



S15-057

## STORAGE RING MAGNET REPORT

### Results

Date 16/07/2018

Hour 10:51:51

Temperature [°C] 23.516

Number of Measurements 9

Main Coil Current [A] (167.7982 ± 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] (-359.598 ± 0.004)

Magnet Center Offset X [μm] - (< ±40.0) (13.89 ± 0.09)

Magnet Center Offset Y [μm] - (< ±40.0) (23.6 ± 0.1)

Roll [mrad] - (< ±0.3) (-8.5 ± 1.0) × 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<sup>(2-n)</sup>]

Normalized  
Skew  
Multipoles  
x=12.0 mm  
[T.m<sup>(2-n)</sup>]

1 (dipole) (-3.8 ± 0.1) × E-4 (-2.1 ± 0.2) × E-4

2 (quadrupole) (-2.31 ± 0.01) × E-3 (-3.94 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00002) (-2.6 ± 0.3) × E-4

4 (5.0 ± 0.2) × E-4 (1.2 ± 0.3) × E-4

5 (4.3 ± 0.3) × E-4 (1.1 ± 0.2) × E-4

6 (-1.3 ± 0.3) × E-4 (2 ± 3) × E-5

7 (1.6 ± 0.2) × E-4 (-4 ± 2) × E-5

8 (2 ± 3) × E-5 (3.7 ± 19.0) × E-6

9 (-1.94 ± 0.02) × E-3 (6.6 ± 0.4) × E-4

10 (4 ± 3) × E-5 (-3.9 ± 18.0) × E-6

11 (-6.206 ± 2519.455) × E-8 (-7.1 ± 29.4) × E-6

12 (5.9 ± 46.1) × E-6 (-2 ± 3) × E-5

13 (-1 ± 3) × E-5 (1 ± 2) × E-5

14 (-2 ± 3) × E-5 (-8.5 ± 17.7) × E-6

15 (1.22 ± 0.02) × E-3 (-2 ± 3) × E-5

