



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

Customer PO #:	85382
Certification #:	20-1155
Calibration Date:	8/25/2020

ASTM E317-16 Performance Evaluation
Ultrasonic Flaw Detector

F-UTFL Rev-0

Meets ASTM E317-16 Minimum Requirements?

YES

Due Date:

8/25/2021

Company:	P & B TESTING INC.				Equipment Model & Serial #	SONATEST 250S S/N:I009664		8/25/2021	
Address:	6645 W.TIDWELL								New
City:	HOUSTON		Inspections/Quality			Lab Conditions:		X	Good
State:	TX		Contact:	Buck Snider					Fair
Zip:	77092		Phone:	(713)290-8490			Temp:	70°F	Poor
Country:	USA		Fax:	(713)290-8627			Hum.%:	47%	Failed
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		SN SO 383925		NIST #:	9000-1324, 9000-1230, 9000-1239				

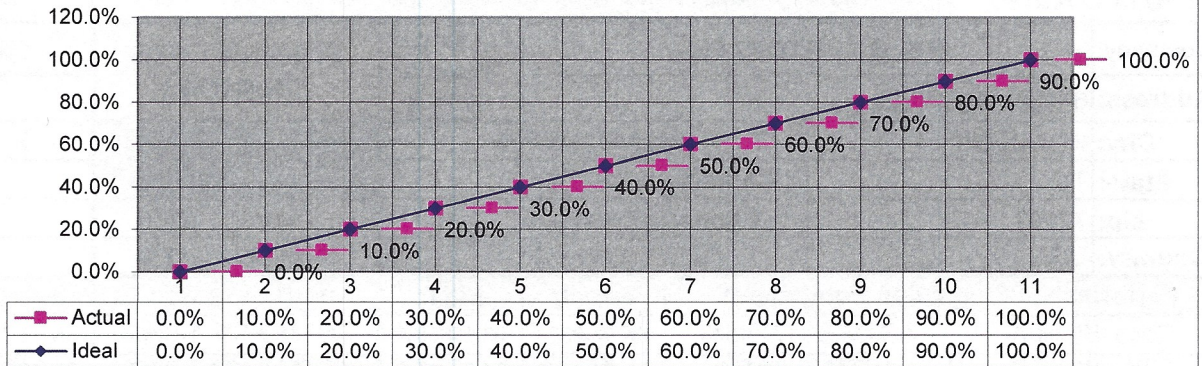
Horizontal Limit Linearity		Vertical Limit Linearity			
Horiz. Accuracy Limit + or -	2.0%			Verticle Accuracy Limit + or -	2.0%
Meets Accuracy Required?	Yes			Meets Accuracy Required?	Yes
Horiz. Accuracy Deviation	0.0%			Vert. Accuracy Deviation	-1.0%
Horiz. Screen Width used?	10"				

% Horiz. Screen Width				%Vertical Screen Height							
Echo #	Actual %	Ideal	Deviation	Ideal %	Actual %	Ideal%	Actual%	Ideal%	Actual%		
1	0.0%	0.0%	0.0%	+1db steps		-2db steps		-4db Steps			
2	10.0%	10.0%	0.0%	50.0%	50.0%	50.0%	50.0%	16.0%	16.0%		
3	20.0%	20.0%	0.0%	56.0%	56.0%	40.0%	41.0%	10.0%	10.0%		
4	30.0%	30.0%	0.0%	63.0%	63.0%	31.0%	31.0%	6.0%	6.0%		
5	40.0%	40.0%	0.0%	71.0%	71.0%	25.0%	26.0%	5.0%	4.0%		
6	50.0%	50.0%	0.0%	79.0%	80.0%	20.0%	20.0%	3.0%	2.0%		
7	60.0%	60.0%	0.0%	89.0%	89.0%	16.0%	16.0%	2.0%	2.0%		
8	70.0%	70.0%	0.0%	100.0%	100.0%						
9	80.0%	80.0%	0.0%	Maximum Vertical Deviation							-1.0%
10	90.0%	90.0%	0.0%								
11	100.0%	100.0%	0.0%	Sensitivity & Noise							

Maximum Horizontal Deviation				0.0%	Test Block Number		Sig. Ampl.	Break Pt.	Noise Lvl.	Hole Size
Accuracy Of Calibrated Gain Controls					ASTM E127 1-0300		60.0%	15.0%	1.0%	1/64
Ideal	Actual	Ideal	Actual		ASTM E127 2-0300		60.0%	11.0%	1.0%	1/32
1	1	10	10		ASTM E127 3-0300		60.0%	12.0%	1.0%	3/64
2	2	12	12		ASTM E127 4-0300		60.0%	8.0%	1.0%	1/16
4	4	14	14		ASTM E127 5-0300		60.0%	8.0%	1.0%	5/64
6	6	20	20				Gain Control Deviation DB			0
Near Surface Resolution at 80%			Far Surface Resolution at 80%							
Depth	Break Pt.	Noise %	Depth	Break Pt.	Noise %	Max Noise Level (Sensitivity & Noise Test)				1.0%
0.7"	18.0%	1.0%	.01"	15.0%	1.0%					
0.5"	18.0%	1.0%	.02"	15.0%	1.0%	Max Noise Level (Resolution Test)				1.0%
0.3"	15.0%	1.0%	.03"	15.0%	1.0%					

Horizontal Linearity As Received!

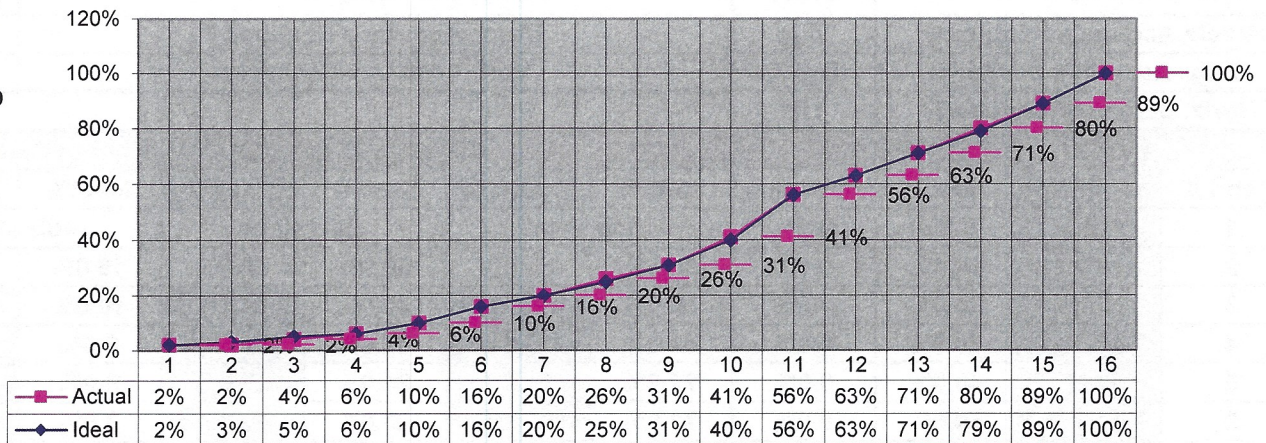
Screen Width in %



Backwall Echo #

Vertical Linearity As Received!

Screen Height in %



Return Echo #

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: _____

F-UTFL Rev-0 05/01/2018

Technician Performing Evaluation: Jacob Hocker

Date:

8/25/2020

Approval Signature: _____

APPROVED

Approved By: Derrick Schumann

AUG 25 2020

An ISO 9001:2015 Registered Company

BUCK SNIDER