

# 1 Objective

The objective is to analyze a circuit and measure the real values to validate the calculated values [1].

# 2 Equipment Used

- Digital Multimeter
- DC Power Supply
- Resistors:  $1.2k\Omega$ ,  $3.3k\Omega$ ,  $10k\Omega$

# 3 Experiment Setup

# 4 Results

**Table 9-1: Calculated Voltage and Current for Resistor R3 [1]**

	Thevenin Equivalent	Norton Equivalent
$I_{R3}$	4.9 mA	4.9 mA
$V_{R3}$	16.17 V	16.17 V

**Table 9-2: Measured Thevenin and Norton Equivalents [1]**

Thevenin Equivalent		Norton Equivalent	
$v_{TH}$	21.43 V	$i_N$	18.3 mA
$R_{TH}$	$1.056k\Omega$	$R_N$	$1.056k\Omega$

**Table 9-3: Measured Voltage and Current for Resistor R3 [1]**

	Figure 9-3	Thevenin Equivalent	Norton Equivalent
$I_{R3}$	4.961 mA	4.961 mA	4.596 mA
$V_{R3}$	16.19 V	16.18 V	15 V

# 5 Conclusion

# References

- [1] UNCC ECE Department. Thevenin and Norton Equivalent Circuits, 2023. [Online; accessed 17 November 2023].