

RE: Icom Incorporated
FCC ID: AFJ281600

In reply to your recent questions:

1) Please provide an RF exposure exhibit relative to this device, similar to the attached document that justifies why no SAR is necessary.

$f_{\text{mid}} = 0.155 \text{ GHz}$

Power thresholds $900/f \text{ (GHz)} = 900/0.155 = 5806\text{mW} = 37.63\text{dBm}$

The EUT's peak conducted power = 37 dBm – 3dB (50% duty cycle for PTT device)
= 34 dBm.

Threshold for no SAR evaluation is 37.63dBm.

The EUT's transmitter power is 34 dBm.

Conclusion: No SAR evaluation is required since the EUT's transmitter power is below FCC threshold.

2) For belt clip configurations and to justify not requiring SAR, can it be shown that when the device transmits, the device is $> 2.5 \text{ cm}$ from the body? This is necessary in order to justify the $900/\text{freq}$ RF levels used in order to approve without requiring evaluation of a SAR report (i.e. when using the optional speaker microphone).

See pictures below:





3) Also in regards to RF exposure, 90.205(q) should be accounted for in evaluations, i.e., power should be determined according to allowed 20% over nominal power, unless radio is documented to not support such levels. Please explain and/or correct as necessary.

The EUT does not support 6W output power ($5W \times 120\% = 6W$).
See alignment procedure for details.

4) This device appears to be capable of scrambler functions. Please provide information to explain compliance to 90.212.

The EUT is capable of turning on/off the scrambler function by one of button on the front panel as described page 15 of user manual. When the scrambler function is turns off, EUT transmits in the unscrambled analog mode (clear voice) as described in 90.212(d).

5) It is uncertain if the optional scrambler is analog or digital in nature. Please explain so we can verify the F3E emissions designator is applicable. Note that use of digital scrambler techniques requires an emissions designator F1E (90.212a/b) and may require additional line entries to the 731 form.

The scrambler that tested with EUT is an analog scrambler, and modulation characteristic is F3E.