SAR TEST EXCLUSION

This device, FCC ID: RSJNIGHTHAWK, is excluded from standalone SAR testing by the following justification. The maximum power that each transmitter IC is capable of is 10 mW. By using the following formula from section 4.3.1 of KDB 447498:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)]*[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

and using the minimum test separation distance of 5 mm, the resulting calculated SAR values are:

For 433.92 MHz:
(10 mW)/5 mm) * (√.43392 GHz) = 1.3

For 315 MHz:
(10 mW)/5 mm) * (√.315 GHz) = 1.1

The values for both frequencies are below the exclusion threshold for both the 1-g SAR and 10-g extremity SAR requirements.

For simultaneous SAR test exclusion, the following formula from section 4.3.2 of KDB 447498 is used:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)]*[√f(GHz)/x], where is x is 7.5 for 1-g SAR and 18.75 for 10-g extremity SAR

and using the minimum test separation distance of 5 mm, the resulting calculated SAR values are:

For 433.92 MHz:
(10 mW)/5 mm) * (√.43392 GHz/7.5) = .176

For 315 MHz:
(10 mW)/5 mm) * (√.315 GHz/7.5) = .150

The individual values, as well as combined values, for both frequencies are below the exclusion threshold, 0.4 W/kg, for both the 1-g SAR and 10-g extremity SAR requirements.