

# RF Exposure

FCC ID: M9MM7XC

## 1.0 INTRODUCTION

These calculations are based on the highest EIRP possible from the EUT, measured in the radiated mode for the RFID portion.

EIRP was calculated using the following.

$$\text{EIRP} = (\text{E} \times \text{d})^2 / 30$$

where:

- **E** = electric field strength in V/m,
- **d** = measurement distance in meters (m).

It was measured to be 65.5 dBuV/m at 13.56 MHz at 3 meters or -29.7 dBm (0.00107 mW) EIRP.

See section 11.3.3 of RP-10112A test report for the field strength test data. The field strength is calculated without distance correction factors.

## 2.0 FCC RF EXPOSURE COMPLIANCE RESULT:

In accordance with FCC KDB Publication 447498 D01 V06 Clause 4.3.1 c) for transmit frequencies below 100 MHz:

- 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  $[1 + \log(100/f_{\text{MHz}})]$
- 2) For *test separation distances*  $\leq 50$  mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$

This table is for devices with a separation of less than 50 mm

MHz	Max Power dBm	Duty Cycle %	EUT EIRP mW	Min Sep mm	SAR Exc Threshold at 50mm 4.3.1 a) in mW	SAR Exclusion threshold per 4.3.1 b)1) in mW	SAR Exclusion threshold per 4.3.1 c) 2) in mW	Result	Notes
13.56	-29.7	100.0	0.00107	5	47.4	17.4	16.3	Exempt	Peak

EUT EIRP << SAR exclusion threshold per 4.3.1 c) 2)