



FCC RADIO TEST REPORT

FCC ID : B32C6803GBTW
Equipment : Point of Sales Terminal
Brand Name : Verifone
Model Name : C680 3G-BT-WiFi
Applicant : Verifone, Inc.
1400 West Stanford Ranch Road Suit 200 Rocklin CA 95765 USA
Manufacturer : Inventec Appliances (Pudong) Corporation
Building 1 - 3, No.789 Pu Xing Road, Caohejing Export
Processing Zone, Shanghai, P.R.C.
Standard : 47 CFR Part 2, 22(H), 24(E)

The product was received on Jun. 03, 2019 and testing was started from Jul. 11, 2019 and completed on Jul. 12, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test	5
1.2 Modification of EUT	5
1.3 Testing Location	6
1.4 Applicable Standards	6
2 Test Configuration of Equipment Under Test	7
2.1 Test Mode.....	7
2.2 Connection Diagram of Test System	8
2.3 Support Unit used in test configuration	8
2.4 Frequency List of Low/Middle/High Channels.....	8
3 Radiated Test Items	9
3.1 Measuring Instruments.....	9
3.2 Test Setup	9
3.3 Test Result of Radiated Test.....	9
3.4 Field Strength of Spurious Radiation Measurement	10
4 List of Measuring Equipment.....	11
5 Uncertainty of Evaluation.....	12
Appendix A. Test Results of Radiated Test	
Appendix B. Test Setup Photographs	



History of this test report

Report No.	Version	Description	Issued Date
FG692114-05	01	Initial issue of report	Jul. 26, 2019



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	§2.1046	Conducted Output Power	Not Required	-
	§22.913 (a)(2)	Effective Radiated Power		
	§24.232 (c)	Equivalent Isotropic Radiated Power		
-	§24.232 (d)	Peak-to-Average Ratio	Not Required	-
-	§2.1049 §22.917 (b) §24.238 (b)	Occupied Bandwidth	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a)	Band Edge Measurement	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a)	Conducted Emission	Not Required	-
-	§2.1055 §22.355	Frequency Stability Temperature & Voltage	Not Required	-
	§2.1055 §24.235			-
3.4	§2.1053 §22.917 (a) §24.238 (a)	Field Strength of Spurious Radiation	Pass	Under limit 18.57 dB at 3700.000 MHz

Remark:

- Not required means after assessing, test items are not necessary to carry out.
- This is a variant report by WWAN Module EHS6 upgrade R4 version and adding one more adapter. The original case which can be referred to Sporton Case No. 692114-04.
- This deviation between Sporton Case No. 692114 and Sporton Case No. 692114-04, was adding adapter 3.
- After pre-scanned tests, the deviation between change (Sporton No. 692114 and Sporton No. 692114-04) is not affected the test result. Therefore, all the tests case of PCS Licensed Transmitter (PCB) report can be referred to Sporton Report Number FG692114.
- Based on the original report, the test cases were verified

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Maggie Chiang



1 General Description

1.1 Product Feature of Equipment Under Test

GSM/WCDMA, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n, and RFID

Product Specification subjective to this standard	
Antenna Type	WWAN: PCB Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna RFID: Bobbin Antenna

Specification of Accessory		
AC Adapter 1	Brand Name	Verifone, Inc.
	Manufacturer	Elementech
	Model Name	A111-3050223U
	Power Rating	Input : 100-240 V AC 50/60Hz, 0.5A Output: 5.0V DC 2.2A
	Power Cord	1.8meter, non-shielded cable, without ferrite core
AC Adapter 2	Brand Name	Verifone, Inc.
	Manufacturer	PHIHONG
	Model Name	AM11A-050A-R
	Power Rating	Input : 100-240 V AC 50/60Hz, 0.5A Output: 5.0V DC 2.2A
	Power Cord	1.8meter, non-shielded cable, without ferrite core
AC Adapter 3	Brand Name	Verifone, Inc.
	Manufacturer	Salcomp
	Model Name	VF0402
	Power Rating	Input : 100-240 V AC 50/60Hz, 0.5A Output: 5.0V DC 2.2A
	Power Cord	1.8meter, non-shielded cable, without ferrite core
AC Adapter 4	Brand Name	Verifone, Inc.
	Manufacturer	PHIHONG
	Model Name	AM111-050A
	Power Rating	Input : 100-240 V AC 50/60Hz, 0.5A Output: 5.0V DC 2.2A
	Power Cord	1.8meter, non-shielded cable, without ferrite core
Battery 1	Brand Name	Verifone, Inc.
	Manufacturer	Palladium Energy Inc.
	Model Name	BPK260-001
Battery 2	Brand Name	Verifone, Inc.
	Manufacturer	Panasonic Corporation
	Model Name	BPK260-001

1.2 Modification of EUT

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



1.3 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. 03CH13-HY
Test Engineer	JC Liang and Wilson Wu
Temperature	22.3 ~ 23.5°C
Relative Humidity	46.5 ~ 49.5%

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW0007

1.4 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ 47 CFR Part 2, 22(H), 24(E)
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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 radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane for Cellular Band and Y plane for PCS Band) were recorded in this report.

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.

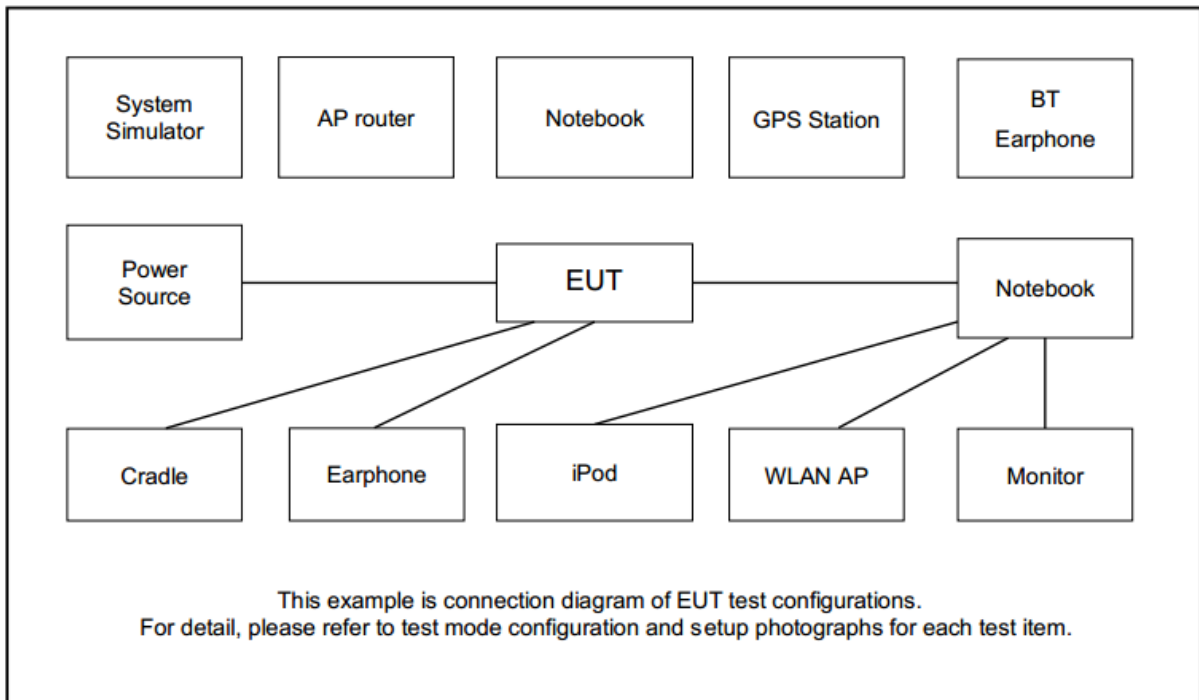
All modes and data rates and positions were investigated.

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

Test Modes	
Band	Radiated TCs
GSM 850	■ GPRS Class 8 Link ■ EDGE Class 8 Link
GSM 1900	■ GPRS Class 8 Link ■ EDGE Class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link

Remark: All radiated test cases were performed with Adapter 1 and 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.	System Simulator	Anritsu	MT8820C	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	251
	Frequency	824.2	836.4	848.8
WCDMA Band V	Channel	4132	4182	4233
	Frequency	826.4	836.4	846.6
GSM1900	Channel	512	661	810
	Frequency	1850.2	1880.0	1909.8
WCDMA Band II	Channel	9262	9400	9538
	Frequency	1852.4	1880.0	1907.6

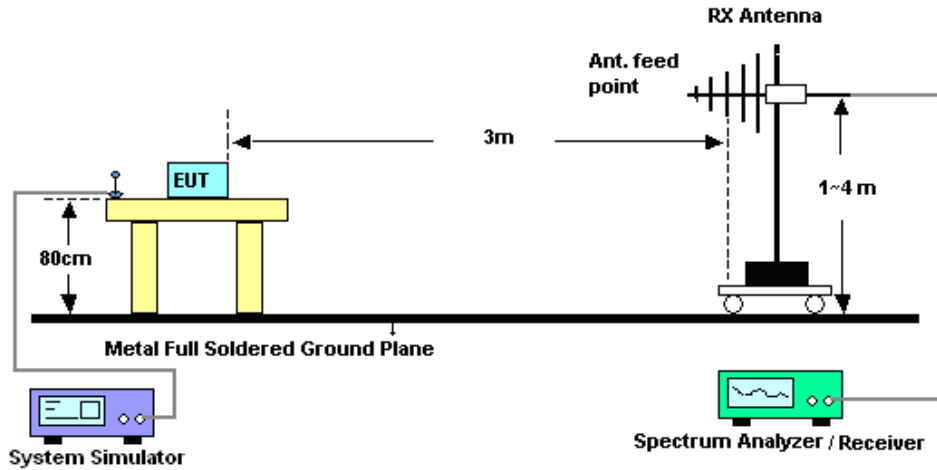
3 Radiated Test Items

3.1 Measuring Instruments

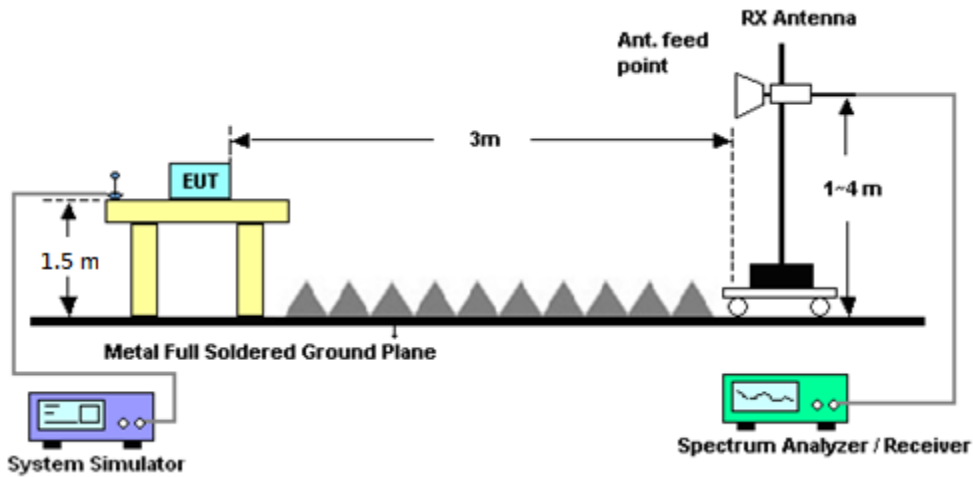
See list of measuring instruments of this test report.

3.2 Test Setup

For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



3.3 Test Result of Radiated Test

Please refer to Appendix A.



3.4 Field Strength of Spurious Radiation Measurement

3.4.1 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.

3.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. 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.
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 for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking 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. $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
11. $ERP (dBm) = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Apr. 30, 2019	Jul. 11, 2019~ Jul. 12, 2019	Apr. 29, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	May 14, 2019	Jul. 11, 2019~ Jul. 12, 2019	May 13, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jul. 02, 2019	Jul. 11, 2019 ~ Jul. 12, 2019	Jul. 01, 2020	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	Jul. 11, 2019~ Jul. 12, 2019	Dec. 04, 2019	Radiation (03CH13-HY)
Amplifier	Sonoma-Instru ment	310 N	187282	9KHz~1GHz	Dec. 18, 2018	Jul. 11, 2019~ Jul. 12, 2019	Dec. 17, 2019	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590074	1GHz~18GHz	May 20, 2019	Jul. 11, 2019~ Jul. 12, 2019	May 19, 2020	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Mar. 15, 2019	Jul. 11, 2019~ Jul. 12, 2019	Mar. 14, 2020	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	Jul. 11, 2019~ Jul. 12, 2019	Dec. 05, 2019	Radiation (03CH13-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 21, 2019	Jul. 11, 2019~ Jul. 12, 2019	Jan. 20, 2020	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 19, 2019	Jul. 11, 2019~ Jul. 12, 2019	Mar. 18, 2020	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jul. 11, 2019~ Jul. 12, 2019	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jul. 11, 2019~ Jul. 12, 2019	N/A	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SF102/2*11SK 252	MY4278/2	9kHz~40GHz	May 16, 2019	Jul. 11, 2019~ Jul. 12, 2019	May 15, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 13, 2019	Jul. 11, 2019~ Jul. 12, 2019	Feb. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 13, 2019	Jul. 11, 2019~ Jul. 12, 2019	Mar. 12, 2020	Radiation (03CH13-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9
---	-----

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4
---	-----

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3
---	-----



Appendix A. Test Results of Radiated Test

Radiated Spurious Emission

Part 22H GPRS 850

GPRS 850									
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	-53.04	-13	-40.04	-63.76	-58.43	1.23	8.76	H
	2472	-45.28	-13	-32.28	-59.81	-52.17	1.44	10.48	H
	4944	-55.15	-13	-42.15	-75.41	-62.78	2.32	12.10	H
									H
									H
									H
	1648	-55.33	-13	-42.33	-65.93	-60.72	1.23	8.76	V
	2472	-51.03	-13	-38.03	-65.85	-57.92	1.44	10.48	V
	4944	-56.94	-13	-43.94	-77.81	-64.57	2.32	12.10	V
									V
									V
									V
Middle	1672	-51.32	-13	-38.32	-62.08	-56.79	1.24	8.85	H
	2512	-45.36	-13	-32.36	-59.83	-52.28	1.44	10.51	H
	5016	-52.85	-13	-39.85	-73.24	-60.45	2.35	12.10	H
									H
									H
									H
	1672	-55.34	-13	-42.34	-65.99	-60.81	1.24	8.85	V
	2512	-49.03	-13	-36.03	-63.69	-55.95	1.44	10.51	V
	5016	-55.07	-13	-42.07	-76.08	-62.67	2.35	12.10	V
									V
									V
									V



Highest	1696	-49.09	-13	-36.09	-59.89	-54.64	1.24	8.94	H
	2544	-44.36	-13	-31.36	-58.87	-51.30	1.44	10.54	H
	5096	-53.45	-13	-40.45	-73.91	-61.10	2.32	12.12	H
									H
									H
									H
	1696	-51.41	-13	-38.41	-62.12	-56.96	1.24	8.94	V
	2544	-44.27	-13	-31.27	-58.99	-51.21	1.44	10.54	V
	5096	-53.16	-13	-40.16	-74.2	-60.81	2.32	12.12	V
									V
									V
									V

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



Part 22H EDGE 850

EDGE 850									
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	-61.48	-13	-48.48	-72.2	-66.87	1.23	8.76	H
	2472	-53.76	-13	-40.76	-68.29	-60.65	1.44	10.48	H
	3296	-59.77	-13	-46.77	-75.82	-67.71	1.70	11.79	H
									H
									H
									H
	1648	-62.51	-13	-49.51	-73.11	-67.90	1.23	8.76	V
	2472	-56.25	-13	-43.25	-71.07	-63.14	1.44	10.48	V
	3296	-59.71	-13	-46.71	-76.16	-67.65	1.70	11.79	V
									V
									V
									V
Middle	1672	-63.29	-13	-50.29	-74.05	-68.76	1.24	8.85	H
	2512	-52.62	-13	-39.62	-67.09	-59.54	1.44	10.51	H
	3344	-60.46	-13	-47.46	-76.21	-68.50	1.74	11.93	H
									H
									H
									H
	1672	-60.24	-13	-47.24	-70.89	-65.71	1.24	8.85	V
	2512	-56.40	-13	-43.40	-71.06	-63.32	1.44	10.51	V
	3344	-59.87	-13	-46.87	-76.15	-67.91	1.74	11.93	V
									V
									V
									V



Highest	1696	-59.73	-13	-46.73	-70.53	-65.28	1.24	8.94	H
	2544	-57.21	-13	-44.21	-71.72	-64.15	1.44	10.54	H
	3392	-60.93	-13	-47.93	-76.38	-69.07	1.78	12.08	H
									H
									H
									H
	1696	-60.06	-13	-47.06	-70.77	-65.61	1.24	8.94	V
	2544	-56.26	-13	-43.26	-70.98	-63.20	1.44	10.54	V
	3392	-60.44	-13	-47.44	-76.54	-68.58	1.78	12.08	V
									V
									V
									V

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



Part 22H WCDMA 850

WCDMA 850									
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	-40.65	-13	-27.65	-51.37	-46.04	1.23	8.76	H
	2480	-58.28	-13	-45.28	-72.79	-65.18	1.44	10.48	H
	4968	-49.95	-13	-36.95	-70.25	-57.56	2.34	12.10	H
									H
									H
									H
	1648	-45.78	-13	-32.78	-56.38	-51.17	1.23	8.76	V
	2480	-59.43	-13	-46.43	-74.2	-66.33	1.44	10.48	V
	4968	-52.82	-13	-39.82	-73.74	-60.43	2.34	12.10	V
									V
									V
									V
Middle	1672	-38.09	-13	-25.09	-48.85	-43.56	1.24	8.85	H
	3344	-57.30	-13	-44.30	-73.05	-65.34	1.74	11.93	H
	5016	-49.87	-13	-36.87	-70.26	-57.47	2.35	12.10	H
									H
									H
									H
	1672	-41.33	-13	-28.33	-51.98	-46.80	1.24	8.85	V
	3344	-58.45	-13	-45.45	-74.73	-66.49	1.74	11.93	V
	5016	-52.40	-13	-39.40	-73.41	-60.00	2.35	12.10	V
									V
									V
									V



Highest	1696	-38.94	-13	-25.94	-49.74	-44.49	1.24	8.94	H
	3384	-57.97	-13	-44.97	-73.46	-66.10	1.77	12.05	H
	5072	-49.35	-13	-36.35	-69.8	-56.98	2.33	12.11	H
									H
									H
									H
	1696	-40.68	-13	-27.68	-51.39	-46.23	1.24	8.94	V
	3384	-58.83	-13	-45.83	-74.96	-66.96	1.77	12.05	V
	5072	-51.67	-13	-38.67	-72.71	-59.30	2.33	12.11	V
									V
									V
									V

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



Part 24E GPRS 1900

GPRS 1900									
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	3700	-40.02	-13	-27.02	-58.63	-50.33	1.97	12.28	H
	5548	-43.93	-13	-30.93	-65.35	-54.05	2.14	12.27	H
	7403	-50.43	-13	-37.43	-75.99	-58.43	2.17	10.17	H
									H
									H
									H
	3700	-31.57	-13	-18.57	-50.18	-41.88	1.97	12.28	V
	5548	-44.84	-13	-31.84	-66.26	-54.96	2.14	12.27	V
	7403	-50.27	-13	-37.27	-75.83	-58.27	2.17	10.17	V
									V
									V
									V
Middle	3763	-45.94	-13	-32.94	-64.14	-56.18	2.01	12.24	H
	5639	-45.64	-13	-32.64	-66.57	-55.91	2.12	12.39	H
	7529	-50.70	-13	-37.70	-75.96	-58.69	2.11	10.10	H
									H
									H
									H
	3763	-35.92	-13	-22.92	-54.62	-46.16	2.01	12.24	V
	5639	-44.11	-13	-31.11	-65.66	-54.38	2.12	12.39	V
	7529	-50.74	-13	-37.74	-75.91	-58.73	2.11	10.10	V
									V
									V
									V



Highest	3819	-49.73	-13	-36.73	-68.03	-59.90	2.04	12.21	H
	5730	-46.16	-13	-33.16	-67.6	-56.58	2.10	12.52	H
	7638	-50.30	-13	-37.30	-75.14	-58.68	2.11	10.50	H
									H
									H
									H
	3819	-39.77	-13	-26.77	-58.54	-49.94	2.04	12.21	V
	5730	-44.76	-13	-31.76	-66.75	-55.18	2.10	12.52	V
	7638	-50.80	-13	-37.80	-75.7	-59.18	2.11	10.50	V
									V
									V
									V

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



Part 24E EDGE 1900

EDGE 1900									
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	3700	-45.45	-13	-32.45	-63.54	-55.76	1.97	12.28	H
	5548	-52.31	-13	-39.31	-73.11	-62.43	2.14	12.27	H
	7400	-50.34	-13	-37.34	-75.94	-58.34	2.18	10.18	H
									H
									H
									H
	3700	-37.64	-13	-24.64	-56.25	-47.95	1.97	12.28	V
	5548	-51.73	-13	-38.73	-73.15	-61.85	2.14	12.27	V
	7400	-50.51	-13	-37.51	-76.07	-58.51	2.18	10.18	V
									V
									V
									V
Middle	3763	-50.67	-13	-37.67	-68.87	-60.91	2.01	12.24	H
	5639	-51.04	-13	-38.04	-71.97	-61.31	2.12	12.39	H
	7526	-50.43	-13	-37.43	-75.7	-58.41	2.11	10.09	H
									H
									H
									H
	3763	-41.44	-13	-28.44	-60.14	-51.68	2.01	12.24	V
	5639	-50.48	-13	-37.48	-72.03	-60.75	2.12	12.39	V
	7526	-50.89	-13	-37.89	-76.06	-58.87	2.11	10.09	V
									V
									V
									V



Highest	3819	-53.75	-13	-40.75	-72.05	-63.92	2.04	12.21	H
	5730	-49.86	-13	-36.86	-71.3	-60.28	2.10	12.52	H
	7638	-50.93	-13	-37.93	-75.77	-59.31	2.11	10.50	H
									H
									H
									H
	3819	-45.01	-13	-32.01	-63.78	-55.18	2.04	12.21	V
	5730	-52.62	-13	-39.62	-74.61	-63.04	2.10	12.52	V
	7638	-50.66	-13	-37.66	-75.56	-59.04	2.11	10.50	V
									V
									V
									V

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



Part 24E WCDMA 1900

WCDMA 1900									
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	3700	-45.18	-13	-32.18	-63.27	-55.49	1.97	12.28	H
	5555	-54.44	-13	-41.44	-75.23	-64.57	2.14	12.28	H
	7400	-50.38	-13	-37.38	-75.98	-58.38	2.18	10.18	H
									H
									H
									H
	3700	-41.44	-13	-28.44	-60.07	-51.75	1.97	12.28	V
	5555	-51.51	-13	-38.51	-72.91	-61.64	2.14	12.28	V
	7400	-50.82	-13	-37.82	-76.38	-58.82	2.18	10.18	V
									V
									V
									V
Middle	3763	-42.89	-13	-29.89	-61.09	-53.13	2.01	12.24	H
	5644	-54.91	-13	-41.91	-75.86	-65.19	2.12	12.40	H
	7526	-50.96	-13	-37.96	-76.23	-58.94	2.11	10.09	H
									H
									H
									H
	3763	-41.19	-13	-28.19	-59.88	-51.43	2.01	12.24	V
	5644	-52.67	-13	-39.67	-74.22	-62.95	2.12	12.40	V
	7526	-51.11	-13	-38.11	-76.27	-59.09	2.11	10.09	V
									V
									V
									V



Highest	3819	-41.31	-13	-28.31	-59.61	-51.48	2.04	12.21	H
	5723	-54.72	-13	-41.72	-76.12	-65.13	2.10	12.51	H
	7638	-51.32	-13	-38.32	-76.16	-59.70	2.11	10.50	H
									H
									H
									H
	3819	-38.28	-13	-25.28	-57.05	-48.45	2.04	12.21	V
	5723	-53.91	-13	-40.91	-75.87	-64.32	2.10	12.51	V
	7638	-51.18	-13	-38.18	-76.08	-59.56	2.11	10.50	V
									V
									V
									V

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