



# S15-127

## STORAGE RING MAGNET REPORT

### Results

Date 05/07/2018

Hour 16:04:59

Temperature [°C] 23.538

Number of Measurements 9

Main Coil Current [A] (167.7975 ± 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] (-359.561 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (10.21 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (23.01 ± 0.06)

Roll [mrad] - (< ±0.3) (-1.3 ± 0.5) × 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<sup>(2-n)</sup>]

Normalized  
Skew  
Multipoles  
x=12.0 mm  
[T.m<sup>(2-n)</sup>]

1 (dipole) (-5.12 ± 0.05) × E-4 (6.4 ± 0.1) × E-4

2 (quadrupole) (-1.701 ± 0.003) × E-3 (-3.84 ± 0.01) × E-3

3 (sextupole) (1.000000 ± 0.000009) (-4 ± 2) × E-5

4 (-1.37 ± 0.03) × E-4 (1.64 ± 0.09) × E-4

5 (2.75 ± 0.06) × E-4 (6 ± 9) × E-6

6 (-1.0 ± 0.5) × E-5 (-2 ± 1) × E-5

7 (9.2 ± 0.9) × E-5 (-4.1 ± 0.7) × E-5

8 (-1.5 ± 58.1) × E-7 (2.8 ± 0.9) × E-5

9 (-2.05 ± 0.01) × E-3 (1.59 ± 0.10) × E-4

10 (1 ± 8) × E-6 (1 ± 1) × E-5

11 (9 ± 8) × E-6 (-1 ± 1) × E-5

12 (-2.6 ± 13.0) × E-6 (-2 ± 9) × E-6

13 (-1.1 ± 0.6) × E-5 (1.4 ± 0.9) × E-5

14 (-7.2 ± 10.6) × E-6 (-4 ± 1) × E-5

15 (1.367 ± 0.006) × E-3 (1.9 ± 0.6) × E-5

