



S15-200

STORAGE RING MAGNET REPORT

Results

Date 01/08/2018

Hour 12:28:36

Temperature [°C] 23.586

Number of Measurements 9

Main Coil Current [A] (167.7990 ± 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] (-359.680 ± 0.006)

Magnet Center Offset X [μm] - (< ±40.0) (12.0 ± 0.1)

Magnet Center Offset Y [μm] - (< ±40.0) (24.1 ± 0.2)

Roll [mrad] - (< ±0.3) (-1 ± 2) x 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) (-9.1 ± 0.1) x E-4 (-2.0 ± 0.3) x E-4

2 (quadrupole) (-1.99 ± 0.02) x E-3 (-4.01 ± 0.03) x E-3

3 (sextupole) (1.00000 ± 0.00003) (-4 ± 5) x E-5

4 (2.4 ± 0.4) x E-4 (8 ± 2) x E-5

5 (2 ± 3) x E-5 (1.0 ± 0.3) x E-4

6 (4 ± 4) x E-5 (-7 ± 4) x E-5

7 (4 ± 2) x E-5 (3 ± 4) x E-5

8 (5 ± 4) x E-5 (-7 ± 3) x E-5

9 (-1.95 ± 0.03) x E-3 (8.3 ± 0.3) x E-4

10 (-6 ± 3) x E-5 (-4 ± 3) x E-5

11 (3 ± 2) x E-5 (-6 ± 3) x E-5

12 (-3 ± 4) x E-5 (4 ± 4) x E-5

13 (-2 ± 2) x E-5 (-3.5 ± 30.7) x E-6

14 (2 ± 2) x E-5 (-4 ± 3) x E-5

15 (1.46 ± 0.04) x E-3 (-7.7 ± 33.2) x E-6

