

INTERTEK TESTING SERVICES

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

The EUT is a Nokia Play 360° Bluetooth Wireless Speaker MD-50W.

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 GFSK modulation type)
 $= 4.65 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$
 $< 4.65 \text{ mW}$, 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 99.5dBμV/m at 3m in GFSK modulation type)
 $= [(FS * D)^2 / 30] * (T_{on} / (T_{on} + T_{off})) \text{ mW}$
 $= 2.67 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$
 $< 2.67 \text{ mW}$, since $(T_{on} / (T_{on} + T_{off})) < 1$

And SAR Low Threshold Level:

$$\begin{aligned} 60/f \text{ (GHz)} &= 60/2.45 \\ &= 24.5 \text{ mW} \\ &= 13.9 \text{ dBm} \end{aligned}$$

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.