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EMI REPORT (Verification)

Axesstel Inc.

6815 Flanders Drive Ste. 210 San Diego,
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Date of Issue: January 04, 2008
Test Report No.: HCT-F08-0103

Test Site: HCT CO., LTD.
HCT FRN: 0005-8664-21

MODEL:


PXQ20

Classification/ Standard(s):	FCC PART 15 Subpart B / CISPR 22 CLASS B
Equipment (EUT) Type:	Fixed Wireless Phone
Trade Name/Model(s):	Axesstel Inc. / PXQ20
Port/ Connector(s):	DC Input Port

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2003.(See Test Report if any modifications were made for compliance)

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

HCT certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse of 1988,21 U.S.C.853(a).


Report prepared by

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TABLE OF CONTENTS

	PAGE
1. GENERAL INFORMATION	3
1.1 Product Description.....	3
1.2 Related submittal(s)/Grant(s).....	3
1.3 Tested System Details.....	4
1.4 Cable Description.....	4
1.5 Noise Suppression Parts on Cable. (I/O CABLE)	4
1.6 Test Methodology.....	5
1.7 Test Facility.....	5
2. SYSTEM TEST CONFIGURATION.....	6
2.1 Configuration of Tested System.....	6
3. PRELIMINARY TEST.....	7
3.1 Conducted Emission Test.....	7
3.2 Radiated Emission Test.....	7
4. CONDUCTED AND RADIATED EMISSION TESTS SUMMARY.....	8
4.1 Conducted Emission Test.....	9 – 12
4.2 Radiated Emission Test.....	13
4.3 Test Setup Photos.....	14
4.3.1 Conducted Emission.....	14
4.3.2 Radiated Emission.....	15
5. FIELD STRENGTH CALCULATION.....	16
6. Test Equipment.....	17
7. Conclusion.....	18

1. GENERAL INFORMATION

1.1 Product Description

The Axesstel Inc. PXQ20 Fixed Wireless Phone. Its basic purpose is used for communications. It transmits from CDMA 835 (824.7 MHz – 848.31 MHz) and receives from CDMA 835 (869.70 MHz – 893.31 MHz).

MODEL	PXQ20
EUT Type	Fixed Wireless Phone
TX Frequency	824.70 – 848.31(CDMA 835)
RX Frequency	869.70 – 893.31(CDMA 835)
Modulation	CDMA 835

1.2 Related Submittal(s) / Grant(s)

ORIGINAL SUBMITTAL ONLY

1.3 Tested System Details

All equipment, plus descriptions used in the tested system (including inserted cards) are:

DEVICE TYPE	MANUFACTURER	MODEL NUMBER/ PART NUMBER	FCC ID / DoC	CONNECTED TO
Fixed Wireless Phone	Axesstel Inc.	PXQ20	PH7PXQ20	Travel Adaptor
AC Adaptor	TENPAO	SR-829R	-	EUT

1.4 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (M)
Fixed Wireless Phone	DC-In	N	N/A	1.8 (P)

The marked "(D)" means the Data Cable and "(P)" means the Power Cable.

1.5 Noise Suppression Parts on Cable. (I/O CABLE)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
Fixed Wireless Phone	DC-In	Y	EUT End	Y	EUT End

1.6 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4/2003. Radiated testing was performed at an antenna to EUT distance of 3 meters.

1.7 Test Facility

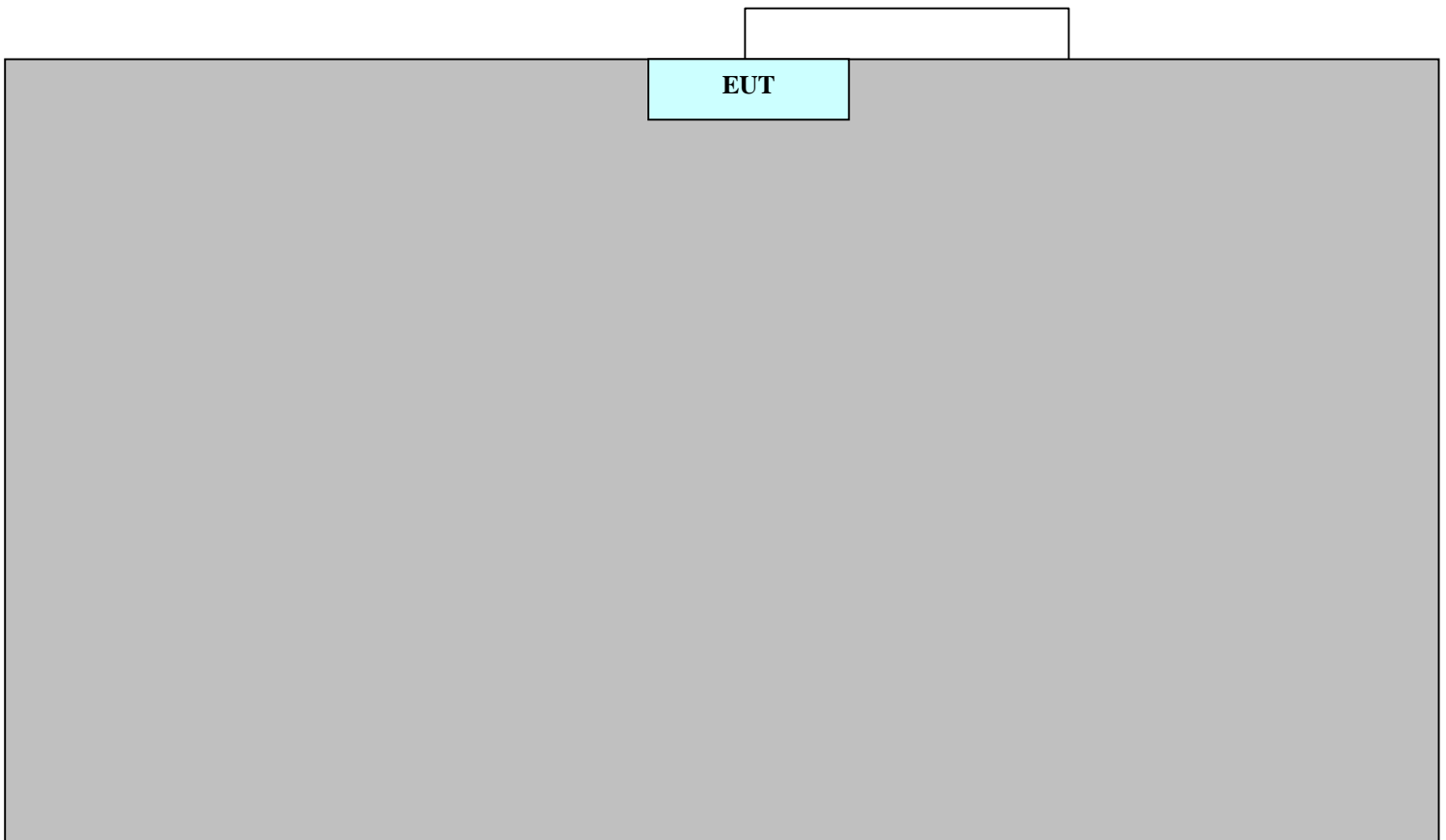
The open area test site and conducted measurement facility used to collect the radiated data are located at the 254-1, Maekok-Ri, Hobup-Myun, Ichon-Si, Kyoungki-Do, 467-701, KOREA. The site is constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated July 6, 2006(Registration Number: 90661)

2.SYSTEM TEST CONFIGURATION

2.1 Configuration of Test system

Line Conducted Test : EUT was connected to LISN, all other supporting equipment were Connected to another LISN. Preliminary Power line Conducted Emission tests were performed by using the procedure in ANSI C63.4/2003 7.2.3 to determine the worst operating conditions.

Radiated Emission Test : Preliminary Radiated Emission tests were performed by using the procedure in ANSI C63.4/2003 8.3.1.1 to determine the worst operating condition. Final Radiated Emission tests were performed at 3 meter open area test site.



Power Line: 110V AC

[Configuration of Tested System]

3. PRELIMINARY TEST

3.1 Conducted Emission Test

During Preliminary Tests, the following operating mode was investigated

Operation Mode	The worst operating condition
Idle (CDMA 835) Mode	

3.2 Radiated Emission Test

During Preliminary Test, the Following operation mode was investigated

Operation Mode	The worst operating condition
Idle (CDMA 835) Mode	

4. CONDUCTED AND RADIATED EMISSION TESTS SUMMARY

4.1 Conducted Emission Test

The following table shows the highest levels of conducted emissions on both polarization of hot and neutral line.

```

=====
Limit apply to          : CISPR 22 CLASS B
Result                  : PASSED BY – 6.5 dB
Operating Condition     : Idle mode
Detector                : Quasi-Peak, Average (6 dB Bandwidth: 9 kHz)
Temperature             : 3.0 °C
Humidity Level          : 45.0 %
Test Date               : 12. 27. 2007
    
```

Power Line Conducted Emissions				CISPR 22 Class B	
Frequency (MHz)	Amplitude (dBuV)	Conductor	Result	Limit (dBuV)	Margin (dB)
0.3001	52.4	HOT	Quasi-Peak	60.0	-7.9
0.3026	40.2	HOT	Average	50.0	-10.0
0.2276	56.1	NEUTRAL	Quasi-Peak	63.0	-6.5
0.2326	45.2	NEUTRAL	Average	52.0	-7.2

Line Conducted Emissions Tabulated Data

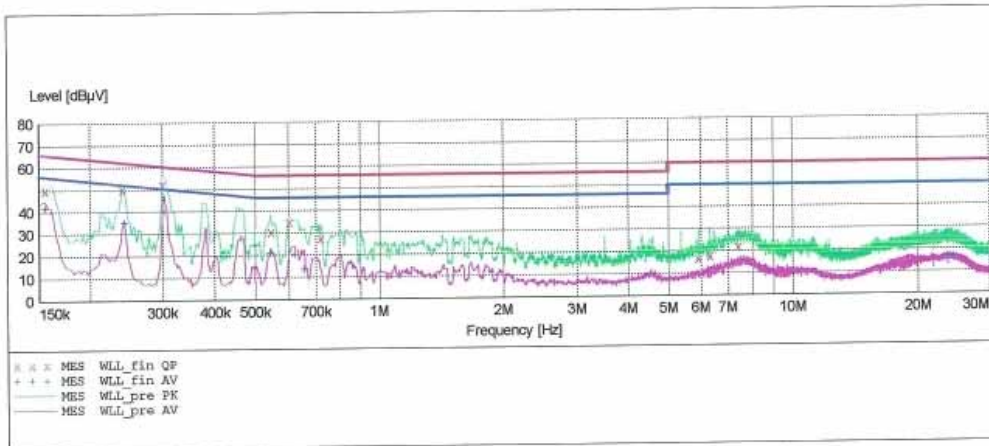
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EMC TEST LAB.

EUT: PXQ20
 Manufacturer: AXESSTEL
 Operating Condition: IDLE MODE
 Test Site: SHIELD ROOM
 Operator: DH.RYU
 Test Specification: CISPR 22 CLASS B
 Comment: H

SCAN TABLE: "CISPR 22 Voltage"

Short Description:		CISPR 22 Voltage					
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
150.1 kHz	500.0 kHz	2.5 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	



MEASUREMENT RESULT: "WLL_fin QP"

12/27/2007 5:35PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.155100	49.90	10.0	66	15.8	---	---
0.240100	50.10	10.0	62	12.0	---	---
0.300100	52.40	10.0	60	7.9	---	---
0.544000	30.50	10.1	56	25.5	---	---
0.604000	35.00	10.1	56	21.0	---	---
0.720000	27.50	10.1	56	28.5	---	---
5.916000	16.40	10.7	60	43.6	---	---
6.320000	17.60	10.8	60	42.4	---	---
7.400000	21.80	10.9	60	38.2	---	---

MEASUREMENT RESULT: "WLL_fin AV"

12/27/2007 5:35PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.155100	41.90	10.0	56	13.8	---	---
0.242600	35.20	10.0	52	16.8	---	---

MEASUREMENT RESULT: "WLL_fin AV"

(continued)

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Line	PE
0.302600	40.20	10.0	50	10.0	---	---
0.544000	21.20	10.1	46	24.8	---	---
0.620000	20.60	10.1	46	25.4	---	---
0.656000	13.80	10.1	46	32.2	---	---
23.652000	16.50	12.6	50	33.5	---	---
23.948000	16.30	12.6	50	33.7	---	---
24.484000	16.40	12.6	50	33.6	---	---

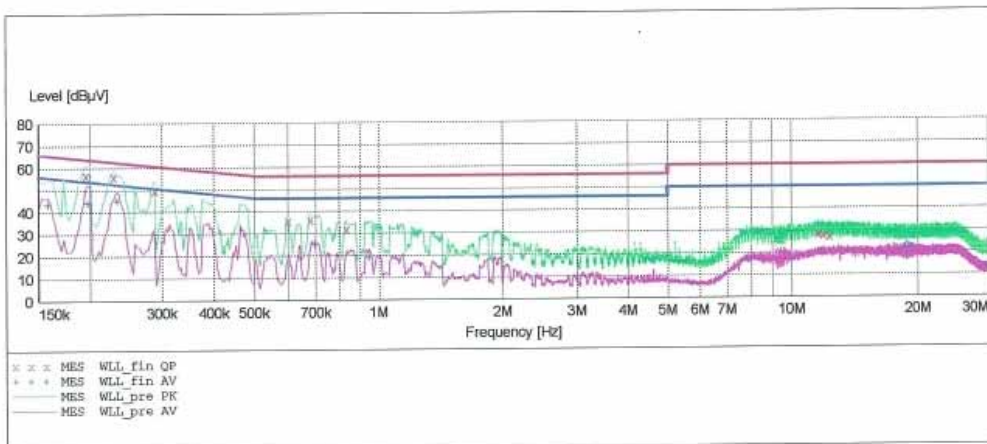
HCT

EMC TEST LAB.

EUT: PXQ20
 Manufacturer: AXESSTEL
 Operating Condition: IDLE MODE
 Test Site: SHIELD ROOM
 Operator: DH.RYU
 Test Specification: CISPR 22 CLASS B
 Comment: N

SCAN TABLE: "CISPR 22 Voltage"

Short Description:			CISPR 22 Voltage			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "WLL_fin QP"

12/27/2007 5:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.195100	56.60	10.0	64	7.2	---	---
0.227600	56.10	10.0	63	6.5	---	---
0.287600	49.60	10.0	61	11.0	---	---
0.600000	35.70	10.1	56	20.3	---	---
0.680000	36.10	10.1	56	19.9	---	---
0.832000	32.00	10.1	56	24.0	---	---
11.564000	28.50	11.4	60	31.5	---	---
11.920000	27.90	11.4	60	32.1	---	---
12.328000	27.20	11.5	60	32.8	---	---

MEASUREMENT RESULT: "WLL_fin AV"

12/27/2007 5:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.157600	43.60	10.0	56	11.9	---	---
0.197600	44.30	10.0	54	9.4	---	---

MEASUREMENT RESULT: "WLL_fin AV"

(continued)

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Line	PE
0.232600	45.20	10.0	52	7.2	---	---
0.644000	19.50	10.1	46	26.5	---	---
0.696000	25.30	10.1	46	20.7	---	---
0.944000	19.40	10.1	46	26.6	---	---
18.632000	21.80	12.2	50	28.2	---	---
18.860000	22.00	12.2	50	28.0	---	---
19.020000	21.60	12.2	50	28.4	---	---

4.2 Radiated Emission Test

The following table shows the highest levels of Radiated Emissions on both polarization of horizontal and vertical.

```

=====
Limit apply to          : FCC PART 15 Subpart B
Result                  : PASSED BY -12.1 dB
Operating Condition     : Idle mode
Detector                : Quasi-Peak (6 dB Bandwidth: 120 kHz)
Temperature             : 1.0 °C
Humidity Level          : 42.0 %
Test Date               : 12. 28. 2007
  
```

Frequency MHz	Reading dBuV	Ant. Factor dB/m	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
128.9	17.1	11.6	2.7	V	31.4	43.5	-12.1
142.2	14.0	12.5	2.8	H	29.3	43.5	-14.2
215.6	15.1	9.6	3.5	V	28.2	43.5	-15.3
215.8	15.3	9.6	3.5	H	28.4	43.5	-15.1
384.0	14.0	14.6	4.6	H	33.2	46.0	-12.8
498.6	7.6	16.9	5.3	V	29.8	46.0	-16.2

*** For measurement over 1 GHz, noise level was more than 10 dB below the limit.

4.3 Test Setup Photos

4.3.1 Conducted Emission



4.3.2 Radiated Emission



5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor.

The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF$$

where FS = Field Strength

RA = Receiver Amplitude

AF = Antenna Factor

CF = Cable Attenuation Factor

Assume a receiver reading of 21.5 dBuV/m is obtained. The Antenna Factor of 7.4 dB and a Cable Factor of 1.1 dB is added. The 30 dBuV/m value is mathematically converted to its corresponding level in uV/m.

$$FS = 21.5 + 7.4 + 1.1 = 30 \text{ dBuV/m}$$

Radiated emission limits

Frequency of emission	Field strength	
	$\mu\text{V} / \text{m}$	$\text{dB } \mu\text{V} / \text{m}$
30 ~ 88	100	40.0
88 ~ 216	150	43.5
216 ~ 960	200	46.0
Above 960	500	54.0

6. Test Equipment

<u>Type</u>	<u>Manufacture</u>	<u>Model Number</u>	<u>Next CAL Date</u>
EMI Test Receiver	Rohde & Schwarz	ESI40	2008.11.06
EMI Test Receiver	Rohde & Schwarz	ESCI	2008.06.01
LISN	EMCO	703125	2008.02.03
LISN	Rohde & Schwarz	ESH2-Z5	2008.04.20
LISN	Rohde & Schwarz	ESH3-Z5	2008.06.13
LISN	EMCO	3816/2	2008.06.13
Attenuator	Rohde & Schwarz	ESH3-Z2	2008.10.30
TRILOG Antenna	Schwarzbeck	VULB9168	2008.03.19
Communication Antenna	TDK	LPDA-0802	N/A
Antenna Position Tower	HD	240/520/00	N/A
Base Station	Rohde & Schwarz	CMU 200	2008.02.27
Horn Antenna	Schwarzbeck	BBHA 9120D	2008.03.31
RF-Amplifier	MITEQ	AMF-6D-00101800-35.20P.PS	2008.01.24

7. Conclusion

The data collected shows that the Axesstel Inc.

Fixed Wireless Phone. MODEL: PXQ20 Complies with §15.107 and §15.109 of the FCC Rules.