



## Certificate of Calibration

Ocean Sonics, Ltd.

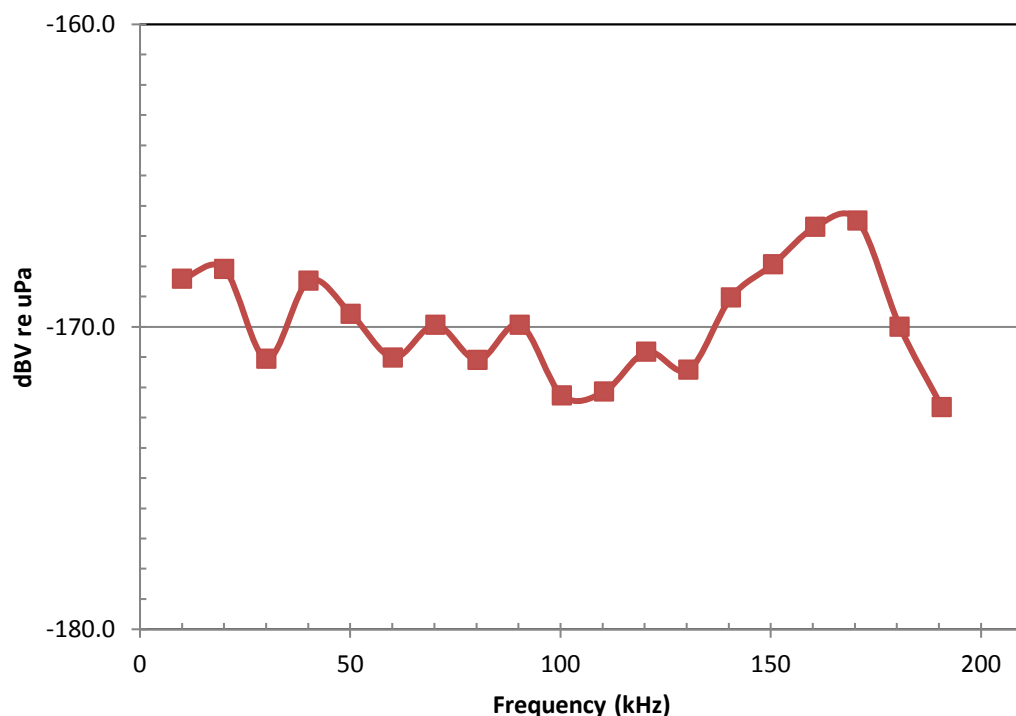
Calibration Certificate Number

**C3073**

Test Result: 10 kHz to 100 kHz:  $-169.6 \pm 1.5$   
10 kHz to 190.7 kHz:  $-169.6 \pm 3.1$

Model Number	SB35-ETH	Projector Manufacturer	Ocean Sonics
Serial Number	1291	Projector Model	TH2-SER-4F
Manufacture Date	7-May-2014	Projector Serial	2210
Measurement Date	20-May-2014	Measurement Distance	1 m
Certificate Date	20-May-2014	Projector Mode	Wideband
Sensitivity @ 26 Hz	-170.2 dBV re $\mu$ Pa	Output Level	131.5 dB re $\mu$ Pa @ 1.0 m
Case Type	Titanium	Reference Manufacturer	Reson
Element Manufacturer	GeoSpectrum	Reference Model	TC4034-1
Element Model	M24HF	Reference Serial	4211050
Element Serial	904	Preamp Manufacturer	Ocean Sonics
Software Release	27	Preamp Model	300415-01
Calibrated By	M.Ceekala	Preamp Serial	110
Work Order Number	W1088	Preamp Gain	30 dB
Test Type	RX Sensitivity	ADC Manufacturer	Ocean Sonics
Test Procedure	Gated DFT	ADC Model Number	04-300422-01
Test Location	Tank #2, 1 m	ADC Serial Number	93

Receive Sensitivity



Frequency kHz	Sensitivity dBV re $\mu$ Pa
10.0	-168.4
20.1	-168.1
30.1	-171.1
40.2	-168.5
50.2	-169.6
60.2	-171.0
70.3	-169.9
80.3	-171.1
90.4	-169.9
100.4	-172.3
110.4	-172.1
120.5	-170.8
130.5	-171.4
140.5	-169.0
150.6	-167.9
160.6	-166.7
170.7	-166.5
180.7	-170.0
190.7	-172.7