



Appendix for test report



1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results(Worst case: External antenna 3dBi)

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
WCDMA850	UMTS/TM1	LCH	23.4	24.25	38.5	PASS
		MCH	23.38	24.23	38.5	PASS
		HCH	23.37	24.22	38.5	PASS
Test Band	Test Mode	Test Channel	Conducted Power	EIRP [dBm]	Limit [dBm]	Verdict
WCDMA1700	UMTS/TM1	LCH	23.21	26.21	30	PASS
		MCH	22.95	25.95	30	PASS
		HCH	23	26	30	PASS
WCDMA1900	UMTS/TM1	LCH	22.68	25.68	33	PASS
		MCH	22.48	25.48	33	PASS
		HCH	22.85	25.85	33	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

Note2:

SET Span=1.5*OBW

SET RBW=1%of the OBW, not to exceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector: RMS



2Appendix_B: Peak-to-Average Ratio

void

3Appendix_C: Modulation Characteristics

void

4Appendix_D: Bandwidth

void

5Appendix_E: Band Edges Compliance

void

6Appendix_F: Spurious Emission at Antenna Terminal

void



7Appendix_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, RBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, RBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

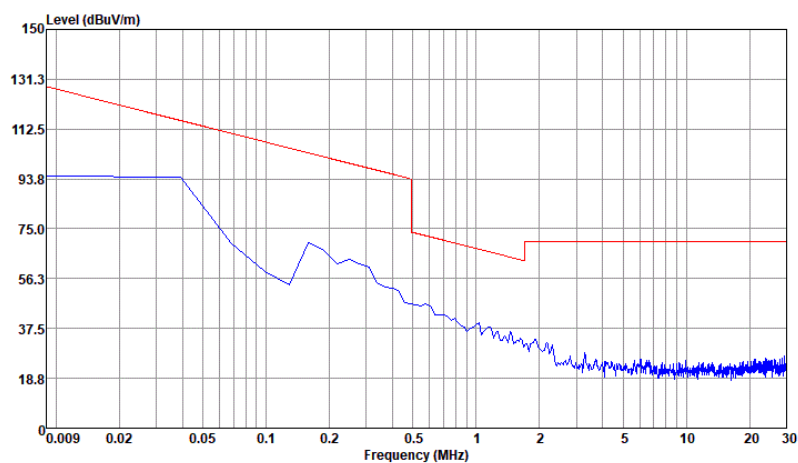
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

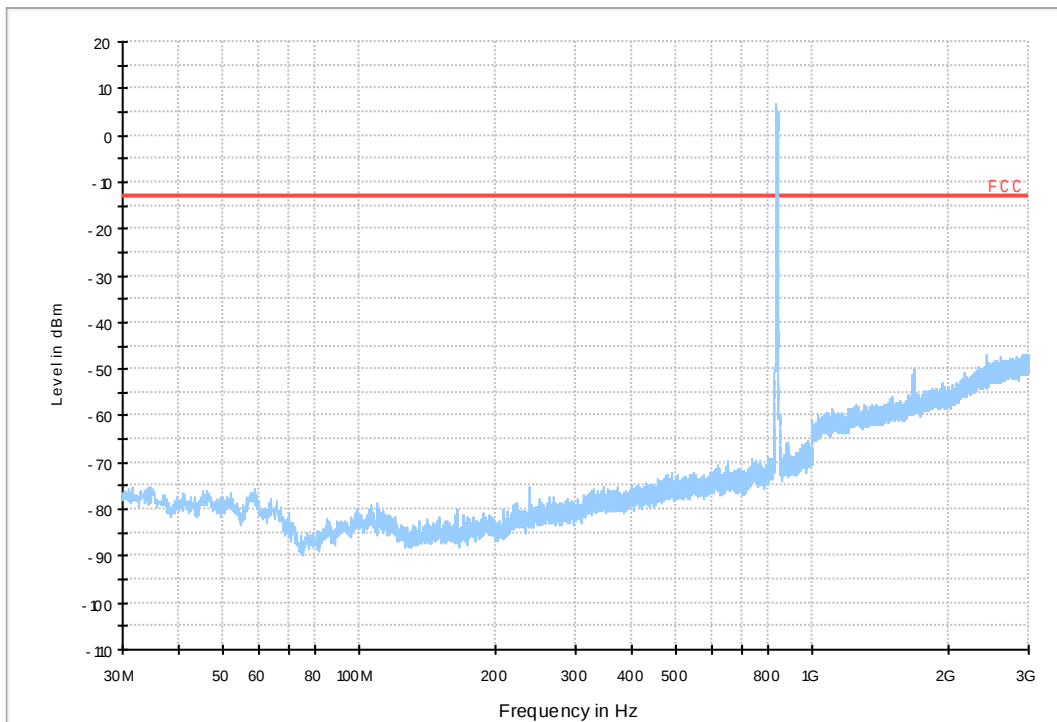
7.1 For UMTS

7.1.1 Test Band = WCDMA850_ External antenna 1dBi

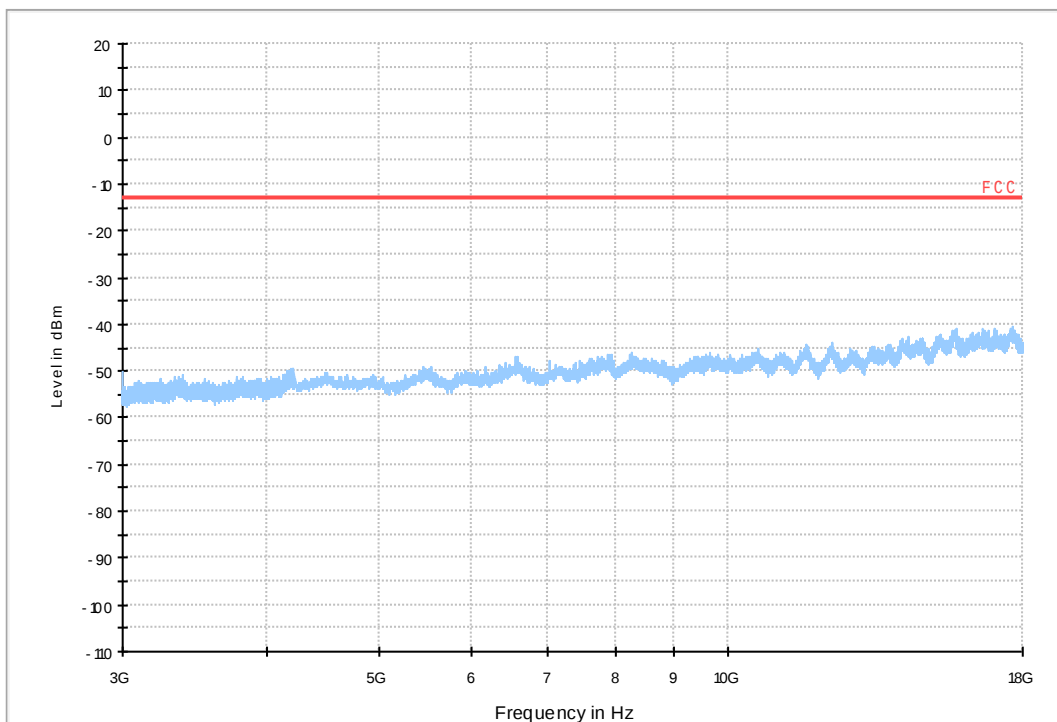
7.1.1.1 Test Mode = UMTS/TM1



06 FCC PART 22 WCDMA850_L

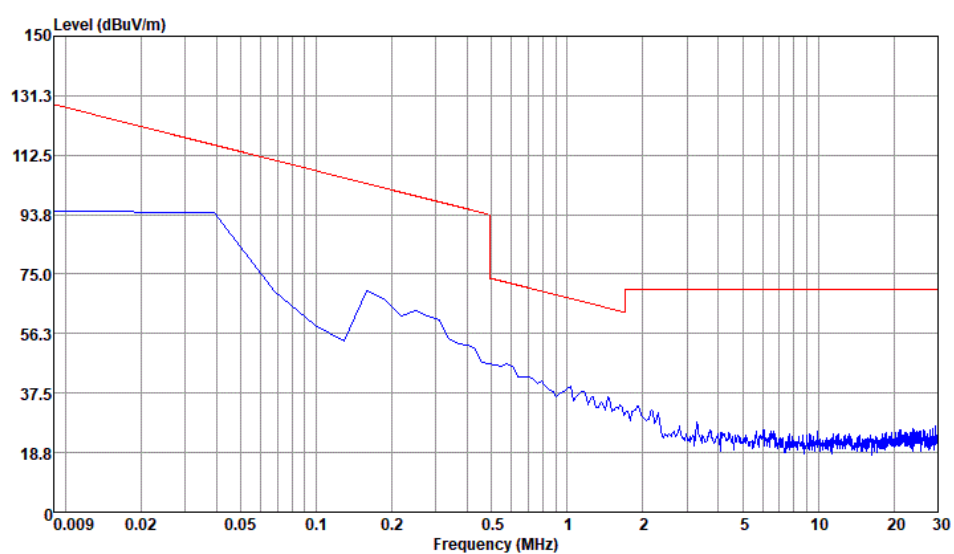


05 FCC PART 22 WCDMA850_H

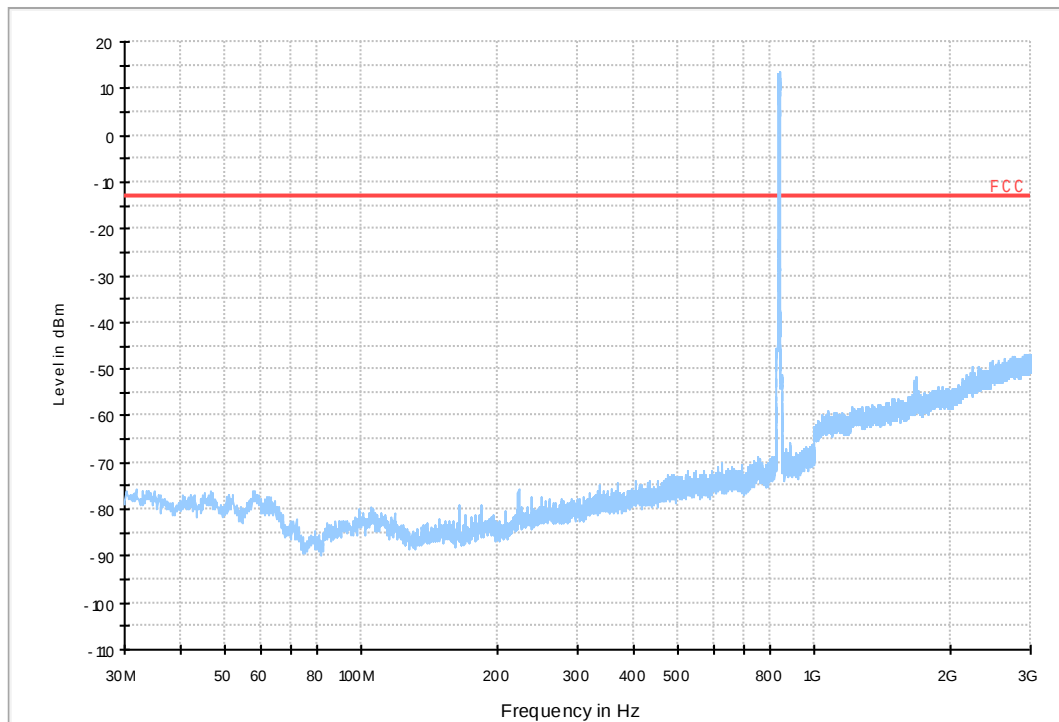


7.1.2 Test Band = WCDMA850_ External antenna 3dBi

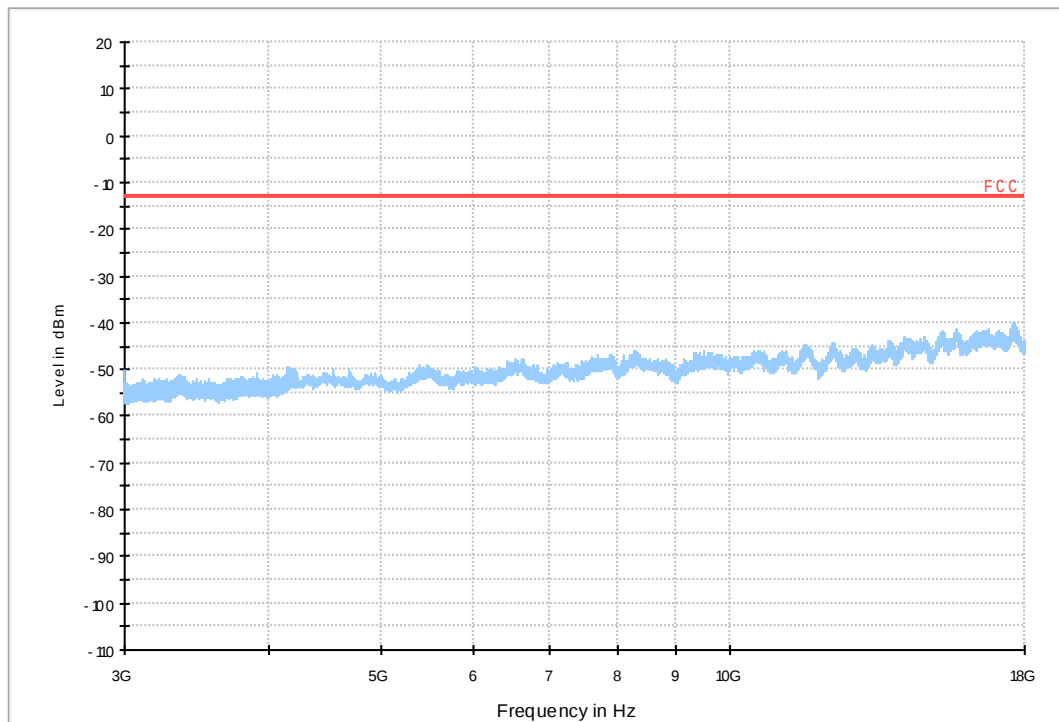
7.1.2.1 Test Mode = UMTS/TM1



06 FCC PART 22 WCDMA850_L

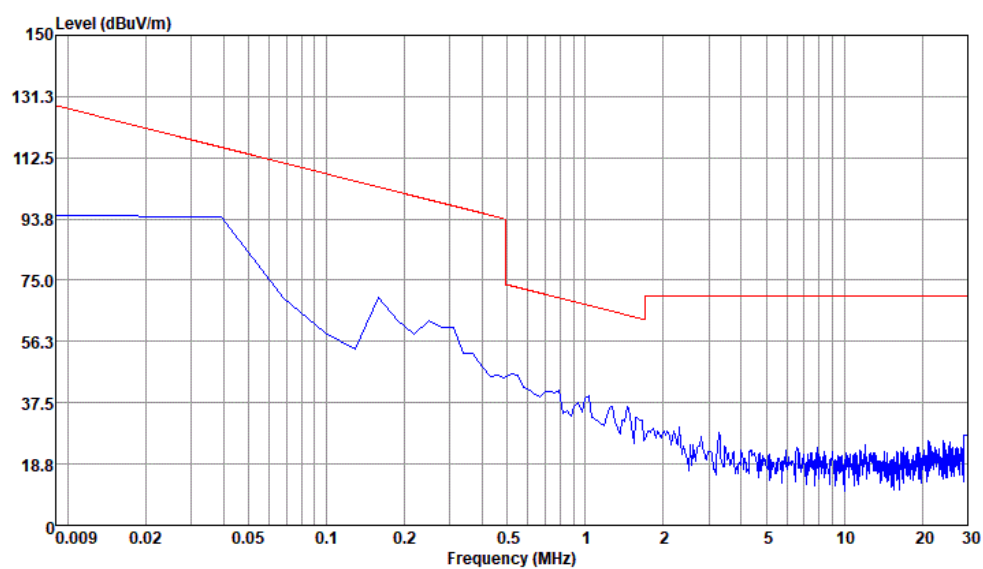


05 FCC PART 22 WCDMA850_H

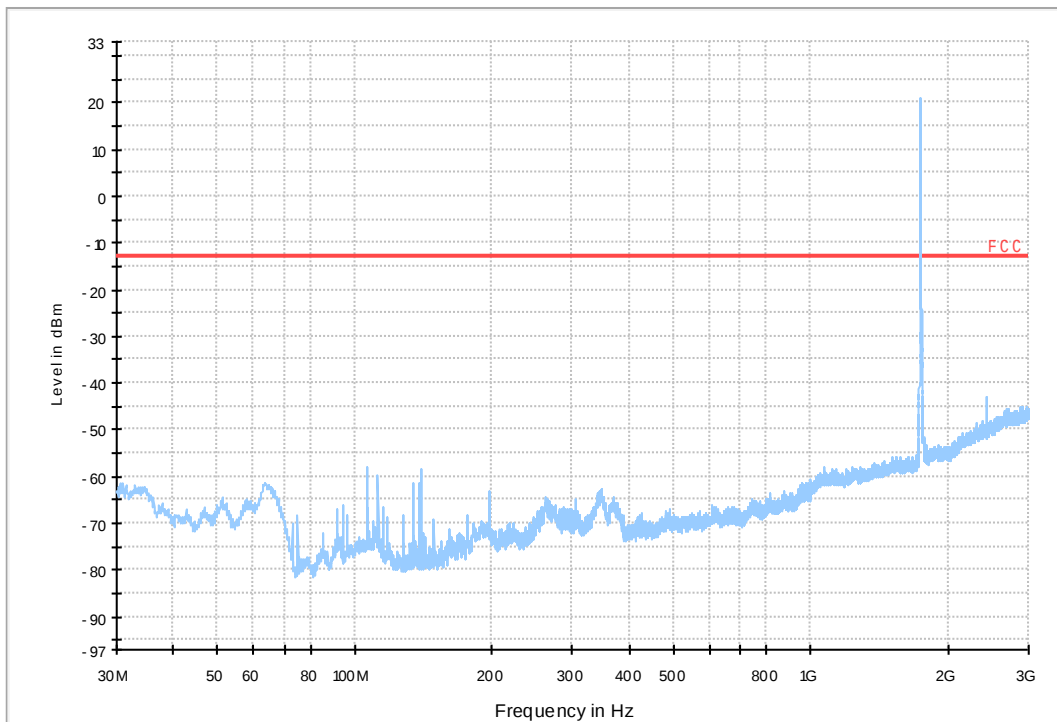


7.1.3 Test Band = WCDMA1700_ External antenna 1dBi

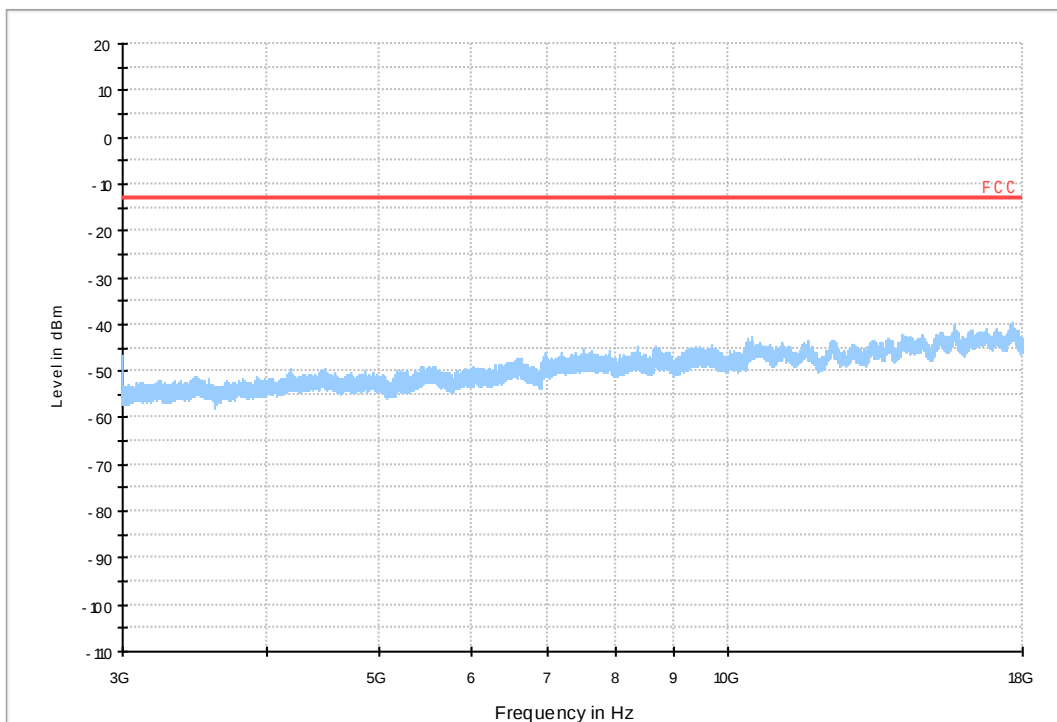
7.1.3.1 Test Mode = UMTS/TM1



18 FCC PART 27 WCDMA1700_L

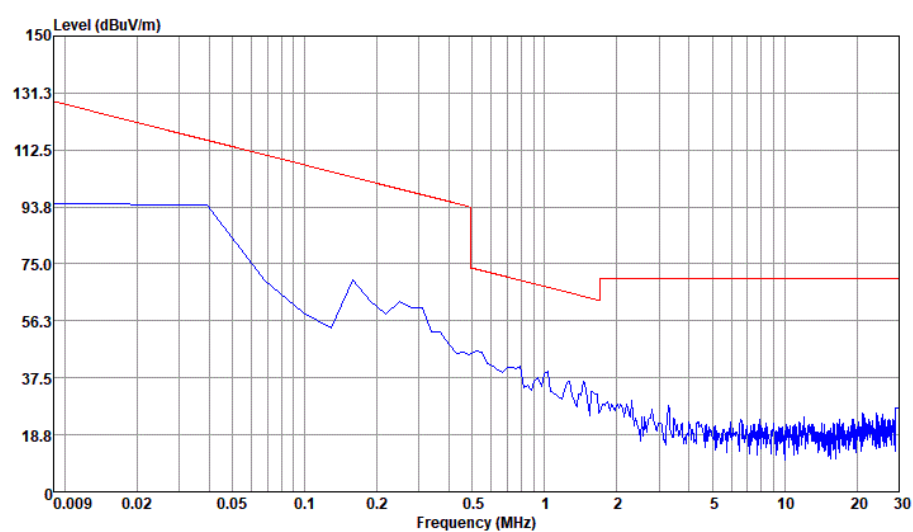


17 FCC PART 27 WCDMA1700_H

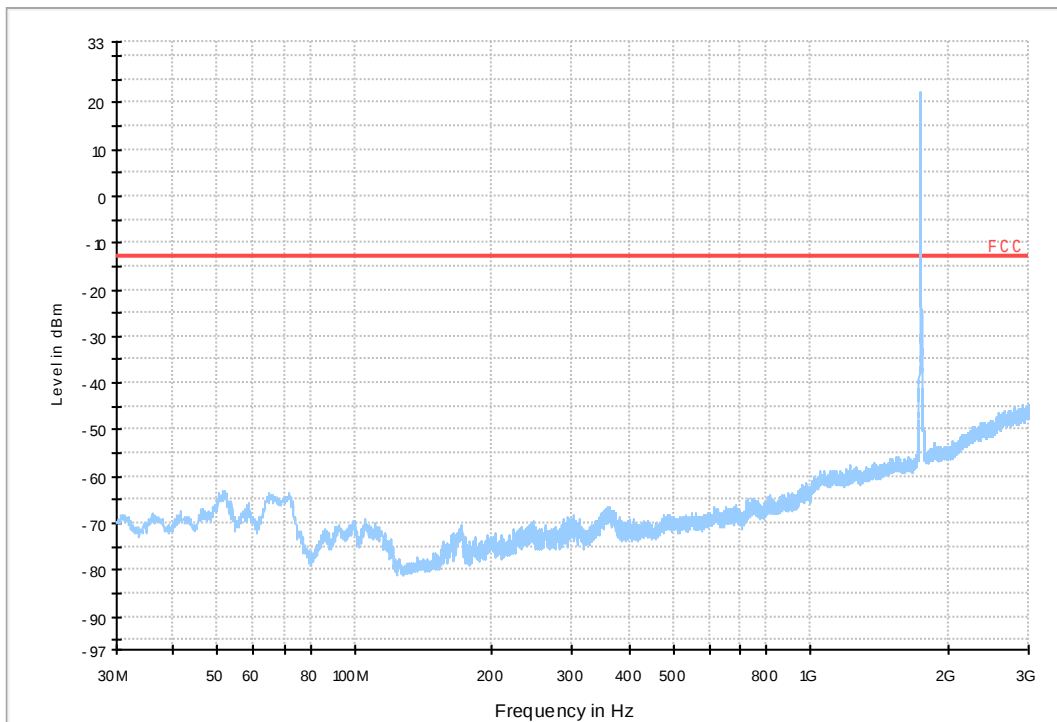


7.1.4 Test Band = WCDMA1700_ External antenna 3dBi

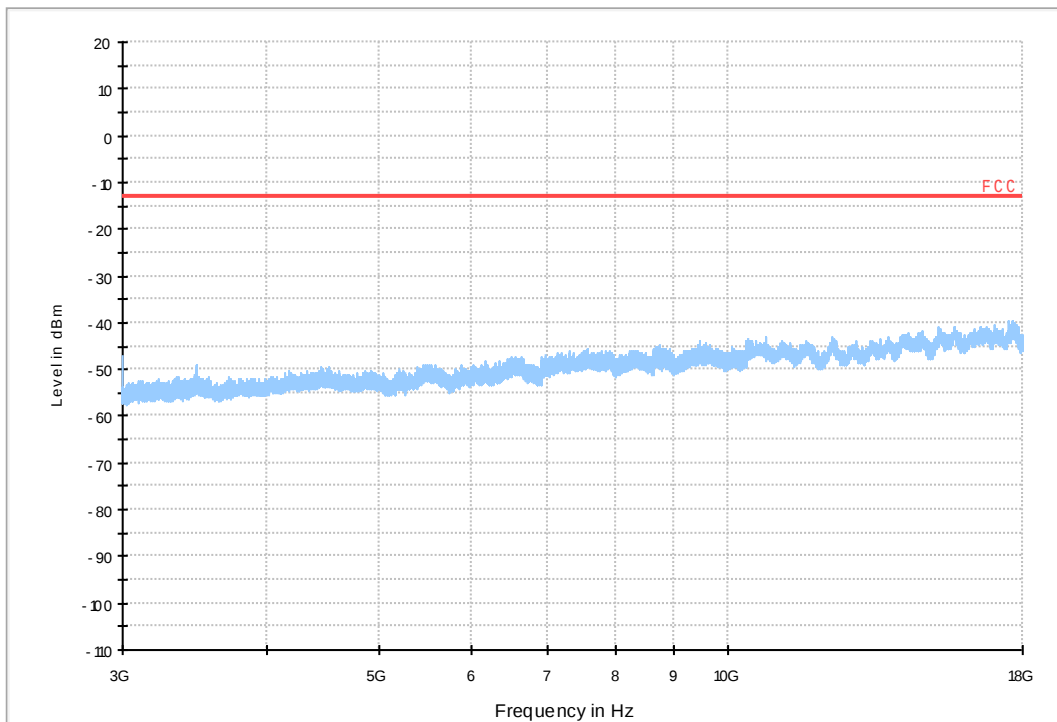
7.1.4.1 Test Mode = UMTS/TM1



18 FCC PART 27 WCDMA1700_L

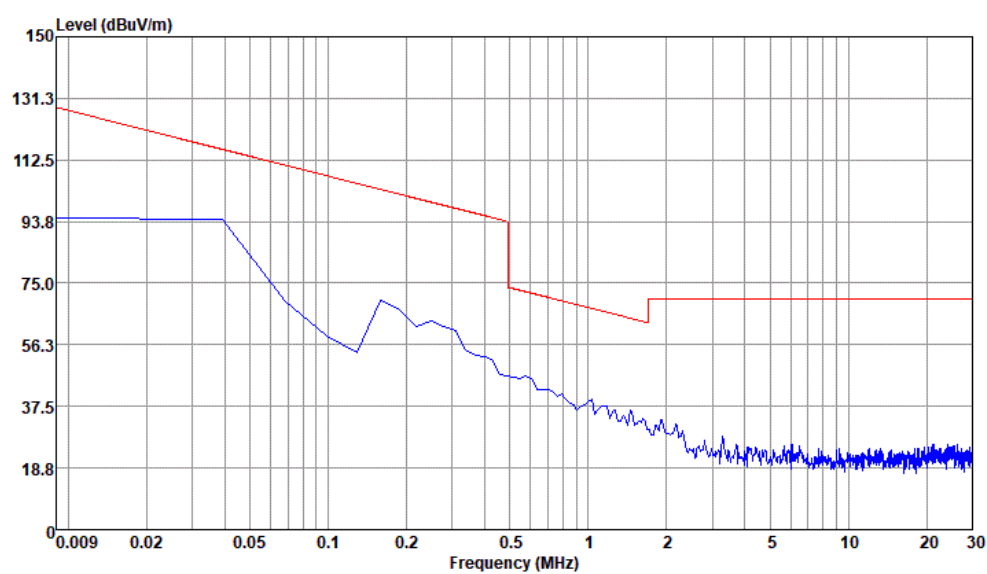


17 FCC PART 27 WCDMA1700_H

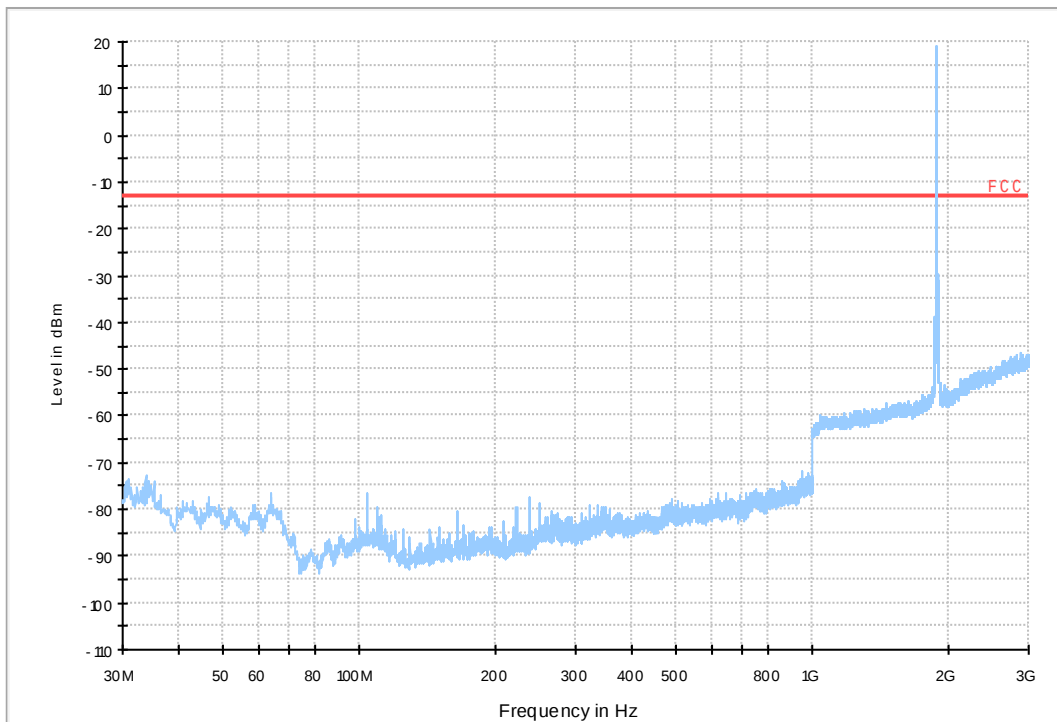


7.1.5 Test Band = WCDMA1900_ External antenna 1dBi

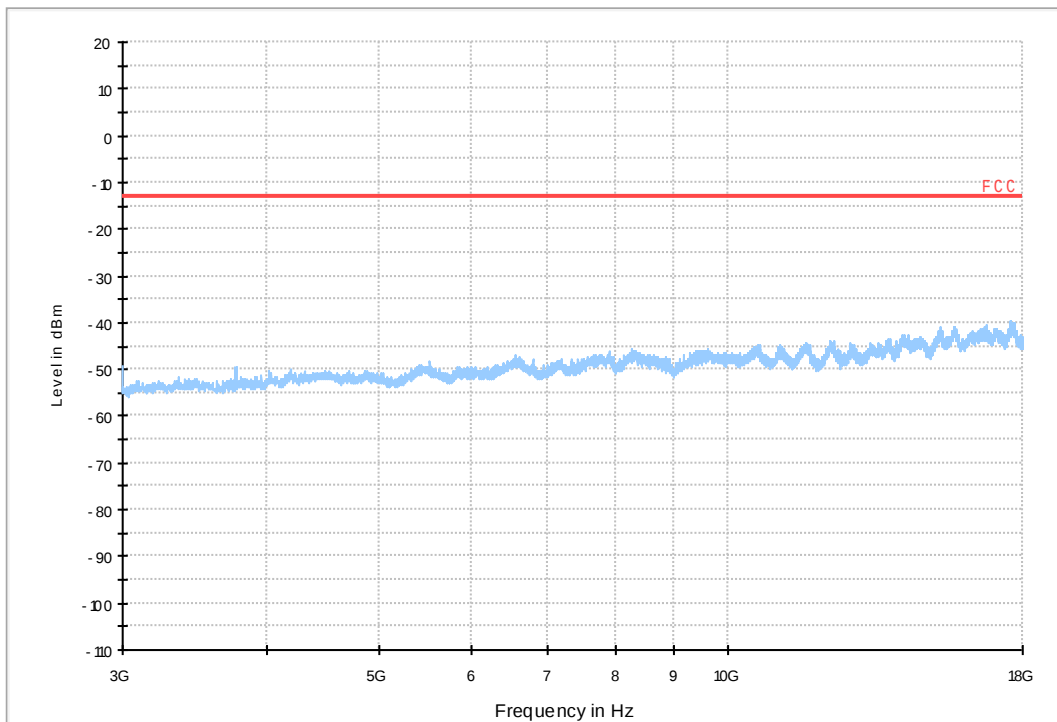
7.1.5.1 Test Mode = UMTS/TM1



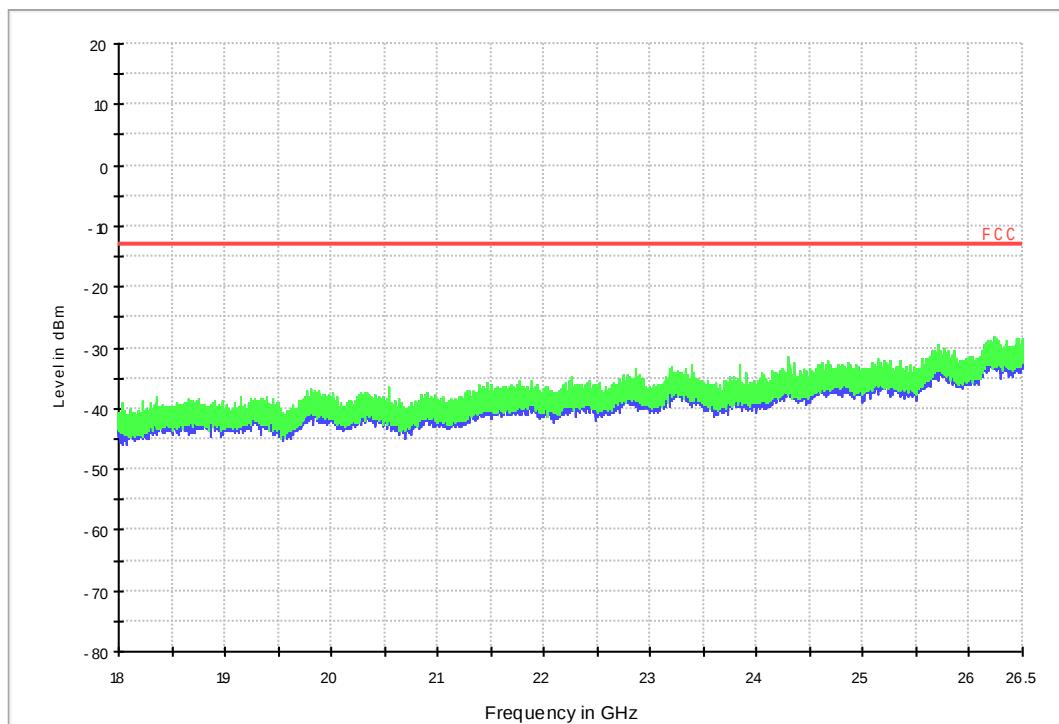
12 FCC PART 24 WCDMA1900_L



11 FCC PART 24 WCDMA1900_H

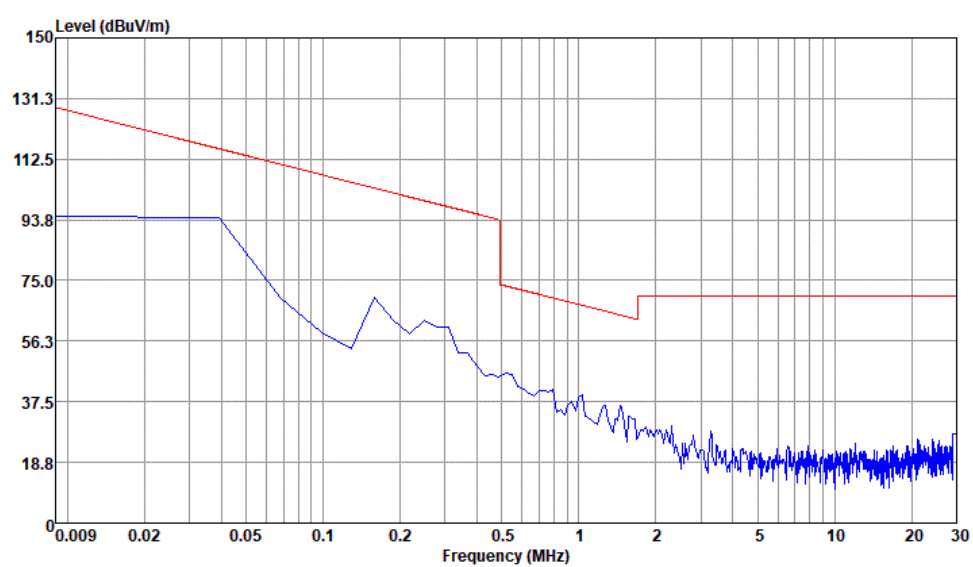


18G~26.5G R SE-T X-DIRECTOR ABOVE 1.5G PK

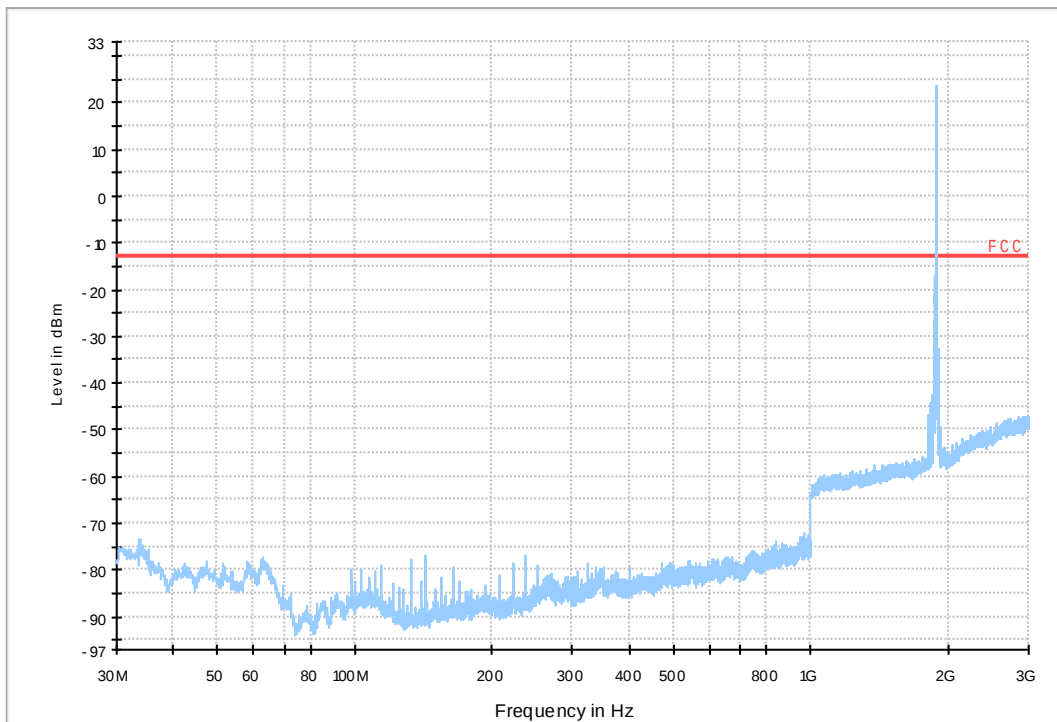


7.1.6 Test Band = WCDMA1900_ External antenna 3dBi

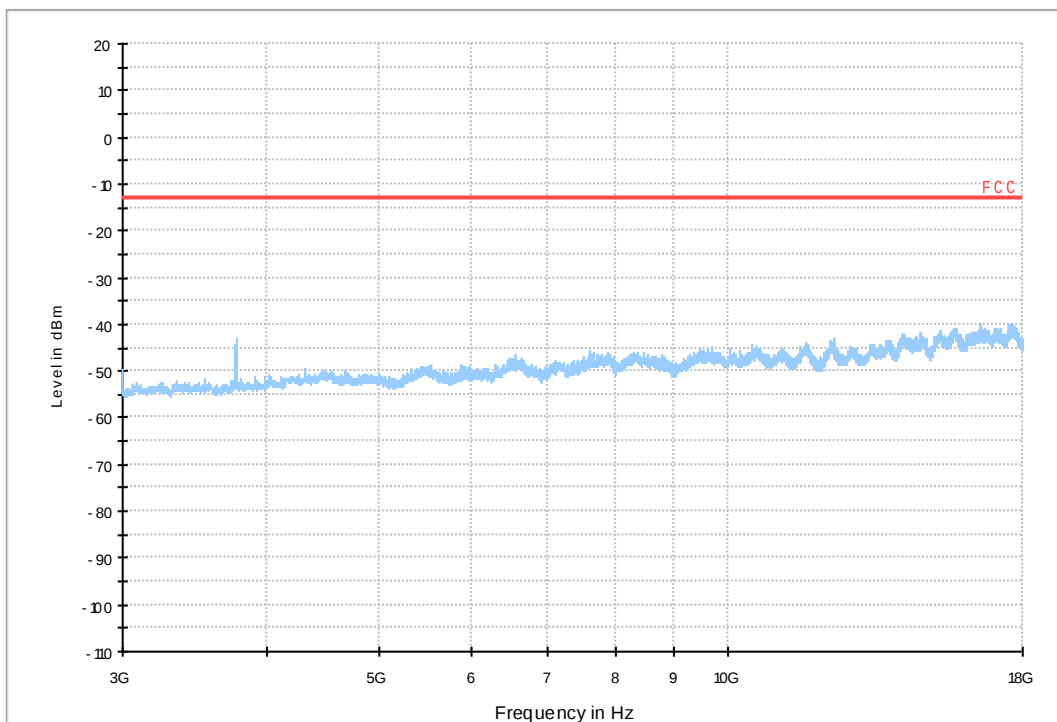
7.1.6.1 Test Mode = UMTS/TM1



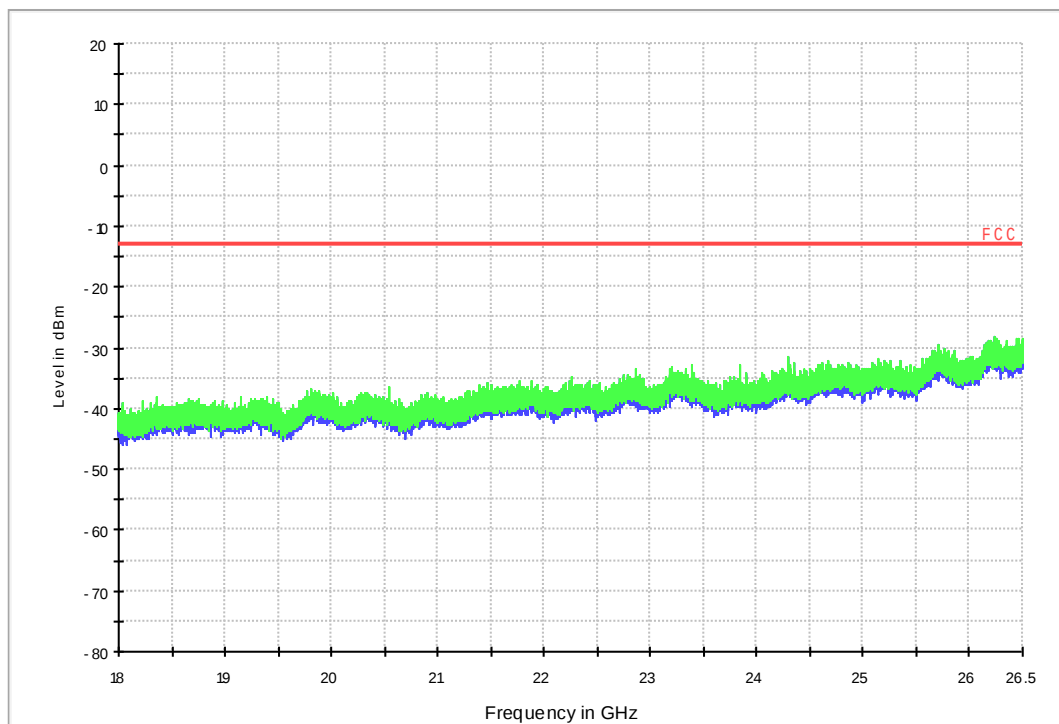
12 FCC PART 24 WCDMA1900_L



11 FCC PART 24 WCDMA1900_H



18G~26.5G R SE-T X-DIRECTOR ABOVE 1.5G PK





8Appendix_H: Frequency Stability

void

END