

# RF Exposure Evaluation

## FCC ID: 2AJ4IIGK-011

### 1. Client Information

<b>Applicant</b>	: Igloohome Pte Ltd
<b>Address</b>	: #03-25, Block B, 1557 Keppel Road, Singapore, S089066
<b>Manufacturer</b>	: Smlpretty Technology Co., Limited
<b>Address</b>	: 4F-J Commercial Office Building Haihong industrial area West side of the Xixiang Big road, Xixiang street, Baoan District, Shenzhen City, Guangdong Province, China

### 2. General Description of EUT

<b>EUT Name</b>	: igloohome Smart Keybox
<b>Models No.</b>	: IGK-01.1, IGK1-C2A4P2-xxxxx (The "xxxxx" can be 00000~99999 denote different production sequence)
<b>Model Difference</b>	: All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.
<b>Product Description</b>	Operation Frequency: Bluetooth 4.1(BLE): 2402MHz~2480MHz
	Number of Channel: Bluetooth 4.1(BLE): 40 channels <b>see note(3)</b>
	RF Output Power: 2.986 dBm Conducted Power
	Antenna Gain: 0dBi PCB Antenna
	Modulation Type: GFSK
	Bit Rate of Transmitter: 1Mbps(GFSK)
<b>Power Supply</b>	: DC power by AAA battery.
<b>Power Rating</b>	: DC 4*1.5V AAA battery.
<b>Connecting I/O Port(S)</b>	: Please refer to the User's Manual

#### Note:

More test information about the EUT please refer to the RF Test Report.

## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 5$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 3.0$  for 1-g SAR

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0$  for 10-g SAR

2. Calculation:

Test separation: 5mm						
BLE (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dbm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	2.986	3±1	4	2.512	0.779	3.0
2.442	2.310	2±1	3	1.995	0.624	3.0
2.480	1.209	1±1	2	1.585	0.499	3.0

So standalone SAR measurements are not required.

-----END OF REPORT-----