



# Q20-140

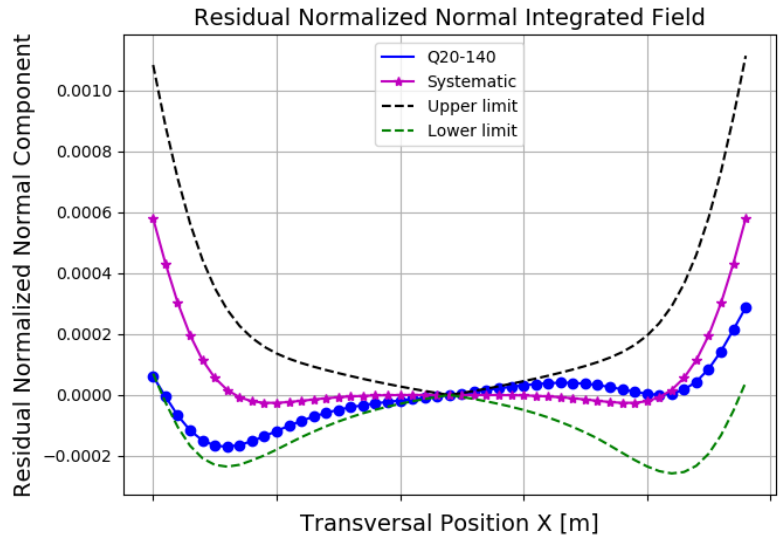
## STORAGE RING MAGNET REPORT

### Results

Date	08/06/2018
Hour	09:01:29
Temperature [°C]	23.08
Number of Measurements	9
Main Coil Current [A]	$(157.3593 \pm 0.0006)$
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]	$(-9.07980 \pm 0.00004)$
Magnet Center Offset X [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(4.77 \pm 0.02)$
Magnet Center Offset Y [ $\mu\text{m}$ ] - ( $< \pm 40.0$ )	$(2.34 \pm 0.04)$
Roll [mrad] - ( $< \pm 0.3$ )	$(1.58 \pm 0.03) \times 10^{-1}$

### 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)	$(-3.97 \pm 0.02) \times 10^{-4}$	$(-1.95 \pm 0.03) \times 10^{-4}$
2 (quadrupole)	$(1.000000 \pm 0.000006)$	$(3.16 \pm 0.06) \times 10^{-4}$
3 (sextupole)	$(1.19 \pm 0.03) \times 10^{-4}$	$(7.5 \pm 0.3) \times 10^{-5}$
4	$(8.8 \pm 0.5) \times 10^{-5}$	$(-5.2 \pm 0.5) \times 10^{-5}$
5	$(-7 \pm 4) \times 10^{-6}$	$(-2.2 \pm 0.6) \times 10^{-5}$
6	$(-8.72 \pm 0.07) \times 10^{-4}$	$(8.9 \pm 0.7) \times 10^{-5}$
7	$(7.0 \pm 39.0) \times 10^{-7}$	$(6 \pm 6) \times 10^{-6}$
8	$(1.9 \pm 41.4) \times 10^{-7}$	$(-1 \pm 7) \times 10^{-6}$
9	$(3 \pm 7) \times 10^{-6}$	$(2.1 \pm 38.8) \times 10^{-7}$
10	$(1.656 \pm 0.006) \times 10^{-3}$	$(-4.3 \pm 0.5) \times 10^{-5}$
11	$(3 \pm 4) \times 10^{-6}$	$(1.9 \pm 45.6) \times 10^{-7}$
12	$(-2 \pm 3) \times 10^{-6}$	$(8 \pm 5) \times 10^{-6}$
13	$(-6.1 \pm 53.8) \times 10^{-7}$	$(3 \pm 2) \times 10^{-6}$
14	$(-6.95 \pm 0.08) \times 10^{-4}$	$(7 \pm 5) \times 10^{-6}$
15	$(-5 \pm 5) \times 10^{-6}$	$(2 \pm 3) \times 10^{-6}$

