

RF Exposure Evaluation

FCC ID: 2AK77-C1

1. Client Information

Applicant : Shenzhen Yuetu Network Technology Ltd.
Address : Wearnes Science and Technology Mansion 310, Kefa RD NO10, Nanshan, Shenzhen, China.
Manufacturer : Shenzhen Yuetu Network Technology Ltd.
Address : Wearnes Science and Technology Mansion 310, Kefa RD NO10, Nanshan, Shenzhen, China.

2. General Description of EUT

EUT Name	:	DVR
Models No.	:	C1, C1plus, C2, T1, T2, X1, X2, X3, M1, M2
Model Difference	:	All these models are identical in the same PCB layout and electrical circuit, the only difference is model name for commercial.
Product Description	Operation Frequency:	802.11b/g/n(HT20):2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
	Number of Channel:	802.11b/g/n(HT20):11 channels see note(3) 802.11n(HT40): 7 channels see note(3)
	Max Peak Output Power:	802.11b: 9.15 dBm 802.11g: 8.99 dBm 802.11n (HT20): 8.43 dBm 802.11n (HT40): 8.01 dBm
	Antenna Gain:	0.75 dBi FPC Antenna
	Modulation Type:	802.11b: DSSS(CCK, QPSK, BPSK) 802.11g: OFDM 802.11n: OFDM
Power Supply	:	DC Voltage Supplied from the Host System. DC Voltage Supply by the Battery.
Power Rating	:	DC 5.0 V from the PC by the USB Cable. DC 3.7 V~200mAh by the Internal Li-Lion Battery.
Connecting I/O Port(S)	:	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 ≤ 5 mm are determined by:

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

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

2. Calculation:

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	9.11	9±0.5	9.5	8.913	2.768	3.0
2.437	9.15	9±0.5	9.5	8.913	2.783	3.0
2.462	9.07	9±0.5	9.5	8.913	2.797	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	8.99	9±0.5	9.5	8.913	2.768	3.0
2.437	8.88	9±0.5	9.5	8.913	2.783	3.0
2.462	8.96	9±0.5	9.5	8.913	2.797	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	8.27	8±0.5	8.5	7.079	2.199	3.0
2.437	8.36	8±0.5	8.5	7.079	2.210	3.0
2.462	8.43	8±0.5	8.5	7.079	2.222	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	8.01	8±0.5	8.5	7.079	2.204	3.0
2.437	7.81	8±0.5	8.5	7.079	2.210	3.0
2.452	7.94	8±0.5	8.5	7.079	2.217	3.0

So standalone SAR measurements are not required.

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