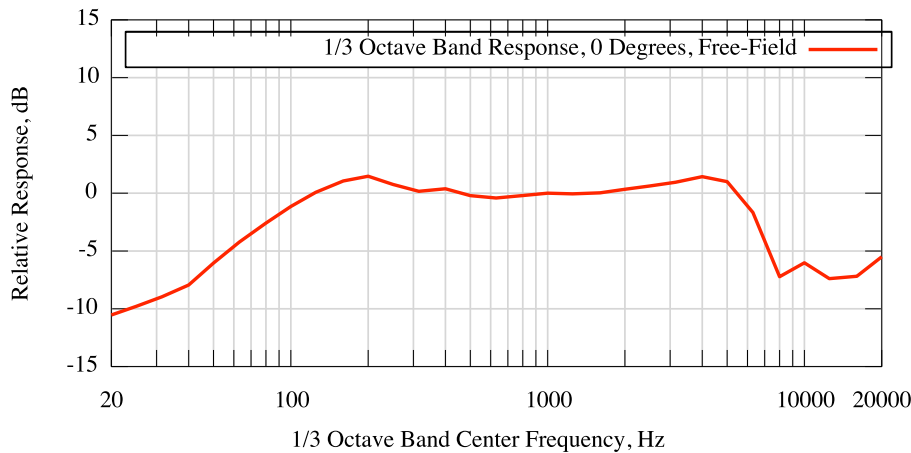
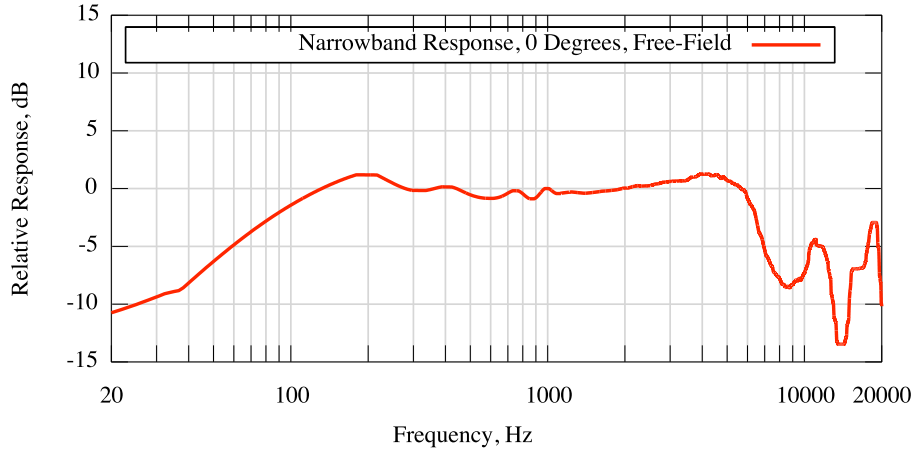




## Microphone Frequency Response Measurement Report

**Microphone Manufacturer:** Cascade      **Model Number:** Knuckle Head  
**Serial Number:** 022      **Phantom Power:** N/A  
**Measurement Date:** February 07, 2012      **Temperature:** 68°F/20°C  
**Engineer:** H. Singleton      **Humidity:** 23%

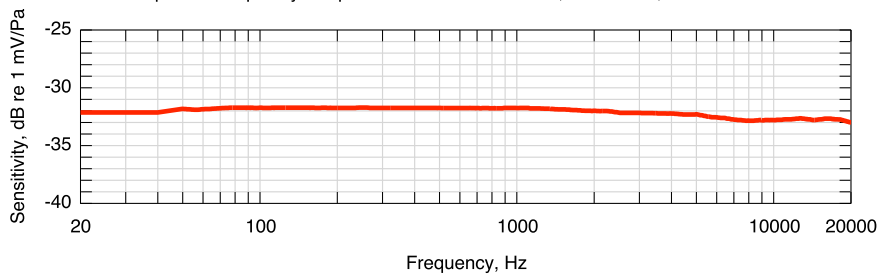
| 1/3 OB Results |            |
|----------------|------------|
| Freq.          | Resp. (dB) |
| 16             | -11.19     |
| 20             | -10.54     |
| 25             | -9.79      |
| 31.5           | -8.96      |
| 40             | -7.94      |
| 50             | -6.04      |
| 63             | -4.22      |
| 80             | -2.58      |
| 100            | -1.14      |
| 125            | 0.07       |
| 160            | 1.06       |
| 200            | 1.47       |
| 250            | 0.76       |
| 315            | 0.16       |
| 400            | 0.39       |
| 500            | -0.21      |
| 630            | -0.42      |
| 800            | -0.20      |
| 1000           | 0.00       |
| 1250           | -0.05      |
| 1600           | 0.03       |
| 2000           | 0.34       |
| 2500           | 0.62       |
| 3150           | 0.95       |
| 4000           | 1.44       |
| 5000           | 1.00       |
| 6300           | -1.67      |
| 8000           | -7.22      |
| 10000          | -6.02      |
| 12500          | -7.39      |
| 16000          | -7.19      |
| 20000          | -5.50      |
| 25000          | -4.56      |



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

### Reference Microphone

Ref. Microphone Frequency Response: ACO Pacific 7052S, S/N 31220, Cal. Date June 30 2010





## Microphone Frequency Response Measurement Report

### Supplemental Information

|                                 |                    |                       |              |
|---------------------------------|--------------------|-----------------------|--------------|
| <b>Microphone Manufacturer:</b> | Cascade            | <b>Model Number:</b>  | Knuckle Head |
| <b>Serial Number:</b>           | 022                | <b>Phantom Power:</b> | N/A          |
| <b>Measurement Date:</b>        | February 07, 2012  | <b>Temperature:</b>   | 68°F/20°C    |
| <b>Engineer:</b>                | H. Singleton       | <b>Humidity:</b>      | 23%          |
| <b>Ref. Calibrator:</b>         | GenRad 1986        |                       |              |
| <b>Serial Number:</b>           | 00242              |                       |              |
| <b>Microphone Sensitivity:</b>  | -55.3 dB (2 mV/Pa) | <b>Noise Floor:</b>   | <17 dBA      |
|                                 | (re 1000Hz, 94 dB) |                       |              |

