



S15-126

STORAGE RING MAGNET REPORT

Results

Date 06/07/2018

Hour 10:23:06

Temperature [°C] 23.676

Number of Measurements 9

Main Coil Current [A] (167.7978 ± 0.0006)

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] (-359.862 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (7.76 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (28.50 ± 0.05)

Roll [mrad] - (< ±0.3) (-3.4 ± 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) (1.89 ± 0.09) × E-4 (-4.58 ± 0.08) × E-4

2 (quadrupole) (-1.293 ± 0.004) × E-3 (-4.751 ± 0.008) × E-3

3 (sextupole) (1.000000 ± 0.000010) (-1.01 ± 0.09) × E-4

4 (1.6 ± 0.8) × E-5 (4.64 ± 0.09) × E-4

5 (5.4 ± 0.1) × E-4 (1.9 ± 0.1) × E-4

6 (4 ± 7) × E-6 (-9.98 ± 169.04) × E-7

7 (1.52 ± 0.08) × E-4 (-6 ± 1) × E-5

8 (2.1 ± 0.7) × E-5 (-4.9 ± 10.8) × E-6

9 (-1.941 ± 0.007) × E-3 (2.6 ± 0.2) × E-4

10 (8.7 ± 10.3) × E-6 (1.33 ± 104.97) × E-7

11 (-2 ± 1) × E-5 (3 ± 8) × E-6

12 (4.2 ± 11.3) × E-6 (-7.7 ± 11.1) × E-6

13 (-1 ± 1) × E-5 (1.6 ± 1.0) × E-5

14 (-1 ± 1) × E-5 (-3.2 ± 0.9) × E-5

15 (1.289 ± 0.008) × E-3 (-6 ± 1) × E-5

