RF EXPOSURE REPORT

REPORT NO.: SA981201L21

MODEL NO.: ETR9350, ESR9330, ESR9360, WL-357

FCC ID: U2M-TR9350

ACCORDING: FCC Guidelines for Human Exposure

IEEE C95.1

APPLICANT: Senao Networks Inc.

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

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

1. 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

2. MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

Pout = 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

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**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

WCDMA 850

For 3G USB Dongle Model: 888U (FCC ID: N7NC88)

CHANNEL	CHANNEL FREQUENCY (MHz)	OUTPUT POWER (erp)	OUTPUT POWER (eirp)	POWER DENSITY (mW/cm^2)	LIMIT OF POWER DENSITY (mW/cm^2)
4132	826.4	26.20	28.35	0.136	0.551

For 3G USB Dongle Model: E176 (FCC ID: QISE176)

CHANNEL	CHANNEL FREQUENCY (MHz)	OUTPUT POWER (erp)	OUTPUT POWER (eirp)	POWER DENSITY (mW/cm^2)	LIMIT OF POWER DENSITY (mW/cm^2)
4182	836.4	17.19	19.34	0.017	0.558

For 3G USB Dongle Model: MD300 (FCC ID: PY7F3232021)

CHANNEL	CHANNEL FREQUENCY (MHz)	OUTPUT POWER (erp)	OUTPUT POWER (eirp)	POWER DENSITY (mW/cm^2)	LIMIT OF POWER DENSITY (mW/cm^2)
4182	836.4	26.10	28.25	0.133	0.558

WCDMA 1900

For 3G USB Dongle Model: 888U (FCC ID: N7NC88)

CHANNEL	CHANNEL FREQUENCY (MHz)	OUTPUT POWER (eirp)	POWER DENSITY (mW/cm^2)	LIMIT OF POWER DENSITY (mW/cm^2)
9262	1852.40	28.70	0.147	1.000

FOR EUT (FCC ID: U2M-TR9350)

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
2412-2462	26.2	2.0	20	0.132	1.00

CONCULSION:

Both of the 3G USB dongle and EUT can transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

1. WLAN 2.4G + WCDMA 850 = 0.132 + 0.247 = 0.379
2. WLAN 2.4G + WCDMA 850 = 0.132 + 0.030 = 0.162
3. WLAN 2.4G + WCDMA 850 = 0.132 + 0.238 = 0.370
4. WLAN 2.4G + WCDMA 1900 = 0.132 + 0.147 = 0.279

Therefore, the maximum calculation of this situation is 0.379, which is less than the "1" limit.