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# RF EXPOSURE REPORT

**REPORT NO.:** SA130814C33

**MODEL NO.:** NeverLost® 6 Tablet

**FCC ID:** 2AA4L-HTZNLTABLET

**RECEIVED:** Aug. 14, 2013

**ISSUED:** Sep. 11, 2013

**APPLICANT:** MiTAC International Corp.

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

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130814C33	Original release	Sep. 11, 2013



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## 1. CERTIFICATION

**PRODUCT:** Automotive Navigation Device  
**MODEL NO.:** NeverLost® 6 Tablet  
**BRAND:** Hertz  
**APPLICANT:** MiTAC International Corp.  
**TEST SAMPLE:** Production Unit  
**STANDARDS:** **FCC Part 2 (Section 2.1091)**  
**FCC OET Bulletin 65, Supplement C (01-01)**  
IEEE C95.1

The above equipment (model: NeverLost® 6 Tablet) 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 :** Vera Huang , **DATE :** Sep. 11, 2013

Vera Huang / Specialist

**APPROVED BY :** Roy Wu , **DATE :** Sep. 11, 2013

Roy Wu / Manager



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## 2. RF EXPOSURE

### 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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

F = Frequency in MHz

### 2.2 MPE CALCULATION FORMULA

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

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

### 2.3 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**.

## 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Frequency Band (MHz)	Operating Mode	Maximum Conducted (dBm)		Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
		Burst Avg. Power	Time Avg. Power				
GSM850	GPRS10	29.41	23.41	1	276.06	0.055	0.55
GSM1900	GPRS8	29.35	20.35	2.5	192.75	0.038	1.00

Frequency band (MHz)	Conducted Avg. power (dBm)	Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WCDMA Band II	22.93	2.5	349.14	0.069	1.00
WCDMA Band V	23.23	1	264.85	0.053	0.55
2402~2480	2.37	1.5	2.44	0.0005	1.00
2412~2462	16.22	4.51	118.30	0.024	1.00
5180~5240	14.89	6.31	131.83	0.026	1.00
5260~5320	17.71	6.21	246.60	0.049	1.00
5500~5700	15.11	6.91	159.22	0.032	1.00
5745~5825	17.83	6.11	247.74	0.049	1.00

### Note:

For 2412~2462: Directional gain = 1.5dBi + 10log(2) = 4.51dBi

For 5180~5240: Directional gain = 3.3dBi + 10log(2) = 6.31dBi

For 5260~5320: Directional gain = 3.2dBi + 10log(2) = 6.21dBi

For 5500~5700: Directional gain = 3.9dBi + 10log(2) = 6.91dBi

For 5745~5825: Directional gain = 3.1dBi + 10log(2) = 6.11dBi

## 2.5 Evaluation of Simultaneous transmission

There is one WWAN module and one WLAN/BT module installed in EUT. According to KDB 616217 D03 4) a), the formula is as following and the calculation is listed in below table.

$(\sum \text{ of the highest MPE / MPE limit}) < 1$

Co-transmission Configuration	Highest WLAN	MPE Limitation	Highest WWAN	MPE Limitation	Highest BT MPE	MPE Limitation	Sum of Ratio
WLAN + GSM 850	0.049	1.00	0.055	0.55	-	-	<b>0.149</b>
WLAN + GSM1900	0.049	1.00	0.038	1.00	-	-	<b>0.087</b>
WLAN + WCDMA Band II	0.049	1.00	0.069	1.00	-	-	<b>0.118</b>
WLAN + WCDMA Band V	0.049	1.00	0.053	0.55	-	-	<b>0.145</b>
WLAN + BT	0.049	1.00	-	-	0.0005	1.00	<b>0.0495</b>
BT + GSM 850	-	-	0.055	0.55	0.0005	1.00	<b>0.0555</b>
BT + GSM1900	-	-	0.038	1.00	0.0005	1.00	<b>0.0385</b>
BT + WCDMA Band II	-	-	0.069	1.00	0.0005	1.00	<b>0.0695</b>
BT + WCDMA Band V	-	-	0.053	0.55	0.0005	1.00	<b>0.0535</b>