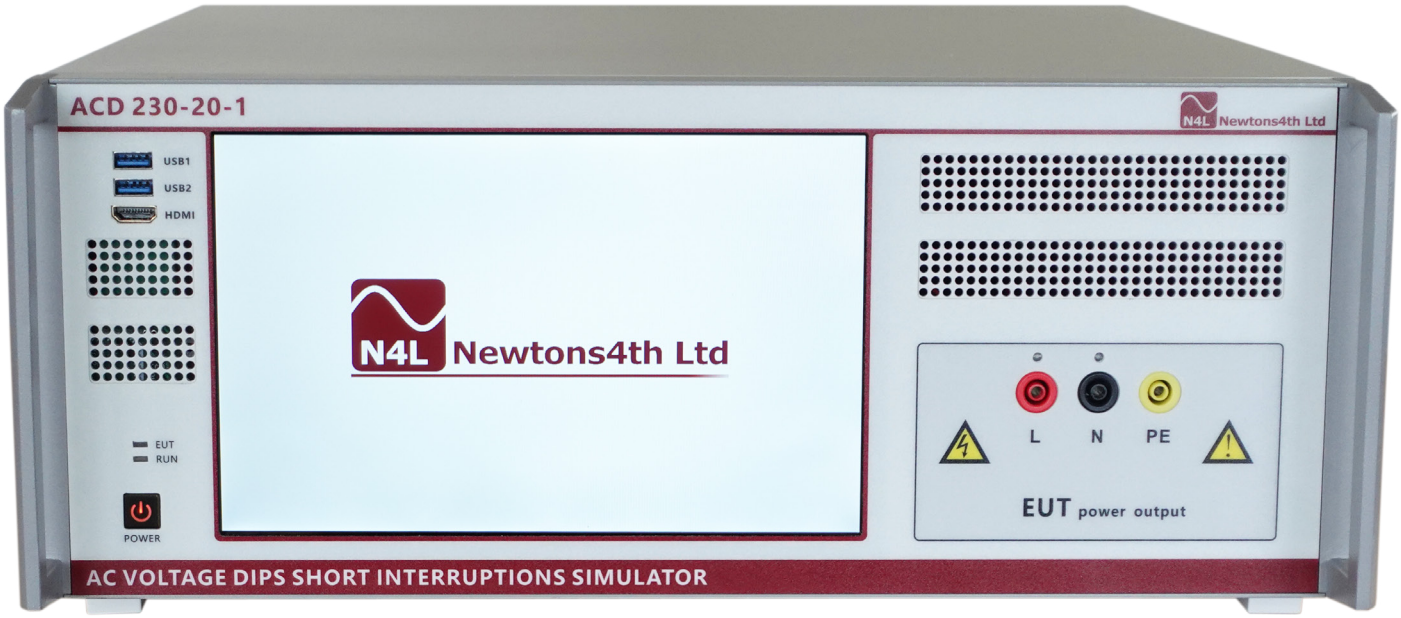
ACD230-20-1

1-5µS Rise / Fall time complient to IEC61000-4-11



N4L ACD230-20-1
Advanced AC Voltage Dips & Short Interruptions Simulator

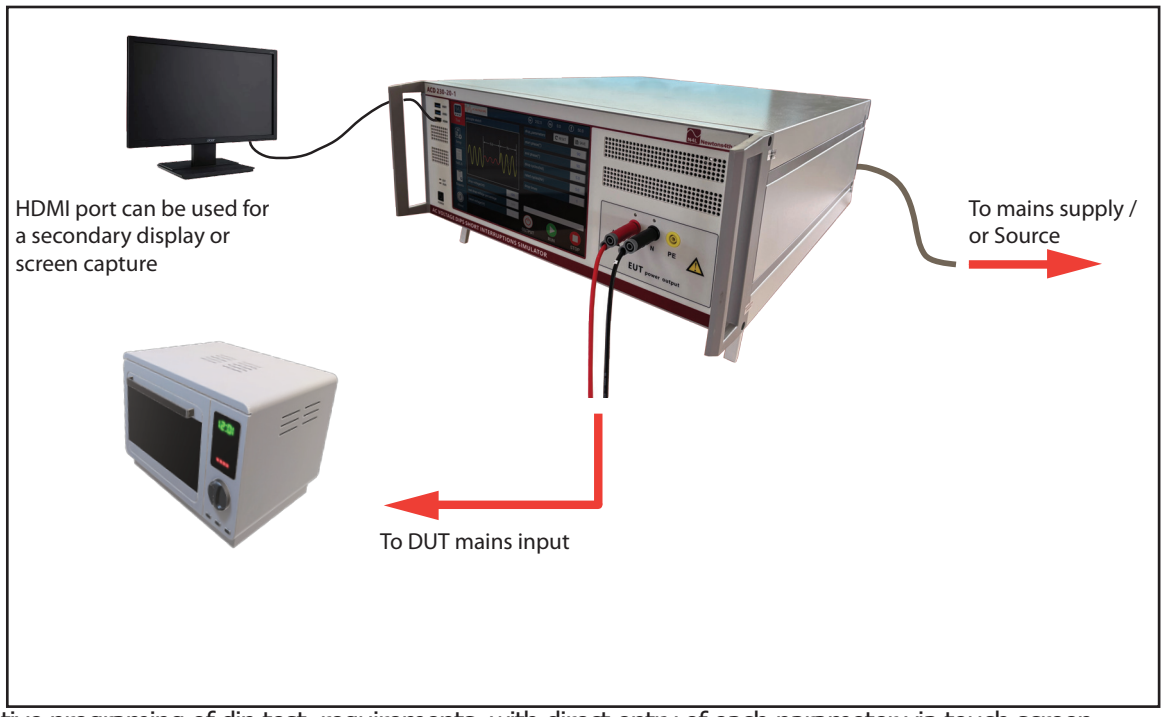
AC Voltage Dips & Short Interruptions Simulator—the latest addition to our IEC 61000 EMC Test range.

Key Features & Benefits

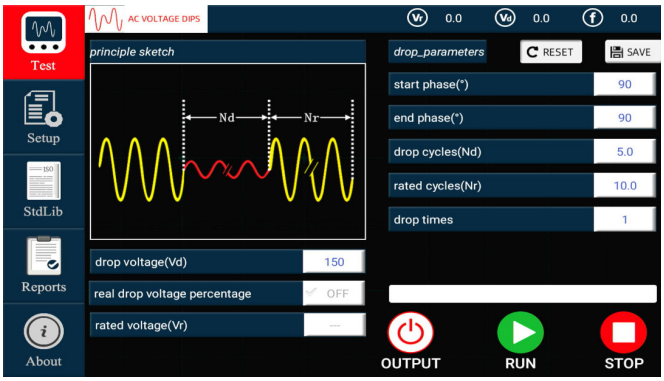
- Interface - Large touchscreen, menu driven, on screen alpha numeric data entry.
- Simple test parameter modeling on screen.
- Standalone Design - Designed for independent operation.
- Accurate Simulation of voltage dips and short interruptions, down to 0V.
- Integral report generation.
- Inbuilt test library memory function for easy repeated testing.
- Inrush Current Testing: Can also be connected directly to the mains supply.
- Full compliance of IEC 61000-4-11 with 1-5µS rise and fall times.
- Power input from source or mains (Mains operation can overcome the inherent inrush limitation of a source)

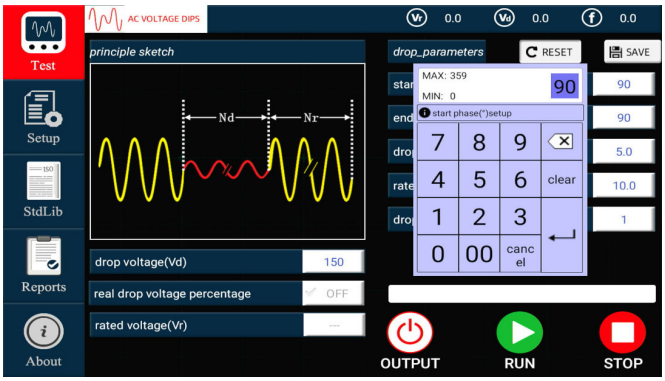
Specification			
Input		Connectivity	
DUT Power Input	20~265VAC 50/60Hz	DUT supply input	4mm safety sockets L, N, PE
Output		DUT supply output	4mm safety sockets L, N, PE
Rated output voltage range	20~265VAC & 16A Max	Unit Power Supply	200~240VAC 50/60Hz, ≦3A @220VAC IEC C14 panel mount
Drop output voltage range	0~265VAC	USB	2x USB-A
Drop cycle	0~9999	Video	HDMI
Recovery Cycle	0~9999	Environmental	
Drop numbers	1~9999	Operational Temperature	-5 to +40° C non-condensing
Drop angle	0~359°	Storage Temperature	-10° C to +70° C
Recovery angle	0~359°	Humidity	20 - 95% RH non-condensing
Mechanical		Altitude	2,000 metres
Dimensions	560 x 450 x187mm [Total]		
Weight	21kg		

Typical Test Setup



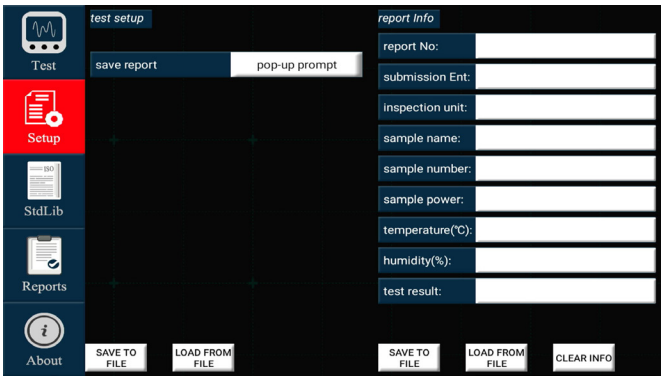
Intuative programing of dip test requirements, with direct entry of each parameter via touch screen

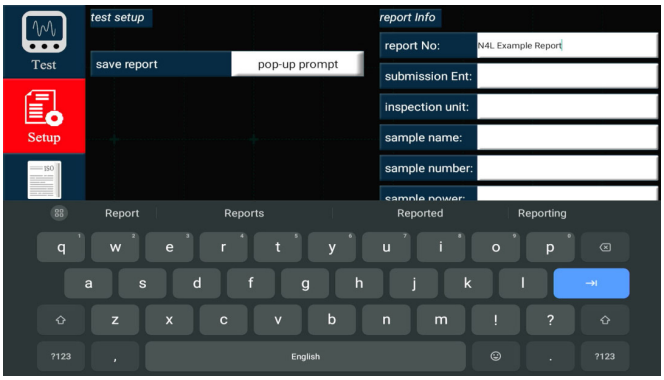




Each parameter, once editing is commenced opens up an on-screen numeric keypad, making the desired values quick and simple to program in for the desired test. The sections of waveform are shown for illustrative purposes and are not representative of the actual set values.

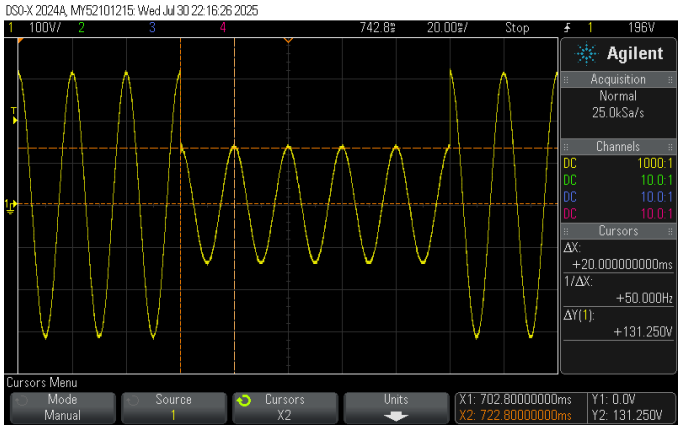
Once the test parameters have been entered, the test can be controlled and run from the touch screen, or alternatively saved to an inbuilt test library for later recall.



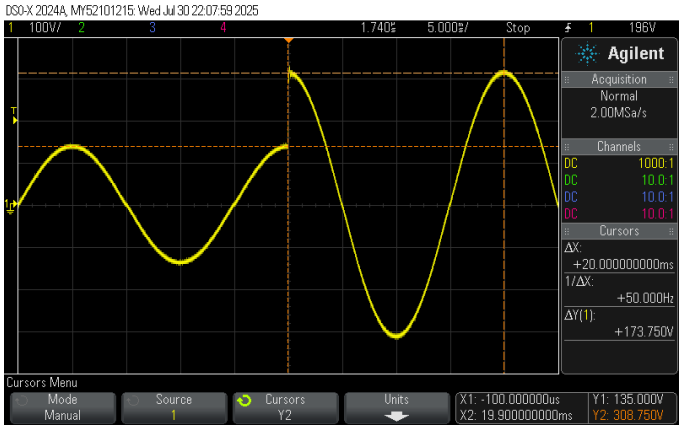


On completion of the test(s), the environmental and EUT details along with the observations made during the test, can be entered using the built in on-screen keybord The results can be saved to a USB memory stick for further analysis and presentation via our free software.

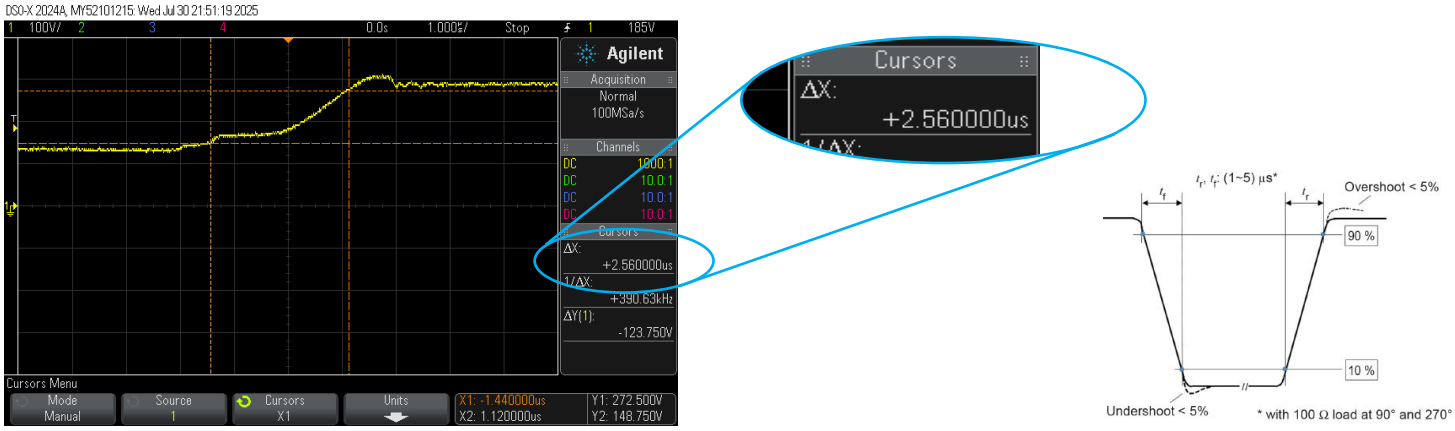
Due to the short duration of the IEC61000-4-11 dip and interuption tests there is no real time osciloscope display. However with a suitable osciloscope attached to the EUT supply, the actual wave form can be reproduced.



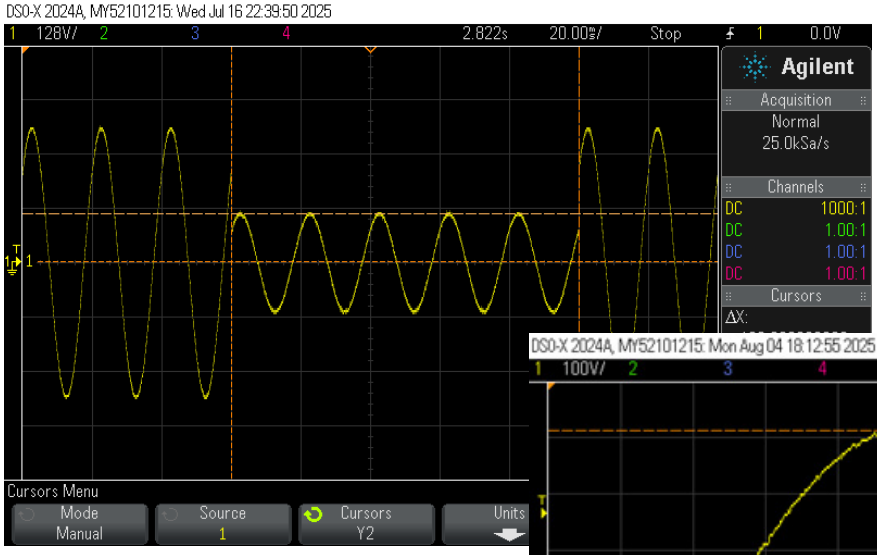
5 cycle dip with 90˚ start and endpoints



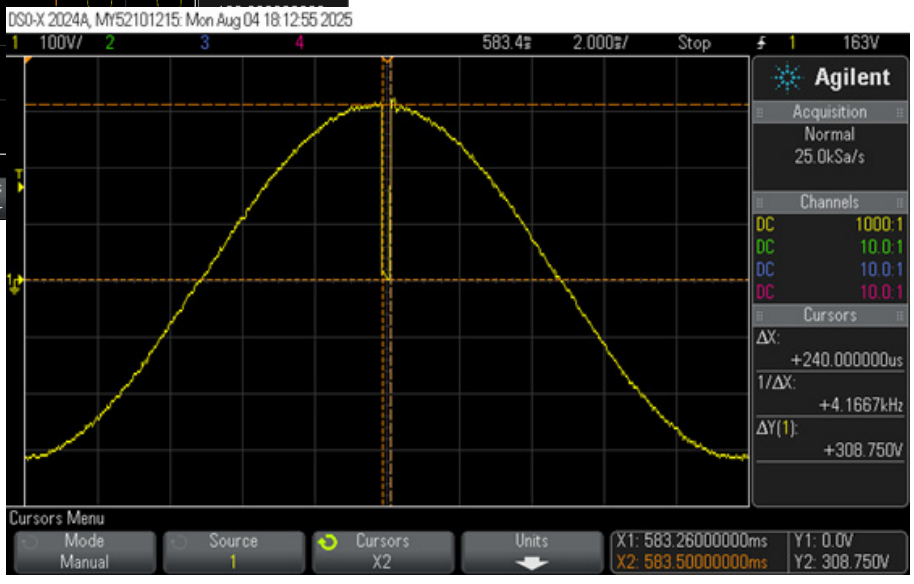
Δ Y indicates dip voltage



Δ X measured between the 10% and 90% points demonstrates a rise time of 2.56µs, the middle of the specified range as set out in IEC61000-4-11:2020 Figure 3, above

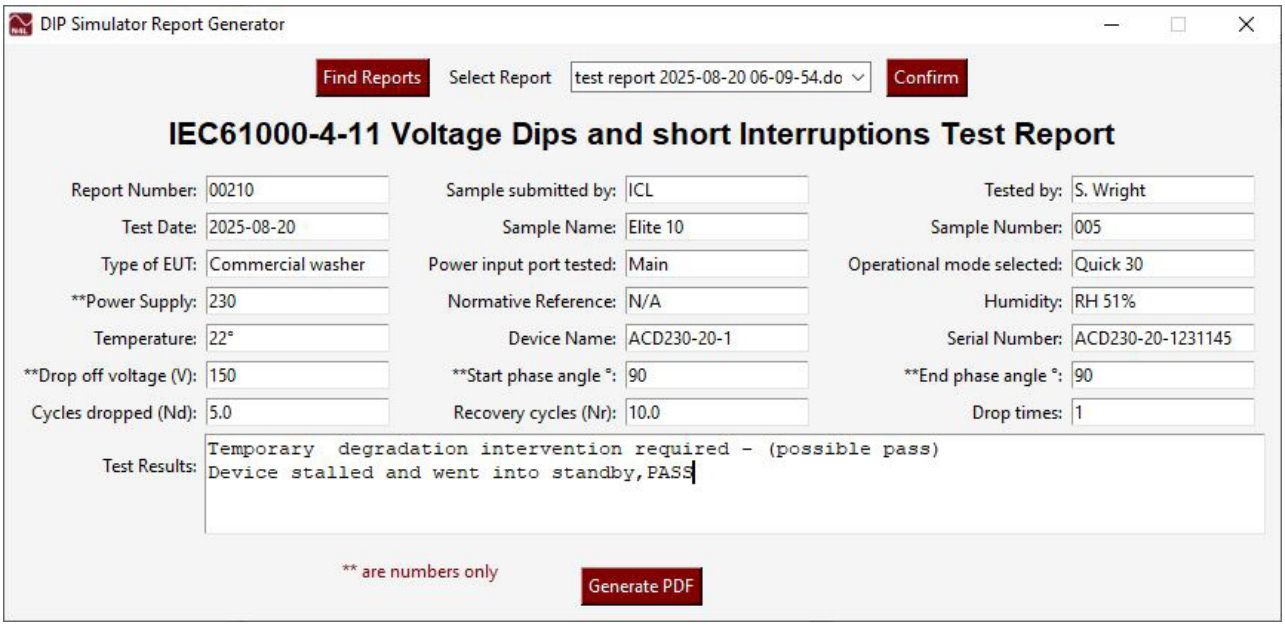


5 cycle dip with 45˚ Start and End points.

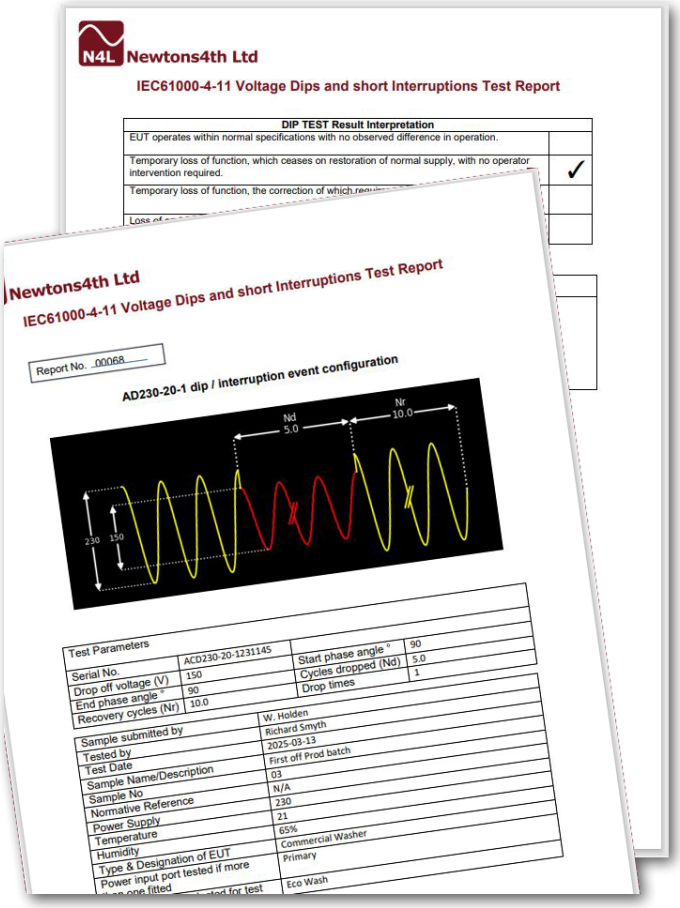


90˚ to 95˚ Dip event test.

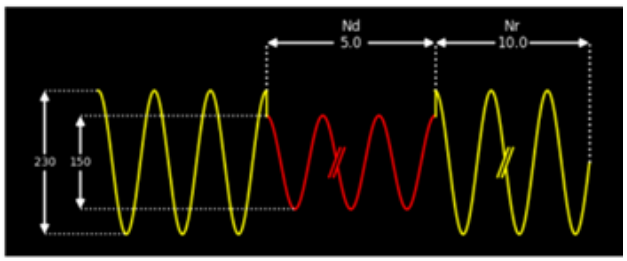
Automated Test Reports

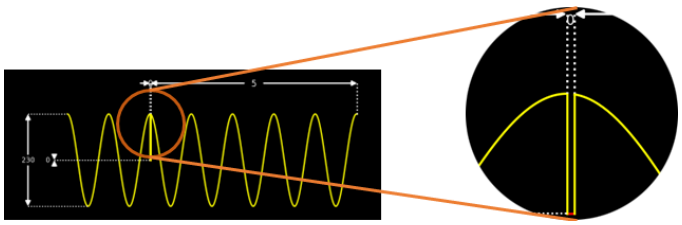


N4L provides free software that retreives the Dip Generator test results files from a USB drive, provides the user with the ability to select and asign the relevent test result observations. This data is then formatted as a report. The softwares output is a two page PDF document. Consisting of a scaled waveform plot, full settings and EUT details, along with the observers detailed notes pertaining to the functioning of the EUT during the test.



Our software reproduces a scaled waveform which accurately represents of both voltage dips and interruptions.





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