



S15-005

STORAGE RING MAGNET REPORT

Results

Date 15/08/2018

Hour 08:47:08

Temperature [°C] 23.487

Number of Measurements 9

Main Coil Current [A] (167.7979 ± 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] (-360.140 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (15.72 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (24.2 ± 0.1)

Roll [mrad] - (< ±0.3) (2.9 ± 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) (-4.93 ± 0.05) × E-4 (-3.2 ± 0.2) × E-4

2 (quadrupole) (-2.620 ± 0.004) × E-3 (-4.03 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00001) (9 ± 2) × E-5

4 (3.23 ± 0.06) × E-4 (1.0 ± 0.2) × E-4

5 (3.10 ± 0.04) × E-4 (-8 ± 2) × E-5

6 (-7 ± 1) × E-5 (-4 ± 2) × E-5

7 (1.34 ± 0.10) × E-4 (1 ± 1) × E-5

8 (2 ± 1) × E-5 (6 ± 1) × E-5

9 (-1.88 ± 0.01) × E-3 (1.7 ± 0.1) × E-4

10 (-8.2 ± 12.5) × E-6 (2 ± 1) × E-5

11 (-1.5 ± 0.9) × E-5 (-1 ± 2) × E-5

12 (5.7 ± 10.3) × E-6 (-7.25 ± 746.27) × E-8

13 (-2.3 ± 0.8) × E-5 (2 ± 1) × E-5

14 (-1 ± 1) × E-5 (-5 ± 1) × E-5

15 (1.327 ± 0.009) × E-3 (1.6 ± 11.5) × E-6

