

RF EXPOSURE EVALUATION

EUT Specification

EUT	InfinitiKloud Wireless
Model Number	30342
FCC ID	2AVK9-30342
Antenna gain (Max)	0dBi
Operation Frequency	2412-2462MHz for 802.11b/g; 2412-2462MHz for 802.11n(HT20); 2422-2452MHz for 802.11n(HT40);
Input Rating	DC 5V
Classification Per Stipulated Test Standard	§15.247(i), §2.1093
Modulation	802.11b: DSSS(DBPSK/DQPSK/CCK) 802.11g/n: OFDM(BPSK/QPSK/16QAM/64QAM)
Max. output power	802.11b: 7.71dBm 802.11g: 7.17dBm 802.11n(HT20): 7.47dBm 802.11n(HT40): 7.19dBm

Test Requirement:

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{GHz}}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}^{24} \text{ where}$$

- f_{GHz} is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁵
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by §2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

One antenna is available for the EUT. The minimum separation distance is 5mm.

Transmit Frequency (MHz)	Mode	Measured Power (dBm)	Tune up Power (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2412	802.11b	7.71	8±1	9	2.467287	3
2437	802.11b	7.71	8±1	9	2.480040	3
2462	802.11b	7.65	8±1	9	2.492729	3
2412	802.11g	7.03	7±1	8	1.959839	3
2437	802.11g	7.13	7±1	8	1.969970	3
2462	802.11g	7.17	7±1	8	1.980049	3
2412	802.11n (HT20)	7.39	7±1	8	1.959839	3
2437	802.11n (HT20)	7.47	7±1	8	1.969970	3
2462	802.11n (HT20)	7.37	7±1	8	1.980049	3
2422	802.11n (HT40)	6.97	7±1	8	1.963898	3
2437	802.11n (HT40)	7.16	7±1	8	1.969970	3
2452	802.11n (HT40)	7.19	7±1	8	1.976023	3

According to KDB 447498, no stand-alone required for WIFI antenna, and no simultaneous SAR measurement is required.

ANCI

Signature:



Alan He

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