§1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to FCC §15.319(i) and §1.1307(b)(1), 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 of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	842/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

MPE Calculation

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

Where: S = power density (in appropriate units, e.g. mW/cm^2);
　　　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
　　　R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For worst case:

Frequency (MHz)	Antenna Gain		Maximum Tune-up power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
	(dBi)	(numeric)	(dBm)	(mW)			
1921.536 - 1928.448	3.5	2.24	20.0	100	20	0.045	1.0

Note:

This EUT contains FCC ID: TLZ-CM389NF, and the maximum power density is
 2.4GHz WLAN= 0.54869mW/cm^2,
  5GHz WLAN =0.48671 mW/cm^2,
  Bluetooth = 0.0034 mW/cm^2,
  NFC= 0.1 $\times 10^{-6}$ mW/cm^2
According to the MPE of FCC ID: TLZ-CM389NF, WLAN, NFC and Bluetooth can transmit
simultaneously, the 2.4GHz WLAN and 5GHz WLAN cannot transmit simultaneously.
so consider the DECT and module transmitting simultaneously, the worst case:
  The ratio= MPE/Limit$_{DECT}$+ MPE/Limit$_{2.4GHZWLAN}$+ MPE/Limit$_{Bluetooth}$ + MPE/Limit$_{NFC}$
=0.045/1.0+0.54869 / 1 + 0.0034 / 1 + (0.1 $\times$10-6) / 0.9789 =0.597<1.0

Result: The device meets MPE limit at 20 cm distance.