



S15-143

STORAGE RING MAGNET REPORT

Results

Date 03/07/2018

Hour 11:34:10

Temperature [°C] 23.441

Number of Measurements 9

Main Coil Current [A] (167.7990 ± 0.0010)

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] (-360.364 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (8.66 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (20.07 ± 0.06)

Roll [mrad] - (< ±0.3) (1.9 ± 0.3) × 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) (-1.025 ± 0.004) × E-3 (-5.44 ± 0.10) × E-4

2 (quadrupole) (-1.443 ± 0.005) × E-3 (-3.345 ± 0.010) × E-3

3 (sextupole) (1.00000 ± 0.00001) (5.8 ± 0.8) × E-5

4 (4.90 ± 0.05) × E-4 (-8.8 ± 0.9) × E-5

5 (3.8 ± 0.4) × E-5 (-1.27 ± 0.05) × E-4

6 (1.38 ± 0.03) × E-4 (1 ± 9) × E-6

7 (5.9 ± 0.6) × E-5 (6.2 ± 0.7) × E-5

8 (1.2 ± 0.8) × E-5 (3.2 ± 0.5) × E-5

9 (-1.999 ± 0.006) × E-3 (1.14 ± 0.06) × E-4

10 (8 ± 8) × E-6 (-4.3 ± 10.9) × E-6

11 (9 ± 8) × E-6 (-4 ± 7) × E-6

12 (-1 ± 5) × E-6 (-4.5 ± 11.3) × E-6

13 (-1.1 ± 0.9) × E-5 (-5 ± 8) × E-6

14 (-2.6 ± 0.9) × E-5 (-3 ± 1) × E-5

15 (1.328 ± 0.007) × E-3 (-5.4 ± 10.4) × E-6

