



Hocker Incorporated  
 13402 Weiman Road Houston, TX 77041  
 713-464-5829 Fax 713-464-3192

Customer PO #:	86476
Certification #:	23-1334

**ASTM E317-16 Performance Evaluation  
 Ultrasonic Flaw Detector**

Calibration Date:	10/5/2023
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F-UTFL Rev-0

Meets ASTM E317-16 Minimum Requirements?	YES
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Due Date:	10/5/2024
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Company:	P&B Testing Inc.		Equipment Model & Serial #	Sonatest MS333 sn-34012542C		Equipment Condition As Found:	
Address:	6645 W. Tidwell					New	
City:	Houston			Lab Conditions:		X Good	
State:	Texas	Contact:	Buck Sneider		Temp:	72°F	Poor
Zip:	77092	Phone:	713-290-8490		Hum. %:	51%	
Country:	USA	Email:	ga@pbtesting.com				

Performance Evaluation Equipment:		Serial:	NIST:	Cert. Blocks C to G:	Serial:	NIST:
Calib. Block A	ASTM-E317 Block	SN 03-8399	03-19698-A	ASTM E127 1-0300	SN 15-8035	14-20265-A 14-21740-A
Calib. Block B	ASTM Type RA	SN 04-5671	04-25714-A	ASTM E127 2-0300	SN 15-8036	
Transducer "A"	FCHR-5050 Hi Res	SN 931/37	n/a	ASTM E127 3-0300	SN 15-8037	
Transducer "B"	PSLM-5050 5mhz 1/2"	SN 504/03	n/a	ASTM E127 4-0300	SN 15-8038	
Transducer "C"	PSLM-5050 5mhz 1/2"	SN 424/20	n/a	ASTM E127 5-0300	SN 15-8039	

Calibrated Attenuator	S/N: SO383925	NIST #:	1821-1022/1104681/9000-1439,1230,1336
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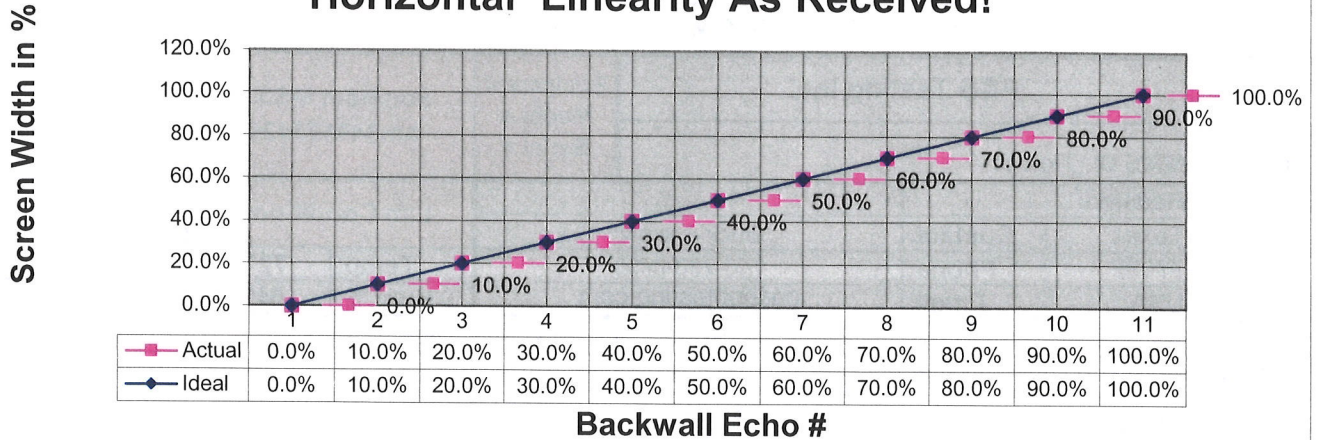
Horizontal Limit Linearity		Vertical Limit Linearity	
Horiz. Accuracy Limit + or -	2.0%	Verticle Accuracy Limit + or -	2.0%
Meets Accuracy Required?	Yes	Meets Accuracy Required?	Yes
Horiz. Accuracy Deviation	0.0%	Vert. Accuracy Deviation	1.0%
Horiz. Screen Width used?	10"	Equipment Overall Pass/ Fail Result:	Pass

% Horiz. Screen Width				% Vertical Screen Height						
Echo #	Actual %	Ideal	Deviation	Ideal %	Actual %	Ideal%	Actual%	Ideal%	Actual%	
				+1db steps		-2db steps		-4db Steps		
1	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	16.0%	16.0%	
2	10.0%	10.0%	0.0%	56.0%	56.0%	40.0%	40.2%	10.0%	10.2%	
3	20.0%	20.0%	0.0%	63.0%	64.0%	31.0%	31.9%	6.0%	6.0%	
4	30.0%	30.0%	0.0%	71.0%	72.0%	25.0%	25.3%	5.0%	5.0%	
5	40.0%	40.0%	0.0%	79.0%	80.0%	20.0%	20.2%	3.0%	3.0%	
6	50.0%	50.0%	0.0%	89.0%	89.0%	16.0%	16.1%	2.0%	2.0%	
7	60.0%	60.0%	0.0%	100.0%	99.7%					
8	70.0%	70.0%	0.0%			Maximum Vertical Deviation		1.0%		
9	80.0%	80.0%	0.0%			Sensitivity & Noise				
10	90.0%	90.0%	0.0%			Test Block Number	Sig. Ampl.	Break Pt.	Noise Lvl.	Hole Size
11	100.0%	100.0%	0.0%			ASTM E127 1-0300	60.0%	18.0%	1.0%	1/64

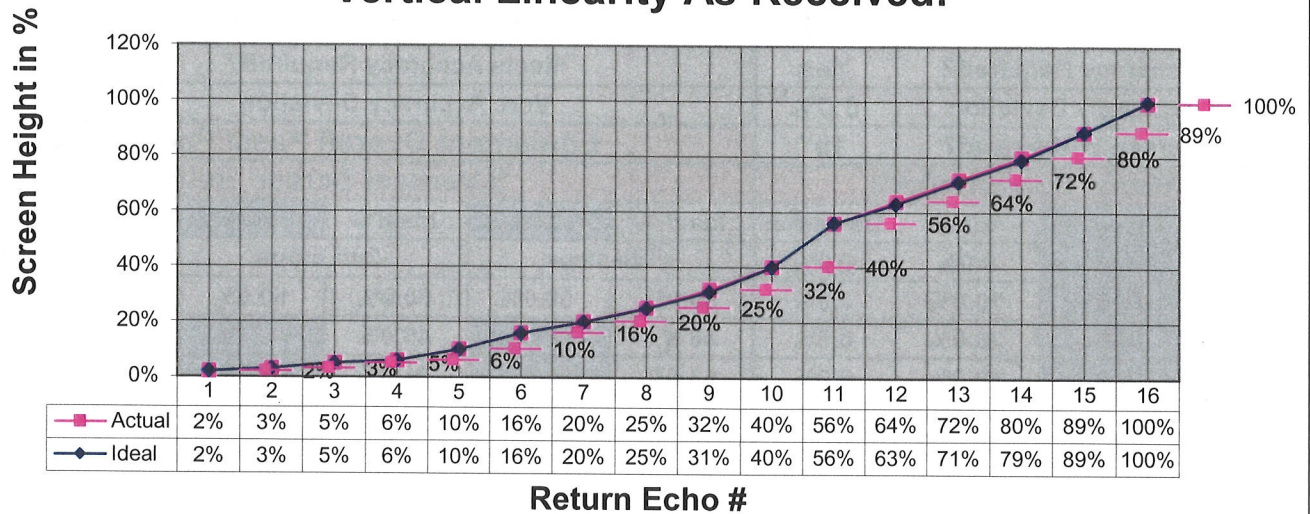
Accuracy Of Calibrated Gain Controls				Gain Control Deviation DB				
Ideal	Actual	Ideal	Actual	0				
				ASTM E127 2-0300	60.0%	18.0%	1.0%	1/32
1	1	10	10	ASTM E127 3-0300	60.0%	17.0%	1.0%	3/64
2	2	12	12	ASTM E127 4-0300	60.0%	17.0%	1.0%	1/16
4	4	14	14	ASTM E127 5-0300	60.0%	16.0%	1.0%	5/64
6	6	20	20					

Near Surface Resolution at 80%			Far Surface Resolution at 80%			Max Noise Level (Sensitivity & Noise Test)	
Depth	Break Pt.	Noise %	Depth	Break Pt.	Noise %	1.0%	
0.7"	12.0%	1.0%	.01"	18.0%	1.0%	1.0%	
0.5"	12.0%	1.0%	.02"	17.0%	1.0%	1.0%	
0.3"	10.0%	1.0%	.03"	17.0%	1.0%	1.0%	

### Horizontal Linearity As Received!



### Vertical Linearity As Received!



Notes:

This performance evaluation was done in accordance with ASTM-E317-16 and Hocker Incorporated procedure CP-UTFL Rev 0. Test equipment and calibration blocks used to perform this evaluation are traceable to the National Institute of Standards and Technology. NIST numbers listed in this document and supporting documentation is on file. This performance evaluation is made in conformance with ANSI/NCSL 2540.3-2006 and/or ISO 10012, and with 10CFR21.

Technician Signature:

*[Signature]*  
Technician Performing Evaluation: Roger Kimmons

F-UTFL Rev-0 05/01/2018

Date: 10/5/2023

Approval Signature:

*[Signature]*

Approved By: Derrick Schumann

An ISO 9001:2015 Registered Company