

INTERTEK TESTING SERVICES

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

The EUT is a HUAWEI Ascend Y 101;
HSDPA/UMTS/GPRS/GSM/EDGE Mobile Phone.

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 2DH1 of $\pi/4$ -DQPSK modulation type)

$$= 4.54 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$
$$< 4.54 \text{ mW, since } (T_{on} / (T_{on} + T_{off})) < 1$$

The power thresholds for source-based time-averaging radiated output power (The worst-case radiated emission is 101.2dB μ V/m at 3m in $\pi/4$ -DQPSK modulation type)

$$= [(FS * D)^2 / 30] * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$
$$= 3.95 * (T_{on} / (T_{on} + T_{off})) \text{ mW}$$
$$< 3.95 \text{ mW, since } (T_{on} / (T_{on} + T_{off})) < 1$$

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.