



S15-185

STORAGE RING MAGNET REPORT

Results

Date 29/08/2018

Hour 10:19:50

Temperature [°C] 23.477

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] (-359.757 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (18.98 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (31.0 ± 0.2)

Roll [mrad] - (< ±0.3) (-9 ± 1) × 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)	(-3.05 ± 0.07) × E-4	(7 ± 3) × E-5
2 (quadrupole)	(-3.163 ± 0.005) × E-3	(-5.16 ± 0.03) × E-3
3 (sextupole)	(1.000000 ± 0.000010)	(-2.7 ± 0.3) × E-4
4	(1.45 ± 0.04) × E-4	(3.0 ± 0.3) × E-4
5	(1.51 ± 0.09) × E-4	(2 ± 2) × E-5
6	(-1.40 ± 0.09) × E-4	(-7.8 ± 24.1) × E-6
7	(8.9 ± 0.7) × E-5	(-3 ± 2) × E-5
8	(2.3 ± 1.0) × E-5	(4 ± 2) × E-5
9	(-1.796 ± 0.006) × E-3	(4.3 ± 0.1) × E-4
10	(7.2 ± 10.8) × E-6	(-2 ± 2) × E-5
11	(9.22 ± 112.46) × E-7	(1 ± 2) × E-5
12	(2 ± 2) × E-5	(-1 ± 2) × E-5
13	(-5 ± 1) × E-5	(3 ± 1) × E-5
14	(-3.3 ± 0.9) × E-5	(-5 ± 2) × E-5
15	(1.17 ± 0.01) × E-3	(-1.6 ± 0.2) × E-4

