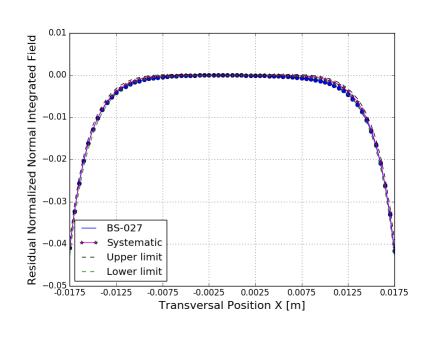


## **BS-027**

## **BOOSTER MAGNET REPORT**

| Results                                  |                     |  |
|--|---------------------|--|
| Date                                     | 24/10/2016          |  |
| Hour                                     | 09:09:44            |  |
| Temperature [°C]                         | 23.0                |  |
| Number of Measurements                   | 17                  |  |
| Main Coil Current [A]                    | (149.978 ± 0.002)   |  |
| Trim Coil Current [A]                    | (0 ± 0)             |  |
| Integrated Gradient [T.m]                | (-21.4409 ± 0.0004) |  |
| Magnet Center Offset X [μm] - (< ±160.0) | (9.29 ± 0.09)       |  |
| Magnet Center Offset Y [μm] - (< ±160.0) | (-44.0 ± 0.2)       |  |
| Roll [mrad] - (< ±0.8)                   | (2.2 ± 0.5) x E-2   |  |
| Electric Parameters                      |                     |  |
| Indutance [mH]                           | 0.106               |  |
| Voltage [V]                              |                     |  |
| Resistance [mΩ]                          |                     |  |
| Main Coil Number of Turns                | 3                   |  |



| n  | Normalized Normal Multipoles x=17.5 mm | Normalized Skew Multipoles x=17.5 mm |                         |                         |                      |
|----|--|--------------------------------------|-------------------------|-------------------------|----------------------|
|    |  |                                      | [T.m <sup>(2-n)</sup> ] | [T.m <sup>(2-n)</sup> ] |                      |
|    |  |                                      | 1 (dipole)              | (-3.63 ± 0.02) x E-3    | (-2.42 ± 0.03) x E-3 |
|    |  |                                      | 2 (quadrupole)          | (1.06 ± 0.01) x E-3     | (-5.03 ± 0.02) x E-3 |
|    | 3 (sextupole)                          | (1.00000 ± 0.00002)                  | (7 ± 2) x E-5           |                         |                      |
| 4  | (-3.0 ± 0.2) x E-4                     | (-9.1 ± 0.3) x E-4                   |                         |                         |                      |
| 5  | (-2.07 ± 0.02) x E-3                   | (2 ± 3) x E-5                        |                         |                         |                      |
| 6  | (9 ± 5) x E-5                          | (6 ± 4) x E-5                        |                         |                         |                      |
| 7  | (-5.1 ± 0.3) x E-4                     | (1.6 ± 0.4) x E-4                    |                         |                         |                      |
| 8  | (-9 ± 3) x E-5                         | (4.3 ± 0.4) x E-4                    |                         |                         |                      |
| 9  | (-2.173 ± 0.004) x E-2                 | (-6 ± 3) x E-5                       |                         |                         |                      |
| 10 | (2 ± 4) x E-5                          | (5 ± 3) x E-5                        |                         |                         |                      |
| 11 | (1.1 ± 0.6) x E-4                      | (-2 ± 4) x E-5                       |                         |                         |                      |
| 12 | (3 ± 9) x E-5                          | (-2 ± 5) x E-5                       |                         |                         |                      |
| 13 | (-3 ± 3) x E-5                         | (2 ± 5) x E-5                        |                         |                         |                      |
| 14 | (-1.4 ± 0.4) x E-4                     | (6.1 ± 0.5) x E-4                    |                         |                         |                      |
| 15 | (-1.714 ± 0.008) x E-2                 | (-5 ± 4) x E-5                       |                         |                         |                      |

