

**For PRC use only**

**Date of approval:**

**Signature of Chair:**

## **Siemens Vision 1.5T Sequence Description**

**Sequence name:**

**Developer:**

**Date:**

**Filename:**

**Location:** Full path

**Other files:** Full paths of other files needed for sequence compilation or execution.

**Brief description:** Purpose, general characteristics, main features and limitations.

**Parent sequence:** What sequence it is based upon (if any) and what are the main differences, especially in RF pulses and dB/dt.

**RF safety:** Listing and characteristics of used RF pulses. If the pulses (their number, repetition rate, shape, duration or allowed flip angle upper limit) are such that more RF power can be delivered than in system standard sequences, document that the sequence is operating within FDA limits. The procedure is as follows: 1. Use the standard Siemens head phantom with the loading cylinder, register it with body weight 68kg (150 pounds) 2. Setup the parameters for the worst-case scenario with respect to SAR (maximum number of slices, maximum flip angle, minimum repetition time, fastest possible measurement repetition) 3. Run the sequence (with inline adjustment selected) for at least 10 minutes. Based on this measurement, report the *Computed Partial Body SAR* (in W/kg; must be smaller than 3.2 W/kg) and *Computed Energy Dose* (in J/kg, must be smaller than 1.66 J/kg)

**Computed Partial Body:**

**Computed Energy Dose:**

**Gradient safety:** Describe gradients with potentially high dB/dt (e.g., EPI readout), if the dB/dt exceeds values found in standard Siemens sequences.

**Parameter meanings, limits and defaults:**

- BW
- Matrix
- Alpha (what pulses it affects)
- TR, TI, TE
- TDs (and what they mean)
- FOV, RFOV
- Others if they are important for the sequence

**Usage notes:** Anything else that may be important for the users.

**Appendices:** 1. Complete sequence code listing. 2. Listing of all changes in the sequence SPL code. 3. Sequence diagram.