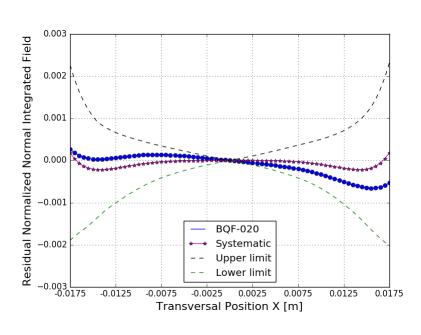


## **BQF-020**

## **BOOSTER MAGNET REPORT**

| Results                                  |                      |  |
|--|----------------------|--|
| Date                                     | 11/04/2016           |  |
| Hour                                     | 12:18:28             |  |
| Temperature [°C]                         | 21.2                 |  |
| Number of Measurements                   | 17                   |  |
| Main Coil Current [A]                    | (130.0030 ± 0.0005)  |  |
| Trim Coil Current [A]                    | (0 ± 0)              |  |
| Integrated Gradient [T]                  | (-4.82525 ± 0.00001) |  |
| Magnet Center Offset X [μm] - (< ±160.0) | (10.50 ± 0.05)       |  |
| Magnet Center Offset Y [μm] - (< ±160.0) | (-15.74 ± 0.10)      |  |
| Roll [mrad] - (< ±0.8)                   | (-4.52 ± 0.04) x E-1 |  |
| Electric Parameters                      | 1                    |  |
| Indutance [mH]                           | 8.303                |  |
| Voltage [V]                              | 0.48                 |  |
| Resistance [m $\Omega$ ]                 | 48.00                |  |
| Main Coil Number of Turns                | 26.25                |  |



| n              | Normalized<br>Normal<br>Multipoles<br>x=17.5 mm<br>[T.m <sup>(2-n)</sup> ] | Normalized<br>Skew<br>Multipoles<br>x=17.5 mm<br>[T.m <sup>(2-n)</sup> ] |
|----------------|--|--|
| 1 (dipole)     | (6.00 ± 0.03) x E-4  | (-8.99 ± 0.06) x E-4   |
| 2 (quadrupole) | (1.000000 ± 0.000003)  | (-9.03 ± 0.02) x E-4   |
| 3 (sextupole)  | (-3.91 ± 0.04) x E-4   | (-9.31 ± 0.05) x E-4   |
| 4              | (3.0 ± 0.4) x E-5  | (2.7 ± 0.5) x E-5  |
| 5              | (-3.6 ± 0.3) x E-5   | (7.8 ± 0.6) x E-5  |
| 6              | (-1.174 ± 0.003) x E-3   | (-7 ± 4) x E-6   |
| 7              | (3.8 ± 0.3) x E-5  | (-3 ± 4) x E-6   |
| 8              | (-1.6 ± 0.5) x E-5   | (-4.6 ± 0.5) x E-5   |
| 9              | (5 ± 3) x E-6  | (-2 ± 6) x E-6   |
| 10             | (1.117 ± 0.002) x E-3  | (1.4 ± 0.4) x E-5  |
| 11             | (-3 ± 3) x E-6   | (-1.4 ± 0.4) x E-5   |
| 12             | (2 ± 3) x E-6  | (2.3 ± 58.9) x E-7   |
| 13             | (6 ± 5) x E-6  | (1.4 ± 0.6) x E-5  |
| 14             | (-9.2 ± 0.6) x E-5   | (4 ± 4) x E-6  |
| 15             | (-1.9 ± 0.4) x E-5   | (9 ± 6) x E-6  |

