Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

Antenna Gain Measurement Report

Test Report Number	STA-22112961-L-ANT
Product Name	Dual band WiFi Hinged Rotatable Antenna
Model (s)	GW.05.0153
Date of Receipt	12/05/2022
Date of Test	12/06/2022- 12/14/2022
Report Issue Date	12/22/2022

Issued by:

Vista Compliance Laboratories
1261 Puerta Del Sol, San Clemente, CA 92673 USA
www.vista-compliance.com

Devin Tai (Test Engineer)

David Zhang (Technical Manager)

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

REVISION HISTORY

Report Number	Version	Description	Issued Date
STA-22112961-L-ANT	01	Initial report	12/22/2022

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

TABLE OF CONTENTS

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

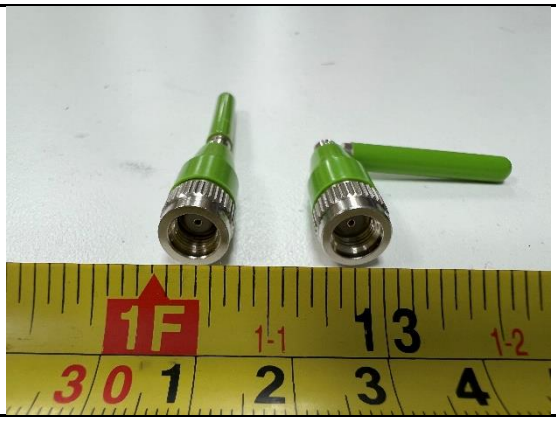
Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

1. General Information

Antenna Photo

Antenna Side View [With Ruler]



Antenna Bottom View [With Ruler]

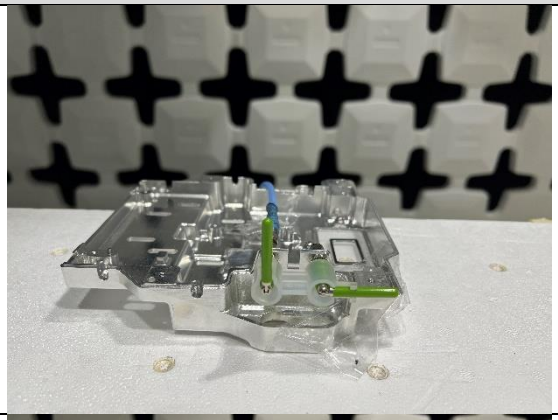
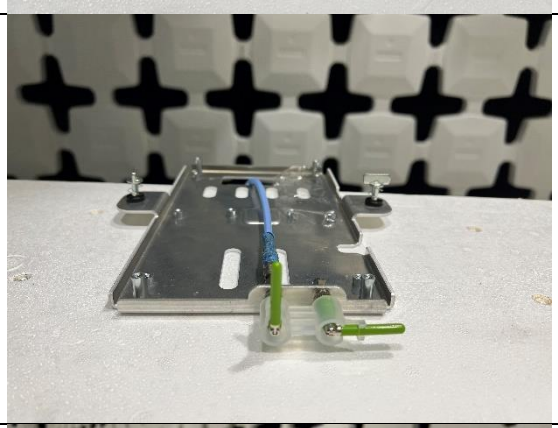
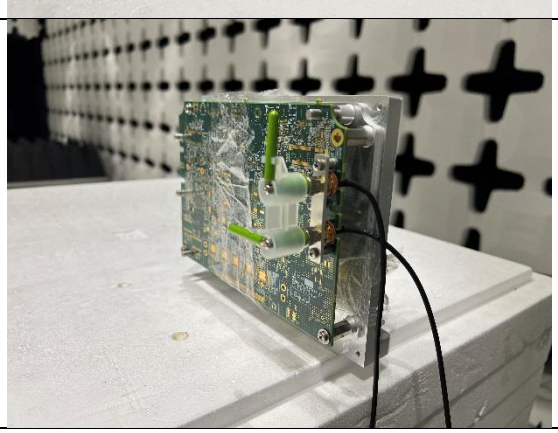
Antenna Information

Manufacturer	Taoglas
Antenna Type	Monopole antenna
Antenna Name	Dual band WiFi Hinged Rotatable Antenna
Antenna Part Number	GW.05.0153
Antenna Frequency Range	2400 - 2483 MHz 5150 - 5250 MHz 5250 - 5350 MHz 5470 - 5725 MHz 5725 - 5850 MHz 5850 - 5895 MHz 5925 - 6425 MHz 6425 - 6525 MHz 6525 - 6875 MHz 6875 - 7125 MHz
Antenna Connector	RP-SMA (M) Connector
Antenna Length	62.3mm ± 1.5mm
Antenna Diameter	10mm
Weight	6g
Radiation	Omni-directional
Polarization	Linear
Impedance	50 Ω
Input Power	10W

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

2. Antenna Configuration/Orientation

Type	Description	Photo
Titan Taoglas antennas	The Titan Taoglas antennas are mounted on a metal plane which will be oriented in the end product as shown at the right. Two identical antennas are installed; both are with bent position 90 deg but in different orientation.	
Xanthus Taoglas antennas	The Xanthus Taoglas antennas are mounted on a metal plane which will be oriented in the end product as shown at the right. Two identical antennas are installed; both are with bent position 90 deg but in different orientation.	
Proteus Taoglas antennas	The Proteus Taoglas antennas are mounted on a metal plane which will be oriented in the end product as shown at the right. Two identical antennas are installed; both are with bent position 90 deg but in different orientation.	

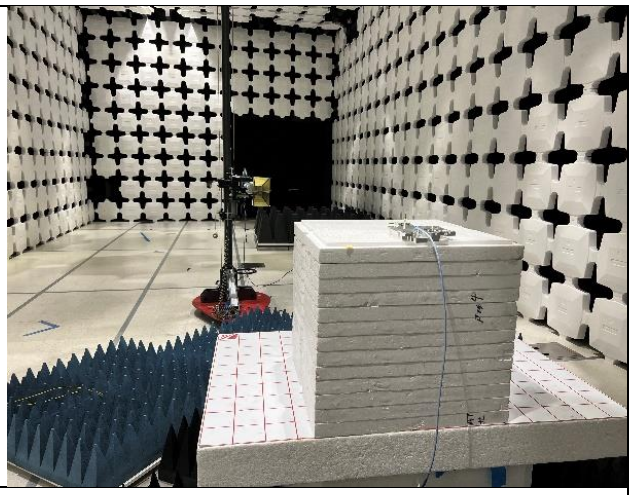
Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

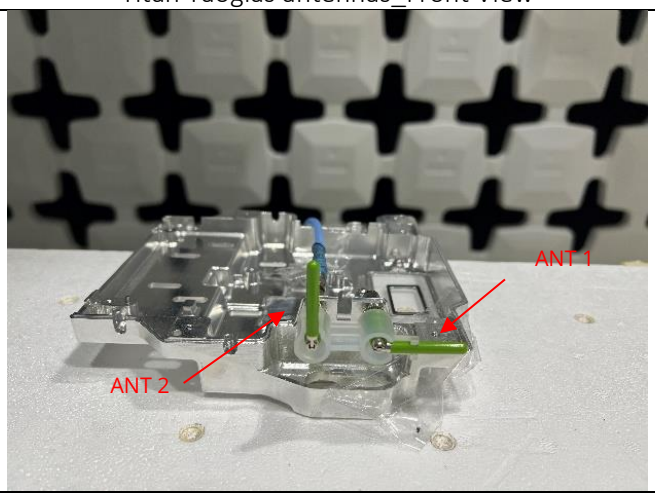
3. Test Setup Photos

Test setup Photos (Titan Taoglas antennas)

Titan Taoglas antennas_Front View



Titan Taoglas antennas_Rear View



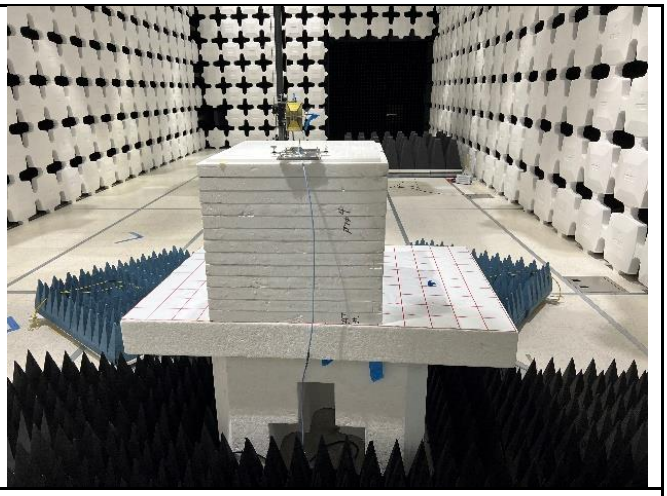
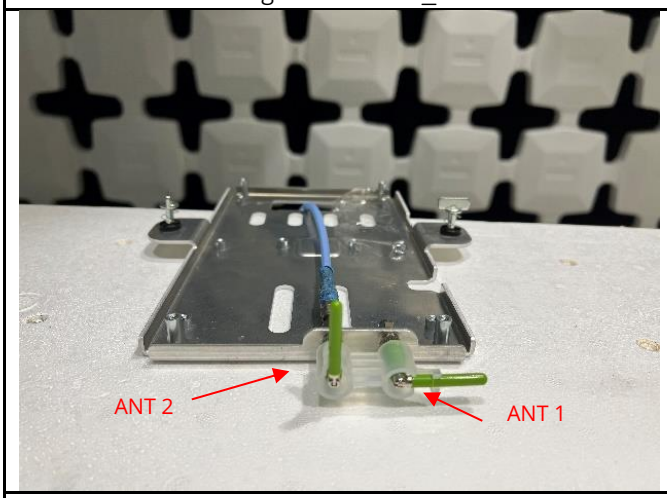
Titan Taoglas antennas_Close-up View

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

Test setup Photos (Xanthus Taoglas antennas)

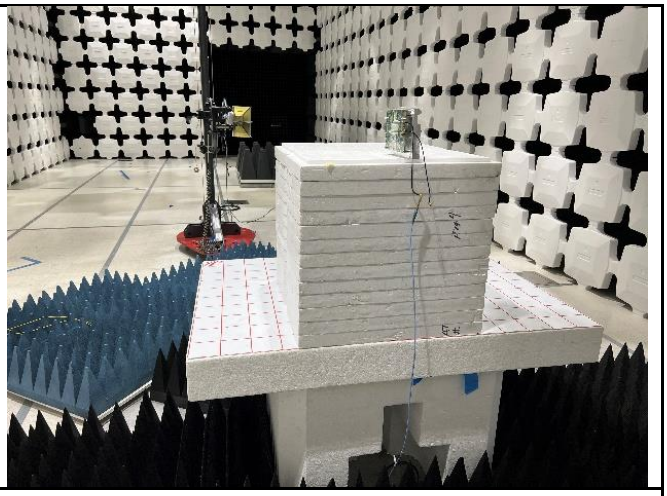
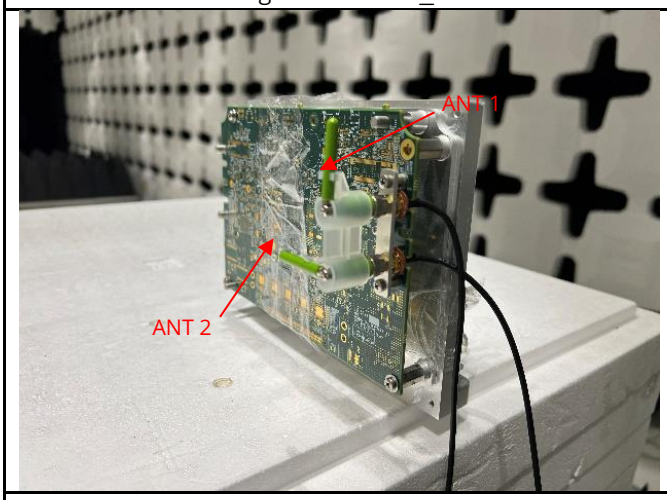
<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Xanthus Taoglas antennas_Front View</td><td>Xanthus Taoglas antennas_Rear View</td></tr>
<tr><td> 
</td><td></td></tr>
<tr><td>Xanthus Taoglas antennas_Close-up View</td><td></td></tr>
</table>

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

Test setup Photos (Proteus Taoglas antennas)

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Proteus Taoglas antennas_Front View</td><td>Proteus Taoglas antennas_Rear View</td></tr>
<tr><td> 
</td><td></td></tr>
<tr><td>Proteus Taoglas antennas_Close-up View</td><td></td></tr>
</table>

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

4. Antenna Gain Measurement Result

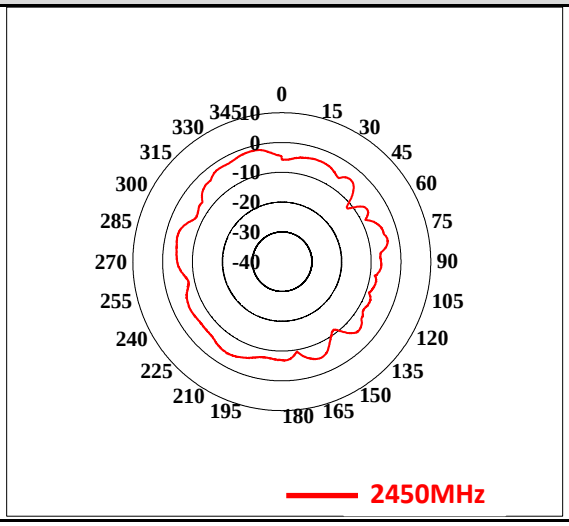
Configuration	Test condition	Orientation	Frequency (MHz)	Peak Gain(dBi)	
				Antenna 1	Antenna 2
1	Mounted on metal plan (Titan)	See "Antenna Configuration/Orientation"	2450	-1.637	**-1.461**
			5200	0.553	-0.243
			5300	0.22	0.242
			5600	1.509	0.593
			5800	**1.744**	1.604
			5870	-0.613	-1.088
			6175	1.084	0.505
			6475	3.166	1.422
			6700	2.39	1.587
			7000	**5.058**	2.887
2	Mounted on metal plan (Xanthus)	See "Antenna Configuration/Orientation"	2450	**3.686**	1.857
			5200	**2.38**	1.805
			5300	1.239	2.191
			5600	1.049	0.547
			5800	1.648	0.713
			5870	0.201	-0.452
			6175	1.548	0.756
			6475	1.65	1.947
			6700	0.91	1.543
			7000	**4.374**	3.874
3	Mounted on metal plan (Proteus)	See "Antenna Configuration/Orientation"	2450	-2.457	**-0.753**
			5200	2.208	2.46
			5300	2.482	1.826
			5600	3.909	**4.267**
			5800	2.226	2.44
			5870	2.827	4.043
			6175	2.977	4.412
			6475	2.841	2.88
			6700	2.92	3.713
			7000	**5.326**	4.339

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

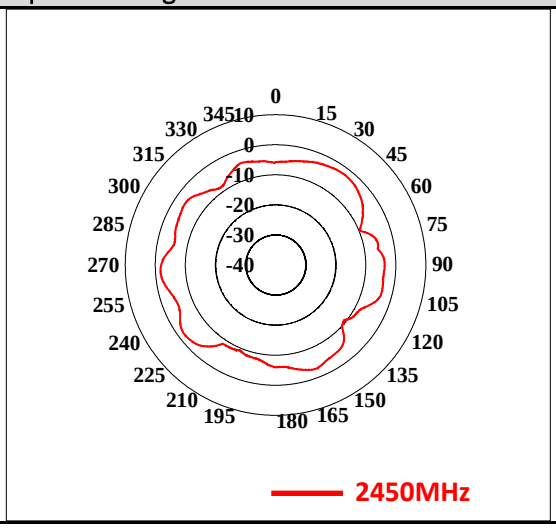
Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

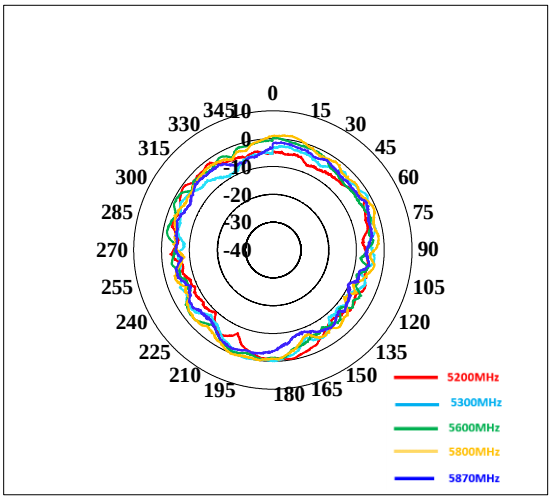
Antenna Radiation Pattern-#1 Test setup-Titan Taoglas antennas



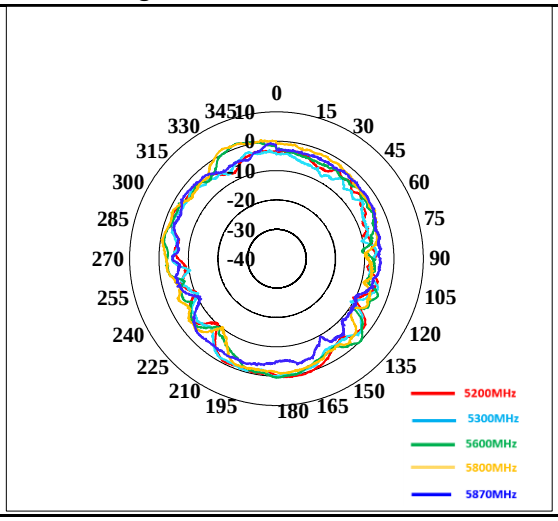
Titan Taoglas antennas-ANT2-2.4GHz Band



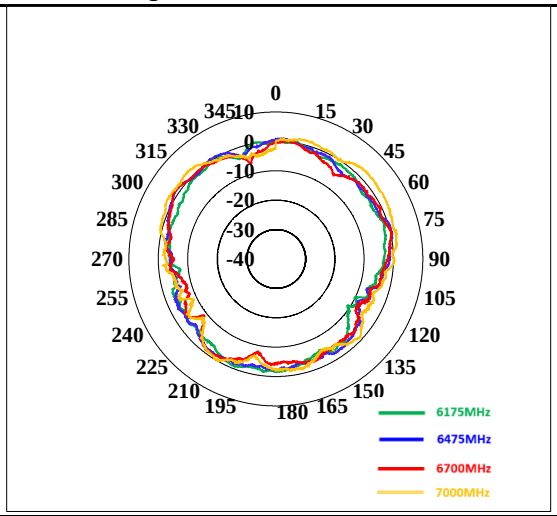
Titan Taoglas antennas-ANT1-2.4GHz Band



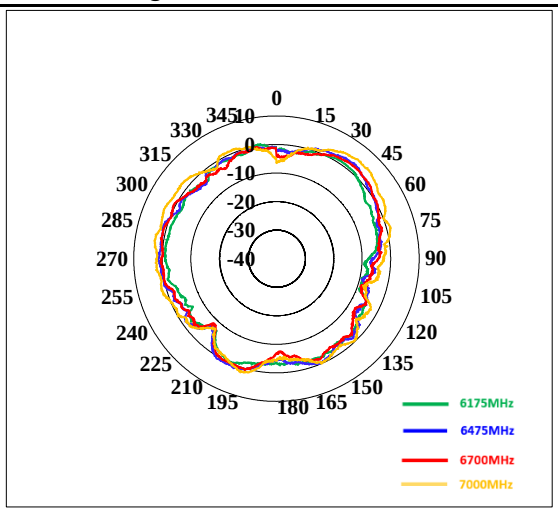
Titan Taoglas antennas-ANT2-5GHz Band



Titan Taoglas antennas-ANT1-5GHz Band



Titan Taoglas antennas-ANT2-6GHz Band



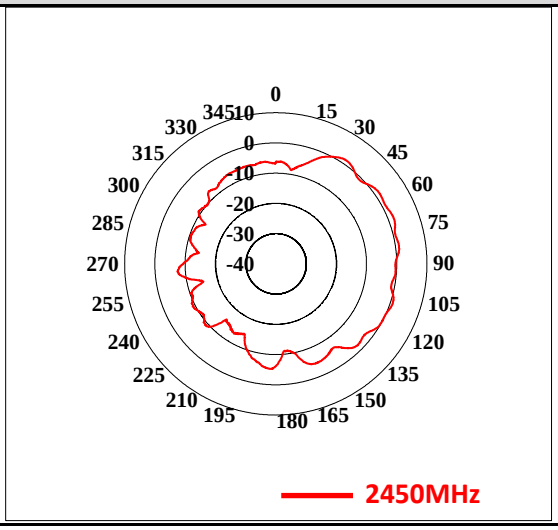
Titan Taoglas antennas-ANT1-6GHz Band

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

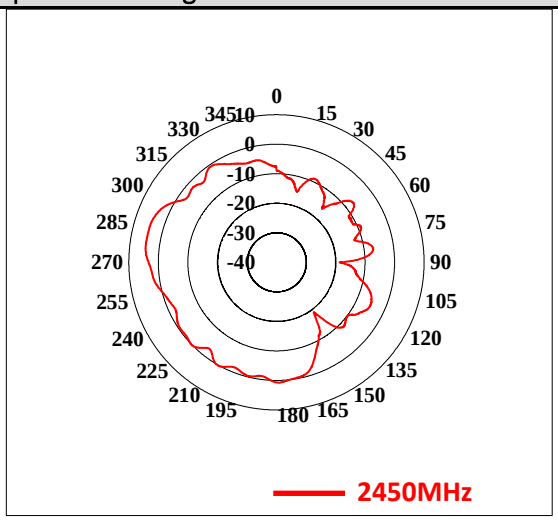
Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

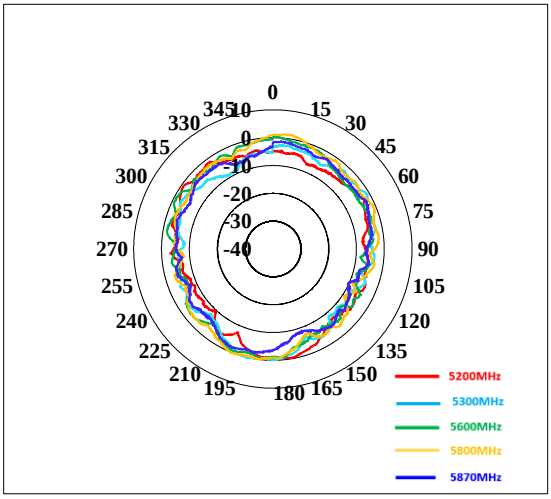
Antenna Radiation Pattern-#2 Test setup-Xanthus Taoglas antennas



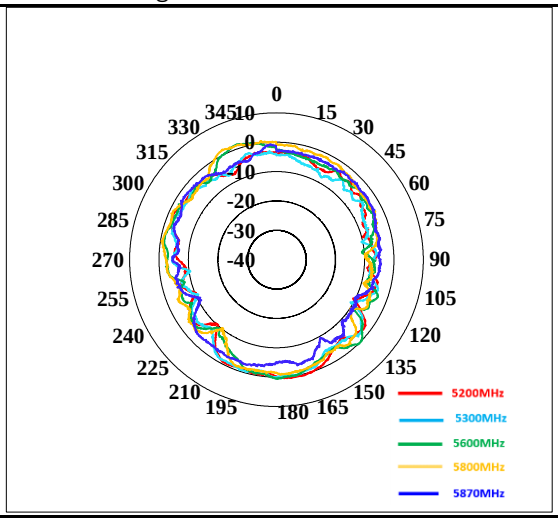
Xanthus Taoglas antennas-ANT2-2.4GHz Band



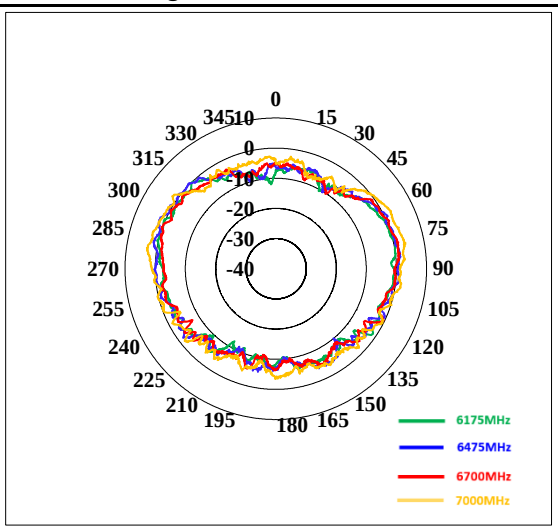
Xanthus Taoglas antennas-ANT1-2.4GHz Band



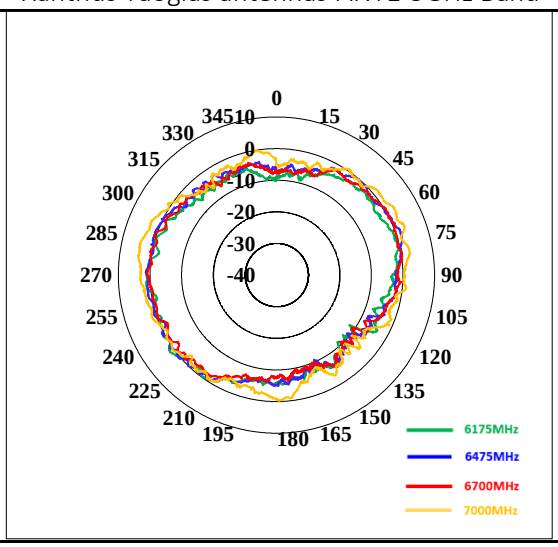
Xanthus Taoglas antennas-ANT2-5GHz Band



Xanthus Taoglas antennas-ANT1-5GHz Band



Xanthus Taoglas antennas-ANT2-6GHz Band



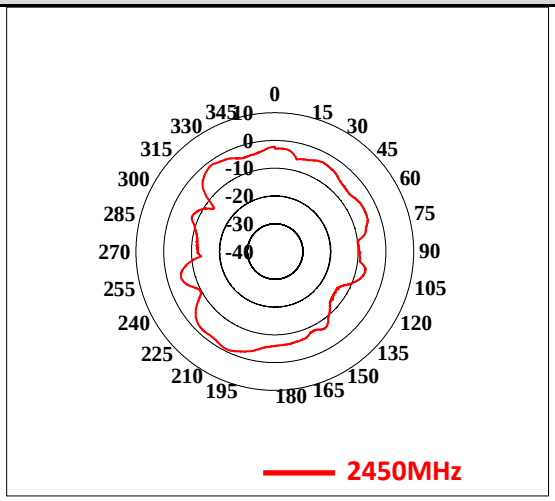
Xanthus Taoglas antennas-ANT1-6GHz Band

Vista Laboratories, Inc.
1261 Puerta Dl Sol
San Clemente, CA 92673

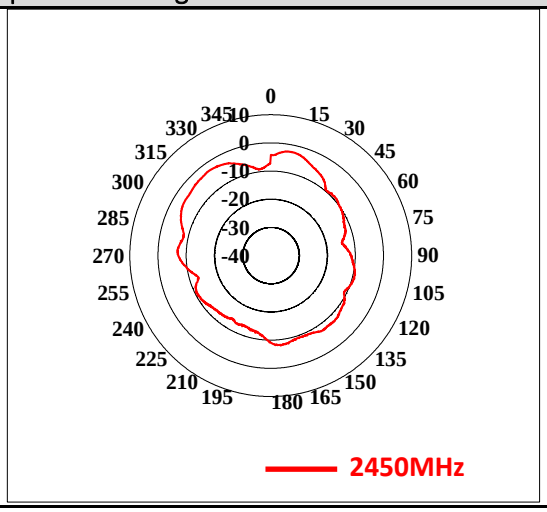
Phone: (949) 393-1123
Web: www.vista-compliance.com
Email: info@vista-compliance.com

Report#	STA-22112961-L-ANT

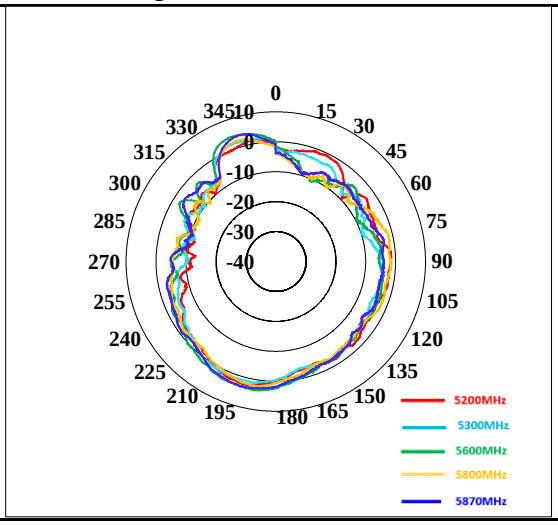
Antenna Radiation Pattern-#3 Test setup-Proteus Taoglas antennas



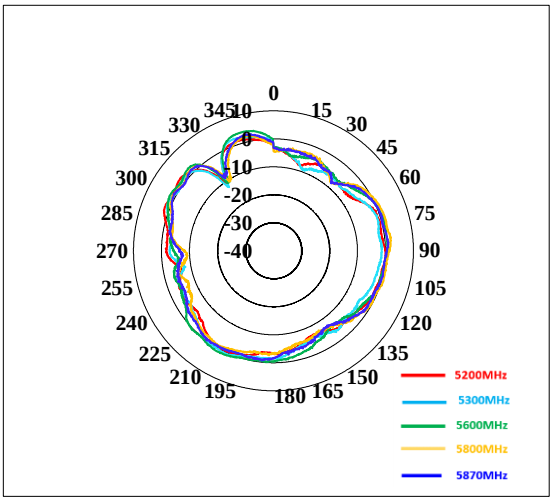
Proteus Taoglas antennas-ANT2-2.4GHz Band



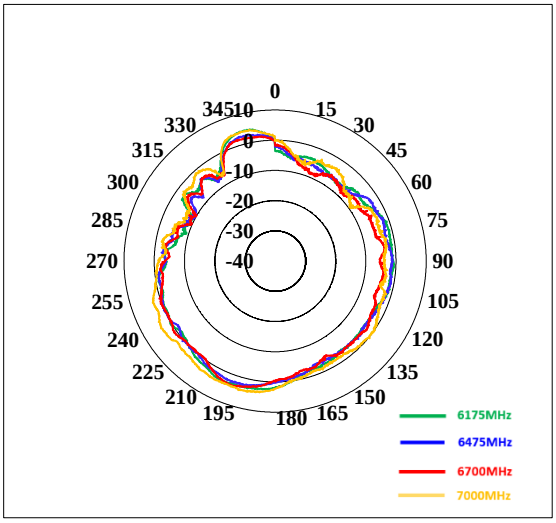
Proteus Taoglas antennas-ANT1-2.4GHz Band



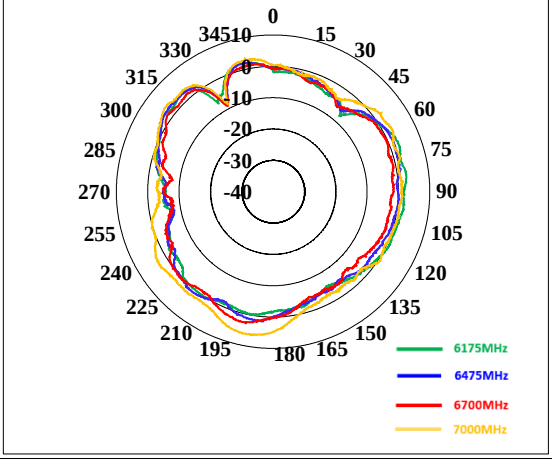
Proteus Taoglas antennas-ANT2-5GHz Band



Proteus Taoglas antennas-ANT1-5GHz Band



Proteus Taoglas antennas-ANT2-6GHz Band



Proteus Taoglas antennas-ANT1-6GHz Band