



S15-082

STORAGE RING MAGNET REPORT

Results

Date 12/07/2018

Hour 10:23:26

Temperature [°C] 22.881

Number of Measurements 9

Main Coil Current [A] (167.7983 ± 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] (-359.286 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (7.00 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (14.96 ± 0.05)

Roll [mrad] - (< ±0.3) (-6.8 ± 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) (-3.28 ± 0.07) × E-4 (1.28 ± 0.07) × E-4

2 (quadrupole) (-1.167 ± 0.005) × E-3 (-2.493 ± 0.008) × E-3

3 (sextupole) (1.00000 ± 0.00001) (-2.05 ± 0.09) × E-4

4 (2.70 ± 0.08) × E-4 (6 ± 1) × E-5

5 (3.29 ± 0.08) × E-4 (-8 ± 7) × E-6

6 (-2.7 ± 0.9) × E-5 (2 ± 1) × E-5

7 (1.28 ± 0.08) × E-4 (-1 ± 1) × E-5

8 (-3.3 ± 1.0) × E-5 (1.5 ± 0.9) × E-5

9 (-1.93 ± 0.02) × E-3 (3.37 ± 0.08) × E-4

10 (1 ± 1) × E-5 (1 ± 8) × E-6

11 (-4.7 ± 12.2) × E-6 (3 ± 8) × E-6

12 (2 ± 8) × E-6 (-5 ± 1) × E-5

13 (-5 ± 1) × E-5 (6 ± 8) × E-6

14 (3 ± 1) × E-5 (-4.5 ± 1.0) × E-5

15 (1.33 ± 0.01) × E-3 (3 ± 2) × E-5

