

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 www.aavamobile.com	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision: D</b>
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

# ***INARI-D-10-WIG-1***

## **WLAN Antenna specification**

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 <small>www.aavamobile.com</small>	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

**1. INARI-D-10-WIG-1 WLAN ANTENNA ..... 3**

1. 1. ANTENNA DIMENSIONS AND TYPE .....3

1. 2. ANTENNA LOCATIONS .....3

1. 3. PEAK GAIN.....4

1. 4. ANTENNA PATTERNS (MIDDLE CH, THETA/PHI).....5

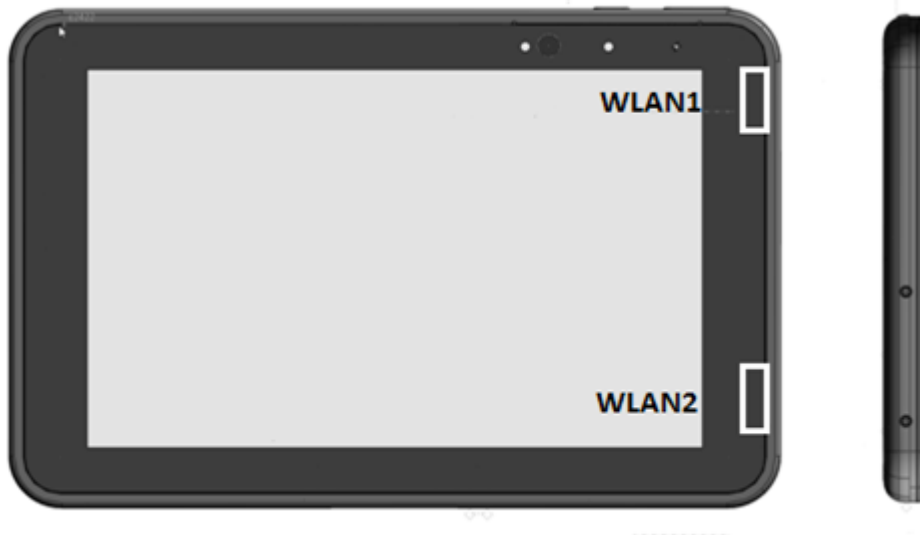
<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 www.aavamobile.com	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

## 1. INARI-D-10-WIG-1 WLAN ANTENNA

### 1. 1. Antenna Dimensions and Type

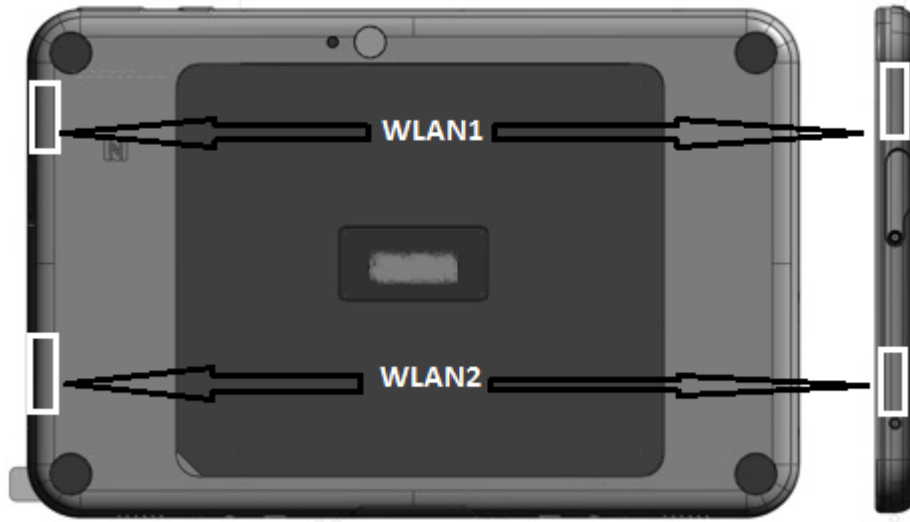
- WLAN: W x L x H (10 x 3.2 x 1.5 mm) Ceramic Chip Antennas (PulseLarsen Part Number: W3006) implementing PIFA antennas. Chip antennas are operating like PIFA antennas because chip antennas are grounded via inductor to ground

### 1. 2. Antenna Locations



**Figure 1. WLAN Antenna locations (front)**

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 <a href="http://www.aavamobile.com">www.aavamobile.com</a>	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>



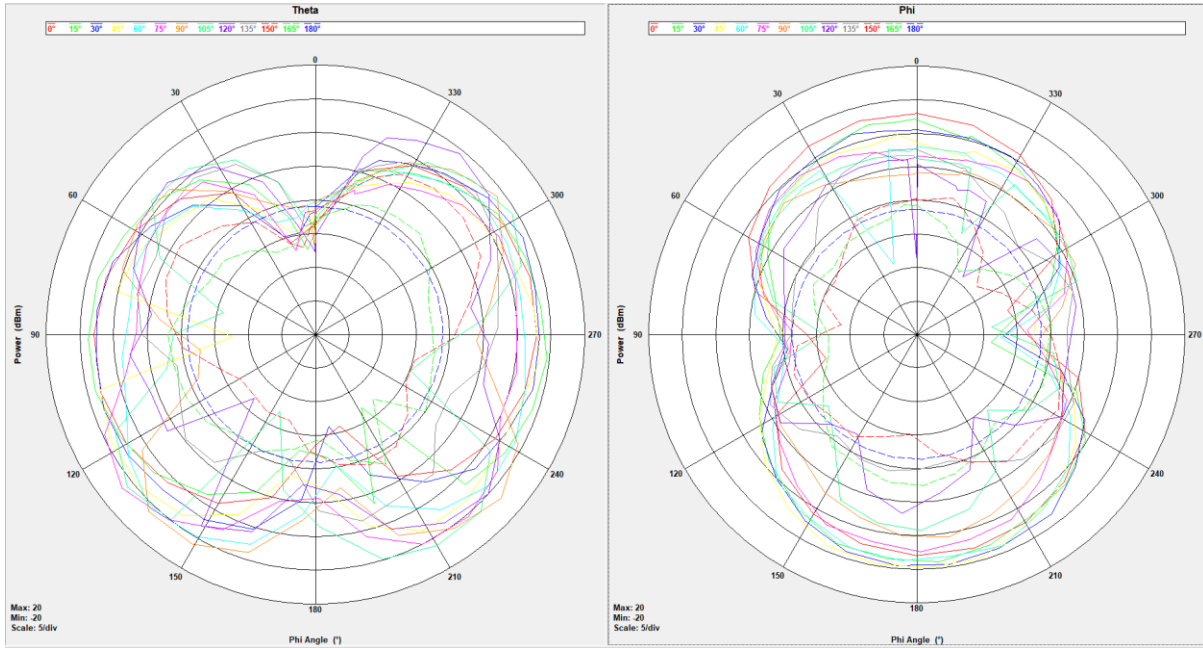
**Figure 2. WLAN Antenna locations (back)**

### 1. 3. Peak Gain

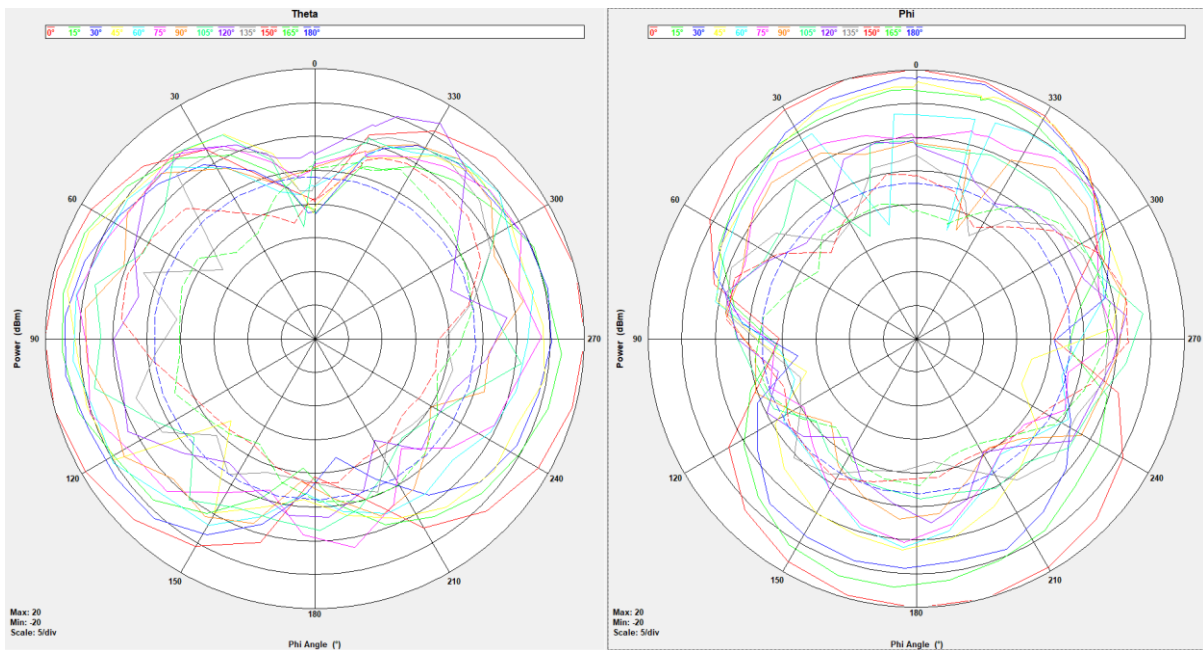
<b>WLAN1</b>	2.4GHz			5GHz			6GHz				
Frequency/MHz	2412	2442	2472	5180	5500	5805	6175	6475	6695	6995	7125
Channel	1	7	13	36	100	161	45	105	149	209	233
Gain (dBi)	0.6	1.1	1.2	2.9	3.0	3.0	2.4	0.9	2.9	3.0	3.0
<b>WLAN2</b>	2.4GHz			5GHz			6GHz				
Frequency/MHz	2412	2442	2472	5180	5500	5805	6175	6475	6695	6995	7125
Channel	1	7	13	36	100	161	45	105	149	209	233
Gain (dBi)	-0.6	-0.7	-0.8	2.8	3.0	2.9	1.8	0.4	2.7	2.8	2.8

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 www.aavamobile.com	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

### 1. 4. Antenna Patterns (Middle Ch, Theta/Phi)

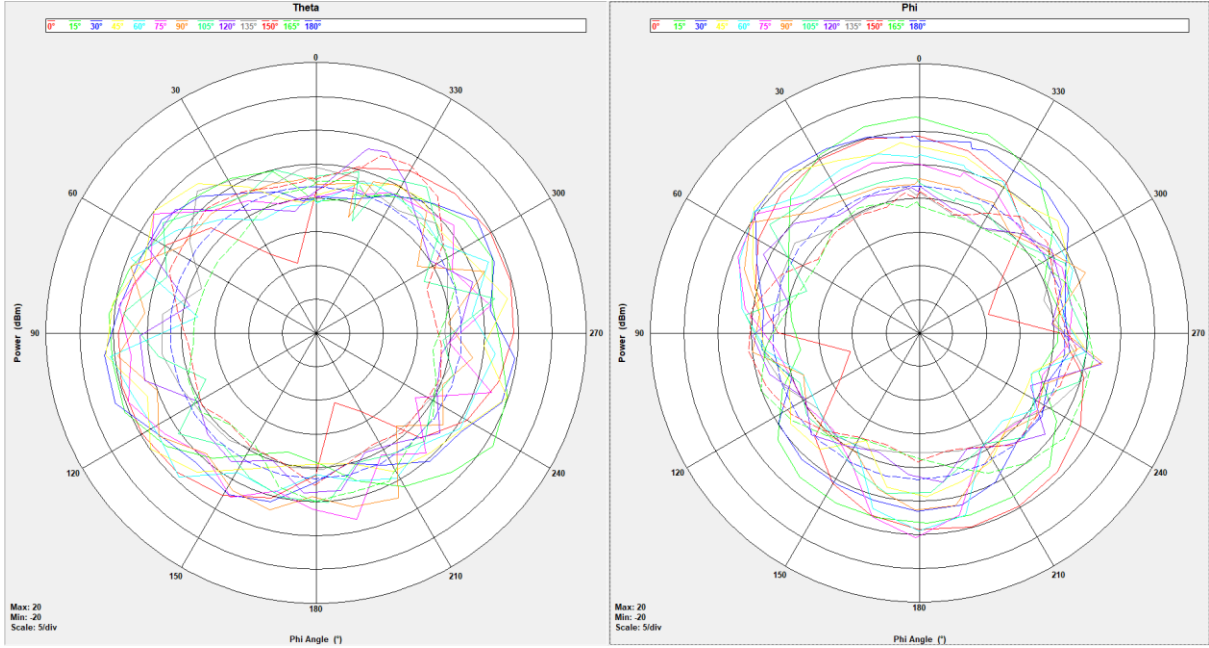


**Figure 3. WLAN1, 2.4GHz**

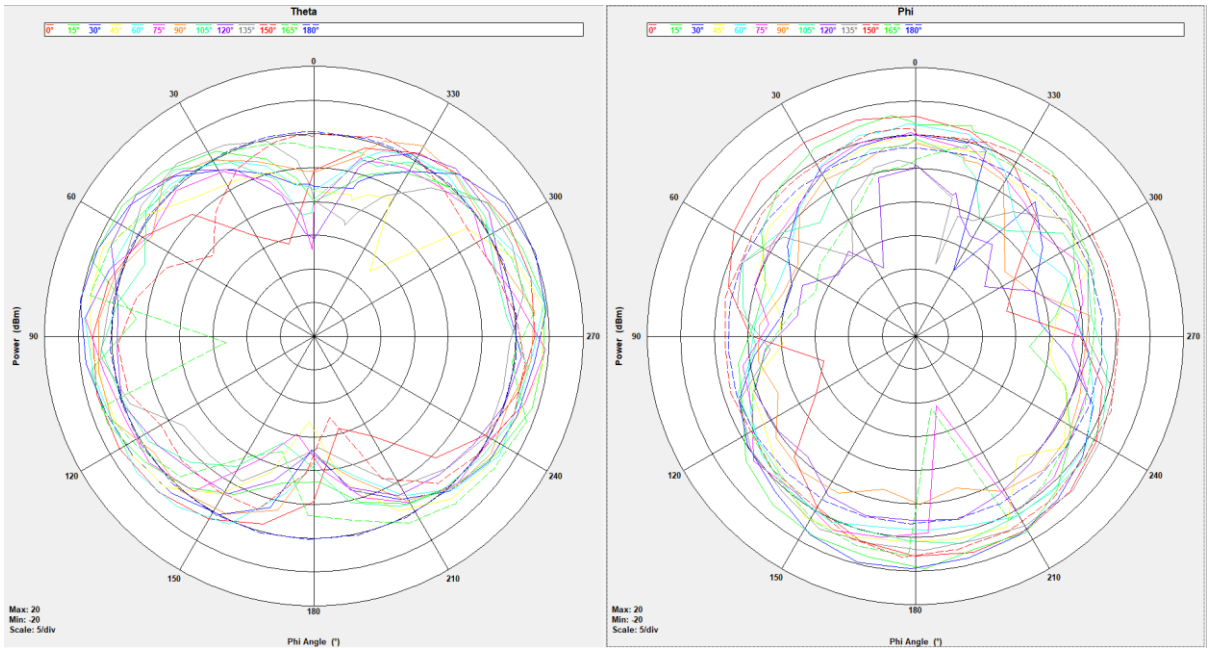


**Figure 4. WLAN1, 5GHz**

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 <a href="http://www.aavamobile.com">www.aavamobile.com</a>	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

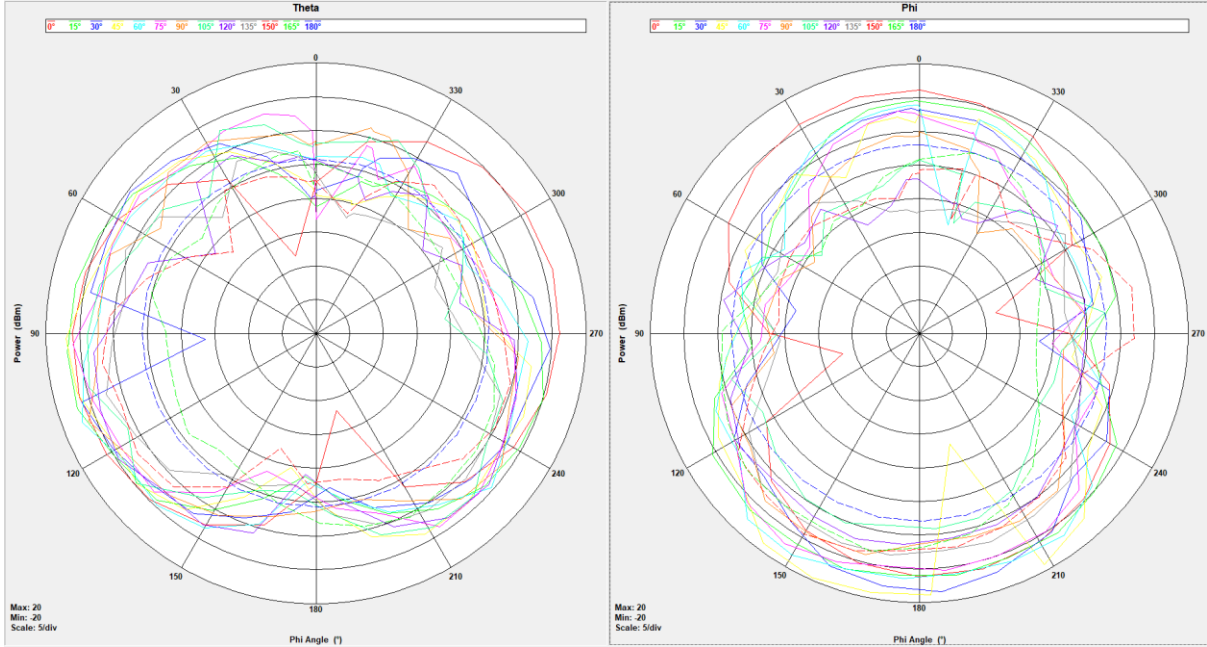


**Figure 5. WLAN1, 6GHz**

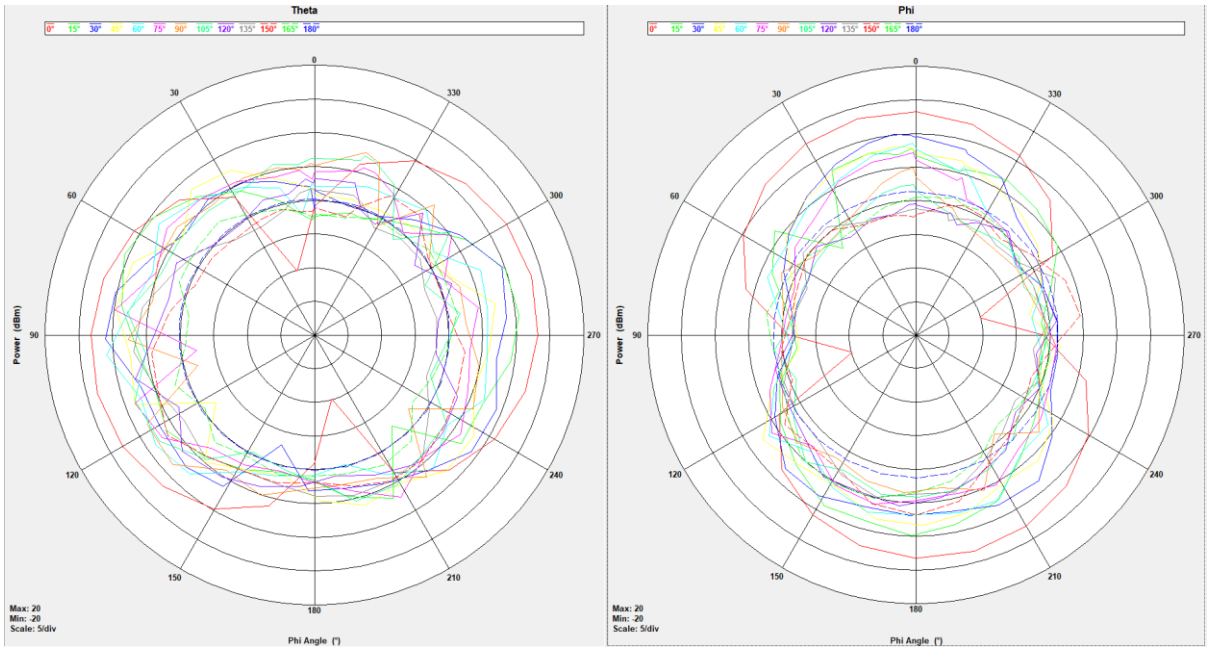


**Figure 6. WLAN2, 2.4GHz**

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 www.aavamobile.com	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>



**Figure 7. WLAN2, 5GHz**



**Figure 8. WLAN2, 6GHz**

<b>Aava Mobile Ltd.</b> <b>CONFIDENTIAL</b>	 <small>www.aavamobile.com</small>	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

## Change History

Version (Rev X)	Date (YYYY-MM-DD)	Author	Change Reason or CR No.	Modify Contents and Location
Rev A	2023-06-30	TKurj	First release	
Rev B	2023-11-13	TKurj	6Ghz update	
Rev C	2023-12-08	TKurj	Focusing antennas type	
Rev D	2023-12-15	TKurj	6Ghz update	



<b>Aava Mobile Ltd.</b>  <b>CONFIDENTIAL</b>	 <small>www.aavamobile.com</small>	<b>Document No:</b>
<b>Title:</b> INARI-D-10-WIG-1 WLAN antenna specification		<b>Revision:</b> D
<b>Prepared by:</b> TKurj		<b>Issue Date:</b> <2023-06-30>

**Reviewed By**

Role	Name
GPM	
R&D Manager	
Chief Engineer	

**Approved By**

Role	Name	Signature	Date (YYYY-MM-DD)
GPM			