



Certificate of Calibration

Ocean Sonics, Ltd.

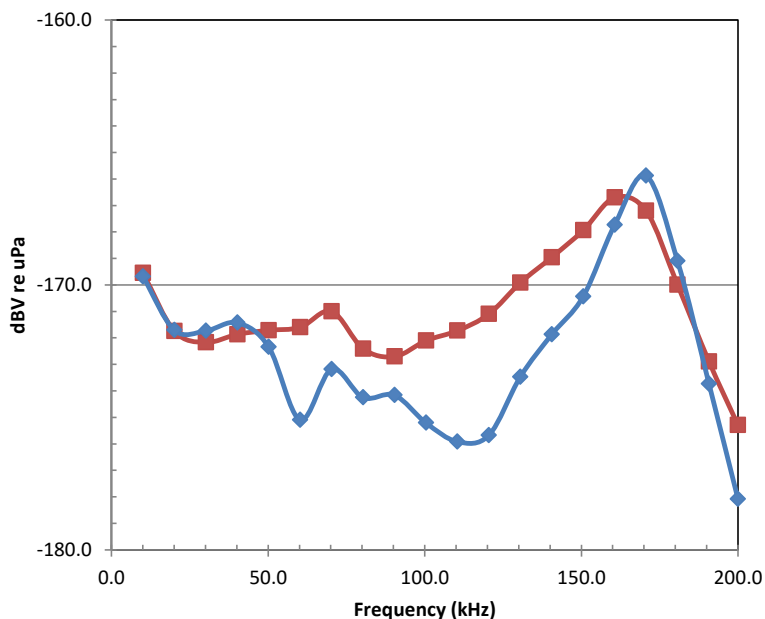
Calibration Certificate Number: **C4282**

Test Result: 10 kHz to 100 kHz: -172.4 ± 2.8
10 kHz to 200 kHz: -172.0 ± 6.1

Model Number SB35-ETH
Serial Number 1292
Manufacture Date 23-Oct-2017
Measurement Date 14-Nov-2017
Certificate Date 14-Nov-2017
Sensitivity @ 26 Hz -170.1 dB re V / uPa
Case Type Titanium
Element Manufacturer GeoSpectrum
Element Model M24HF
Element Serial 906
Preamp Model 04-300435-01
Calibrated By S.MacLean
Work Order Number W1592
Test Type RX Sensitivity
Test Procedure Complex RMS
Test Location Tank #2, 1 m
Water Temperature 17 °C

Projector Manufacturer Ocean Sonics
Projector Model TH2-SER-4F
Projector Serial 2210
Measurement Distance 1 m
Output Level 125.5 dB re uPa @ 1 m
Tone Burst 100.0 us / 300 ms
Reference Manufacturer Ocean Sonics
Reference Model RB9-ETH
Reference Serial 1492
Primary Calibration 22-Dec-2015
Preamp Manufacturer Ocean Sonics
Preamp Model 04-300434-01
Preamp Serial 473
Preamp Gain 36 dB
ADC Manufacturer Ocean Sonics
ADC Model Number 04-300423-01
ADC Serial Number 473

Receive Sensitivity



Frequency	Sensitivity [dBV re uPa]	
kHz	180 deg	270 deg
10.0	-169.5	-169.7
20.1	-171.7	-171.7
30.1	-172.2	-171.7
40.2	-171.9	-171.4
50.2	-171.7	-172.3
60.2	-171.6	-175.1
70.3	-171.0	-173.2
80.3	-172.4	-174.3
90.4	-172.7	-174.2
100.4	-172.1	-175.2
110.4	-171.7	-175.9
120.5	-171.1	-175.7
130.5	-169.9	-173.5
140.5	-169.0	-171.9
150.6	-167.9	-170.4
160.6	-166.7	-167.7
170.7	-167.2	-165.9
180.7	-170.0	-169.1
190.7	-172.9	-173.7
200.0	-175.3	-178.1