

Test Report On**Dual-Band CDMA Cellular Phone with Bluetooth****FCC Part 22 & 24 Certification**FCC ID: **V65SCP-27H**Models: **SCP-2700**Date: **December 15, 2008****STATEMENT OF CERTIFICATION**

The data, data evaluation and equipment configuration represented herein are a true and accurate representation of the measurements of the sample's radio frequency interference emissions characteristics as of the dates and at the times of the test under the conditions herein specified.

STATEMENT OF COMPLIANCE

This product has been shown to be capable of compliance with the applicable technical standards as indicted in the measurement report and was tested in accordance with the measurement procedures specified in §2.947.

Report No: KWC-V65-2224-1208-R0**Report Prepared for:** KYOCERA Corporation
KYOCERA SANYO Telecom, Inc.
21605 Plummer Street
Chatsworth, CA 91311 United States**Test performed by:** Kyocera Wireless Corp.
10300 Campus Point Drive
San Diego, CA 92121**Date of Test:** Dec 11 – Dec 14, 2008**Report Prepared by:** Neil Primero, Test Technician**Report Reviewed by:** Ngoc-Thi Nguyen, Regulatory Engineer**Report Approved by:** C.K. Li, Director of Regulatory Engineering

Compliance Certification Services performed the tests that required an OATS site.

Table of Contents

1	GENERAL INFORMATION	3
2	PRODUCT DESCRIPTION	4
3	TEST CONFIGURATION.....	5
4	NOT USED	5
5	NOT USED	5
6	TRANSMITTER RF POWER OUTPUT	6
6.1	CONDUCTED POWER	6
6.2	RADIATED POWER	6
7	OCCUPIED BANDWIDTH.....	7
8	SPURIOUS EMISSIONS AT ANTENNA TERMINALS.....	11
9	TRANSMITTER RADIATED SPURIOUS EMISSIONS MEASURED DATA	18
10	RECEIVER SPURIOUS EMISSIONS	18
11	TRANSMITTER RF CARRIER FREQUENCY STABILITY	18
11.1	CDMA 800 MODE.....	19
11.2	CDMA 1900 MODE.....	20
12	EXPOSURE OF HUMANS TO RF FIELDS (SAR)	21
13	TEST EQUIPMENT.....	21

1 General Information

Applicant:	KYOCERA SANYO Telecom, Inc. 21605 Plummer Street Chatsworth California United States 91311	
FCC ID:	V65SCP-27H	
Product:	Dual-Band CDMA Cellular Phone with Bluetooth	
Model Numbers:	SCP-2700	
EUT Serial Number:	2700D309	
Type:	<input checked="" type="checkbox"/> Identical Prototype, <input type="checkbox"/> Pre-Production, <input type="checkbox"/> Production	
Device Category:	Portable	
RF Exposure Environment:	General Population / Uncontrolled	
Antenna:	Internal Antenna	
Detachable Antenna:	No	
External Input:	Audio/Digital Data	
Quantity:	Quantity production is planned	
FCC Rule Parts:	§22H	§24E
Modes:	800 CDMA	1900 CDMA
Multiple Access Scheme:	CDMA	CDMA
TX Frequency (MHz):	824 – 849	1850 - 1910
Emission Designators:	1M25F9W	1M25F9W
Max. Output Power (mW):	467.7 ERP	549.5 EIRP

2 Product Description

The V65SCP-27H is a Dual-Band 1XRTT CDMA Cellular phone. The dual-band architecture is defined as 800MHz (cellular CDMA) and 1900MHz (PCS CDMA). Please refer to Exhibit 1 (operation description) for detail technical description.

3 Test Configuration

For Part 22 and 24, all of CDMA measurements were conducted with Agilent 8960 as a base station simulator. The base station simulator establishes a CDMA link with the test device. To justify on the selection of applicable configurations, the EUT was pre-tested under all R.C. and S.O. operation modes to determine the worst case scenario:

CONFIGURATION Peak Power	CONDUCTED POWER (dBm)					
	CDMA 800			CDMA 1900		
	Ch 1013	Ch 383	Ch 777	Ch 25	Ch 600	Ch 1175
	Peak	Peak	Peak	Peak	Peak	Peak
SO2, RC1 Full Rate	28.58	28.57	28.08	27.57	28.44	27.66
SO2, RC3 Full Rate	28.61	28.25	27.84	27.49	28.19	27.54
SO55, RC1 Full Rate	28.63	28.68	28.16	27.72	28.51	27.84
SO55, RC3 Full Rate	28.74	28.88	28.33	27.75	28.59	27.93
TDSO SO32, RC3 (FCH+SCH) Full Rate	28.30	28.37	27.97	27.53	28.15	27.60
TDSO SO32, RC3 (-SCH) Full Rate	28.33	28.36	28.03	27.50	28.35	27.63

CONFIGURATION Average Power	CONDUCTED POWER (dBm)					
	CDMA 800			CDMA 1900		
	Ch 1013	Ch 383	Ch 777	Ch 25	Ch 600	Ch 1175
	Ave	Ave	Ave	Ave	Ave	Ave
SO2, RC1 Full Rate	24.57	24.64	24.56	24.49	24.58	24.60
SO2, RC3 Full Rate	24.59	24.62	24.58	24.46	24.55	24.66
SO55, RC1 Full Rate	24.56	24.62	24.54	24.48	24.60	24.64
SO55, RC3 Full Rate	24.61	24.68	24.59	24.51	24.62	24.67
TDSO SO32, RC3 (FCH+SCH) Full Rate	24.60	24.65	24.56	24.48	24.56	24.63
TDSO SO32, RC3 (-SCH) Full Rate	24.58	24.64	24.57	24.50	24.59	24.65

The following configuration was determined and reported as worst case for all measurements:
Radio Configuration: RC3
Service Options: SO55
Data Rate: full rate

4 Not Used

5 Not Used

6 Transmitter RF Power Output

6.1 Conducted Power

FCC: § 2.1046

Measurement Procedures:

The RF output power was measured using a Giga-tronics 8541C Universal Power Meter. Terminated to a resistive coaxial load of 50 ohms.

Mode	Frequency (MHz)	Channel	Power (dBm)
CDMA 800	824.70	1013	24.85
	836.52	384	24.79
	848.31	777	24.83
CDMA 1900	1851.25	25	24.60
	1880.00	600	24.75
	1908.75	1175	24.79

6.2 Radiated Power

FCC: § 22.913, § 24.232

Measurement Procedures:

Tests were performed in Compliance Certification Service using substitution method. See separated radiated emission report for details.

Mode	Frequency (MHz)	Channel	Max. Power (dBm)	Ref.
CDMA 800	824.70	1013	25.9	ERP
	836.52	383	26.2	
	848.31	777	26.7	
CDMA 1900	1851.25	25	26.9	EIRP
	1880.00	600	27.4	
	1908.75	1175	27.3	

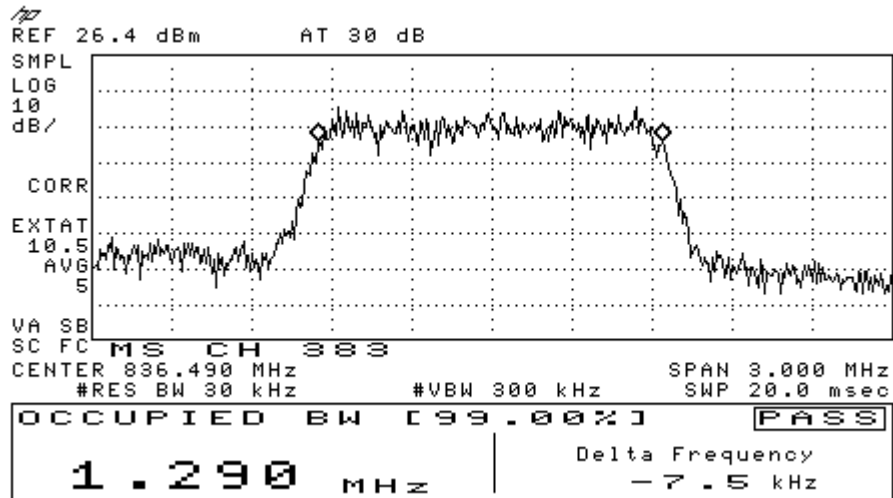
7 Occupied Bandwidth**FCC:** § 2.1049, § 22.917(b)(d), § 24.238**Measurement Procedures:**

The RF output of the EUT was connected to the input of the spectrum analyzer (S.A.) with sufficient attenuation. The spectrum with no modulation was recorded.

For Digital: Modulate with full rate all up power control bit.

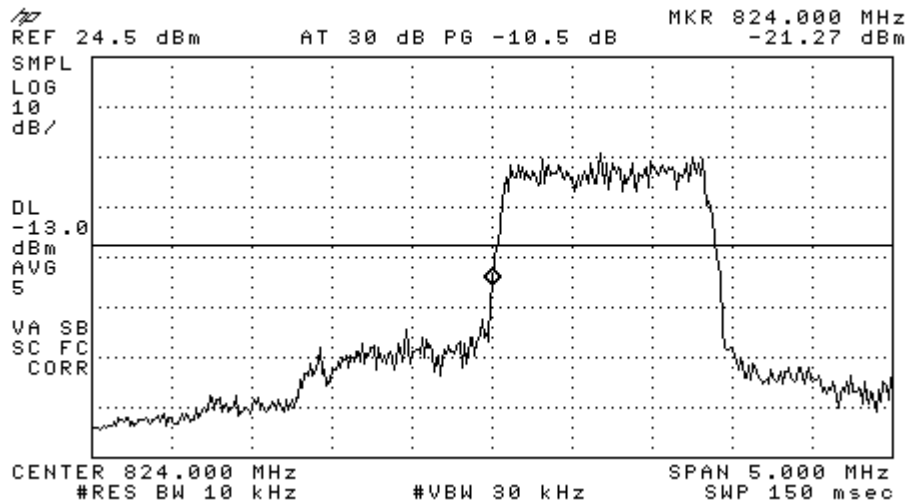
List of Figures

Figure	Mode	Description
7-1	CDMA 800	CDMA @ Ch383
7-2		Lower Band Edge @ CH 25
7-3		Upper Band Edge @ CH 1175
7-4	CDMA 1900	CDMA @ CH600
7-5		Lower Band Edge @ CH 25
7-6		Upper Band Edge @ CH 1175



RL

Figure 7-1 CDMA 800 @ CH 383



RL

Figure 7-2 CDMA 800 Lower Band Edge @ CH 1013

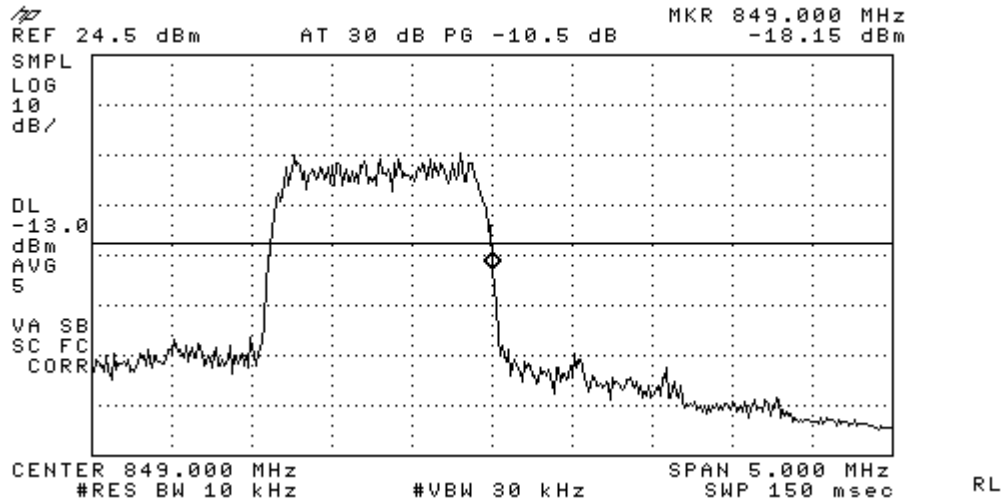


Figure 7-3 CDMA 800 Upper Band Edge @ CH 777

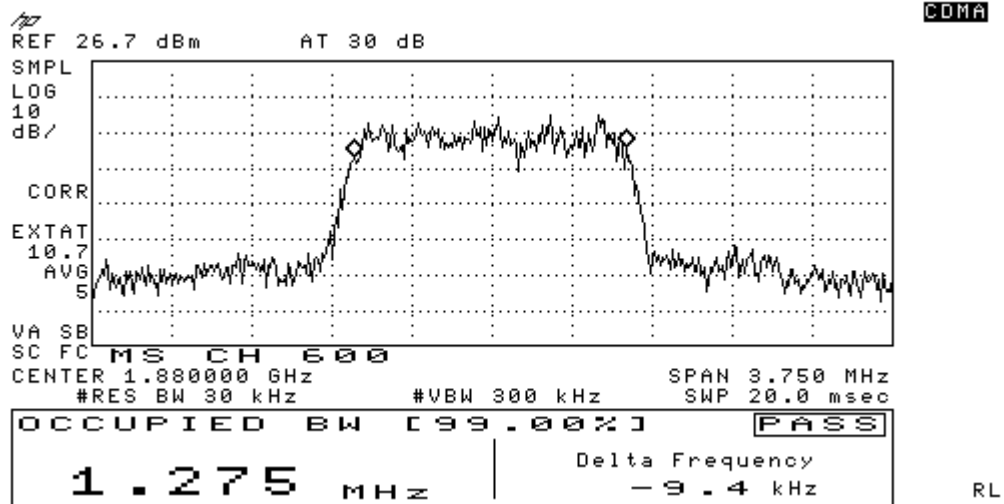
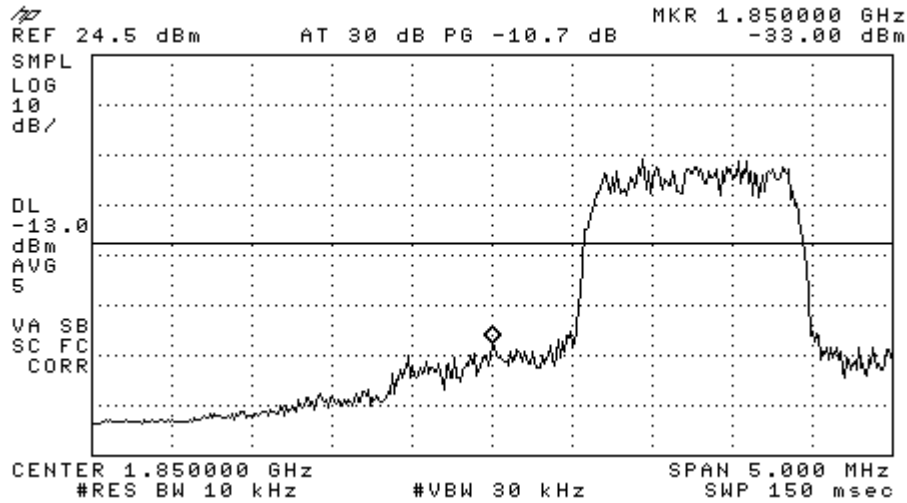
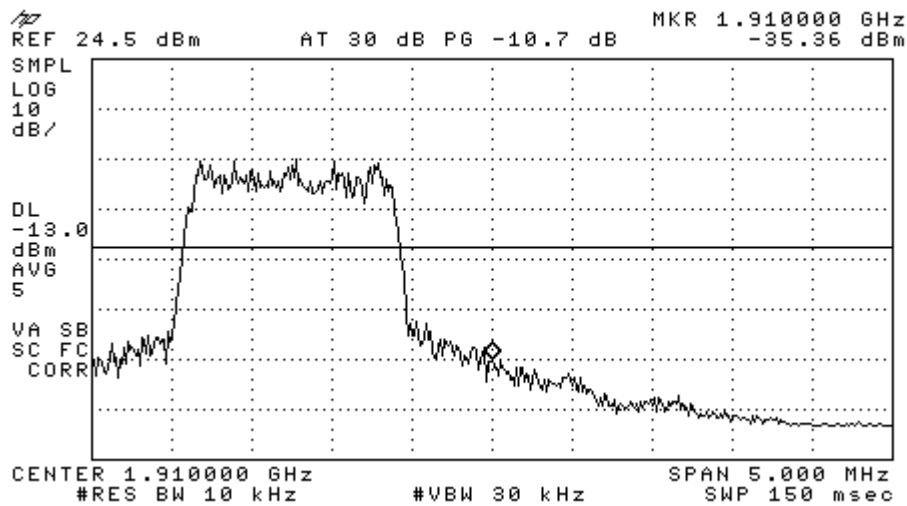


Figure 7-4 CDMA 1900 @ CH 600



RL



RL

8 Spurious Emissions At Antenna Terminals

FCC: § 2.1051, § 22.917(e)(f), § 24.238

Measurement Procedures:

Out of Band: The RF output of the EUT was connected to the input of the spectrum analyzer with sufficient attenuation. The modulating signal was applied accordingly. The frequency spectrum was investigated from the lowest frequency signal generated up to at least the tenth harmonic of the fundamental.

S.A. Setting: RBW=1MHz, VBW=1MHz

List of Figures:

Figure	Mode	Channel	Plot Description
8-1	CDMA 800	1013	Conducted spurious emissions, 9kHz to 10GHz
8-2		383	Conducted spurious emissions, 9kHz to 10GHz
8-3		777	Conducted spurious emissions, 9kHz to 10GHz
8-4	CDMA 1900	25	Conducted spurious emissions, 9kHz to 20GHz
8-5		600	Conducted spurious emissions, 9kHz to 20GHz
8-6		1175	Conducted spurious emissions, 9kHz to 20GHz

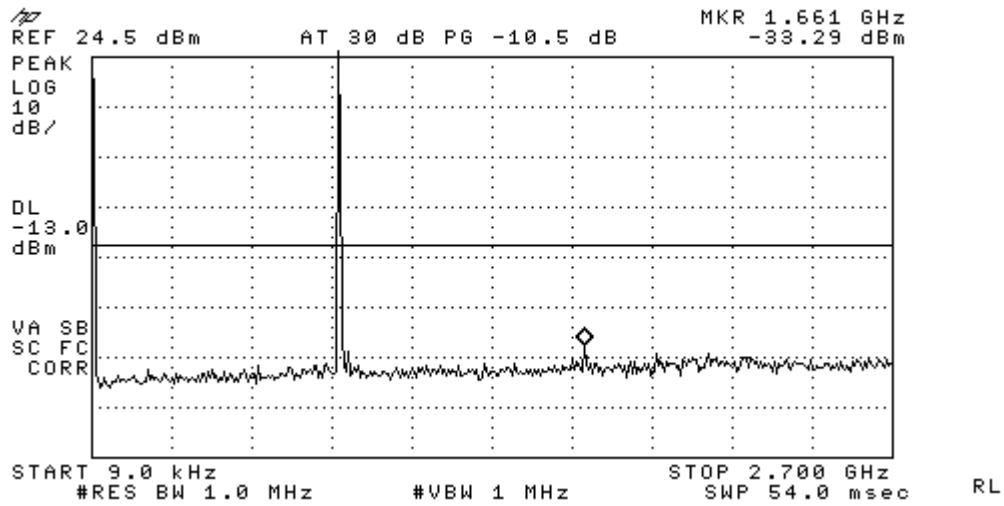


Figure 8-1a CDMA 800 – Conducted Spurious Emission (CH 1013)

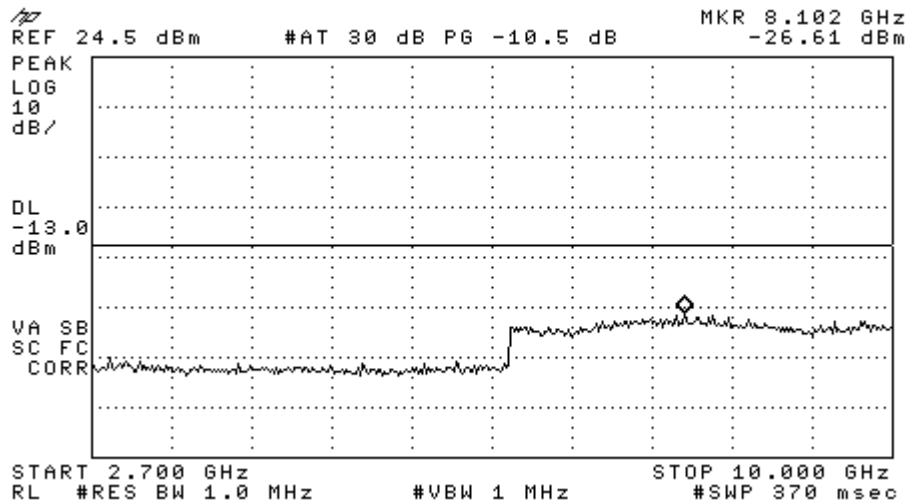


Figure 8-1b CDMA 800 – Conducted Spurious Emission (CH 1013)

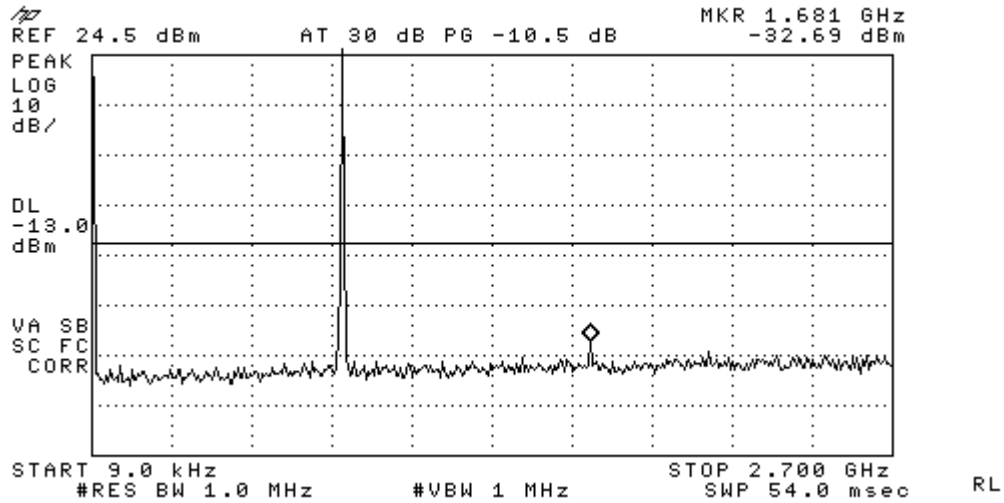


Figure 8-2a CDMA 800 – Conducted Spurious Emission (CH 383)

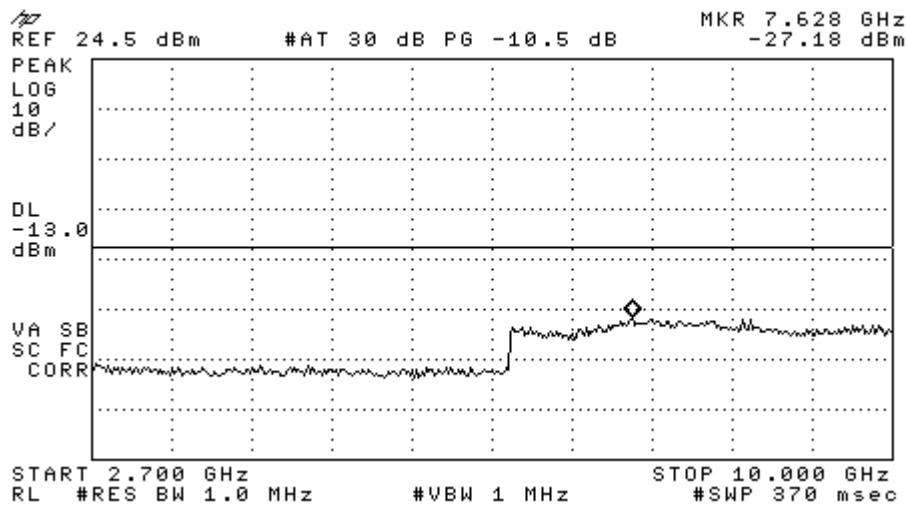


Figure 8-2b CDMA 800 – Conducted Spurious Emission (CH 383)

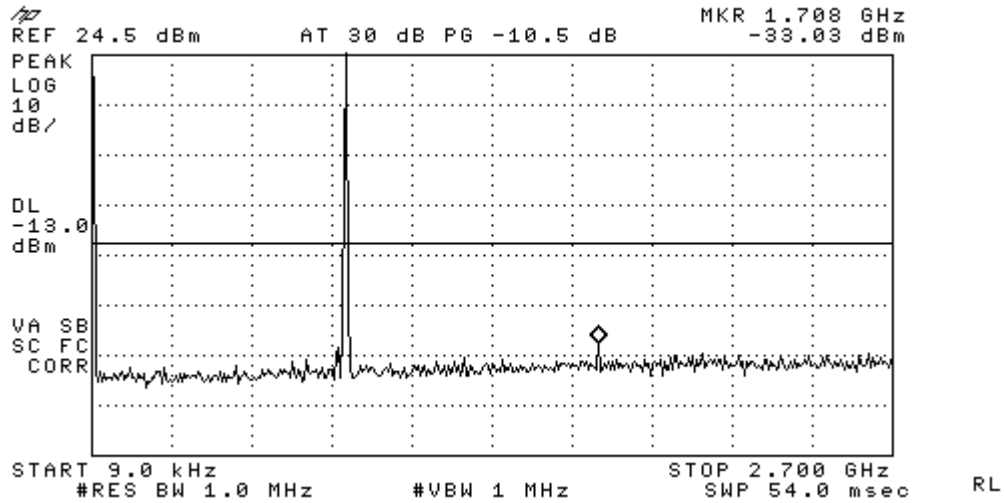


Figure 8-3a CDMA 800 – Conducted Spurious Emission (CH 777)

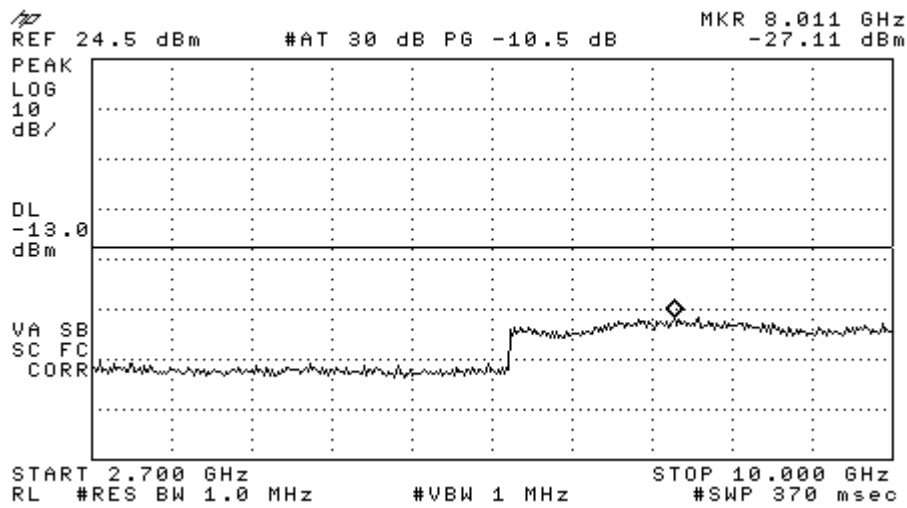


Figure 8-3b CDMA 800 – Conducted Spurious Emission (CH 777)

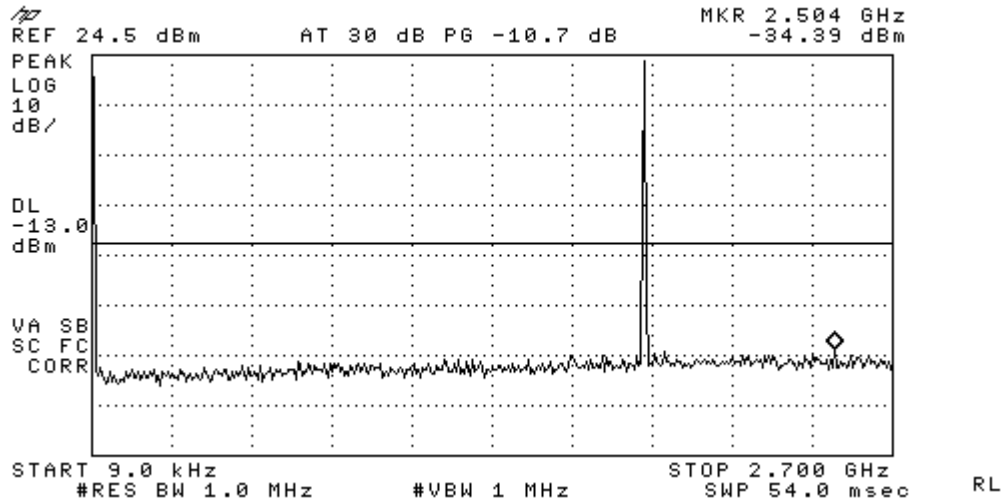


Figure 8-4a CDMA 1900 - Conducted Spurious Emission (CH 25)

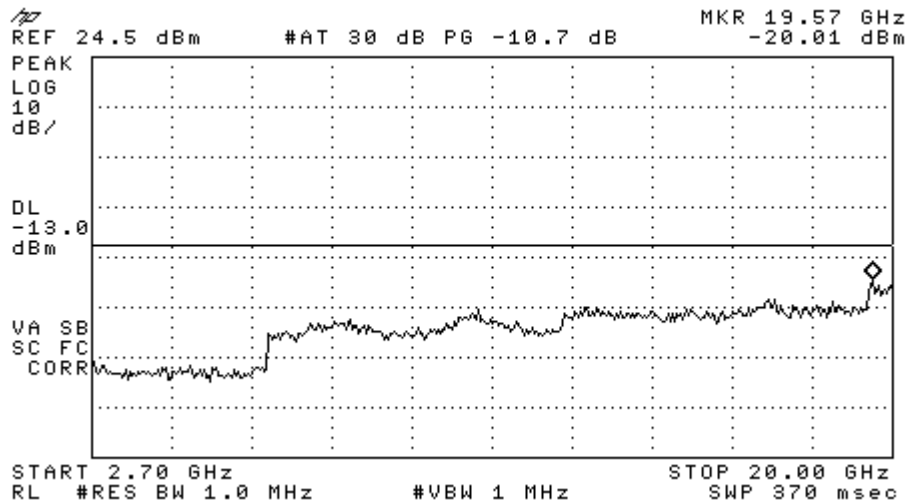


Figure 8-4b CDMA 1900 - Conducted Spurious Emission (CH 25)

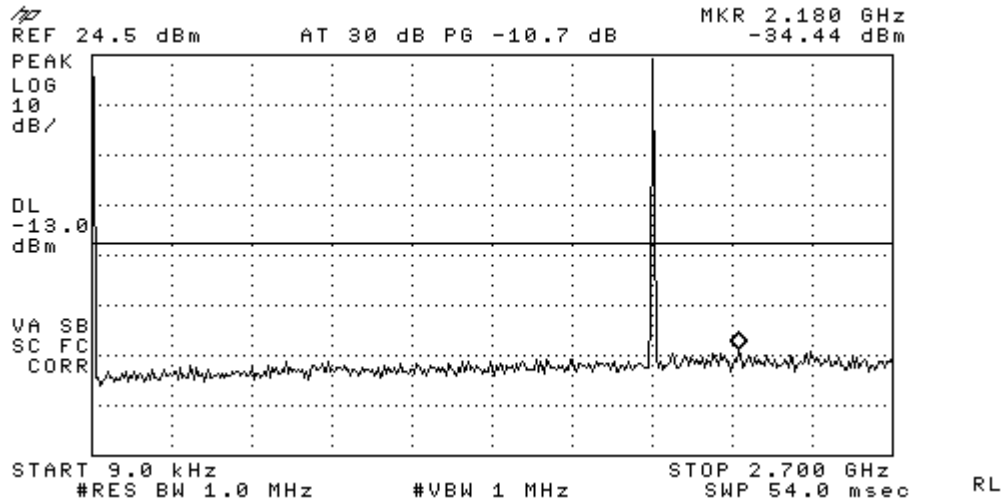


Figure 8-5a CDMA 1900 - Conducted Spurious Emission (CH 600)

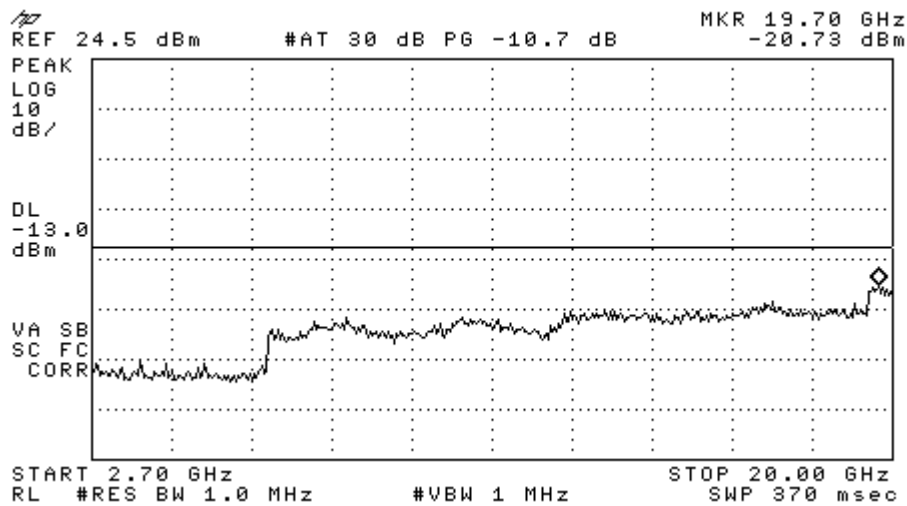


Figure 8-5b CDMA 1900 - Conducted Spurious Emission (CH 600)

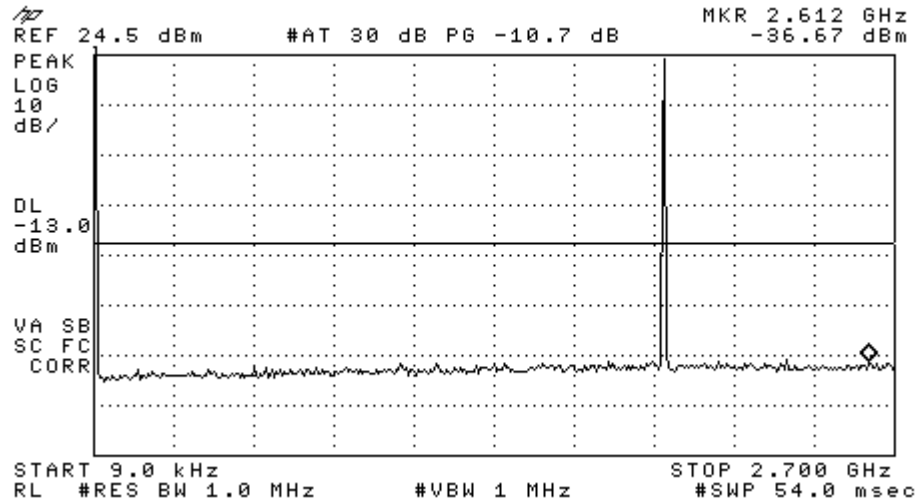


Figure 8-6a CDMA 1900 - Conducted Spurious Emission (CH 1175)

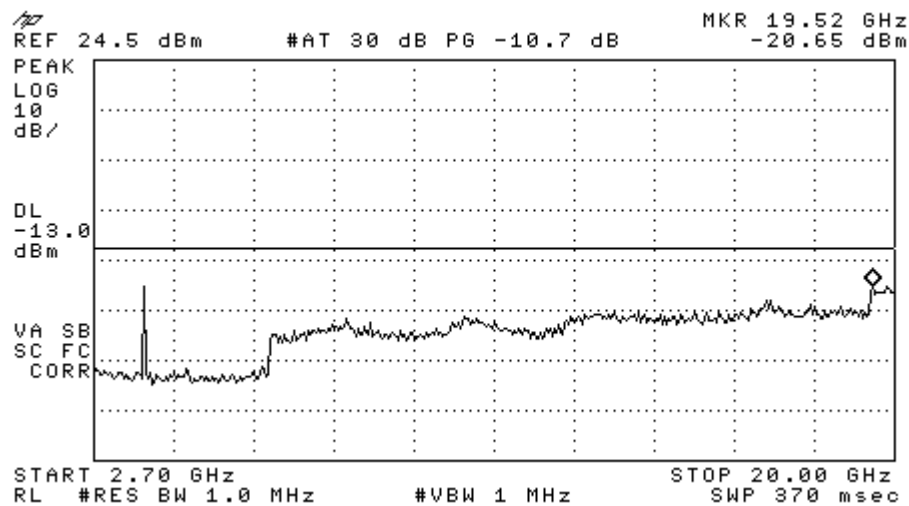


Figure 8-6b CDMA 1900 - Conducted Spurious Emission (CH 1175)

9 Transmitter Radiated Spurious Emissions Measured Data**FCC:** § 2.1053, § 22.91, § 24.238**Measurement Procedures:**

The radiated spurious emission test was performed at Compliance Certification Service. The test report is attached in a separate attachment.

10 Receiver Spurious Emissions**FCC:** § 15.109**Measurement Procedures:**

The receiver radiated spurious emission test was performed at Compliance Certification Service. The test report is attached in a separate attachment.

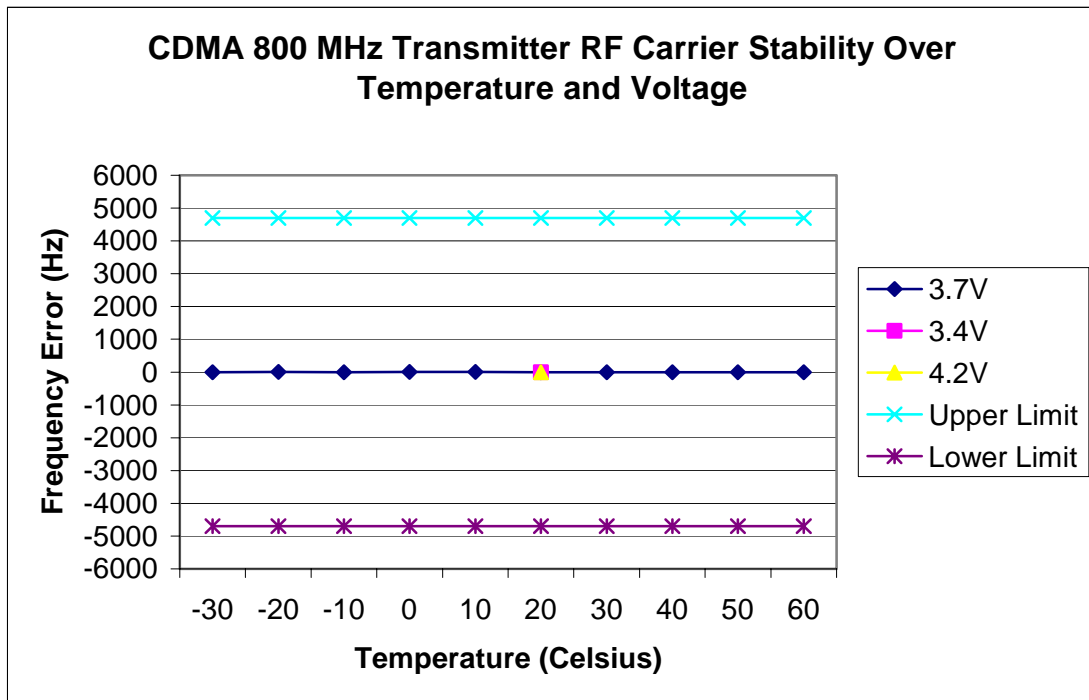
11 Transmitter RF Carrier Frequency Stability**FCC:** § 2.1055, § 22.355, § 24.235**Measurement Procedures:**

The EUT was placed in an environmental chamber. The RF output of the EUT was connected to Agilent 8960 Series 10 E5515C. A power supplier was connected as primary voltage supply.

11.1 CDMA 800 Mode

Tx Frequency:	836.49 MHz	Voltage:	3.7V
Tolerance:	+/- 2.5 Ppm (+/- 2091 Hz)	Ch:	383

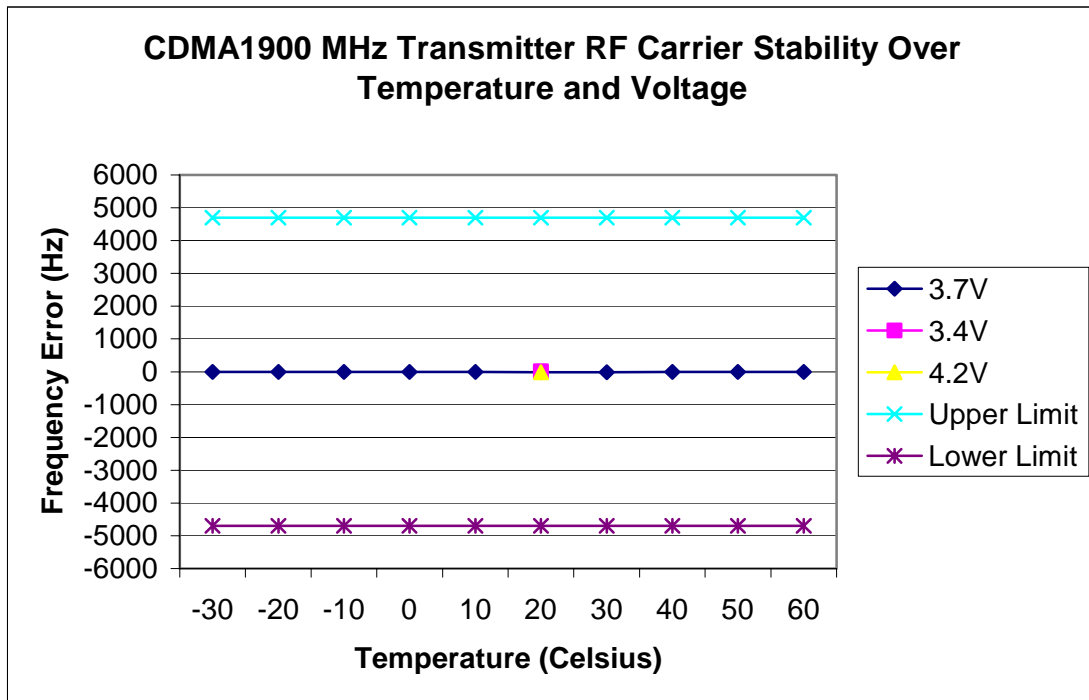
Temperature (°C)	Deviation of Carrier (Hz)			Specification (Hz)	
	3.4V (Battery endpoint)	3.7V	4.26V (115%)	Lower limit	Upper limit
-30		-5.92		-4700	4700
-20		5.37		-4700	4700
-10		-5.79		-4700	4700
0		3.73		-4700	4700
10		3.96		-4700	4700
20	-4.48	-5.11	-3.59	-4700	4700
30		-8.57		-4700	4700
40		-3.21		-4700	4700
50		-2.85		-4700	4700
60		-2.09		-4700	4700



11.2 CDMA 1900 Mode

Tx Frequency:	1880.00 MHz	Voltage :	3.7V
Tolerance:	+/- 2.5 Ppm (+/-4700 Hz)	Ch:	600

Temperature (°C)	Deviation of Carrier (Hz)			Specification (Hz)	
	3.4V (Battery endpoint)	3.7V	4.26V (115%)	Lower limit	Upper limit
-30		-5.88		-4700	4700
-20		-5.82		-4700	4700
-10		-3.92		-4700	4700
0		-5.43		-4700	4700
10		-8.66		-4700	4700
20	11.88	-10.34	-12.78	-4700	4700
30		-18.03		-4700	4700
40		-5.07		-4700	4700
50		-5.2		-4700	4700
60		-6.24		-4700	4700



12 Exposure of Humans to RF Fields (SAR)

The SAR Test Report is showed in a separate attachment as Exhibit 9.

13 Test Equipment

Description	Manufacturer	Model Number	Serial Number	Cal Due Date
Power Meter	Giga-tronics	8541C	1832048	07/16/09
Spectrum Analyzer	Hewlett Packard	8593EM	3710A00203	03/04/10
Spectrum Analyzer	Hewlett Packard	8595E	3911A03899	07/19/09
Wireless Communications Test Set	Agilent	8960	GB44052789	05/19/10
Temperature Chamber	Test Equity	ZH2-033-033-H/AC	ZZ9622421	02/20/09