RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	FM Transmitter
Model Name	BH269A, BH269B, BH269C
FCC ID	2AIL4-BH269A

2. EVALUATION METHOD

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)] ·[$\sqrt{f(GHz)}$] ≤ 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

3. CALCULATION
   According to the follow transmitter output power（P_t）formula：
   $P_t = (E \times d)^2 / (30 \times g_t)$
   P_t=transmitter output power in watts
   g_t=numeric gain of the transmitting antenna (unitess)
   E=electric field strength in V/m
   d=measurement distance in meters (m)

   BT:
   Pt= 0.7dBm=1.17mW
   The result for RF exposure evaluation
   SAR=(1.17mW /5mm) .[$\sqrt{2.480}$(GHz)]= 0.37<3.0 for 1-g SAR

   FM:
   Pt=0.000 000 012mW
   The result for RF exposure evaluation
   SAR=(0.000 000 012mW /5mm) .[$\sqrt{0.881}$(GHz)]= 0.000 000 002 25<3.0 for 1-g SAR

   Simultaneous transmission between Bluetooth and FM transmitter:
   [(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [$\sqrt{f(GHz)}$/x] W/kg, for test separation distances ≤ 50 mm;
   where x = 7.5 for 1-g SAR and x = 18.75 for 10-g SAR.
    SAR=(0.37+0.000 000 002 25)/7.5=0.049W/kg<1.6W/kg

4. CONCLUSION

 The SAR evaluation is not required.