
RF Test Report

Report No.: AGC00552181219EE07

PRODUCT DESIGNATION : Smart Phone
BRAND NAME : CUBOT
MODEL NAME : X19
APPLICANT : Shenzhen Huafurui Technology Co., Ltd.
DATE OF ISSUE : Jan. 07, 2019
STANDARD(S) : EN 301 908-1 V11.1.1 (2016-07)
: EN 301 908-2 V11.1.2 (2017-08)
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

| Report Version | Revise Time | Issued Date | Valid Version | Notes |
|----------------|-------------|---------------|---------------|-----------------|
| V1.0 | / | Jan. 07, 2019 | Valid | Initial release |

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1. TEST REPORT CERTIFICATION

| | |
|---------------------------------|--|
| Applicant | Shenzhen Huafurui Technology Co., Ltd. |
| Address | Unit 1401 &1402, 14/F, Jin qi zhi gu mansion (No. 4 building of Chong wen Garden), Crossing of the Liu xian street and Tang ling road, Tao yuan street, Nan shan district, Shenzhen,P.R. China |
| Manufacturer | Shenzhen Huafurui Technology Co., Ltd. |
| Address | Unit 1401 &1402, 14/F, Jin qi zhi gu mansion (No. 4 building of Chong wen Garden), Crossing of the Liu xian street and Tang ling road, Tao yuan street, Nan shan district, Shenzhen,P.R. China |
| Factory Name | Shenzhen Huafurui Technology Co., Ltd. |
| Address | Unit 1401 &1402, 14/F, Jin qi zhi gu mansion (No. 4 building of Chong wen Garden), Crossing of the Liu xian street and Tang ling road, Tao yuan street, Nan shan district, Shenzhen,P.R. China |
| Product Designation | Smart Phone |
| Brand Name | CUBOT |
| Test Model | X19 |
| Date of test | Dec. 25, 2018 to Jan. 07, 2019 |
| Deviation | None |
| Condition of Test Sample | Normal |
| Report Template | AGCRT-EC-3G1/RF |

We, Attestation of Global Compliance (Shenzhen) Co., Ltd., for compliance with the requirements set forth in the European Standard ETSI EN 301 908-1/-2. The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

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Jan. 07, 2019

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Jan. 07, 2019

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Authorized Officer

Jan. 07, 2019

2. GENERAL INFORMATION

2.1. DESCRIPTION OF EUT

2.1.1. FINAL EQUIPMENT BUILD STATUS

Details of technical specification refer to the description in follows:

| | |
|----------------------|--|
| Product Name | Smart Phone |
| Brand Name | CUBOT |
| Test Model | X19 |
| Product Type | UMTS |
| Hardware Version | Q593_MB_V1.0 |
| Software Version | CUBOT_X19_9021C_V01_20181211 |
| UMTS Frequency Bands | <input checked="" type="checkbox"/> FDD Band I <input checked="" type="checkbox"/> FDD Band VIII (EU Bands) |
| Modulation Mode | HSDPA:QPSK/16QAM; HSUPA:BPSK; WCDMA:QPSK |
| Antenna Type | PIFA antenna |
| Antenna Gain | FDD Band I: 1.07dBi, FDD Band VIII:0.98dBi |
| Power Class | FDD Band I:3, FDD Band VIII:3 |
| GSM Release Version | N/A |
| SIM Card Description | There are dual-SIM cards, just one for GSM/WCDMA/LTE and the other only for GSM. |

2.1.2. PHOTOGRAPHS OF THE EUT

Please see Photo report for photographs of the EUT.

2.1.3. IDENTIFICATION OF SAMPLES EUT

The EUT Identity consists of numerical and letter characters (see the table below), the first five numerical characters indicates the Type of the EUT defined by AGC, the next letter character indicates the test sample, and the following two numerical characters indicates the software version of the test sample.

SAMPLE A01

| | |
|-------------------------|---|
| Sample Reference Number | A01 |
| Factory Name | Shenzhen Huafurui Technology Co., Ltd. |
| Test Model | X19 |
| Product Type | FDD Band I, FDD Band VIII |
| Frequency Bands | HSDPA:QPSK/16QAM;HSUPA:BPSK WCDMA: QPSK |

2.2. TYPE OF PICS/PIXIT INFORMATION

| Item | Release | FDD (DS) RF Baseline Implementation capabilities | Support | Allowed Value | Comments |
|------|---------|---|---------|------------------|-----------|
| 1 | R99 | Chip rate 3.84 Mbps | YES | Yes/No | -- |
| 2 | R99 | Frequency band: 1920-1980, 2110-2170 MHz | YES | Yes/No | Band I |
| 3 | R99 | Frequency band: 1850-1910, 1930-1990 MHz | NO | Yes/No | Band II |
| 9 | R99 | UE Power Class 1 (+33 dBm) | NO | Yes/No | -- |
| 10 | R99 | UE Power Class 2 (+27 dBm) | NO | Yes/No | -- |
| 11 | R99 | UE Power Class 3 (+24 dBm) | YES | Yes/No | -- |
| 12 | R99 | UE Power Class 4 (+21 dBm) | NO | Yes/No | -- |
| 14 | R99 | Frequency band: 1710-1785, 1805-1880 MHz | NO | Yes/No | Band III |
| 15 | R99 | Frequency band: 1710-1755, 2110-2155 MHz | NO | Yes/No | Band IV |
| 16 | R99 | Frequency band: 824-849, 869-894 MHz | NO | Yes/No | Band V |
| 17 | R99 | Frequency band: 830-840, 875-885 MHz | NO | Yes/No | Band VI |
| 18 | R99 | Frequency band: 2500-2570, 2620-2690 MHz | NO | Yes/No | Band VII |
| 19 | R99 | Frequency band: 880-915, 925-960 MHz | YES | Yes/No | Band VIII |
| 20 | R99 | Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | NO | Yes/No | Band IX |
| 21 | R99 | Frequency band: 1710-1770, 2110-2170 MHz | NO | Yes/No | Band X |
| 22 | R99 | Frequency band: 1427.9-1452.9, 1475.9-1500.9 MHz | NO | Yes/No | Band XI |
| 23 | R99 | Frequency band: 698-716, 728-746 MHz | NO | Yes/No | Band XII |
| 24 | R99 | Frequency band: 777-787, 746-756 MHz | NO | Yes/No | Band XIII |
| 25 | R99 | Frequency band: 788-798, 758-768 MHz | NO | Yes/No | Band XIV |

3. IDENTIFICATION OF THE RESPONSIBLE TESTING LOCATION

| | |
|--------------------|---|
| Test Site-1 | Attestation of Global Compliance (Shenzhen) Co., Ltd |
| Location | 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao 'an District, Shenzhen, Guangdong, China |

Note: adjacent channel selectivity, blocking characteristics, intermodulation characteristics of receiver test within the scope of TAF approval.

LIST OF EQUIPMENTS USED OF AGC

| No. | Type | Manufacturer | S/N | Cal. Date | Cal. Due |
|-----|--|-----------------|----------------------------|---------------|---------------|
| 1 | H & T Chamber ETH225-40A | Test EQ | WIT-05121302 | Mar. 01, 2018 | Feb. 28, 2019 |
| 2 | CMU200 | R&S | 120237 | Mar. 01, 2018 | Feb. 28, 2019 |
| 3 | Wireless communication test set 8960 | Agilent | GB46200384 | July 13, 2018 | July 12, 2019 |
| 4 | Power Splitter 11636A | Agilent | 34 | Sep. 20, 2018 | Sep. 19, 2019 |
| 5 | Attenuator | JFW | 50FHC-006-50 | June 12, 2018 | June 11, 2019 |
| 6 | Vector Signal Generator SMU200A | R&S | 104332 | Sep. 20, 2018 | Sep. 19, 2019 |
| 7 | VECTOR ANALYZER E4440A | Agilent | MY44303916 | June 12, 2018 | June 11, 2019 |
| 8 | MXG Vector Signal Generator N5182A | AGILENT | MY50140530 | Sep. 20, 2018 | Sep. 19, 2019 |
| 9 | PSG Analog Signal Generator E8257D | AGILENT | MY45141029 | Sep. 20, 2018 | Sep. 19, 2019 |
| 10 | MXA Signal Analyzer N9020A | AGILENT | W1312-60196 | Mar. 01, 2018 | Feb. 28, 2019 |
| 11 | Universal Switch Control Unit | JS TONSCEND | N/A | --- | --- |
| 12 | RF SHIELD BOX | R&S | 1204.7008K02-1 02590-EE | Mar. 01, 2018 | Feb. 28, 2019 |
| 13 | Programmable Power Supply PPT-1830 | GW INSTEK | EM907629 | Aug. 18, 2018 | Aug. 17, 2019 |
| 14 | Vibration Source SCU-200 | SUSHI | 3000-40-07 | Mar. 01, 2018 | Feb. 28, 2019 |
| 15 | Attenuator | JFW | 50FHC-006-50 | June 12, 2018 | June 11, 2019 |
| 16 | EMI Test Receiver ESCI | R&S | 100694 | Mar. 01, 2018 | Feb. 28, 2019 |
| 17 | Double-Ridged Waveguide Horn Antenna 3117 | ETS LINDGREN | 00034609 | Mar. 01, 2018 | Feb. 28, 2019 |
| 18 | Trilog Broadband Antenna VULB 9168 | SCHWARZBECK | 494 | Mar. 01, 2018 | Feb. 28, 2020 |
| 19 | LOOP ANTENNA | A.H | / | Mar. 01, 2018 | Feb. 28, 2020 |

| No. | Type | Manufacturer | S/N | Cal. Date | Cal. Due |
|-----|--------------------------------------|-------------------|--------|---------------|---------------|
| | SAS-562B | | | | |
| 20 | Artificial Mains Network ENV4200 | R&S | 101116 | July 13, 2018 | July 12, 2019 |
| 21 | Artificial Mains Network ENV216 | R&S | 101242 | July 13, 2018 | July 12, 2019 |
| 22 | Filter Bank Notch 1(880-915MHz) | MICRO-TRONI CS | 010 | Mar. 01, 2018 | Feb. 28, 2019 |
| 23 | Filter Bank Notch 2(1710-1785MHz) | MICRO-TRONI CS | 009 | Mar. 01, 2018 | Feb. 28, 2019 |
| 24 | Filter Bank Notch 3(1920-1980MHz) | MICRO-TRONI CS | 008 | Mar. 01, 2018 | Feb. 28, 2019 |

4. MEASUREMENT UNCERTAINTY

| Parameter | Conditions | Test System Uncertainty |
|---|---------------------------------------|-------------------------|
| Transmitter Maximum Output power | -- | ±0,6dB |
| Transmitter spectrum emissions mask | -- | ±1,4 dB |
| Transmitter spurious emissions | $f \leq 2,2$ GHz | ±1,35 dB |
| | $2,2$ GHz < $f \leq 4$ GHz | ±1.8 dB |
| | $f > 4$ GHz | ±3.5 dB |
| | Co-existence band (≥ -60 dBm) | ±1.8 dB |
| | Co-existence band (< -60 dBm) | ±2.7 dB |
| Transmitter Minimum output power | -- | ±0.8 dB |
| Receiver Adjacent Channel Selectivity(ACS) | -- | ±0.9 dB |
| Receiver Blocking characteristics | $f < 15$ MHz offset: | ±1,1 dB |
| | 15 MHz offset $\leq f \leq 2,2$ GHz | ±0.8 dB |
| | $2,2$ GHz < $f \leq 4$ GHz | ±1,5 dB |
| | $f > 4$ GHz | ±2.9 dB |
| Receiver spurious response | $f \leq 2,2$ GHz | ±0.8 dB |
| | $2,2$ GHz < $f \leq 4$ GHz | ±1,5 dB |
| | $f > 4$ GHz | ±2.9 dB |
| Receiver intermodulation characteristics | -- | ±1,2 dB |
| Receiver spurious emissions | For UE receive band (-60 dBm) | ±2.8 dB |
| | For UE transmit band (-60 dBm) | ±2.9 dB |
| | Outside the UE receive band: | ±1.8 dB |
| | $f \leq 2,2$ GHz | ±1.7 dB |
| | $2,2$ GHz < $f \leq 4$ GHz | ±3.6 dB |
| Out of synchronization of handing power | DPCCH Ec/Ior | ±0,3 dB |
| | Transmit OFF power | ±0.8 dB |
| Transmitter adjacent channel leakage power ratio | -- | ±0,7 dB |
| Effective radiated RF power between 30 MHz and 180 MHz | -- | ±5 dB |
| Effective radiated RF power between 180 MHz and 12,75 GHz | -- | ±2 dB |
| Conducted RF power | -- | ±0.9 dB |

5. TEST RESULT

5.1. APPLIED REFERENCE DOCUMENTS

Leading reference documents for testing:

| No. | Identity | Document Title |
|-----|-------------------|--|
| 1 | ETSI EN 301 908-1 | IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements |
| 2 | ETSI EN 301 908-2 | IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: CDMA Direct Spread (UTRA FDD) User Equipment (UE) |

Specific reference documents for testing:

| No. | Identity | Document Title |
|-----|------------------|--|
| 3 | 3GPP TS 34.121-1 | 3rd Generation Partnership Project; Technical Specification Group Radio Access Network ; Terminal conformance specification; Radio transmission and reception (FDD) |
| 4 | 3GPP TS 34.121-2 | 3rd Generation Partnership Project; Technical Specification Group Radio Access Network User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 2: Implementation Conformance Statement (ICS) |

5.2. TEST ENVIRONMENT/CONDITIONS

| | |
|---|---|
| Normal Temperature (NT) | 15 ... 35 °C |
| Relative Humidity | 20 ... 75 % |
| Air Pressure | 980 ... 1020 hPa |
| Adapter Test Model Name | X19 |
| Details of Power Supply (Rated Input) | AC100-240V, 50/60Hz, 0.3A |
| Details of Power Supply (Rated Output) | DC5V, 2A |
| Extreme Temperature | Low Temperature (TL) = -20°C Normal Temperature(TN) = 25 °C High Temperature (TH) = +55°C |
| Extreme Voltage of the EUT | Low Voltage = DC 3.40V Normal Voltage= DC 3.80V High Voltage = DC 4.35V |

Note: The Limit Voltage 4.35V was declared by manufacturer,
The EUT couldn't be operate normally with higher voltage.

5.3. ITEMS USED IN THE TEST RESULTS LIST

Terms in the column “Verdict” for the test results list of the section:

| Verdict | Description |
|------------|---|
| PASS | EUT passed this test case |
| FAIL | EUT failed this test case |
| INC. | EUT did not pass and did not fail this test case, therefore the verdict is inconclusive |
| FOUR-FAITH | Test case not applicable for the EUT, see the column “Note” for detailed |

5.4. TEST RESULTS LIST
ETSI EN 301 908-1

| Test case | Description | Condition | FDDI | | FDDVIII | |
|-----------|---------------------------------------|-----------|--------|--------|---------|--------|
| | | | Sample | Result | Sample | Result |
| 5.3.1 | Radiated emission (UE) | NTC | A01 | PASS | A01 | PASS |
| 5.3.3 | Control and monitoring functions (UE) | NTC | A01 | PASS | A01 | PASS |

ETSI EN 301 908-2

| Test case | Description | Condition | FDDI | | FDDVIII | |
|-----------|---|-----------|--------|--------|---------|--------|
| | | | Sample | Result | Sample | Result |
| 4.2.2 | Transmitter Characteristics/Maximum Output Power | NTC | A01 | PASS | A01 | PASS |
| 4.2.2 | Transmitter Characteristics/Maximum Output Power | HT/HV | A01 | PASS | A01 | PASS |
| 4.2.2 | Transmitter Characteristics/Maximum Output Power | HT/LV | A01 | PASS | A01 | PASS |
| 4.2.2 | Transmitter Characteristics/Maximum Output Power | LT/HV | A01 | PASS | A01 | PASS |
| 4.2.2 | Transmitter Characteristics/Maximum Output Power | LT/LV | A01 | PASS | A01 | PASS |
| 4.2.5 | Transmitter Characteristics/Output Dynamics in the Uplink/Minimum Output Power | NTC | A01 | PASS | A01 | PASS |
| 4.2.5 | Transmitter Characteristics/Output Dynamics in the Uplink/Minimum Output Power | HTHV | A01 | PASS | A01 | PASS |
| 4.2.5 | Transmitter Characteristics/Output Dynamics in the Uplink/Minimum Output Power | HTLV | A01 | PASS | A01 | PASS |
| 4.2.5 | Transmitter Characteristics/Output Dynamics in the Uplink/Minimum Output Power | LT/HV | A01 | PASS | A01 | PASS |
| 4.2.5 | Transmitter Characteristics/Output Dynamics in the Uplink/Minimum Output Power | LT/LV | A01 | PASS | A01 | PASS |
| 4.2.11 | Transmitter Characteristics/Output Dynamics in the Uplink/Out-of-synchronization Handling of Output power | NTC | A01 | PASS | A01 | PASS |
| 4.2.3 | Transmitter Characteristics/Spectrum Emission Mask | NTC | A01 | PASS | A01 | PASS |
| 4.2.3 | Transmitter Characteristics/Spectrum Emission Mask-HSDPA&HSUPA | NTC | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR) | NTC | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio | HT/HV | A01 | PASS | A01 | PASS |

| | | | | | | |
|--------|--|-------|-----|------|-----|------|
| | (ACLR) | | | | | |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR) | HT/LV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR) | LT/HV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR) | LT/LV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR)--HSDPA&HSUPA | NTC | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR)--HSDPA&HSUPA | HT/HV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR)--HSDPA&HSUPA | HT/LV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR)--HSDPA&HSUPA | LT/HV | A01 | PASS | A01 | PASS |
| 4.2.12 | Transmitter Characteristics/Adjacent Channel Leakage Power Ratio (ACLR)--HSDPA&HSUPA | LT/LV | A01 | PASS | A01 | PASS |
| 4.2.4 | Transmitter Characteristics/Spurious Emissions | NTC | A01 | PASS | A01 | PASS |
| 4.2.6 | Receiver Characteristics/Adjacent Channel Selectivity (ACS) | NTC | A01 | PASS | A01 | PASS |
| 4.2.7 | Receiver Characteristics/Blocking Characteristics | NTC | A01 | PASS | A01 | PASS |
| 4.2.8 | Receiver Characteristics/Spurious Response | NTC | A01 | PASS | A01 | PASS |
| 4.2.9 | Receiver Characteristics /Intermodulation Characteristics | NTC | A01 | PASS | A01 | PASS |

| | | | | | | |
|--------|---|-----|-----|------|-----|------|
| 4.2.10 | Receiver Characteristics/Spurious Emissions | NTC | A01 | PASS | A01 | PASS |
| 4.2.13 | Receiver Reference Sensitivity level | NTC | A01 | PASS | A01 | PASS |

Note: All the SIM Cards had been tested, but the worst test result is SIM Card 1 and recorded in the test report.

Appendix A. Transmitter maximum output power

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|-----------------------|---------------|--------|
| Band I | TNVN | LCH | 23.80 | 24(+1.7/-3.7) | Pass |
| | | MCH | 24.22 | 24(+1.7/-3.7) | Pass |
| | | HCH | 24.09 | 24(+1.7/-3.7) | Pass |
| Band VIII | TNVN | LCH | 24.06 | 24(+1.7/-3.7) | Pass |
| | | MCH | 23.81 | 24(+1.7/-3.7) | Pass |
| | | HCH | 23.98 | 24(+1.7/-3.7) | Pass |

Appendix B. Transmitter minimum output power

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|-----------------------|------------|--------|
| Band I | TNVN | LCH | -54.24 | -49 | Pass |
| | | MCH | -54.57 | -49 | Pass |
| | | HCH | -54.45 | -49 | Pass |
| Band VIII | TNVN | LCH | -54.83 | -49 | Pass |
| | | MCH | -55.37 | -49 | Pass |
| | | HCH | -54.98 | -49 | Pass |

Appendix C. Transmitter spectrum emission mask

BAND I

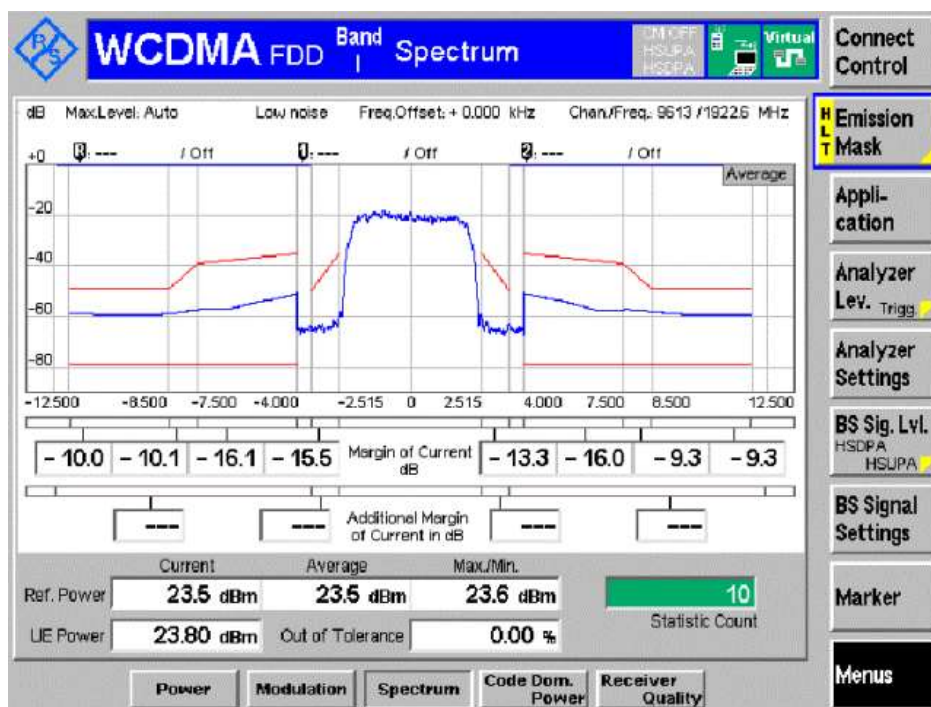
| Operating Band | Test Conditions | Δf in MHz | Test Channel | | |
|----------------|-----------------|-------------------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band I | TNVN | 2.5-3.5 | PASS | PASS | PASS |
| | | 3.5-7.5 | | | |
| | | 7.5-8.5 | | | |
| | | 8.5-12.5 MHz | | | |

BAND VIII

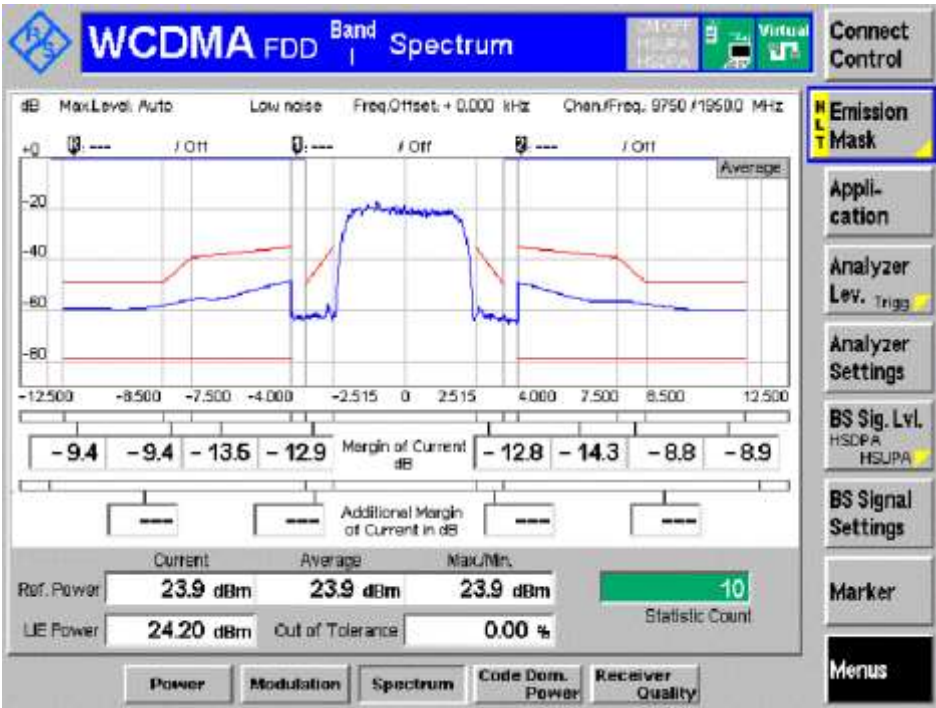
| Operating Band | Test Conditions | Δf in MHz | Test Channel | | |
|----------------|-----------------|-------------------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band VIII | TNVN | 2.5-3.5 | PASS | PASS | PASS |
| | | 3.5-7.5 | | | |
| | | 7.5-8.5 | | | |
| | | 8.5-12.5 MHz | | | |

BAND I

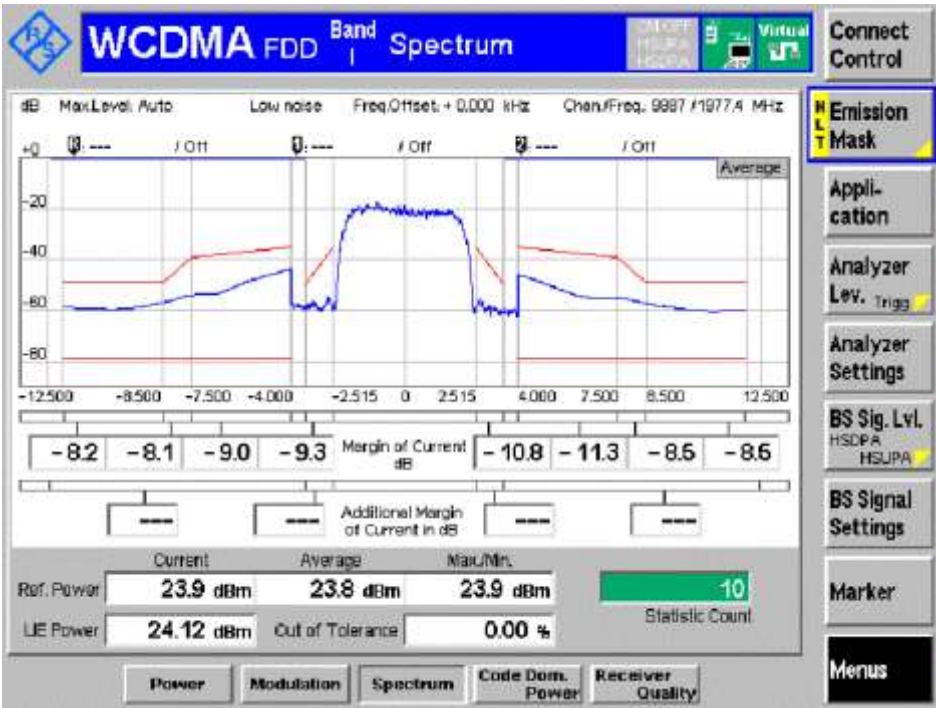
Channel LCH



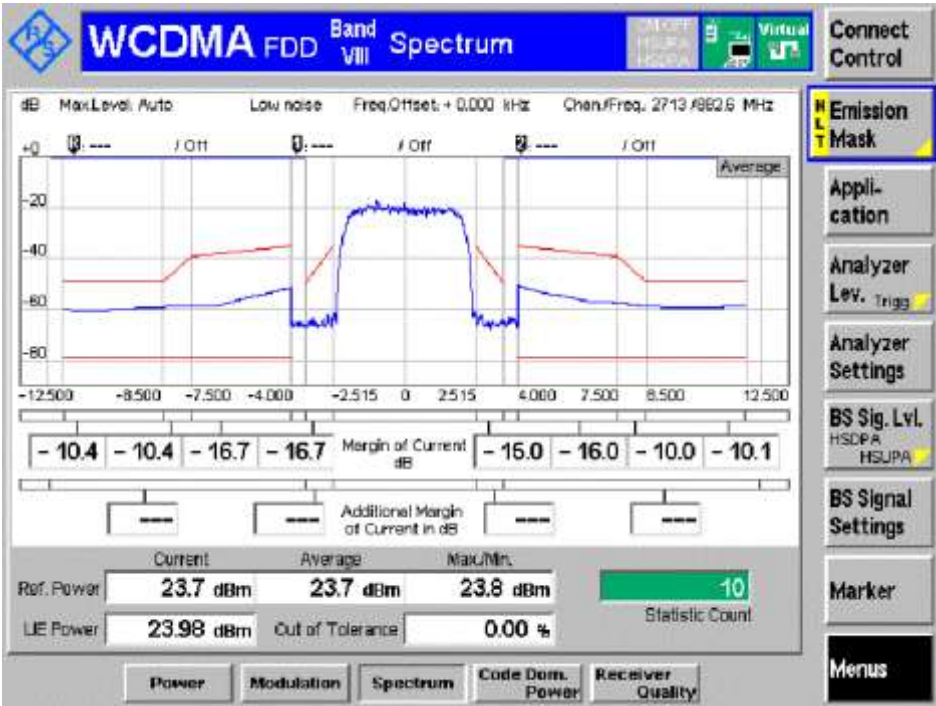
Channel MCH



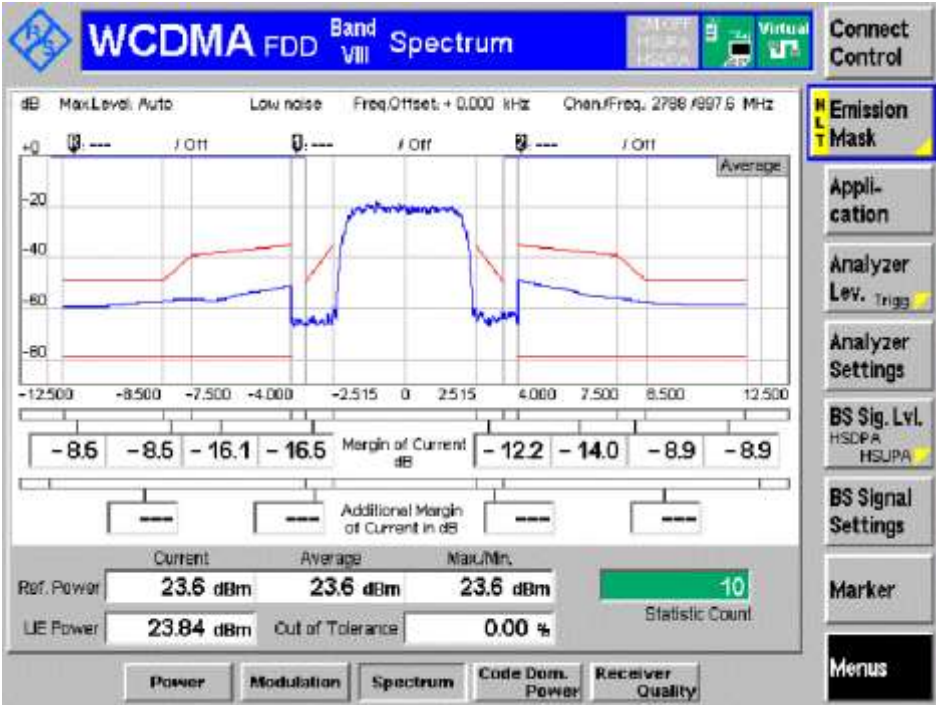
Channel HCH



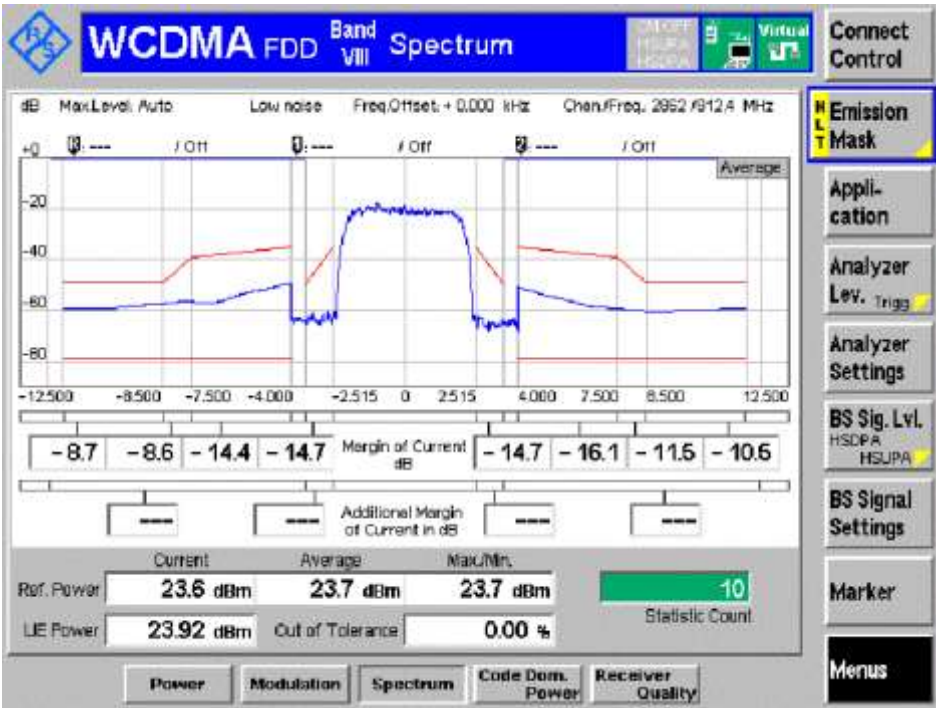
BAND VIII
Channel LCH



Channel MCH



Channel HCH



Appendix D. Transmitter adjacent channel leakage power ratio

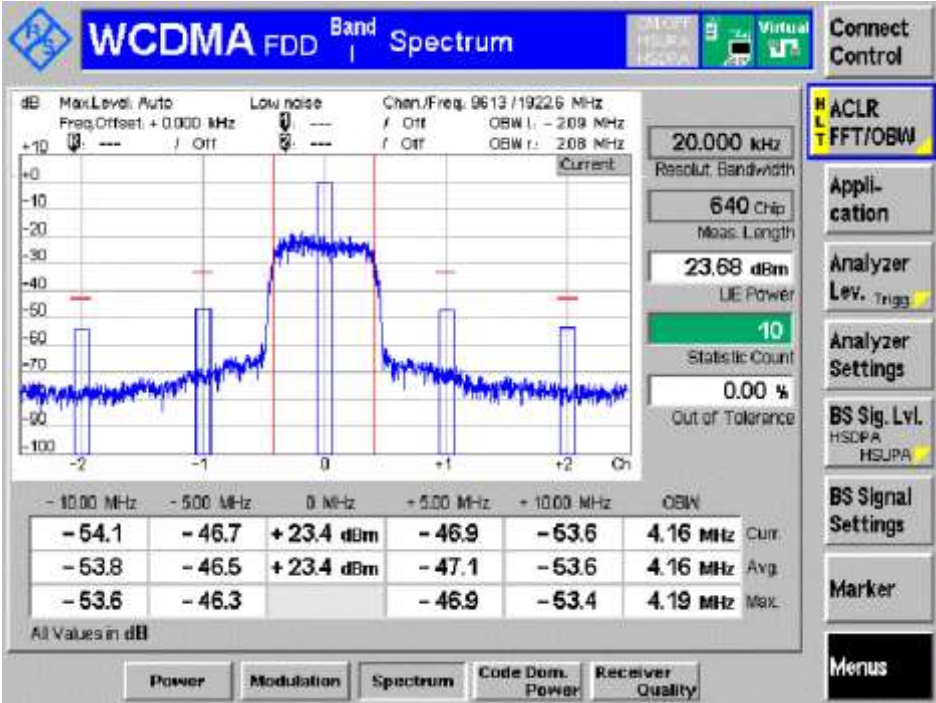
Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | UE Channel | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|------------|-----------------------|------------|--------|
| Band I | TNVN | LCH | +5MHz | -47.09 | -32.2 | Pass |
| | | | -5 MHz | -46.54 | -32.2 | Pass |
| | | | -10 MHz | -53.83 | -42.2 | Pass |
| | | | +10 MHz | -53.57 | -42.2 | Pass |
| | | MCH | +5MHz | -44.95 | -32.2 | Pass |
| | | | -5 MHz | -44.06 | -32.2 | Pass |
| | | | -10 MHz | -53.83 | -42.2 | Pass |
| | | | +10 MHz | -54.02 | -42.2 | Pass |
| | | HCH | +5MHz | -42.56 | -32.2 | Pass |
| | | | -5 MHz | -39.99 | -32.2 | Pass |
| | | | -10 MHz | -52.95 | -42.2 | Pass |
| | | | +10 MHz | -53.86 | -42.2 | Pass |
| Band VIII | TNVN | LCH | +5MHz | -47.44 | -32.2 | Pass |
| | | | -5 MHz | -47.91 | -32.2 | Pass |
| | | | -10 MHz | -54.57 | -42.2 | Pass |
| | | | +10 MHz | -54.00 | -42.2 | Pass |
| | | MCH | +5MHz | -45.47 | -32.2 | Pass |
| | | | -5 MHz | -47.31 | -32.2 | Pass |
| | | | -10 MHz | -53.16 | -42.2 | Pass |
| | | | +10 MHz | -53.04 | -42.2 | Pass |
| | | HCH | +5MHz | -47.98 | -32.2 | Pass |
| | | | -5 MHz | -45.84 | -32.2 | Pass |
| | | | -10 MHz | -53.19 | -42.2 | Pass |
| | | | +10 MHz | -54.52 | -42.2 | Pass |

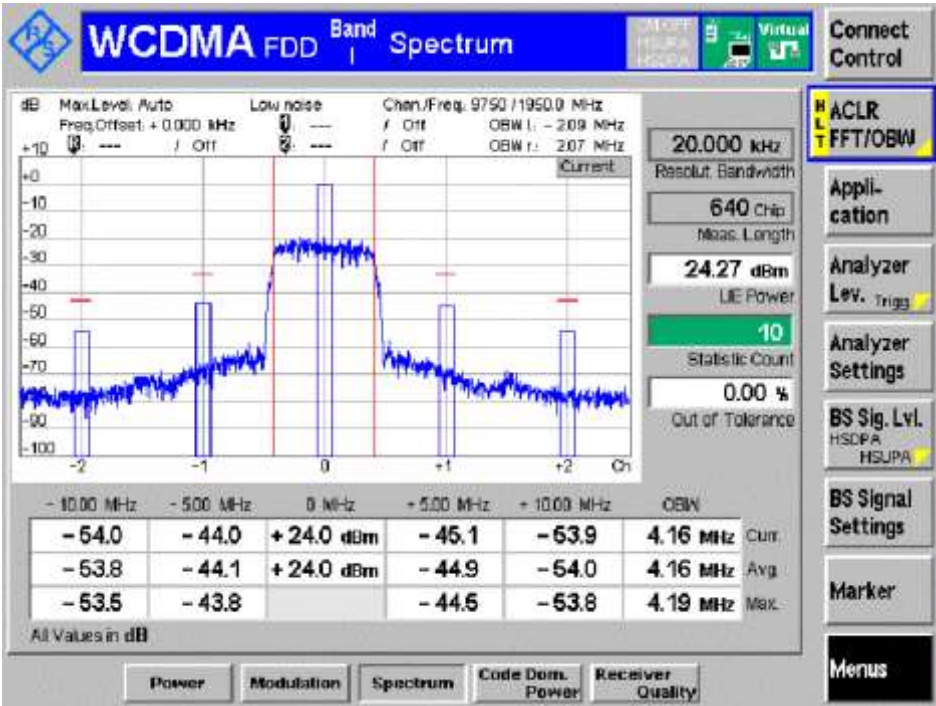
BAND I

TNVN

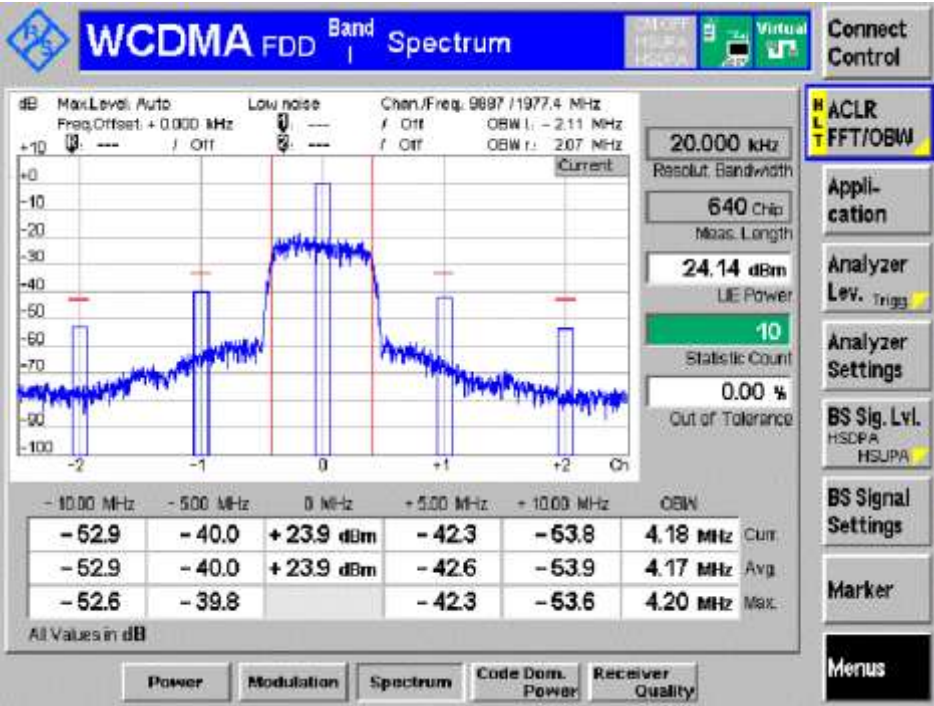
Channel LCH



Channel MCH



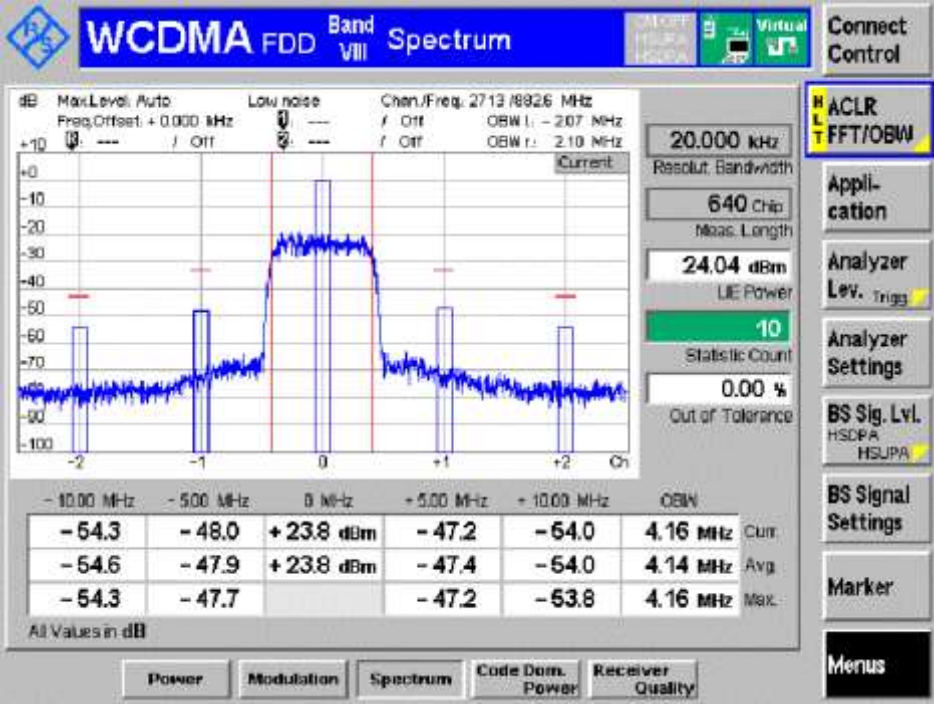
Channel HCH



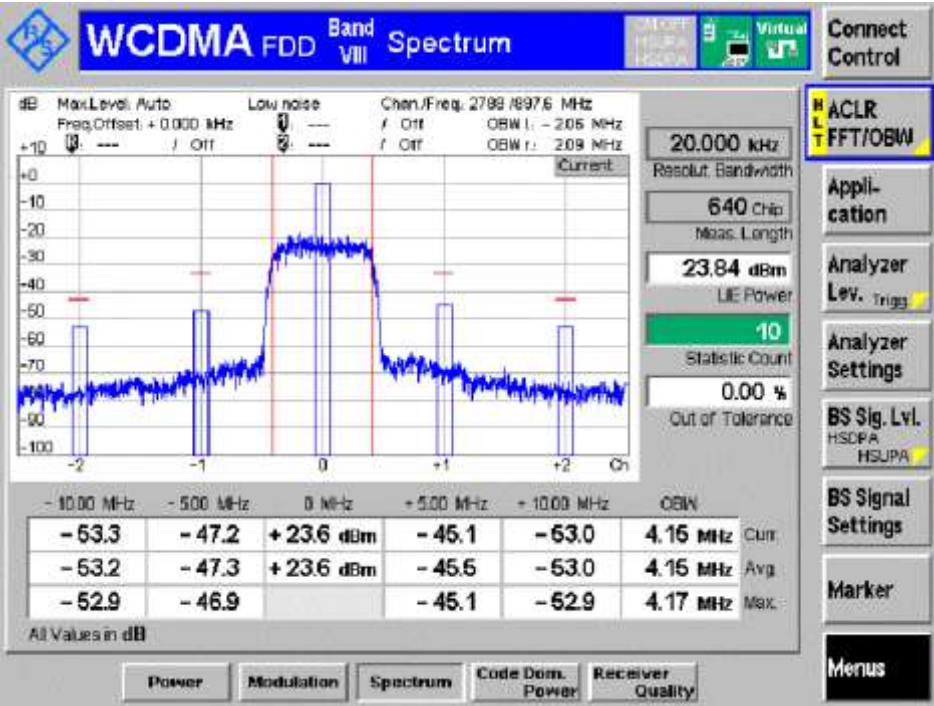
BAND VIII

TNVM

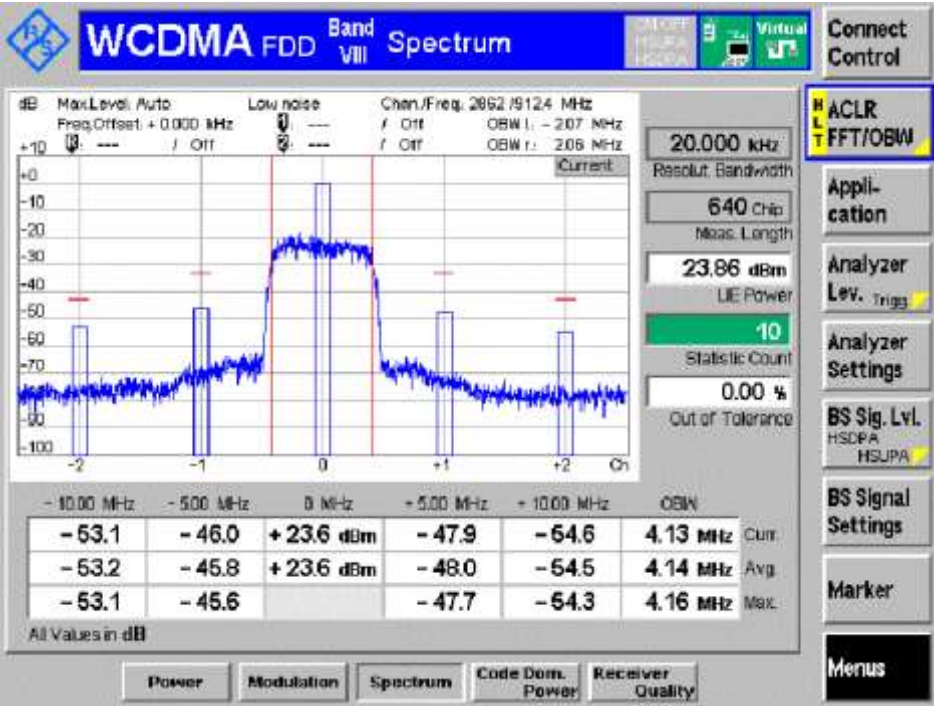
Channel LCH



Channel MCH



Channel HCH



Appendix E. Transmitter spurious emissions

| Frequency | RBW | Max. Level | Test Band=Band I | | | Result |
|-------------------------|---------|------------|----------------------|--------|--------|--------|
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 9 kHz ≤f < 150 kHz | 1 kHz | -36 | -41.72 | -44.44 | -46.39 | Pass |
| 150 kHz ≤f < 30 MHz | 10kHz | -36 | -51.24 | -50.96 | -51.14 | Pass |
| 30 MHz ≤f < 1 000 MHz | 100kHz | -36 | -60.15 | -60.21 | -59.45 | Pass |
| 1 GHz ≤f < 12.750GHz | 1 MHz | -30 | -41.89 | -41.51 | -41.83 | Pass |
| 791 MHz ≤f ≤821 MHz | 3.84MHz | -60 | -65.72 | -65.80 | -66.26 | Pass |
| 921 MHz ≤f < 925 MHz | 100 kHz | -60 | -61.82 | -62.86 | -62.54 | Pass |
| 925 MHz ≤f ≤935 MHz | 100 kHz | -67 | -76.88 | -76.92 | -76.31 | Pass |
| 935 MHz < f ≤960 MHz | 100 kHz | -79 | -86.97 | -86.91 | -86.95 | Pass |
| 1 805 MHz ≤f ≤1 880 MHz | 100 kHz | -71 | -82.91 | -82.93 | -83.17 | Pass |
| 2 110 MHz ≤f ≤2 170 MHz | 3.84MHz | -60 | -65.58 | -65.60 | -65.55 | Pass |
| 2 585 MHz ≤f ≤2 690 MHz | 3.84MHz | -60 | -64.41 | -64.34 | -64.42 | Pass |

| Frequency | RBW | Max. Level (dbm) | Test Band=Band VIII | | | Result |
|-----------------------|---------|------------------|----------------------|--------|--------|--------|
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 9 kHz ≤f < 150 kHz | 1 kHz | -36 | -41.74 | -41.37 | -42.56 | Pass |
| 150 kHz ≤f < 30 MHz | 10 kHz | -36 | -50.84 | -49.18 | -51.96 | Pass |
| 30 MHz ≤f < 1 000 MHz | 100kHz | -36 | -54.79 | -54.83 | -55.30 | Pass |
| 1 GHz ≤f < 12,75 GHz | 1 MHz | -30 | -42.02 | -41.51 | -41.88 | Pass |
| 791 MHz ≤f ≤821 MHz | 3.84MHz | -60 | -65.76 | -66.17 | -66.19 | Pass |
| 925MHz ≤f ≤935 MHz | 100 kHz | -67 | -71.31 | -71.73 | -71.80 | Pass |
| | 3.84MHz | -60 | -66.20 | -66.14 | -66.12 | Pass |

| | | | | | | |
|-------------------------|---------|-----|--------|--------|--------|------|
| 935MHz ≤f ≤960 MHz | 100KHz | -79 | -86.90 | -86.58 | -87.06 | Pass |
| | 3.84MHz | -60 | -66.17 | -66.13 | -66.24 | Pass |
| 1805MHz ≤f ≤1830 MHz | 100KHz | -71 | -83.22 | -83.24 | -83.32 | Pass |
| | 3.84MHz | -60 | -66.58 | -66.51 | -66.47 | Pass |
| 1830MHz ≤f ≤1880 MHz | 100KHz | -71 | -83.10 | -83.03 | -82.92 | Pass |
| | 3.84MHz | -60 | -66.40 | -66.21 | -66.30 | Pass |
| 2110MHz ≤f≤2170MHz | 3.84MHz | -60 | -65.64 | -65.59 | -65.49 | Pass |
| 2 585 MHz ≤f ≤2 640 MHz | 3.84MHz | -60 | -63.83 | -63.84 | -63.80 | Pass |
| 2 640 MHz ≤f ≤2 690 MHz | 3.84MHz | -60 | -64.37 | -64.33 | -64.28 | Pass |

BAND I

Channel LCH

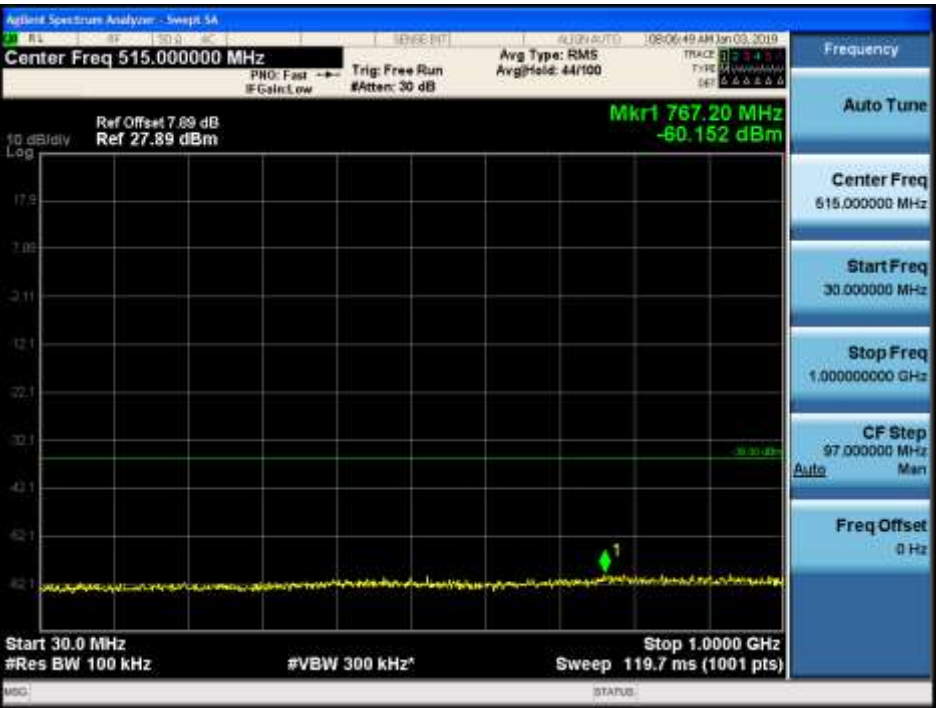
9KHZ~150KHZ



150KHZ~30MHZ



30MHZ~1GHZ



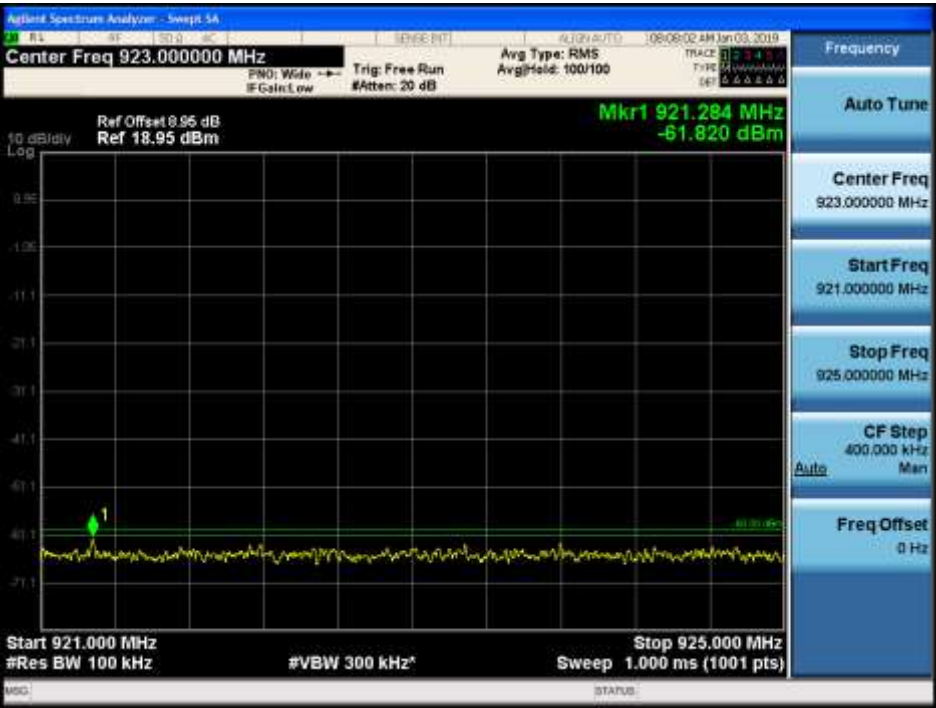
1GHZ~1.9101GHZ



1.9351GHZ~12.750GHZ



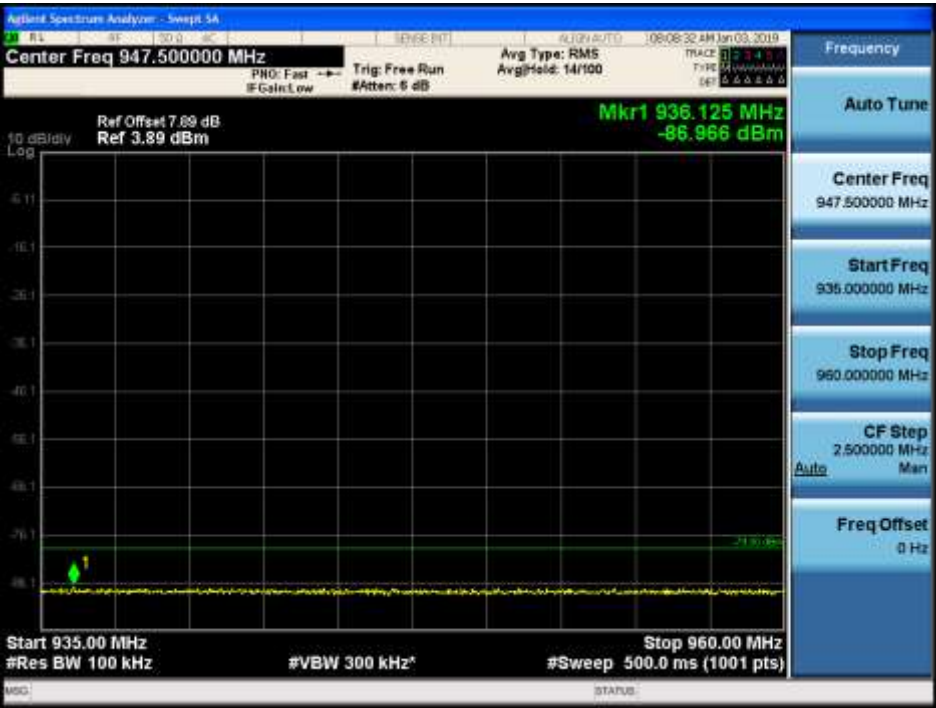
921MHz~925MHz



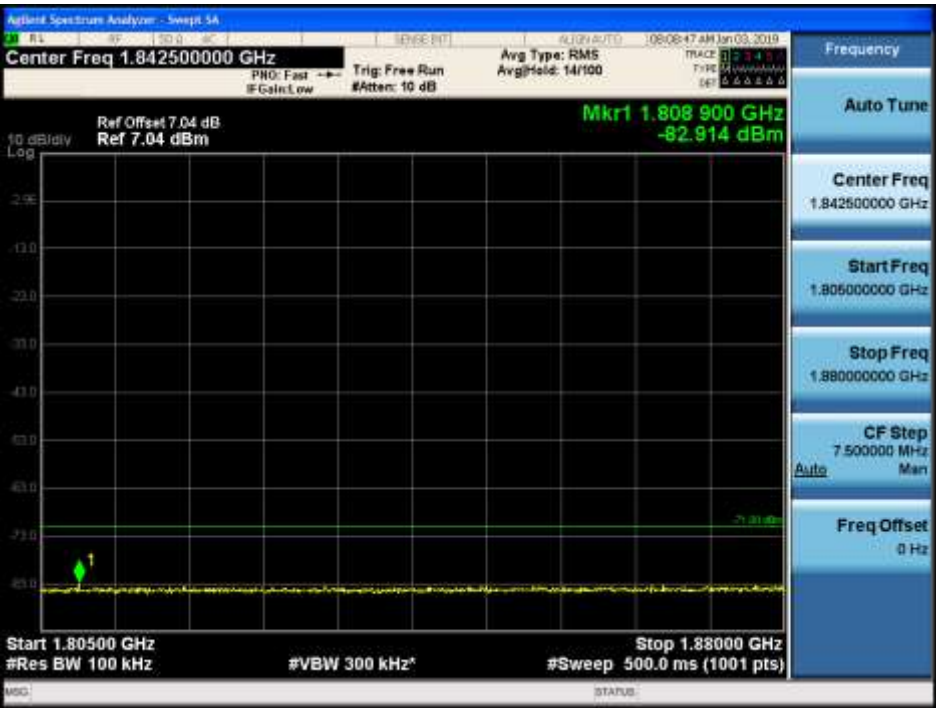
925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel MCH
9KHZ~150KHZ



150KHZ~30MHZ



30MHZ~1GHZ



1GHZ~1.9101GHZ



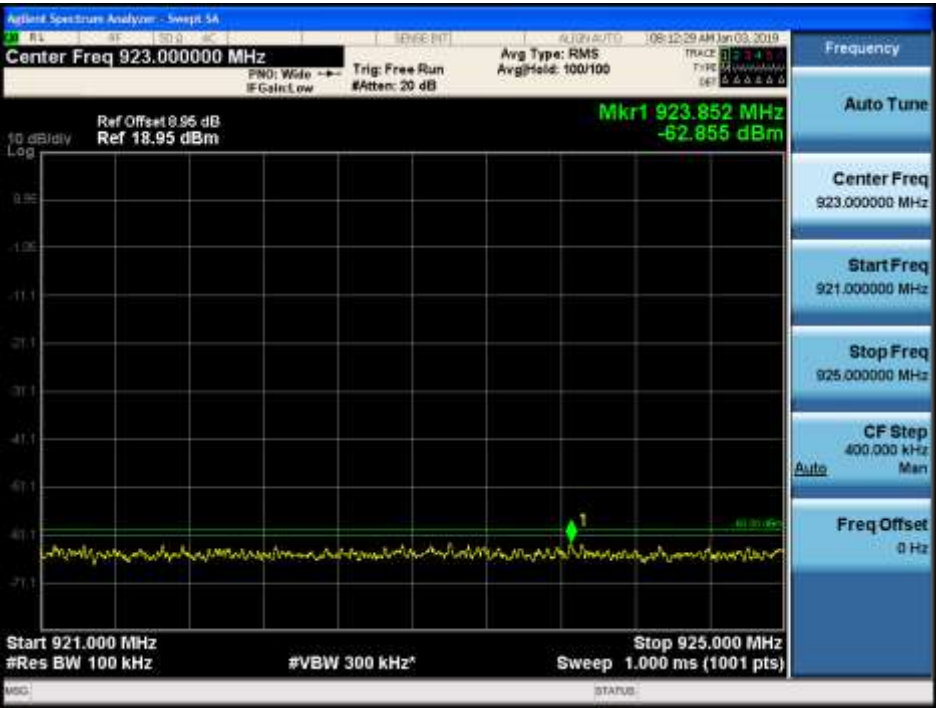
1.9351GHZ~12.750GHZ



791MHZ~821MHZ



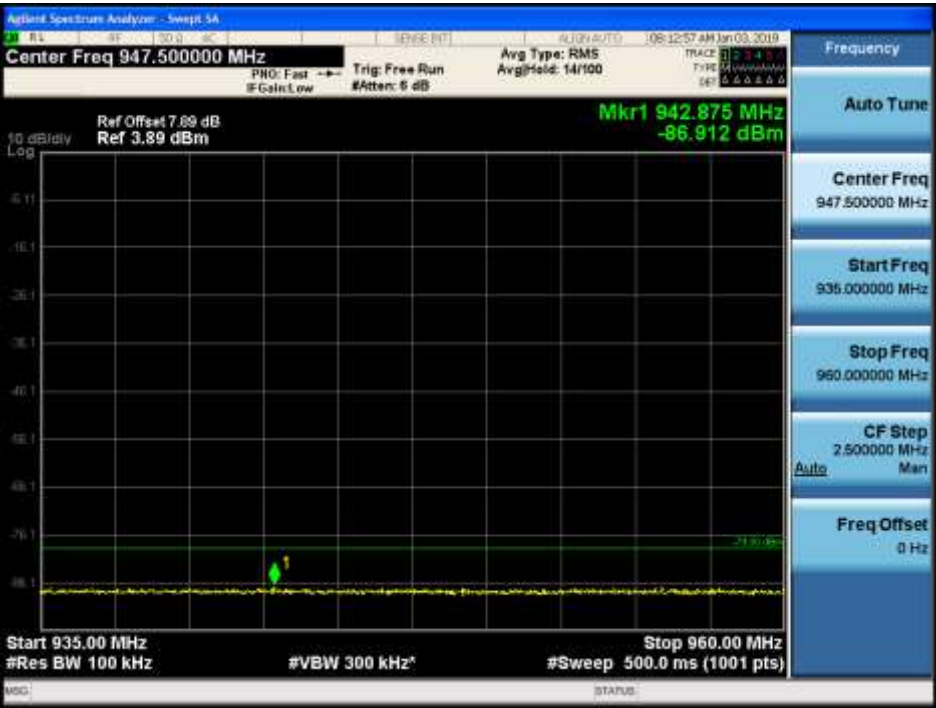
921MHz~925MHz



925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel HCH
9KHZ~150KHZ



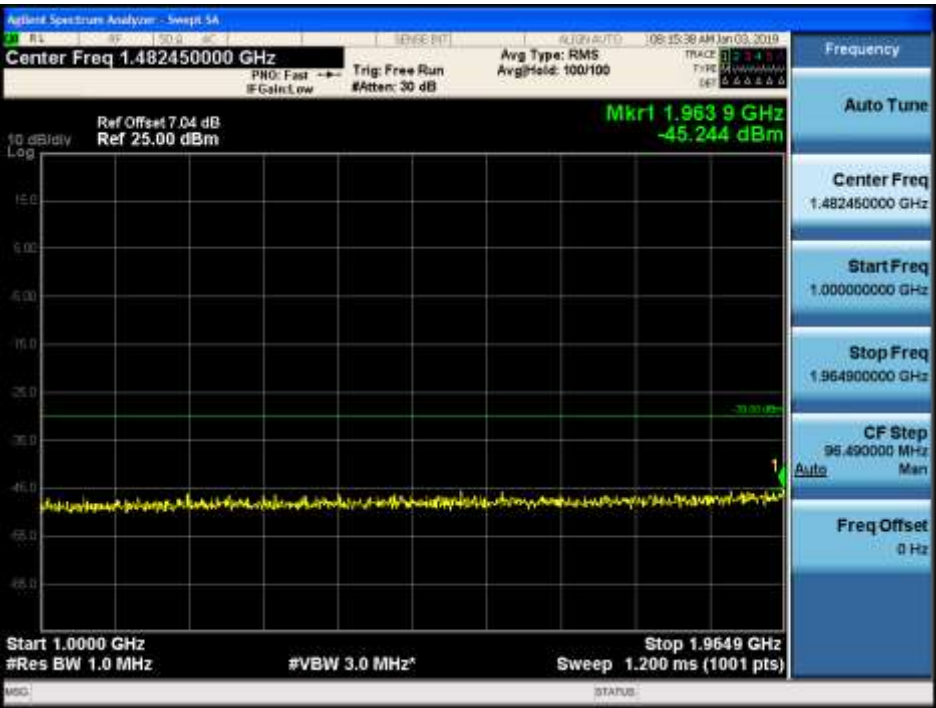
150KHZ~30MHZ



30MHZ~1GHZ



1GHZ~1.9101GHZ



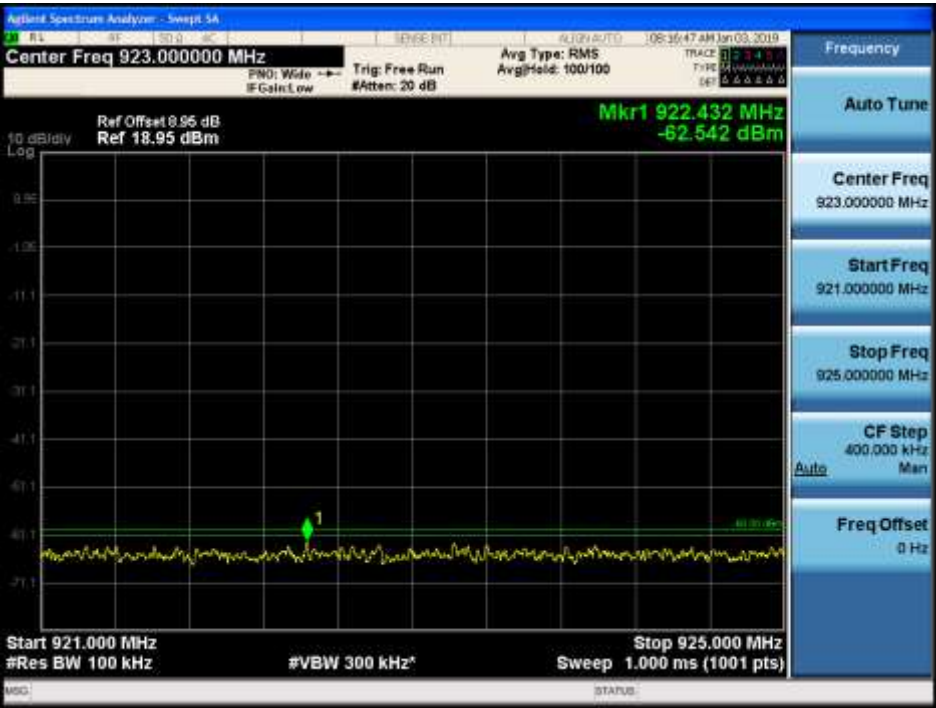
1.9351GHZ~12.750GHZ



791MHZ~821MHZ



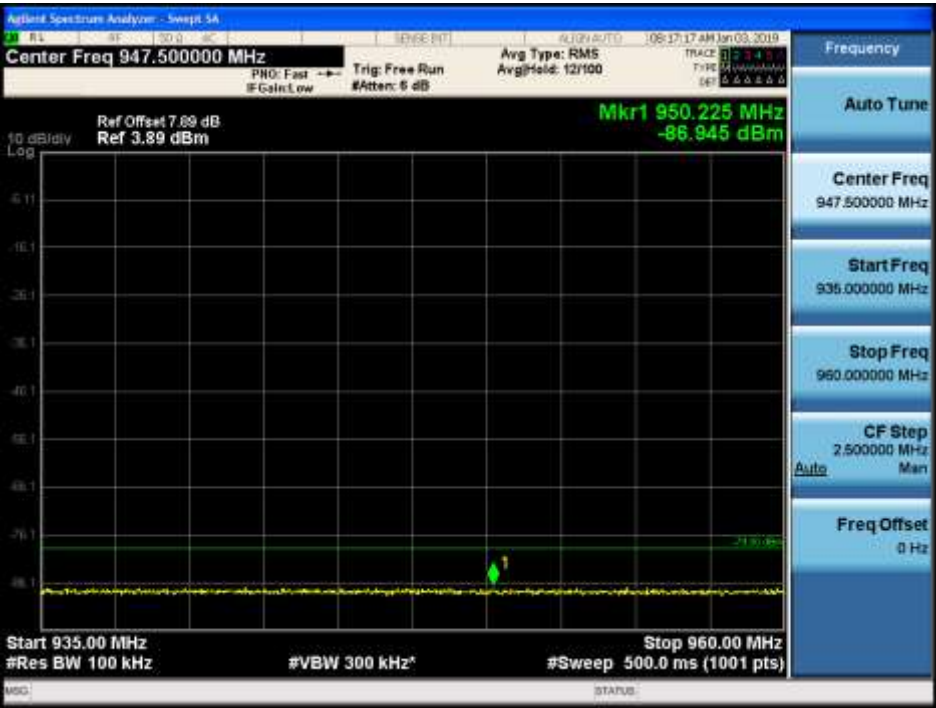
921MHz~925MHz



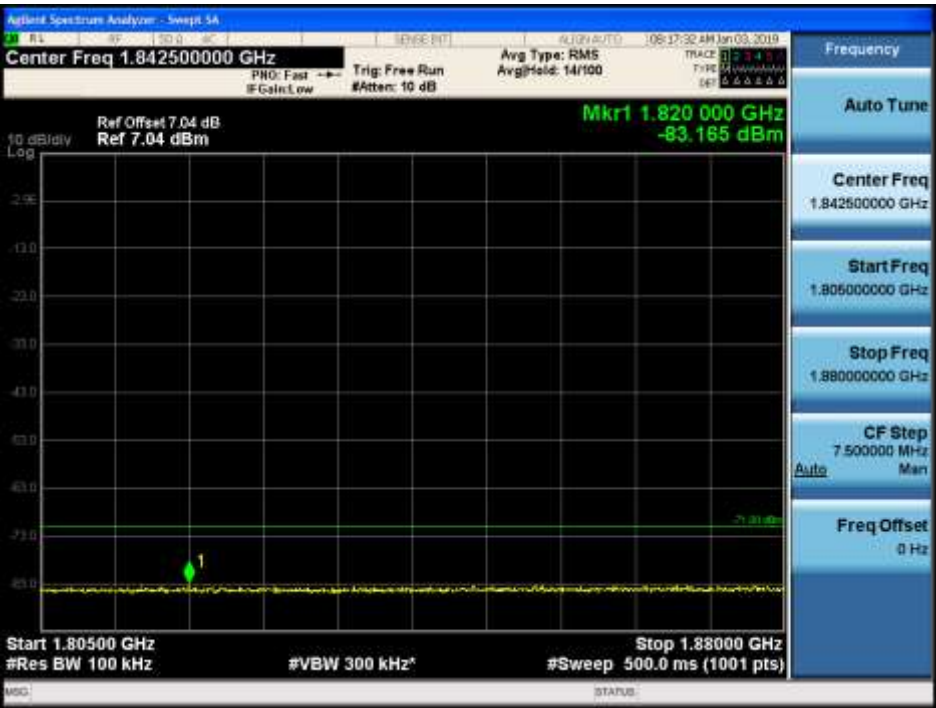
925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



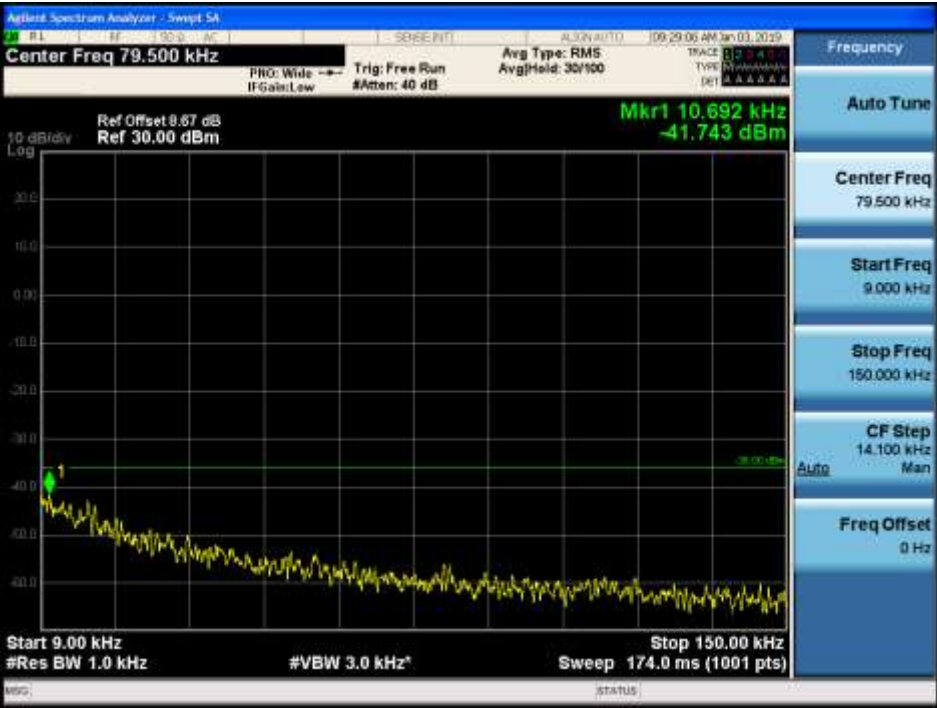
2110MHZ~2170MHZ



2585MHZ~2690MHZ



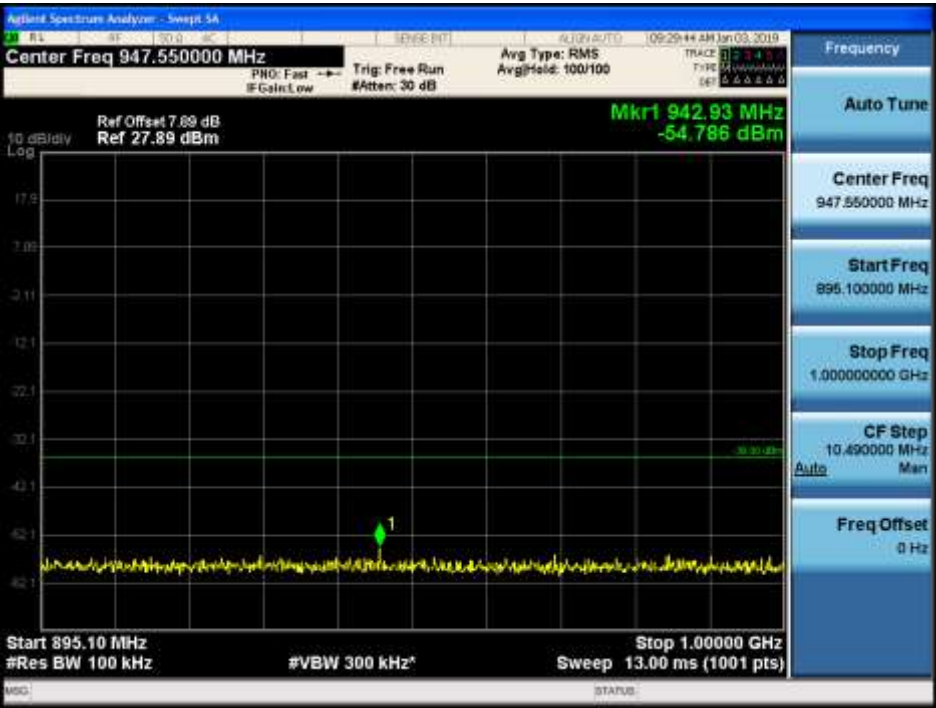
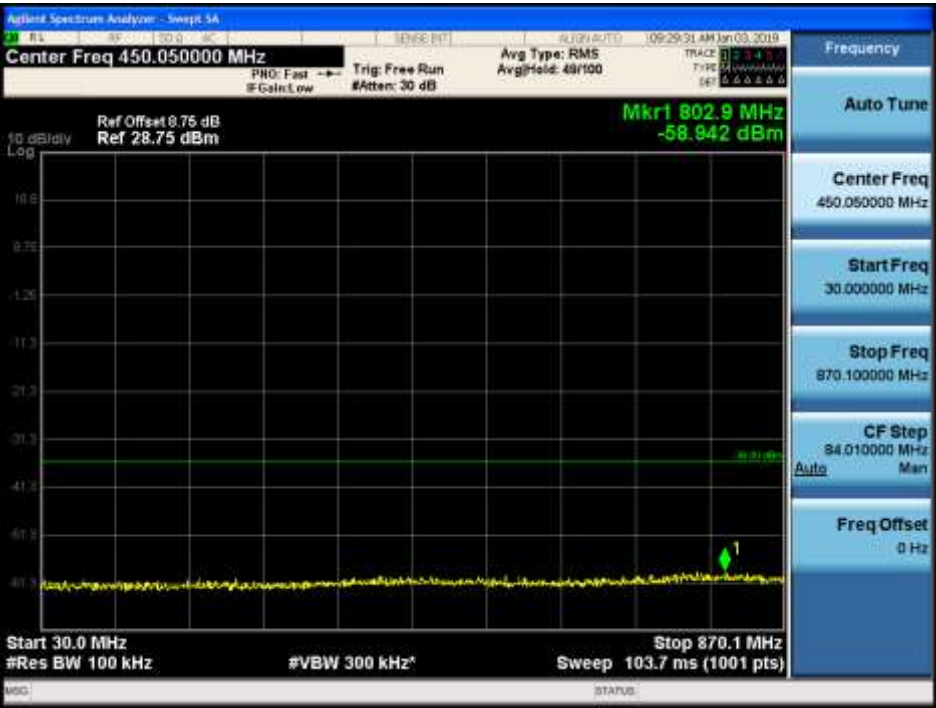
BAND VIII
Channel LCH
9KHZ~150KHZ



150KHZ~30MHZ



30MHz~1GHz



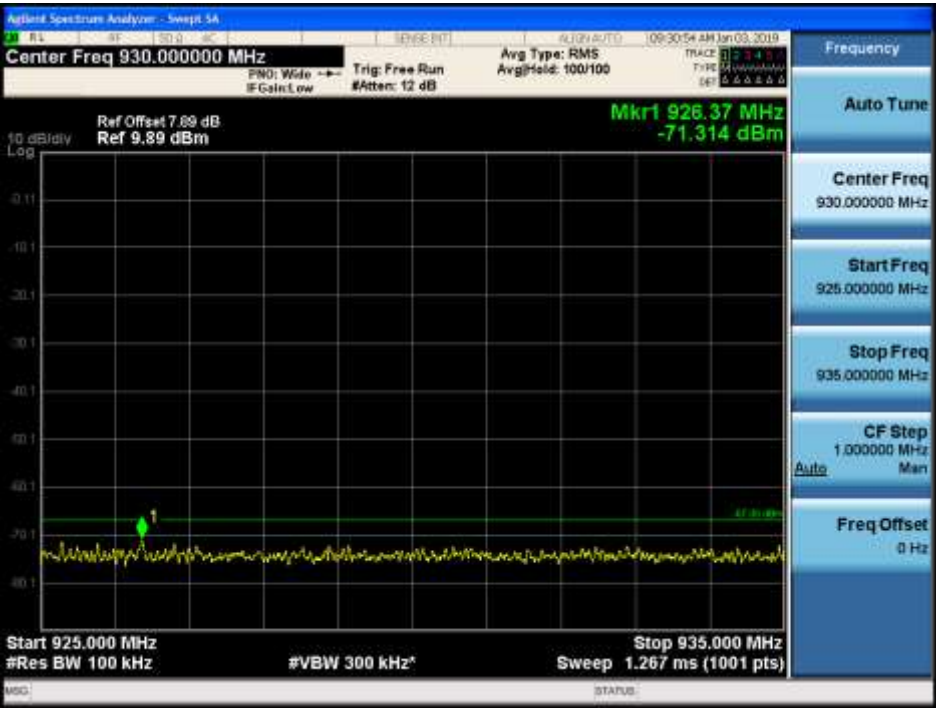
1GHZ~12.75GHZ



791MHZ~821MHZ



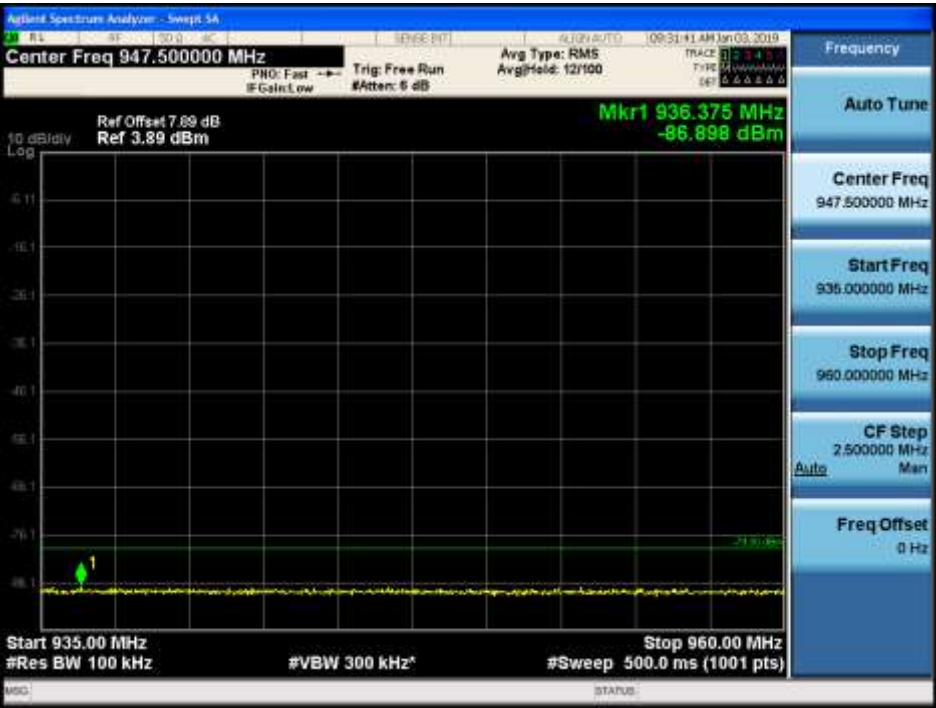
925MHz~935MHz



925MHz~935MHz



935MHz~960MHz



935MHz~960MHz



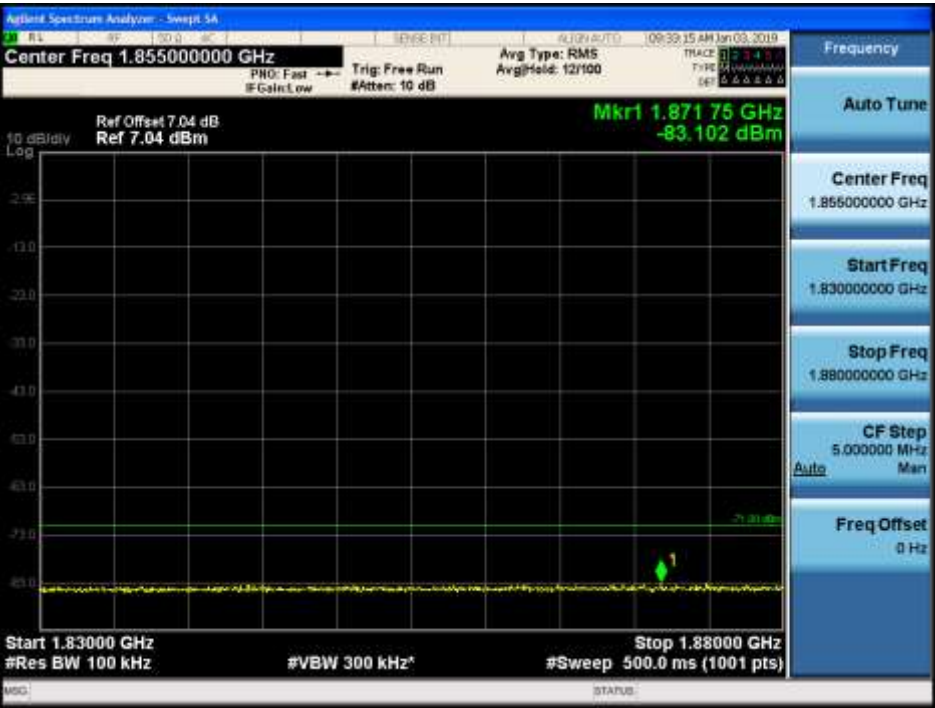
1805MHZ~1830MHZ



1805MHZ~1830MHZ



1830MHZ~1880MHZ



1830MHZ~1880MHZ



2110MHZ~2170MHZ



2585MHZ~2640MHZ



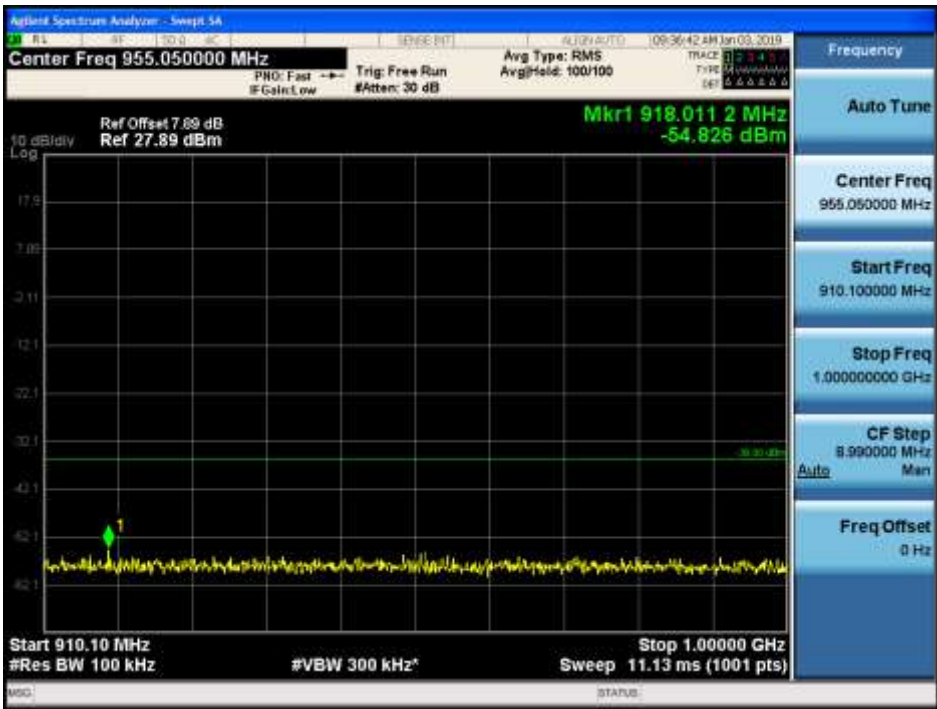
2640MHZ~2690MHZ

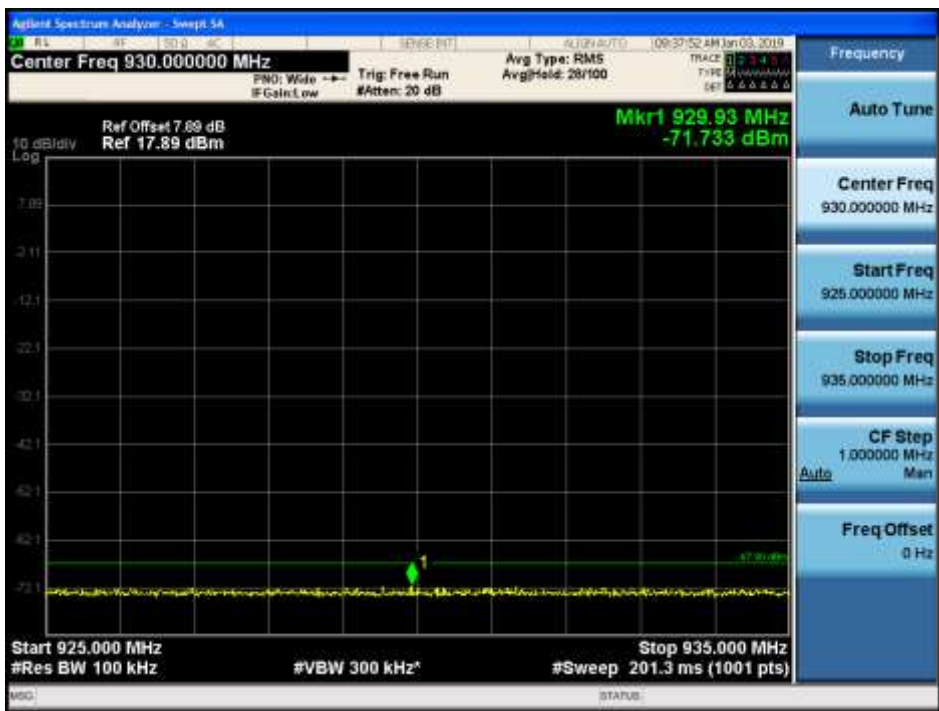


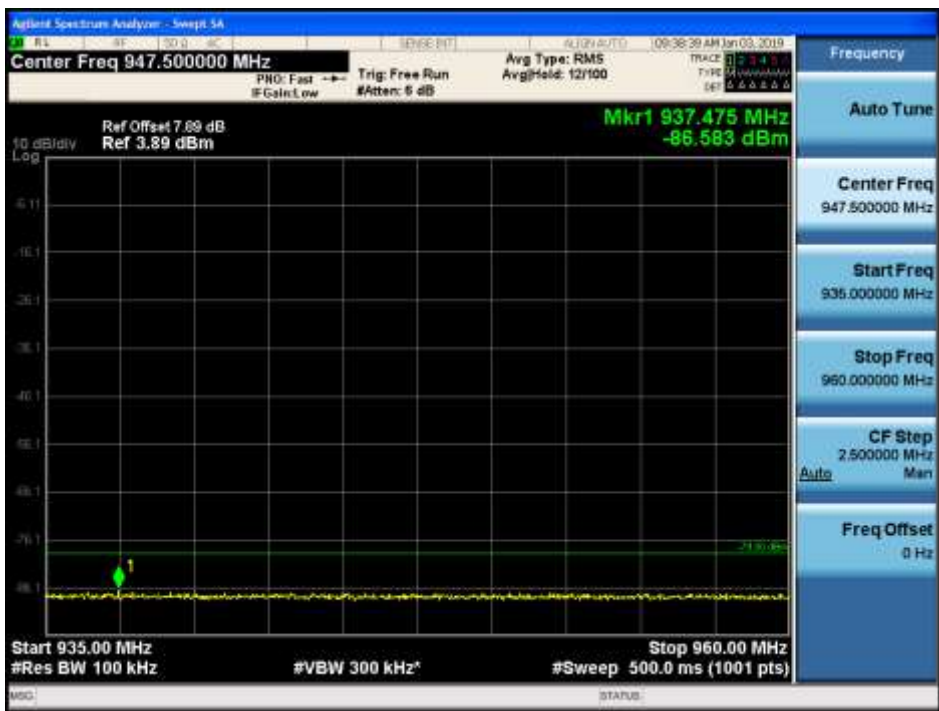
Channel MCH

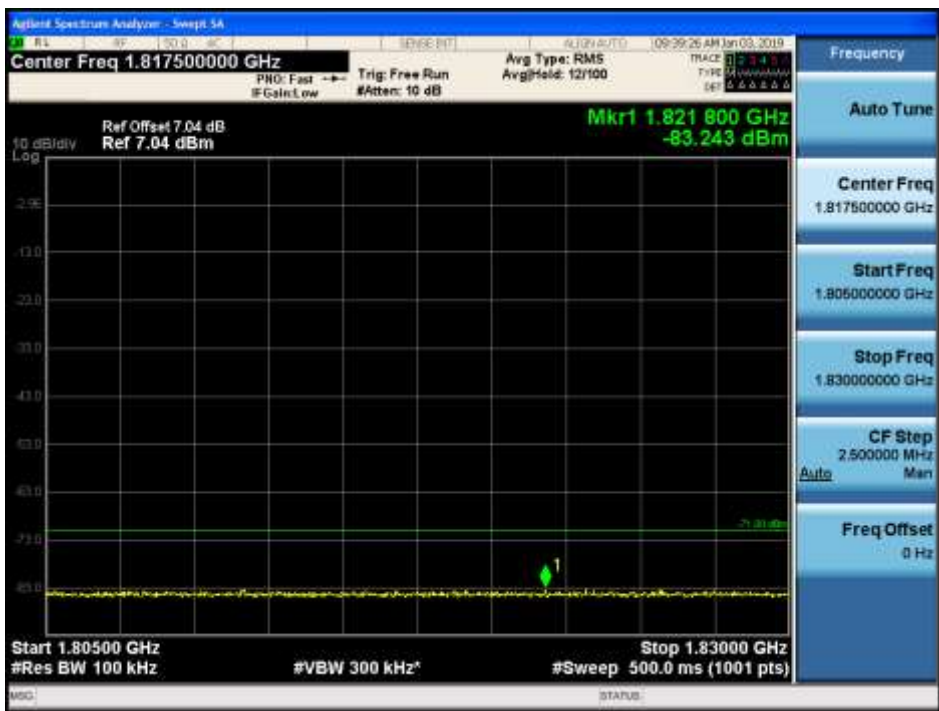


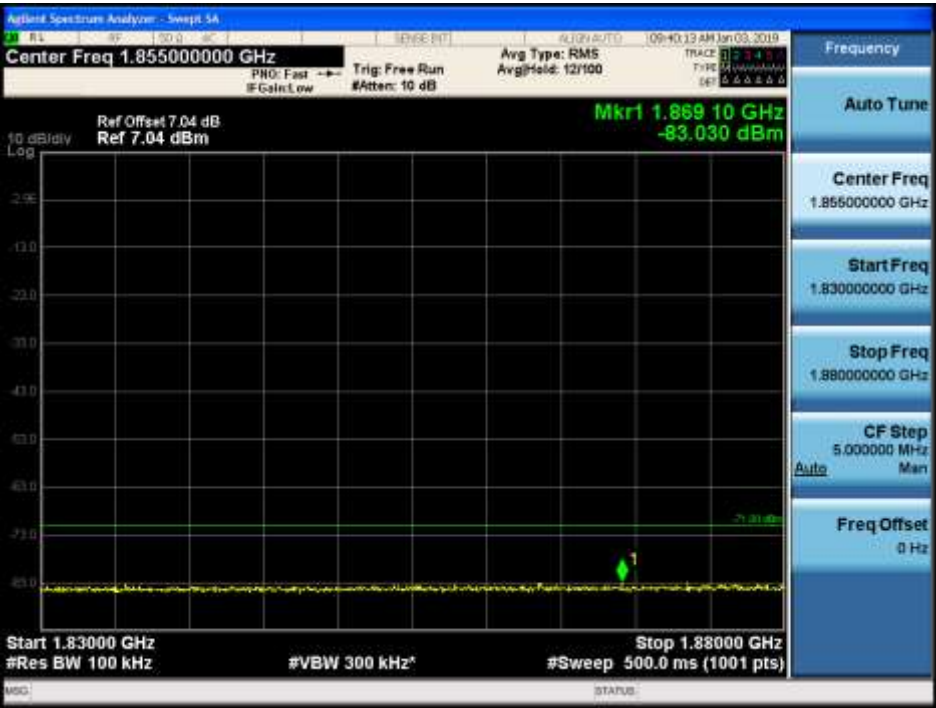








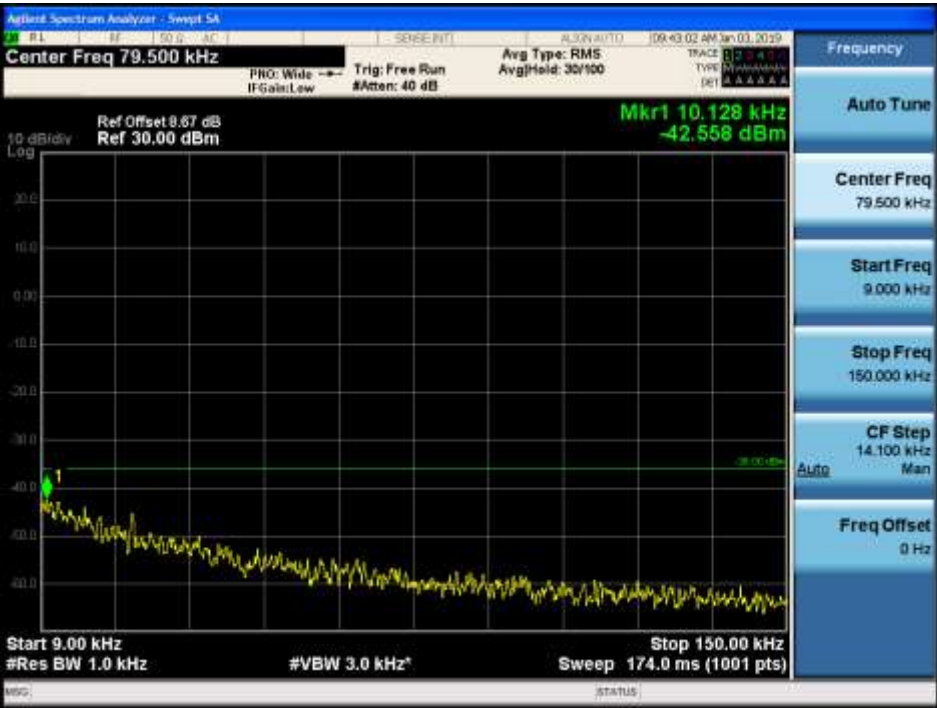


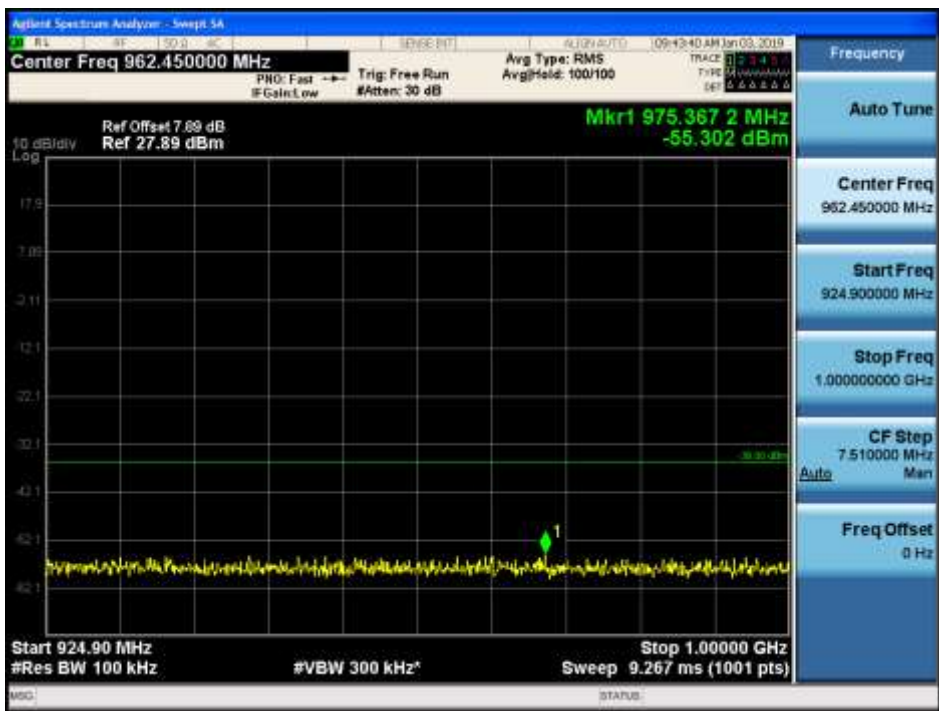




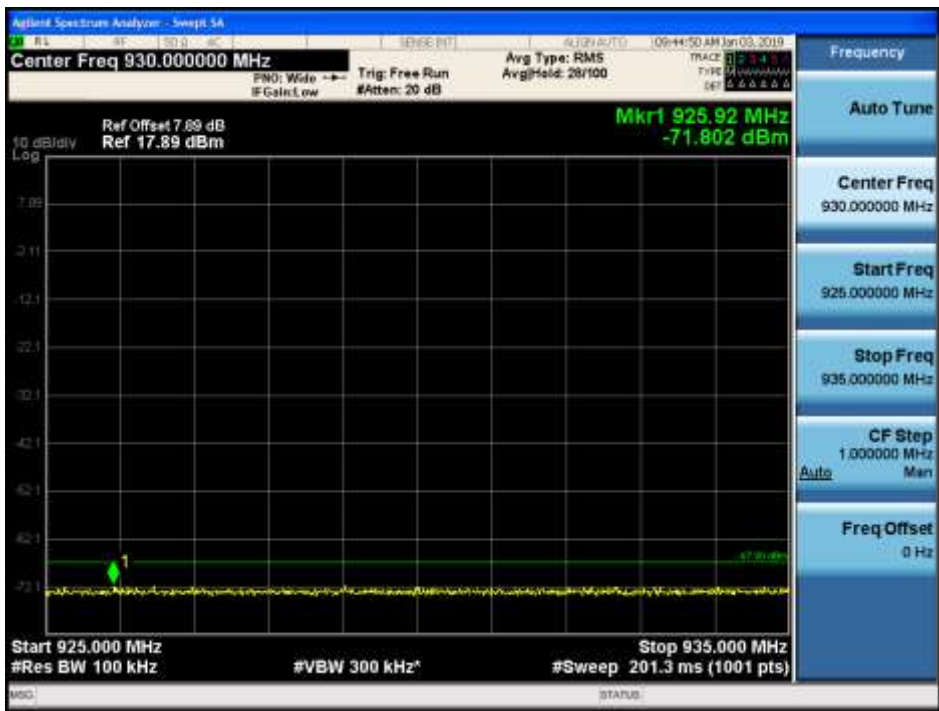


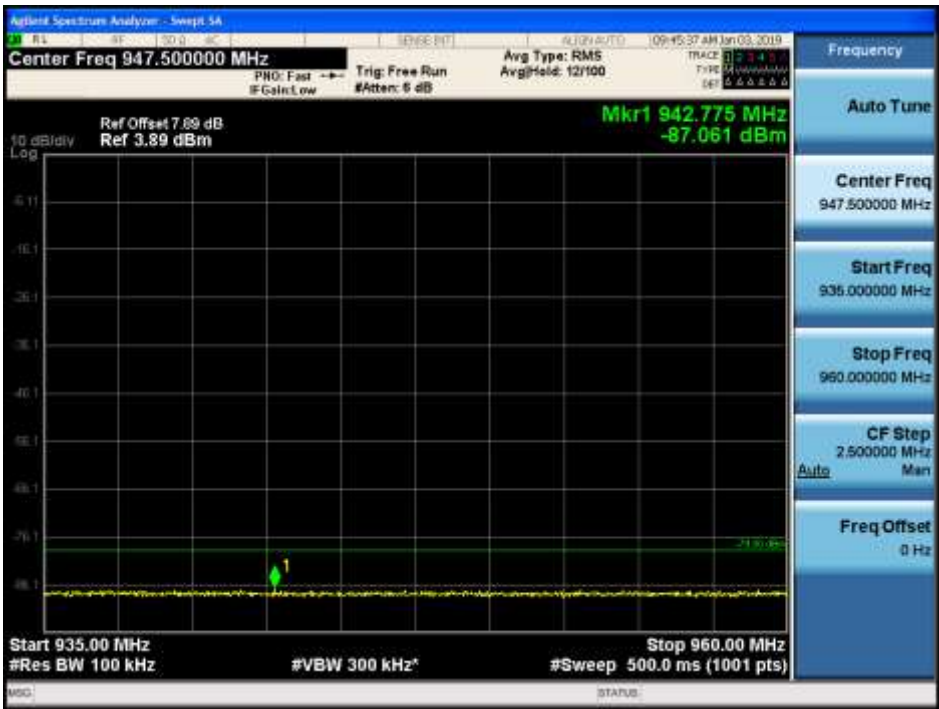
Channel HCH

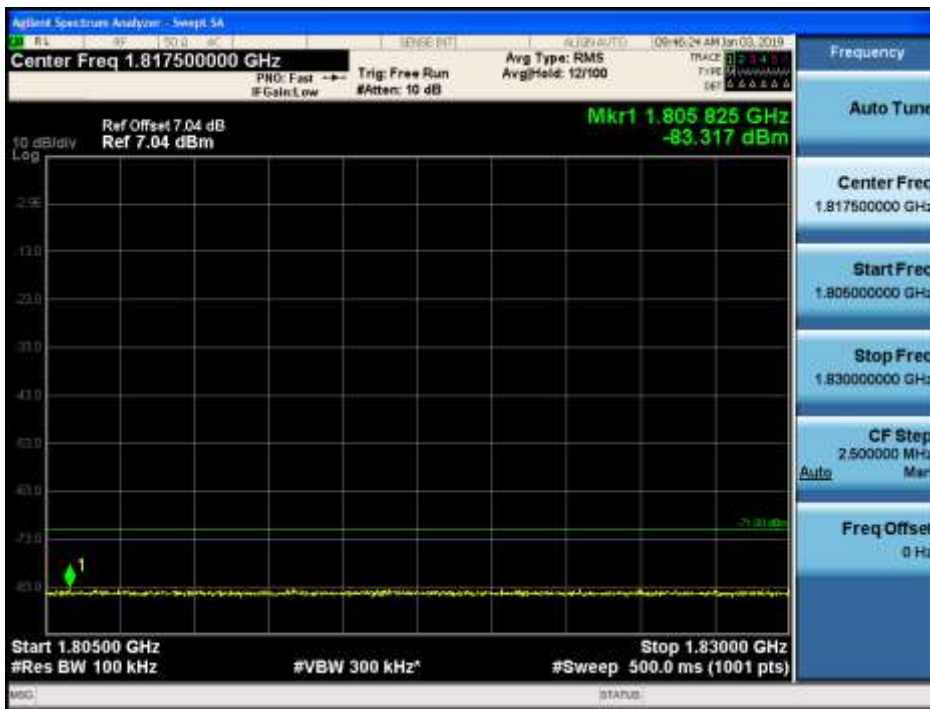


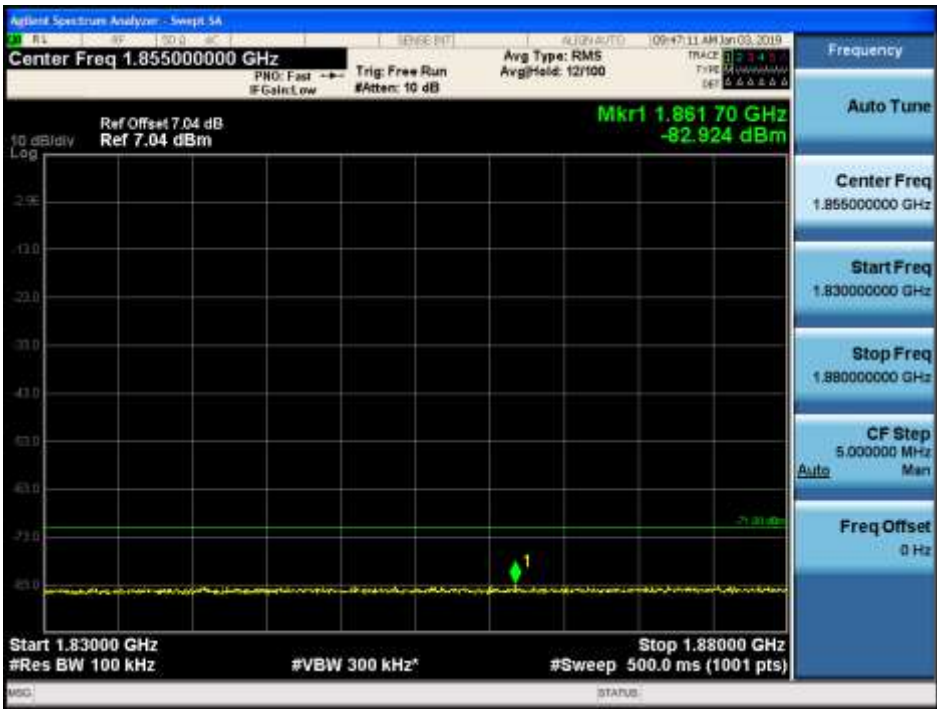
















Appendix F. Transmitter maximum output power with HS-DPCCH

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Sub-test | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|----------|-----------------------|-----------------|--------|
| Band I | TNVN | LCH | 1 | 23.11 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.17 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.07 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 22.06 | 23.5(+2.2/-3.7) | Pass |
| | | MCH | 1 | 23.24 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.14 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.38 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 22.27 | 23.5(+2.2/-3.7) | Pass |
| | | HCH | 1 | 23.22 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.26 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.27 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 22.17 | 23.5(+2.2/-3.7) | Pass |
| Band VIII | TNVN | LCH | 1 | 23.04 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.21 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.15 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 22.06 | 23.5(+2.2/-3.7) | Pass |
| | | MCH | 1 | 22.84 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.04 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.02 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 21.99 | 23.5(+2.2/-3.7) | Pass |
| | | HCH | 1 | 22.99 | 24(+1.7/-3.7) | Pass |
| | | | 2 | 22.27 | 24(+1.7/-3.7) | Pass |
| | | | 3 | 22.31 | 23.5(+2.2/-3.7) | Pass |
| | | | 4 | 22.24 | 23.5(+2.2/-3.7) | Pass |

Appendix G. Transmitter spectrum emission mask with HS-DPCCH

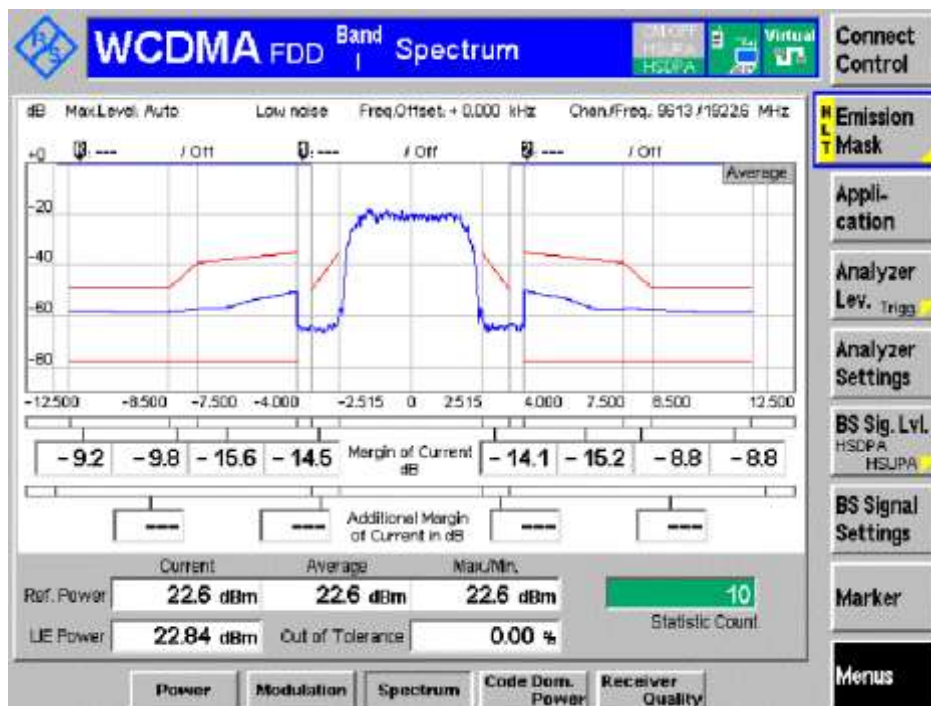
| Operating Band | Test Conditions | Sub-test | Test Channel | | |
|----------------|-----------------|----------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band I | TNVN | 1 | PASS | PASS | PASS |
| | | 2 | PASS | PASS | PASS |
| | | 3 | PASS | PASS | PASS |
| | | 4 | PASS | PASS | PASS |

| Operating Band | Test Conditions | Sub-test | Test Channel | | |
|----------------|-----------------|----------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band VIII | TNVN | 1 | PASS | PASS | PASS |
| | | 2 | PASS | PASS | PASS |
| | | 3 | PASS | PASS | PASS |
| | | 4 | PASS | PASS | PASS |

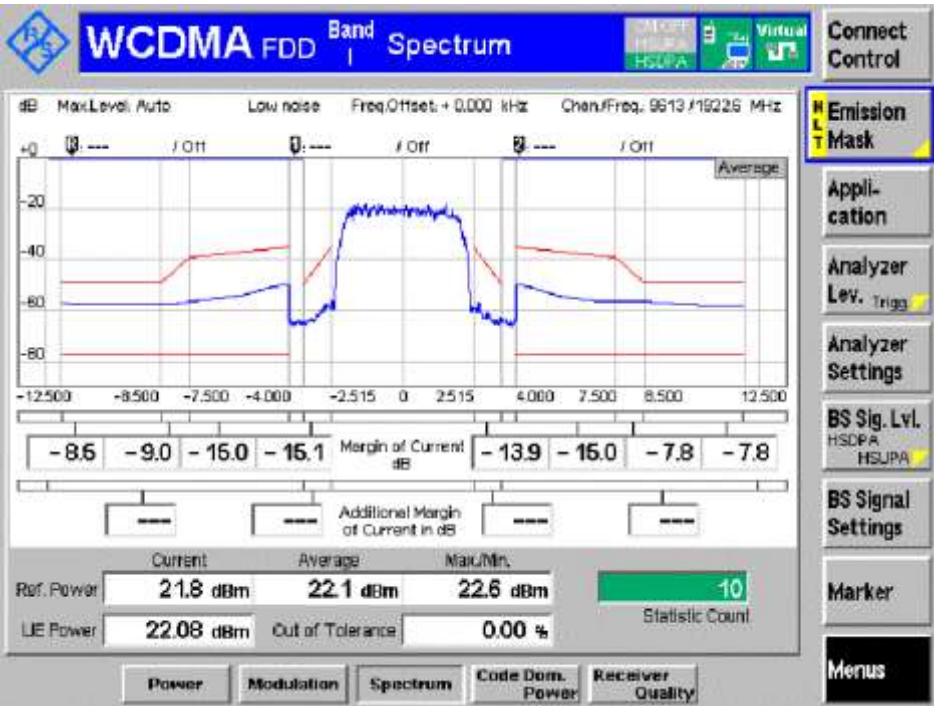
BAND I

Channel LCH

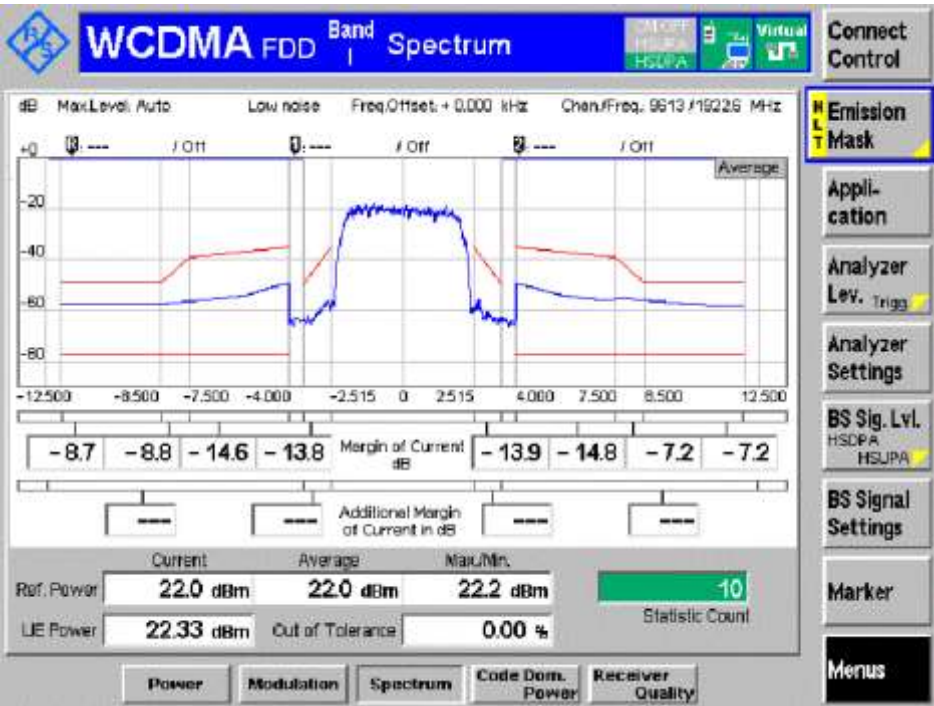
Sub-test 1



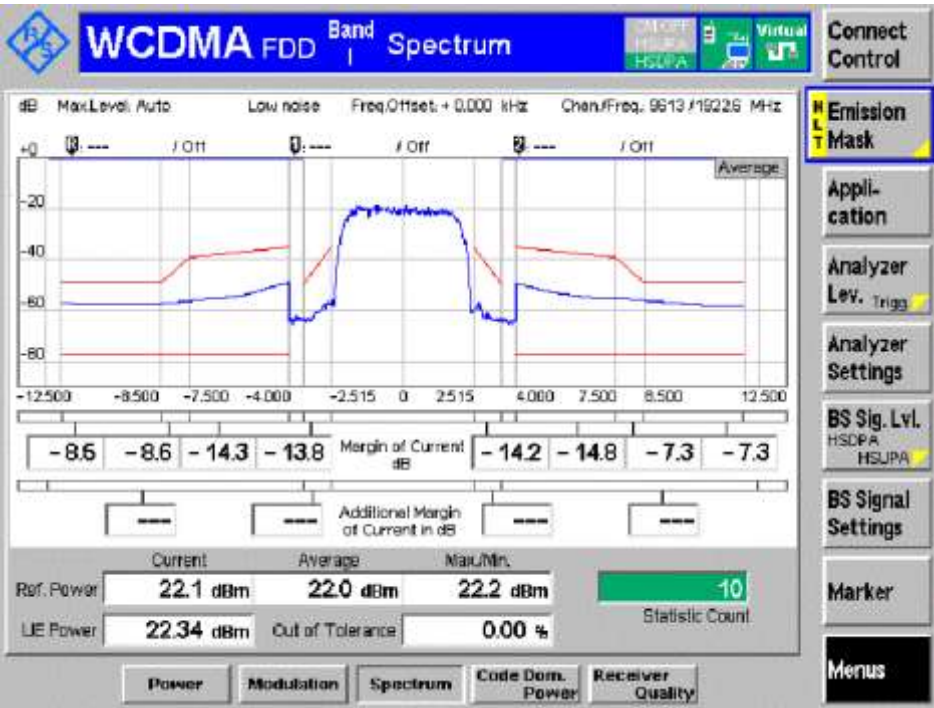
Sub-test 2



Sub-test 3

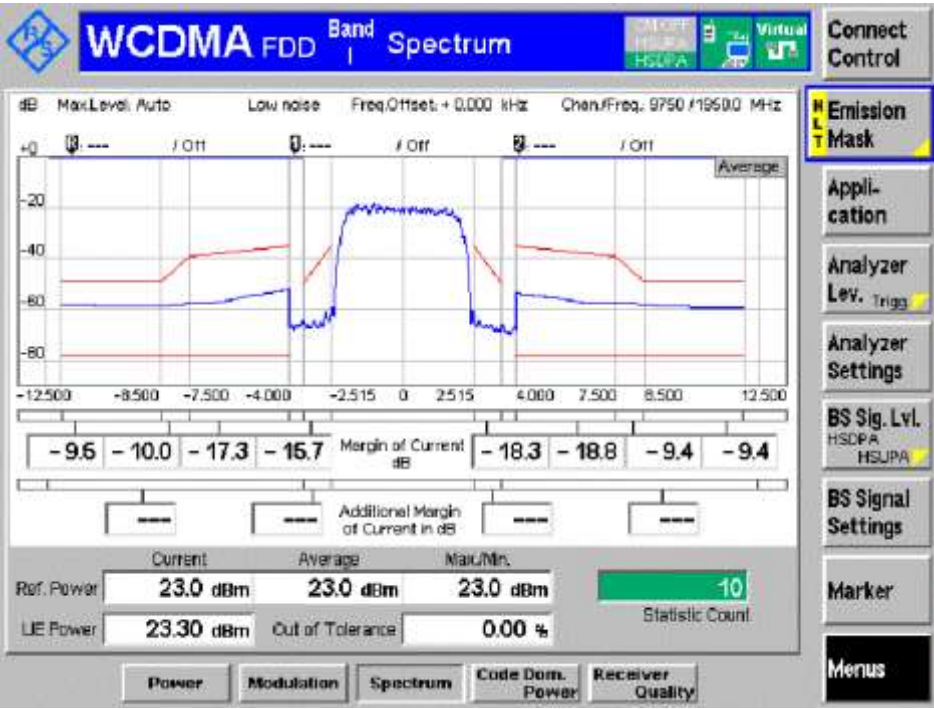


Sub-test 4

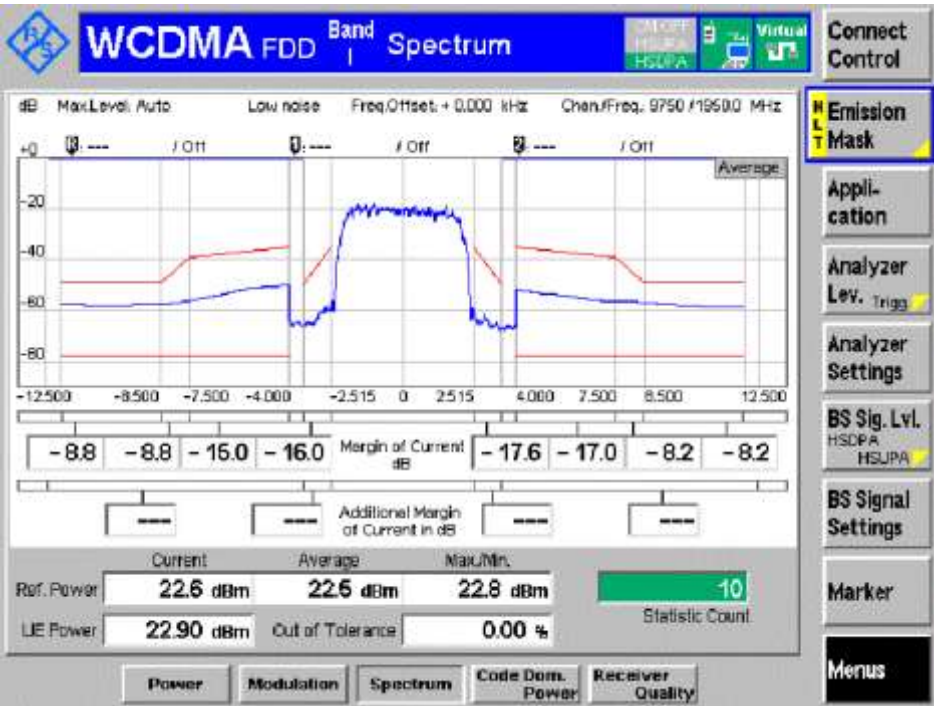


Channel MCH

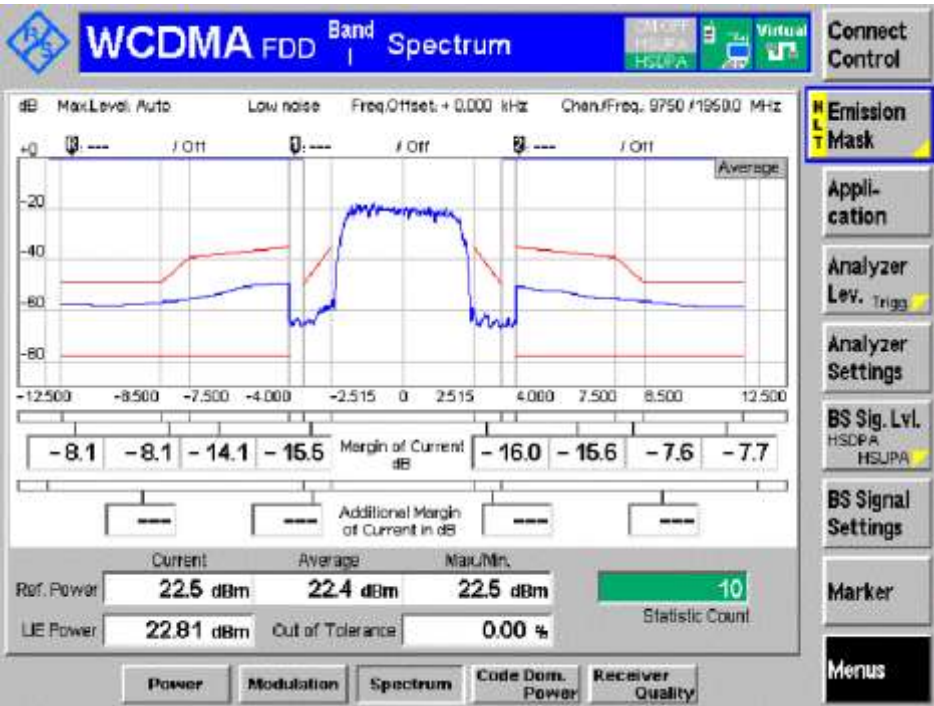
Sub-test 1



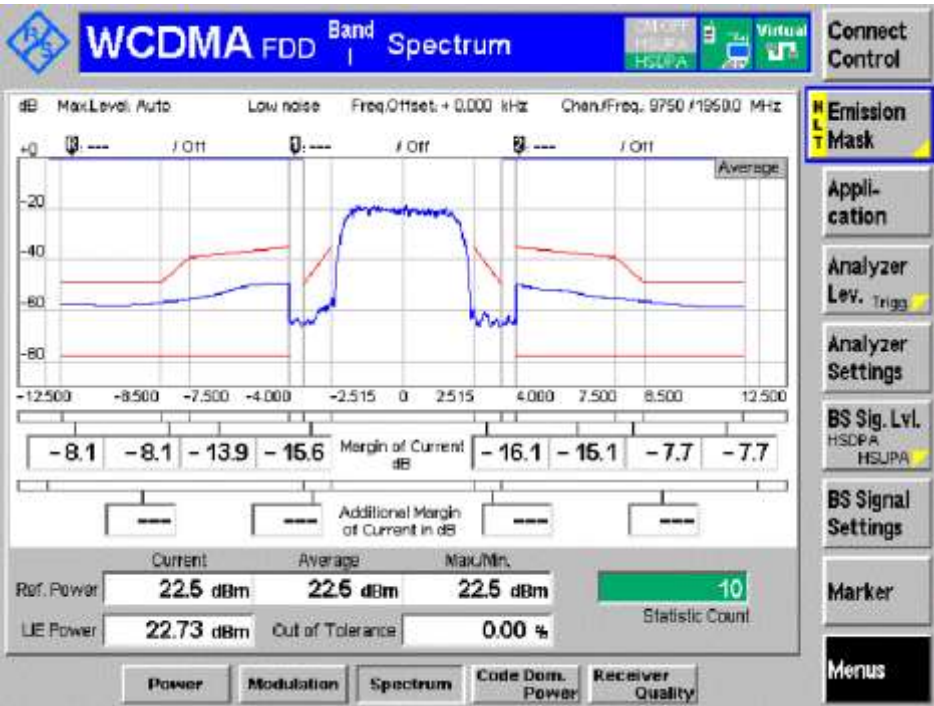
Sub-test 2



Sub-test 3

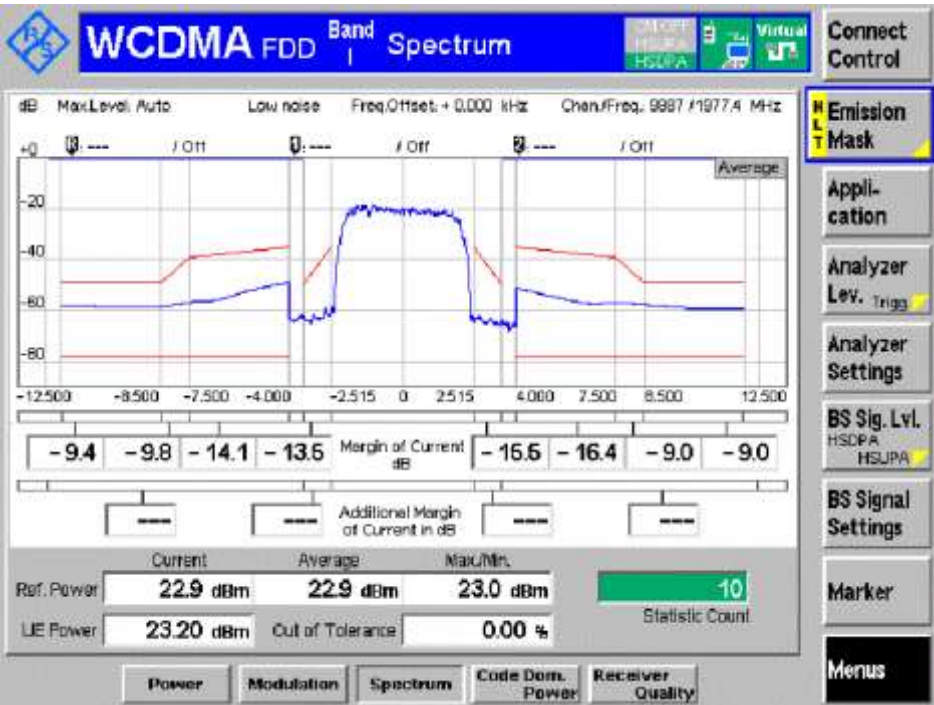


Sub-test 4

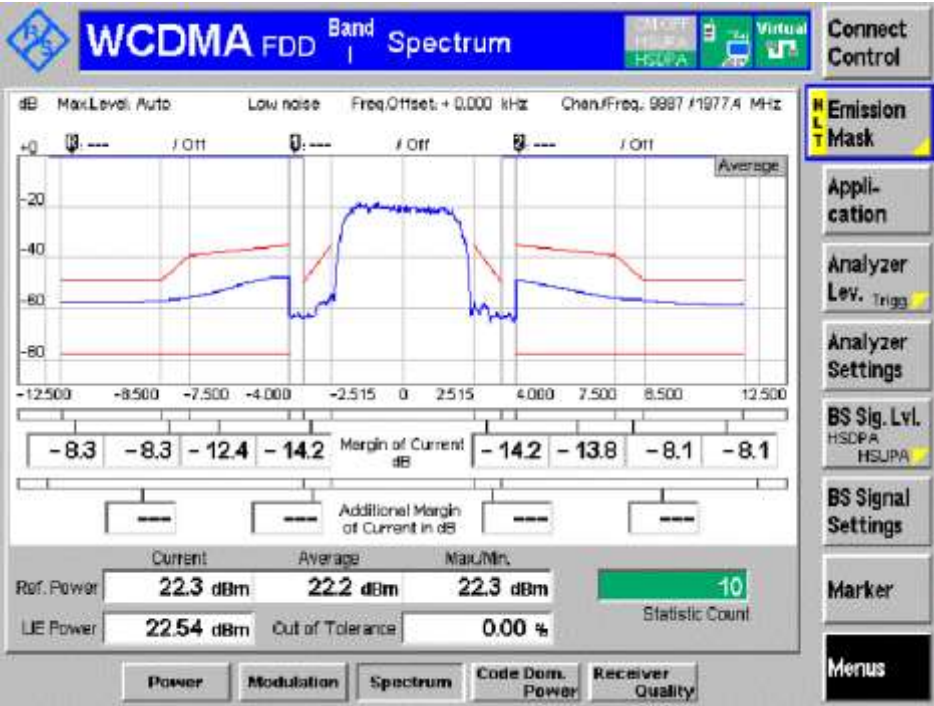


Channel HCH

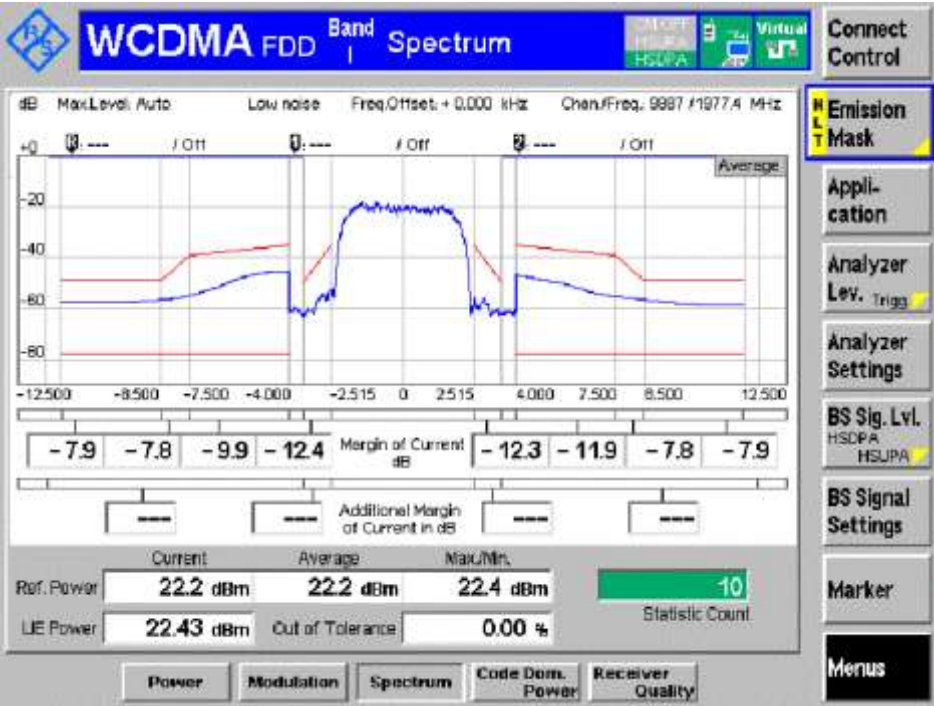
Sub-test 1



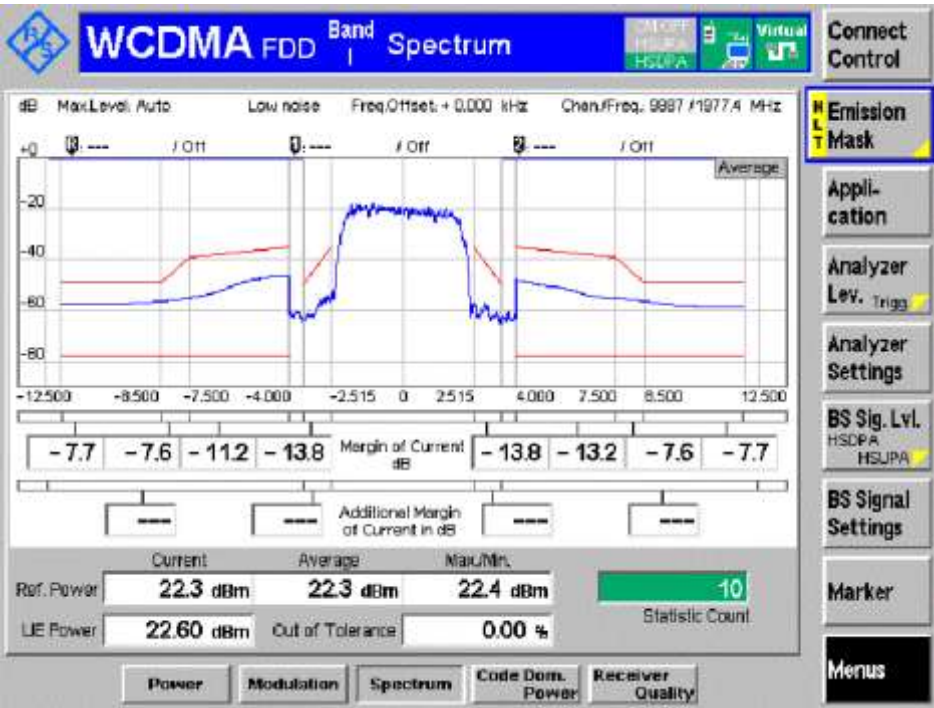
Sub-test 2



Sub-test 3



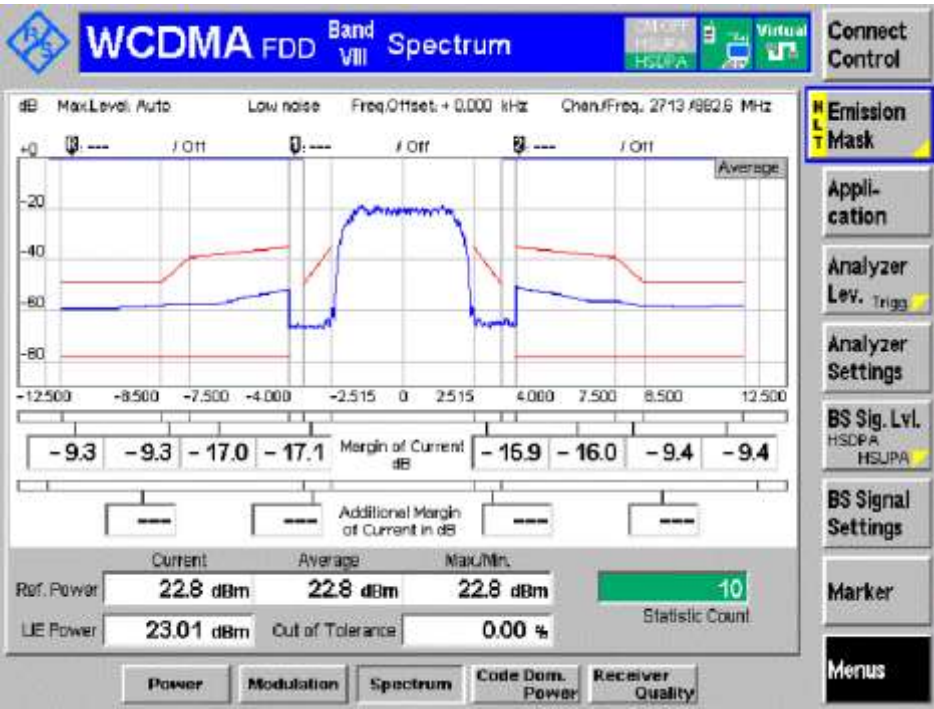
Sub-test 4



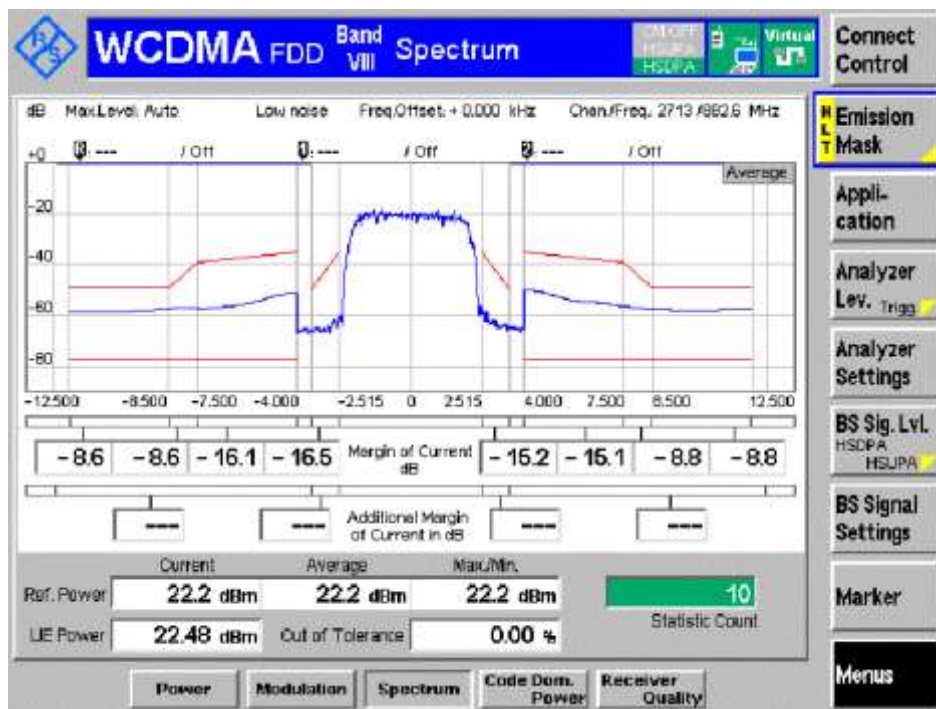
BAND VIII

Channel LCH

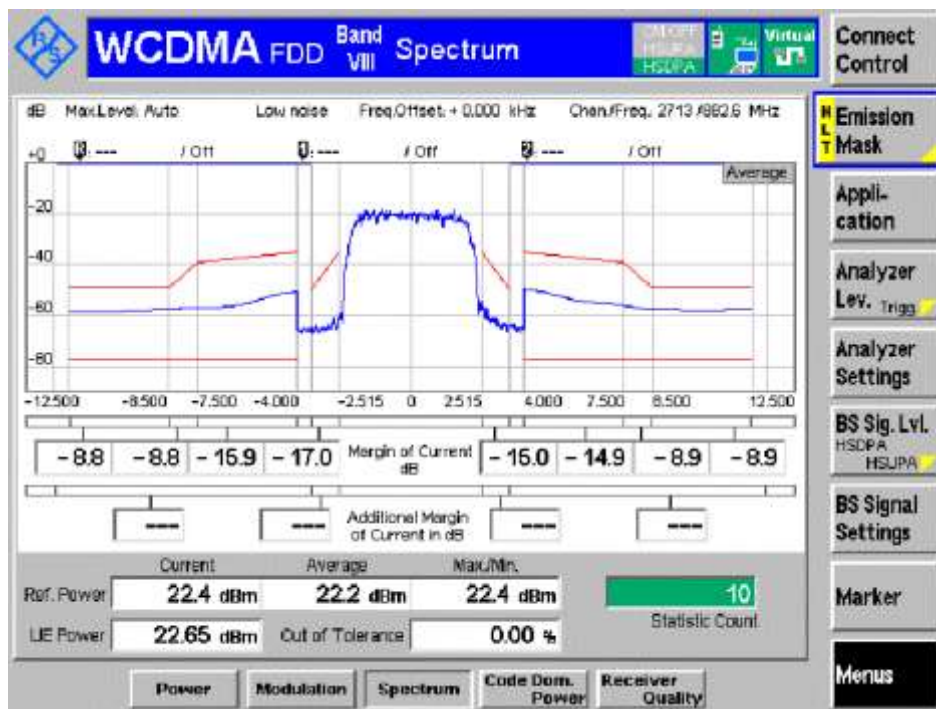
Sub-test 1



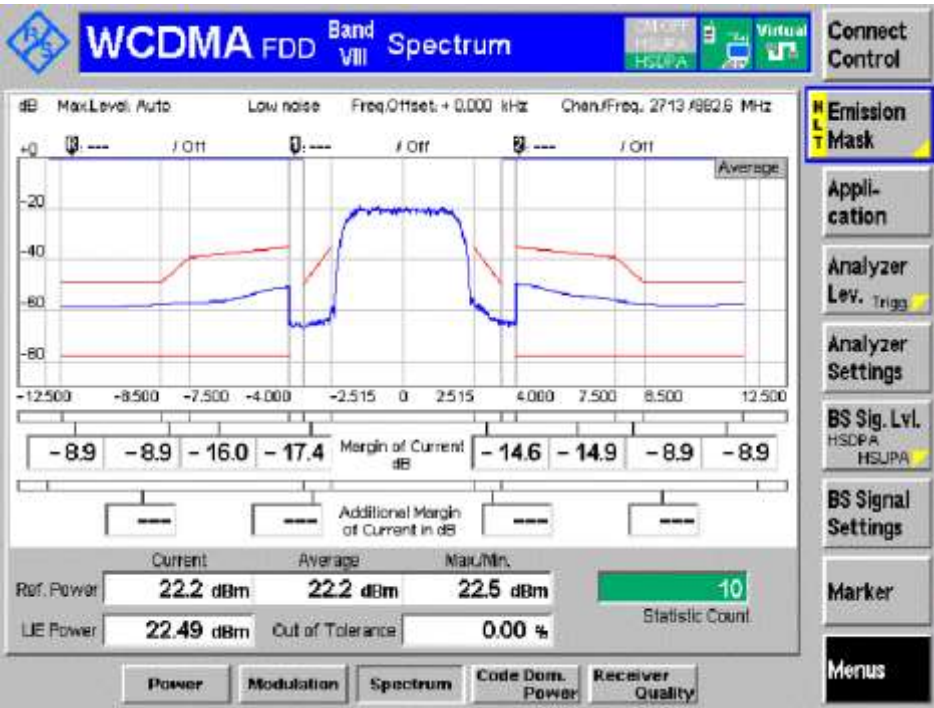
Sub-test 2



Sub-test 3

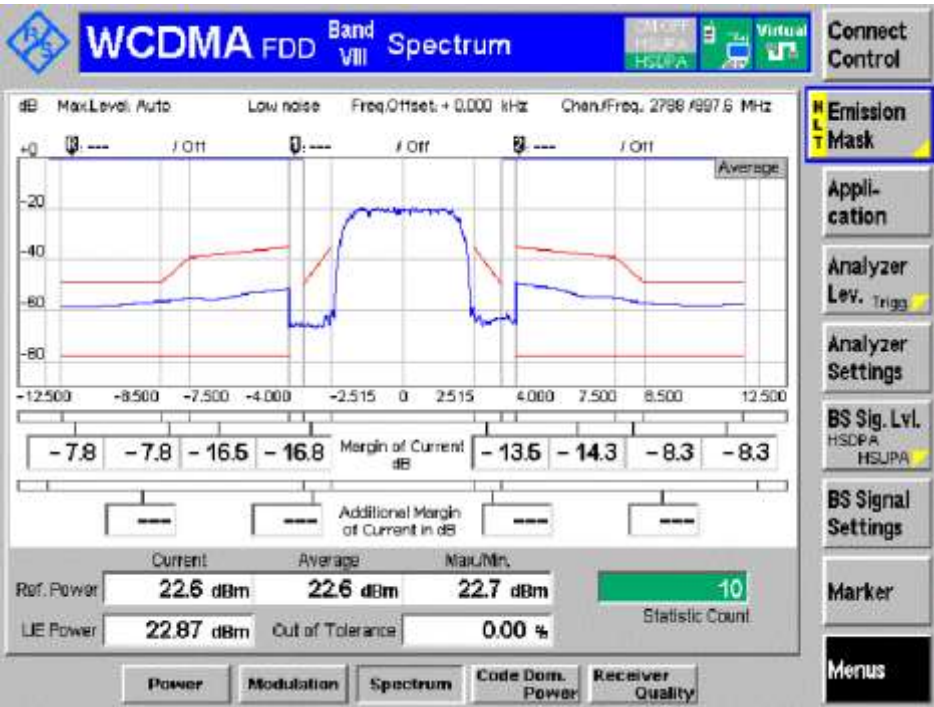


Sub-test 4

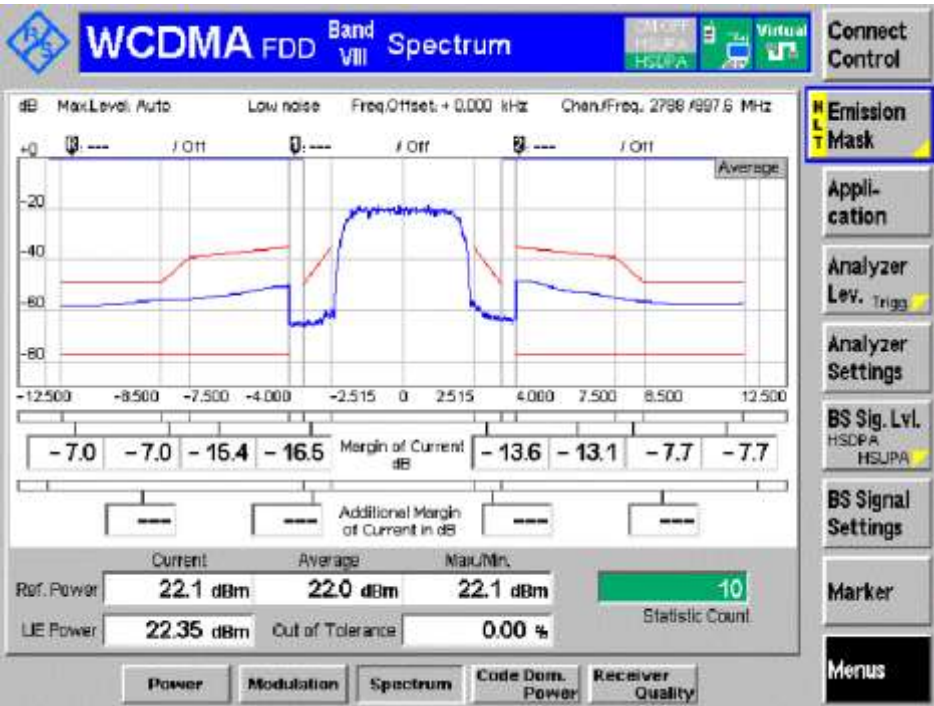


Channel MCH

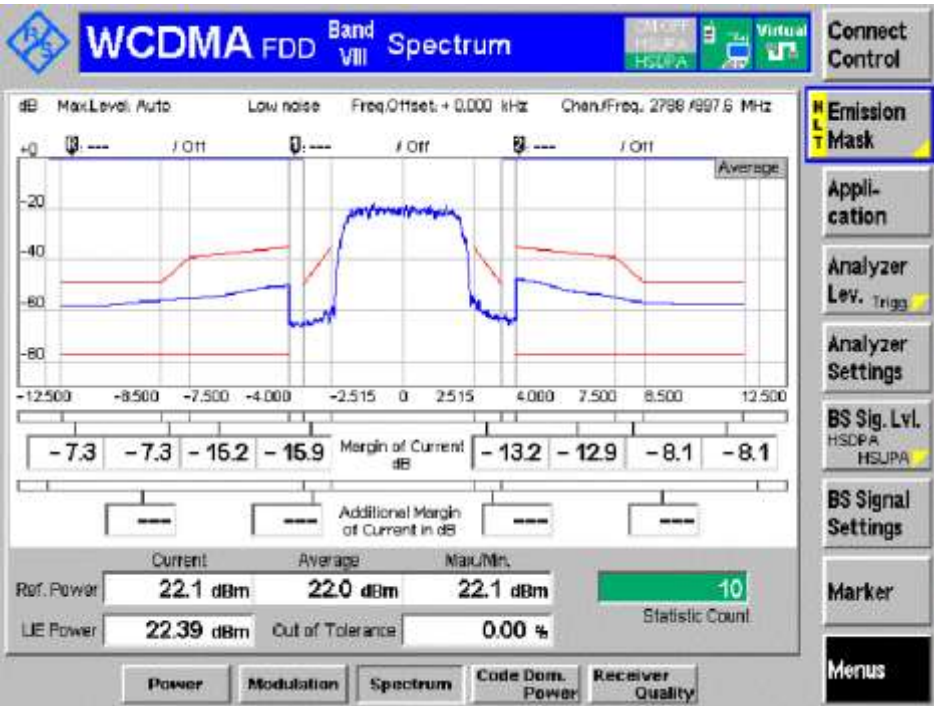
Sub-test 1



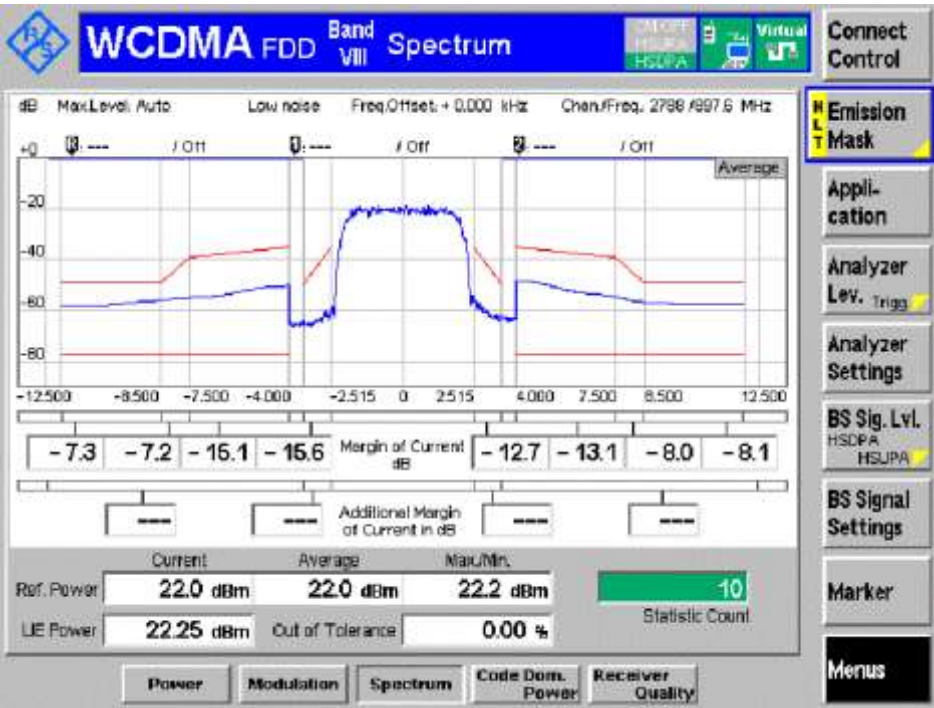
Sub-test 2



Sub-test 3

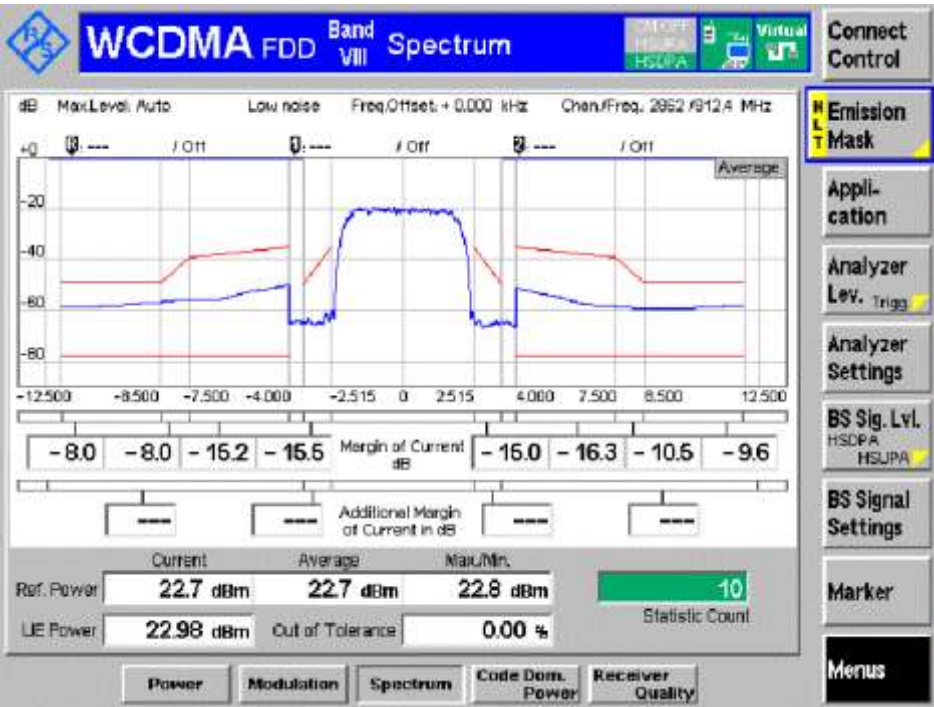


Sub-test 4

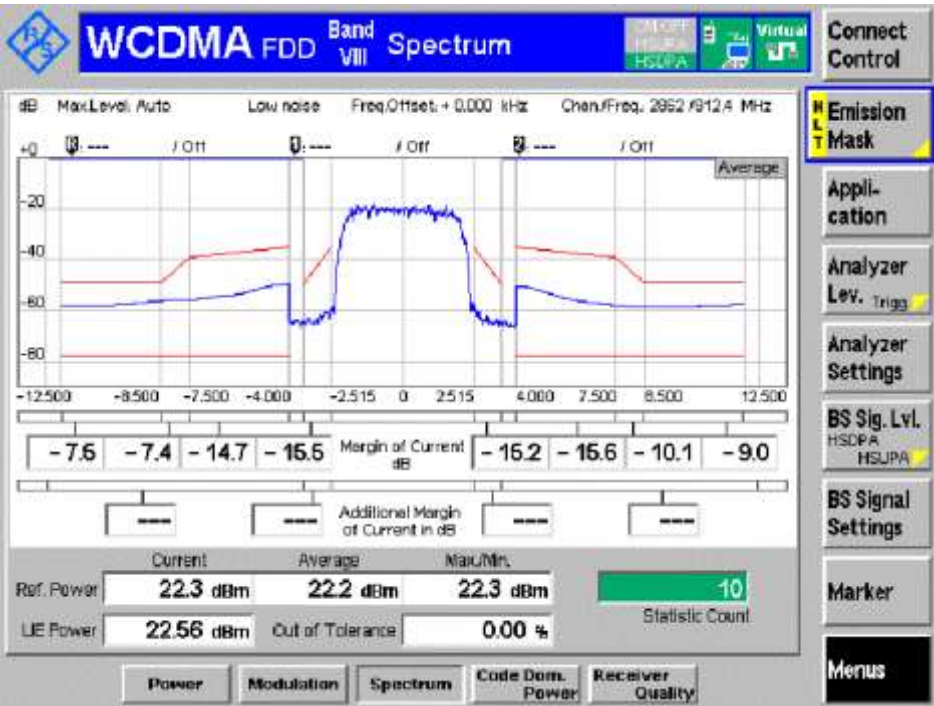


Channel HCH

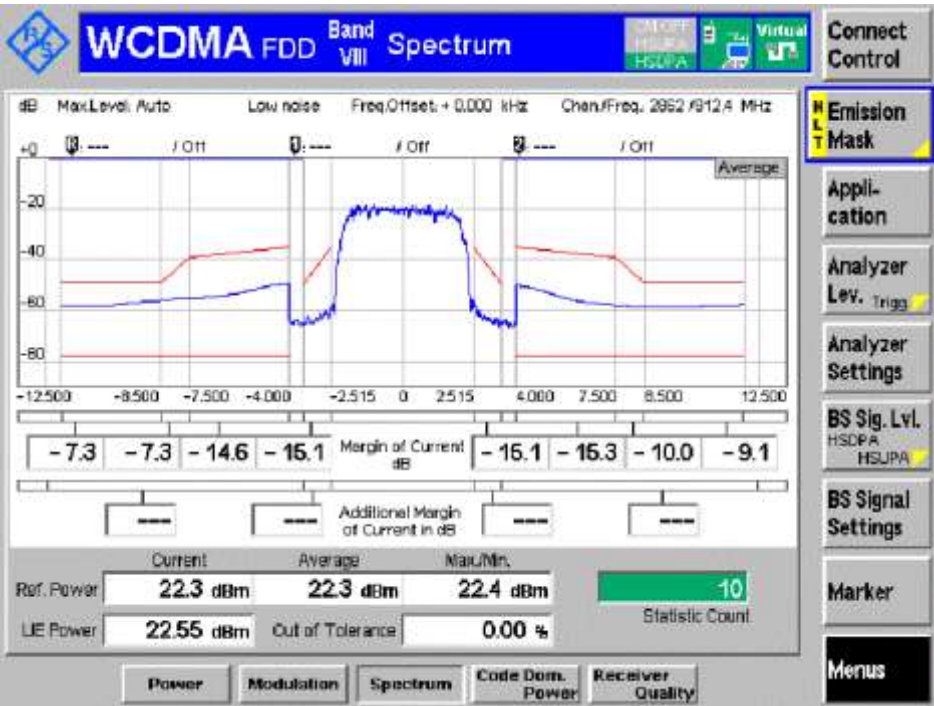
Sub-test 1



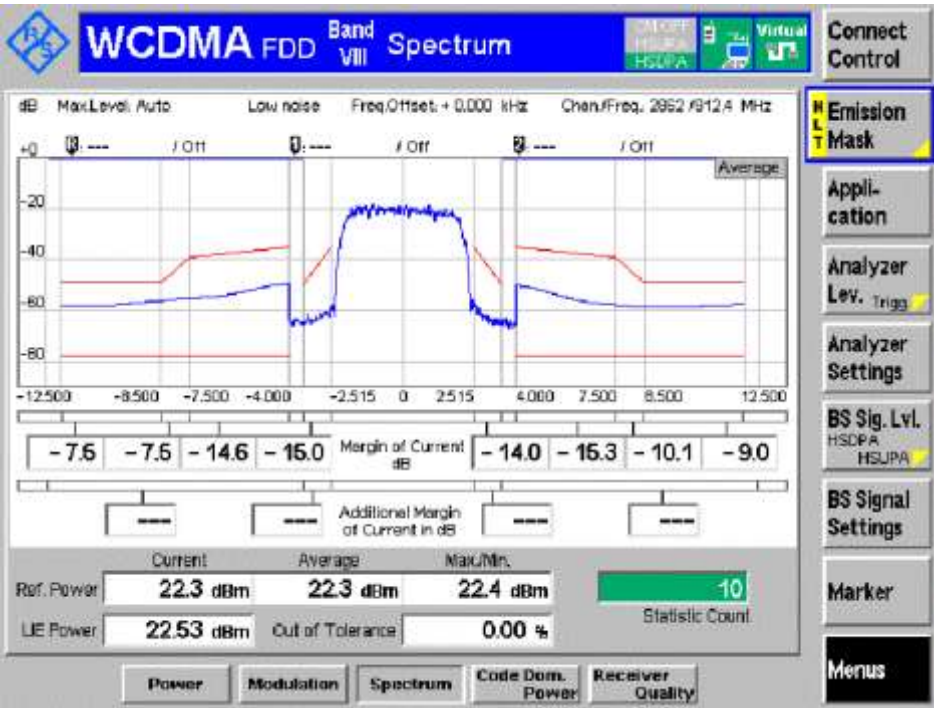
Sub-test 2



Sub-test 3



Sub-test 4



Appendix H. Transmitter adjacent channel leakage power ratio with HS-DPPCH

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Sub-test | UE Channel | Measurement Data(dBm) | Limit (dBm) | Result |
|----------------|-----------------|--------------|----------|------------|-----------------------|-------------|--------|
| Band I | TNVN | LCH | 1 | +5MHz | -46.30 | -32.2 | Pass |
| | | | | -5 MHz | -46.61 | -32.2 | Pass |
| | | | | -10MHz | -52.69 | -42.2 | Pass |
| | | | | +10MHz | -52.63 | -42.2 | Pass |
| | | | 2 | +5MHz | -46.61 | -32.2 | Pass |
| | | | | -5 MHz | -46.01 | -32.2 | Pass |
| | | | | -10MHz | -52.39 | -42.2 | Pass |
| | | | | +10MHz | -52.17 | -42.2 | Pass |
| | | | 3 | +5MHz | -46.04 | -32.2 | Pass |
| | | | | -5 MHz | -45.96 | -32.2 | Pass |
| | | | | -10MHz | -52.38 | -42.2 | Pass |
| | | | | +10MHz | -52.02 | -42.2 | Pass |
| | | | 4 | +5MHz | -45.88 | -32.2 | Pass |
| | | | | -5 MHz | -45.70 | -32.2 | Pass |
| | | | | -10MHz | -52.28 | -42.2 | Pass |
| | | | | +10MHz | -51.88 | -42.2 | Pass |
| | | MCH | 1 | +5MHz | -49.32 | -32.2 | Pass |
| | | | | -5 MHz | -48.24 | -32.2 | Pass |
| | | | | -10MHz | -53.44 | -42.2 | Pass |
| | | | | +10MHz | -53.55 | -42.2 | Pass |
| | | | 2 | +5MHz | -45.71 | -32.2 | Pass |
| | | | | -5 MHz | -45.37 | -32.2 | Pass |
| | | | | -10MHz | -52.42 | -42.2 | Pass |
| | | | | +10MHz | -52.51 | -42.2 | Pass |
| | | | 3 | +5MHz | -45.82 | -32.2 | Pass |

| | | | | | | | |
|--|--|-----|---|--------|--------|-------|------|
| | | | | -5 MHz | -44.55 | -32.2 | Pass |
| | | | | -10MHz | -52.37 | -42.2 | Pass |
| | | | | +10MHz | -52.50 | -42.2 | Pass |
| | | | 4 | +5MHz | -45.72 | -32.2 | Pass |
| | | | | -5 MHz | -44.50 | -32.2 | Pass |
| | | | | -10MHz | -52.33 | -42.2 | Pass |
| | | | | +10MHz | -52.50 | -42.2 | Pass |
| | | HCH | 1 | +5MHz | -48.55 | -32.2 | Pass |
| | | | | -5 MHz | -44.45 | -32.2 | Pass |
| | | | | -10MHz | -52.75 | -42.2 | Pass |
| | | | | +10MHz | -53.25 | -42.2 | Pass |
| | | | 2 | +5MHz | -46.87 | -32.2 | Pass |
| | | | | -5 MHz | -43.44 | -32.2 | Pass |
| | | | | -10MHz | -52.08 | -42.2 | Pass |
| | | | | +10MHz | -52.71 | -42.2 | Pass |
| | | | 3 | +5MHz | -44.04 | -32.2 | Pass |
| | | | | -5 MHz | -42.00 | -32.2 | Pass |
| | | | | -10MHz | -51.87 | -42.2 | Pass |
| | | | | +10MHz | -52.55 | -42.2 | Pass |
| | | | 4 | +5MHz | -44.03 | -32.2 | Pass |
| | | | | -5 MHz | -41.83 | -32.2 | Pass |
| | | | | -10MHz | -51.79 | -42.2 | Pass |
| | | | | +10MHz | -52.59 | -42.2 | Pass |

| Operating Band | Test Conditions | Test Channel | Sub-test | UE Channel | Measurement Data(dBm) | Limit (dBm) | Result |
|----------------|-----------------|--------------|----------|------------|-----------------------|-------------|--------|
| Band VIII | TNVN | LCH | 1 | +5MHz | -47.21 | -32.2 | Pass |
| | | | | -5 MHz | -48.25 | -32.2 | Pass |
| | | | | -10MHz | -53.57 | -42.2 | Pass |

| | | | | | | | |
|--|--|-----|---|--------|--------|-------|------|
| | | | | +10MHz | -53.01 | -42.2 | Pass |
| | | | 2 | +5MHz | -46.30 | -32.2 | Pass |
| | | | | -5 MHz | -47.53 | -32.2 | Pass |
| | | | | -10MHz | -52.92 | -42.2 | Pass |
| | | | | +10MHz | -52.43 | -42.2 | Pass |
| | | | 3 | +5MHz | -46.07 | -32.2 | Pass |
| | | | | -5 MHz | -47.36 | -32.2 | Pass |
| | | | | -10MHz | -52.93 | -42.2 | Pass |
| | | | | +10MHz | -52.59 | -42.2 | Pass |
| | | | 4 | +5MHz | -45.95 | -32.2 | Pass |
| | | | | -5 MHz | -47.42 | -32.2 | Pass |
| | | | | -10MHz | -53.00 | -42.2 | Pass |
| | | | | +10MHz | -52.70 | -42.2 | Pass |
| | | MCH | 1 | +5MHz | -45.30 | -32.2 | Pass |
| | | | | -5 MHz | -47.41 | -32.2 | Pass |
| | | | | -10MHz | -52.33 | -42.2 | Pass |
| | | | | +10MHz | -52.24 | -42.2 | Pass |
| | | | 2 | +5MHz | -44.61 | -32.2 | Pass |
| | | | | -5 MHz | -46.55 | -32.2 | Pass |
| | | | | -10MHz | -51.96 | -42.2 | Pass |
| | | | | +10MHz | -51.89 | -42.2 | Pass |
| | | | 3 | +5MHz | -44.39 | -32.2 | Pass |
| | | | | -5 MHz | -46.25 | -32.2 | Pass |
| | | | | -10MHz | -51.94 | -42.2 | Pass |
| | | | | +10MHz | -52.07 | -42.2 | Pass |
| | | | 4 | +5MHz | -44.33 | -32.2 | Pass |
| | | | | -5 MHz | -46.16 | -32.2 | Pass |
| | | | | -10MHz | -51.93 | -42.2 | Pass |

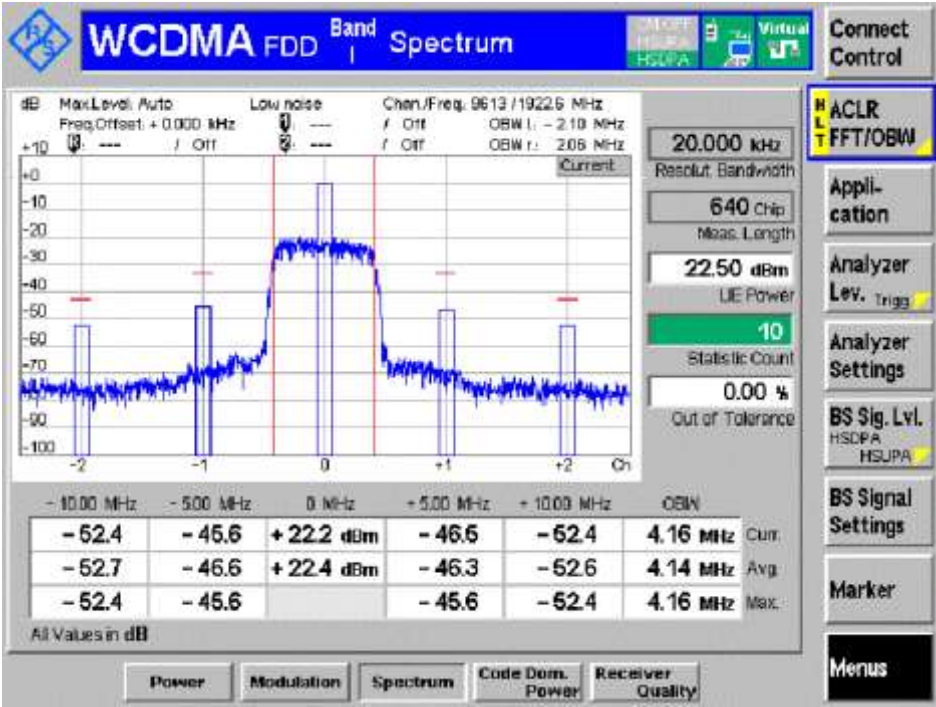
| | | | | | | | |
|--|--|-----|---|--------|--------|-------|------|
| | | HCH | 1 | +10MHz | -52.17 | -42.2 | Pass |
| | | | | +5MHz | -47.83 | -32.2 | Pass |
| | | | | -5 MHz | -46.39 | -32.2 | Pass |
| | | | | -10MHz | -52.42 | -42.2 | Pass |
| | | | | +10MHz | -53.61 | -42.2 | Pass |
| | | | 2 | +5MHz | -47.11 | -32.2 | Pass |
| | | | | -5 MHz | -45.88 | -32.2 | Pass |
| | | | | -10MHz | -52.05 | -42.2 | Pass |
| | | | | +10MHz | -53.13 | -42.2 | Pass |
| | | | 3 | +5MHz | -46.80 | -32.2 | Pass |
| | | | | -5 MHz | -45.73 | -32.2 | Pass |
| | | | | -10MHz | -52.11 | -42.2 | Pass |
| | | | | +10MHz | -53.19 | -42.2 | Pass |
| | | | 4 | +5MHz | -46.77 | -32.2 | Pass |
| | | | | -5 MHz | -45.69 | -32.2 | Pass |
| | | | | -10MHz | -52.11 | -42.2 | Pass |
| | | | | +10MHz | -53.19 | -42.2 | Pass |

BAND I

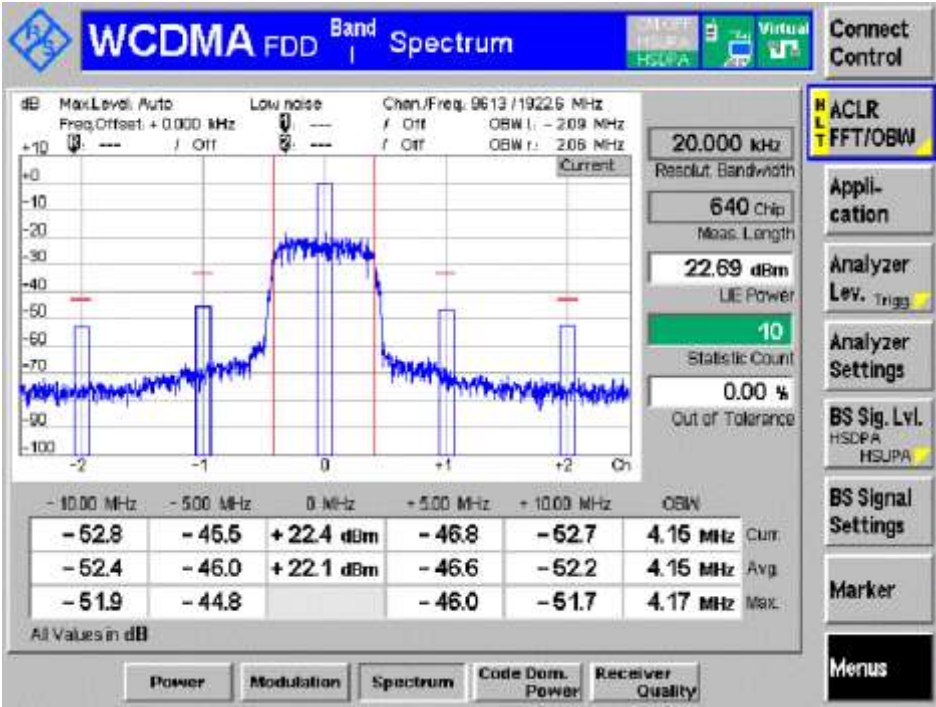
TNVN

Channel LCH

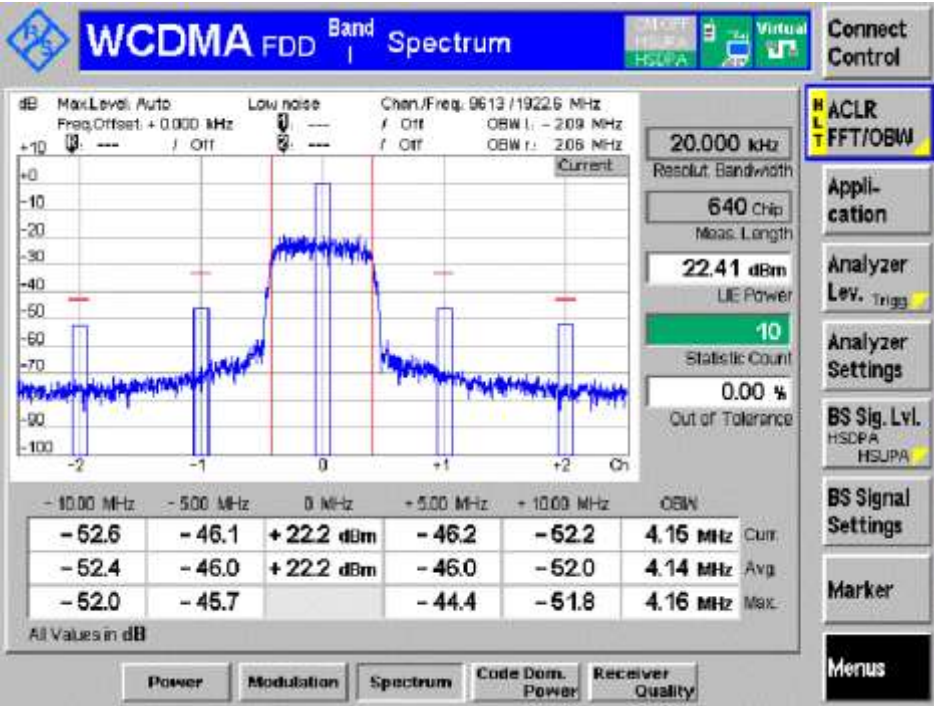
Sub-test 1



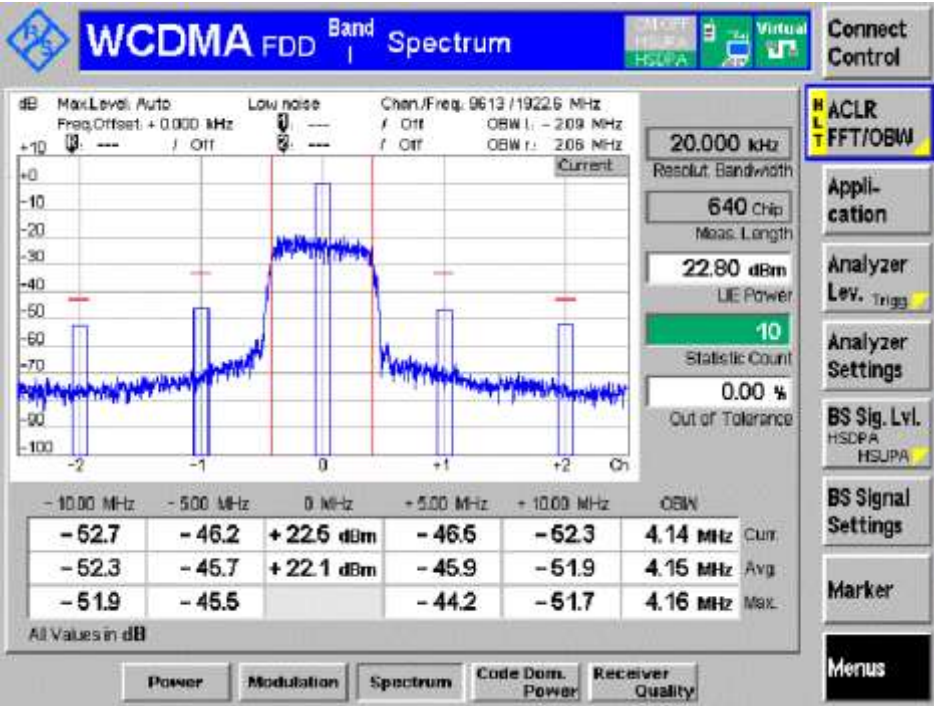
Sub-test 2



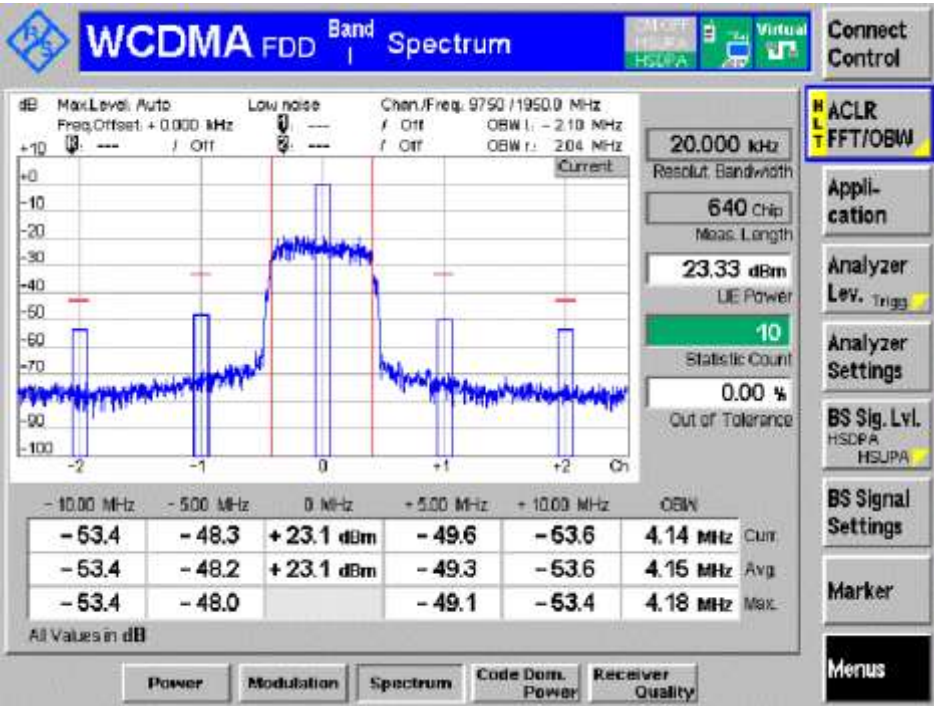
Sub-test 3



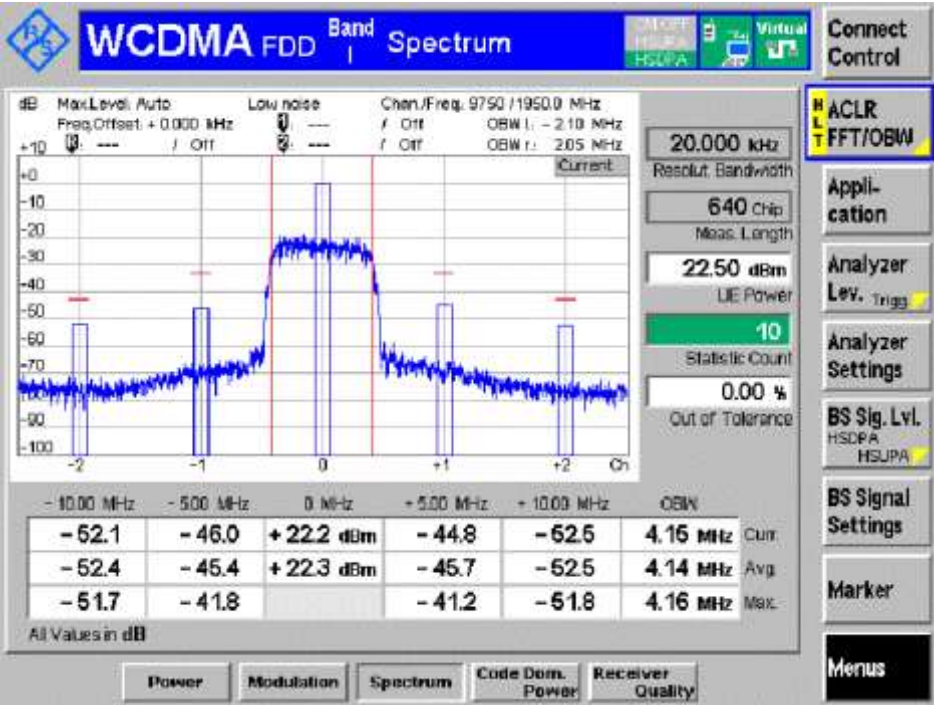
Sub-test 4



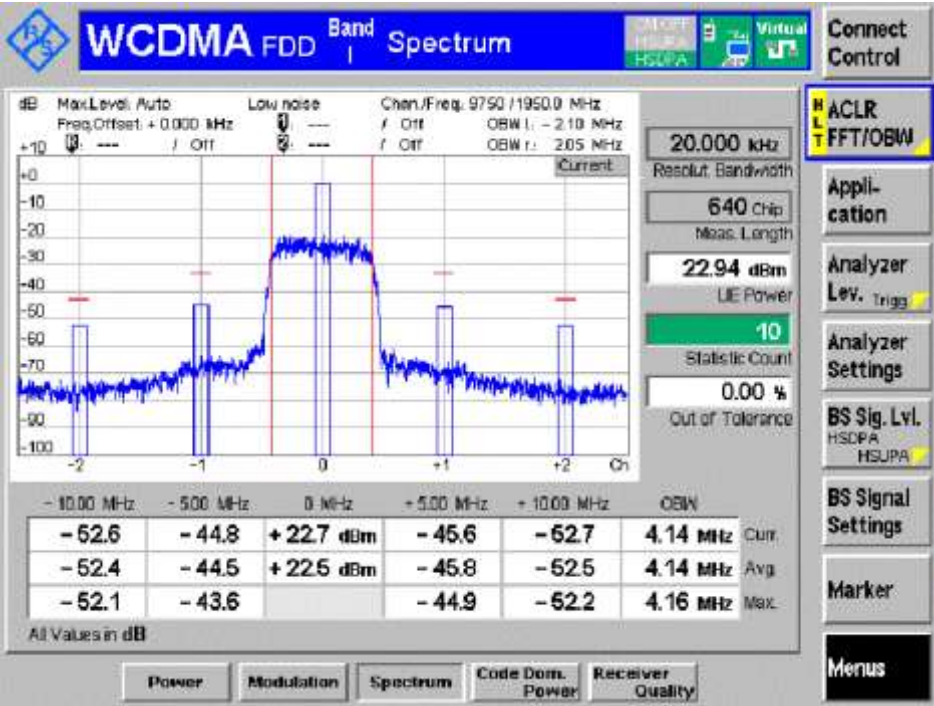
Channel MCH
Sub-test 1



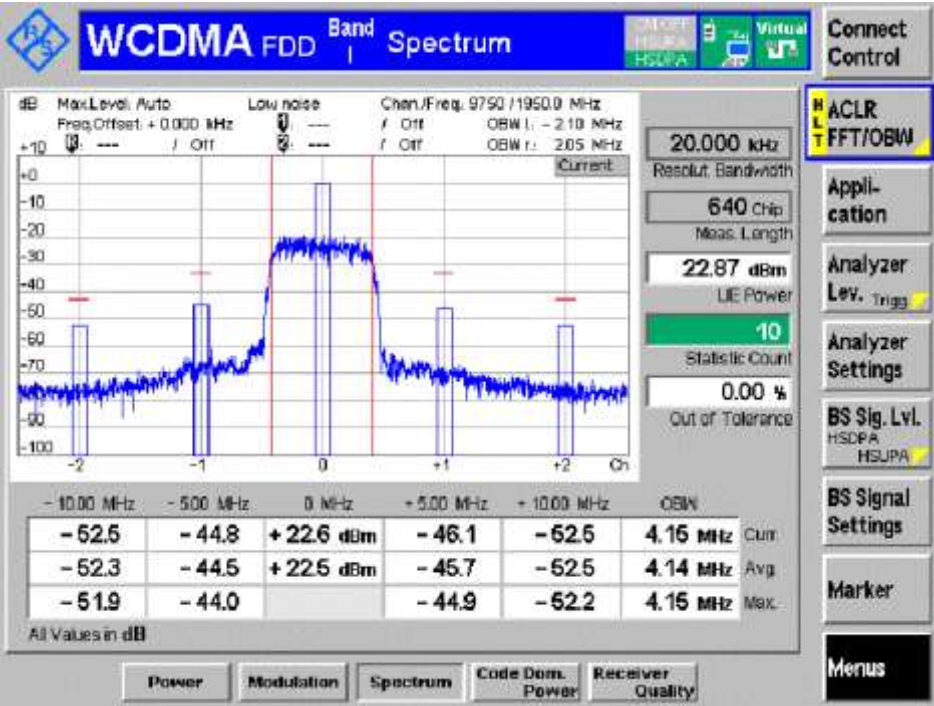
Sub-test 2



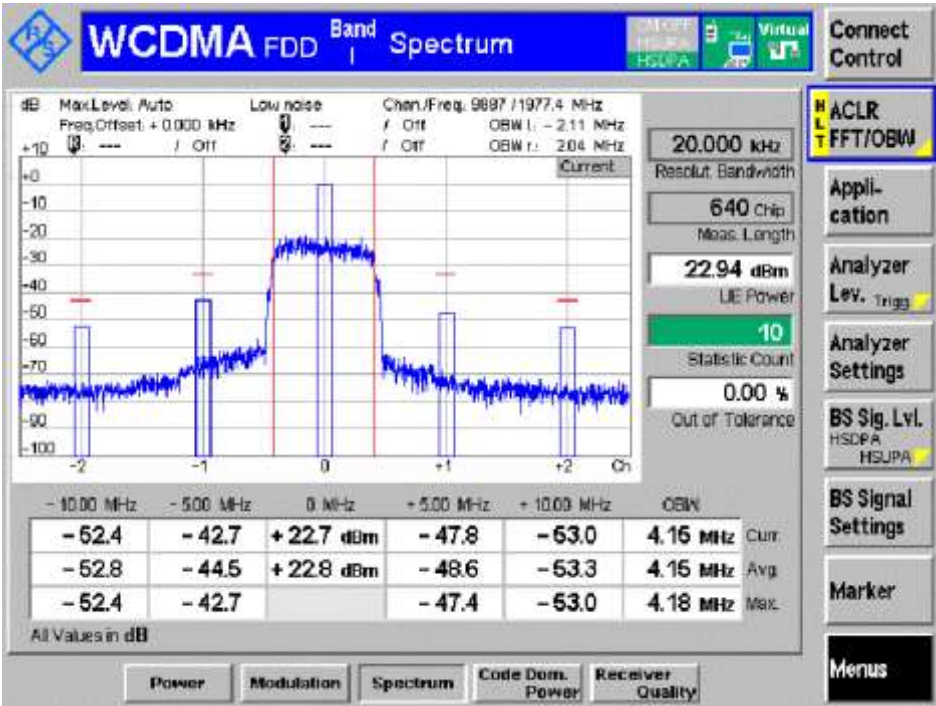
Sub-test 3



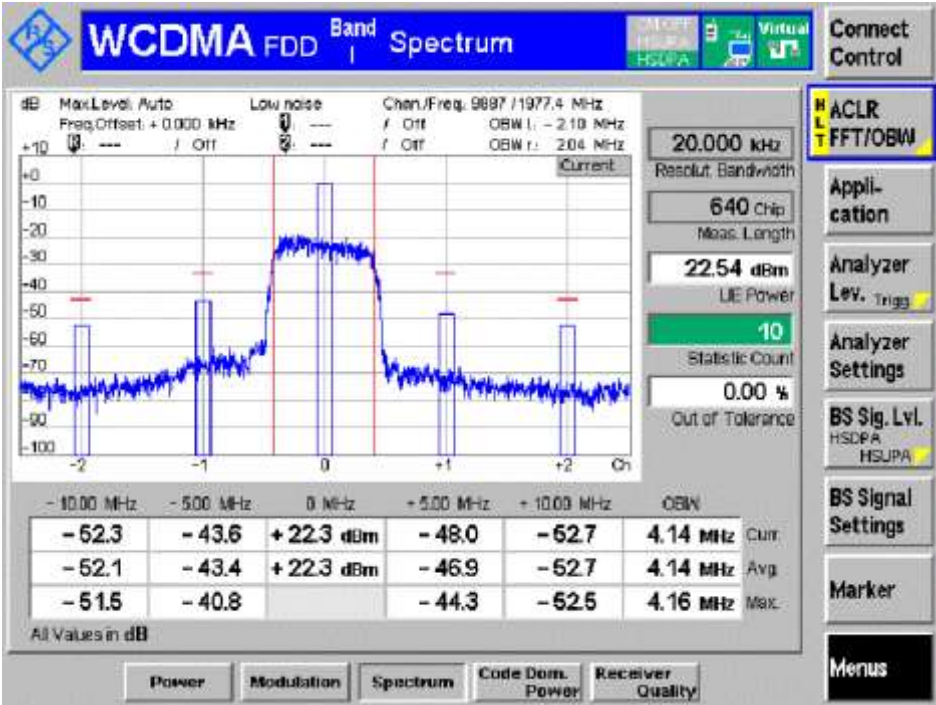
Sub-test 4



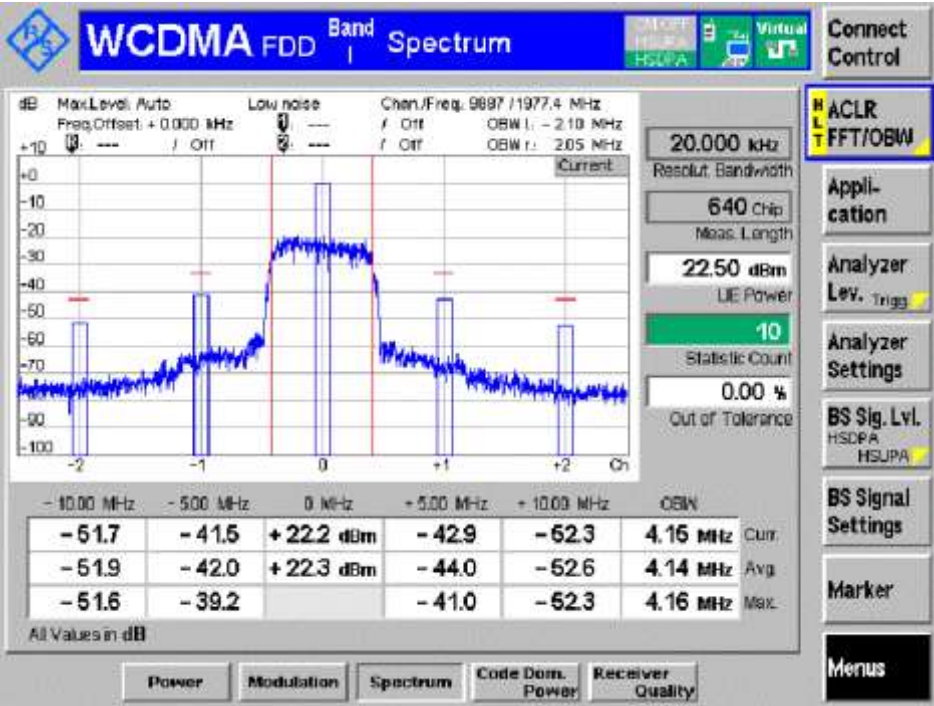
Channel HCH
Sub-test 1



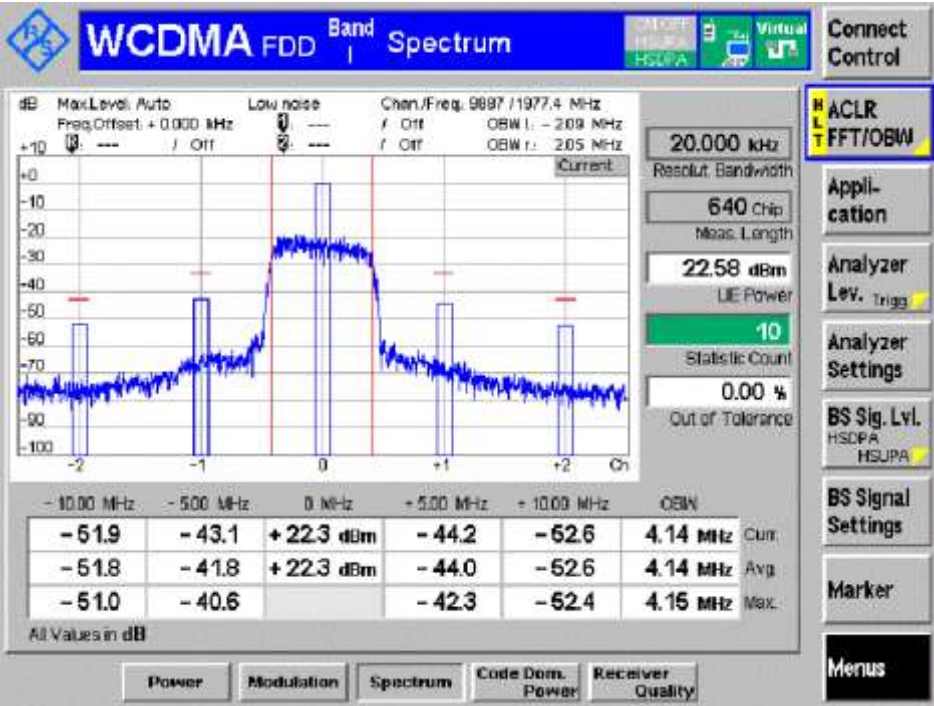
Sub-test 2



Sub-test 3



Sub-test 4

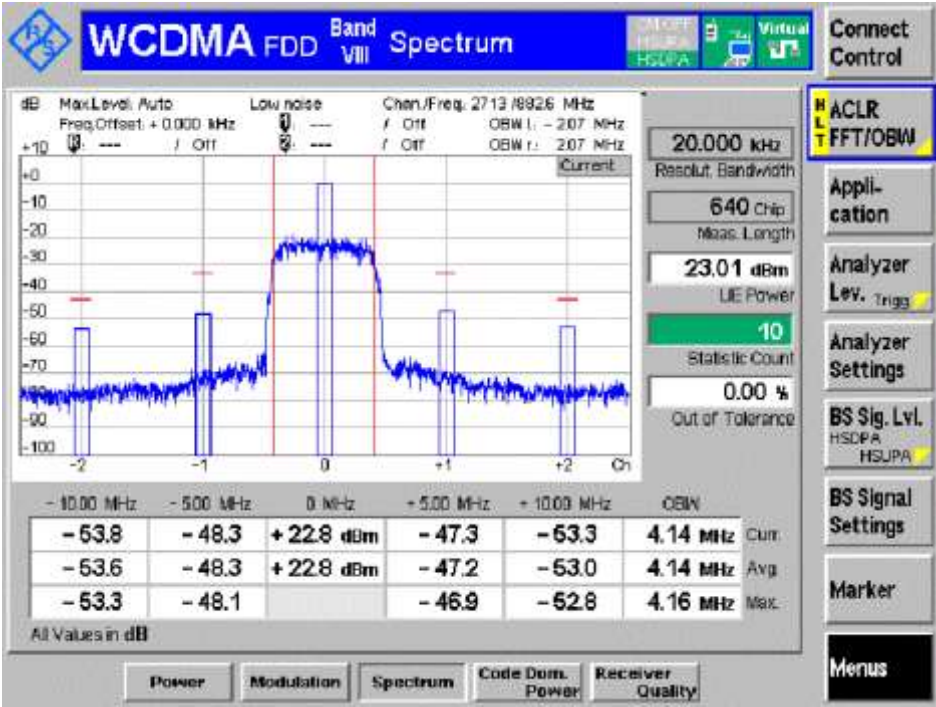


BAND VIII

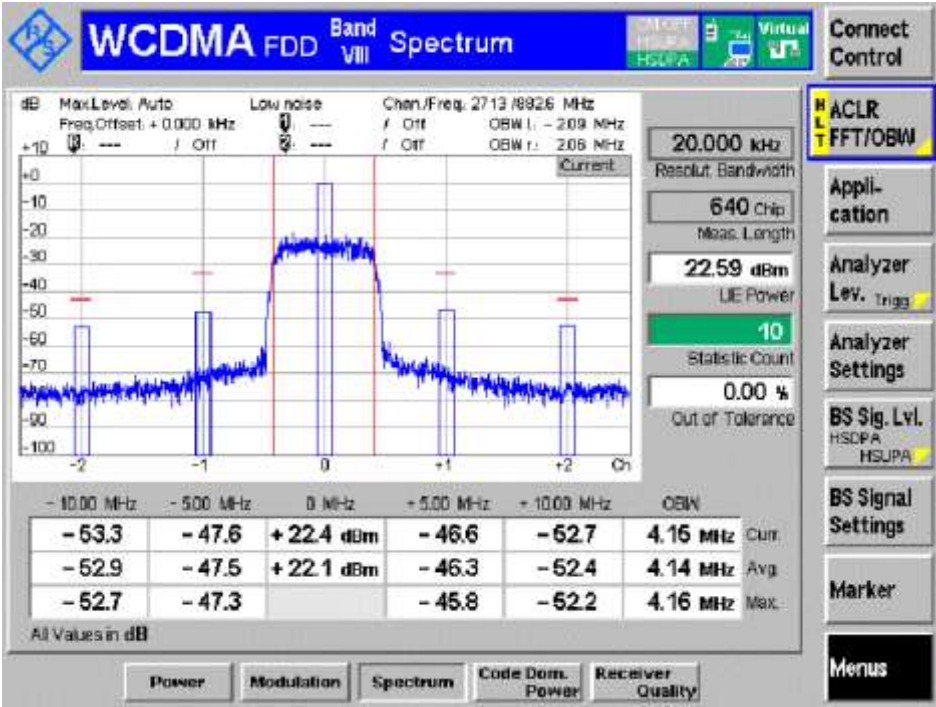
TNVN

Channel LCH

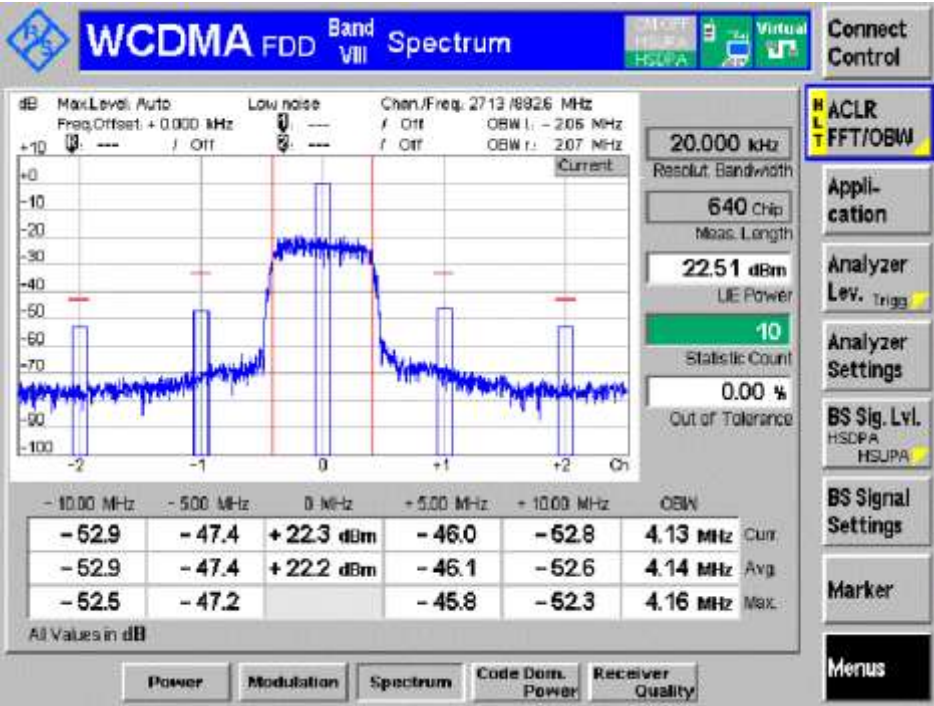
Sub-test 1



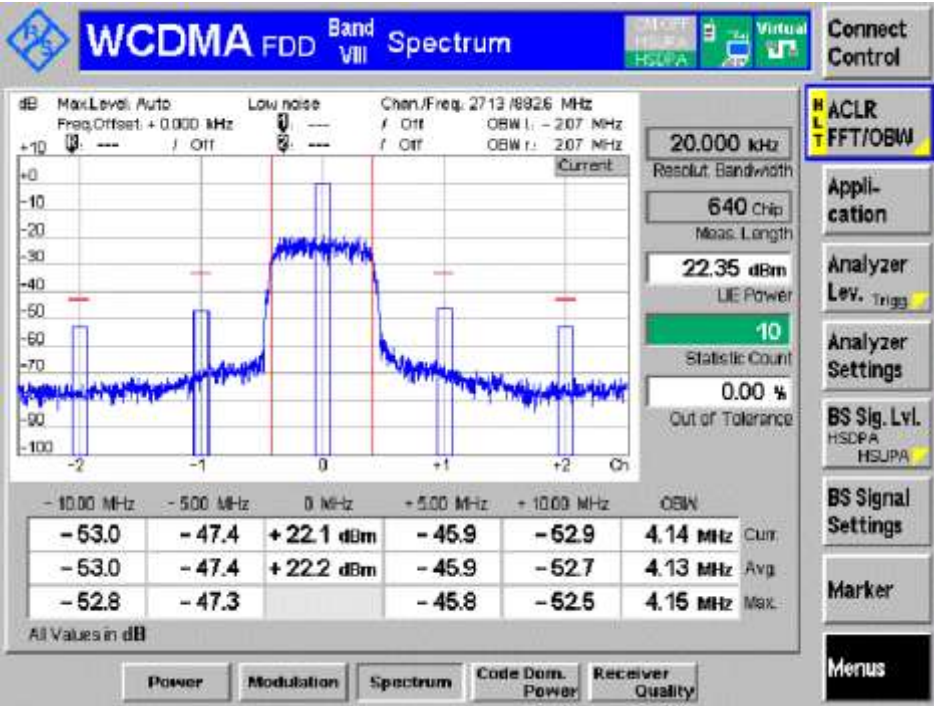
Sub-test 2



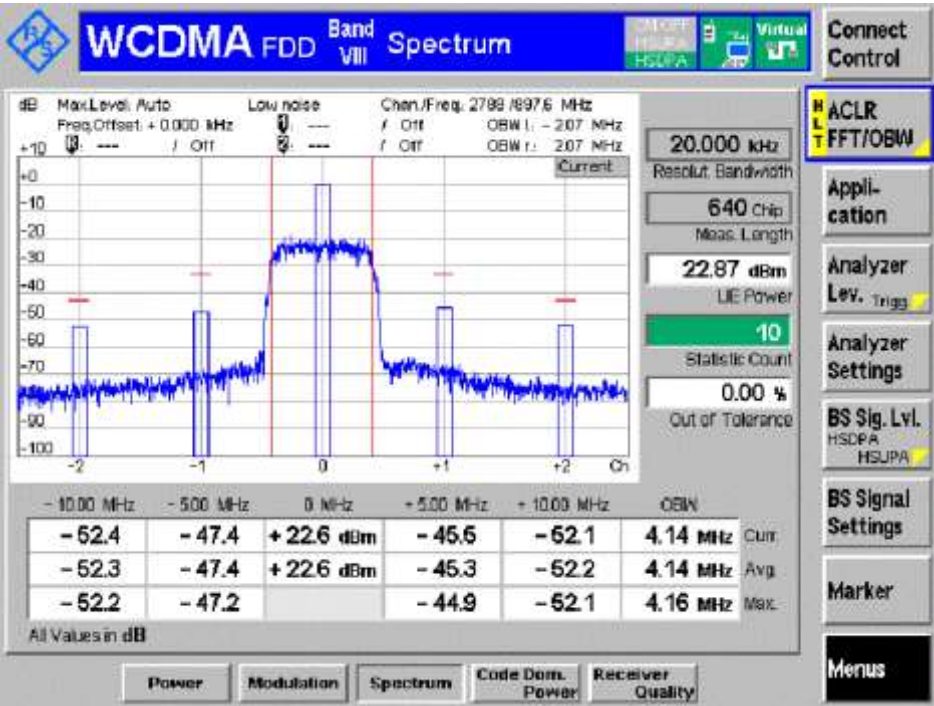
Sub-test 3



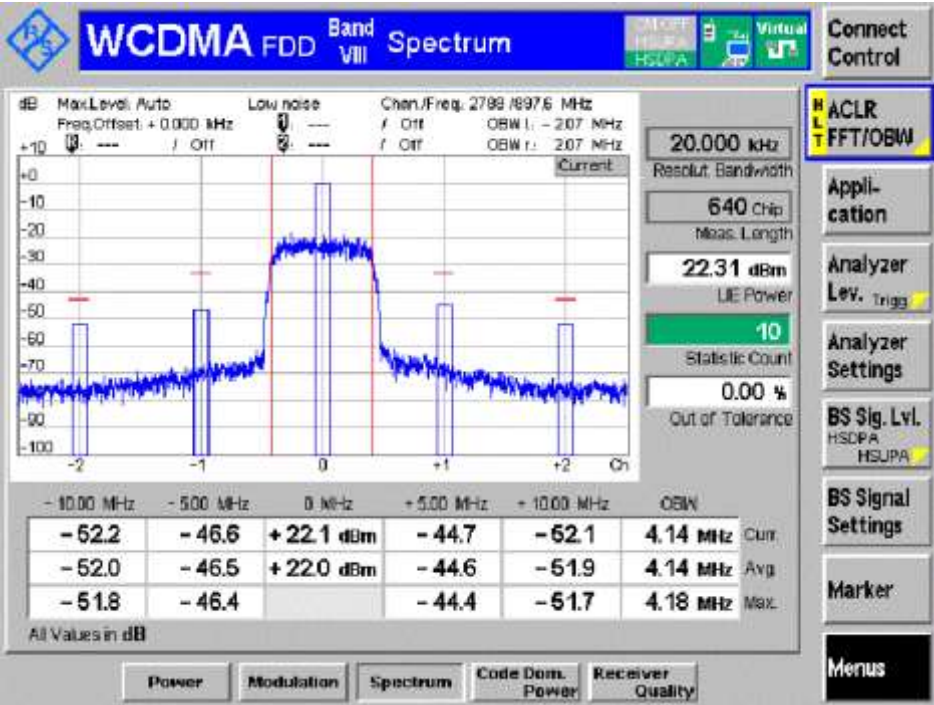
Sub-test 4



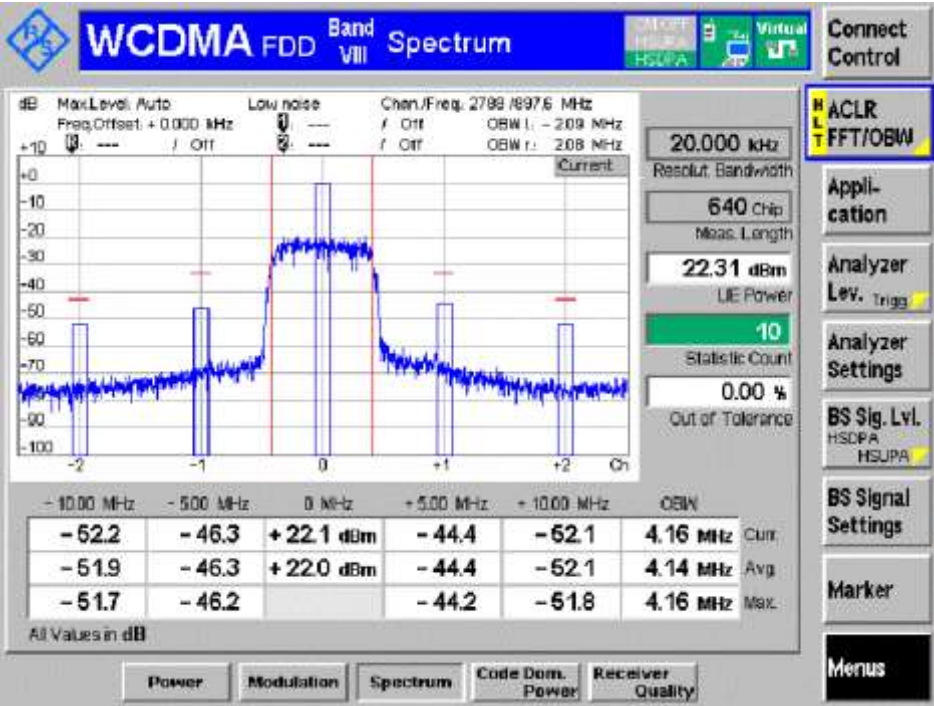
Channel MCH
Sub-test 1



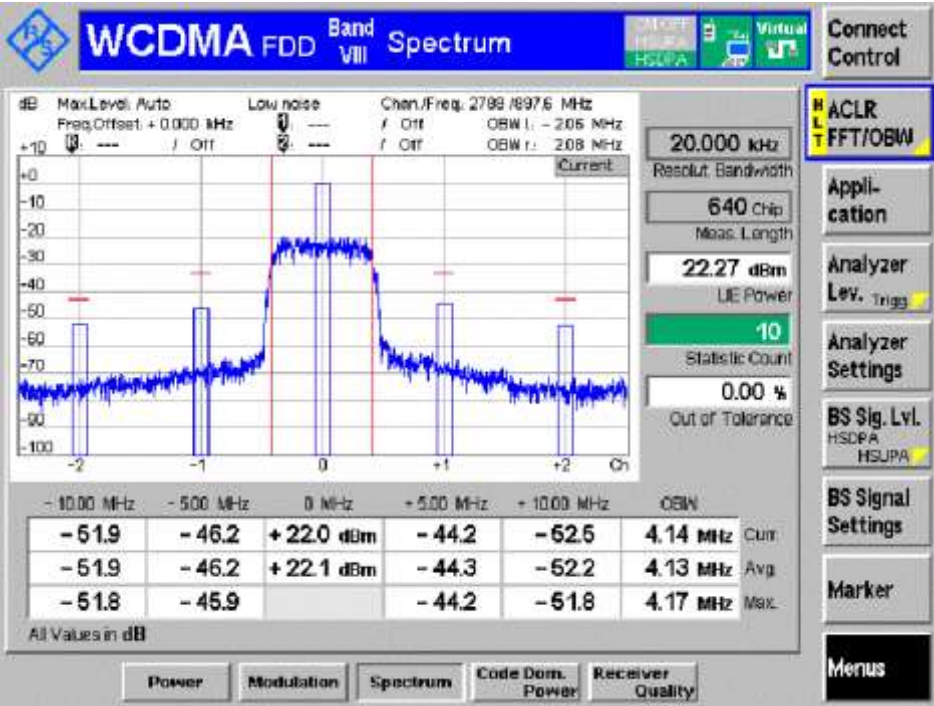
Sub-test 2



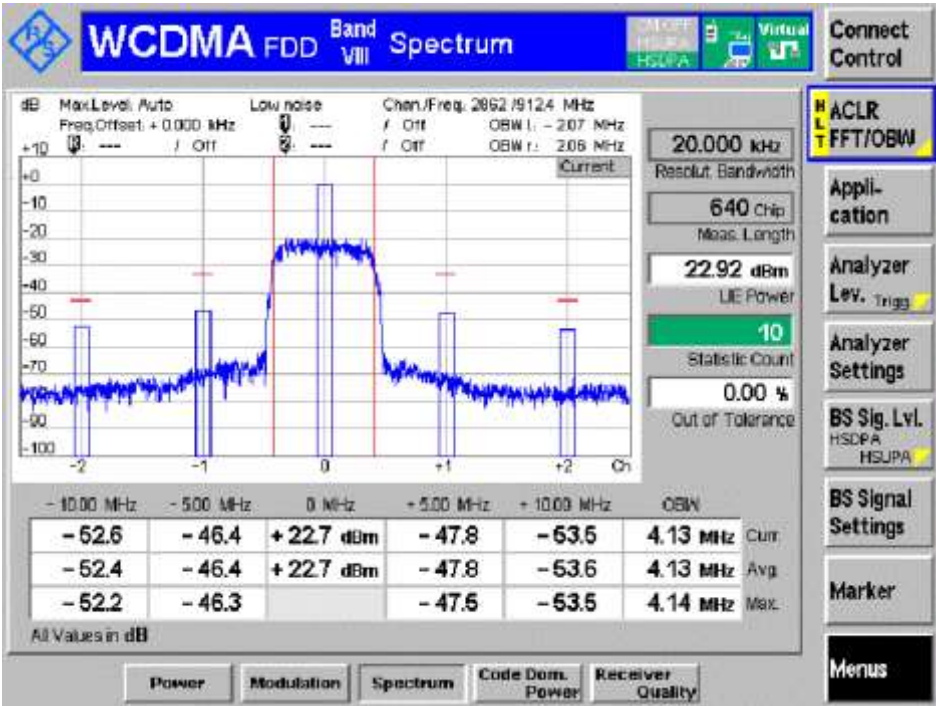
Sub-test 3



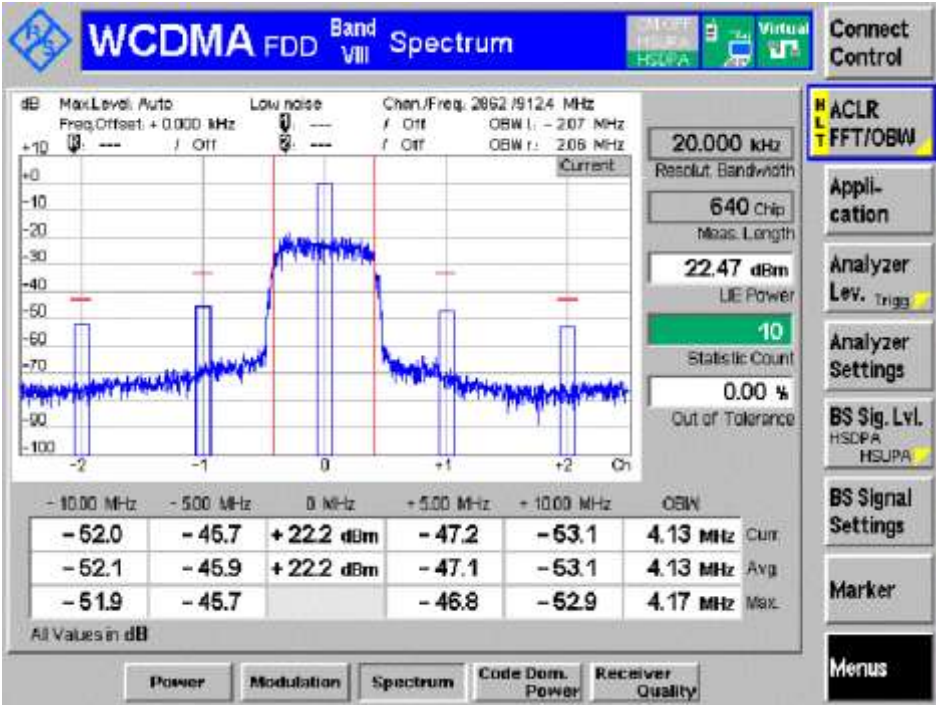
Sub-test 4



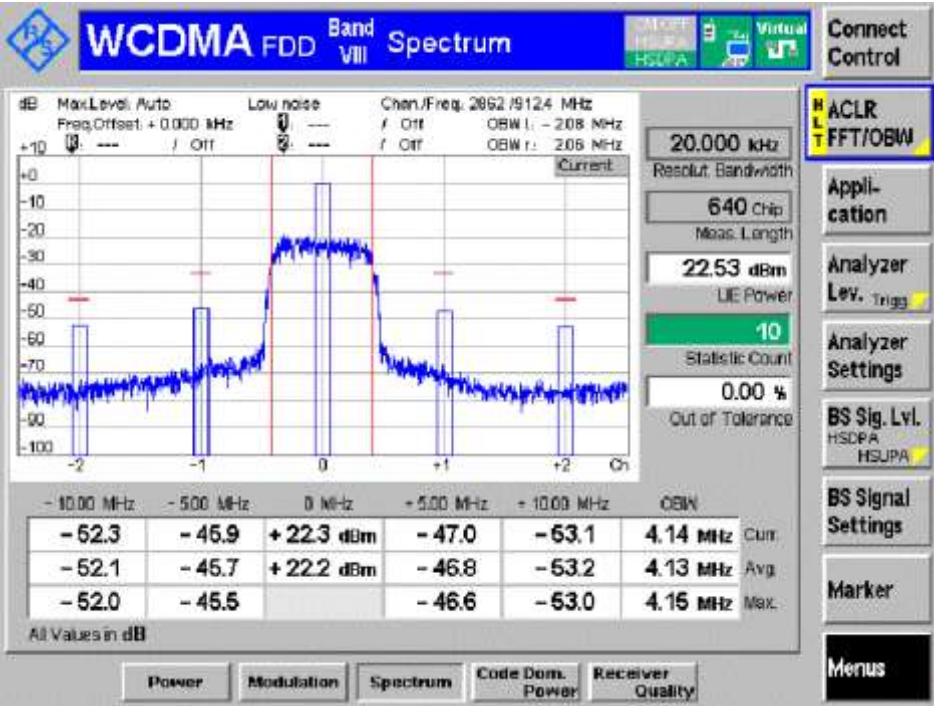
Channel HCH
Sub-test 1



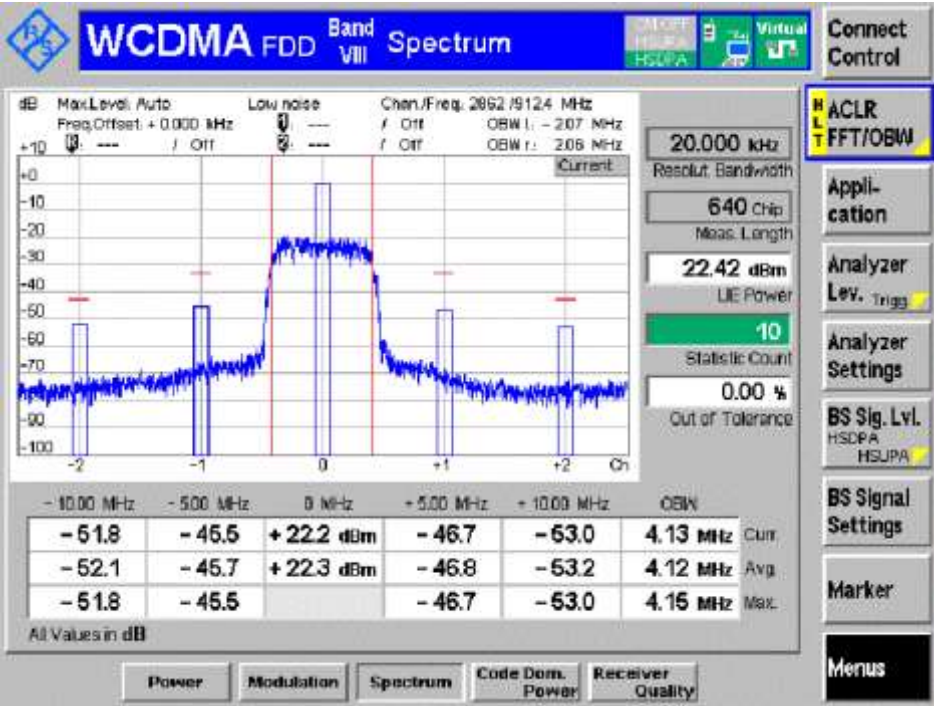
Sub-test 2



Sub-test 3



Sub-test 4



Appendix I. Transmitter maximum output power with HS-DPCCH and E-DCH

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Sub-test | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|----------|-----------------------|----------------|--------|
| Band I | TNVN | LCH | 1 | 20.99 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 21.08 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 21.79 | +23(+2.7/-5.2) | Pass |
| | | | 4 | 20.33 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.33 | +24(+1.7/-3.7) | Pass |
| | | MCH | 1 | 21.28 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 21.34 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 22.27 | +23(+2.7/-5.2) | Pass |
| | | | 4 | 20.78 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.73 | +24(+1.7/-3.7) | Pass |
| | | HCH | 1 | 21.16 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 21.27 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 21.99 | +23(+2.7/-5.2) | Pass |
| | | | 4 | 20.58 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.35 | +24(+1.7/-3.7) | Pass |

| Operating Band | Test Conditions | Test Channel | Sub-test | Measurement Data(dBm) | Limit(dBm) | Result |
|----------------|-----------------|--------------|----------|-----------------------|----------------|--------|
| Band VIII | TNVN | LCH | 1 | 20.79 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 20.80 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 21.79 | +23(+2.7/-5.2) | Pass |
| | | | 4 | 20.21 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.20 | +24(+1.7/-3.7) | Pass |
| | | MCH | 1 | 20.71 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 20.71 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 21.71 | +23(+2.7/-5.2) | Pass |

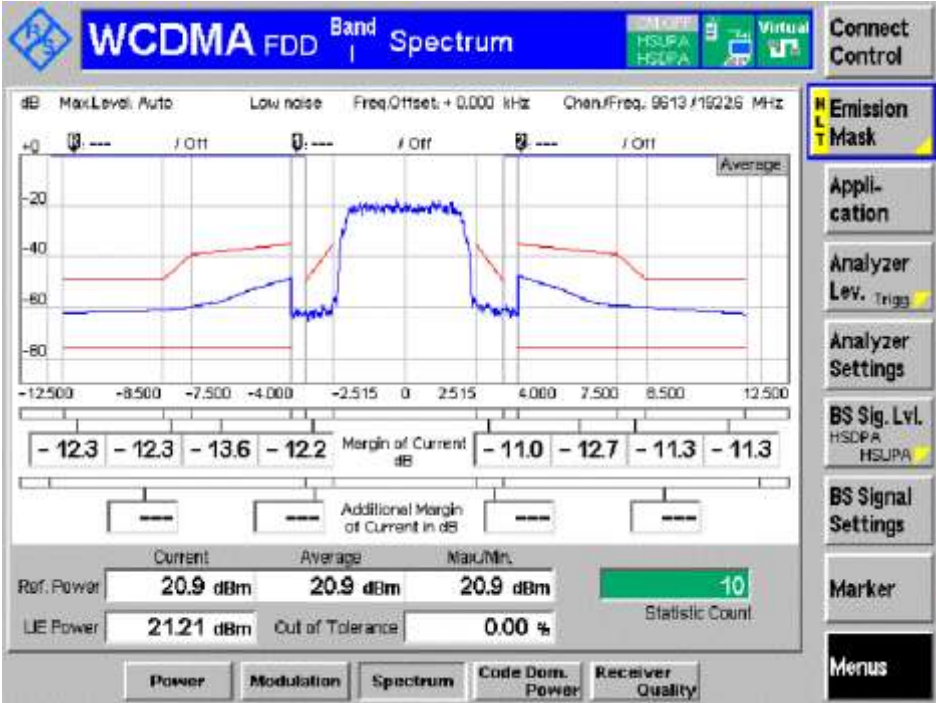
| | | | | | | |
|--|--|-----|---|-------|----------------|------|
| | | | 4 | 20.10 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.11 | +24(+1.7/-3.7) | Pass |
| | | HCH | 1 | 20.83 | +24(+1.7/-6.7) | Pass |
| | | | 2 | 20.80 | +22(+3.7/-5.2) | Pass |
| | | | 3 | 21.79 | +23(+2.7/-5.2) | Pass |
| | | | 4 | 20.17 | +22(+3.7/-5.2) | Pass |
| | | | 5 | 21.23 | +24(+1.7/-3.7) | Pass |
| | | | | | | |

Appendix J. Transmitter spectrum emission mask with HS-DPCCH and E-DCH

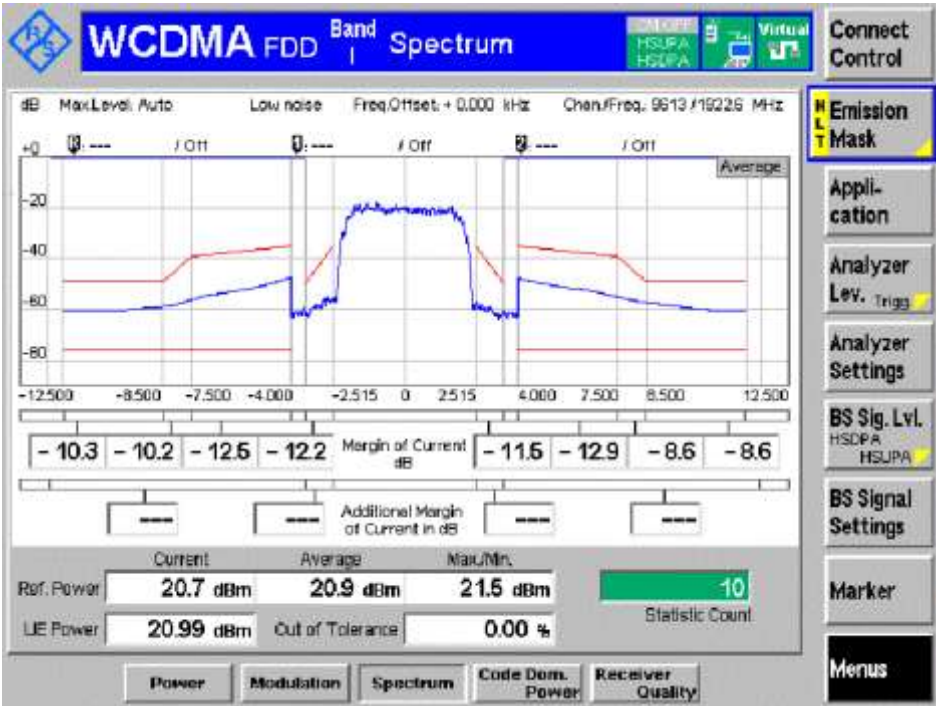
| Operating Band | Test Conditions | Sub-test | Test Channel | | |
|----------------|-----------------|----------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band I | TNVN | 1 | PASS | PASS | PASS |
| | | 2 | PASS | PASS | PASS |
| | | 3 | PASS | PASS | PASS |
| | | 4 | PASS | PASS | PASS |
| | | 5 | PASS | PASS | PASS |

| Operating Band | Test Conditions | Sub-test | Test Channel | | |
|----------------|-----------------|----------|--------------|------|------|
| | | | LCH | MCH | HCH |
| Band VIII | TNVN | 1 | PASS | PASS | PASS |
| | | 2 | PASS | PASS | PASS |
| | | 3 | PASS | PASS | PASS |
| | | 4 | PASS | PASS | PASS |
| | | 5 | PASS | PASS | PASS |

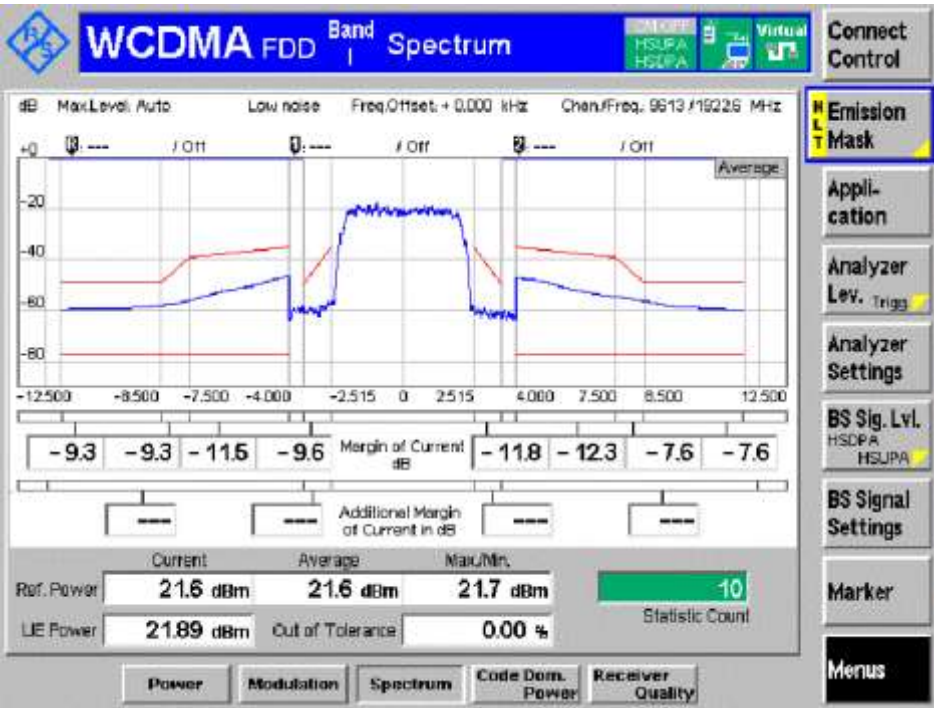
BAND I
Channel LCH
Sub-test 1



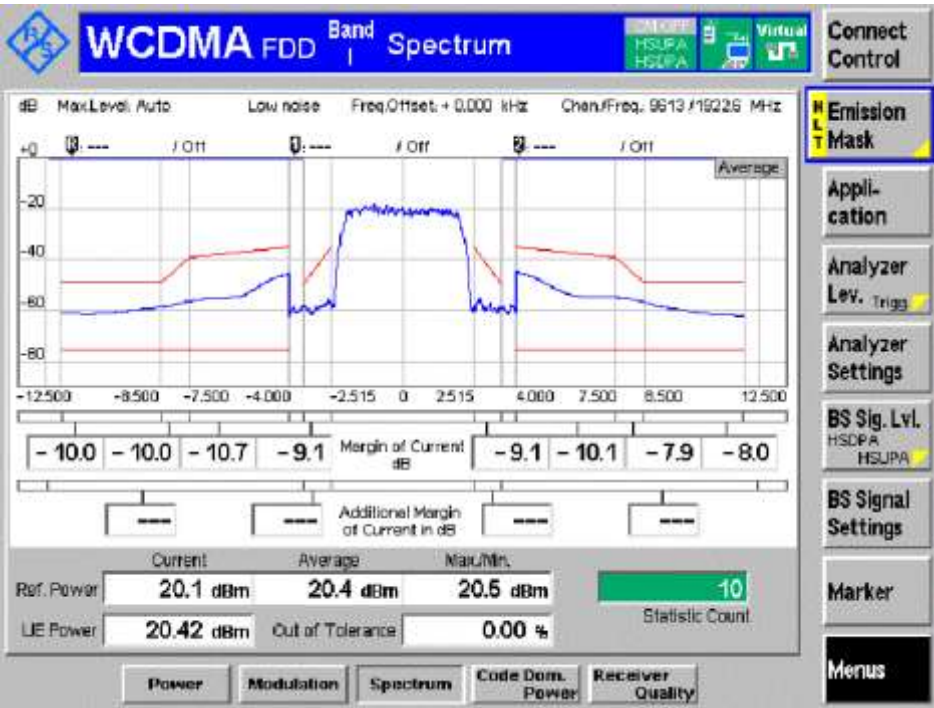
Sub-test 2



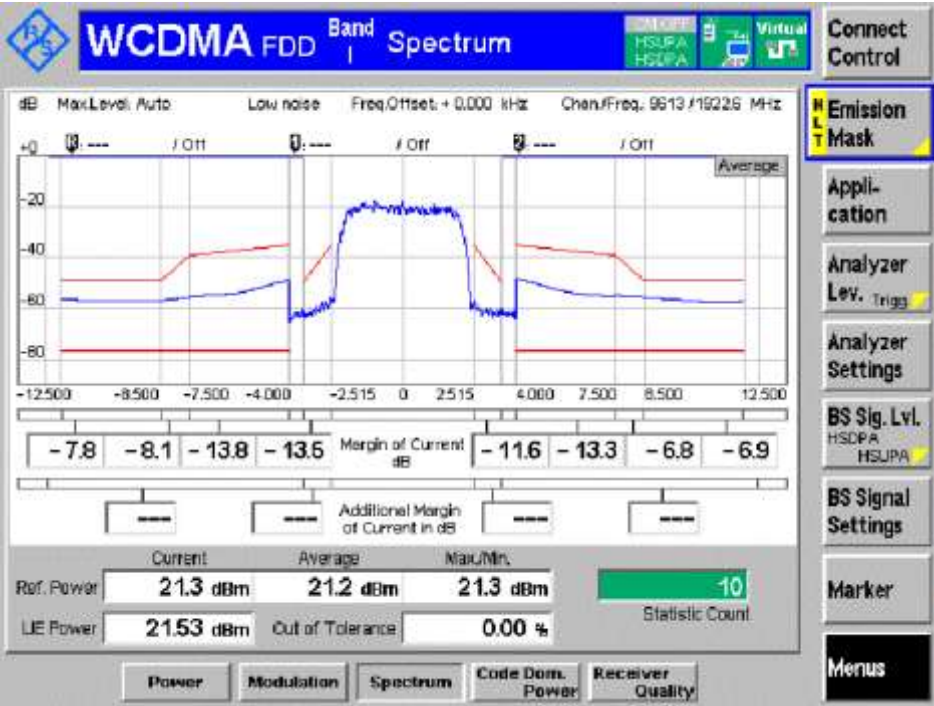
Sub-test 3



Sub-test 4

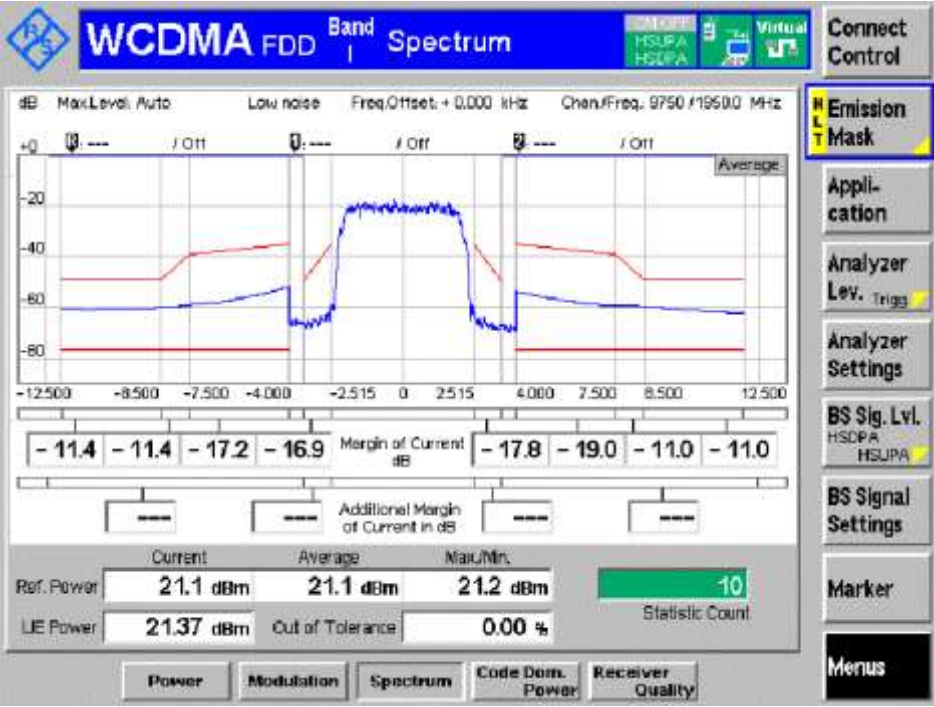


Sub-test 5

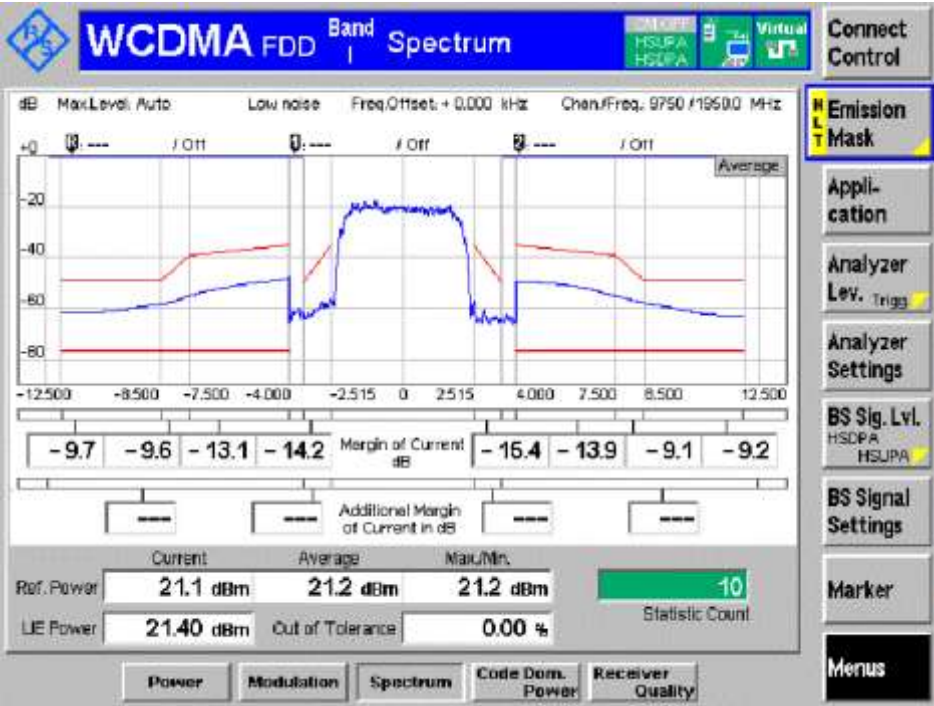


Channel MCH

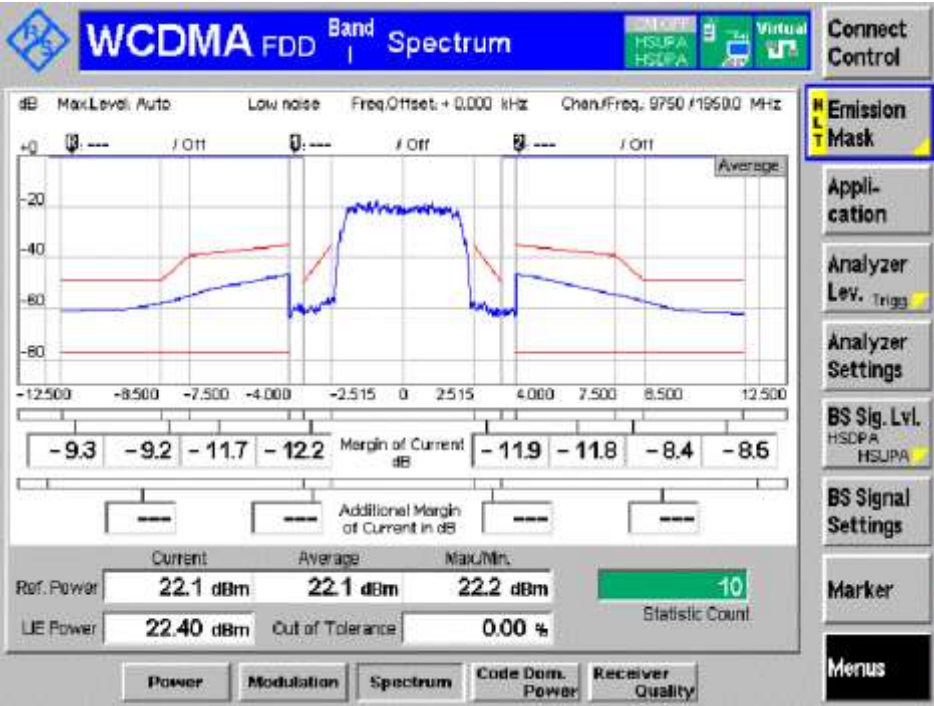
Sub-test 1



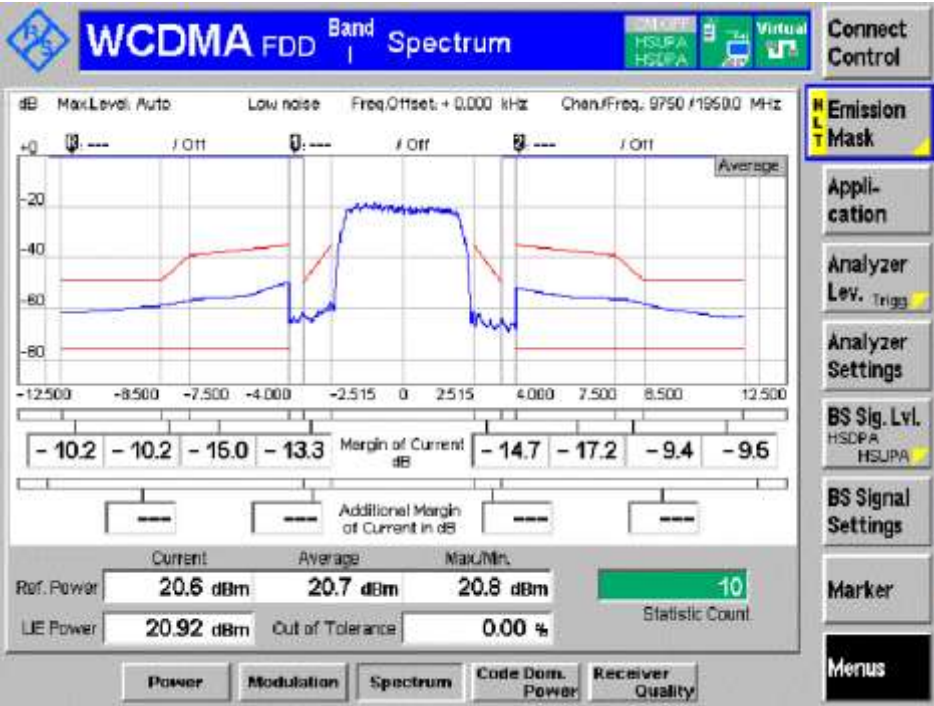
Sub-test 2



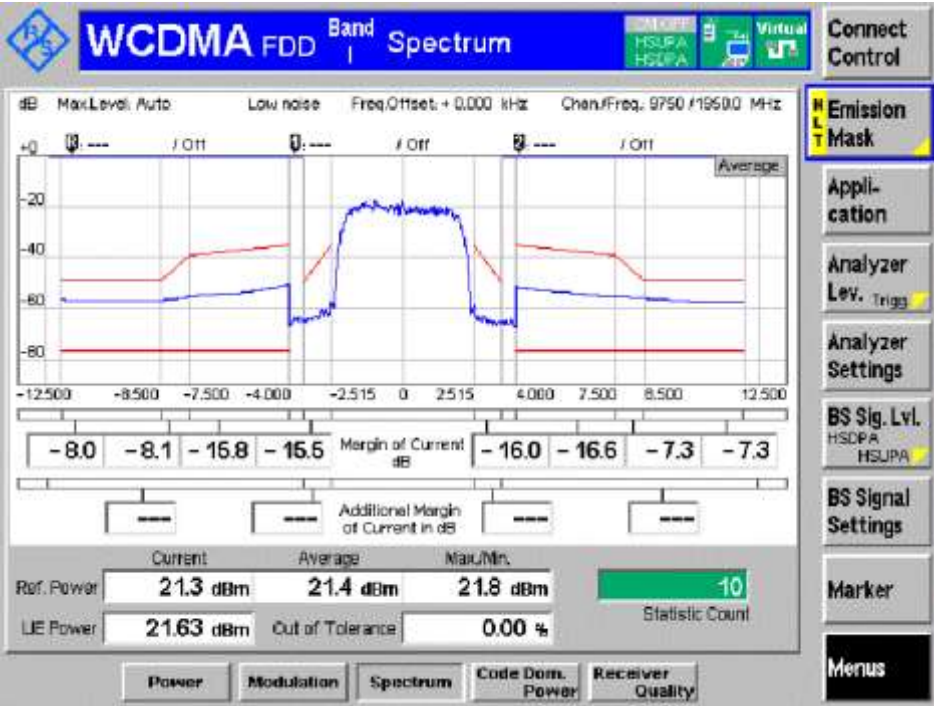
Sub-test 3



Sub-test 4

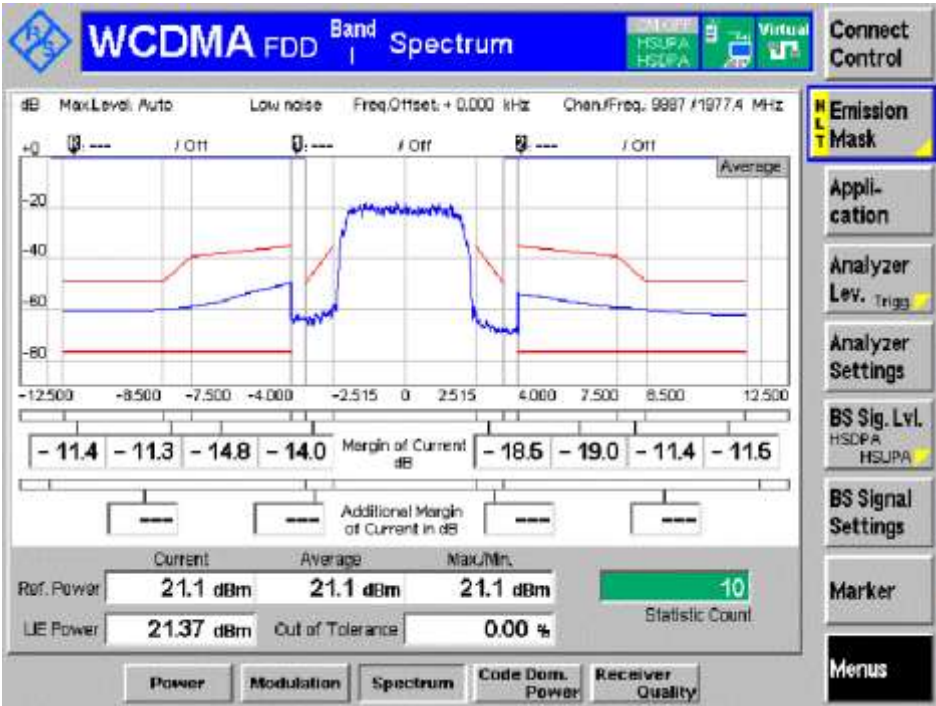


Sub – test 5

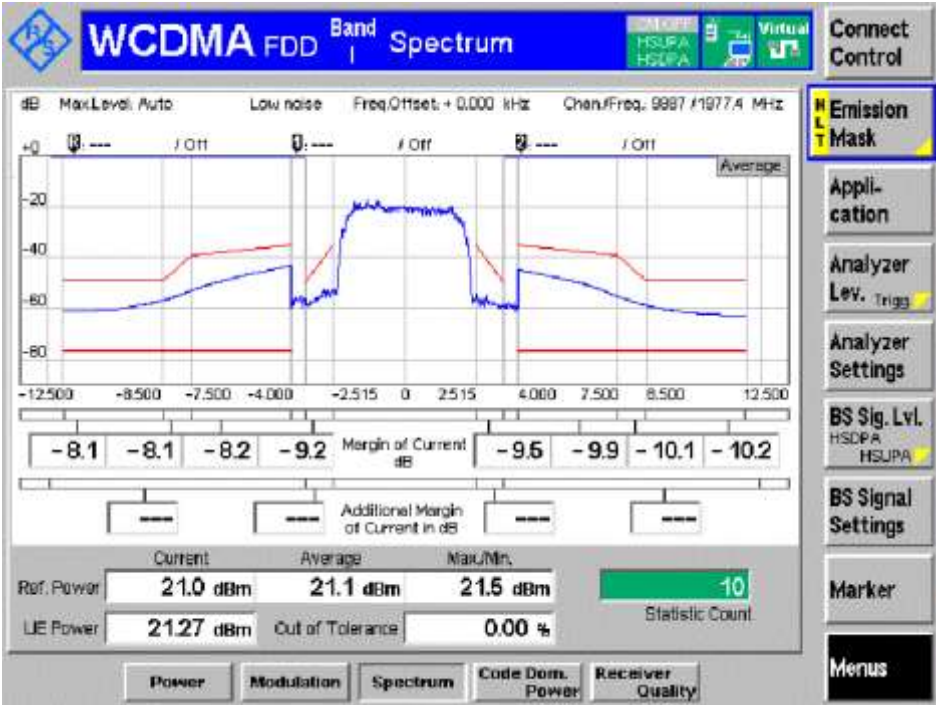


Channel HCH

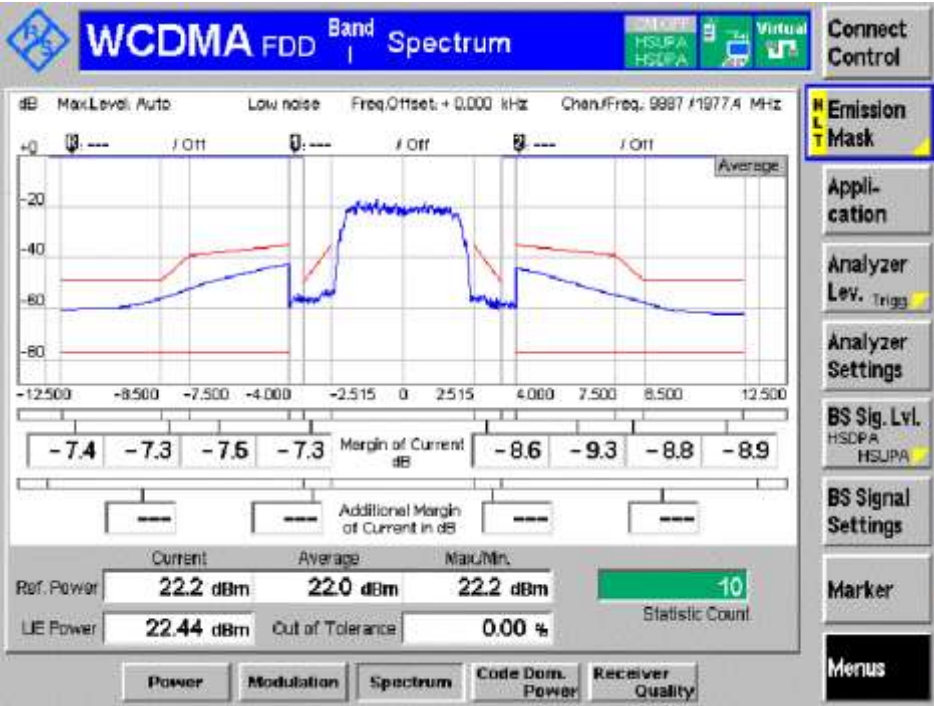
Sub-test 1



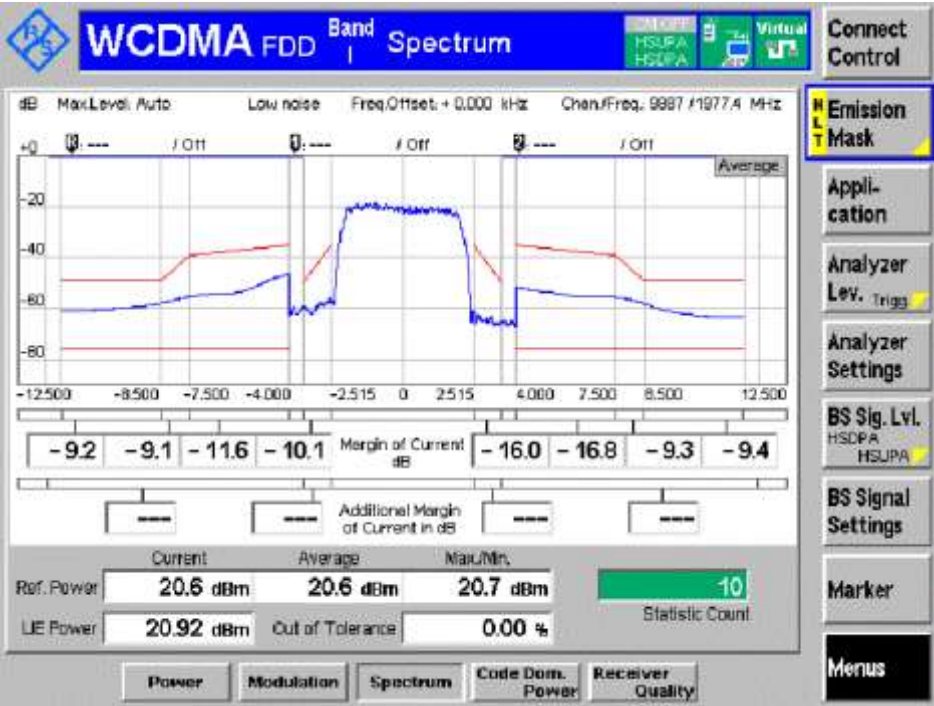
Sub-test 2



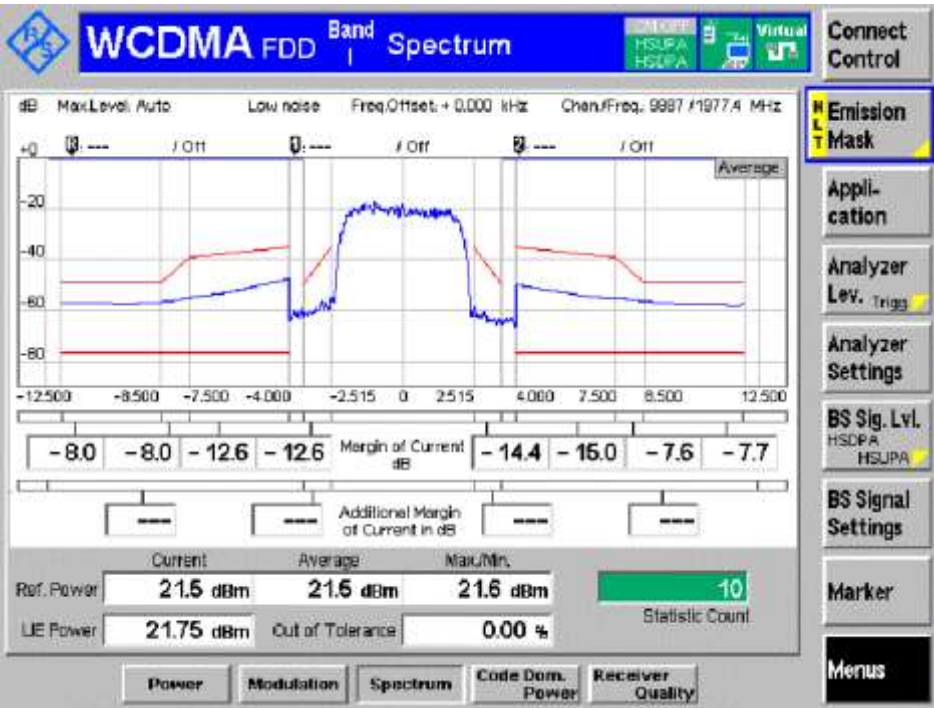
Sub-test 3



Sub-test 4



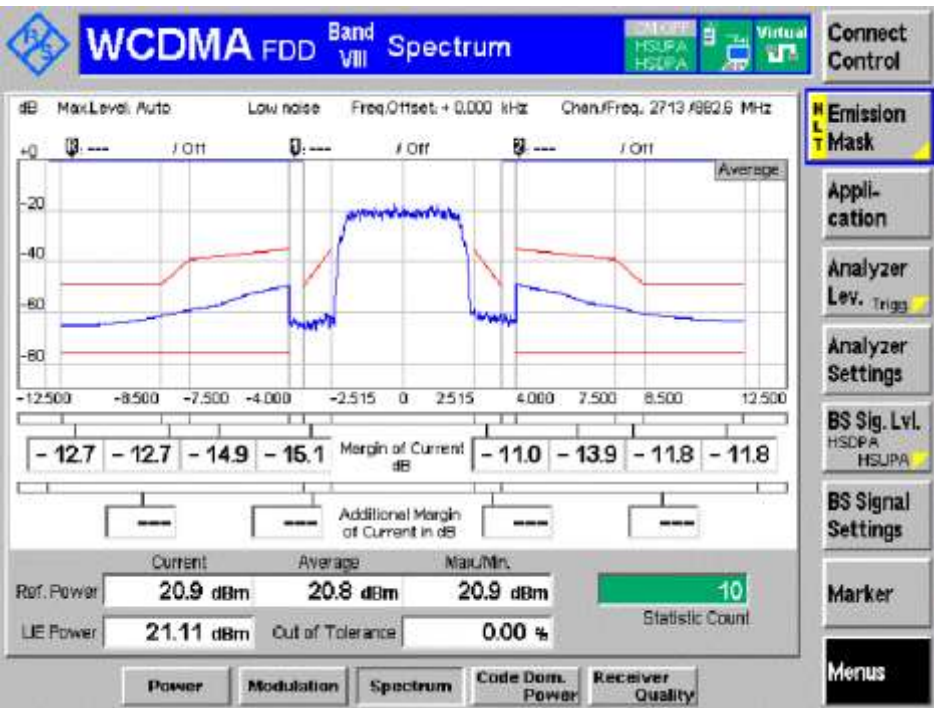
Sub-test 5



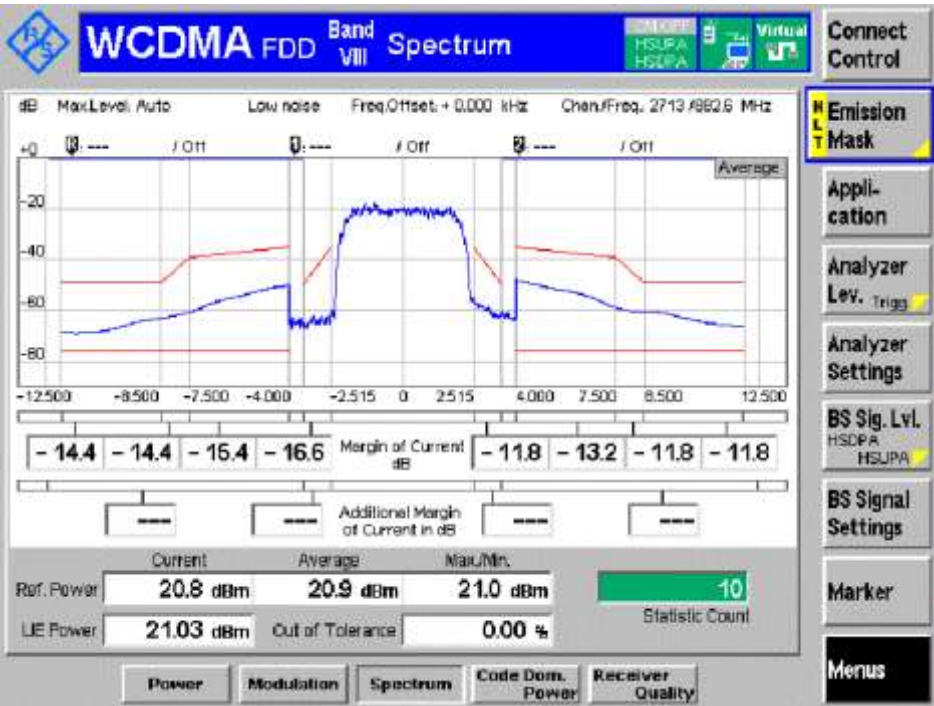
BAND VIII

Channel LCH

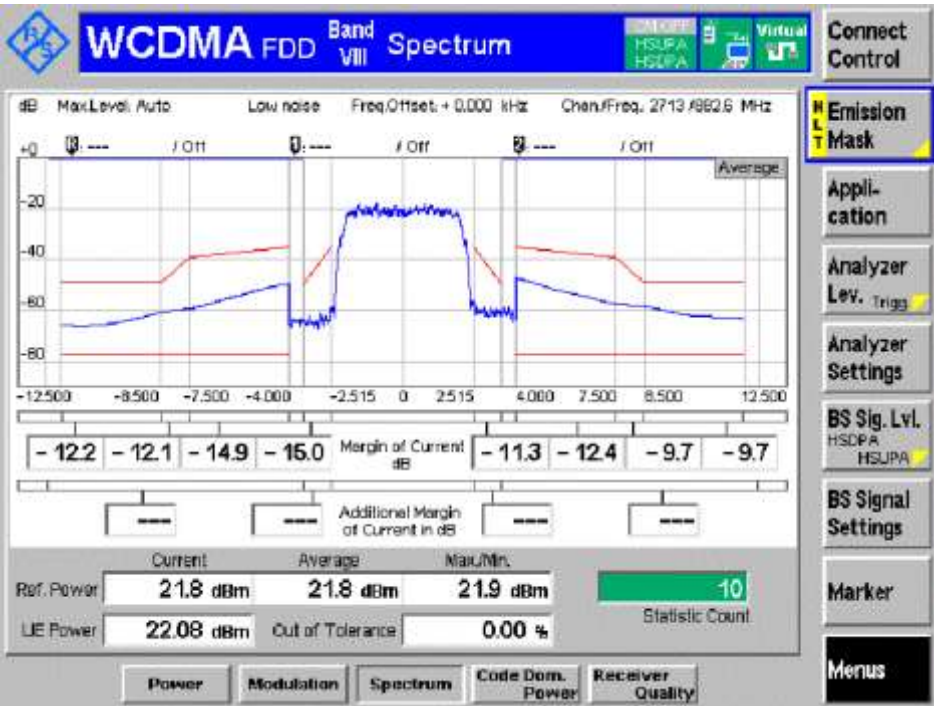
Sub-test 1



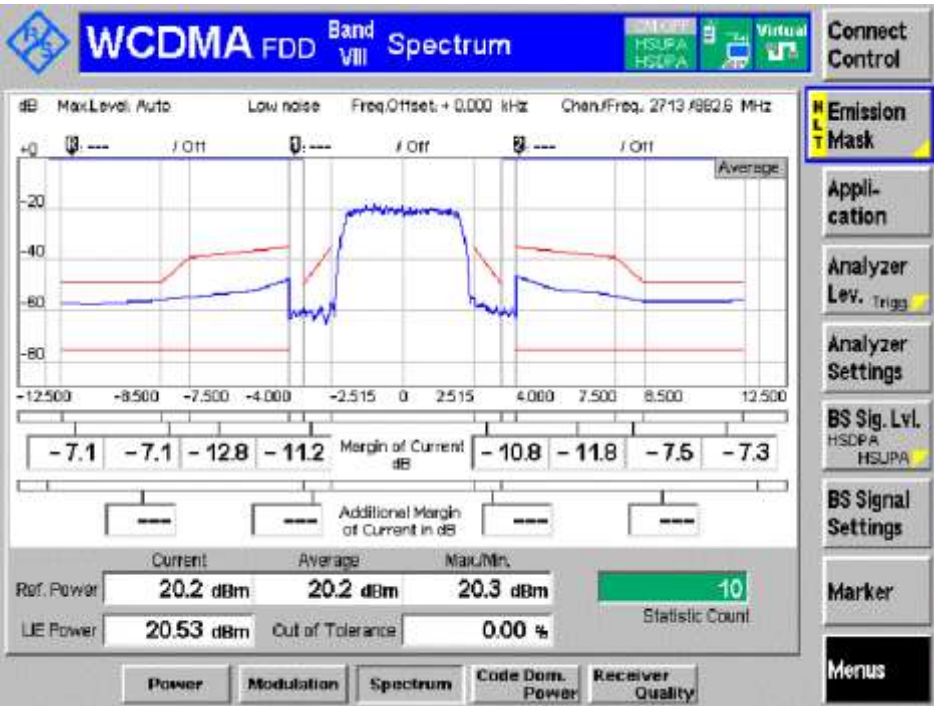
Sub-test 2



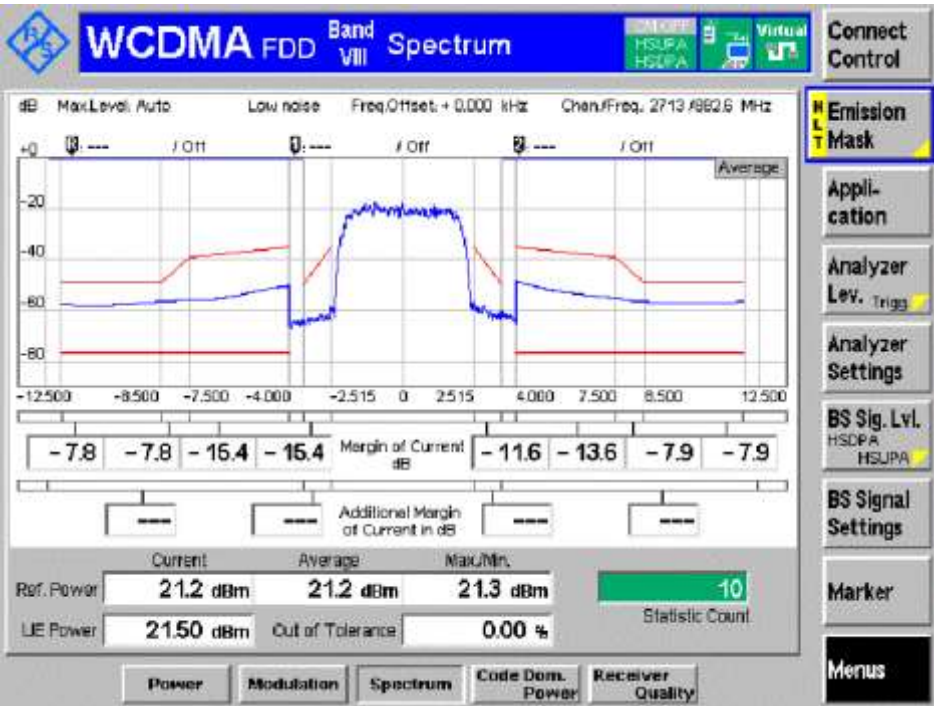
Sub-test 3



Sub-test 4

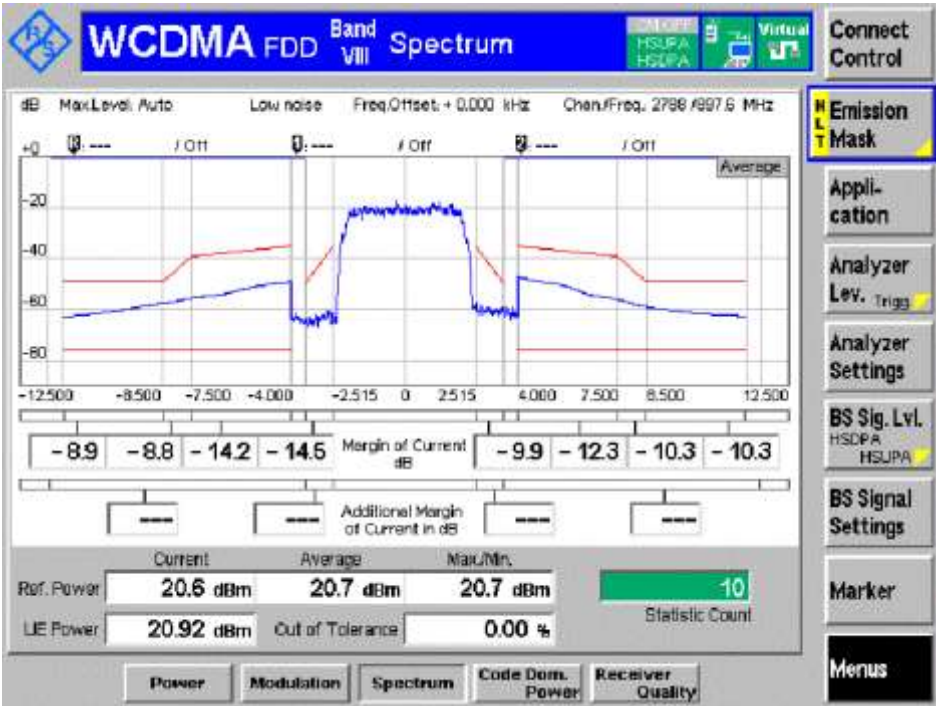


Sub-test 5

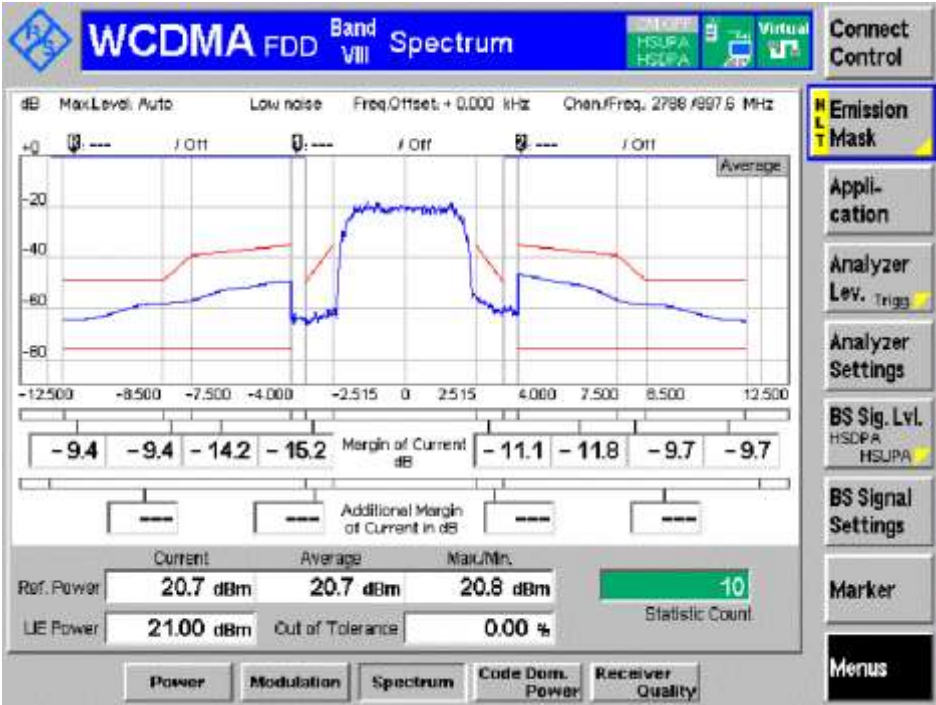


Channel MCH

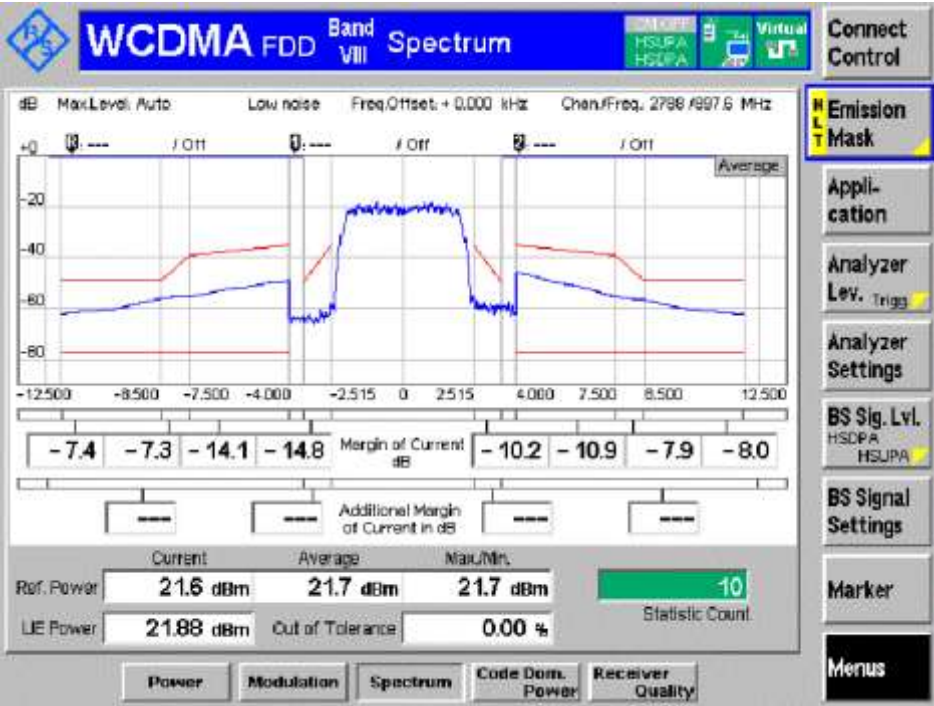
Sub-test 1



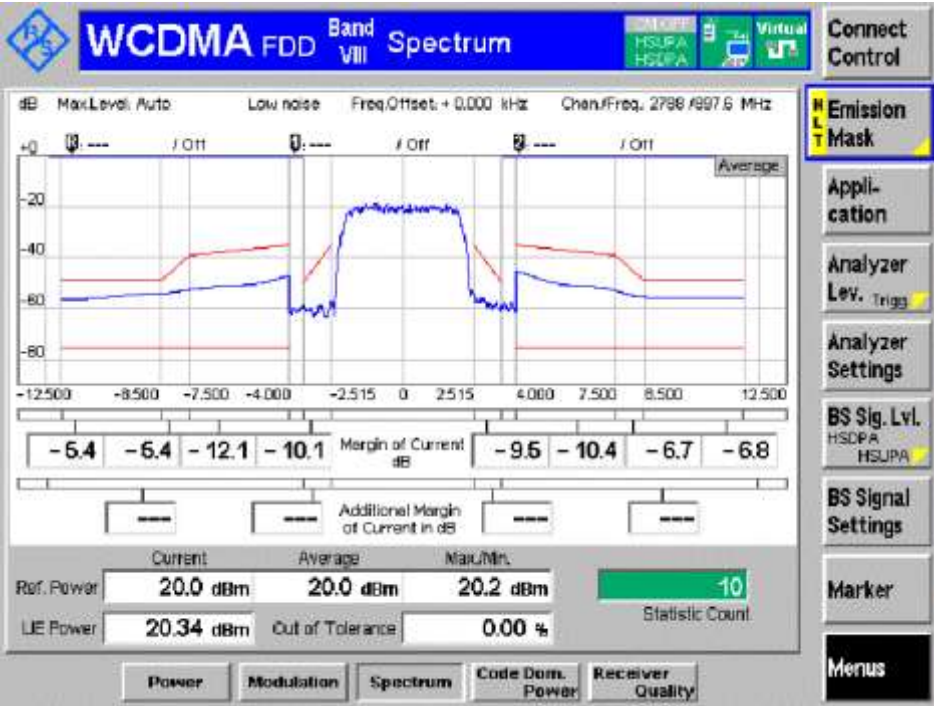
Sub-test 2



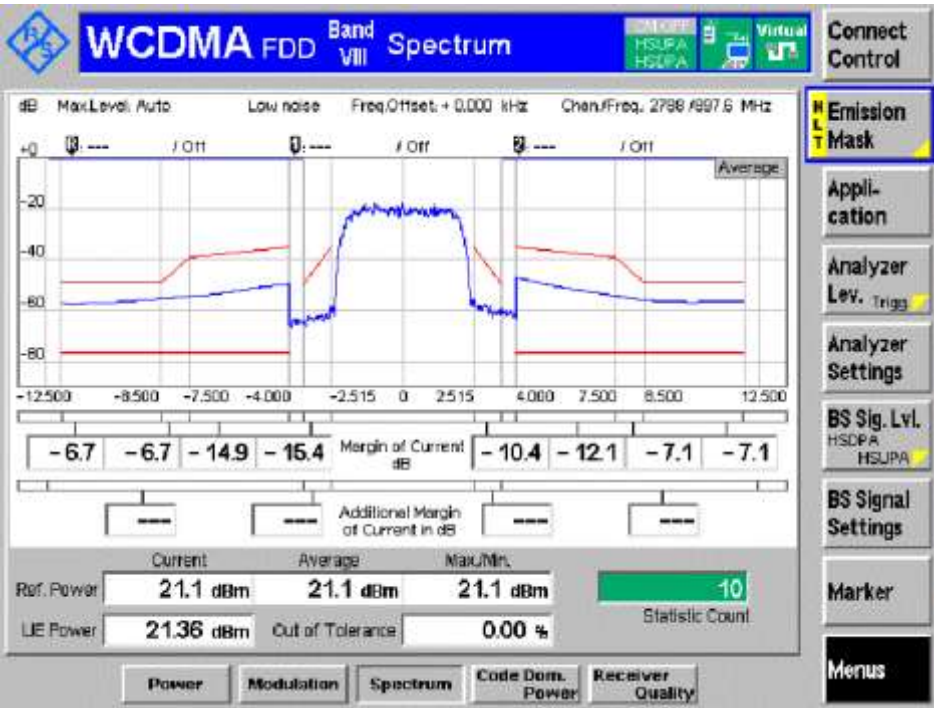
Sub-test 3



Sub-test 4

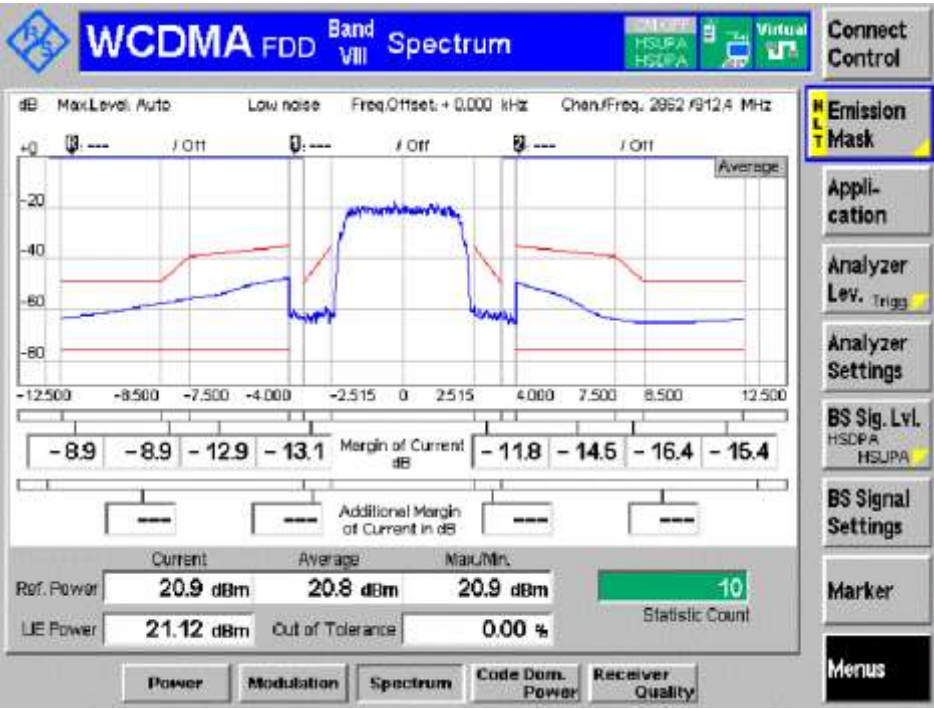


Sub-test 5

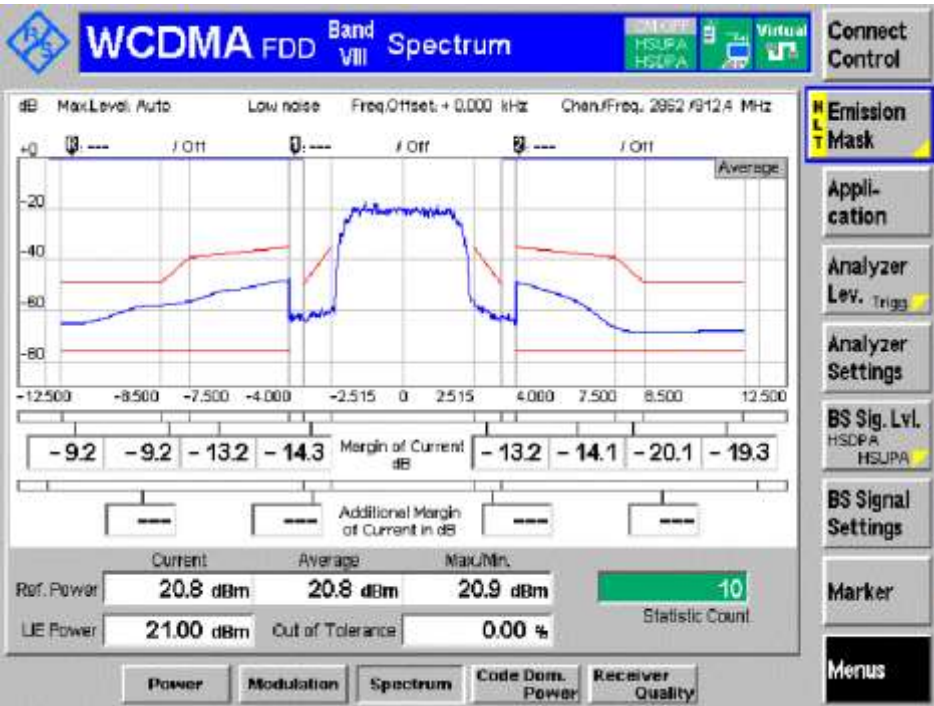


Channel HCH

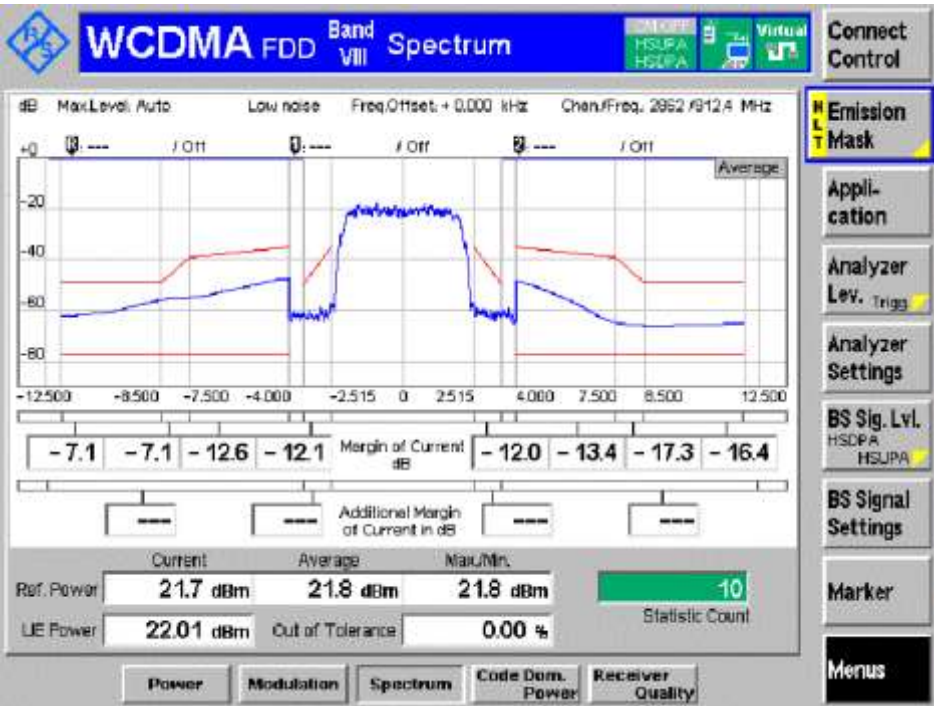
Sub-test 1



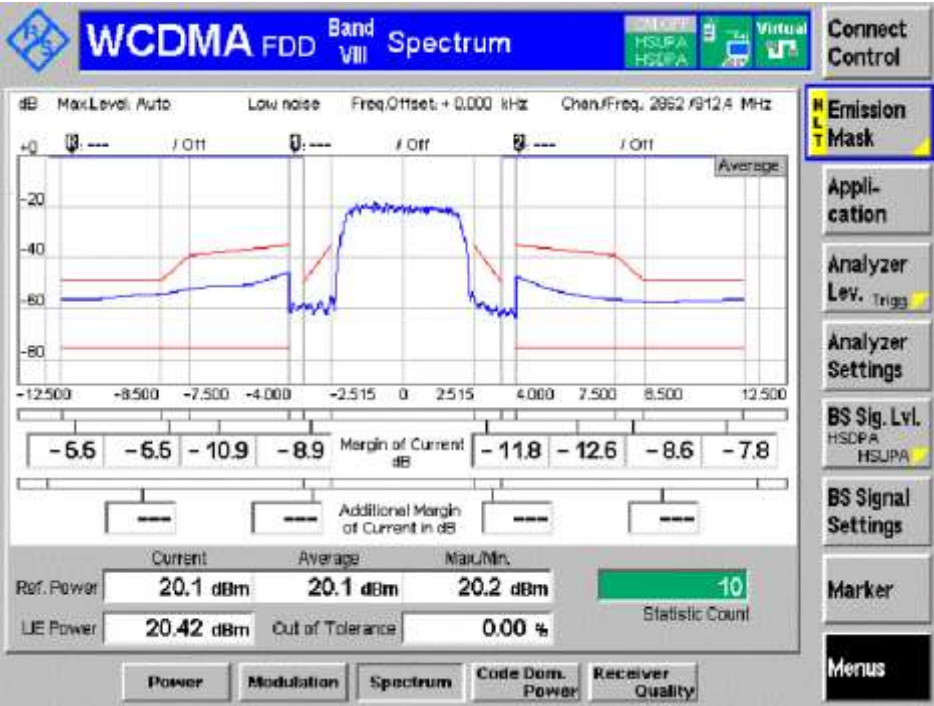
Sub-test 2



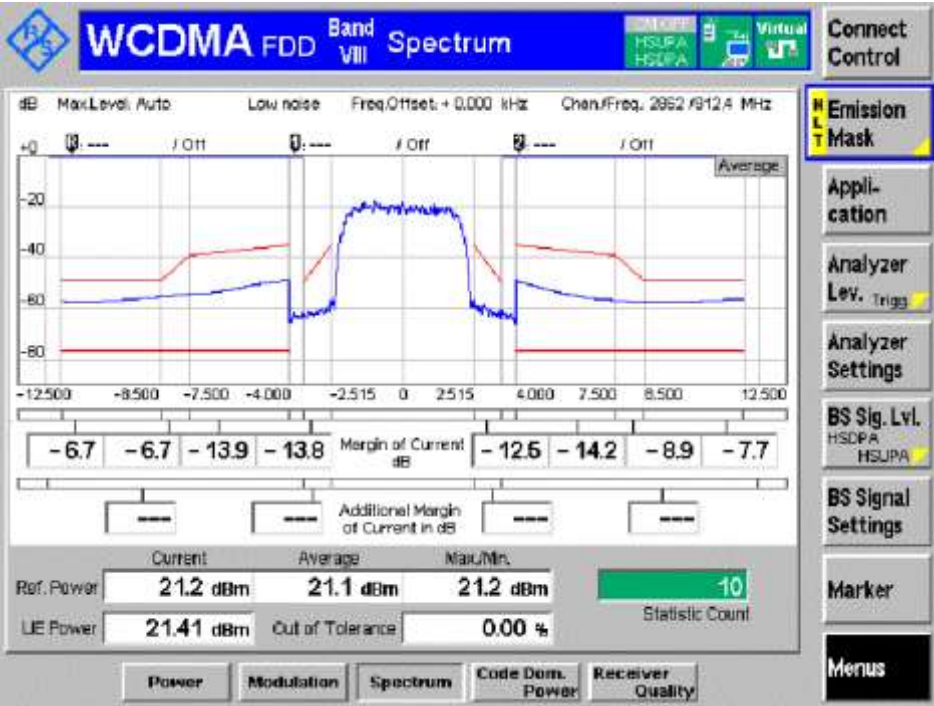
Sub-test 3



Sub-test 4



Sub-test 5



Appendix K. Transmitter adjacent channel leakage power ratio with HS-DPPCH and E-DCH

Note: All the modes had been tested, but only the worst data recorded in the report.

| Operating Band | Test Conditions | Test Channel | Sub-test | UE Channel | Measurement Data(dBm) | Limit (dBm) | Result |
|----------------|-----------------|--------------|----------|------------|-----------------------|-------------|--------|
| Band I | TNVN | LCH | 1 | +5MHz | -44.56 | -32.2 | Pass |
| | | | | -5 MHz | -45.05 | -32.2 | Pass |
| | | | | -10MHz | -55.10 | -42.2 | Pass |
| | | | | +10MHz | -54.76 | -42.2 | Pass |
| | | | 2 | +5MHz | -42.81 | -32.2 | Pass |
| | | | | -5 MHz | -42.75 | -32.2 | Pass |
| | | | | -10MHz | -55.13 | -42.2 | Pass |
| | | | | +10MHz | -54.28 | -42.2 | Pass |
| | | | 3 | +5MHz | -43.18 | -32.2 | Pass |
| | | | | -5 MHz | -42.75 | -32.2 | Pass |
| | | | | -10MHz | -54.71 | -42.2 | Pass |
| | | | | +10MHz | -53.74 | -42.2 | Pass |
| | | | 4 | +5MHz | -42.37 | -32.2 | Pass |
| | | | | -5 MHz | -42.73 | -32.2 | Pass |
| | | | | -10MHz | -55.08 | -42.2 | Pass |
| | | | | +10MHz | -54.07 | -42.2 | Pass |
| | | | 5 | +5MHz | -44.69 | -32.2 | Pass |
| | | | | -5 MHz | -44.95 | -32.2 | Pass |
| | | | | -10MHz | -51.58 | -42.2 | Pass |
| | | | | +10MHz | -51.31 | -42.2 | Pass |
| | | MCH | 1 | +5MHz | -49.95 | -32.2 | Pass |
| | | | | -5 MHz | -48.43 | -32.2 | Pass |
| | | | | -10MHz | -55.35 | -42.2 | Pass |
| | | | | +10MHz | -55.80 | -42.2 | Pass |
| | | | 2 | +5MHz | -43.70 | -32.2 | Pass |

| | | | | | | | |
|--|--|-----|---|--------|--------|-------|------|
| | | | | -5 MHz | -42.85 | -32.2 | Pass |
| | | | | -10MHz | -55.05 | -42.2 | Pass |
| | | | | +10MHz | -55.06 | -42.2 | Pass |
| | | | 3 | +5MHz | -41.48 | -32.2 | Pass |
| | | | | -5 MHz | -41.71 | -32.2 | Pass |
| | | | | -10MHz | -54.46 | -42.2 | Pass |
| | | | | +10MHz | -54.63 | -42.2 | Pass |
| | | | 4 | +5MHz | -47.62 | -32.2 | Pass |
| | | | | -5 MHz | -46.54 | -32.2 | Pass |
| | | | | -10MHz | -55.00 | -42.2 | Pass |
| | | | | +10MHz | -55.56 | -42.2 | Pass |
| | | | 5 | +5MHz | -47.29 | -32.2 | Pass |
| | | | | -5 MHz | -45.80 | -32.2 | Pass |
| | | | | -10MHz | -51.86 | -42.2 | Pass |
| | | | | +10MHz | -52.01 | -42.2 | Pass |
| | | HCH | 1 | +5MHz | -49.68 | -32.2 | Pass |
| | | | | -5 MHz | -46.14 | -32.2 | Pass |
| | | | | -10MHz | -55.13 | -42.2 | Pass |
| | | | | +10MHz | -55.85 | -42.2 | Pass |
| | | | 2 | +5MHz | -40.68 | -32.2 | Pass |
| | | | | -5 MHz | -39.13 | -32.2 | Pass |
| | | | | -10MHz | -54.20 | -42.2 | Pass |
| | | | | +10MHz | -55.92 | -42.2 | Pass |
| | | | 3 | +5MHz | -40.97 | -32.2 | Pass |
| | | | | -5 MHz | -39.20 | -32.2 | Pass |
| | | | | -10MHz | -53.09 | -42.2 | Pass |
| | | | | +10MHz | -55.04 | -42.2 | Pass |
| | | | 4 | +5MHz | -47.95 | -32.2 | Pass |

| | | | | | | | |
|--|--|--|---|--------|--------|-------|------|
| | | | | -5 MHz | -43.71 | -32.2 | Pass |
| | | | | -10MHz | -54.48 | -42.2 | Pass |
| | | | | +10MHz | -55.95 | -42.2 | Pass |
| | | | 5 | +5MHz | -45.82 | -32.2 | Pass |
| | | | | -5 MHz | -43.84 | -32.2 | Pass |
| | | | | -10MHz | -51.64 | -42.2 | Pass |
| | | | | +10MHz | -52.10 | -42.2 | Pass |
| | | | | | | | |

| Operating Band | Test Conditions | Test Channel | Sub-test | UE Channel | Measurement Data(dBm) | Limit (dBm) | Result |
|----------------|-----------------|--------------|----------|------------|-----------------------|-------------|--------|
| Band VIII | TNVN | LCH | 1 | +5MHz | -45.11 | -32.2 | Pass |
| | | | | -5 MHz | -46.22 | -32.2 | Pass |
| | | | | -10MHz | -58.28 | -42.2 | Pass |
| | | | | +10MHz | -56.81 | -42.2 | Pass |
| | | | 2 | +5MHz | -44.26 | -32.2 | Pass |
| | | | | -5 MHz | -46.51 | -32.2 | Pass |
| | | | | -10MHz | -60.42 | -42.2 | Pass |
| | | | | +10MHz | -57.26 | -42.2 | Pass |
| | | | 3 | +5MHz | -43.76 | -32.2 | Pass |
| | | | | -5 MHz | -46.07 | -32.2 | Pass |
| | | | | -10MHz | -58.16 | -42.2 | Pass |
| | | | | +10MHz | -55.48 | -42.2 | Pass |
| | | | 4 | +5MHz | -43.14 | -32.2 | Pass |
| | | | | -5 MHz | -44.11 | -32.2 | Pass |
| | | | | -10MHz | -51.47 | -42.2 | Pass |
| | | | | +10MHz | -51.02 | -42.2 | Pass |
| | | | 5 | +5MHz | -44.69 | -32.2 | Pass |
| | | | | -5 MHz | -46.17 | -32.2 | Pass |
| | | | | -10MHz | -52.16 | -42.2 | Pass |

| | | | | | | | |
|--|--|-----|---|--------|--------|-------|------|
| | | | | +10MHz | -51.66 | -42.2 | Pass |
| | | MCH | 1 | +5MHz | -43.23 | -32.2 | Pass |
| | | | | -5 MHz | -45.04 | -32.2 | Pass |
| | | | | -10MHz | -54.30 | -42.2 | Pass |
| | | | | +10MHz | -55.44 | -42.2 | Pass |
| | | | 2 | +5MHz | -42.33 | -32.2 | Pass |
| | | | | -5 MHz | -44.69 | -32.2 | Pass |
| | | | | -10MHz | -55.03 | -42.2 | Pass |
| | | | | +10MHz | -55.50 | -42.2 | Pass |
| | | | 3 | +5MHz | -42.13 | -32.2 | Pass |
| | | | | -5 MHz | -44.79 | -32.2 | Pass |
| | | | | -10MHz | -53.27 | -42.2 | Pass |
| | | | | +10MHz | -53.86 | -42.2 | Pass |
| | | | 4 | +5MHz | -41.73 | -32.2 | Pass |
| | | | | -5 MHz | -42.93 | -32.2 | Pass |
| | | | | -10MHz | -49.78 | -42.2 | Pass |
| | | | | +10MHz | -50.53 | -42.2 | Pass |
| | | | 5 | +5MHz | -43.01 | -32.2 | Pass |
| | | | | -5 MHz | -45.04 | -32.2 | Pass |
| | | | | -10MHz | -51.23 | -42.2 | Pass |
| | | | | +10MHz | -51.11 | -42.2 | Pass |
| | | HCH | 1 | +5MHz | -45.97 | -32.2 | Pass |
| | | | | -5 MHz | -44.13 | -32.2 | Pass |
| | | | | -10MHz | -54.69 | -42.2 | Pass |
| | | | | +10MHz | -59.52 | -42.2 | Pass |
| | | | 2 | +5MHz | -45.57 | -32.2 | Pass |
| | | | | -5 MHz | -44.21 | -32.2 | Pass |
| | | | | -10MHz | -55.31 | -42.2 | Pass |

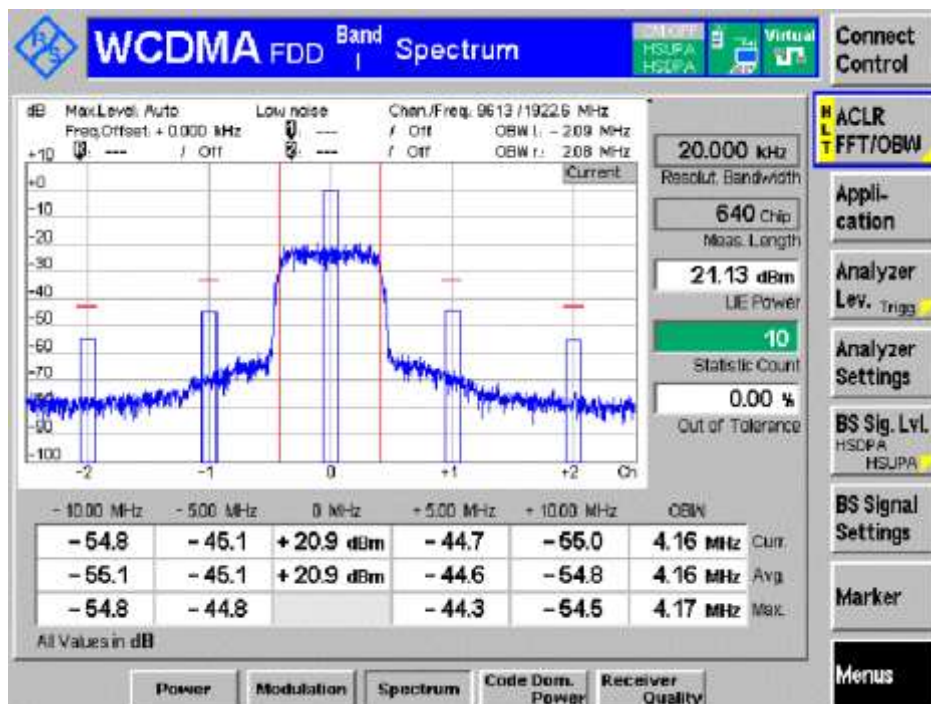
| | | | | | | | |
|--|--|--|---|--------|--------|-------|------|
| | | | | +10MHz | -63.34 | -42.2 | Pass |
| | | | 3 | +5MHz | -44.99 | -32.2 | Pass |
| | | | | -5 MHz | -43.66 | -32.2 | Pass |
| | | | | -10MHz | -53.29 | -42.2 | Pass |
| | | | | +10MHz | -60.53 | -42.2 | Pass |
| | | | 4 | +5MHz | -44.18 | -32.2 | Pass |
| | | | | -5 MHz | -42.16 | -32.2 | Pass |
| | | | | -10MHz | -50.24 | -42.2 | Pass |
| | | | | +10MHz | -51.95 | -42.2 | Pass |
| | | | 5 | +5MHz | -45.33 | -32.2 | Pass |
| | | | | -5 MHz | -44.59 | -32.2 | Pass |
| | | | | -10MHz | -51.22 | -42.2 | Pass |
| | | | | +10MHz | -51.98 | -42.2 | Pass |

BAND I

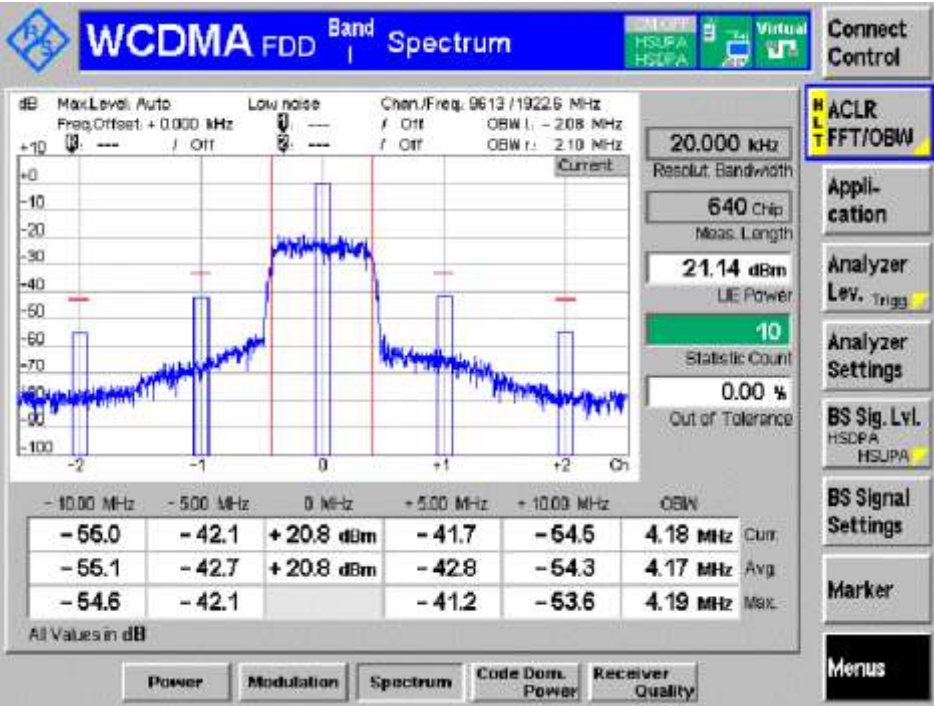
TNVN

Channel LCH

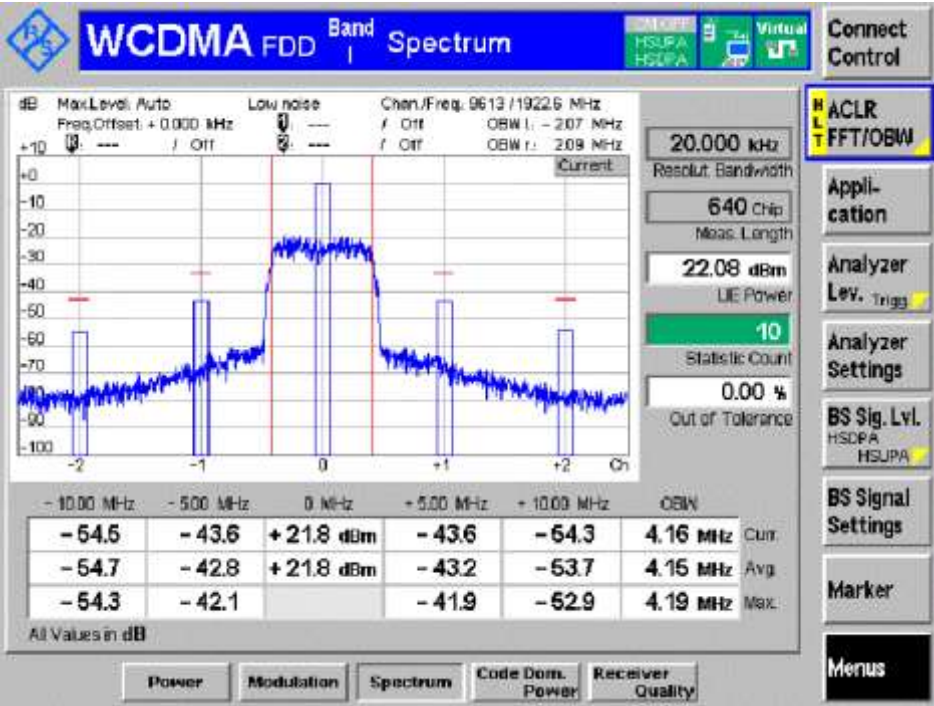
Sub-test 1



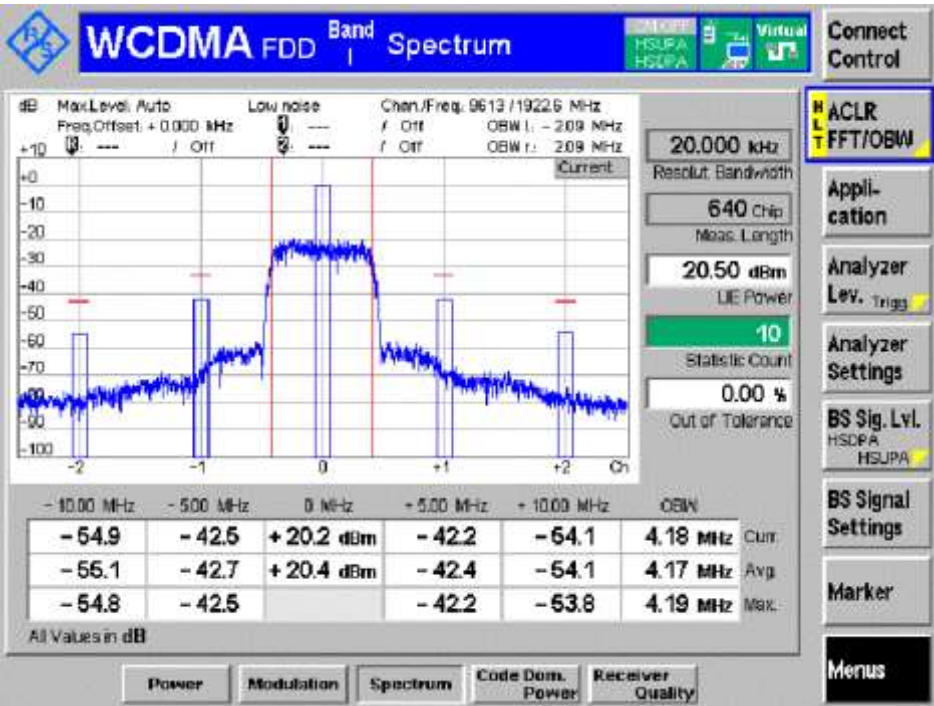
Sub-test 2



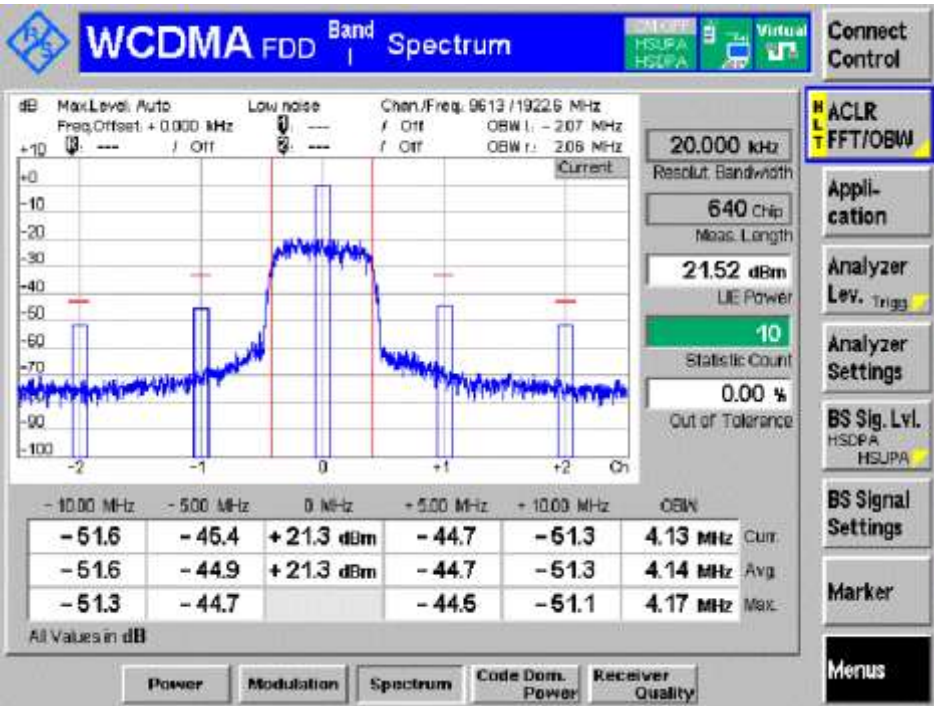
Sub-test 3



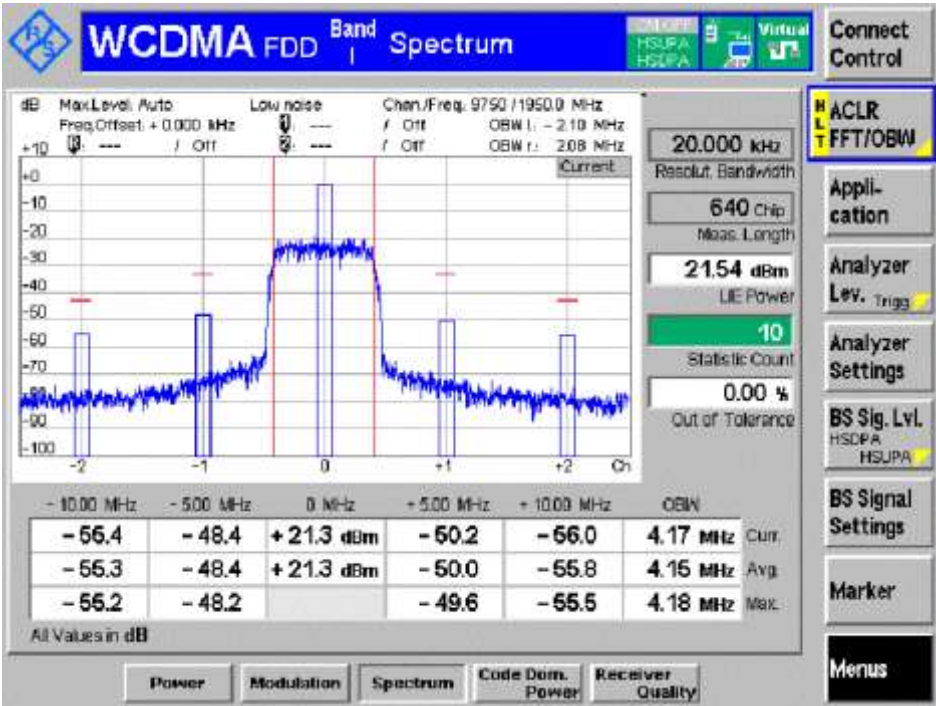
Sub-test 4



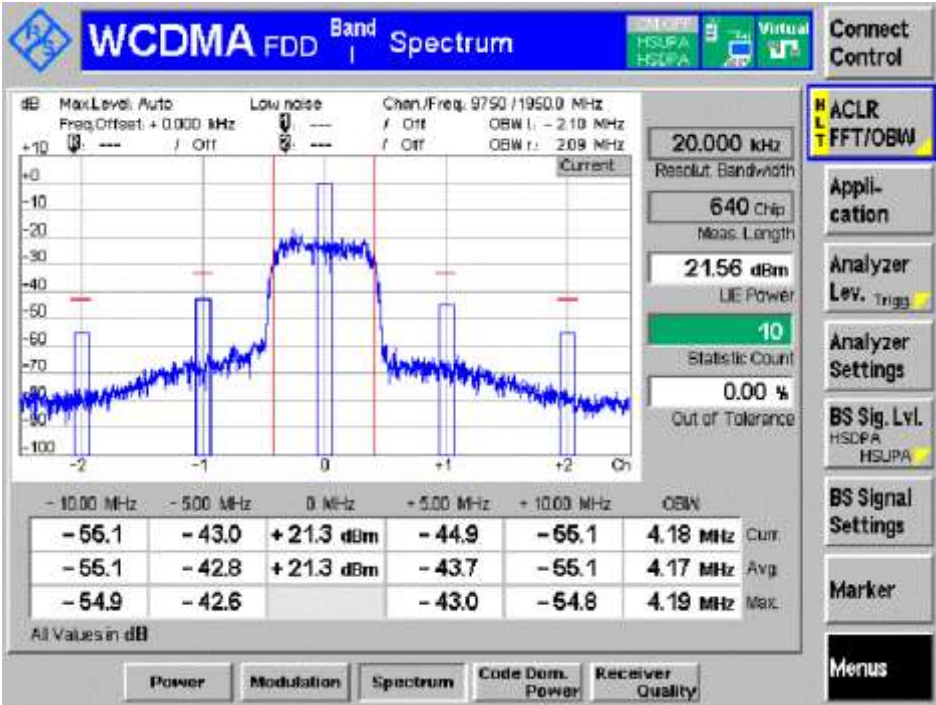
Sub-test 5



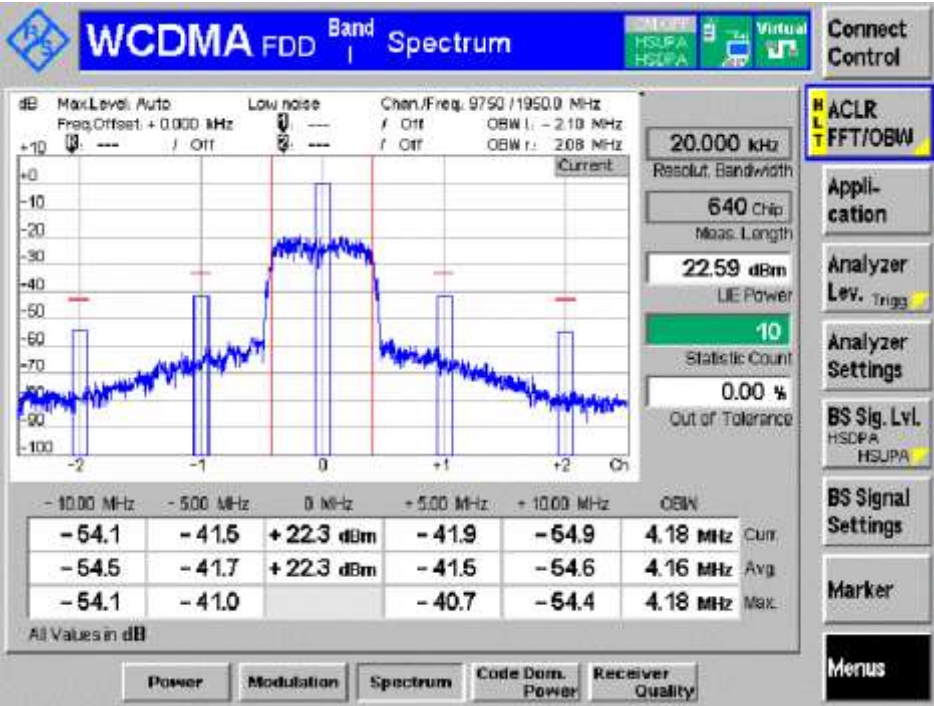
Channel MCH
Sub-test 1



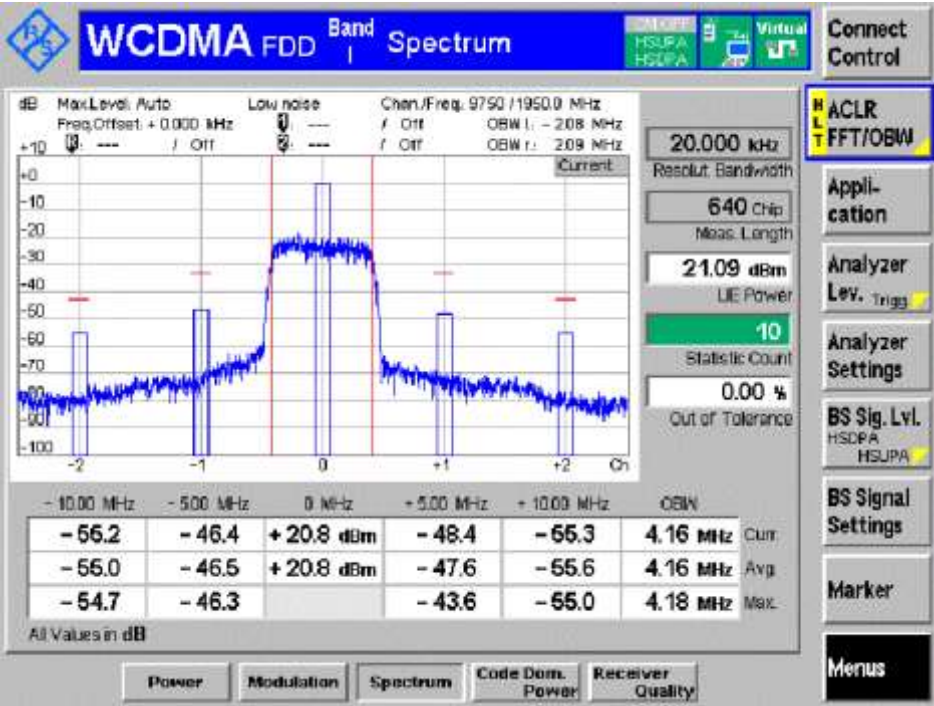
Sub-test 2



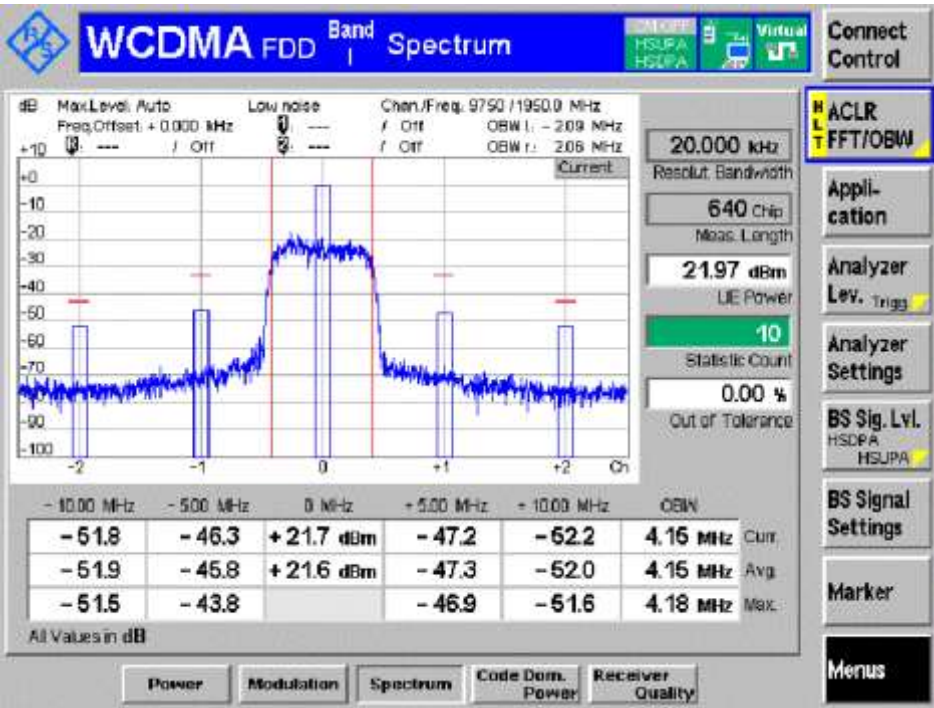
Sub-test 3



Sub-test 4

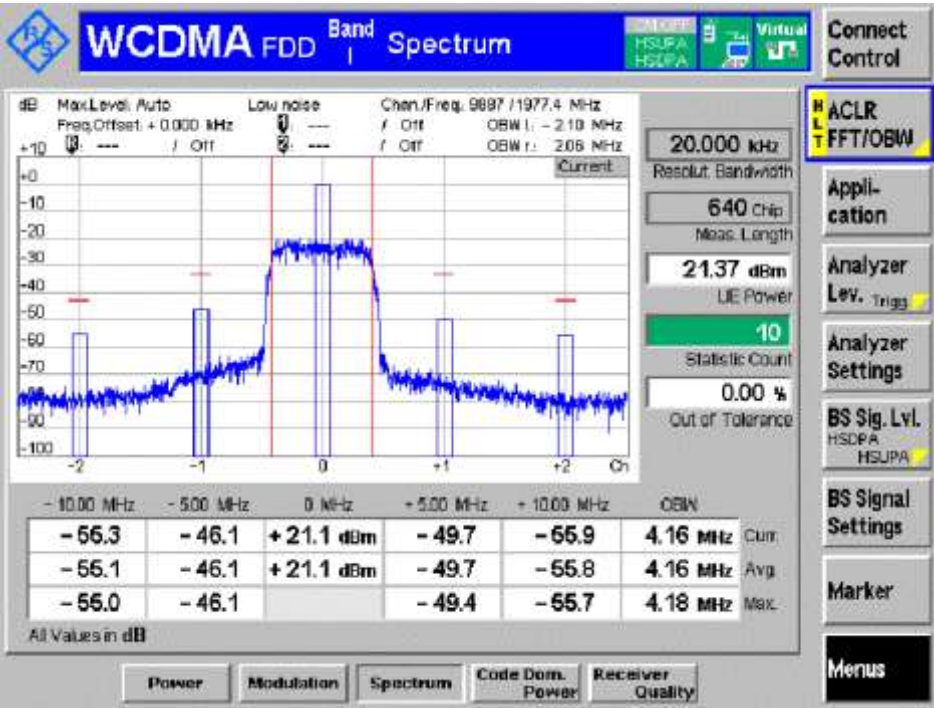


Sub-test 5

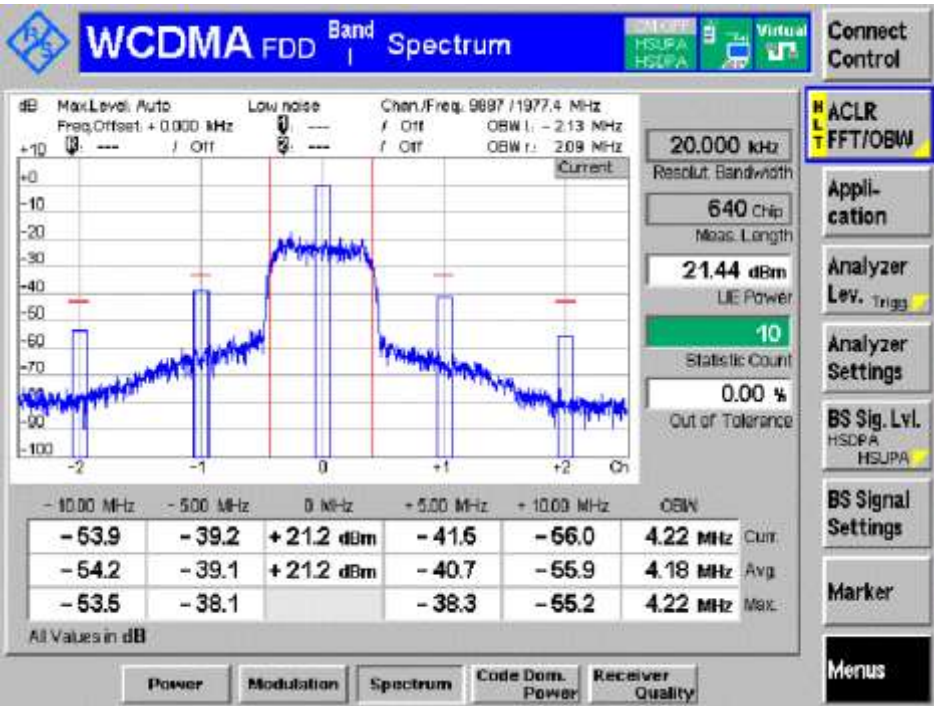


Channel HCH

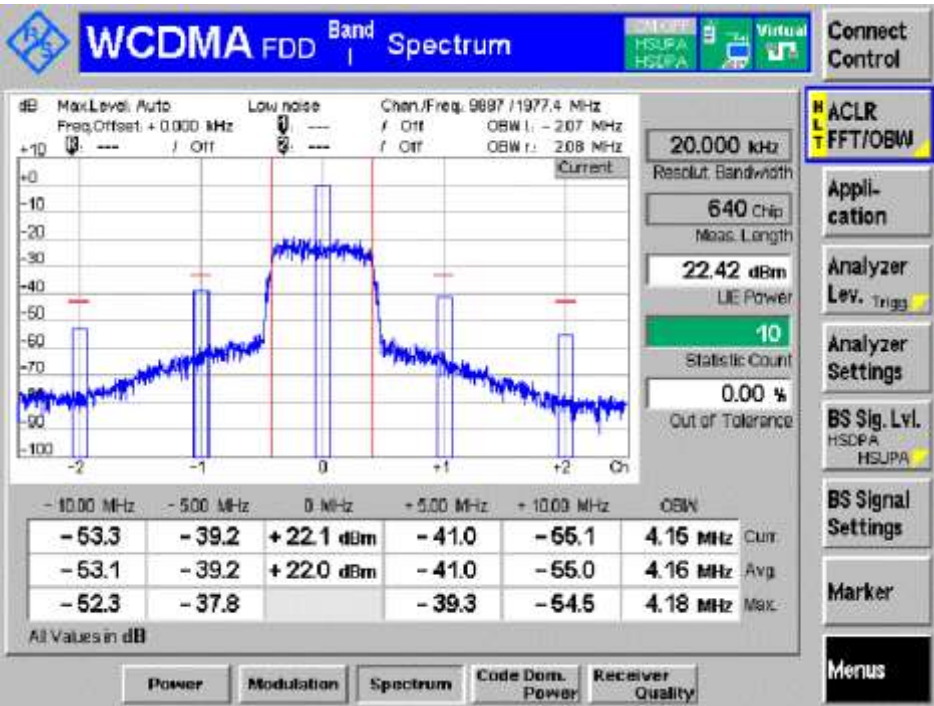
Sub-test 1



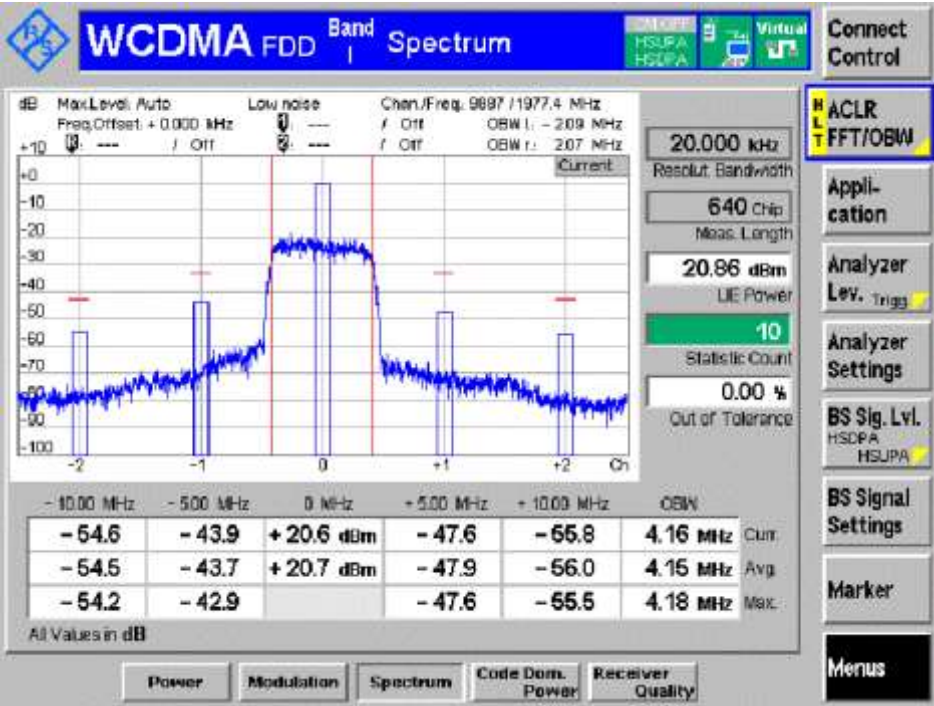
Sub-test 2



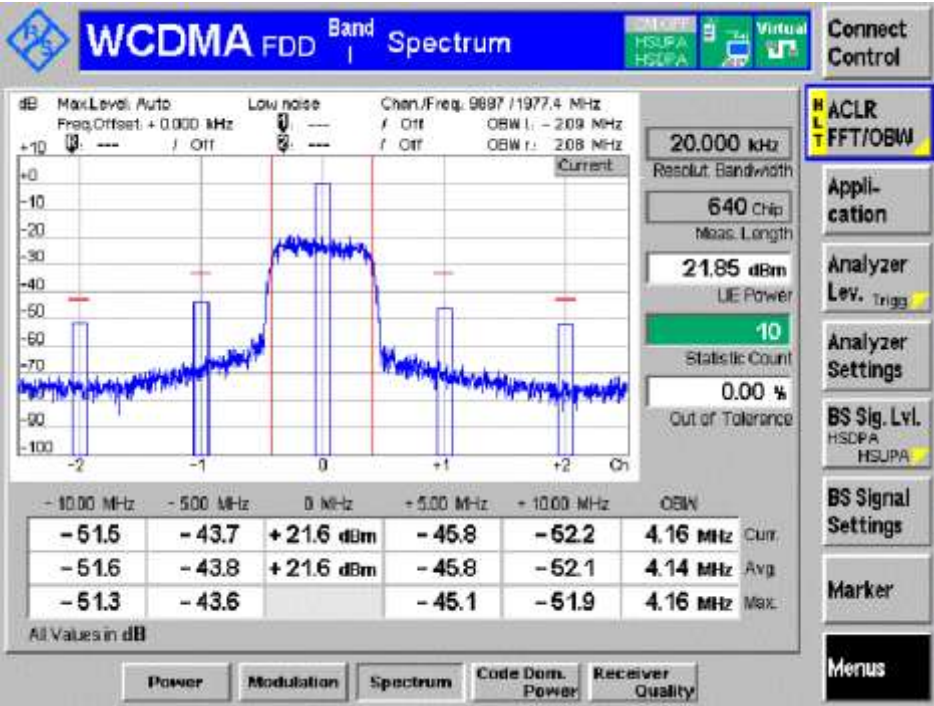
Sub-test 3



Sub-test 4



Sub-test 5

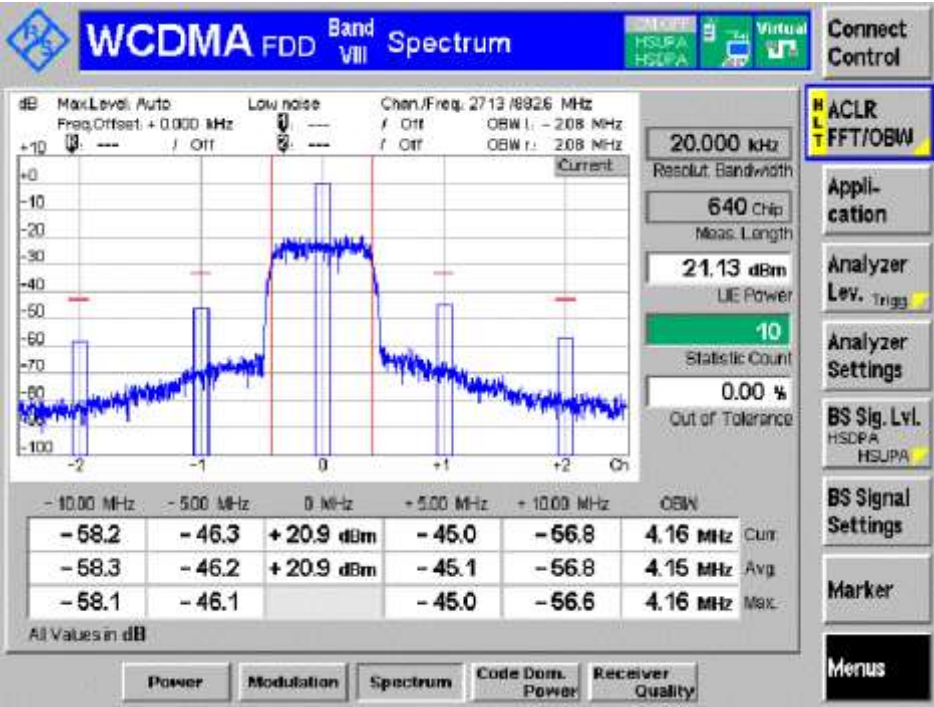


BAND VIII

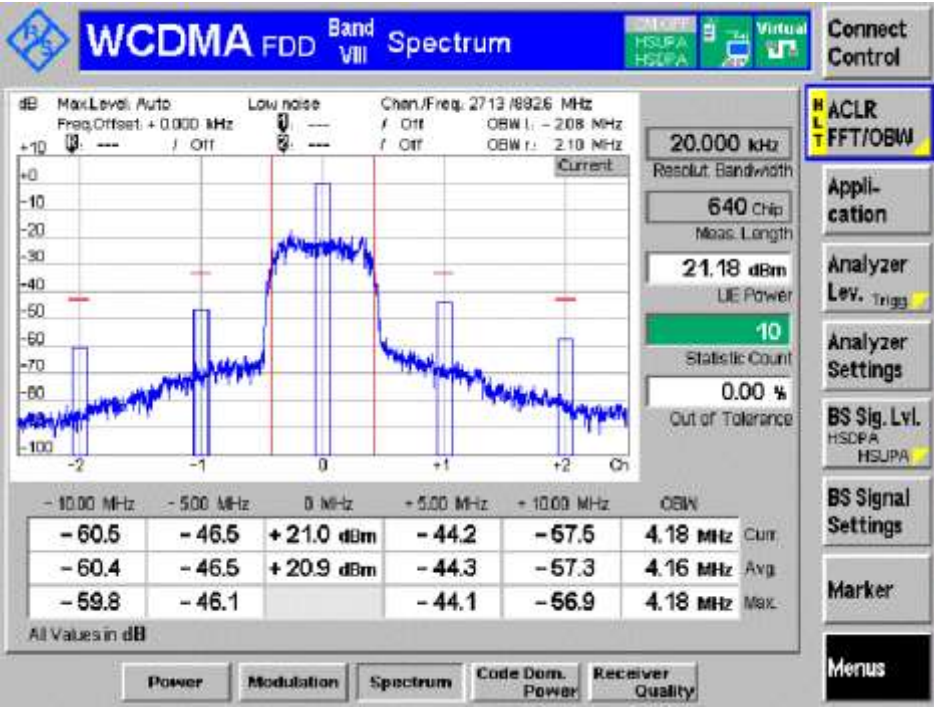
TNVN

Channel LCH

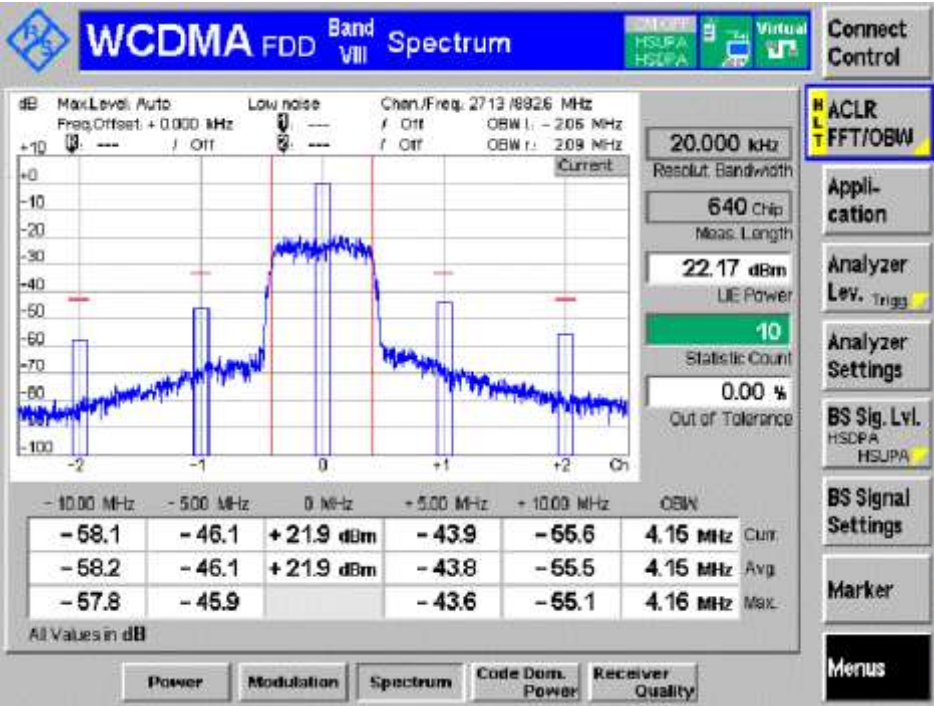
Sub-test 1



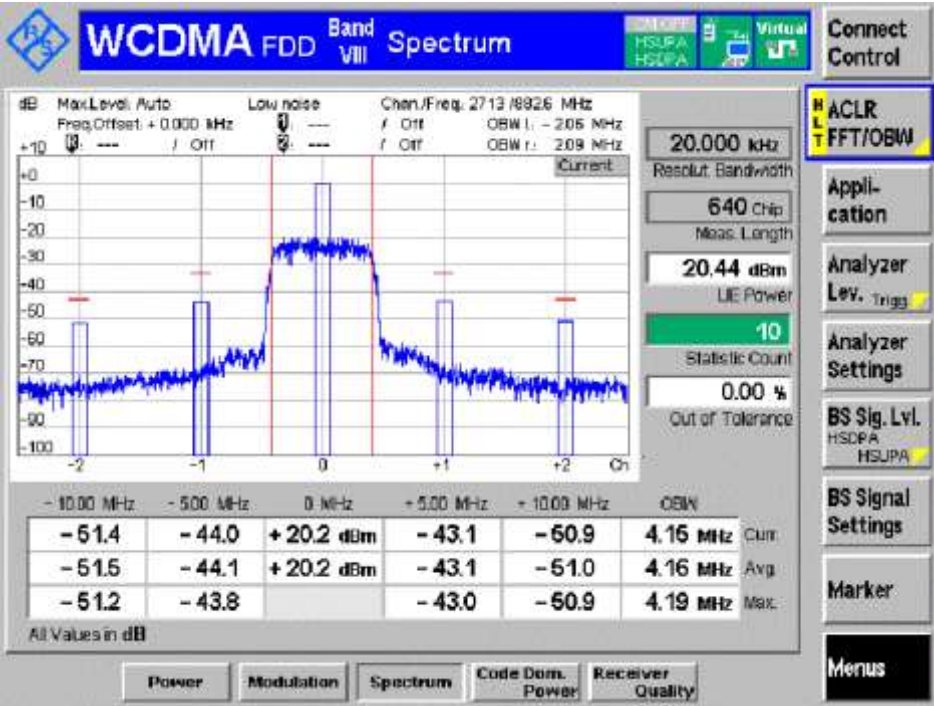
Sub-test 2



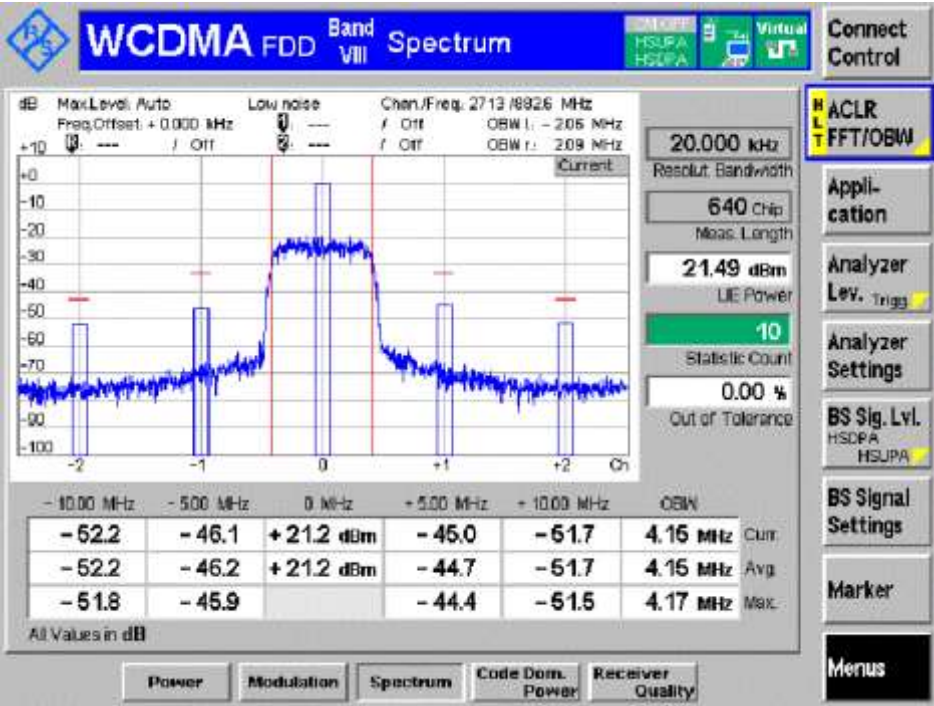
Sub-test 3



Sub-test 4

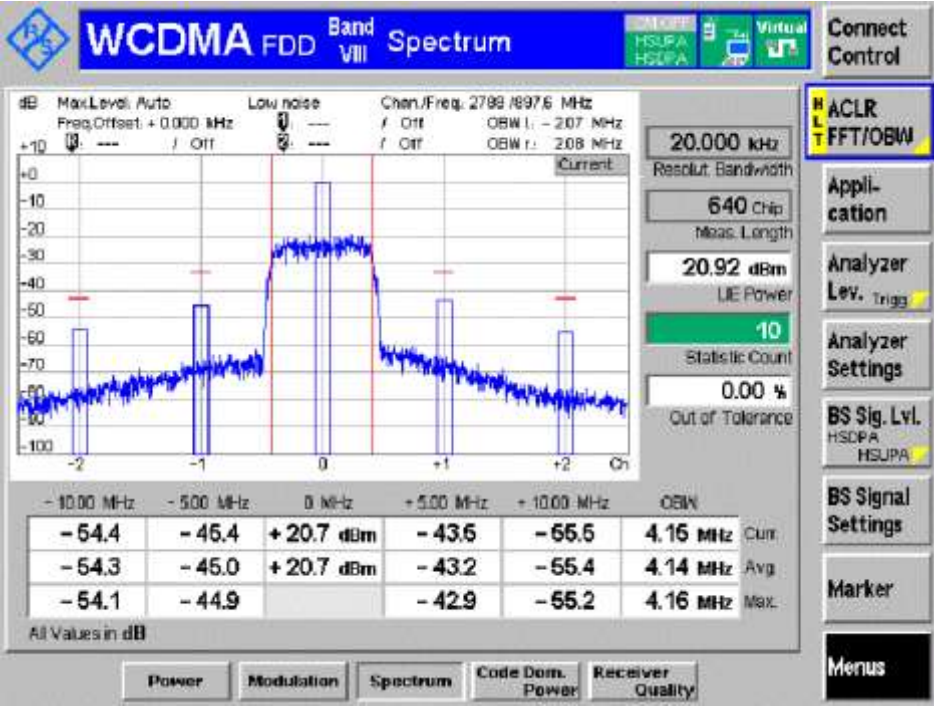


Sub-test 5

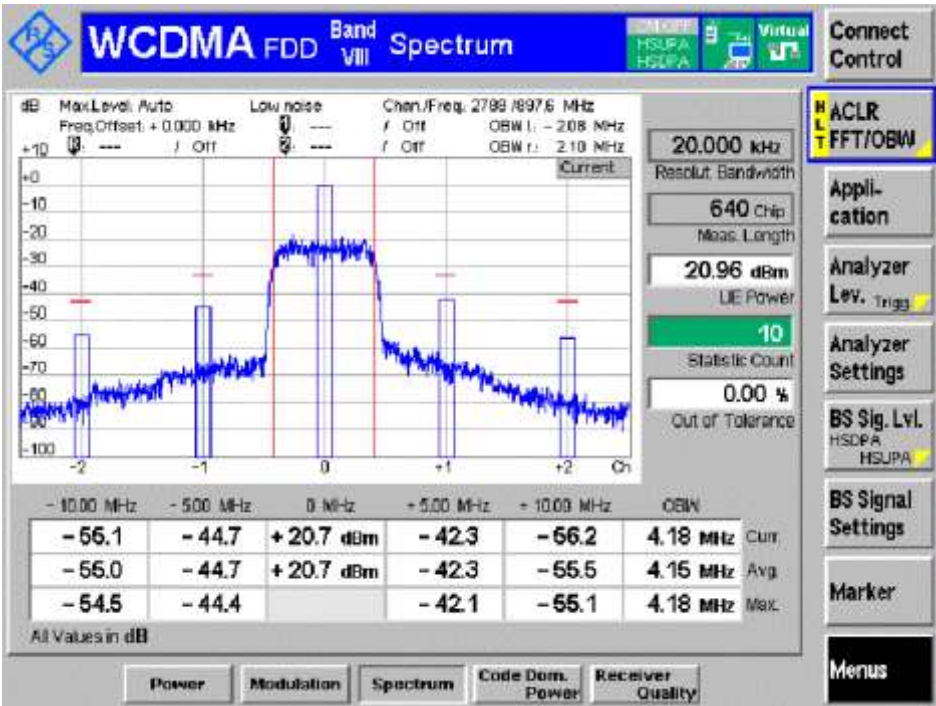


Channel MCH

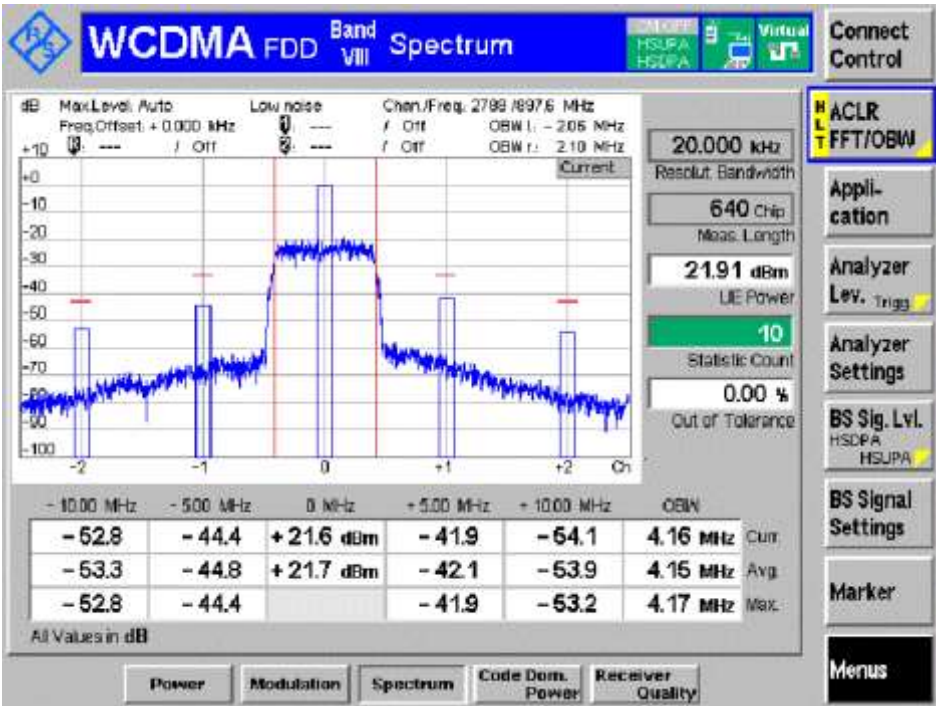
Sub-test 1



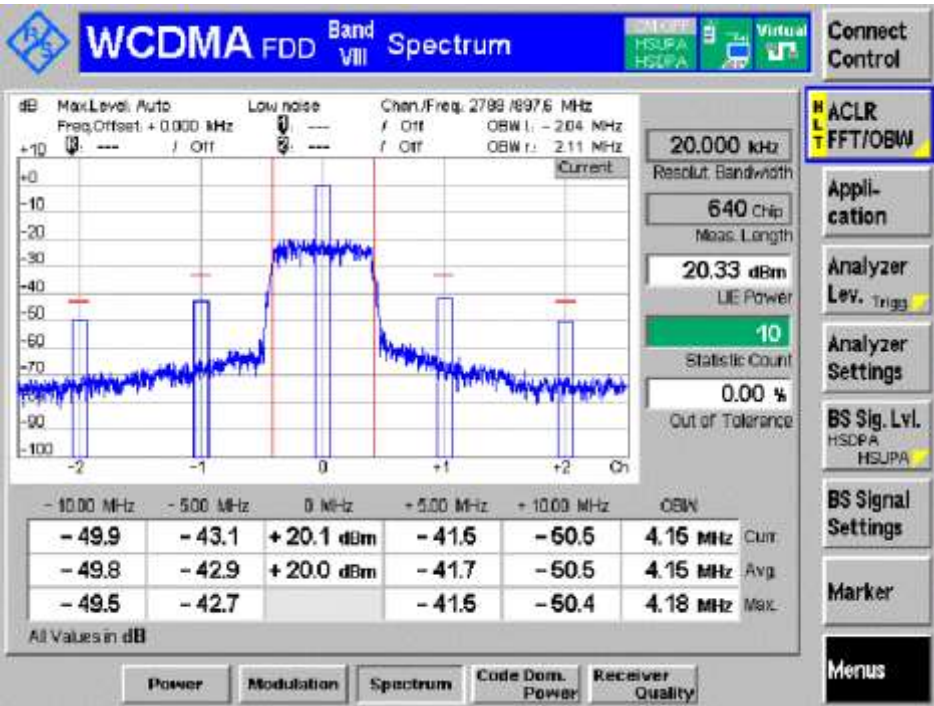
Sub-test 2



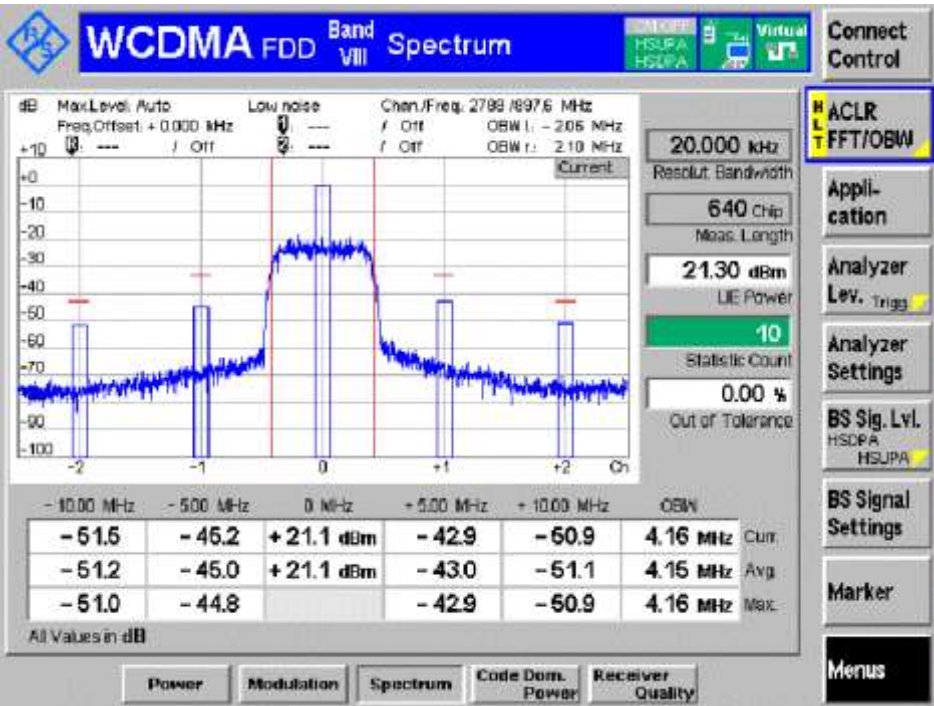
Sub-test 3



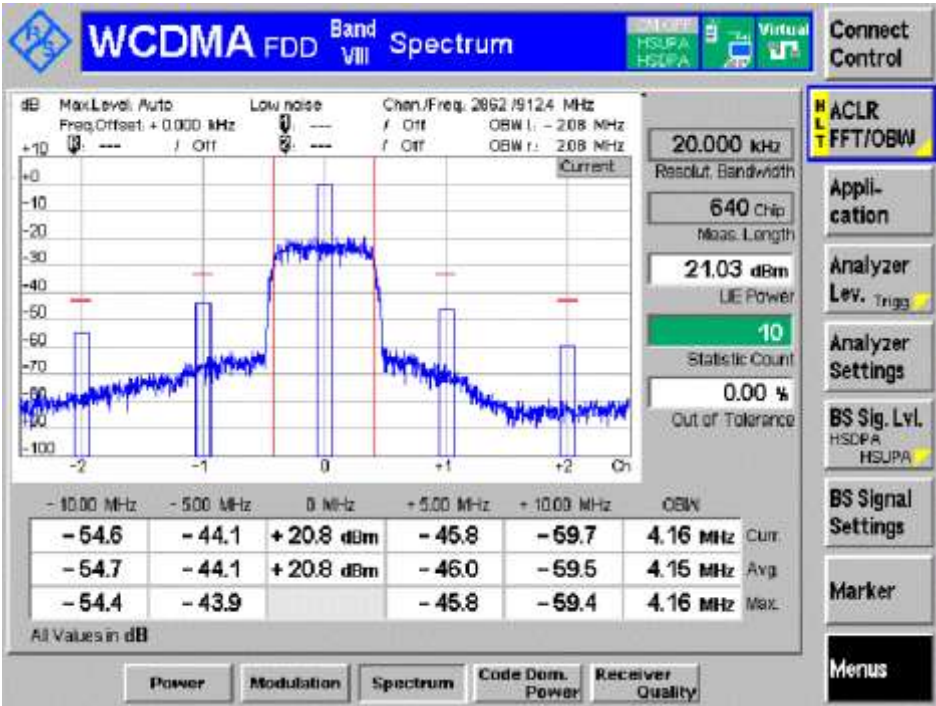
Sub-test 4



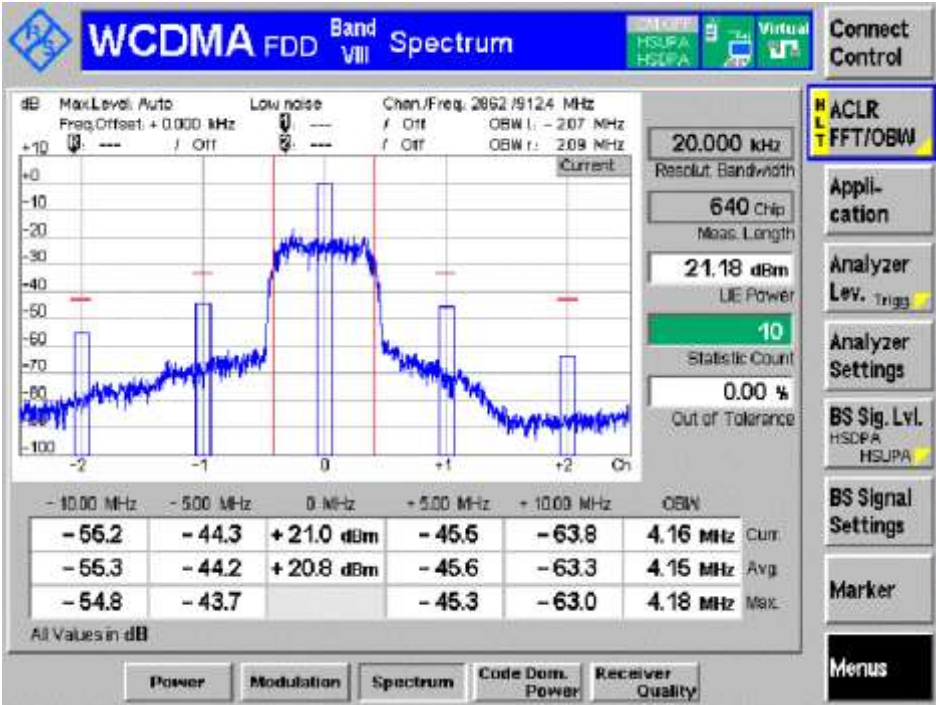
Sub-test 5



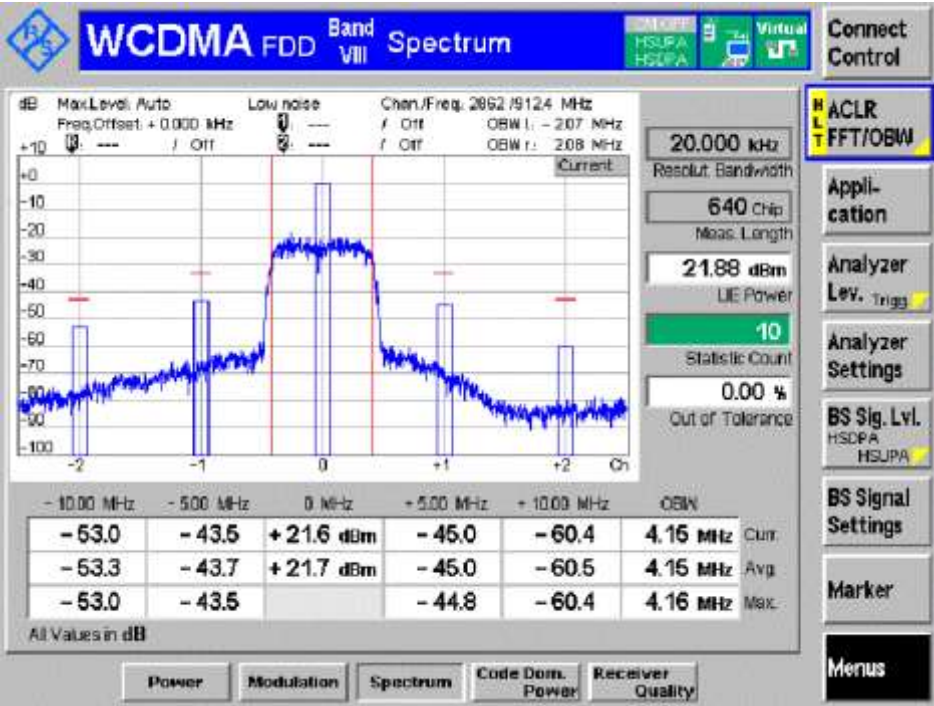
Channel HCH
Sub-test 1



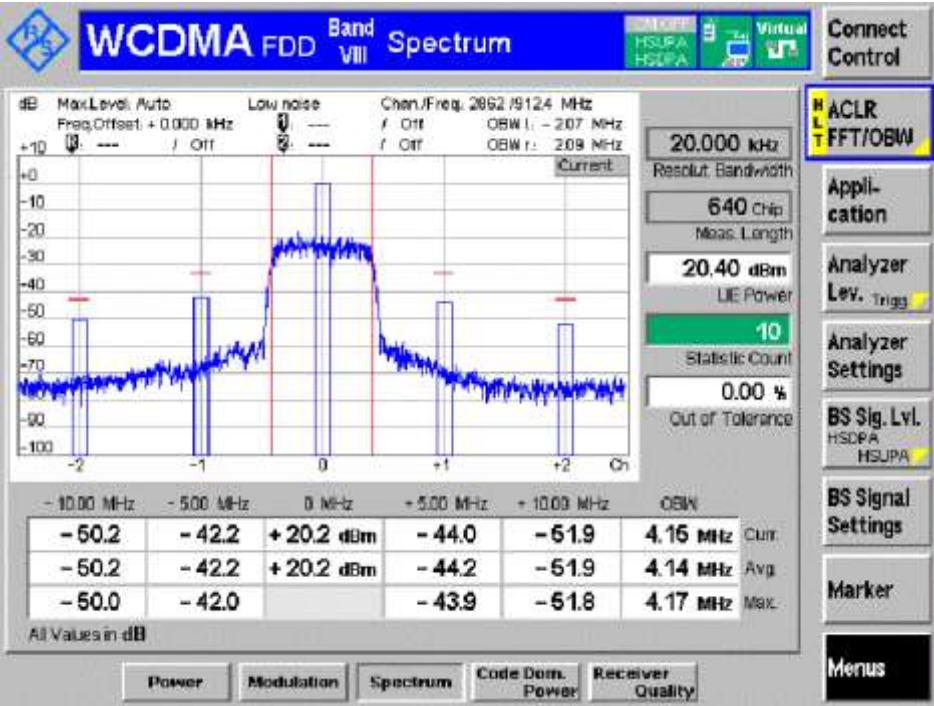
Sub-test 2



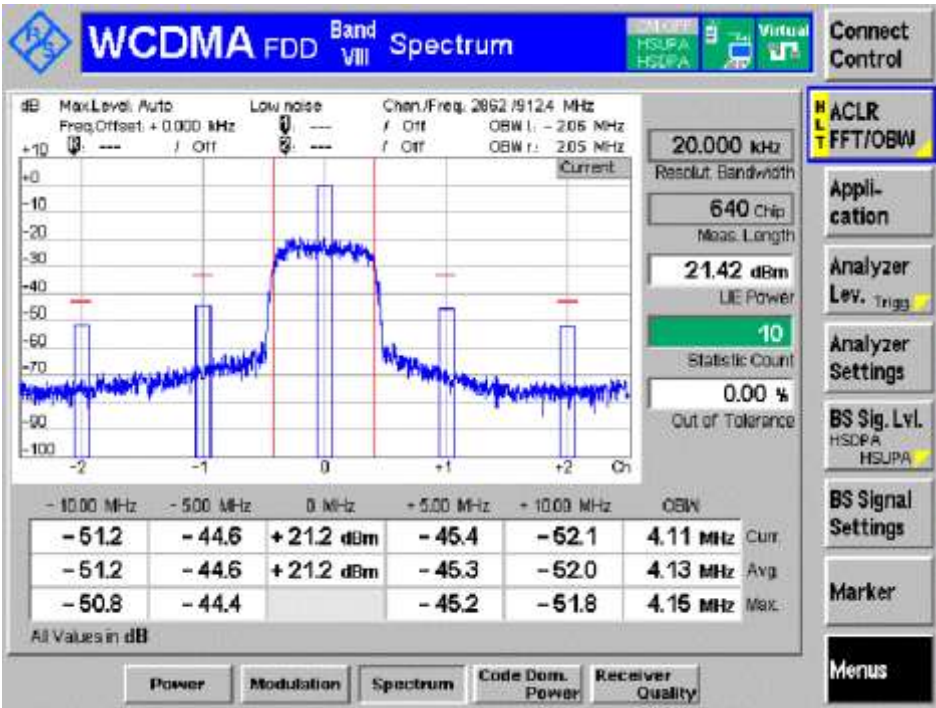
Sub-test 3



Sub-test 4



Sub-test 5



Appendix L. Receiver spurious emissions

| Frequency | RBW | Max .Level (dbm) | Test Band=Band I | | | Result |
|--------------------------|----------|------------------------|----------------------|---------|---------|--------|
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 30 MHz ≤f < 1 GHz | 100 kHz | -57 | -61.248 | -61.412 | -61.159 | Pass |
| 1 GHz ≤f ≤ 12.75 GHz | 1 MHz | -47 | -51.479 | -51.523 | -51.491 | Pass |
| 791 MHz ≤f ≤ 821 MHz | 3.84 MHz | -60 | -66.221 | -66.194 | -66.259 | Pass |
| 921 MHz ≤f < 925 MHz | 100 kHz | -60 | -62.46 | -62.936 | -63.025 | Pass |
| 925 MHz ≤f ≤ 935 MHz | 100 kHz | -67 | -71.95 | -71.137 | -71.712 | Pass |
| 935 MHz < f ≤ 960 MHz | 100 kHz | -79 | -86.769 | -87.028 | -86.825 | Pass |
| 1805MHz ≤f ≤ 1880MHz | 100 kHz | -60 | -83.283 | -83.189 | -83.09 | Pass |
| 1920MHz ≤f ≤ 1980MHz | 3.84 MHz | -60 | -65.95 | -65.94 | -65.976 | Pass |
| 2 110 MHz ≤f ≤ 2 170 MHz | 3.84 MHz | -60 | -65.607 | -65.618 | -65.646 | Pass |
| 2 585 MHz ≤f ≤ 2 690 MHz | 3.84 MHz | -60 | -64.367 | -64.395 | -64.382 | Pass |
| | | | | | | |
| Frequency | RBW | Max .Level (dbm) | Test Band=Band VIII | | | Result |
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 30 MHz ≤f < 1 GHz | 100 kHz | -57 | -61.358 | -60.725 | -61.058 | Pass |
| 1 GHz ≤f ≤12.75 GHz | 1 MHz | -47 | -51.349 | -51.163 | -51.414 | Pass |
| 791 MHz ≤f ≤821 MHz | 3.84 MHz | -60 | -66.176 | -66.216 | -66.068 | Pass |
| 880 MHz ≤f < 915 MHz | 3.84 MHz | -60 | -65.204 | -65.21 | -65.189 | Pass |
| 921 MHz ≤f ≤925 MHz | 100 kHz | -60 | -62.76 | -62.442 | -62.273 | Pass |
| 925 MHz ≤f ≤935 MHz | 100 kHz | -67 | -76.79 | -76.682 | -76.941 | Pass |
| 925 MHz ≤f ≤935 MHz | 3.84 MHz | -60 | -66.219 | -66.12 | -66.161 | Pass |
| 935 MHz < f ≤960 MHz | 100 kHz | -79 | -86.916 | -86.866 | -86.928 | Pass |

| | | | | | | |
|-------------------------|----------|-----|---------|---------|---------|------|
| 1805MHz ≤f ≤1880MHz | 3,84 MHz | -60 | -66.334 | -66.364 | -66.286 | Pass |
| 2 110 MHz ≤f ≤2 170 MHz | 3,84 MHz | -60 | -65.596 | -65.585 | -65.56 | Pass |
| 2 585 MHz ≤f ≤2 690 MHz | 3,84 MHz | -60 | -64.375 | -64.325 | -64.307 | Pass |

BAND I

Channel LCH

30MHz~1GHz



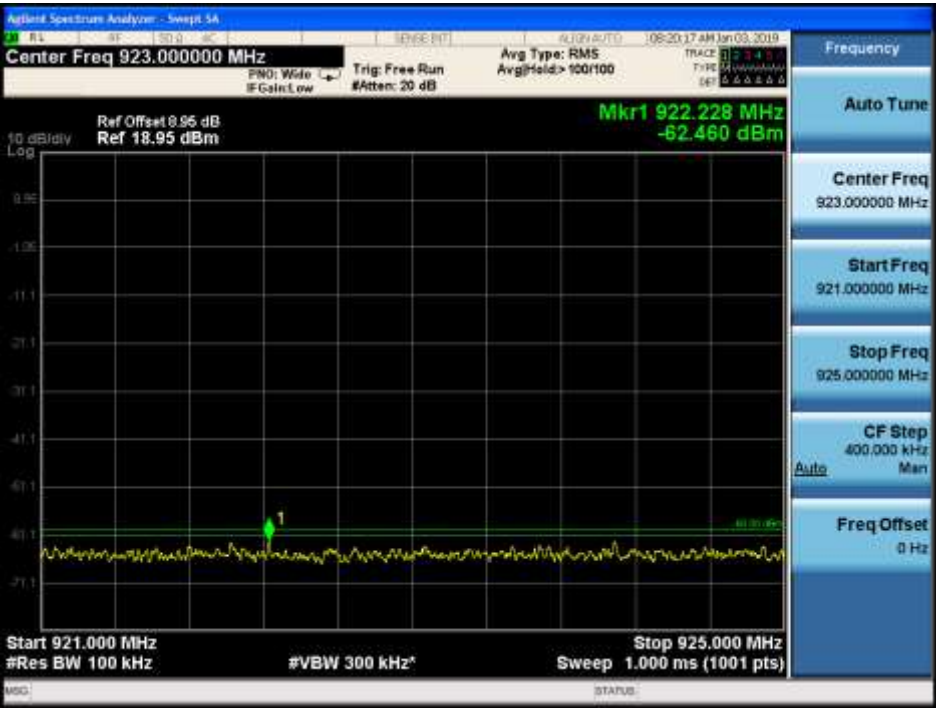
1GHZ~12.75GHZ



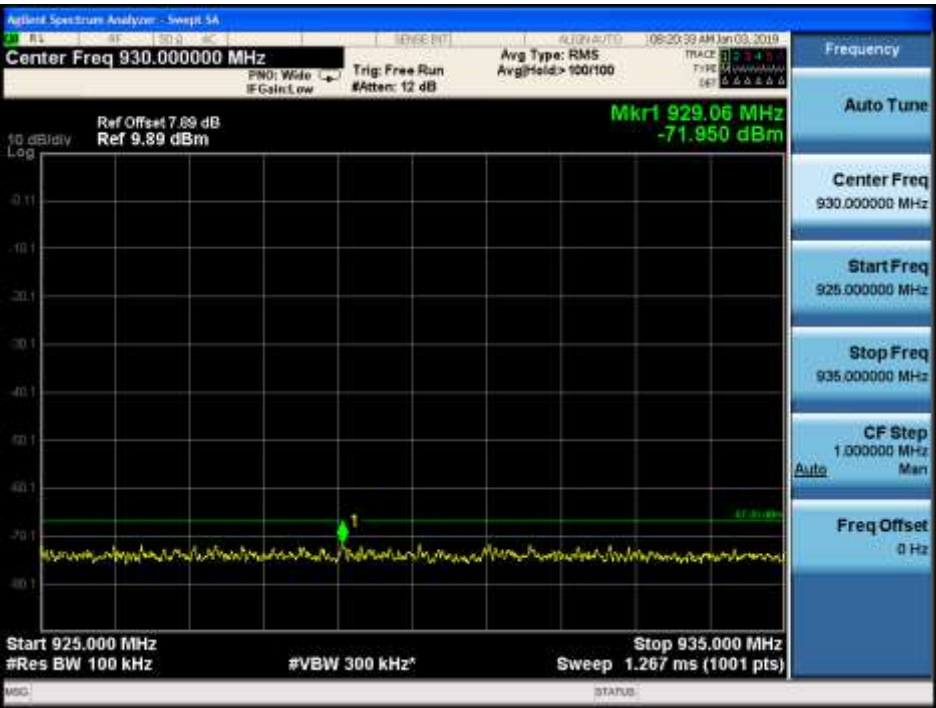
791MHZ~821HZ



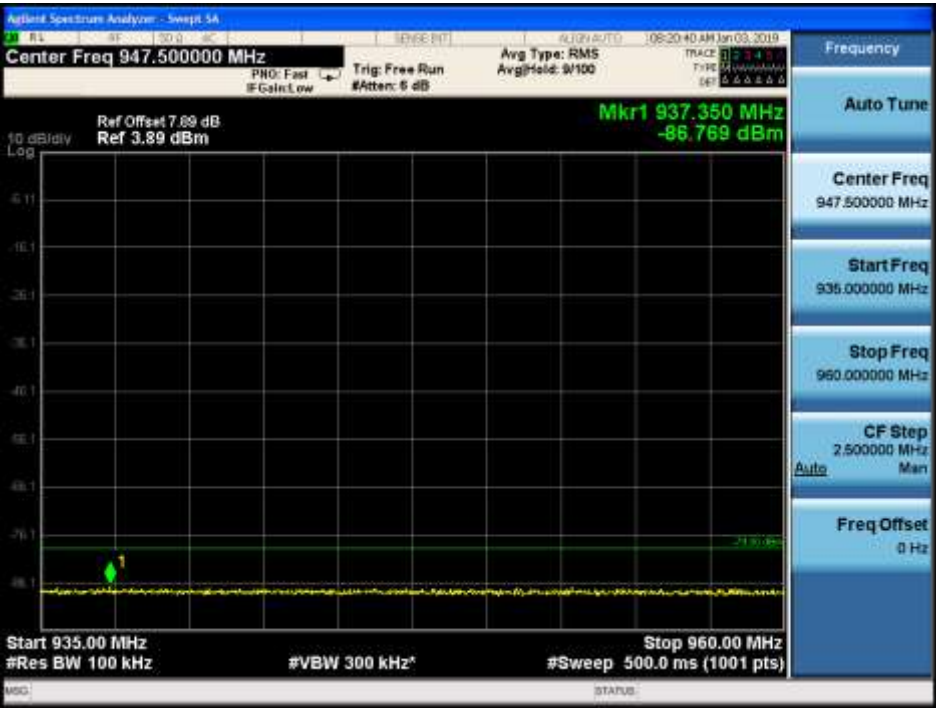
921MHz~925MHz



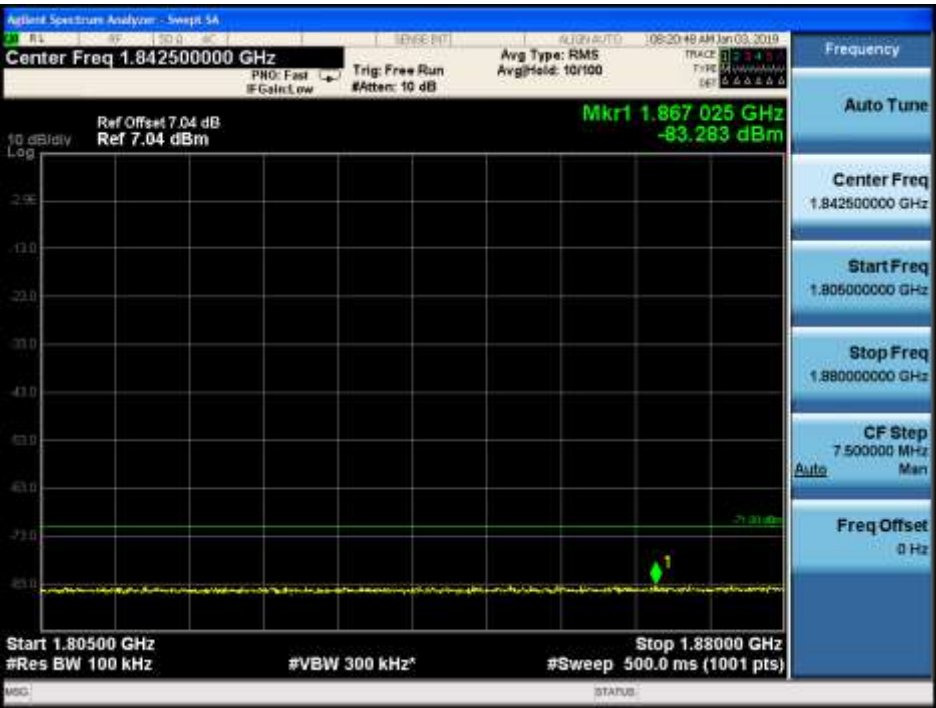
925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



1920MHZ~1980MHZ



2110MHZ~2170MHZ

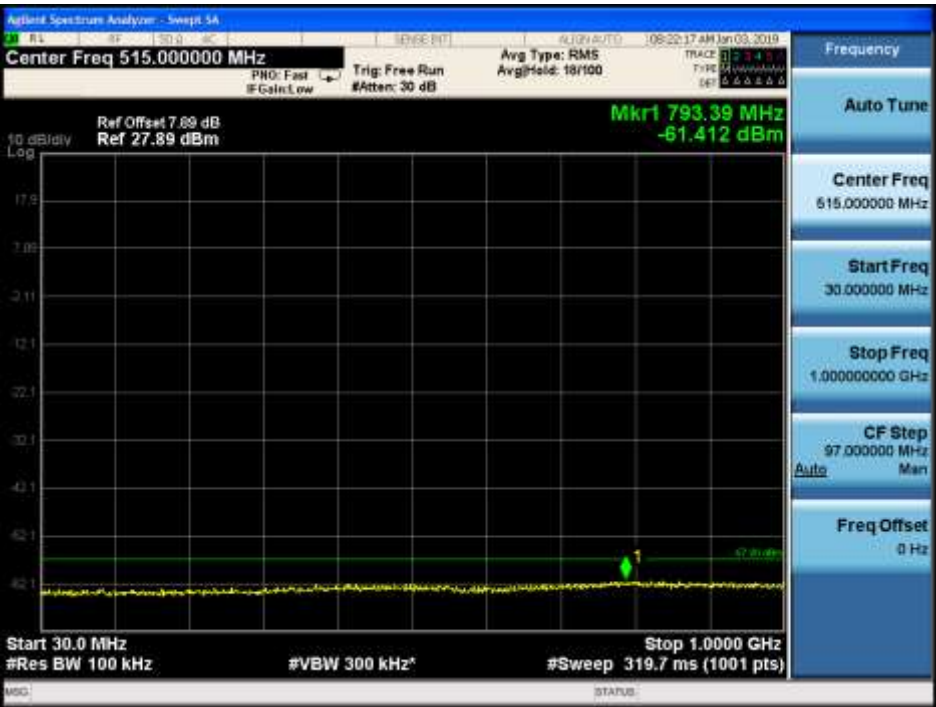


2585MHZ~2690MHZ



Channel MCH

30MHZ~1GHZ



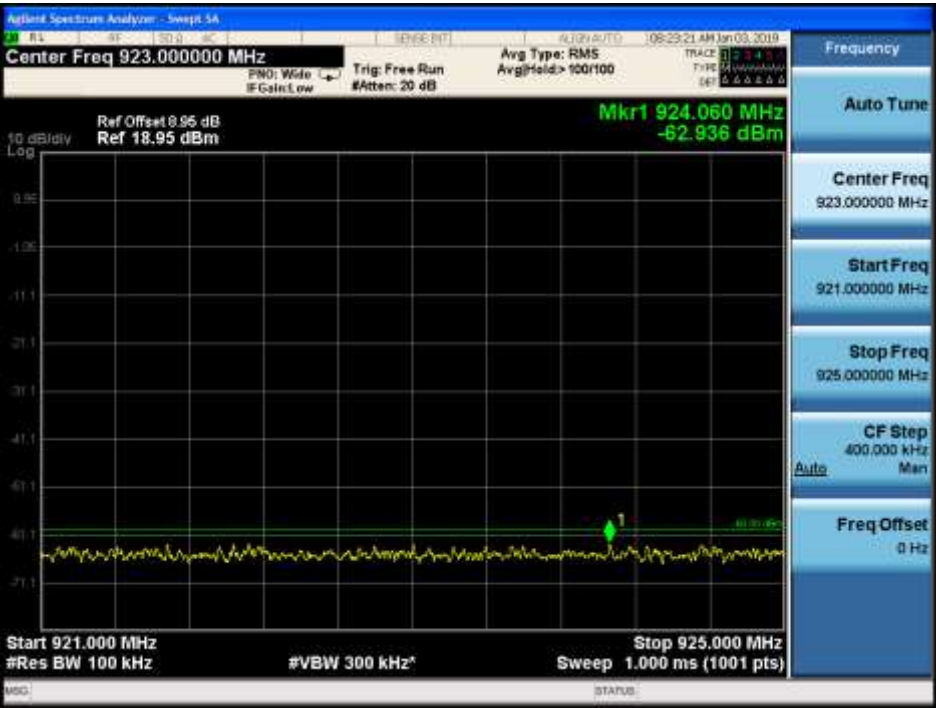
1GHZ~12.75GHZ



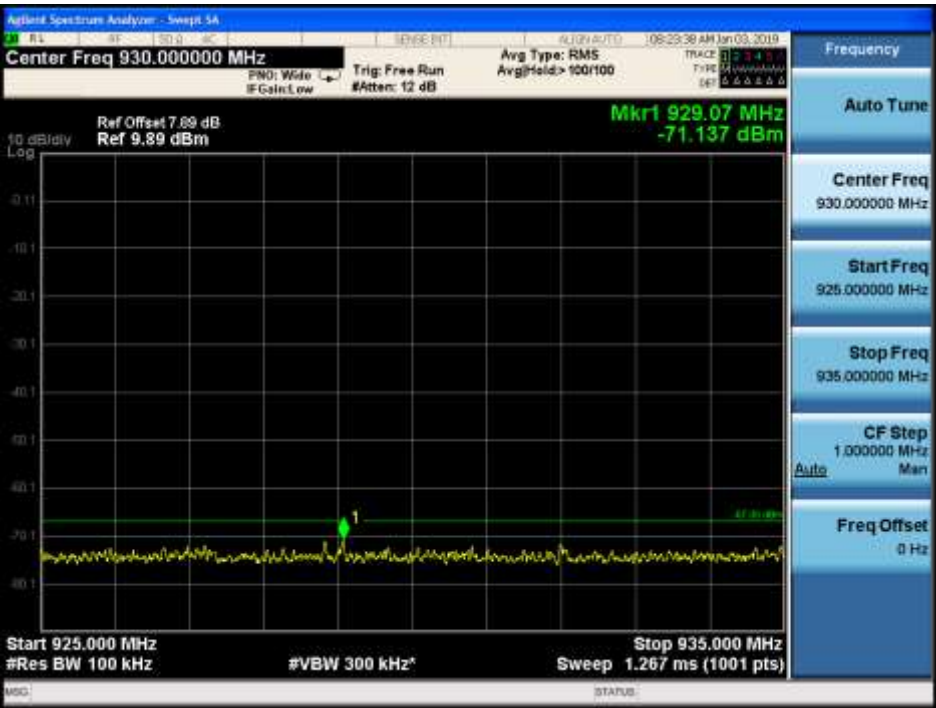
791MHZ~821HZ



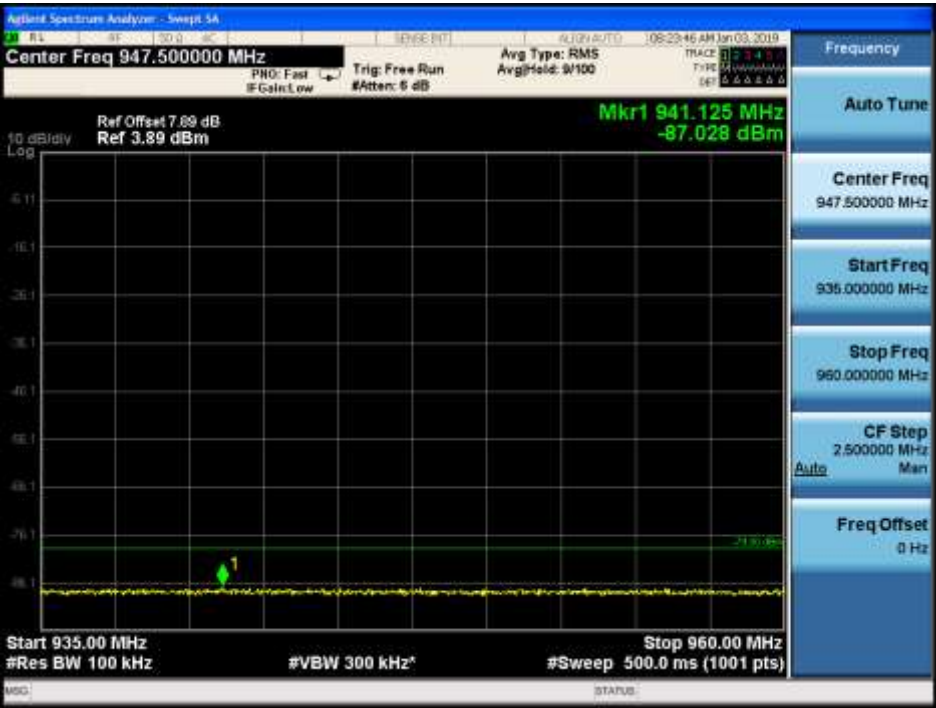
921MHz~925MHz



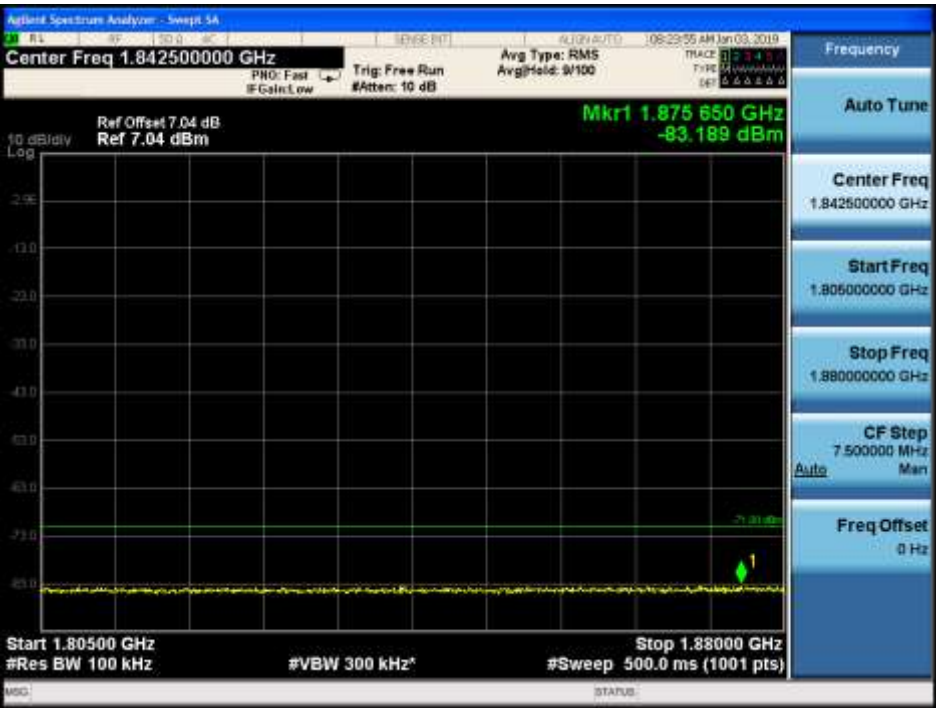
925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



1920MHZ~1980MHZ



2110MHZ~2170MHZ

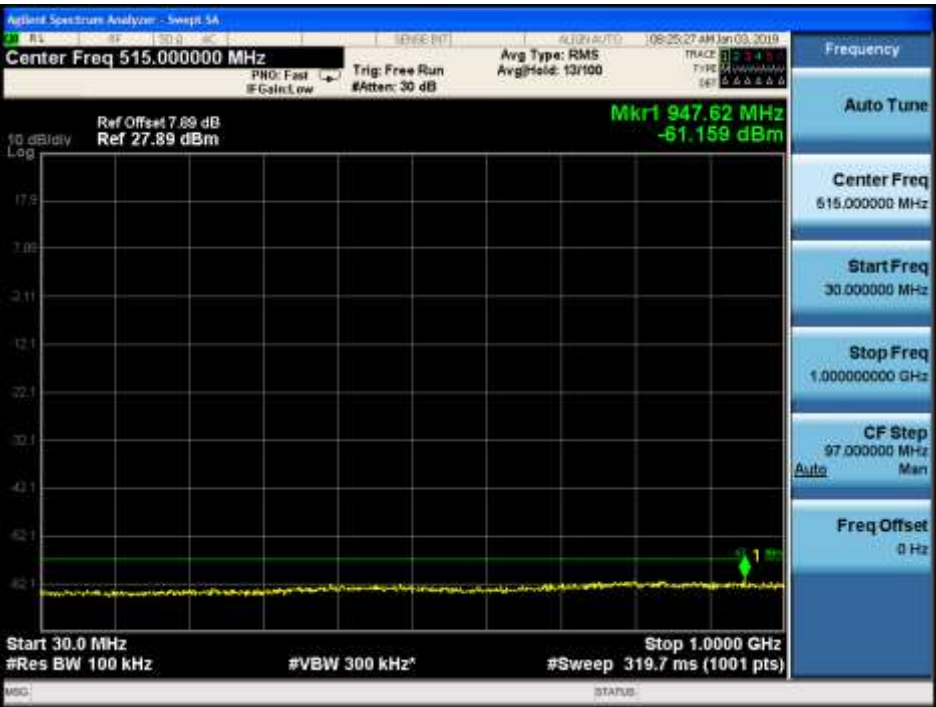


2585MHZ~2690MHZ



Channel HCH

30MHZ~1GHZ



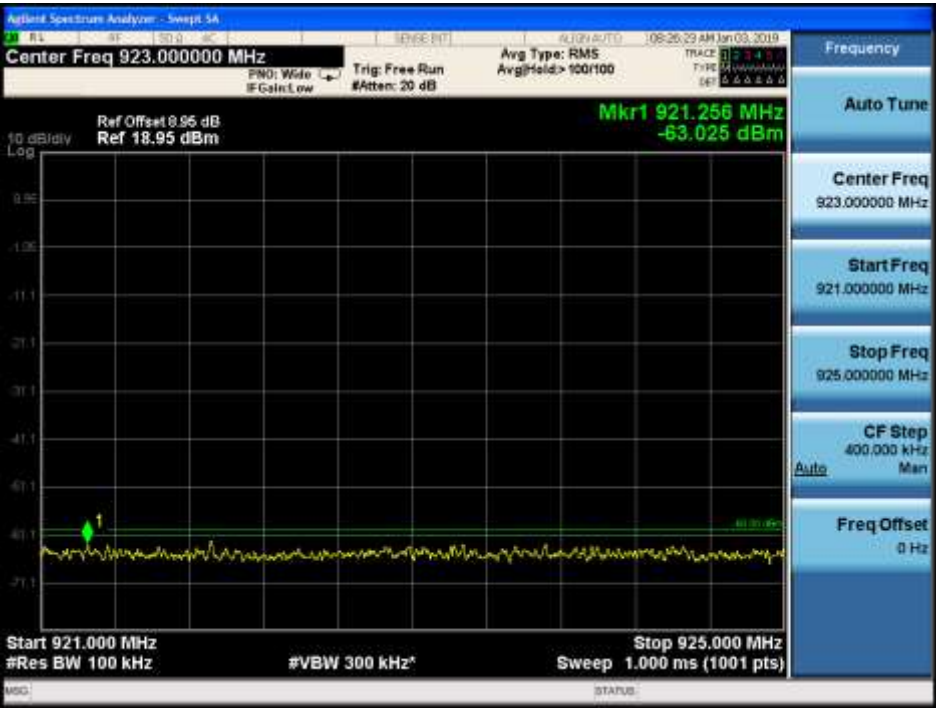
1GHZ~12.75GHZ



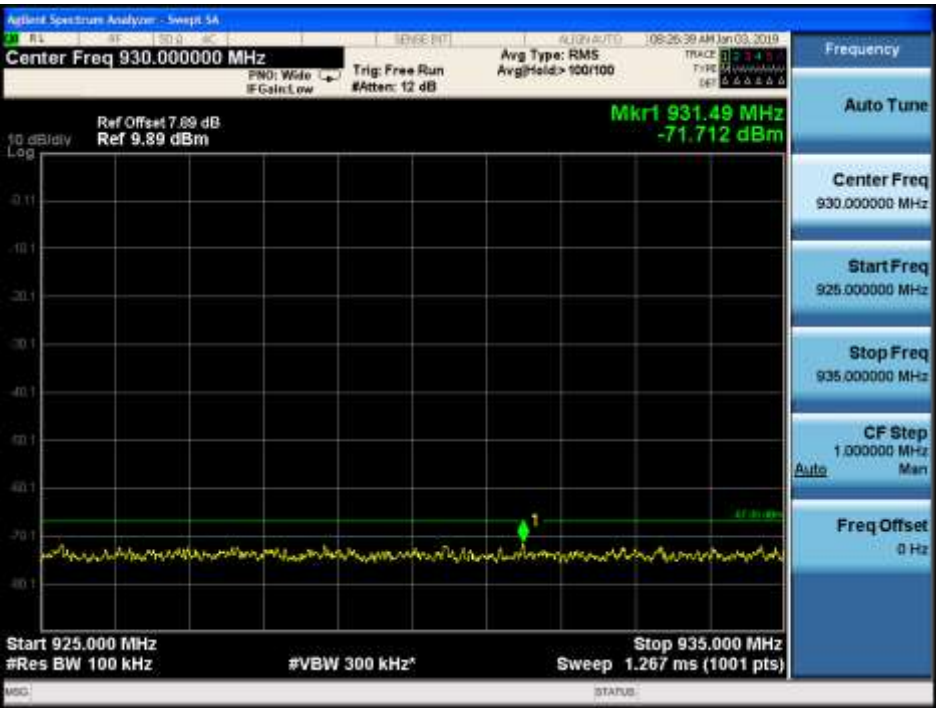
791MHZ~821HZ



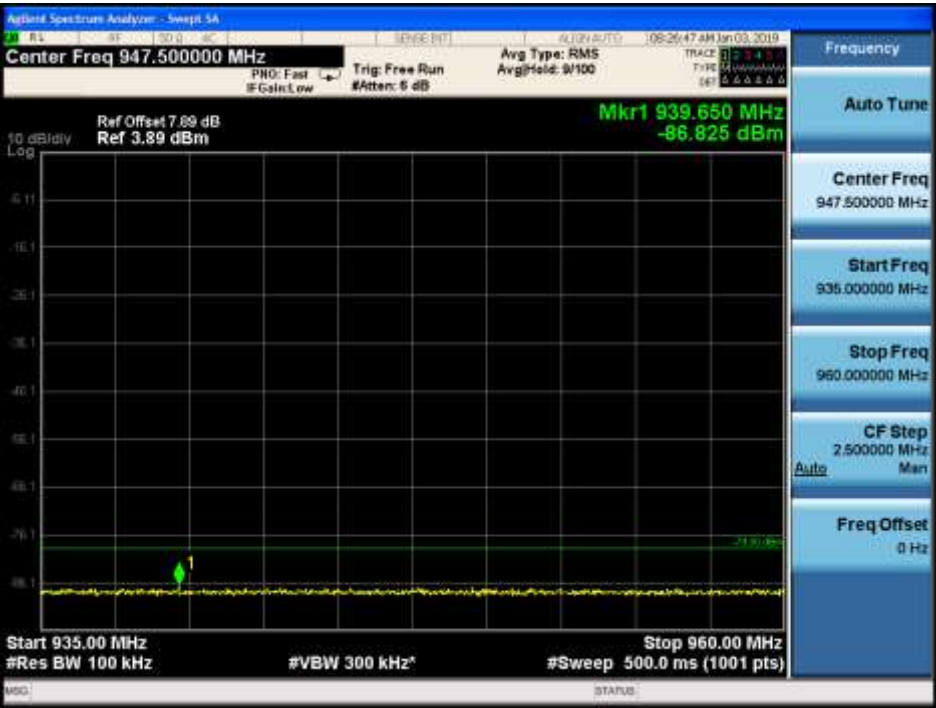
921MHz~925MHz



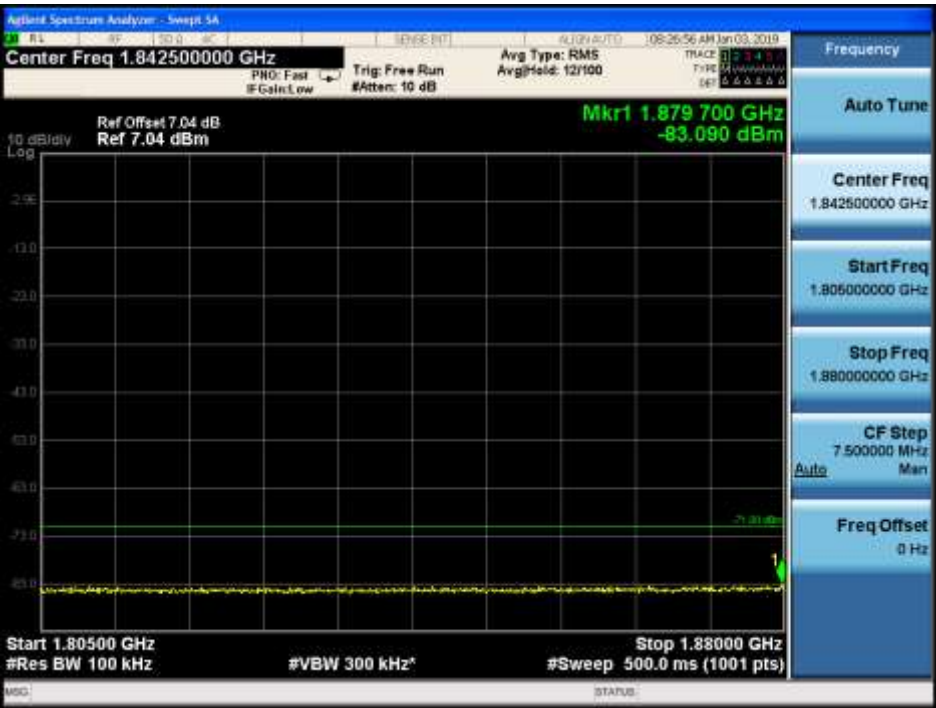
925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



1920MHZ~1980MHZ



2110MHZ~2170MHZ



2585MHZ~2690MHZ



BAND VIII

Channel LCH

30MHZ~1GHz



1GHZ~12.75GHZ



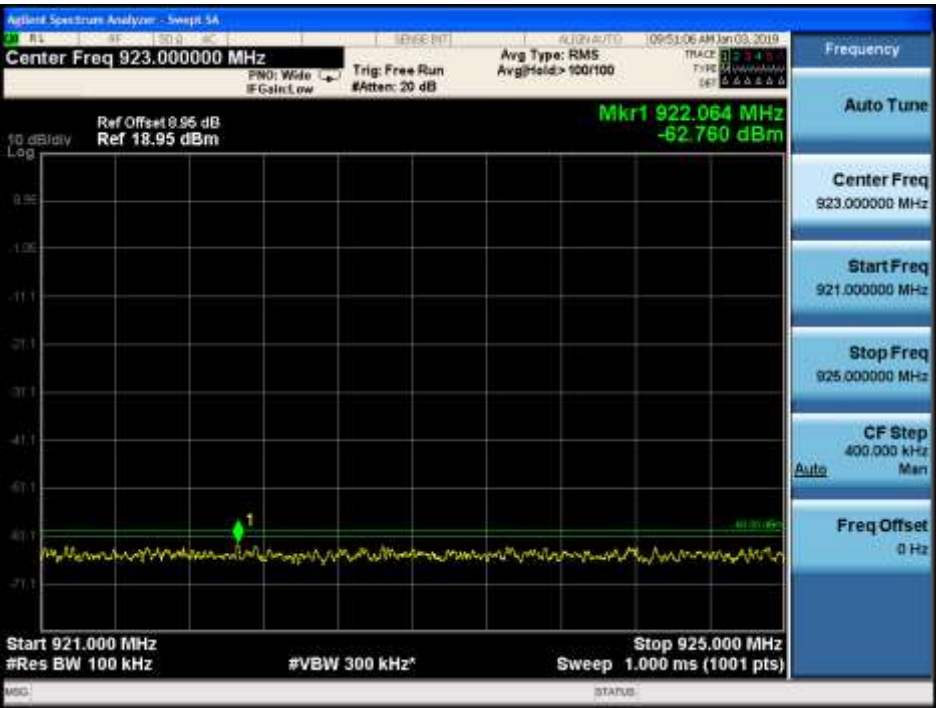
791MHZ~821MHZ



880MHz~915MHz



921MHz~925MHz



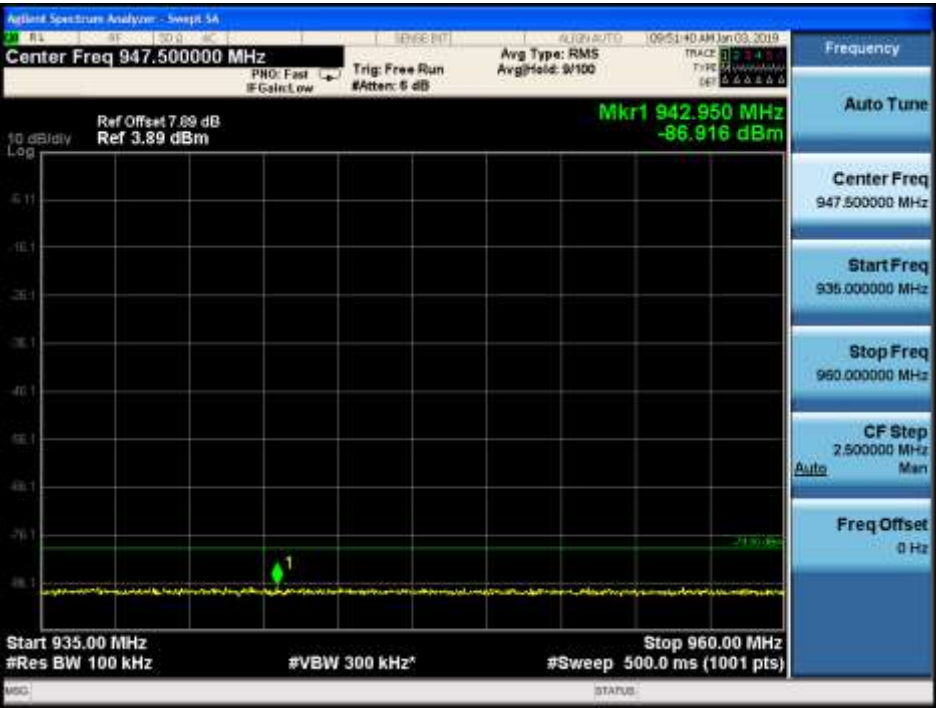
925MHz~935MHz



925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel MCH
30MHZ~1GHZ



1GHZ~12.75GHZ



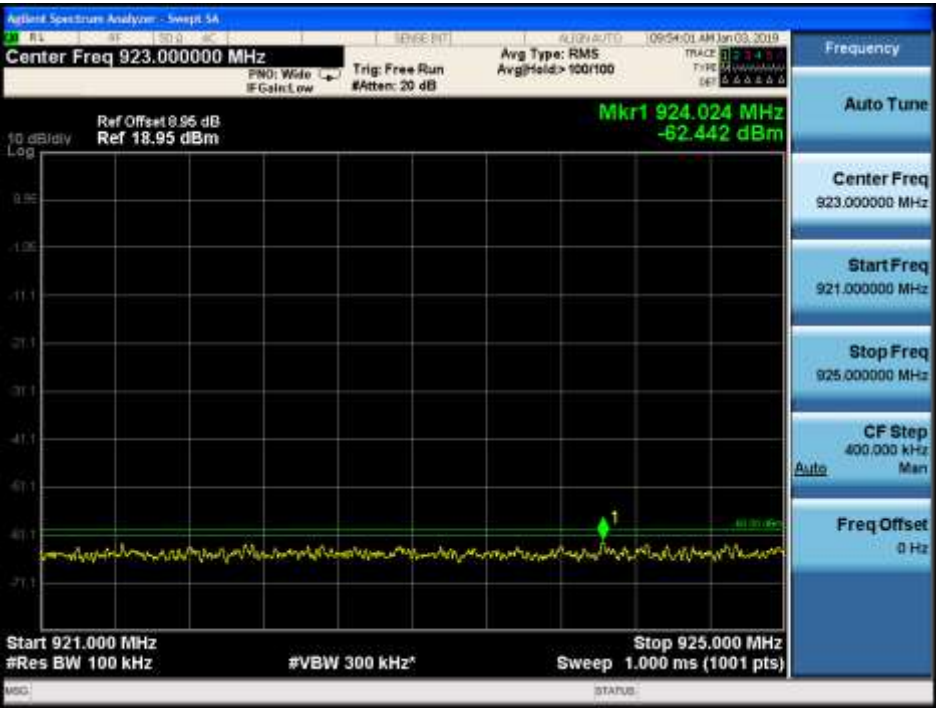
791MHZ~821MHZ



880MHZ~915MHZ



921MHZ~925MHZ



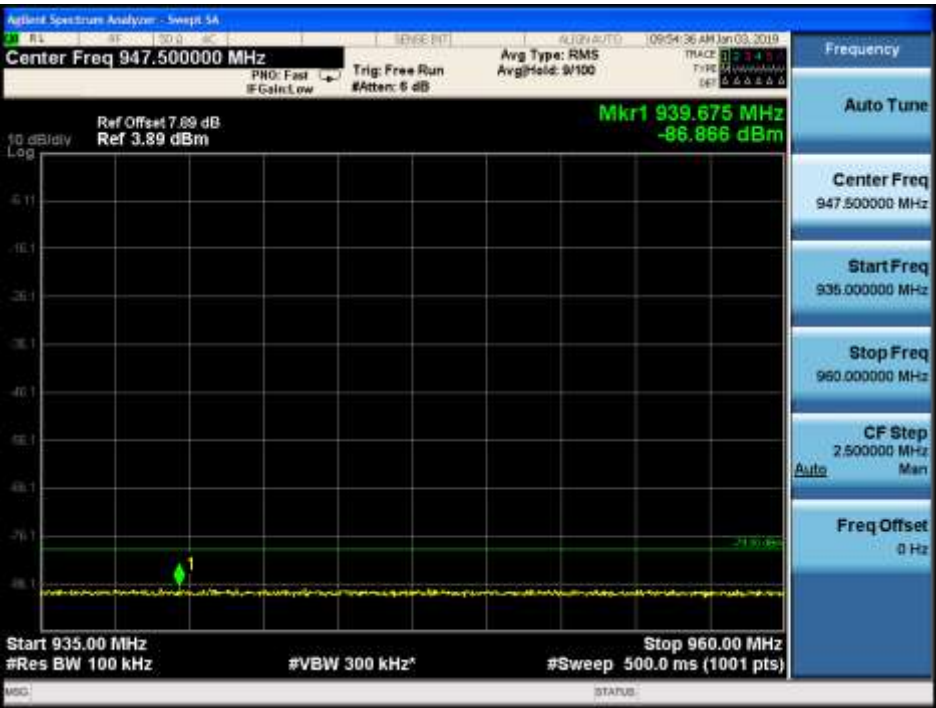
925MHZ~935MHZ



925MHz~935MHz



935MHz~960MHz



1805MHZ~1880MHZ



2110MHZ~2170MHZ

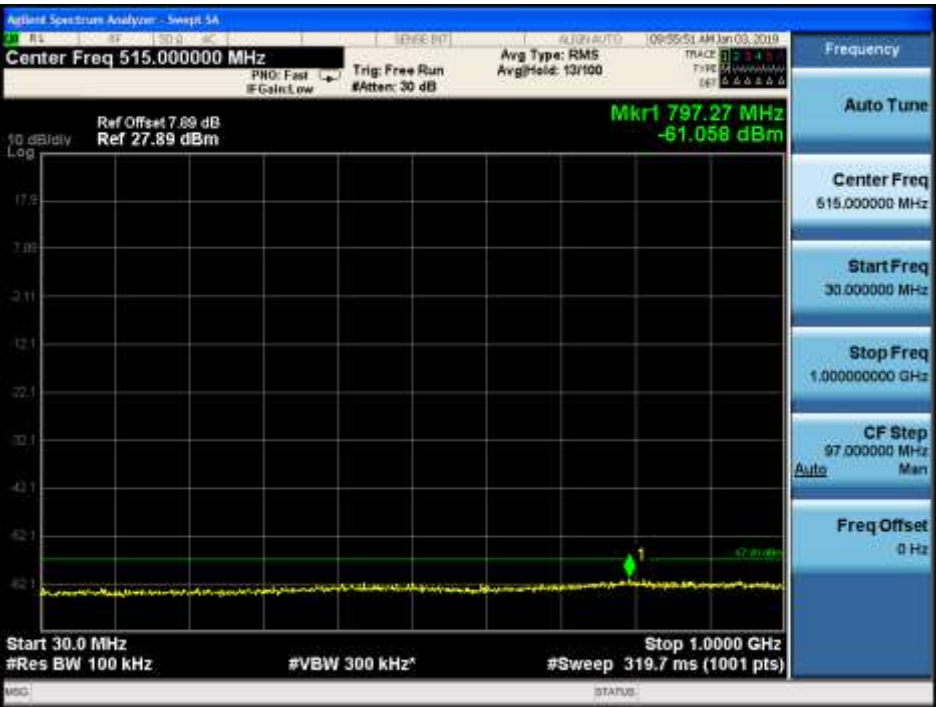


2585MHZ~2690MHZ



Channel HCH

30MHZ~1GHZ



1GHZ~12.75GHZ



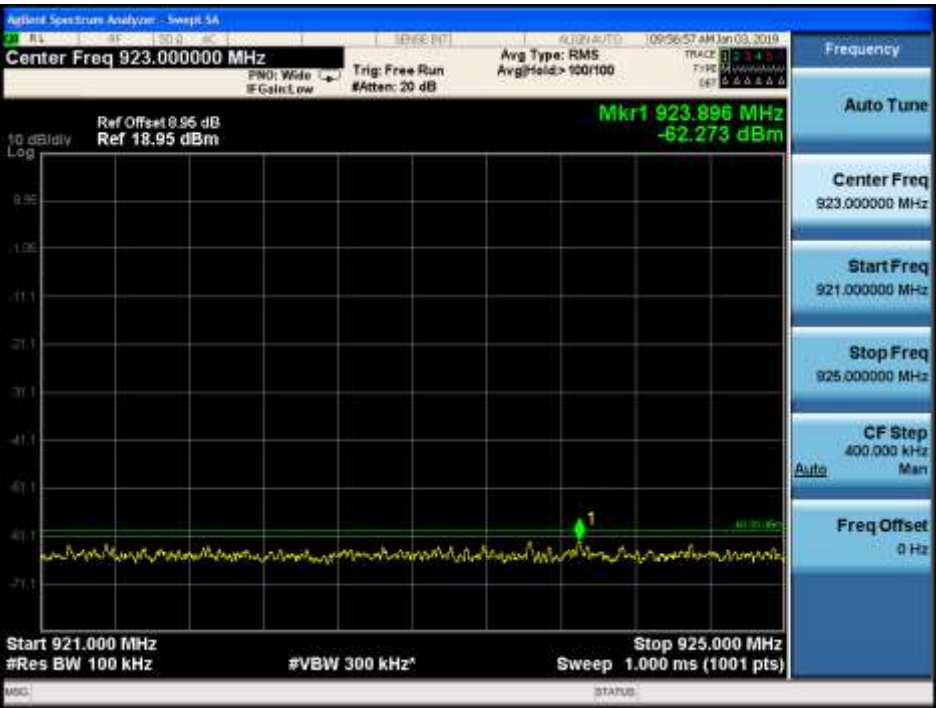
791MHZ~821MHZ



880MHz~915MHz



921MHz~925MHz



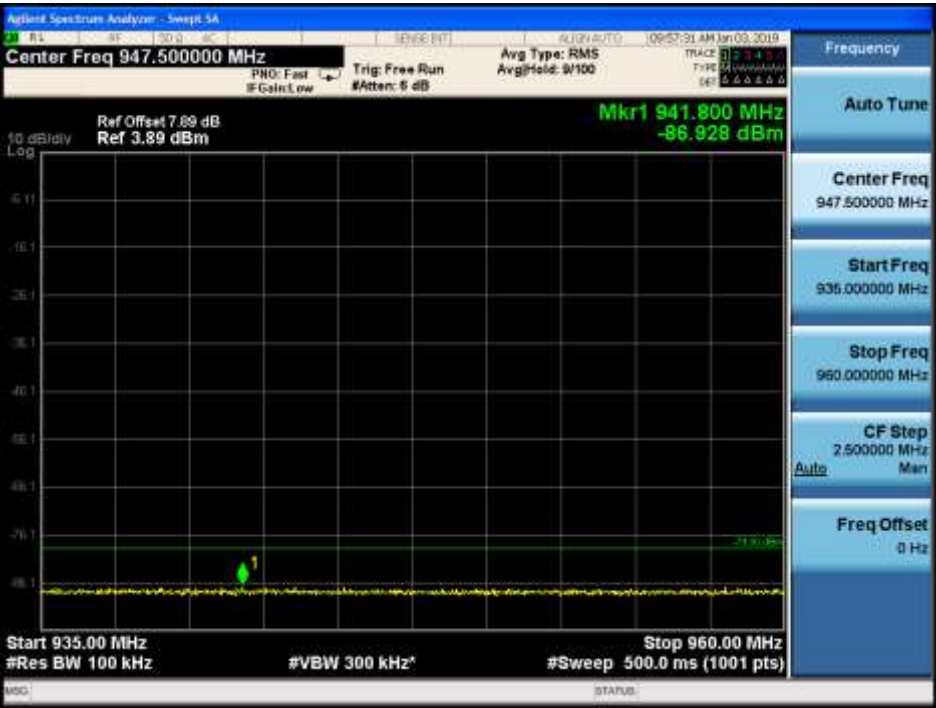
925MHz~935MHz



925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Appendix M. Receiver channel selectivity(ACS)

| WCDMA Band I | | | |
|-----------------------------|------|----------|----------|
| Parameter | Unit | Case 1 | Case 2 |
| loac mean power (modulated) | dBm | -52 | -25 |
| Fuw (offset) | MHz | +5 or -5 | +5 or -5 |
| UE transmitted mean power | dBm | 20 | 20 |
| BER | | 0 | 0 |
| Result | | PASS | PASS |

| WCDMA Band VIII | | | |
|-----------------|------|----------|----------|
| Parameter | Unit | Case 1 | Case 2 |
| loac mean power | dBm | -52 | -25 |
| Fuw (offset) | MHz | +5 or -5 | +5 or -5 |
| UE transmitted | dBm | 20 | 20 |
| BER | | 0 | 0 |
| Result | | Pass | Pass |

Appendix N. Receiver intermodulation characteristics

| WCDMA Band I | | | |
|-----------------------------|--------|--------|------|
| Parameter | Level | | Unit |
| low1 (CW) | -46 | | dBm |
| low2 mean power (modulated) | -46 | | dBm |
| Fu1 (offset) | 10 | -10 | MHz |
| Fu2 (offset) | 20 | -20 | MHz |
| UE Transmitted mean power | 20 dBm | 20 dBm | dBm |
| BER | 0 | 0 | |
| Result | Pass | Pass | |

| WCDMA Band VIII | | | |
|-----------------------------|--------|--------|------|
| Parameter | Level | | Unit |
| low1 (CW) | -46 | | dBm |
| low2 mean power (modulated) | -46 | | dBm |
| Fu1 (offset) | 10 | -10 | MHz |
| Fu2 (offset) | 20 | -20 | MHz |
| UE Transmitted mean power | 20 dBm | 20 dBm | dBm |
| BER | 0 | 0 | |
| Result | Pass | Pass | |

Appendix O. Receiver blocking characteristics

In-band Blocking Test

| WCDMA Band I | | | |
|---------------------------------|------|--------------------------------|--------------------------------|
| Parameter | Unit | Level | |
| Blocking mean power (modulated) | dBm | -56 (For Fuw offset 10 MHz) | -44 (For Fuw offset 10 MHz) |
| UE Transmitted mean power | dBm | 20 dBm | |
| Fuw | MHz | $2102.4 \leq f \leq 2177.6$ | $2095 \leq f \leq 2185$ |
| BER | % | 0 | 0 |
| Result | | Pass | Pass |

| WCDMA Band VIII | | | |
|---------------------------------|------|--------------------------------|--------------------------------|
| Parameter | Unit | Level | |
| Blocking mean power (modulated) | dBm | -56 (For Fuw offset 10 MHz) | -44 (For Fuw offset 10 MHz) |
| UE Transmitted mean power | dBm | 20 dBm | |
| Fuw | MHz | $917.4 \leq f \leq 967.6$ | $910 \leq f \leq 975$ |
| BER | % | 0 | 0 |
| Result | | Pass | Pass |

Out-band Blocking Test

| WCDMA Band I | | | | |
|-------------------------------|------|--|--|--|
| Parameter | Unit | Frequency range 1 | Frequency range 2 | Frequency range 3 |
| Blocking (cw) | dBm | -44 | -30 | -15 |
| Fuw | MHz | $2050 < f < 2095$ $2185 < f < 2230$ | $2025 < f \leq 2050$ $2230 \leq f < 2255$ | $1 < f \leq 2025$ $2255 \leq f < 12750$ |
| Spurious Response Frequencies | MHz | NO | NO | NO |
| BER | % | 0 | 0 | 0 |
| Result | | Pass | Pass | Pass |

| WCDMA Band VIII | | | | |
|-------------------------------|------|---------------------------------|----------------------------------|---------------------------------|
| Parameter | Unit | Frequency range 1 | Frequency range 2 | Frequency range 3 |
| Blocking (cw) | dBm | -44 | -30 | -15 |
| Fuw | MHz | 865 < f < 910 975 < f < 1020 | 840 < f ≤ 865 1020 ≤ f < 1045 | 1 < f ≤ 840 1045 ≤ f < 12750 |
| Spurious Response Frequencies | MHz | NO | NO | NO |
| BER | % | 0 | 0 | 0 |
| Result | | Pass | Pass | Pass |

Narrow Band Blocking Test:

| WCDMA Band I | | |
|---------------------------|------|--------|
| Parameter | Unit | Level |
| blocking (GMSK) | dBm | -56 |
| Fuw (offset) | | 2.8 |
| UE Transmitted mean power | dBm | 20 dBm |
| BER | % | 0 |
| Result | | Pass |

| WCDMA Band VIII | | |
|---------------------------|------|--------|
| Parameter | Unit | Level |
| blocking (GMSK) | dBm | -56 |
| Fuw (offset) | | 2.8 |
| UE Transmitted mean power | dBm | 20 dBm |
| BER | % | 0 |
| Result | | Pass |

Appendix P. Receiver Characteristics/Spurious Response

| WCDMA Band I | | | |
|---------------------------|-------------------------------|--------|------|
| Parameter | Level | | Unit |
| Iblocking(CW) | -46 | | dBm |
| Fuw | Spurious response frequencies | | MHz |
| UE Transmitted mean power | 20 dBm | 20 dBm | dBm |
| BER | 0 | 0 | |
| Result | Pass | Pass | |

| WCDMA Band VIII | | | |
|---------------------------|-------------------------------|--------|------|
| Parameter | Level | | Unit |
| Iblocking(CW) | -46 | | dBm |
| Fuw | Spurious response frequencies | | MHz |
| UE Transmitted mean power | 20 dBm | 20 dBm | dBm |
| BER | 0 | 0 | |
| Result | Pass | Pass | |

Appendix Q. Out-of-synchronization handling of output power

| WCDMA Band I | | | |
|---|-------|------|------|
| Parameter | Level | | Unit |
| I or I _{oc} | -1 | | dB |
| I _{oc} | -60 | | dBm |
| <u>DPDCH E_c</u> I _{or} | -19,6 | | dB |
| Result | Pass | Pass | |

| WCDMA Band VIII | | | |
|---|-------|------|------|
| Parameter | Level | | Unit |
| I or I _{oc} | -1 | | dB |
| I _{oc} | -60 | | dBm |
| <u>DPDCH E_c</u> I _{or} | -19,6 | | dB |
| Result | Pass | Pass | |

Appendix R. Receiver Reference Sensitivity level

| WCDMA Band I | | | | |
|--------------|-----------|--------------|------------------|----------|
| | Parameter | Unit | DPCH_Ec<REFSENS> | <REF↑or> |
| | | dBm/3.84 MHz | -116.3 | -106 |
| TNVN | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TL,VL | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TL,VH | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TH,VL | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TH,VH | BER | % | 0 | 0 |
| | Result | | Pass | Pass |

| WCDMA Band VIII | | | | |
|-----------------|-----------|--------------|------------------|----------|
| | Parameter | Unit | DPCH_Ec<REFSENS> | <REF↑or> |
| | | dBm/3.84 MHz | -116.3 | -106 |
| TNVN | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TL,VL | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TL,VH | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TH,VL | BER | % | 0 | 0 |
| | Result | | Pass | Pass |
| TH,VH | BER | % | 0 | 0 |
| | Result | | Pass | Pass |

Appendix S. Radiated spurious emissions - MS in idle mode

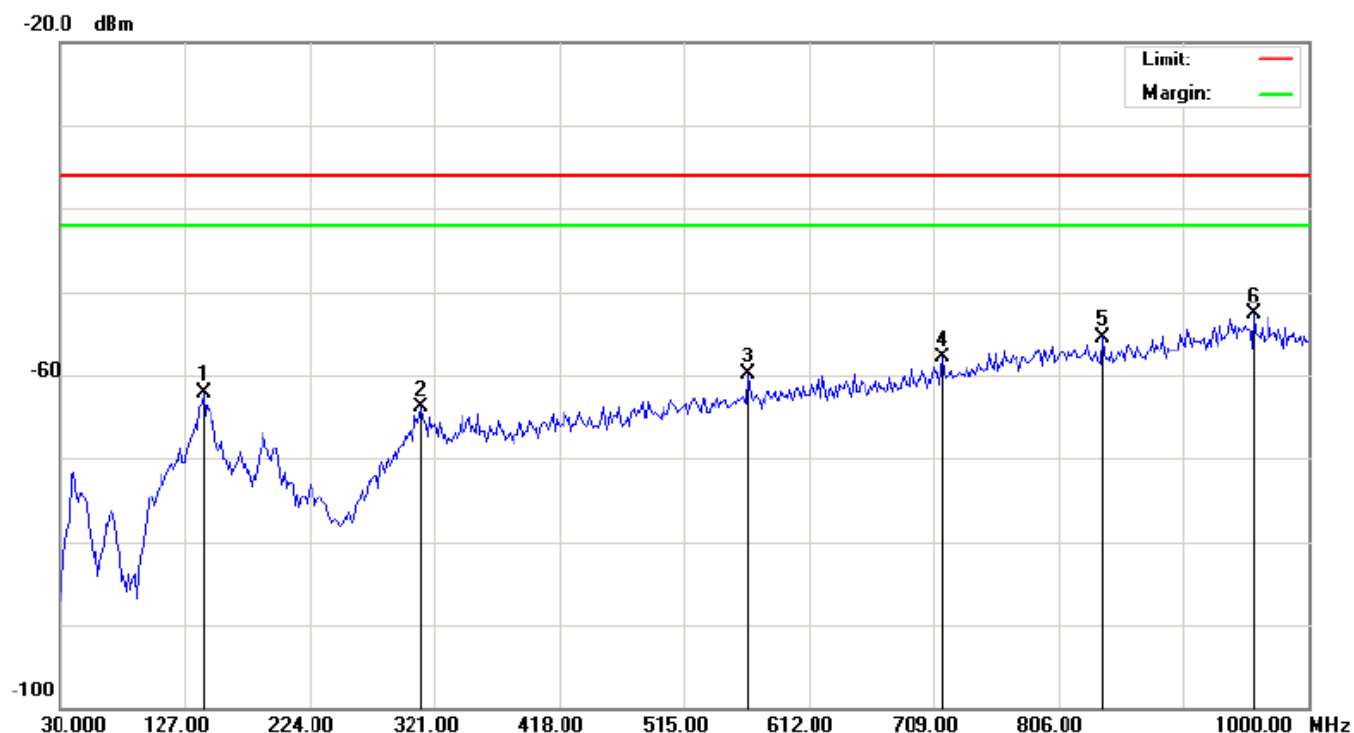
| Frequency | RBW | Max .Level (dbm) | Test Band=Band I | | | Result |
|--------------------------|----------|------------------|----------------------|--------|--------|--------|
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 30 MHz ≤f < 1 GHz | 100 kHz | -57 | -65.23 | -66.03 | -65.46 | Pass |
| 1 GHz ≤f ≤ 12.75 GHz | 1 MHz | -47 | -60.21 | -60.38 | -60.87 | Pass |
| 791 MHz ≤f ≤ 821 MHz | 3.84 MHz | -60 | -71.23 | -71.97 | -71.55 | Pass |
| 921 MHz ≤f < 925 MHz | 100 kHz | -60 | -72.43 | -72.24 | -72.86 | Pass |
| 925 MHz ≤f ≤ 935 MHz | 100 kHz | -67 | -83.65 | -83.97 | -83.32 | Pass |
| 935 MHz < f ≤ 960 MHz | 100 kHz | -79 | -89.56 | -89.27 | -89.89 | Pass |
| 1805MHz ≤f ≤ 1880MHz | 100 kHz | -60 | -72.11 | -72.36 | -72.62 | Pass |
| 1920MHz ≤f ≤ 1980MHz | 3.84 MHz | -60 | -71.93 | -71.83 | -71.66 | Pass |
| 2 110 MHz ≤f ≤ 2 170 MHz | 3.84 MHz | -60 | -70.09 | -70.22 | -70.37 | Pass |
| 2 585 MHz ≤f ≤ 2 690 MHz | 3.84 MHz | -60 | -73.05 | -73.68 | -73.84 | Pass |

| Frequency | RBW | Max .Level (dbm) | Test Band=Band VIII | | | Result |
|-----------------------|----------|------------------------|----------------------|--------|--------|--------|
| | | | Test Conditions=TNVN | | | |
| | | | Test Channel | | | |
| | | | LCH | MCH | HCH | |
| 30 MHz ≤f < 1 GHz | 100 kHz | -57 | -71.02 | -71.33 | -71.59 | Pass |
| 1 GHz ≤f ≤ 12.75 GHz | 1 MHz | -47 | -68.02 | -68.58 | -68.94 | Pass |
| 791 MHz ≤f ≤ 821 MHz | 3.84 MHz | -60 | -71.02 | -71.52 | -71.83 | Pass |
| 921 MHz ≤f < 925 MHz | 100 kHz | -60 | -72.05 | -72.63 | -72.88 | Pass |
| 925 MHz ≤f ≤ 935 MHz | 100 kHz | -67 | -82.56 | -82.91 | -82.21 | Pass |
| 935 MHz < f ≤ 960 MHz | 100 kHz | -79 | -88.27 | -88.46 | -88.83 | Pass |
| 1805MHz ≤f ≤ 1880MHz | 100 kHz | -60 | -74.02 | -74.34 | -74.63 | Pass |
| 1920MHz ≤f ≤ 1980MHz | 3.84 MHz | -60 | -75.33 | -75.69 | -75.82 | Pass |

| | | | | | | |
|---------------------------|----------|-----|--------|--------|--------|------|
| 2 110 MHz ≤ f ≤ 2 170 MHz | 3.84 MHz | -60 | -72.31 | -72.36 | -72.64 | Pass |
| 2 585 MHz ≤ f ≤ 2 690 MHz | 3.84 MHz | -60 | -73.65 | -73.89 | -73.98 | Pass |

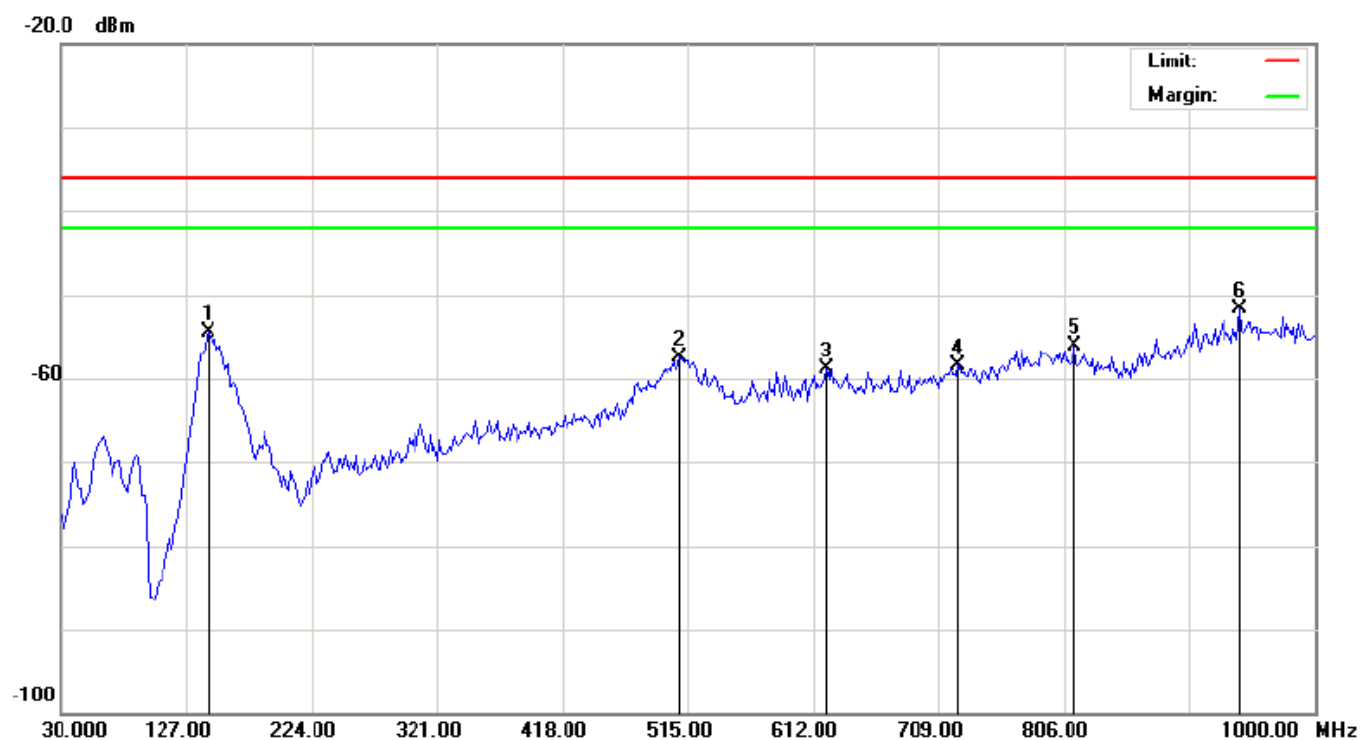
Appendix T. Radiated spurious emissions test result

RADIATED SPURIOUS EMISSIONS UMTS BAND I BELOW 1GHZ– HORIZONTAL



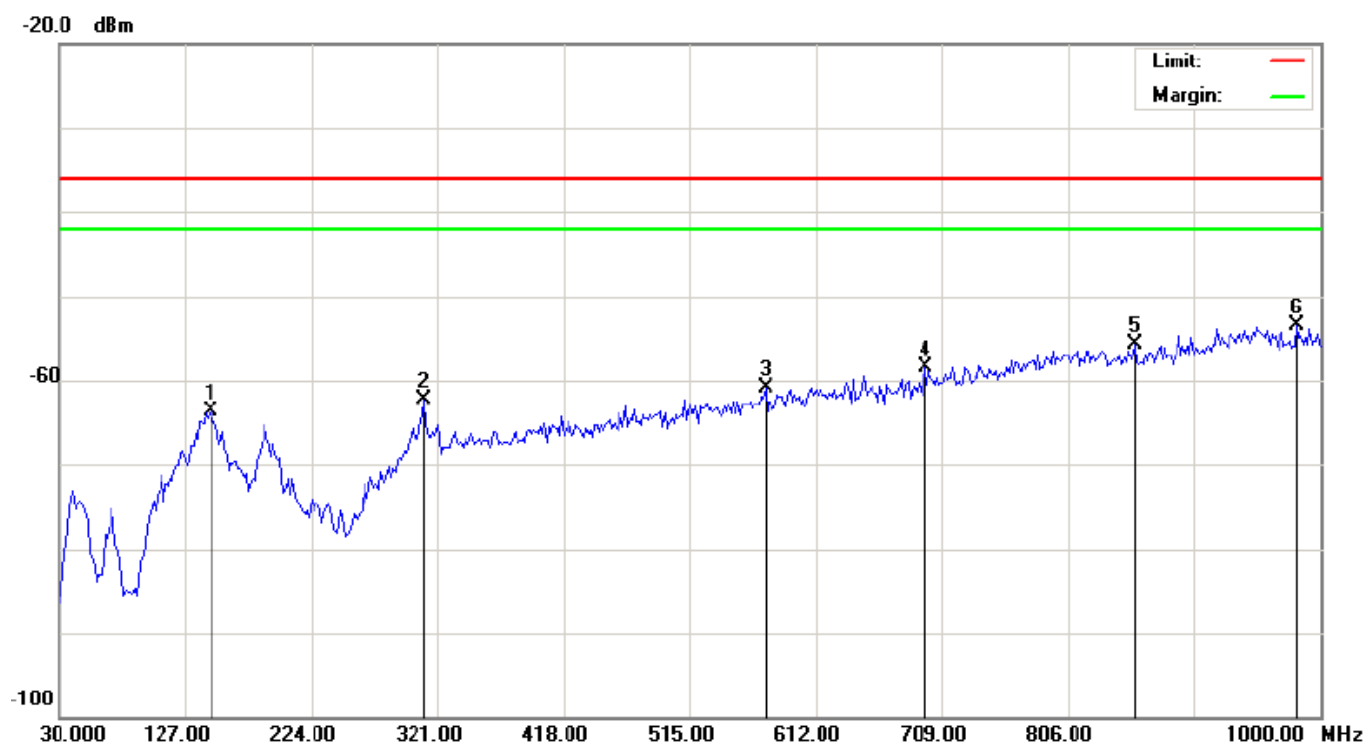
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | cm | degree | |
| 1 | | 141.5500 | -99.12 | 37.12 | -62.00 | -36.00 | -26.00 | peak | | | |
| 2 | | 311.3000 | -101.93 | 38.09 | -63.84 | -36.00 | -27.84 | peak | | | |
| 3 | | 565.1167 | -104.70 | 44.85 | -59.85 | -36.00 | -23.85 | peak | | | |
| 4 | | 715.4667 | -105.40 | 47.50 | -57.90 | -36.00 | -21.90 | peak | | | |
| 5 | | 839.9500 | -104.71 | 49.31 | -55.40 | -36.00 | -19.40 | peak | | | |
| 6 | * | 957.9667 | -104.62 | 51.92 | -52.70 | -36.00 | -16.70 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND I BELOW 1GHZ-VERTICAL



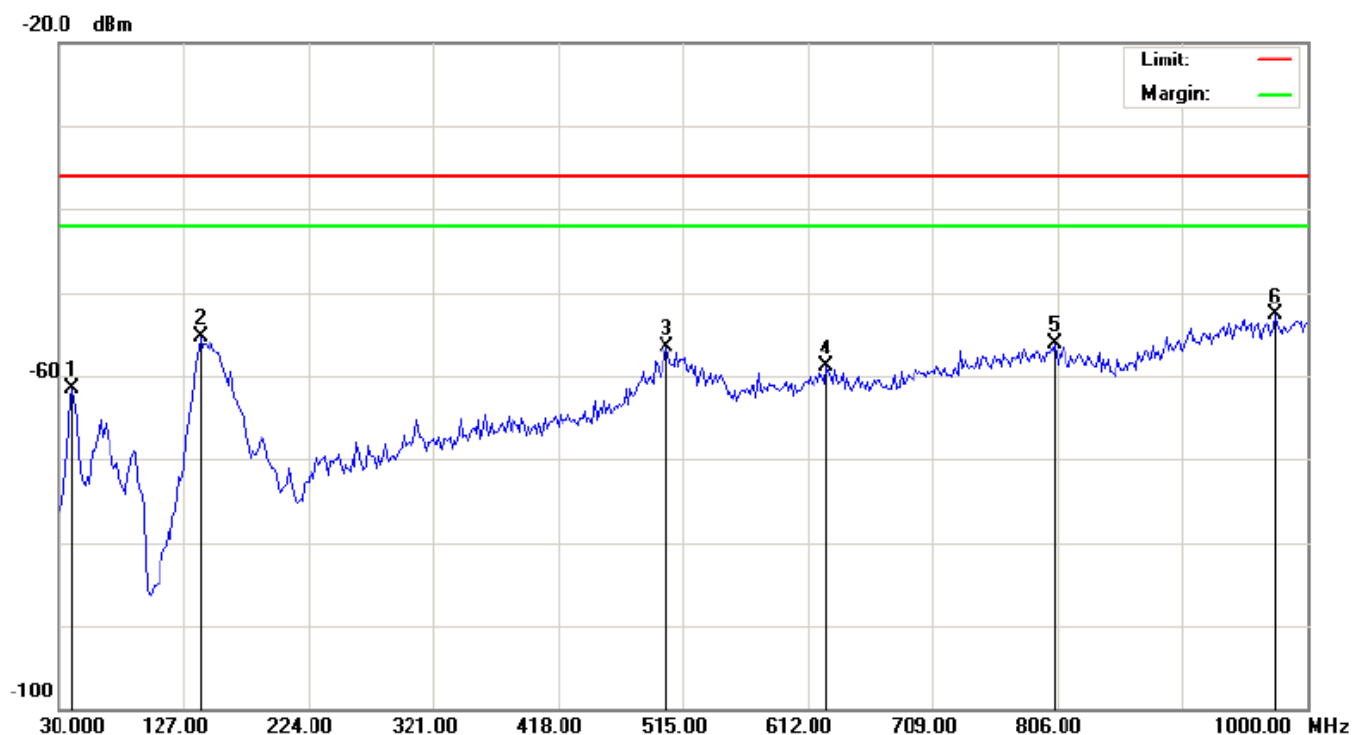
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | cm | degree | |
| 1 | | 144.7833 | -91.66 | 37.21 | -54.45 | -36.00 | -18.45 | peak | | | |
| 2 | | 508.5333 | -100.88 | 43.39 | -57.49 | -36.00 | -21.49 | peak | | | |
| 3 | | 623.3167 | -104.09 | 45.25 | -58.84 | -36.00 | -22.84 | peak | | | |
| 4 | | 723.5500 | -106.09 | 47.64 | -58.45 | -36.00 | -22.45 | peak | | | |
| 5 | | 814.0833 | -104.84 | 48.75 | -56.09 | -36.00 | -20.09 | peak | | | |
| 6 | * | 941.8000 | -103.41 | 51.77 | -51.64 | -36.00 | -15.64 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND VIII BELOW 1GHZ– HORIZONTAL



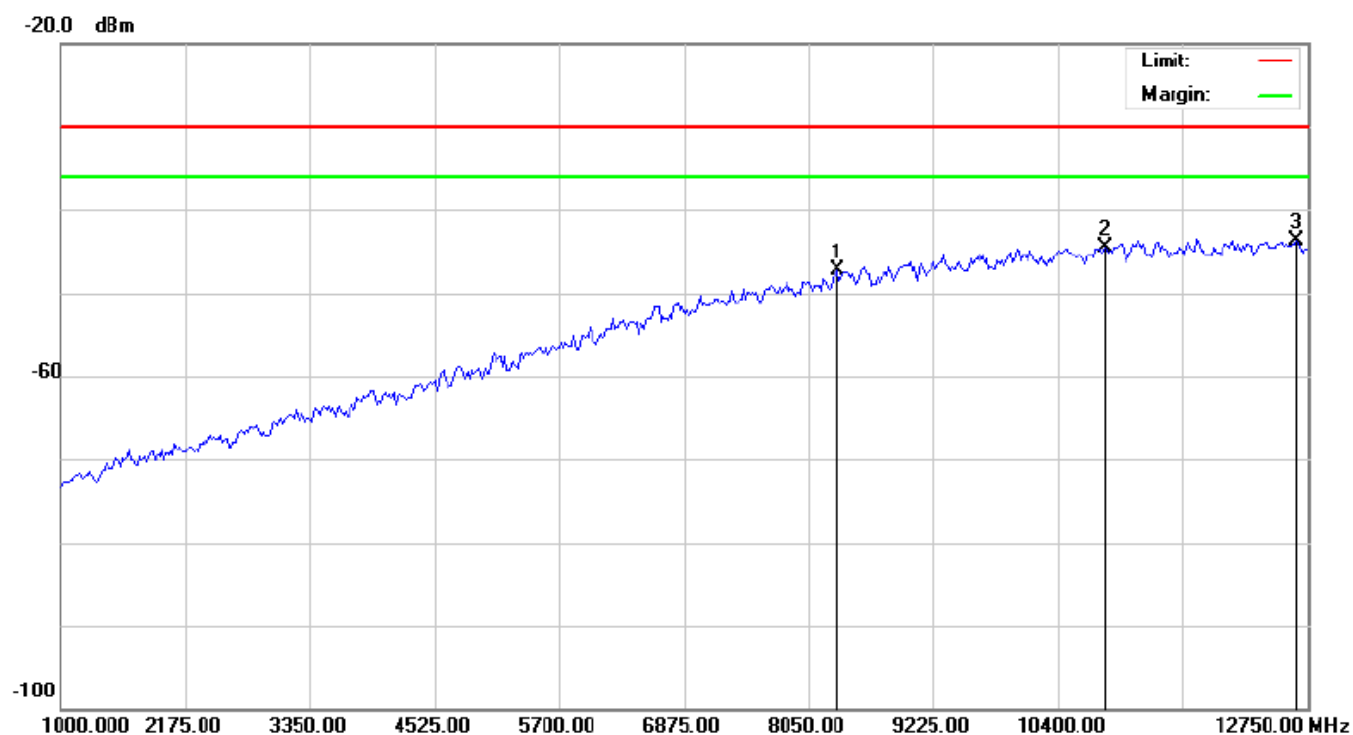
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | cm | degree | |
| 1 | | 146.4000 | -99.56 | 35.86 | -63.70 | -36.00 | -27.70 | peak | | | |
| 2 | | 311.3000 | -100.37 | 38.09 | -62.28 | -36.00 | -26.28 | peak | | | |
| 3 | | 573.2000 | -105.95 | 44.96 | -60.99 | -36.00 | -24.99 | peak | | | |
| 4 | | 696.0667 | -105.56 | 47.05 | -58.51 | -36.00 | -22.51 | peak | | | |
| 5 | | 857.7333 | -105.18 | 49.51 | -55.67 | -36.00 | -19.67 | peak | | | |
| 6 | * | 982.2167 | -105.15 | 51.69 | -53.46 | -36.00 | -17.46 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND VIII BELOW 1GHZ-VERTICAL



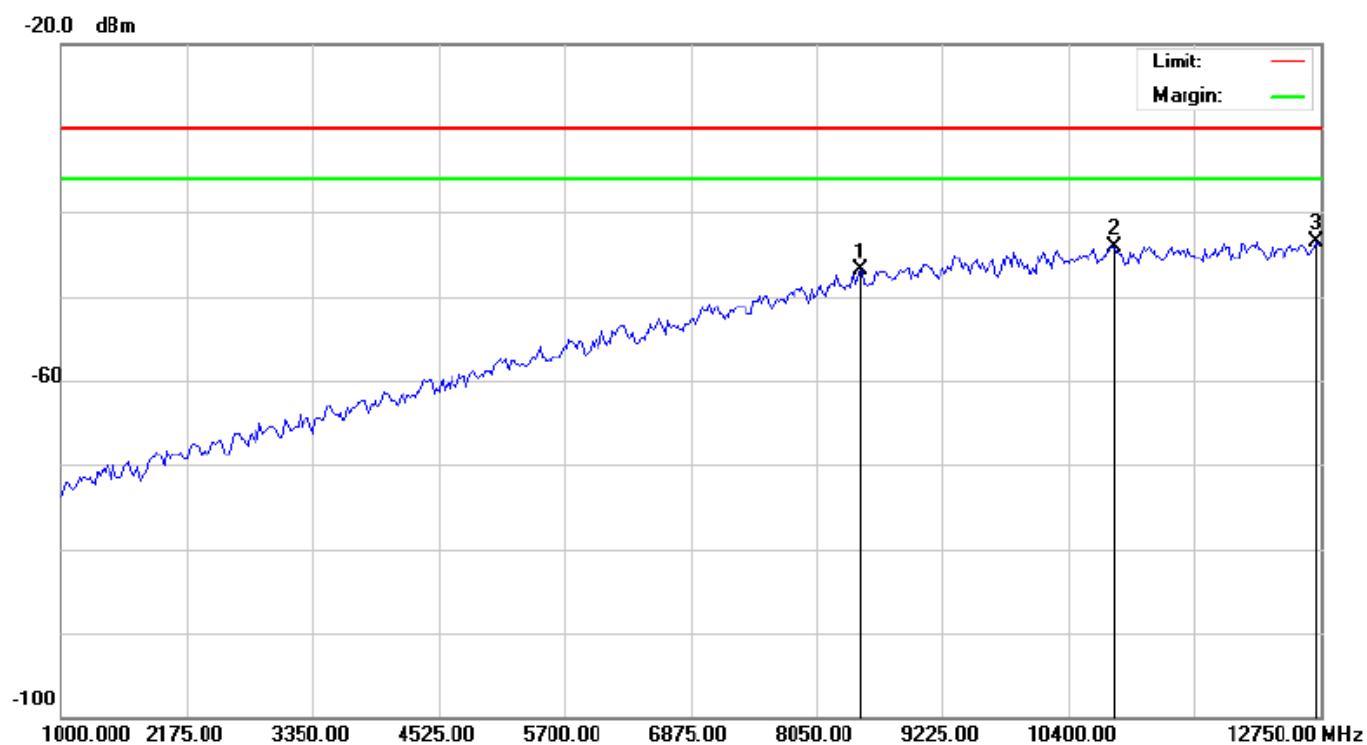
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | cm | degree | |
| 1 | | 41.3167 | -92.22 | 30.63 | -61.59 | -36.00 | -25.59 | peak | | | |
| 2 | | 139.9333 | -92.45 | 37.17 | -55.28 | -36.00 | -19.28 | peak | | | |
| 3 | | 502.0667 | -99.74 | 43.21 | -56.53 | -36.00 | -20.53 | peak | | | |
| 4 | | 626.5500 | -104.13 | 45.32 | -58.81 | -36.00 | -22.81 | peak | | | |
| 5 | | 804.3833 | -105.33 | 49.14 | -56.19 | -36.00 | -20.19 | peak | | | |
| 6 | * | 975.7500 | -105.02 | 52.27 | -52.75 | -36.00 | -16.75 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND I ABOVE 1GHZ- HORIZONTAL



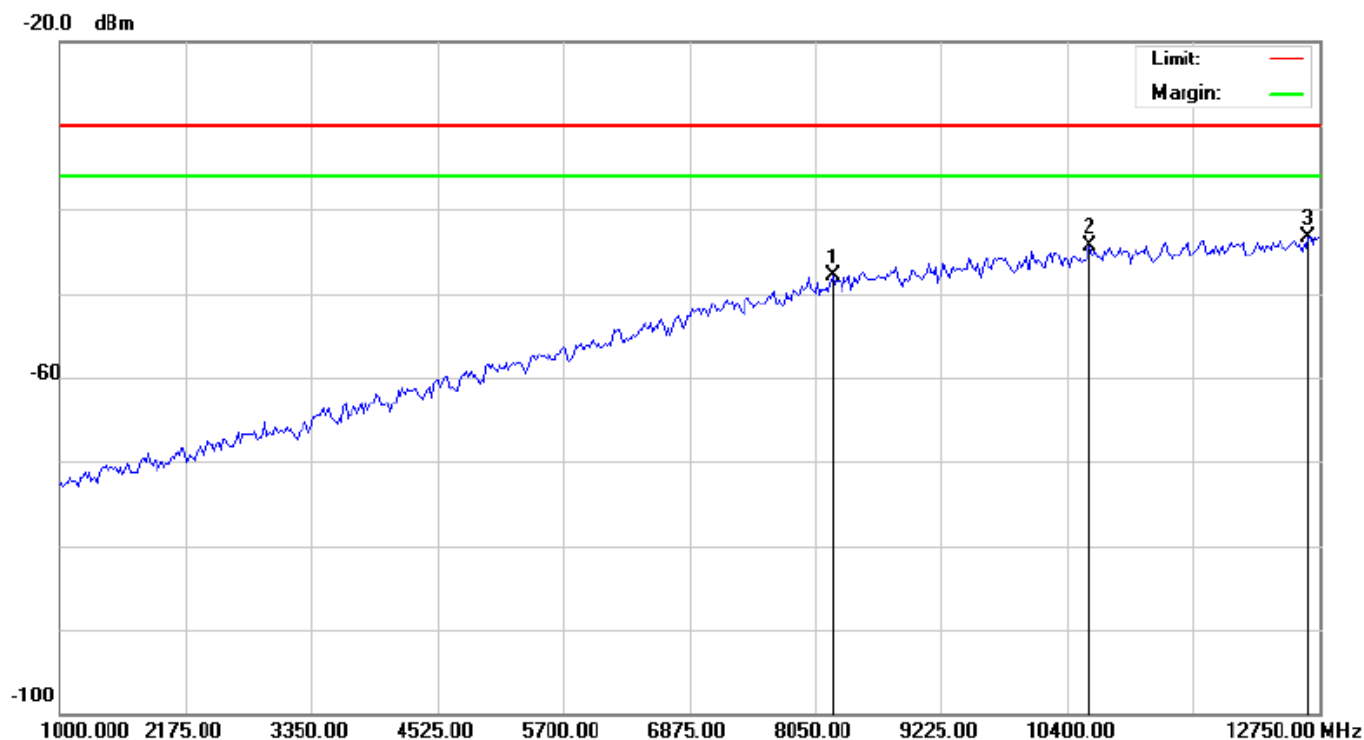
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|-----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dBm | dBm | dBm | dB | | cm | degree | |
| 1 | | 8324.167 | -62.57 | 15.19 | -47.38 | -30.00 | -17.38 | peak | | | |
| 2 | | 10850.417 | -60.18 | 15.68 | -44.50 | -30.00 | -14.50 | peak | | | |
| 3 | * | 12652.083 | -62.81 | 19.15 | -43.66 | -30.00 | -13.66 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND I ABOVE 1GHZ-VERTICAL



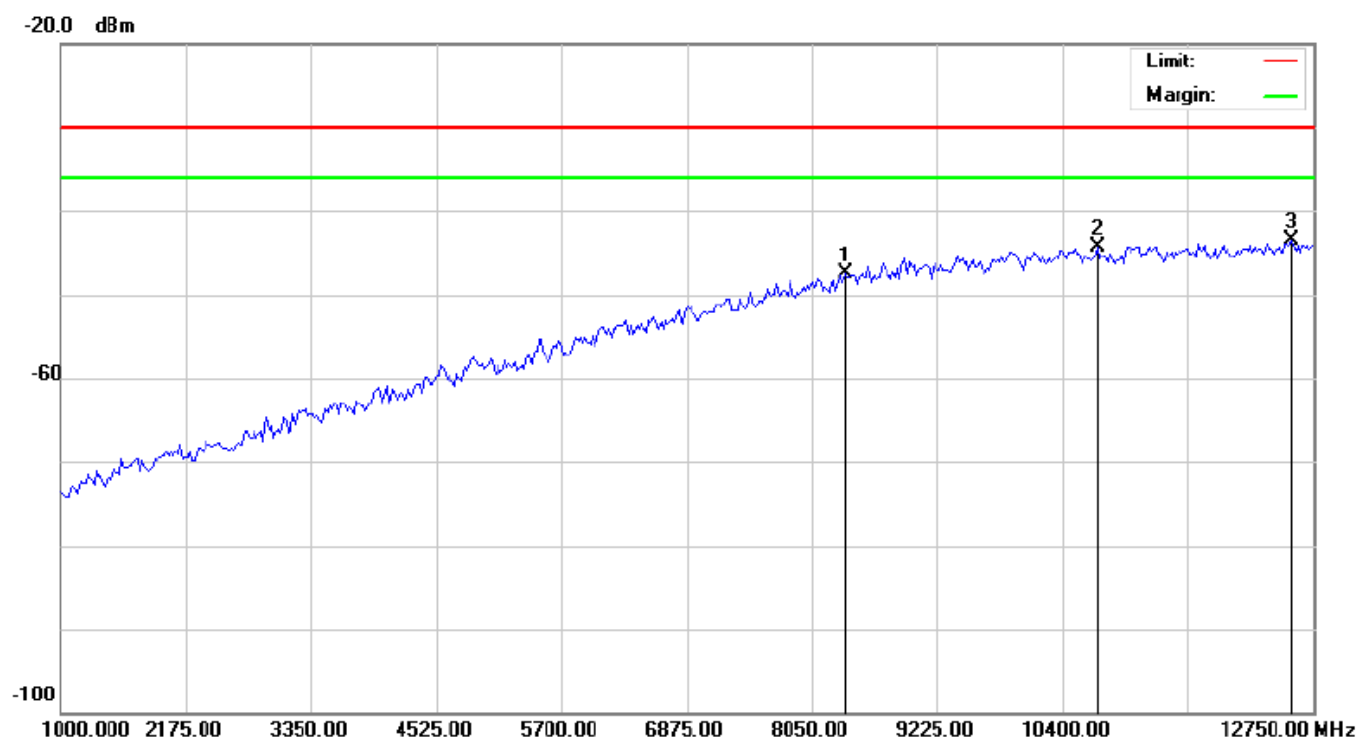
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|-----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dBm | dBm | dBm | dB | | cm | degree | |
| 1 | | 8461.250 | -61.97 | 15.15 | -46.82 | -30.00 | -16.82 | peak | | | |
| 2 | | 10830.833 | -59.75 | 15.67 | -44.08 | -30.00 | -14.08 | peak | | | |
| 3 | * | 12710.833 | -62.71 | 19.26 | -43.45 | -30.00 | -13.45 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND VIII ABOVE 1GHZ– HORIZONTAL



| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|-----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dBm | dBm | dBm | dB | | cm | degree | |
| 1 | | 8206.667 | -63.13 | 15.22 | -47.91 | -30.00 | -17.91 | peak | | | |
| 2 | | 10615.417 | -59.95 | 15.60 | -44.35 | -30.00 | -14.35 | peak | | | |
| 3 | * | 12652.083 | -62.38 | 19.15 | -43.23 | -30.00 | -13.23 | peak | | | |

RADIATED SPURIOUS EMISSIONS UMTS BAND VIII ABOVE 1GHZ-VERTICAL

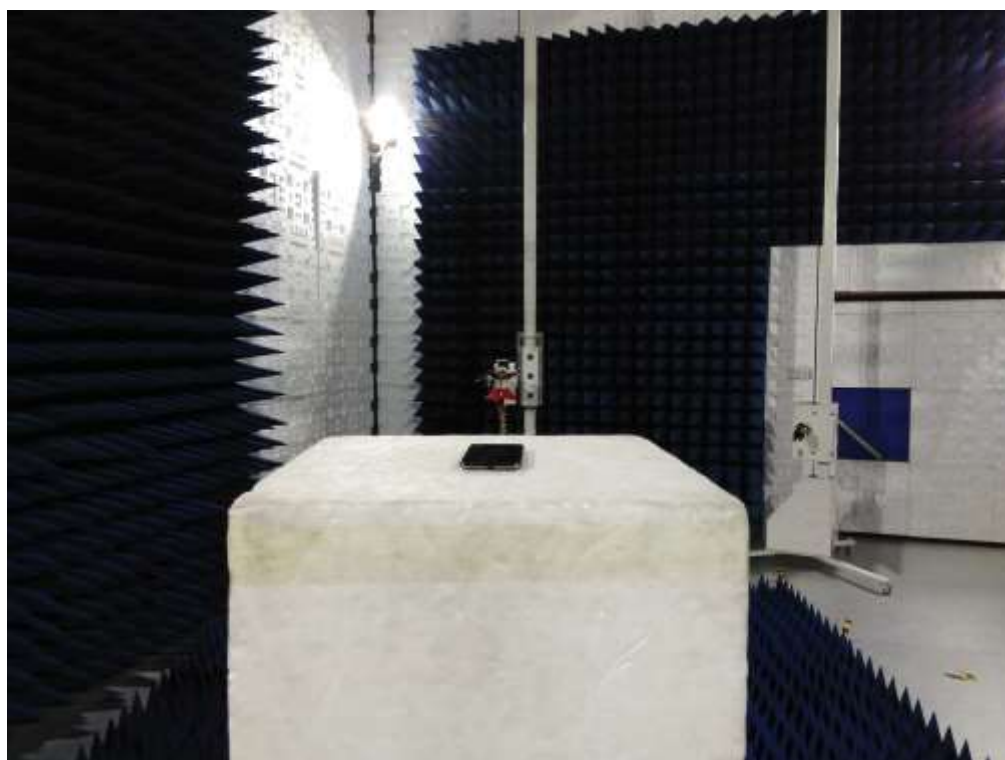


| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|-----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBm | dBm | dBm | dBm | dB | | cm | degree | |
| 1 | | 8363.333 | -62.65 | 15.18 | -47.47 | -30.00 | -17.47 | peak | | | |
| 2 | | 10732.917 | -59.99 | 15.64 | -44.35 | -30.00 | -14.35 | peak | | | |
| 3 | * | 12554.167 | -62.45 | 18.98 | -43.47 | -30.00 | -13.47 | peak | | | |

APPENDIX U: PHOTOGRAPHS OF TEST SETUP
RADIATED SPURIOUS EMISSION TEST SETUP



RADIATED SPURIOUS EMISSION-ABOVE 1G TEST SETUP



Sample label



----END OF REPORT----