

Single Peerless XXLS 830 847 in 46 litre sealed box with 0.7 Q Max power 250 watts = Xmax at 20 Hz.... **97 dB max SPL at 20 Hz.**

AJ Sealed Designer 2.0 [www.ajdesigner.com](http://www.ajdesigner.com)

File Units Box Calculator Help

Speaker Parameters

Qtc: 0.7	Vas: 144.2 liters
Qts: 0.346	Pmax: 250 watts
Qes: 0.37	Diameter: 27 cm
Fs: 21.8 Hz	Xmax: 12.5 mm

Calculate

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Output Response  
 Power Response

Box Results

Vb: 46.6211 liters
Fb: 44.104 Hz
F3: 44.5564 Hz

### Power Response: Power vs. Frequency

Frequency (Hz)	Thermal Limit (dB)	Displacement Limit (dB)
10	90	90
50	110	110
100	115	125
500	115	145
1000	115	150

Legend:  
— Displacement Limit  
— Thermal Limit

XXLS 830 847 sealed box with 0.5 Q- Box increases to 132 litres but Xmax limit remains unchanged so max output remains at 97dB but it is achieved with 100 watts Vs 250 watts.

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File Units Box Calculator Help

Speaker Parameters

Qtc: <input type="text" value="0.5"/>	Vas: <input type="text" value="144.2"/> liters
Qts: <input type="text" value="0.346"/>	Pmax: <input type="text" value="100"/> watts
Qes: <input type="text" value="0.37"/>	Diameter: <input type="text" value="27"/> cm
Fs: <input type="text" value="21.8"/> Hz	Xmax: <input type="text" value="12.5"/> mm

Calculate

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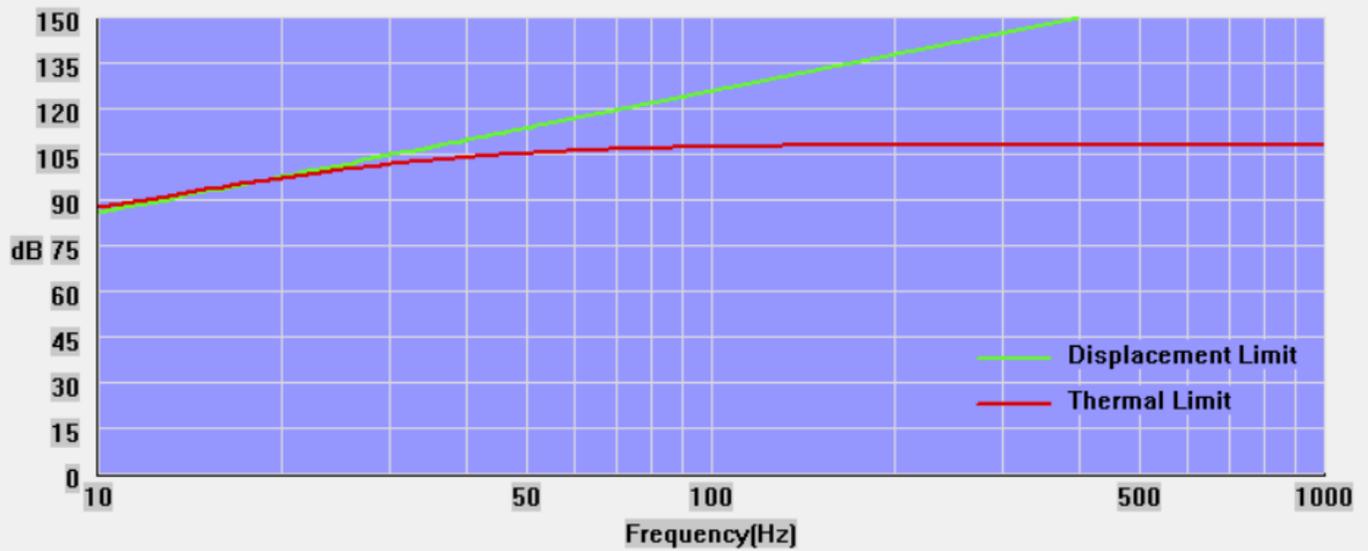
Output Response

Power Response

Box Results

Vb: <input type="text" value="132.503"/> liters
Fb: <input type="text" value="31.5029"/> Hz
F3: <input type="text" value="48.9484"/> Hz

Power Response: Power vs. Frequency



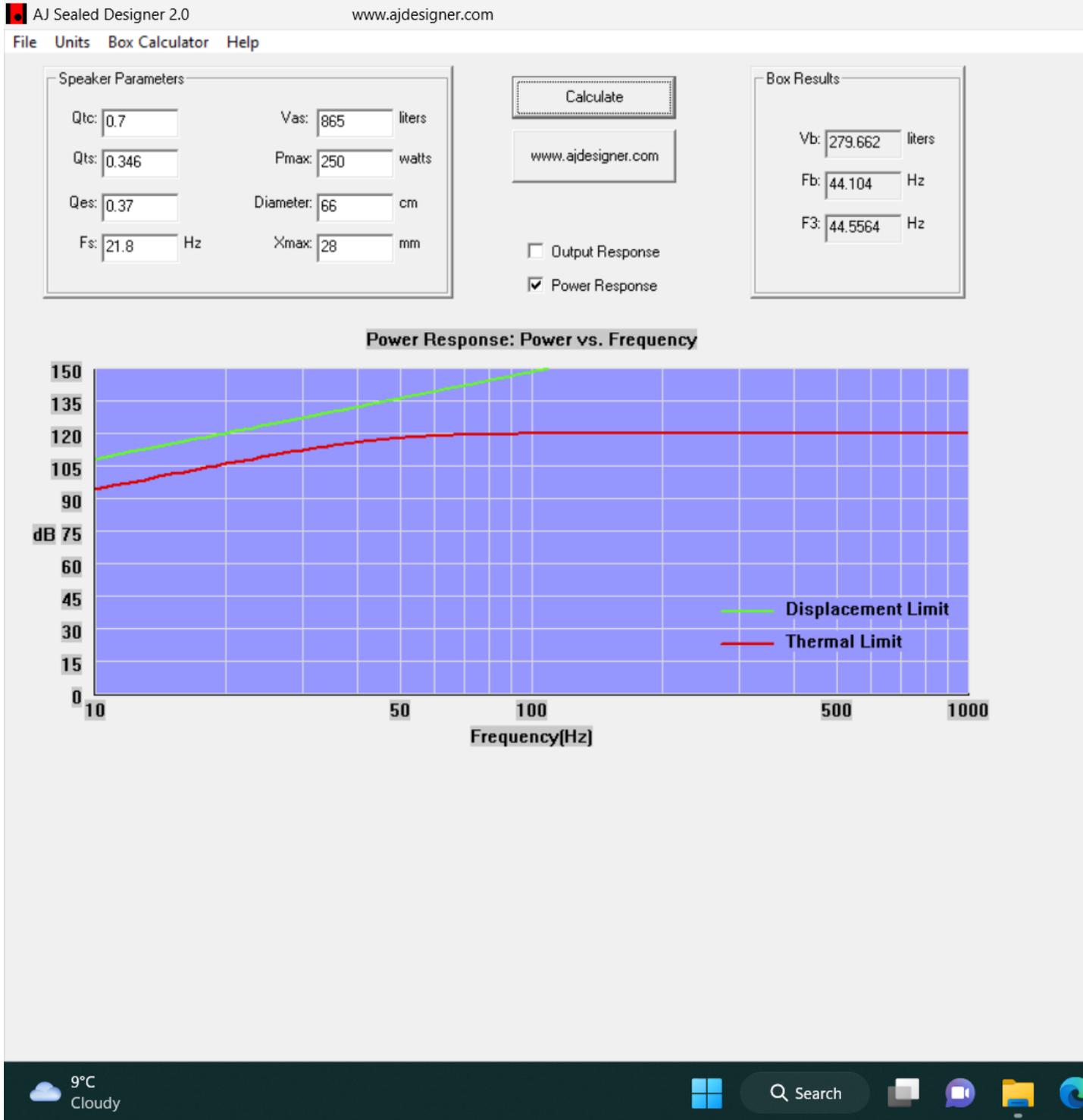
9°C  
Cloudy



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**SIX** Peerless XXLS 830 847 - diameter = 66cm (24 inch driver has 60cm diameter) sealed box with 0.7 Q (865 VAS) = box 279 litre box- Requires 28mm (!) Xmax to reach 120dB at 20Hz. Power handling limit = 106dB.



Six Peerless XXLS 830 847 sealed box with 0.5 Q (vas 865) = box 794 (!) liters. This requires 28mm (!) Xmax to reach 120 dB at 20 Hz and is still limited to 109 dB max SPL with 250 watts.

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File Units Box Calculator Help

**Speaker Parameters**

Qtc:  Vas:  liters

Qts:  Pmax:  watts

Qes:  Diameter:  cm

Fs:  Hz Xmax:  mm

**Calculate**

[www.ajdesigner.com](http://www.ajdesigner.com)

Output Response

Power Response

**Box Results**

Vb:  liters

Fb:  Hz

F3:  Hz

**Power Response: Power vs. Frequency**

Frequency (Hz)	Displacement Limit (dB)	Thermal Limit (dB)
10	108	102
50	135	118
100	150	120
500	-	120
1000	-	120

9°C Cloudy

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