



S15-104

STORAGE RING MAGNET REPORT

Results

Date 28/08/2018

Hour 16:39:28

Temperature [°C] 23.283

Number of Measurements 9

Main Coil Current [A] (167.7983 ± 0.0007)

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] (-359.538 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (10.17 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (25.40 ± 0.05)

Roll [mrad] - (< ±0.3) (-7.2 ± 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) (-1.144 ± 0.006) × E-3 (-1.79 ± 0.09) × E-4

2 (quadrupole) (-1.695 ± 0.004) × E-3 (-4.234 ± 0.008) × E-3

3 (sextupole) (1.000000 ± 0.000009) (-2.16 ± 0.09) × E-4

4 (2.99 ± 0.04) × E-4 (3.07 ± 0.06) × E-4

5 (2.13 ± 0.05) × E-4 (-2.6 ± 0.7) × E-5

6 (-4.9 ± 0.5) × E-5 (-3.4 ± 69.5) × E-7

7 (1.26 ± 0.06) × E-4 (9.5 ± 10.1) × E-6

8 (4.5 ± 0.5) × E-5 (1.8 ± 0.5) × E-5

9 (-1.874 ± 0.005) × E-3 (2.89 ± 0.09) × E-4

10 (-4.4 ± 0.7) × E-5 (5.6 ± 12.1) × E-6

11 (-1 ± 1) × E-5 (-2.2 ± 0.7) × E-5

12 (5 ± 7) × E-6 (-4.4 ± 11.0) × E-6

13 (-2.3 ± 0.4) × E-5 (1.1 ± 1.0) × E-5

14 (-3.0 ± 0.5) × E-5 (-2.0 ± 0.8) × E-5

15 (1.260 ± 0.004) × E-3 (-1.27 ± 0.07) × E-4

