HYPER Taiwan Technology Inc.

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Bluetooth Qualification Test Report

IUT: VF1

Job Number: 0055-2008Jun18

Date: Jun/19/08

Prepared for:

QUANTA

211, Wen Hwa 2nd Rd., Kuei Shan,Tao Yuan 33377, Taiwan

Phone: +886-3-327-2345 #15012

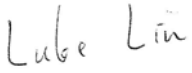
CNLA/TAF Accredited Laboratory to ISO/IEC 17025

- for the scope of *Bluetooth* Testing

Certificate Number 0916

Signature Page

The below listed HYPER Taiwan Technology Inc. personnel take responsibility for the contents of this Test Report.

Test Engineer(s)	Signatures	Date
Luke Lin		Jun/19/08

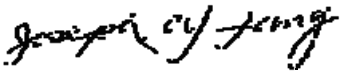
Reviewed and Approved by	Signatures	Date
Joseph Fang		Jun/19/08

Table of Contents

1. List of Revisions

Version	Date	Author(s)	Description
001	Jun/19/08	Min-Hsun Chiang	Initial Version

2. Disclaimer Notice

This test report applies only to the IUT (Implementation Under Test) and the results of the specifications called out in this report.

3. Reproduction Clause

4. Project Details

Product Name: VF1

Job Number: 0055-2008Jun18

5. Description of the IUT

Date received:	Jun/10/08
Date(s) tested	Jun/10/08 – Jun/17/08
Description of IUT	Personal Navigation Device
Condition of IUT:	The IUT was received in good condition.
Product ID	WL4218J00079
Serial number	001
Hardware Version	PR2
Software Version	8.200.9464
Firmware Version	N/A

6. General Testing Information

6.1. Test Facility

Company	Location	Parts Tested
HYPER Taiwan Technology Inc., Ltd.	No 17-2, Dahu 1st Rd., Dahu Village, Gueishan, Taoyuan County 333, Taiwan, R.O.C.	RF Conformance

6.2. Test Environment

Nominal Temperature	25-28°C
Nominal Humidity	25% – 65%
Low Temperature	-10°C
High Temperature	55°C
Nominal Voltage	3.7V
Low Voltage	N/A
High Voltage	N/A
Antenna Gain	2dBi

7. Test Summary

This test report is prepared for the project of QUANTA.The tests performed on the IUT are in compliance with the Bluetooth Wireless Technology Specification(s) below. A table of the tests performed and their results are provided in Section 7 of this report. Test results show that the IUT is tested against Bluetooth Specification Version 2.0+EDR.

Description	Document Number
TCRL	TCRL_2.0_EDR_2008-1
RF Test Spec	RF.TS/2.1.E.2

Test results are summarized below. “Pass”, indicates the test case requirements were reviewed to be in conformance. "Fail", indicates the test case requirements were reviewed and not in conformance. In case where “Declaration” is indicated, the required documentation is available in the client’s Compliance Folder. “N/A", is indicated when the test case requirements are not applicable.

7.1. List of Test Cases Performed and Result

7.1.1. RF Conformance

Test Case	Description	Cat.	Verdict
RCV/CA/01/C	Sensitivity – single slot packets (Nominal + Extremes)	A	Pass
RCV/CA/02/C	Sensitivity - multi-slot packets (Nominal + Extremes)	A	Pass
RCV/CA/03/C	C/I performance (Nominal Only)	A	Pass
RCV/CA/04/C	Blocking performance (Nominal Only)	A	Pass
RCV/CA/05/C	Intermodulation Performance (Nominal Only)	A	Pass
RCV/CA/06/C	Maximum Input Level (Nominal Only)	A	Pass
RCV/CA/07/C	EDR Sensitivity (Nominal + Extremes)	A	Pass
RCV/CA/08/C	EDR BER Floor Performance (Nominal Only)	A	Pass
RCV/CA/09/C	EDR C/I Performance (Nominal Only)	A	Pass
RCV/CA/10/C	EDR Maximum Input Level (Nominal Only)	A	Pass
TRM/CA/01/C	Output Power (Nominal + Extremes)	A	Pass
TRM/CA/02/C	Power Density (Nominal + Extremes)	B	Pass
TRM/CA/03/C	Power Control (Nominal Only)	A	Pass
TRM/CA/04/C	TX Output Spectrum – Frequency range (Nominal + Extremes)	A	Pass
TRM/CA/05/C	TX Output Spectrum – 20 dB Bandwidth (Nominal + Extremes)	A	Pass
TRM/CA/06/C	TX Output Spectrum – Adjacent channel power (Nominal + Extremes)	A	Pass
TRM/CA/07/C	Modulation Characteristics (Nominal + Extremes)	A	Pass
TRM/CA/08/C	Initial Carrier Frequency Tolerance (Nominal + Extremes)	A	Pass
TRM/CA/09/C	Carrier Frequency Drift (Nominal + Extremes)	A	Pass
TRM/CA/10/C	EDR Relative Transmit Power (Nominal + Extremes)	A	Pass
TRM/CA/11/C	EDR Carrier Frequency Stability and Modulation Accuracy (Nominal + Extremes)	A	Pass
TRM/CA/12/C	EDR Differential Phase Encoding (Nominal Only)	A	Pass
TRM/CA/13/C	EDR In-band Spurious Emissions (Nominal + Extremes)	B	Pass

8. Test Procedure

The test procedure followed for the test cases is in compliance with the applicable test specification.

8.1. Test Setup

Test setup for RF is shown below:

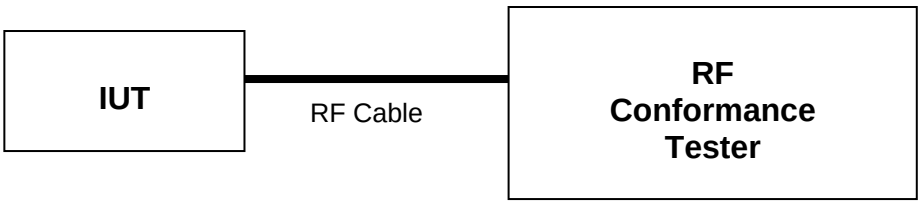


Figure1: Test set up for RF

9. List of Test Equipment Used

9.1. RF Testing

Description	Manufacturer	Cal Date	Cal Due
BRITS	Hyper Taiwan Technology	01/08/2007	07/31/2008

Appendix A: Pre-Qualified Designs

1. BC41B143A, CSR.

The supported protocols/profiles of the Pre-Qualified Components are described below:

Radio (RF)
RFCOMM Protocol

Appendix B: ICS/IXIT

Please reference the compliance folder for complete details. HYPER Taiwan Technology Inc., retains a copy of the data in the job file #: 0055-2008Jun18

Appendix C: Test Data

1. Test Data for RF Testing： Test Evidence for RF Test.zip