

RF Exposure

FCC ID : BEJNT-24CR670

IC : 2703H-24CR670

RF Exposure Evaluation Exemption for FCC

In accordance with FCC KDB Publication 447498 D01 V06 Clause 4.3.1, b) 1)

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances >50 mm are determined by:

For transmit frequencies below 100 MHz:

In accordance with FCC KDB Publication 447498 D01 V05R02 Clause 4.3.1 c), 1) For test separation distances >50 mm and <200 mm, the power threshold at the corresponding test separation distance at 100 MHz in section 4.3.1 step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$

This table is for devices with a separation greater than 50 mm

MHz	Max Power [dBm]	Duty Cycle [%]	EUT EIRP [mW]	Min Sep [mm]	SAR Exc Threshold at 50mm 4.3.1 a) [mW]	SAR Exclusion threshold per 4.3.1 b)1) [mW]	SAR Exclusion threshold per 4.3.1 c) 1) [mW]	Result	Notes
0.125	-19.28	100	0.01180	200	474.3	574.3	2241.7	Exempt	Peak
13.56	-26.12	100	0.00244	200	474.3	574.3	1072.7	Exempt	Peak

EUT EIRP << SAR exclusion threshold per 4.3.1 c) 1)

RF Exposure Evaluation Exemption for IC – 13.56 MHz

Per RSS-102 issue 5, section 2.5.1 as reproduced below:

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 below table:

Frequency [MHz]	Exemption Limits [mW]				
	Separation distance of ≤ 5 mm	Separation distance of 10 mm	Separation distance of 15 mm	Separation distance of 20 mm	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

Frequency [MHz]	Exemption Limits (mW)				
	Separation distance of 30 mm	Separation distance of 35 mm	Separation distance of 40 mm	Separation distance of 45 mm	Separation distance of ≥ 50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 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.

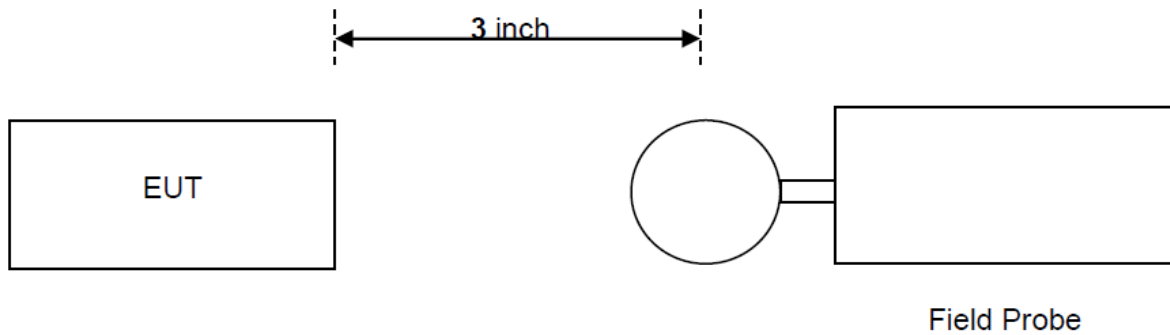
For medical implants devices, the exemption limit for routine evaluation is set at 1 mW. The output power of a medical implants device is defined as the higher of the conducted or e.i.r.p to determine whether the device is exempt from the SAR evaluation

Mode	Frequency (MHz)	Field Strength (dBuV/m)	Max. Power (mW)	Tune-Up Tolerance	Radiated Power (e.i.r.p.) (mW)	Min. test separation distance (mm)	Limits of RF Exposure Evaluation (mW)	Result
RFID	13.56	29.11*	0.00244	±1dB	0.00308	20	345	Pass

NOTE:

1. Note: * Please refer report No. RP-9208 Rev. 0 for testing detail.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

RF Exposure Evaluation Exemption for IC – 125 kHz



The basic restrictions are based on internal induced electric field or SAR. The relationship between the induced field and that of the exposure area is proportional; thus, in cases where the limbs are the primary point of exposure, the induced field would be less than that induced in the trunk of the human body.

When assessing compliance at the compliance distance, where limb exposure is the primary exposed condition, the following table may be used for relaxation of the RSS-102 nerve stimulation RLs.

Limb Exposure Limit Relaxation			
Exposure Condition	Relaxation Factor	Electric Field (V/m R.M.S.)	Magnetic Field (A/m R.M.S.)
Whole Body / Torso / Head	1.0	83	90
Leg	1.5	124.5	135
Arm	2.5	207.5	225
Hand/Foot	5.0	415	450

Nerve Stimulation Exposure Test Result

3 inch

H-field measurement result:

Frequency (MHz)	H-Field measurements [A/m]						Max [A/m]	Limit [A/m]	Result
	Top	Bottom	Left	Right	Front	Rear			
0.125	0.0567	0.0562	0.0581	0.0562	0.0581	0.0562	0.0581	90	Pass

E-field measurement result:

Frequency (MHz)	E-Field measurements [V/m]						Max [V/m]	Limit [V/m]	Result
	Top	Bottom	Left	Right	Front	Rear			
0.125	0.3795	0.3996	0.3887	0.3846	0.3887	0.3834	0.3996	83	Pass