



Q14-034

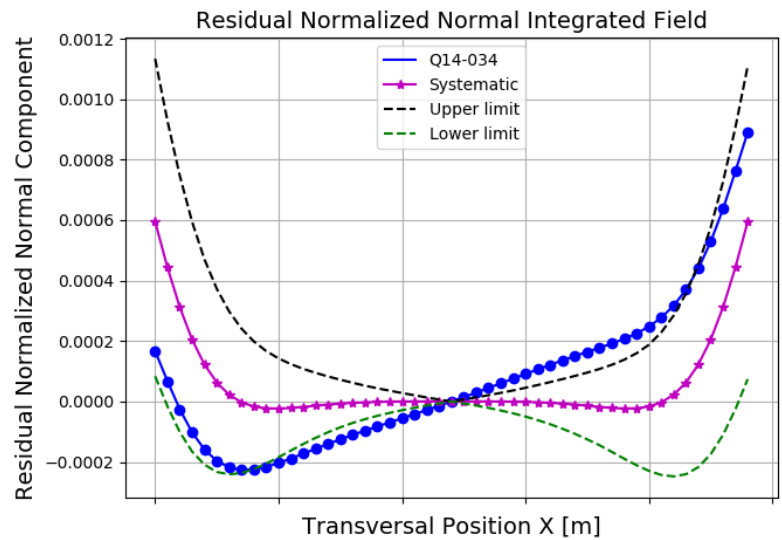
STORAGE RING MAGNET REPORT

Results

| | |
|---|-------------------------------|
| Date | 26/04/2018 |
| Hour | 09:21:31 |
| Temperature [°C] | 23.39 |
| Number of Measurements | 9 |
| Main Coil Current [A] | (147.9968 ± 0.0009) |
| Trim Coil Current [A] | (0 ± 0) |
| CH Coil Current [A] | (0 ± 0) |
| CV Coil Current [A] | (0 ± 0) |
| QS Coil Current [A] | (0 ± 0) |
| Integrated Gradient [T] | (-5.23913 ± 0.00002) |
| Magnet Center Offset X [μm] - ($< \pm 40.0$) | (-14.59 ± 0.03) |
| Magnet Center Offset Y [μm] - ($< \pm 40.0$) | $(2.1 \pm 1.0) \times E-1$ |
| Roll [mrad] - ($< \pm 0.3$) | $(-3.81 \pm 0.03) \times E-1$ |

Electric Parameters

| | |
|---------------------------------|--------|
| Inductance [mH] | 4.781 |
| Voltage [V] | 4.4843 |
| Resistance [$\text{m}\Omega$] | 30.3 |
| Main Coil Number of Turns | 20.0 |



| n | Normalized Normal Multipoles $x=12.0 \text{ mm}$ [T.m ⁽²⁻ⁿ⁾] | Normalized Skew Multipoles $x=12.0 \text{ mm}$ [T.m ⁽²⁻ⁿ⁾] |
|----------------|--|--|
| 1 (dipole) | $(1.216 \pm 0.003) \times E-3$ | $(-1.8 \pm 0.8) \times E-5$ |
| 2 (quadrupole) | (1.000000 ± 0.000005) | $(-7.63 \pm 0.07) \times E-4$ |
| 3 (sextupole) | $(3.46 \pm 0.03) \times E-4$ | $(4.8 \pm 0.4) \times E-5$ |
| 4 | $(9.5 \pm 0.2) \times E-5$ | $(-5.3 \pm 0.5) \times E-5$ |
| 5 | $(1.8 \pm 0.4) \times E-5$ | $(2 \pm 5) \times E-6$ |
| 6 | $(-4.33 \pm 0.05) \times E-4$ | $(6.6 \pm 0.3) \times E-5$ |
| 7 | $(-4 \pm 3) \times E-6$ | $(4 \pm 4) \times E-6$ |
| 8 | $(-3 \pm 4) \times E-6$ | $(-3 \pm 3) \times E-6$ |
| 9 | $(1.5 \pm 0.5) \times E-5$ | $(-6 \pm 6) \times E-6$ |
| 10 | $(1.547 \pm 0.006) \times E-3$ | $(-3.9 \pm 0.4) \times E-5$ |
| 11 | $(-4 \pm 3) \times E-6$ | $(-2 \pm 4) \times E-6$ |
| 12 | $(-9.85 \pm 325.91) \times E-8$ | $(1.0 \pm 0.4) \times E-5$ |
| 13 | $(-1.1 \pm 0.5) \times E-5$ | $(10 \pm 4) \times E-6$ |
| 14 | $(-6.77 \pm 0.07) \times E-4$ | $(1.1 \pm 0.6) \times E-5$ |
| 15 | $(1 \pm 3) \times E-6$ | $(-2 \pm 5) \times E-6$ |

