



Q30-022

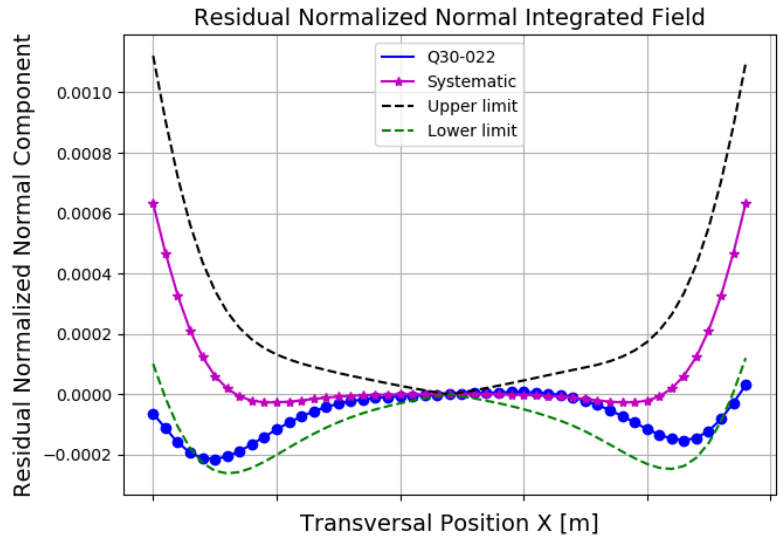
STORAGE RING MAGNET REPORT

Results

| | |
|---|-------------------------------|
| Date | 08/05/2018 |
| Hour | 11:19:03 |
| Temperature [°C] | 23.45 |
| Number of Measurements | 9 |
| Main Coil Current [A] | (154.9971 ± 0.0006) |
| 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] | (-13.63963 ± 0.00004) |
| Magnet Center Offset X [μm] - ($< \pm 40.0$) | (2.74 ± 0.03) |
| Magnet Center Offset Y [μm] - ($< \pm 40.0$) | (1.01 ± 0.05) |
| Roll [mrad] - ($< \pm 0.3$) | $(-3.47 \pm 0.03) \times E-1$ |

Electric Parameters

| | |
|---------------------------------|--------|
| Inductance [mH] | 9.24 |
| Voltage [V] | 7.4863 |
| Resistance [$\text{m}\Omega$] | 48.3 |
| Main Coil Number of Turns | 23.25 |



| 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) | $(-2.28 \pm 0.03) \times E-4$ | $(-8.4 \pm 0.4) \times E-5$ |
| 2 (quadrupole) | (1.000000 ± 0.000004) | $(-6.94 \pm 0.06) \times E-4$ |
| 3 (sextupole) | $(4.0 \pm 0.6) \times E-5$ | $(2.47 \pm 0.05) \times E-4$ |
| 4 | $(3.1 \pm 0.5) \times E-5$ | $(-5.2 \pm 0.5) \times E-5$ |
| 5 | $(-1.5 \pm 0.5) \times E-5$ | $(-4.7 \pm 0.6) \times E-5$ |
| 6 | $(-1.101 \pm 0.006) \times E-3$ | $(1.14 \pm 0.10) \times E-4$ |
| 7 | $(2 \pm 1) \times E-5$ | $(7.74 \pm 683.77) \times E-8$ |
| 8 | $(-4 \pm 8) \times E-6$ | $(-4 \pm 5) \times E-6$ |
| 9 | $(8 \pm 9) \times E-6$ | $(9 \pm 9) \times E-6$ |
| 10 | $(1.776 \pm 0.009) \times E-3$ | $(-7.1 \pm 0.6) \times E-5$ |
| 11 | $(-1.9 \pm 0.6) \times E-5$ | $(-3.9 \pm 88.3) \times E-7$ |
| 12 | $(3 \pm 7) \times E-6$ | $(9.0 \pm 10.5) \times E-6$ |
| 13 | $(-5 \pm 10) \times E-6$ | $(2.2 \pm 11.2) \times E-6$ |
| 14 | $(-7.23 \pm 0.07) \times E-4$ | $(3.4 \pm 0.9) \times E-5$ |
| 15 | $(1.4 \pm 0.7) \times E-5$ | $(-5 \pm 9) \times E-6$ |

