



S15-089

STORAGE RING MAGNET REPORT

Results

Date 29/08/2018

Hour 16:00:58

Temperature [°C] 23.266

Number of Measurements 9

Main Coil Current [A] (167.7980 ± 0.0010)

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] (-359.752 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (17.99 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (28.23 ± 0.05)

Roll [mrad] - (< ±0.3) (-3.5 ± 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) (-3.41 ± 0.03) × E-4 (-3.86 ± 0.08) × E-4

2 (quadrupole) (-2.998 ± 0.003) × E-3 (-4.705 ± 0.008) × E-3

3 (sextupole) (1.000000 ± 0.000008) (-1.1 ± 0.1) × E-4

4 (2.04 ± 0.04) × E-4 (1.57 ± 0.09) × E-4

5 (2.05 ± 0.04) × E-4 (9.3 ± 0.7) × E-5

6 (-2.22 ± 0.04) × E-4 (-1.0 ± 0.6) × E-5

7 (7.7 ± 0.6) × E-5 (-2.7 ± 0.7) × E-5

8 (4.2 ± 0.4) × E-5 (3.1 ± 0.8) × E-5

9 (-1.716 ± 0.004) × E-3 (2.78 ± 0.06) × E-4

10 (-3.3 ± 0.8) × E-5 (1.2 ± 69.8) × E-7

11 (5 ± 8) × E-6 (-1.2 ± 0.8) × E-5

12 (2.2 ± 0.8) × E-5 (-4 ± 10) × E-6

13 (-2.1 ± 0.3) × E-5 (2.1 ± 0.6) × E-5

14 (-2.9 ± 0.8) × E-5 (-2.0 ± 0.4) × E-5

15 (1.213 ± 0.007) × E-3 (-1.1 ± 0.1) × E-4

