



# Q20-017

## STORAGE RING MAGNET REPORT

### Results

Date 13/06/2018

Hour 14:32:24

Temperature [°C] 22.52

Number of Measurements 9

Main Coil Current [A]  $(157.5185 \pm 0.0006)$

Trim Coil Current [A]  $(0 \pm 0)$

CH Coil Current [A]  $(0 \pm 0)$

CV Coil Current [A]  $(0 \pm 0)$

QS Coil Current [A]  $(0 \pm 0)$

Integrated Gradient [T]  $(-9.10347 \pm 0.00003)$

Magnet Center Offset X [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )  $(2.6 \pm 0.2) \times E-1$

Magnet Center Offset Y [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )  $(7.68 \pm 0.05)$

Roll [mrad] - ( $< \pm 0.3$ )  $(5.3 \pm 0.2) \times E-2$

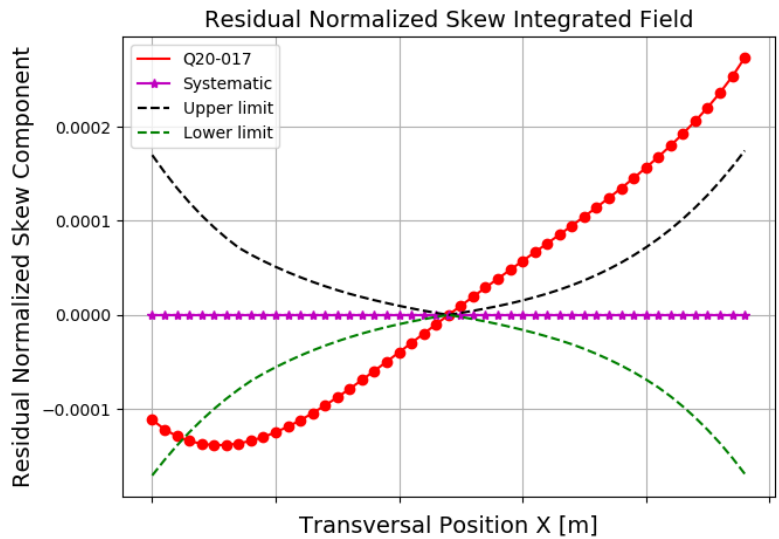
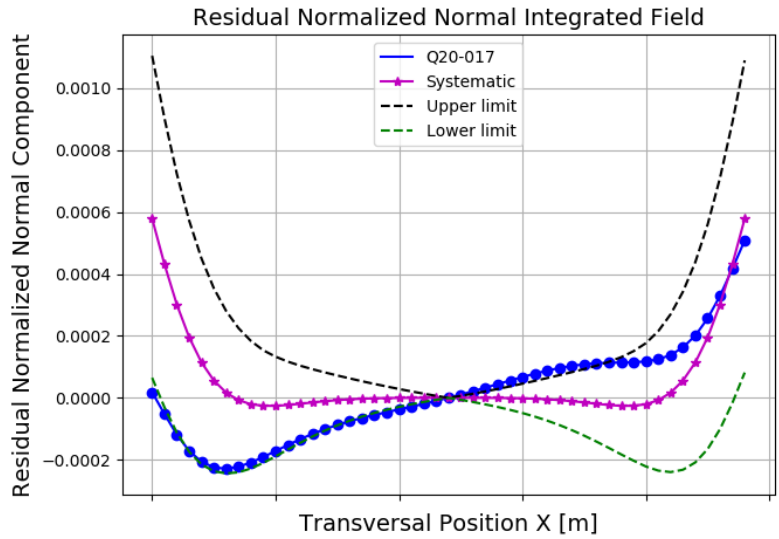
### Electric Parameters

Inductance [mH] 8.9467

Voltage [V] 5.42

Resistance [ $\text{m}\Omega$ ] 34.4

Main Coil Number of Turns 23.25



n	Normalized Normal Multipoles $x=12.0 \text{ mm}$ [T.m <sup>(2-n)</sup> ]	Normalized Skew Multipoles $x=12.0 \text{ mm}$ [T.m <sup>(2-n)</sup> ]
1 (dipole)	$(-2.2 \pm 0.1) \times E-5$	$(-6.40 \pm 0.04) \times E-4$
2 (quadrupole)	$(1.000000 \pm 0.000004)$	$(1.06 \pm 0.04) \times E-4$
3 (sextupole)	$(2.46 \pm 0.02) \times E-4$	$(2.36 \pm 0.06) \times E-4$
4	$(1.50 \pm 0.03) \times E-4$	$(-2.4 \pm 0.2) \times E-5$
5	$(-4 \pm 6) \times E-6$	$(-3.3 \pm 0.5) \times E-5$
6	$(-8.78 \pm 0.05) \times E-4$	$(1.21 \pm 0.06) \times E-4$
7	$(5 \pm 3) \times E-6$	$(-2.0 \pm 0.7) \times E-5$
8	$(-4 \pm 6) \times E-6$	$(-1.3 \pm 0.6) \times E-5$
9	$(-2.4 \pm 78.9) \times E-7$	$(4 \pm 4) \times E-6$
10	$(1.716 \pm 0.004) \times E-3$	$(-2.6 \pm 0.6) \times E-5$
11	$(-5 \pm 5) \times E-6$	$(4 \pm 7) \times E-6$
12	$(-4 \pm 7) \times E-6$	$(1.6 \pm 0.5) \times E-5$
13	$(-1 \pm 5) \times E-6$	$(2 \pm 6) \times E-6$
14	$(-7.16 \pm 0.05) \times E-4$	$(7 \pm 5) \times E-6$
15	$(5 \pm 6) \times E-6$	$(-6.0 \pm 34.4) \times E-7$