RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v05
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:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation
The result is rounded to one decimal place for comparison

eirp = pt x gt = (EXd)2/30
where:
pt = transmitter output power in watts,
gt = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, --- 10((dBuV/m)/20)/106
d = measurement distance in meters (m)---3m
So pt = (EXd)2/30 x gt

RF Exposure evaluation for AT-80HT
Copied from the FCC test report:

Carrier Frequency (MHz)	**Factual Level dBm (mW)**
614.200	-7.6dBm(i.e.0.17 mW)
665.247	-7.8dBm(i.e.0.17 mW)
697.800	-7.8dBm(i.e 0.17 mW)

tune-up tolerance=±1dB,
min. test separation distance = the min distance from the antenna to the outer = 10.44 mm
Field strength = -7.6 dBm=0.17 mW in 614.200MHz
Field strength = -7.8 dBm=0.17 mW in 665.247MHz
Field strength = -7.8 dBm=0.17 mW in 697.800MHz

Max. power of channel after included tune-up tolerance
Field strength = -6.6 dBm=0.22 mW in 614.200MHz
Field strength = -6.8 dBm=0.21 mW in 665.247MHz
Field strength = -6.8 dBm=0.21 mW in 697.800MHz

So (0.22 mW)/10.44mm)x √0.614200 GHz = 0.0165 <3

So (0.21 mW)/10.44mm)x √0.665247 GHz = 0.0164 <3
So (0.21 mW)/10.44mm)x √0.697800 GHz = 0.0168 <3

Then SAR evaluation is not required