

INTERTEK TESTING SERVICES

Radio Frequency Radiation Exposure, FCC Rule 15.247(i):

The EUT is a Bluetooth headset.

According to the DA 00-705 and KDB 447498,

The power thresholds for source-based time-averaging conducted output power (in the worst-case duty cycle of DH5 of 8DPSK modulation type)

$$= 5.35 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$

$$< 5.35 \text{ mW, since } (T_{on} / (T_{on} + T_{off})) < 1$$

The power thresholds for source-based time-averaging radiated output power (The worst-case radiated emission is 101.7 dBμV/m at 3m in 8DPSK modulation type)

$$= [(FS * D)^2 / 30] * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$

$$= 4.44 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$

$$< 4.44 \text{ mW, since } (T_{on} / (T_{on} + T_{off})) < 1$$

And SAR Low Threshold Level:

$$60/f \text{ (GHz)} = 60/2.45$$

$$= 24.5 \text{ mW}$$

$$= 13.9 \text{ dBm}$$

Since the source-based time-averaging conducted output power and radiated output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.