



RF Exposure Evaluation

FCC ID: 2A2TA-IT-1001A

1. Client Information

Applicant	:	SMARTCN LIMITED
Address	:	2-3Floor, Bldg 8, Yisong Industrial Park, No. 9 Jie Jiabao Rd, Shuitian Community, Shiyan, Shenzhen, China
Manufacturer	:	SMARTCN LIMITED
Address	:	2-3Floor, Bldg 8, Yisong Industrial Park, No. 9 Jie Jiabao Rd, Shuitian Community, Shiyan, Shenzhen, China

2. General Description of EUT

EUT Name	:	Tablet pc
Model(s) No.	:	IT-1001A, IT-1001B, IT-1001C, IT-1001D, IT-1001E, IT-801A
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is Different sales areas and customers, the model name is different.
Product Description	:	Operation Frequency: Bluetooth V5.2: 2402MHz~2480MHz 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11ax(HE20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz 802.11ax(HE40): 2422MHz~2452MHz
	:	Antenna Gain: 2.94dBi FPC Antenna
Power Supply	:	USB INPUT: DC 5V/2A DC 3.8V 6000mAh 22.8Wh Rechargeable Li-ion battery
Software Version	:	Android 13, Android 12, Android 14
Hardware Version	:	AL-A133-863ST-V2.0
Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.		

Note: More test information about the EUT please refer 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 ≤ 5 mm are determined by:

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

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



2. Calculation:

Test separation: 5mm						
Bluetooth Mode (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	4.723	4±1	5	3.162	0.980	3.0
2.441	4.903	4±1	5	3.162	0.988	3.0
2.480	5.387	5±1	6	3.981	1.254	3.0
Bluetooth Mode (Pi/4-DQPSK)						
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	5.106	5±1	6	3.981	1.234	3.0
2.441	5.290	5±1	6	3.981	1.244	3.0
2.480	5.282	5±1	6	3.981	1.254	3.0
Bluetooth Mode (8-DPSK)						
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	5.777	5±1	6	3.981	1.234	3.0
2.441	5.912	5±1	6	3.981	1.244	3.0
2.480	5.367	5±1	6	3.981	1.254	3.0

Test separation: 5mm						
Bluetooth LE 1M						
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	5.308	5±1	6	3.981	1.234	3.0
2.440	4.676	4±1	5	3.162	0.988	3.0
2.480	3.898	3±1	4	2.512	0.791	3.0

Test separation: 5mm						
Bluetooth LE 2M						
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	5.402	5±1	6	3.981	1.234	3.0
2.440	4.787	4±1	5	3.162	0.988	3.0
2.480	4.038	4±1	5	3.162	0.996	3.0



Test separation: 5mm						
802.11b						
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
2.412	6.97	6±1	7	5.012	1.557	3.0
2.437	6.49	6±1	7	5.012	1.565	3.0
2.462	6.25	6±1	7	5.012	1.573	3.0
802.11g						
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
2.412	6.61	6±1	7	5.012	1.557	3.0
2.437	5.98	5±1	6	3.981	1.243	3.0
2.462	5.40	5±1	6	3.981	1.249	3.0
802.11n(HT20)						
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
2.412	6.83	6±1	7	5.012	1.557	3.0
2.437	5.87	5±1	6	3.981	1.243	3.0
2.462	5.33	5±1	6	3.981	1.249	3.0
802.11n(HT40)						
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
2.422	6.26	6±1	7	5.012	1.560	3.0
2.437	5.92	5±1	6	3.981	1.243	3.0
2.452	5.58	5±1	6	3.981	1.247	3.0
802.11ax(HE20)						
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
2.412	6.40	6±1	7	5.012	1.557	3.0
2.437	5.84	5±1	6	3.981	1.243	3.0
2.462	5.25	5±1	6	3.981	1.249	3.0
802.11ax(HE40)						
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
2.422	5.84	5±1	6	3.981	1.239	3.0
2.437	5.99	5±1	6	3.981	1.243	3.0
2.452	5.16	5±1	6	3.981	1.247	3.0

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

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

