

Acoustic Chamber OQC Report

Client FOXCONN

Manufacturer BOOSTER

Description Acoustic Chamber Test upgrade

Model/Type

Serial No. OTT AI Soundbar Test upgrade20210720

Cal. Date

Next Cal.

Conclusion Passed at Calibration Item

Calibrated by zhiying wu

Inspected by

Approved by jingxiang liu

Sound insulation performance Testing Report

1. All data issued by this laboratory are traceable to national primary standards and International System of Units(SI)
2. The certificates must not be partially duplicated except with, prior written approval from the issuing laboratory.
3. The measurement results are only related to the Unit Under Test.
4. Reference documents for the calibration:

- JJF 1147-2006: Calibration specification for acoustic performance of anechoic rooms and hemi-anechoic rooms
- Background Noise: (-2.5~120) dB ;
- Sound pressure level: (-2.5~120) dB (31.5Hz~20kHz ; d:(0.5~5m) .

5. Main measurement standards used during the calibration

Description	Specification	Due Date	Certificate No.
Low Noise Microphone.	MegaSig MPA 663/0.1dB ~ 0.3 dB	2022-10-18	6GC8000123-004
Signal Generator 4ch	MegaSig PM004 Frequency Response: +/- 1 dB Distortion <= 0.2%	2022-10-18	6GC8000123-005
AWA5510 Sound Source with 12 spaces.	U=0.5 dB	2022-10-18	6GC8000123-007

6. Place of the calibration

- Booster(Zhongshan)

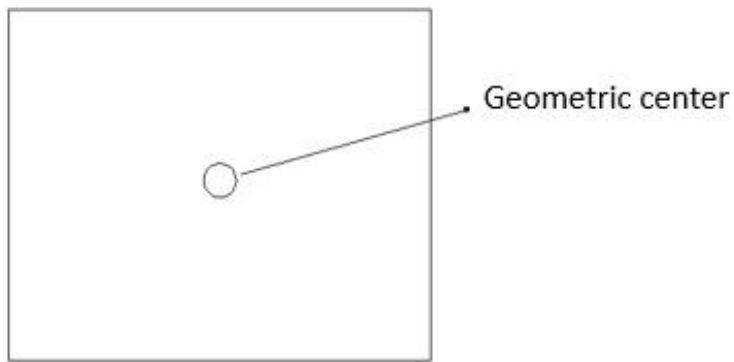
7. Environmental condition during the calibration

- Temperature: 20 (°C)
- Relative Humidity: 55 (%)

8. Other Comments

9. Limiting condition of instrument calibrated:

- Appearance and Functional Check
- Microphone Fixed Position

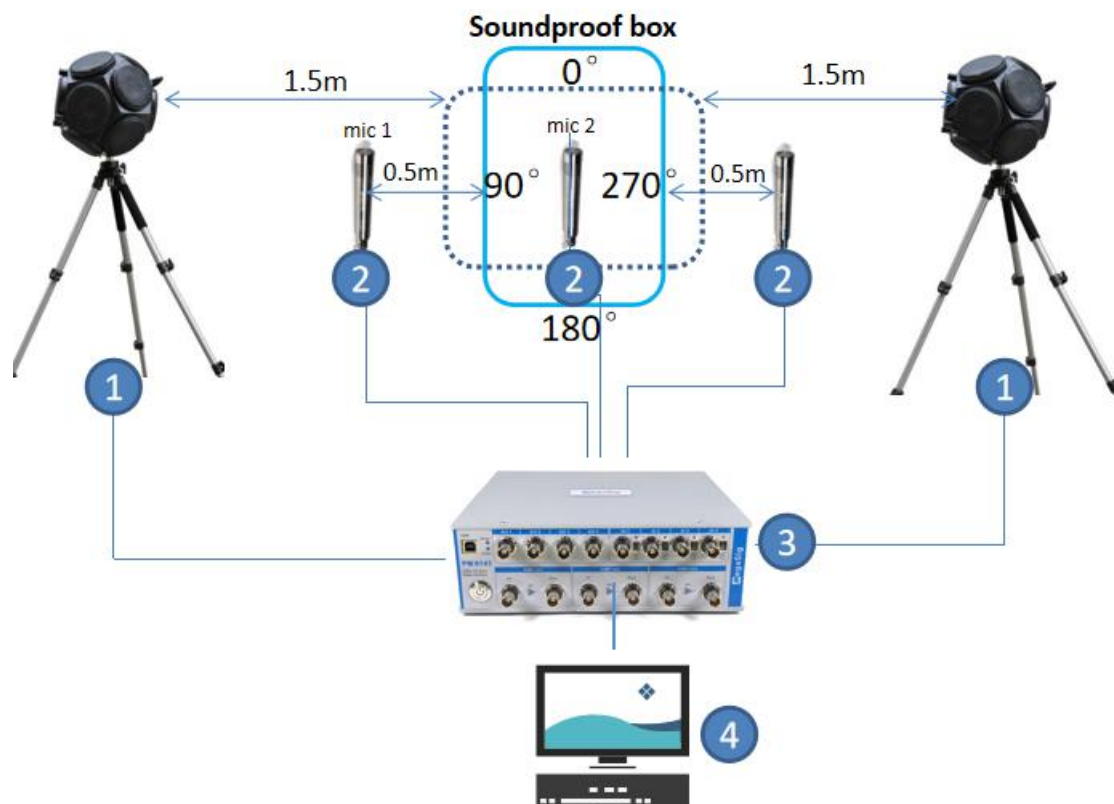


10. Background Noise

Center Frequency/Hz	20	63	100	200	250	315	400	U=0.5 dB
Background Noise/dB	N/A	N/A	N/A	-45	-44	-43	-42	0.5
Center Frequency/Hz	500	630	800	1000	1250	1600	2000	
Background Noise/dB	-44	-42	-41	-41	-40	-44	-41	0.5
Center Frequency /Hz	2500	3150	4000	5000	6300	8000	10000	
Background Noise / dB	-43	-39	-38	-37	-39	-37	-34	0.5
A-Weighting								
8.23								

11. 1 / 3 OCT Sound insulation performance

- 1.AWA5510 Sound Source with 12 spaces
- 2.Low Noise Microphone MegaSig MPA 663
- 3.Signal Generator 4ch MegaSig PM004 Frequency Response
- 4.Control computer



Test sketch map

- 1.Generate pink noise waveform and play for 10 seconds.
2. the average of 1/3 Octave noise spectrum in 10 seconds in the center of chamber and recode as reference noise level B.
- 3.Test the noise of 0 ° & 180 ° and 90 ° & 270 ° inside the soundproof box.

12. 1 / 3 OCT Sound insulation performance

Center Frequency	Mic 1 SPL	Mic 2 SPL	Sound insulation	
Hz	dB(A)	dB(A)	dB(A)	0.6
200	88	45	43	0.6
250	87	44	43	0.6
315	85	43	42	0.6
400	84	42	42	0.6
500	89	44	45	0.6
630	84	42	42	0.6
800	83	41	42	0.6
1000	85	41	44	0.6
1250	86	40	46	0.6
1600	88	44	44	0.6
2000	90	41	49	0.6
2500	91	43	48	0.6
3150	89	39	49	0.6
4000	88	38	50	0.6
5000	87	37	50	0.6
6300	88	39	49	0.6
8000	89	37	52	0.6
10000	85	34	51	0.6
Total SPL (100Hz~10KHz)	94	47	46	0.6

Appendix: Directions of measurement uncertainty in the calibration

- Reference Document
- The measurement expanded uncertainties of the calibration)(K=2)