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Radio Frequency Exposure Information

For VTech 5825 / 5850
5.8GHz Cordless Telephones

Handset (Tx: 2.4GHz; Rx: 5.8GHz)

Readings from test report :
(1) Max. Output Power = 107 mW (20.3 dBm)
(2) Duty cycle – 824us / 10ms = 8.24% (measured in single slot transmission)

Under the worst environment with interference, dual slot diversity gives the max. duty cycle on the handset Tx (ie. 8.24% x2 or 16.5%)

Hence, taking the max. power output & max. duty cycle, the average effective output power is :
107 mW x 16.5% = 17.7 mW

Conclusion : The average effective output power is much lower than the 50mW level (Supplement C, Table 1) which starts to require SAR testing. Hence, there is no RF exposure concerns on handset.

Base (Tx: 5.8GHz; Rx: 2.4GHz)

Readings from test report :
(1) Max. Output Power – 871 mW (29.4 dBm)
(2) Duty Cycle – 822us / 10ms = 8.22% (with single handset & dummy carriers)

The phone is a TDD, FHSS. So, the worst case is actually operating with 2 handsets in dual-slot diversity (8.22% x4, or 32.88%).

Hence, taking the worst case, the average effective output power is :
871 mW x 32.88% = 286.4 mW

Conclusion : SAR testing was done on the base to show RF exposure compliance (See SAR test report). Being the base of a cordless telephone & together with the general installation instructions in the user manual, there is no RF exposure safety issue when the phone is under normal usage.

Provided by :

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