

## RF EXPOSURE EVALUATION

### EUT Specification

<b>EUT</b>	Module
<b>Model Number</b>	RFM95C
<b>IC</b>	24999-RFM95C
<b>Modulation</b>	LoRa
<b>Input Rating</b>	DC 3.3V 500mA
<b>Max. output power (peak power)</b>	LoRa: 10.33 dBm
<b>Antenna gain (Max)</b>	2.15 dBi
<b>Evaluation Applied</b>	MPE Evaluation

### Limits for Maximum Permissible Exposure(MPE)

Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $4.49/f^{0.5}W$  (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834} W$  (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)

MHz	EIRP(W)	EIRP(dBm)
903.0	1.37	31.37
923.3	1.39	31.43
927.5	1.40	31.46

## Measurement Result

Mode	Channel Freq. (MHz)	Measured power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain (dBi)	EIRP(dBm)
LoRa	903.0	10.33	10±1	11	2.15	13.15

Distance=20cm

Calculated EIRP=Output power+Antenna gain<MPE limit

Signature: 

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