



# S15-176

## STORAGE RING MAGNET REPORT

### Results

Date 16/08/2018

Hour 09:40:10

Temperature [°C] 23.574

Number of Measurements 9

Main Coil Current [A] (167.799 ± 0.005)

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] (-359.870 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (8.44 ± 0.03)

Magnet Center Offset Y [μm] - (< ±40.0) (27.06 ± 0.04)

Roll [mrad] - (< ±0.3) (8.8 ± 0.7) × 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) (-6.73 ± 0.05) × E-4 (9.06 ± 0.08) × E-4

2 (quadrupole) (-1.407 ± 0.005) × E-3 (-4.510 ± 0.006) × E-3

3 (sextupole) (1.000000 ± 0.000010) (2.6 ± 0.2) × E-4

4 (2.32 ± 0.09) × E-4 (1.5 ± 0.1) × E-4

5 (-3 ± 1) × E-5 (-1.1 ± 0.1) × E-4

6 (1 ± 1) × E-5 (1 ± 6) × E-6

7 (3.2 ± 0.9) × E-5 (-1 ± 1) × E-5

8 (2 ± 1) × E-5 (5 ± 1) × E-5

9 (-2.06 ± 0.01) × E-3 (1.32 ± 0.07) × E-4

10 (1 ± 1) × E-5 (-9.3 ± 15.0) × E-6

11 (3.4 ± 1.0) × E-5 (-9.0 ± 15.7) × E-6

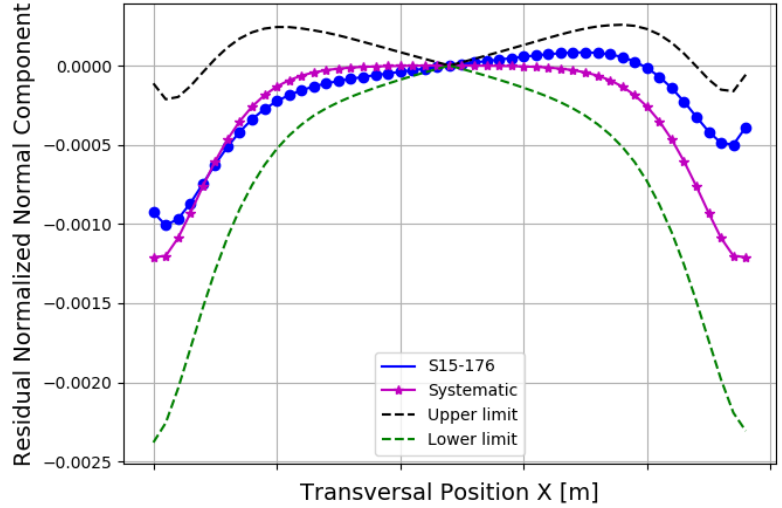
12 (8 ± 7) × E-6 (-7.3 ± 85.2) × E-7

13 (-2 ± 1) × E-5 (9.1 ± 12.3) × E-6

14 (-2 ± 1) × E-5 (-4.8 ± 1.0) × E-5

15 (1.38 ± 0.01) × E-3 (6 ± 1) × E-5

Residual Normalized Normal Integrated Field



Residual Normalized Skew Integrated Field

