



S15-180

STORAGE RING MAGNET REPORT

Results

Date 16/08/2018

Hour 11:11:46

Temperature [°C] 23.572

Number of Measurements 9

Main Coil Current [A] (167.797 ± 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/m] (-359.960 ± 0.003)

Magnet Center Offset X [μm] - (< ±40.0) (10.26 ± 0.05)

Magnet Center Offset Y [μm] - (< ±40.0) (28.39 ± 0.06)

Roll [mrad] - (< ±0.3) (9.6 ± 0.6) × E-2

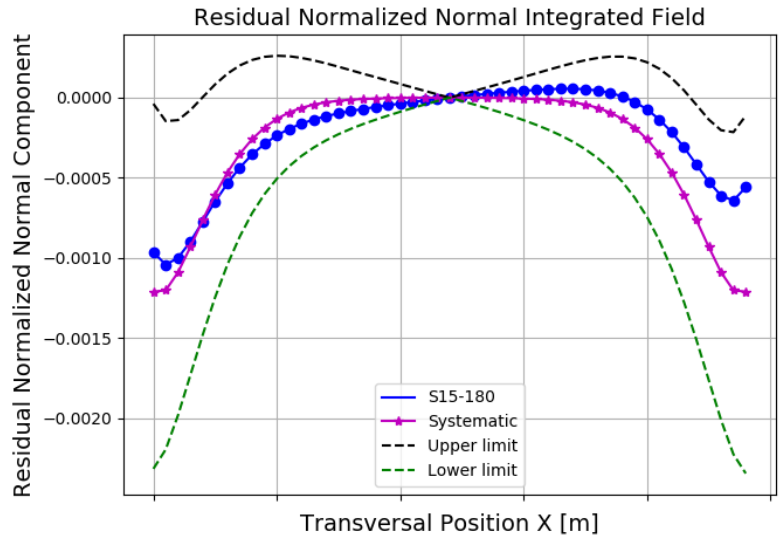
Electric Parameters

Inductance [mH] 3.157

Voltage [V] 6.0106

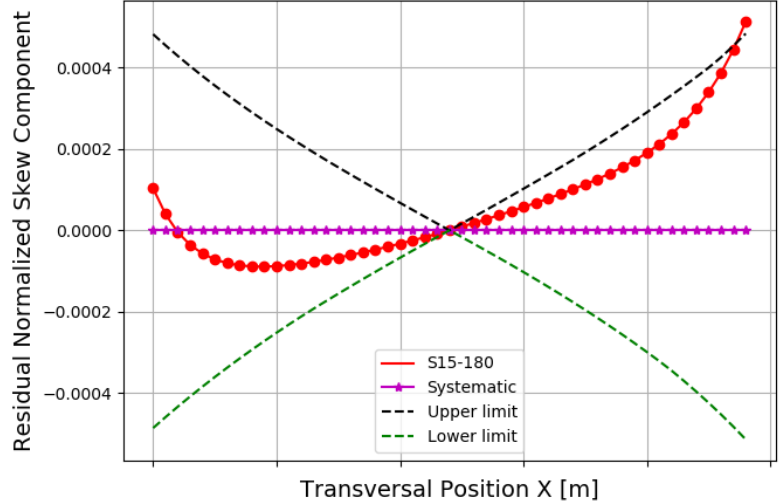
Resistance [mΩ] 35.82

Main Coil Number of Turns 11.25



| n | Normalized Normal Multipoles x=12.0 mm [T.m ⁽²⁻ⁿ⁾] | Normalized Skew Multipoles x=12.0 mm [T.m ⁽²⁻ⁿ⁾] |
|---|--|--|
|---|--|--|

Residual Normalized Skew Integrated Field



| | | |
|------------|--------------------|----------------------|
| 1 (dipole) | (-9.6 ± 0.1) × E-4 | (-1.91 ± 0.07) × E-4 |
|------------|--------------------|----------------------|

| | | |
|----------------|------------------------|----------------------|
| 2 (quadrupole) | (-1.711 ± 0.009) × E-3 | (-4.73 ± 0.01) × E-3 |
|----------------|------------------------|----------------------|

| | | |
|---------------|---------------------|-------------------|
| 3 (sextupole) | (1.00000 ± 0.00001) | (2.9 ± 0.2) × E-4 |
|---------------|---------------------|-------------------|

| | | |
|---|-------------------|-------------------|
| 4 | (2.0 ± 0.2) × E-4 | (2.1 ± 0.1) × E-4 |
|---|-------------------|-------------------|

| | | |
|---|--------------------|---------------|
| 5 | (-1.2 ± 0.2) × E-4 | (8 ± 2) × E-5 |
|---|--------------------|---------------|

| | | |
|---|---------------|--------------------|
| 6 | (2 ± 2) × E-5 | (-1.9 ± 1.0) × E-5 |
|---|---------------|--------------------|

| | | |
|---|---------------|-----------------------|
| 7 | (3 ± 2) × E-5 | (9.03 ± 148.77) × E-7 |
|---|---------------|-----------------------|

| | | |
|---|--------------------|---------------|
| 8 | (7.1 ± 10.8) × E-6 | (3 ± 1) × E-5 |
|---|--------------------|---------------|

| | | |
|---|----------------------|-------------------|
| 9 | (-2.03 ± 0.01) × E-3 | (2.0 ± 0.1) × E-4 |
|---|----------------------|-------------------|

| | | |
|----|---------------------|-------------------|
| 10 | (-1.1 ± 17.8) × E-6 | (2.7 ± 1.0) × E-5 |
|----|---------------------|-------------------|

| | | |
|----|--------------------|----------------|
| 11 | (7.2 ± 17.7) × E-6 | (-2 ± 2) × E-5 |
|----|--------------------|----------------|

| | | |
|----|--------------------|---------------|
| 12 | (2.2 ± 14.6) × E-6 | (3 ± 7) × E-6 |
|----|--------------------|---------------|

| | | |
|----|----------------|----------------|
| 13 | (-1 ± 1) × E-5 | (-4 ± 9) × E-6 |
|----|----------------|----------------|

| | | |
|----|--------------------|----------------|
| 14 | (-2.5 ± 0.7) × E-5 | (-5 ± 2) × E-5 |
|----|--------------------|----------------|

| | | |
|----|-----------------------|---------------|
| 15 | (1.363 ± 0.006) × E-3 | (5 ± 1) × E-5 |
|----|-----------------------|---------------|