



S15-284

STORAGE RING MAGNET REPORT

Results

Date 19/07/2018

Hour 09:37:05

Temperature [°C] 23.671

Number of Measurements 9

Main Coil Current [A] (167.796 ± 0.004)

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] (-359.891 ± 0.005)

Magnet Center Offset X [μm] - (< ±40.0) (9.36 ± 0.04)

Magnet Center Offset Y [μm] - (< ±40.0) (22.6 ± 0.1)

Roll [mrad] - (< ±0.3) (8.7 ± 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) (-2.57 ± 0.07) × E-4 (1.20 ± 0.02) × E-3

2 (quadrupole) (-1.560 ± 0.007) × E-3 (-3.76 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00002) (2.6 ± 0.2) × E-4

4 (4.5 ± 0.1) × E-4 (1.0 ± 0.3) × E-4

5 (2.0 ± 0.2) × E-4 (-1.2 ± 0.1) × E-4

6 (-2.7 ± 0.8) × E-5 (-9.9 ± 21.0) × E-6

7 (5 ± 1) × E-5 (-3 ± 3) × E-5

8 (6 ± 2) × E-5 (1 ± 2) × E-5

9 (-2.04 ± 0.02) × E-3 (3.9 ± 0.2) × E-4

10 (-2 ± 1) × E-5 (9.2 ± 20.5) × E-6

11 (1 ± 2) × E-5 (1.7 ± 19.0) × E-6

12 (-1 ± 2) × E-5 (-2.1 ± 22.4) × E-6

13 (1 ± 2) × E-5 (2 ± 4) × E-5

14 (-1 ± 2) × E-5 (-4 ± 2) × E-5

15 (1.39 ± 0.02) × E-3 (-2 ± 3) × E-5

