



## Lab Testing Summary Report

March 2003  
Report 270303

Product Category:  
**Conference  
Phone**

Vendor Tested:  
**Mitel Networks**

Product Tested:  
**5303  
Conference Phone**



### Key findings and conclusions:

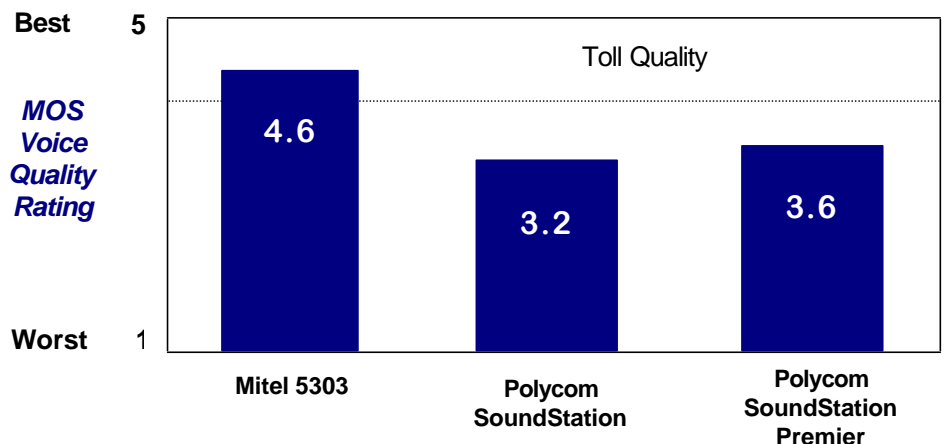
- Offers a simple, straightforward configuration and an intuitive user interface
- Packs many features in a small, functional phone
- Demonstrated “toll quality” voice in both normal and presentation modes
- Supports a large display that provides a great deal of helpful information to the user

**M**itel Networks engaged Miercom to test its 5303 Conference Phone, which was reviewed competitively with the Polycom SoundStation and the Polycom SoundStation Premier. Testing was based on a test bed and methodology developed by Miercom. The objective of testing was to determine how well the products fared in features, functionality, ease of installation and performance.

Testing revealed that the 5303 Conference Phone packs many features into a small, functional phone. A large display provides much helpful information to users, and soft keys dynamically adjust to present features applicable to the current call state. Supported features include programmed speed dialing, redial, caller ID, mute microphone, call hold, transfer, flash, and others.

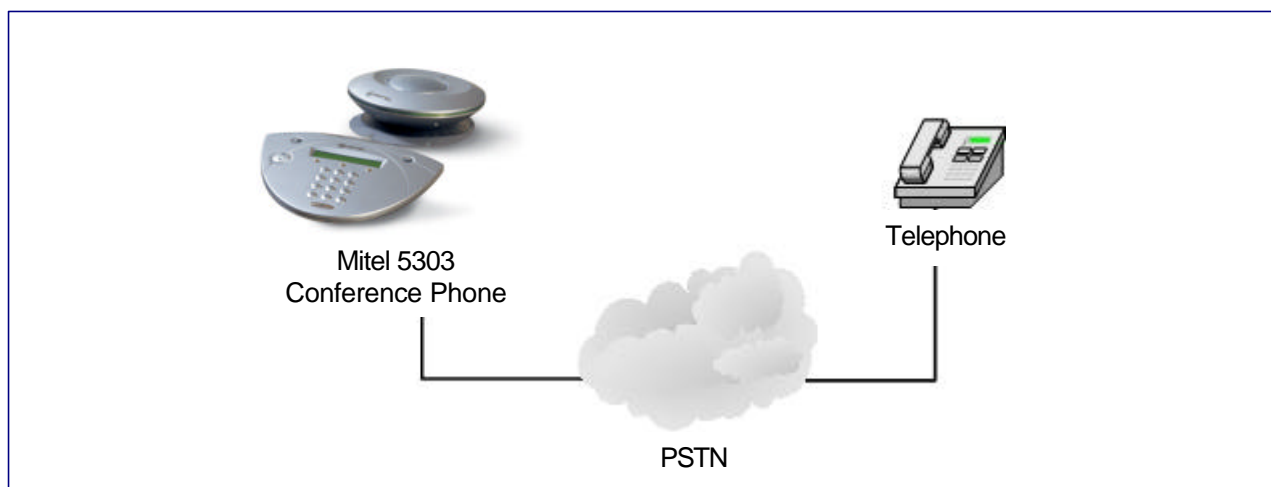
The 5303 demonstrated an excellent ITU Mean Opinion Score (MOS) of 4.6 in a “normal” setting (handset to conference phone without background noise) compared to ratings of 3.2 and 3.7 for the Polycom SoundStation and SoundStation Premier, respectively. We also conducted tests with background noise in which the Mitel 5303 fared best among the three phones with a score of 3.7, while the SoundStation and SoundStation Premier scored a 3.50 and 3.39, respectively. Tested with background noise in “presentation mode,” a feature that locks the microphone on an individual speaker, the Mitel 5303 voice quality score rose significantly from 3.7 to 4.3.

### Voice Quality MOS Ratings Compared\*



\*This represents ratings obtained in tests conducted from handset to conference phone without background noise. Ratings of 4.0 and higher are “toll quality.”

## Test Bed Set-up



**About the testing**...Mitel brought in one 5303 Conference Phone for testing. We conducted tests to assess both International Telecommunications Union (ITU) MOS (Mean Opinion Score) and interactive ratings. To assess MOS a blind panel rated voice quality from 1 (poor—the speech is not understandable) to 5 (excellent—the speech is perfectly understandable). A rating of 4.0 or above is considered “toll quality,” which is suitable for all business applications. In the interactive tests, which Miercom developed, we tested the performance of telephony systems in terms of latency, bi-directional speech and overall clarity. Three engineers made two calls each from each end of the test system (for this testing we used an analog phone and a conference phone). In the latency test each engineer counted down from 20 to 1, alternating numbers as soon as one was heard from the party on the other side of the connection. For the bi-directional test, engineers recited the alphabet simultaneously, concentrating on what was said by the other engineer. Dropped letters and clipping were noted. During the course of the call, engineers also rated the overall clarity of the speech. The call was then given an overall rating based on a scale of 1 to 5--with 1 meaning that the speech is not usable under any circumstances, while a rating of 5 indicates that the speech offers perfect clarity, latency and bi-directionality. In the interactive tests, a rating of 3.0 and above indicates that the speech is suitable for most business applications.



Mitel 5303 Conference Phone



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## About Miercom's Product Testing Services...

With hundreds of its product-comparison analyses published over the years in such leading network trade periodicals as *Business Communications Review* and *Network World*, Miercom's reputation as the leading, independent product test center is unquestioned. Founded in 1988, the company has pioneered the comparative assessment of networking hardware and software, having developed methodologies for testing products from ATM switches to VoIP gateways and IP PBXs. Products submitted for review are typically evaluated under the “NetWORKS As Advertised™” program, in which networking-related products must endure a comprehensive, independent assessment of the products' usability and performance. Products that meet the appropriate criteria and performance levels receive the “NetWORKS As Advertised” award and Miercom Labs' testimonial endorsement.



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