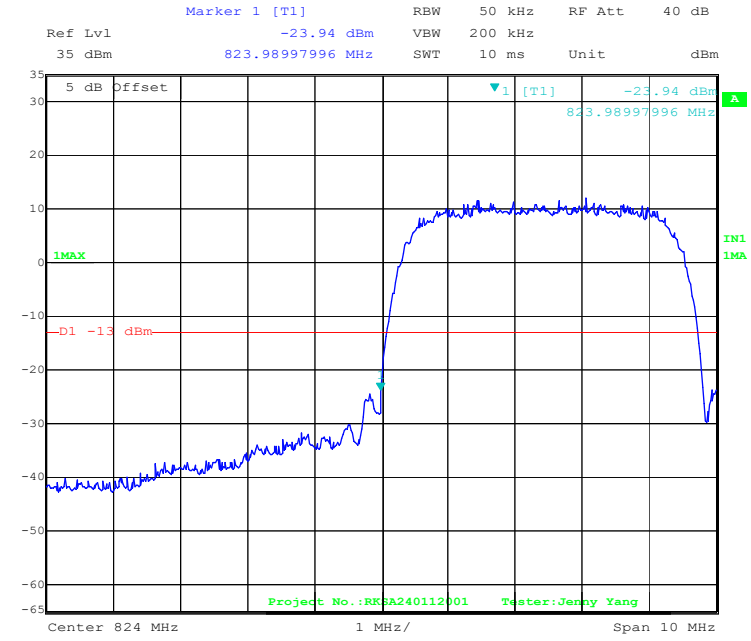
GPRS Mode, Right Band Edge

EGPRS Mode, Left Band Edge

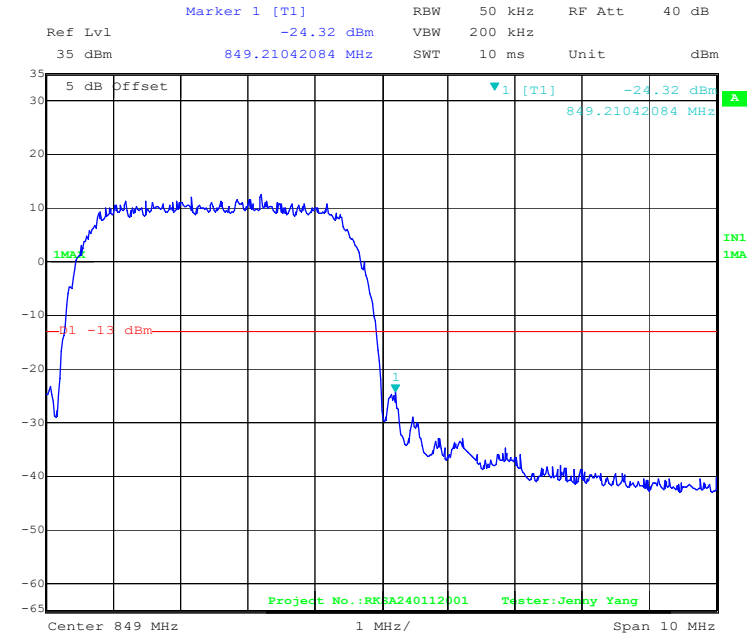
EGPRS Mode, Right Band Edge

WCDMA Band V

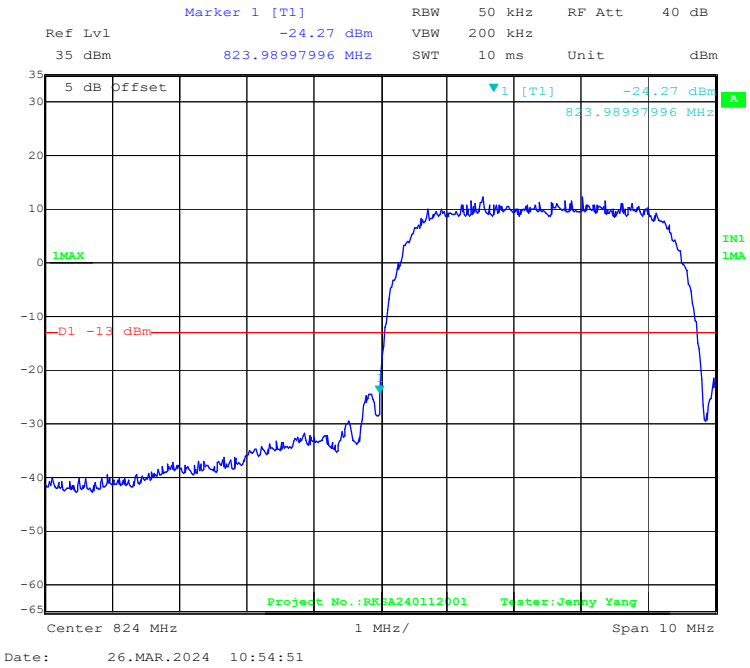
WCDMA (Rel 99) Mode, Left Band Edge



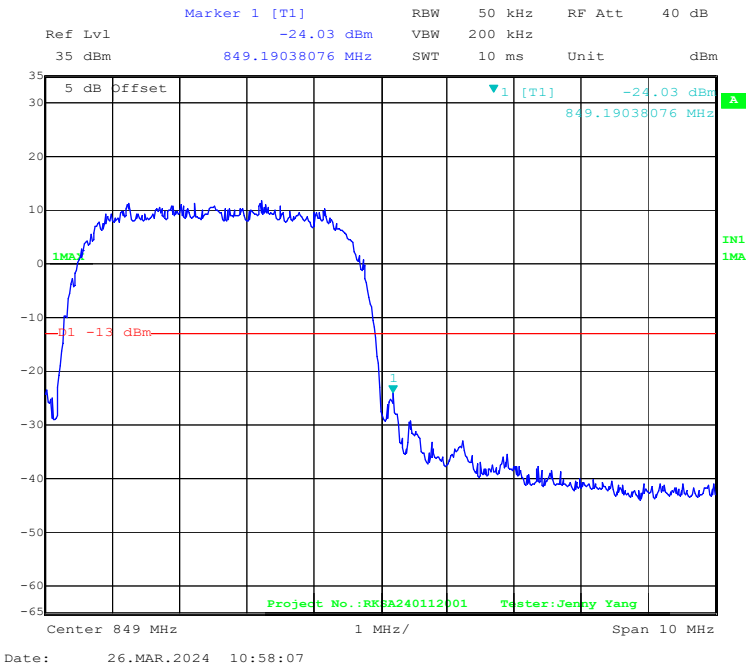
WCDMA (Rel 99) Mode, Right Band Edge



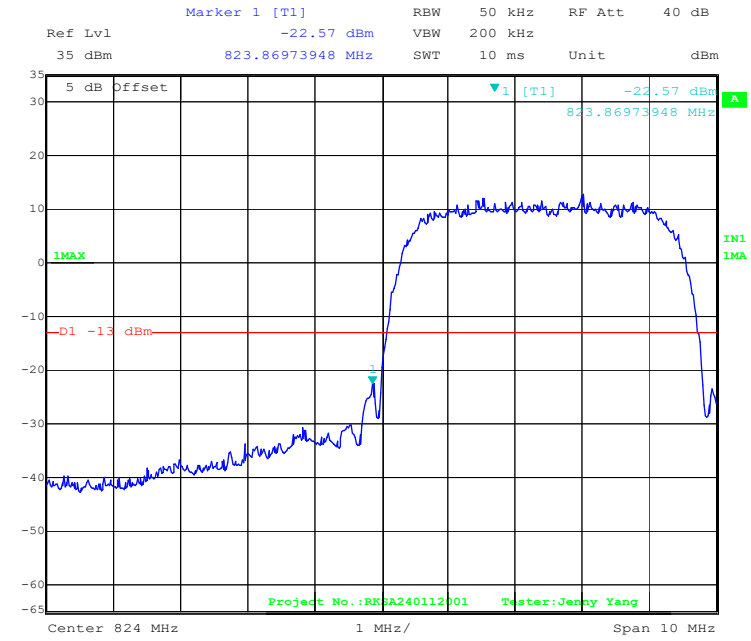
WCDMA (HSDPA) Mode, Left Band Edge



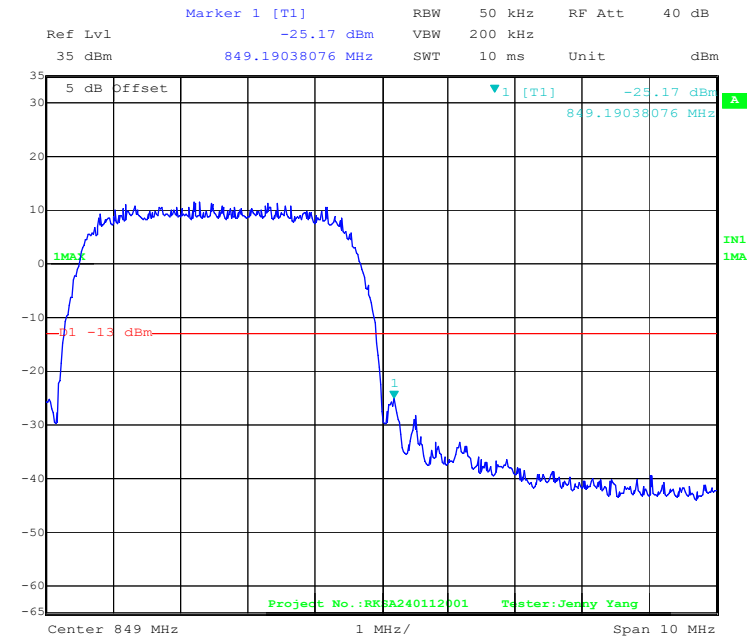
WCDMA (HSDPA) Mode, Right Band Edge



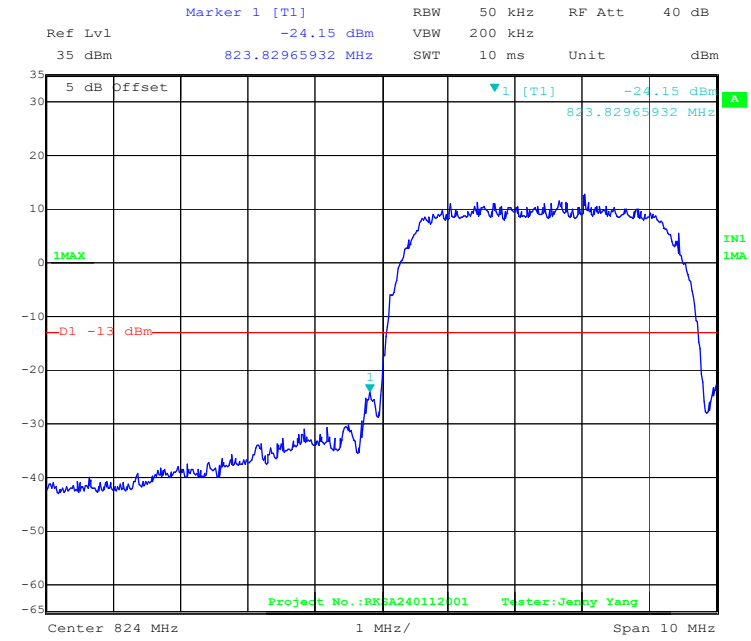
WCDMA (HSUPA) Mode, Left Band Edge



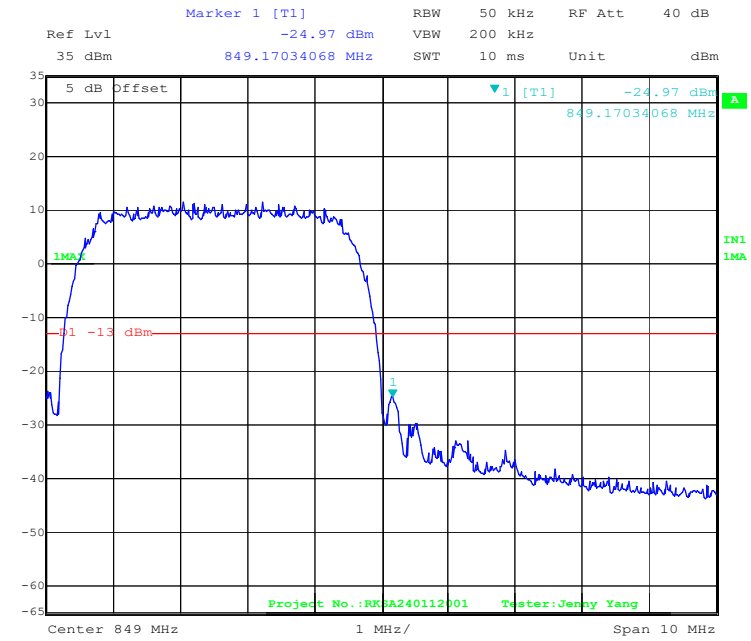
WCDMA (HSUPA) Mode, Right Band Edge



WCDMA (HSPA+) Mode, Left Band Edge

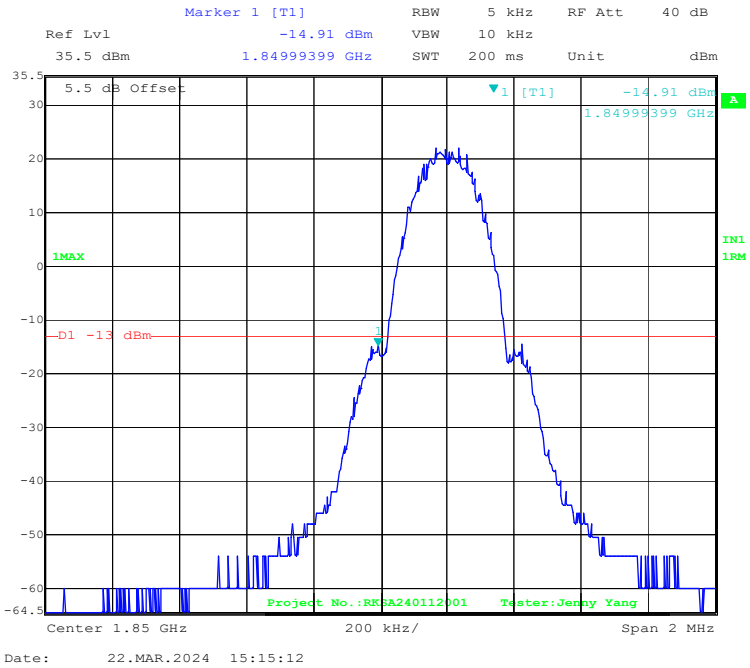


WCDMA (HSPA+) Mode, Right Band Edge

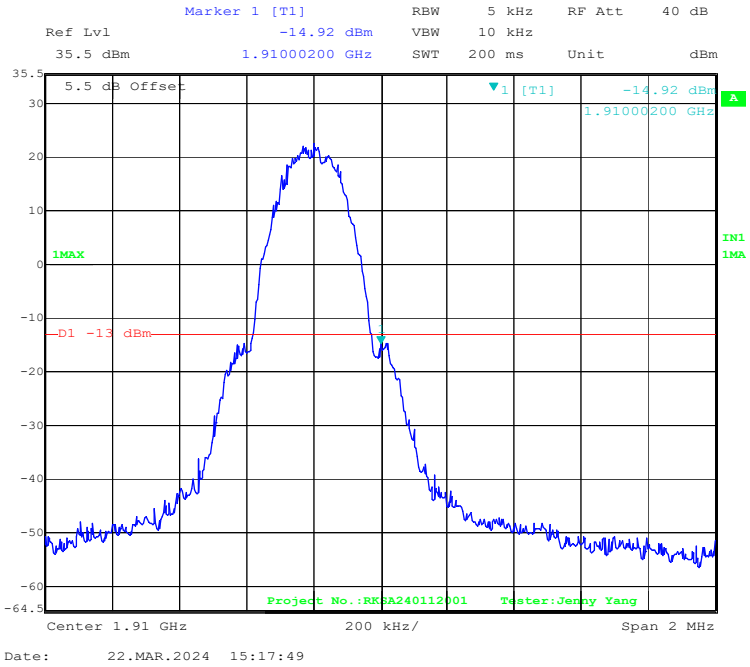


PCS 1900 Band:

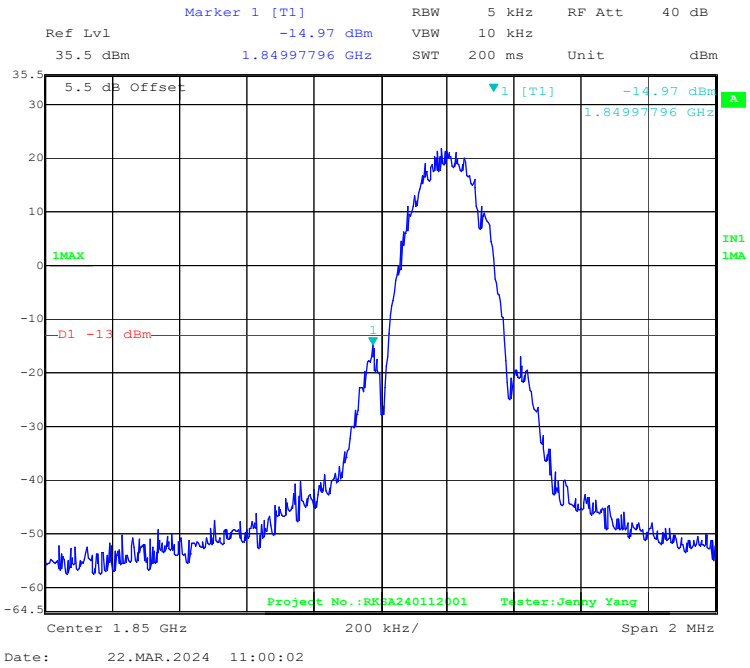
GPRS Mode, Left Band Edge



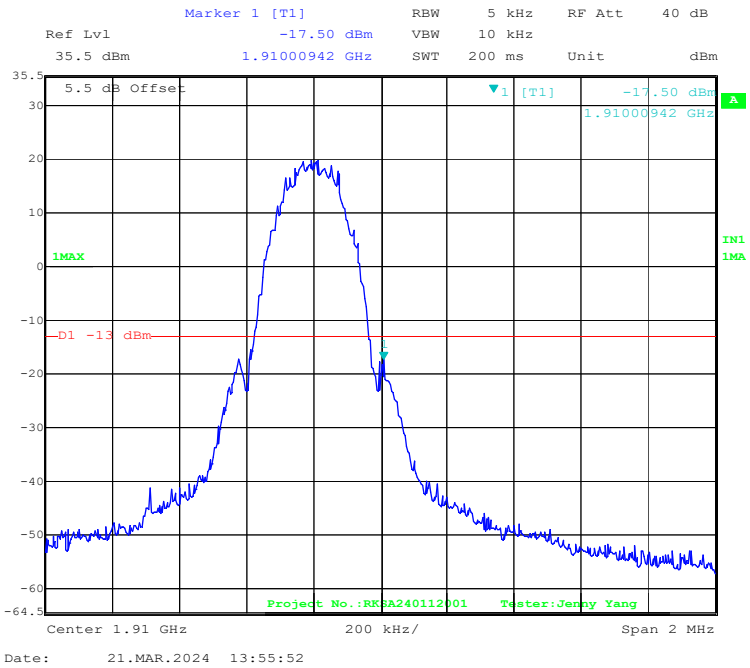
GPRS Mode, Right Band Edge



EGPRS Mode, Left Band Edge

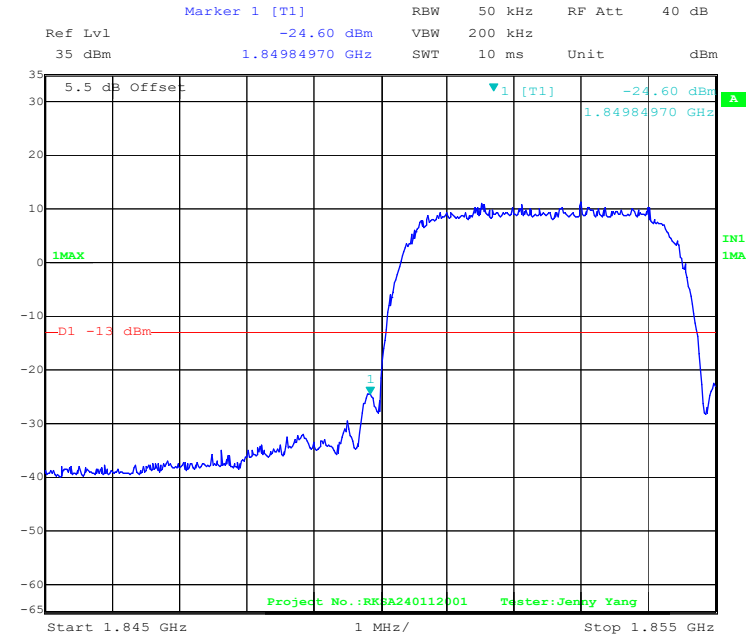


EGPRS Mode, Right Band Edge

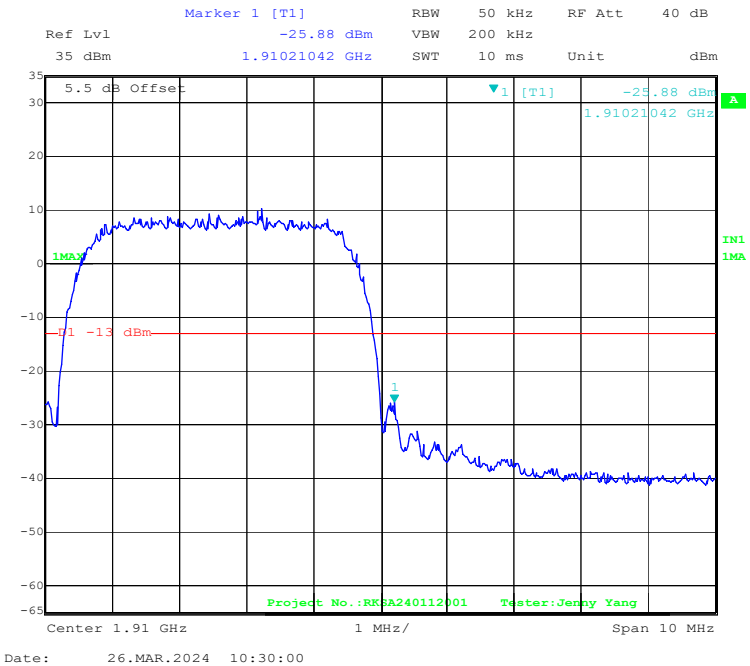


WCDMA Band II

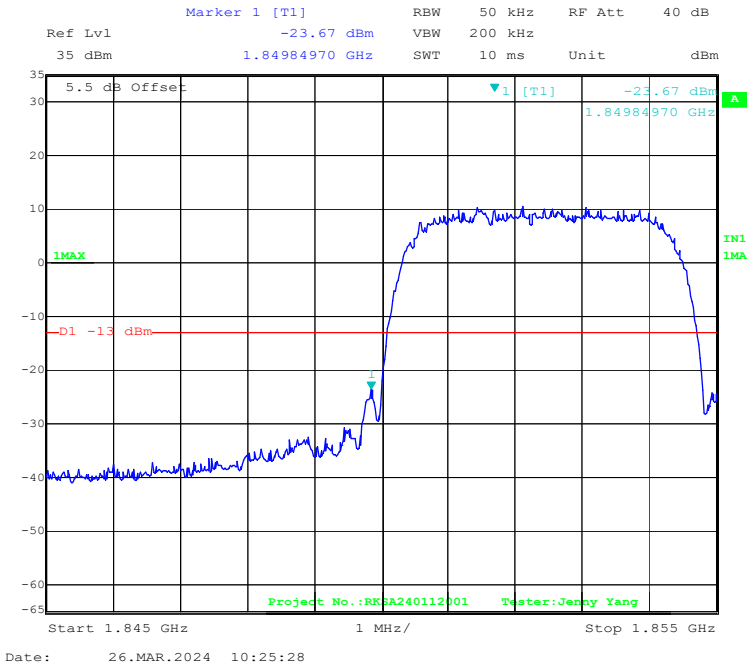
WCDMA (Rel 99) Mode, Left Band Edge



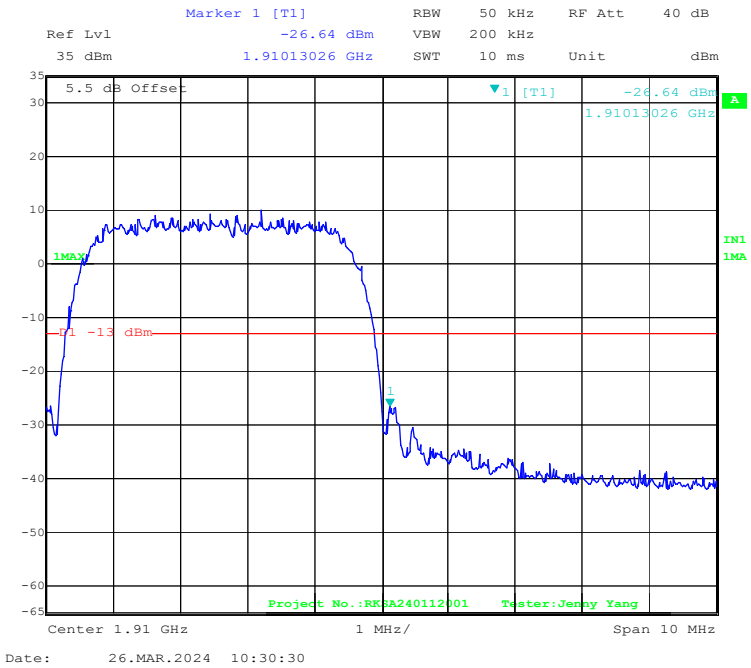
WCDMA (Rel 99) Mode, Right Band Edge



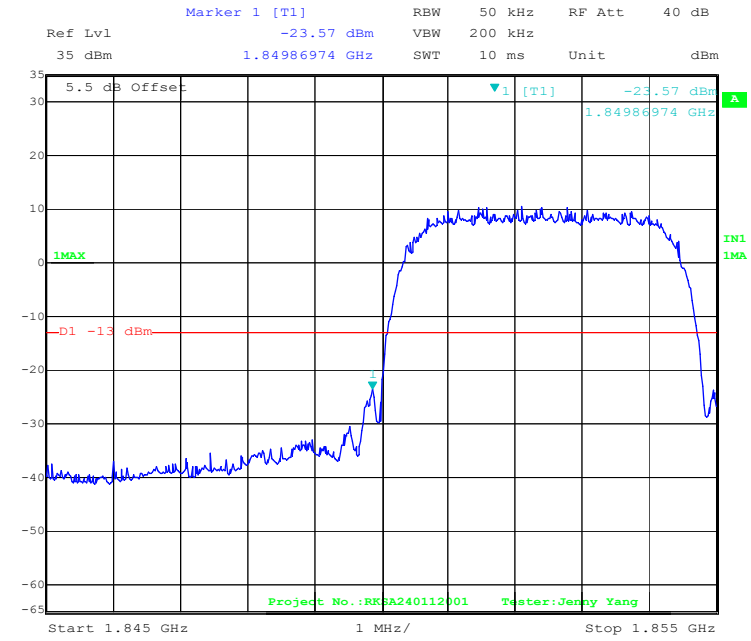
WCDMA (HSDPA) Mode, Left Band Edge



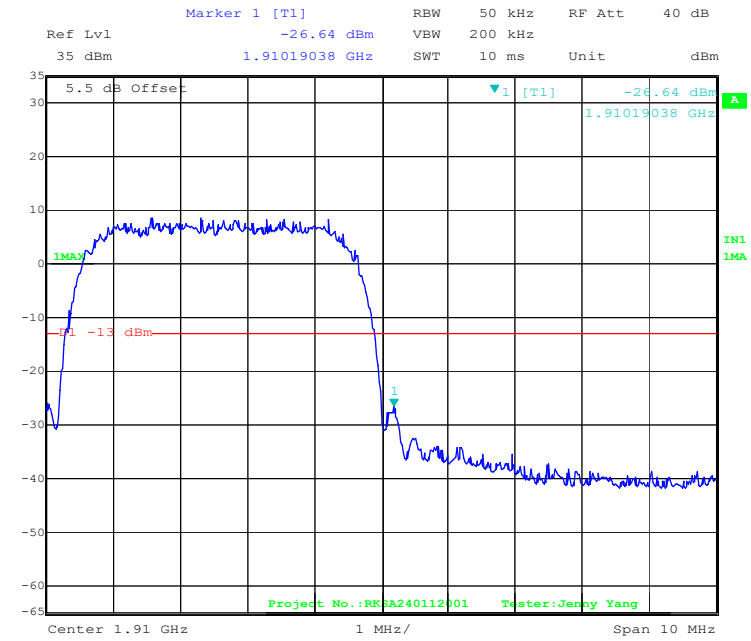
WCDMA (HSDPA) Mode, Right Band Edge



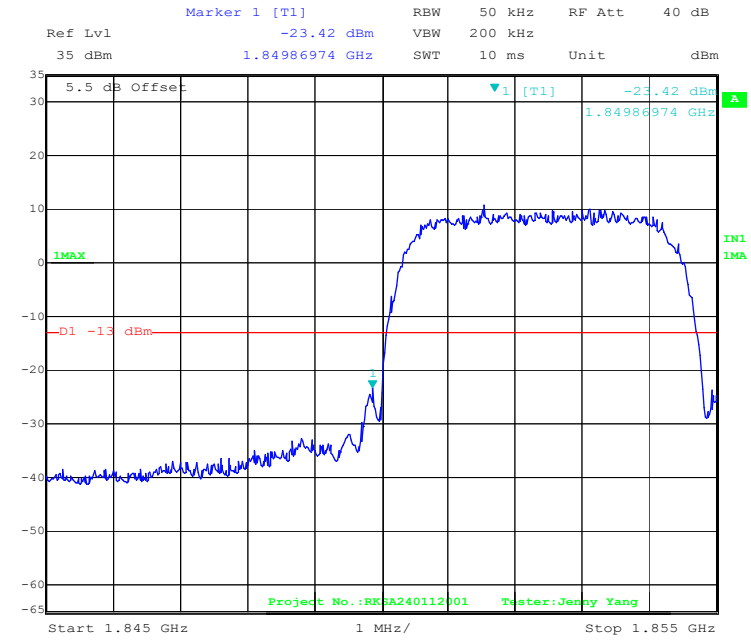
WCDMA (HSUPA) Mode, Left Band Edge



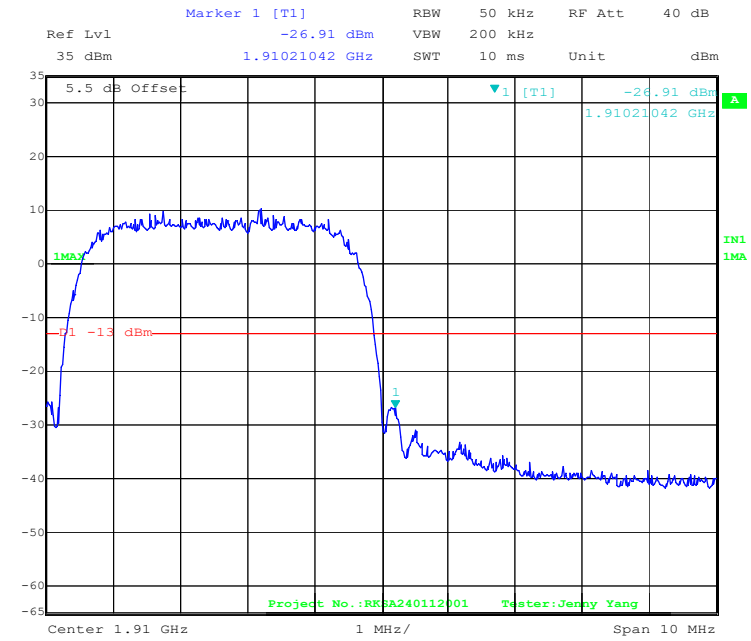
WCDMA (HSUPA) Mode, Right Band Edge



WCDMA (HSPA+) Mode, Left Band Edge

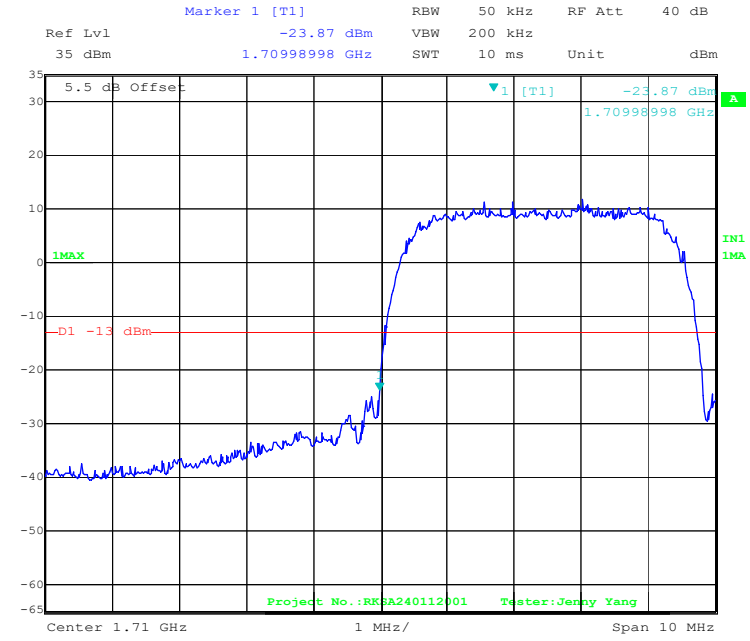


WCDMA (HSPA+) Mode, Right Band Edge

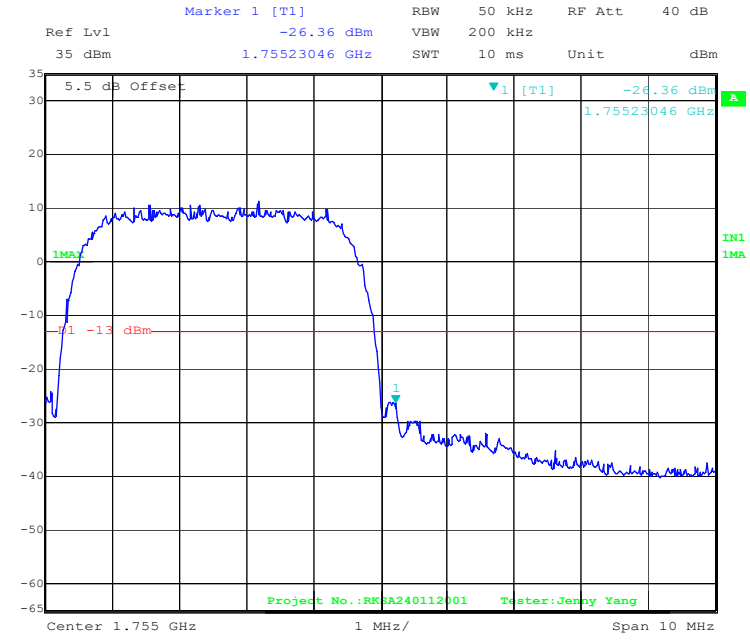


WCDMA Band IV

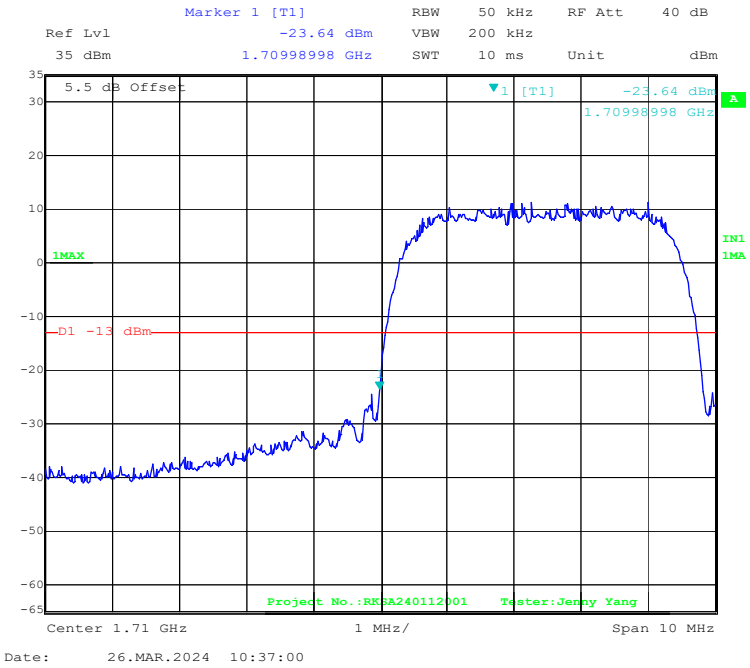
WCDMA (Rel 99) Mode, Left Band Edge



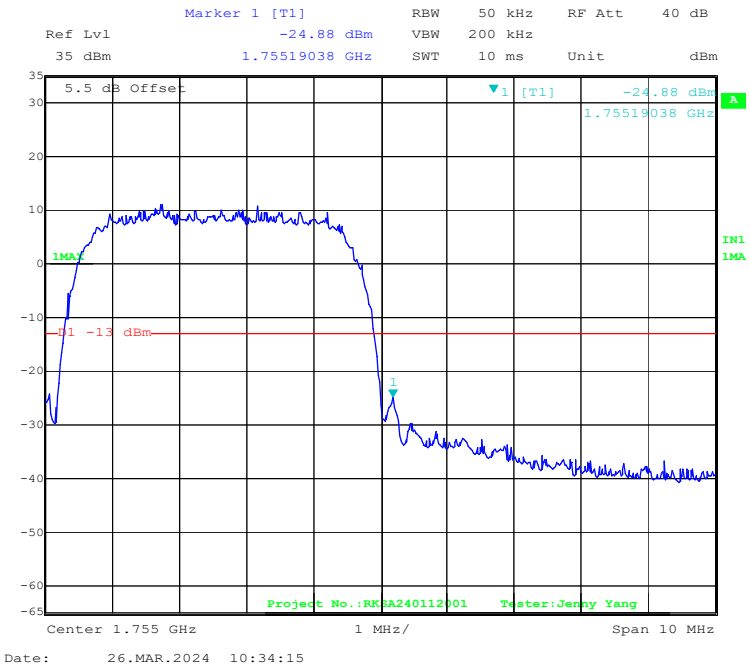
WCDMA (Rel 99) Mode, Right Band Edge



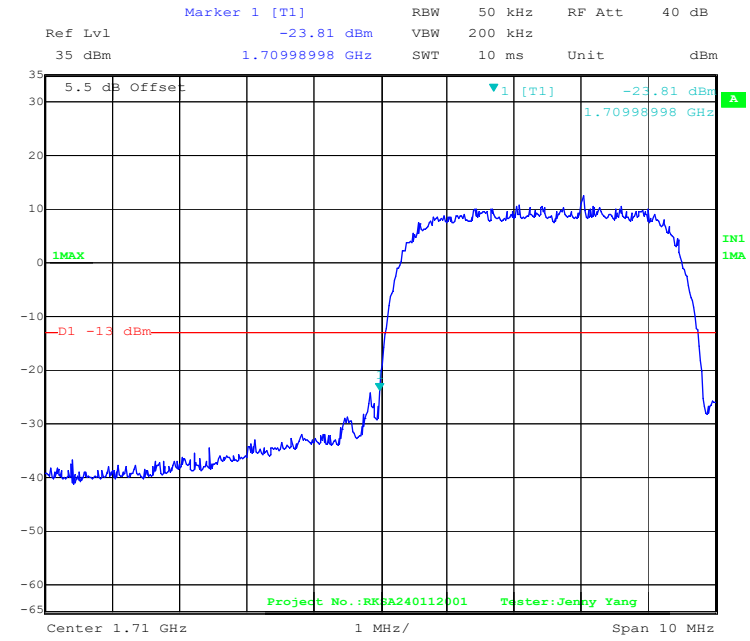
WCDMA (HSDPA) Mode, Left Band Edge



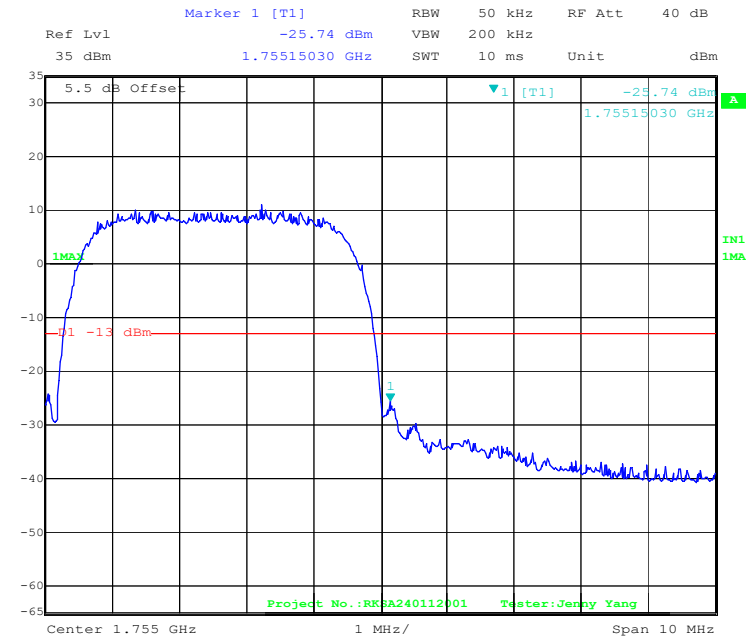
WCDMA (HSDPA) Mode, Right Band Edge



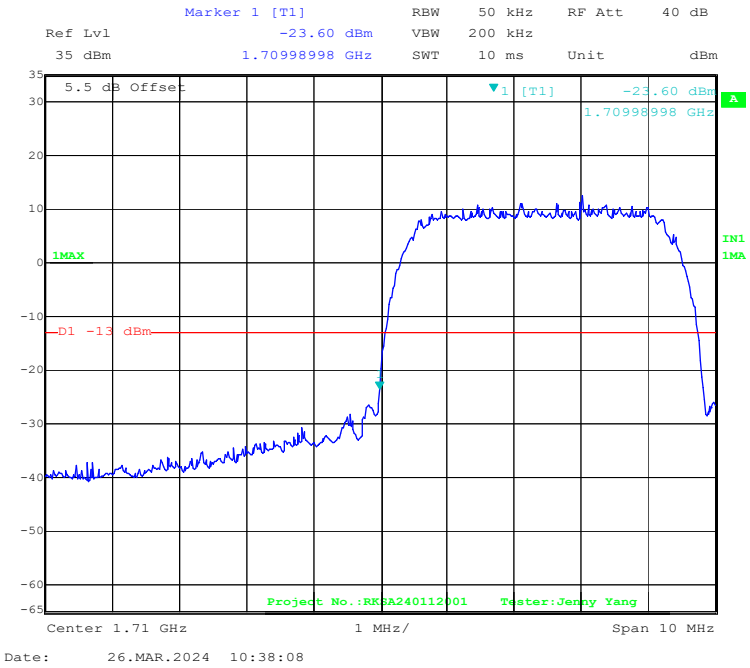
WCDMA (HSUPA) Mode, Left Band Edge



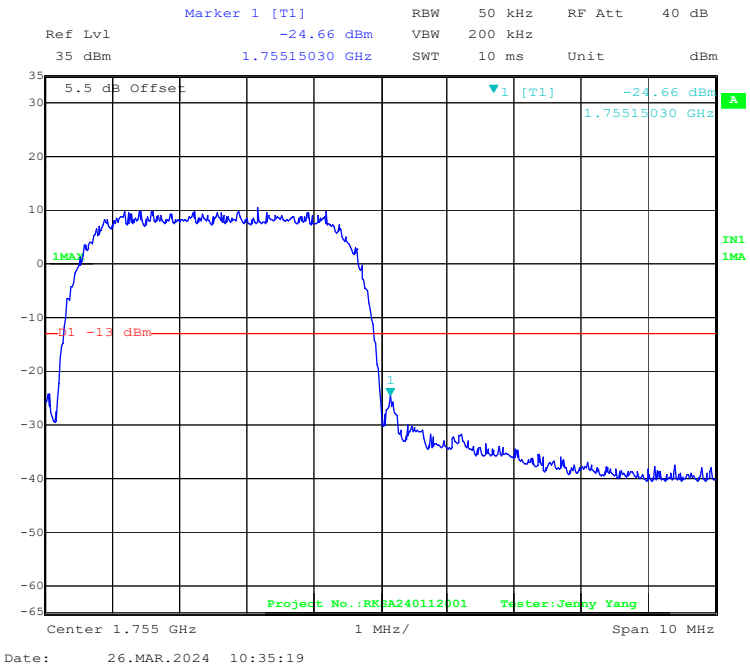
WCDMA (HSUPA) Mode, Right Band Edge



WCDMA (HSPA+) Mode, Left Band Edge



WCDMA (HSPA+) Mode, Right Band Edge



FREQUENCY STABILITY

EUT operation mode: Transmitting

GPRS 850(GMSK), Middle Channel				
Temperature (°C)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	21	0.02510	2.5
-20		31	0.03705	2.5
-10		19	0.02271	2.5
0		29	0.03466	2.5
10		30	0.03586	2.5
20		34	0.04064	2.5
30		47	0.05618	2.5
40		23	0.02749	2.5
50		31	0.03705	2.5
20	L.V.=3.42	22	0.02630	2.5
	H.V.=4.18	34	0.04064	2.5

EGPRS 850(8PSK), Middle Channel				
Temperature (°C)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	43	0.05140	2.5
-20		33	0.03945	2.5
-10		19	0.02271	2.5
0		49	0.05857	2.5
10		19	0.02271	2.5
20		46	0.05498	2.5
30		44	0.05259	2.5
40		26	0.03108	2.5
50		33	0.03945	2.5
20	L.V.=3.42	49	0.05857	2.5
	H.V.=4.18	40	0.04781	2.5

GPRS 1900(GMSK), Low Channel & High Channel					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.031	1909.956	1850	1910
-20		1850.039	1909.963	1850	1910
-10		1850.042	1909.961	1850	1910
0		1850.033	1909.956	1850	1910
10		1850.036	1909.958	1850	1910
20		1850.039	1909.955	1850	1910
30		1850.040	1909.958	1850	1910
40		1850.036	1909.961	1850	1910
50		1850.042	1909.963	1850	1910
20	L.V.=3.42	1850.041	1909.958	1850	1910
20	H.V.=4.18	1850.044	1909.955	1850	1910

EGPRS 1900(8PSK), Low Channel & High Channel					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.033	1909.955	1850	1910
-20		1850.036	1909.952	1850	1910
-10		1850.034	1909.953	1850	1910
0		1850.033	1909.952	1850	1910
10		1850.036	1909.954	1850	1910
20		1850.037	1909.955	1850	1910
30		1850.041	1909.953	1850	1910
40		1850.038	1909.957	1850	1910
50		1850.039	1909.955	1850	1910
20	L.V.=3.42	1850.042	1909.959	1850	1910
20	H.V.=4.18	1850.043	1909.956	1850	1910

WCDMA Band II:

WCDMA Mode, Low Channel & High Channel					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.336	1909.534	1850	1910
-20		1850.341	1909.526	1850	1910
-10		1850.329	1909.535	1850	1910
0		1850.331	1909.538	1850	1910
10		1850.335	1909.526	1850	1910
20		1850.342	1909.531	1850	1910
30		1850.339	1909.533	1850	1910
40		1850.335	1909.537	1850	1910
50		1850.331	1909.536	1850	1910
20	L.V.=3.42	1850.334	1909.532	1850	1910
20	H.V.=4.18	1850.337	1909.534	1850	1910

WCDMA Band IV:

WCDMA Mode, Low Channel & High Channe					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1710.223	1754.305	1710	1755
-20		1710.162	1754.313	1710	1755
-10		1710.298	1754.470	1710	1755
0		1710.047	1754.342	1710	1755
10		1710.001	1754.318	1710	1755
20		1710.159	1754.589	1710	1755
30		1710.223	1754.379	1710	1755
40		1710.174	1754.338	1710	1755
50		1710.238	1754.526	1710	1755
20	L.V.=3.42	1710.232	1754.433	1710	1755
20	H.V.=4.18	1710.126	1754.492	1710	1755

WCDMA Band V:

WCDMA Mode, Middle Channel				
Temperature (°C)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	37	0.04423	2.5
-20		54	0.06455	2.5
-10		40	0.04781	2.5
0		19	0.02271	2.5
10		50	0.05977	2.5
20		30	0.03586	2.5
30		35	0.04184	2.5
40		42	0.05020	2.5
50		22	0.02630	2.5
20	L.V.=3.42	40	0.04781	2.5
	H.V.=4.18	46	0.05498	2.5

LTE Band 2:

20.0 MHz Low Channel & High Channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(°C)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.157	1909.852	1850	1910
-20		1850.162	1909.853	1850	1910
-10		1850.159	1909.862	1850	1910
0		1850.155	1909.856	1850	1910
10		1850.161	1909.855	1850	1910
20		1850.153	1909.851	1850	1910
30		1850.157	1909.857	1850	1910
40		1850.156	1909.855	1850	1910
50		1850.155	1909.863	1850	1910
20	L.V.=3.42	1850.161	1909.865	1850	1910
	H.V.=4.18	1850.165	1909.867	1850	1910

20.0 MHz Middle Channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.153	1909.864	1850	1910
-20		1850.162	1909.861	1850	1910
-10		1850.156	1909.856	1850	1910
0		1850.157	1909.858	1850	1910
10		1850.162	1909.859	1850	1910
20		1850.156	1909.854	1850	1910
30		1850.153	1909.857	1850	1910
40		1850.157	1909.862	1850	1910
50		1850.155	1909.859	1850	1910
20	L.V.=3.42	1850.159	1909.853	1850	1910
	H.V.=4.18	1850.162	1909.856	1850	1910

LTE Band 4:

20.0 MHz Low Channel & High Channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1710.978	1753.936	1710	1755
-20		1710.999	1753.815	1710	1755
-10		1710.847	1753.969	1710	1755
0		1710.936	1753.980	1710	1755
10		1710.845	1753.954	1710	1755
20		1711.040	1754.040	1710	1755
30		1710.826	1753.889	1710	1755
40		1710.813	1753.809	1710	1755
50		1710.944	1753.974	1710	1755
20	L.V.=3.42	1710.837	1753.881	1710	1755
	H.V.=4.18	1710.921	1753.949	1710	1755

20.0 MHz Low Channel & High Channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1710.988	1753.923	1710	1755
-20		1710.911	1753.851	1710	1755
-10		1710.956	1753.883	1710	1755
0		1710.948	1753.901	1710	1755
10		1710.919	1753.891	1710	1755
20		1711.120	1753.960	1710	1755
30		1711.034	1753.813	1710	1755
40		1711.031	1753.962	1710	1755
50		1710.996	1753.829	1710	1755
20	L.V.=3.42	1710.922	1753.934	1710	1755
	H.V.=4.18	1710.990	1753.964	1710	1755

LTE Band 5:

10MHz, Middle Channel (QPSK)				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	56	0.06695	2.5
-20		9	0.01076	2.5
-10		42	0.05021	2.5
0		52	0.06216	2.5
10		40	0.04782	2.5
20		17	0.02032	2.5
30		51	0.06097	2.5
40		13	0.01554	2.5
50		52	0.06216	2.5
20	L.V.=3.42	46	0.05499	2.5
	H.V.=4.18	33	0.03945	2.5

10MHz， Middle Channel (16-QAM)				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	12	0.01435	2.5
-20		26	0.03108	2.5
-10		66	0.07890	2.5
0		68	0.08129	2.5
10		70	0.08368	2.5
20		29	0.03467	2.5
30		58	0.06934	2.5
40		35	0.04184	2.5
50		15	0.01793	2.5
20	L.V.=3.42	32	0.03825	2.5
	H.V.=4.18	29	0.03467	2.5

LTE Band 7:

20 MHz Bandwidth Low Channel & High Channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	2500.593	2569.149	2500	2570
-20		2500.784	2569.079	2500	2570
-10		2500.946	2569.091	2500	2570
0		2501.069	2569.109	2500	2570
10		2501.050	2569.016	2500	2570
20		2501.120	2568.880	2500	2570
30		2500.841	2569.038	2500	2570
40		2500.971	2569.158	2500	2570
50		2500.924	2569.011	2500	2570
20	L.V.=3.42	2501.071	2568.985	2500	2570
	H.V.=4.18	2500.915	2569.008	2500	2570

20 MHz Bandwidth Low Channel & High Channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	2501.045	2568.904	2500	2570
-20		2501.092	2568.783	2500	2570
-10		2500.947	2568.884	2500	2570
0		2500.908	2568.759	2500	2570
10		2500.969	2569.034	2500	2570
20		2501.120	2568.880	2500	2570
30		2500.845	2569.023	2500	2570
40		2500.985	2568.741	2500	2570
50		2500.992	2568.902	2500	2570
20	L.V.=3.42	2500.902	2569.070	2500	2570
	H.V.=4.18	2500.966	2569.193	2500	2570

LTE Band 38:

20 MHz Bandwidth Low Channel & High Channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	2570.988	2618.650	2570	2620
-20		2571.029	2618.601	2570	2620
-10		2570.960	2618.700	2570	2620
0		2570.816	2618.607	2570	2620
10		2570.918	2618.847	2570	2620
20		2571.120	2618.960	2570	2620
30		2570.937	2618.685	2570	2620
40		2570.976	2618.659	2570	2620
50		2570.956	2618.795	2570	2620
20	L.V.=3.42	2570.928	2618.645	2570	2620
	H.V.=4.18	2571.015	2618.788	2570	2620

20 MHz Bandwidth Low Channel & High Channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	2570.869	2618.843	2570	2620
-20		2570.996	2618.670	2570	2620
-10		2571.033	2618.841	2570	2620
0		2571.027	2618.742	2570	2620
10		2570.882	2618.848	2570	2620
20		2571.120	2618.960	2570	2620
30		2571.076	2618.776	2570	2620
40		2571.021	2618.621	2570	2620
50		2571.094	2618.886	2570	2620
20	L.V.=3.42	2571.047	2618.731	2570	2620
	H.V.=4.18	2570.901	2618.733	2570	2620

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

******* END OF REPORT *******