



APPENDIX L
: RF EXPOSURE EVALUATION



RF Exposure Evaluation

1.1 Applicable Standard

According to §15.247(e)(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.

According to KDB 447498 DS01 Ver 04, no Hand SAR required if power is lower than the following threshold: Device is hand-operated device; its antenna will be less than 5cm, but more than 5 cm from human body. So Body SAR is not required.

Zigbee Pro

Hand SAR

Frequency Range		Center frequency (MHz)	1000*[f _(GHz)] ^{-0.5} Hand SAR Limitation (mW)
Low Frequency (MHz)	High Frequency(MHz)		
2405	2480	2445	645

Body SAR

Frequency Range		Center frequency (MHz)	300*[f _(GHz)] ^{-0.5} Body SAR Limitation (mW)
Low Frequency (MHz)	High Frequency(MHz)		
2405	2480	2445	193

Maximum measured transmitter power

Conducted Power (mW)	Max Antenna Gain (dBi)	EIRP (mW)
79.7	2.27	134.3

Threshold at which no SAR required is 193 mW.
 Maximum Tx power is 134.3 mW EIRP.

Conclusion: No SAR is required.

No Simultaneous transmission occurs.