

APPENDIX: FCC §15.247 (i) & §1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

EUT Description: Android MID
 Model No.: MD1005
 FCC ID: UVD-10M6

RF Exposure Calculation Result:

802.11b/g/n:
 Frequency: 2412-2462 MHz
 Modulation: DSSS (CCK, OFDM, DBPSK, DQPSK)
 Mid-Channel: 2.412 GHz (channel 01)
 Antenna Gain: G = 1 dBi

Standard Applicable

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

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Frequency Range (MHz)	Electric Field Strength	Magnetic Field Strength	Power Density (mw/cm ²)	Averaging Time (Minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	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

Test Data

Predication of MPE limit at a given distance: $S = PG/4\pi R^2$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Items	Value
Maximum peak output power at antenna input terminal:	10.6 (dBm)
Maximum peak output power at antenna input terminal:	11.48(mW)
Predication frequency:	2412 (MHz)
Antenna Gain (typical):	1 (dBi)
Maximum Antenna Gain:	10 (numeric)
The predicted power density level of EUT:	1.0 (mW/cm ²)
Minimum distance of SAR Test Exclusion:	0.33cm

Result:

According to the table of SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm in KDB447498, The minimum distance of SAR Test Exclusion calculated is 0.33cm. The EUT is at least 0.33 cm away from user's body when used(as showed in the following picture). It is determined as mobile equipment and complies with the MPE limit.