



Q20-139

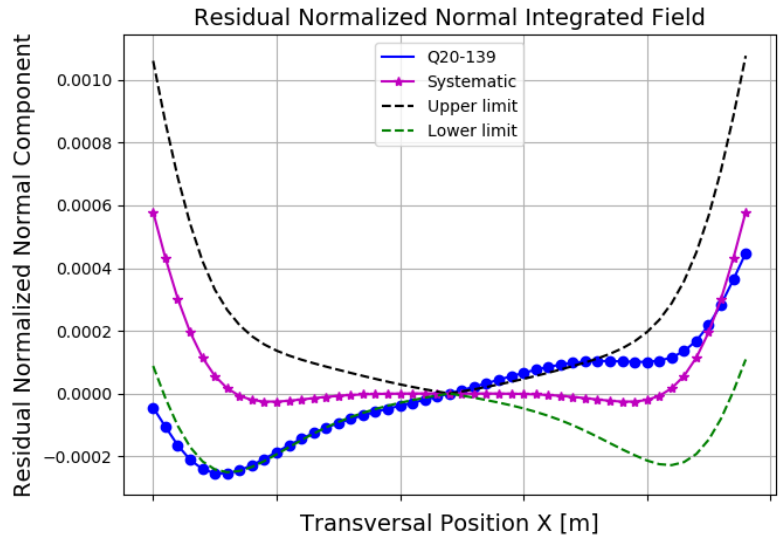
## STORAGE RING MAGNET REPORT

### Results

Date	08/06/2018
Hour	10:26:21
Temperature [°C]	23.11
Number of Measurements	9
Main Coil Current [A]	$(157.3588 \pm 0.0007)$
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]	$(-9.09087 \pm 0.00002)$
Magnet Center Offset X [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(1.47 \pm 0.03)$
Magnet Center Offset Y [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(4.2 \pm 0.5) \times \text{E-1}$
Roll [mrad] - ( $< \pm 0.3$ )	$(4.1 \pm 0.2) \times \text{E-2}$

### 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)	$(-1.22 \pm 0.02) \times \text{E-4}$	$(-3.5 \pm 0.4) \times \text{E-5}$
2 (quadrupole)	$(1.000000 \pm 0.000002)$	$(8.2 \pm 0.3) \times \text{E-5}$
3 (sextupole)	$(2.49 \pm 0.02) \times \text{E-4}$	$(6.6 \pm 0.4) \times \text{E-5}$
4	$(1.10 \pm 0.03) \times \text{E-4}$	$(-2.6 \pm 0.4) \times \text{E-5}$
5	$(-3 \pm 3) \times \text{E-6}$	$(3.6 \pm 0.5) \times \text{E-5}$
6	$(-8.66 \pm 0.03) \times \text{E-4}$	$(1.07 \pm 0.06) \times \text{E-4}$
7	$(3 \pm 3) \times \text{E-6}$	$(-1.4 \pm 0.5) \times \text{E-5}$
8	$(-1.4 \pm 0.2) \times \text{E-5}$	$(-1.3 \pm 0.4) \times \text{E-5}$
9	$(-7 \pm 2) \times \text{E-6}$	$(-9 \pm 4) \times \text{E-6}$
10	$(1.661 \pm 0.003) \times \text{E-3}$	$(-5.7 \pm 0.5) \times \text{E-5}$
11	$(-6 \pm 4) \times \text{E-6}$	$(1.5 \pm 0.4) \times \text{E-5}$
12	$(1.9 \pm 0.4) \times \text{E-5}$	$(1.8 \pm 0.4) \times \text{E-5}$
13	$(3 \pm 4) \times \text{E-6}$	$(-5 \pm 3) \times \text{E-6}$
14	$(-7.08 \pm 0.04) \times \text{E-4}$	$(1.9 \pm 0.8) \times \text{E-5}$
15	$(8 \pm 4) \times \text{E-6}$	$(-2.1 \pm 0.3) \times \text{E-5}$

