

## Site Voltage Report - Bottle Shop

**Voltage as a Service (VAAS)<sup>TM</sup>** is an energy-saving service solution for regulating and optimising the voltage supplied to electrical equipment to the optimal level for efficient operation. The purpose of VAAS is to reduce energy consumption, lower electricity bills, and decrease carbon emissions by ensuring that electrical devices operate at their most efficient voltage level.

### Executive Summary

<b>Objective</b>	Report on voltage provided to load using Voltage Optimisation
<b>Site Location</b>	Site #1030 Regional City, Western Australia, Australia
<b>Facility Type</b>	Bottle Shop
<b>Time Period</b>	A 6 month period, from 3 <sup>rd</sup> January 2024 through to 28 <sup>th</sup> August 2024

### Methodology

<b>Data Collection</b>	3 phase voltage meter
<b>Communication</b>	4G wireless. 1 minute interval messaging
<b>Sample interval</b>	1 minute interval data
<b>Data storage</b>	iStar Cloud Repository
<b>Accuracy</b>	Class 1 accuracy

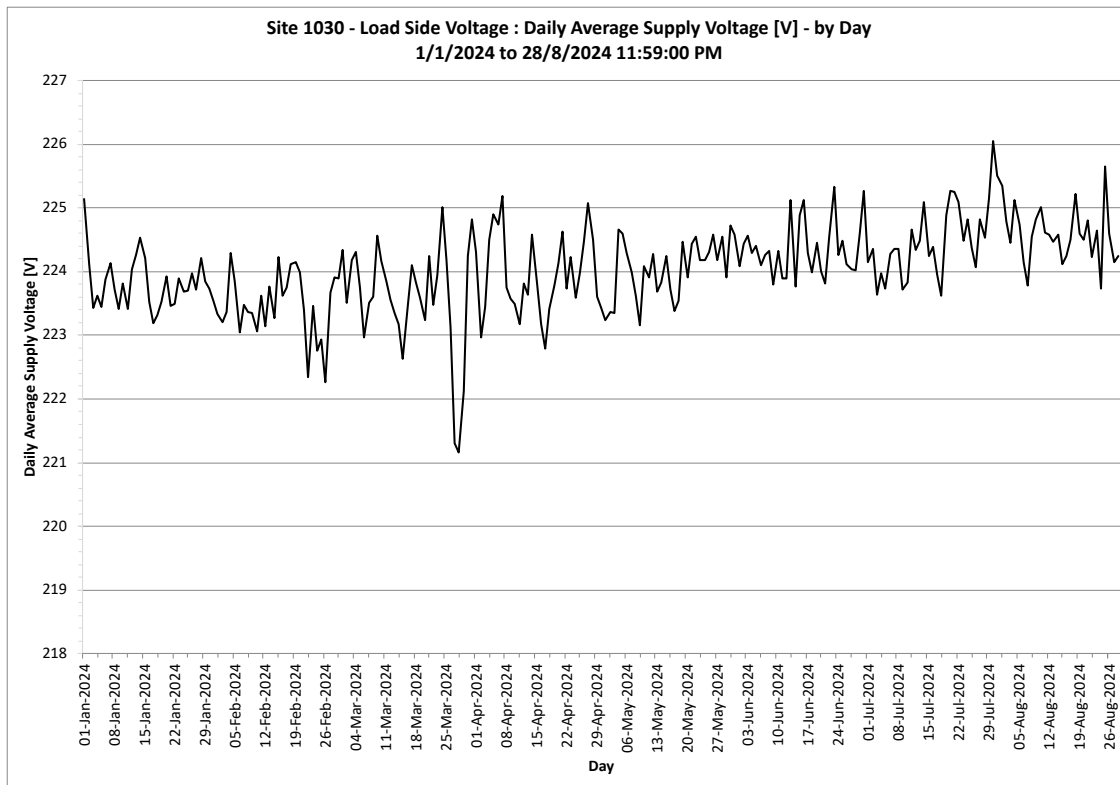
### Summary Statistics

Statistic	Phase 1 Voltage	Phase 2 Voltage	Phase 3 Voltage	Average Voltage	Minimum Voltage	Maximum Voltage
<b>Mean</b>	223.43	223.98	224.68	224.03	223.32	224.73
<b>Median</b>	223.30	223.90	224.70	223.97	223.20	224.70
<b>Mode</b>	221.30	224.10	224.50	223.67	221.30	224.70
<b>Minimum</b>	210.10	188.70	190.70	196.50	188.70	210.10
<b>Maximum</b>	247.00	247.10	247.50	247.20	247.00	247.50
<b>Range</b>	36.90	58.40	56.80	50.70	58.30	37.40
<b>Standard Deviation</b>	1.67	1.50	1.54	1.52	1.59	1.53
<b>Sample Variance</b>	2.80	2.25	2.37	2.30	2.53	2.34
<b>Kurtosis</b>	3.80	6.99	6.13	6.06	5.37	5.58
<b>Skewness</b>	0.77	0.66	0.43	0.70	0.75	0.52
<b># Samples Read</b>	337,117	337,117	337,117	337,117	337,117	337,117
<b>Start date</b>	1/1/2024	1/1/2024	1/1/2024	1/1/2024	1/1/2024	1/1/2024
<b>End date</b>	28/8/2024	28/8/2024	28/8/2024	28/8/2024	28/8/2024	28/8/2024
<b>Days</b>	241.00	241.00	241.00	241.00	241.00	241.00

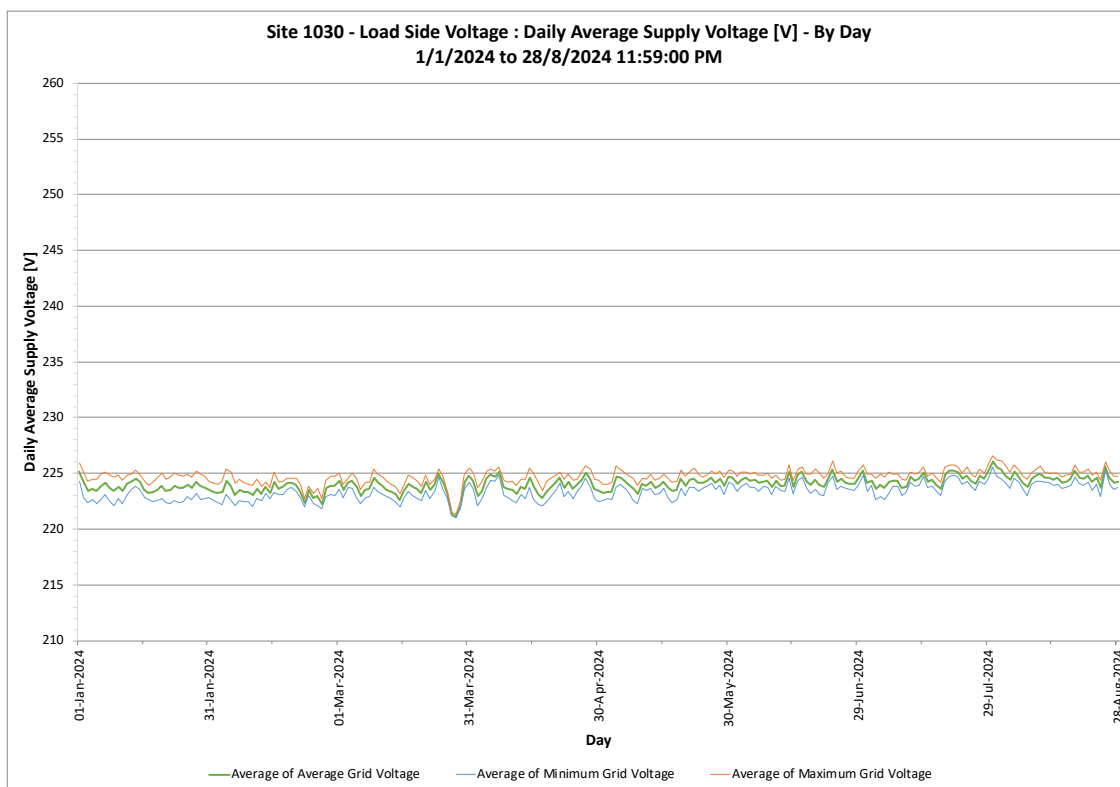
## VAASCO GROUP

VAASCO Group Ltd ABN 80 653 685 164  
corporate HQ – Suite 3, Level 10, 45 William Street, Melbourne VIC 3000 Australia  
correspondence - PO Box 7, Flinders Lane Victoria 8009 Australia

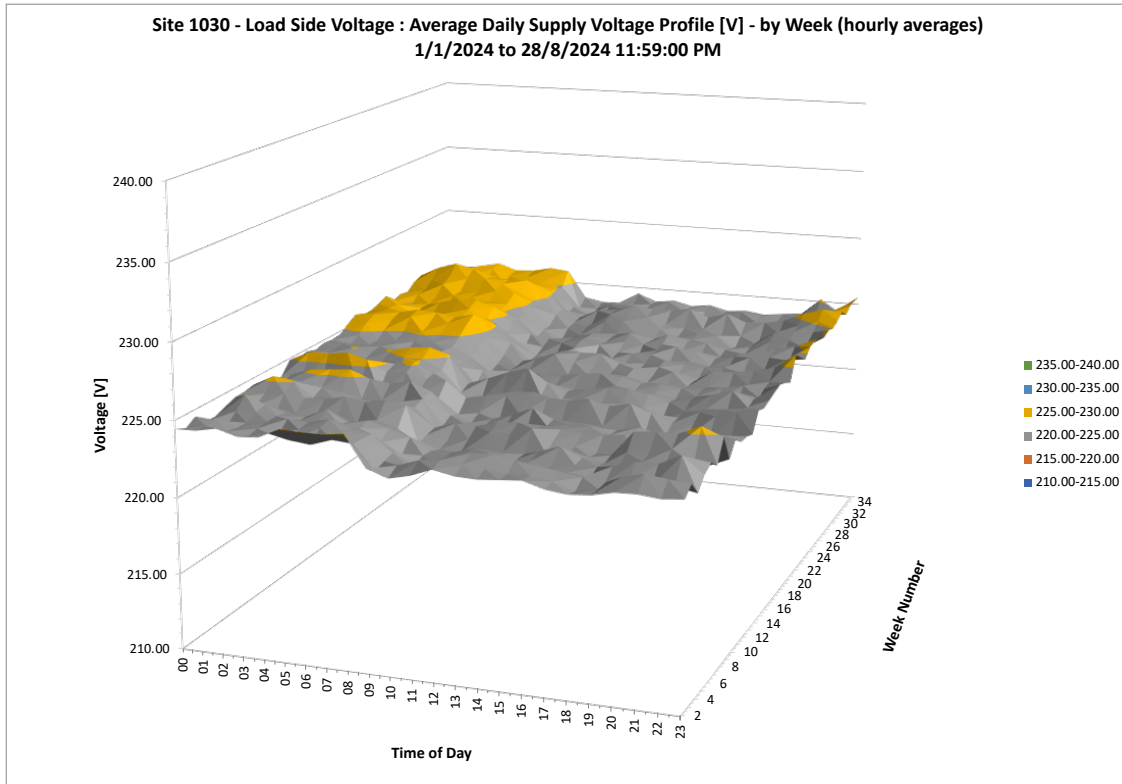
**Figure 1** Average Load Voltage – 1 minute average - 8 month period



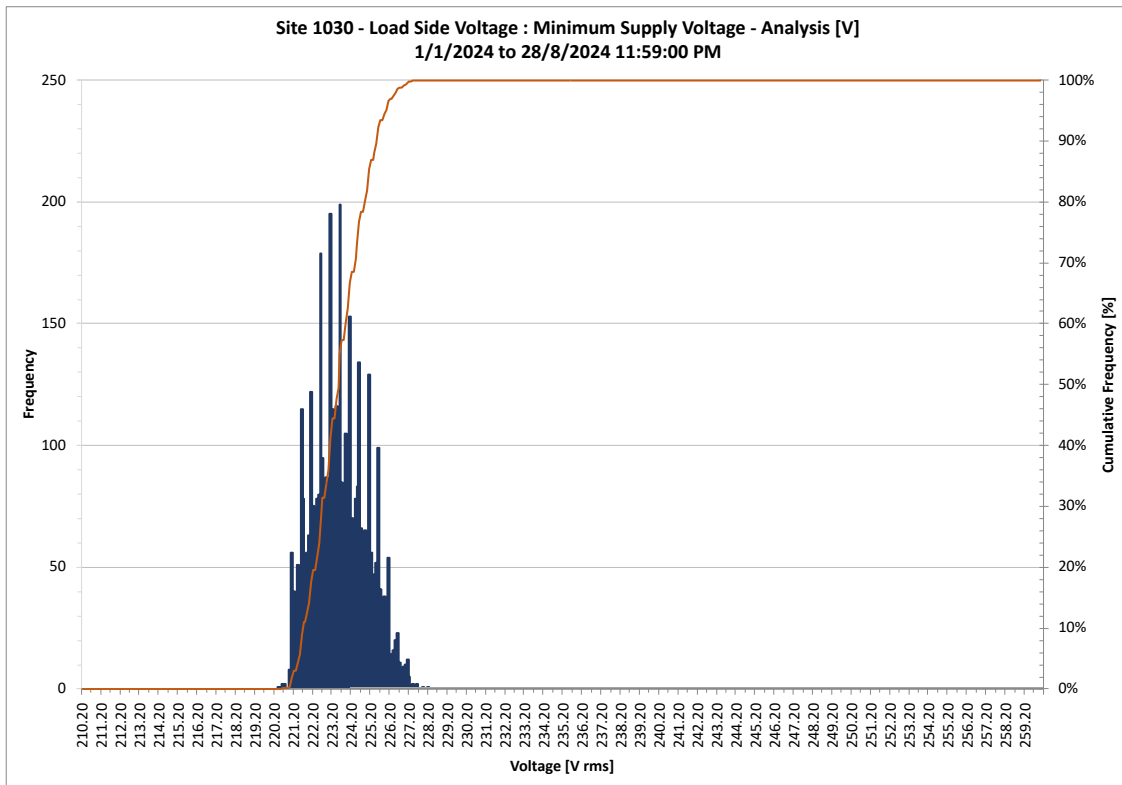
**Figure 2** Average Time of Day Load Voltage – Min, Avg and Max 1 minute average - 8 month period



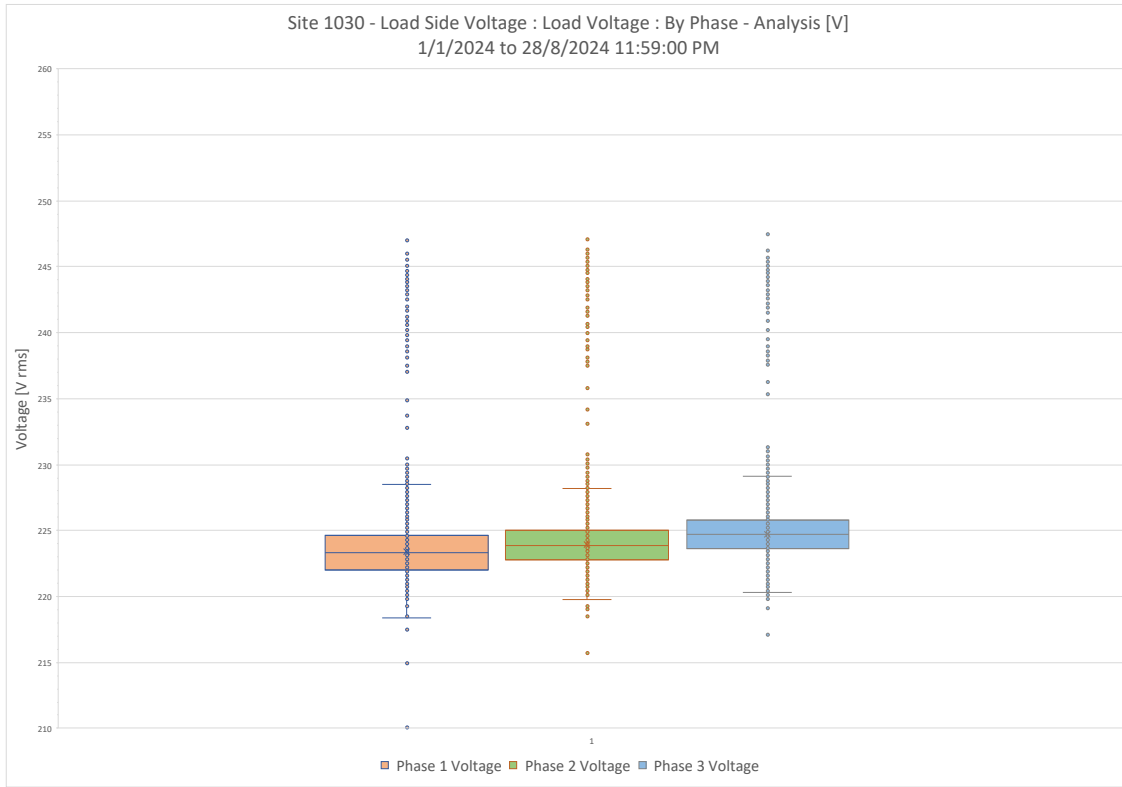
**Figure 3** Average Time of Day Load Voltage – 1 minute average – By week - 8 month period



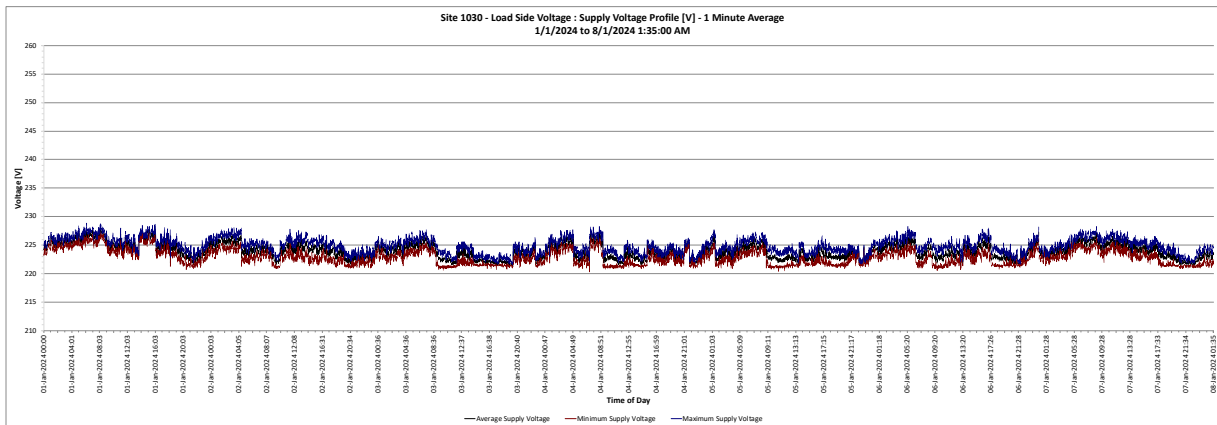
**Figure 4** Average Load Voltage - Histogram – 1 minute average – 8 month period



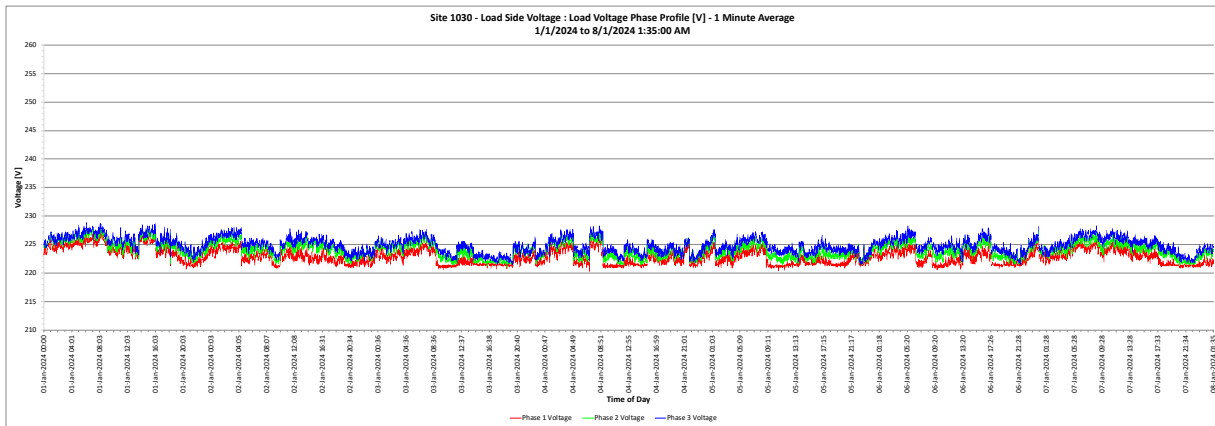
**Figure 5 Average Load Voltage - Box Whisker Plot – 3 phases - 1 minute average – 8 month period**



**Figure 6 Voltage – Minimum, Average and Maximum 1 minute average over 1 week period**



**Figure 7 Three Phase Voltage – 1 minute average over 1 week period**



## Conclusion

Voltage Optimisation offers both immediate and long-term financial benefits while aligning with broader strategic goals related to sustainability, operational efficiency, and risk management. These benefits make VO an attractive proposition for businesses looking to reduce energy costs, enhance their environmental credentials, and improve their overall competitiveness.

VAAS can provide a very useful contribution to a company’s plans to meet its Carbon emission targets, as well as reporting requirements. VAAS provides the right voltage to electrical equipment, ensuring efficiency, cost savings, environmental benefits and performance reporting while maintaining equipment performance and longevity.

For further information, contact us at [sales@vaasco.net](mailto:sales@vaasco.net)

## VAASCO GROUP

VAASCO Group Ltd ABN 80 653 685 164  
corporate HQ – Suite 3, Level 10, 45 William Street, Melbourne VIC 3000 Australia  
correspondence - PO Box 7, Flinders Lane Victoria 8009 Australia

phone +61 2 9475 0971

fax +61 2 9475 4055

email [sales@vaasco.net](mailto:sales@vaasco.net)

web [www.vaasco.net](http://www.vaasco.net)