ELP Manet 8f
Acoustic Test Report

HARMAN Professional Denmark ApS - Olof Palmes Allé 44 - 8200 Aarhus N - Denmark - www.martin.com

Title

MARTIN ELP Manet 8f Acoustic Test Report

Test conditions.

Test carried out according to ISO 3744:2010(E)

Device tested.

Make: HARMAN Professional Denmark ApS

Model: ELP Manet 8f

Serial no: 20000120039

Software version: V1.0.0

Results

An image of the test setup can be found on Page 3. Test results are listed in Table 1 & 2 on Page 5~6. Tables for the equipment list are shown on Page 7.

HARMAN Professional Denmark ApS, R&D QA are responsible for the test results given in this report.

Environment

Temperature: 26±2°C Ta

Humidity: 64 %RH

AC mains power: 230 V, 50 Hz

Background noise level: 8.9 dBA

Warm-up time: 30 minutes at each test scenario till fixture heat stable.

Fixture placement: Fixture was placed at least one meter from walls and ceiling, as described in the Standard ISO 3744:2010(E)

Remarks

Test results apply only to the tested specimen.

Rev: (last five)	Made by:	Description:	Approved by:	Date approved:
A	Guo, Kevin	Manet 8f noise level measurement	Darren, Sun	2025-08-22

Setup

The product was placed indoors in a semi-anechoic room in the internal Lab of Harman Technology in Shenzhen, China (See Figure 1). The main dimensions of the room were 5.9m * 4.9m * 3.3m (length * width * height).

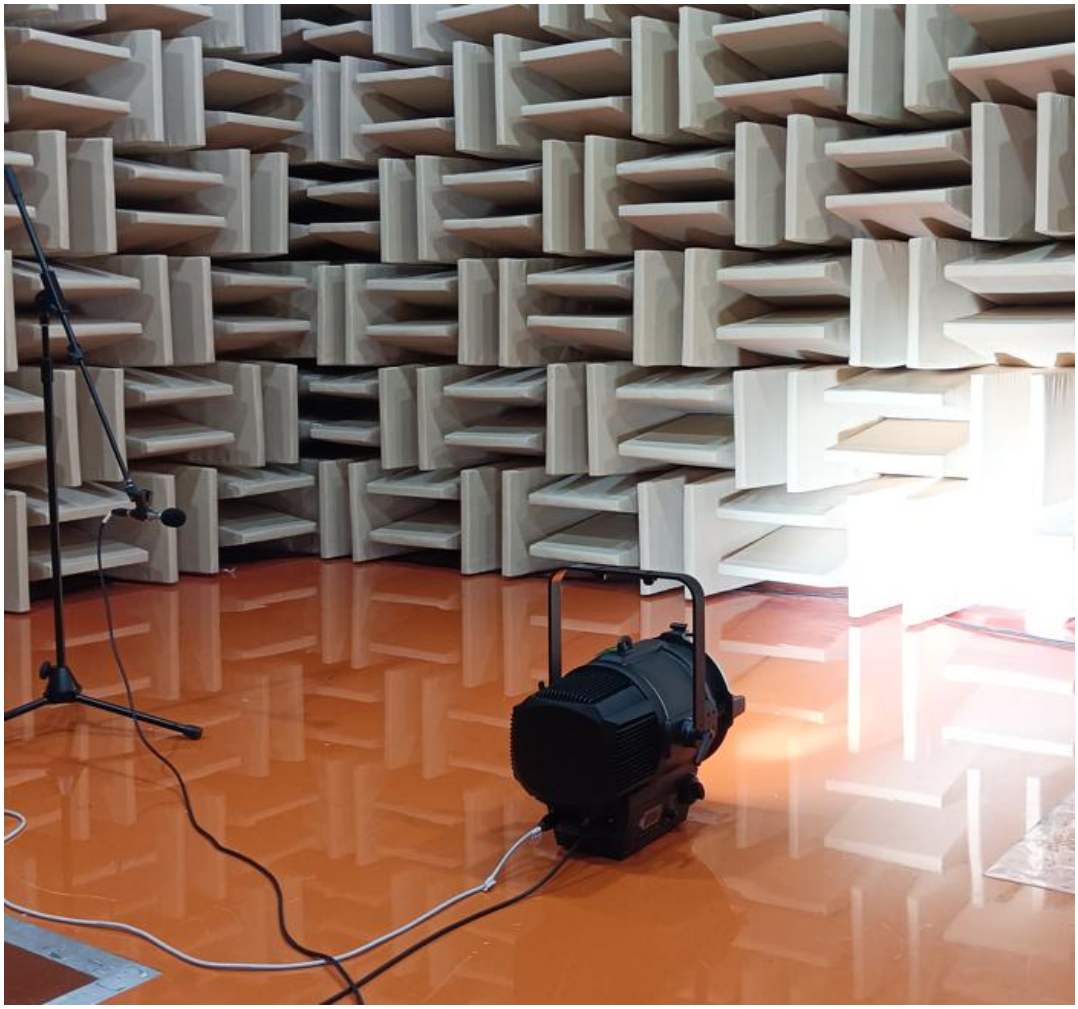


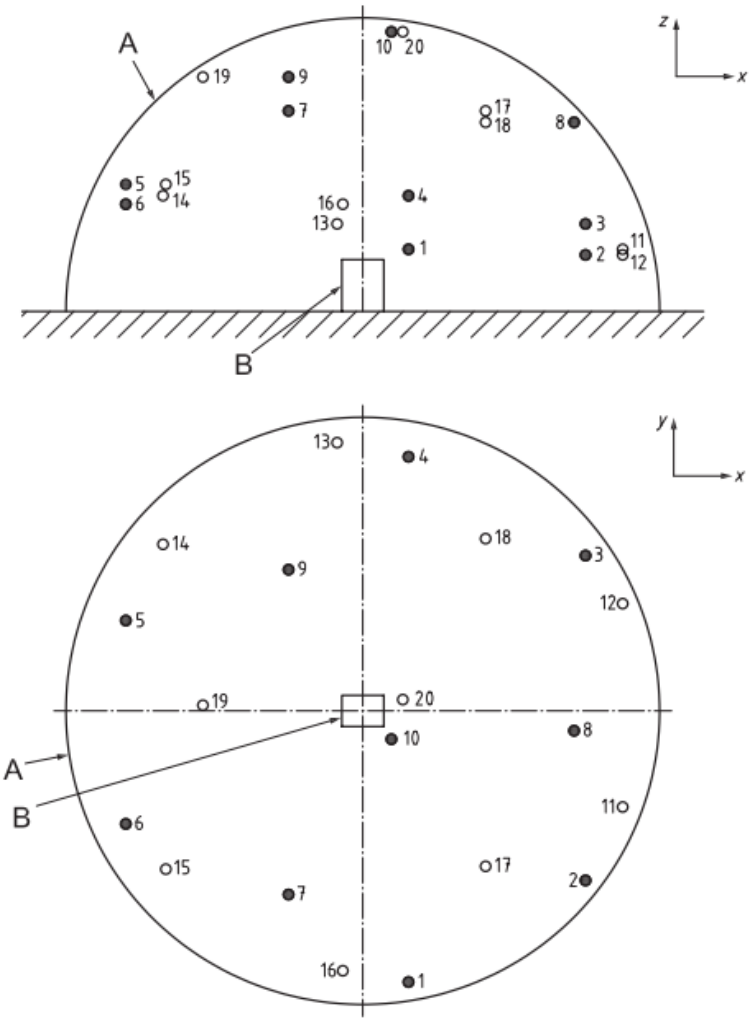
Figure 1: Test setup

The product was allowed a minimum 30 minutes of warm-up time before measurements were performed.

Measurement method

Measurements were carried out using a setup with 1 microphone. The microphone was in turn moved to the measurement positions described below.

Measurement setup at hemispherical measurement model, as figure 2



Key

- ● key microphone positions (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
- ○ additional microphone positions (11, 12, 13, 14, 15, 16, 17, 18, 19, 20)
- A measurement surface
- B reference box

Figure 2: Microphone Positions

Note：

1. R=1.5m.
2. S=2πR², Measurement surface area: 14.14 m².
3. 10 key microphones were taken measurement, as the range of A-weighted sound pressure levels measured at position 1 to 10 does not exceed 10 dB, additional 11 to 20 can be not considered.
4. The dimensions of the reference box (L: W: H): 49.0 cm x 69.0 cm x 56.0 cm.

Results

The ELP Manet 8f was measured in below 2 different Modes:

[Output mode: High Output]

1. Light source ON, 100% white light output, others use default – Fan Mode: Constant Full.
2. Light source ON, 100% white light output, others use default – Fan Mode: Regulated High.
3. Light source ON, 100% white light output, others use default – Fan Mode: Regulated Medium.
4. Light source ON, 100% white light output, others use default – Fan Mode: Regulated Low.

With position as “Figure 1” show.

Measured sound pressure levels results are shown in Table 1.

Distance from fixture	Constant Full [dBA]	Regulated High [dBA]	Regulated Medium [dBA]	Regulated Low [dBA]
LpA at 0m	49.9	34.7	29.1	26.9
LpA at 1m	**41.9**	**26.7**	**21.1**	**18.9**
LpA at 4m	29.9	14.7	9.1	6.9
LpA at 7m	25.0	9.8	4.2	2.0

Table 1: Sound Pressure Levels

The duration of the acoustical measurement for each position is 10s.

Sound Pressure Levels have been converted from Sound Power Levels using the formula: $LpA = (LwA - \text{reduction}_{\text{distance}})$

Reductions used: 8dB(A)@1m, 20dB(A)@4m, 24.9dB(A)@7m.

[Output mode: High Quality]

1. Light source ON, 100% white light output, others use default – Fan Mode: Constant Full.

2. Light source ON, 100% white light output, CCT=Maximum (DMX=255), others use default – Fan Mode: Regulated High.

3. Light source ON, 100% white light output, others use default – Fan Mode: Regulated Medium.

4. Light source ON, 100% white light output, others use default – Fan Mode: Regulated Low.

With position as “Figure 1” show.

Measured sound pressure levels results are shown in Table 1.

Distance from fixture	Constant Full [dBA]	Regulated High [dBA]	Regulated Medium [dBA]	Regulated Low [dBA]
LpA at 0m	49.9	33.4	29.8	27.2
LpA at 1m	**41.9**	**25.4**	**21.8**	**19.2**
LpA at 4m	29.9	13.4	9.8	7.2
LpA at 7m	25.0	8.5	4.9	2.3

Table 2: Sound Pressure Levels

The duration of the acoustical measurement for each position is 10s.

Sound Pressure Levels have been converted from Sound Power Levels using the formula: $LpA = (LwA - reduction_{distance})$

Reductions used: 8dB(A)@1m, 20dB(A)@4m, 24.9dB(A)@7m.

Instrumentation

Test equipment list:

Equipment	Maker	Type
Harman	NTi Audio	NTi XL2 A2A-14709-E0
Harman	NTi Audio	MIC MA220 No.7587
Harman		Semi-anechoic room
Harman		Digital Barometer
Harman		Data logger for atmosphere & environment

Table 3: Instruments Used