

TEST REPORT

Reference No...... : WTH22X08161493W001
FCC ID : 2AFIW-MIFIC4-EXT
Applicant : GL Technologies (Hong Kong) Limited
Address..... : FLAT/RM 203 2/F BUILDING, 19W 19 SCIENCE PARK WEST AVENUE
SHATIN NT, Shatin, Hong Kong
Manufacturer : Shenzhen Guanglian Zhitong Technology Co., LTD
Address..... : Room 305, 306, Chuangwei Digital Building, Songbai Road, Shiyuan Street,
Baoan District, Shenzhen
Product Name : 4G Smart Router
Model No...... : GL-MiFiC4-EXT
Standards : FCC Part 22H, FCC Part 24E, FCC Part 27
Date of Receipt sample : 2022-08-08
Date of Test..... : 2022-08-08 to 2022-08-22
Date of Issue : 2022-08-22
Test Report Form No. : WTX_Part 22_Part 24_Part 27W
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,
Block 70 Bao'an District, Shenzhen, Guangdong, China

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Email: sem@waltek.com.cn

Tested by:

Approved by:



Mike Shi

Silin Chen

TABLE OF CONTENTS

1. GENERAL INFORMATION	4
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
1.2 TEST STANDARDS	6
1.3 TEST METHODOLOGY	6
1.4 TEST FACILITY	6
1.5 EUT SETUP AND TEST MODE	7
1.6 MEASUREMENT UNCERTAINTY	9
1.7 TEST EQUIPMENT LIST AND DETAILS	10
2. SUMMARY OF TEST RESULTS	12
3. RF OUTPUT POWER	13
3.1 STANDARD APPLICABLE	13
3.2 TEST PROCEDURE	13
3.3 SUMMARY OF TEST RESULTS/PLOTS	13
4. PEAK-TO-AVERAGE RATIO (PAR) OF TRANSMITTER	15
4.1 STANDARD APPLICABLE	15
4.2 TEST PROCEDURE	15
4.3 SUMMARY OF TEST RESULTS	15
5. EMISSION BANDWIDTH	16
5.1 STANDARD APPLICABLE	16
5.2 TEST PROCEDURE	16
5.3 SUMMARY OF TEST RESULTS/PLOTS	16
6. OUT OF BAND EMISSIONS AT ANTENNA TERMINAL	17
6.1 STANDARD APPLICABLE	17
6.2 TEST PROCEDURE	17
6.3 SUMMARY OF TEST RESULTS/PLOTS	17
7. SPURIOUS RADIATED EMISSIONS	18
7.1 STANDARD APPLICABLE	18
7.2 TEST PROCEDURE	18
7.3 SUMMARY OF TEST RESULTS/PLOTS	18
8. FREQUENCY STABILITY	27
8.1 STANDARD APPLICABLE	27
8.2 TEST PROCEDURE	27
8.3 SUMMARY OF TEST RESULTS/PLOTS	27
9. MODULATION CHARACTERISTICS	28
9.1 STANDARD APPLICABLE	28
9.2 TEST PROCEDURE	28
9.3 SUMMARY OF TEST RESULTS/PLOTS	28
APPENDIX SUMMARY	29
APPENDIX A	30
APPENDIX B	32
APPENDIX C	33
APPENDIX D	52
APPENDIX E	85
APPENDIX F	87
APPENDIX PHOTOGRAPHS	88

Report version

Version No.	Date of issue	Description
Rev.00	2022-08-22	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT:	
Product Name:	4G Smart Router
Trade Name:	GL.iNET
Model No.:	GL-MiFiC4-EXT
Adding Model(s):	/
Rated Voltage:	Charging port:DC5V Battery:DC3.7V
Battery:	5000mAh
Adapter Model:	MODEL: KA1602-0502000DEU INPUT: AC100-240V, 50/60Hz, 0.35A OUTPUT:DC5.0V, 2.0A, 10.0W
<i>Note: The Antenna Gain is provided by the customer and can affect the validity of results. The test data is gathered from a production sample provided by the manufacturer.</i>	

Technical Characteristics of EUT:	
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 4, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 4: 1710~1755MHz WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 4: 2110~2155MHz WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 23.77dBm, WCDMA Band 4: 23.47dBm WCDMA Band 5: 23.77dBm
Type of Emission:	WCDMA Band 2: 4M26F9W WCDMA Band 4: 4M18F9W WCDMA Band 5: 4M18F9W
Type of Modulation:	BPSK
Antenna Type:	External Antenna
Antenna Gain:	WCDMA Band 2: -1.2dBi, WCDMA Band 4: -2.5dBi, WCDMA Band 5: -1.9dBi

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 2: Frequency Allocations and Radio Treaty Matters; General Rules and Regulations.

FCC Rules Part 22: Private Land Mobile Radio Services.

FCC Rules Part 24: Public Mobile Services.

FCC Rules Part 27: Miscellaneous Wireless Communications Services.

TIA/EIA 603 E March 2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

KDB 971168 D01 Power Meas License Digital Systems v03r01: Measurement Guidance for Certification of Licensed Digital Transmitters.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with TIA/EIA 603 E/ KDB 971168/ ANSI C63.26. The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	WCDMA Band 5	Low, Middle, High Channels
TM2	HSDPA Band 5	Low, Middle, High Channels
TM3	HSUPA Band 5	Low, Middle, High Channels
TM4	WCDMA Band 4	Low, Middle, High Channels
TM5	HSDPA Band 4	Low, Middle, High Channels
TM6	HSUPA Band 4	Low, Middle, High Channels
TM7	WCDMA Band 2	Low, Middle, High Channels
TM8	HSDPA Band 2	Low, Middle, High Channels
TM9	HSUPA Band 2	Low, Middle, High Channels

Testing Configure			
Support Band	Support Standard	Channel Frequency	Channel Number
WCDMA Band 5	WCDMA/HSDPA/HSUPA	826.4 MHz	4132
		836.6 MHz	4183
		846.6 MHz	4233
WCDMA Band 4	WCDMA/HSDPA/HSUPA	1712.4 MHz	1312
		1732.4 MHz	1412
		1752.6 MHz	1513
WCDMA Band 2	WCDMA/HSDPA/HSUPA	1852.4 MHz	9262
		1880.0 MHz	9400
		1907.6 MHz	9538

Note: the transmitter has been tested on the communications mode of WCDMA, HSDPA, HSUPA compliance test and record the worst case.

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	50~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	0.8	Unshielded	Without Ferrite
Network Cable	0.8	Unshielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	ASUS	FA5061C	M8NRCX057996349

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Frequency Stability	Conducted	2.3%
Transmitter Spurious Emissions	Conducted	$\pm 0.42\text{dB}$
Transmitter Spurious Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-18GHz $\pm 3.92\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1075	Communication Tester	Rohde & Schwarz	CMW500	148650	2022-03-22	2023-03-21
SEMT-1063	GSM Tester	Rohde & Schwarz	CMU200	114403	2022-03-22	2023-03-21
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2022-03-25	2023-03-24
SEMT-1079	Spectrum Analyzer	Agilent	N9020A	US47140102	2022-03-22	2023-03-21
SEMT-1080	Signal Generator	Agilent	83752A	3610A01453	2022-03-22	2023-03-21
SEMT-1081	Vector Signal Generator	Agilent	N5182A	MY47070202	2022-03-22	2023-03-21
SEMT-1028	Power Divider	Weinschel	1506A	PM204	2022-03-22	2023-03-21
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	/	/
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	/	/
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	/	/
SEMT-C004	Cable	Zheng DI	2M0RFC	/	/	/
SEMT-C005	Cable	Zheng DI	1M0RFC	/	/	/
SEMT-C006	Cable	Zheng DI	1M0RFC	/	/	/
<input checked="" type="checkbox"/> Chamber A: Below 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2022-03-22	2023-03-21
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2022-03-22	2023-03-21
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2022-01-07	2023-01-06
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2023-03-19
SEMT-1068	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-20	2023-03-19
<input checked="" type="checkbox"/> Chamber A: Above 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2022-03-22	2023-03-21
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2022-03-22	2023-03-21
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2022-03-22	2023-03-21
SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2021-04-27	2023-04-26
SEMT-1216	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2022-03-25	2023-03-24
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2022-03-22	2023-03-21
<input type="checkbox"/> Chamber B:Below 1GHz						

SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
SEMT-1067	Amplifier	Agilent	8447D	2944A10179	2022-03-22	2023-03-21
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2022-03-22	2023-03-21
<input type="checkbox"/> Chamber C: Below 1GHz						
SEMT-1319	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2022-01-07	2023-01-06
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A03869	2022-03-22	2023-03-21

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1

*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§22.913(a), §24.232(c), §27.50(d)	RF Output Power	Compliant
§24.51, §27.50	Peak-to-average Ratio (PAR) of Transmitter	Compliant
§22.917(b), §24.238(b), §27.53	Emission Bandwidth	Compliant
§22.917(a), §24.238(a), §27.53(h)	Spurious Emissions at Antenna Terminal	Compliant
§22.917(a), §24.238(a), §27.53(h)	Spurious Radiation Emissions	Compliant
§22.917(a), §24.238(a), §27.53(h)	Out of Band Emissions	Compliant
§22.355, §24.235, §27.54	Frequency Stability	Compliant

3. RF Output Power

3.1 Standard Applicable

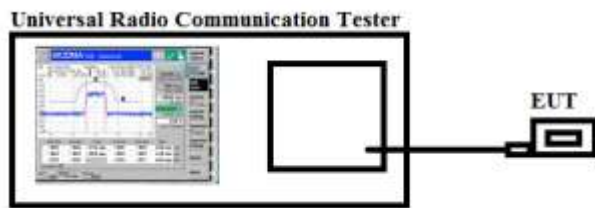
According to §22.913(a)(2), the ERP of mobile and portable stations transmitters and auxiliary test transmitters must not exceed 7 Watts.

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

According to §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1710-1755MHz band and mobile and portable stations operating in the 1695-1710MHz and 1755-1780MHz bands are limited to 1 watt EIRP.

3.2 Test Procedure

- Conducted output power test method:



- Radiated power test method:

1. The setup of EUT is according with per ANSI/TIA Standard 603E and ANSI C63.26 measurement procedure.
2. 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.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. 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.

3.3 Summary of Test Results/Plots

➤ **Max. Radiated Power**

Mode	Channel	Antenna Polar	ERP	Limit (dBm)	Result
WCDMA Band V	4132	V	20.29	<38.45	Pass
		H	13.72		
	4183	V	20.59		
		H	13.74		
	4233	V	20.37		
		H	14.00		

Mode	Channel	Antenna Polar	EIRP	Limit (dBm)	Result
WCDMA Band IV	1312	V	20.09	<30.00	Pass
		H	13.64		
	1412	V	20.20		
		H	12.76		
	1513	V	20.35		
		H	13.40		

Mode	Channel	Antenna Polar	EIRP	Limit (dBm)	Result
WCDMA Band II	9262	V	20.13	<33.00	Pass
		H	13.33		
	9400	V	20.29		
		H	12.80		
	9538	V	20.72		
		H	13.86		

➤ **Max. Conducted Power (Average power)**

Please refer to Appendix A

4. Peak-to-average Ratio (PAR) of Transmitter

4.1 Standard Applicable

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51, in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

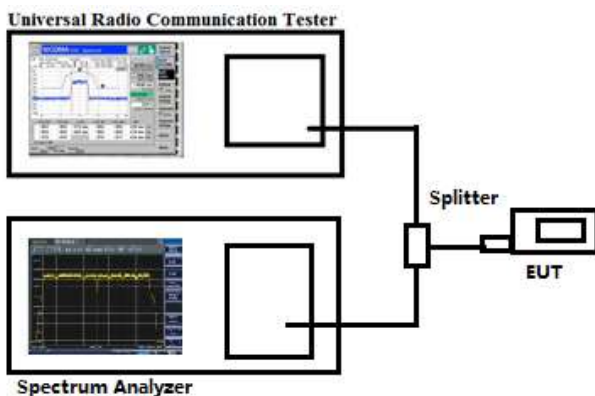
According to §27.50(B), the peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

4.2 Test Procedure

According with KDB 971168

1. The signal analyzer's CCDF measurement profile is enabled.
2. Frequency = carrier center frequency.
3. Measurement BW > Emission bandwidth of signal.
4. The signal analyzer was set to collect one million samples to generate the CCDF curve.
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power.

Test Configuration for the emission bandwidth testing:



4.3 Summary of Test Results

Please refer to Appendix B.

Waltek Testing Group (Shenzhen) Co., Ltd.

[Http://www.waltek.com.cn](http://www.waltek.com.cn)

5. Emission Bandwidth

5.1 Standard Applicable

According to §22.917(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

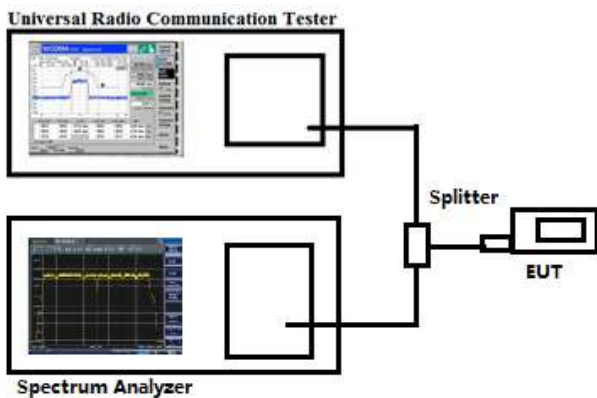
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

According to §27.53, the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

5.2 Test Procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 10kHz for GSM mode and 100kHz for WCDMA mode, VBW shall be at least 3 times the RBW, and the 26dB bandwidth was recorded.

Test Configuration for the emission bandwidth testing:



5.3 Summary of Test Results/Plots

Please refer to Appendix C.

6. Out of Band Emissions at Antenna Terminal

6.1 Standard Applicable

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.

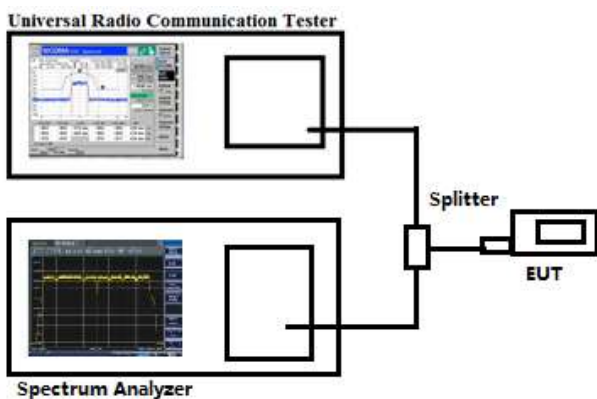
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §27.53 (h), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

6.2 Test Procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 100kHz and 1MHz for the scan frequency from 30MHz to 1GHz and the scan frequency from 1GHz to up to 10th harmonic.

Test Configuration for the out of band emissions testing:



6.3 Summary of Test Results/Plots

Please refer to Appendix D.

7. Spurious Radiated Emissions

7.1 Standard Applicable

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.

According to §27.53 (h), 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.

7.2 Test Procedure

1. The setup of EUT is according with per ANSI/TIA Standard 603E and ANSI C63.26 measurement procedure.
2. 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.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. 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.

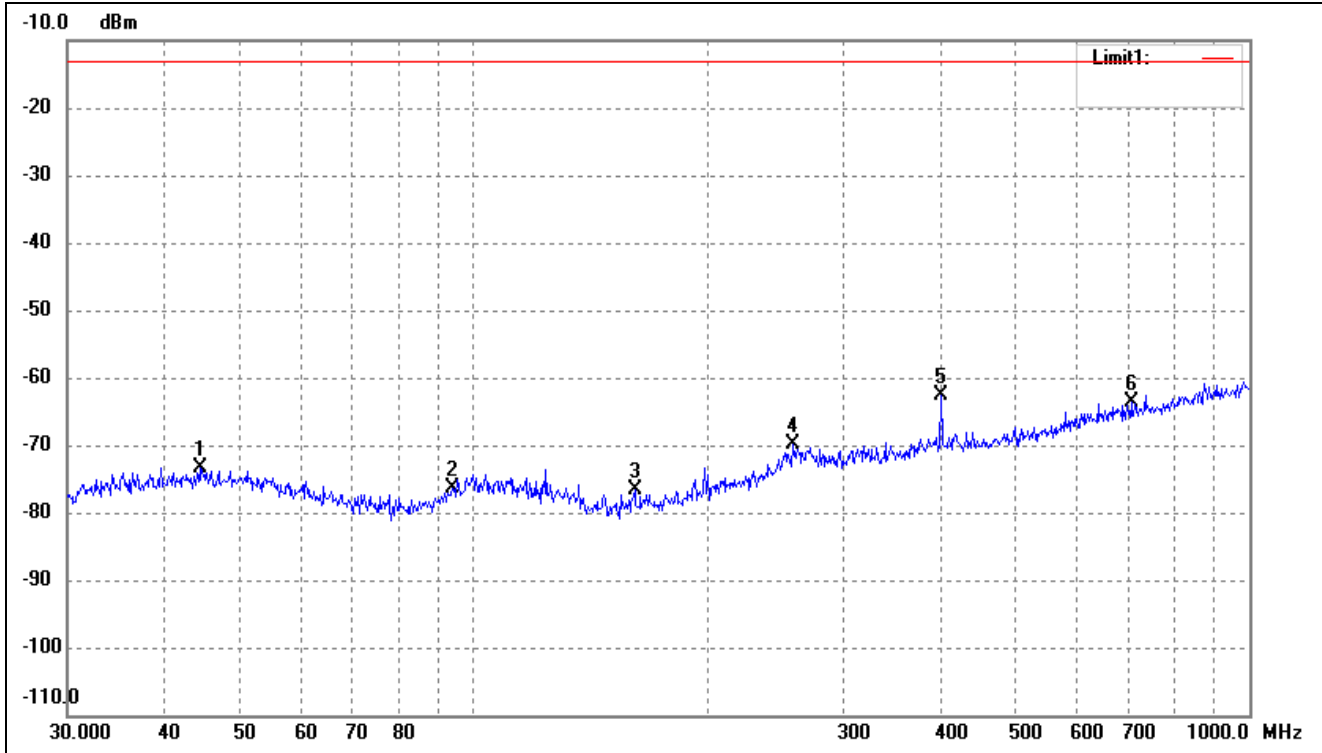
$$\text{Spurious attenuation limit in dB} = 43 + 10 \log_{10}(\text{power out in Watts})$$

7.3 Summary of Test Results/Plots

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

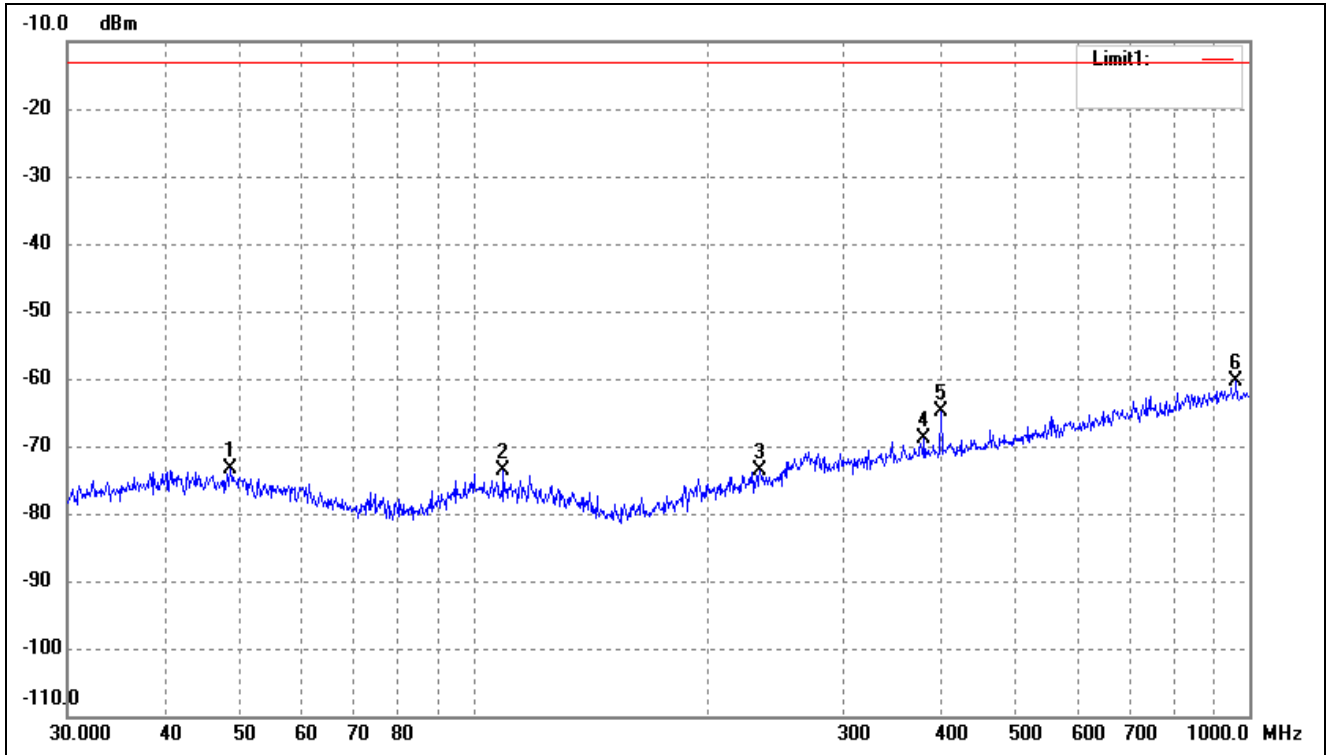
➤ Spurious Emissions Below 1GHz

Test Channel	WCDMA Band II	Polarity:	Horizontal
--------------	---------------	-----------	------------



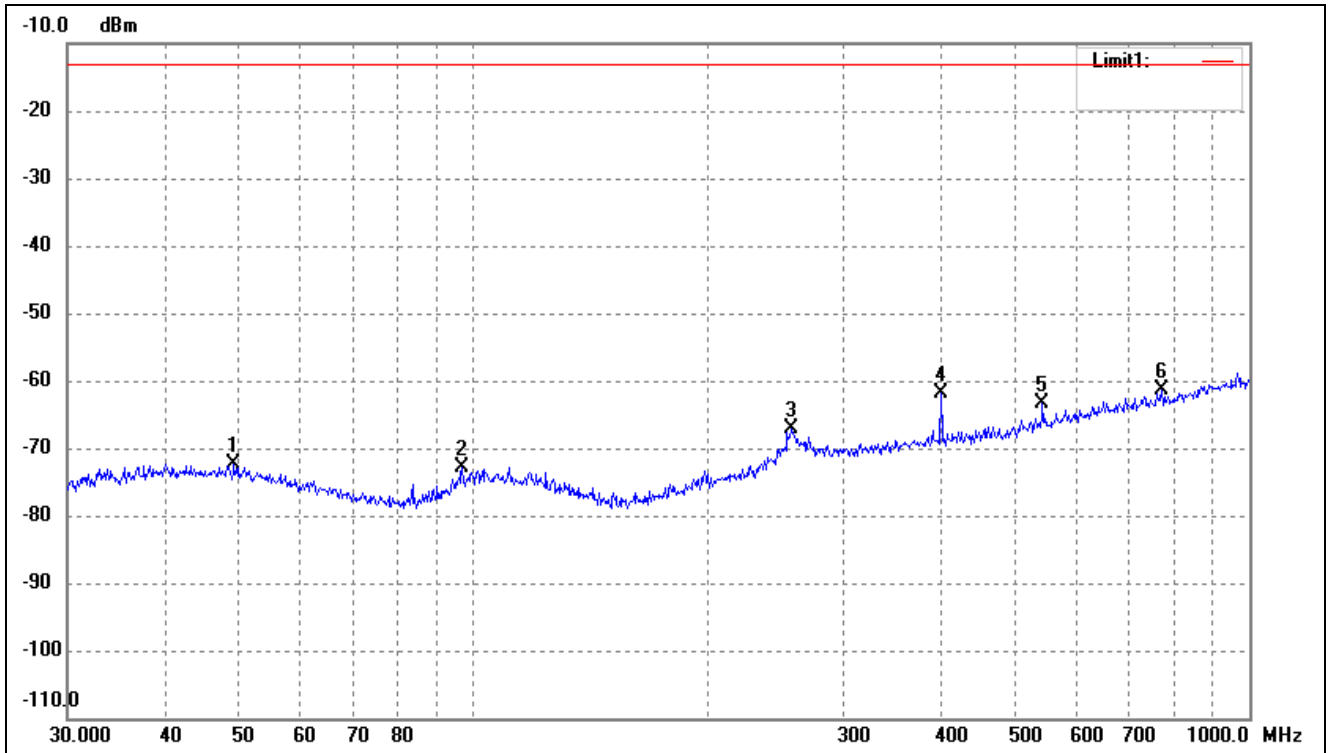
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	44.4308	-77.41	3.94	-73.47	-13.00	-60.47	ERP
2	94.0979	-77.82	1.52	-76.30	-13.00	-63.30	ERP
3	161.4742	-76.91	0.27	-76.64	-13.00	-63.64	ERP
4	258.3264	-74.95	5.00	-69.95	-13.00	-56.95	ERP
5	400.4319	-70.71	8.17	-62.54	-13.00	-49.54	ERP
6	704.2261	-76.54	12.98	-63.56	-13.00	-50.56	ERP

Test Channel	WCDMA Band II	Polarity:	Vertical
--------------	---------------	-----------	----------



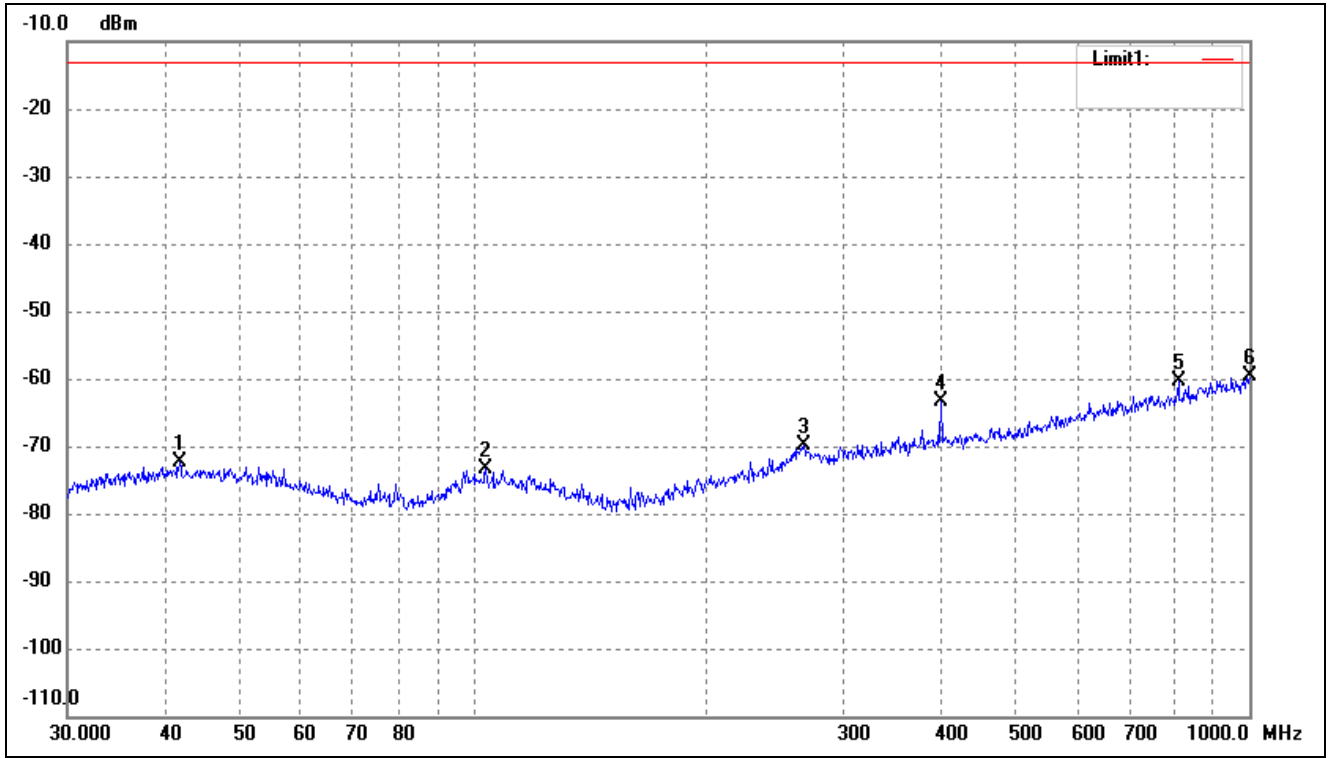
No.	Frequency (MHz)	Reading (dBm)	Correct (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	48.6719	-77.33	3.86	-73.47	-13.00	-60.47	ERP
2	109.4116	-76.80	3.11	-73.69	-13.00	-60.69	ERP
3	234.1684	-77.86	4.15	-73.71	-13.00	-60.71	ERP
4	381.2487	-76.79	7.84	-68.95	-13.00	-55.95	ERP
5	400.4319	-73.08	8.17	-64.91	-13.00	-51.91	ERP
6	962.1623	-76.52	16.14	-60.38	-13.00	-47.38	ERP

Test Channel	WCDMA Band V	Polarity:	Horizontal
--------------	--------------	-----------	------------



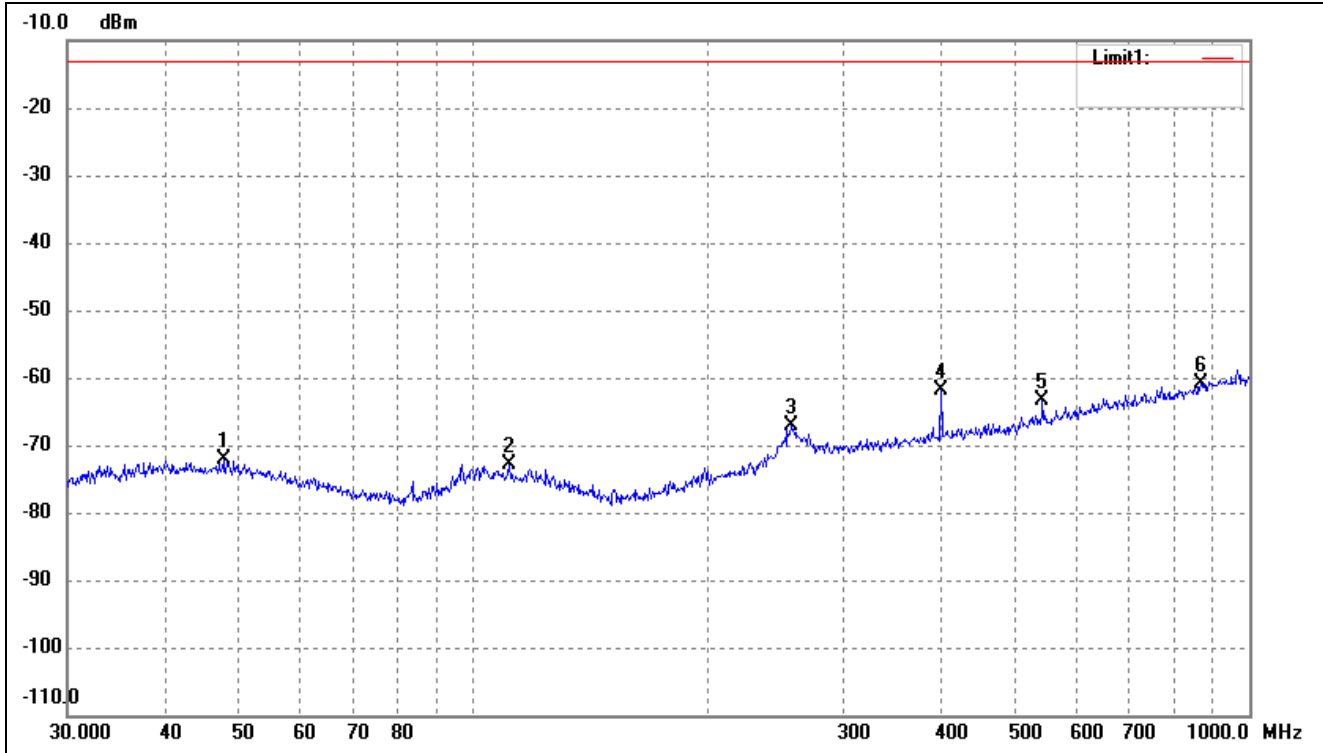
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	49.1866	-76.27	3.85	-72.42	-13.00	-59.42	ERP
2	96.7749	-75.20	2.27	-72.93	-13.00	-59.93	ERP
3	257.4222	-72.08	4.97	-67.11	-13.00	-54.11	ERP
4	400.4319	-70.01	8.17	-61.84	-13.00	-48.84	ERP
5	541.3725	-73.63	10.25	-63.38	-13.00	-50.38	ERP
6	771.4486	-75.03	13.69	-61.34	-13.00	-48.34	ERP

Test Channel	WCDMA Band V	Polarity:	Vertical
--------------	--------------	-----------	----------



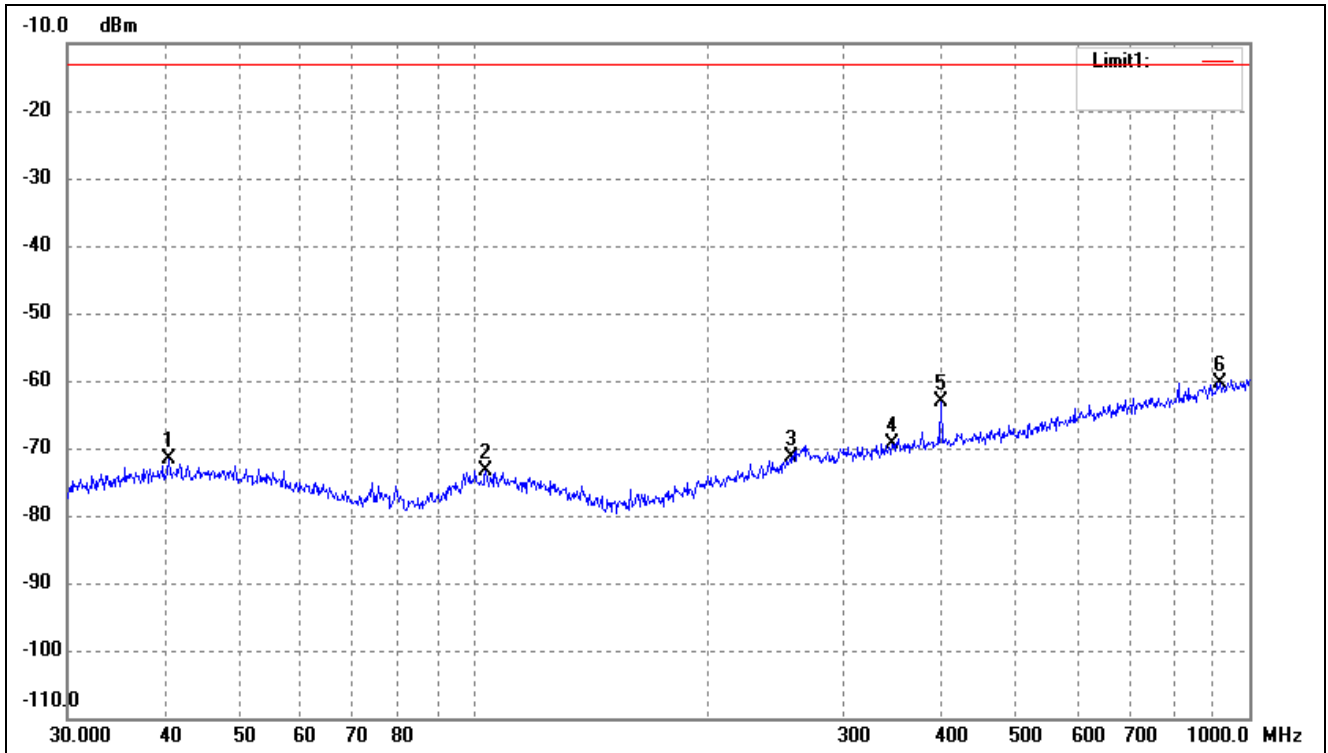
No.	Frequency (MHz)	Reading (dBm)	Correct (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	41.8596	-76.38	3.99	-72.39	-13.00	-59.39	ERP
2	103.8055	-76.50	3.14	-73.36	-13.00	-60.36	ERP
3	266.6089	-75.18	5.29	-69.89	-13.00	-56.89	ERP
4	400.4319	-71.66	8.17	-63.49	-13.00	-50.49	ERP
5	810.2654	-74.64	14.17	-60.47	-13.00	-47.47	ERP
6	1000.0000	-76.07	16.42	-59.65	-13.00	-46.65	ERP

Test Channel	WCDMA Band IV	Polarity:	Horizontal
--------------	---------------	-----------	------------



No.	Frequency (MHz)	Reading (dBm)	Correct (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	47.6586	-76.12	3.89	-72.23	-13.00	-59.23	ERP
2	111.3468	-75.83	3.02	-72.81	-13.00	-59.81	ERP
3	257.4222	-72.08	4.97	-67.11	-13.00	-54.11	ERP
4	400.4319	-70.01	8.17	-61.84	-13.00	-48.84	ERP
5	541.3725	-73.63	10.25	-63.38	-13.00	-50.38	ERP
6	866.0879	-75.91	15.09	-60.82	-13.00	-47.82	ERP

Test Channel	WCDMA Band IV	Polarity:	Vertical
--------------	---------------	-----------	----------



No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	40.5591	-75.73	4.01	-71.72	-13.00	-58.72	ERP
2	103.8055	-76.50	3.14	-73.36	-13.00	-60.36	ERP
3	256.5211	-76.33	4.94	-71.39	-13.00	-58.39	ERP
4	346.8092	-76.57	7.27	-69.30	-13.00	-56.30	ERP
5	400.4319	-71.32	8.17	-63.15	-13.00	-50.15	ERP
6	916.0687	-76.22	15.81	-60.41	-13.00	-47.41	ERP

Note: Margin= (Reading+ Correct)- Limit

- Spurious Emissions Above 1GHz
- For WCDMA Band V Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V
Low Channel (826.4MHz)						
1652.8	-36.62	4.94	-31.68	-13	-18.68	H
2479.2	-43.07	8.46	-34.61	-13	-21.61	H
1652.8	-38.07	4.94	-33.13	-13	-20.13	V
2479.2	-45.19	8.46	-36.73	-13	-23.73	V
Middle Channel (836.6MHz)						
1672.8	-38.05	5.11	-32.94	-13	-19.94	H
2509.2	-45.25	8.54	-36.71	-13	-23.71	H
1672.8	-35.92	5.11	-30.81	-13	-17.81	V
2509.2	-43.96	8.54	-35.42	-13	-22.42	V
High Channel (846.6MHz)						
1693.2	-38.16	5.25	-32.91	-13	-19.91	H
2539.8	-44.54	8.57	-35.97	-13	-22.97	H
1693.2	-37.97	5.25	-32.72	-13	-19.72	V
2539.8	-45.76	8.57	-37.19	-13	-24.19	V

- For WCDMA Band IV Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V
Low Channel (1712.4MHz)						
3424.8	-37.02	8.65	-28.37	-13	-15.37	H
5137.2	-45.53	12.03	-33.50	-13	-20.50	H
3424.8	-38.47	8.65	-29.82	-13	-16.82	V
5137.2	-44.65	12.03	-32.62	-13	-19.62	V
Middle Channel (1732.4MHz)						
3466.8	-37.94	8.91	-29.03	-13	-16.03	H
5200.2	-40.46	12.29	-28.17	-13	-15.17	H
3466.8	-36.45	8.91	-27.54	-13	-14.54	V
5200.2	-44.33	12.29	-32.04	-13	-19.04	V
High Channel (1752.6MHz)						
3505.2	-36.51	9.11	-27.40	-13	-14.40	H
5257.8	-42.76	12.56	-30.20	-13	-17.20	H
3505.2	-37.45	9.11	-28.34	-13	-15.34	V
5257.8	-41.81	12.56	-29.25	-13	-16.25	V

➤ For WCDMA Band II Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V
Low Channel (1852.4MHz)						
3704.8	-39.47	10.54	-28.93	-13	-15.93	H
5557.2	-43.60	13.37	-30.23	-13	-17.23	H
3704.8	-37.55	10.54	-27.01	-13	-14.01	V
5557.2	-42.91	13.37	-29.54	-13	-16.54	V
Middle Channel (1880MHz)						
3760.8	-39.54	10.64	-28.90	-13	-15.90	H
5640.0	-42.94	13.54	-29.40	-13	-16.40	H
3760.8	-38.26	10.64	-27.62	-13	-14.62	V
5640.0	-41.99	13.54	-28.45	-13	-15.45	V
High Channel (1907.6MHz)						
3815.2	-38.79	10.74	-28.05	-13	-15.05	H
5722.8	-41.49	13.71	-27.78	-13	-14.78	H
3815.2	-38.99	10.74	-28.25	-13	-15.25	V
5722.8	-45.13	13.71	-31.42	-13	-18.42	H

Note: Result=Reading+ Correct, Margin= Result- Limit

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

8. Frequency Stability

8.1 Standard Applicable

According to §22.355, §24.235, §27.54 the limit is 2.5ppm.

8.2 Test Procedure

According to §2.1055, the following test procedure was performed.

The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.

The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode.

8.3 Summary of Test Results/Plots

Please refer to Appendix E

9. Modulation characteristics

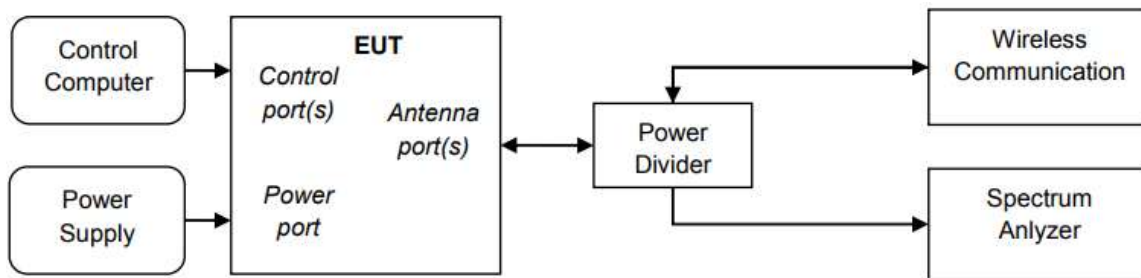
9.1 Standard Applicable

According to §2.1047, measurements required: Modulation characteristics is given below:

- (a) Voice modulated communication equipment. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000Hz shall be submitted. For equipment required to have an audio low-pass filter, a curve showing the frequency response of the filter, or of all circuitry installed between the modulation limiter and the modulated stage shall be submitted.
- (b) Equipment which employs modulation limiting. A curve or family of curves showing the percentage of modulation versus the modulation input voltage shall be supplied. The information submitted shall be sufficient to show modulation limiting capability throughout the range of modulating frequencies and input modulating signal levels employed.
- (c) Single sideband and independent sideband radiotelephone transmitters which employ a device or circuit to limit peak envelope power. A curve showing the peak envelope power output versus the modulation input voltage shall be supplied. The modulating signals shall be the same in frequency as specified in paragraph (c) of §2.1049 for the occupied bandwidth tests.
- (d) Other types of equipment. A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

9.2 Test Procedure

According to ANSI C63.26-2015 section 5.3.2, the following test setup was performed.



9.3 Summary of Test Results/Plots

Please refer to Appendix F

APPENDIX SUMMARY

Project No.	WTH22X08161493W	Test Engineer	DAIdi
Start date	2022/08/15	Finish date	2020/08/15
Temperature	25°C	Humidity	56%
RF specifications	WCDMA		

APPENDIX	Description of Test Item	Result
A	RF Output Power	Compliant
B	Peak-to-average Ratio (PAR) of Transmitter	Compliant
C	Emission Bandwidth	Compliant
D	Out of Band Emissions at Antenna Terminal	Compliant
E	Frequency Stability	Compliant
F	Modulation characteristics	Compliant

APPENDIX A**Conducted Average power**

Conducted Average power (dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4183	4233	9262	9400	9538
Frequency(MHz)	826.4	836.6	846.6	1852.4	1880.0	1907.6
RMC 12.2k	23.35	23.38	23.47	23.77	23.64	23.70
HSDPA Subtest-1	22.31	22.40	22.75	22.59	22.55	22.52
HSDPA Subtest-2	22.15	22.19	22.63	22.46	22.44	22.37
HSDPA Subtest-3	22.20	22.30	22.61	22.45	22.32	22.36
HSDPA Subtest-4	22.19	22.20	22.57	22.35	22.31	22.32
HSUPA Subtest-1	21.91	21.89	22.17	22.15	21.91	22.01
HSUPA Subtest-2	21.71	21.67	21.97	21.93	21.67	21.77
HSUPA Subtest-3	21.69	21.74	22.07	22.02	21.77	21.81
HSUPA Subtest-4	21.72	21.66	21.94	21.91	21.72	21.78
HSUPA Subtest-5	21.72	21.78	22.03	21.93	21.78	21.88

Conducted Average power (dBm)						
Band	WCDMA Band IV			/		
Channel	1312	1412	1513	/	/	/
Frequency(MHz)	1712.4	1733.4	1752.6	/	/	/
RMC 12.2k	23.54	23.51	23.77	/	/	/
HSDPA Subtest-1	22.64	22.56	22.80	/	/	/
HSDPA Subtest-2	22.52	22.35	22.69	/	/	/
HSDPA Subtest-3	22.53	22.45	22.56	/	/	/
HSDPA Subtest-4	22.51	22.32	22.58	/	/	/
HSUPA Subtest-1	22.16	22.12	22.22	/	/	/
HSUPA Subtest-2	22.03	21.95	22.05	/	/	/
HSUPA Subtest-3	21.91	21.89	22.00	/	/	/
HSUPA Subtest-4	22.02	21.97	21.98	/	/	/
HSUPA Subtest-5	21.95	21.88	22.03	/	/	/

APPENDIX B**Peak-to-average Ratio (PAR) of Transmitter**

WCDMA Band V				
Test Mode	Channel	Frequency (MHz)	PAR (dB)	Limit (dB)
WCDMA	4132	826.40	5.75	13
	4183	836.60	6.87	13
	4233	846.60	7.01	13

WCDMA Band IV				
Test Mode	Channel	Frequency (MHz)	PAR (dB)	Limit (dB)
WCDMA	1312	1712.4	5.12	13
	1412	1733.4	6.01	13
	1513	1752.6	6.70	13

WCDMA Band II				
Test Mode	Channel	Frequency (MHz)	PAR (dB)	Limit (dB)
WCDMA	9262	1852.4	5.36	13
	9400	1880.0	6.22	13
	9538	1907.6	6.10	13

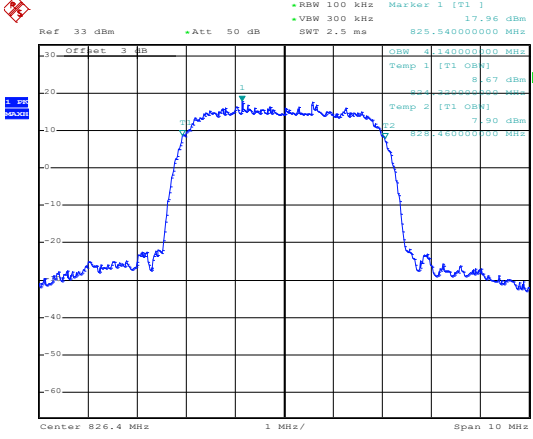
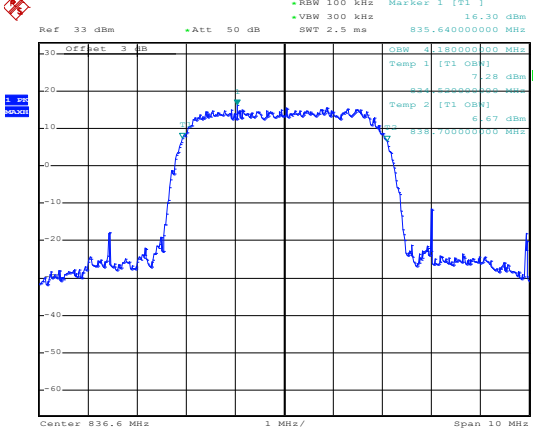
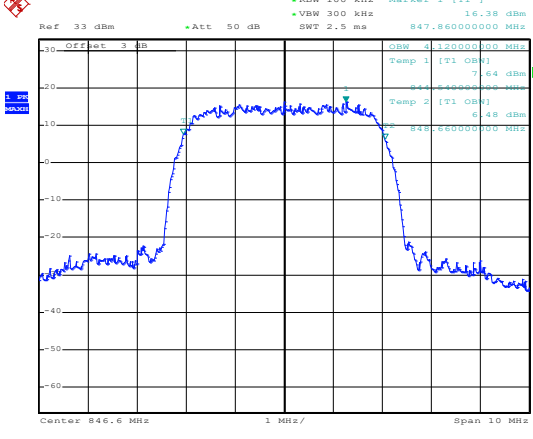
Note: Only the worst case was selected to record.

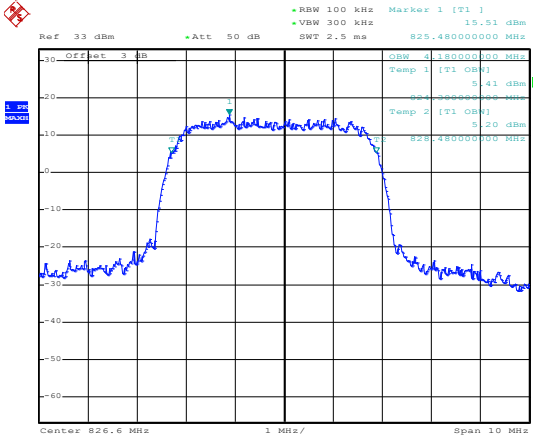
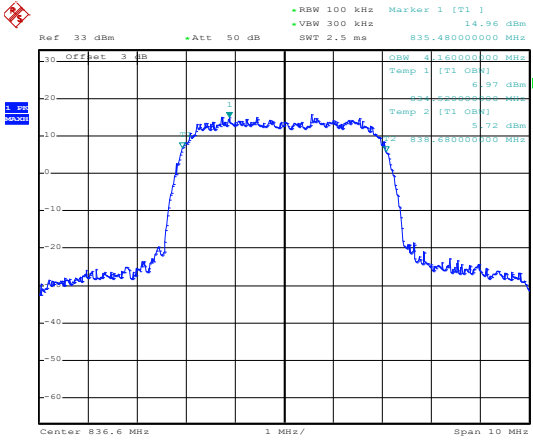
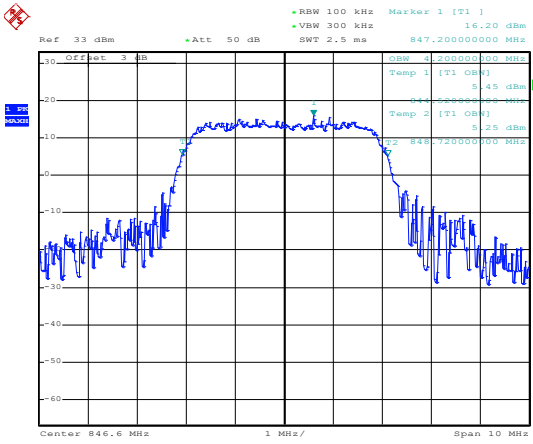
APPENDIX C

EUT Mode	Channel	Frequency (MHz)	99% Occupancy bandwidth (kHz)	-26dB bandwidth (kHz)
WCDMA Band V	4132	826.40	4140.00	4760.00
	4183	836.60	4180.00	4760.00
	4233	846.60	4120.00	4740.00
HSDPA	4132	826.40	4180.00	4720.00
	4183	836.60	4160.00	4760.00
	4233	846.60	4200.00	5300.00
HSUPA	4132	826.40	4160.00	4760.00
	4183	836.60	4160.00	4760.00
	4233	846.60	4260.00	4920.00
WCDMA Band II	9262	1852.40	4160.00	4740.00
	9400	1880.00	4160.00	4720.00
	9538	1907.60	4140.00	4720.00
HSDPA	9262	1852.40	4180.00	4740.00
	9400	1880.00	4120.00	4760.00
	9538	1907.60	4140.00	4720.00
HSUPA	9262	1852.40	4140.00	4740.00
	9400	1880.00	4160.00	4760.00
	9538	1907.60	4160.00	4720.00
WCDMA Band IV	1312	1712.4	4160.00	4760.00
	1412	1733.4	4160.00	4720.00
	1513	1752.6	4140.00	4740.00
HSDPA	1312	1712.4	4140.00	4720.00
	1412	1733.4	4140.00	4720.00
	1513	1752.6	4140.00	4700.00
HSUPA	1312	1712.4	4160.00	4720.00
	1412	1733.4	4180.00	4740.00

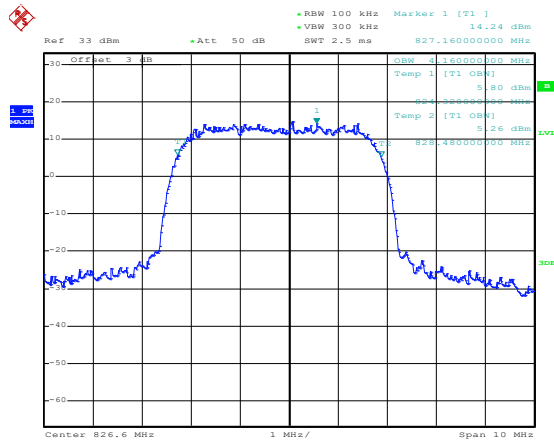
	1513	1752.6	4140.00	4760.00
--	------	--------	---------	---------

99%

<p>WCDMA Band V-Low</p>	 <p>Ref 33 dBm •Att 50 dB •RBW 100 kHz Marker 1 [T1] 17.96 dBm •VBW 300 kHz 825.540000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB DBW 1 140000000 MHz Temp 1 [T1] OBW] 8.67 dBm Temp 2 [T1] OBW] 7.90 dBm</p> <p>Center 826.4 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:55:31</p>
<p>WCDMA Band V-Middle</p>	 <p>Ref 33 dBm •Att 50 dB •RBW 100 kHz Marker 1 [T1] 16.30 dBm •VBW 300 kHz 835.640000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB DBW 1 180000000 MHz Temp 1 [T1] OBW] 7.28 dBm Temp 2 [T1] OBW] 6.67 dBm</p> <p>Center 836.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:56:12</p>
<p>WCDMA Band V-High</p>	 <p>Ref 33 dBm •Att 50 dB •RBW 100 kHz Marker 1 [T1] 16.38 dBm •VBW 300 kHz 847.860000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB DBW 1 150000000 MHz Temp 1 [T1] OBW] 7.64 dBm Temp 2 [T1] OBW] 6.48 dBm</p> <p>Center 846.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:56:26</p>

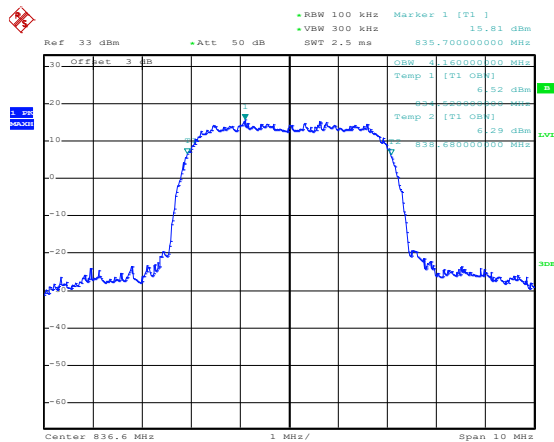
<p>HSDPA-Low</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 15.51 dBm 825.48000000 MHz</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Offset 3 dB</p> <p>Center 826.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:57:18</p>
<p>HSDPA-Middle</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 14.96 dBm 835.48000000 MHz</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Offset 3 dB</p> <p>Center 836.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:57:47</p>
<p>HSDPA-High</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 16.20 dBm 847.20000000 MHz</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Offset 3 dB</p> <p>Center 846.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 17:58:09</p>

HSUPA-Low



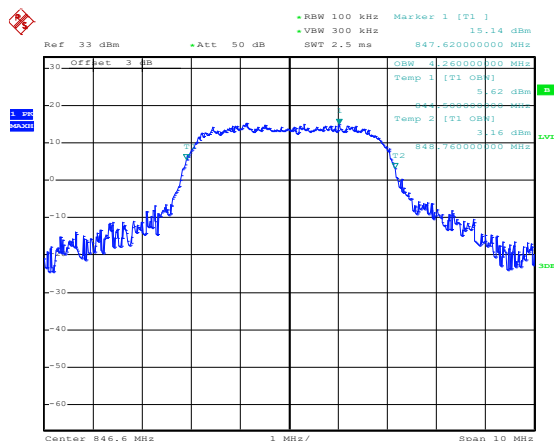
Date: 15.AUG.2022 17:59:03

HSUPA-Middle

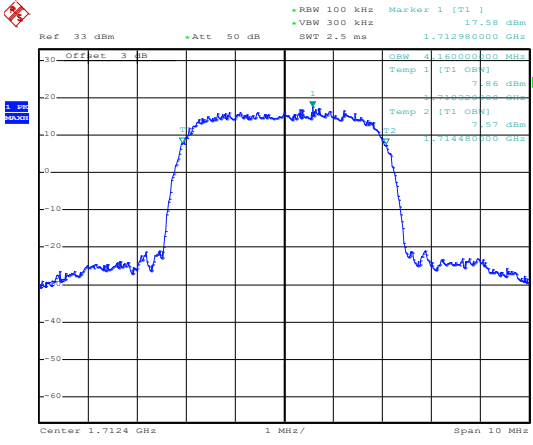
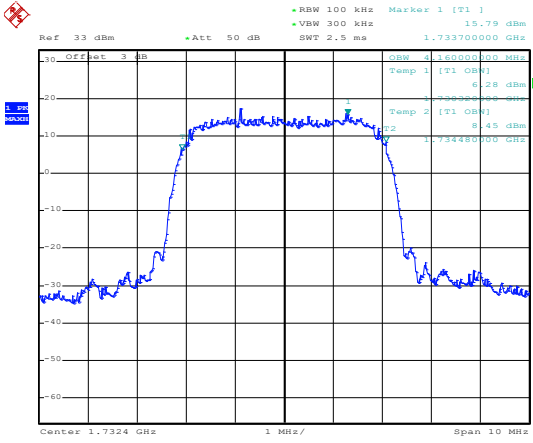
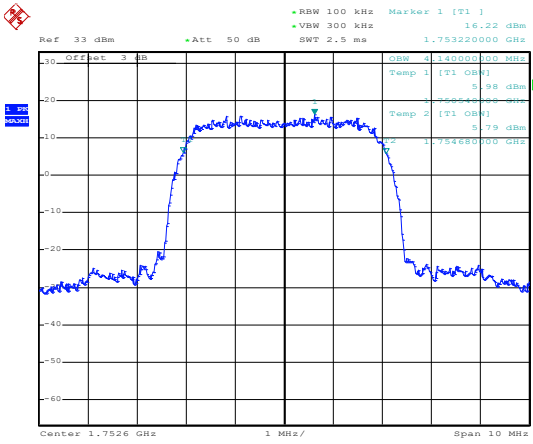


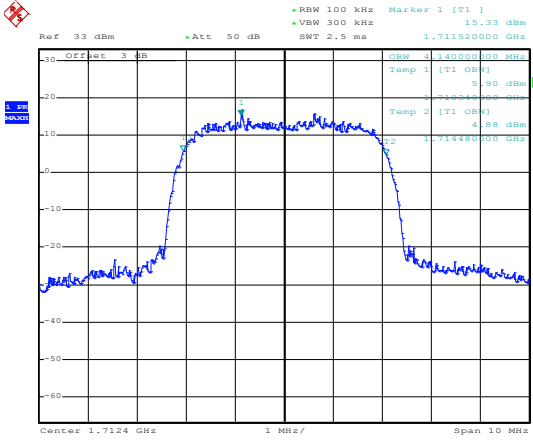
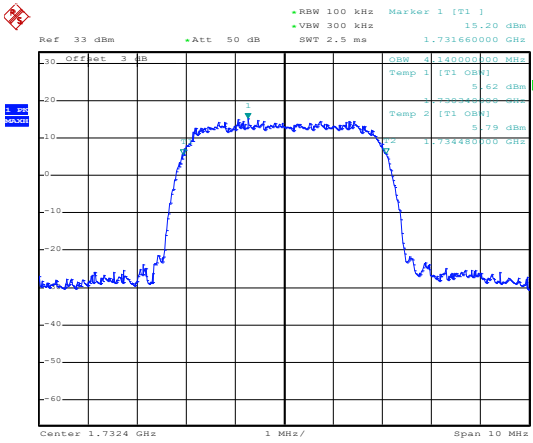
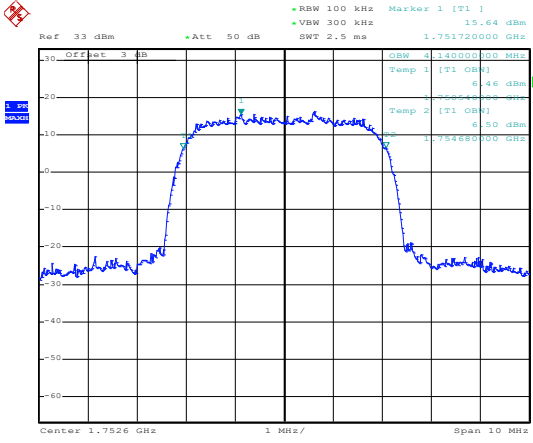
Date: 15.AUG.2022 18:00:02

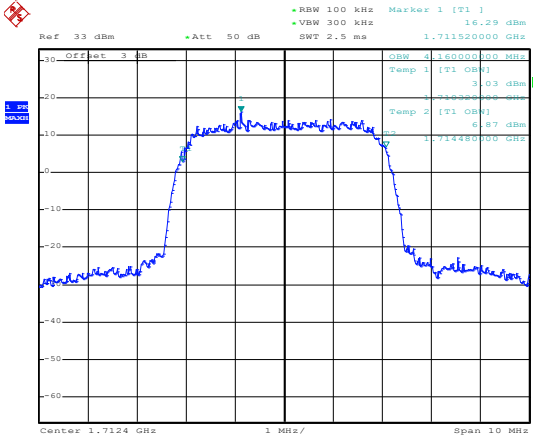
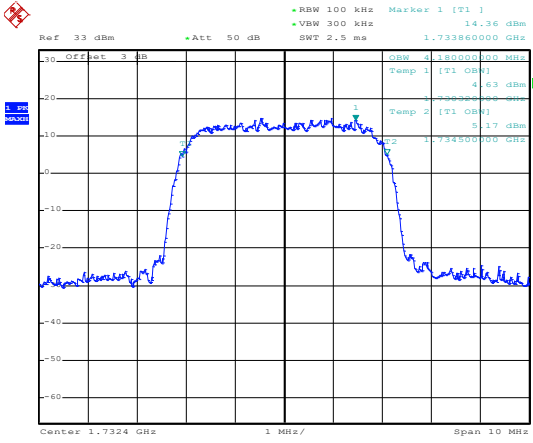
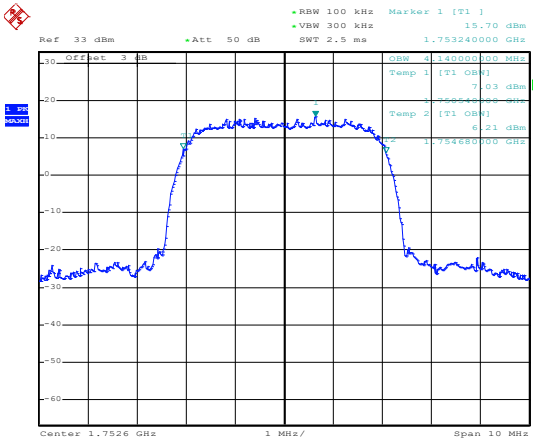
HSUPA-High

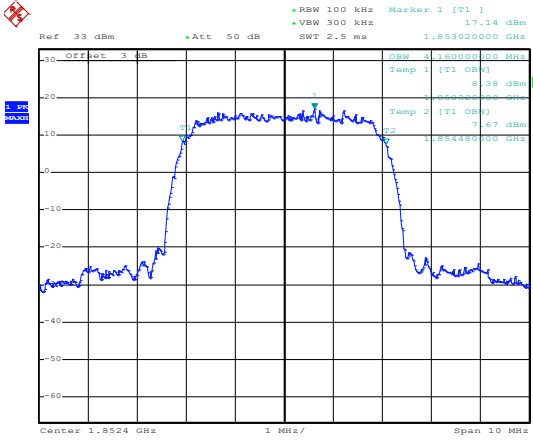
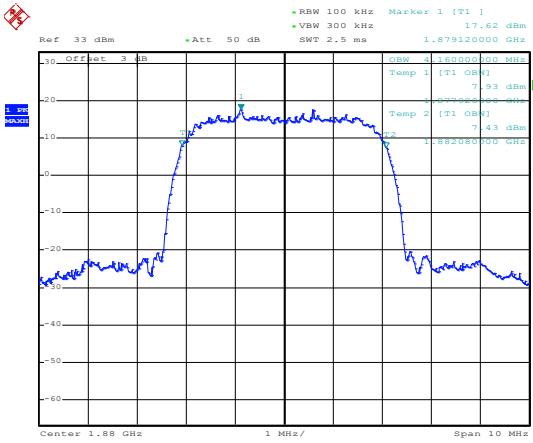
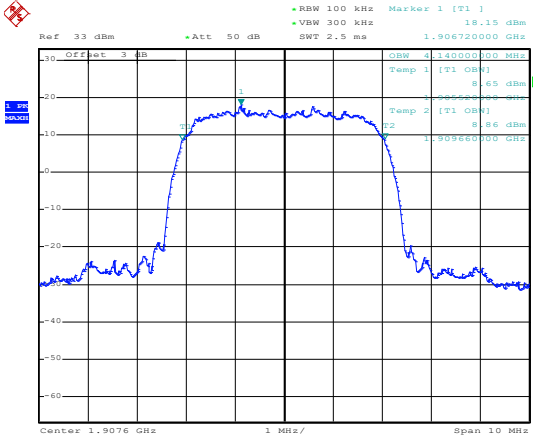


Date: 15.AUG.2022 18:01:02

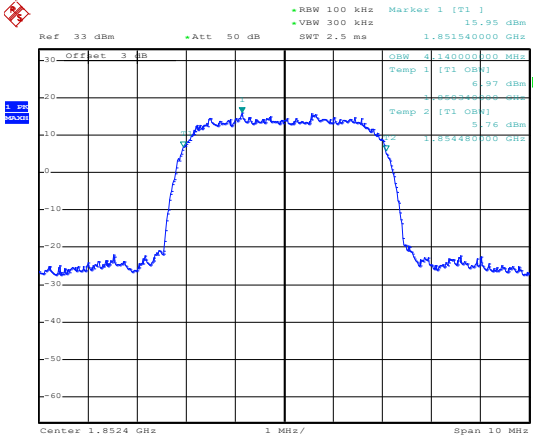
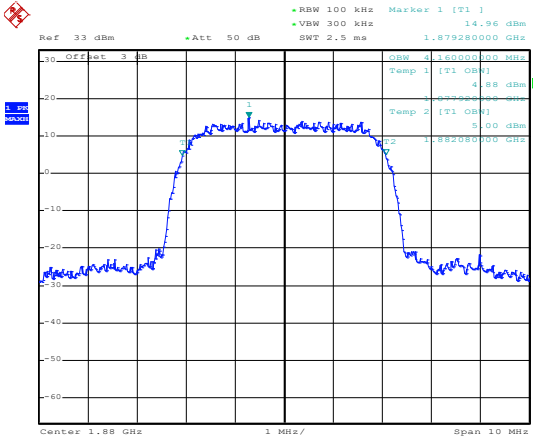
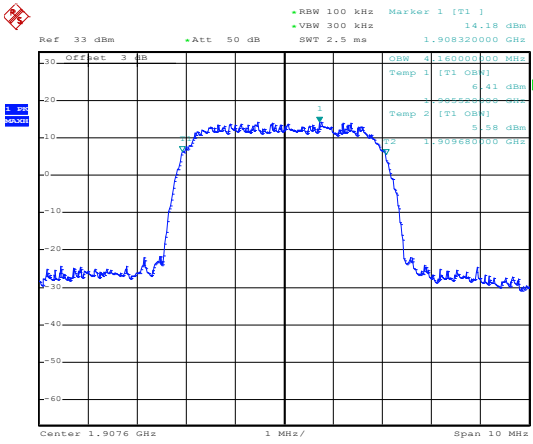
<p>WCDMA Band IV-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 17.58 dBm VBW 300 kHz SWT 2.5 ms 1.712980000 GHz</p> <p>Center 1.7124 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:48:00</p>
<p>WCDMA Band IV-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.79 dBm VBW 300 kHz SWT 2.5 ms 1.732790000 GHz</p> <p>Center 1.7324 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:48:17</p>
<p>WCDMA Band IV-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 16.22 dBm VBW 300 kHz SWT 2.5 ms 1.753220000 GHz</p> <p>Center 1.7526 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:48:34</p>

<p>HSDPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.33 dBm VBW 300 kHz SWT 2.5 ms 1.711520000 GHz</p> <p>Offset 3 dB Span 10 MHz Center 1.7124 GHz 1 MHz/</p> <p>Date: 15.AUG.2022 16:49:10</p>
<p>HSDPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.20 dBm VBW 300 kHz SWT 2.5 ms 1.731660000 GHz</p> <p>Offset 3 dB Span 10 MHz Center 1.7324 GHz 1 MHz/</p> <p>Date: 15.AUG.2022 16:49:29</p>
<p>HSDPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.64 dBm VBW 300 kHz SWT 2.5 ms 1.751720000 GHz</p> <p>Offset 3 dB Span 10 MHz Center 1.7526 GHz 1 MHz/</p> <p>Date: 15.AUG.2022 16:50:10</p>

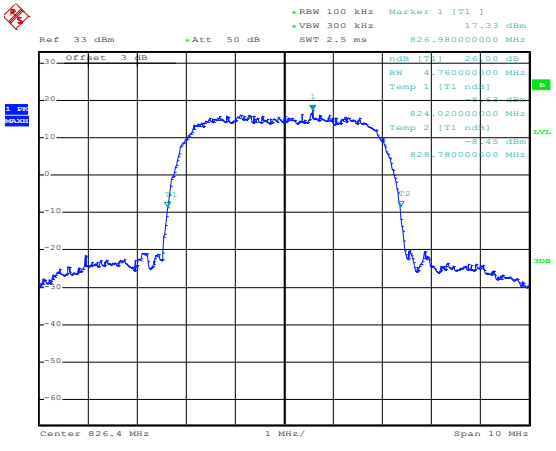
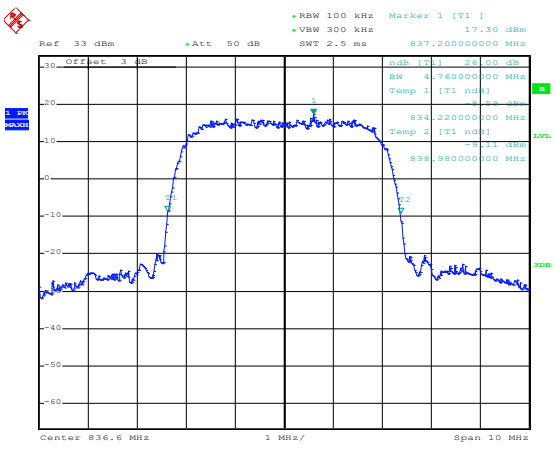
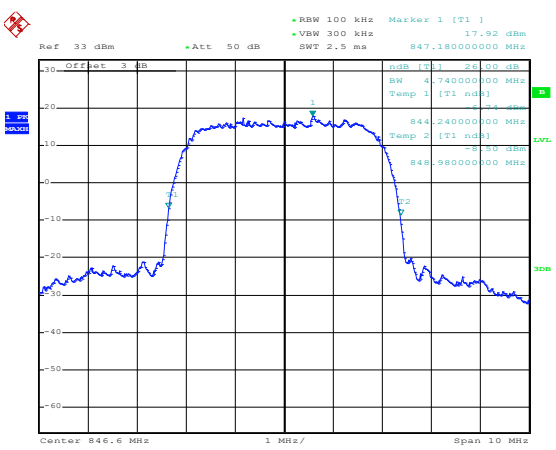
<p>HSUPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 16.29 dBm VBW 300 kHz SWT 2.5 ms 1.711520000 GHz</p> <p>Center 1.7124 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:51:05</p>
<p>HSUPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 14.36 dBm VBW 300 kHz SWT 2.5 ms 1.733860000 GHz</p> <p>Center 1.7324 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:51:23</p>
<p>HSUPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.70 dBm VBW 300 kHz SWT 2.5 ms 1.753240000 GHz</p> <p>Center 1.7526 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:52:03</p>

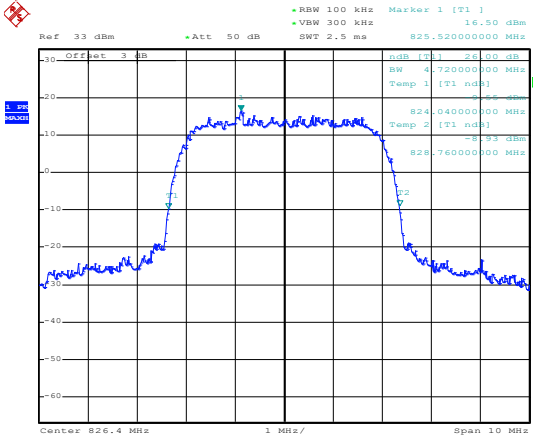
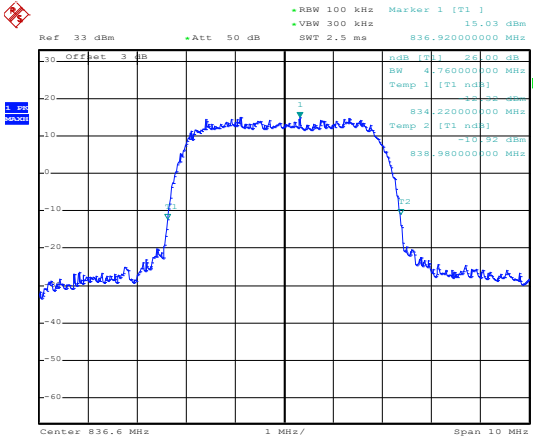
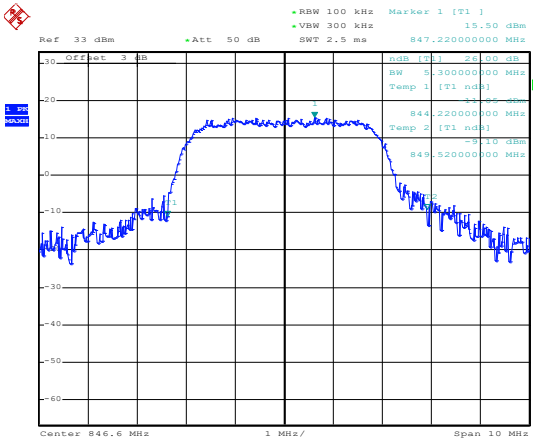
<p>WCDMA Band II-Low</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 17.14 dBm RBW 100 kHz VBW 300 kHz SWT 2.5 ms 1.85320000 GHz</p> <p>Center 1.8534 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:51:09</p>
<p>WCDMA Band II-Middle</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 17.62 dBm RBW 100 kHz VBW 300 kHz SWT 2.5 ms 1.87912000 GHz</p> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:51:58</p>
<p>WCDMA Band II-High</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 18.15 dBm RBW 100 kHz VBW 300 kHz SWT 2.5 ms 1.90672000 GHz</p> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:53:09</p>

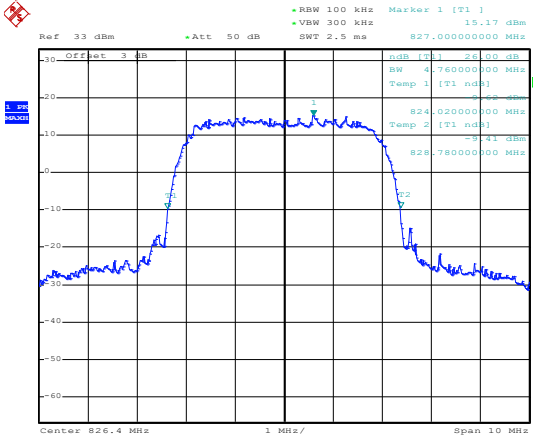
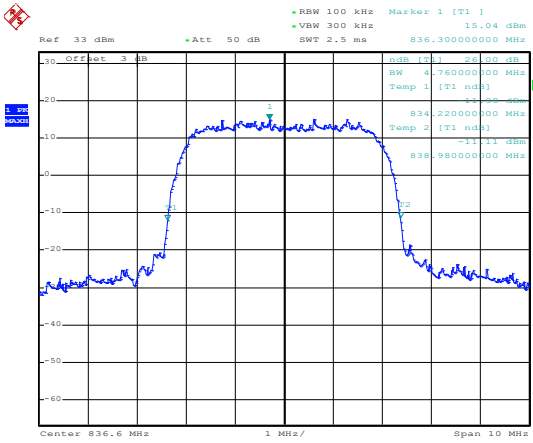
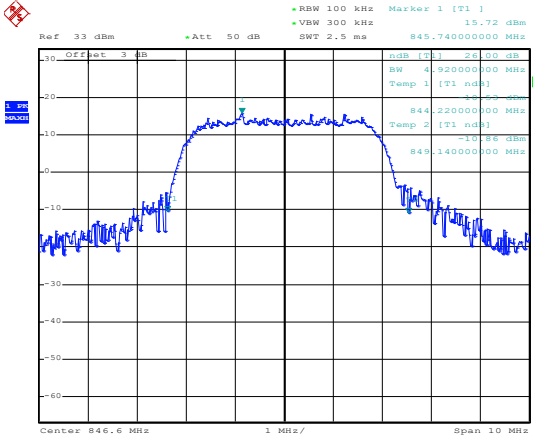
<p>HSDPA-Low</p>	<p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.10 dBm VBW 300 kHz SWT 2.5 ms 1.85300000 GHz</p> <p>Center 1.8534 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:53:51</p>
<p>HSDPA-Middle</p>	<p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.42 dBm VBW 300 kHz SWT 2.5 ms 1.88120000 GHz</p> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:54:14</p>
<p>HSDPA-High</p>	<p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.77 dBm VBW 300 kHz SWT 2.5 ms 1.90672000 GHz</p> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:54:42</p>

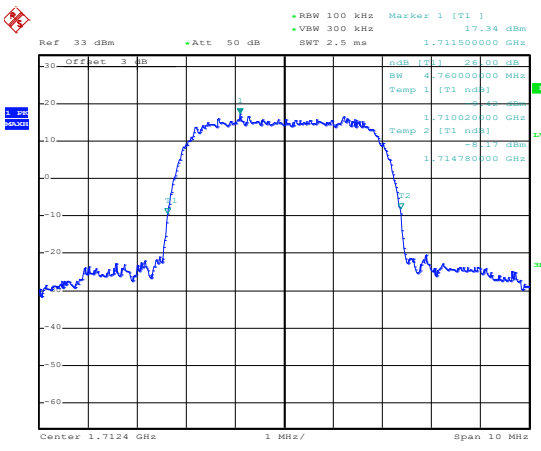
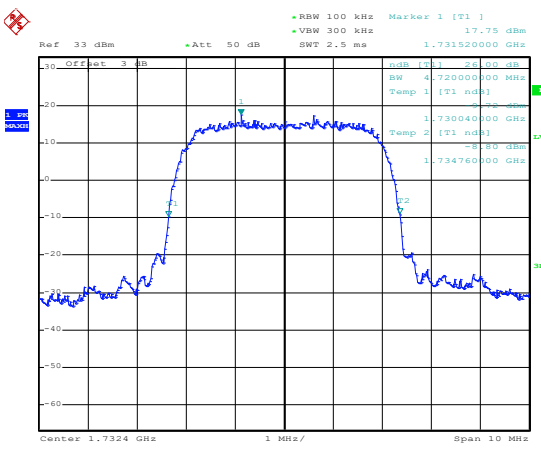
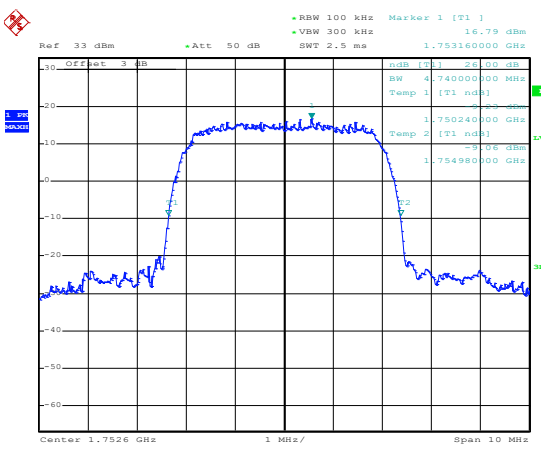
<p>HSUPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 15.95 dBm 1.85140000 GHz</p> <p>Center 1.8514 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:56:51</p>
<p>HSUPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 14.96 dBm 1.87920000 GHz</p> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:57:08</p>
<p>HSUPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 14.18 dBm 1.90820000 GHz</p> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:57:34</p>

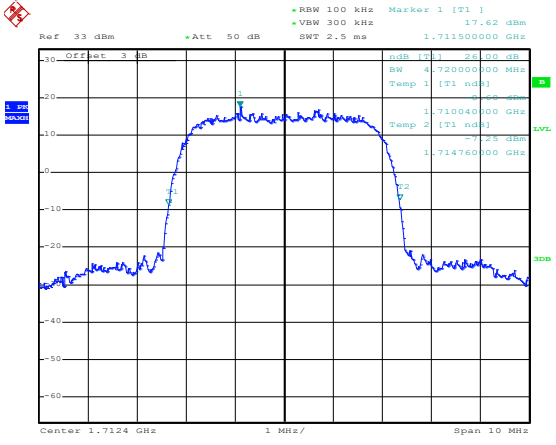
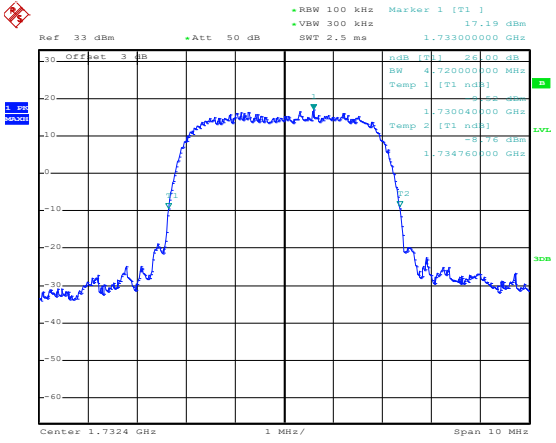
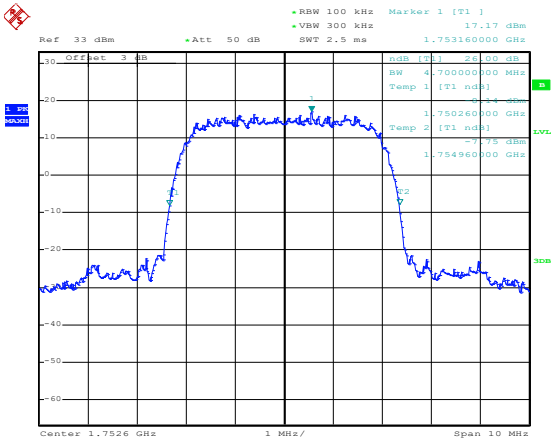
-26dB

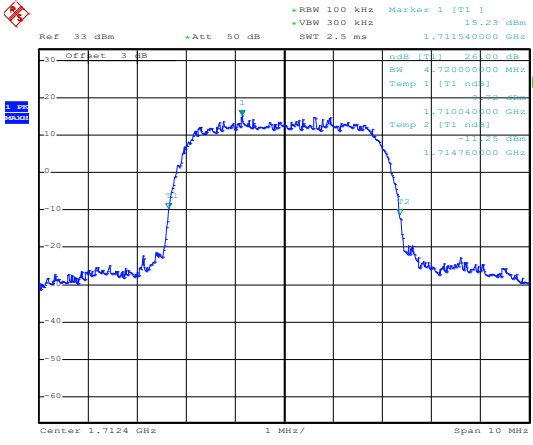
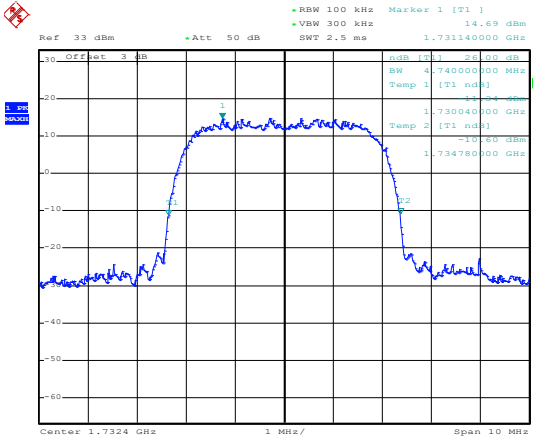
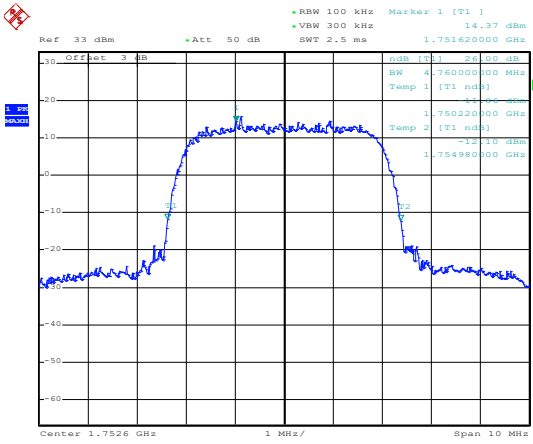
<p>WCDMA Band V-Low</p>	 <p>Ref 33 dBm +Att 50 dB +RBW 100 kHz Marker 1 [T1] 17.33 dBm +VSW 300 kHz +SWT 2.5 ms 826.980000000 MHz</p> <table border="1" data-bbox="1029 324 1189 459"> <tr> <td>dBm [T1]</td> <td>25.00 dB</td> </tr> <tr> <td>SW</td> <td>4.760000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.33 dBm</td> </tr> </table> <p>Center 826.4 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:33:37</p>	dBm [T1]	25.00 dB	SW	4.760000000 MHz	Temp 1 [T1 ndB]	-17.33 dBm	Temp 2 [T1 ndB]	-17.33 dBm	Temp 1 [T1 ndB]	-17.33 dBm	Temp 2 [T1 ndB]	-17.33 dBm	Temp 1 [T1 ndB]	-17.33 dBm	Temp 2 [T1 ndB]	-17.33 dBm	Temp 1 [T1 ndB]	-17.33 dBm	Temp 2 [T1 ndB]	-17.33 dBm
dBm [T1]	25.00 dB																				
SW	4.760000000 MHz																				
Temp 1 [T1 ndB]	-17.33 dBm																				
Temp 2 [T1 ndB]	-17.33 dBm																				
Temp 1 [T1 ndB]	-17.33 dBm																				
Temp 2 [T1 ndB]	-17.33 dBm																				
Temp 1 [T1 ndB]	-17.33 dBm																				
Temp 2 [T1 ndB]	-17.33 dBm																				
Temp 1 [T1 ndB]	-17.33 dBm																				
Temp 2 [T1 ndB]	-17.33 dBm																				
<p>WCDMA Band V-Middle</p>	 <p>Ref 33 dBm +Att 50 dB +RBW 100 kHz Marker 1 [T1] 17.30 dBm +VSW 300 kHz +SWT 2.5 ms 837.200000000 MHz</p> <table border="1" data-bbox="1029 878 1189 1012"> <tr> <td>dBm [T1]</td> <td>25.00 dB</td> </tr> <tr> <td>SW</td> <td>4.760000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.30 dBm</td> </tr> </table> <p>Center 836.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:34:14</p>	dBm [T1]	25.00 dB	SW	4.760000000 MHz	Temp 1 [T1 ndB]	-17.30 dBm	Temp 2 [T1 ndB]	-17.30 dBm	Temp 1 [T1 ndB]	-17.30 dBm	Temp 2 [T1 ndB]	-17.30 dBm	Temp 1 [T1 ndB]	-17.30 dBm	Temp 2 [T1 ndB]	-17.30 dBm	Temp 1 [T1 ndB]	-17.30 dBm	Temp 2 [T1 ndB]	-17.30 dBm
dBm [T1]	25.00 dB																				
SW	4.760000000 MHz																				
Temp 1 [T1 ndB]	-17.30 dBm																				
Temp 2 [T1 ndB]	-17.30 dBm																				
Temp 1 [T1 ndB]	-17.30 dBm																				
Temp 2 [T1 ndB]	-17.30 dBm																				
Temp 1 [T1 ndB]	-17.30 dBm																				
Temp 2 [T1 ndB]	-17.30 dBm																				
Temp 1 [T1 ndB]	-17.30 dBm																				
Temp 2 [T1 ndB]	-17.30 dBm																				
<p>WCDMA Band V-High</p>	 <p>Ref 33 dBm +Att 50 dB +RBW 100 kHz Marker 1 [T1] 17.92 dBm +VSW 300 kHz +SWT 2.5 ms 847.180000000 MHz</p> <table border="1" data-bbox="1029 1431 1189 1565"> <tr> <td>dBm [T1]</td> <td>25.00 dB</td> </tr> <tr> <td>SW</td> <td>4.740000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 1 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> <tr> <td>Temp 2 [T1 ndB]</td> <td>-17.92 dBm</td> </tr> </table> <p>Center 846.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:35:59</p>	dBm [T1]	25.00 dB	SW	4.740000000 MHz	Temp 1 [T1 ndB]	-17.92 dBm	Temp 2 [T1 ndB]	-17.92 dBm	Temp 1 [T1 ndB]	-17.92 dBm	Temp 2 [T1 ndB]	-17.92 dBm	Temp 1 [T1 ndB]	-17.92 dBm	Temp 2 [T1 ndB]	-17.92 dBm	Temp 1 [T1 ndB]	-17.92 dBm	Temp 2 [T1 ndB]	-17.92 dBm
dBm [T1]	25.00 dB																				
SW	4.740000000 MHz																				
Temp 1 [T1 ndB]	-17.92 dBm																				
Temp 2 [T1 ndB]	-17.92 dBm																				
Temp 1 [T1 ndB]	-17.92 dBm																				
Temp 2 [T1 ndB]	-17.92 dBm																				
Temp 1 [T1 ndB]	-17.92 dBm																				
Temp 2 [T1 ndB]	-17.92 dBm																				
Temp 1 [T1 ndB]	-17.92 dBm																				
Temp 2 [T1 ndB]	-17.92 dBm																				

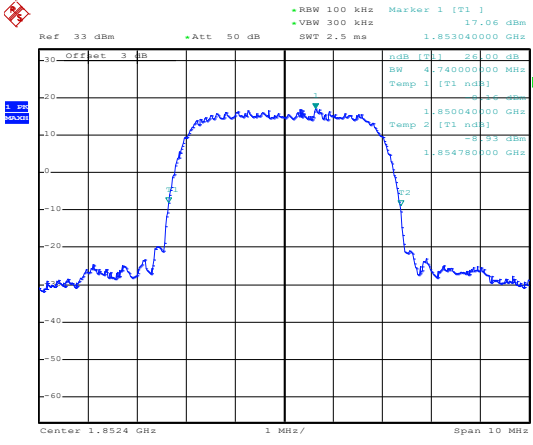
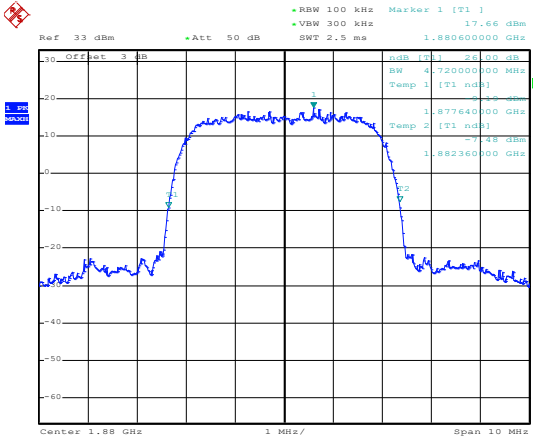
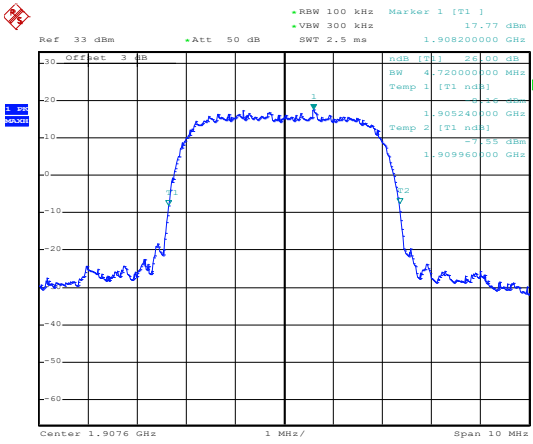
<p>HSDPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 16.50 dBm VBW 300 kHz 825.52000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 24.00 dB BW 4.72000000 MHz Temp 1 [T1 n dB] -34.00 dB 824.04000000 MHz Temp 2 [T1 n dB] -8.93 dBm 828.76000000 MHz</p> <p>Center 825.4 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:36:55</p>
<p>HSDPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.03 dBm VBW 300 kHz 836.92000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 24.00 dB BW 4.76000000 MHz Temp 1 [T1 n dB] -34.00 dB 834.22000000 MHz Temp 2 [T1 n dB] -10.92 dBm 838.98000000 MHz</p> <p>Center 836.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:37:23</p>
<p>HSDPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.50 dBm VBW 300 kHz 847.22000000 MHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 24.00 dB BW 4.30000000 MHz Temp 1 [T1 n dB] -34.00 dB 844.22000000 MHz Temp 2 [T1 n dB] -9.10 dBm 849.52000000 MHz</p> <p>Center 846.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:38:24</p>

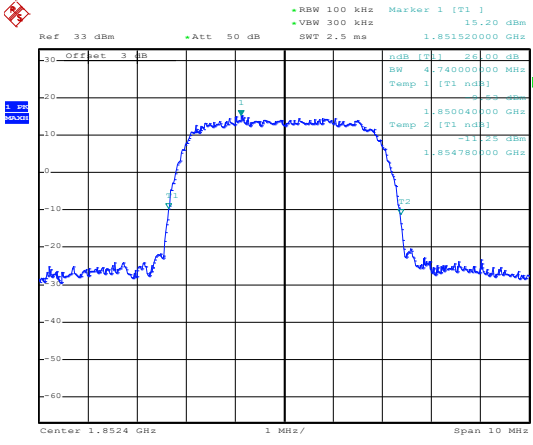
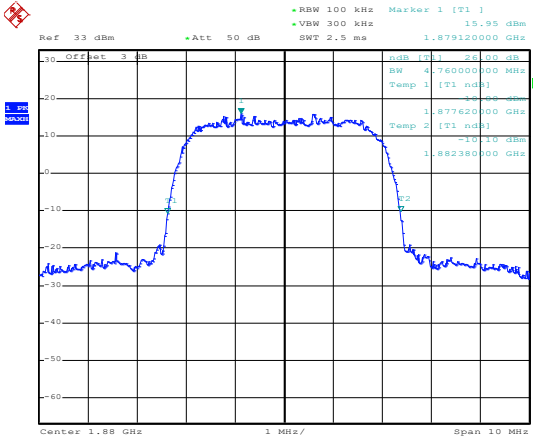
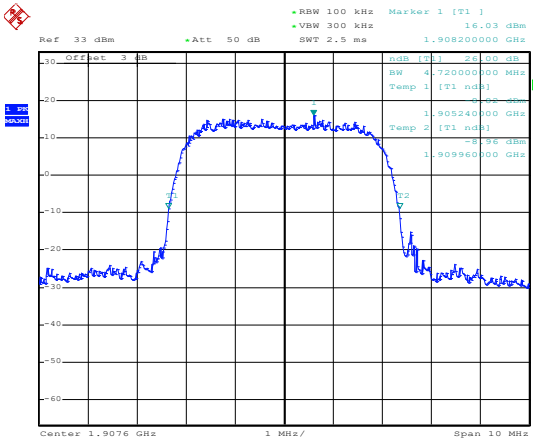
<p>HSUPA-Low</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 15.17 dBm 827.00000000 MHz</p> <p>Offset 3 dB</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Center 826.4 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:39:32</p>
<p>HSUPA-Middle</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 15.04 dBm 836.20000000 MHz</p> <p>Offset 3 dB</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Center 836.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:40:42</p>
<p>HSUPA-High</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 15.72 dBm 845.74000000 MHz</p> <p>Offset 3 dB</p> <p>RBW 100 kHz VBW 300 kHz SWT 2.5 ms</p> <p>Center 846.6 MHz 1 MHz/ Span 10 MHz</p> <p>Date: 16.AUG.2022 15:41:37</p>

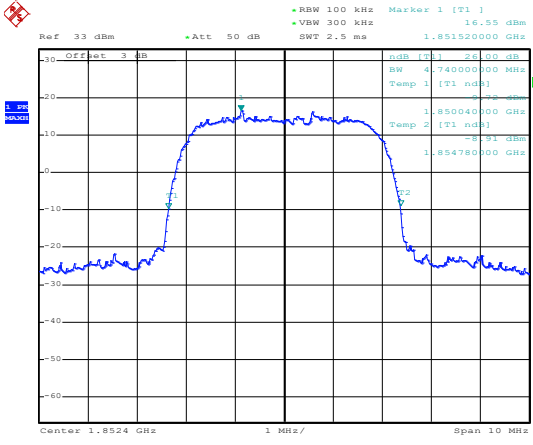
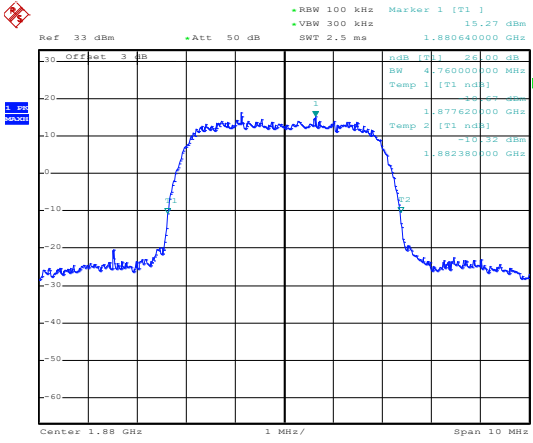
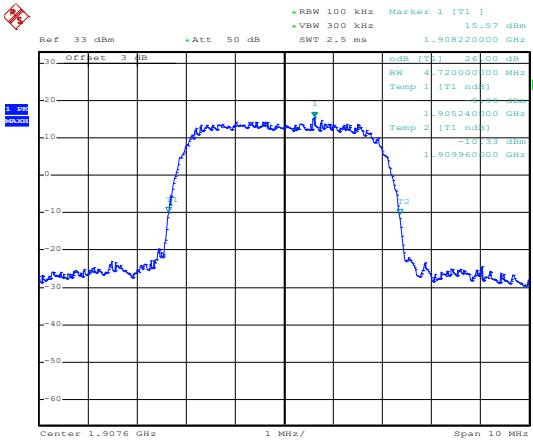
<p>WCDMA Band IV-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 17.34 dBm 1.71500000 GHz</p> <p>Center 1.7124 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:42:00</p>
<p>WCDMA Band IV-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 17.75 dBm 1.73520000 GHz</p> <p>Center 1.7324 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:42:33</p>
<p>WCDMA Band IV-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 16.79 dBm 1.75316000 GHz</p> <p>Center 1.7526 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:42:56</p>

<p>HSDPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 17.62 dBm VBW 300 kHz 1.711500000 GHz</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.720000000 MHz Temp 1 [T1 n dB] -26.00 dB 1.710040000 GHz Temp 2 [T1 n dB] -27.25 dBm 1.714760000 GHz</p> <p>Center 1.7124 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:43:37</p>
<p>HSDPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 17.19 dBm VBW 300 kHz 1.732000000 GHz</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.720000000 MHz Temp 1 [T1 n dB] -26.00 dB 1.730040000 GHz Temp 2 [T1 n dB] -27.78 dBm 1.734760000 GHz</p> <p>Center 1.7324 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:44:00</p>
<p>HSDPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 17.17 dBm VBW 300 kHz 1.753160000 GHz</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.700000000 MHz Temp 1 [T1 n dB] -26.00 dB 1.750260000 GHz Temp 2 [T1 n dB] -27.75 dBm 1.754960000 GHz</p> <p>Center 1.7526 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:44:26</p>

<p>HSUPA-Low</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 15.23 dBm 1.711540000 GHz</p> <table border="1"> <thead> <tr> <th>n dB [T1]</th> <th>24.00 dB</th> </tr> </thead> <tbody> <tr> <td>BW</td> <td>4.720000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 n dB]</td> <td>-34.00 dBm</td> </tr> <tr> <td>Temp 2 [T1 n dB]</td> <td>-11.25 dBm</td> </tr> </tbody> </table> <p>Center 1.7124 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:45:46</p>	n dB [T1]	24.00 dB	BW	4.720000000 MHz	Temp 1 [T1 n dB]	-34.00 dBm	Temp 2 [T1 n dB]	-11.25 dBm
n dB [T1]	24.00 dB								
BW	4.720000000 MHz								
Temp 1 [T1 n dB]	-34.00 dBm								
Temp 2 [T1 n dB]	-11.25 dBm								
<p>HSUPA-Middle</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 14.69 dBm 1.731140000 GHz</p> <table border="1"> <thead> <tr> <th>n dB [T1]</th> <th>24.00 dB</th> </tr> </thead> <tbody> <tr> <td>BW</td> <td>4.740000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 n dB]</td> <td>-34.00 dBm</td> </tr> <tr> <td>Temp 2 [T1 n dB]</td> <td>-10.60 dBm</td> </tr> </tbody> </table> <p>Center 1.7324 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:46:11</p>	n dB [T1]	24.00 dB	BW	4.740000000 MHz	Temp 1 [T1 n dB]	-34.00 dBm	Temp 2 [T1 n dB]	-10.60 dBm
n dB [T1]	24.00 dB								
BW	4.740000000 MHz								
Temp 1 [T1 n dB]	-34.00 dBm								
Temp 2 [T1 n dB]	-10.60 dBm								
<p>HSUPA-High</p>	 <p>Ref 33 dBm +Att 50 dB Marker 1 [T1] 14.37 dBm 1.751620000 GHz</p> <table border="1"> <thead> <tr> <th>n dB [T1]</th> <th>24.00 dB</th> </tr> </thead> <tbody> <tr> <td>BW</td> <td>4.760000000 MHz</td> </tr> <tr> <td>Temp 1 [T1 n dB]</td> <td>-34.00 dBm</td> </tr> <tr> <td>Temp 2 [T1 n dB]</td> <td>-12.10 dBm</td> </tr> </tbody> </table> <p>Center 1.7526 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 16:46:28</p>	n dB [T1]	24.00 dB	BW	4.760000000 MHz	Temp 1 [T1 n dB]	-34.00 dBm	Temp 2 [T1 n dB]	-12.10 dBm
n dB [T1]	24.00 dB								
BW	4.760000000 MHz								
Temp 1 [T1 n dB]	-34.00 dBm								
Temp 2 [T1 n dB]	-12.10 dBm								

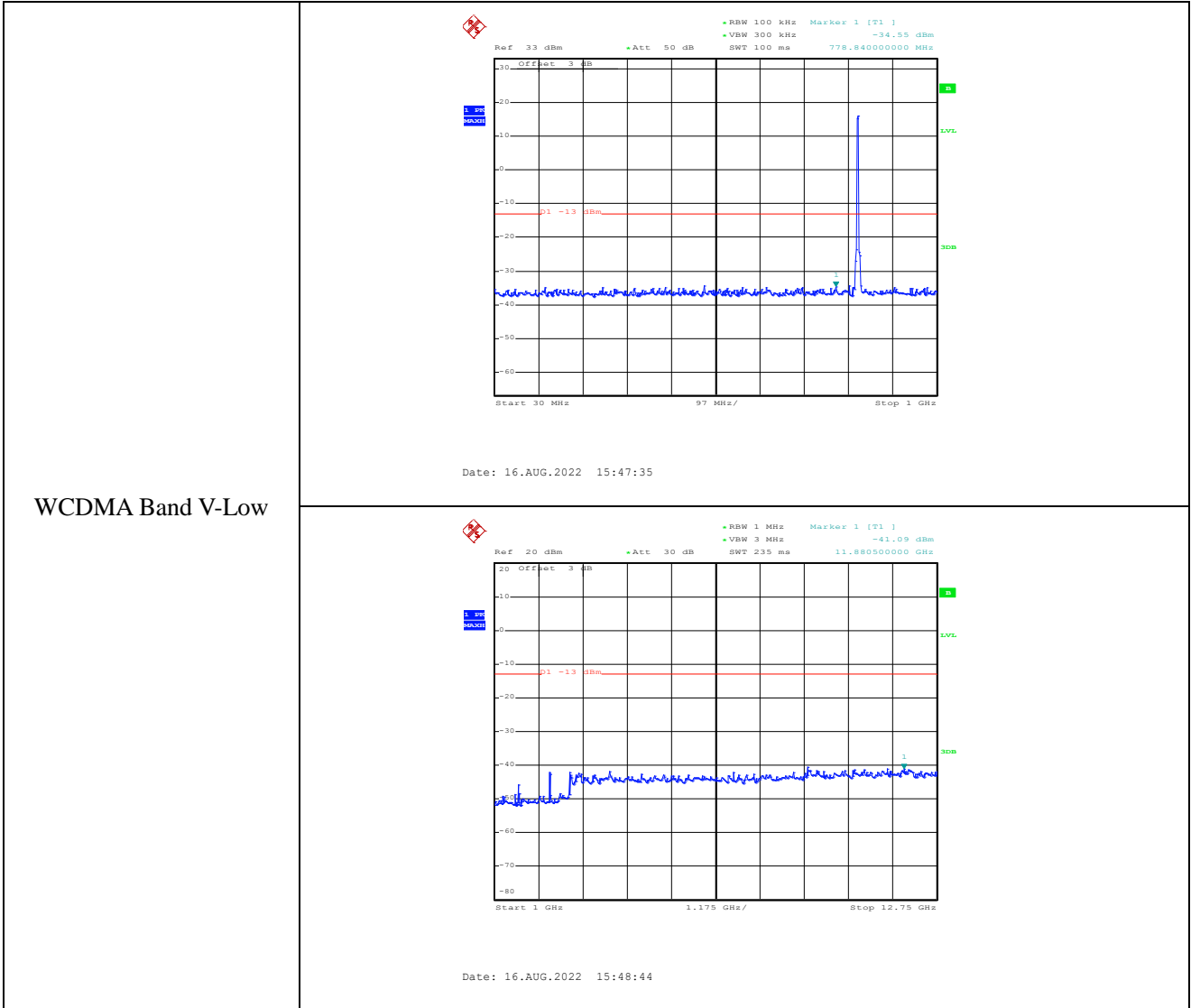
<p>WCDMA Band II-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 17.06 dBm</p> <table border="1" data-bbox="1029 280 1173 414"> <tr><td>ndB [T1]</td><td>24.00 dB</td></tr> <tr><td>BW</td><td>4.74000000 MHz</td></tr> <tr><td>Temp 1 [T1 ndB]</td><td>17.06 dBm</td></tr> <tr><td>Temp 2 [T1 ndB]</td><td>-8.93 dBm</td></tr> </table> <p>Center 1.8534 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:32:01</p>	ndB [T1]	24.00 dB	BW	4.74000000 MHz	Temp 1 [T1 ndB]	17.06 dBm	Temp 2 [T1 ndB]	-8.93 dBm
ndB [T1]	24.00 dB								
BW	4.74000000 MHz								
Temp 1 [T1 ndB]	17.06 dBm								
Temp 2 [T1 ndB]	-8.93 dBm								
<p>WCDMA Band II-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 17.66 dBm</p> <table border="1" data-bbox="1029 835 1173 969"> <tr><td>ndB [T1]</td><td>24.00 dB</td></tr> <tr><td>BW</td><td>4.72000000 MHz</td></tr> <tr><td>Temp 1 [T1 ndB]</td><td>17.66 dBm</td></tr> <tr><td>Temp 2 [T1 ndB]</td><td>-9.48 dBm</td></tr> </table> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:32:26</p>	ndB [T1]	24.00 dB	BW	4.72000000 MHz	Temp 1 [T1 ndB]	17.66 dBm	Temp 2 [T1 ndB]	-9.48 dBm
ndB [T1]	24.00 dB								
BW	4.72000000 MHz								
Temp 1 [T1 ndB]	17.66 dBm								
Temp 2 [T1 ndB]	-9.48 dBm								
<p>WCDMA Band II-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms Marker 1 [T1] 17.77 dBm</p> <table border="1" data-bbox="1029 1391 1173 1525"> <tr><td>ndB [T1]</td><td>24.00 dB</td></tr> <tr><td>BW</td><td>4.72000000 MHz</td></tr> <tr><td>Temp 1 [T1 ndB]</td><td>17.77 dBm</td></tr> <tr><td>Temp 2 [T1 ndB]</td><td>-9.55 dBm</td></tr> </table> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:33:18</p>	ndB [T1]	24.00 dB	BW	4.72000000 MHz	Temp 1 [T1 ndB]	17.77 dBm	Temp 2 [T1 ndB]	-9.55 dBm
ndB [T1]	24.00 dB								
BW	4.72000000 MHz								
Temp 1 [T1 ndB]	17.77 dBm								
Temp 2 [T1 ndB]	-9.55 dBm								

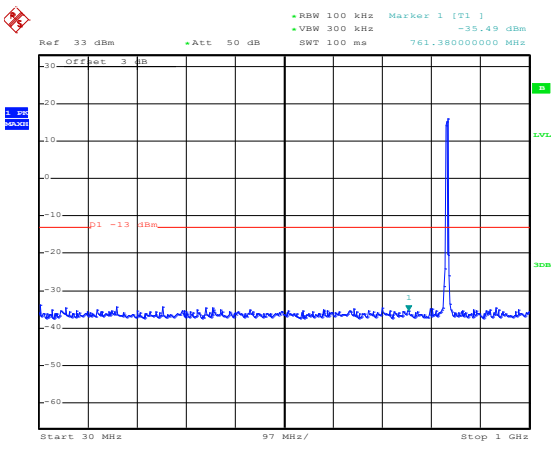
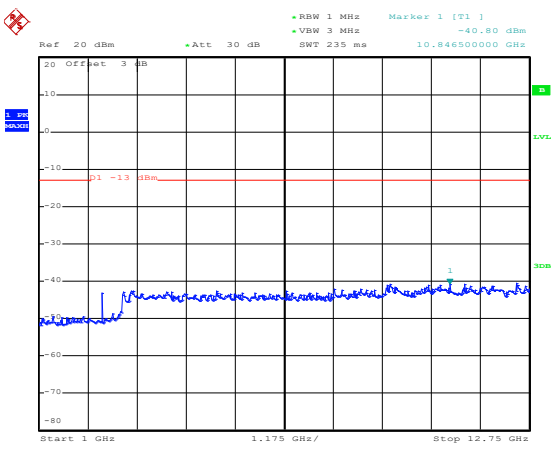
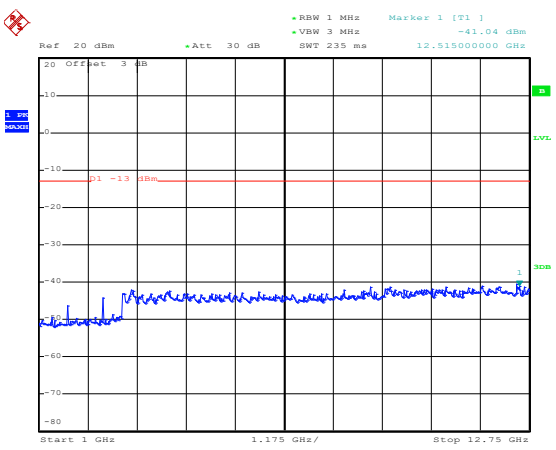
<p>HSDPA-Low</p>	 <p>Ref 33 dBm +Att 50 dB RBW 100 kHz Marker 1 [T1] 15.20 dBm VBW 300 kHz 1.851520000 GHz SWT 2.5 ms</p> <table border="1" data-bbox="1029 280 1181 660"> <thead> <tr> <th>ndB [T1]</th> <th>dB</th> </tr> </thead> <tbody> <tr> <td>4.740000000 MHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.850040000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.854780000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> </tbody> </table> <p>Center 1.8524 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:34:10</p>	ndB [T1]	dB	4.740000000 MHz		[T1 ndB]		1.850040000 GHz		[T1 ndB]		1.854780000 GHz		[T1 ndB]	
ndB [T1]	dB														
4.740000000 MHz															
[T1 ndB]															
1.850040000 GHz															
[T1 ndB]															
1.854780000 GHz															
[T1 ndB]															
<p>HSDPA-Middle</p>	 <p>Ref 33 dBm +Att 50 dB RBW 100 kHz Marker 1 [T1] 15.95 dBm VBW 300 kHz 1.879120000 GHz SWT 2.5 ms</p> <table border="1" data-bbox="1029 835 1181 1216"> <thead> <tr> <th>ndB [T1]</th> <th>dB</th> </tr> </thead> <tbody> <tr> <td>4.760000000 MHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.877620000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.882380000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> </tbody> </table> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:34:56</p>	ndB [T1]	dB	4.760000000 MHz		[T1 ndB]		1.877620000 GHz		[T1 ndB]		1.882380000 GHz		[T1 ndB]	
ndB [T1]	dB														
4.760000000 MHz															
[T1 ndB]															
1.877620000 GHz															
[T1 ndB]															
1.882380000 GHz															
[T1 ndB]															
<p>HSDPA-High</p>	 <p>Ref 33 dBm +Att 50 dB RBW 100 kHz Marker 1 [T1] 16.03 dBm VBW 300 kHz 1.908200000 GHz SWT 2.5 ms</p> <table border="1" data-bbox="1029 1391 1181 1771"> <thead> <tr> <th>ndB [T1]</th> <th>dB</th> </tr> </thead> <tbody> <tr> <td>4.720000000 MHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.905240000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> <tr> <td>1.909960000 GHz</td> <td></td> </tr> <tr> <td>[T1 ndB]</td> <td></td> </tr> </tbody> </table> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:35:24</p>	ndB [T1]	dB	4.720000000 MHz		[T1 ndB]		1.905240000 GHz		[T1 ndB]		1.909960000 GHz		[T1 ndB]	
ndB [T1]	dB														
4.720000000 MHz															
[T1 ndB]															
1.905240000 GHz															
[T1 ndB]															
1.909960000 GHz															
[T1 ndB]															

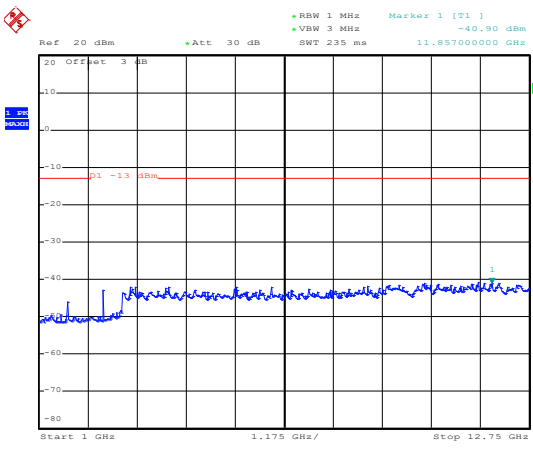
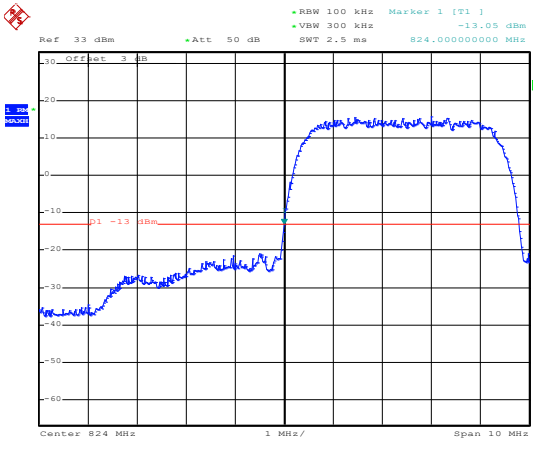
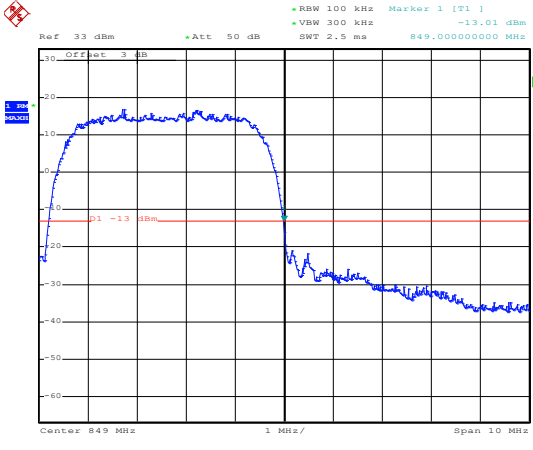
<p>HSUPA-Low</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 16.55 dBm VBW 300 kHz 1.851520000 GHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.740000000 MHz Temp 1 [T1 n dB] 16.55 dBm 1.850040000 GHz Temp 2 [T1 n dB] -8.91 dBm 1.854780000 GHz</p> <p>Center 1.8524 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:46:20</p>
<p>HSUPA-Middle</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.27 dBm VBW 300 kHz 1.880640000 GHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.760000000 MHz Temp 1 [T1 n dB] 15.27 dBm 1.877620000 GHz Temp 2 [T1 n dB] -10.32 dBm 1.882380000 GHz</p> <p>Center 1.88 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:46:53</p>
<p>HSUPA-High</p>	 <p>Ref 33 dBm Att 50 dB RBW 100 kHz Marker 1 [T1] 15.37 dBm VBW 300 kHz 1.908220000 GHz SWT 2.5 ms</p> <p>Offset 3 dB n dB [T1] 26.00 dB BW 4.720000000 MHz Temp 1 [T1 n dB] 15.37 dBm 1.905240000 GHz Temp 2 [T1 n dB] -10.33 dBm 1.909960000 GHz</p> <p>Center 1.9076 GHz 1 MHz/ Span 10 MHz</p> <p>Date: 15.AUG.2022 15:47:32</p>

APPENDIX D

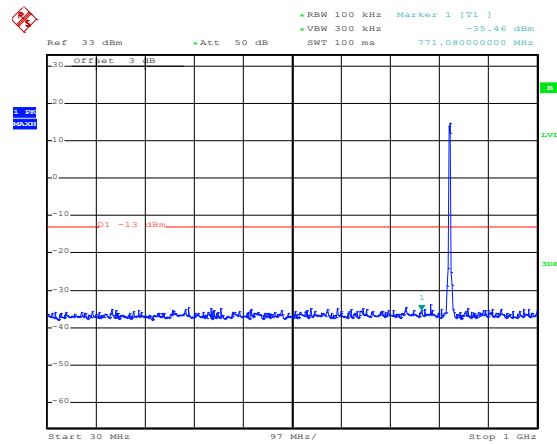
Out of Band Emissions at Antenna Terminal



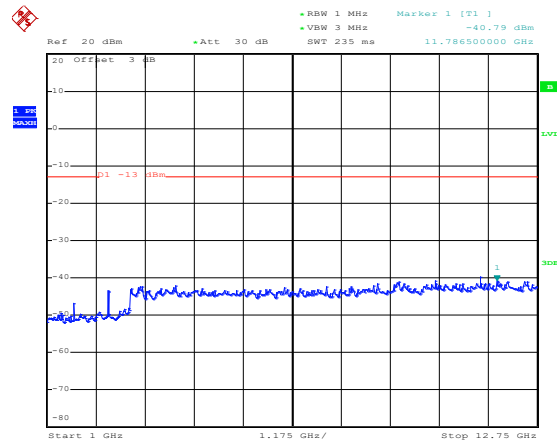
<p>WCDMA Band V-Middle</p>	 <p>Date: 16.AUG.2022 15:49:47</p>
<p>WCDMA Band V-Middle</p>	 <p>Date: 16.AUG.2022 15:50:56</p>
<p>WCDMA Band V-High</p>	 <p>Date: 16.AUG.2022 16:08:47</p>

	 <p>Date: 16.AUG.2022 15:52:45</p>
<p>Bandedge</p>	 <p>Date: 15.AUG.2022 17:34:30</p>
	 <p>Date: 15.AUG.2022 17:36:12</p>

HSDPA Band V-Low

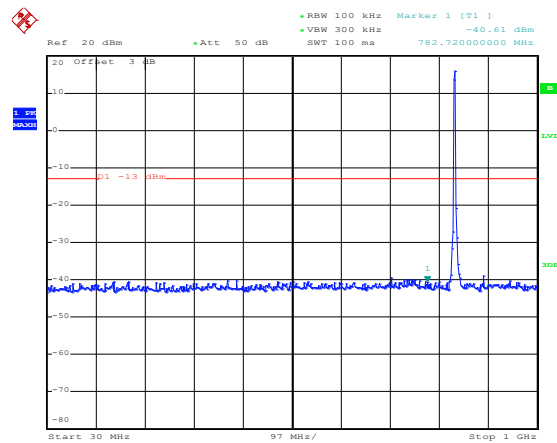


Date: 16.AUG.2022 16:14:54

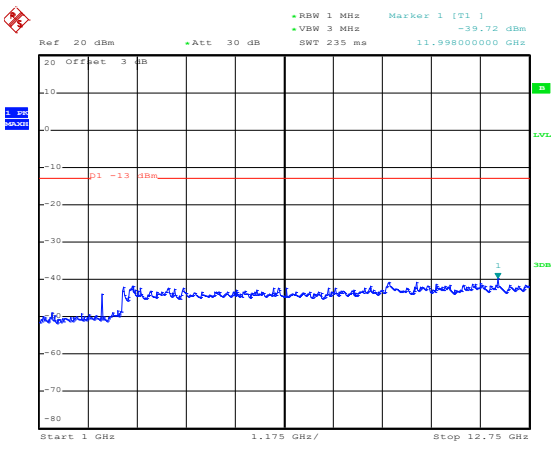
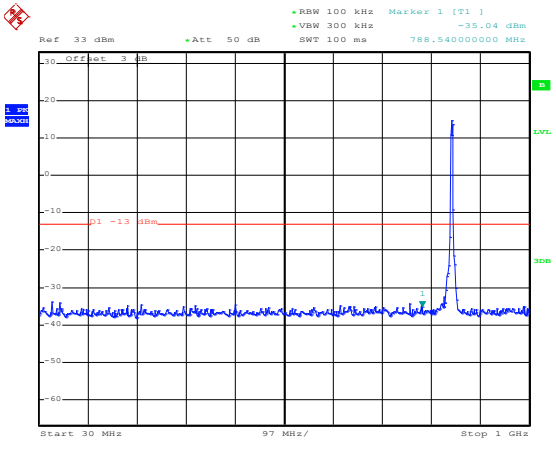
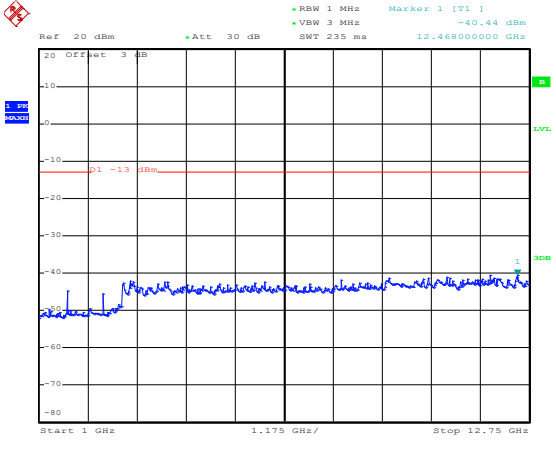


Date: 16.AUG.2022 15:55:34

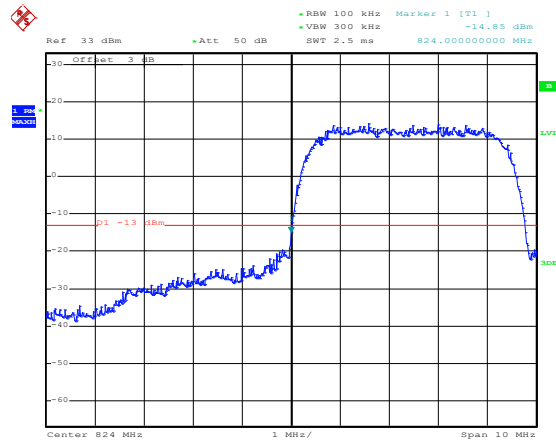
HSDPA Band V-Middle



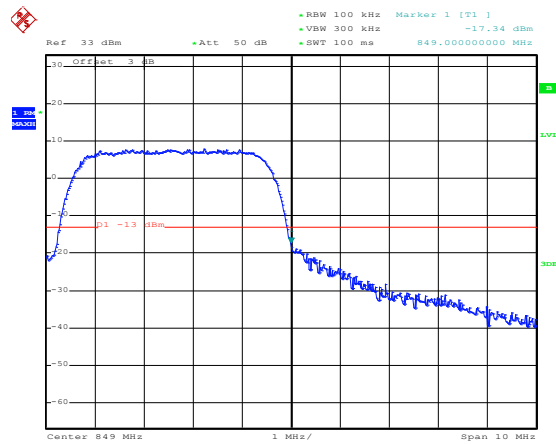
Date: 16.AUG.2022 15:56:44

	 <p>Date: 16.AUG.2022 15:57:34</p>
<p>HSDPA Band V-High</p>	 <p>Date: 16.AUG.2022 15:59:08</p>
	 <p>Date: 16.AUG.2022 15:59:59</p>

Bandedge

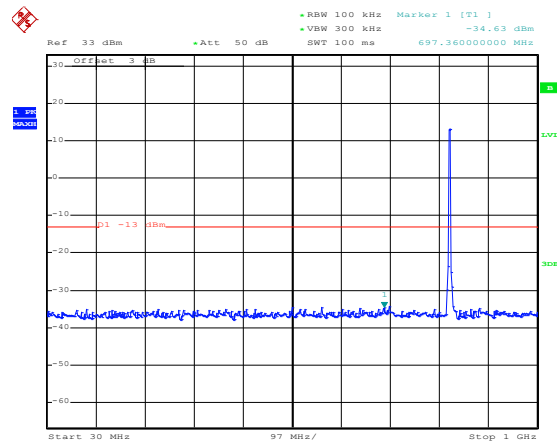


Date: 15.AUG.2022 17:36:55

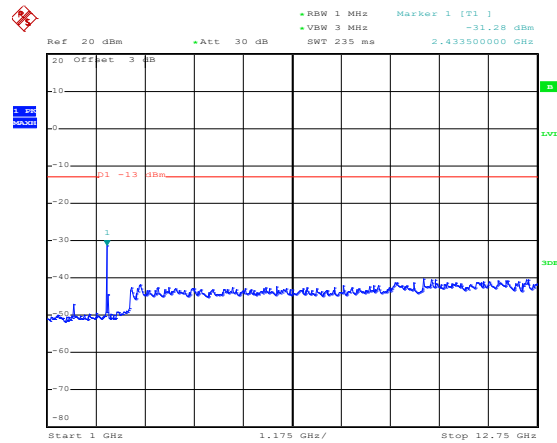


Date: 15.AUG.2022 17:40:49

HSUPA Band V-Low

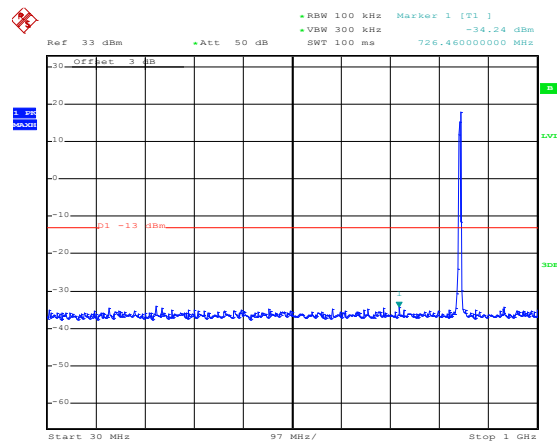


Date: 16.AUG.2022 16:20:49

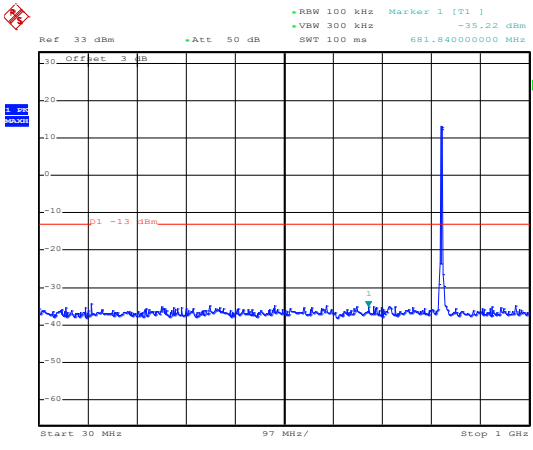
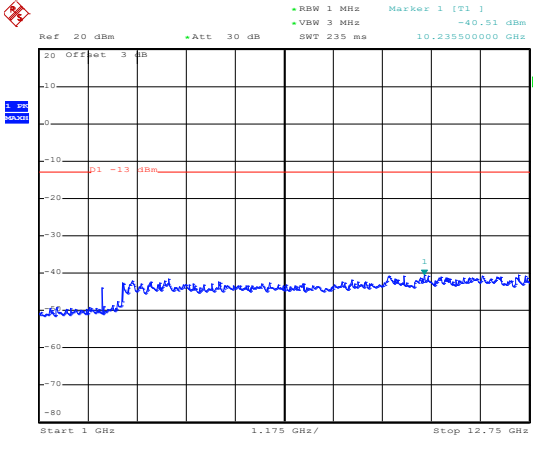


Date: 16.AUG.2022 16:04:28

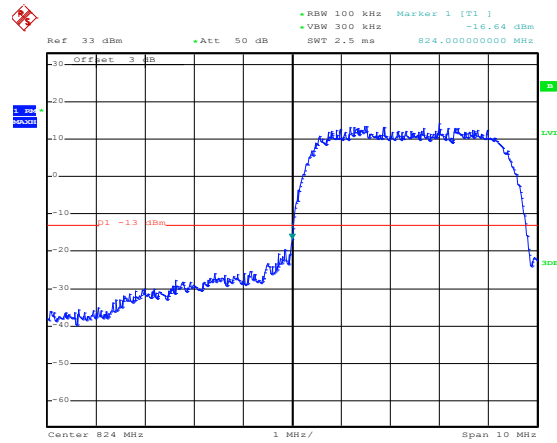
HSUPA Band V-Middle



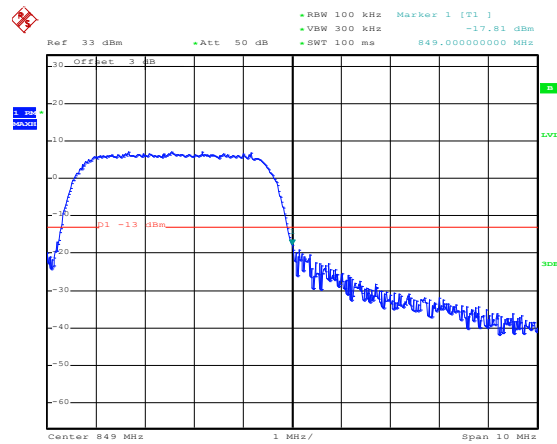
Date: 16.AUG.2022 16:12:30

	 <p>Date: 16.AUG.2022 16:23:14</p>
<p>HSUPA Band V-High</p>	 <p>Date: 16.AUG.2022 16:04:58</p>
	 <p>Date: 16.AUG.2022 16:06:52</p>

Bandedge

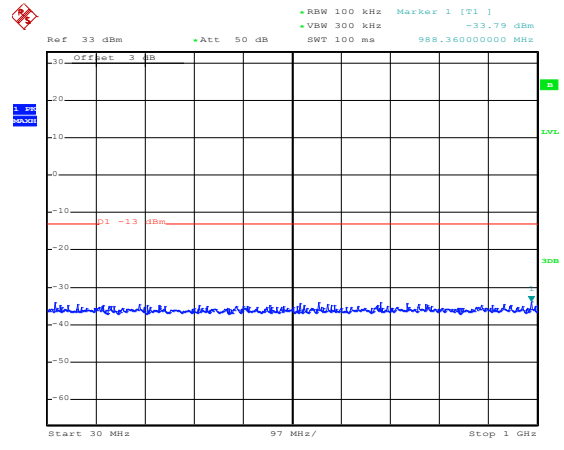


Date: 15.AUG.2022 17:43:08

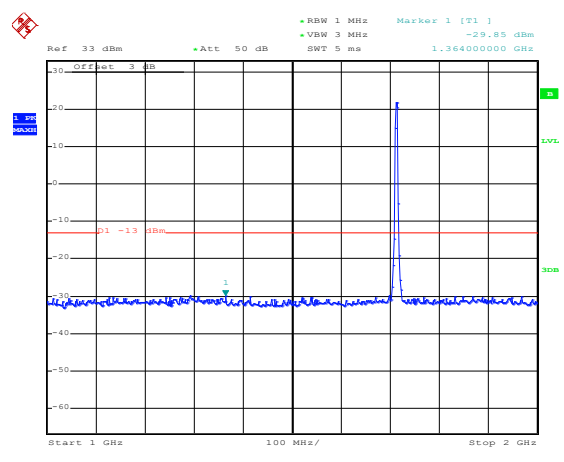


Date: 15.AUG.2022 17:43:34

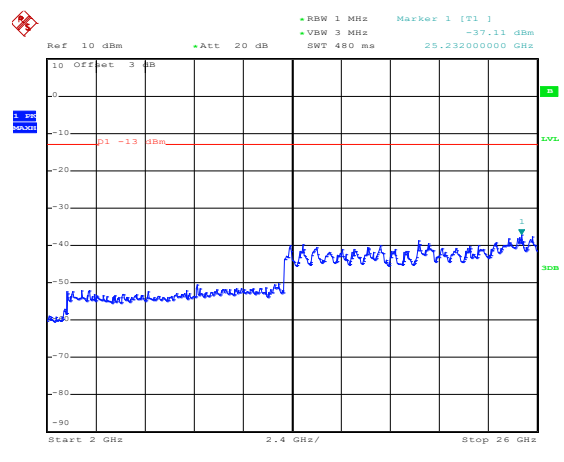
WCDMA Band IV-Low



Date: 15.AUG.2022 17:10:00

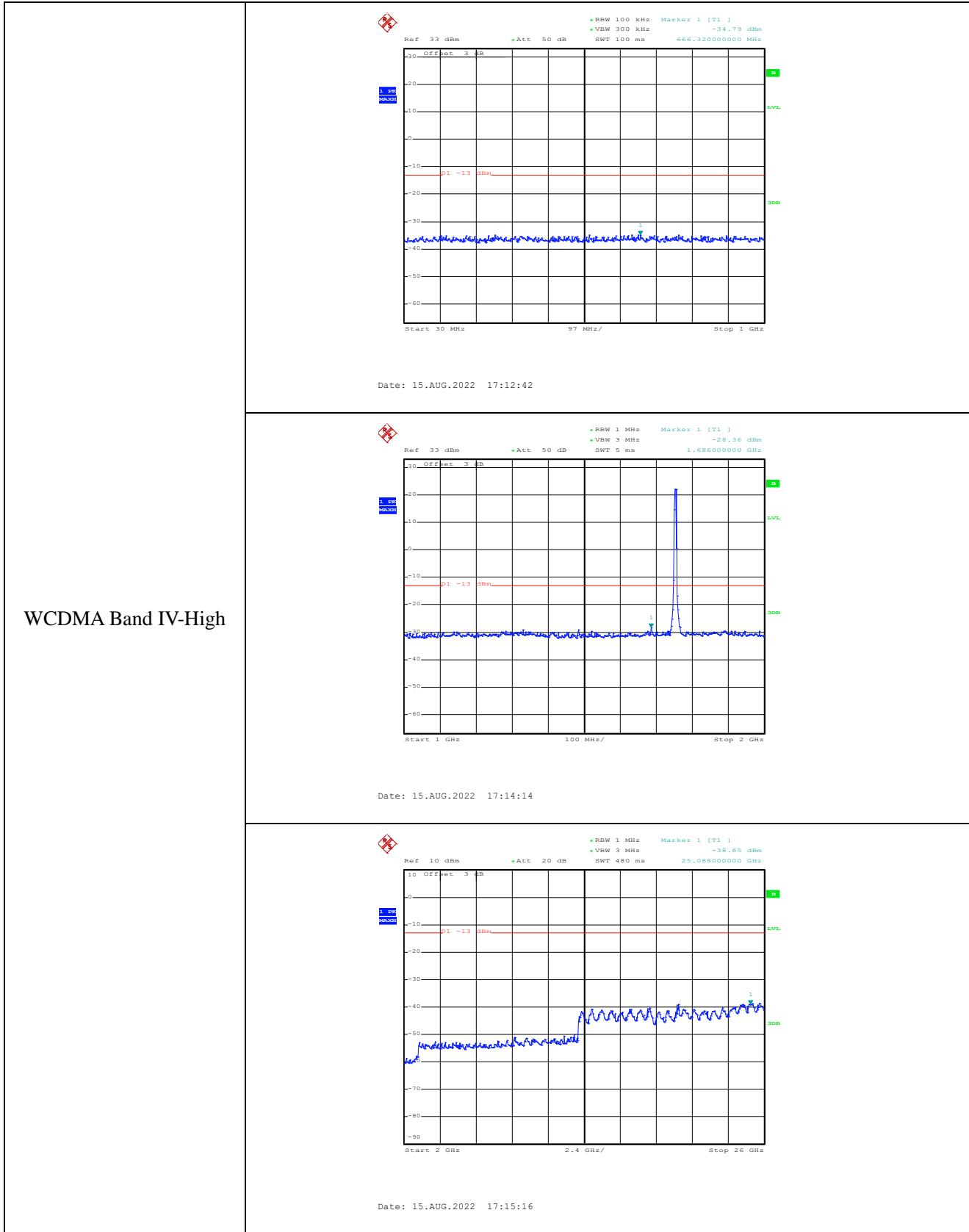


Date: 15.AUG.2022 17:10:27

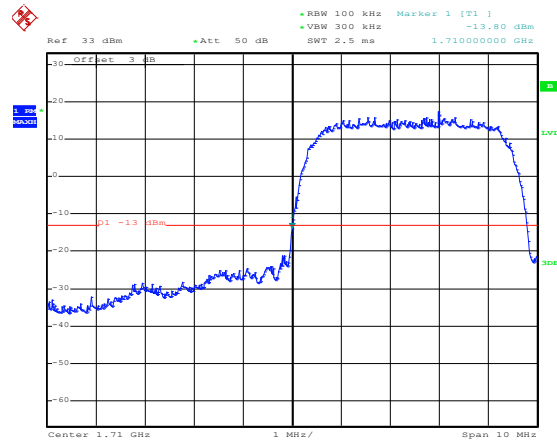


Date: 15.AUG.2022 17:10:45

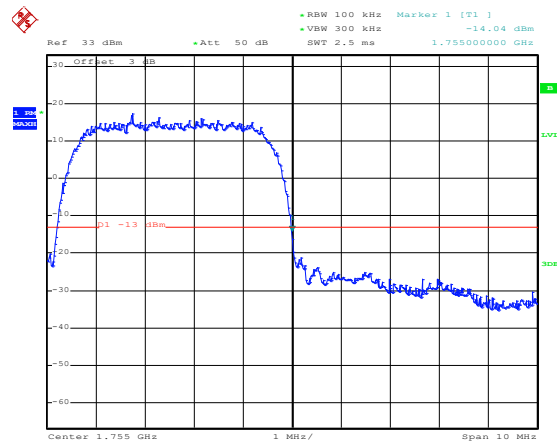




Bandedge

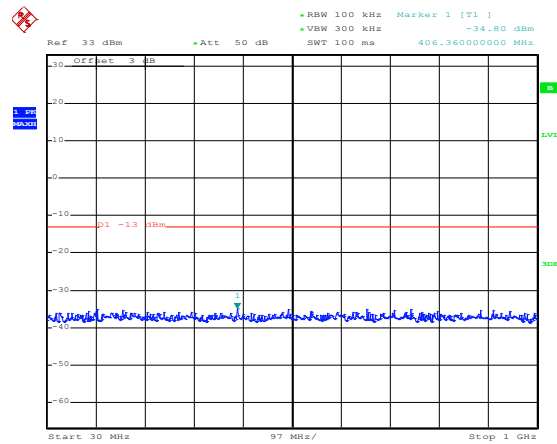


Date: 15.AUG.2022 16:33:56

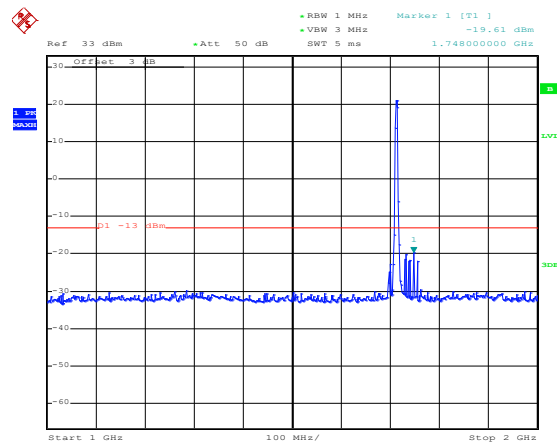


Date: 15.AUG.2022 16:35:23

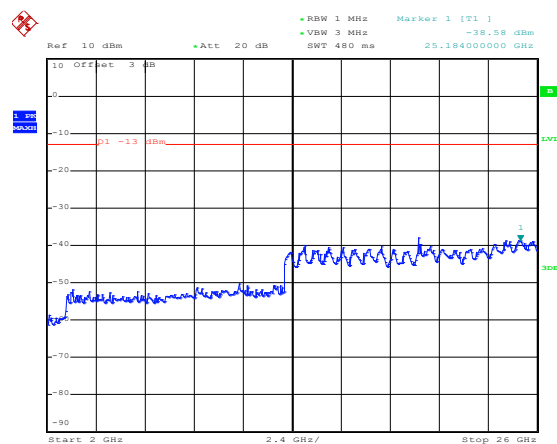
HSDPA Band IV-Low



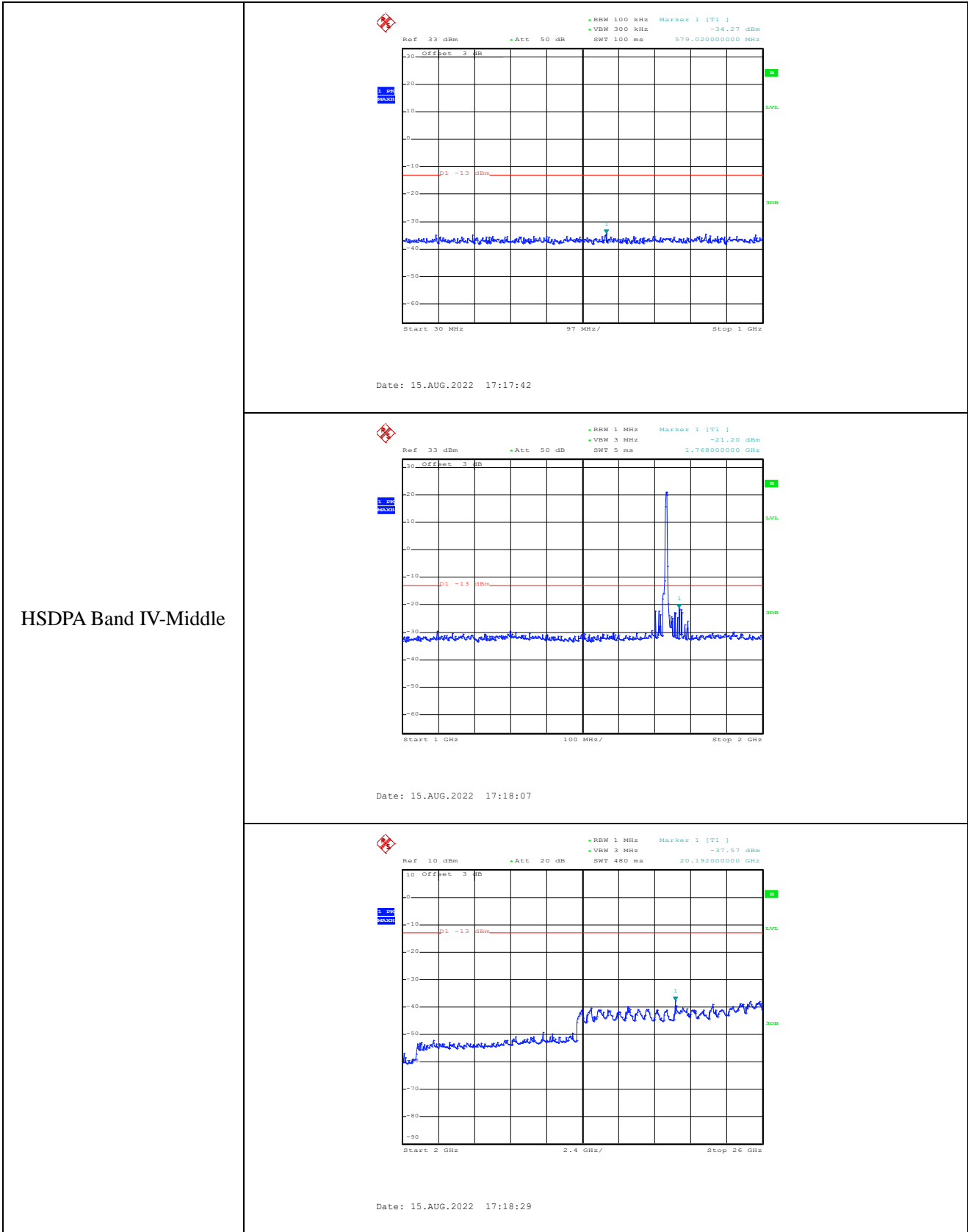
Date: 15.AUG.2022 17:15:59



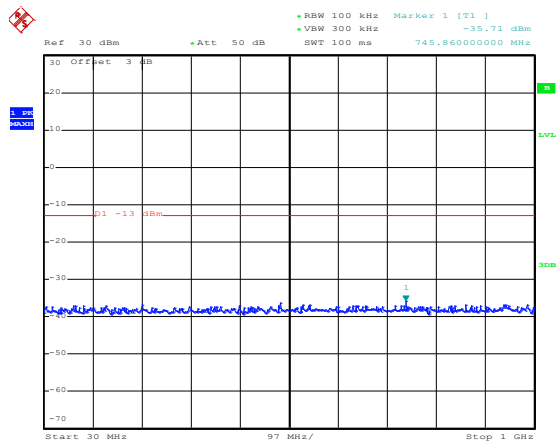
Date: 15.AUG.2022 17:16:18



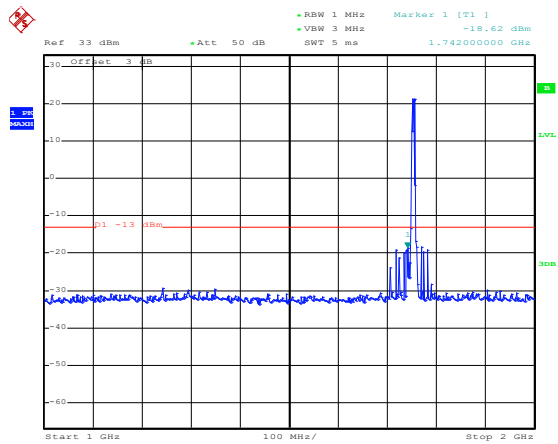
Date: 15.AUG.2022 17:16:44



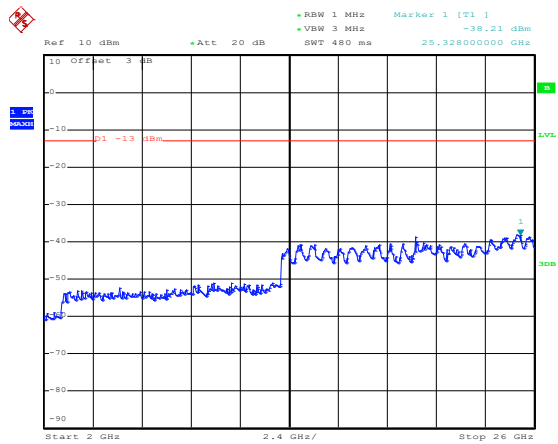
HSDPA Band IV-High



Date: 15.AUG.2022 17:19:38

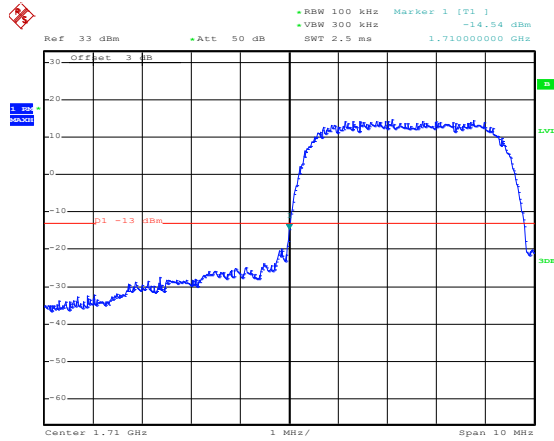


Date: 15.AUG.2022 17:20:51

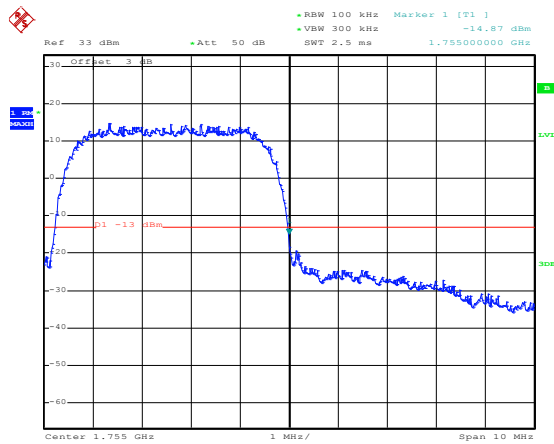


Date: 15.AUG.2022 17:20:25

Bandedge

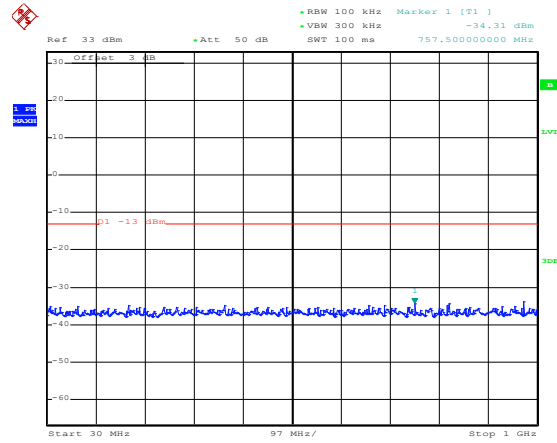


Date: 15.AUG.2022 16:36:16

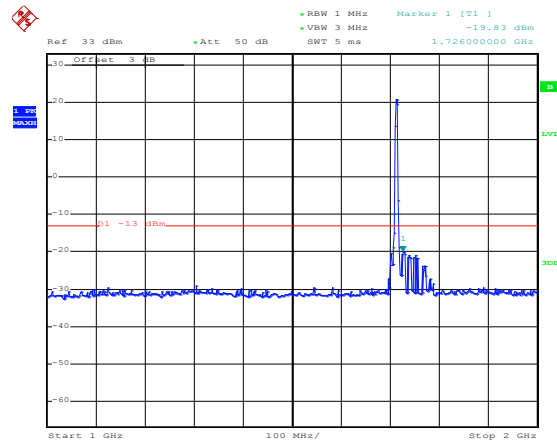


Date: 15.AUG.2022 16:37:21

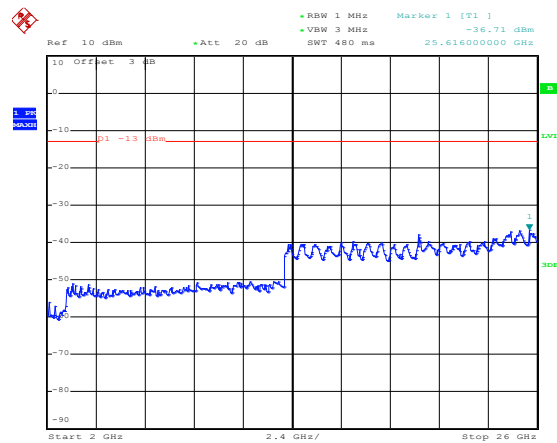
HSUPA Band IV-Low



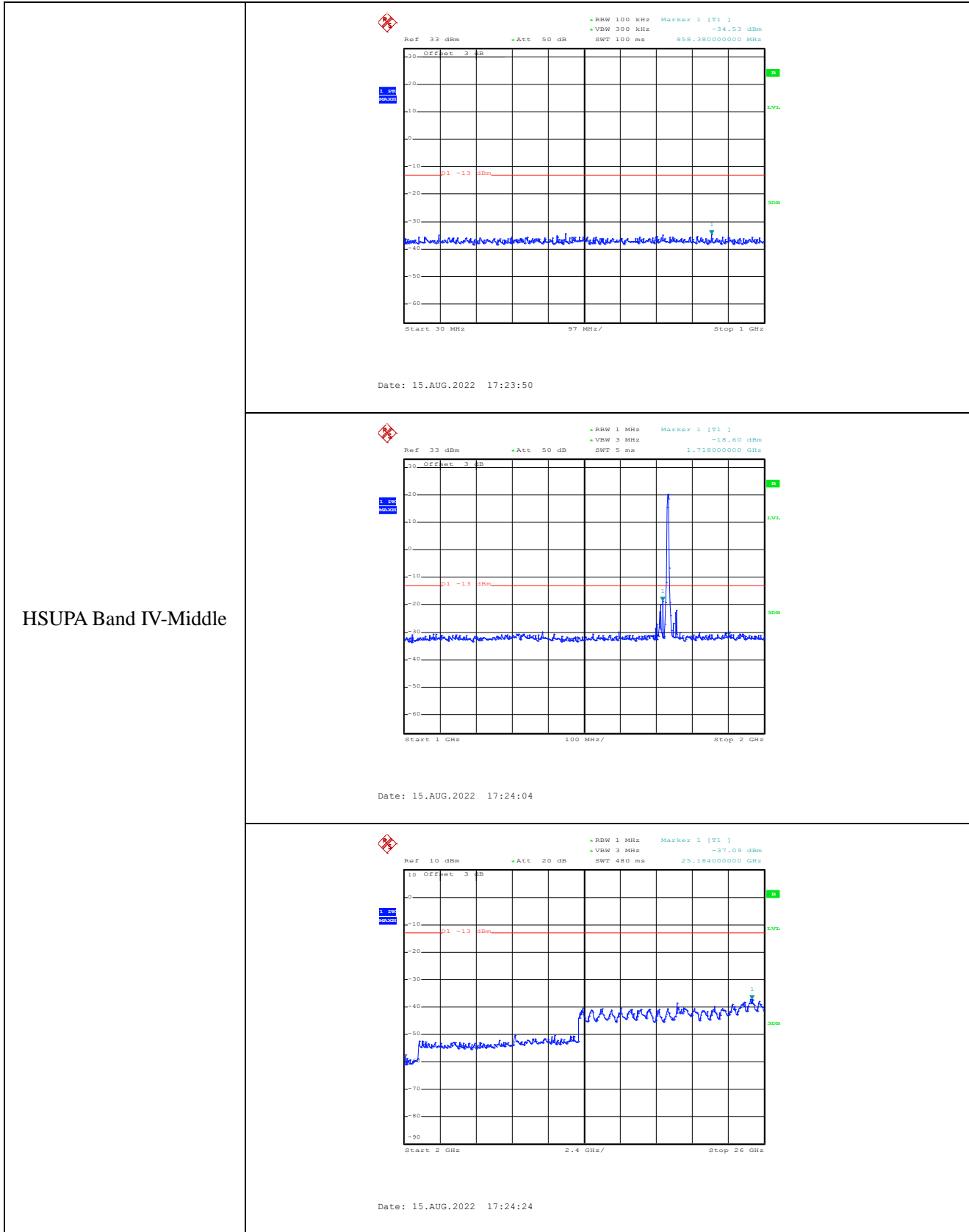
Date: 15.AUG.2022 17:25:06



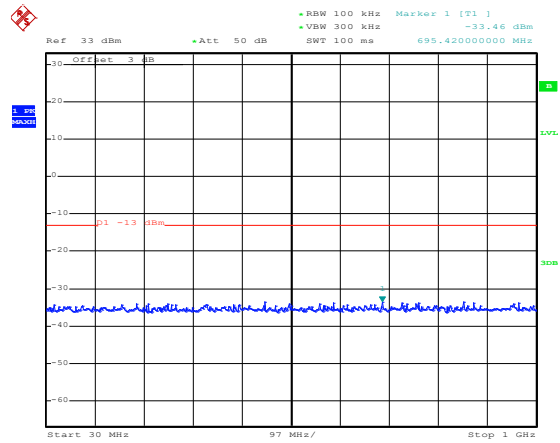
Date: 15.AUG.2022 17:26:11



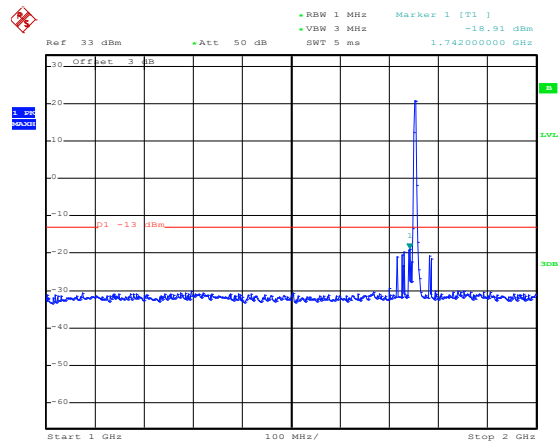
Date: 15.AUG.2022 17:27:04



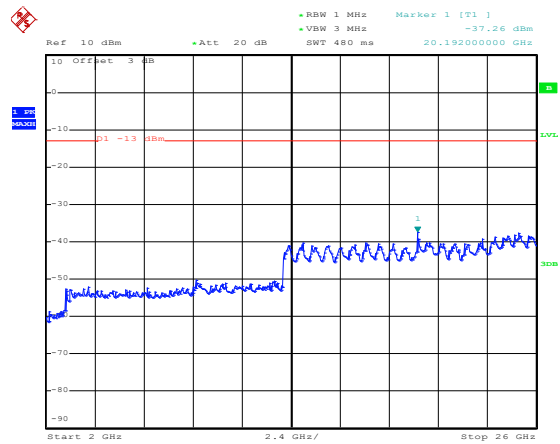
HSUPA Band IV-High



Date: 15.AUG.2022 17:06:31

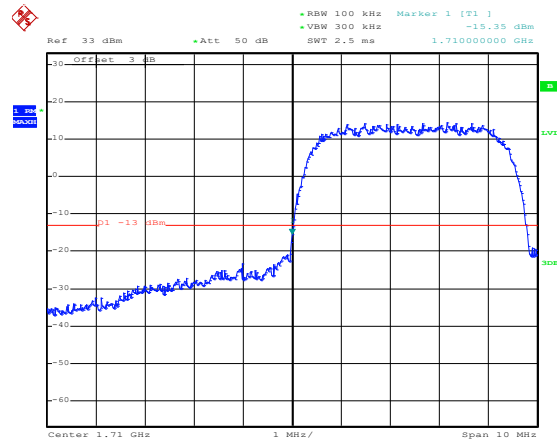


Date: 15.AUG.2022 17:06:48

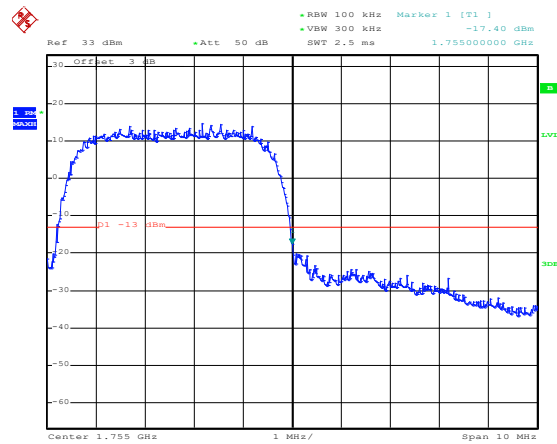


Date: 15.AUG.2022 17:07:06

Bandedge

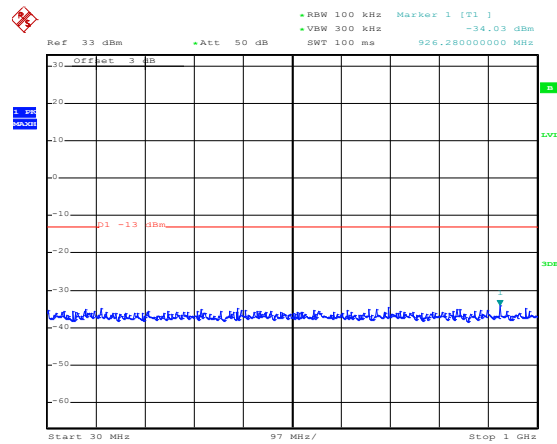


Date: 15.AUG.2022 16:38:54

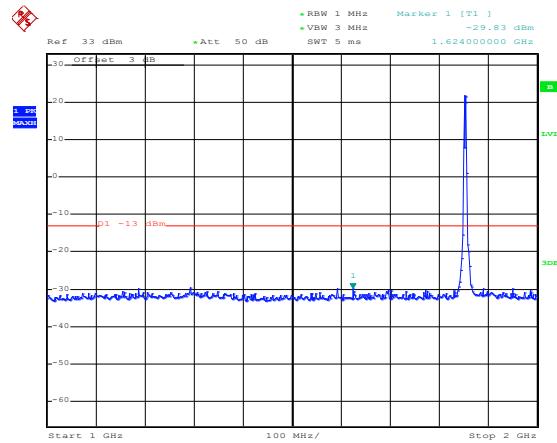


Date: 15.AUG.2022 16:39:11

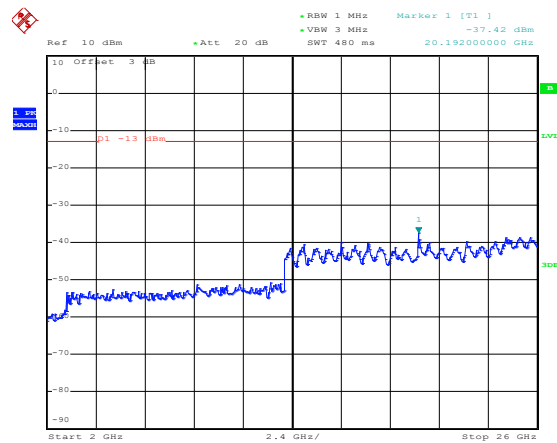
WCDMA Band II-Low



Date: 15.AUG.2022 16:02:57

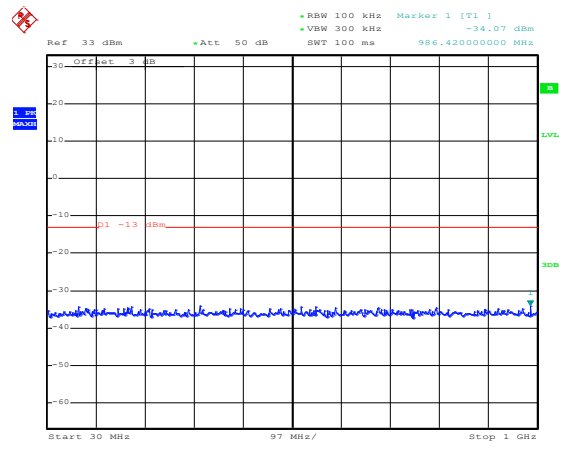


Date: 15.AUG.2022 16:03:16

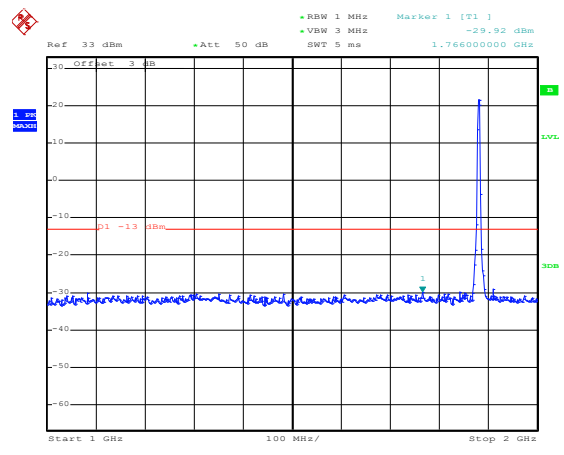


Date: 15.AUG.2022 16:03:34

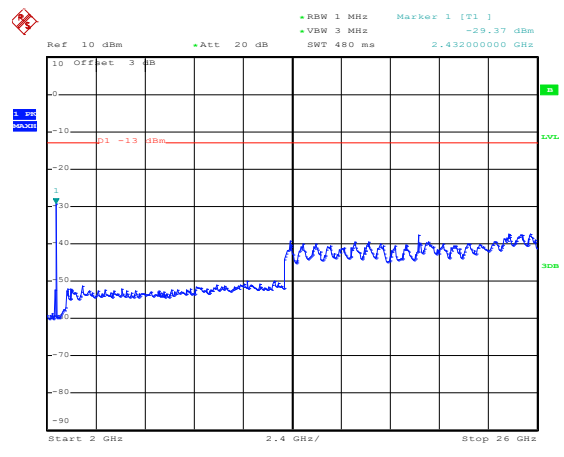
WCDMA Band II-Low



Date: 15.AUG.2022 16:04:50

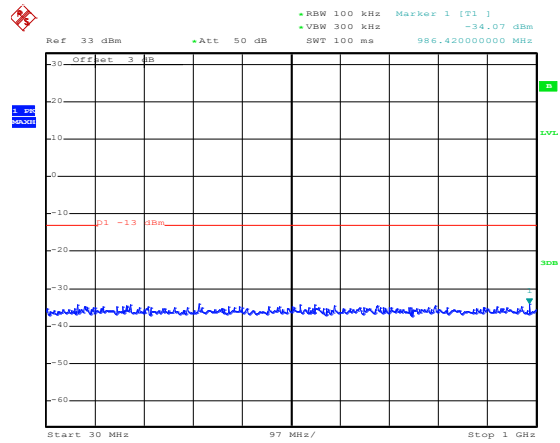


Date: 15.AUG.2022 16:05:46

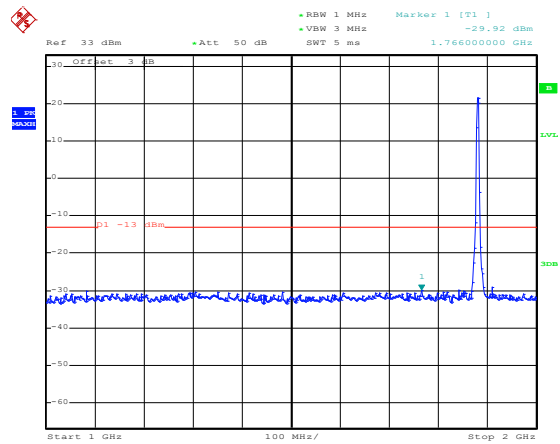


Date: 15.AUG.2022 16:07:58

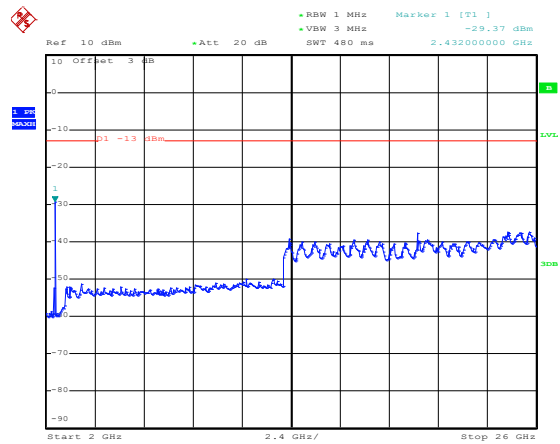
WCDMA Band II-Low



Date: 15.AUG.2022 16:04:50

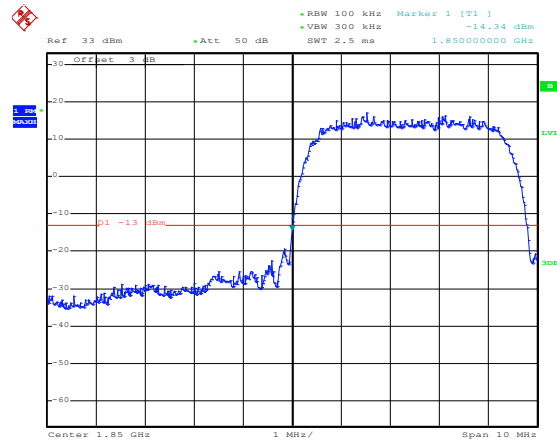


Date: 15.AUG.2022 16:05:46

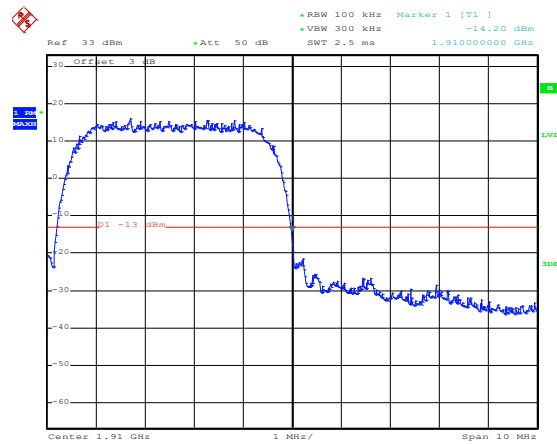


Date: 15.AUG.2022 16:07:58

Bandedge

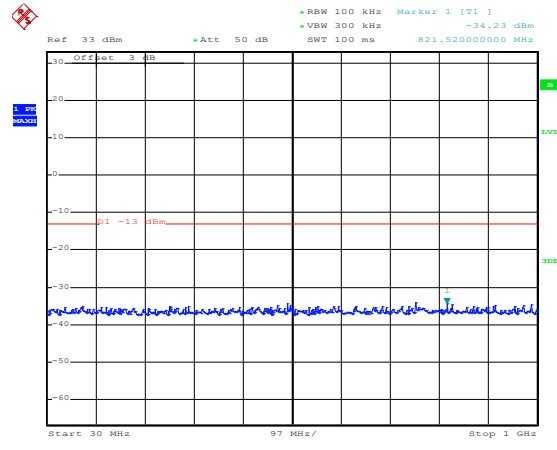


Date: 15.AUG.2022 15:22:53

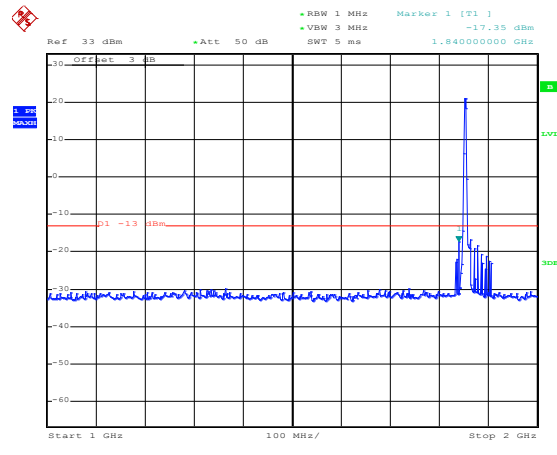


Date: 15.AUG.2022 15:23:16

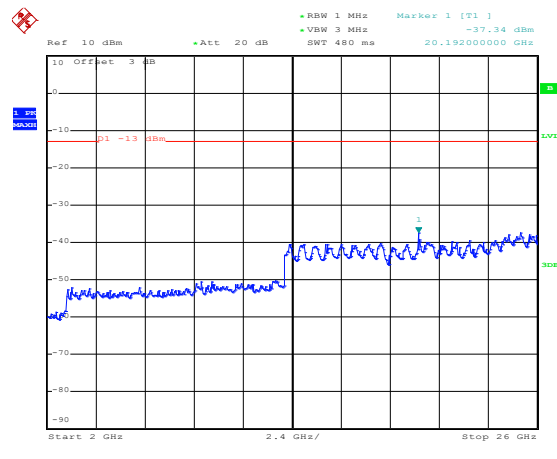
HSDPA Band II-Low



Date: 15.AUG.2022 16:10:58

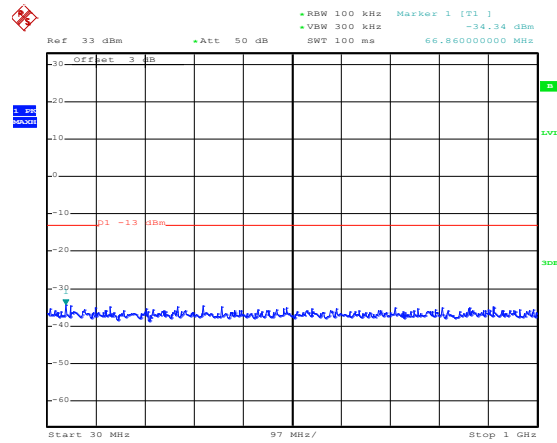


Date: 15.AUG.2022 16:11:39

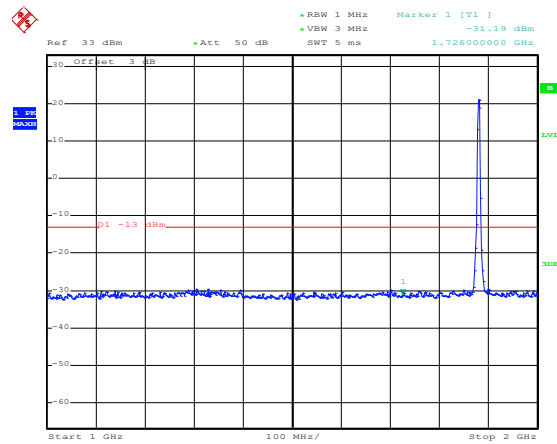


Date: 15.AUG.2022 16:12:10

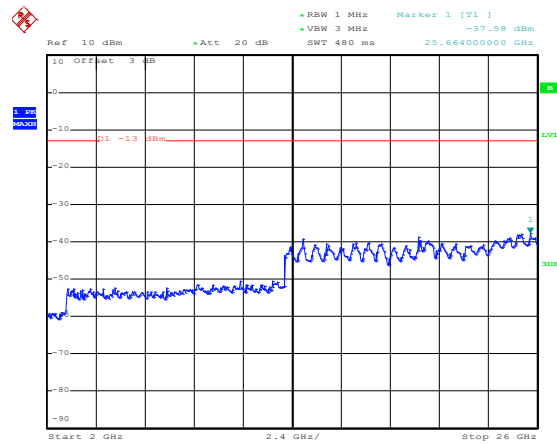
HSDPA Band II-Low



Date: 15.AUG.2022 16:12:44

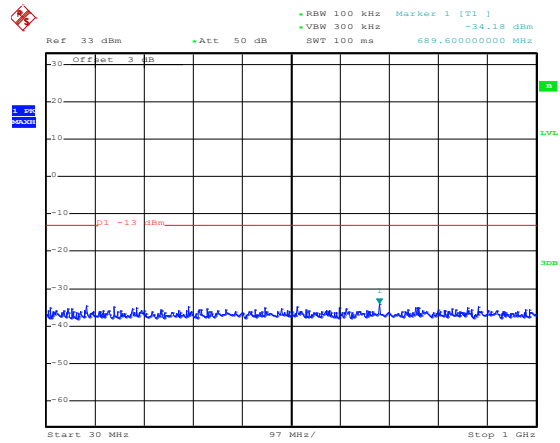


Date: 15.AUG.2022 16:13:41

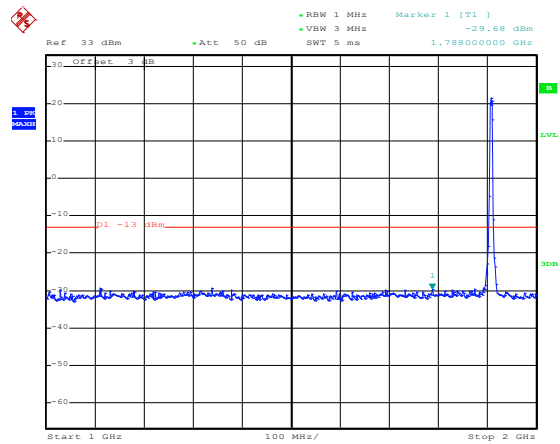


Date: 15.AUG.2022 16:14:03

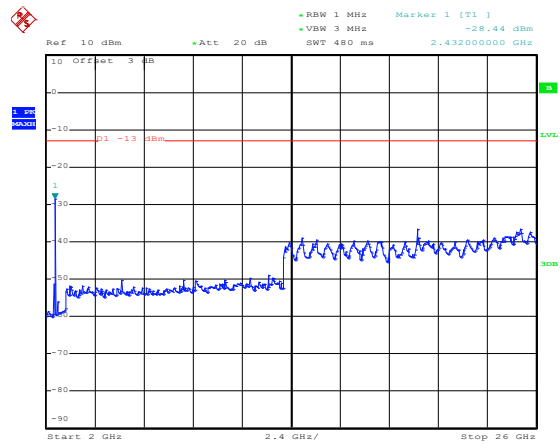
HSDPA Band II-Low



Date: 15.AUG.2022 16:14:41

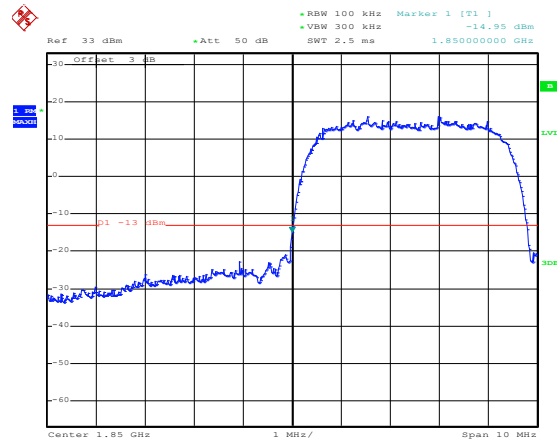


Date: 15.AUG.2022 16:15:20

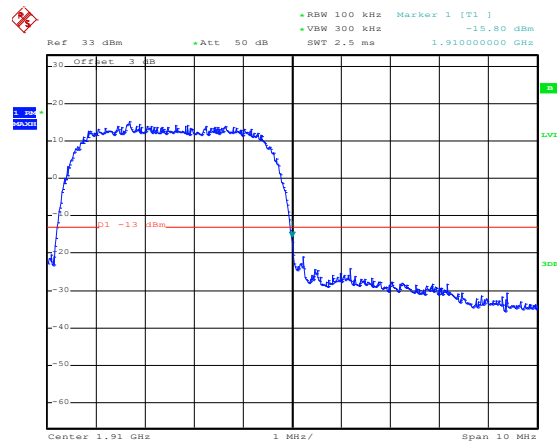


Date: 15.AUG.2022 16:16:17

Bandedge

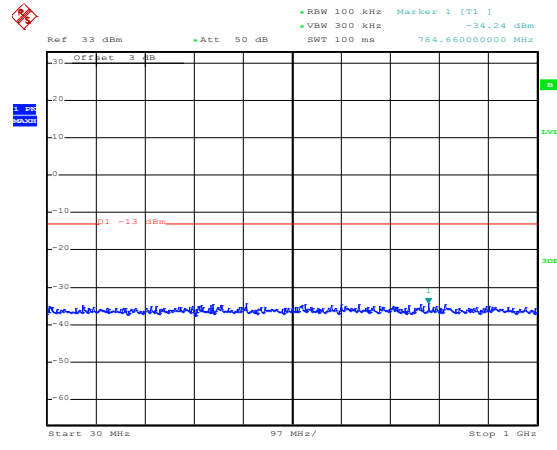


Date: 15.AUG.2022 15:24:51

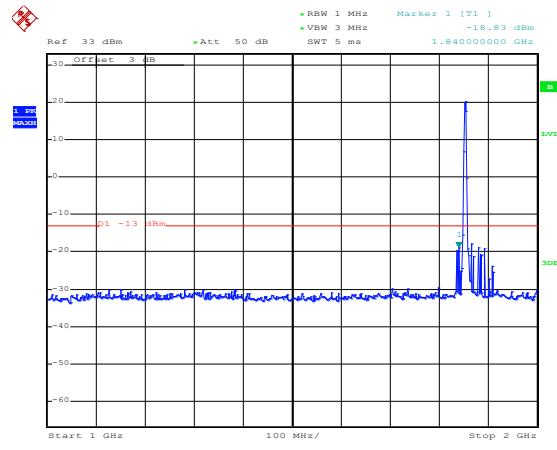


Date: 15.AUG.2022 15:25:24

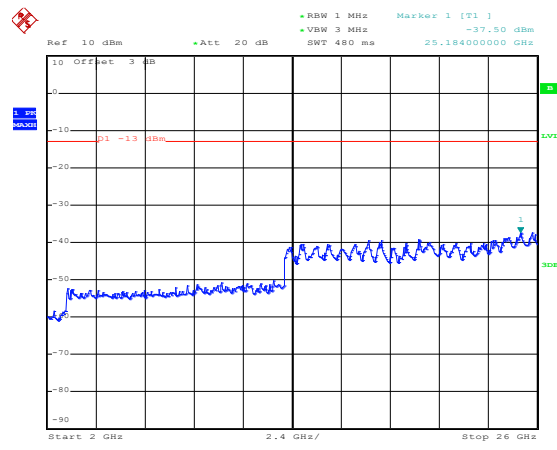
HSUPA Band II-Low



Date: 15.AUG.2022 16:21:01

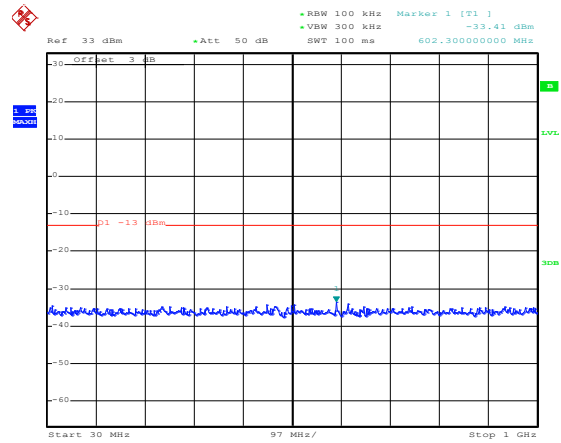


Date: 15.AUG.2022 16:21:44

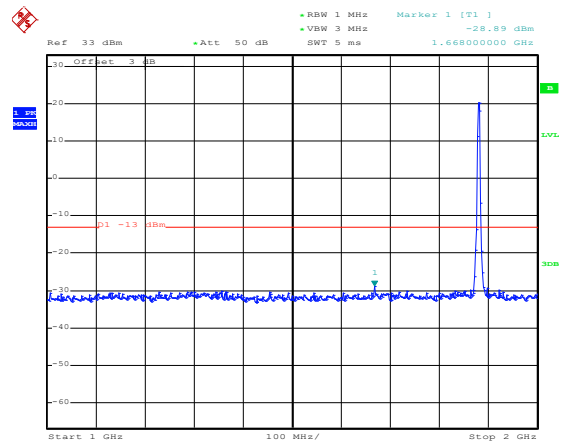


Date: 15.AUG.2022 16:22:05

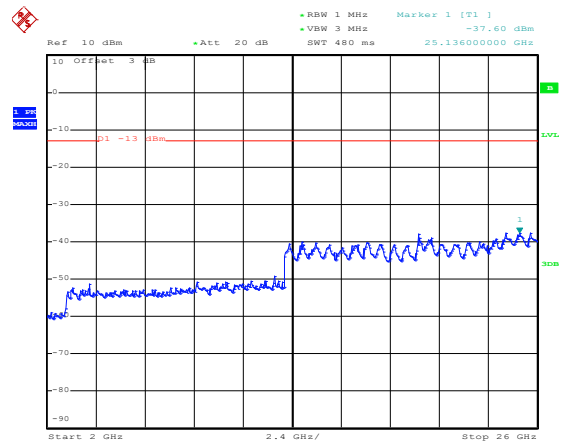
HSUPA Band II-Low



Date: 15.AUG.2022 16:22:59

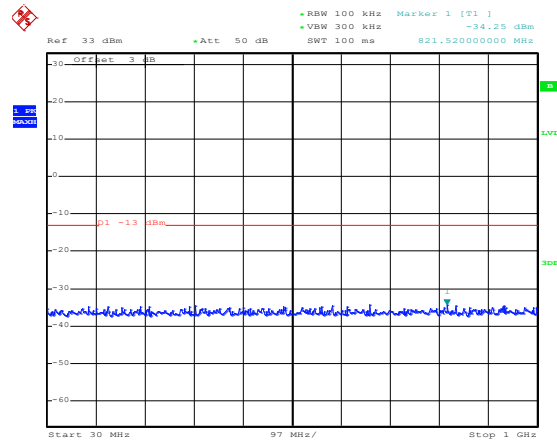


Date: 15.AUG.2022 16:23:28

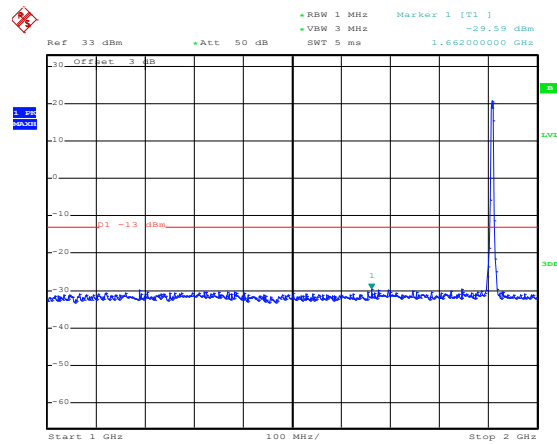


Date: 15.AUG.2022 16:24:24

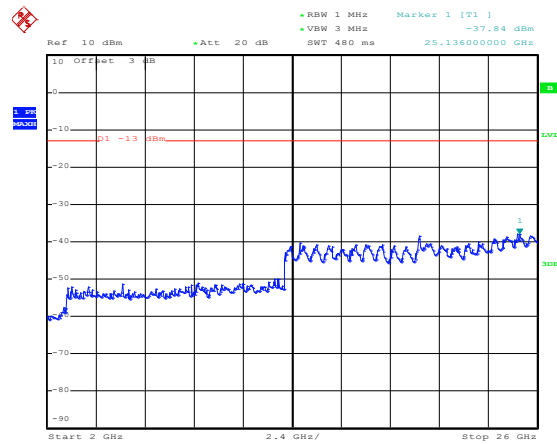
HSUPA Band II-Low



Date: 15.AUG.2022 16:25:20

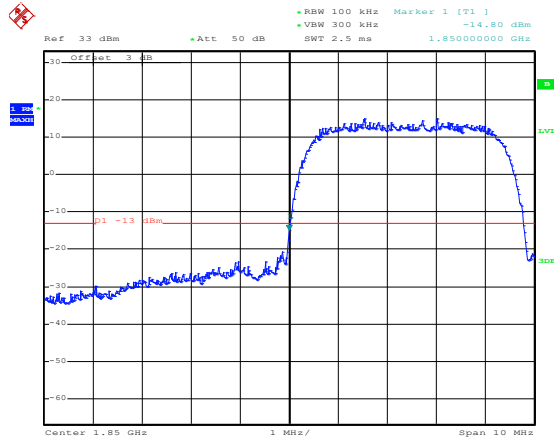


Date: 15.AUG.2022 16:26:12

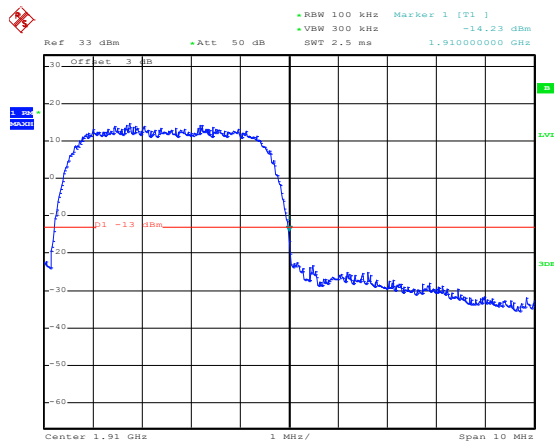


Date: 15.AUG.2022 16:26:31

Bandedge



Date: 15.AUG.2022 15:26:36



Date: 15.AUG.2022 15:27:22

APPENDIX E**Frequency Stability**

Note: 1. Worst case at GSM850/PCS1900/WCDMA B2/B5 middle channel

2. Normal Voltage NV=DC3.8V; Low Voltage LV=DC3.6V;High Voltage HV=DC4.35V

➤ Frequency stability V.S. Temperature measurement

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
NV	-30	54	0.0666	2.50	Pass
	-20	46	0.0577		
	-10	40	0.0409		
	0	34	0.0367		
	10	26	0.0245		
	20	18	0.0212		
	30	24	0.0247		
	40	27	0.0388		
	50	36	0.0323		
Reference Frequency: WCDMA Band IV Middle channel=1412 channel=1733.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
NV	-30	45	0.0252	2.50	Pass
	-20	37	0.0216		
	-10	34	0.0184		
	0	27	0.0154		
	10	21	0.0118		
	20	16	0.0078		
	30	27	0.0154		
	40	24	0.0145		
	50	32	0.0144		

Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
NV	-30	75	0.0445	2.50	Pass
	-20	60	0.0321		
	-10	50	0.0287		
	0	44	0.0244		
	10	41	0.0214		
	20	32	0.0180		
	30	47	0.0217		
	40	45	0.0294		
	50	56	0.0299		

➤ Frequency stability V.S. Voltage measurement

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	
		Hz	ppm	Result	
25	HV	70	0.0844	2.50	Pass
	NV	54	0.0670		
	LV	51	0.0598		

Reference Frequency: WCDMA Band IV Middle channel=1412 channel=1733.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	Ppm		
25	HV	70	0.0421	2.50	Pass
	NV	64	0.0347		
	LV	58	0.0388		

Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	Ppm		
25	HV	40	0.0444	2.50	Pass
	NV	42	0.0524		
	LV	47	0.0568		

APPENDIX F

Modulation characteristics

<p>WCDMA B5</p>	<p>WCDMA FDD Band V Modulation</p> <p>Measurement Length: 2560 Chip</p> <p>Err. Vect. Magn. (RMS) 2.1 %</p> <p>Magn. Error (RMS) 1.3 %</p> <p>Phase Error (RMS) 0.9 °</p> <p>Slot Number 0</p> <p>23.37 dBm UE Power</p> <p>-63.26 dB I/Q Origin Offset</p> <p>-63.40 dB I/Q Imbalance</p>
<p>WCDMA B4</p>	<p>WCDMA FDD Band IV Modulation</p> <p>Measurement Length: 2560 Chip</p> <p>Err. Vect. Magn. (RMS) 4.0 %</p> <p>Magn. Error (RMS) 2.4 %</p> <p>Phase Error (RMS) 1.9 °</p> <p>Slot Number 0</p> <p>23.72 dBm UE Power</p> <p>-60.59 dB I/Q Origin Offset</p> <p>-68.79 dB I/Q Imbalance</p>
<p>WCDMA B2</p>	<p>WCDMA FDD Band II Modulation</p> <p>Measurement Length: 2560 Chip</p> <p>Err. Vect. Magn. (RMS) 4.1 %</p> <p>Magn. Error (RMS) 2.5 %</p> <p>Phase Error (RMS) 1.9 °</p> <p>Slot Number 0</p> <p>23.77 dBm UE Power</p> <p>-55.66 dB I/Q Origin Offset</p> <p>-56.76 dB I/Q Imbalance</p>

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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