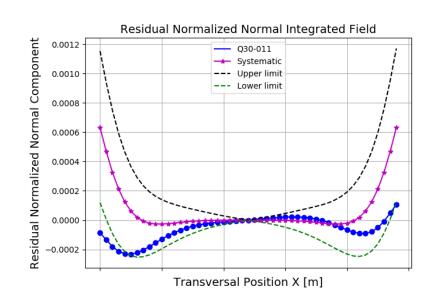


## Q30-011

## STORAGE RING MAGNET REPORT

| Results                                 |                      |  |
|---|----------------------|--|
| Date                                    | 02/05/2018           |  |
| Hour                                    | 18:02:47             |  |
| Temperature [°C]                        | 23.49                |  |
| Number of Measurements                  | 9                    |  |
| Main Coil Current [A]                   | (154.9965 ± 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]                 | (-13.63312 ± 0.00003 |  |
| Magnet Center Offset X [μm] - (< ±40.0) | (-13.47 ± 0.02)      |  |
| Magnet Center Offset Y [μm] - (< ±40.0) | (3.00 ± 0.07)        |  |
| Roll [mrad] - (< ±0.3)                  | (-3.27 ± 0.03) x E-1 |  |
| Electric Parameters                     |                      |  |
| Indutance [mH]                          | 9.24                 |  |
| Voltage [V]                             | 7.4863               |  |
| Resistance [m $\Omega$ ]                | 48.3                 |  |
| 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)     | (1.123 ± 0.002) x E-3   | (-2.50 ± 0.05) x E-4    |
| 2 (quadrupole) | (1.000000 ± 0.000004)   | (-6.55 ± 0.07) x E-4    |
| 3 (sextupole)  | (8.1 ± 0.3) x E-5       | (4.55 ± 0.05) x E-4     |
| 4              | (7.4 ± 0.4) x E-5       | (-4.9 ± 0.3) x E-5      |
| 5              | (5 ± 3) x E-6           | (-6.4 ± 0.6) x E-5      |
| 6              | (-1.117 ± 0.005) x E-3  | (1.01 ± 0.04) x E-4     |
| 7              | (1.2 ± 0.3) x E-5       | (-1.4 ± 0.7) x E-5      |
| 8              | (-7 ± 4) x E-6          | (-4 ± 4) x E-6          |
| 9              | (9 ± 5) x E-6           | (6 ± 4) x E-6           |
| 10             | (1.792 ± 0.006) x E-3   | (-4.6 ± 0.5) x E-5      |
| 11             | (-6 ± 5) x E-6          | (6 ± 6) x E-6           |
| 12             | (2 ± 5) x E-6           | (1.1 ± 0.5) x E-5       |
| 13             | (-4 ± 6) x E-6          | (-3 ± 4) x E-6          |
| 14             | (-7.35 ± 0.05) x E-4    | (7 ± 5) x E-6           |
| 15             | (1 ± 4) x E-6           | (-3 ± 4) x E-6          |
|                |                         |                         |

