

# **RF Exposure Evaluation**

**Test report  
On Behalf of  
MAYFLASH LIMITED  
For  
MAGIC PACK(REV2.0)**

**Model No.: MAGIC PACK(REV2.0)**

**FCC ID: 2ASVQ-MAGICV2**

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## 1 General Description of EUT

Product Name:	MAGIC PACK(REV2.0)
Model/Type reference:	MAGIC PACK(REV2.0)
Serial Model:	N/A
Trade Mark	N/A
FCC ID	2ASVQ-MAGICV2
Hardware Version:	V1.2
Software Version:	V1.0
Operation frequency:	2402MHz to 2480MHz
Channel separation:	2MHz
Channel number:	40
Modulation Technology:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Power Supply:	DC 5.0V from usb port

## 2 RF Exposure Compliance Requirement

### 2.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

#### 4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 2.2 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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  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 before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion

### 3 EUT RF Exposure

For BLE:

GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-1.097	$-1 \pm 1$	0	1.0	0.310	3.0
Middle (2440MHz)	-0.700	$-1 \pm 1$	0	1.0	0.312	
Highest (2480MHz)	-1.374	$-1 \pm 1$	0	1.0	0.315	
Conclusion: the calculated value $\leq 3.0$ , SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: HK1910252677-E