



# S15-149

## STORAGE RING MAGNET REPORT

### Results

Date 29/08/2018

Hour 16:37:47

Temperature [°C] 23.242

Number of Measurements 9

Main Coil Current [A] (167.798 ± 0.001)

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] (-360.302 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (12.63 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (24.06 ± 0.08)

Roll [mrad] - (< ±0.3) (4.5 ± 0.5) × 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)	(1.0 ± 0.6) × E-5	(-5 ± 2) × E-5
2 (quadrupole)	(-2.105 ± 0.003) × E-3	(-4.01 ± 0.01) × E-3
3 (sextupole)	(1.00000 ± 0.00001)	(1.3 ± 0.1) × E-4
4	(3.79 ± 0.06) × E-4	(2.1 ± 0.1) × E-4
5	(9 ± 1) × E-5	(4 ± 1) × E-5
6	(7.2 ± 0.6) × E-5	(-3 ± 10) × E-6
7	(2.3 ± 0.5) × E-5	(-3 ± 1) × E-5
8	(4.7 ± 0.8) × E-5	(8.3 ± 11.9) × E-6
9	(-1.846 ± 0.008) × E-3	(2.7 ± 0.1) × E-4
10	(-1 ± 2) × E-5	(-1.9 ± 12.3) × E-6
11	(4 ± 10) × E-6	(1 ± 2) × E-5
12	(-2.9 ± 0.9) × E-5	(9.9 ± 13.6) × E-6
13	(-2 ± 1) × E-5	(2.3 ± 12.8) × E-6
14	(-3 ± 1) × E-5	(-3 ± 1) × E-5
15	(1.26 ± 0.01) × E-3	(-10 ± 1) × E-5

