

**47 C.F.R. Part 1, Subpart I, Section 1.1310**  
**47 C.F.R. Part 2, Subpart J, Section 2.1091**  
**Maximum Permissible Exposure Calculations**

**For Kinestral Technologies Inc. M/N: UC100**

**802.15.4 Zigbee Transceiver**

EUT Device Category = General Population/Uncontrolled Exposure

The EUT is operated by a finger momentarily pressing one of the switches of the device.

EUT consists of one ISM band radio transmitting operating over a range of:  
**2405 MHz to 2475 MHz**

MPE Summary:

KDB 447498 D01 General RF Exposure Guidance v06 gives the 1-g and 10-g SAR test exclusion thresholds. The limits for 100 MHz to 6 GHz and a test separation distance of  $\leq 50$  mm are defined by the following equations:

$$((\text{max EIRP, mW} / (\text{minimum separation, mm})) * \sqrt{F_{\text{GHz}}} \leq 3.0 \text{ for 1-g SAR or } \leq 7.5 \text{ for 10-g SAR}$$

MPE and Limit are calculated as follows:

Max EIRP	Separation	Frequency	Density	Maximum Duty Cycle	Worst-case Density	Limit	Result
mW	(mm)	GHz	mW/mm	%	mW/mm	10-g	
30.27	8.0	2.405	5.87	100	5.87	7.5	Exempt
23.77	8.0	2.440	4.64	100	4.64	7.5	Exempt
22.44	8.0	2.475	4.41	100	4.41	7.5	Exempt

**Result:** The device meets FCC MPE limit for General Population/Uncontrolled Exposure