

Variant FCC RF Test Report

APPLICANT : HTC Corporation
EQUIPMENT : Smartphone
MODEL NAME : PG05100
FCC ID : NM8PG05100
STANDARD : FCC 47 CFR Part 2, 22(H), 24(E)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
Tx/Rx FREQUENCY RANGE : CDMA2000 BC0 : 824.70 ~ 848.31 MHz /
869.70 ~ 893.31 MHz
CDMA2000 BC1 : 1851.25 ~ 1908.75 MHz /
1931.25 ~ 1988.75 MHz
MAX. ERP/EIRP POWER : CDMA2000 BC0 : 0.09 W
CDMA2000 BC1 : 0.10 W

This is a variant report which is only valid together with the original test report. The product was received on Feb. 22, 2011 and completely tested on Mar. 25, 2011. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:



Roy Wu / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG001550-01A	Rev. 01	This is a variant report for adding extend battery (battery 5), extend battery cover, and wireless charging cover. All the test cases were performed on original report which can be referred to Sporton Report No. FG001550-03A. Based on original report, only the ERP/EIRP and Radiated Emission were verified.	Mar. 29, 2011



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS	-
3.1	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
3.2	§2.1053 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1)	Field Strength of Spurious Radiation	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 10.04 dB at 3760 MHz



1 General Description

1.1 Applicant

HTC Corporation
No. 23, Xinghua Rd., Taoyuan City, Taiwan

1.2 Manufacturer

HTC Corporation
No. 23, Xinghua Rd., Taoyuan City, Taiwan

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Smartphone
Model Name	PG05100
FCC ID	NM8PG05100
Sample 1	EUT with LCM1, Camera1, Filter1 ,and PA1
Sample 2	EUT with LCM2, Camera2, Filter2 ,and PA2
Tx Frequency	CDMA2000 BC0 : 824 MHz ~ 849 MHz CDMA2000 BC1 : 1850 MHz ~1910 MHz
Rx Frequency	CDMA2000 BC0 : 869 MHz ~ 894 MHz CDMA2000 BC1 : 1930 MHz ~ 1990 MHz
Maximum ERP/EIRP	CDMA2000 BC0 : 0.09 W (19.41 dBm) CDMA2000 BC1 : 0.10 W (19.92 dBm)
Antenna Type	Fixed Internal Antenna
Type of Modulation	QPSK
EUT Stage	Production Unit

Remark:

1. For other wireless features of this EUT, the test report will be issued separately.
2. This test report recorded only product characteristics and test results of PCS Licensed Transmitter Held to Ear (PCE).
3. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	FCC/IC Registration No.
	03CH05-HY	722060/4086B-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ Preliminary Guidance for Receiving Applications for Certification of 3G Device. May 9, 2006.
- ♦ FCC 47 CFR Part 2, 22(H), 24(E)
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ IC RSS-132 Issue 2
- ♦ IC RSS-133 Issue 5

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B (DoC), recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m

2 Test Configuration of Equipment Under Test

2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is as follows:

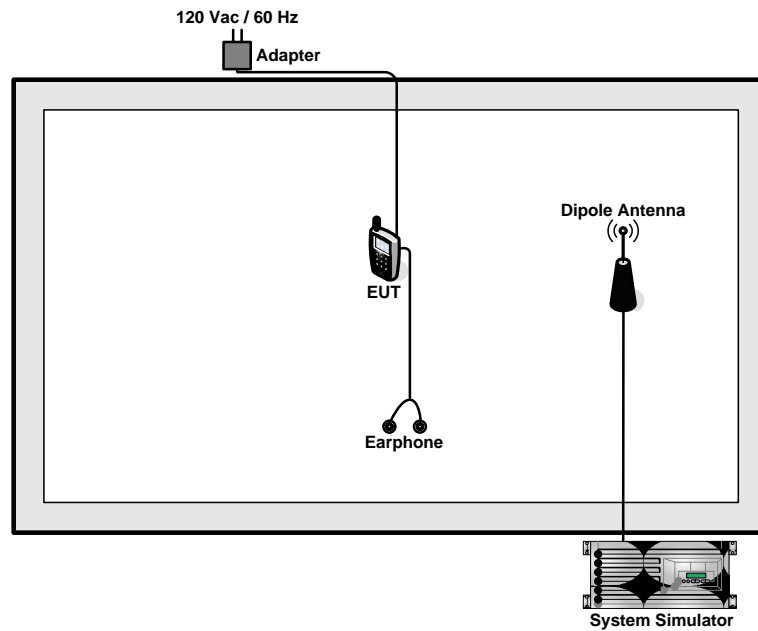
1. 30 MHz to 9000 MHz for CDMA2000 BC0.
2. 30 MHz to 19000 MHz for CDMA2000 BC1.

Test Modes	
Band	Radiated TCs
CDMA2000 BC0	<ul style="list-style-type: none"> ■ 1xRTT Link Mode + TC + Battery 5 for Sample 2 ■ 1xRTT Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 2 ■ 1xRTT Link Mode + TC + Battery 5 for Sample 1 ■ 1xRTT Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 1 ■ 1xEV-DO Rev. A Link Mode + TC + Battery 5 for Sample 2 ■ 1xEV-DO Rev. A Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 2 ■ 1xEV-DO Rev. A Link Mode TC + Battery 5 for Sample 1 ■ 1xEV-DO Rev. A Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 1
CDMA2000 BC1	<ul style="list-style-type: none"> ■ 1xRTT Link Mode + TC + Battery 5 for Sample 2 ■ 1xRTT Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 2 ■ 1xRTT Link Mode + TC + Battery 5 for Sample 1 ■ 1xRTT Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 1 ■ 1xEV-DO Rev. 0 Link Mode + TC + Battery 5 for Sample 2 ■ 1xEV-DO Rev. 0 Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 2 ■ 1xEV-DO Rev. 0 Link Mode TC + Battery 5 for Sample 1 ■ 1xEV-DO Rev. 0 Link Mode + TC + Battery 3 + Wireless Charging Cover for Sample 1

Note:

1. Because there are individual antennas for each WWAN, WLAN, and Bluetooth, the co-location test modes are not required.
2. TC stands for Test Configuration, and consists of Earphone, USB Cable1, and Adapter1.
3. This device has two antennas for CDMA. The Ant-1 is used for 1xRTT, and the Ant-2 is used for EVDO. Therefore, ERP/EIRP is tested on the maximum power mode for Ant-1 and Ant-2.

2.2 Connection Diagram of Test System





3 Test Result

3.1 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

3.1.1 Description of the ERP/EIRP Measurement

ERP/EIRP is measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts.

3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The EUT was placed on a turntable with 1.0 meter height in a fully anechoic chamber.
2. The EUT was set at 1.2 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiated power.
4. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
5. Taking the record of maximum ERP/EIRP.
6. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
7. The conducted power at the terminal of the dipole antenna is measured.
8. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
9. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm) : Input power to substitution antenna.

G_s (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

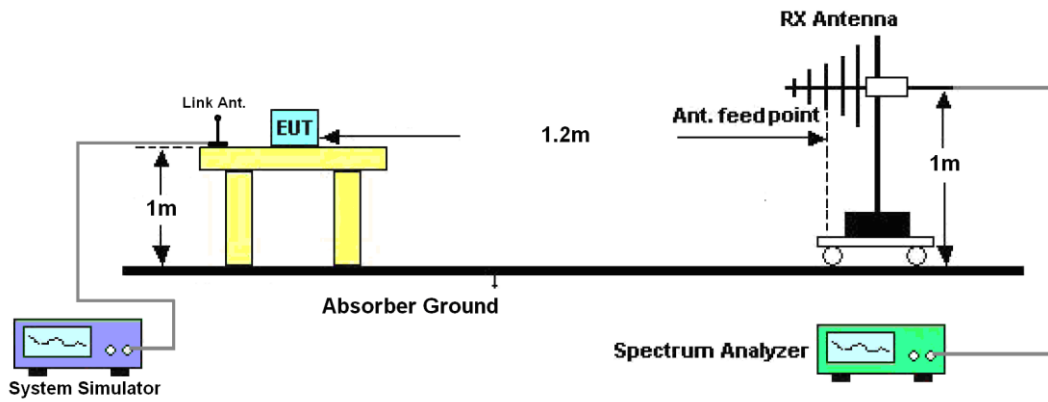
$E_s = R_s + AF$

AF (dB/m) : Receive antenna factor

R_t : The highest received signal in spectrum analyzer for EUT.

R_s : The highest received signal in spectrum analyzer for substitution antenna.

3.1.4 Test Setup





3.1.5 Test Result of ERP

CDMA2000 BC0 1xRTT_RC3+SO55 (for Ant-1) Radiated Power ERP (Sample 2 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-29.14	-48.12	0.00	-1.08	17.90	0.06
836.52	-29.20	-48.28	0.00	-0.93	18.15	0.07
848.31	-29.82	-48.35	0.00	-0.76	17.77	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-50.23	-47.97	0.00	-1.08	-3.34	0.0005
836.52	-50.43	-48.01	0.00	-0.93	-3.35	0.0005
848.31	-50.56	-48.05	0.00	-0.76	-3.27	0.0005

CDMA2000 BC0 1xRTT_RC3+SO55 (for Ant-1) Radiated Power ERP (Sample 2 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-30.08	-48.12	0.00	-1.08	16.96	0.05
836.52	-29.87	-48.28	0.00	-0.93	17.48	0.06
848.31	-30.33	-48.35	0.00	-0.76	17.26	0.05
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-51.03	-47.97	0.00	-1.08	-4.14	0.0004
836.52	-50.35	-48.01	0.00	-0.93	-3.27	0.0005
848.31	-50.21	-48.05	0.00	-0.76	-2.92	0.0005



CDMA2000 BC0 1xRTT_RC3+SO55 (for Ant-1) Radiated Power ERP (Sample 1 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-28.71	-48.12	0.00	-1.08	18.33	0.07
836.52	-27.94	-48.28	0.00	-0.93	19.41	0.09
848.31	-28.18	-48.35	0.00	-0.76	19.41	0.09
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-49.75	-47.97	0.00	-1.08	-2.86	0.0005
836.52	-49.09	-48.01	0.00	-0.93	-2.01	0.0006
848.31	-48.44	-48.05	0.00	-0.76	-1.15	0.0008

CDMA2000 BC0 1xRTT_RC3+SO55 (for Ant-1) Radiated Power ERP (Sample 1 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-29.67	-48.12	0.00	-1.08	17.37	0.05
836.52	-29.32	-48.28	0.00	-0.93	18.03	0.06
848.31	-29.79	-48.35	0.00	-0.76	17.80	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-49.36	-47.97	0.00	-1.08	-2.47	0.0006
836.52	-49.50	-48.01	0.00	-0.93	-2.42	0.0006
848.31	-50.52	-48.05	0.00	-0.76	-3.23	0.0005



CDMA2000 BC0 1xEVDO_RETAP 153.6K RC3+SO55 (for Ant-2) Radiated Power ERP (Sample 2 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-32.41	-48.12	0.00	-1.08	14.63	0.03
836.52	-32.69	-48.28	0.00	-0.93	14.66	0.03
848.31	-32.35	-48.35	0.00	-0.76	15.24	0.03
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-38.25	-47.97	0.00	-1.08	8.64	0.0073
836.52	-39.00	-48.01	0.00	-0.93	8.08	0.0064
848.31	-38.72	-48.05	0.00	-0.76	8.57	0.0072

CDMA2000 BC0 1xEVDO_RETAP 153.6K RC3+SO55 (for Ant-2) Radiated Power ERP (Sample 2 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-33.28	-48.12	0.00	-1.08	13.76	0.02
836.52	-33.70	-48.28	0.00	-0.93	13.65	0.02
848.31	-33.09	-48.35	0.00	-0.76	14.50	0.03
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-40.34	-47.97	0.00	-1.08	6.55	0.0045
836.52	-40.98	-48.01	0.00	-0.93	6.10	0.0041
848.31	-40.59	-48.05	0.00	-0.76	6.70	0.0047



CDMA2000 BC0 1xEVDO_RETAP 153.6K RC3+SO55 (for Ant-2) Radiated Power ERP (Sample 1 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-31.20	-48.12	0.00	-1.08	15.84	0.04
836.52	-32.03	-48.28	0.00	-0.93	15.32	0.03
848.31	-32.24	-48.35	0.00	-0.76	15.35	0.03
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-37.17	-47.97	0.00	-1.08	9.72	0.0094
836.52	-37.89	-48.01	0.00	-0.93	9.19	0.0083
848.31	-38.26	-48.05	0.00	-0.76	9.03	0.0080

CDMA2000 BC0 1xEVDO_RETAP 153.6K RC3+SO55 (for Ant-2) Radiated Power ERP (Sample 1 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-35.31	-48.12	0.00	-1.08	11.73	0.01
836.52	-36.20	-48.28	0.00	-0.93	11.15	0.01
848.31	-36.25	-48.35	0.00	-0.76	11.34	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-41.12	-47.97	0.00	-1.08	5.77	0.0038
836.52	-41.91	-48.01	0.00	-0.93	5.17	0.0033
848.31	-42.21	-48.05	0.00	-0.76	5.08	0.0032



3.1.6 Test Result of EIRP

CDMA2000 BC1 1xRTT_RC3+SO55 (for Ant-1) Radiated Power EIRP (Sample 2 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-37.42	-51.88	0.00	1.96	16.42	0.04
1880.00	-38.41	-52.99	0.00	2.00	16.58	0.05
1908.75	-39.05	-54.28	0.00	1.98	17.21	0.05
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-39.78	-52.13	0.00	1.96	14.31	0.03
1880.00	-40.47	-53.17	0.00	2.00	14.70	0.03
1908.75	-41.49	-54.13	0.00	1.98	14.62	0.03

CDMA2000 BC1 1xRTT_RC3+SO55 (for Ant-1) Radiated Power EIRP (Sample 2 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-36.59	-51.88	0.00	1.96	17.25	0.05
1880.00	-38.19	-52.99	0.00	2.00	16.80	0.05
1908.75	-38.86	-54.28	0.00	1.98	17.40	0.05
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-39.09	-52.13	0.00	1.96	15.00	0.03
1880.00	-40.59	-53.17	0.00	2.00	14.58	0.03
1908.75	-41.65	-54.13	0.00	1.98	14.46	0.03



CDMA2000 BC1 1xRTT_RC3+SO55 (for Ant-1) Radiated Power EIRP (Sample 1 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-37.04	-51.88	0.00	1.96	16.80	0.05
1880.00	-39.24	-52.99	0.00	2.00	15.75	0.04
1908.75	-39.82	-54.28	0.00	1.98	16.44	0.04
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-39.12	-52.13	0.00	1.96	14.97	0.03
1880.00	-40.77	-53.17	0.00	2.00	14.40	0.03
1908.75	-40.92	-54.13	0.00	1.98	15.19	0.03

CDMA2000 BC1 1xRTT_RC3+SO55 (for Ant-1) Radiated Power EIRP (Sample 1 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-36.27	-51.88	0.00	1.96	17.57	0.06
1880.00	-38.52	-52.99	0.00	2.00	16.47	0.04
1908.75	-39.14	-54.28	0.00	1.98	17.12	0.05
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-38.45	-52.13	0.00	1.96	15.64	0.04
1880.00	-40.96	-53.17	0.00	2.00	14.21	0.03
1908.75	-41.56	-54.13	0.00	1.98	14.55	0.03



CDMA2000 BC1 1xEVDO_RETAP 153.6K (for Ant-2) Radiated Power EIRP (Sample 2 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-39.39	-51.88	0.00	1.96	14.45	0.03
1880.00	-42.01	-52.99	0.00	2.00	12.98	0.02
1908.75	-43.18	-54.28	0.00	1.98	13.08	0.02
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-37.10	-52.13	0.00	1.96	16.99	0.05
1880.00	-39.11	-53.17	0.00	2.00	16.06	0.04
1908.75	-39.91	-54.13	0.00	1.98	16.20	0.04

CDMA2000 BC1 1xEVDO_RETAP 153.6K (for Ant-2) Radiated Power EIRP (Sample 2 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-42.93	-51.88	0.00	1.96	10.91	0.01
1880.00	-44.05	-52.99	0.00	2.00	10.94	0.01
1908.75	-44.09	-54.28	0.00	1.98	12.17	0.02
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-41.44	-52.13	0.00	1.96	12.65	0.02
1880.00	-42.01	-53.17	0.00	2.00	13.16	0.02
1908.75	-41.69	-54.13	0.00	1.98	14.42	0.03



CDMA2000 BC1 1xEVDO_RETAP 153.6K (for Ant-2) Radiated Power EIRP (Sample 1 + Battery 5)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-36.29	-51.88	0.00	1.96	17.55	0.06
1880.00	-36.50	-52.99	0.00	2.00	18.49	0.07
1908.75	-36.34	-54.28	0.00	1.98	19.92	0.10
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-38.11	-52.13	0.00	1.96	15.98	0.04
1880.00	-40.16	-53.17	0.00	2.00	15.01	0.03
1908.75	-43.79	-54.13	0.00	1.98	12.32	0.02

CDMA2000 BC1 1xEVDO_RETAP 153.6K (for Ant-2) Radiated Power EIRP (Sample 1 + Wireless Charging Cover)						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-47.54	-51.88	0.00	1.96	6.30	0.0043
1880.00	-48.82	-52.99	0.00	2.00	6.17	0.0041
1908.75	-49.62	-54.28	0.00	1.98	6.64	0.0046
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-46.09	-52.13	0.00	1.96	8.00	0.0063
1880.00	-46.99	-53.17	0.00	2.00	8.18	0.0066
1908.75	-47.46	-54.13	0.00	1.98	8.65	0.0073



3.2 Field Strength of Spurious Radiation Measurement

3.2.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43+10\log_{10}(P[\text{Watts}])$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

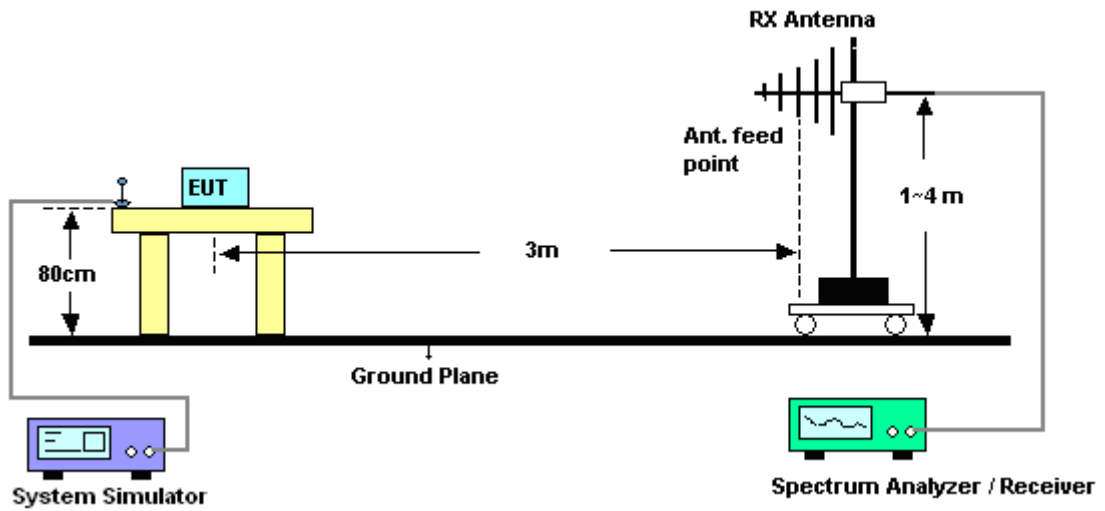
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$

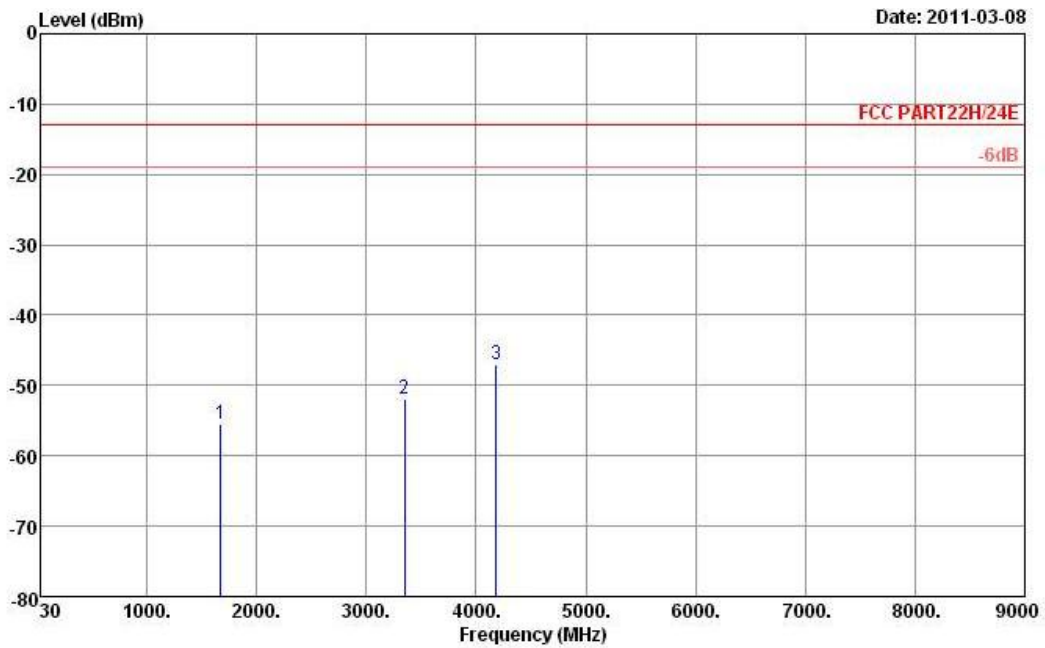
3.2.4 Test Setup





3.2.5 Test Result of Field Strength of Spurious Radiated

Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

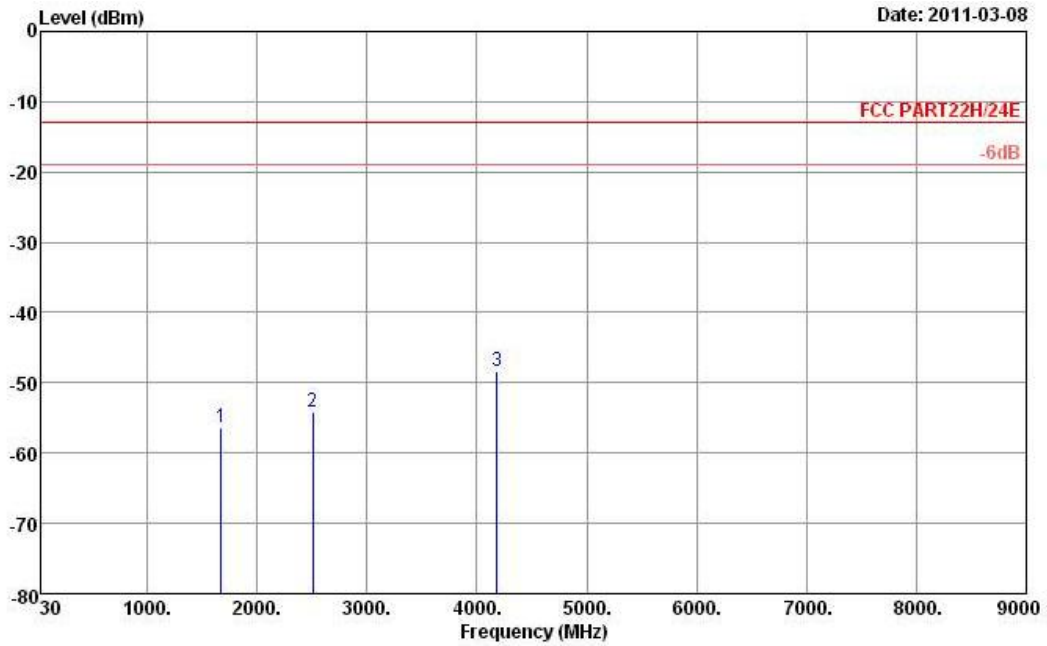


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.56	-13	-42.56	-60.33	-56.75	2.15	5.49	H	Pass
3346	-51.84	-13	-38.84	-62.17	-55.17	2.86	8.34	H	Pass
4180	-47.11	-13	-34.11	-61.16	-51.05	3.26	9.35	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

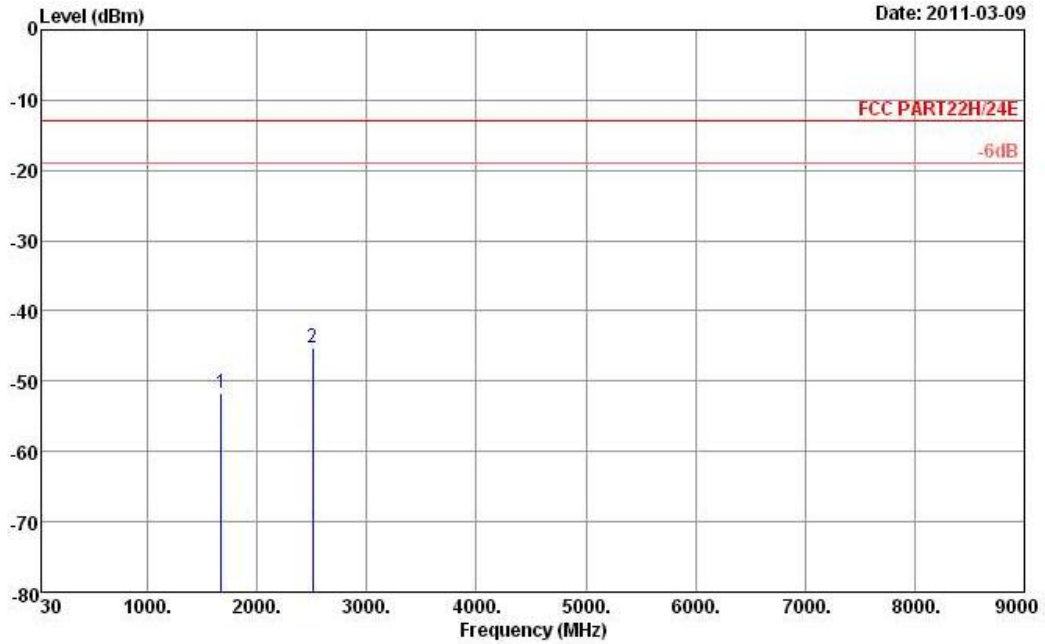


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-56.32	-13	-43.32	-61.09	-57.51	2.15	5.49	V	Pass
2509	-54.04	-13	-41.04	-62.12	-55.93	2.38	6.41	V	Pass
4180	-48.32	-13	-35.32	-62.37	-52.26	3.26	9.35	V	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

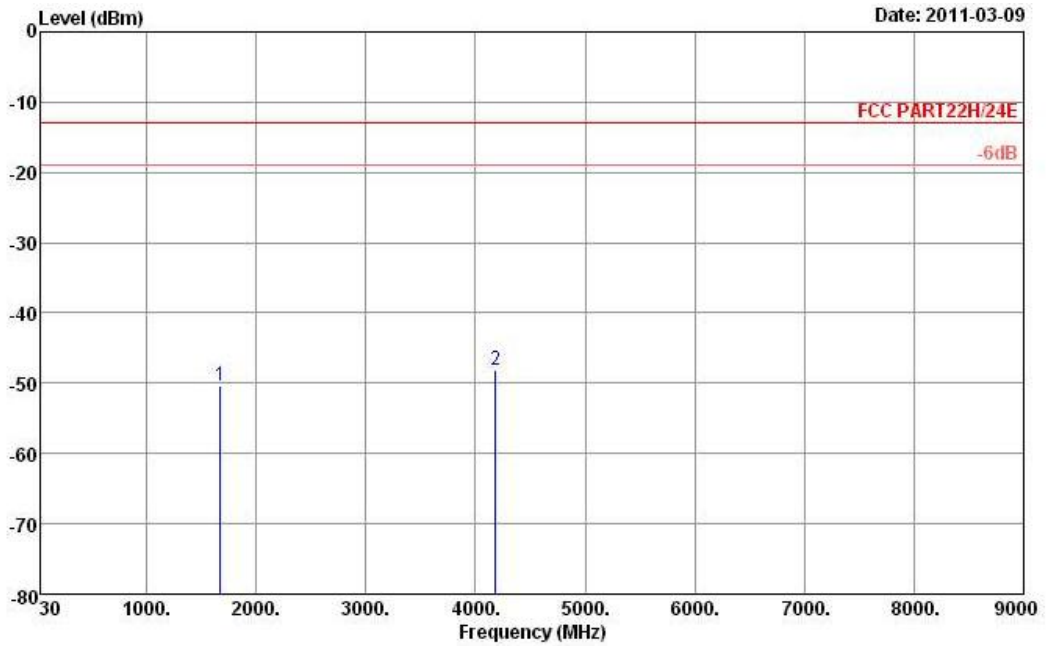


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-51.59	-13	-38.59	-56.36	-52.78	2.15	5.49	H	Pass
2509	-45.13	-13	-32.13	-53.21	-47.02	2.38	6.41	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

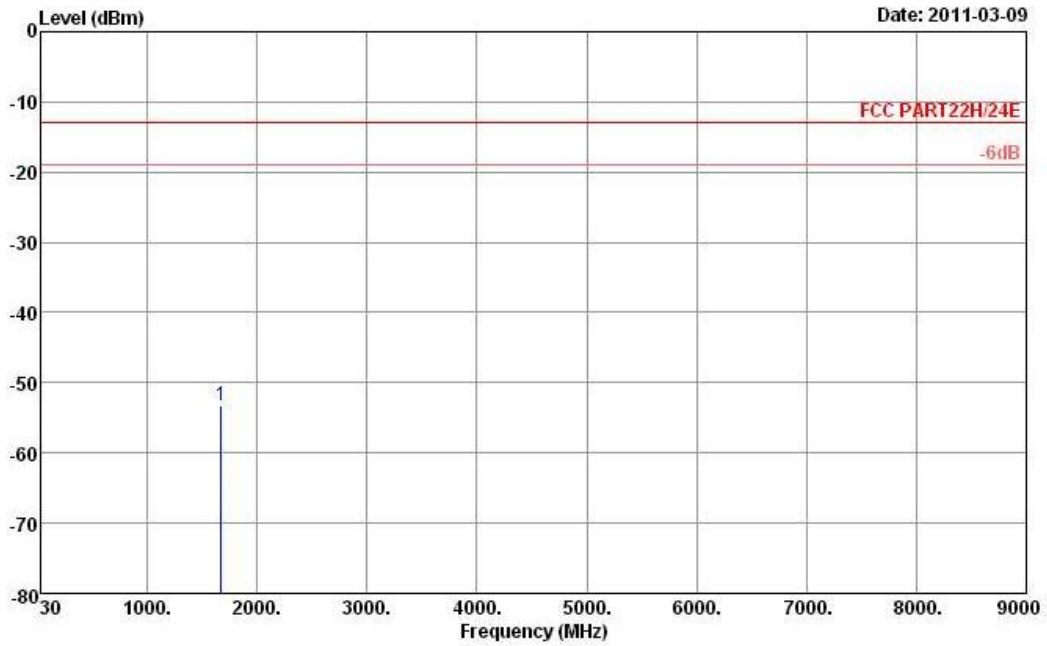


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-50.45	-13	-37.45	-55.22	-51.64	2.15	5.49	V	Pass
4180	-48.16	-13	-35.16	-62.21	-52.10	3.26	9.35	V	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

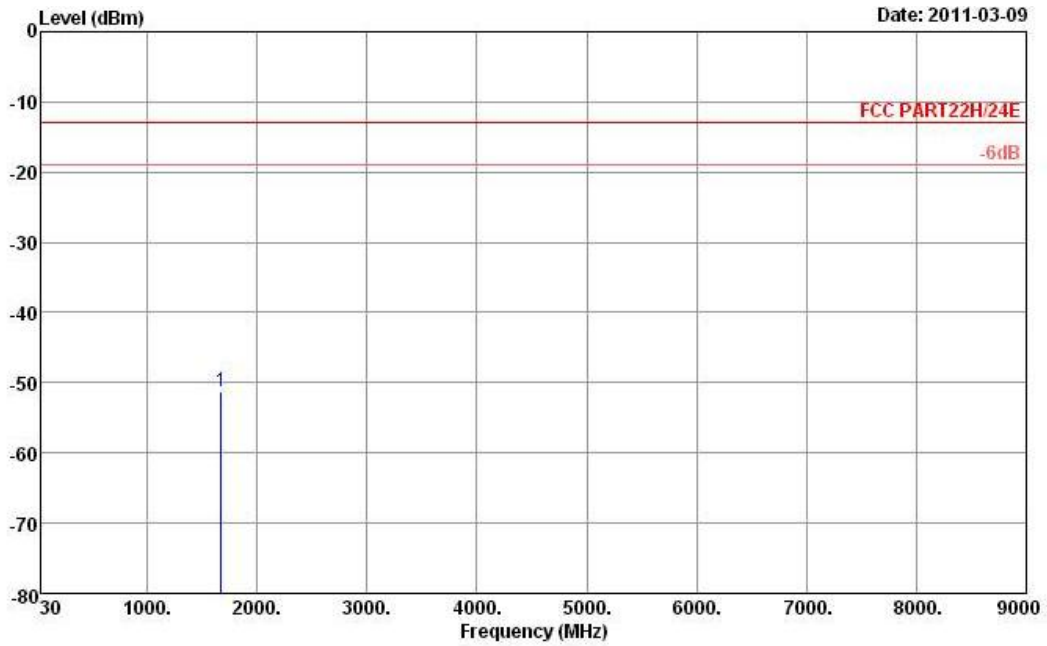


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-53.24	-13	-40.24	-58.01	-54.43	2.15	5.49	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

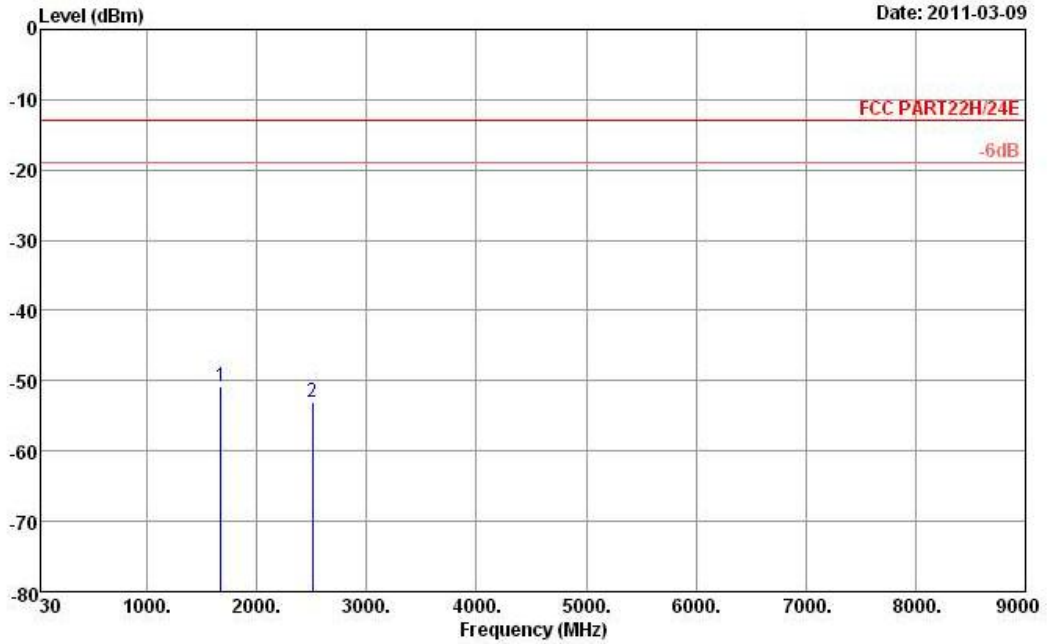


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-51.23	-13	-38.23	-56.00	-52.42	2.15	5.49	V	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

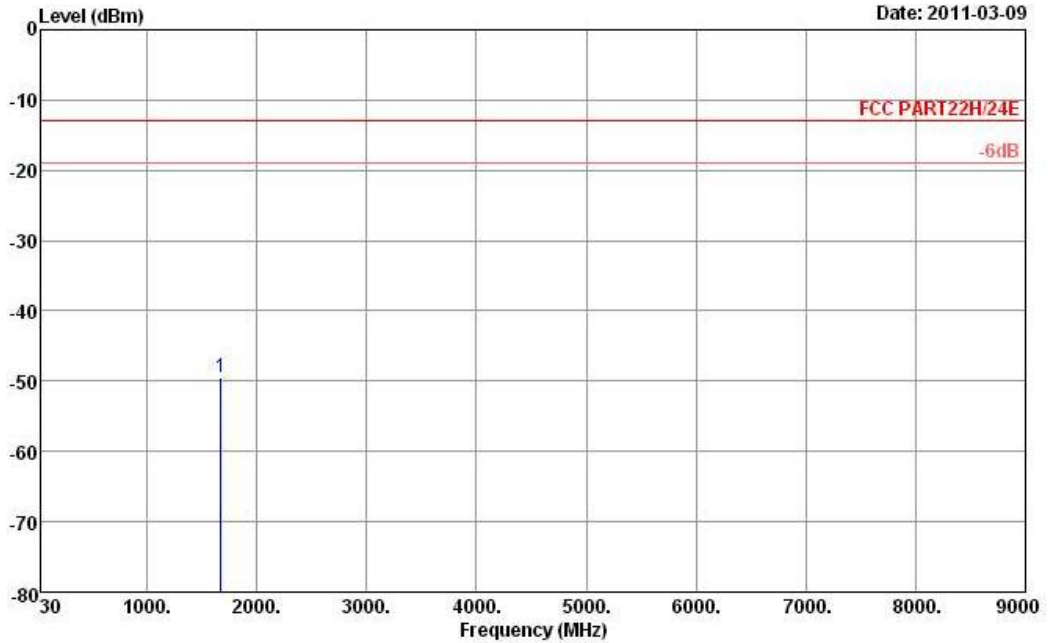


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-50.88	-13	-37.88	-55.65	-52.07	2.15	5.49	H	Pass
2509	-53.13	-13	-40.13	-61.21	-55.02	2.38	6.41	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

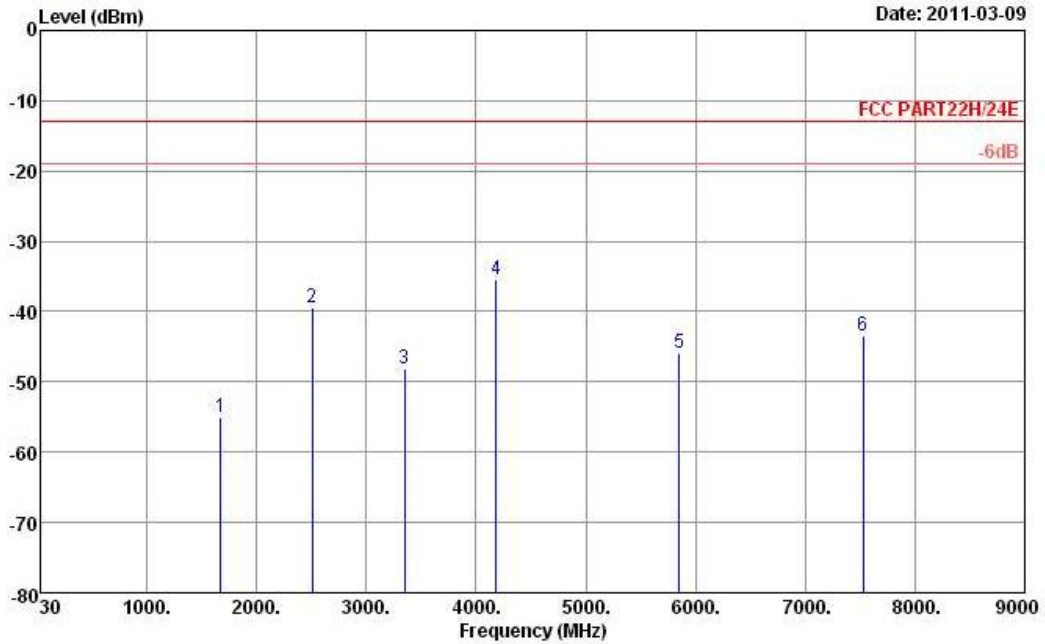


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-49.54	-13	-36.54	-54.31	-50.73	2.15	5.49	V	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

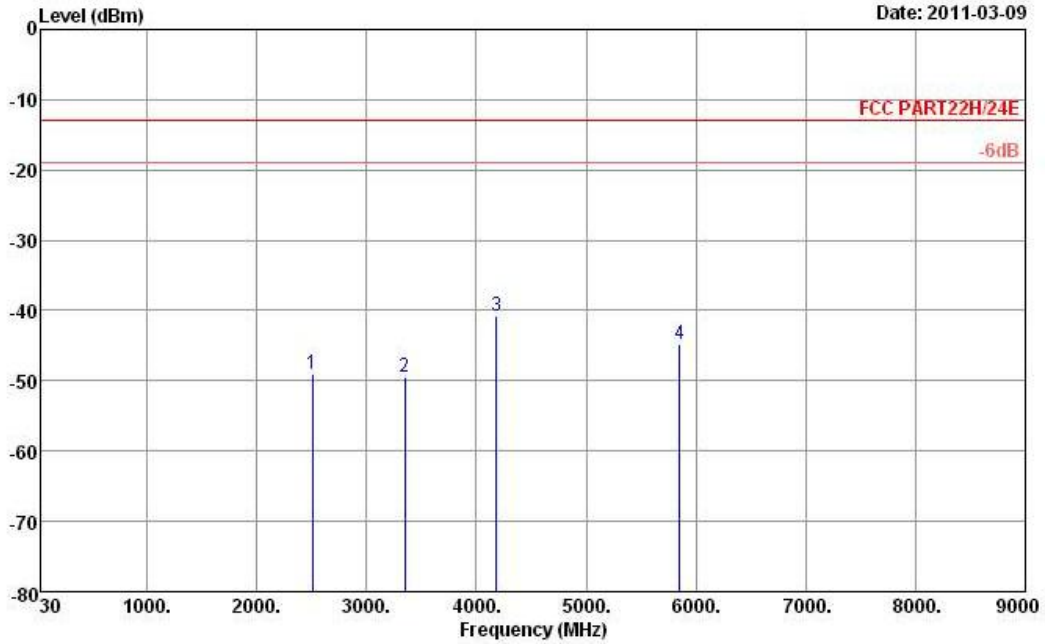


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.01	-13	-42.01	-59.78	-56.20	2.15	5.49	H	Pass
2509	-39.53	-13	-26.53	-47.61	-41.42	2.38	6.41	H	Pass
3346	-48.20	-13	-35.20	-58.53	-51.53	2.86	8.34	H	Pass
4180	-35.39	-13	-22.39	-49.44	-39.33	3.26	9.35	H	Pass
5855	-45.96	-13	-32.96	-63.98	-50.73	3.95	10.87	H	Pass
7525	-43.45	-13	-30.45	-64.18	-49.32	4.60	12.62	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

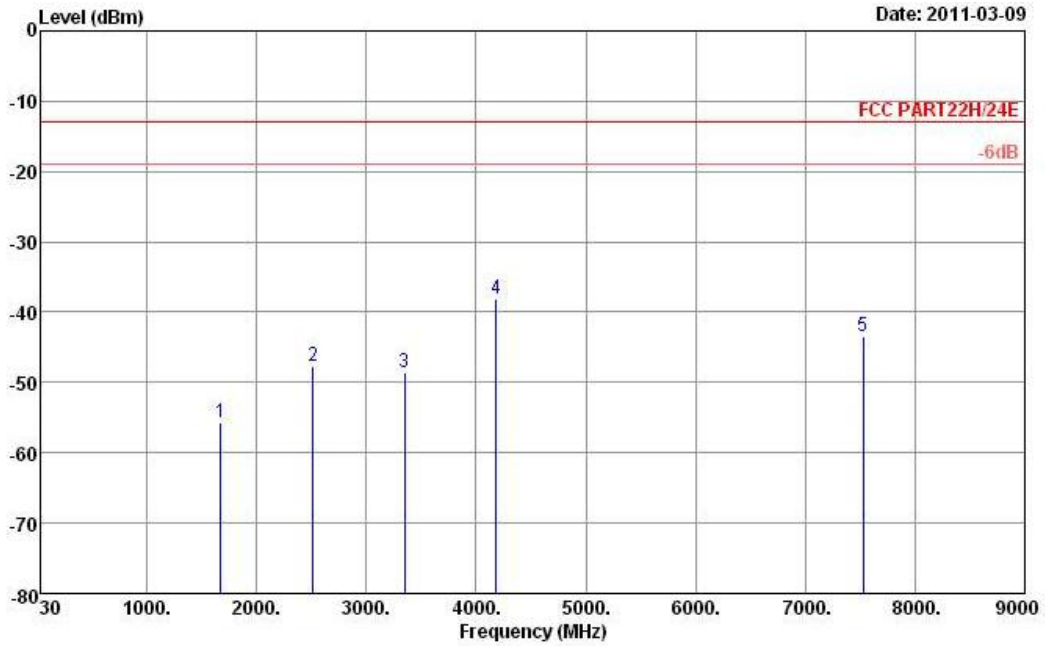


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
2509	-49.09	-13	-36.09	-57.17	-50.98	2.38	6.41	V	Pass
3346	-49.46	-13	-36.46	-59.79	-52.79	2.86	8.34	V	Pass
4180	-40.87	-13	-27.87	-54.92	-44.81	3.26	9.35	V	Pass
5855	-44.87	-13	-31.87	-62.89	-49.64	3.95	10.87	V	Pass



Band :	CDMA2000 BC0 + TC	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

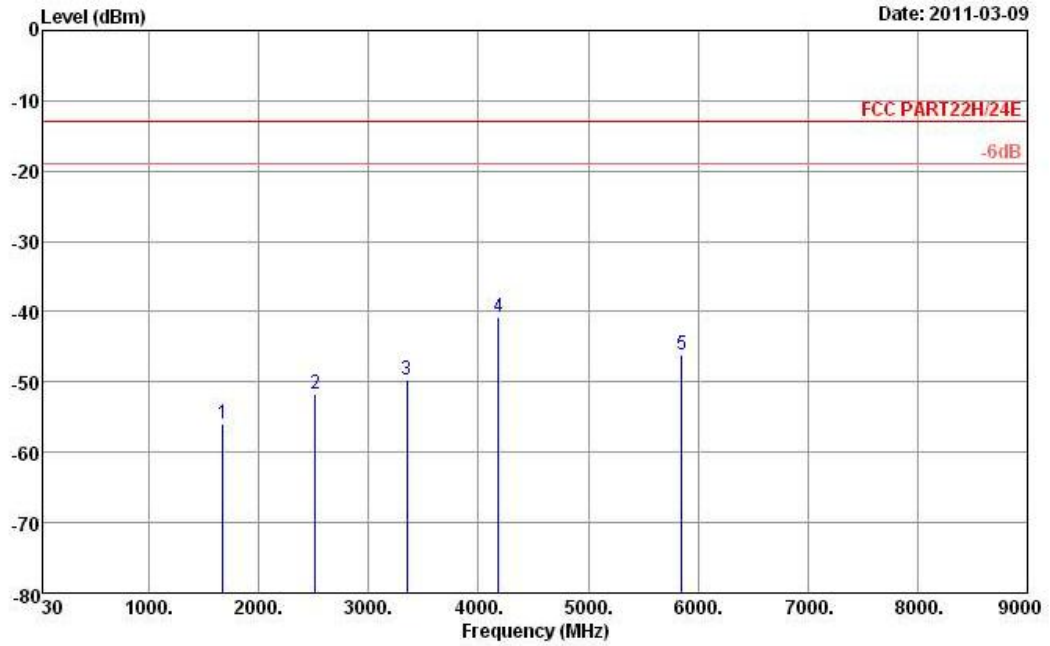


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.82	-13	-42.82	-60.59	-57.01	2.15	5.49	H	Pass
2512	-47.60	-13	-34.60	-55.68	-49.49	2.38	6.41	H	Pass
3346	-48.56	-13	-35.56	-58.89	-51.89	2.86	8.34	H	Pass
4180	-38.07	-13	-25.07	-52.12	-42.01	3.26	9.35	H	Pass
7525	-43.54	-13	-30.54	-64.27	-49.41	4.60	12.62	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

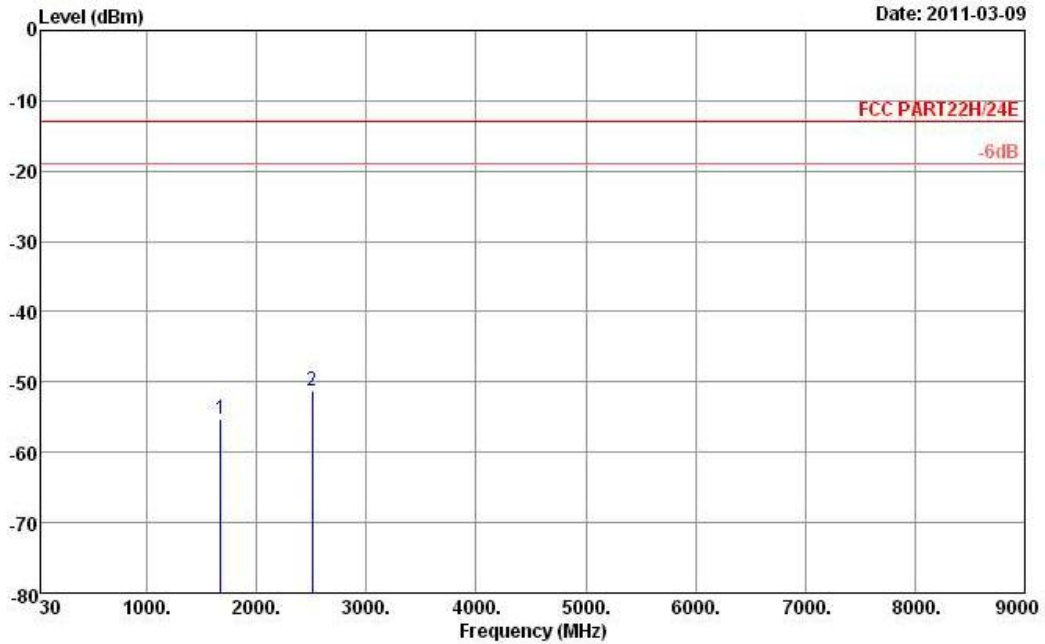


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.85	-13	-42.85	-60.62	-57.04	2.15	5.49	V	Pass
2512	-51.73	-13	-38.73	-59.81	-53.62	2.38	6.41	V	Pass
3349	-49.59	-13	-36.59	-59.92	-52.92	2.86	8.34	V	Pass
4180	-40.76	-13	-27.76	-54.81	-44.70	3.26	9.35	V	Pass
5855	-46.2	-13	-33.20	-64.22	-50.97	3.95	10.87	V	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

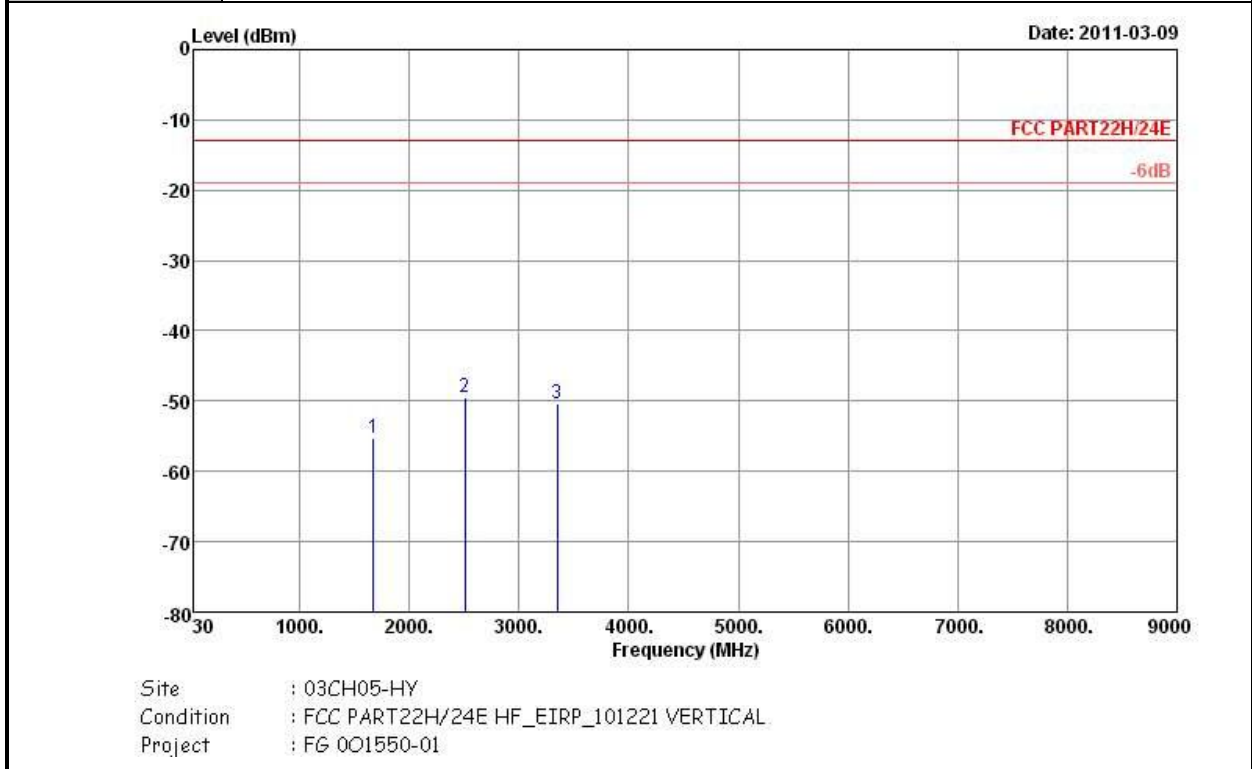


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.30	-13	-42.30	-60.07	-56.49	2.15	5.49	H	Pass
2510	-51.33	-13	-38.33	-59.41	-53.22	2.38	6.41	H	Pass



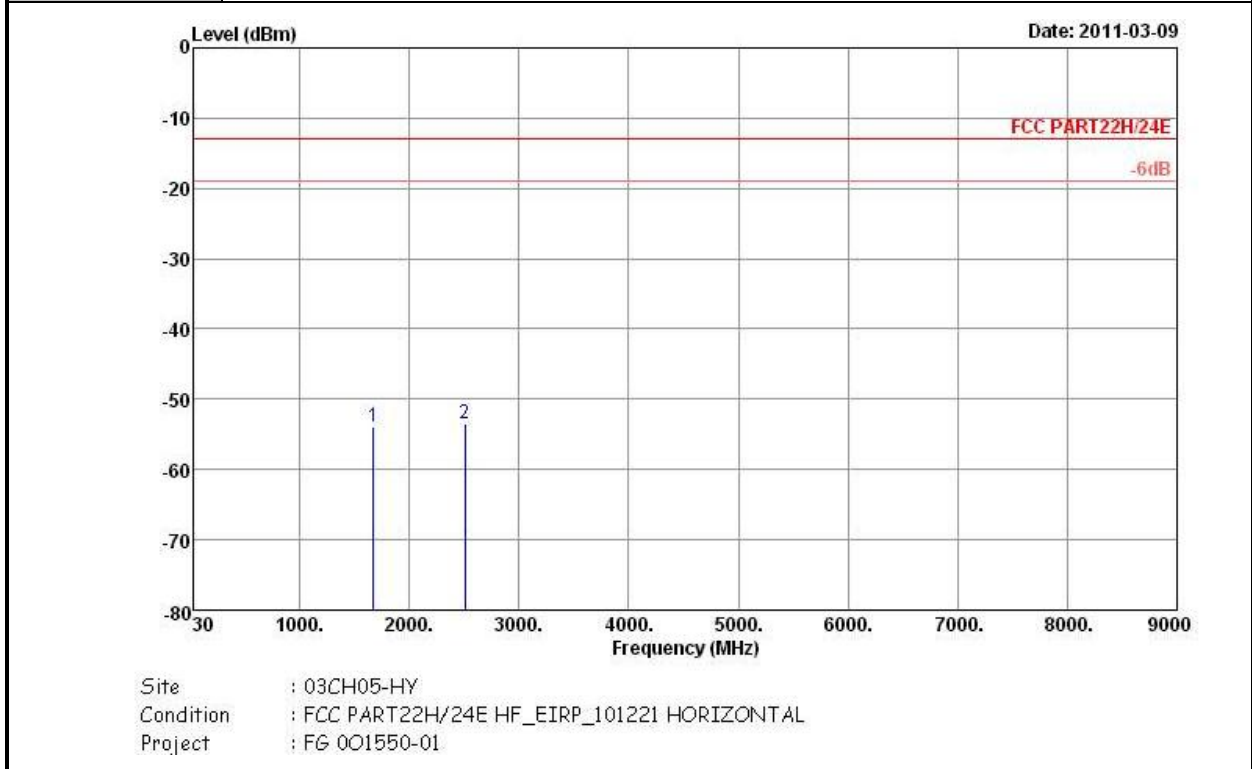
Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-55.23	-13	-42.23	-60.00	-56.42	2.15	5.49	V	Pass
2510	-49.47	-13	-36.47	-57.55	-51.36	2.38	6.41	V	Pass
3346	-50.39	-13	-37.39	-60.72	-53.72	2.86	8.34	V	Pass



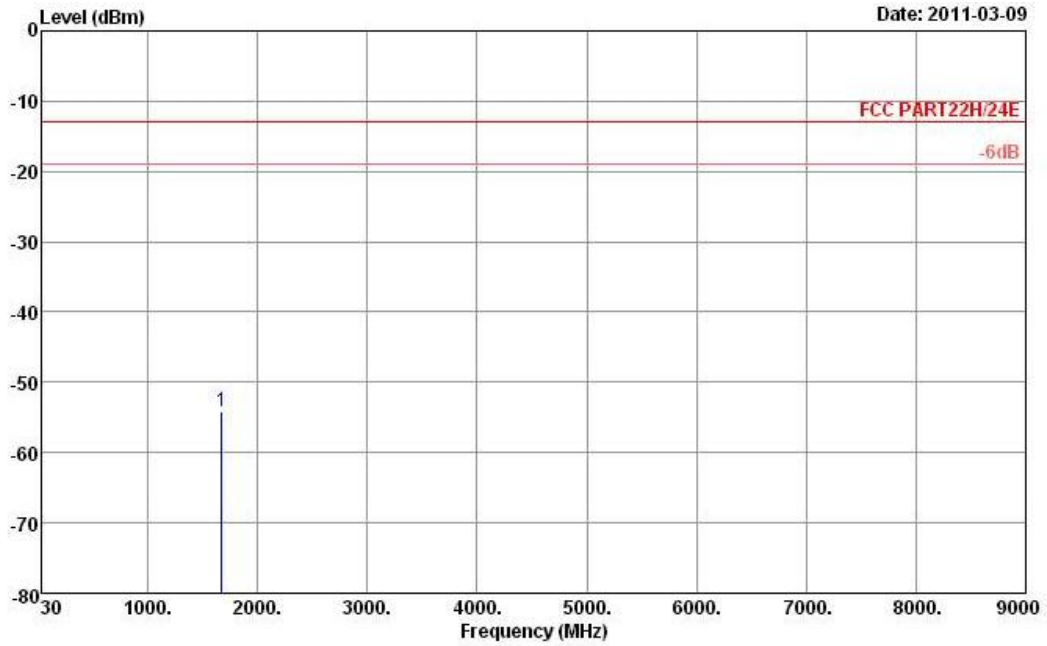
Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-53.99	-13	-40.99	-58.76	-55.18	2.15	5.49	H	Pass
2509	-53.49	-13	-40.49	-61.57	-55.38	2.38	6.41	H	Pass



Band :	CDMA2000 BC0	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

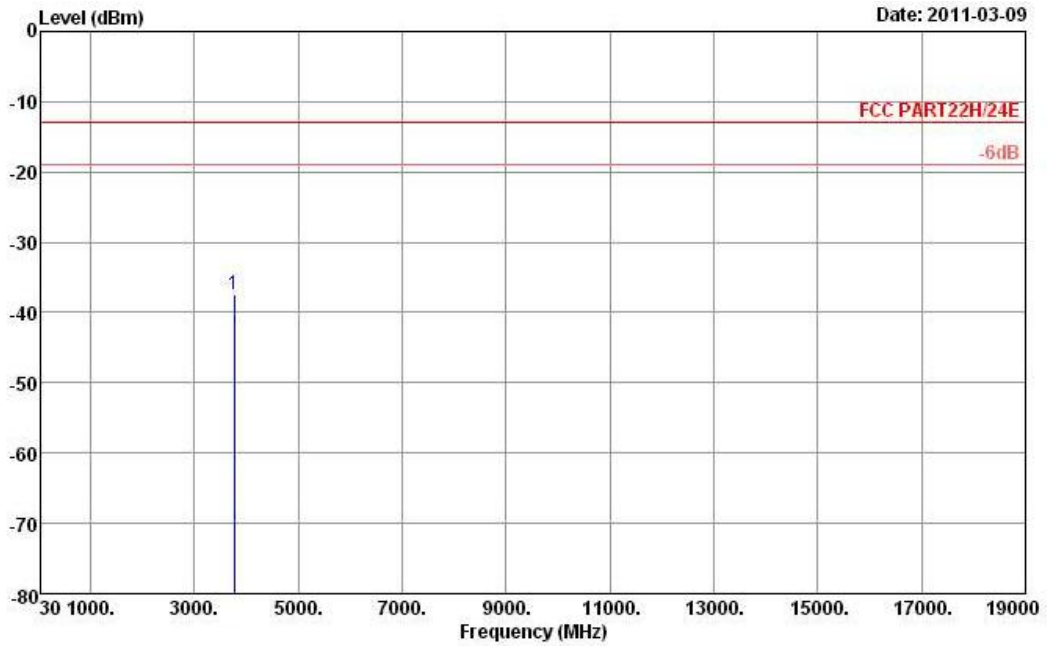


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-54.14	-13	-41.14	-58.91	-55.33	2.15	5.49	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

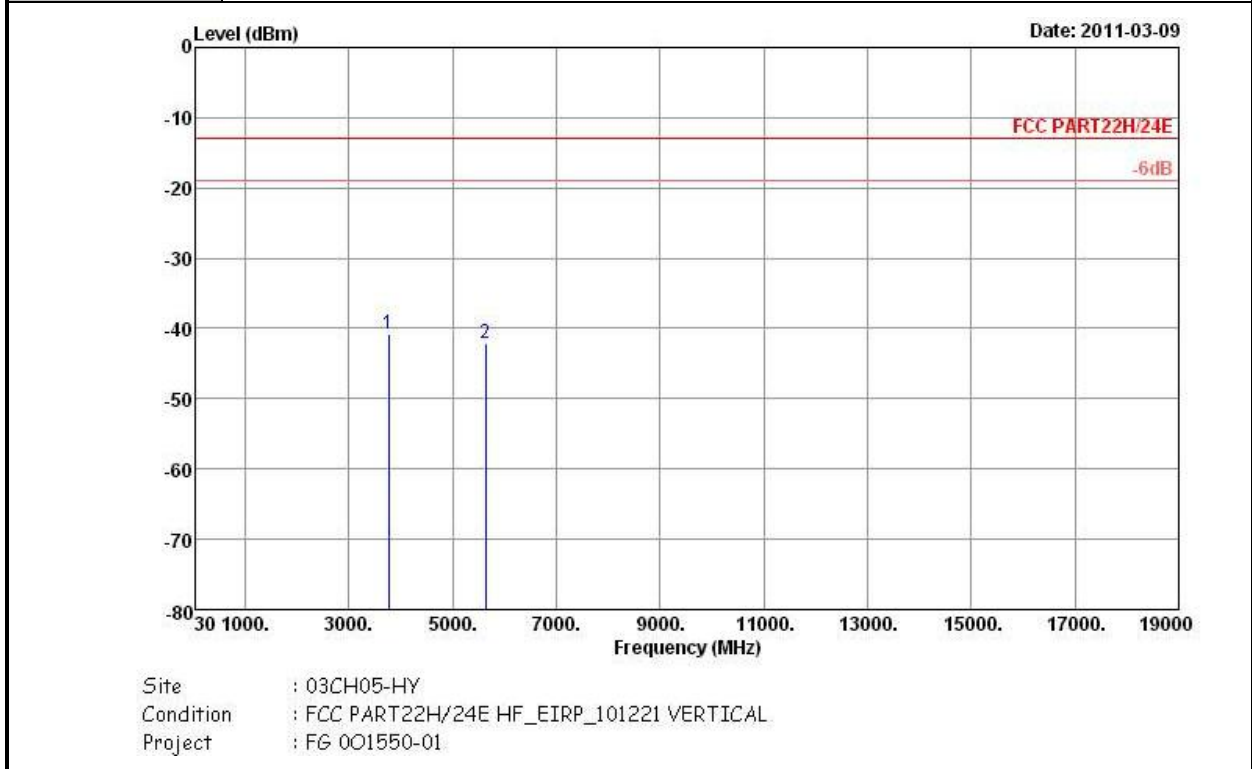


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-37.54	-13	-24.54	-51.94	-43.67	2.93	9.06	H	Pass



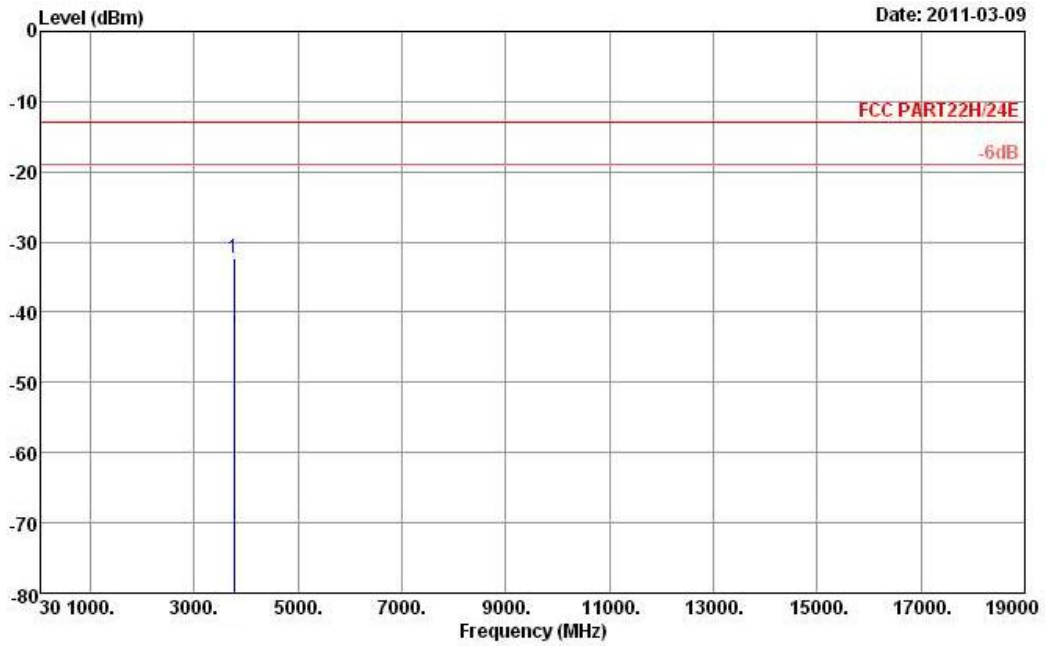
Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-40.68	-13	-27.68	-55.08	-46.81	2.93	9.06	V	Pass
5636	-42.20	-13	-29.20	-62.01	-49.12	3.91	10.83	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

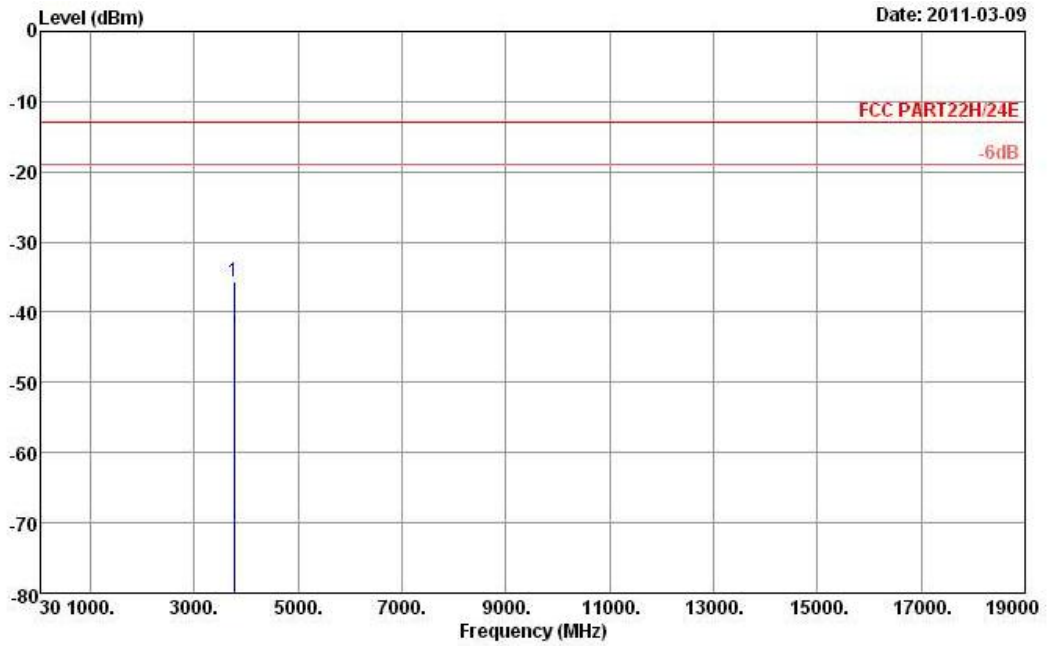


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-32.30	-13	-19.30	-46.70	-38.43	2.93	9.06	H	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

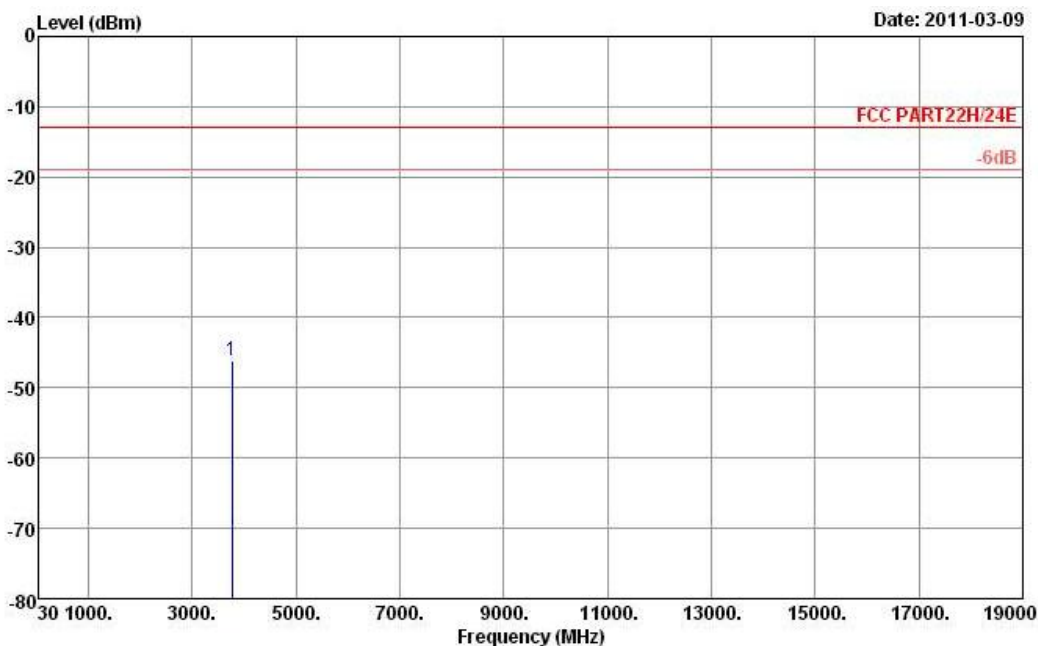


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-35.68	-13	-22.68	-50.08	-41.81	2.93	9.06	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

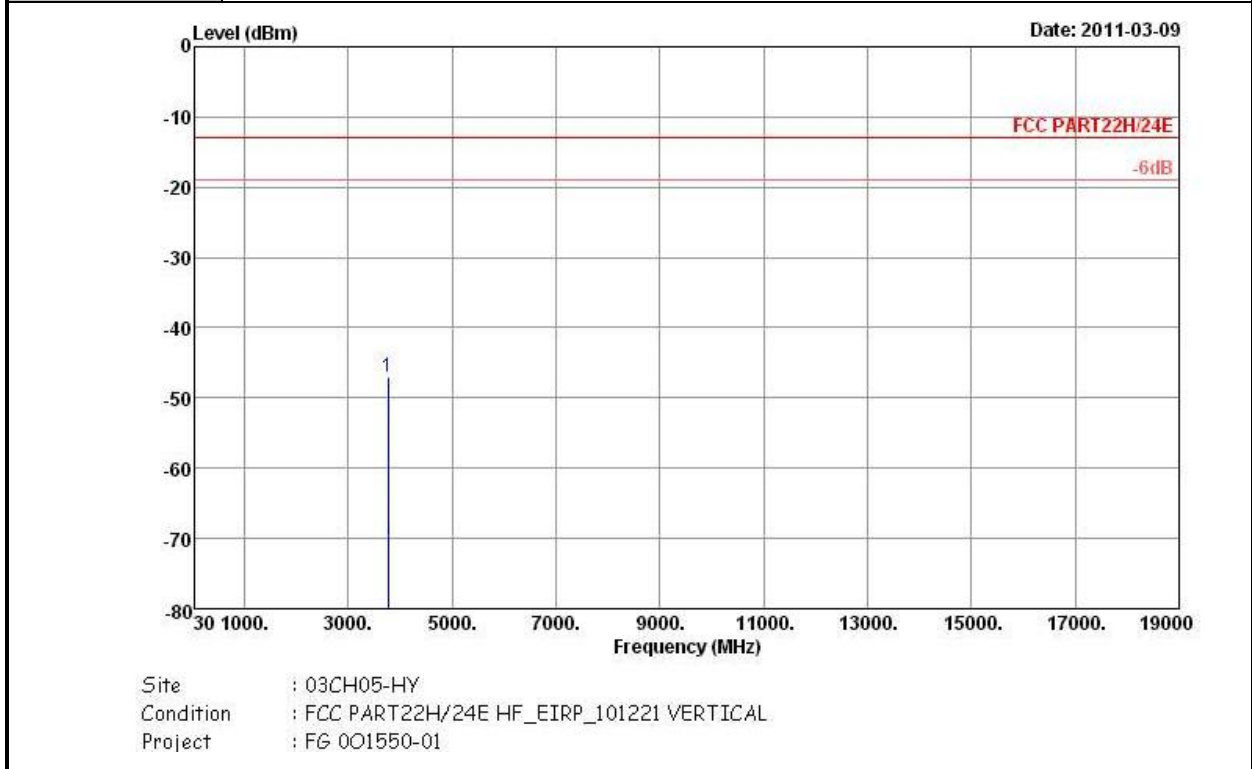


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-46.14	-13	-33.14	-60.54	-52.27	2.93	9.06	H	Pass



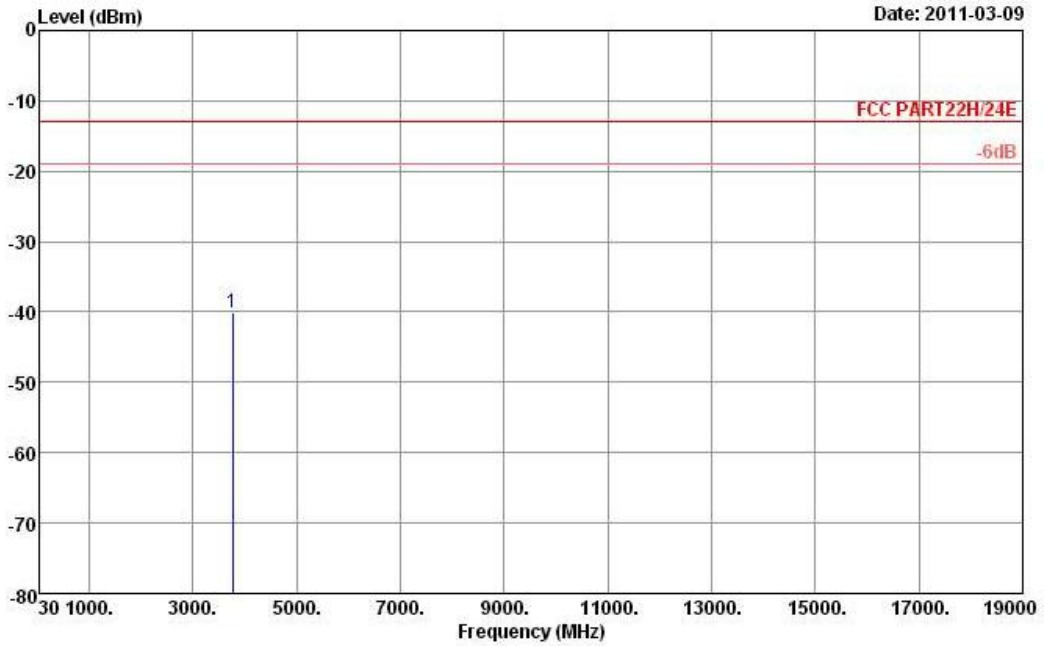
Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-47.00	-13	-34.00	-61.40	-53.13	2.93	9.06	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

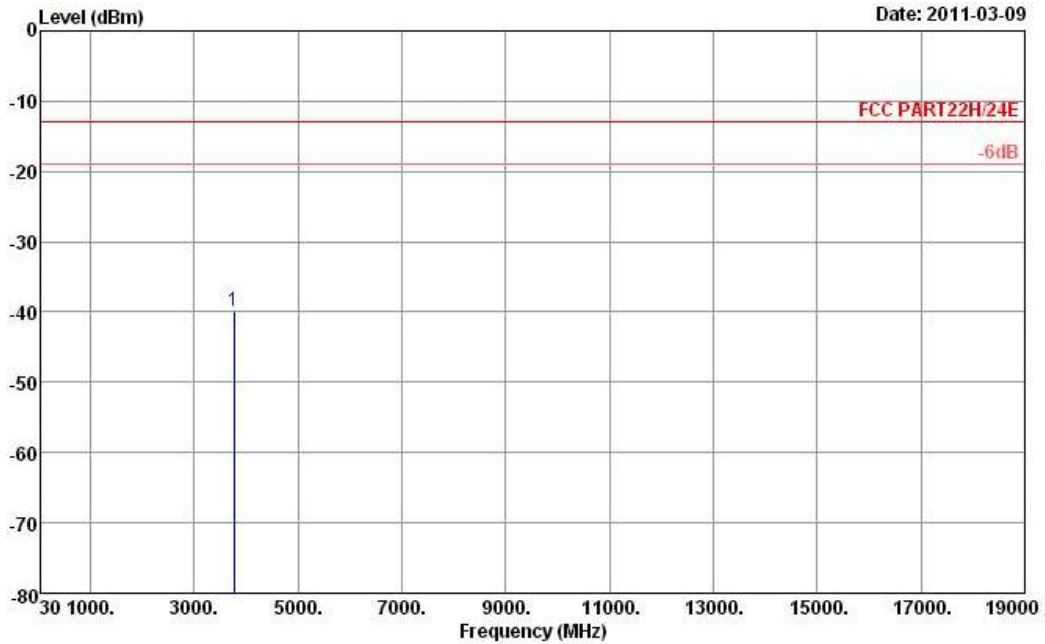


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-40.05	-13	-27.05	-54.45	-46.18	2.93	9.06	H	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xRTT_RC3+SO55 (for Ant-1) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

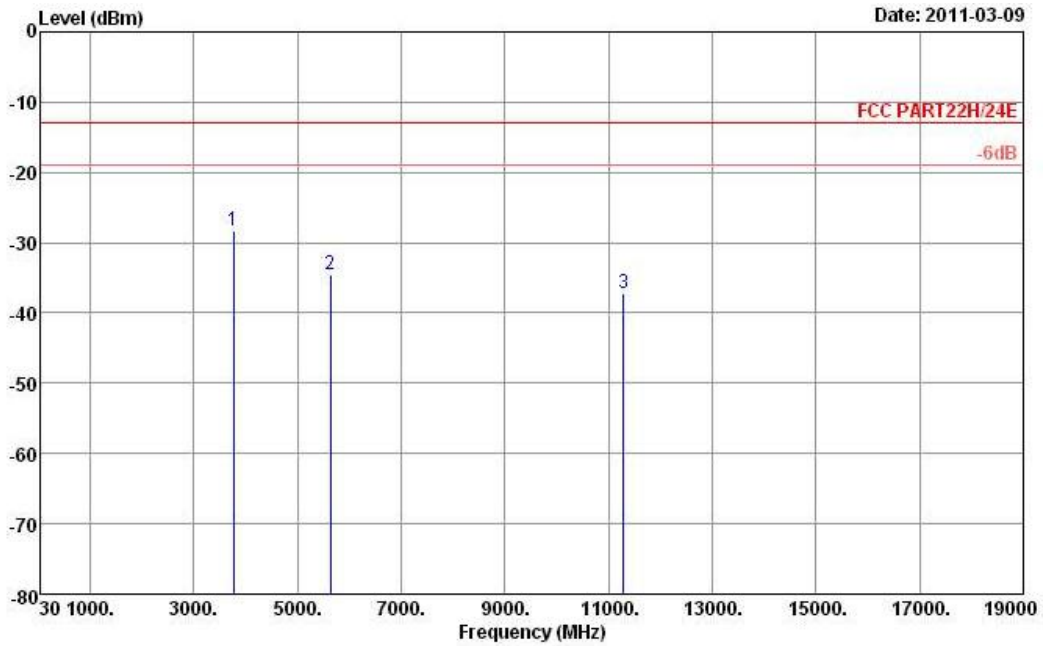


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-39.78	-13	-26.78	-54.18	-45.91	2.93	9.06	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

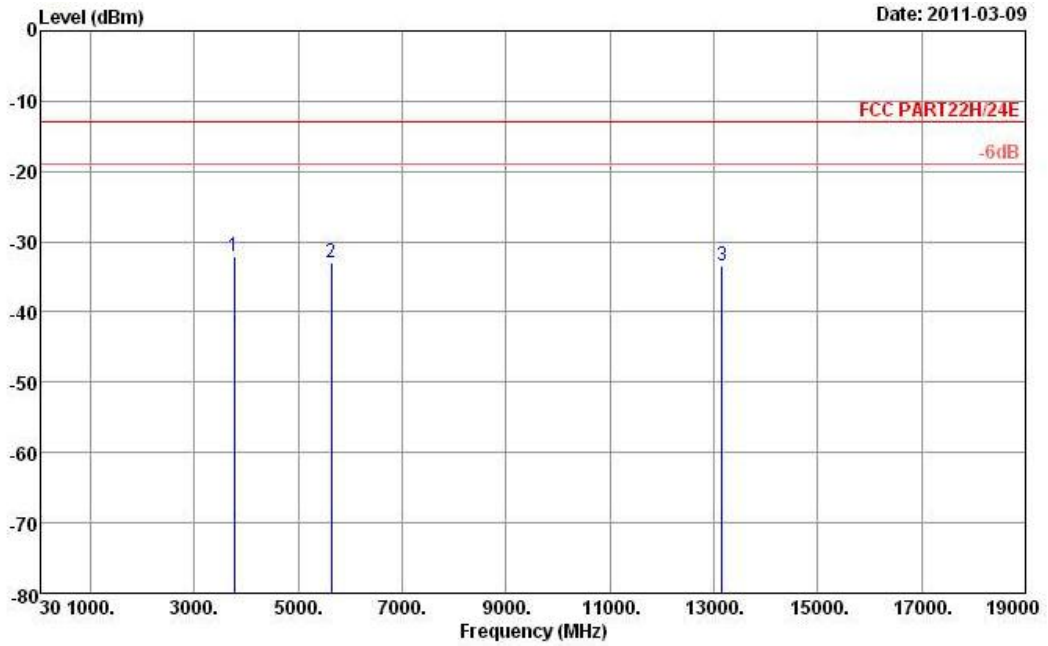


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-28.21	-13	-15.21	-42.61	-34.34	2.93	9.06	H	Pass
5636	-34.59	-13	-21.59	-54.40	-41.51	3.91	10.83	H	Pass
11280	-37.31	-13	-24.31	-65.26	-44.72	5.93	13.34	H	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

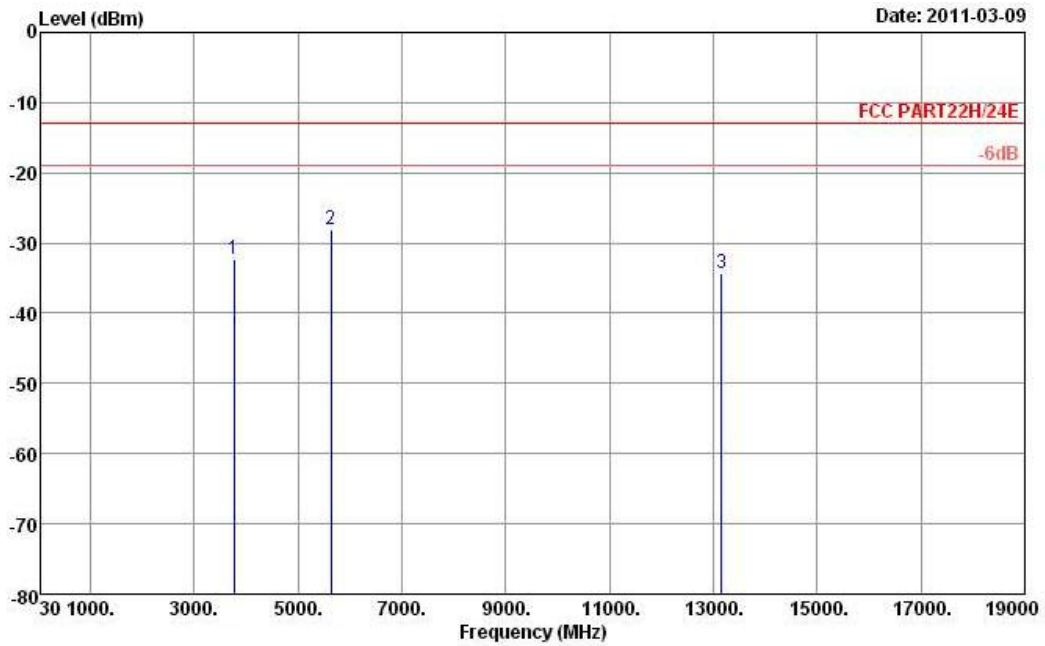


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-32.20	-13	-19.20	-46.60	-38.33	2.93	9.06	V	Pass
5636	-32.87	-13	-19.87	-52.68	-39.79	3.91	10.83	V	Pass
13160	-33.47	-13	-20.47	-65.02	-40.53	6.43	13.49	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

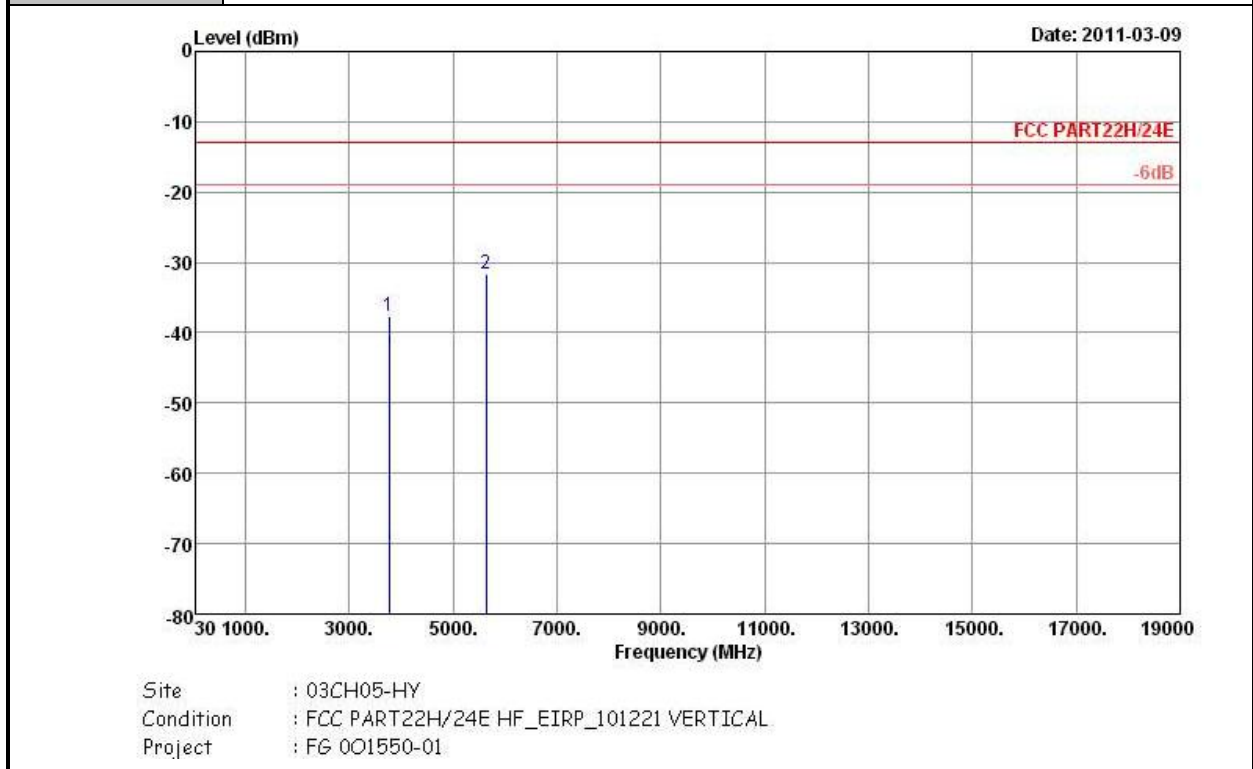


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-32.23	-13	-19.23	-46.63	-38.36	2.93	9.06	H	Pass
5636	-28.08	-13	-15.08	-47.89	-35.00	3.91	10.83	H	Pass
13160	-34.28	-13	-21.28	-65.88	-41.34	6.43	13.49	H	Pass



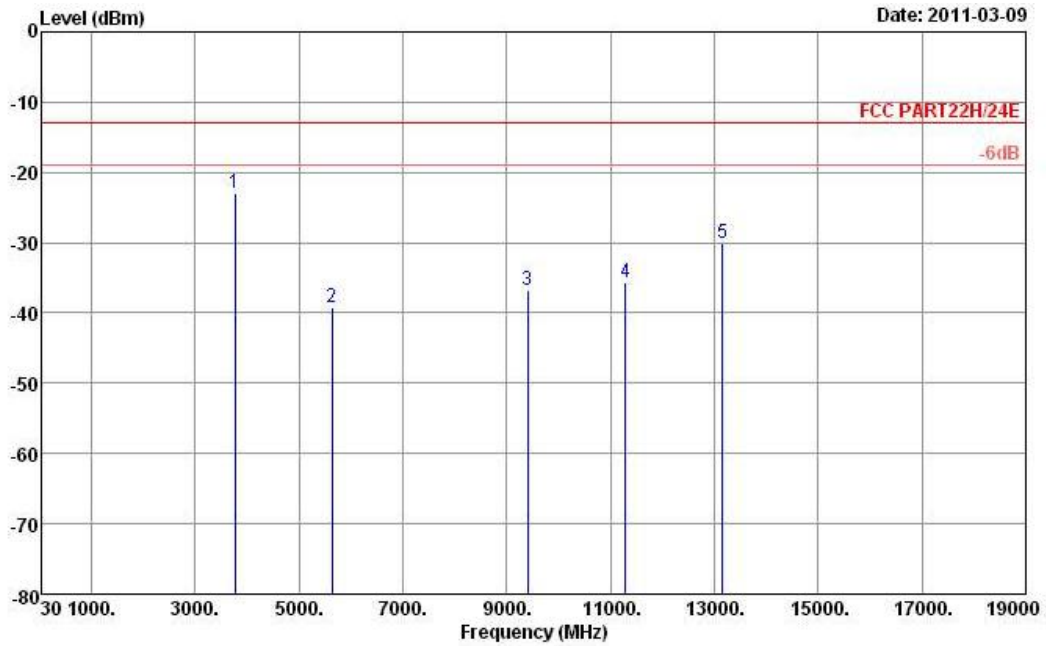
Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 2	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-37.73	-13	-24.73	-52.13	-43.86	2.93	9.06	V	Pass
5636	-31.69	-13	-18.69	-51.50	-38.61	3.91	10.83	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

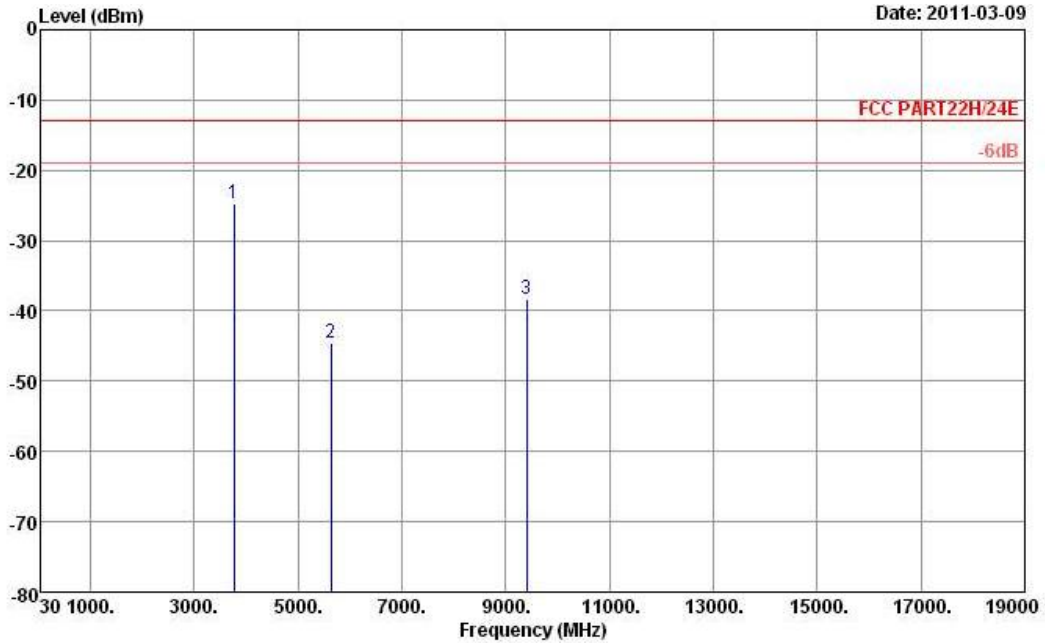


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-23.04	-13	-10.04	-37.44	-29.17	2.93	9.06	H	Pass
5636	-39.21	-13	-26.21	-59.02	-46.13	3.91	10.83	H	Pass
9396	-36.82	-13	-23.82	-61.68	-44.78	5.40	13.36	H	Pass
11280	-35.70	-13	-22.70	-63.68	-43.11	5.93	13.34	H	Pass
13160	-30.04	-13	-17.04	-61.64	-37.10	6.43	13.49	H	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 5 for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

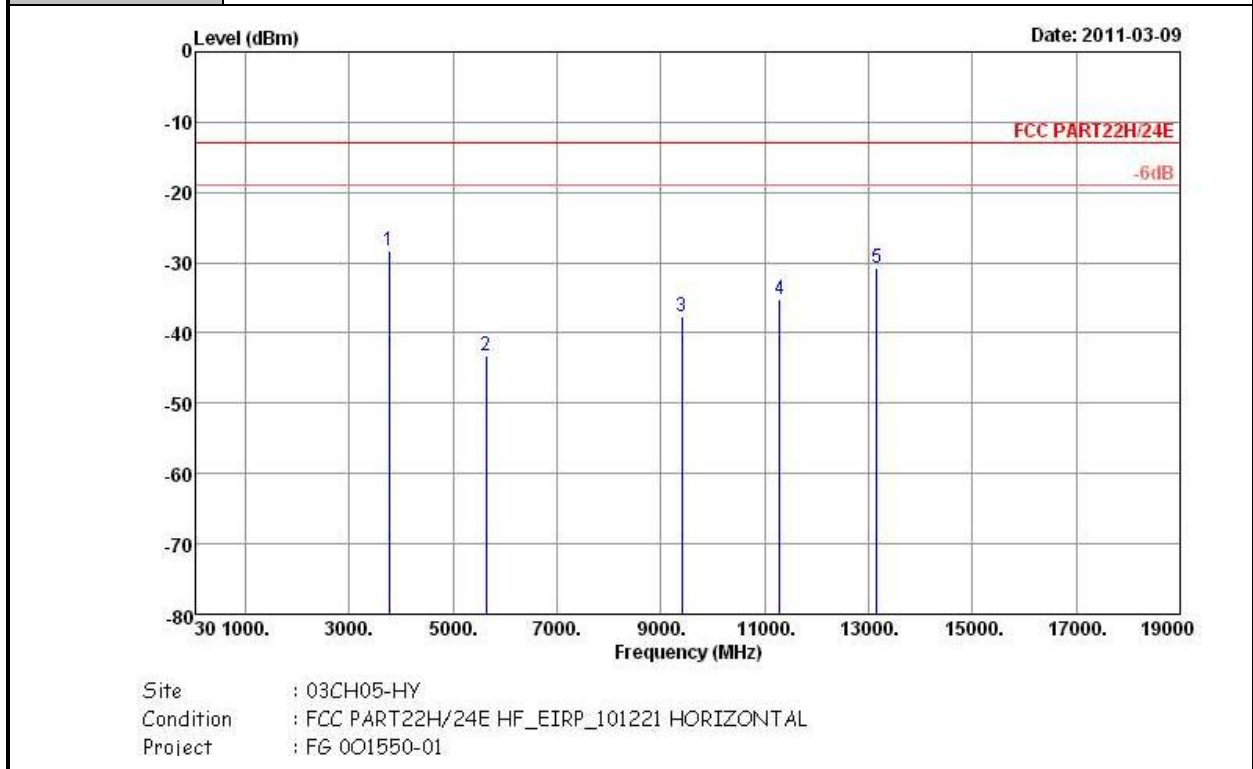


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-24.72	-13	-11.72	-39.12	-30.85	2.93	9.06	V	Pass
5636	-44.64	-13	-31.64	-64.45	-51.56	3.91	10.83	V	Pass
9396	-38.34	-13	-25.34	-63.20	-46.30	5.40	13.36	V	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

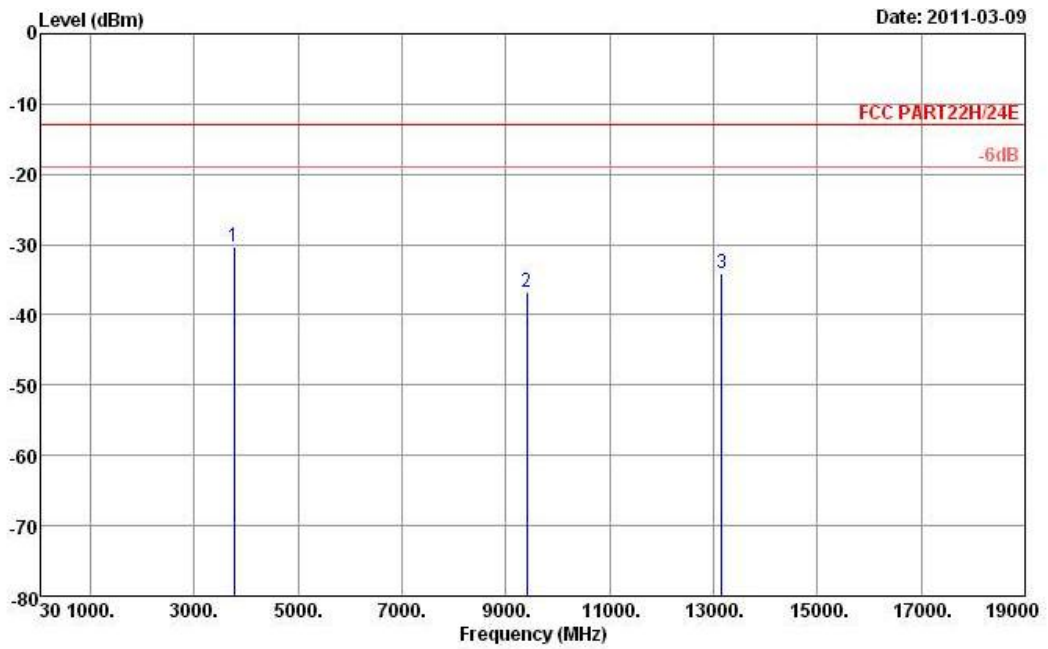


Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 HORIZONTAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-28.28	-13	-15.28	-42.68	-34.41	2.93	9.06	H	Pass
5636	-43.23	-13	-30.23	-63.04	-50.15	3.91	10.83	H	Pass
9396	-37.66	-13	-24.66	-62.52	-45.62	5.40	13.36	H	Pass
11280	-35.20	-13	-22.20	-63.18	-42.61	5.93	13.34	H	Pass
13160	-30.69	-13	-17.69	-62.24	-37.75	6.43	13.49	H	Pass



Band :	CDMA2000 BC1	Temperature :	21~24°C
Test Mode :	1xEV-DO Rev. 0_RETAP 153.6K (for Ant-2) + TC + Battery 3 + Wireless Charging Cover for Sample 1	Relative Humidity :	44~48%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Site : 03CH05-HY
 Condition : FCC PART22H/24E HF_EIRP_101221 VERTICAL
 Project : FG 001550-01

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-30.27	-13	-17.27	-44.67	-36.40	2.93	9.06	V	Pass
9396	-36.70	-13	-23.70	-61.56	-44.66	5.40	13.36	V	Pass
13160	-34.06	-13	-21.06	-65.66	-41.12	6.43	13.49	V	Pass



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
System Simulator	R&S	CMU200	117995	N/A	Jun. 08, 2009	Jun. 07, 2011	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 11, 2010	Jun. 10, 2011	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 13, 2010	Sep. 12, 2011	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	0846202	N/A	Sep. 14, 2010	Sep. 13, 2011	Conducted (TH02-HY)
Thermal Chamber	Ten Billion	TTH-D35P	TBN-930701	N/A	Jul. 30,2010	Jul. 29, 2011	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP30	101352	9KHz-40GHz	Nov. 03, 2010	Nov. 02, 2011	Radiation (03CH05-HY)
Amplifier	COM-POWER	PA-103	161069	1KHz - 1GHz	Mar. 29, 2010	Mar. 28, 2011	Radiation (03CH05-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2725	30MHz ~ 1GHz	Nov. 06, 2010	Nov. 05, 2011	Radiation (03CH05-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	15GHz- 40GHz	Oct. 18, 2010	Oct. 17, 2011	Radiation (03CH05-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1GHz- 26.5GHz	Apr. 15, 2010	Apr. 14, 2011	Radiation (03CH05-HY)
Turn Table	HD	Deis HD 2000	420/611	0 - 360 degree	N/A	N/A	Radiation (03CH05-HY)
Antenna Mast	HD	MA 240	240/666	1 m - 4 m	N/A	N/A	Radiation (03CH05-HY)
Horn Antenna	ESCO	3117	00066584	1GHz ~ 18GHz	Aug. 05, 2010	Aug. 04, 2011	Radiation (03CH05-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz~30 MHz	Jul. 29, 2010	Jul. 28, 2011	Radiation (03CH05-HY)
System Simulator	R&S	CMU200	117997	N/A	May 14, 2009	May 13, 2011	Radiation (03CH05-HY)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Contribution	Uncertainty of X_i		$u(X_i)$
	dB	Probability Distribution	
Receiver Reading	0.41	Normal (k=2)	0.21
Antenna Factor Calibration	0.83	Normal (k=2)	0.42
Cable Loss Calibration	0.25	Normal (k=2)	0.13
Pre-Amplifier Gain Calibration	0.27	Normal (k=2)	0.14
RCV/SPA Specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site Imperfection	1.43	Rectangular	0.83
Mismatch	+0.39 / -0.41	U-Shape	0.28
Combined Standard Uncertainty $U_c(y)$	1.27		
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.54		

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Contribution	Uncertainty of X_i		$u(X_i)$	C_i	$C_i * u(X_i)$
	dB	Probability Distribution			
Receiver Reading	± 0.10	Normal (k=2)	0.10	1	0.10
Antenna Factor Calibration	± 1.70	Normal (k=2)	0.85	1	0.85
Cable Loss Calibration	± 0.50	Normal (k=2)	0.25	1	0.25
Receiver Correction	± 2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	± 1.50	Rectangular	0.87	1	0.87
Site Imperfection	± 2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20\text{Log}(1-\Gamma_1*\Gamma_2)$	+0.34 / -0.35	U-Shape	0.244	1	0.244
Combined Standard Uncertainty $U_c(y)$	2.36				
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.72				



Appendix B. Product Equality Declaration



宏達國際電子股份有限公司
HTC Corporation

1F, No. 6-3, Baoqiang Rd.,
Xindian City, Taipei County
231, Taiwan

Mar. 14, 2011

Federal Communication Commission

Equipment Authorization Division, Application Processing Branch

7435 Oakland Mills Road

Columbia, MD 21048

TO WHOM IT MAY CONCERN :

SUBJECT: Class II Permissive Change for FCC ID: NM8PG05100

The product, Smartphone, has been granted by FCC dated 02/07/2011, FCC ID: NM8PG05100.

Now we, HTC Corporation, would like to modify the authorized equipment for below changes:

- Extend Battery
- Extend Battery cover
- Wireless Charging cover

We would like to certify the additional of certified FCC ID: NM8PG05100 as a Class II Permissive Change in this device.

Sincerely yours,

Ray Wang

HTC Corporation

TEL: + 886-2-89124138

FAX: + 886-2-89126307



Appendix C. Original Report

Please refer to Sporton report number FG001550-03A as below.