



BC-084

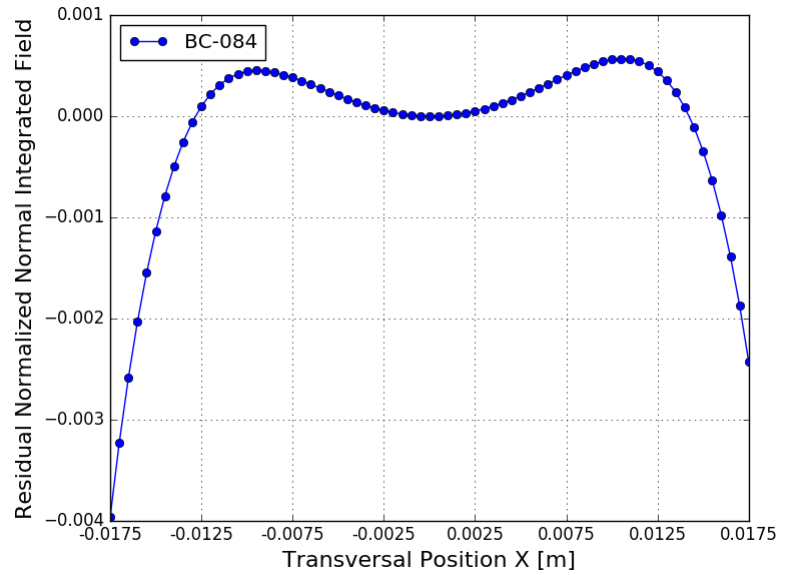
## BOOSTER MAGNET REPORT

### Results

|  |   |
|--|---|
| Date                                     | 28/04/2016                              |
| Hour                                     | 12:59:41                                |
| Temperature [°C]                         | 23.0                                    |
| Number of Measurements                   | 17                                      |
| Main Coil Current [A]                    | $(9.9787 \pm 0.0006)$                   |
| Trim Coil Current [A]                    | --                                      |
| Integrated Field [T.m]                   | $(-3.38906 \pm 0.00006) \times 10^{-3}$ |
| Magnet Center Offset X [ $\mu\text{m}$ ] | --                                      |
| Magnet Center Offset Y [ $\mu\text{m}$ ] | --                                      |
| Roll [mrad]                              | $(6.9 \pm 0.3) \times 10^{-1}$          |

### Electric Parameters

|                           |        |
|---------------------------|--------|
| Indutance [mH]            | 3.194  |
| Voltage [V]               | 0.774  |
| Resistance [m $\Omega$ ]  | 77.380 |
| Main Coil Number of Turns | 38.5   |



| n              | Normalized Normal Multipoles<br>$x=17.5 \text{ mm}$<br>[T.m <sup>(2-n)</sup> ] | Normalized Skew Multipoles<br>$x=17.5 \text{ mm}$<br>[T.m <sup>(2-n)</sup> ] |
|----------------|--|--|
| 1 (dipole)     | $(1.00000 \pm 0.00002)$  | $(6.89 \pm 0.09) \times 10^{-4}$   |
| 2 (quadrupole) | $(-2.6 \pm 0.8) \times 10^{-5}$  | $(-5.2 \pm 0.1) \times 10^{-4}$  |
| 3 (sextupole)  | $(2.69 \pm 0.01) \times 10^{-3}$   | $(8 \pm 1) \times 10^{-5}$   |
| 4              | $(1.4 \pm 0.1) \times 10^{-4}$   | $(1 \pm 1) \times 10^{-5}$   |
| 5              | $(-2.22 \pm 0.01) \times 10^{-3}$  | $(3 \pm 2) \times 10^{-5}$   |
| 6              | $(8.0 \pm 0.1) \times 10^{-4}$   | $(2 \pm 1) \times 10^{-5}$   |
| 7              | $(-4.076 \pm 0.005) \times 10^{-3}$  | $(-3 \pm 1) \times 10^{-5}$  |
| 8              | $(-2 \pm 1) \times 10^{-5}$  | $(3.0 \pm 0.7) \times 10^{-5}$   |
| 9              | $(3 \pm 1) \times 10^{-5}$   | $(1.1 \pm 13.1) \times 10^{-6}$  |
| 10             | $(-1.50 \pm 0.07) \times 10^{-4}$  | $(3 \pm 1) \times 10^{-5}$   |
| 11             | $(4.8 \pm 0.1) \times 10^{-4}$   | $(1.8 \pm 1.0) \times 10^{-5}$   |
| 12             | $(2.6 \pm 0.9) \times 10^{-5}$   | $(2 \pm 1) \times 10^{-5}$   |
| 13             | $(-6 \pm 2) \times 10^{-5}$  | $(2 \pm 2) \times 10^{-5}$   |
| 14             | $(-3.1 \pm 20.3) \times 10^{-6}$   | $(5 \pm 3) \times 10^{-5}$   |
| 15             | $(-4 \pm 2) \times 10^{-5}$  | $(-4 \pm 3) \times 10^{-5}$  |

