Calculations for Medtronic Model 9767 programmer/controller

Following are the calculations used to convert the 175 kHz measured level of +19.5 dBuA/m at 3 meters to show compliance with the FCC Limit in Section 15.209 at 300 meters of 13.7 uV/m. Since all other measurable emissions were more than 20 dB lower than the fundamental they have not been converted to dBuV/m at 300 meters.

Measured level at 3 meters - +19.5 dBuA/m

Pursuant to Section 15.31(f)(2) the extrapolation rate permitted is 40 dB/decade for a total of 80 dB of attenuation.

Extrapolated H field value: +19.5 – 80 = -60.5 dBuA/m at 300 meters

Converting to E field value using the free space impedance factor :
–60.5 + 51.5 = -9 dBuV/m =0.354 uV/m at 300 meters.

Thus, the Model 9767, complies with the radiated emissions requirements of Section 15.209 of the FCC Rules.