



# BQD-020

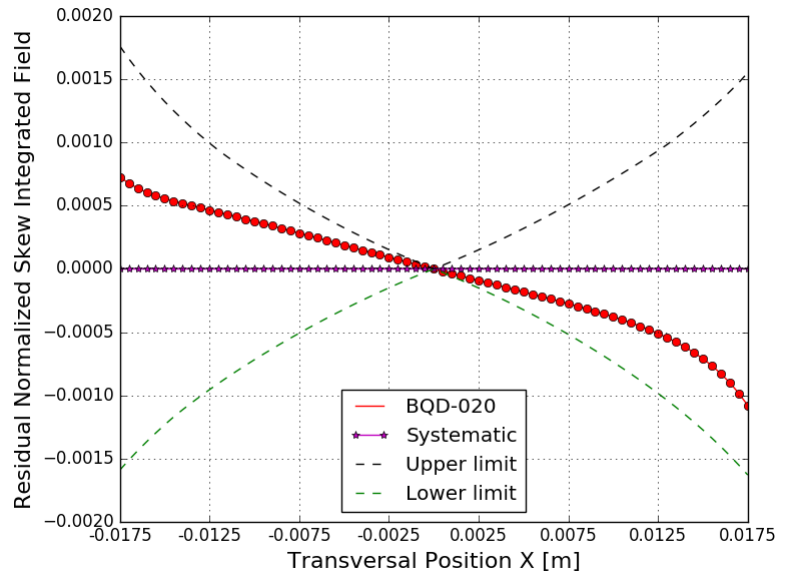
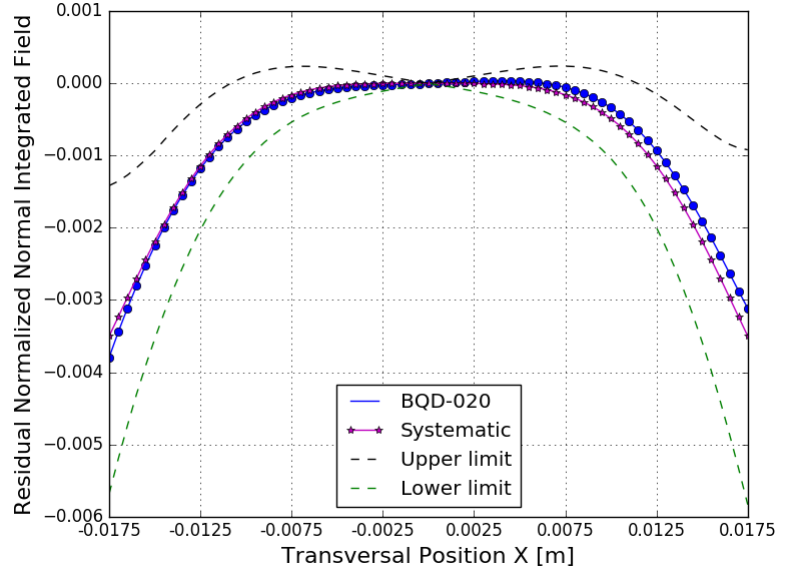
## BOOSTER MAGNET REPORT

### Results

Date	18/04/2016
Hour	09:22:39
Temperature [°C]	27.2
Number of Measurements	17
Main Coil Current [A]	$(32.0027 \pm 0.0006)$
Trim Coil Current [A]	--
Integrated Gradient [T]	$(-5.30630 \pm 0.00007) \times 10^{-1}$
Magnet Center Offset X [ $\mu\text{m}$ ] - ( $< \pm 160.0$ )	$(-4.3 \pm 0.3)$
Magnet Center Offset Y [ $\mu\text{m}$ ] - ( $< \pm 160.0$ )	$(-45.4 \pm 0.4)$
Roll [mrad] - ( $< \pm 0.8$ )	$(-3.0 \pm 0.4) \times 10^{-1}$

### Electric Parameters

Inductance [mH]	3.731
Voltage [V]	0.2794
Resistance [m $\Omega$ ]	27.94
Main Coil Number of Turns	27.5



n	Normalized Normal Multipoles $x=17.5 \text{ mm}$ [T.m <sup>(2-n)</sup> ]	Normalized Skew Multipoles $x=17.5 \text{ mm}$ [T.m <sup>(2-n)</sup> ]
1 (dipole)	$(-2.5 \pm 0.1) \times 10^{-4}$	$(-2.59 \pm 0.02) \times 10^{-3}$
2 (quadrupole)	$(1.00000 \pm 0.00001)$	$(-6.0 \pm 0.3) \times 10^{-4}$
3 (sextupole)	$(1.7 \pm 0.1) \times 10^{-4}$	$(-6.4 \pm 0.2) \times 10^{-4}$
4	$(1.5 \pm 0.2) \times 10^{-4}$	$(5 \pm 4) \times 10^{-5}$
5	$(-9.9 \pm 14.6) \times 10^{-6}$	$(-3 \pm 3) \times 10^{-5}$
6	$(-4.64 \pm 0.02) \times 10^{-3}$	$(-1.1 \pm 0.3) \times 10^{-4}$
7	$(2.1 \pm 22.2) \times 10^{-6}$	$(-6 \pm 4) \times 10^{-5}$
8	$(-1 \pm 3) \times 10^{-5}$	$(-1.3 \pm 0.4) \times 10^{-4}$
9	$(-2 \pm 6) \times 10^{-5}$	$(-2 \pm 4) \times 10^{-5}$
10	$(1.22 \pm 0.06) \times 10^{-3}$	$(-3.3 \pm 54.8) \times 10^{-6}$
11	$(9.9 \pm 13.2) \times 10^{-5}$	$(-9.5 \pm 14.8) \times 10^{-5}$
12	$(-1.0 \pm 0.6) \times 10^{-4}$	$(-3 \pm 6) \times 10^{-5}$
13	$(-3 \pm 7) \times 10^{-5}$	$(3 \pm 5) \times 10^{-5}$
14	$(-7 \pm 7) \times 10^{-5}$	$(6 \pm 7) \times 10^{-5}$
15	$(1 \pm 1) \times 10^{-4}$	$(-9.0 \pm 13.1) \times 10^{-5}$