RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Car MP3 Player
Model Name	T25, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T50 ,T51, T52, T53, T55, T56, T57, T58, T59, T60, T35Q, T25S, T25Q, T25C, T35, T35C, T29, T32, T45Q, T45C, T46Q, T46C, T47, T48Q, T48C, T49Q, T49C, CP24, CP89, CP89Q, CP93, CP94, CP123, CP98.NX10, NX11, HL-t25s, AMT22, AM6EB, AM6EW, CAD6005, X7, V8, BT02, BT03, BT04, BT05, SRXA-ABFM46, SRXA-ABFM60, SRXA-ABFM50, Peakage S6, IPH-1088N, 68491760054, PT-736, PT-737, PT-805, VO2101, 7946, TRACER T1, MY2119, MY2121, NOVELEKA-FM1, NOVELEKA-FM2, SWM 3535, SWM 4545, SWM 4848, SWM 5858, T71, T74, EBH05045GA01
FCC ID	2AMBA-T25

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)] $\cdot[\sqrt{f(GHz)}]$ ≤ 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 P_t= 6.657dBm=4.63mW

   The result for RF exposure evaluation
SAR=(4.63mW /5mm) .$[\sqrt{2.402}$(GHz)]= 1.44<3.0 for 1-g SAR

FM P_t=0.0000098mW
The result for RF exposure evaluation
SAR=(0.0000098mW /5mm) .$[\sqrt{0.0881}$(GHz)]= 0.00000059<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=(1.44+0.00000059)/7.5=0.192W/kg<1.6W/kg

4. CONCLUSION

The SAR evaluation is not required.