FCC ID : 2ATUK-GPS-103

RF EXPOSURE

1.1.Standards:

FCC part 2(Section 2.1091)
FCC OET Bulletin 65, Supplement C(01-01)
IEEE C95.1

1.2.Limit For Maximum Permissible Exposure (MPE)

Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2, \|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

F = frequency in MHz, * Plane-wave equivalent power density

1.3.MPE Calculation Method

Predication of MPE limit at a given distance
Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=PG/4\pi R^2$

Where: S=power density
P=power input to antenna
G=power gain of the antenna in the direction of interest relative to an isotropic radiator
R=distance to the center of radiation of the antenna

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the antenna is 0 dBi, the RF power density can be obtained.

1.4.TEST RESULTS

Maximum measured transmitter power

For GSM worse mode

band	Test Frequency （MHz）	Output Power (dBm)	Output Power (W)	Target power (dBm)	Antenna Gain (Numeric)	Power Density Limit (mW/cm^2)	Power Density At 20 cm (mW/cm^2)	Test Results
GSM850	848.8	32.25	1.679	31.5±1	1.000	0.57	0.35	Pass
GSM1900	1909.8	29.54	0.899	29.0±1	1.000	1.000	0.20	Pass

For WCDMA worse mode

band	Test Frequency （MHz）	Output Power (dBm)	Output Power (W)	Target power (dBm)	Antenna Gain (Numeric)	Power Density Limit (mW/cm^2)	Power Density At 20 cm (mW/cm^2)	Test Results
WCDMA850	836.6	22.70	0.186	22±1	1.000	0.56	0.04	Pass
WCDMA1900	1880.0	22.42	0.175	22±1	1.000	1.000	0.03	Pass

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure.

1.5.FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, Human proximity to the antenna shall not be less than 20cm(8 inches) during normal operation. Proposed RF exposure safety information to include in User’s Manual.