



Variant FCC RF Test Report

APPLICANT : TCT Mobile Limited
EQUIPMENT : Tablet PC
BRAND NAME : ALCATEL
MODEL NAME : ONE TOUCH EVO 7HD / ONE TOUCH E710
(Module: one touch M600Y)
FCC ID : RAD402
STANDARD : FCC 47 CFR Part 2, 22(H), 24(E)
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was installed into Tablet PC (Brand Name: ALCATEL, Model Name: one touch M600Y, FCC ID: RAD383) during test.

This is a variant report which is only valid together with the original report. The product was received on Apr. 22, 2013 and completely tested on Jun. 20, 2013. We, SPORTON INTERNATIONAL (SHENZHEN) 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 (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai / Manager



SPORTON INTERNATIONAL (SHENZHEN) INC.

No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C.



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG342211-01	Rev. 01	This is a variant report for ONE TOUCH EVO 7HD / ONE TOUCH E710; (Module: one touch M600Y). The product equality declaration could be referred to Appendix C. All test cases were performed on original report which can be referred to SPORTON Report Number FG342209 (FCC ID: RAD383). Based on the original test report, only ERP/EIRP and Radiated Spurious Emission were verified for the difference.	Jun. 21, 2013



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§22.913(a)(2)	Effective Radiated Power	< 7 Watts	PASS	-
3.1	§24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
3.2	§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiated	< $43+10\log_{10}(P[\text{Watts}])$	PASS	Under limit 15.31 dB at 1672.000 MHz



1 General Description

1.1 Applicant

TCT Mobile Limited

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

1.2 Manufacturer

TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED

70 Huifeng 4rd., ZhongKai Hi-tech Development District, Huizhou, Guangdong 516006 P.R.China (TCL Mobile Communication Co., LTD. Huizhou)

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	ALCATEL
Model Name	ONE TOUCH EVO 7HD / ONE TOUCH E710 (Module: one touch M600Y)
FCC ID	RAD402
EUT supports Radios application	GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only)/ WLAN 11bgn/Bluetooth EDR
HW Version	JUPITER_MAIN_V6.0
SW Version	UPDATA_111_104
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	GPRS850: 824.2 MHz ~ 848.8 MHz GPRS1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz
Rx Frequency	GPRS850: 869.2 MHz ~ 893.8 MHz GPRS1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz
Antenna Type	Monopole Antenna
Type of Modulation	GPRS: GMSK EDGE: 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM (Downlink Only)

1.5 Maximum ERP/EIRP Power

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)
Part 22	GPRS850 GPRS 8	GMSK	0.0351
Part 22	GPRS850 EDGE 8	8PSK	0.0094
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.0052
Part 24	GPRS1900 GPRS 8	GMSK	0.0469
Part 24	GPRS1900 EDGE 8	8PSK	0.0191
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.0187

1.6 Testing Site

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.		
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755-3320-2398		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	TH01-SZ	03CH01-SZ	831040/4086F-1



1.7 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
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v01

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

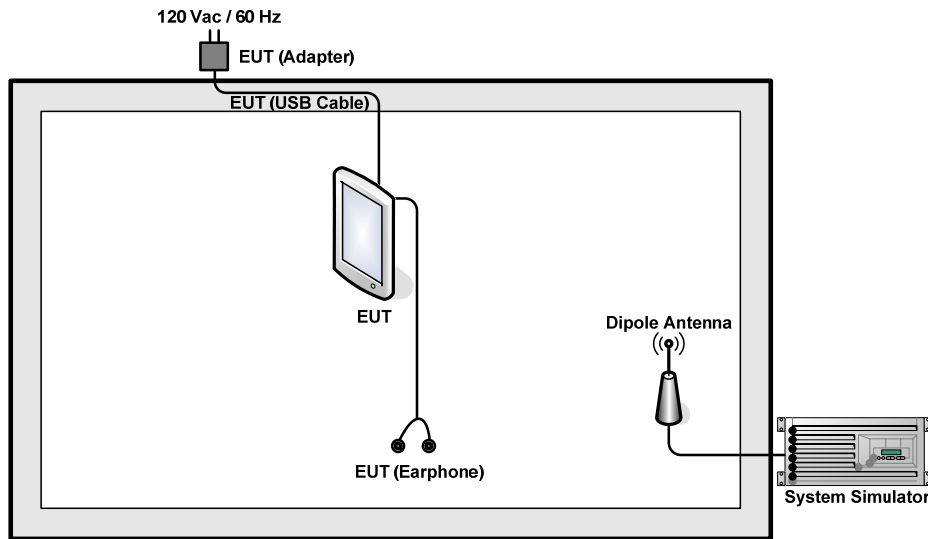
During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (Y plane for 22H and Z plane for 24E).

Frequency range investigated for radiated emission is as follows:

1. 30 MHz to 9000 MHz for GPRS850 and WCDMA Band V.
2. 30 MHz to 19000 MHz for GPRS1900 and WCDMA Band II.

Test Modes		
Band	Radiated TCs	Conducted TCs
GPRS850	<ul style="list-style-type: none"> ■ GPRS 8 Link ■ EDGE 8 Link 	<ul style="list-style-type: none"> ■ GPRS 8 Link ■ EDGE 8 Link
GPRS1900	<ul style="list-style-type: none"> ■ GPRS 8 Link ■ EDGE 8 Link 	<ul style="list-style-type: none"> ■ GPRS 8 Link ■ EDGE 8 Link
WCDMA Band V	<ul style="list-style-type: none"> ■ RMC 12.2Kbps Link 	<ul style="list-style-type: none"> ■ RMC 12.2Kbps Link
WCDMA Band II	<ul style="list-style-type: none"> ■ RMC 12.2Kbps Link 	<ul style="list-style-type: none"> ■ RMC 12.2Kbps Link

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Agilent	E5515C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$



3 Test Result

3.1 Effective Radiated Power/ Effective Isotropic Radiated Power Measurement

3.1.1 Description of the Effective Radiated Power/ Effective Isotropic Radiated Power Measurement

The substitution method, in ANSI / TIA / EIA-603-C-2004, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v01. The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts.

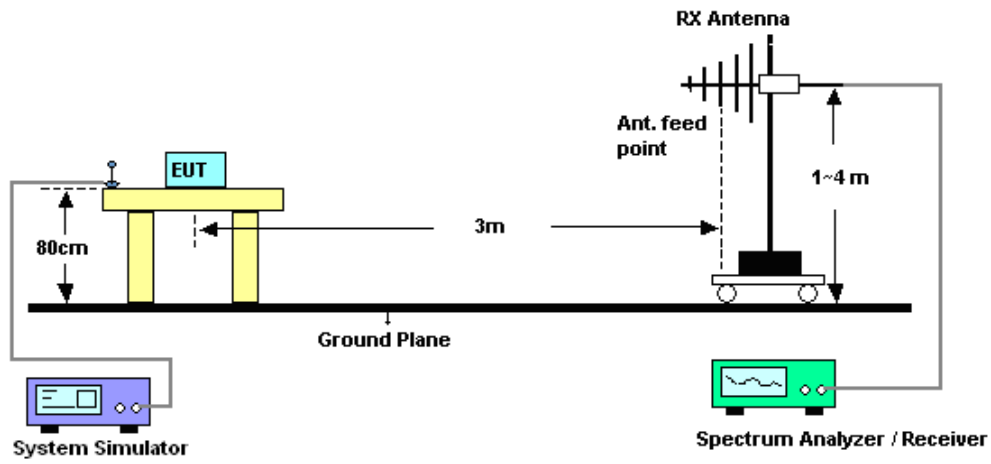
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. GSM operating modes: Set RBW= 1MHz, VBW= 3MHz, RMS detector over burst;
UMTS operating modes: Set RBW= 100 KHz, VBW= 300 KHz, RMS detector over frame, and use channel power option with bandwidth=5MHz, per section 4.0 of KDB 971168 D01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$
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.

3.1.4 Test Setup





3.1.5 Test Result of ERP

Cellular Band					
Modes	Channel	Frequency (MHz)	ERP (dBm)	ERP (Watts)	H/V
GPRS850 (GPRS 8)	128	824.2	14.42	0.0277	H
GPRS850 (GPRS 8)	189	836.4	14.78	0.0301	H
GPRS850 (GPRS 8)	251	848.8	15.45	0.0351	H
GPRS850 (GPRS 8)	128	824.2	14.06	0.0255	V
GPRS850 (GPRS 8)	189	836.4	14.25	0.0266	V
GPRS850 (GPRS 8)	251	848.8	14.92	0.0310	V
GPRS850 (EDGE 8)	128	824.2	8.72	0.0074	H
GPRS850 (EDGE 8)	189	836.4	9.05	0.0080	H
GPRS850 (EDGE 8)	251	848.8	9.73	0.0094	H
GPRS850 (EDGE 8)	128	824.2	8.35	0.0068	V
GPRS850 (EDGE 8)	189	836.4	8.55	0.0072	V
GPRS850 (EDGE 8)	251	848.8	9.19	0.0083	V
WCDMA Band V (RMC 12.2Kbps)	4132	826.4	5.69	0.0037	H
WCDMA Band V (RMC 12.2Kbps)	4182	836.4	7.16	0.0052	H
WCDMA Band V (RMC 12.2Kbps)	4233	846.6	6.65	0.0046	H
WCDMA Band V (RMC 12.2Kbps)	4132	826.4	5.54	0.0036	V
WCDMA Band V (RMC 12.2Kbps)	4182	836.4	6.47	0.0044	V
WCDMA Band V (RMC 12.2Kbps)	4233	846.6	5.99	0.0040	V



3.1.6 Test Result of EIRP

PCS Band					
Modes	Channel	Frequency (MHz)	EIRP (dBm)	EIRP (Watts)	H/V
GPRS1900 (GPRS 8)	512	1850.2	14.12	0.0258	H
GPRS1900 (GPRS 8)	661	1880	13.21	0.0209	H
GPRS1900 (GPRS 8)	810	1909.8	13.61	0.0230	H
GPRS1900 (GPRS 8)	512	1850.2	16.46	0.0443	V
GPRS1900 (GPRS 8)	661	1880	16.23	0.0420	V
GPRS1900 (GPRS 8)	810	1909.8	16.71	0.0469	V
GPRS1900 (EDGE 8)	512	1850.2	9.87	0.0097	H
GPRS1900 (EDGE 8)	661	1880	9.22	0.0084	H
GPRS1900 (EDGE 8)	810	1909.8	9.86	0.0097	H
GPRS1900 (EDGE 8)	512	1850.2	12.48	0.0177	V
GPRS1900 (EDGE 8)	661	1880	12.15	0.0164	V
GPRS1900 (EDGE 8)	810	1909.8	12.81	0.0191	V
WCDMA Band II (RMC 12.2Kbps)	9262	1852.4	10.32	0.0108	H
WCDMA Band II (RMC 12.2Kbps)	9400	1880	7.54	0.0057	H
WCDMA Band II (RMC 12.2Kbps)	9538	1907.6	9.56	0.0090	H
WCDMA Band II (RMC 12.2Kbps)	9262	1852.4	12.71	0.0187	V
WCDMA Band II (RMC 12.2Kbps)	9400	1880	10.12	0.0103	V
WCDMA Band II (RMC 12.2Kbps)	9538	1907.6	11.80	0.0151	V



3.2 Field Strength of Spurious Radiated Measurement

3.2.1 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.

3.2.2 Measuring Instruments

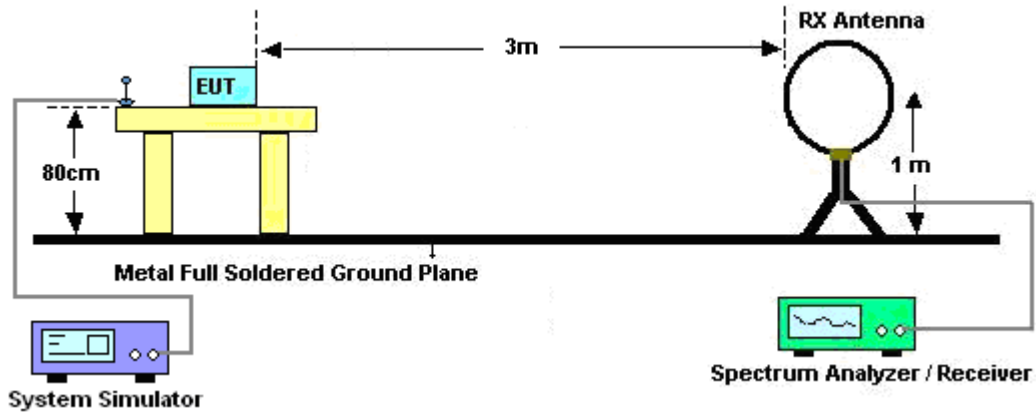
See list of measuring instruments of this test report.

3.2.3 Test Procedures

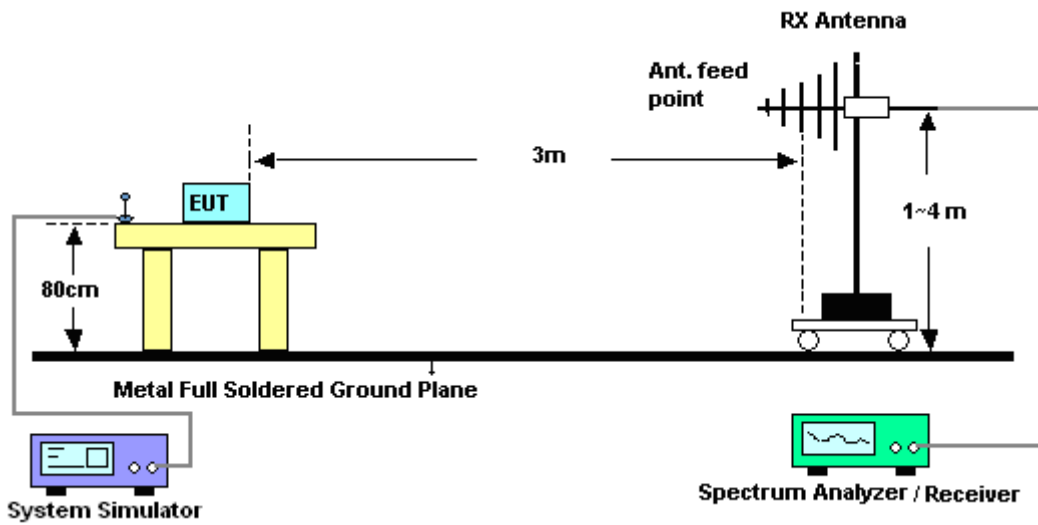
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving 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, 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. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13\text{dBm}$.
12. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
13. $\text{ERP (dBm)} = \text{EIRP} - 2.15$

3.2.4 Test Setup

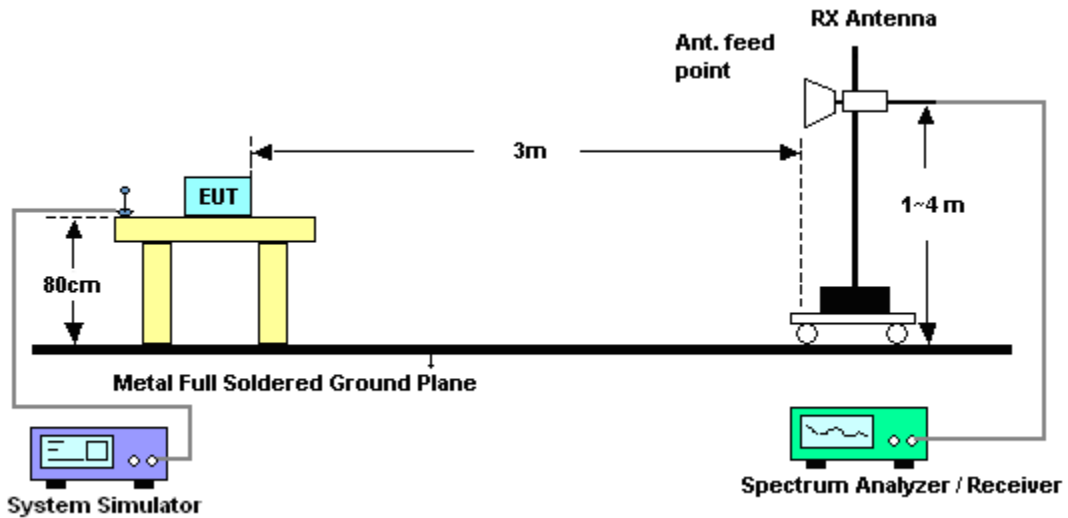
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



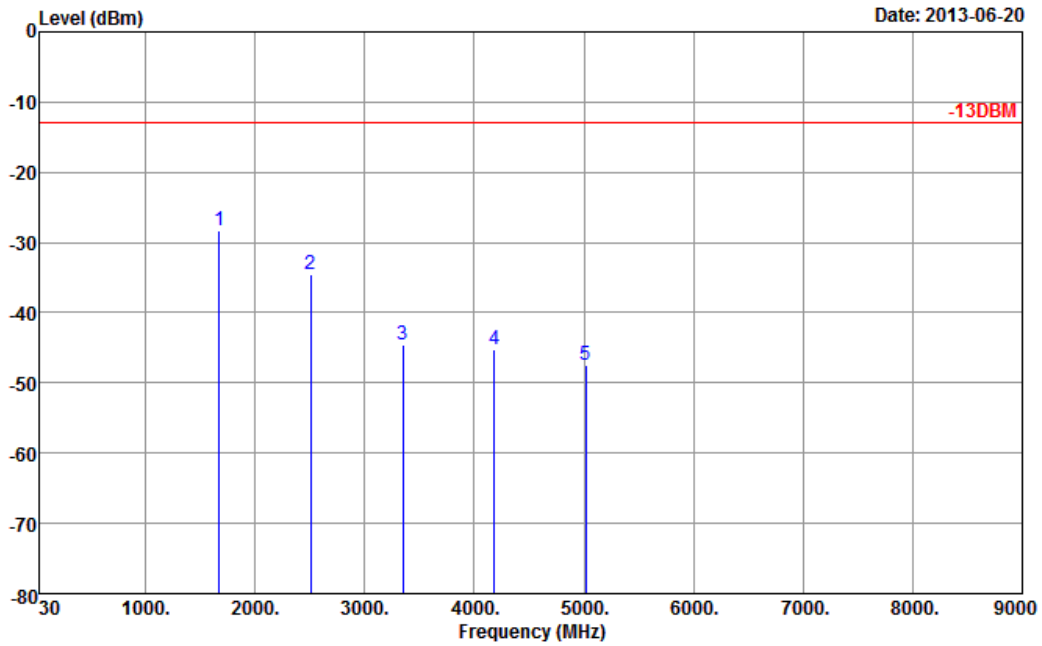
3.2.5 Test Results of Radiated Emissions (9 KHz ~ 30 MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.2.6 Test Result of Field Strength of Spurious Radiated

Band :	GPRS850	Temperature :	24~25°C
Test Mode :	GPRS 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

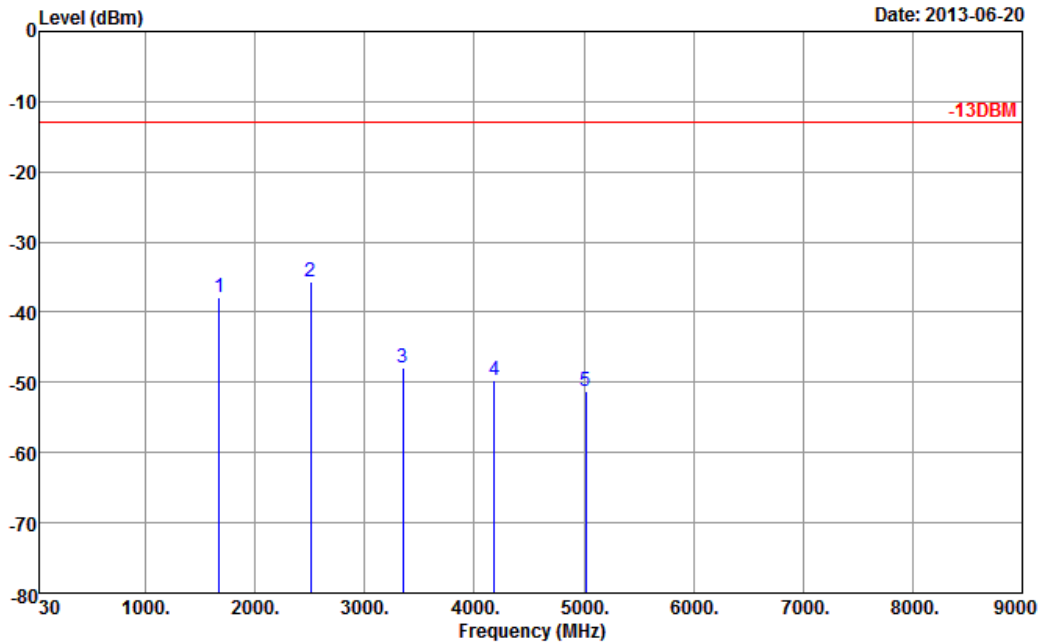


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-28.31	-13	-15.31	-44.85	-28.96	0.57	3.37	H	Pass
2510	-34.47	-13	-21.47	-59.44	-36.70	0.78	5.16	H	Pass
3346	-44.47	-13	-31.47	-56.16	-48.11	0.87	6.66	H	Pass
4182	-45.19	-13	-32.19	-59.95	-49.78	0.97	7.71	H	Pass
5018	-47.38	-13	-34.38	-65.67	-53.05	1.09	8.91	H	Pass



Band :	GPRS850	Temperature :	24~25°C
Test Mode :	GPRS 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

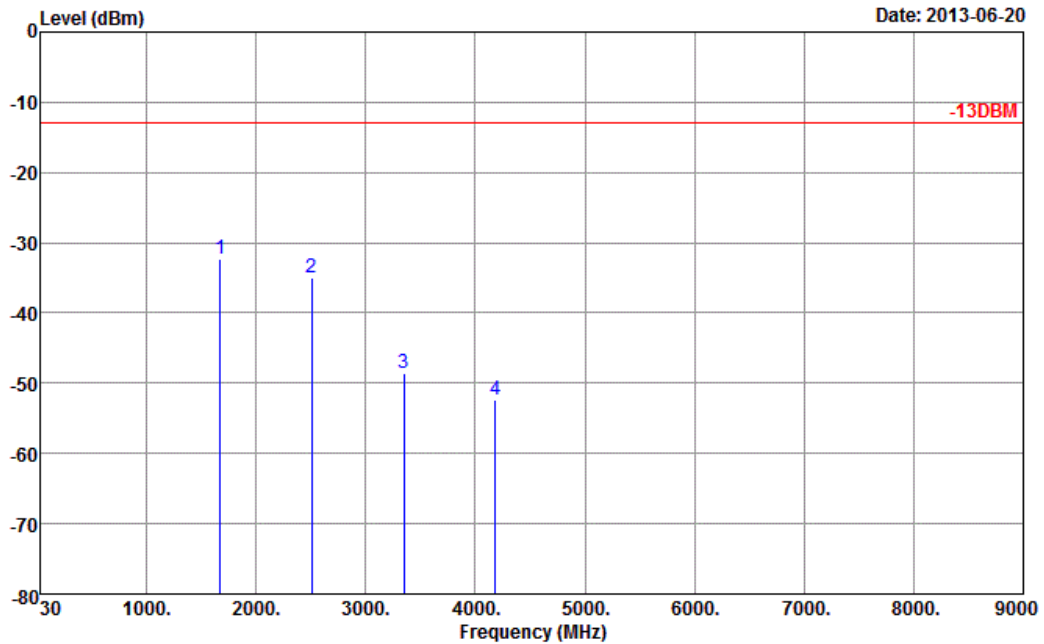


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-37.86	-13	-24.86	-51.75	-38.51	0.57	3.37	V	Pass
2510	-35.65	-13	-22.65	-58.29	-37.88	0.78	5.16	V	Pass
3346	-48.02	-13	-35.02	-60.47	-51.66	0.87	6.66	V	Pass
4182	-49.70	-13	-36.70	-64.92	-54.29	0.97	7.71	V	Pass
5018	-51.19	-13	-38.19	-68.64	-56.86	1.09	8.91	V	Pass



Band :	GPRS850	Temperature :	24~25°C
Test Mode :	EDGE 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

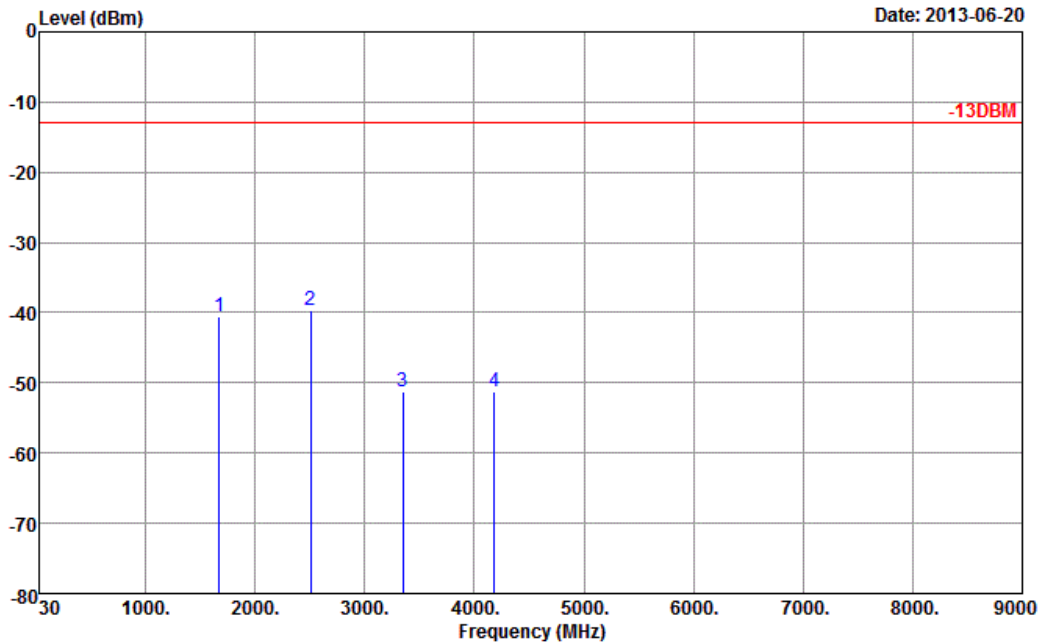


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-32.40	-13	-19.40	-49.00	-33.05	0.57	3.37	H	Pass
2509	-35.00	-13	-22.00	-59.96	-37.23	0.78	5.16	H	Pass
3346	-48.63	-13	-35.63	-59.23	-52.27	0.87	6.66	H	Pass
4180	-52.44	-13	-39.44	-67.20	-57.03	0.97	7.71	H	Pass



Band :	GPRS850	Temperature :	24~25°C
Test Mode :	EDGE 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

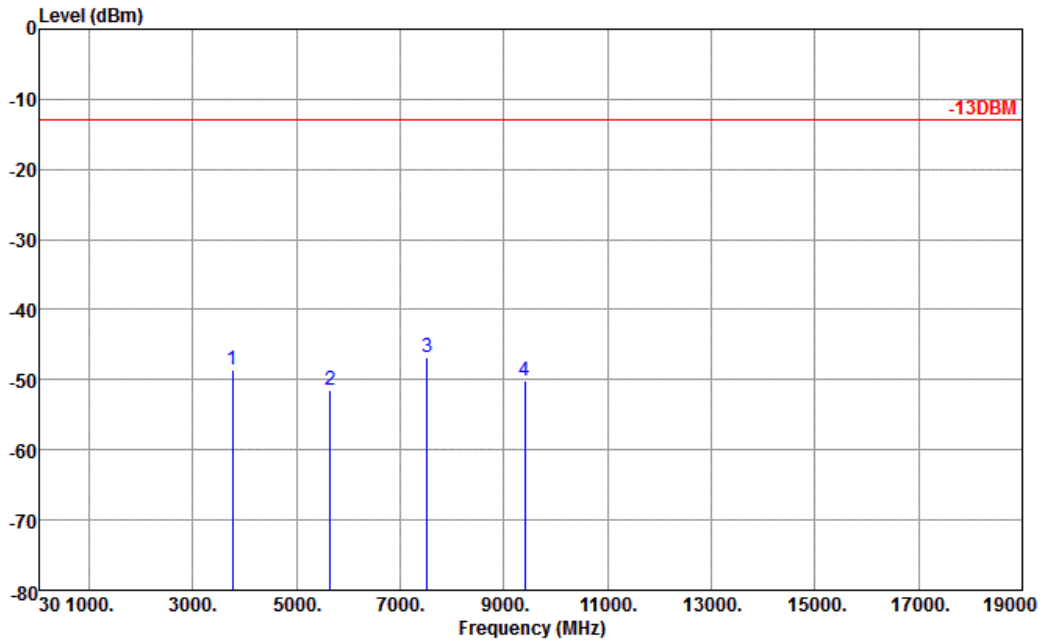


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-40.61	-13	-27.61	-54.19	-41.26	0.57	3.37	V	Pass
2509	-39.63	-13	-26.63	-61.92	-41.86	0.78	5.16	V	Pass
3346	-51.18	-13	-38.18	-63.01	-54.82	0.87	6.66	V	Pass
4182	-51.61	-13	-38.61	-66.83	-56.20	0.97	7.71	V	Pass



Band :	GPRS1900	Temperature :	24~25°C
Test Mode :	GPRS 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

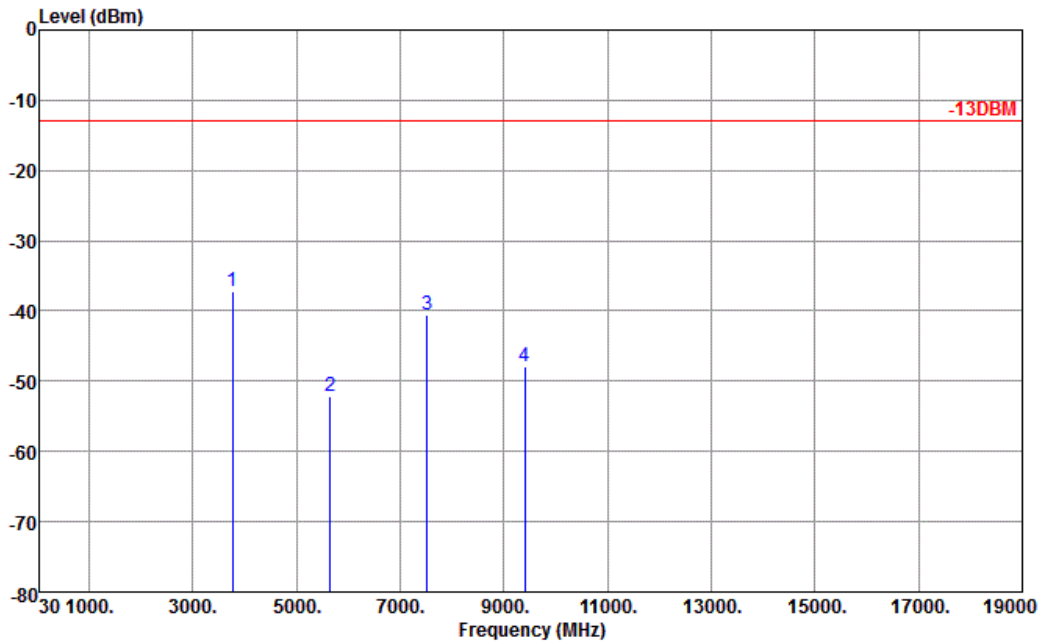


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-48.59	-13	-35.59	-62.39	-55.33	1.28	8.02	H	Pass
5640	-51.51	-13	-38.51	-69.50	-59.93	1.58	10.00	H	Pass
7520	-46.77	-13	-33.77	-68.71	-57.09	1.78	12.10	H	Pass
9400	-50.08	-13	-37.08	-72.20	-60.86	2.22	13.00	H	Pass



Band :	GPRS1900	Temperature :	24~25°C
Test Mode :	GPRS 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

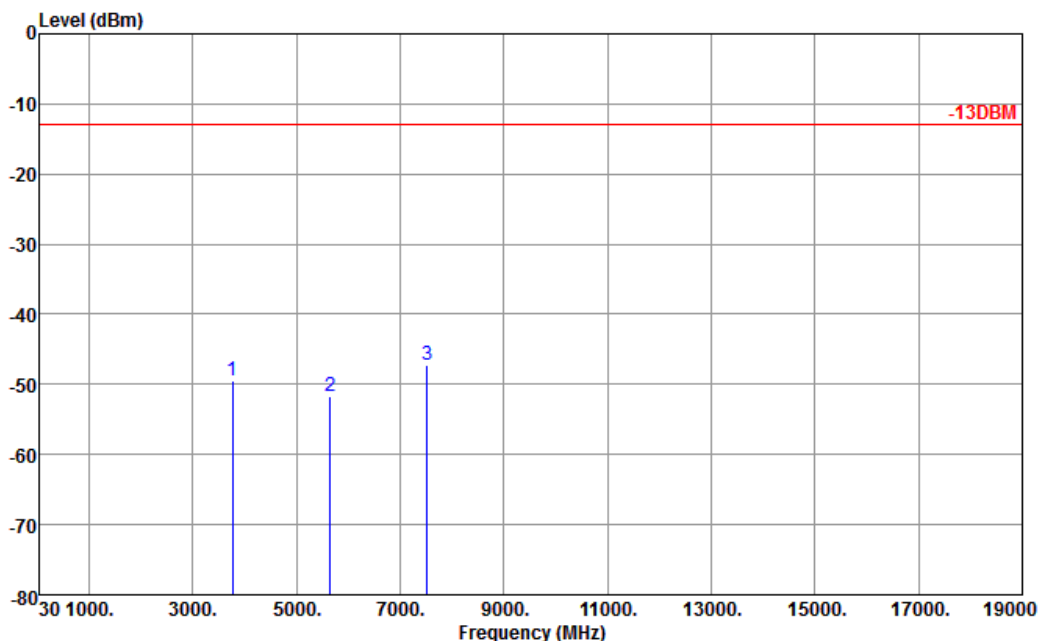


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-37.16	-13	-24.16	-54.89	-43.90	1.28	8.02	V	Pass
5640	-52.09	-13	-39.09	-69.17	-60.51	1.58	10	V	Pass
7520	-40.45	-13	-27.45	-62.92	-50.77	1.78	12.1	V	Pass
9400	-47.98	-13	-34.98	-71.6	-58.76	2.22	13	V	Pass



Band :	GPRS1900	Temperature :	24~25°C
Test Mode :	EDGE 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

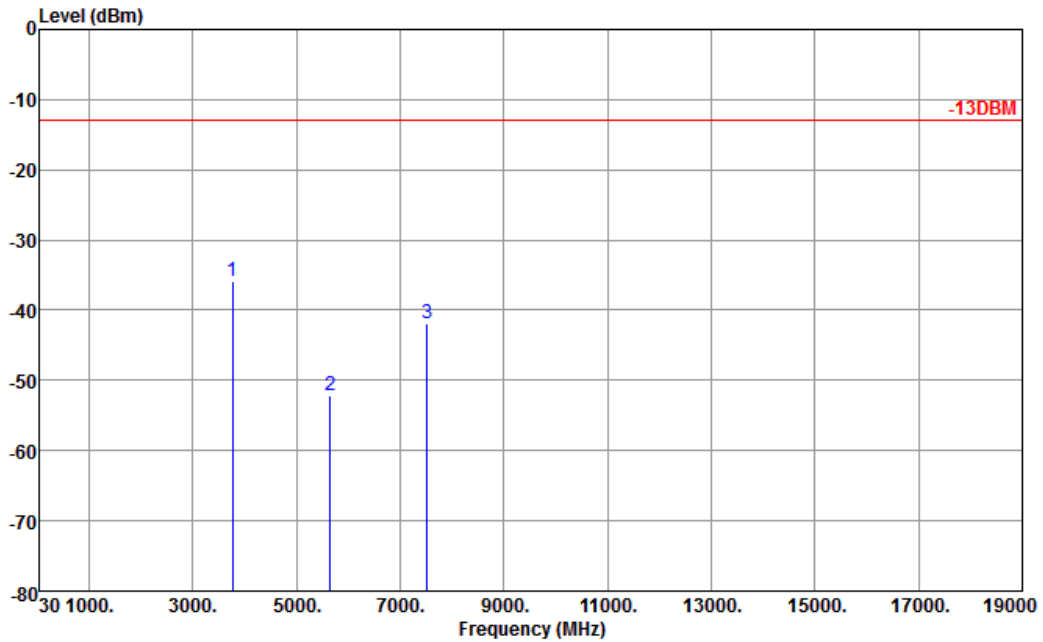


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-49.58	-13	-36.58	-63.02	-56.32	1.28	8.02	H	Pass
5640	-51.61	-13	-38.61	-69.60	-60.03	1.58	10.00	H	Pass
7520	-47.30	-13	-34.30	-69.24	-57.62	1.78	12.10	H	Pass



Band :	GPRS1900	Temperature :	24~25°C
Test Mode :	EDGE 8 Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

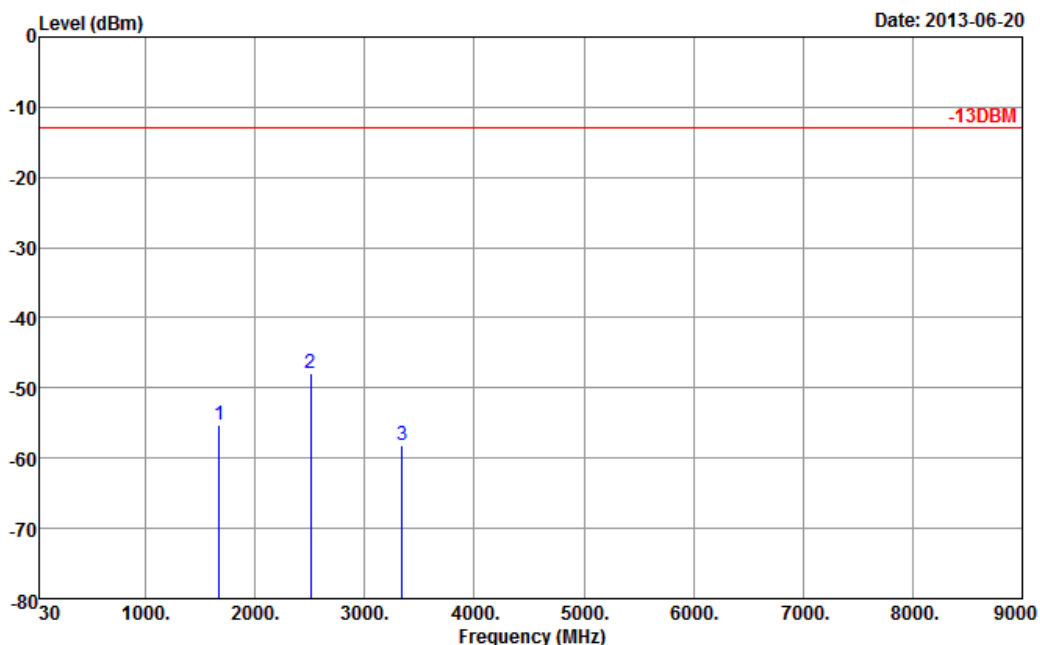


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-35.78	-13	-22.78	-53.53	-42.52	1.28	8.02	V	Pass
5640	-52.23	-13	-39.23	-69.31	-60.65	1.58	10	V	Pass
7520	-42.00	-13	-29.00	-64.25	-52.32	1.78	12.1	V	Pass



Band :	WCDMA Band V	Temperature :	24~25°C
Test Mode :	RMC 12.2Kbps Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

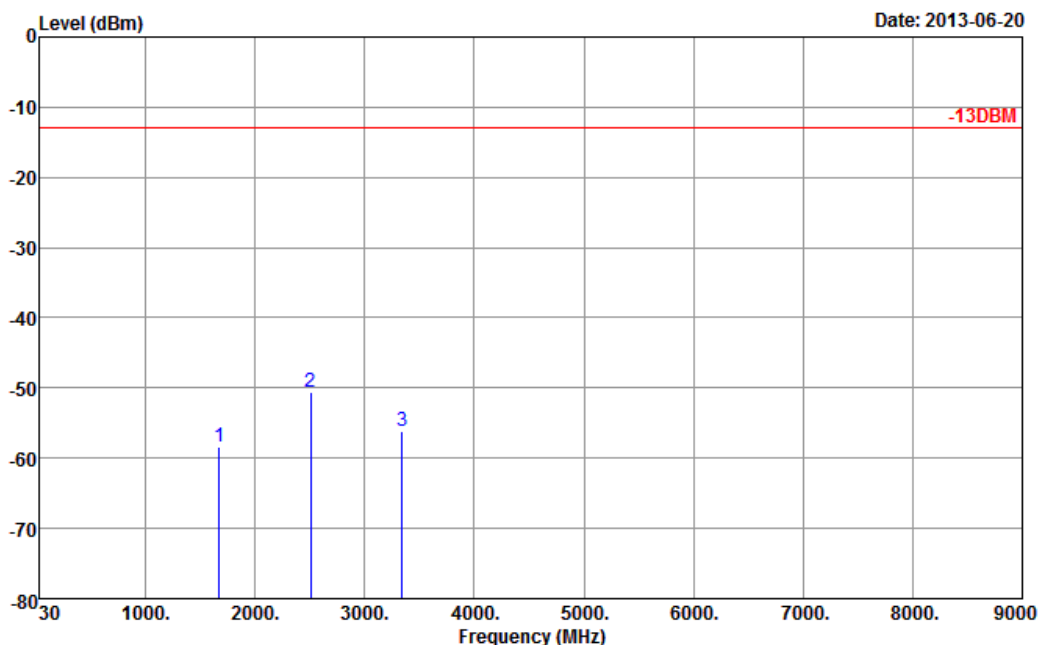


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-55.25	-13	-42.25	-68.17	-58.22	0.88	6.00	H	Pass
2510	-47.94	-13	-34.94	-70.07	-50.55	1.08	5.84	H	Pass
3345	-58.16	-13	-45.16	-68.76	-62.53	1.14	7.66	H	Pass



Band :	WCDMA Band V	Temperature :	24~25°C
Test Mode :	RMC 12.2Kbps Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

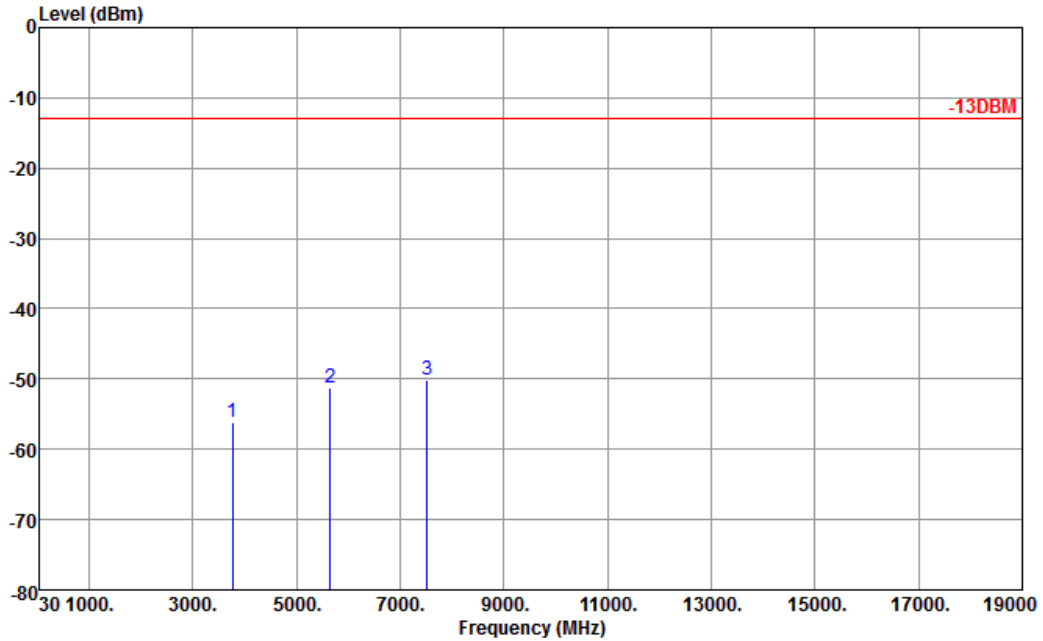


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-58.30	-13	-45.30	-68.93	-61.27	0.88	6.00	V	Pass
2510	-50.67	-13	-37.67	-70.27	-53.28	1.08	5.84	V	Pass
3345	-56.23	-13	-43.23	-68.06	-60.60	1.14	7.66	V	Pass



Band :	WCDMA Band II	Temperature :	24~25°C
Test Mode :	RMC 12.2Kbps Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

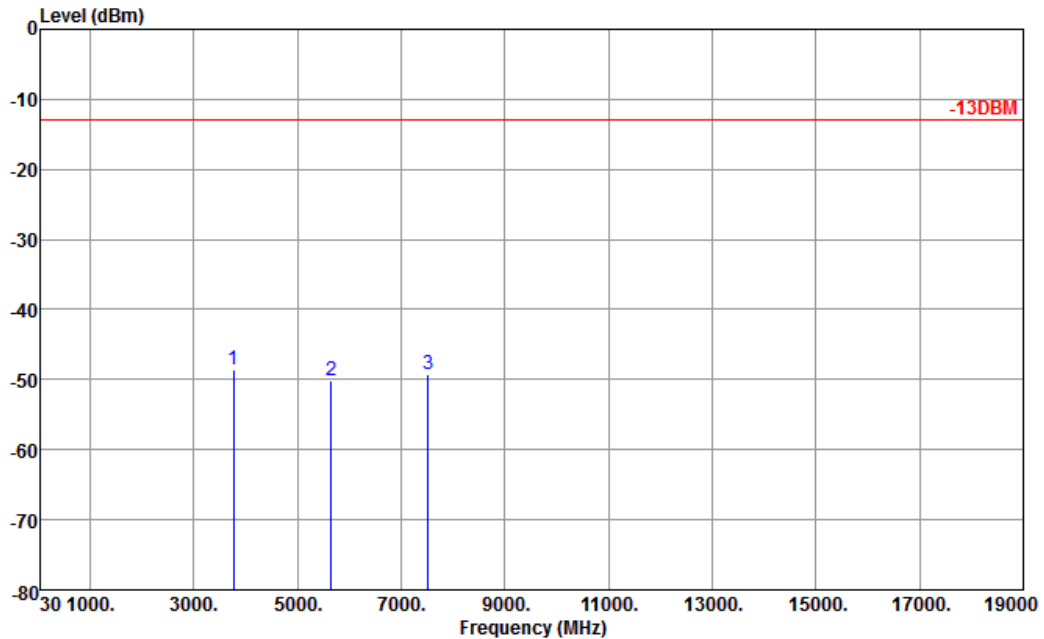


Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_H_130101 HORIZONTAL
 Project : (FG) 342211-01

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	-56.16	-13	-43.16	-68.31	-62.90	1.28	8.02	H	Pass
5640	-51.34	-13	-38.34	-69.33	-59.76	1.58	10.00	H	Pass
7520	-50.18	-13	-37.18	-72.12	-60.50	1.78	12.10	H	Pass



Band :	WCDMA Band II	Temperature :	24~25°C
Test Mode :	RMC 12.2Kbps Link	Relative Humidity :	49~50%
Test Engineer :	Robin Luo	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Site : 03CH01-SZ
 Condition : -13DBM HF_EIRP_V_130101 VERTICAL
 Project : (FG) 342211-01

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	-48.62	-13	-35.62	-63.65	-55.36	1.28	8.02	V	Pass
5640	-50.16	-13	-37.16	-67.24	-58.58	1.58	10	V	Pass
7520	-49.26	-13	-36.26	-71.51	-59.58	1.78	12.1	V	Pass



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP30	101400	9kHz~30GHz	Mar. 28, 2013	Jun. 13, 2013	Mar. 27, 2014	Conducted (TH01-SZ)
System Simulator	Agilent	E5515C	MY50264168	GSM/WCDMA /CDMA2000	Oct. 09, 2012	Jun. 13, 2013	Oct. 08, 2013	Conducted (TH01-SZ)
DC Power Supply	TOPWORD	3303DR	N/A714621	N/A	Mar. 28, 2013	Jun. 13, 2013	Mar. 27, 2014	Conducted (TH01-SZ)
Thermal Chamber	Hongzhan	LP-150U	HD20120425	N/A	Mar. 28, 2013	Jun. 13, 2013	Mar. 27, 2014	Conducted (TH01-SZ)
ESCI TEST Receiver	R&S	ESCI	100724	9K-3GHz	Mar. 28, 2013	Jun. 20, 2013	Mar. 27, 2014	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSP30	101362	9kHz~30GHz	Oct. 11, 2012	Jun. 20, 2013	Oct. 10, 2013	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 12, 2012	Jun. 20, 2013	Oct. 11, 2013	Radiation (03CH01-SZ)
Bilog Antenna	SCHAFFNER	CBL6112B	2614	30Mhz~2Ghz	Nov. 03, 2012	Jun. 20, 2013	Nov. 02, 2013	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9K-3000MHz GAIN 30db	Mar. 28, 2013	Jun. 20, 2013	Mar. 27, 2014	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	Mar. 28, 2013	Jun. 20, 2013	Mar. 27, 2014	Radiation (03CH01-SZ)
SHF-EHF-Horn	Schwarzbeck	BBHA9170	BBHA9170249	14Ghz~40Ghz	Nov. 23, 2012	Jun. 20, 2013	Nov. 22, 2013	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100321	9KHZ-30MHZ	Oct. 22, 2012	Jun. 20, 2013	Oct. 21, 2013	Radiation (03CH01-SZ)
System Simulator	Agilent	E5515C	MY50264168	GSM/WCDMA /CDMA2000	Oct. 09, 2012	Jun. 20, 2013	Oct. 08, 2013	Radiation (03CH01-SZ)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.54
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.72
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Appendix A. Photographs of EUT

Please refer to Sporton report number EP342211-01 as below.



Appendix C. Product Equality Declaration

TCT Mobile Limited

5F, C building, No. 232, Liang Jing Road,Zhangjiang High-Tech Park,
Pudong,Shanghai,China

Tel: +86(0)2161460890 ; Fax: +86(0)2161460600

Federal Communications Commission
Authorization and Evaluation Division
1435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern:

This device with FCC ID: RAD402 integrates a WWAN module:

	Brand Name	FCC ID
WWAN module	ALCATEL	RAD383

No hardware design changes are made on the modules, and the software has not been changed to increase the RF output power of the modules. Pursuant to KDB 996369 D01v01r03, the original modular report (Sporton Report Number: FG342209) are submitted to represent the compliance of Part 22/24 conducted RF testing items of this device.

Part 22/24 radiated RF testing items are tested on this host device, and the test report is submitted additionally.

Should you have any comments or questions, please feel free to contact me.

Sincerely,



Contact Person: Zhizhou Gong
E-mail: zhizhou.gong@jrdcom.com