PCTEST ENGINEERING LABORATORY, INC.



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MEASUREMENT REPORT FCC Part 22, 24

Applicant Name: LG Electronics MobileComm U.S.A 1000 Sylvan Avenue Englewood Cliffs, NJ 07632 **United States**

Date of Testing: June 10 - 11, 2013 Test Site/Location: PCTEST Lab., Columbia, MD, USA **Test Report Serial No.:** 0Y1306030933.ZNF

FCC ID: ZNFVN360

APPLICANT: LG ELECTRONICS MOBILECOMM U.S.A

Application Type: Class II Permissive Change

Model(s): VN360, LG-VN360, LGVN360, LG-UN530, LGUN530, UN530

EUT Type: Portable Handset

FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)

FCC Rule Part(s): §2 §22(H) §24(E)

ANSI/TIA-603-C-2004, KDB 971168 Test Procedure(s):

Test Device Serial No.: identical prototype [S/N: N/A]

Class II Permissive Change: Please see FCC change documents.

Original Grant Date: May 16,2013

			ERP/	EIRP
Mode	Tx Frequency	Emission	Max.	Max.
Mode	(MHz)	Designator	Power	Power
			(W)	(dBm)
CDMA850	824.70 - 848.31	1M27F9W	0.130	21.15
CDMA1900	1851.25 - 1908.75	1M27F9W	0.557	27.46

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

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.







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MEASUREMENT REPORT



FCC Part 22, 24

§2.1033 General Information

APPLICANT: LG Electronics MobileComm U.S.A

APPLICANT ADDRESS: 1000 Sylvan Avenue

Englewood Cliffs, NJ 07632, United States

TEST SITE: PCTEST ENGINEERING LABORATORY, INC. **TEST SITE ADDRESS:** 6660-B Dobbin Road, Columbia, MD 21045 USA

FCC RULE PART(S): §2 §22(H) §24(E)

BASE MODEL: VN360 FCC ID: ZNFVN360

FCC CLASSIFICATION: PCS Licensed Transmitter Held to Ear (PCE)

MODE: **CDMA**

FREQUENCY TOLERANCE: ±0.00025 % (2.5 ppm)

Test Device Serial No.: N/A ☐ Production Pre-Production ☐ Engineering

DATE(S) OF TEST: June 10 - 11, 2013 **TEST REPORT S/N:** 0Y1306030933.ZNF

Test Facility / Accreditations

Measurements were performed at PCTEST Engineering Lab located in Columbia, MD 21046, U.S.A.

- PCTEST facility is an FCC registered (PCTEST Reg. No. 159966) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (2451B-1).
- PCTEST Lab is accredited to ISO 17025 by U.S. National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP Lab code: 100431-0) in EMC, FCC and Telecommunications.
- PCTEST Lab is accredited to ISO 17025-2005 by the American Association for Laboratory Accreditation (A2LA) in Specific Absorption Rate (SAR) testing, Hearing Aid Compatibility (HAC) testing, CTIA Test Plans, and wireless testing for FCC and Industry Canada Rules.
- PCTEST Lab is a recognized U.S. Conformity Assessment Body (CAB) in EMC and R&TTE (n.b. 0982) under the U.S.-EU Mutual Recognition Agreement (MRA).
- PCTEST TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC Guide 65 by the American National Standards Institute (ANSI) in all scopes of FCC Rules and Industry Canada Standards (RSS).
- PCTEST facility is an IC registered (2451B-1) test laboratory with the site description on file at Industry Canada.
- PCTEST is a CTIA Authorized Test Laboratory (CATL) for AMPS, CDMA, and EvDO wireless devices and for Over-the-Air (OTA) Antenna Performance testing for AMPS, CDMA, GSM, GPRS, EGPRS, UMTS (W-CDMA), CDMA 1xEVDO, and CDMA 1xRTT.





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INTRODUCTION

Scope 1.1

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 and the Industry Canada Certification and Engineering Bureau.

1.2 **Testing Facility**

The map below shows the location of the PCTEST LABORATORY, its proximity to the FCC Laboratory, the Columbia vicinity, the Baltimore-Washington Internt'i (BWI) airport, the city of Baltimore and the Washington, DC area. (See Figure 1-1).

These measurement tests were conducted at the PCTEST Engineering Laboratory, Inc. facility located at 7185 Oakland Mills Road. Columbia. MD 21046. The site coordinates are 39° 10'23" N latitude and 76° 49'50" W longitude. The facility is 0.4 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on February 15, 2012.

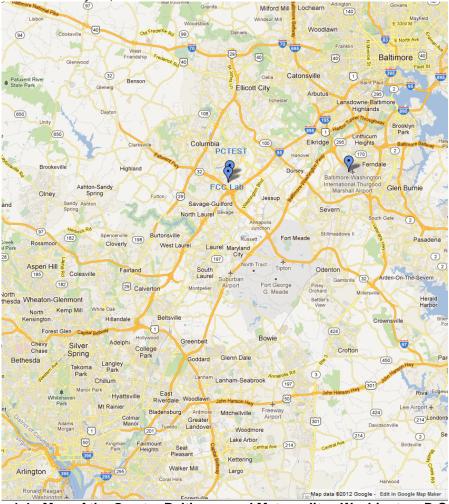


Figure 1-1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area

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PRODUCT INFORMATION

2.1 **Equipment Description**

The Equipment Under Test (EUT) is the Portable Handset FCC ID: ZNFVN360. The test data contained in this report pertains only to the emissions due to the EUT's 2G/3G licensed transmitters.

2.2 **Device Capabilities**

This device contains the following capabilities:

850/1900 CDMA (BC0, BC1), Bluetooth (1x,EDR)

2.3 **Test Configuration**

The Portable Handset FCC ID: ZNFVN360 was tested per the guidance of ANSI/TIA-603-C-2004 and KDB 971168. See Section 3.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

2.4 **EMI Suppression Device(s)/Modifications**

No EMI suppression device(s) were added and no modifications were made during testing.

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3.0 DESCRIPTION OF TESTS

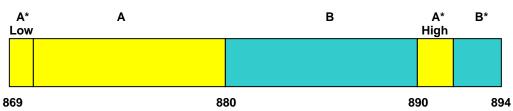
3.1 Evaluation Procedure

The measurement procedures described in the "Land Mobile FM or PM – Communications Equipment – Measurements and Performance Standards" (ANSI/TIA-603-C-2004) and "Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems" (KDB 971168) were used in the measurement of the **Portable Handset FCC ID: ZNFVN360.**

Deviation from Measurement Procedure......None

3.2 Cellular - Base Frequency Blocks





BLOCK 1: 869 - 880 MHz (A* Low + A)

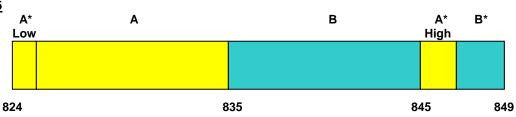
BLOCK 3: 890 – 891.5 MHz (A* High)

BLOCK 2: 880 - 890 MHz (B)

BLOCK 4: 891.5 - 894 MHz (B*)

3.3 Cellular - Mobile Frequency Blocks





BLOCK 1: 824 - 835 MHz (A* Low + A)

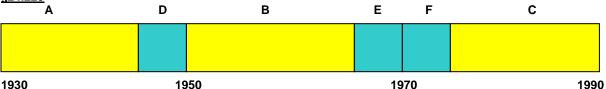
BLOCK 3: 845 – 846.5 MHz (A* High)

BLOCK 2: 835 - 845 MHz (B)

BLOCK 4: 846.5 - 849 MHz (B*)

3.4 PCS - Base Frequency Blocks





BLOCK 1: 1930 - 1945 MHz (A)

BLOCK 4: 1965 – 1970 MHz (E)

BLOCK 2: 1945 - 1950 MHz (D)

BLOCK 5: 1970 - 1975 MHz (F)

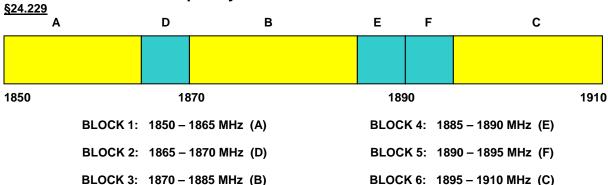
BLOCK 3: 1950 - 1965 MHz (B)

BLOCK 6: 1975 – 1990 MHz (C)

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3.5 **PCS - Mobile Frequency Blocks**



3.6 Radiated Power and Radiated Spurious Emissions §2.1053 §22.913(a.2) §22.917(a) §24.232(c) §24.238(a) RSS-132(4.4) RSS-132(4.5.1) RSS-133(6.4) RSS-133(6.5.1)

Radiated power measurements are performed on the 3 meter OATS per the guidelines of ANSI/TIA-603-C-2004. The measurement area is situated on an 18 meter x 20 meter galvanized 1/2" hardware cloth as the conducting ground plane. This material is sewn together in sections 4 feet wide and 60 feet long. A total of eighteen sections are required to cover the entire measurement area. Sections are laid across the width of the pad, overlapped 1" and sewn and soldered together at intervals of 3" (7.6 cm.) The terrain of the test site is reasonably flat and level. Power and cable to the test site are buried 18" deep into the ground outside the perimeter of the site. An all-weather non-metallic housing is situated on a 2 x 3 meter area adjacent to the measurement area to house the test equipment. The equipment under test was transmitting while connected to its integral antenna and is placed on a wooden turntable 80cm above the ground plane and 3 meters from the receive antenna. The receive antenna height is adjusted between 1 and 4 meter height, the turntable is rotated through 360 degrees, and the EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer. Radiated power levels are also investigated with the receive antenna horizontally and vertically polarized. The maximized power level is recorded using the spectrum analyzer "Channel Power" function with the integration band set to the emissions' occupied bandwidth, a RMS detector, RBW = 100kHz, VBW = 300kHz, and a 1 second sweep time over a minimum of 10 sweeps, per the guidelines of KDB 971168.

Per the guidance of ANSI/TIA-603-C-2004, a half-wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer level previously recorded from the spurious emission from the EUT. The power of the emission is calculated using the following formula:

$$P_{d [dBm]} = P_{g [dBm]} - cable loss_{[dB]} + antenna gain_{[dBd/dBi]}$$

Where, P_d is the dipole equivalent power, P_g is the generator output into the substitution antenna, and the antenna gain is the gain of the substitute antenna used relative to either a half-wave dipole (dBd) or an isotropic source (dBi). The substitute level is equal to $P_{g [dBm]}$ – cable loss [dB].

The calculated P_d levels are then compared to the absolute spurious emission limit of -13dBm which is equivalent to the required minimum attenuation of 43 + 10log₁₀(Power [Watts]) specified in 22.917(a) and 24.238(a).

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Open Area Test Site

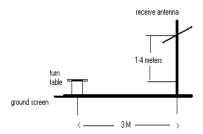


Figure 3-1. Diagram of 3-meter outdoor test range

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TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST).

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	RE1	Radiated Emissions Cable Set (UHF/EHF)	3/29/2013	Annual	3/29/2014	N/A
-	RE2	Radiated Emissions Cable Set (VHF/UHF)	3/29/2013	Annual	3/29/2014	N/A
Agilent	8447D	Broadband Amplifier	5/31/2013	Annual	5/31/2014	1937A03348
Agilent	8449B	(1-26.5GHz) Pre-Amplifier	4/17/2013	Annual	4/17/2014	3008A00985
Agilent	8648D	(9kHz-4GHz) Signal Generator	10/10/2012	Annual	10/10/2013	3613A00315
Agilent	E5515C	Wireless Communications Test Set	10/10/2012	Annual	10/10/2013	GB46110872
Agilent	E8257D	(250kHz-20GHz) Signal Generator	4/16/2013	Annual	4/16/2014	MY45470194
Agilent	N9038A	MXE EMI Receiver	12/8/2012	Annual	12/8/2013	MY51210133
Mini-Circuits	VHF-1300+	High Pass Filter	1/21/2013	Annual	1/21/2014	30716
Mini-Circuits	VHF-3100+	High Pass Filter	1/21/2013	Annual	1/21/2014	31144
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Tx	10/3/2011	Biennial	10/3/2013	91052522TX
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Rx	10/3/2011	Biennial	10/3/2013	91052523RX
Seekonk	NC-100	Torque Wrench (8" lb)	3/5/2012	Triennial	3/5/2015	N/A
Sunol	DRH-118	Horn Antenna (1 - 18GHz)	7/5/2011	Biennial	7/5/2013	A050307
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	1/26/2012	Biennial	1/26/2014	A051107
Sunol	DRH-118	Horn Antenna (1-18 GHz)	6/17/2011	Biennial	6/17/2013	A042511

Table 4-1. Test Equipment

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SAMPLE CALCULATIONS

CDMA Emission Designator

Emission Designator = 1M25F9W

CDMA BW = 1.25 MHz F = Frequency Modulation 9 = Composite Digital Info

W = Combination (Audio/Data) (Measured at the 99.75% power bandwidth)

Spurious Radiated Emission

Example: Spurious emission at 3700.40 MHz

The receive spectrum analyzer reading at 3 meters with the EUT on the turntable was -81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of -81.0 dBm on the spectrum analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 3700.40 MHz. So 6.1 dB is added to the signal generator reading of -30.9 dBm yielding -24.80 dBm. The fundamental EIRP was 25.50 dBm so this harmonic was 25.50 dBm - (-24.80) = 50.3 dBc.

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6.0 TEST RESULTS

6.1 Summary

Company Name: <u>LG Electronics MobileComm U.S.A</u>

FCC ID: ZNFVN360

FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)

Mode(s): CDMA

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
TRANSMITTER	MODE (TX)				
22.913(a.2)	Effective Radiated Power	< 7 Watts max. ERP		PASS	Section 6.2
24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts max. EIRP	RADIATED	PASS	Section 6.3
2.1053 22.917(a) 24.238(a)	Undesirable Emissions	> 43 + log ₁₀ (P[Watts]) for all out- of-band emissions		PASS	Sections, 6.4, 6.5

Table 6-1. Summary of Test Results

Notes:

1) All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.

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Cellular Effective Radiated Power (ERP)

§22.913(a)(2) RSS-132(4.4) [SRSP-503(5.1.3)]

Frequency [MHz]	Mode	Battery Type	Substitute Level [dBm]	Antenna Gain [dBd]	Pol [H/V]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
824.70	CDMA850	Standard	20.94	-0.85	H2	20.09	0.102	38.45	-18.36
836.52	CDMA850	Standard	21.95	-0.80	H2	21.15	0.130	38.45	-17.30
848.31	CDMA850	Standard	21.15	-0.76	H2	20.39	0.109	38.45	-18.06

Table 6-2. ERP (Cellular CDMA)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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PCS Effective Radiated Power (EIRP)

§22.913(a)(2) RSS-132(4.4) [SRSP-503(5.1.3)]

Frequency [MHz]	Mode	Battery Type	Substitute Level [dBm]	Antenna Gain [dBi]	Pol [H/V]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1851.25	CDMA1900	Standard	19.13	7.75	Н	26.88	0.488	33.01	-6.13
1880.00	CDMA1900	Standard	17.53	7.83	Н	25.36	0.344	33.01	-7.65
1908.75	CDMA1900	Standard	19.53	7.93	Н	27.46	0.557	33.01	-5.55

Table 6-3. EIRP (PCS CDMA)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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Cellular CDMA Radiated Measurements §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 824.70 MHz

> CHANNEL: 1013

MEASURED OUTPUT POWER: 20.09 dBm 0.102 W

CDMA MODULATION SIGNAL:

> 3 DISTANCE:

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

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1649.40	-47.72	6.16	-41.56	H2	61.7
2474.10	-42.65	6.34	-36.30	H2	56.4
3298.80	-82.54	6.71	-75.84	H2	95.9
4123.50	-80.79	7.39	-73.40	H2	93.5
4948.20	-80.87	8.91	-71.97	H2	92.1

Table 6-4. Radiated Spurious Data (Cellular CDMA Mode – Ch. 1013)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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Cellular CDMA Radiated Measurements (Cont'd) §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 836.52 MHz

> 384 CHANNEL:

MEASURED OUTPUT POWER: 21.15 dBm 0.130 W

MODULATION SIGNAL: **CDMA**

> DISTANCE: 3 meters

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

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1673.04	-50.33	6.09	-44.25	H2	65.4
2509.56	-41.65	6.38	-35.27	H2	56.4
3346.08	-82.75	6.90	-75.85	H2	97.0
4182.60	-81.41	7.79	-73.62	H2	94.8
5019.12	-80.47	8.83	-71.64	H2	92.8

Table 6-5. Radiated Spurious Data (Cellular CDMA Mode – Ch. 384)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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Cellular CDMA Radiated Measurements (Cont'd) §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 848.31 MHz

> 777 CHANNEL:

MEASURED OUTPUT POWER: 20.39 dBm 0.109 W

MODULATION SIGNAL: **CDMA**

> DISTANCE: 3 meters

> > LIMIT: $43 + 10 \log_{10} (W) =$ 33.39 dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1696.62	-53.32	6.01	-47.30	H2	67.7
2544.93	-42.44	6.47	-35.97	H2	56.4
3393.24	-82.95	7.10	-75.86	H2	96.3
4241.55	-81.82	8.09	-73.73	H2	94.1
5089.86	-80.20	8.86	-71.34	H2	91.7

Table 6-6. Radiated Spurious Data (Cellular CDMA Mode – Ch. 777)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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PCS CDMA Radiated Measurements

§2.1053 §24.238(a) RSS-133(6.5.2)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1851.25 MHz

> CHANNEL: 25

MEASURED OUTPUT POWER: 26.88 0.488 dBm W

MODULATION SIGNAL: **CDMA**

> DISTANCE: 3 meters

> > LIMIT: $43 + 10 \log_{10} (W) =$ 39.88 dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3702.50	-36.64	9.62	-27.02	Н	53.9
5553.75	-51.36	10.61	-40.75	Н	67.6
7405.00	-75.14	10.84	-64.29	Н	91.2
9256.25	-73.86	12.20	-61.66	Н	88.5
11107.50	-71.01	12.86	-58.16	Н	85.0

Table 6-7. Radiated Spurious Data (PCS CDMA Mode – Ch. 25)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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PCS CDMA Radiated Measurements (Cont'd) §2.1053 §24.238(a) RSS-133(6.5.2)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1880.00 MHz

> CHANNEL: 661

25.36 MEASURED OUTPUT POWER: dBm 0.344

MODULATION SIGNAL: **CDMA**

> DISTANCE: 3 meters

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

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3760.00	-35.46	9.30	-26.16	Н	51.5
5640.00	-52.53	10.89	-41.64	Н	67.0
7520.00	-75.14	10.85	-64.29	Н	89.7
9400.00	-73.83	12.17	-61.66	Н	87.0
11280.00	-71.20	13.05	-58.16	Н	83.5

Table 6-8. Radiated Spurious Data (PCS CDMA Mode – Ch. 600)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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PCS CDMA Radiated Measurements (Cont'd) §2.1053 §24.238(a) RSS-133(6.5.2)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1908.75 MHz

> 1175 CHANNEL:

MEASURED OUTPUT POWER: 27.46 dBm 0.557

MODULATION SIGNAL: **CDMA**

> DISTANCE: 3 meters

> > LIMIT: $43 + 10 \log_{10} (W) =$ 40.46 dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3817.50	-33.81	9.05	-24.76	Н	52.2
5726.25	-51.64	11.07	-40.56	Н	68.0
7635.00	-75.40	11.11	-64.29	Н	91.7
9543.75	-74.01	12.36	-61.66	Н	89.1
11452.50	-71.38	13.23	-58.16	Н	85.6

Table 6-9. Radiated Spurious Data (PCS CDMA Mode – Ch. 1175)

- 1) This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case test configuration was found in the EUT in the H2 positioning for Cellular band and H positioning for PCS band. The data reported in the table above was measured in this test setup.

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CONCLUSION

The data collected relate only to the item(s) tested and show that the Portable Handset FCC ID: ZNFVN360 complies with all the requirements of Parts 2, 22, 24 of the FCC rules.

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