

Exposure of Humans to RF Fields

Test Requirement: RSS-Gen clause 3.4
Category I and Category II equipment shall comply with the applicable requirements of **RSS-102 Issue 5:2015**.

Test Method: RSS-102 clause 2.5

Test Status: Test lowest, middle and highest channels.

Requirements:

The EUT shall comply with the requirement of RSS-102 section 2.5.1:

Exemption from Routine Evaluation Limits – SAR Evaluation:

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power. For controlled use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 5. For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 2.5. If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance. For test separation distance less than 5 mm, the exemption limits for a separation distance of 5 mm can be applied to determine if a routine evaluation is required.

For medical implants devices, the exemption limit for routine evaluation is set at 1 mW. The output power of a medical implants device is defined as the higher of the conducted or e.i.r.p to determine whether the device is exempt from the SAR evaluation.

Measurement Record:

The product belongs to standalone portable device. The transmission frequencies of the device are between 1900 MHz-2450 MHz and 2450 MHz-3500MHz. The worst case test separation distance is 5mm.

The Max Conducted Output Power and SAR Test Exclusion Threshold (mW) are listed below:

Transmit frequency (MHz)	Max Conducted Output Power (mW)	SAR Test Exclusion Threshold (mW)
2402	1.66	4.3
2440	1.66	4.0
2480	1.66	3.9

The EUT meet the **Exemption from Routine Evaluation Limits – SAR Evaluation**, so no SAR report is required for the EUT.

Pls. refer to clause 7.4 of this report 200330213GZU-003 for more details.