



S15-228

STORAGE RING MAGNET REPORT

Results

Date 30/07/2018

Hour 12:39:28

Temperature [°C] 23.316

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] (-359.788 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (9.80 ± 0.04)

Magnet Center Offset Y [μm] - (< ±40.0) (29.7 ± 0.1)

Roll [mrad] - (< ±0.3) (6.8 ± 0.6) × 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)	(2.31 ± 0.04) × E-4	(1.5 ± 0.2) × E-4
2 (quadrupole)	(-1.634 ± 0.007) × E-3	(-4.94 ± 0.02) × E-3
3 (sextupole)	(1.00000 ± 0.00001)	(2.0 ± 0.2) × E-4
4	(6.20 ± 0.09) × E-4	(2.4 ± 0.2) × E-4
5	(5.1 ± 0.2) × E-4	(-7 ± 2) × E-5
6	(2 ± 1) × E-5	(1.2 ± 13.4) × E-6
7	(1.4 ± 0.2) × E-4	(-5.1 ± 22.6) × E-6
8	(3 ± 2) × E-5	(2 ± 2) × E-5
9	(-1.99 ± 0.02) × E-3	(3.8 ± 0.3) × E-4
10	(-5.4 ± 10.7) × E-6	(-8.5 ± 20.6) × E-6
11	(-2 ± 2) × E-5	(-4.1 ± 14.4) × E-6
12	(-4.2 ± 12.5) × E-6	(-1 ± 2) × E-5
13	(-2 ± 2) × E-5	(2 ± 2) × E-5
14	(-1 ± 1) × E-5	(-3 ± 1) × E-5
15	(1.34 ± 0.02) × E-3	(6 ± 2) × E-5

