



Q20-079

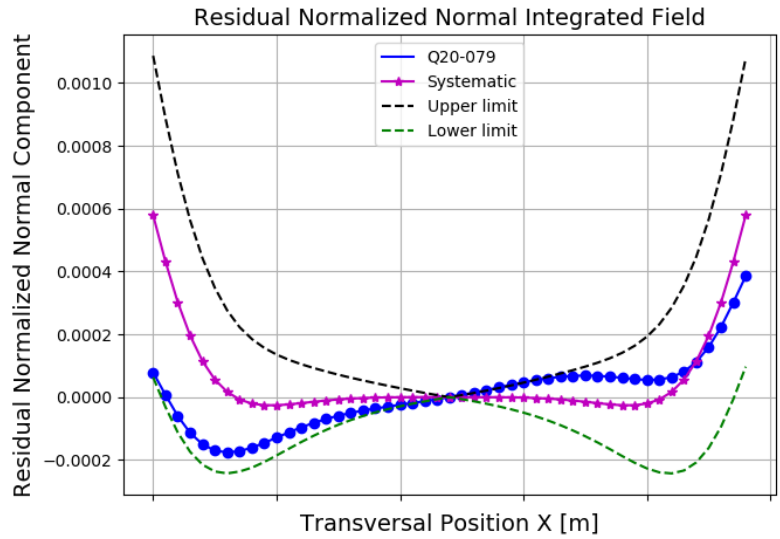
## STORAGE RING MAGNET REPORT

### Results

Date	25/05/2018
Hour	10:05:13
Temperature [°C]	23.56
Number of Measurements	9
Main Coil Current [A]	$(157.3571 \pm 0.0004)$
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]	$(-9.07739 \pm 0.00003)$
Magnet Center Offset X [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(11.13 \pm 0.04)$
Magnet Center Offset Y [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(16.54 \pm 0.03)$
Roll [mrad] - ( $< \pm 0.3$ )	$(2.8 \pm 0.2) \times \text{E-2}$

### 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 $x=12.0 \text{ mm}$ [ $\text{T}\cdot\text{m}^{(2-n)}$ ]	Normalized Skew Multipoles $x=12.0 \text{ mm}$ [ $\text{T}\cdot\text{m}^{(2-n)}$ ]
1 (dipole)	$(-9.27 \pm 0.04) \times \text{E-4}$	$(-1.378 \pm 0.003) \times \text{E-3}$
2 (quadrupole)	$(1.000000 \pm 0.000005)$	$(5.6 \pm 0.4) \times \text{E-5}$
3 (sextupole)	$(1.66 \pm 0.02) \times \text{E-4}$	$(5.37 \pm 0.04) \times \text{E-4}$
4	$(1.39 \pm 0.03) \times \text{E-4}$	$(-4.9 \pm 0.4) \times \text{E-5}$
5	$(-8 \pm 4) \times \text{E-6}$	$(-3.9 \pm 0.5) \times \text{E-5}$
6	$(-8.84 \pm 0.02) \times \text{E-4}$	$(1.00 \pm 0.05) \times \text{E-4}$
7	$(3 \pm 6) \times \text{E-6}$	$(-2.7 \pm 0.5) \times \text{E-5}$
8	$(-4 \pm 7) \times \text{E-6}$	$(-4 \pm 3) \times \text{E-6}$
9	$(-1.7 \pm 0.3) \times \text{E-5}$	$(-6 \pm 6) \times \text{E-6}$
10	$(1.676 \pm 0.004) \times \text{E-3}$	$(-3.9 \pm 0.6) \times \text{E-5}$
11	$(-5 \pm 7) \times \text{E-6}$	$(10 \pm 7) \times \text{E-6}$
12	$(-2.9 \pm 81.9) \times \text{E-7}$	$(7 \pm 2) \times \text{E-6}$
13	$(1.3 \pm 0.6) \times \text{E-5}$	$(3 \pm 4) \times \text{E-6}$
14	$(-6.96 \pm 0.06) \times \text{E-4}$	$(1.9 \pm 0.6) \times \text{E-5}$
15	$(2 \pm 7) \times \text{E-6}$	$(-1 \pm 7) \times \text{E-6}$

