

**Noise and Directivity Tests:  
Honda EU2000i Generators in Single and Parallel Operation  
Pincor 2000W Contractor Generator**

**Tests Conducted  
Spring 2006  
*On the Quad  
At  
The University of Alabama***



**By the students in  
ME 377 NOISE CONTROL  
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Dr. Shepard. If interested, please feel free to inquire at [sshepard@eng.ua.edu](mailto:sshepard@eng.ua.edu).***

**Test Samples:** One Pincor 2000W (16.6 Amp) Contractor Generator  
One Honda EU2000i  
Two Honda EU2000i in Parallel with Both ECO settings

**Load:** 1500W: One 1500W Ceramic Heater on Max Heat Setting  
3000W: Two 1500W Ceramic Heaters on Max Heat Setting  
(Note: Heater noise was neglected)

**Configuration:** For all tests, generator exhaust aimed due North along 0° measurement  
Data taken at 25 foot radius form center of generator  
No trees for at least 100 feet. Closest building approx. 300 feet, most farther.  
Occasional light traffic noise at min. 200 foot distance.

**Notes:** National Park Service Regulation 2.12 Audio Disturbances: “Prohibited...an electric generator... that exceeds a noise level of 60 decibels measured on the A-weighted scale at 50 feet.”

To extend the data presented here for 25 feet to 50 feet, an **approximate** value can be obtained by simply subtracting 6 dB (or 6 dB(A)) from each measurement. Data at 0° and 50 feet is provided on page 4.

**Pictures:**

*Pincor Generator:*



*Single Honda Test:*



*Parallel Honda Test:*



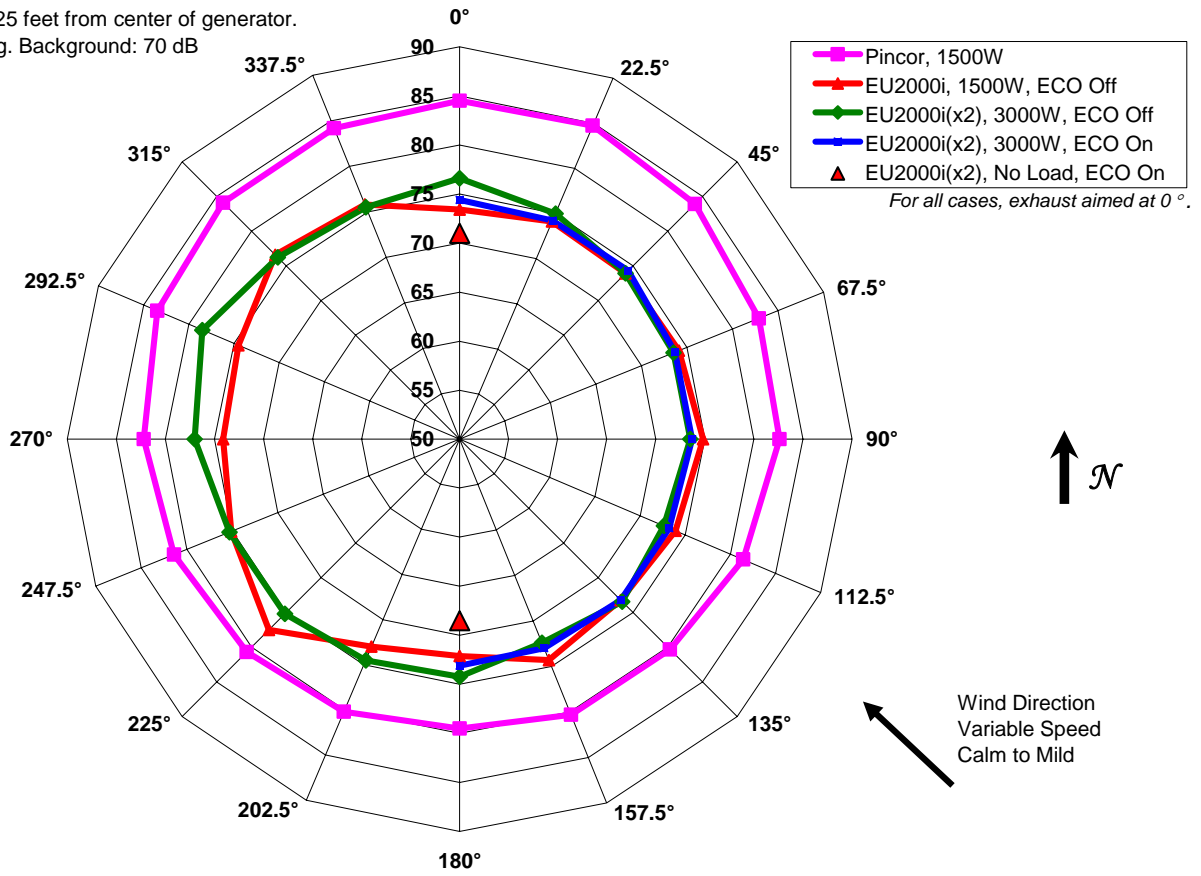
*Note: The Pincor generator is approximately the same size as the Honda. The picture perspective distorts the scale.*

**Test Location on Campus:**



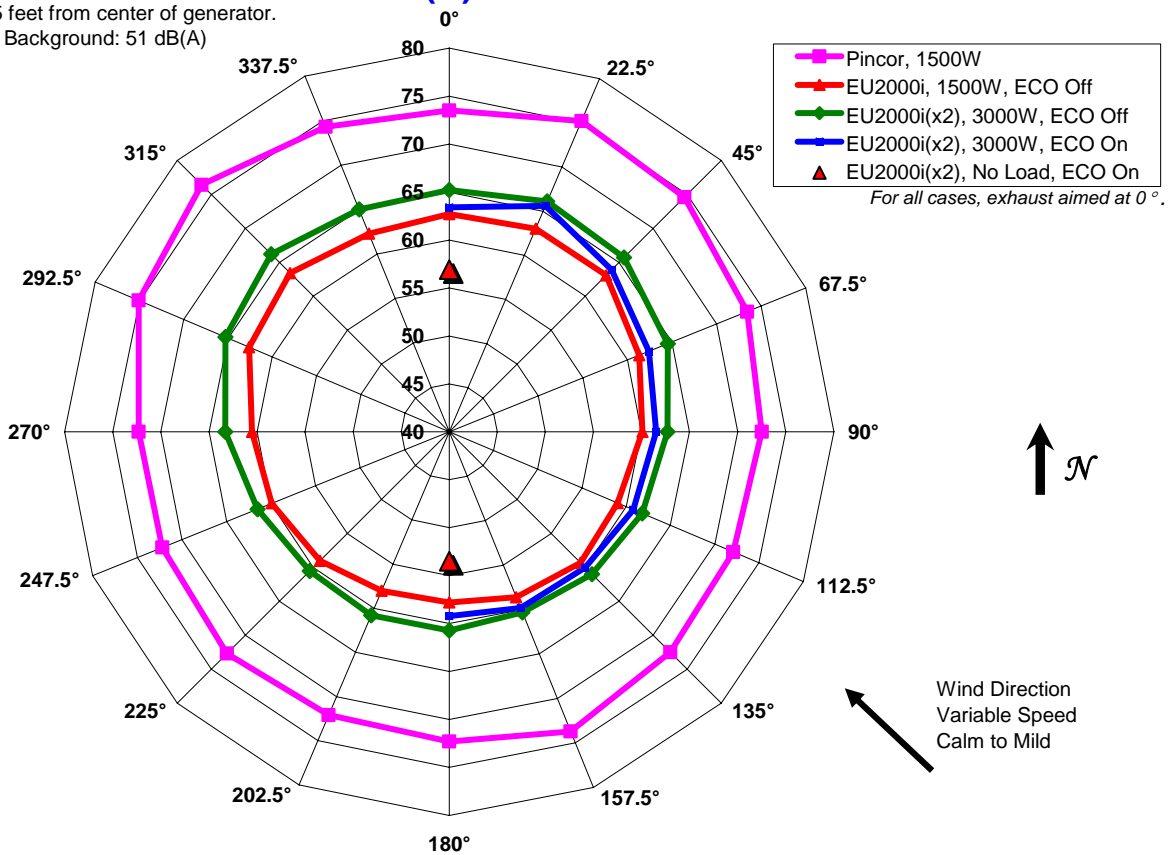
# Sound Pressure Level - dB

at 25 feet from center of generator.  
Avg. Background: 70 dB

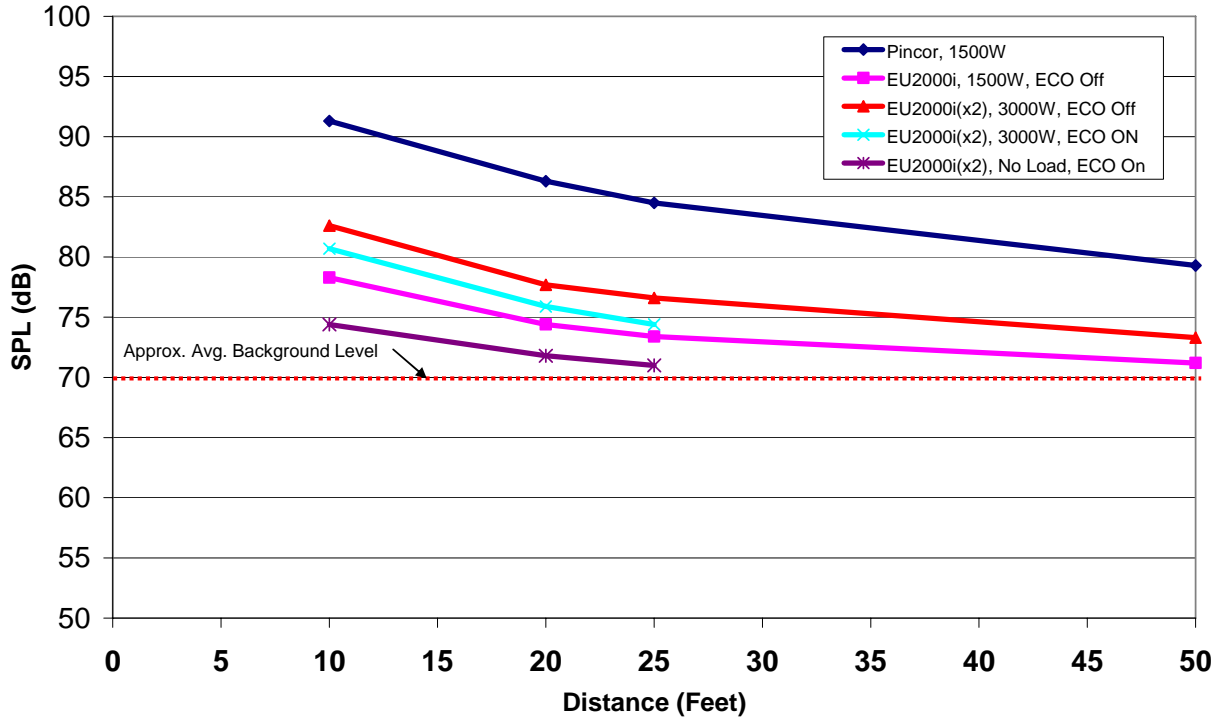


# Sound Pressure Level - dB(A)

at 25 feet from center of generator.  
Avg. Background: 51 dB(A)



### SPL Variation with Distance at 0 Degrees



### SPL Variation with Distance at 0 Degrees

