

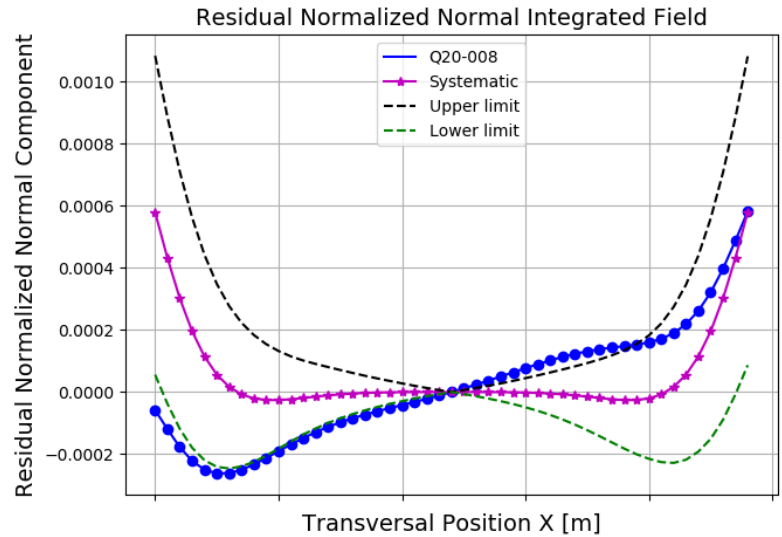


Q20-008

## STORAGE RING MAGNET REPORT

### Results

|   |                      |
|---|----------------------|
| Date                                    | 11/06/2018           |
| Hour                                    | 16:02:13             |
| Temperature [°C]                        | 22.82                |
| Number of Measurements                  | 9                    |
| Main Coil Current [A]                   | (157.5202 ± 0.0005)  |
| 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]                 | (-9.11184 ± 0.00002) |
| Magnet Center Offset X [μm] - (< ±40.0) | (-1.13 ± 0.02)       |
| Magnet Center Offset Y [μm] - (< ±40.0) | (7.31 ± 0.03)        |
| Roll [mrad] - (< ±0.3)                  | (2.10 ± 0.02) × E-1  |
| Electric Parameters                     |                      |
| Inductance [mH]                         | 8.9467               |
| Voltage [V]                             | 5.42                 |
| Resistance [mΩ]                         | 34.4                 |
| Main Coil Number of Turns               | 23.25                |



| n | Normalized Normal Multipoles<br>x=12.0 mm<br>[T.m <sup>(2-n)</sup> ] | Normalized Skew Multipoles<br>x=12.0 mm<br>[T.m <sup>(2-n)</sup> ] |
|---|--|--|
|---|--|--|

|                |                       |                      |
|----------------|-----------------------|----------------------|
| 1 (dipole)     | (9.4 ± 0.2) × E-5     | (-6.09 ± 0.02) × E-4 |
| 2 (quadrupole) | (1.000000 ± 0.000003) | (4.19 ± 0.03) × E-4  |
| 3 (sextupole)  | (2.75 ± 0.01) × E-4   | (2.20 ± 0.03) × E-4  |
| 4              | (1.75 ± 0.03) × E-4   | (-7.0 ± 0.3) × E-5   |
| 5              | (4.0 ± 0.1) × E-5     | (-2.1 ± 0.3) × E-5   |
| 6              | (-8.81 ± 0.02) × E-4  | (8.7 ± 0.3) × E-5    |
| 7              | (1.1 ± 0.3) × E-5     | (-1.1 ± 0.3) × E-5   |
| 8              | (-3 ± 2) × E-6        | (-2 ± 5) × E-6       |
| 9              | (6.3 ± 36.5) × E-7    | (-1.5 ± 0.5) × E-5   |
| 10             | (1.674 ± 0.003) × E-3 | (-4.2 ± 0.4) × E-5   |
| 11             | (-6 ± 3) × E-6        | (5 ± 4) × E-6        |
| 12             | (-5 ± 3) × E-6        | (5 ± 5) × E-6        |
| 13             | (-1 ± 2) × E-6        | (1.3 ± 0.5) × E-5    |
| 14             | (-6.98 ± 0.03) × E-4  | (1.4 ± 0.5) × E-5    |
| 15             | (3.8 ± 30.7) × E-7    | (-4 ± 3) × E-6       |

