

Rough Magnetic Field Mapping

| | Left | | | Right | | | | |
|-------|----------|-------|-------|----------|------|-------|-------|------|
| | Position | Volt | Gauss | Position | Volt | Gauss | R-L % | |
| Inner | 0 | 1.716 | 3432 | Inner | 0 | 1.732 | 3464 | 0.9 |
| | 10 | 1.394 | 2788 | | 10 | 1.423 | 2846 | 2.1 |
| | 20 | 0.953 | 1906 | | 20 | 0.978 | 1956 | 2.6 |
| | 30 | 0.795 | 1590 | | 30 | 0.819 | 1638 | 3.0 |
| | 40 | 0.893 | 1786 | | 40 | 0.909 | 1818 | 1.8 |
| | 50 | 1.023 | 2046 | | 50 | 1.036 | 2072 | 1.3 |
| Outer | 0 | 0.053 | 106 | Outer | 0 | 0.048 | 96 | -9.9 |
| | 30 | 0.747 | 1494 | | 30 | 0.738 | 1476 | -1.2 |
| | 60 | 0.744 | 1488 | | 60 | 0.714 | 1428 | -4.1 |
| | 90 | 0.490 | 980 | | 90 | 0.472 | 944 | -3.7 |
| | 120 | 0.288 | 576 | | 120 | 0.274 | 548 | -5.0 |

Accuracy and repeatability better than 2%.

Measurements made in the median plane on the outer surface of the inner and outer WC covers.

Positions are in inches from the inner surface of the WC gas volume at 20 degree end.

Measurement is of the vertical magnetic field.

Comparing Magnetic Field with Sub-Detector Open/Closed

| | Open | | | Closed | | | | |
|-------|----------|-------|-------|--------|----------|-------|-------|-------|
| | Position | Volt | Gauss | | Position | Volt | Gauss | O-C % |
| Frame | 0 | 0.251 | 502 | Frame | 0 | 0.247 | 494 | 1.6 |
| | 20 | 0.271 | 542 | | 20 | 0.295 | 590 | -8.5 |
| | 40 | 0.241 | 482 | | 40 | 0.245 | 490 | -1.6 |
| | 60 | 0.250 | 500 | | 60 | 0.287 | 574 | -13.8 |
| | 80 | 0.199 | 398 | | 80 | 0.226 | 452 | -12.7 |
| | 100 | 0.198 | 396 | | 100 | 0.217 | 434 | -9.2 |
| Strut | 1 | 1.235 | 2470 | Strut | 1 | 1.235 | 2470 | 0.0 |
| | 2 | 1.236 | 2472 | | 2 | 1.239 | 2478 | -0.2 |
| | 3 | 1.200 | 2400 | | 3 | 1.210 | 2420 | -0.8 |
| | 4 | 1.210 | 2420 | | 4 | 1.194 | 2388 | 1.3 |

Frame measurements are of the radial component of field on the coil support frame.

Frame position is in inches along the frame from the 90 degree point.

Frame measurements when closed are quite close to Cerenkov shielding for 40, 60, and 80.

Strut Measurements are of the azimuthal component of the field on the struts in the coil centre.

Strut position is counting from the 90 degree point and each side of the strut.