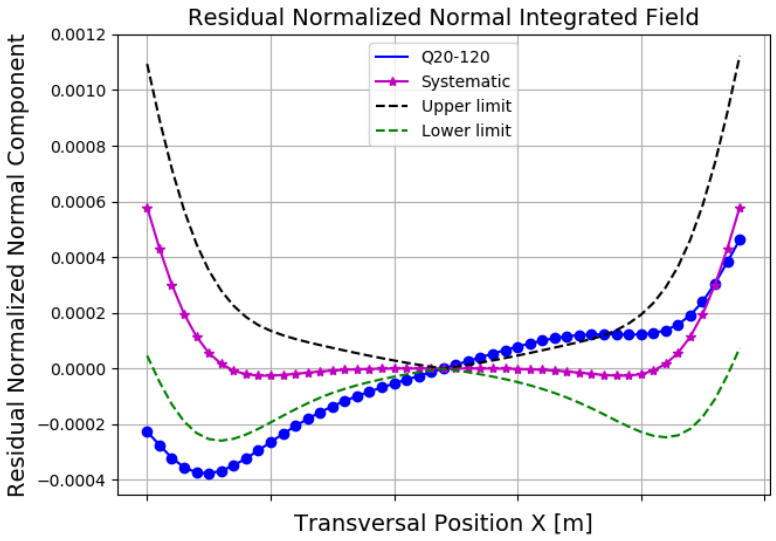
# Q20-120

# STORAGE RING MAGNET REPORT

| Results | |
|---|---|
| **Date** | 05/06/2018 |
| **Hour** | 16:21:04 |
| **Temperature [°C]** | 22.94 |
| **Number of Measurements** | 9 |
| **Main Coil Current [A]** | (157.4360 ± 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]** | (-9.08683 ± 0.00004) |
| **Magnet Center Offset X [μm] - (< ±40.0)** | (-4.6 ± 0.3) x E-1 |
| **Magnet Center Offset Y [μm] - (< ±40.0)** | (5.03 ± 0.04) |
| **Roll [mrad] - (< ±0.3)** | (1.46 ± 0.02) x E-1 |
| **Electric Parameters** | |
| **Indutance [mH]** | 8.9467 |
| **Voltage [V]** | 5.42 |
| **Resistance [mΩ]** | 34.4 |
| **Main Coil Number of Turns** | 23.25 |




| n | Normalized Normal Multipoles x=12.0 mm [T.m$^{(2-n)}$] | Normalized Skew Multipoles x=12.0 mm [T.m$^{(2-n)}$] |
|---|---|---|
| 1 (dipole) | (3.8 ± 0.2) x E-5 | (-4.19 ± 0.03) x E-4 |
| 2 (quadrupole) | (1.000000 ± 0.000007) | (2.91 ± 0.05) x E-4 |
| 3 (sextupole) | (3.21 ± 0.03) x E-4 | (3.23 ± 0.04) x E-4 |
| 4 | (1.8 ± 0.4) x E-5 | (-1.2 ± 0.3) x E-5 |
| 5 | (3.8 ± 0.4) x E-5 | (-4.9 ± 0.4) x E-5 |
| 6 | (-8.51 ± 0.04) x E-4 | (7.7 ± 0.6) x E-5 |
| 7 | (-1.4 ± 0.4) x E-5 | (-1.4 ± 0.7) x E-5 |
| 8 | (9 ± 6) x E-6 | (-3 ± 4) x E-6 |
| 9 | (-1.9 ± 0.6) x E-5 | (-2 ± 5) x E-6 |
| 10 | (1.649 ± 0.004) x E-3 | (-2.7 ± 0.6) x E-5 |
| 11 | (1.4 ± 0.6) x E-5 | (1.1 ± 0.8) x E-5 |
| 12 | (-1.3 ± 0.7) x E-5 | (7 ± 5) x E-6 |
| 13 | (1.7 ± 0.7) x E-5 | (2 ± 6) x E-6 |
| 14 | (-6.94 ± 0.05) x E-4 | (-5 ± 9) x E-6 |
| 15 | (-1.3 ± 0.7) x E-5 | (-6 ± 6) x E-6 |