



S15-219

STORAGE RING MAGNET REPORT

Results

Date 26/07/2018

Hour 12:55:03

Temperature [°C] 23.566

Number of Measurements 9

Main Coil Current [A] (167.7971 ± 0.0008)

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] (-359.843 ± 0.005)

Magnet Center Offset X [μm] - (< ±40.0) (21.13 ± 0.06)

Magnet Center Offset Y [μm] - (< ±40.0) (30.3 ± 0.2)

Roll [mrad] - (< ±0.3) (4.9 ± 0.7) × 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)	(-5.73 ± 0.07) × E-4	(7 ± 3) × E-5
2 (quadrupole)	(-3.52 ± 0.01) × E-3	(-5.05 ± 0.03) × E-3
3 (sextupole)	(1.00000 ± 0.00002)	(1.5 ± 0.2) × E-4
4	(-2.2 ± 0.2) × E-4	(3.5 ± 0.3) × E-4
5	(2.2 ± 0.2) × E-4	(-6 ± 3) × E-5
6	(-7 ± 3) × E-5	(1 ± 3) × E-5
7	(1.3 ± 0.2) × E-4	(1.9 ± 34.4) × E-6
8	(8.3 ± 12.4) × E-6	(-3 ± 2) × E-5
9	(-1.88 ± 0.02) × E-3	(6.3 ± 0.3) × E-4
10	(-6 ± 3) × E-5	(-3 ± 3) × E-5
11	(1 ± 2) × E-5	(4.80 ± 174.77) × E-7
12	(1 ± 4) × E-5	(-4 ± 2) × E-5
13	(-1 ± 3) × E-5	(5.9 ± 15.8) × E-6
14	(6.2 ± 19.5) × E-6	(-4 ± 3) × E-5
15	(1.37 ± 0.03) × E-3	(-4 ± 3) × E-5

