



S15-076

STORAGE RING MAGNET REPORT

Results

Date 10/08/2018

Hour 09:21:38

Temperature [°C] 23.354

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] (-359.174 ± 0.004)

Magnet Center Offset X [μm] - (< ±40.0) (23.88 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (25.50 ± 0.03)

Roll [mrad] - (< ±0.3) (9.3 ± 0.1) × 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) (-1.255 ± 0.006) × E-3 (-7.7 ± 0.6) × E-5

2 (quadrupole) (-3.980 ± 0.003) × E-3 (-4.249 ± 0.005) × E-3

3 (sextupole) (1.00000 ± 0.00002) (2.80 ± 0.04) × E-4

4 (1.27 ± 0.03) × E-4 (1.13 ± 0.05) × E-4

5 (-1.51 ± 0.04) × E-4 (-1.6 ± 0.5) × E-5

6 (-3.9 ± 0.3) × E-5 (4.2 ± 0.3) × E-5

7 (-1.4 ± 0.4) × E-5 (-2.1 ± 0.5) × E-5

8 (2.3 ± 0.4) × E-5 (4.1 ± 0.4) × E-5

9 (-1.952 ± 0.004) × E-3 (2.9 ± 0.5) × E-5

10 (3 ± 4) × E-6 (-3 ± 7) × E-6

11 (1.5 ± 0.2) × E-5 (-4 ± 5) × E-6

12 (-2 ± 3) × E-6 (-5 ± 5) × E-6

13 (-8 ± 4) × E-6 (1.4 ± 0.3) × E-5

14 (-3.5 ± 0.3) × E-5 (-4.8 ± 0.4) × E-5

15 (1.340 ± 0.003) × E-3 (1.9 ± 0.4) × E-5

