

Specification Approval Sheet(External)

Version: A0

Customer :

Product Model : JLI-3413AU W2-GP

Customer Part No. :

Dimensions : $\Phi 34 * H13.6\text{mm}$

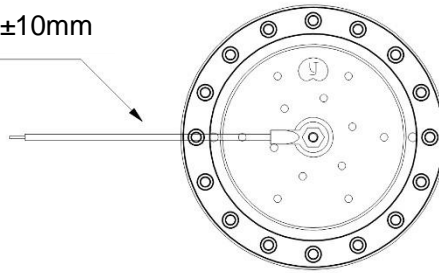
Sensitivity : $-40 \pm 2\text{dB}$ (0dB=1V/Pa, at1KHz) 34 electret jig

Document No. : 8.34.00358

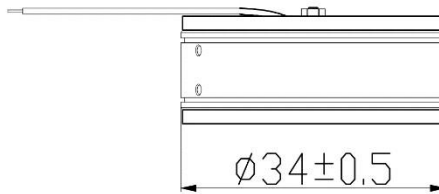
Prepared by		Approved by		Signed back by customer	
Changed by	Model	Date	Changes made	Version	
		October 11, 2022	First release	A0	

1. Dimensional Drawing

yellow Teflon wire
Wire length: 80 ± 10 mm



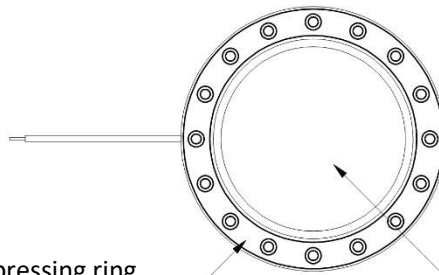
$\varnothing 13.6 \pm 0.25$



$\varnothing 34 \pm 0.5$

Green pressing ring

Gold-plated diaphragm



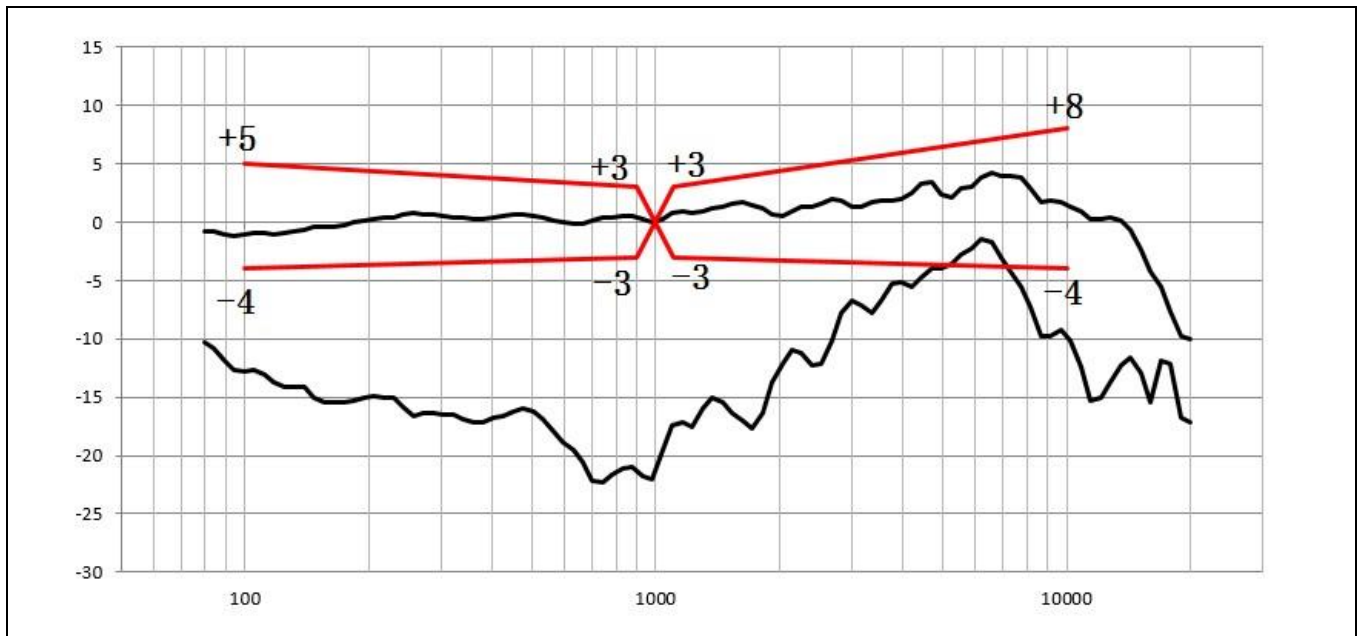
Unit : mm

2. Criteria for Test Parameters

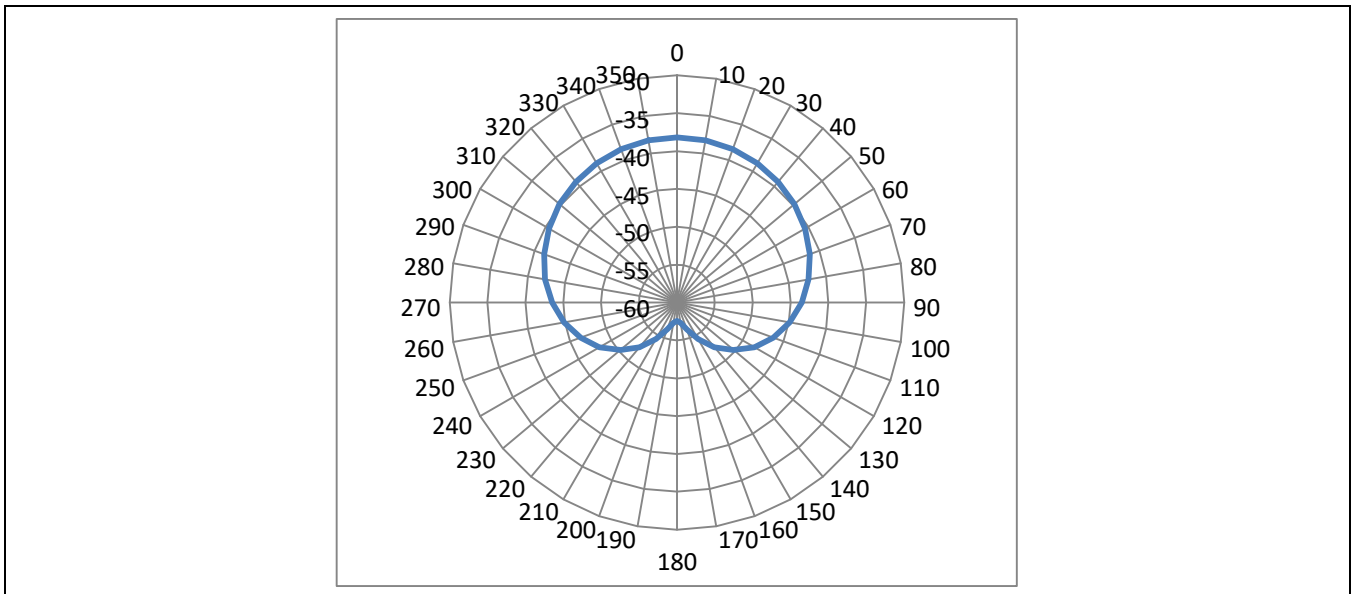
Test Item	Symbol	Test Condition	Criteria			
			Min	Mid	Max	Unit
Sensitivity (unidirectional)	S	f=1KHz ,S.P.L=1Pa 0dB=1V/Pa	-42	-40	-38	dB
Polar Pattern (0-180°)		B&K, 34 electret jig			-15	dB
Operating Voltage	$\Delta S-V_s$	$V_s=1.5V$ to $1.0V$			-3	dB
S/N Ratio	S/N	S :(f=1KHz ,S.P.L=1Pa) N:(A-Weighted curve)	68			dB
Max SPL		f=1KHz, THD \leq 3%	120			dB

3. AP Frequency Response Curve (Test Distance: 100cm, 34 Electret Jig)

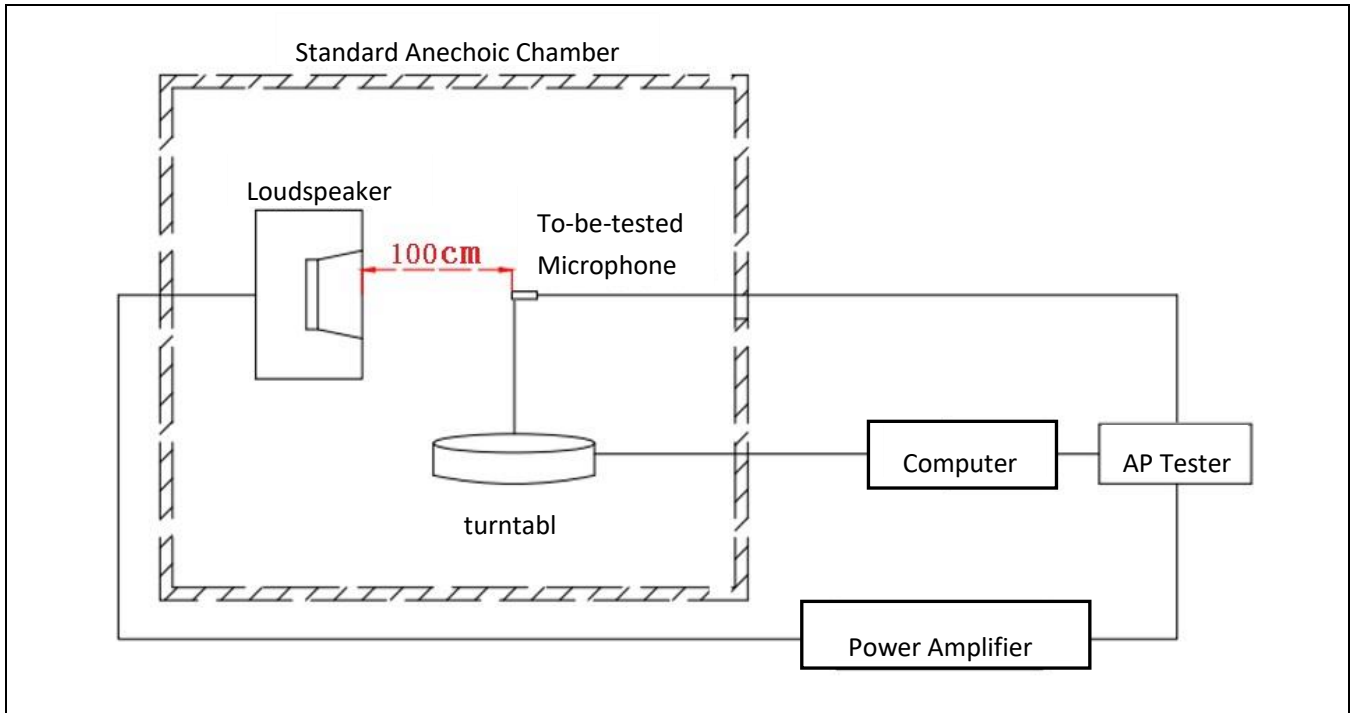
3.1.1 Frequency Response Curve



3.1.2 Polar Pattern



3.2 Connection Diagram for AP Test



3.3 Picture of Test Jig (34 Electret Jig)



3.4 Test Loop for Capsule

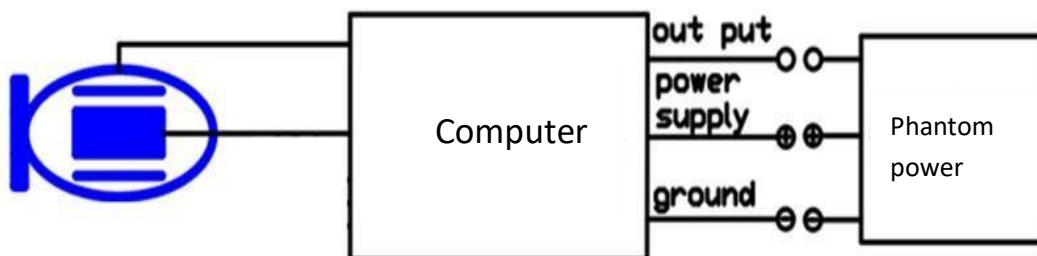
5. Requirements for Test Environment

1. General Test Conditions

Temperature: 5 ~ +35°C Relative Humidity: 45 ~ 85% Atmospheric Pressure: 86 ~ 106Kpa

2. Standard Test Conditions

Temperature: 20 +/- 2°C Relative Humidity: 60 ~ 70% Atmospheric Pressure: 86 ~ 106Kpa



6. Requirements for Reliability Testing

Test Item	Test Condition	Acceptance Criteria
High Temperature Test	<ol style="list-style-type: none">1. Temperature: 60+/-3°C, 50+/-5% Relative humidity(IEC 68-2-2Bb)2. Duration time: 16h	<ol style="list-style-type: none">1. After the test, the microphones must be placed at room temperature for 2 hours before they are inspected.2. The difference of sensitivity before and after the test should not exceed $\pm 3\text{dB}$, and there

		are no abnormalities such as low sound and noise.
Low Temperature Test	<ol style="list-style-type: none"> 1. Temperature: -40°C (IEC 68-2-1 Ab) 2. Duration time: 16h 	<ol style="list-style-type: none"> 1. After the test, the microphones must be placed at room temperature for 2 hours before they are inspected. 2. The difference of sensitivity before and after the test should not exceed $\pm 3\text{dB}$, and there are no abnormalities such as low sound and noise.
Cyclicdamp heat test	<ol style="list-style-type: none"> 1. Temperature: $55^{\circ}\text{C}\pm 2^{\circ}\text{C}$; Relative humidity: $93\pm 3\%$; Duration time: 9h 2. The temperature drops to $25^{\circ}\text{C}\pm 3^{\circ}\text{C}$ within 6h, and the humidity is greater than 95%. 24h is a cycle. 3. Totally 2 cycles: 48h (total time) 	<ol style="list-style-type: none"> 1. After the test, the microphones must be placed at room temperature for 2 hours before they are inspected. 2. The difference of sensitivity before and after the test should not exceed $\pm 3\text{dB}$, and there are no abnormalities such as low sound and noise.
Thermostatic heattest	<ol style="list-style-type: none"> 1. Temperature: $40\pm 3^{\circ}\text{C}$(IEC 68-2-1 Ab) Relative humidity: $92\pm 3\%$ (IEC 68-2-2Bb) 2. Duration time: 96h 	<ol style="list-style-type: none"> 1. After the test, the microphones must be placed at room temperature for 2 hours before they are inspected. 2. The difference of sensitivity before and after the test should not exceed $\pm 3\text{dB}$, and there are no abnormalities such as low sound and noise.
Temperature & humidity cyclic test	<p>$-10\pm 3^{\circ}\text{C}\sim 55\pm 3^{\circ}\text{C}$(IEC 68-2-14)</p> <p>Note: The microphones are neither packed nor powered on.</p> <p>Duration time: 5 cycles</p> <p>Time slot 1: 60 min Time slot 2: ≤ 60 min</p> <p>Time slot 3: 60 min Time slot 4: ≤ 30 min</p>	<ol style="list-style-type: none"> 1. After the test, the microphones must be placed at room temperature for 2 hours before they are inspected. 2. The difference of sensitivity before and after the test should not exceed $\pm 3\text{dB}$, and there are no abnormalities such as low sound and noise.

Water spray test	<ol style="list-style-type: none"> 1. Place the microphones at room temperature of 23°C +/- 5°C and keep them dry. 2. Place the microphones in a refrigerator with a temperature of 2°C - 8°C for 30 minutes. 3. Then immediately put them into a constant temperature and humidity chamber (temperature: 25 °C, relative humidity: 95%) for 30 minutes. 4. Take out the microphones and immediately conduct a sound test on them for over 10 seconds. 	<ol style="list-style-type: none"> 1. The difference of sensitivity before and after the test should not exceed ± 3dB, and there are no abnormalities such as low sound and noise. 2. The difference of sensitivity before and after the test should not exceed ± 3dB.
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7. Storage Environment

7.1 The storage environment should be clean, ventilated and free of corrosive gases.

7.2 The storage temperature should be controlled at -10°C to 55°C and the relative humidity at 20% to 70%.

8. Way of Packing

1. As shown in the following figure, put the capsule into the box (one for each box).

