1 General Information

1.1 Document Release

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1.2 Table of Content

1.3 Purpose

This document describes the antenna specifications for the Widex Sound Assist.

1.4 Change History

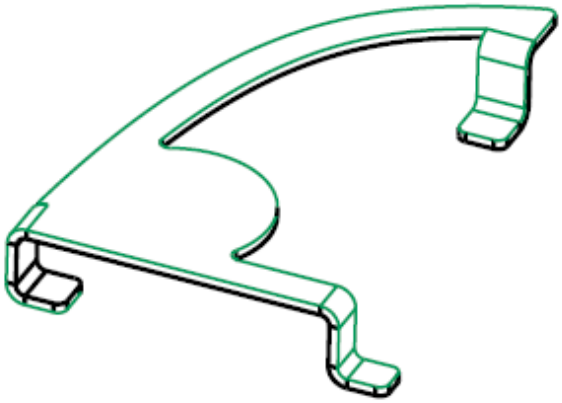
Version	Description
1.0	Initial release of document.

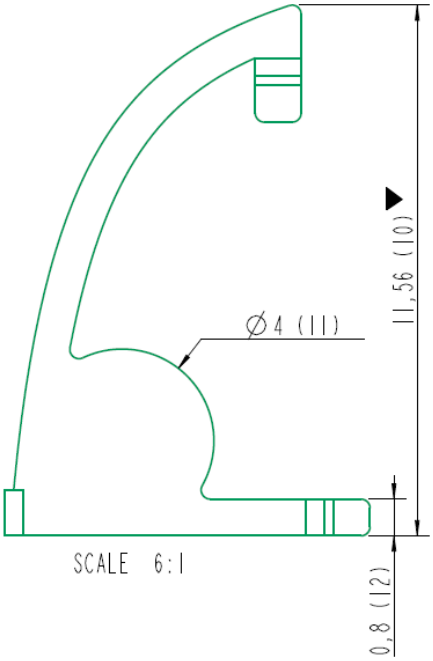
2 Antenna Parameters

Antenna part no is 30-6100-000 and is an internal part manufactured by Widex.

2.1 Mechanical Structure

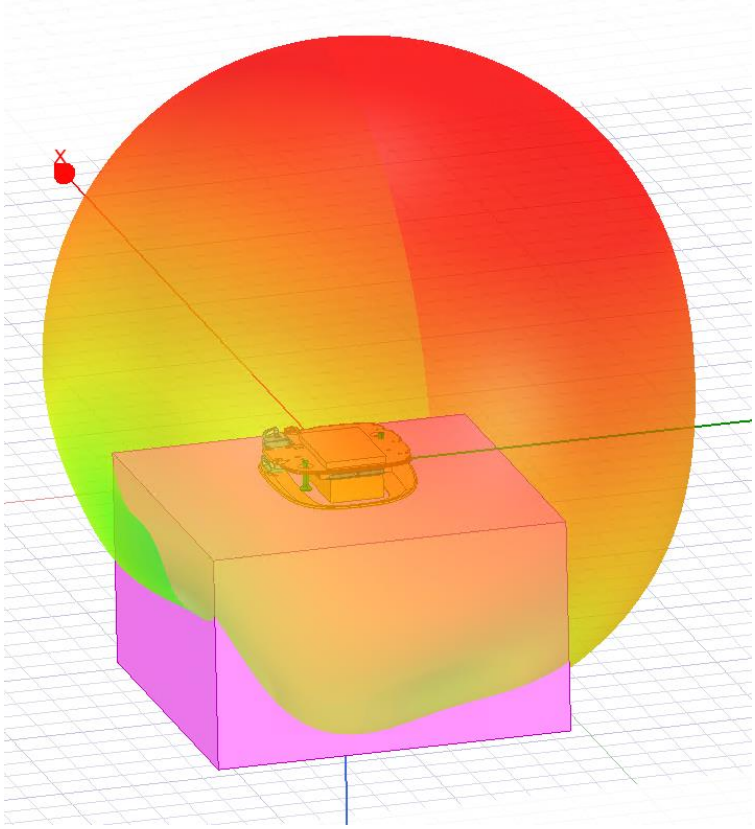
Material is NICKEL SILVER ALLOY C7521 1/2H with a thickness of 0.2mm.



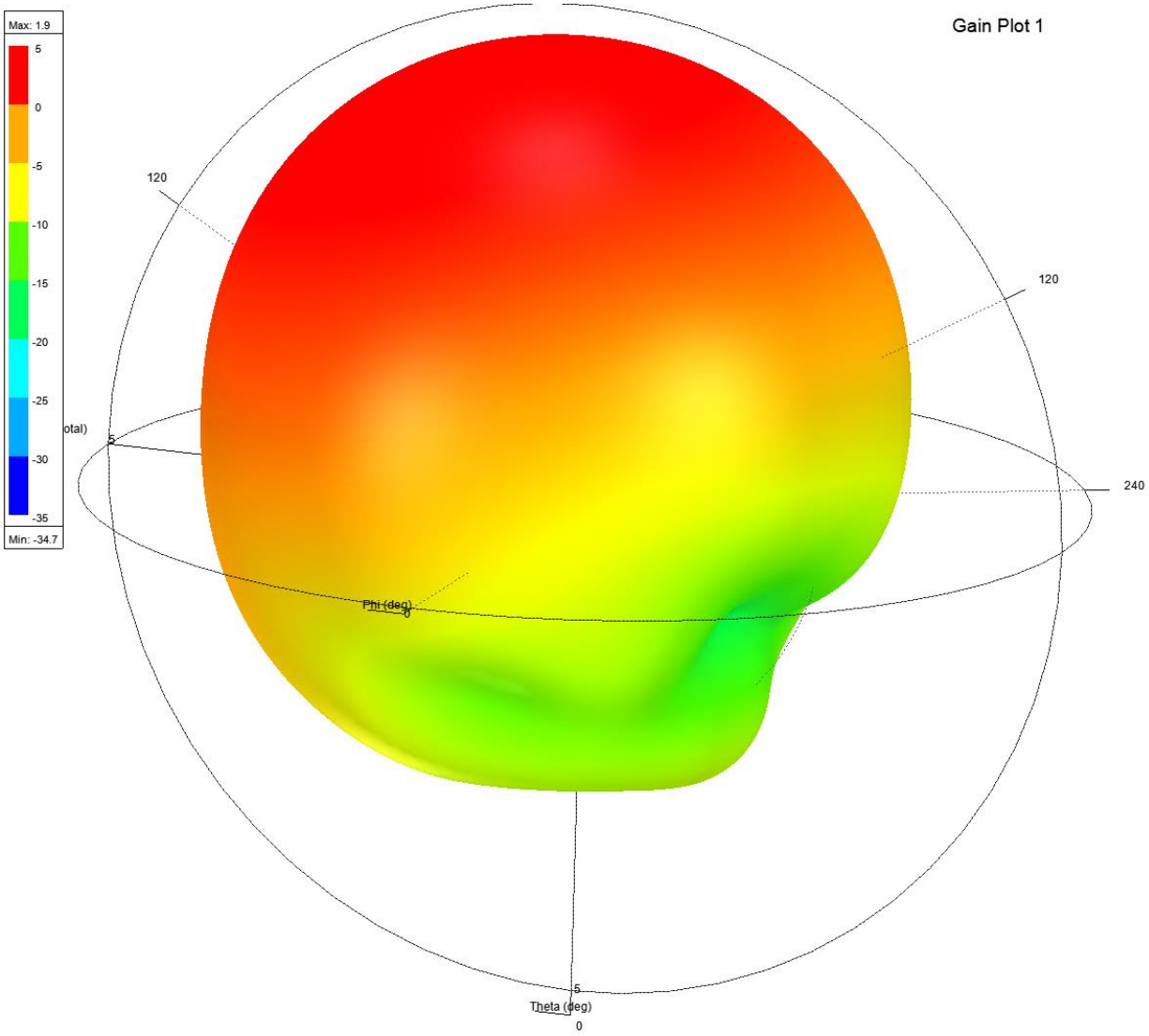


2.2 Simulated Radiation Pattern

Configuration of antenna with added body (purple square):



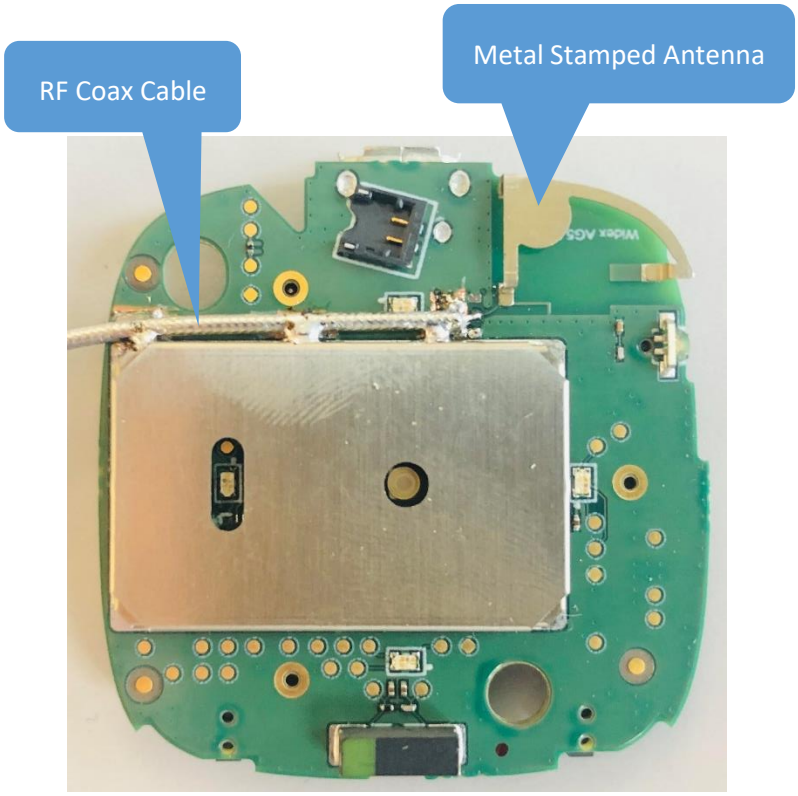
Maximum simulated gain is 1.9dBi.



3 Measurements

3.1 Setup

Picture of antenna and device placed in hand. Coaxial cable added to measure radiation pattern.

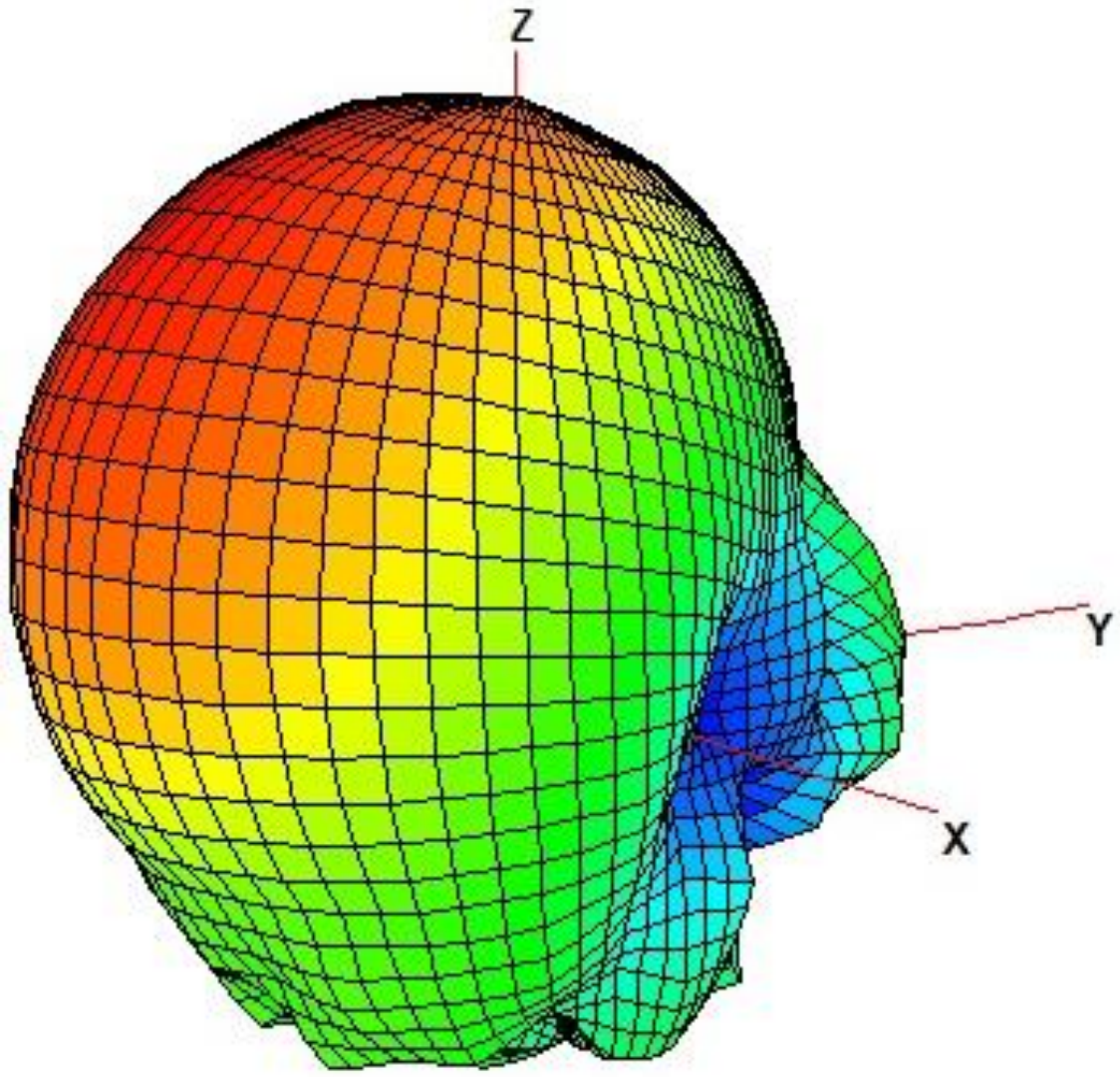


3.2 Efficiency

Metal Stamp Antenna	2402 MHz	2440 MHz	2480 MHz	Average
Measured efficiency	-4.31dB	-4.41dB	-4.66dB	-4.46dB
Gain	1.34dBi	1.1dBi	0.8dBi	

3.3 Directivity Pattern

Maximum directivity is measured to 5.6dBi.



3.4 Gain

Maximum **gain is 1.3dBi at 2.402GHz**, referring to the table above.

Gain = Directivity + Efficiency

Note: The radiation shape is somehow similar to the simulation, but there are differences in gain value due to RF cable and other loss factors.