
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.

Tested By

donjon . huang

Donjon Huang(Huang Dongyang)

Jan. 07, 2019

Reviewed By

Bart xie

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Jan. 07, 2019

Approved By

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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 Huafului 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	SCHWARZBEC K	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

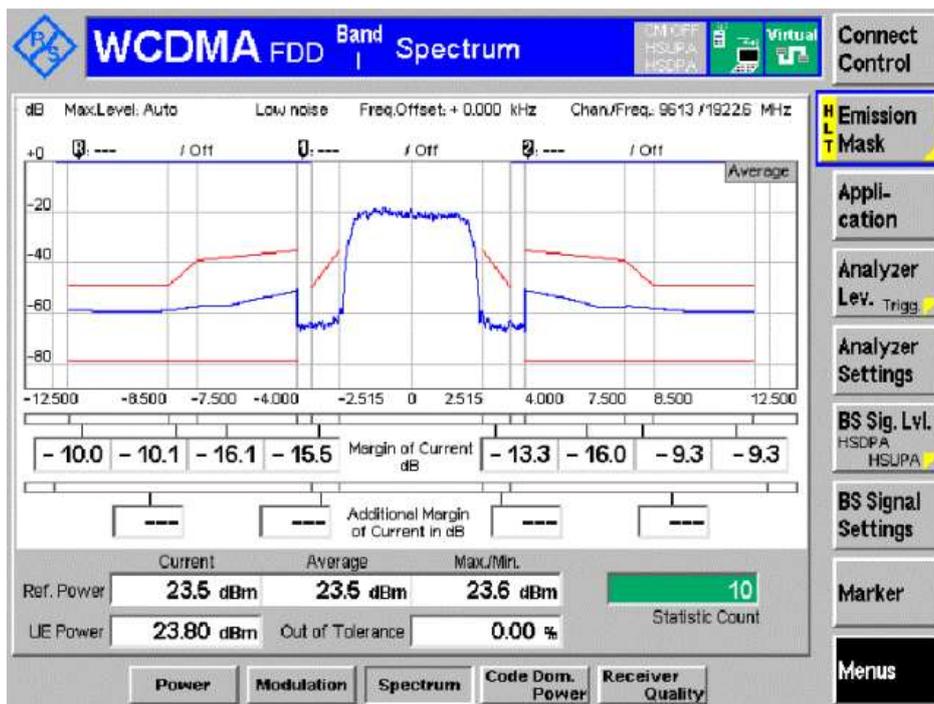
Operating Band	Test Conditions	Δf in MHz	Test Channel		
			LCH	MCH	HCH
Band I	TNVN	2.5-3.5	PASS	PASS	PASS
		3.5-7.5			
		7.5-8.5			
		8.5-12.5 MHz			

BAND VIII

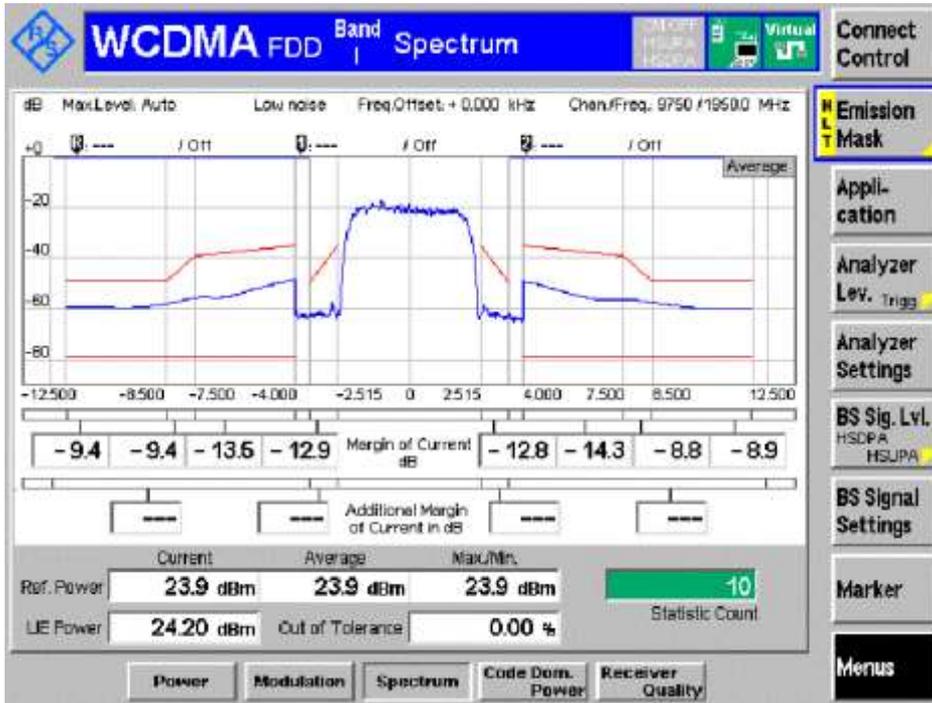
Operating Band	Test Conditions	Δf in MHz	Test Channel		
			LCH	MCH	HCH
Band VIII	TNVN	2.5-3.5	PASS	PASS	PASS
		3.5-7.5			
		7.5-8.5			
		8.5-12.5 MHz			

BAND I

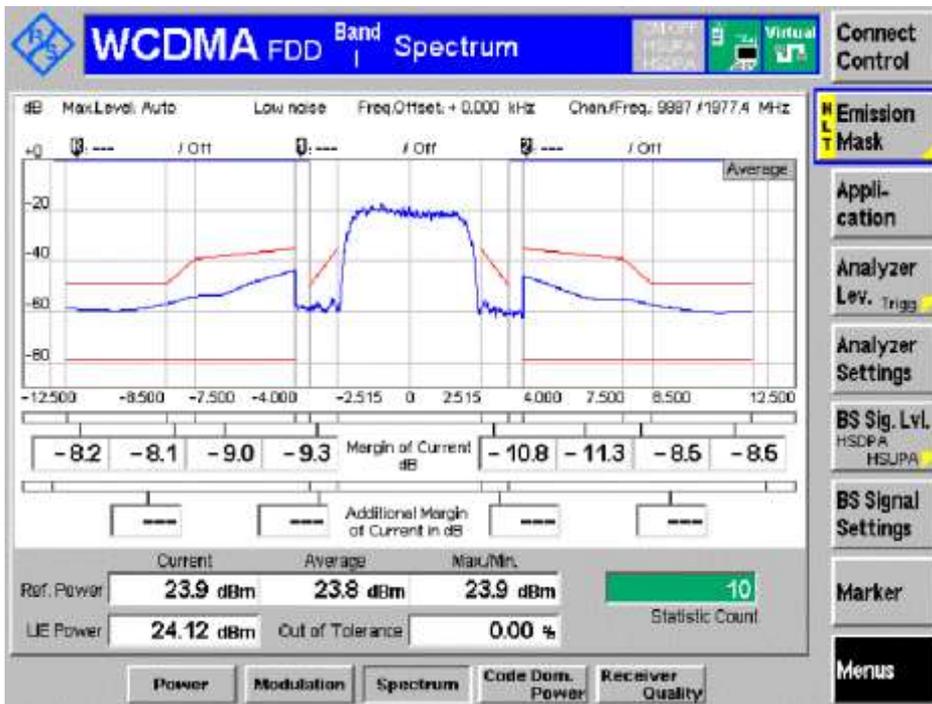
Channel LCH



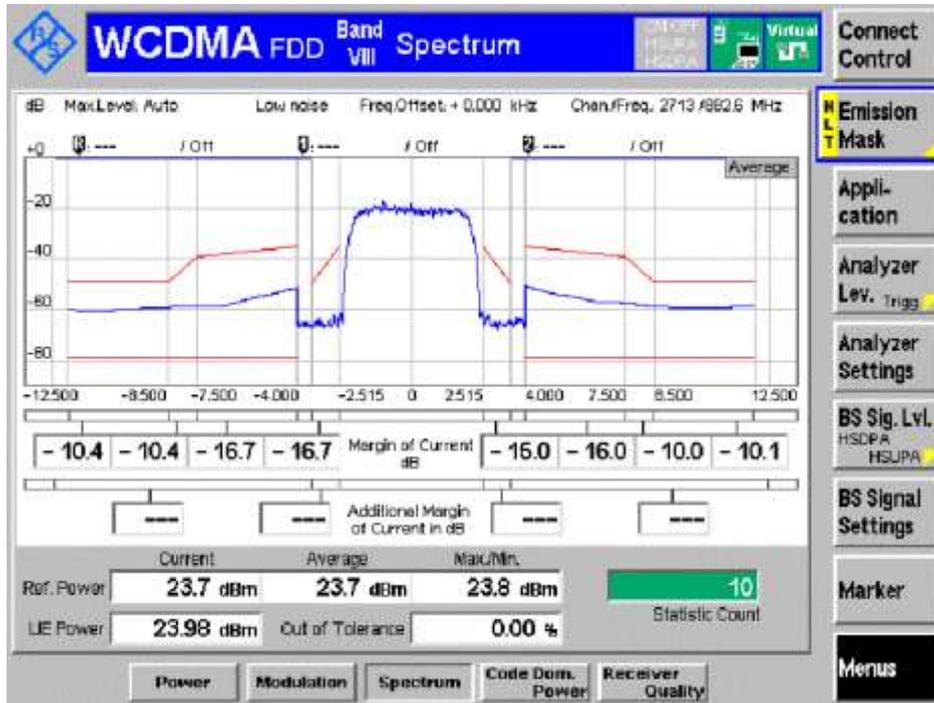
Channel MCH



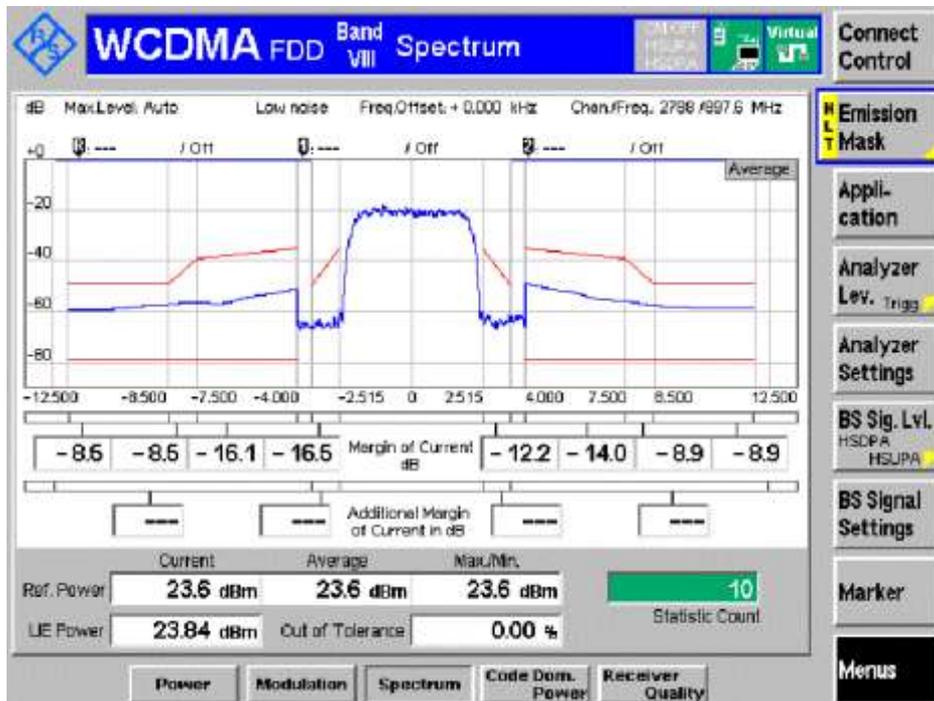
Channel HCH



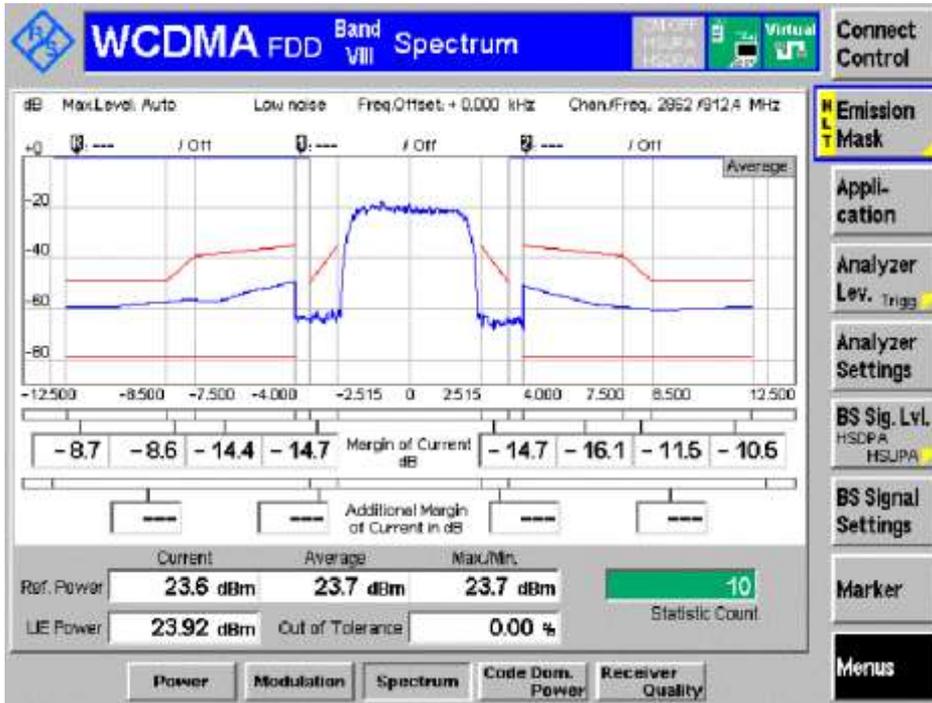
BAND VIII
Channel LCH



Channel MCH



Channel HCH



Appendix D. Transmitter adjacent channel leakage power ratio

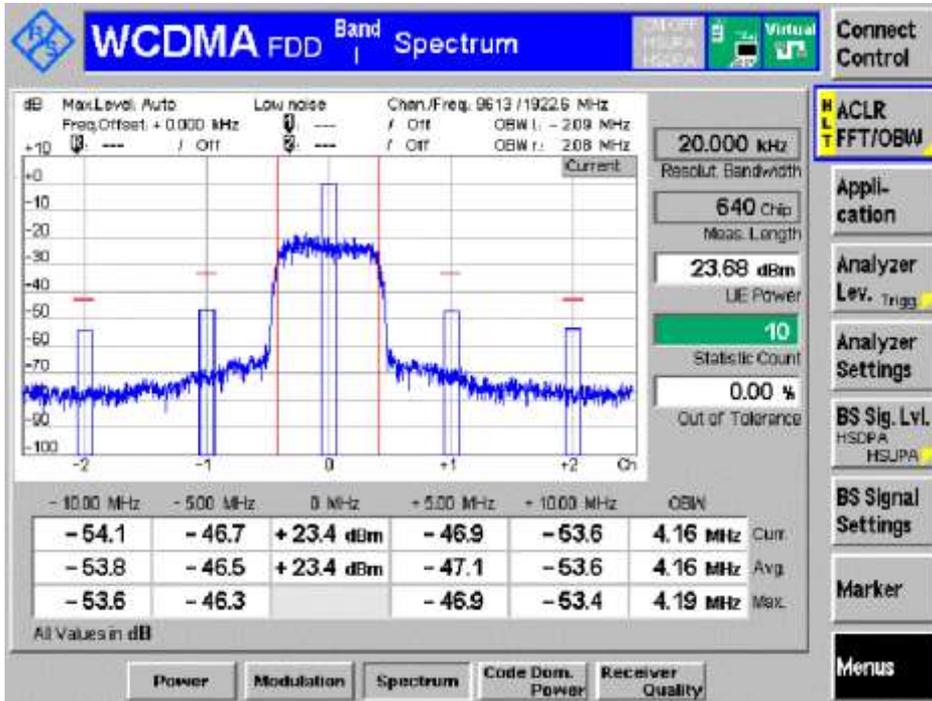
Note: All the modes had been tested, but only the worst data recorded in the report.

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

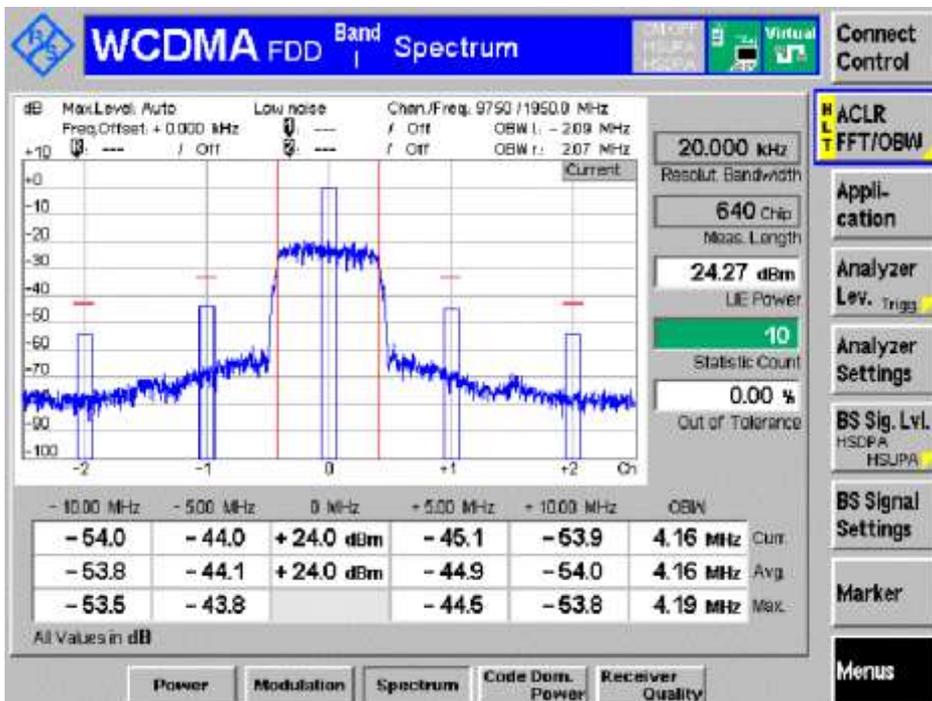
BAND I

TNVN

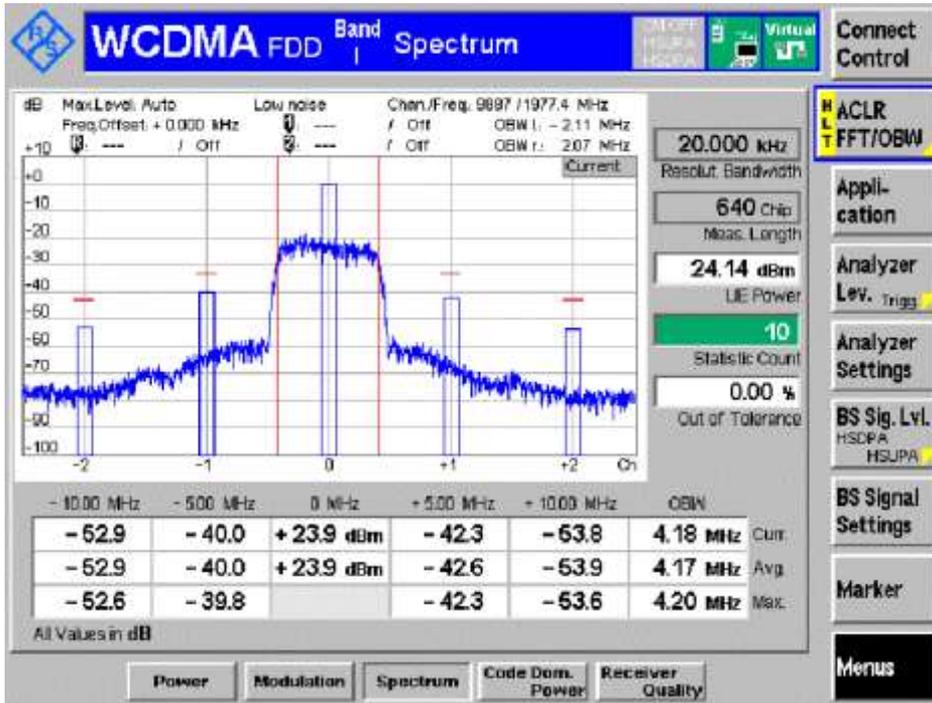
Channel LCH



Channel MCH



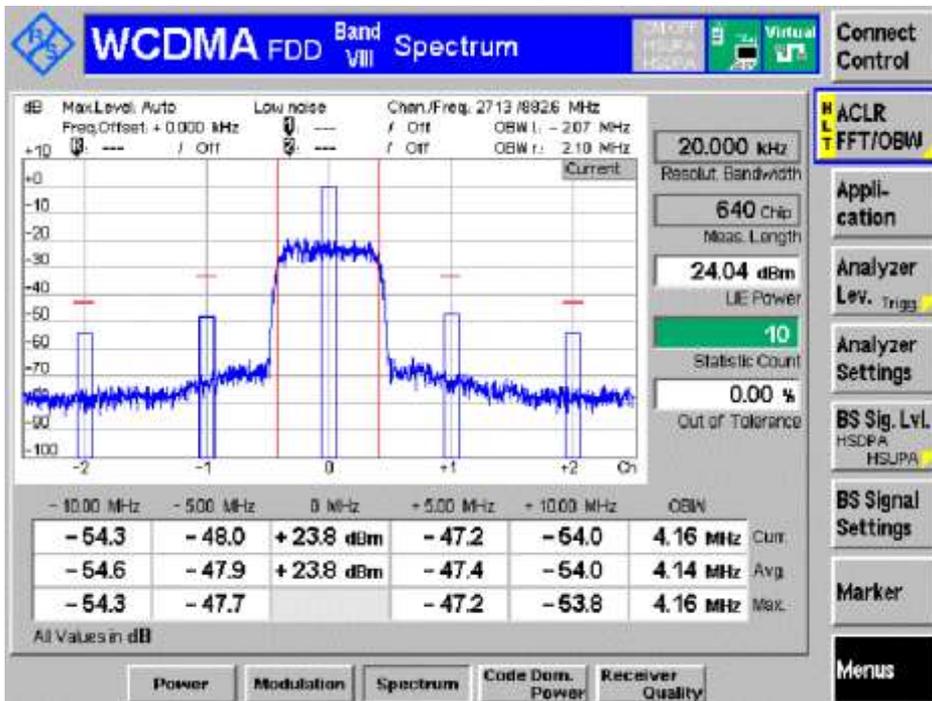
Channel HCH



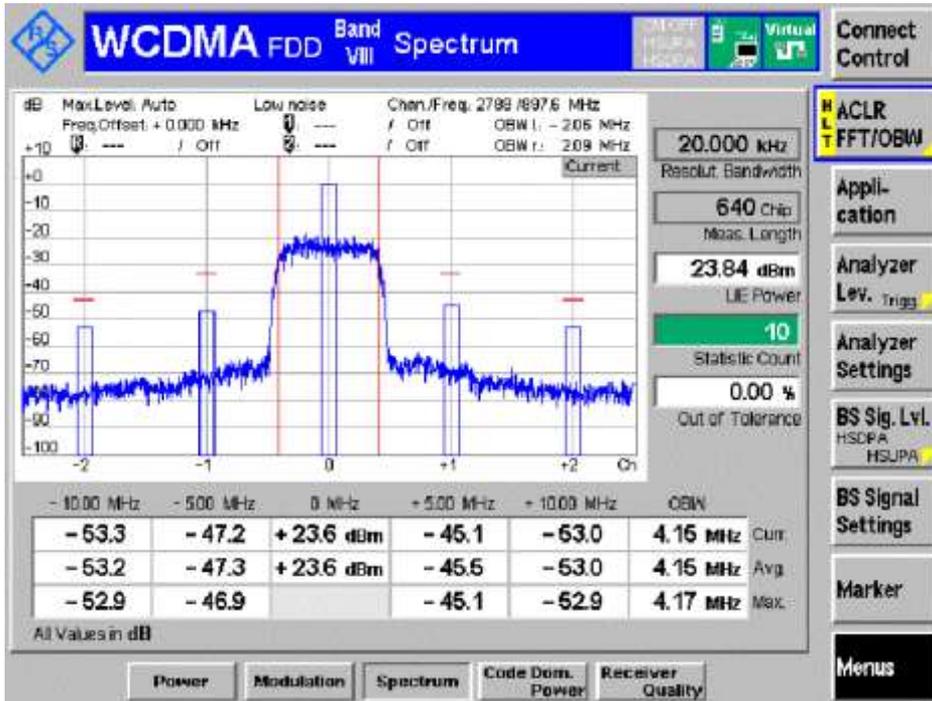
BAND VIII

TNPN

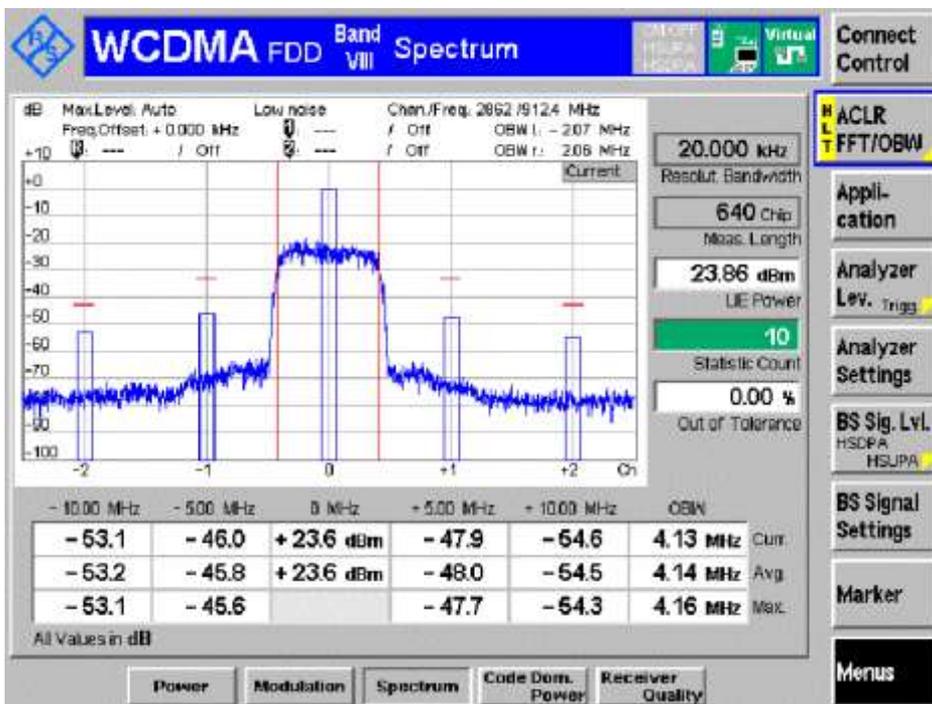
Channel LCH



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 \leq f < 150 kHz	1 kHz	-36	-41.72	-44.44	-46.39	Pass
150 kHz \leq f < 30 MHz	10kHz	-36	-51.24	-50.96	-51.14	Pass
30 MHz \leq f < 1 000 MHz	100kHz	-36	-60.15	-60.21	-59.45	Pass
1 GHz \leq f < 12.750GHz	1 MHz	-30	-41.89	-41.51	-41.83	Pass
791 MHz \leq f \leq 821 MHz	3.84MHz	-60	-65.72	-65.80	-66.26	Pass
921 MHz \leq f < 925 MHz	100 kHz	-60	-61.82	-62.86	-62.54	Pass
925 MHz \leq f \leq 935 MHz	100 kHz	-67	-76.88	-76.92	-76.31	Pass
935 MHz < f \leq 960 MHz	100 kHz	-79	-86.97	-86.91	-86.95	Pass
1 805 MHz \leq f \leq 1 880 MHz	100 kHz	-71	-82.91	-82.93	-83.17	Pass
2 110 MHz \leq f \leq 2 170 MHz	3.84MHz	-60	-65.58	-65.60	-65.55	Pass
2 585 MHz \leq f \leq 2 690 MHz	3.84MHz	-60	-64.41	-64.34	-64.42	Pass

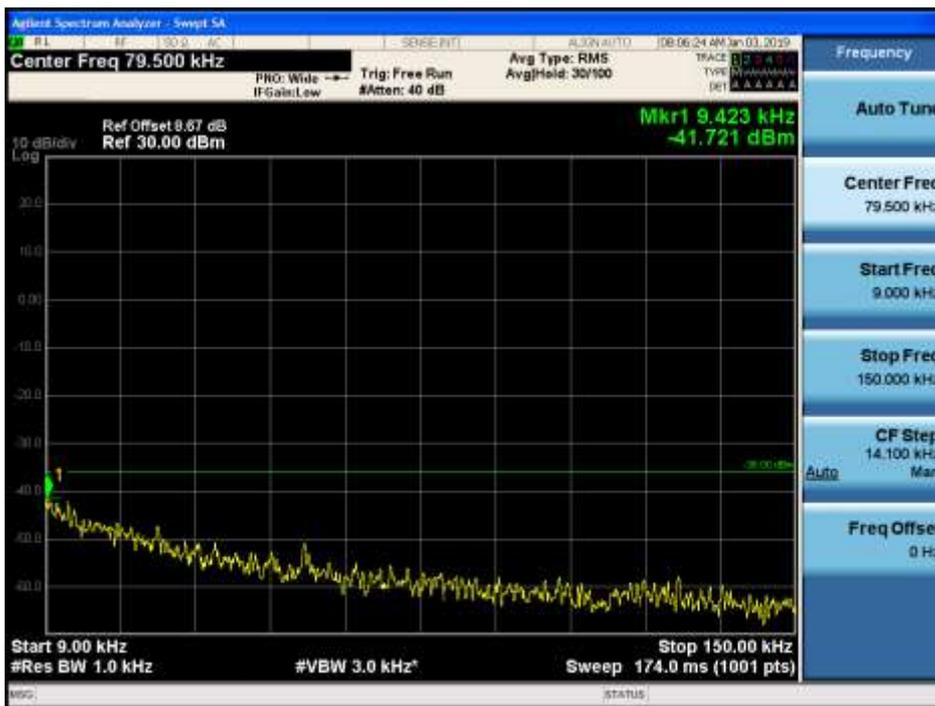
Frequency	RBW	Max. Level (dbm)	Test Band=Band VIII			Result
			Test Conditions=TNVN			
			Test Channel			
			LCH	MCH	HCH	
9 kHz \leq f < 150 kHz	1 kHz	-36	-41.74	-41.37	-42.56	Pass
150 kHz \leq f < 30 MHz	10 kHz	-36	-50.84	-49.18	-51.96	Pass
30 MHz \leq f < 1 000 MHz	100kHz	-36	-54.79	-54.83	-55.30	Pass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



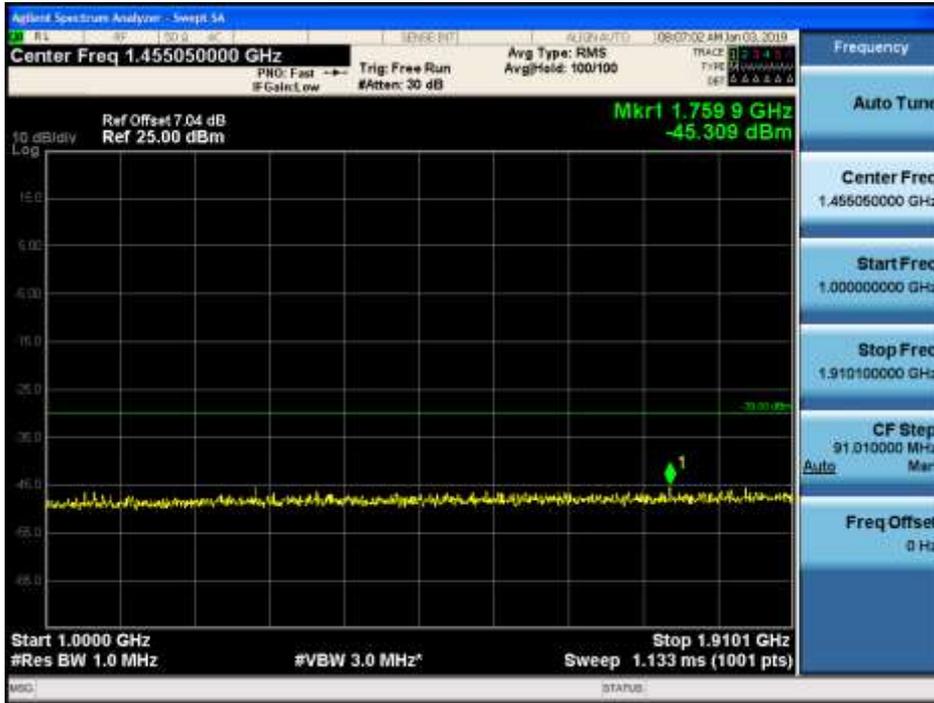
150KHZ~30MHZ



30MHZ~1GHZ



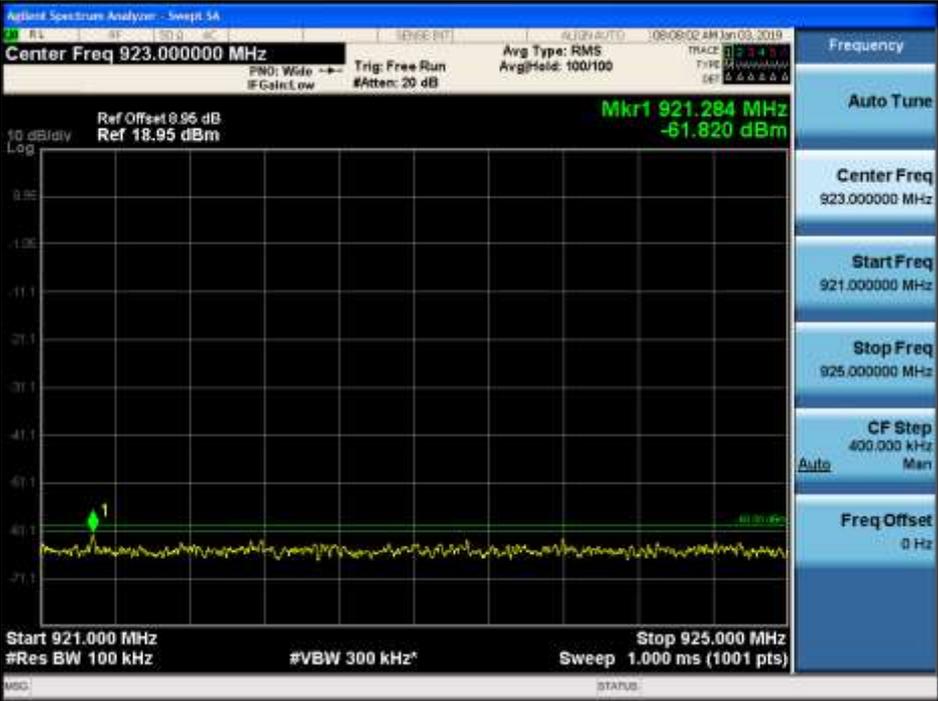
1GHZ~1.9101GHZ



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



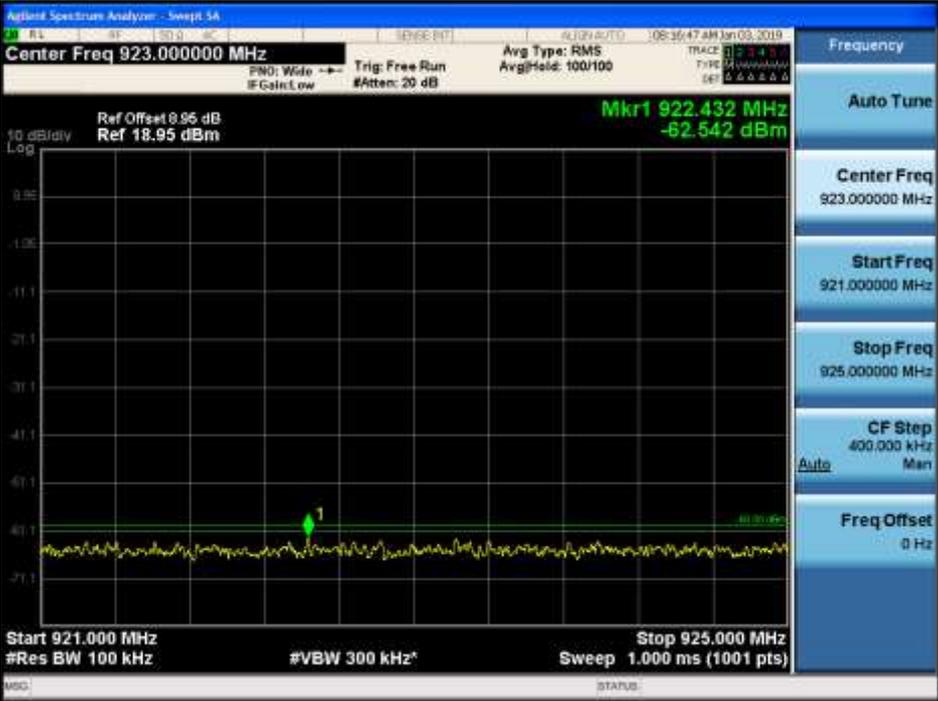
1.9351GHZ~12.750GHZ



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



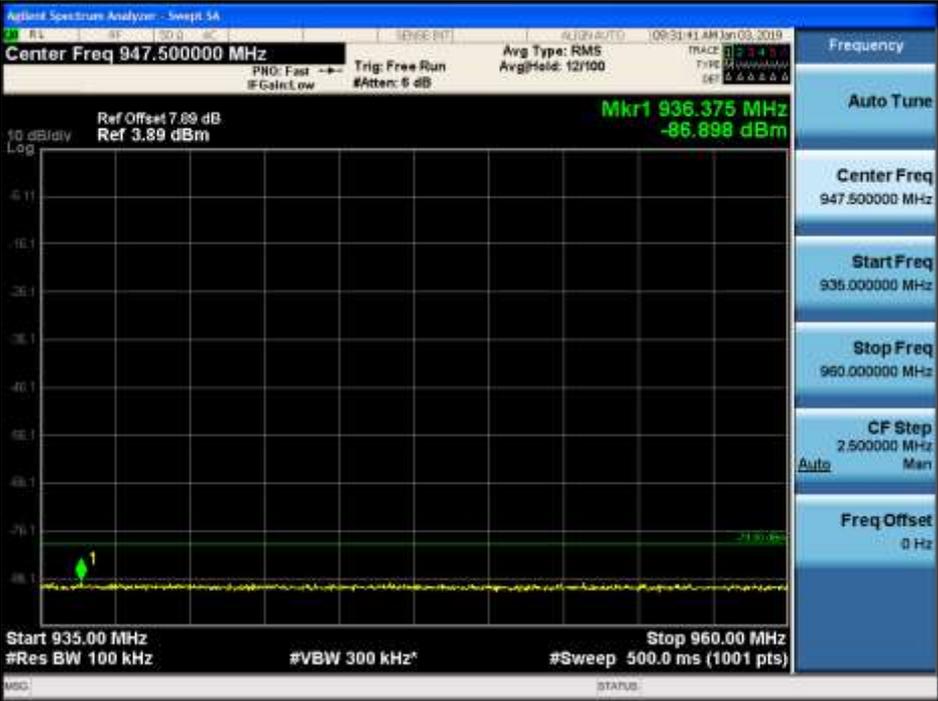
925MHZ~935MHZ



925MHZ~935MHZ



935MHZ~960MHZ



935MHZ~960MHZ



1805MHZ~1830MHZ



1805MHZ~1830MHZ



1830MHZ~1880MHZ



1830MHZ~1880MHZ



2110MHZ~2170MHZ



2585MHZ~2640MHZ



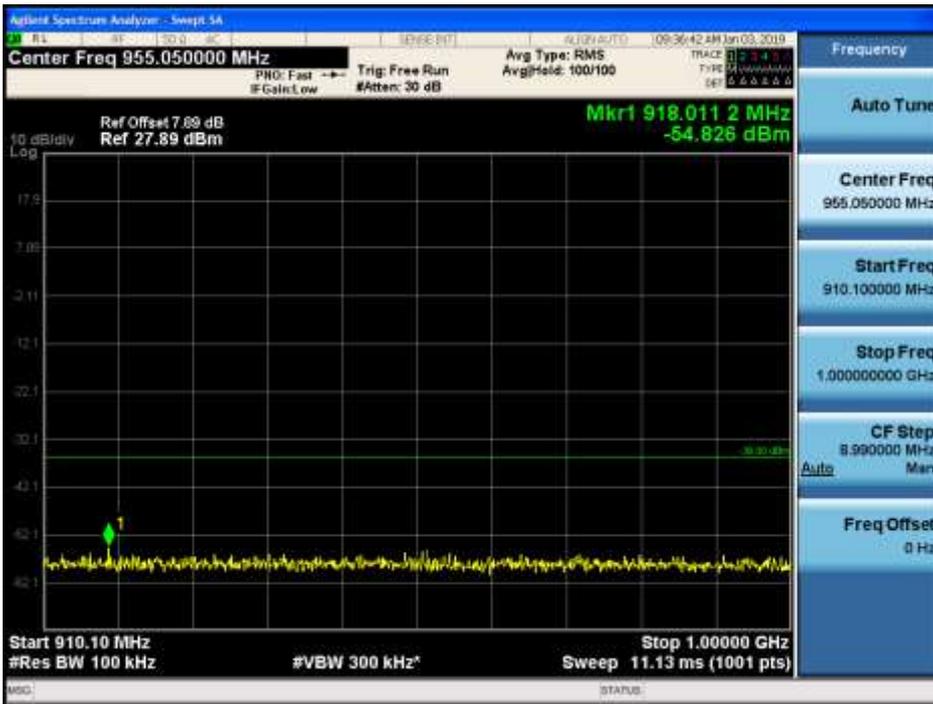
2640MHZ~2690MHZ

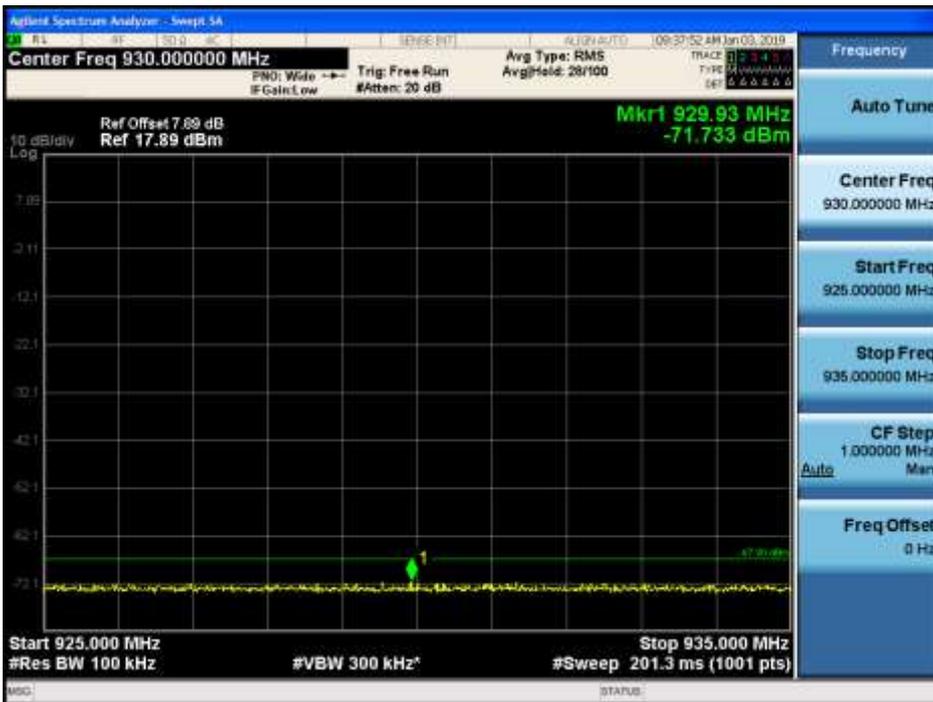


Channel MCH











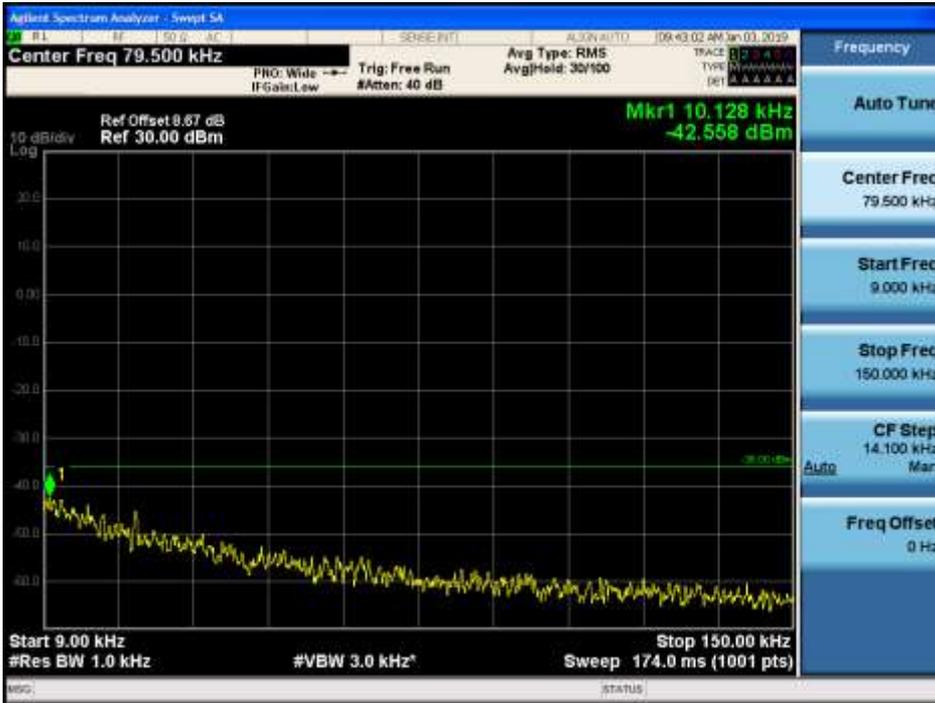








Channel HCH

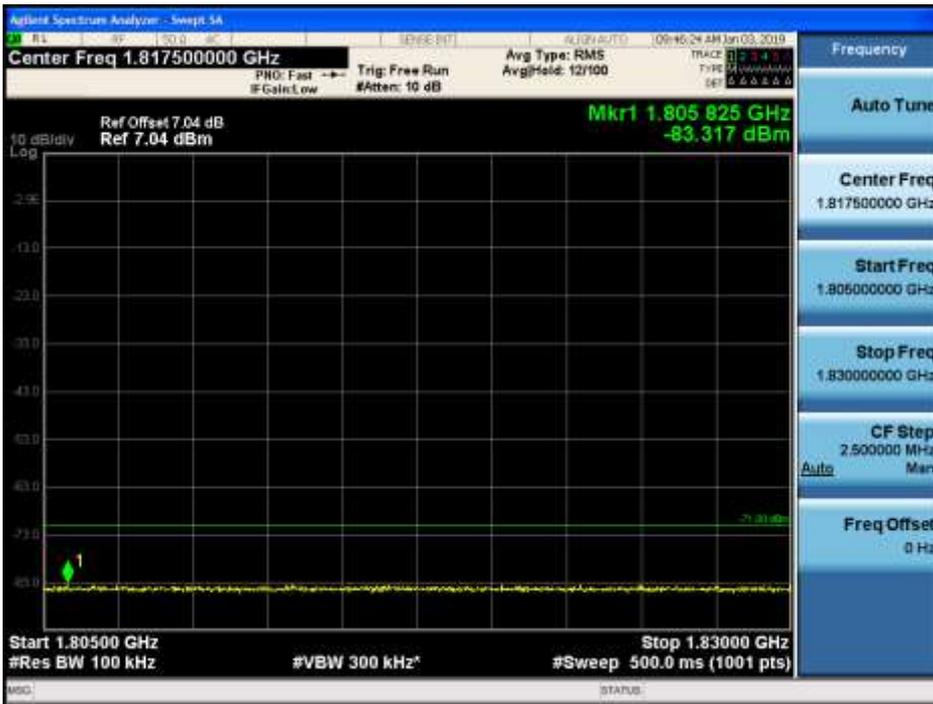


















Appendix F. Transmitter maximum output power with HS-DPCCH

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

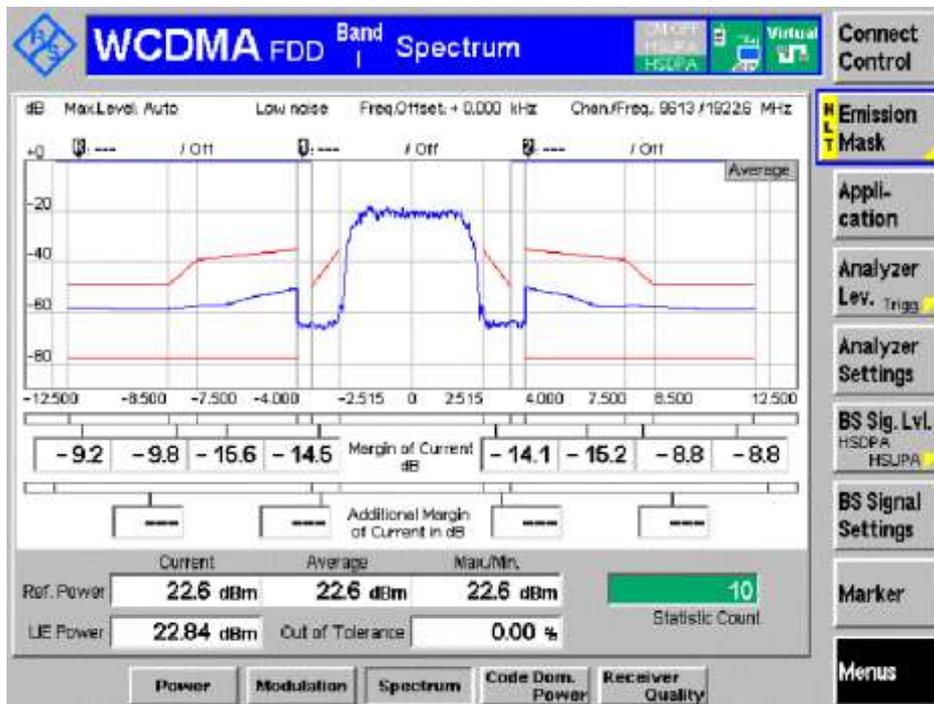
Operating Band	Test Conditions	Sub-test	Test Channel		
			LCH	MCH	HCH
Band I	TNVN	1	PASS	PASS	PASS
		2	PASS	PASS	PASS
		3	PASS	PASS	PASS
		4	PASS	PASS	PASS

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

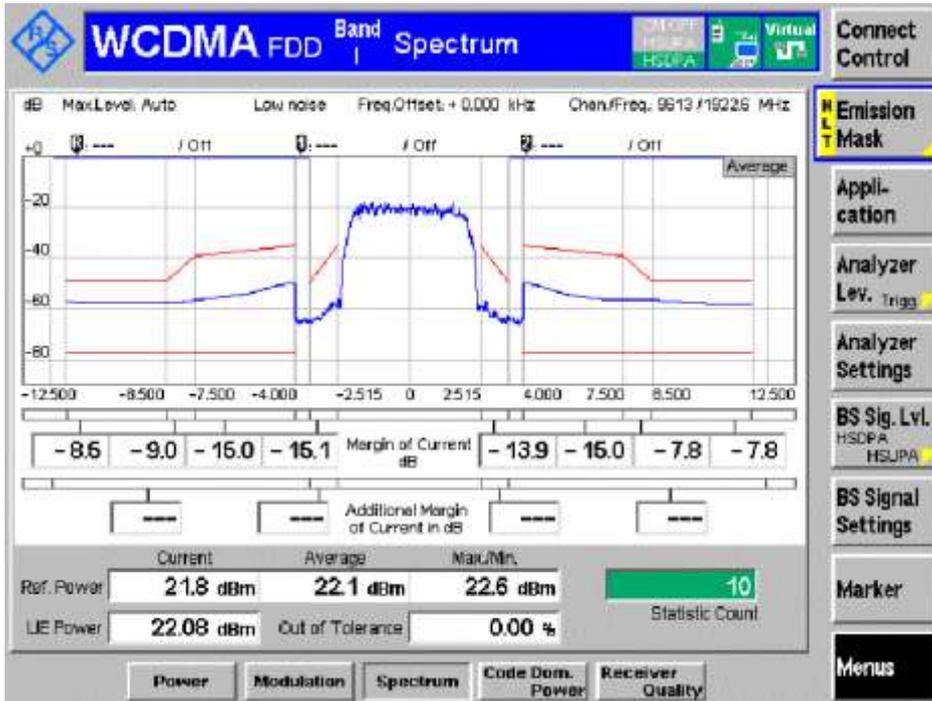
BAND I

Channel LCH

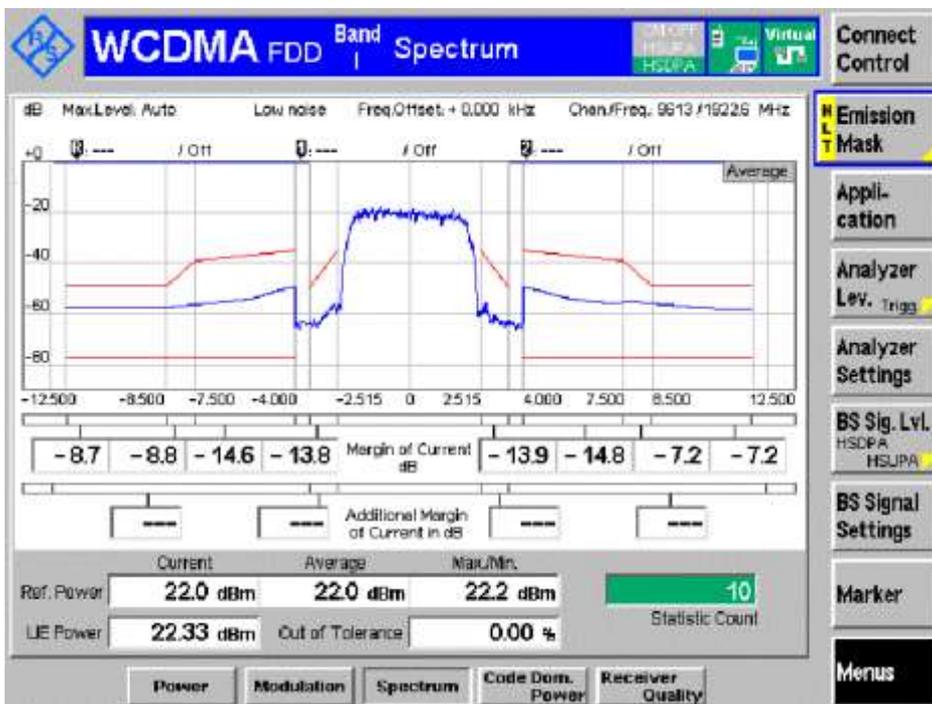
Sub-test 1



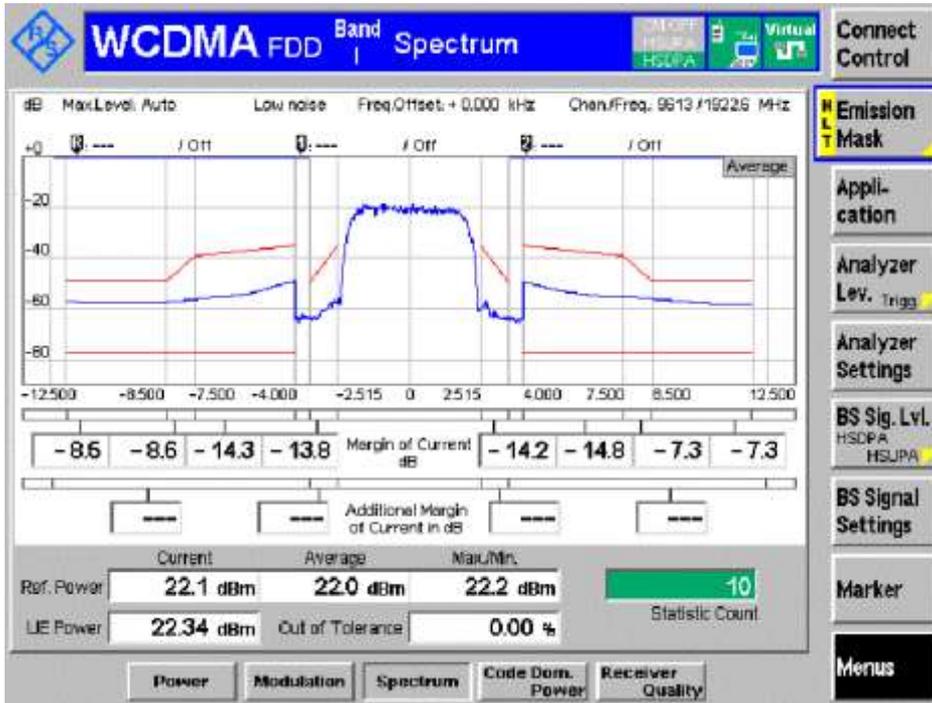
Sub-test 2



Sub-test 3

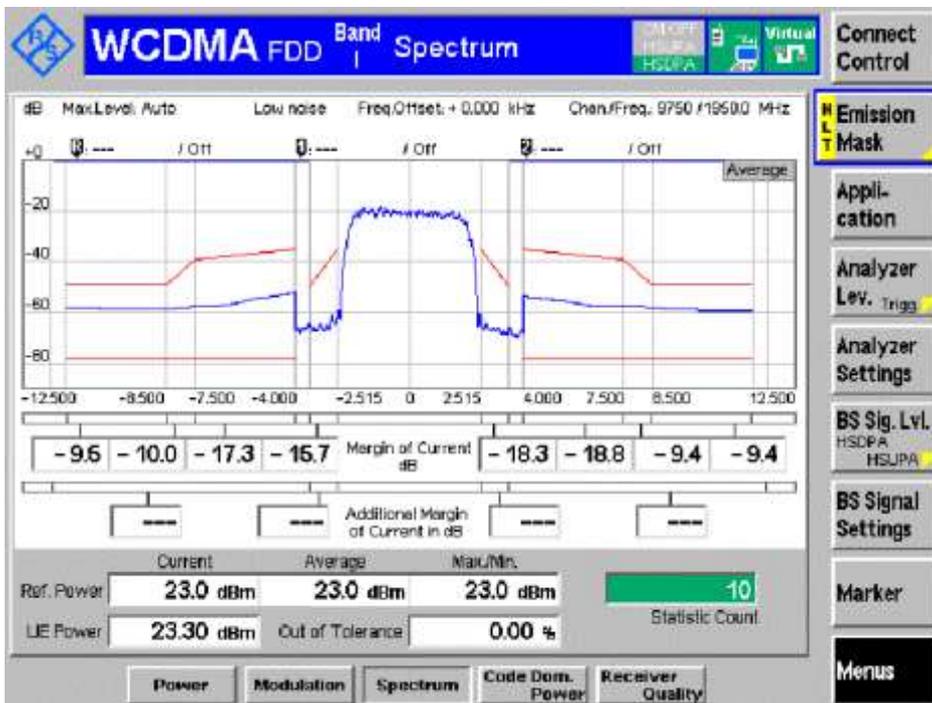


Sub-test 4

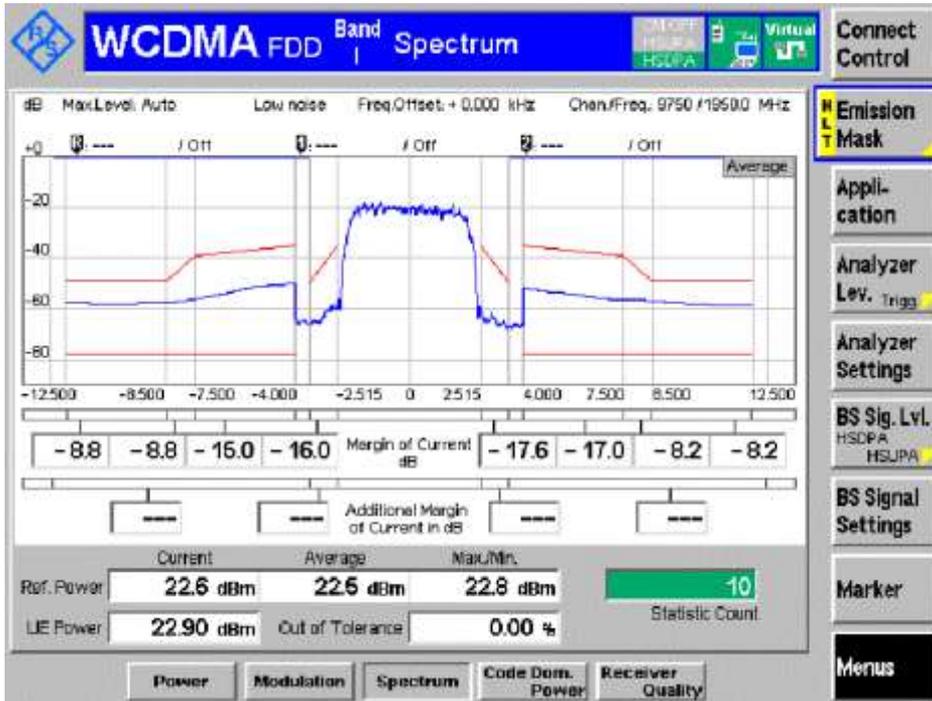


Channel MCH

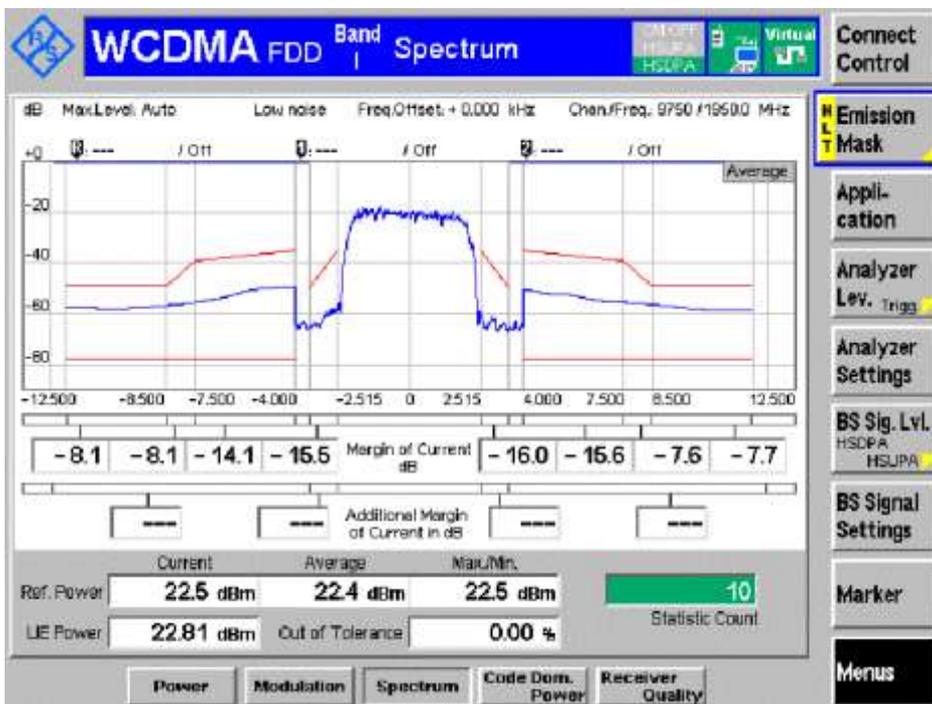
Sub-test 1



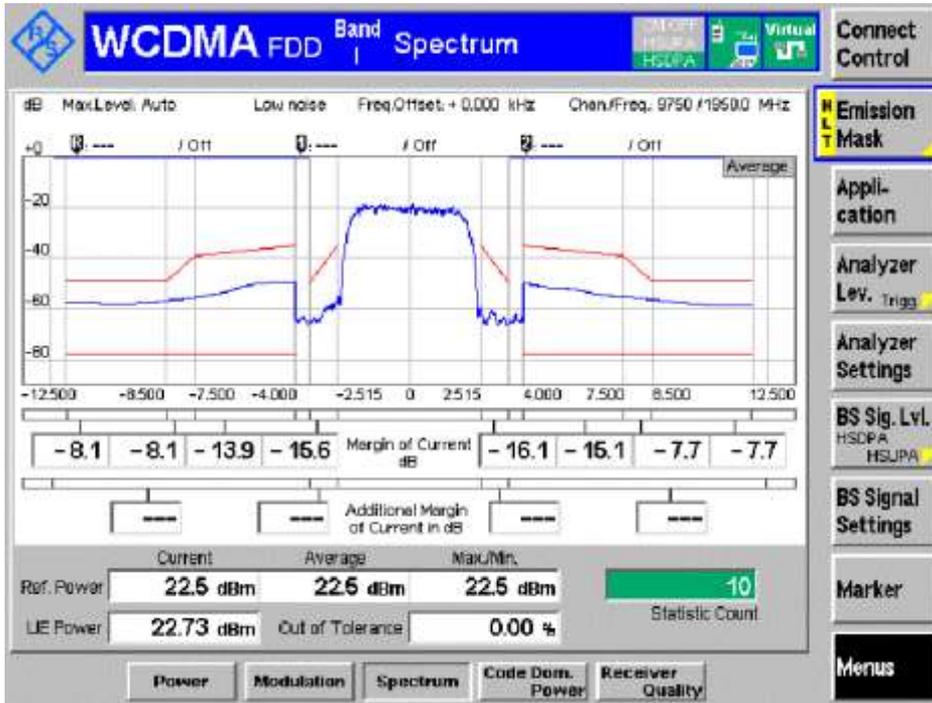
Sub-test 2



Sub-test 3

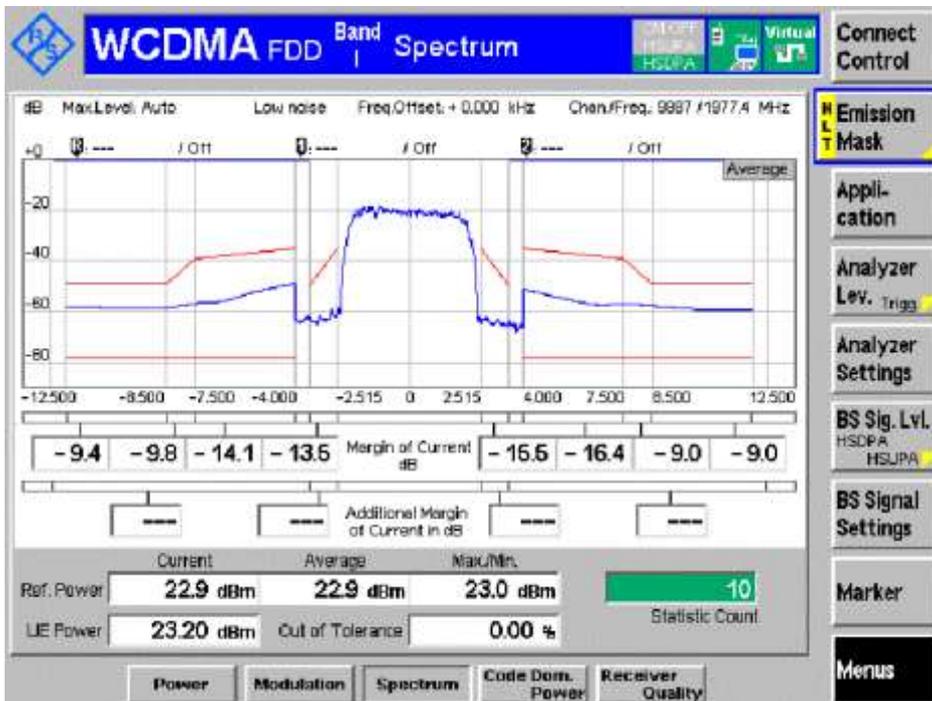


Sub-test 4

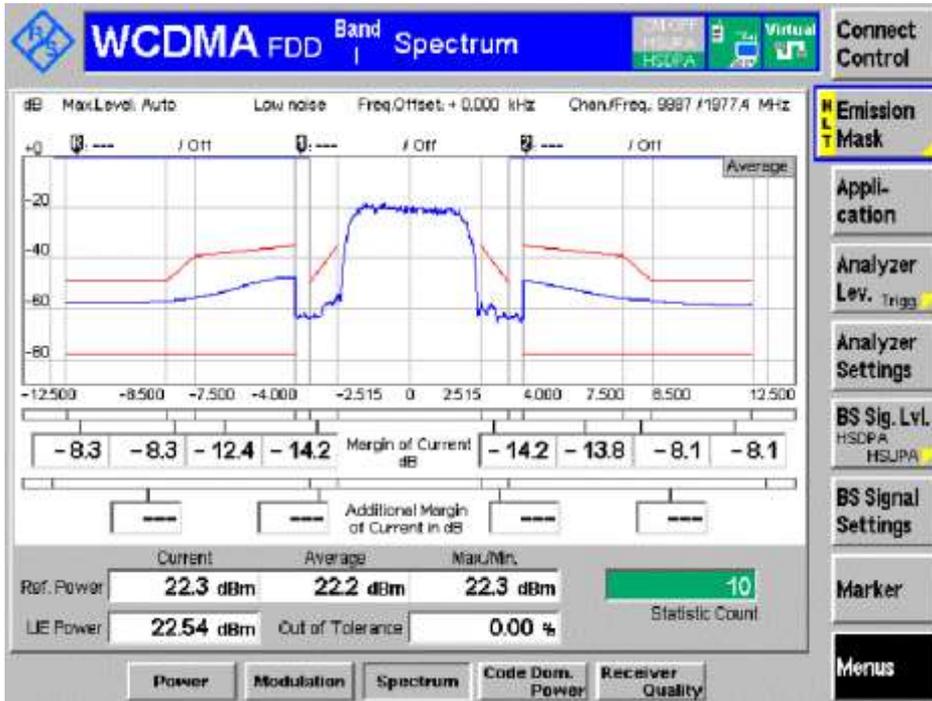


Channel HCH

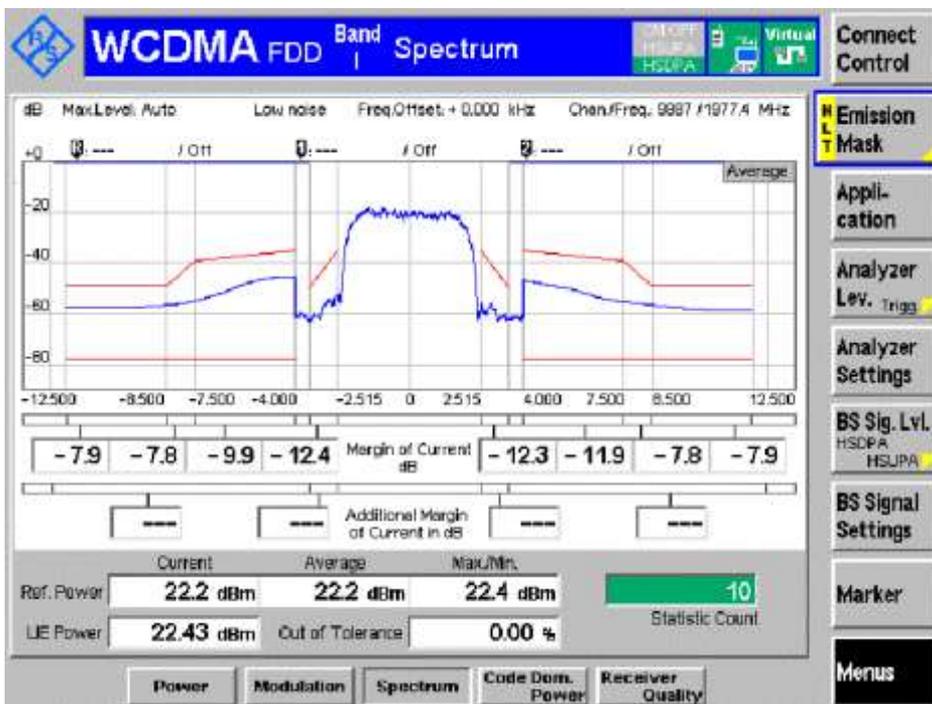
Sub-test 1



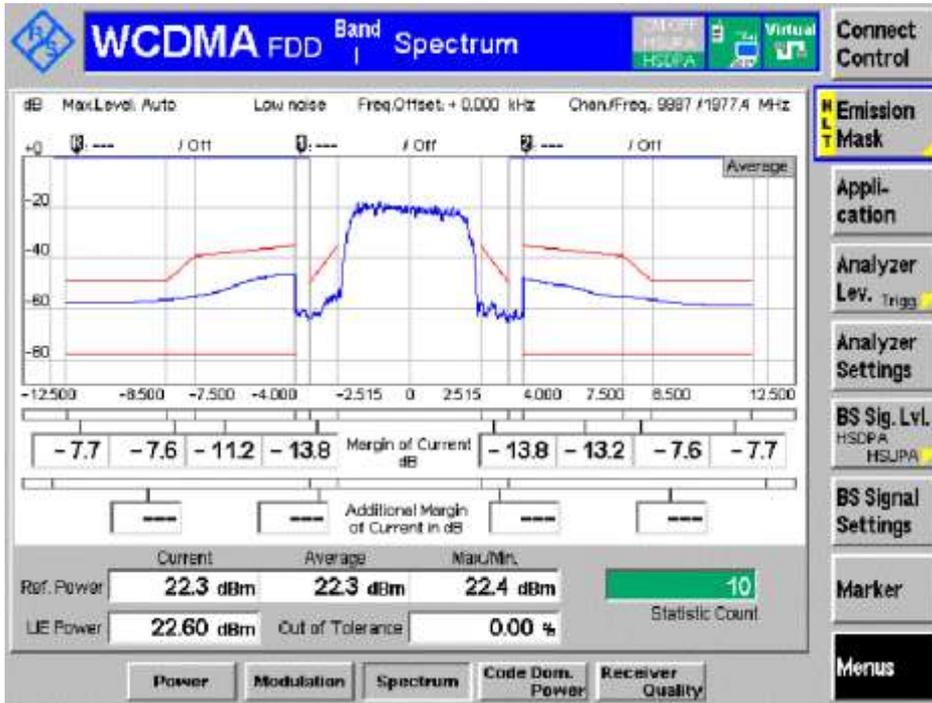
Sub-test 2



Sub-test 3



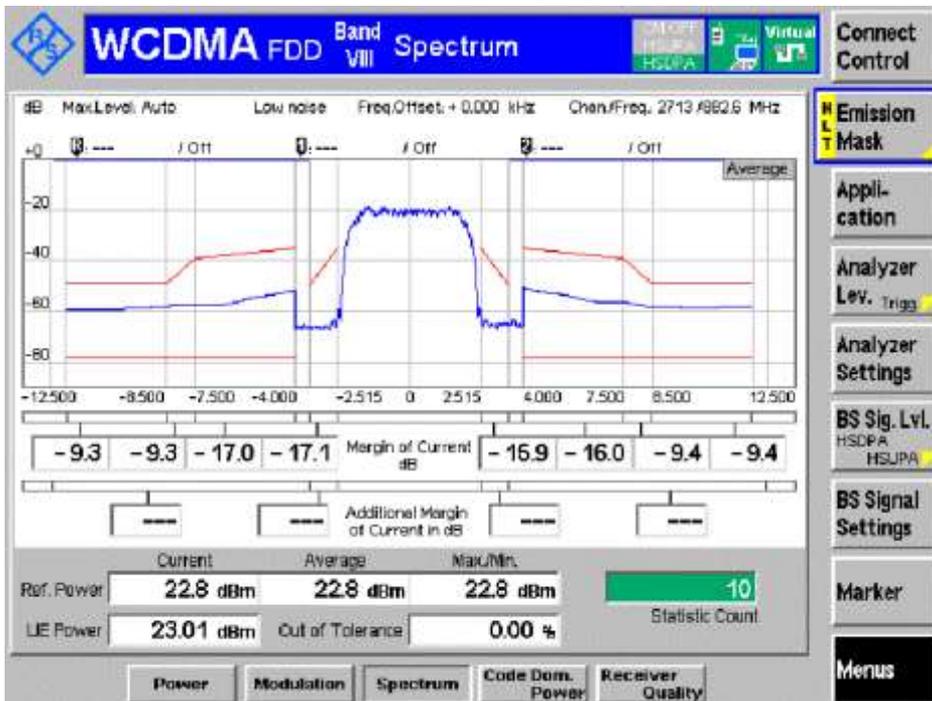
Sub-test 4



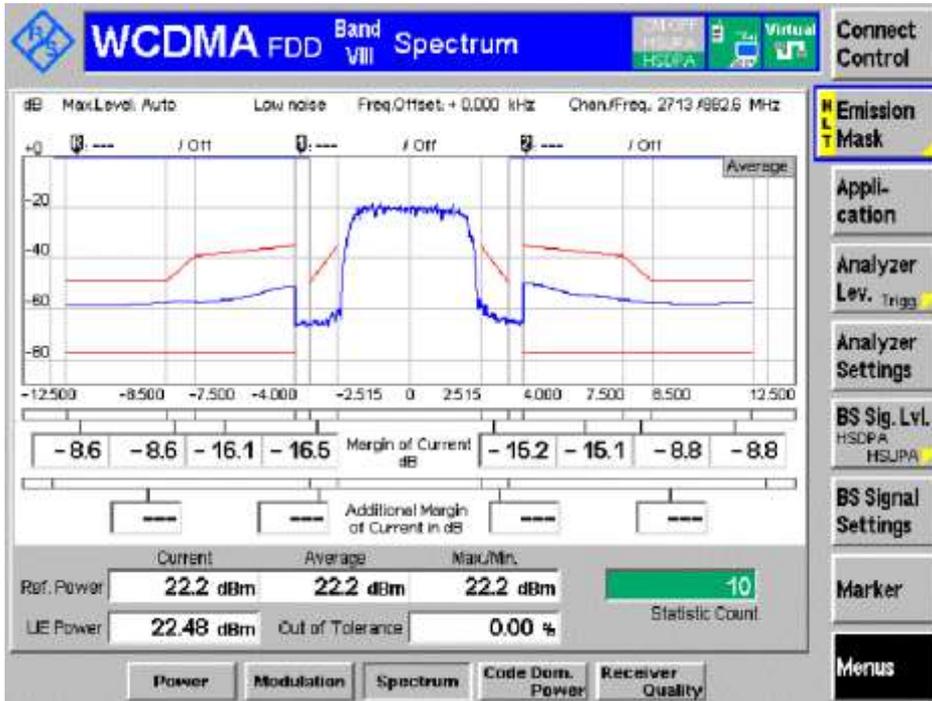
BAND VIII

Channel LCH

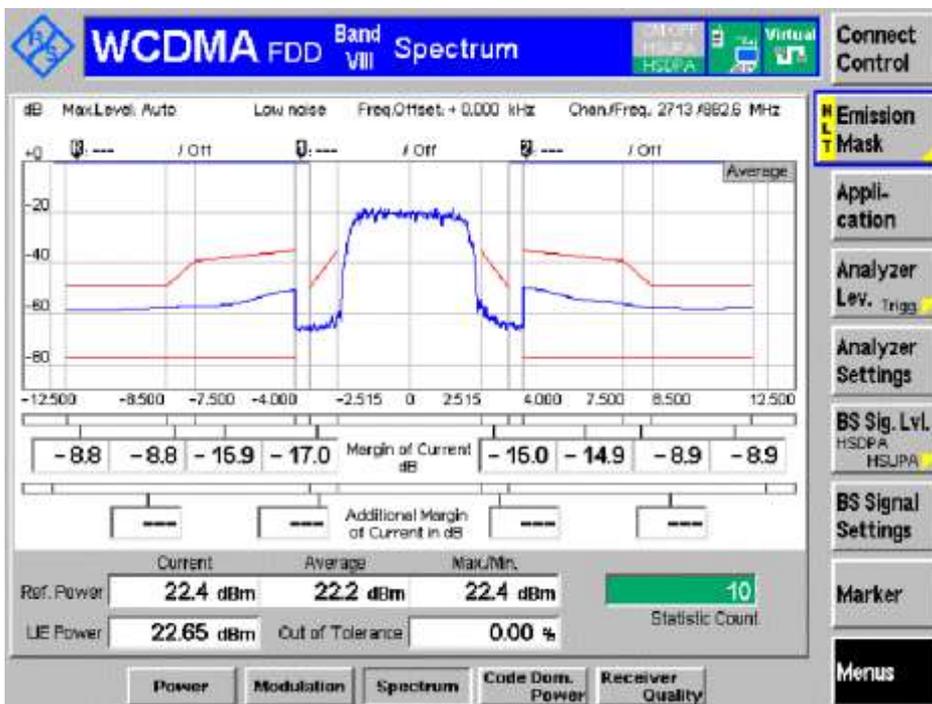
Sub-test 1



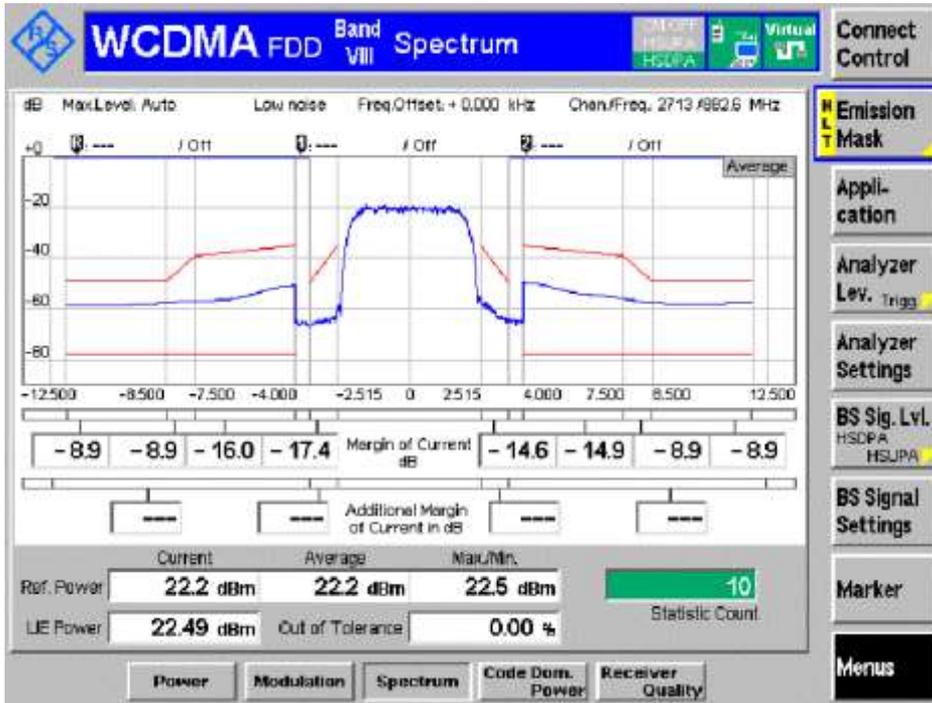
Sub-test 2



Sub-test 3

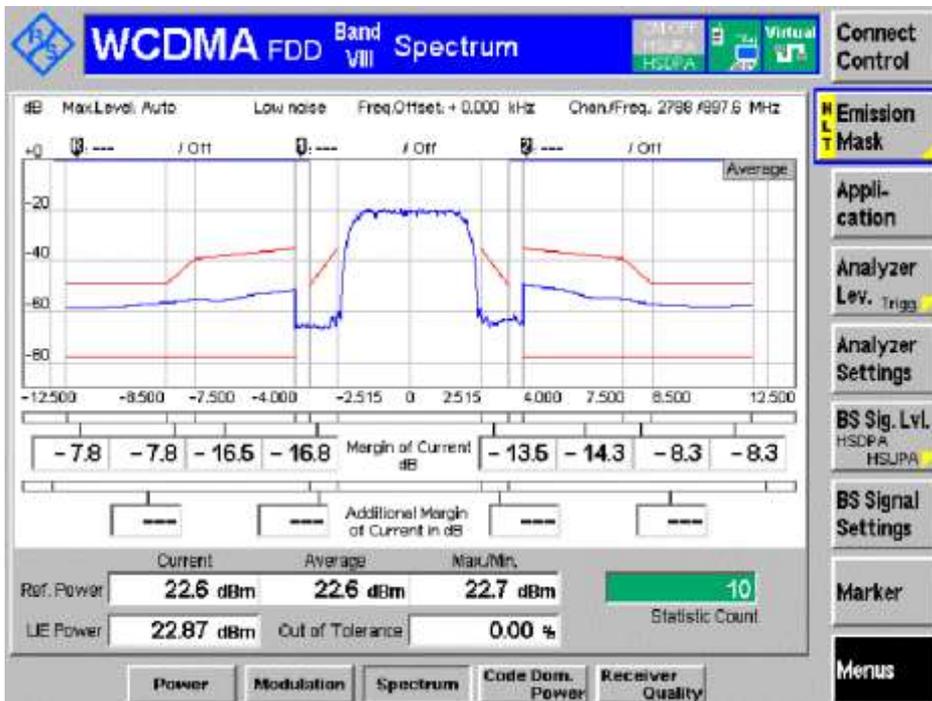


Sub-test 4

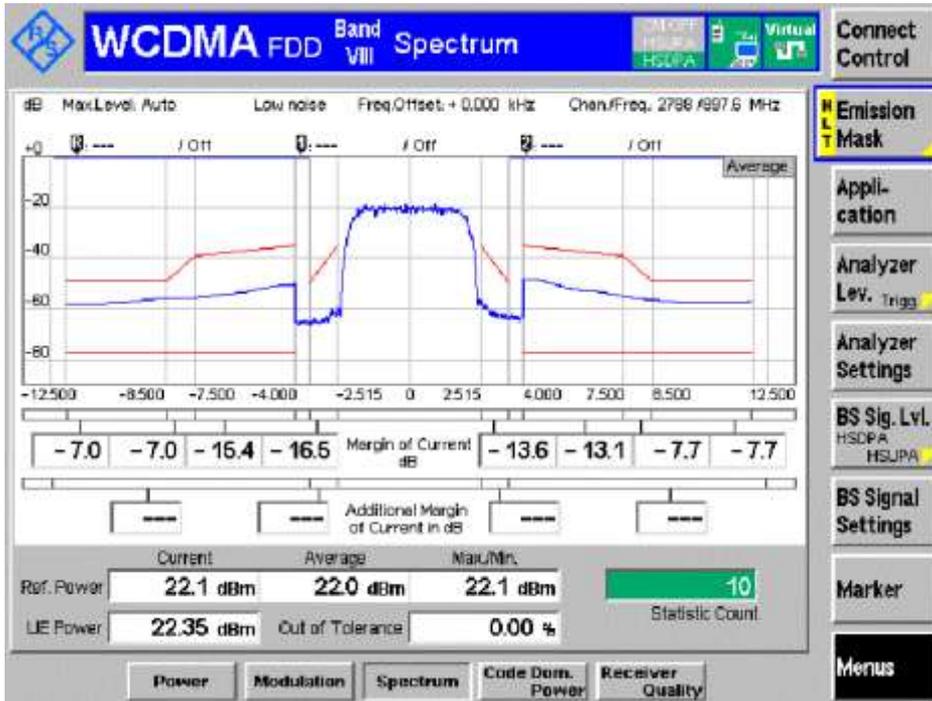


Channel MCH

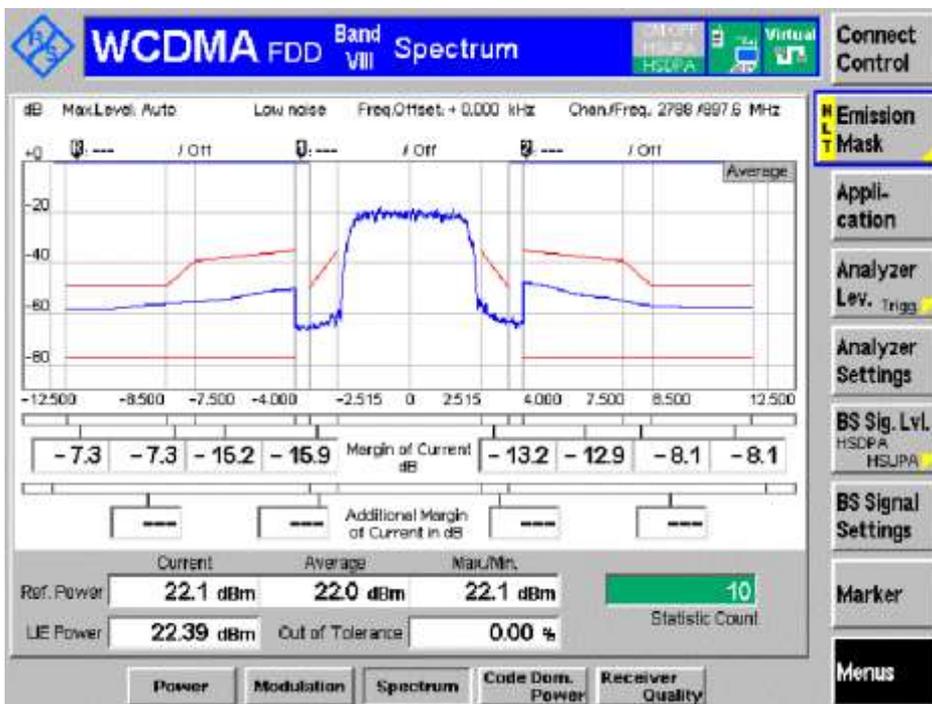
Sub-test 1



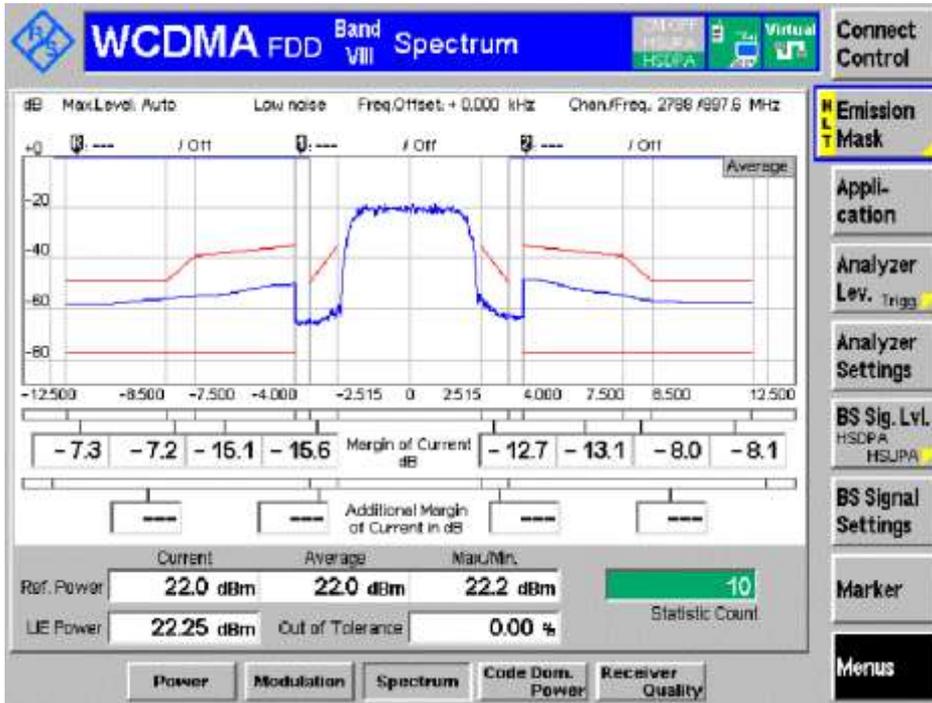
Sub-test 2



Sub-test 3

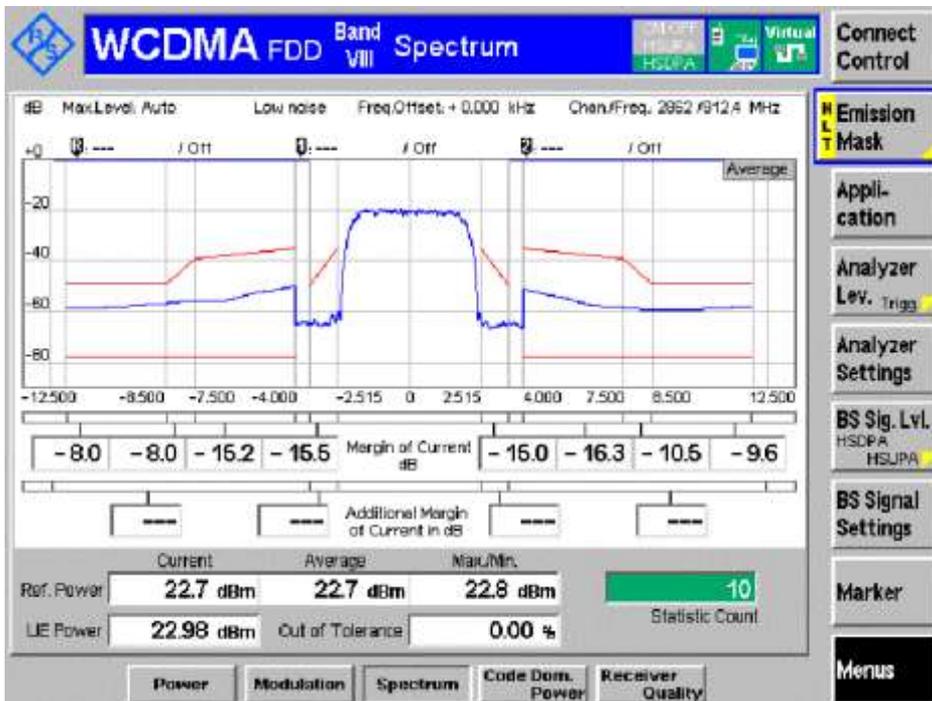


Sub-test 4

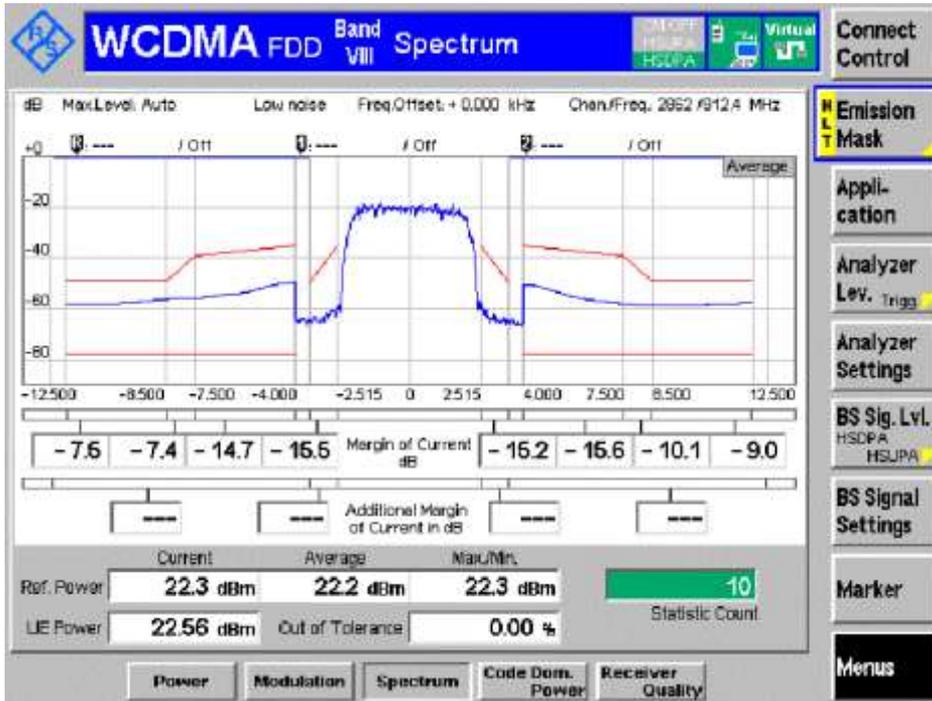


Channel HCH

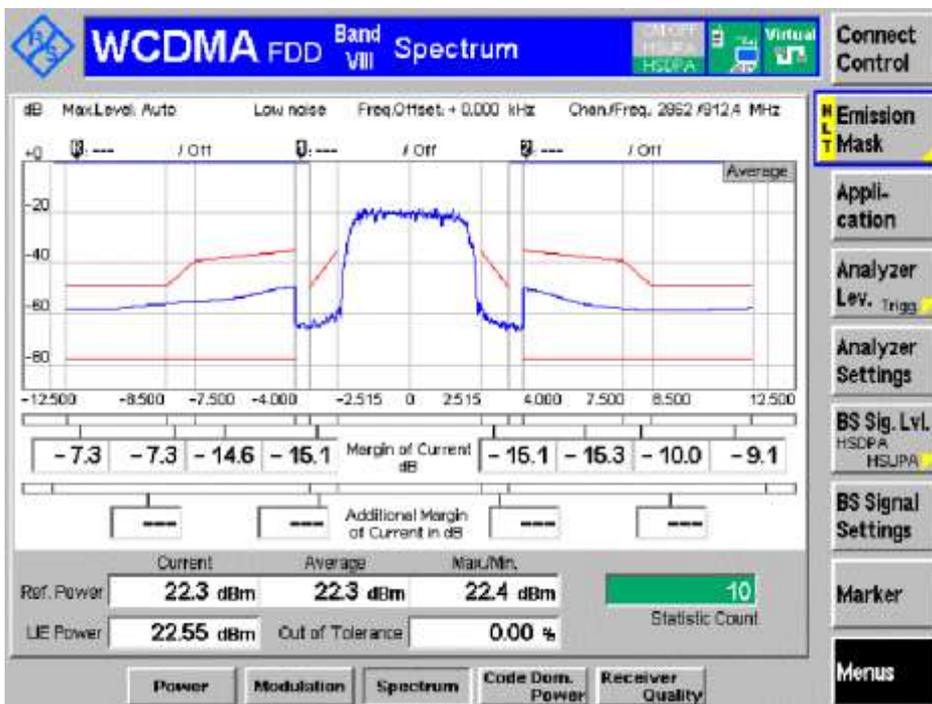
Sub-test 1



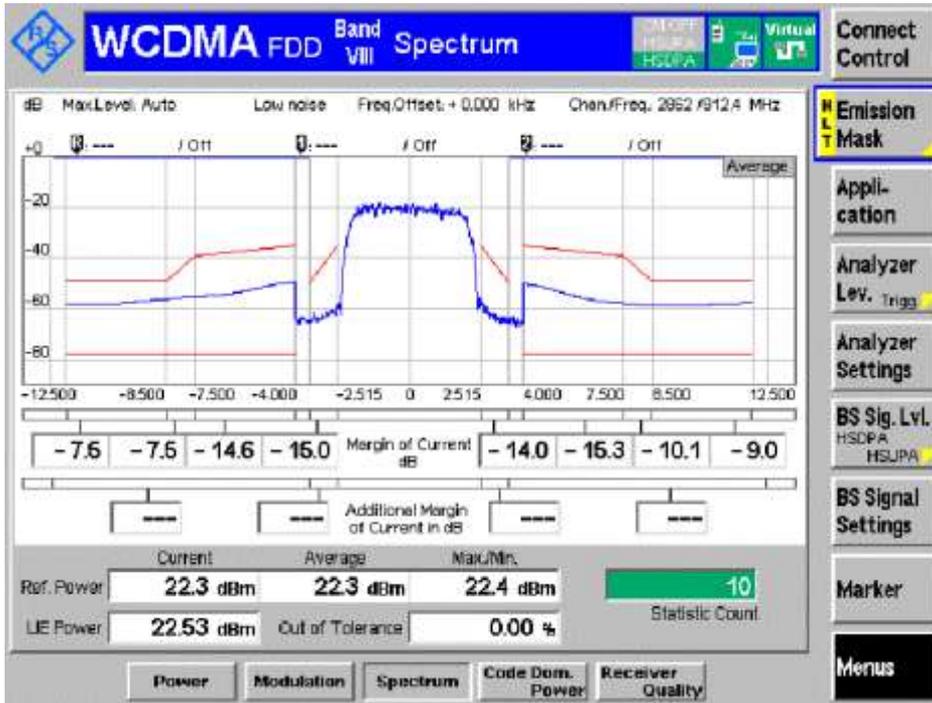
Sub-test 2



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
		-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

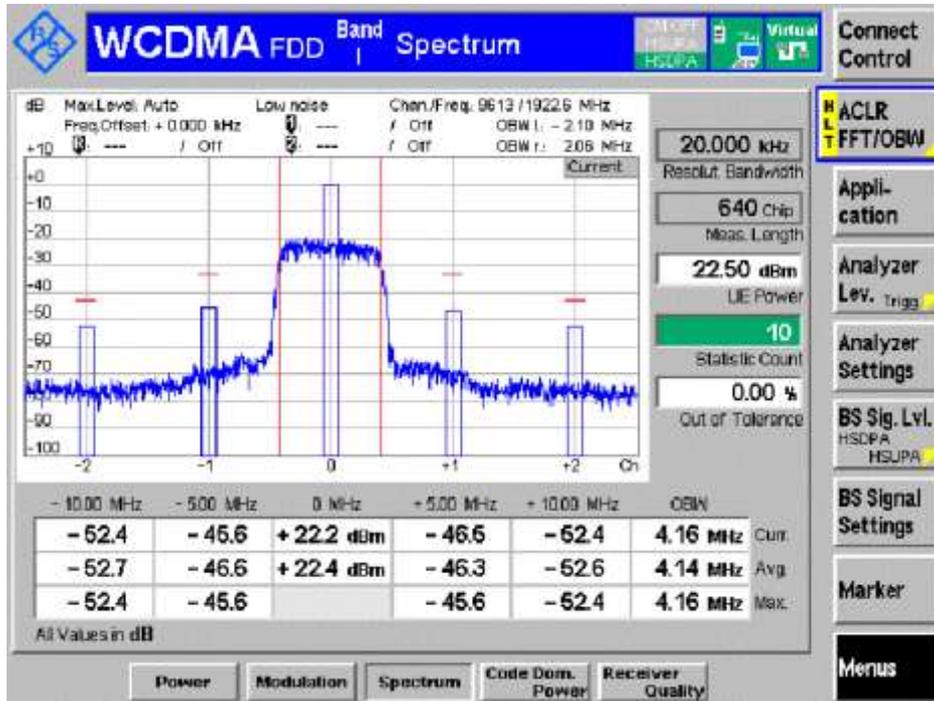
				+10MHz	-52.17	-42.2	Pass
		HCH	1	+5MHz	-47.83	-32.2	Pass
				-5 MHz	-46.39	-32.2	Pass
				-10MHz	-52.42	-42.2	Pass
				+10MHz	-53.61	-42.2	Pass
			2	+5MHz	-47.11	-32.2	Pass
				-5 MHz	-45.88	-32.2	Pass
				-10MHz	-52.05	-42.2	Pass
				+10MHz	-53.13	-42.2	Pass
			3	+5MHz	-46.80	-32.2	Pass
				-5 MHz	-45.73	-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

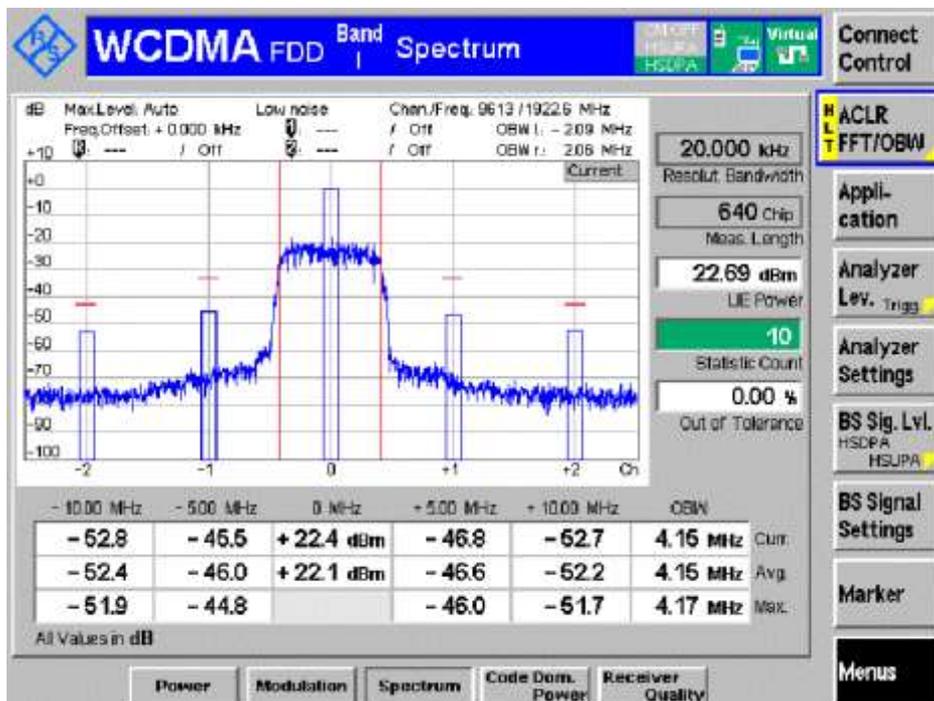
TNVN

Channel LCH

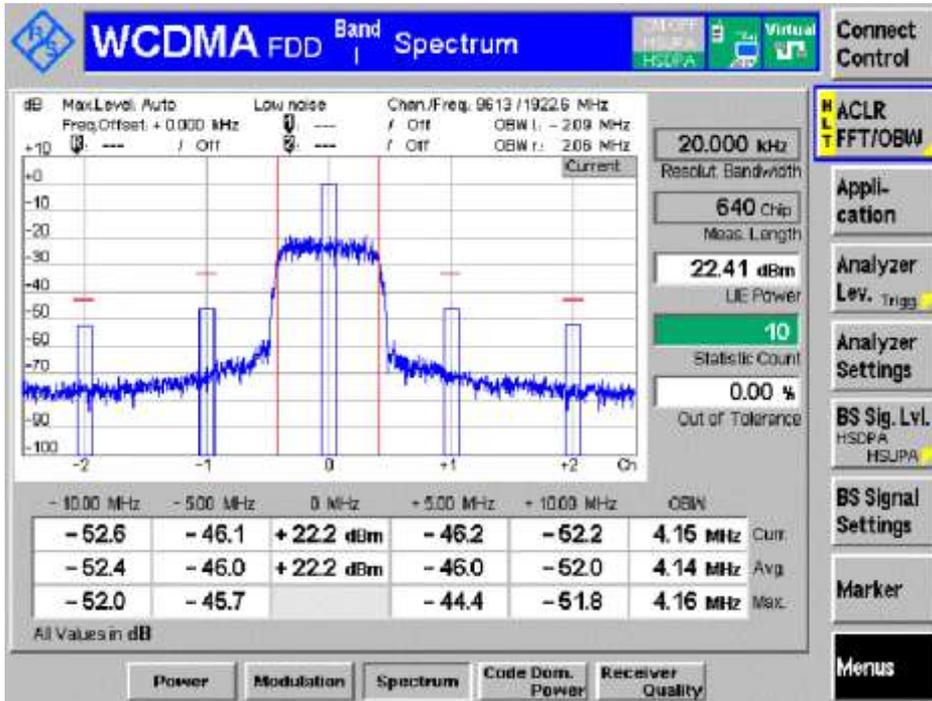
Sub-test 1



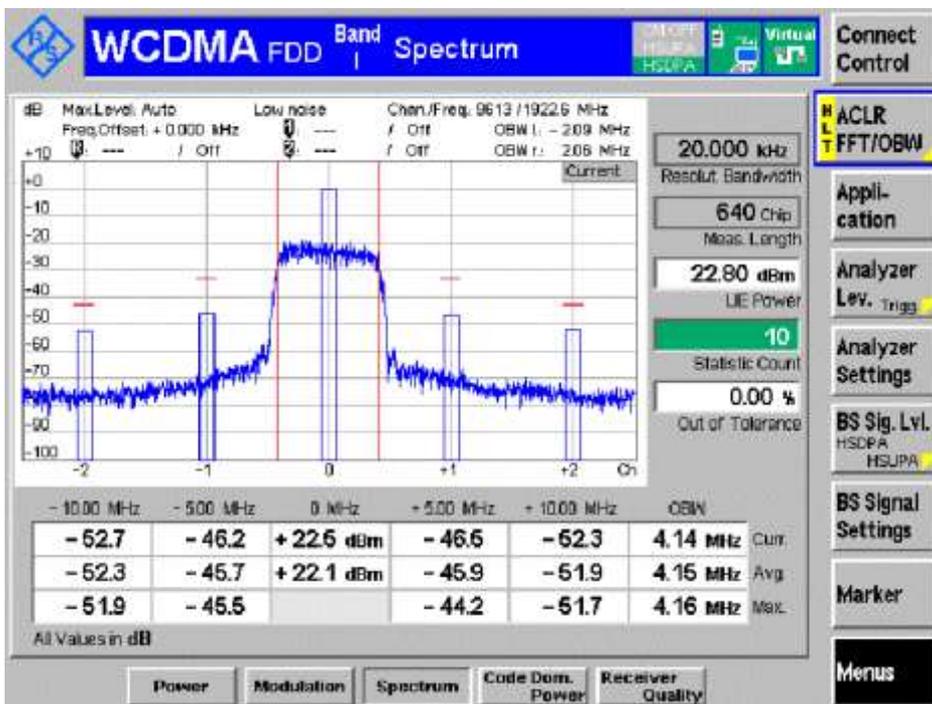
Sub-test 2



Sub-test 3

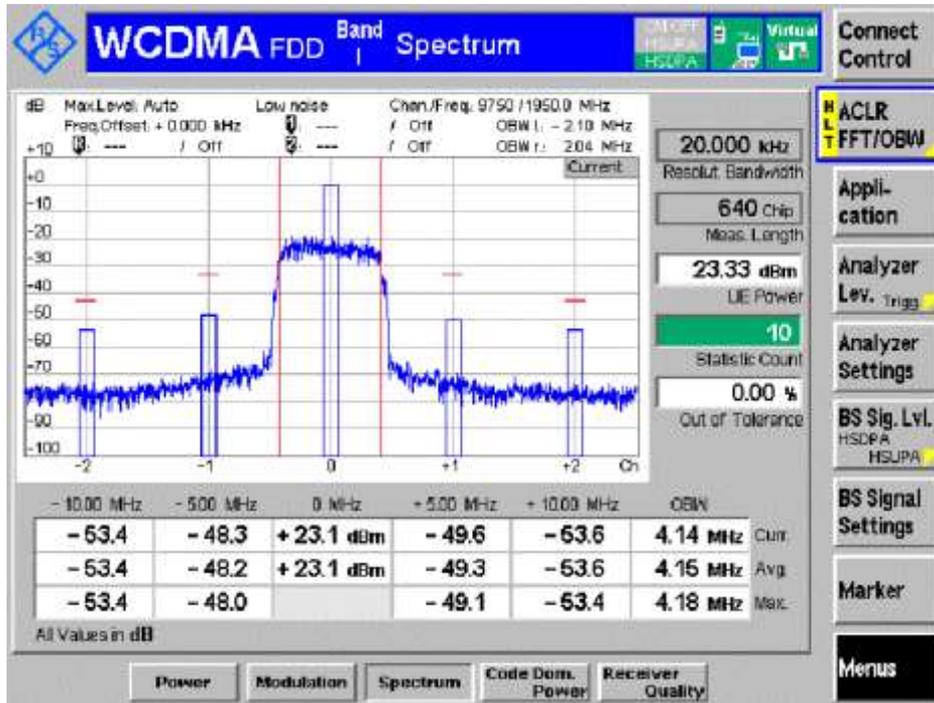


Sub-test 4

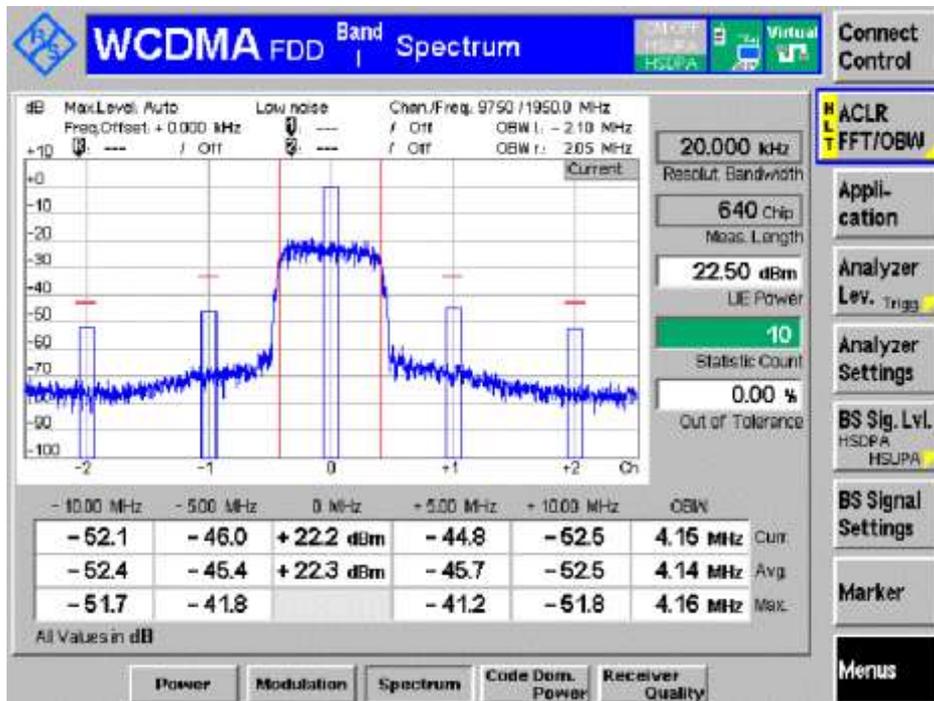


Channel MCH

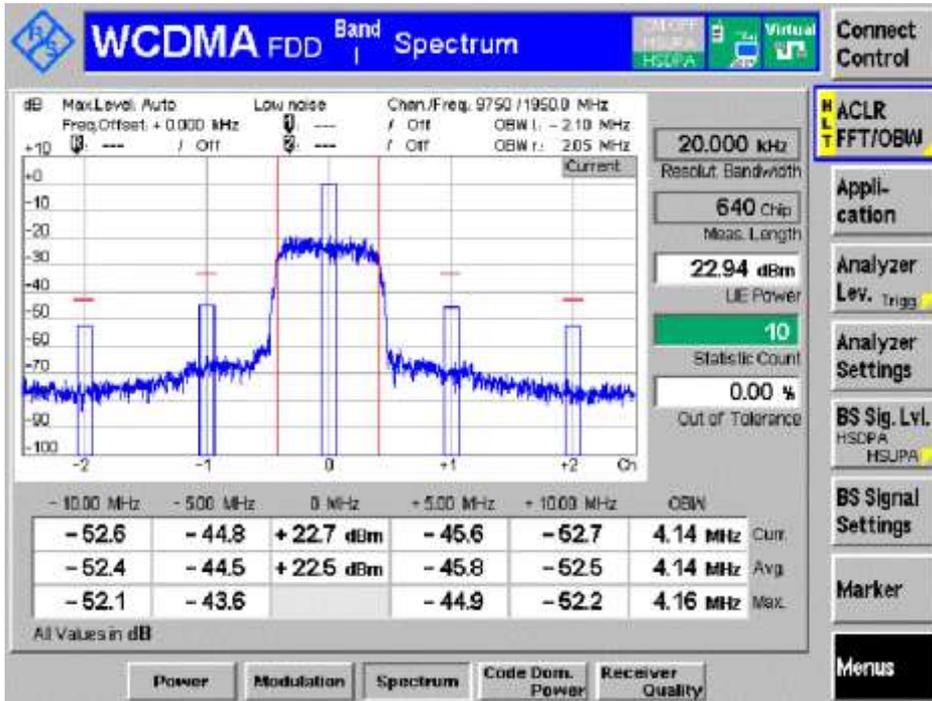
Sub-test 1



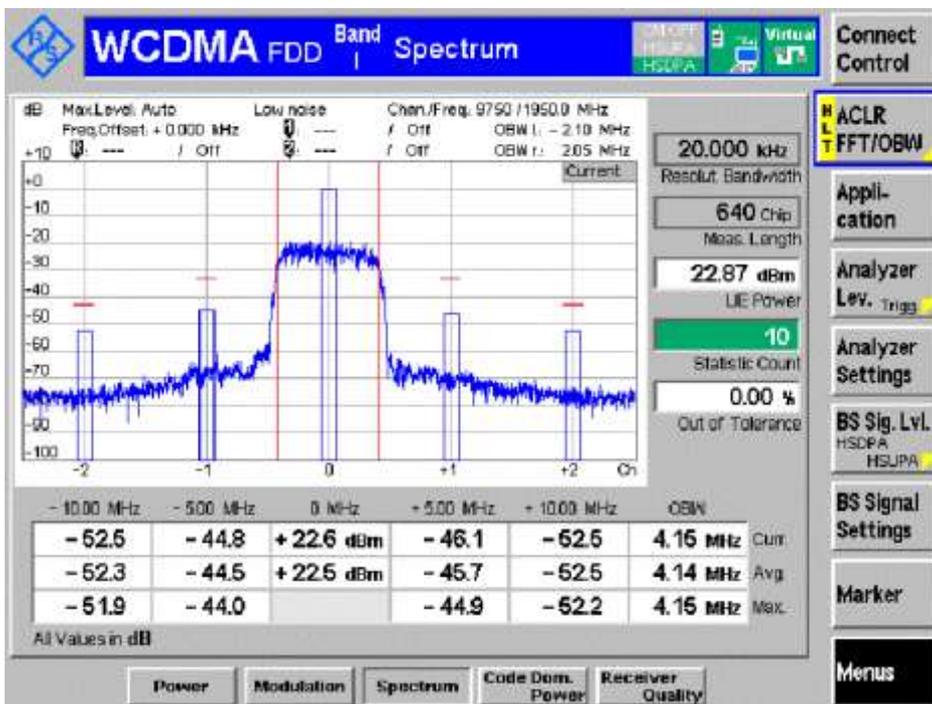
Sub-test 2



Sub-test 3

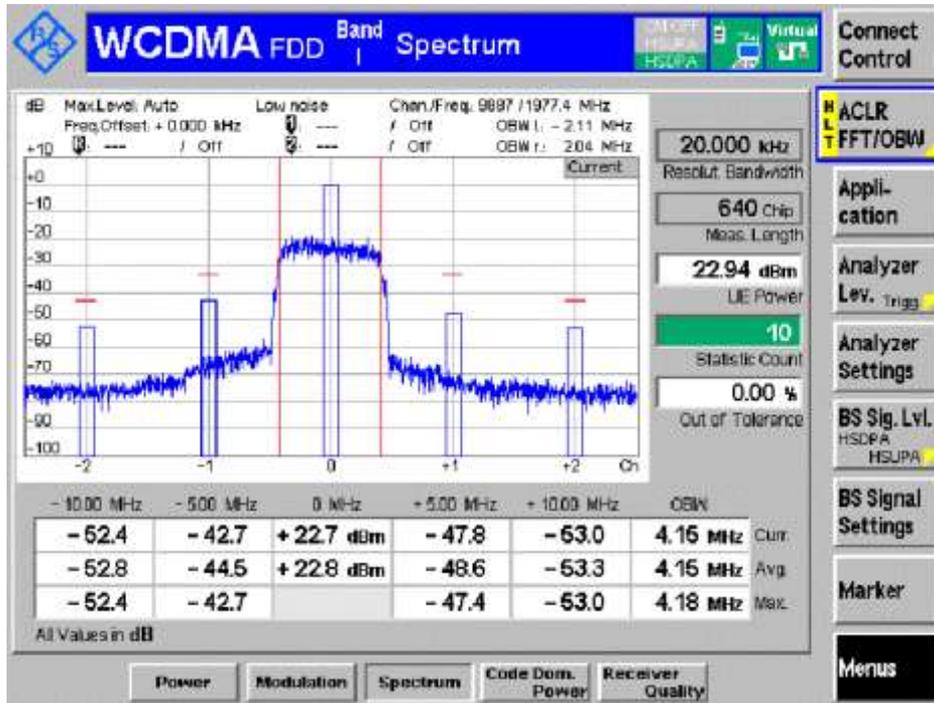


Sub-test 4

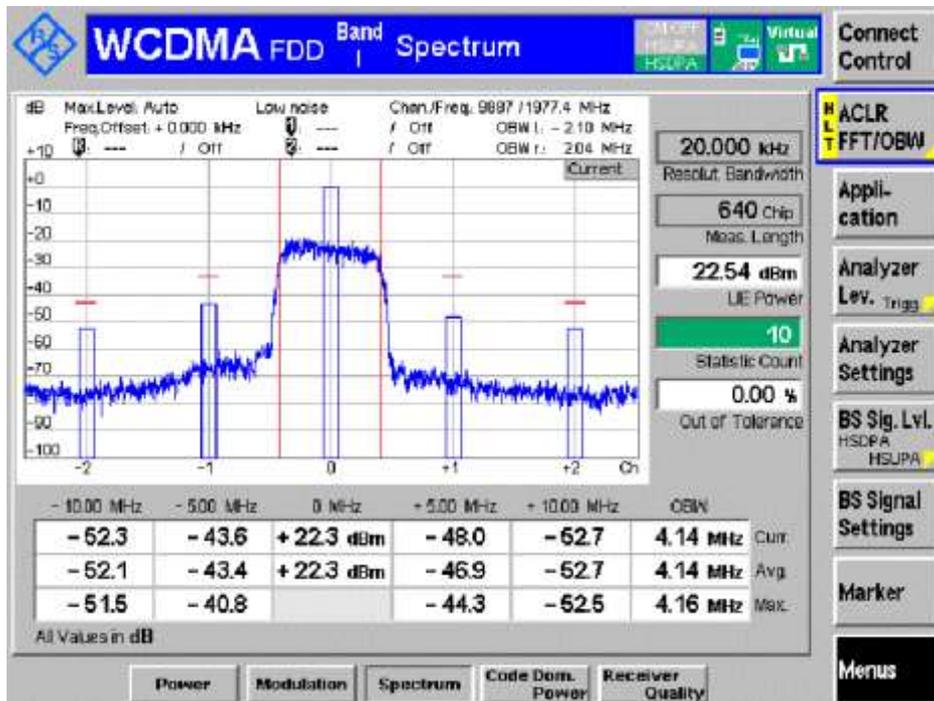


Channel HCH

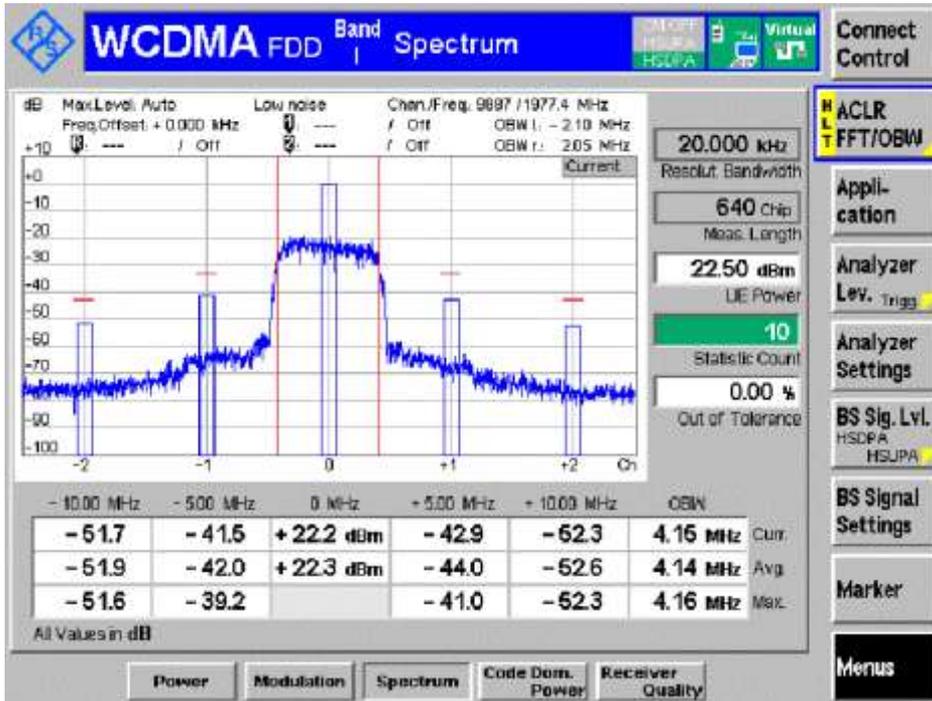
Sub-test 1



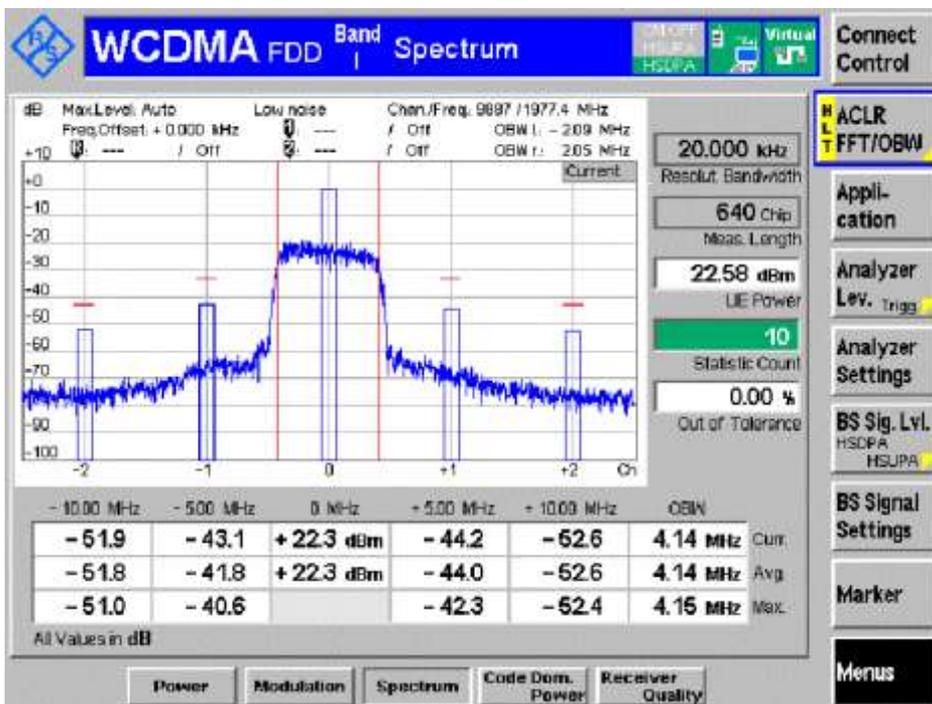
Sub-test 2



Sub-test 3



Sub-test 4

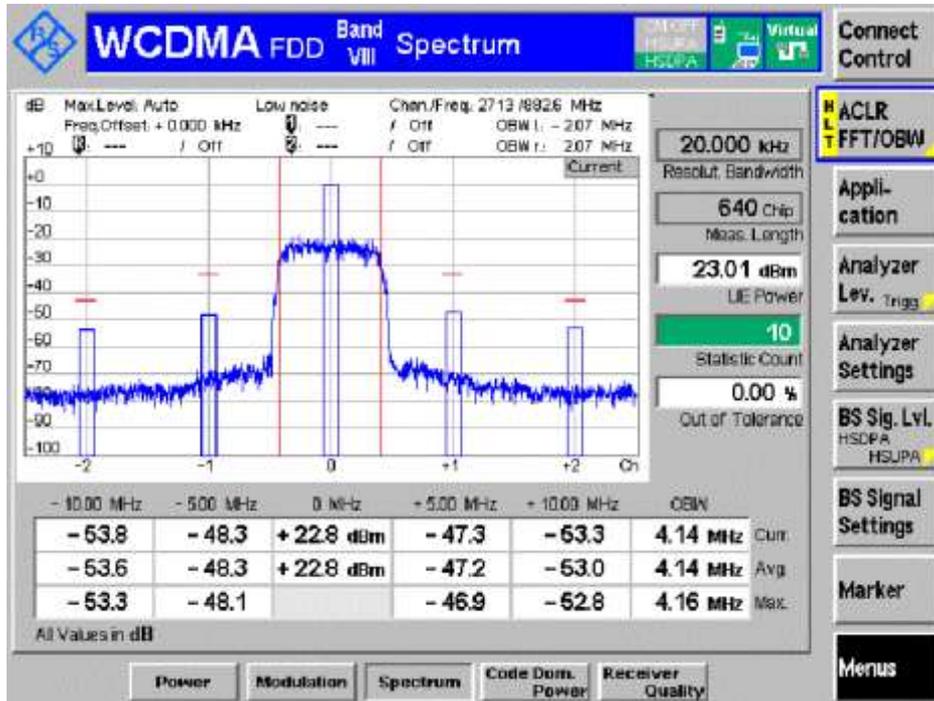


BAND VIII

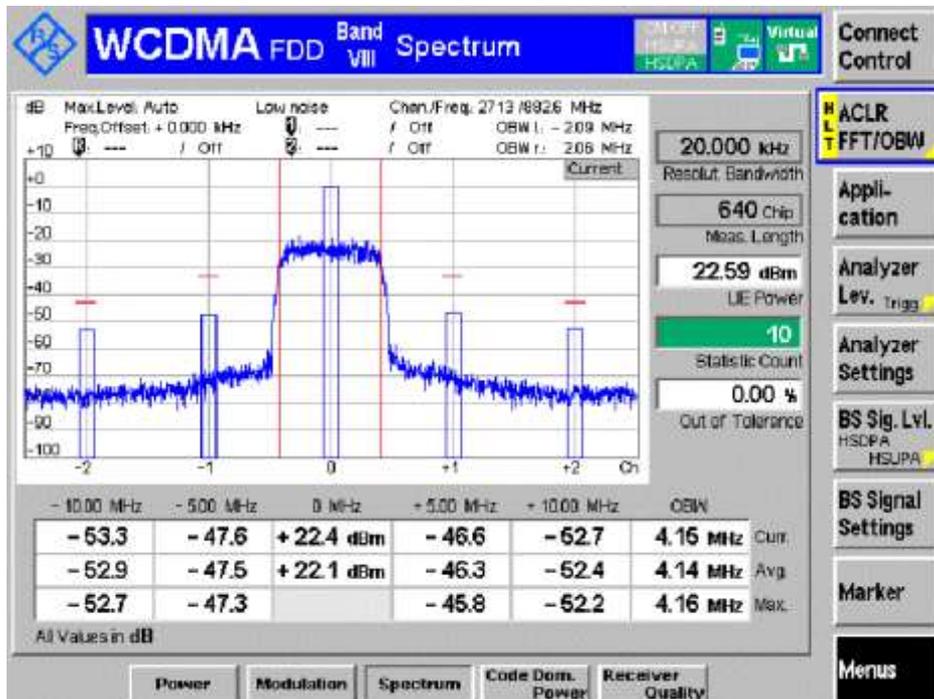
TNVN

Channel LCH

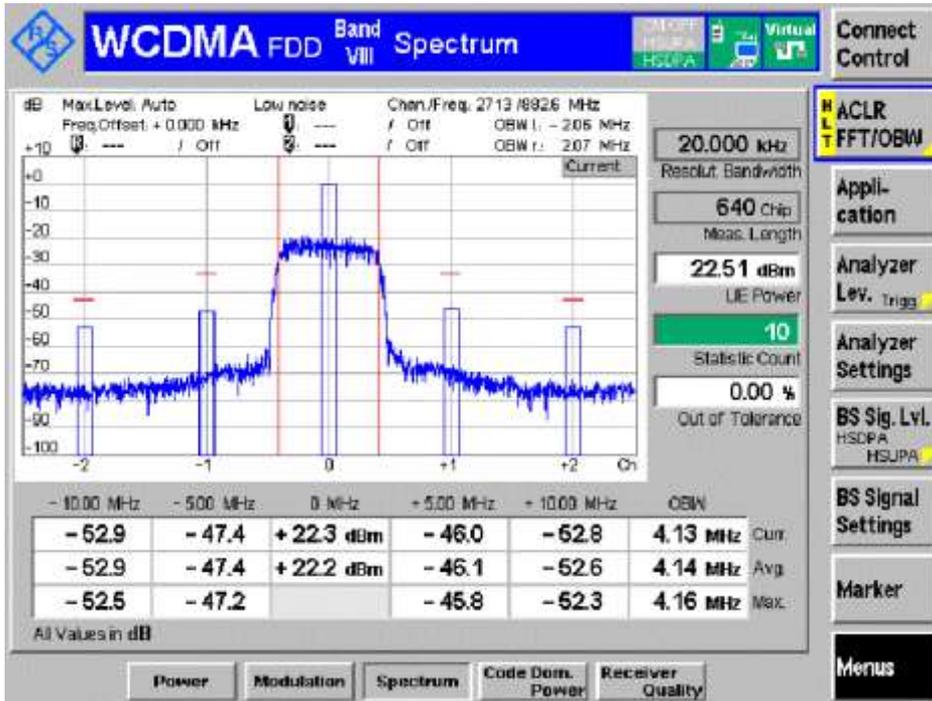
Sub-test 1



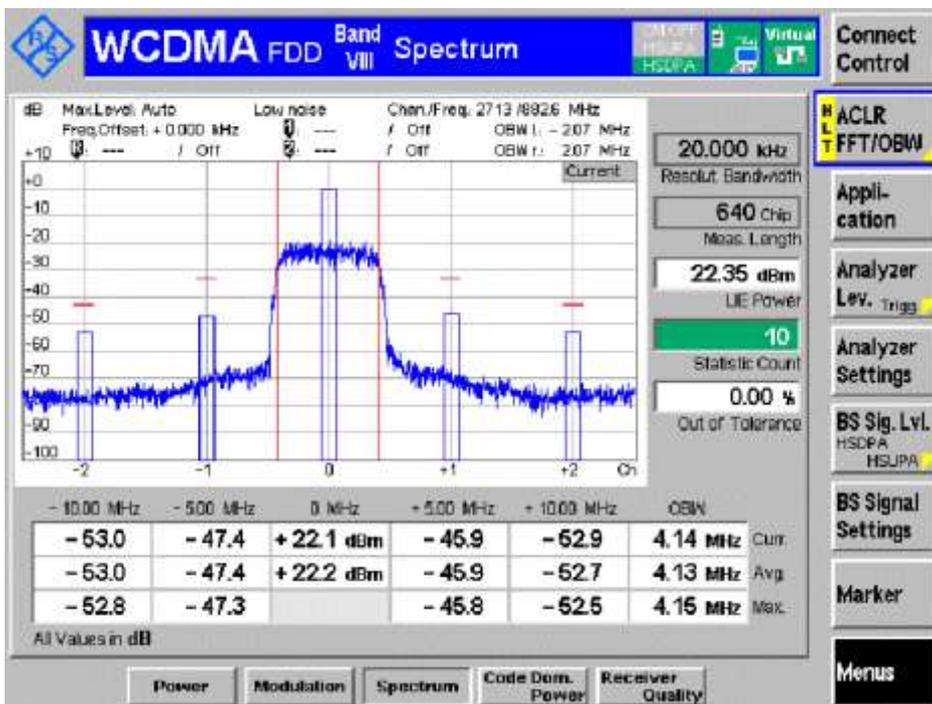
Sub-test 2



Sub-test 3

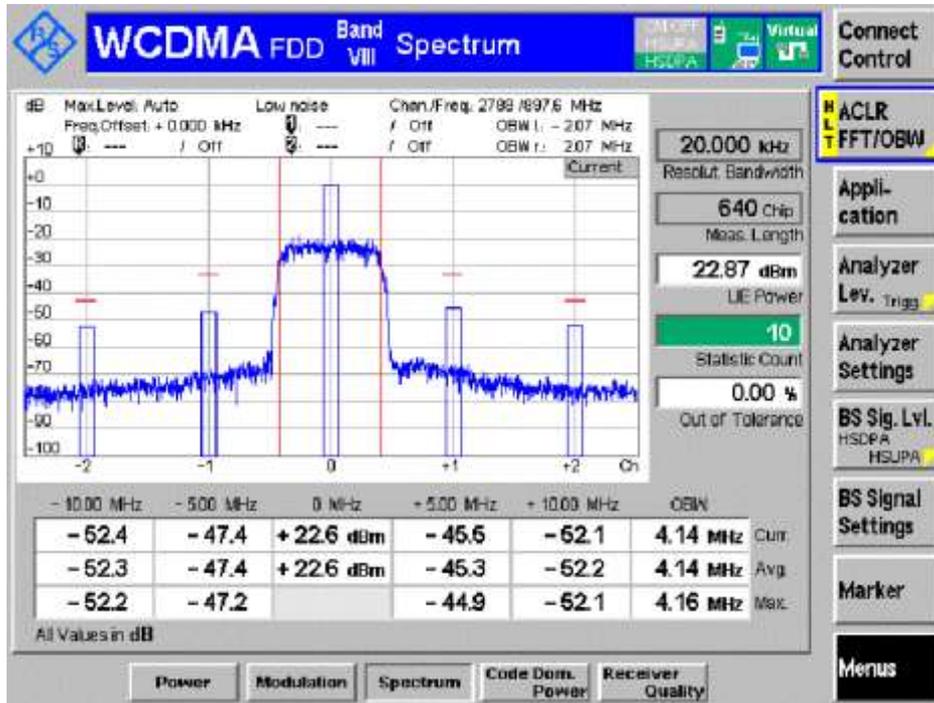


Sub-test 4

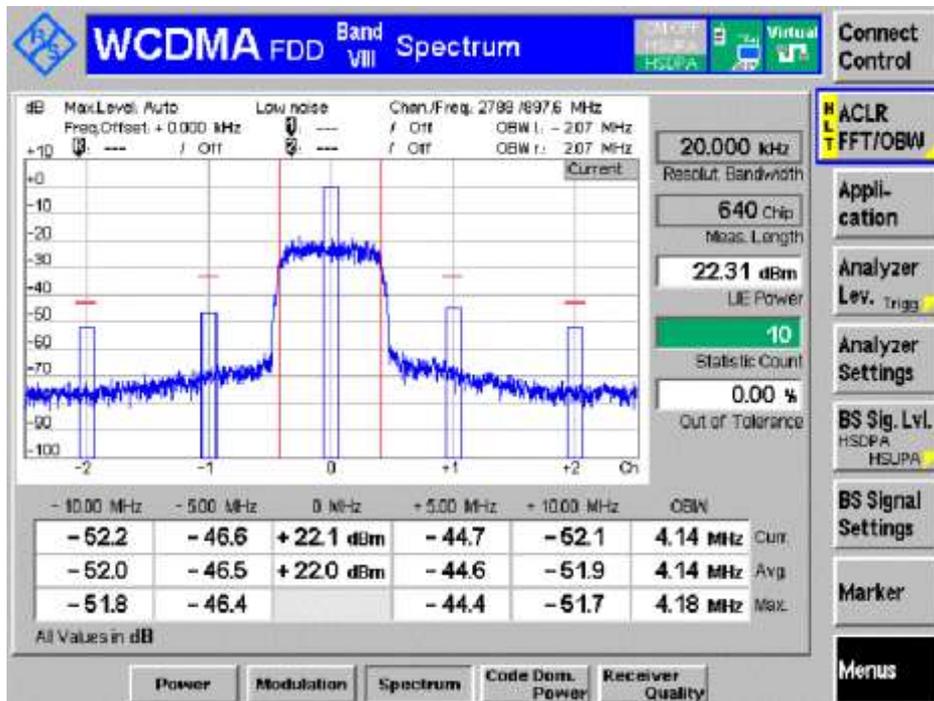


Channel MCH

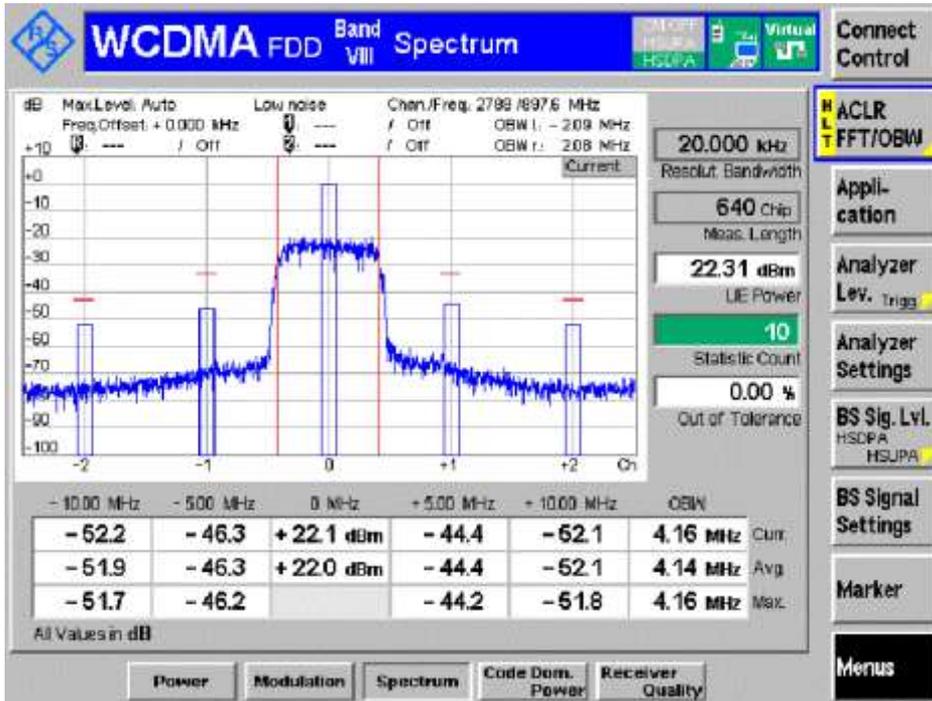
Sub-test 1



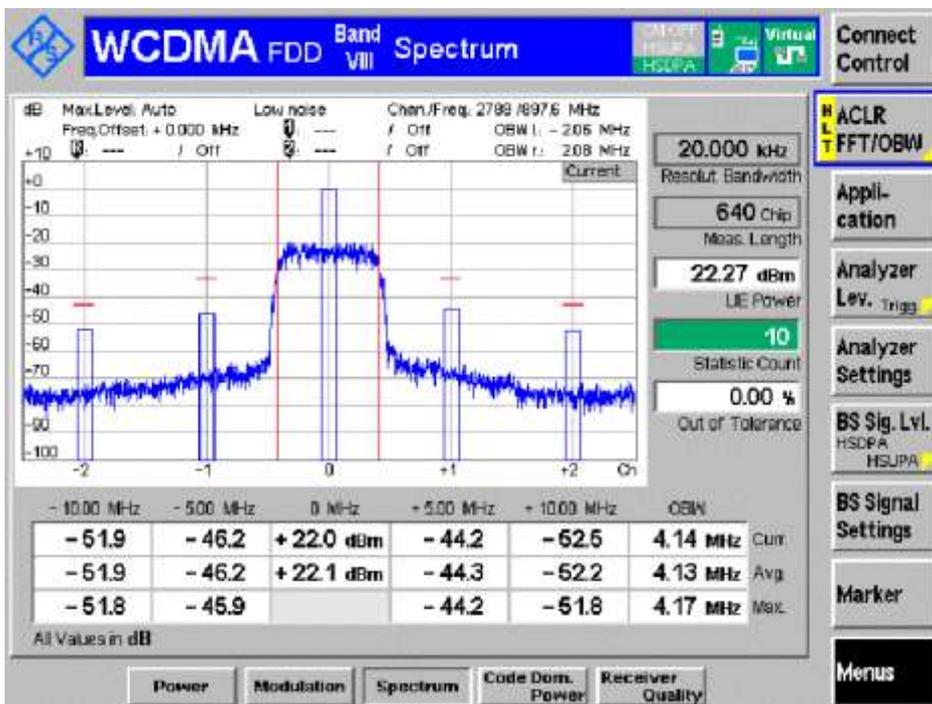
Sub-test 2



Sub-test 3

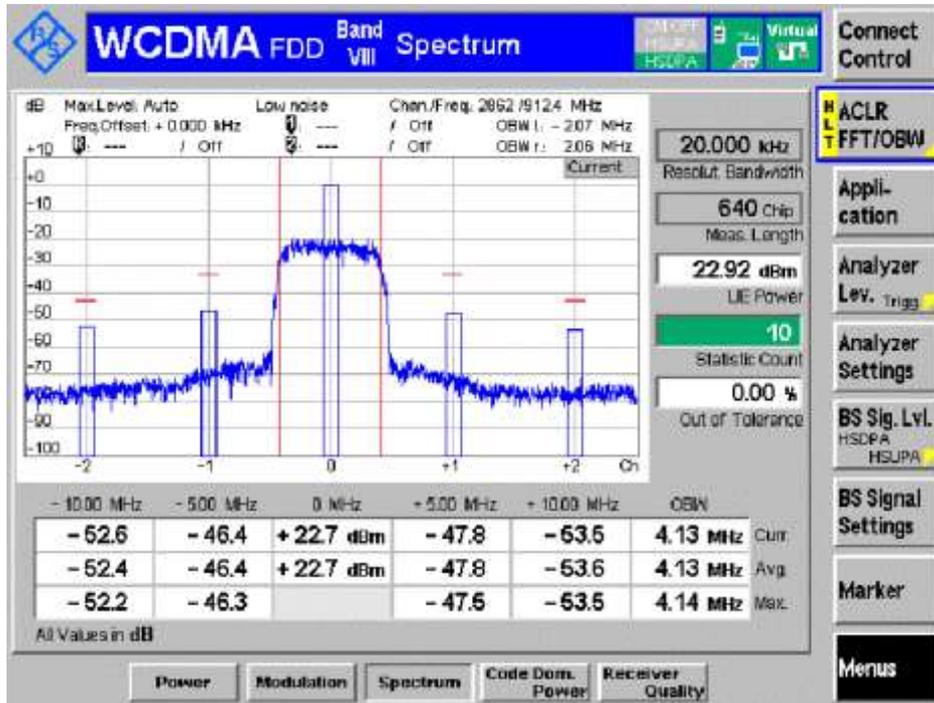


Sub-test 4

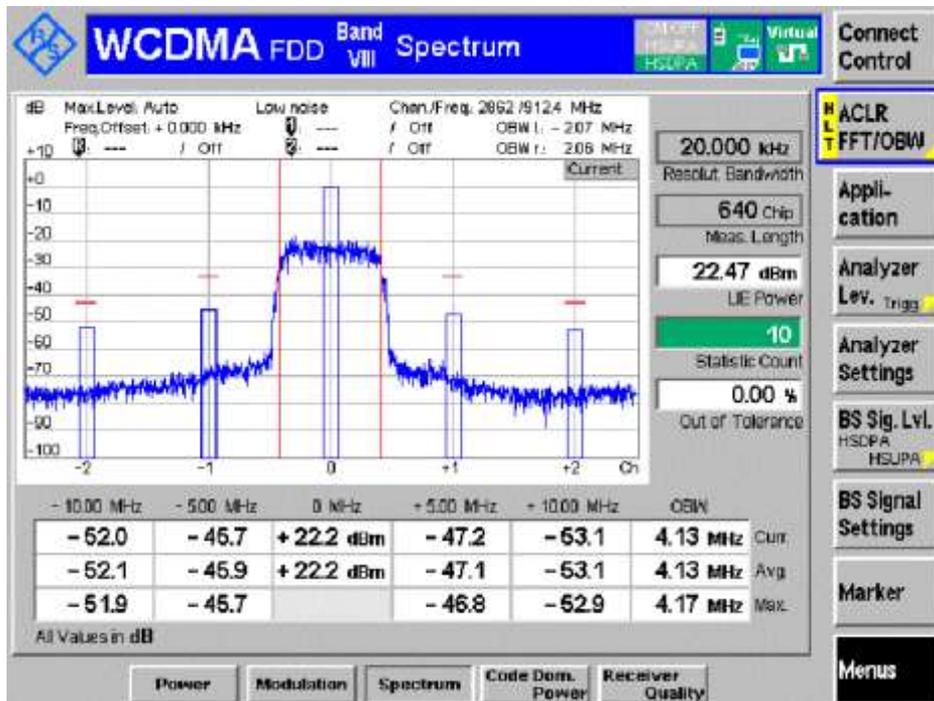


Channel HCH

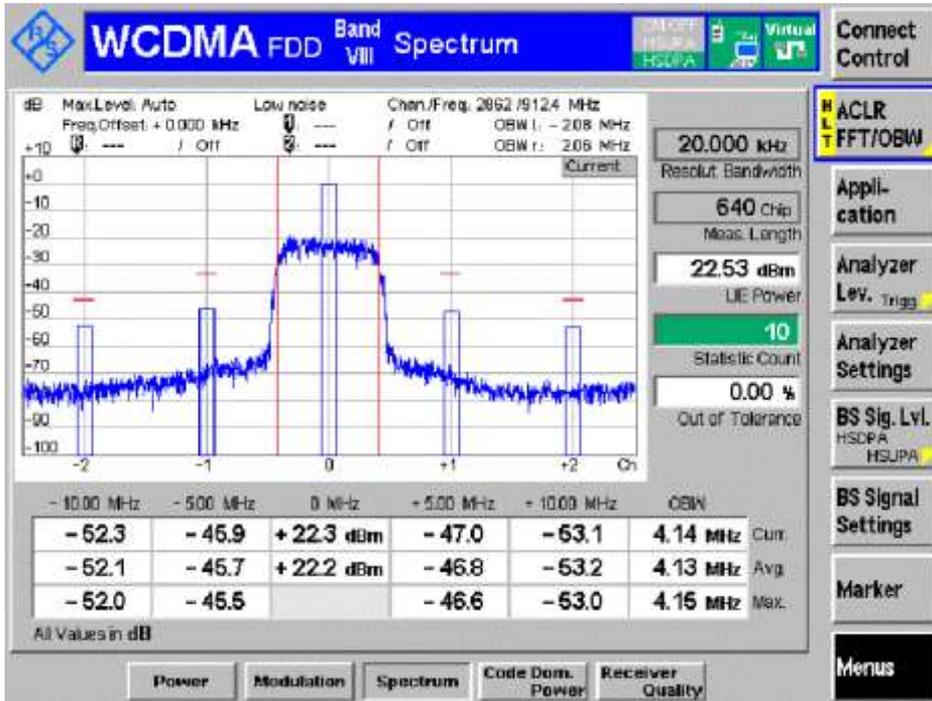
Sub-test 1



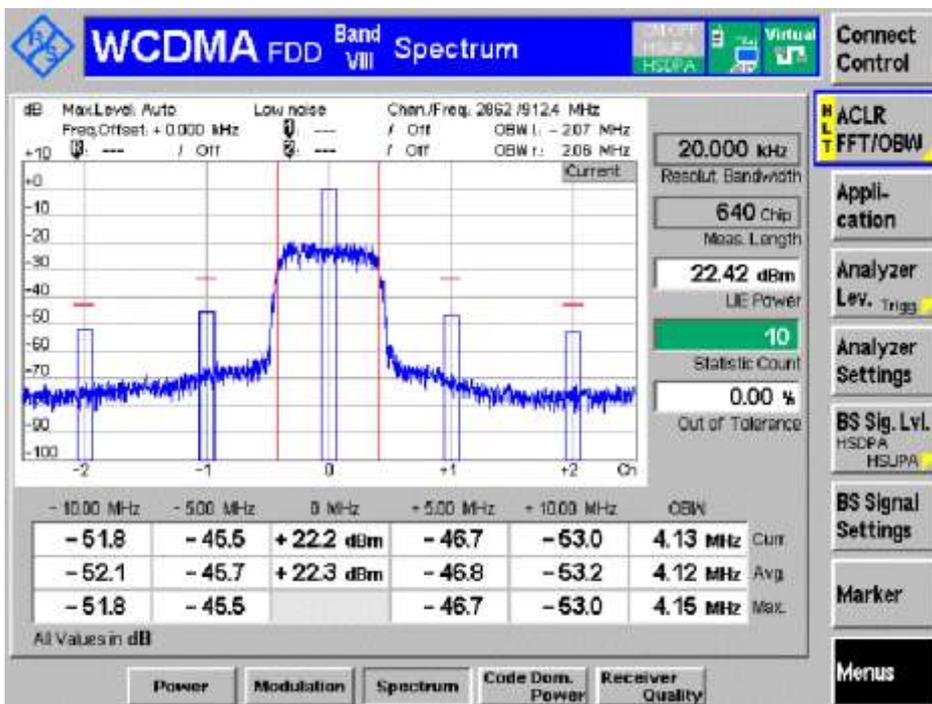
Sub-test 2



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

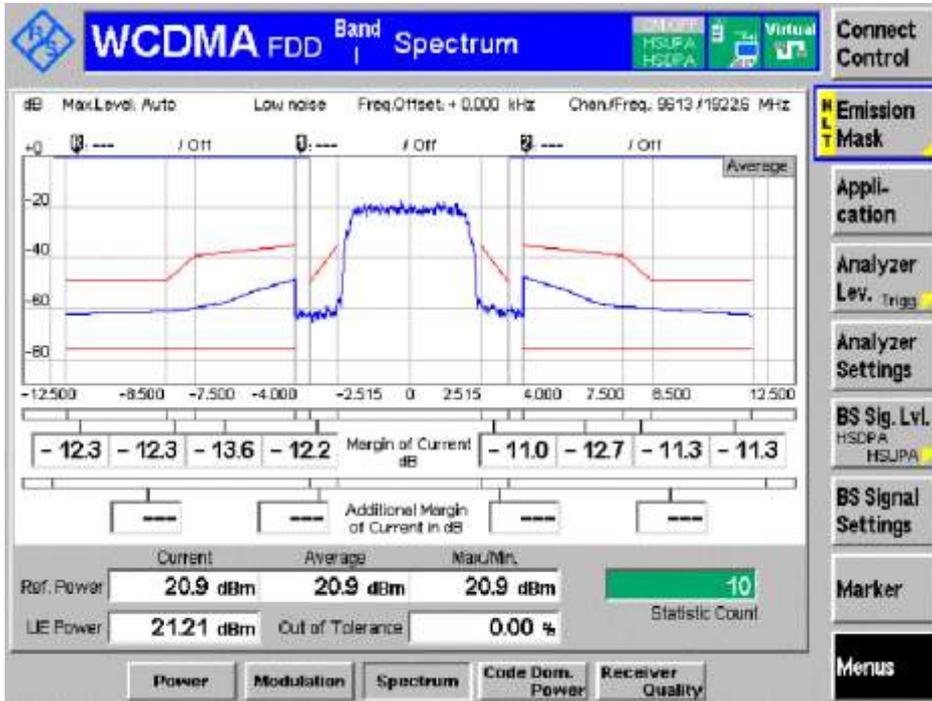
Operating Band	Test Conditions	Sub-test	Test Channel		
			LCH	MCH	HCH
Band I	TNVN	1	PASS	PASS	PASS
		2	PASS	PASS	PASS
		3	PASS	PASS	PASS
		4	PASS	PASS	PASS
		5	PASS	PASS	PASS

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

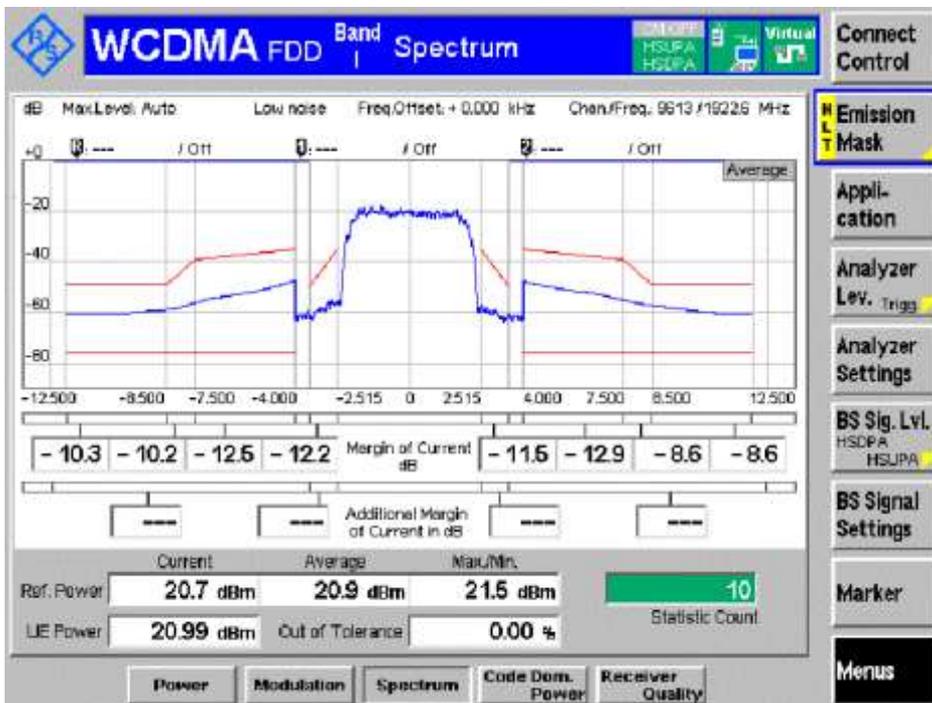
BAND I

Channel LCH

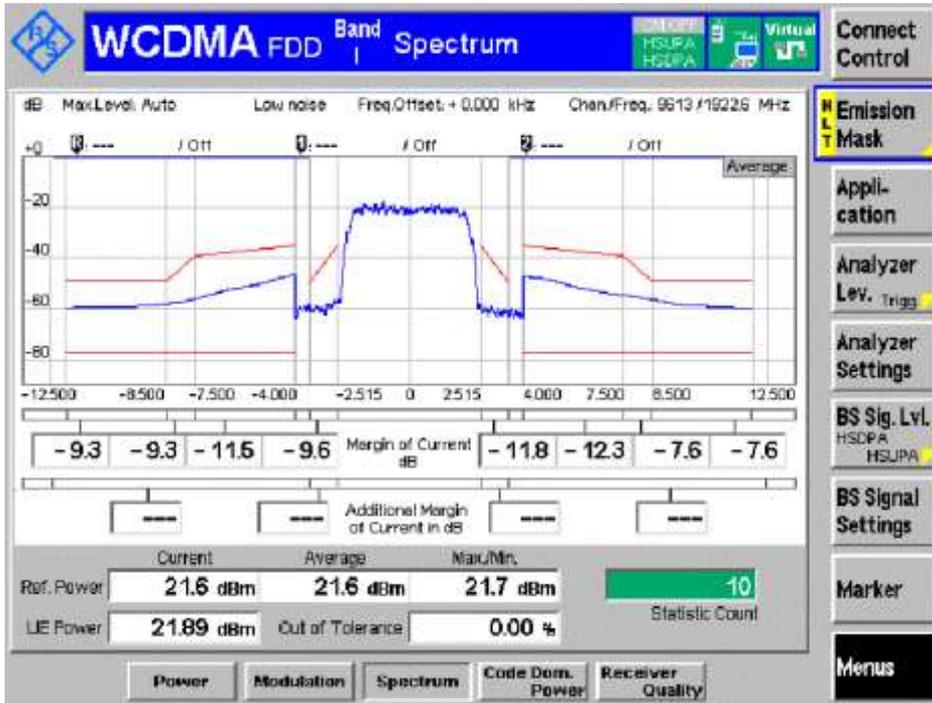
Sub-test 1



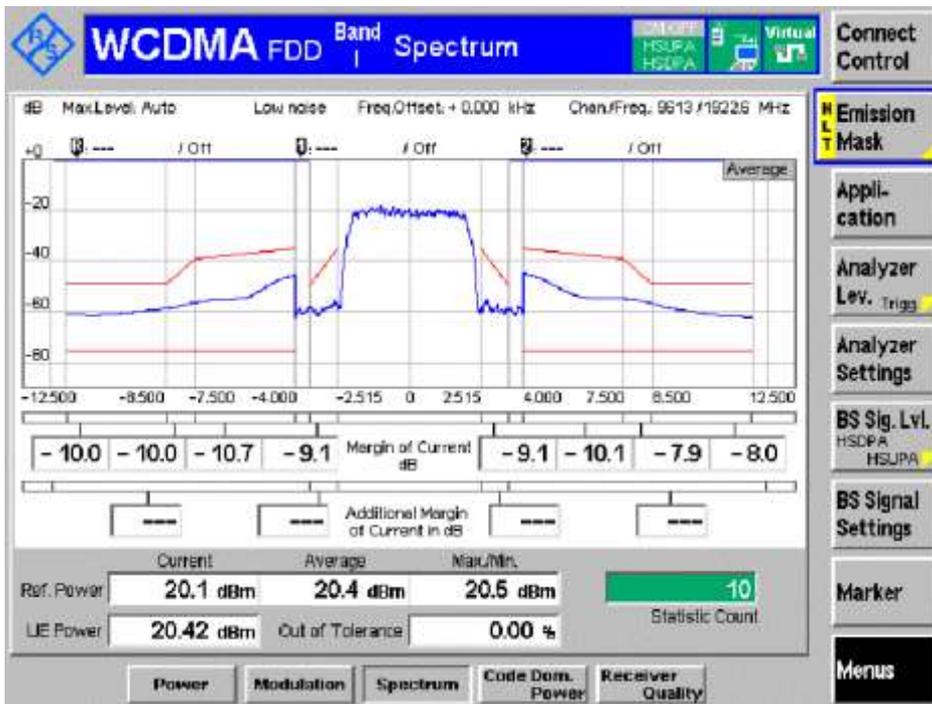
Sub-test 2



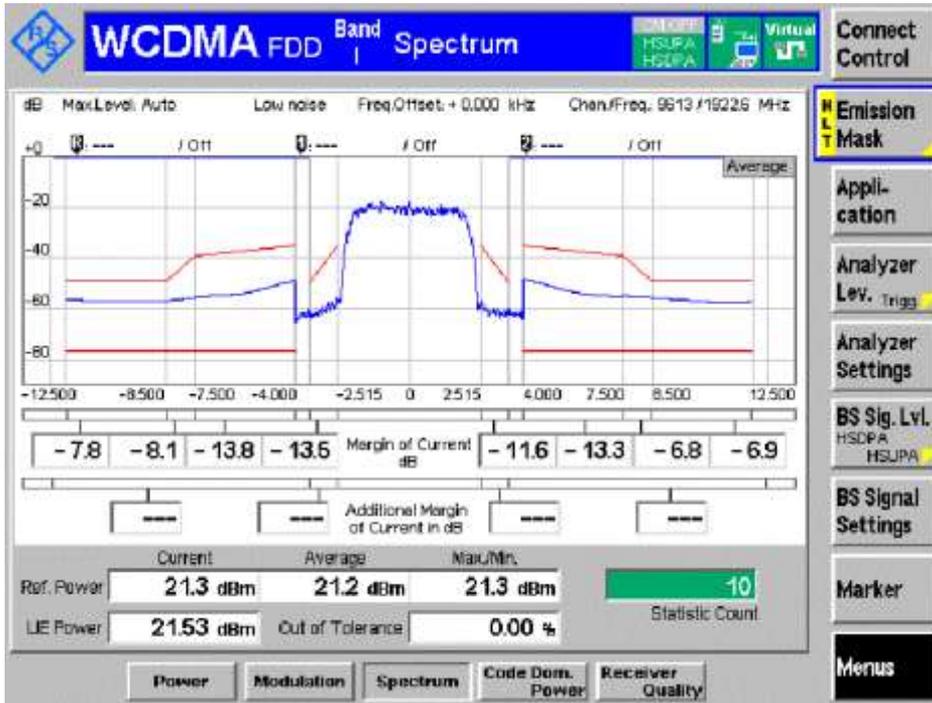
Sub-test 3



Sub-test 4

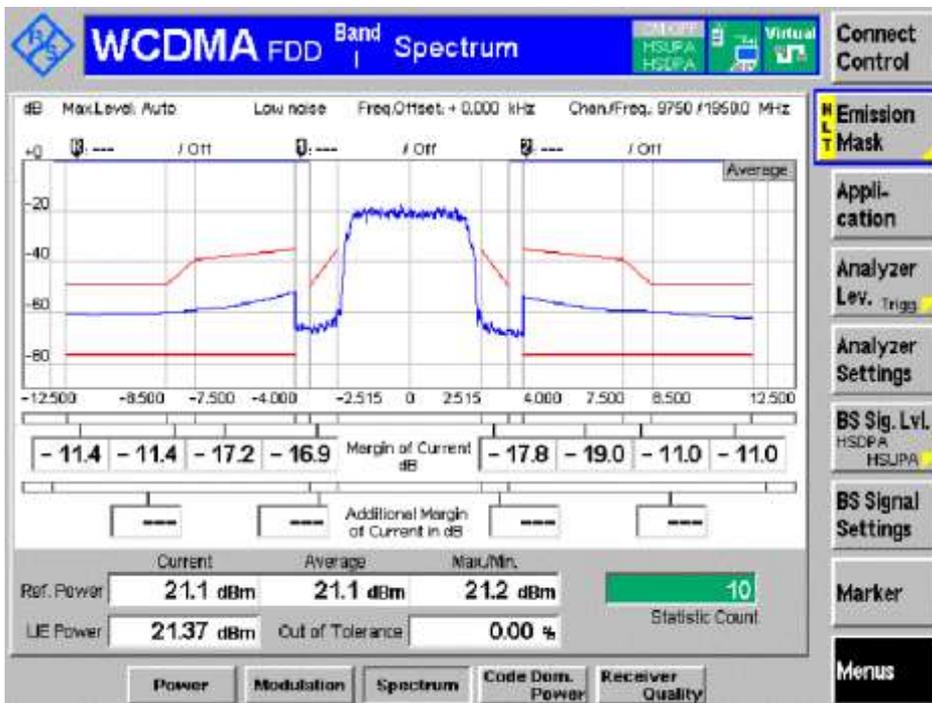


Sub-test 5

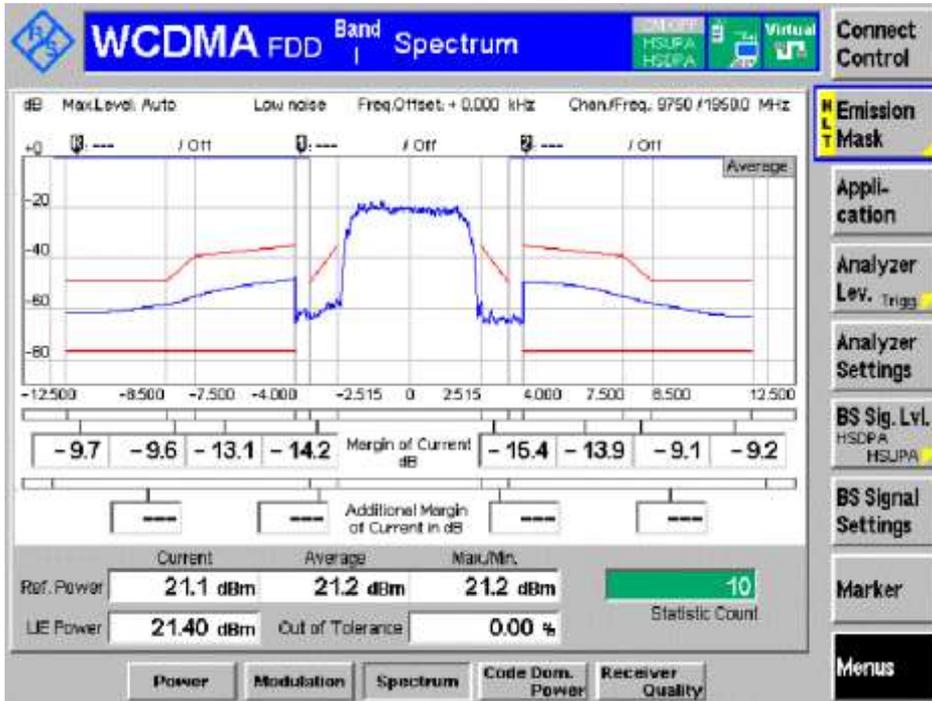


Channel MCH

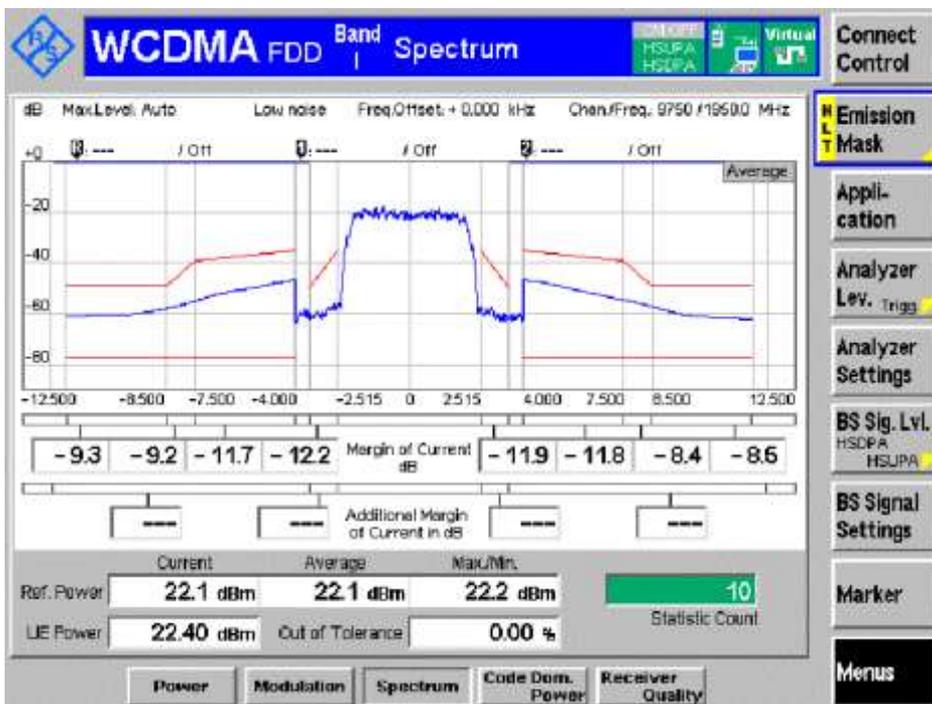
Sub-test 1



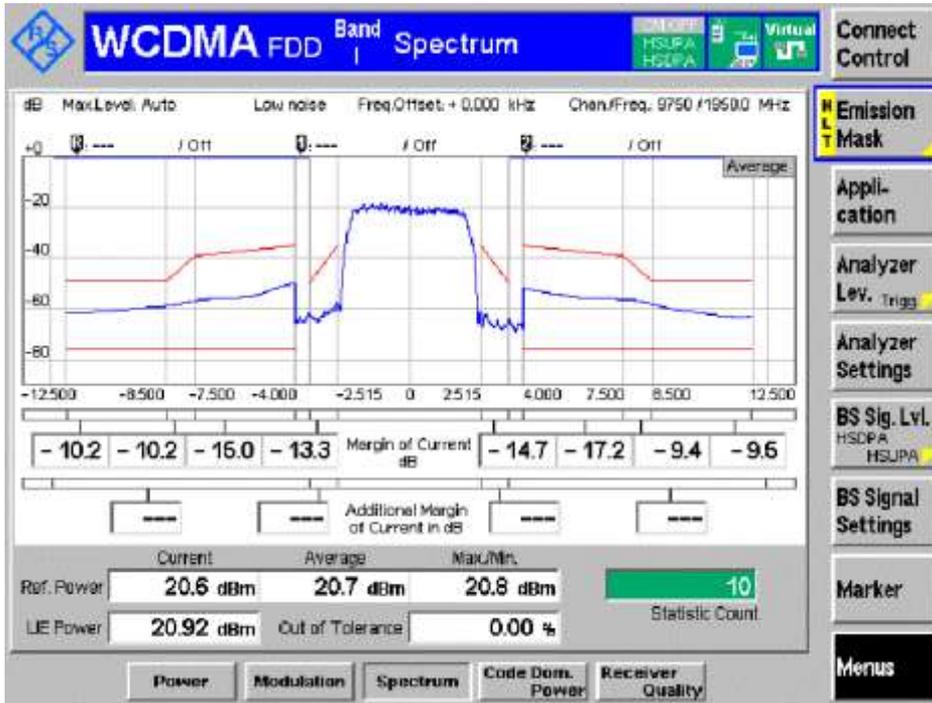
Sub-test 2



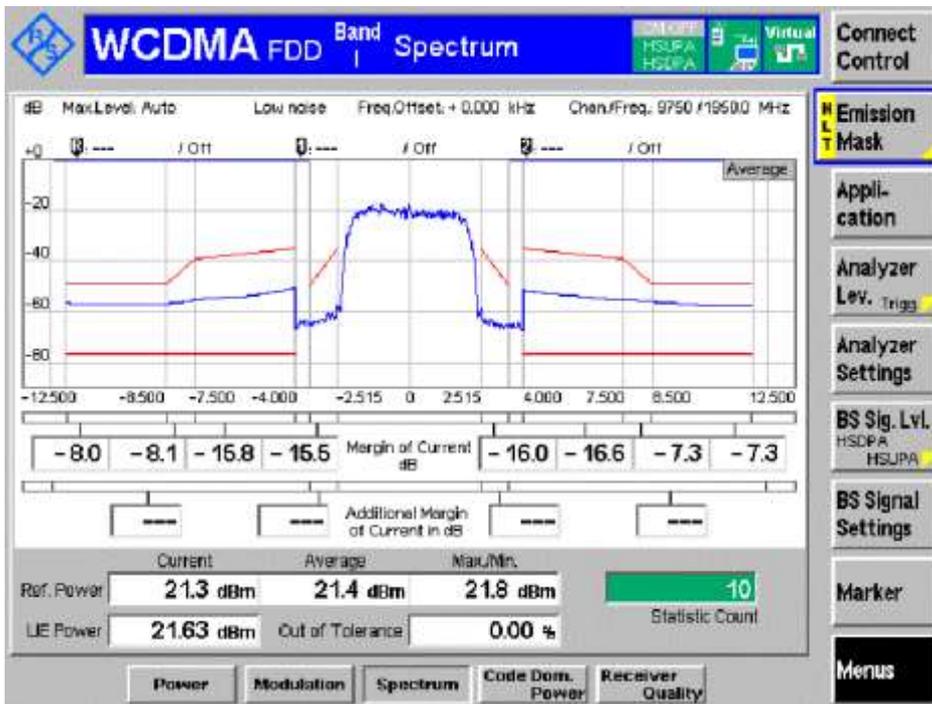
Sub-test 3



Sub-test 4

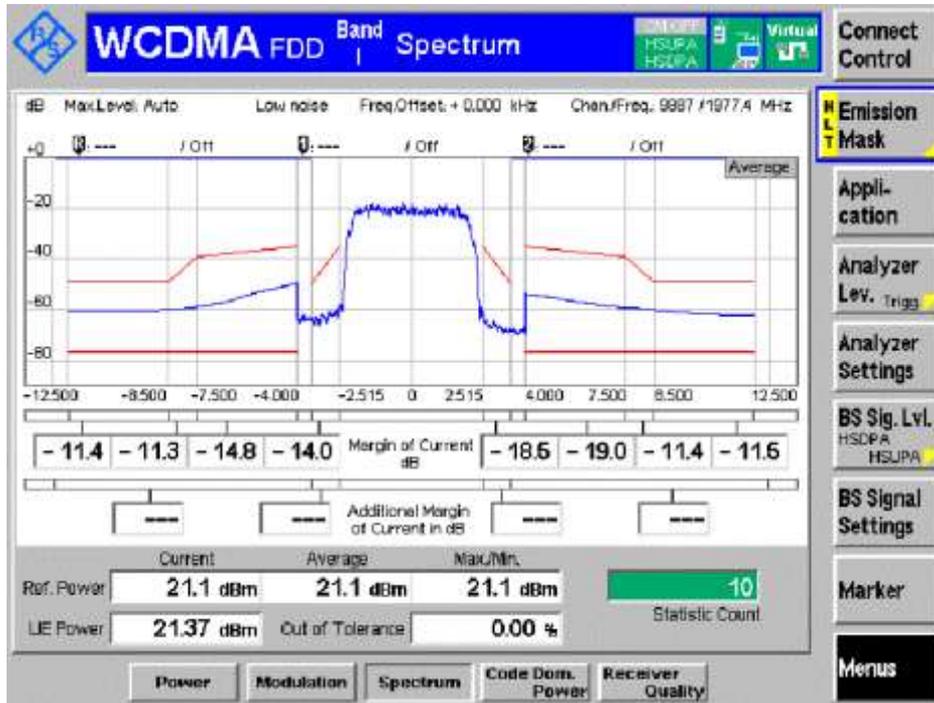


Sub – test 5

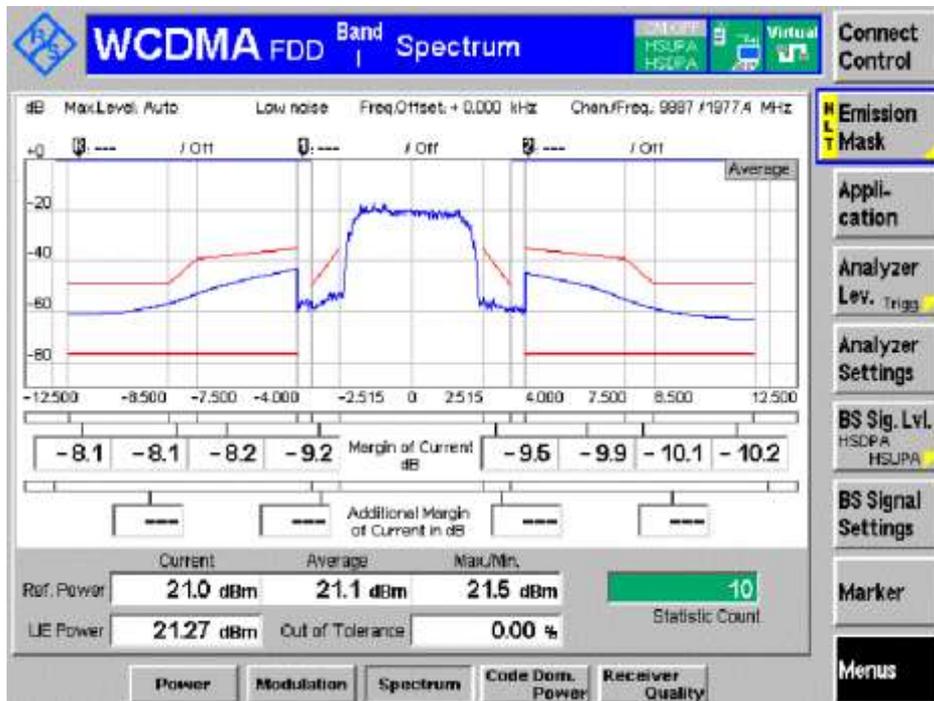


Channel HCH

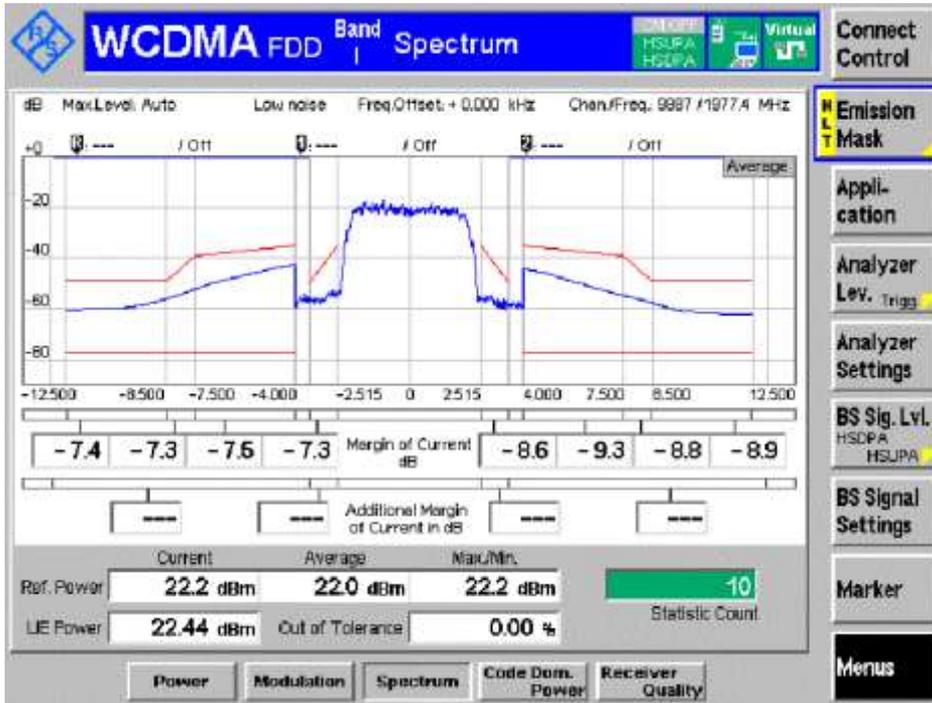
Sub-test 1



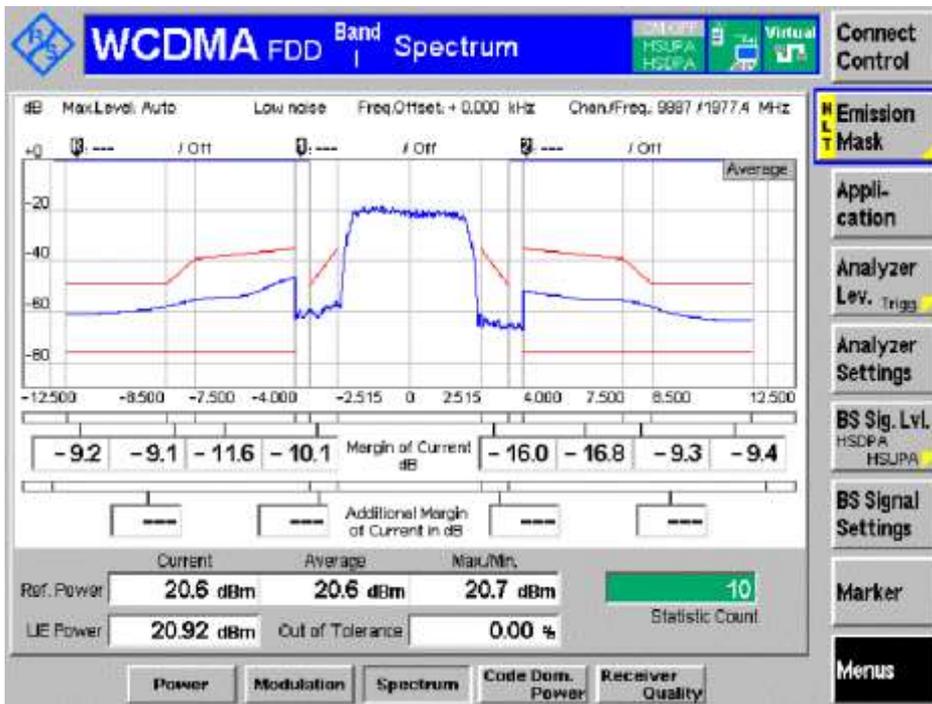
Sub-test 2



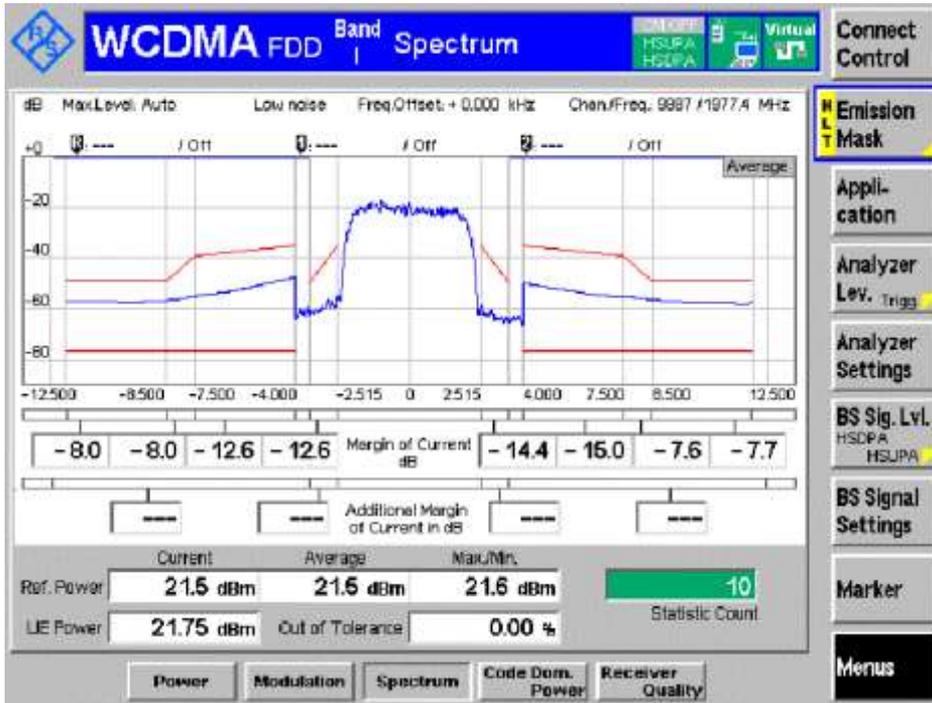
Sub-test 3



Sub-test 4



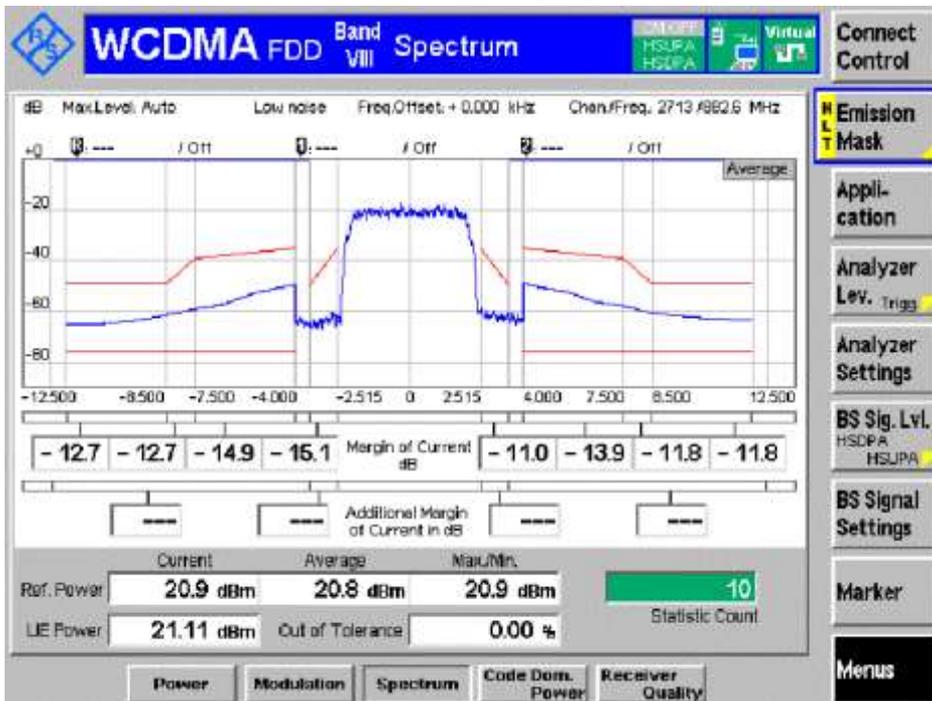
Sub-test 5



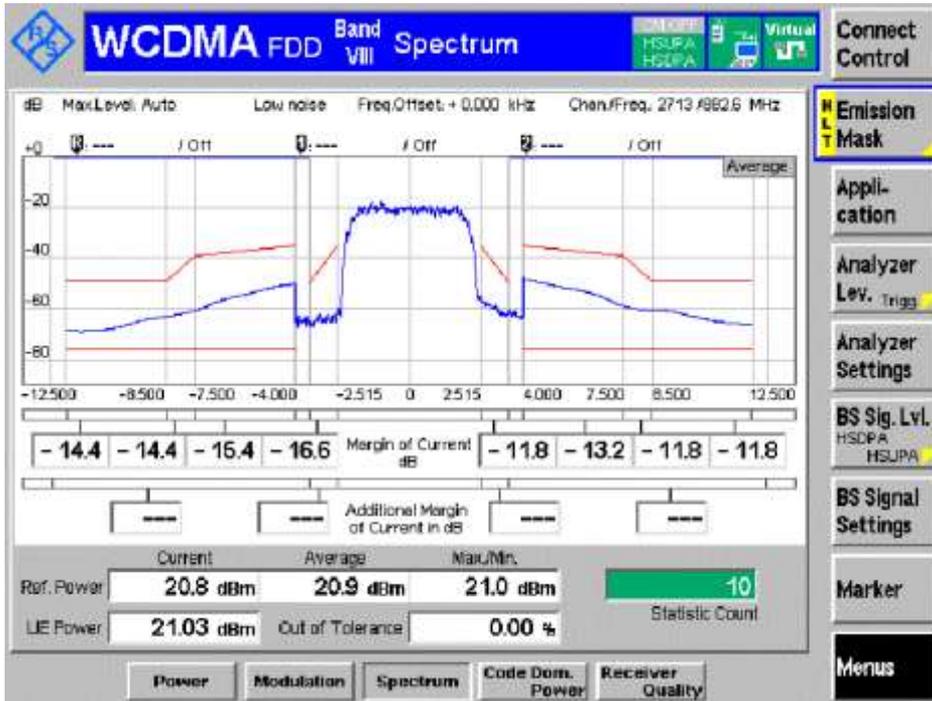
BAND VIII

Channel LCH

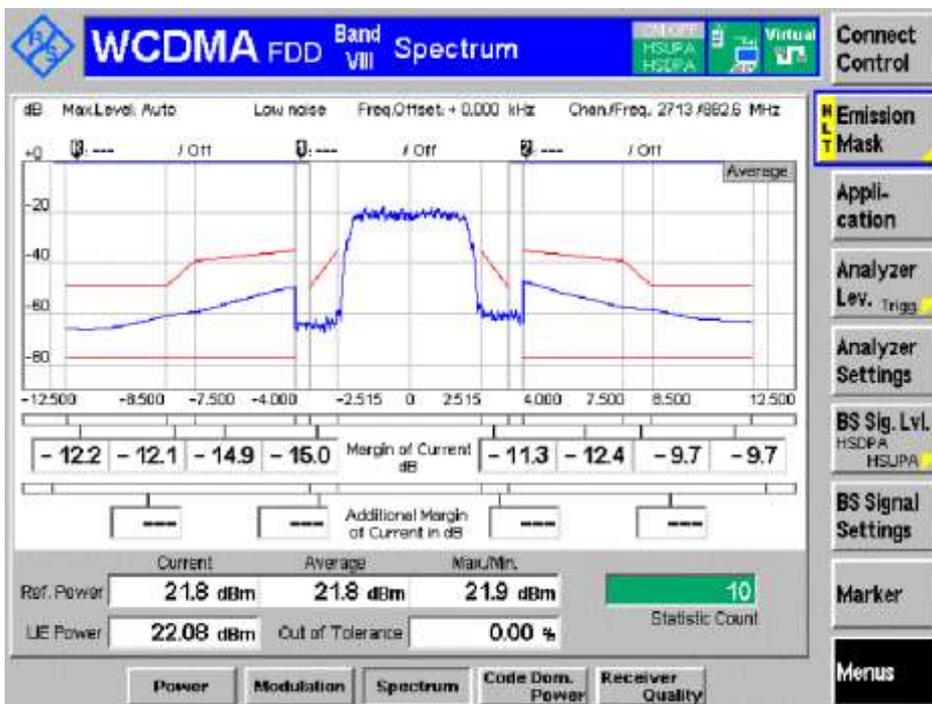
Sub-test 1



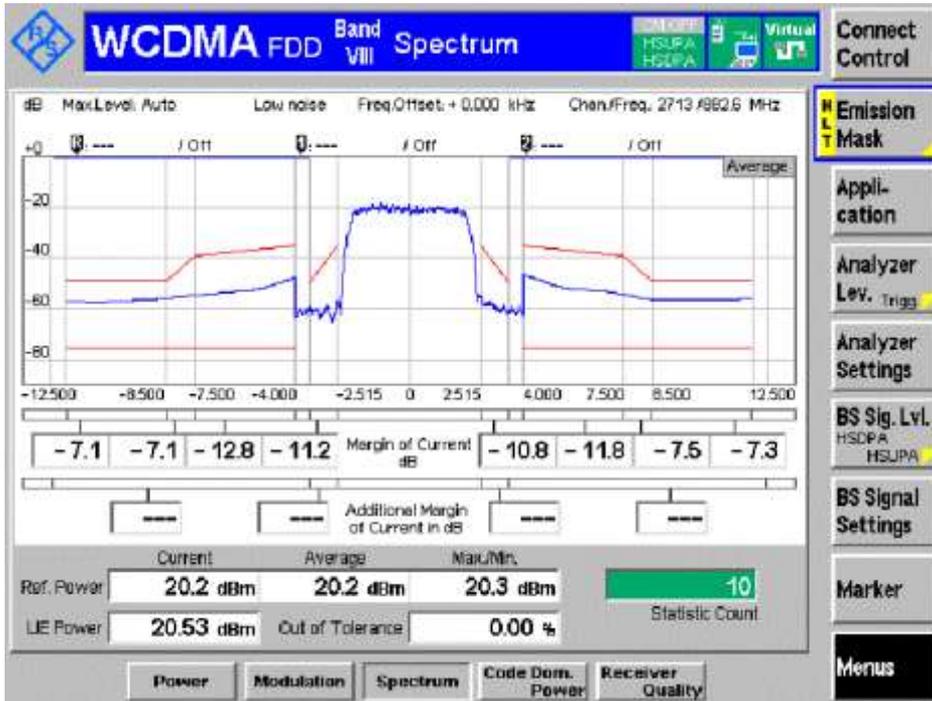
Sub-test 2



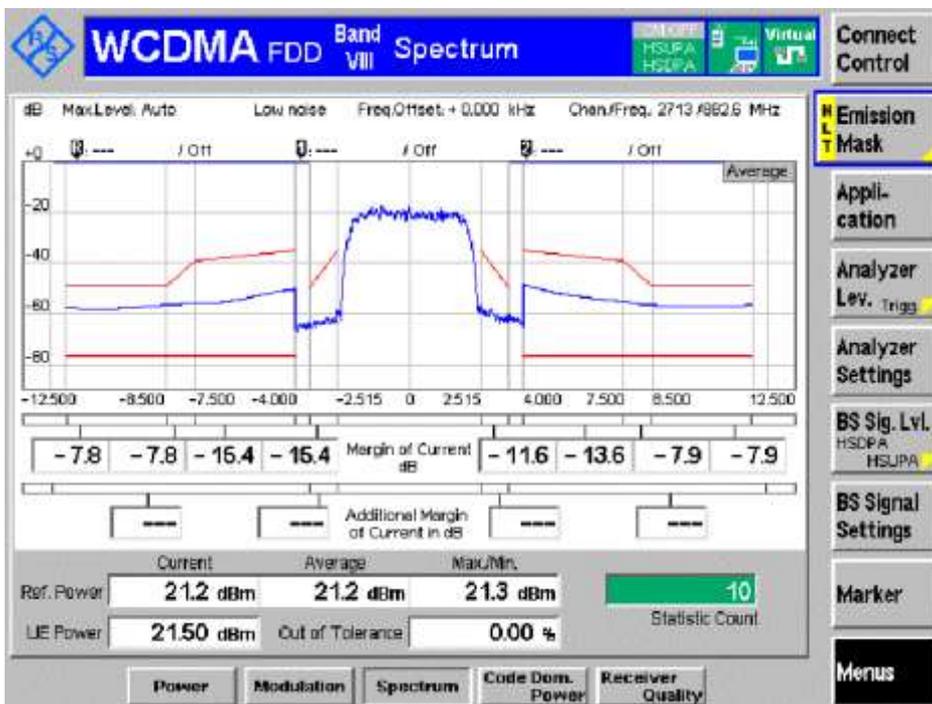
Sub-test 3



Sub-test 4

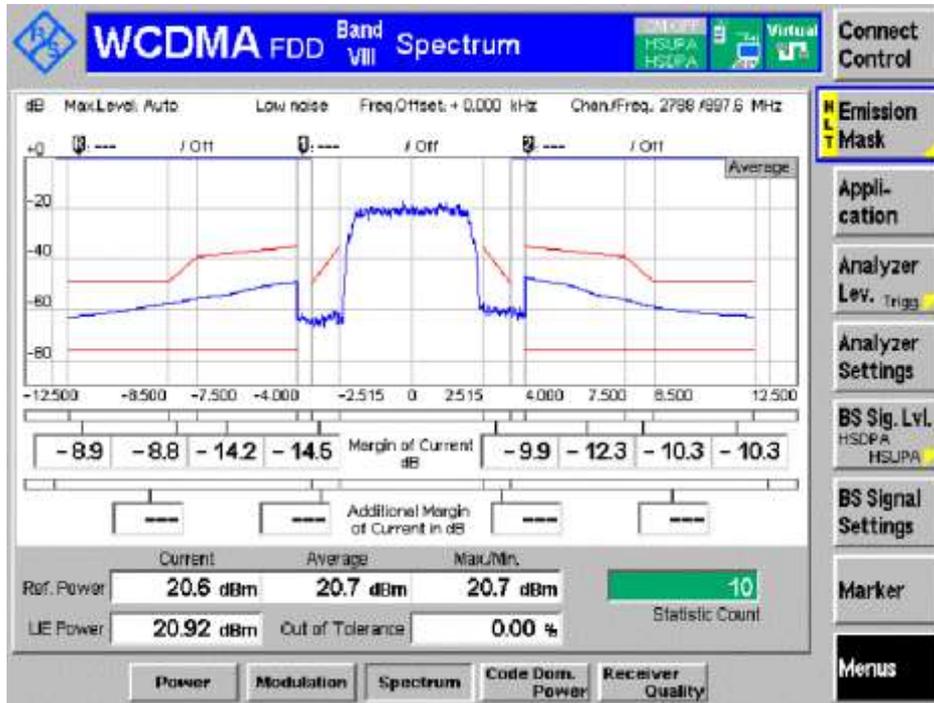


Sub-test 5

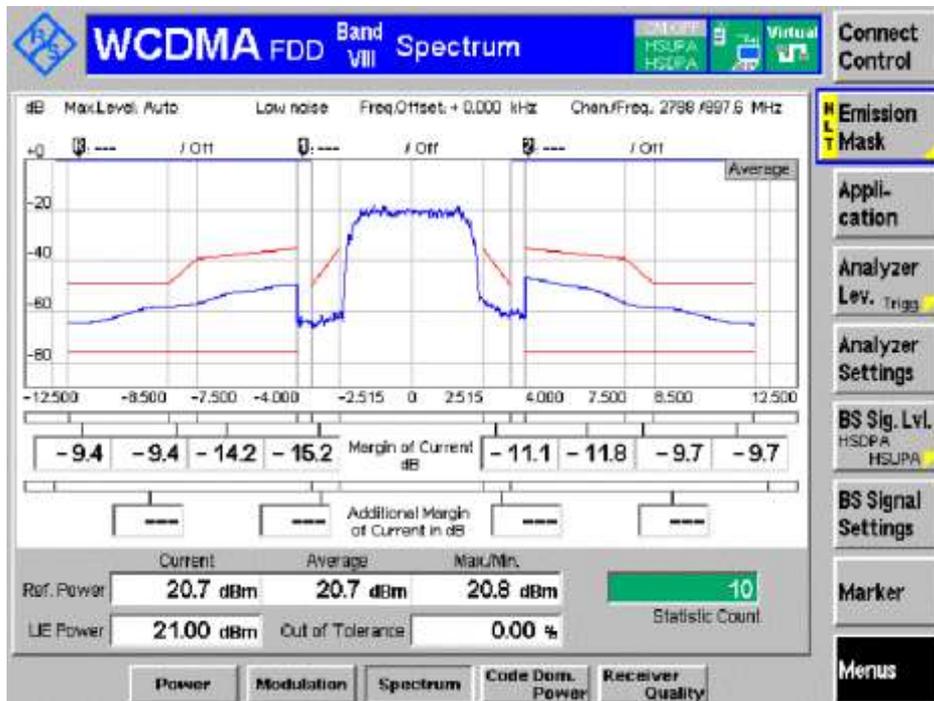


Channel MCH

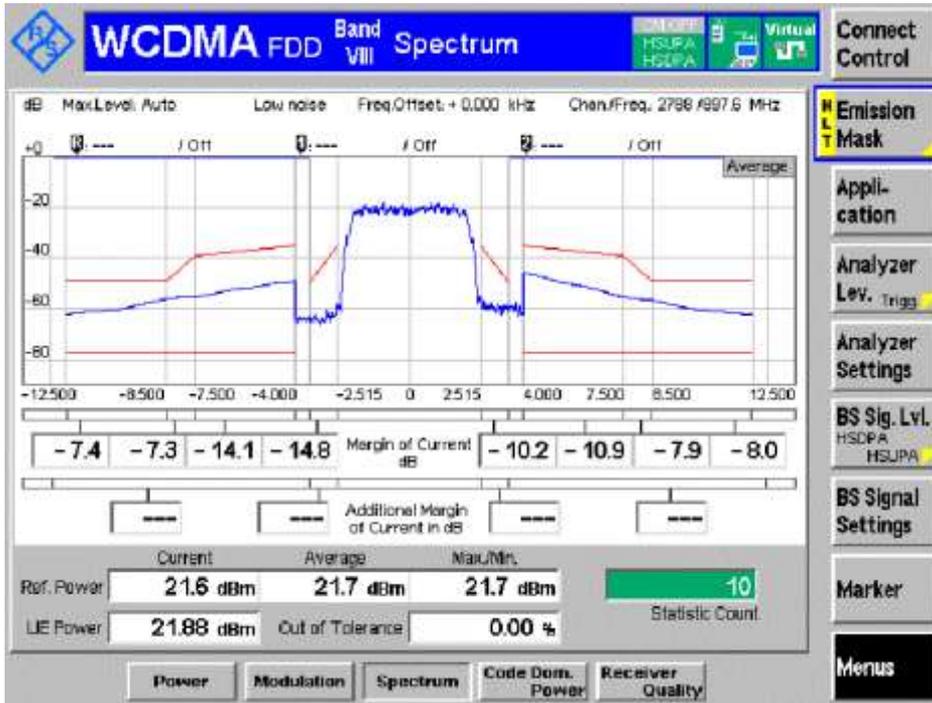
Sub-test 1



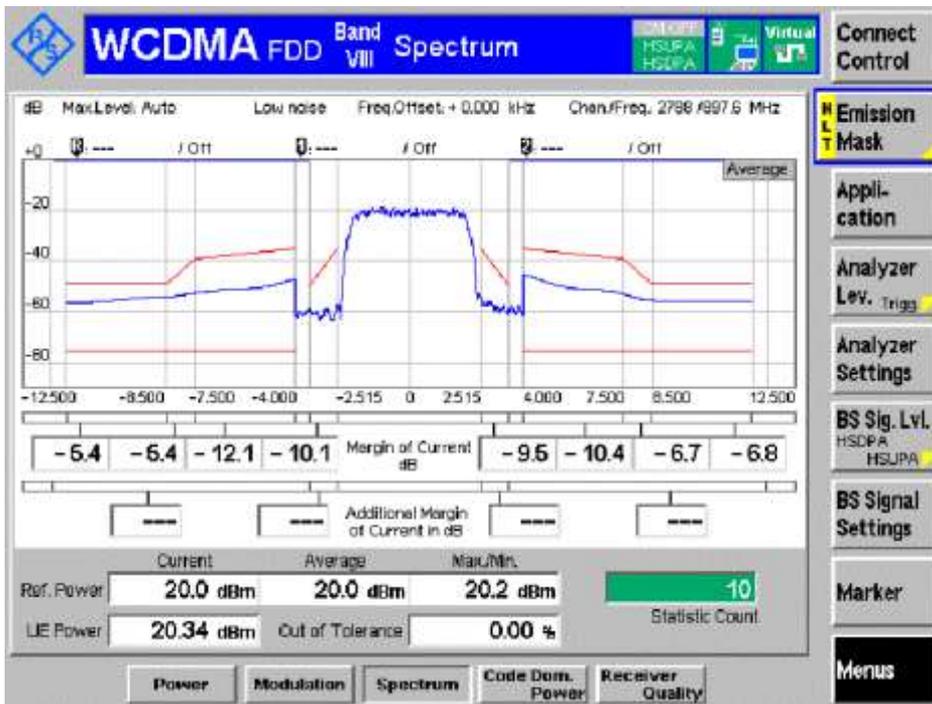
Sub-test 2



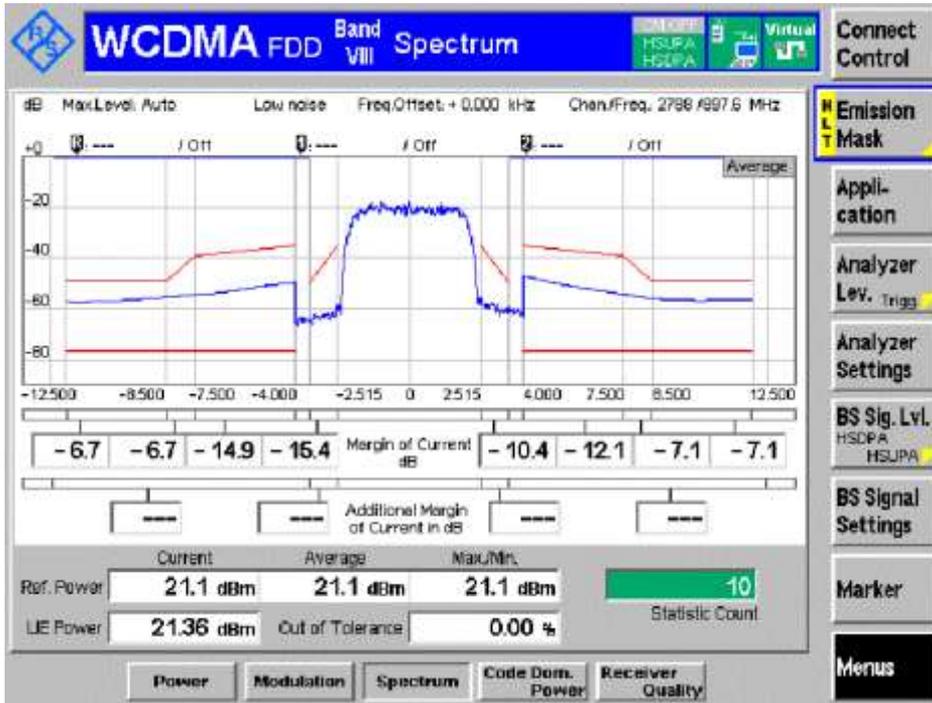
Sub-test 3



Sub-test 4

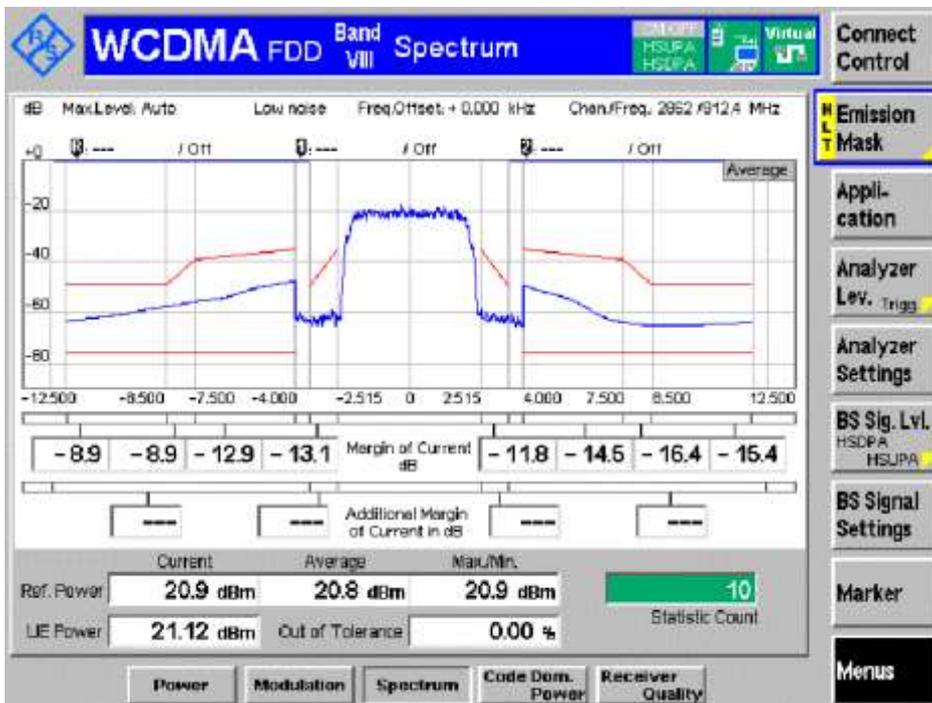


Sub-test 5

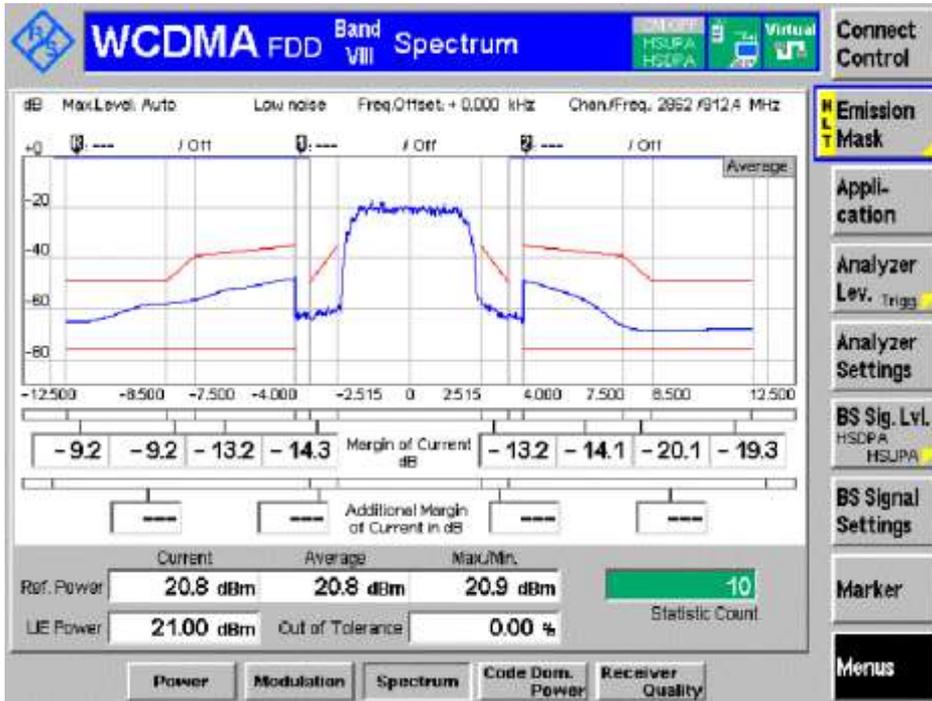


Channel HCH

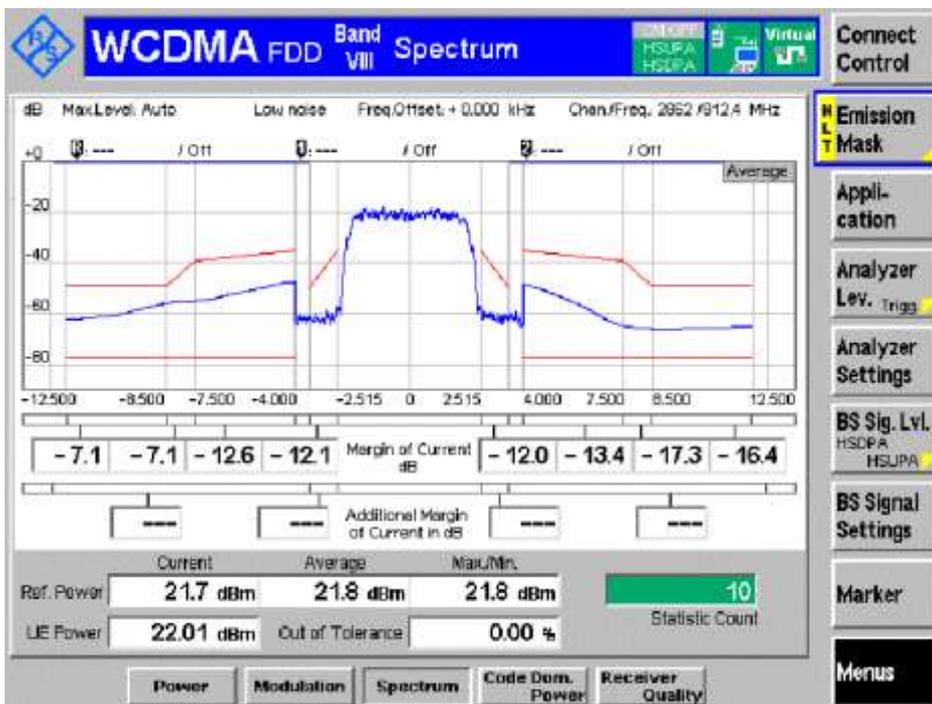
Sub-test 1



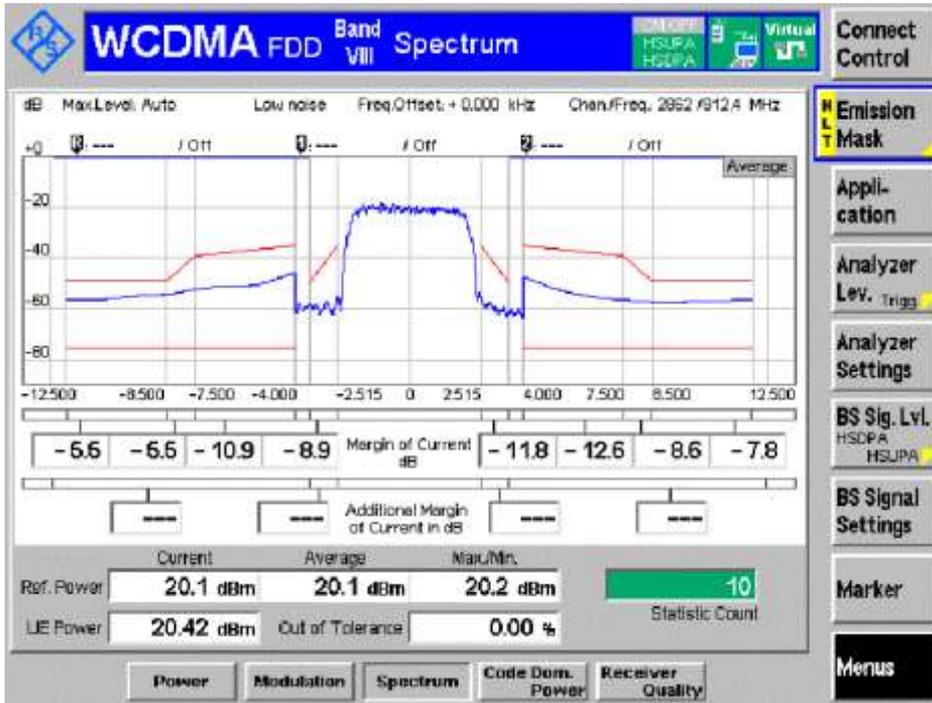
Sub-test 2



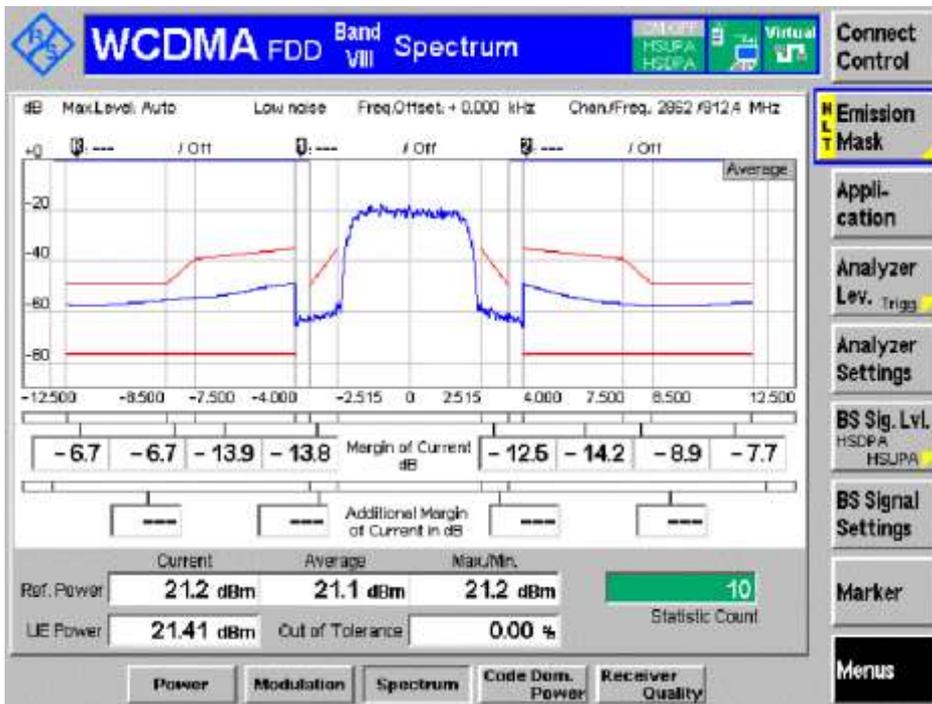
Sub-test 3



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

		HCH		-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
		-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

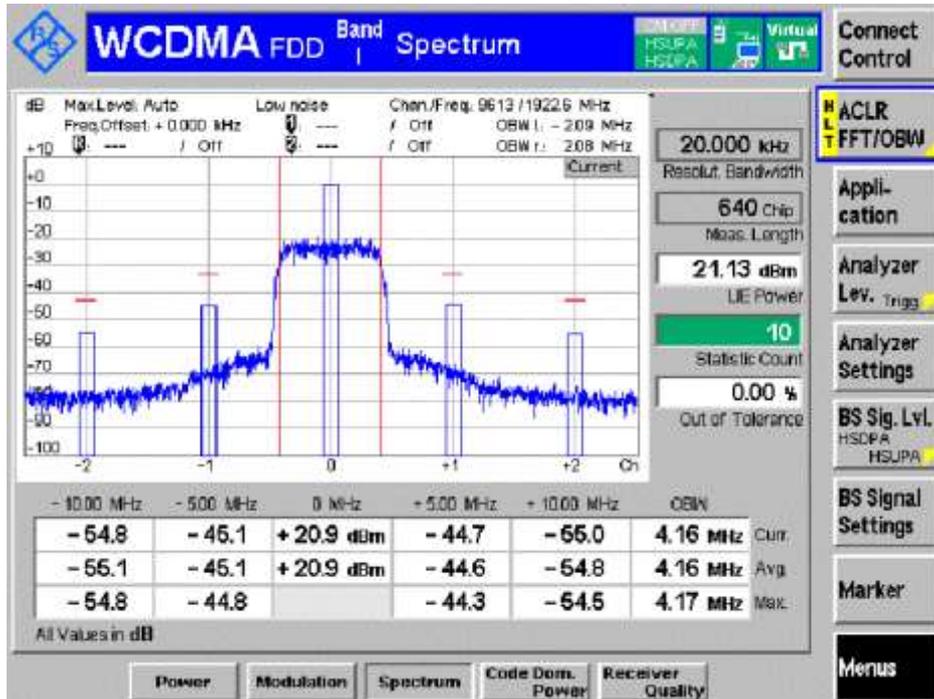
				+10MHz	-63.34	-42.2	Pass
			3	+5MHz	-44.99	-32.2	Pass
				-5 MHz	-43.66	-32.2	Pass
				-10MHz	-53.29	-42.2	Pass
				+10MHz	-60.53	-42.2	Pass
			4	+5MHz	-44.18	-32.2	Pass
				-5 MHz	-42.16	-32.2	Pass
				-10MHz	-50.24	-42.2	Pass
				+10MHz	-51.95	-42.2	Pass
			5	+5MHz	-45.33	-32.2	Pass
				-5 MHz	-44.59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

BAND 1

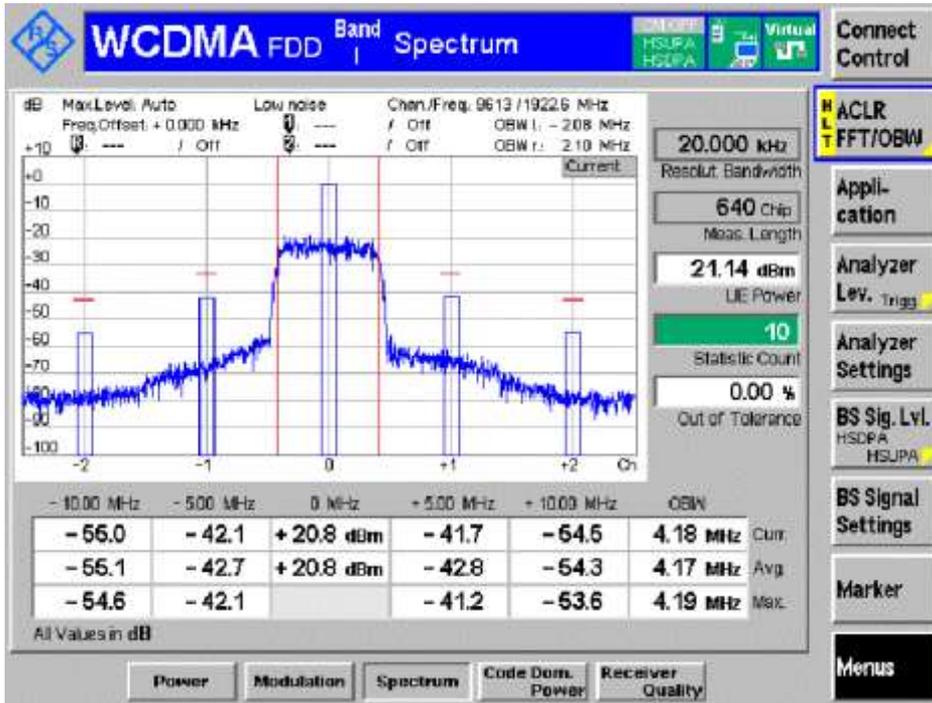
TNVN

Channel LCH

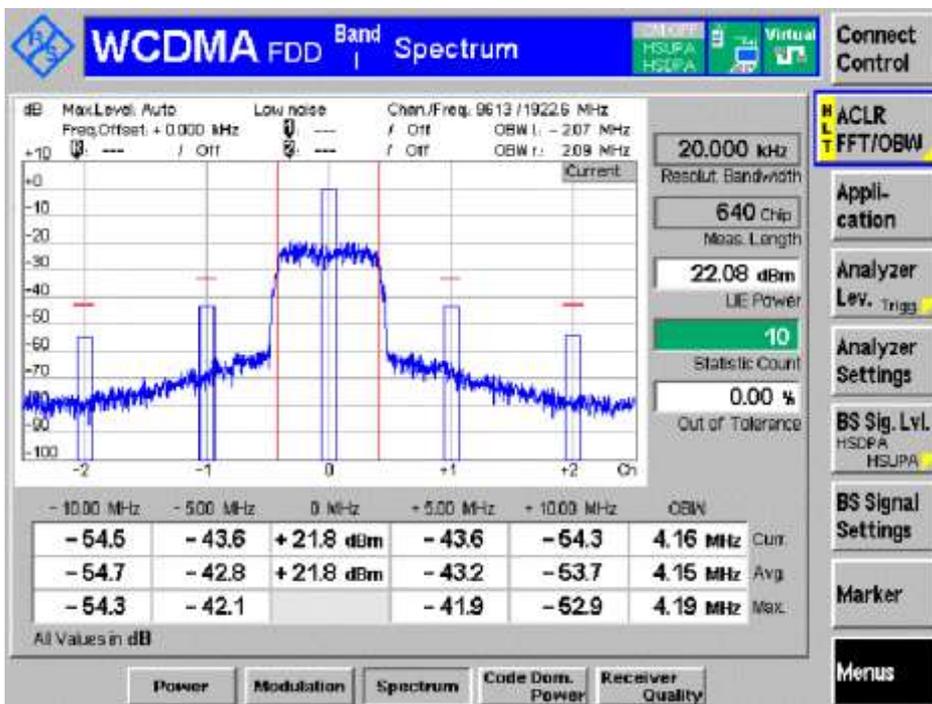
Sub-test 1



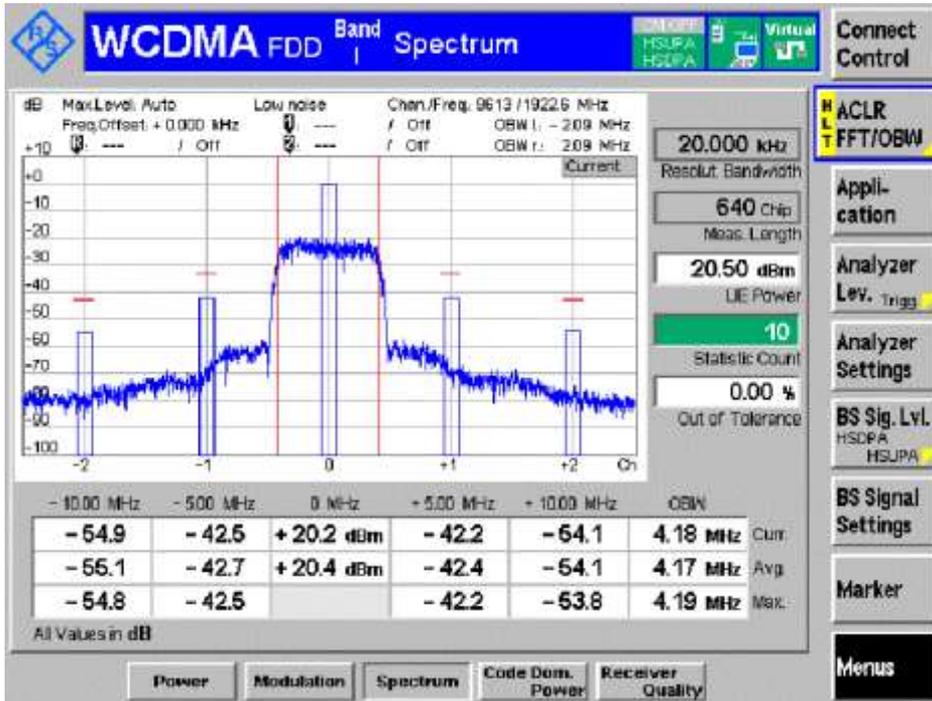
Sub-test 2



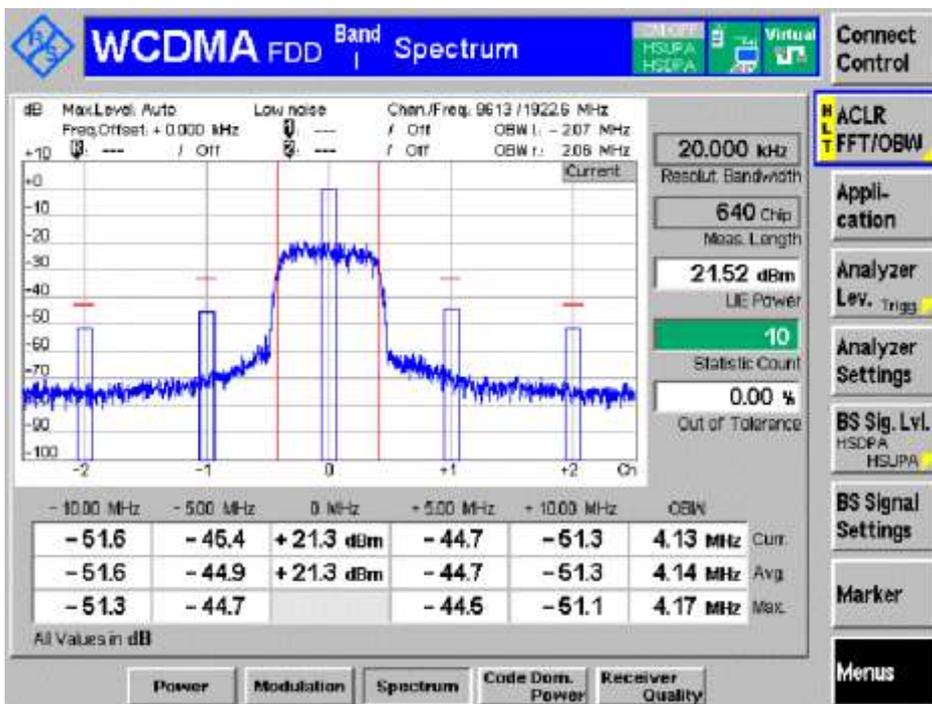
Sub-test 3



Sub-test 4

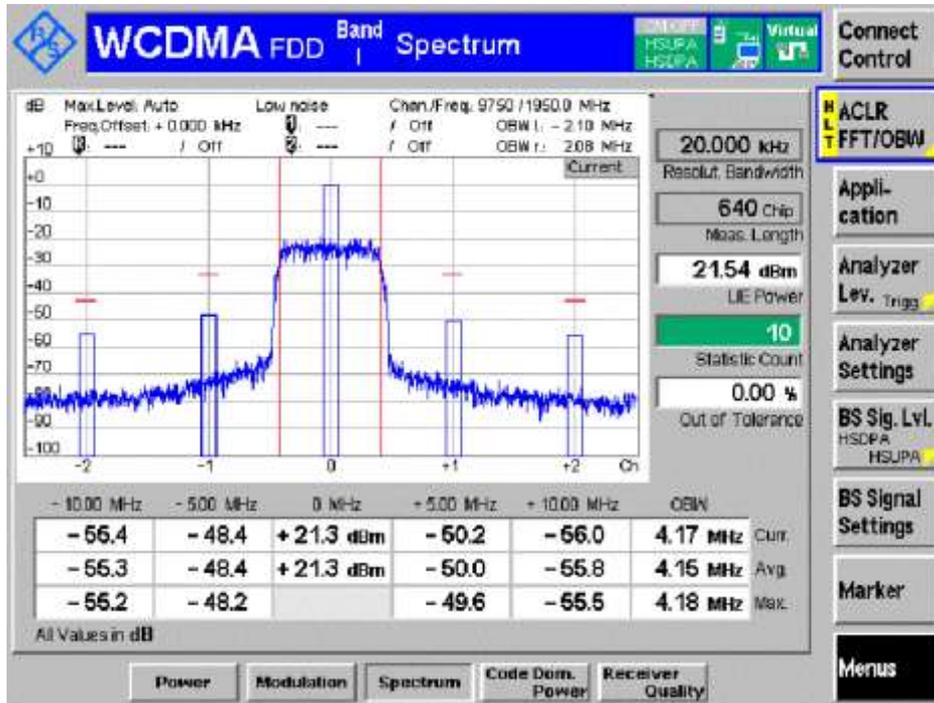


Sub-test 5

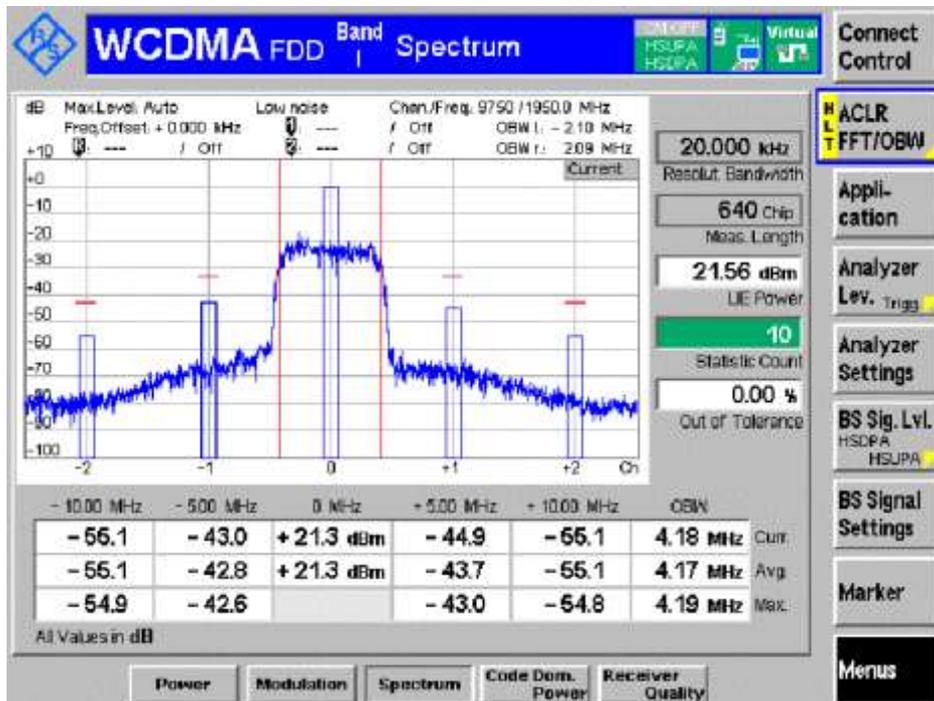


Channel MCH

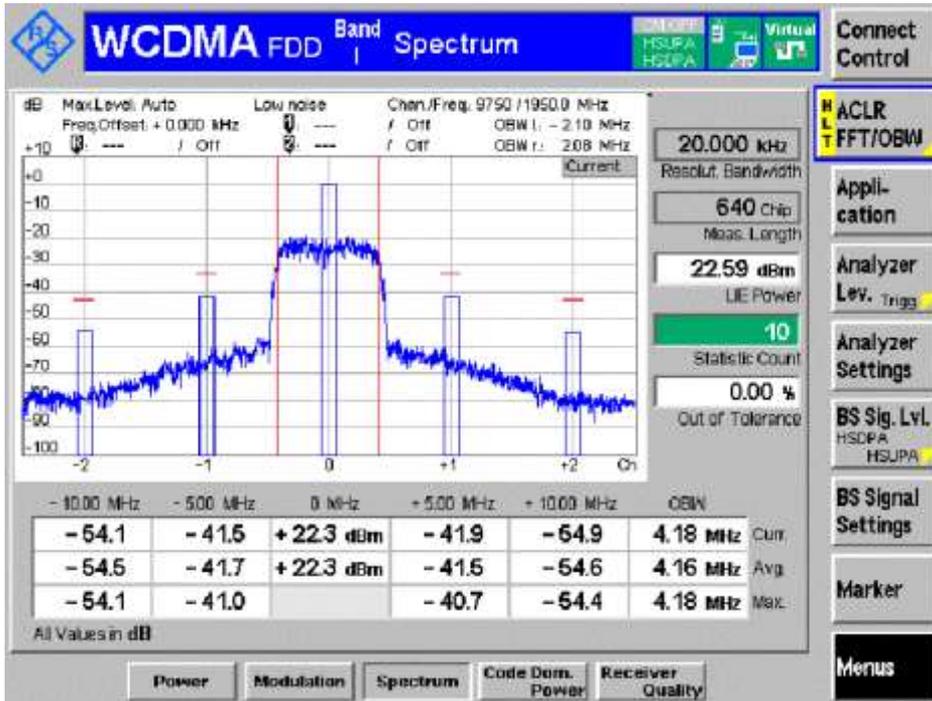
Sub-test 1



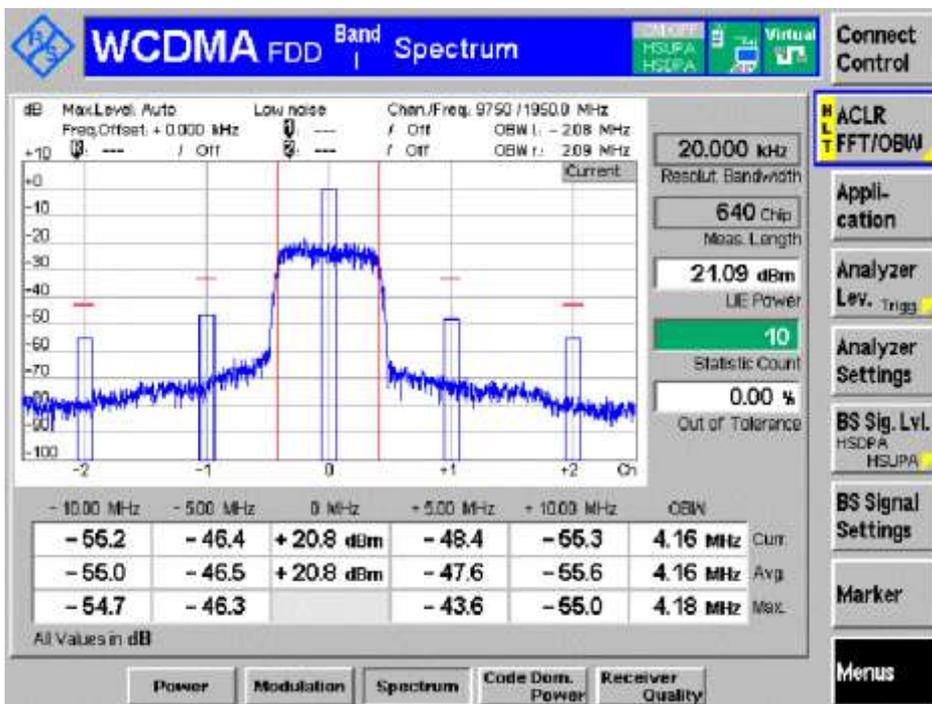
Sub-test 2



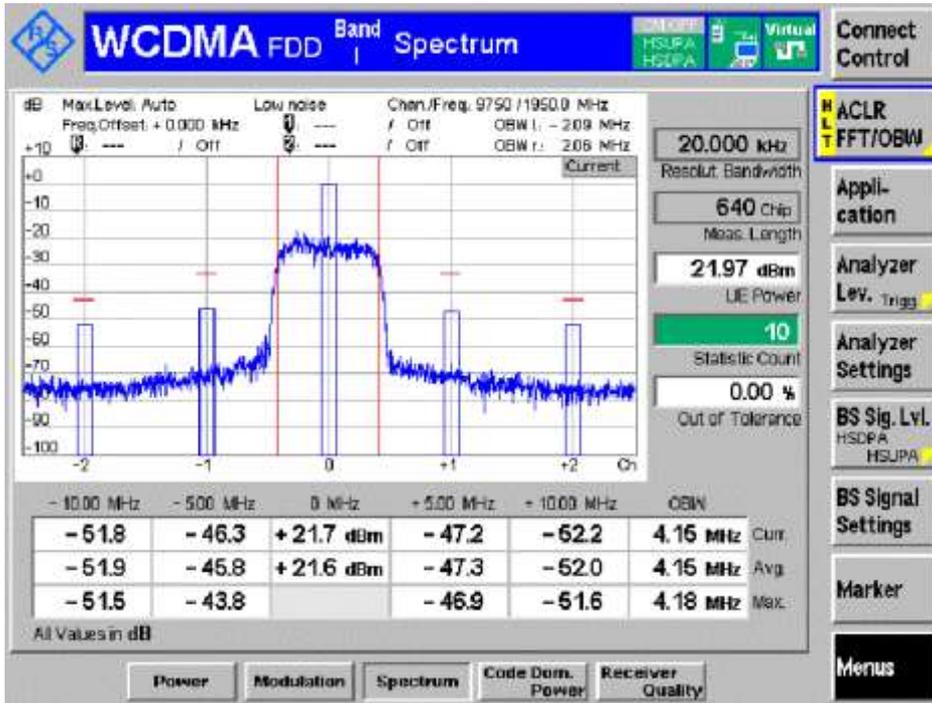
Sub-test 3



Sub-test 4

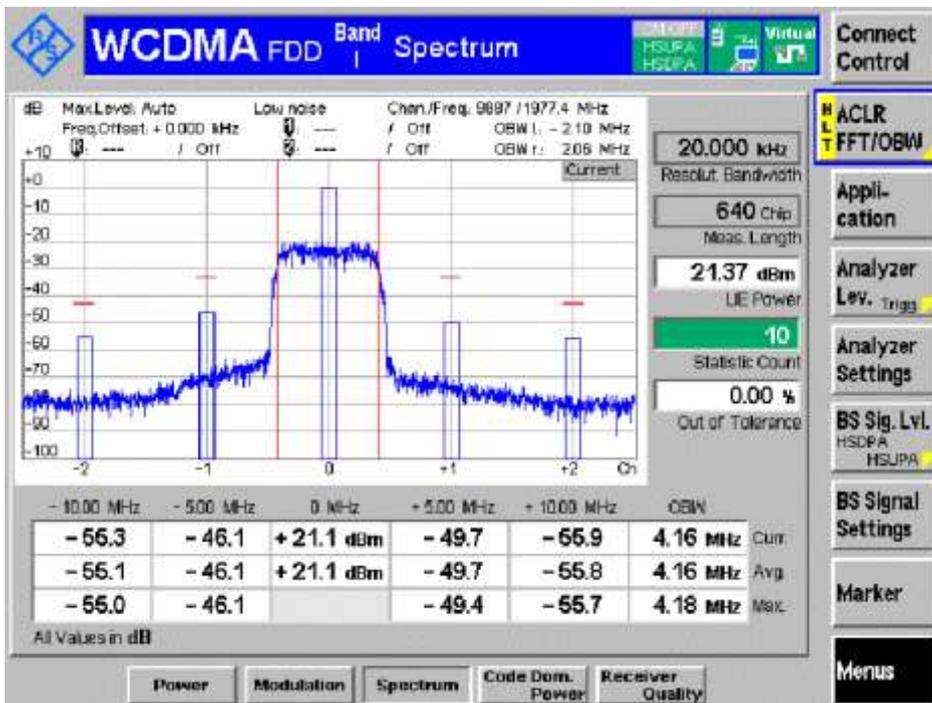


Sub-test 5

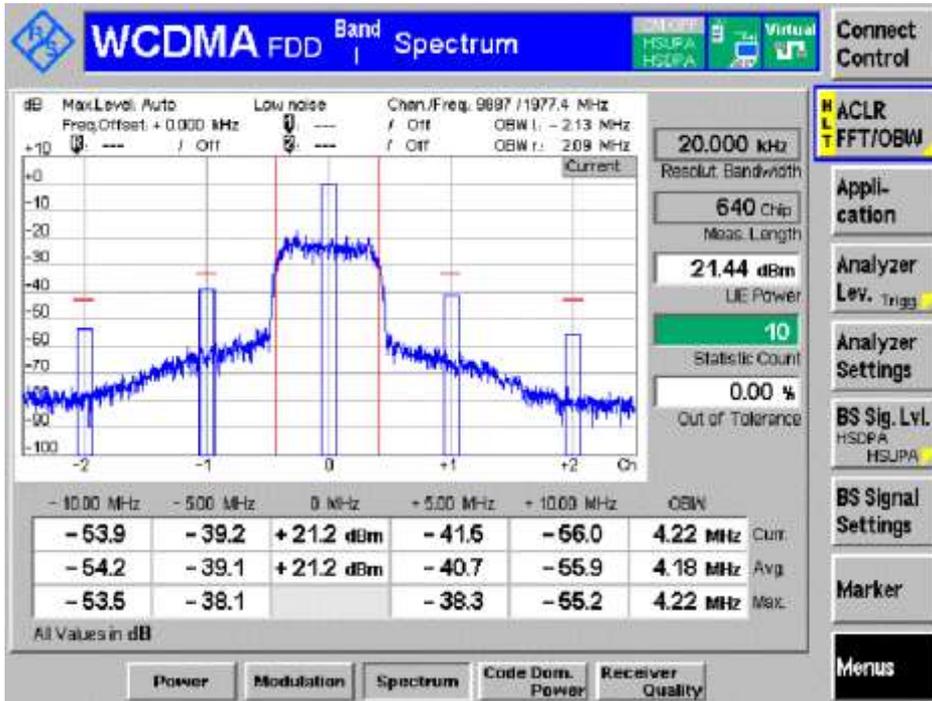


Channel HCH

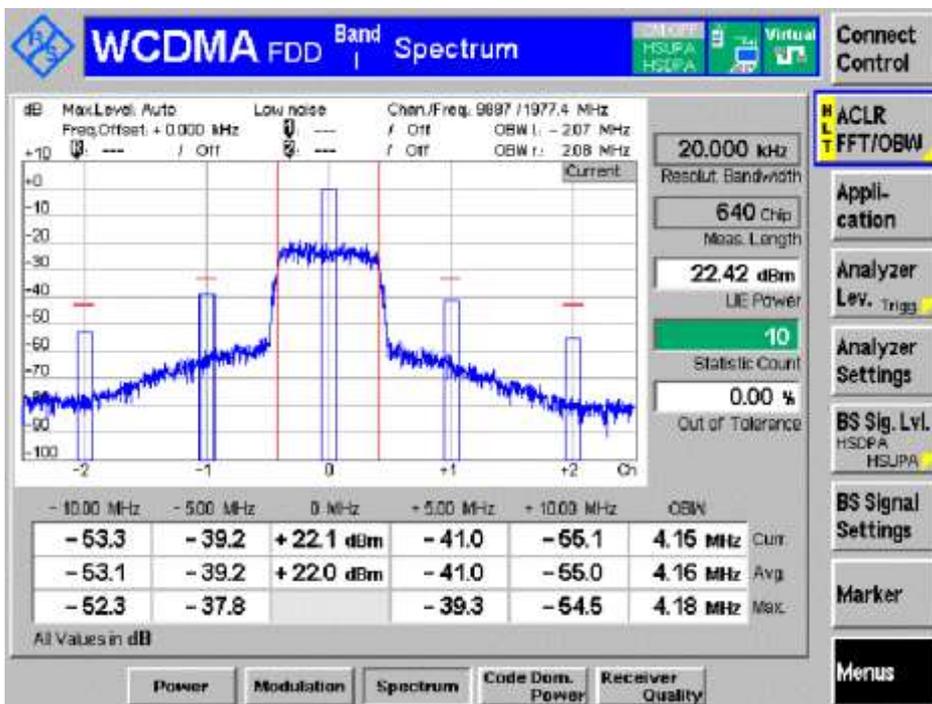
Sub-test 1



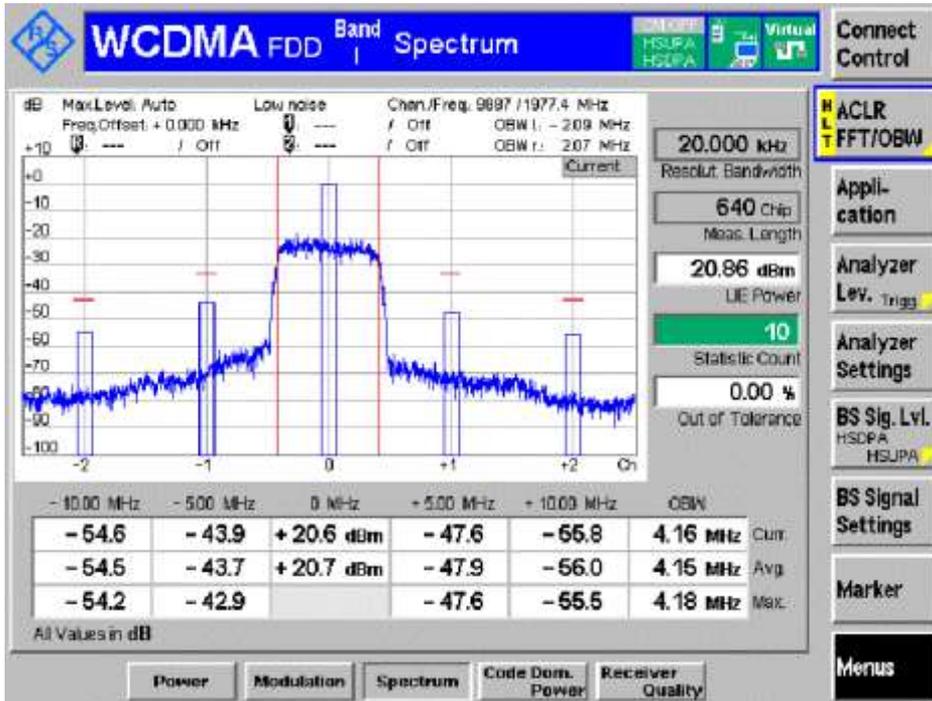
Sub-test 2



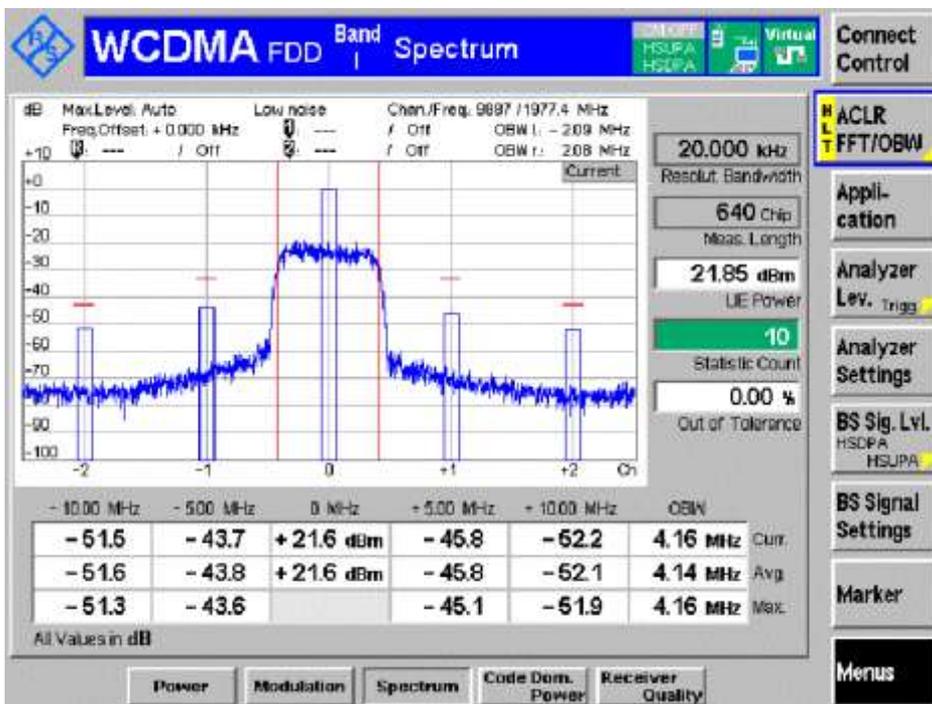
Sub-test 3



Sub-test 4



Sub-test 5

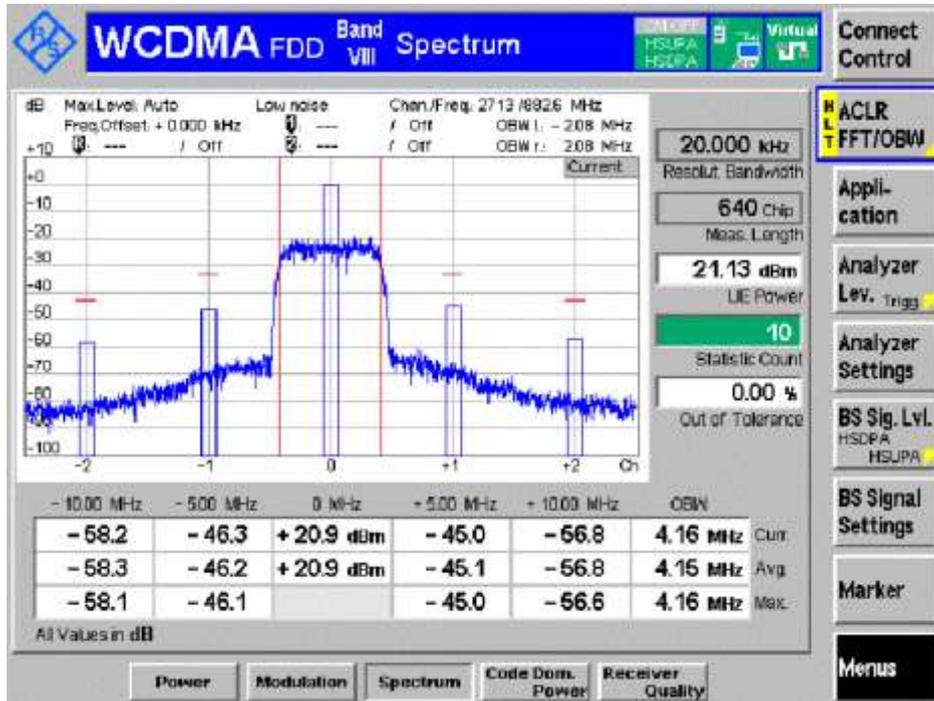


BAND VIII

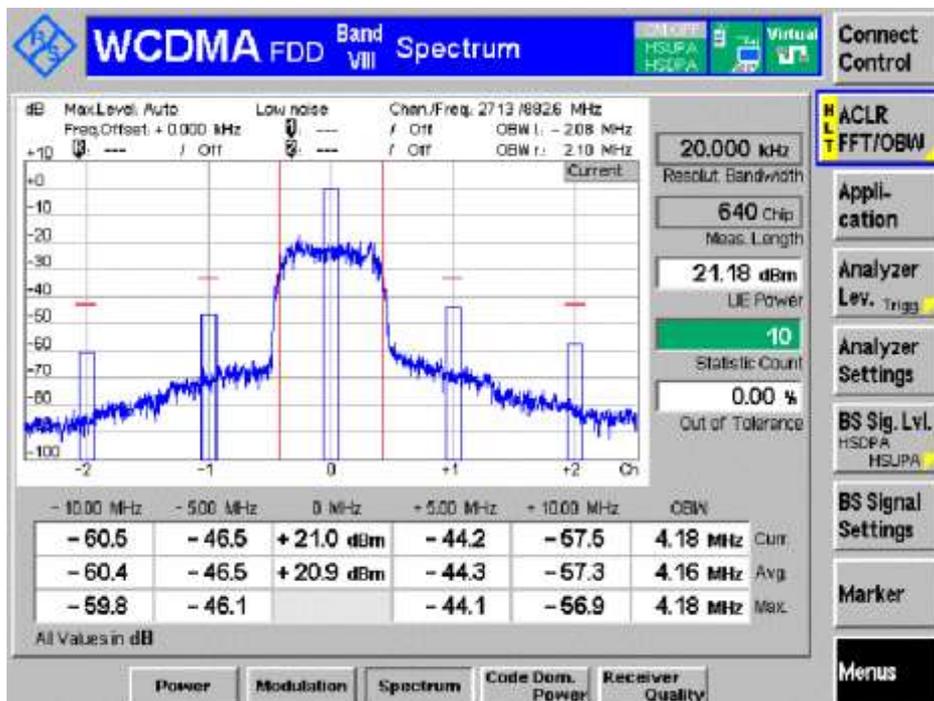
TNVN

Channel LCH

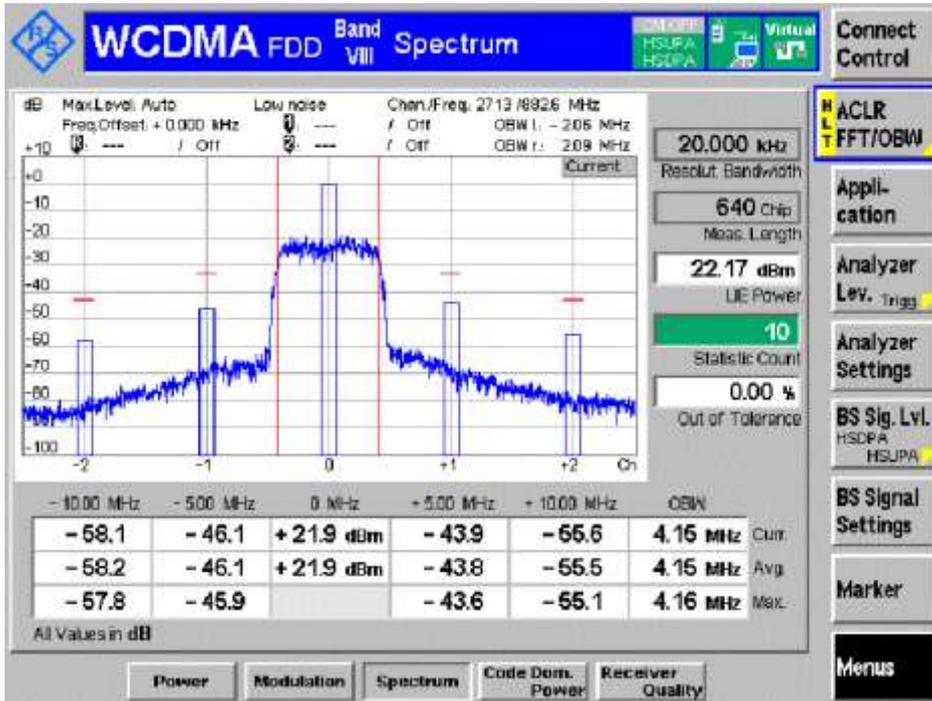
Sub-test 1



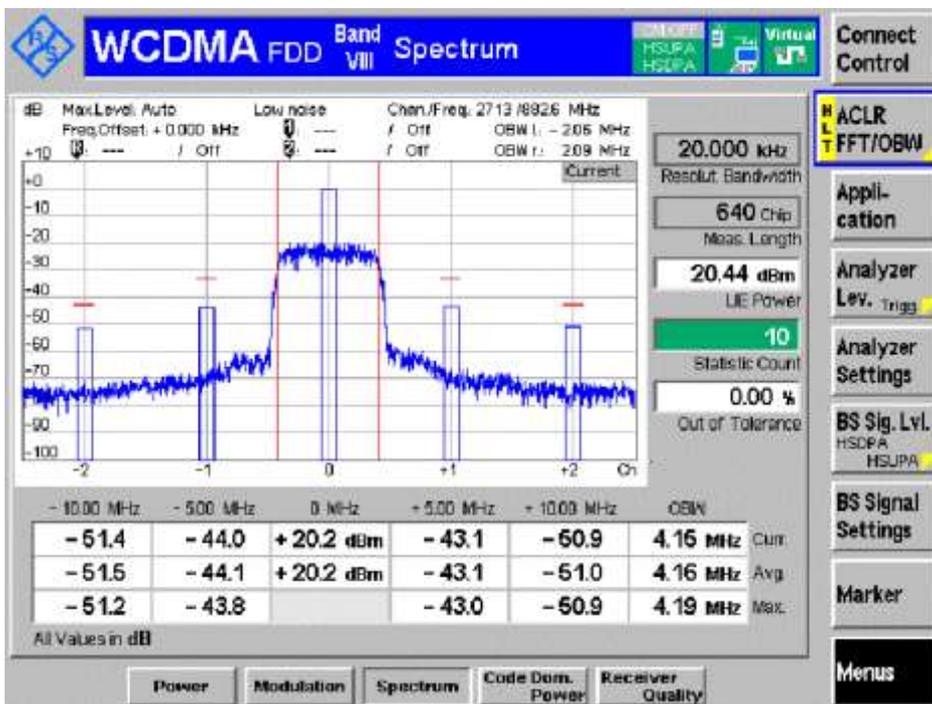
Sub-test 2



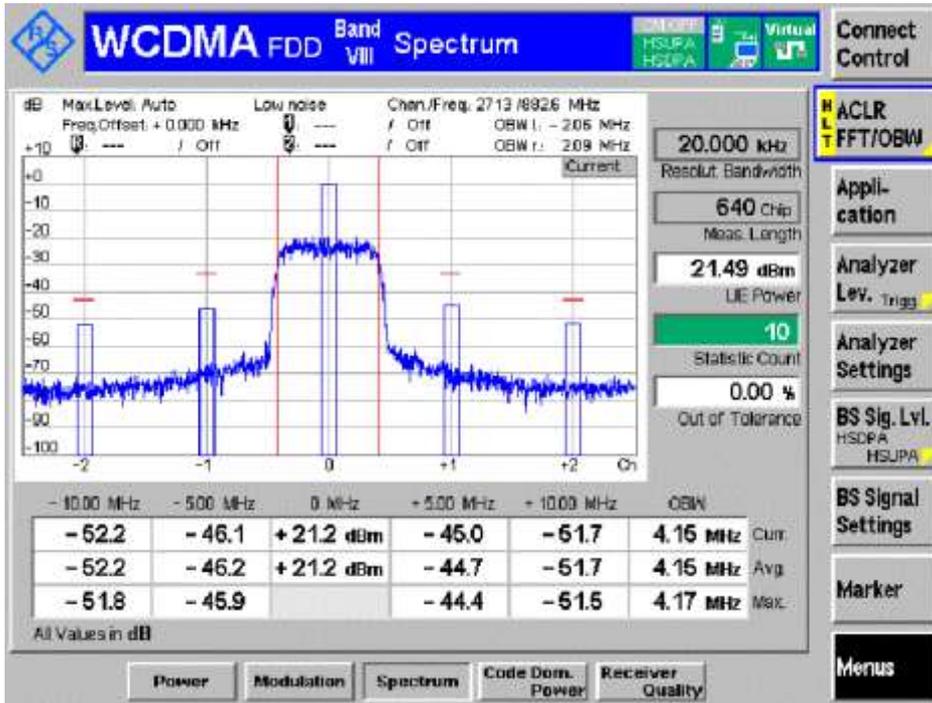
Sub-test 3



Sub-test 4

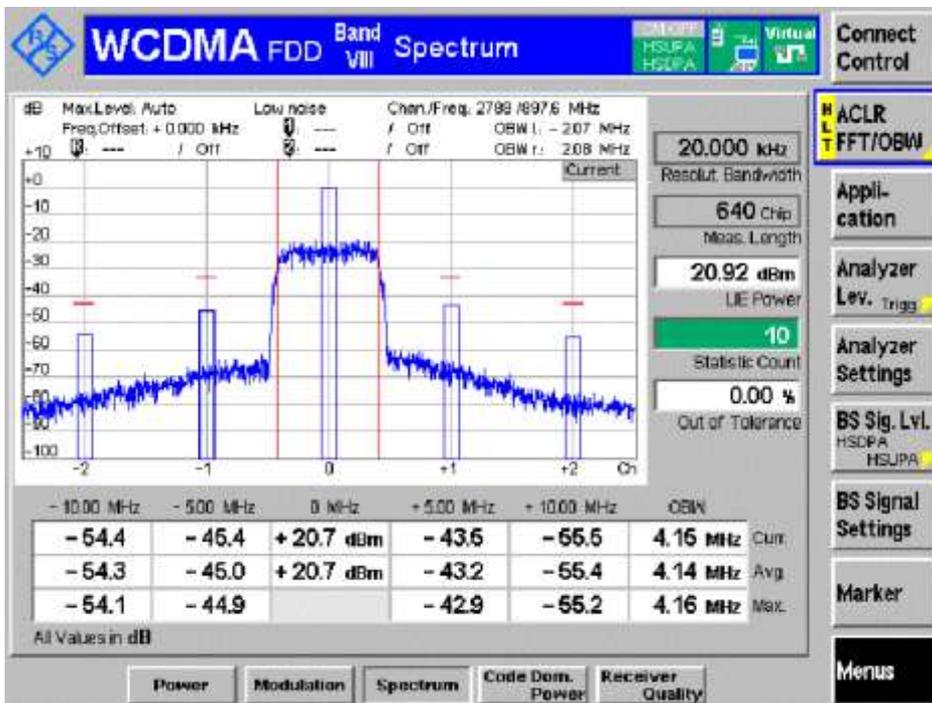


Sub-test 5

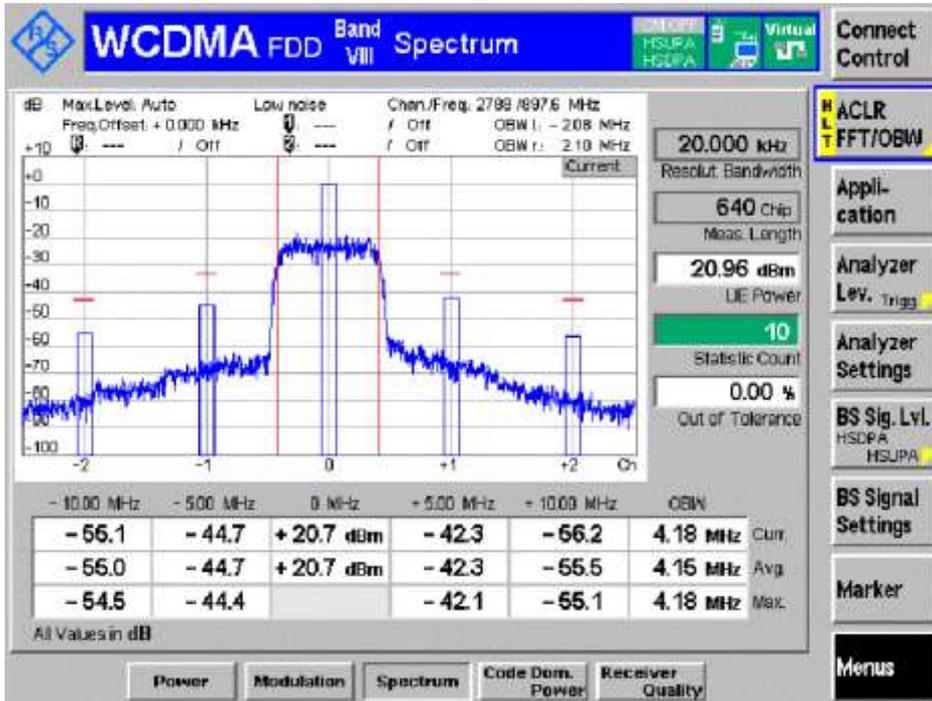


Channel MCH

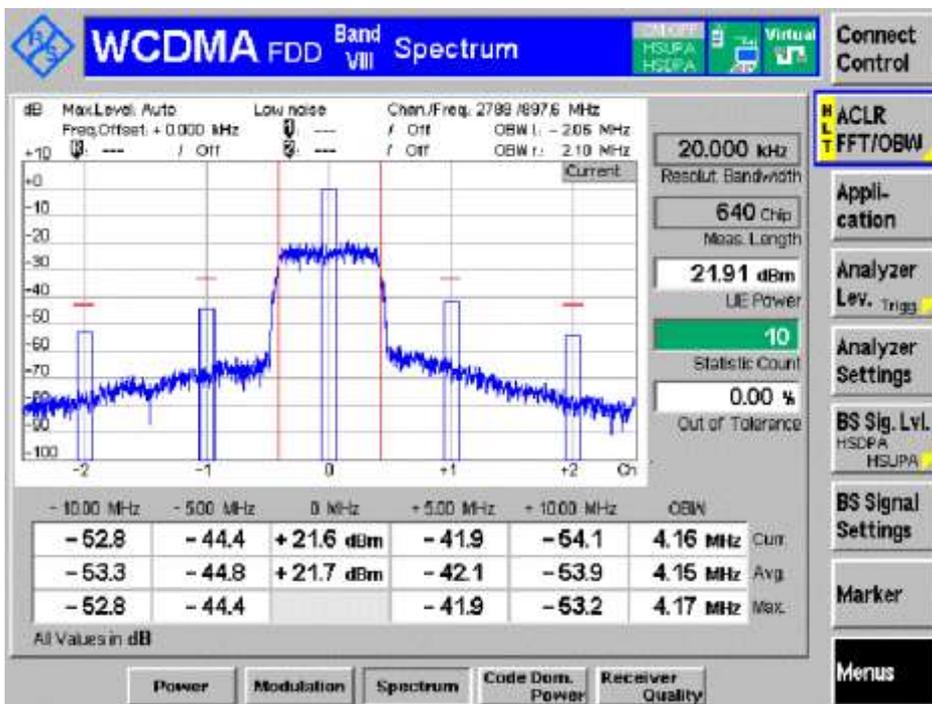
Sub-test 1



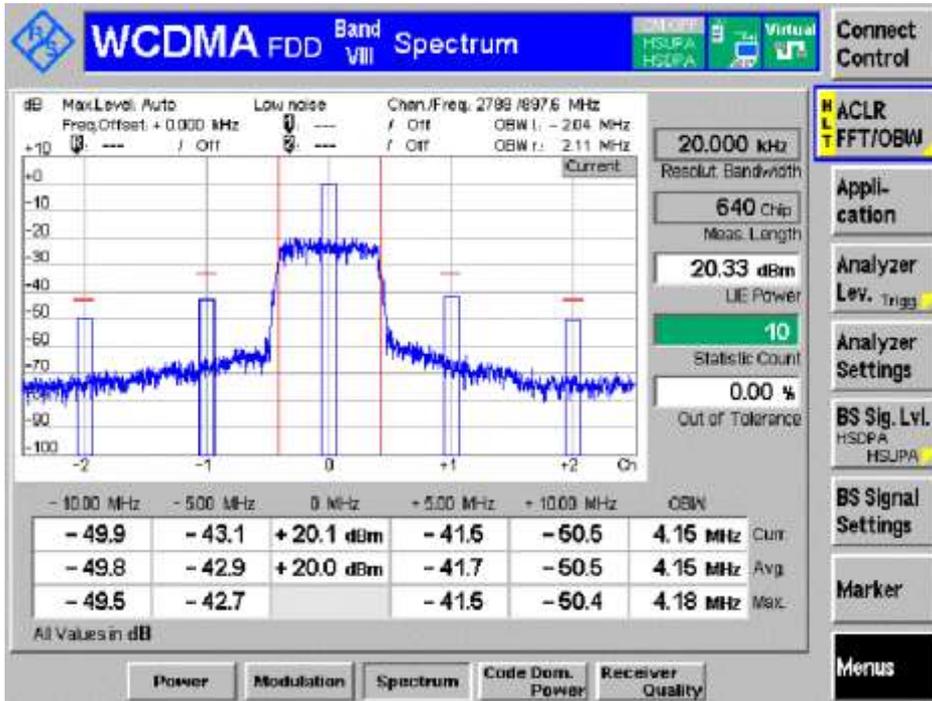
Sub-test 2



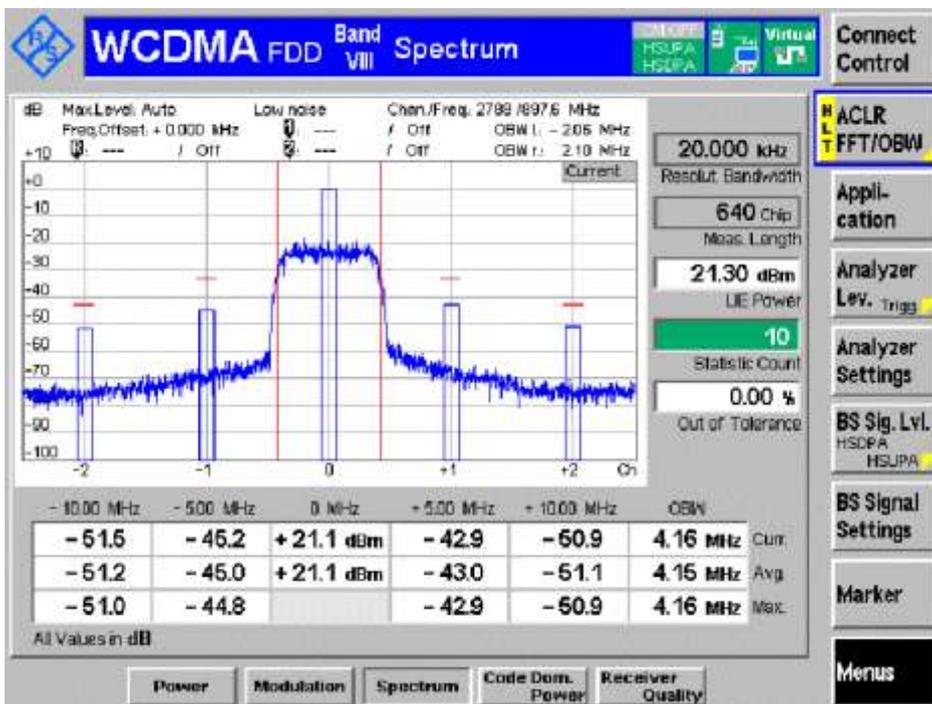
Sub-test 3



Sub-test 4

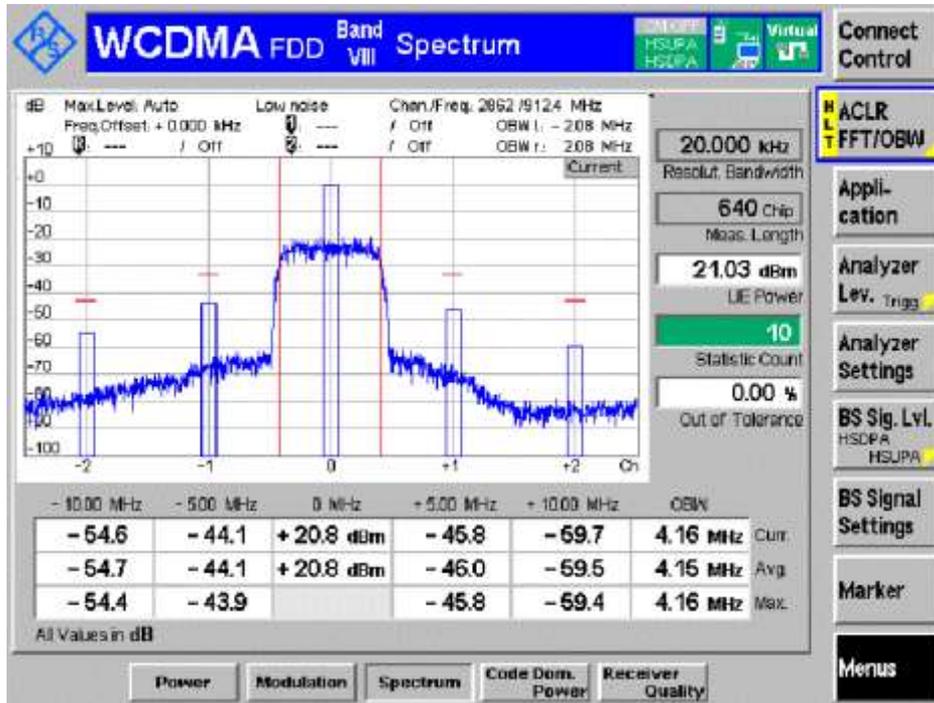


Sub-test 5

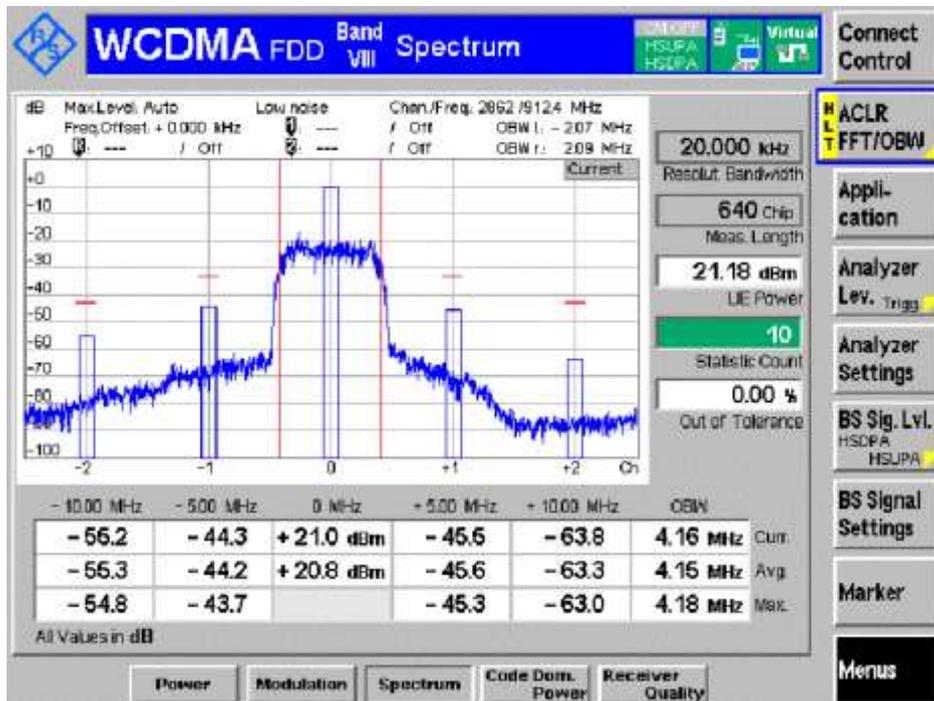


Channel HCH

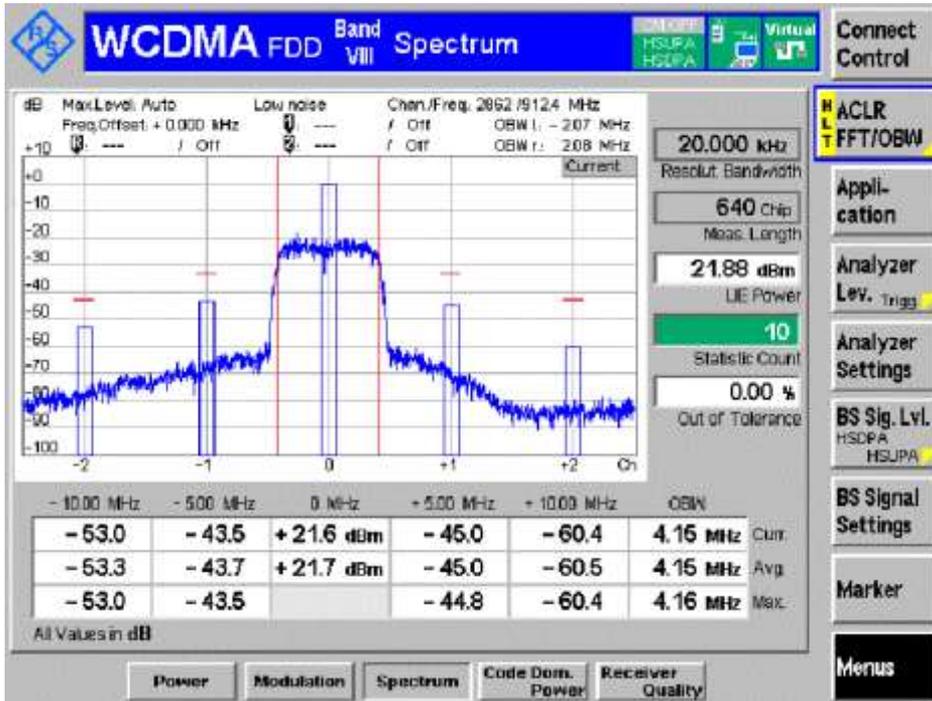
Sub-test 1



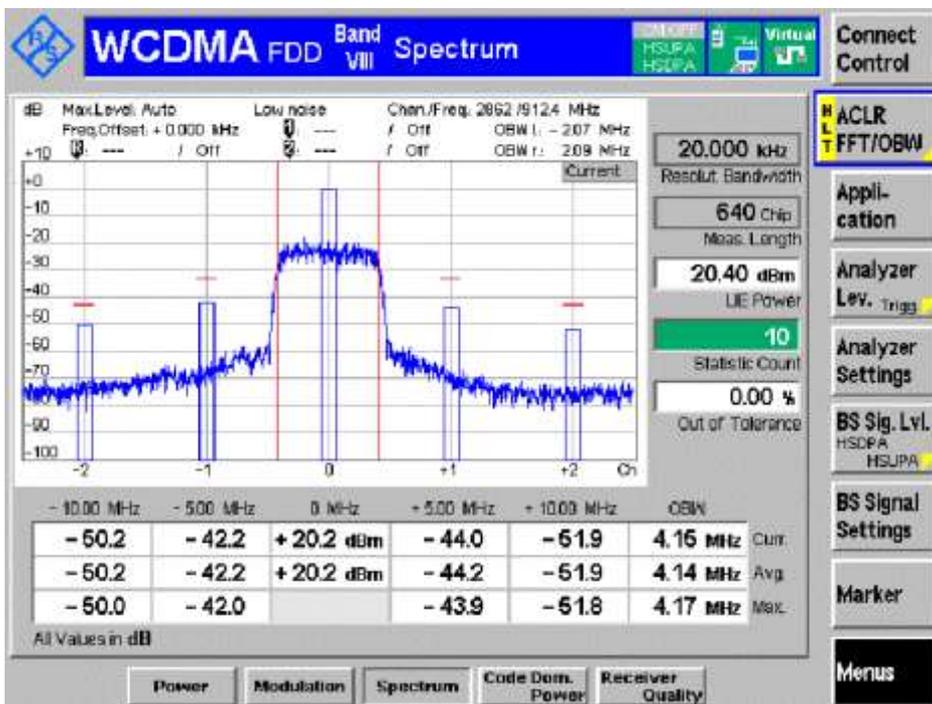
Sub-test 2



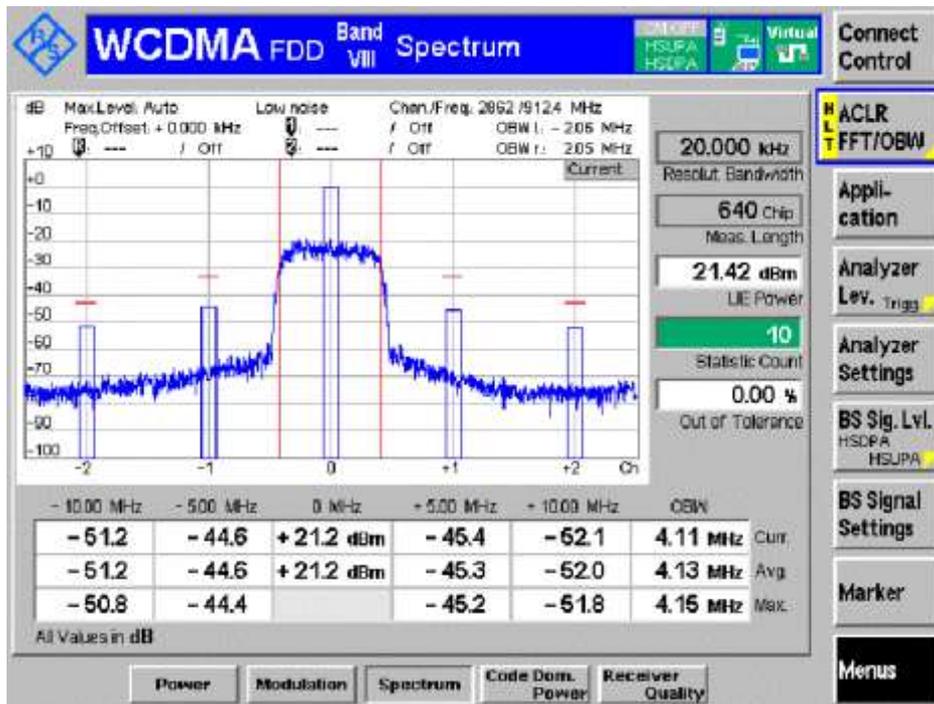
Sub-test 3



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



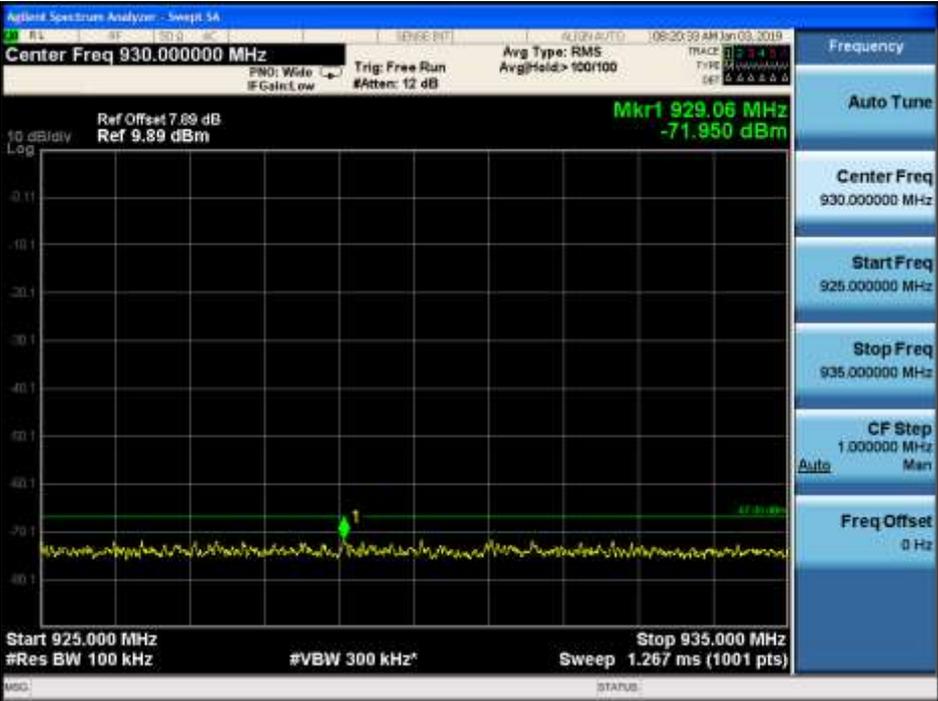
791MHZ~821HZ



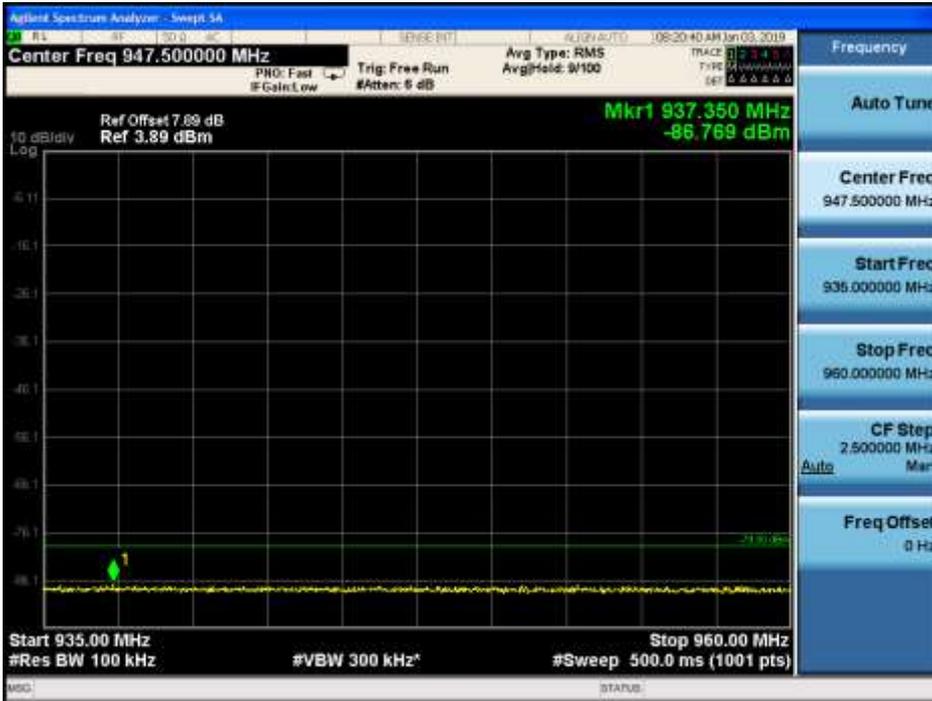
921MHz~925MHz



925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



1920MHZ~1980MHZ



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel MCH

30MHZ~1GHZ



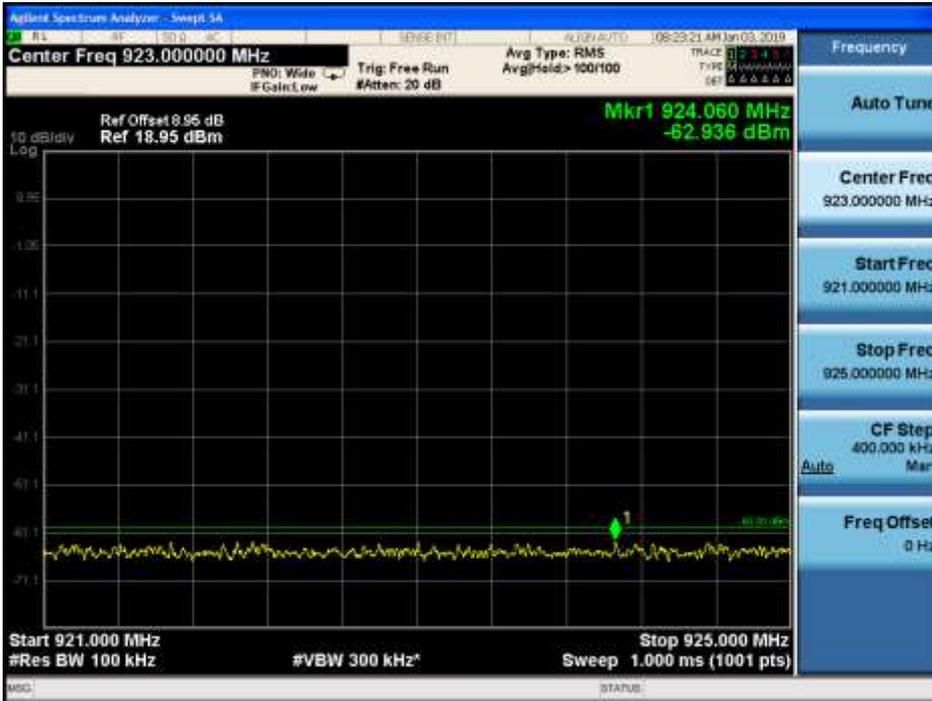
1GHZ~12.75GHZ



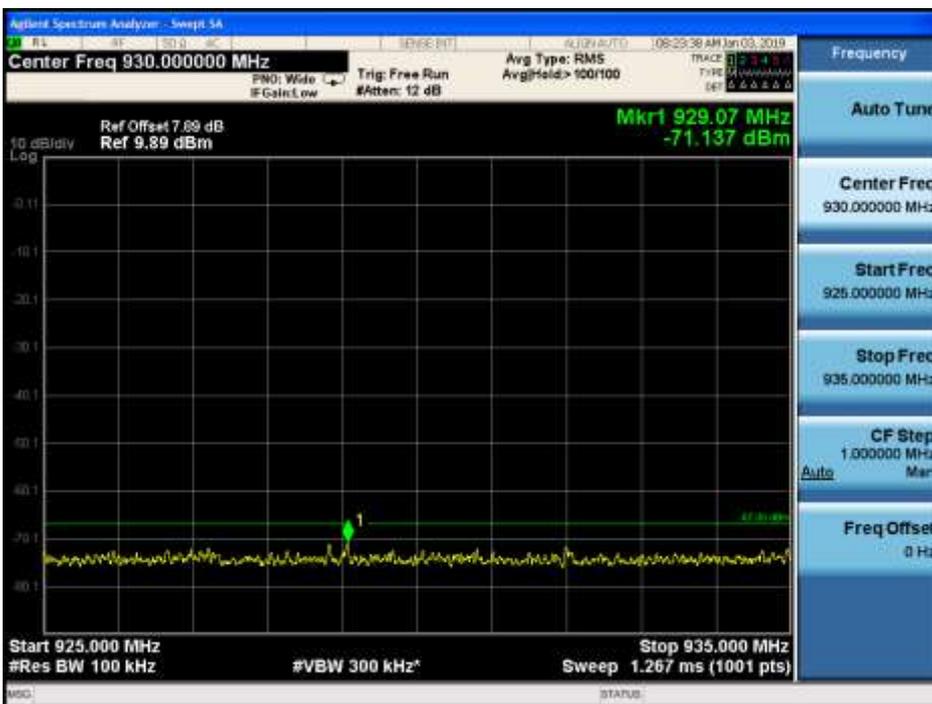
791MHZ~821HZ



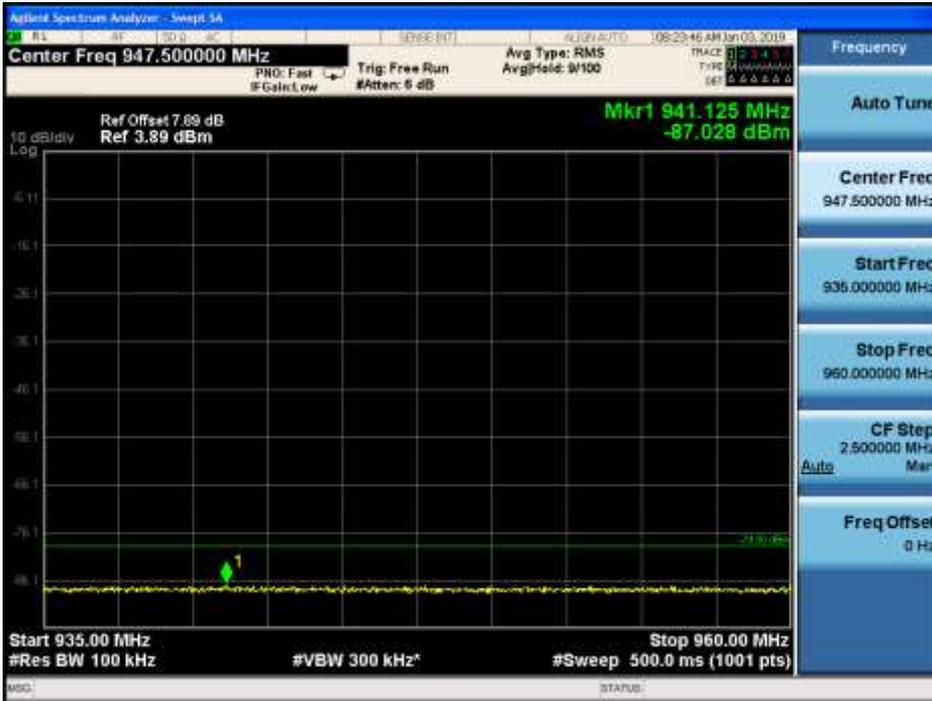
921MHz~925MHz



925MHz~935MHz



935MHz~960MHz



1805MHz~1880MHz



1920MHZ~1980MHZ



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel HCH

30MHZ~1GHZ



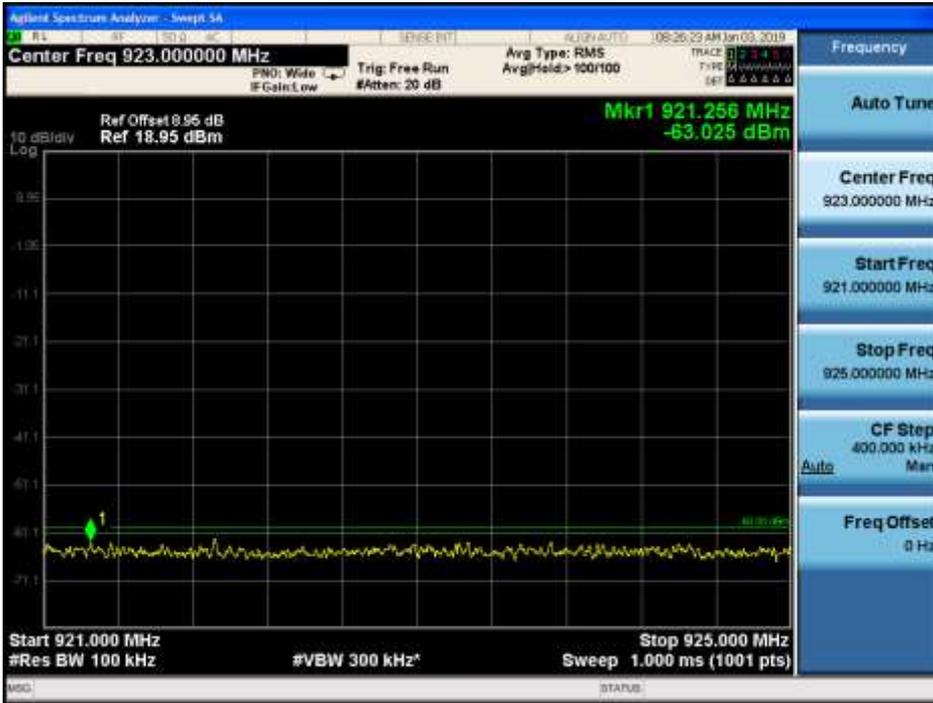
1GHZ~12.75GHZ



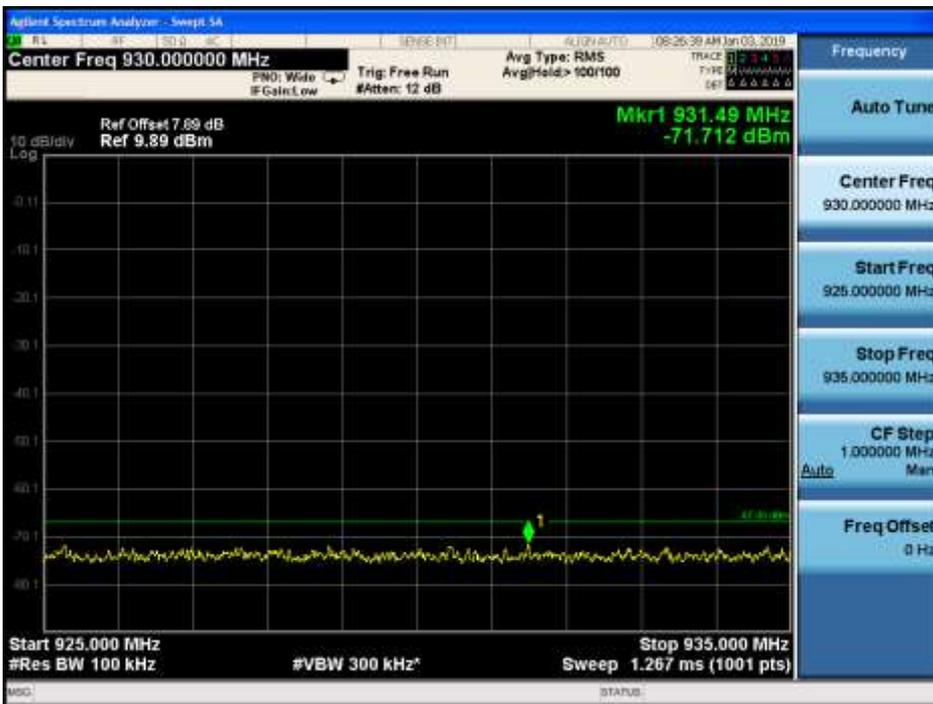
791MHZ~821HZ



921MHZ~925MHZ



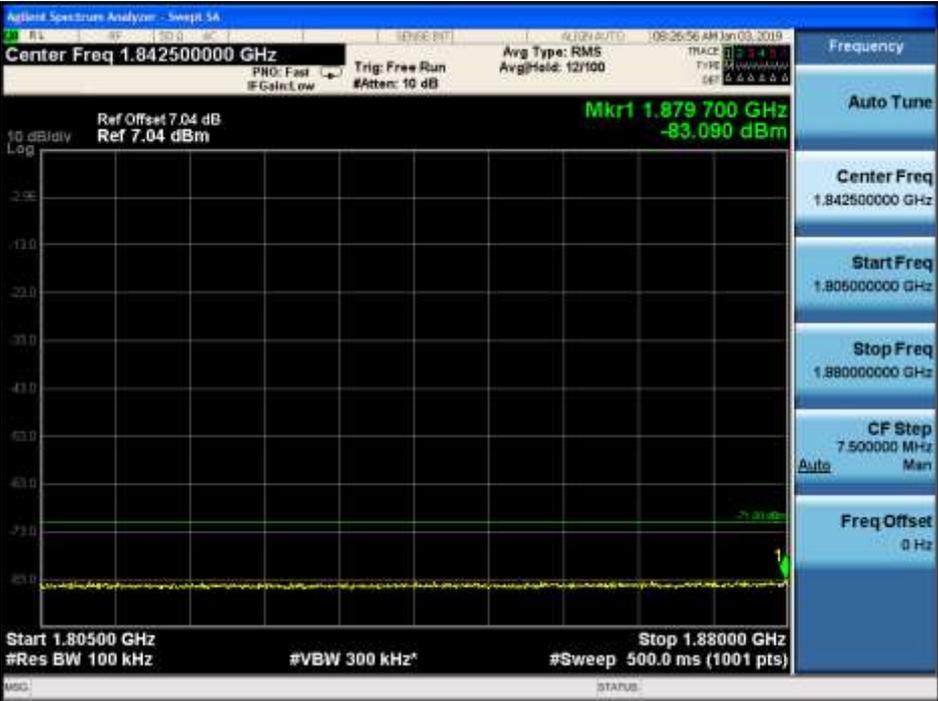
925MHZ~935MHZ



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



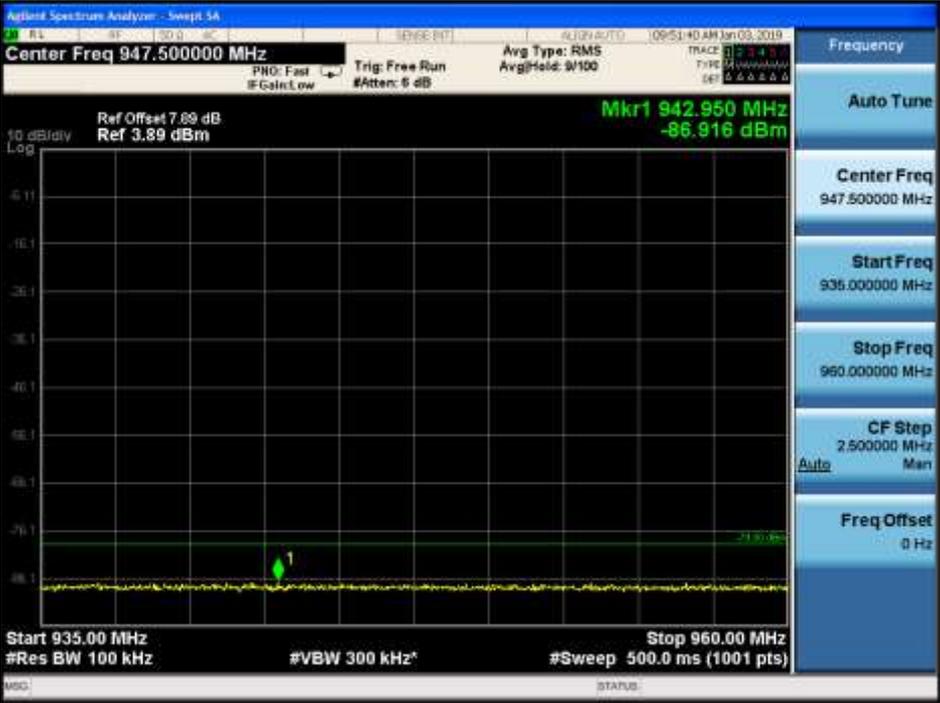
925MHZ~935MHZ



925MHZ~935MHZ



935MHz~960MHz



1805MHz~1880MHz



2110MHZ~2170MHZ



2585MHZ~2690MHZ



Channel MCH
30MHZ~1GHZ



1GHZ~12.75GHZ



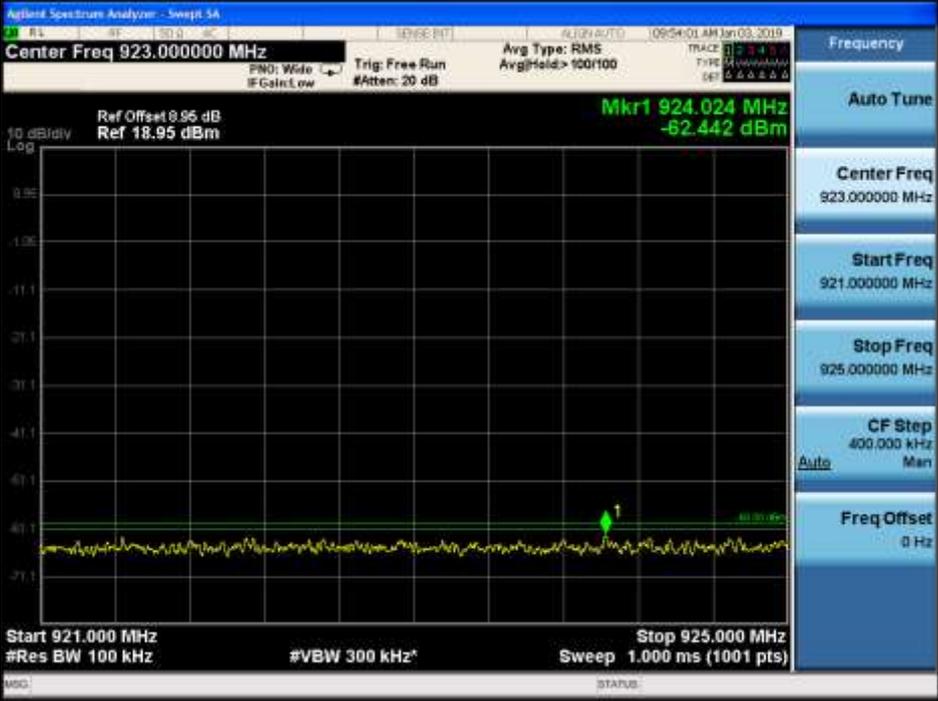
791MHz~821MHz



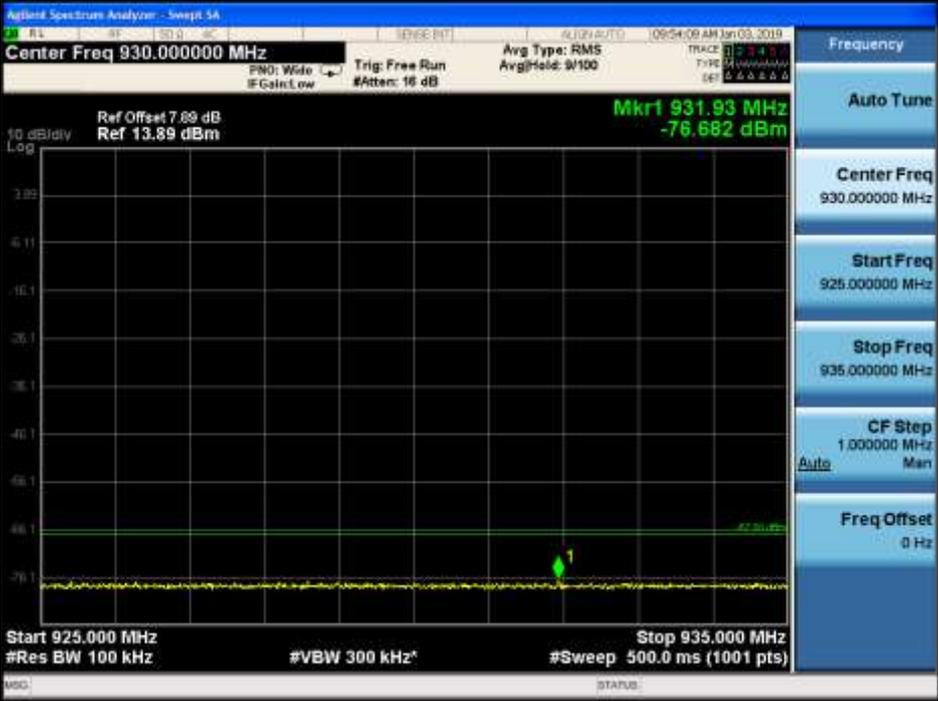
880MHz~915MHz



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



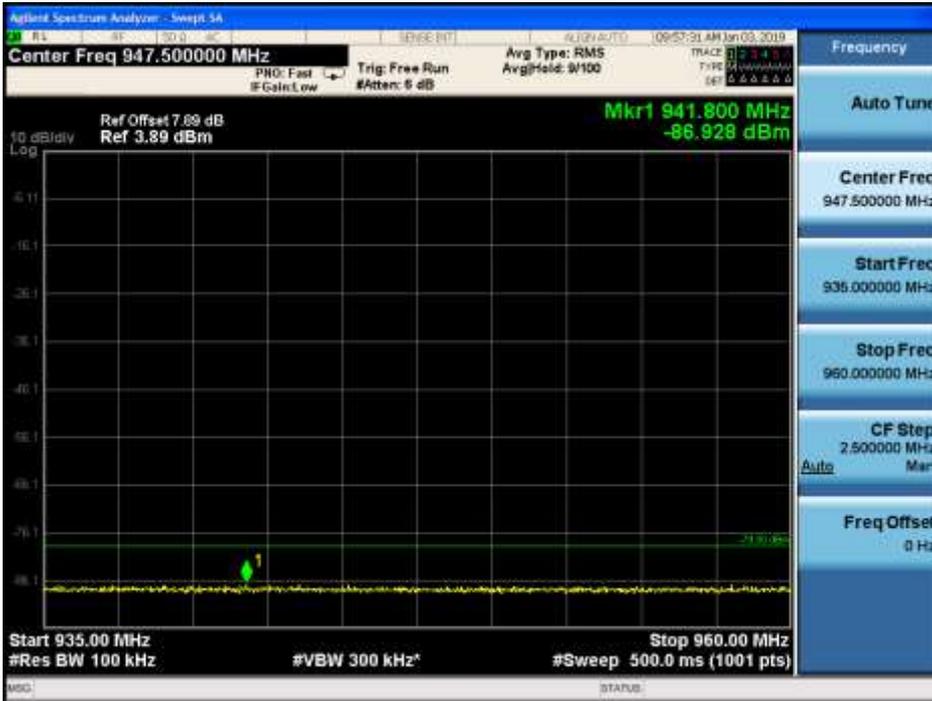
925MHZ~935MHZ



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
Fuw1 (offset)	10	-10	MHz
Fuw2 (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
Fuw1 (offset)	10	-10	MHz
Fuw2 (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 F _{uw} offset 10 MHz)	-44 (For F _{uw} offset 10 MHz)
UE Transmitted mean power	dBm	20 dBm	
F _{uw}	MHz	2102.4 ≤ f ≤ 2177.6	2095 ≤ f ≤ 2185
BER	%	0	0
Result		Pass	Pass

WCDMA Band VIII			
Parameter	Unit	Level	
Blocking mean power (modulated)	dBm	-56 (For F _{uw} offset 10 MHz)	-44 (For F _{uw} offset 10 MHz)
UE Transmitted mean power	dBm	20 dBm	
F _{uw}	MHz	917.4 ≤ f ≤ 967.6	910 ≤ f ≤ 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
F _{uw}	MHz	2050 < f < 2095 2185 < f < 2230	2025 < f ≤ 2050 2230 ≤ f < 2255	1 < f ≤ 2025 2255 ≤ 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>	<REFlor>
		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>	<REFlor>
		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

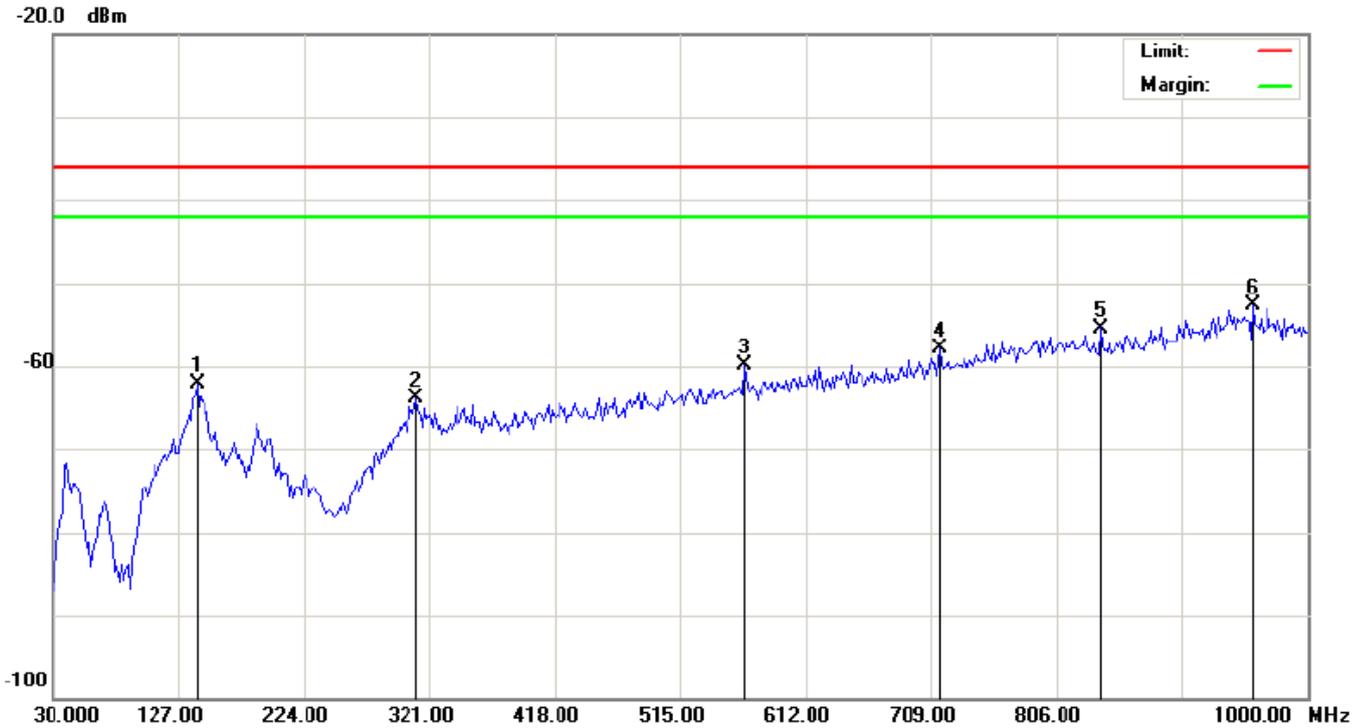
Frequency	RBW	Max .Level (dbm)	Test Band=Band I			Result
			Test Conditions=TNVN			
			Test Channel			
			LCH	MCH	HCH	
30 MHz ≤ f < 1 GHz	100 kHz	-57	-65.23	-66.03	-65.46	Pass
1 GHz ≤ f ≤ 12.75 GHz	1 MHz	-47	-60.21	-60.38	-60.87	Pass
791 MHz ≤ f ≤ 821 MHz	3.84 MHz	-60	-71.23	-71.97	-71.55	Pass
921 MHz ≤ 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

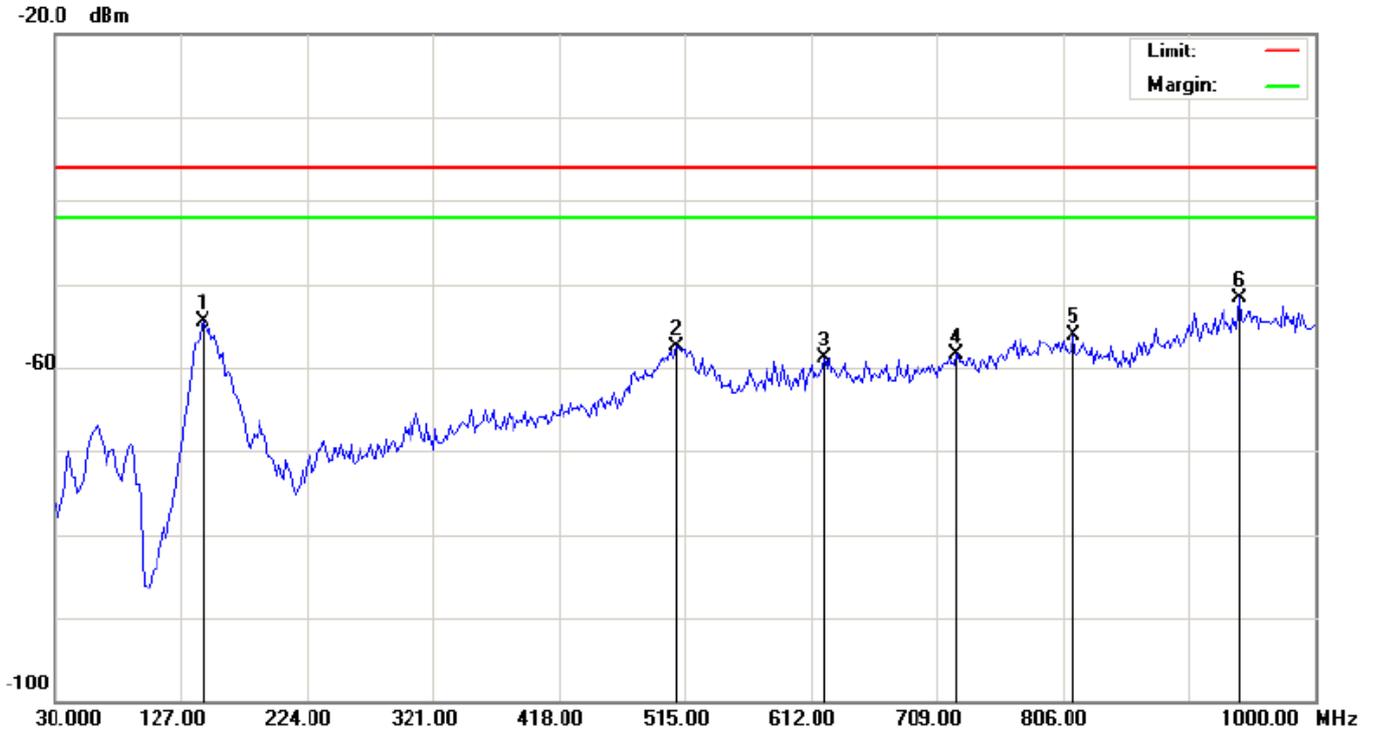
Appendix T. Radiated spurious emissions test result

RADIATED SPURIOUS EMISSIONS UMTS BAND I BELOW 1GHZ– HORIZONTAL



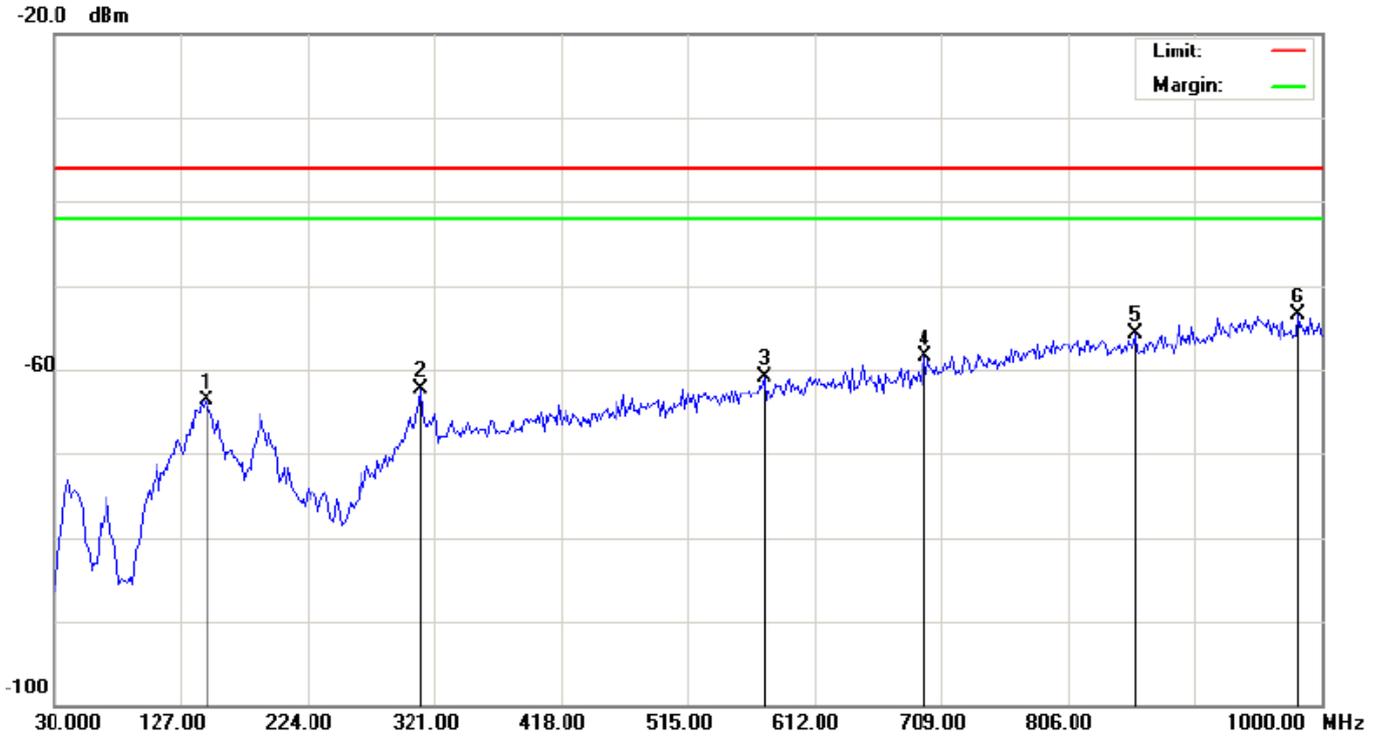
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB		cm	degree	
1		141.5500	-99.12	37.12	-62.00	-36.00	-26.00	peak			
2		311.3000	-101.93	38.09	-63.84	-36.00	-27.84	peak			
3		565.1167	-104.70	44.85	-59.85	-36.00	-23.85	peak			
4		715.4667	-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



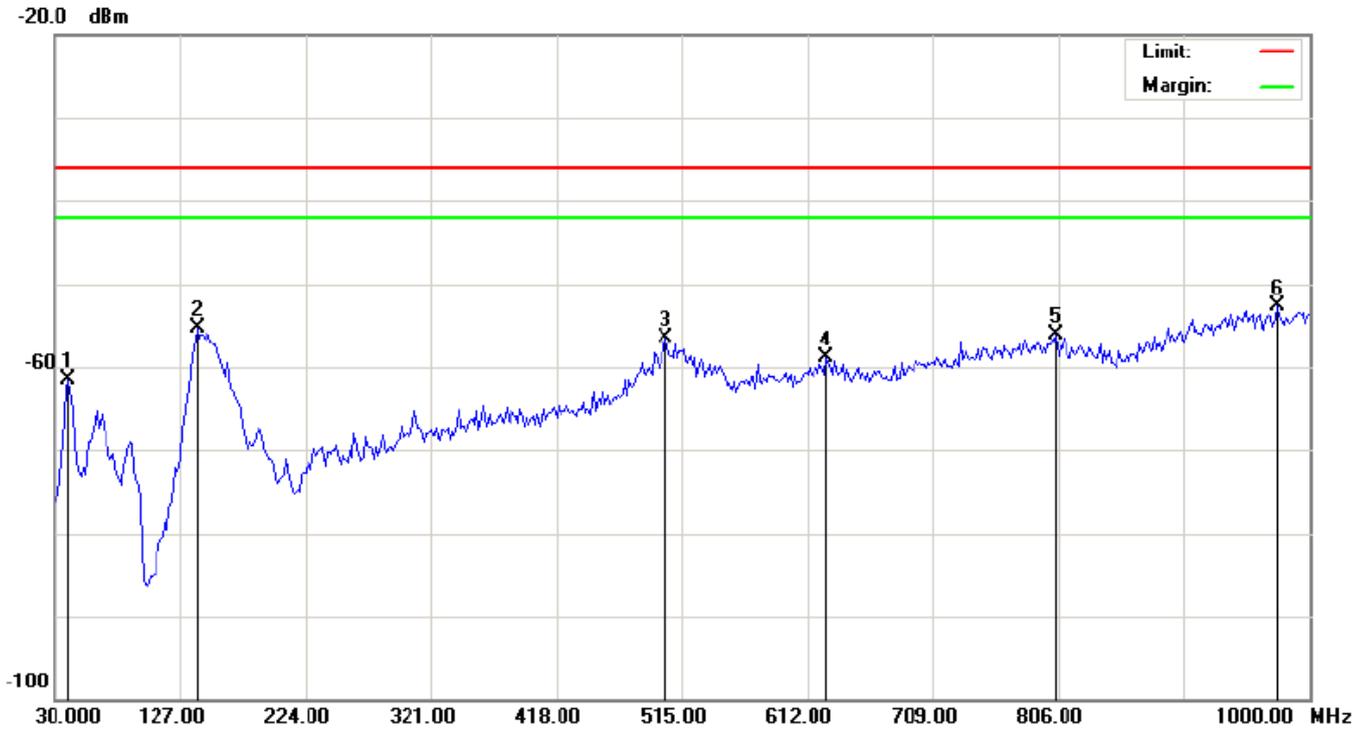
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB		cm	degree	
1		144.7833	-91.66	37.21	-54.45	-36.00	-18.45	peak			
2		508.5333	-100.88	43.39	-57.49	-36.00	-21.49	peak			
3		623.3167	-104.09	45.25	-58.84	-36.00	-22.84	peak			
4		723.5500	-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



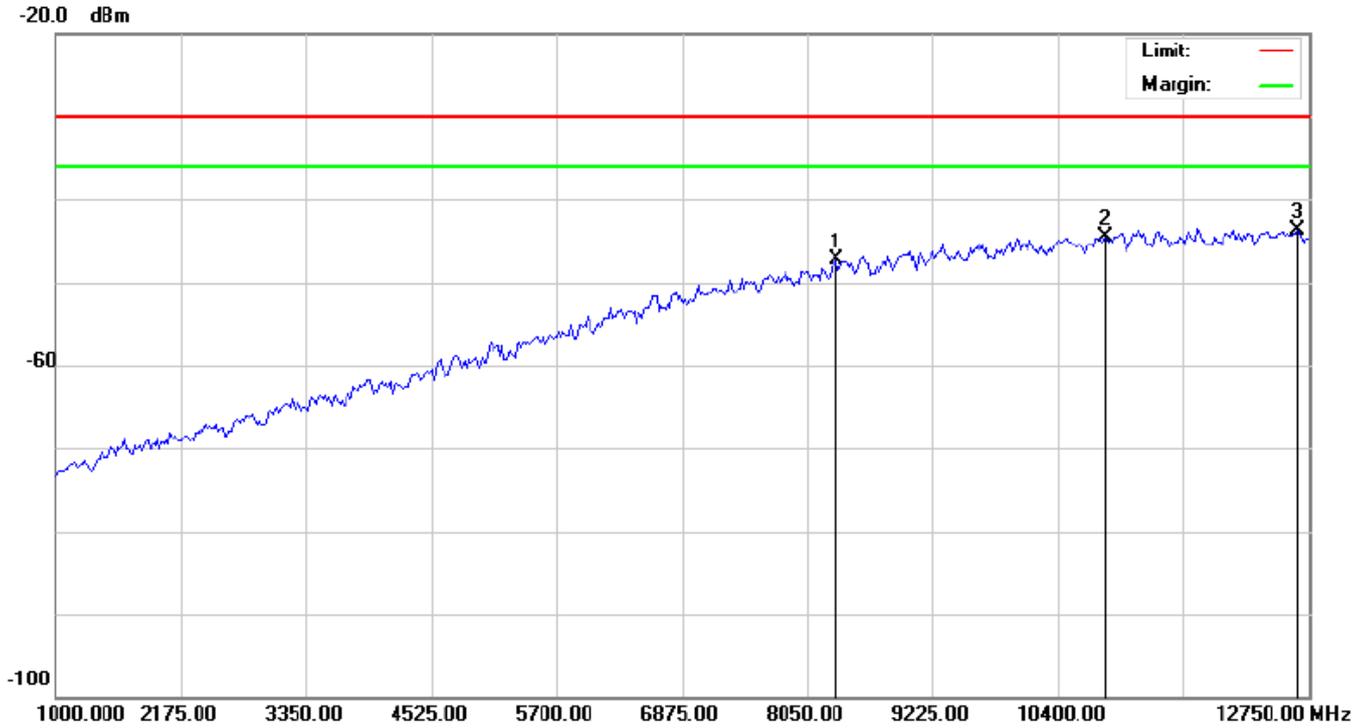
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB		cm	degree	
1		146.4000	-99.56	35.86	-63.70	-36.00	-27.70	peak			
2		311.3000	-100.37	38.09	-62.28	-36.00	-26.28	peak			
3		573.2000	-105.95	44.96	-60.99	-36.00	-24.99	peak			
4		696.0667	-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



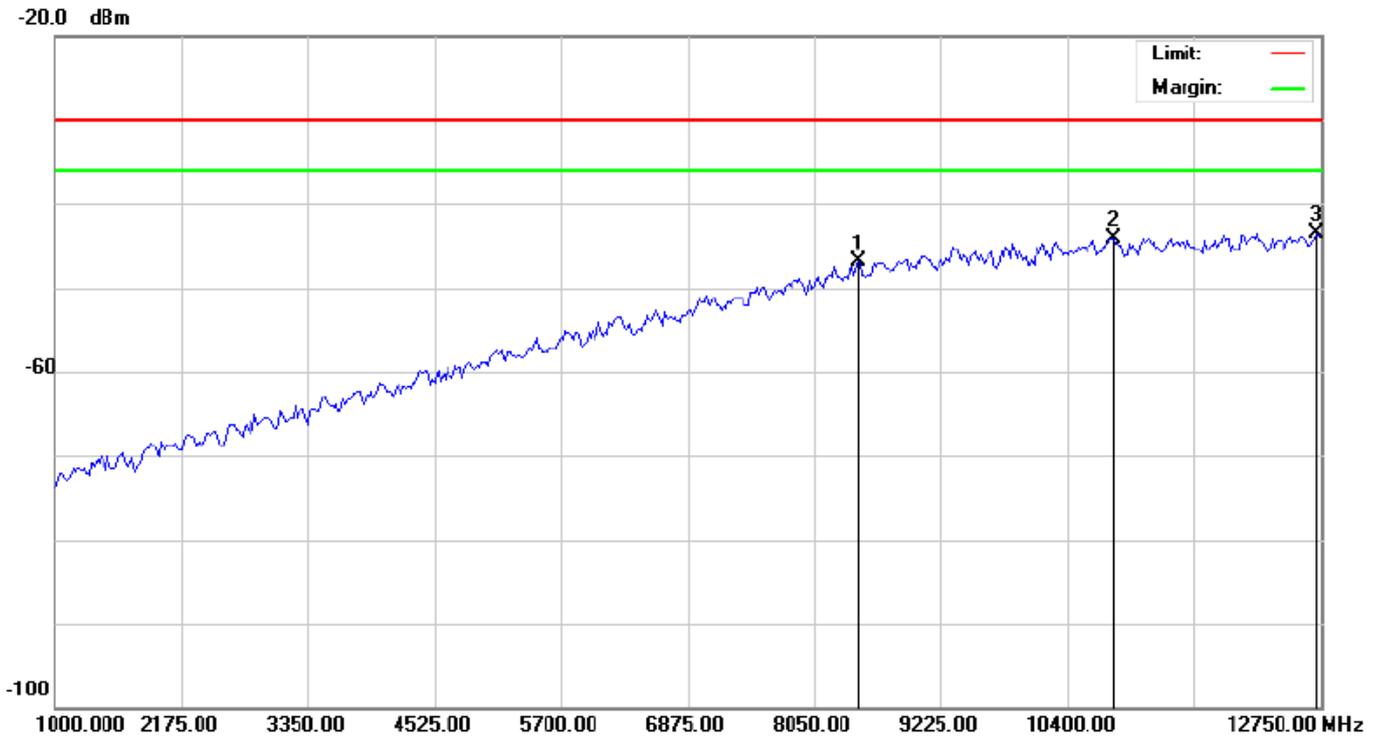
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB		cm	degree	
1		41.3167	-92.22	30.63	-61.59	-36.00	-25.59	peak			
2		139.9333	-92.45	37.17	-55.28	-36.00	-19.28	peak			
3		502.0667	-99.74	43.21	-56.53	-36.00	-20.53	peak			
4		626.5500	-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



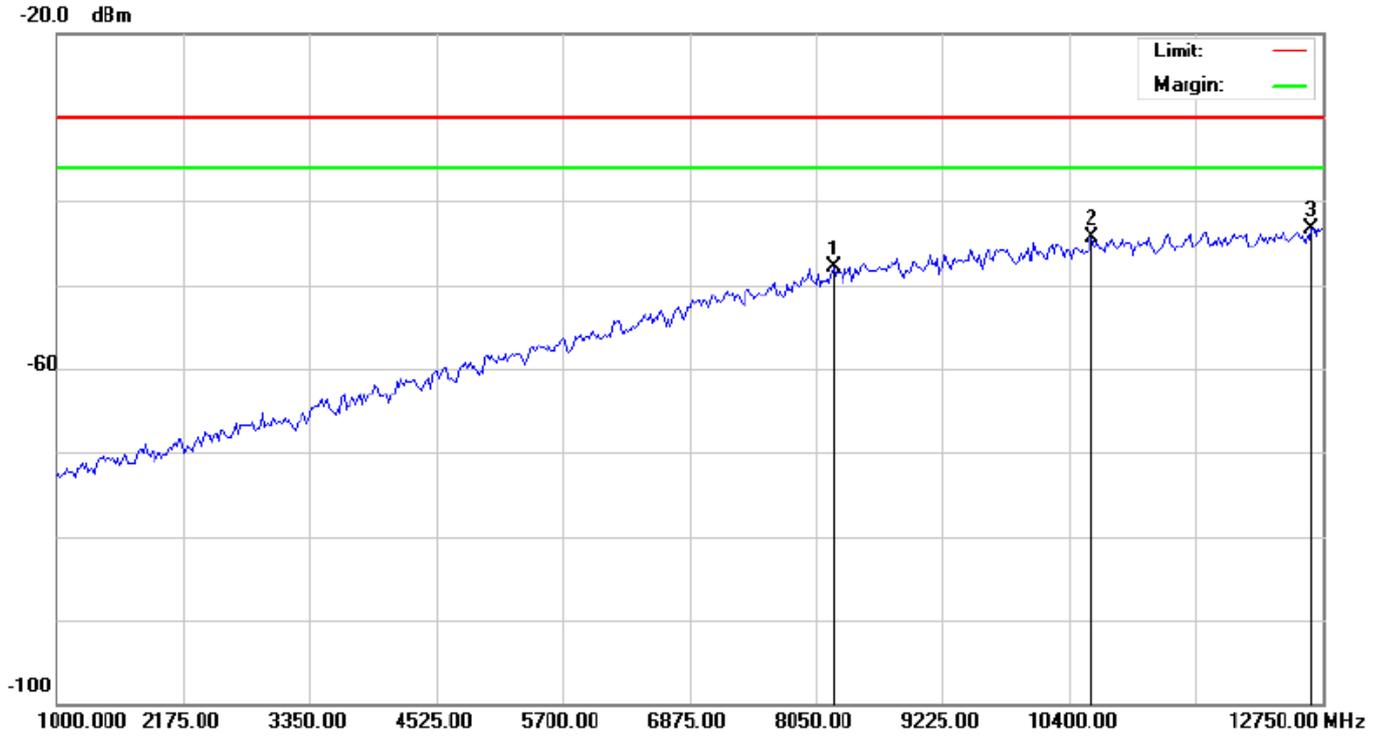
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dBm	dBm	dBm	dB		cm	degree	
1		8324.167	-62.57	15.19	-47.38	-30.00	-17.38	peak			
2		10850.417	-60.18	15.68	-44.50	-30.00	-14.50	peak			
3	*	12652.083	-62.81	19.15	-43.66	-30.00	-13.66	peak			

RADIATED SPURIOUS EMISSIONS UMTS BAND I ABOVE 1GHZ-VERTICAL



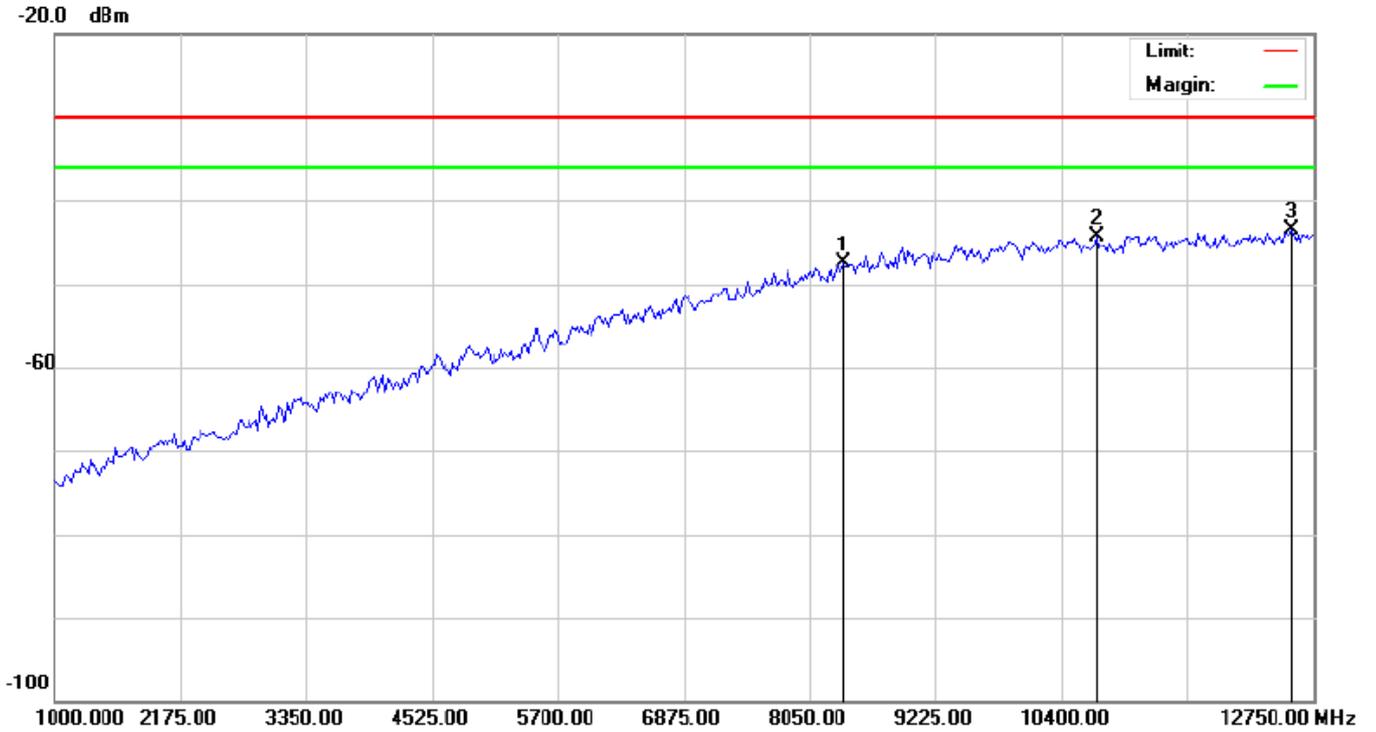
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dBm	dBm	dBm	dB		cm	degree	
1		8461.250	-61.97	15.15	-46.82	-30.00	-16.82	peak			
2		10830.833	-59.75	15.67	-44.08	-30.00	-14.08	peak			
3	*	12710.833	-62.71	19.26	-43.45	-30.00	-13.45	peak			

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 UMTTS BAND VIII ABOVE 1GHZ-VERTICAL

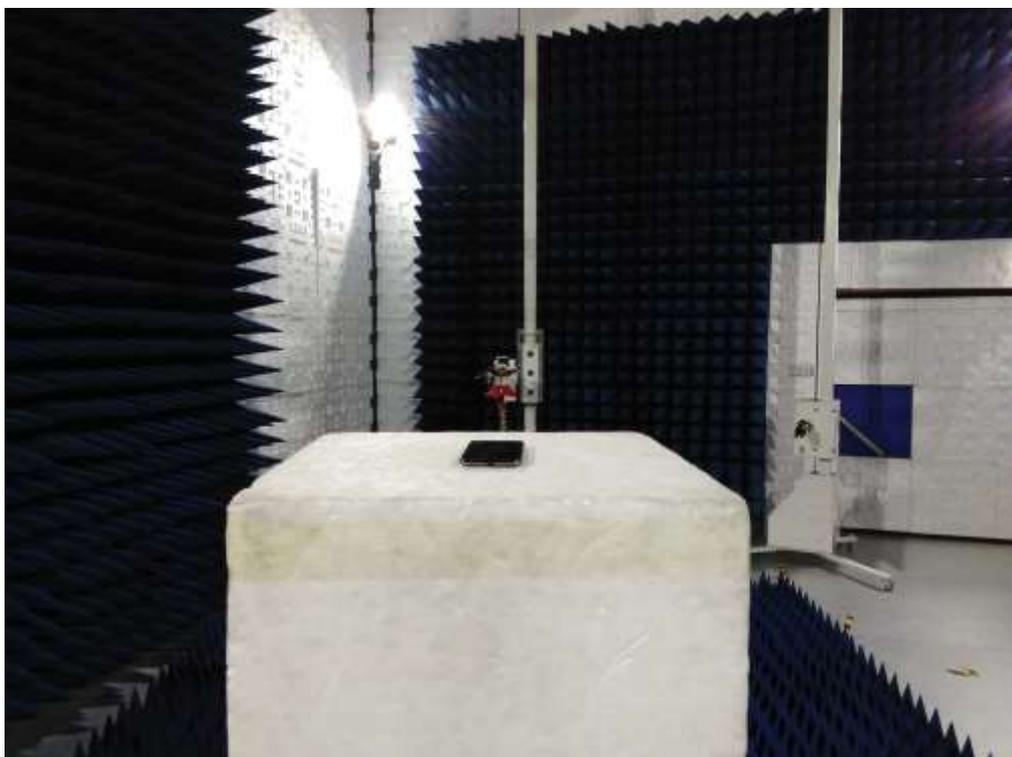


No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBm	dBm	dBm	dBm	dB		cm	degree	
1		8363.333	-62.65	15.18	-47.47	-30.00	-17.47	peak			
2		10732.917	-59.99	15.64	-44.35	-30.00	-14.35	peak			
3	*	12554.167	-62.45	18.98	-43.47	-30.00	-13.47	peak			

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



RADIATED SPURIOUS EMISSION-ABOVE 1G TEST SETUP



Sample label



----END OF REPORT----