

EIFS 2023:3

Site name: Vinga bus laddstation
Meter serial no: 27100497
Period start: 2023-11-27 00:00:00
Period end: 2024-02-04 23:59:59
Nominal voltage: 230,00V
Version: 24.0

Summary

Unbalance	Passed
Voltage variations	Passed
THD	Passed
PLT	Passed
Individual harmonics	Failed
Voltage dips	Failed - Needs investigation
Voltage swells	Passed
RVC	Passed
Interruptions	Informative

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1 Voltage unbalance

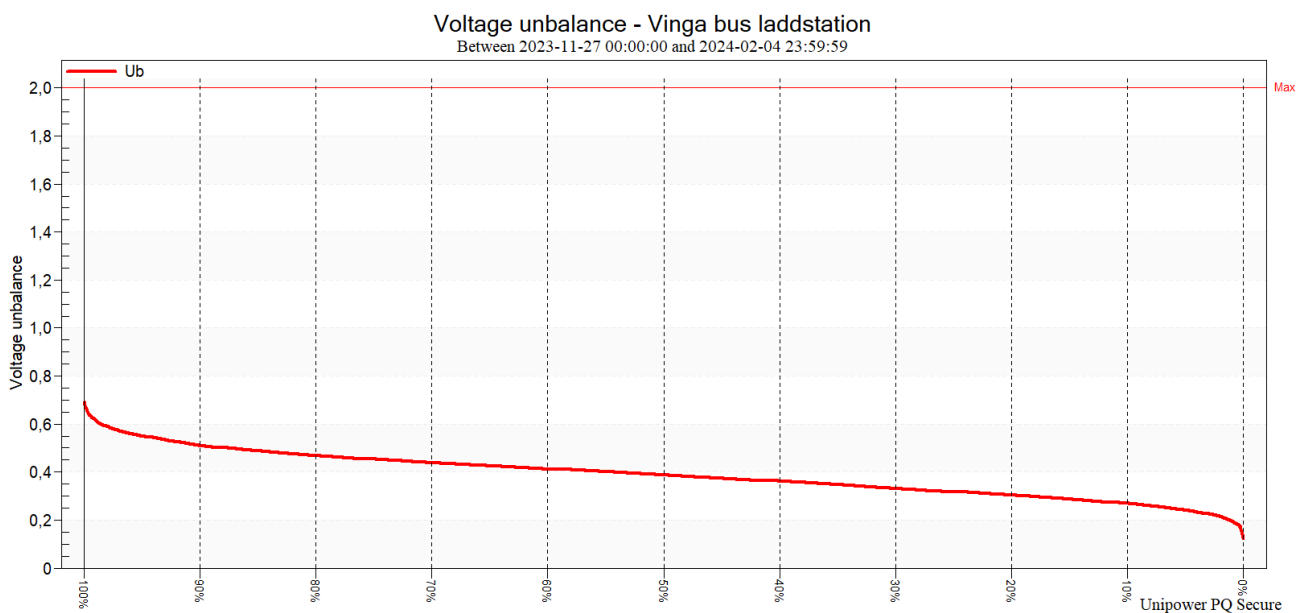
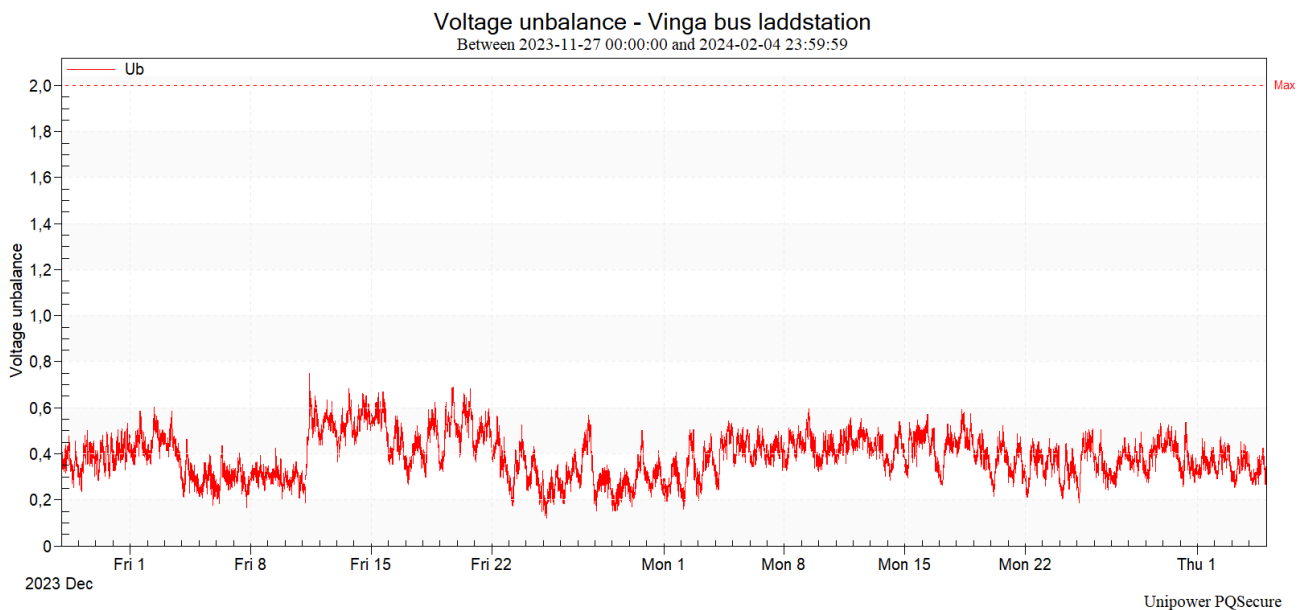
The voltage unbalance is assessed according to EIFS 2023:3 section 7.7.

All 10m values of the voltage asymmetry, measured as negative sequence asymmetry, shall be $\leq 2\%$.

Max 2,00% during 100% of time.

Phase	Within limit [%]	Max [%]	Min [%]	95% [%]	Result
Ub	100	0,750	0,122	0,550	Passed

Excluded 4 flagged value(s) in the result



2 Voltage variation

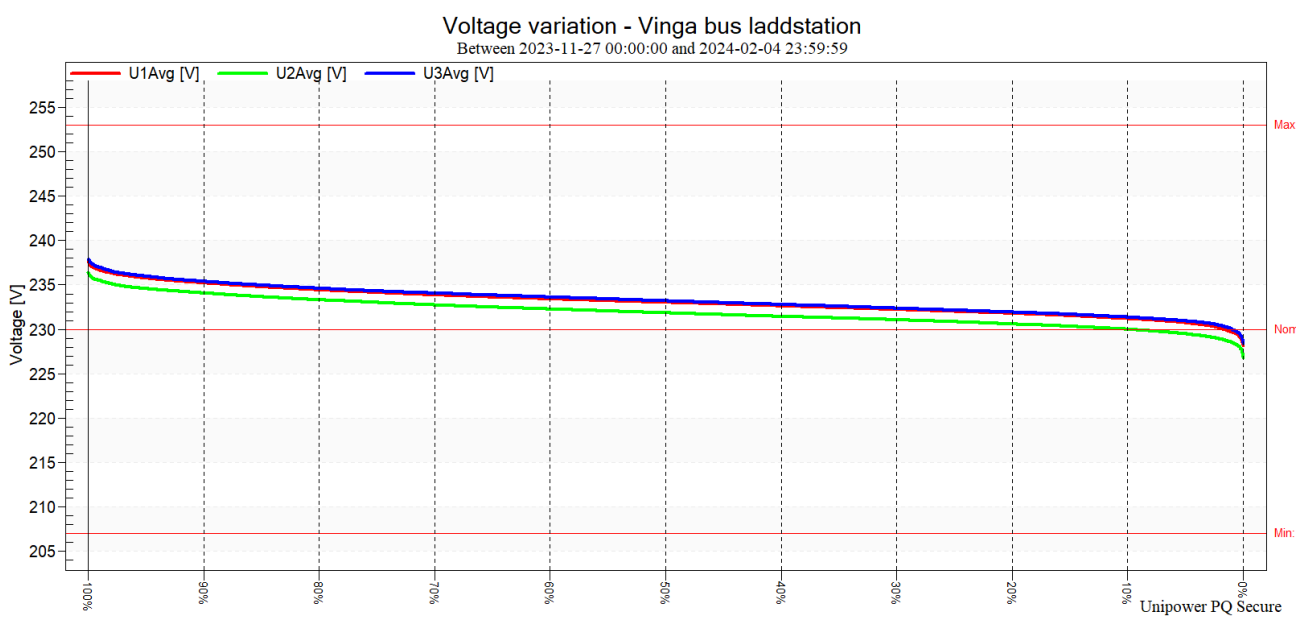
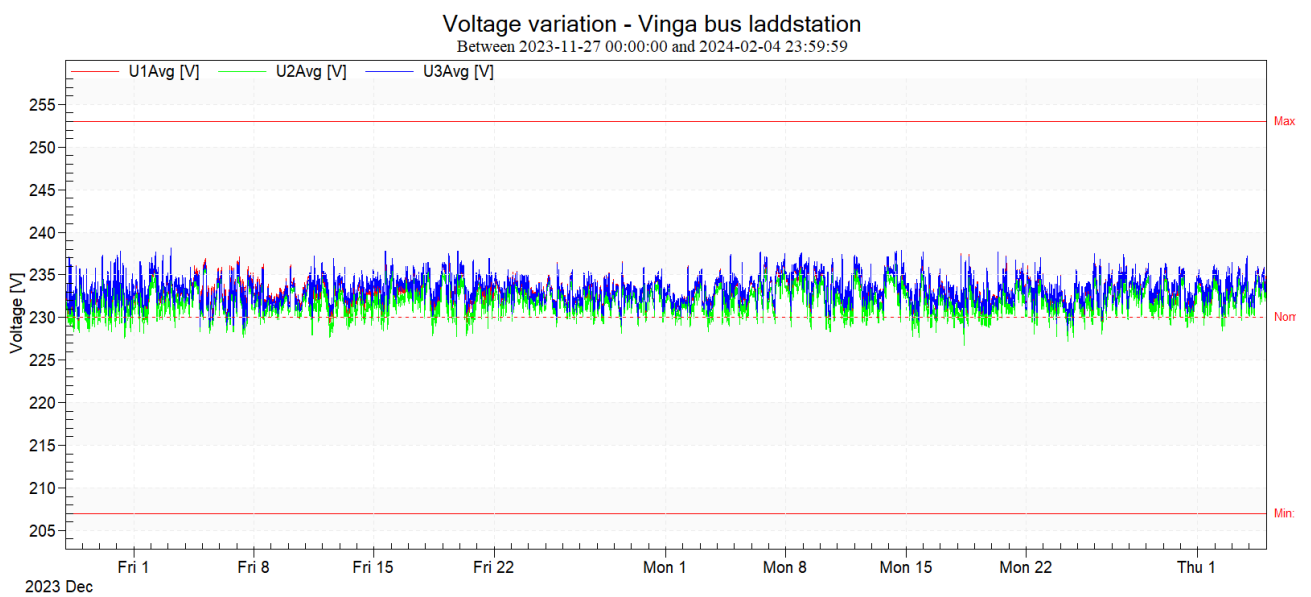
The voltage variation is assessed according to EIFS 2023:3 section 7.3.

All 10m rms values of the supply voltage shall be between 90% and 110% of the reference voltage.

Max 253,00V, Min 207,00V during 100% of time.

Phase	Within limit [%]	Max [V]	Min [V]	95% [V]	Result
U1Avg	100	237,85	228,19	235,76	Passed
U2Avg	100	236,44	226,74	234,57	Passed
U3Avg	100	238,15	228,45	235,96	Passed

Excluded 4 flagged value(s) in the result



3 THD analysis

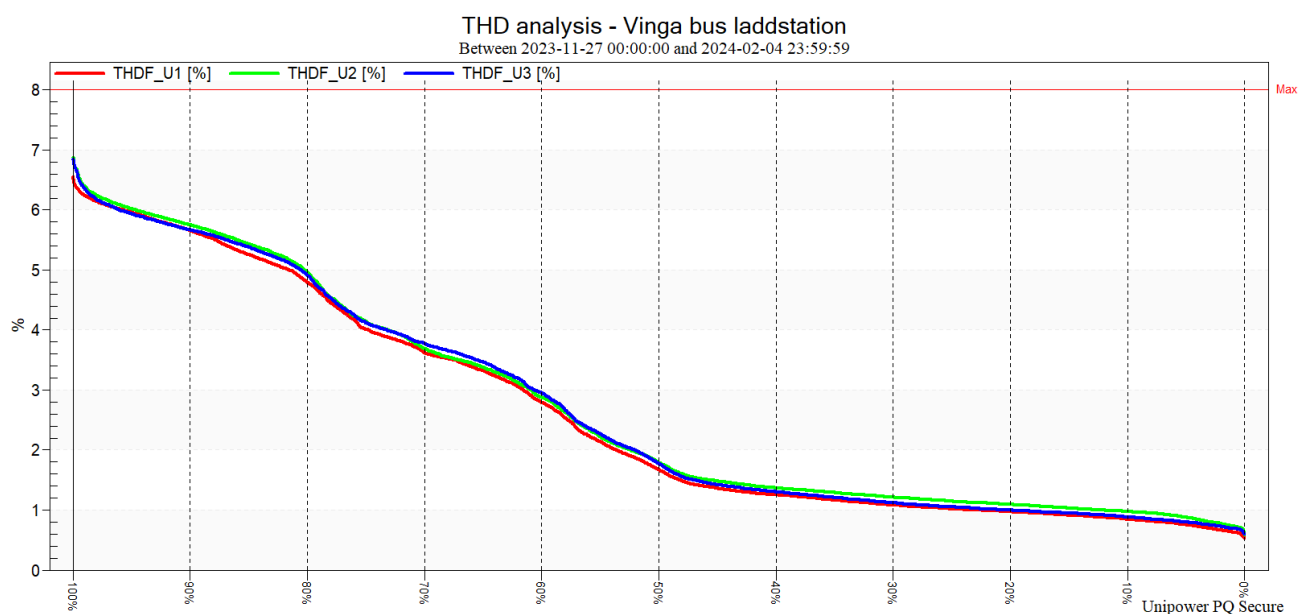
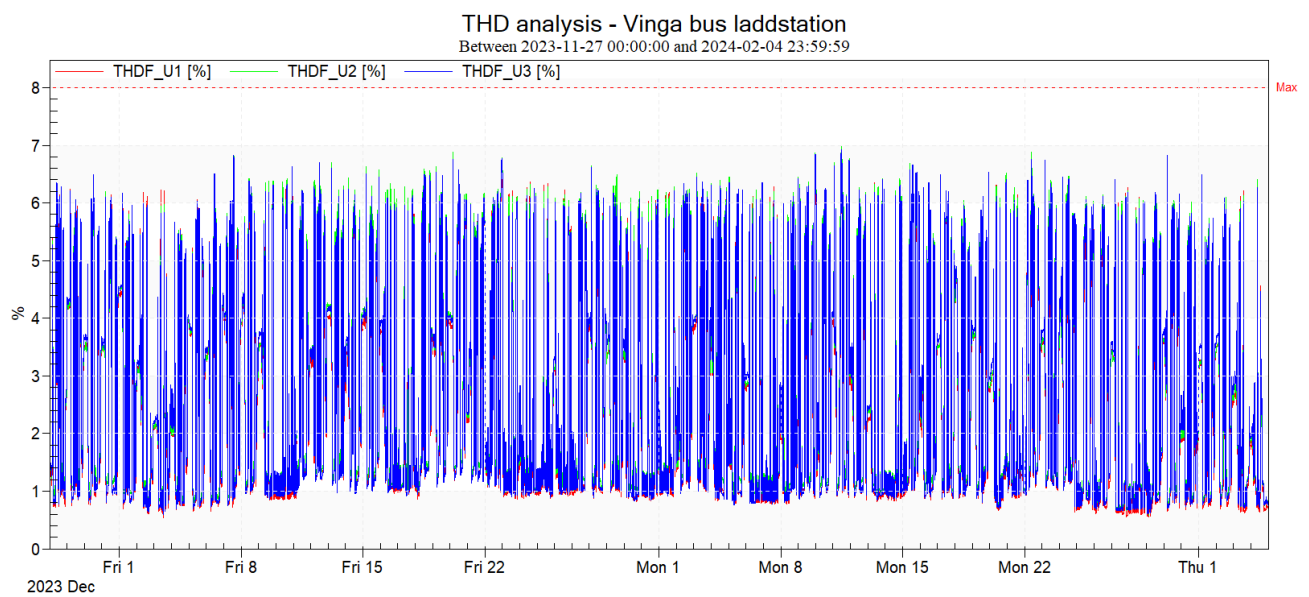
The THD analysis is assessed according to EIFS 2023:3 section 7.4-7.6.

All 10m values of the total harmonic content must be $\leq 8\%$.

Max 8,00% during 100% of time.

Phase	Within limit [%]	Max [%]	Min [%]	95% [%]	Result
THDF U1	100	6,58	0,535	5,96	Passed
THDF U2	100	6,97	0,580	6,02	Passed
THDF U3	100	6,93	0,600	5,93	Passed

Excluded 4 flagged value(s) in the result



4 PLT analysis

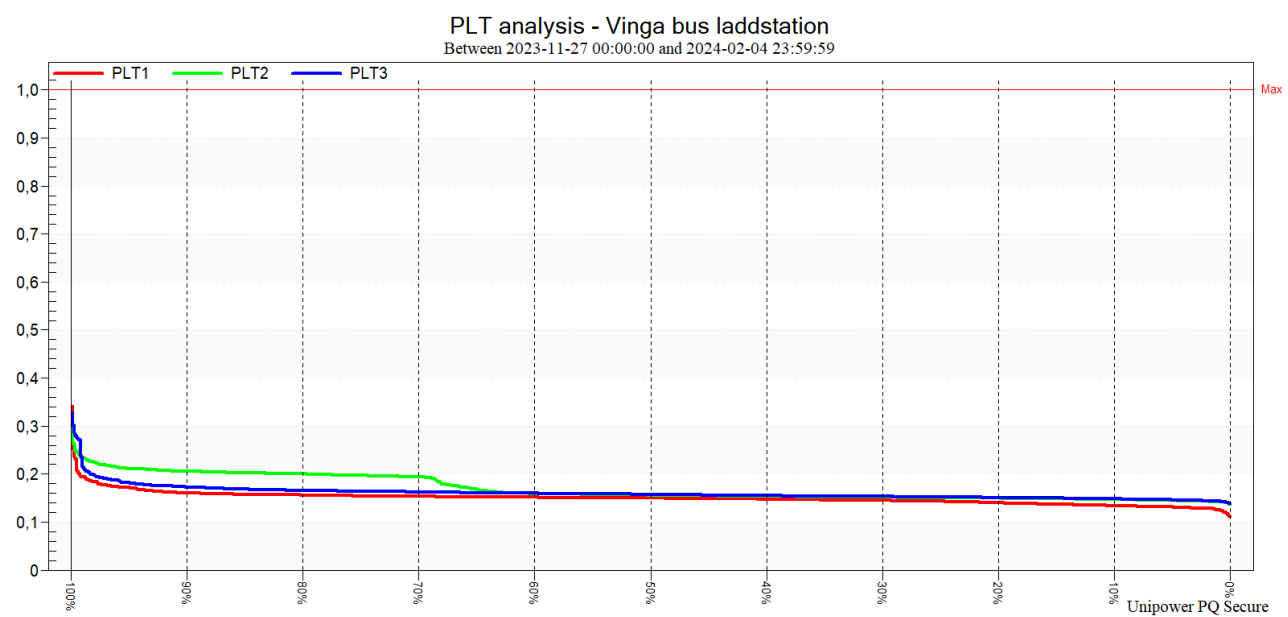
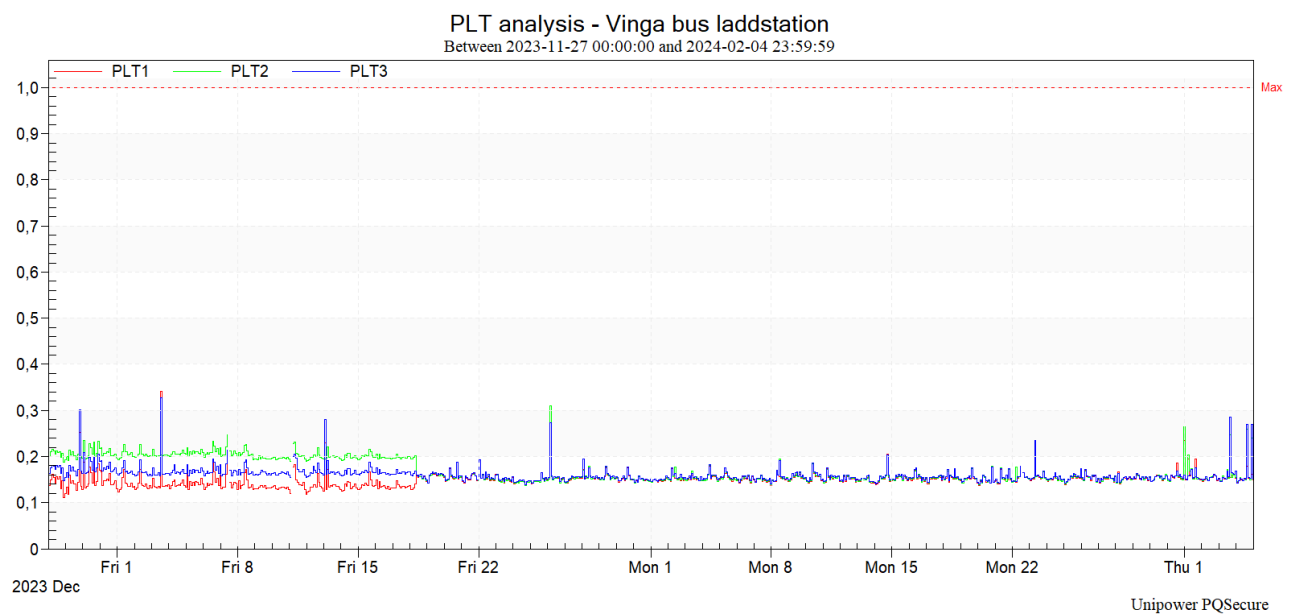
The PLT analysis is assessed according to EIFS 2023:3 section 7.13.

The long term flicker severity (PLT) shall be ≤ 1 .

Max 1,000 during 100% of time.

Phase	Within limit [%]	Max	Min	95%	Result
PLT1	100	0,342	0,112	0,171	Passed
PLT2	100	0,311	0,136	0,211	Passed
PLT3	100	0,327	0,139	0,181	Passed

Excluded 4 flagged value(s) in the result



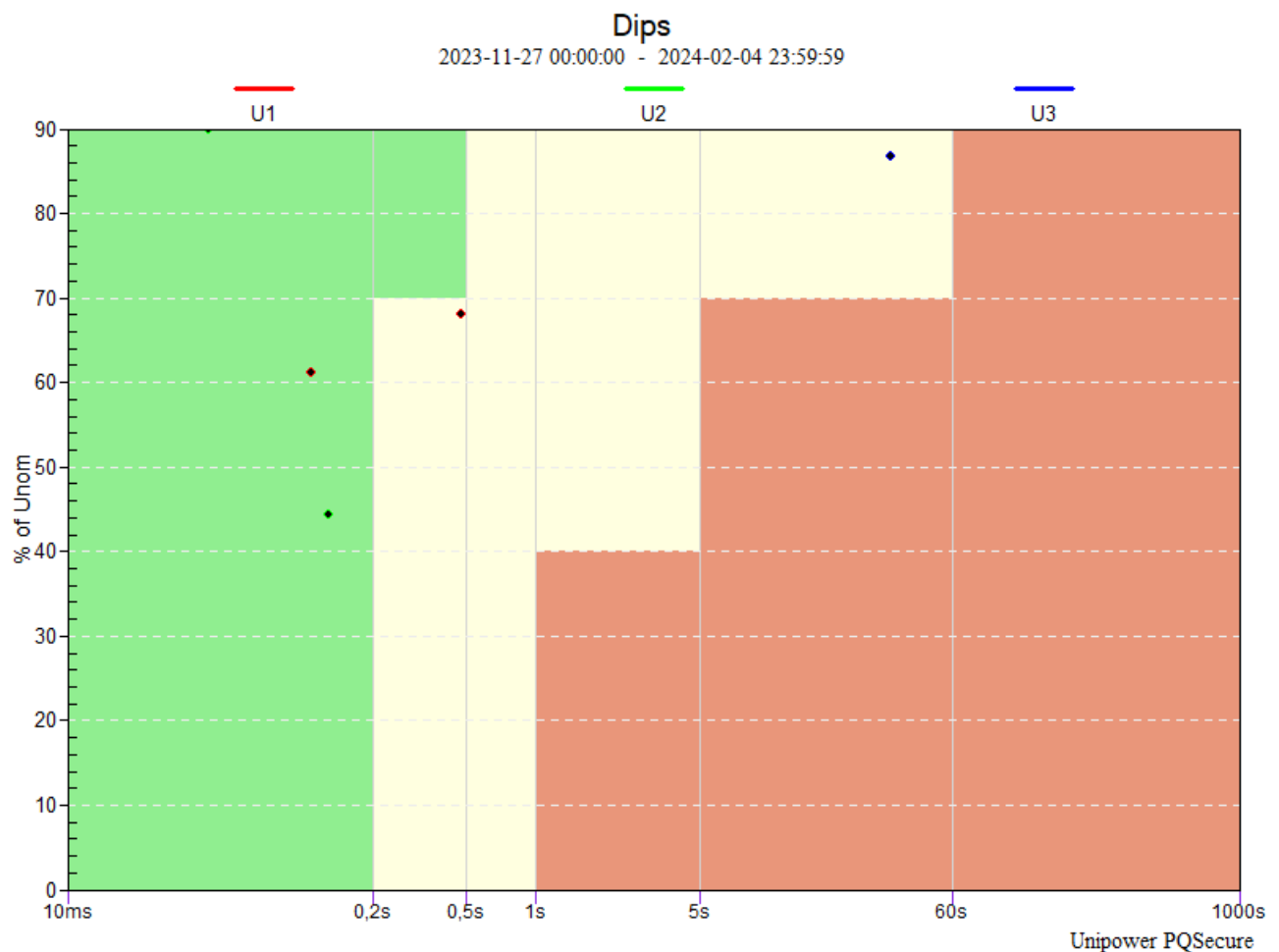
6 Voltage dips

The voltage dips are assessed according to EIFS 2023:3 section 7.8-7.9.

Voltage dips in the area A - Good quality is assessed as good voltage quality regardless of the number of dips. It is not good quality if there are voltage dips in the area C - Not good quality. Voltage dips in the area B needs further investigation.

Area	No
A - Good quality	3
B	3
C - Not good quality	0
Total:	6

Depth (d)	Duration (t)	10ms < t ≤ 0.2s	0.2s < t ≤ 0.5s	0.5s < t ≤ 1s	1s < t ≤ 5s	5s < t ≤ 60s	t > 60s
80% ≤ d < 90%		1	0	0	0	2	0
70% ≤ d < 80%		0	0	0	0	0	0
40% ≤ d < 70%		2	1	0	0	0	0
5% ≤ d < 40%		0	0	0	0	0	0
0% ≤ d < 5%		0	0	0	0	0	0



7 Voltage swells

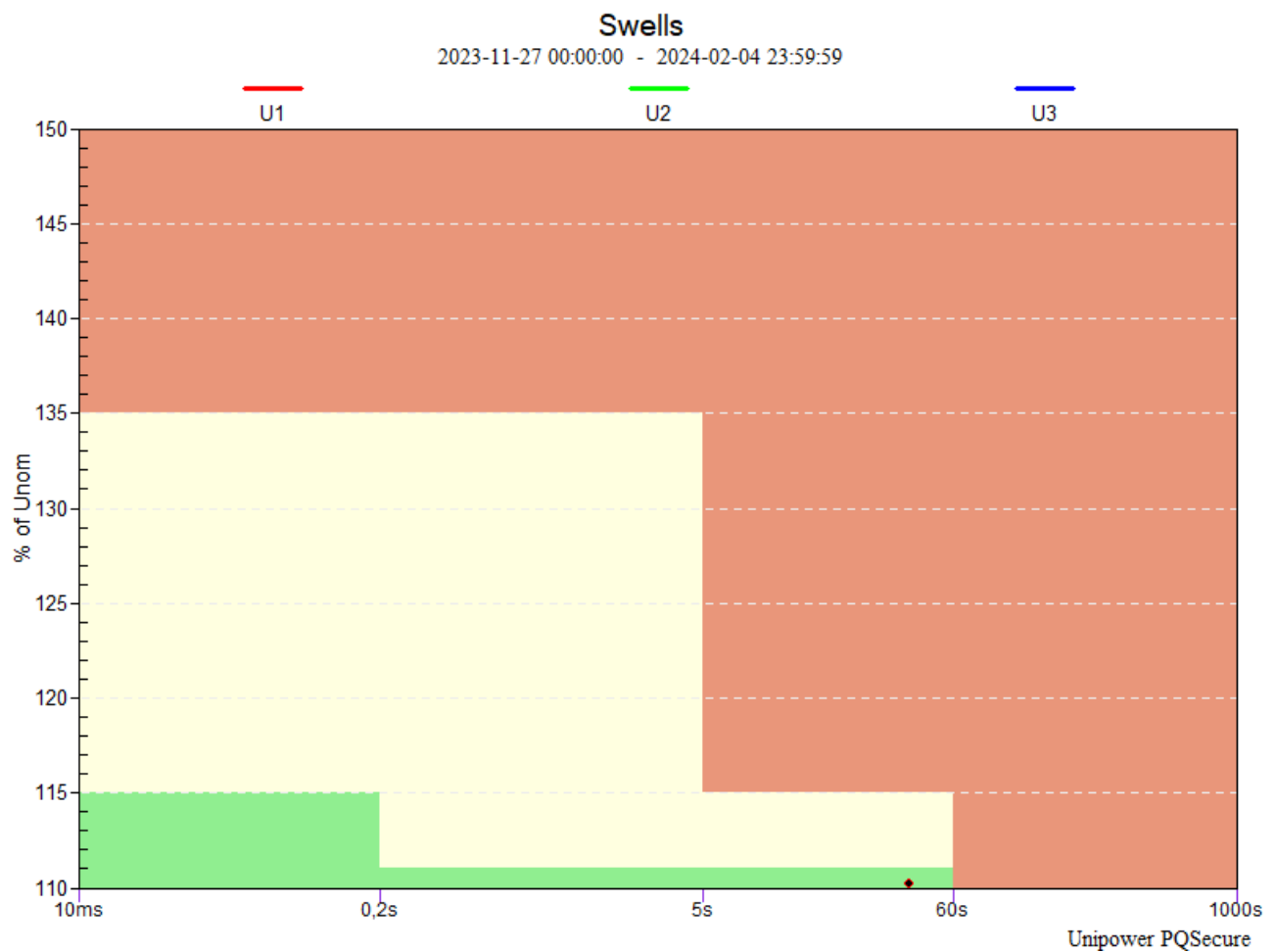
The voltage swells are assessed according to EIFS 2023:3 section 7.10.

Voltage swells in the area A - Good quality is assessed as good voltage quality regardless of the number of swells.

It is not good quality if there are voltage swells in the area C - Not good quality. Voltage swells in the area B needs further investigation.

Area	No
A - Good quality	2
B	0
C - Not good quality	0
Total:	2

Depth (d)	Duration (t)	10ms < t ≤ 0.2s	0.2s < t ≤ 5s	5s < t ≤ 60s	t > 60s
$u \geq 135\%$		0	0	0	0
$115\% \geq u < 135\%$		0	0	0	0
$111\% \leq u < 115\%$		0	0	0	0
$110\% \leq u < 111\%$		0	0	2	0



8 Rapid voltage changes

The rapid voltage changes is assessed according to EIFS 2023:3 section 7.11-7.12.

The number of rapid voltage changes (Delta Ustationary $\geq 3\%$) added to the number of dips in area A - Good quality (Dip A) must not exceed 24 per day.

At the same time, the number of rapid voltage changes (Delta Umax $\geq 5\%$) added to the number of dips in area A - Good quality (Dip A) must not exceed 24 per day.

Summary of RVC analysis: Passed

Date	RVC Delta Ustationary $\geq 3\%$	RVC Delta Umax $\geq 5\%$	Dip A	Result
2023-12-07	2	2	0	Passed
2023-12-11	0	0	2	Passed
2024-01-13	0	0	1	Passed

9 Interruptions

The quality of the interruptions is assessed according to EIFS 2023:3 sections 4.1-4.4 and 6.1.

Informative. An interruption is classified as a long interruption (longer than 3 min) or a short interruption (longer than 100 ms up to and including 3 min). The quality of the interruptions is assessed according to EIFS 2023:3 sections 4.1-4.4 and 6.1.

No events