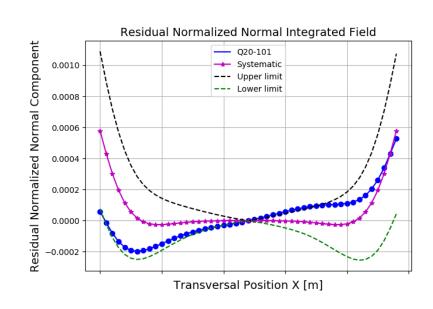


## Q20-101

## STORAGE RING MAGNET REPORT

| Results                                 |                     |
|---|---------------------|
| Results                                 |                     |
| Date                                    | 05/06/2018          |
| Hour                                    | 09:11:38            |
| Temperature [°C]                        | 23.11               |
| Number of Measurements                  | 9                   |
| Main Coil Current [A]                   | (157.5173 ± 0.0005  |
| Trim Coil Current [A]                   | (0 ± 0)             |
| CH Coil Current [A]                     | (0 ± 0)             |
| CV Coil Current [A]                     | (0 ± 0)             |
| QS Coil Current [A]                     | (0 ± 0)             |
| Integrated Gradient [T]                 | (-9.08948 ± 0.00004 |
| Magnet Center Offset X [μm] - (< ±40.0) | (10.16 ± 0.02)      |
| Magnet Center Offset Y [μm] - (< ±40.0) | (4.36 ± 0.04)       |
| Roll [mrad] - (< ±0.3)                  | (1.84 ± 0.02) x E-1 |
| Electric Parameters                     | 1                   |
| Indutance [mH]                          | 8.9467              |
| Voltage [V]                             | 5.42                |
| Resistance [m $\Omega$ ]                | 34.4                |
| Main Coil Number of Turns               | 23.25               |



|                | Normalized              | Normalized              |
|----------------|-------------------------|-------------------------|
|                | Normal                  | Skew                    |
| n              | Multipoles              | Multipoles              |
|                | x=12.0 mm               | x=12.0 mm               |
|                | [T.m <sup>(2-n)</sup> ] | [T.m <sup>(2-n)</sup> ] |
| 1 (dipole)     | (-8.47 ± 0.02) x E-4    | (-3.63 ± 0.03) x E-4    |
| 2 (quadrupole) | (1.000000 ± 0.000006)   | (3.68 ± 0.03) x E-4     |
| 3 (sextupole)  | (2.03 ± 0.02) x E-4     | (2.31 ± 0.03) x E-4     |
| 4              | (1.52 ± 0.03) x E-4     | (-2.9 ± 0.3) x E-5      |
| 5              | (4.4 ± 0.2) x E-5       | (-2.9 ± 0.4) x E-5      |
| 6              | (-8.15 ± 0.01) x E-4    | (7.1 ± 0.3) x E-5       |
| 7              | (-9 ± 3) x E-6          | (-2 ± 3) x E-6          |
| 8              | (-1.6 ± 0.3) x E-5      | (2 ± 4) x E-6           |
| 9              | (-2.4 ± 0.4) x E-5      | (-8.4 ± 22.7) x E-7     |
| 10             | (1.655 ± 0.003) x E-3   | (-3.6 ± 0.4) x E-5      |
| 11             | (9 ± 4) x E-6           | (-7 ± 5) x E-6          |
| 12             | (1.2 ± 0.4) x E-5       | (-3 ± 3) x E-6          |
| 13             | (1.8 ± 0.4) x E-5       | (2 ± 3) x E-6           |
| 14             | (-6.96 ± 0.03) x E-4    | (7 ± 4) x E-6           |
| 15             | (-6 ± 4) x E-6          | (8 ± 5) x E-6           |
|                |                         |                         |

