



FCC Test Report

APPLICANT : IXI Mobile
EQUIPMENT : Messaging device
BRAND NAME : OGO
MODEL NAME : CC-10
FCC ID : SOW-OGOCC10
STANDARD : 47 CFR Part 2, 24(E)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
Tx/Rx FREQUENCY RANGE : 1850.2 ~ 1909.8 MHz / 1930.2 ~ 1989.8 MHz
MAX. EIRP POWER : 0.96 W
EMISSION DESIGNATOR : 247KGXW

The product sample received on Dec. 20, 2008 and completely tested on Jun. 22, 2009. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Roy Wu / Manager



SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.



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APPENDIX A. PHOTOGRAPHS OF EUT

APPENDIX B. SETUP PHOTOGRAPHS



REVISION HISTORY



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result
3.1	§2.1046	N/A	Conducted Output Power	N/A	PASS
3.2	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS
3.2	§2.1049 §24.238(a)	N/A	Occupied Bandwidth	N/A	PASS
3.3	§2.1051 §24.238(a)	RSS-133 (6.5.1)	Band Edge Measurement	< 43+10log ₁₀ (P[Watts])	PASS
3.4	§2.1051 §24.238(a)	RSS-133 (6.5.1)	Conducted Emission	< 43+10log ₁₀ (P[Watts])	PASS
3.5	§2.1053 §24.238(a)	RSS-133 (6.5.1)	Field Strength of Spurious Radiation	< 43+10log ₁₀ (P[Watts])	PASS
3.6	§2.1055 §24.235	RSS-133(6.3)	Frequency Stability for Temperature & Voltage	< 2.5 ppm	PASS



1 General Description

1.1 Applicant

IXI Mobile

No. 11 Moshe Levi St., Rishon Lezion 75658, Israel

1.2 Manufacturer

Inventec Appliances (Shanghai) Co., Ltd.

#7, Guiqing Road, Shanghai 200233, China P.R.C.

1.3 Feature of Equipment under Test

Product Feature & Specification	
Equipment	Messaging device
Brand Name	OGO
Model Name	CC-10
FCC ID	SOW-OGOCC10
Tx Frequency	GSM1900 : 1850 MHz ~ 1910 MHz
Rx Frequency	GSM1900 : 1930 MHz ~ 1990 MHz
Maximum Output Power to Antenna	29.25 dBm
Maximum EIRP	GSM1900 (GSM) : 0.96 W (29.82 dBm)
Antenna Type	Fixed Internal Antenna
HW Version	EVT2 VER.
SW Version	CC10_IMAGE_1.3 version
Type of Modulation	GSM / GPRS : GMSK
Type of Emission	247KGXW
EUT Stage	Identical Prototype

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).

**List of Accessory:**

Specification of Accessory		
AC Adapter	Brand Name	PI
	Model Name	P925BW05050EB1U
	Power Rating	I/P:100-240Vac, 50-60Hz, 0.1A; O/P: 5Vdc, 0.5A
	AC Power Cord Type	1.6 meter non-shielded cable without ferrite core
Battery	Brand Name	ogo
	Model Name	IXC0000232
	Power Rating	3.7Vdc, 950mAh
	Type	Li-ion

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. For accessories equipped with this EUT, please refer to the appendix of the external photo.

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.	
Test Site Location	No. 3-2, PingXiang Road Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958	
Test Site No.	Sporton Site No.	
	TH01-KS	03CH01-KS



1.5 Applied Standards

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

- 47 CFR Part 2, 24(E)
- ANSI C63.4-2003
- ANSI / TIA / EIA-603-C-2004
- 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	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Nokia	HS.12W	PYAH.S.12W	N/A	N/A



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 30 MHz to 19000 MHz for GSM1900.

Test Modes		
Band	Radiated TCs	Conducted TCs
GSM 1900	■ GSM Link ■ GSM Link + BT Link	■ GSM Link

Note: The maximum power levels are GSM mode for GMSK link, only this mode was used for all tests.

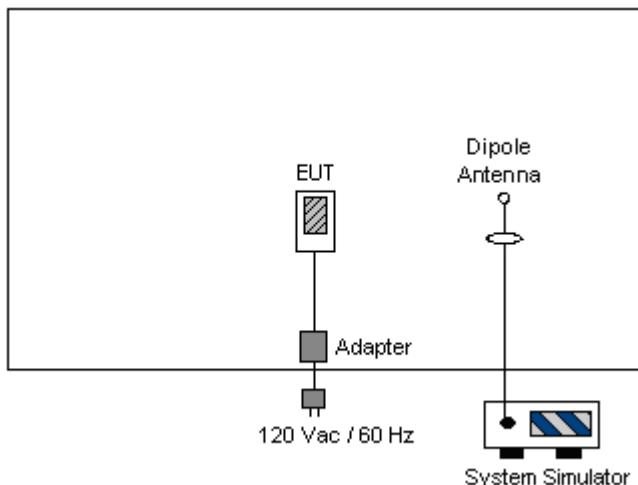
The power tables are listed as follows:

Conducted Power			
Band	GSM1900		
Channel	512	661	810
Frequency	1850.2	1880.0	1909.8
GSM	29.25	29.00	28.87
GPRS 8	29.14	28.91	28.80
GPRS 10	29.13	28.93	28.79

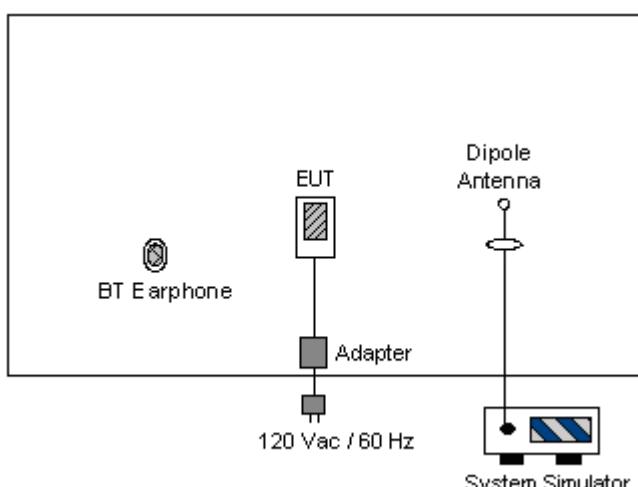
(*Unit: dBm)

2.2 Connection Diagram of Test System

<WWAN Link Mode>



<WWAN Link + BT Link Mode>



3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

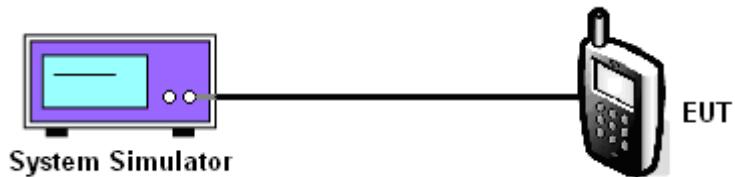
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

PCS Band			
Modes	Channel	Frequency (MHz)	Conducted Power (dBm)
GSM	512 (Low)	1850.2	29.25
	661 (Mid)	1880.0	29.00
	810 (High)	1909.8	28.87



3.2 Effective Isotropic Radiated Power Measurement

3.2.1 Description of the EIRP Measurement

EIRP is measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The EIRP of mobile transmitters are limited to 2 Watts.

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 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 EIRP.
5. Taking the record of maximum 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 EIRP of the substitution antenna.
9. $EIRP = Ps + Et - Es + Gs = Ps + Rt - Rs + Gs$

Ps (dBm) : Input power to substitution antenna.

Gs (dBi or dBd) : Substitution antenna Gain.

$Et = Rt + AF$

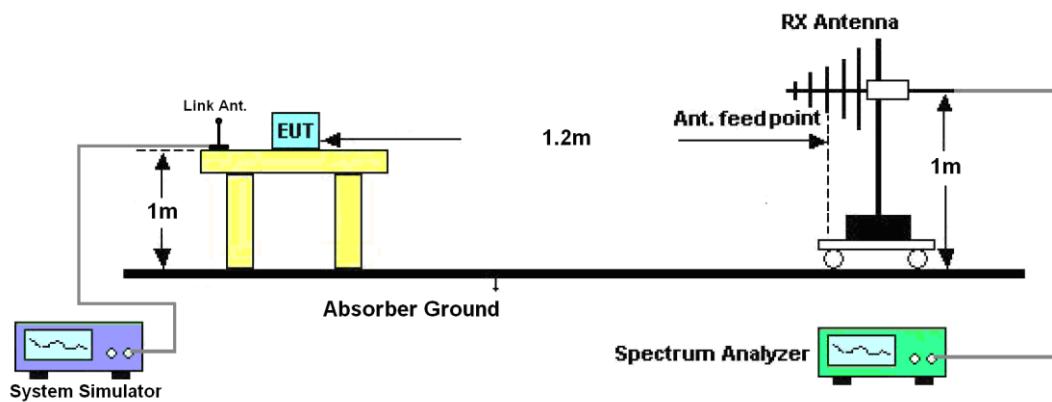
$Es = Rs + AF$

AF (dB/m) : Receive antenna factor

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

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

3.2.4 Test Setup



3.2.5 Test Result of EIRP

GSM1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-24.02	-51.88	0.00	1.96	29.82	0.96
1880.00	-27.29	-52.99	0.00	2.00	27.70	0.59
1909.80	-30.46	-54.28	0.00	1.98	25.80	0.38
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-25.04	-52.13	0.00	1.96	29.05	0.80
1880.00	-29.04	-53.17	0.00	2.00	26.13	0.41
1909.80	-31.67	-54.13	0.00	1.98	24.44	0.28

3.3 Occupied Bandwidth Measurement

3.3.1 Description of Occupied Bandwidth Measurement

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

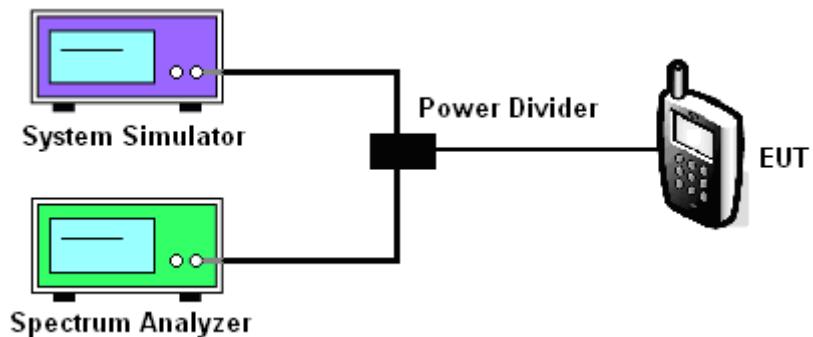
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

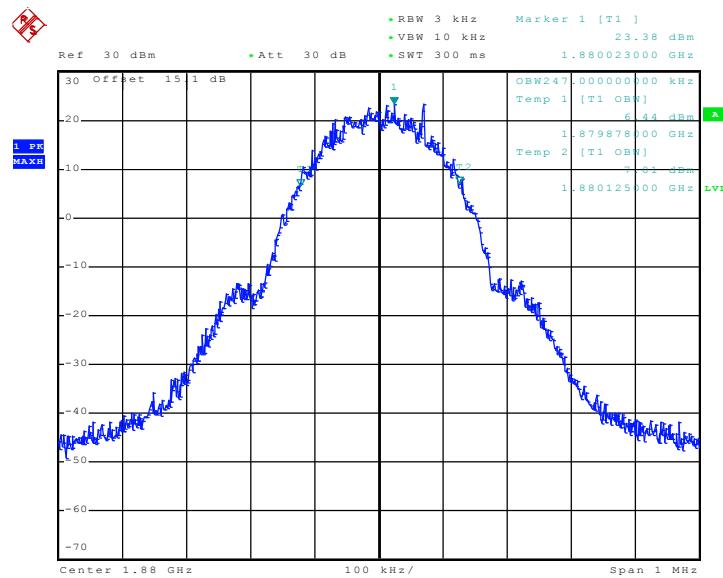
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% and 26 dB occupied bandwidth (BW) of the middle channel for the highest RF powers were measured.
3. The RBW was replaced by 10 kHz, due to the spectrum analyzer IF-Filter including an excess of the limit. A worst case correction factor of $10 \log (1\% \text{ BW}/\text{measurement RBW})$ was implemented.

3.3.4 Test Setup

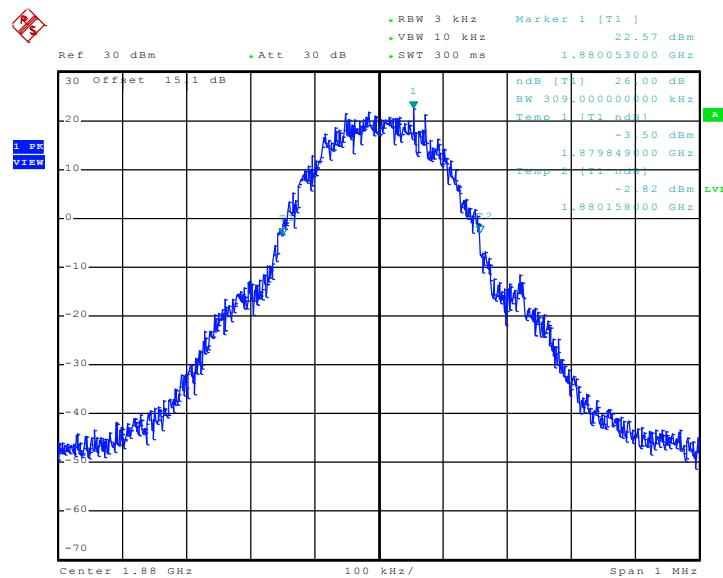


3.3.5 Test Result (Plots) of Occupied Bandwidth

Band :	GSM 1900	Power Stage :	High
Test Mode :	GSM Link		

99% Occupied Bandwidth Plot on Channel 661


Date: 22.JUN.2009 18:42:59

26dB Bandwidth Plot on Channel 661


Date: 22.JUN.2009 18:45:48

3.4 Band Edge Measurement

3.4.1 Description of Band Edge Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

3.4.2 Measuring Instruments

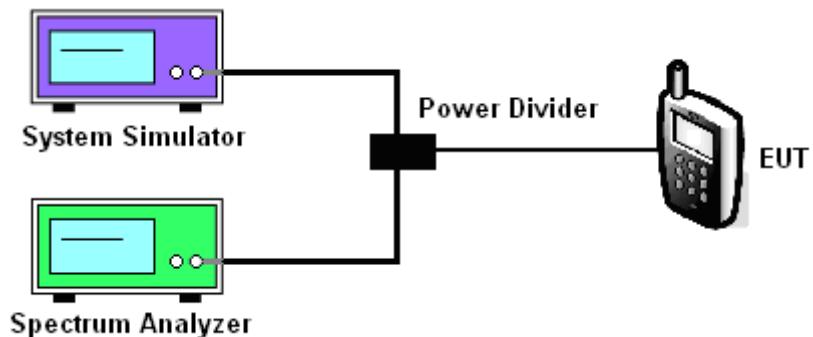
See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100.

3.4.4 Test Setup

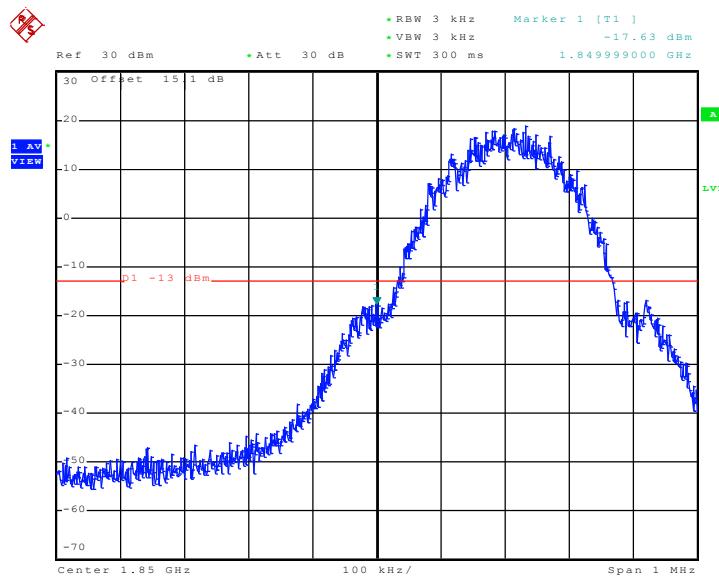
<Conducted Band Edge >



3.4.5 Test Result (Plots) of Conducted Band Edge

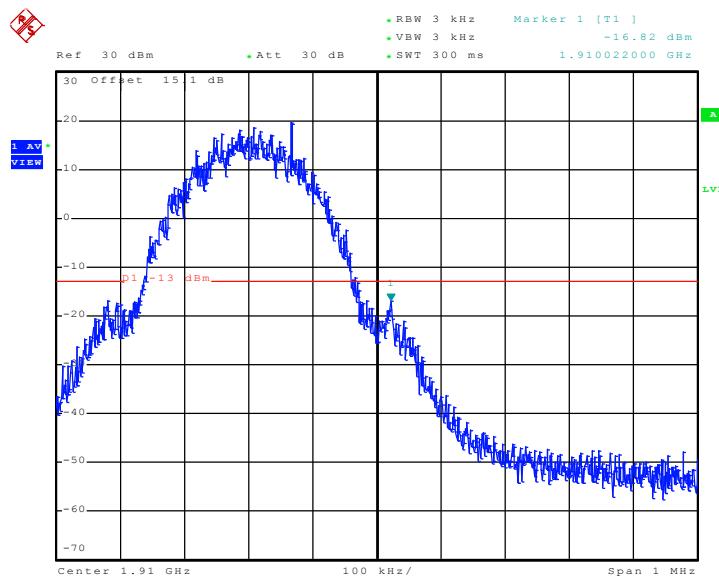
Band :	GSM1900	Power Stage :	High
Test Mode :	GSM Link		

Lower Band Edge Plot on Channel 512



Date: 22.JUN.2009 18:35:38

Higher Band Edge Plot on Channel 810



Date: 22.JUN.2009 18:33:07

3.5 Conducted Emission Measurement

3.5.1 Description of Conducted Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

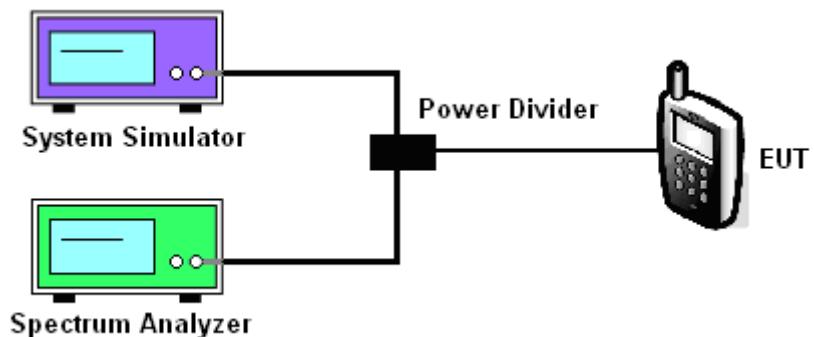
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

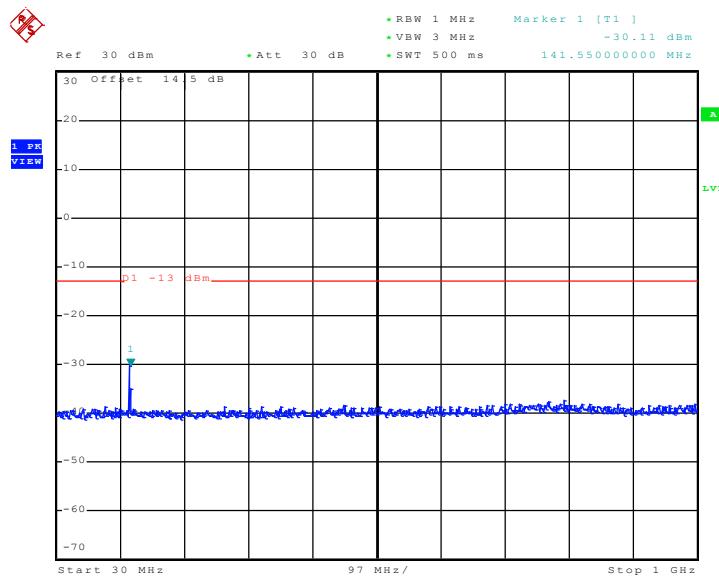
1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

3.5.4 Test Setup

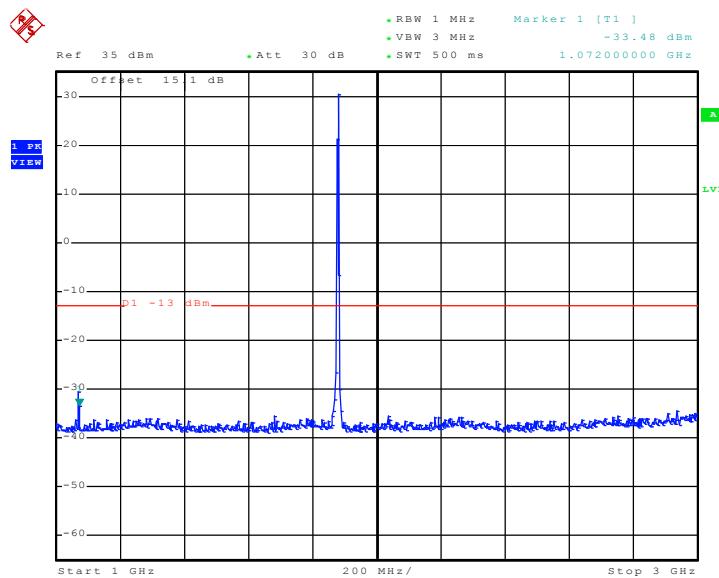


3.5.5 Test Result (Plots) of Conducted Emission

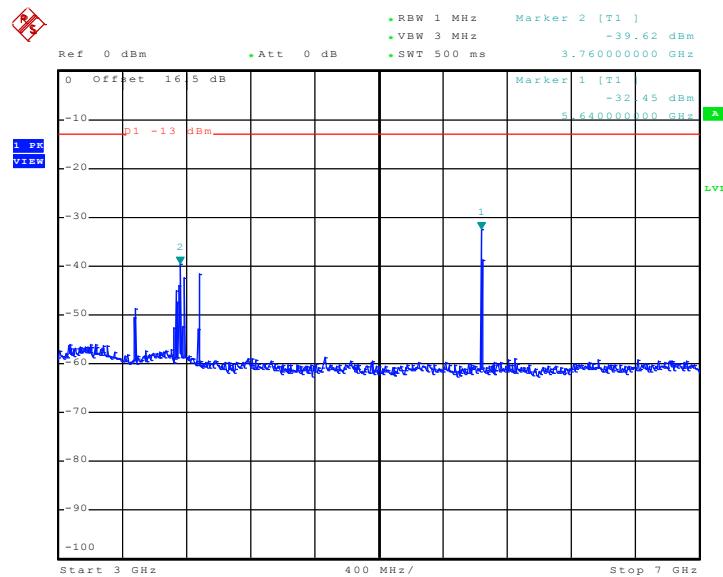
Band :	GSM1900	Channel :	CH661
Test Mode :	GSM Link		

Conducted Emission Plot between 30MHz ~ 1GHz


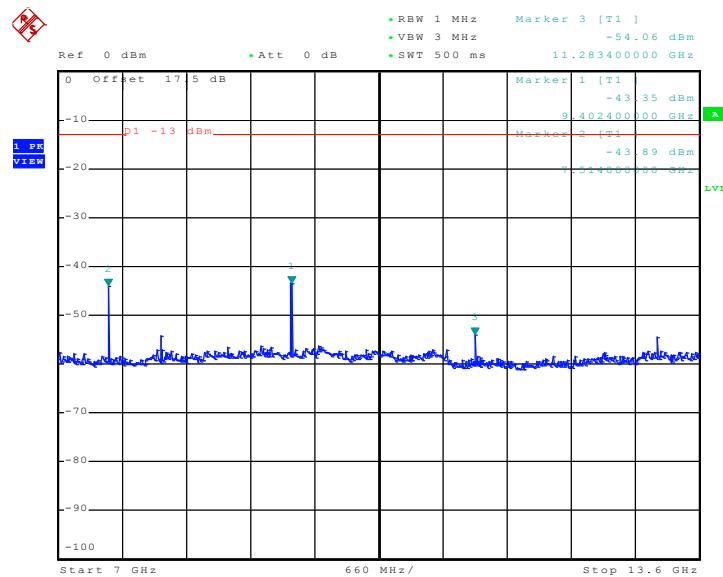
Date: 22.JUN.2009 19:00:45

Conducted Emission Plot between 1GHz ~ 3GHz


Date: 22.JUN.2009 19:04:58

Conducted Emission Plot between 3GHz ~ 7GHz


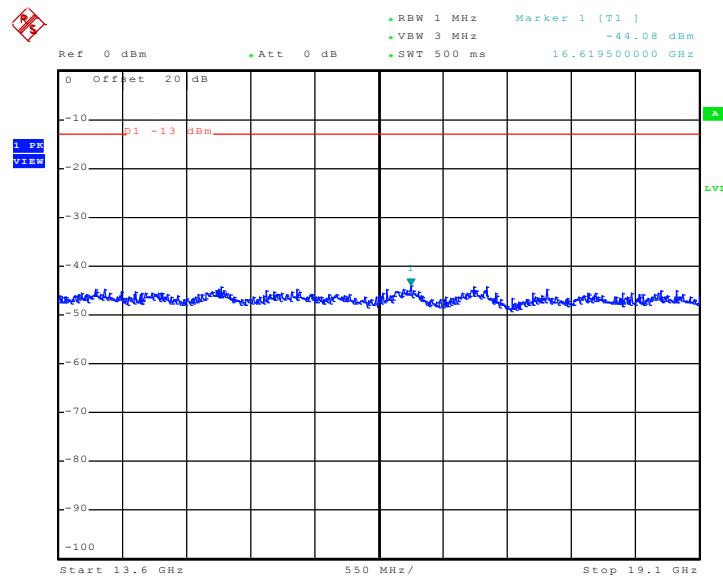
Date: 22.JUN.2009 19:11:22

Conducted Emission Plot between 7GHz ~ 13.6GHz


Date: 22.JUN.2009 19:09:27



Conducted Emission Plot between 13.6GHz ~ 19.1GHz



Date: 22.JUN.2009 19:13:06



3.6 Field Strength of Spurious Radiation Measurement

3.6.1 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 $43 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

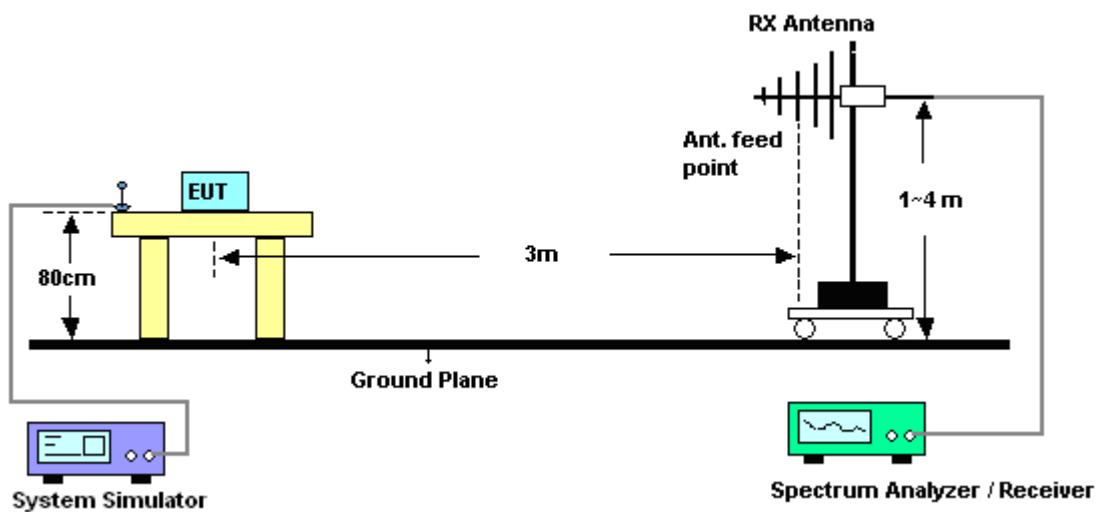
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 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. 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. Emission level (dBm) = output power + substitution Gain.

3.6.4 Test Setup

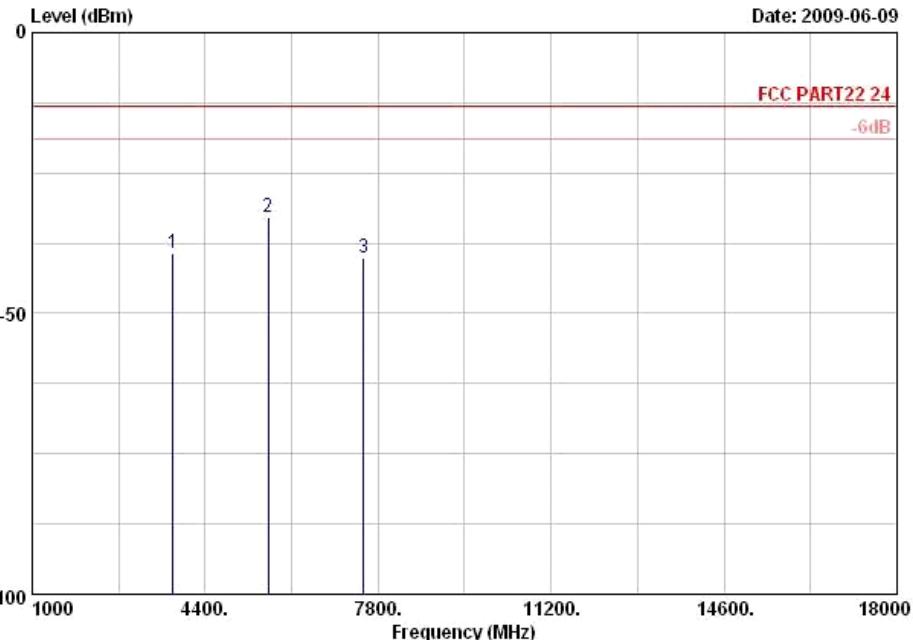




3.6.5 Test Result of Field Strength of Spurious Radiated

Band :	GSM1900	Temperature :	25~26°C						
Test Mode :	GSM Link	Relative Humidity :	43~45%						
Test Engineer :	Andy Yeh	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
<p>Level (dBm)</p> <p>Date: 2009-06-09</p> <p>FCC PART22 24</p> <p>-6dB</p> <p>Frequency (MHz)</p>									
Site : 03CH01-KS Condition: FCC PART22 24 HF EIRP FACTOR-09020 HORIZONTAL									
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading	Power	loss	Gain	(H/V)	
3760	-49.40	-13	-36.40	-63.11	-57.33	0.11	8.04	H	Pass
5640	-38.46	-13	-25.46	-52.87	-47.24	1.22	10.00	H	Pass
7520	-42.83	-13	-29.83	-60.93	-53.63	1.31	12.11	H	Pass



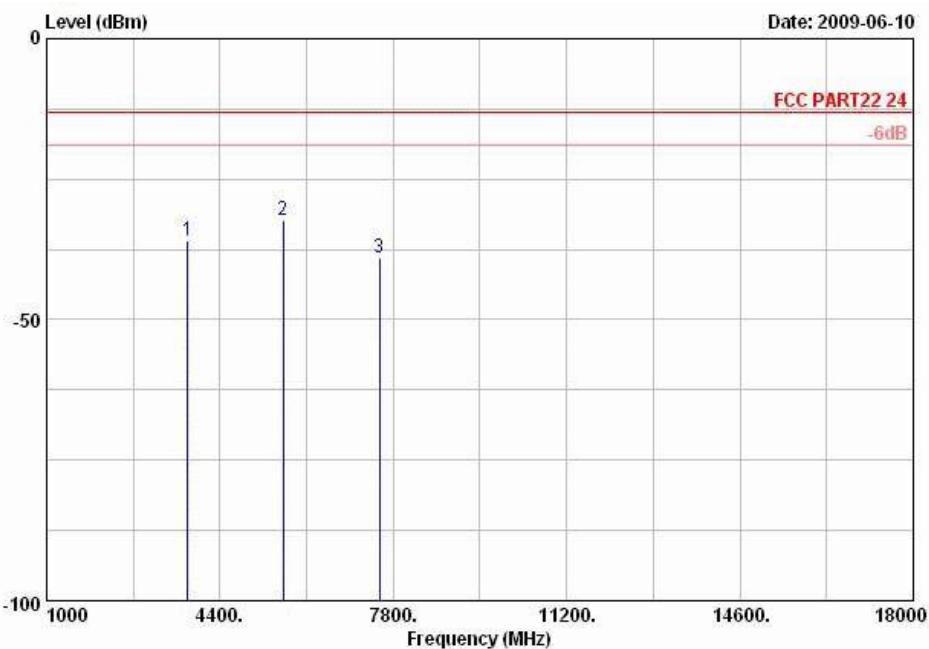
Band :	GSM1900	Temperature :	25~26°C						
Test Mode :	GSM Link	Relative Humidity :	43~45%						
Test Engineer :	Andy Yeh	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
 <p>The figure is a spectral plot with 'Frequency (MHz)' on the x-axis (ranging from 1000 to 18000) and 'Level (dBm)' on the y-axis (ranging from -100 to 0). A red horizontal line at -6dB is labeled 'FCC PART22 24'. Three vertical lines are labeled 1, 2, and 3, representing spurious emissions. Line 1 is at approximately 3760 MHz, line 2 is at approximately 5640 MHz, and line 3 is at approximately 7520 MHz. All three lines are well below the -6dB limit.</p>			Date: 2009-06-09						
Site : 03CH01-KS Condition: FCC PART22 24 HF EIRP FACTOR-09020 VERTICAL									
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-39.27	-13	-26.27	-52.98	-47.20	0.11	8.04	V	Pass
5640	-32.91	-13	-19.91	-53.22	-41.69	1.22	10.00	V	Pass
7520	-40.00	-13	-27.00	-55.7	-23.80	1.31	12.11	V	Pass



Band :	GSM1900	Temperature :	25~26°C						
Test Mode :	GSM + BT Link	Relative Humidity :	43~45%						
Test Engineer :	Andy Yeh	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
<p>Level (dBm)</p> <p>Date: 2009-06-10</p> <p>FCC PART22 24</p> <p>-6dB</p> <p>1000 4400. 7800. 11200. 14600. 18000</p> <p>Frequency (MHz)</p>									
<p>Site : 03CH01-K3 Condition: FCC PART22 24 HF EIRP FACTOR-09020 HORIZONTAL</p>									
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
3760	-47.87	-13	-34.87	-54.40	-55.80	0.11	8.04	H	Pass
5639	-38.61	-13	-25.61	-51.73	-47.39	1.22	10.00	H	Pass
7520	-41.48	-13	-28.48	-56.74	-52.28	1.31	12.11	H	Pass



Band :	GSM1900	Temperature :	25~26°C
Test Mode :	GSM + BT Link	Relative Humidity :	43~45%
Test Engineer :	Andy Yeh	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition: FCC PART22 24 HF EIRP FACTOR-09020 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA (dBm)	S.G. (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result	
									Reading	Power (dBm)
3760	-38.41	-13	-25.41	-49.71	-46.34	0.11	8.04	V	Pass	
5640	-34.43	-13	-21.43	-46.62	-43.21	1.22	10.00	V	Pass	
7520	-42.03	-13	-29.03	-57.17	-23.80	1.31	12.11	V	Pass	

3.7 Frequency Stability Measurement

3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

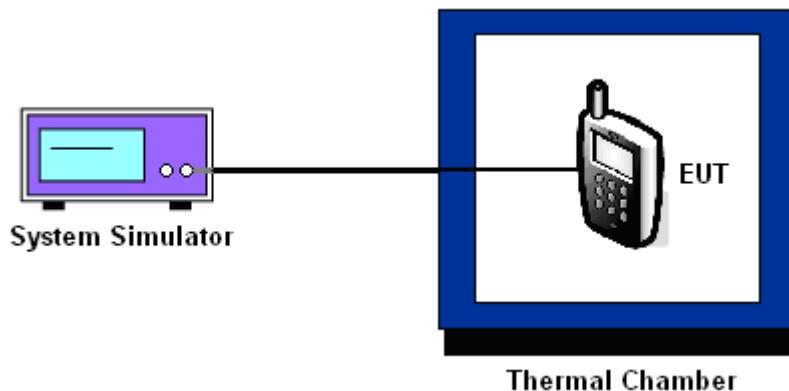
3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. If the EUT can not be turned on at -30°C , the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.

3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at $25\pm 5^\circ\text{C}$ and connected with the base station.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.7.5 Test Setup





3.7.6 Test Result of Temperature Variation

Band :	GSM 1900	Channel :	661
Limit (ppm) :	2.5		

Temperature (°C)	GSM		Result
	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-30	-0.02	PASS
-20	-69	-0.04	
-10	59	0.03	
0	66	0.03	
10	-40	-0.02	
20	53	0.03	
30	63	0.03	
40	61	0.03	
50	-80	-0.04	

3.7.7 Test Result of Voltage Variation

Band & Channel	Mode	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
GSM 1900 CH661	GSM	3.7	67	0.04	2.5	PASS
		BEP	-47	-0.02		
		4.2	45	0.02		

Note:

1. Normal Voltage = 3.7V.
2. Battery End Point (BEP) = 3.5 V.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 08, 2008	Dec. 07, 2009	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-930701	N/A	Dec. 15, 2008	Dec. 14, 2009	Conducted (TH01-KS)
Spectrum Analyzer	R&S	ESCI	100534	9kHz – 2.75GHz	Dec. 08, 2008	Dec. 07, 2009	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 08, 2008	Dec. 07, 2009	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	75959	1GHz~18GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH01-KS)
Amplifier	Wireless	FPA6592G	600006	30MHz~2GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH01-KS)
Signal Generator	R&S	SMR40	100455	10MHz~40GHz	Aug. 29, 2007	Aug. 28, 2009	Radiation (03CH01-KS)
System Simulator	R&S	CMU200	837587/066	Full-Band/BT	Jan. 08, 2009	Jan. 07, 2011	Radiation (03CH01-KS)



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-shaped	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		$u(x_i)$	Ci	$Ci * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	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=20log(1- $\Gamma 1 * \Gamma 2$)	+0.34/-0.35	U-shaped	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				



6 Certification of TAF Accreditation



Certificate No. : L1190-090417

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,
Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria : ISO/IEC 17025:2005
Accreditation Number : 1190
Originally Accredited : December 15, 2003
Effective Period : January 10, 2007 to January 09, 2010
Accredited Scope : Testing Field, see described in the Appendix
Specific Accreditation Program : Accreditation Program for Designated Testing Laboratory
for Commodities Inspection
Accreditation Program for Telecommunication Equipment
Testing Laboratory
Accreditation Program for BSMI Mutual Recognition
Arrangement with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : April 17, 2009

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The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



Appendix A. Photographs of EUT

Please refer to Sporton report number EP8D2005 as below.