



S15-170

STORAGE RING MAGNET REPORT

Results

Date 07/08/2018

Hour 14:42:42

Temperature [°C] 23.543

Number of Measurements 9

Main Coil Current [A] (167.798 ± 0.002)

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] (-359.958 ± 0.002)

Magnet Center Offset X [μm] - (< ±40.0) (12.18 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (23.27 ± 0.02)

Roll [mrad] - (< ±0.3) (6.0 ± 0.2) × 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) (-1.120 ± 0.006) × E-3 (-4.87 ± 0.04) × E-4

2 (quadrupole) (-2.030 ± 0.004) × E-3 (-3.878 ± 0.003) × E-3

3 (sextupole) (1.000000 ± 0.000009) (1.79 ± 0.06) × E-4

4 (4.30 ± 0.04) × E-4 (-3.33 ± 0.04) × E-4

5 (1.91 ± 0.07) × E-4 (2.07 ± 0.04) × E-4

6 (-2.53 ± 0.04) × E-4 (-1.3 ± 0.5) × E-5

7 (1.18 ± 0.05) × E-4 (-5.3 ± 0.4) × E-5

8 (3.0 ± 0.4) × E-5 (5.2 ± 0.4) × E-5

9 (-2.009 ± 0.004) × E-3 (2.7 ± 0.7) × E-5

10 (-4 ± 4) × E-6 (4 ± 6) × E-6

11 (2 ± 7) × E-6 (-1.2 ± 0.6) × E-5

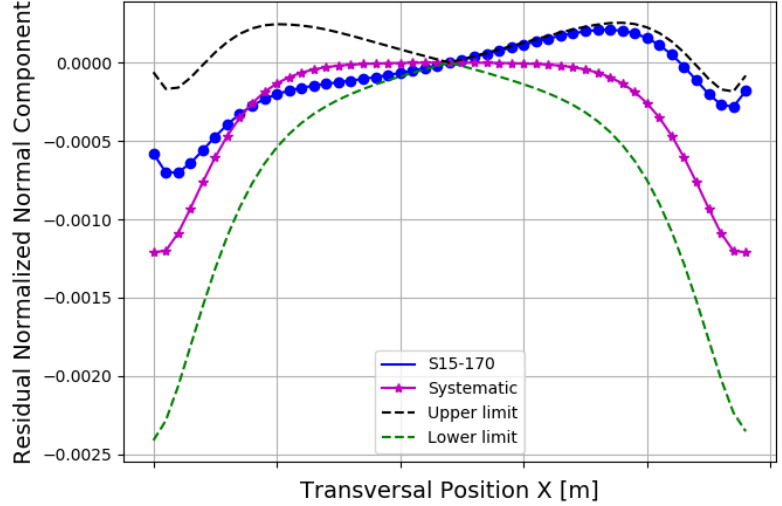
12 (1.6 ± 0.6) × E-5 (-3 ± 3) × E-6

13 (-2.0 ± 0.4) × E-5 (8 ± 7) × E-6

14 (-1.9 ± 0.4) × E-5 (-3.5 ± 0.6) × E-5

15 (1.337 ± 0.004) × E-3 (1.3 ± 0.4) × E-5

Residual Normalized Normal Integrated Field



Residual Normalized Skew Integrated Field

