Maximum Public Exposure to RF (MPE) CFR 15.247 (i), CFR 1.1310 (e) & RSS-102, 2.5.2

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm^2 at a distance, d, of 20 cm from the EUT.

Therefore, for compliance at 902 MHz (0.601 mW/cm^2):

Peak Power (dBm) = 12.91 dBm (from Table 14 of test report)
Peak Power (Watts) = 0.0195 W
Gain of Transmit Antenna = -1.0 dB$_i$ = 0.79, numeric
d = Distance = 20 cm = 0.2 m

S = (PG/ 4πd^2) = EIRP/4A = 0.0195*(0.79)/4*π*0.2*0.2
=0.0154/0.5030 = 0.0306 W/m^2
= (0.0306 W/m^2) (1m^2/W) (0.1 mW/cm^2)
= 0.00306 mW/cm^2

which is << less than 0.6010 mW/cm^2

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f^2	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

RSS-102, 2.5.2 Compliance for 902 MHz – 928 MHz band:

At or above 300 MHz and below 6 GHz and the source based time averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ in Watts (adjusted for tune-up tolerance where applicable), where f = frequency in MHz.

Note: Calculated for 902 MHz

$1.31 * 10^{-2} * 902^{0.6834} = 1.37$ W

EUT max ERP = 12.9 dBm + (-1.0) dBi = 11.9 dBm or 0.015 Watts << 1.37 Watts