



Q20-125

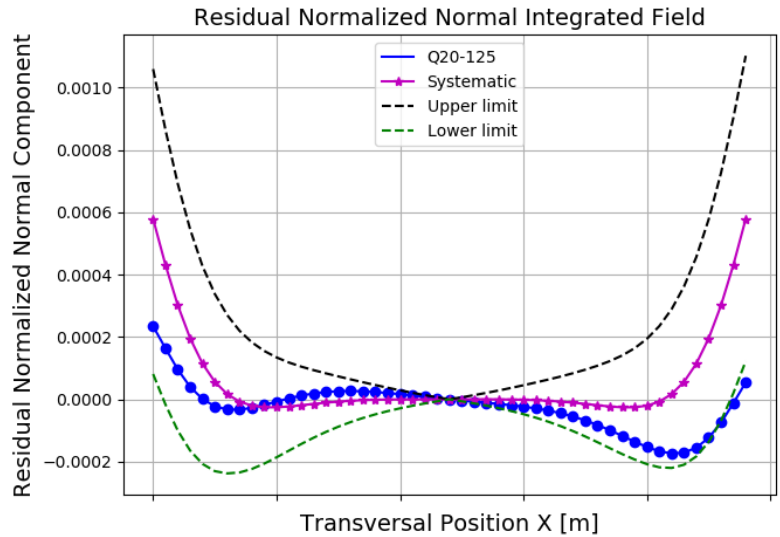
STORAGE RING MAGNET REPORT

Results

Date	18/05/2018
Hour	15:47:21
Temperature [°C]	23.52
Number of Measurements	9
Main Coil Current [A]	(157.3574 ± 0.0005)
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]	(-9.08401 ± 0.00003)
Magnet Center Offset X [μm] - ($< \pm 40.0$)	(13.48 ± 0.02)
Magnet Center Offset Y [μm] - ($< \pm 40.0$)	(13.49 ± 0.06)
Roll [mrad] - ($< \pm 0.3$)	$(-1.26 \pm 0.02) \times E-1$

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 ⁽²⁻ⁿ⁾]	Normalized Skew Multipoles $x=12.0 \text{ mm}$ [T.m ⁽²⁻ⁿ⁾]
1 (dipole)	$(-1.124 \pm 0.002) \times E-3$	$(-1.125 \pm 0.005) \times E-3$
2 (quadrupole)	(1.000000 ± 0.000005)	$(-2.52 \pm 0.04) \times E-4$
3 (sextupole)	$(-9.3 \pm 0.3) \times E-5$	$(5.57 \pm 0.06) \times E-4$
4	$(5.3 \pm 0.4) \times E-5$	$(-5.9 \pm 0.4) \times E-5$
5	$(-7 \pm 3) \times E-6$	$(-5.3 \pm 0.5) \times E-5$
6	$(-8.80 \pm 0.03) \times E-4$	$(5.7 \pm 0.4) \times E-5$
7	$(1.9 \pm 0.4) \times E-5$	$(-2.6 \pm 0.6) \times E-5$
8	$(2.7 \pm 43.1) \times E-7$	$(3.8 \pm 46.3) \times E-7$
9	$(-1.1 \pm 0.5) \times E-5$	$(-2 \pm 5) \times E-6$
10	$(1.672 \pm 0.004) \times E-3$	$(-2.3 \pm 0.4) \times E-5$
11	$(-9 \pm 5) \times E-6$	$(9 \pm 5) \times E-6$
12	$(1 \pm 4) \times E-6$	$(8 \pm 5) \times E-6$
13	$(7 \pm 4) \times E-6$	$(2 \pm 6) \times E-6$
14	$(-7.02 \pm 0.05) \times E-4$	$(2 \pm 5) \times E-6$
15	$(5 \pm 3) \times E-6$	$(-3 \pm 7) \times E-6$

