



# S15-007

## STORAGE RING MAGNET REPORT

### Results

Date 31/08/2018

Hour 14:44:52

Temperature [°C] 23.323

Number of Measurements 9

Main Coil Current [A] (167.7976 ± 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] (-364.716 ± 0.001)

Magnet Center Offset X [μm] - (< ±40.0) (16.20 ± 0.01)

Magnet Center Offset Y [μm] - (< ±40.0) (24.11 ± 0.07)

Roll [mrad] - (< ±0.3) (-8.4 ± 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<sup>(2-n)</sup>]

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

1 (dipole) (-7.10 ± 0.05) × E-4 (4.2 ± 0.1) × E-4

2 (quadrupole) (-2.700 ± 0.002) × E-3 (-4.02 ± 0.01) × E-3

3 (sextupole) (1.000000 ± 0.000005) (-2.51 ± 0.09) × E-4

4 (4.07 ± 0.03) × E-4 (-1.1 ± 0.1) × E-4

5 (4.83 ± 0.04) × E-4 (-8.9 ± 0.7) × E-5

6 (-1.04 ± 0.05) × E-4 (2.3 ± 0.7) × E-5

7 (1.89 ± 0.05) × E-4 (-3.9 ± 1.0) × E-5

8 (2.9 ± 0.4) × E-5 (7.4 ± 0.4) × E-5

9 (-1.735 ± 0.009) × E-3 (3.2 ± 0.1) × E-4

10 (-4.0 ± 0.8) × E-5 (4 ± 1) × E-5

11 (1 ± 1) × E-5 (-5.1 ± 14.7) × E-6

12 (-1.1 ± 0.9) × E-5 (-1 ± 1) × E-5

13 (-5 ± 9) × E-6 (3.1 ± 0.7) × E-5

14 (-3.6 ± 1.0) × E-5 (-5.6 ± 0.9) × E-5

15 (1.205 ± 0.008) × E-3 (-1.67 ± 0.09) × E-4

