



S15-013

STORAGE RING MAGNET REPORT

Results

Date 28/08/2018

Hour 15:16:58

Temperature [°C] 23.338

Number of Measurements 9

Main Coil Current [A] (167.7981 ± 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] (-359.544 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (15.95 ± 0.01)

Magnet Center Offset Y [μm] - (< ±40.0) (32.80 ± 0.07)

Roll [mrad] - (< ±0.3) (6.6 ± 0.4) × 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) (-1.112 ± 0.002) × E-3 (-9 ± 1) × E-5

2 (quadrupole) (-2.658 ± 0.002) × E-3 (-5.47 ± 0.01) × E-3

3 (sextupole) (1.000000 ± 0.000006) (2.0 ± 0.1) × E-4

4 (-1.87 ± 0.04) × E-4 (1.8 ± 0.1) × E-4

5 (4.17 ± 0.04) × E-4 (-3.36 ± 0.10) × E-4

6 (1.64 ± 0.06) × E-4 (-9.8 ± 1.0) × E-5

7 (1.75 ± 0.05) × E-4 (6.4 ± 1.0) × E-5

8 (-7 ± 7) × E-6 (4.4 ± 0.6) × E-5

9 (-1.823 ± 0.006) × E-3 (2.43 ± 0.08) × E-4

10 (-3.6 ± 0.5) × E-5 (-4.9 ± 12.6) × E-6

11 (-2 ± 1) × E-5 (-4.2 ± 1.0) × E-5

12 (-1.1 ± 14.2) × E-6 (3 ± 1) × E-5

13 (-3.0 ± 0.6) × E-5 (-9 ± 5) × E-6

14 (-3.1 ± 1.0) × E-5 (-4.8 ± 1.0) × E-5

15 (1.284 ± 0.008) × E-3 (-9 ± 1) × E-5

