

# FCC RADIO TEST REPORT

## FCC ID: 2AOKUCYBER7

**Product:** Mobile Phone

**Trade Mark:** HOTWAV

**Model No.:** Cyber 7

**Family Model:** N/A

**Report No.:** S21062900105006

**Issue Date:** 09 Sep. 2021

### Prepared for

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### Prepared by

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# 1 TEST RESULT CERTIFICATION

Applicant's name .....	: SHENZHEN TUGAO INTELLIGENT CO.,LTD
Address .....	: 8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong, Bao'an District, Shenzhen, China
Manufacturer's Name .....	: SHENZHEN TUGAO INTELLIGENT CO.,LTD
Address .....	: 8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong, Bao'an District, Shenzhen, China
Product description	
Product name .....	: Mobile Phone
Model and/or type reference .....	: Cyber 7
Family Model .....	: N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
APPLICABLE STANDARD/ TEST PROCEDURE	TEST RESULT
47 CFR Part 2, Part 22H, Part 24E, Part 90 ANSI/TIA-603-E-2016 FCC KDB 971168 D01 Power Meas License Digital Systems v03 ANSI C63.26:2015	Complied

This device described above has been tested by Shenzhen NTEK Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of Shenzhen NTEK Testing Technology Co., Ltd., this document may be altered or revised by Shenzhen NTEK Testing Technology Co., Ltd., personnel only, and shall be noted in the revision of the document.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : Jun 29, 2021 ~Sep 09, 2021

Testing Engineer :   
(Mary Hu)

Authorized Signatory :   
(Alex Li)

**2 SUMMARY OF TEST RESULTS**

<b>FCC Part22, Subpart H, FCC Part 24E, Part 90 &amp; ANSI C63.26-2015</b>			
<b>FCC Rule</b>	<b>Test Item</b>	<b>Verdict</b>	<b>Remark</b>
2.1046 90	Conducted Output Power	PASS	
Subclause 5.2.3.4 of ANSI C63.26-2015 24.232 90	Peak-to-Average Ratio	PASS	
2.1049 22.917(b) 24.238 90	Occupied Bandwidth	PASS	
2.1051 22.917(a) 24.238 90	Band Edge	PASS	
22.913(a)(2) 24.232 90	Effective Radiated Power	PASS	
2.1053 22.917(a) 90	Field Strength of Spurious Radiation	PASS	
2.1055 22.355 24.238 90	Frequency Stability for Temperature & Voltage	PASS	
2.1051 22.917(a) 24.238 90	Conducted Emission	PASS	

**Remark:**

1. "N/A" denotes test is not applicable in this Test Report.
2. All test items were verified and recorded according to the standards and without any deviation during the test.
3. No modifications are made to the EUT during all test items.

### 3 FACILITIES AND ACCREDITATIONS

#### 3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

#### 3.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

CNAS-Lab. : The Certificate Registration Number is L5516.

IC-Registration : The Certificate Registration Number is 9270A-1.

FCC- Accredited : Test Firm Registration Number: 463705.

Designation Number: CN1184

A2LA-Lab. : The Certificate Registration Number is 4298.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

Name of Firm : Shenzhen NTEK Testing Technology Co., Ltd.

Site Location : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

#### 3.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.5dB

#### 4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification	
Equipment	Mobile Phone
Trade Mark	HOTWAV
FCC ID	2AOKUCYBER7
Model No.	Cyber 7
Family Model	N/A
Model Difference	N/A
Operating Frequency	<input type="checkbox"/> GSM850: TX824.2MHz~848.8MHz /RX869.2MHz~893.8MHz; <input type="checkbox"/> UMTS FDD Band V: TX826.4MHz~846.6MHz /RX871.4MHz~891.6MHz; <input type="checkbox"/> PCS1900: TX1850.2MHz~1909.8MHz /RX1930.2MHz~1989.8MHz; <input type="checkbox"/> UMTS FDD Band II: TX1852.4MHz~1907.6MHz /RX1932.4MHz~1987.6MHz; <input type="checkbox"/> UMTS-FDD Band IV:TX1710MHz~1755MHz /RX2110MHz~2155MHz <input checked="" type="checkbox"/> CDMA2000 BC0: TX824.70MHz~848.31MHz /RX869MHz~894MHz; <input checked="" type="checkbox"/> CDMA2000 BC1: TX1851.25MHz~1908.75MHz /RX1931.25MHz~1988.75MHz; <input checked="" type="checkbox"/> CDMA2000 BC10: TX816MHz~824MHz /RX861MHz~869MHz;
Modulation	<input type="checkbox"/> GMSK for GSM/GPRS; <input type="checkbox"/> 8PSK for EGPRS; <input type="checkbox"/> QPSK for UMTS bands; <input checked="" type="checkbox"/> QPSK for CDMA2000;
Power Class	3, tested with power control "all up"(CDMA BC0/1/10)
GPRS Class	<input type="checkbox"/> Multi-Class12 <input type="checkbox"/> Only 4 timeslots are used for GPRS
CDMA Type	1xRTT, 1xEV-Do
SIM CARD	SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

Antenna Type	PIFA Antenna
Antenna Gain	CDMA2000: 0.7dBi
Power supply	<input checked="" type="checkbox"/> DC supply: DC 3.85V, 8280mAh, 31.878Wh from battery or DC 5V from Adapter.
	<input checked="" type="checkbox"/> Adapter supply: Adapter : Model: HJ-FC001K7-US Input: AC 100-240V~50/60Hz 0.6A Output: DC 5.0V---3.0A OR 9.0V---2.0A OR 12.0V---1.5A 18.0W
HW Version	TF919 MB V1.1
SW Version	HOTWAV Cyber 7 V8.0 20210910

Note: Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual. The High Voltage 4.2V and Low Voltage 3.5V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.

### Revision History

Report No.	Version	Description	Issued Date
S21062900105006	Rev.01	Initial issue of report	Sep 09, 2021



## 5 DESCRIPTION OF TEST MODES

During the testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication Tester(CMU 200) to ensure max power transmission and proper modulation. Three channels (The low channel, the middle channel and the high channel) were chosen for testing on CDMA2000 BC0,BC1, GSM/GPRS/EGPRS 850, GSM/GPRS/EGPRS 1900, HSDPA band II, HSUPA band II, HSDPA band V, HSUPA band V, HSDPA band IV, HSUPA band IV frequency band.

Note: GSM/GPRS/EGPRS 850, GSM/GPRS/EGPRS 1900, HSDPA band II, HSUPA band II, HSDPA band V, HSUPA band V, HSDPA band IV, HSUPA band IV, CDMA2000 BC0 BC1 modes have been tested during the test. the worst condition (GSM850, RMC 12.2k, CDMA2000 1xRTT BC0 BC1 BC10& 1xEVDO Rev A BC0 BC1 BC10) be recorded in the test report if no other modes test data.

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03 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 10th harmonic for GSM850/UMTS FDD Band V/ UMTS FDD Band IV.

2. 30 MHz to 10th harmonic for GSM1900/UMTS FDD 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	For Conducted Test Cases	For Radiated Test Cases
GSM 850	GSM Link	GSM Link
UMTS Band II	RMC 12.2Kbps Link	RMC 12.2Kbps Link
UMTS Band V	RMC 12.2Kbps Link	RMC 12.2Kbps Link
UMTS Band IV	RMC 12.2Kbps Link	RMC 12.2Kbps Link
CDMA2000	1xRTT& 1xEVDO Rev A	1xRTT& 1xEVDO Rev A

Test Frequency and Channels:

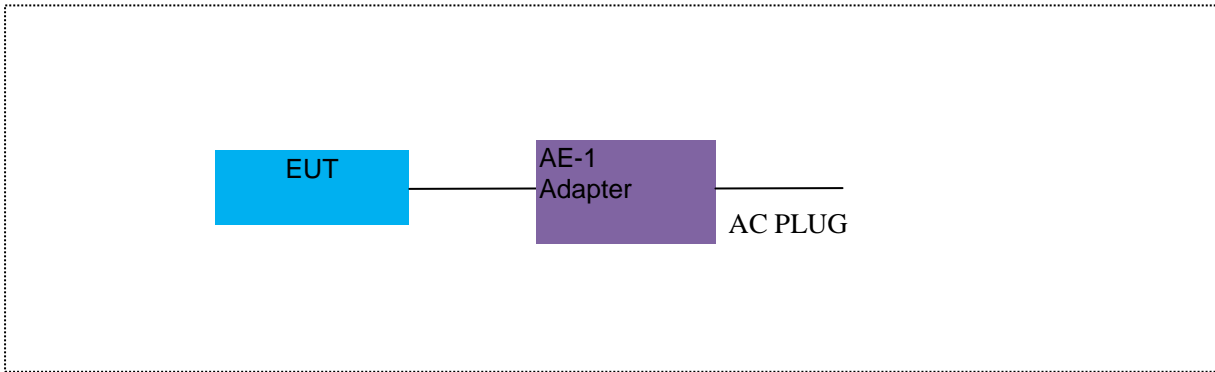
Frequency Band	<input type="checkbox"/> GSM 850		<input type="checkbox"/> GSM 1900		<input type="checkbox"/> UMTS Band II		<input type="checkbox"/> UMTS Band V	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH_H	251	848.8	810	1909.8	9538	1907.6	4233	846.6
CH_M	189	836.4	661	1880.0	9400	1880.0	4182	836.4
CH_L	128	824.2	512	1850.2	9262	1852.4	4132	826.4

Frequency Band	<input type="checkbox"/> UMTS Band IV		<input checked="" type="checkbox"/> CDMA2000 BC1		<input checked="" type="checkbox"/> CDMA2000 BC0		<input checked="" type="checkbox"/> CDMA2000 BC10	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH_L	1513	1752.6	25	1013	824.7	1851.25	450	817.25
CH_M	1412	1732.4	600	384	836.52	1880	560	820
CH_H	1312	1712.4	1175	777	848.31	1908.75	670	822.75

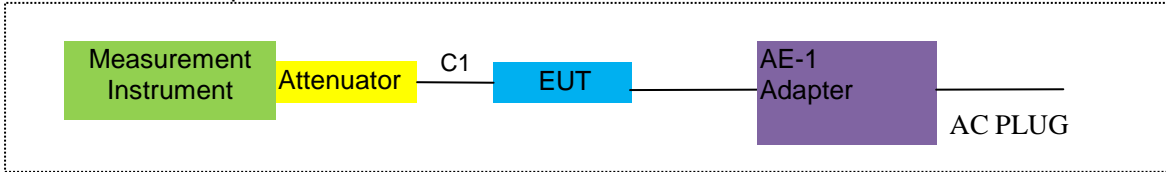
## 6 SETUP OF EQUIPMENT UNDER TEST

### 6.1 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM

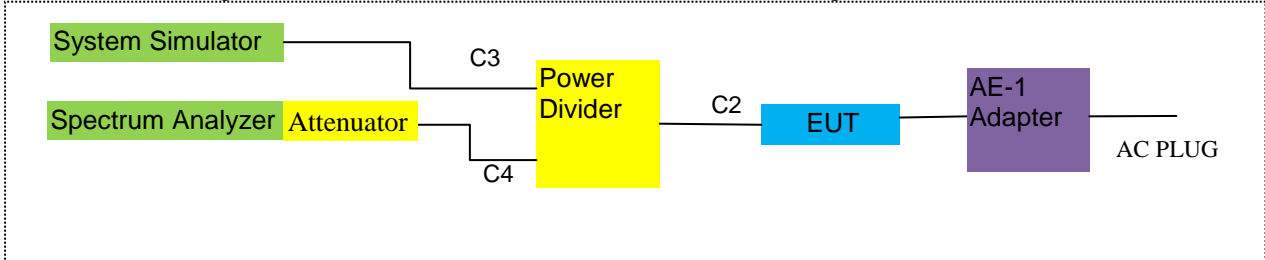
For Radiated Test Cases



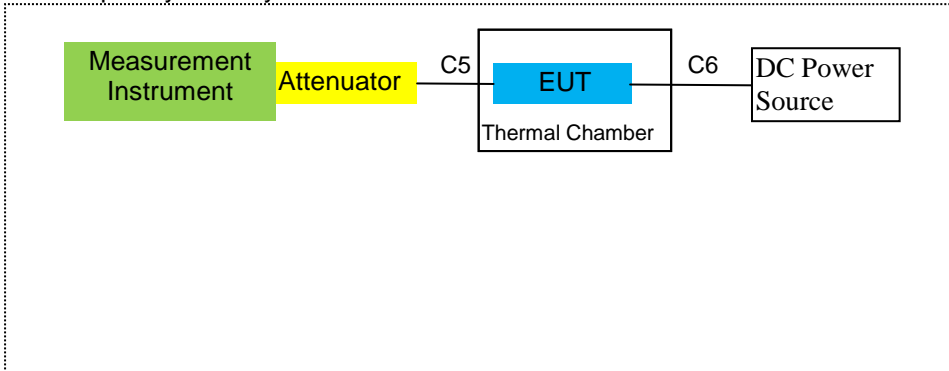
For Conducted Output Power



For Peak-to Average Ratio, Occupied Bandwidth, Conducted Band edge and Conducted Spurious Emission



For Frequency Stability



**6.2 SUPPORT EQUIPMENT**

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	RF Cable	YES	NO	0.1m
C-2	RF Cable	YES	NO	0.1m
C-3	RF Cable	YES	NO	0.1m
C-4	RF Cable	YES	NO	0.2m
C-5	RF Cable	YES	NO	0.2m
C-6	DC Cable	NO	NO	1.0m

**Notes:**

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

**6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	MXA Signal Analyzer	Agilent	N9020A	MY49100060	2021.04.27	2022.04.26	1 year
2	Test Receiver	R&S	ESPI	101318	2021.04.27	2022.04.26	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2021.03.29	2022.03.28	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
5	Horn Antenna	EM	EM-AH-10180	2011071402	2021.03.29	2022.03.28	1 year
6	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2021.04.27	2022.04.26	1 year
7	Amplifier	EM	EM-30180	060538	2021.04.27	2022.04.26	1 year
8	Loop Antenna	ARA	PLA-1030/B	1029	2021.04.27	2022.04.26	1 year
9	Power Meter	R&S	NRVS	100696	2021.04.27	2022.04.26	1 year
10	Power Sensor	R&S	URV5-Z4	0395.1619.05	2021.04.27	2022.04.26	1 year
11	Test Cable	N/A	R-01	N/A	2019.08.06	2022.08.05	3 year
12	Test Cable	N/A	R-02	N/A	2019.08.06	2022.08.05	3 year
13	Test Cable	N/A	R-03	N/A	2019.06.28	2022.06.27	3 year
14	Test Receiver	R&S	ESCI	101160	2021.04.27	2022.04.26	1 year
15	LISN	R&S	ENV216	101313	2021.04.27	2022.04.26	1 year
16	LISN	EMCO	3816/2	00042990	2021.04.27	2022.04.26	1 year
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2021.04.27	2022.04.26	1 year
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2021.03.29	2022.03.28	3 year
19	Test Cable	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
20	Test Cable	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
21	Test Cable	N/A	C03	N/A	2020.05.11	2023.05.10	3 year
22	Attenuator	MCE	24-10-34	BN9258	2021.04.27	2022.04.26	1 year
23	Spectrum Analyzer	agilent	e4440a	us44300399	2021.04.27	2022.04.26	1 year
24	test receiver	R&S	ESCI	a0304218	2021.04.27	2022.04.26	1 year
25	Communication Tester	R&S	CMU200	A0304247	2021.04.27	2022.04.26	1 year

26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2021.04.27	2022.04.26	1 year
27	DC Power Source	N/A	PS-6005D	2017040292 3	2020.05.11	2023.05.10	3 year
28	PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2021.06.27	2022.06.26	1 year
29	Communication Tester	R&S	CMW500	148500	2021.04.27	2022.04.26	1 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& DC Power Source which is scheduled for calibration every 3 years.

## 7 TEST REQUIREMENTS

### 7.1 FIELD STRENGTH OF SPURIOUS RADIATION

#### 7.1.1 Applicable Standard

According to FCC KDB 971168 D01 v03 Section 5.8 and ANSI/TIA-603-E-2016 Section 2.2.12

#### 7.1.2 Conformance Limit

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.

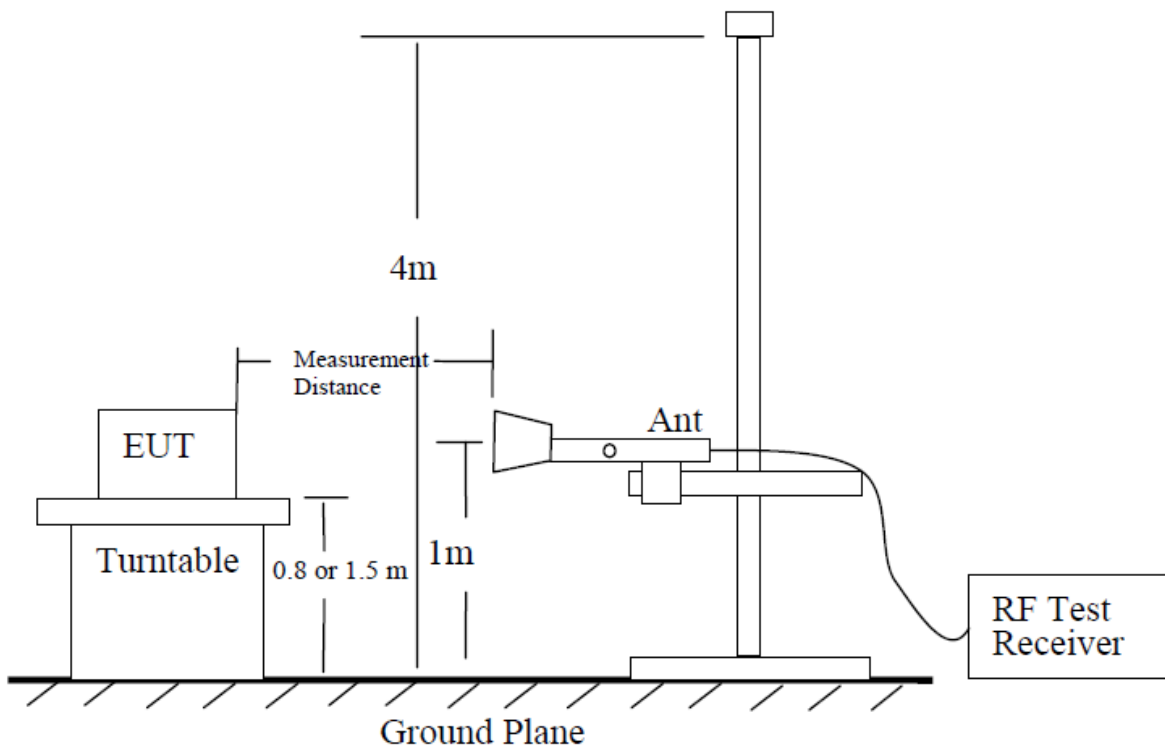
#### 7.1.3 Measuring Instruments

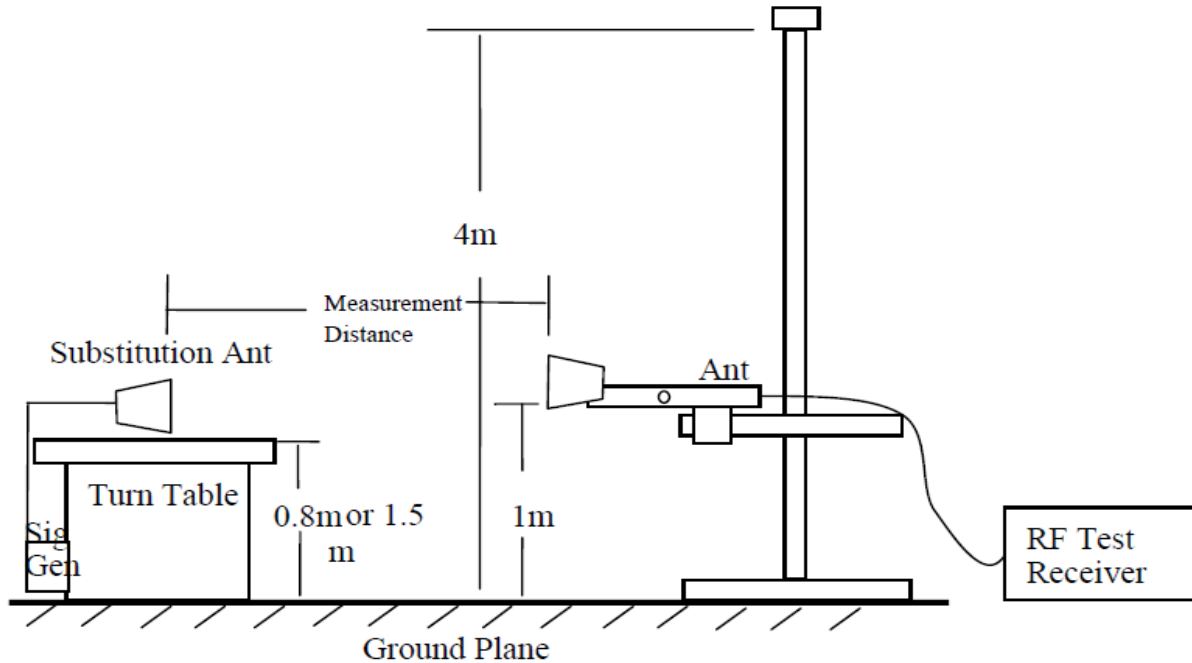
The Measuring equipment is listed in the section 6.3 of this test report.

#### 7.1.4 Test Configuration

According to the ANSI/TIA-603-E-2016 test method, The Receiver or Spectrum was scanned from 9 KHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 1910 MHz The resolution bandwidth is set as outlined in Part 24.238, Part 22.917. The spectrum is scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of CDMA 2000.

### TEST CONFIGURATION





### 7.1.5 Test Procedure

1. EUT was placed on a 0.8 meter (For frequency above 1G, EUT should be placed on 1.5m) high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.50 meter. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz, And the maximum value of the receiver should be recorded as (P<sub>r</sub>).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (SG Level) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P<sub>r</sub>). The power of signal source (SG Level) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Cable Loss), the Substitution Antenna Gain should be recorded after test.  
The measurement results are obtained as described below:  
Power(EIRP)= SG Level- Cable Loss+ Antenna Gain
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.

**7.1.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1 CDMA2000 EVDO-Rev A BC0/BC1	Test By:	Mary Hu

Radiated Spurious Emission

<b>CDMA2000 1xRTT BC0</b>							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 1013/824.70 MHz							
1649.4	-41.84	2.80	27.50	-17.14	-13	-4.14	Vertical
1649.4	-42.61	2.80	27.50	-17.91	-13	-4.91	Horizontal
2474.1	-48.55	2.91	27.80	-23.66	-13	-10.66	Vertical
2474.1	-43.25	2.91	27.80	-18.36	-13	-5.36	Horizontal
3298.8	-45.83	4.02	29.87	-19.98	-13	-6.98	Vertical
3298.8	-44.80	4.02	29.87	-18.95	-13	-5.95	Horizontal
110.8	-43.06	1.69	16.92	-27.83	-13	-14.83	Vertical
202.5	-46.73	1.44	17.46	-30.71	-13	-17.71	Horizontal
Test Results for Channel 384/836.52 MHz							
1673.04	-46.60	2.80	27.48	-21.92	-13	-8.92	Vertical
1673.04	-50.71	2.80	27.48	-26.03	-13	-13.03	Horizontal
2509.56	-44.97	2.91	27.70	-20.18	-13	-7.18	Vertical
2509.56	-45.80	2.91	27.70	-21.01	-13	-8.01	Horizontal
3346.08	-46.18	4.02	29.82	-20.38	-13	-7.38	Vertical
3346.08	-46.24	4.02	29.82	-20.44	-13	-7.44	Horizontal
151.4	-42.93	1.48	15.71	-28.70	-13	-15.70	Vertical
265.5	-43.19	1.61	17.99	-26.81	-13	-13.81	Horizontal
Test Results for Channel 777/848.31 MHz							
1696.62	-47.26	2.80	27.42	-22.64	-13	-9.64	Vertical
1696.62	-43.16	2.80	27.42	-18.54	-13	-5.54	Horizontal
2544.93	-47.08	2.91	27.68	-22.31	-13	-9.31	Vertical
2544.93	-47.74	2.91	27.68	-22.97	-13	-9.97	Horizontal
3393.24	-45.88	4.02	29.80	-20.10	-13	-7.10	Vertical
3393.24	-48.32	4.02	29.80	-22.54	-13	-9.54	Horizontal
237.4	-43.25	1.48	15.06	-29.67	-13	-16.67	Vertical
273.9	-41.81	1.47	15.08	-28.20	-13	-15.20	Horizontal

Remark:

1. We were tested all Configuration refer 3GPP TS134 121.
2. Absolute Level = SG Level- Cable Loss+ Antenna Gain
3. Over Limit= Absolute Level (dBm)-Limit(dBm)



<b>CDMA2000 1xEVDO-Rev A BC0</b>							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 1013/824.70 MHz							
1649.4	-41.84	2.80	27.50	-17.14	-13	-4.14	Vertical
1649.4	-42.61	2.80	27.50	-17.91	-13	-4.91	Horizontal
2474.1	-48.55	2.91	27.80	-23.66	-13	-10.66	Vertical
2474.1	-43.25	2.91	27.80	-18.36	-13	-5.36	Horizontal
3298.8	-45.83	4.02	29.87	-19.98	-13	-6.98	Vertical
3298.8	-44.80	4.02	29.87	-18.95	-13	-5.95	Horizontal
110.8	-43.06	1.69	16.92	-27.83	-13	-14.83	Vertical
202.5	-46.73	1.44	17.46	-30.71	-13	-17.71	Horizontal
Test Results for Channel 384/836.52 MHz							
1673.04	-46.60	2.80	27.48	-21.92	-13	-8.92	Vertical
1673.04	-50.71	2.80	27.48	-26.03	-13	-13.03	Horizontal
2509.56	-44.97	2.91	27.70	-20.18	-13	-7.18	Vertical
2509.56	-45.80	2.91	27.70	-21.01	-13	-8.01	Horizontal
3346.08	-46.18	4.02	29.82	-20.38	-13	-7.38	Vertical
3346.08	-46.24	4.02	29.82	-20.44	-13	-7.44	Horizontal
151.4	-42.93	1.48	15.71	-28.70	-13	-15.70	Vertical
265.5	-43.19	1.61	17.99	-26.81	-13	-13.81	Horizontal
Test Results for Channel 777/848.31 MHz							
1696.62	-47.26	2.80	27.42	-22.64	-13	-9.64	Vertical
1696.62	-43.16	2.80	27.42	-18.54	-13	-5.54	Horizontal
2544.93	-47.08	2.91	27.68	-22.31	-13	-9.31	Vertical
2544.93	-47.74	2.91	27.68	-22.97	-13	-9.97	Horizontal
3393.24	-45.88	4.02	29.80	-20.10	-13	-7.10	Vertical
3393.24	-48.32	4.02	29.80	-22.54	-13	-9.54	Horizontal
237.4	-43.25	1.48	15.06	-29.67	-13	-16.67	Vertical
273.9	-41.81	1.47	15.08	-28.20	-13	-15.20	Horizontal

**Remark:**

1. We were tested all Configuration refer 3GPP TS134 121.
2. Absolute Level = SG Level- Cable Loss+ Antenna Gain
3. Over Limit= Absolute Level (dBm)-Limit(dBm)

<b>CDMA2000 1xRTT BC1</b>							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 25/1851.25 MHz							
3702.5	-55.83	4.04	33.51	-26.36	-13	-13.36	Vertical
3702.5	-50.70	4.04	33.51	-21.23	-13	-8.23	Horizontal
5553.75	-55.24	5.24	35.84	-24.64	-13	-11.64	Vertical
5553.75	-52.97	5.24	35.84	-22.37	-13	-9.37	Horizontal
118.3	-39.19	1.76	17.51	-23.44	-13	-10.44	Vertical
156.3	-45.15	1.61	15.16	-31.60	-13	-18.60	Horizontal
Test Results for Channel 600/1880.0MHz							
3760	-49.19	4.04	33.56	-19.67	-13	-6.67	Vertical
3760	-53.61	4.04	33.56	-24.09	-13	-11.09	Horizontal
5640	-49.10	5.24	35.91	-18.43	-13	-5.43	Vertical
5640	-55.70	5.24	35.91	-25.03	-13	-12.03	Horizontal
271.7	-43.75	1.69	17.89	-27.55	-13	-14.55	Vertical
158.4	-46.94	1.76	17.72	-30.98	-13	-17.98	Horizontal
Test Results for Channel 1175/1908.75 MHz							
3817.5	-48.89	4.04	34.00	-18.93	-13	-5.93	Vertical
3817.5	-53.77	4.04	34.00	-23.81	-13	-10.81	Horizontal
5726.25	-51.87	5.24	36.04	-21.07	-13	-8.07	Vertical
5726.25	-51.19	5.24	36.04	-20.39	-13	-7.39	Horizontal
265.9	-39.12	1.50	17.96	-22.66	-13	-9.66	Vertical
113.4	-38.63	1.63	17.28	-22.98	-13	-9.98	Horizontal

Remark:

1. We were tested all Configuration refer 3GPP TS134 121.
2. Absolute Level = SG Level- Cable Loss+ Antenna Gain
3. Over Limit= Absolute Level (dBm)-Limit(dBm)

<b>CDMA2000 1xEVDO-Rev A BC1</b>							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 25/1851.25 MHz							
3702.5	-50.08	4.04	33.51	-20.61	-13	-7.61	Vertical
3702.5	-50.82	4.04	33.51	-21.35	-13	-8.35	Horizontal
5553.75	-54.62	5.24	35.84	-24.02	-13	-11.02	Vertical
5553.75	-48.28	5.24	35.84	-17.68	-13	-4.68	Horizontal
125.4	-44.46	1.65	17.95	-28.16	-13	-15.16	Vertical
255.5	-41.75	1.48	16.68	-26.55	-13	-13.55	Horizontal
Test Results for Channel 600/1880.0MHz							
3760	-48.30	4.04	33.56	-18.78	-13	-5.78	Vertical
3760	-48.66	4.04	33.56	-19.14	-13	-6.14	Horizontal
5640	-55.56	5.24	35.91	-24.89	-13	-11.89	Vertical
5640	-58.49	5.24	35.91	-27.82	-13	-14.82	Horizontal
117.8	-48.39	1.35	17.32	-32.42	-13	-19.42	Vertical
89.6	-43.98	1.33	15.00	-30.31	-13	-17.31	Horizontal
Test Results for Channel 1175/1908.75 MHz							
3817.5	-51.91	4.04	34.00	-21.95	-13	-8.95	Vertical
3817.5	-54.45	4.04	34.00	-24.49	-13	-11.49	Horizontal
5726.25	-48.81	5.24	36.04	-18.01	-13	-5.01	Vertical
5726.25	-56.37	5.24	36.04	-25.57	-13	-12.57	Horizontal
81.7	-45.24	1.36	15.92	-30.68	-13	-17.68	Vertical
144.7	-39.32	1.70	17.42	-23.60	-13	-10.60	Horizontal

Remark:

1. We were tested all Configuration refer 3GPP TS134 121.
2. Absolute Level = SG Level- Cable Loss+ Antenna Gain
3. Over Limit= Absolute Level (dBm)-Limit(dBm)

CDMA2000 BC10 1xRTT							
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 450/817.25 MHz							
1634.5	-50.15	2.80	27.50	-25.45	-13	-12.45	Vertical
1634.5	-51.02	2.80	27.50	-26.32	-13	-13.32	Horizontal
2451.75	-46.60	2.91	27.80	-21.71	-13	-8.71	Vertical
2451.75	-51.83	2.91	27.80	-26.94	-13	-13.94	Horizontal
3269	-54.57	4.02	29.87	-28.72	-13	-15.72	Vertical
3269	-43.82	4.02	29.87	-17.97	-13	-4.97	Horizontal
232.1	-46.56	1.56	16.76	-31.36	-13	-18.36	Vertical
152.3	-38.88	1.46	16.84	-23.50	-13	-10.50	Horizontal
Test Results for Channel 560/820 MHz							
1640	-41.56	2.80	27.48	-16.88	-13	-3.88	Vertical
1640	-41.41	2.80	27.48	-16.73	-13	-3.73	Horizontal
2460	-52.08	2.91	27.70	-27.29	-13	-14.29	Vertical
2460	-41.50	2.91	27.70	-16.71	-13	-3.71	Horizontal
3280	-42.30	4.02	29.82	-16.50	-13	-3.50	Vertical
3280	-51.74	4.02	29.82	-25.94	-13	-12.94	Horizontal
147.7	-43.98	1.60	16.55	-29.03	-13	-16.03	Vertical
215.9	-45.38	1.79	15.82	-31.35	-13	-18.35	Horizontal
Test Results for Channel 670/822.75 MHz							
1645.5	-41.61	2.80	27.42	-16.99	-13	-3.99	Vertical
1645.5	-43.25	2.80	27.42	-18.63	-13	-5.63	Horizontal
2468.25	-44.99	2.91	27.68	-20.22	-13	-7.22	Vertical
2468.25	-44.45	2.91	27.68	-19.68	-13	-6.68	Horizontal
3291	-45.60	4.02	29.80	-19.82	-13	-6.82	Vertical
3291	-49.04	4.02	29.80	-23.26	-13	-10.26	Horizontal
212.3	-44.89	1.59	15.96	-30.52	-13	-17.52	Vertical
153.6	-39.30	1.64	15.11	-25.83	-13	-12.83	Horizontal

**Remark:**

1. We were tested all Configuration refer 3GPP TS134 121.
2. Absolute Level = SG Level- Cable Loss+ Antenna Gain
3. Over Limit= Absolute Level (dBm)-Limit(dBm)

**CDMA2000 BC10 1xEV-Do Rel.A**

Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)	
Test Results for Channel 450/817.25 MHz							
1634.5	-43.10	2.80	27.50	-18.40	-13	-5.40	Vertical
1634.5	-45.04	2.80	27.50	-20.34	-13	-7.34	Horizontal
2451.75	-44.29	2.91	27.80	-19.40	-13	-6.40	Vertical
2451.75	-50.23	2.91	27.80	-25.34	-13	-12.34	Horizontal
3269	-49.37	4.02	29.87	-23.52	-13	-10.52	Vertical
3269	-42.03	4.02	29.87	-16.18	-13	-3.18	Horizontal
128.5	-40.06	1.66	16.48	-25.24	-13	-12.24	Vertical
92.6	-44.58	1.53	15.13	-30.98	-13	-17.98	Horizontal
Test Results for Channel 560/820 MHz							
1640	-51.95	2.80	27.48	-27.27	-13	-14.27	Vertical
1640	-45.01	2.80	27.48	-20.33	-13	-7.33	Horizontal
2460	-45.14	2.91	27.70	-20.35	-13	-7.35	Vertical
2460	-46.50	2.91	27.70	-21.71	-13	-8.71	Horizontal
3280	-49.86	4.02	29.82	-24.06	-13	-11.06	Vertical
3280	-51.05	4.02	29.82	-25.25	-13	-12.25	Horizontal
277.8	-45.31	1.68	17.27	-29.72	-13	-16.72	Vertical
169.3	-43.91	1.66	15.80	-29.77	-13	-16.77	Horizontal
Test Results for Channel 670/822.75 MHz							
1645.5	-49.73	2.80	27.42	-25.11	-13	-12.11	Vertical
1645.5	-39.47	2.80	27.42	-14.85	-13	-1.85	Horizontal
2468.25	-45.48	2.91	27.68	-20.71	-13	-7.71	Vertical
2468.25	-44.76	2.91	27.68	-19.99	-13	-6.99	Horizontal
3291	-40.95	4.02	29.80	-15.17	-13	-2.17	Vertical
3291	-45.75	4.02	29.80	-19.97	-13	-6.97	Horizontal
198.2	-44.23	1.77	17.60	-28.40	-13	-15.40	Vertical
266.9	-44.48	1.48	17.31	-28.65	-13	-15.65	Horizontal

## 7.2 EFFECTIVE RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER

### 7.2.1 Applicable Standard

According to FCC KDB 971168 D01 v03 Section 5.2.1/ Section 5.2.2.2 and ANSI/TIA-603-E-2016 Section 2.2.17

### 7.2.2 Conformance Limit

The substitution method, in ANSI/TIA-603-E-2016, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03. 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).

### 7.2.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.2.4 Test Configuration

(a) For E.R.P and E.I.R.P Measurements  
Please refer to the section 7.1.4 in this report.

### 7.2.5 Test Procedure

The measurements procedures specified in ANSI/TIA-603-E-2016 were applied. In an anechoic antenna test chamber, a half-wave dipole antenna for the frequency band of interest is placed at the reference centre of the chamber. An RF Signal source for the frequency band of interest is connected to the dipole with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A known (measured) power ( $P_{in}$ ) is applied to the input of the dipole, and the power received ( $P_r$ ) at the chamber's probe antenna is recorded.

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$ERP/EIRP = SGLevel - P_{cl} + G_a$$

where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as SGLevel, typically dBW or dBm);

SGLevel = Signal generator output power or PSD, in dBm or dBW;

$G_a$  = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

$P_{cl}$  = signal attenuation in the connecting cable between the transmitter and antenna, in dB.<sup>2</sup>

The EUT is substituted for the dipole at the reference centre of the chamber and a scan is performed to obtain the radiation pattern.

From the radiation pattern, the co-ordinates where the maximum antenna gain occurs are identified.

The EUT is then put into continuously transmitting mode at its maximum power level.

Power mode measurements are performed with the receiving antenna placed at the coordinates determined in Step 3 to determine the output power as defined in Rule 24.232 (b) and (c). The "reference path loss" from Step1 is added to this result.

This value is EIRP since the measurement is calibrated using a half-wave dipole antenna of known gain (2.15 dBi) and known input power ( $P_{in}$ ).

ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15dBi$ .

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

Substitution antenna and Receiving Antenna:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Character	Note
1	Bilog Antenna	TESEQ	CBL6111D	31216	30MHz~2GHz	Receiving Antenna
2	Horn Antenna	EM	EM-AH-10180	2011071402	1GHz~18GHz	Receiving Antenna
3	Bilog Antenna	TESEQ	CBL6111D	31216	30MHz~2GHz	Substitution antenna
4	Horn Antenna	EM	EM-AH-10180	2011071402	1GHz~18GHz	Substitution antenna

Use the following spectrum analyzer settings:

	CDMA2000
Span	10MHz
RBW	300KHz
VBW	1MHz
Detector	RMS
Trace	Average
Average Type	Power
Sweep Count	100

**7.2.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu

**■ Effective Radiated Power**

Radiated Power (ERP) for CDMA2000 1xRTT RC3,SO32(+F-SCH) BC0							
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	Correction	ERP	ERP
(MHz)		(dBm)	(dB)	(dB)	(dB)	(dBm)	(W)
824.7	H	5.03	2.11	23.84	2.15	24.61	0.28907
836.52	H	5.01	2.13	23.15	2.15	23.88	0.24434
848.31	H	4.16	2.13	23.06	2.15	22.94	0.19679
824.7	V	4.55	2.11	23.11	2.15	23.40	0.21878
836.52	V	4.27	2.13	23.07	2.15	23.06	0.20230
848.31	V	5.7	2.13	23.25	2.15	24.67	0.29309

Radiated Power (ERP) for CDMA2000 1xEVDO-Rev A BC0							
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	Correction	ERP	ERP
(MHz)		(dBm)	(dB)	(dB)	(dB)	(dBm)	(W)
824.7	H	4.97	2.11	23.84	2.15	24.55	0.28510
836.52	H	5.28	2.13	23.15	2.15	24.15	0.26002
848.31	H	3.9	2.13	23.06	2.15	22.68	0.18535
824.7	V	4.71	2.11	23.11	2.15	23.56	0.22699
836.52	V	4.46	2.13	23.07	2.15	23.25	0.21135
848.31	V	5.42	2.13	23.25	2.15	24.39	0.27479

Note:

SG Level= Signal generator output

Pcl= cable loss

Ga= Antenna Gain

Peak EIRP(dBm)= SGLevel -Pcl +Ga

ERP(dBm)=EIRP-2.15



Radiated Power (E.I.R.P) for CDMA2000 1xRTT RC3,SO32(+F-SCH) BC1						
Frequency	Polarization	SG	Pcl	Ga	ERP	ERP
(MHz)		Level	(dB)	Antenna	(dBm)	(W)
		(dBm)		Gain		
		(dBm)	(dB)	(dB)	(dBm)	(W)
1851.25	H	0.30	3.76	28.24	24.78	0.30061
1880	H	0.39	3.91	28.22	24.70	0.29512
1908.75	H	0.76	3.93	28.20	25.03	0.31842
1851.25	V	0.70	3.76	27.32	24.26	0.26669
1880	V	1.06	3.91	27.33	24.48	0.28054
1908.75	V	1.72	3.93	27.31	25.10	0.32359

Radiated Power (E.I.R.P) for CDMA2000 1xEVDO-Rev A BC1						
Frequency	Polarization	SG	Pcl	Ga	ERP	ERP
(MHz)		Level	(dB)	Antenna	(dBm)	(W)
		(dBm)		Gain		
		(dBm)	(dB)	(dB)	(dBm)	(W)
1851.25	H	-0.31	3.76	28.24	24.17	0.26122
1880	H	-0.1	3.91	28.22	24.21	0.26363
1908.75	H	-0.1	3.93	28.20	24.17	0.26122
1851.25	V	0.51	3.76	27.32	24.07	0.25527
1880	V	0.13	3.91	27.33	23.55	0.22646
1908.75	V	1.05	3.93	27.31	24.43	0.27733

Note:

SG Level= Signal generator output

Pcl= cable loss

Ga= Antenna Gain

Peak EIRP(dBm)= SGLevel -Pcl +Ga

ERP(dBm)=EIRP-2.15

Radiated Power (ERP) CDMA2000 1xRTT RC3,SO32(+F-SCH) BC10							
Frequency	Polarization	SG	Pcl	Ga	Correction	ERP	ERP
(MHz)		Level	(dB)	Antenna Gain		(dBm)	(W)
817.25	H	4.89	1.89	23.84	2.15	24.69	0.29444
820	H	4.53	1.92	23.15	2.15	23.61	0.22961
822.75	H	4.43	1.94	23.06	2.15	23.40	0.21878
817.25	V	5.04	1.89	23.11	2.15	24.11	0.25763
820	V	5.08	1.92	23.07	2.15	24.08	0.25586
822.75	V	5.06	1.94	23.25	2.15	24.22	0.26424

Radiated Power (ERP) for CDMA2000 1xEVDO-Rev A BC10							
Frequency	Polarization	SG	Pcl	Ga	Correction	ERP	ERP
(MHz)		Level	(dB)	Antenna Gain		(dBm)	(W)
817.25	H	4.03	1.89	23.84	2.15	23.83	0.24155
820	H	5.24	1.92	23.15	2.15	24.32	0.27040
822.75	H	4.17	1.94	23.06	2.15	23.14	0.20606
817.25	V	4.66	1.89	23.11	2.15	23.73	0.23605
820	V	4.31	1.92	23.07	2.15	23.31	0.21429
822.75	V	4.97	1.94	23.25	2.15	24.13	0.25882

Note:

SG Level= Signal generator output

Pcl= cable loss

Ga= Antenna Gain

Peak EIRP(dBm)= SGLevel -Pcl +Ga

### 7.3 CONDUCTED OUTPUT POWER

#### 7.3.1 Applicable Standard

According to FCC Part 2.1046 and FCC Part 22.913(a)(2)) and FCC KDB 971168 D01 v03 Section 5.2

#### 7.3.2 Conformance Limit

Extend coverage on a secondary basis into cellular unserved areas, as those areas are defined in §22.949, the ERP of base transmitters and cellular repeaters of such systems must not exceed 1000 Watts. The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts(38.5dBm).

Mobile and portable stations are limited to 2 watts (33dBm)EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications..

For CDMA2000 Power: Maximum output power is verified on the Low, Middle and High channels according to procedures in section 4.4.5.2.of 3GPP2 C.S0011/TIA-98-E for 1Xrtt, section 3.1.2.3.4 of 3GPP2 C.S0033-0/TIA-866 for Rel.0 and section 4.3.4 of 3GPP2 C.S0033-A for Rev.A.

#### 7.3.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

#### 7.3.4 Test Setup

Please refer to Section 6.1 of this test report.

#### 7.3.5 Test Procedure

Connect the EUT to Universal Radio Communication Tester CMU200 or CMU500 via the antenna connector. A call is set up by the SS according to the generic call set up procedure on a channel with ARFCN in the ARFCN range, power control level set to Max power. The frequency band is set as selected frequency, The RF output of the transmitter was connected to base station simulator.

Set EUT at maximum average power by base station simulator.

Set RBW = 1-5% of the OBW, not to exceed 1 MHz.

Set VBW  $\geq 3 \times$  RBW.

Number of points in sweep  $\geq 2 \times$  span / RBW. (This gives bin-to-bin spacing  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)

Sweep time = auto.

Detector = RMS (power averaging).

Set sweep trigger to "free run".

Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the on and off periods of the transmitter.

Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Add  $10 \log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \log(1/0.25) = 6$  dB if the duty cycle is a constant 25%.

Measure lowest, middle, and highest channels for each bandwidth and different modulation.

Measure and record the results in the test report.

**7.3.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu

Band	Channel	Frequency (MHz)	Power (dBm)
CDMA2000 BC0 1xRTT(RC1,SO55)	1013	824.7	23.03
CDMA2000 BC0 1xRTT(RC1,SO55)	384	836.52	22.88
CDMA2000 BC0 1xRTT(RC1,SO55)	777	848.31	22.84
CDMA2000 BC0 1xRTT(RC3,SO55)	1013	824.7	23.01
CDMA2000 BC0 1xRTT(RC3,SO55)	384	836.52	23.42
CDMA2000 BC0 1xRTT(RC3,SO55)	777	848.31	23.31
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	1013	824.7	23.21
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	384	836.52	23.52
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	777	848.31	23.12
CDMA2000 BC0 1xEV-Do Rel.0	1013	824.7	22.21
CDMA2000 BC0 1xEV-Do Rel.0	384	836.52	23.42
CDMA2000 BC0 1xEV-Do Rel.0	777	848.31	23.31
CDMA2000 BC0 1xEV-Do Rel.A	1013	824.7	23.07
CDMA2000 BC0 1xEV-Do Rel.A	384	836.52	22.24
CDMA2000 BC0 1xEV-Do Rel.A	777	848.31	23.24
CDMA2000 BC1 1xRTT(RC1,SO55)	25	1851.25	22.87
CDMA2000 BC1 1xRTT(RC1,SO55)	600	1880	23
CDMA2000 BC1 1xRTT(RC1,SO55)	1175	1908.75	22.91
CDMA2000 BC1 1xRTT(RC3,SO55)	25	1851.25	23.77
CDMA2000 BC1 1xRTT(RC3,SO55)	600	1880	23.75
CDMA2000 BC1 1xRTT(RC3,SO55)	1175	1908.75	23.71
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	25	1851.25	23.81
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	600	1880	23.21
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	1175	1908.75	23.12
CDMA2000 BC1 1xEV-Do Rel.0	25	1851.25	23.74
CDMA2000 BC1 1xEV-Do Rel.0	600	1880	23.92
CDMA2000 BC1 1xEV-Do Rel.0	1175	1908.75	23.76
CDMA2000 BC1 1xEV-Do Rel.A	25	1851.25	23.82
CDMA2000 BC1 1xEV-Do Rel.A	600	1880	23.18
CDMA2000 BC1 1xEV-Do Rel.A	1175	1908.75	23.01

CDMA2000 BC10 1xRTT(RC1,SO55)	450	817.25	23.03
CDMA2000 BC10 1xRTT(RC1,SO55)	560	820	22.92
CDMA2000 BC10 1xRTT(RC1,SO55)	670	822.75	22.92
CDMA2000 BC10 1xRTT(RC3,SO55)	450	817.25	23.47
CDMA2000 BC10 1xRTT(RC3,SO55)	560	820	23.72
CDMA2000 BC10 1xRTT(RC3,SO55)	670	822.75	23.41
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	450	817.25	23.42
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	560	820	23.21
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	670	822.75	23.11
CDMA2000 BC10 1xEV-Do Rel.0	450	817.25	23.34
CDMA2000 BC10 1xEV-Do Rel.0	560	820	23.29
CDMA2000 BC10 1xEV-Do Rel.0	670	822.75	23.31
CDMA2000 BC10 1xEV-Do Rel.A	450	817.25	23.32
CDMA2000 BC10 1xEV-Do Rel.A	560	820	23.17
CDMA2000 BC10 1xEV-Do Rel.A	670	822.75	23.01

## 7.4 FREQUENCY STABILITY

### 7.4.1 Applicable Standard

According to FCC Part 2.1055 and FCC Part 22.355 and FCC KDB 971168 D01 Section 9.0

### 7.4.2 Conformance Limit

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.

### 7.4.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

### 7.4.5 Test Procedure

Connect the EUT to Universal Radio Communication Tester CMU200 or CMU500 via the antenna connector. A call is set up by the SS according to the generic call set up procedure on a channel with ARFCN in the ARFCN range, power control level set to Max power. MS TXPWR\_MAX\_CCH is set to the maximum value supported by the Power Class of the Mobile under test.

EUT was placed at temperature chamber and connected to an external power supply.

Temperature and voltage condition shall be tested to confirm frequency stability.

For Temperature Variation

1. The testing follows FCC KDB 971168 D01 v03 Section 9.0.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps up to  $50^{\circ}\text{C}$ . 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.

For Voltage Variation

1. The testing follows FCC KDB 971168 D01 v03 Section 9.0.
2. The EUT was placed in a temperature chamber at  $25\pm 5^{\circ}\text{C}$  and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

**7.4.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu
Results: PASS			

Frequency Error Against Voltage for CDMA2000 1xRTT BC0(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	23	0.02749
3.85	15	0.01793
4.2	12	0.01435

Frequency Error Against Temperature for CDMA2000 1xRTT BC0(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	20	0.02391
-20	12	0.01435
-10	8	0.00956
0	6	0.00717
10	5	0.00598
20	6	0.00717
30	5	0.00598
40	4	0.00478
50	6	0.00717

Frequency Error Against Voltage for CDMA2000 1xEV-Do Rev.A BC0(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	26	0.03108
3.85	21	0.02510
4.2	12	0.01435

Frequency Error Against Temperature for CDMA2000 1xEV-Do Rev.A BC0(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	21	0.02510
-20	5	0.00598
-10	11	0.01315
0	13	0.01554
10	3	0.00359
20	12	0.01435
30	6	0.00717
40	13	0.01554
50	14	0.01674

Note:

1. Normal Voltage = 3.85V; Battery End Point (BEP) = 3.4V; Maximum Voltage = 4.2V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Frequency Error Against Voltage for CDMA2000 1xRTT BC1(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	5	0.00266
3.85	14	0.00745
4.2	6	0.00319

Frequency Error Against Temperature for CDMA2000 1xRTT BC1(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	13	0.00691
-20	12	0.00638
-10	14	0.00745
0	12	0.00638
10	13	0.00691
20	6	0.00319
30	5	0.00266
40	6	0.00319
50	4	0.00213

Frequency Error Against Voltage for CDMA2000 1xEV-Do Rev.A BC1(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	13	0.00691
3.85	3	0.00160
4.2	12	0.00638

Frequency Error Against Temperature for CDMA2000 1xEV-Do Rev.A BC1(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	9	0.00479
-20	11	0.00585
-10	5	0.00266
0	13	0.00691
10	10	0.00532
20	5	0.00266
30	6	0.00319
40	7	0.00372
50	9	0.00479

Note:

1. Normal Voltage = 3.85V; Battery End Point (BEP) = 3.4V; Maximum Voltage = 4.2V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Frequency Error Against Voltage for CDMA2000 1xRTT(RC3,SO32(+F-SCH))BC10(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	22	0.026829
3.85	21	0.025610
4.2	15	0.018293

Frequency Error Against Temperature for CDMA2000 1xRTT(RC3,SO32(+F-SCH))BC10(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	24	0.02927
-20	9	0.01098
-10	15	0.01829
0	5	0.00610
10	6	0.00732
20	14	0.01707
30	12	0.01463
40	13	0.01585
50	6	0.00732

Note:

1. Normal Voltage = 3.85V; Battery End Point (BEP) = 3.4V; Maximum Voltage =4.2V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

Frequency Error Against Voltage for CDMA2000 1xEV-Do Rev.A BC10(Mid CH)		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.4	20	0.024390
3.85	21	0.025610
4.2	23	0.028049

Frequency Error Against Temperature for CDMA2000 1xEV-Do Rev.A BC10(Mid CH)		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	13	0.01585
-20	14	0.01707
-10	12	0.01463
0	16	0.01951
10	15	0.01829
20	17	0.02073
30	8	0.00976
40	9	0.01098
50	21	0.02561

Note:

1. Normal Voltage = 3.85V; Battery End Point (BEP) = 3.4V; Maximum Voltage =4.2V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

## 7.5 PEAK-TO-AVERAGE RATIO

### 7.5.1 Applicable Standard

According to Subclause 5.2.3.4 of ANSI C63.26-2015 and FCC KDB 971168 D01 Section 5.7.1

### 7.5.2 Conformance Limit

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

### 7.5.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

### 7.5.5 Test Procedure

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set the number of counts to a value that stabilizes the measured CCDF curve.

Set the measurement interval to 1 ms.

Record the maximum PAPR level associated with a probability of 0.1%.

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

**7.5.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu
Results: PASS			

Band	Channel	Frequency (MHz)	Result (dB)	high Limit (dB)	Verdict
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	1013	824.7	3.85	13	PASS
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	384	836.52	4.02	13	PASS
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	777	848.31	3.79	13	PASS
CDMA2000 BC0 1xEV-Do Rel.A	1013	824.7	3.85	13	PASS
CDMA2000 BC0 1xEV-Do Rel.A	384	836.52	4.02	13	PASS
CDMA2000 BC0 1xEV-Do Rel.A	777	848.31	3.79	13	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	25	1851.25	3.06	13	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	600	1880	3.01	13	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	1175	1908.75	3.05	13	PASS
CDMA2000 BC1 1xEV-Do Rel.A	25	1851.25	3.06	13	PASS
CDMA2000 BC1 1xEV-Do Rel.A	600	1880	3.00	13	PASS
CDMA2000 BC1 1xEV-Do Rel.A	1175	1908.75	3.05	13	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	25	1851.25	3.91	13	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	600	1880	4.00	13	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	1175	1908.75	4.03	13	PASS
CDMA2000 BC10 1xEV-Do Rel.A	25	1851.25	3.90	13	PASS
CDMA2000 BC10 1xEV-Do Rel.A	600	1880	4.00	13	PASS
CDMA2000 BC10 1xEV-Do Rel.A	1175	1908.75	4.04	13	PASS

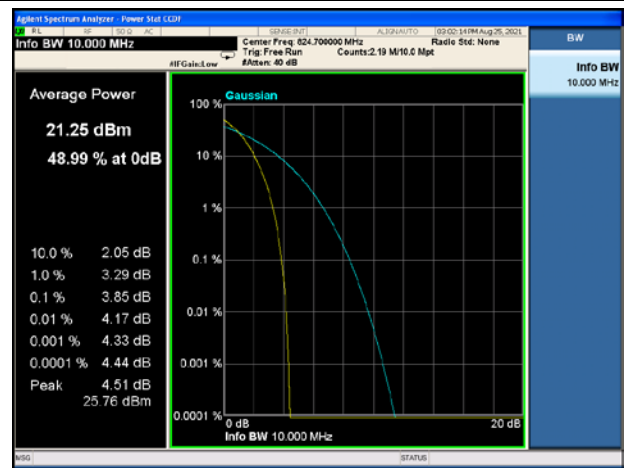
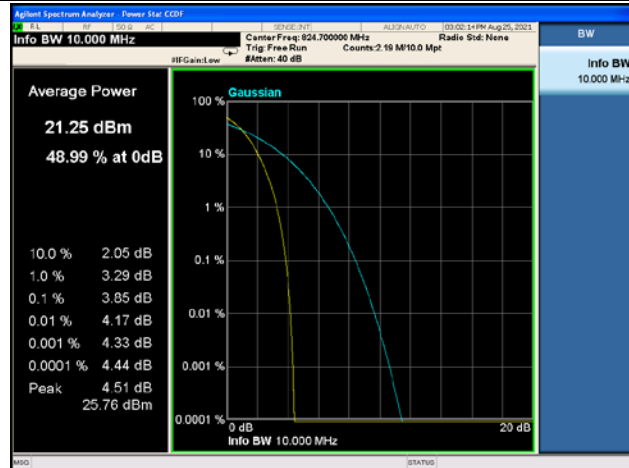
Test plot

CDMA2000 BC0 1xRTT(RC3,S032(+F-SCH))

CDMA2000 BC0 1xEV-Do Rel.A

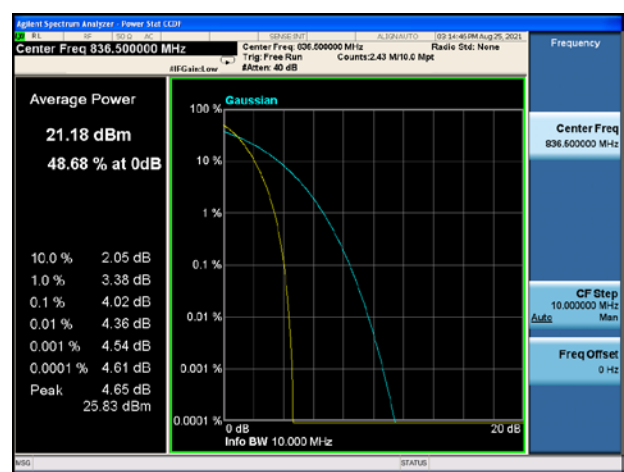
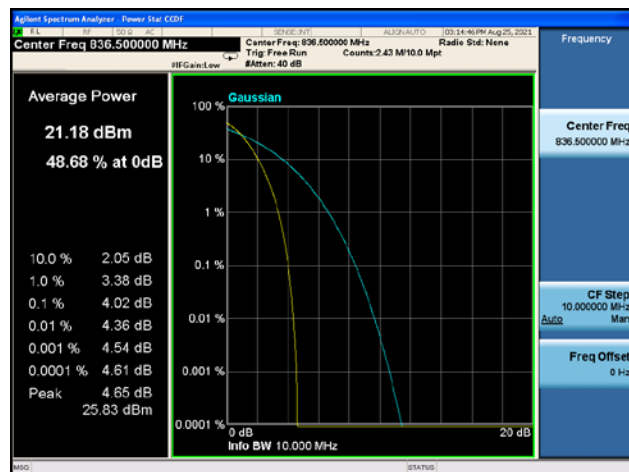
Peak-to-Average Ratio on channel 1013

Peak-to-Average Ratio on channel 1013



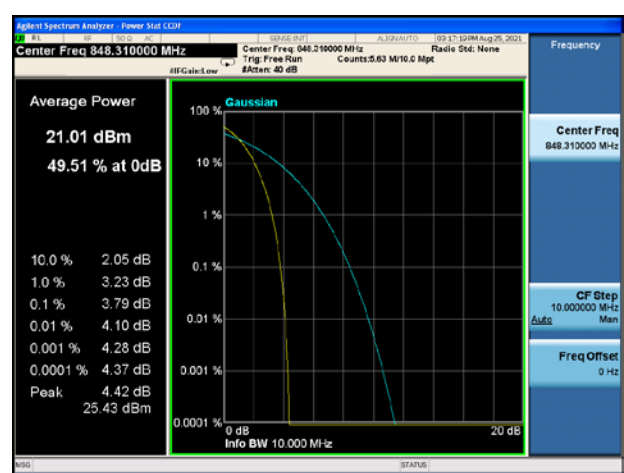
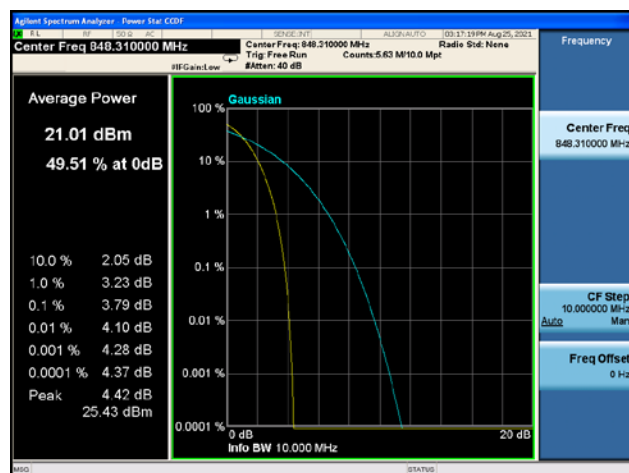
Peak-to-Average Ratio on channel 384

Peak-to-Average Ratio on channel 384



Peak-to-Average Ratio on channel 777

Peak-to-Average Ratio on channel 777



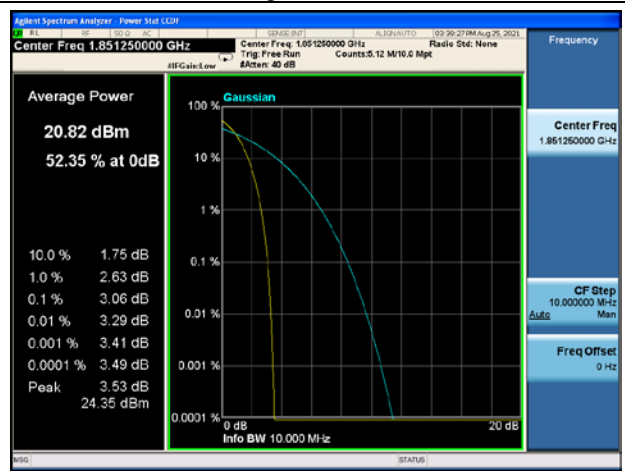
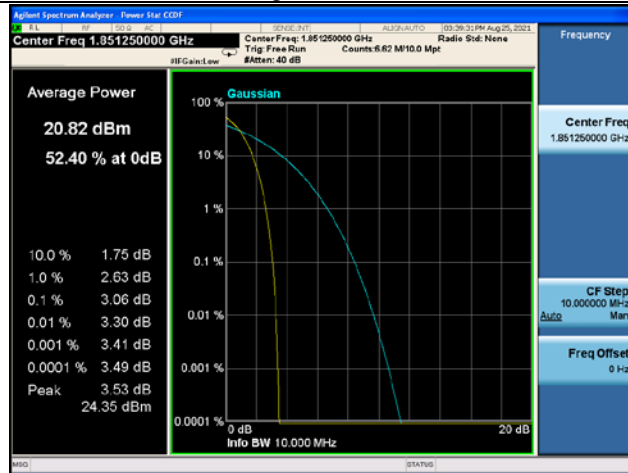
Test plot

CDMA2000 BC1 1xRTT(RC3,S032(+F-SCH))

CDMA2000 BC1 1xEV-Do Rel.A

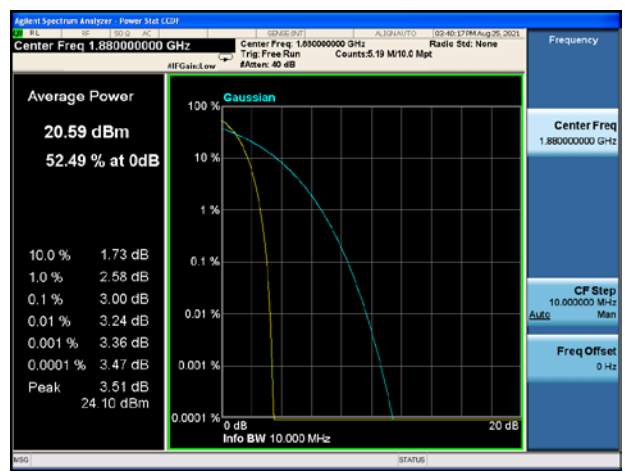
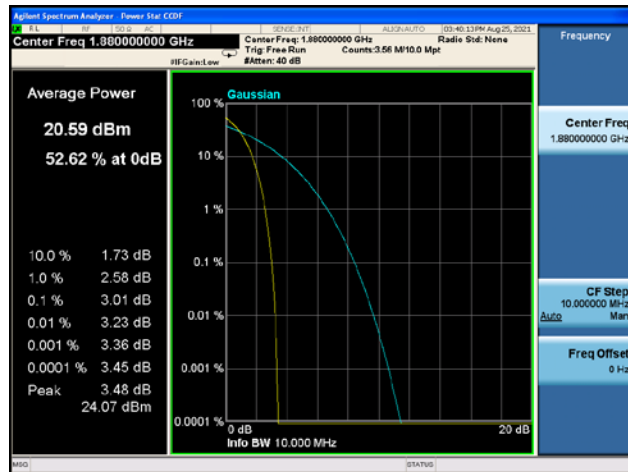
Peak-to-Average Ratio on channel 25

Peak-to-Average Ratio on channel 25



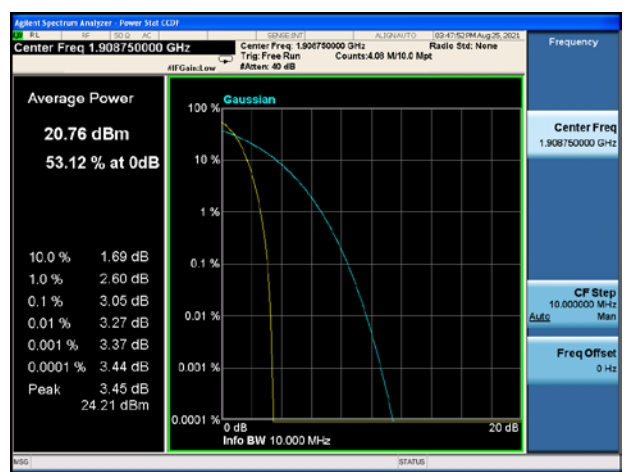
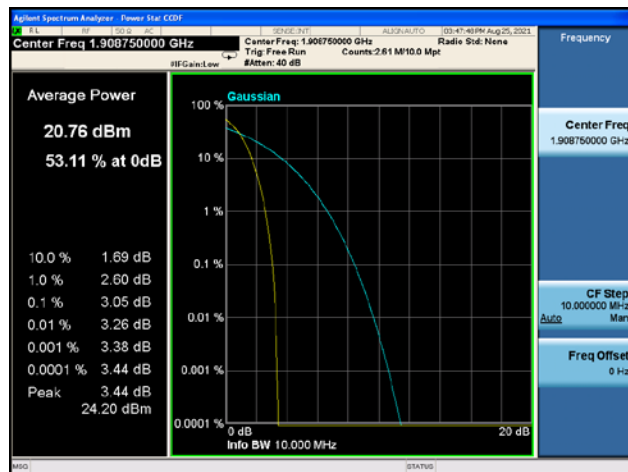
Peak-to-Average Ratio on channel 600

Peak-to-Average Ratio on channel 600



Peak-to-Average Ratio on channel 1175

Peak-to-Average Ratio on channel 1175



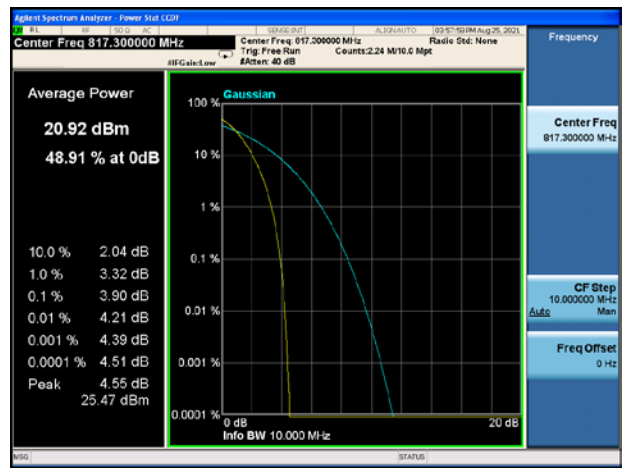
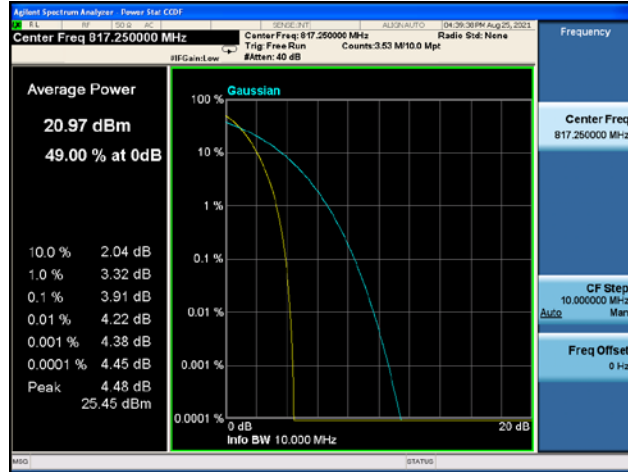
Test plot

CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC10 1xEV-Do Rel.A

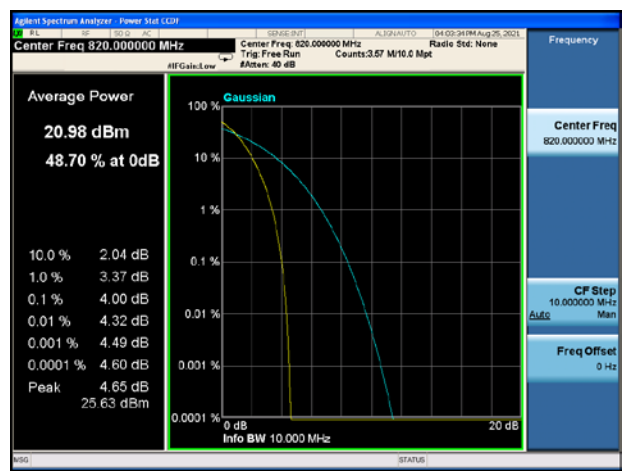
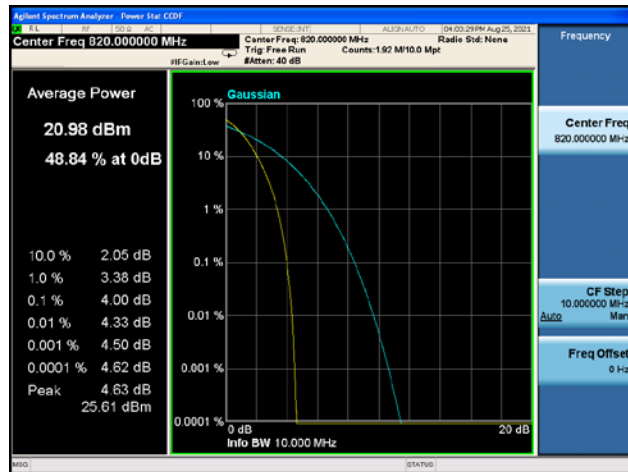
Peak-to-Average Ratio on channel 450

Peak-to-Average Ratio on channel 450



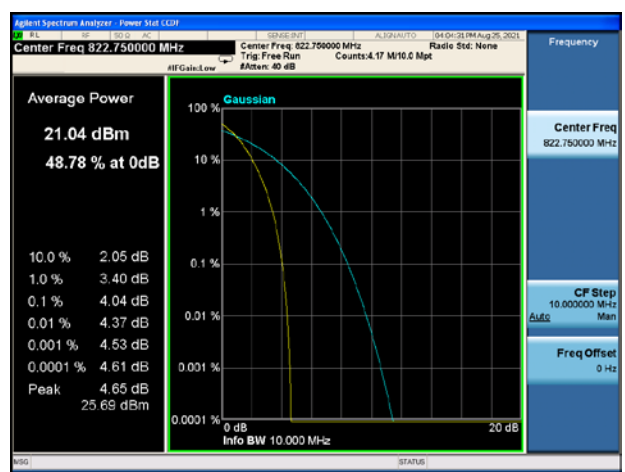
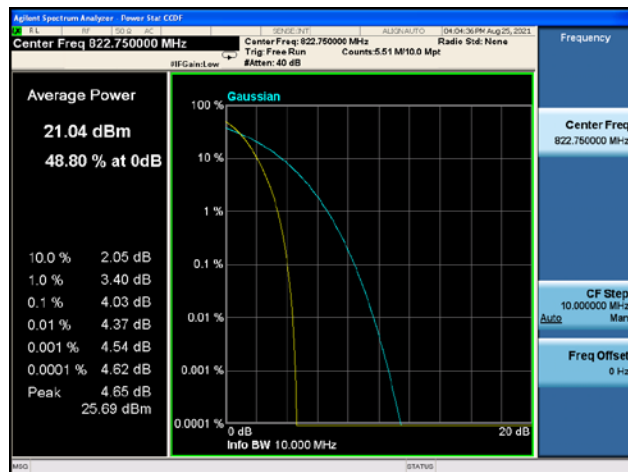
Peak-to-Average Ratio on channel 560

Peak-to-Average Ratio on channel 560



Peak-to-Average Ratio on channel 670

Peak-to-Average Ratio on channel 670



## 7.6 26DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

### 7.6.1 Applicable Standard

According to FCC Part 2.1049 and FCC Part 22H and FCC KDB 971168 D01 Section 4

### 7.6.2 Conformance Limit

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

### 7.6.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

### 7.6.5 Test Procedure

The testing follows FCC KDB 971168 v03 Section 4.

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.

The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

Set the detection mode to peak, and the trace mode to max hold.

Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.

(this is the reference value)

Determine the “-26 dB down amplitude” as equal to (Reference Value – X).

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



**7.6.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu
Results: PASS			

Band	Channel	Frequency (MHz)	99% OBW (kHz)	-26dB EBW (kHz)	Verdict
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	1013	824.7	1277.7	1421	PASS
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	384	836.52	1274.4	1424	PASS
CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))	777	848.31	1272.6	1427	PASS
CDMA2000 BC0 1xEV-Do Rel.A	1013	824.7	1268.1	1431	PASS
CDMA2000 BC0 1xEV-Do Rel.A	384	836.52	1273.4	1419	PASS
CDMA2000 BC0 1xEV-Do Rel.A	777	848.31	1269.9	1427	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	25	1851.25	1278.5	1443	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	600	1880	1275.7	1435	PASS
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))	1175	1908.75	1272.4	1441	PASS
CDMA2000 BC1 1xEV-Do Rel.A	25	1851.25	1280.8	1449	PASS
CDMA2000 BC1 1xEV-Do Rel.A	600	1880	1282.0	1437	PASS
CDMA2000 BC1 1xEV-Do Rel.A	1175	1908.75	1282.2	1435	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	25	1851.25	1278.7	1429	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	600	1880	1267.4	1415	PASS
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))	1175	1908.75	1276.0	1420	PASS
CDMA2000 BC10 1xEV-Do Rel.A	25	1851.25	1271.2	1425	PASS
CDMA2000 BC10 1xEV-Do Rel.A	600	1880	1276.8	1420	PASS
CDMA2000 BC10 1xEV-Do Rel.A	1175	1908.75	1279.0	1417	PASS

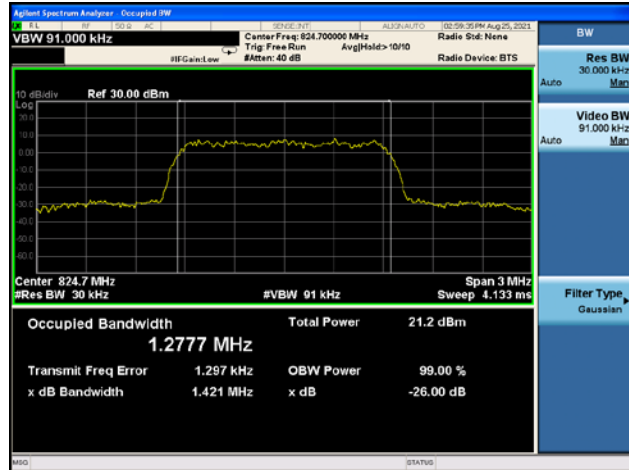
Test plot

CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC0 1xEV-Do Rel.A

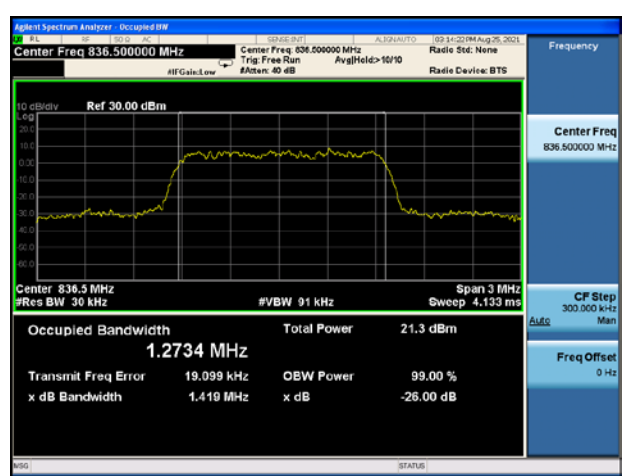
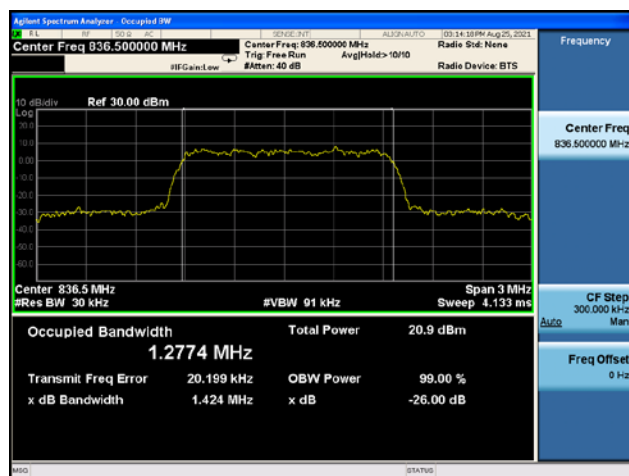
-26dB&99% Bandwidth plot on channel 384

-26dB&99% Bandwidth plot on channel 384



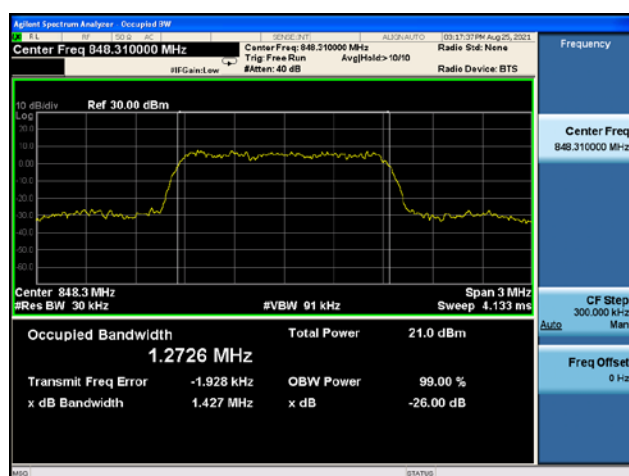
-26dB&99% Bandwidth plot on channel 777

-26dB&99% Bandwidth plot on channel 777



-26dB&99% Bandwidth plot on channel 1013

-26dB&99% Bandwidth plot on channel 1013



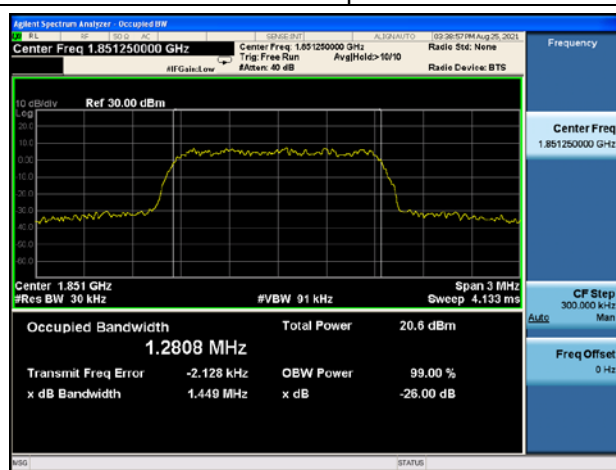
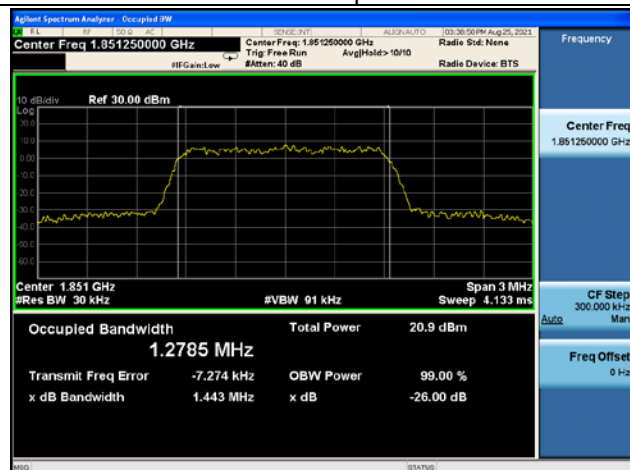
Test plot

CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC1 1xEV-Do Rel.A

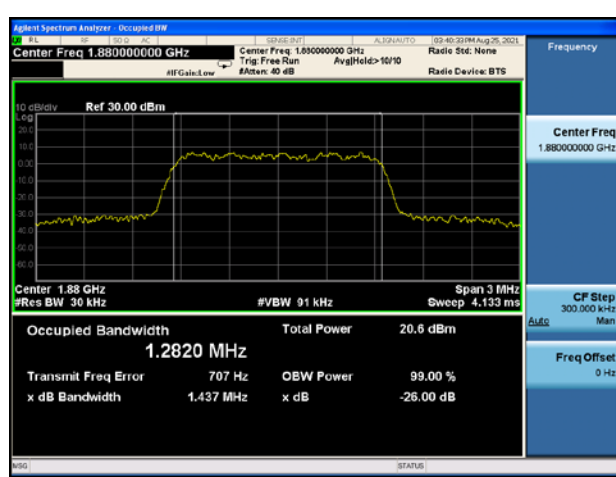
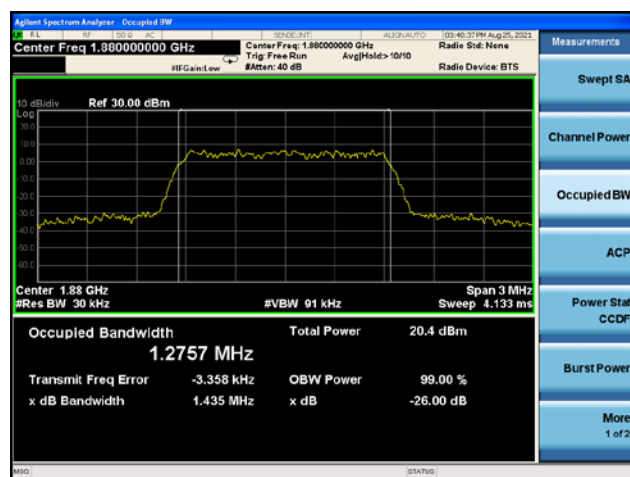
-26dB&99% Bandwidth plot on channel 25

-26dB&99% Bandwidth plot on channel 25



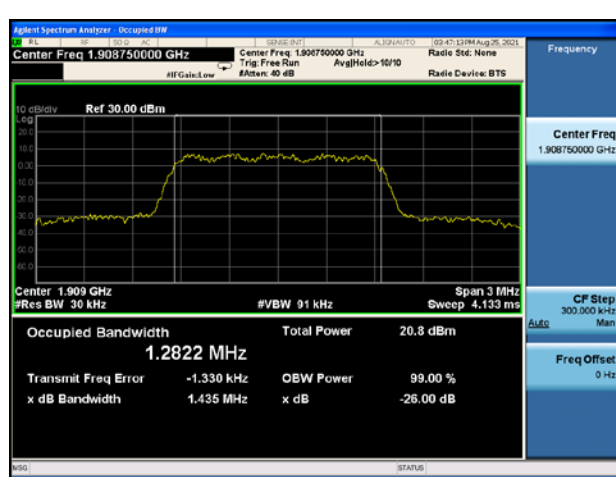
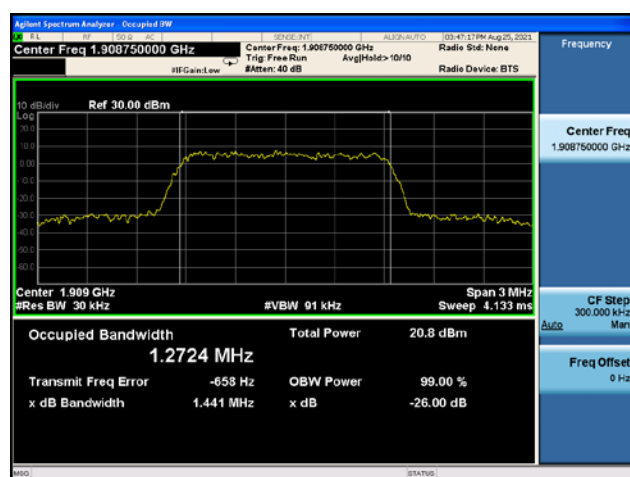
-26dB&99% Bandwidth plot on channel 600

-26dB&99% Bandwidth plot on channel 600



-26dB&99% Bandwidth plot on channel 1175

-26dB&99% Bandwidth plot on channel 1175



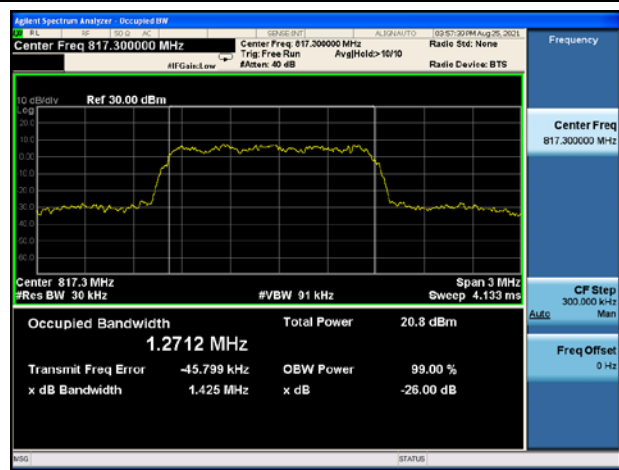
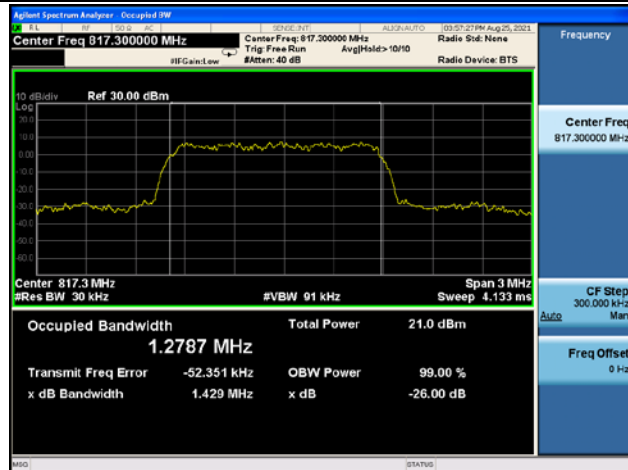
Test plot

CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC10 1xEV-Do Rel.A

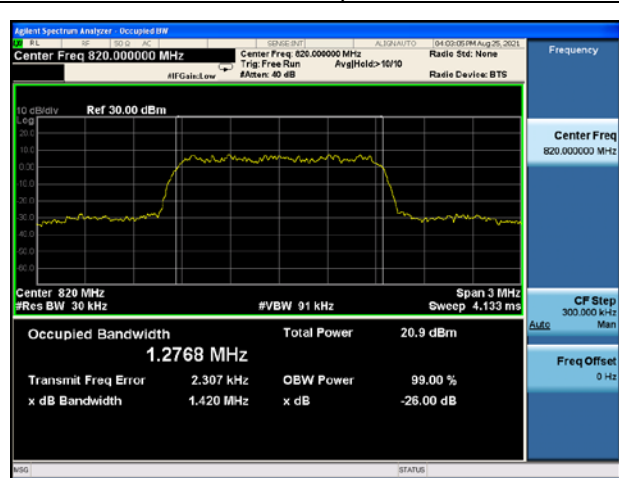
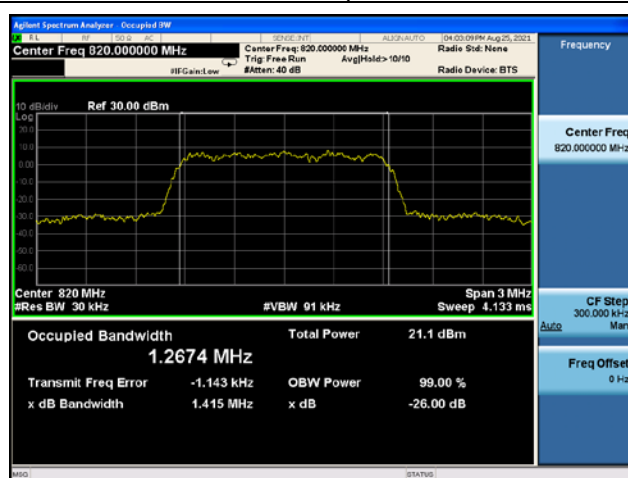
-26dB&99% Bandwidth plot on channel 450

-26dB&99% Bandwidth plot on channel 450



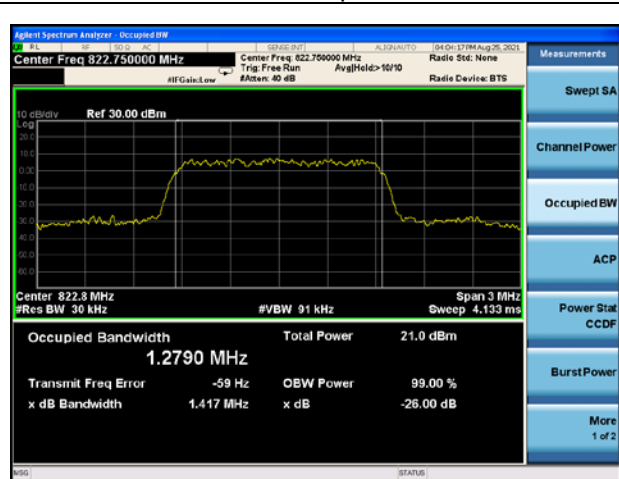
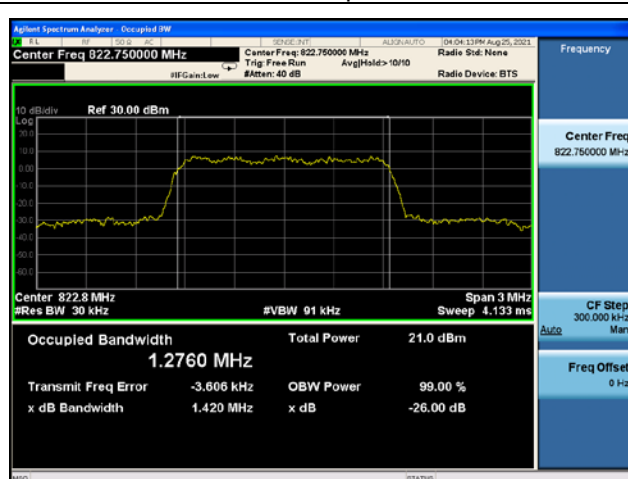
-26dB&99% Bandwidth plot on channel 560

-26dB&99% Bandwidth plot on channel 560



-26dB&99% Bandwidth plot on channel 670

-26dB&99% Bandwidth plot on channel 670



**7.7 CONDUCTED BAND EDGE**

**7.7.1 Applicable Standard**

According to FCC Part 2.1051 and FCC Part 22.917(a) and FCC KDB 971168 D01 Section6.

**7.7.2 Conformance Limit**

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.

**7.7.3 Measuring Instruments**

The Measuring equipment is listed in the section 6.3 of this test report.

**7.7.4 Test Setup**

Please refer to Section 6.1 of this test report.

**7.7.5 Test Procedure**

The testing follows FCC KDB 971168 v03 Section 6.  
 The EUT was connected to Spectrum Analyzer and Base Station via power divider.  
 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.  
 The path loss was compensated to the results for each measurement.  
 The band edges of low and high channels for the highest RF powers were measured.  
 The RF fundamental frequency should be excluded against the limit line in the operating frequency band.  
 The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)  
 = P(W) - [43 + 10log(P) ] (dB)  
 = [30 + 10log(P)] (dBm) - [43 + 10log(P) ] (dB)  
 = -13dBm.

**7.7.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu
Results: PASS			

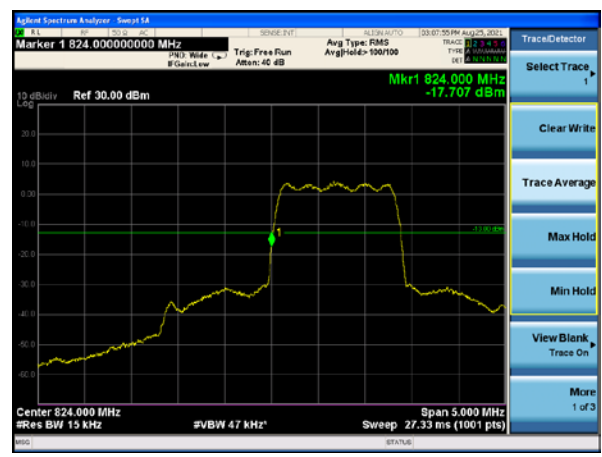
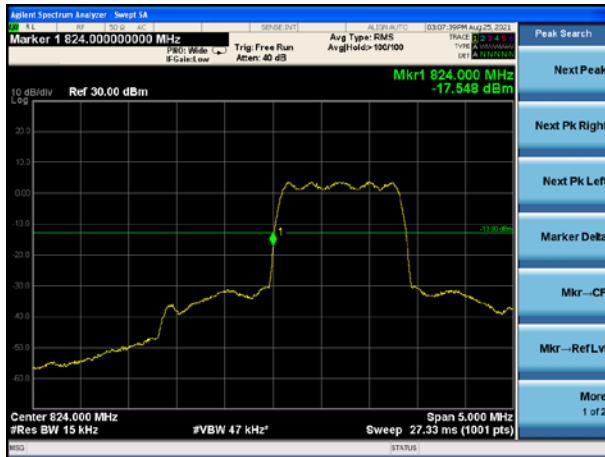
Test plot For

CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC0 1xEV-Do Rel.A

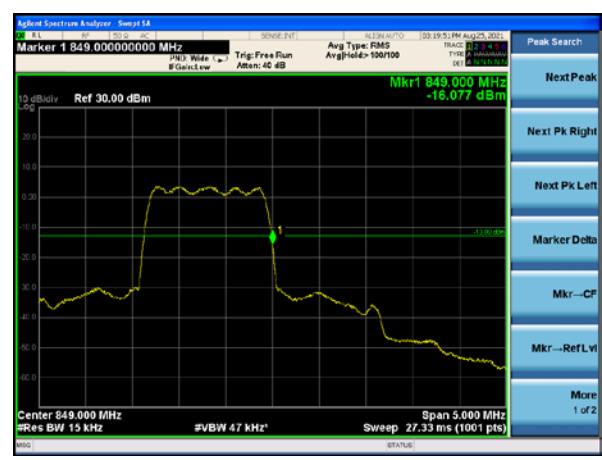
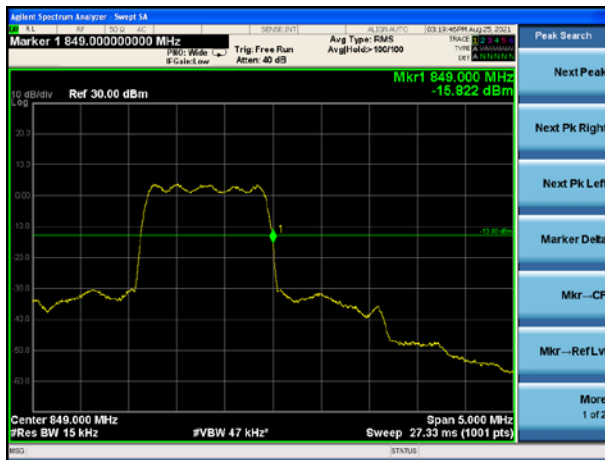
Conducted Band Edge plot on channel 1013

Conducted Band Edge plot on channel 1013



Conducted Band Edge plot on channel 777

Conducted Band Edge plot on channel 777



Test plot For

CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC1 1xEV-Do Rel.A

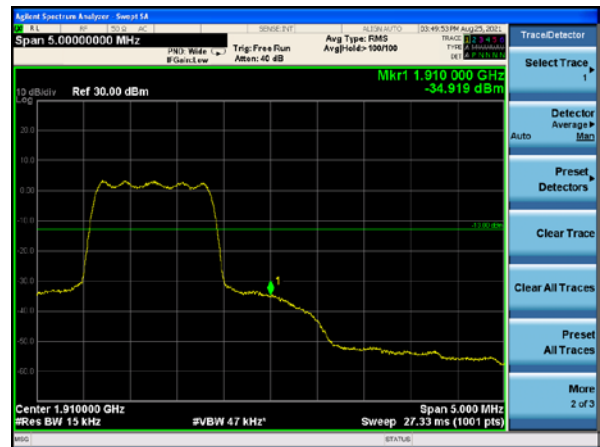
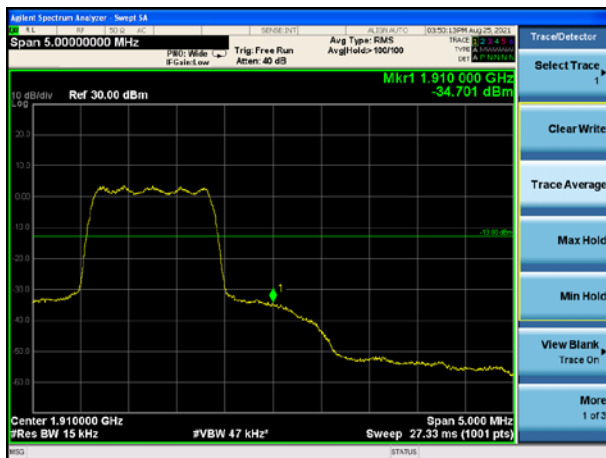
Conducted Band Edge plot on channel 25

Conducted Band Edge plot on channel 25



Conducted Band Edge plot on channel 1175

Conducted Band Edge plot on channel 1175



Test plot For

CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC10 1xEV-Do Rel.A

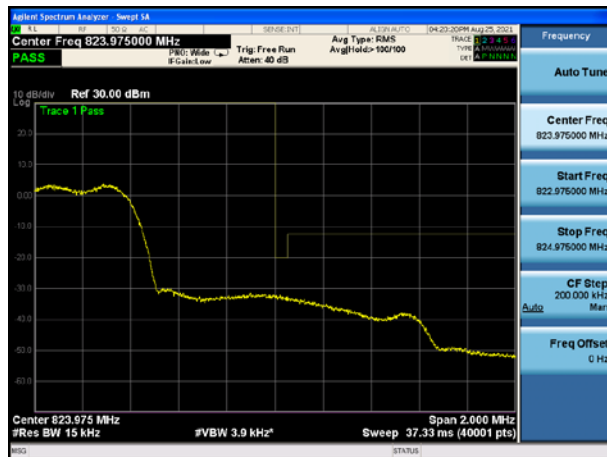
Conducted Band Edge plot on channel 450

Conducted Band Edge plot on channel 450



Conducted Band Edge plot on channel 670

Conducted Band Edge plot on channel 670





**7.8 CONDUCTED SPURIOUS EMISSION AT ANTENNA TERMINAL**

**7.8.1 Applicable Standard**

According to FCC Part 2.1051 and FCC Part 22.917(a) and FCC KDB 971168 D01 Section6.

**7.8.2 Conformance Limit**

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.

**7.8.3 Measuring Instruments**

The Measuring equipment is listed in the section 6.3 of this test report.

**7.8.4 Test Setup**

Please refer to Section 6.1 of this test report.

**7.8.5 Test Procedure**

The testing follows FCC KDB 971168 v03 Section 6.  
The EUT was connected to Spectrum Analyzer and Base Station via power divider.  
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.  
The path loss was compensated to the results for each measurement.  
The middle channel for the highest RF power within the transmitting frequency was measured.  
The conducted spurious emission for the whole frequency range was taken.  
The RF fundamental frequency should be excluded against the limit line in the operating frequency band.  
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)  
 $= -13\text{dBm}$ .

**7.8.6 Test Results**

EUT:	Mobile Phone	Model No.:	Cyber 7
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	CDMA2000 1xRTT BC0/BC1/BC10, CDMA2000 EVDO-Rev A BC0/BC1/BC10	Test By:	Mary Hu
Results: PASS			

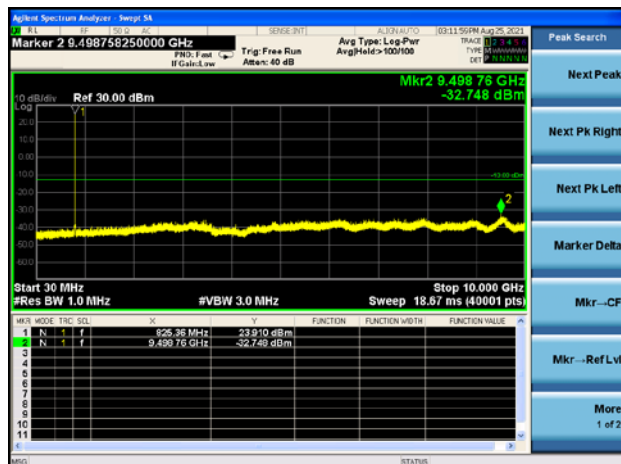
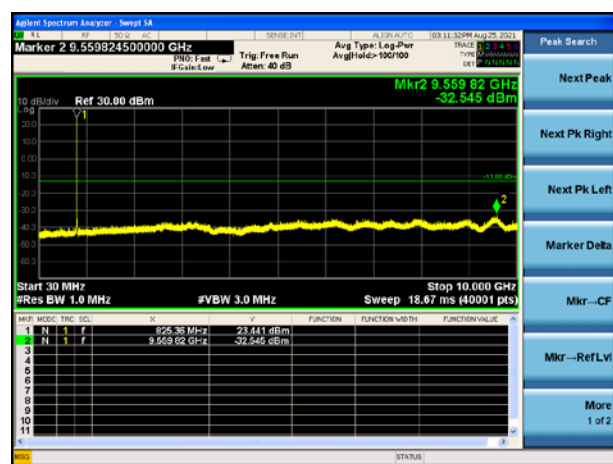
Test Plot

CDMA2000 BC0 1xRTT(RC3,SO32(+F-SCH))

CDMA2000 BC0 1xEV-Do Rel.A

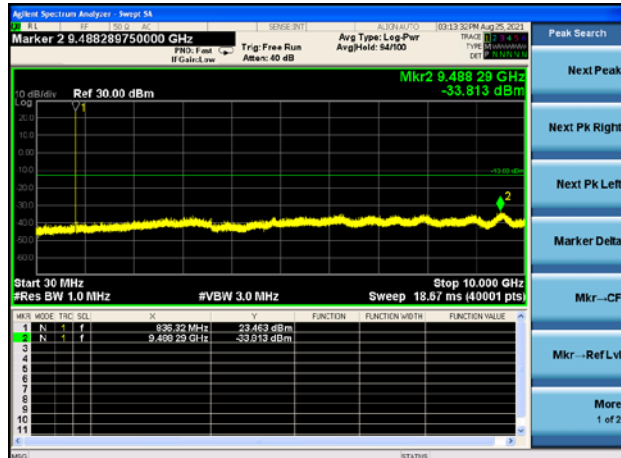
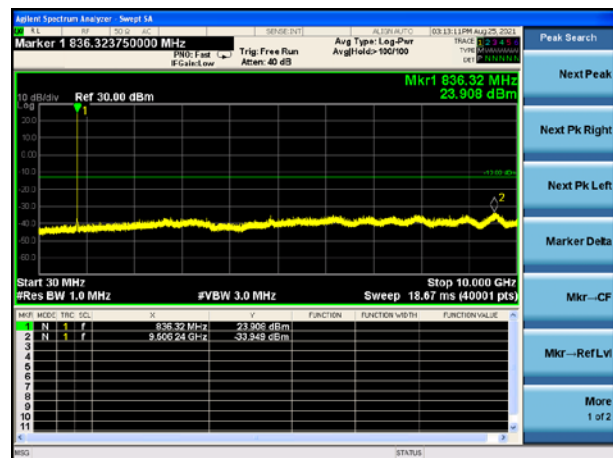
Conducted Emission Transmitting Mode CH 1013

Conducted Emission Transmitting Mode CH 1013



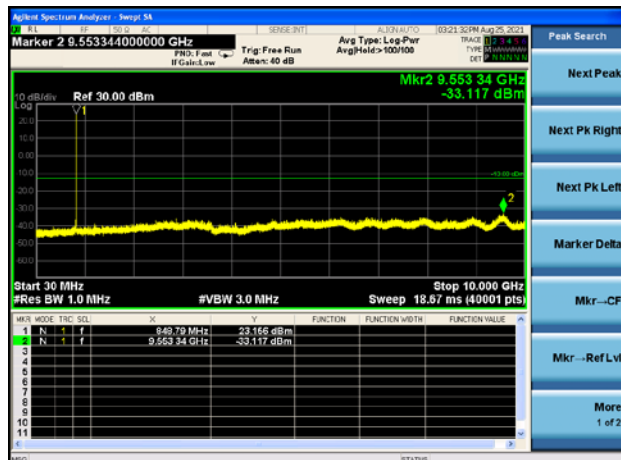
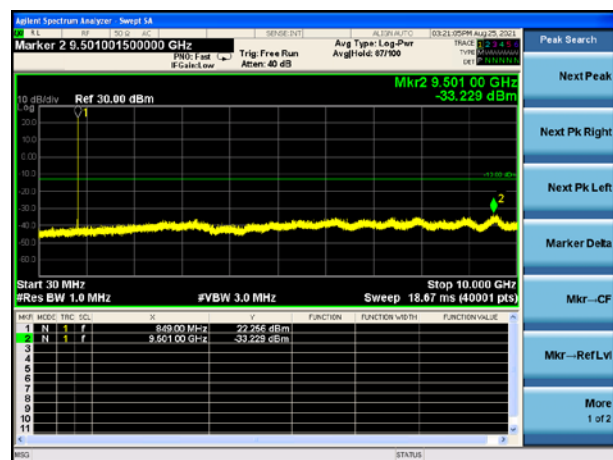
Conducted Emission Transmitting Mode CH 384

Conducted Emission Transmitting Mode CH 384



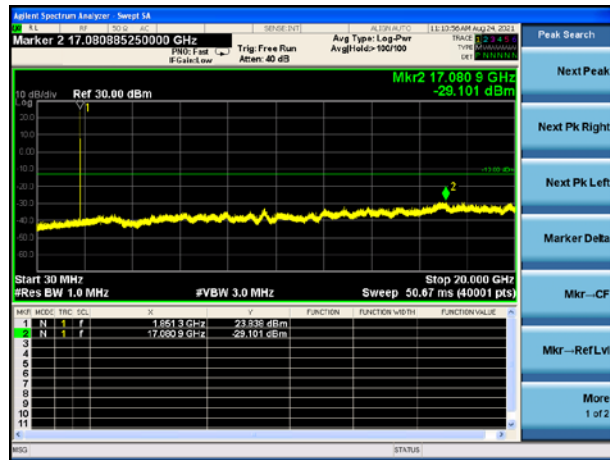
Conducted Emission Transmitting Mode CH 777

Conducted Emission Transmitting Mode CH 777

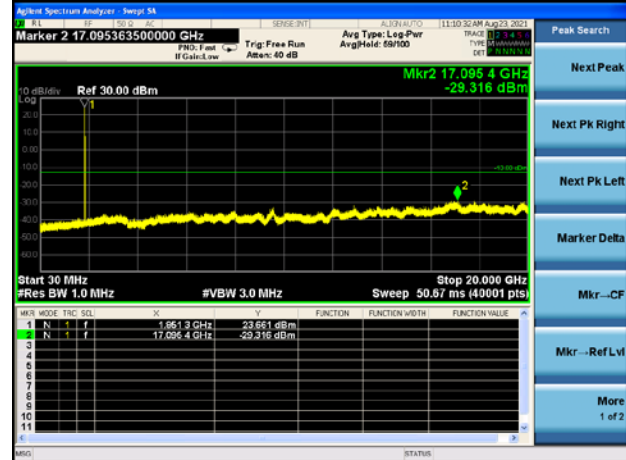


Test Plot

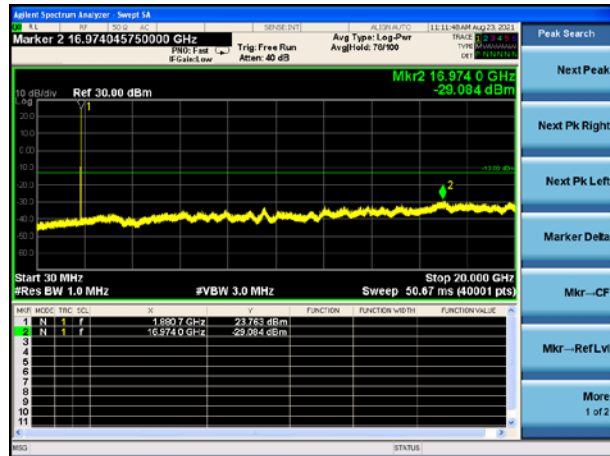
CDMA2000 BC1 1xRTT(RC3,SO32(+F-SCH))  
Conducted Emission Transmitting Mode CH 25



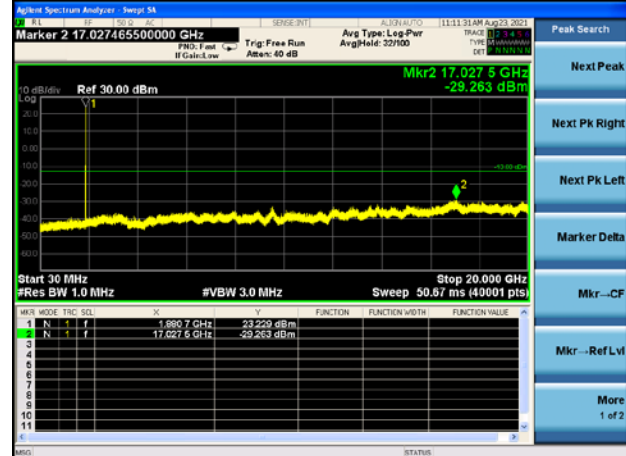
CDMA2000 BC1 1xEV-Do Rel.A  
Conducted Emission Transmitting Mode CH 25



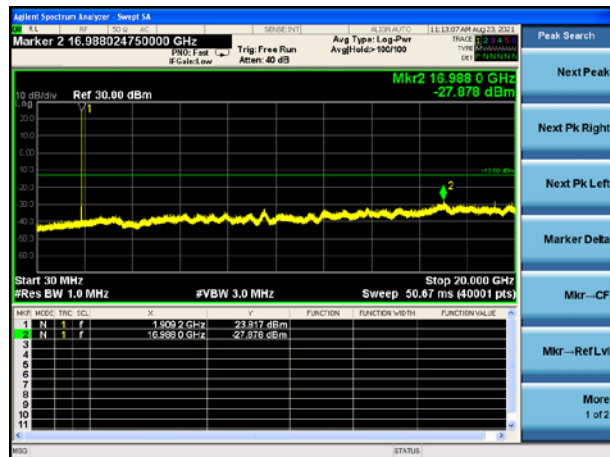
Conducted Emission Transmitting Mode CH 600



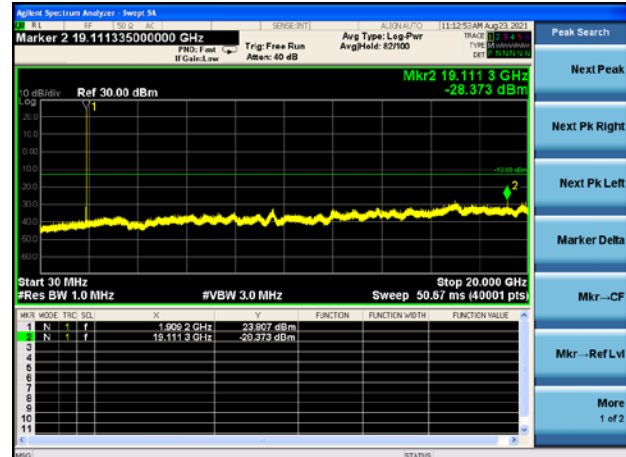
Conducted Emission Transmitting Mode CH 600



Conducted Emission Transmitting Mode CH 1175



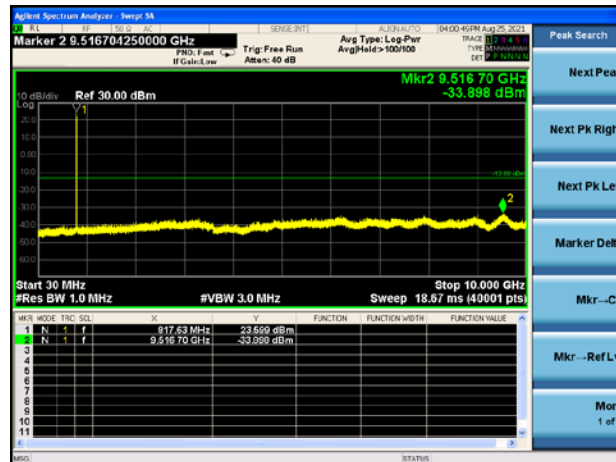
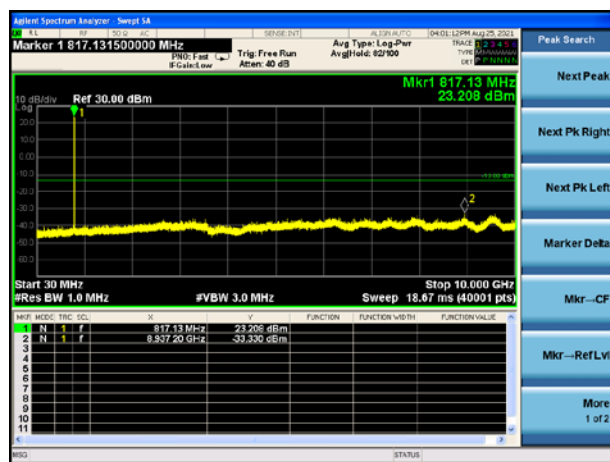
Conducted Emission Transmitting Mode CH 1175



Test Plot

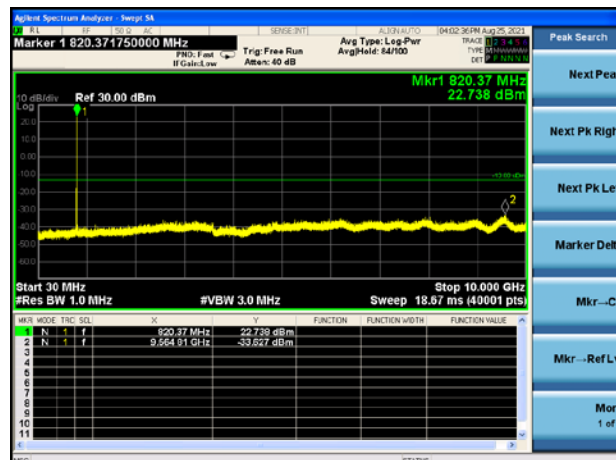
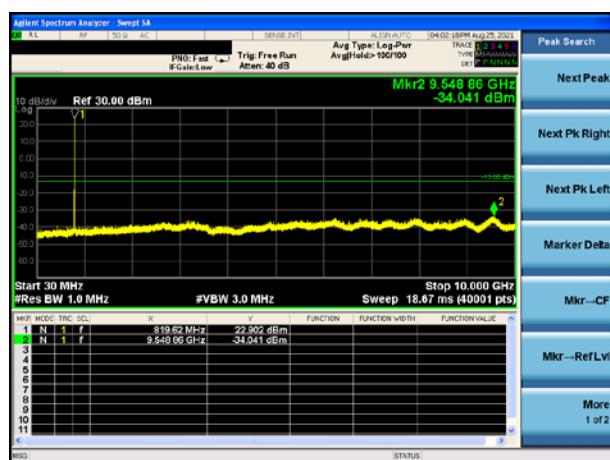
CDMA2000 BC10 1xRTT(RC3,SO32(+F-SCH))  
Conducted Emission Transmitting Mode CH 450

CDMA2000 BC10 1xEV-Do Rel.A  
Conducted Emission Transmitting Mode CH 450



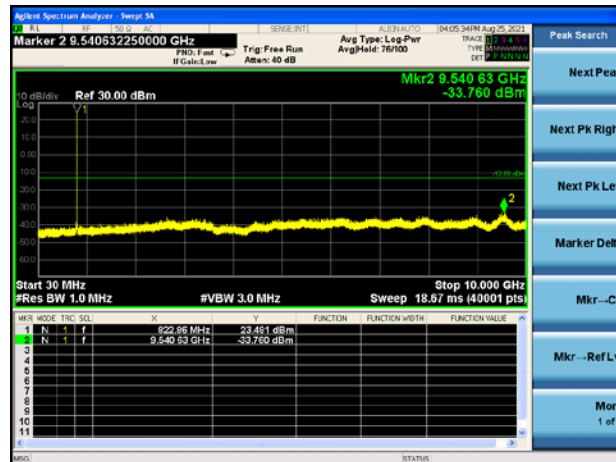
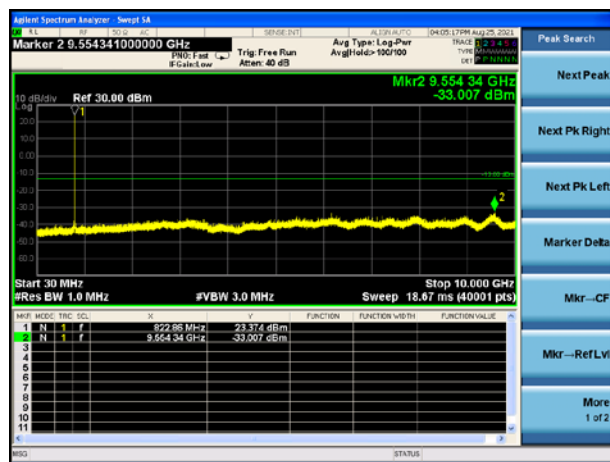
Conducted Emission Transmitting Mode CH 560

Conducted Emission Transmitting Mode CH 560



Conducted Emission Transmitting Mode CH 670

Conducted Emission Transmitting Mode CH 670



END OF REPORT