



# S15-128

## STORAGE RING MAGNET REPORT

### Results

Date 06/07/2018

Hour 09:44:42

Temperature [°C] 23.653

Number of Measurements 9

Main Coil Current [A] (167.7977 ± 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] (-359.774 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (12.36 ± 0.02)

Magnet Center Offset Y [μm] - (< ±40.0) (20.62 ± 0.04)

Roll [mrad] - (< ±0.3) (-2 ± 3) × E-3

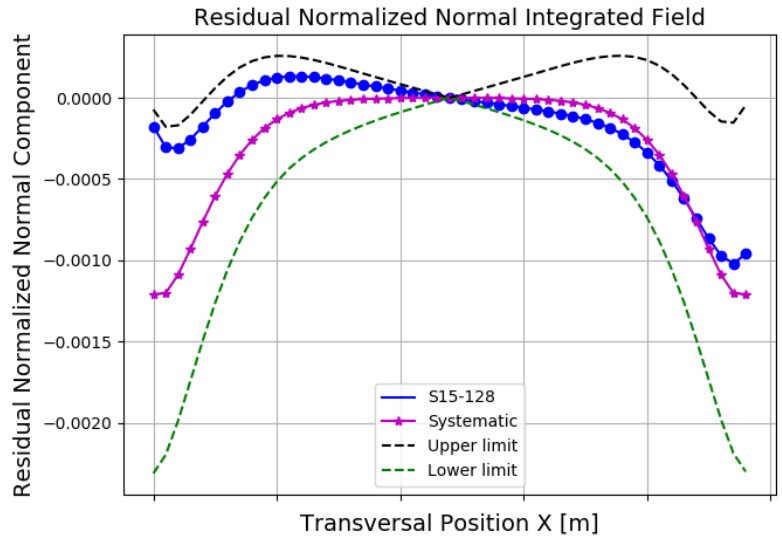
### Electric Parameters

Inductance [mH] 3.157

Voltage [V] 6.0106

Resistance [mΩ] 35.82

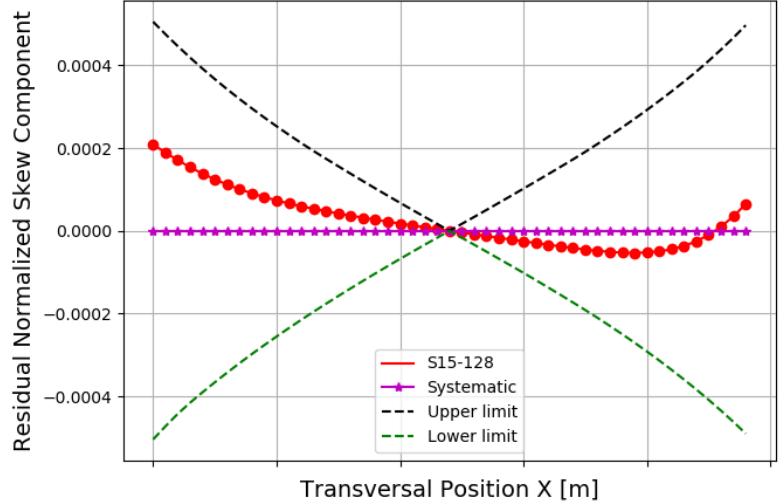
Main Coil Number of Turns 11.25



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>]

### Residual Normalized Skew Integrated Field



n

1 (dipole)	(-6.58 ± 0.04) × E-4	(-4.7 ± 0.5) × E-5
2 (quadrupole)	(-2.060 ± 0.003) × E-3	(-3.437 ± 0.007) × E-3
3 (sextupole)	(1.00000 ± 0.00001)	(-6 ± 9) × E-6
4	(-2.51 ± 0.07) × E-4	(-1.03 ± 0.08) × E-4
5	(6.8 ± 0.4) × E-5	(1.2 ± 0.9) × E-5
6	(-1.57 ± 0.09) × E-4	(-2.7 ± 0.6) × E-5
7	(4.8 ± 1.0) × E-5	(-1.4 ± 10.1) × E-6
8	(2.8 ± 0.6) × E-5	(1.8 ± 0.8) × E-5
9	(-2.043 ± 0.010) × E-3	(1.75 ± 0.06) × E-4
10	(5 ± 1) × E-5	(3.5 ± 1.0) × E-5
11	(10 ± 8) × E-6	(-2.6 ± 0.6) × E-5
12	(-9 ± 8) × E-6	(2.8 ± 1.0) × E-5
13	(1.3 ± 0.9) × E-5	(-2.6 ± 0.9) × E-5
14	(-5.3 ± 0.8) × E-5	(-2.4 ± 0.7) × E-5
15	(1.337 ± 0.009) × E-3	(2.5 ± 11.8) × E-6