

19. Multiple TRANSMITTERS SAR CONSIDERATIONS

19.1 Introduction

The following procedures adopted from "FCC SAR Evaluation Considerations for Handsets with Multiple Transmitters"(v01r05 #648474) on September 2008 are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

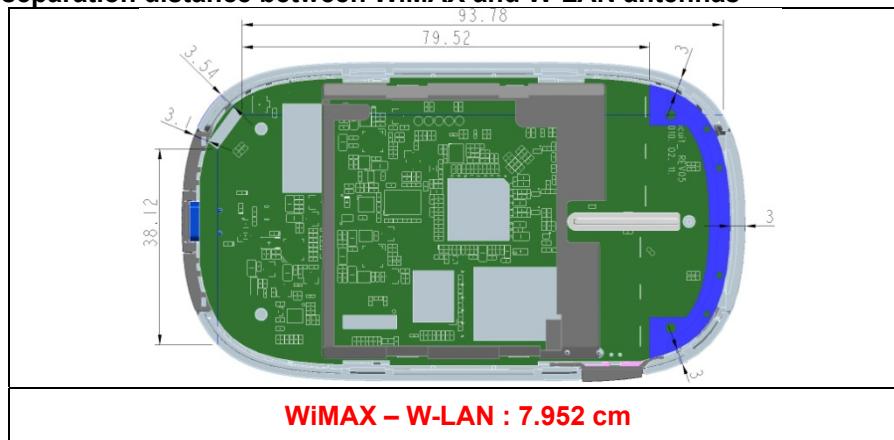
19.2 Output Power Thresholds for Unlicensed Transmitters

	2.45	5.15-5.35	5.47-5.85	GHz
P Ref	12	5	5	mW

Device output power should be rounded to the nearest mW to compare with values specified in this table

19.3 Multiple Antenna Transmission Information for IMW-C610W

19.3.1 The closest separation distance between WiMAX and W-LAN antennas



19.3.2 W-LAN(802.11b) out power

Test Mode	Frequency	Test Results	
		dBm	mW
802.11b	Lowest	8.48	7.047
	Middle	8.44	6.982
	Highest	6.38	4.345
802.11g	Lowest	8.49	7.063
	Middle	8.39	6.902
	Highest	7.65	5.821

* SAR is not required for 802.11g channels when the maximum average output power is less than $\frac{1}{4}$ dB higher than that measured on the corresponding 802.11b channels.

Note 1: Unlicensed transmitter's stand alone SAR is not required when following condition.

- Output power $\leq P_{Ref}$, antenna distance from other antennas $> 2.5\text{cm}$ each with either output power $\leq P_{Ref}$ or 1-g SAR $< 1.2 \text{ W/kg}$
- The DUT's antenna distance is more than 2.5 cm and output power is less than $\leq P_{Ref}$ therefore W-LAN stand alone SAR is not required.

Note 2 : SAR For Simultaneous transmission

- When $(\text{WiMAX}_{\text{sar}} + \text{W-LAN}_{\text{sar}}) > 1.6 \text{ W/kg}$, then simultaneous transmission is not performed.