



47 CFR PART 15 SUBPART B

TEST REPORT

of

Fixed Wireless Phone on CDMA 900/1800/1575 MHz

Model Name: PX340G
Brand Name: Axesstel
Report No.: SH10060012E09
FCC ID: PH7PX340G

prepared for

Axesstel Inc
6815 Flanders Drive, #210, San Diego, CA 92121, USA

prepared by

**Shenzhen Electronic Product Quality Testing Center
Morlab Laboratory**

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LAB CODE 20081223-00

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1. TEST CERTIFICATION

Equipment under Test: Fixed Wireless Phone on CDMA 900/1800/1575MHz

Brand Name: Axesstel Inc
 Model Name: PX340G
 FCC ID: PH7PX340G
 Applicant: Axesstel Inc
 6815 Flanders Drive,#210,San Diego,CA92121,USA
 Manufacturer: AsiaTelco Technologies Co.
 #289 Bisheng Road,Building-8,3F.Zhangjiang Hi-Tech
 Park,Pudong,Shanghai China

Test Standards: 47 CFR Part 15 Subpart B

Test Date(s): 2011.02.12-2011.02.28

Test Result: PASS

*** We Hereby Certify That:**

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by: Zhang Wenjie Dated: 2011.3.4.
 Zhang Wenjie

Reviewed by: Zhang Jun Dated: 2011.3.4
 Zhang Jun

Approved by: Wei Bei Dated: 2011.3.4.
 Wei Bei



2.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

No.	Identity	Document Title
1	47 CFR Part 15 (10-1-05 Edition)	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Result
1	15.107	Conducted Emission	PASS
2	15.109	Radiated Emission	PASS
3	ANSI C63.4-2003	Radiated Emission	PASS

2.3 Facilities and Accreditations

2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Laboratories (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen 518055 CHINA. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

2.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	20 - 25
Relative Humidity (%):	40 - 60
Atmospheric Pressure (mbar):	1020

3. TEST CONDITIONS SETTING

3.1 CDMA Test Mode

1. During the measurement, the CDMA radio is working. The test modes of the EUT are showed as below:

(1) Traffic operating CDMA mode

The EUT configuration of the emission tests is EUT +Adapter

A communication link was established between the EUT and a System Simulator (SS). The EUT operated at CDMA 800 mid ARFCN (384) and maximum output power (All up bit).The EUT operated at CDMA 1900 mid ARFCN (600) and maximum output power (All up bit).

(2) Receiver operating GPS mode

The EUT configuration of the emission tests is EUT +Adapter

A communication link was established between the EUT and a System Simulator (SS). The EUT operated at GPS 1575, and maintained during the measurement.

(3) Idle operating mode

The EUT configuration of the emission tests is EUT + Adapter

The EUT was registered to the base station simulator but no call was set up.

(4) PC mode

The EUT configuration of the emission tests is EUT + PC.

In this test mode, the EUT is connected with a PC via a special USB cable supplied by applicant. During the measurement, a communication link was established between the EUT and a System Simulator (SS) simultaneity, the date is transmitting between the PC and the EUT.

Note: All test modes are performed, only the worst cases are recorded in this report.

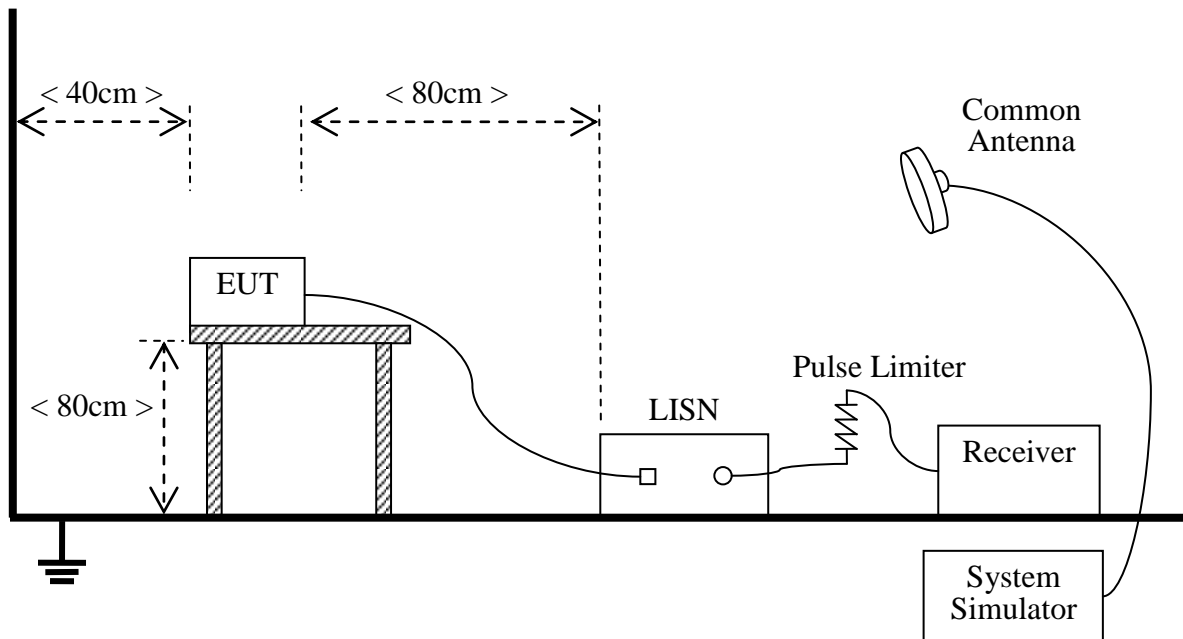
In the Conducted Emission, the worst cases are operated at CDMA 800/ PC mode

In the Radiated Emission, the worst cases are operated at CDMA 800/1900

3.2 Test Setup and Equipments List

3.2.1 Conducted Emission

A. Test Setup:



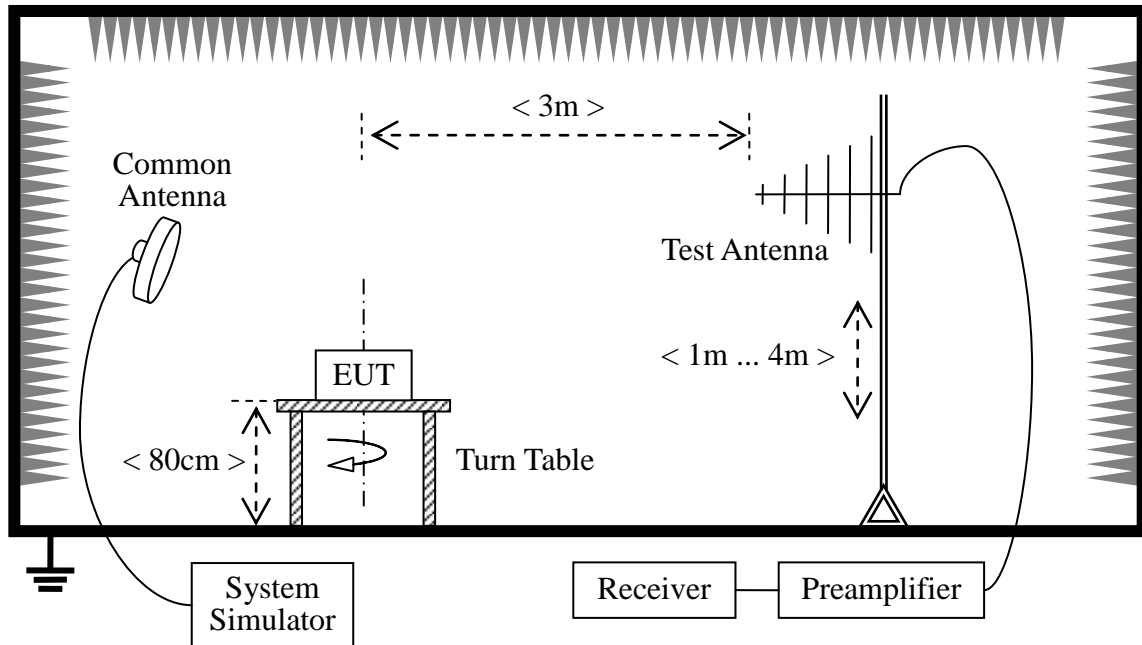
The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides $50\Omega/50\mu\text{H}$ of coupling impedance for the measuring instrument. The Common Antenna is used for the call between the EUT and the System Simulator (SS). A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Rohde&Schwarz	ESCI3	100666	2009.11	1year
LISN	Rohde&Schwarz	ENV216	812744	2009.11	1year
System Simulator	Rohde&Schwarz	CMU200	105571	2009.12.	1year
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)

3.2.2 Radiated Emission

C. Test Setup:



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on a variable-height antenna master tower. The Common Antenna is used for the call between the EUT and the System Simulator (SS).

D. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Rohde&Schwarz	ESCI3	100666	2009.10	1year
Full-Anechoic Chamber	ETS • LINDGREN	9m*6m*6m	(n.a.)	2009.10	1year
Test Antenna - Bi-Log	Rohde&Schwarz	HL562	100385	2009.10	1year
System Simulator	Rohde&Schwarz	CMU200	105571	2009.10	1year
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)

4. 47 CFR Part 15B Requirements

4.1 Conducted Emission

4.1.1 Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

NOTE:

- The limit subjects to the Class B digital device.
- The lower limit shall apply at the band edges.
- The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

4.1.2 Test Description

See section 2.3.1 of this report.

4.1.3 Test Result

The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.



A. Test Verdict Recorded for Suspicious Points:

CDMA 800

Frequency (MHz)	QuasiPeak (dBμ V)	Meas. Time (ms)	Band width (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.150000	56.5	1000.000	9.000	N	9.8	9.5	66.0	PASS
0.217162	49.0	1000.000	9.000	N	9.6	13.8	62.8	PASS
0.362681	36.3	1000.000	9.000	N	9.7	22.2	58.5	PASS
0.437306	34.1	1000.000	9.000	N	9.7	22.9	57.0	PASS
0.661181	38.7	1000.000	9.000	N	9.7	17.3	56.0	PASS
0.735806	38.2	1000.000	9.000	N	9.7	17.8	56.0	PASS
0.150000	53.0	1000.000	9.000	L	9.5	13.0	66.0	PASS
0.220894	50.0	1000.000	9.000	L	9.7	12.6	62.6	PASS
0.511931	40.2	1000.000	9.000	L	9.7	15.8	56.0	PASS
0.657450	40.0	1000.000	9.000	L	9.7	16.0	56.0	PASS
0.735806	40.2	1000.000	9.000	L	9.7	15.8	56.0	PASS
1.101469	40.9	1000.000	9.000	L	9.7	15.1	56.0	PASS

Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Band width (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.150000	12.2	1000.000	9.000	N	9.8	43.8	56.0	PASS
0.220894	38.9	1000.000	9.000	N	9.6	13.7	52.6	PASS
0.437306	26.4	1000.000	9.000	N	9.7	20.6	47.0	PASS
0.657450	30.9	1000.000	9.000	N	9.7	15.1	46.0	PASS
0.728344	22.1	1000.000	9.000	N	9.7	23.9	46.0	PASS
1.030575	23.6	1000.000	9.000	N	9.7	22.4	46.0	PASS
0.220894	39.7	1000.000	9.000	L	9.7	12.9	52.6	PASS
0.437306	23.7	1000.000	9.000	L	9.7	23.3	47.0	PASS
0.515662	35.7	1000.000	9.000	L	9.7	10.3	46.0	PASS
0.657450	30.0	1000.000	9.000	L	9.7	16.0	46.0	PASS
0.728344	25.5	1000.000	9.000	L	9.7	20.5	46.0	PASS
0.806700	29.5	1000.000	9.000	L	9.7	16.5	46.0	PASS



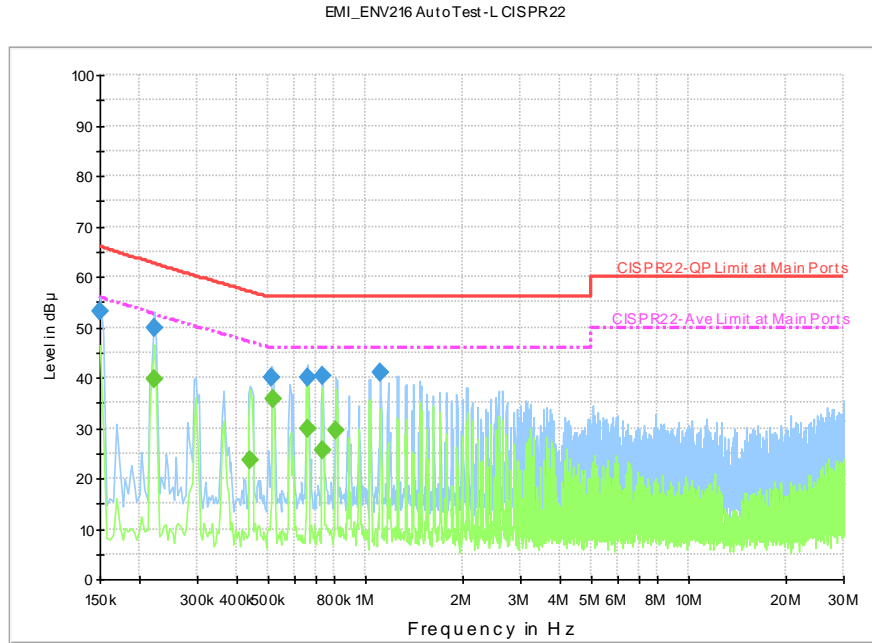
PC mode

Frequency (MHz)	QuasiPeak (dBμ V)	Meas. Time (ms)	Band width (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
1.213406	40.9	150.000	9.000	N	9.7	15.1	56.0	PASS
1.616381	39.6	150.000	9.000	N	9.7	16.4	56.0	PASS
1.638769	40.4	150.000	9.000	N	9.7	15.6	56.0	PASS
1.754438	42.9	150.000	9.000	N	9.7	13.1	56.0	PASS
1.776825	42.2	150.000	9.000	N	9.8	13.8	56.0	PASS
1.892494	43.5	150.000	9.000	N	9.7	12.5	56.0	PASS
1.213406	46.8	150.000	9.000	L	9.7	9.2	56.0	PASS
1.482056	46.2	150.000	9.000	L	9.8	9.8	56.0	PASS
1.620112	49.0	150.000	9.000	L	9.8	7.0	56.0	PASS
1.646231	38.9	150.000	9.000	L	9.8	17.1	56.0	PASS
1.754438	49.0	150.000	9.000	L	9.8	7.0	56.0	PASS
1.892494	48.6	150.000	9.000	L	9.7	7.4	56.0	PASS

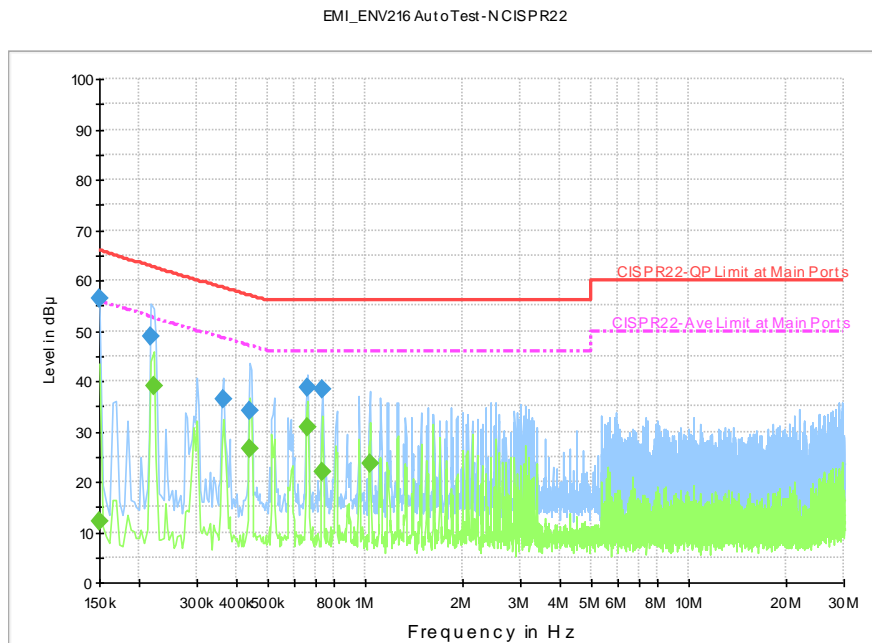
Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Band width (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
1.213406	30.3	150.000	9.000	N	9.7	15.7	46.0	PASS
1.351462	29.2	150.000	9.000	N	9.7	16.8	46.0	PASS
1.754438	30.1	150.000	9.000	N	9.7	15.9	46.0	PASS
1.892494	32.7	150.000	9.000	N	9.7	13.3	46.0	PASS
1.899956	34.9	150.000	9.000	N	9.7	11.1	46.0	PASS
2.038012	30.0	150.000	9.000	N	9.7	16.0	46.0	PASS
0.269400	36.4	150.000	9.000	L	9.7	14.5	50.9	PASS
1.213406	37.9	150.000	9.000	L	9.7	8.1	46.0	PASS
1.351462	36.5	150.000	9.000	L	9.7	9.5	46.0	PASS
1.620112	38.7	150.000	9.000	L	9.8	7.3	46.0	PASS
1.754438	38.9	150.000	9.000	L	9.8	7.1	46.0	PASS
1.892494	39.1	150.000	9.000	L	9.7	6.9	46.0	PASS

B. Test Plot:

CDMA 800



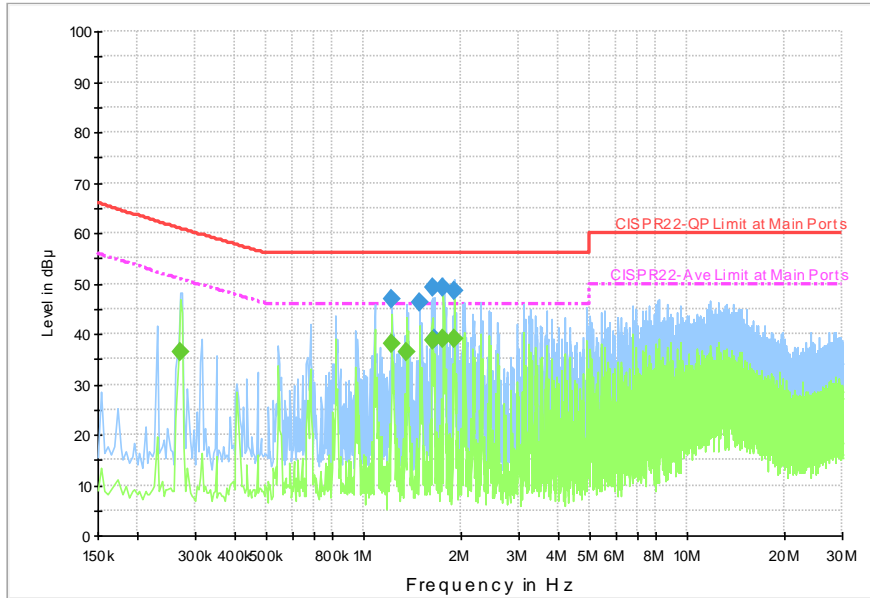
(Plot A: L Phase)



(Plot B: N Phase)

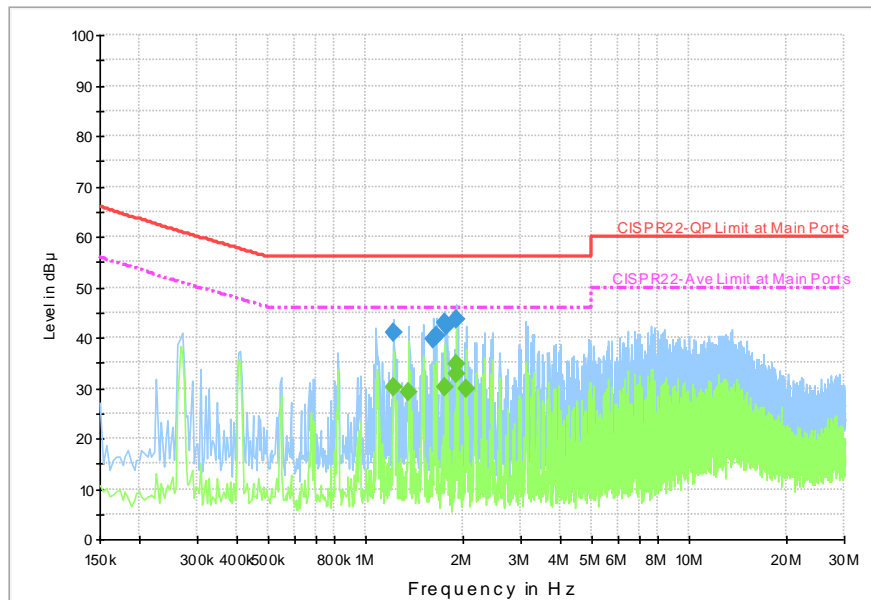
PC Mode

EMI_ENV216 AutoTest - L CISPR22



(Plot: L Phase)

EMI_ENV216 AutoTest - N CISPR22



(Plot: N Phase)

4.2 Radiated Emission

4.2.1 Requirement

According to FCC section 15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency range (MHz)	Field Strength	
	$\mu\text{V/m}$	$\text{dB } \mu\text{V/m}$
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

NOTE:

- Field Strength ($\text{dB } \mu\text{V/m}$) = $20 * \log[\text{Field Strength } (\mu\text{V/m})]$.
- In the emission tables above, the tighter limit applies at the band edges.

4.2.2 Test Description

See section 2.3.2 of this report.

4.2.3 Test Result

The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

CDMA mode

(1) Traffic operating CDMA mode

The EUT configuration of the emission tests is EUT + Adapter

A communication link was established between the EUT and a System Simulator (SS). The EUT operated at CDMA 800 mid ARFCN (384) and maximum output power (All up bit). The EUT operated at CDMA 1900 mid ARFCN (600) and maximum output power (All up bit).

A. Test Verdict Recorded for Suspicious Points:
1. CDMA 800

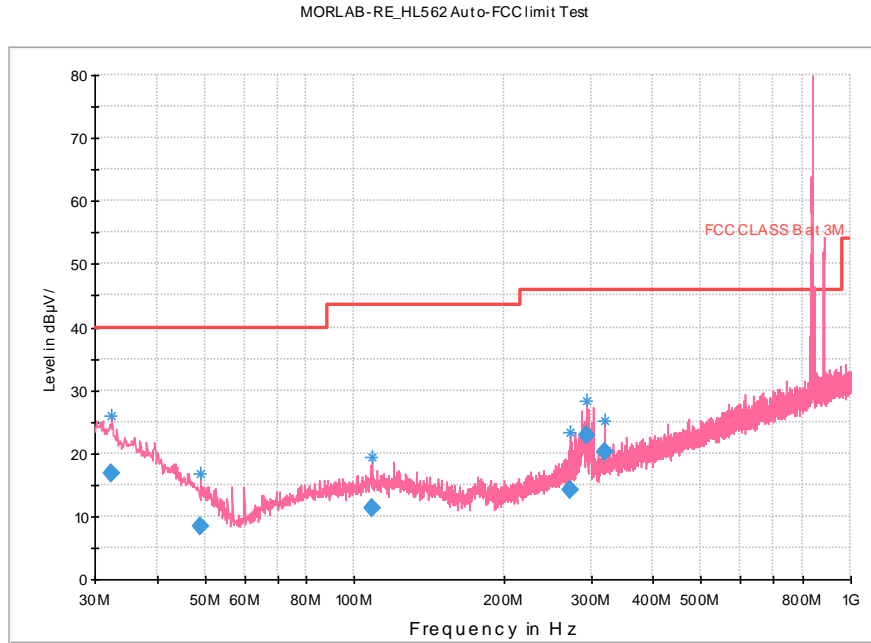
No.	@Frequency (MHz)	Emission Level (dB μ V/m)		Quasi-Peak Limit (dB μ V/m)	Margin (dB μ V/m)	Result
		QP	Antenna Polarization			
1	32.42500	16.7	V	40.0	23.3	PASS
2	48.91500	8.4	V	40.0	31.6	PASS
3	108.57000	11.4	V	43.5	32.1	PASS
4	272.62125	14.1	V	46.0	31.9	PASS
5	293.11250	22.8	V	46.0	23.2	PASS
6	320.03000	20.1	V	46.0	25.9	PASS
7	31.69750	17.0	H	40.0	23.0	PASS
8	56.67500	4.9	H	40.0	35.1	PASS
9	59.94875	8.3	H	40.0	31.7	PASS
10	108.20625	9.3	H	43.5	34.2	PASS
11	184.71500	7.5	H	43.5	36.0	PASS
12	293.11250	21.8	H	46.0	18.2	PASS

2. CDMA 1900

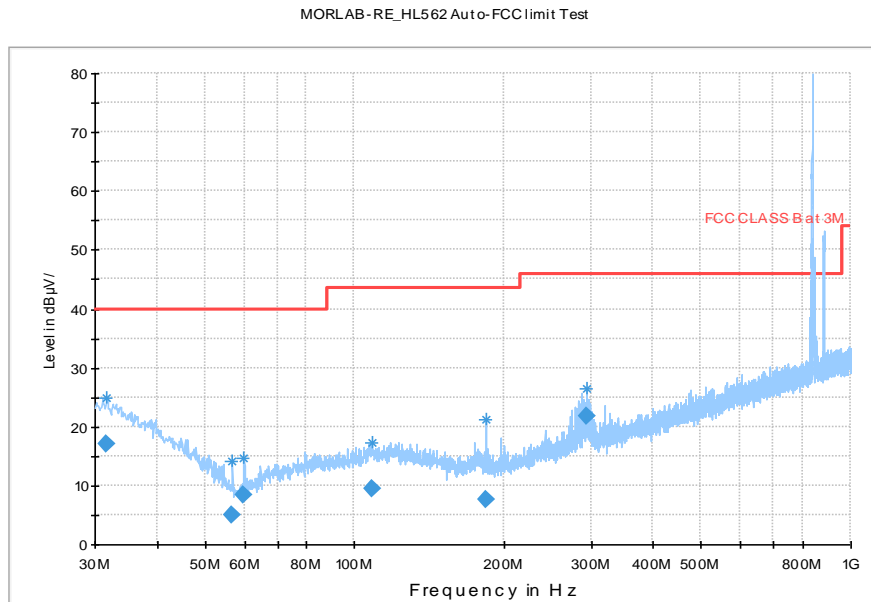
No.	@Frequency (MHz)	Emission Level (dB μ V/m)		Quasi-Peak Limit (dB μ V/m)	Margin (dB μ V/m)	Result
		QP	Antenna Polarization			
1	51.461250	23.4	V	40.0	16.6	PASS
2	85.775000	24.7	V	40.0	15.3	PASS
3	88.685000	24.9	V	43.5	18.6	PASS
4	105.417500	25.6	V	43.5	17.9	PASS
5	124.453750	26.1	V	43.5	17.4	PASS
6	169.073750	24.3	V	43.5	19.2	PASS
7	32.546250	33.6	H	40.0	6.4	PASS
8	59.948750	19.9	H	40.0	20.1	PASS
9	155.978750	27.2	H	43.5	16.3	PASS
10	207.995000	30.6	H	43.5	12.9	PASS
11	260.011250	29.4	H	46.0	16.6	PASS
12	312.027500	31.4	H	46.0	14.6	PASS

B. Test Plot:

1. CDMA 800



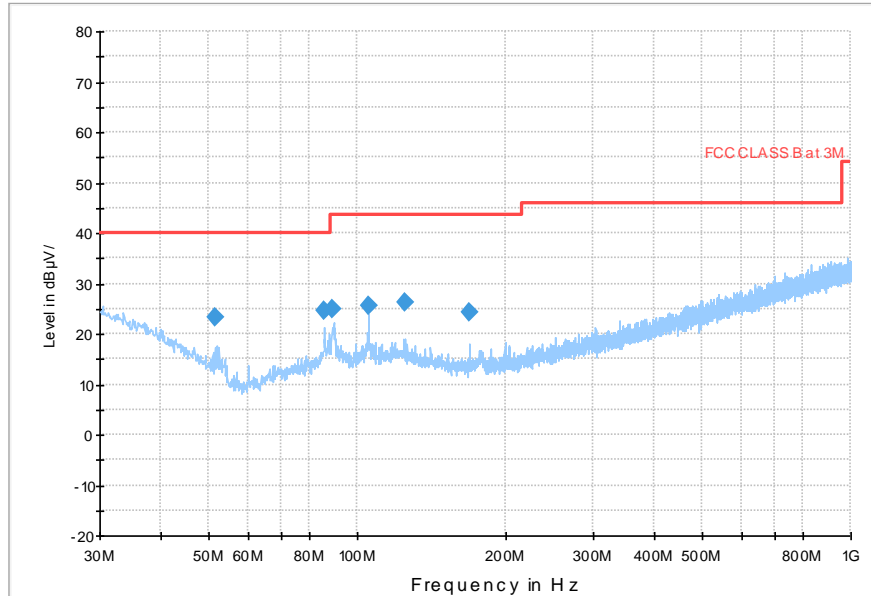
(Plot A: Test Antenna Vertical)



(Plot B: Test Antenna Horizontal)

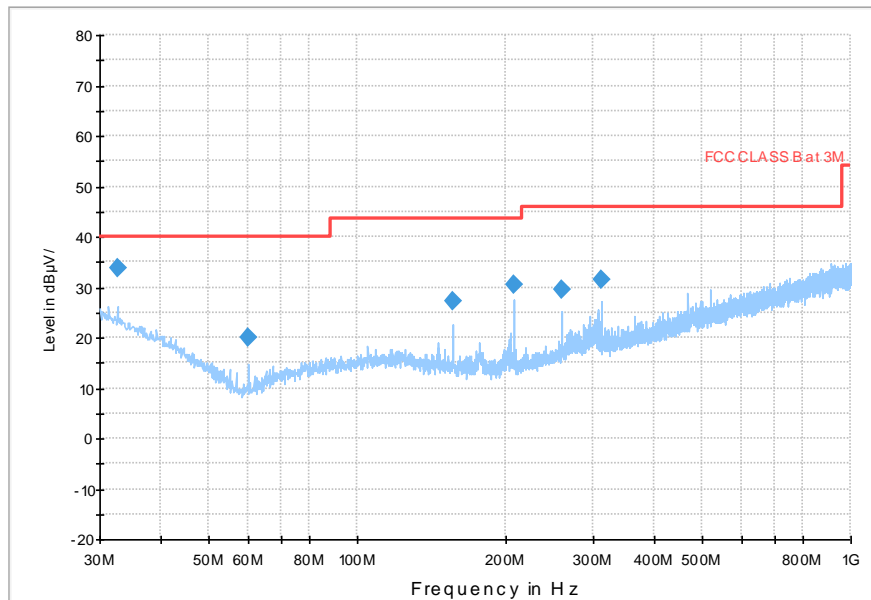
2. CDMA 1900

MORLAB-RE_HL562 AutoTest-GSMFOR FCC



(Plot A: Test Antenna Vertical)

MORLAB-RE_HL562 AutoTest-GSMFOR FCC



(Plot B: Test Antenna Horizontal)

** END OF REPORT **