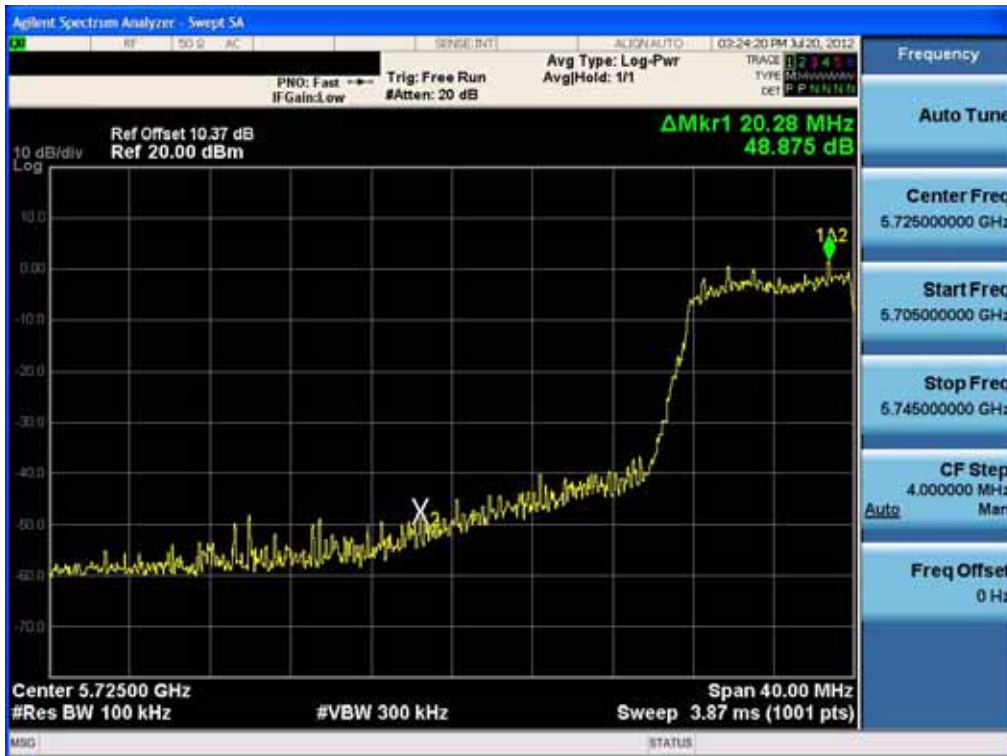
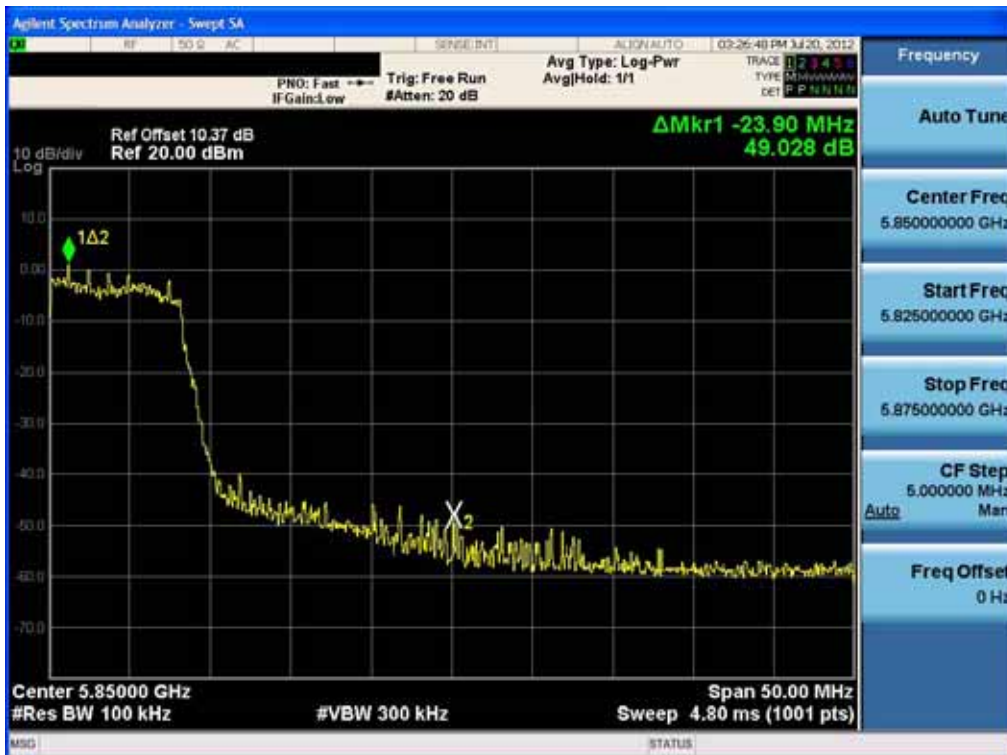


### BandEdge (802.11a-CH 149)

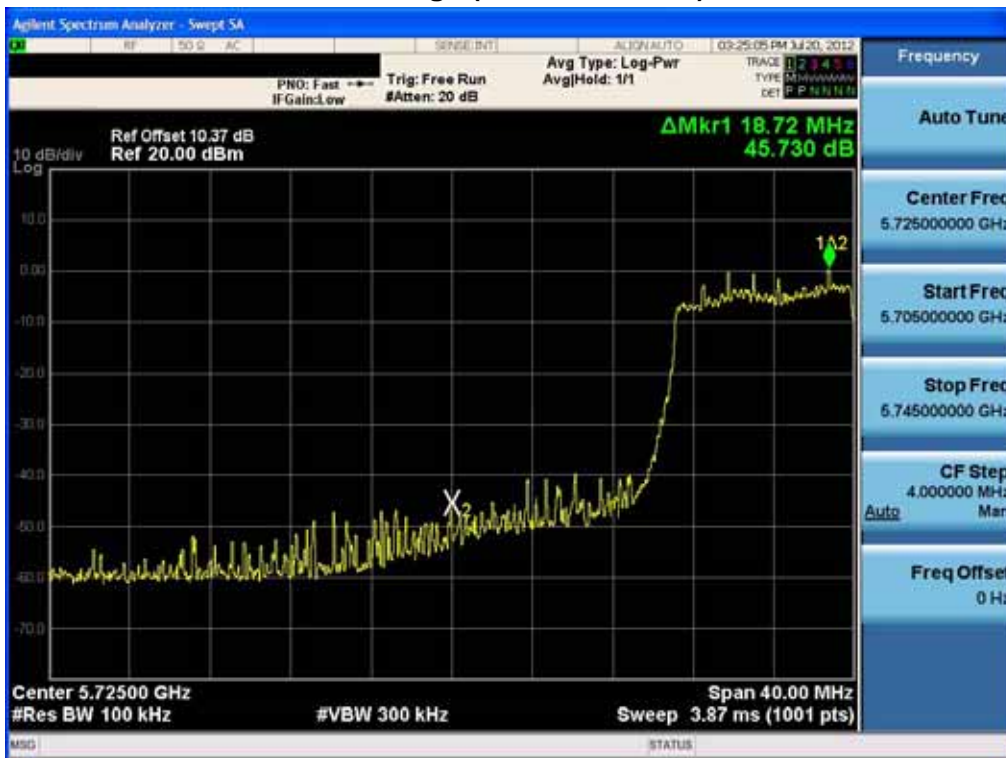


### BandEdge (802.11a-CH 165)

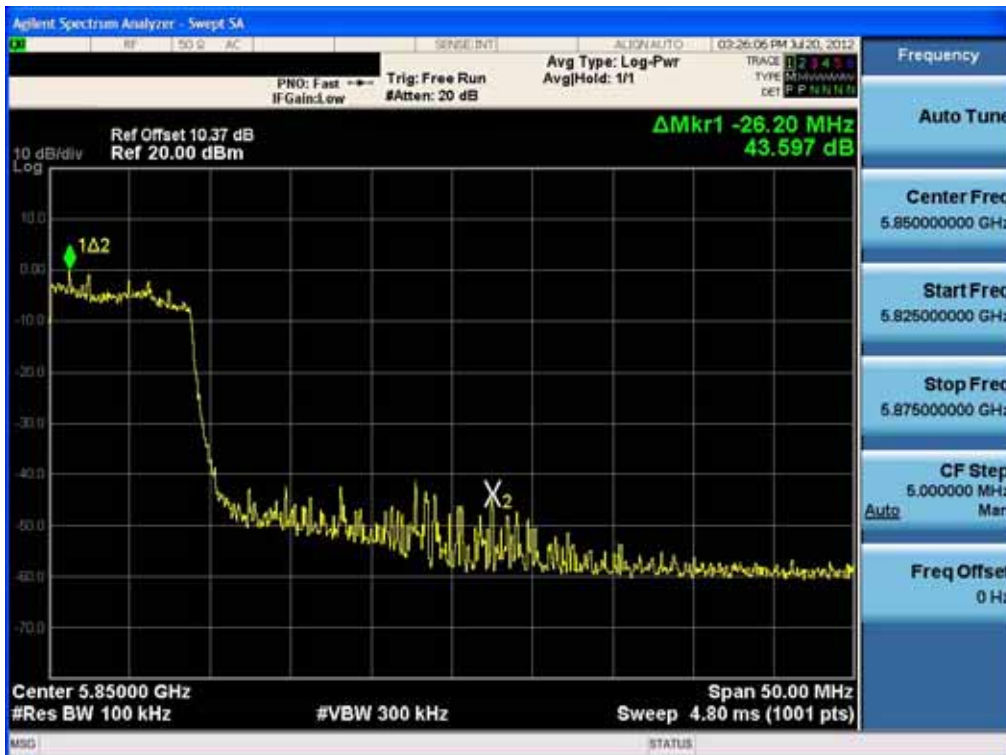


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895

### BandEdge (802.11n-CH 149)

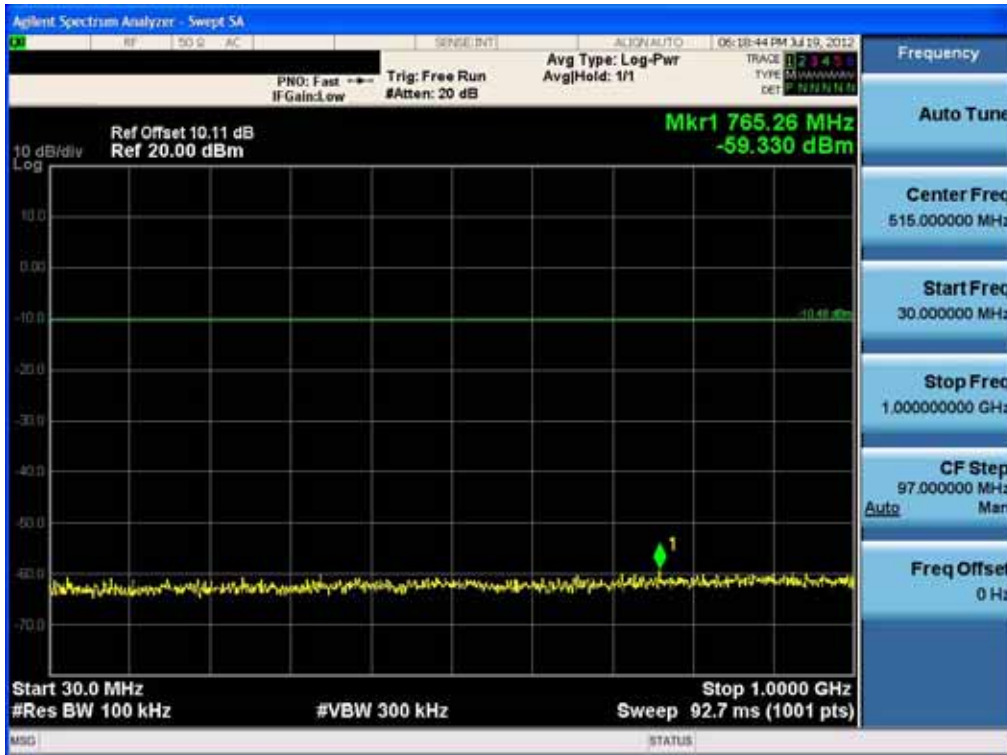


### BandEdge (802.11n-CH 165)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

Conducted Spurious Emission (802.11b-CH1)

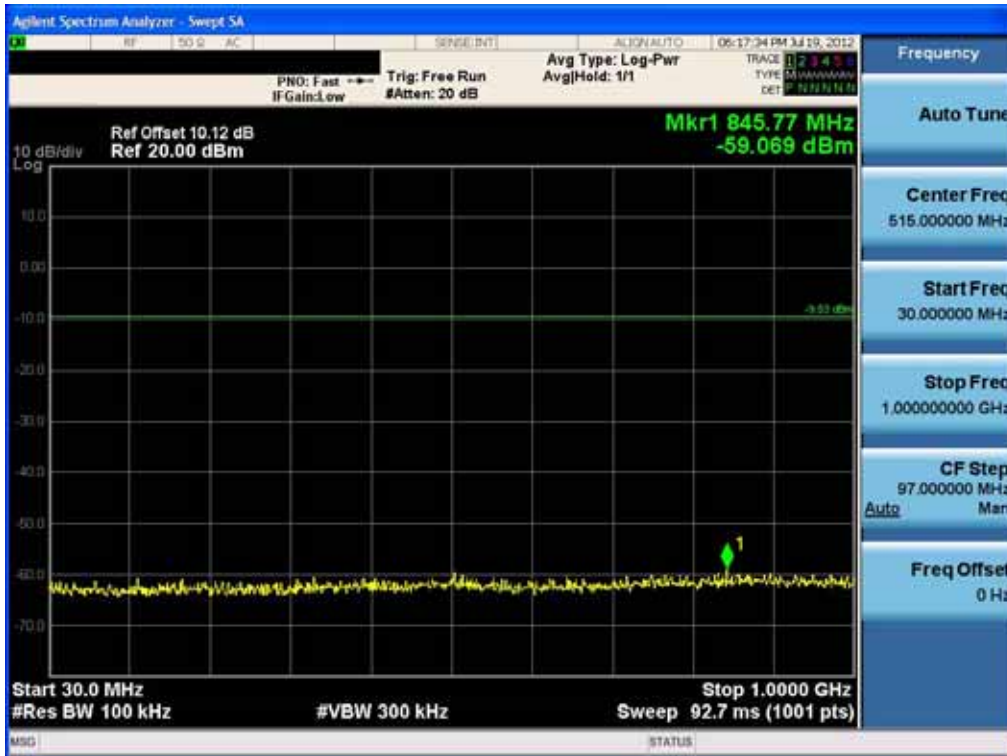


Conducted Spurious Emission (802.11b-CH6)

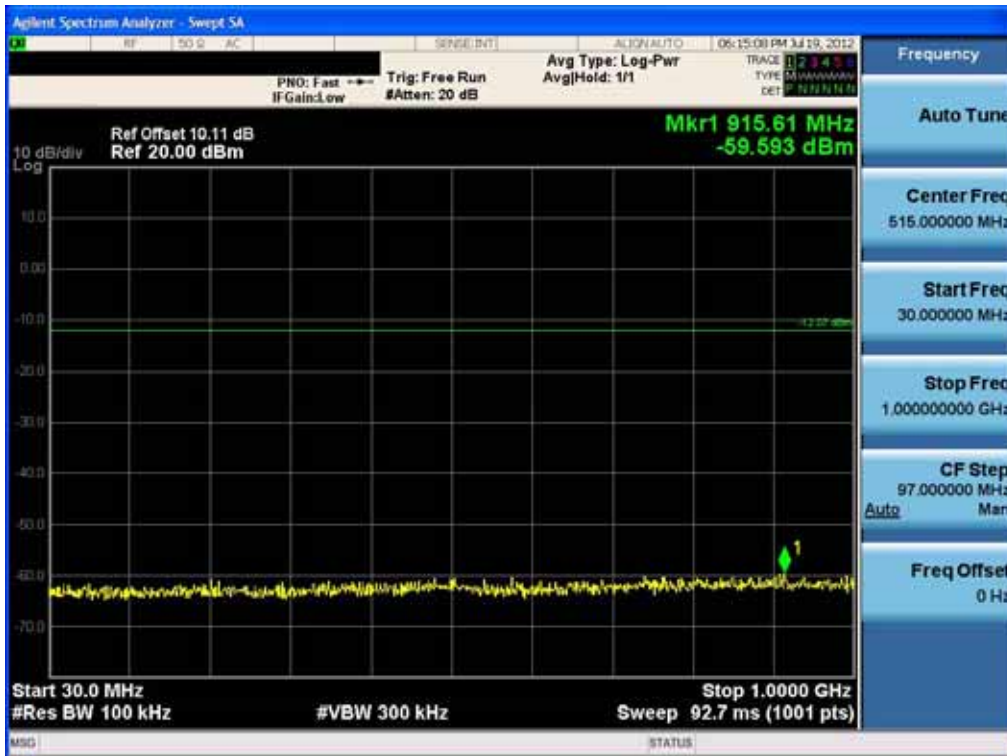


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11b-CH11)



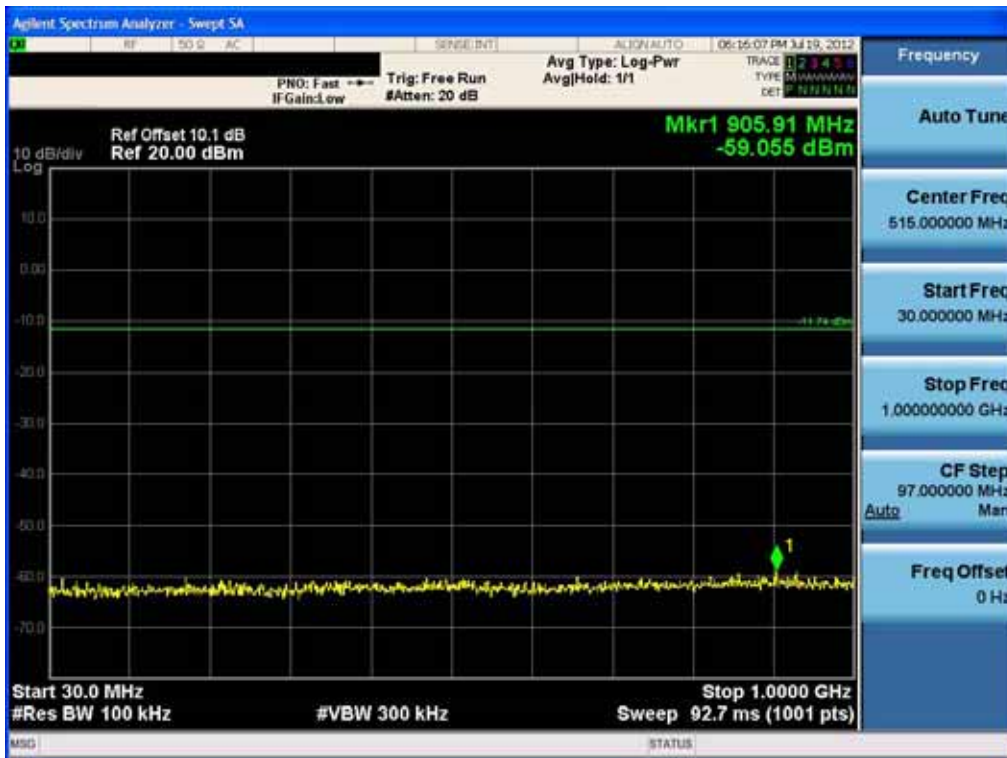
### Conducted Spurious Emission (802.11g-CH1)



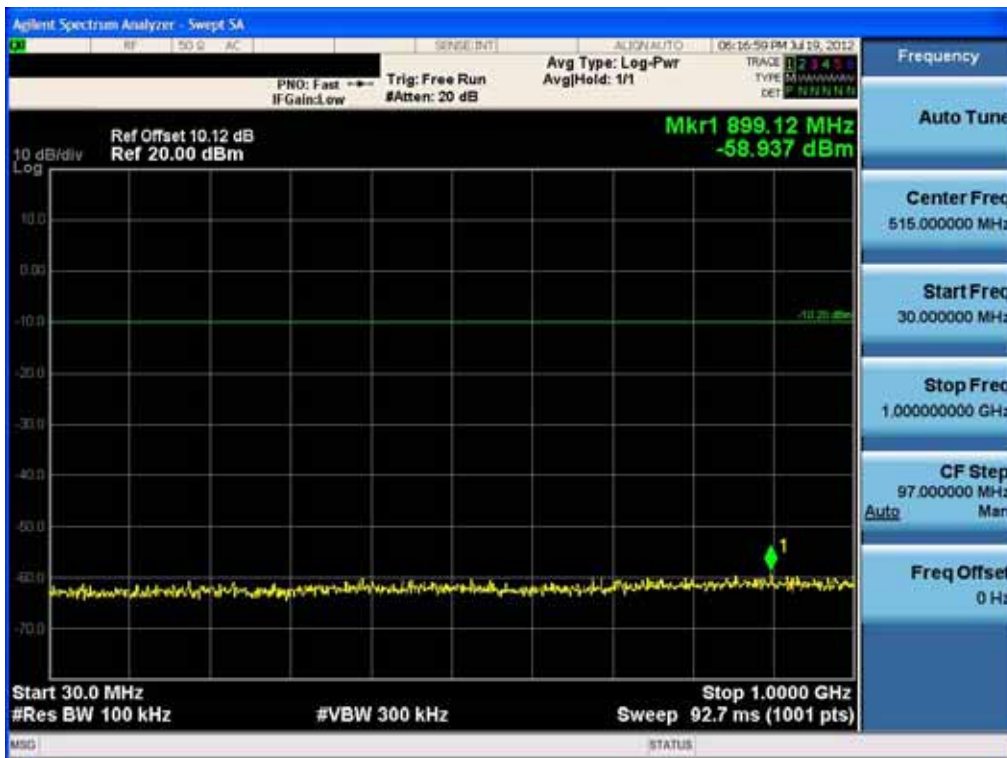
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895



### Conducted Spurious Emission (802.11g-CH6)

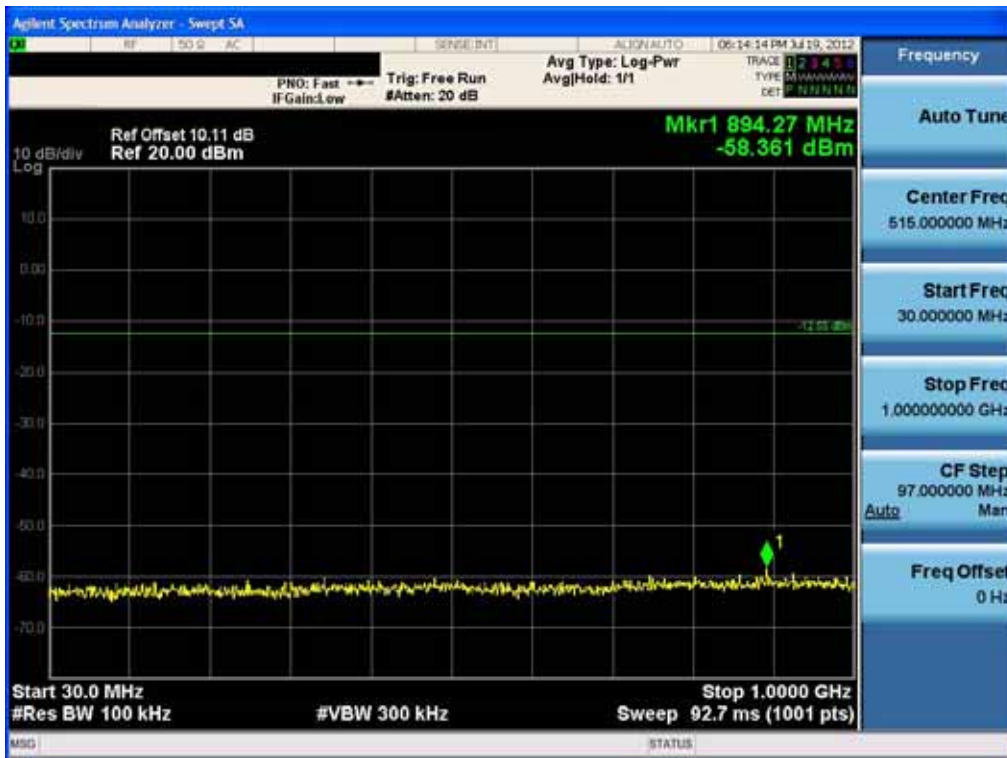


### Conducted Spurious Emission (802.11g-CH11)

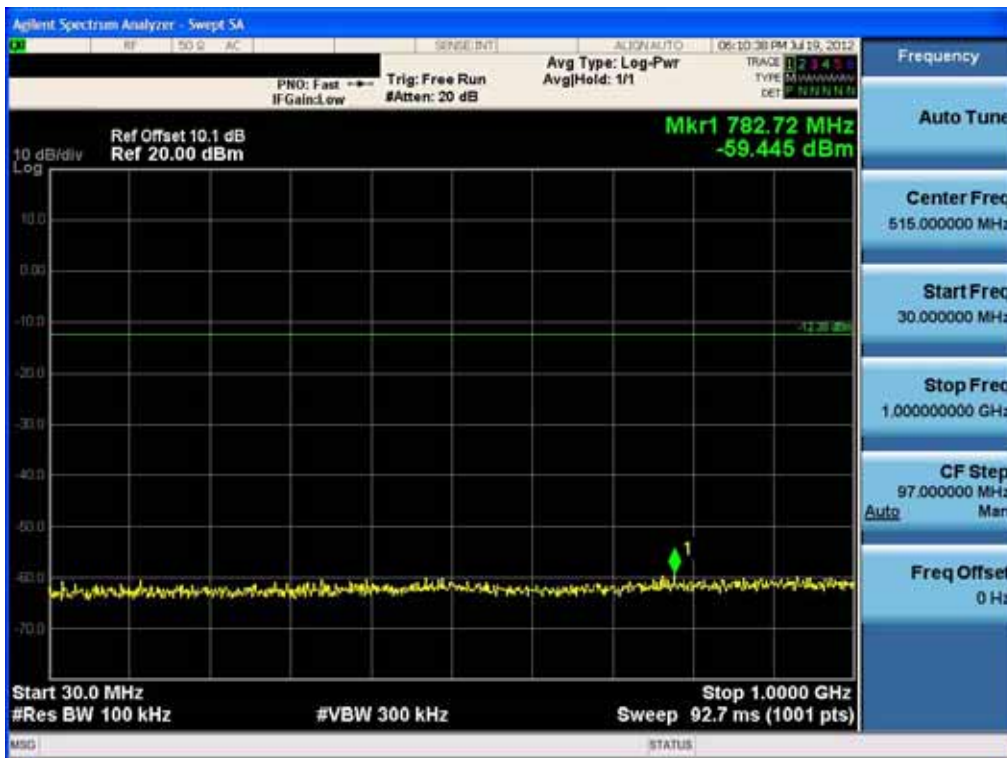


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895

### Conducted Spurious Emission (802.11n-CH1)

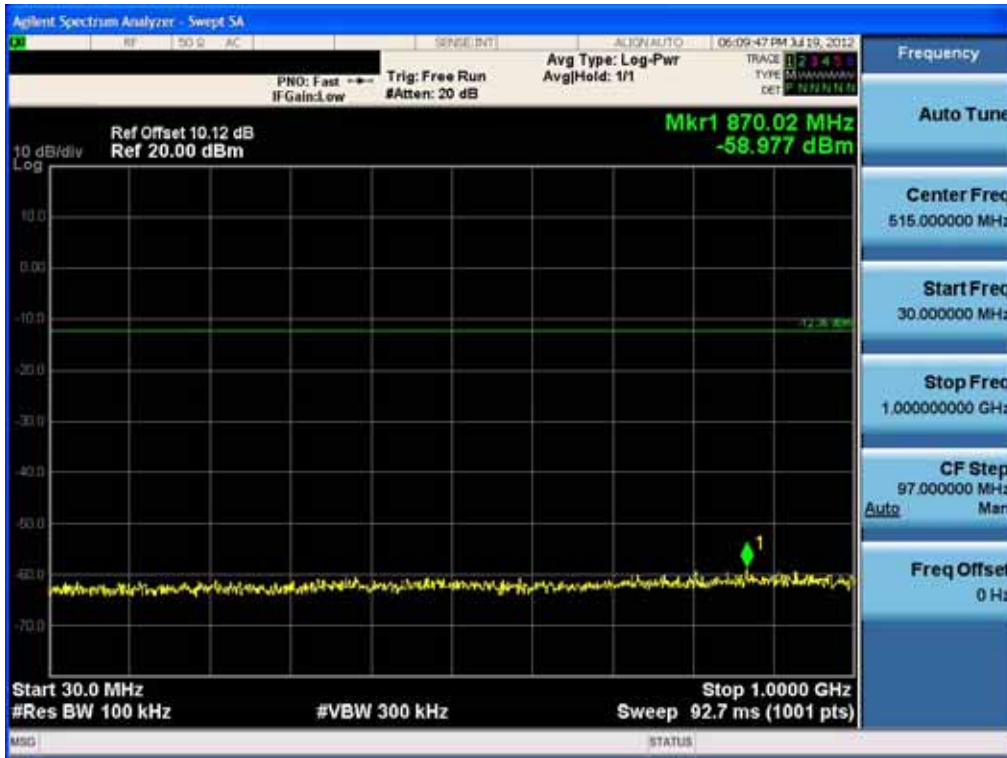


### Conducted Spurious Emission (802.11n-CH6)



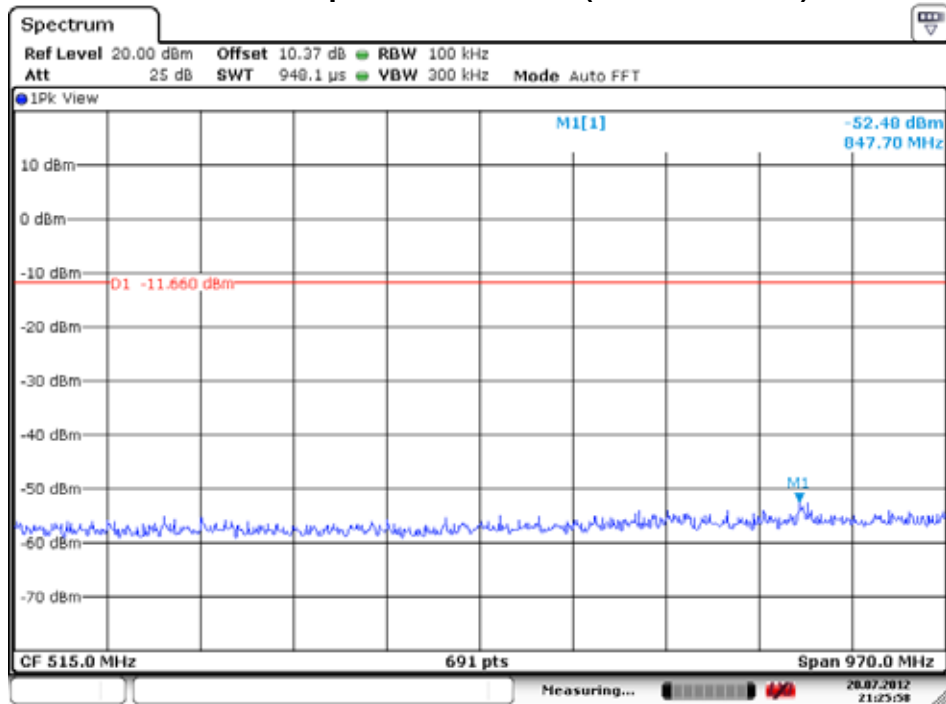
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11n-CH11)



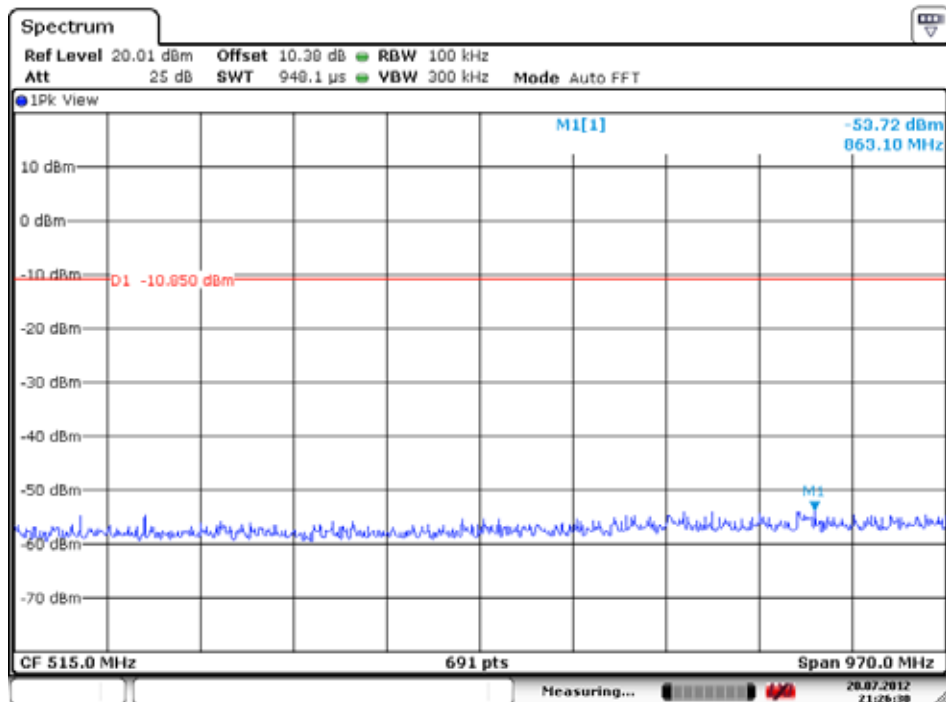
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11a-CH149)



Date: 20.JUL.2012 21:25:58

### Conducted Spurious Emission (802.11a-CH157)

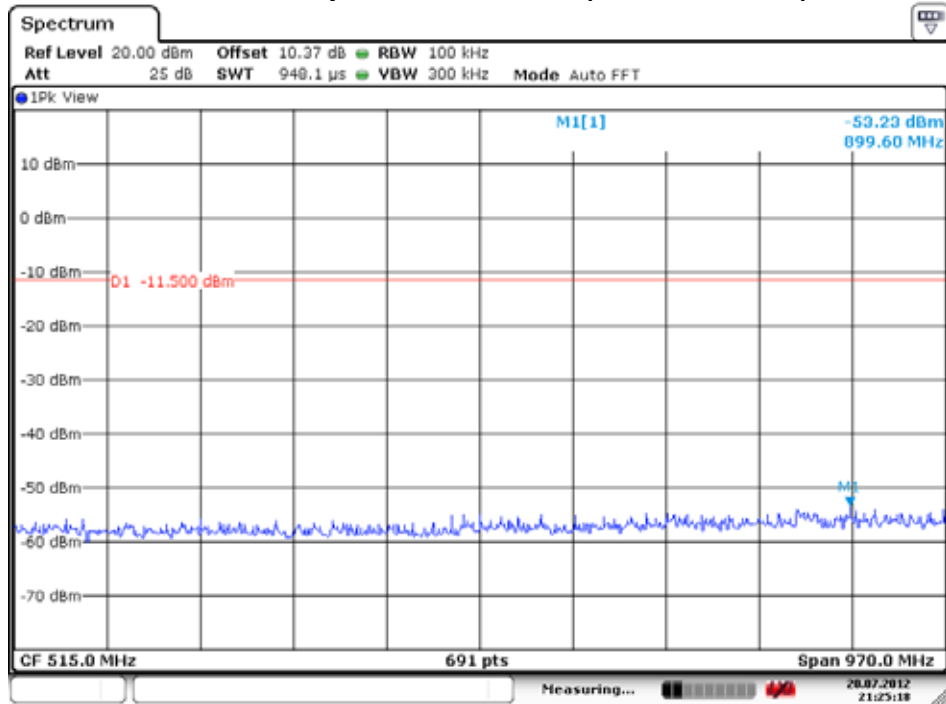


Date: 20.JUL.2012 21:26:30

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

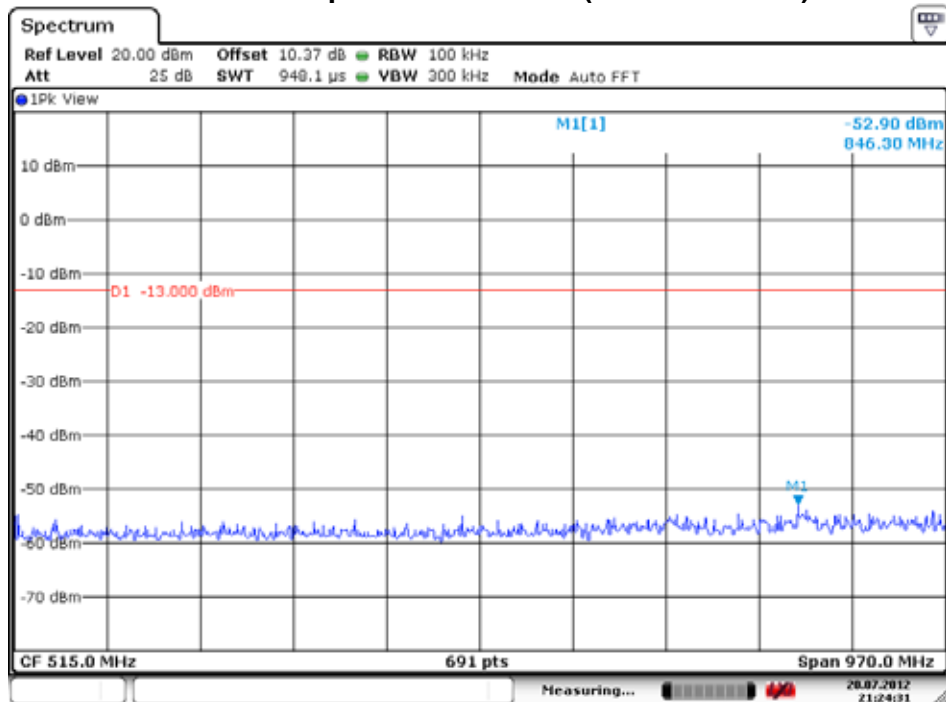


### Conducted Spurious Emission (802.11a-CH165)



Date: 20.JUL.2012 21:25:18

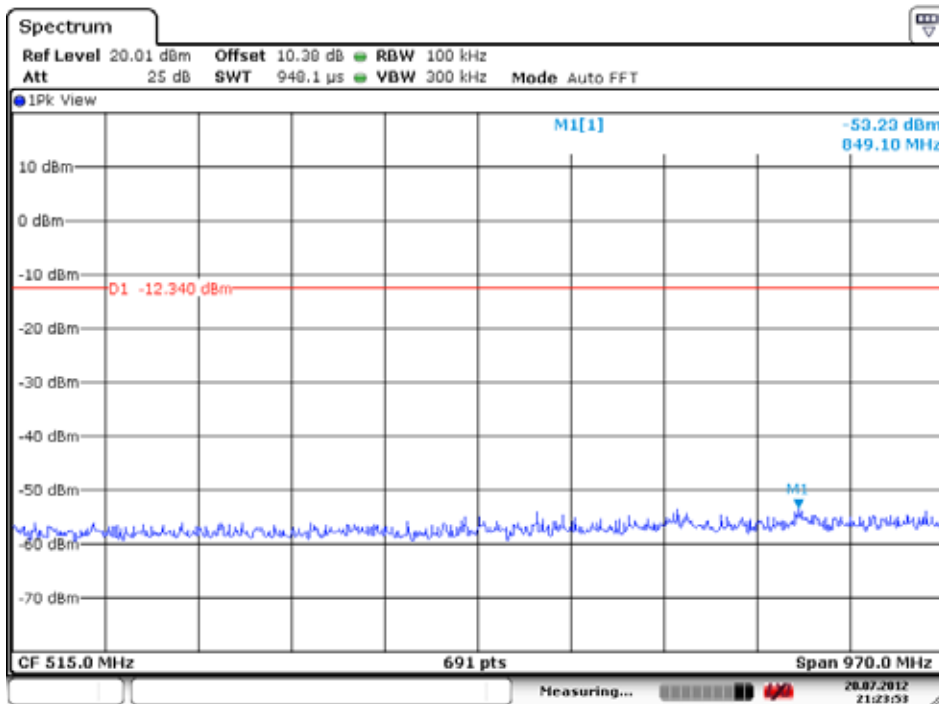
### Conducted Spurious Emission (802.11n-CH149)



Date: 20.JUL.2012 21:24:30

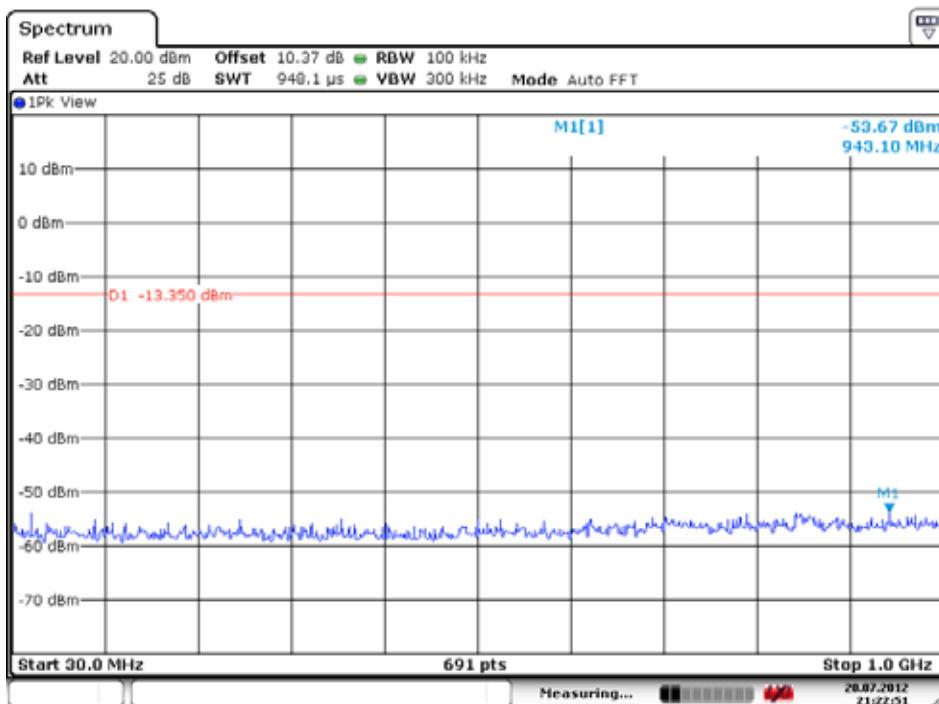
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11n-CH157)



Date: 20.JUL.2012 21:23:53

### Conducted Spurious Emission (802.11n-CH165)



Date: 20.JUL.2012 21:22:51

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

1 GHz ~ 26 GHz

### Conducted Spurious Emission (802.11b-CH1)



### Conducted Spurious Emission (802.11b-CH6)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11b-CH11)



### Conducted Spurious Emission (802.11g-CH1)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895

### Conducted Spurious Emission (802.11g-CH6)



### Conducted Spurious Emission (802.11g-CH11)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895



### Conducted Spurious Emission (802.11n-CH1)



### Conducted Spurious Emission (802.11n-CH6)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895

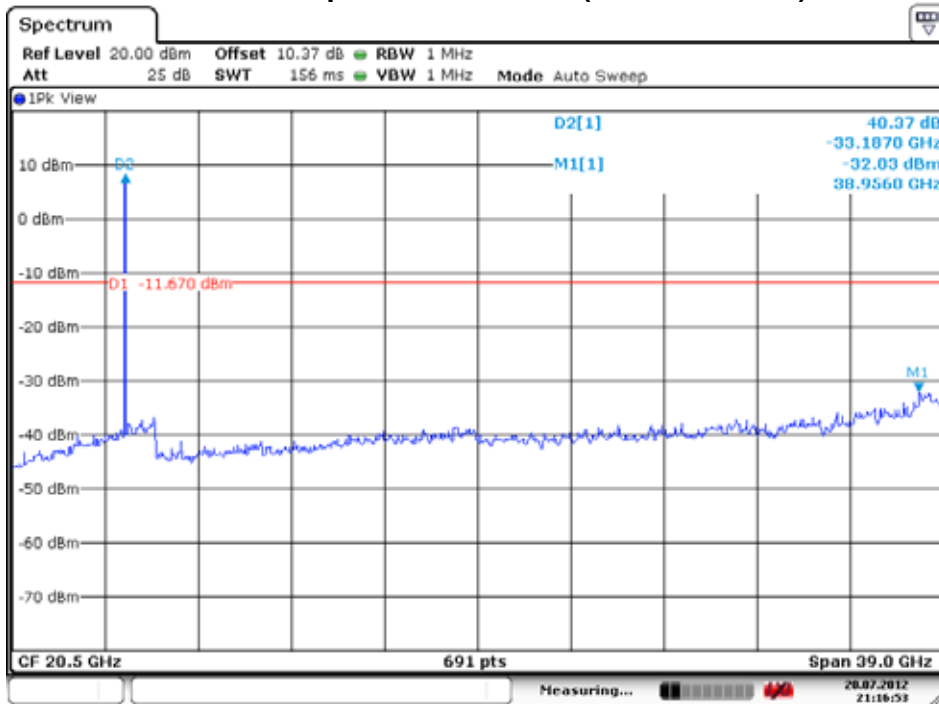
### Conducted Spurious Emission (802.11n-CH11)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

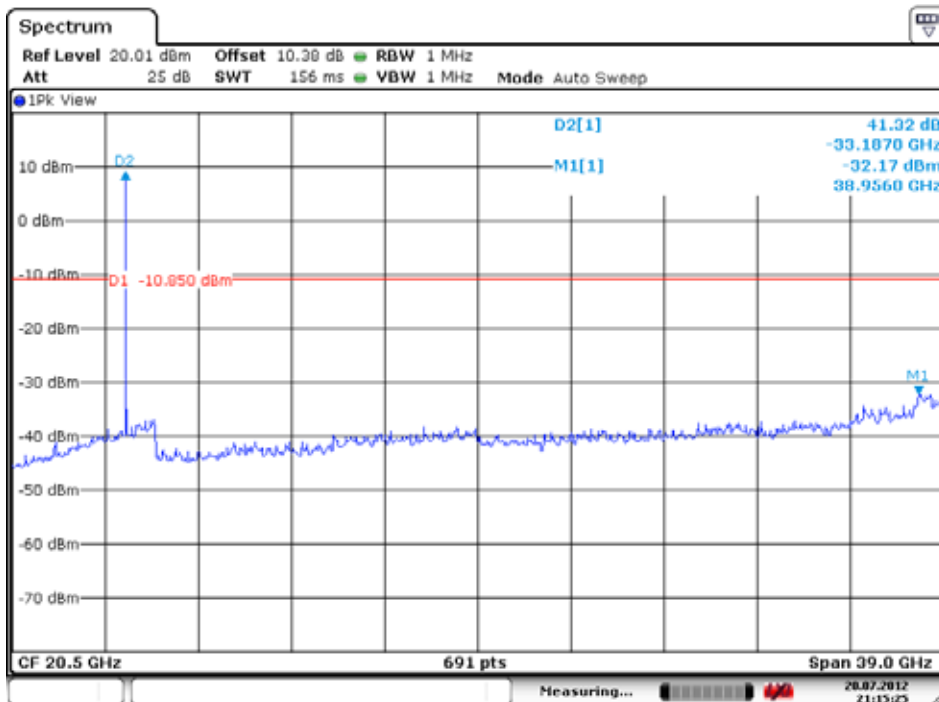
1 GHz ~ 40 GHz

**Conducted Spurious Emission (802.11a-CH149)**



Date: 20.JUL.2012 21:16:53

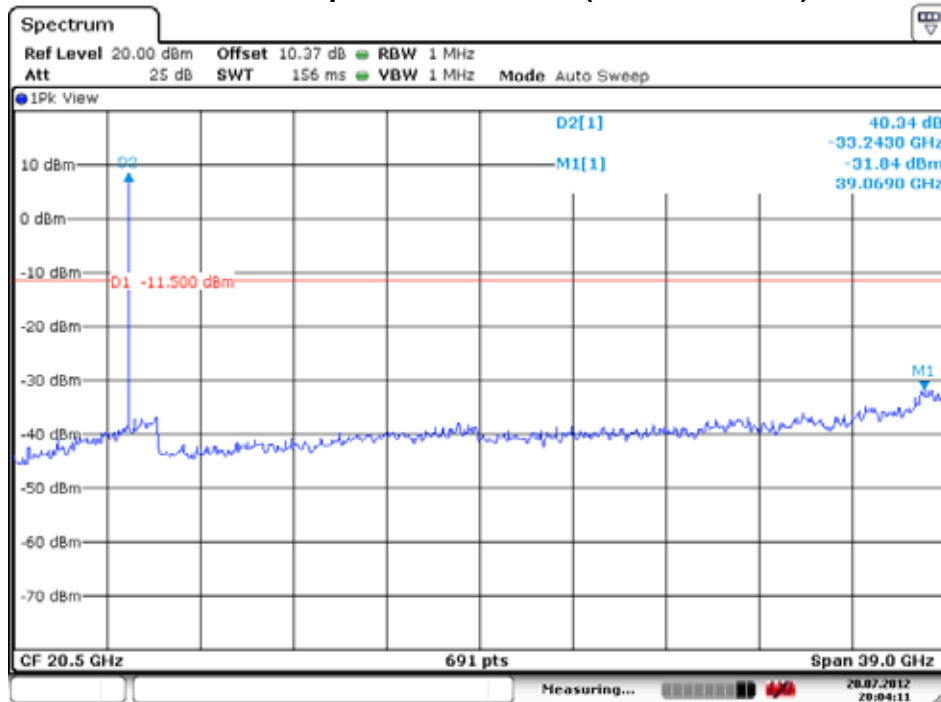
**Conducted Spurious Emission (802.11a-CH157)**



Date: 20.JUL.2012 21:15:25

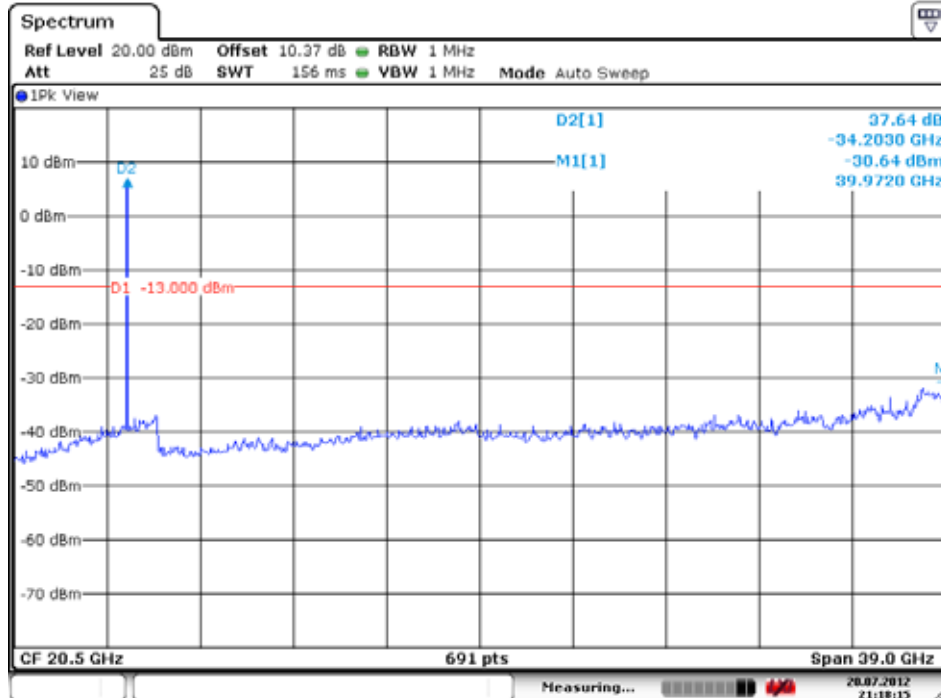
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Conducted Spurious Emission (802.11a-CH165)



Date: 20.JUL.2012 20:04:11

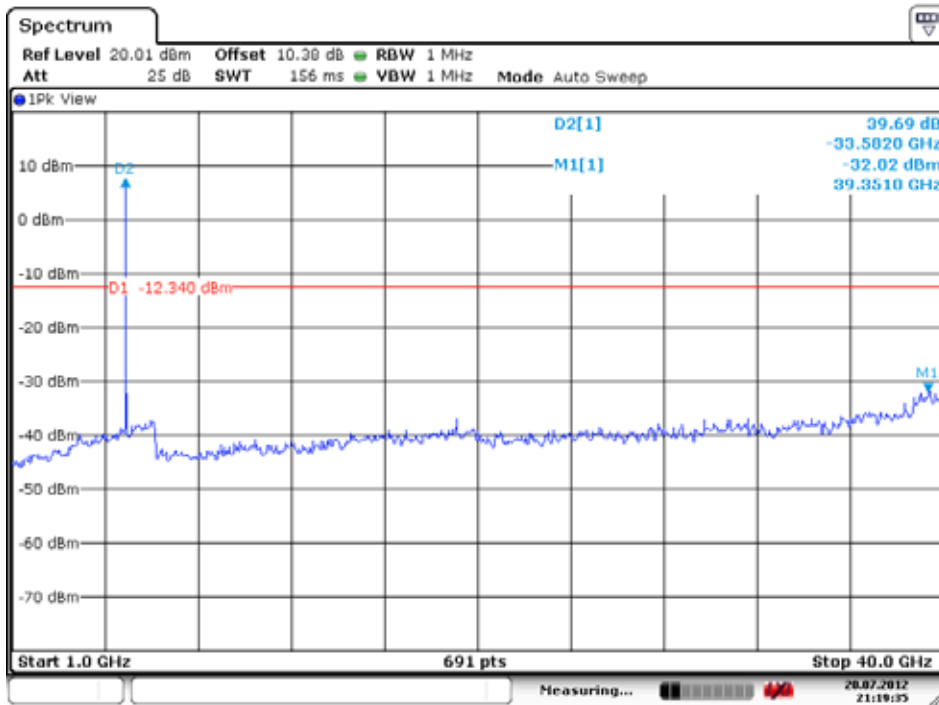
### Conducted Spurious Emission (802.11n-CH149)



Date: 20.JUL.2012 21:18:14

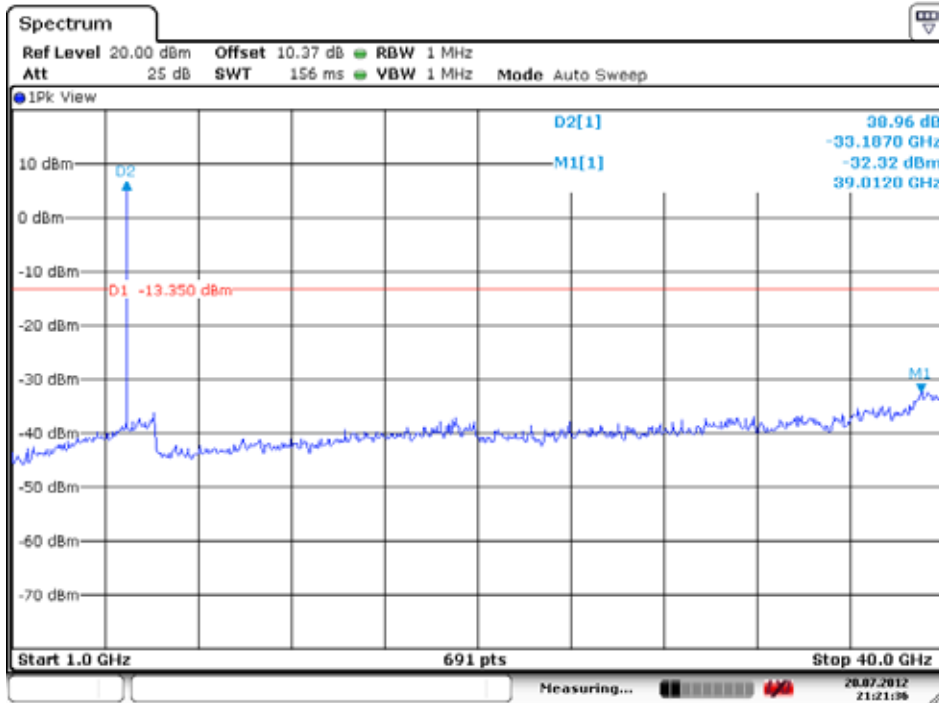
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895

### Conducted Spurious Emission (802.11n-CH157)



Date: 20.JUL.2012 21:19:35

### Conducted Spurious Emission (802.11n-CH165)



Date: 20.JUL.2012 21:21:36

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895



## 8.5 RADIATED MEASUREMENT.

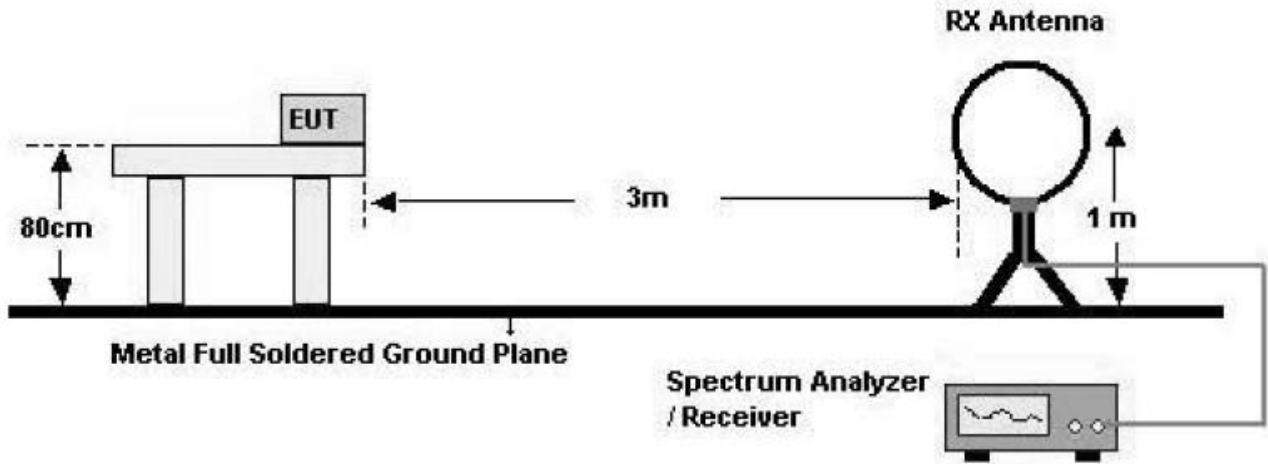
### 8.5.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209

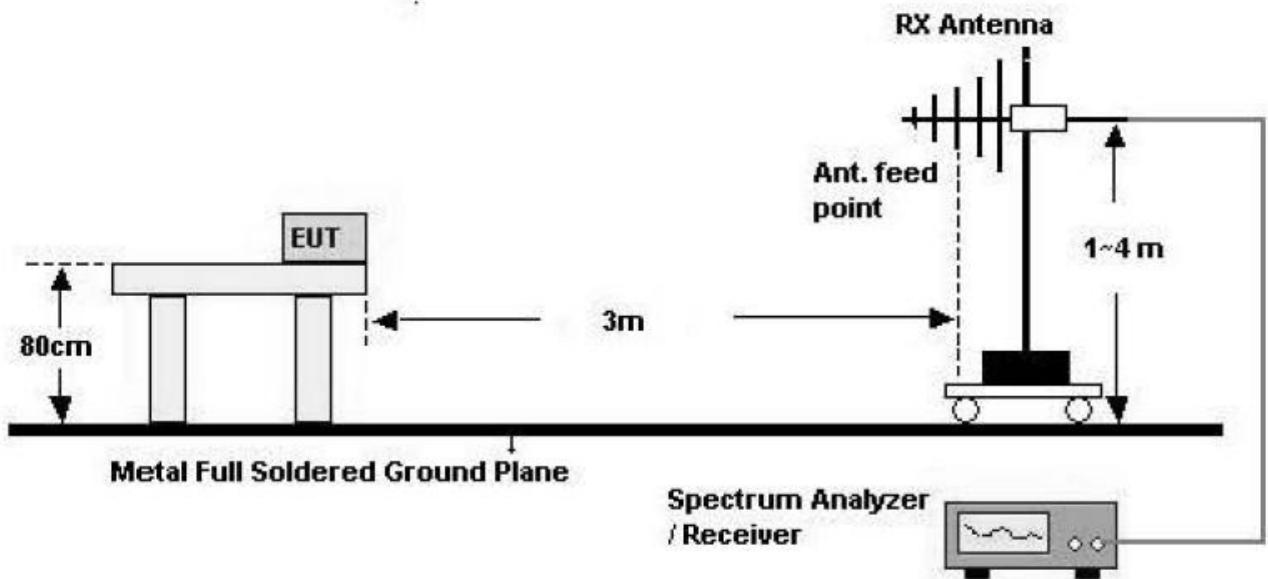
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**Test Configuration**

**Below 30 MHz**

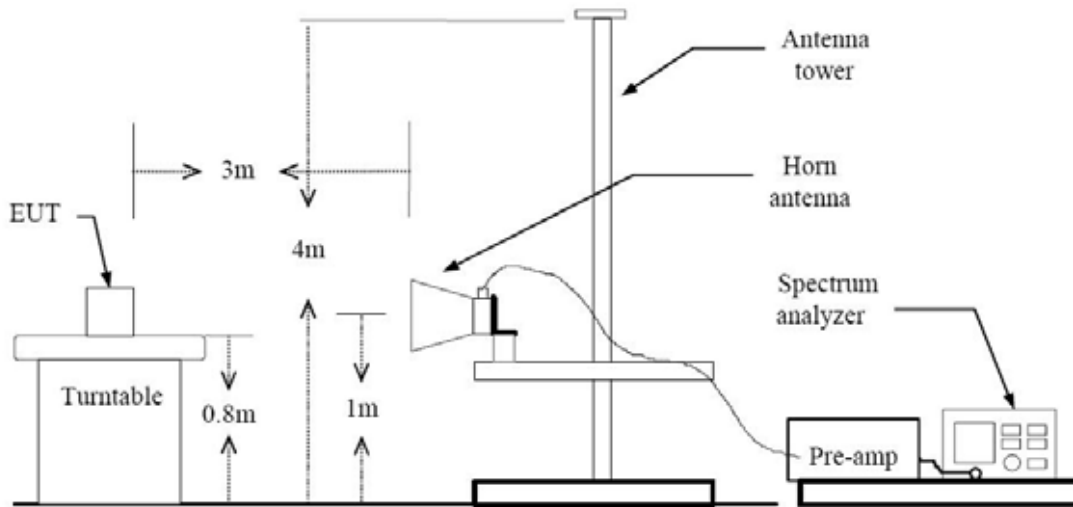


**30 MHz - 1 GHz**



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

### Above 1 GHz



### TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC		FCC ID: ZNF895

**TEST RESULTS**

**9 kHz – 30MHz**

**Operation Mode:** Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB $\mu$ V	dB /m	dB	(H/V)	dB $\mu$ V/m	dB $\mu$ V/m	dB
No Critical peaks found							

**Notes:**

1. Measuring frequencies from 9 kHz to the 30MHz.
2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



**TEST RESULTS**

**Below 1 GHz**

**Operation Mode:** Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB $\mu$ V	dB /m	dB	(H/V)	dB $\mu$ V/m	dB $\mu$ V/m	dB
No Critical peaks found							

**Notes:**

1. Measuring frequencies from 30 MHz to the 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

<b>FCC PT.15.247 TEST REPORT</b>	<b>FCC CERTIFICATION REPORT</b>		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
<b>Test Report No.</b> HCTR1208FR18	<b>Date of Issue:</b> August 16, 2012	<b>EUT Type:</b> Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	<b>FCC ID:</b> ZNFP895



### Above 1 GHz

Operation Mode:	802.11 b
Transfer Rate:	1 Mbps
Operating Frequency	2412
Channel No.	01 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
4824	50.31	-0.10	V	50.21	74	23.79	PK
4824	37.07	-0.10	V	36.97	54	17.03	AV
7236	48.73	10.13	V	58.86	74	15.14	PK
7236	34.79	10.13	V	44.92	54	9.08	AV
4824	52.54	-0.10	H	52.44	74	21.56	PK
4824	42.91	-0.10	H	42.81	54	11.19	AV
7236	48.88	10.13	H	59.01	74	14.99	PK
7236	34.78	10.13	H	44.91	54	9.09	AV

#### Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. We have done 802.11b/g/n(2.4 GHz) mode test. Worst case of EUT is 1 Mbps in 802.11b.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Operation Mode: 802.11 b  
 Transfer Rate: 1 Mbps  
 Operating Frequency: 2437  
 Channel No. 06 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
4874	49.28	0.13	V	49.41	74	24.59	PK
4874	35.76	0.13	V	35.89	54	18.11	AV
7311	47.72	10.01	V	57.73	74	16.27	PK
7311	34.10	10.01	V	44.11	54	9.89	AV
4874	50.61	0.13	H	50.74	74	23.26	PK
4874	38.07	0.13	H	38.20	54	15.80	AV
7311	47.15	10.01	H	57.16	74	16.84	PK
7311	33.79	10.01	H	43.80	54	10.20	AV

**Notes:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. We have done 802.11b/g/n(2.4 GHz) mode test. Worst case of EUT is 1 Mbps in 802.11b.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC		FCC ID: ZNFP895



Operation Mode: 802.11 b  
 Transfer Rate: 1 Mbps  
 Operating Frequency: 2462  
 Channel No. 11 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
4924	48.95	0.45	V	49.40	74	24.60	PK
4924	35.37	0.45	V	35.82	54	18.18	AV
7386	47.79	10.17	V	57.96	74	16.04	PK
7386	34.50	10.17	V	44.67	54	9.33	AV
4924	49.21	0.45	H	49.66	74	24.34	PK
4924	36.07	0.45	H	36.52	54	17.48	AV
7386	47.77	10.17	H	57.94	74	16.06	PK
7386	34.64	10.17	H	44.81	54	9.19	AV

**Notes:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. We have done 802.11b/g/n(2.4 GHz) mode test. Worst case of EUT is 1 Mbps in 802.11b.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

Band :	5.8 GHz
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5745 MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11490	38.62	10.64	V	49.26	74	24.74	PK
11490	25.91	10.64	V	36.55	54	17.45	AV
17235	44.75	19.85	V	64.60	74	9.40	PK
17235	30.25	19.85	V	50.10	54	3.90	AV
11490	38.00	10.64	H	48.64	74	25.36	PK
11490	25.26	10.64	H	35.90	54	18.10	AV
17235	44.63	19.85	H	64.48	74	9.52	PK
17235	30.25	19.85	H	50.10	54	3.90	AV

**Notes:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. . We have done 802.11a/n(5.8 GHz) mode test. Worst case of EUT is 6 Mbps in 802.11a\_5.8 GHz.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	5.8 GHz
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11570	38.03	10.41	V	48.44	74	25.56	PK
11570	24.67	10.41	V	35.08	54	18.92	AV
17355	44.42	19.23	V	63.65	74	10.35	PK
17355	30.53	19.23	V	49.76	54	4.24	AV
11570	37.75	10.41	H	48.16	74	25.84	PK
11570	24.67	10.41	H	35.08	54	18.92	AV
17355	44.02	19.23	H	63.25	74	10.75	PK
17355	30.55	19.23	H	49.78	54	4.22	AV

**Notes:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. . We have done 802.11a/n(5.8 GHz) mode test. Worst case of EUT is 6 Mbps in 802.11a\_5.8 GHz.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	5.8 GHz
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11650	37.39	10.24	V	47.63	74	26.37	PK
11650	24.41	10.24	V	34.65	54	19.35	AV
17475	44.61	20.73	V	65.34	74	8.66	PK
17475	30.26	20.73	V	50.99	54	3.01	AV
11650	37.36	10.21	H	47.57	74	26.43	PK
11650	24.24	10.21	H	34.45	54	19.55	AV
17475	45.28	18.86	H	64.14	74	9.86	PK
17475	31.28	18.86	H	50.14	54	3.86	AV

**Notes:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
6. . We have done 802.11a/n(5.8 GHz) mode test. Worst case of EUT is 6 Mbps in 802.11a\_5.8 GHz.
7. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

## 8.5.2 RADIATED RESTRICTED BAND EDGE MEASUREMENTS

### Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

Operation Mode:	802.11g
Transfer Rate:	6 Mbps
Operating Frequency	2412 MHz, 2462 MHz
Channel No.	01 Ch, 11 Ch

Frequency [MHz]	Reading dBuV	AN.+CL [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
2390.0	33.76	33.86	H	67.62	74	6.38	PK
2390.0	17.27	33.86	H	51.13	54	2.87	AV
2390.0	29.14	33.86	V	63.00	74	11.00	PK
2390.0	14.45	33.86	V	48.31	54	5.69	AV
2483.5	34.14	34.02	H	68.16	74	5.84	PK
2483.5	16.48	34.02	H	50.50	54	3.50	AV
2483.5	32.13	34.02	V	66.15	74	7.85	PK
2483.5	16.28	34.02	V	50.30	54	3.70	AV

### Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss
2. Spectrum setting:
  - a. Peak Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
  - b. AV Setting 1 GHz – 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
3. We have done 802.11b/g/n mode test. . Worst case of EUT is 6 Mbps in 802.11g

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNF895



## 8.6 POWERLINE CONDUCTED EMISSIONS

### Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

### Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

### TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.
5. We are performed the AC Power Line Conducted Emission test for 54 Mbps, Ch.11 and 802.11g. Because 802.11g mode is worst case.

■ RESULT PLOTS

Conducted Emissions (Line 1)

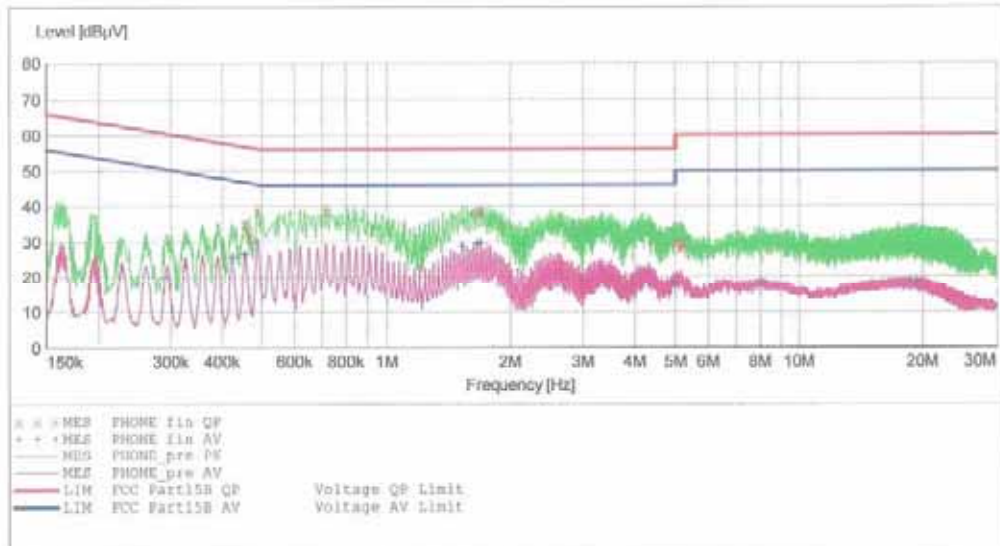
HCT

EMC

EUT: LG-P895  
 Manufacturer: LG  
 Operating Condition: WLAN MODE (2.4 GHz)  
 Test Site: SHIELD ROOM  
 Operator: JS LEE  
 Test Specification: FCC PART 15 B  
 Comment: H

SCAN TABLE: "FCC PART 15 B(H)"

Short Description:		FCC PART 15 CLASS B					
Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer	
150.0 kHz	500.0 kHz	1.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				



MEASUREMENT RESULT: "PHONE\_fin\_QP"

8/3/2012 3:11PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.455010	35.00	9.8	57	21.8	---	---
0.466010	31.70	9.8	57	24.9	---	---
0.487010	38.40	9.8	56	17.8	---	---
0.716000	38.60	9.8	56	17.4	---	---
1.660000	38.20	9.9	56	17.8	---	---
1.692000	38.70	9.9	56	17.3	---	---
5.012000	29.60	10.2	60	30.4	---	---
5.140000	28.20	10.2	60	31.8	---	---
5.172000	29.20	10.2	60	30.8	---	---

MEASUREMENT RESULT: "PHONE\_fin AV"

8/3/2012 3:11PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.424010	25.80	9.8	47	21.5	---	---
0.455010	26.50	9.8	47	20.3	---	---
0.487010	29.90	9.8	46	16.3	---	---
1.528000	28.70	9.9	46	17.3	---	---
1.660000	29.40	9.9	46	16.6	---	---
1.692000	29.60	9.9	46	16.4	---	---
5.000000	10.00	10.2	46	28.0	---	---
8.204000	18.30	10.4	50	31.7	---	---
19.328000	17.90	11.7	50	32.1	---	---

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

## Conducted Emissions (Line 2)

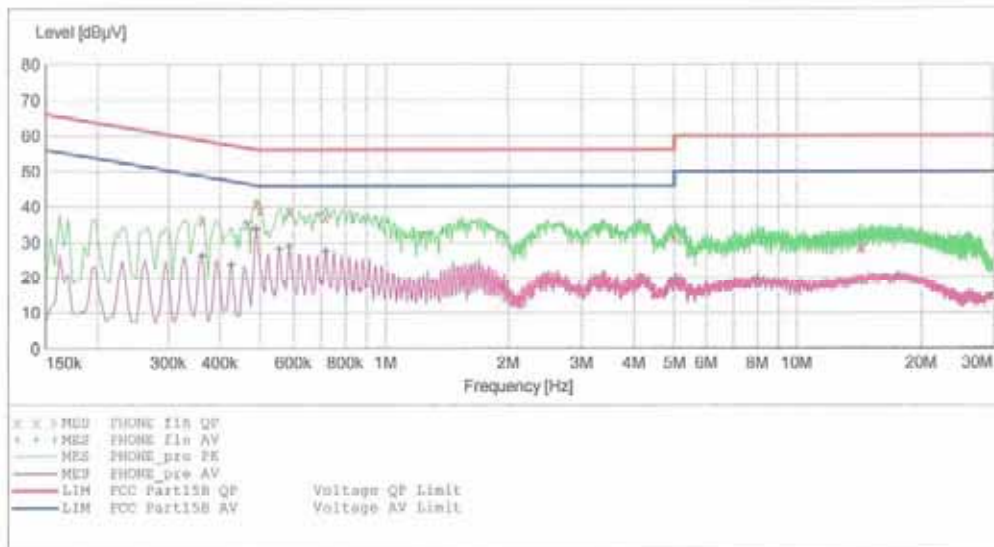
HCT

EMC

EUT: LG-P895  
 Manufacturer: LG  
 Operating Condition: WLAN MODE(2.4 GHz)  
 Test Site: SHIELD ROOM  
 Operator: JS LEE  
 Test Specification: FCC PART 15 CLASS B  
 Comment: N

**SCAN TABLE: "FCC PART 15 B(N)"**

Short Description:			FCC PART 15 CLASS B			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			



**MEASUREMENT RESULT: "PHONE\_fin QP"**

8/3/2012 3:16PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.362010	36.30	10.0	59	22.4	---	---
0.466010	35.20	10.0	57	21.4	---	---
0.490010	40.90	10.0	56	15.3	---	---
0.500000	39.00	10.0	56	17.0	---	---
0.588000	38.70	10.0	56	17.3	---	---
0.716000	37.20	10.0	56	18.8	---	---
5.000000	31.60	10.4	56	24.4	---	---
14.212000	28.70	11.2	60	31.3	---	---
14.456000	28.70	11.2	60	31.3	---	---

MEASUREMENT RESULT: "PHONE\_fin AV"

8/3/2012 3:16PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.362010	26.20	10.0	49	22.5	---	---
0.426010	23.70	10.0	47	23.7	---	---
0.490010	33.90	10.0	46	12.3	---	---
0.556000	28.10	10.0	46	17.9	---	---
0.568000	29.00	10.0	46	17.0	---	---
0.720000	27.60	10.0	46	18.4	---	---
5.000000	18.90	10.4	46	27.1	---	---
8.040000	19.60	10.6	50	30.4	---	---
17.548000	20.30	11.7	50	29.7	---	---

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		<a href="http://www.hct.co.kr">www.hct.co.kr</a>
Test Report No. HCTR1208FR18	Date of Issue: August 16, 2012	EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	FCC ID: ZNFP895

## 9. LIST OF TEST EQUIPMENT

Manufacturer	Model / Equipment	Calibration Interval	Calibration Due	Serial No.
Rohde & Schwarz	ENV216/ LISN	Annual	02/09/2013	100073
Schwarzbeck	VULB 9168/ TRILOG Antenna	Biennial	02/09/2013	200
Rohde & Schwarz	ESI 40 / EMI TEST RECEIVER	Annual	05/03/2013	831564103
Agilent	E4440A/ Spectrum Analyzer	Annual	05/02/2013	US45303008
Agilent	N9020A/ SIGNAL ANALYZER	Annual	07/31/2013	MY51110020
HD	MA240/ Antenna Position Tower	N/A	N/A	556
EMCO	1050/ Turn Table	N/A	N/A	114
HD GmbH	HD 100/ Controller	N/A	N/A	13
HD GmbH	KMS 560/ SlideBar	N/A	N/A	12
Rohde & Schwarz	SCU-18/ Signal Conditioning Unit	Annual	09/19/2012	10094
MITEQ	AMF-6B-180265-35-10P / POWER AMP	Annual	04/16/2013	667624
CERNEX	CBL26405040 / POWER AMP	Annual	04/16/2013	19660
Schwarzbeck	BBHA 9120D/ Horn Antenna	Biennial	10/17/2013	937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	Biennial	10/26/2012	BBHA9170342
Rohde & Schwarz	FSP / Spectrum Analyzer	Annual	02/09/2013	839117/011
Agilent	E4416A /Power Meter	Annual	11/07/2012	GB41291412
Agilent	E9327A /POWER SENSOR	Annual	05/02/2013	MY4442009
Wainwright Instrument	WHF3.3/18G-10EF / High Pass Filter	Annual	05/02/2013	1
Wainwright Instrument	WHNX6.0/26.5G-6SS / High Pass Filter	Annual	05/02/2013	1
Wainwright Instrument	WHNX7.0/18G-8SS / High Pass Filter	Annual	05/02/2013	29
Wainwright Instrument	WRCJ2400/2483.5-2370/2520-60/14SS / Band Reject Filter	Annual	05/02/2013	1
Hewlett Packard	11636B/Power Divider	Annual	11/07/2012	11377
Hewlett Packard	11667B / Power Splitter	Annual	06/05/2013	05001
DIGITAL	EP-3010 /DC POWER SUPPLY	Annual	11/07/2012	3110117
ITECH	IT6720 / DC POWER SUPPLY	Annual	11/07/2012	010002156287001199
TESCOM	TC-3000C / BLUETOOTH TESTER	Annual	11/14/2012	3000C000276
Rohde & Schwarz	CBT / BLUETOOTH TESTER	Annual	05/02/2013	100422
EMCO	6502.LOOP ANTENNA	Biennial	01/11/2014	9009-2536
MITEQ	AMF-6D-001180-35-20P/ POWER AMP	Annual	07/30/2013	990893
Agilent	8493C / Attenuator(10 dB)	Annual	07/30/2013	76649
WEINSCHL	2-3 / Attenuator(3 dB)	Annual	11/07/2013	BR0617
CERNEX	CBLU1183540 / POWER AMP	Annual	07/27/2013	21691

<b>FCC PT.15.247 TEST REPORT</b>	<b>FCC CERTIFICATION REPORT</b>			<a href="http://www.hct.co.kr">www.hct.co.kr</a>
<b>Test Report No.</b> HCTR1208FR18	<b>Date of Issue:</b> August 16, 2012	<b>EUT Type:</b> Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC		<b>FCC ID:</b> ZNFP895