



UWB Antenna Radiation Pattern Data

Pigtail/U.FL Connector Type Alereon p/n AL50001

Original Date: 09/02/2008

*Prepared By
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Organizations	Signing Authority	Signature	Date
Alereon Engineering	D.M. Dickson		09.02.2008

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Revision History

REVISION HISTORY				
Rev. Level	Description of Changes	Date	Originator	Reviewer
A	Initial Release	09.02.2008	D.M. Dickson	

0. Introduction

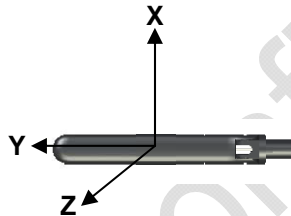
This document presents test data for the AL50001 antenna radiation pattern. Data for three rotation planes is presented: ZY, ZX and XY. The antenna radiation pattern is not influenced by the length of the coaxial pigtail over the full range of lengths allowed by the AL50001 specification, this report presents data for the 200mm maximum pigtail cable length as typical of all coaxial pigtail lengths.

1. Test Condition

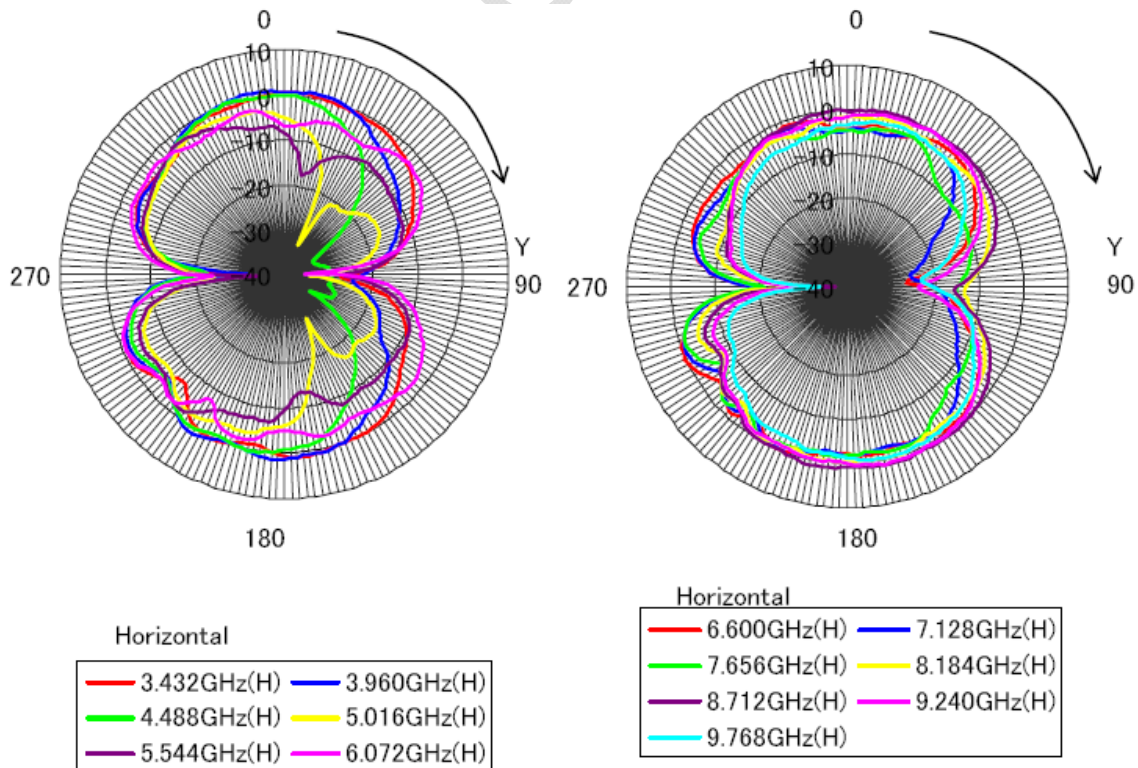
The data presented was taken in a fully-anechoic chamber using a linearly-polarized horn reference antenna. In each rotation plane, the data was taken with normal polarization between the AUT and the Reference.

2. Test Data

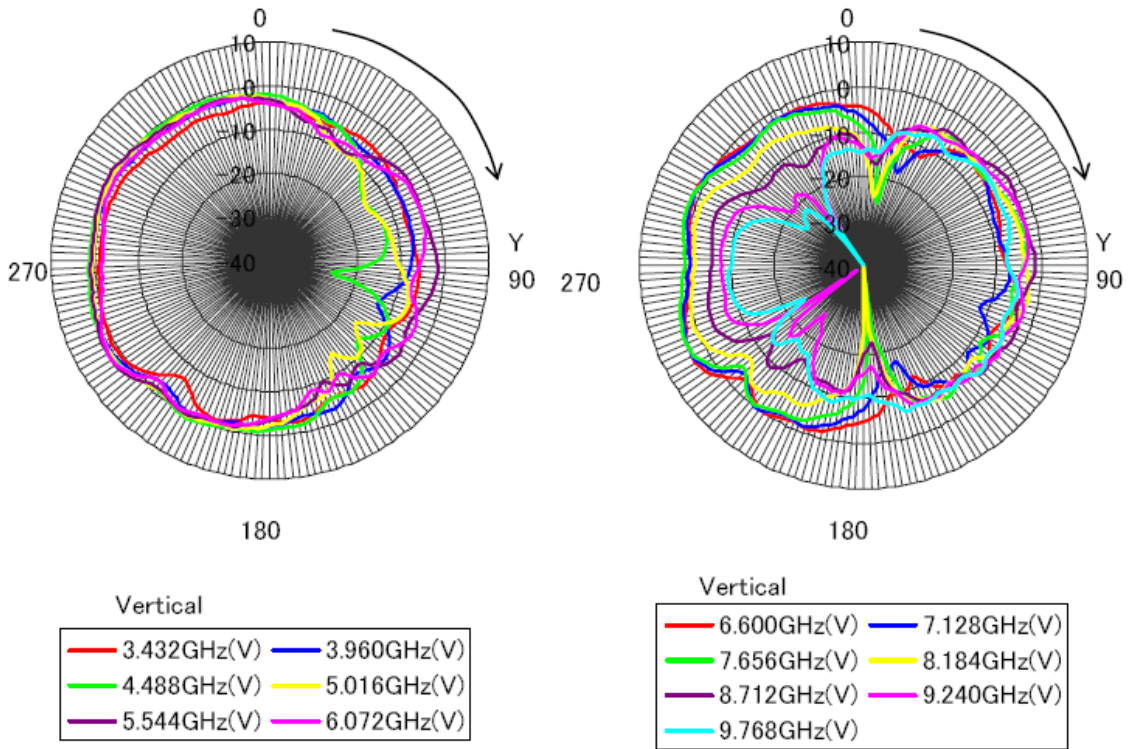
2.1 ZY Rotation Plane



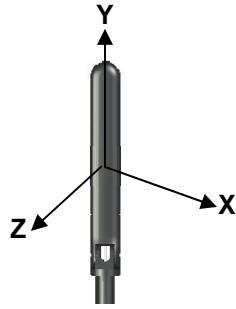
Reference antenna polarization horizontal (normal polarization).



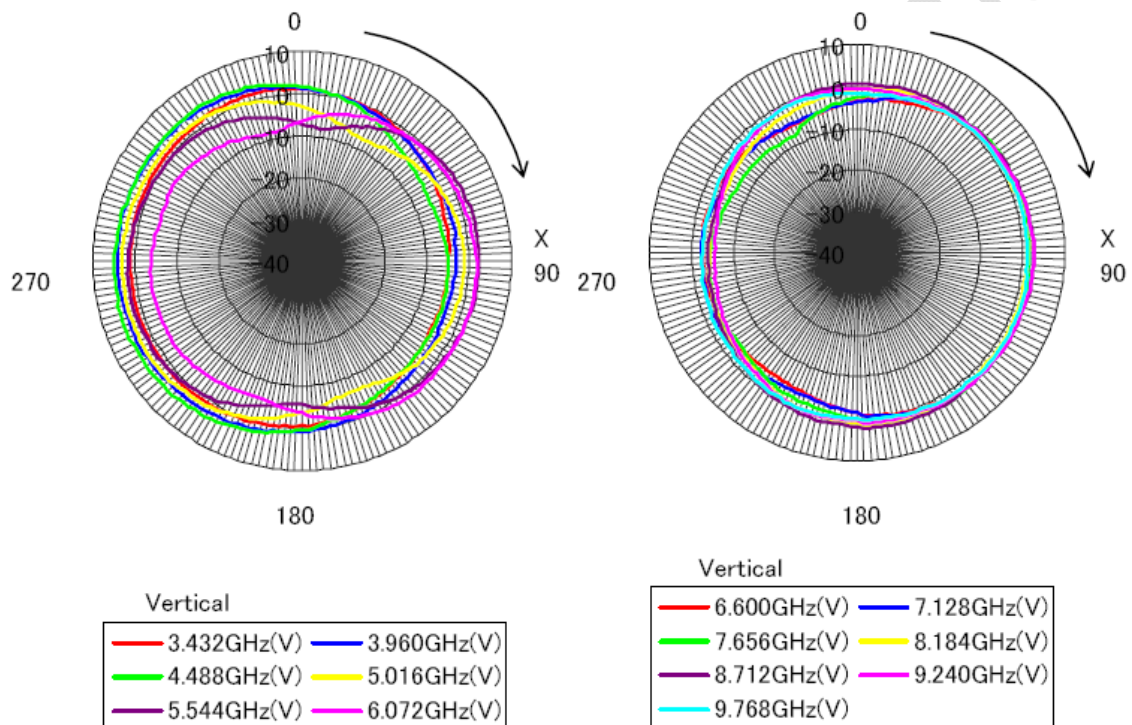
Reference antenna polarization vertical (cross polarization).



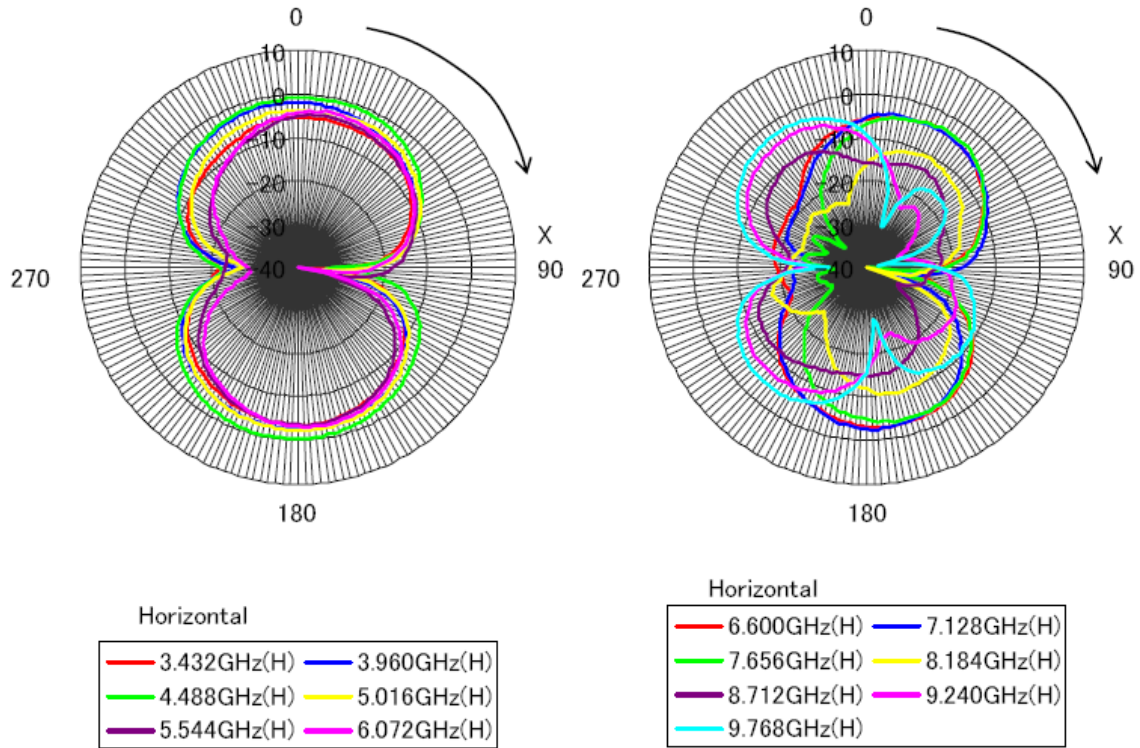
2.2 ZX Rotation Plane



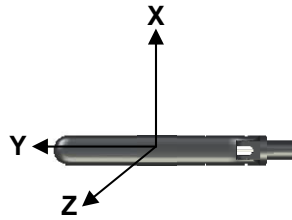
Reference antenna polarization vertical (normal polarization).



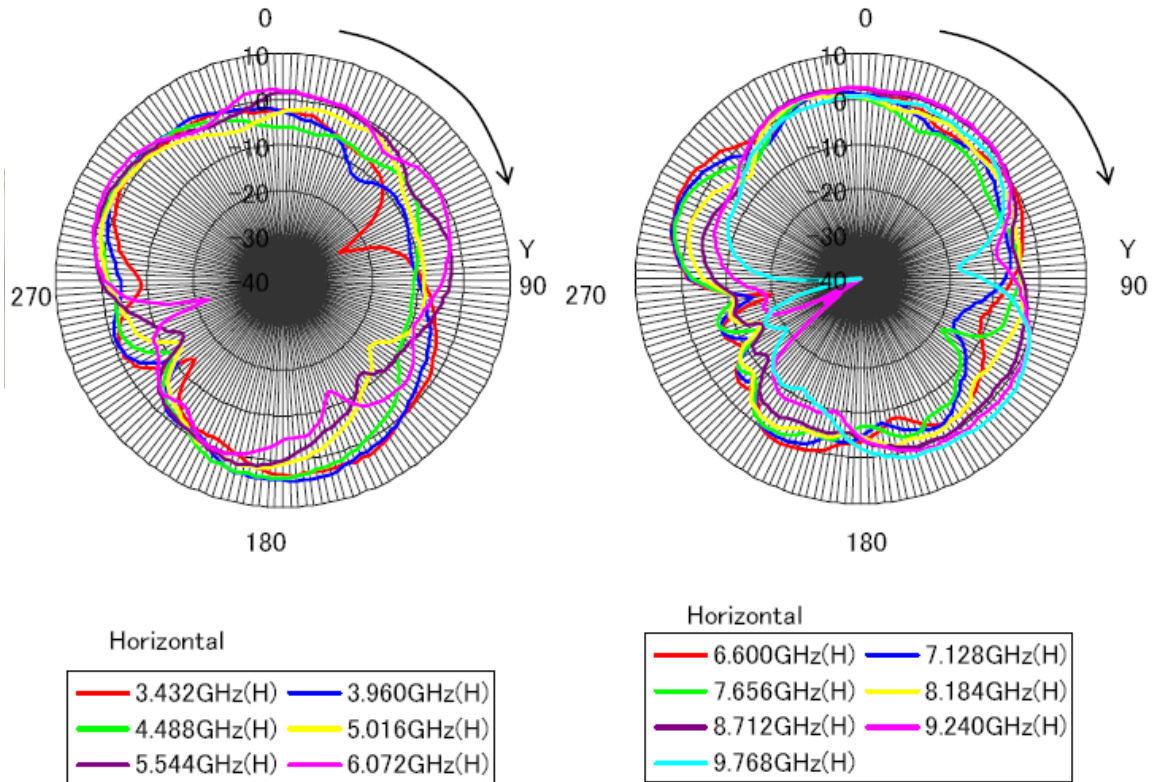
Reference antenna polarization horizontal (cross polarization).



2.3 XY Rotation Plane



Reference antenna polarization horizontal (normal polarization).



Reference antenna polarization vertical (cross polarization).

