

TEST REPORT

Applicant Name: Shenzhen Youmi Intelligent Technology Co., Ltd.
Address: 406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Report Number: SZ1240129-06571E-RF-00A
FCC ID: 2ATZ4-G75G

Test Standard (s)

FCC PART 27; FCC PART 22H; FCC PART 24E

Sample Description

Product Type: Smart phone
Model No.: PG3N BG7YB
Multiple Model(s) No.: N/A
Trade Mark: UMIDIGI
Date Received: 2024/01/22
Issue Date: 2024/04/01

Test Result:

Pass[▲]

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Andy Yu

Andy Yu
RF Engineer

Approved By:

Nancy Wang

Nancy Wang
RF Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.

This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China

Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY4

GENERAL INFORMATION.....5

 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)5

 OBJECTIVE5

 TEST METHODOLOGY6

 MEASUREMENT UNCERTAINTY6

 TEST FACILITY6

SYSTEM TEST CONFIGURATION7

 DESCRIPTION OF TEST CONFIGURATION7

 EQUIPMENT MODIFICATIONS8

 SUPPORT EQUIPMENT LIST AND DETAILS8

 SUPPORT CABLE DESCRIPTION8

 BLOCK DIAGRAM OF TEST SETUP8

SUMMARY OF TEST RESULTS9

TEST EQUIPMENT LIST10

FCC §1.1307(B) & §2.1093 - RF EXPOSURE INFORMATION.....11

FCC§2.1047 - MODULATION CHARACTERISTIC12

FCC § 2.1046, § 22.913 (A) (D) & § 24.232 (C) (D) &§27.50 (C) (H) - RF OUTPUT POWER13

 APPLICABLE STANDARD13

 TEST PROCEDURE13

 TEST DATA13

FCC §2.1049, §22.917, §22.905 & §24.238&§27.53 - OCCUPIED BANDWIDTH28

 APPLICABLE STANDARD28

 TEST PROCEDURE28

 TEST DATA28

FCC §2.1051, §22.917(A) & §24.238(A) & §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS ..46

 APPLICABLE STANDARD46

 TEST PROCEDURE46

 TEST DATA46

FCC § 2.1053; § 22.917 (A);§ 24.238 (A); §27.53 - SPURIOUS RADIATED EMISSIONS.....59

 APPLICABLE STANDARD59

 TEST PROCEDURE59

 TEST DATA59

FCC§ 22.917 (A); § 24.238 (A); §27.53(G)(M) - BAND EDGES69

 APPLICABLE STANDARD69

 TEST PROCEDURE69

 TEST DATA70

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY79

 APPLICABLE STANDARD79

 TEST PROCEDURE79

 TEST DATA80

EUT PHOTOGRAPHS88
TEST SETUP PHOTOGRAPHS89

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZ1240129-06571E-RF-00A	Original Report	2024/04/01

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Smart phone			
Tested Model	PG3N BG7YB			
Multiple Model(s)	N/A			
Frequency Range	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(TX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 41: 2496-2690MHz (TX/RX)			
Modulation Technique	2G: GMSK 3G: BPSK, QPSK, 16QAM, 64QAM 4G: QPSK, 16QAM			
Antenna Specification [#]	Antenna	Operation Bands	Antenna Gain (G _T) (dBi)	L _c (dB)
	ANT0	GSM 850/WCDMA/LTE B5	-2.53	0.5
		LTE B7	-1.49	0.8
		LTE B12	-2.89	0.5
		LTE B41	-1.49	0.8
ANT1	PCS1900/WCDMA/LTE B2	0.88	0	
Note: L _c = Signal Attenuation in the connecting cable between the transmitter and antenna, in dB.				
Voltage Range	DC 3.87V from battery or DC 5V from adapter			
Sample serial number	2H9S-2 for Radiated Emissions Test 2H9S-1 for RF Conducted Test (Assigned by BACL, Shenzhen)			
Sample/EUT Status	Good condition			
Normal/Extreme Condition [#]	L.V.: Low Voltage 3.45V _{DC} N.V.: Normal Voltage 3.87V _{DC} H.V.: High Voltage 4.45V _{DC}			
Adapter Information	Model:HJ-0502000W2-US Input: AC 100-240V~50/60Hz 0.3A Output: DC 5V, 2A			

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part24-Subpart E, and Subpart 27 of the Federal Communication Commission’s rules.

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

Test Methodology

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

Part 22 Subpart H - Public Mobile Services
 Part 24 Subpart E - Personal Communication Services
 Part 27 - Miscellaneous Wireless Communications Services

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

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF output power, conducted		0.72 dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.75 dB(k=2, 95% level of confidence)
RF Frequency		213.55 Hz(k=2, 95% level of confidence)
Radiated Emissions	30MHz~200MHz (Horizontal)	4.48dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	4.55dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	4.85dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.05dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.35dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.44dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.16dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

Frequency Band	Bandwidth (MHz)	Test Frequency (MHz)		
		Low	Middle	High
GSM850	0.25	824.2	836.6	848.8
PCS1900	0.25	1850.2	1880	1909.8
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B5	4.2	826.4	836.6	846.6
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
LTE B12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704.0	707.5	711.0
LTE B41	5	2498.5	2593	2687.5
	10	2501	2593	2685
	15	2503.5	2593	2682.5
	20	2506	2593	2680

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

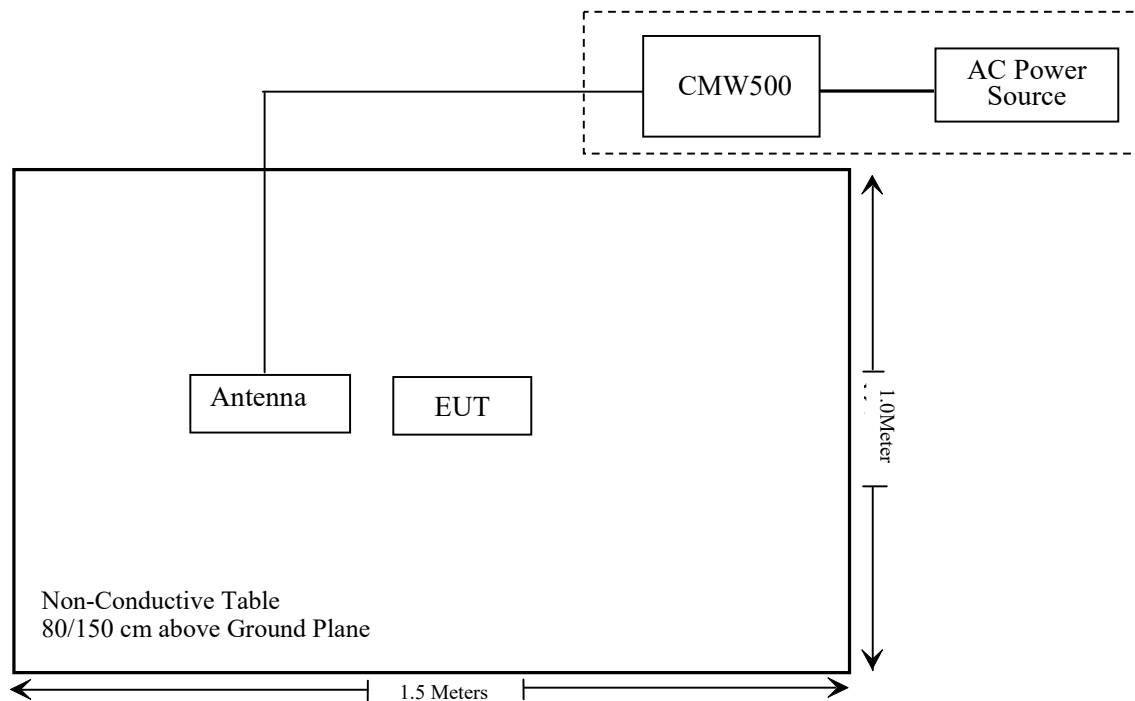
Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	141718

Support Cable Description

Cable Description	Length (m)	From / Port	To
Un-shielded detachable AC cable	1.2	AC Power	CMW500

Block Diagram of Test Setup

For radiated spurious emission



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 ,§2.1093	RF Exposure (SAR)	Compliant
§2.1046; § 22.913 (a) (d); § 24.232 (c) (d); §27.50(c) (h)	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliant
§ 2.1051; §22.917 (a); § 24.238 (a); §27.53;	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliant
§ 22.917 (a); § 24.238 (a); §27.53 (g)(m)	Band Edge	Compliant
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310 N	186238	2023/06/08	2024/06/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2024/07/19
COM-POWER	Dipole Antenna	AD-100	721027	NCR	NCR
Unknown	Cable	Chamber Cable 1	F-03-EM236	2023/08/03	2024/08/02
Unknown	Cable	Chamber Cable 4	EC-007	2023/08/03	2024/08/02
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2023/04/18	2024/04/17
COM-POWER	Pre-amplifier	PA-122	181919	2023/06/29	2024/06/28
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2024/07/25
A.H.System	Horn Antenna	SAS-200/571	135	2021/07/14	2024/07/13
Unknown	RF Cable	KMSE	0735	2023/10/08	2024/10/07
Unknown	RF Cable	UFA147	219661	2023/10/08	2024/10/07
Unknown	RF Cable	XH750A-N	J-10M	2023/10/08	2024/10/07
Unknown	1.3G High Pass filter	1.3GHz	101120	2023/08/03	2024/08/02
SNSD	2.4G Band Reject filter	BSF2402-2480MN-0898-001	2.4G filter	2023/08/03	2024/08/02
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	NCR	NCR
A.H.System	Pre-amplifier	PAM-1840VH	190	2023/08/03	2024/08/02
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Electro-Mechanics Co	Horn Antenna	3116	2026	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2023/08/03	2024/08/02
Agilent	Signal Generator	N5183A	MY50140588	2023/12/18	2024/12/17
RF Conducted Test					
R&S	SPECTRUM ANALYZER	FSV40-N	102259	2024/01/16	2025/01/15
BACL	Temperature & Humidity Chamber	BTH-150-40	30145	2024/01/16	2025/01/15
R&S	Wideband Radio Communication Tester	CMW500	141718	2023/09/06	2024/09/05
instek	DC Power Supply	GPS-3030DD	EM832096	NCR	NCR
Fluke	Digital Multimeter	287	19000011	2023/06/08	2024/06/07
narda	Power divider	SN5	100005	2023/12/07	2024/12/06
WEINSCHEL	3dB Attenuator	Unknown	F-03-EM220	2023/07/04	2024/07/03
MARCONI	10dB Attenuator	6534/3	2942	2023/07/04	2024/07/03
Unknown	RF Cable	65475	01670515	2023/07/04	2024/07/03

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

FCC §1.1307(b) & §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: SZ1240129-06571E-20A.

FCC§2.1047 - MODULATION CHARACTERISTIC

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

FCC § 2.1046, § 22.913 (a) (d) & § 24.232 (c) (d) & § 27.50 (c) (h) - RF OUTPUT POWER

Applicable Standard

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

According to FCC §2.1046 and §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(c), Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP. And Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

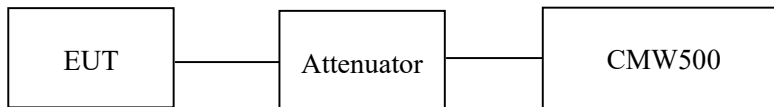
According to §27.50 (h) The following power limits shall apply in the BRS and EBS:
 (2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

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

Test Procedure

Conducted method: ANSI C63.26-2015 Section 5.2

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



Test Data

Environmental Conditions

Temperature:	22~25.8 °C
Relative Humidity:	25~62 %
ATM Pressure:	101.0kPa

The testing was performed by Bamboo Zhan from 2024-02-19 to 2024-03-15.

Test Result: Compliant

Cellular Band (Part 22H)

GSM 850

Test Mode	Conducted Peak Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
	Lowest Channel	Middle Channel	Highest Channel		
GSM	33.61	33.73	33.73	28.55	38.45
GPRS 1 Slot	33.51	33.61	33.55	28.43	38.45
GPRS 2 Slots	32.87	32.99	32.96	27.81	38.45
GPRS 3 Slots	30.85	31.06	30.95	25.88	38.45
GPRS 4 Slots	29.53	29.75	29.61	24.57	38.45

Note:

ERP= Conducted Power(dBm) - LC(dB) + GT(dBd)

GT(dBd)=GT(dBi)-2.15

WCAMA B5

Test Mode	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
	Lowest Channel	Middle Channel	Highest Channel		
WCDMA R99	23.60	23.55	23.49	18.42	38.45
HSDPA Subtest 1	20.86	20.97	20.94	15.79	38.45
HSDPA Subtest 2	20.90	21.03	20.97	15.85	38.45
HSDPA Subtest 3	20.92	21.07	21.01	15.89	38.45
HSDPA Subtest 4	21.00	21.13	21.08	15.95	38.45
HSUPA Subtest 1	21.14	20.59	20.70	15.96	38.45
HSUPA Subtest 2	21.18	20.65	20.77	16.00	38.45
HSUPA Subtest 3	21.23	20.72	20.82	16.05	38.45
HSUPA Subtest 4	21.30	20.79	20.85	16.12	38.45
HSUPA Subtest 5	21.32	20.85	20.92	16.14	38.45
HSPA+ Subtest 1	21.39	20.85	20.91	16.21	38.45

Note:

ERP= Conducted Power(dBm) - LC(dB) + GT(dBd)

GT(dBd)=GT(dBi)-2.15

PCS Band (Part 24E)**PCS 1900**

Test Mode	Conducted Peak Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
	Lowest Channel	Middle Channel	Highest Channel		
GSM	30.37	30.29	30.16	31.25	33
GPRS 1 Slot	30.32	30.23	30.00	31.20	33
GPRS 2 Slots	29.82	29.70	29.61	30.70	33
GPRS 3 Slots	26.71	26.30	26.54	27.59	33
GPRS 4 Slots	25.41	25.08	25.23	26.29	33

Note: EIRP=Conducted Power(dBm) - LC(dB) + GT(dBi)

WCDMA B2

Test Mode	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
	Lowest Channel	Middle Channel	Highest Channel		
WCDMA R99	22.39	22.23	22.1	23.27	33
HSDPA Subtest 1	19.98	19.52	19.54	20.86	33
HSDPA Subtest 2	20.02	19.54	19.58	20.90	33
HSDPA Subtest 3	20.06	19.58	19.62	20.94	33
HSDPA Subtest 4	20.09	19.64	19.67	20.97	33
HSUPA Subtest 1	19.56	19.47	19.19	20.44	33
HSUPA Subtest 2	19.58	19.54	19.22	20.46	33
HSUPA Subtest 3	19.60	19.62	19.29	20.50	33
HSUPA Subtest 4	19.66	19.66	19.34	20.54	33
HSUPA Subtest 5	19.69	19.68	19.39	20.57	33
HSPA+ Subtest 1	19.82	19.70	19.50	20.70	33

Note: EIRP=Conducted Power(dBm) - LC(dB) + GT(dBi)

**LTE Band
Band 2**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	21.90	21.78	21.66	22.82	33
	RB1#3	21.86	21.75	21.65		
	RB1#5	21.91	21.78	21.67		
	RB3#0	21.94	21.74	21.73		
	RB3#3	21.94	21.72	21.73		
	RB6#0	20.94	20.78	20.68		
1.4MHz 16QAM	RB1#0	20.95	20.94	20.69	22.04	33
	RB1#3	20.95	20.92	20.67		
	RB1#5	20.95	20.93	20.71		
	RB3#0	21.13	20.86	20.75		
	RB3#3	21.16	20.85	20.75		
	RB6#0	19.96	19.80	19.66		
3MHz QPSK	RB1#0	21.90	21.81	21.66	22.79	33
	RB1#8	21.85	21.73	21.64		
	RB1#14	21.91	21.79	21.67		
	RB6#0	20.92	20.79	20.70		
	RB6#9	20.94	20.77	20.71		
3MHz 16QAM	RB1#0	20.97	21.34	20.85	22.22	33
	RB1#8	20.91	21.29	20.80		
	RB1#14	20.96	21.34	20.81		
	RB6#0	19.88	19.84	19.73		
	RB6#9	19.90	19.83	19.74		
5MHz QPSK	RB1#0	22.02	21.89	21.79	22.92	33
	RB1#13	22.01	21.87	21.74		
	RB1#24	22.04	21.88	21.81		
	RB15#0	21.01	20.88	20.74		
	RB15#10	21.01	20.83	20.76		
	RB25#0	21.03	20.83	20.75		
5MHz 16QAM	RB1#0	21.32	20.94	20.67	22.21	33
	RB1#13	21.30	20.90	20.63		
	RB1#24	21.33	20.93	20.71		
	RB15#0	20.01	19.89	19.80		
	RB15#10	20.00	19.87	19.82		
	RB25#0	20.03	19.87	19.80		

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	22.03	21.91	21.79	22.91	33
	RB1#25	21.95	21.84	21.74		
	RB1#49	21.93	21.85	21.77		
	RB25#0	20.97	20.87	20.74		
	RB25#25	20.99	20.83	20.76		
	RB50#0	20.98	20.85	20.76		
10MHz 16QAM	RB1#0	21.08	21.46	20.98	22.34	33
	RB1#25	21.02	21.44	20.88		
	RB1#49	20.96	21.44	20.95		
	RB25#0	20.08	19.90	19.79		
	RB25#25	20.06	19.87	19.77		
	RB50#0	20.00	19.85	19.75		
15MHz QPSK	RB1#0	22.01	21.90	21.81	22.89	33
	RB1#38	21.92	21.89	21.80		
	RB1#74	21.88	21.85	21.78		
	RB36#0	21.03	20.86	20.77		
	RB36#39	20.95	20.83	20.76		
	RB75#0	20.98	20.85	20.75		
15MHz 16QAM	RB1#0	21.46	21.50	21.00	22.38	33
	RB1#38	21.37	21.44	20.95		
	RB1#74	21.33	21.43	20.96		
	RB36#0	20.02	19.87	19.81		
	RB36#39	19.95	19.83	19.79		
	RB75#0	19.99	19.88	19.80		
20MHz QPSK	RB1#0	22.02	21.95	21.89	22.90	33
	RB1#50	21.95	21.95	21.83		
	RB1#99	21.90	21.90	21.84		
	RB50#0	21.04	20.93	20.86		
	RB50#50	20.99	20.89	20.78		
	RB100#0	20.99	20.91	20.80		
20MHz 16QAM	RB1#0	21.73	21.29	21.13	22.61	33
	RB1#50	21.55	21.26	21.06		
	RB1#99	21.55	21.22	21.09		
	RB50#0	20.01	19.92	19.81		
	RB50#50	19.97	19.88	19.75		
	RB100#0	20.03	19.92	19.83		

Note: EIRP=Conducted Power(dBm) - LC(dB) + GT(dBi)

Band 5

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	23.51	23.47	23.35	18.43	38.45
	RB1#3	23.50	23.39	23.30		
	RB1#5	23.54	23.46	23.35		
	RB3#0	23.59	23.55	23.38		
	RB3#3	23.61	23.52	23.39		
	RB6#0	22.55	22.53	22.45		
1.4MHz 16QAM	RB1#0	22.59	22.60	22.57	17.53	38.45
	RB1#3	22.56	22.57	22.55		
	RB1#5	22.61	22.58	22.58		
	RB3#0	22.59	22.69	22.43		
	RB3#3	22.60	22.71	22.42		
	RB6#0	21.50	21.59	21.49		
3MHz QPSK	RB1#0	23.62	23.47	23.36	18.44	38.45
	RB1#8	23.54	23.47	23.34		
	RB1#14	23.51	23.45	23.31		
	RB6#0	22.55	22.56	22.46		
	RB6#9	22.54	22.53	22.42		
	RB15#0	22.53	22.56	22.44		
3MHz 16QAM	RB1#0	23.06	22.73	22.48	17.88	38.45
	RB1#8	23.05	22.76	22.44		
	RB1#14	23.03	22.71	22.46		
	RB6#0	21.62	21.58	21.40		
	RB6#9	21.62	21.56	21.39		
	RB15#0	21.61	21.53	21.49		
5MHz QPSK	RB1#0	23.70	23.59	23.52	18.52	38.45
	RB1#13	23.55	23.55	23.45		
	RB1#24	23.62	23.57	23.48		
	RB15#0	22.62	22.60	22.56		
	RB15#10	22.55	22.59	22.49		
	RB25#0	22.56	22.60	22.45		
5MHz 16QAM	RB1#0	22.46	22.87	22.56	17.69	38.45
	RB1#13	22.48	22.82	22.50		
	RB1#24	22.48	22.83	22.47		
	RB15#0	21.67	21.63	21.57		
	RB15#10	21.61	21.63	21.50		
	RB25#0	21.64	21.64	21.47		

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	23.69	23.60	23.57	18.52	38.45
	RB1#25	23.62	23.51	23.45		
	RB1#49	23.70	23.48	23.42		
	RB25#0	22.63	22.61	22.56		
	RB25#25	22.57	22.55	22.40		
	RB50#0	22.61	22.58	22.50		
10MHz 16QAM	RB1#0	23.18	22.79	22.61	18.00	38.45
	RB1#25	23.16	22.73	22.51		
	RB1#49	23.10	22.72	22.51		
	RB25#0	21.68	21.65	21.63		
	RB25#25	21.59	21.56	21.54		
	RB50#0	21.60	21.59	21.49		
Note: ERP= Conducted Power(dBm) - LC(dB) + GT(dBd) GT(dBd)=GT(dBi)-2.15						

Band 7

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	20.13	21.92	21.84	19.66	33
	RB1#13	21.57	21.83	21.89		
	RB1#24	21.76	21.73	21.95		
	RB15#0	20.54	20.85	20.88		
	RB15#10	20.66	20.83	20.86		
	RB25#0	20.62	20.83	20.85		
5MHz 16QAM	RB1#0	20.89	20.90	20.77	18.69	33
	RB1#13	20.89	20.85	20.74		
	RB1#24	20.98	20.93	20.77		
	RB15#0	19.59	19.89	19.93		
	RB15#10	19.65	19.88	19.92		
	RB25#0	19.63	19.85	19.93		
10MHz QPSK	RB1#0	21.58	21.82	21.81	19.60	33
	RB1#25	21.64	21.73	21.78		
	RB1#49	21.76	21.80	21.89		
	RB25#0	20.56	20.79	20.84		
	RB25#25	20.69	20.78	20.88		
	RB50#0	20.64	20.79	20.88		
10MHz 16QAM	RB1#0	21.09	21.05	20.89	19.02	33
	RB1#25	21.16	20.98	20.89		
	RB1#49	21.31	21.02	20.96		
	RB25#0	19.61	19.84	19.94		
	RB25#25	19.75	19.81	19.98		
	RB50#0	19.67	19.81	19.91		
15MHz QPSK	RB1#0	21.66	21.81	21.80	19.61	33
	RB1#38	21.80	21.88	21.90		
	RB1#74	21.79	21.85	21.89		
	RB36#0	20.67	20.87	20.89		
	RB36#39	20.77	20.87	20.94		
	RB75#0	20.72	20.87	20.89		
15MHz 16QAM	RB1#0	21.18	21.03	21.24	19.03	33
	RB1#38	21.31	21.11	21.28		
	RB1#74	21.32	21.07	21.26		
	RB36#0	19.69	19.91	19.89		
	RB36#39	19.81	19.88	19.93		
	RB75#0	19.75	19.91	19.92		

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
20MHz QPSK	RB1#0	22.07	22.27	22.31	20.08	33
	RB1#50	22.27	22.37	22.34		
	RB1#99	22.25	22.34	22.35		
	RB50#0	21.20	21.42	21.42		
	RB50#50	21.29	21.38	21.44		
	RB100#0	21.24	21.37	21.43		
20MHz 16QAM	RB1#0	21.43	21.58	22.01	19.80	33
	RB1#50	21.59	21.67	21.95		
	RB1#99	21.59	21.63	22.09		
	RB50#0	20.21	20.42	20.42		
	RB50#50	20.31	20.37	20.44		
	RB100#0	20.30	20.42	20.48		

Note: EIRP=Conducted Power(dBm) - LC(dB) + GT(dBi)

Band 12

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	23.51	23.48	23.42	18.08	34.77
	RB1#3	23.49	23.46	23.35		
	RB1#5	23.51	23.49	23.41		
	RB3#0	23.59	23.51	23.42		
	RB3#3	23.62	23.52	23.45		
	RB6#0	22.53	22.52	22.49		
1.4MHz 16QAM	RB1#0	22.56	22.59	22.67	17.20	34.77
	RB1#3	22.55	22.59	22.63		
	RB1#5	22.60	22.59	22.67		
	RB3#0	22.60	22.72	22.48		
	RB3#3	22.59	22.74	22.47		
	RB6#0	21.49	21.58	21.53		
3MHz QPSK	RB1#0	23.45	23.66	23.44	18.12	34.77
	RB1#8	23.45	23.60	23.39		
	RB1#14	23.50	23.57	23.37		
	RB6#0	22.52	22.55	22.51		
	RB6#9	22.56	22.53	22.43		
	RB15#0	22.52	22.50	22.45		
3MHz 16QAM	RB1#0	22.61	23.06	22.98	17.53	34.77
	RB1#8	22.52	23.07	22.81		
	RB1#14	22.60	23.05	22.90		
	RB6#0	21.48	21.64	21.58		
	RB6#9	21.49	21.61	21.51		
	RB15#0	21.62	21.64	21.55		
5MHz QPSK	RB1#0	23.57	23.65	23.69	18.15	34.77
	RB1#13	23.51	23.56	23.69		
	RB1#24	23.54	23.60	23.62		
	RB15#0	22.56	22.65	22.57		
	RB15#10	22.58	22.59	22.52		
	RB25#0	22.61	22.59	22.55		
5MHz 16QAM	RB1#0	22.83	22.70	22.52	17.29	34.77
	RB1#13	22.82	22.62	22.37		
	RB1#24	22.79	22.64	22.36		
	RB15#0	21.59	21.66	21.64		
	RB15#10	21.61	21.63	21.56		
	RB25#0	21.62	21.63	21.63		

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	23.56	23.69	23.62	18.15	34.77
	RB1#25	23.49	23.66	23.54		
	RB1#49	23.58	23.63	23.41		
	RB25#0	22.59	22.59	22.60		
	RB25#25	22.55	22.55	22.51		
	RB50#0	22.57	22.59	22.58		
10MHz 16QAM	RB1#0	22.60	23.14	22.92	17.60	34.77
	RB1#25	22.61	23.10	22.77		
	RB1#49	22.66	22.97	22.77		
	RB25#0	21.66	21.64	21.64		
	RB25#25	21.66	21.59	21.54		
	RB50#0	21.56	21.60	21.59		
Note: ERP= Conducted Power(dBm) - LC(dB) + GT(dBd) GT(dBd)=GT(dBi)-2.15						

Band 41

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.03	23.46	23.82	21.60	33
	RB1#13	23.03	23.43	23.82		
	RB1#24	23.02	23.46	23.89		
	RB15#0	23.01	23.41	23.73		
	RB15#10	23.01	23.41	23.71		
	RB25#0	23.02	23.41	23.72		
5MHz 16QAM	RB1#0	23.05	23.67	23.68	21.48	33
	RB1#13	23.03	23.65	23.66		
	RB1#24	23.09	23.68	23.73		
	RB15#0	23.03	23.46	23.77		
	RB15#10	23.09	23.45	23.71		
	RB25#0	23.10	23.40	23.74		
10MHz QPSK	RB1#0	23.03	23.48	23.59	21.43	33
	RB1#25	22.96	23.43	23.56		
	RB1#49	23.07	23.51	23.72		
	RB25#0	23.00	23.41	23.64		
	RB25#25	23.09	23.44	23.69		
	RB50#0	23.03	23.40	23.67		
10MHz 16QAM	RB1#0	23.22	23.68	23.58	21.44	33
	RB1#25	23.18	23.63	23.54		
	RB1#49	23.26	23.72	23.67		
	RB25#0	23.04	23.41	23.70		
	RB25#25	23.12	23.42	23.73		
	RB50#0	23.04	23.40	23.68		
15MHz QPSK	RB1#0	23.05	23.46	23.52	21.40	33
	RB1#38	23.11	23.50	23.63		
	RB1#74	23.09	23.47	23.68		
	RB36#0	23.00	23.43	23.64		
	RB36#39	23.06	23.44	23.69		
	RB75#0	23.04	23.42	23.67		
15MHz 16QAM	RB1#0	23.23	23.65	23.52	21.44	33
	RB1#38	23.27	23.73	23.63		
	RB1#74	23.27	23.67	23.65		
	RB36#0	23.09	23.41	23.64		
	RB36#39	23.13	23.41	23.70		
	RB75#0	23.11	23.42	23.69		

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
20MHz QPSK	RB1#0	23.05	23.40	23.48	21.39	33
	RB1#50	23.14	23.47	23.59		
	RB1#99	23.18	23.47	23.67		
	RB50#0	23.04	23.45	23.63		
	RB50#50	23.12	23.46	23.68		
	RB100#0	23.09	23.47	23.66		
20MHz 16QAM	RB1#0	23.41	23.51	23.53	21.47	33
	RB1#50	23.53	23.57	23.63		
	RB1#99	23.54	23.55	23.73		
	RB50#0	23.07	23.45	23.71		
	RB50#50	23.16	23.48	23.76		
	RB100#0	23.14	23.48	23.70		

Note: EIRP=Conducted Power(dBm) - LC(dB) + GT(dBi)

Peak-to-average ratio (PAR)

Cellular Band

Test Mode	Peak-to-average Ratio(dB)			Limit (dB)
	Lowest Channel	Middle Channel	Highest Channel	
GSM	3.51	3.65	3.62	13

WCDMA B5

Test Mode	Peak-to-average Ratio (dB)			Limit (dB)
	Lowest Channel	Middle Channel	Highest Channel	
WCDMA R99	2.99	3.04	3.10	13
HSDPA	4.87	4.46	4.64	13
HSUPA	5.48	5.54	6.09	13

PCS Band

Test Mode	Peak-to-average Ratio(dB)			Limit (dB)
	Lowest Channel	Middle Channel	Highest Channel	
GSM	3.16	3.23	3.27	13

WCDMA B2

Test Mode	Peak-to-average Ratio (dB)			Limit (dB)
	Lowest Channel	Middle Channel	Highest Channel	
WCDMA R99	3.07	3.10	3.22	13
HSDPA	4.49	3.36	4.14	13
HSUPA	5.91	5.91	6.12	13

LTE Band 2 20MHz Bandwidth

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio (dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	3.74	3.48	4.03	13
	RB100#0	4.58	4.52	4.72	13
20MHz 16QAM	RB1#0	4.52	4.14	4.90	13
	RB100#0	5.51	5.48	5.65	13

LTE Band 5 10MHz Bandwidth

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	3.68	8.67	3.51	13
	RB50#0	4.49	4.26	4.70	13
10MHz 16QAM	RB1#0	4.32	4.49	4.46	13
	RB50#0	5.57	8.49	5.74	13

LTE Band 7 20MHz Bandwidth

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	2.81	3.04	4.23	13
	RB100#0	3.91	4.87	4.96	13
20MHz 16QAM	RB1#0	3.45	4.55	5.48	13
	RB100#0	4.87	5.45	5.57	13

LTE Band 12 10MHz Bandwidth

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	3.59	3.65	3.57	13
	RB50#0	4.46	4.46	4.29	13
10MHz 16QAM	RB1#0	4.26	4.29	4.58	13
	RB50#0	5.54	5.48	5.45	13

LTE Band 41 20MHz Bandwidth

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	8.49	8.49	7.97	13
	RB100#0	8.23	8.75	8.32	13
20MHz 16QAM	RB1#0	8.70	8.67	8.09	13
	RB100#0	9.13	9.25	8.64	13

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

Applicable Standard

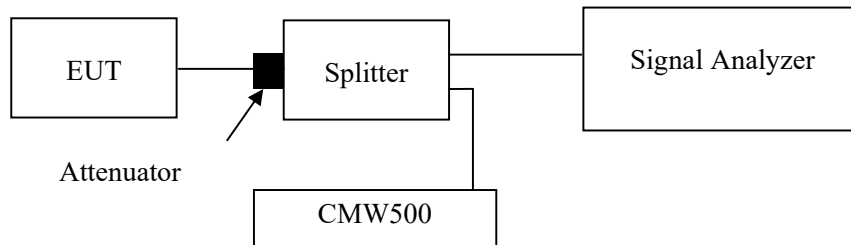
FCC 47 §2.1049, §22.917, §22.905, §24.238 and §27.53.

Test Procedure

ANSI C63.26-2015 Section 5.4.4

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

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.



Test Data

Environmental Conditions

Temperature:	22~25.8 °C
Relative Humidity:	25~62 %
ATM Pressure:	101.0kPa

The testing was performed by Jim Cheng from 2024-02-18 to 2024-03-13 and Bamboo Zhan from 2024-03-12 to 2024-03-13.

EUT operation mode: Transmitting

Test Result: Compliant

Please refer to the following tables and plots.

Cellular Band (Part 22H)

GSM 850

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
GSM	0.245	0.246	0.246	0.317	0.316	0.315

Note: The test plots please refer to the Plots of Occupied Bandwidth

WCDMA B5

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
WCDMA R99	4.136	4.146	4.136	4.695	4.705	4.695
HSDPA	4.156	4.146	4.156	4.695	4.685	4.695
HSUPA	4.166	4.156	4.146	4.685	4.685	4.675

Note: The test plots please refer to the Plots of Occupied Bandwidth

PCS Band (Part 24E)

PCS 1900

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
GSM	0.246	0.246	0.245	0.314	0.314	0.313

Note: The test plots please refer to the Plots of Occupied Bandwidth

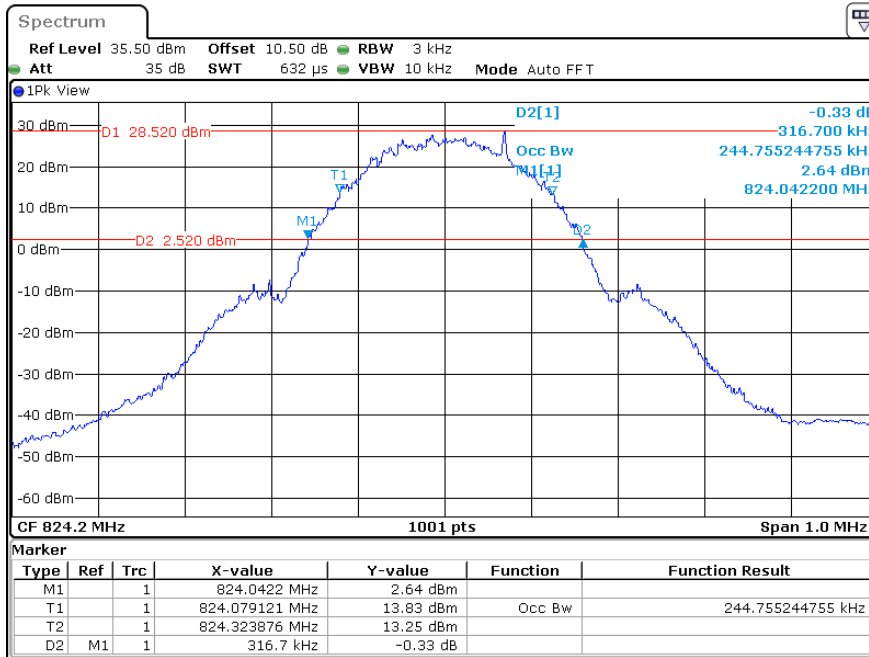
WCDMA B2

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
WCDMA R99	4.146	4.146	4.146	4.695	4.685	4.695
HSDPA	4.146	4.156	4.156	4.675	4.685	4.665
HSUPA	4.146	4.146	4.156	4.675	4.675	4.675

Note: The test plots please refer to the Plots of Occupied Bandwidth

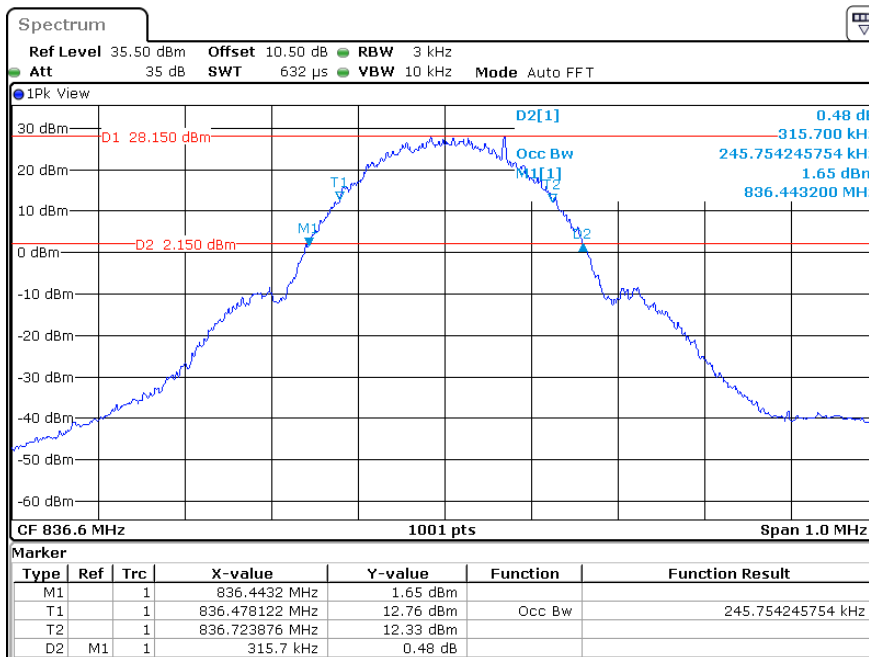
**26dB Bandwidth&99% Occupied Bandwidth
Cellular Band**

GSM(GMSK) Mode, Low channel



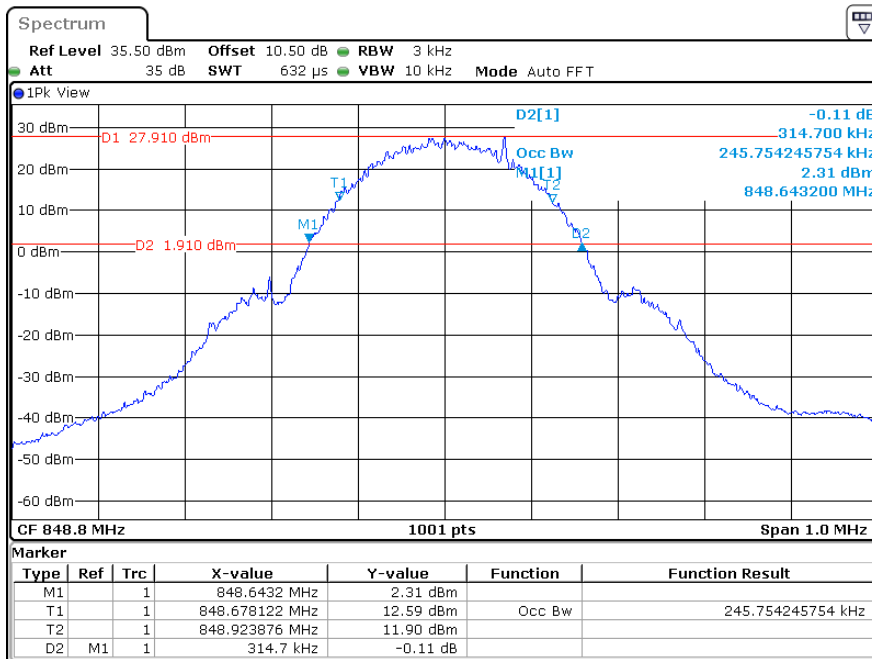
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 13.MAR.2024 09:11:57

GSM(GMSK) Mode, Middle channel



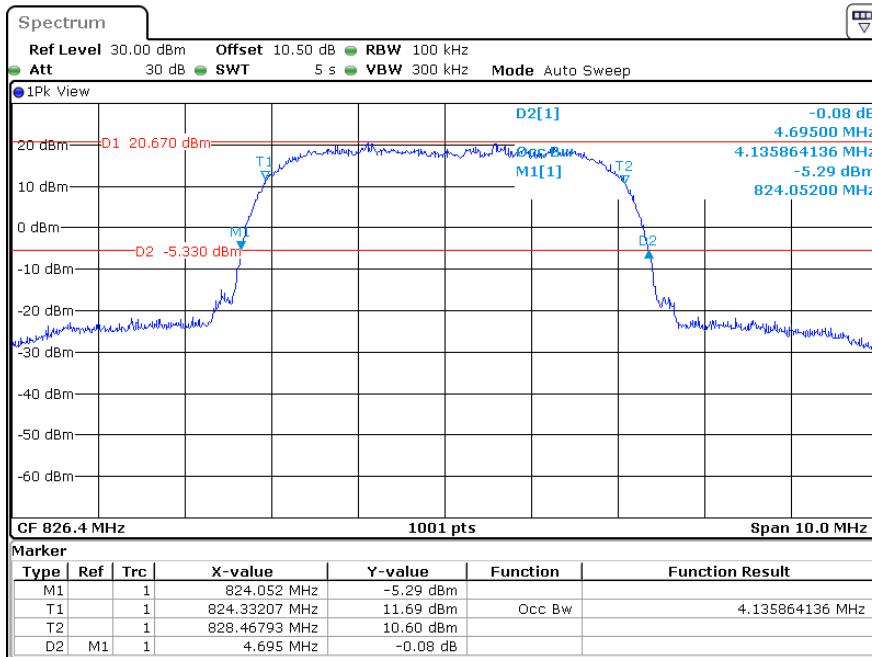
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 13.MAR.2024 09:08:25

GSM(GMSK) Mode, High channel



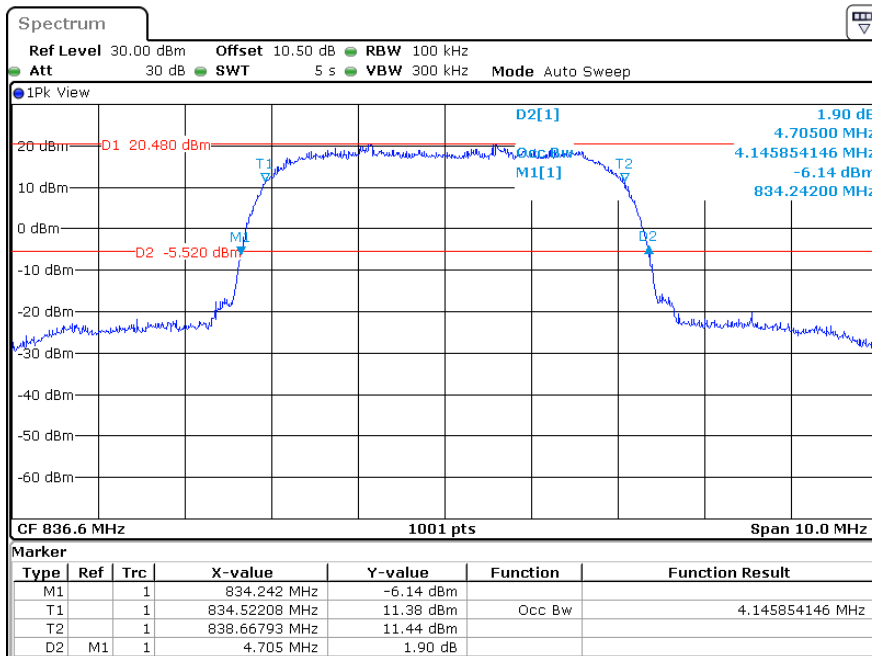
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:15:53

RMC (BPSK) Mode, Low channel



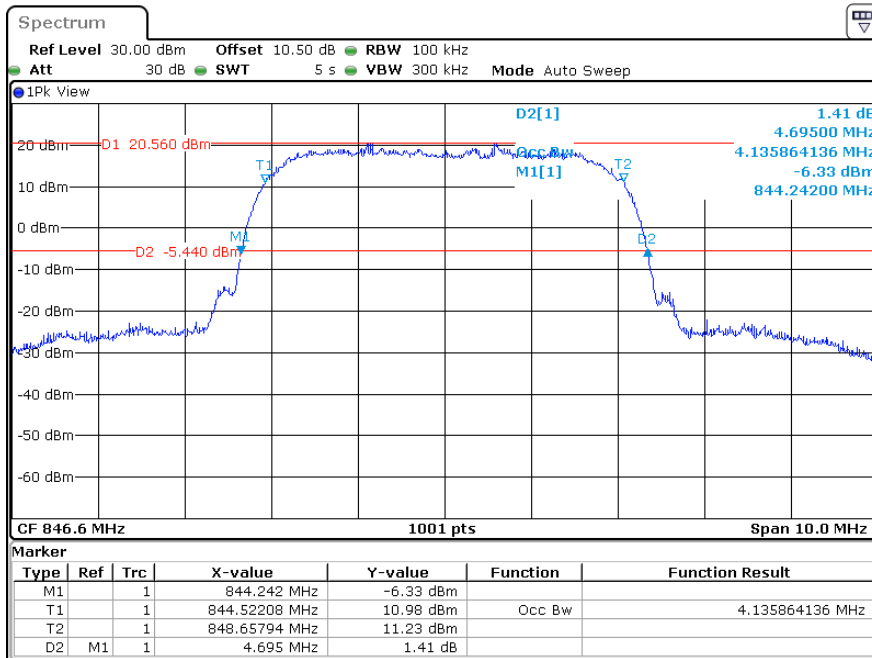
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:46:47

RMC (BPSK) Mode, Middle channel



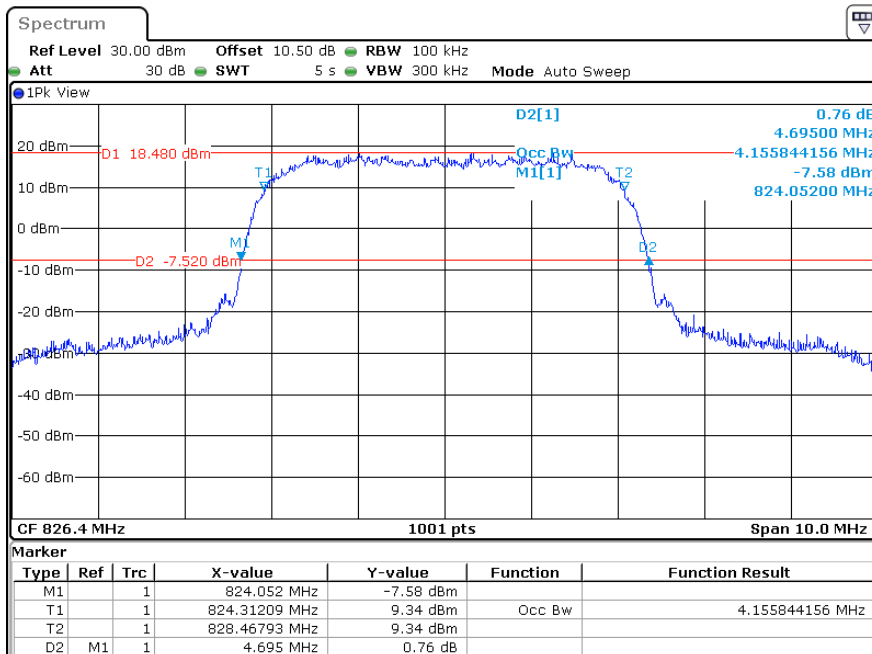
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:49:53

RMC (BPSK) Mode, High channel



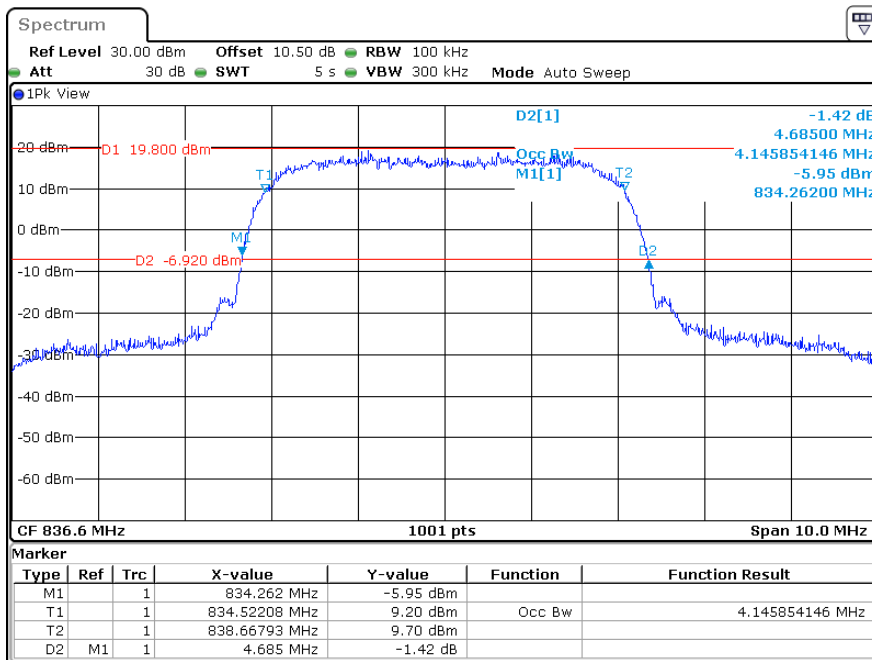
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:51:52

HSDPA Mode, Low channel



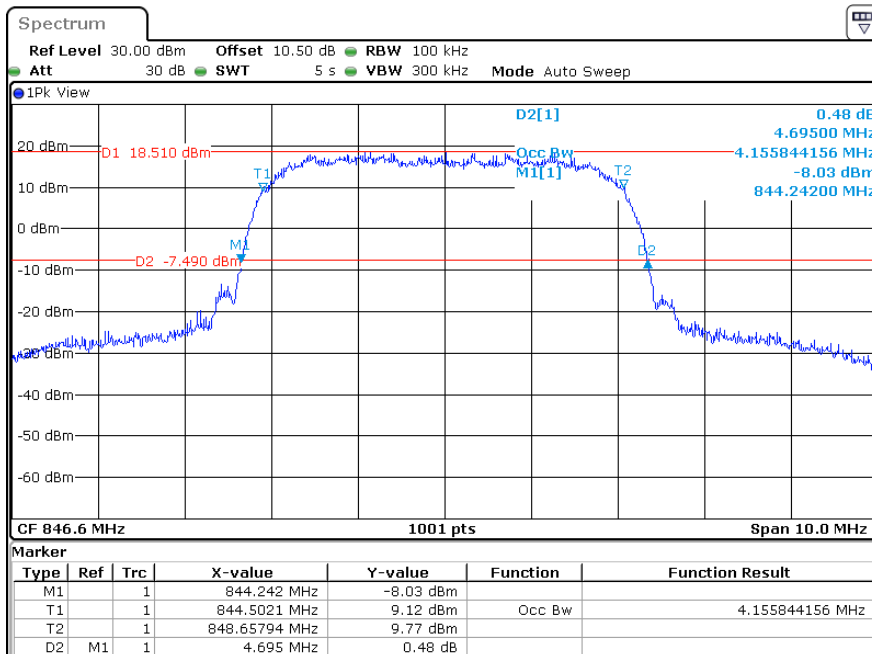
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:59:33

HSDPA Mode, Middle channel



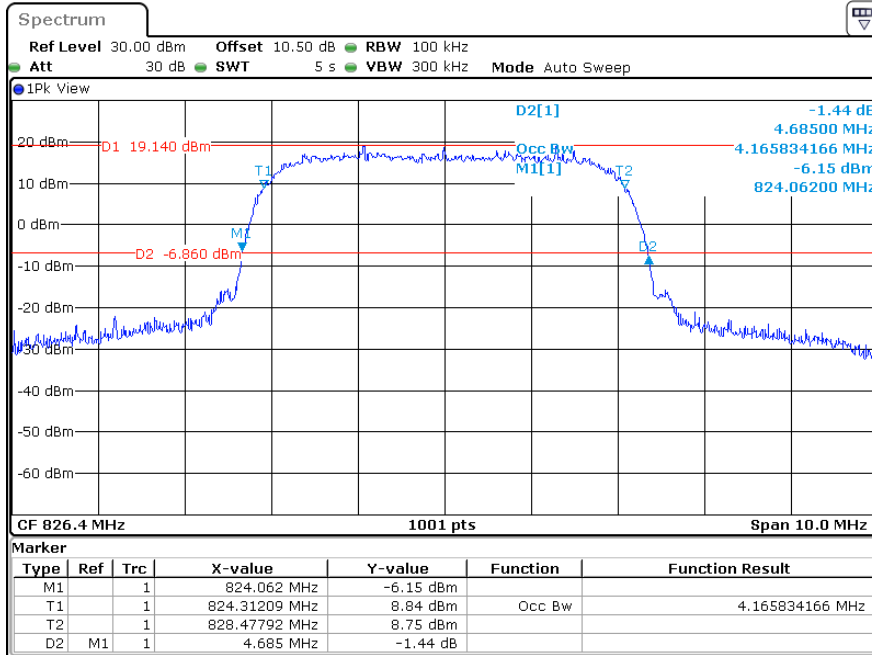
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:57:19

HSDPA Mode, High channel



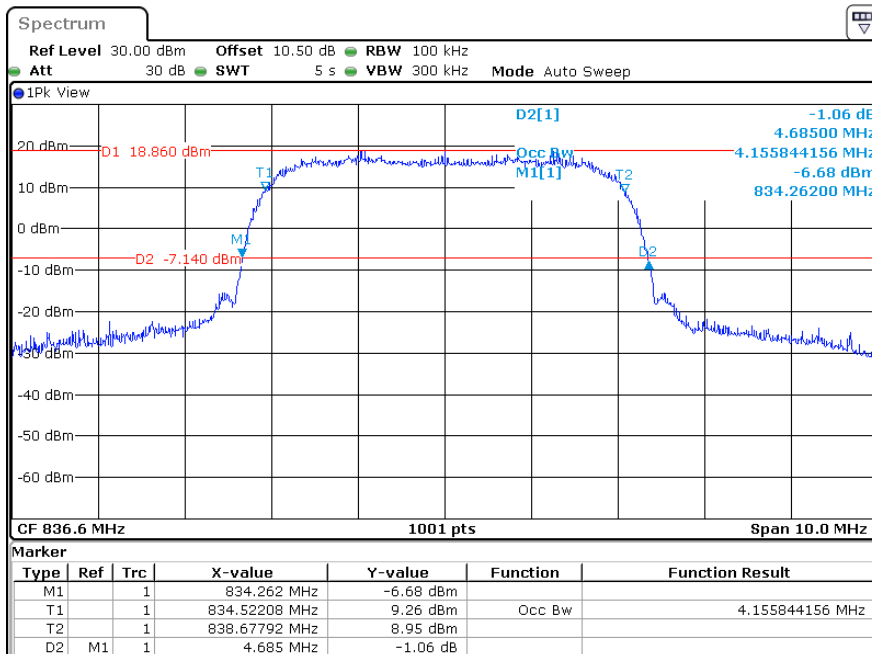
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:54:50

HSUPA Mode, Low channel



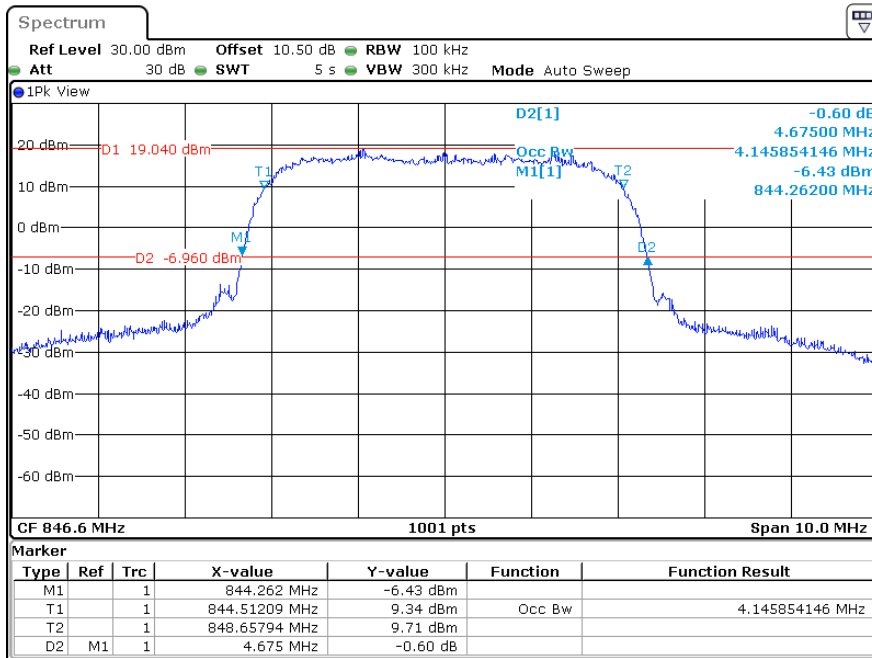
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:02:52

HSUPA Mode, Middle channel



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:05:50

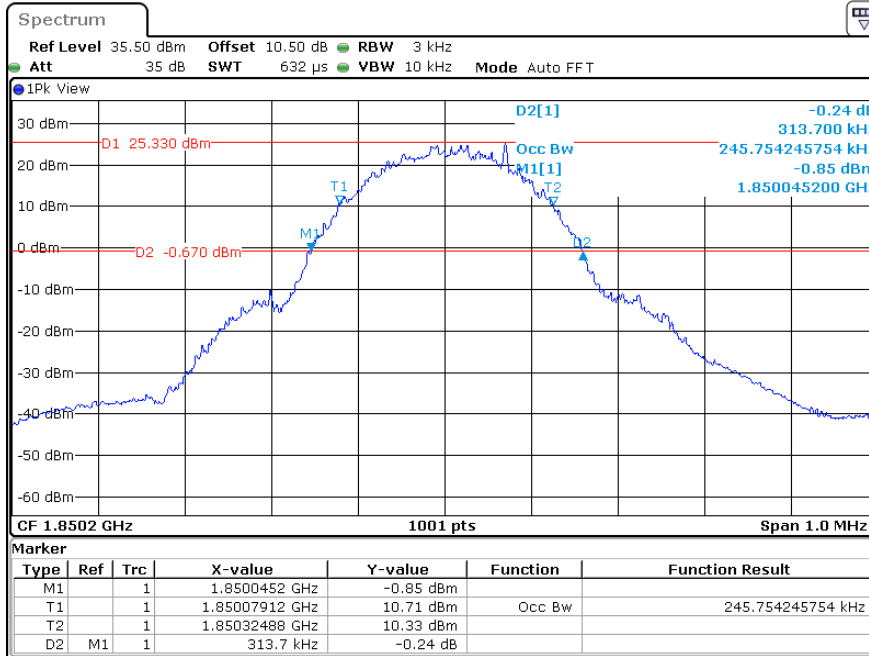
HSUPA Mode, High channel



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:08:42

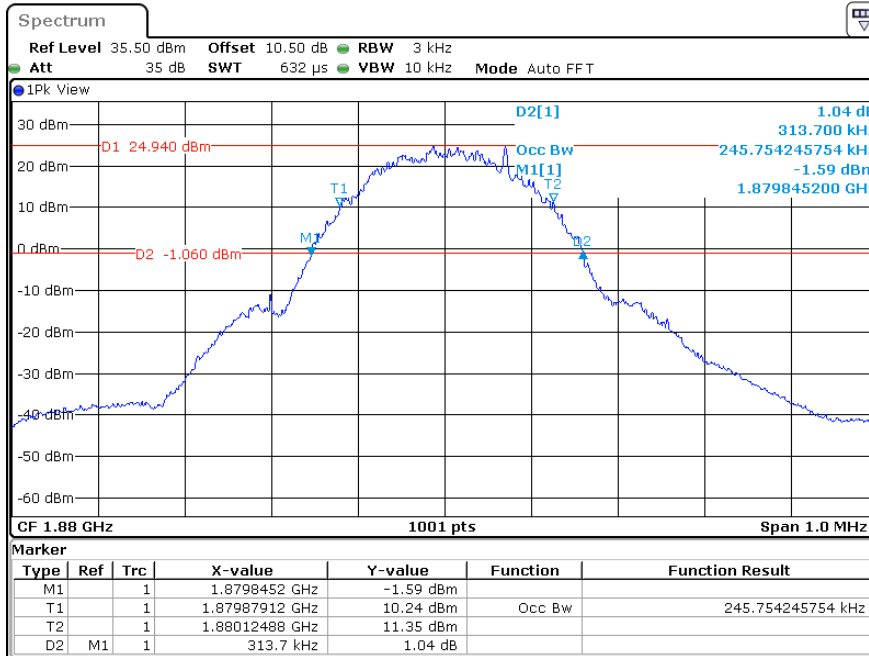
PCS Band

GSM(GMSK) Mode, Low channel



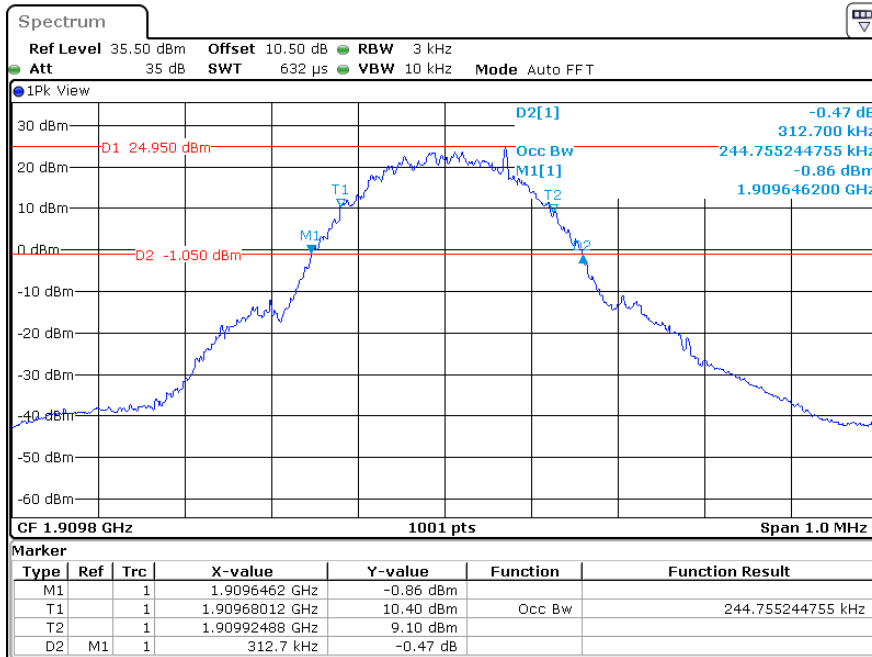
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 16:02:49

GSM(GMSK) Mode, Middle channel



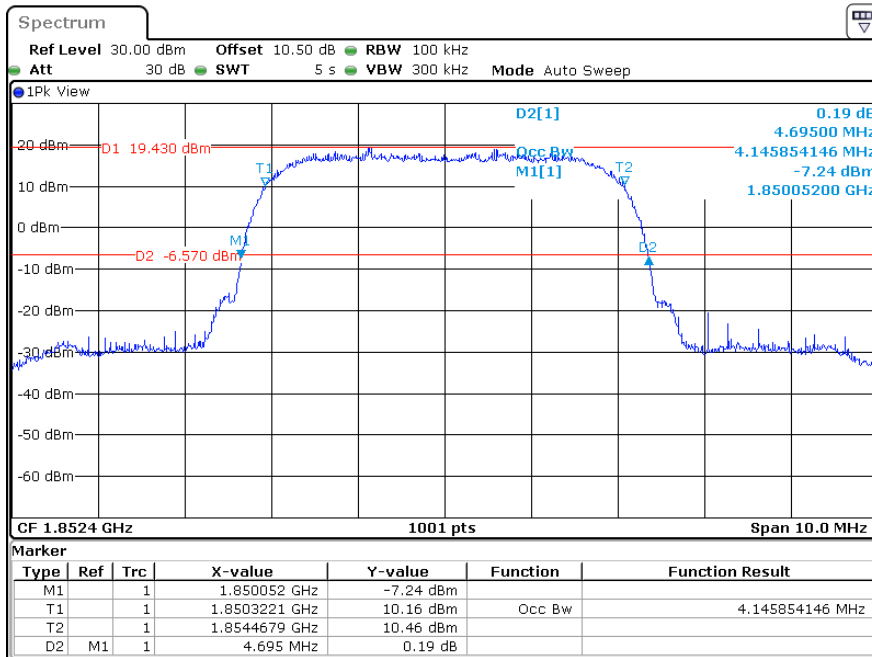
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 16:13:57

GSM(GMSK) Mode, High channel

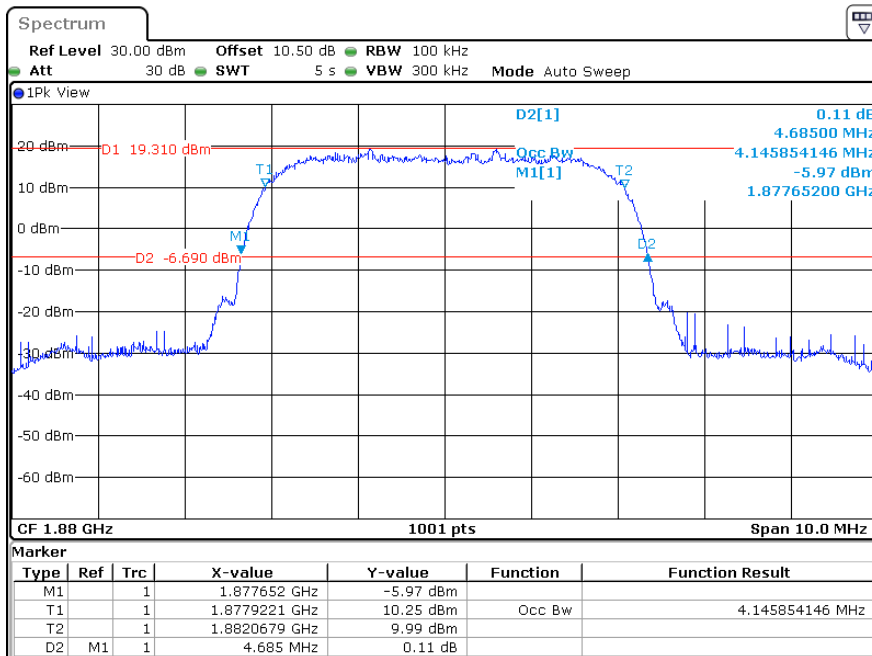


ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 16:18:29

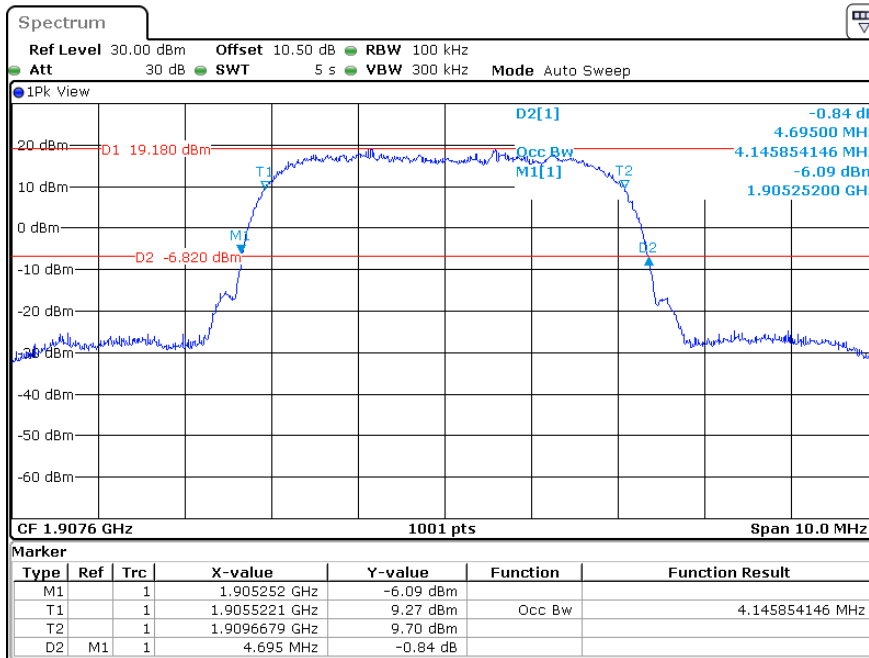
RMC (BPSK) Mode, Low channel



RMC (BPSK) Mode, Middle channel

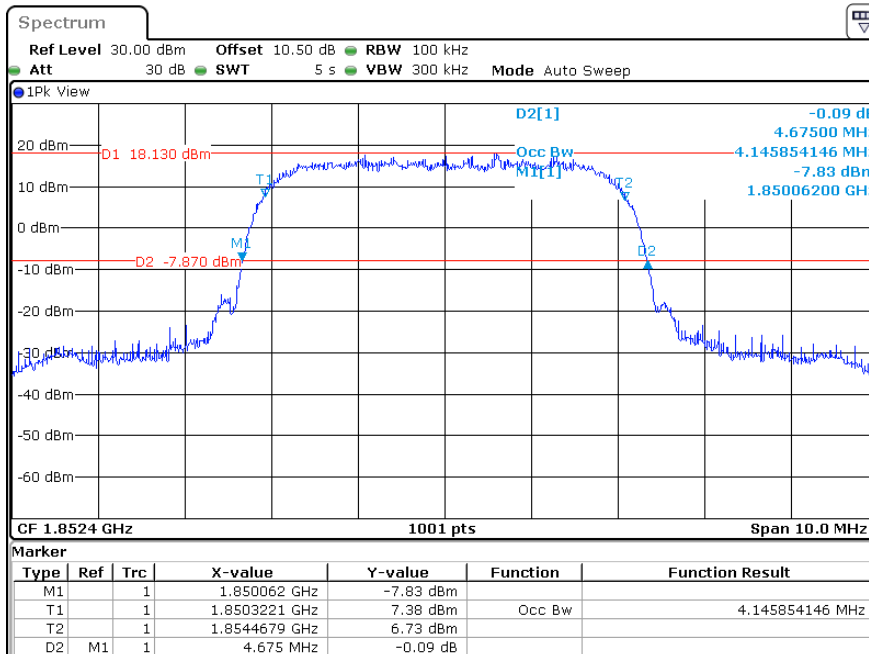


RMC (BPSK) Mode, High channel



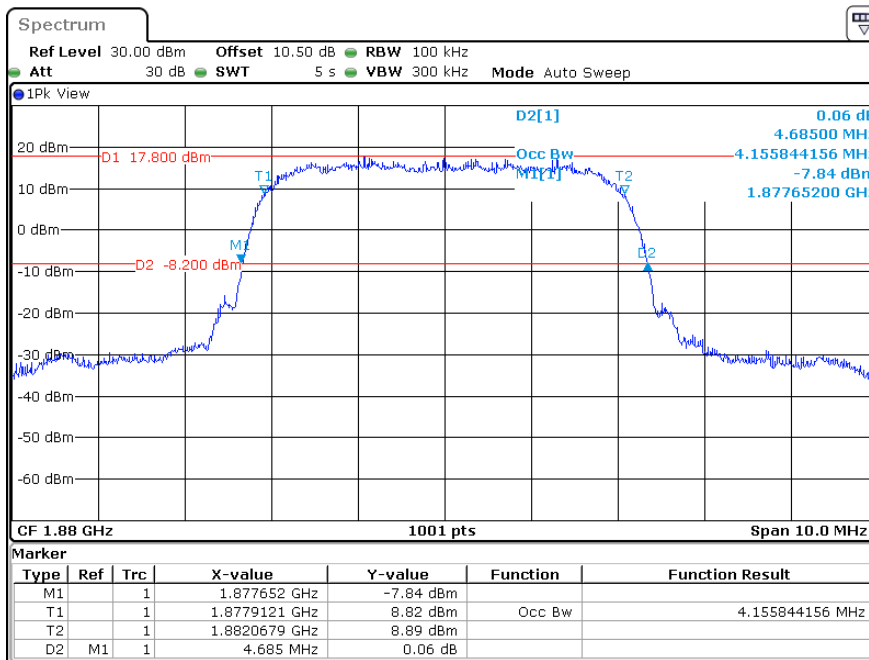
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:43:24

HSDPA Mode, Low channel



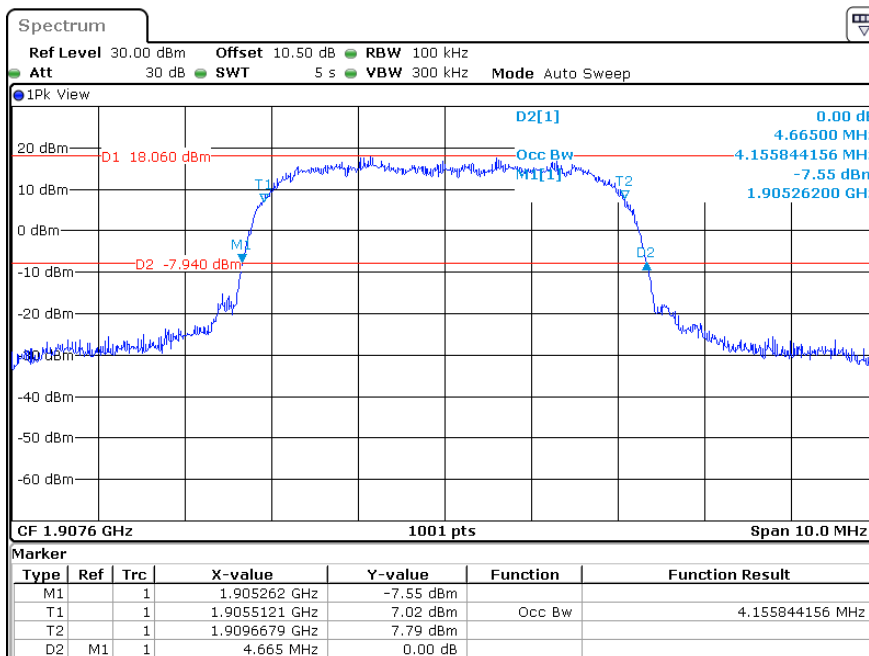
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:31:45

HSDPA Mode, Middle channel



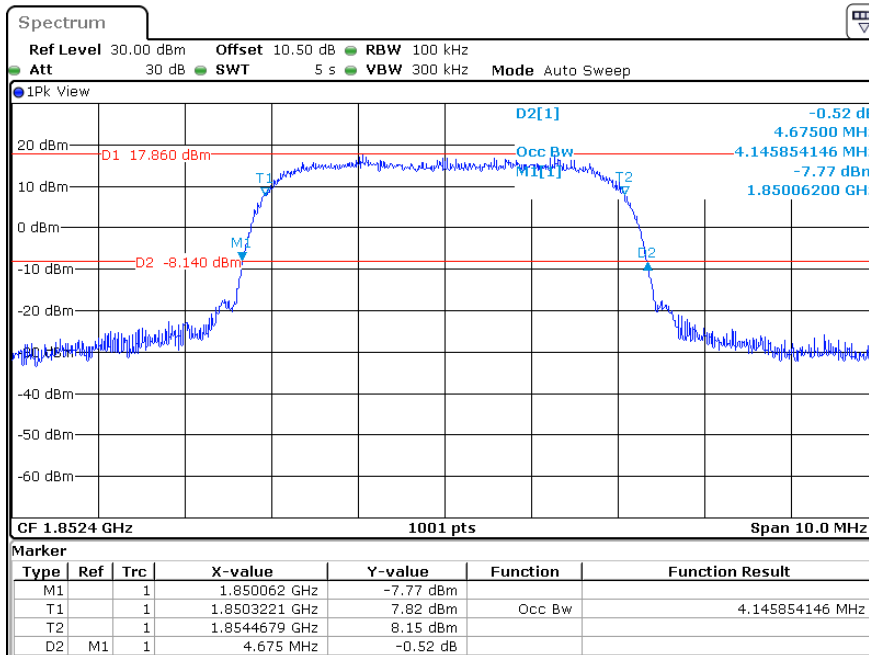
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:29:03

HSDPA Mode, High channel



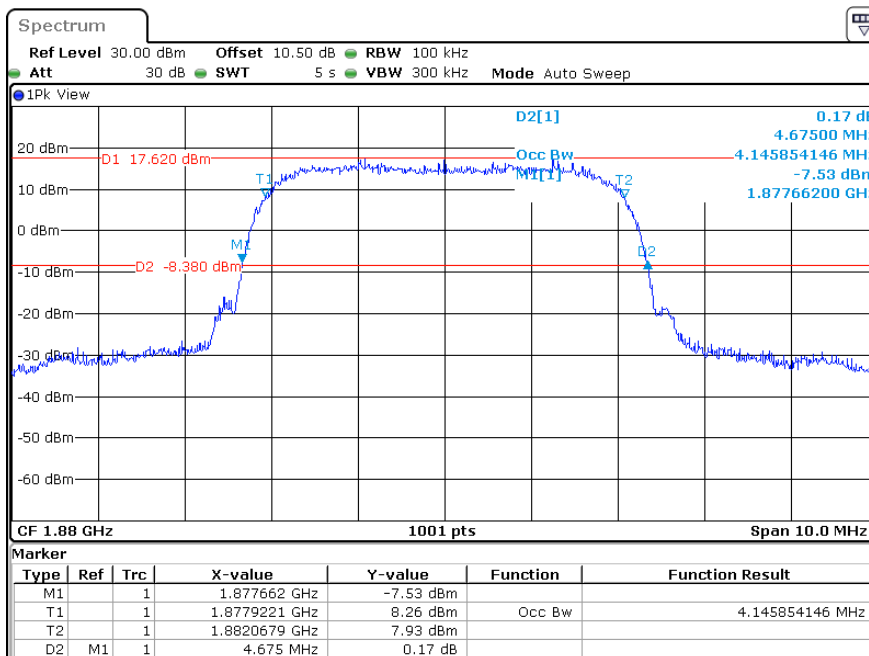
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:25:54

HSUPA Mode, Low channel



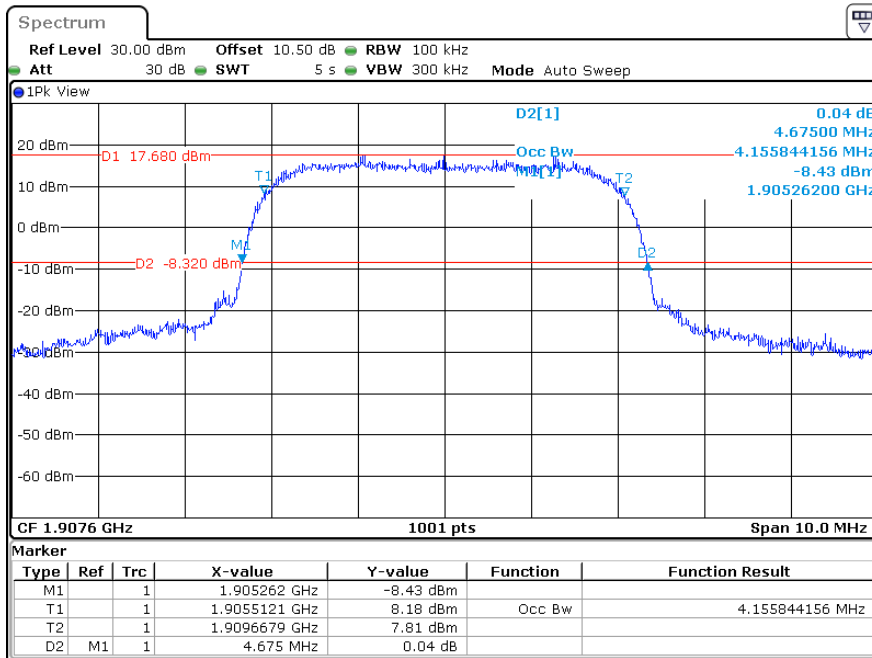
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:15:32

HSUPA Mode, Middle channel



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:18:56

HSUPA Mode, High channel



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:22:13

LTE Band

Band 2

Operation Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
	Middle channel	Middle Channel
1.4MHz QPSK	1.102	1.308
1.4MHz 16QAM	1.102	1.314
3MHz QPSK	2.695	2.904
3MHz 16QAM	2.695	2.928
5MHz QPSK	4.511	5.000
5MHz 16QAM	4.511	5.000
10MHz QPSK	8.982	9.760
10MHz 16QAM	8.942	9.640
15MHz QPSK	13.473	14.700
15MHz 16QAM	13.473	14.700
20MHz QPSK	17.964	19.360
20MHz 16QAM	18.044	19.440

Band 5

Operation Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
	Middle channel	Middle Channel
1.4MHz QPSK	1.102	1.344
1.4MHz 16QAM	1.108	1.320
3MHz QPSK	2.683	2.928
3MHz 16QAM	2.683	2.916
5MHz QPSK	4.511	5.040
5MHz 16QAM	4.511	5.020
10MHz QPSK	8.982	9.800
10MHz 16QAM	8.942	9.640

Band 7

Operation Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
	Middle channel	Middle Channel
5MHz QPSK	4.511	5.000
5MHz 16QAM	4.511	5.000
10MHz QPSK	8.942	9.760
10MHz 16QAM	8.942	9.640
15MHz QPSK	13.533	14.880
15MHz 16QAM	13.533	14.760
20MHz QPSK	17.964	19.360
20MHz 16QAM	18.044	19.520

Band 12

Operation Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
	Middle channel	Middle Channel
1.4MHz QPSK	1.096	1.302
1.4MHz 16QAM	1.096	1.320
3MHz QPSK	2.683	2.904
3MHz 16QAM	2.683	2.916
5MHz QPSK	4.511	5.000
5MHz 16QAM	4.511	5.000
10MHz QPSK	8.942	9.600
10MHz 16QAM	8.982	9.680

Band 41

Operation Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
	Middle channel	Middle Channel
5MHz QPSK	4.511	5.260
5MHz 16QAM	4.511	5.240
10MHz QPSK	8.942	10.360
10MHz 16QAM	8.942	9.760
15MHz QPSK	13.473	15.540
15MHz 16QAM	13.533	17.400
20MHz QPSK	17.964	19.200
20MHz 16QAM	17.884	19.440

The test plots of LTE band please refer to the Appendix A.

FCC §2.1051, §22.917(a) & §24.238(a) & §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard

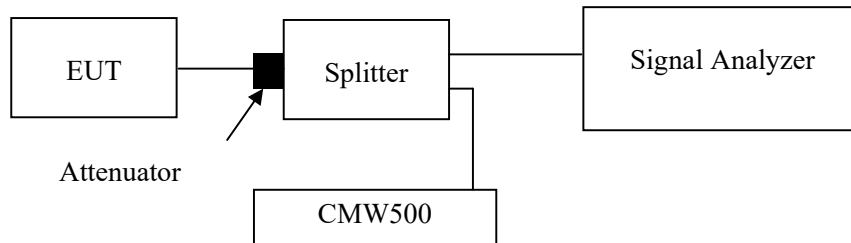
FCC §2.1051, §22.917(a) & §24.238(a) & §27.53.

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

Test Procedure

ANSI C63.26-2015 Section 5.7

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



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range was added into plots.

Test Data

Environmental Conditions

Temperature:	22~25.8 °C
Relative Humidity:	25~62 %
ATM Pressure:	101.0kPa

The testing was performed by Jim Cheng from 2024-02-18 to 2024-03-14 and Bamboo Zhan from 2024-03-12 to 2024-03-13.

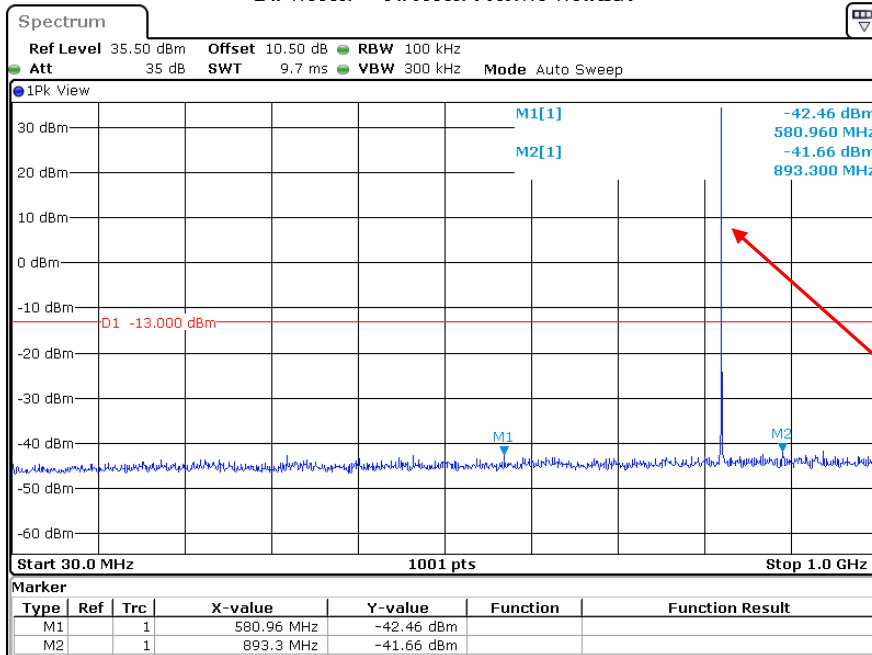
EUT operation mode: Transmitting

Test result: Compliant

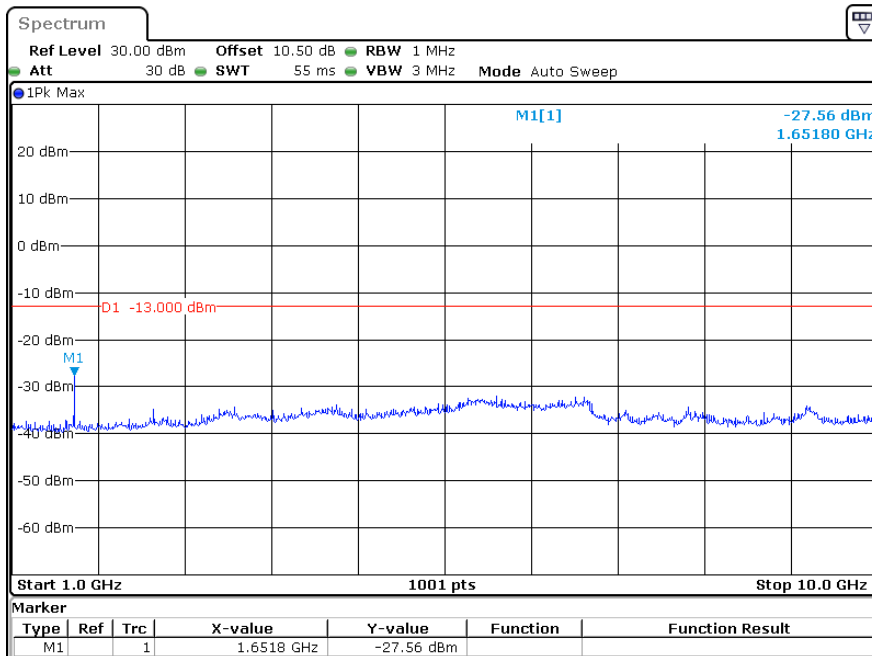
Please refer to the following plots.

**Cellular Band
Low Channel:**

30 MHz – 10GHz (GSM Mode)



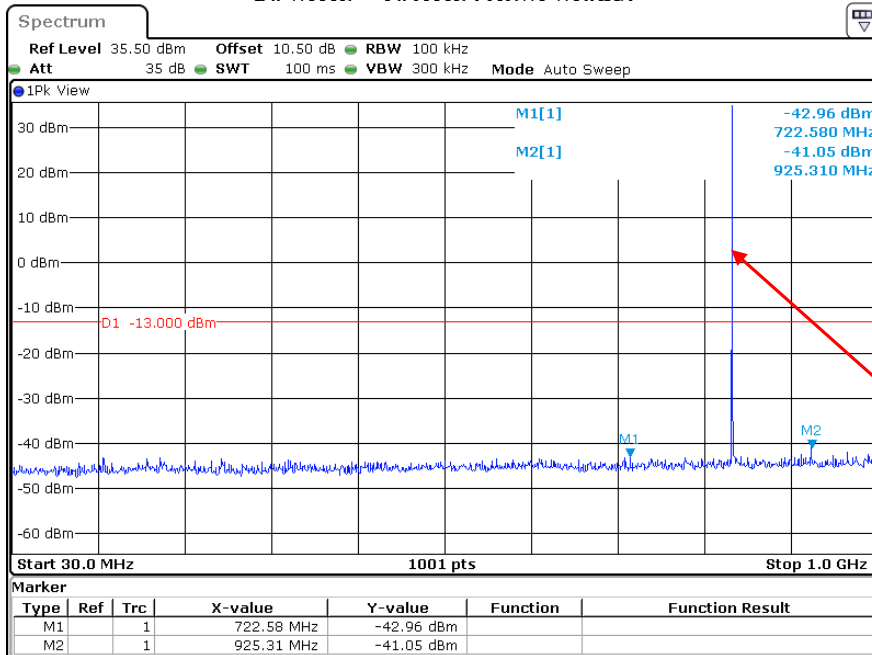
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:13:06



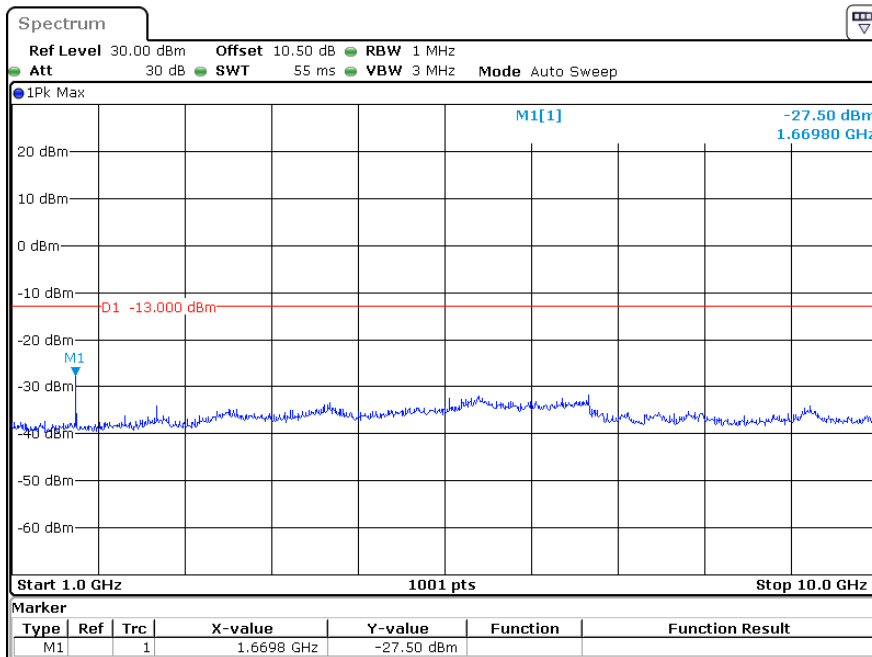
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:13:36

Middle Channel:

30 MHz – 10GHz (GSM Mode)



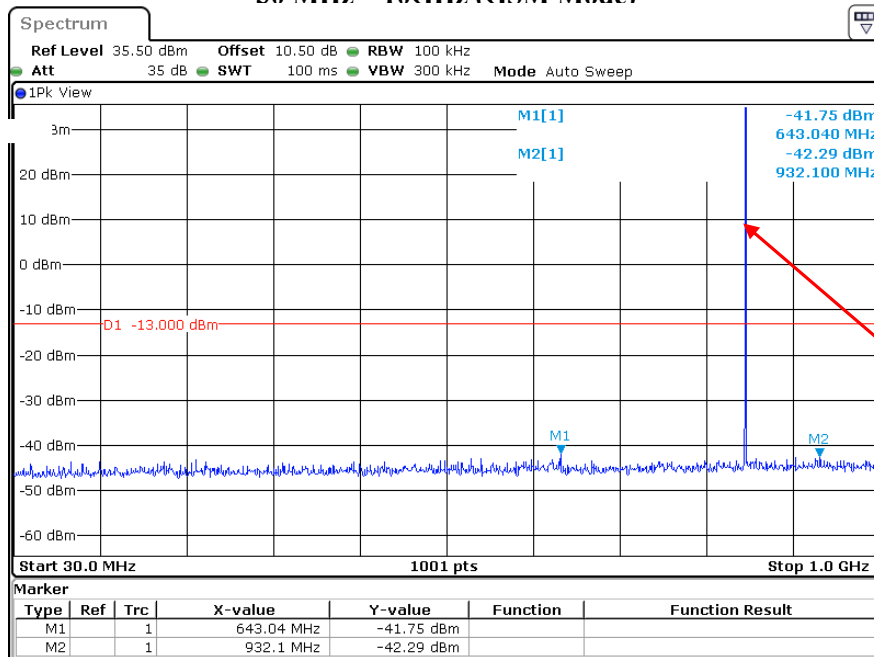
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:09:35



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:10:07

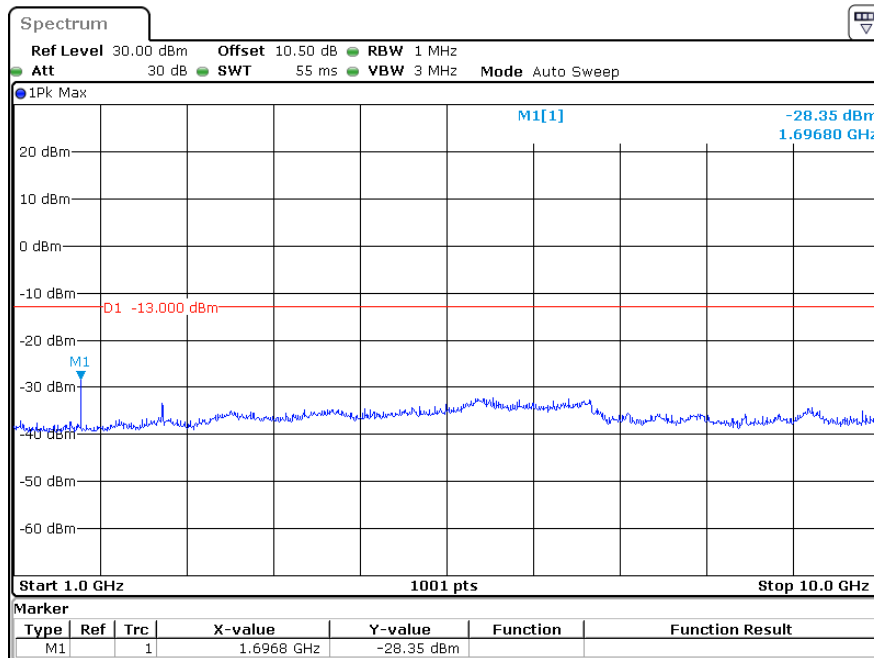
High Channel:

30 MHz – 10GHz (GSM Mode)



Fundamental test

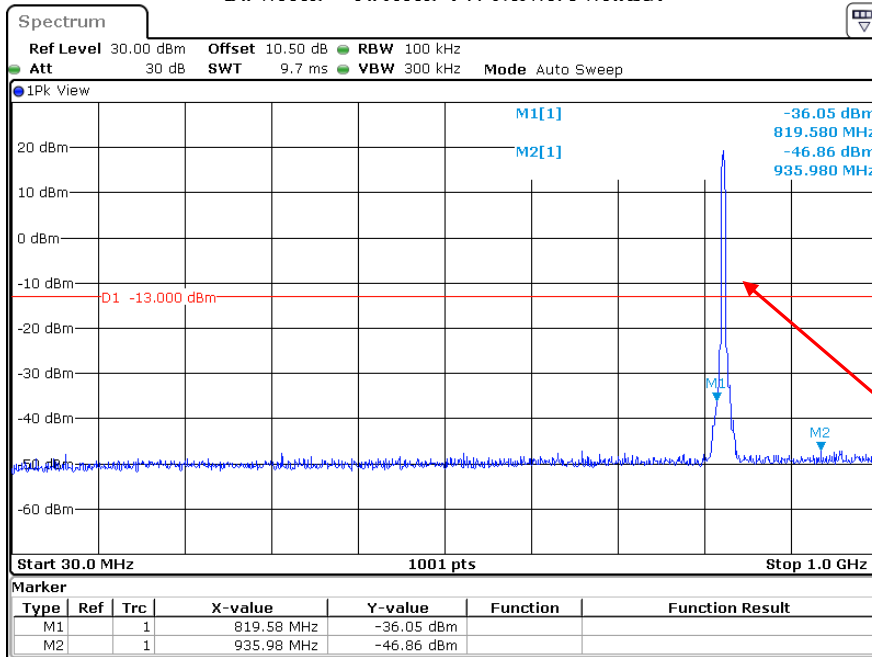
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:17:01



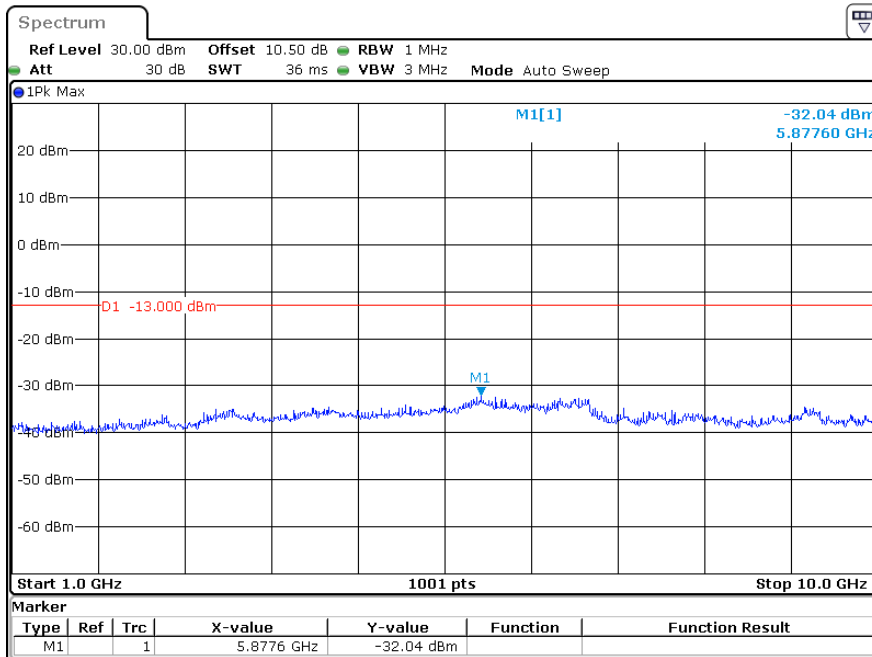
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 09:17:32

Low Channel:

30 MHz – 10GHz (WCDMA Mode)



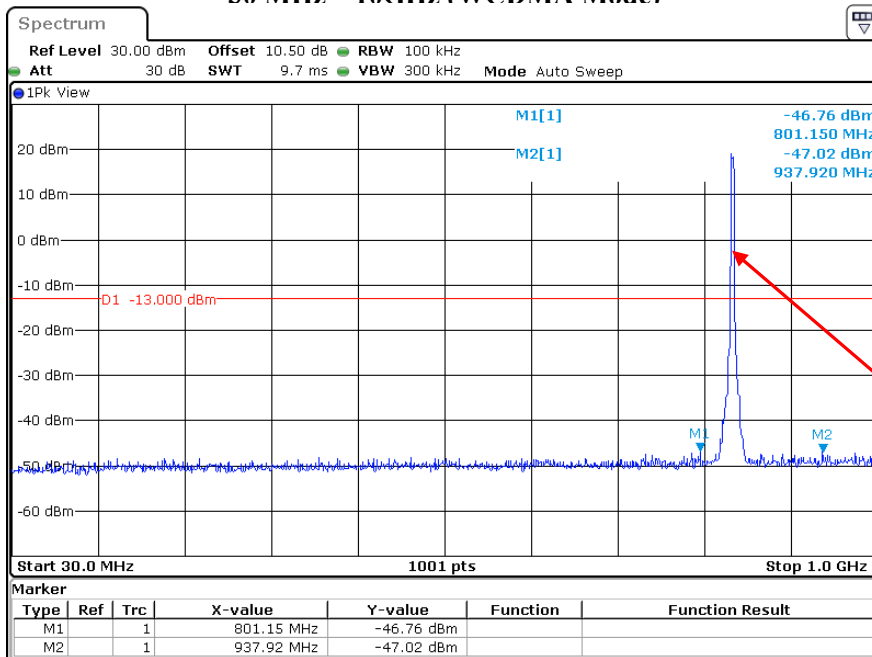
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 14:47:14



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 14:47:33

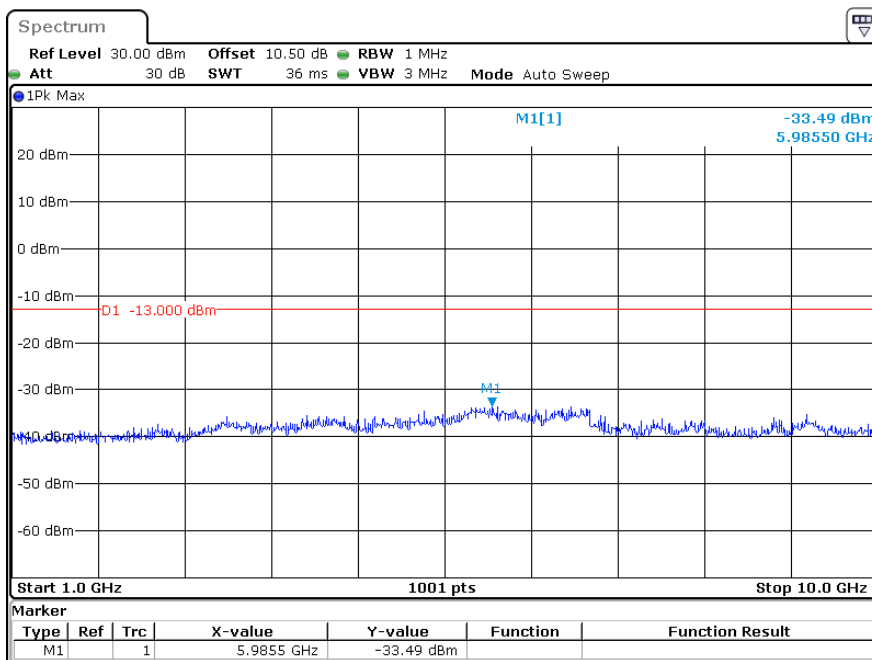
Middle Channel:

30 MHz – 10GHz (WCDMA Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 14:50:06

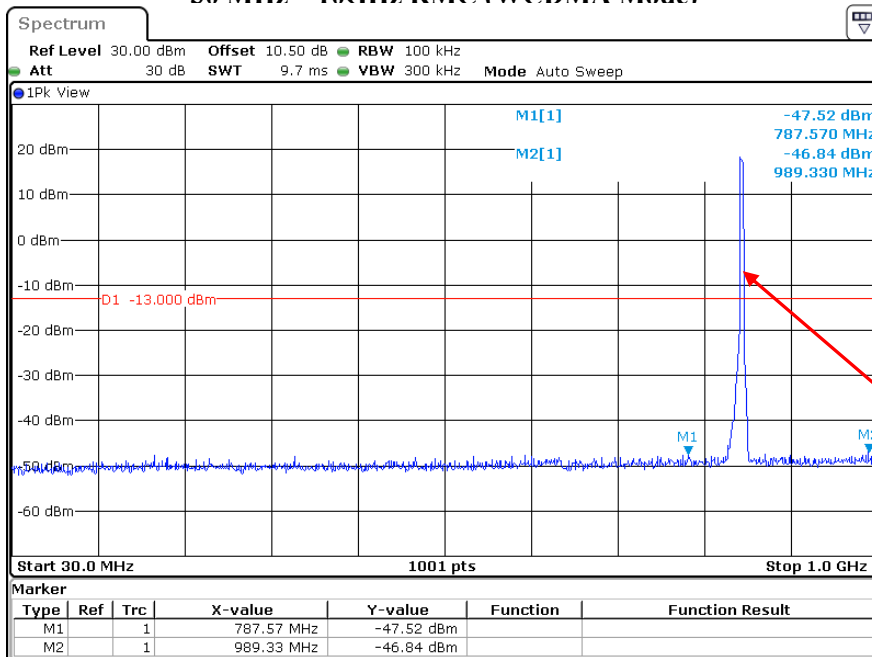
Fundamental test



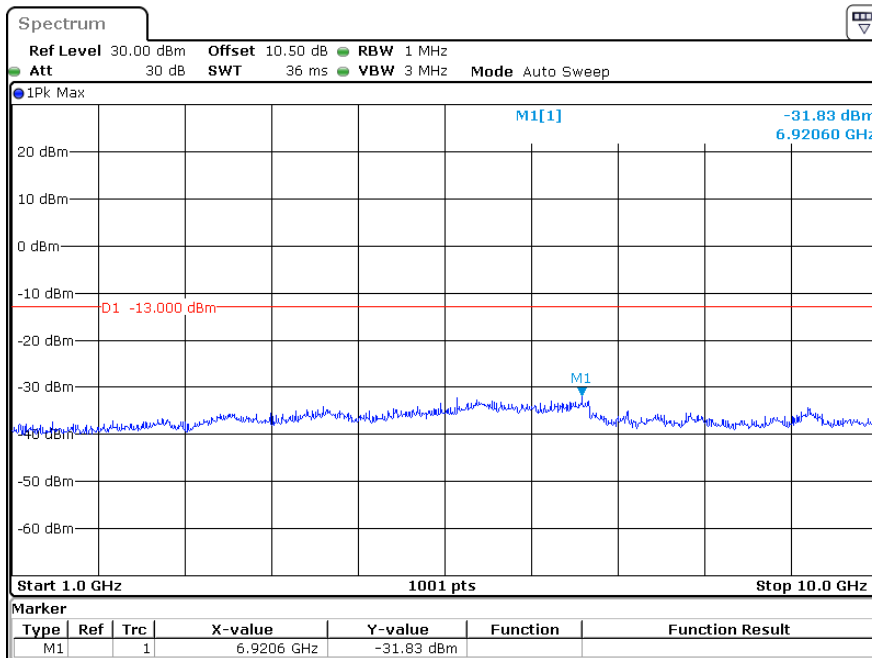
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 12.MAR.2024 14:50:14

High Channel:

30 MHz – 10GHz RMC (WCDMA Mode)



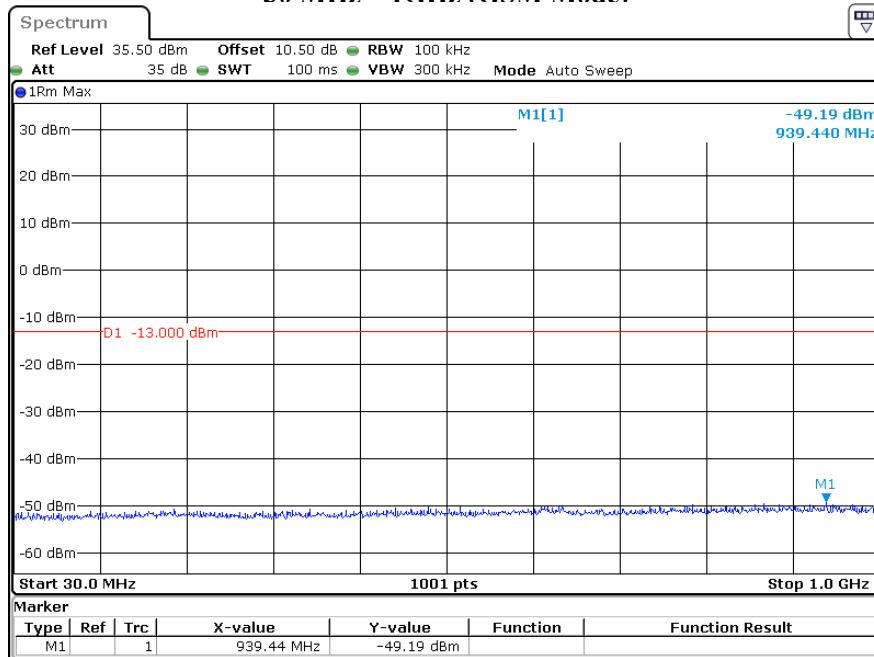
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:52:19



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:52:38

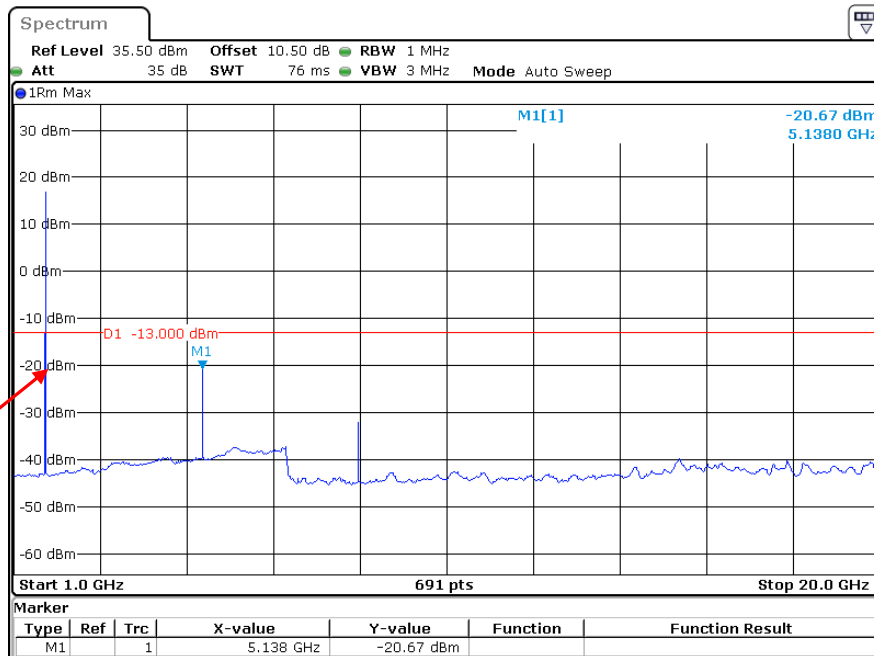
**PCS Band
Low Channel:**

30 MHz – 1GHz (GSM Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 13.MAR.2024 08:58:19

1 GHz – 20GHz (GSM Mode)

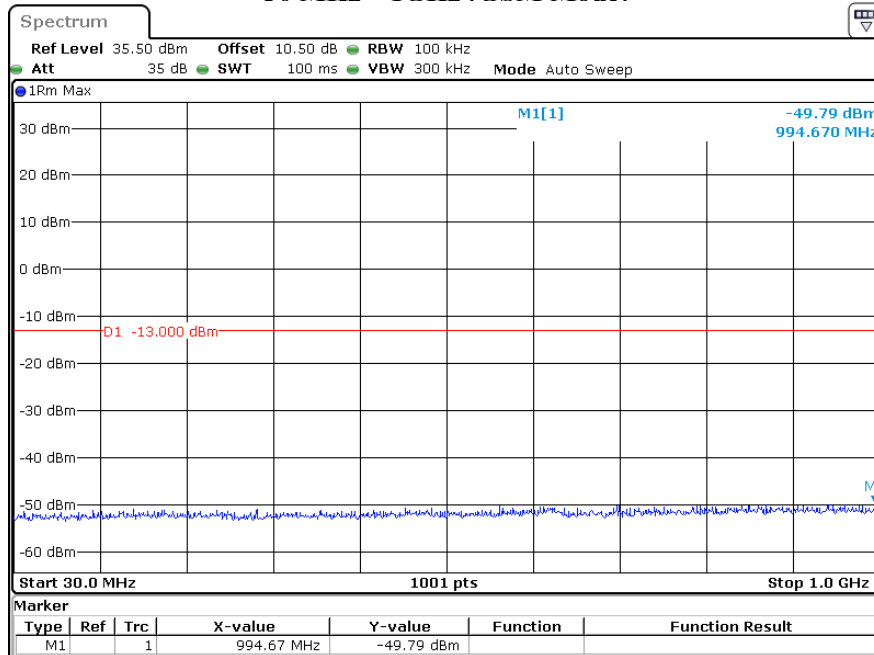


Fundamental test

ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
Date: 13.MAR.2024 08:47:57

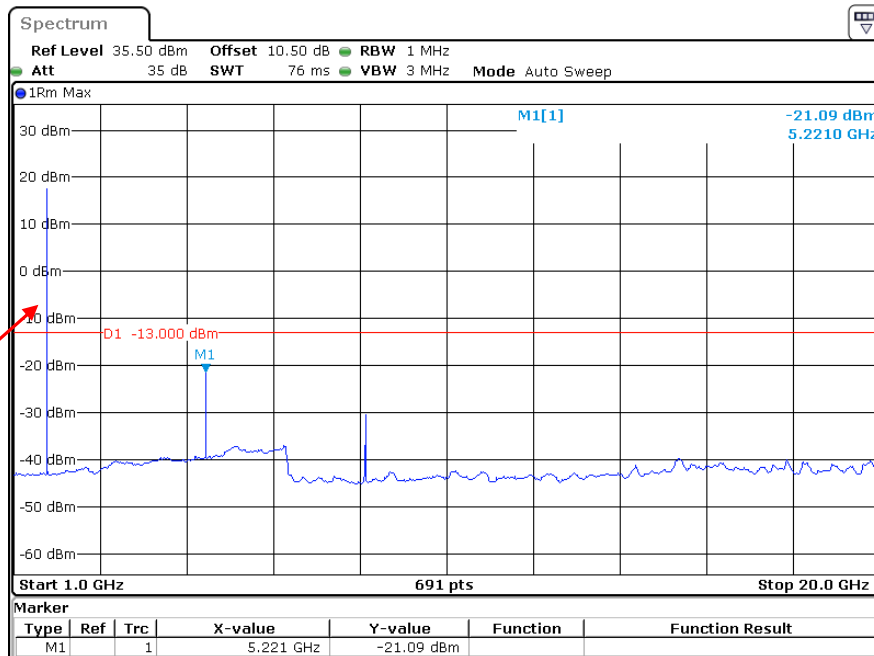
Middle Channel:

30 MHz – 1GHz (GSM Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 08:56:56

1 GHz – 20GHz (GSM Mode)

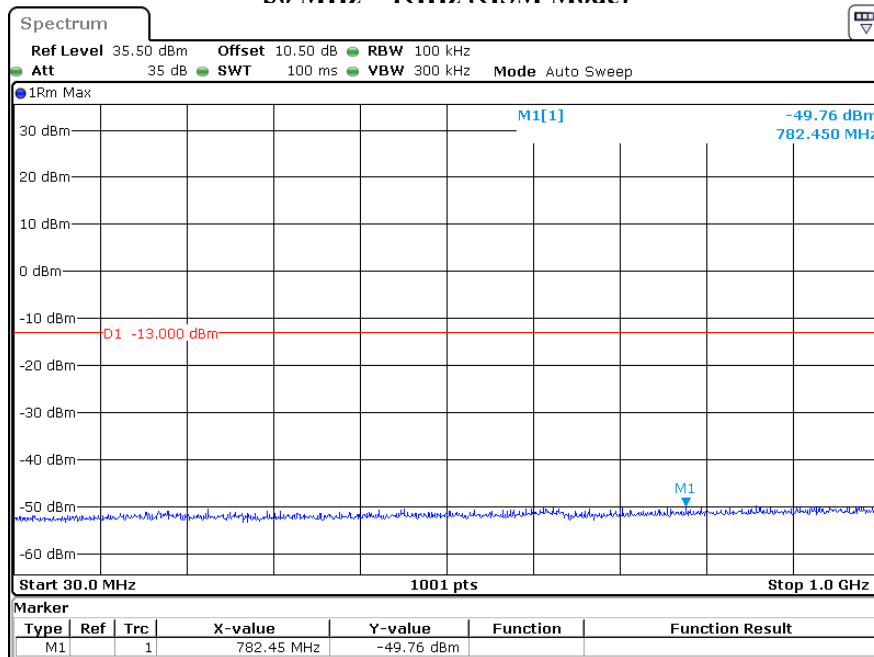


Fundamental test

ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 08:46:32

High Channel:

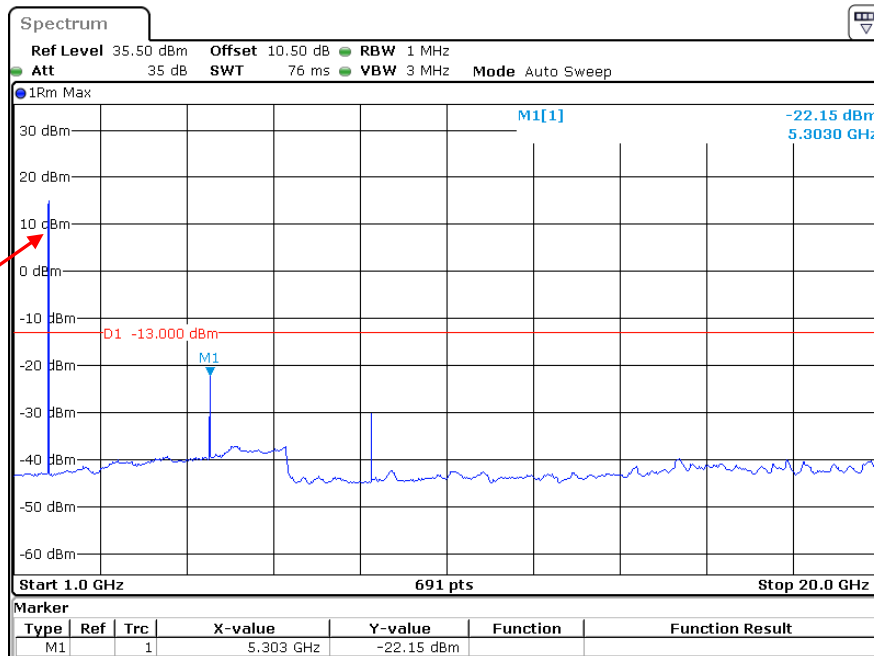
30 MHz – 1GHz (GSM Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 08:57:29

1 GHz – 20GHz (GSM Mode)

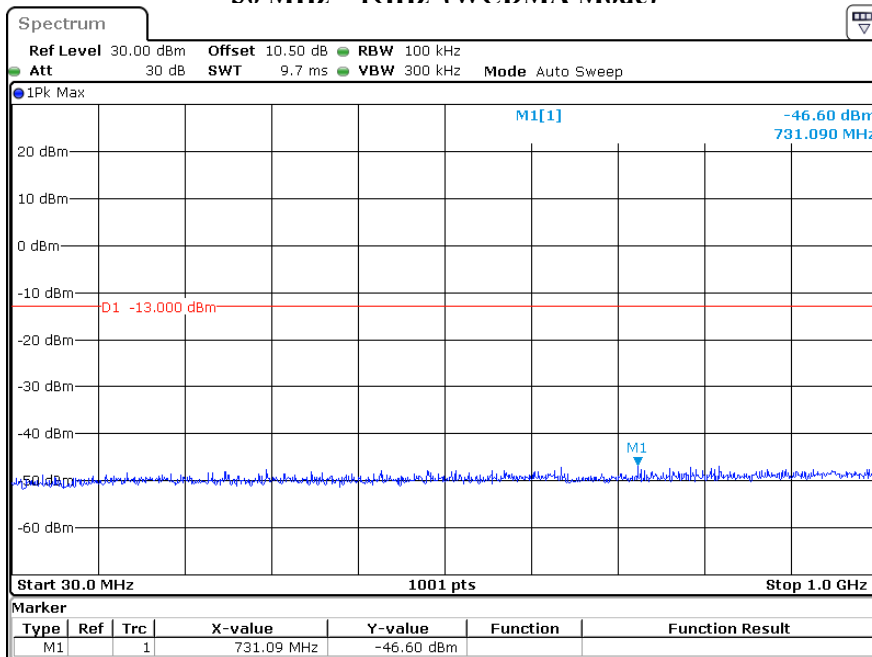
Fundamental test



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 13.MAR.2024 08:47:22

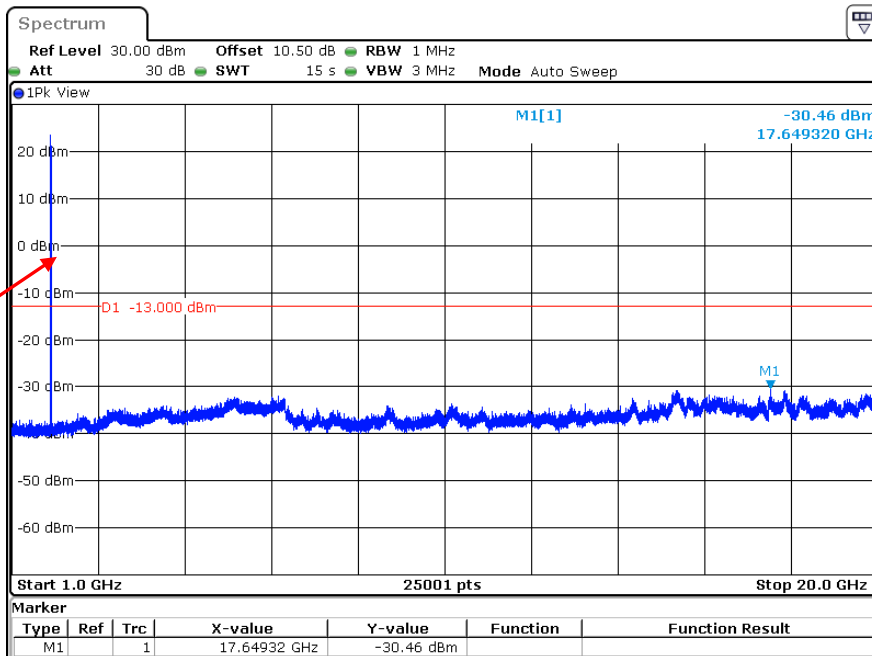
Low Channel:

30 MHz – 1GHz (WCDMA Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:36:07

1 GHz – 20GHz (WCDMA Mode)

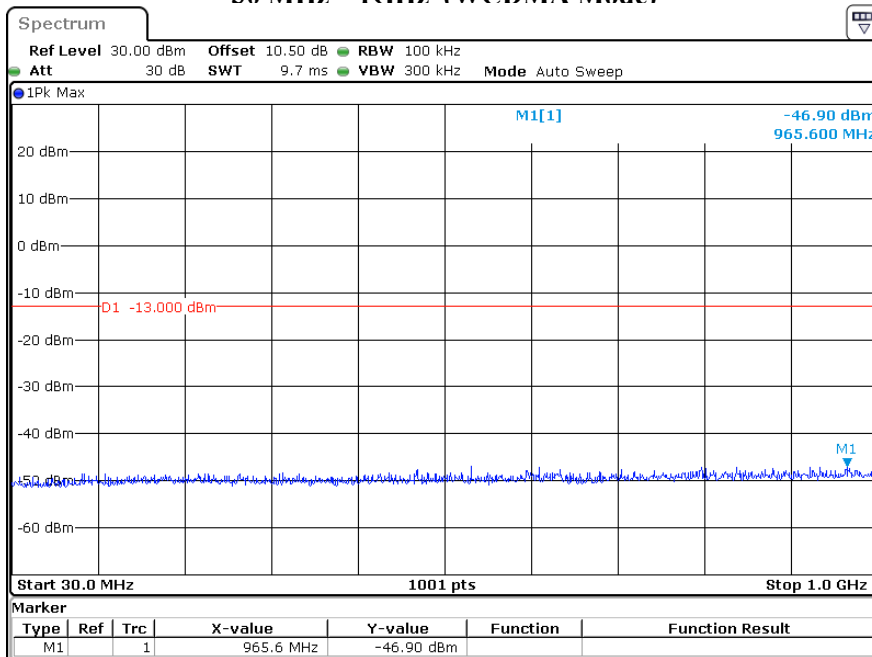


Fundamental test

ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:36:53

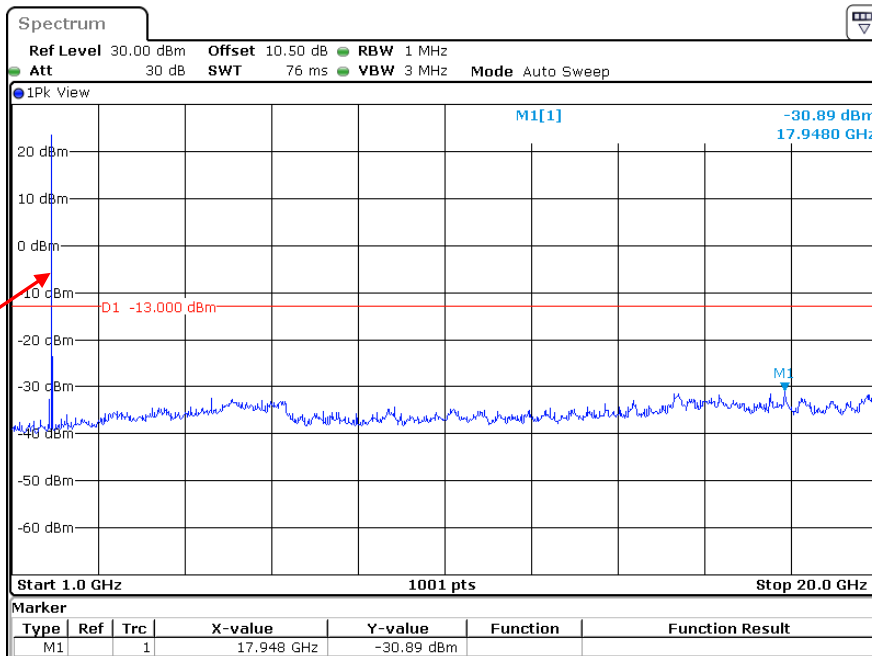
Middle Channel:

30 MHz – 1GHz (WCDMA Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:40:26

1 GHz – 20GHz (WCDMA Mode)

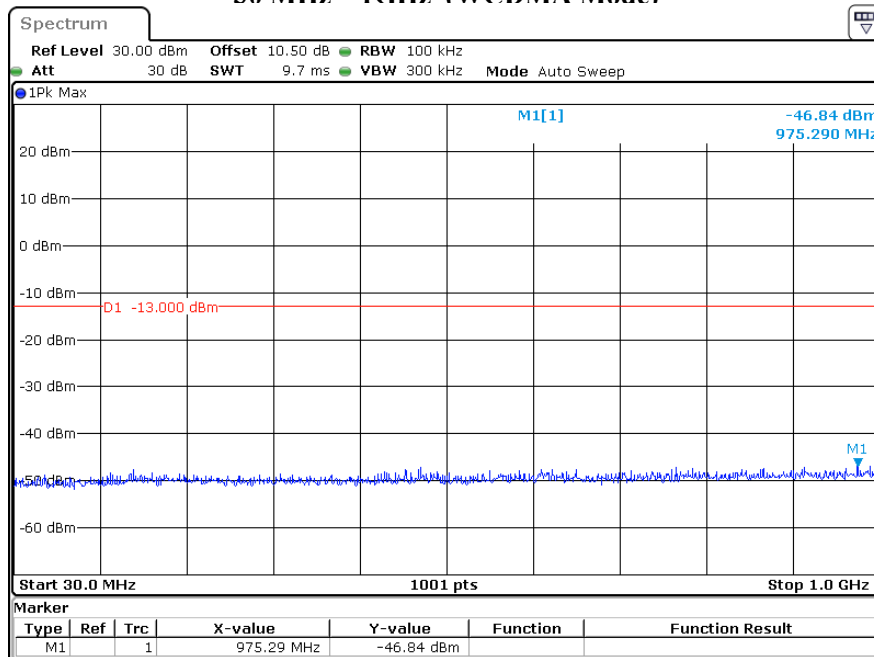


Fundamental test

ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:40:55

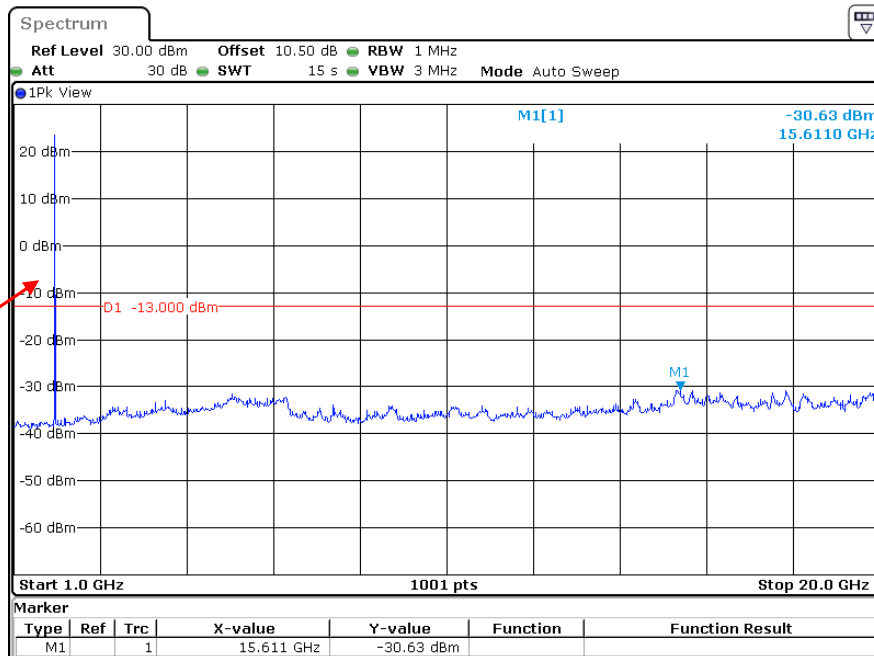
High Channel:

30 MHz – 1GHz (WCDMA Mode)



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:44:20

1 GHz – 20GHz (WCDMA Mode)



Fundamental test

ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:45:07

The test plots of LTE band please refer to the Appendix B.

FCC § 2.1053; § 22.917 (a); § 24.238 (a); §27.53 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917(a)& § 24.238(a) & § 27.53.

Test Procedure

ANSI/TIA-603-E-2016 Section 2.2.12
KDB 671168 D01 v03r01 Section 6.2

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

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

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

Test Data

Environmental Conditions

Temperature:	23~23.5 °C
Relative Humidity:	50~52 %
ATM Pressure:	101 kPa

The testing was performed by Warren Huang on 2024-03-17 for below 1GHz and Zenos Qiao from 2024-02-24 to 2024-02-25 for above 1GHz.

EUT operation mode: Transmitting (Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)

Frequency (MHz)	Receiver Reading (dBµV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
GSM 850 (30MHz-10GHz)								
Low Channel								
955.6	32.67	H	-63.8	1.36	0.0	-65.16	-13	52.16
955.6	32.11	V	-61.9	1.36	0.0	-63.26	-13	50.26
1648.40	53.19	H	-54.5	0.90	8.60	-46.80	-13	33.80
1648.40	51.94	V	-56.3	0.90	8.60	-48.60	-13	35.60
2472.60	59.87	H	-47.5	1.10	8.80	-39.80	-13	26.80
2472.60	61.45	V	-45.7	1.10	8.80	-38.00	-13	25.00
3296.80	47.73	H	-58.3	1.30	8.80	-50.80	-13	37.80
3296.80	48.26	V	-57.4	1.30	8.80	-49.90	-13	36.90
Middle Channel								
952.4	32.85	H	-63.7	1.36	0.0	-65.06	-13	52.06
952.4	32.30	V	-61.8	1.36	0.0	-63.16	-13	50.16
1673.20	53.95	H	-53.6	0.90	8.60	-45.90	-13	32.90
1673.20	52.89	V	-55.3	0.90	8.60	-47.60	-13	34.60
2509.80	60.63	H	-46.7	1.10	8.80	-39.00	-13	26.00
2509.80	62.18	V	-44.9	1.10	8.80	-37.20	-13	24.20
3346.40	48.07	H	-57.9	1.30	8.80	-50.40	-13	37.40
3346.40	48.52	V	-57.2	1.30	8.80	-49.70	-13	36.70
High Channel								
955.5	33.14	H	-63.4	1.36	0.0	-64.76	-13	51.76
955.5	32.42	V	-61.6	1.36	0.0	-62.96	-13	49.96
1697.60	54.78	H	-52.8	0.90	8.60	-45.10	-13	32.10
1697.60	53.57	V	-54.6	0.90	8.60	-46.90	-13	33.90
2546.40	62.42	H	-44.9	1.10	8.80	-37.20	-13	24.20
2546.40	63.69	V	-43.4	1.10	8.80	-35.70	-13	22.70
3395.20	48.81	H	-57.2	1.30	9.90	-48.60	-13	35.60
3395.20	49.36	V	-56.3	1.30	9.90	-47.70	-13	34.70

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
PCS 1900 (30MHz-20GHz)								
Low Channel								
956.8	31.78	H	-64.7	1.36	0.0	-66.06	-13	53.06
956.8	32.05	V	-62.0	1.36	0.0	-63.36	-13	50.36
3700.40	50.69	H	-54.7	1.30	11.00	-45.00	-13	32.00
3700.40	50.08	V	-55.2	1.30	11.00	-45.50	-13	32.50
5550.60	58.72	H	-43.7	1.70	10.90	-34.50	-13	21.50
5550.60	59.96	V	-42.6	1.70	10.90	-33.40	-13	20.40
Middle Channel								
952.5	32.36	H	-64.1	1.36	0.0	-65.46	-13	52.46
952.5	32.53	V	-61.5	1.36	0.0	-62.86	-13	49.86
3760.00	51.15	H	-54.0	1.30	10.70	-44.60	-13	31.60
3760.00	50.32	V	-54.7	1.30	10.70	-45.30	-13	32.30
5640.00	59.64	H	-42.8	1.70	10.90	-33.60	-13	20.60
5640.00	60.83	V	-41.7	1.70	10.90	-32.50	-13	19.50
High Channel								
956.0	32.55	H	-64.0	1.36	0.0	-65.36	-13	52.36
956.0	32.84	V	-61.2	1.36	0.0	-62.56	-13	49.56
3819.60	52.24	H	-52.9	1.30	10.70	-43.50	-13	30.50
3819.60	51.57	V	-53.5	1.30	10.70	-44.10	-13	31.10
5729.40	60.49	H	-41.7	1.70	11.10	-32.30	-13	19.30
5729.40	61.63	V	-40.7	1.70	11.10	-31.30	-13	18.30

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
WCDMA Band 2(30MHz-20GHz)								
Low Channel								
957.2	32.24	H	-64.3	1.36	0.0	-65.66	-13	52.66
957.2	31.65	V	-62.4	1.36	0.0	-63.76	-13	50.76
3704.80	46.87	H	-58.5	1.30	11.00	-48.80	-13	35.80
3704.80	47.32	V	-57.9	1.30	11.00	-48.20	-13	35.20
5557.20	47.95	H	-54.5	1.70	10.90	-45.30	-13	32.30
5557.20	48.64	V	-53.9	1.70	10.90	-44.70	-13	31.70
Middle Channel								
953.0	32.61	H	-63.9	1.36	0.0	-65.26	-13	52.26
953.0	31.84	V	-62.2	1.36	0.0	-63.56	-13	50.56
3760.00	47.25	H	-57.9	1.30	10.70	-48.50	-13	35.50
3760.00	47.68	V	-57.4	1.30	10.70	-48.00	-13	35.00
5640.00	48.37	H	-54.0	1.70	10.90	-44.80	-13	31.80
5640.00	49.06	V	-53.5	1.70	10.90	-44.30	-13	31.30
High Channel								
955.4	32.85	H	-63.7	1.36	0.0	-65.06	-13	52.06
955.4	32.11	V	-61.9	1.36	0.0	-63.26	-13	50.26
3815.20	47.81	H	-57.3	1.30	10.70	-47.90	-13	34.90
3815.20	48.36	V	-56.7	1.30	10.70	-47.30	-13	34.30
5722.80	49.12	H	-53.1	1.70	11.10	-43.70	-13	30.70
5722.80	49.75	V	-52.6	1.70	11.10	-43.20	-13	30.20

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
WCDMA Band 5(30MHz-10GHz)								
Low Channel								
953.6	31.95	H	-64.6	1.36	0.0	-65.96	-13	52.96
953.6	31.91	V	-62.1	1.36	0.0	-63.46	-13	50.46
1652.80	49.13	H	-58.4	0.90	8.60	-50.70	-13	37.70
1652.80	48.64	V	-59.5	0.90	8.60	-51.80	-13	38.80
2479.20	47.25	H	-60.1	1.10	8.80	-52.40	-13	39.40
2479.20	47.79	V	-59.3	1.10	8.80	-51.60	-13	38.60
3305.60	46.57	H	-59.4	1.30	8.80	-51.90	-13	38.90
3305.60	46.86	V	-58.8	1.30	8.80	-51.30	-13	38.30
Middle Channel								
956.2	32.52	H	-64.0	1.36	0.0	-65.36	-13	52.36
956.2	32.28	V	-61.8	1.36	0.0	-63.16	-13	50.16
1673.20	49.57	H	-58.0	0.90	8.60	-50.30	-13	37.30
1673.20	49.32	V	-58.8	0.90	8.60	-51.10	-13	38.10
2509.80	47.78	H	-59.6	1.10	8.80	-51.90	-13	38.90
2509.80	48.19	V	-58.9	1.10	8.80	-51.20	-13	38.20
3346.40	46.93	H	-59.1	1.30	8.80	-51.60	-13	38.60
3346.40	47.14	V	-58.5	1.30	8.80	-51.00	-13	38.00
High Channel								
955.8	32.70	H	-63.8	1.36	0.0	-65.16	-13	52.16
955.8	32.66	V	-61.4	1.36	0.0	-62.76	-13	49.76
1693.20	50.36	H	-57.2	0.90	8.60	-49.50	-13	36.50
1693.20	49.87	V	-58.3	0.90	8.60	-50.60	-13	37.60
2539.80	48.45	H	-58.9	1.10	8.80	-51.20	-13	38.20
2539.80	48.98	V	-58.1	1.10	8.80	-50.40	-13	37.40
3386.40	47.54	H	-58.4	1.30	9.90	-49.80	-13	36.80
3386.40	48.01	V	-57.6	1.30	9.90	-49.00	-13	36.00

LTE Bands: (pre-scan QPSK & 16QAM with all bandwidths, the worst case as below)

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
Band 2 (30MHz-20GHz)								
QPSK, 1.4MHz, Low Channel								
953.5	32.15	H	-64.4	1.36	0.0	-65.76	-13	52.76
953.5	31.42	V	-62.6	1.36	0.0	-63.96	-13	50.96
3701.40	47.45	H	-58.0	1.30	11.00	-48.30	-13	35.30
3701.40	46.96	V	-58.3	1.30	11.00	-48.60	-13	35.60
5552.10	51.18	H	-51.2	1.70	10.90	-42.00	-13	29.00
5552.10	51.87	V	-50.7	1.70	10.90	-41.50	-13	28.50
QPSK, 1.4MHz, Middle Channel								
951.1	32.33	H	-64.2	1.36	0.0	-65.56	-13	52.56
951.1	31.60	V	-62.5	1.36	0.0	-63.86	-13	50.86
3760.00	47.84	H	-57.3	1.30	10.70	-47.90	-13	34.90
3760.00	47.32	V	-57.7	1.30	10.70	-48.30	-13	35.30
5640.00	51.73	H	-50.7	1.70	10.90	-41.50	-13	28.50
5640.00	52.48	V	-50.1	1.70	10.90	-40.90	-13	27.90
QPSK, 1.4MHz, High Channel								
952.9	32.48	H	-64.0	1.36	0.0	-65.36	-13	52.36
952.9	31.76	V	-62.3	1.36	0.0	-63.66	-13	50.66
3818.60	48.69	H	-56.4	1.30	10.70	-47.00	-13	34.00
3818.60	48.22	V	-56.8	1.30	10.70	-47.40	-13	34.40
5727.90	52.51	H	-49.7	1.70	11.10	-40.30	-13	27.30
5727.90	53.16	V	-49.2	1.70	11.10	-39.80	-13	26.80

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
Band 5(30MHz-10GHz)								
QPSK, 1.4MHz, Low Channel								
959.6	31.88	H	-64.6	1.36	0.0	-65.96	-13	52.96
959.6	32.13	V	-61.9	1.36	0.0	-63.26	-13	50.26
1649.40	48.06	H	-59.6	0.90	8.60	-51.90	-13	38.90
1649.40	47.53	V	-60.7	0.90	8.60	-53.00	-13	40.00
2474.10	51.72	H	-55.6	1.10	8.80	-47.90	-13	34.90
2474.10	52.91	V	-54.2	1.10	8.80	-46.50	-13	33.50
3298.80	46.39	H	-59.6	1.30	8.80	-52.10	-13	39.10
3298.80	46.84	V	-58.8	1.30	8.80	-51.30	-13	38.30
QPSK, 1.4MHz, Middle Channel								
954.3	31.96	H	-64.5	1.36	0.0	-65.86	-13	52.86
954.3	32.35	V	-61.7	1.36	0.0	-63.06	-13	50.06
1673.00	48.45	H	-59.1	0.90	8.60	-51.40	-13	38.40
1673.00	47.98	V	-60.2	0.90	8.60	-52.50	-13	39.50
2509.50	52.69	H	-54.7	1.10	8.80	-47.00	-13	34.00
2509.50	53.82	V	-53.3	1.10	8.80	-45.60	-13	32.60
3346.00	46.76	H	-59.2	1.30	8.80	-51.70	-13	38.70
3346.00	47.27	V	-58.4	1.30	8.80	-50.90	-13	37.90
QPSK, 1.4MHz, High Channel								
956.2	32.41	H	-64.1	1.36	0.0	-65.46	-13	52.46
956.2	32.50	V	-61.6	1.36	0.0	-62.96	-13	49.96
1696.60	49.27	H	-58.3	0.90	8.60	-50.60	-13	37.60
1696.60	48.78	V	-59.4	0.90	8.60	-51.70	-13	38.70
2544.90	53.54	H	-53.8	1.10	8.80	-46.10	-13	33.10
2544.90	54.63	V	-52.5	1.10	8.80	-44.80	-13	31.80
3393.20	47.31	H	-58.7	1.30	9.90	-50.10	-13	37.10
3393.20	47.86	V	-57.8	1.30	9.90	-49.20	-13	36.20

Frequency (MHz)	Receiver Reading (dBµV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
Band 7(30MHz-26.5GHz)								
QPSK, 5MHz, Low Channel								
958.4	32.67	H	-63.8	1.36	0.0	-65.16	-25	40.16
958.4	32.20	V	-61.9	1.36	0.0	-63.26	-25	38.26
5005.00	48.36	H	-54.9	1.50	9.80	-46.60	-25	21.60
5005.00	48.95	V	-53.6	1.50	9.80	-45.30	-25	20.30
7507.50	46.89	H	-49.1	1.90	10.80	-40.20	-25	15.20
7507.50	46.23	V	-50.1	1.90	10.80	-41.20	-25	16.20
QPSK, 5MHz, Middle Channel								
948.0	32.83	H	-63.7	1.36	0.0	-65.06	-25	40.06
948.0	32.55	V	-61.5	1.36	0.0	-62.86	-25	37.86
5070.00	48.72	H	-54.5	1.50	9.60	-46.40	-25	21.40
5070.00	49.39	V	-53.2	1.50	9.60	-45.10	-25	20.10
7605.00	47.27	H	-48.6	1.90	11.00	-39.50	-25	14.50
7605.00	46.91	V	-49.3	1.90	11.00	-40.20	-25	15.20
QPSK, 5MHz, High Channel								
950.5	33.11	H	-63.4	1.36	0.0	-64.76	-25	39.76
950.5	32.72	V	-61.3	1.36	0.0	-62.66	-25	37.66
5135.00	49.68	H	-53.5	1.50	9.60	-45.40	-25	20.40
5135.00	50.21	V	-52.4	1.50	9.60	-44.30	-25	19.30
7702.50	48.32	H	-47.5	1.90	10.90	-38.50	-25	13.50
7702.50	47.75	V	-48.4	1.90	10.90	-39.40	-25	14.40

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
Band 12(30MHz-10GHz)								
QPSK, 1.4MHz, Low Channel								
951.6	32.88	H	-63.6	1.36	0.0	-64.96	-13	51.96
951.6	30.69	V	-63.4	1.36	0.0	-64.76	-13	51.76
1399.40	47.42	H	-60.3	0.80	7.90	-53.20	-13	40.20
1399.40	47.05	V	-61.4	0.80	7.90	-54.30	-13	41.30
2099.10	49.13	H	-58.2	1.00	8.30	-50.90	-13	37.90
2099.10	49.86	V	-58.0	1.00	8.30	-50.70	-13	37.70
2798.80	46.57	H	-60.0	1.20	9.20	-52.00	-13	39.00
2798.80	46.84	V	-59.5	1.20	9.20	-51.50	-13	38.50
QPSK, 1.4MHz, Middle Channel								
953.0	33.05	H	-63.5	1.36	0.0	-64.86	-13	51.86
953.0	30.83	V	-63.2	1.36	0.0	-64.56	-13	51.56
1415.00	47.75	H	-60.0	0.80	7.90	-52.90	-13	39.90
1415.00	47.36	V	-61.0	0.80	7.90	-53.90	-13	40.90
2122.50	49.64	H	-57.7	1.00	8.30	-50.40	-13	37.40
2122.50	50.27	V	-57.6	1.00	8.30	-50.30	-13	37.30
2830.00	46.98	H	-59.6	1.20	9.20	-51.60	-13	38.60
2830.00	47.19	V	-59.1	1.20	9.20	-51.10	-13	38.10
QPSK, 1.4MHz, High Channel								
958.3	33.14	H	-63.4	1.36	0.0	-64.76	-13	51.76
958.3	31.38	V	-62.7	1.36	0.0	-64.06	-13	51.06
1430.60	48.87	H	-58.8	0.80	7.90	-51.70	-13	38.70
1430.60	48.52	V	-59.9	0.80	7.90	-52.80	-13	39.80
2145.90	50.45	H	-56.9	1.00	8.30	-49.60	-13	36.60
2145.90	51.03	V	-56.8	1.00	8.30	-49.50	-13	36.50
2861.20	47.74	H	-58.6	1.20	9.00	-50.80	-13	37.80
2861.20	48.36	V	-57.7	1.20	9.00	-49.90	-13	36.90

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
Band 41 (30MHz-27GHz)								
QPSK, 5MHz, Low Channel								
957.9	31.80	H	-64.7	1.36	0.0	-66.06	-25	41.06
957.9	32.04	V	-62.0	1.36	0.0	-63.36	-25	38.36
4997	52.78	H	-50.4	1.5	9.6	-42.3	-25	17.3
4997	53.04	V	-49.6	1.5	9.6	-41.5	-25	16.5
7495.5	56.69	H	-39.2	1.9	11	-30.1	-25	5.1
7495.5	55.81	V	-40.4	1.9	11	-31.3	-25	6.3
QPSK, 5MHz, Middle Channel								
960.9	32.44	H	-64.1	1.36	0.0	-65.46	-25	40.46
960.9	32.78	V	-61.3	1.36	0.0	-62.66	-25	37.66
5186	53.84	H	-49.2	1.6	9.7	-41.1	-25	16.1
5186	54.99	V	-47.7	1.6	9.7	-39.6	-25	14.6
7779	57.05	H	-38.7	1.9	11.1	-29.5	-25	4.5
7779	56.27	V	-39.8	1.9	11.1	-30.6	-25	5.6
QPSK, 5MHz, High Channel								
956.6	32.89	H	-63.6	1.36	0.0	-64.96	-25	39.96
956.6	33.03	V	-61.0	1.36	0.0	-62.36	-25	37.36
5375	55.15	H	-47.8	1.70	10	-39.5	-25	14.5
5375	56.36	V	-46.3	1.70	10	-38	-25	13
8062.5	57.44	H	-38.1	2.00	11.1	-29	-25	4
8062.5	56.52	V	-39.4	2.00	11.1	-30.3	-25	5.3

Note:

Absolute Level = Reading Level + Substituted Factor

Substituted Factor contains: Substituted Level - Cable loss+ Antenna Gain

Margin = Limit-Absolute Level

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

Applicable Standard

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 FCC §27.53 (g) , For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

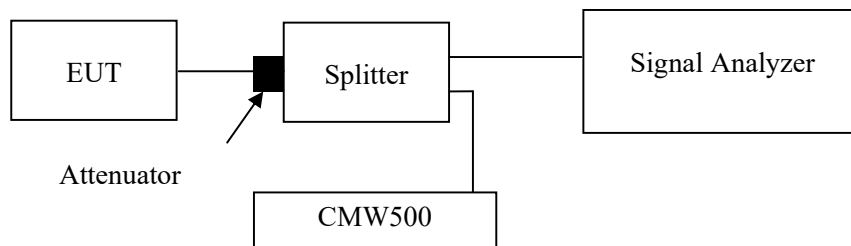
According to FCC §27.53 (m), For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5MHz.

Test Procedure

ANSI C63.26-2015 Section 5.7

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

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



Test Data**Environmental Conditions**

Temperature:	22~25.8 °C
Relative Humidity:	25~62 %
ATM Pressure:	101.0kPa

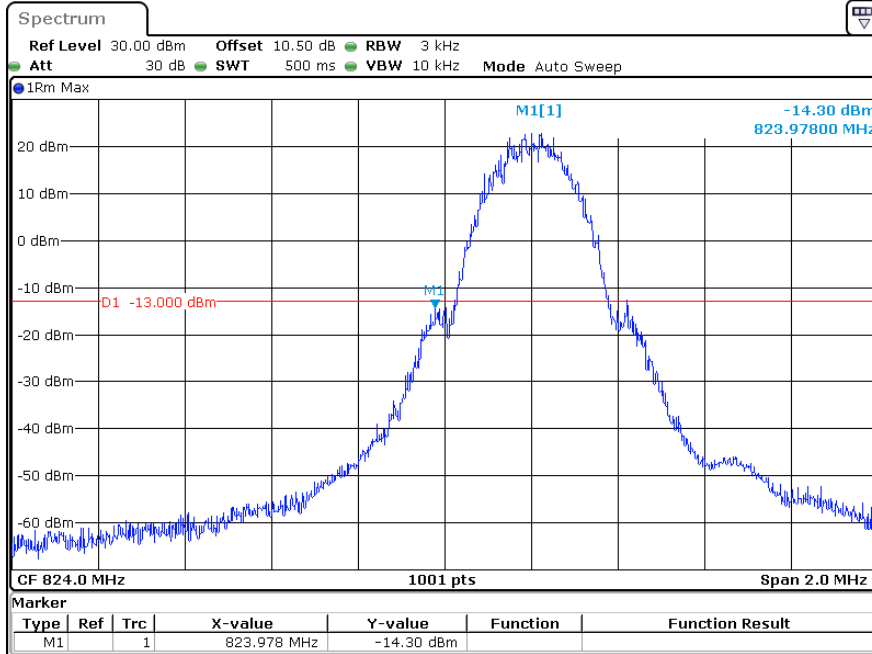
The testing was performed by Jim Cheng from 2024-02-18 to 2024-03-15 and Bamboo Zhan from 2024-03-12 to 2024-03-13.

EUT operation mode: Transmitting (Worst case)

Test Result: Compliant

Please refer to the following plots.

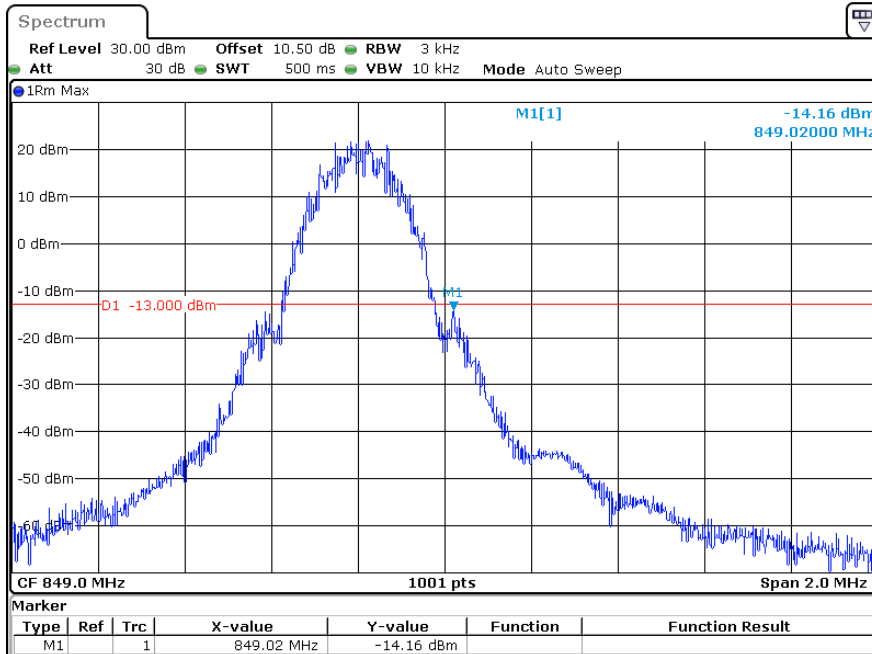
Cellular Band, Left Band Edge for GSM (GMSK) Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan

Date: 13.MAR.2024 09:12:48

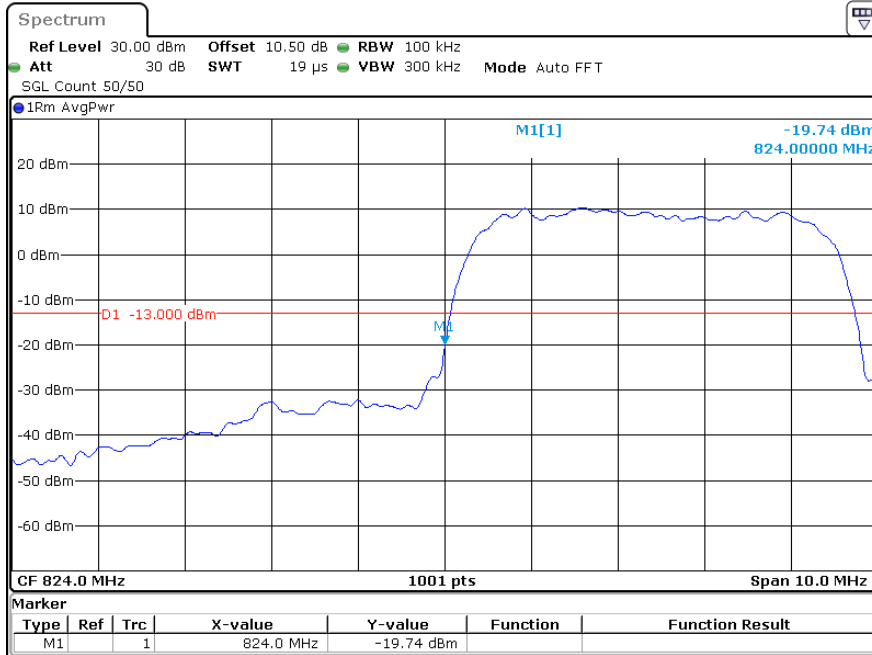
Cellular Band, Right Band Edge for GSM (GMSK) Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan

Date: 13.MAR.2024 09:16:21

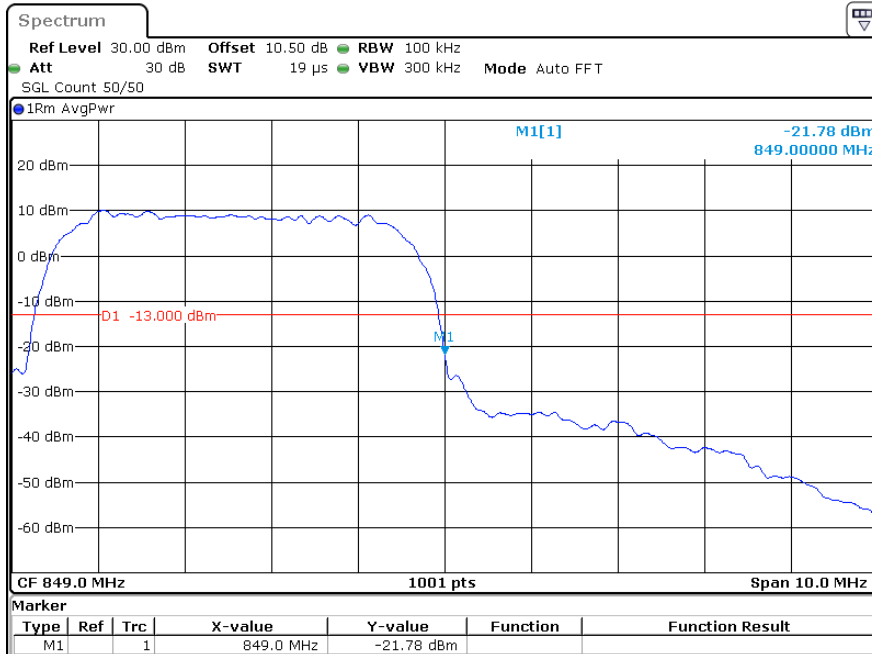
Cellular Band, Left Band Edge for RMC (BPSK) Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan

Date: 12.MAR.2024 14:46:59

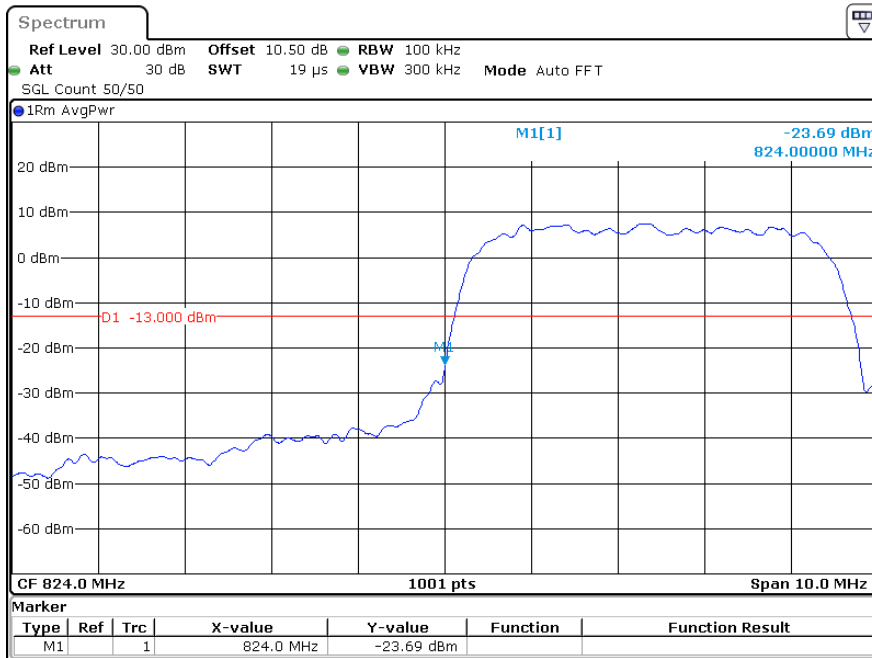
Cellular Band, Right Band Edge for RMC (BPSK) Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan

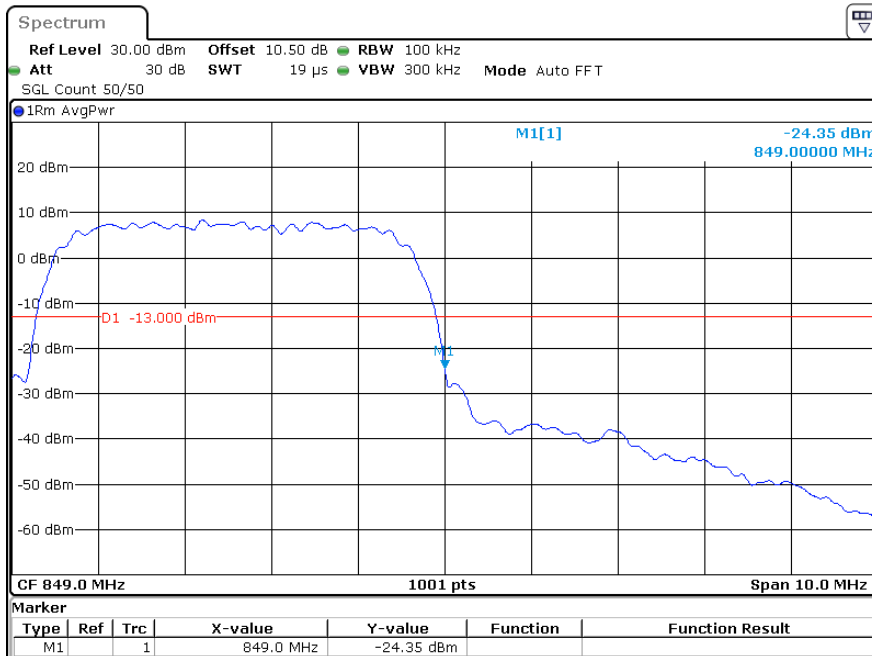
Date: 12.MAR.2024 14:52:05

Cellular Band, Left Band Edge for HSDPA Mode



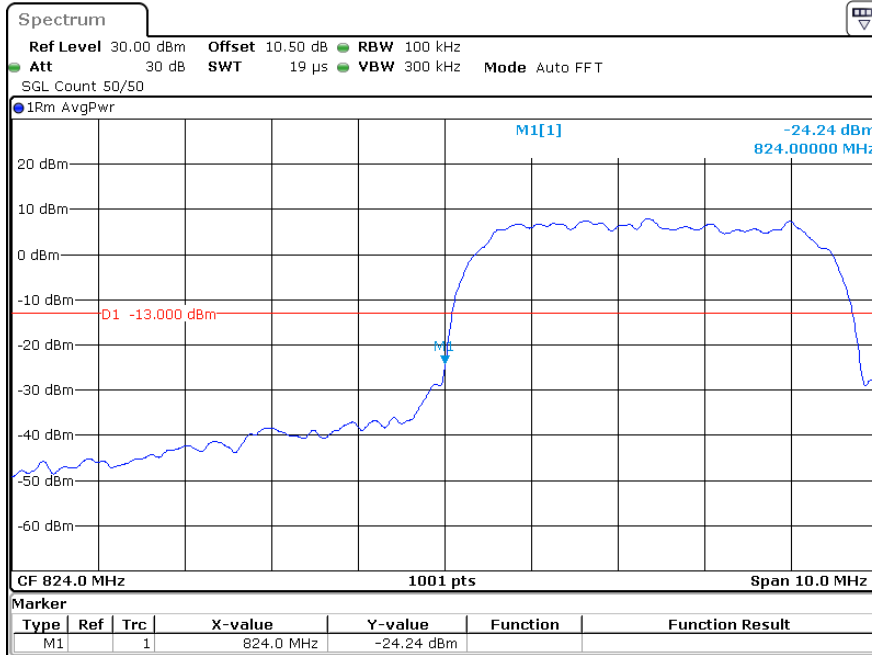
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:59:45

Cellular Band, Right Band Edge for HSDPA Mode



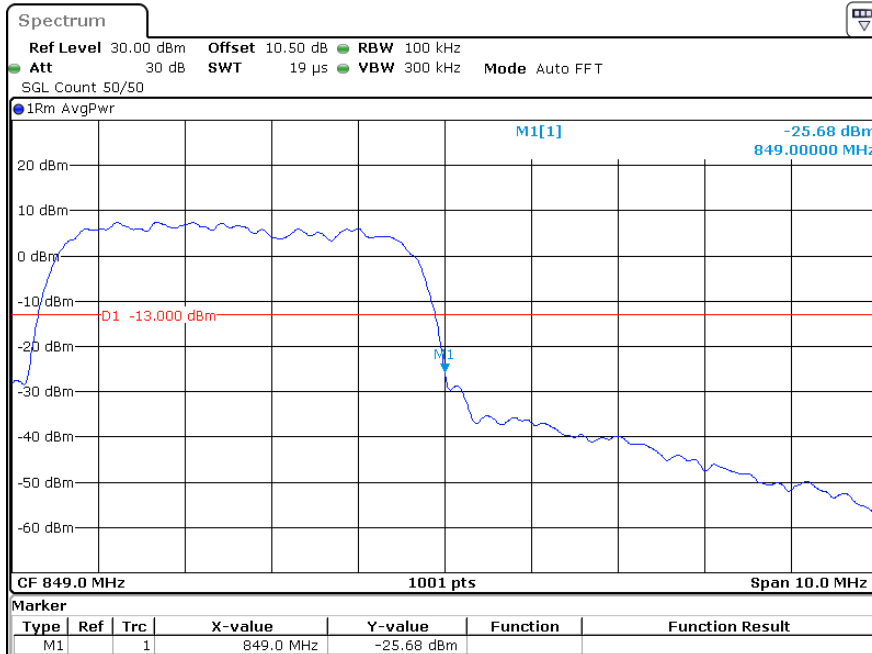
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 14:55:00

Cellular Band, Left Band Edge for HSUPA Mode



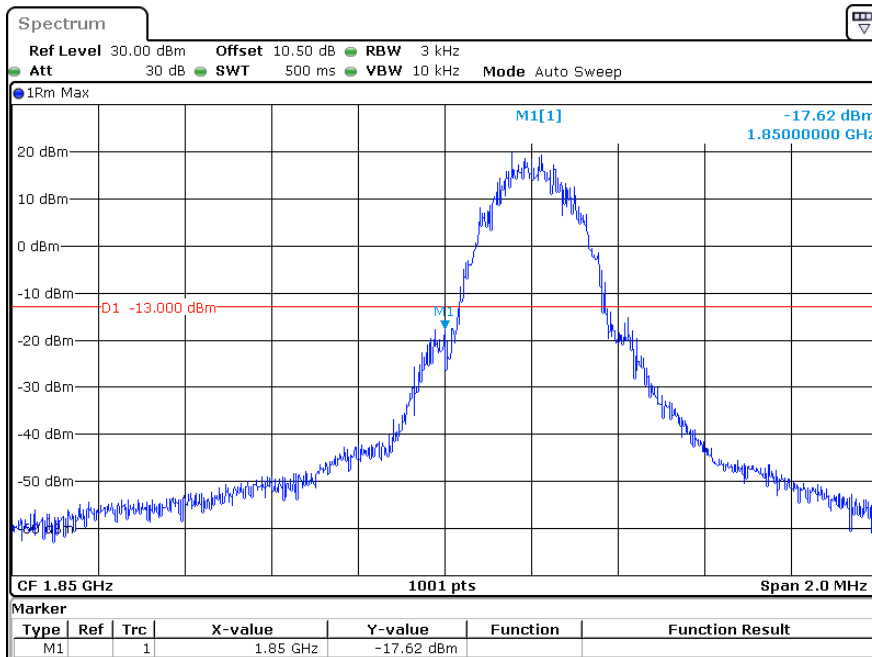
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:03:02

Cellular Band, Right Band Edge for HSUPA Mode



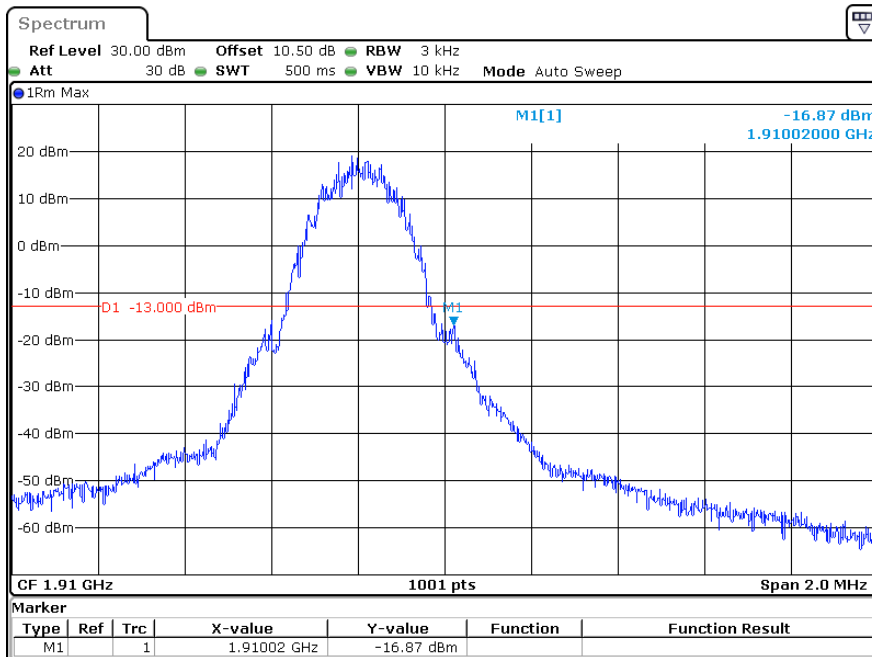
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:08:52

PCS Band, Left Band Edge for GSM(GMSK) Mode



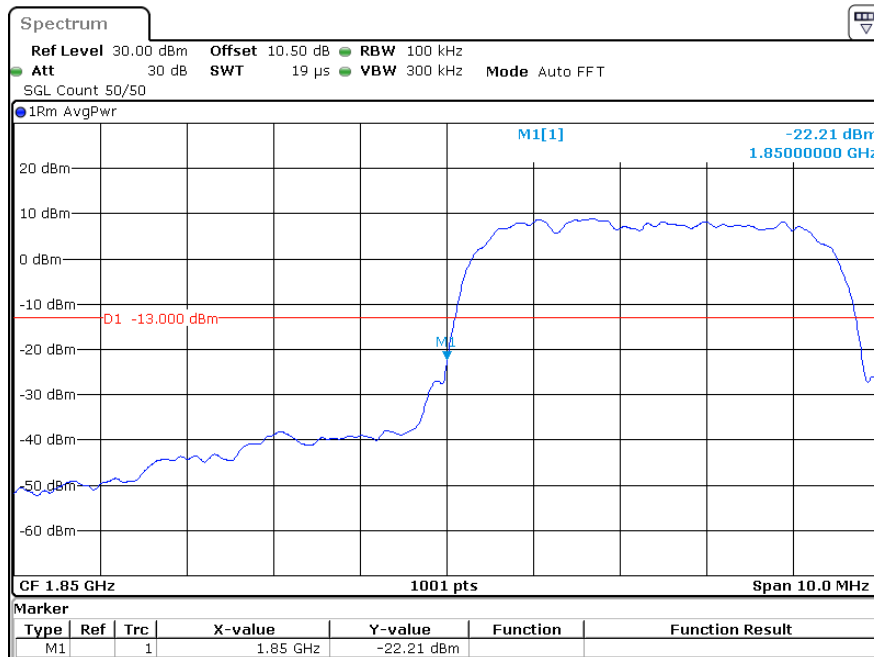
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 16:03:36

PCS Band, Right Band Edge for GSM (GMSK) Mode



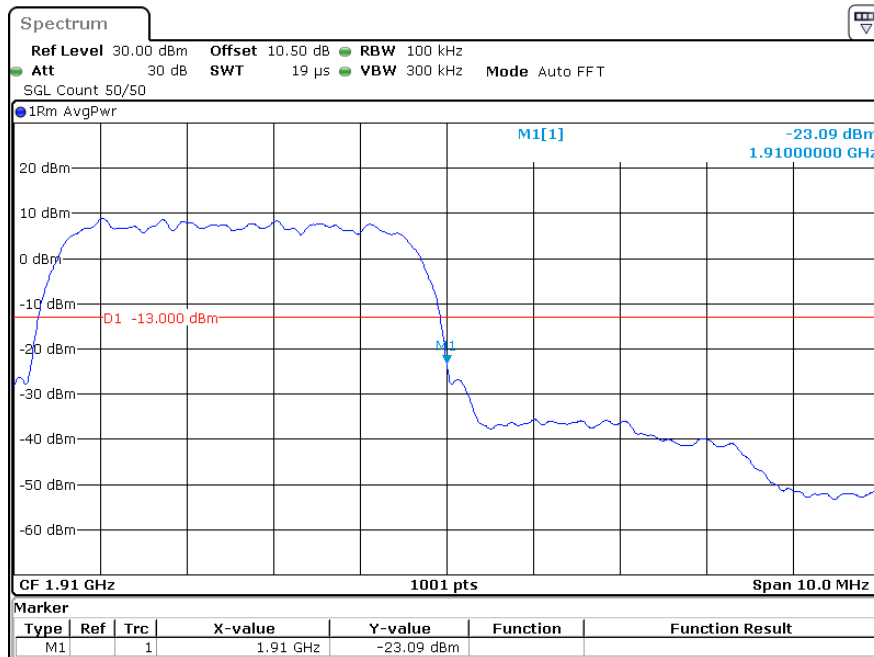
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 16:19:13

PCS Band, Left Band Edge for RMC (BPSK) Mode



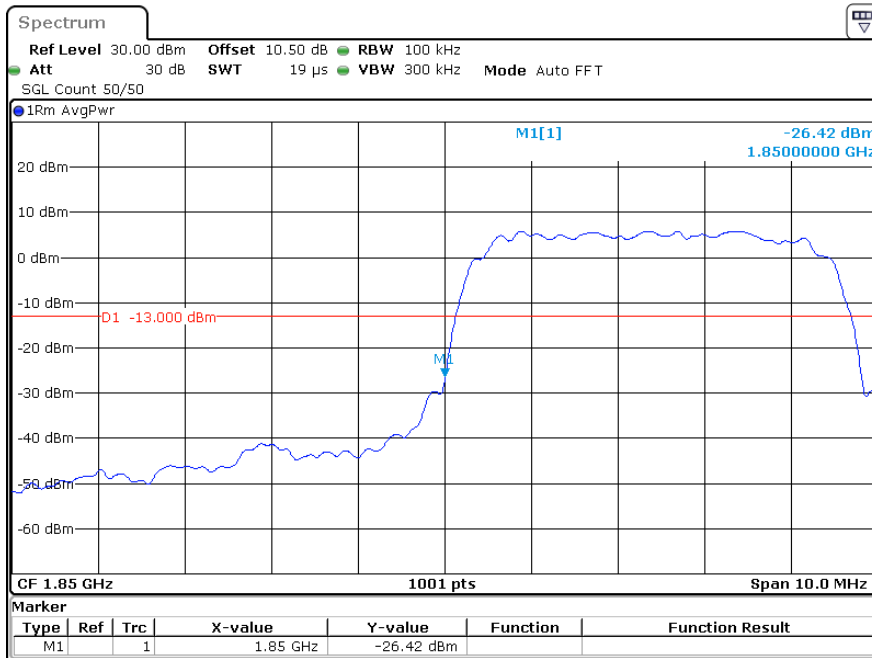
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:35:49

PCS Band, Right Band Edge for RMC (BPSK) Mode



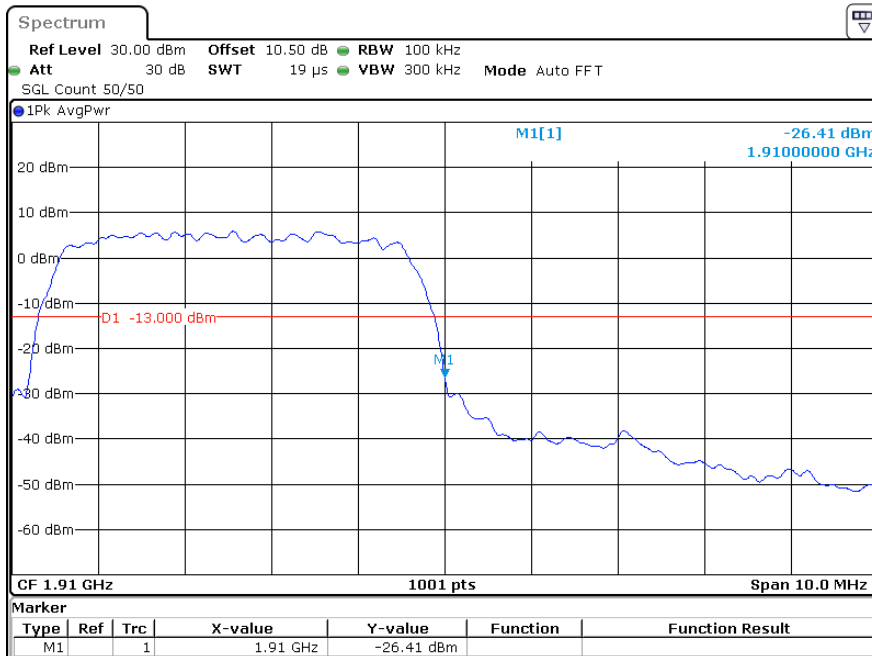
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:44:02

PCS Band, Left Band Edge for HSDPA Mode



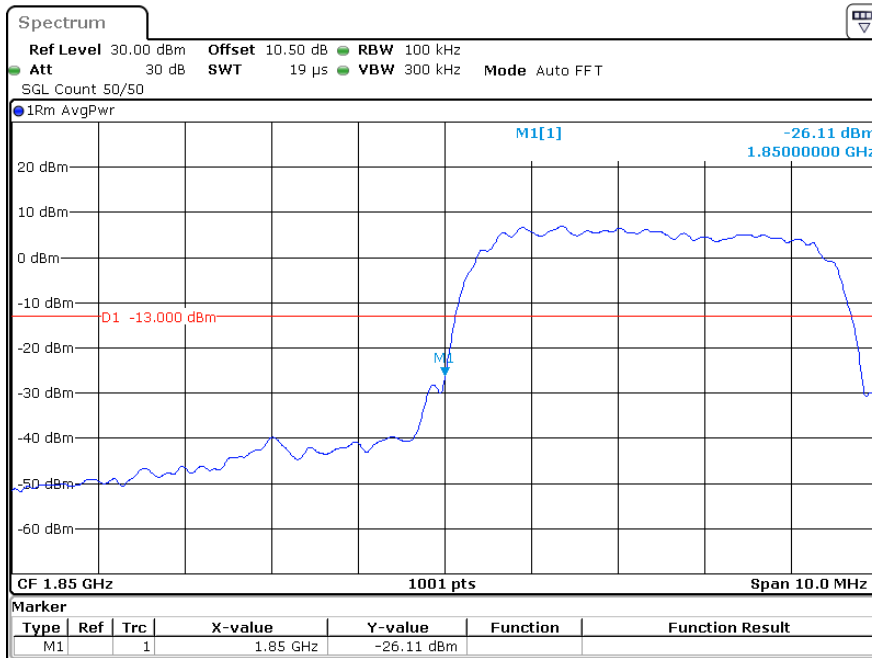
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:31:58

PCS Band, Right Band Edge for HSDPA Mode



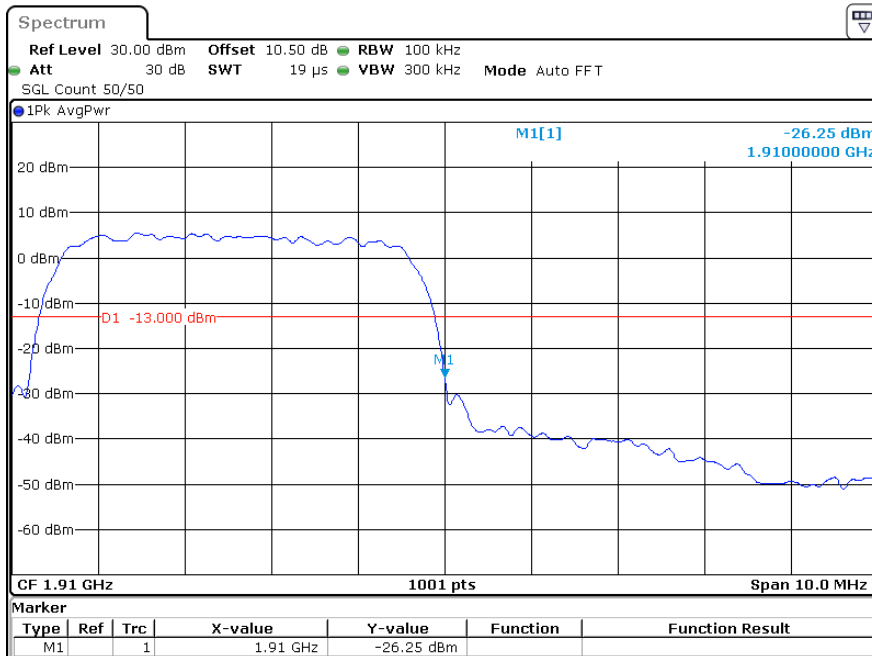
ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:26:12

PCS Band, Left Band Edge for HSUPA Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:15:46

PCS Band, Right Band Edge for HSUPA Mode



ProjectNo.:SZ1240129-06571E Tester:Bamboo Zhan
 Date: 12.MAR.2024 15:22:29

The test plots of LTE bands please refer to the Appendix C.

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

Applicable Standard

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

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

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

Frequency Tolerance for Transmitters in the Public Mobile Services

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

According to §24.235&§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

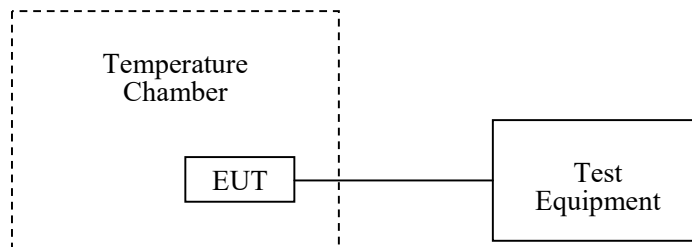
Test Procedure

ANSI C63.26-2015 Section 5.6

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

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

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



Test Data**Environmental Conditions**

Temperature:	22~25.8 °C
Relative Humidity:	25~62 %
ATM Pressure:	101.0kPa

The testing was performed by Bamboo Zhan from 2024-02-19 to 2024-03-15.

EUT operation mode: Transmitting

Test Result: Compliant

Please refer to the following tables.

Cellular Band (Part 22H)

GSM Mode

Test Modulation:	GMSK		Test Channel	836.6	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	4	0.005	2.5
	-20	3.87	8	0.010	2.5
	-10	3.87	-9	-0.011	2.5
	0	3.87	5	0.006	2.5
	10	3.87	6	0.007	2.5
	20	3.87	-7	-0.008	2.5
	30	3.87	5	0.006	2.5
	40	3.87	10	0.012	2.5
	50	3.87	14	0.017	2.5
Frequency Stability vs. Voltage	20	3.45	-3	-0.004	2.5
	20	4.45	11	0.013	2.5

WCDMA Mode

Test Modulation:	WCDMA R99		Test Channel:	836.6	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	-16	-0.019	2.5
	-20	3.87	-9	-0.011	2.5
	-10	3.87	-16	-0.019	2.5
	0	3.87	-5	-0.006	2.5
	10	3.87	-10	-0.012	2.5
	20	3.87	-4	-0.005	2.5
	30	3.87	-13	-0.016	2.5
	40	3.87	-4	-0.005	2.5
	50	3.87	-3	-0.004	2.5
Frequency Stability vs. Voltage	20	3.45	-11	-0.013	2.5
	20	4.45	-15	-0.018	2.5

PCS Band (Part 24E)

GSM Mode

Test Mode:	GMSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.04257	1850.00000	1909.99778	1910.00000
	-20	3.87	1850.01616	1850.00000	1909.97794	1910.00000
	-10	3.87	1850.02478	1850.00000	1909.98158	1910.00000
	0	3.87	1850.03139	1850.00000	1909.00019	1910.00000
	10	3.87	1850.03130	1850.00000	1909.93402	1910.00000
	20	3.87	1850.03762	1850.00000	1909.98767	1910.00000
	30	3.87	1850.00502	1850.00000	1909.99465	1910.00000
	40	3.87	1850.03857	1850.00000	1909.94764	1910.00000
	50	3.87	1850.05999	1850.00000	1909.97260	1910.00000
Frequency Stability vs. Voltage	20	3.45	1850.08347	1850.00000	1909.97328	1910.00000
	20	4.45	1850.02827	1850.00000	1909.91378	1910.00000

WCDMA Mode

Test Mode:	WCDMA R99	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.04734	1850.00000	1909.98211	1910.00000
	-20	3.87	1850.03752	1850.00000	1909.97885	1910.00000
	-10	3.87	1850.02237	1850.00000	1909.98618	1910.00000
	0	3.87	1850.03211	1850.00000	1909.97714	1910.00000
	10	3.87	1850.02309	1850.00000	1909.94826	1910.00000
	20	3.87	1850.05043	1850.00000	1909.98710	1910.00000
	30	3.87	1850.00853	1850.00000	1909.98487	1910.00000
	40	3.87	1850.02459	1850.00000	1909.93640	1910.00000
	50	3.87	1850.05246	1850.00000	1909.98530	1910.00000
Frequency Stability vs. Voltage	20	3.45	1850.09113	1850.00000	1909.97851	1910.00000
	20	4.45	1850.01124	1850.00000	1909.92635	1910.00000

LTE

Band 2

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.02650	1850.00000	1909.96853	1910.00000
	-20	3.87	1850.11754	1850.00000	1909.91719	1910.00000
	-10	3.87	1850.17072	1850.00000	1909.86055	1910.00000
	0	3.87	1850.05401	1850.00000	1909.84564	1910.00000
	10	3.87	1850.18507	1850.00000	1909.91707	1910.00000
	20	3.87	1850.10818	1850.00000	1909.92516	1910.00000
	30	3.87	1850.12871	1850.00000	1909.85824	1910.00000
	40	3.87	1850.05103	1850.00000	1909.94313	1910.00000
	50	3.87	1850.14940	1850.00000	1909.92250	1910.00000
Frequency Stability vs. Voltage	20	3.45	1850.06609	1850.00000	1909.90889	1910.00000
	20	4.45	1850.16386	1850.00000	1909.97016	1910.00000
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	1850.01716	1850.00000	1909.87412	1910.00000
	-20	3.87	1850.11558	1850.00000	1909.95787	1910.00000
	-10	3.87	1850.17801	1850.00000	1909.82413	1910.00000
	0	3.87	1850.10249	1850.00000	1909.80122	1910.00000
	10	3.87	1850.02297	1850.00000	1909.81325	1910.00000
	20	3.87	1850.18422	1850.00000	1909.84670	1910.00000
	30	3.87	1850.03395	1850.00000	1909.88816	1910.00000
	40	3.87	1850.05623	1850.00000	1909.84353	1910.00000
	50	3.87	1850.09650	1850.00000	1909.87603	1910.00000
Frequency Stability vs. Voltage	20	3.45	1850.11569	1850.00000	1909.83755	1910.00000
	20	4.45	1850.10470	1850.00000	1909.82906	1910.00000

Band 5

Test Modulation:	10 MHz QPSK		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	-4.1	-0.005	2.5
	-20	3.87	1.6	0.002	2.5
	-10	3.87	-4.7	-0.006	2.5
	0	3.87	-4.1	-0.005	2.5
	10	3.87	-3.7	-0.004	2.5
	20	3.87	-2.4	-0.003	2.5
	30	3.87	-5.1	-0.006	2.5
	40	3.87	-3.5	-0.004	2.5
	50	3.87	0.9	0.001	2.5
Frequency Stability vs. Voltage	20	3.45	-5.4	-0.007	2.5
	20	4.45	-1.9	-0.002	2.5
Test Modulation:	10 MHz 16QAM		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V_{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.87	0.1	0.000	2.5
	-20	3.87	-0.6	-0.001	2.5
	-10	3.87	4.1	0.005	2.5
	0	3.87	0.1	0.000	2.5
	10	3.87	-0.7	-0.001	2.5
	20	3.87	-3.4	-0.004	2.5
	30	3.87	-2.6	-0.003	2.5
	40	3.87	1.3	0.002	2.5
	50	3.87	-1.1	-0.001	2.5
Frequency Stability vs. Voltage	20	3.45	-4.8	-0.006	2.5
	20	4.45	-1.6	-0.002	2.5

Band 7

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	2500.12254	2500.00000	2569.81837	2570.00000
	-20	3.87	2500.12951	2500.00000	2569.85935	2570.00000
	-10	3.87	2500.00704	2500.00000	2569.85336	2570.00000
	0	3.87	2500.04153	2500.00000	2569.88593	2570.00000
	10	3.87	2500.08990	2500.00000	2569.93791	2570.00000
	20	3.87	2500.04776	2500.00000	2569.83015	2570.00000
	30	3.87	2500.13828	2500.00000	2569.84660	2570.00000
	40	3.87	2500.09642	2500.00000	2569.83560	2570.00000
Frequency Stability vs. Voltage	20	3.45	2500.09911	2500.00000	2569.99800	2570.00000
	20	4.45	2500.14783	2500.00000	2569.95475	2570.00000
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	2500.12839	2500.00000	2569.90957	2570.00000
	-20	3.87	2500.01952	2500.00000	2569.86291	2570.00000
	-10	3.87	2500.08282	2500.00000	2569.94786	2570.00000
	0	3.87	2500.14659	2500.00000	2569.85526	2570.00000
	10	3.87	2500.00834	2500.00000	2569.90960	2570.00000
	20	3.87	2500.11948	2500.00000	2569.92771	2570.00000
	30	3.87	2500.00201	2500.00000	2569.85886	2570.00000
	40	3.87	2500.10855	2500.00000	2569.83989	2570.00000
Frequency Stability vs. Voltage	20	3.45	2500.09263	2500.00000	2569.81964	2570.00000
	20	4.45	2500.03863	2500.00000	2569.87100	2570.00000

Band 12

Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	699.007	699.00	715.945	716.00
	-20	3.87	699.109	699.00	715.865	716.00
	-10	3.87	699.179	699.00	715.948	716.00
	0	3.87	699.083	699.00	715.887	716.00
	10	3.87	699.017	699.00	715.805	716.00
	20	3.87	699.053	699.00	715.877	716.00
	30	3.87	699.013	699.00	715.973	716.00
	40	3.87	699.090	699.00	715.980	716.00
	50	3.87	699.011	699.00	715.964	716.00
Frequency Stability vs. Voltage	20	3.45	699.187	699.00	715.966	716.00
	20	4.45	699.012	699.00	715.967	716.00
Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V_{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	699.144	699.00	715.933	716.00
	-20	3.87	699.087	699.00	715.921	716.00
	-10	3.87	699.051	699.00	715.963	716.00
	0	3.87	699.088	699.00	715.854	716.00
	10	3.87	699.133	699.00	715.962	716.00
	20	3.87	699.064	699.00	715.923	716.00
	30	3.87	699.090	699.00	715.921	716.00
	40	3.87	699.143	699.00	715.878	716.00
	50	3.87	699.069	699.00	715.881	716.00
Frequency Stability vs. Voltage	20	3.45	699.042	699.00	715.974	716.00
	20	4.45	699.035	699.00	715.938	716.00

Band 41

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	2496.04272	2496.00	2689.85926	2690
	-20	3.87	2496.01979	2496.00	2689.89400	2690
	-10	3.87	2496.10534	2496.00	2689.98231	2690
	0	3.87	2496.17615	2496.00	2689.83064	2690
	10	3.87	2496.10983	2496.00	2689.86239	2690
	20	3.87	2496.15391	2496.00	2689.98921	2690
	30	3.87	2496.12548	2496.00	2689.84250	2690
	40	3.87	2496.12422	2496.00	2689.81124	2690
	50	3.87	2496.09036	2496.00	2689.83447	2690
Frequency Stability vs. Voltage	20	3.45	2496.19002	2496.00	2689.93249	2690
	20	4.45	2496.12205	2496.00	2689.95333	2690
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.87	2496.03903	2496.00	2689.80351	2690
	-20	3.87	2496.04678	2496.00	2689.83494	2690
	-10	3.87	2496.00469	2496.00	2689.85570	2690
	0	3.87	2496.07762	2496.00	2689.82141	2690
	10	3.87	2496.03612	2496.00	2689.94799	2690
	20	3.87	2496.02595	2496.00	2689.81222	2690
	30	3.87	2496.03682	2496.00	2689.97185	2690
	40	3.87	2496.11142	2496.00	2689.92245	2690
	50	3.87	2496.04574	2496.00	2689.89876	2690
Frequency Stability vs. Voltage	20	3.45	2496.17110	2496.00	2689.92215	2690
	20	4.45	2496.03969	2496.00	2689.86031	2690

EUT PHOTOGRAPHS

Please refer to the attachment SZ1240129-06571E-RF External photo and SZ1240129-06571E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment SZ1240129-06571E-RF-00A Test Setup photo.

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