

Reliability Report

Report Title: Bipolar 3 150mm Qualification

Report Number: 4061

Date: 27 September 2004

*Analog Devices Reliability . Gateway Business Park, Special Economic Park,
Javelera, Gen. Trias . Cavite, Philippines*

Tel: 632.867.7030

Fax: 632.867.7200

www.analog.com

Introduction

This reports details the activities undertaken to qualify the 150mm Bipolar Process 3 in the Wilmington Wafer Fabrication Site. A number of devices were chosen as qualification vehicles to cover the different process options available on Process 3. They are as follows: AD712 JFET process, AD22050 Nitride Capacitors Process, AD22100 Pure Aluminum Resistor Process, AD526 SiCr Resistor Process and Nitride Capacitors, AD549 Pig-FET Process, AD588 Buried Zener Process, AD694 Plain Vanilla Process and Thin Film Resistor Sensitivity, AD780 Bandgap Reference Structure, and the AD8221 Super Beta Process.

Process Description

Process 3 Bipolar is a NPN bipolar process with 500 MHz NPN transistors. The minimum geometry for Bipolar is 5um (contact). It is designed to operate with power supplies that have a maximum span of 36V (i.e. 0 to 36V, -12V to 12V, etc.).

It has trimmable 1000 ohm/sq. SiCr thin film resistors. The Bipolar process also has process options for a JFET, 6.2 Volt Buried Zener, Nitride capacitors and a super Beta NPN transistor. The first and second metal levels are aluminum, 1% copper with a 12um and 10um pitch respectively.

Device Characteristics

Part Number	AD712	AD22050
Die Size (mm)	2.87 x 1.82	1.54 x 2.18
Wafer Fabrication Site	ADI-Wilmington	ADI-Wilmington
Wafer Fabrication Process	Bipolar 3	Bipolar 3
Process Variation	BiFet's	DJFet with Cap
Transistor Count	120	45
Maximum Power Dissipation (W)	1.000	0.010
Passivation Layer	Doped-oxide/SiN	Doped-oxide/SiN
Bond Pad Metal Composition	AlCu	AlCu
Package	SOICnb - I	SOICnb - III

Part Number	AD22100	AD526
Die Size (mm)	1.01 x 2.28	3.07 x 3.96
Wafer Fabrication Site	ADI-Wilmington	ADI-Wilmington
Wafer Fabrication Process	Bipolar 3	Bipolar 3
Process Variation	Pure Aluminum Resistor	Absolute Value TFR
Transistor Count	17	76
Maximum Power Dissipation (W)	0.003	1.250
Passivation Layer	Doped-oxide/SiN	Doped-oxide/SiN
Bond Pad Metal Composition	AlCu	AlCu
Package	SOICnb - II	16-SBDIP

Part Number	AD549	AD588
Die Size (mm)	2.03 x 1.86	2.26 x 23.78
Wafer Fabrication Site	ADI-Wilmington	ADI-Wilmington
Wafer Fabrication Process	Bipolar 3	Bipolar 3
Process Variation	PigFet	Buried Zener
Transistor Count	56	45
Maximum Power Dissipation (W)	0.500	0.600
Passivation Layer	Doped-oxide/SiN	Doped-oxide/SiN
Bond Pad Metal Composition	AlCu	AlCu
Package	8-TO99	16-Cerdip

Part Number	AD694	AD780
Die Size (mm)	2.765 x 2.415	1.70 x 2.43
Wafer Fabrication Site	ADI-Wilmington	ADI-Wilmington
Wafer Fabrication Process	Bipolar 3	Bipolar 3
Process Variation	TFR Sensitivity	Bandgap Ref
Transistor Count	75	63
Maximum Power Dissipation (W)	0.048	0.500
Passivation Layer	Doped-oxide/SiN	Doped-oxide/SiN
Bond Pad Metal Composition	AlCu	AlCu
Package	16-PDIP	SOICnb - II

Part Number	AD8221
Die Size (mm)	1.52 x 2.18
Wafer Fabrication Site	ADI-Wilmington
Wafer Fabrication Process	Bipolar 3
Process Variation	Super Beta NPN's
Transistor Count	100
Maximum Power Dissipation (W)	0.030
Passivation Layer	Doped-oxide/SiN
Bond Pad Metal Composition	AlCu
Package	SOICnb - IV

Package/Assembly Characteristics

Available Packages	8-SOICnb -I	8-SOICnb - II	8-SOICnb - III
Assembly Location	ADGT	ADGT	ADGT
Package Die Attach	Ablestik 84-1LMIS R4	JM-7000	Ablestik 84-1LMIS R4
Leadframe Material	Copper Olin 194	Alloy 42	Alloy 42
Package Bond Wire	Gold	Aluminum	Gold
Bond Wire Dia. (mils)	1.00	1.30	1.30
Die Overcoat	Dow 4939	NA	NA
Package Molding Compound	Sumitomo 6300H	Sumitomo 6730	Sumitomo 6300H
Package Lead Finish	Tin / Lead Solder Plate	Tin / Lead Solder Plate	Tin / Lead Solder Plate
Package Moisture Sensitivity Level	MSL 1	MSL 1	MSL 1
Maximum Peak Reflow Temperature	240°C	240°C	240°C

Available Packages	16-PDIP	16-CERDIP	16-SBDIP
Assembly Location	ADGT	ADPI	ADPI
Package Die Attach	Ablestik 84-1LMIS R4	JM-7000	Ablestik 84-1LMIS R4
Leadframe Material	Copper Olin 194	Alloy 42	Alloy 42
Package Bond Wire	Gold	Aluminum	Aluminum
Bond Wire Dia. (mils)	1.00	1.20	1.25
Die Overcoat	NA	NA	NA
Package Molding Compound	Sumitomo 6300H	NA	NA
Package Lead Finish	Tin / Lead Solder Plate	Hot Solder	Hot Solder
Package Moisture Sensitivity Level	NA	NA	NA
Maximum Peak Reflow Temperature	NA	NA	NA

Available Packages	8-SOIC - IV	8-TO-99
Assembly Location	Carsem-M	ADPI
Package Die Attach	Ablestik 84-1LMIS R4	Eutectic
Leadframe Material	Copper	Kovar
Package Bond Wire	Gold	Aluminum
Bond Wire Dia. (mils)	1.00	1.30
Die Overcoat	Dow 4939	NA
Package Molding Compound	Sumitomo 6730B	NA
Package Lead Finish	Tin / Lead Solder Plate	Gold
Package Moisture Sensitivity Level	MSL 1	NA
Maximum Peak Reflow Temperature	240°C	NA

Description/Results of Tests Performed

Table 1 provides a description of the qualification tests conducted and the associated test results. Tests and sample sizes for the qualification of the Bipolar Process 3 are based on the ADI specification ADI0012, "Procedure for the Qualification of New or Revised Processes or Packages." All qualification devices were chosen from standard material manufactured through normal production processes and were electrically tested at room temperature following each endpoint. Any device that did not meet all electrical data sheet limits following stressing would be considered a failure. As Table 1 indicates no failures occurred during qualification of the Bipolar Process 3.

Table 1. Bipolar Process 3 Qualification Results

Test Name	Conditions	Part	Duration	Package Type	Lot #	Sample Size	Qty. Rejects
Autoclave*	121C 100%RH 2atm	AD712	168hrs	8-SOICnb	L77692.1	77	0
		AD712			L84158.1	77	0
		AD712			L79827.1	77	0
High Temperature Operating Life	TJ = 150°C	AD588	500hrs	16-CERDIP	M61846.1	76	0
High Temperature Operating Life	TJ = 150°C	AD694	500hrs	16-PDIP	M53038.1	76	0
High Temperature Operating Life	TJ = 150°C	AD526	500hrs	16-SBDIP	D78886.1	75	0
High Temperature Operating Life	TJ = 150°C	AD780	500hrs	8-SOICnb	M44064.1	77	0
High Temperature Operating Life	TJ = 150°C	AD22100	500hrs	8-SOICnb	D73375.1	77	0
High Temperature Operating Life	TJ = 125C	AD712	500hrs	8-SOICnb	L77317.1	77	0
		AD712			L84187.1	77	0
		AD712			L79830.1	77	0
High Temperature Operating Life	TJ = 150C	AD8221	500hrs	8-SOICnb	M44571	77	0
High Temperature Operating Life	TJ = 150°C	AD22050	500hrs	8-SOICnb	M27476.1	77	0
High Temperature Operating Life	TJ = 150°C	AD549	500hrs	8-TO-99	D82966.1	77	0
High Temperature Storage	TJ = 150°C	AD712	1000hrs	8-SOICnb	L77318.1	77	0
Highly Accelerated Stress Test*	130C 85%RH 2atm, Biased	AD712	96hrs	8-SOICnb	L79828.1	77	0
		AD712			L84159.1	77	0
		AD712			L75597.1	77	0
Temperature Cycle*	-65C/+150C	AD712	500cycles	8-SOICnb	L79829.1	77	0
		AD712			L84160.1	77	0
		AD712			L77693.1	77	0
Thermal Shock*	-65C/+150C	AD712	500cycles	8-SOICnb	L75598.1	77	0

Noted samples (*) were subjected to preconditioning (per J-STD-020B Level 1) prior to the start of the stress test. Level 1 preconditioning consists of the following:

- Bake: 24 hrs @ 125°C
- Unbiased Soak: 168 hrs @ 85°C, 85%RH

- Reflow: 3 passes through a convection/IR oven with a peak temperature of 240 +0/-5°C for a minimum of 10 seconds.

ESD Testing Results

The results of ESD testing are summarized in Table 3. As accept/reject criteria, all samples were electrically tested to data sheet limits before and after ESD stressing.

Human Body Model (HBM) and Machine Model (MM) ESD Sensitivity Classification testing was conducted on the devices using a KeyTek ZapMaster Test System. During HBM and MM testing of a given sample, one positive and one negative discharge was applied to each of the following pin combinations for each of the parts listed:

AD22050, AD22100, AD694, and AD780

- (1) Every individual pin to +Vs
- (2) Every individual pin to Gnd
- (3) Every individual I/O pin to the group of all other I/O pins.

AD526

- (1) Every individual pin to Vcc
- (2) Every individual pin to Vee
- (3) Every individual pin to Analog Gnd
- (4) Every individual pin to Digital Gnd
- (5) Every individual I/O pin to the group of all other I/O pins.

AD549, AD712, and AD8221

- (1) Every individual pin to Vcc
- (2) Every individual pin to Vee
- (3) Every individual I/O pin to the group of all other I/O pins.

AD588

- (1) Every individual pin to Vcc
- (2) Every individual pin to Vee
- (3) Every individual pin to Gnd
- (4) Every individual I/O pin to the group of all other I/O pins.

Field-Induced (Robotic) Charged Device Model (FICDM) ESD Sensitivity Classification testing was conducted using a Verifier Robotic CDM Test System. During FICDM testing of a given sample, the device package was charged via a field plate and a discharge pin made contact with each individual device pin to discharge it through a 1Ω resistor to ground. Three positive and three negative discharges were applied to every pin.

Table 2. Bipolar 3 ESD Characterization Results*

ESD Model	Part	Package	ESD Test Spec	RC Network	Highest Pass Level	First Fail Level	Class
FICDM	AD780	8-SOICnb	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	250V	500V	C3
FICDM	AD549	8-TO-99	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	125V	250V	C2
FICDM	AD8221	8-SOICnb	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	250V	500V	C3
FICDM	AD588	16-CERDIP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	500V	1000V	C4
FICDM	AD22100	8-SOICnb	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	800V	1000V	C4
FICDM	AD22050	8-SOICnb	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	1500V	2000V	C6
FICDM	AD694	16-SOICWB	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	500V	1000V	C4
FICDM	AD712	8-SOICnb	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	1500V	2000V	C6
FICDM	AD526	16-SBDIP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	125V	250V	C2
HBM	AD8221	8-SOICnb	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	1000V	1500V	1C
HBM	AD549	8-TO-99	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	250V	500V	1C
HBM	AD780	8-SOICnb	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	2000V	2500V	2
HBM	AD588	16-CERDIP	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	500V	1000V	1B
HBM	AD712	8-SOICnb	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	1500V	2000V	1C
HBM	AD526	16-SBDIP	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	250V	500V	1C
HBM	AD694	16-SOICWB	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	1000V	1500V	1C
HBM	AD22100	8-SOICnb	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	1500V	2000V	1C
HBM	AD22050	8-SOICnb	ESD Assoc. STM5.1-1998	1.5kΩ, 100pF	2500V	3000V	2
MM	AD712	8-SOICnb	ESD Assoc. STM5.2-1999	0Ω, 200pF	200V	400V	M3
MM	AD549	8-TO-99	ESD Assoc. STM5.2-1999	0Ω, 200pF	100V	200V	M2
MM	AD780	8-SOICnb	ESD Assoc. STM5.2-1999	0Ω, 200pF	400V	800V	M4
MM	AD588	16-CERDIP	ESD Assoc. STM5.2-1999	0Ω, 200pF	200V	400V	M3
MM	AD8221	8-SOICnb	ESD Assoc. STM5.2-1999	0Ω, 200pF	200V	400V	M3
MM	AD694	16-SOICWB	ESD Assoc. STM5.2-1999	0Ω, 200pF	100V	200V	M2
MM	AD22050	8-SOICnb	ESD Assoc. STM5.2-1999	0Ω, 200pF	200V	400V	M3
MM	AD22100	8-SOICnb	ESD Assoc. STM5.2-1999	0Ω, 200pF	200V	400V	M3
MM	AD526	16-SBDIP	ESD Assoc.	0Ω, 200pF	100V	200V	M2

*ADI measures ESD results using stringent test procedures based on the specifications listed in the above table. Any comparison with another supplier's results should ensure that the same ESD test procedures have been used. For further details, please see the EOS/ESD chapter of the ADI Reliability Handbook at <http://www.analog.com/corporate/quality/manuals/>.

Latch-Up and Electrical Overstress Testing Results

The Bipolar 3 Qualification vehicles were tested for Class I, Level A, static latch-up conditions using the test method outlined in JEDEC Standard Number 78. The result summary is shown below:

- No latch-up occurred during testing of each individual input and output pin in which both positive and negative current pulses (50 μ s risetime, 5ms duration) were applied up to **I_{norm} +I_{High} ma** and **-I_{Low} ma**. This input and output latch-up testing was conducted initially with all input pins at V_{in} minimum levels, and subsequently with all input pins at V_{in} maximum levels.
- No latch-up occurred during testing of the **Supply** pin groups in which voltage pulses (50 μ s risetime, 5ms duration) were applied up to **V_{High}**. This overvoltage latch-up testing was conducted initially with all input pins at V_{in} minimum levels, and subsequently with all input pins at V_{in} maximum levels.

The six devices that were subjected to the latch-up test criteria all passed post-latch-up electrical testing.

Table 3 Results of Latch-up Testing

Part #	I _{norm} ma	I _{high} ma	I _{low} ma	Supply V	V _{high} V
AD22050	25	125	-100	15	18
AD22100	0.3	100	-100	15	16.5
AD526	65	165	-100	15	16.5
AD549	0.7	101	-100	15	16.5
AD588	25	125	-100	15	18
AD694	25	125	-100	15	18.5
AD712	10	110	-100	15	18
AD780	1	101	-100	15	36
AD8221	0.5	100	-100	15	16.5

Conclusion

The qualification of the Bipolar 3 150mm Conversion has successfully completed for production release.

Approvals

Reliability Engineer: Denis Belisle

This report has been approved by electronic means (1.8).

Additional Information

Data sheets and other additional information are available on Analog Devices' web site at the addresses shown below.

Home Page: <http://www.analog.com>
Sales Info: http://www.analog.com/world/corp_fin/sales_directory/distrib.html
Reliability Data: <http://www.analog.com/corporate/quality/read/1stpage.html>
Reliability Handbook: <http://www.analog.com/corporate/quality/manuals/>

Attachments

Data Reduction of HTOL

AD22050 Data Reduction Report

AD22050 HTOL DATA REDUCTION

AD22050 DATA REDUCTION

LOT ID : M27476

Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test#	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	Test Site Number	77	0.480519	0.502897	0	1	1	0	5	
10	Supply Current @ 5V	77	-3.12423	6.298	-15.4149	7.13963	22.5545	0	500	uA
12	Output Swing Lo	77	-2.58196	3.30383	-9.71088	3.47945	13.1903	-4	20	mv
14	Output Swing Hi	77	-0.00447518	0.00564164	-0.0134974	0.00409079	0.0175881	4.8	5	V
16	Short Circuit Current	77	0.0878705	0.217568	-0.396244	0.854733	1.25098	7	25	mA
20	Positive Input Impedance	77	-0.672748	2.5119	-8.15862	4.43192	12.5905	200	300	Kohms
24	Negative Input Impedance	77	0.454351	2.64391	-4.88408	7.08618	11.9703	200	300	Kohms
26	A2 Gain	77	-9.98E-06	0.00308749	-0.00729513	0.00578582	0.013081	1.94	2.06	V/V
28	A2 Input Offset	77	-130.646	127.177	-448.366	121.434	569.8	-1.50E+03	1.50E+03	uV
30	Bipolar Gain	77	0.00023351	0.000645979	-0.00224766	0.00190493	0.0041526	0.49	0.51	
32	Bipolar Input Resistance	77	16.3453	44.8132	-86.4021	111.548	197.95	2.50E+03	5.00E+03	ohms
34	System Gain	77	-0.00490402	0.00899692	-0.0223351	0.00825882	0.0305939	19.9	20.1	V/V
36	System Offset	77	30.8384	140.339	-291.87	447.755	739.625	-1.00E+03	1.00E+03	uV
37	System Gain @ 36 V	77	-0.00520808	0.0100276	-0.0233688	0.00980377	0.0331726	19.74	20.26	V/V
99	AD620 Circuitry Check	77	0	0	0	0	0	-0.5	0.5	
38	DC CMRR	77	0.724856	19.3845	-32.2522	55.6195	87.8717	-100	100	uV/V
40	A1 Rout	77	0.0463581	0.261521	-0.652683	0.689717	1.3424	97	103	Kohms
70	Output Swing Hi @ 36V	77	-0.00972519	0.00495826	-0.0300455	-0.00121403	0.0288315	4.75	5.1	V
80	Output Swing Lo @ 36V	77	1.44836	2.87418	-12.603	7.34484	19.9479	0	100	mV

AD22050 DATA REDUCTION

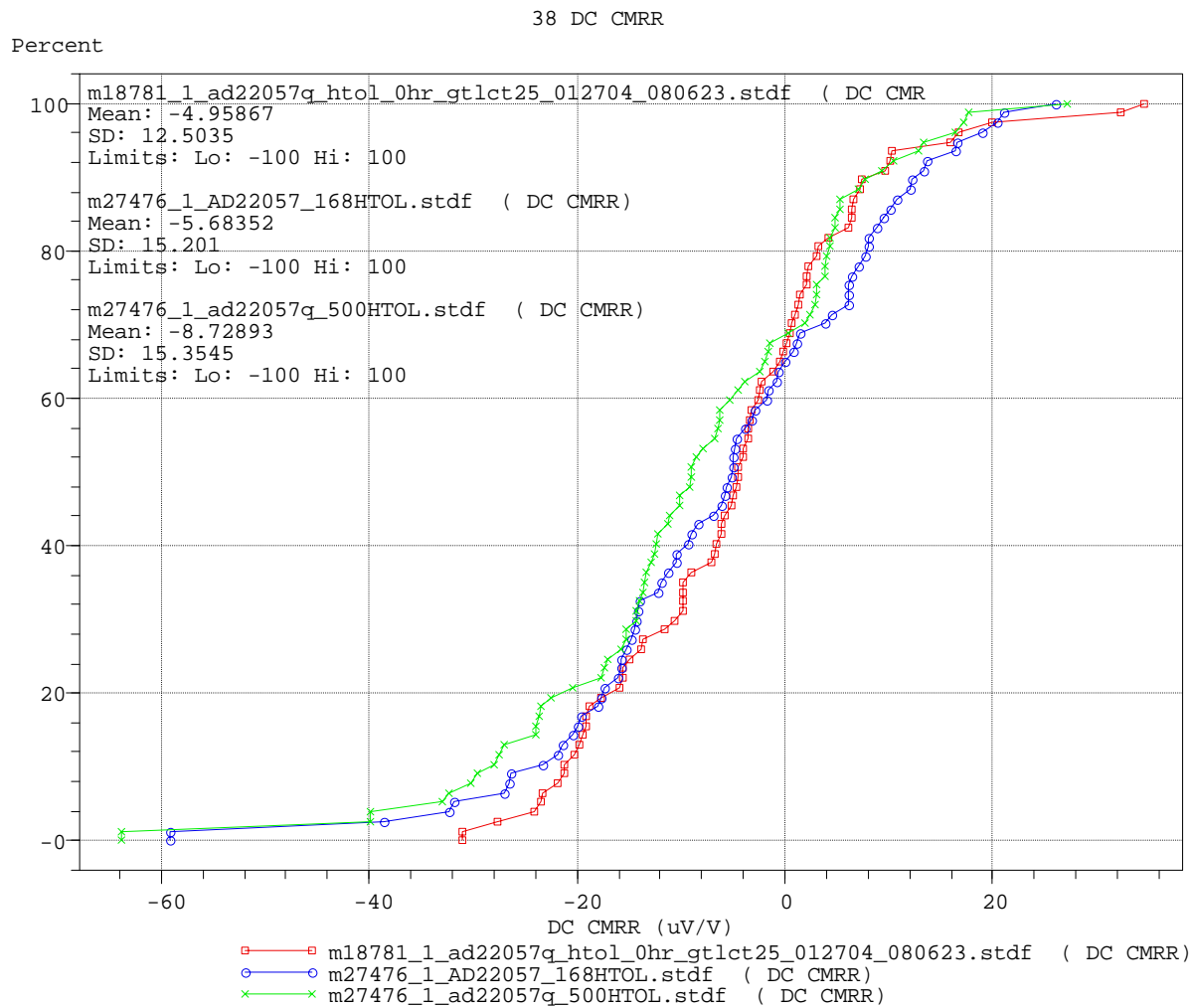
LOT ID : M27476

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

Test#	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	Test Site Number	77	0.480519	0.502897	0	1	1	0	5	
10	Supply Current @ 5V	77	1.46214	6.33649	-10.1655	12.3856	22.5511	0	500	uA
12	Output Swing Lo	77	-2.45536	3.63448	-9.47569	4.43556	13.9113	-4	20	mv
14	Output Swing Hi	77	0.00198122	0.00594557	-0.00753021	0.0103149	0.0178452	4.8	5	V
16	Short Circuit Current	77	0.0947131	0.186043	-0.380739	0.649635	1.03037	7	25	mA
20	Positive Input Impedance	77	1.30708	2.83292	-3.6897	6.78005	10.4697	200	300	Kohms
24	Negative Input Impedance	77	1.77824	3.17455	-3.82741	8.97943	12.8068	200	300	Kohms
26	A2 Gain	77	0.00173916	0.00316562	-0.00415611	0.00812602	0.0122821	1.94	2.06	V/V
28	A2 Input Offset	77	-45.6197	159.453	-582.861	276.759	859.62	-1.50E+03	1.50E+03	uV
30	Bipolar Gain	77	0.000360065	0.000581862	-0.00183582	0.00165573	0.0034916	0.49	0.51	
32	Bipolar Input Resistance	77	4.88779	44.5912	-81.4407	108.145	189.585	2.50E+03	5.00E+03	ohms
34	System Gain	77	-0.00581499	0.00799985	-0.0193577	0.00717926	0.0265369	19.9	20.1	V/V
36	System Offset	77	29.1087	143.632	-278.046	349.259	627.305	-1.00E+03	1.00E+03	uV
37	System Gain @ 36 V	77	-0.00806288	0.00909857	-0.0260544	0.0067482	0.0328026	19.74	20.26	V/V
99	AD620 Circuitry Check	77	0	0	0	0	0	-0.5	0.5	
38	DC CMRR	77	3.77027	19.3091	-37.1771	49.9744	87.1515	-100	100	uV/V
40	A1 Rout	77	-0.0887592	0.228636	-0.599669	0.438518	1.03819	97	103	Kohms
70	Output Swing Hi @ 36V	77	-0.00195386	0.0044376	-0.0199671	0.00671864	0.0266857	4.75	5.1	V
80	Output Swing Lo @ 36V	77	-8.61134	3.33097	-24.8971	-1.51141	23.3857	0	100	mV

CUMULATIVE DISTRIBUTION PLOTS

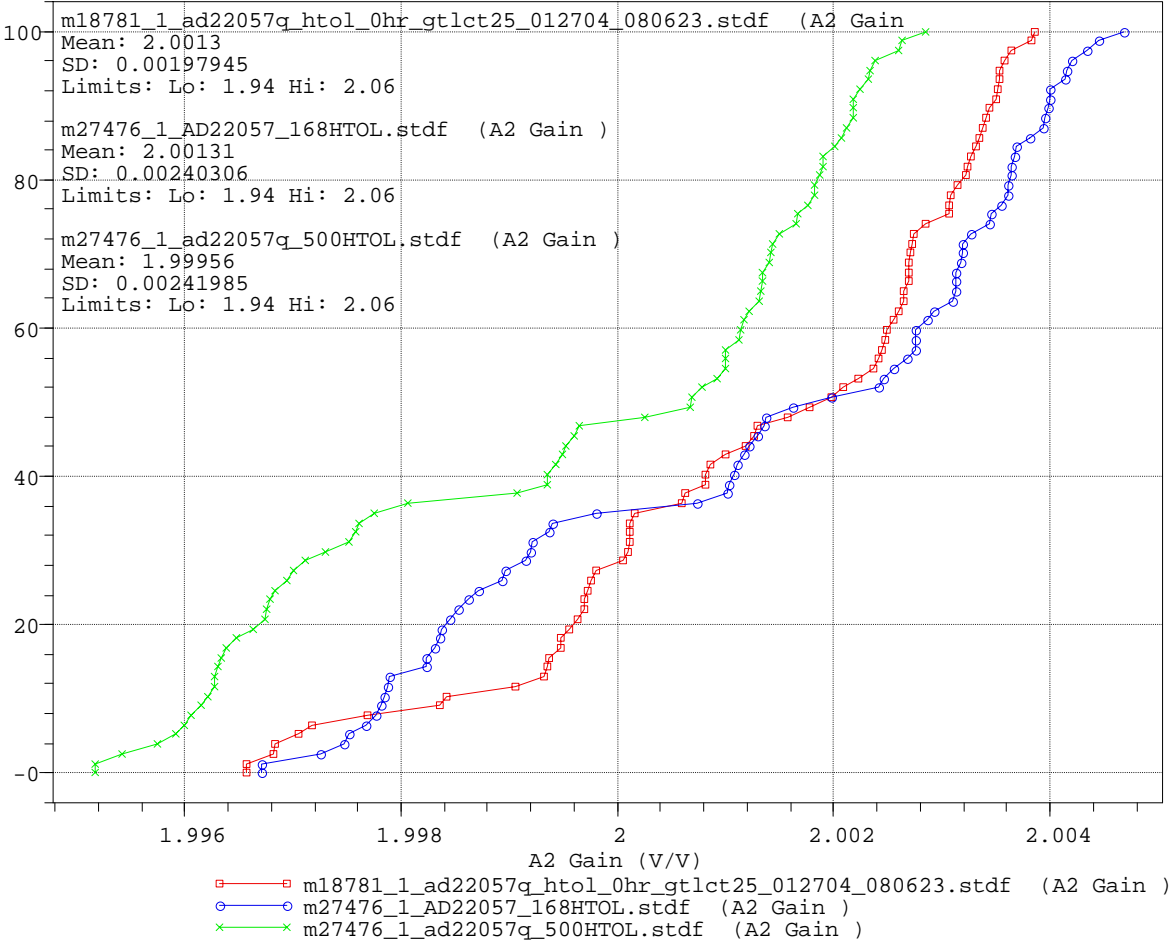
CMRR



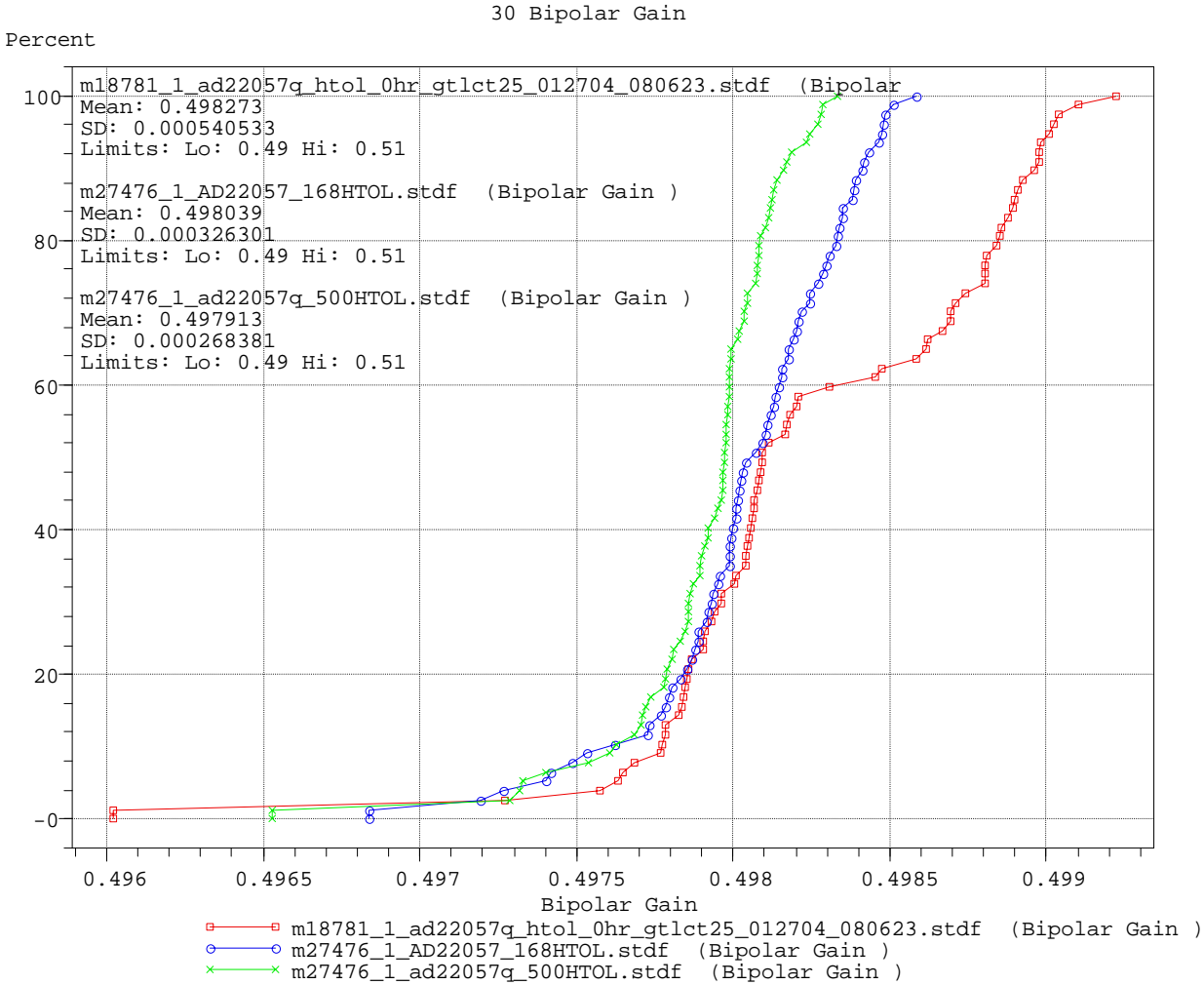
A2 Gain

26 A2 Gain

Percent



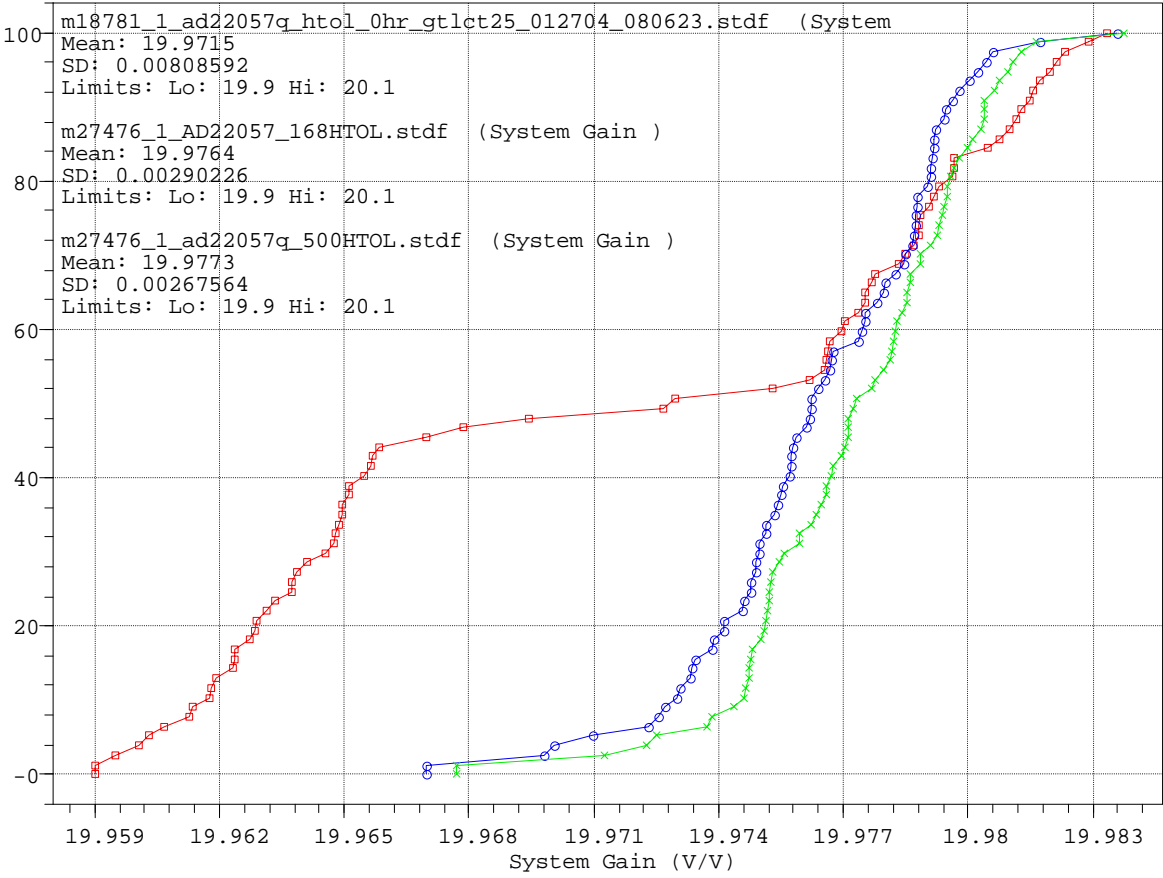
Bipolar Gain



System Gain

34 System Gain

Percent

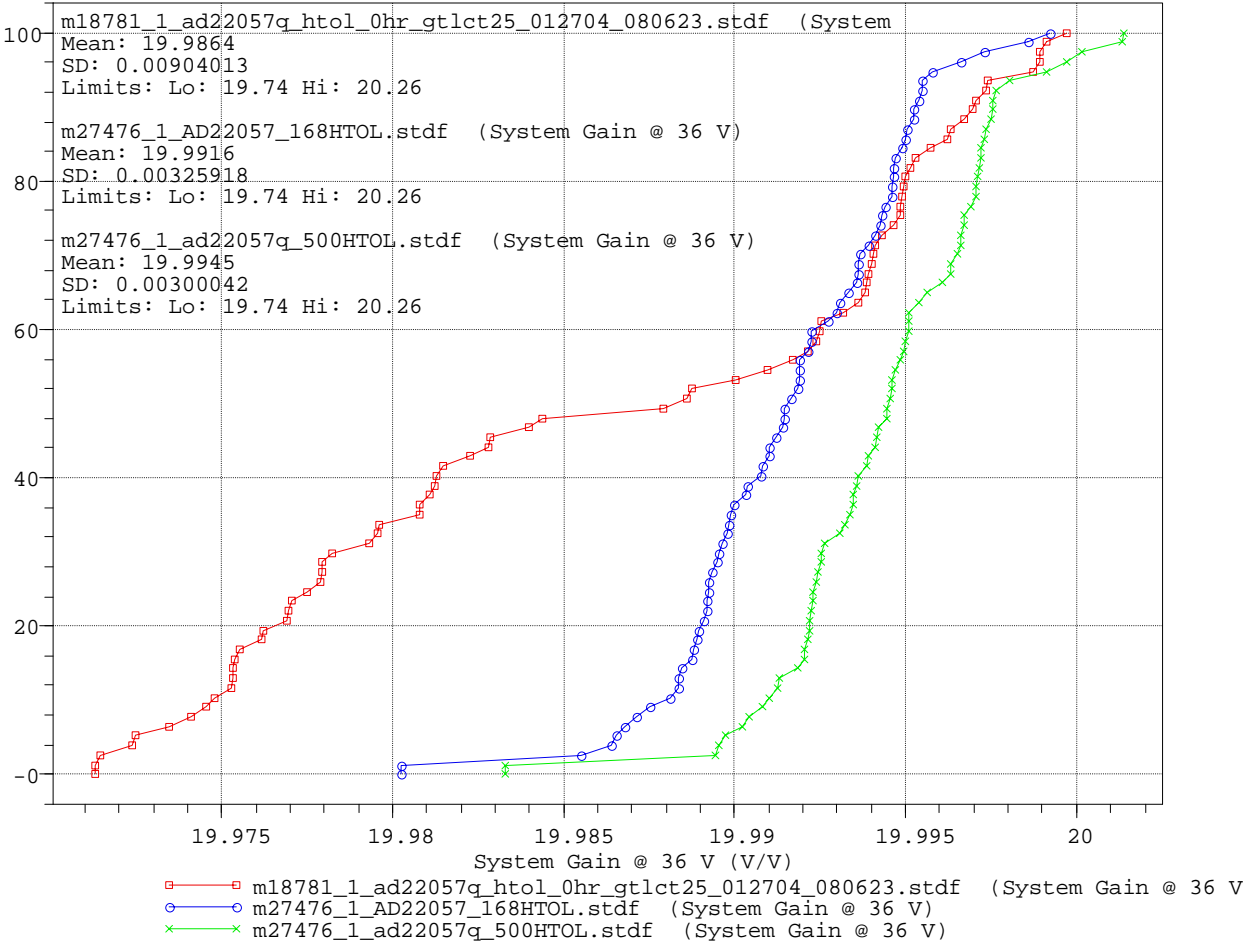


- m18781_1_ad22057q_htol_0hr_gtlct25_012704_080623.stdf (System Gain)
- m27476_1_AD22057_168HTOL.stdf (System Gain)
- × m27476_1_ad22057q_500HTOL.stdf (System Gain)

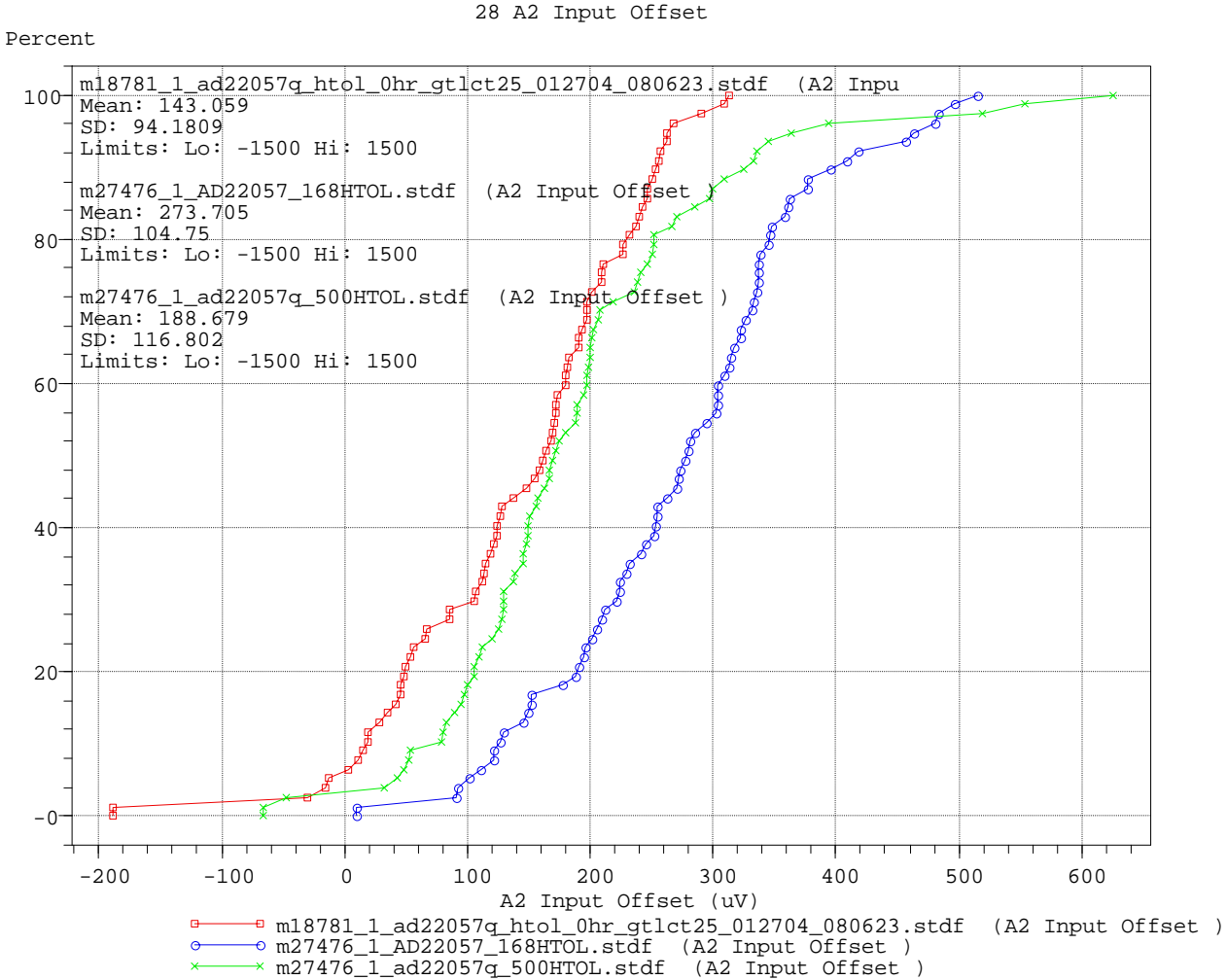
System Gain @ 36V

37 System Gain @ 36 V

Percent

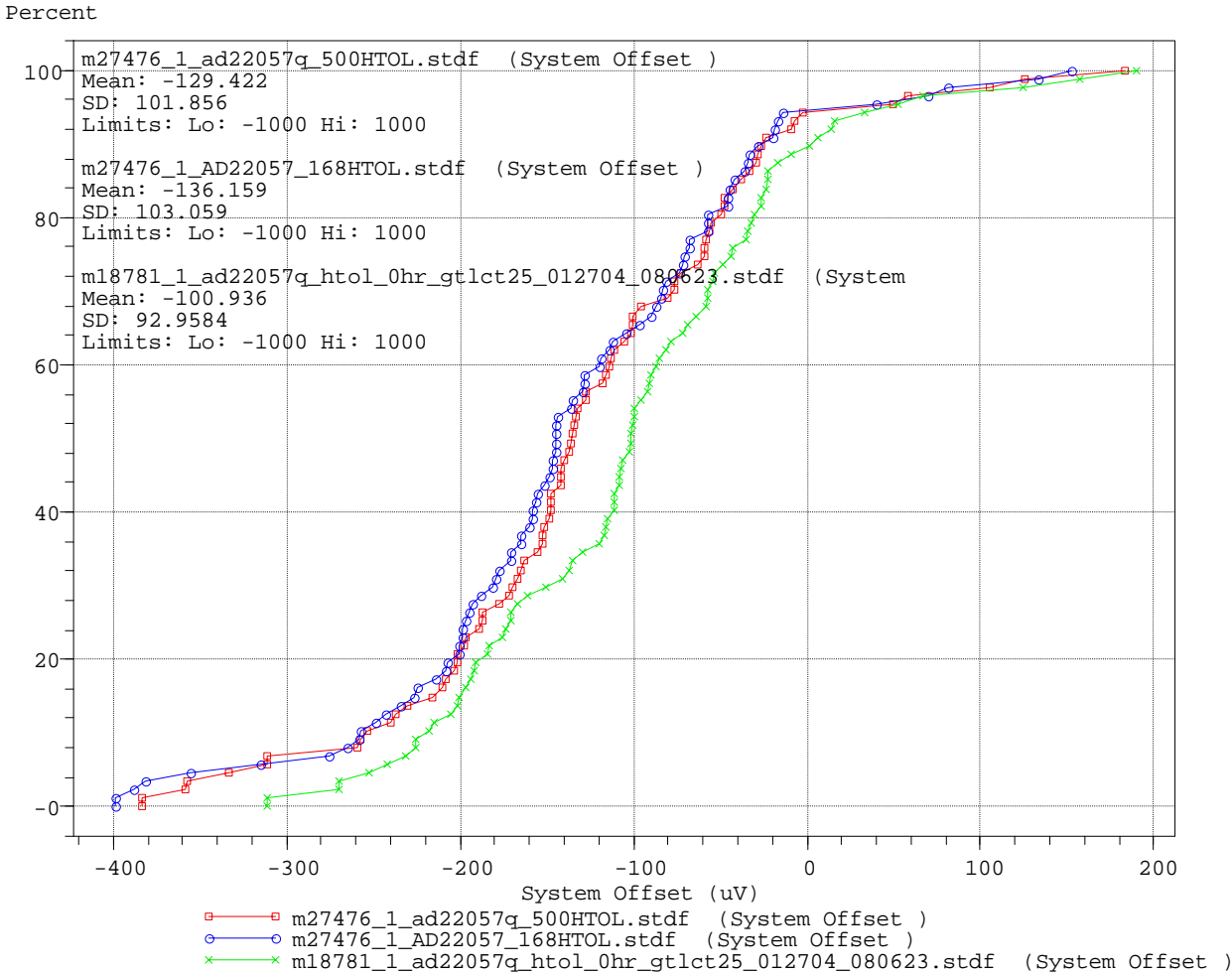


A2 Input Offset



System Offset

36 System Offset



AD526 Data Reduction Report

AD526 HTOL DATA REDUCTION

AD526 DATA REDUCTION

LOT ID: D75387.1

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
100	1.0 PLUS SWING G=1 2K LOAD +- 4.5V SUPPLIES	75	-0.00397466	0.000608435	-0.00553989	-0.00243092	0.00310898	2	4.5	V
200	2.0 MINUS SWING G=1 2K LOAD +- 4.5V SUPPLIES	75	0.174568	0.0601969	0.0306244	0.418077	0.387453	-4.5	-2	V
300	3.0 PLUS SWING 2K LOAD VIN=+12V +- 15V SUPPL	75	-0.0282999	0.000921459	-0.0298615	-0.0259237	0.00393772	10.5	15	V
400	4.0 MINUS SWING 2K LOAD VIN=-12V +- 15V SUPP	75	0.0299759	0.0143394	-0.0155554	0.0868502	0.102406	-15	-10.5	V
500	5.0 PLUS SWING 2K LOAD +- 18V SUPPLIES [V]	75	-0.100118	0.000745312	-0.101732	-0.0982523	0.00347996	11	18	V
600	6.0 MINUS SWING 2K LOAD +- 18V SUPPLIES [V]	75	0.0302485	0.0012257	0.0276461	0.0329561	0.00531006	-18	-13	V
700	7.0 OUTPUT SHORT-CIRCUIT CURRENT (+) [MA]	75	-1.09162	0.515034	-2.35652	0.276871	2.63339	-150	-16	mA
701	7.1 OUTPUT SHORT-CIRCUIT CURRENT (-) [MA]	75	1.73322	2.04111	-2.10995	7.02202	9.13197	16	150	mA
800	8.0 +V SUPPLY CURRENT [MA]	75	-0.199979	0.323163	-0.930368	1.73026	2.66062	0	13.5	mA
900	9.0 -V SUPPLY CURRENT [MA]	75	0.168561	0.31519	-1.67057	0.870626	2.54119	-12.5	0	mA
1000	10.0 OFFSET VOLTAGE @ 25 C [MV]	75	0.123822	0.340375	-0.907157	0.798819	1.70598	-1.5	1.5	mV
1100	11.0 +PSRR (16.5-4.5) [DB]	75	-13.9345	1424.89%	-41.0011	34.1893	75.1904	70	160	dB
1200	12.0 -PSRR (16.5-4.5) [DB]	75	-10.4141	843.37%	-34.1317	26.4186	60.5503	70	160	dB
1300	13.0 +PSRR (16.5-13.5) [DB]	75	-7.80985	369.18%	-27.3397	25.5893	52.929	70	160	dB
1400	14.0 -PSRR (16.5-13.5) [DB]	75	-2.47396	262.78%	-24.1797	30.042	54.2217	70	160	dB
1500	15.0 IB @ 10V [PA]	75	-18.0892	34.9358	-145.957	66.8717	212.829	-125	125	pA
1600	16.0 IB @ 0V [PA]	75	59.9141	32.1417	-81.131	160.279	241.411	-125	125	pA
4300	43.0 RELAY K2 TEST FAILURE (STUCKED-UP) [V]	75	0.139917	0.000774709	0.13849	0.142124	0.00363445	-15	15	V
1800	18.0 G=1 ACCURACY TWO POINT [%]	75	0.00174381	0.00307187	-0.00597895	0.00861949	0.0145984	-0.05	0.05	%
1900	19.0 G=2 ACCURACY TWO POINT [%]	75	-0.00302255	0.0035498	-0.012431	0.00408066	0.0165117	-0.05	0.05	%
2000	20.0 G=4 ACCURACY TWO POINT [%]	72	0.00675729	0.00397231	-0.00120503	0.0173381	0.0185432	-0.1	0.1	%
2100	21.0 G=8 ACCURACY TWO POINT [%]	75	0.0134779	0.00808987	-3.21E-05	0.0621195	0.0621516	-0.15	0.15	%
2200	22.0 G=16 ACCURACY (TWO POINT) [%]	75	0.0118646	0.00926217	-0.0287604	0.0319821	0.0607425	-0.15	0.15	%
2300	23.0 % NON-LINEARITY F.S.R. [%]	75	-0.00042263	0.00172263	-0.00427827	0.00389174	0.00817001	-0.005	0.005	%
2600	26.0 V/US SLEW RATE G=1 RISING EDGE [V]	75	-0.934682	0.63389	-5.86959	0.270528	6.14012	4	100	V
2700	27.0 V/US SLEW RATE G=8 RISING EDGE [V]	75	-2.19677	1.30994	-4.5768	2.27258	6.84938	18	100	V

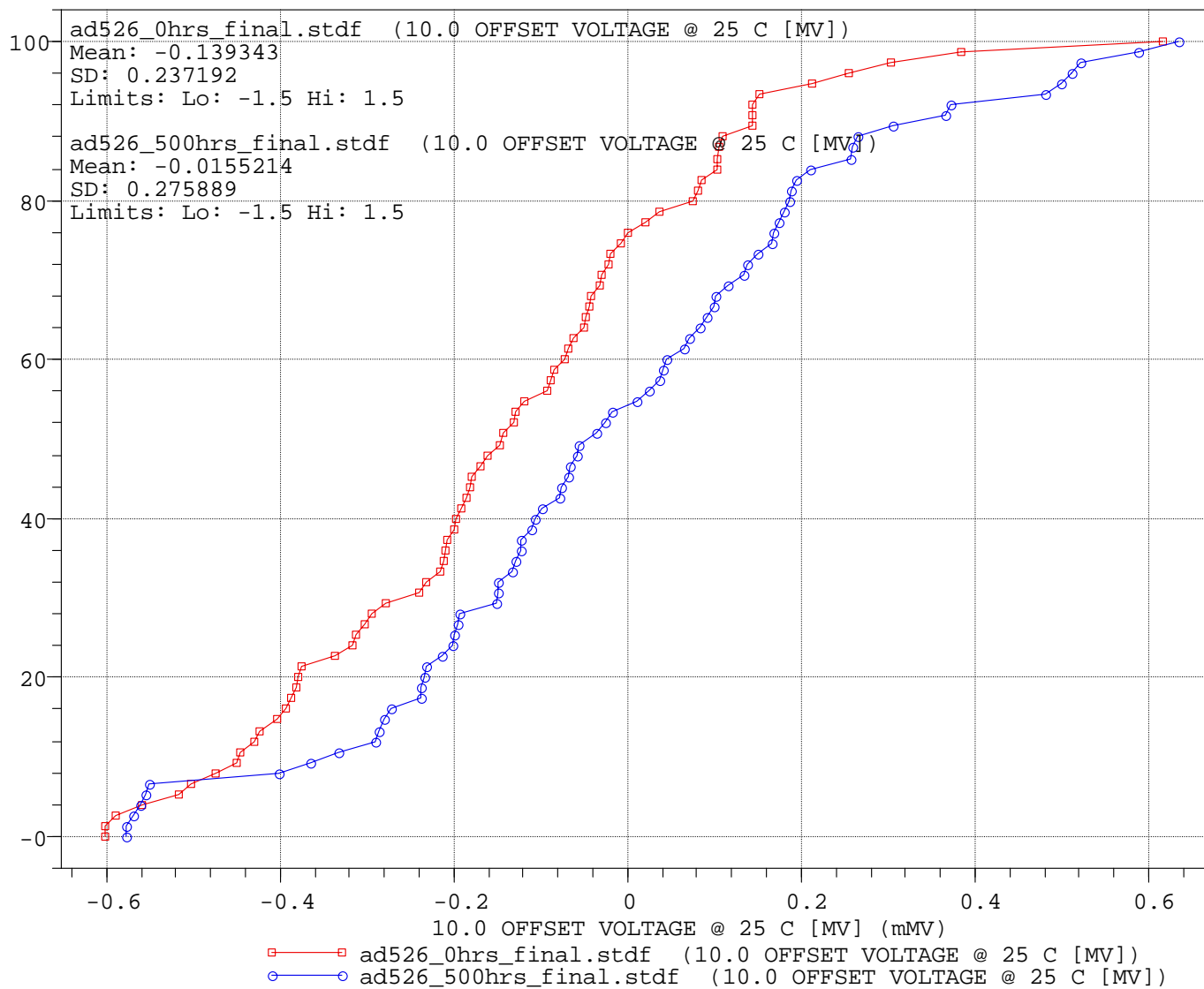
AD526 CUMULATIVE DISTRIBUTION PLOTS

OFFSET VOLTAGE

LOT ID : D75387.1

1000 10.0 OFFSET VOLTAGE @ 25 C [MV]

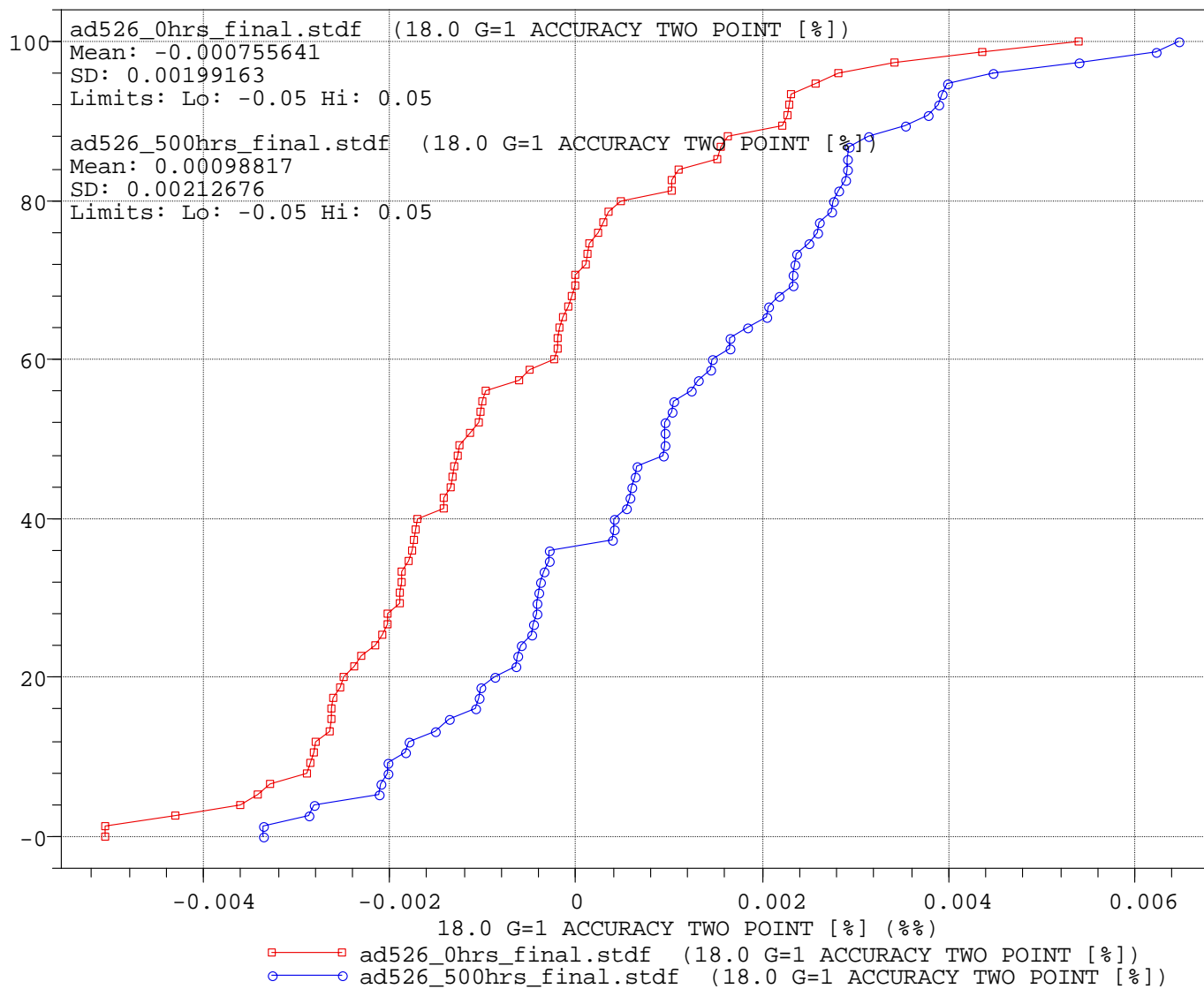
Percent



GAIN OF 1 ACCURACY
LOT ID : D75387.1

1800 18.0 G=1 ACCURACY TWO POINT [%]

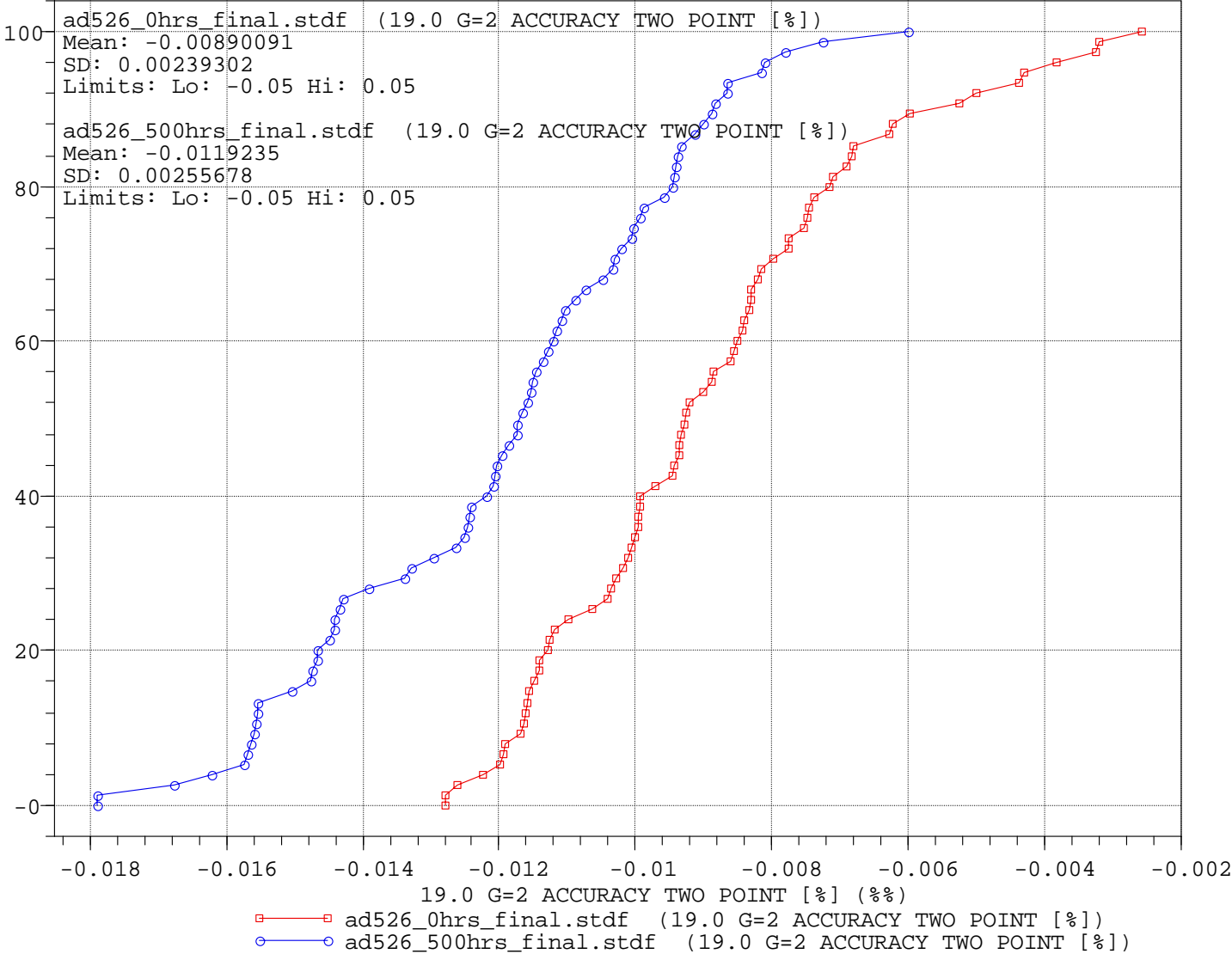
Percent



GAIN OF 2 ACCURACY

1900 19.0 G=2 ACCURACY TWO POINT [%]

Percent

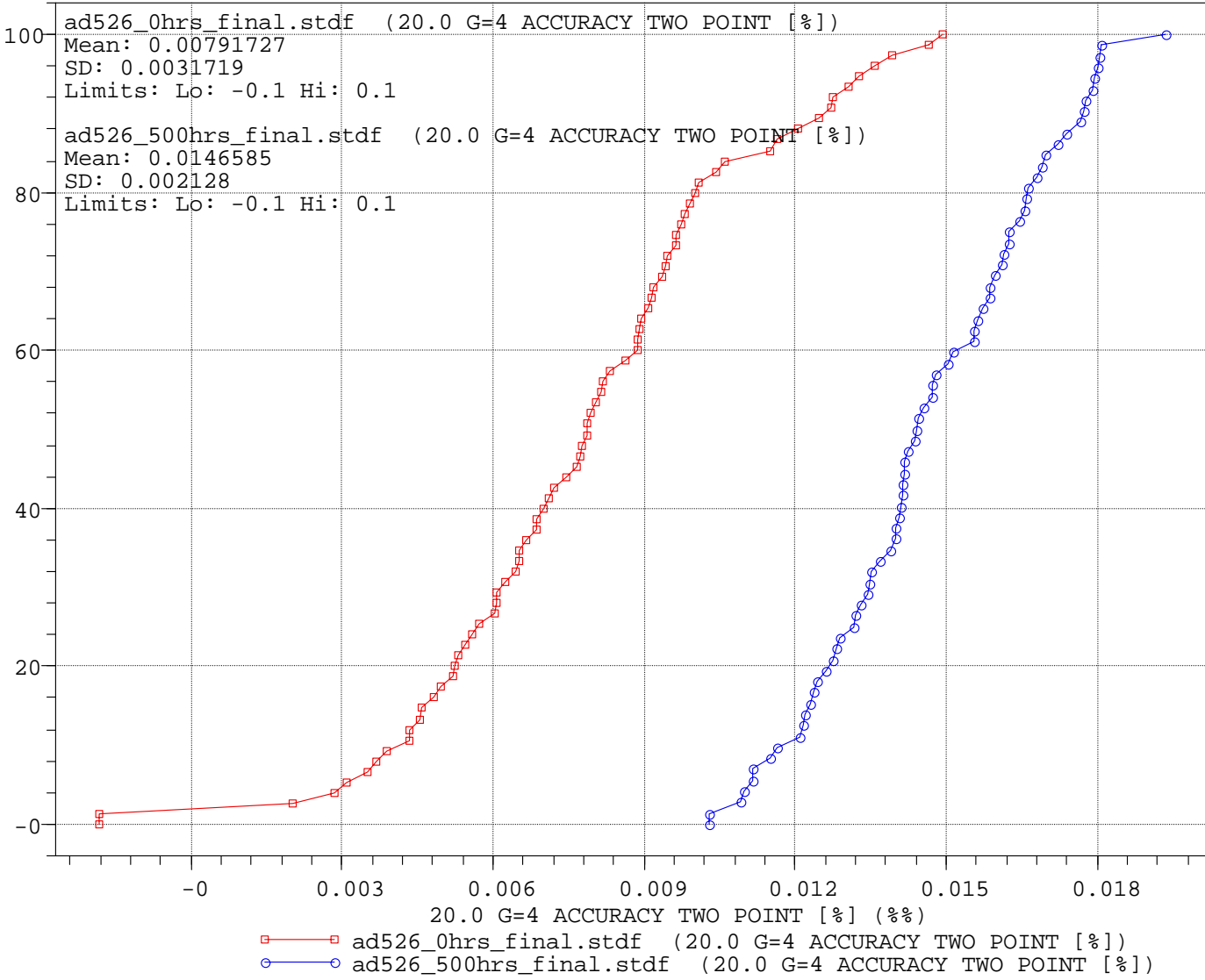


GAIN OF 4 ACCURACY

LOT ID : D75387.1

2000 20.0 G=4 ACCURACY TWO POINT [%]

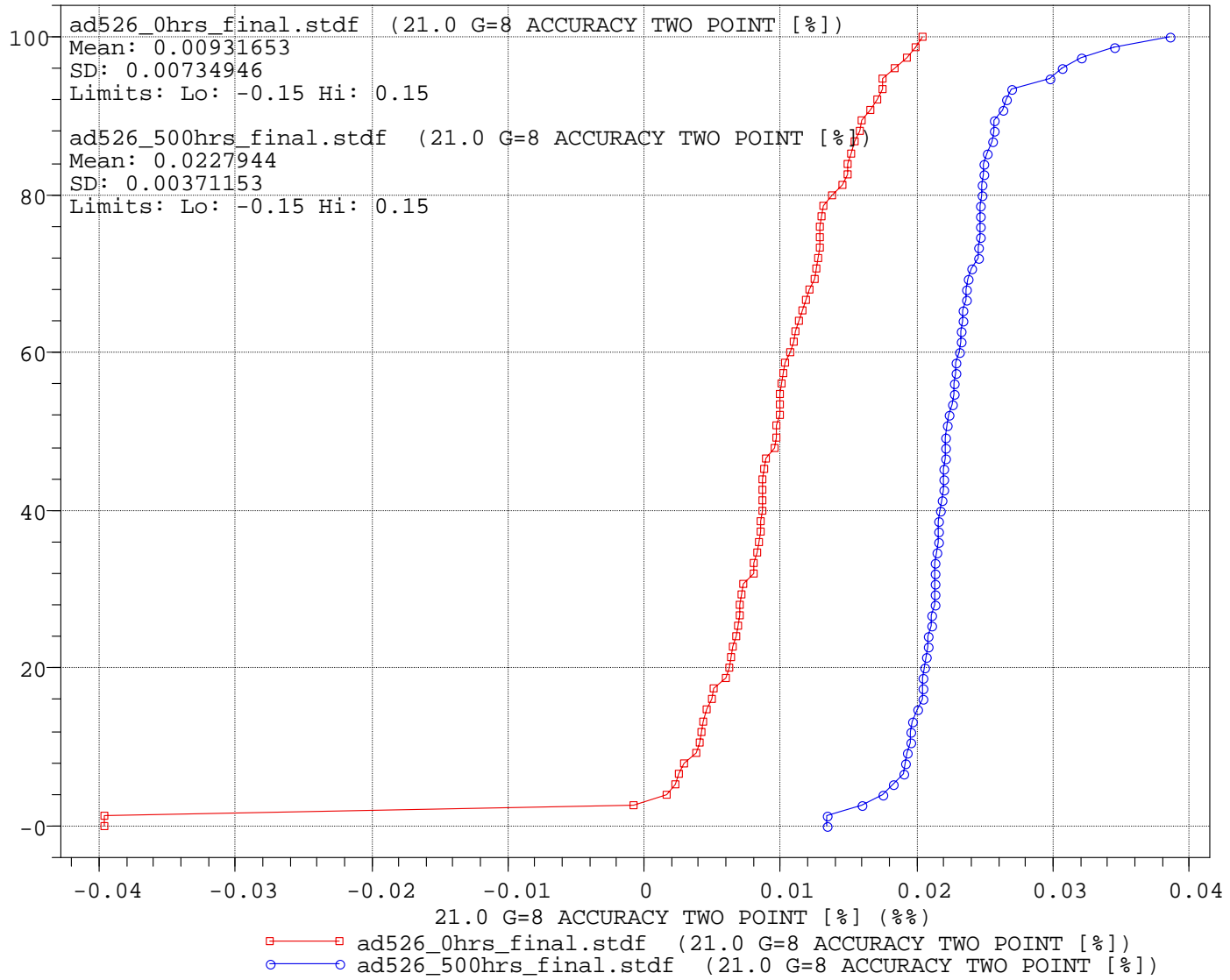
Percent



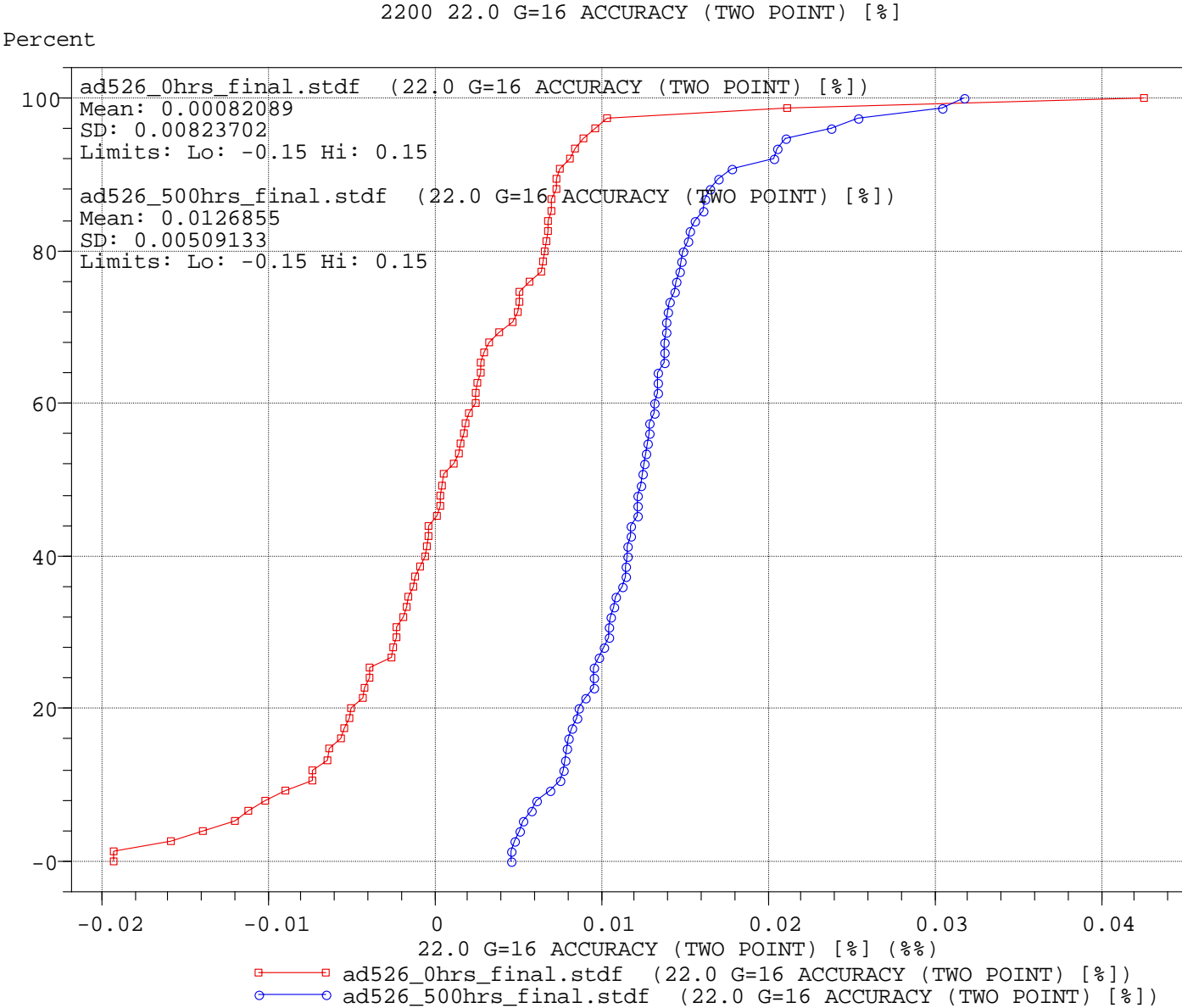
GAIN OF 8 ACCURACY
LOT ID : D75387.1

2100 21.0 G=8 ACCURACY TWO POINT [%]

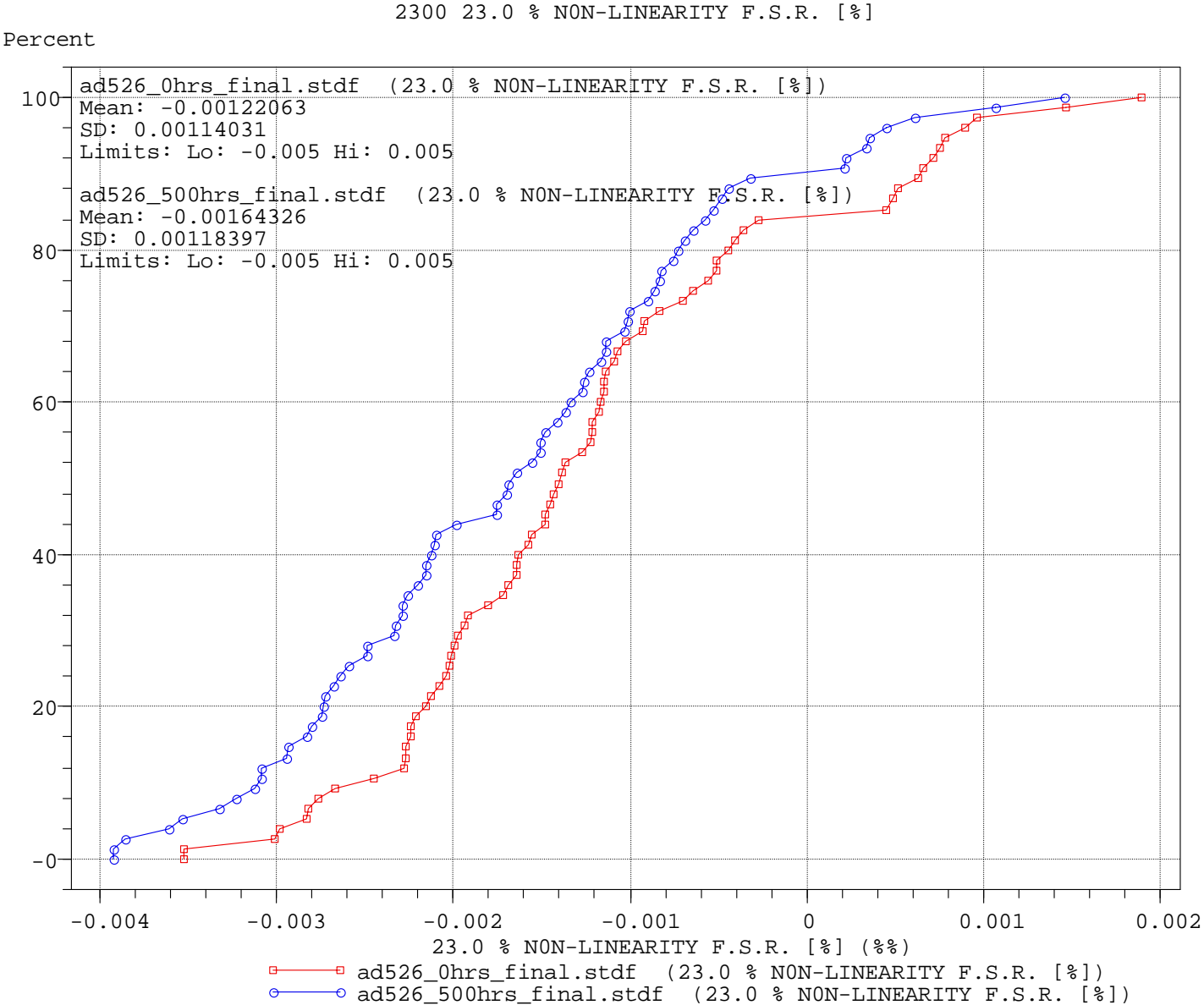
Percent



GAIN OF 16 ACCURACY
LOT ID : D75387.1



% NON-LINEARITY FS
LOT ID : D75387.1



AD694 Data Reduction Report

AD694 HTOL DATA REDUCTION

AD694 DATA REDUCTION

LOT ID: M53038.1

Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
SUPPLY I VS=36V 4MA OFF	71	0.013234	0.17653	-0.226678	1.42687	1.65355	1	2	mA
SUPPLY I VS=36V 4MA ON	70	0.00472599	0.01414	-0.025805	0.0445719	0.0703769	3.2	5.5	mA
BUFFER AMP +IBIAS VS=36V	70	0.15756	0.14521	-0.229968	0.504704	0.734672	0	5	nA
BUFFER AMP IOS	70	0.0176726	0.0255564	-0.0366924	0.0855167	0.122209	0	1	nA
BUFFER AMP -IBIAS - VS=36V	70	0.0924154	0.149443	-0.279688	0.480939	0.760626	0	5	nA
BUFFER AMP GAIN/SWINGS - IDEAL 101X	70	-0.0876986	0.029859	-0.133942	0.0853958	0.219337	97	103	
BUFFER AMP OFFSET	70	3.72658	69.4914	-146.388	188.143	334.532	0	500	uV
BUFFER AMP PSRR - VS=24V TO 36V	70	-27.4307	16838.50%	-62.9849	36.0371	99.0221	80	200	dB
OUTPUT AMP VOS - VS=12V	70	0.0435834	0.0306593	-0.0270753	0.122697	0.149772	0	1	mV
BUFFER AMP VOS +ADJ	70	-0.218027	0.228763	-1.1631	0.267957	1.43106	2	11	mV
BUFFER AMP VOS -ADJ	70	0.0600596	0.280168	-0.68395	0.818996	1.50295	-11	-2	mV
2V FS - MAX IOOUT CURRENT - VIN=5V	70	0.081819	0.279951	-0.579975	0.855343	1.43532	24	44	mA
ALARM PIN LEAKAGE @36V BIAS	70	-0.0183269	0.00303762	-0.0317661	-0.0131321	0.0186339	0	1	uA
ALARM I SHORT CKT #1 - VS=5V	70	0.539278	0.131612	0.249762	0.829016	0.579254	9	30	mA
ALARM I SHORT CKT #2 - VS=5V	70	0.538312	0.131252	0.250587	0.82604	0.575453	9	30	mA
VSAT OF ALARM @2.5MA - VS=5V	70	-0.00622099	0.00471734	-0.0168508	0.00565797	0.0225088	0	0.5	V
2.000V REFERENCE ERROR - VIN=2V	70	-0.173009	0.827641	-2.07221	2.26872	4.34092	-4	4	mV
2.000V REFERENCE ERROR - VIN=2V	4	0	0	0	0	0	-8	8	mV
2V REF LOAD REGULATION 0 TO -5MA	70	-0.000660068	0.0014434	-0.00360929	0.00406286	0.00767215	0	0.5	mV/mA
10.000V REFERENCE ERROR - 4MA OFF	70	-0.821462	4.60524	-12.2974	16.7138	29.0113	-20	20	mV
10.000V REFERENCE ERROR - 4MA OFF	4	0	0	0	0	0	-40	40	mV
10V REF LOAD REGULATION 0 TO -5MA	70	0.00107726	0.0045506	-0.00271054	0.0220353	0.0247459	0	0.5	mV/mA
10V REF PSRR - VS=21.6V TO 26.4V	70	-2.41E-05	9.47E+00	-0.000319332	0.00020524	0.000524856	0	0.005	
10V FS - 4.008MA ERROR - VIN=5MV	70	2.38719	1.36713	-1.12042	5.11974	6.24016	0	10	uA
10V FS - 4.008MA ERROR - VIN=5MV	4	0	0	0	0	0	0	20	uA
10V FS - 20.0MA ERROR - VIN=10V	70	-1.61181	3.5106	-8.93303	6.21887	15.1519	0	100	uA
10V FS - NONLINEARITY	70	0.000128212	0.000231967	-0.000388556	0.000569087	0.000957644	0	0.005	
10V FS - NONLINEARITY	4	0	0	0	0	0	0	0.015	
10V FS - SPAN ERROR	70	0.00559415	0.0229592	-0.0493493	0.0544777	0.103827	0	0.15	

AD549 Data Reduction Report

AD549 HTOL DATA REDUCTION

AD549 DATA REDUCTION

LOT ID: D82966.1

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
100	+5V SWING	77	-0.0454533	0.367856	-3.33536	0.0153913	3.35076	3	5	V
200	-5V SWING	77	0.0866355	0.507228	0.0129657	4.62331	4.61035	-5	-3	V
300	+18V SWING	77	-0.172299	1.79826	-16.2575	0.0437965	16.3013	13	18	V
400	-18V SWING	77	0.139207	1.94629	-0.308945	17.5455	17.8544	-18	-13	V
500	+15V SWING RL2K	77	-0.169551	1.39717	-12.6635	0.103634	12.7671	10	15	V
600	-15V SWING RL2K	77	0.214679	1.37449	0.0103827	12.5085	12.4981	-15	-10	V
700	-15V SWING RL10K	77	0.222932	1.57167	0.0344267	14.2813	14.2468	-15	-12	V
800	+15V SWING RL10K	77	-0.239889	1.46679	-13.3602	-0.054966	13.3052	12	15	V
900	+I SUPPLY	77	-15.5049	15.2763	-43.7366	29.8312	73.5679	485	700	UA
1000	OFFSET	77	0.167395	0.293123	-0.528039	0.767498	1.29554	-0.25	0.25	MV
1100	+CMRR	77	-12.2687	1808.25%	-44.1452	34.6756	78.8207	90	201	DB
1200	-CMRR	77	-10.1017	813.25%	-36.4059	42.5814	78.9873	90	201	DB
1300	+PSRR	77	0.224152	1.34349	-2.74247	2.99457	5.73704	-32	32	UV/V
1400	-PSRR	77	-0.108353	6.49373	-12.3075	15.0479	27.3554	-32	32	UV/V
1500	-GAIN RL2K	77	-2.24487	27.6573	-91.8252	59.4388	151.264	100	2.00E+05	V/MV
1600	+GAIN RL2K	77	-535.682	4700.01	-18080.1	17528.9	35609	100	2.00E+05	V/MV
1700	+GAIN RL10K	77	-378.532	2540.26	-8091.74	16794.9	24886.6	300	2.00E+05	V/MV
1800	-GAIN RL10K	77	-483.376	6808.47	-17629.1	17600.2	35229.4	300	2.00E+05	V/MV
1900	-NULL	77	0.372595	0.453412	-0.832739	1.36813	2.20087	-20	-2	MV
2000	+NULL	77	0.0107217	0.444088	-0.948414	1.0688	2.01721	2	20	MV
2100	+ISC	77	-0.517815	2.06714	-18.2806	1.28552	19.5661	15	35	MA
2200	-ISC	77	0.787021	1.89704	-0.614557	17.2842	17.8987	-35	-15	MA
1010	OFFSET	6	0.390245	0.365586	-0.0680194	0.767498	0.835517	-0.5	0.5	MV

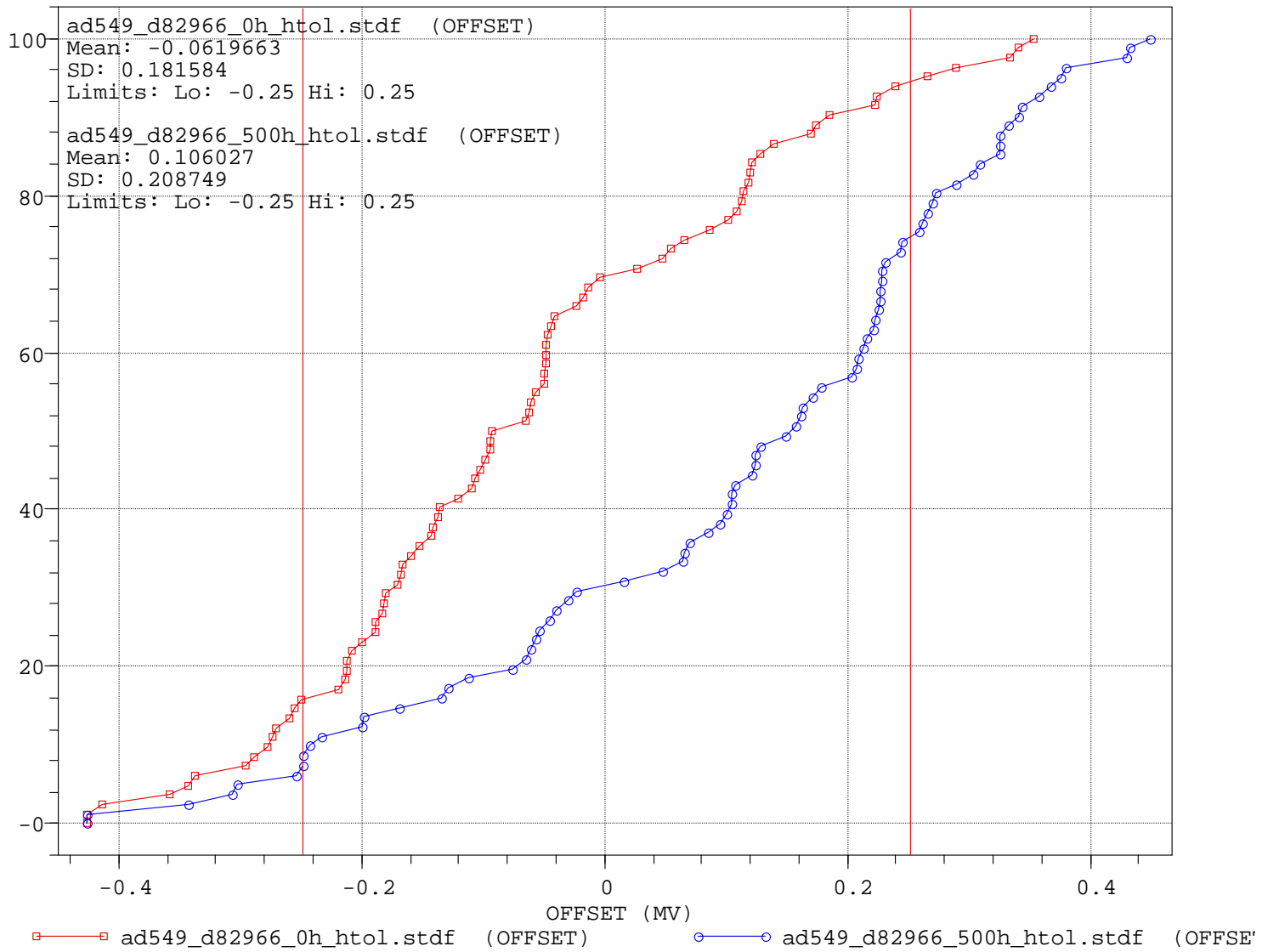
AD549 DATA REDUCTION CUMULATIVE DISTRIBUTION PLOTS

OFFSET VOLTAGE

LOT ID : D82966.1

1000 OFFSET

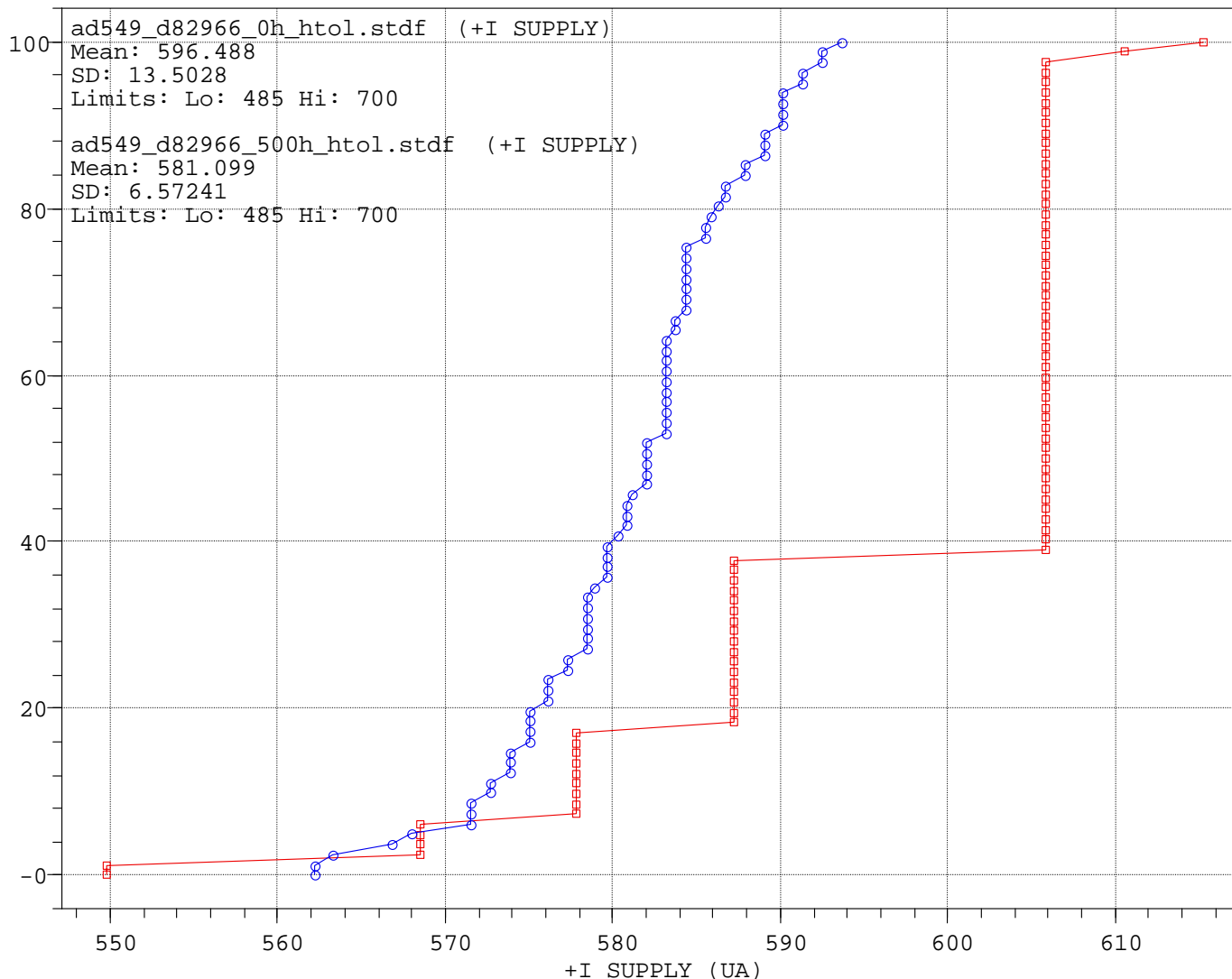
Percent



SUPPLY CURRENT
LOT ID : D82966.1

900 +I SUPPLY

Percent



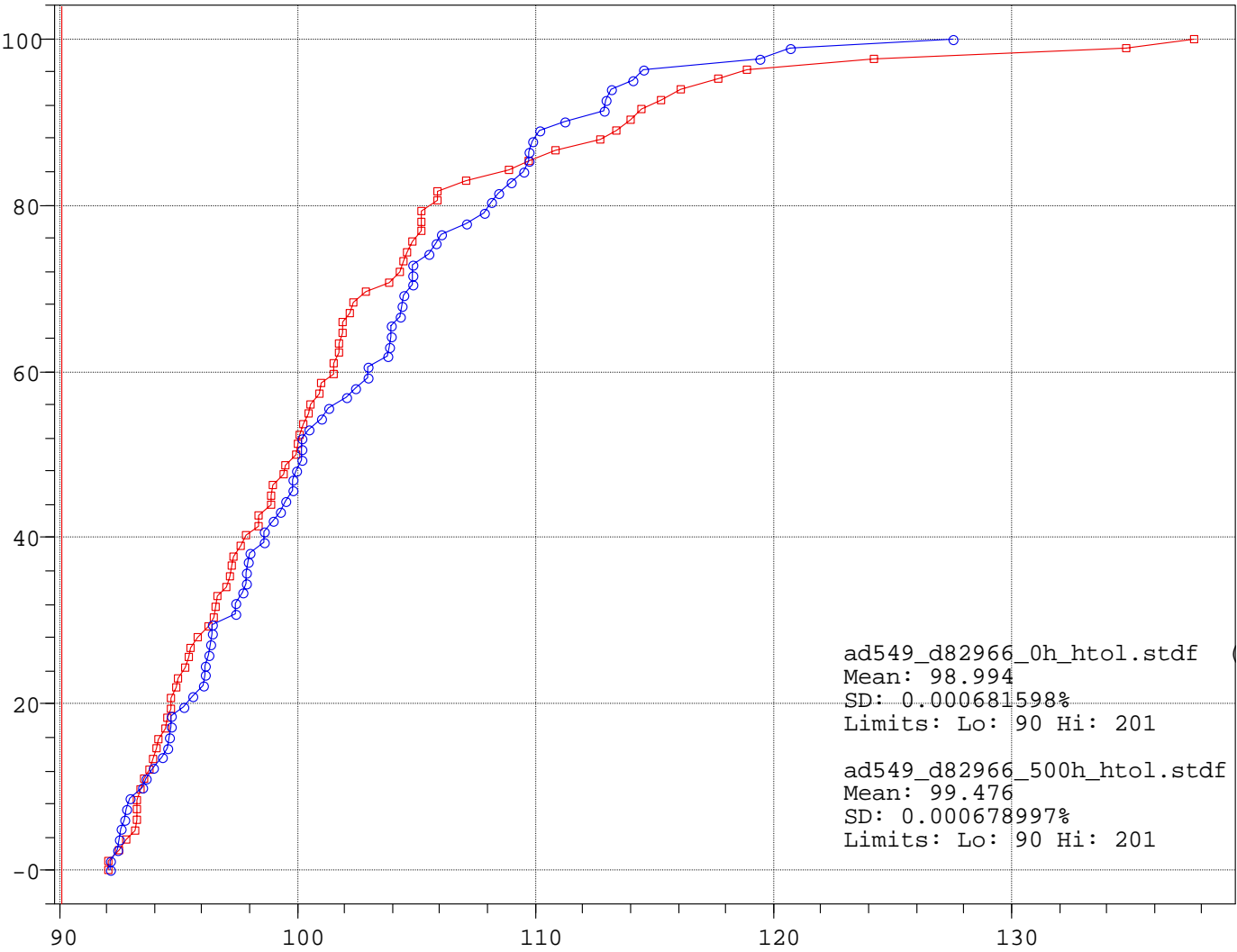
□—□ ad549_d82966_0h_htol.stdf (+I SUPPLY) ○—○ ad549_d82966_500h_htol.stdf (+I SUPPLY)

POSITIVE INPUT CMRR (CMRR+)

LOT ID : D82966.1

1100 +CMRR

Percent



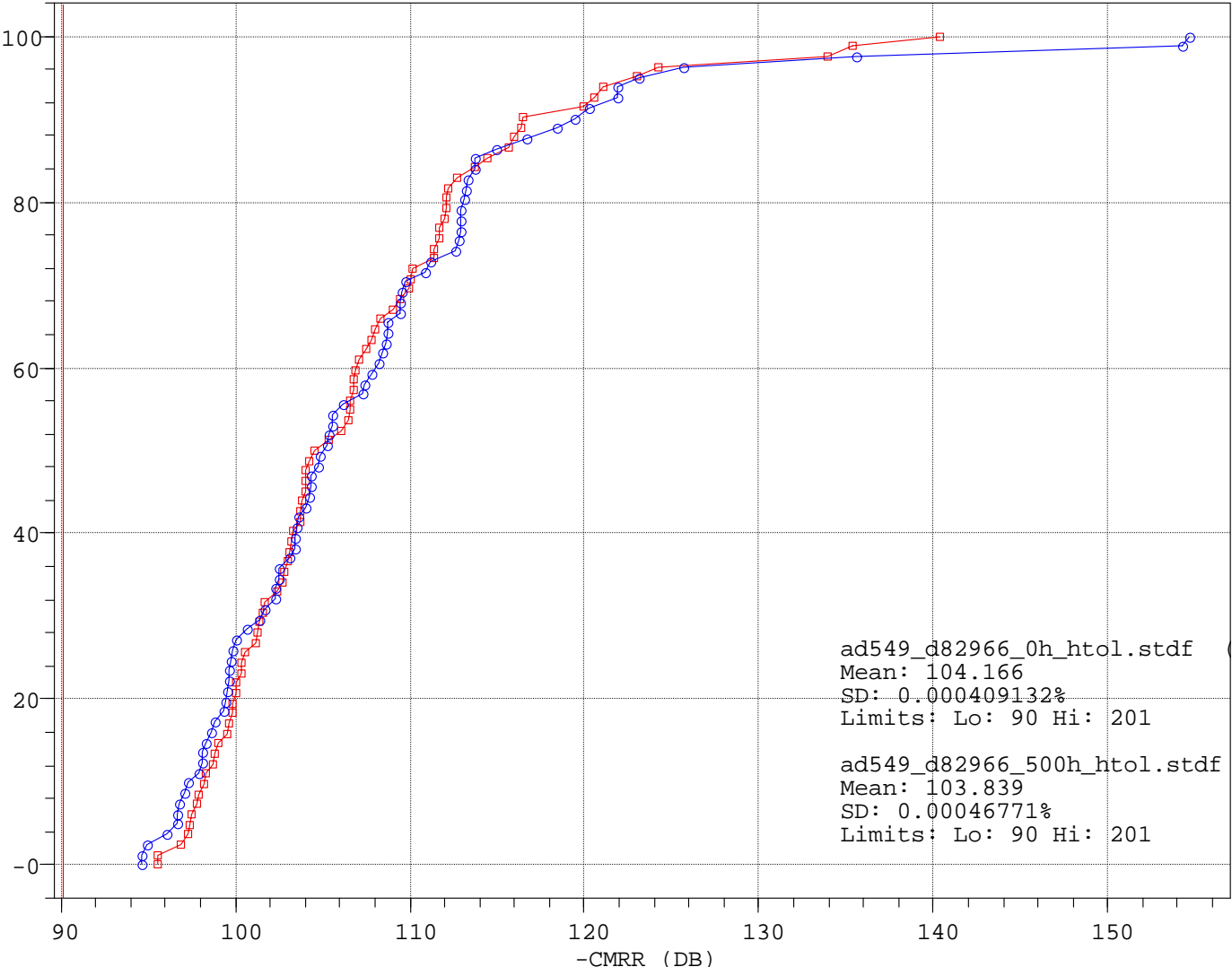
ad549_d82966_0h_htol.stdf (+CMRR) ad549_d82966_500h_htol.stdf (+CMRR)

NEGATIVE INPUT CNRR (CMRR-)

LOT ID : D82966.1

1200 -CMRR

Percent

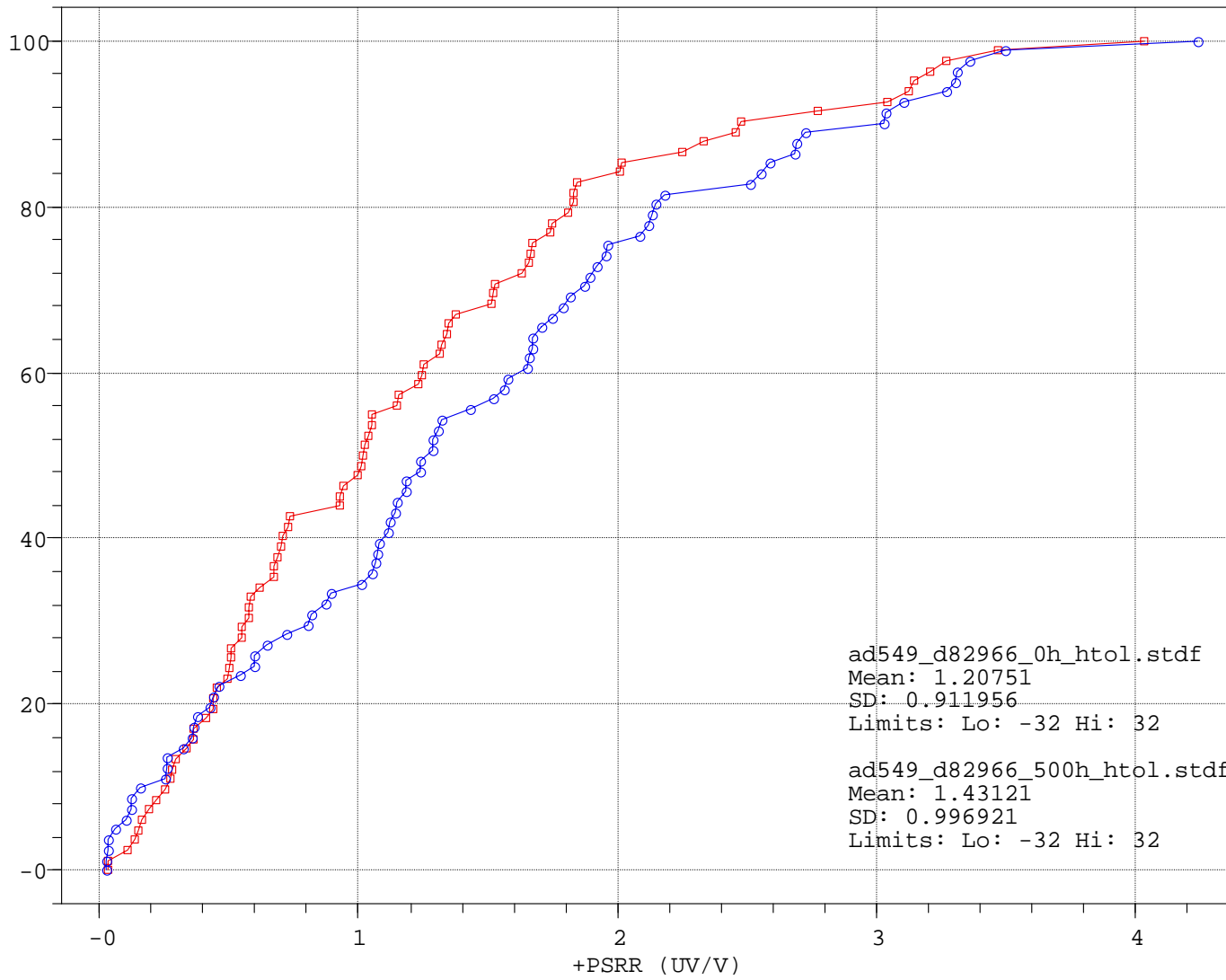


ad549_d82966_0h_htol.stdf (-CMRR) ad549_d82966_500h_htol.stdf (-CMRR)

POSITIVE SUPPLY PSRR (PSRR+)
LOT ID: D82966.1

1300 +PSRR

Percent



ad549_d82966_0h_htol.stdf (+PSRR) ad549_d82966_500h_htol.stdf (+PSRR)

AD588 Data Reduction Report

AD588 HTOL DATA REDUCTION

AD588 DATA REDUCTION

LOT ID: M53540.1

Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
+V SUPPLY CURRENT	77	-0.00529367	0.464845	-3.30026	0.65503	3.95529	1	10	mA
-V SUPPLY CURRENT	77	-0.165289	0.466272	-0.830649	3.13953	3.97018	-10	-1	mA
NEGATIVE GAIN ADJ	77	-5.57E-07	0.000179049	-0.00060375	0.00037827	0.00098202	0.003	10	V
POSITIVE GAIN ADJ	77	1.00E-05	0.000384814	-0.00129989	0.000860522	0.00216041	0.003	10	V
NEGATIVE BALANCE ADJ	77	4.29E-06	0.000132137	-0.000400154	0.000273547	0.00067371	0.003	10	V
POSITIVE BALANCE ADJ.	77	4.21E-06	0.000133775	-0.000381725	0.00028583	0.000667555	0.003	10	V
A3 BUFFER +10V DELTA	77	0.127899	0.59959	-1.556	1.79106	3.34706	-1	1	mV
A3 BUFFER +10V DELTA	77	0.127899	0.59959	-1.556	1.79106	3.34706	-3	3	mV
A4 BUFFER -10V DELTA	77	-0.146227	0.599078	-1.80451	1.50121	3.30571	-1	1	mV
A4 BUFFER -10V DELTA	77	-0.146227	0.599078	-1.80451	1.50121	3.30571	-3	3	mV
A3 BUFFER +5V DELTA	77	0.134089	0.306132	-0.722925	0.965411	1.68834	-1	1	mV
A3 BUFFER +5V DELTA	77	0.134089	0.306132	-0.722925	0.965411	1.68834	-3	3	mV
A4 BUFFER -5V DELTA	77	-0.0033384	0.327132	-0.824182	0.803253	1.62744	-1	1	mV
A4 BUFFER -5V DELTA	77	-0.0033384	0.327132	-0.824182	0.803253	1.62744	-3	3	mV
A3/A4 TRK ERR +/-5V MODE	77	0.461139	1.59108	-5.73292	6.85675	12.5897	0	750	uV
A3/A4 TRK ERR +/-5V MODE	77	0.000461139	0.00159108	-0.00573292	0.00685675	0.0125897	0	1.5	mV
A3 +5V PSRR @ +/-18V	77	-1.25415	9.62164	-45.3506	19.9	65.2506	0	200	uV
A4 -5V PSRR @ +/-18V	77	0.628823	8.94684	-23.2701	21.9293	45.1993	0	200	uV
A3 +5V PSRR @ +/-10.5V	77	-1.60139	10.1837	-53.8881	17.1755	71.0636	0	200	uV
A4 -5V PSRR @ +/-10.5V	77	0.666912	9.10368	-22.0418	20.9003	42.9421	0	200	uV
A3 +10V PSRR @ +13.5V/-15V	77	2.75633	11.7366	-38.9251	23.873	62.7981	0	200	uV
A4 -10V PSRR @ +13.5V/-15V	77	2.6447	7.46095	-15.7863	19.0527	34.839	0	200	uV
A3 +10V PSRR @ +18V/-15V	77	-2.12242	10.7964	-44.5568	21.4813	66.0381	0	200	uV
A4 -10V PSRR @ +18V/-15V	77	-2.5564	6.71333	-24.519	13.0462	37.5652	0	200	uV
A3 +10V PSRR @ +15V/-13.5V	77	-2.65716	8.33568	-21.5962	14.2463	35.8425	0	200	uV
A4 -10V PSRR @ +15V/-13.5V	77	6.60833	10.4862	-18.9017	34.1222	53.024	0	200	uV
A3 +10V PSRR @ +15V/-18V	77	1.49784	8.23398	-18.7716	24.6688	43.4404	0	200	uV
A4 -10V PSRR @ +15V/-18V	77	-4.07191	7.98091	-25.1294	15.2538	40.3832	0	200	uV
NOISE PIN	77	0.0012977	0.017775	-0.047792	0.0456052	0.933971	6.3	8.3	V
+10V LOAD REG	77	-0.00282646	0.00984002	-0.0252548	0.0159725	0.0412272	0	0.5	mV
-10V LOAD REG	77	0.0029958	0.0105232	-0.0229668	0.0259085	0.488753	0	0.5	mV
Test Site Number	77	1	0	1	1	0	N/A	N/A	
Test Head Number	77	1	0	1	1	0	N/A	N/A	

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

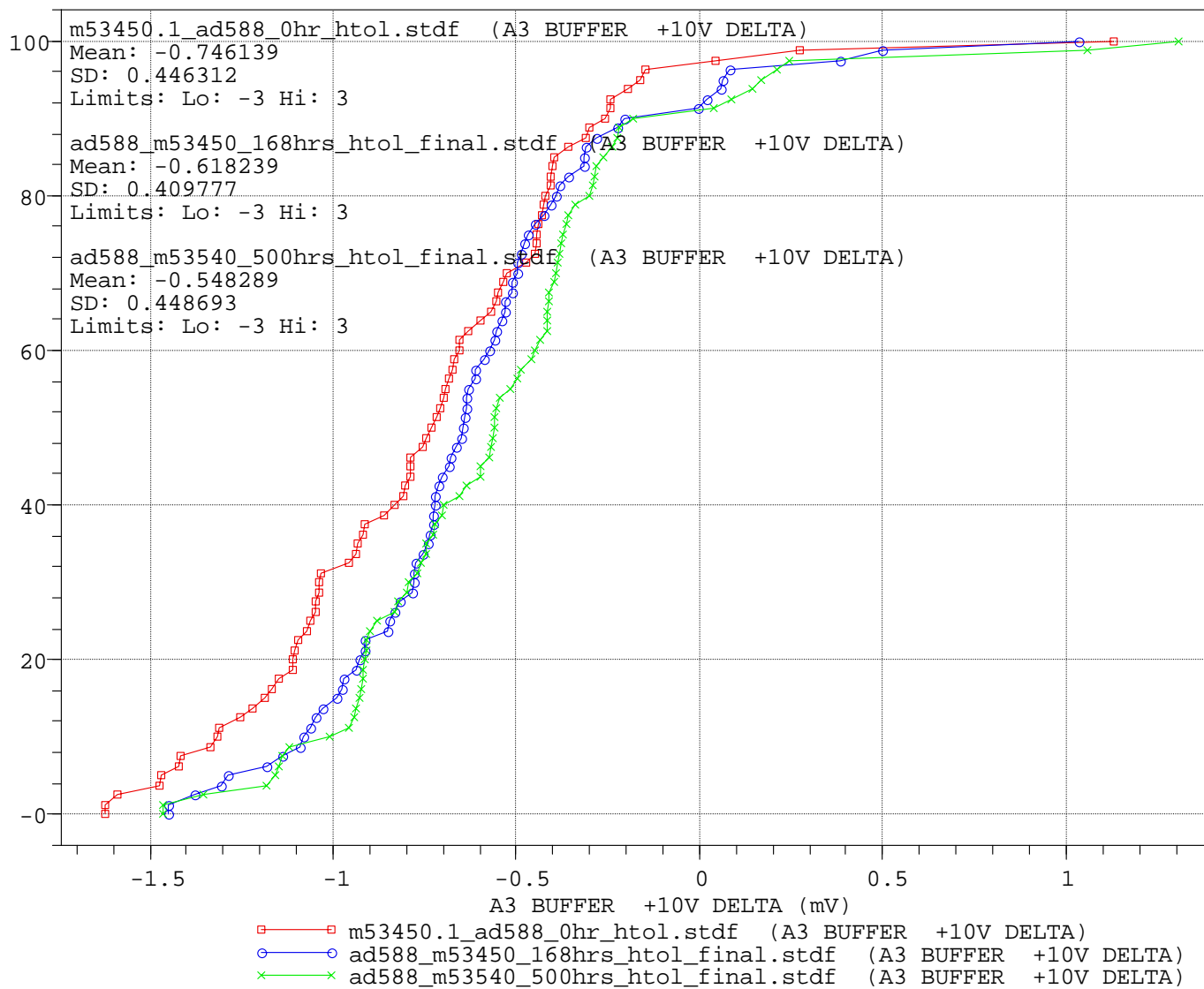
Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
+V SUPPLY CURRENT	77	0.521743	0.280383	-0.117149	1.01433	1.13148	1	10	mA
-V SUPPLY CURRENT	77	-0.484831	0.281481	-0.978312	0.161508	1.13982	-10	-1	mA
NEGATIVE GAIN ADJ	77	-1.21E-06	0.000211116	-0.000422017	0.000574719	0.000996736	0.003	10	V
POSITIVE GAIN ADJ	77	5.68E-06	0.000456157	-0.00103498	0.00125978	0.00229475	0.003	10	V
NEGATIVE BALANCE ADJ	77	-1.59E-05	0.000137072	-0.000314347	0.000348981	0.000663329	0.003	10	V
POSITIVE BALANCE ADJ.	77	1.70E-05	0.000136358	-0.000303602	0.000386226	0.000689828	0.003	10	V
A3 BUFFER +10V DELTA	77	0.19785	0.581982	-0.916059	2.16709	3.08315	-1	1	mV
A3 BUFFER +10V DELTA	77	0.19785	0.581982	-0.916059	2.16709	3.08315	-3	3	mV
A4 BUFFER -10V DELTA	77	-0.133405	0.597797	-2.20233	0.915155	3.11749	-1	1	mV
A4 BUFFER -10V DELTA	77	-0.133405	0.597797	-2.20233	0.915155	3.11749	-3	3	mV
A3 BUFFER +5V DELTA	77	0.125195	0.305375	-0.455121	1.14407	1.5992	-1	1	mV
A3 BUFFER +5V DELTA	77	0.125195	0.305375	-0.455121	1.14407	1.5992	-3	3	mV
A4 BUFFER -5V DELTA	77	-0.0369492	0.330054	-1.01681	0.608023	1.62483	-1	1	mV
A4 BUFFER -5V DELTA	77	-0.0369492	0.330054	-1.01681	0.608023	1.62483	-3	3	mV
A3/A4 TRK ERR +/-5V MODE	77	0.284075	1.7447	-5.59477	6.0792	11.674	0	750	uV
A3/A4 TRK ERR +/-5V MODE	77	0.000284075	0.0017447	-0.00559477	0.0060792	0.011674	0	1.5	mV
A3 +5V PSRR @ +/-18V	77	-0.765826	9.26502	-47.5724	18.1938	65.7662	0	200	uV
A4 -5V PSRR @ +/-18V	77	1.55303	8.83221	-20.9798	20.2432	41.223	0	200	uV
A3 +5V PSRR @ +/-10.5V	77	-2.20907	9.08717	-47.6646	14.2198	61.8845	0	200	uV
A4 -5V PSRR @ +/-10.5V	77	-0.660704	9.05956	-23.6516	17.3174	40.969	0	200	uV
A3 +10V PSRR @ +13.5V/-15V	77	-1.12638	12.1065	-57.43	22.669	80.099	0	200	uV
A4 -10V PSRR @ +13.5/-15V	77	-1.21122	5.92731	-16.4442	11.4642	27.9084	0	200	uV
A3 +10V PSRR @ +18V/-15V	77	-0.217344	11.0312	-47.4646	19.5711	67.0357	0	200	uV
A4 -10V PSRR @ +18V/-15V	77	0.972967	8.16606	-25.3693	16.4187	41.788	0	200	uV
A3 +10V PSRR @ +15V/-13.5V	77	1.88549	8.93773	-15.7503	21.6978	37.4482	0	200	uV
A4 -10V PSRR @ +15V/-13.5V	77	-1.513	9.75077	-23.3533	20.9021	44.2554	0	200	uV
A3 +10V PSRR @ +15V/-18V	77	-0.361225	7.68819	-24.692	19.5193	44.2113	0	200	uV
A4 -10V PSRR @ +15V/-18V	77	1.47772	8.26528	-26.6067	17.777	44.3837	0	200	uV
NOISE PIN	77	0.000921214	0.0172521	-0.0498786	0.0518332	0.101712	6.3	8.3	V
+10V LOAD REG	77	-0.00199458	0.00983177	-0.0253043	0.0184951	0.0437994	0	0.5	mV
-10V LOAD REG	77	-0.00237654	0.00934245	-0.0265587	0.0251658	0.0517244	0	0.5	mV
Test Site Number	77	1	0	1	1	0	N/A	N/A	
Test Head Number	77	1	0	1	1	0	N/A	N/A	

CUMULATIVE DISTRIBUTION PLOTS

A3 BUFFER POSITIVE 10V DELTA

45 A3 BUFFER +10V DELTA

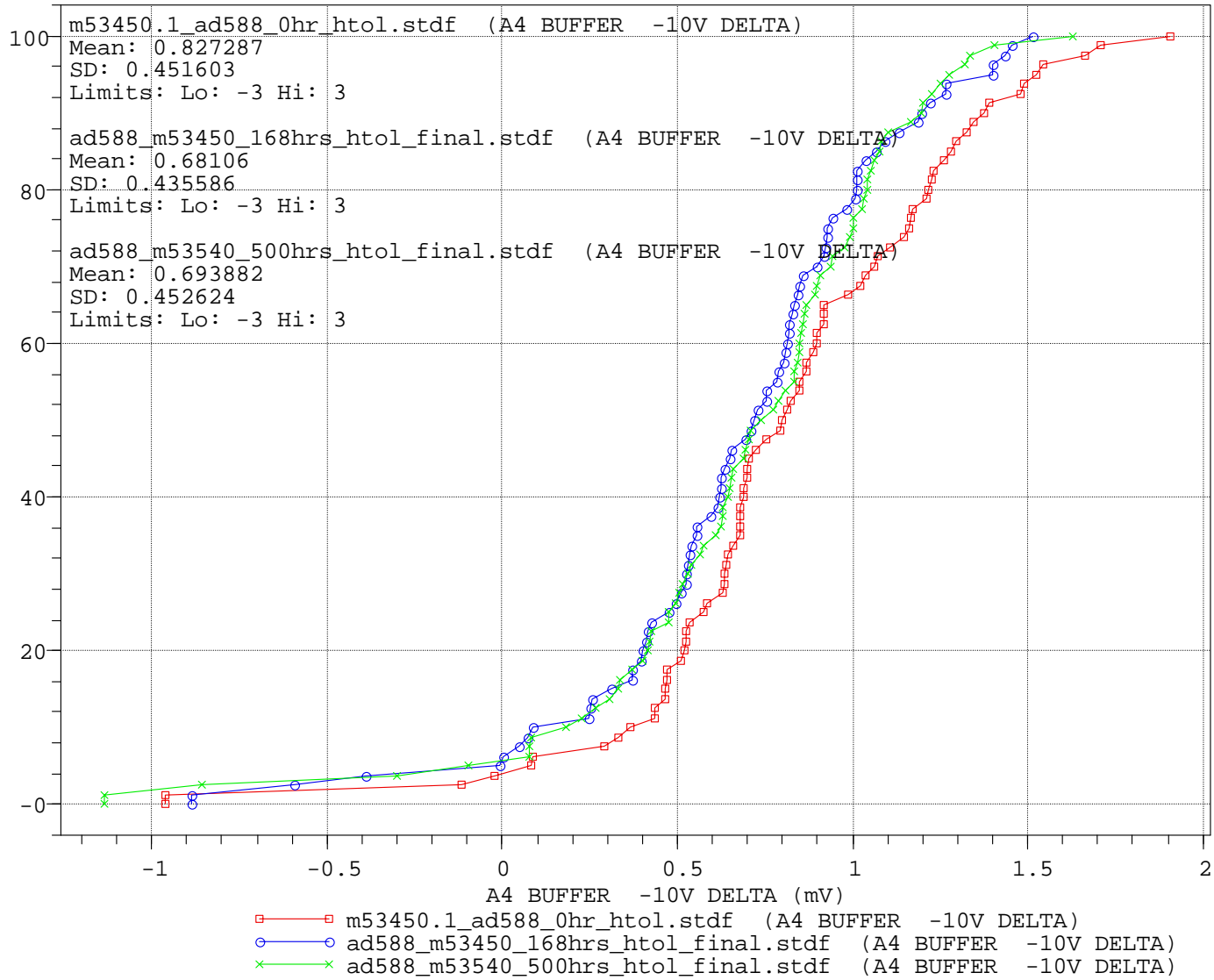
Percent



A4 BUFFER NEGATIVE 10V DELTA

65 A4 BUFFER -10V DELTA

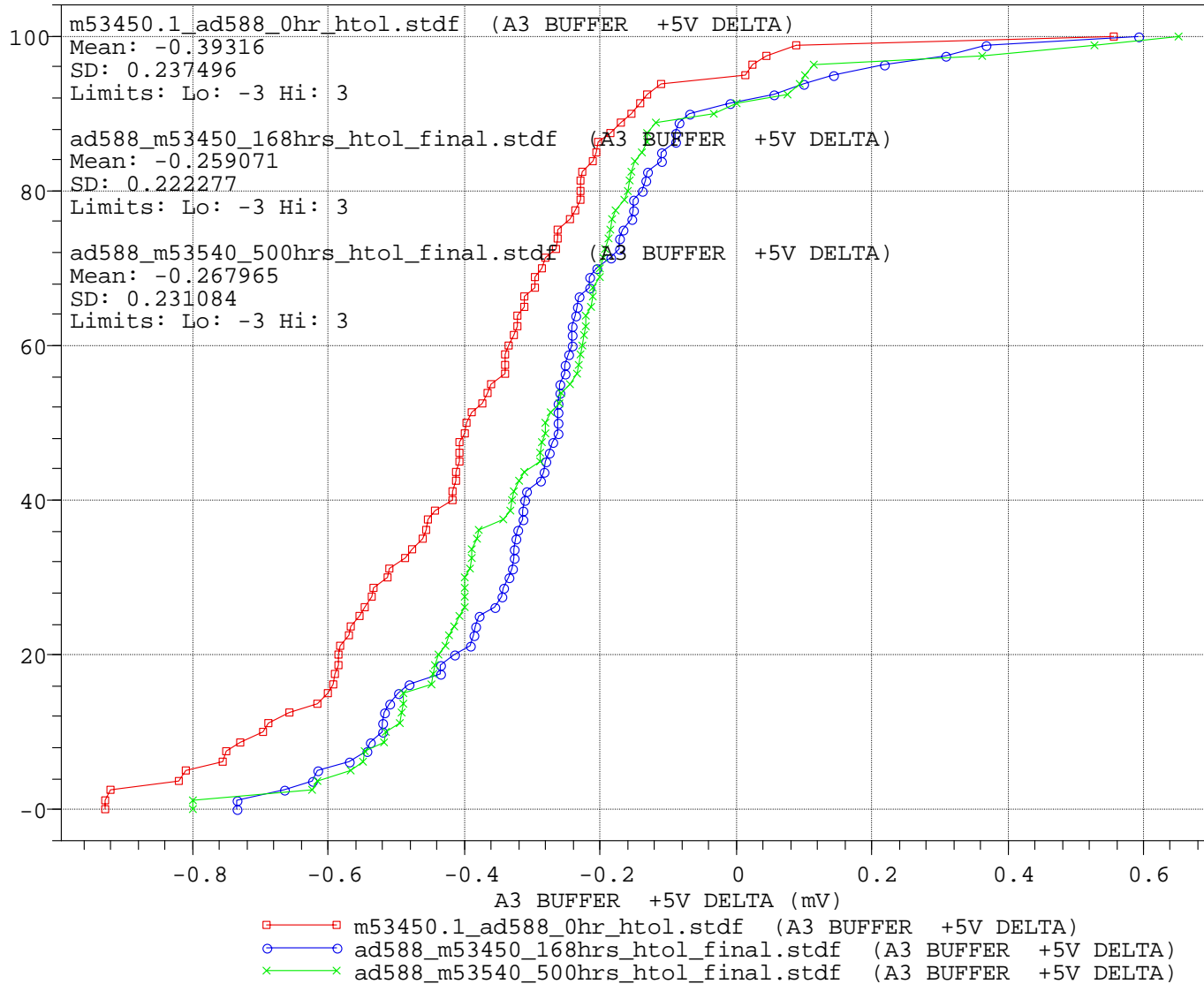
Percent



A3 BUFFER POSITIVE 5V DELTA

55 A3 BUFFER +5V DELTA

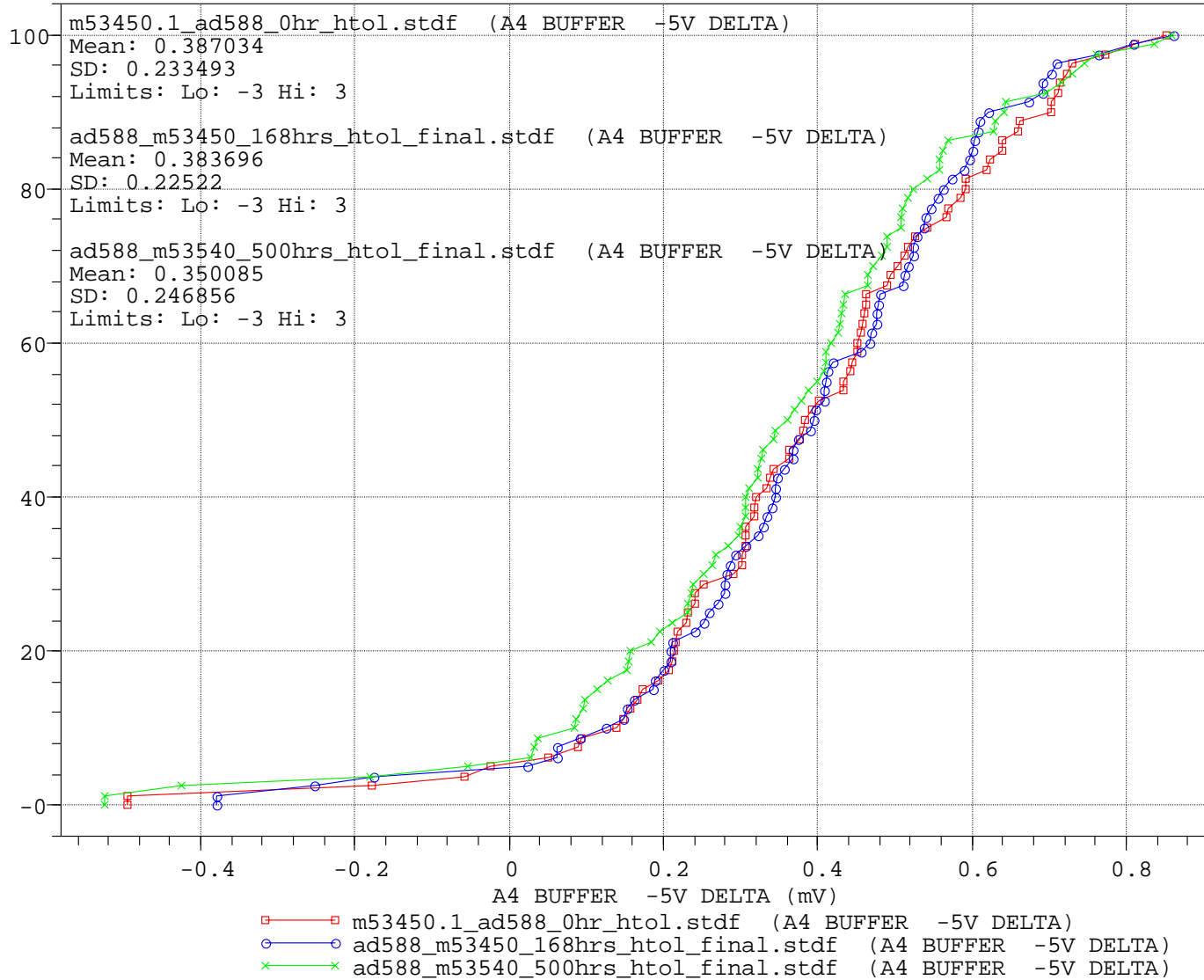
Percent



A4 BUFFER NEGATIVE 5V DELTA

75 A4 BUFFER -5V DELTA

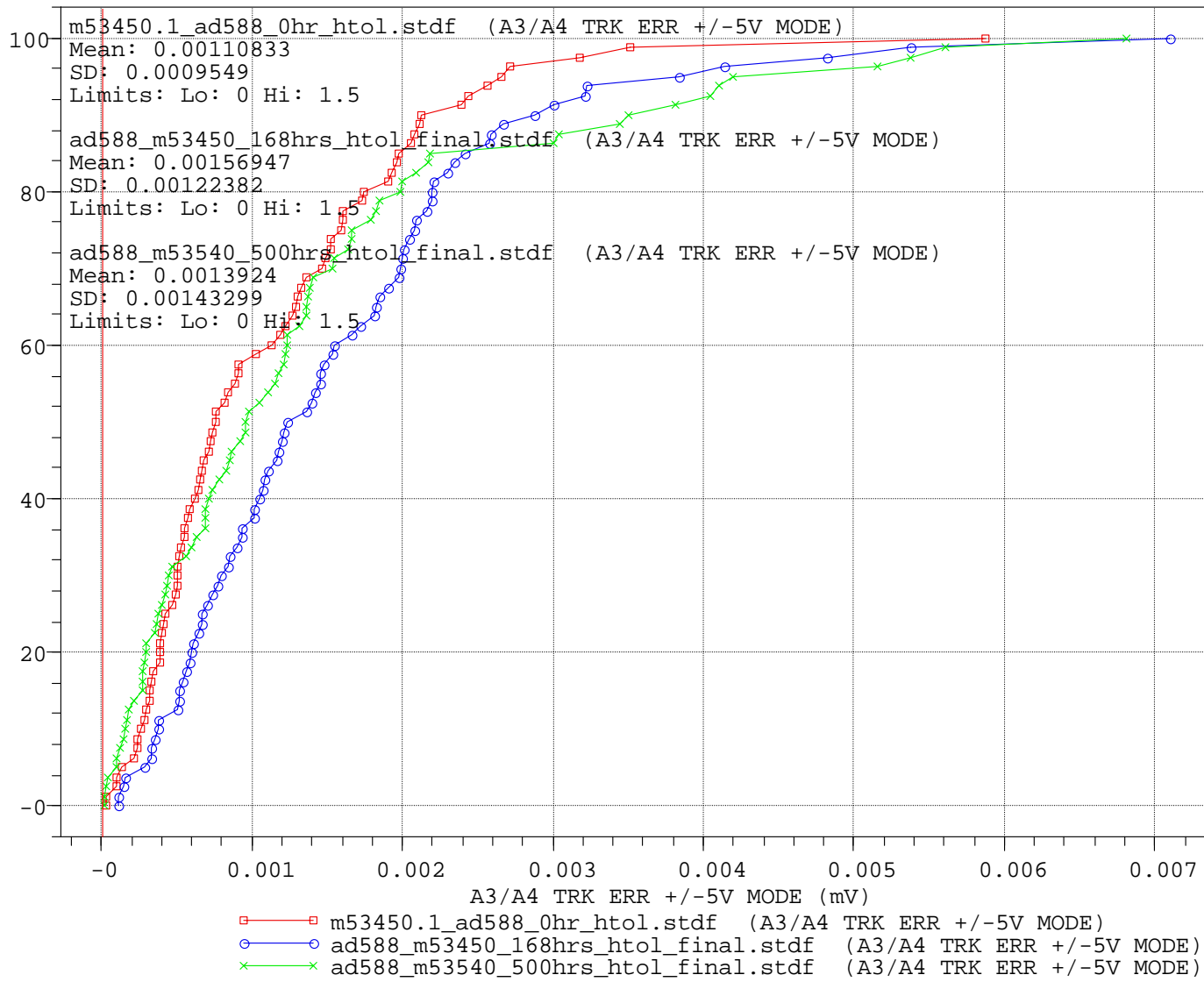
Percent



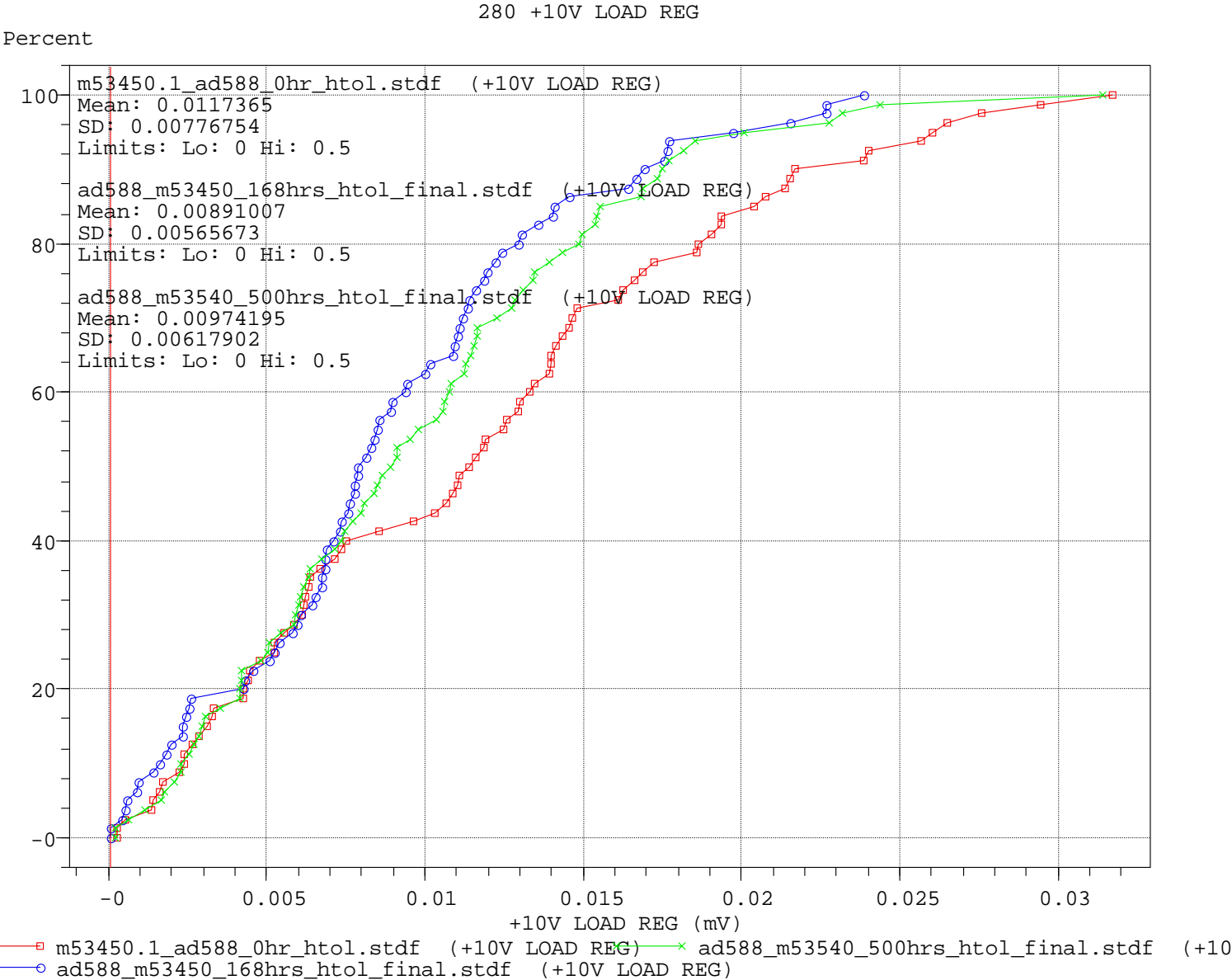
A3/A4 TRACKING ERROR 5V MODE

173 A3/A4 TRK ERR +/-5V MODE

Percent

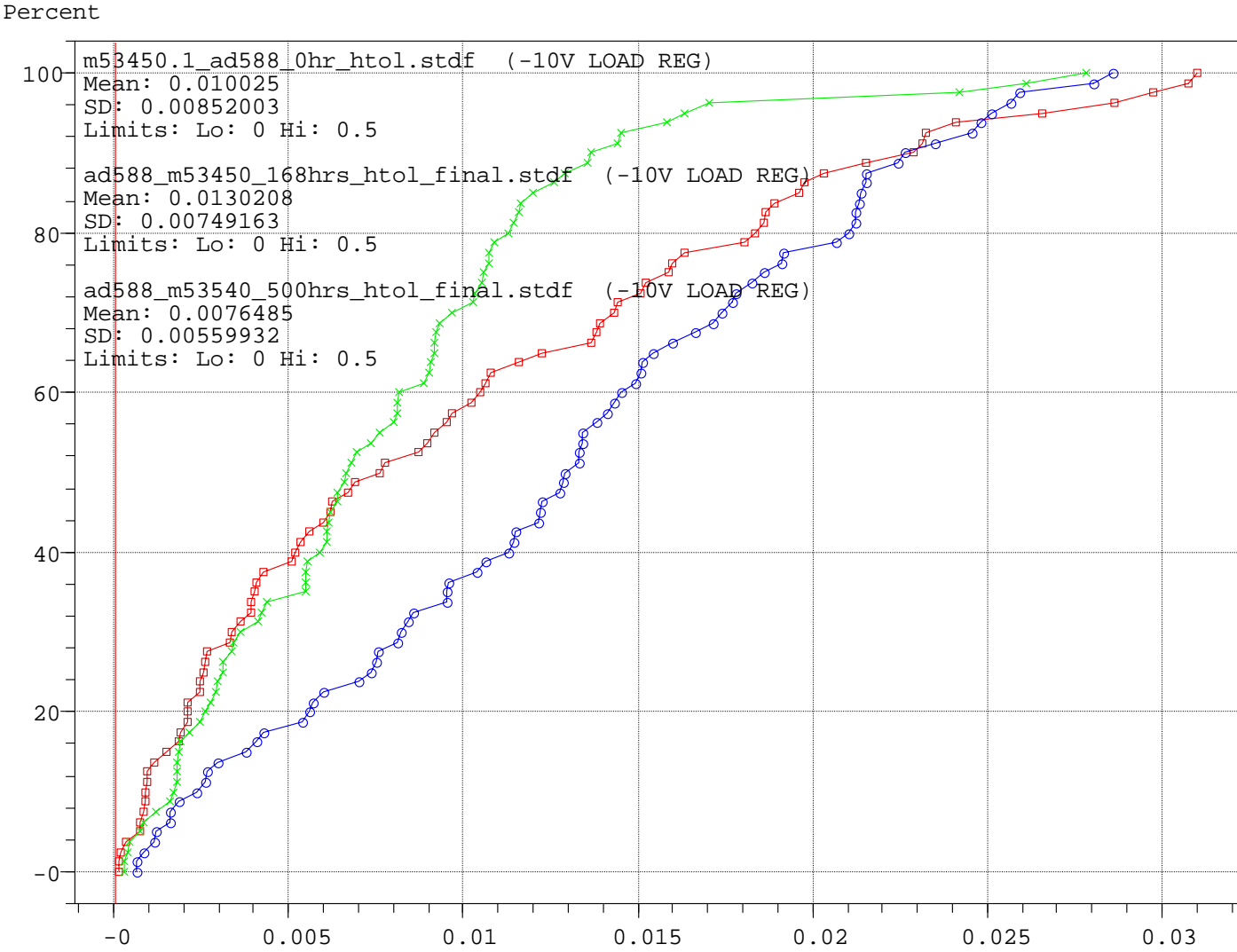


POSITIVE 10V LOAD REGULATION



NEGATIVE 10V LOAD REGULATION

290 -10V LOAD REG



■ m53450.1_ad588_0hr_htol.stdf (-10V LOAD REG) × ad588_m53540_500hrs_htol_final.stdf (-10
○ ad588_m53450_168hrs_htol_final.stdf (-10V LOAD REG)

AD712 Data Reduction Report

AD712 HTOL DATA REDUCTION

LOT ID : L77317

Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	+Isupply Vs=+-15V	77	-0.0999341	0.250931	-1.5849	0.123006	1.70791	0.3	5.6	mA
80	+Swing(A) Vs=+-4.5	77	0.00153066	0.0107631	-0.00351834	0.078172	0.0816903	1	4.5	V
81	+Swing(B) Vs=+-4.5	77	0.00380407	0.0111825	-0.000883341	0.0719602	0.0728436	1	4.5	V
90	-Swing(A) Vs=+-4.5	77	-0.0020912	0.00667065	-0.0439279	0.00645375	0.0503817	-4.5	-1	V
91	-Swing(B) Vs=+-4.5	77	-0.00121853	0.00684469	-0.0411046	0.0092144	0.050319	-4.5	-1	V
100	+Swing(A) Vs=+-15 RI=2K	77	0.00219501	0.0107061	-0.00244617	0.0786791	0.0811253	13	14.5	V
101	+Swing(B) Vs=+-15 RI=2K	77	-0.000609621	0.0112416	-0.00564575	0.0679502	0.073596	13	14.5	V
110	-Swing(A) Vs=+-15 RI=2K	77	0.0292287	0.00504525	-0.00528431	0.0358114	0.0410957	-14.5	-12.5	V
111	-Swing(B) Vs=+-15 RI=2K	77	0.00424358	0.00518376	-0.0271187	0.011342	0.0384607	-14.5	-12.5	V
120	+Swing(A) Vs=+-18 RI=2K	77	-0.0160257	0.00949627	-0.0228977	0.0529556	0.0758533	10	17.5	V
121	+Swing(B) Vs=+-18 RI=2K	77	-0.0209089	0.0102046	-0.02635	0.0414753	0.0678253	10	17.5	V
130	-Swing(A) Vs=+-18 RI=2K	77	-0.0288619	0.00591163	-0.0395422	-0.0023365	0.0372057	-17.5	-10	V
131	-Swing(B) Vs=+-18 RI=2K	77	-0.0230432	0.00317838	-0.0278101	-0.0172062	0.0106039	-17.5	-10	V
140	Vos(A) Vs=+-15V	77	0.107179	0.174629	-0.287706	0.541241	0.828947	-1	1	mV
142	Vos(B) Vs=+-15V	77	0.0167211	0.191339	-0.419136	0.553197	0.972333	-1	1	mV
144	Vos Match	77	-0.118667	0.228905	-0.768355	0.41422	1.18258	-1	1	mV
150	-CMRR(A) @ Vcm=10V	77	-1.20964	119.22%	-21.0849	7.61597	28.7008	86	201	dB
153	-CMRR(B) @ Vcm=10V	77	-0.904708	59.42%	-11.9747	11.7052	23.6799	86	201	dB
160	-CMRR(A) @ Vcm=11V	77	-1.93024	111.77%	-18.9926	13.326	32.3186	76	201	dB
162	-CMRR(B) @ Vcm=11V	77	-0.349287	58.72%	-12.3222	44.8258	57.148	76	201	dB
170	+CMRR(A) @ Vcm=10V	77	0.627944	24.57%	-5.42554	20.8377	26.2633	86	201	dB
173	+CMRR(B) @ Vcm=10V	77	0.300623	24.29%	-4.20502	31.944	36.1491	86	201	dB
180	+CMRR(A) @ Vcm=11V	77	0.85024	33.26%	-7.83083	19.5591	27.39	76	201	dB
182	+CMRR(B) @ Vcm=11V	77	0.0758351	27.00%	-5.2037	31.446	36.6497	76	201	dB
190	+PSRR(A)	77	0.260437	9.23%	-1.07758	4.38988	5.46746	86	150	dB
193	+PSRR(B)	77	0.0248421	10.28%	-2.12397	3.60277	5.72674	86	150	dB
200	-PSRR(A)	77	-0.279224	23.17%	-7.61543	6.78481	14.4002	86	150	dB
203	-PSRR(B)	77	-0.551899	88.07%	-18.4112	7.54888	25.9601	88	150	dB
210	-GAIN(A) RL=2K	77	255.111	1587.1	-482.35	13835.7	14318.1	200	2.00E+04	
212	-GAIN(B) RL=2K	77	236.96	966.438	-775.299	8201.67	8976.97	200	2.00E+04	
220	+GAIN(A) RL=2K	77	37.4995	67.0543	-241.388	240.402	481.79	200	2.00E+04	
222	+GAIN(B) RL=2K	77	7.64617	48.7901	-138.349	222.849	361.198	200	2.00E+04	
230	-ISC(A) Vs=+-15V	77	0.190823	0.0582474	0.0961749	0.431036	0.334861	10	50	mA
231	-ISC(B) Vs=+-15V	77	0.175289	0.0578404	0.0887718	0.418122	0.32935	10	50	mA

240	+ISC(A) Vs=+-15V	77	-0.11156	0.226834	-0.371453	1.52054	1.892	-50	-10	mA
241	+ISC(B) Vs=+-15V	77	-0.100287	0.22311	-0.359866	1.19379	1.55366	-50	-10	mA
250	+SLEW(A)	77	0.861491	0.556857	-0.324354	3.81937	4.14372	18	35	V/uS
252	+SLEW(B)	77	1.46879	0.566807	0.790262	4.21714	3.42688	18	35	V/uS
300	Ios(A) Vs=+-15V	77	0.659074	1.02794	-2.32709	3.39931	5.7264	-10	10	pA
302	Ios(B) Vs=+-15V	77	-2.91729	1.1496	-5.282	1.12507	6.40707	-10	10	pA
310	+Ibias(A) Vs=+-15V	77	-0.162694	2.09628	-8.0876	4.76668	12.8543	3	27	pA
312	+Ibias(B) Vs=+-15V	77	-0.0498212	1.23438	-7.03383	1.57348	8.60732	3	27	pA
320	-Ibias(A) Vs=+-15V	77	0.210227	1.29839	-6.64175	1.80494	8.44669	3	27	pA
322	-Ibias(B) Vs=+-15V	77	3.24453	1.60142	-3.30079	6.2099	9.51069	3	27	pA
330	+Ibias(A) Vcm=10V	77	-1.28429	2.68792	-8.97958	4.3913	13.3709	-57.2	62.2	pA
332	+Ibias(B) Vcm=10V	77	-1.30988	1.42488	-10.2011	0.7009	10.902	-57.2	62.2	pA
340	-Ibias Match	77	-2.88166	1.27169	-5.55273	0.770858	6.32359	-0.1	10	pA
342	+Ibias Match	77	0.497727	1.10106	-2.50849	3.66354	6.17202	-0.1	10	pA

AD712 DATA REDUCTION

LOT ID : L77317

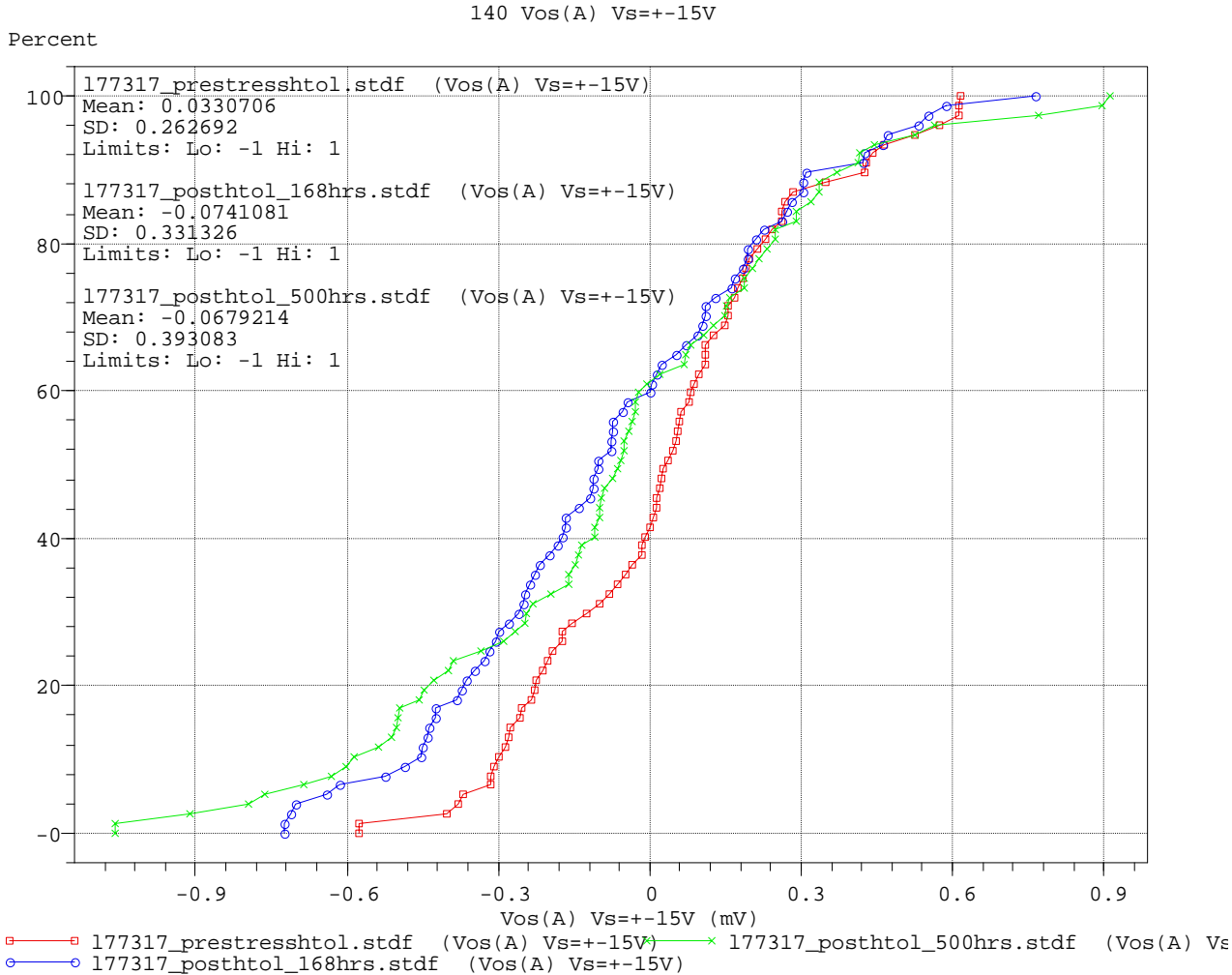
Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	+Isupply Vs=+-15V	77	-0.100667	0.258888	-1.62955	0.138697	1.76825	0.3	5.6	mA
80	+Swing(A) Vs=+-4.5	77	0.0079788	0.0108463	-0.00119972	0.079618	0.0808177	1	4.5	V
81	+Swing(B) Vs=+-4.5	77	0.0103819	0.0117198	0.00161672	0.0796793	0.0780625	1	4.5	V
90	-Swing(A) Vs=+-4.5	77	-0.0132132	0.00774771	-0.0451269	0.00128508	0.046412	-4.5	-1	V
91	-Swing(B) Vs=+-4.5	77	-0.0126477	0.00868531	-0.0527875	0.0017221	0.0545096	-4.5	-1	V
100	+Swing(A) Vs=+-15 RI=2K	77	0.00572114	0.0109739	-0.00107384	0.0809145	0.0819883	13	14.5	V
101	+Swing(B) Vs=+-15 RI=2K	77	0.00468638	0.0117873	-0.0037384	0.0760078	0.0797462	13	14.5	V
110	-Swing(A) Vs=+-15 RI=2K	77	0.0203265	0.00575915	-0.00847435	0.0290823	0.0375566	-14.5	-12.5	V
111	-Swing(B) Vs=+-15 RI=2K	77	-0.0070599	0.00653499	-0.0410318	0.00255203	0.0435839	-14.5	-12.5	V
120	+Swing(A) Vs=+-18 RI=2K	77	0.0305623	0.0086625	0.0217304	0.0917435	0.070013	10	17.5	V
121	+Swing(B) Vs=+-18 RI=2K	77	0.0286248	0.00961425	0.021843	0.0882759	0.066433	10	17.5	V
130	-Swing(A) Vs=+-18 RI=2K	77	0.0256188	0.00401505	0.0143661	0.046875	0.0325089	-17.5	-10	V
131	-Swing(B) Vs=+-18 RI=2K	77	0.0325559	0.00140796	0.0235882	0.0345154	0.0109272	-17.5	-10	V
140	Vos(A) Vs=+-15V	77	0.100992	0.268073	-0.50904	0.589179	1.09822	-1	1	mV
142	Vos(B) Vs=+-15V	77	0.00556618	0.23836	-0.636343	0.454666	1.09101	-1	1	mV
144	Vos Match	77	-0.145751	0.310017	-1.22552	0.511953	1.73747	-1	1	mV
150	-CMRR(A) @ Vcm=10V	77	-0.217156	30.04%	-8.21455	7.92116	16.1357	86	201	dB
153	-CMRR(B) @ Vcm=10V	77	-1.3967	96.69%	-17.565	14.1024	31.6674	86	201	dB
160	-CMRR(A) @ Vcm=11V	77	-8.94121	1438.51%	-42.0818	13.6323	55.7141	76	201	dB
162	-CMRR(B) @ Vcm=11V	77	-1.32297	152.02%	-22.0786	41.1123	63.1908	76	201	dB
170	+CMRR(A) @ Vcm=10V	77	-0.442207	103.44%	-19.8464	16.6614	36.5078	86	201	dB
173	+CMRR(B) @ Vcm=10V	77	-0.0339722	31.43%	-9.25197	29.7335	38.9855	86	201	dB
180	+CMRR(A) @ Vcm=11V	77	0.110859	64.85%	-15.8078	17.4524	33.2601	76	201	dB
182	+CMRR(B) @ Vcm=11V	77	-1.18166	94.78%	-19.0319	29.8913	48.9232	76	201	dB
190	+PSRR(A)	77	0.322763	8.62%	-1.0442	4.06963	5.11382	86	150	dB
193	+PSRR(B)	77	0.144216	9.54%	-2.22684	3.60239	5.82924	86	150	dB
200	-PSRR(A)	77	-0.269891	35.07%	-10.7521	11.5611	22.3131	86	150	dB
203	-PSRR(B)	77	-0.78003	107.36%	-20.0466	11.0968	31.1434	88	150	dB
210	-GAIN(A) RL=2K	77	213.052	1351.72	-331.98	11734.7	12066.7	200	2.00E+04	

212	-GAIN(B) RL=2K	77	257.948	936.944	-507.718	7981.58	8489.3	200	2.00E+04	
220	+GAIN(A) RL=2K	77	34.7249	57.4594	-43.2896	239.013	282.302	200	2.00E+04	
222	+GAIN(B) RL=2K	77	6.9463	46.6623	-76.9921	199.131	276.123	200	2.00E+04	
230	-ISC(A) Vs=+-15V	77	-0.32223	0.0670271	-0.474682	-0.155609	0.319073	10	50	mA
231	-ISC(B) Vs=+-15V	77	-0.345614	0.0683744	-0.508055	-0.175274	0.332781	10	50	mA
240	+ISC(A) Vs=+-15V	77	0.391508	0.23395	0.0877647	1.97404	1.88628	-50	-10	mA
241	+ISC(B) Vs=+-15V	77	0.391957	0.246063	0.0483913	1.85603	1.80764	-50	-10	mA
250	+SLEW(A)	77	-0.374874	0.550525	-1.44931	1.95275	3.40205	18	35	V/uS
252	+SLEW(B)	77	0.793715	0.62191	-0.390602	3.7037	4.09431	18	35	V/uS
300	Ios(A) Vs=+-15V	77	-0.898458	1.4837	-5.40271	3.09795	8.50065	-10	10	pA
302	Ios(B) Vs=+-15V	77	-1.16276	1.35892	-5.24627	1.35158	6.59786	-10	10	pA
310	+Ibias(A) Vs=+-15V	77	7.00543	2.41025	-1.86059	12.6143	14.4749	3	27	pA
312	+Ibias(B) Vs=+-15V	77	4.5665	1.6203	-1.15455	8.87171	10.0263	3	27	pA
320	-Ibias(A) Vs=+-15V	77	5.84323	1.7899	-1.33625	10.0035	11.3397	3	27	pA
322	-Ibias(B) Vs=+-15V	77	5.65642	1.99725	-1.21317	10.1476	11.3608	3	27	pA
330	+Ibias(A) Vcm=10V	77	1.95976	2.26129	-6.89702	6.84755	13.7446	-57.2	62.2	pA
332	+Ibias(B) Vcm=10V	77	0.478596	2.56588	-14.9559	5.65618	20.6121	-57.2	62.2	pA
340	-Ibias Match	77	-0.855078	1.55839	-6.16239	2.20079	8.36318	-0.1	10	pA
342	+Ibias Match	77	-1.5635	1.32946	-4.0468	1.53538	5.58218	-0.1	10	pA

CUMULATIVE PLOTS

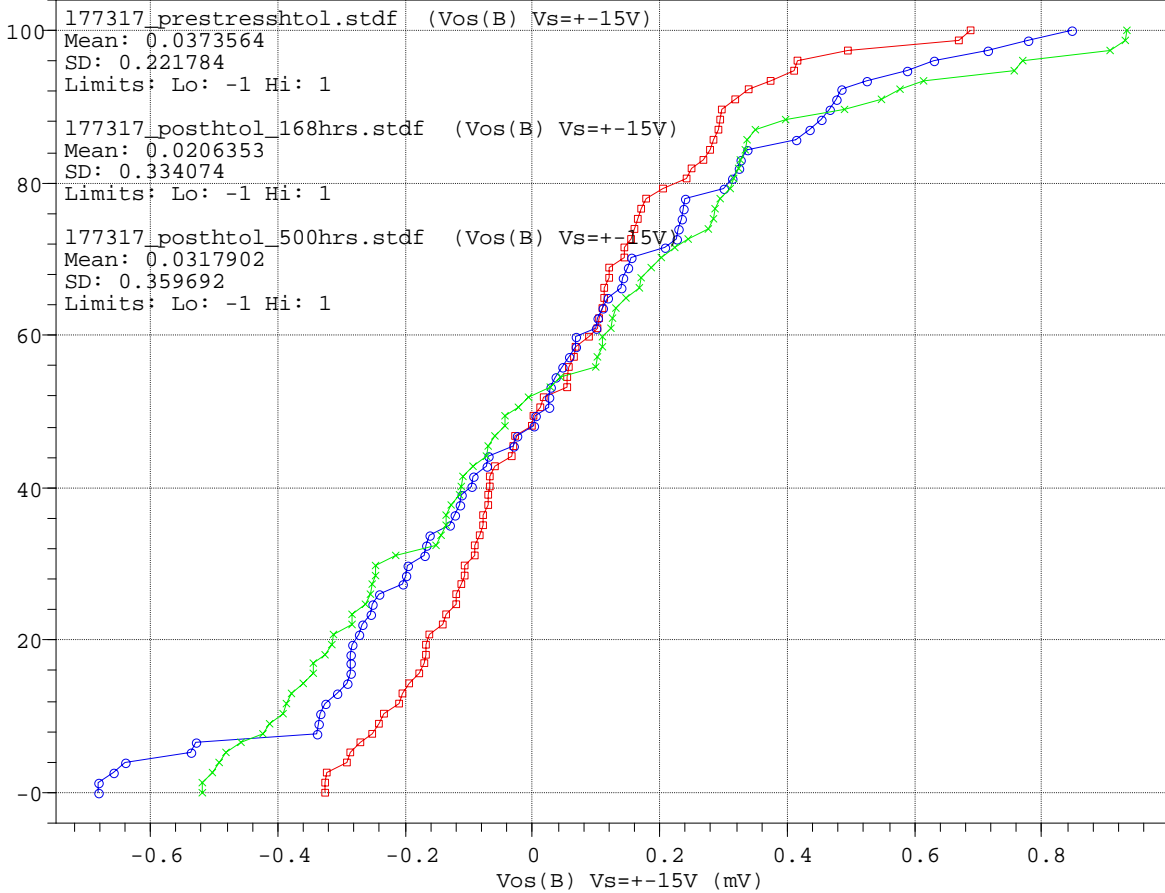
Offset Voltage Side A



Offset Voltage Side B

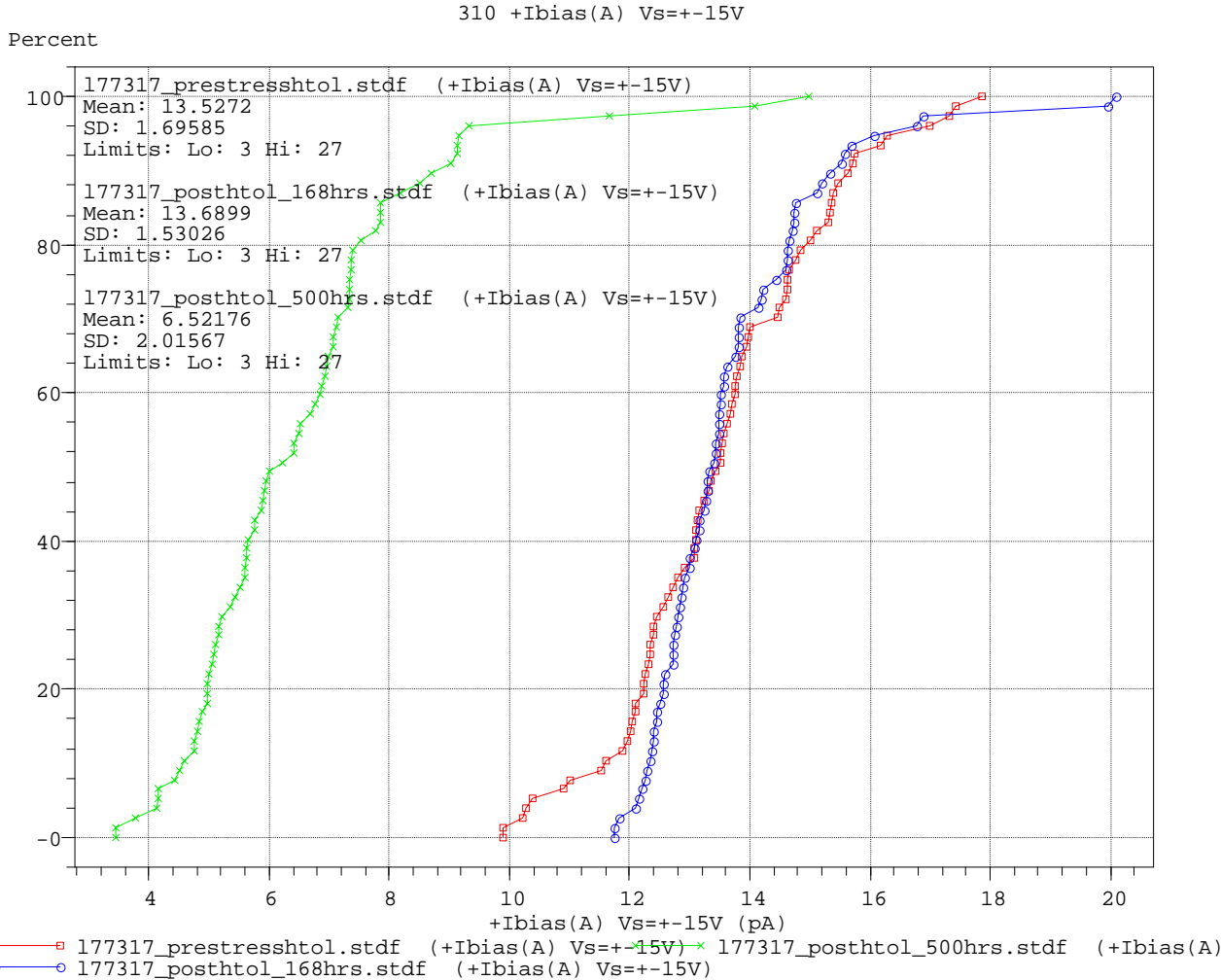
142 Vos(B) Vs=+-15V

Percent

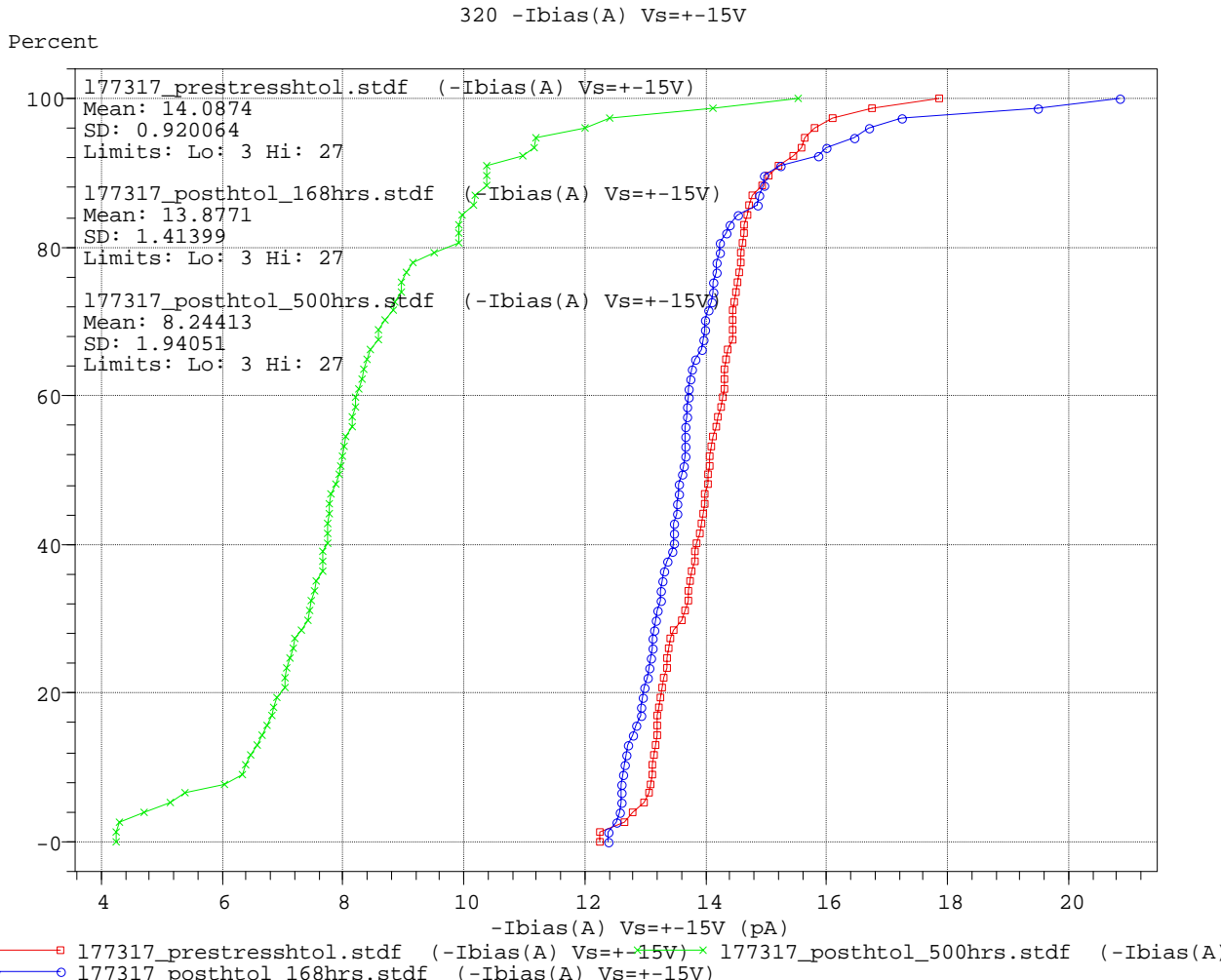


□ 177317_prestresshtol.stdf (Vos(B) Vs=+-15V)
 x 177317_posthtol_500hrs.stdf (Vos(B) Vs=+-15V)
 ○ 177317_posthtol_168hrs.stdf (Vos(B) Vs=+-15V)

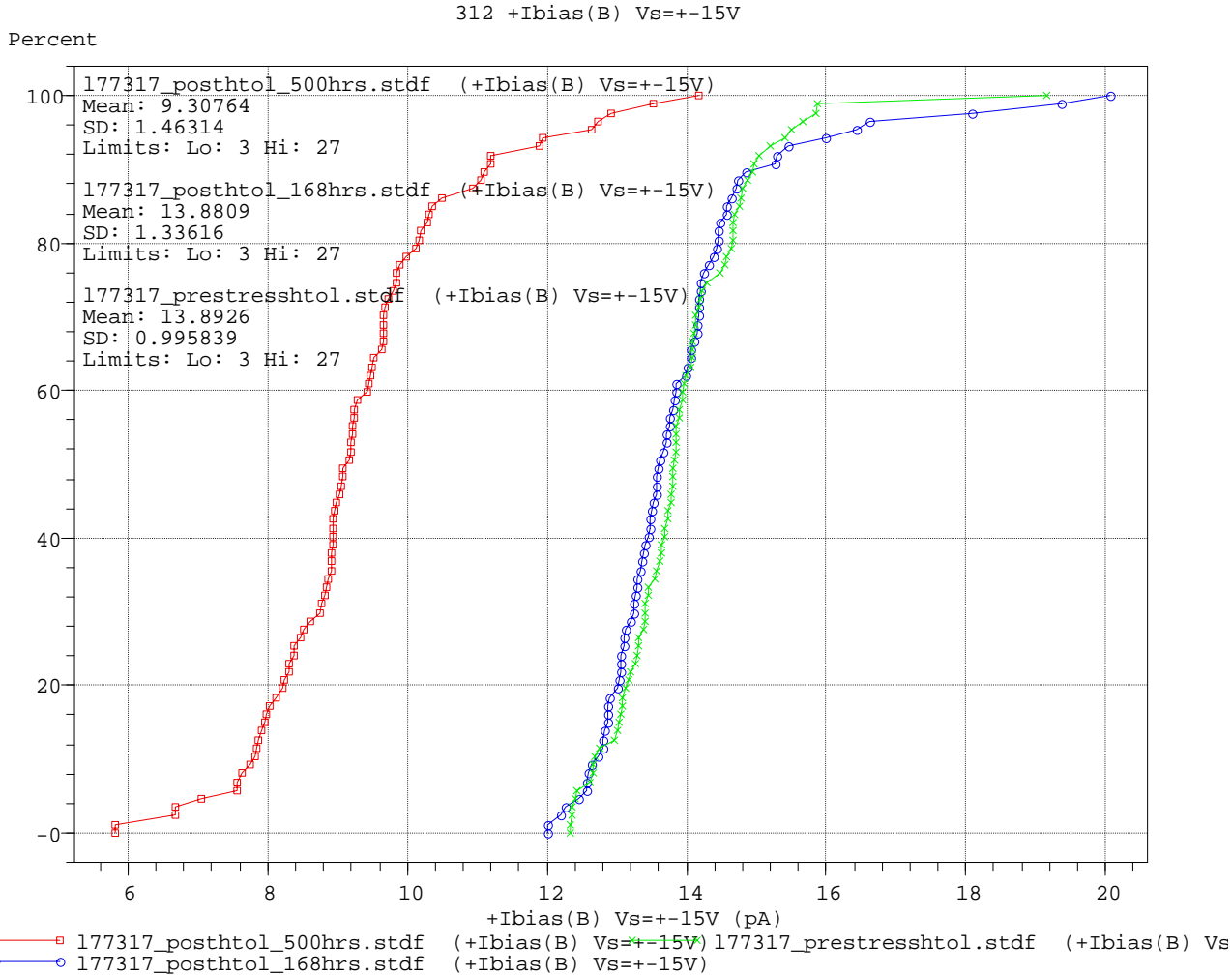
Positive Bias Current $V_s = \pm 15V$ Side A



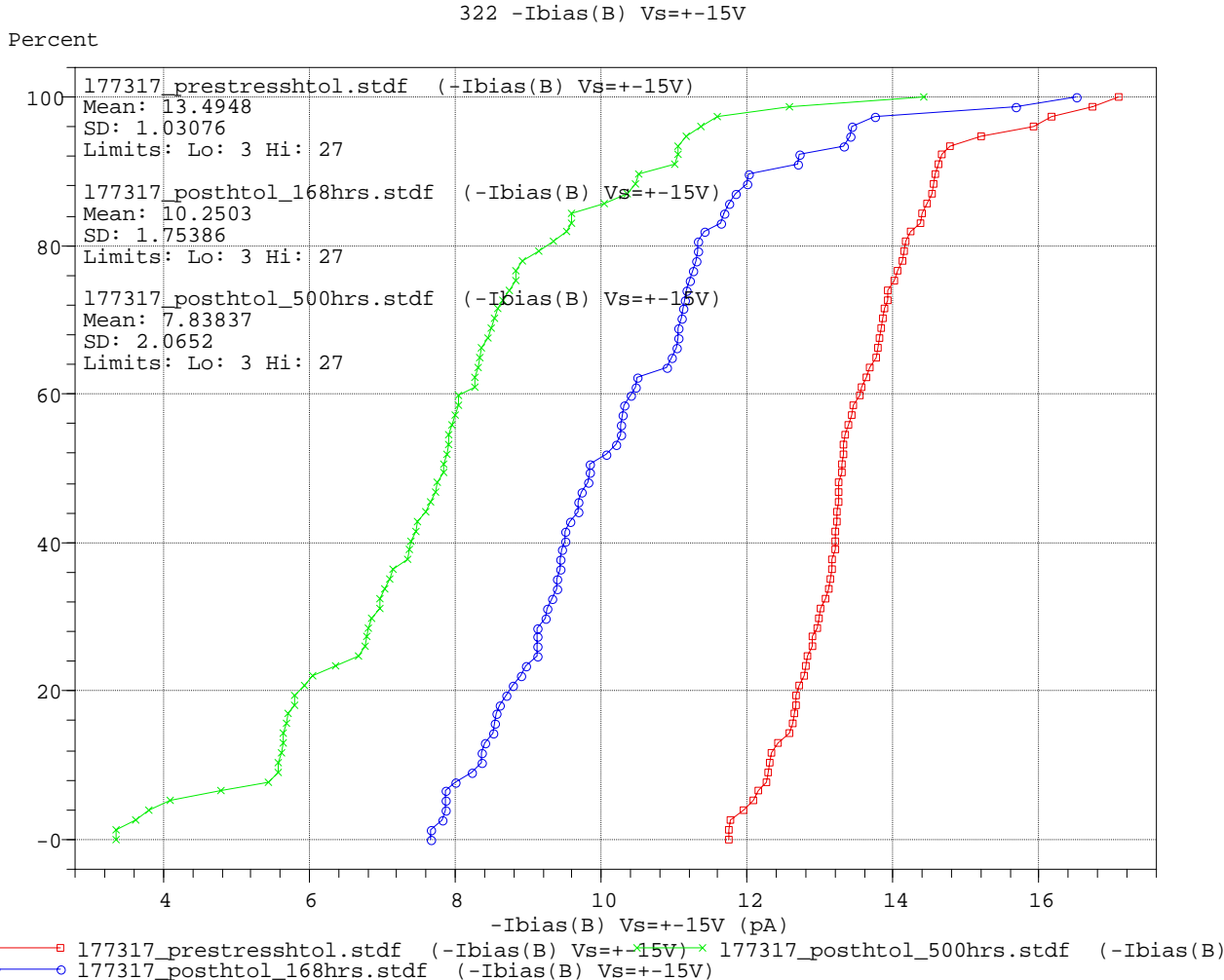
Negative Bias Current $V_s = \pm 15V$ Side A



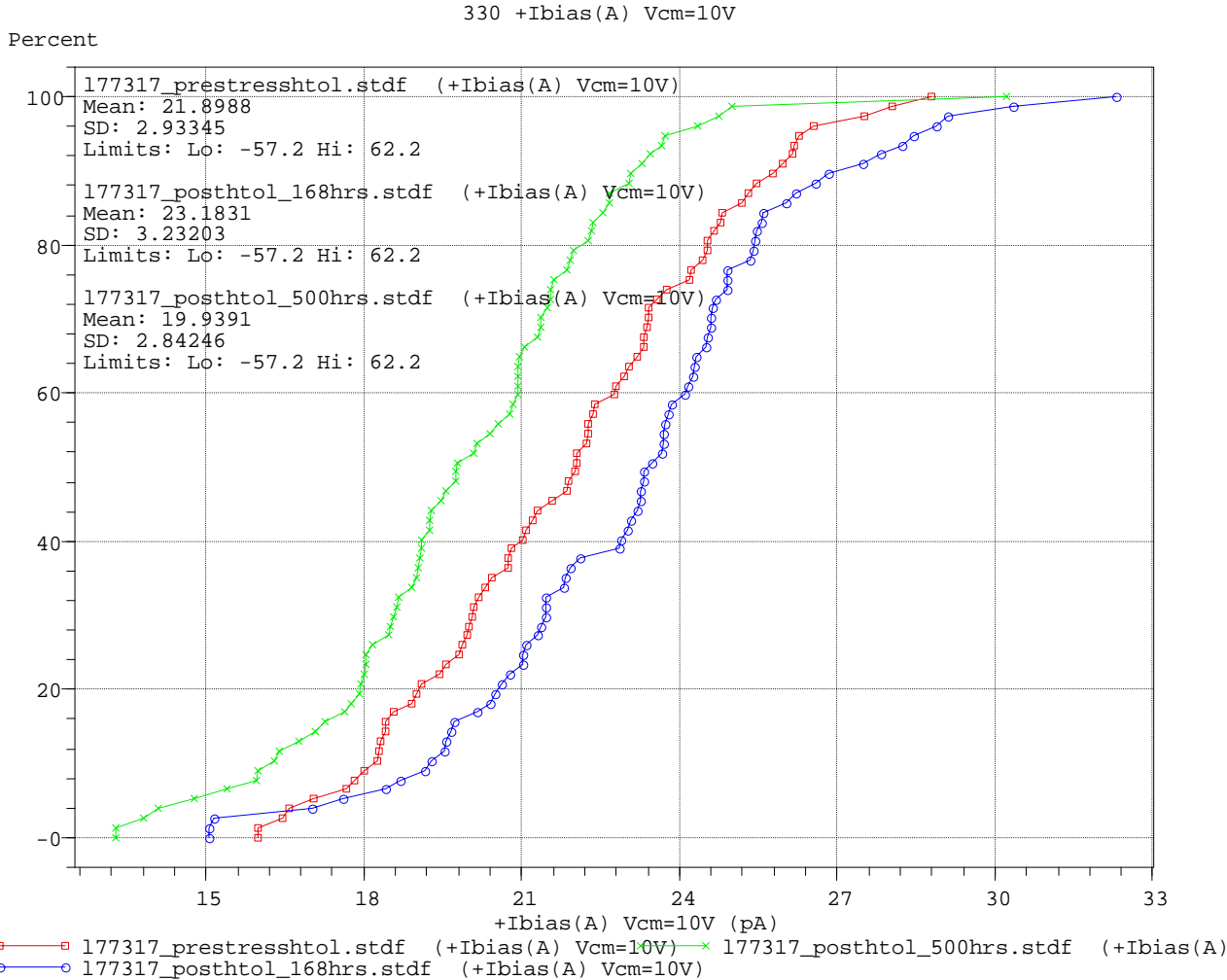
Positive Bias Current Vs= \pm 15V Side B



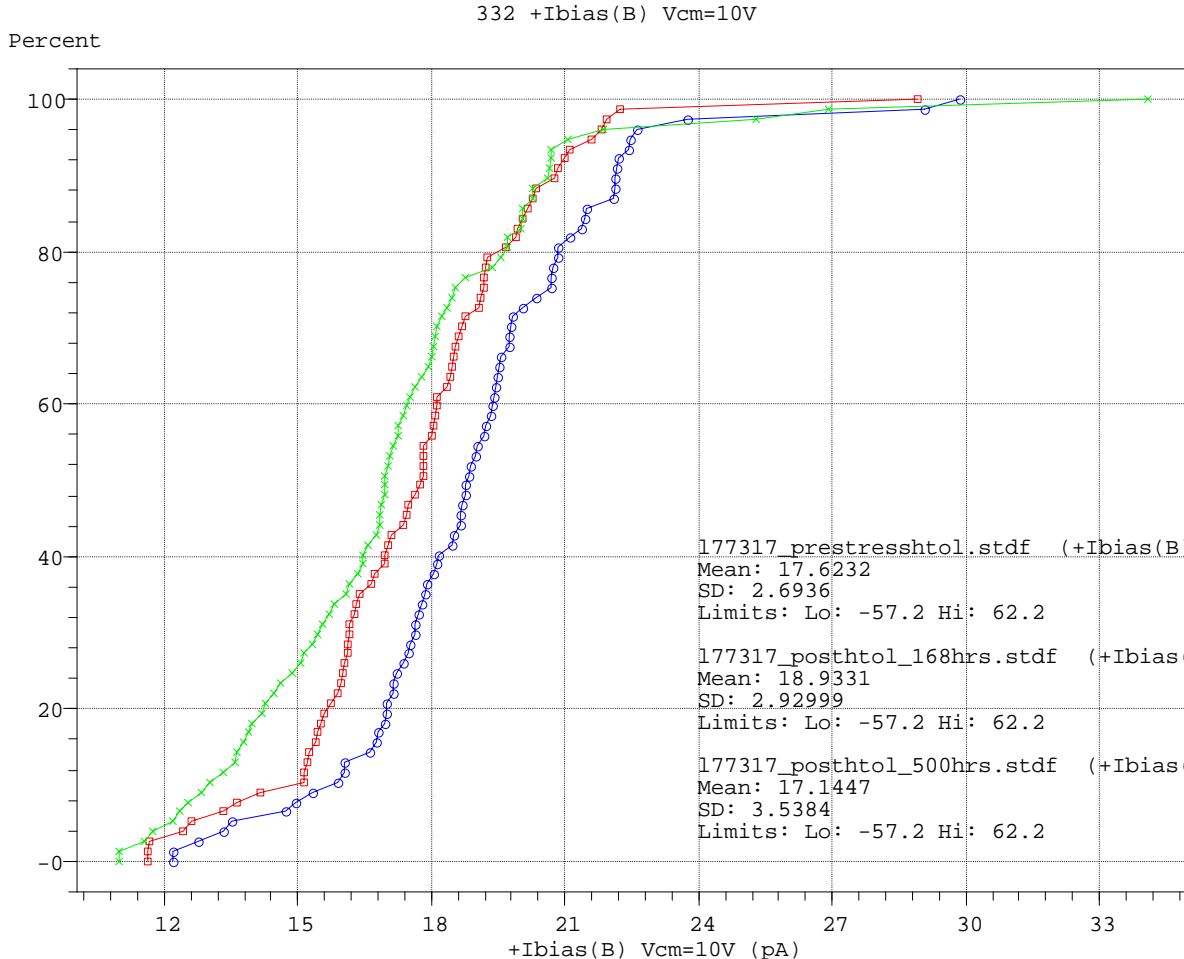
Negative Bias Current Vs= \pm 15V Side B



Positive Bias Current Vcm=10V Side A

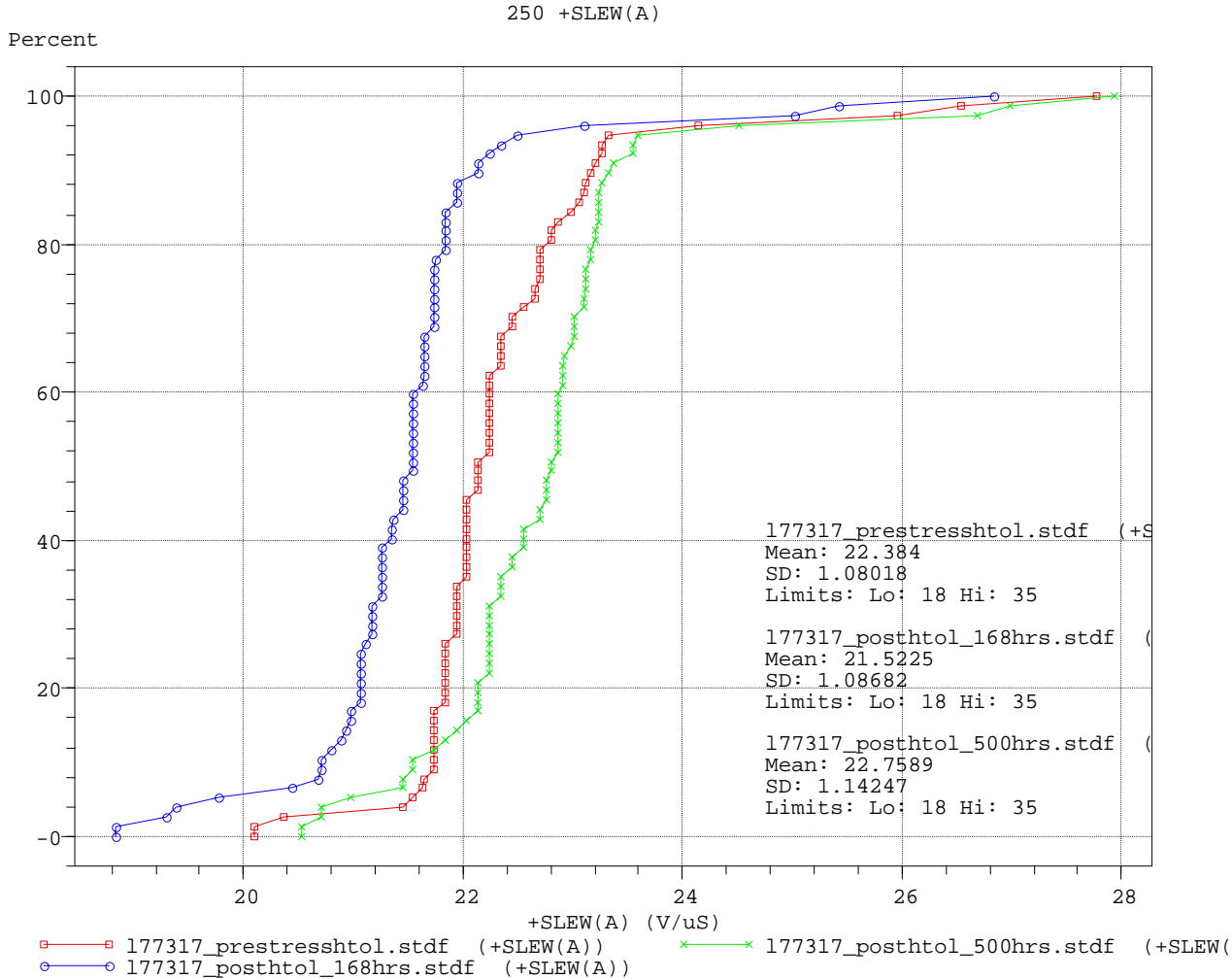


Positive Bias Current Vcm=10V Side B



■ 177317_prestreshtol.stdf (+Ibias(B) Vcm=10V)
 x 177317_posthtol_500hrs.stdf (+Ibias(B) Vcm=10V)
 ○ 177317_posthtol_168hrs.stdf (+Ibias(B) Vcm=10V)

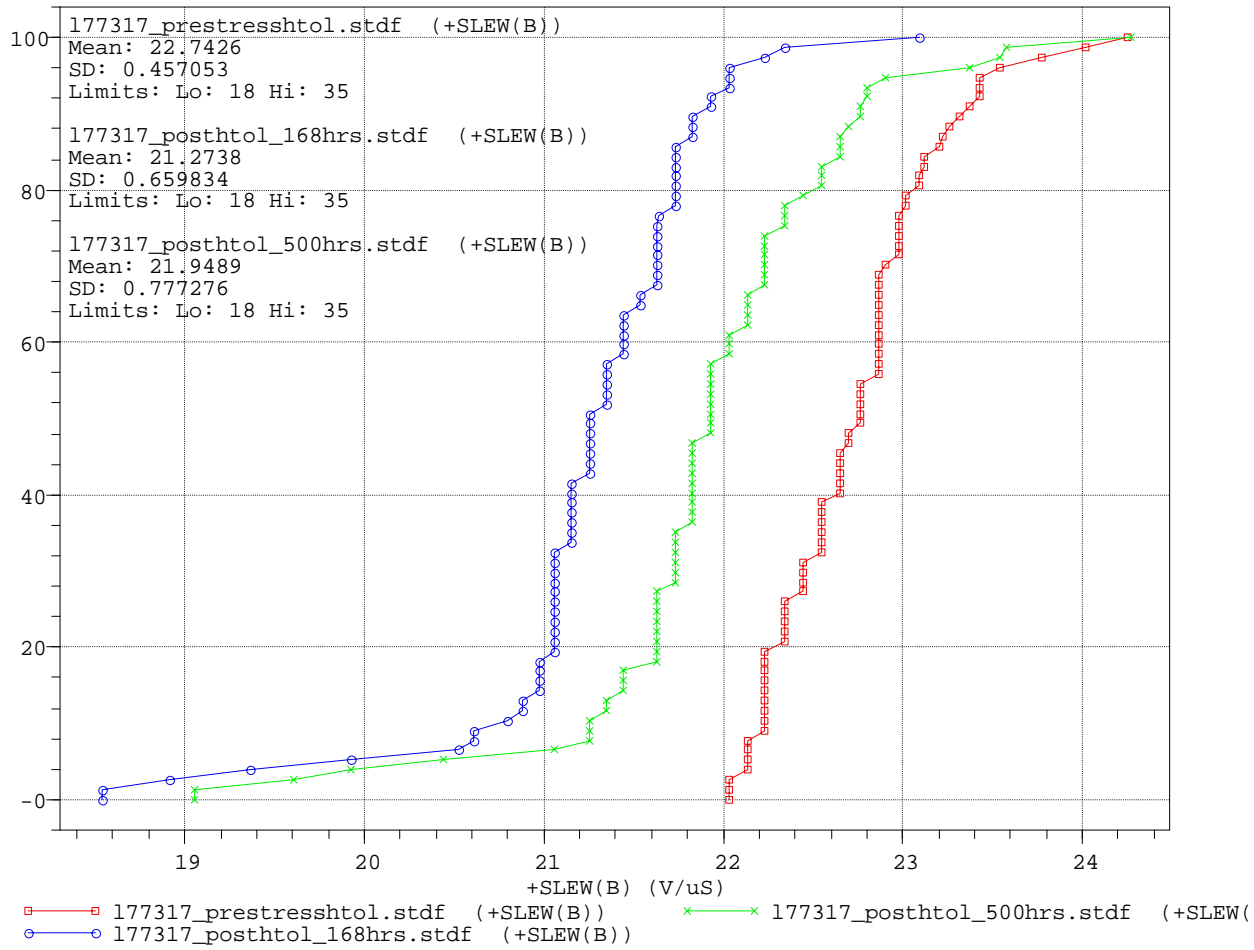
Slew Rate Side A



Slew Rate Side B

252 +SLEW(B)

Percent



Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	+Isupply Vs=+-15V	77	-2.60E+39	1.60E+40	-1.00E+41	0.143831	1.00E+41	0.3	5.6	mA
80	+Swing(A) Vs=+-4.5	77	0.0937198	0.636117	-0.0344758	3.96476	3.99923	1	4.5	V
81	+Swing(B) Vs=+-4.5	77	0.0941255	0.635803	-0.0231197	3.96275	3.98587	1	4.5	V
90	-Swing(A) Vs=+-4.5	77	-0.0549826	0.454907	-2.83393	0.0227132	2.85664	-4.5	-1	V
91	-Swing(B) Vs=+-4.5	77	-0.0550779	0.454857	-2.83342	0.0247209	2.85814	-4.5	-1	V
100	+Swing(A) Vs=+-15 RL=2K	77	0.359579	2.24874	-0.0157948	14.042	14.0578	13	14.5	V
101	+Swing(B) Vs=+-15 RL=2K	77	0.359163	2.25098	-0.0184298	14.0538	14.0722	13	14.5	V
110	-Swing(A) Vs=+-15 RL=2K	77	-0.324797	2.0814	-12.9963	0.0272465	13.0236	-14.5	-12.5	V
111	-Swing(B) Vs=+-15 RL=2K	77	-0.325155	2.08368	-13.0102	0.0277481	13.038	-14.5	-12.5	V
120	+Swing(A) Vs=+-18 RL=2K	77	0.460037	2.70106	0.00172424	16.8928	16.8911	10	17.5	V
121	+Swing(B) Vs=+-18 RL=2K	77	0.438244	2.70857	-0.0131454	16.9179	16.931	10	17.5	V
130	-Swing(A) Vs=+-18 RL=2K	77	-0.390048	2.46361	-15.3858	0.0150633	15.4008	-17.5	-10	V
131	-Swing(B) Vs=+-18 RL=2K	77	-0.396905	2.46247	-15.3856	0.00765896	15.3933	-17.5	-10	V
140	Vos(A) Vs=+-15V	77	-1.28E+37	7.91E+37	-4.94E+38	0.998415	4.94E+38	-1.000	1.000	mV
142	Vos(B) Vs=+-15V	77	-1.28E+37	7.91E+37	-4.94E+38	0.848724	4.94E+38	-1.000	1.000	mV
144	Vos Match	77	-0.0580591	0.294165	-0.766112	0.590673	1.35678	-1	1	mV
150	-CMRR(A) @ Vcm=10V	77	-73.6476	4.16E+04	-111.251	35.7161	146.967	86	201	dB
153	-CMRR(B) @ Vcm=10V	77	-72.299	2.69E+04	-106.582	41.801	148.383	86	201	dB
160	-CMRR(A) @ Vcm=11V	77	-77.3813	5.63E+04	-113.776	51.6105	165.387	76	201	dB
162	-CMRR(B) @ Vcm=11V	77	-78.4795	5.17E+04	-110.242	27.2398	137.482	76	201	dB
170	+CMRR(A) @ Vcm=10V	77	-56.9736	564959%	-93.8778	26.0571	119.935	86	201	dB
173	+CMRR(B) @ Vcm=10V	77	-61.0484	697989%	-93.6327	28.5155	122.148	86	201	dB
180	+CMRR(A) @ Vcm=11V	77	-56.9981	576449%	-94.0647	26.7083	120.773	76	201	dB
182	+CMRR(B) @ Vcm=11V	77	-61.1382	704450%	-93.707	41.5083	135.215	76	201	dB
190	+PSRR(A)	77	-6.97056	783.48%	-36.0261	8.83949	44.8656	86	150	dB
193	+PSRR(B)	77	-8.92334	1088.22%	-37.5416	4.55208	42.0937	86	150	dB
200	-PSRR(A)	77	-14.5377	2033.15%	-44.2271	30.0725	74.2995	86	150	dB
203	-PSRR(B)	77	-17.8039	3646.63%	-49.0132	19.463	68.4762	88	150	dB
210	-GAIN(A) RL=2K	77	-498.063	3092.87	-19259.3	1317.9	20577.2	200	2.00E+04	
212	-GAIN(B) RL=2K	77	-541.108	3080.27	-19219.6	1062.48	20282	200	2.00E+04	
220	+GAIN(A) RL=2K	77	-492.282	3139.2	-19599.4	563.662	20163.1	200	2.00E+04	
222	+GAIN(B) RL=2K	77	-500.799	3141.51	-19641.5	146.939	19788.4	200	2.00E+04	
230	-ISC(A) Vs=+-15V	77	0.48613	2.77953	-0.237636	17.4807	17.7183	10	50	mA
231	-ISC(B) Vs=+-15V	77	0.497337	2.78546	-0.274345	17.5144	17.7888	10	50	mA
240	+ISC(A) Vs=+-15V	77	-0.629928	3.92149	-24.5713	0.344896	24.9162	-50	-10	mA
241	+ISC(B) Vs=+-15V	77	-0.643582	3.91974	-24.5903	0.376447	24.9667	-50	-10	mA
250	+SLEW(A)	77	0.0505697	1.58037	-8.83965	10.0778	18.9175	18	35	V/uS

252	+SLEW(B)	77	0.411253	3.1503	-1.08072	19.6321	20.7128	18	35	V/uS
300	Ios(A) Vs=+-15V	77	-0.435694	0.71512	-2.70156	1.25911	3.96067	-10	10	pA
302	Ios(B) Vs=+-15V	77	-0.742134	0.808762	-3.03061	0.63356	3.66418	-10	10	pA
310	+Ibias(A) Vs=+-15V	77	-0.263035	2.35826	-6.7586	12.981	19.7396	3	27	pA
312	+Ibias(B) Vs=+-15V	77	-0.404596	2.33513	-2.42972	13.1966	15.6264	3	27	pA
320	-Ibias(A) Vs=+-15V	77	-0.689158	2.34804	-5.25463	12.8592	18.1138	3	27	pA
322	-Ibias(B) Vs=+-15V	77	0.436874	2.16389	-1.82121	13.3561	15.1773	3	27	pA
330	+Ibias(A) Vcm=10V	77	1.94366	5.57251	-22.4044	27.2624	49.6668	-57.2	62.2	pA
332	+Ibias(B) Vcm=10V	77	-1.18141	5.09825	-11.6685	16.78	28.4484	-57.2	62.2	pA
340	-Ibias Match	77	-0.726418	0.811221	-4.10039	0.868028	4.96842	-0.1	10	pA
342	+Ibias Match	77	-0.753433	0.889025	-4.82656	0.948043	5.77461	-0.1	10	pA

AD712 HTOL DATA REDUCTION

LOT ID : L84187

Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	+Isupply Vs=+-15V	77	-0.000727687	0.0827546	-0.357784	0.295982	0.653766	0.3	5.6	mA
80	+Swing(A) Vs=+-4.5	77	0.0192875	0.0040265	0.0138628	0.0332882	0.0194254	1	4.5	V
81	+Swing(B) Vs=+-4.5	77	0.0186655	0.00400071	0.00811958	0.0353584	0.0272388	1	4.5	V
90	-Swing(A) Vs=+-4.5	77	-0.0327231	0.00540108	-0.0468099	-0.0119572	0.0348527	-4.5	-1	V
91	-Swing(B) Vs=+-4.5	77	-0.0325005	0.00473793	-0.0443583	-0.0226998	0.0216584	-4.5	-1	V
100	+Swing(A) Vs=+-15 RI=2K	77	0.0126605	0.0034177	0.00818443	0.0275278	0.0193434	13	14.5	V
101	+Swing(B) Vs=+-15 RI=2K	77	0.01483	0.00335917	0.00460434	0.0302124	0.0256081	13	14.5	V
110	-Swing(A) Vs=+-15 RI=2K	77	-0.0269255	0.00353252	-0.036478	-0.0153751	0.0211029	-14.5	-12.5	V
111	-Swing(B) Vs=+-15 RI=2K	77	-0.0285719	0.00328456	-0.0368404	-0.0215864	0.015254	-14.5	-12.5	V
120	+Swing(A) Vs=+-18 RI=2K	77	0.023911	0.00408869	0.0109329	0.0375385	0.0266056	10	17.5	V
121	+Swing(B) Vs=+-18 RI=2K	77	0.0540394	0.00188306	0.0463657	0.058548	0.0121822	10	17.5	V
130	-Swing(A) Vs=+-18 RI=2K	77	0.0380245	0.000767654	0.0358601	0.0396891	0.003829	-17.5	-10	V
131	-Swing(B) Vs=+-18 RI=2K	77	0.0453261	0.000849648	0.042697	0.0476551	0.00495815	-17.5	-10	V
140	Vos(A) Vs=+-15V	77	0.171435	0.217548	-0.498475	0.88572	1.38419	-1	1	mV
142	Vos(B) Vs=+-15V	77	-0.0311391	0.303626	-1.84831	0.685751	2.53406	-1	1	mV
144	Vos Match	77	-0.0853199	0.363037	-1.89676	0.640976	2.53773	-1	1	mV
150	-CMRR(A) @ Vcm=10V	77	-1.89248	150.78%	-21.1572	39.1579	60.3152	86	201	dB
153	-CMRR(B) @ Vcm=10V	77	-0.615018	62.85%	-12.8534	13.8365	26.6898	86	201	dB
160	-CMRR(A) @ Vcm=11V	77	-5.60794	845.95%	-37.5114	28.6591	66.1704	76	201	dB
162	-CMRR(B) @ Vcm=11V	77	-0.244883	62.22%	-12.7142	24.4918	37.206	76	201	dB
170	+CMRR(A) @ Vcm=10V	77	-5.33141	343.44%	-26.9219	28.6374	55.5593	86	201	dB
173	+CMRR(B) @ Vcm=10V	77	-4.96545	503.49%	-33.049	26.0872	59.1362	86	201	dB
180	+CMRR(A) @ Vcm=11V	77	-7.04285	573.96%	-32.8541	25.4436	58.2977	76	201	dB
182	+CMRR(B) @ Vcm=11V	77	-11.2688	2040.19%	-45.107	15.7037	60.8107	76	201	dB
190	+PSRR(A)	77	0.345785	12.74%	-3.61814	3.88878	7.50692	86	150	dB
193	+PSRR(B)	77	0.38046	6.70%	-1.63268	1.8714	3.50408	86	150	dB
200	-PSRR(A)	77	-1.76364	137.06%	-20.8909	23.7807	44.6716	86	150	dB
203	-PSRR(B)	77	-0.754007	54.81%	-11.9892	19.0473	31.0364	88	150	dB
210	-GAIN(A) RL=2K	77	-119.83	871.845	-7168.67	1047.06	8215.73	200	2.00E+04	
212	-GAIN(B) RL=2K	77	-268.145	898.022	-3988.38	1614.85	5603.23	200	2.00E+04	
220	+GAIN(A) RL=2K	77	-23.0604	58.4396	-371.766	219.692	591.458	200	2.00E+04	
222	+GAIN(B) RL=2K	77	-11.7268	34.2451	-128.529	130.082	258.61	200	2.00E+04	
230	-ISC(A) Vs=+-15V	77	-0.881803	0.087679	-1.06605	-0.675157	0.390892	10	50	mA
231	-ISC(B) Vs=+-15V	77	-0.891085	0.0861991	-1.07962	-0.710882	0.368741	10	50	mA

240	+ISC(A) Vs=+-15V	77	0.786128	0.112369	0.372027	1.14174	0.769713	-50	-10	mA
241	+ISC(B) Vs=+-15V	77	0.789916	0.083648	0.588312	0.988138	0.399826	-50	-10	mA
250	+SLEW(A)	77	-1.08599	0.350965	-1.59876	-0.190632	1.40813	18	35	V/uS
252	+SLEW(B)	77	-0.645808	0.293595	-1.64951	-0.0768185	1.57269	18	35	V/uS
300	Ios(A) Vs=+-15V	77	-1.05243	1.8775	-6.49062	1.50603	7.99665	-10	10	pA
302	Ios(B) Vs=+-15V	77	-1.50687	1.93156	-10.5177	0.961887	11.4796	-10	10	pA
310	+Ibias(A) Vs=+-15V	77	7.71471	1.90986	4.17212	14.737	10.5648	3	27	pA
312	+Ibias(B) Vs=+-15V	77	7.62306	1.48835	1.8443	10.4522	8.6079	3	27	pA
320	-Ibias(A) Vs=+-15V	77	8.77208	2.21884	2.00923	14.3791	12.3698	3	27	pA
322	-Ibias(B) Vs=+-15V	77	9.35304	1.86136	5.37862	17.1986	11.8199	3	27	pA
330	+Ibias(A) Vcm=10V	77	9.34046	2.09929	-0.367359	18.387	18.7544	-57.2	62.2	pA
332	+Ibias(B) Vcm=10V	77	9.64741	2.09516	0.144721	16.6337	16.4889	-57.2	62.2	pA
340	-Ibias Match	77	-1.27802	2.10613	-13.5354	2.22929	15.7647	-0.1	10	pA
342	+Ibias Match	77	-0.374333	1.65581	-5.97142	2.90176	8.87318	-0.1	10	pA

AD712 DATA REDUCTION

LOT ID : L84187

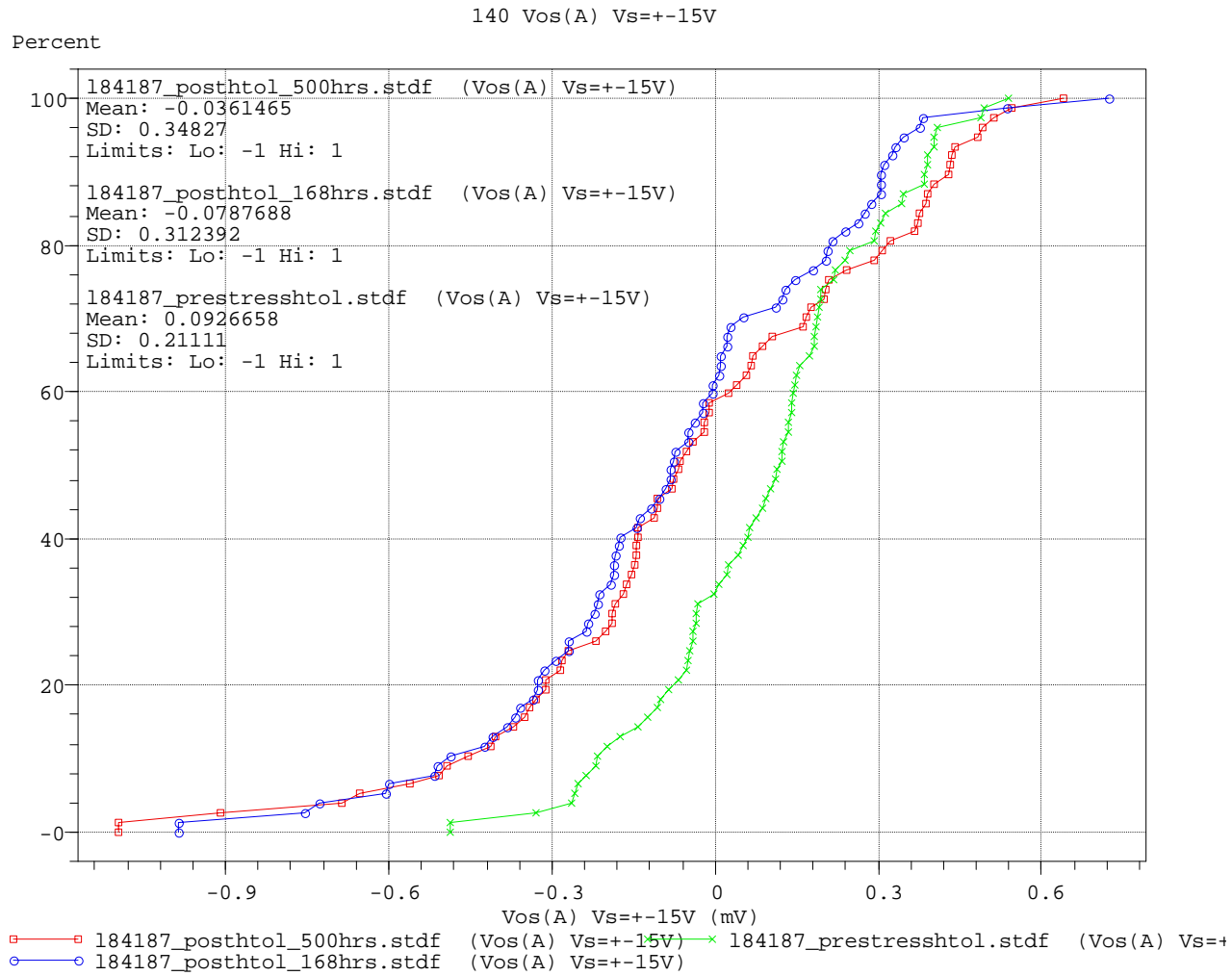
Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	+Isupply Vs=+-15V	77	0.000364837	0.0834897	-0.357263	0.294188	0.65145	0.3	5.6	mA
80	+Swing(A) Vs=+-4.5	77	0.00646294	0.00349546	0.00193954	0.0211926	0.019253	1	4.5	V
81	+Swing(B) Vs=+-4.5	77	0.00586525	0.00336616	-0.00514913	0.0234511	0.0286002	1	4.5	V
90	-Swing(A) Vs=+-4.5	77	-0.0100402	0.00386676	-0.0213079	0.00747752	0.0287855	-4.5	-1	V
91	-Swing(B) Vs=+-4.5	77	-0.00947763	0.00314149	-0.0210581	-0.00387073	0.0171874	-4.5	-1	V
100	+Swing(A) Vs=+-15 RI=2K	77	-0.337462	0.00455413	-0.345712	-0.322008	0.0237036	13	14.5	V
101	+Swing(B) Vs=+-15 RI=2K	77	-0.322098	0.00508194	-0.334294	-0.300183	0.034111	13	14.5	V
110	-Swing(A) Vs=+-15 RI=2K	77	0.350047	0.00461061	0.340676	0.363127	0.0224504	-14.5	-12.5	V
111	-Swing(B) Vs=+-15 RI=2K	77	0.336941	0.0044679	0.328381	0.348639	0.0202579	-14.5	-12.5	V
120	+Swing(A) Vs=+-18 RI=2K	77	-0.315407	0.0110305	-0.345219	-0.290894	0.0543251	10	17.5	V
121	+Swing(B) Vs=+-18 RI=2K	77	-0.268258	0.00790146	-0.294527	-0.256069	0.0384579	10	17.5	V
130	-Swing(A) Vs=+-18 RI=2K	77	0.0519495	0.00122153	0.0491877	0.0542078	0.00502014	-17.5	-10	V
131	-Swing(B) Vs=+-18 RI=2K	77	0.0683155	0.001243	0.0651217	0.0714579	0.00633621	-17.5	-10	V
140	Vos(A) Vs=+-15V	77	0.128812	0.260172	-0.647815	0.88054	1.52836	-1	1	mV
142	Vos(B) Vs=+-15V	77	-0.0333827	0.309558	-1.80162	0.573589	2.37521	-1	1	mV
144	Vos Match	77	-0.100581	0.357673	-1.83171	0.666457	2.49817	-1	1	mV
150	-CMRR(A) @ Vcm=10V	77	-13.8731	3046.63%	-48.5006	40.1651	88.6656	86	201	dB
153	-CMRR(B) @ Vcm=10V	77	-0.47275	53.22%	-12.654	13.6681	26.3221	86	201	dB
160	-CMRR(A) @ Vcm=11V	77	-2.44249	340.12%	-29.7313	27.8602	57.5915	76	201	dB
162	-CMRR(B) @ Vcm=11V	77	-0.394593	56.41%	-11.6845	22.0174	33.7019	76	201	dB
170	+CMRR(A) @ Vcm=10V	77	-2.80552	233.22%	-26.2804	27.688	53.9684	86	201	dB
173	+CMRR(B) @ Vcm=10V	77	-2.52228	170.24%	-23.7157	25.3318	49.0475	86	201	dB
180	+CMRR(A) @ Vcm=11V	77	-14.1001	3055.75%	-48.5691	29.4232	77.9922	76	201	dB
182	+CMRR(B) @ Vcm=11V	77	-1.74997	72.63%	-13.8974	15.4483	29.3457	76	201	dB
190	+PSRR(A)	77	0.313209	14.49%	-4.92368	3.61082	8.5345	86	150	dB
193	+PSRR(B)	77	0.207152	8.29%	-2.73764	2.22005	4.9577	86	150	dB
200	-PSRR(A)	77	-2.85962	194.04%	-21.8077	23.605	45.4128	86	150	dB
203	-PSRR(B)	77	-0.539861	41.81%	-9.81508	15.5855	25.4006	88	150	dB
210	-GAIN(A) RL=2K	77	893.587	1386.16	37.2092	12354.9	12317.7	200	2.00E+04	

212	-GAIN(B) RL=2K	77	1283.6	827.99	-424.451	4296.44	4720.89	200	2.00E+04	
220	+GAIN(A) RL=2K	77	54.9038	51.9405	-211.092	253.068	464.16	200	2.00E+04	
222	+GAIN(B) RL=2K	77	37.4415	43.9126	-79.71	301.571	381.281	200	2.00E+04	
230	-ISC(A) Vs=+-15V	77	-0.251484	0.0455731	-0.398049	-0.117026	0.281023	10	50	mA
231	-ISC(B) Vs=+-15V	77	-0.256953	0.0425447	-0.361433	-0.0950843	0.266349	10	50	mA
240	+ISC(A) Vs=+-15V	77	0.229715	0.0933891	-0.191592	0.558017	0.749609	-50	-10	mA
241	+ISC(B) Vs=+-15V	77	0.239676	0.0496449	0.0839941	0.357347	0.273352	-50	-10	mA
250	+SLEW(A)	77	-0.931365	0.388868	-1.89249	-0.0501518	1.84233	18	35	V/uS
252	+SLEW(B)	77	-1.49364	0.92214	-2.42424	2.20317	4.62742	18	35	V/uS
300	Ios(A) Vs=+-15V	77	-0.262574	1.06608	-2.95351	1.78426	4.73777	-10	10	pA
302	Ios(B) Vs=+-15V	77	-0.781409	1.09926	-4.4746	0.928546	5.40315	-10	10	pA
310	+Ibias(A) Vs=+-15V	77	1.68773	0.987181	-0.756447	3.6213	4.37774	3	27	pA
312	+Ibias(B) Vs=+-15V	77	3.43337	1.3856	-0.256713	7.50231	7.75903	3	27	pA
320	-Ibias(A) Vs=+-15V	77	1.61203	1.11659	-1.75698	3.94374	5.70071	3	27	pA
322	-Ibias(B) Vs=+-15V	77	3.95977	1.27504	0.883236	7.06018	6.17694	3	27	pA
330	+Ibias(A) Vcm=10V	77	4.21348	1.6296	-3.42476	11.4326	14.8573	-57.2	62.2	pA
332	+Ibias(B) Vcm=10V	77	3.99956	2.07261	-5.33556	12.6387	17.9742	-57.2	62.2	pA
340	-Ibias Match	77	-1.43509	1.36654	-4.55414	1.38682	5.94096	-0.1	10	pA
342	+Ibias Match	77	0.260207	1.11484	-2.83453	3.19415	6.02868	-0.1	10	pA

CUMULATIVE PLOTS

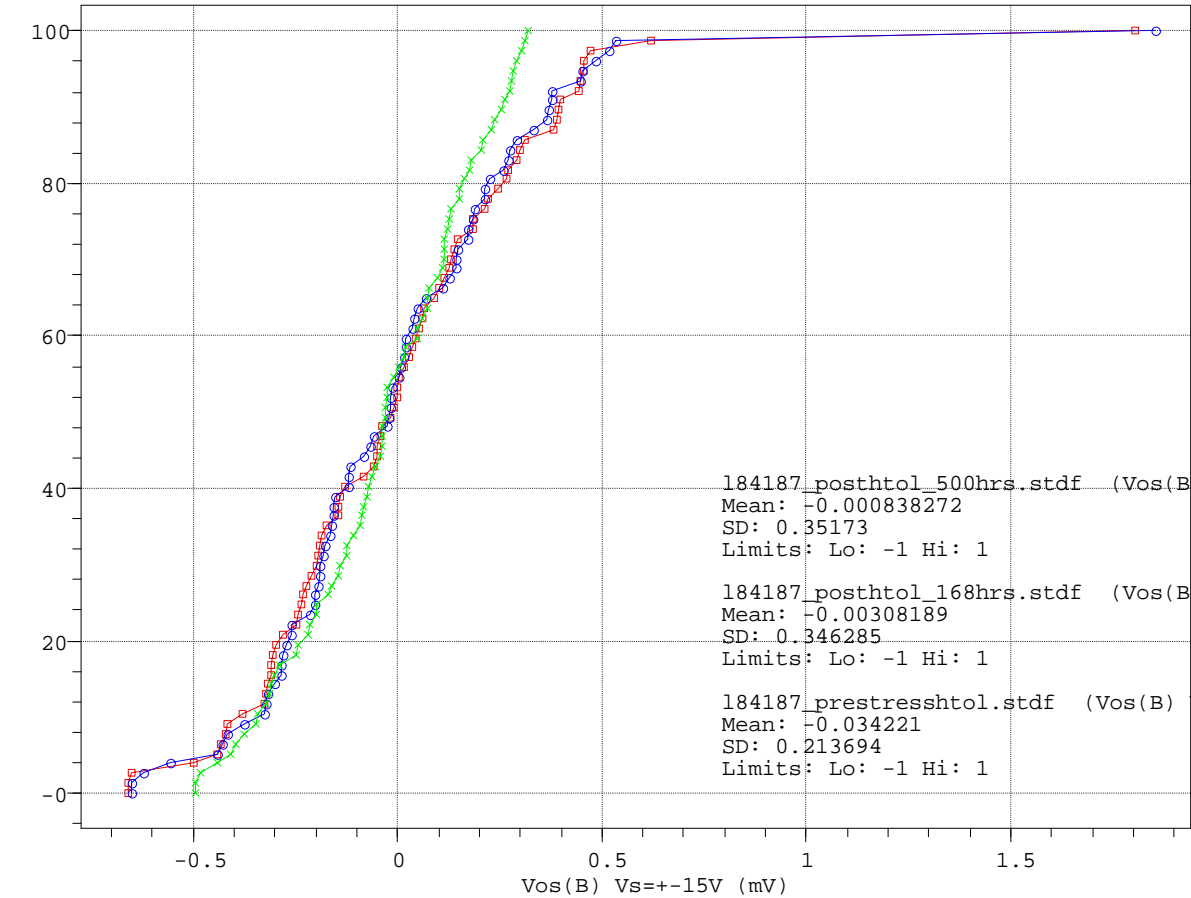
Offset Voltage Side A



Offset Voltage Side B

142 Vos(B) Vs=+-15V

Percent



184187_posthtol_500hrs.stdf (Vos(B)

Mean: -0.000838272

SD: 0.35173

Limits: Lo: -1 Hi: 1

184187_posthtol_168hrs.stdf (Vos(B)

Mean: -0.00308189

SD: 0.346285

Limits: Lo: -1 Hi: 1

184187_prestresshtol.stdf (Vos(B)

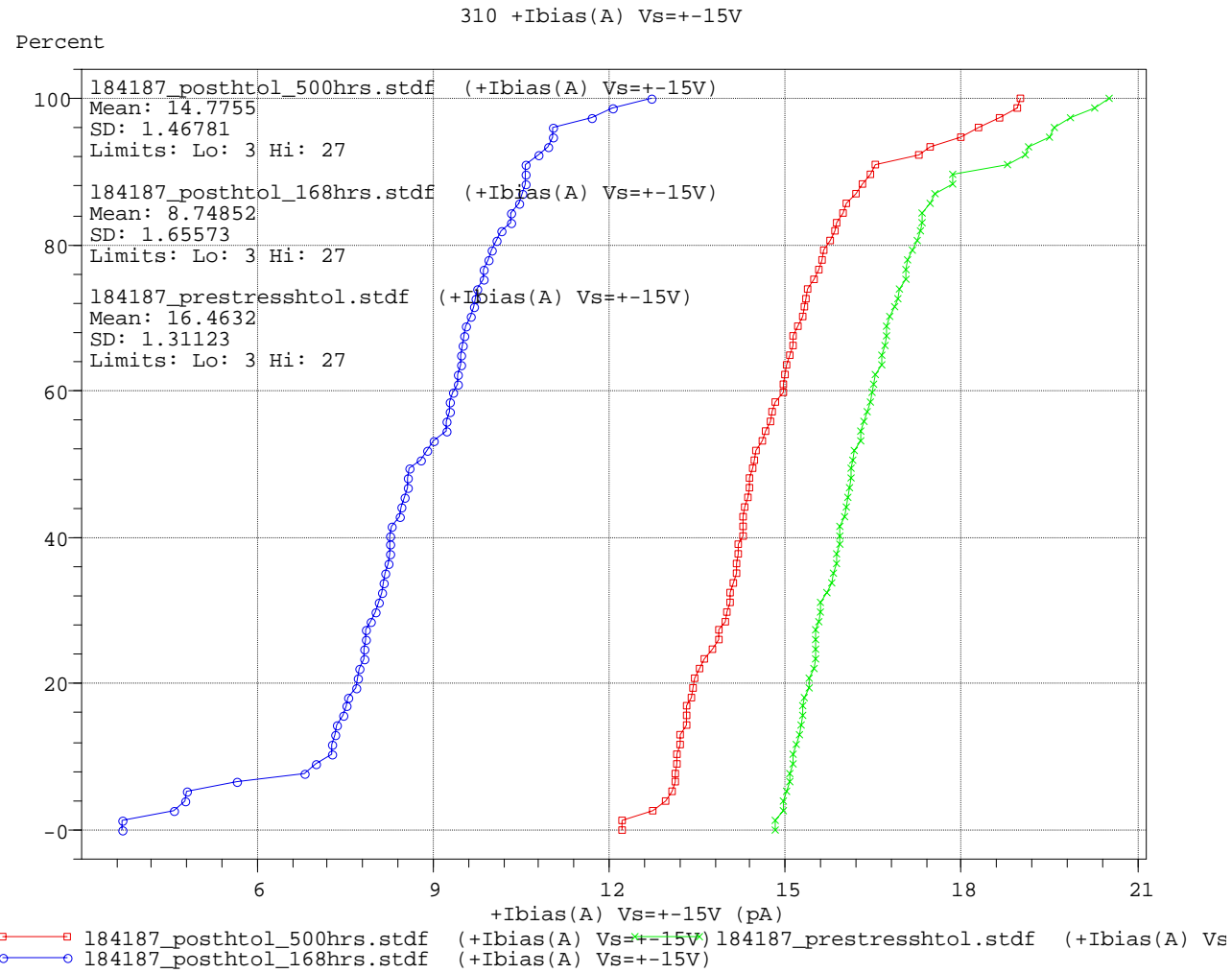
Mean: -0.034221

SD: 0.213694

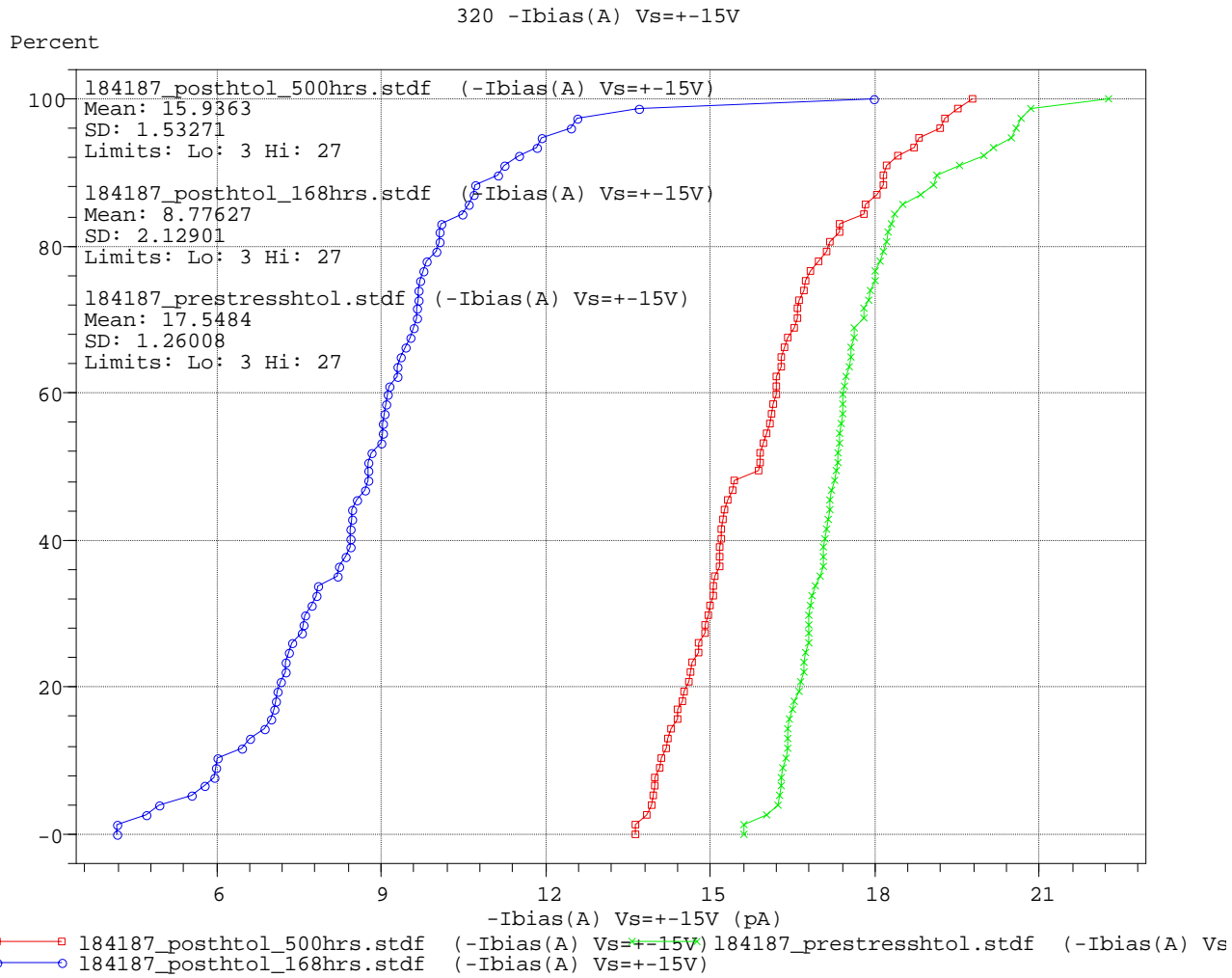
Limits: Lo: -1 Hi: 1

184187_posthtol_500hrs.stdf (Vos(B) Vs=+-15V) 184187_prestresshtol.stdf (Vos(B) Vs=+-15V)
184187_posthtol_168hrs.stdf (Vos(B) Vs=+-15V)

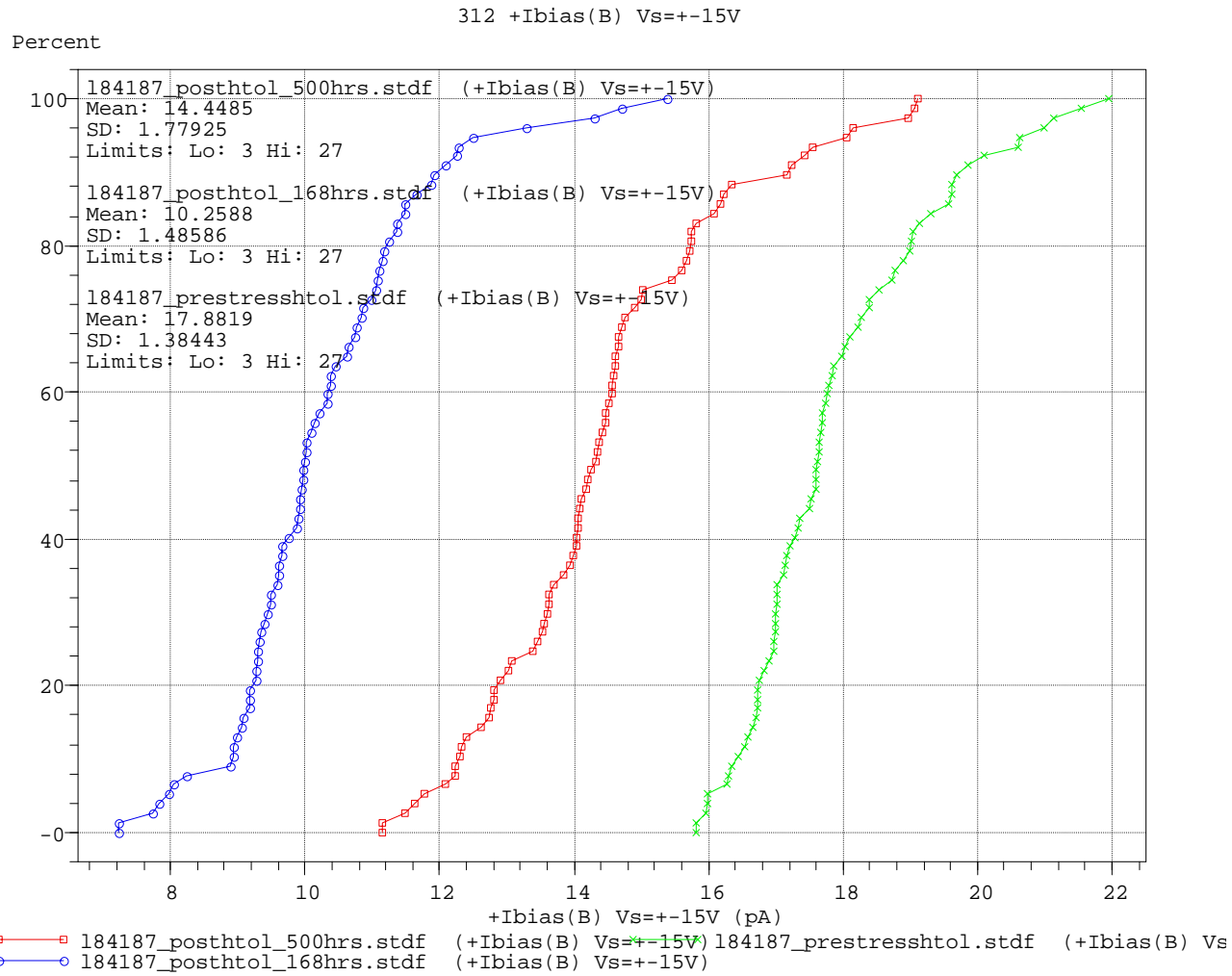
Positive Bias Current Vs=+/-15V Side A



Negative Bias Current Vs=+/-15V Side A



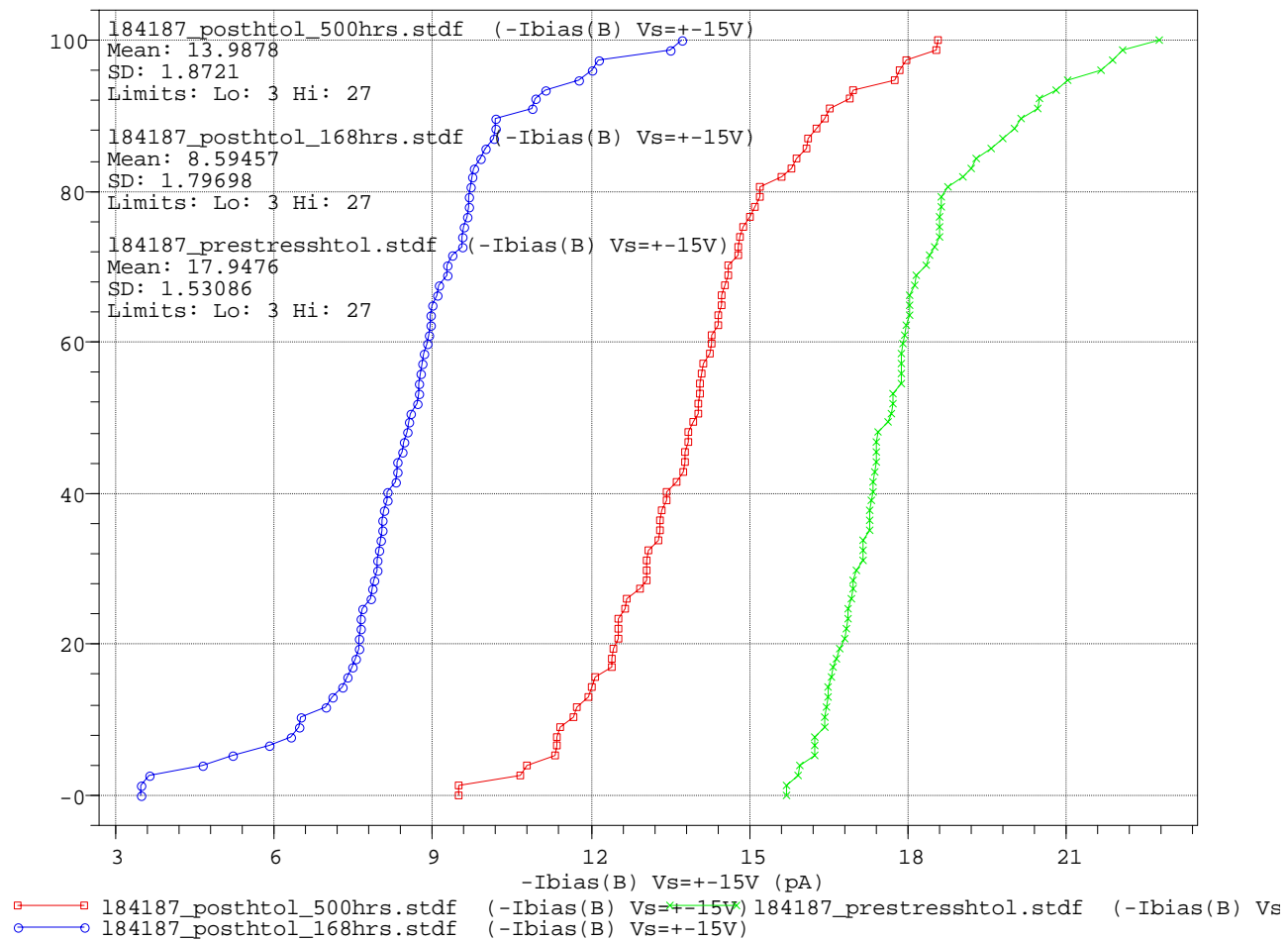
Positive Bias Current Vs= \pm 15V Side B



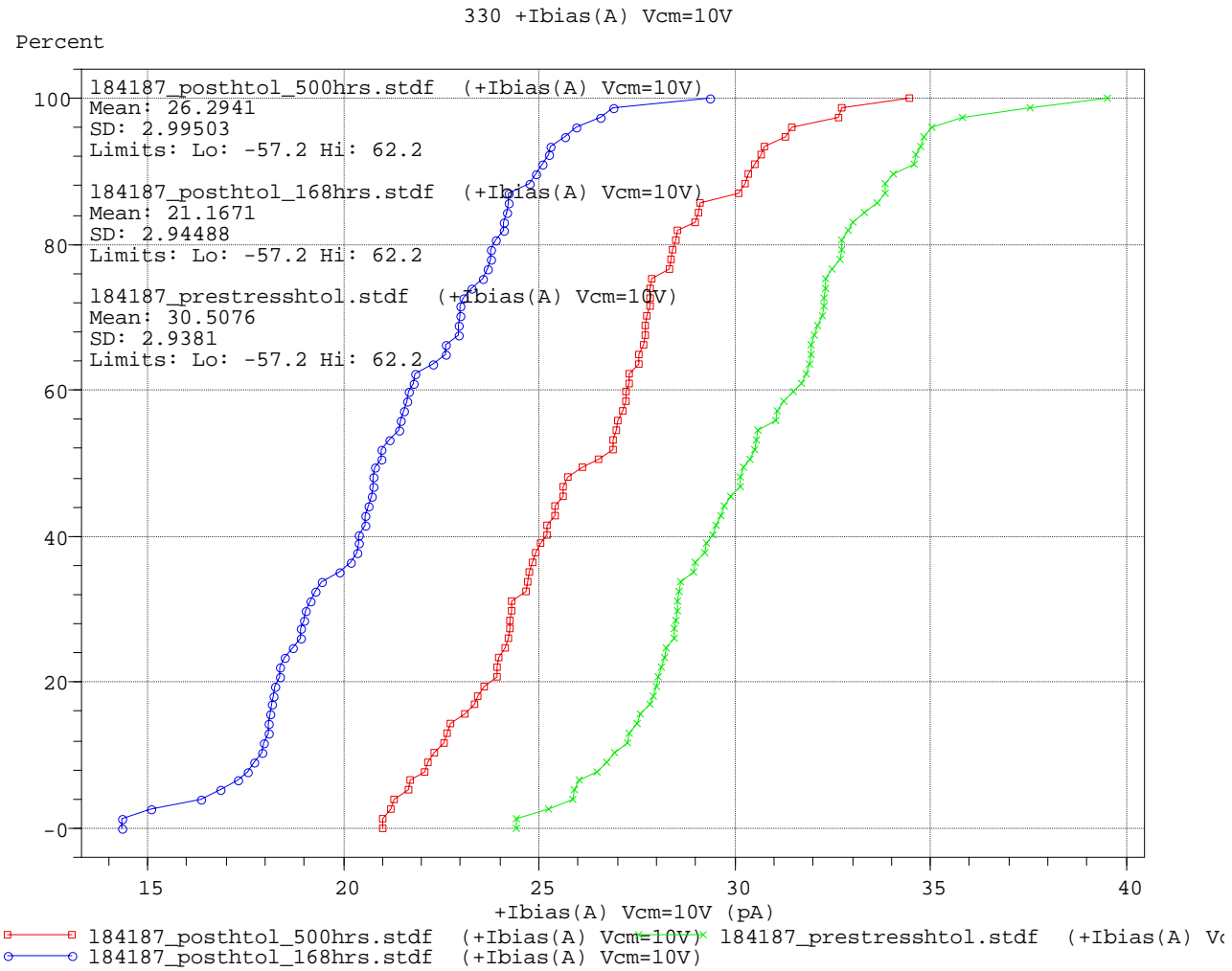
Negative Bias Current Vs= \pm 15V Side B

322 -Ibias(B) Vs= \pm 15V

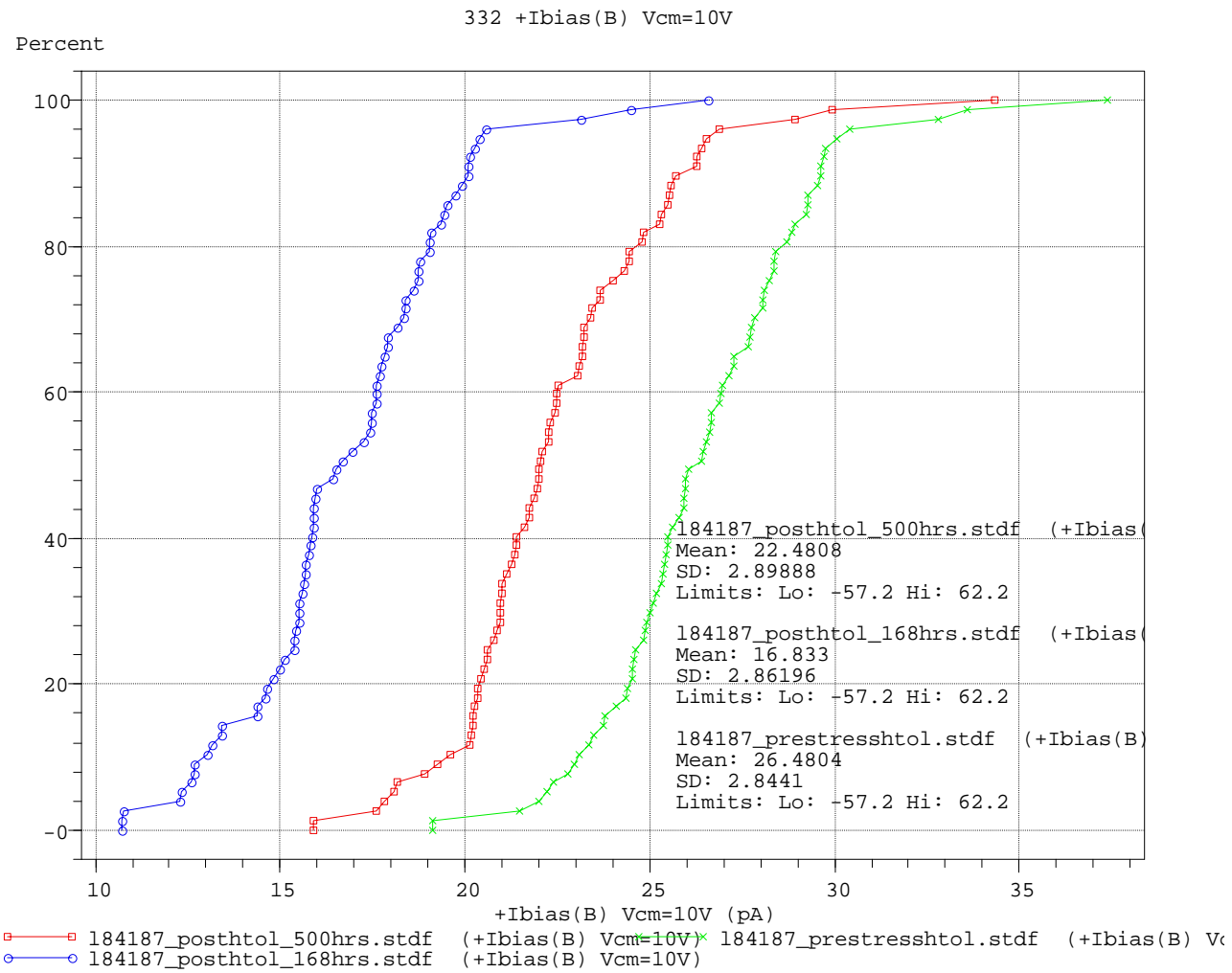
Percent



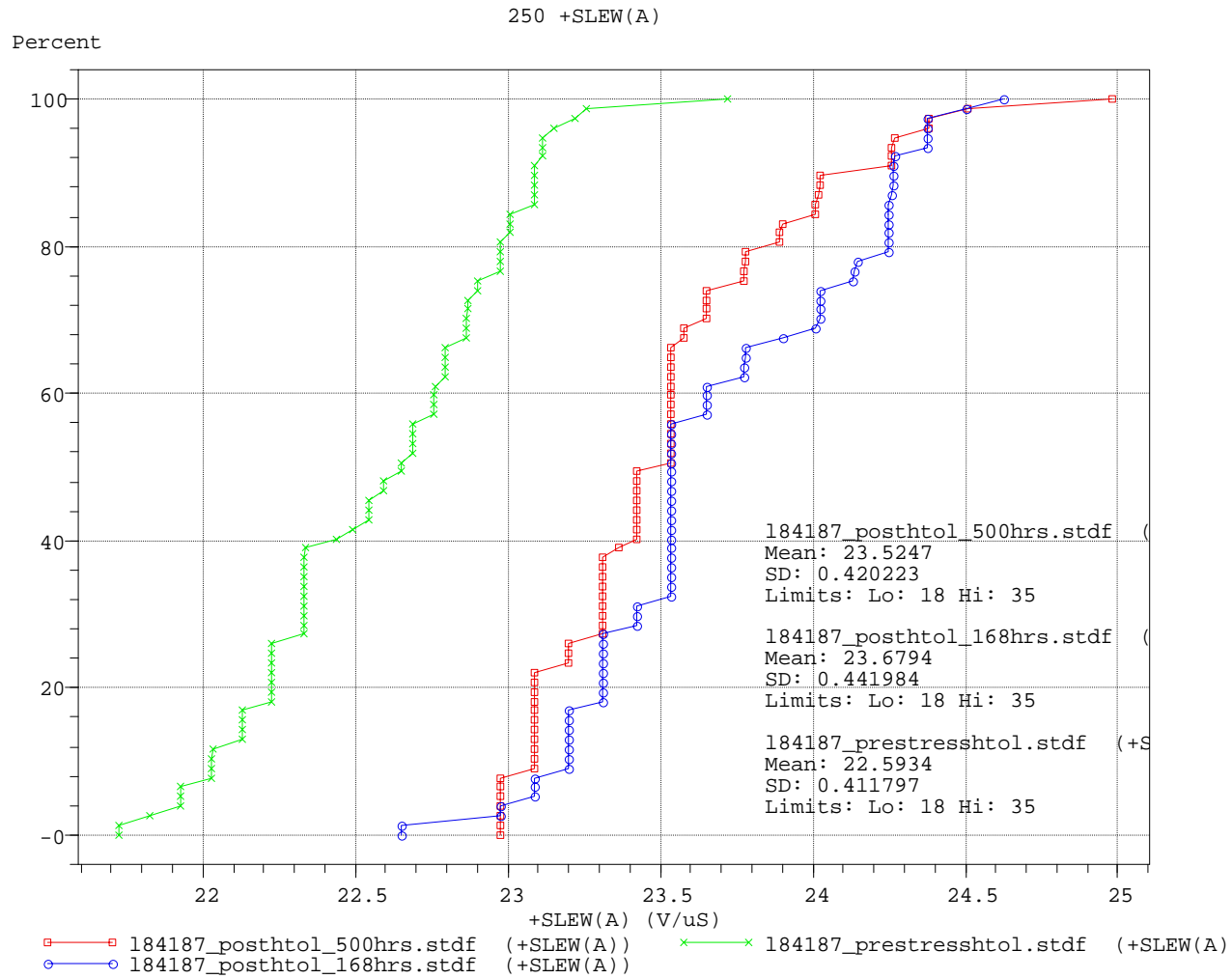
Positive Bias Current Vcm=10V Side A



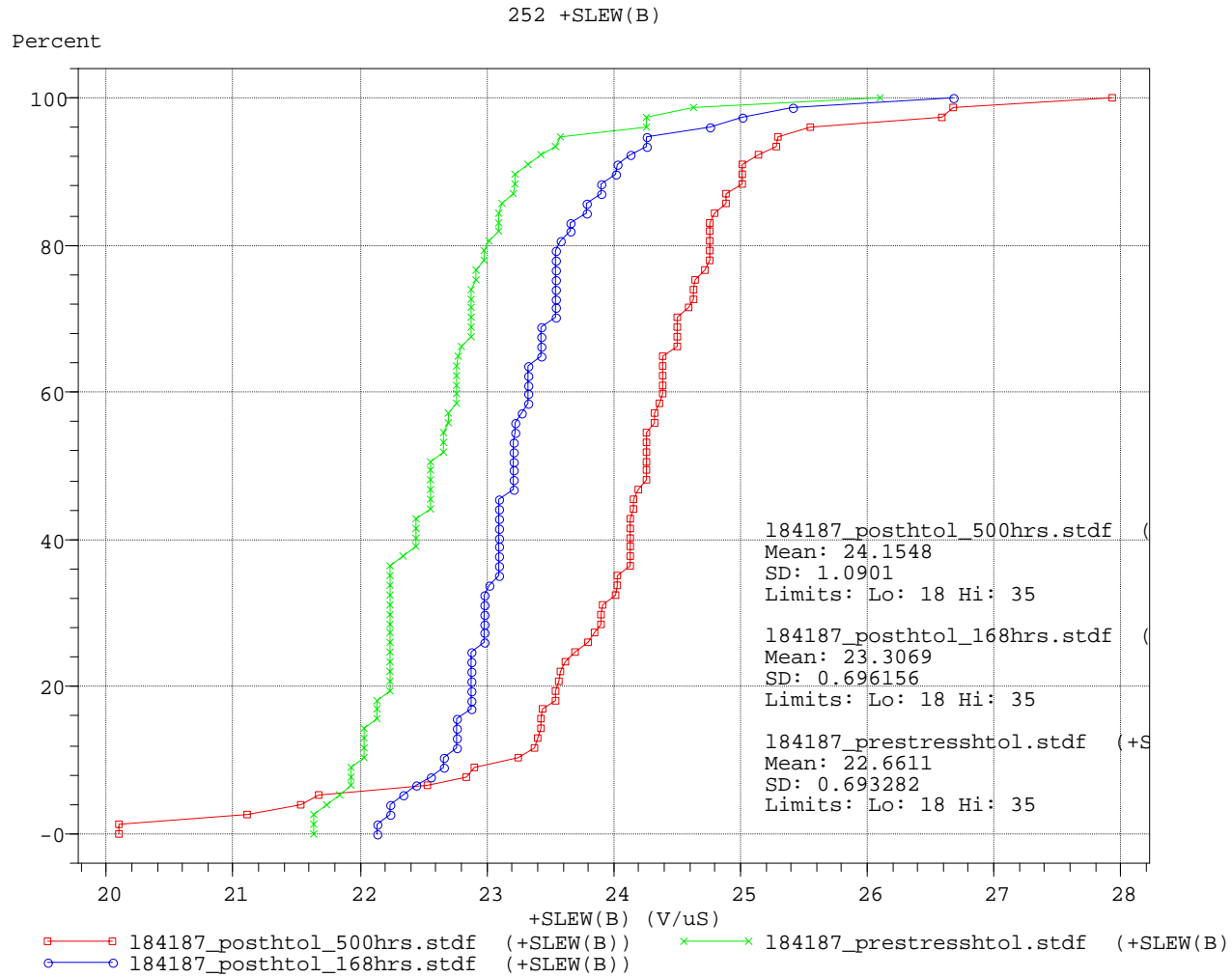
Positive Bias Current Vcm=10V Side B



Slew Rate Side A



Slew Rate Side B



AD694 Data Reduction Report

AD694 HTOL DATA REDUCTION

AD694 DATA REDUCTION

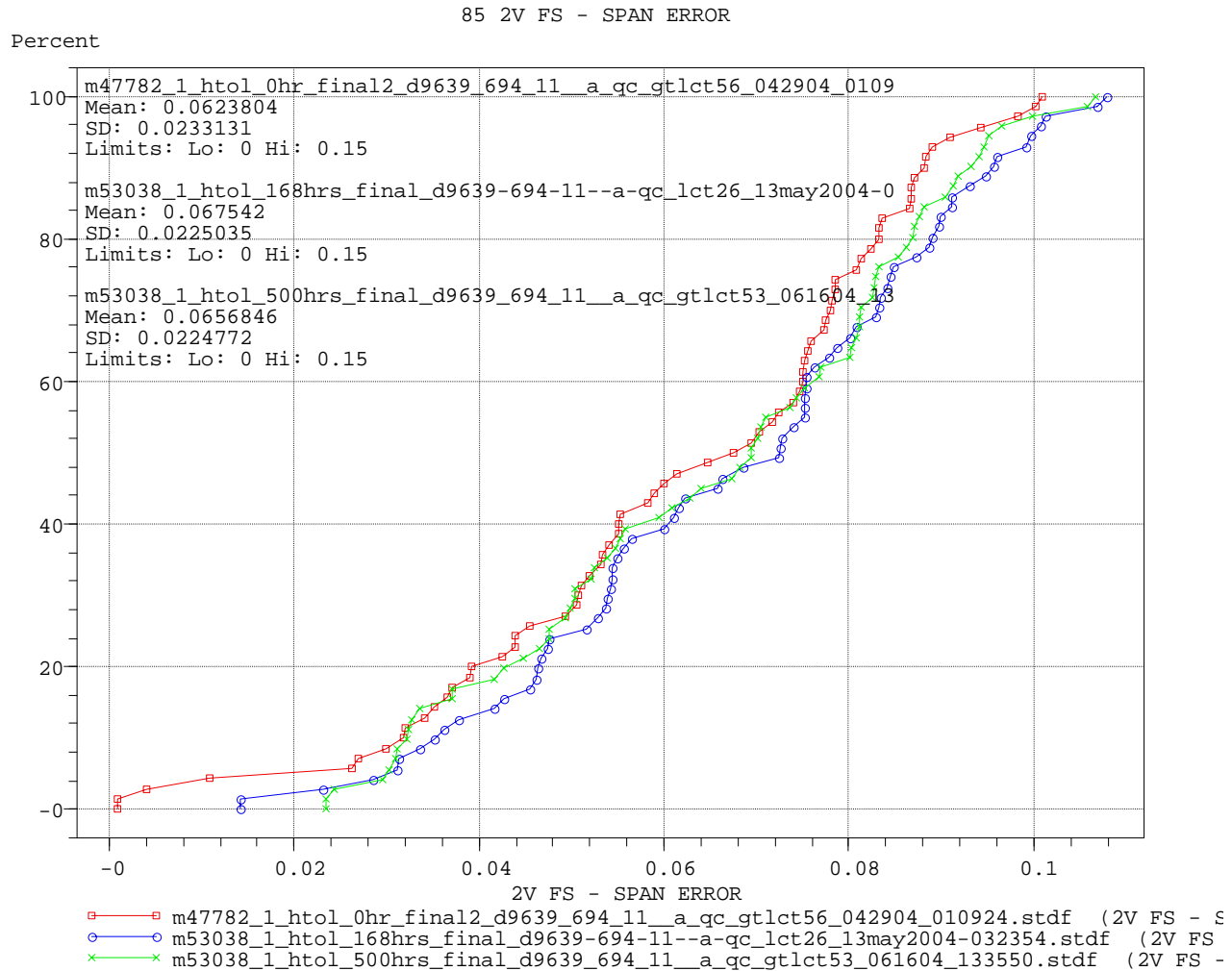
LOT ID: M53038.1

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

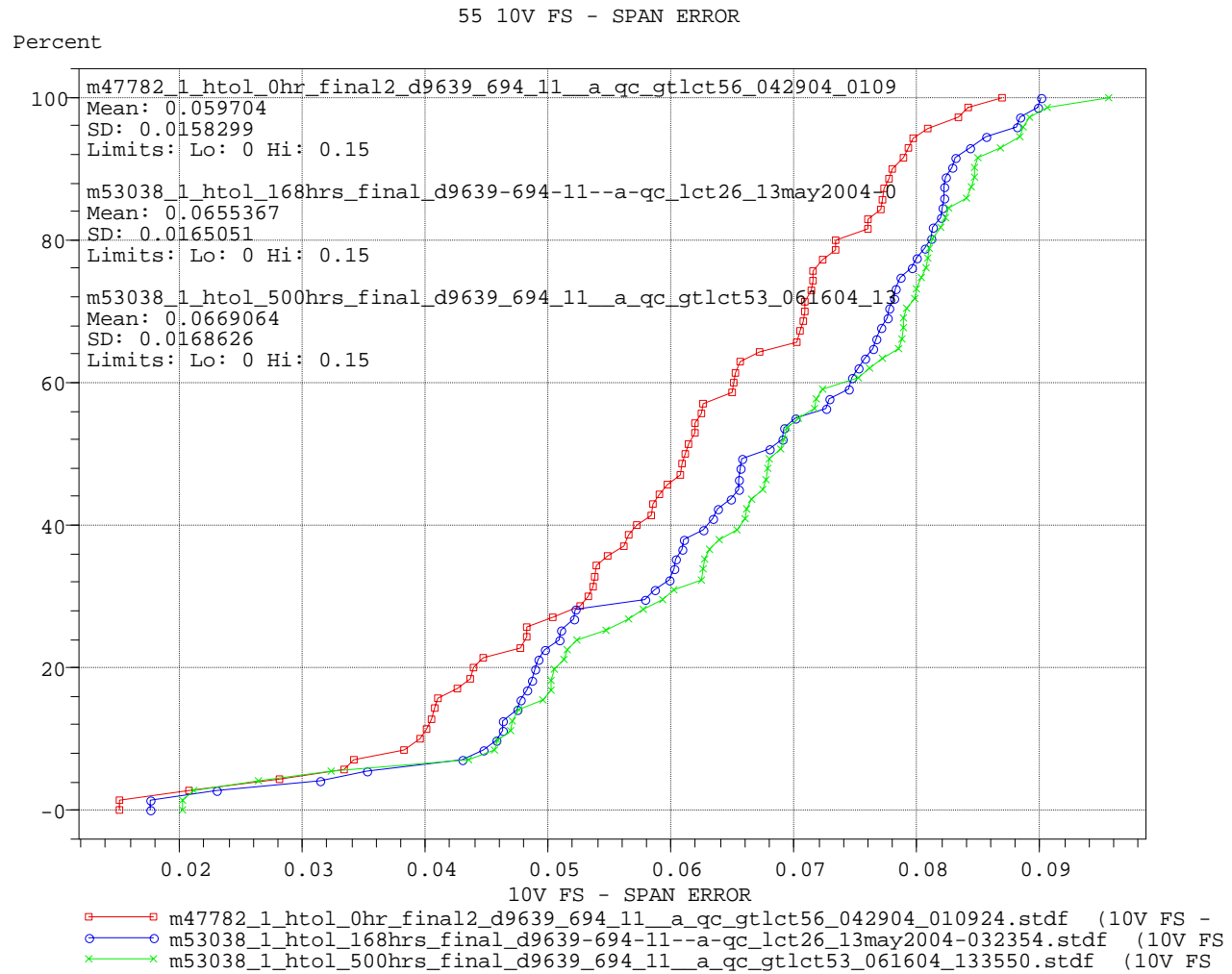
Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	SUPPLY I VS=36V 4MA OFF	71	0.0147181	0.17455	-0.202056	1.42527	1.62732	1	2	mA
2	SUPPLY I VS=36V 4MA ON	70	0.00173033	0.0137864	-0.028307	0.0405884	0.0688953	3.2	5.5	mA
10	BUFFER AMP +IBIAS VS=36V	70	0.184163	0.148821	-0.191708	0.559759	0.751468	0	5	nA
11	BUFFER AMP IOS	70	-0.00112311	0.0246279	-0.0483774	0.107969	0.156347	0	1	nA
12	BUFFER AMP -IBIAS - VS=36V	70	0.184947	0.150899	-0.188935	0.599018	0.787953	0	5	nA
13	BUFFER AMP GAIN/SWINGS - IDEAL 101X	70	0.122577	0.0306947	0.0784454	0.300354	0.221909	97	103	
14	BUFFER AMP OFFSET	70	19.2377	66.2565	-146.402	242.396	388.798	0	500	uV
15	BUFFER AMP PSRR - VS=24V TO 36V	70	-27.3894	16939.70%	-63.0374	46.5503	109.588	80	200	dB
16	OUTPUT AMP VOS - VS=12V	70	0.00598372	0.0322275	-0.0698285	0.083778	0.153606	0	1	mV
17	BUFFER AMP VOS +ADJ	70	-0.162021	0.226672	-1.0788	0.407584	1.48638	2	11	mV
18	BUFFER AMP VOS -ADJ	70	0.0137311	0.279368	-0.6798	0.802717	1.48252	-11	-2	mV
19	2V FS - MAX IOUT CURRENT - VIN=5V	70	0.0496525	0.27964	-0.604862	0.8405	1.44536	24	44	mA
20	ALARM PIN LEAKAGE @36V BIAS	70	0.0345519	0.0109352	0.011233	0.065641	0.0544079	0	1	uA
21	ALARM I SHORT CKT #1 - VS=5V	70	0.275287	0.13922	-0.0281391	0.604639	0.632778	9	30	mA
22	ALARM I SHORT CKT #2 - VS=5V	70	0.27459	0.13886	-0.0274734	0.602848	0.630322	9	30	mA
23	VSAT OF ALARM @2.5MA - VS=5V	70	-0.00331586	0.00475642	-0.0148441	0.00754249	0.0223866	0	0.5	V
30	2.000V REFERENCE ERROR - VIN=2V	70	-0.486622	0.804591	-2.39848	1.20654	3.60502	-4	4	mV
31	2.000V REFERENCE ERROR - VIN=2V	4	0	0	0	0	0	-8	8	mV
32	2V REF LOAD REGULATION 0 TO -5MA	70	-6.00E-05	0.00253701	-0.00444936	0.00838217	0.0128315	0	0.5	mV/mA
40	10.000V REFERENCE ERROR - 4MA OFF	70	-2.56803	4.14429	-13.5012	8.64337	22.1446	-20	20	mV
41	10.000V REFERENCE ERROR - 4MA OFF	4	0	0	0	0	0	-40	40	mV
42	10V REF LOAD REGULATION 0 TO -5MA	70	-0.000877726	0.00276145	-0.00415335	0.0128676	0.017021	0	0.5	mV/mA
43	10V REF PSRR - VS=21.6V TO 26.4V	70	1.42E-05	0.000131564	-0.000253544	0.000372543	0.000626087	0	0.005	
50	10V FS - 4.008MA ERROR - VIN=5MV	70	2.3493	1.53314	-1.119	7.81914	8.93814	0	10	uA
51	10V FS - 4.008MA ERROR - VIN=5MV	4	0	0	0	0	0	0	20	uA
52	10V FS - 20.0MA ERROR - VIN=10V	70	-1.36993	3.49214	-9.22199	6.38473	15.6067	0	100	uA
53	10V FS - NONLINEARITY	70	0.000183099	0.000351586	-0.000615022	0.000969124	0.00158415	0	0.005	
54	10V FS - NONLINEARITY	4	0	0	0	0	0	0	0.015	
55	10V FS - SPAN ERROR	70	0.00698928	0.0232309	-0.048521	0.0554093	0.10393	0	0.15	
56	10V FS - SPAN ERROR	4	0	0	0	0	0	0	0.3	
57	10V FS - 4MA PSRR - VS=24V TO 26.4V	70	0.00662008	0.0323757	-0.0840975	0.110653	0.194751	0	0.4	uA
58	10V FS - SPAN PSRR - VS=24V TO 26.4V	70	3.50E-05	0.000212401	-0.000358487	0.000508399	0.000866886	0	0.005	
59	10V FS - 4.008MA ERROR - VS=12.5V	70	-18.4253	1.75326	-23.9743	-14.1128	9.86144	0	100	uA

CUMULATIVE DISTRIBUTION PLOTS

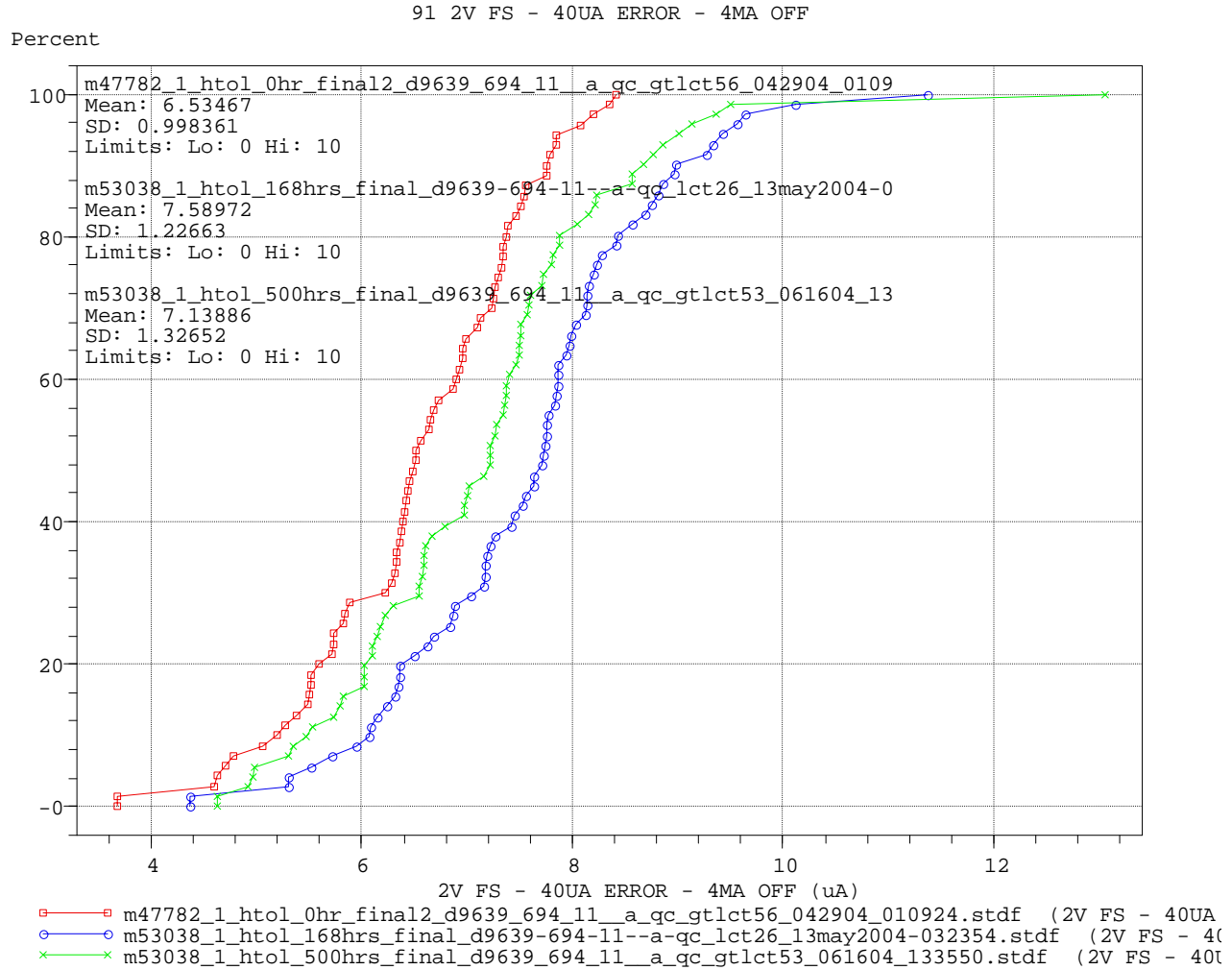
SPAN ACCURACY / 2V FS SPAN ERROR / M53038.1



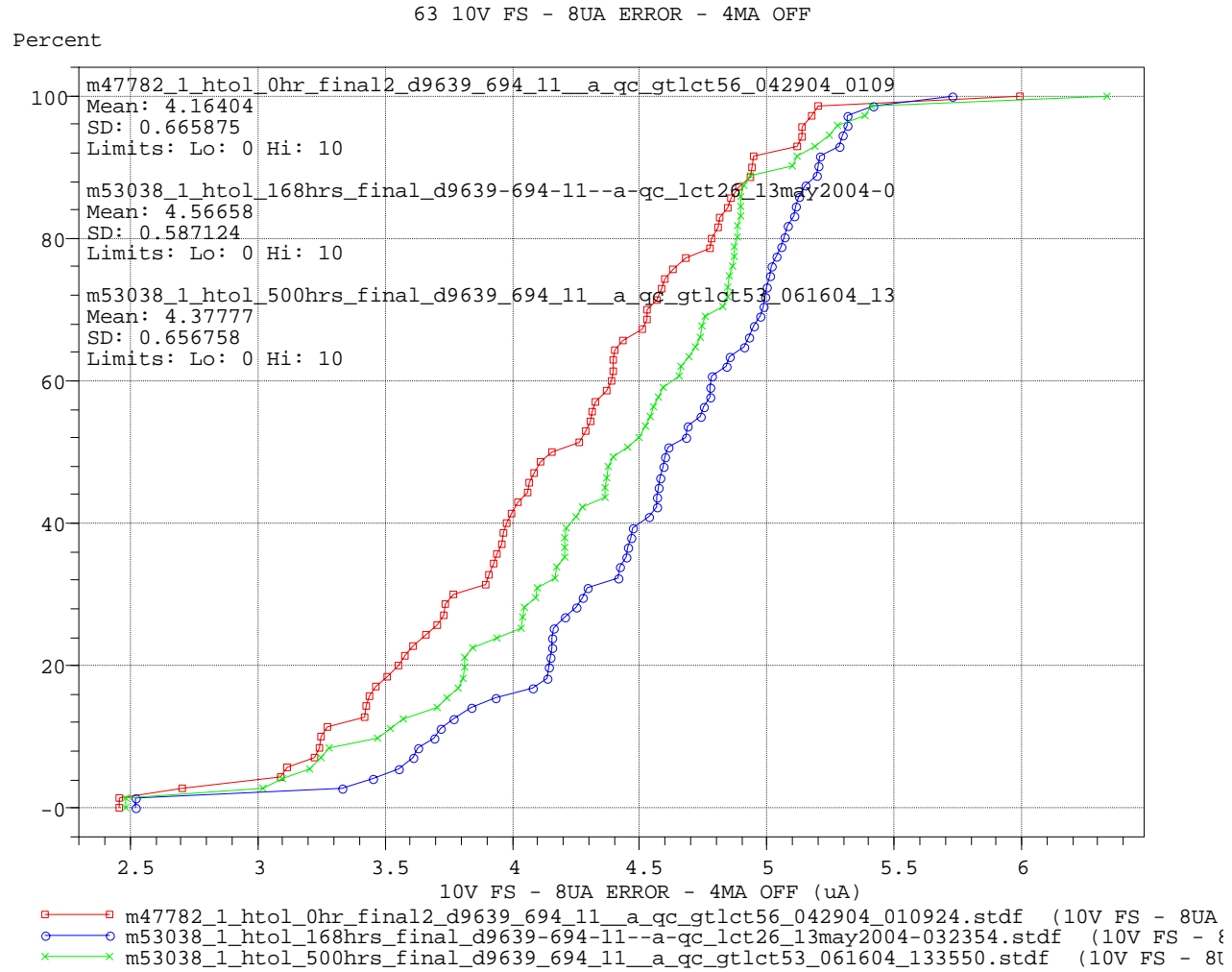
SPAN ACCURACY / 10V FS SPAN ERROR / M53038.1



ZERO ACCURACY / 2V FS – 40uA ERROR – 4mA OFF / M53038.1



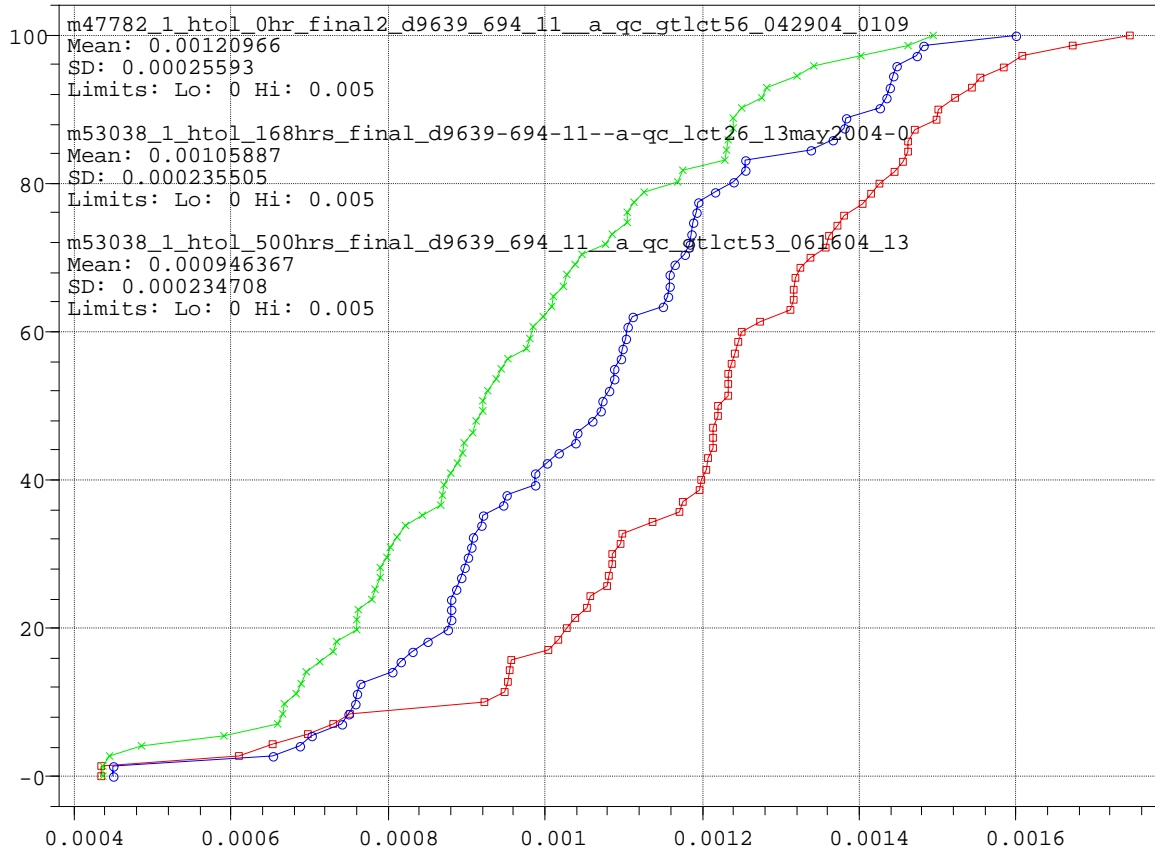
ZERO ACCURACY / 10V FS – 8uA ERROR – 4mA OFF / M53038.1



2V FS NONLINEARITY / M53038.1

83 2V FS - NONLINEARITY

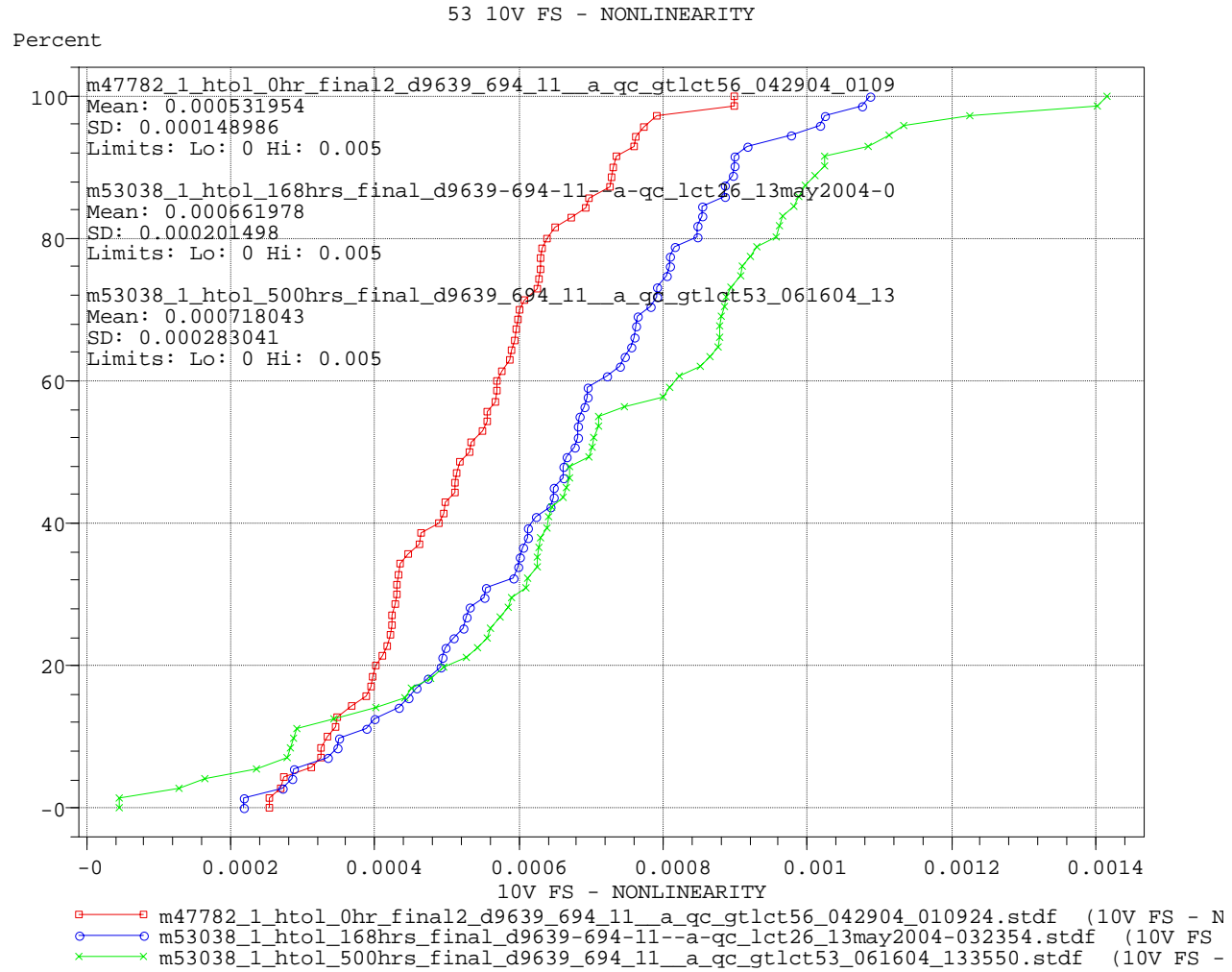
Percent



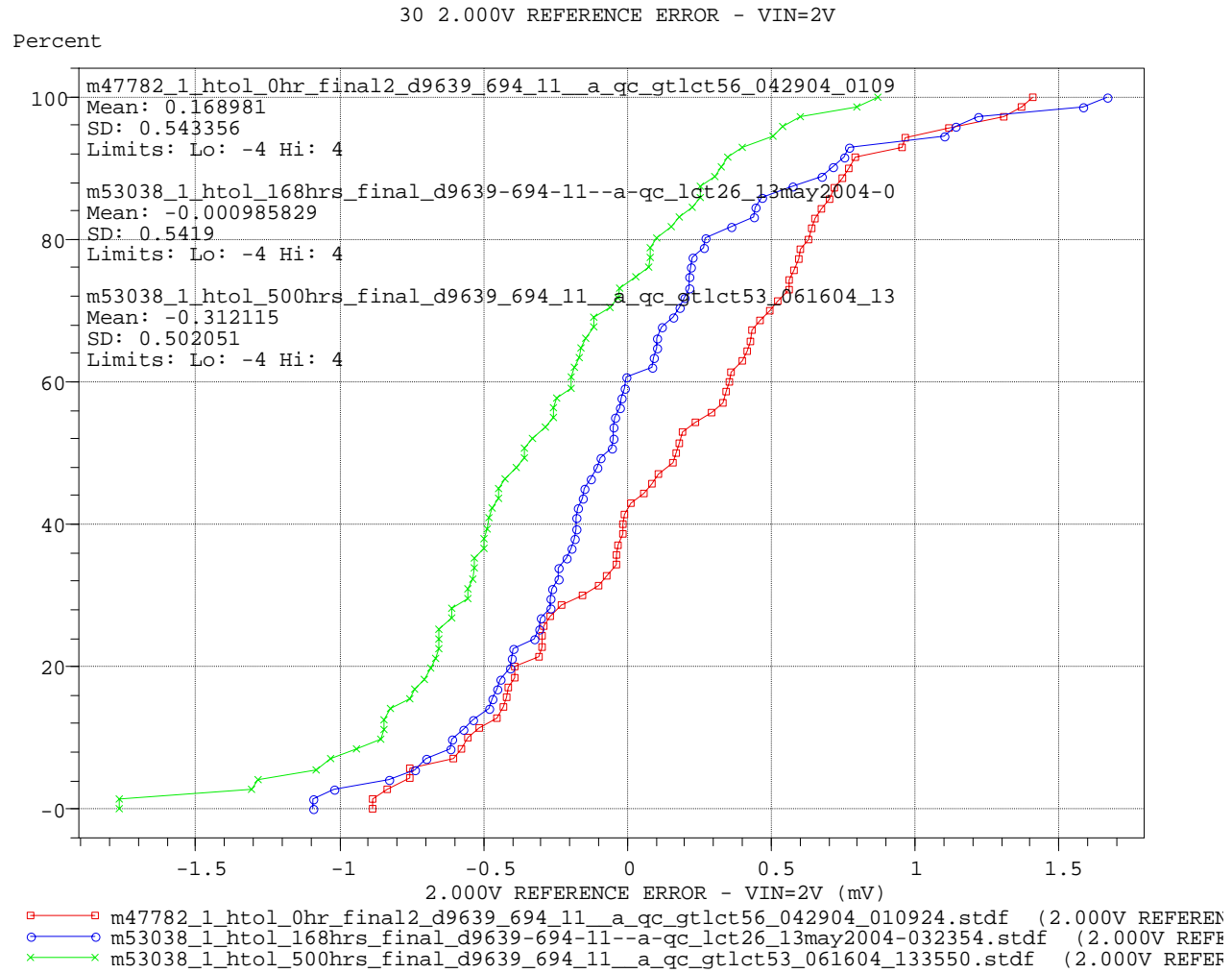
2V FS - NONLINEARITY

- m47782_1_htol_0hr_final2_d9639_694_11_a_qc_gtlct56_042904_010924.std (2V FS - NC)
- m53038_1_htol_168hrs_final_d9639-694-11--a-qc_lct26_13may2004-032354.std (2V FS - NC)
- × m53038_1_htol_500hrs_final_d9639_694_11_a_qc_gtlct53_061604_133550.std (2V FS - NC)

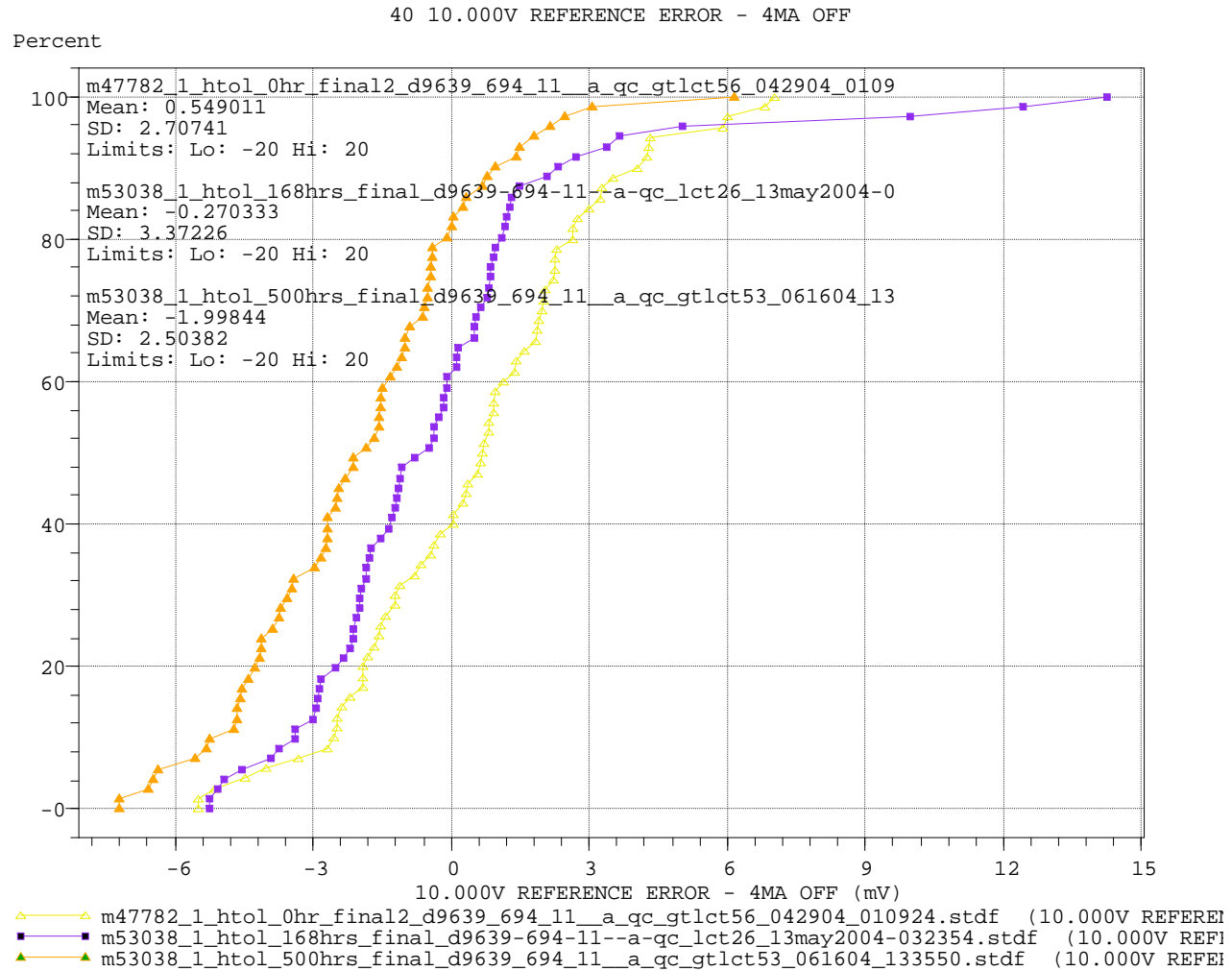
10V FS NONLINEARITY / M53038.1



2V REFERENCE ERROR / M53038.1



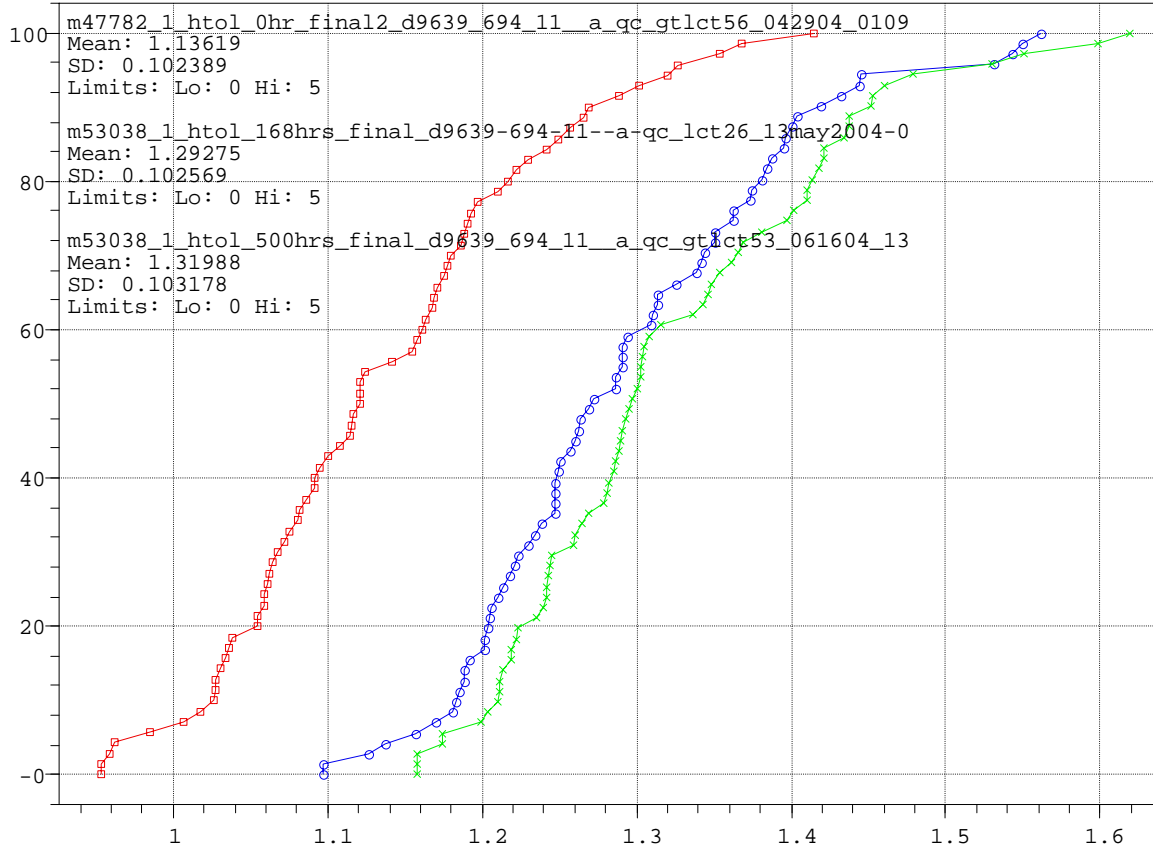
10V REFERENCE ERROR



POSITIVE INPUT BIAS CURRENT / M53038.1

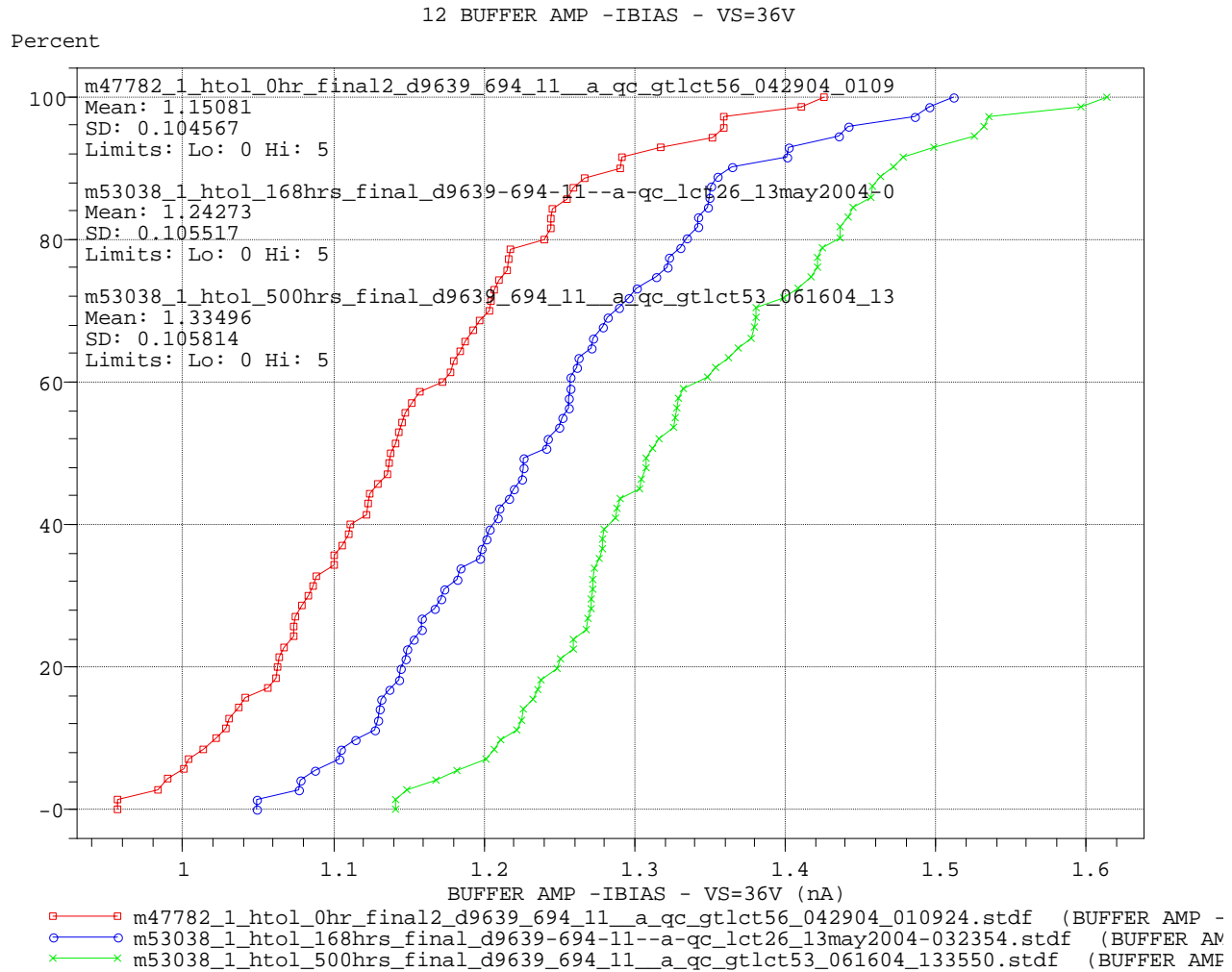
10 BUFFER AMP +IBIAS VS=36V

Percent



—□— m47782_1_htol_0hr_final2_d9639_694_11_a_qc_gtlct56_042904_010924.std (BUFFER AMP
—○— m53038_1_htol_168hrs_final_d9639-694-11--a-qc_lct26_13may2004-032354.std (BUFFER A
—×— m53038_1_htol_500hrs_final_d9639_694_11_a_qc_gtlct53_061604_133550.std (BUFFER AM

NEGATIVE INPUT BIAS CURRENT / M53038.1



AD780 Data Reduction Report

AD780 HTOL DATA REDUCTION

AD780 DATA REDUCTION

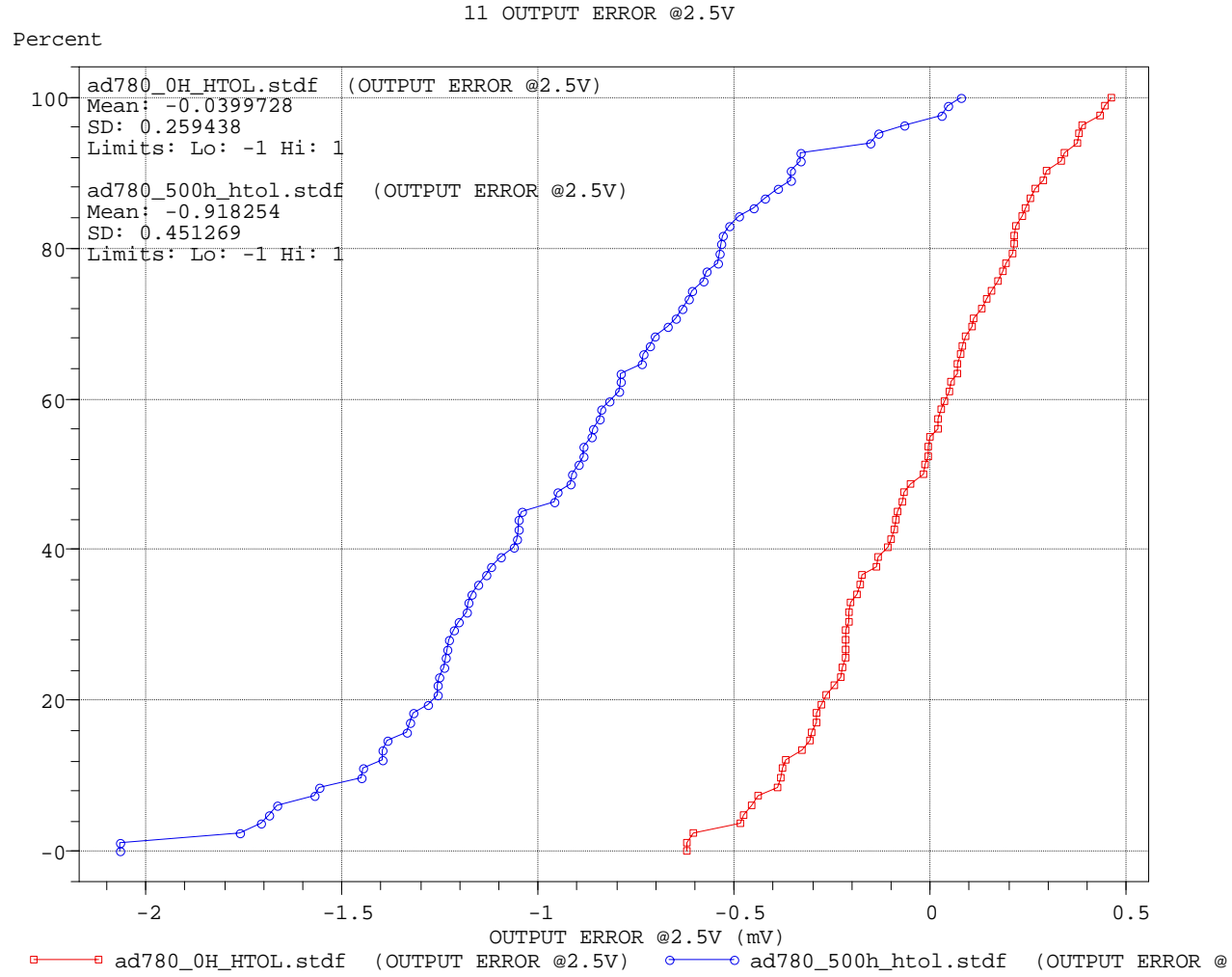
LOT ID : M44064.1

Statistics of Delta of Values between 500 Hrs and 0Hrs. HTOL

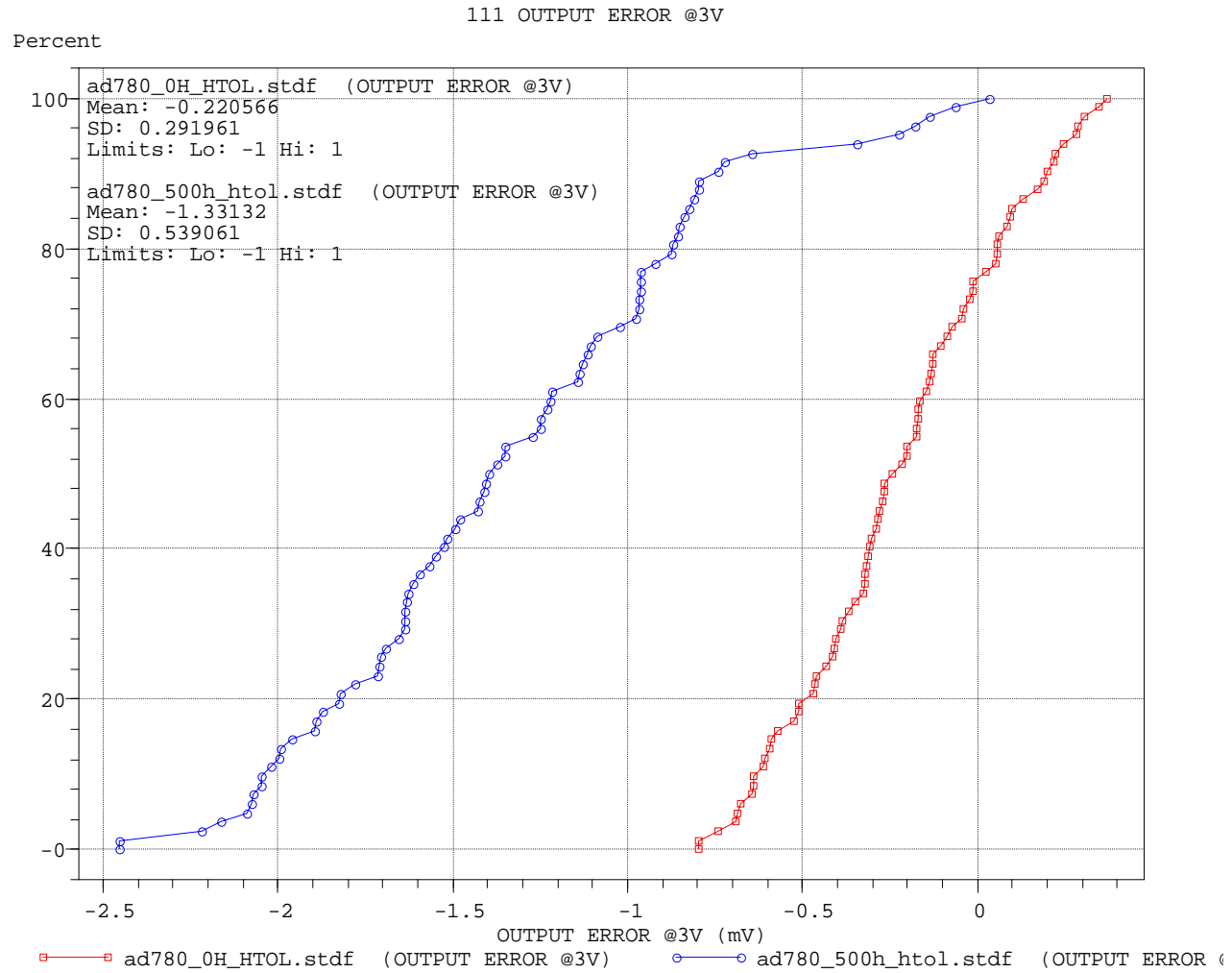
Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
10	SUPPLY CURRENT @2.5V	77	-0.00594999	0.0118763	-0.0282023	0.0193345	0.0475368	0	1	mA
11	OUTPUT ERROR @2.5V	77	-0.878281	0.485792	-1.93664	0.110058	2.0467	-1	1	mV
12	OUTPUT ERROR @2.5V	77	-0.878281	0.485792	-1.93664	0.110058	2.0467	-1.5	1.5	mV
13	OUTPUT ERROR @2.5V	77	-0.878281	0.485792	-1.93664	0.110058	2.0467	-5	5	mV
14	TEMP PIN@ 2.5V	77	-0.575761	6.12869	-15.9515	15.2569	31.2083	500	620	mV
15	NULL TO VOUT @2.5V	77	-1.89044	0.584196	-3.19822	-0.695177	2.50304	-1000	-100	mV
16	NULL TO GND @2.5V	77	-0.0032369	0.000633693	-0.00463171	-0.0020342	0.00259751	0.1	1	V
17	I BRKDN VIN=36V @2.5V	77	-0.0328768	0.0123723	-0.0551304	-0.00609582	0.0490346	0	1.5	mA
18	PSRR 4.5V TO 36V @2.5V	77	0.0523454	0.215805	-0.50289	0.502833	1.00572	-10	10	uV/V
19	LOAD REG SOURCE 10MA	77	7.07583	2.49034	0.484684	18.0867	17.602	-1.00E+34	1.00E+34	uV/mA
20	LOAD REG SINK 10MA	77	-17.3644	3.8813	-25.5267	-7.68163	17.8451	-1.00E+34	1.00E+34	uV/mA
21	ZENER SHUNT MODE @2.5V	77	-0.9118	0.485445	-1.95662	0.0668303	2.02345	-1	1	mV
22	ZENER SHUNT MODE @2.5V	77	-0.9118	0.485445	-1.95662	0.0668303	2.02345	-5	5	mV
24	LOAD REG SHUNT MODE	77	-9.18238	3.9158	-17.3514	0.51441	17.8658	-1.00E+34	1.00E+34	uV/mA
25	VO SHORTED TO GND	77	0.0437743	3.96435	-7.89916	6.60968	14.5088	-49	49	mA
110	SUPPLY CURRENT @3V	77	-0.00692296	0.0122184	-0.0302539	0.0204973	0.0507512	0	1	mA
111	OUTPUT ERROR @3V	77	-1.11075	0.606411	-2.37033	0.43161	2.80194	-1	1	mV
112	OUTPUT ERROR @3V	77	-1.11075	0.606411	-2.37033	0.43161	2.80194	-5	5	mV
114	TEMP PIN @3V	77	-0.522945	6.19889	-16.0485	15.495	31.5434	500	620	mV
115	NULL TO VOUT @3V	77	-0.649914	0.697825	-2.52697	1.09837	3.62534	-1000	-120	mV
116	NULL TO GND @3V	77	-0.000795662	0.000760721	-0.00251488	0.00066188	0.00317676	0.12	1	V
117	I BRKDN VIN=36V @3V	77	-0.0317532	0.0139692	-0.0595531	-0.00322457	0.0563285	0	1.5	mA
118	PSRR 4.5V TO 36V @3V	77	0.0723225	0.257214	-0.816826	0.575401	1.39223	-10	10	uV/V
119	LOAD REG SOURCE 10MA	77	7.05687	2.41902	0.0126598	17.813	17.8003	-1.00E+34	1.00E+34	uV/mA
120	LOAD REG SINK 10MA	77	-22.6292	4.75841	-33.1427	-12.1754	20.9673	-1.00E+34	1.00E+34	uV/mA
121	ZENER SHUNT MODE @3V	77	-1.0067	0.608637	-2.27574	0.530564	2.8063	-1	1	mV
122	ZENER SHUNT MODE @3V	77	-1.0067	0.608637	-2.27574	0.530564	2.8063	-5	5	mV
124	LOAD REG SHUNT MODE	77	-28.8651	5.05057	-39.4791	-18.4016	21.0775	-1.00E+34	1.00E+34	uV/mA
125	VOUT SHORTED TO GND	77	0.0426873	3.95582	-7.8806	6.6011	14.4817	0	49	mA

CUMULATIVE DISTRIBUTION PLOTS

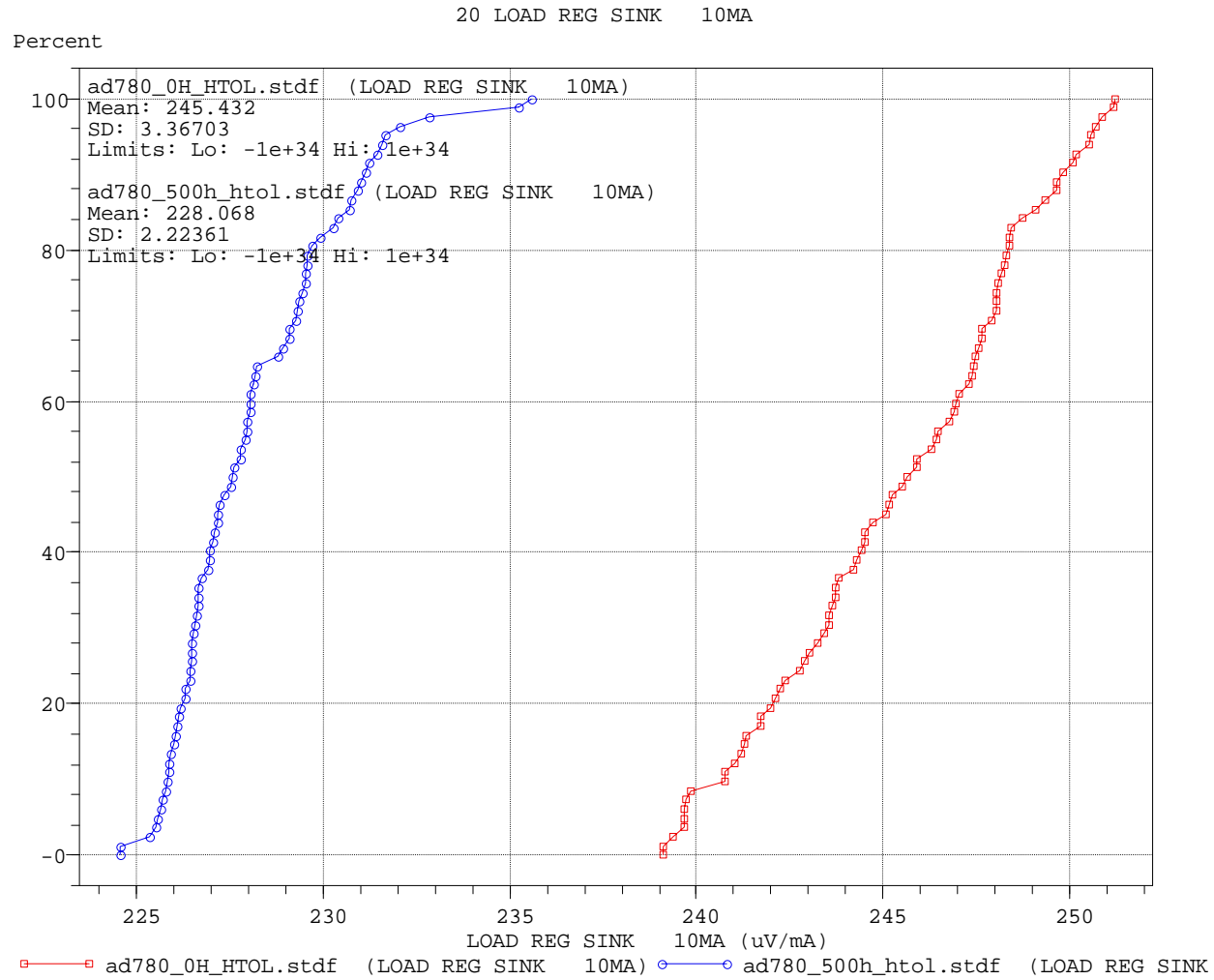
OUTPUT ERROR @ 2.5V / M44064.1



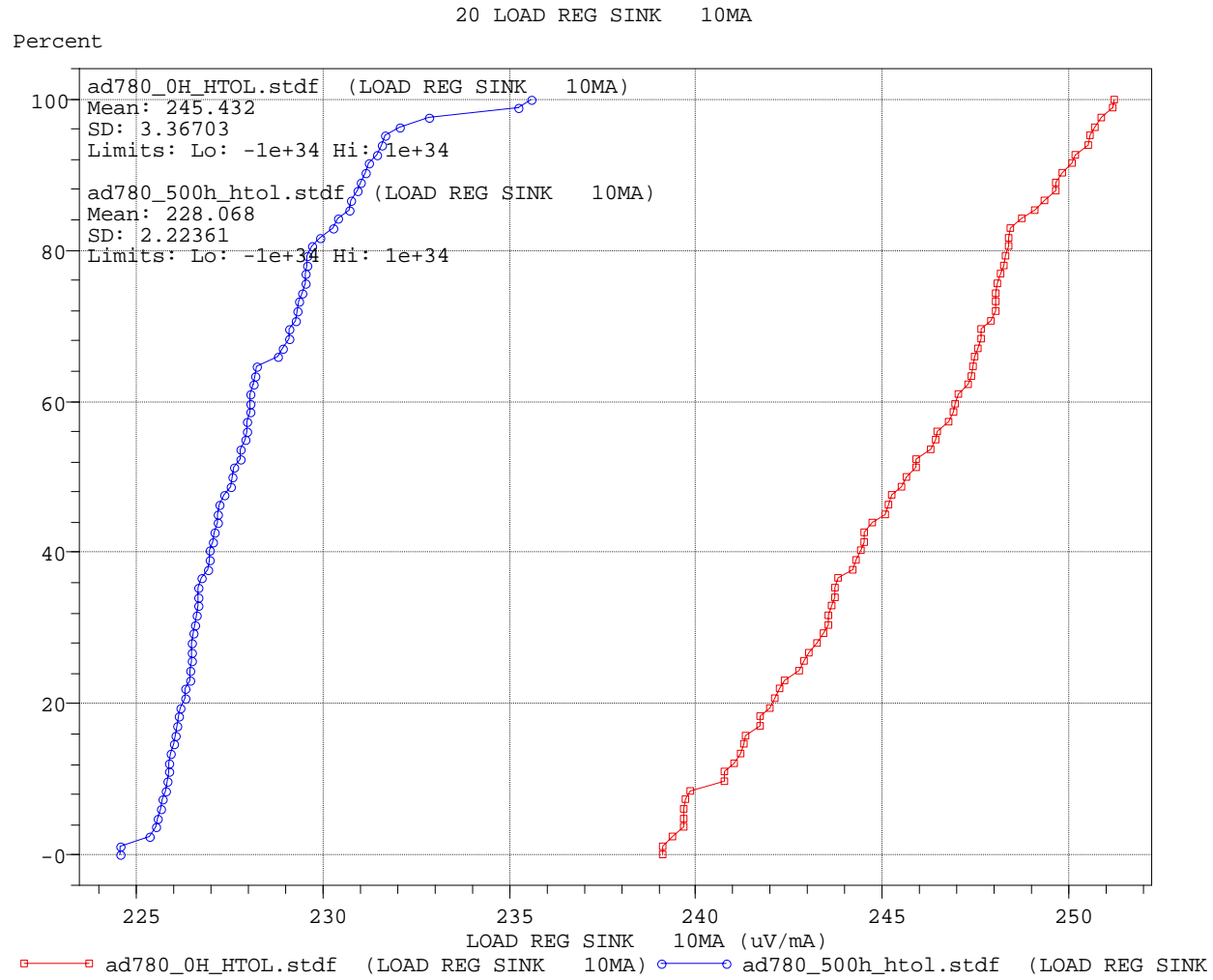
OUTPUT ERROR @ 3.0V / M44064.1



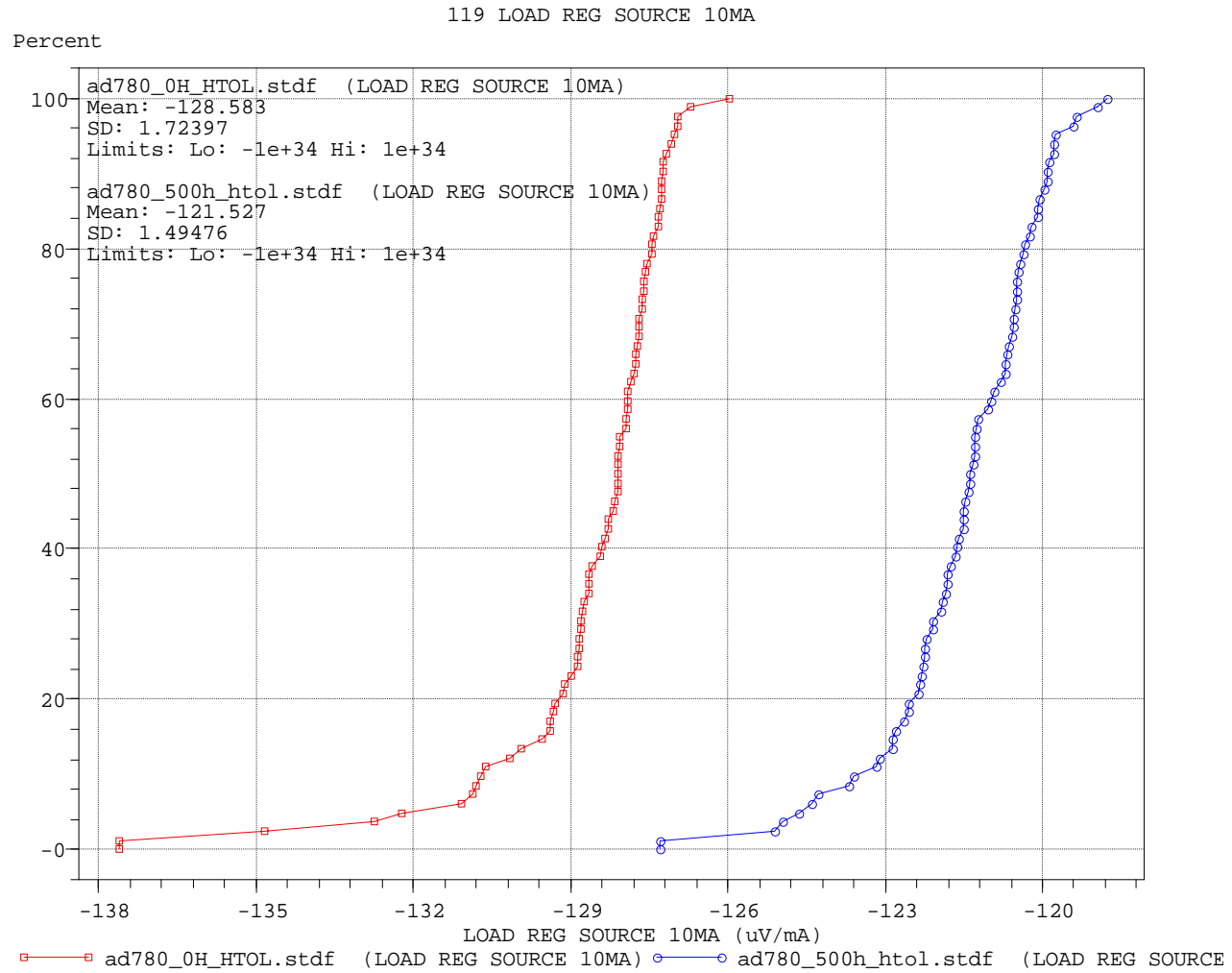
LOAD REGULATION SOURCE 10mA @ 2.5V / M44064.1



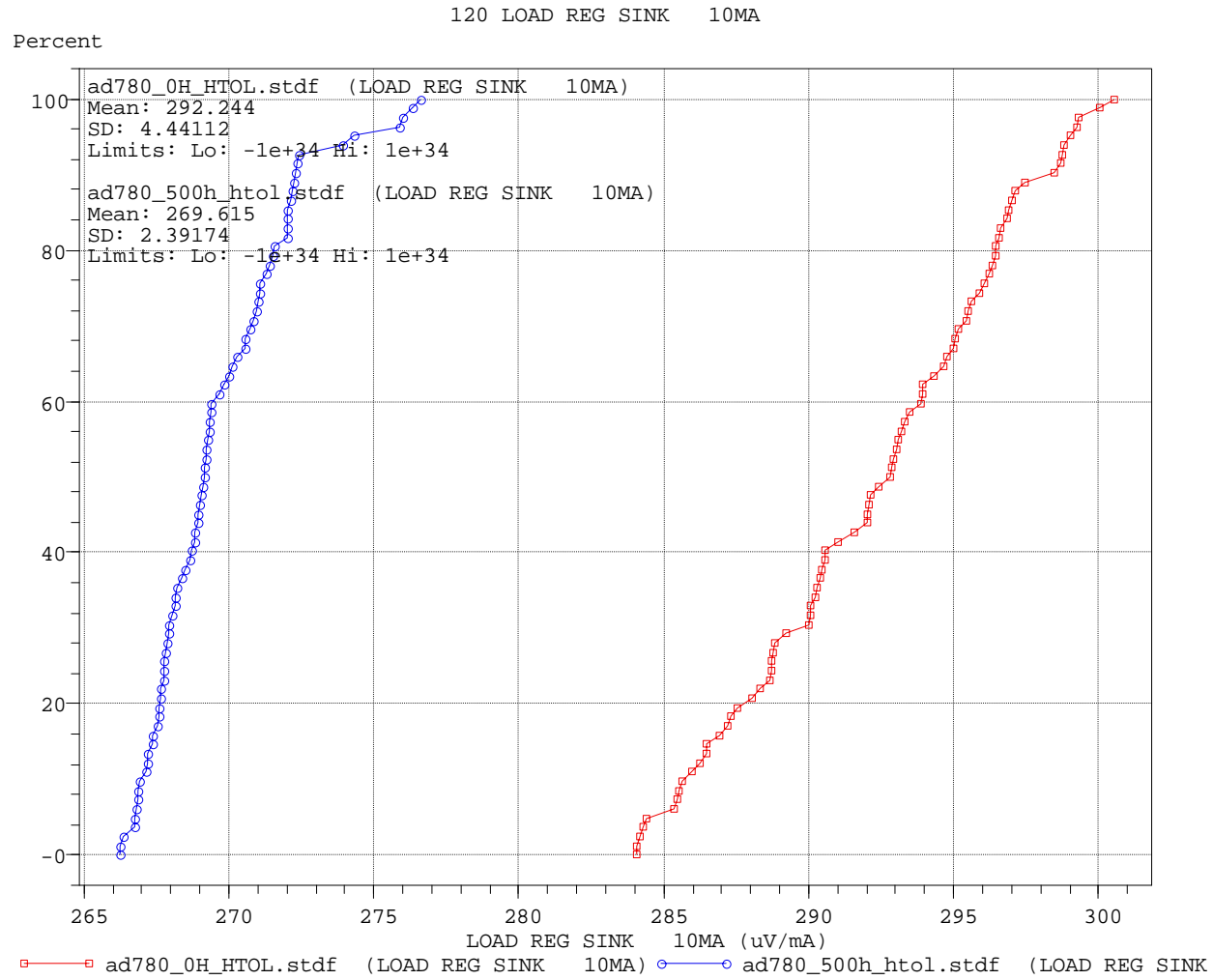
LOAD REGULATION SINK 10mA @ 2.5V / M44064.1



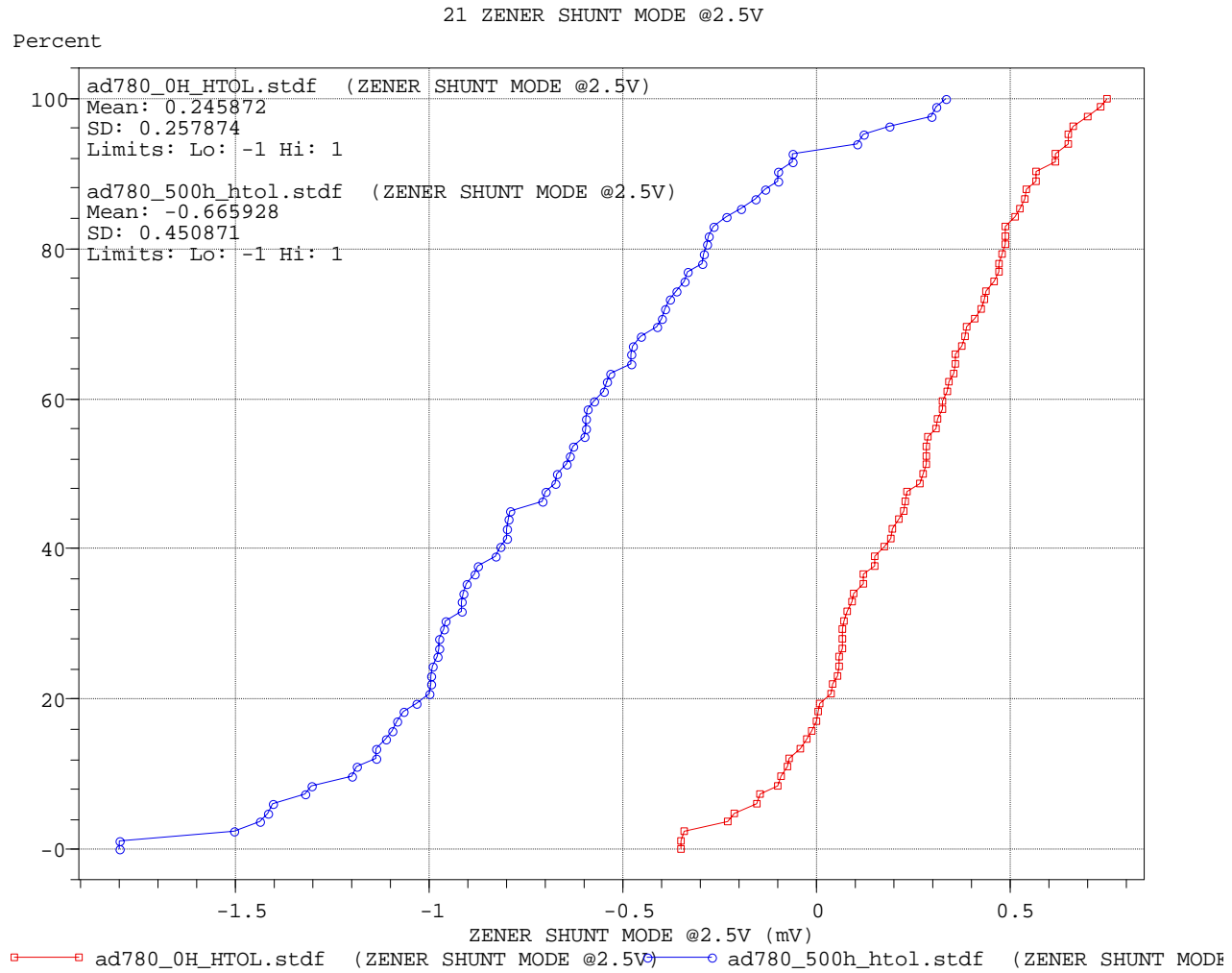
LOAD REGULATION SOURCE 10mA @ 3.0V / M44064.1



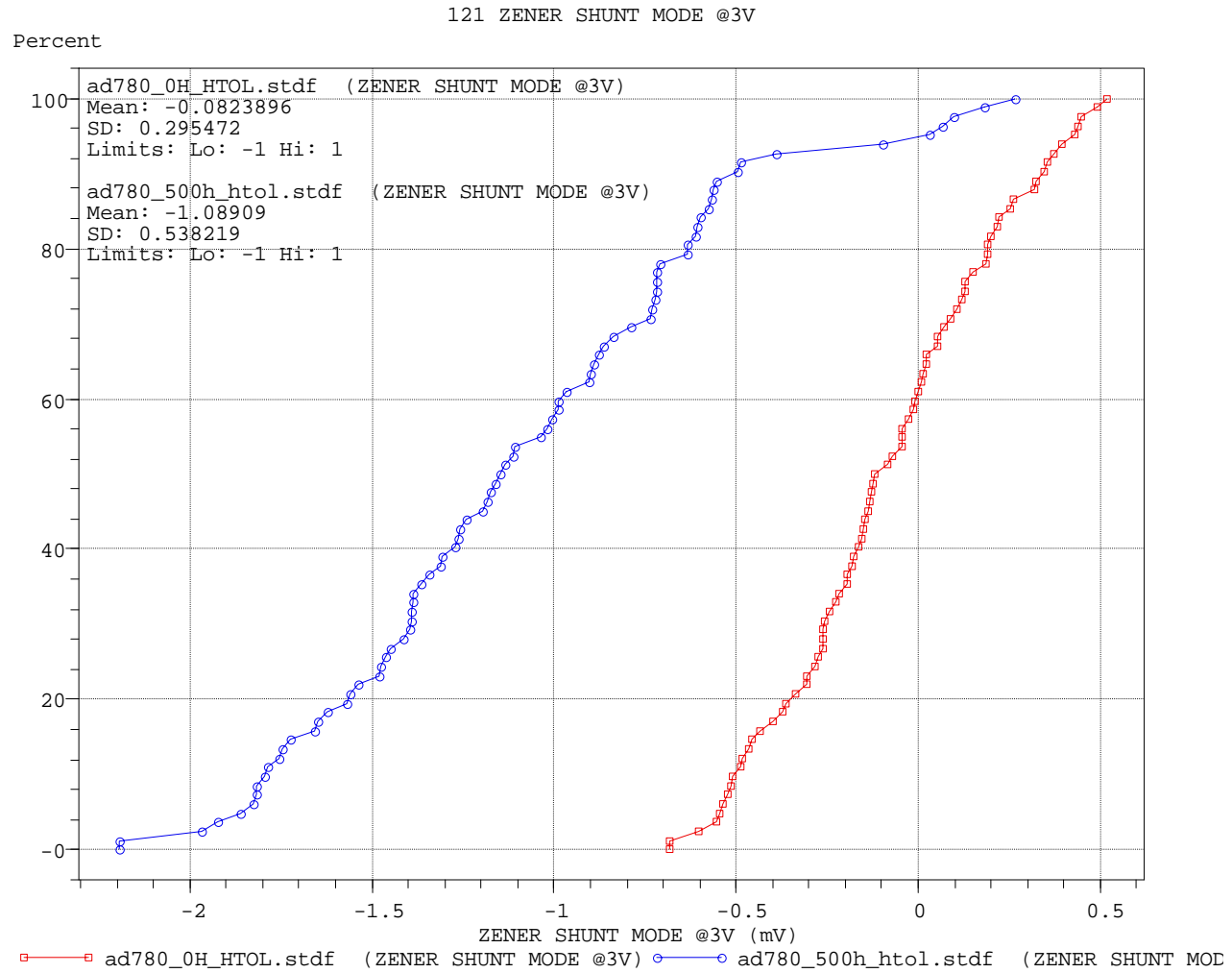
LOAD REGULATION SINK 10mA @ 3.0V / M44064.1



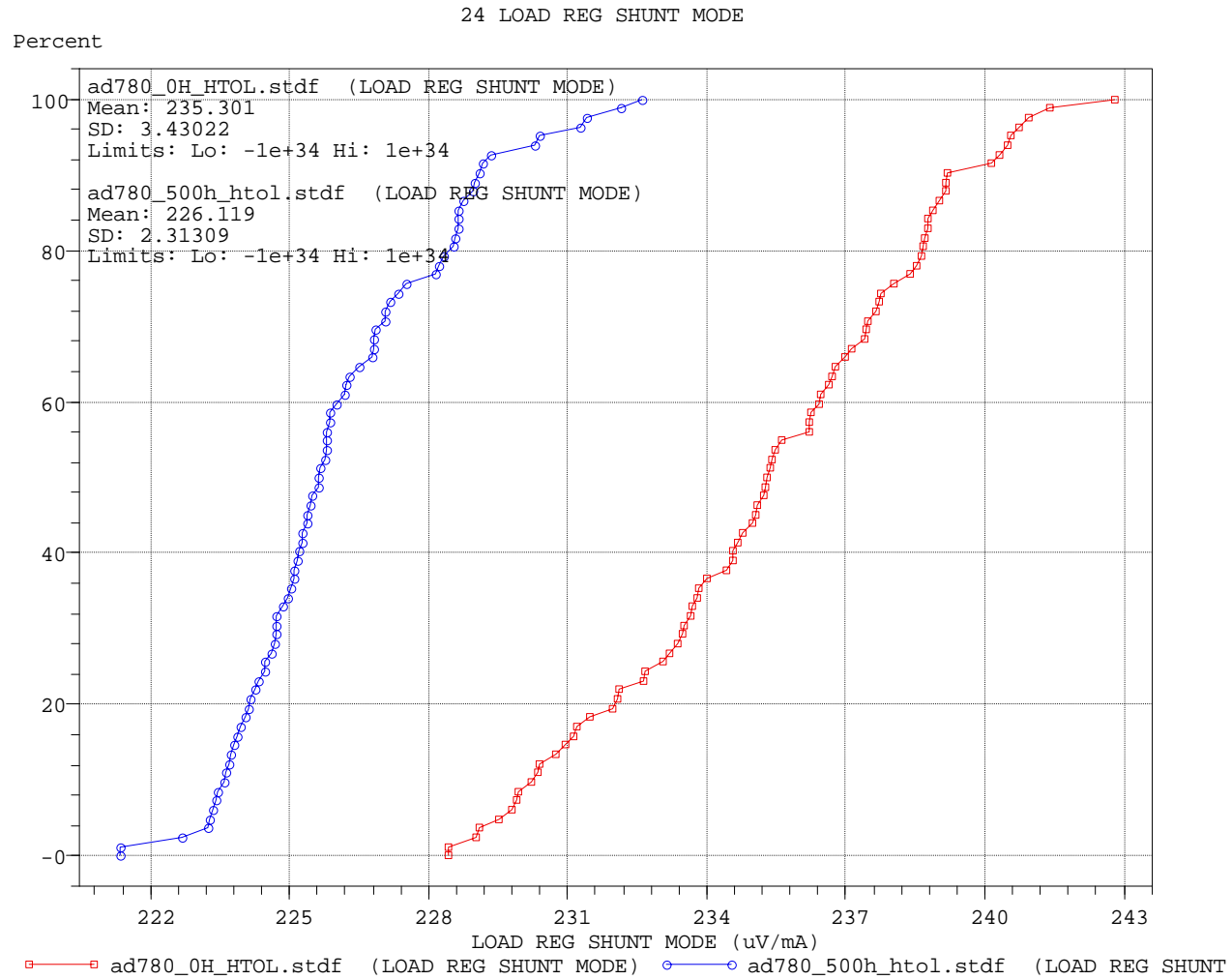
ZENER SHUNT MODE OUTPUT ERROR @ 2.5V / M44064.1



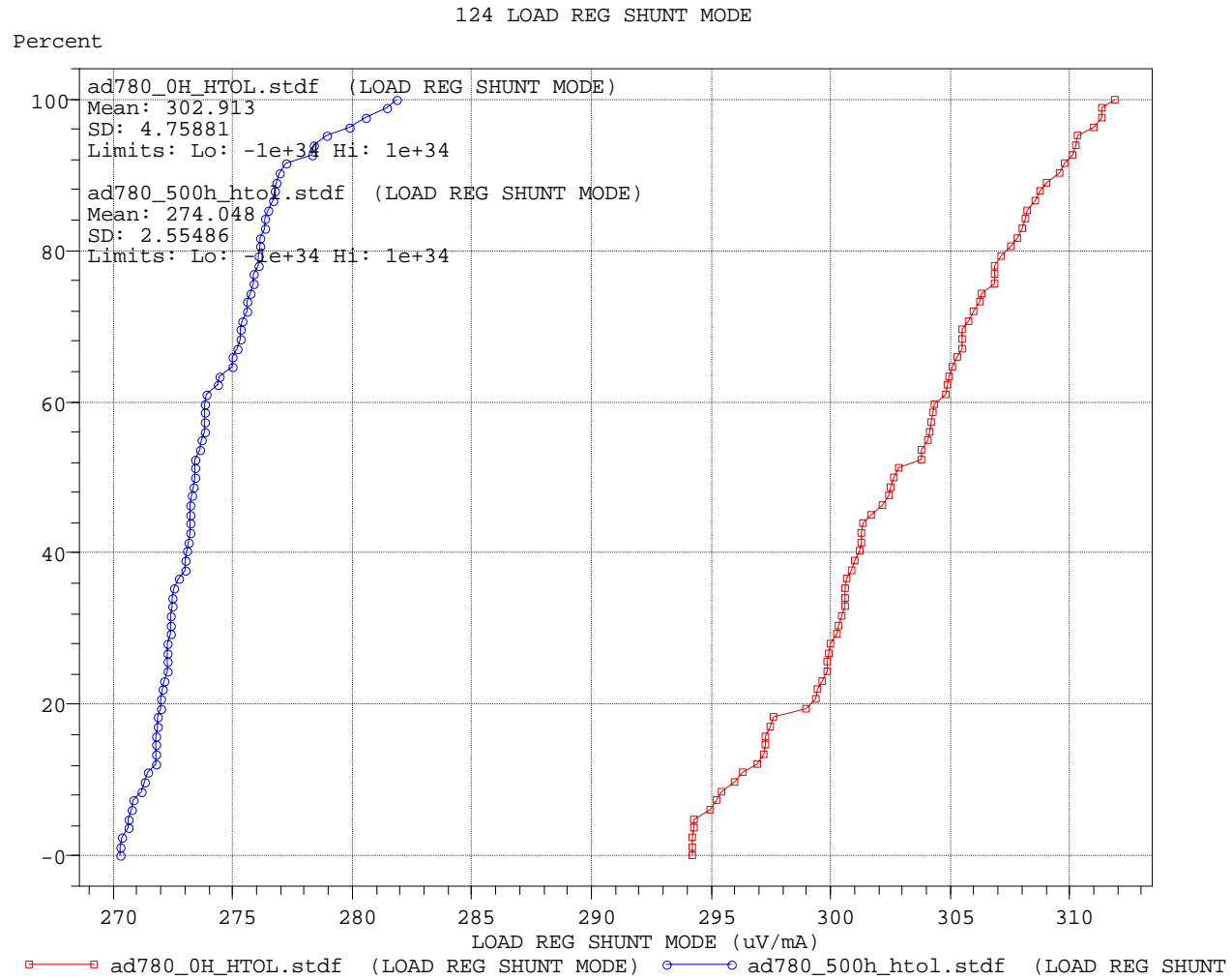
ZENER SHUNT MODE OUTPUT ERROR @ 3.0V / M44064.1



LOAD REGULATION ZENER SHUNT MODE @ 2.5V / M44064.1



LOAD REGULATION ZENER SHUNT MODE @ 3.0V / M44064.1



AD8221 Data Reduction Report

AD8221 HTOL DATA REDUCTION

AD8221 DATA REDUCTION

LOT ID : M44571.1

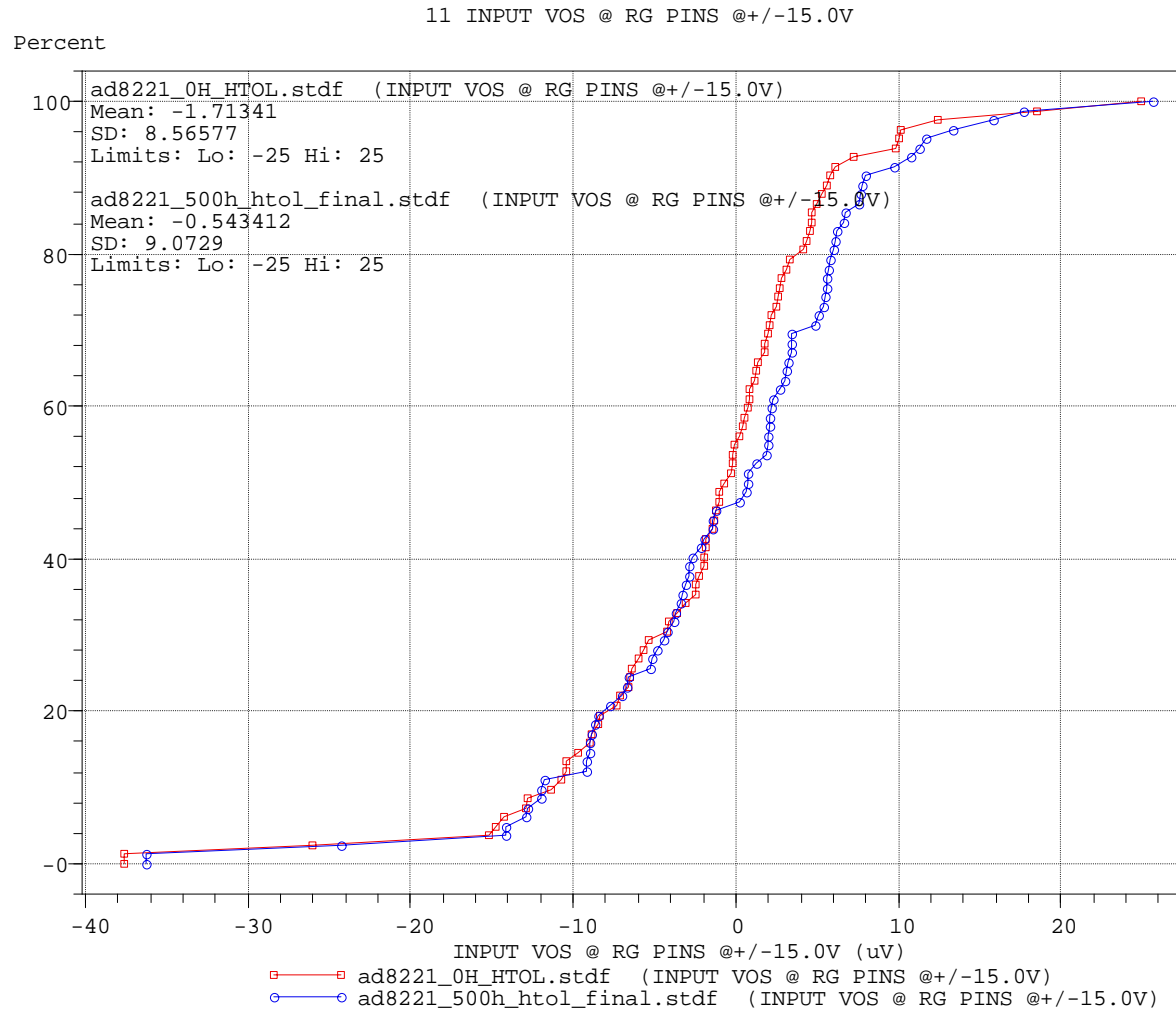
Statistics of Delta of Values between 168 Hrs and 0Hrs. HTOL

Test #	Test Name	Count	Mean	SD	Min	Max	Range	QC-Lo-Lim	QC-Hi-Lim	Units
1	Test Site	77	0.52439	1.12465	-1	2	3	0	5	
2	+Swing +In VS=+/-15V	77	0.00031234	0.0104074	-0.0331764	0.0323696	0.065546	0	1.4	V
3	-Swing +In VS=+/-15V	77	-0.0081384	0.00289397	-0.0159092	-0.000166893	0.0157423	-1.2	0	V
6	+Swing +In VS=+/-18V	77	-0.000903432	0.0103972	-0.0335464	0.0312939	0.0648403	0	1.4	V
7	-Swing +In VS=+/-18V	77	-0.00309584	0.00247593	-0.00862122	0.00392914	0.0125504	-1.2	0	V
10	Supply Current Vee = -15V	77	0.00265707	0.0210635	-0.105936	0.112482	0.218418	-1	-0.5	mA
201	GainAmp Relay Test	77	0.595037	1.08773	-0.0740967	2.45339	2.52748	7.5	12.5	V
11	INPUT VOS @ RG PINS @+/-15.0V	77	1.17	9.36124	-26.3249	24.8388	51.1637	-25	25	uV
111	INPUT VOS @ RG PINS @+/-15.0V	77	1.17	9.36124	-26.3249	24.8388	51.1637	-60	60	uV
12	INPUT VOS @ RG PINS @+/-2.3V	77	1.08503	9.39997	-26.2661	24.7556	51.0217	-25	25	uV
112	INPUT VOS @ RG PINS @+/-2.3V	77	1.08503	9.39997	-26.2661	24.7556	51.0217	-60	60	uV
13	OUTPUT VOS @+/-15.0V	77	16.199	69.9396	-144.614	171.344	315.958	-200	200	uV
113	OUTPUT VOS @+/-15.0V	77	16.199	69.9396	-144.614	171.344	315.958	-300	300	uV
14	OUTPUT VOS @+/-5.0V	77	18.1169	69.3256	-151.121	199.244	350.365	-200	200	uV
114	OUTPUT VOS @+/-5.0V	77	18.1169	69.3256	-151.121	199.244	350.365	-300	300	uV
15	Pos Ibias Current@+/-15V	77	-0.000526687	0.264733	-0.654165	0.83963	1.49379	-0.4	0.4	nA
115	Pos Ibias Current@+/-15V	77	-0.000526687	0.264733	-0.654165	0.83963	1.49379	-1.5	1.5	nA
16	IOS @+/-15V	77	0.0314968	0.0884075	-0.334079	0.432715	0.766794	-0.4	0.4	nA
116	IOS @+/-15V	77	0.0314968	0.0884075	-0.334079	0.432715	0.766794	-0.6	0.6	nA
17	Neg Ibias Current@+/-15V	77	-0.0320235	0.250069	-0.618769	0.534596	1.15337	-0.4	0.4	nA
117	Neg Ibias Current@+/-15V	77	-0.0320235	0.250069	-0.618769	0.534596	1.15337	-1.5	1.5	nA
18	PSRR	77	-0.108436	2.45443	-7.23883	5.78577	13.0246	-20	20	uV/V
118	PSRR	77	-0.108436	2.45443	-7.23883	5.78577	13.0246	-31.6	31.6	uV/V
202	GainAmp_Functionality	77	-0.0405906	0.437622	-0.974412	0.913121	1.88753	-10	10	V
19	CMRR	77	2.93504	39.5355	-85.453	90.361	175.814	-31.6	31.6	uV/V
119	CMRR	77	2.93504	39.5355	-85.453	90.361	175.814	-100	100	uV/V
203	GainAmp_Functionality	77	0.00266908	0.0798132	-0.21322	0.209258	0.422478	-10	10	V
20	+INPUT GAIN ERROR	77	-0.00208965	0.0806204	-0.210326	0.217172	0.427498	-0.2	0.2	mV/V
120	+INPUT GAIN ERROR	77	-0.00208965	0.0806204	-0.210326	0.217172	0.427498	-0.3	0.3	mV/V
21	-INPUT GAIN ERROR CALC	77	0.0562982	0.0920251	-0.176473	0.294067	0.47054	-0.2	0.2	mV/V
121	-INPUT GAIN ERROR CALC	77	0.0562982	0.0920251	-0.176473	0.294067	0.47054	-0.3	0.3	mV/V
204	GainAmp_Functionality	77	0.00266908	0.0798132	-0.21322	0.209258	0.422478	-10	10	V

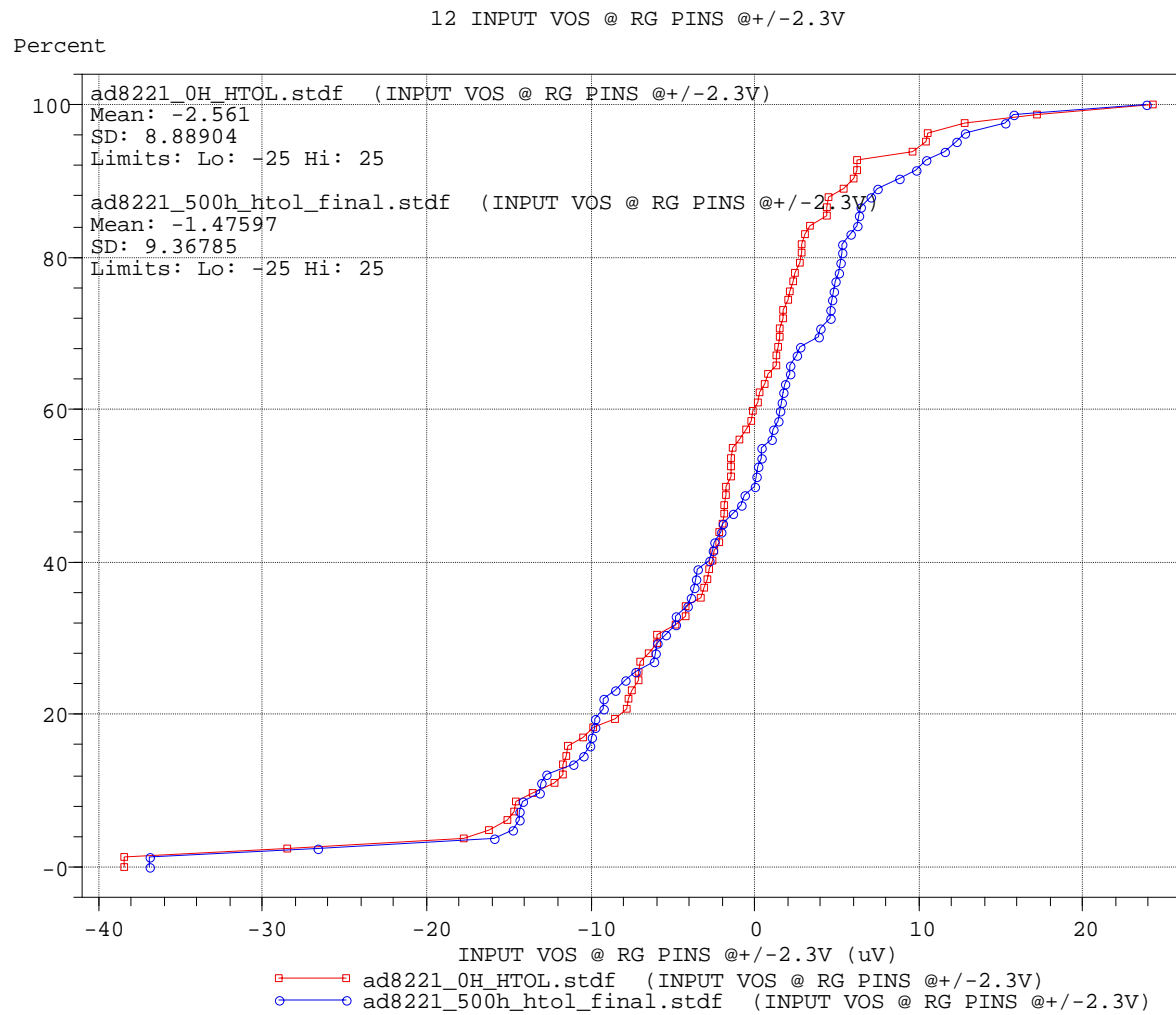
205	GainAmp_Functionality	77	0.521592	1.34206	-3.2819	4.43392	7.71582	-10	10	V
22	PLUS ABS RESISTOR	77	-0.648818	1.4451	-4.53896	3.21187	7.75083	-5	5	mV/V
23	MINUS ABS RESISTOR	77	-0.596845	1.34195	-4.51437	3.21194	7.72631	-5	5	mV/V
24	TOTAL ABS RESISTORS	77	-0.622831	1.07792	-3.71463	2.4118	6.12643	-1.5	1.5	mV/V
124	TOTAL ABS RESISTORS	77	-0.622831	1.07792	-3.71463	2.4118	6.12643	-3	3	mV/V

CUMULATIVE DISTRIBUTION PLOTS

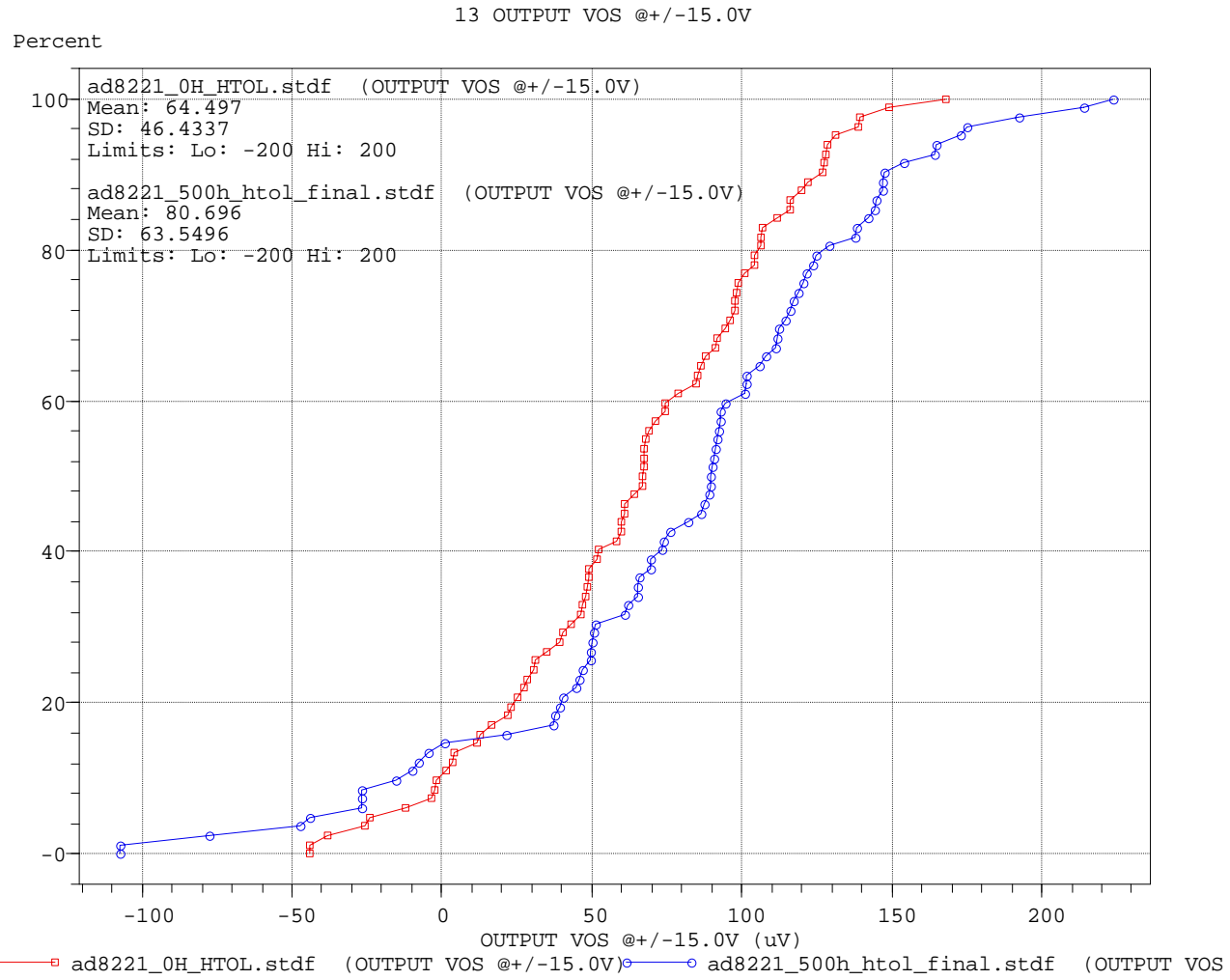
INPUT OFFSET VOLTAGE @ RG PINS @ +/- 15V / M44571.1



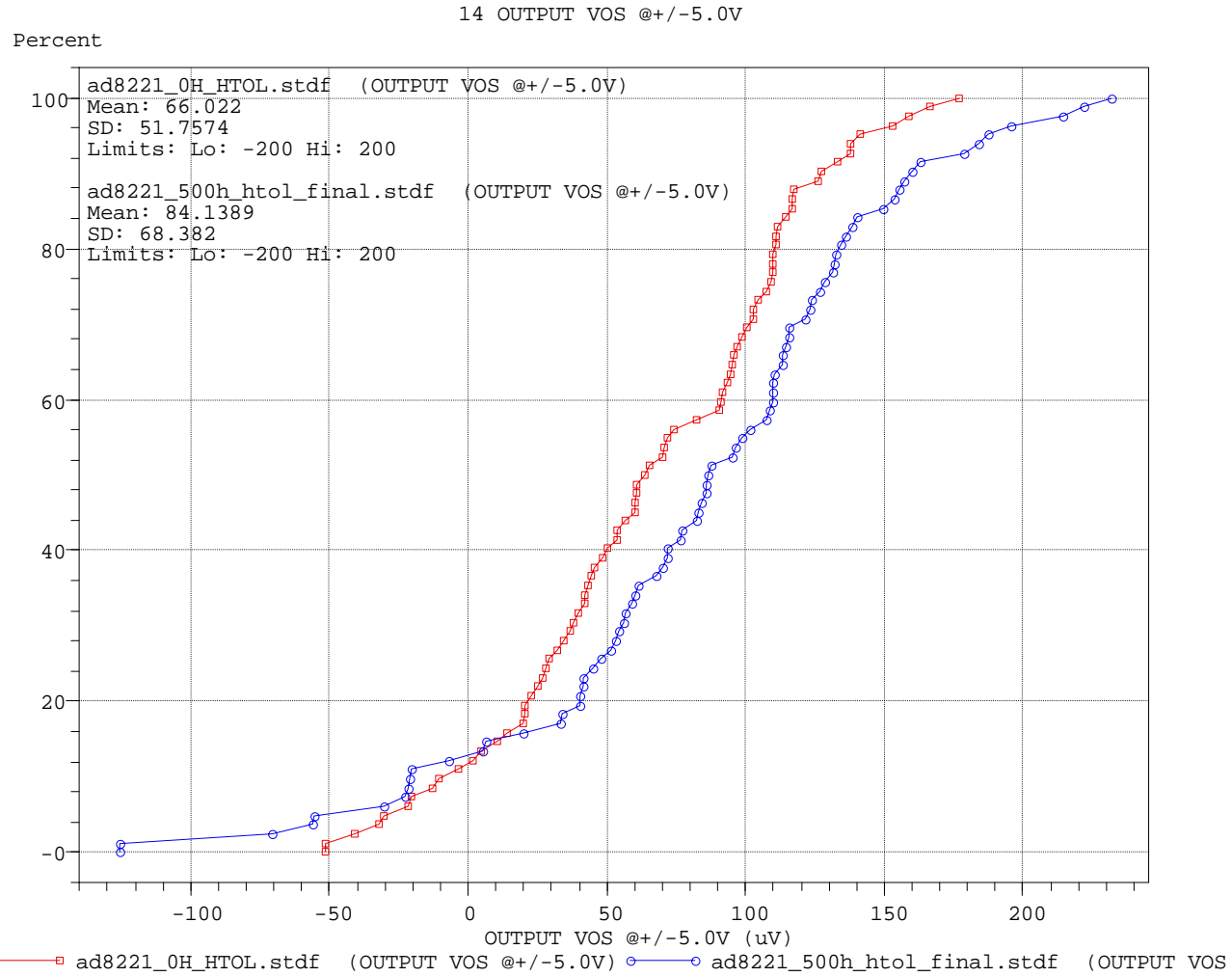
INPUT OFFSET VOLTAGE @ RG PINS @ +/- 2.3V / M44571.1



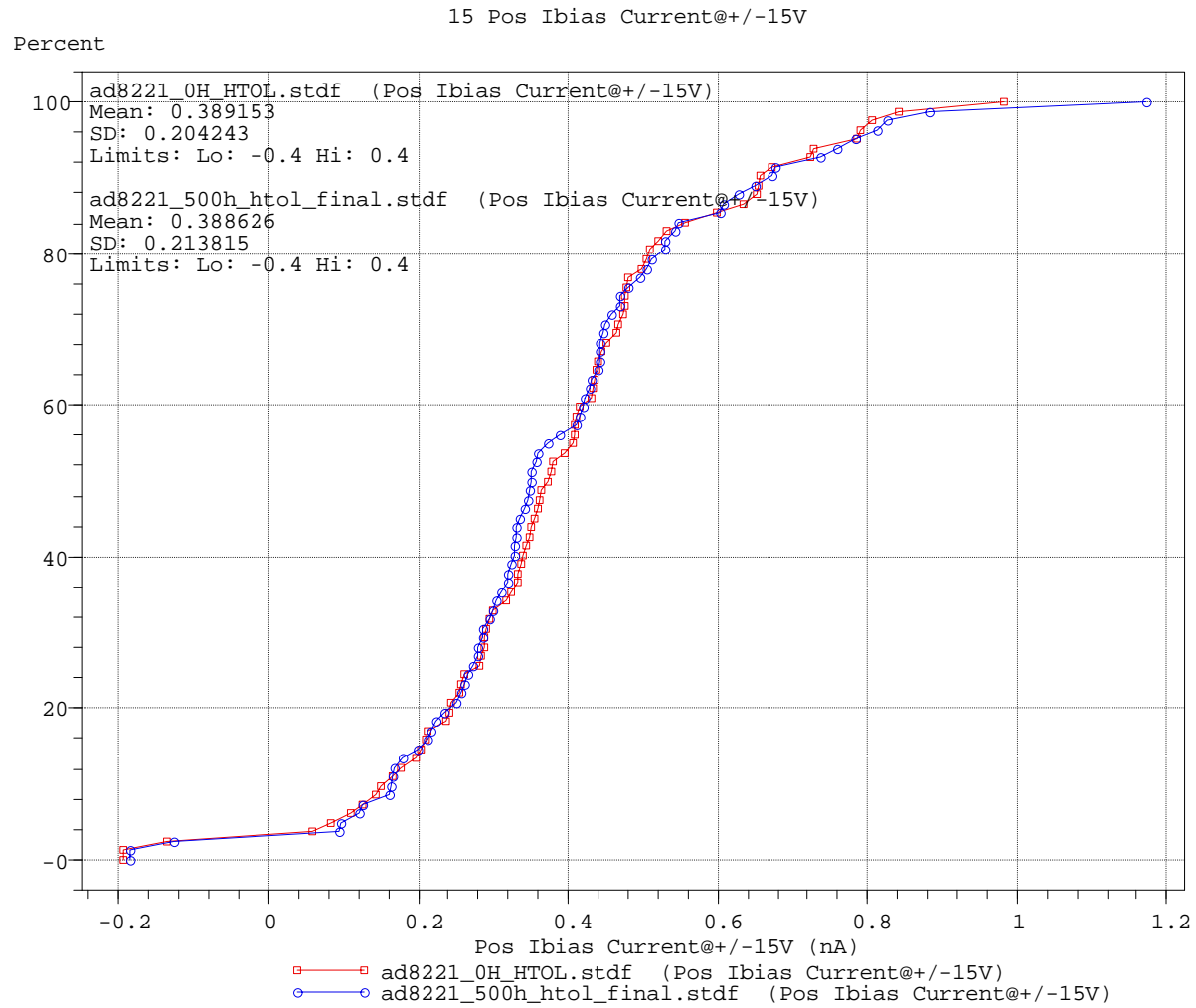
OUTPUT OFFSET VOLTAGE @ +/- 15V / M44571.1



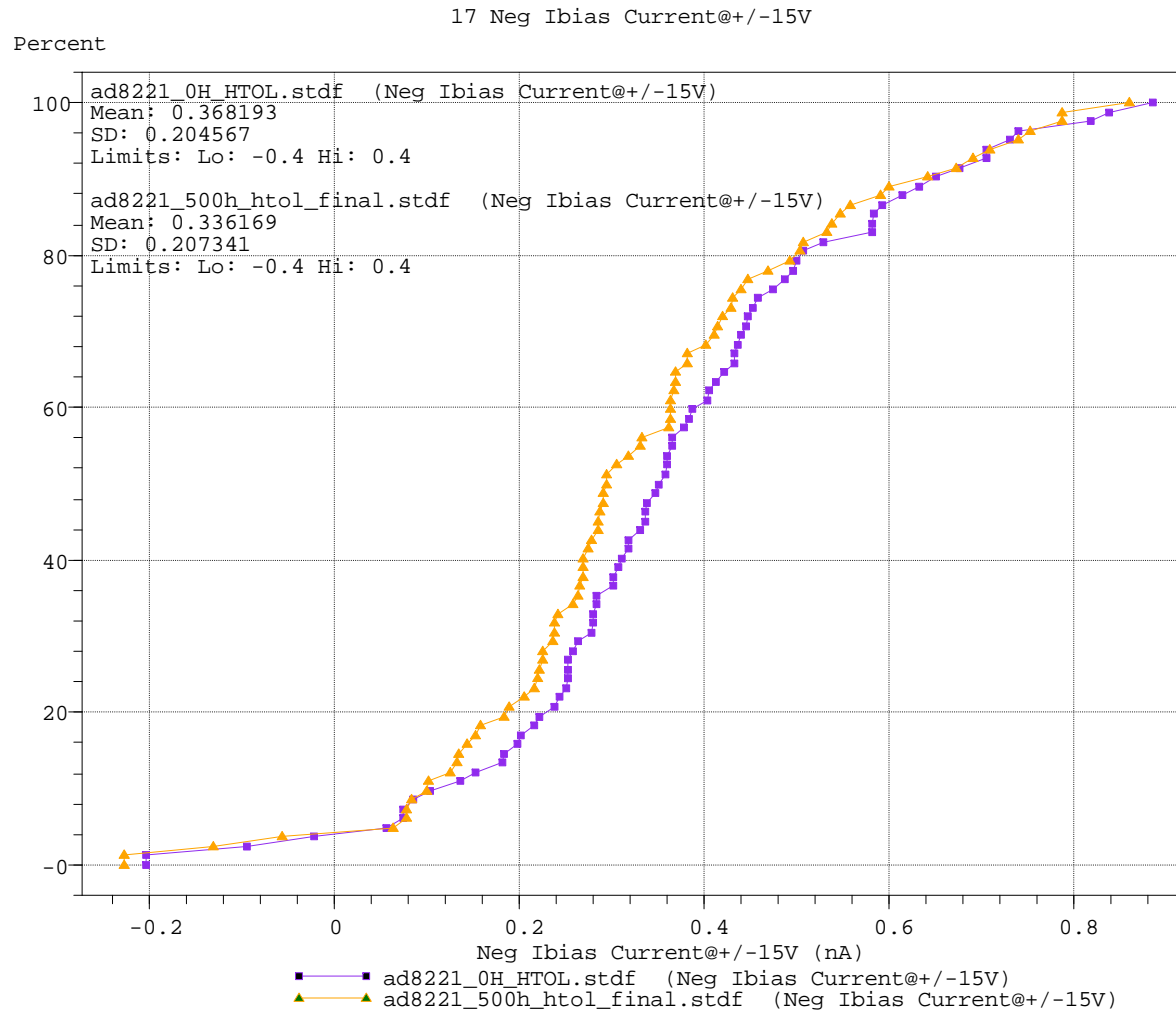
OUTPUT OFFSET VOLTAGE @ +/- 5V / M44571.1



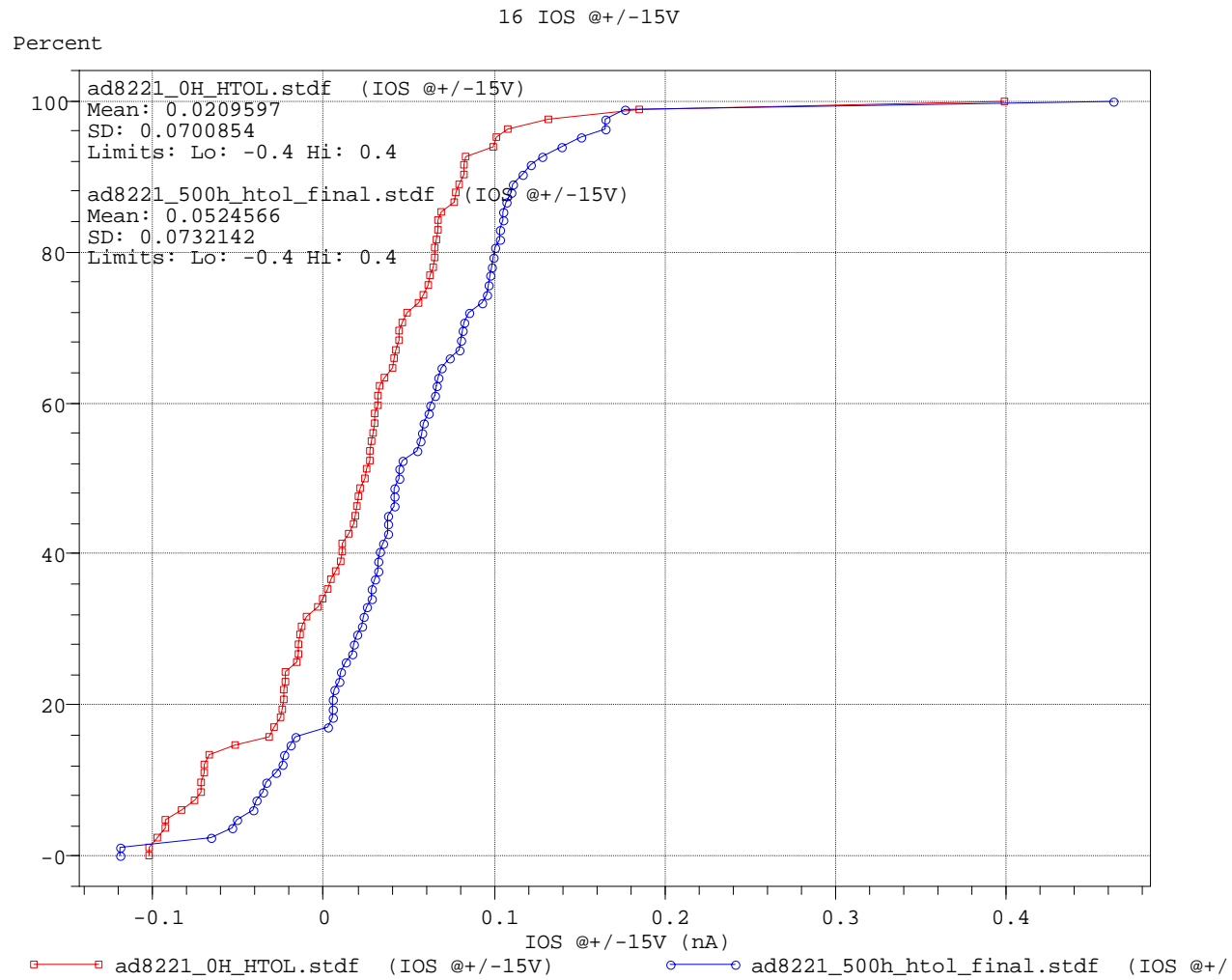
POSITIVE INPUT BIAS CURRENT @ +/- 15V / M44571.1



NEGATIVE INPUT BIAS CURRENT @ +/- 15V / M44571.1



INPUT OFFSET CURRENT @ +/- 15V / M44571.1



18 PSRR

Percent

