

## Radiofrequency radiation exposure evaluation: mobile devices

RESULT :

Pass

### Test Specification

Test item : T401AI WIFI Module  
 Identification / Type No. : BT534217  
 FCC ID : WUI-T401AI  
 Test standard : CFR47 FCC Part 2: Section 2.1091  
 CFR47 FCC Part 1: Section 1.1310  
 FCC KDB Publication 447498 D04

### ➤ FCC requirements

**FCC requirement:** Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 20cm normally can be maintained between the user and the device.

### MPE Calculation Method according to KDB 447498 D04

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES  
 SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source Frequency		Minimum Distance				Threshold ERP
$f_L$ MHz	$f_H$ MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$		W
0.3	– 1.34	159 m	–	35.6 m		$1,920 R^2$
1.34	– 30	35.6 m	–	1.6 m		$3,450 R^2/f^2$
30	– 300	1.6 m	–	159 mm		$3.83 R^2$
300	– 1,500	159 mm	–	31.8 mm		$0.0128 R^2f$
1,500	– 100,000	31.8 mm	–	0.5 mm		$19.2R^2$

Subscripts L and H are low and high;  $\lambda$  is wavelength.  
 From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.

### a) EUT RF Exposure Evaluation operations, Worst Case mode

Test Mode	Measured Power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Minimum Separation Distances (cm)	Limit (mW)
2.4GHz band Wi-Fi	12.67	2.24	12.76	18.88	20	768