



S15-156

STORAGE RING MAGNET REPORT

Results

Date 02/08/2018

Hour 10:34:33

Temperature [°C] 23.157

Number of Measurements 9

Main Coil Current [A] (167.799 ± 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] (-359.645 ± 0.006)

Magnet Center Offset X [μm] - (< ±40.0) (13.2 ± 0.1)

Magnet Center Offset Y [μm] - (< ±40.0) (27.0 ± 0.1)

Roll [mrad] - (< ±0.3) (7.5 ± 0.8) × 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)	(-4.44 ± 0.07) × E-4	(1.7 ± 0.2) × E-4
2 (quadrupole)	(-2.20 ± 0.02) × E-3	(-4.49 ± 0.02) × E-3
3 (sextupole)	(1.00000 ± 0.00002)	(2.3 ± 0.2) × E-4
4	(6 ± 2) × E-5	(5.1 ± 0.3) × E-4
5	(1.6 ± 0.2) × E-4	(-6 ± 2) × E-5
6	(-3 ± 2) × E-5	(5 ± 3) × E-5
7	(7 ± 3) × E-5	(-3 ± 3) × E-5
8	(2 ± 4) × E-5	(-1 ± 3) × E-5
9	(-1.93 ± 0.04) × E-3	(8.2 ± 0.4) × E-4
10	(7 ± 3) × E-5	(-3 ± 3) × E-5
11	(-3 ± 3) × E-5	(2 ± 3) × E-5
12	(4.2 ± 26.9) × E-6	(-6 ± 3) × E-5
13	(-3.83 ± 298.46) × E-7	(-7.71 ± 220.68) × E-7
14	(-3 ± 3) × E-5	(-5 ± 2) × E-5
15	(1.37 ± 0.03) × E-3	(-6 ± 3) × E-5

