

### 11 RF EXPOSURE COMPLIANCE

#### **11.1 LIMIT**

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 levels 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 0.2 m normally can be maintained between the user and the device.

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)		Magnetic Field Strength (H) (A/m)	Power Density (5)	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)		Magnetic Field Strength (H) (A/m)	Power Density (3)	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> 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

NOTE: f = frequency in MHz; \*Plane-wave equivalent power density.

## 11.2MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Feb,26,2014
2	Power Meter Sensor	Anritsu	MA2411B	1126001	Feb,26,2014

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

# 11.3MPE CALCULATION METHOD

E (V/m) 
$$=\frac{\sqrt{30\times P\times G}}{d}$$
 Power Density:  $Pd$  (W/m²)  $=\frac{E^2}{377}$ 

**E** = Electric field (V/m)

**P** = Peak RF output power (W)

**G** = EUT Antenna numeric gain (numeric)

**d** = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

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

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# **11.4TEST SETUP LAYOUT**

FIIT	Power Meter
LUI	Fower Meter

# 11.5 DEVIATION FROM TEST STANDARD

No deviation

# 11.6EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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