



BS-033

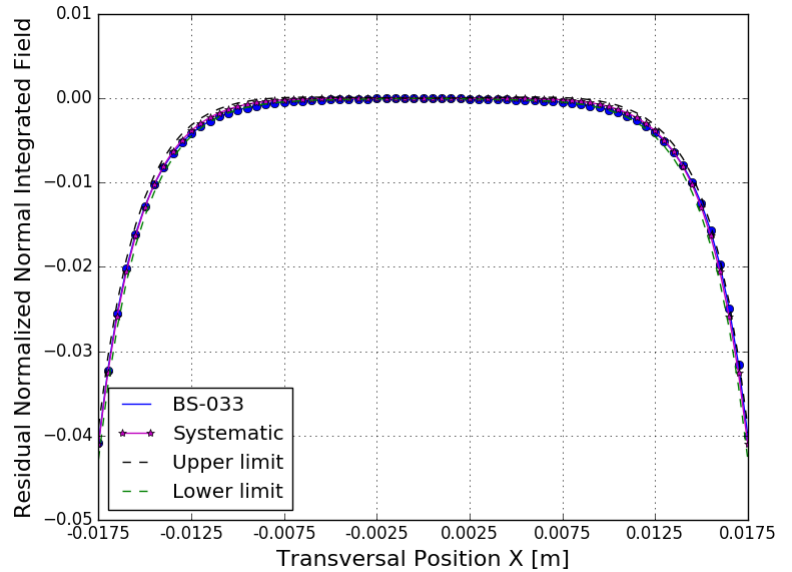
## BOOSTER MAGNET REPORT

### Results

|  |                     |
|--|---------------------|
| Date                                     | 20/10/2016          |
| Hour                                     | 09:05:55            |
| Temperature [°C]                         | 23.0                |
| Number of Measurements                   | 17                  |
| Main Coil Current [A]                    | (149.965 ± 0.002)   |
| Trim Coil Current [A]                    | --                  |
| Integrated Gradient [T/m]                | (-21.3955 ± 0.0008) |
| Magnet Center Offset X [μm] - (< ±160.0) | (-10.4 ± 0.2)       |
| Magnet Center Offset Y [μm] - (< ±160.0) | (-56.0 ± 0.4)       |
| Roll [mrad] - (< ±0.8)                   | (2.41 ± 0.06) x E-1 |

### Electric Parameters

|                           |       |
|---------------------------|-------|
| Inductance [mH]           | 0.105 |
| Voltage [V]               | --    |
| Resistance [mΩ]           | --    |
| Main Coil Number of Turns | 3     |



| n              | Normalized Normal Multipoles<br>x=17.5 mm<br>[T.m <sup>(2-n)</sup> ] | Normalized Skew Multipoles<br>x=17.5 mm<br>[T.m <sup>(2-n)</sup> ] |
|----------------|--|--|
| 1 (dipole)     | (-3.03 ± 0.02) x E-3   | (-2.03 ± 0.03) x E-3   |
| 2 (quadrupole) | (-1.19 ± 0.02) x E-3   | (-6.40 ± 0.05) x E-3   |
| 3 (sextupole)  | (1.00000 ± 0.00004)  | (7.2 ± 0.2) x E-4  |
| 4              | (-5 ± 2) x E-5   | (-2.4 ± 0.3) x E-4   |
| 5              | (-1.69 ± 0.02) x E-3   | (1.3 ± 0.5) x E-4  |
| 6              | (1.8 ± 0.2) x E-4  | (5 ± 5) x E-5  |
| 7              | (-3.8 ± 0.3) x E-4   | (1.0 ± 0.4) x E-4  |
| 8              | (1.4 ± 0.3) x E-4  | (5.5 ± 0.4) x E-4  |
| 9              | (-2.163 ± 0.005) x E-2   | (-7 ± 4) x E-5   |
| 10             | (-5.2 ± 42.9) x E-6  | (5 ± 7) x E-5  |
| 11             | (1.3 ± 0.2) x E-4  | (1 ± 6) x E-5  |
| 12             | (-2 ± 6) x E-5   | (-2 ± 6) x E-5   |
| 13             | (8.3 ± 25.2) x E-6   | (2 ± 5) x E-5  |
| 14             | (1.8 ± 0.4) x E-4  | (6.7 ± 0.5) x E-4  |
| 15             | (-1.686 ± 0.006) x E-2   | (-1.4 ± 0.4) x E-4   |

