



## Certificate of Calibration

Ocean Sonics, Ltd.

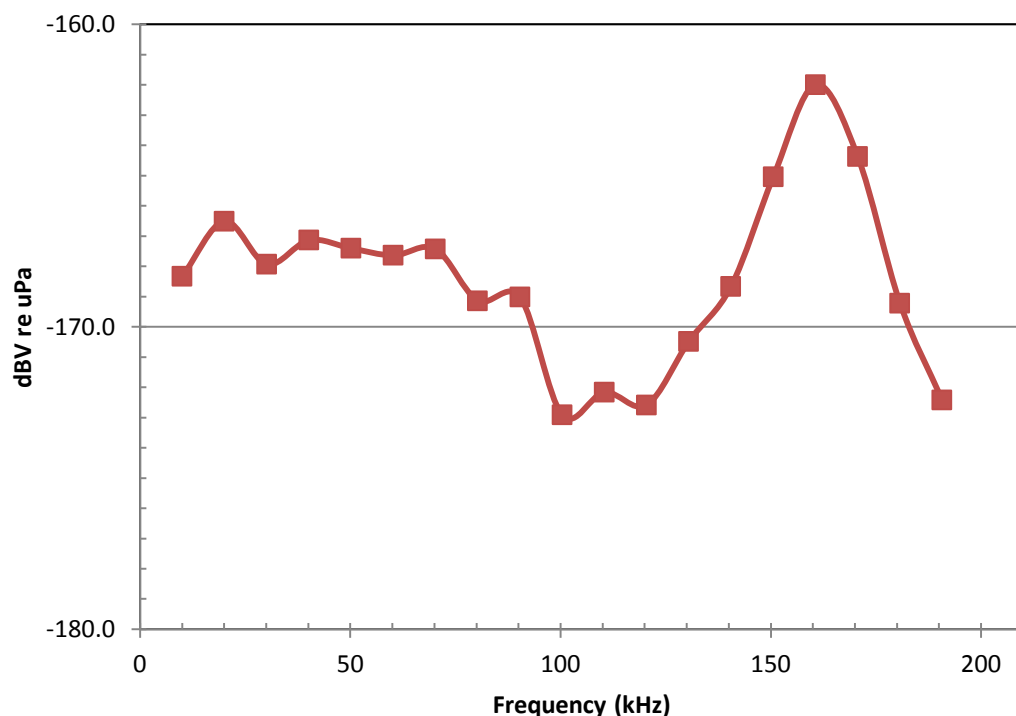
Calibration Certificate Number

**C3063**

Test Result: 10 kHz to 100 kHz:  $-167.8 \pm 1.3$   
10 kHz to 190.7 kHz:  $-167.5 \pm 5.5$

Model Number	SB35-ETH	Projector Manufacturer	Ocean Sonics
Serial Number	1271	Projector Model	TH2-SER-4F
Manufacture Date	9-Dec-2013	Projector Serial	2210
Measurement Date	8-May-2014	Measurement Distance	1 m
Certificate Date	8-May-2014	Projector Mode	Wideband
Sensitivity @ 26 Hz	-169.1 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	840	Preamp Manufacturer	Ocean Sonics
Software Release	26	Preamp Model	300415-01
Calibrated By	M.Ceekala	Preamp Serial	110
Work Order Number	W1086	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	-168.3
20.1	-166.5
30.1	-167.9
40.2	-167.1
50.2	-167.4
60.2	-167.6
70.3	-167.4
80.3	-169.1
90.4	-169.0
100.4	-172.9
110.4	-172.2
120.5	-172.6
130.5	-170.5
140.5	-168.7
150.6	-165.0
160.6	-162.0
170.7	-164.4
180.7	-169.2
190.7	-172.4