



S15-119

STORAGE RING MAGNET REPORT

Results

Date 13/07/2018

Hour 10:02:38

Temperature [°C] 22.784

Number of Measurements 9

Main Coil Current [A] (167.798 ± 0.002)

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] (-359.627 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (16.87 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (21.27 ± 0.05)

Roll [mrad] - (< ±0.3) (-3 ± 3) × E-3

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)	(-3.50 ± 0.07) × E-4	(4.8 ± 1.0) × E-5
2 (quadrupole)	(-2.811 ± 0.005) × E-3	(-3.544 ± 0.008) × E-3
3 (sextupole)	(1.000000 ± 0.000007)	(-1.0 ± 0.9) × E-5
4	(-7.4 ± 15.2) × E-6	(-1.1 ± 0.1) × E-4
5	(3.6 ± 0.1) × E-4	(-1.8 ± 0.1) × E-4
6	(6 ± 1) × E-5	(2.3 ± 0.9) × E-5
7	(1.2 ± 0.1) × E-4	(5 ± 2) × E-5
8	(-3 ± 1) × E-5	(4 ± 2) × E-5
9	(-2.081 ± 0.010) × E-3	(4.1 ± 0.2) × E-4
10	(-5.80 ± 160.99) × E-7	(6.0 ± 12.7) × E-6
11	(1.8 ± 13.1) × E-6	(5.2 ± 17.6) × E-6
12	(-1 ± 1) × E-5	(-1 ± 1) × E-5
13	(-3 ± 1) × E-5	(-2.4 ± 17.9) × E-6
14	(3 ± 1) × E-5	(-3 ± 2) × E-5
15	(1.35 ± 0.01) × E-3	(2 ± 1) × E-5

