

# **SENNHEISER ACPAEBT Antenna Report**

*Testing Date: 2023.04.28* 

Report Date : 2023.05.26



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## **Test Equipment**

Passive Passive								
Antenna Type	PIFA							
Antenna Model	HDT568-R-MAIN-R3							
Antenna Gain	Free Space 2.3dBi							
Manufacturer & address	Sonova Consumer Hearing GmbH Am Labor 1, 30900 Wedemark, Germany.							
Test Equipment	E5071C ENA Vector Network Analyzer – Keysight / Calibration Date: 2022/05/30							
Test chamber	ETS-lindgren_AMS-8500 Antenna Measurement System/Calibration Date: 2022/04/15							
Testers	Oscar Chu							
Test Software	ETS-Lindgren EMQuest							



## **Antenna Efficiency Measurement Setup**



Free Space







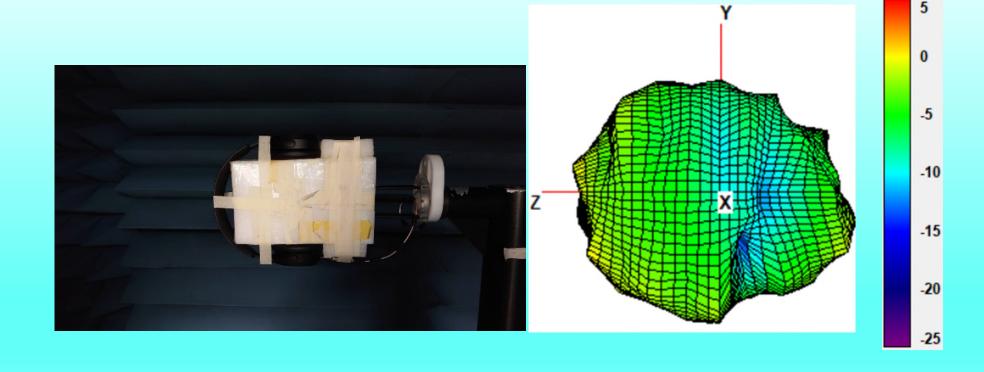
## **Antenna Efficiency**

#### Free Space

Merry HDT568-DVT2.5-FS_2000~3000MHz											
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dB)	-3.39	-3.42	-3.38	-3.33	-3.18	-3.09	-2.95	-2.90	-2.82	-2.80	-2.86
Efficiency (%)	45.78	45.52	45.96	46.46	48.11	49.13	50.70	51.31	52.29	52.51	51.71
Gain (dBi)	2.30	2.05	1.88	1.90	1.97	1.98	2.01	1.90	1.93	2.12	2.18



#### **Radiation Pattern**



#### Measurements description

**Conducted Measurements** 

Conducted measurements was done using Network Analyzer – Keysight, the Return Loss of the Antenna was obtained to ensure the efficiency over the operation frequency.

Antenna Radiation Patten

Radiation Pattern

Measurements was done in the ETS-lindgren anechoic chamber through radiation, the earbud was set to continuous radiation and the AMS-8500 receive the RF power in 360degree angel with rotation of EUT.

Antenna Gain Calculation

The antenna gain was calculated as the difference between the measured Peak EIRP(dBm) and Ant. port input pwr(dBm) in previous page.

# Antenna photo

