



S15-140

STORAGE RING MAGNET REPORT

Results

Date 27/07/2018

Hour 12:51:54

Temperature [°C] 23.445

Number of Measurements 9

Main Coil Current [A] (167.7981 ± 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] (-360.310 ± 0.008)

Magnet Center Offset X [μm] - (< ±40.0) (10.01 ± 0.09)

Magnet Center Offset Y [μm] - (< ±40.0) (23.4 ± 0.2)

Roll [mrad] - (< ±0.3) (6 ± 1) × 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) (4.9 ± 0.1) × E-4 (2.9 ± 0.4) × E-4

2 (quadrupole) (-1.67 ± 0.02) × E-3 (-3.90 ± 0.04) × E-3

3 (sextupole) (1.00000 ± 0.00003) (1.7 ± 0.4) × E-4

4 (2.2 ± 0.3) × E-4 (-6.4 ± 31.2) × E-6

5 (5.5 ± 0.4) × E-4 (-1.1 ± 0.3) × E-4

6 (-8 ± 2) × E-5 (-2 ± 5) × E-5

7 (1.4 ± 0.4) × E-4 (2.5 ± 44.7) × E-6

8 (5 ± 3) × E-5 (3 ± 3) × E-5

9 (-1.85 ± 0.04) × E-3 (7.5 ± 0.3) × E-4

10 (3 ± 4) × E-5 (3 ± 3) × E-5

11 (-1 ± 3) × E-5 (-2 ± 3) × E-5

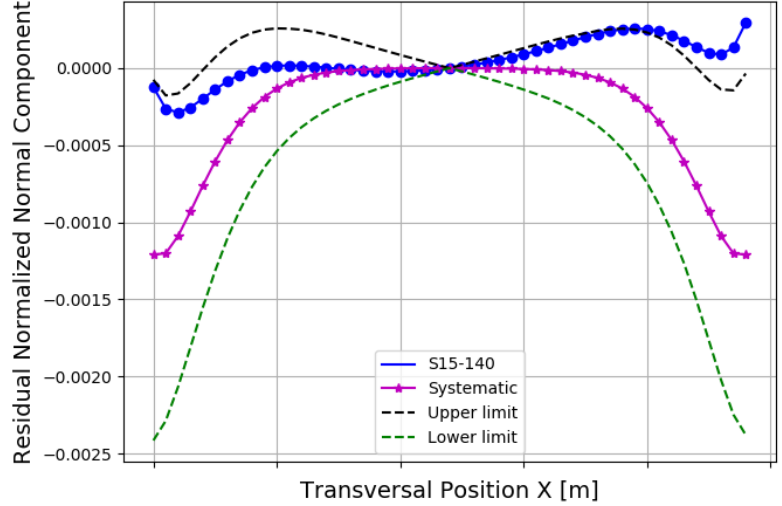
12 (2 ± 2) × E-5 (-5.4 ± 31.8) × E-6

13 (-3 ± 4) × E-5 (1 ± 4) × E-5

14 (-4 ± 3) × E-5 (8.1 ± 42.8) × E-6

15 (1.29 ± 0.05) × E-3 (-8 ± 5) × E-5

Residual Normalized Normal Integrated Field



Residual Normalized Skew Integrated Field

