



S15-190

STORAGE RING MAGNET REPORT

Results

Date 10/07/2018

Hour 14:29:41

Temperature [°C] 23.708

Number of Measurements 9

Main Coil Current [A] (167.799 ± 0.005)

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] (-359.718 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (15.85 ± 0.04)

Magnet Center Offset Y [μm] - (< ±40.0) (28.16 ± 0.09)

Roll [mrad] - (< ±0.3) (-9.7 ± 0.6) × 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) (2.9 ± 0.1) × E-4 (-6.2 ± 0.1) × E-4

2 (quadrupole) (-2.641 ± 0.007) × E-3 (-4.69 ± 0.01) × E-3

3 (sextupole) (1.00000 ± 0.00001) (-2.9 ± 0.2) × E-4

4 (1.7 ± 0.1) × E-4 (-1.4 ± 0.2) × E-4

5 (4.0 ± 0.1) × E-4 (2.7 ± 23.4) × E-6

6 (8.9 ± 14.4) × E-6 (-3 ± 2) × E-5

7 (6 ± 2) × E-5 (3 ± 2) × E-5

8 (3 ± 2) × E-5 (4 ± 2) × E-5

9 (-1.99 ± 0.02) × E-3 (3.9 ± 0.1) × E-4

10 (-2 ± 2) × E-5 (1 ± 2) × E-5

11 (-5 ± 2) × E-5 (-1 ± 2) × E-5

12 (5.3 ± 23.1) × E-6 (1 ± 2) × E-5

13 (7.8 ± 19.9) × E-6 (-3.0 ± 11.1) × E-6

14 (-4 ± 2) × E-5 (-6 ± 2) × E-5

15 (1.31 ± 0.01) × E-3 (3.2 ± 28.3) × E-6

