

# CU21007 Preliminary Product Specification Rev.04

For Antenova					
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For Leica			
	Approved by	Signature	Date



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#### 1. PART NUMBER

Antenova Part number		
CU21007		
Leica Part number		
957303		

# 2. GENERAL DATA

Frequency	2.4-2.5GHZ	
Polarisation	Linear	
Operating Temperature	-40 to +85°C	
Impedance	50Ω	
Weight	<2g	
Antenna Type	FPC with UFL connector (I-PEX 20279-001E-03)	
Antenna Dimensions	30.0x6.0x1.35 mm	

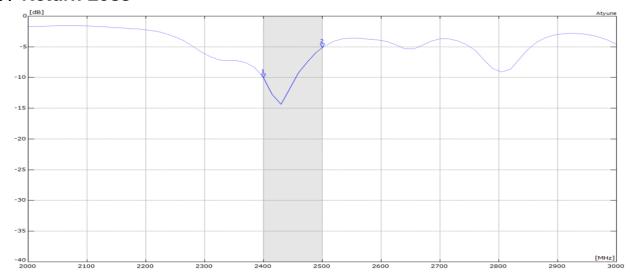
# 3. RF CHARACTERISTICS SUMMARY

	2400-2500MHz
Return Loss -5.1dB	
Efficiency (Min)	20%
Efficiency (Avg)	25%
Gain (Peak)	2.8dBi
Gain (Avg)	-6.0dBi



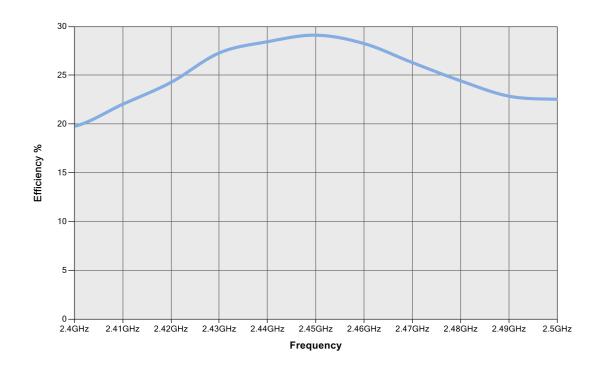
# 4. RF PERFORMANCE

#### 4.1 Return Loss



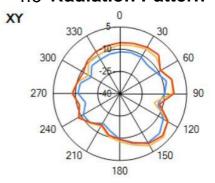
MARKERS: MHz dB CU21007.S1P - S11 \_\_\_\_\_\_ 1: 2400 -10.00 2: 2500 -5.12

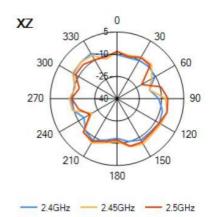
### 4.2 Antenna Efficiency

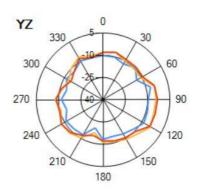




#### 4.3 Radiation Pattern









#### **5. ANTENNA DIMENSIONS**

L	W	Н
Length	Width	Height
30.0 ±0.1	6.0 ±0.1	1.35 nominal



All dimensions in mm



#### 6. ELECTRICAL INTERFACE

The Host PCB should ensure that the transmission lines are designed to have a characteristic impedance of 50  $\Omega\,$ 

- The length of the transmission lines should be kept to a minimum
- Any other parts of the RF system like transceivers, power amplifiers, etc., should also be designed to have an impedance of 50  $\Omega$

Once the material for the PCB has been chosen (PCB thickness and dielectric constant), a coplanar transmission line can easily be designed using any of the commercial software packages for transmission line design. For the chosen PCB thickness, copper thickness and substrate dielectric constant, the program will calculate the appropriate transmission line width and gaps on either side of the track so the characteristic impedance of the coplanar transmission line is  $50\,\Omega$ 

#### 7. HAZARDOUS MATERIAL REGULATION CONFORMANCE

Antenova's products conform to REACH and RoHS legislation worldwide. A certificate of conformance is available from Antenova's website.

#### 8. STATEMENT ON INTELLECTUAL PROPERTY & DISCLAIMER

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#### **Disclaimer**

Antenova accepts no responsibility for injury to the individual resulting from the use or misuse of this product.

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