



S15-080

STORAGE RING MAGNET REPORT

Results

Date 12/07/2018

Hour 09:07:05

Temperature [°C] 22.888

Number of Measurements 9

Main Coil Current [A] (167.7987 ± 0.0006)

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] (-359.064 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (28.85 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (32.60 ± 0.05)

Roll [mrad] - (< ±0.3) (-5.7 ± 0.3) × 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)	(-8.45 ± 0.04) × E-4	(-5.53 ± 0.08) × E-4
2 (quadrupole)	(-4.808 ± 0.006) × E-3	(-5.433 ± 0.008) × E-3
3 (sextupole)	(1.000000 ± 0.000007)	(-1.71 ± 0.09) × E-4
4	(2.76 ± 0.08) × E-4	(3.0 ± 0.1) × E-4
5	(4.13 ± 0.08) × E-4	(1.8 ± 0.1) × E-4
6	(1 ± 1) × E-5	(-4.4 ± 0.9) × E-5
7	(1.6 ± 0.1) × E-4	(-4.7 ± 0.9) × E-5
8	(5.7 ± 0.8) × E-5	(1.0 ± 0.8) × E-5
9	(-1.96 ± 0.01) × E-3	(2.98 ± 0.08) × E-4
10	(-1.2 ± 0.8) × E-5	(7.58 ± 108.16) × E-7
11	(-3.8 ± 12.3) × E-6	(-2 ± 10) × E-6
12	(-8 ± 7) × E-6	(6.2 ± 11.0) × E-6
13	(-4 ± 1) × E-5	(-4.1 ± 14.6) × E-6
14	(-5 ± 1) × E-5	(-5 ± 2) × E-5
15	(1.362 ± 0.007) × E-3	(1 ± 2) × E-5

