



Microphone Frequency Response Measurement Report

Customer: Cascade Microphones
Project No.: J2007-020

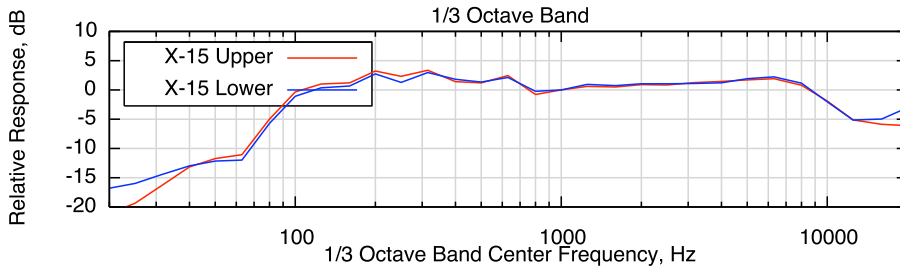
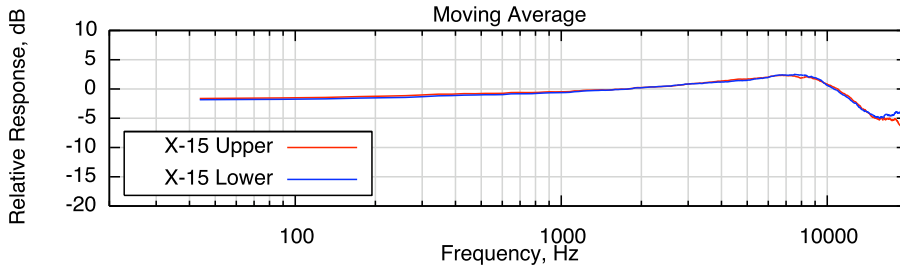
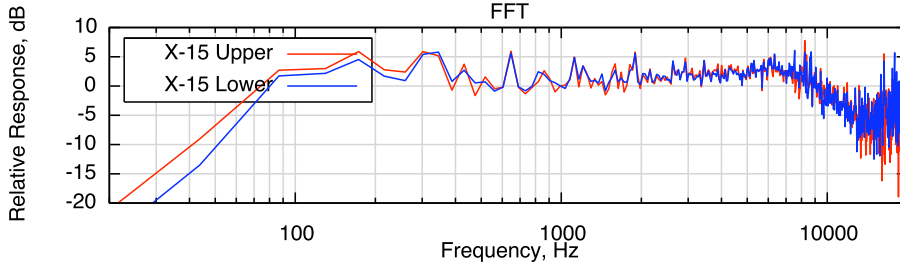
Address: 3720 Gravelly Beach Loop NW
Olympia, WA 98502

Microphone Manufacturer: Cascade Microphones
Serial Number: N/A

Model Number: X-15
Phantom Power: N/A

Measurement Date: Jan 18, 2007
Engineer: H. Singleton

Temperature: 68°F/20°C
Humidity: 23%

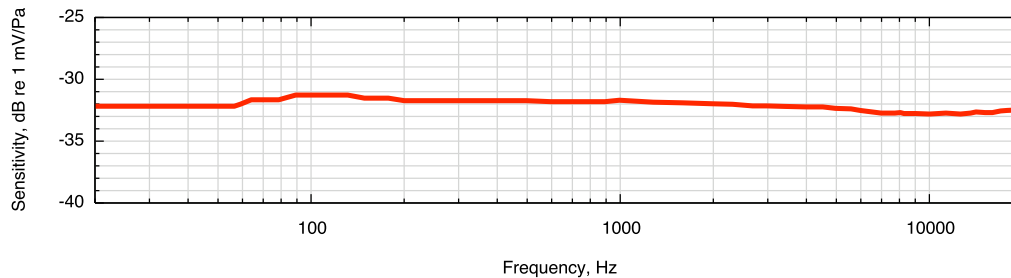


1/3 OB Results		
Freq. Element	Resp. (dB)	
	Upper	Lower
25	-19.35	-15.98
31.5	-16.32	-14.46
40	-13.15	-12.97
50	-11.73	-12.16
63	-11.06	-11.99
80	-4.99	-5.71
100	-0.35	-1.08
125	1.01	0.37
160	1.21	0.67
200	3.24	2.74
250	2.33	1.28
315	3.37	2.97
400	1.42	1.82
500	1.21	1.35
630	2.46	2.13
800	-0.78	-0.24
1000	0.00	0.00
1250	0.61	0.95
1600	0.50	0.74
2000	0.91	1.05
2500	0.84	1.05
3150	1.25	1.11
4000	1.45	1.22
5000	1.72	1.92
6300	1.92	2.23
8000	0.81	1.15
10000	-1.89	-2.03
12500	-5.13	-5.14
16000	-5.87	-4.97

This frequency response measurement is not a NIST-traceable calibration.

Reference Microphone

Reference Microphone Frequency Response: ACO Pacific 7052S, S/N 31220, Cal. Date March 16, 2006



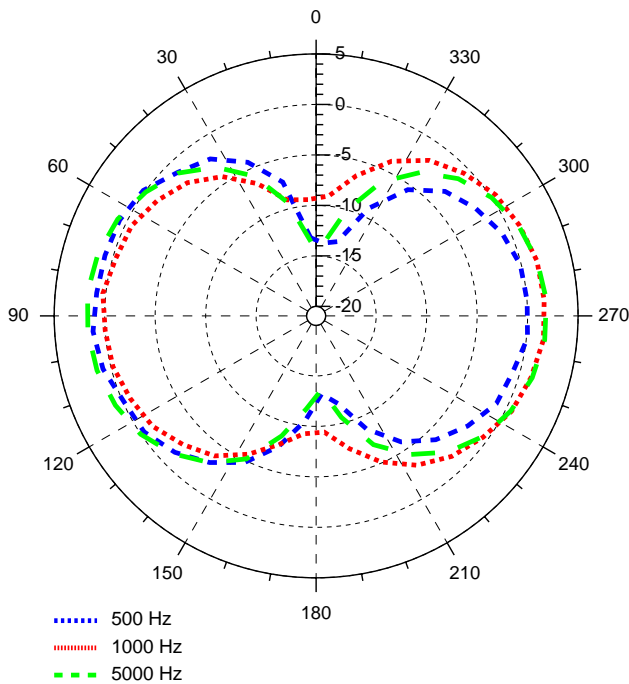


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Supplemental Information

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Project No.: J2007-020	Olympia, WA 98502
Microphone Manufacturer: Cascade Microphones	Model Number: X-15
Serial Number: N/A	Phantom Power: N/A
Measurement Date: Jan 18, 2007	Temperature: 68°F/20°C
Engineer: H. Singleton	Humidity: 23%
Ref. Calibrator: GenRad 1986	
Serial Number: 00242	
Microphone Sensitivity: -51.7 dB (2.6 mV/Pa) Lower	Noise Floor: <17 dBA Lower
(re 1000Hz, 94 dB) -51.7 dB (2.6 mV/Pa) Upper	<17 dBA Upper

Cascade X-15 Ribbon Microphone Polar Response (Upper)



Cascade X-15 Ribbon Microphone Polar Response (Lower)

