



S15-025

STORAGE RING MAGNET REPORT

Results

Date 04/09/2018

Hour 09:01:45

Temperature [°C] 23.428

Number of Measurements 9

Main Coil Current [A] (167.798 ± 0.002)

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] (-359.780 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (23.32 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (36.9 ± 0.2)

Roll [mrad] - (< ±0.3) (7.6 ± 0.8) × 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) (-7.32 ± 0.05) × E-4 (3.2 ± 0.3) × E-4

2 (quadrupole) (-3.886 ± 0.005) × E-3 (-6.15 ± 0.03) × E-3

3 (sextupole) (1.00000 ± 0.00001) (2.3 ± 0.3) × E-4

4 (9.8 ± 0.4) × E-5 (3.8 ± 0.2) × E-4

5 (1.84 ± 0.07) × E-4 (1.5 ± 0.2) × E-4

6 (1.2 ± 0.1) × E-4 (-3 ± 2) × E-5

7 (1.0 ± 0.1) × E-4 (-5 ± 2) × E-5

8 (3 ± 1) × E-5 (2 ± 2) × E-5

9 (-1.804 ± 0.007) × E-3 (3.3 ± 0.2) × E-4

10 (8.4 ± 11.4) × E-6 (3.4 ± 30.2) × E-6

11 (1 ± 2) × E-5 (3 ± 3) × E-5

12 (9.1 ± 18.1) × E-6 (2 ± 2) × E-5

13 (-4 ± 1) × E-5 (1 ± 2) × E-5

14 (-5 ± 1) × E-5 (-5 ± 2) × E-5

15 (1.226 ± 0.008) × E-3 (-1.3 ± 0.1) × E-4

