



S15-197

STORAGE RING MAGNET REPORT

Results

Date 01/08/2018

Hour 11:55:27

Temperature [°C] 23.509

Number of Measurements 9

Main Coil Current [A] (167.7985 ± 0.0008)

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] (-359.756 ± 0.004)

Magnet Center Offset X [μm] - (< ±40.0) (6.78 ± 0.07)

Magnet Center Offset Y [μm] - (< ±40.0) (22.4 ± 0.1)

Roll [mrad] - (< ±0.3) (5.9 ± 1.0) × E-2

Electric Parameters

Inductance [mH] 3.157

Voltage [V] 6.0106

Resistance [mΩ] 35.82

Main Coil Number of Turns 11.25

n

Normalized
Normal
Multipoles
x=12.0 mm
[T.m⁽²⁻ⁿ⁾]

Normalized
Skew
Multipoles
x=12.0 mm
[T.m⁽²⁻ⁿ⁾]

| | | |
|----------------|-----------------------|----------------------|
| 1 (dipole) | (-7.30 ± 0.06) × E-4 | (7.9 ± 0.2) × E-4 |
| 2 (quadrupole) | (-1.13 ± 0.01) × E-3 | (-3.74 ± 0.02) × E-3 |
| 3 (sextupole) | (1.00000 ± 0.00001) | (1.8 ± 0.3) × E-4 |
| 4 | (2.4 ± 0.2) × E-4 | (-9 ± 3) × E-5 |
| 5 | (3.5 ± 0.3) × E-4 | (6.3 ± 18.6) × E-6 |
| 6 | (-9 ± 1) × E-5 | (-1 ± 2) × E-5 |
| 7 | (9 ± 2) × E-5 | (-6.5 ± 28.4) × E-6 |
| 8 | (3 ± 2) × E-5 | (6 ± 3) × E-5 |
| 9 | (-1.89 ± 0.03) × E-3 | (6.7 ± 0.2) × E-4 |
| 10 | (1 ± 3) × E-5 | (-4 ± 3) × E-5 |
| 11 | (2 ± 3) × E-5 | (-2 ± 3) × E-5 |
| 12 | (2.41 ± 100.90) × E-7 | (-2 ± 3) × E-5 |
| 13 | (-4 ± 1) × E-5 | (2 ± 2) × E-5 |
| 14 | (-6.6 ± 23.4) × E-6 | (-4 ± 3) × E-5 |
| 15 | (1.41 ± 0.03) × E-3 | (8 ± 2) × E-5 |

