



**A111/A121 + lens**

Antenna Datasheet v1.2



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## 1 Revision History

Revision	Comment
v1.0	Released version
V1.1	Updates in table 2.2



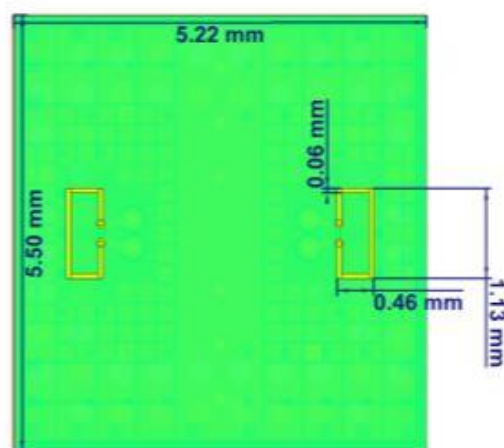
## 2 A111/A121 Antenna specification

The Tx and Rx antennas are integrated in the package (AiP).

Antenna specification	Description
Number of antennas	1 Tx, 1 Rx
Type of antenna	Folded dipole antennas, integrated in package (AiP)
Frequency range	57-64 GHz
Antenna peak gain	6 dBi

*Table 2.1 Antenna specification*

Antenna in Package (AiP) dimensions are shown in figure 2.1.



*Figure 2.1 Antenna in Package (AiP) dimensions*



The A111/A121 radiation pattern, Horizontal plane and Elevation plane, is shown in figure 2.2 and figure 2.3.

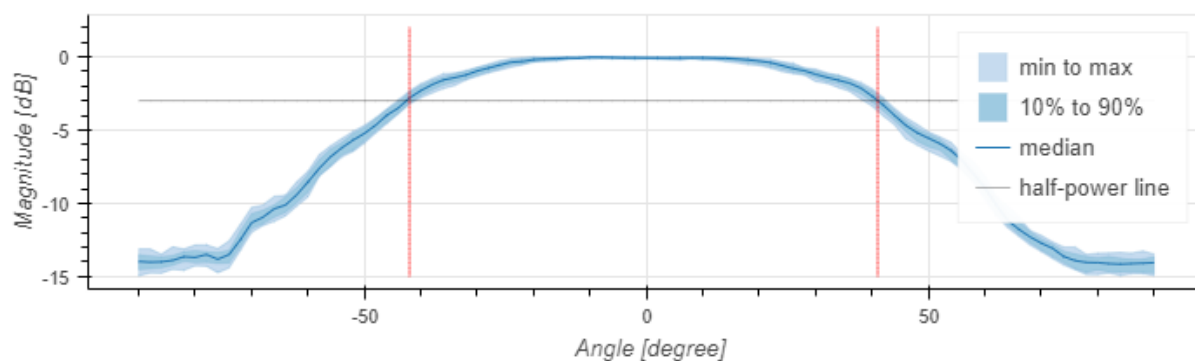


Figure 2.2 Normalized radiation pattern at H-plane

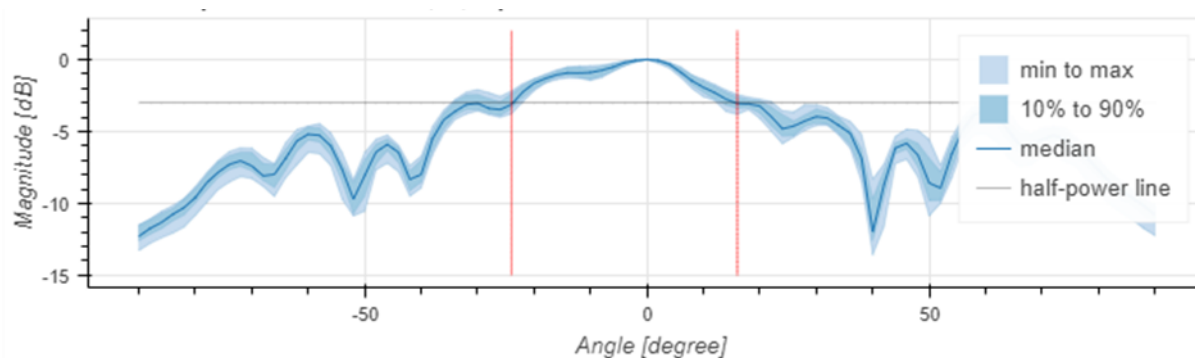


Figure 2.3 Normalized radiation pattern at E-plane



Figure 2.4. HBL lens diameter 36.3 mm and height 9 mm



Figure 2.5. FZP lens diameter 36.3 mm and height 7.8 mm

Table 2.2 Radiation properties of lenses, FS – Free space

XR112 with LH112 holder Distance from PCB to Lens in D1 = 3mm	Max. Gain (dB <sub>FS</sub> )	HPBW-E (degree)	HPBW-H (degree)
	D1*	D1*	D1*
HBL	13	15	20
FZP	12	25	12

\*Other combinations of distance and lens that generated a gain below 13 dB will be possible



Acconeer AB  
Västra Varvsgatan 19  
211 77 Malmö  
Sweden

[www.acconeer.com](http://www.acconeer.com)  
[info@acconeer.com](mailto:info@acconeer.com)  
+46 10 218 92 00