FCC/IC Test Report

FOR:

Manufacturer: SmartSynch Inc.

Model Name: SSI I210 1x

FCC ID: QHC-SSI2101X

IC ID: 4393B-SSI2101X

47 CFR Part 2, 22, 24

RSS-129 Issue 2

RSS-133 Issue 5

TEST REPORT #: EMC_SMAR1_023_10001 _FCC_22_24 CDMA
DATE: 2010-06-17

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 2135.01

Bluetooth Qualification Test Facility (BQTF)

CTIA Authorized Test Lab
LAB CODE 20020328-00

FCC listed: A2LA accredited

IC recognized # 3462B-1

***CETECOM* Inc.**
411 Dixon Landing Road ◆ Milpitas, CA 95035 ◆ U.S.A.
Phone: + 1 (408) 586 6200 ◆ Fax: + 1 (408) 586 6299 ◆ E-mail: info@cetecomusa.com ◆ http://www.cetecom.com
CETECOM Inc. is a Delaware Corporation with Corporation number: 2113686
Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

Table of Contents

1 Assessment

The following is in compliance with the applicable criteria specified in FCC rules Parts 2, 22 and 24 of Title 47 of the Code of Federal Regulations and Industry Canada Standards RSS 129 and RSS 133.

Company	Description	Model #
SmartSynch Inc.	**Wireless Utility Meter with CDMA & ZiGBEE radios.**	**SSI I210 1x**

Responsible for Testing Laboratory:

Date	Section	Name	Signature
2010-06-17	Compliance	Marc Douat (Test Lab Manager)	

Responsible for the Report:

Date	Section	Name	Signature
2010-06-17	Compliance	Josie Sabado (Project Engineer)	Josie Sabado I am the author of this document

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	CETECOM Inc.
Department:	Compliance
Address:	411 Dixon Landing Road Milpitas, CA 95035 U.S.A.
Telephone:	+1 (408) 586 6200
Fax:	+1 (408) 586 6299
Responsible Test Lab Manager:	Heiko Strehlow
Responsible Project Leader:	Josie Sabado

2.2 Identification of the Client

Applicant's Name:	SmartSynch Inc.
Street Address:	4400 Old Canton Road, Suite 300
City/Zip Code	Jackson, MS 39211
Country	USA
Contact Person:	Mike Mathis
Phone No.	601-362-1780 ext 1018
Fax:	601-362-1787
e-mail:	mmathis@smartsynch.com

2.3 Identification of the Manufacturer

Same as above client.

3 Equipment under Test (EUT)

3.1 Specification of the Equipment under Test

Marketing Name:	SSI I210 1x
Model No:	SSI I210 1x
Product Type:	Fixed
Hardware Revision :	55M-000600006
Software Revision :	660-040100-P01
FCC-ID:	QHC-SSI2101X
IC-ID :	4393B-SSI2101X
Frequency:	Cellular US CDMA: 824.70-848.31 MHz PCS CDMA: 1851.25- 1908.75 MHz
Antenna Type:	Integral antenna 800 band: -2.9 dBi gain 1900 band: 3.2 dBi gain
Power Supply:	240VAC

3.2 Identification of the Equipment Under Test (EUT)

EUT #	Serial Number	HW Version	SW Version	Comment
1	N/A	55M-000600006	660-040100-P01	Radiated Unit
2	N/A	55M-000600006	660-040100-P01	Conducted Unit

3.3 Identification of Accessory equipment

AE #	Type	Manufacturer	Model	Serial Number	Comment
1	Power Transformer	Acme	N/A	N/A	Converts 120VAC to 240VAC

4 Subject of Investigation

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT as specified by requirements listed in the following test standards:

- 47 CFR Part 2: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission Frequency allocations and radio treaty matters; general rules and regulations.
- 47 CFR Part 22: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission subchapter B- common carrier services; Part 22- Public mobile services
- 47 CFR Part 24: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission subchapter B- common carrier services; Part 24- Personal communication services
- RSS 132- Issue 2: Spectrum management and telecommunication policy- Radio Standards Specifications Cellular telephones employing new technologies operating in the bands 824-849MHz and 869-894MHz
- RSS 133- Issue 5: Spectrum management and telecommunication policy- Radio Standards Specifications- 2GHz personal communication services

Conducted measurements are leveraged from the module's test report.

5 Measurements

5.1 RF Power Output

5.1.1 References

FCC: CFR Part 2.1046, CFR Part 22.913, CFR Part 24.232
IC: RSS 132 Section 9.4; RSS 133 Section 4.3

5.1.2 FCC 2.1046 Measurements required: RF power output.

Power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on circuit elements as specified. The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

5.1.3 Limits:

5.1.3.1 FCC 22.913 (a) Effective radiated power limits.

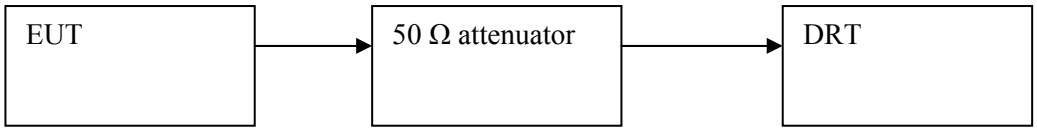
The effective radiated power (ERP) of mobile transmitters must not exceed 7 Watts.

5.1.3.2 FCC 24.232 (b)(c) Power limits.

(b) Mobile/portable stations are limited to 2 Watts effective isotropic radiated power (EIRP).
(c) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement over the full bandwidth of the channel.

5.1.4 Conducted Output Power Measurement procedure

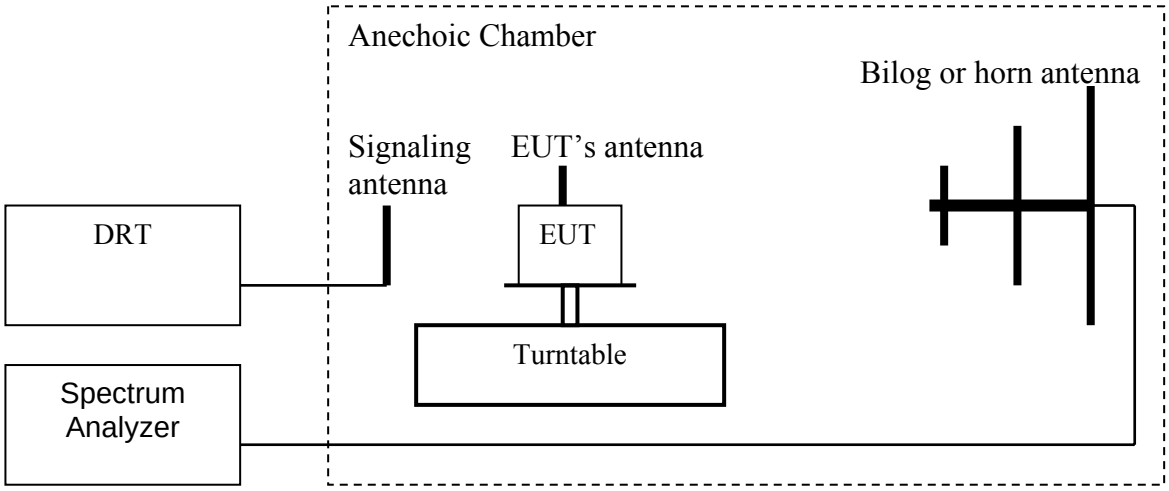
Ref: TIA-603C 2004 2.2.1 Conducted Carrier Output Power Rating



1. Connect the equipment as shown in the above diagram. A Digital RadioCommunication Tester (DRT) is used to enable the EUT to transmit and to measure the output power.
2. Adjust the settings of the DRT to set the EUT to its maximum power at the required channel.
3. Record the output power level measured by the DRT.
4. Correct the measured level for all losses in the RF path.
5. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

5.1.5 Radiated Output Power Measurement procedure

Ref: TIA-603C 2004 -2.2.17.2 Effective Radiated Power (ERP) or Effective Isotropic Radiated Power (EIRP)



1. Connect the equipment as shown in the above diagram with the EUT's antenna in a vertical orientation.
2. Adjust the settings of the Digital RadioCommunication Tester (DRT) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to the channel frequency. Set the analyzer to measure peak hold with the required settings.
4. Rotate the EUT 360°. Record the peak level in dBm (**LVL**).
5. Replace the EUT with a vertically polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (**LOSS)**. **LOSS** = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the ERP using the following equation:
   ERP (dBm) = **LVL** (dBm) + **LOSS** (dB)
8. Determine the EIRP using the following equation:
   EIRP (dBm) = **ERP** (dBm) + 2.14 (dB)
9. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

Spectrum analyzer settings: RBW=VBW=5MHz
(**Note:** Steps 5 and 6 above are performed prior to testing and **LOSS** is recorded by test software. Steps 3, 4, 7 and 8 above are performed with test software.)

Worst case configuration is tested with RC3/SO55 with "All Up" Power Control Bits.

5.1.6 RF Power Output 850MHz band

Limit: Nominal Peak Output Power < 38.45 dBm (7W)
Measurement Uncertainty: ±3 dB

CDMA 850	
Frequency (MHz)	**Radiated Power**
	ERP (dBm)
824.70	25.0
836.52	24.2
848.31	23.7

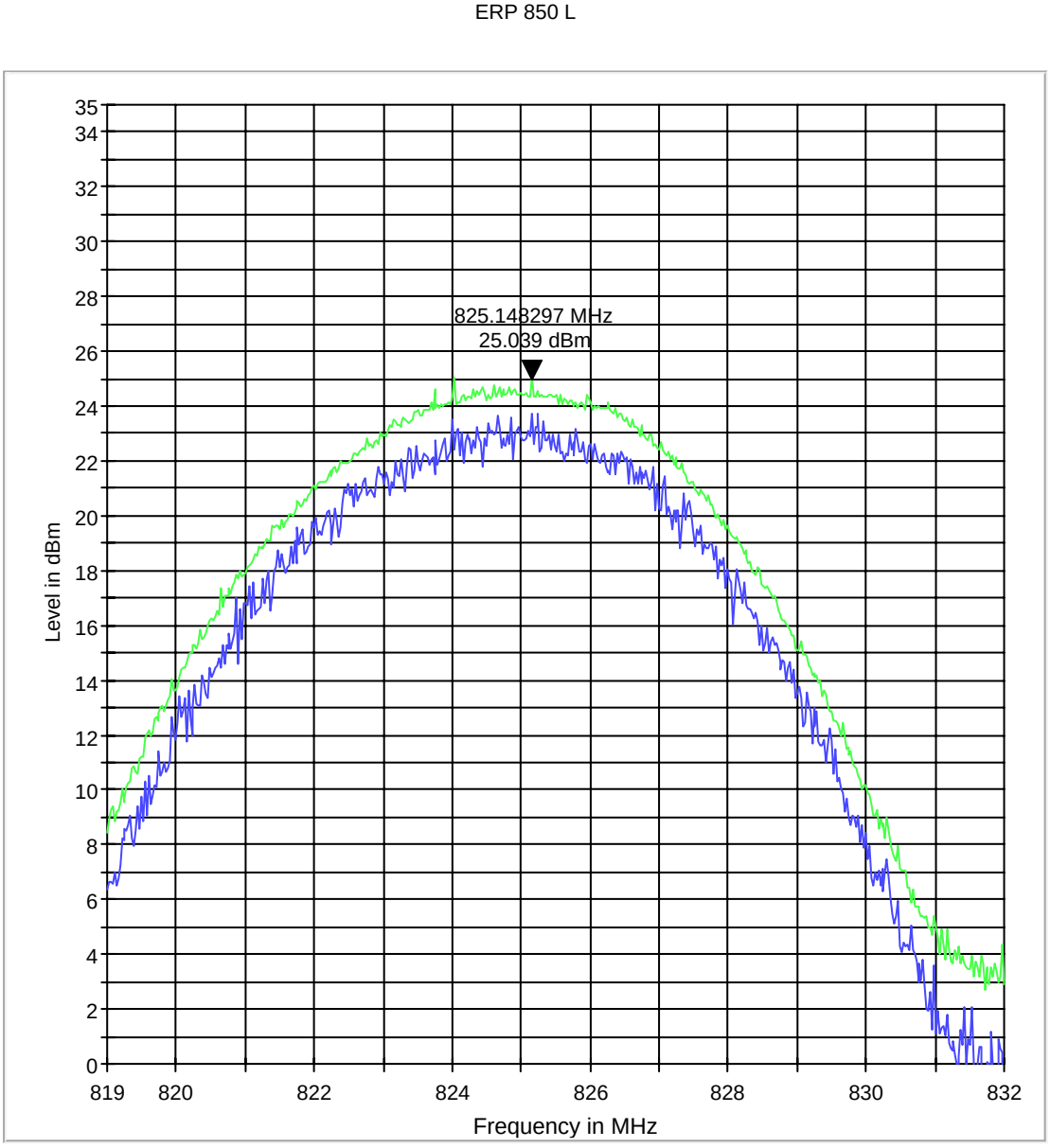
5.1.7 RF Power Output 1900MHz band

Limit: Nominal Peak Output Power < 33 dBm (2W)
Measurement Uncertainty: ±3 dB

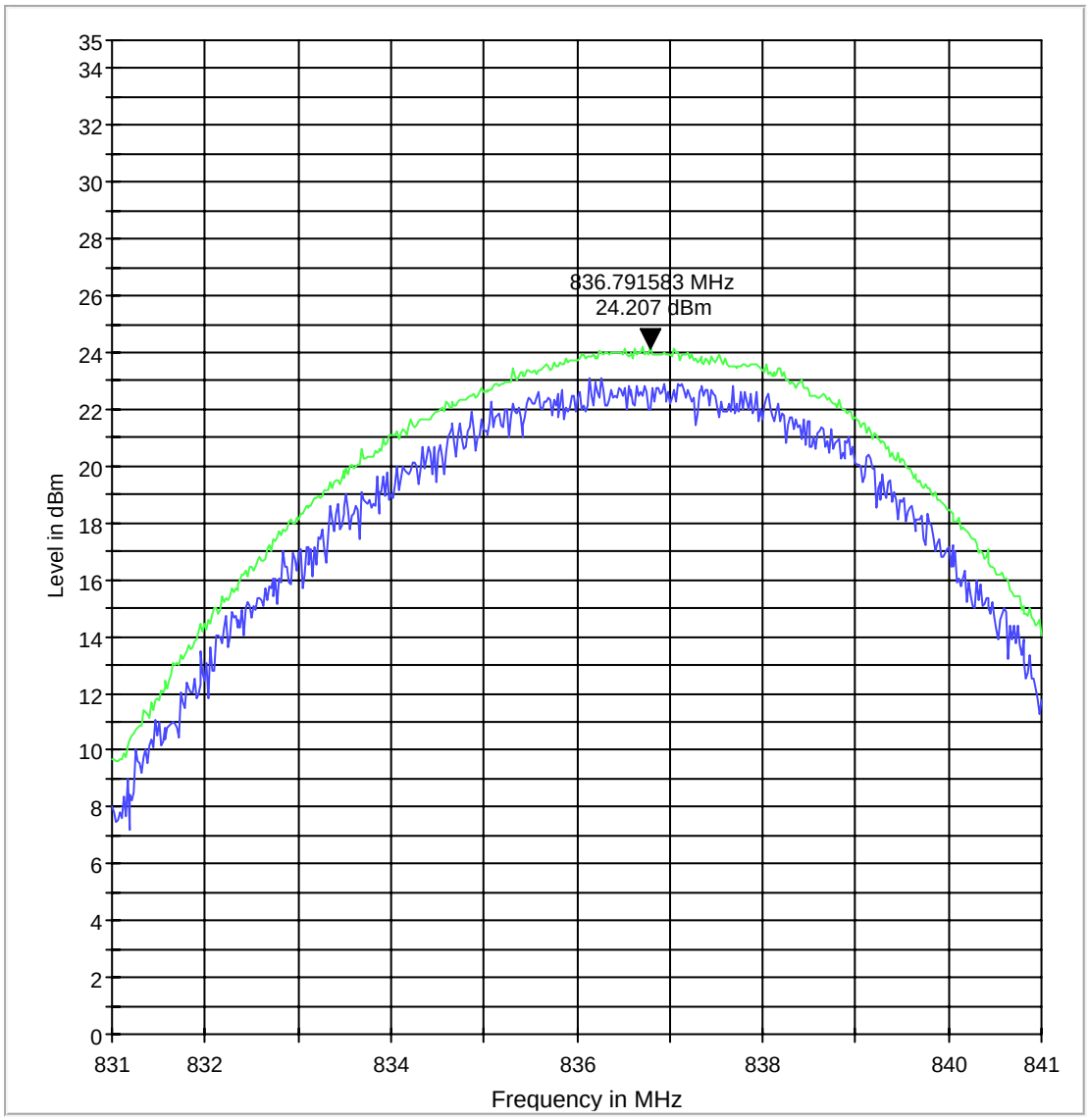
CDMA 1900	
Frequency (MHz)	**Radiated Power**
	EIRP (dBm)
1851.25	32.1
1880.0	31.2
1908.75	30.5

5.1.8 Results

ERP (CDMA 850) CHANNEL 1013 §22.913(a)

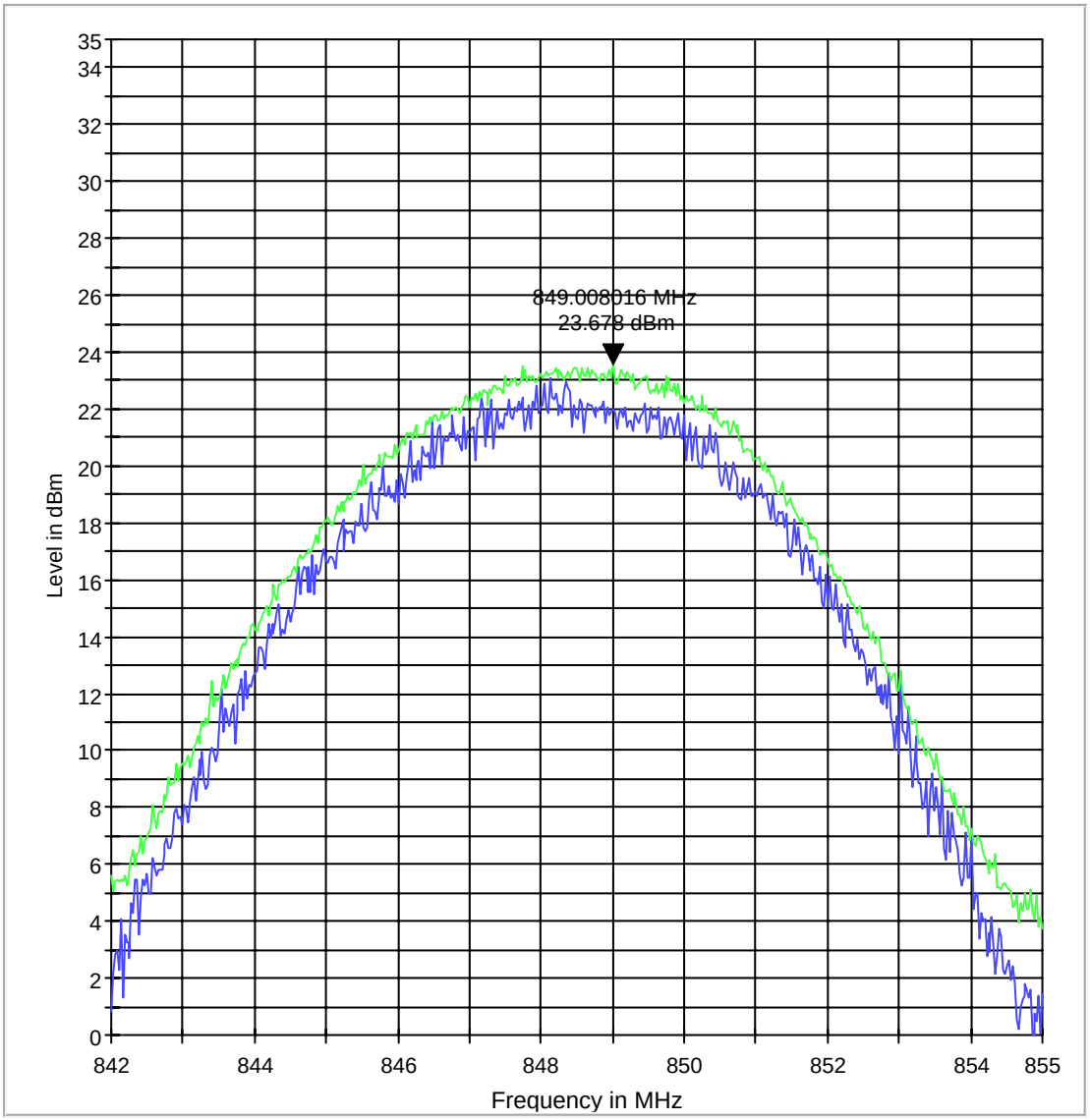


ERP (CDMA 850) CHANNEL 384 §22.913(a)



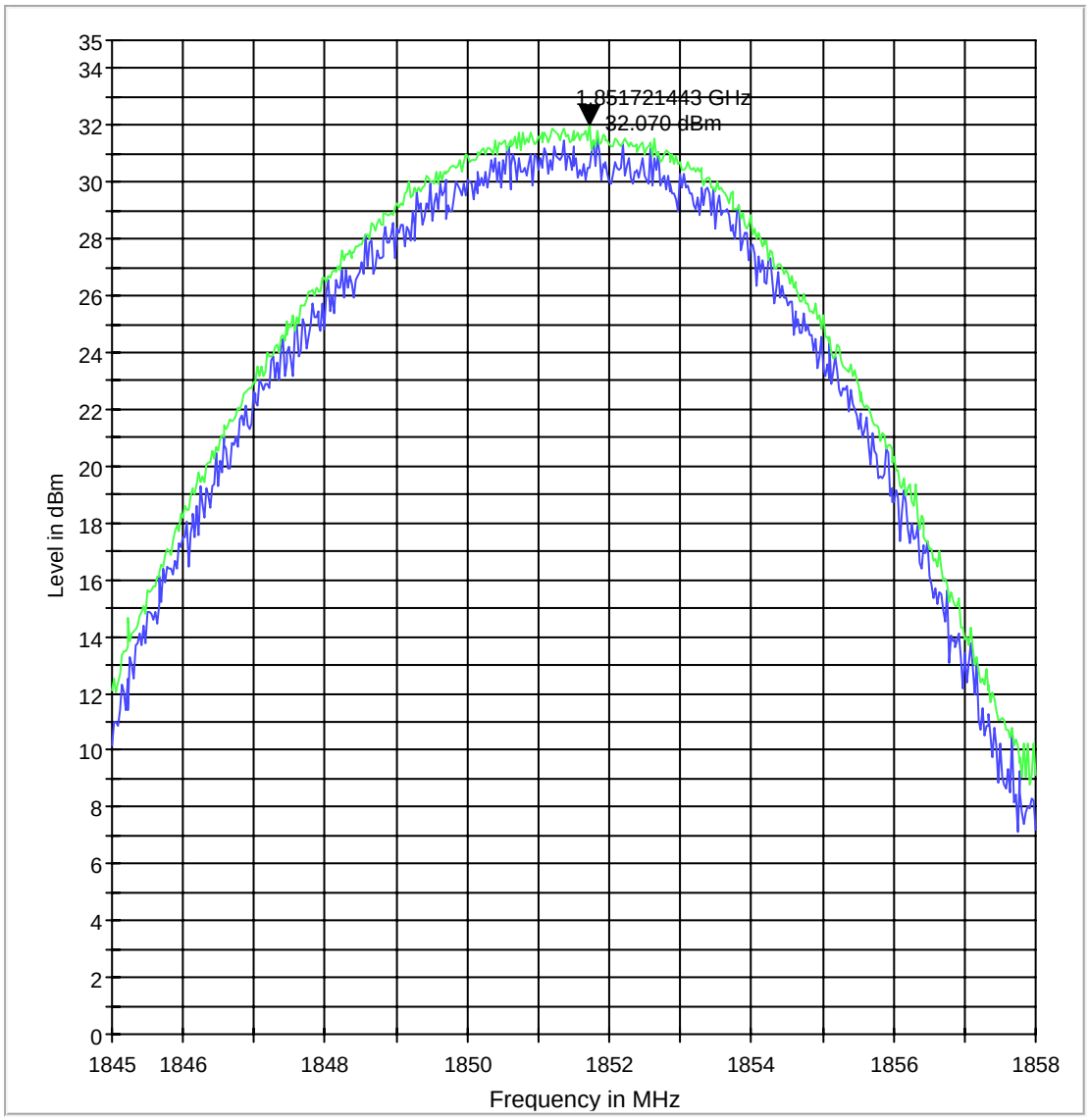
ERP (CDMA 850) CHANNEL 777 §22.913(a)

ERP 850 H



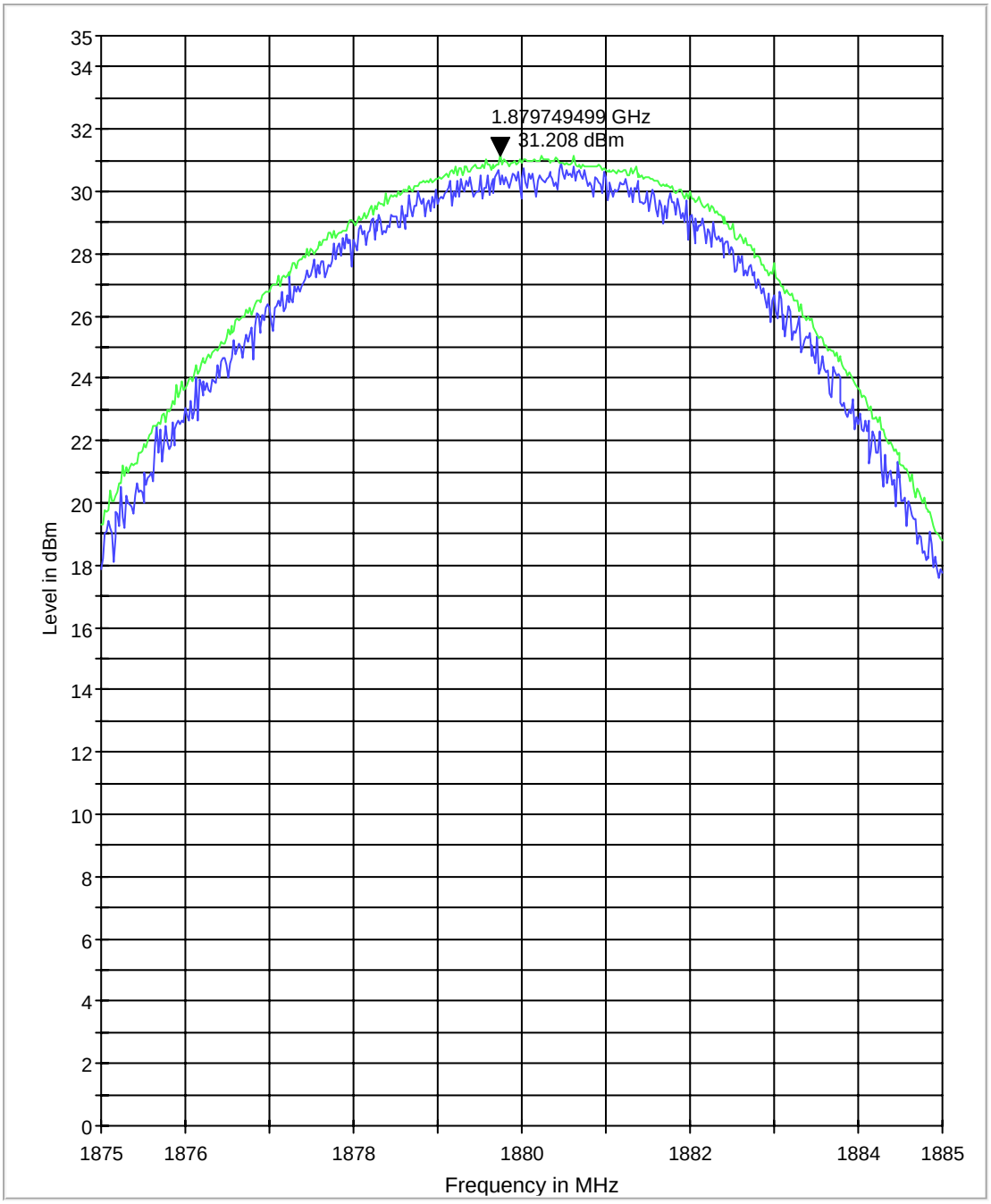
EIRP (CDMA-1900) CHANNEL 25 §24.232(b)

EIRP 1900 L



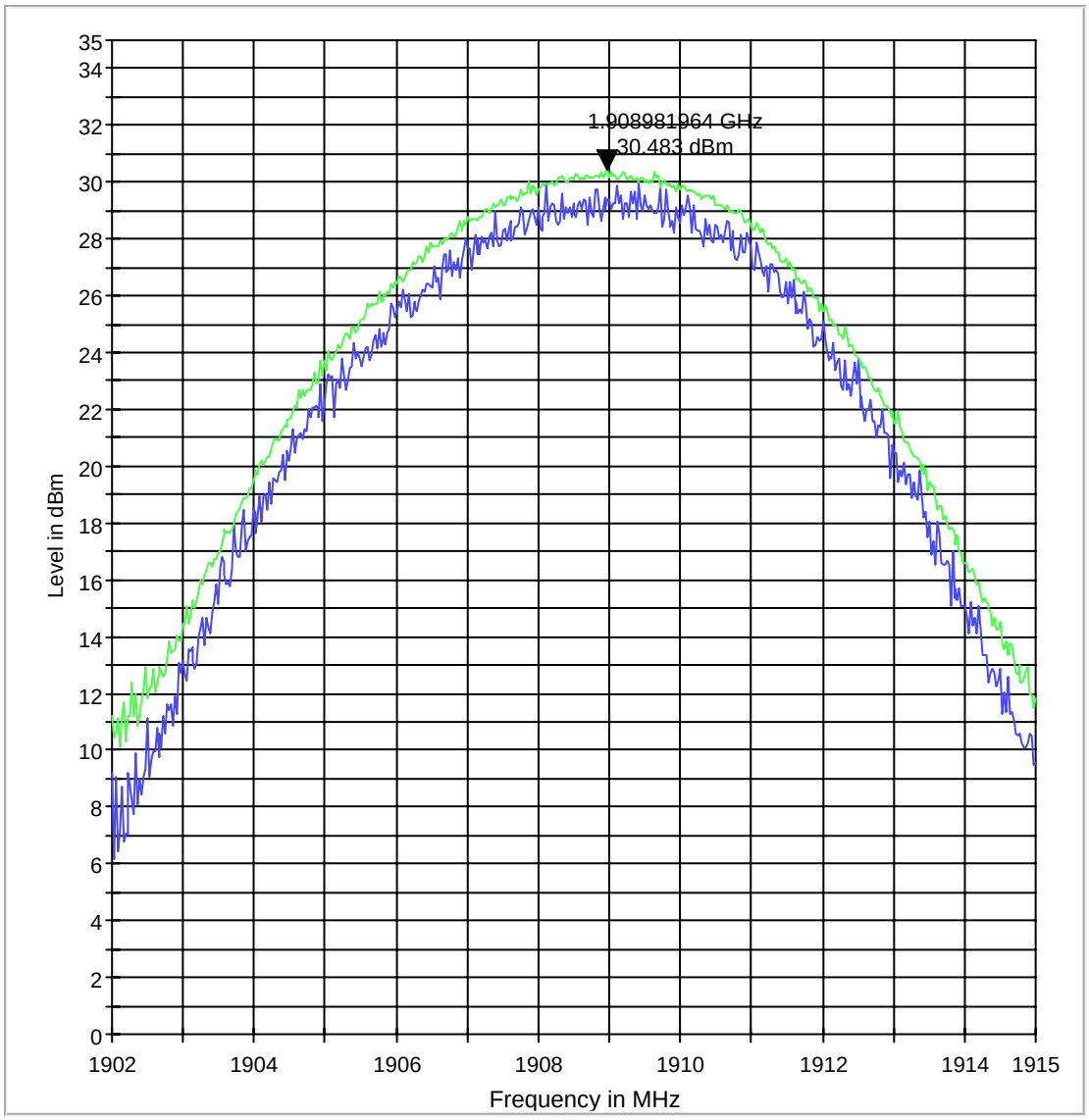
EIRP (CDMA-1900) CHANNEL 600 §24.232(b)

EIRP 1900 M



EIRP (CDMA-1900) CHANNEL 1175 §24.232(b)

EIRP 1900 H



5.2 Spurious Emissions Radiated

5.2.1 References

FCC: CFR Part 2.1053, CFR Part 22.917, CFR Part 24.238
IC: RSS 129 Section 8.1; RSS 133 Section 4.4

5.2.2 FCC 2.1053 Measurements required: Field strength of spurious radiation.

Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, power leads or intermediate circuit elements under normal conditions of installation and operation. Curves or equivalent data shall be supplied showing the magnitude of each harmonic and other spurious emission.

5.2.3 Limits:

(a) *Out of band emissions*. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.
For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

5.2.3.1 FCC 22.917 Emission limitations for cellular equipment.

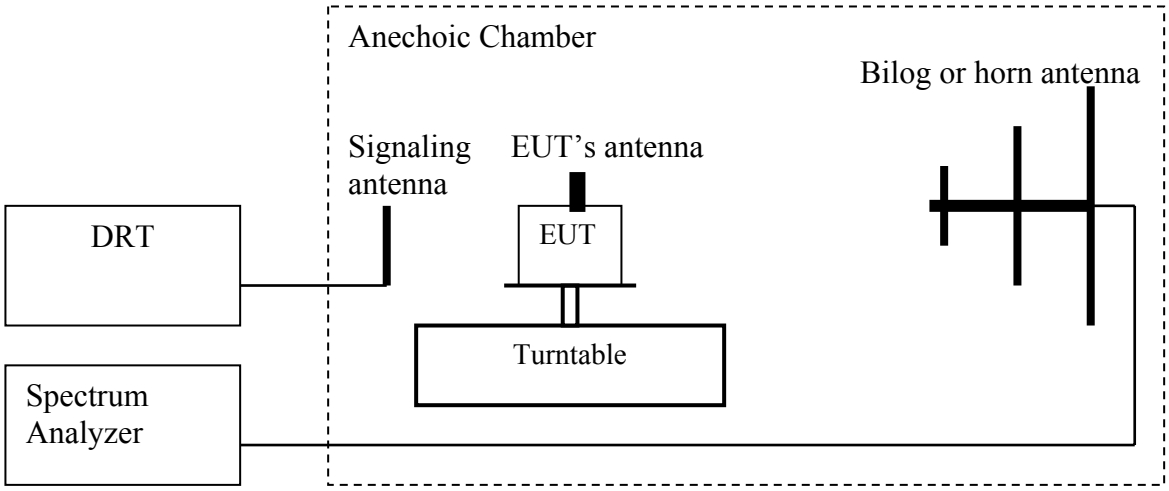
The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.
(b) *Measurement procedure.* Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

5.2.3.2 FCC 24.238 Emission limitations for Broadband PCS equipment.

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.
(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

5.2.4 Radiated out of band measurement procedure:

Ref: TIA-603C 2004- 2.2.12 Unwanted emissions: Radiated Spurious



1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
2. Adjust the settings of the Digital RadioCommunication Tester (DRT) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure peak hold with the required settings.
4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360°. Raise the measurement antenna up to 4 meters in 0.5 meters increments and rotate the EUT 360° at each height to maximize all emissions. Measure and record all spurious emissions (**LVL**) up to the tenth harmonic of the carrier frequency.
5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (**LOSS)**. **LOSS** = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
9. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
10. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.
    (N**ote:** Steps 5 and 6 above are performed prior to testing and **LOSS** is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)

Spectrum analyzer settings:

30 – 1000 MHz: RBW=VBW=100kHz
1000 – 18 GHz: RBW=VBW=1MHz

Measurement Survey:

The site is constructed in accordance with ANSI C63.4 requirements and is recognized by the FCC to be in compliance for a 3m site. The spectrum is scanned from 30MHz to the 10th harmonic of the highest frequency generated by the EUT.
Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the 850 & 1900 bands. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the 850 & 1900 band into any of the other blocks respectively. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

All measurements are done in horizontal and vertical polarization; the plots show the worst case where it is not indicated otherwise.
Unless mentioned otherwise, the peaks in the plots are from the carrier frequency.

5.2.5 Radiated out of band emissions results on EUT- Transmit Mode:

5.2.5.1 Test Results Transmitter Spurious Emission CDMA 850:

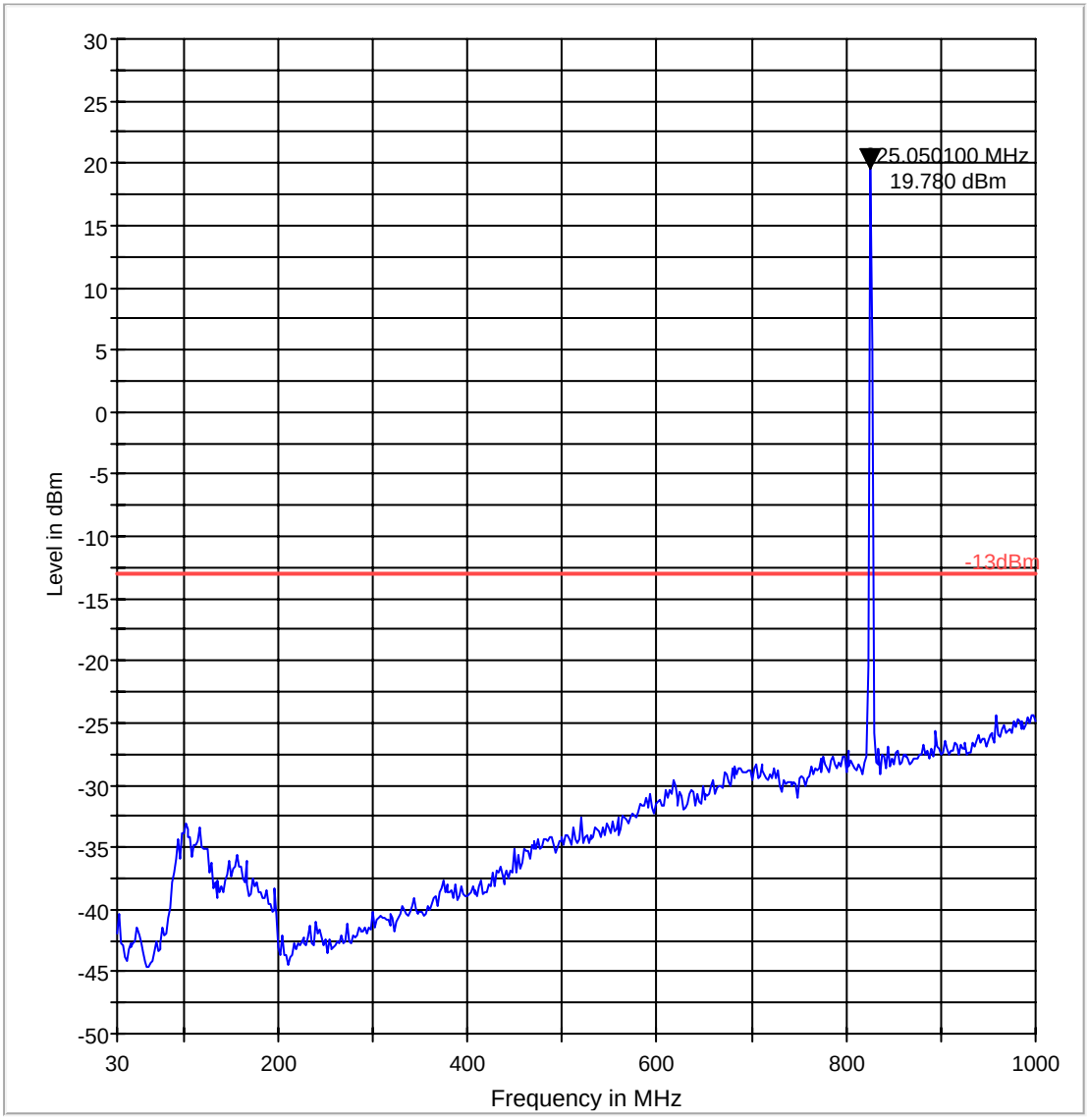
Harmonic	Tx ch-1013 Freq. (MHz)	Level (dBm)	Tx ch-384 Freq. (MHz)	Level (dBm)	Tx ch-777 Freq. (MHz)	Level (dBm)
1	**824.7**	-	**836.52**	-	**848.31**	-
2	**1649.4**	NF	**1673.04**	NF	**1696.62**	NF
3	**2474.1**	NF	**2509.56**	NF	**2544.93**	NF
4	**3298.8**	NF	**3346.08**	NF	**3393.24**	NF
5	**4123.5**	NF	**4182.6**	NF	**4241.55**	NF
6	**4948.2**	NF	**5019.12**	NF	**5089.86**	NF
7	**5772.9**	NF	**5855.64**	NF	**5938.17**	NF
8	**6597.6**	NF	**6692.16**	NF	**6786.48**	NF
9	**7422.3**	NF	**7528.68**	NF	**7634.79**	NF
10	**8247**	NF	**8365.2**	NF	**8483.1**	NF
NF = Noise Floor						

Radiated Spurious Emissions (CDMA-850) Tx: Low Channel

30MHz-1GHz

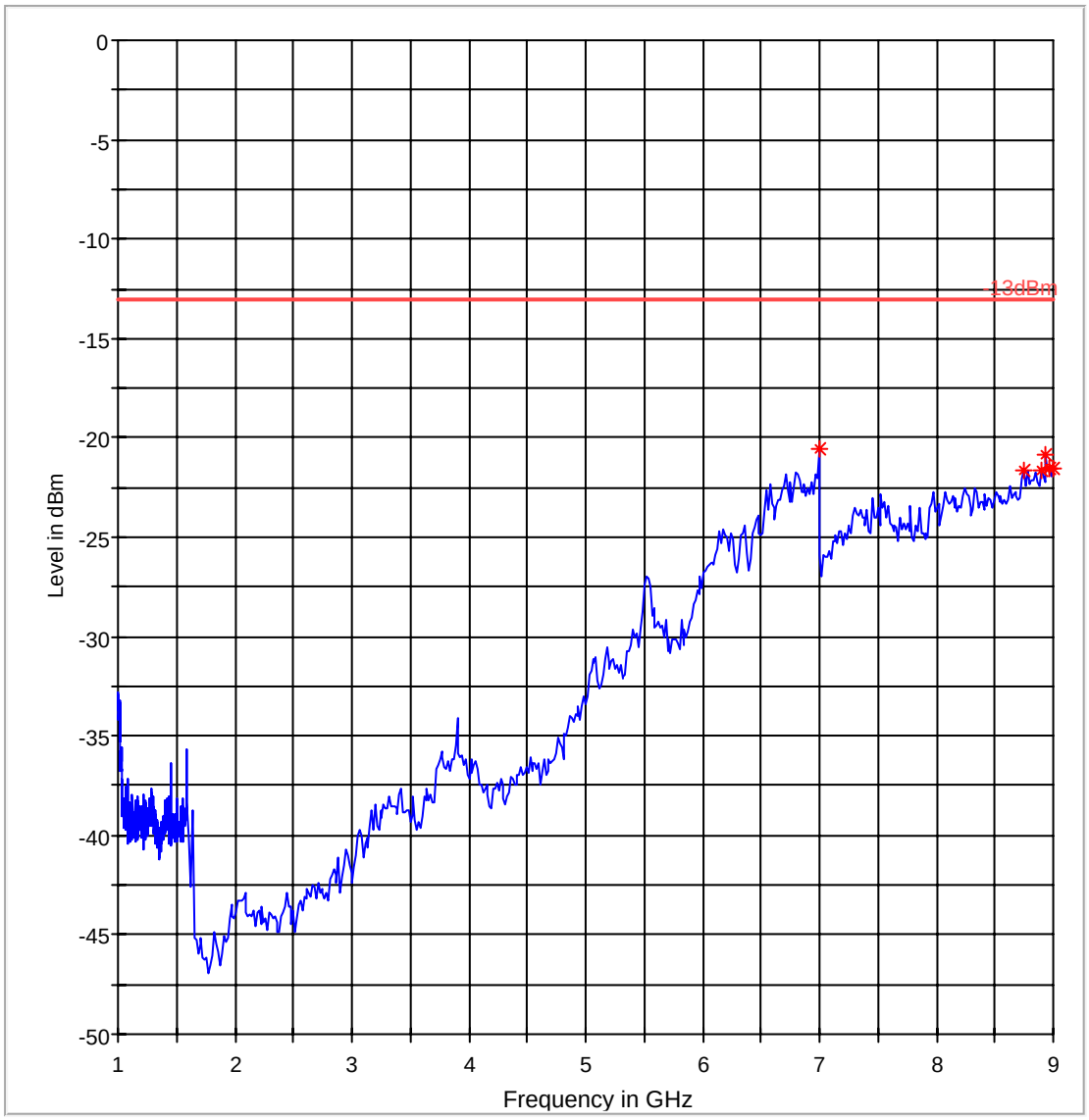
Note: Marker placed on downlink

FCC 22 30-1000MHz



1GHz-9GHz

FCC 22 1-9GHz

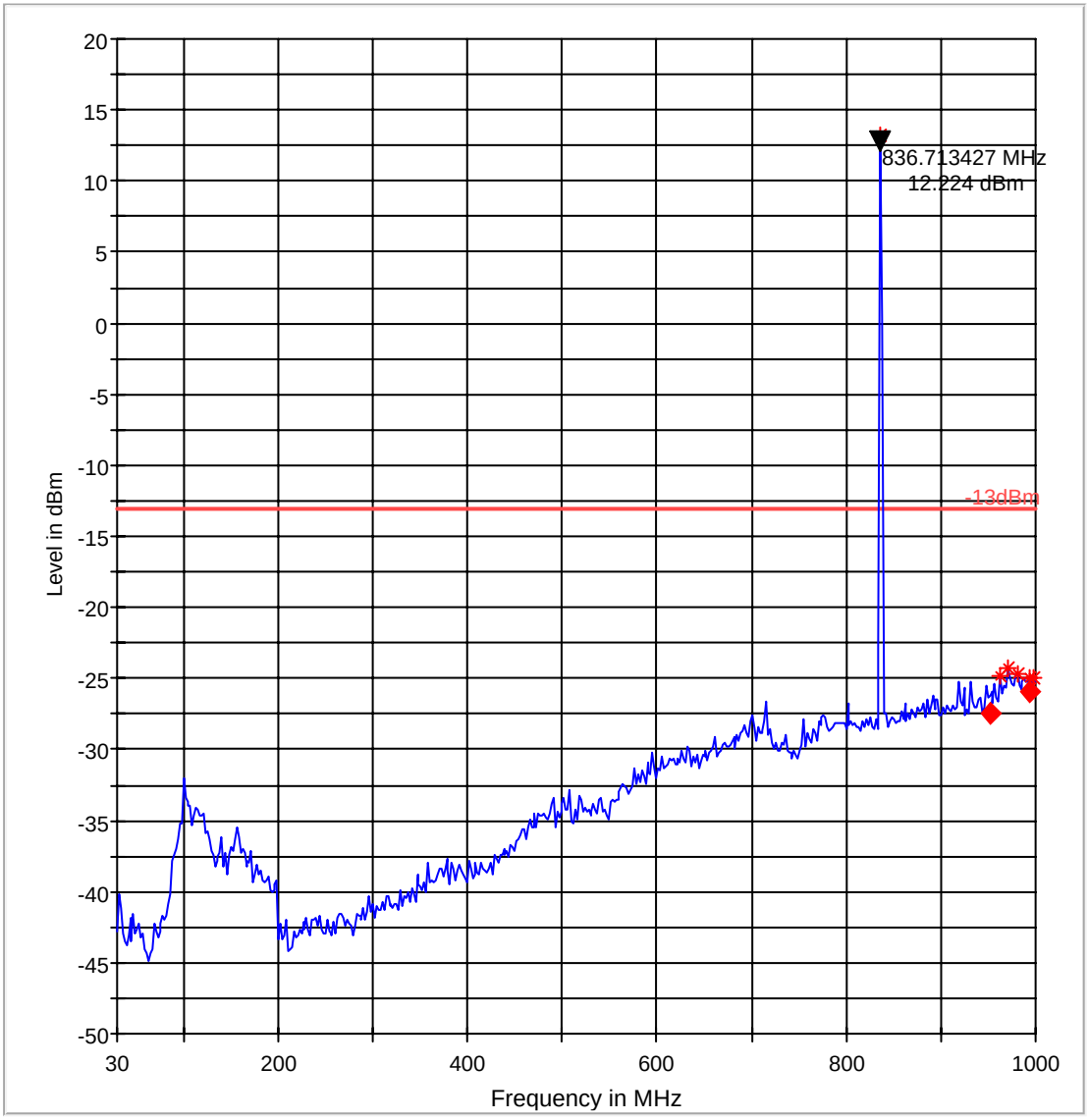


Radiated Spurious Emissions (CDMA-850) Tx: Mid Channel

30MHz-1GHz

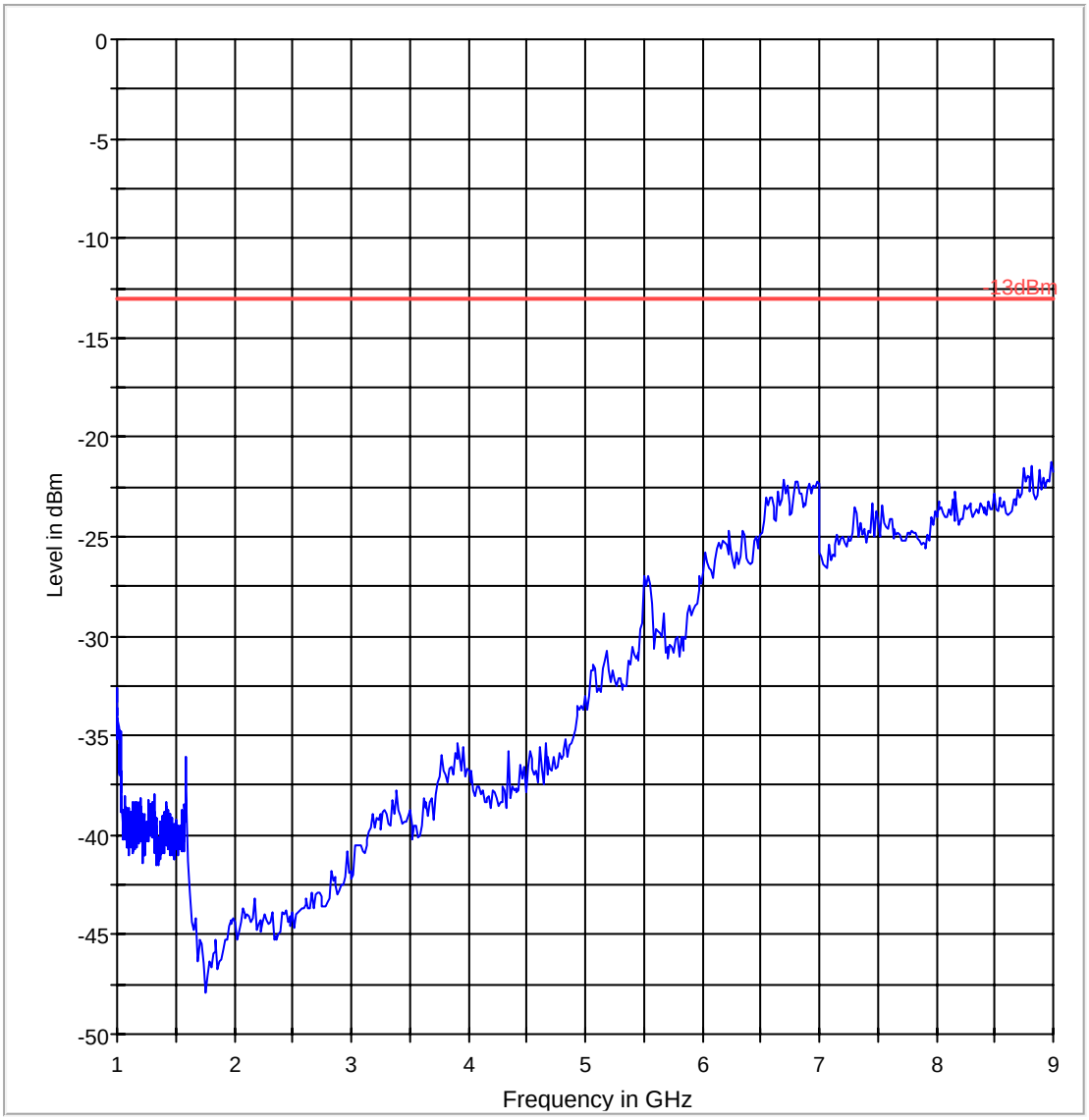
Note: Marker placed on downlink

FCC 22 30-1000MHz



1GHz-9GHz

FCC 22 1-9GHz

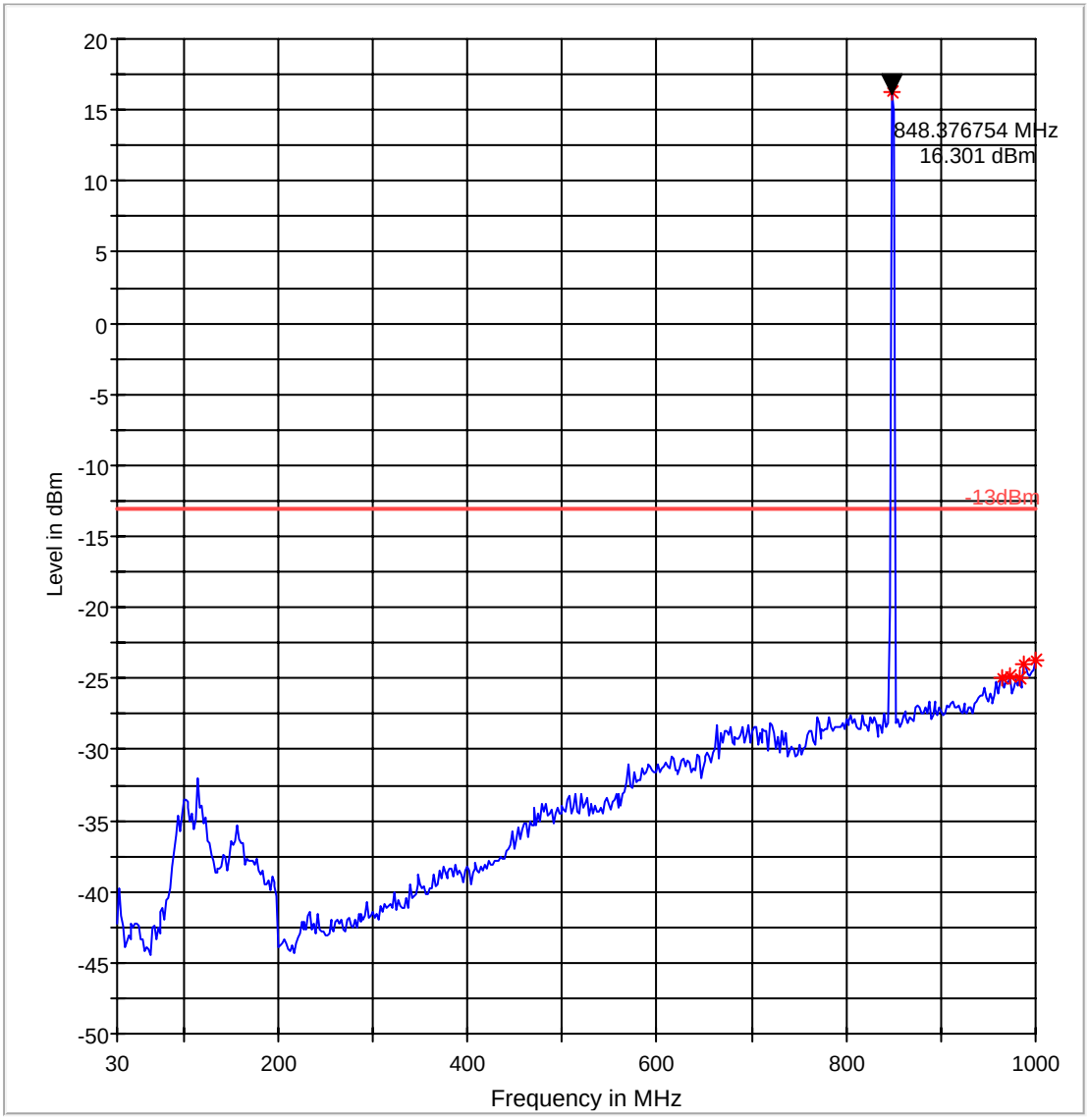


Radiated Spurious Emissions (CDMA-850) Tx: High Channel

30MHz-1GHz

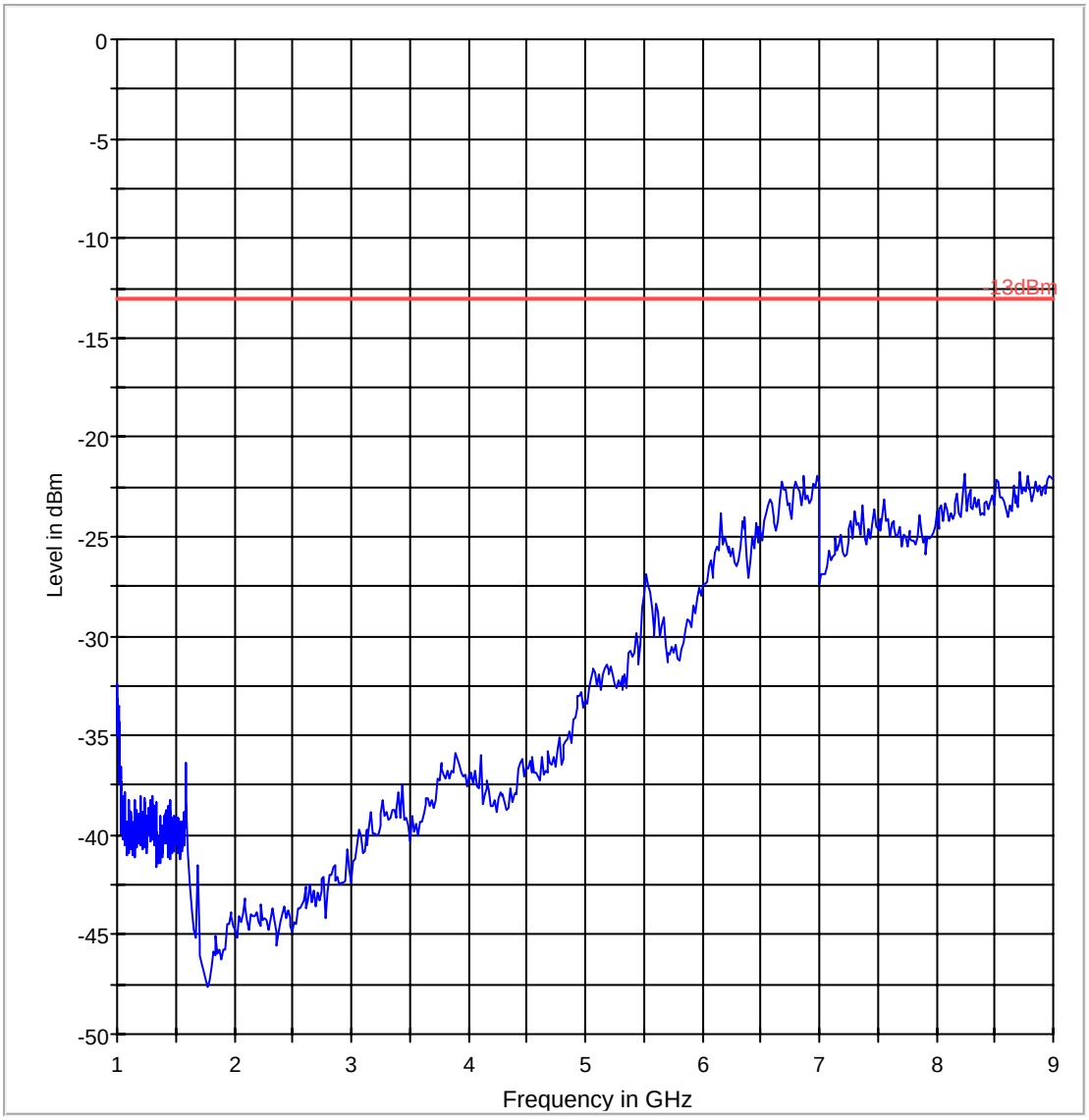
Note: Marker placed on downlink

FCC 22 30-1000MHz



1GHz-9GHz

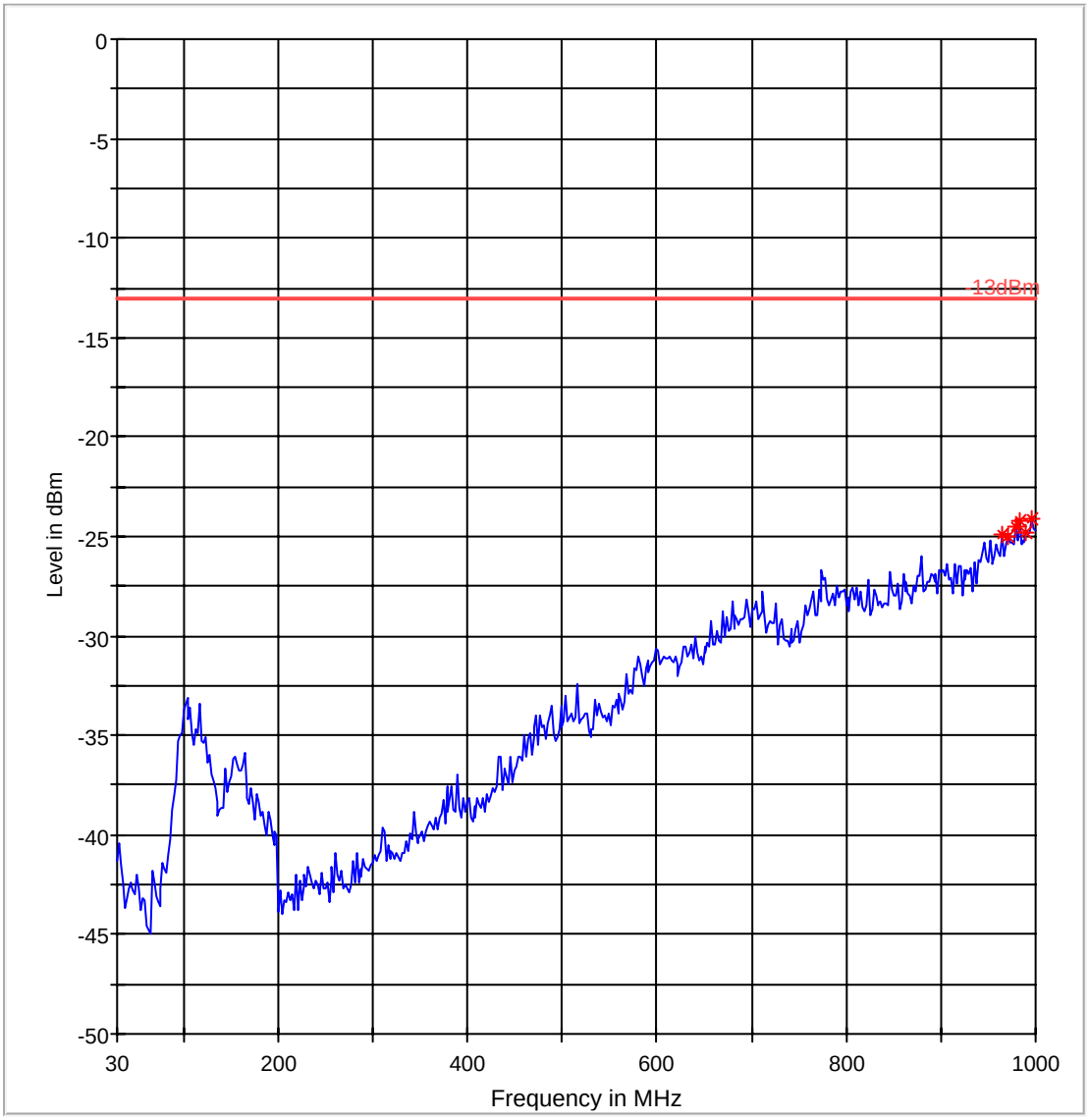
FCC 22 1-9GHz



5.2.5.2 Test Results Transmitter Spurious Emission CDMA-1900:

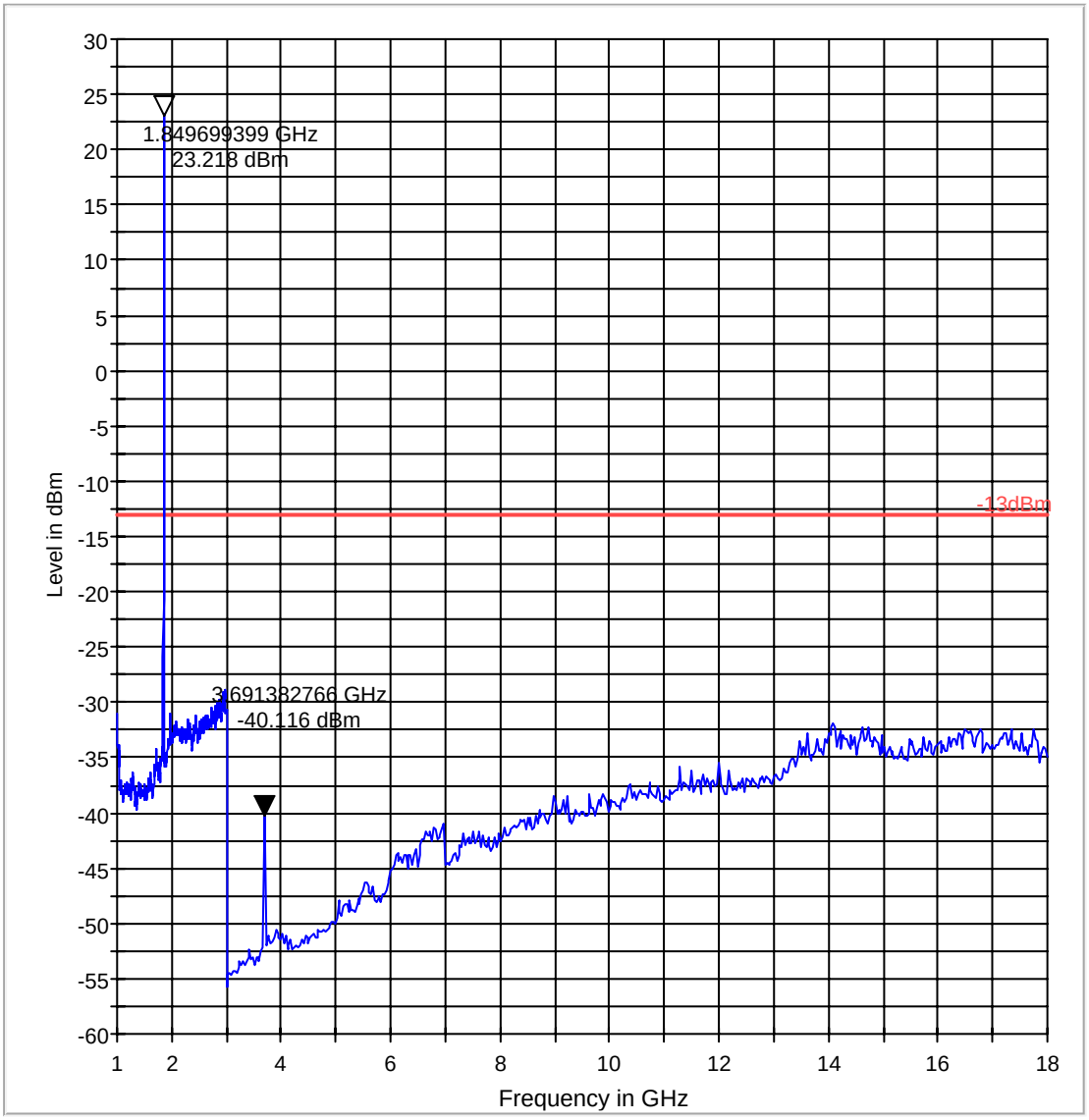
Harmonic	Tx ch-25 Freq.(MHz)	Level (dBm)	Tx ch-600 Freq. (MHz)	Level (dBm)	Tx ch-1175 Freq. (MHz)	Level (dBm)
1	**1851.25**	-	**1880.0**	-	**1908.75**	-
2	**3702.5**	NF	**3760**	NF	**3817.5**	NF
3	**5553.75**	NF	**5640**	NF	**5726.25**	NF
4	**7405**	NF	**7520**	NF	**7635**	NF
5	**9256.25**	NF	**9400**	NF	**9543.75**	NF
6	**11107.5**	NF	**11280**	NF	**11452.5**	NF
7	**12958.75**	NF	**13160**	NF	**13361.25**	NF
8	**14810**	NF	**15040**	NF	**15270**	NF
9	**16661.25**	NF	**16920**	NF	**17178.75**	NF
10	**18512.5**	NF	**18800**	NF	**19087.5**	NF
NF = Noise Floor						

Radiated Spurious Emissions (CDMA-1900) Tx: Low Channel
30MHz-1GHz

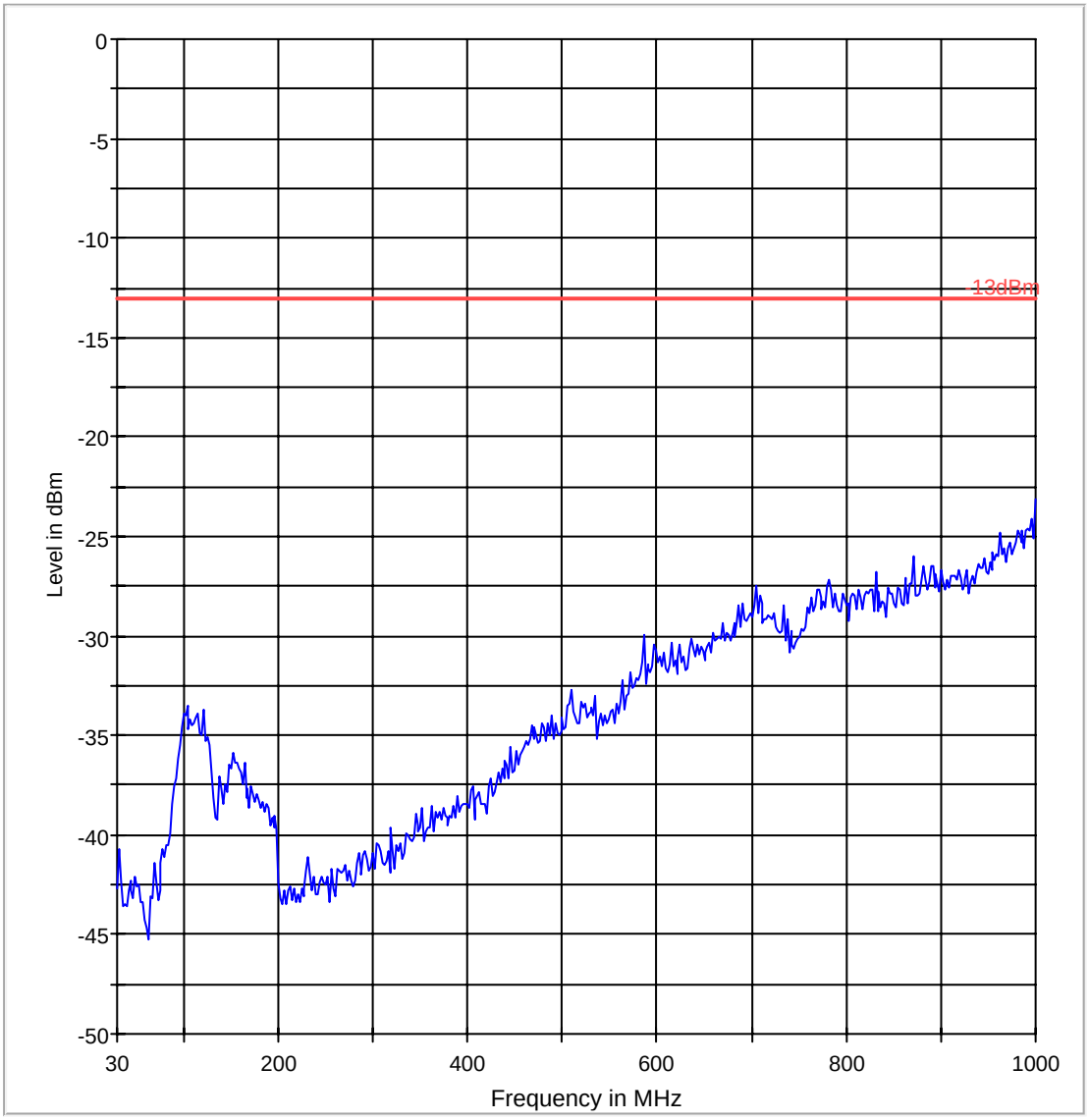


1GHz-18GHz
Note: Marker placed on downlink

FCC 24 1-18GHz

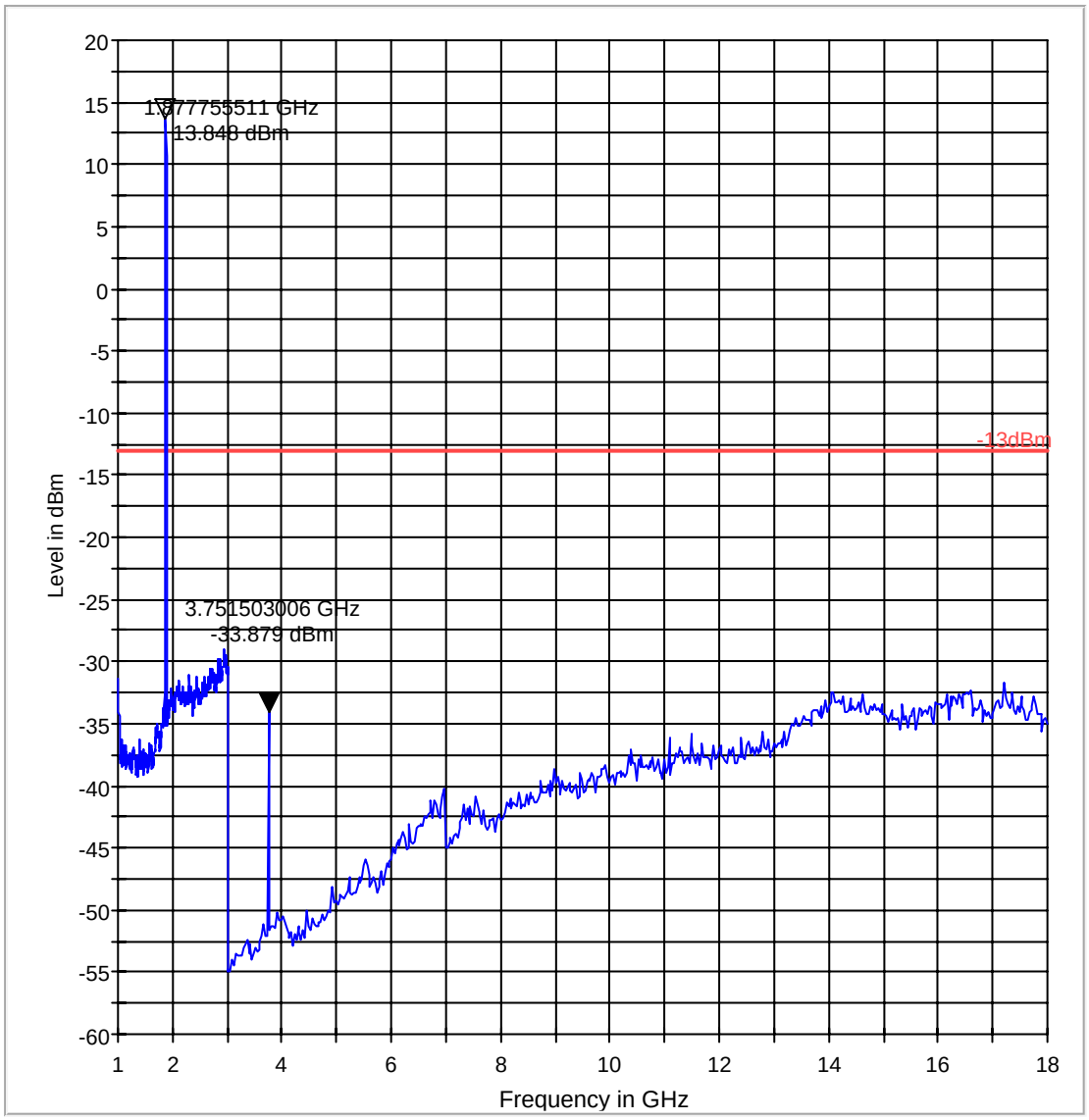


Radiated Spurious Emissions (CDMA-1900) Tx: Mid Channel
30MHz-1GHz

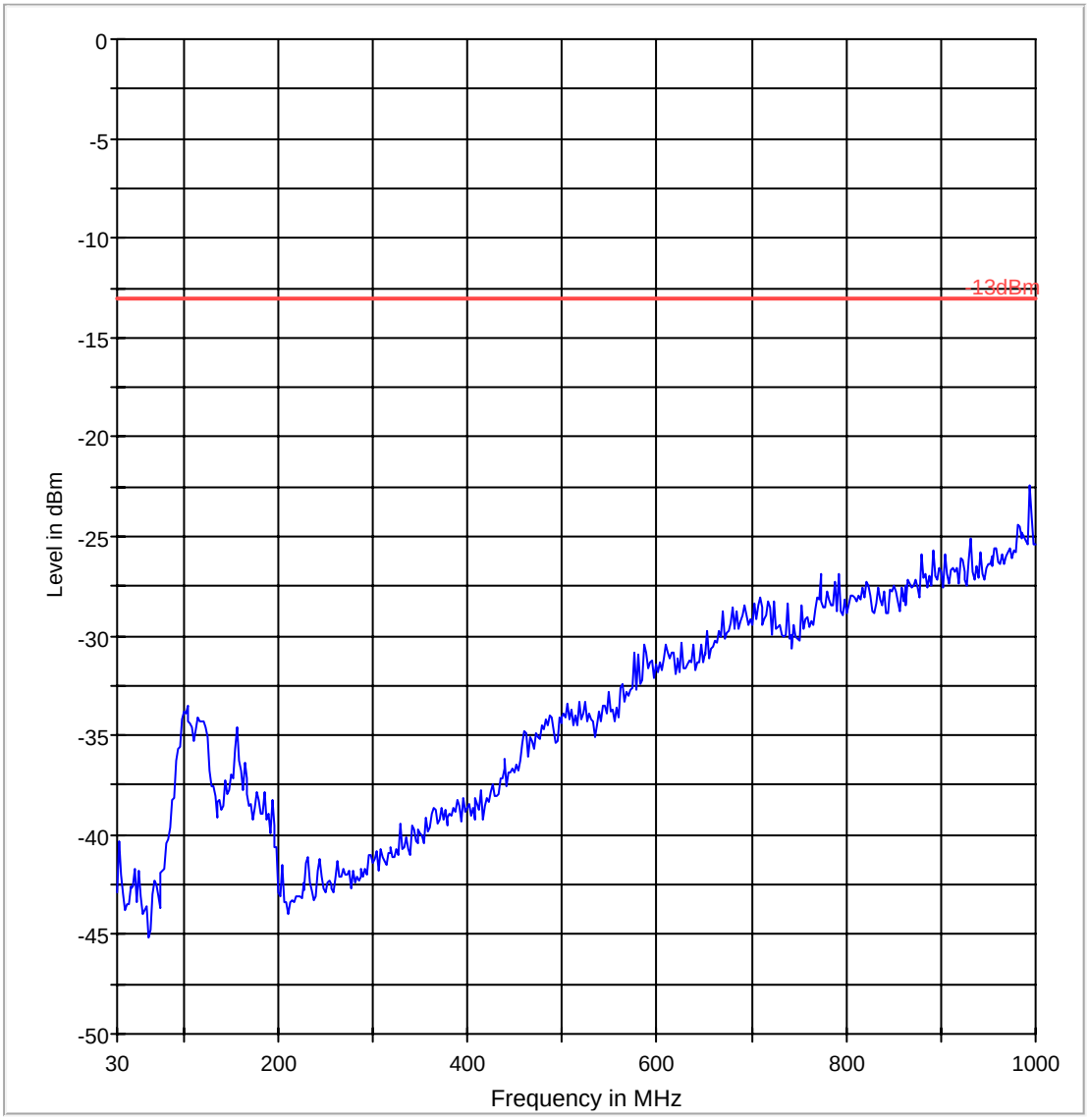


1GHz-18GHz

FCC 24 1-18GHz

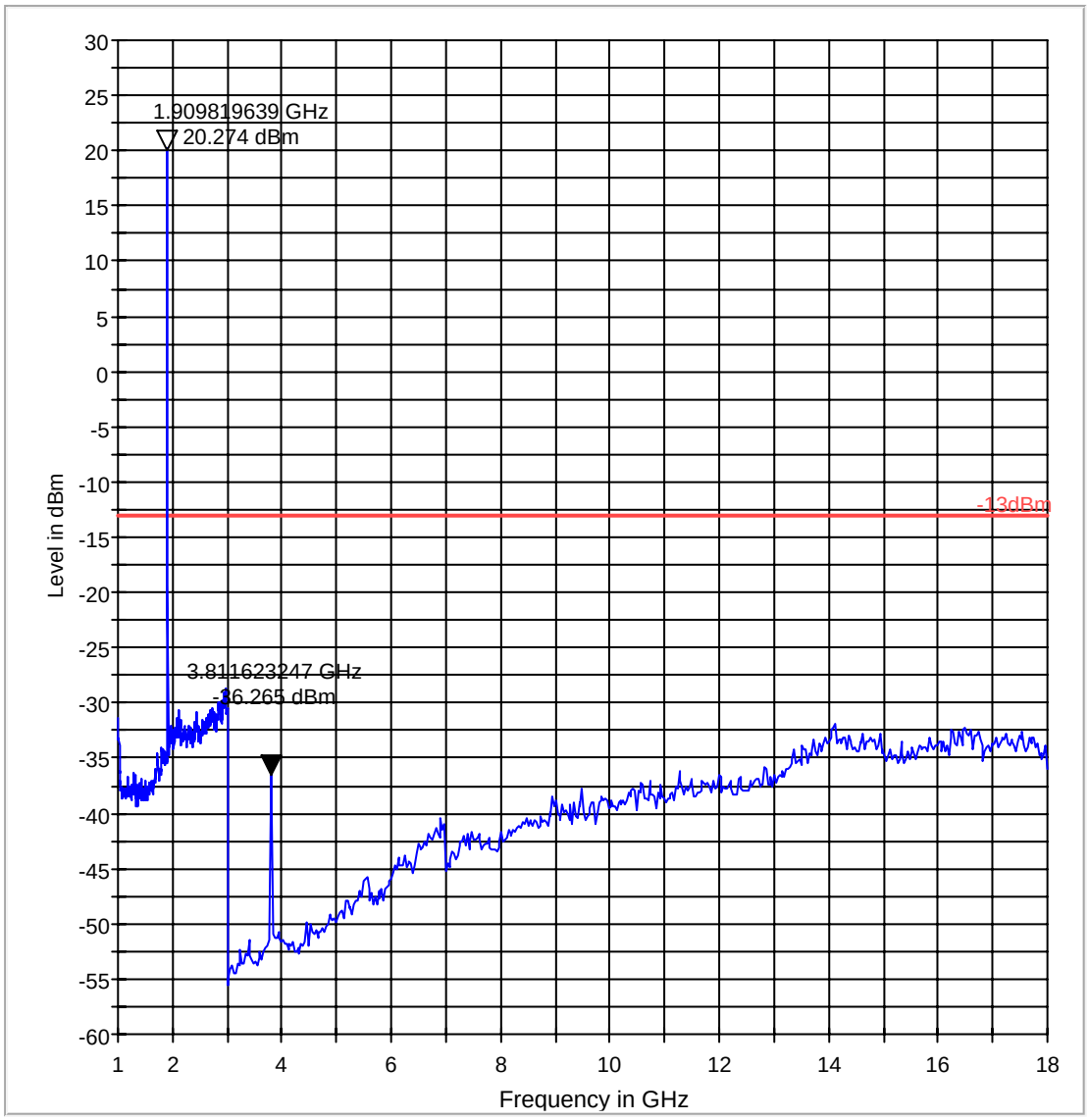


Radiated Spurious Emissions (CDMA-1900) Tx: High Channel
30MHz-1GHz



1GHz-18GHz

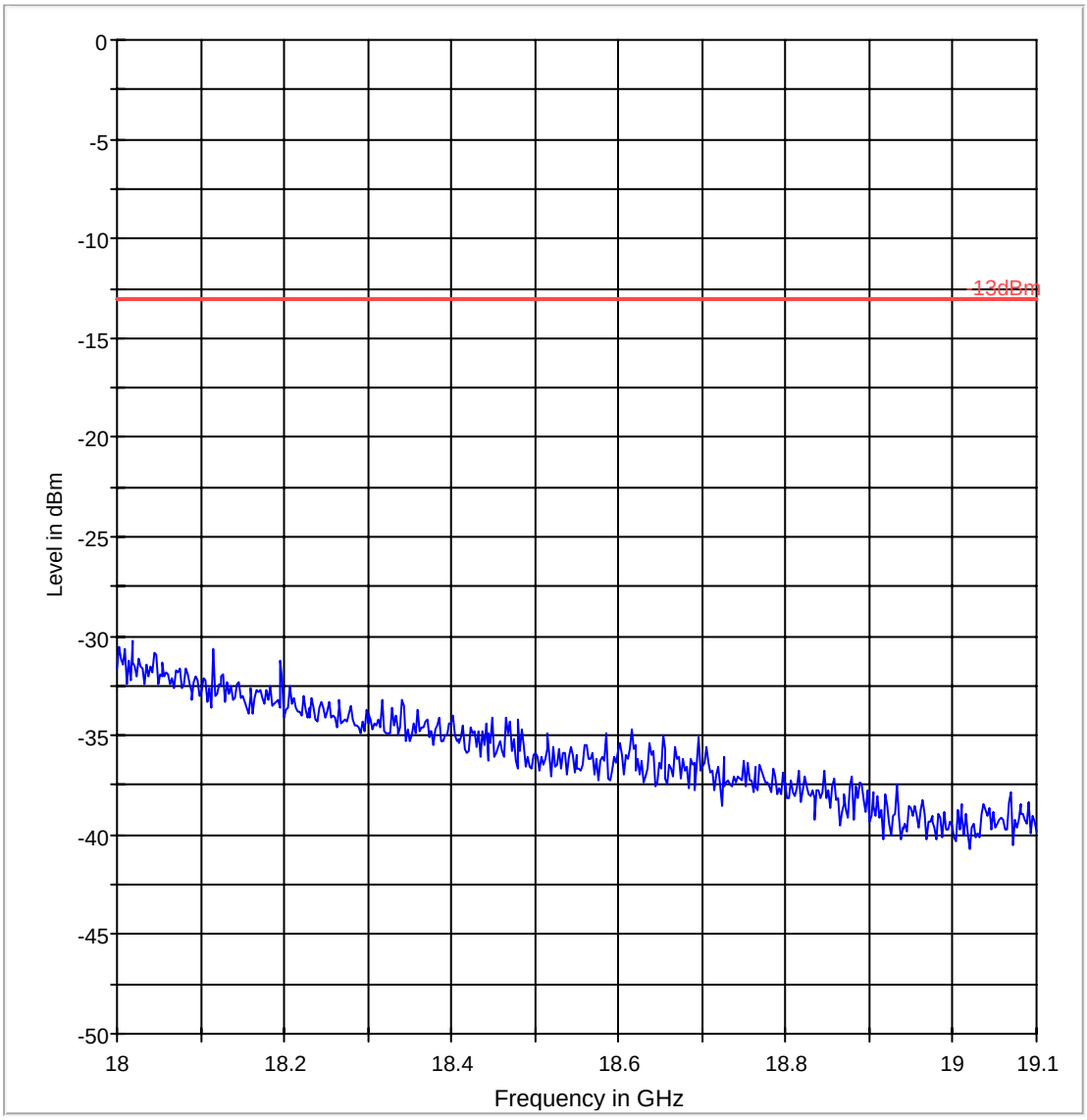
FCC 24 1-18GHz



Radiated Spurious Emissions (CDMA-1900) Tx

18GHz-19.1GHz

Note: Plot represents worst case channel



5.2.6 Radiated out of band emissions results on EUT- Receive Mode:

5.2.6.1 References

FCC: CFR Part 15.109, 2.1053
IC: RSS 129 Section 10

5.2.6.2 §15.109 Radiated emission limits- Unintentional Radiators:

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (µV/m)
30–88	100 (40dBµV/m)
88–216	150 (43.5 dBµV/m)
216–960	200 (46 dBµV/m)
Above 960	500 (54 dBµV/m)

(b) The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the following:

Frequency of emission (MHz)	Field strength (µV/m)
30–88	90
88–216	150
216–960	210
Above 960	300

5.2.6.3 Test Conditions:

RBW=120kHz, VBW=1Mhz

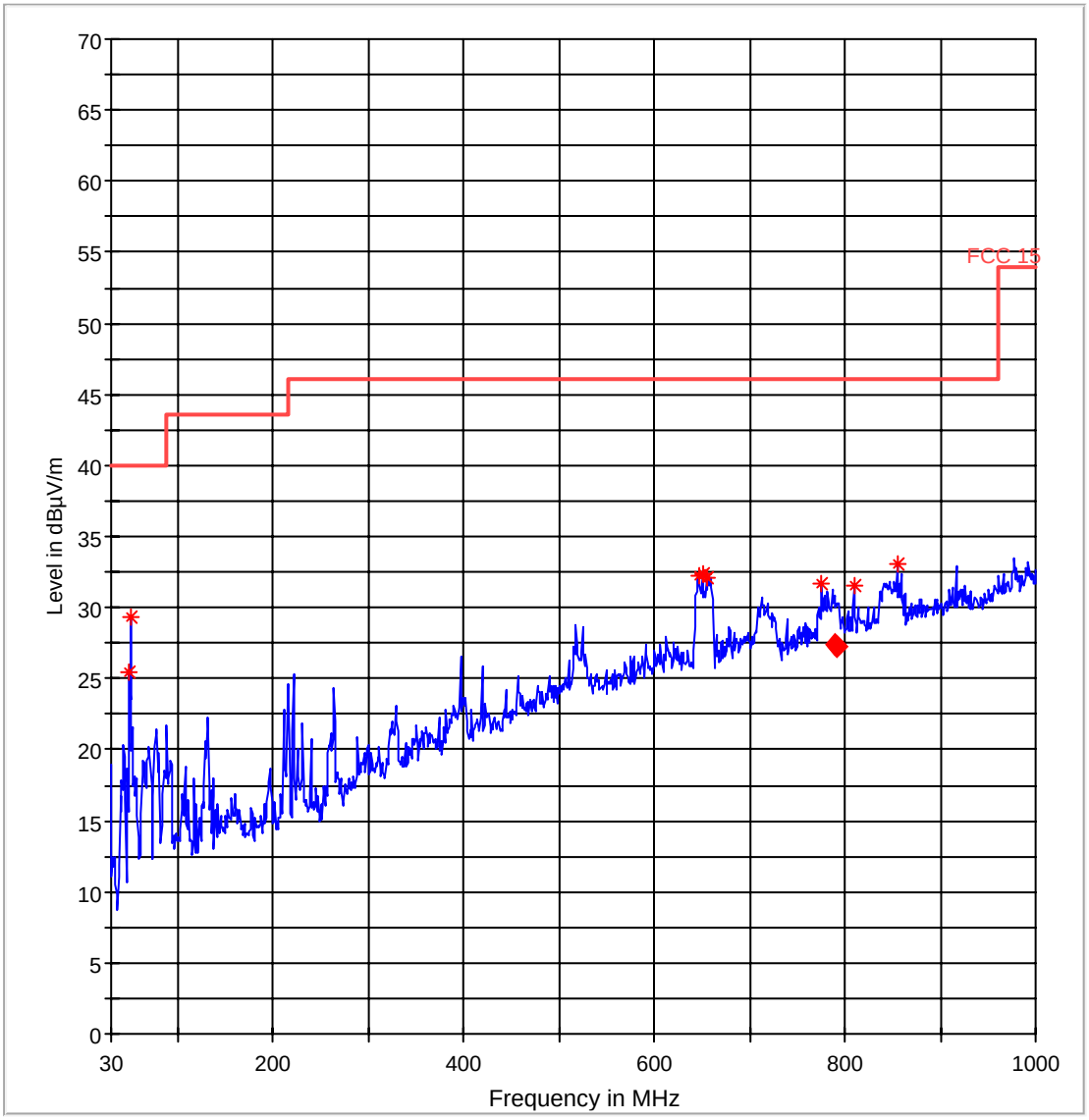
5.2.6.4 Results

No significant emissions measurable. Plots reported here represent the worse case emissions.

5.2.6.5 Test Results Receiver Spurious Emission

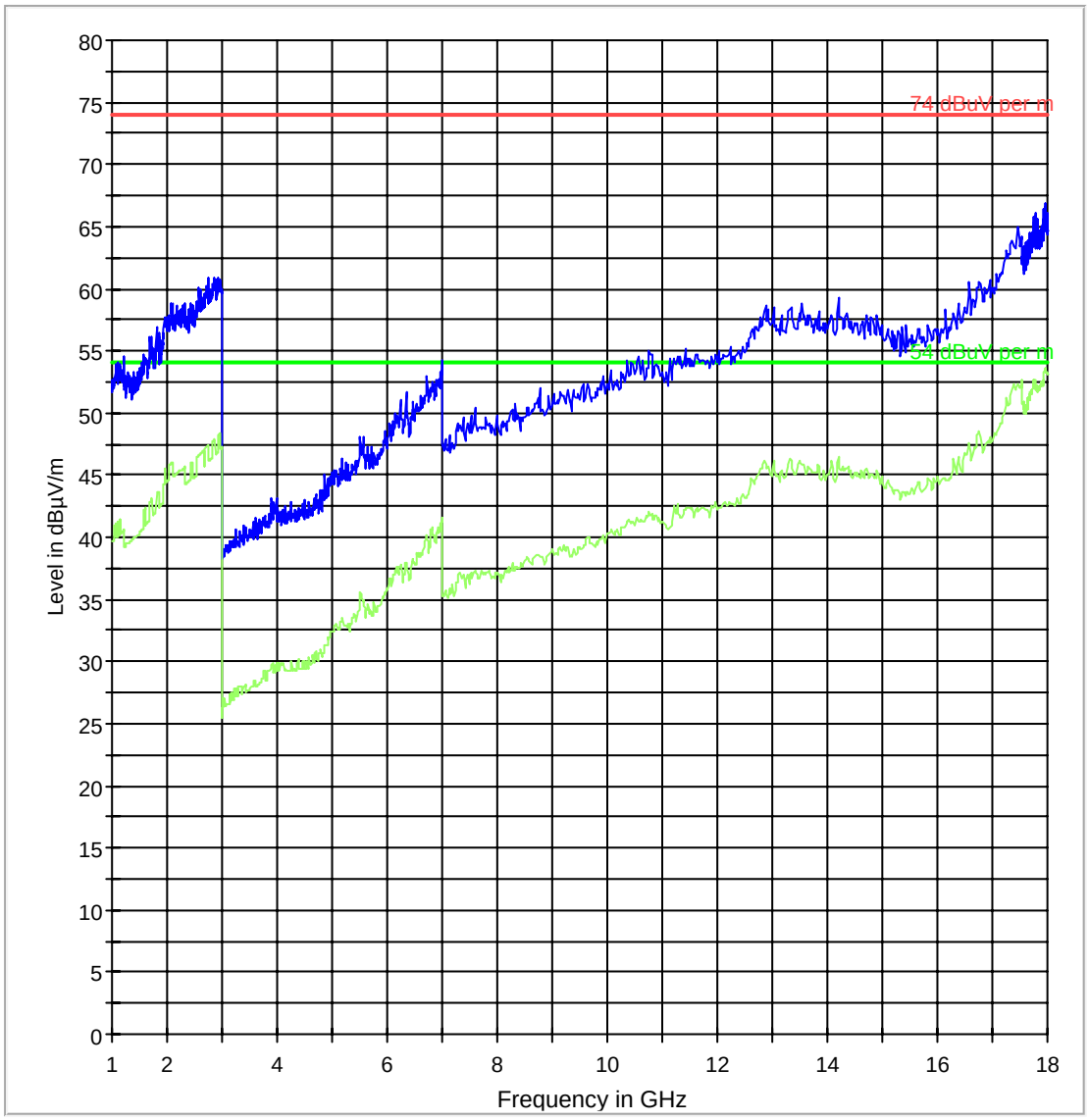
Receive Mode: 30MHz-1GHz

FCC 15 30-1000MHz

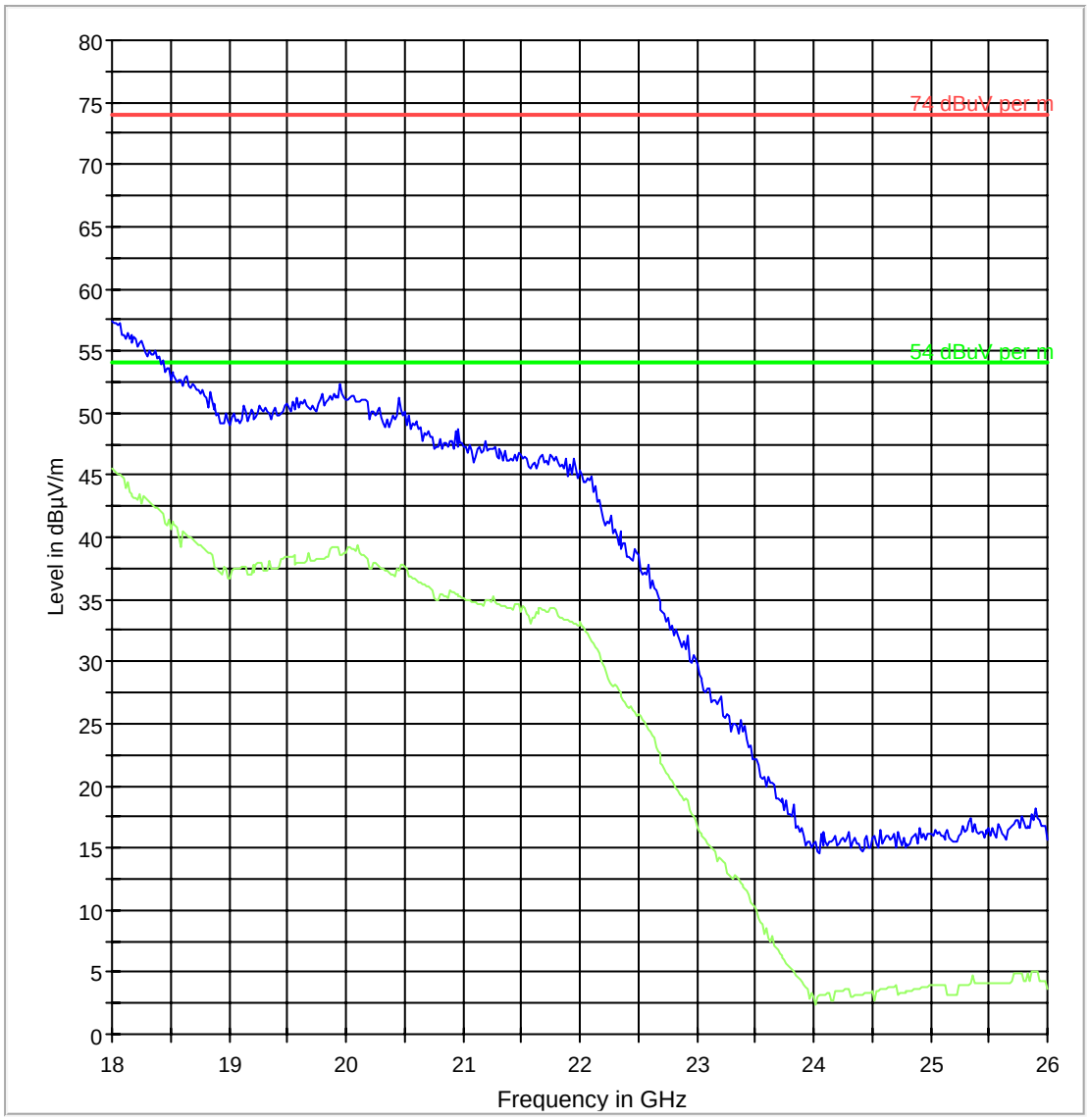


Receive Mode: 1GHz-18GHz

FCC 15 1-18GHz



Receive Mode: 18GHz-26.5GHz



5.2.7 AC Power Line Conducted Emissions

5.2.8 §15.207 Conducted limits- Intentional Radiators:

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

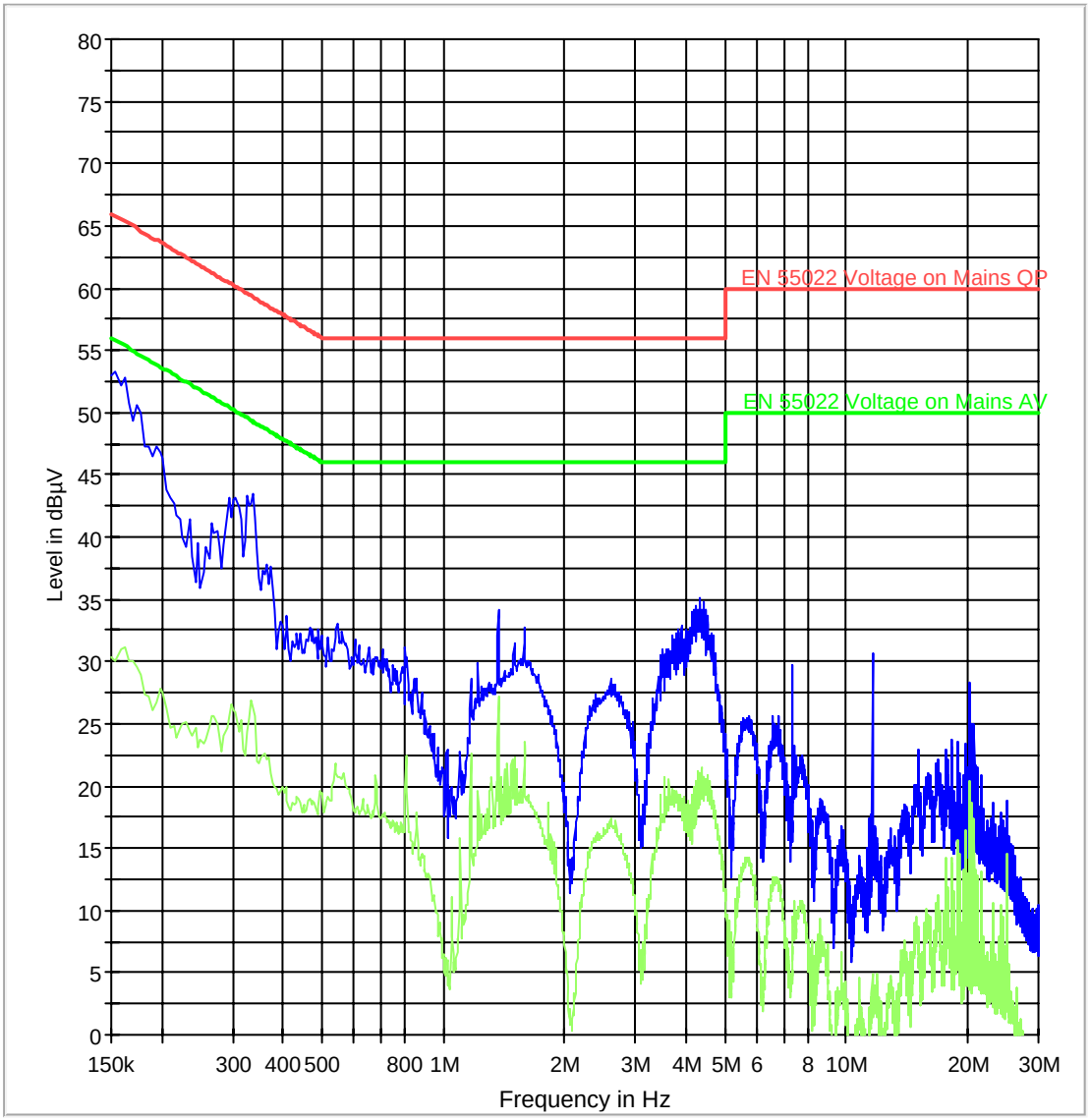
*Decreases with the logarithm of the frequency.

Analyzer Settings: RBW = 10KHz; VBW = 10KHz

5.2.9 Test Results:

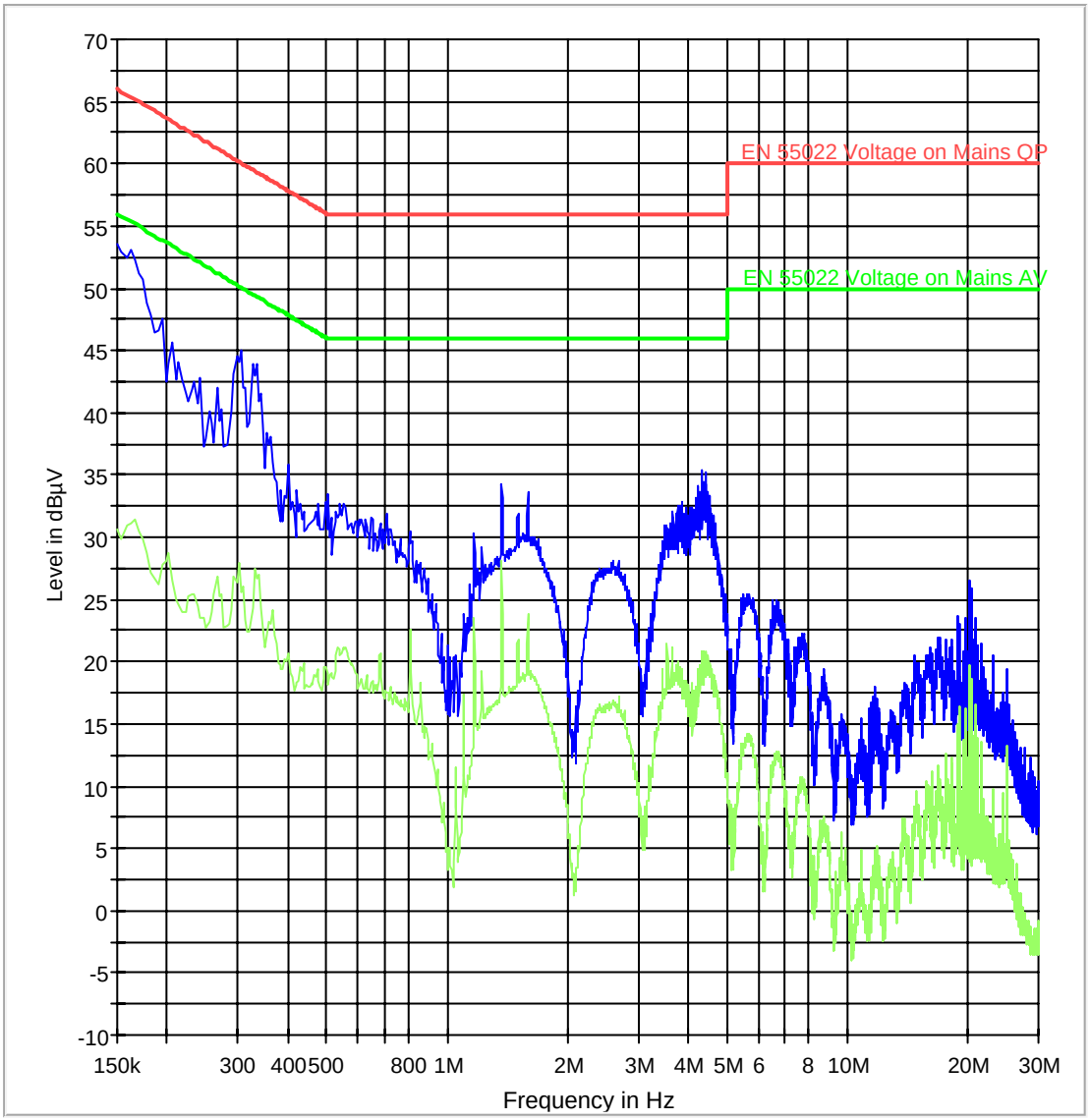
CDMA-850 Transmit

CISPR 22 Mains Conducted ESH3-Z5



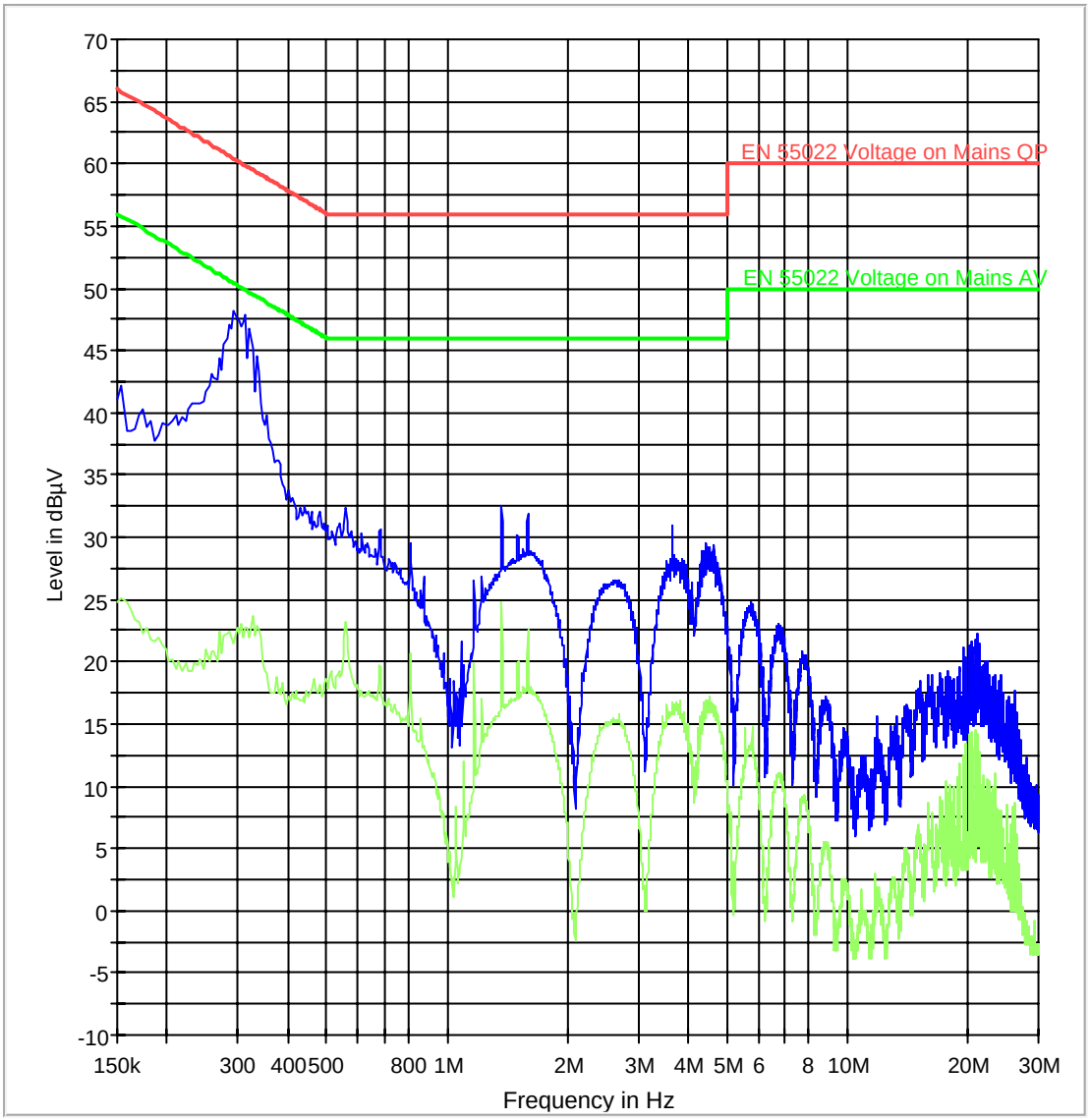
CDMA-1900 Transmit

CISPR 22 Mains Conducted ESH3-Z5



Receive mode

CISPR 22 Mains Conducted ESH3-Z5

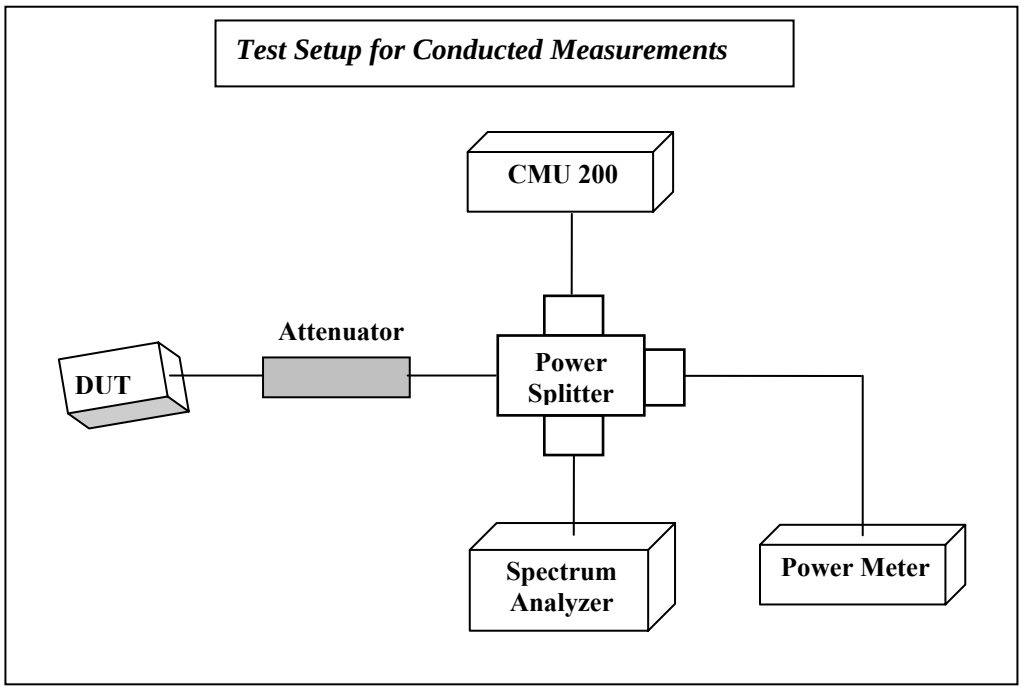


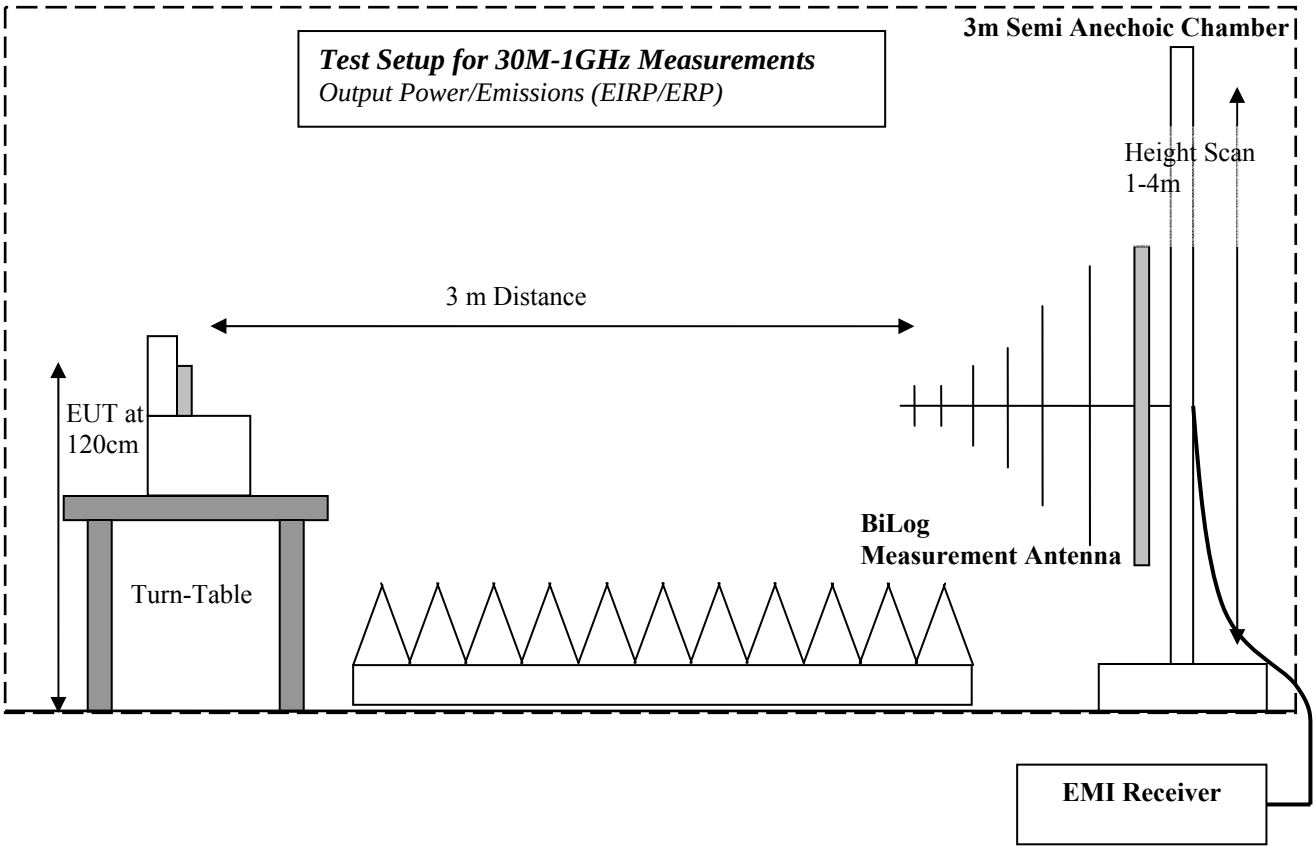
6 Test Equipment And Ancillaries Used For Tests

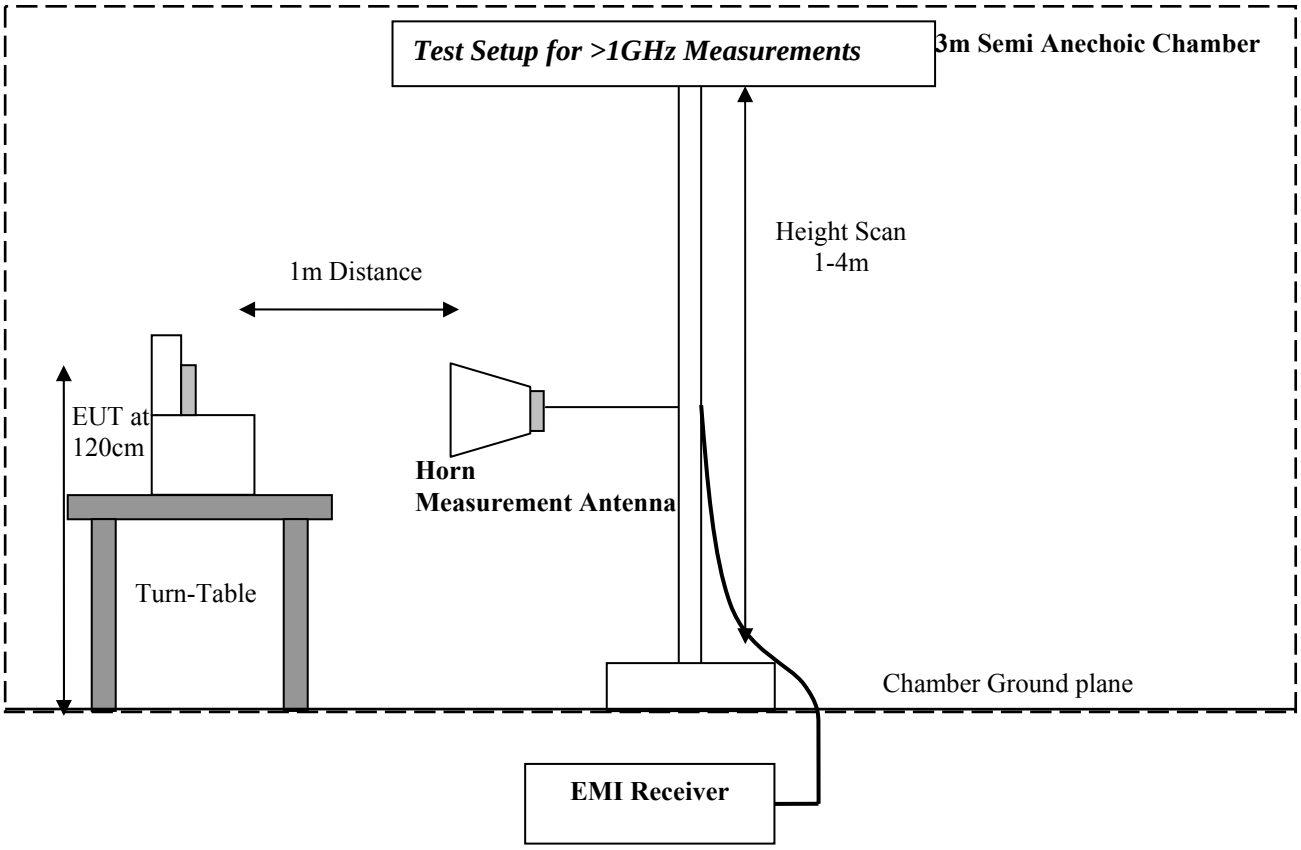
Instrument/Ancillary	Model	Manufacturer	Serial No.	Cal Date	Cal Interval
Radio Communication Tester	CMU 200	Rohde & Schwarz	101821	May 2009	1 year
Radio Communication Tester	CMU 200	Rohde & Schwarz	109879	May 2009	1 year
Radio Communication Tester	CMU 200	Rohde & Schwarz	110759	May 2009	1 year
Bluetooth Tester	CBT	Rohde & Schwarz	100212	May 2009	1 year
EMI Receiver/Analyzer	ESIB 40	Rohde & Schwarz	100107	May 2009	1 year
Spectrum Analyzer	FSU	Rohde & Schwarz	200302	Dec 2009	1 year
Loop Antenna	6512	EMCO	00049838	July 2008	2 years
Biconilog Antenna	3141	EMCO	0005-1186	June 2009	2 years
Horn Antenna (1-18GHz)	3115	ETS	00035111	Jan 2009	3 years
Horn Antenna (18-40GHz)	3116	ETS	00070497	Jan 2009	3 years
Communication Antenna	IBP5-900/1940	Kathrein	n/a	n/a	n/a
High Pass Filter	5HC2700	Trilithic Inc.	9926013	n/a	n/a
High Pass Filter	4HC1600	Trilithic Inc.	9922307	n/a	n/a
6GHz High Pass Filter	HPM50106	Microtronics	001	n/a	n/a
Pre-Amplifier	JS4-00102600	Miteq	00616	May 2009	1 year
LISN	50-25-2-08	FCC	08014	Apr 2009	1 year
Power Smart Sensor	R&S	NRP-Z81	100161	May 2009	1 Year
Power Smart Sensor	R&S	NRP-Z22	100223	May 2009	1 Year
Upconverter	PXI-5610	NI	E93740	Aug 2008	2 years
Waveform Generator	PXI-5421	NI	E965F1	Aug 2008	2 years
10dB attenuator	ATT-0298-10	MidwestMicrowav	n/a	n/a	n/a
Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
DC Power Supply	E3610A	Hewlett Packard	KR83021224	n/a	n/a
DC Power Supply	E3610A	Hewlett Packard	KR83023316	n/a	n/a
DC Power Supply	6632A	Hewlett Packard	3524A-12822	n/a	n/a
DC Power Supply	6655A	Hewlett Packard	3403A-00487	n/a	n/a
Multimeter	179	Fluke	N/A	Feb 2010	1 Year
Temp Hum Logger	TM320	Dickson	03280063	Feb 2010	1 Year
Temp Hum Logger	TM325	Dickson	5285354	Feb 2010	1 Year
Climatic Chamber	VT4004	Votsch	G1115	May 2009	1 year

Note:
Equipment calibration is performed by an accredited calibration lab according to ISO 17025 requirements.
Calibration intervals are determined from manufacturer recommendation and/or lab discretion.
Cetecom Inc takes all measures to calibrate equipment before the due date; for instances when the equipment has to be used beyond the calibration due date, necessary steps are taken for calibration verification and documented until accredited calibration can be performed- to meet the Quality System requirements

7 Block Diagrams






Test Setup for >1GHz Measurements
3m Semi Anechoic Chamber
Height Scan
1-4m
1m Distance
EUT at
120cm
Horn
Measurement Antenna
Turn-Table
Chamber Ground plane
EMI Receiver

8 Revision History

Date	Report Name	Changes to report	Report prepared by
2010-06-17	**EMC_SMAR1_023_10001 _FCC22_24**	**Original Report**	**Josie Sabado**