683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080
Tel: +82-31-321-2664 Fax: +82-31-321-1664
http://www.digitalemc.com

CERTIFICATE OF COMPLIANCE
FCC Part 24 Certification

Dates of Tests: Oct. 12 ~ 19, 2004
Test Report S/N:DR50110410N
Test Site : DIGITAL EMC CO., LTD.

FCC ID+. **SBWVK900**

APPLICANT **VK Corporation**

Classification:	**Licensed Portable Transmitter Held to Ear (PCE)**
FCC Rule Part(s):	**§24(E), §15, §2**
EUT Type:	**PCS1900 with GPRS Function Mobile Station**
Model name:	**VK900**
Serial number:	**Identical prototype**
TX Frequency Range:	**1850.2 ~ 1909.8 MHz (PCS1900)**
RX Frequency Range:	**1930.2 ~ 1989.8 MHz (PCS1900)**
Max. RF Output Power:	**0.728 W EIRP PCS1900 (28.62dBm)**
Max. SAR Measurement:	**0.077W/kg PCS1900 Head SAR / 0.600W/kg PCS1900 Body SAR**
Date of Issue:	**November 10, 2004**

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

NVLAP LAB CODE 200559-0

TABLE OF CONTENTS

MEASUREMENT REPORT

1. Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

§2.1033 General Information

Applicant: VK Corporation

Address: 2F Seo-Woo B/D, 97-3, I-Mea-Dong, Bundang-Gu, Seongnam City, Kyonggi-Do, KOREA

Attention: Seung-Bok Won **(Manager)**

- FCC ID: SBWVK900
- Quantity: The mass product
- Tx Freq. Range: 1850.2 ~ 1909.8 MHz (PCS1900)
- Rx Freq. Range: 1930.2 ~ 1989.8 MHz (PCS1900)
- Max. Power Rating: 0.728W EIRP PCS1900
- FCC Classification(s): Licensed Portable Transmitter Held to Ear (PCE)
- Equipment (EUT) Type: PCS1900 with GPRS Function Mobile Station
- Modulation(s): GMSK
- Frequency Tolerance: ± 0.00025 % (2.5ppm)
- FCC Rule Part(s): §24(E), §15, §2
- Dates of Tests: October 12 ~ 19, 2004
- Place of Tests: DIGITAL EMC
- Test Report S/N: DR50110410N

2. General information's

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.
Address : 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080
http://www.digitalemc.com E-mail : demc@unitel.co.kr
Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competents of calibration and testing laboratory".
This laboratory is accredited by NVLAP for NVLAP Lab. Code : 200559-0.

Test operator: engineer

Data	Name	Signature
November 10, 2004	Kyung-Taek LEE	

Report Reviewed By: manager

Data	Name	Signature
November 10, 2004	Dong –Min JUNG	

Ordering party:

Company name	:	VK Corporation
Address	:	R&D Center 2F Seo-Woo B/D, 97-3, I-Mea-Dong, Bundang-Gu
Zipcode	:	463-060
City/town	:	Seongnam City, Kyonggi-Do
Country	:	KOREA
Date of order	:	October 02, 2004

3. Test Report

3.1 Summary of tests

FCC Part Section(s)	Parameter	Status (note 1)
24.232(b)	Power Output	C
2.1049(h)(i)	Occupied Bandwidth	C
24.238(b)	Emission Bandwidth	C
2.1051 / 24.238	Emission Limits Transmitter	C
2.1053 (a)	Field Strength of Spurious Radiation	C
2.1053	Receiver Radiated Emissions	C
2.1055	Frequency Stability	C
2.1057	Conducted Spurious Emissions	C
15.107 / 15.207	Conducted Emissions	C
Note 1: C= Complies NC=Not Complies NT=Not Tested NA=Not Applicable		

The sample was tested according to the following specification:

FCC Parts §24(E), §15, §2; ANSI C-63.4-2001

3.2 Requirements

3.2.1 Output Power

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1046 (a)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

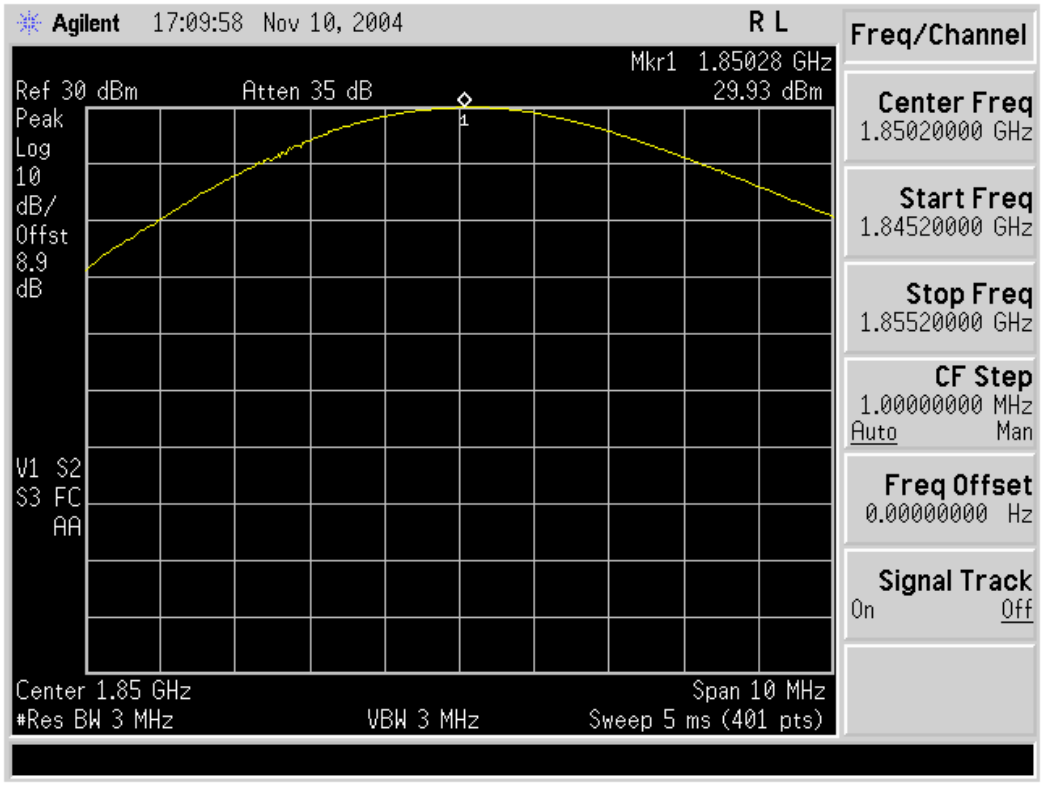
- During the process of testing, the EUT was controlled via Radio Communication tester to ensure max. Power transmission and proper modulation.
- Power output was measured at the RF output terminals when the transmitter is adjusted in accordance with Communication tester (or the tune-up procedure).

Measurement Data:

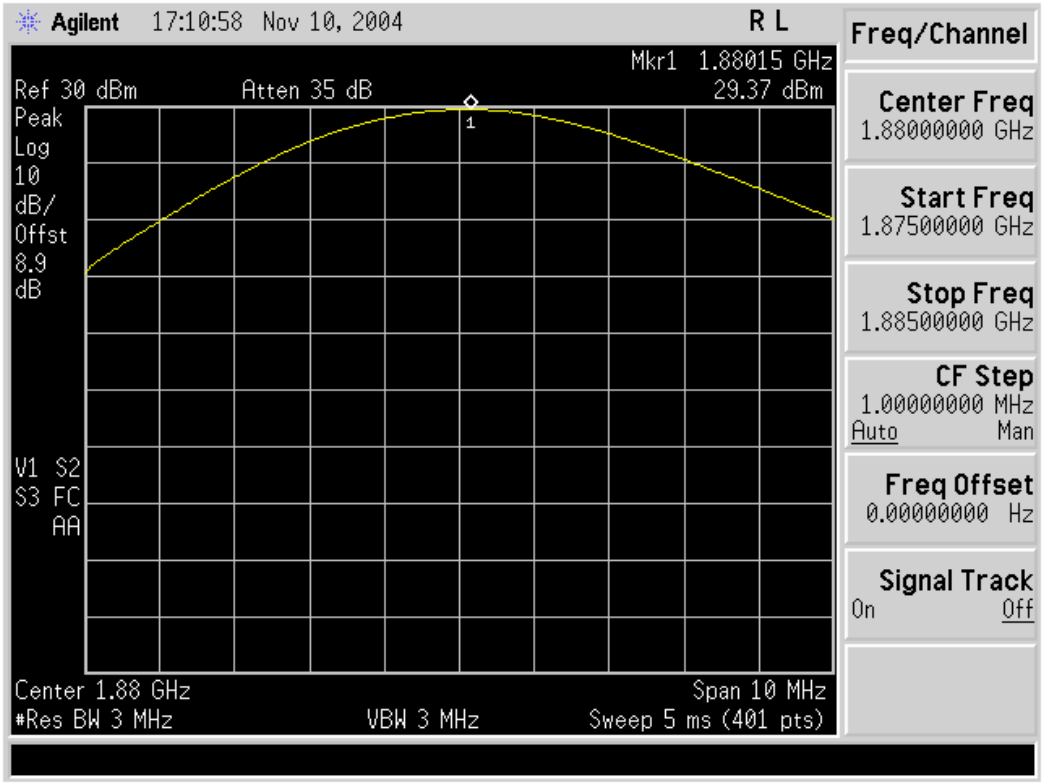
PCS1900

Channel	Frequency (MHz)	TEST CONDITIONS Power Step: 0
		(dBm)
512	1850.2	**29.93**
661	1880.0	**29.37**
810	1909.8	**29.28**

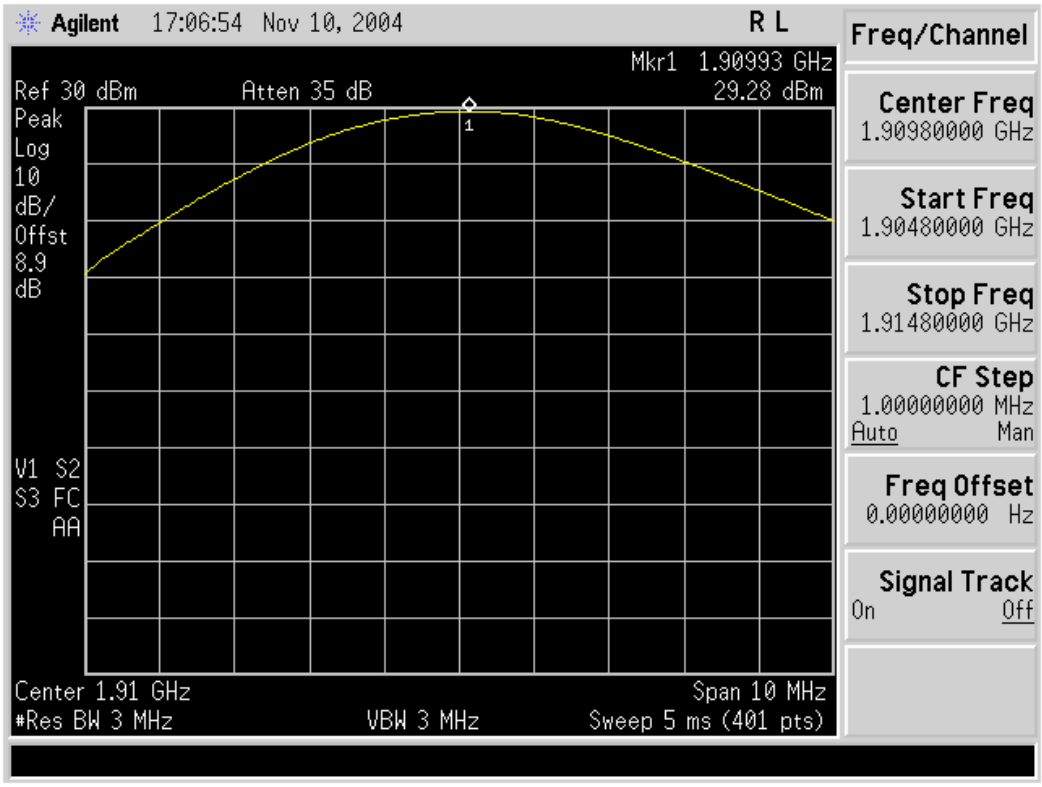
POWER OUT. PCS1900 Ch.512



POWER OUT. PCS1900 Ch.661



POWER OUT. PCS1900 Ch.810



EIRP (PCS1900)

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 24.232(b)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900
RBW=VBW	:	3MHz

Measurement Procedure:

Effective Radiated Power Output Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A Horn antenna was substituted in place of the EUT. This Horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of the Horn antenna is measured. The difference between the gain of the horn and an isotropic antenna is taken into consideration and the EIRP is recorded.

Measurement Data:

PCS1900

Channel	Frequency (MHz)	TEST CONDITIONS Power Step: 0				
		Ref. level (dBm)	Pol. (H/V)	EIRP (dBm)	EIRP (W)	Battery
512	**1850.2**	**-15.52**	**V**	**28.62**	**0.728**	**Standard**
661	1880.0	-15.86	V	27.42	0.552	Standard
810	1909.8	-14.55	V	28.51	0.710	Standard

Note: Standard Battery is options for this phone.

3.2.2 Occupied Bandwidth

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1049 (h)(i)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

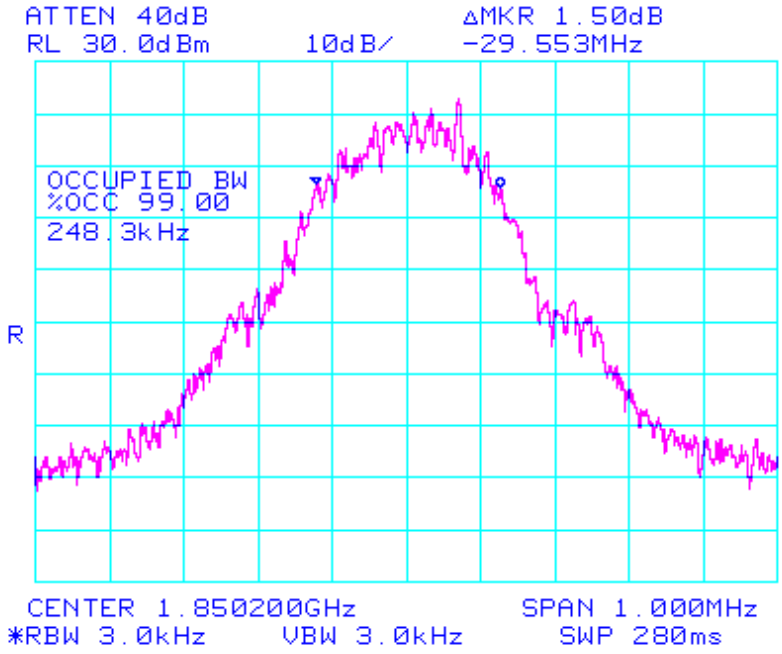
- The 99% power bandwidth was measured with a calibrated spectrum analyzer.
- Spectrum analyzer plots are included on the following pages.

Measurement Data:

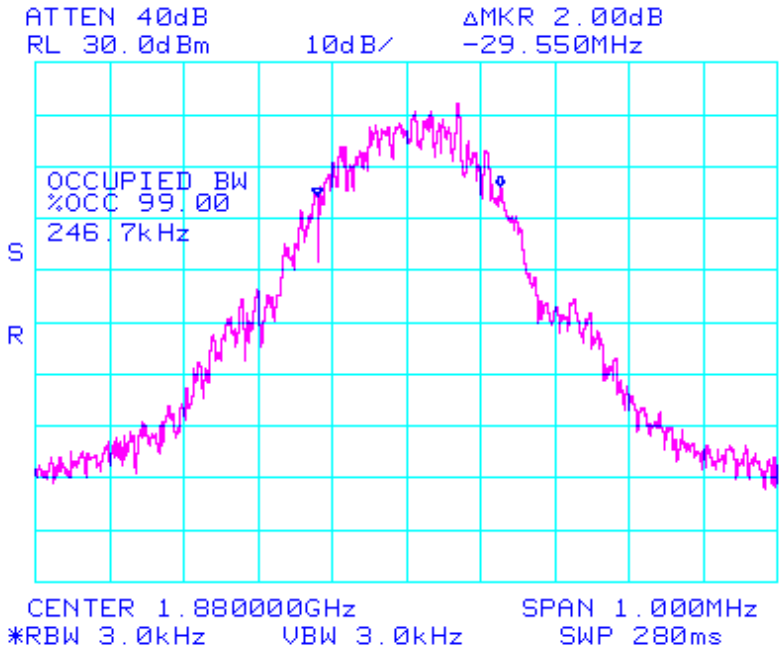
PCS1900

Channel	Frequency (MHz)	99% Bandwidth (kHz)
512	1850.2	**248.3**
661	1880.0	**246.7**
810	1909.8	**250.0**

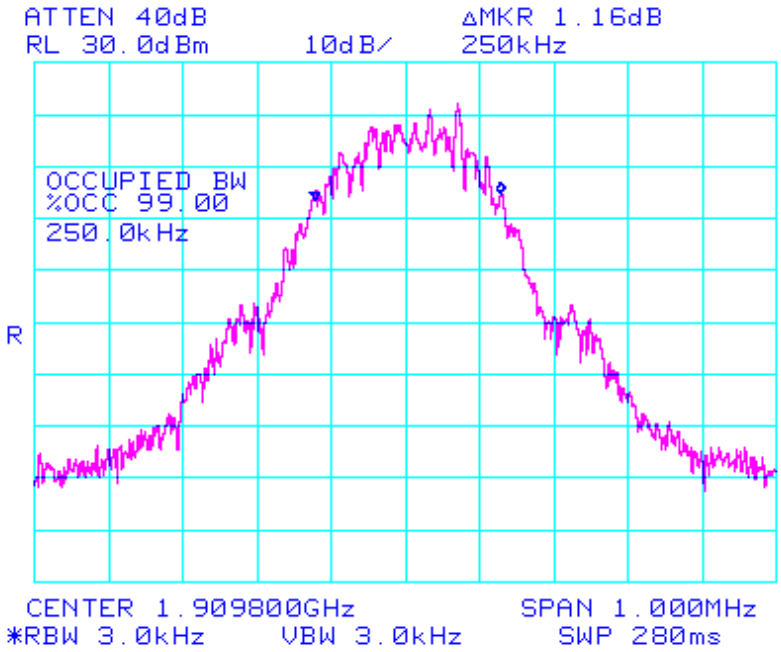
PCS1900 **99 % Bandwidth Ch. 512**



PCS1900 **99 % Bandwidth Ch. 661**



PCS1900 **99 % Bandwidth Ch. 810**



3.2.3 Occupied Bandwidth Emission Limits

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 24.238(b)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

- (a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43+10log(P) dB.

  (b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1㎒ or greater. However, in the 1㎒ 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. 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 emission are attenuated at least 26dB below the transmitter power.

  (c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

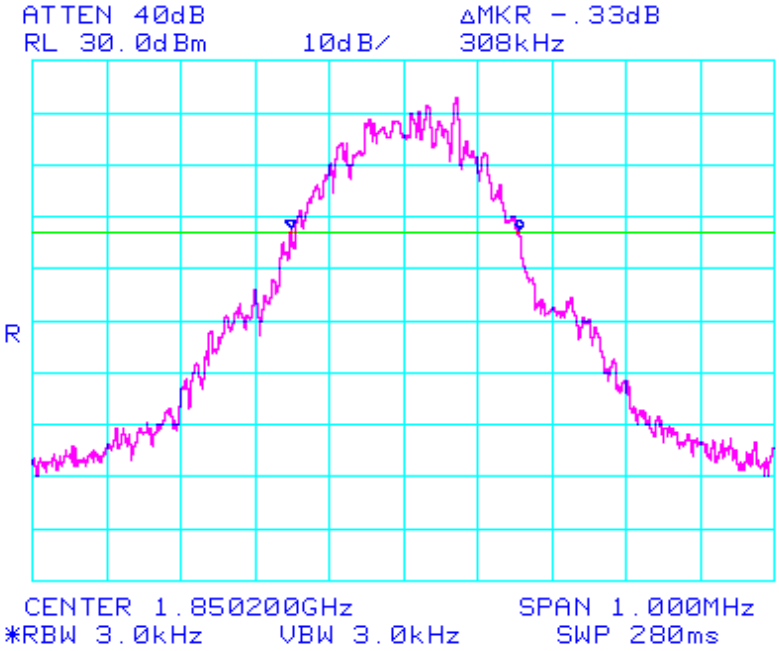
- The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.
- Spectrum analyzer plots are included on the following pages.

Measurement Data:

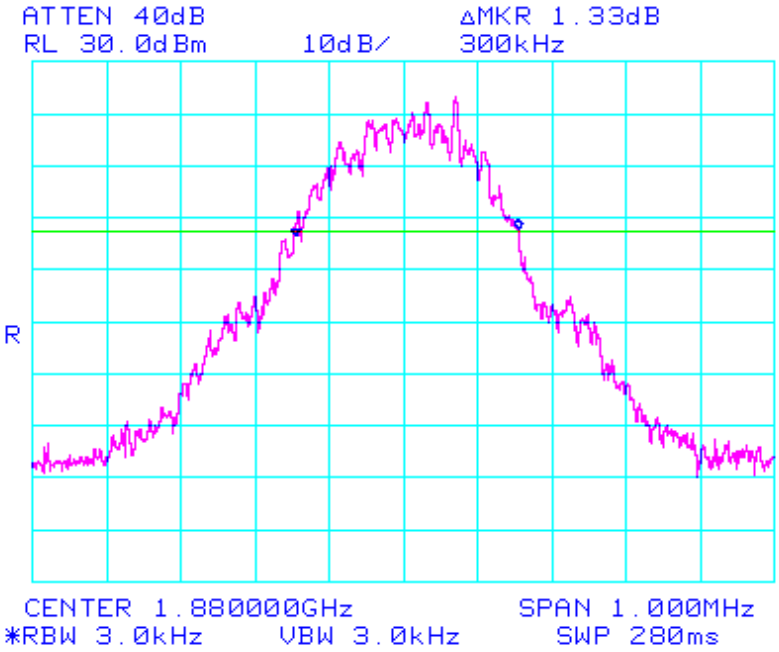
PCS1900

Channel	Frequency (MHz)	-26dBc Bandwidth (kHz)
512	1850.2	**308**
661	1880.0	**300**
810	1909.8	**305**

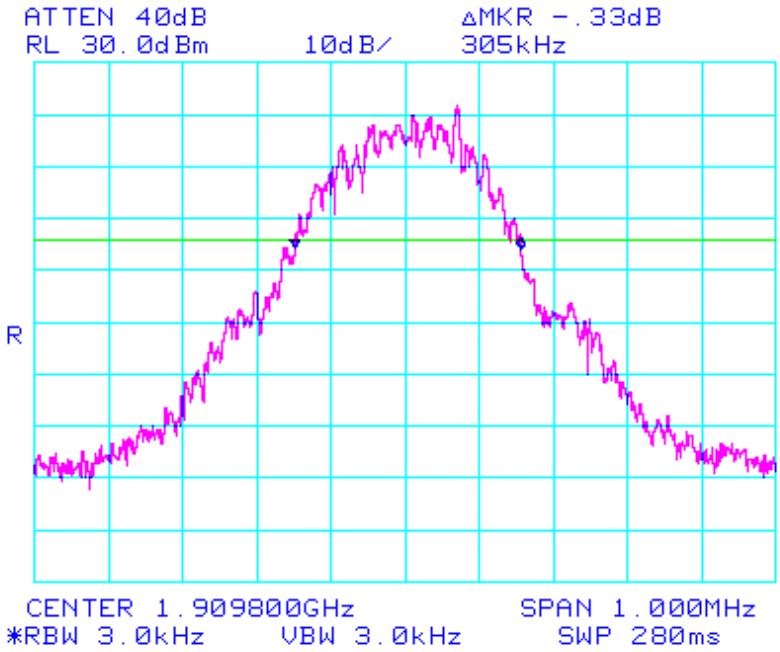
PCS1900 **-26dBc Bandwidth Ch. 512**



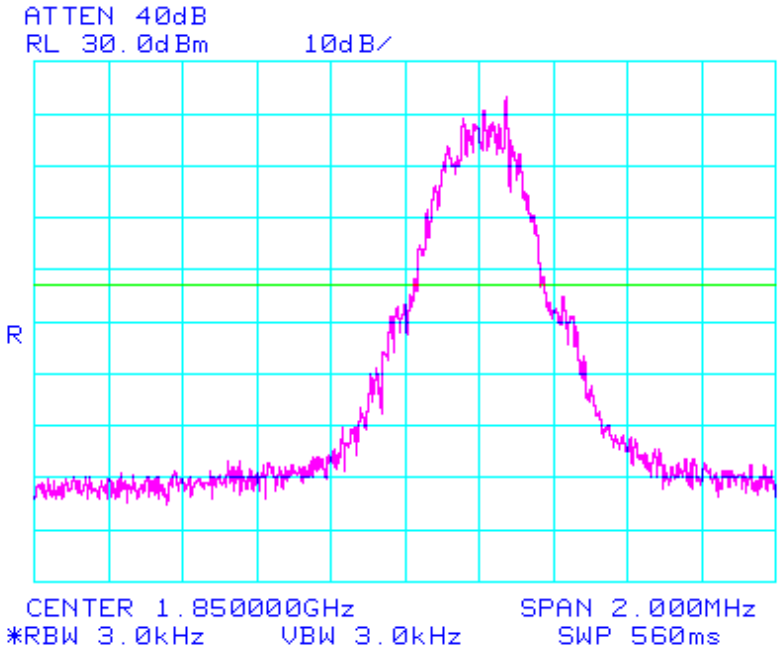
PCS1900 **-26dBc Bandwidth Ch. 661**



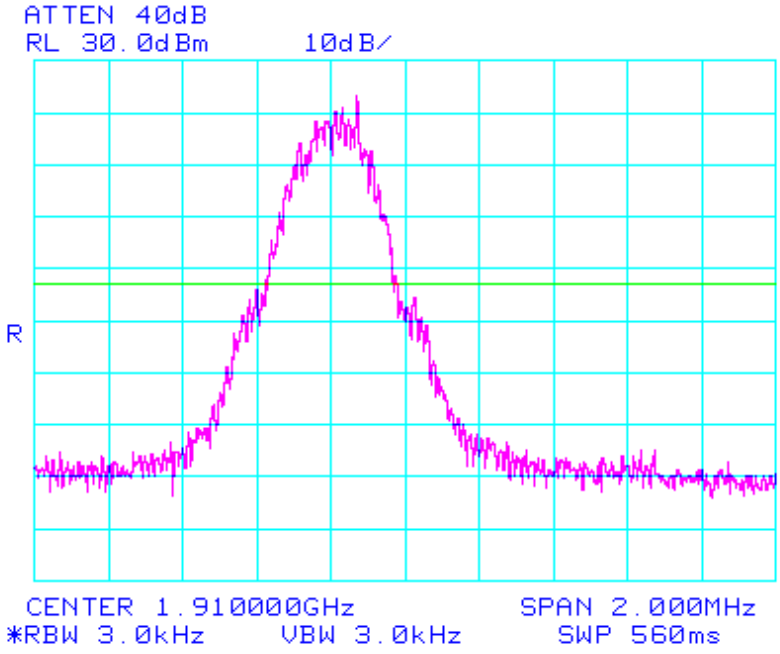
PCS1900 **-26dBc Bandwidth Ch. 810**



PCS1900 **Band Edge Ch. 512**



PCS1900 **Band Edge Ch. 810**



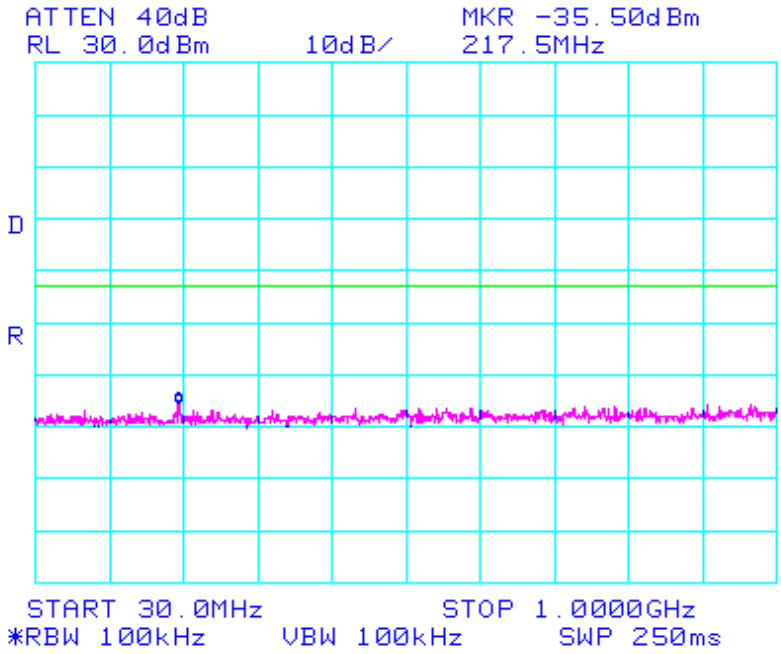
3.2.4 Spurious and Harmonic Emissions at Antenna Terminal

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1051, 24.238(a)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

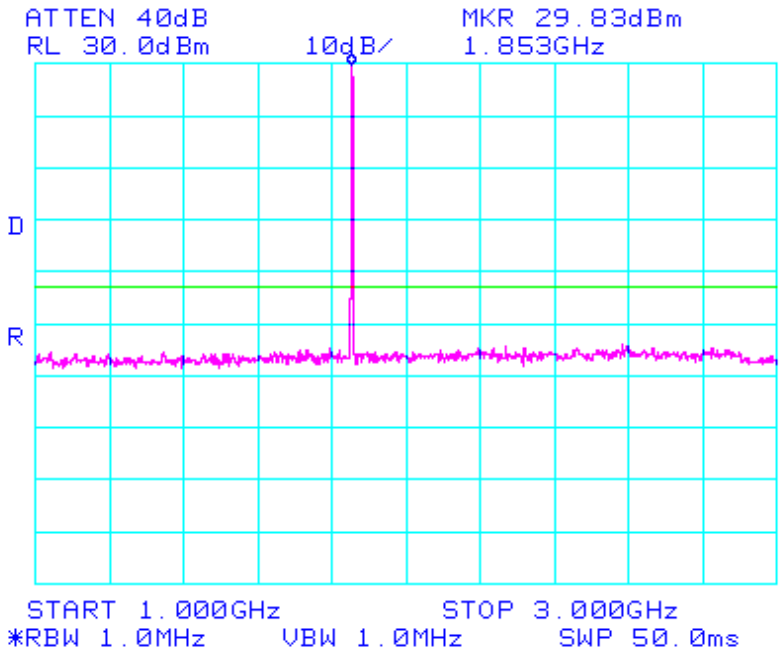
Measurement Procedure:

- The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer.
- The spectrum is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.
- Spectrum analyzer plots are included on the following pages.

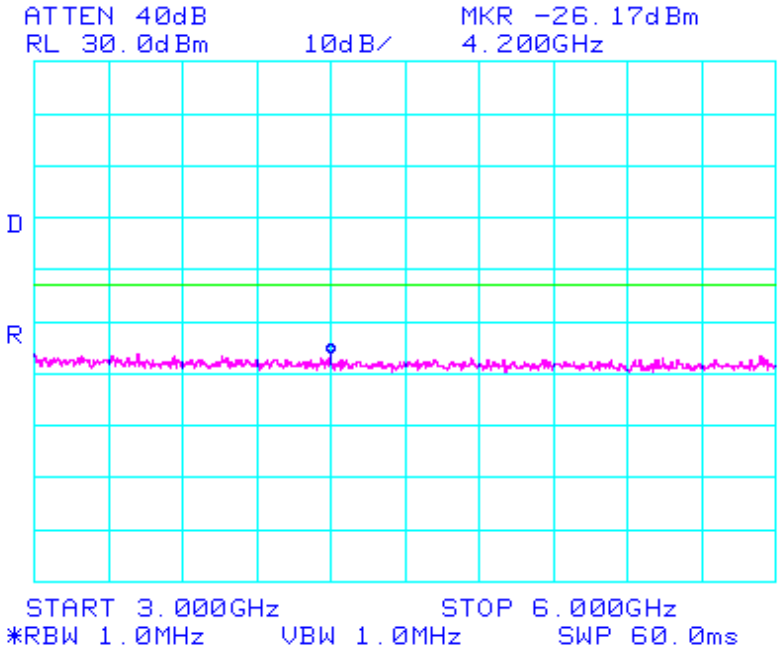
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -1



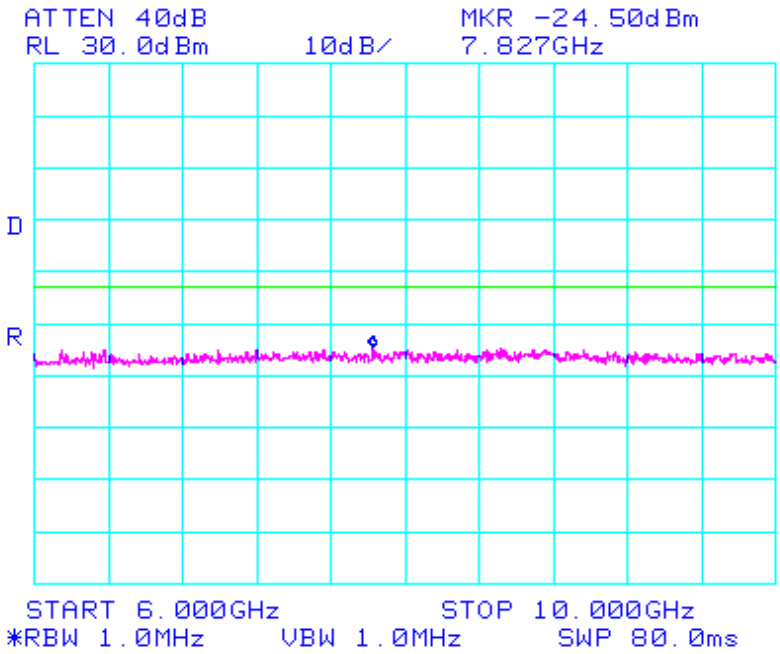
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -2



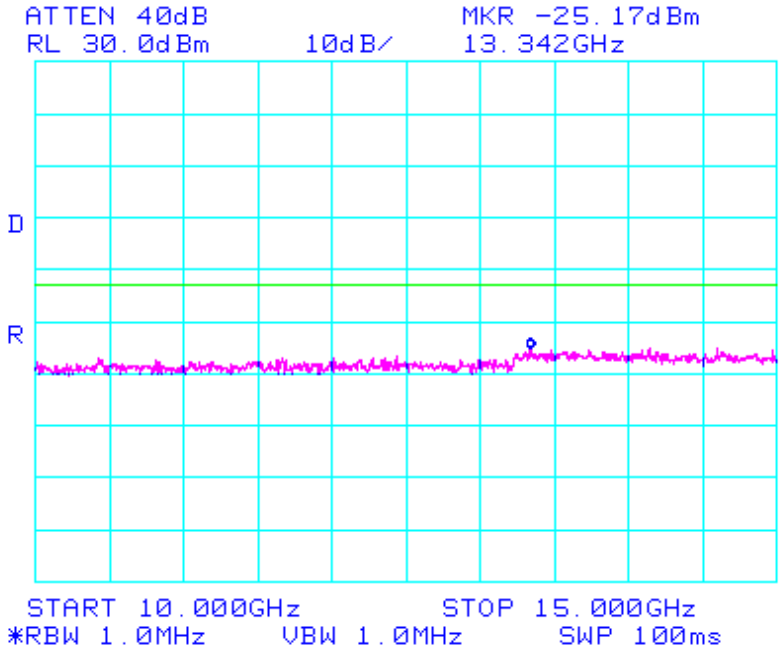
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -3



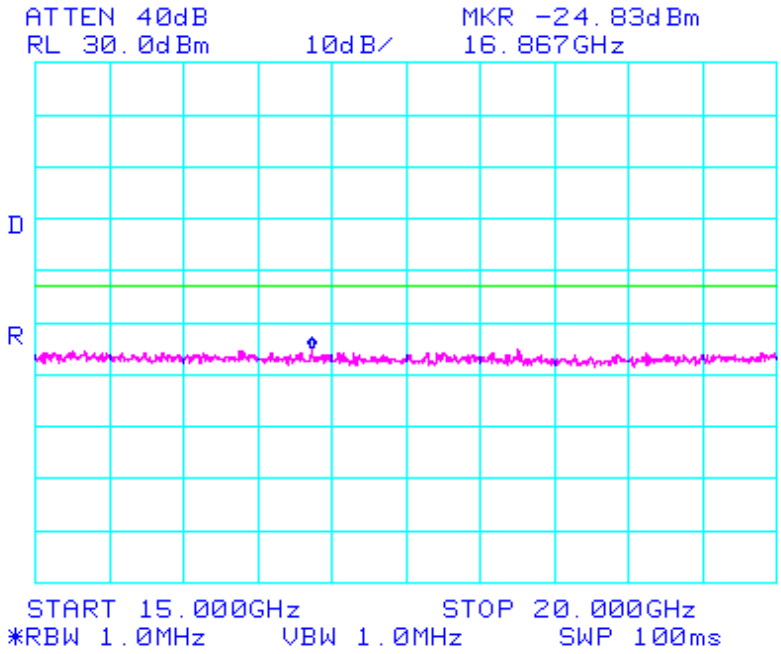
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -4



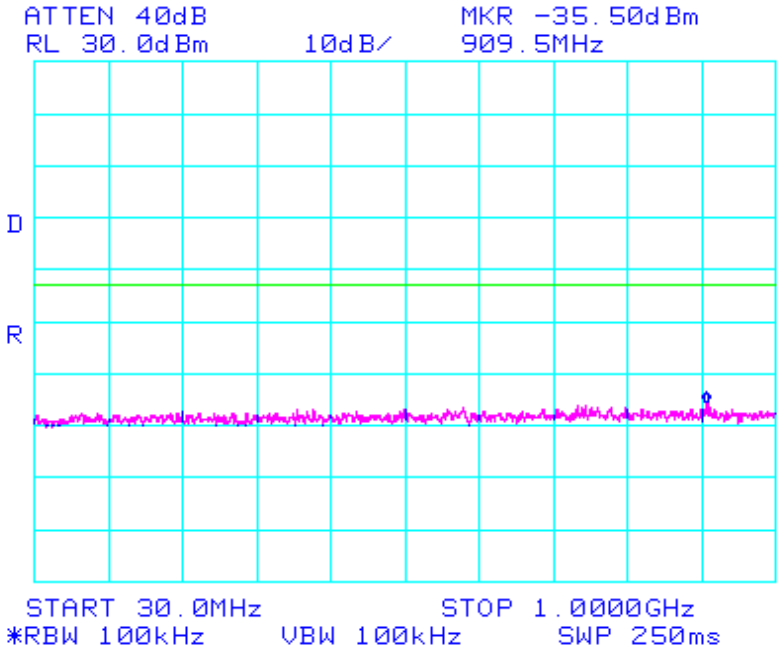
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -5



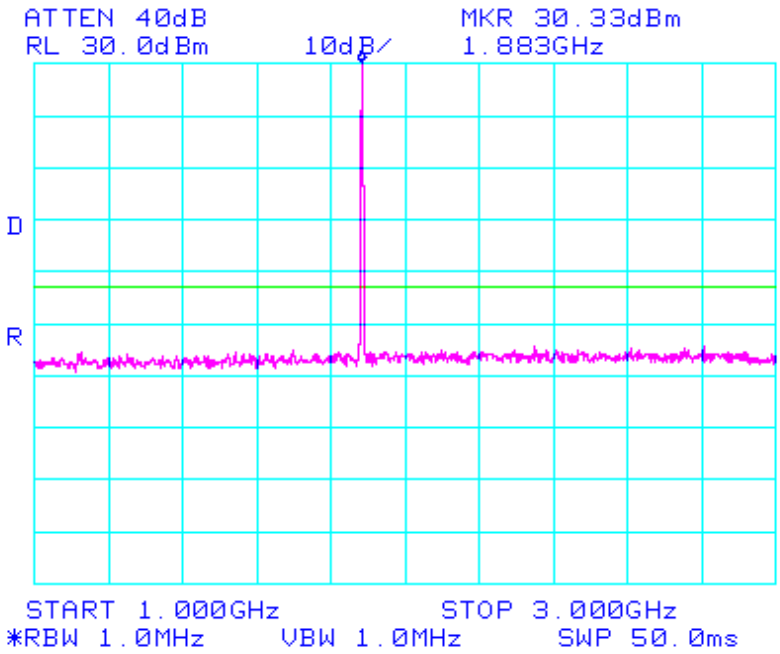
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -6



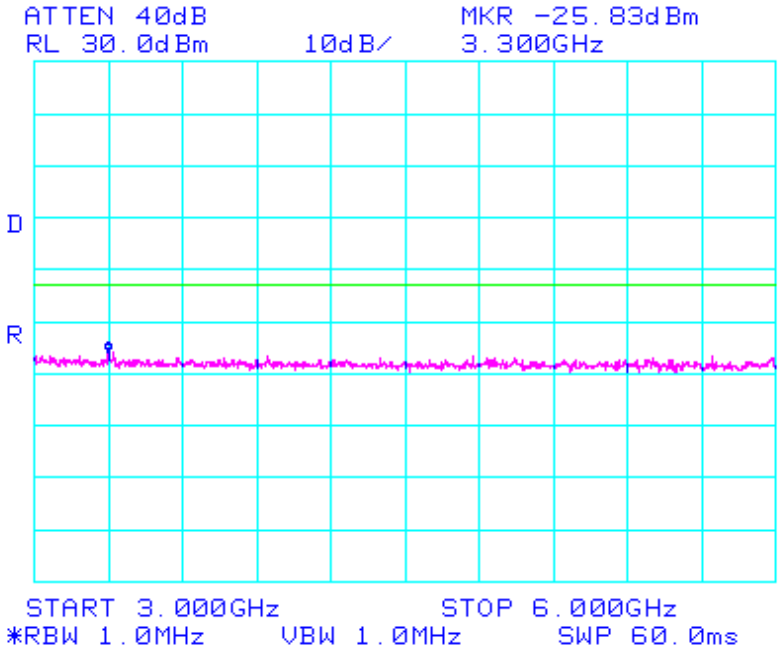
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -1



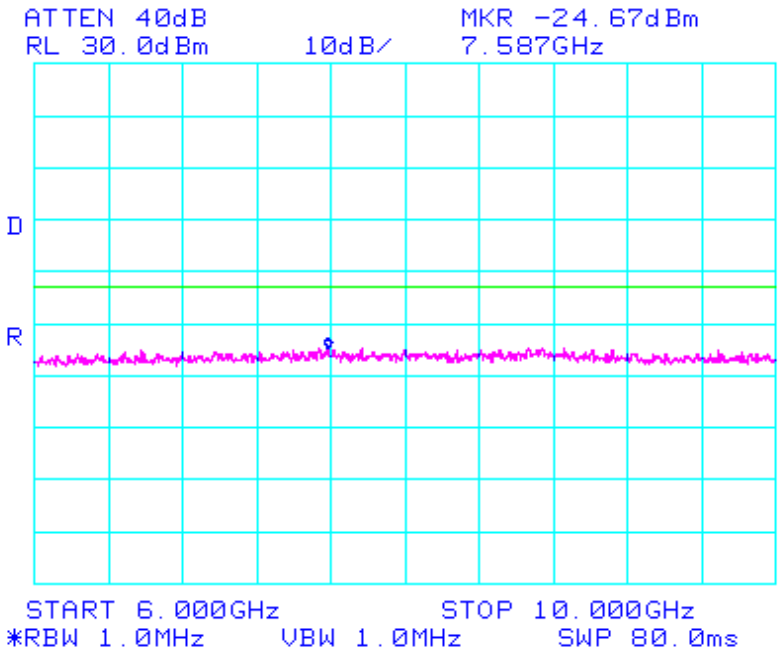
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -2



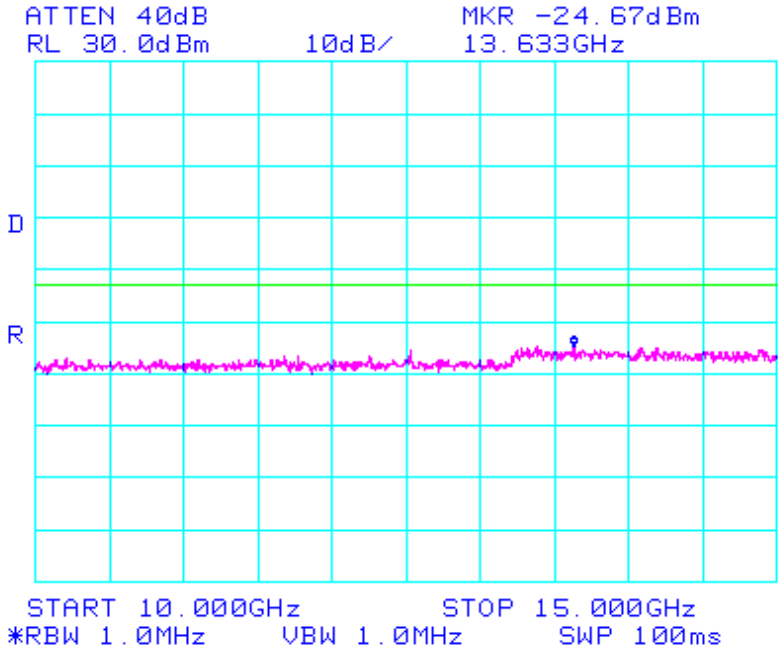
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -3



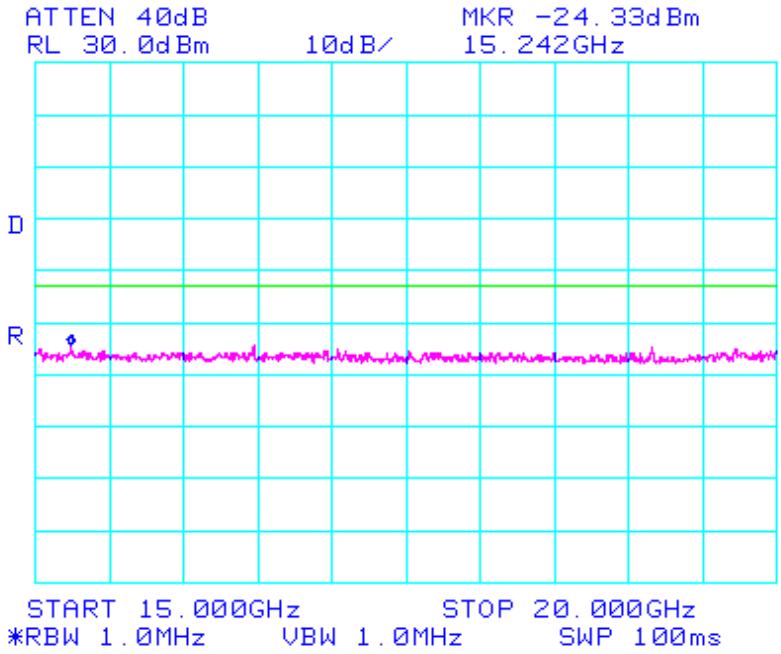
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -4



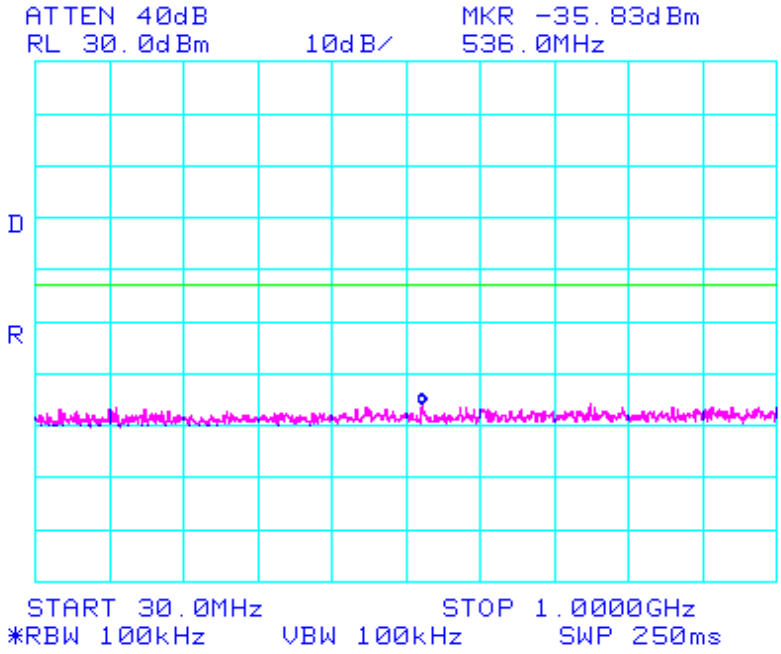
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -5



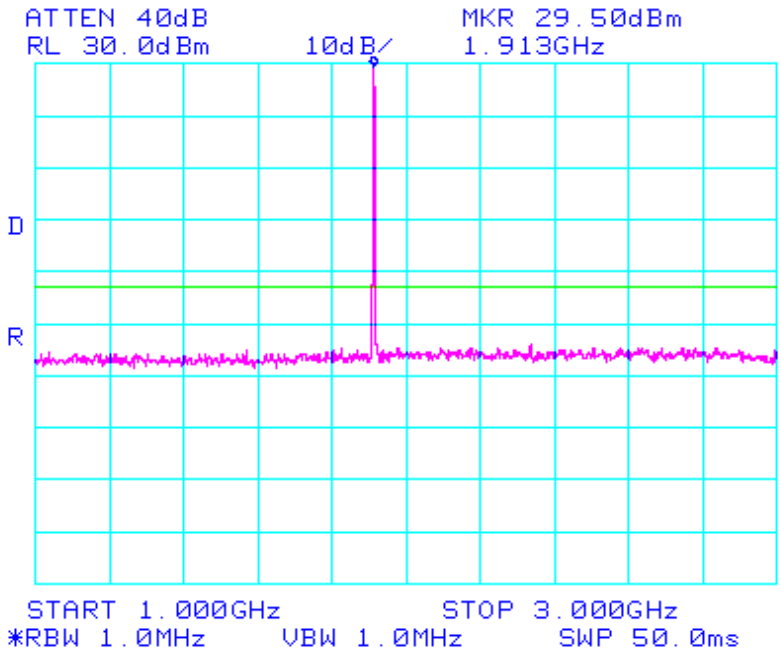
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -6



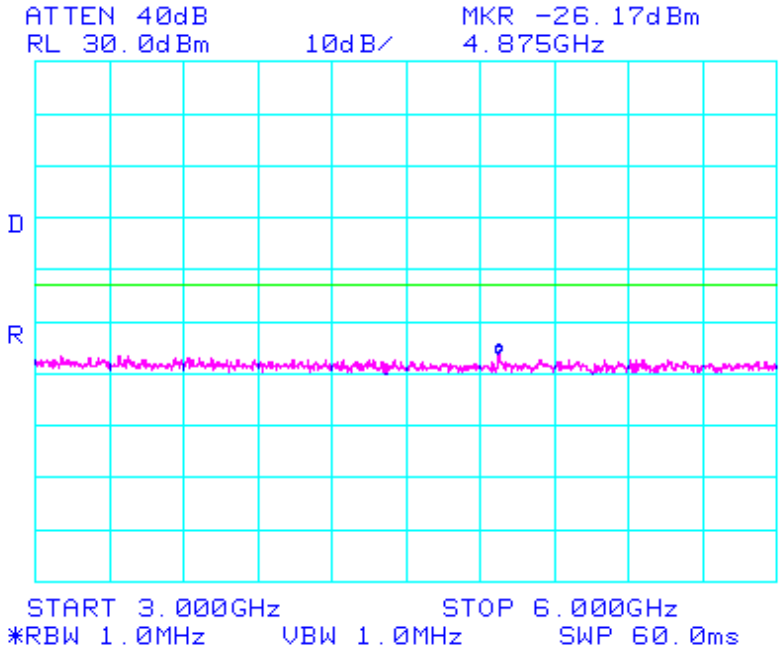
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -1



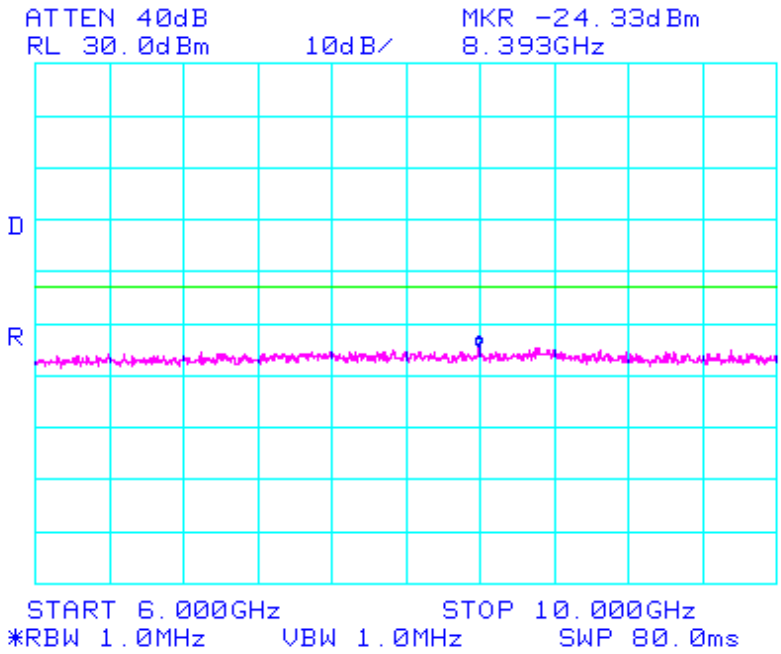
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -2



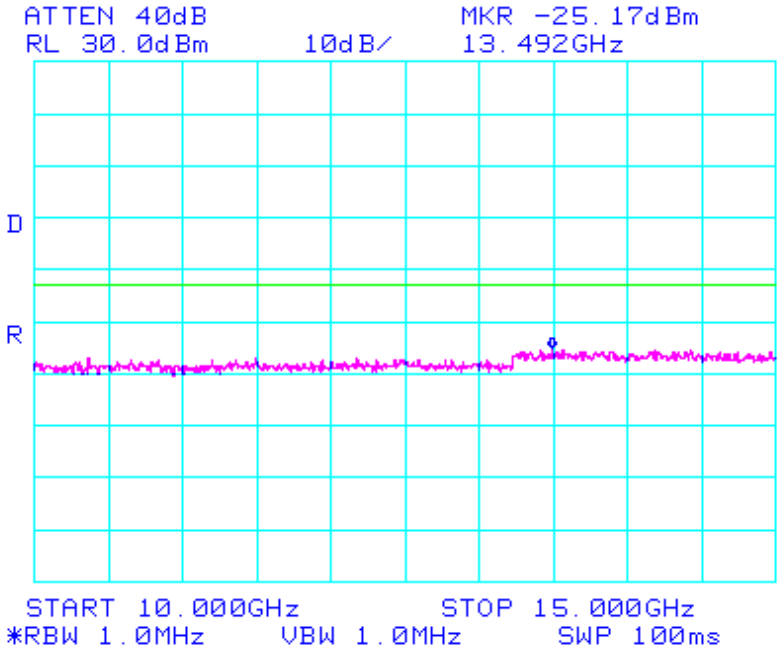
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -3



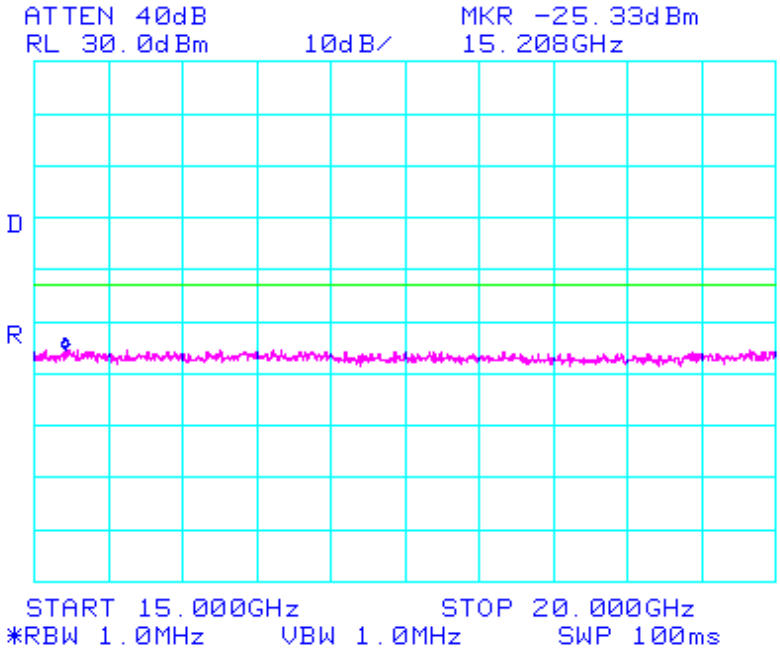
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -4



PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -5



PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -6



3.2.5 Field Strength of Spurious Radiation

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1053(a)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

- Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna.
  The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1850.2 MHz

CHANNEL : 512(Low)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3700.4	-50.95	9.5	-41.45	V	70.07
5550.6	-65.38	11.1	-54.28	V	82.9
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10th harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1880.0 MHz

CHANNEL : 661(Mid)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3760.0	-56.42	9.5	-46.92	V	75.54
5640.0	-66.24	11.1	-55.14	V	83.76
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10th harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1909.8 MHz

CHANNEL : 810(High)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : $43 + 10 \log_{10} (W)$ = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3819.6	-55.33	9.5	-45.83	V	74.45
5729.4	-64.72	11.1	-53.62	V	82.24
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.

3.2.6 Frequency Stability/Temperature Variation.

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1055 , 24.235
Tested Frequency	:	1880.0MHz for PCS1900

Measurement Procedure:

The frequency stability of the transmitter is measured by:

a) **Temperature** :The temperature is varied from -30°C to + 50°C using an environmental chamber.
b) **Primary Supply Voltage** :The primary supply voltage is varied from 85% to 115% of the voltage Normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification –The minimum frequency stability shall be +/- 0.00025% at any time during normal operation.

Specification — The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025(± 2.5ppm) of the center frequency.

Time Period and Procedure:

1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature (25°C to 27 °C to provide a reference)
2. The equipment is subjected to an overnight “soak” at -30°C without any power applied.
3. After the overnight ”soak” at -30°C(usually 14-16 hours),the equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency to the transmitter and the individual oscillators is made within a three minute interval after applying power to the transmitter.
4. Frequency measurements is made at 10°C interval up to room temperature. At least a period of one and one half hour is provided to allow stabilization of the equipment at each temperature level.
5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
6. Frequency were made at 10intervals starting at -30°C up to +50°C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after applying power to the transmitter.
7. The artificial load is mounted external to the temperature chamber.

NOTE : The EUT is tested down to the battery endpoint.

Frequency Stability (PCS1900)

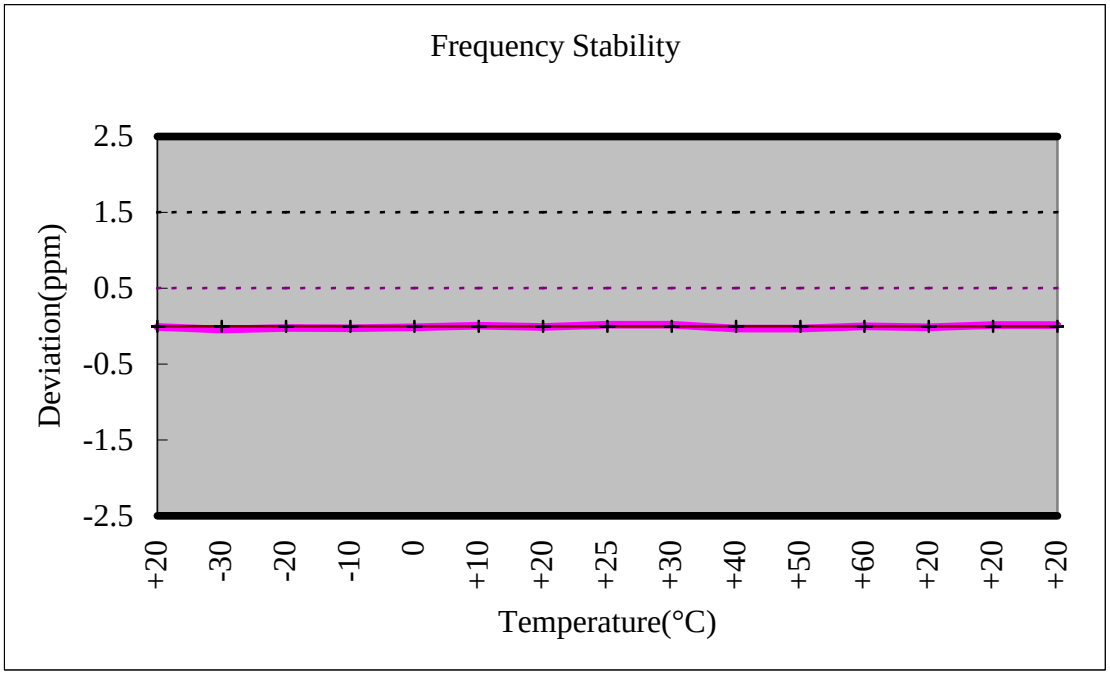
OPERATING FREQUENCY : 1,880,000,000 Hz

CHANNEL : 0661(Mid)

REFERENCE VOLTAGE : 3.7 VDC

DEVIATION LIMIT : ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	**POWER** (VDC)	TEMP (dB)	**FREQ** (H/A)	**Deviation** (%)
100%	3.7	+20(Ref)	1,880,000,018	0.000001
100%		-30	1,880,000,085	0.000005
100%		-20	1,880,000,045	0.000002
100%		-10	1,880,000,053	0.000003
100%		0	1,880,000,027	0.000001
100%		+10	1,879,999,985	-0.000001
100%		+20	1,880,000,018	0.000001
100%		+25	1,879,999,968	-0.000002
100%		+30	1,879,999,961	-0.000002
100%		+40	1,880,000,058	0.000003
100%		+50	1,880,000,061	0.000003
85%	3.2	+20	1,880,000,027	0.000001
115%	4.2	+20	1,879,999,969	-0.000002
BATT.ENDPOINT	2.89	+20	1,879,999,970	-0.000002



3.2.7 Receiver Radiated Emission

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1053
Bandwidth	:	120kHz (< 1GHz) 1 Mz (> 1GHz)
Tested mode	:	PCS1900 idle mode

Measurement Procedure:

- Final test was performed according to ANSI C63.4-2001 at the open field test site. There are no deviations from the standard.
- The EUT was placed in a 0.8m high table along with the peripherals. The turn table was separated from the antenna distance 3meters. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for maximum.
- The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Reported are maximized emission levels.
- These tests were performed at 120kHz of 6dB bandwidth.

Measurement Data

PCS1900

Frequency [㎒]	ANT Pol.	Reading [dB㎶]	T.F [dB]	Results [dB㎶/m]	Limits [dB㎶/m]	Margin [dB]
	No emissions were detected at a level greater than 10dB below limit.					

Remark

1. There is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit for the frequency being investigated.
2. Measurements above 1GHz is performed using a minimum resolution bandwidth of 1MHz.
   The EUT was tested up to the 20GHz and no significant emission was found.

3.2.8 Conducted Emission

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 15.107/207
Bandwidth	:	9kHz
Tested mode	:	PCS1900 idle mode

Measurement Procedure:

- The power line conducted interference measurements were performed according to ANSI C63.4-2001 in a shielded enclosure with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded enclosure wall. There are no deviations from the standard.
- The EUT was plugged into the LISN and the frequency range of interest scanned.
- Reported are maximized emission levels.
- These tests were performed at 9kHz of 6dB bandwidth.

Measurement Data

- The measurement plots are included on the following pages.

Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	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

PCS1900 / Conducted Emission / Neutral Graph

PCS1900 / Conducted Emission / Line Graph

PCS1900 / Conducted Emission / Data

4. TEST EQUIPMENT

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	S/N
01	Spectrum Analyzer	Agilent	E4404B	22/11/04	US41061134
02	Spectrum Analyzer	H.P	8563E	25/09/05	3551A04634
03	Power Meter	H.P	EPM-442A	15/07/05	GB37170413
04	Power Sensor	H.P	8481A	15/07/05	3318A96332
05	Frequency Counter	H.P	5342A	07/10/05	2119A04450
06	Multfunction Synthesizer	H.P	8904A	07/10/05	3633A08404
07	Signal Generator	H.P	8673D	26/09/05	2844A00753
08	Signal Generator	H.P	E4421A	15/07/05	US37230529
09	Signal Generator	H.P	8657A	26/05/05	3430U02049
10	Audio Analyzer	H.P	8903B	21/07/05	3011A0944B
11	Modulation Analyzer	H.P	8901B	15/07/05	3028A03029
12	Sensor Module	H.P	11722A	15/07/05	3111A04665
13	Oscilloscope	LeCroy	9314A	10/10/05	93144390
14	CDMA Mobile Station Test Set	H.P	8924C	07/10/05	US35360688
15	Power Splitter	WEINSCHEL	1593	07/10/05	332
16	BAND Reject Filter	Microwave circuits INC.	NO308372	07/10/05	3125-01DC0312
17	BAND Reject Filter	Wainwright	WRCG1750	07/10/05	SN2
18	AC Power supply	DAEKWANG	5KVA	03/04/05	N/A
19	DC Power Supply	H.P	6622A	24/03/05	465487
20	Attenuator (30dB)	H.P	8498A	07/10/05	50101
21	Attenuator (10dB)	WEINSCHEL	23-10-34	07/10/05	BP4387
22	HORN ANT	EMCO	3115	04/04/05	6419
23	HORN ANT	EMCO	3115	10/01/05	21097
24	HORN ANT	A.H.Systems	SAS-574	27/11/04	154
25	HORN ANT	A.H.Systems	SAS-574	14/11/04	155
26	Dipole Antenna	Schwarzbeck	VHA9103	04/10/04	2116

4. TEST EQUIPMENT (CONTINUED)

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	S/N
27	Dipole Antenna	Schwarzbeck	VHA9103	04/10/04	2117
28	Dipole Antenna	Schwarzbeck	UHA9105	04/10/04	2261
29	Dipole Antenna	Schwarzbeck	UHA9105	04/10/04	2262
30	RFI/FIELD Iintensity Meter	Kyorits	KNM-504D	25/07/05	SN-161-4
31	Frequency Converter	Kyorits	KCV-604C	25/07/05	4-230-3
32	TEMP & HUMIDITY Chamber	JISCO	J-RHC2	14/09/04	021031
33	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	23/10/04	1098
34	Biconical Antenna	Schwarzbeck	VHA9103	23/10/04	VHA91031946
35	Digital Multimeter	H.P	34401A	07/04/05	3146A13475
36	Attenuator (10dB)	WEINSCHEL	23-10-34	07/10/05	BP4386
37	High-Pass Filter	ANRITSU	MP526	12/05/05	M27756
38	Attenuator (3dB)	Agilent	8491B	15/09/05	58177
39	Wireless communication test set	Agilent	8960	10/11/04	GB41321167
40	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	07/07/05	4N-170-3
41	LISN	Kyorits	KNW-407	16/08/05	8-317-8
42	LISN	Kyorits	KNW-242	16/08/05	8-654-15
43	Spectrum Analyzer	H.P	8591E	23/05/05	3649A05889
44	Software	ToYo EMI	EP5/CE	N/A	Ver 2.0.801
45	CVCF	NF Electronic	4400	N/A	344536 4420064
46	Band Reject Filter	Wainright inst	WRCT 800/960-0.2	N/A	SN9
47	Band Reject Filter	Wainright inst	WRCD 1700/2000-0.2	N/A	SN26
48	GSM/DCS/PCS MS TEST SET	HP	8922M	24/11/04	3639U01779
		HP	83220E	24/11/04	3254U01637

5. SAMPLE CALCULATIONS

A. Emission Designator

PCS1900

Emission Designator = 250KGXW

GSM BW = 250 KHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

(Measured at the 99.75% power bandwidth)

6. CONCLUSION

The data collected shows that the **VK Corporation.** Dual band GSM phone **FCC ID: SBWVK900** complies with all the requirements of Parts 2 , 15 and 24 of the FCC rules.

3.2.2 Occupied Bandwidth

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1049 (h)(i)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

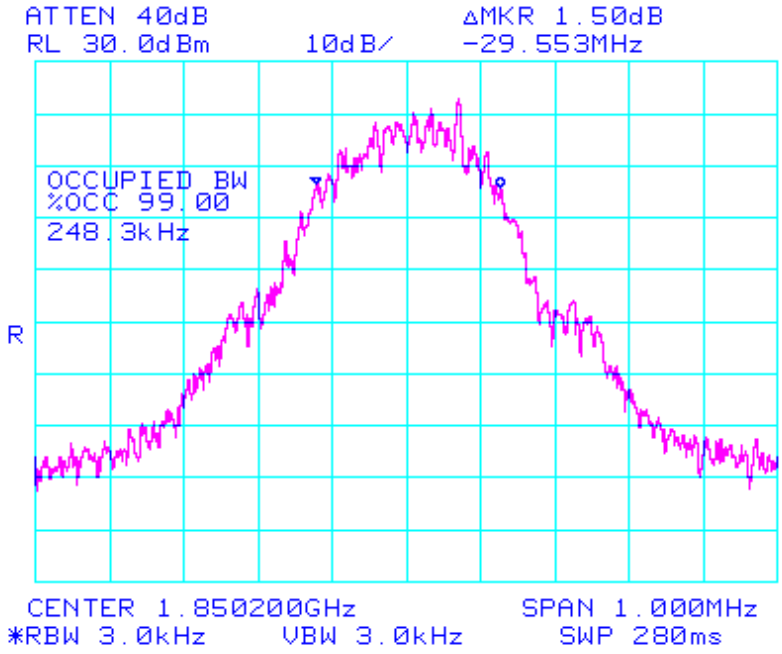
- The 99% power bandwidth was measured with a calibrated spectrum analyzer.
- Spectrum analyzer plots are included on the following pages.

Measurement Data:

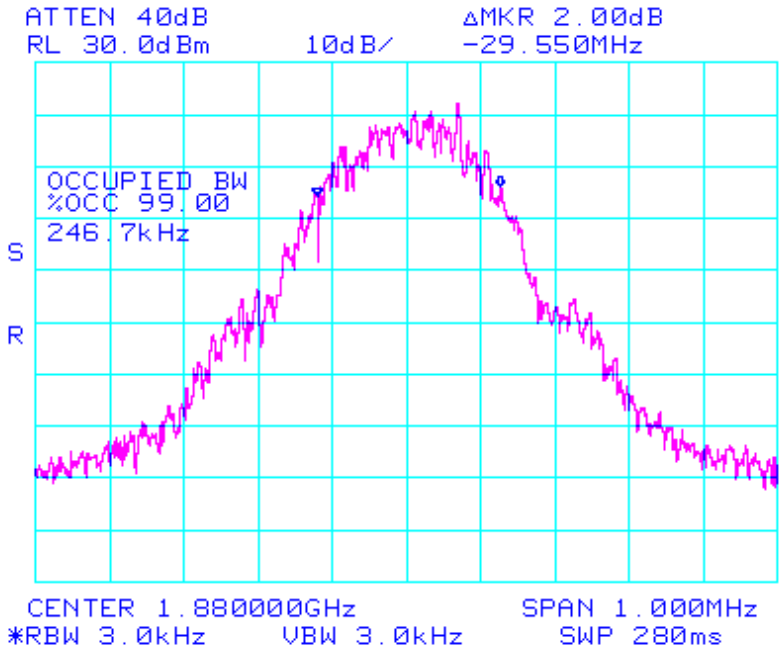
PCS1900

Channel	Frequency (MHz)	99% Bandwidth (kHz)
512	1850.2	**248.3**
661	1880.0	**246.7**
810	1909.8	**250.0**

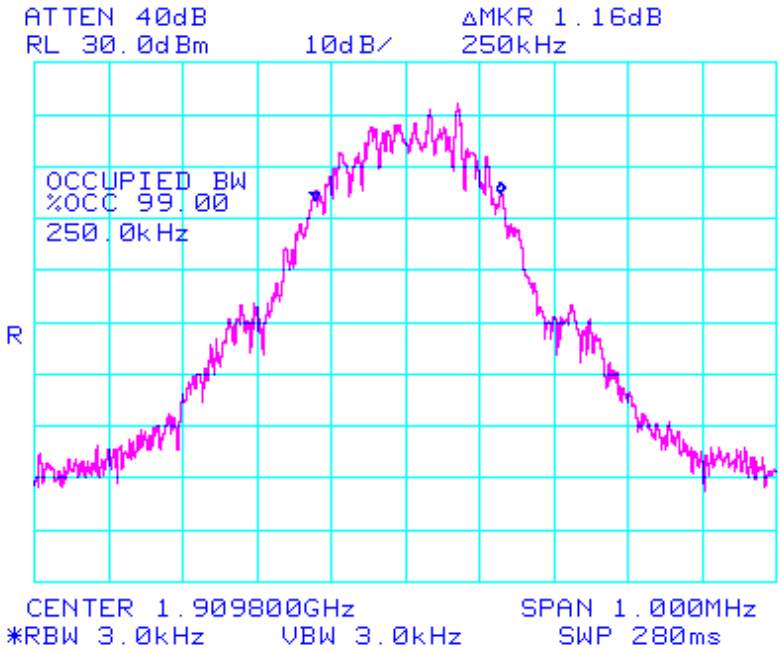
PCS1900 **99 % Bandwidth Ch. 512**



PCS1900 **99 % Bandwidth Ch. 661**



PCS1900 **99 % Bandwidth Ch. 810**



3.2.3 Occupied Bandwidth Emission Limits

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 24.238(b)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

- (a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43+10log(P) dB.

  (b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1㎒ or greater. However, in the 1㎒ 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. 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 emission are attenuated at least 26dB below the transmitter power.

  (c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

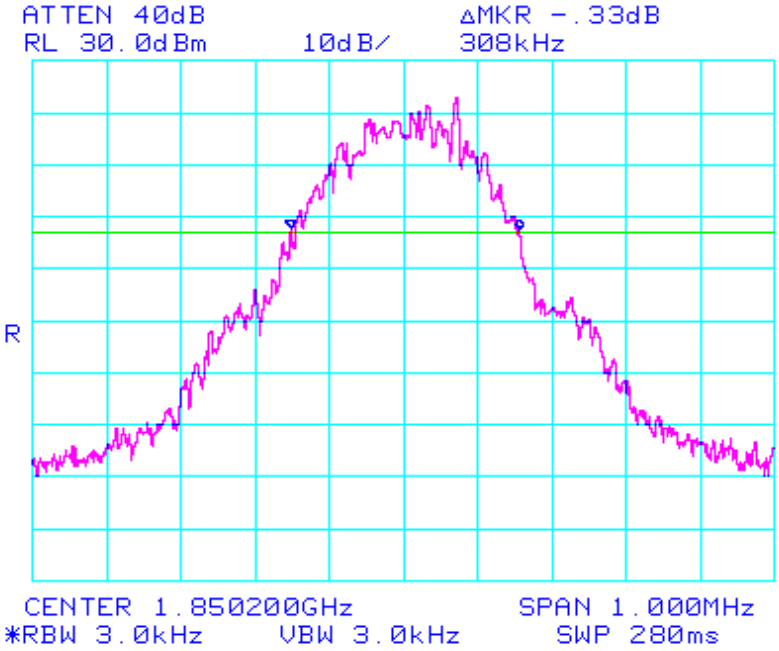
- The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.
- Spectrum analyzer plots are included on the following pages.

Measurement Data:

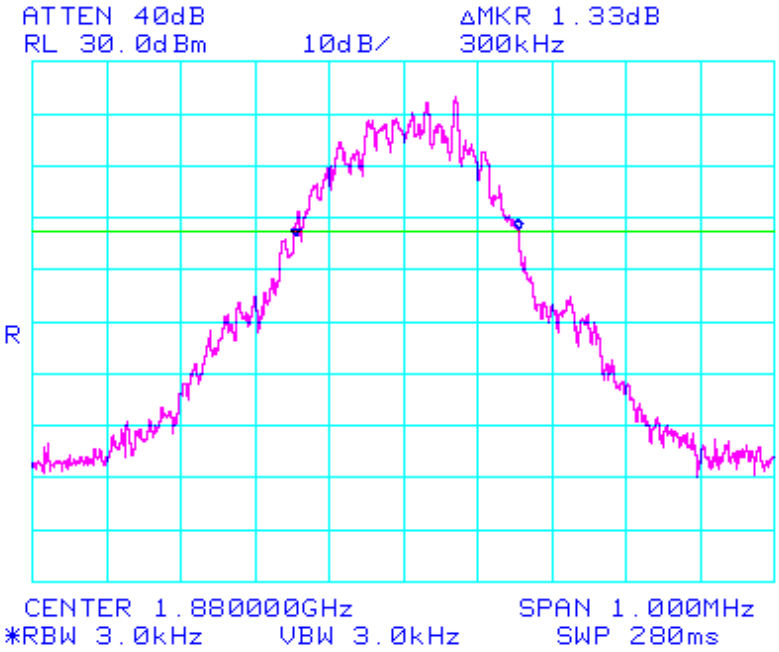
PCS1900

Channel	Frequency (MHz)	-26dBc Bandwidth (kHz)
512	1850.2	**308**
661	1880.0	**300**
810	1909.8	**305**

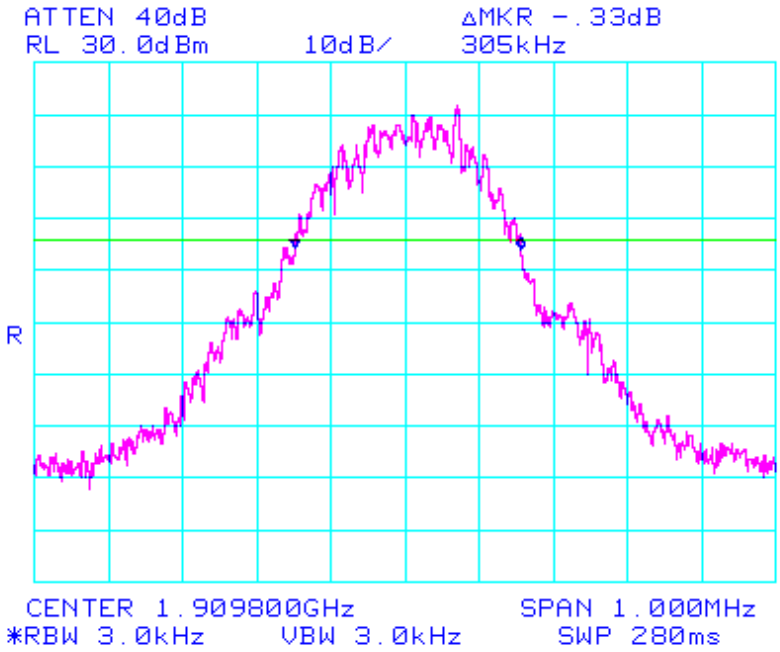
PCS1900 **-26dBc Bandwidth Ch. 512**



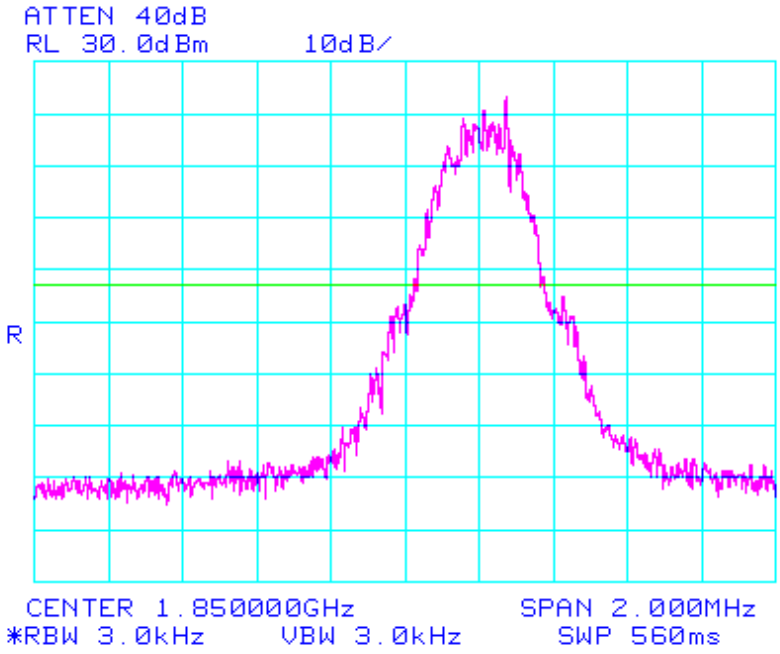
PCS1900 **-26dBc Bandwidth Ch. 661**



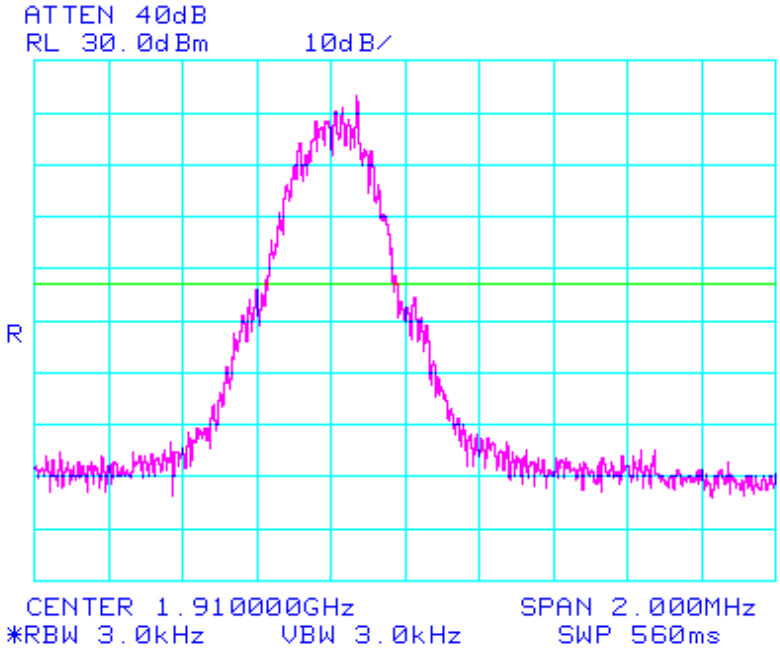
PCS1900 **-26dBc Bandwidth Ch. 810**



PCS1900 **Band Edge Ch. 512**



PCS1900 **Band Edge Ch. 810**



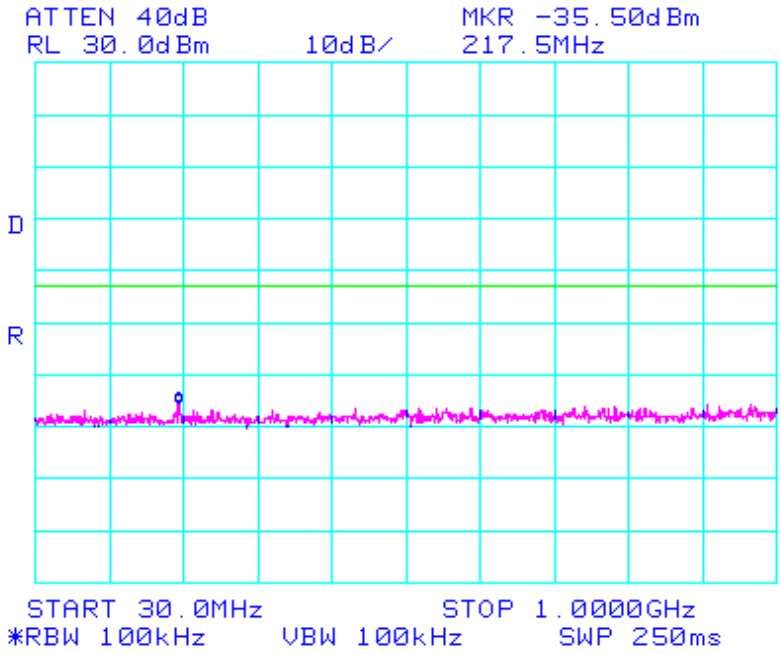
3.2.4 Spurious and Harmonic Emissions at Antenna Terminal

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1051, 24.238(a)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

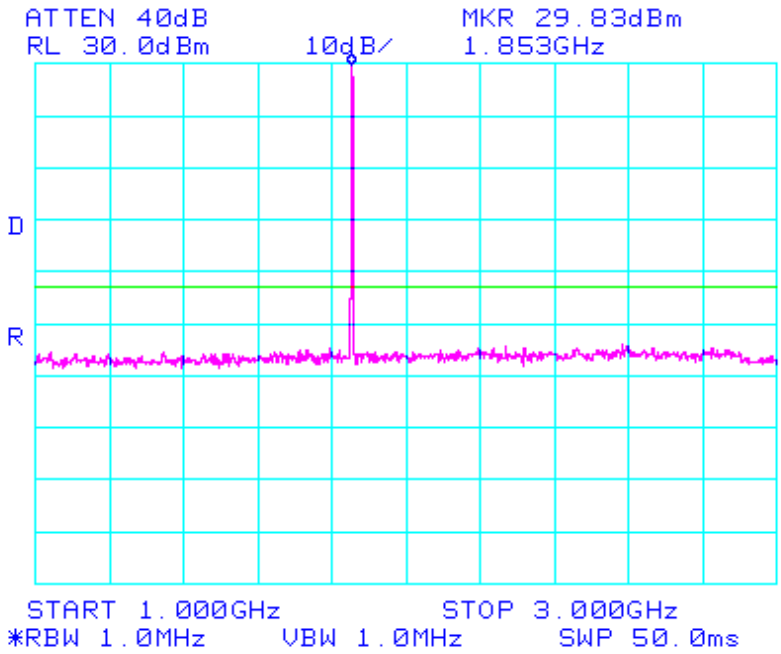
Measurement Procedure:

- The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer.
- The spectrum is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.
- Spectrum analyzer plots are included on the following pages.

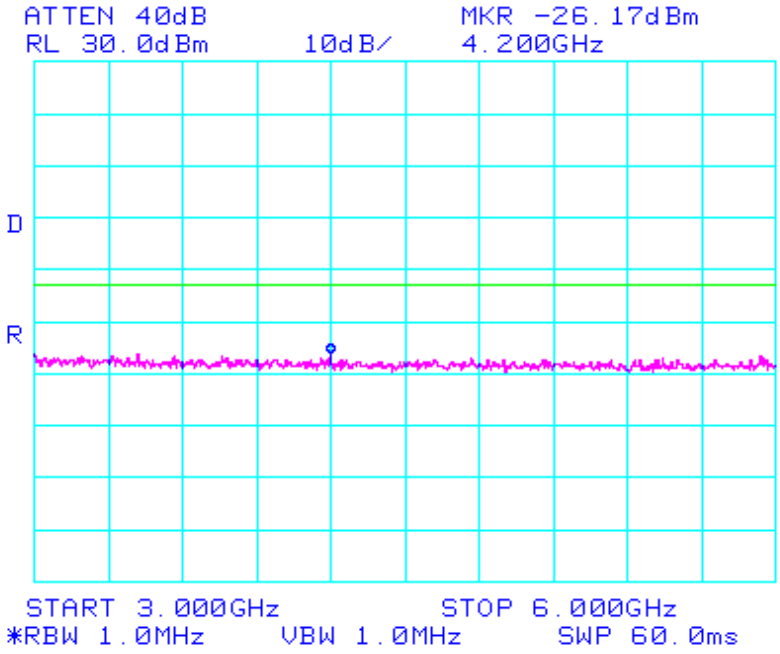
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -1



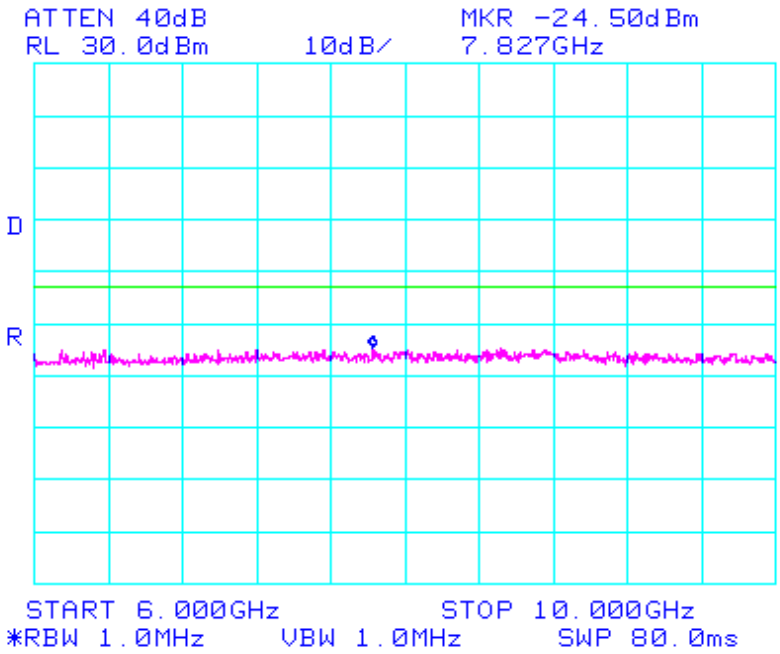
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -2



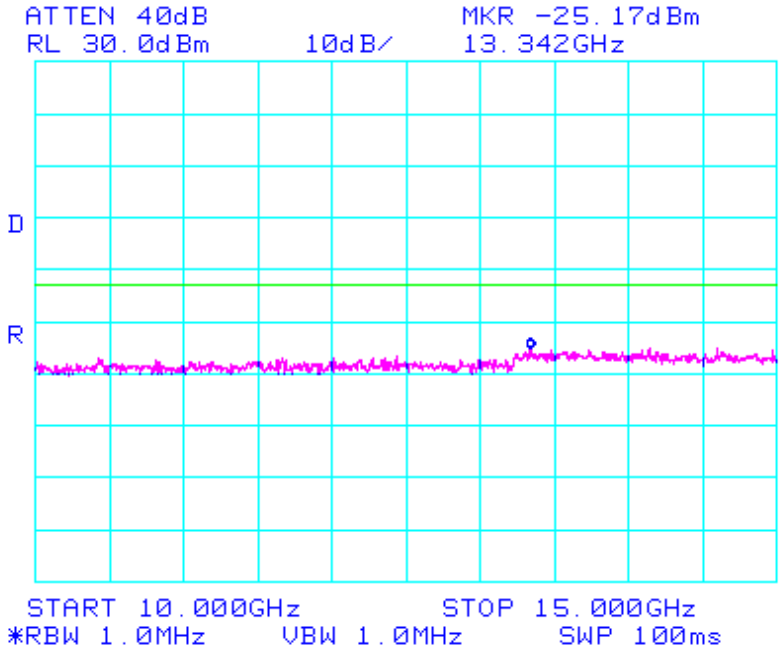
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -3



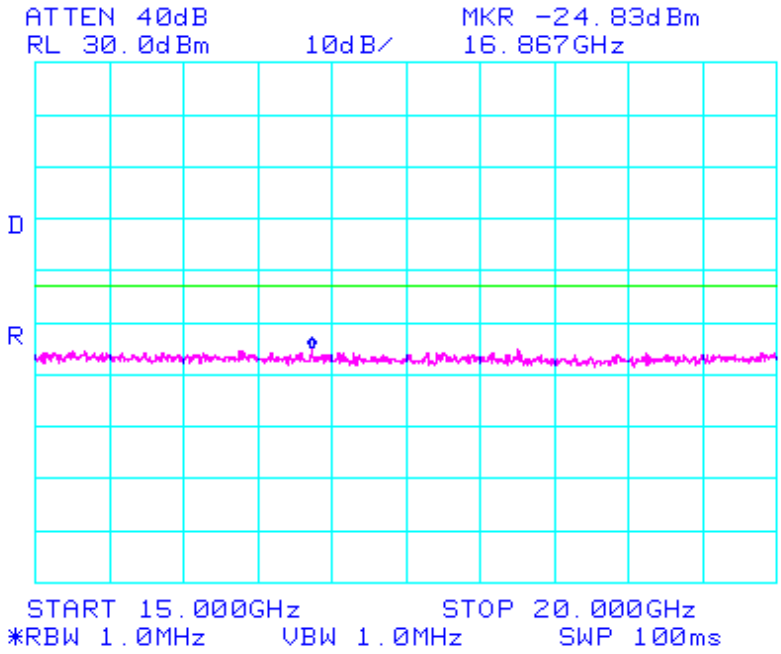
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -4



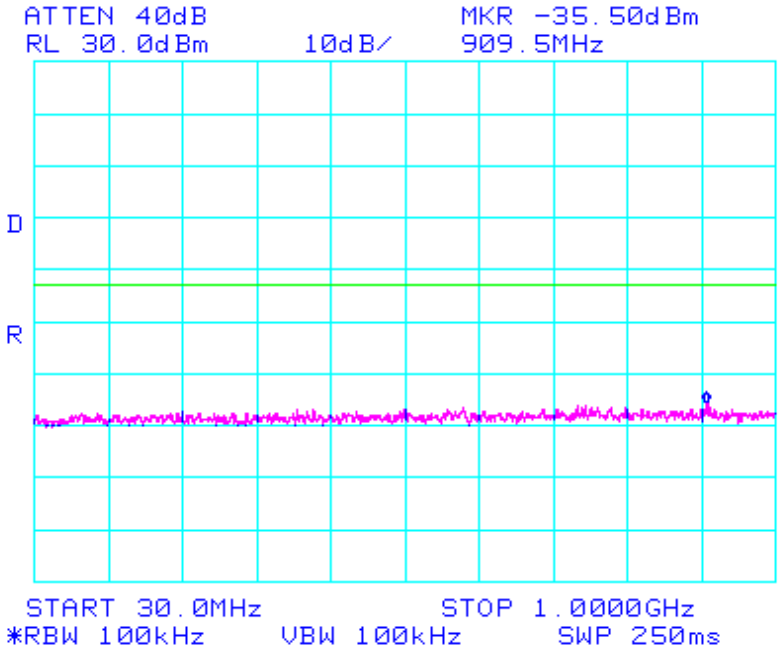
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -5



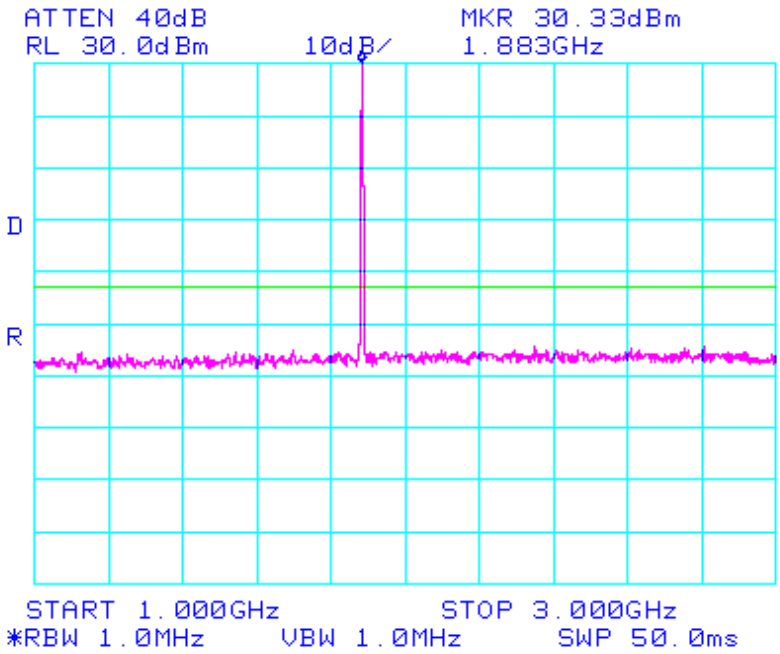
PCS1900 Spurious Emissions at Antenna Terminal / Ch.512 -6



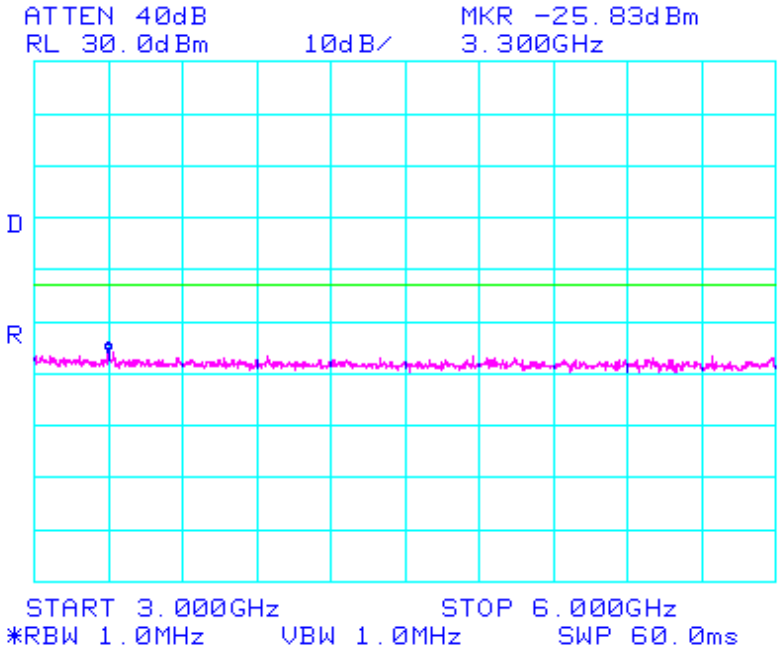
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -1



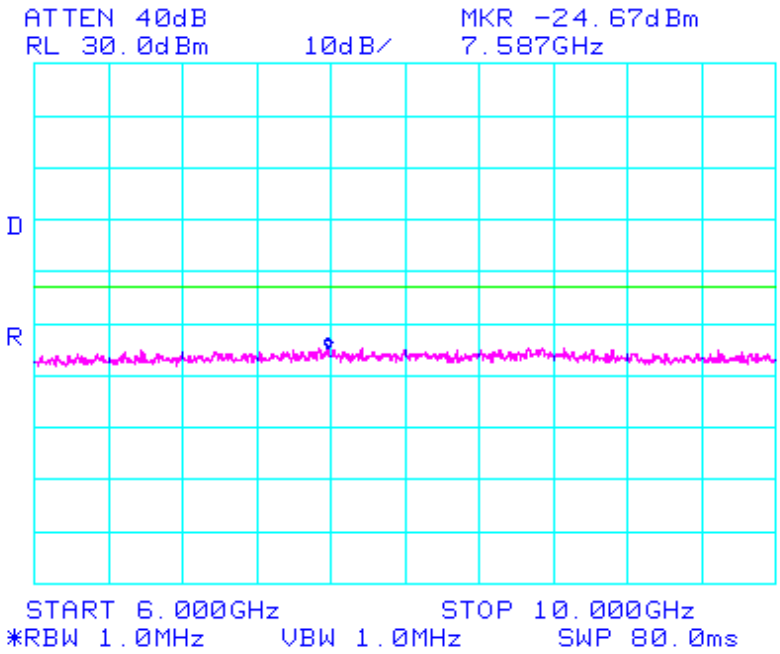
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -2



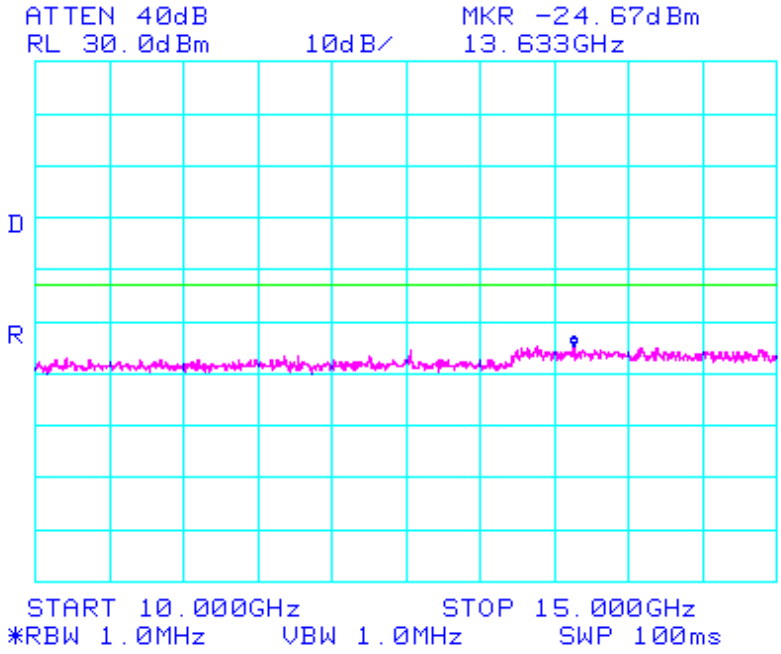
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -3



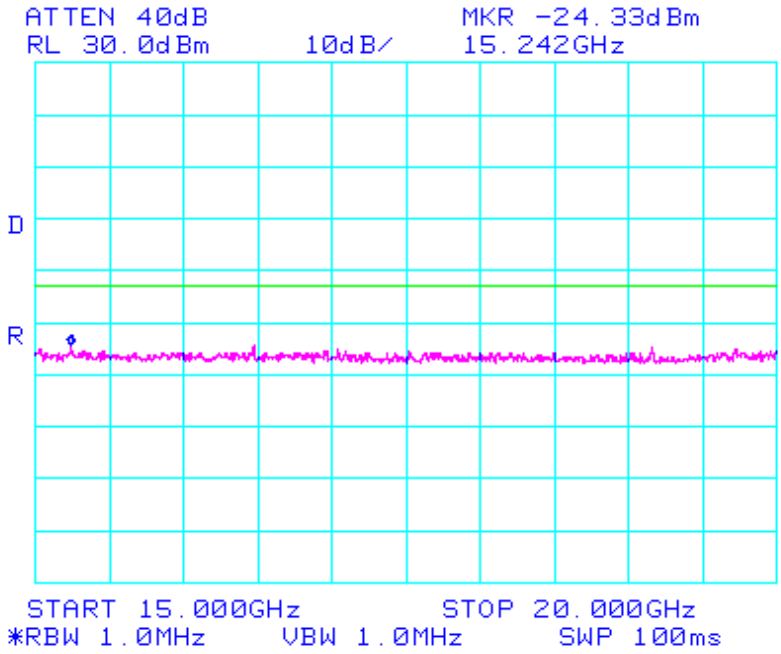
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -4



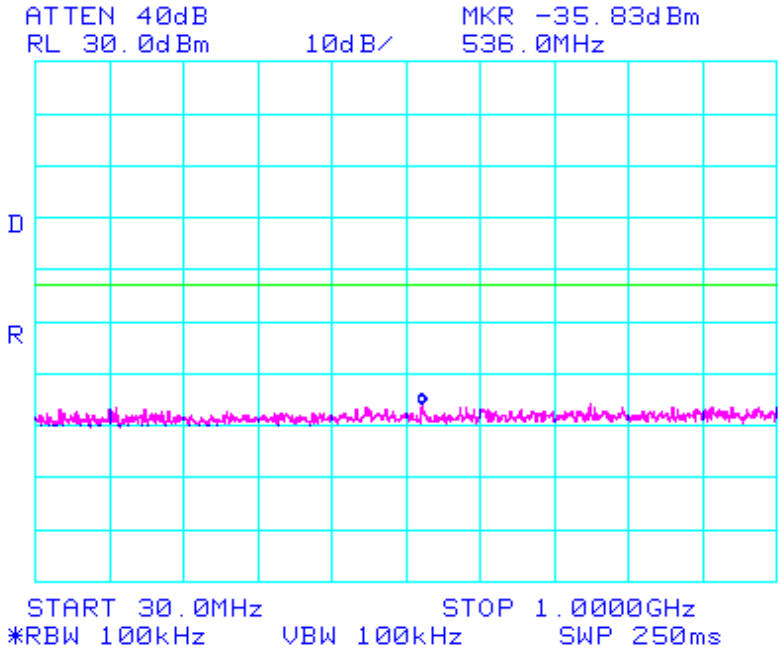
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -5



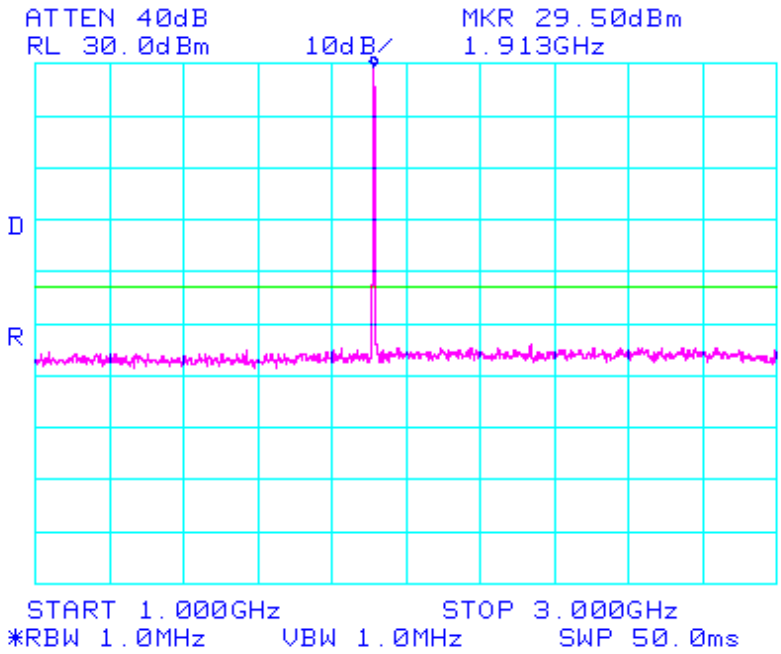
PCS1900 Spurious Emissions at Antenna Terminal / Ch.661 -6



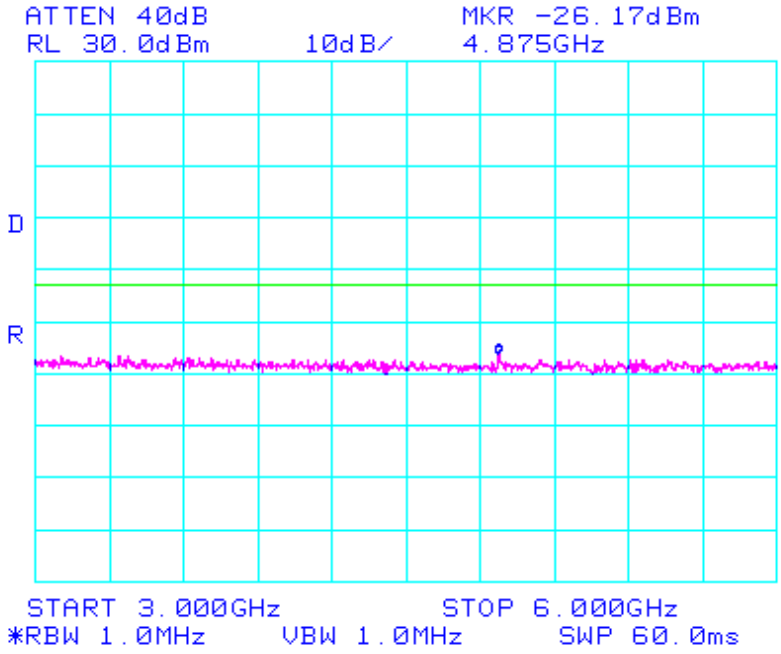
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -1



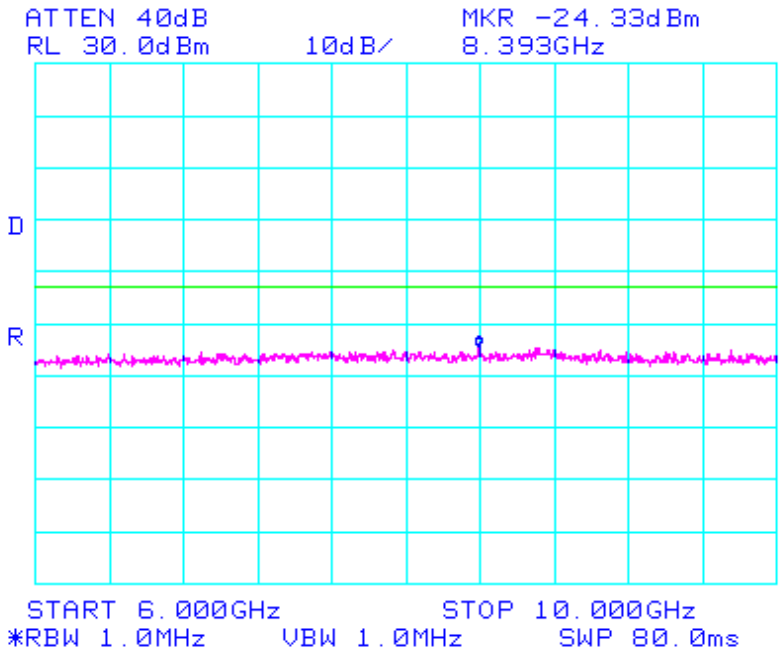
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -2



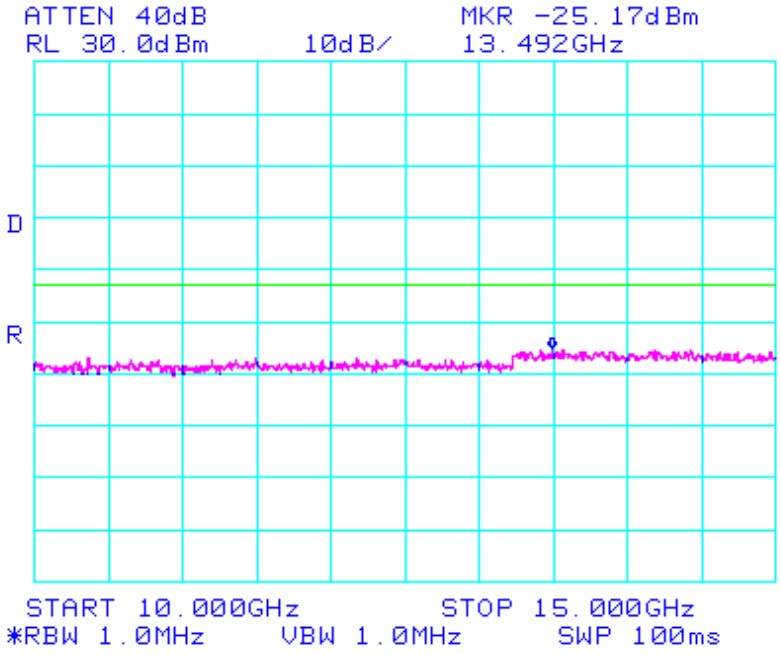
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -3



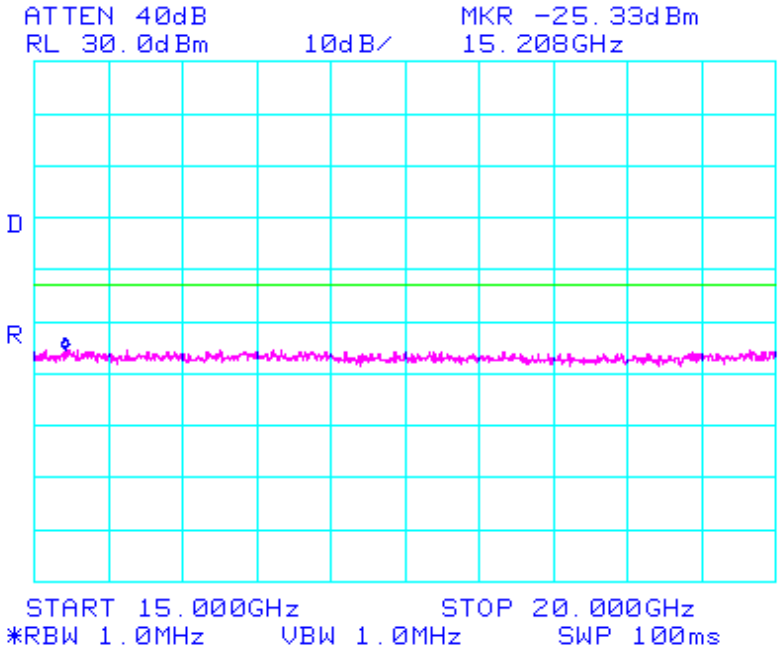
PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -4



PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -5



PCS1900 Spurious Emissions at Antenna Terminal / Ch.810 -6



3.2.5 Field Strength of Spurious Radiation

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1053(a)
Tested Frequency	:	1850.2MHz, 1880.0MHz and 1909.8MHz for PCS1900

Measurement Procedure:

- Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna.
  The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1850.2 MHz

CHANNEL : 512(Low)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3700.4	-50.95	9.5	-41.45	V	70.07
5550.6	-65.38	11.1	-54.28	V	82.9
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10th harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1880.0 MHz

CHANNEL : 661(Mid)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3760.0	-56.42	9.5	-46.92	V	75.54
5640.0	-66.24	11.1	-55.14	V	83.76
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10th harmonic of the highest fundamental frequency.

PCS1900 Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY : 1909.8 MHz

CHANNEL : 810(High)

MEASURED OUTPUT POWER : 28.62 dBm = 0.728 W

MODULATION SIGNAL : GSM (Internal)

DISTANCE : 3 meters

LIMIT : $43 + 10 \log_{10} (W)$ = 41.62 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBd)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
3819.6	-55.33	9.5	-45.83	V	74.45
5729.4	-64.72	11.1	-53.62	V	82.24
-	-	-	-	-	-
-	-	-	-	-	-

NOTE

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

- The Radiated Emission is scanned from the lowest frequency generated in the equipment up to 10^{th} harmonic of the highest fundamental frequency.

3.2.6 Frequency Stability/Temperature Variation.

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1055 , 24.235
Tested Frequency	:	1880.0MHz for PCS1900

Measurement Procedure:

The frequency stability of the transmitter is measured by:

a) **Temperature** :The temperature is varied from -30°C to + 50°C using an environmental chamber.
b) **Primary Supply Voltage** :The primary supply voltage is varied from 85% to 115% of the voltage Normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification –The minimum frequency stability shall be +/- 0.00025% at any time during normal operation.

Specification — The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025(± 2.5ppm) of the center frequency.

Time Period and Procedure:

1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature (25°C to 27 °C to provide a reference)
2. The equipment is subjected to an overnight “soak” at -30°C without any power applied.
3. After the overnight ”soak” at -30°C(usually 14-16 hours),the equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency to the transmitter and the individual oscillators is made within a three minute interval after applying power to the transmitter.
4. Frequency measurements is made at 10°C interval up to room temperature. At least a period of one and one half hour is provided to allow stabilization of the equipment at each temperature level.
5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
6. Frequency were made at 10intervals starting at -30°C up to +50°C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after applying power to the transmitter.
7. The artificial load is mounted external to the temperature chamber.

NOTE : The EUT is tested down to the battery endpoint.

Frequency Stability (PCS1900)

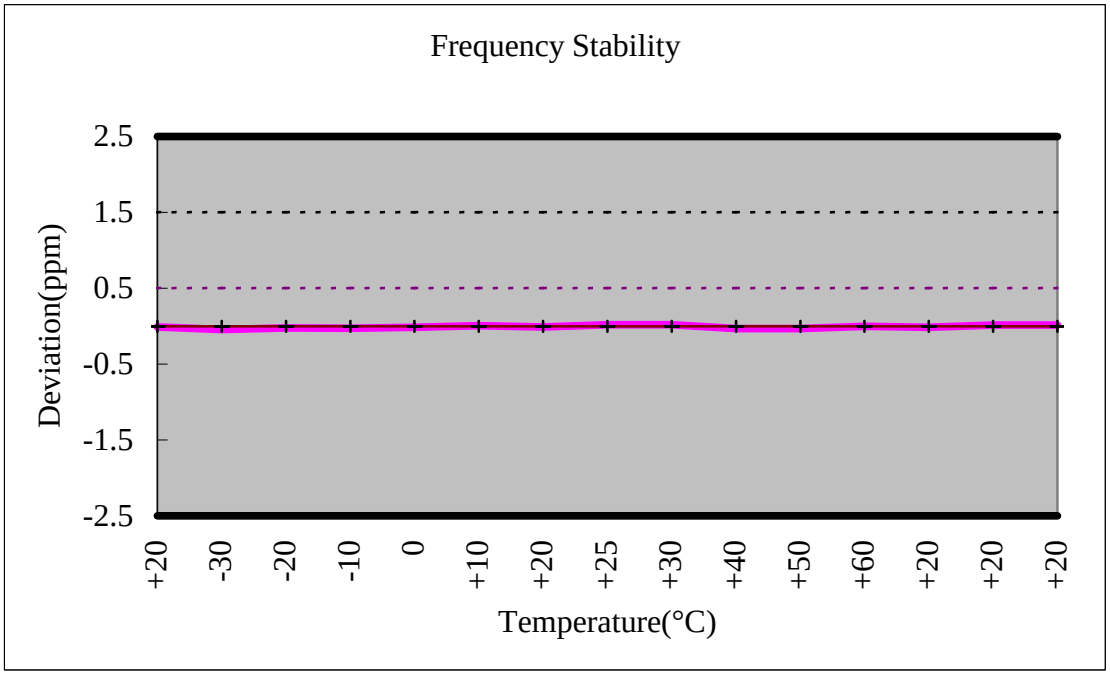
OPERATING FREQUENCY : 1,880,000,000 Hz

CHANNEL : 0661(Mid)

REFERENCE VOLTAGE : 3.7 VDC

DEVIATION LIMIT : ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	**POWER** (VDC)	TEMP (dB)	**FREQ** (H/A)	**Deviation** (%)
100%	3.7	+20(Ref)	1,880,000,018	0.000001
100%		-30	1,880,000,085	0.000005
100%		-20	1,880,000,045	0.000002
100%		-10	1,880,000,053	0.000003
100%		0	1,880,000,027	0.000001
100%		+10	1,879,999,985	-0.000001
100%		+20	1,880,000,018	0.000001
100%		+25	1,879,999,968	-0.000002
100%		+30	1,879,999,961	-0.000002
100%		+40	1,880,000,058	0.000003
100%		+50	1,880,000,061	0.000003
85%	3.2	+20	1,880,000,027	0.000001
115%	4.2	+20	1,879,999,969	-0.000002
BATT.ENDPOINT	2.89	+20	1,879,999,970	-0.000002



3.2.7 Receiver Radiated Emission

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 2.1053
Bandwidth	:	120kHz (< 1GHz) 1 Mz (> 1GHz)
Tested mode	:	PCS1900 idle mode

Measurement Procedure:

- Final test was performed according to ANSI C63.4-2001 at the open field test site. There are no deviations from the standard.
- The EUT was placed in a 0.8m high table along with the peripherals. The turn table was separated from the antenna distance 3meters. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for maximum.
- The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Reported are maximized emission levels.
- These tests were performed at 120kHz of 6dB bandwidth.

Measurement Data

PCS1900

Frequency [㎒]	ANT Pol.	Reading [dB㎶]	T.F [dB]	Results [dB㎶/m]	Limits [dB㎶/m]	Margin [dB]
	No emissions were detected at a level greater than 10dB below limit.					

Remark

1. There is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit for the frequency being investigated.
2. Measurements above 1GHz is performed using a minimum resolution bandwidth of 1MHz.
   The EUT was tested up to the 20GHz and no significant emission was found.

3.2.8 Conducted Emission

FCC ID	:	**SBWVK900**
Specification	:	47 CFR 15.107/207
Bandwidth	:	9kHz
Tested mode	:	PCS1900 idle mode

Measurement Procedure:

- The power line conducted interference measurements were performed according to ANSI C63.4-2001 in a shielded enclosure with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded enclosure wall. There are no deviations from the standard.
- The EUT was plugged into the LISN and the frequency range of interest scanned.
- Reported are maximized emission levels.
- These tests were performed at 9kHz of 6dB bandwidth.

Measurement Data

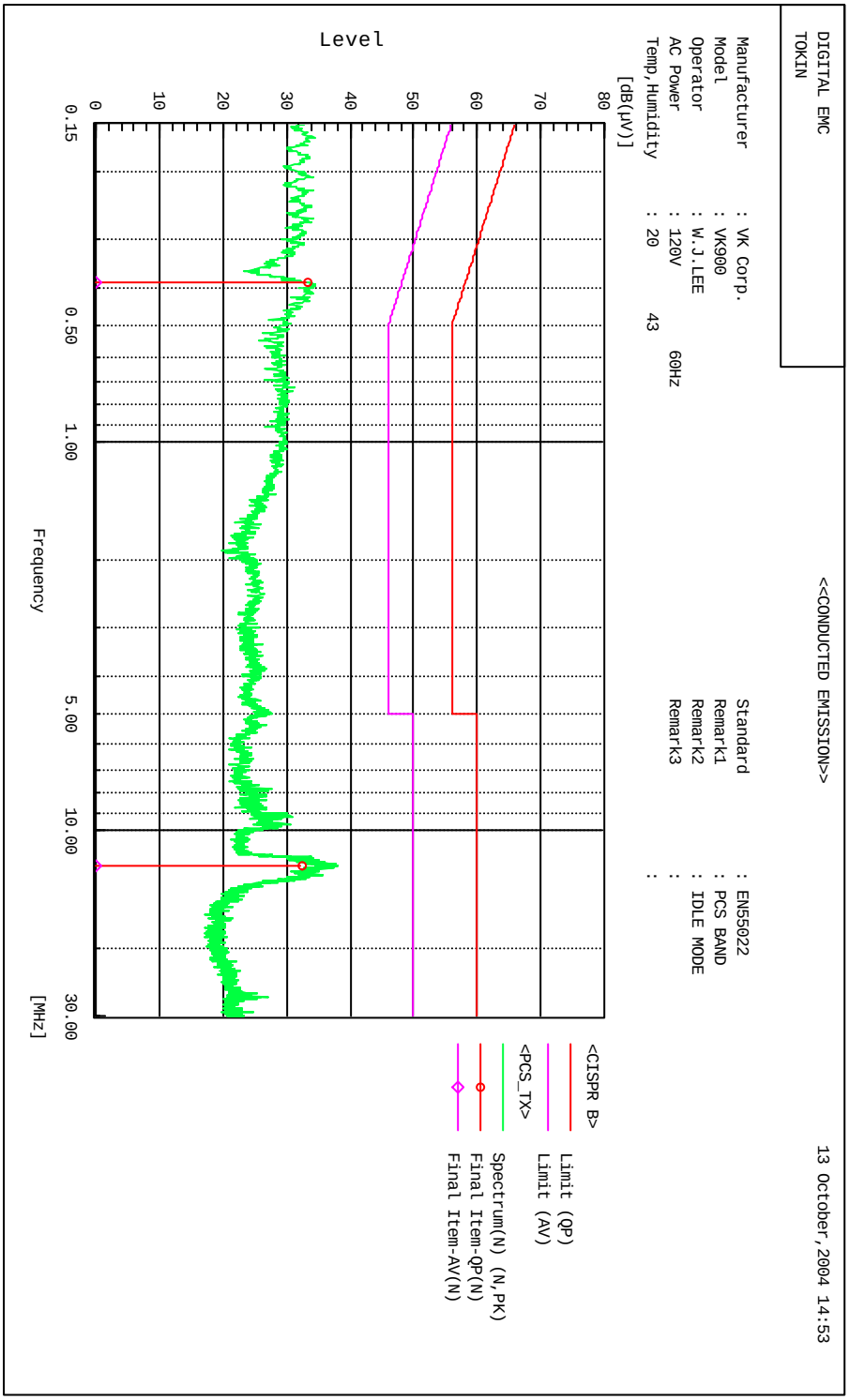
- The measurement plots are included on the following pages.

Minimum Standard: FCC Part 15.207(a)/EN 55022

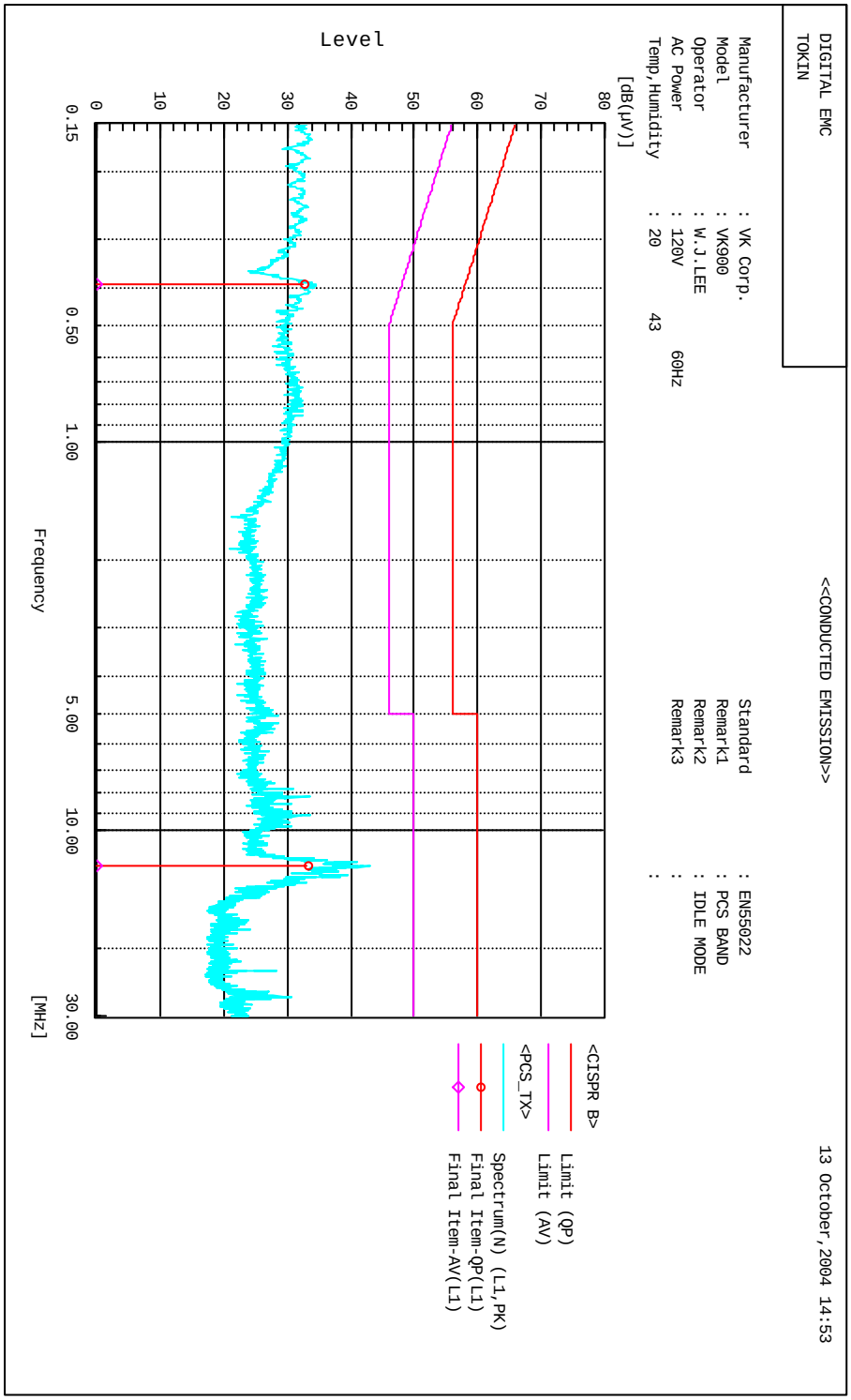
Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

PCS1900 / Conducted Emission / Neutral Graph



PCS1900 / Conducted Emission / Line Graph



********** DIGITAL EMC **********

<<CONDUCTED EMISSION>>

13 October,2004 14:53

Standard : EN55022
Manufacturer : VK Corp.
Model : VK900
Operator : W.J.LEE
AC Power : 120V 60Hz
Temp,Humidity : 20 43
Remark1 : PCS BAND
Remark2 : IDLE MODE
Remark3 :
:

****

Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	12.308	31.8	0.0	0.6	32.4	0.0	60.0	50.0	27.6	0.0	
2	0.387	32.9	0.0	0.4	33.3	0.0	58.1	48.1	24.8	0.0	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	12.378	32.7	0.0	0.7	33.4	0.0	60.0	50.0	26.6	0.0	
2	0.389	32.3	0.0	0.5	32.8	0.0	58.1	48.1	25.3	0.0	

4. TEST EQUIPMENT

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	S/N
01	Spectrum Analyzer	Agilent	E4404B	22/11/04	US41061134
02	Spectrum Analyzer	H.P	8563E	25/09/05	3551A04634
03	Power Meter	H.P	EPM-442A	15/07/05	GB37170413
04	Power Sensor	H.P	8481A	15/07/05	3318A96332
05	Frequency Counter	H.P	5342A	07/10/05	2119A04450
06	Multfunction Synthesizer	H.P	8904A	07/10/05	3633A08404
07	Signal Generator	H.P	8673D	26/09/05	2844A00753
08	Signal Generator	H.P	E4421A	15/07/05	US37230529
09	Signal Generator	H.P	8657A	26/05/05	3430U02049
10	Audio Analyzer	H.P	8903B	21/07/05	3011A0944B
11	Modulation Analyzer	H.P	8901B	15/07/05	3028A03029
12	Sensor Module	H.P	11722A	15/07/05	3111A04665
13	Oscilloscope	LeCroy	9314A	10/10/05	93144390
14	CDMA Mobile Station Test Set	H.P	8924C	07/10/05	US35360688
15	Power Splitter	WEINSCHEL	1593	07/10/05	332
16	BAND Reject Filter	Microwave circuits INC.	NO308372	07/10/05	3125-01DC0312
17	BAND Reject Filter	Wainwright	WRCG1750	07/10/05	SN2
18	AC Power supply	DAEKWANG	5KVA	03/04/05	N/A
19	DC Power Supply	H.P	6622A	24/03/05	465487
20	Attenuator (30dB)	H.P	8498A	07/10/05	50101
21	Attenuator (10dB)	WEINSCHEL	23-10-34	07/10/05	BP4387
22	HORN ANT	EMCO	3115	04/04/05	6419
23	HORN ANT	EMCO	3115	10/01/05	21097
24	HORN ANT	A.H.Systems	SAS-574	27/11/04	154
25	HORN ANT	A.H.Systems	SAS-574	14/11/04	155
26	Dipole Antenna	Schwarzbeck	VHA9103	04/10/04	2116

4. TEST EQUIPMENT (CONTINUED)

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	S/N
27	Dipole Antenna	Schwarzbeck	VHA9103	04/10/04	2117
28	Dipole Antenna	Schwarzbeck	UHA9105	04/10/04	2261
29	Dipole Antenna	Schwarzbeck	UHA9105	04/10/04	2262
30	RFI/FIELD Iintensity Meter	Kyorits	KNM-504D	25/07/05	SN-161-4
31	Frequency Converter	Kyorits	KCV-604C	25/07/05	4-230-3
32	TEMP & HUMIDITY Chamber	JISCO	J-RHC2	14/09/04	021031
33	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	23/10/04	1098
34	Biconical Antenna	Schwarzbeck	VHA9103	23/10/04	VHA91031946
35	Digital Multimeter	H.P	34401A	07/04/05	3146A13475
36	Attenuator (10dB)	WEINSCHEL	23-10-34	07/10/05	BP4386
37	High-Pass Filter	ANRITSU	MP526	12/05/05	M27756
38	Attenuator (3dB)	Agilent	8491B	15/09/05	58177
39	Wireless communication test set	Agilent	8960	10/11/04	GB41321167
40	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	07/07/05	4N-170-3
41	LISN	Kyorits	KNW-407	16/08/05	8-317-8
42	LISN	Kyorits	KNW-242	16/08/05	8-654-15
43	Spectrum Analyzer	H.P	8591E	23/05/05	3649A05889
44	Software	ToYo EMI	EP5/CE	N/A	Ver 2.0.801
45	CVCF	NF Electronic	4400	N/A	344536 4420064
46	Band Reject Filter	Wainright inst	WRCT 800/960-0.2	N/A	SN9
47	Band Reject Filter	Wainright inst	WRCD 1700/2000-0.2	N/A	SN26
48	GSM/DCS/PCS MS TEST SET	HP	8922M	24/11/04	3639U01779
		HP	83220E	24/11/04	3254U01637

5. SAMPLE CALCULATIONS

A. Emission Designator

PCS1900

Emission Designator = 250KGXW

GSM BW = 250 KHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

(Measured at the 99.75% power bandwidth)

6. CONCLUSION

The data collected shows that the **VK Corporation.** Dual band GSM phone **FCC ID: SBWVK900** complies with all the requirements of Parts 2 , 15 and 24 of the FCC rules.

