

RF Exposure Evaluation

Conclusion:

It was determined that this device is exempt from SAR testing based on an analysis of the time-averaged rf output power. The threshold was determined from KDB 447498 v5, 4.3.1 “Standalone SAR test exclusion considerations”.

FCC ID.: AMWUN368R
Model(s): D1660v, D1680v, and DCX160v
Manufacturer: Uniden America Corporation
Type of equipment: DECT handset

Operating frequency:	1921.536 – 1928.448 MHz
Maximum rf output power (conducted):	19.15 dBm (82.2 mW)
Duty Cycle:	0.4 ms / 10 ms = 0.04
Maximum source-based time-averaged power:	3.29 mW
Tuneup tolerance:	+/-2 dB
Maximum power with tuneup tolerance:	5.2 mW

Calculation of threshold per KDB 447498 D01 General RF Exposure Guidance v05, 4.3.1(1)

“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:”

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]

* $[\sqrt{f_{(\text{GHz})}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f_{(\text{GHz})}$ is the rf channel transmit frequency in GHz)
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison.

For this case;

$$f_{(\text{GHz})} = 1.921536$$

Minimum separation distance = 5 mm


Maximum power = 5 mW

Therefore;

$$\left(\frac{5\text{mW}}{5\text{mm}}\right) * \sqrt{1.921536} = 1.4$$

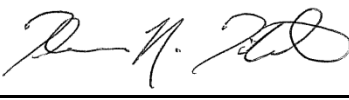
1.4 < 3.0 and <7.5, therefore the equipment is excluded from SAR testing.

Values are from Nemko test report no. 10236228_trf2

Evaluated by: 

Date: 19 March, 2013

David Light, Sr. Wireless Test Engineer

Approved by: 

Date: 19 March, 2013

Tom Tidwell, Director, Nemko Direct for Telecom