



S15-122

## STORAGE RING MAGNET REPORT

### Results

Date 09/08/2018

Hour 12:19:59

Temperature [°C] 23.604

Number of Measurements 9

Main Coil Current [A] (167.797 ± 0.004)

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/m] (-360.159 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (9.1 ± 0.3) × E-1

Magnet Center Offset Y [μm] - (< ±40.0) (20.93 ± 0.02)

Roll [mrad] - (< ±0.3) (8 ± 1) × E-3

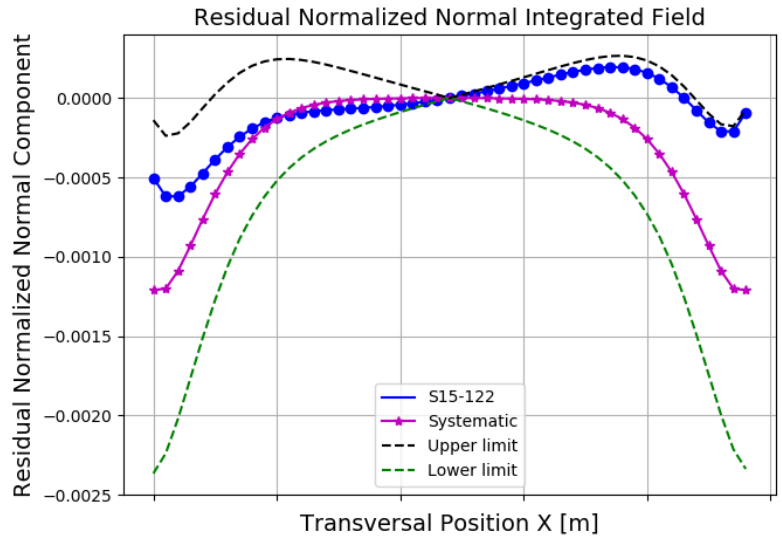
### Electric Parameters

Inductance [mH] 3.157

Voltage [V] 6.0106

Resistance [mΩ] 35.82

Main Coil Number of Turns 11.25



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

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

| 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)     | (-3.59 ± 0.05) × E-4   | (-4.73 ± 0.04) × E-4   |
| 2 (quadrupole) | (-1.51 ± 0.04) × E-4   | (-3.487 ± 0.003) × E-3   |
| 3 (sextupole)  | (1.000000 ± 0.000010)  | (2.4 ± 0.4) × E-5  |
| 4              | (3.05 ± 0.02) × E-4  | (-2.17 ± 0.04) × E-4   |
| 5              | (2.92 ± 0.05) × E-4  | (1.9 ± 0.4) × E-5  |
| 6              | (-8.9 ± 0.3) × E-5   | (-2.7 ± 0.5) × E-5   |
| 7              | (1.13 ± 0.04) × E-4  | (5 ± 4) × E-6  |
| 8              | (-9 ± 4) × E-6   | (4.5 ± 0.6) × E-5  |
| 9              | (-2.033 ± 0.004) × E-3   | (4.3 ± 0.4) × E-5  |
| 10             | (-3 ± 5) × E-6   | (1.1 ± 0.4) × E-5  |
| 11             | (-4 ± 4) × E-6   | (-6 ± 5) × E-6   |
| 12             | (3 ± 6) × E-6  | (-2 ± 5) × E-6   |
| 13             | (-1.5 ± 0.4) × E-5   | (7 ± 6) × E-6  |
| 14             | (-8.2 ± 29.2) × E-7  | (-3.8 ± 0.6) × E-5   |
| 15             | (1.348 ± 0.002) × E-3  | (3 ± 3) × E-6  |

