

RF Exposure Report

FCC ID: 2AHLZ-CWI535

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

Equipment	Notebook
Model Name	CWI535
Additional Model Number(s)	CWI538, CWI533, CWI534, CWI549, CWI539, CWI540, CWI541, CWI542, CWI543, CWI544, CWI545, CWI546, CWI547, CWI548
Model Difference	All these models are identical in the same PCB layout and electrical circuit, the only difference is model name for commercial.
Frequency Range	802.11b/g/n(HT20):2412~2462 MHz 802.11n(HT40):2422~2452 MHz Bluetooth V4.0: 2402~2480 MHz
Modulation Type	802.11b: DSSS (BPSK/QPSK/CCK) 802.11g/n: OFDM Bluetooth: GFSK/ π /4-DQPSK/8-DPSK
Data Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n: 150 Mbps Bluetooth: 1M/2M/3M
Power Source	DC Powered by AC/DC Adapter . DC Powered by Li-ion Battery .
Power Rating	AC/DC Adapter: Input: AC 100-240V,0.8A Max. Output: DC 12, 2A. DC 7.6V from Li-ion Battery.
Remark	More details EUT technical specifications, please refer to the User's Manual.

2. RF EXPOSURE INFORMATION

SAR Test Exclusion Calculations

2.1 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 distances ≤ 50 mm are determined by:

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

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

2.2

Calculation:

Bluetooth Mode						
GFSK(1Mbps)						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2402	2.197	2±1	3	1.995	0.618	3.0
2441	2.567	2±1	3	2.512	0.785	3.0
2480	2.690	2±1	3	3.162	0.996	3.0
8-DPSK(3Mbps)						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2402	1.414	1±1	2	1.585	0.491	3.0
2441	1.883	1±1	2	1.585	0.495	3.0
2480	1.990	1±1	2	1.995	0.628	3.0

WiFi Mode						
802.11b						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2412	9.32	9±0.5	9.5	8.913	2.768	3.0
2437	9.21	9±0.5	9.5	8.913	2.783	3.0
2462	9.25	9±0.5	9.5	8.913	2.797	3.0
802.11g						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2412	9.18	9±0.5	9.5	8.913	2.768	3.0
2437	9.19	9±0.5	9.5	8.913	2.783	3.0
2462	9.17	9±0.5	9.5	8.913	2.797	3.0
802.11n(HT20)						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2412	9.03	9±0.5	9.5	8.913	2.768	3.0
2437	9.05	9±0.5	9.5	8.913	2.783	3.0
2462	9.09	9±0.5	9.5	8.913	2.797	3.0
802.11n(HT40)						
Frequency (MHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2422	9.01	9±0.5	9.5	8.913	2.774	3.0
2437	8.99	9±0.5	9.5	8.913	2.783	3.0
2452	8.97	9±0.5	9.5	8.913	2.791	3.0

So standalone SAR measurements are not required.

*****END OF REPORT*****