



S15-084

STORAGE RING MAGNET REPORT

Results

Date 18/07/2018

Hour 15:27:19

Temperature [°C] 23.49

Number of Measurements 9

Main Coil Current [A] (167.7969 ± 0.0008)

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] (-359.315 ± 0.005)

Magnet Center Offset X [μm] - (< ±40.0) (21.34 ± 0.05)

Magnet Center Offset Y [μm] - (< ±40.0) (23.4 ± 0.1)

Roll [mrad] - (< ±0.3) (7.9 ± 0.7) × 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) (-6.04 ± 0.10) × E-4 (-2.9 ± 0.2) × E-4

2 (quadrupole) (-3.557 ± 0.009) × E-3 (-3.89 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00002) (2.4 ± 0.2) × E-4

4 (4 ± 2) × E-5 (1.1 ± 0.3) × E-4

5 (4.6 ± 0.2) × E-4 (-5.3 ± 0.3) × E-4

6 (-1 ± 2) × E-5 (-1 ± 2) × E-5

7 (1.3 ± 0.2) × E-4 (1.4 ± 0.3) × E-4

8 (1 ± 2) × E-5 (2 ± 2) × E-5

9 (-1.88 ± 0.02) × E-3 (4.1 ± 0.2) × E-4

10 (3 ± 2) × E-5 (-1.3 ± 14.3) × E-6

11 (-5 ± 3) × E-5 (1 ± 3) × E-5

12 (3 ± 1) × E-5 (1 ± 2) × E-5

13 (-8.2 ± 19.8) × E-6 (-8.6 ± 12.9) × E-6

14 (-2 ± 2) × E-5 (-3 ± 2) × E-5

15 (1.38 ± 0.02) × E-3 (-1 ± 2) × E-5

