MPE CALCULATION

FCC ID: F5317LE4010

RF Exposure Requirements: 47 CFR §1.1307(b)

RF Radiation Exposure Limits: 47 CFR §1.1310

RF Radiation Exposure Guidelines: FCC OST/OET Bulletin Number 65

Limits for General Population/Uncontrolled Exposure in the band of:

Frequency Range (MHz)	Power Density (mW/cm^2)
1,500-100,000	1.0
300-1,500	f/1500

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

MPE Calculations:

Prediction distance 20cm

Radio Mode	Frequency Range (MHz)	Reference Freq. (dBm)	Average Output Power (dBm)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Antenna Gain (dBi)	Measurement Distance (cm)	Power Density (mw/cm2)	MPE Limit (mw/cm2)
LTE Band 2	1850-1910	1850.7	23.43	±1dB	24.43	3.2	20	0.115	1
LTE Band 4	1710-1755	1710.7	23.12	±1dB	24.12	3.2	20	0.107	1
LTE Band 5	824-849	824.7	22.90	±1dB	23.90	4.4	20	0.135	0.550
LTE Band 12	699-716	699.0	22.86	±1dB	23.90	4.4	20	0.135	0.466
LTE Band 13	777-787	777.0	22.88	±1dB	23.88	4.4	20	0.134	0.518

Radio Mode	Frequency Range (MHz)	CH Freq. (dBm)	Average Output Power (dBm)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Antenna Gain (dBi)	Measurement Distance (cm)	Power Density (mw/cm2)	MPE Limit (mw/cm2)
UMTS Band 2	1850-1910	1852.4	23.50	±1dB	24.50	3.2	20	0.117	1
UMTS Band 5	824-849	826.4	23.50	±1dB	24.50	4.4	20	0.154	0.551

The different radios from different bands are not transmitting simultaneously.

The Above Result had shown that the Device complied with MPE requirement.

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