



National Physical Laboratory

Project Title: Validating Precision Measurement of Very Large Electric Currents

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Summary

Measurement	Variation	Uncertainty	Notes
Along 355 mm bus bar	0.35% across bar 0.03% across central 50 mm	-	0.03% incorporated as uncertainty in remainder of testing
Rotation with bus bar at edge of coil	0.4% variation	0.06%	
Rotation with bus bar in middle of coil	0.12% variation	0.06%	
Off- bar measurement	190 ppm	0.006%	At a coil diameter away from the busbar Only done in one orientation, would vary with location
Linearity measurement from 500 A to 9 kA	Ratio 0.2% Phase 0.0235 rad	0.09% ratio 0.017 rad	
Tension	80 ppm	-	



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