



S15-144

STORAGE RING MAGNET REPORT

Results

Date 27/07/2018

Hour 15:54:15

Temperature [°C] 23.285

Number of Measurements 9

Main Coil Current [A] (167.7983 ± 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] (-359.267 ± 0.005)

Magnet Center Offset X [μm] - (< ±40.0) (16.1 ± 0.1)

Magnet Center Offset Y [μm] - (< ±40.0) (19.6 ± 0.1)

Roll [mrad] - (< ±0.3) (4.1 ± 0.9) × 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) (-1.93 ± 0.04) × E-4 (1.2 ± 0.2) × E-4

2 (quadrupole) (-2.68 ± 0.02) × E-3 (-3.26 ± 0.02) × E-3

3 (sextupole) (1.00000 ± 0.00002) (1.2 ± 0.3) × E-4

4 (-2.4 ± 0.3) × E-4 (5 ± 3) × E-5

5 (4.3 ± 0.3) × E-4 (9 ± 2) × E-5

6 (-1.9 ± 0.3) × E-4 (1 ± 1) × E-5

7 (1.9 ± 0.2) × E-4 (-1.4 ± 0.2) × E-4

8 (-10 ± 4) × E-5 (-6.4 ± 31.1) × E-6

9 (-1.95 ± 0.03) × E-3 (7.0 ± 0.4) × E-4

10 (2 ± 2) × E-5 (-7 ± 3) × E-5

11 (-3 ± 3) × E-5 (-3 ± 3) × E-5

12 (2 ± 2) × E-5 (1 ± 3) × E-5

13 (-4 ± 2) × E-5 (7 ± 3) × E-5

14 (3.9 ± 42.1) × E-6 (-2 ± 3) × E-5

15 (1.29 ± 0.04) × E-3 (-8 ± 3) × E-5

