



S15-113

STORAGE RING MAGNET REPORT

Results

Date 07/07/2018

Hour 11:51:24

Temperature [°C] 23.687

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] (-359.651 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (15.19 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (22.09 ± 0.08)

Roll [mrad] - (< ±0.3) (-5.5 ± 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⁽²⁻ⁿ⁾]

Normalized
Skew
Multipoles
x=12.0 mm
[T.m⁽²⁻ⁿ⁾]

1 (dipole)	(-8.84 ± 0.05) × E-4	(5 ± 1) × E-5
2 (quadrupole)	(-2.531 ± 0.005) × E-3	(-3.68 ± 0.01) × E-3
3 (sextupole)	(1.00000 ± 0.00001)	(-1.7 ± 0.1) × E-4
4	(2.38 ± 0.08) × E-4	(3 ± 1) × E-5
5	(1.8 ± 0.1) × E-4	(-2.0 ± 0.1) × E-4
6	(6.4 ± 10.8) × E-6	(-7.5 ± 13.9) × E-6
7	(8 ± 1) × E-5	(4 ± 2) × E-5
8	(3 ± 1) × E-5	(2 ± 2) × E-5
9	(-1.98 ± 0.01) × E-3	(2.8 ± 0.2) × E-4
10	(6.8 ± 12.1) × E-6	(2 ± 2) × E-5
11	(3.7 ± 12.7) × E-6	(2.4 ± 14.0) × E-6
12	(3.0 ± 12.7) × E-6	(5.3 ± 19.1) × E-6
13	(-8.6 ± 11.6) × E-6	(2 ± 1) × E-5
14	(-2 ± 2) × E-5	(-3 ± 1) × E-5
15	(1.34 ± 0.02) × E-3	(-8.0 ± 0.9) × E-5

