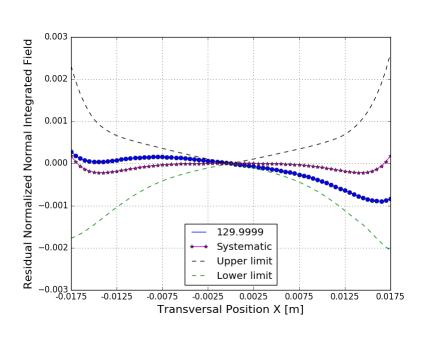


## **BQF-046**

## **BOOSTER MAGNET REPORT**

| Results                                  |                      |  |
|--|----------------------|--|
| Date                                     | 15/04/2016           |  |
| Hour                                     | 17:03:06             |  |
| Temperature [°C]                         | 21.3                 |  |
| Number of Measurements                   | 17                   |  |
| Main Coil Current [A]                    | (129.9999 ± 0.0005)  |  |
| Trim Coil Current [A]                    | (0 ± 0)              |  |
| Integrated Gradient [T]                  | (-4.82569 ± 0.00002) |  |
| Magnet Center Offset X [μm] - (< ±160.0) | (-17.51 ± 0.04)      |  |
| Magnet Center Offset Y [μm] - (< ±160.0) | (-32.64 ± 0.07)      |  |
| Roll [mrad] - (< ±0.8)                   | (-4.23 ± 0.05) x E-1 |  |
| Electric Parameters                      | 1                    |  |
| Indutance [mH]                           | 8.334                |  |
| Voltage [V]                              | 0.482                |  |
| Resistance [m $\Omega$ ]                 | 3.708                |  |
| Main Coil Number of Turns                | 26.25                |  |



|                | Normalized<br>Normal    | Normalized<br>Skew      |                         |
|----------------|-------------------------|-------------------------|-------------------------|
| n              | Multipoles<br>x=17.5 mm | Multipoles<br>x=17.5 mm |                         |
|                |                         |                         | [T.m <sup>(2-n)</sup> ] |
|                | 1 (dipole)              | (-1.001 ± 0.003) x E-3  | (-1.865 ± 0.004) x E-3  |
| 2 (quadrupole) | (1.000000 ± 0.000003)   | (-8.46 ± 0.03) x E-4    |                         |
| 3 (sextupole)  | (-4.74 ± 0.03) x E-4    | (-4.49 ± 0.04) x E-4    |                         |
| 4              | (-8.5 ± 0.3) x E-5      | (1.02 ± 0.04) x E-4     |                         |
| 5              | (-7.6 ± 0.3) x E-5      | (-3.2 ± 0.4) x E-5      |                         |
| 6              | (-1.182 ± 0.003) x E-3  | (-8 ± 3) x E-6          |                         |
| 7              | (4.2 ± 0.4) x E-5       | (-1.8 ± 0.5) x E-5      |                         |
| 8              | (-1.2 ± 0.3) x E-5      | (-3.9 ± 0.3) x E-5      |                         |
| 9              | (-2.4 ± 0.7) x E-5      | (1.4 ± 0.3) x E-5       |                         |
| 10             | (1.085 ± 0.006) x E-3   | (-1.2 ± 0.4) x E-5      |                         |
| 11             | (-3 ± 4) x E-6          | (-2.2 ± 0.4) x E-5      |                         |
| 12             | (6 ± 3) x E-6           | (8.8 ± 47.7) x E-7      |                         |
| 13             | (-1.3 ± 0.5) x E-5      | (1.2 ± 0.5) x E-5       |                         |
| 14             | (-9.6 ± 0.5) x E-5      | (-1.1 ± 0.5) x E-5      |                         |
| 15             | (-9 ± 5) x E-6          | (-1.7 ± 0.4) x E-5      |                         |

