



S15-042

STORAGE RING MAGNET REPORT

Results

Date 11/07/2018

Hour 12:57:22

Temperature [°C] 22.954

Number of Measurements 9

Main Coil Current [A] (167.7983 ± 0.0007)

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] (-360.463 ± 0.001)

Magnet Center Offset X [μm] - (< ±40.0) (20.70 ± 0.05)

Magnet Center Offset Y [μm] - (< ±40.0) (28.73 ± 0.06)

Roll [mrad] - (< ±0.3) (1.96 ± 0.04) x E-1

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) (-3.35 ± 0.03) x E-4 (1.58 ± 0.09) x E-4

2 (quadrupole) (-3.449 ± 0.008) x E-3 (-4.789 ± 0.010) x E-3

3 (sextupole) (1.000000 ± 0.000005) (5.9 ± 0.1) x E-4

4 (4.8 ± 0.1) x E-4 (3.7 ± 0.1) x E-4

5 (8.2 ± 0.7) x E-5 (-4.21 ± 0.10) x E-4

6 (1.4 ± 0.1) x E-4 (3.4 ± 0.7) x E-5

7 (4 ± 1) x E-5 (8 ± 1) x E-5

8 (-4.3 ± 17.0) x E-6 (3 ± 1) x E-5

9 (-1.98 ± 0.01) x E-3 (2.5 ± 0.2) x E-4

10 (-5 ± 2) x E-5 (1 ± 1) x E-5

11 (-9.22 ± 126.45) x E-7 (1 ± 1) x E-5

12 (-4 ± 9) x E-6 (1.2 ± 1.0) x E-5

13 (4.3 ± 18.1) x E-6 (2 ± 1) x E-5

14 (-3 ± 2) x E-5 (-3 ± 2) x E-5

15 (1.331 ± 0.006) x E-3 (-1.8 ± 1.0) x E-5

