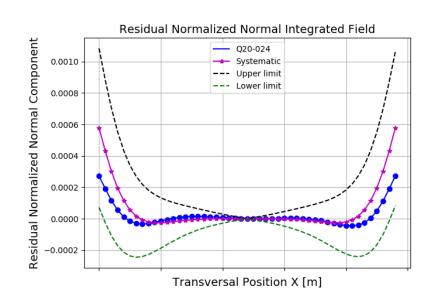


## Q20-024

## STORAGE RING MAGNET REPORT

| Results                                 |                     |  |
|---|---------------------|--|
| Date                                    | 12/06/2018          |  |
| Hour                                    | 12:43:23            |  |
| Temperature [°C]                        | 22.69               |  |
| Number of Measurements                  | 9                   |  |
| Main Coil Current [A]                   | (157.519 ± 0.001)   |  |
| 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]                 | (-9.09689 ± 0.00004 |  |
| Magnet Center Offset X [μm] - (< ±40.0) | (14.52 ± 0.04)      |  |
| Magnet Center Offset Y [μm] - (< ±40.0) | (6.28 ± 0.06)       |  |
| Roll [mrad] - (< ±0.3)                  | (1.10 ± 0.03) 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)     | (-1.210 ± 0.003) x E-3  | (-5.23 ± 0.05) x E-4    |
| 2 (quadrupole) | (1.000000 ± 0.000007)   | (2.20 ± 0.06) x E-4     |
| 3 (sextupole)  | (-2.1 ± 0.2) x E-5      | (5.3 ± 0.6) x E-5       |
| 4              | (1.73 ± 0.03) x E-4     | (-1.3 ± 0.6) x E-5      |
| 5              | (2.6 ± 0.2) x E-5       | (-4 ± 6) x E-6          |
| 6              | (-8.77 ± 0.03) x E-4    | (9.7 ± 0.6) x E-5       |
| 7              | (3 ± 3) x E-6           | (4 ± 5) x E-6           |
| 8              | (-1.3 ± 0.4) x E-5      | (-3 ± 5) x E-6          |
| 9              | (-1.4 ± 0.5) x E-5      | (-6 ± 7) x E-6          |
| 10             | (1.685 ± 0.004) x E-3   | (-4.1 ± 0.5) x E-5      |
| 11             | (7 ± 5) x E-6           | (-2 ± 5) x E-6          |
| 12             | (9 ± 3) x E-6           | (1 ± 5) x E-6           |
| 13             | (3 ± 4) x E-6           | (5 ± 5) x E-6           |
| 14             | (-7.05 ± 0.03) x E-4    | (2.0 ± 0.5) x E-5       |
| 15             | (-3 ± 4) x E-6          | (-6.5 ± 43.4) x E-7     |
|                |                         |                         |

