

## **FCC ID : YFK-LSHS500LA**

### ➤ **Test Standards and Limits**

#### **1. According to KDB 447498 D01 v06, Section 4.3.1**

#### **2. FCC Radiofrequency radiation exposure limits:**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation

distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

For 2.4G band device, the limit of worse case is

$$P_{\text{max}} \leq 3.0 \cdot D_{\text{min}} / f = 3.0 \cdot 5 / 2.480 = 9.525 \text{ mW}$$

### ➤ **Measurement and Calculation**

#### **1. Maximum transmit power**

|               |          |
|---------------|----------|
| Antenna Gain: | 1.29 dBi |
|---------------|----------|

| TestMode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] |
|----------|---------|----------------|---------------------------|
| DH5      | Ant1    | 2402           | 0.25                      |
|          |         | 2441           | 0.29                      |
|          |         | 2480           | 0.13                      |
| 2DH5     | Ant1    | 2402           | 0.12                      |
|          |         | 2441           | 0.21                      |
|          |         | 2480           | 0.03                      |
| 3DH5     | Ant1    | 2402           | 0.32                      |
|          |         | 2441           | 0.38                      |
|          |         | 2480           | 0.27                      |

| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] |
|-----------|---------|----------------|---------------------------|
| SRD       | Ant1    | 2402           | -0.01                     |
|           |         | 2441           | -0.11                     |
|           |         | 2480           | -0.13                     |

#### **2. MPE Calculation**

The Max Conducted Peak Output Power is 0.38 dBm.

The Max Antenna Gain is 1.29 dBi.

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 0.38 \text{ mW} \times 1.63 = 0.619 \text{ mW} < 9.525 \text{ mW}$$

**So the SAR report is not required.**

-End of the Report-