

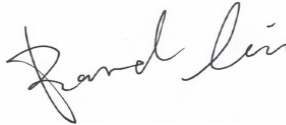
FCC PART 27
FCC PART 22H, PART 24E
TEST REPORT

For

Feitian Technologies Co., Ltd.

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

FCC ID: ZD3FTF360

Report Type: Original Report	Product Name: Android POS Terminal
Report Number:	<u>RKSA240319001-00G</u>
Report Date:	<u>2024-11-14</u>
Reviewed By:	<u>Bard Liu</u> 
Approved By:	<u>Kyle Xu</u> 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA240319001-00G	R1V1	2024-11-14	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Feitian Technologies Co., Ltd.
Tested Model:	F360
Product Name:	Android POS Terminal
Power Supply:	DC 3.7V from battery or DC 5V from adapter
Maximum Conducted Output Power:	GPRS 850: 32.70 dBm; EGPRS 850: 26.32 dBm GPRS 1900: 28.49 dBm; EGPRS 1900: 24.88 dBm WCDMA Band II: 22.25 dBm; Band IV: 22.09 dBm; Band V: 22.64 dBm LTE: Band 2: 22.29 dBm; Band 4: 22.27dBm; Band 5: 22.39 dBm; Band 7: 23.48 dBm Band 38: 22.58 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: -5.15 dBi GPRS/EGPRS 1900: -0.34 dBi WCDMA Band II :-0.34 dBi WCDMA Band IV: -1.89 dBi WCDMA Band V: -5.15 dBi LTE Band 2: -0.34 dBi LTE Band 4: -1.89 dBi LTE Band 5: -5.15 dBi LTE Band 7: -0.57 dBi LTE Band 38: -0.64 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: RKSA240319001-1 (Assigned by the BACL (Kunshan)). The EUT supplied by the applicant was received on 2024-03-19.)

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 Frequency		0.082×10^{-7}
RF output power, conducted		0.73dB
RF conducted test with spectrum		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°C
Humidity		6%
Supply voltages		$\pm 0.4\%$

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

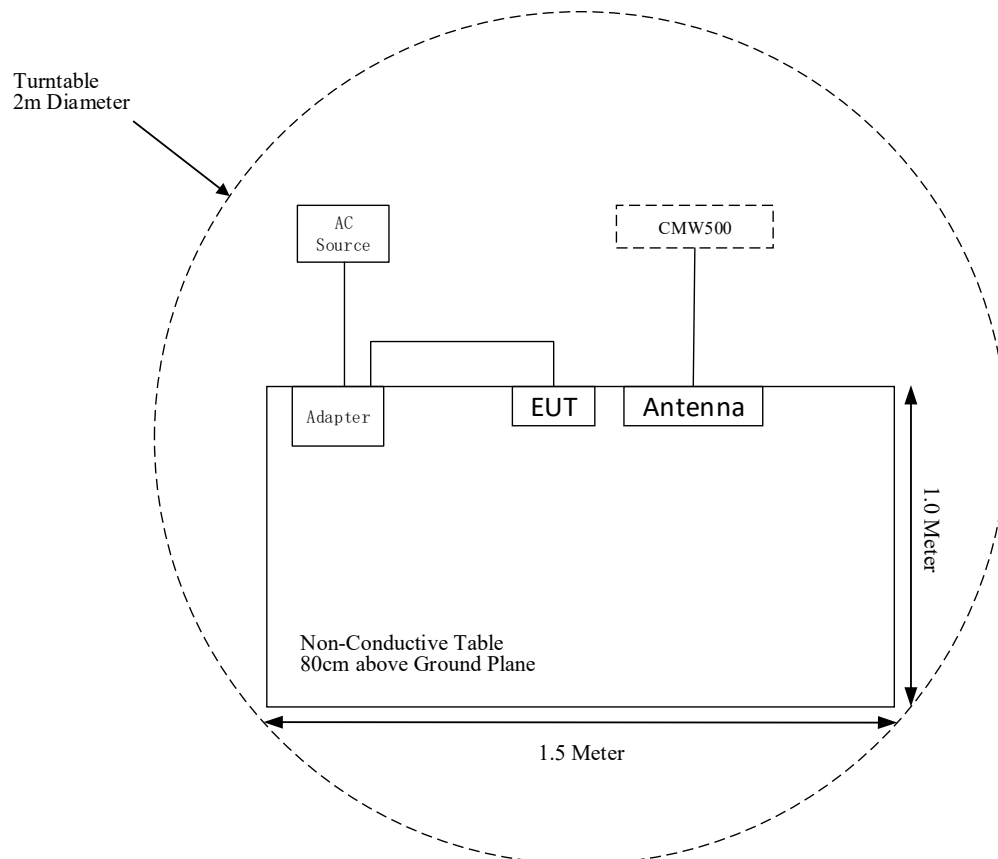
Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478

External I/O Cable

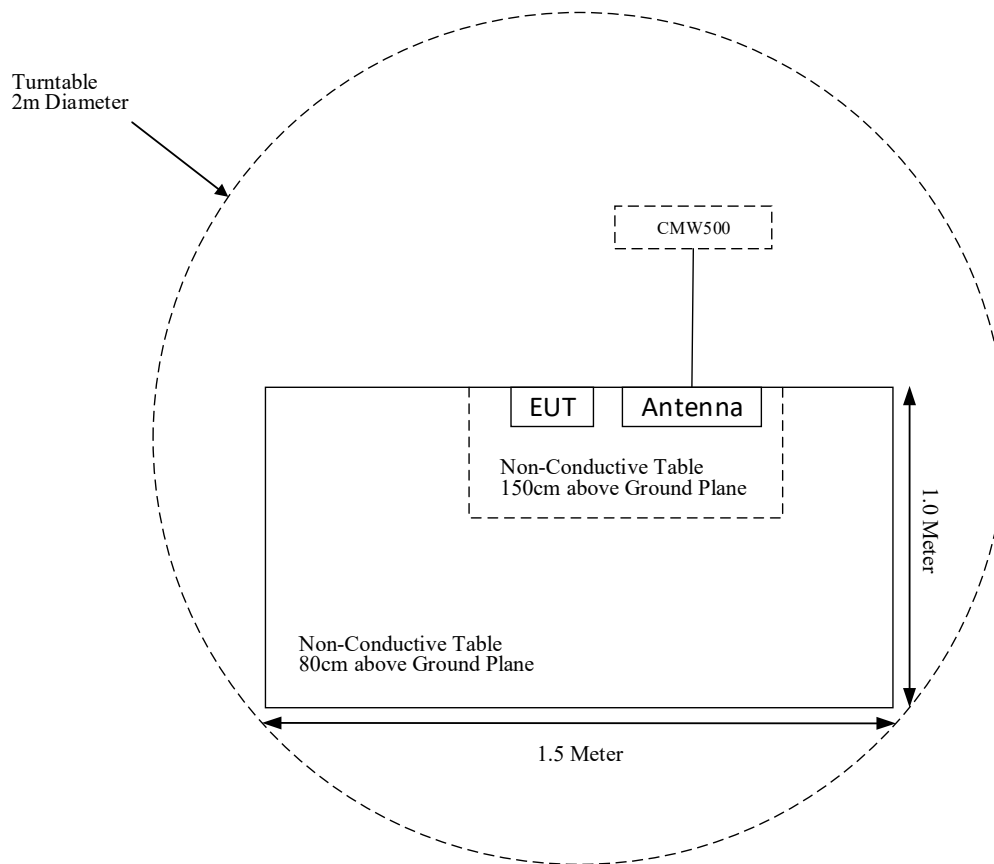
Cable Description	Length (m)	From Port	To
Power Cable 1	1.0	AC Source	Adapter
Power Cable 2	1.0	Adapter	EUT

Block Diagram of Test Setup

For Radiated Emissions(Below 1GHz):



For Radiated Emissions (Above 1 GHz):



TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-04-23	2025-04-22
Keysight	Signal Generator	N5183A	MY47420304	2024-04-24	2025-04-23
Sunol Sciences	Broadband 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	2024-04-23	2025-04-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-7	007	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2024-04-24	2025-04-23
Radiated Emission Test (Chamber #2)					
Keysight	Signal Generator	N5183A	MY47420304	2024-04-24	2025-04-23
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
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	2024-04-25	2025-04-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
Wi	Band reject filter	SN1	WRCGV5-804-824-849-869-30SS	2024-04-25	2025-04-24
Wi	Band reject filter	SN1	WRCGV8-1695-1710-1755-1770-30SS	2024-04-25	2025-04-24
Wi	Band reject filter	SN1	WRCGV6-1830-1850-1910-1930-30SS	2024-04-25	2025-04-24
Wi	Band reject filter	SN1	WRCJV8-2550-2570-2620-2640-30SS	2024-04-25	2025-04-24
Wi	Band reject filter	SN1	WRCJV8-2450-2500-2570-2620-40SS	2024-04-25	2025-04-24
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-04-25	2025-04-24

Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2024-04-24	2025-04-23
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2024-04-24	2025-04-23
Rohde & Schwarz	Spectrum Analyzer	FSIQ26	100048	2024-04-24	2025-04-23
BACL	Temperature & Humidity Chamber	BTH-150	30023	2024-04-25	2025-04-24
EAST	Regulated DC Power Supply	MCH-303D-II	14070562	2023-10-10	2024-10-09
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2024-04-24	2025-04-23
Narda	Attenuator	10dB	010	2024-04-24	2025-04-23
Eastsheep	Attenuator	2W-N-JK-18G	20dB-01	2024-04-24	2025-04-23
MACOM	Power Splitter	2090-6214-00	96341	2024-04-23	2025-04-22
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 §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E, Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

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.

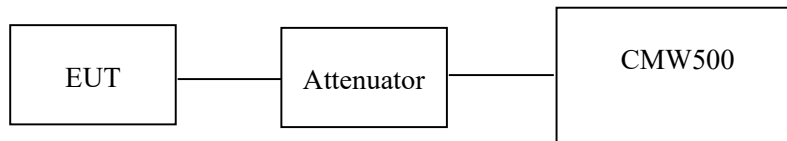
According to §27.50(h) (2), Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

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

Test Procedure

Conducted method:

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



Test Data: See appendix A

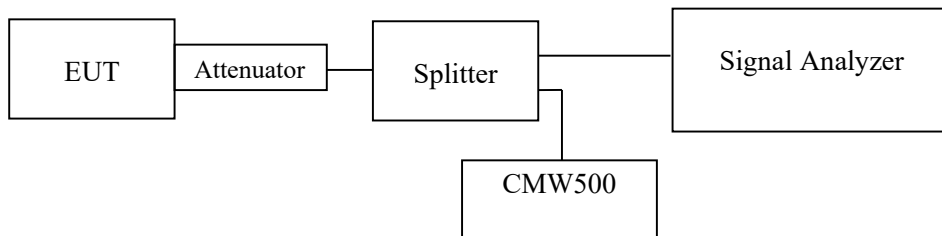
FCC §2.1049, §22.917, §22.905 & §24.238, §27.53, OCCUPIED BANDWIDTH**Applicable Standards**

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

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation. The 26 dB & 99% bandwidth was recorded.

Note: The 14.5 or 15dB or 25dB is the Insertion loss of the RF cable, Power Splitter, Attenuator, which was offset into the Spectrum Analyzer.



Test Data: See appendix A & appendix B

FCC § 2.1051; § 22.917 (a); § 24.238 (a); §27.53 (h) (m); - 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.

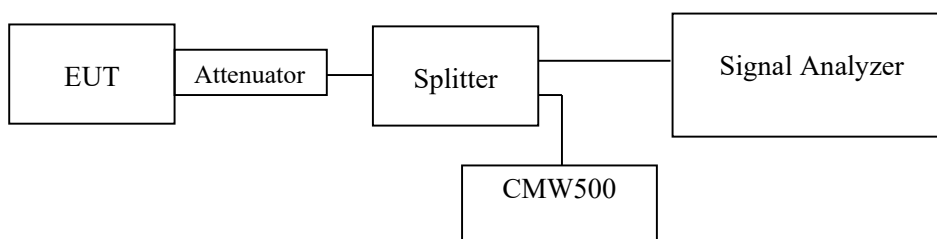
§27.53 (h) AWS emission limits - operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power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

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.

Note: The 14.5 or 15dB is the Insertion loss of the RF cable, Power Splitter, Attenuator, which was offset into the Spectrum Analyzer.



Test Data: See appendix A & appendix 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 $43 + 10 \log_{10} (P)$ 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

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 = $10 \lg (\text{TX pwr in Watts}/0.001)$ – the absolute level

Spurious attenuation limit in dB = $43 + 10 \text{Log}_{10} (\text{power out in Watts})$

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 $43 + 10 \log_{10}(P)$ 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 than $43 + 10 \log(P)$ 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.

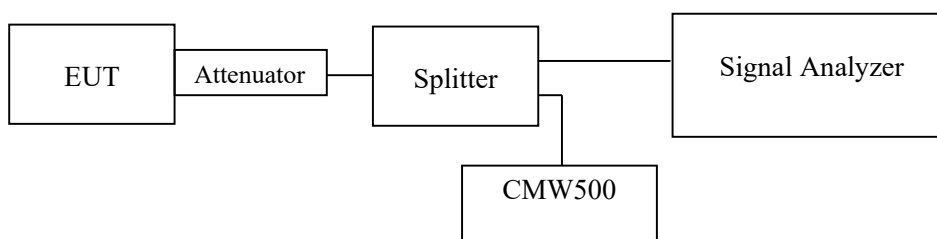
FCC §2.1051. The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement 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

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.

Note: The 14.5 or 15dB is the Insertion loss of the RF cable, Power Splitter, Attenuator, which was offset into the Spectrum Analyzer.



Test Data: See Appendix A&C

FCC § 2.1055; § 22.355; § 24.235; §27.54; - 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

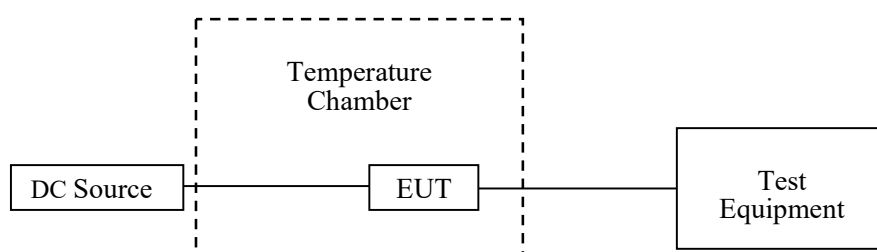
According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

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 F - TEST SETUP PHOTOGRAPHS.

APPENDIX A - TEST DATA

Environmental Conditions & Test Information

Test Item:	FREQUENCY STABILITY	TRANSMITTE R OUTPUT POWER	OCCUPIED BANDWIDTH	SPURIOUS EMISSIONS AT ANTENNA TERMINALS	SPURIOUS RADIATED EMISSIONS	Band Edge
Test Date:	2024-05-20	2024-05-20	2024-05-18 to 2024-05-24&2024-10-11&2024-10-14	2024-05-18 to 2024-06-26	2024-05-18 to 2024-05-24	2024-05-18 to 2024-05-24
Temperature:	17.6 °C	17.6 °C	17.5-20.2 °C	17.0-20.5 °C	17.0-18.5 °C	17.5-20.2 °C
Relative Humidity:	51 %	51 %	45-55 %	40-56 %	40-50 %	45-55 %
ATM Pressure:	101.8 kPa	101.8 kPa	101.5-102.0 kPa	101.2-102.0 kPa	101.5-102.0 kPa	101.5-102.0 kPa
Test Result:	Pass	Pass	Pass	Pass	Pass	Pass
Test Engineer:	Jay Liu	Jay Liu	Neil Zhou &Loki Shi& Jason lu	Neil Zhou& Jay Liu &Loki Shi	Jay Liu	Neil Zhou& Jay Liu &Loki Shi

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	32.70	31.63	29.25	28.22	25.4	24.33	21.95	20.92	38.45
	190	836.6	32.54	31.48	29.15	28.14	25.24	24.18	21.85	20.84	38.45
	251	848.8	32.66	31.66	29.28	28.44	25.36	24.36	21.98	21.14	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	26.32	25.35	24.06	23.09	19.02	18.05	16.76	15.79	38.45
	190	836.6	26.18	25.19	23.90	22.94	18.88	17.89	16.6	15.64	38.45
	251	848.8	26.15	25.23	23.83	22.82	18.85	17.93	16.53	15.52	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	28.49	27.36	25.12	24.07	28.15	27.02	24.78	23.73	33
	661	1880	28.18	27.01	24.88	23.82	27.84	26.67	24.54	23.48	33
	810	1909.8	28.28	27.11	25.01	23.91	27.94	26.77	24.67	23.57	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	24.88	24.19	22.43	21.08	24.54	23.85	22.09	20.74	33
	661	1880	24.67	24.06	22.23	20.95	24.33	23.72	21.89	20.61	33
	810	1909.8	24.88	24.17	22.32	21.15	24.54	23.83	21.98	20.81	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		22.25	22.06	22.16	21.91	21.72	21.82
	HSDPA	1	21.90	22.04	21.81	21.56	21.7	21.47
		2	21.31	21.86	21.35	20.97	21.52	21.01
		3	22.15	21.32	21.99	21.81	20.98	21.65
		4	22.21	21.41	21.71	21.87	21.07	21.37
	HSUPA	1	21.27	21.12	21.49	20.93	20.78	21.15
		2	21.44	21.28	22.01	21.1	20.94	21.67
		3	22.06	21.39	21.88	21.72	21.05	21.54
		4	21.26	21.84	21.52	20.92	21.5	21.18
		5	22.09	21.95	21.44	21.75	21.61	21.1
	HUPA+	1	22.14	21.42	21.79	21.8	21.08	21.45

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

Limit: EIRP≤33dBm

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		22.61	22.64	22.6	15.31	15.34	15.3
	HSDPA	1	22.15	22.04	21.98	14.85	14.74	14.68
		2	21.44	21.6	21.33	14.14	14.3	14.03
		3	21.38	21.24	21.66	14.08	13.94	14.36
		4	22.18	21.33	21.71	14.88	14.03	14.41
	HSUPA	1	21.77	21.58	21.25	14.47	14.28	13.95
		2	21.97	21.16	21.63	14.67	13.86	14.33
		3	21.36	21.41	21.71	14.06	14.11	14.41
		4	21.42	21.82	21.24	14.12	14.52	13.94
		5	22.21	21.37	21.91	14.91	14.07	14.61
	HUPA+	1	21.73	21.53	21.39	14.43	14.23	14.09

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

Antenna Gain(dBd) = Antenna Gain(dBi)-2.15

Limit: ERP≤38.5dBm

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		21.95	21.88	22.09	20.06	19.99	20.2
	HSDPA	1	21.60	21.41	22.02	19.71	19.52	20.13
		2	21.54	21.54	21.91	19.65	19.65	20.02
		3	21.53	21.40	21.68	19.64	19.51	19.79
		4	21.51	21.31	21.46	19.62	19.42	19.57
	HSUPA	1	22.00	21.78	21.13	20.11	19.89	19.24
		2	22.23	22.02	21.70	20.34	20.13	19.81
		3	21.81	21.63	21.34	19.92	19.74	19.45
		4	21.66	21.84	21.22	19.77	19.95	19.33
		5	21.54	21.17	21.84	19.65	19.28	19.95
	HSPA+	1	21.32	21.93	21.85	19.43	20.04	19.96

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

Limit: EIRP≤30dBm

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	21.99	21.58	21.78	21.65	21.24	21.44
		1#3	21.57	21.21	21.24	21.23	20.87	20.9
		1#5	21.82	21.20	21.38	21.48	20.86	21.04
		3#0	22.17	21.93	22.01	21.83	21.59	21.67
		3#3	21.89	21.66	21.62	21.55	21.32	21.28
		6#0	21.32	21.26	21.55	20.98	20.92	21.21
	16QAM	1#0	21.67	21.24	21.72	21.33	20.9	21.38
		1#3	21.55	21.75	21.79	21.21	21.41	21.45
		1#5	21.68	21.21	21.82	21.34	20.87	21.48
		3#0	21.33	21.65	21.92	20.99	21.31	21.58
		3#3	21.67	21.57	21.41	21.33	21.23	21.07
		6#0	22.17	21.27	21.44	21.83	20.93	21.1
3	QPSK	1#0	21.43	21.31	21.53	21.09	20.97	21.19
		1#8	21.97	21.75	21.30	21.63	21.41	20.96
		1#14	21.55	21.88	21.89	21.21	21.54	21.55
		6#0	22.23	22.09	21.41	21.89	21.75	21.07
		6#9	22.12	21.36	21.02	21.78	21.02	20.68
		15#0	21.36	21.32	22.00	21.02	20.98	21.66
	16QAM	1#0	21.28	21.96	21.32	20.94	21.62	20.98
		1#8	22.05	21.47	21.61	21.71	21.13	21.27
		1#14	21.40	21.41	21.35	21.06	21.07	21.01
		6#0	21.67	21.52	21.64	21.33	21.18	21.3
		6#9	22.18	21.38	21.95	21.84	21.04	21.61
		15#0	22.09	21.25	21.43	21.75	20.91	21.09

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	21.97	21.46	21.48	21.63	21.12	21.14
		1#13	21.56	21.69	21.24	21.22	21.35	20.9
		1#24	21.49	21.64	21.29	21.15	21.3	20.95
		15#0	22.15	21.39	21.51	21.81	21.05	21.17
		15#10	21.84	21.97	21.97	21.5	21.63	21.63
		25#0	21.39	21.13	21.96	21.05	20.79	21.62
	16QAM	1#0	21.61	21.59	21.95	21.27	21.25	21.61
		1#13	21.47	21.42	21.27	21.13	21.08	20.93
		1#24	21.46	21.40	21.21	21.12	21.06	20.87
		15#0	21.31	21.13	21.91	20.97	20.79	21.57
		15#10	21.71	21.98	21.82	21.37	21.64	21.48
		25#0	21.68	22.02	21.67	21.34	21.68	21.33
10	QPSK	1#0	21.74	21.68	21.08	21.4	21.34	20.74
		1#25	21.40	21.30	21.38	21.06	20.96	21.04
		1#49	21.93	21.47	21.98	21.59	21.13	21.64
		25#0	21.62	21.70	21.30	21.28	21.36	20.96
		25#25	21.78	21.16	21.87	21.44	20.82	21.53
		50#0	21.28	21.27	21.56	20.94	20.93	21.22
	16QAM	1#0	21.81	21.14	21.10	21.47	20.8	20.76
		1#25	22.08	21.90	21.18	21.74	21.56	20.84
		1#49	21.63	21.59	21.67	21.29	21.25	21.33
		25#0	21.33	21.71	21.44	20.99	21.37	21.1
		25#25	21.52	22.10	21.89	21.18	21.76	21.55
		50#0	21.69	22.09	21.77	21.35	21.75	21.43

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	21.27	21.83	21.49	20.93	21.49	21.15
		1#38	21.58	21.87	21.30	21.24	21.53	20.96
		1#74	22.13	21.69	21.49	21.79	21.35	21.15
		36#0	22.13	21.32	21.13	21.79	20.98	20.79
		36#39	21.51	21.99	21.96	21.17	21.65	21.62
		75#0	21.93	21.28	21.56	21.59	20.94	21.22
	16QAM	1#0	21.88	21.42	21.83	21.54	21.08	21.49
		1#38	21.71	21.57	21.89	21.37	21.23	21.55
		1#74	22.14	21.91	21.90	21.80	21.57	21.56
		36#0	22.20	21.20	21.99	21.86	20.86	21.65
		36#39	21.88	21.16	21.50	21.54	20.82	21.16
		75#0	21.89	21.66	21.81	21.55	21.32	21.47
20	QPSK	1#0	22.13	22.01	22.29	21.79	21.67	21.95
		1#50	22.10	21.18	21.46	21.76	20.84	21.12
		1#99	22.07	21.52	21.11	21.73	21.18	20.77
		50#0	21.97	21.66	21.45	21.63	21.32	21.11
		50#50	22.06	21.72	21.24	21.72	21.38	20.90
		100#0	21.80	21.11	21.63	21.46	20.77	21.29
	16QAM	1#0	21.46	21.12	21.21	21.12	20.78	20.87
		1#50	21.93	21.78	21.87	21.59	21.44	21.53
		1#99	21.72	21.76	21.59	21.38	21.42	21.25
		50#0	21.71	21.50	21.49	21.37	21.16	21.15
		50#50	21.79	21.15	21.44	21.45	20.81	21.10
		100#0	21.71	21.47	21.02	21.37	21.13	20.68

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	22.04	21.95	22.26	20.15	20.06	20.37
		1#3	22.00	21.94	21.95	20.11	20.05	20.06
		1#5	21.92	22.02	21.93	20.03	20.13	20.04
		3#0	22.24	21.89	22.02	20.35	20	20.13
		3#3	22.03	22.21	22.06	20.14	20.32	20.17
		6#0	21.96	22.02	22.23	20.07	20.13	20.34
	16QAM	1#0	21.93	22.18	22.07	20.04	20.29	20.18
		1#3	22.20	22.02	22.22	20.31	20.13	20.33
		1#5	22.14	22.06	22.22	20.25	20.17	20.33
		3#0	21.87	21.94	22.02	19.98	20.05	20.13
		3#3	21.87	22.03	22.19	19.98	20.14	20.3
		6#0	22.06	21.93	21.91	20.17	20.04	20.02
3	QPSK	1#0	22.20	22.11	21.95	20.31	20.22	20.06
		1#8	22.20	22.17	22.13	20.31	20.28	20.24
		1#14	22.10	21.93	21.96	20.21	20.04	20.07
		6#0	21.93	22.16	22.26	20.04	20.27	20.37
		6#9	22.17	22.01	21.88	20.28	20.12	19.99
		15#0	22.18	22.06	22.26	20.29	20.17	20.37
	16QAM	1#0	21.86	22.15	22.05	19.97	20.26	20.16
		1#8	21.95	22.16	22.08	20.06	20.27	20.19
		1#14	21.89	22.09	21.99	20	20.2	20.1
		6#0	22.06	21.95	22.06	20.17	20.06	20.17
		6#9	21.90	21.94	22.15	20.01	20.05	20.26
		15#0	22.17	21.97	22.20	20.28	20.08	20.31

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.06	22.25	22.25	20.17	20.36	20.36
		1#13	22.20	21.92	21.96	20.31	20.03	20.07
		1#24	22.10	22.26	21.90	20.21	20.37	20.01
		15#0	21.92	21.95	22.26	20.03	20.06	20.37
		15#10	21.93	22.22	21.92	20.04	20.33	20.03
		25#0	22.10	22.15	21.98	20.21	20.26	20.09
	16QAM	1#0	21.98	22.04	22.17	20.09	20.15	20.28
		1#13	21.88	22.04	22.12	19.99	20.15	20.23
		1#24	21.95	21.88	22.22	20.06	19.99	20.33
		15#0	22.18	22.11	21.97	20.29	20.22	20.08
		15#10	22.21	21.88	22.25	20.32	19.99	20.36
		25#0	21.96	22.07	21.88	20.07	20.18	19.99
10	QPSK	1#0	21.96	22.05	21.93	20.07	20.16	20.04
		1#25	22.20	22.22	22.25	20.31	20.33	20.36
		1#49	22.02	21.86	22.20	20.13	19.97	20.31
		25#0	21.97	21.88	22.19	20.08	19.99	20.3
		25#25	21.97	21.94	22.21	20.08	20.05	20.32
		50#0	21.89	22.01	22.24	20	20.12	20.35
	16QAM	1#0	21.95	22.15	22.04	20.06	20.26	20.15
		1#25	22.06	22.15	22.10	20.17	20.26	20.21
		1#49	21.99	21.86	22.08	20.1	19.97	20.19
		25#0	21.97	21.90	21.88	20.08	20.01	19.99
		25#25	22.20	21.89	21.94	20.31	20	20.05
		50#0	22.12	22.09	22.11	20.23	20.2	20.22

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.20	21.91	22.18	20.31	20.02	20.29
		1#38	21.96	22.21	22.06	20.07	20.32	20.17
		1#74	21.88	22.18	22.15	19.99	20.29	20.26
		36#0	21.89	21.87	22.02	20.00	19.98	20.13
		36#39	21.96	22.22	22.14	20.07	20.33	20.25
		75#0	21.96	22.00	22.20	20.07	20.11	20.31
	16QAM	1#0	22.01	22.18	22.10	20.12	20.29	20.21
		1#38	22.16	21.98	22.00	20.27	20.09	20.11
		1#74	21.93	21.91	22.06	20.04	20.02	20.17
		36#0	21.97	22.07	22.20	20.08	20.18	20.31
		36#39	22.21	22.06	22.23	20.32	20.17	20.34
		75#0	21.86	21.99	22.03	19.97	20.10	20.14
20	QPSK	1#0	22.19	22.27	22.22	20.30	20.38	20.33
		1#50	21.99	21.98	22.22	20.10	20.09	20.33
		1#99	21.90	21.97	21.96	20.01	20.08	20.07
		50#0	22.13	21.97	22.05	20.24	20.08	20.16
		50#50	22.13	22.24	22.03	20.24	20.35	20.14
		100#0	21.87	21.86	21.88	19.98	19.97	19.99
	16QAM	1#0	22.12	21.90	21.98	20.23	20.01	20.09
		1#50	22.03	21.92	22.24	20.14	20.03	20.35
		1#99	21.96	22.04	21.93	20.07	20.15	20.04
		50#0	22.12	22.24	22.22	20.23	20.35	20.33
		50#50	22.13	22.06	21.94	20.24	20.17	20.05
		100#0	22.02	22.13	22.23	20.13	20.24	20.34

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	22.00	22.22	22.33	14.7	14.92	15.03
		1#3	22.36	22.17	21.84	15.06	14.87	14.54
		1#5	22.28	21.95	22.10	14.98	14.65	14.8
		3#0	22.00	22.02	22.14	14.7	14.72	14.84
		3#3	21.83	22.10	22.14	14.53	14.8	14.84
		6#0	22.32	22.31	22.38	15.02	15.01	15.08
	16QAM	1#0	22.00	22.22	22.11	14.7	14.92	14.81
		1#3	22.24	22.28	22.04	14.94	14.98	14.74
		1#5	22.24	22.17	22.09	14.94	14.87	14.79
		3#0	22.05	22.13	22.12	14.75	14.83	14.82
		3#3	21.91	22.02	21.91	14.61	14.72	14.61
		6#0	22.16	21.95	22.33	14.86	14.65	15.03
3	QPSK	1#0	22.14	22.03	21.83	14.84	14.73	14.53
		1#8	22.31	22.28	21.96	15.01	14.98	14.66
		1#14	22.25	22.31	22.28	14.95	15.01	14.98
		6#0	22.17	22.15	22.14	14.87	14.85	14.84
		6#9	21.99	21.90	22.08	14.69	14.6	14.78
		15#0	21.88	22.00	21.84	14.58	14.7	14.54
	16QAM	1#0	22.33	22.28	22.11	15.03	14.98	14.81
		1#8	22.29	21.92	22.03	14.99	14.62	14.73
		1#14	22.19	21.84	21.96	14.89	14.54	14.66
		6#0	21.86	22.00	22.26	14.56	14.7	14.96
		6#9	22.19	21.93	22.12	14.89	14.63	14.82
		15#0	22.01	22.25	22.17	14.71	14.95	14.87

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.10	22.17	22.16	14.80	14.87	14.86
		1#13	21.85	22.29	22.19	14.55	14.99	14.89
		1#24	22.25	21.97	21.95	14.95	14.67	14.65
		15#0	21.84	21.87	21.83	14.54	14.57	14.53
		15#10	22.13	22.14	22.03	14.83	14.84	14.73
		25#0	21.90	22.13	21.98	14.60	14.83	14.68
	16QAM	1#0	22.35	22.05	22.16	15.05	14.75	14.86
		1#13	22.23	22.09	22.21	14.93	14.79	14.91
		1#24	21.83	22.21	22.13	14.53	14.91	14.83
		15#0	22.23	22.21	21.83	14.93	14.91	14.53
		15#10	22.25	21.86	21.84	14.95	14.56	14.54
		25#0	22.14	21.96	21.92	14.84	14.66	14.62
10	QPSK	1#0	22.03	22.39	22.23	14.73	15.09	14.93
		1#25	22.27	22.29	22.14	14.97	14.99	14.84
		1#49	22.33	22.01	22.38	15.03	14.71	15.08
		25#0	22.31	22.17	22.23	15.01	14.87	14.93
		25#25	22.11	22.12	21.98	14.81	14.82	14.68
		50#0	22.11	22.02	22.31	14.81	14.72	15.01
	16QAM	1#0	22.33	21.91	22.18	15.03	14.61	14.88
		1#25	21.84	22.00	21.98	14.54	14.70	14.68
		1#49	22.12	22.19	22.28	14.82	14.89	14.98
		25#0	22.21	22.18	22.08	14.91	14.88	14.78
		25#25	21.97	22.28	21.94	14.67	14.98	14.64
		50#0	22.05	22.09	21.90	14.75	14.79	14.60

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	23.45	23.12	23.07	22.88	22.55	22.5
		1#13	22.99	23.22	23.19	22.42	22.65	22.62
		1#24	23.46	22.91	22.92	22.89	22.34	22.35
		15#0	23.18	23.18	23.42	22.61	22.61	22.85
		15#10	22.94	23.26	23.15	22.37	22.69	22.58
		25#0	23.24	23.21	23.08	22.67	22.64	22.51
	16QAM	1#0	23.16	23.33	23.30	22.59	22.76	22.73
		1#13	23.27	23.38	23.11	22.7	22.81	22.54
		1#24	23.24	23.35	23.09	22.67	22.78	22.52
		15#0	23.13	23.19	23.09	22.56	22.62	22.52
		15#10	22.94	23.34	23.36	22.37	22.77	22.79
		25#0	23.40	23.14	23.11	22.83	22.57	22.54
10	QPSK	1#0	23.22	23.14	23.23	22.65	22.57	22.66
		1#25	23.16	23.44	22.96	22.59	22.87	22.39
		1#49	23.43	23.16	23.29	22.86	22.59	22.72
		25#0	23.44	23.32	22.96	22.87	22.75	22.39
		25#25	23.27	23.25	22.92	22.7	22.68	22.35
		50#0	23.28	23.06	23.08	22.71	22.49	22.51
	16QAM	1#0	23.12	23.12	23.15	22.55	22.55	22.58
		1#25	23.32	23.23	23.14	22.75	22.66	22.57
		1#49	23.32	23.12	23.25	22.75	22.55	22.68
		25#0	23.28	23.21	23.04	22.71	22.64	22.47
		25#25	23.45	23.32	23.28	22.88	22.75	22.71
		50#0	23.07	23.28	23.46	22.5	22.71	22.89

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	23.45	23.00	23.11	22.88	22.43	22.54
		1#38	23.38	23.18	23.08	22.81	22.61	22.51
		1#74	23.13	23.35	23.08	22.56	22.78	22.51
		36#0	23.15	23.02	23.09	22.58	22.45	22.52
		36#39	23.08	23.30	23.17	22.51	22.73	22.60
		75#0	23.17	23.36	23.25	22.60	22.79	22.68
	16QAM	1#0	23.36	23.32	23.17	22.79	22.75	22.60
		1#38	23.38	23.27	23.32	22.81	22.70	22.75
		1#74	23.19	23.25	23.29	22.62	22.68	22.72
		36#0	23.35	23.24	23.32	22.78	22.67	22.75
		36#39	22.94	23.08	23.05	22.37	22.51	22.48
		75#0	23.18	23.16	23.11	22.61	22.59	22.54
20	QPSK	1#0	23.48	23.33	23.06	22.91	22.76	22.49
		1#50	23.38	22.96	22.97	22.81	22.39	22.40
		1#99	23.34	23.06	23.27	22.77	22.49	22.70
		50#0	23.43	23.40	23.30	22.86	22.83	22.73
		50#50	23.31	23.25	23.41	22.74	22.68	22.84
		100#0	23.33	23.34	23.14	22.76	22.77	22.57
	16QAM	1#0	22.97	23.02	23.44	22.40	22.45	22.87
		1#50	23.14	22.98	23.36	22.57	22.41	22.79
		1#99	23.34	23.41	22.96	22.77	22.84	22.39
		50#0	23.00	23.37	23.14	22.43	22.80	22.57
		50#50	22.92	23.32	23.29	22.35	22.75	22.72
		100#0	23.01	23.14	22.91	22.44	22.57	22.34

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	22.35	22.24	22.25	21.71	21.6	21.61
		1#13	22.55	22.26	22.39	21.91	21.62	21.75
		1#24	22.52	22.52	22.35	21.88	21.88	21.71
		15#0	22.54	22.24	22.55	21.9	21.6	21.91
		15#10	22.44	22.37	22.33	21.8	21.73	21.69
		25#0	22.36	22.34	22.49	21.72	21.7	21.85
	16QAM	1#0	22.35	22.55	22.43	21.71	21.91	21.79
		1#13	22.28	22.54	22.50	21.64	21.90	21.86
		1#24	22.33	22.49	22.25	21.69	21.85	21.61
		15#0	22.40	22.55	22.46	21.76	21.91	21.82
		15#10	22.20	22.47	22.38	21.56	21.83	21.74
		25#0	22.33	22.24	22.20	21.69	21.6	21.56
10	QPSK	1#0	22.35	22.30	22.26	21.71	21.66	21.62
		1#25	22.36	22.40	22.54	21.72	21.76	21.9
		1#49	22.31	22.49	22.26	21.67	21.85	21.62
		25#0	22.49	22.23	22.43	21.85	21.59	21.79
		25#25	22.45	22.25	22.21	21.81	21.61	21.57
		50#0	22.39	22.37	22.51	21.75	21.73	21.87
	16QAM	1#0	22.38	22.54	22.30	21.74	21.9	21.66
		1#25	22.49	22.30	22.53	21.85	21.66	21.89
		1#49	22.29	22.29	22.52	21.65	21.65	21.88
		25#0	22.50	22.20	22.52	21.86	21.56	21.88
		25#25	22.27	22.38	22.44	21.63	21.74	21.8
		50#0	22.48	22.56	22.21	21.84	21.92	21.57

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.22	22.42	22.44	21.58	21.78	21.80
		1#38	22.28	22.25	22.39	21.64	21.61	21.75
		1#74	22.45	22.36	22.21	21.81	21.72	21.57
		36#0	22.47	22.49	22.53	21.83	21.85	21.89
		36#39	22.35	22.52	22.40	21.71	21.88	21.76
		75#0	22.55	22.53	22.41	21.91	21.89	21.77
	16QAM	1#0	22.41	22.39	22.26	21.77	21.75	21.62
		1#38	22.23	22.29	22.42	21.59	21.65	21.78
		1#74	22.25	22.51	22.30	21.61	21.87	21.66
		36#0	22.31	22.28	22.37	21.67	21.64	21.73
		36#39	22.39	22.46	22.25	21.75	21.82	21.61
		75#0	22.39	22.27	22.40	21.75	21.63	21.76
20	QPSK	1#0	22.58	22.43	22.31	21.94	21.79	21.67
		1#50	22.43	22.39	22.51	21.79	21.75	21.87
		1#99	22.19	22.21	22.40	21.55	21.57	21.76
		50#0	22.42	22.35	22.32	21.78	21.71	21.68
		50#50	22.34	22.33	22.28	21.70	21.69	21.64
		100#0	22.28	22.43	22.20	21.64	21.79	21.56
	16QAM	1#0	22.56	22.20	22.50	21.92	21.56	21.86
		1#50	22.21	22.27	22.51	21.57	21.63	21.87
		1#99	22.43	22.32	22.47	21.79	21.68	21.83
		50#0	22.39	22.33	22.45	21.75	21.69	21.81
		50#50	22.50	22.32	22.34	21.86	21.68	21.70
		100#0	22.44	22.52	22.21	21.80	21.88	21.57

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

Peak-to-average ratio (PAR):**GPRS/EGPRS 850 Band**

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	2.98	≤ 13
	Middle	3.15	≤ 13
	High	2.87	≤ 13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	2.74	≤ 13
	Middle	2.86	≤ 13
	High	2.93	≤ 13

WCDMA Band V

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	3.12	≤ 13
	Middle	3.33	≤ 13
	High	3.24	≤ 13
WCDMA (HSDPA)	Low	3.87	≤ 13
	Middle	3.75	≤ 13
	High	3.93	≤ 13
WCDMA (HSUPA)	Low	3.86	≤ 13
	Middle	3.95	≤ 13
	High	3.74	≤ 13
WCDMA (HSPA+)	Low	3.74	≤ 13
	Middle	3.85	≤ 13
	High	4.1	≤ 13

WCDMA Band IV

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	3.48	≤ 13
	Middle	3.27	≤ 13
	High	3.52	≤ 13
WCDMA (HSDPA)	Low	4.11	≤ 13
	Middle	4.24	≤ 13
	High	4.15	≤ 13
WCDMA (HSUPA)	Low	4.27	≤ 13
	Middle	4.19	≤ 13
	High	4.26	≤ 13
WCDMA (HSPA+)	Low	4.05	≤ 13
	Middle	3.98	≤ 13
	High	4.12	≤ 13

PCS 1900

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	3.25	≤ 13
	Middle	3.09	≤ 13
	High	3.11	≤ 13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	2.84	≤ 13
	Middle	2.96	≤ 13
	High	2.84	≤ 13

WCDMA Band II

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (Rel99)	Low	3.48	≤ 13
	Middle	3.27	≤ 13
	High	3.28	≤ 13
WCDMA (HSDPA)	Low	2.95	≤ 13
	Middle	2.98	≤ 13
	High	3.01	≤ 13
WCDMA (HSUPA)	Low	2.58	≤ 13
	Middle	2.76	≤ 13
	High	2.88	≤ 13
WCDMA (HSPA+)	Low	3.84	≤ 13
	Middle	3.54	≤ 13
	High	3.76	≤ 13

LTE Band 2

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit (dB)
QPSK	1 RB	20M	8.85	8.74	8.92	≤ 13
	100 RB		6.76	6.54	6.58	≤ 13
16-QAM	1 RB	20M	8.62	8.78	8.84	≤ 13
	100 RB		6.52	6.63	6.48	≤ 13

LTE Band 4

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	8.6	8.52	8.41	≤ 13
	100 RB		6.23	6.45	6.33	≤ 13
16-QAM	1 RB	20M	8.02	8.11	8.24	≤ 13
	100 RB		6.58	6.34	6.69	≤ 13

LTE Band 5

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	10M	4.52	4.39	4.45	≤ 13
	50 RB		5.86	5.81	5.63	≤ 13
16-QAM	1 RB	10M	5.23	5.15	5.19	≤ 13
	50 RB		6.12	5.67	5.96	≤ 13

LTE Band 7

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	7.27	7.38	7.46	≤ 13
	100 RB		6.05	6.12	6.18	≤ 13
16-QAM	1 RB	20M	7.42	7.56	7.31	≤ 13
	100 RB		6.28	6.41	6.34	≤ 13

LTE Band 38

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	7.95	7.84	7.62	≤ 13
	100 RB		7.34	7.26	7.15	≤ 13
16-QAM	1 RB	20M	7.74	7.88	7.69	≤ 13
	100 RB		7.63	7.65	7.52	≤ 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	323	240
	836.6	320	242
	848.8	319	241
EGPRS (8PSK)	824.2	322	241
	836.6	321	241
	848.8	322	239

WCDMA Band V

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	826.4	4.1	4.71
	836.6	4.12	4.73
	846.6	4.12	4.73
WCDMA (HSDPA)	826.4	4.12	4.71
	836.6	4.12	4.73
	846.6	4.12	4.71
WCDMA (HSUPA)	826.4	4.12	4.71
	836.6	4.12	4.73
	846.6	4.12	4.71
WCDMA (HSPA+)	826.4	4.1	4.71
	836.6	4.12	4.73
	846.6	4.12	4.73

PCS 1900

Mode	Frequency (MHz)	26 dB Emission Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
GPRS (GMSK)	1850.2	322	240
	1880	321	240
	1909.8	323	241
EGPRS (8PSK)	1850.2	320	242
	1880	321	240
	1909.8	323	242

WCDMA Band II

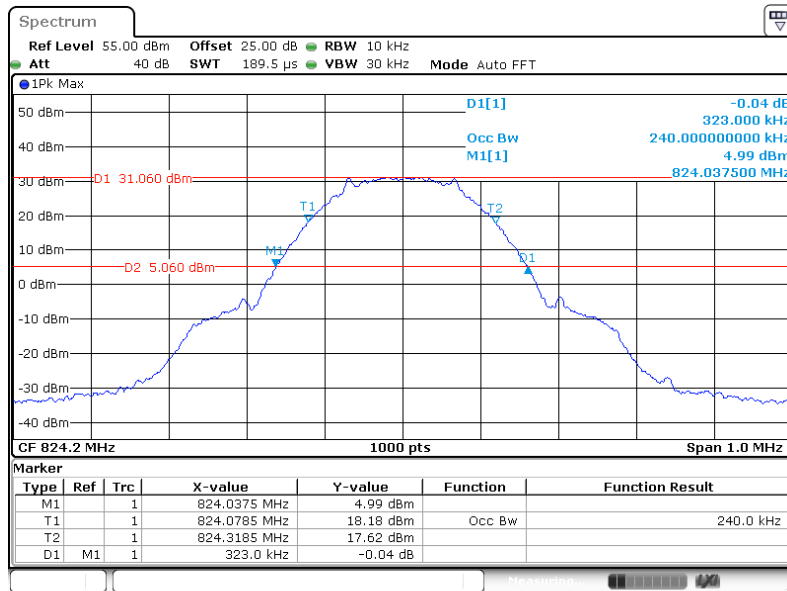
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	1852.4	4.12	4.71
	1880	4.12	4.74
	1907.6	4.12	4.73
WCDMA (HSDPA)	1852.4	4.12	4.75
	1880	4.12	4.74
	1907.6	4.12	4.71
WCDMA (HSUPA)	1852.4	4.12	4.71
	1880	4.12	4.74
	1907.6	4.12	4.73
WCDMA (HSPA+)	1852.4	4.12	4.71
	1880	4.1	4.71
	1907.6	4.12	4.71

WCDMA Band IV

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (Rel 99)	1712.4	4.12	4.73
	1732.6	4.12	4.73
	1752.6	4.12	4.73
WCDMA (HSDPA)	1712.4	4.12	4.71
	1732.6	4.12	4.73
	1752.6	4.12	4.73
WCDMA (HSUPA)	1712.4	4.12	4.74
	1732.6	4.12	4.74
	1752.6	4.12	4.73
WCDMA (HSPA+)	1712.4	4.12	4.74
	1732.6	4.12	4.73
	1752.6	4.1	4.73

GPRS 850 Band

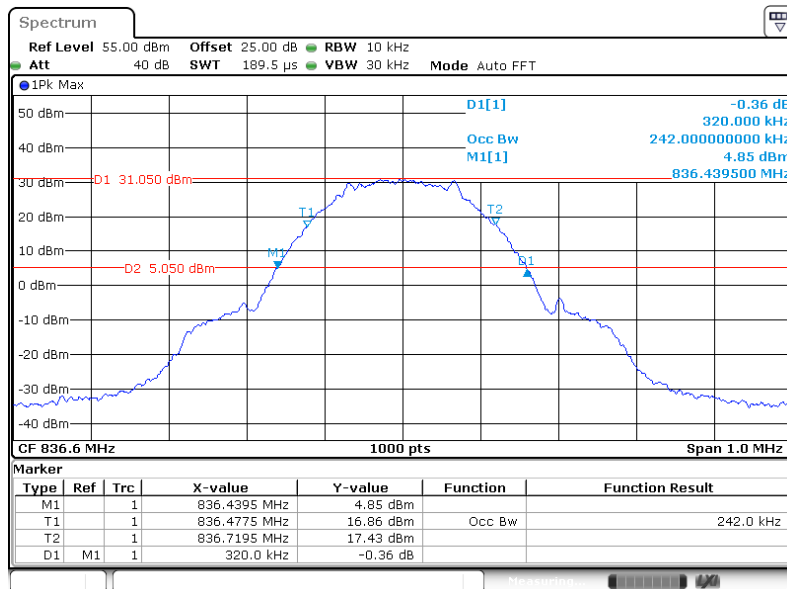
99% Occupied & 26 dB Emissions Bandwidth for GPRS (GMSK) Low channel



ProjectNo.:RKSA240319001 Tester:Jason Lu

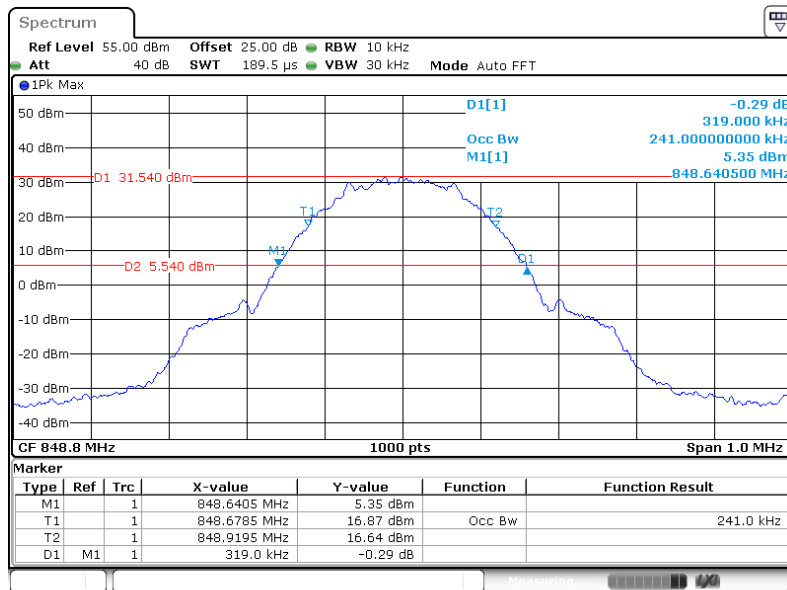
Date: 11.NOV.2024 15:31:17

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



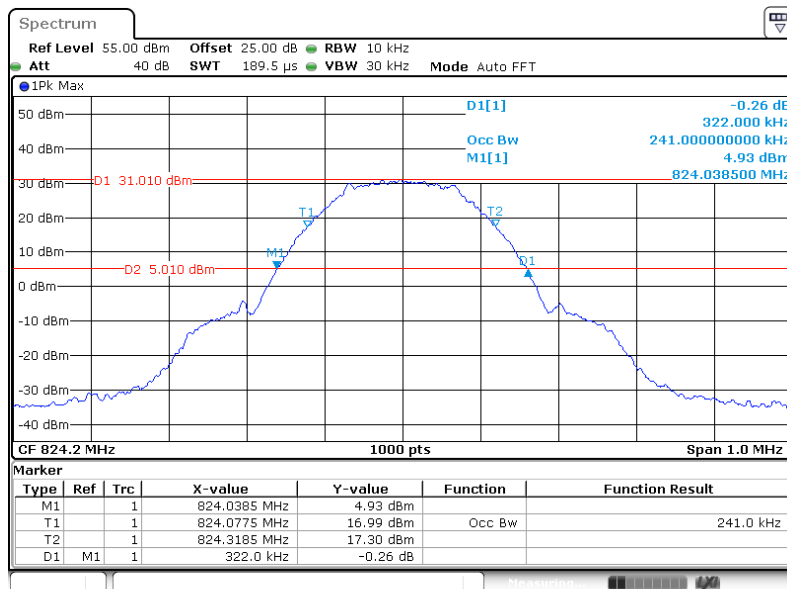
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 15:40:02

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

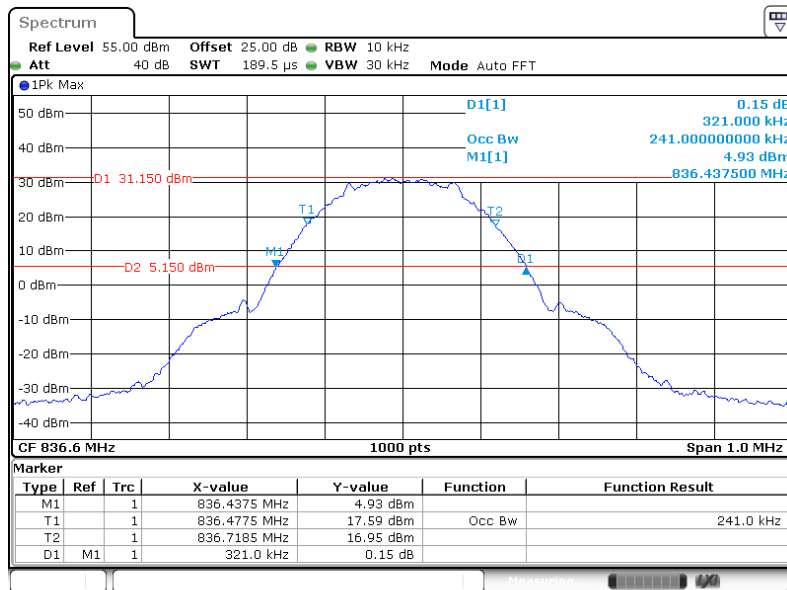
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 15:43:16

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

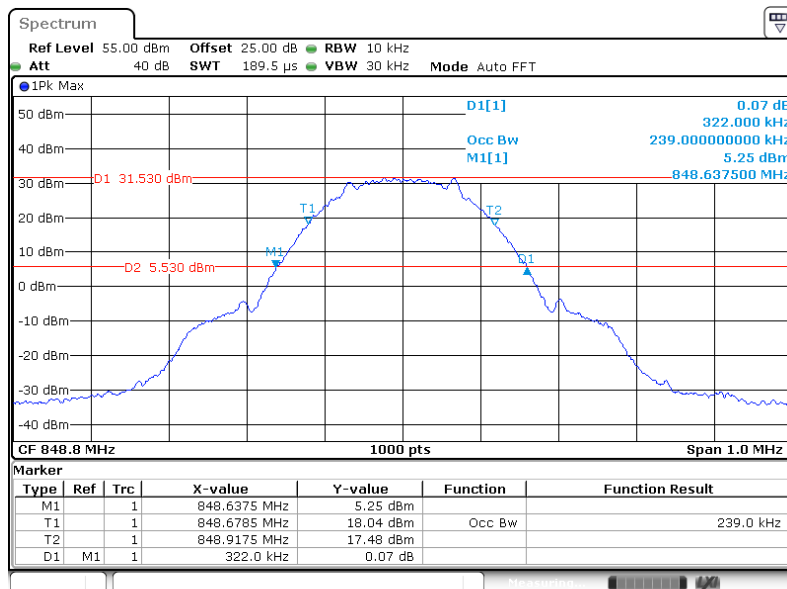
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 15:51:00

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

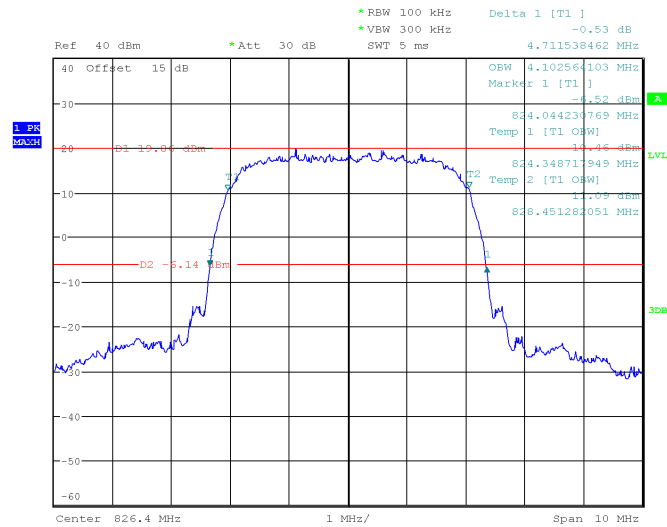
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 15:55:03

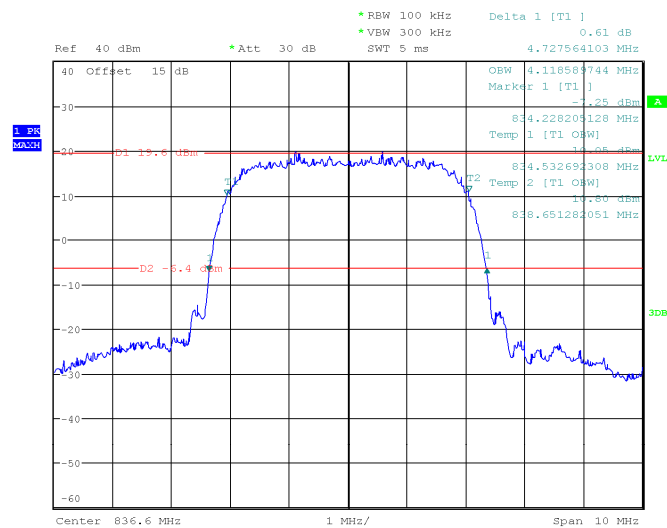
99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) High channel

ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 16:02:20

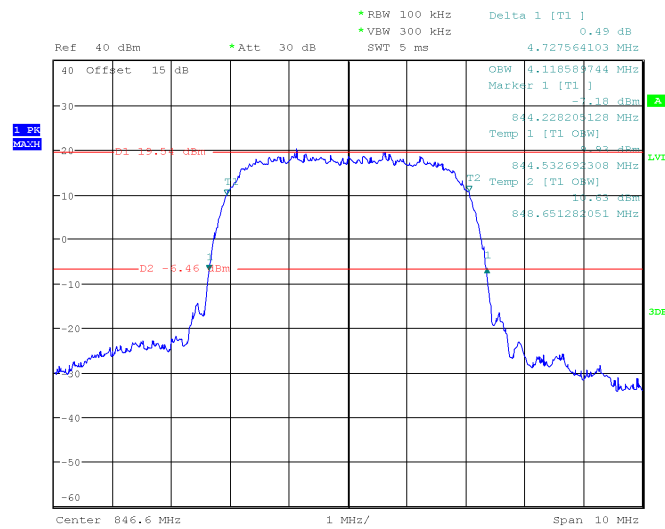
WCDMA Band V**99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Low channel**

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:29:10

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

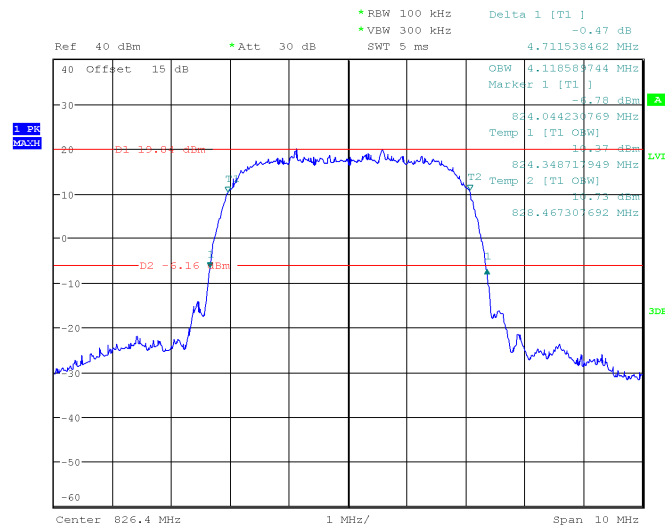
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:31:06

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



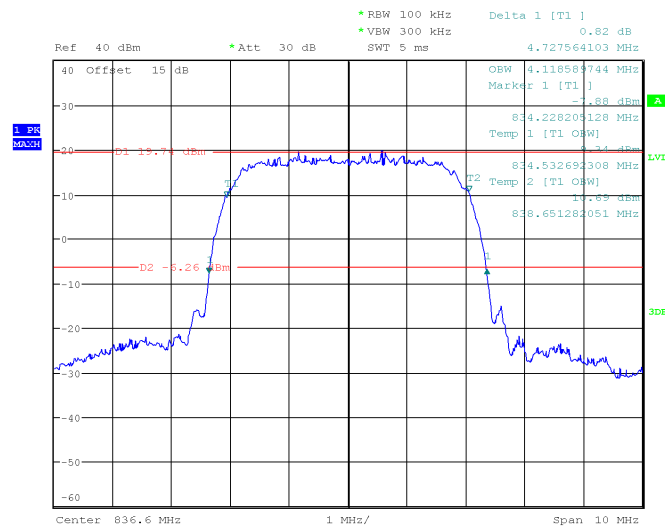
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:32:56

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



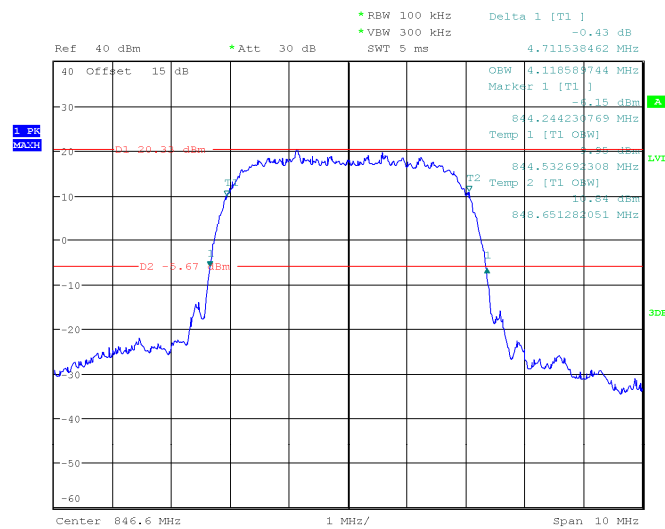
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:34:39

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

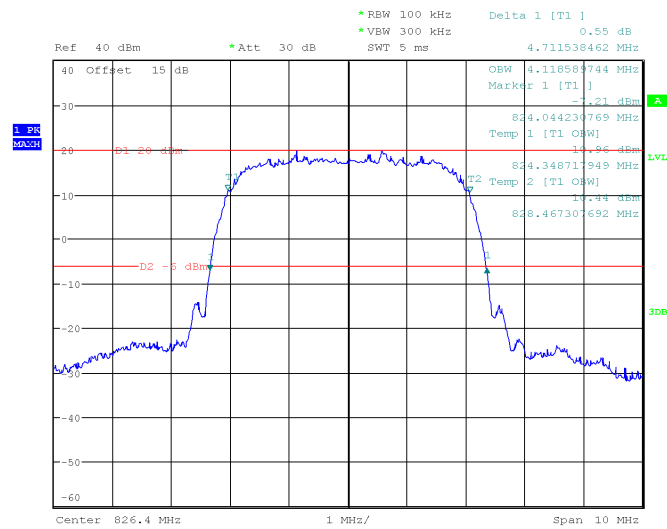


ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:36:45

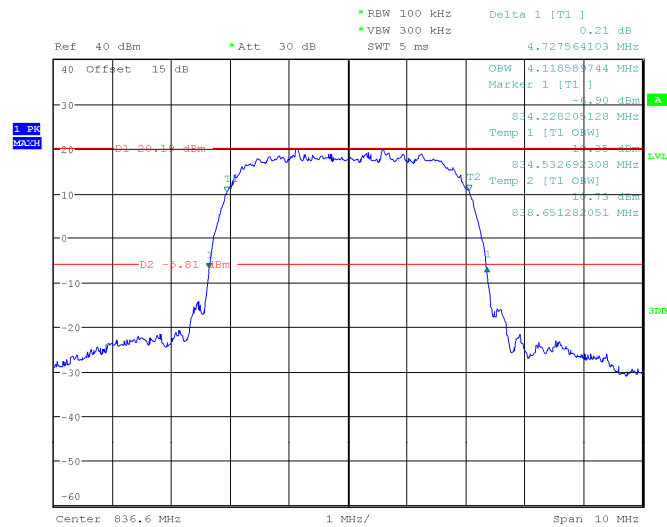
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSDPA) High channel



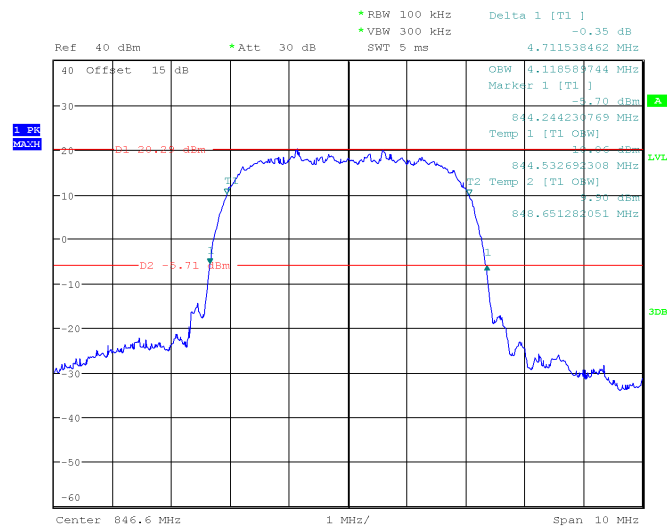
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:38:17

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

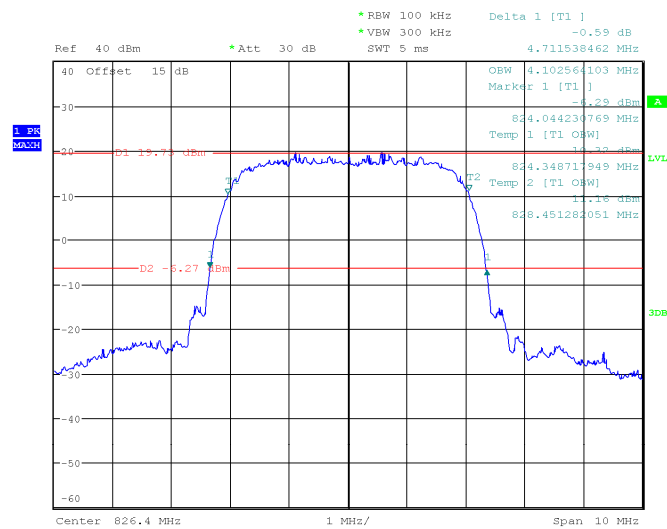
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:51:15

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

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:56:58

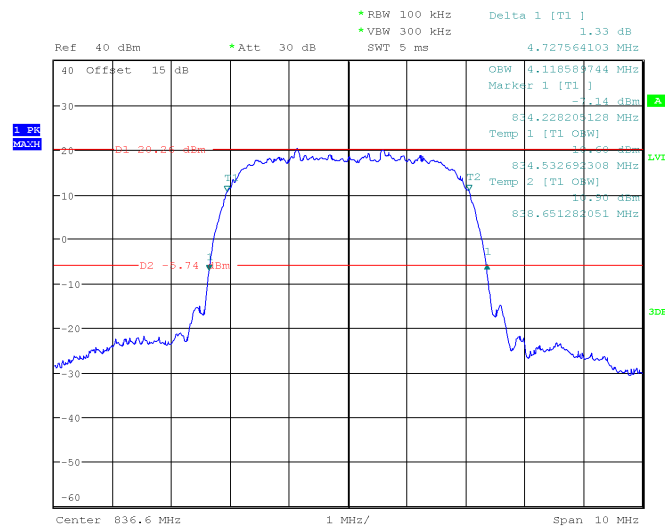
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) High channel

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:58:58

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

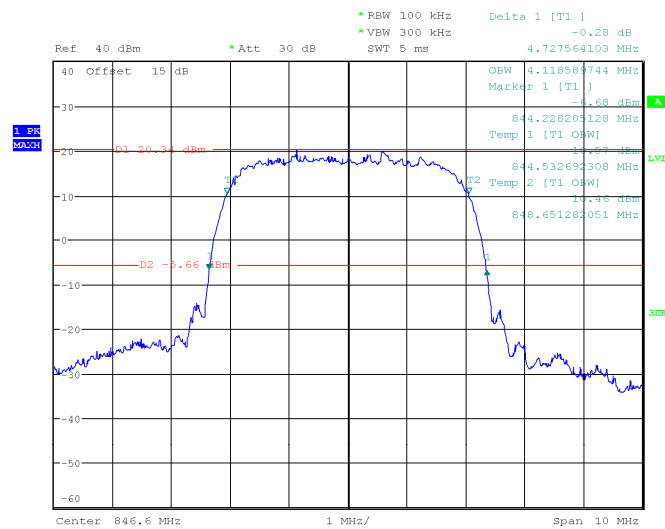
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:40:20

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:47:10

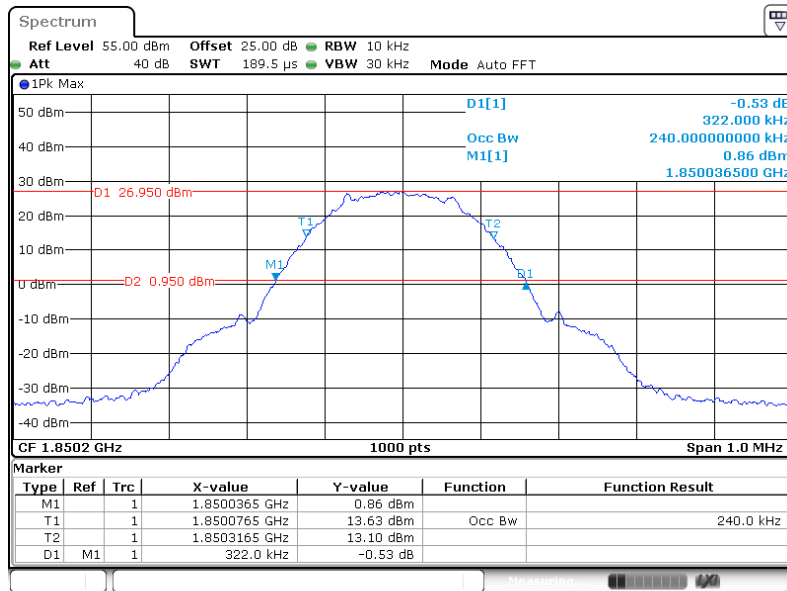
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) High channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:49:34

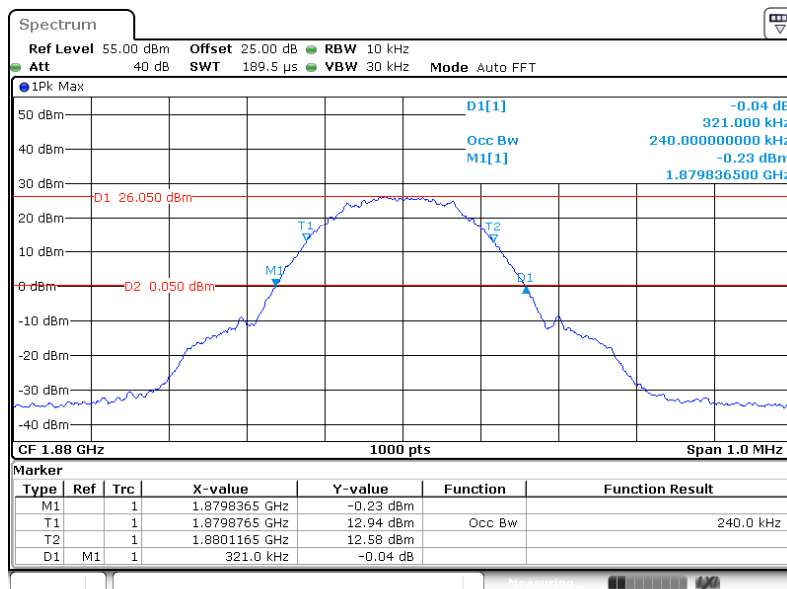
PCS 1900 Band

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

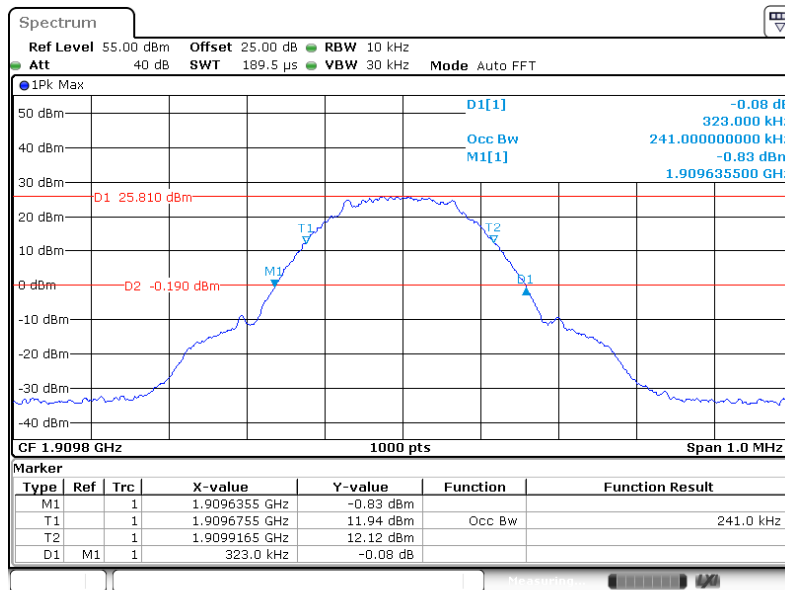


ProjectNo.:RKSA240319001 Tester:Jason Lu
Date: 11.NOV.2024 16:20:05

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

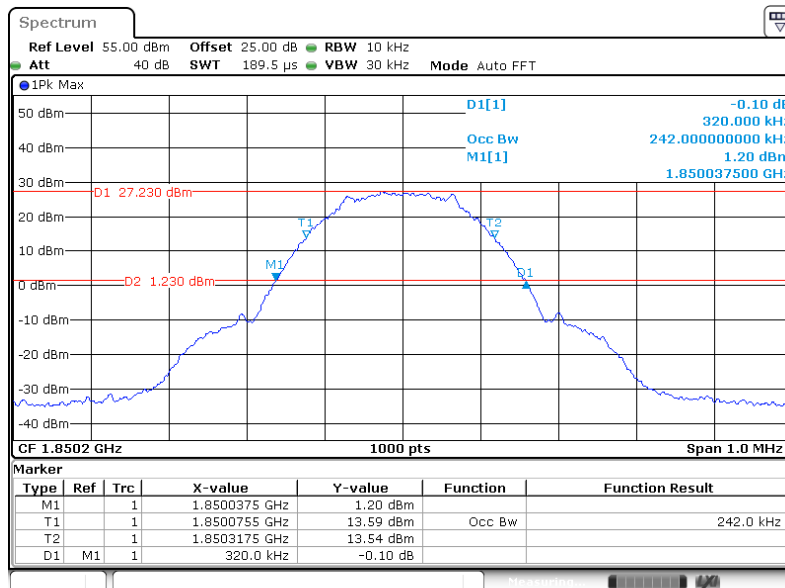


ProjectNo.:RKSA240319001 Tester:Jason Lu
Date: 11.NOV.2024 16:23:23

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

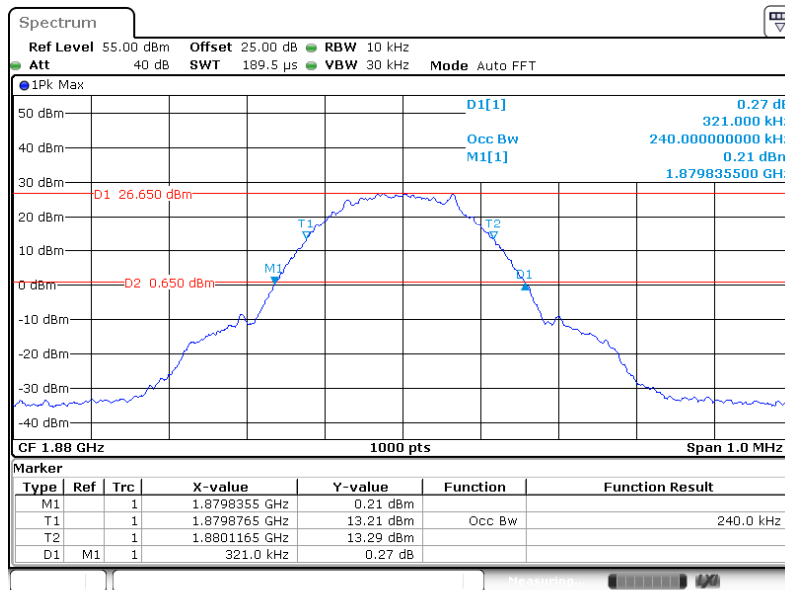
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 16:38:30

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

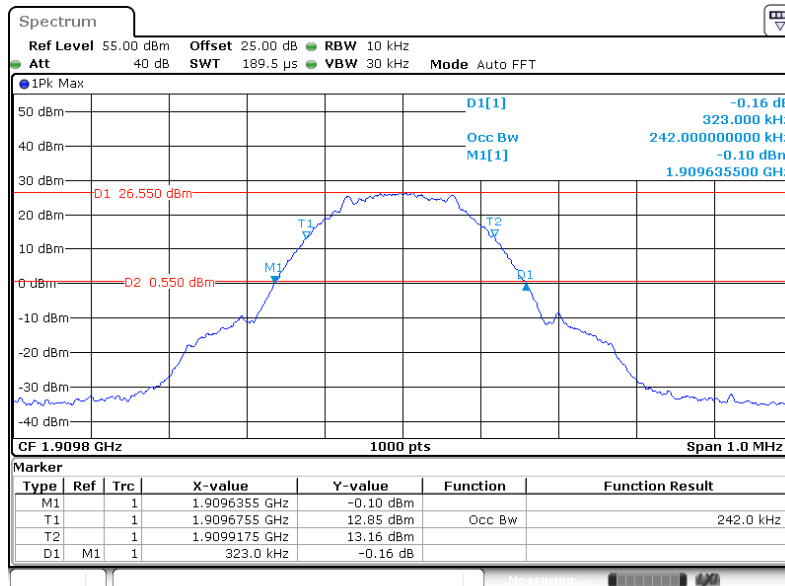
ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 16:11:56

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

ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 16:14:21

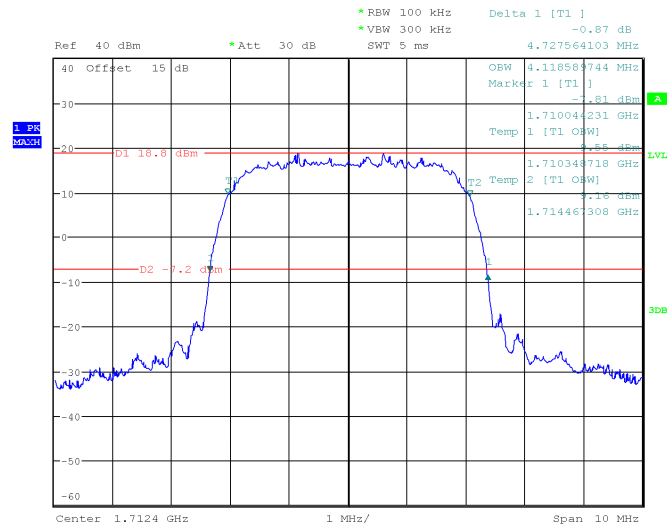
99% Occupied & 26 dB Emissions Bandwidth for EGPRS (8PSK) High channel

ProjectNo.:RKSA240319001 Tester:Jason Lu

Date: 11.NOV.2024 16:16:09

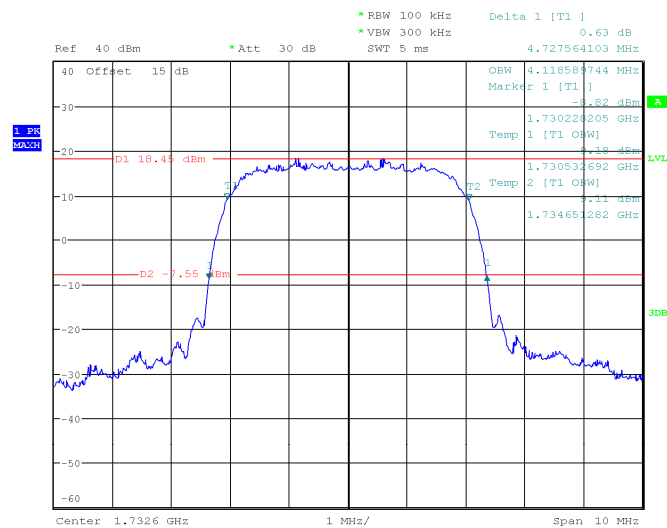
WCDMA Band IV

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

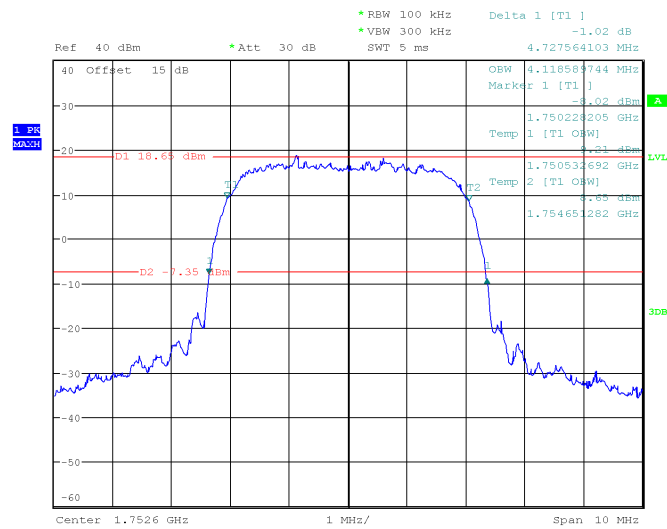


ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:58:06

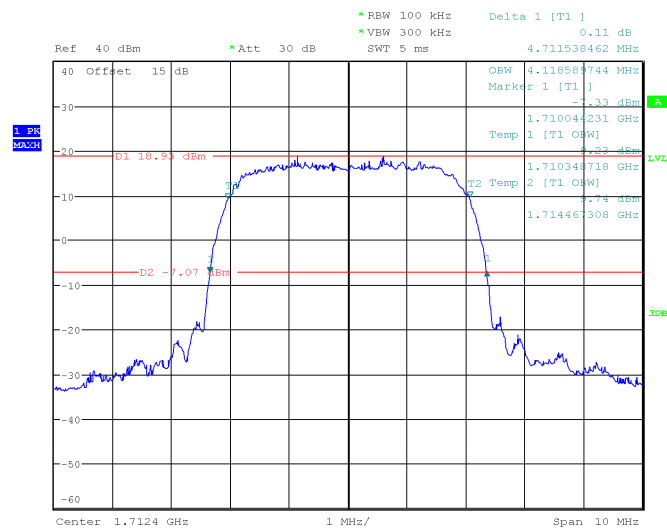
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Middle channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:00:26

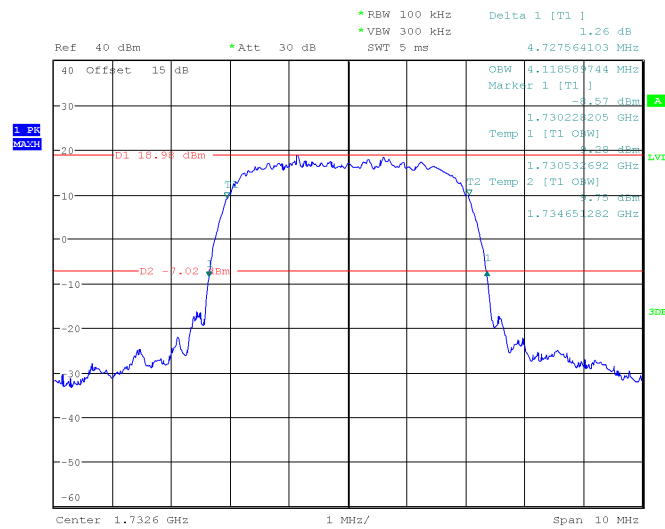
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) High channel

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:02:13

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

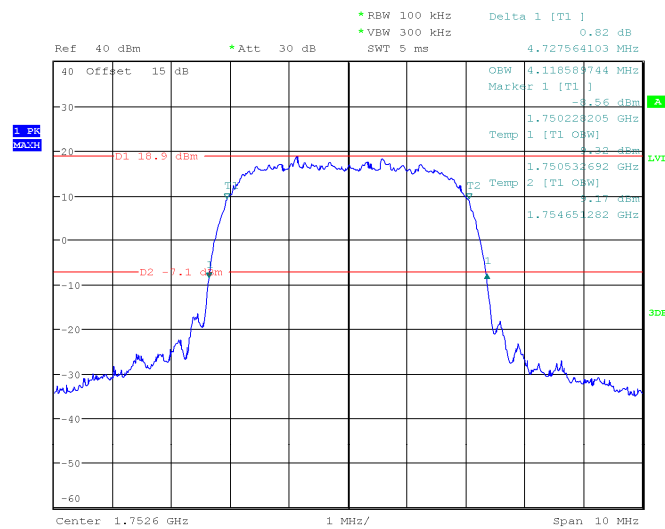
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:04:25

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



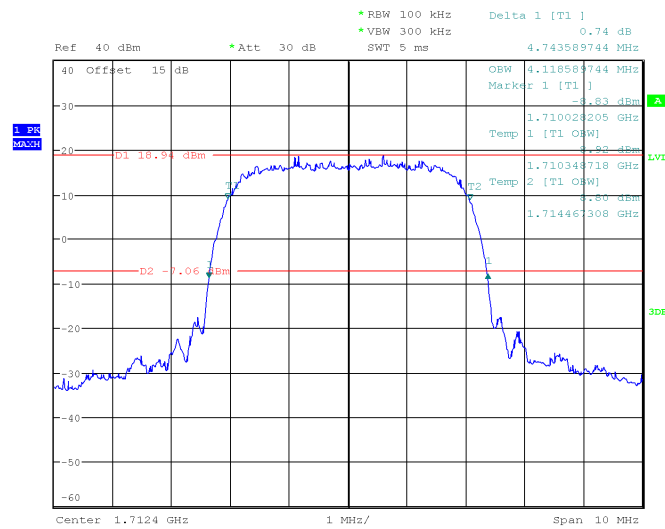
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:08:05

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



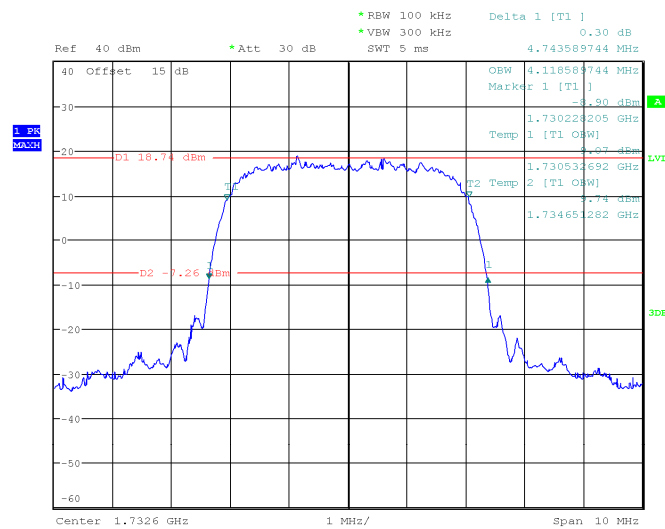
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:10:56

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



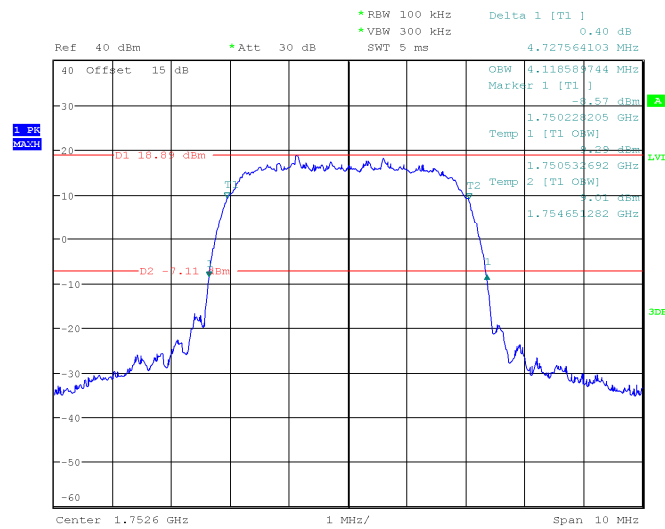
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:21:17

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



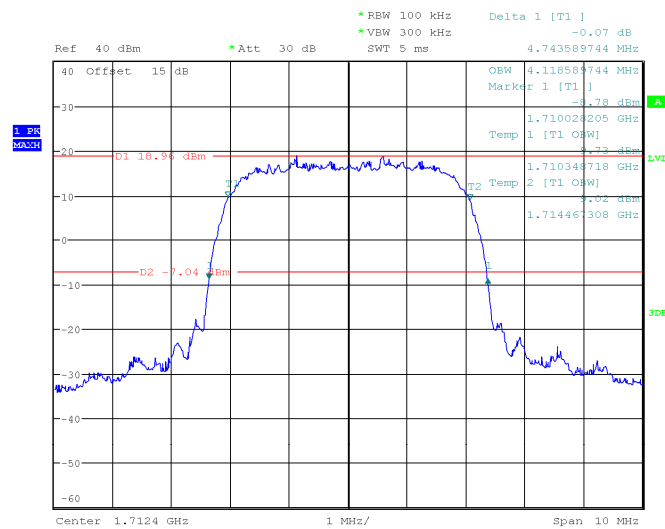
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:23:29

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

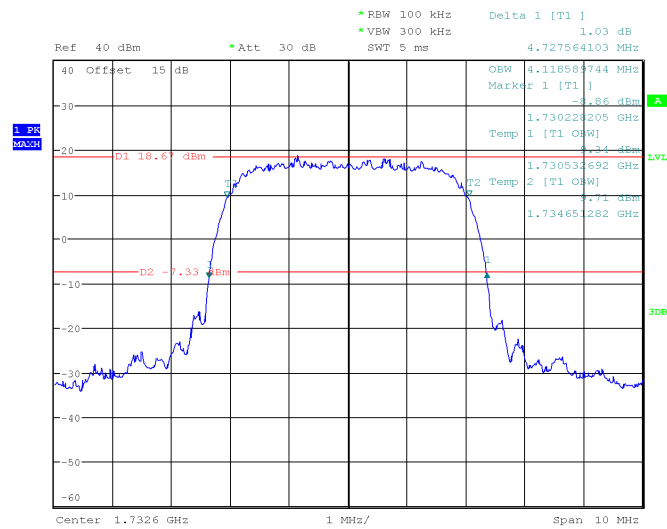


ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:25:29

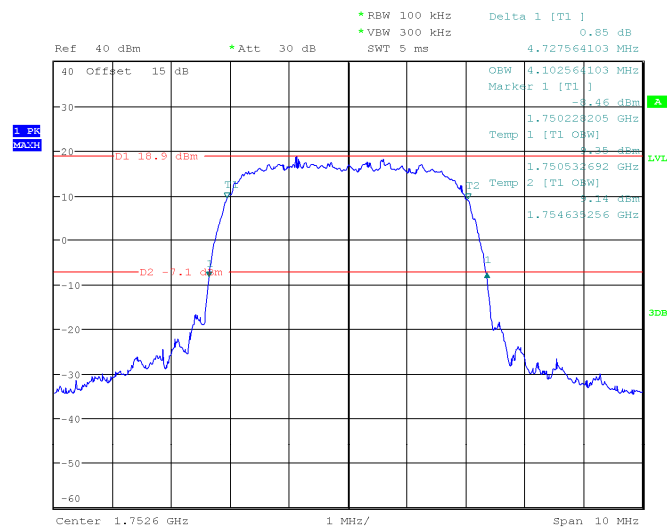
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSPA+) Low channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 15:15:01

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

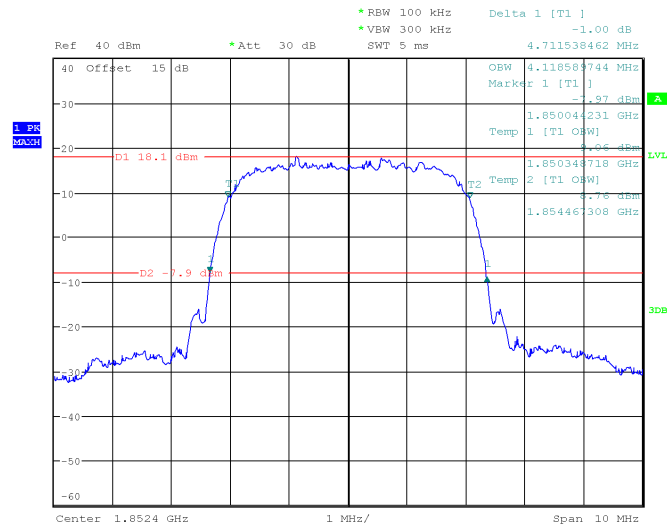
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:16:57

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

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 15:19:32

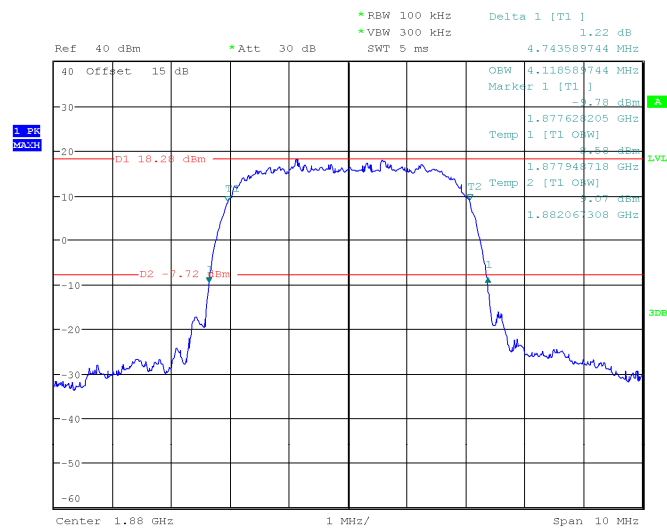
WCDMA Band II

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

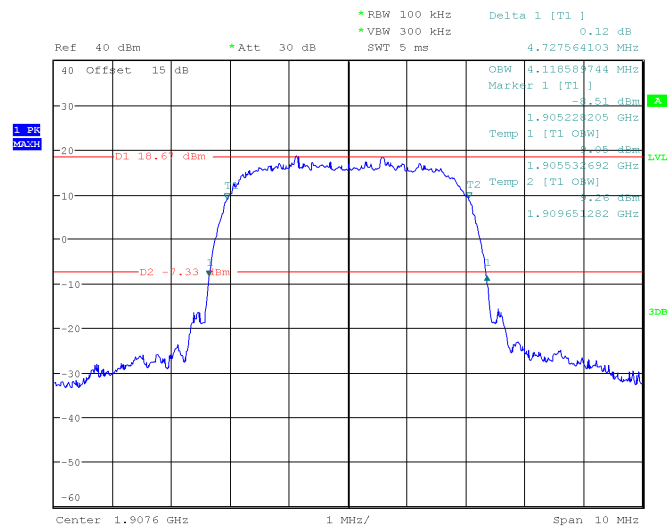


ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 14:15:35

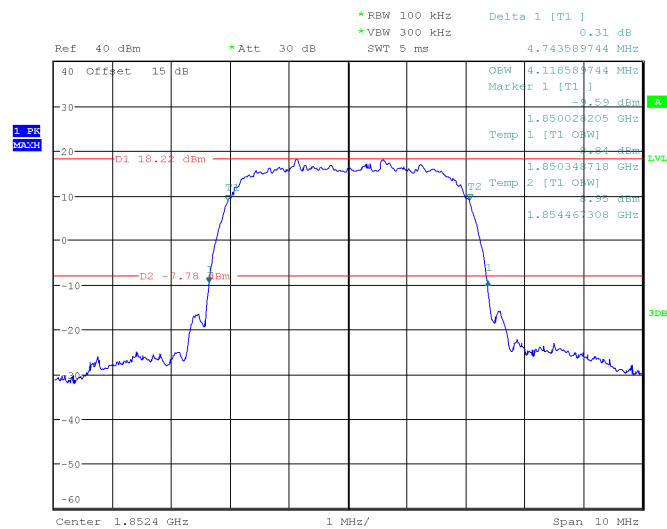
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) Middle channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 14:23:20

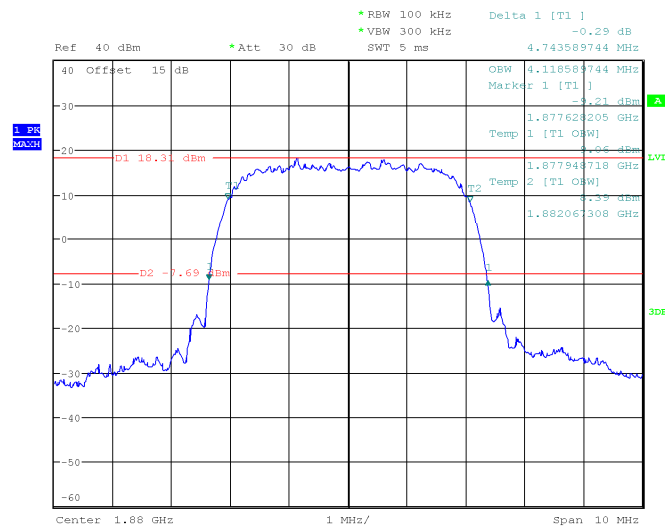
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (Rel 99) High channel

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:26:10

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

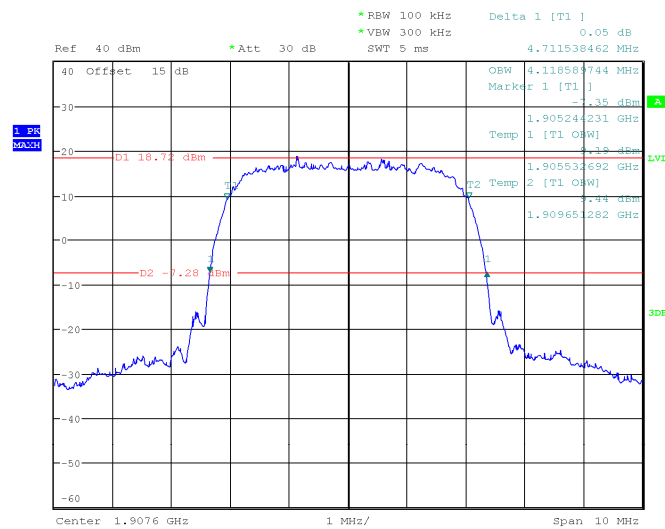
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:31:46

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



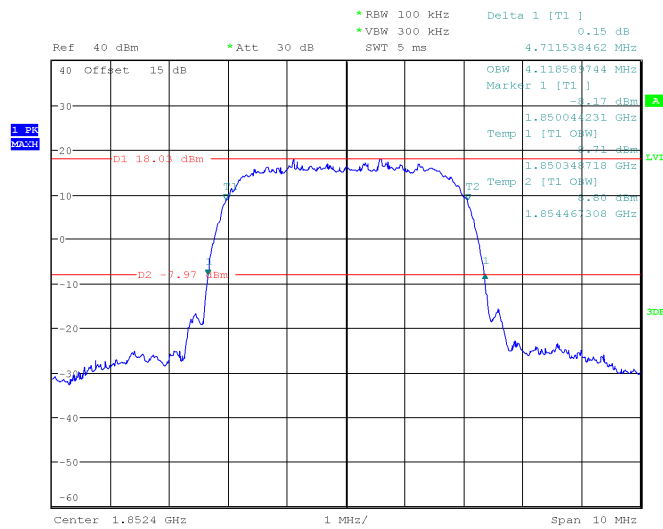
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:34:45

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



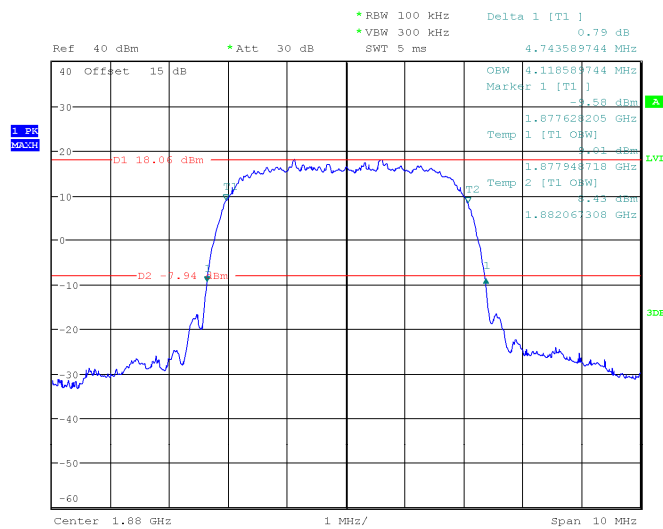
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:37:59

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

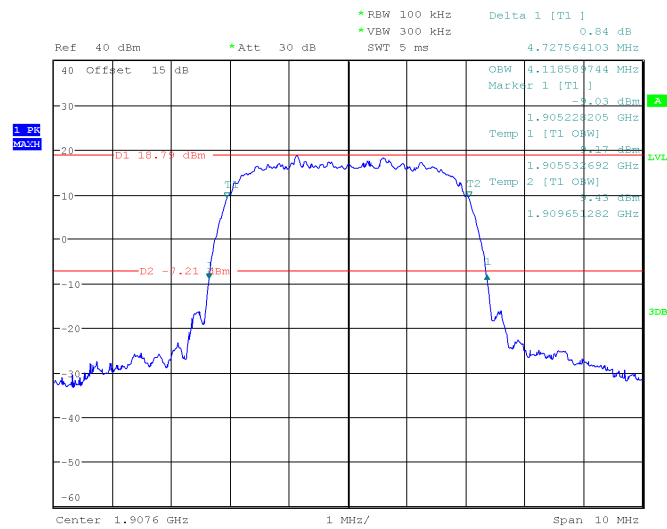


ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 14:47:00

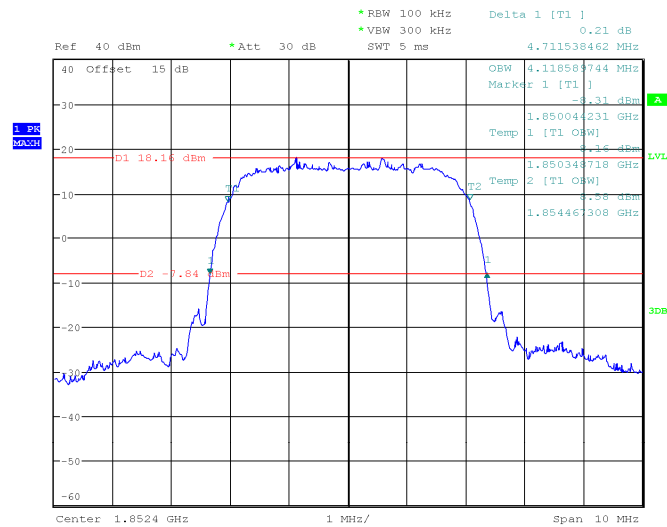
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (HSUPA) Middle channel



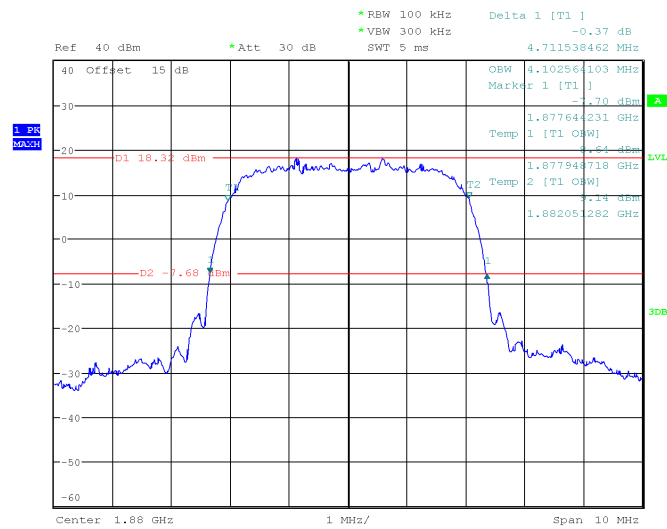
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 14:50:06

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

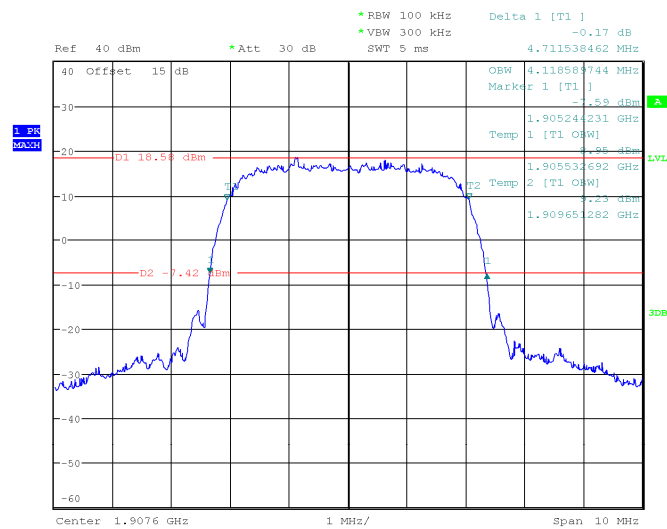
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:54:56

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

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:40:20

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

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:42:35

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

ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 14:44:38

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:

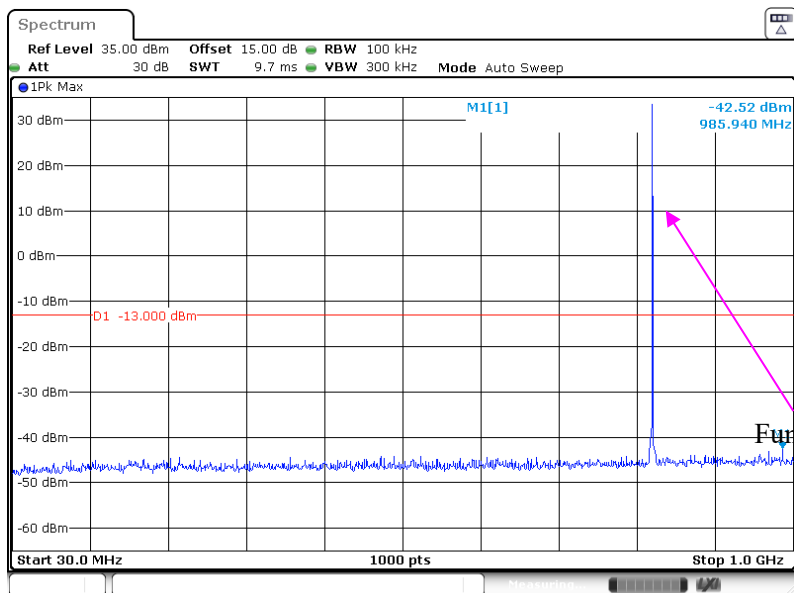
Mode	99% OBW (MHz)	EBW (MHz)
1.4MHz_Low_16QAM_6@0	1.086	1.274
1.4MHz_Low_QPSK_6@0	1.075	1.246
1.4MHz_Middle_16QAM_6@0	1.086	1.280
1.4MHz_Middle_QPSK_6@0	1.078	1.246
1.4MHz_High_16QAM_6@0	1.078	1.266
1.4MHz_High_QPSK_6@0	1.086	1.266
3MHz_Low_16QAM_15@0	2.682	2.940
3MHz_Low_QPSK_15@0	2.688	2.958
3MHz_Middle_16QAM_15@0	2.682	2.928
3MHz_Middle_QPSK_15@0	2.682	2.922
3MHz_High_16QAM_15@0	2.676	2.928
3MHz_High_QPSK_15@0	2.682	2.922
5MHz_Low_16QAM_25@0	4.460	4.850
5MHz_Low_QPSK_25@0	4.470	4.880
5MHz_Middle_16QAM_25@0	4.470	4.900
5MHz_Middle_QPSK_25@0	4.470	4.840
5MHz_High_16QAM_25@0	4.460	4.860
5MHz_High_QPSK_25@0	4.460	4.850
10MHz_Low_16QAM_50@0	8.960	9.640
10MHz_Low_QPSK_50@0	8.920	9.740
10MHz_Middle_16QAM_50@0	8.960	9.620
10MHz_Middle_QPSK_50@0	8.920	9.720
10MHz_High_16QAM_50@0	8.900	9.780
10MHz_High_QPSK_50@0	8.900	9.580

LTE Band 7:

Mode	99% OBW (MHz)	EBW (MHz)
5MHz_Low_16QAM_25@0	4.460	4.930
5MHz_Low_QPSK_25@0	4.470	4.880
5MHz_Middle_16QAM_25@0	4.460	4.860
5MHz_Middle_QPSK_25@0	4.470	4.870
5MHz_High_16QAM_25@0	4.470	4.920
5MHz_High_QPSK_25@0	4.470	4.840
10MHz_Low_16QAM_50@0	8.940	9.700
10MHz_Low_QPSK_50@0	8.920	9.540
10MHz_Middle_16QAM_50@0	8.920	9.580
10MHz_Middle_QPSK_50@0	8.920	9.740
10MHz_High_16QAM_50@0	8.920	9.560
10MHz_High_QPSK_50@0	8.940	9.700
15MHz_Low_16QAM_75@0	13.350	14.460
15MHz_Low_QPSK_75@0	13.380	14.400
15MHz_Middle_16QAM_75@0	13.380	14.490
15MHz_Middle_QPSK_75@0	13.410	14.610
15MHz_High_16QAM_75@0	13.380	14.520
15MHz_High_QPSK_75@0	13.410	14.430
20MHz_Low_16QAM_100@0	17.840	18.800
20MHz_Low_QPSK_100@0	17.800	18.880
20MHz_Middle_16QAM_100@0	17.840	19.080
20MHz_Middle_QPSK_100@0	17.800	19.080
20MHz_High_16QAM_100@0	17.800	19.000
20MHz_High_QPSK_100@0	17.800	19.000

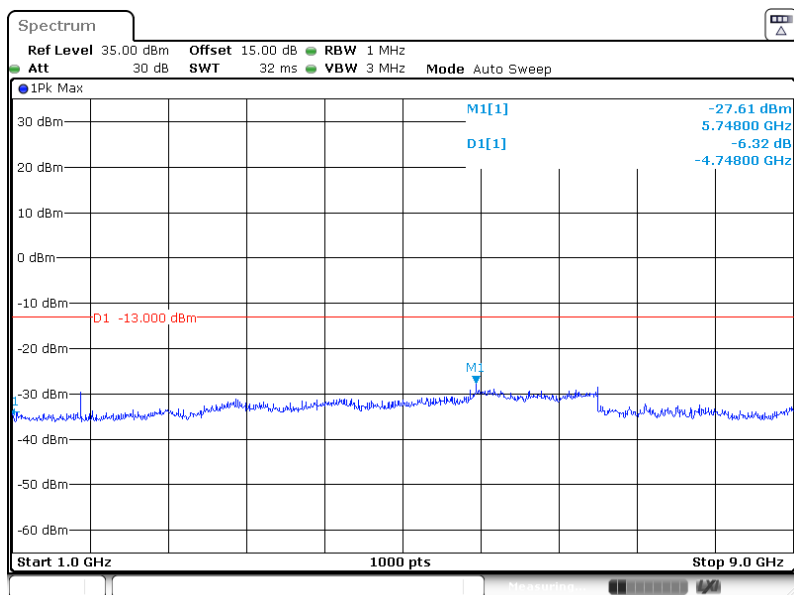
LTE Band 38:

Mode	99% OBW (MHz)	EBW (MHz)
5MHz_Low_16QAM_25@0	4.460	4.870
5MHz_Low_QPSK_25@0	4.450	4.880
5MHz_Middle_16QAM_25@0	4.450	4.870
5MHz_Middle_QPSK_25@0	4.460	4.850
5MHz_High_16QAM_25@0	4.450	4.810
5MHz_High_QPSK_25@0	4.460	4.920
10MHz_Low_16QAM_50@0	8.940	9.620
10MHz_Low_QPSK_50@0	8.920	9.580
10MHz_Middle_16QAM_50@0	8.940	9.480
10MHz_Middle_QPSK_50@0	8.940	9.620
10MHz_High_16QAM_50@0	8.940	9.700
10MHz_High_QPSK_50@0	8.920	9.560
15MHz_Low_16QAM_75@0	13.320	14.280
15MHz_Low_QPSK_75@0	13.380	14.250
15MHz_Middle_16QAM_75@0	13.380	14.310
15MHz_Middle_QPSK_75@0	13.380	14.370
15MHz_High_16QAM_75@0	13.410	14.490
15MHz_High_QPSK_75@0	13.350	14.130
20MHz_Low_16QAM_100@0	17.760	19.440
20MHz_Low_QPSK_100@0	17.760	18.760
20MHz_Middle_16QAM_100@0	17.800	19.120
20MHz_Middle_QPSK_100@0	17.840	19.080
20MHz_High_16QAM_100@0	17.760	18.800
20MHz_High_QPSK_100@0	17.840	18.960

SPURIOUS EMISSIONS AT ANTENNA TERMINALS*EUT operation mode: Transmitting**Test Result: Compliance***GPRS 850 Band:****30 MHz – 1GHz (GPRS Mode), Low channel**

ProjectNo.:RKSA240319001 Tester:Jay Liu

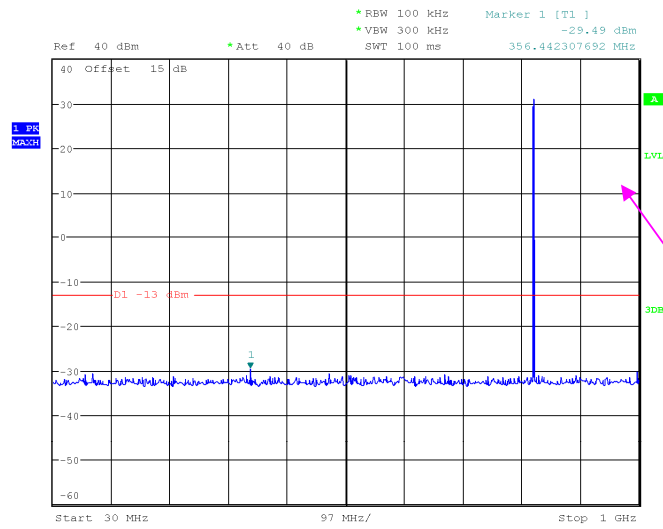
Date: 18.MAY.2024 15:13:19

1 GHz – 9 GHz (GPRS Mode), Low channel

ProjectNo.:RKSA240319001 Tester:Jay Liu

Date: 18.MAY.2024 14:54:39

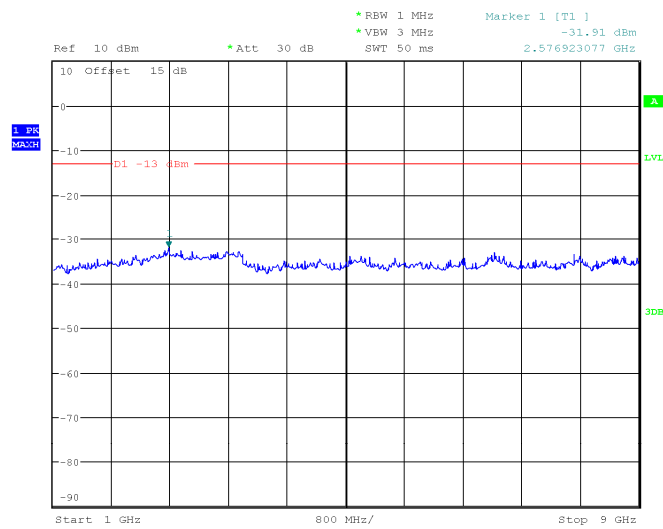
30 MHz – 1GHz (EGPRS Mode), Low channel



Fundamental

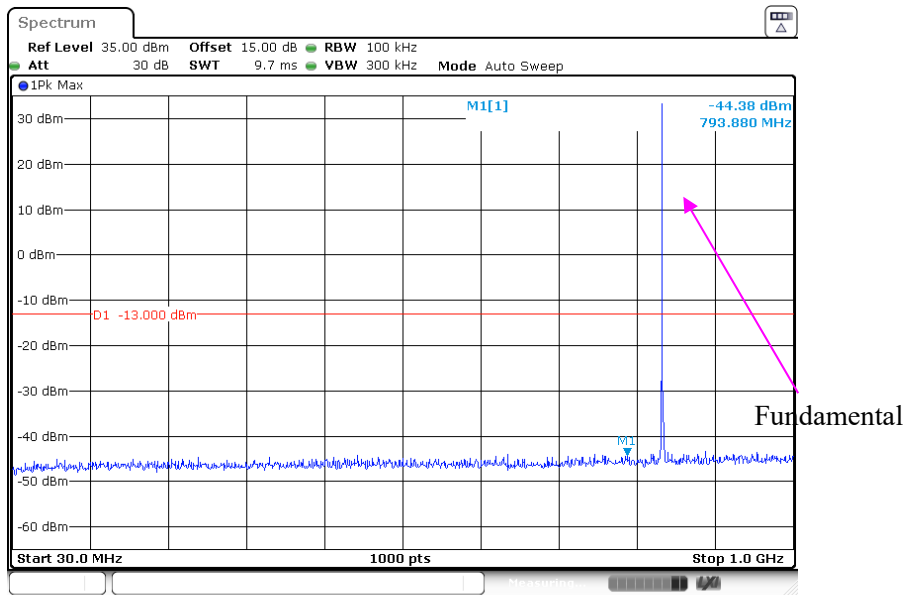
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 10:32:57

1 GHz – 9 GHz (EGPRS Mode), Low channel

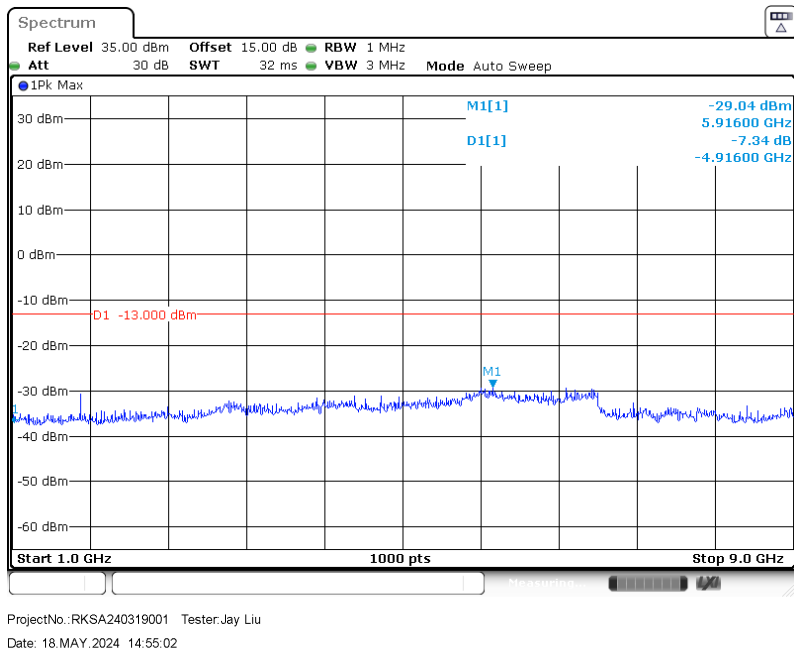


ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 10:39:14

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



1 GHz – 9 GHz (GPRS Mode), Middle channel



Ref 40 dBm *Att 40 dB SWT 100 ms 999.118589744 MHz

40 Offset 15 dB

30

20

10

0

-10

-20

-30

-40

-50

-60

Start 30 MHz 97 MHz/ Stop 1 GHz

1 PR
MATH

D1 -13 dBm

Marker 1 [T1] -29.42 dBm

30dB

Fundamental

*RBW 1 MHz
 *VBW 3 MHz
 SWT 50 ms
 Marker 1 [T1]
 -31.43 dBm
 3.500000000 GHz

Ref 10 dBm
 *Att 30 dB

10 Offset 15 dB
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80
 -90

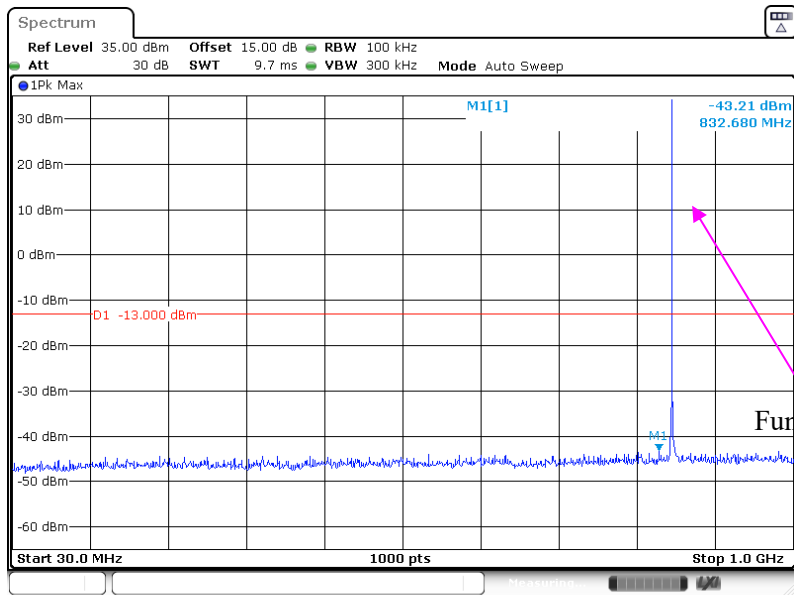
1.00
 MHz

D1 -13 dBm
 3

Start 1 GHz
 800 MHz/
 Stop 9 GHz

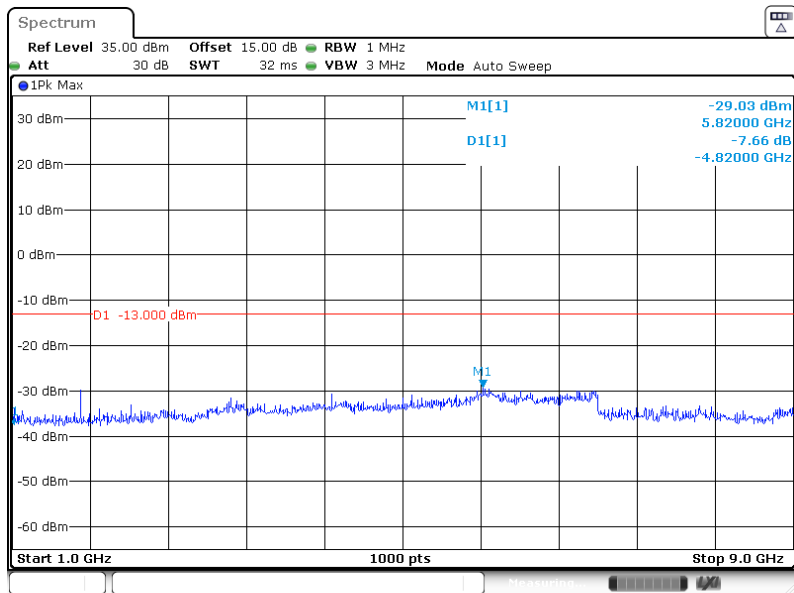
Page 77 of 153

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



ProjectNo.:RKSA240319001 Tester:Jay Liu
 Date: 18.MAY.2024 15:11:32

1 GHz – 9 GHz (GPRS Mode), High channel



ProjectNo.:RKSA240319001 Tester:Jay Liu
 Date: 18.MAY.2024 14:55:17

Ref 40 dBm *Att 40 dB RBW 100 kHz Marker 1 [T1] -29.69 dBm
 *VEW 300 kHz SWT 100 ms 539.871794872 MHz

40 Offset 15 dB

30
20
10
0
-10
-20
-30
-40
-50
-60

D1 -13 dBm

1

Start 30 MHz 97 MHz/ Stop 1 GHz

Fundamental

Ref 10 dBm *Att 30 dB SWT 50 ms 2.538461538 GHz

*RBW 1 MHz Marker 1 [T1] -31.64 dBm
 *VEW 3 MHz

1. PR
 MAG

Offset 15 dB

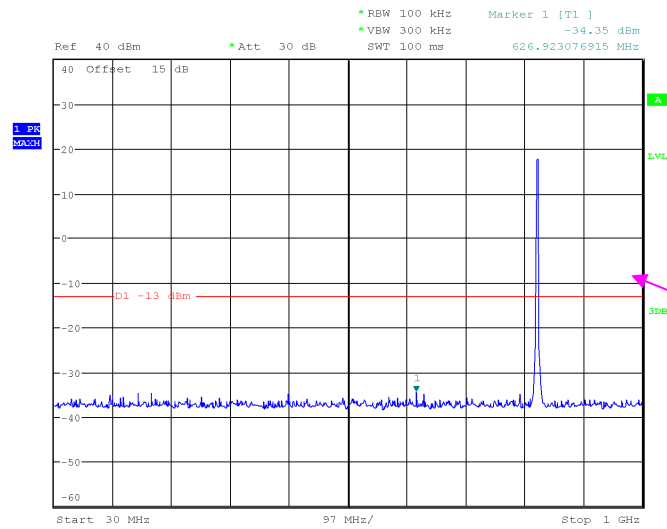
D1 -13 dBm

Start 1 GHz 800 MHz/ Stop 9 GHz

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WCDMA Band V:

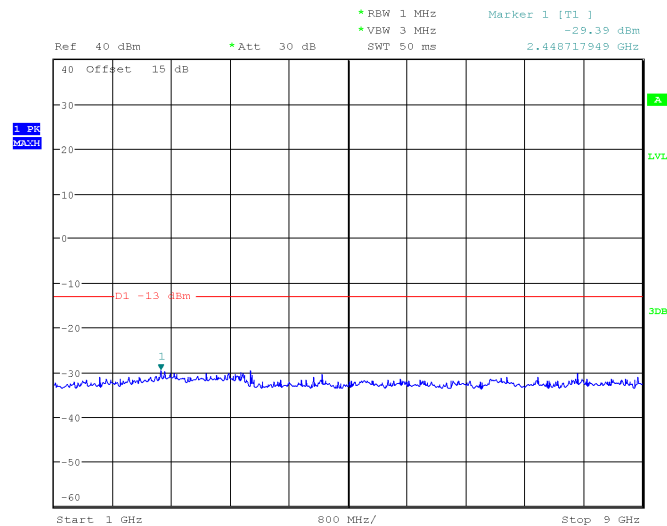
30 MHz – 1GHz WCDMA (Rel 99) Mode, Low channel



Fundamental

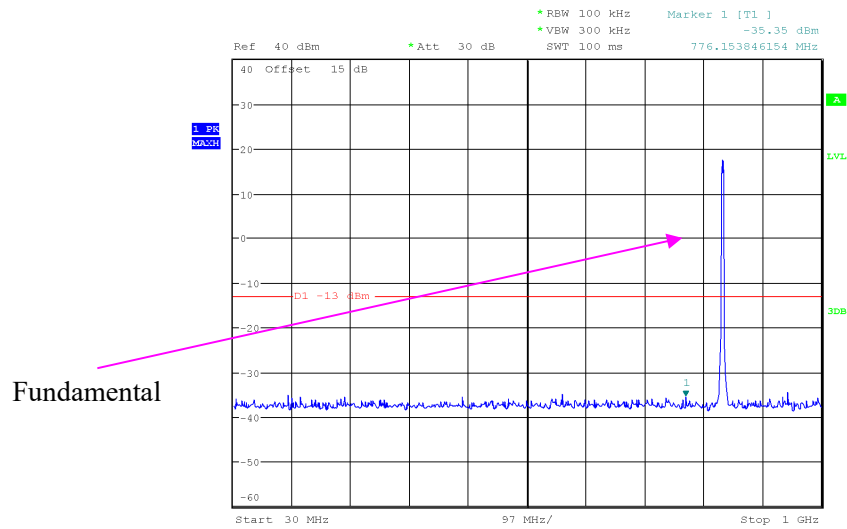
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:44:35

1 GHz – 9 GHz WCDMA (Rel 99) Mode, Low channel



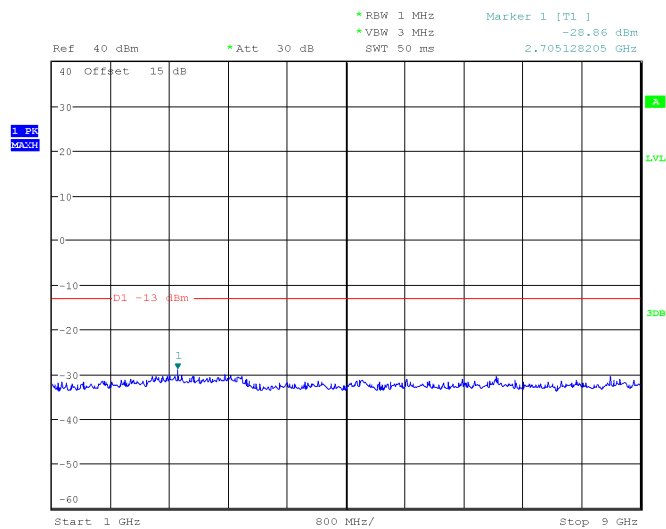
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:02:50

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



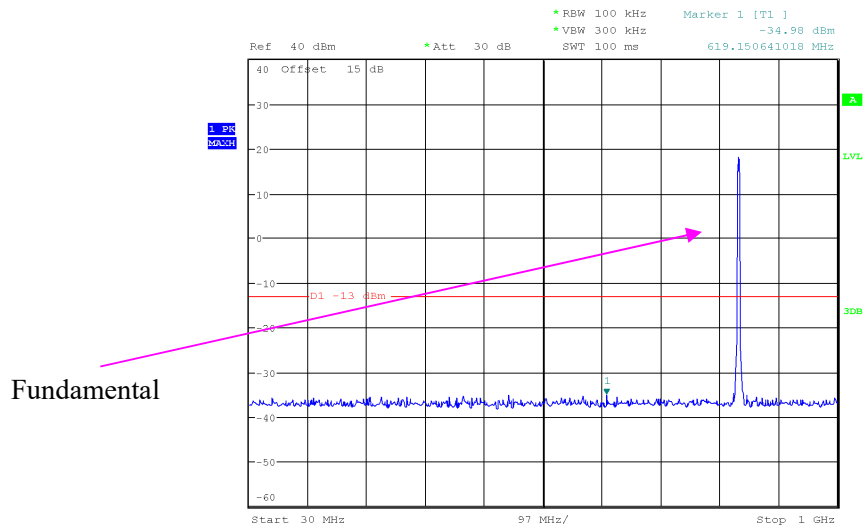
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 18:39:16

1 GHz – 9 GHz WCDMA (HSDPA) Mode, Low channel



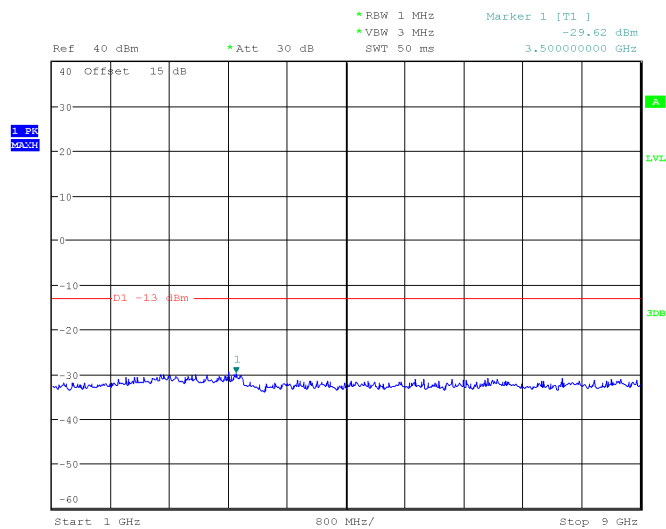
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 18:55:56

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



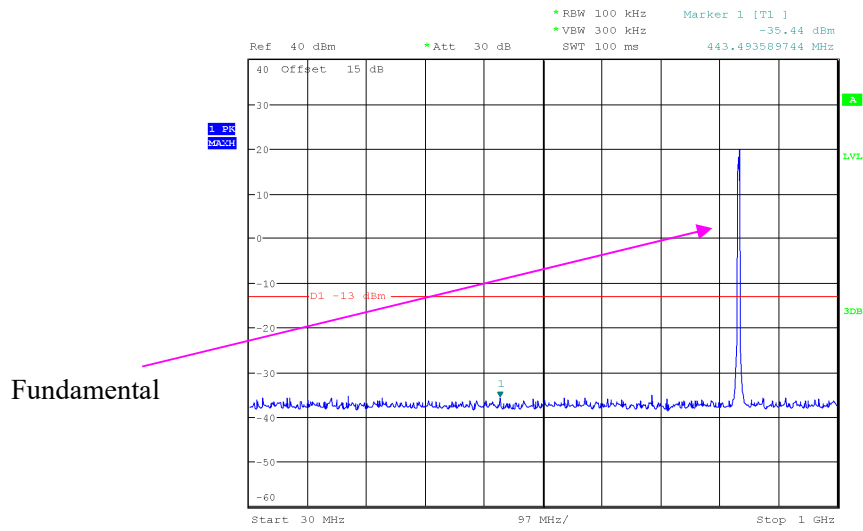
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:49:06

1 GHz – 9 GHz WCDMA (HSUPA) Mode, Low channel



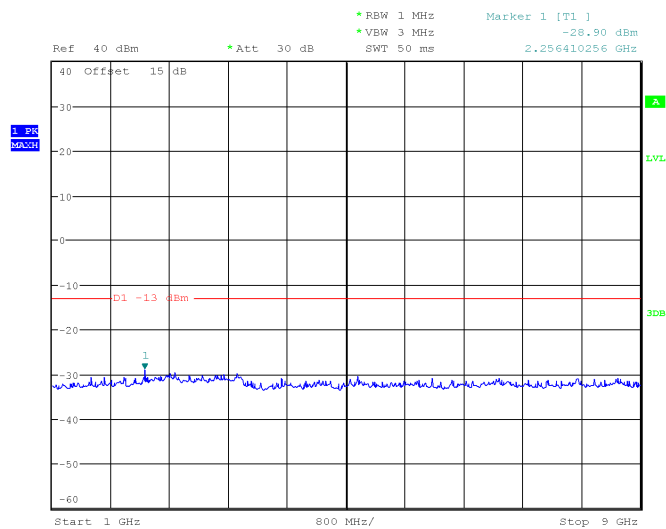
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:08:42

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



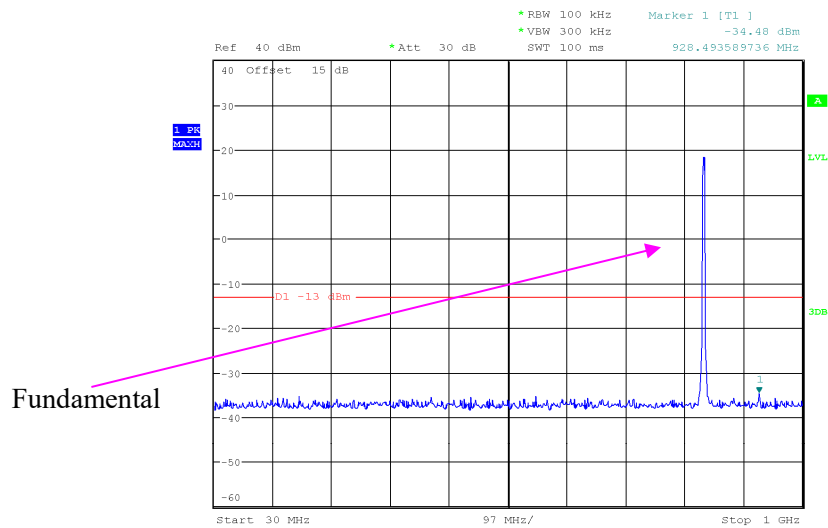
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:42:37

1 GHz – 9 GHz WCDMA (HSPA+) Mode, Low channel



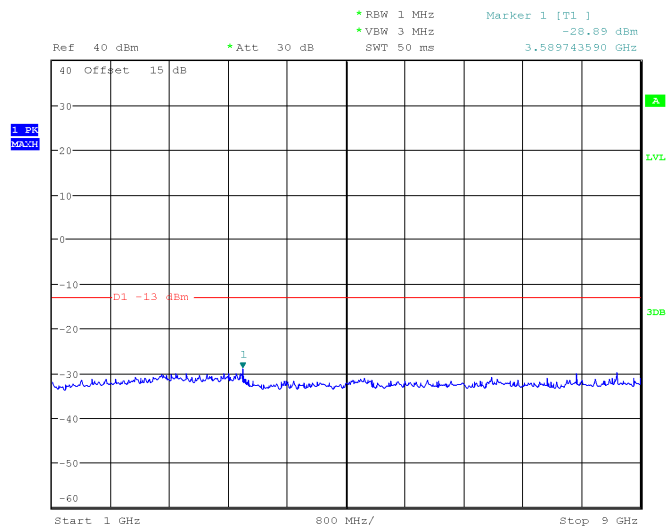
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:00:17

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



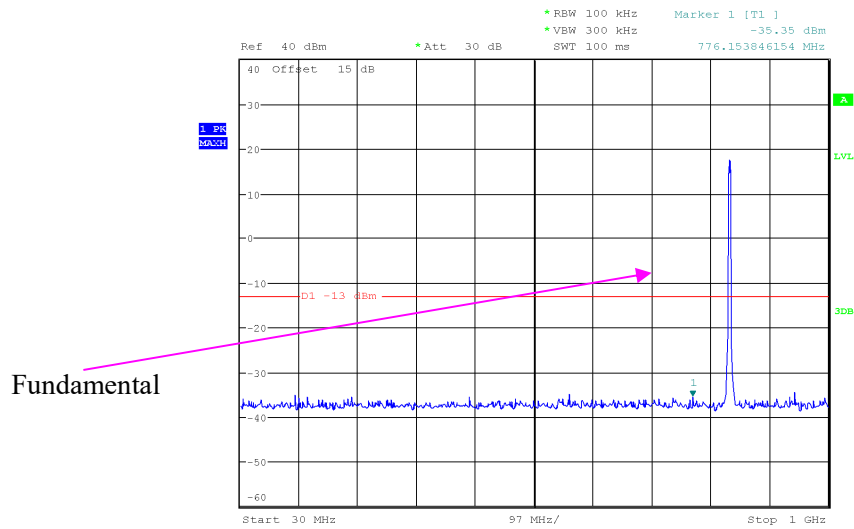
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:45:31

1 GHz – 9 GHz WCDMA (Rel 99) Mode, Middle channel



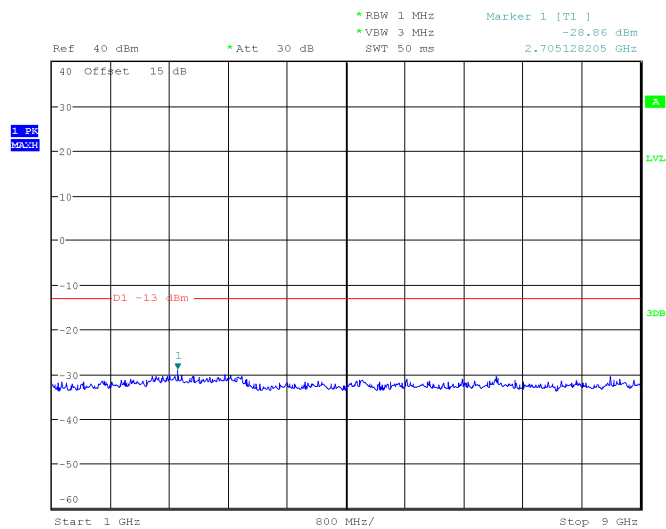
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:04:12

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



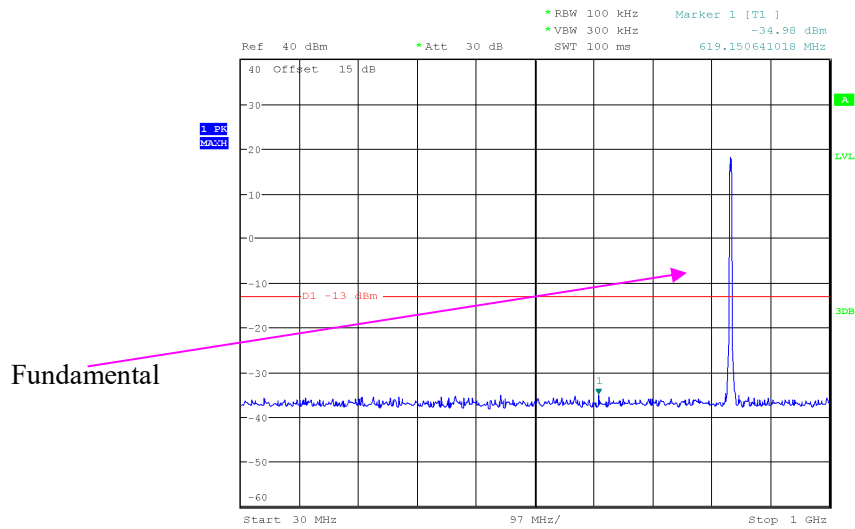
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 18:39:16

1 GHz – 9 GHz WCDMA (HSDPA) Mode, Middle channel



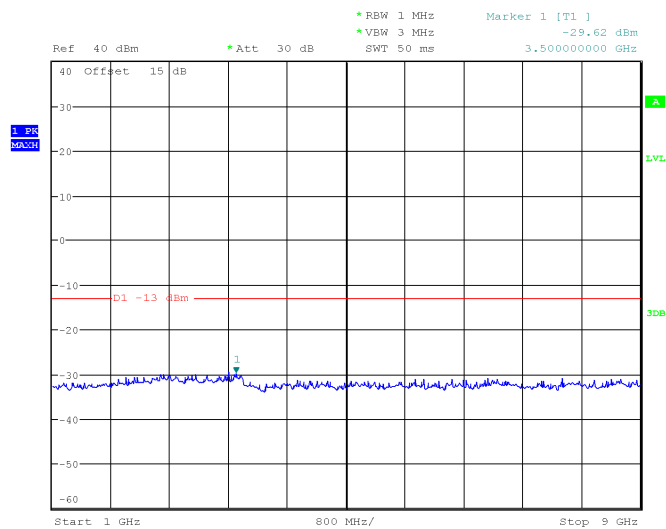
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 18:55:56

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



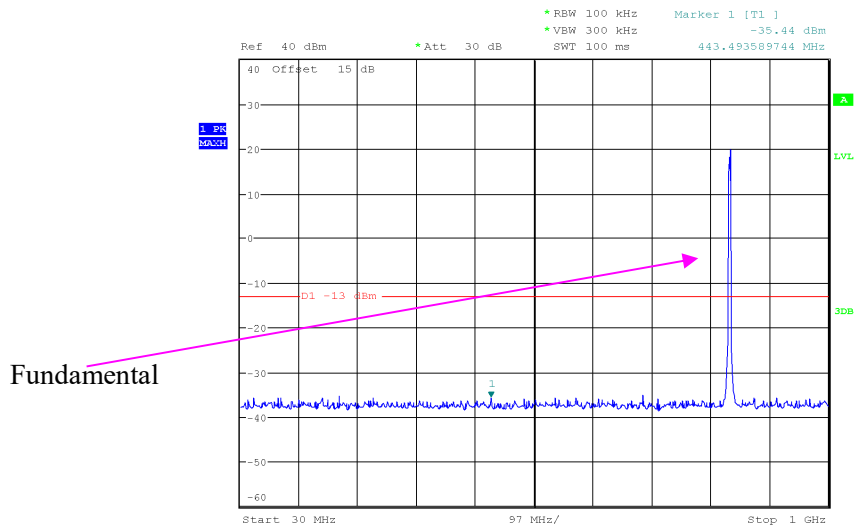
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:49:06

1 GHz – 9 GHz WCDMA (HSUPA) Mode, Middle channel



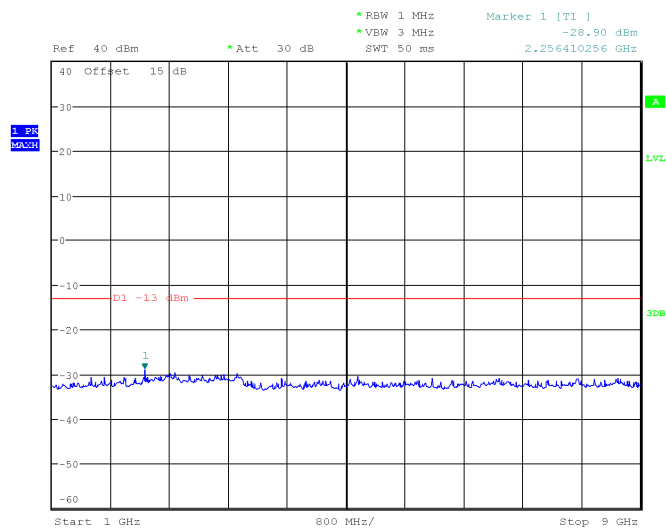
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:08:42

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



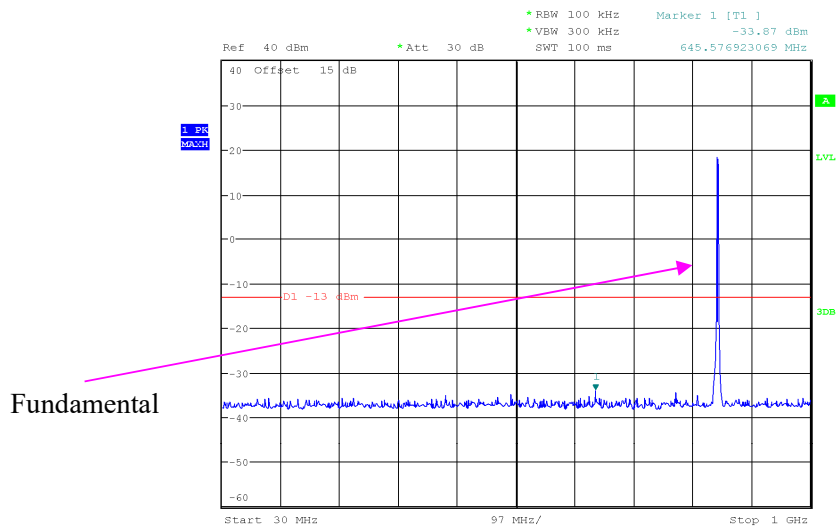
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:42:37

1 GHz – 9 GHz WCDMA (HSPA+) Mode, Middle channel



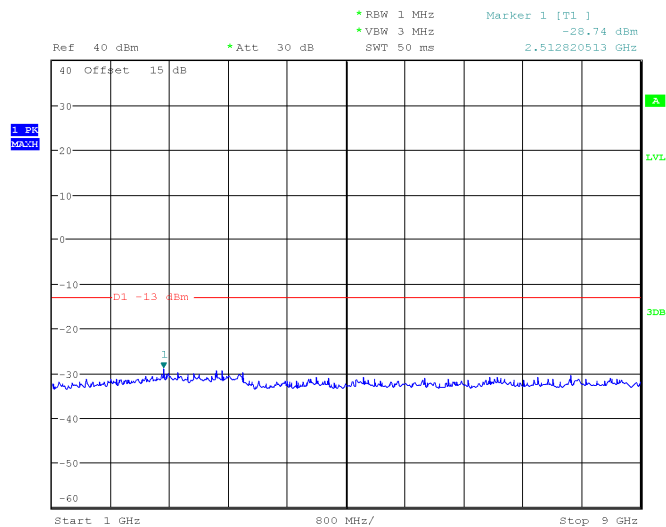
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:00:17

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



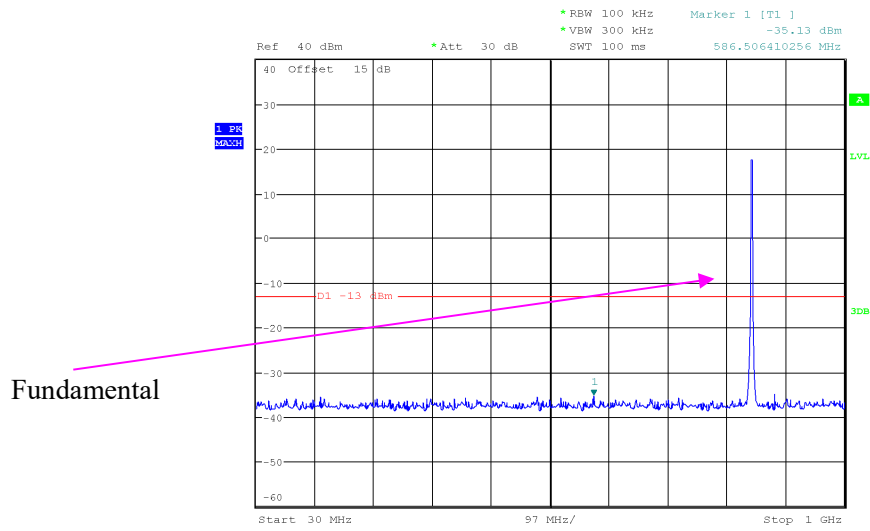
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:46:30

1 GHz – 9 GHz WCDMA (Rel 99) Mode, High channel



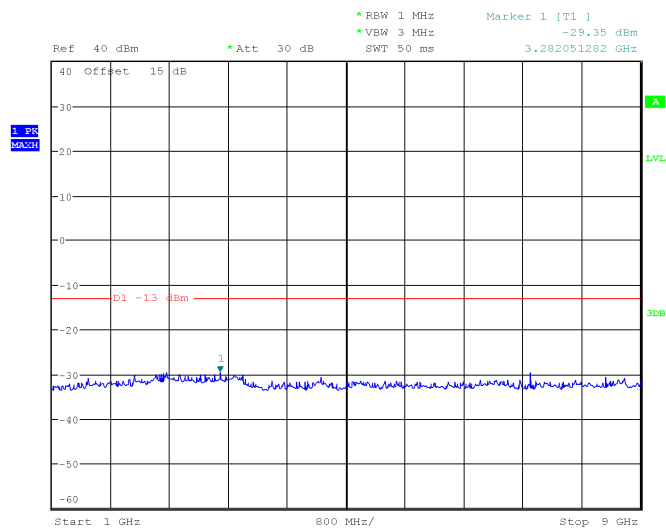
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:06:06

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



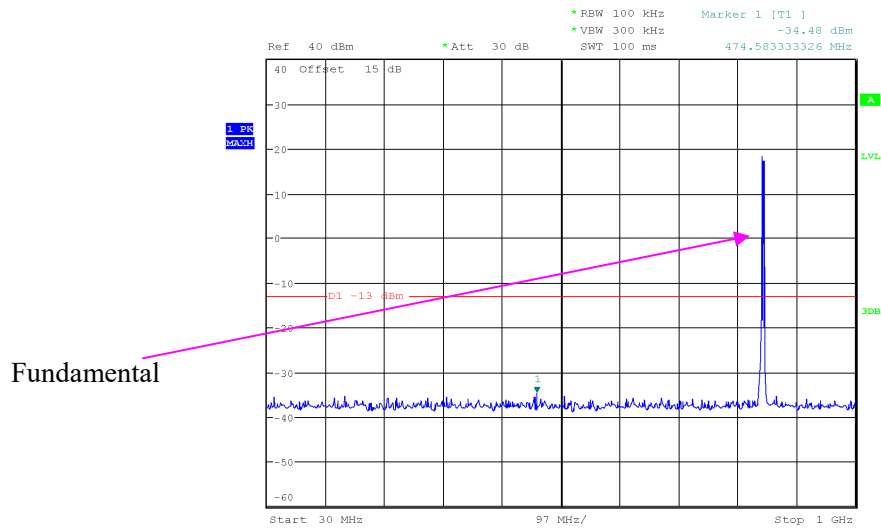
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:40:21

1 GHz – 9 GHz WCDMA (HSDPA) Mode, High channel



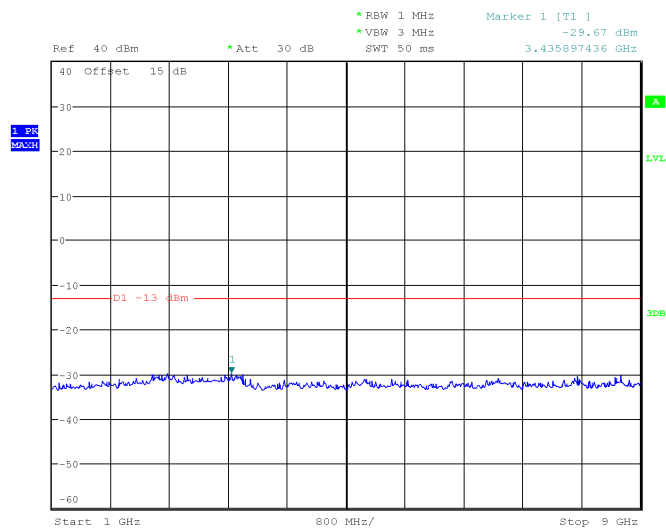
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:57:28

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



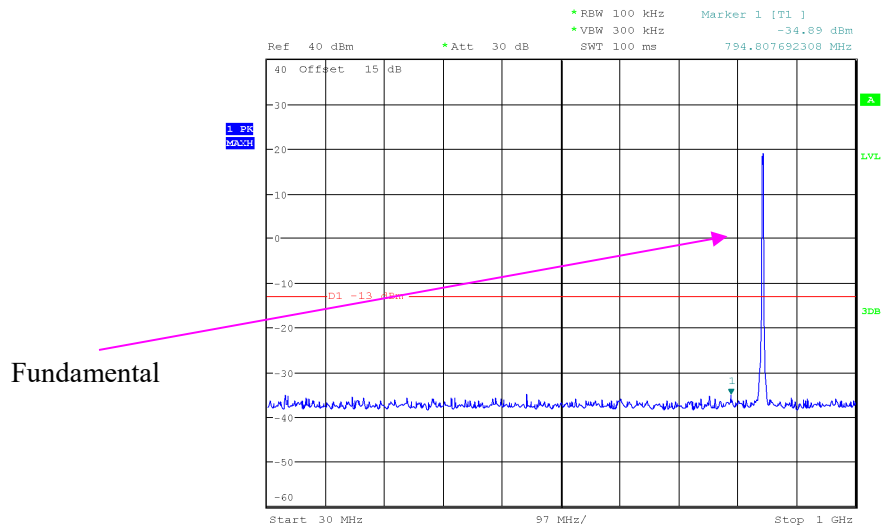
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:49:57

1 GHz – 9 GHz WCDMA (HSUPA) Mode, High channel



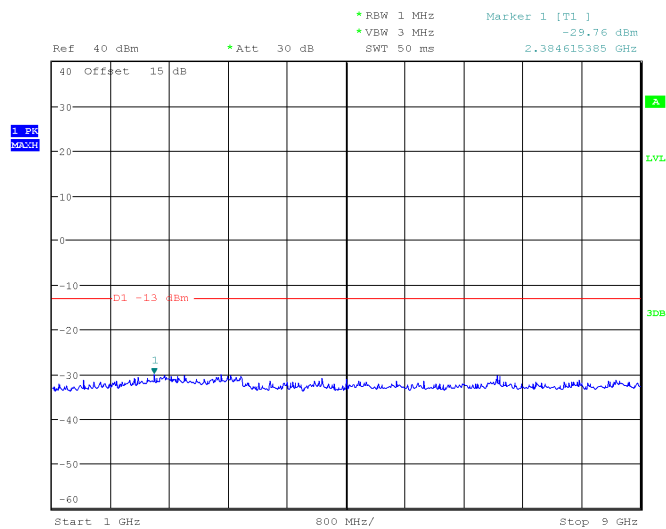
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:09:56

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:43:35

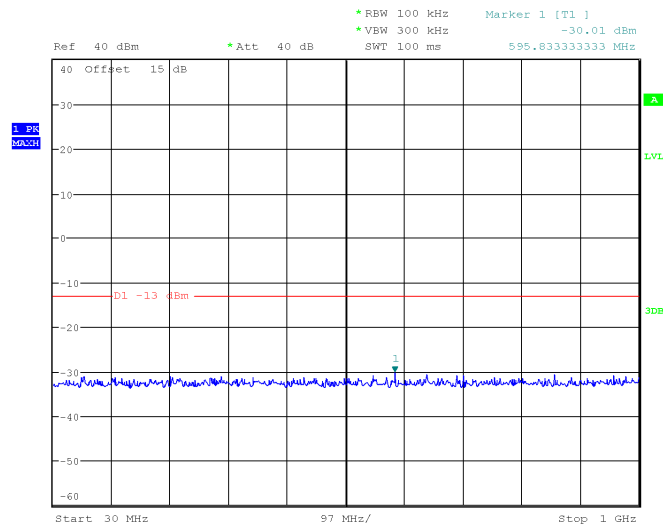
1 GHz – 9 GHz WCDMA (HSPA+) Mode, High channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 19:01:29

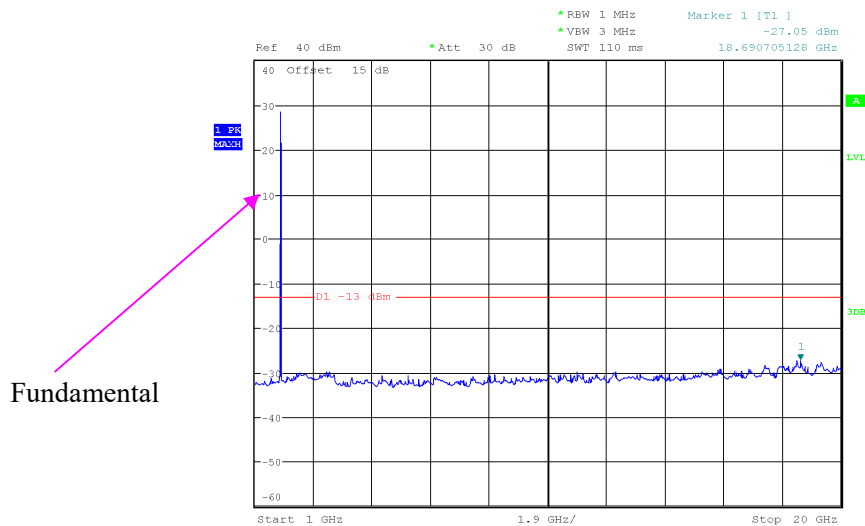
PCS 1900 Band:

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



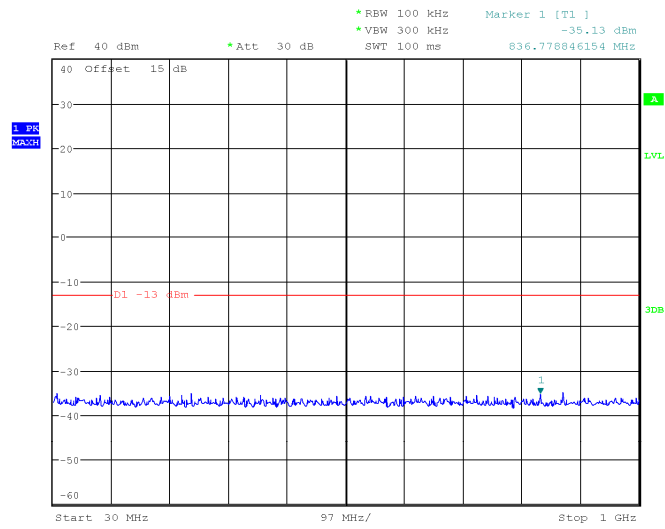
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:35:23

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



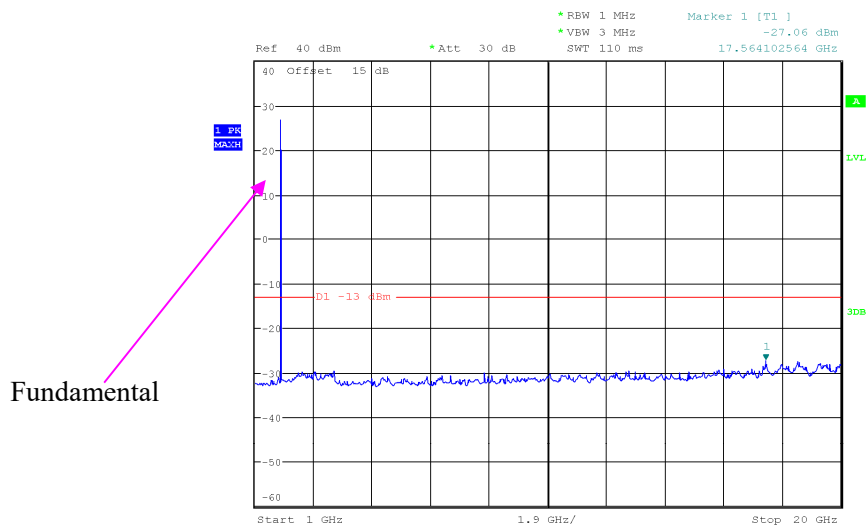
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:44:12

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



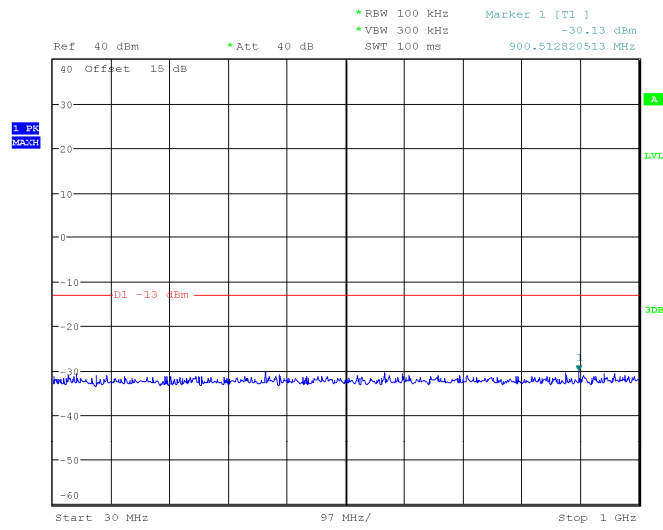
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:58:26

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



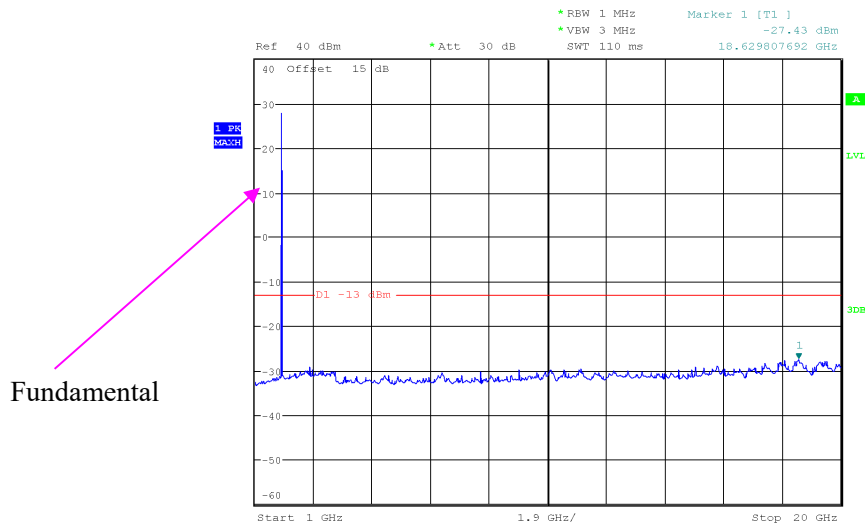
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:48:13

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



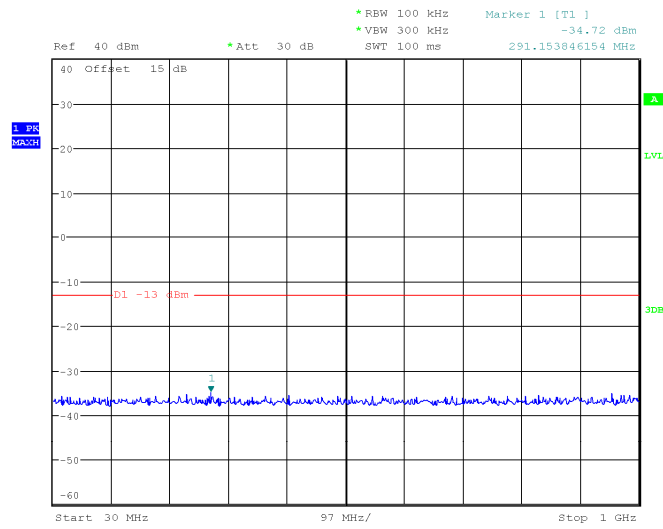
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:36:51

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



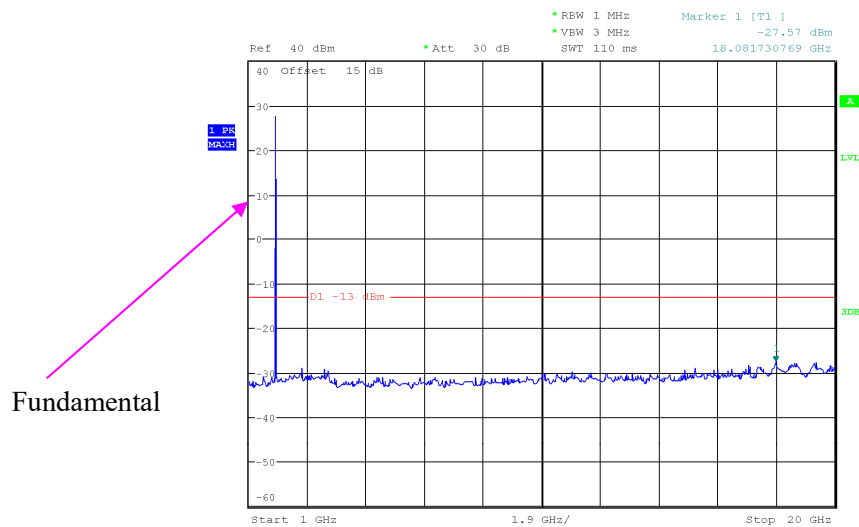
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:42:27

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



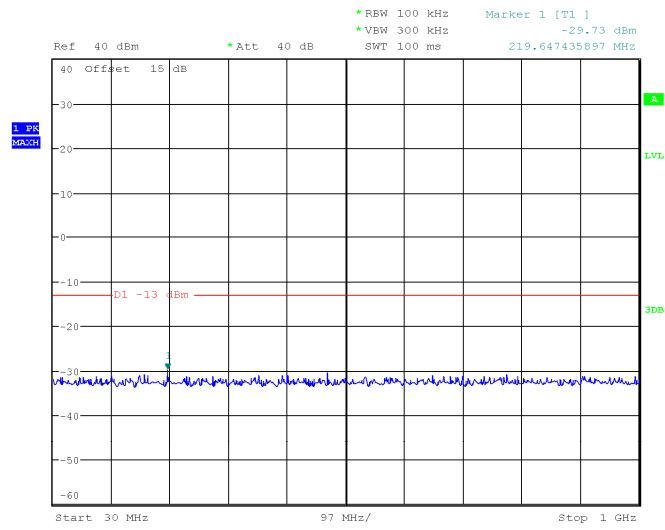
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:57:29

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



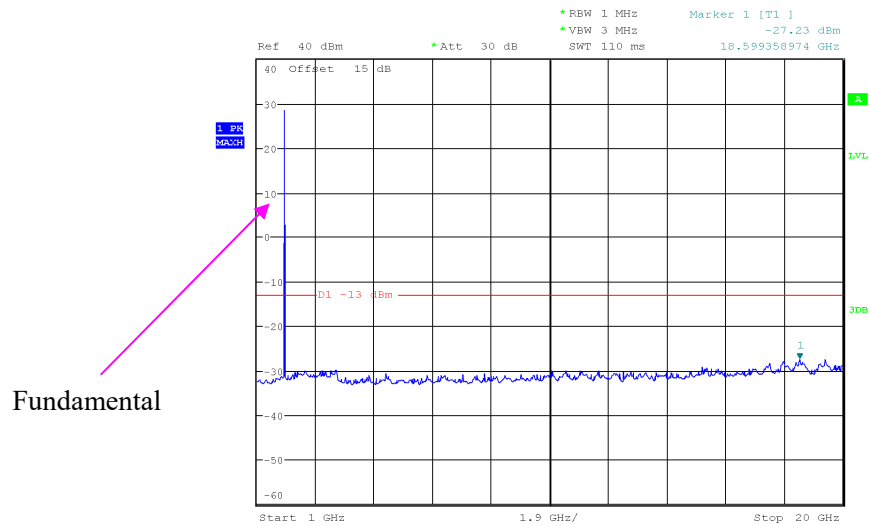
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 11:49:44

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:37:51

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:40:51

* RBW 100 kHz
 * VEW 300 kHz
 SWT 100 ms

Ref 40 dBm
 * Att 30 dB
 Marker 1 [T1]
 -34.06 dBm
 783.926282051 MHz

40 Offset 15 dB
 -30
 -20
 -10
 0
 -10
 -20
 -30
 -40
 -50
 -60

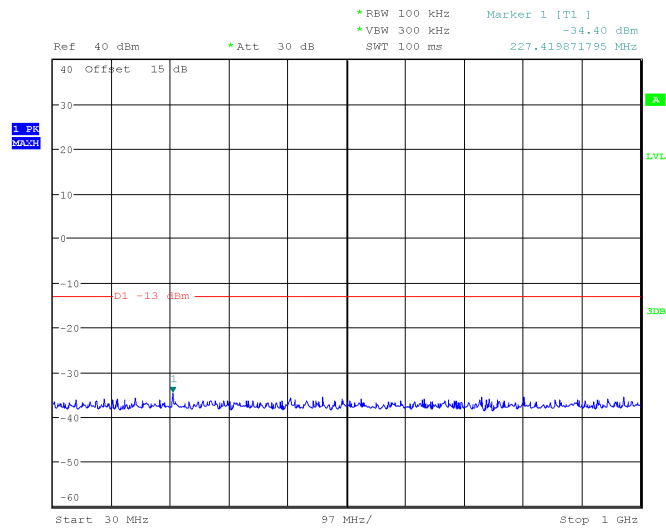
D1 -13 dBm
 783.926282051 MHz

Start 30 MHz
 97 MHz/
 Stop 1 GHz

Page 97 of 153

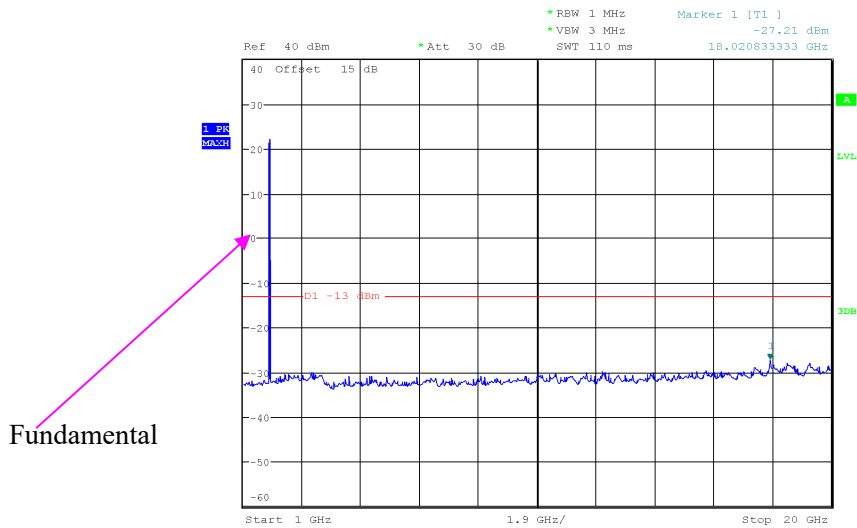
WCDMA Band II:

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



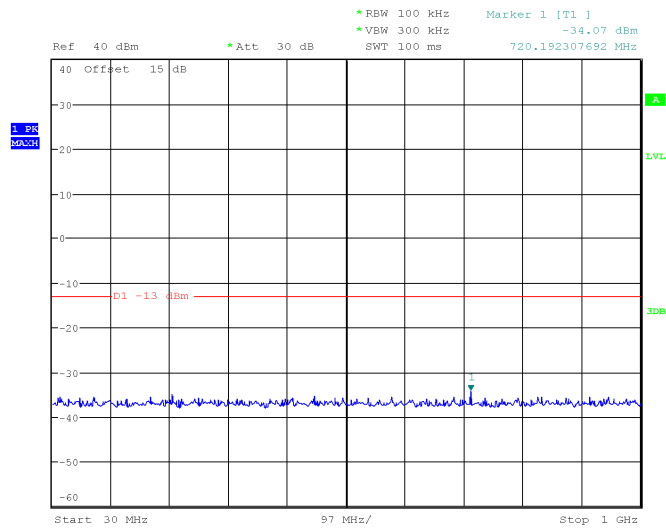
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:02:04

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



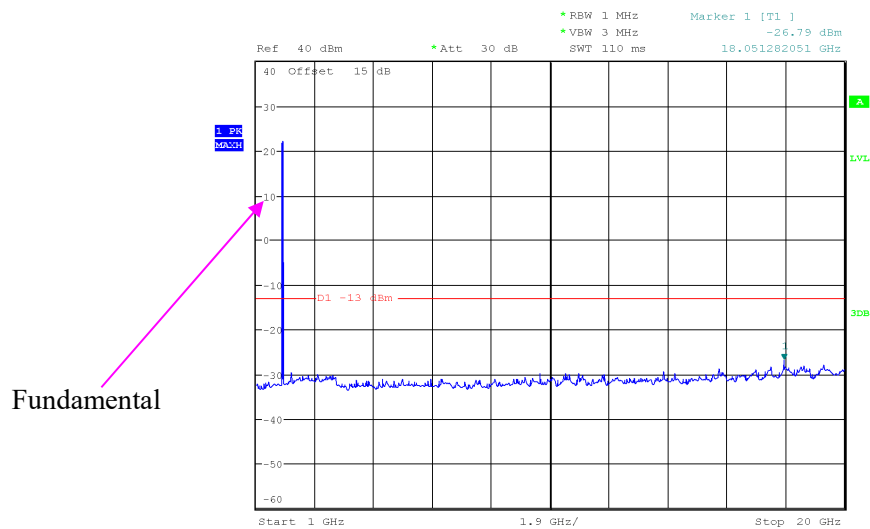
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:19:39

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



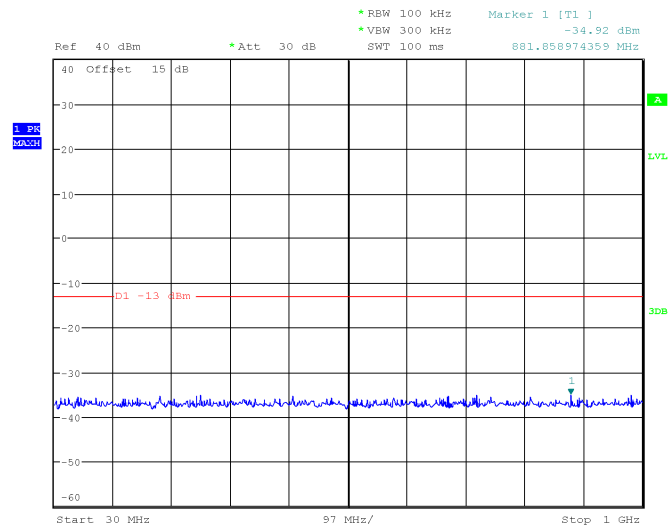
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 16:54:26

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



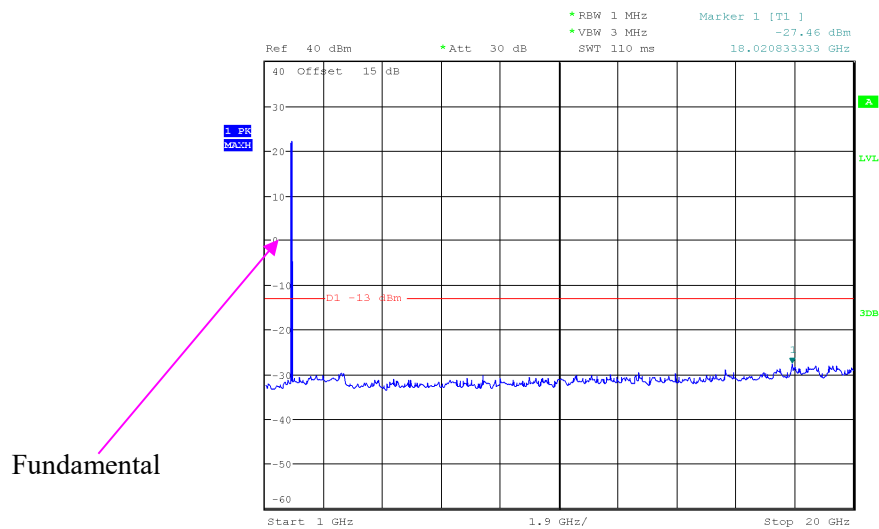
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:14:33

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



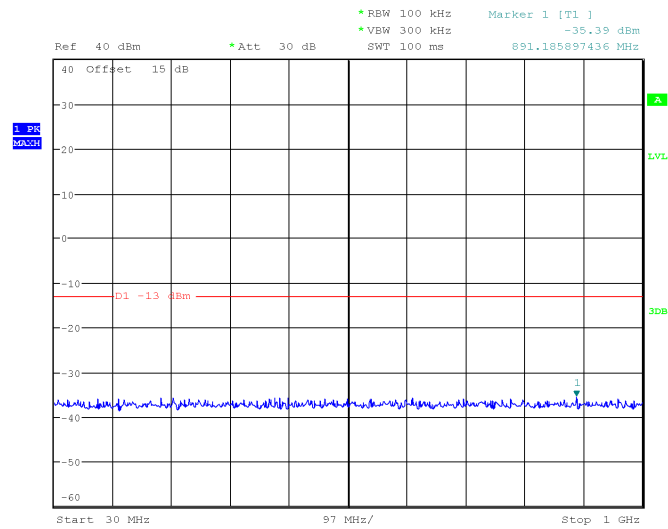
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:05:22

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



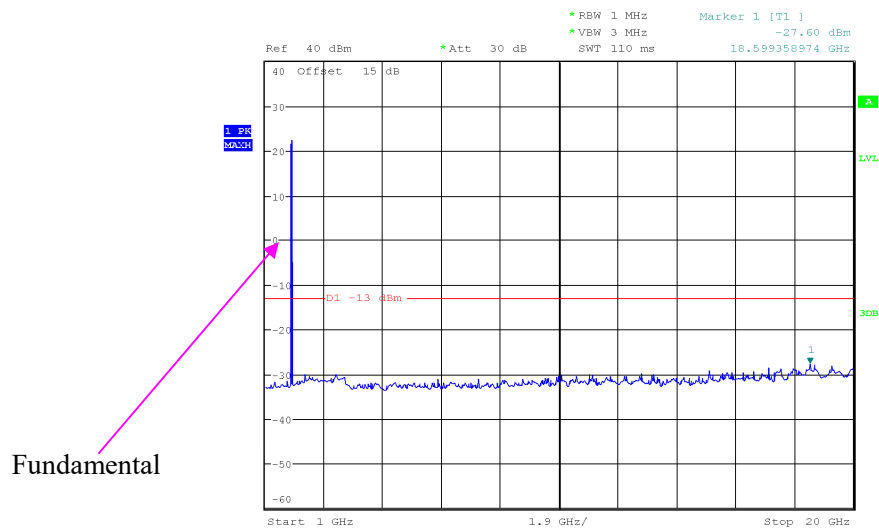
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:23:59

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



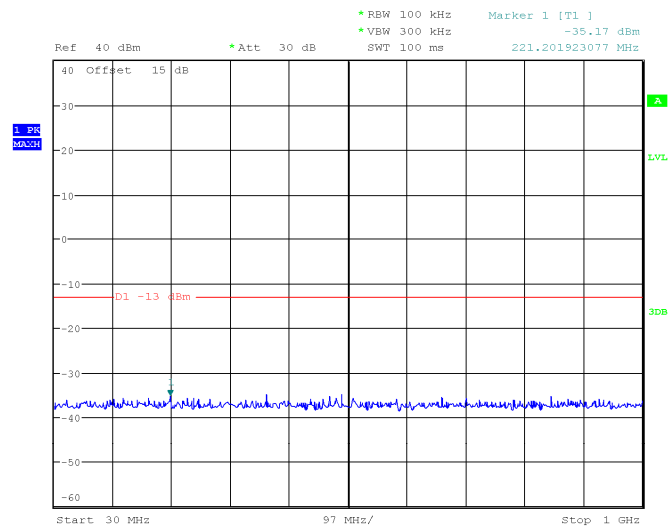
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:58:24

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



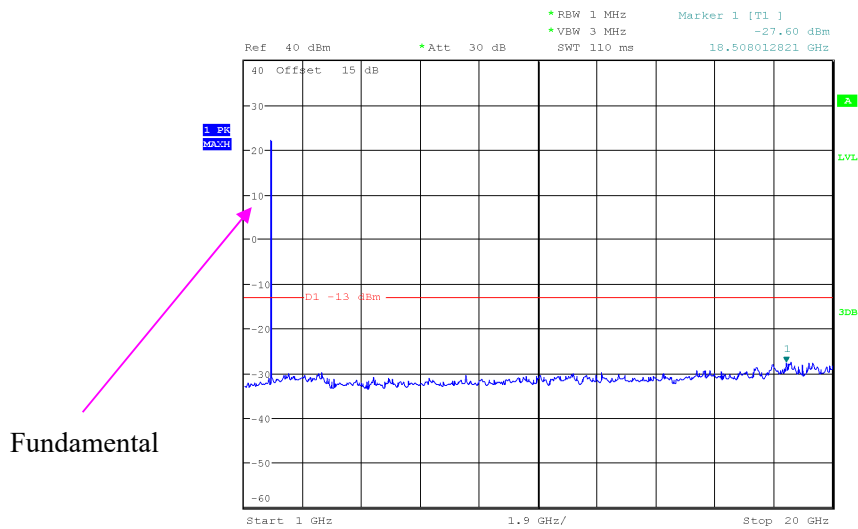
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:16:11

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



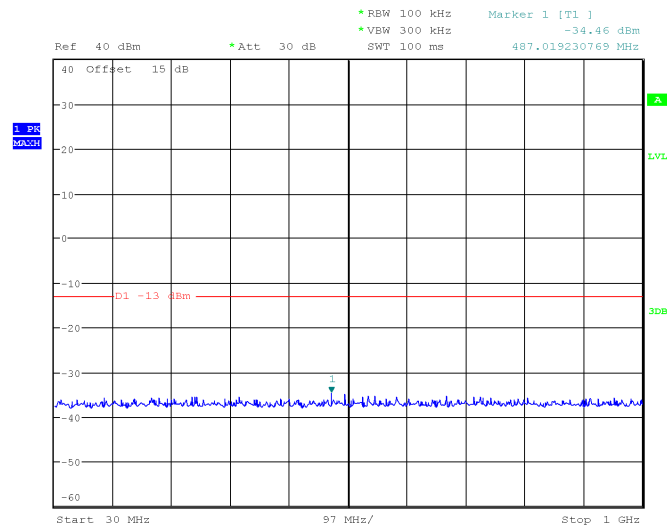
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:02:59

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



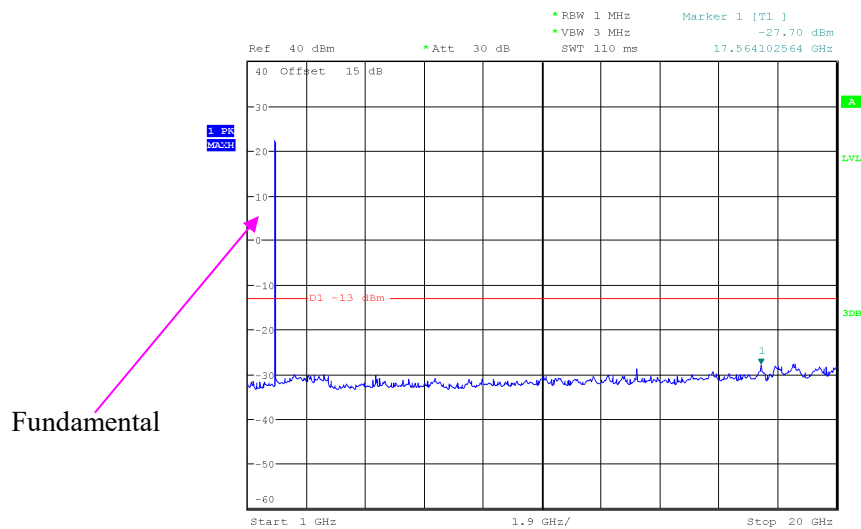
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:21:00

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:55:42

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:11:29

1 PR
MAGN

Ref 40 dBm *Att 30 dB

*RBW 1 MHz
*VBW 3 MHz
SWT 110 ms

Marker 1 [T1]
-27.20 dBm
19.421474359 GHz

40 Offset dB 15 dB

30

20

10

0

-10

-20

-30

-40

-50

-60

D1 -13 dBm

1

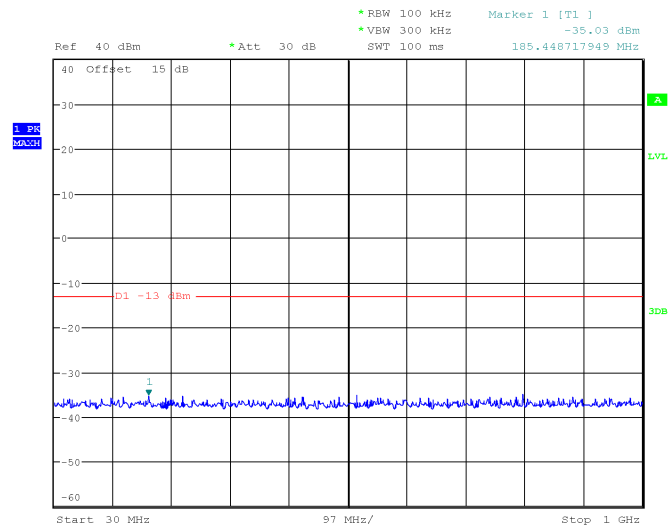
3DB

A

Start 1 GHz 1.9 GHz/ Stop 20 GHz

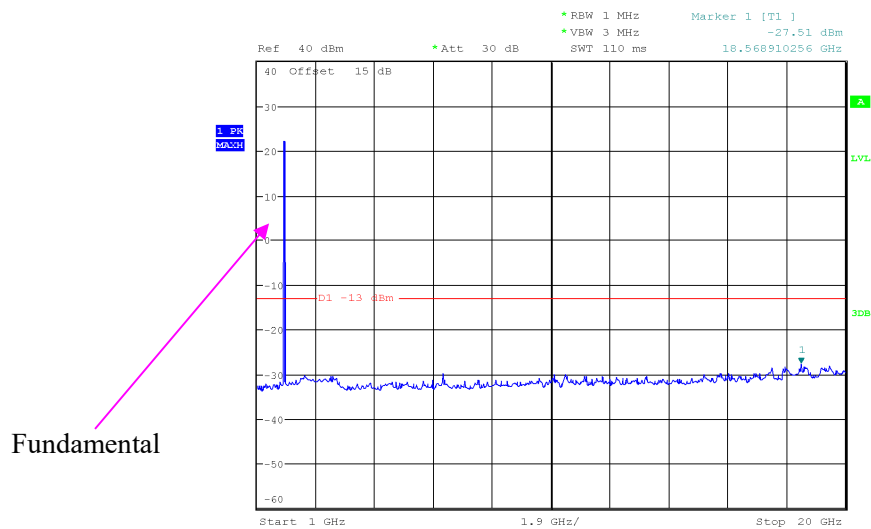
Page 104 of 153

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



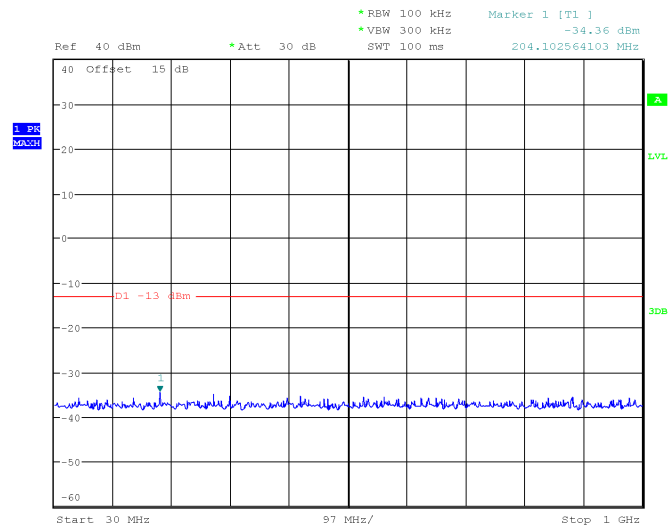
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:59:38

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



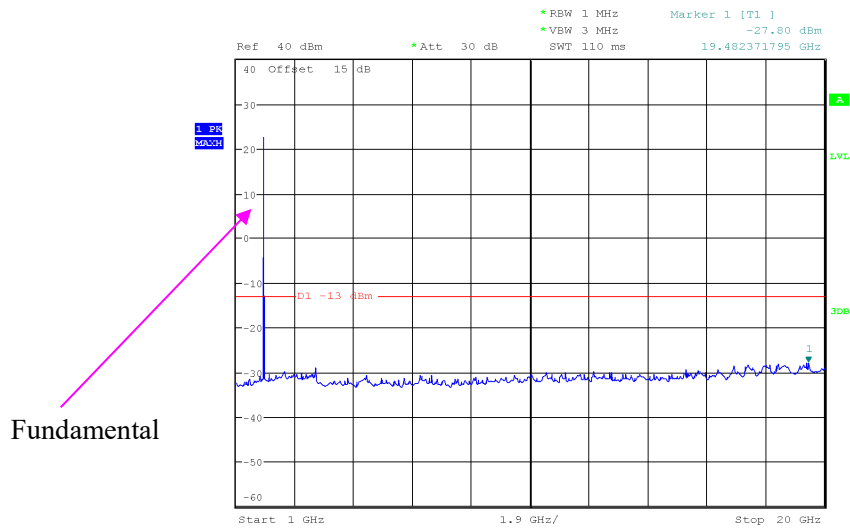
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:17:10

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



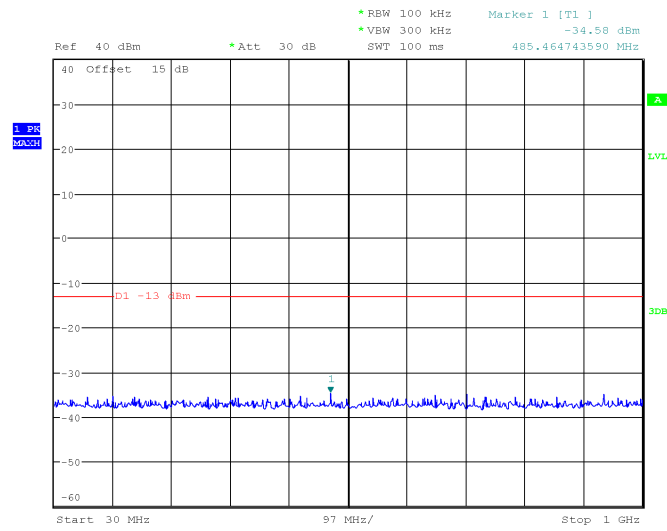
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:04:05

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



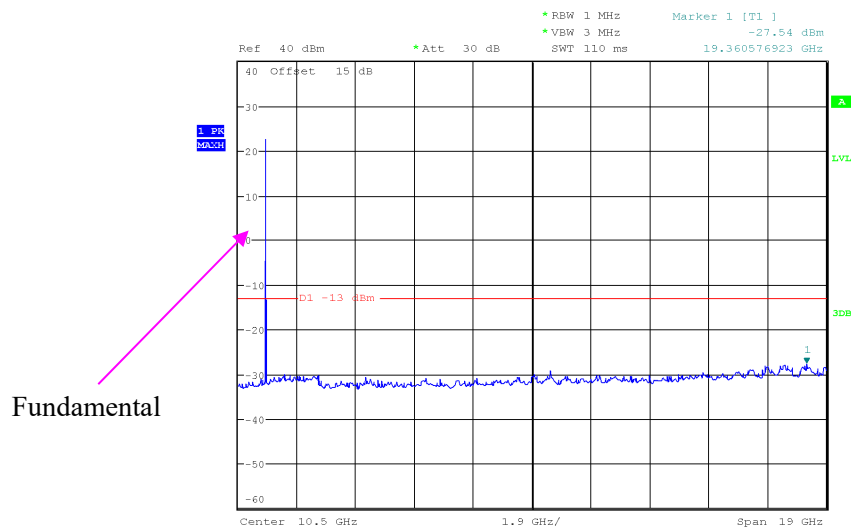
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:22:24

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



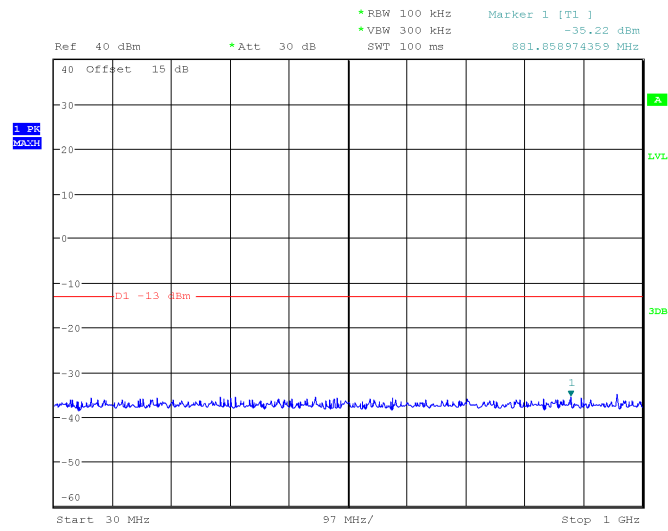
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:57:03

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



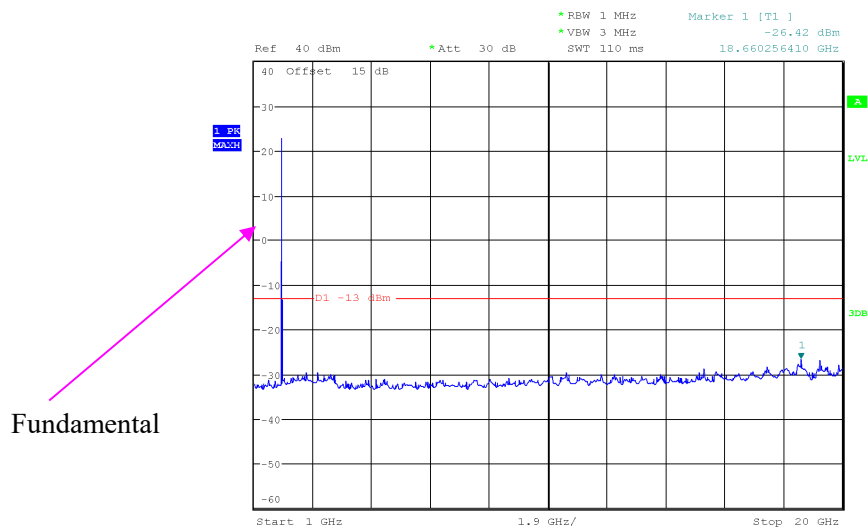
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:10:01

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



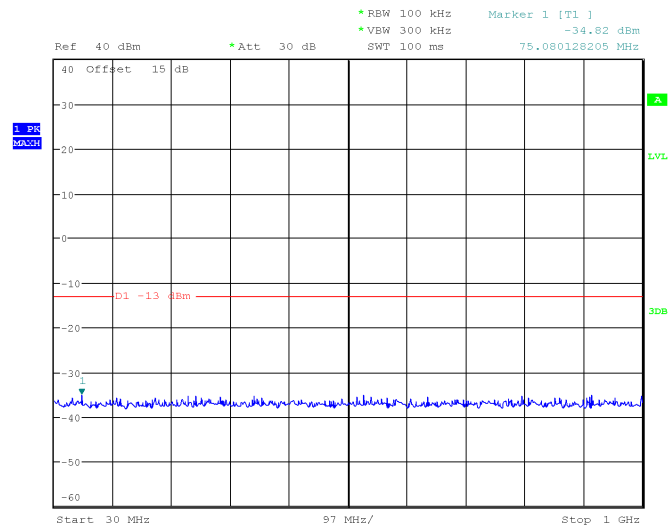
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:07:40

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



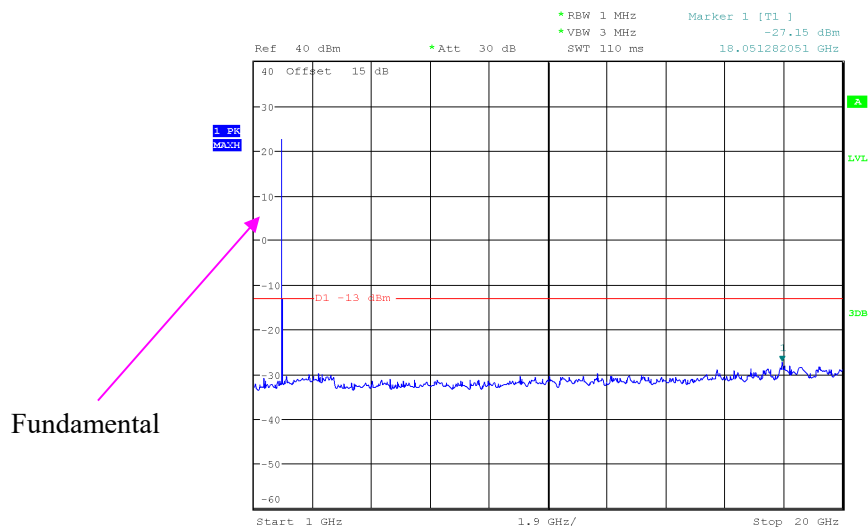
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:26:38

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:01:12

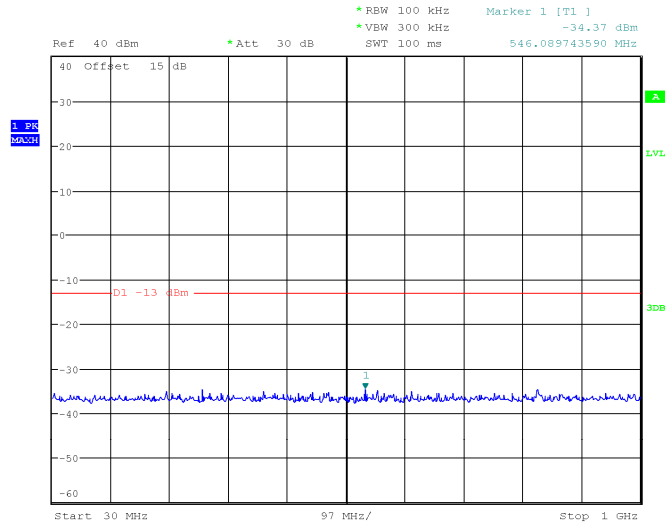
1 GHz – 20 GHz WCDMA (HSPA+) Mode, High channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:18:28

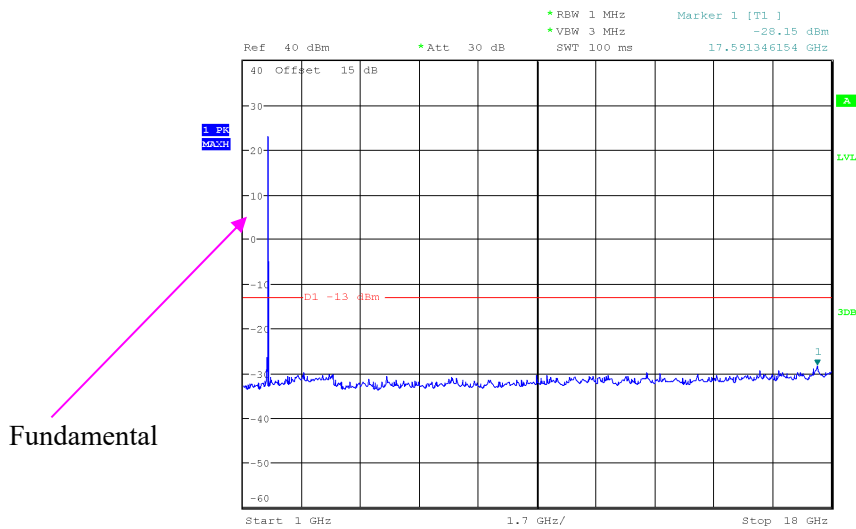
WCDMA Band IV:

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:05:14

1 GHz – 18 GHz WCDMA (Rel 99) Mode, Low channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:40:07

Ref 40 dBm *Att 30 dB SWT 100 ms 284.935897436 MHz

40 Offset 15 dB

30

20

10

0

-10

-20

-30

-40

-50

-60

Start 30 MHz 97 MHz/ Stop 1 GHz

Marker 1 [T1] -34.96 dBm

VBW 300 kHz

RBW 100 kHz

D1 -13 dBm

1 dB

1 PR

ROUGH

LVL

3DB

Ref 40 dBm * Att 30 dB

RBW 1 MHz Marker 1 [T1]
VBW 3 MHz -28.54 dBm
SWT 100 ms 17.53658974 GHz

40 Offset 15 dB

1 PK
MASH

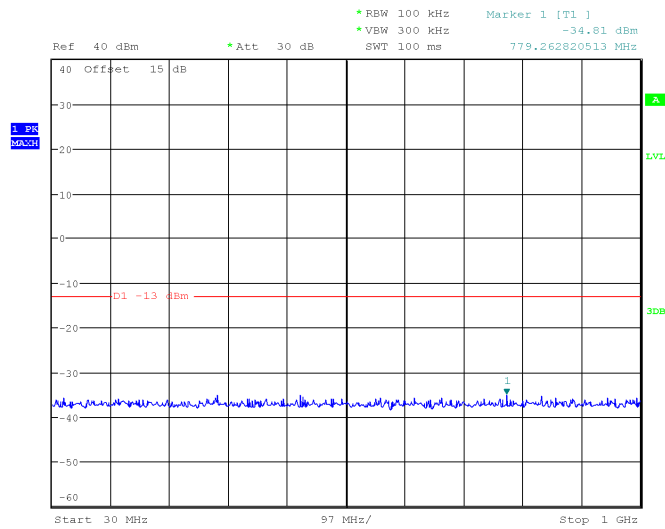
D1 -13 dBm

Fundamental

Start 1 GHz 1.7 GHz/ Stop 18 GHz

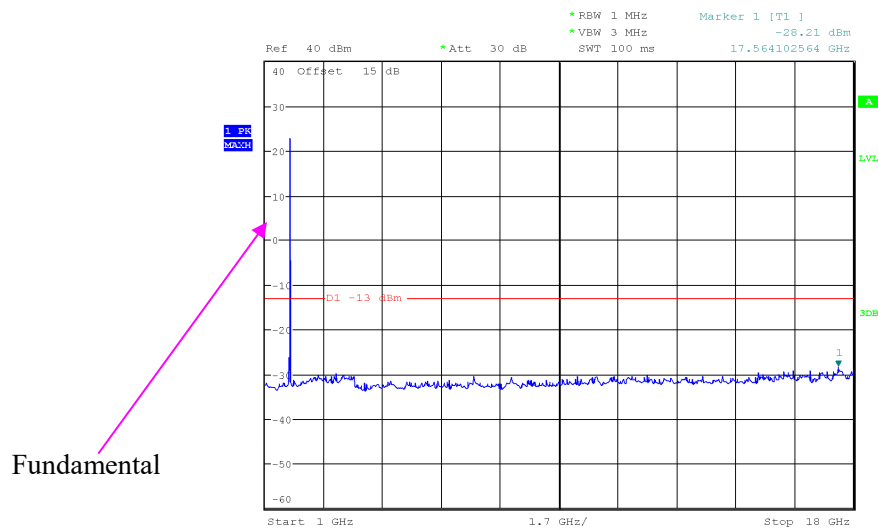
Page 111 of 153

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



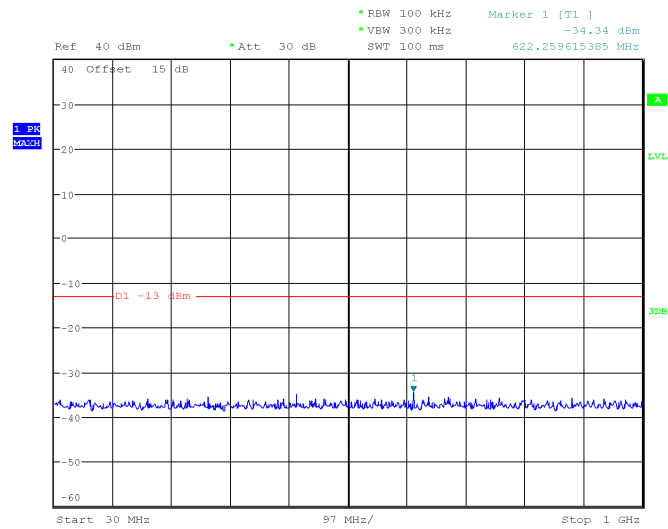
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 18:32:37

1 GHz – 18 GHz WCDMA (HSUPA) Mode, Low channel



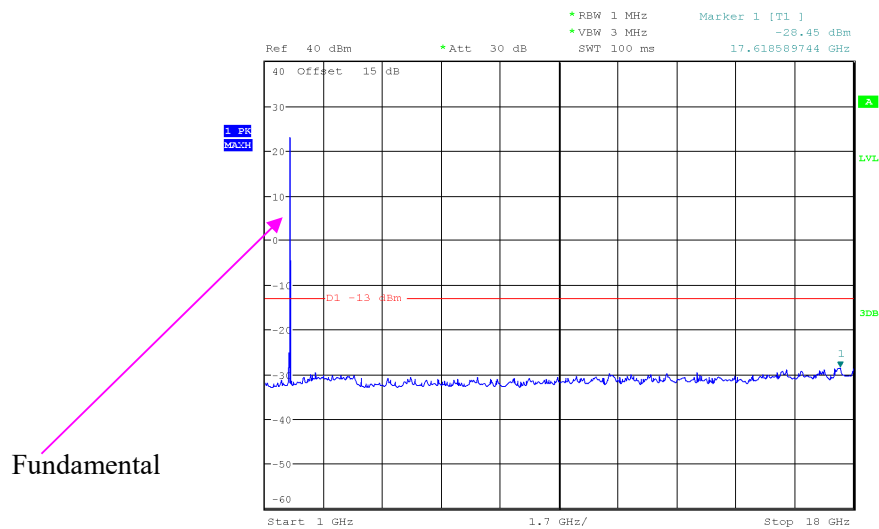
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:43:37

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



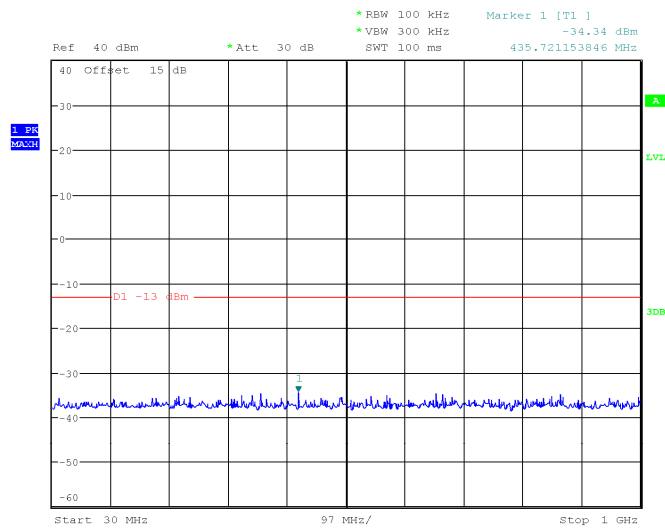
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:55:30

1 GHz – 18 GHz WCDMA (HSPA+) Mode, Low channel



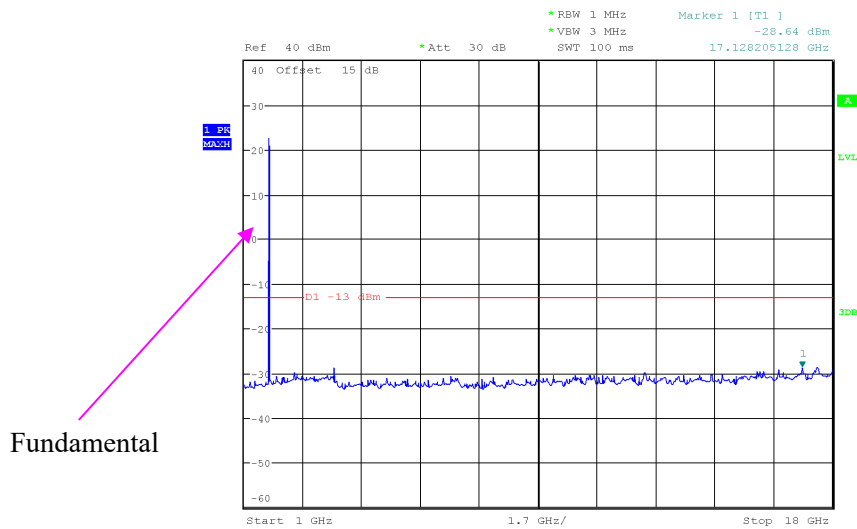
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:35:55

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



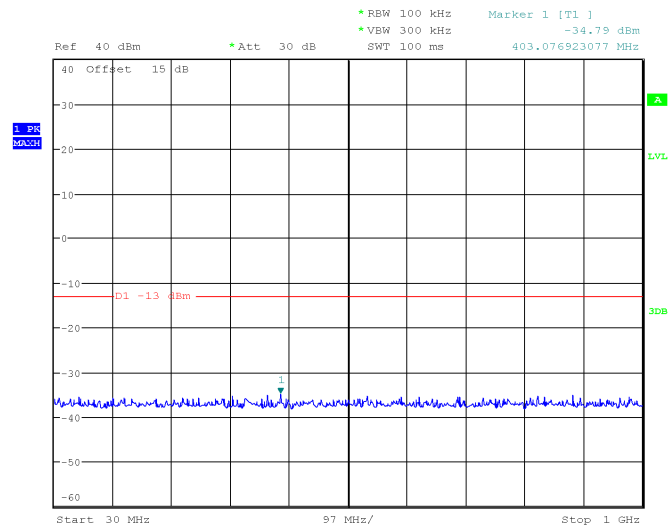
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:06:28

1 GHz – 18 GHz WCDMA (Rel 99) Mode, Middle channel



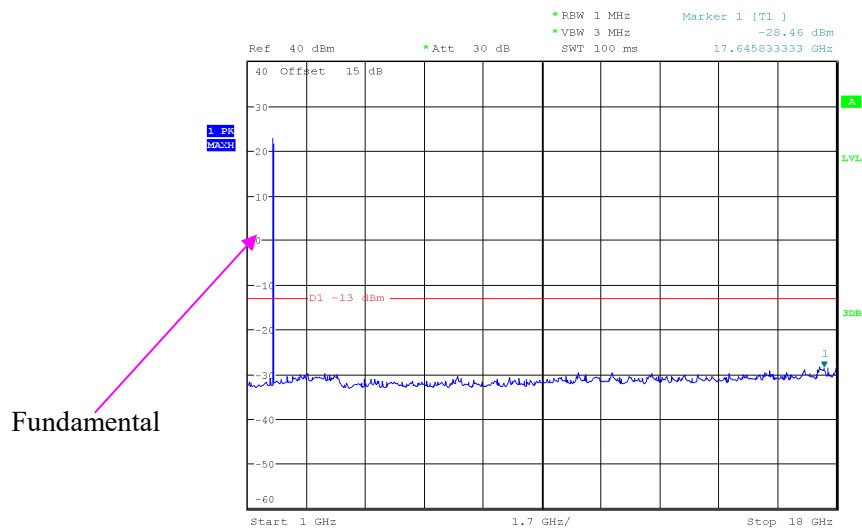
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:41:18

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



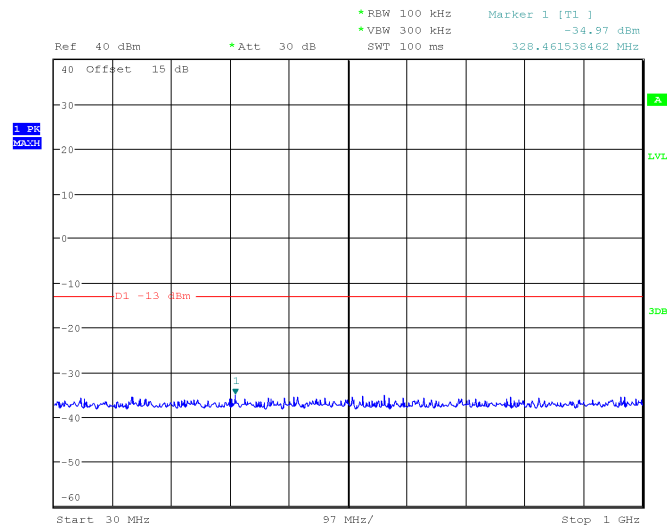
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:52:44

1 GHz – 18 GHz WCDMA (HSDPA) Mode, Middle channel



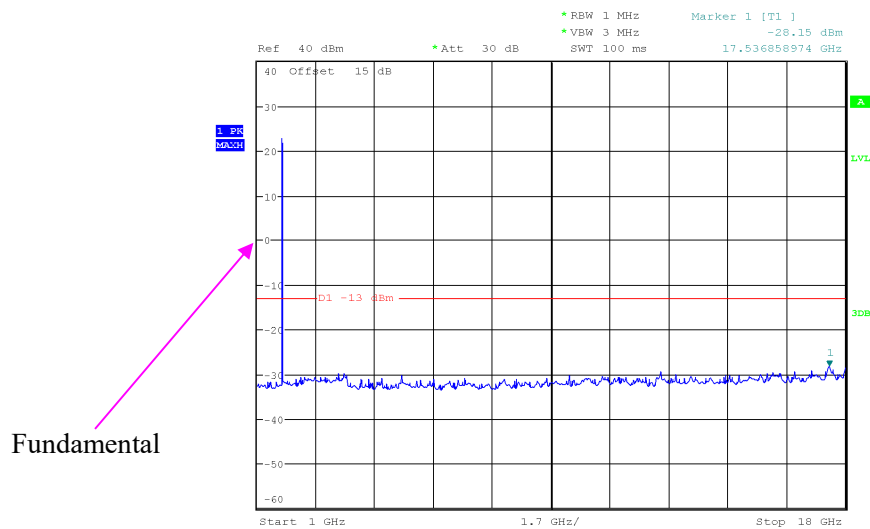
ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 17:32:47

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



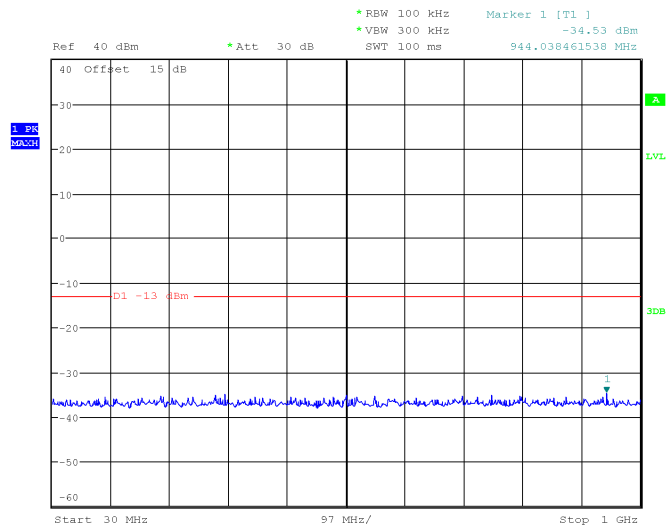
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:34:17

1 GHz – 18 GHz WCDMA (HSUPA) Mode, Middle channel



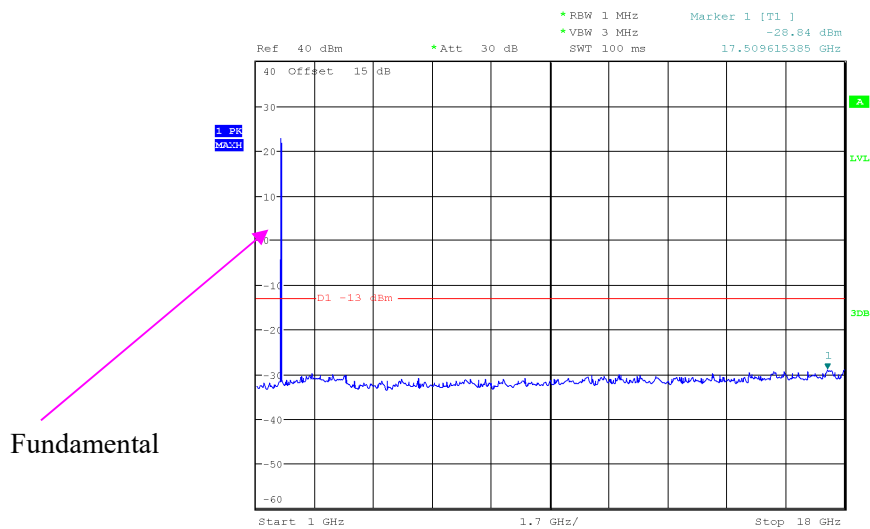
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:45:17

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



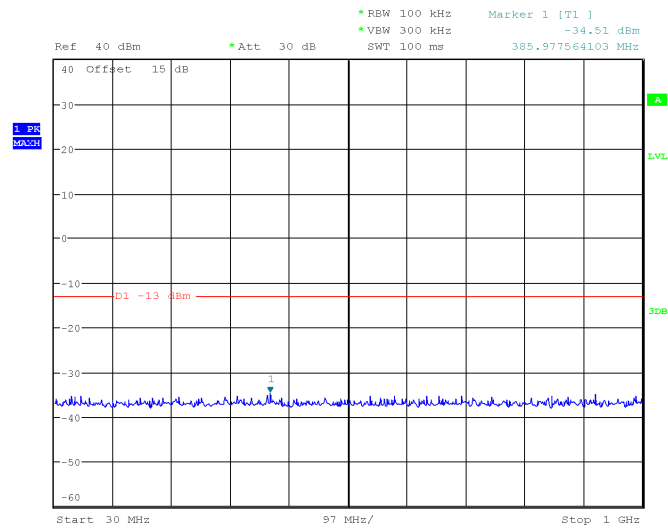
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:57:14

1 GHz – 18 GHz WCDMA (HSPA+) Mode, Middle channel



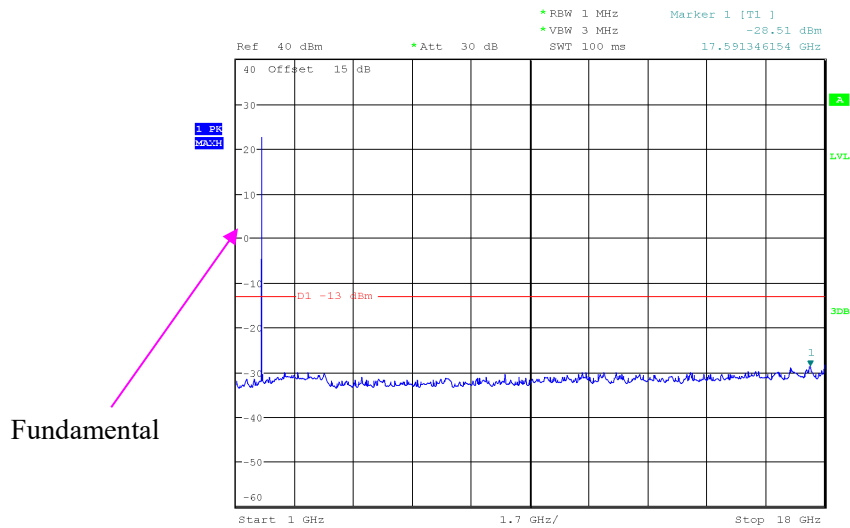
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:37:29

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



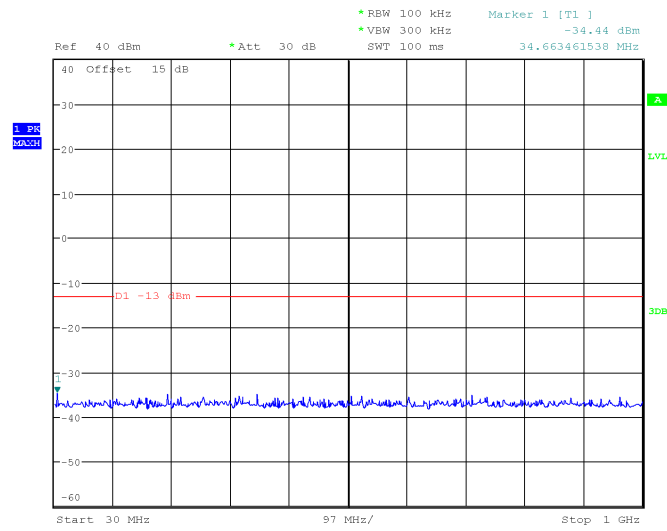
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:08:01

1 GHz – 18 GHz WCDMA (Rel 99) Mode, High channel



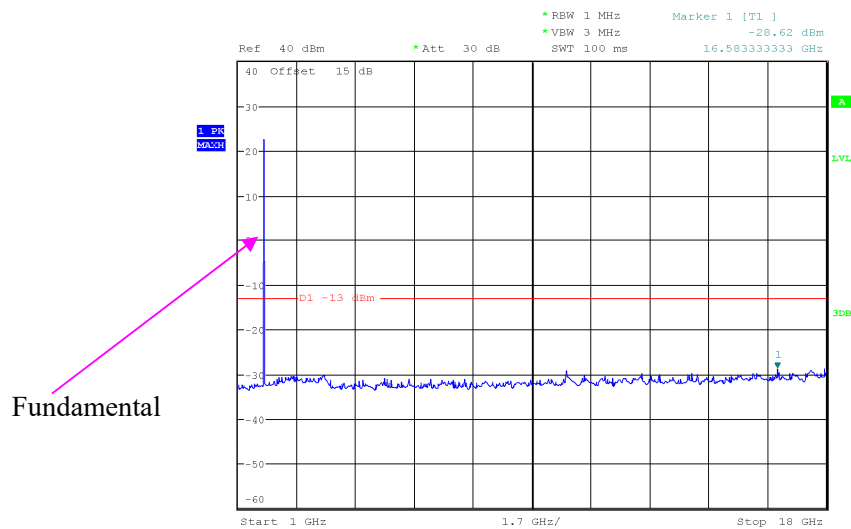
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:42:21

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



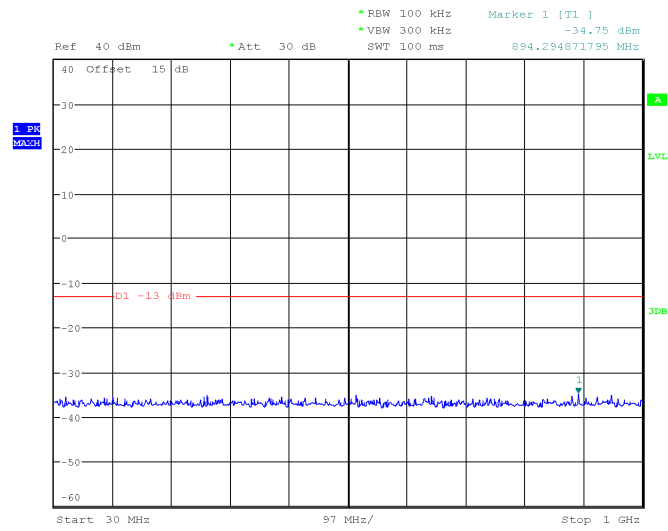
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:54:27

1 GHz – 18 GHz WCDMA (HSDPA) Mode, High channel



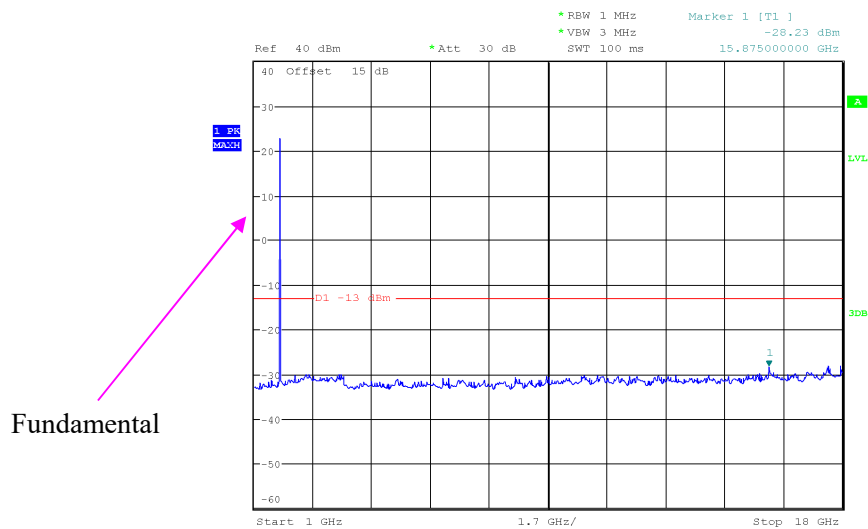
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:34:01

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



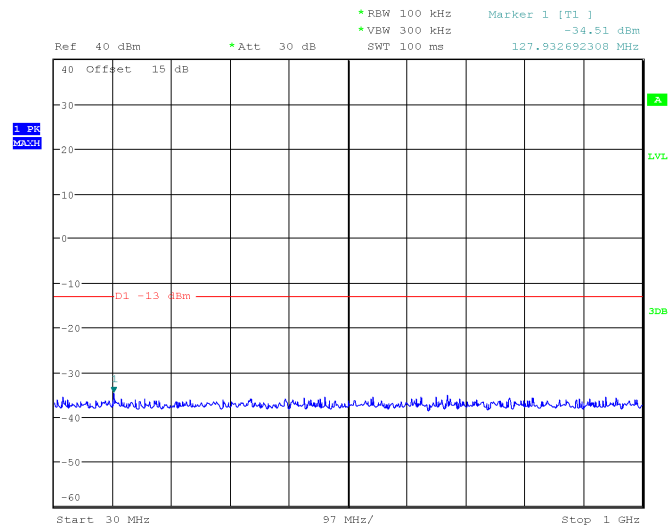
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 18:35:43

1 GHz – 18 GHz WCDMA (HSUPA) Mode, High channel



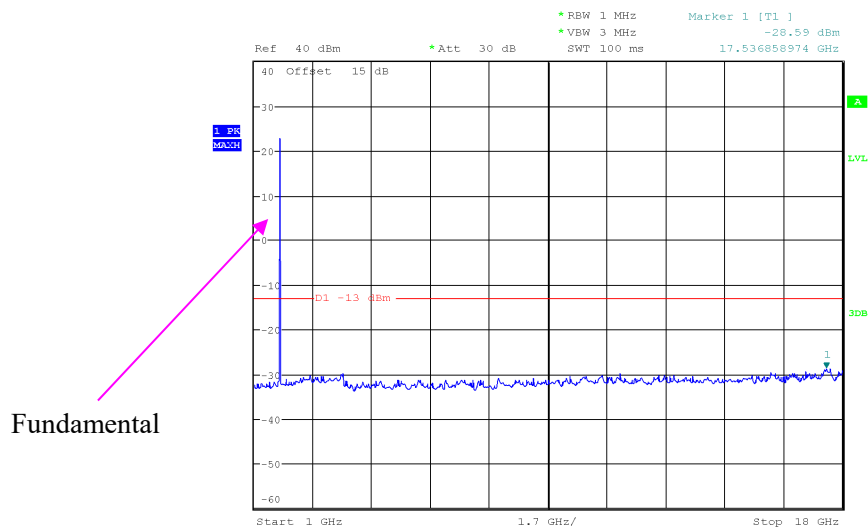
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:46:28

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



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:59:34

1 GHz – 18 GHz WCDMA (HSPA+) Mode, High channel



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 17:38:37

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										
238.40	47.23	90	150	H	-55.17	0.44	-2.64	-58.25	-13	45.25
238.40	52.30	140	200	V	-56.33	0.44	-2.64	-59.41	-13	46.41
1648.40	66.61	240	100	H	-46.74	0.84	8.44	-39.14	-13	26.14
1648.40	65.44	354	200	V	-47.91	0.84	8.44	-40.31	-13	27.31
GPRS Mode, Middle channel										
238.40	47.56	272	200	H	-54.84	0.44	-2.64	-57.92	-13	44.92
238.40	52.60	178	200	V	-56.03	0.44	-2.64	-59.11	-13	46.11
1673.20	65.33	178	200	H	-47.84	0.84	8.48	-40.20	-13	27.20
1673.20	64.18	350	100	V	-48.99	0.84	8.48	-41.35	-13	28.35
GPRS Mode, High channel										
238.40	47.40	137	150	H	-55.00	0.44	-2.64	-58.08	-13	45.08
238.40	52.41	192	200	V	-56.22	0.44	-2.64	-59.30	-13	46.30
1697.60	64.83	48	200	H	-48.17	0.84	8.52	-40.49	-13	27.49
1697.60	63.97	159	200	V	-49.03	0.84	8.52	-41.35	-13	28.35

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										
242.60	46.44	314	100	H	-55.60	0.44	-2.50	-58.54	-13	45.54
242.60	52.69	256	150	V	-56.33	0.44	-2.50	-59.27	-13	46.27
1652.80	65.02	156	200	H	-48.29	0.84	8.44	-40.69	-13	27.69
1652.80	64.24	217	200	V	-49.07	0.84	8.44	-41.47	-13	28.47
WCDMA Mode, Middle channel										
242.60	45.74	122	150	H	-56.30	0.44	-2.50	-59.24	-13	46.24
242.60	51.71	313	150	V	-57.31	0.44	-2.50	-60.25	-13	47.25
1673.20	65.22	324	200	H	-47.95	0.84	8.48	-40.31	-13	27.31
1673.20	64.05	342	100	V	-49.12	0.84	8.48	-41.48	-13	28.48
WCDMA Mode, High channel										
242.60	46.30	285	100	H	-55.74	0.44	-2.50	-58.68	-13	45.68
242.60	52.82	140	200	V	-56.20	0.44	-2.50	-59.14	-13	46.14
1693.20	64.91	343	100	H	-48.12	0.84	8.51	-40.45	-13	27.45
1693.20	63.73	50	200	V	-49.30	0.84	8.51	-41.63	-13	28.63

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										
253.80	45.09	241	200	H	-56.77	0.44	-2.24	-59.45	-13	46.45
253.80	51.84	129	200	V	-57.58	0.44	-2.24	-60.26	-13	47.26
3700.40	58.83	8	100	H	-48.14	0.95	9.78	-39.31	-13	26.31
3700.40	56.67	171	100	V	-50.30	0.95	9.78	-41.47	-13	28.47
GPRS Mode, Middle channel										
253.80	45.66	284	100	H	-56.20	0.44	-2.24	-58.88	-13	45.88
253.80	52.15	108	150	V	-57.27	0.44	-2.24	-59.95	-13	46.95
3760.00	60.75	33	200	H	-46.03	0.95	9.74	-37.24	-13	24.24
3760.00	58.41	87	200	V	-48.37	0.95	9.74	-39.58	-13	26.58
GPRS Mode, High channel										
253.80	45.30	227	200	H	-56.56	0.44	-2.24	-59.24	-13	46.24
253.80	51.97	161	150	V	-57.45	0.44	-2.24	-60.13	-13	47.13
3819.60	59.36	275	150	H	-47.23	0.96	9.71	-38.48	-13	25.48
3819.60	56.99	222	150	V	-49.60	0.96	9.71	-40.85	-13	27.85

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										
235.60	46.12	261	200	H	-56.51	0.43	-2.74	-59.68	-13	46.68
235.60	50.80	337	150	V	-57.57	0.43	-2.74	-60.74	-13	47.74
3704.80	59.86	187	100	H	-47.09	0.95	9.78	-38.26	-13	25.26
3704.80	58.33	74	100	V	-48.62	0.95	9.78	-39.79	-13	26.79
WCDMA Mode, Middle channel										
235.60	45.82	67	200	H	-56.81	0.43	-2.74	-59.98	-13	46.98
235.60	50.69	270	200	V	-57.68	0.43	-2.74	-60.85	-13	47.85
3760.00	58.60	140	100	H	-48.18	0.95	9.74	-39.39	-13	26.39
3760.00	57.43	80	200	V	-49.35	0.95	9.74	-40.56	-13	27.56
WCDMA Mode, High channel										
235.60	46.06	3	200	H	-56.57	0.43	-2.74	-59.74	-13	46.74
235.60	51.20	341	200	V	-57.17	0.43	-2.74	-60.34	-13	47.34
3815.20	57.57	189	200	H	-49.03	0.96	9.71	-40.28	-13	27.28
3815.20	56.22	331	100	V	-50.38	0.96	9.71	-41.63	-13	28.63

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										
286.80	50.07	179	100	H	-55.62	0.45	-2.18	-58.25	-13	45.25
286.80	50.15	123	200	V	-56.85	0.45	-2.18	-59.48	-13	46.48
3424.80	58.04	99	100	H	-49.88	0.93	9.83	-40.98	-13	27.98
3424.80	57.23	242	150	V	-50.69	0.93	9.83	-41.79	-13	28.79
Middle channel										
286.80	49.76	27	150	H	-55.93	0.45	-2.18	-58.56	-13	45.56
286.80	50.36	78	100	V	-56.64	0.45	-2.18	-59.27	-13	46.27
3465.20	57.60	217	150	H	-50.15	0.93	9.87	-41.21	-13	28.21
3465.20	56.33	135	200	V	-51.42	0.93	9.87	-42.48	-13	29.48
High channel										
286.80	49.67	135	100	H	-56.02	0.45	-2.18	-58.65	-13	45.65
286.80	49.89	228	200	V	-57.11	0.45	-2.18	-59.74	-13	46.74
3505.20	57.08	263	200	H	-50.50	0.93	9.90	-41.53	-13	28.53
3505.20	55.74	237	200	V	-51.84	0.93	9.90	-42.87	-13	29.87

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										
245.23	45.19	308	100	H	-56.63	0.44	-2.41	-59.48	-13	46.48
245.23	51.70	180	100	V	-57.56	0.44	-2.41	-60.41	-13	47.41
1649.40	63.39	284	100	H	-49.95	0.84	8.44	-42.35	-13	29.35
1649.40	61.87	253	150	V	-51.47	0.84	8.44	-43.87	-13	30.87
QPSK 1.4MHz Bandwidth Middle Channel										
245.23	45.03	37	150	H	-56.79	0.44	-2.41	-59.64	-13	46.64
245.23	51.83	186	150	V	-57.43	0.44	-2.41	-60.28	-13	47.28
1673.00	63.04	253	200	H	-50.13	0.84	8.48	-42.49	-13	29.49
1673.00	62.12	201	200	V	-51.05	0.84	8.48	-43.41	-13	30.41
QPSK 1.4MHz Bandwidth High Channel										
245.23	46.50	352	150	H	-55.32	0.44	-2.41	-58.17	-13	45.17
245.23	52.29	225	200	V	-56.97	0.44	-2.41	-59.82	-13	46.82
1696.60	61.08	282	100	H	-51.93	0.84	8.52	-44.25	-13	31.25
1696.60	60.15	95	150	V	-52.86	0.84	8.52	-45.18	-13	32.18

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										
257.80	46.52	180	150	H	-55.80	0.44	-2.23	-58.47	-13	45.47
257.80	52.12	355	200	V	-57.01	0.44	-2.23	-59.68	-13	46.68
3701.40	55.81	77	150	H	-51.15	0.95	9.78	-42.32	-13	29.32
3701.40	54.39	317	200	V	-52.57	0.95	9.78	-43.74	-13	30.74
QPSK 1.4MHz Bandwidth Middle Channel										
257.80	45.79	260	100	H	-56.53	0.44	-2.23	-59.20	-13	46.20
257.80	51.17	87	100	V	-57.96	0.44	-2.23	-60.63	-13	47.63
3760.00	56.49	118	100	H	-50.29	0.95	9.74	-41.50	-13	28.50
3760.00	54.25	298	150	V	-52.53	0.95	9.74	-43.74	-13	30.74
QPSK 1.4MHz Bandwidth High Channel										
257.80	45.52	204	150	H	-56.80	0.44	-2.23	-59.47	-13	46.47
257.80	51.22	198	100	V	-57.91	0.44	-2.23	-60.58	-13	47.58
3818.60	54.99	204	200	H	-51.60	0.96	9.71	-42.85	-13	29.85
3818.60	54.22	94	150	V	-52.37	0.96	9.71	-43.62	-13	30.62

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										
223.80	48.75	97	200	H	-54.88	0.43	-3.14	-58.45	-13	45.45
223.80	51.22	346	100	V	-56.06	0.43	-3.14	-59.63	-13	46.63
3421.40	55.80	54	100	H	-52.14	0.93	9.82	-43.25	-13	30.25
3421.40	54.46	144	100	V	-53.48	0.93	9.82	-44.59	-13	31.59
QPSK 1.4MHz Bandwidth Middle Channel										
223.80	47.84	78	200	H	-55.79	0.43	-3.14	-59.36	-13	46.36
223.80	53.23	308	100	V	-54.05	0.37	-6.05	-60.47	-13	47.47
3465.00	57.29	115	150	H	-50.46	0.93	9.87	-41.52	-13	28.52
3465.00	56.14	84	100	V	-51.61	0.93	9.87	-42.67	-13	29.67
QPSK 1.4MHz Bandwidth High Channel										
223.80	46.88	259	150	H	-56.75	0.43	-3.14	-60.32	-13	47.32
223.80	49.28	100	200	V	-58.00	0.43	-3.14	-61.57	-13	48.57
3508.60	57.38	223	150	H	-50.19	0.93	9.89	-41.23	-13	28.23
3508.60	55.74	109	150	V	-51.83	0.93	9.89	-42.87	-13	29.87

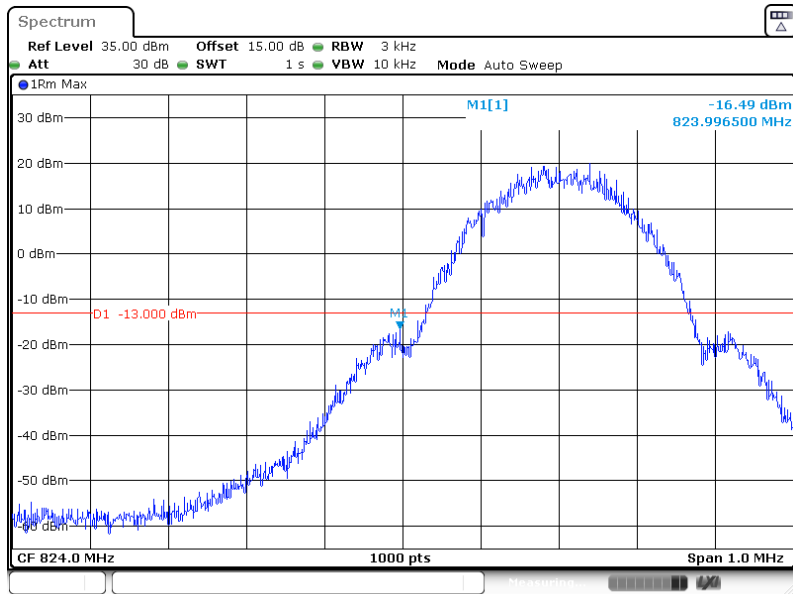
30 MHz ~ 26 GHz:**LTE Band 7:**

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										
243.80	44.59	296	200	H	-57.35	0.44	-2.46	-60.25	-25	35.25
243.80	50.85	215	200	V	-58.69	0.44	-2.46	-61.59	-25	36.59
5005.00	48.51	241	200	H	-57.48	1.08	10.30	-48.26	-25	23.26
5005.00	47.19	39	100	V	-58.80	1.08	10.30	-49.58	-25	24.58
QPSK 5MHz Bandwidth Middle Channel										
243.80	45.58	72	100	H	-56.36	0.44	-2.46	-59.26	-25	34.26
243.80	51.85	206	150	V	-57.69	0.44	-2.46	-60.59	-25	35.59
5070.00	47.97	122	200	H	-57.66	1.09	10.30	-48.45	-25	23.45
5070.00	47.04	242	200	V	-58.59	1.09	10.30	-49.38	-25	24.38
QPSK 5MHz Bandwidth High Channel										
243.80	45.19	320	200	H	-56.75	0.44	-2.46	-59.65	-25	34.65
243.80	52.20	193	100	V	-57.34	0.44	-2.46	-60.24	-25	35.24
5135.00	45.82	312	100	H	-59.45	1.10	10.30	-50.25	-25	25.25
5135.00	44.77	6	100	V	-60.50	1.10	10.30	-51.30	-25	26.30

30 MHz ~ 26.5 GHz:

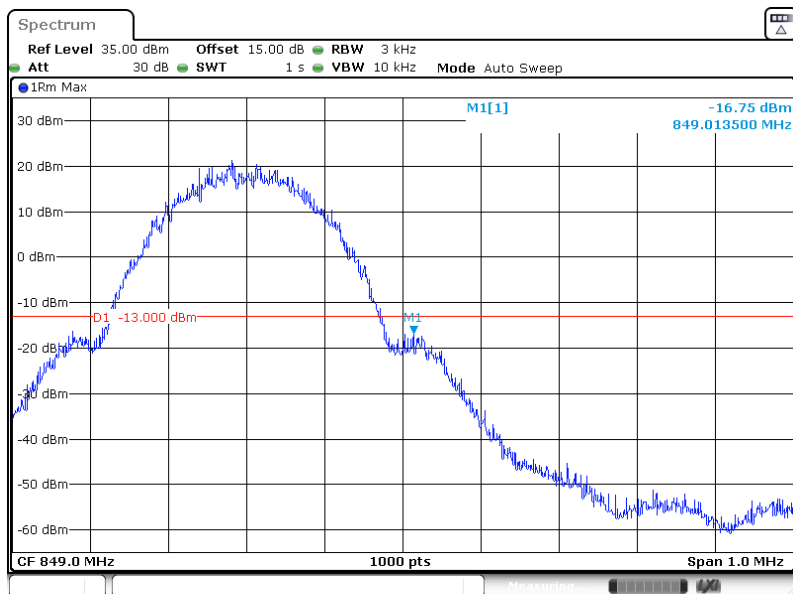
LTE Band 38:

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										
235.56	46.53	34	100	H	-56.12	0.43	-2.75	-59.30	-25	34.30
235.56	51.12	235	100	V	-57.23	0.43	-2.75	-60.41	-25	35.41
5145.00	47.42	92	200	H	-58.57	1.08	10.30	-49.35	-25	24.35
5145.00	46.53	128	150	V	-59.46	1.08	10.30	-50.24	-25	25.24
QPSK 5MHz Bandwidth Middle Channel										
235.56	46.26	219	100	H	-56.39	0.43	-2.75	-59.57	-25	34.57
235.56	51.29	167	150	V	-57.06	0.43	-2.75	-60.24	-25	35.24
5190.00	47.58	176	200	H	-58.05	1.09	10.30	-48.84	-25	23.84
5190.00	46.10	115	150	V	-59.53	1.09	10.30	-50.32	-25	25.32
QPSK 5MHz Bandwidth High Channel										
235.56	46.35	12	200	H	-56.30	0.43	-2.75	-59.48	-25	34.48
235.56	50.96	142	100	V	-57.39	0.43	-2.75	-60.57	-25	35.57
5235.00	48.65	283	100	H	-56.62	1.10	10.30	-47.42	-25	22.42
5235.00	47.53	348	200	V	-57.74	1.10	10.30	-48.54	-25	23.54

BAND EDGES*EUT operation mode: Transmitting**Test Result: Compliant.***GPRS 850 Band:****GPRS Mode, Left Band Edge**

ProjectNo.:RKSA240319001 Tester:Jay Liu

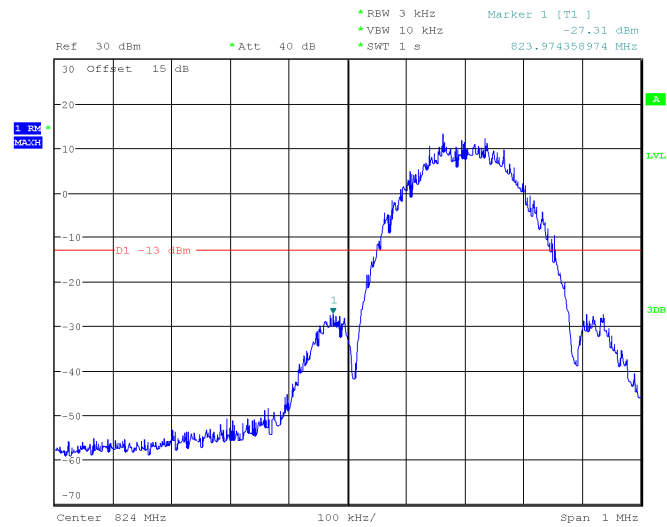
Date: 18 MAY.2024 15:07:35

GPRS Mode, Right Band Edge

ProjectNo.:RKSA240319001 Tester:Jay Liu

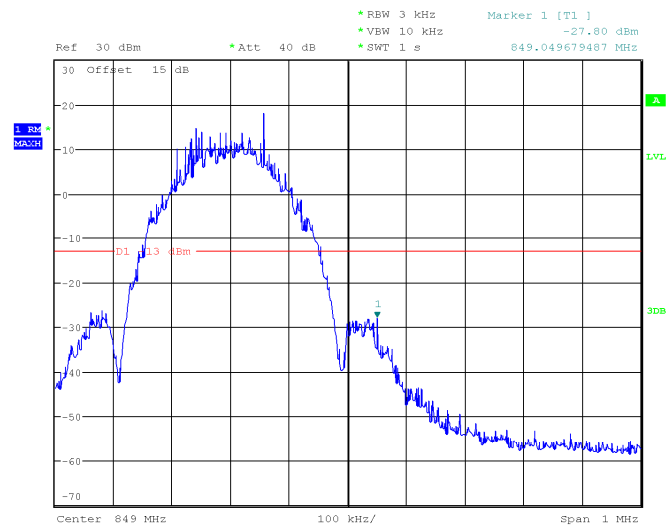
Date: 18 MAY.2024 15:09:44

EGPRS Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 10:28:00

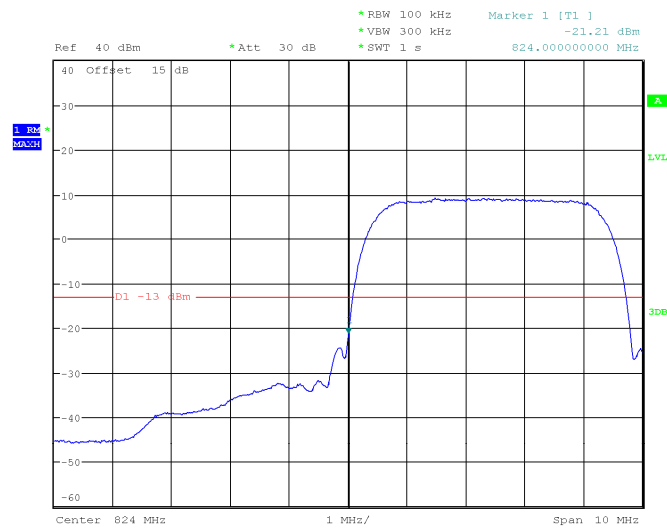
EGPRS Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 10:29:46

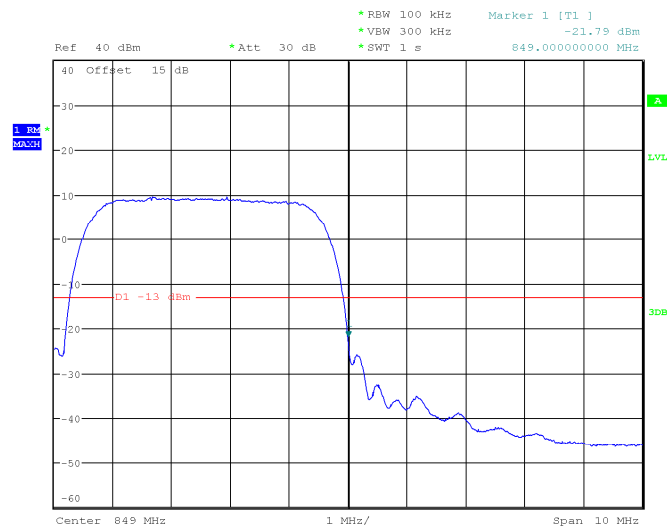
WCDMA Band V

WCDMA (Rel 99) Mode, Left Band Edge



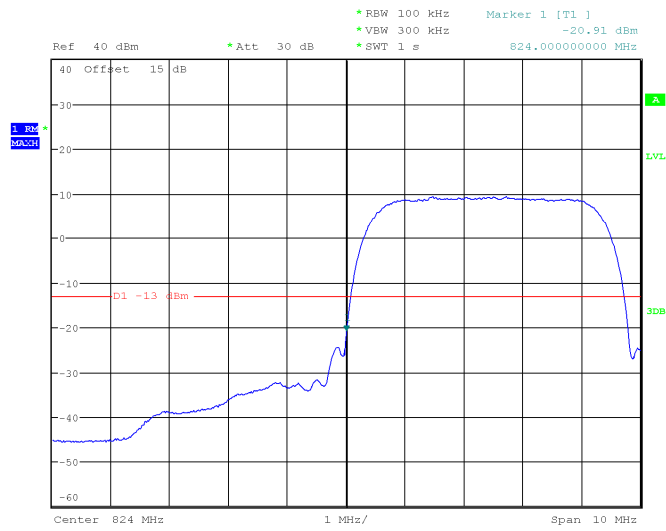
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:37:56

WCDMA (Rel 99) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:39:03

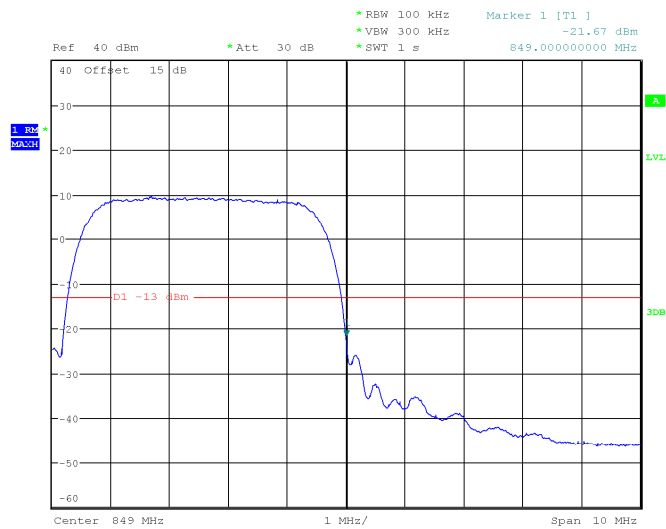
WCDMA (HSDPA) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou

Date: 20.MAY.2024 16:32:55

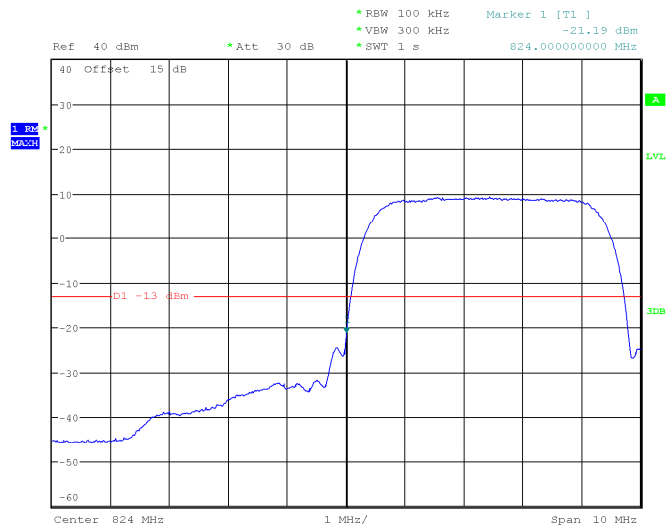
WCDMA (HSDPA) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou

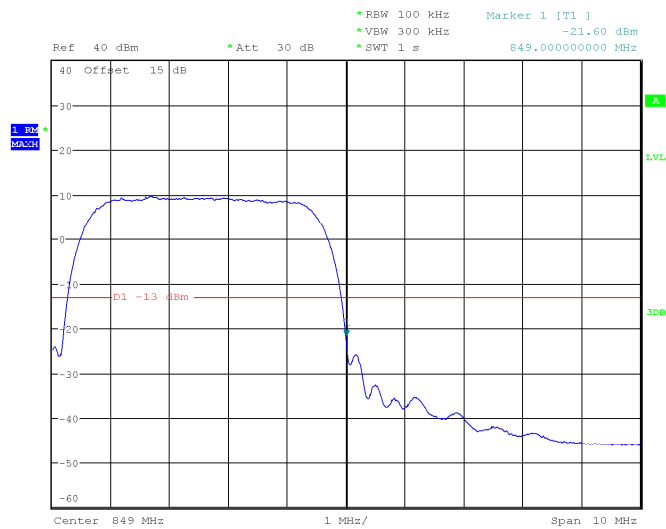
Date: 20.MAY.2024 16:33:59

WCDMA (HSUPA) Mode, Left Band Edge



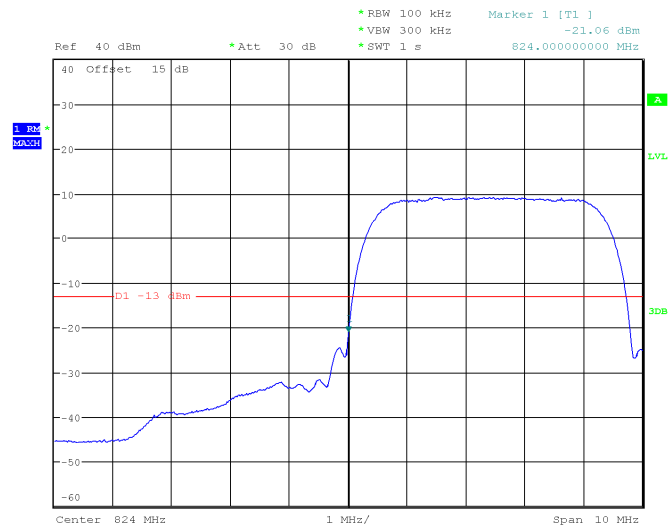
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:40:02

WCDMA (HSUPA) Mode, Right Band Edge



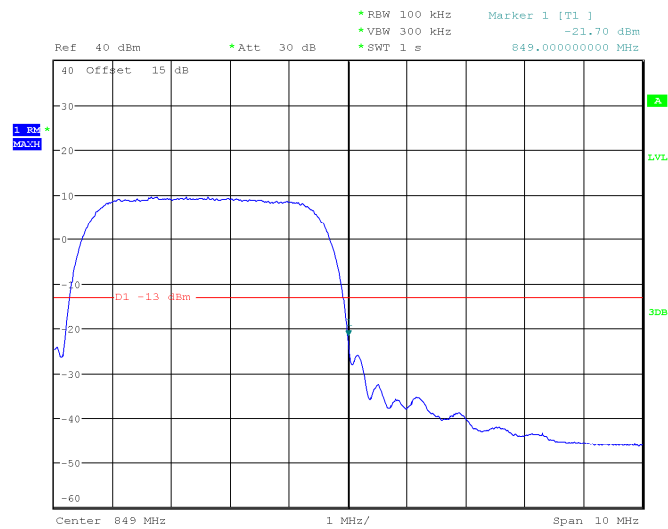
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:41:24

WCDMA (HSPA+) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:35:35

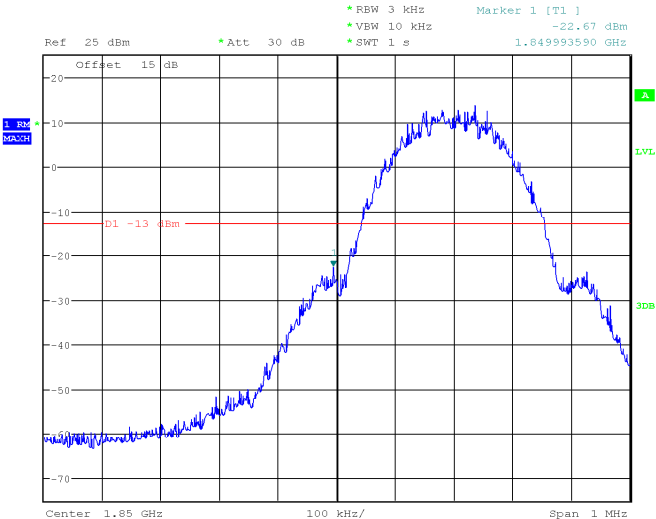
WCDMA (HSPA+) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:36:53

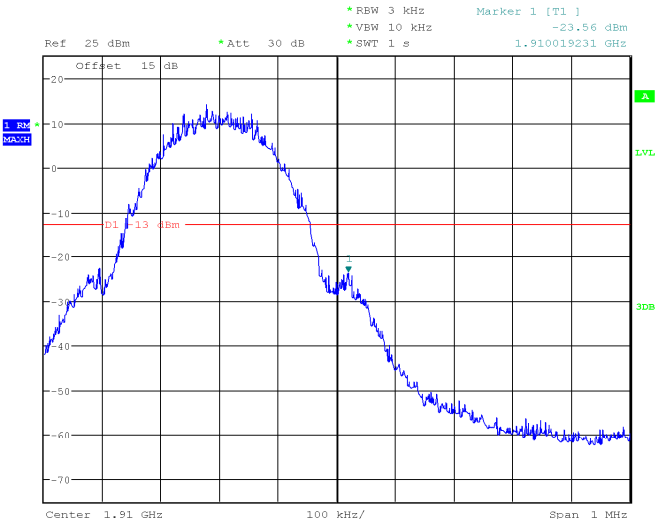
PCS 1900 Band:

GPRS Mode, Left Band Edge



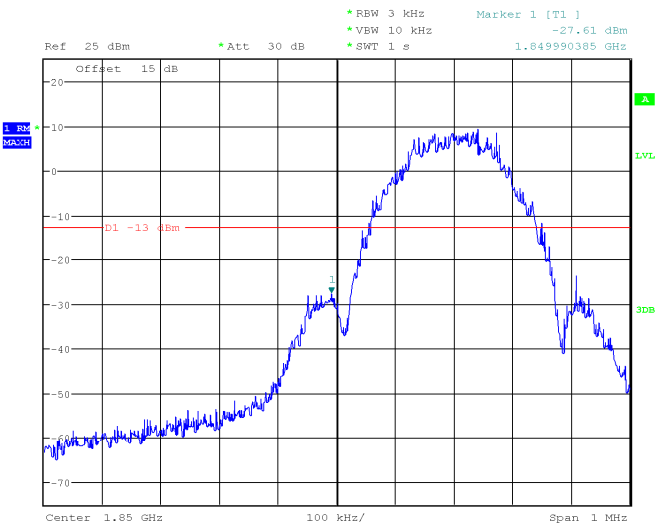
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:27:13

GPRS Mode, Right Band Edge



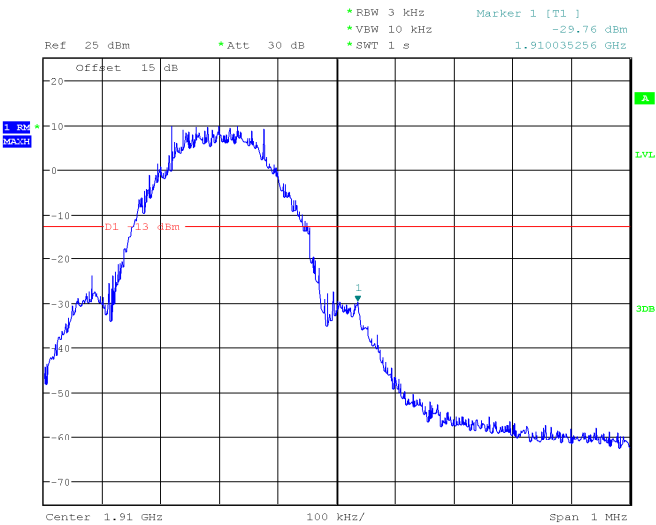
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:29:13

EGPRS Mode, Left Band Edge



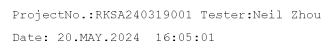
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:21:38

EGPRS Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 11:24:07

WCDMA (Rel 99) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:08:31

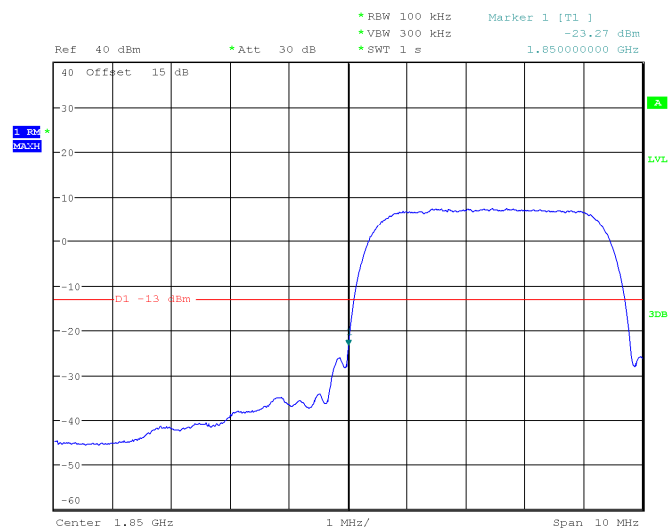
[illegible]

The screenshot displays a spectrum analyzer interface. The main plot shows a signal centered at 1.91 GHz with a bandwidth of 10 MHz. The signal has a flat top at approximately -10 dBm and a sharp drop-off at the edges. A red horizontal line is drawn at -13 dBm, labeled "D1 -13 dBm". A green cursor is positioned at the -13 dBm level on the signal's edge. The top status bar shows the following parameters: RBW 100 kHz, VBW 300 kHz, SWT 1 s, and Marker 1 [T1] at -22.81 dBm. The bottom status bar shows the center frequency of 1.91 GHz, a span of 10 MHz, and a resolution of 1 MHz.

Parameter	Value
Center	1.91 GHz
Span	10 MHz
Resolution	1 MHz
RBW	100 kHz
VBW	300 kHz
SWT	1 s
Marker 1 [T1]	-22.81 dBm
Signal Level (D1)	-13 dBm

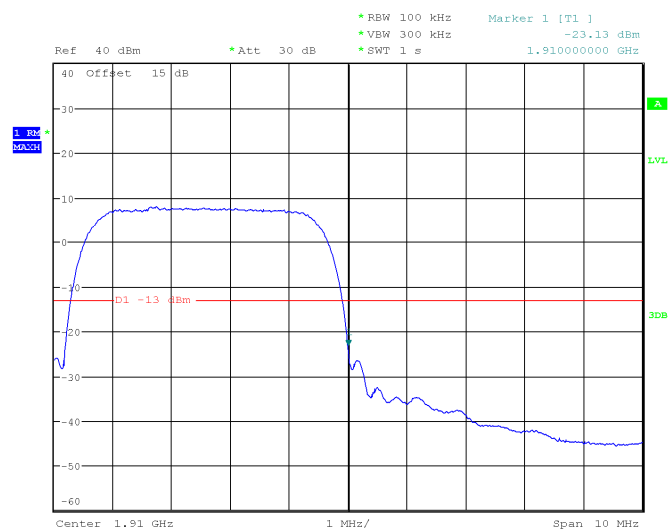
Page 137 of 153

WCDMA (HSUPA) Mode, Left Band Edge



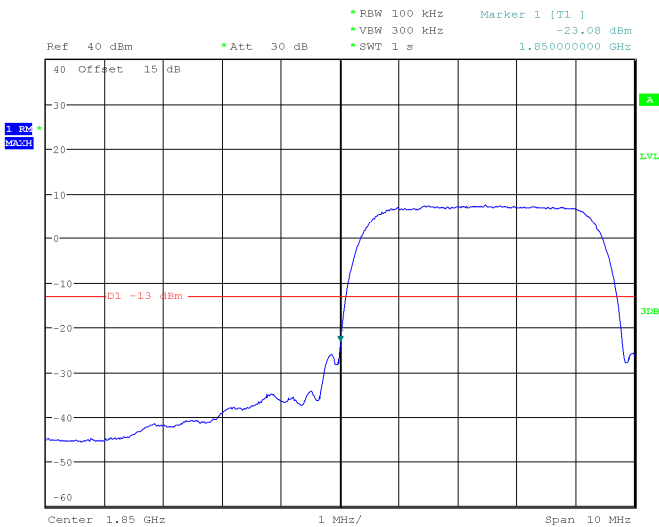
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:17:56

WCDMA (HSUPA) Mode, Right Band Edge



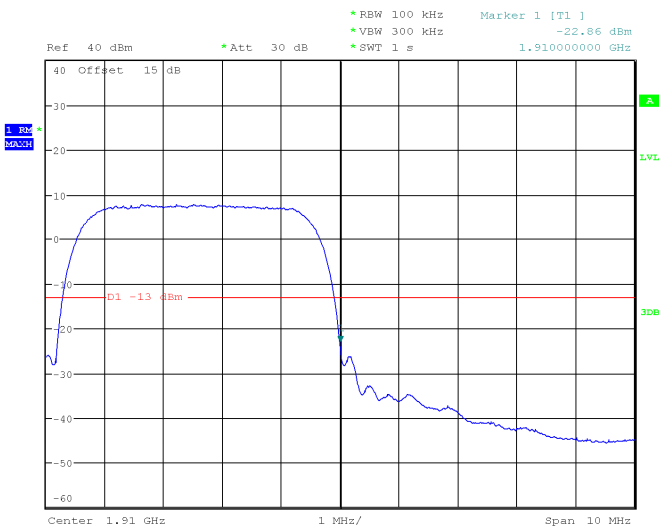
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:19:06

WCDMA (HSPA+) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:15:36

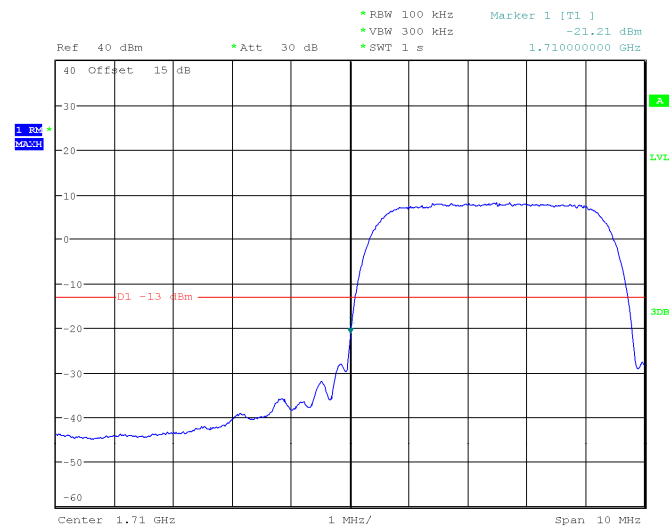
WCDMA (HSPA+) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:16:43

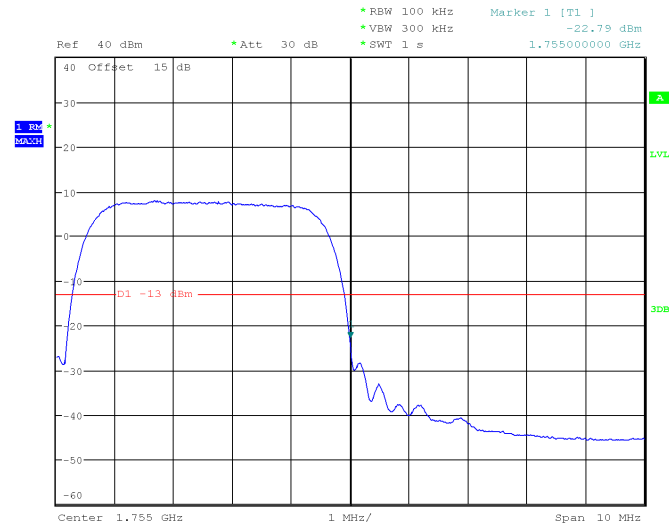
WCDMA Band IV

WCDMA (Rel 99) Mode, Left Band Edge



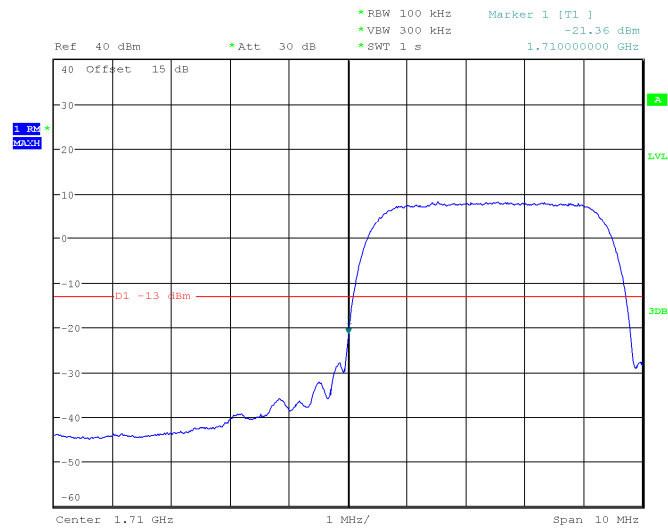
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:27:54

WCDMA (Rel 99) Mode, Right Band Edge



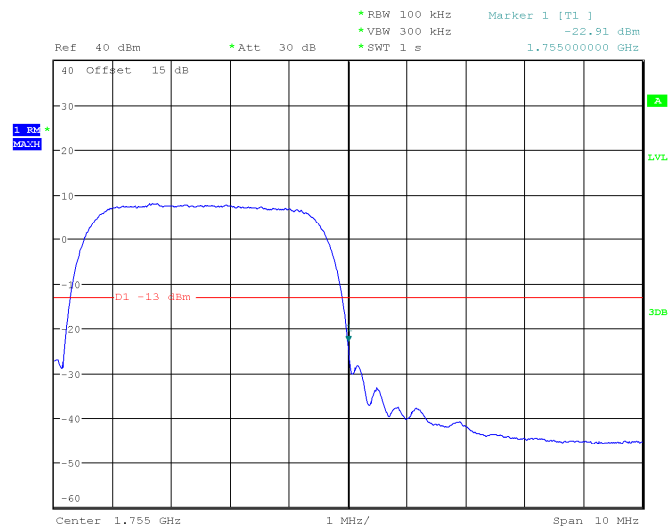
ProjectNo.:RKSA240319001 Tester:Neil Zhou
Date: 20.MAY.2024 16:28:54

WCDMA (HSDPA) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 16:23:13

WCDMA (HSDPA) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 16:24:47

Ref 40 dBm *Att 30 dB *RBW 100 kHz *VBW 300 kHz *SWT 1 s Marker 1 [T1] -21.19 dBm 1.710000000 GHz

40 Offset 15 dB

30

20

10

0

-10

-20

-30

-40

-50

-60

1.71 GHz

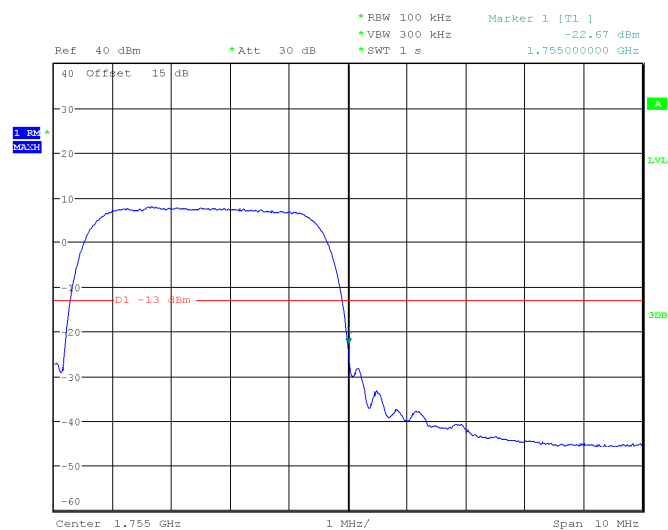
MAU3H

D1 -13 dBm

3dB

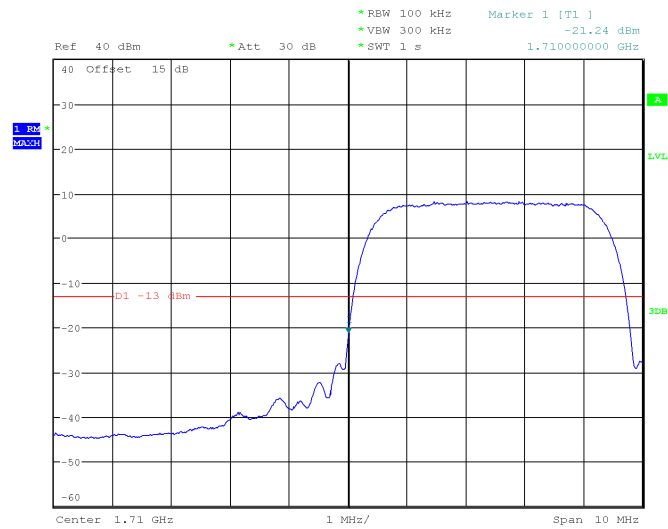
Center 1.71 GHz 1 MHz/ Span 10 MHz

WCDMA (HSUPA) Mode, Right Band Edge



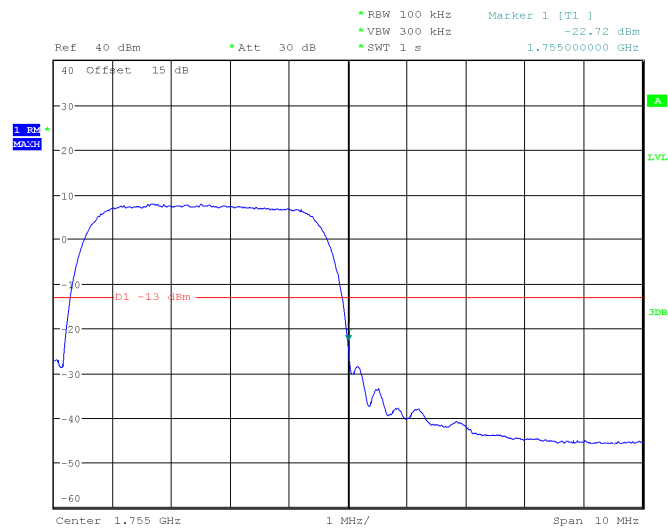
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WCDMA (HSPA+) Mode, Left Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 16:26:01

WCDMA (HSPA+) Mode, Right Band Edge



ProjectNo.:RKSA240319001 Tester:Neil Zhou
 Date: 20.MAY.2024 16:27:06

FREQUENCY STABILITY*EUT operation mode: Transmitting*

GPRS 850,Middle channel				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.7	12	0.00638	2.5
-20		9	0.00479	2.5
-10		5	0.00266	2.5
0		11	0.00585	2.5
10		6	0.00319	2.5
20		-3	-0.00160	2.5
30		7	0.00372	2.5
40		5	0.00266	2.5
50		4	0.00213	2.5
20	V min.= 3.3	7	0.00372	2.5
20	V max.= 4.07	5	0.00266	2.5

EGPRS 850, Middle channel				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.7	9	0.00479	2.5
-20		6	0.00319	2.5
-10		4	0.00213	2.5
0		10	0.00532	2.5
10		15	0.00798	2.5
20		7	0.00372	2.5
30		3	0.00160	2.5
40		-4	-0.00213	2.5
50		-2	-0.00106	2.5
20	V min.= 3.3	-4	-0.00213	2.5
20	V max.= 4.07	3	0.00160	2.5

GPRS 1900, low channel& high channel					
Temperature (°C)	Voltage Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1850.052	1909.984	1850	1910
-20		1850.051	1909.985	1850	1910
-10		1850.050	1909.994	1850	1910
0		1850.058	1909.990	1850	1910
10		1850.054	1909.992	1850	1910
20		1850.100	1909.989	1850	1910
30		1850.077	1909.991	1850	1910
40		1850.056	1909.994	1850	1910
50		1850.075	1909.994	1850	1910
20	V min.= 3.3	1850.096	1909.993	1850	1910
20	V max.= 4.07	1850.065	1909.992	1850	1910

EGPRS 1900, low channel& high channel					
Temperature (°C)	Voltage Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1850.091	1909.984	1850	1910
-20		1850.092	1909.985	1850	1910
-10		1850.047	1909.987	1850	1910
0		1850.098	1909.988	1850	1910
10		1850.052	1909.994	1850	1910
20		1850.058	1909.989	1850	1910
30		1850.086	1909.985	1850	1910
40		1850.059	1909.990	1850	1910
50		1850.059	1909.989	1850	1910
20	V min.= 3.3	1850.059	1909.988	1850	1910
20	V max.= 4.07	1850.084	1909.991	1850	1910

WCDMA Band II:

WCDMA Mode , low channel& high channel					
Temperature (°C)	Voltage Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1850.207	1909.810	1850	1910
-20		1850.208	1909.812	1850	1910
-10		1850.209	1909.815	1850	1910
0		1850.207	1909.801	1850	1910
10		1850.213	1909.825	1850	1910
20		1850.202	1909.808	1850	1910
30		1850.193	1909.829	1850	1910
40		1850.197	1909.774	1850	1910
50		1850.205	1909.784	1850	1910
20	V min.= 3.3	1850.207	1909.830	1850	1910
20	V max.= 4.07	1850.198	1909.827	1850	1910

WCDMA Band IV:

WCDMA Mode , low channel& high channel					
Temperature (°C)	Voltage Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1710.185	1754.984	1710	1755
-20		1710.184	1754.984	1710	1755
-10		1710.227	1754.983	1710	1755
0		1710.211	1754.984	1710	1755
10		1710.210	1754.985	1710	1755
20		1710.242	1754.983	1710	1755
30		1710.212	1754.985	1710	1755
40		1710.227	1754.984	1710	1755
50		1710.213	1754.983	1710	1755
20	V min.= 3.3	1710.224	1754.983	1710	1755
20	V max.= 4.07	1710.195	1754.983	1710	1755

WCDMA Band V:

WCDMA Mode , Middle channel				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.7	25	0.02988	2.5
-20		35	0.04184	2.5
-10		41	0.04901	2.5
0		32	0.03825	2.5
10		28	0.03347	2.5
20		24	0.02869	2.5
30		17	0.02032	2.5
40		30	0.03586	2.5
50		26	0.03108	2.5
20	V min.= 3.3	18	0.02152	2.5
20	V max.= 4.07	21	0.02510	2.5

LTE Band 2:

QPSK, 20MHz, low channel& high channel					
Temperature (°C)	Voltage Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	3.7	1850.050	1909.992	1850	1910
-20		1850.051	1909.992	1850	1910
-10		1850.048	1909.986	1850	1910
0		1850.055	1909.991	1850	1910
10		1850.047	1909.973	1850	1910
20		1850.099	1909.991	1850	1910
30		1850.062	1909.983	1850	1910
40		1850.047	1909.987	1850	1910
50		1850.083	1909.991	1850	1910
20	V min.= 3.3	1850.053	1909.969	1850	1910
20	V max.= 4.07	1850.069	1909.978	1850	1910

16-QAM, 20MHz, low channel& high channel					
Temperature (°C)	Voltage Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1850.130	1909.979	1850	1910
-20		1850.129	1909.978	1850	1910
-10		1850.090	1909.973	1850	1910
0		1850.126	1909.968	1850	1910
10		1850.089	1909.970	1850	1910
20		1850.083	1909.976	1850	1910
30		1850.092	1909.971	1850	1910
40		1850.099	1909.986	1850	1910
50		1850.100	1909.987	1850	1910
20	V min.= 3.3	1850.084	1909.968	1850	1910
20	V max.= 4.07	1850.081	1909.974	1850	1910

LTE Band 4:

QPSK, 20MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1710.086	1754.990	1710	1755
-20		1710.085	1754.989	1710	1755
-10		1710.093	1754.972	1710	1755
0		1710.092	1754.982	1710	1755
10		1710.097	1754.971	1710	1755
20		1710.062	1754.972	1710	1755
30		1710.071	1754.967	1710	1755
40		1710.050	1754.967	1710	1755
50		1710.070	1754.961	1710	1755
20	V min.= 3.3	1710.087	1754.975	1710	1755
20	V max.= 4.07	1710.064	1754.975	1710	1755

QPSK, 20MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	1710.045	1754.962	1710	1755
-20		1710.046	1754.963	1710	1755
-10		1710.095	1754.964	1710	1755
0		1710.045	1754.961	1710	1755
10		1710.097	1754.965	1710	1755
20		1710.052	1754.956	1710	1755
30		1710.050	1754.961	1710	1755
40		1710.043	1754.975	1710	1755
50		1710.057	1754.968	1710	1755
20	V min.= 3.3	1710.046	1754.976	1710	1755
20	V max.= 4.07	1710.090	1754.956	1710	1755

LTE Band 5:

QPSK, 10.0 MHz,Middle channel				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.7	15	0.01793	2.5
-20		19	0.02271	2.5
-10		28	0.03347	2.5
0		19	0.02271	2.5
10		28	0.03347	2.5
20		21	0.02510	2.5
30		15	0.01793	2.5
40		20	0.02391	2.5
50		15	0.01793	2.5
20	V min.= 3.3	12	0.01435	2.5
20	V max.= 4.07	9	0.01076	2.5

16-QAM, 10.0 MHz, Middle channel				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.7	11	0.01315	2.5
-20		15	0.01793	2.5
-10		20	0.02391	2.5
0		15	0.01793	2.5
10		20	0.02391	2.5
20		36	0.04304	2.5
30		23	0.02750	2.5
40		14	0.01674	2.5
50		19	0.02271	2.5
20	V min.= 3.3	13	0.01554	2.5
20	V max.= 4.07	23	0.02750	2.5

LTE Band 7:

QPSK, 20 MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	2500.117	2569.927	2500	2570
-20		2500.118	2569.926	2500	2570
-10		2500.115	2569.944	2500	2570
0		2500.123	2569.927	2500	2570
10		2500.105	2569.943	2500	2570
20		2500.133	2569.915	2500	2570
30		2500.106	2569.932	2500	2570
40		2500.139	2569.931	2500	2570
50		2500.120	2569.920	2500	2570
20	V min.= 3.3	2500.140	2569.949	2500	2570
20	V max.= 4.07	2500.131	2569.970	2500	2570

16-QAM, 20 MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	2500.116	2569.982	2500	2570
-20		2500.117	2569.981	2500	2570
-10		2500.158	2569.967	2500	2570
0		2500.106	2569.975	2500	2570
10		2500.135	2569.987	2500	2570
20		2500.111	2569.925	2500	2570
30		2500.132	2569.974	2500	2570
40		2500.137	2569.933	2500	2570
50		2500.116	2569.900	2500	2570
20	V min.= 3.3	2500.106	2569.947	2500	2570
20	V max.= 4.07	2500.133	2569.889	2500	2570

LTE Band 38:

QPSK, 20 MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	2570.130	2619.908	2570	2620
-20		2570.131	2619.910	2570	2620
-10		2570.123	2619.906	2570	2620
0		2570.133	2619.909	2570	2620
10		2570.117	2619.907	2570	2620
20		2570.103	2619.970	2570	2620
30		2570.130	2619.936	2570	2620
40		2570.102	2619.911	2570	2620
50		2570.106	2619.944	2570	2620
20	V min.= 3.3	2570.137	2619.974	2570	2620
20	V max.= 4.07	2570.111	2619.964	2570	2620

16-QAM, 20 MHz, low channel& high channel					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	3.7	2570.114	2619.940	2570	2620
-20		2570.115	2619.941	2570	2620
-10		2570.126	2619.959	2570	2620
0		2570.116	2619.901	2570	2620
10		2570.136	2619.962	2570	2620
20		2570.147	2619.941	2570	2620
30		2570.110	2619.946	2570	2620
40		2570.119	2619.939	2570	2620
50		2570.103	2619.895	2570	2620
20	V min.= 3.3	2570.110	2619.968	2570	2620
20	V max.= 4.07	2570.140	2619.961	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 *******