

U.S. Tech Test Report:
FCC ID:
IC:
Report Number:
Issue Date:
Customer:
Model:

FCC Part 95 Certification
JOFRS51033
5855A-51033
12-0243
June 27, 2012
Radio Sound Inc.
RS-51033

RF Exposure Requirements (1.1310 & 2.1091)

Limits

§ 1.1310: The criteria listed in Table 1 of this section shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in 1.1307(b).

Maximum Public Exposure to RF (MPE)

The maximum exposure level to the public from the RF power of the EUT shall not exceed the following:

Occupational/Controlled Exposure, $S_{controlled}$ [mW/cm²] = 900/(27 MHz²)=
1.23 mW/cm² = 12.3 W/m²

General population/Uncontrolled Exposure, $S_{uncontrolled}$ [mW/cm²] = 180/(27 MHz²)=
0.25 mW/cm² = 2.5 W/m²

Therefore, for: Gain Antenna= 0 dBi

Peak Power (Watts) = 3.98 (from Table 3 of Test Report)

Gain of Transmit Antenna = 0 dB_i = 1,

$r_{controlled} = \sqrt{(PG/ 4\pi S)} = 3.98(1)/4*\pi*12.3 = 0.16$ m = 16 cm

$r_{uncontrolled} = \sqrt{(PG/ 4\pi S)} = 3.98(1)/4*\pi*2.5 = 0.36$ m = 35.6 cm