



S15-224

## STORAGE RING MAGNET REPORT

### Results

Date 24/07/2018

Hour 12:39:58

Temperature [°C] 23.597

Number of Measurements 9

Main Coil Current [A] (167.7976 ± 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] (-359.702 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (15.40 ± 0.06)

Magnet Center Offset Y [μm] - (< ±40.0) (28.6 ± 0.1)

Roll [mrad] - (< ±0.3) (7.7 ± 0.9) × 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) (-5.82 ± 0.07) × E-4 (-5.7 ± 0.1) × E-4

2 (quadrupole) (-2.566 ± 0.010) × E-3 (-4.77 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00001) (2.3 ± 0.3) × E-4

4 (3.4 ± 0.2) × E-4 (4 ± 2) × E-5

5 (5 ± 1) × E-5 (2.39 ± 0.09) × E-4

6 (1.2 ± 0.2) × E-4 (-3 ± 2) × E-5

7 (4 ± 1) × E-5 (-6 ± 2) × E-5

8 (-1 ± 2) × E-5 (-3 ± 2) × E-5

9 (-1.98 ± 0.02) × E-3 (5.1 ± 0.3) × E-4

10 (2.8 ± 16.6) × E-6 (4.6 ± 12.6) × E-6

11 (8.1 ± 18.1) × E-6 (-4 ± 2) × E-5

12 (-1 ± 2) × E-5 (2 ± 2) × E-5

13 (-7.6 ± 17.4) × E-6 (2 ± 2) × E-5

14 (3 ± 2) × E-5 (-3 ± 2) × E-5

15 (1.34 ± 0.03) × E-3 (-2 ± 3) × E-5

