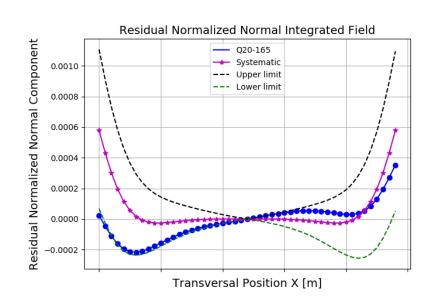


## Q20-165

## STORAGE RING MAGNET REPORT

| Results                                 |                     |  |
|---|---------------------|--|
| Date                                    | 15/05/2018          |  |
| Hour                                    | 12:18:57            |  |
| Temperature [°C]                        | 23.49               |  |
| Number of Measurements                  | 9                   |  |
| Main Coil Current [A]                   | (157.5579 ± 0.0004  |  |
| 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]                 | (-9.09113 ± 0.00003 |  |
| Magnet Center Offset X [μm] - (< ±40.0) | (7.66 ± 0.02)       |  |
| Magnet Center Offset Y [μm] - (< ±40.0) | (3.5 ± 0.5) x E-1   |  |
| Roll [mrad] - (< ±0.3)                  | (-8.1 ± 0.1) x E-2  |  |
| 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)     | (-6.38 ± 0.02) x E-4    | (-2.9 ± 0.4) x E-5      |
| 2 (quadrupole) | (1.000000 ± 0.000004)   | (-1.63 ± 0.03) x E-4    |
| 3 (sextupole)  | (1.69 ± 0.03) x E-4     | (-1.46 ± 0.05) x E-4    |
| 4              | (4.3 ± 0.4) x E-5       | (-1.3 ± 0.3) x E-5      |
| 5              | (3 ± 4) x E-6           | (1.7 ± 0.4) x E-5       |
| 6              | (-8.15 ± 0.04) x E-4    | (1.07 ± 0.04) x E-4     |
| 7              | (-9.5 ± 59.5) x E-7     | (1.4 ± 0.3) x E-5       |
| 8              | (1 ± 4) x E-6           | (-8 ± 4) x E-6          |
| 9              | (-8 ± 4) x E-6          | (-4 ± 3) x E-6          |
| 10             | (1.655 ± 0.005) x E-3   | (-5.7 ± 0.4) x E-5      |
| 11             | (-6.4 ± 41.4) x E-7     | (-8 ± 3) x E-6          |
| 12             | (-5 ± 6) x E-6          | (9 ± 4) x E-6           |
| 13             | (4 ± 6) x E-6           | (4 ± 7) x E-6           |
| 14             | (-6.92 ± 0.04) x E-4    | (2.1 ± 0.4) x E-5       |
| 15             | (-9.9 ± 39.3) x E-7     | (2 ± 2) x E-6           |
|                |                         |                         |

