

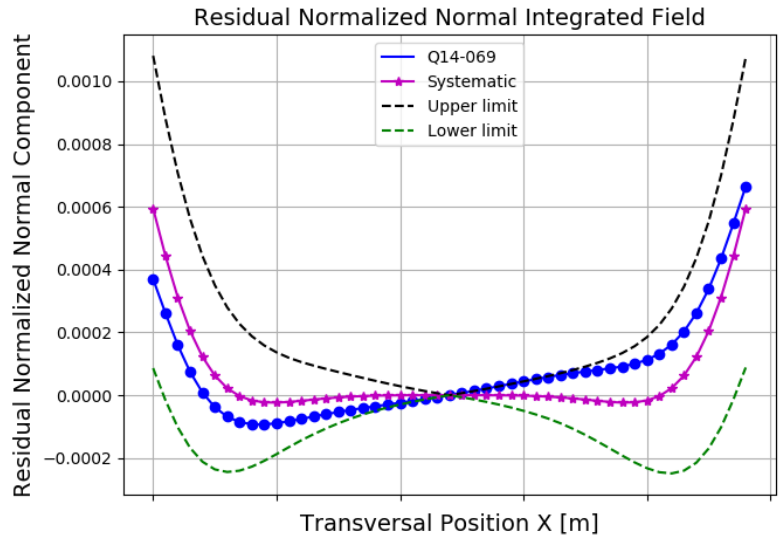


Q14-069

## STORAGE RING MAGNET REPORT

### Results

|   |                      |
|---|----------------------|
| Date                                    | 06/04/2018           |
| Hour                                    | 12:04:18             |
| Temperature [°C]                        | 23.7                 |
| Number of Measurements                  | 9                    |
| Main Coil Current [A]                   | (147.9953 ± 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]                 | (-5.23734 ± 0.00001) |
| Magnet Center Offset X [μm] - (< ±40.0) | (4.92 ± 0.05)        |
| Magnet Center Offset Y [μm] - (< ±40.0) | (4.03 ± 0.03)        |
| Roll [mrad] - (< ±0.3)                  | (-3.36 ± 0.01) x E-1 |
| Electric Parameters                     |                      |
| Inductance [mH]                         | 4.781                |
| Voltage [V]                             | 4.4843               |
| Resistance [mΩ]                         | 30.3                 |
| Main Coil Number of Turns               | 20.0                 |



| 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)     | (-4.10 ± 0.04) x E-4   | (-3.36 ± 0.03) x E-4   |
| 2 (quadrupole) | (1.000000 ± 0.000004)  | (-6.73 ± 0.03) x E-4   |
| 3 (sextupole)  | (1.59 ± 0.03) x E-4  | (1.4 ± 0.3) x E-5  |
| 4              | (9.7 ± 0.2) x E-5  | (-1.4 ± 0.2) x E-5   |
| 5              | (-1.1 ± 0.2) x E-5   | (-2.1 ± 0.3) x E-5   |
| 6              | (-4.45 ± 0.02) x E-4   | (1.2 ± 0.2) x E-5  |
| 7              | (-2 ± 2) x E-6   | (10 ± 4) x E-6   |
| 8              | (-4 ± 3) x E-6   | (-5 ± 2) x E-6   |
| 9              | (7 ± 2) x E-6  | (7 ± 4) x E-6  |
| 10             | (1.539 ± 0.002) x E-3  | (-5.8 ± 27.5) x E-7  |
| 11             | (2 ± 3) x E-6  | (-5 ± 4) x E-6   |
| 12             | (3 ± 4) x E-6  | (8 ± 3) x E-6  |
| 13             | (-3 ± 4) x E-6   | (-7.7 ± 30.1) x E-7  |
| 14             | (-6.74 ± 0.02) x E-4   | (-1.2 ± 0.2) x E-5   |
| 15             | (-3 ± 3) x E-6   | (-8.6 ± 46.4) x E-7  |

