Appendix I- RF Exposure statement

FCC Requirement

According to FCC 2.1091, mobile equipment must comply with the following applicable limit for maximum permissible exposure (MPE) specified in FCC 1.1310:

Equipment Use	Frequency Range	Power Density [mW/cm^2]	Average Time [min]
General Population / Uncontrolled Exposure	1.5 – 100GHz	1	30

IC Requirement

According to RSS-102 (Issue 5), clause 2.5.2, no routine RF exposure evaluation is required if the transmitter power (e.i.r.p.) is below the following threshold:

'at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1.31 x 10^{-2} $f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz; '

Here f = 2450MHz, so Max EIRP should ⩽ 2.7129 W = 2712.9 mW

Measurement Result

The maximum measured transmitter power is the following:

Conducted Output Power P$_{out}$ [dBm]	Conducted Output Power P$_{out}$ [mW]	Maximum Antenna Gain [dBi]	P$_{out}$ EIRP [mW]	Power Density at 20cm [mW/cm2]
22.75	188.36	2.2	312.61	0.062

Note:

The power density S in mW/cm^2 is calculated according to the Friis formula:
$$S = (P_{out} \cdot G) / (4\pi \cdot D^2),$$
where
S = power density in mW/cm^2
P$_{out}$ = antenna conducted output power in mW
G = antenna gain in linear scale (here: 2.2dBi=10log(G))
D = distance between observation point and radiating structure in cm (here: 20cm)

Conclusion
The device complies with the FCC and IC RF exposure requirements since the maximum transmitter power density is below the FCC limit and the e.i.r.p. power is below the IC RF exposure evaluation exemption threshold.