

RF EXPOSURE REPORT

REPORT NO.: SA131022E03C

MODEL NO.: WD105

FCC ID: N89-WD105

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ISSUED: Apr. 07, 2014

APPLICANT: CyberTAN Technology, Inc.

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ISSUED BY: Bureau Veritas Consumer Products Services (H.K.)
Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA131022E03C	Original release	Apr. 07, 2014

1. CERTIFICATION

PRODUCT: 1x1 802.11b/g/n module
BRAND NAME: CyberTAN
MODEL NO.: WD105
TEST SAMPLE: ENGINEERING SAMPLE
APPLICANT: CyberTAN Technology, Inc.
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: WD105) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Phoenix Huang , **DATE:** Apr. 07, 2014
(Phoenix Huang, Specialist)

APPROVED BY : May Chen , **DATE:** Apr. 07, 2014
(May Chen, Manager)

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Ant. No.	Brand	Model	Ant. Gain (include cable lose) (dBi)	Frequency range (MHz to MHz)	Ant. Type	Connector Type	Cable Loss (dBi)	Cable Length (mm)
1	QCA	NA	1	2400~2483.5	PCB	NA	NA	NA
2	WNC	81.EBJ15.005	3.62	2400~2483.5	PIFA	IPEX	1.15	300

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

802.11b

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	178.238	3.62	20	0.08161	1.00

802.11g

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	439.542	3.62	20	0.20125	1.00

802.11n (HT20)

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	433.511	3.62	20	0.19849	1.00

802.11n (HT40)

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2422-2452	155.239	3.62	20	0.07108	1.00

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