



# FCC RF Test Report

**APPLICANT** : Motorola Mobility, LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : 10059  
**FCC ID** : IHDT56WA5  
**STANDARD** : FCC 47 CFR Part 2, 22(H), 24(E)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

This is a variant report which is only valid together with the original test report. The product was received on Feb. 03, 2017 and testing was completed on Mar. 10, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-D-2010 and has been in 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: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



## SPORTON INTERNATIONAL INC.

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FCC ID : IHDT56WA5

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Report Issued Date : Mar. 20, 2017

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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG720310-06A	Rev. 01	Initial issue of report	Mar. 20, 2017



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
4.4	§22.913(a)(2)	Effective Radiated Power	< 7 Watts	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
4.5	§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 23.06 dB at 1648.000 MHz



# 1 General Description

## 1.1 Applicant

**Motorola Mobility, LLC**

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

## 1.2 Manufacturer

**Motorola Mobility, LLC**

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

## 1.3 Product Feature of Equipment Under Test

Product Feature	
<b>Equipment</b>	Mobile Cellular Phone
<b>Brand Name</b>	Motorola
<b>Model Name</b>	10059
<b>FCC ID</b>	IHDT56WA5
<b>EUT supports Radios application</b>	GSM/EGPRS/WCDMA/HSPA/LTE/NFC/FM WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth BR/EDR/LE
<b>HW Version</b>	DVT2
<b>EUT Stage</b>	Identical Prototype

**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. This is a variant report. All the test cases were performed on original report which can be referred to Sporton Report Number FG720310-04A.



Accessory List	
AC Adapter	Brand Name : Motorola
	Model Name : SPN5970A
Battery 1	Brand Name : Motorola
	Model Name : SNN5983A
Battery 2	Brand Name : Motorola
	Model Name : SNN5985A
Earphone	Brand Name : Motorola
	Model Name : SH38C16618
USB Cable	Brand Name : Motorola
	Model Name : SKN6473A

### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	<b>GSM/GPRS/EDGE:</b> 850: 824.2 MHz ~ 848.8 MHz 1900: 1850.2 MHz ~ 1909.8MHz <b>WCDMA:</b> Band V: 826.4 MHz ~ 846.6 MHz Band II: 1852.4 MHz ~ 1907.6 MHz
<b>Rx Frequency</b>	<b>GSM/GPRS/EDGE:</b> 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 MHz <b>WCDMA:</b> Band V: 871.4 MHz ~ 891.6 MHz Band II: 1932.4 MHz ~ 1987.6 MHz
<b>Maximum Output Power to Antenna</b>	<b>GSM/GPRS/EDGE:</b> 850: 32.65 dBm 1900: 28.96 dBm <b>WCDMA:</b> Band V: 22.66 dBm Band II: 23.08 dBm
<b>Antenna Type</b>	Coupling type (LDS) Antenna
<b>Antenna Gain</b>	Cellular Band: -2.30 dBi PCS Band: -1.00 dBi
<b>Type of Modulation</b>	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: BPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink)



### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

### 1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	Frequency Range (MHz)	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	824.2 ~848.8	GSM850 GPRS class 8	GMSK	0.4688	-	-
Part 22	824.2 ~848.8	GSM850 EDGE class 8	8PSK	0.1102	-	-
Part 22	826.4 ~846.6	WCDMA Band V RMC 12.2Kbps	BPSK	0.0794	-	-
Part 24	1850.2 ~1909.8	GSM1900 GPRS class 8	GMSK	0.8974	-	-
Part 24	1850.2 ~1909.8	GSM1900 EDGE class 8	8PSK	0.2805	-	-
Part 24	1852.4 ~ 1907.6	WCDMA Band II RMC 12.2Kbps	BPSK	0.2218	-	-

### 1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	TH05-HY	03CH07-HY



## 1.8 Applicable Standards

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

- ♦ 47 CFR Part 2, 22(H), 24(E)
- ♦ ANSI / TIA / EIA-603-D-2010
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

### **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, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V.
2. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II.

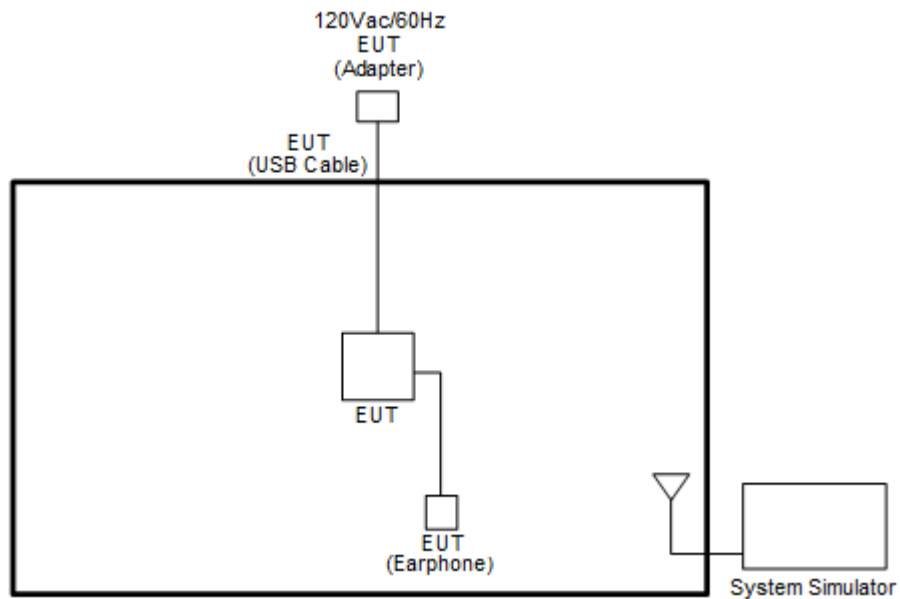
All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

Test Modes	
Band	Radiated TCs
GSM 850	<ul style="list-style-type: none"><li>■ GPRS class 8 Link</li><li>■ EDGE class 8 Link</li></ul>
GSM 1900	<ul style="list-style-type: none"><li>■ GPRS class 8 Link</li><li>■ EDGE class 8 Link</li></ul>
WCDMA Band V	<ul style="list-style-type: none"><li>■ RMC 12.2Kbps Link</li></ul>
WCDMA Band II	<ul style="list-style-type: none"><li>■ RMC 12.2Kbps Link</li></ul>

**Remark:** All the radiated test cases were performance with Battery 1.

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration

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

## 2.4 Frequency List of Low/Middle/High Channels

Frequency List				
Band	Channel / Frequency (MHz)	Lowest	Middle	Highest
GSM850	Channel	128	189	-
	Frequency	824.2	836.4	-
WCDMA Band V	Channel	4132	-	-
	Frequency	826.4	-	-
GSM1900	Channel	512	661	-
	Frequency	1850.2	1880.0	-
WCDMA Band II	Channel	-	9400	9538
	Frequency	-	1880.0	1907.6

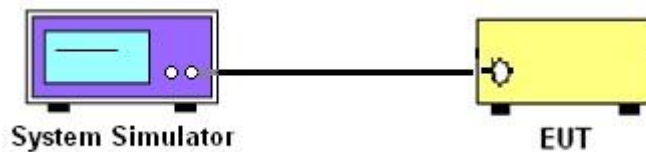
### 3 Conducted Test Result

#### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.2 Test Setup

##### 3.2.1 Conducted Output Power



#### 3.3 Test Result of Conducted Test

Please refer to Appendix A.

#### 3.4 Conducted Output Power

##### 3.4.1 Description of the Conducted Output Power

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

##### 3.4.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

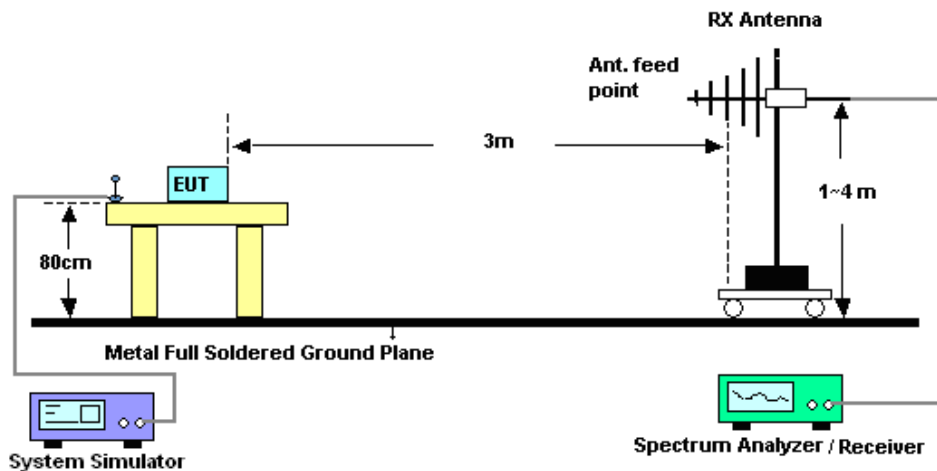
## 4 Radiated Test Items

### 4.1 Measuring Instruments

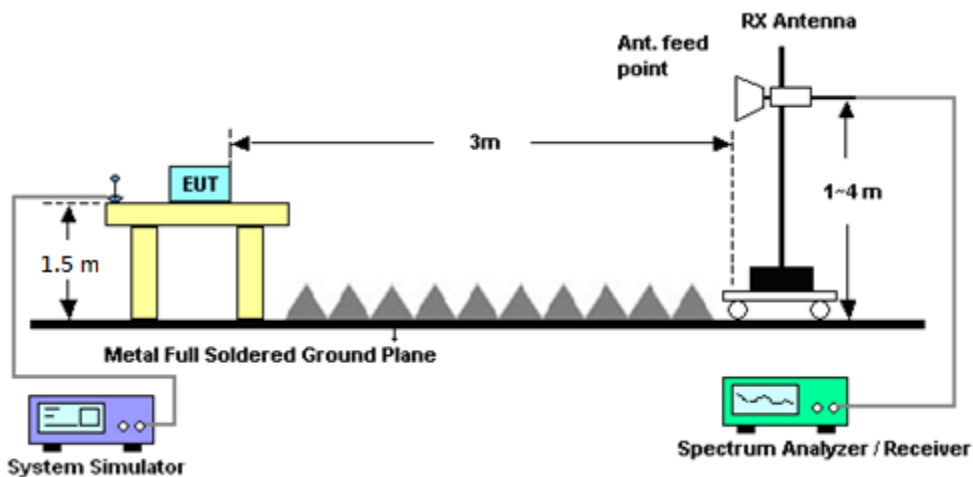
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test from 30MHz to 1GHz



#### 4.2.2 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

Please refer to Appendix B.



## 4.4 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

### 4.4.1 Description of the ERP/EIRP Measurement

The substitution method, in ANSI / TIA / EIA-603-D-2010, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. The ERP of mobile transmitters must not exceed 7 Watts (Cellular Band) and the EIRP of mobile transmitters are limited to 2 Watts (PCS Band).

### 4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-D-2010 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform (0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz) in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-D. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor,  $EIRP = LVL + \text{Correction factor}$  and  $ERP = EIRP - 2.15$ . Take the record of the output power at substitution antenna.



	GSM/GPRS/EDGE	WCDMA/HSPA
SPAN	500kHz	10MHz
RBW	10kHz	100kHz
VBW	30kHz	300kHz
Detector	RMS	RMS
Trace	Average	Average
Average Type	Power	Power
Sweep Count	100	100



## 4.5 Field Strength of Spurious Radiation Measurement

### 4.5.1 Description of Field Strength of Spurious Radiated Measurement

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.

### 4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.8 and ANSI / TIA-603-D-2010 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11.  $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
12.  $ERP (dBm) = EIRP - 2.15$
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Jun. 27, 2016	Feb. 21, 2017	Jun. 26, 2017	Conducted (TH03-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35419&03	30MHz to 1GHz	Jan. 07, 2017	Mar. 02, 2017 ~ Mar. 10, 2017	Jan. 06, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 19, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Aug. 18, 2017	Radiation (03CH07-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY541300 85	20Hz ~ 8.4GHz	Oct. 26, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Oct. 25, 2017	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2015	Mar. 02, 2017 ~ Mar. 10, 2017	Sep. 01, 2017	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz ~ 18GHz	Apr. 15, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Apr. 14, 2017	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	Mar. 18, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Mar. 17, 2017	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY523502 76	3Hz~44GHz	Mar. 21, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Mar. 20, 2017	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Mar. 02, 2017 ~ Mar. 10, 2017	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Mar. 02, 2017 ~ Mar. 10, 2017	N/A	Radiation (03CH07-HY)
Preamplifier	MITEQ	JS44-180040 00-33-8P	1840917	18GHz ~ 40GHz	Jun. 14, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Jun. 13, 2017	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Nov. 08, 2016	Mar. 02, 2017 ~ Mar. 10, 2017	Nov. 07, 2017	Radiation (03CH07-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 04, 2017	Mar. 02, 2017 ~ Mar. 10, 2017	Jan. 03, 2018	Radiation (03CH07-HY)



## 6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.7
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.5
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### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.2
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## Appendix A. Test Results of Conducted Test

### Conducted Output Power(Average power)

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	32.62	32.63	32.60	28.92	28.95	28.85
GPRS class 8	<b>32.65</b>	32.64	32.62	28.93	<b>28.96</b>	28.88
GPRS class 10	29.14	29.16	29.27	25.71	25.86	25.63
GPRS class 11	27.41	27.40	27.41	23.91	23.94	23.78
GPRS class 12	25.90	25.93	25.88	22.58	22.59	22.50
EGPRS class 8	26.21	<b>26.24</b>	26.23	24.53	<b>24.78</b>	24.61
EGPRS class 10	26.13	26.09	26.14	24.50	24.56	24.52
EGPRS class 11	24.73	24.72	24.69	23.03	23.19	22.98
EGPRS class 12	23.29	23.31	23.28	21.65	21.79	21.56

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	<b>22.66</b>	22.58	22.62	23.02	<b>23.08</b>	22.98
HSDPA Subtest-1	21.71	21.62	21.68	22.05	22.14	22.00
HSDPA Subtest-2	21.69	21.63	21.71	22.02	22.16	21.96
HSDPA Subtest-3	21.25	21.16	21.20	21.53	21.68	21.49
HSDPA Subtest-4	21.24	21.18	21.19	21.52	21.71	21.51
HSUPA Subtest-1	21.67	21.56	21.61	22.01	22.11	21.95
HSUPA Subtest-2	19.75	19.67	19.74	20.03	20.10	19.97
HSUPA Subtest-3	20.66	20.56	20.59	21.09	21.10	20.99
HSUPA Subtest-4	19.73	19.70	19.75	20.09	20.11	20.01
HSUPA Subtest-5	21.75	21.66	21.68	22.05	22.19	22.03



## Appendix B. Test Results of ERP/EIRP and Radiated Test

### ERP/EIRP

Channel	Mode	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Middle	GSM850 GPRS class 8	25.24	0.3342	26.71	0.4688
Middle	GSM850 EDGE class 8	19.38	0.0867	20.42	0.1102
Lowest	WCDMA Band V AMR 12.2Kbps	17.91	0.0618	19.00	0.0794
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Middle	GSM1900 GPRS class 8	29.53	0.8974	29.12	0.8166
Middle	GSM1900 EDGE class 8	24.48	0.2805	23.99	0.2506
Highest	WCDMA Band II AMR 12.2Kbps	23.46	0.2218	22.68	0.1854
Limit	EIRP < 2W	Result		PASS	



## Radiated Spurious Emission

GSM850 (GPRS class 8)									
Channel	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)
Lowest	1648	-39.93	-13	-26.93	-27.5	-41.69	0.98	4.89	H
	2472	-46.86	-13	-33.86	-39.84	-48.74	1.28	5.32	H
	3296	-60.95	-13	-47.95	-56.06	-64.36	1.54	7.10	H
	4120	-60.08	-13	-47.08	-55.68	-64.72	1.83	8.62	H
	1648	-36.06	-13	-23.06	-24.07	-37.82	0.98	4.89	V
	2472	-42.58	-13	-29.58	-36.01	-44.46	1.28	5.32	V
	3296	-60.84	-13	-47.84	-56.27	-64.25	1.54	7.10	V
	4120	-61.07	-13	-48.07	-56.83	-65.71	1.83	8.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM850 (EDGE class 8)									
Channel	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)
Middle	1672	-47.54	-13	-34.54	-35.41	-49.22	0.99	4.82	H
	2512	-58.11	-13	-45.11	-51.25	-60.08	1.29	5.41	H
	3344	-65.24	-13	-52.24	-60.53	-68.85	1.56	7.31	H
	1672	-45.78	-13	-32.78	-34.14	-47.46	0.99	4.82	V
	2512	-56.72	-13	-43.72	-50.38	-58.69	1.29	5.41	V
	3344	-65.73	-13	-52.73	-61.22	-69.34	1.56	7.31	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GSM1900 (GPRS class 8)									
Channel	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)
Middle	3762	-50.28	-13	-37.28	-45.78	-56.91	1.69	8.31	H
	5640	-53.48	-13	-40.48	-56.3	-60.53	2.71	9.76	H
	11278	-49.27	-13	-36.27	-60.81	-58.97	2.68	12.39	H
	3762	-47.72	-13	-34.72	-43.23	-54.35	1.69	8.31	V
	5640	-55.64	-13	-42.64	-58.48	-62.69	2.71	9.76	V
	11278	-45.26	-13	-32.26	-56.55	-54.96	2.68	12.39	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



GSM1900 (EDGE class 8)									
Channel	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)
Lowest	3702	-51.34	-13	-38.34	-46.89	-57.91	1.67	8.24	H
	5550	-55.97	-13	-42.97	-58.42	-63.04	2.65	9.72	H
	7410	-58.27	-13	-45.27	-62.2	-67.43	2.46	11.62	H
	3702	-46.84	-13	-33.84	-42.39	-53.41	1.67	8.24	V
	5550	-53.27	-13	-40.27	-55.65	-60.34	2.65	9.72	V
	7410	-56.33	-13	-43.33	-60.45	-65.49	2.46	11.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band V (RMC 12.2Kbps)									
Channel	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)
Lowest	1648	-55.76	-13	-42.76	-43.32	-57.52	0.98	4.89	H
	2480	-66.34	-13	-53.34	-59.35	-68.25	1.28	5.34	H
	3296	-65.78	-13	-52.78	-60.85	-69.19	1.54	7.10	H
	1648	-53.96	-13	-40.96	-41.97	-55.72	0.98	4.89	V
	2480	-64.72	-13	-51.72	-58.17	-66.63	1.28	5.34	V
	3296	-66.08	-13	-53.08	-61.44	-69.49	1.54	7.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band II (RMC 12.2Kbps)									
Channel	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)
Middle	3762	-65.17	-13	-52.17	-60.68	-71.8	1.69	8.31	H
	5640	-63.44	-13	-50.44	-66.31	-70.49	2.71	9.76	H
	11278	-55.78	-13	-42.78	-67.34	-65.48	2.68	12.39	H
	3762	-65.38	-13	-52.38	-60.92	-72.01	1.69	8.31	V
	5640	-63.16	-13	-50.16	-66	-70.21	2.71	9.76	V
	11278	-55.06	-13	-42.06	-66.54	-64.76	2.68	12.39	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



## **Appendix C. Original Report**

Please refer to Sporton report number FG720310-04A.