

Acoustic Chamber OQC Report

Client FOXCONN

Manufacturer BOOSTER

Description Acoustic Chamber

Model/Type

Serial No. OTT AI Soundbar Tester20210915

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)

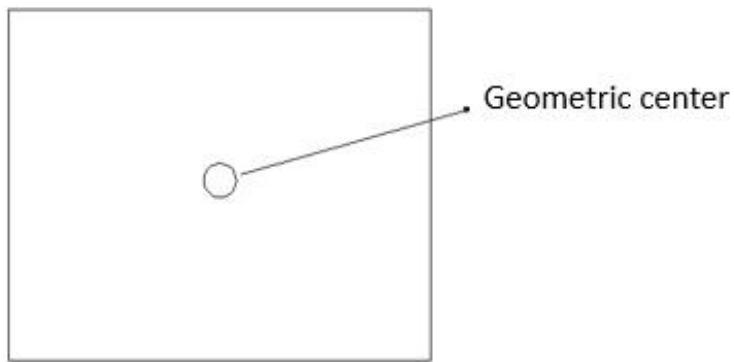
7. Environmental condition during the calibration

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

8. Other Comments

9. Limiting condition of instrument calibrated:

- Appearance and Functional Check
- Microphone Fixed Position

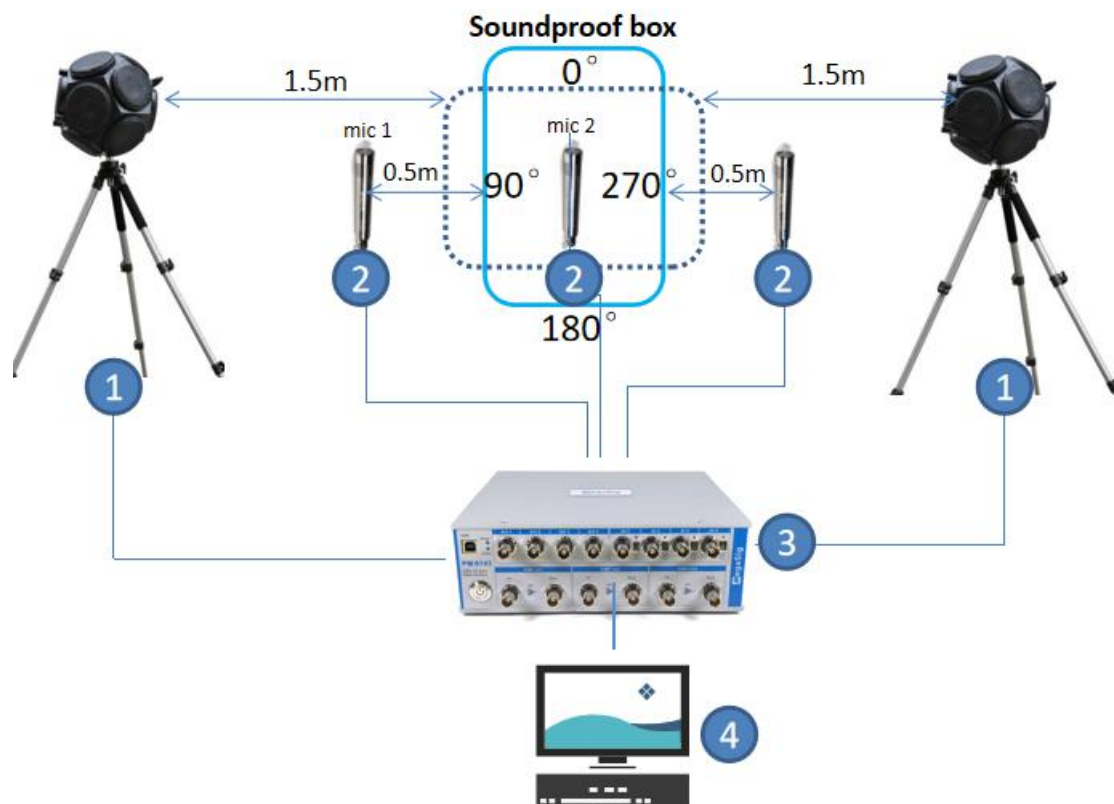


10. Background Noise

Center Frequency/Hz	20	31.5	63	100	125	250	500	U=0.5 dB
Background Noise/dB	N/A	N/A	N/A	-46	-45	-44	-45	0.5
Center Frequency/KHz	1	1.25	2	2.5	4	5	6.3	
Background Noise/dB	-42	-41	-40	-45	-39	-36	-38	0.5
Center Frequency/KHz	8	12.5	16	20				
Background Noise/dB	-36	-37	-33	-32				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	44	44	0.6
250	83	43	40	0.6
315	84	42	42	0.6
400	82	40	42	0.6
500	88	45	43	0.6
630	83	42	41	0.6
800	80	40	40	0.6
1000	85	42	43	0.6
1250	83	41	42	0.6
1600	88	43	45	0.6
2000	89	40	49	0.6
2500	91	45	46	0.6
3150	86	38	48	0.6
4000	86	39	47	0.6
5000	86	36	50	0.6
6300	89	38	51	0.6
8000	89	36	53	0.6
10000	82	35	47	0.6
Total SPL (100Hz~10KHz)	94	47	47	0.6

Appendix: Directions of measurement uncertainty in the calibration

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