



S15-151

STORAGE RING MAGNET REPORT

Results

Date 07/07/2018

Hour 14:20:00

Temperature [°C] 23.651

Number of Measurements 9

Main Coil Current [A] (167.7985 ± 0.0009)

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] (-359.072 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (11.30 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (26.98 ± 0.04)

Roll [mrad] - (< ±0.3) (-6.1 ± 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) (-1.009 ± 0.005) × E-3 (5.82 ± 0.06) × E-4

2 (quadrupole) (-1.884 ± 0.004) × E-3 (-4.497 ± 0.006) × E-3

3 (sextupole) (1.00000 ± 0.00001) (-1.84 ± 0.08) × E-4

4 (1.8 ± 0.1) × E-4 (2.8 ± 0.1) × E-4

5 (1.47 ± 0.07) × E-4 (-1.08 ± 0.09) × E-4

6 (-1.41 ± 0.10) × E-4 (4.4 ± 11.8) × E-6

7 (8.3 ± 1.0) × E-5 (-1.1 ± 0.8) × E-5

8 (4 ± 1) × E-5 (5 ± 1) × E-5

9 (-1.930 ± 0.010) × E-3 (3.1 ± 0.1) × E-4

10 (-7.3 ± 10.0) × E-6 (-2.0 ± 0.9) × E-5

11 (9 ± 9) × E-6 (-7.7 ± 14.6) × E-6

12 (9.7 ± 17.0) × E-6 (3.8 ± 14.1) × E-6

13 (-1 ± 1) × E-5 (6.88 ± 145.48) × E-7

14 (-6 ± 2) × E-5 (-6 ± 2) × E-5

15 (1.314 ± 0.009) × E-3 (-8 ± 2) × E-5

