



規格承認書

Specification for Approval

客 戶 : Tymphany

Customer

品 名 : DH600 Antenna

Part name

料 號 :

Part No.

ARY196-0383-040-H0 (WIFI-1)

ARY196-0383-041-H0 (WIFI-2)

ARY196-0383-042-H0 (BT)

客戶承認印 CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR
Approval No.		
Model		
Part No.		

CHIEF	SALES	CHIEF	ENGINEER
ROX	GRANT	ROX	WAH
Date: 2024.12.25		Date: 2024.12.25	
驊 陸 科 技 股 份 有 限 公 司 WIESON TECHNOLOGIES CO., LTD.			

(SR-83-16)

 WIESON TECHNOLOGIES CO., LTD.	SPECIFICATION LIST	TYPE OF PRODUCT
		RF ANTENNA

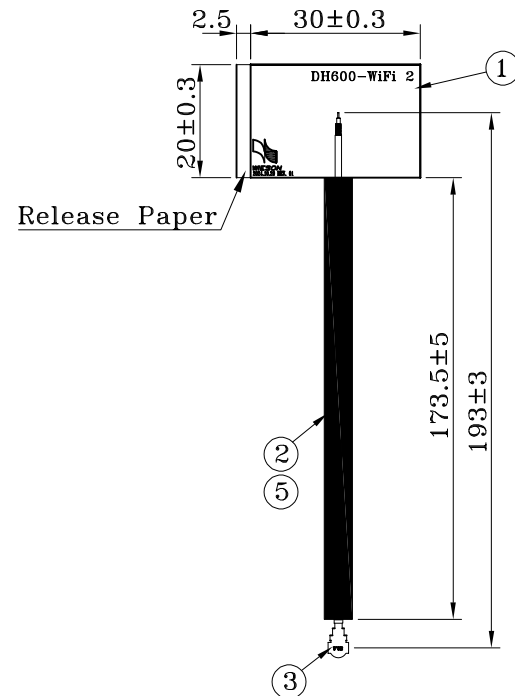
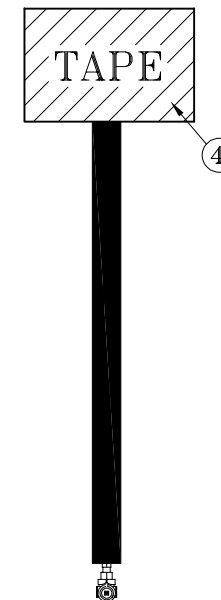
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				Approvals	
Rev	Date	Description	Edited by	Prepared :	WAH
01	2024/12/25	ISSUE	WAH	Checked :	FOUNTAIN
				Approved :	ROX
				Issued No :	01
				Sheet :	1 OF 28

HF Compliant

REV	DATE	DESCRIPTION	ECN NO.	NAME
A1	24.10.29	PROPOSAL		TIM



						CUST NO.:	
				 WIESON TECHNOLOGIES CO., LTD		PART NO.:	
				WIESON		ARY196-0383-041-H0	
⑤	Foam	Size: 173.5 x 10 x 1mm	1	TITLE: WiFi 2 Antenna			
④	Tape	G9000 , Size:29.2 x 19.2mm	1				
③	MHF	I-PEX(I) Plug For 1.13mm Cable , Gold Plated	1	DRAWN BY	TIM(WST)	DRAWING NO.	ARY196-0383-041-H0
②	Cable	1.13mm Normal Coaxial Cable , FEP Gray Jacket	1	CHECKED BY		DRAWING SIZE	A4
①	PCB	FR-4 , Size: 30 x 20 x 1mm	1	APPROVED BY		UNIT	mm
NO.	ITEM	DESCRIPTION	QTY	SORTING NO.	WSC	PAGE	1 OF 1

PRODUCT SPECIFICATION

Product name	WIFI-1 Antenna(DH600)		
Part number	ARY196-0383-040-H0		
Frequency Range	2.4GHz-2.5GHz	5.15GHz-5.85GHz	5.925GHz-7.125GHz
Operating Temperature	-10℃ to 60℃		
Storage with matching	-10℃ to 70℃		
Impedance	50 Ohms		
Polarization	Linear		
Admitted Power	1W		
Antenna type	PCB		
Cable (Length)	Ø1.13mm (463mm)		
Connector	MHF I		

Product name	WIFI-2 Antenna(DH600)		
Part number	ARY196-0383-041-H0		
Frequency Range	2.4GHz-2.5GHz	5.15GHz-5.85GHz	5.925GHz-7.125GHz
Operating Temperature	-10℃ to 60℃		
Storage with matching	-10℃ to 70℃		
Impedance	50 Ohms		
Polarization	Linear		
Admitted Power	1W		
Antenna type	PCB		
Cable (Length)	Ø1.13mm (193mm)		
Connector	MHF I		

Product name	BT Antenna(DH600)		
Part number	ARY196-0383-042-H0		
Frequency Range	2.4GHz-2.5GHz		
Operating Temperature	-10℃ to 60℃		
Storage with matching	-10℃ to 70℃		
Impedance	50 Ohms		
Polarization	Linear		
Admitted Power	1W		
Antenna type	PCB		
Cable (Length)	Ø1.13mm (283mm)		
Connector	MHF I		

Product name	WIFI-1 Antenna(DH600)		
Part number	ARY196-0383-040-H0		
Frequency Range	2.4GHz-2.5GHz	5.15GHz-5.85GHz	5.925GHz-7.125GHz
Peak Gain (Max)	1.97	1.90	2.46
Efficiency	>40%	>40%	>40%

Product name	WIFI-2 Antenna(DH600)		
Part number	ARY196-0383-041-H0		
Frequency Range	2.4GHz-2.5GHz	5.15GHz-5.85GHz	5.925GHz-7.125GHz
Peak Gain (Max)	1.15	2.85	3.5
Efficiency	>40%	>40%	>40%

Product name	BT Antenna(DH600)		
Part number	ARY196-0383-042-H0		
Frequency Range	2.4GHz-2.5GHz		
Peak Gain (Max)	1.82		
Efficiency	>40%		



B&W_DH600

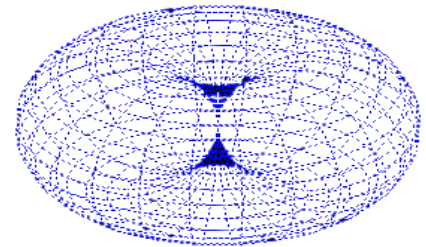
Engineer :Betty

Report date : 2024/12/06 REV.03



Executive Summary

- **Revision History**
- **Antenna Specification**
- **Antenna Photo**
- **Antenna Solution**
- **Antenna Measurement Vector Network Analyzer**
 - **S-Parameter Result**
- **The Antenna Anechoic Chamber Measurement**
 - **Antenna Measurement Photo**
 - **Antenna Measurement**
 - **Peak Gain 、Efficiency Result**
 - **2D Antenna Pattern**



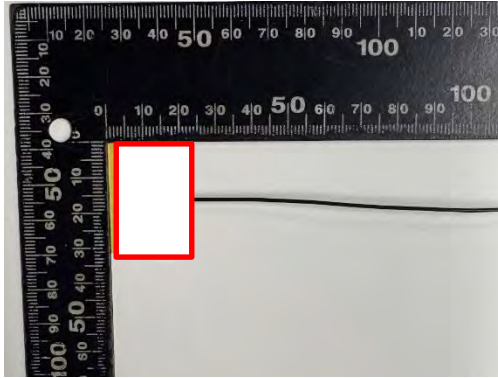
Revision History

Revision	Date	Engineer	Description
01	2024/09/24	Betty	New Release
02	2024/10/07	Betty	Add 6GHz
03	2024/12/06	Betty	Antenna Testing in FS

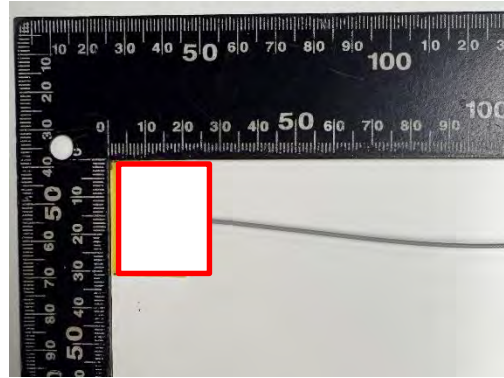
Antenna Specification

Item	ARY196-0383-040-H0			ARY196-0383-041-H0			ARY196-0383-042-H0
Operating Frequency	2400-2500	5150-5850	5925-7125	2400-2500	5150-5850	5925-7125	2400-2500
Return Loss	10 dB	10 dB	10 dB	10 dB	10 dB	10 dB	10 dB
Material	PCB						
Peak Gain	1.97 dBi	1.9 dBi	2.46 dBi	1.15 dBi	2.85 dBi	3.5 dBi	1.82 dBi
Efficiency	50 %(Max.)	49 %(Max.)	48 %(Max.)	53%(Max.)	56 %(Max.)	54 %(Max.)	56 %(Max.)

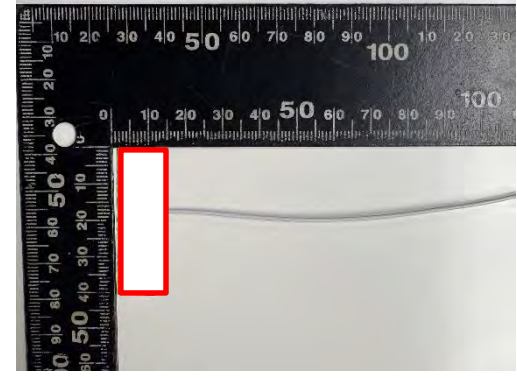
Antenna Photo



ARY196-0383-040-H0



ARY196-0383-041-H0



ARY196-0383-042-H0

Antenna Solution



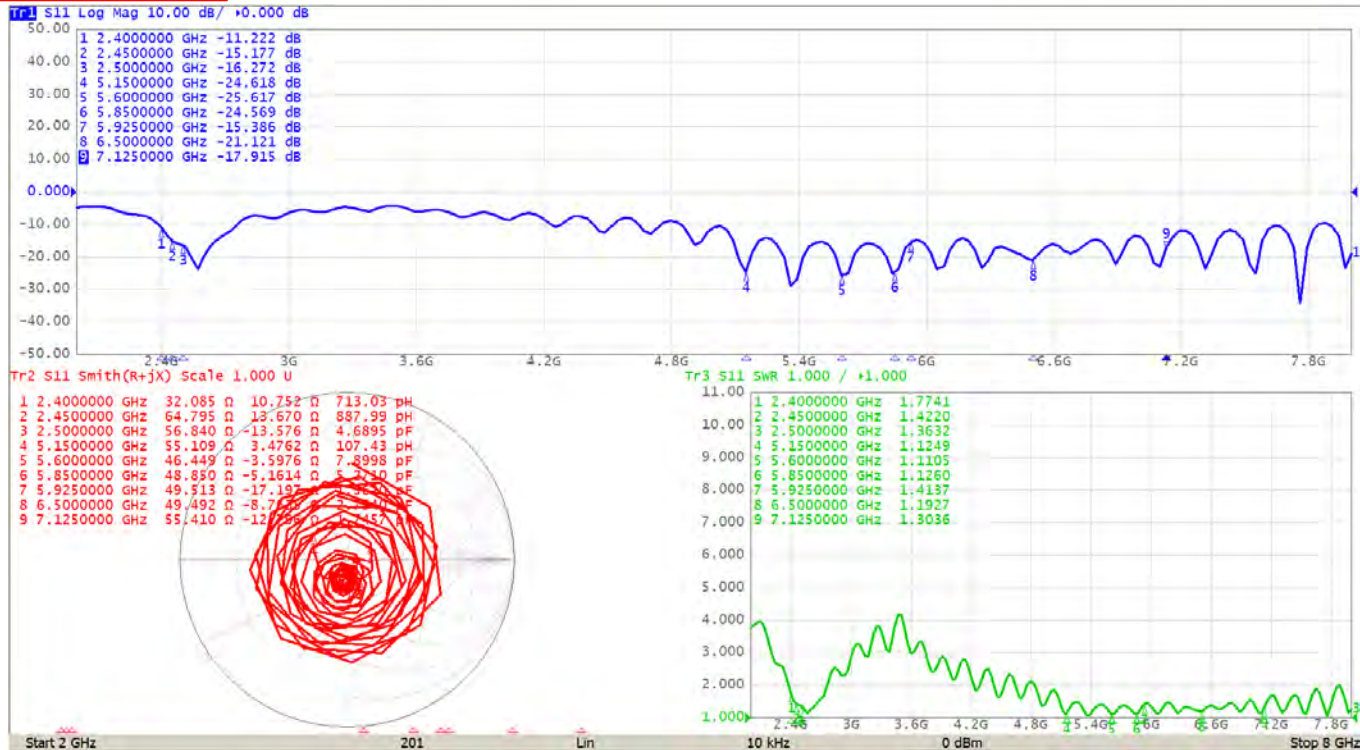
ANT	ANT Type	Size(L*W*H)	Cable Type	Connector	Cable Loss(dB)		
					2.4G	5.6G	6.5G
ARY196-0383-040-H0	PCB	30 mm*20 mm*1mm	463 mm/1.13 Normal	MHF I	1.11	1.28	1.35
ARY196-0383-041-H0	PCB	30 mm*20 mm*1mm	193 mm/1.13 Normal	MHF I	0.84	1.05	1.12
ARY196-0383-042-H0	PCB	40 mm*10 mm*1mm	283 mm/1.13 Normal	MHF I	0.98	-	-

S-Parameter Result

Return Loss(dB)									
Freq.(MHz) ANT	2400	2450	2500	5150	5600	5850	5925	6500	7125
ARY196-0383-040-H0	-11.2	-15.1	-16.2	-24.6	-25.6	-24.5	-15.3	-21.1	-17.9
ARY196-0383-041-H0	-11.7	-18.5	-28.3	-16.4	-19.7	-15.5	-19.3	-18.2	-28.0
ARY196-0383-042-H0	-12.7	-12.5	-12.9	-	-	-	-	-	-

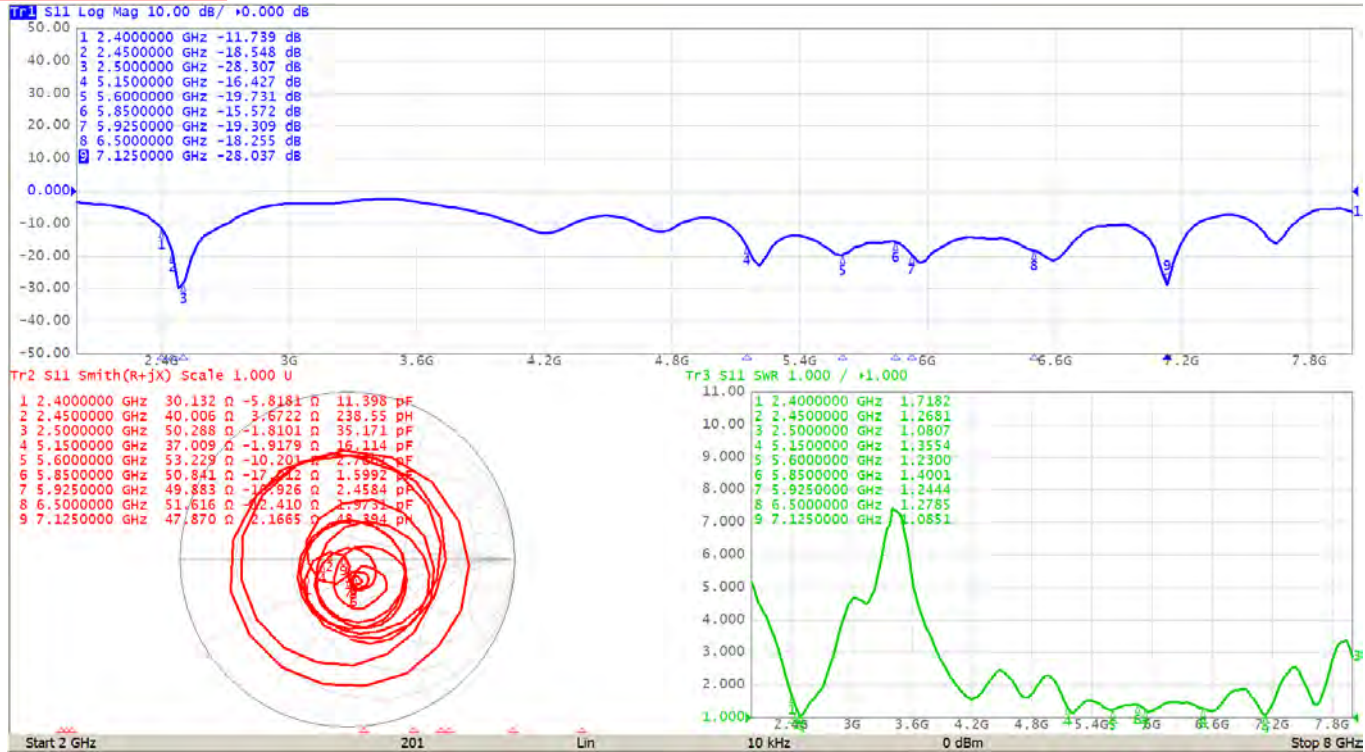
S-Parameter Result

ARY196-0383-040-H0



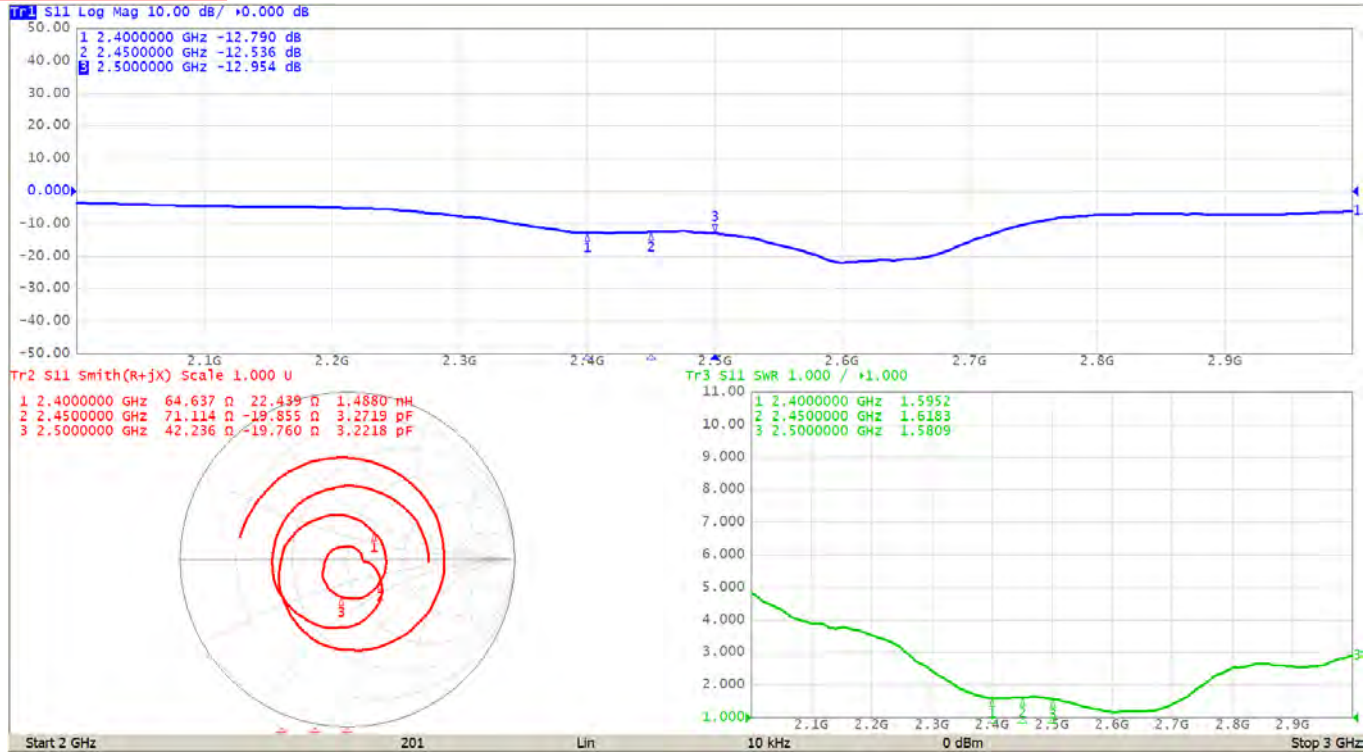
S-Parameter Result

ARY196-0383-041-H0

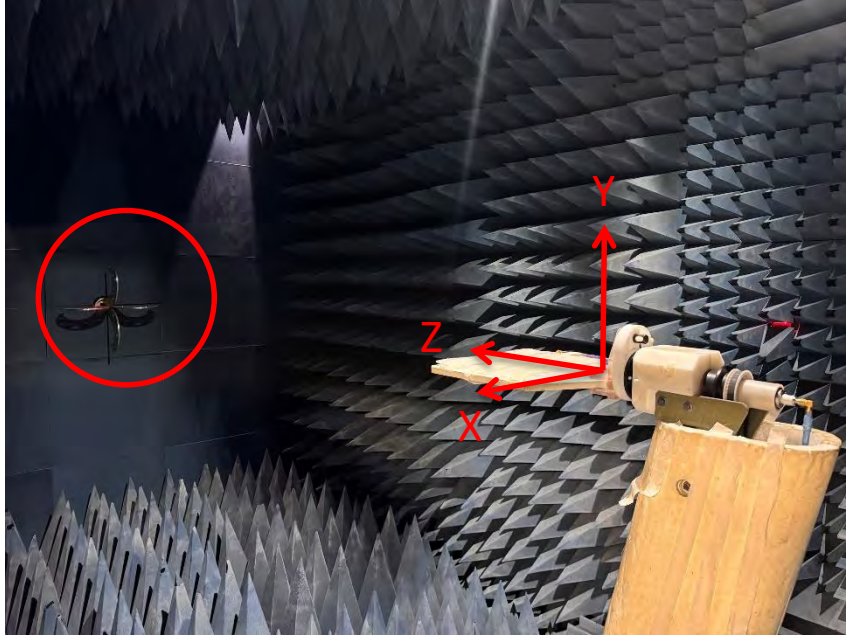
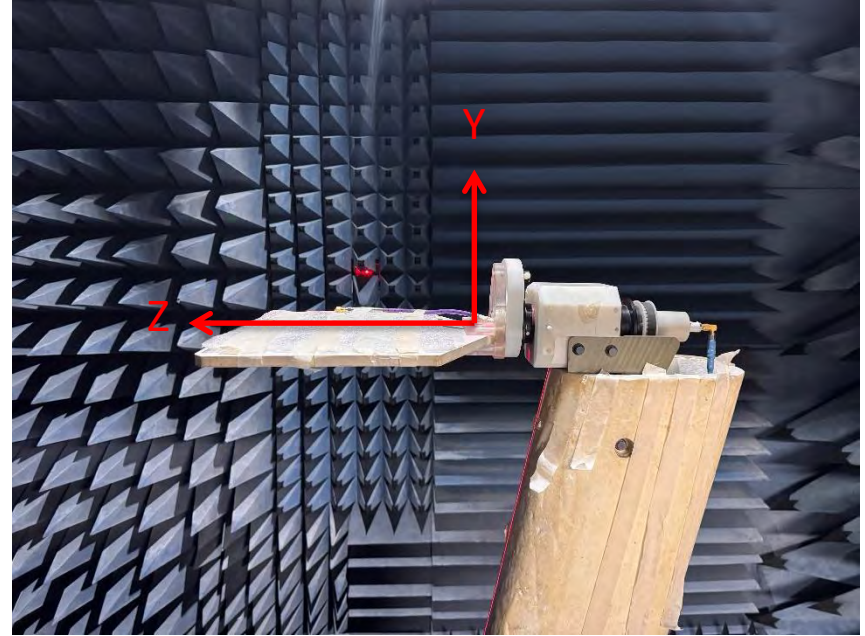


S-Parameter Result

ARY196-0383-042-H0



Chamber Measurement Photo



Peak Gain 、 Efficiency Result

Frequency (GHz)	ARY196-0383-040-H0		ARY196-0383-041-H0	
	Peak Gain (dBi)	Efficiency (%)	Peak Gain (dBi)	Efficiency (%)
2.4	1.19	43	0.82	47
2.45	1.25	46	1.15	52
2.5	1.97	50	0.88	53
5.15	1.2	41	1.99	50
5.25	1.49	42	2.64	52
5.35	1.83	42	2.85	52
5.47	1.72	40	2.57	55
5.6	1.9	42	2.35	52
5.725	1.54	47	2.36	56
5.785	1.69	49	2.52	56
5.85	1.58	47	2.51	53
5.925	1.75	45	2.59	51

Frequency (GHz)	ARY196-0383-040-H0		ARY196-0383-041-H0	
	Peak Gain (dBi)	Efficiency (%)	Peak Gain (dBi)	Efficiency (%)
6	2.46	48	2.71	54
6.125	1.49	43	2.55	50
6.225	1.44	41	2.62	49
6.325	1.77	43	2.35	52
6.425	1.86	47	3.07	54
6.525	1.93	44	3.11	50
6.625	1.31	40	3.32	49
6.725	1.49	43	2.95	46
6.875	1.01	43	3.5	49
6.925	1.44	43	3.4	51
7	1.88	40	3.28	50
7.125	1.74	41	3.28	48

Peak Gain 、 Efficiency Result

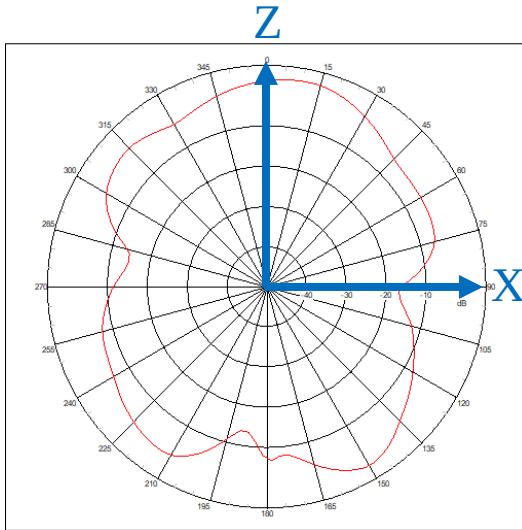
Frequency (GHz)	ARY196-0383-042-H0	
	Peak Gain (dBi)	Efficiency (%)
2.4	1.4	51
2.41	1.56	52
2.42	1.82	54
2.43	1.51	51
2.44	1.53	52
2.45	1.24	51
2.46	1.09	50
2.47	1.22	53
2.48	1.06	52
2.49	1.32	55
2.5	1.33	56

2D Antenna Pattern

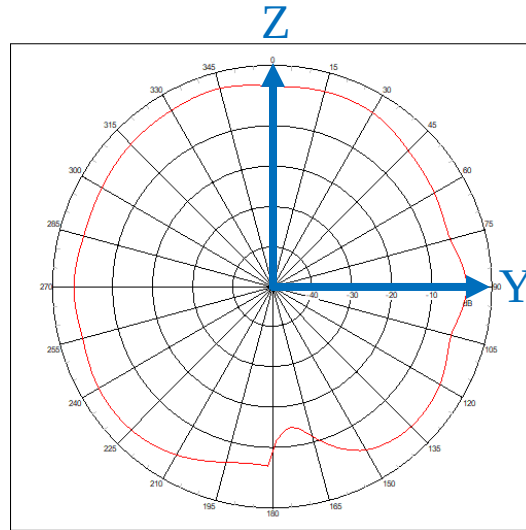
ARY196-0383-040-H0

Frequency : 2450 MHz

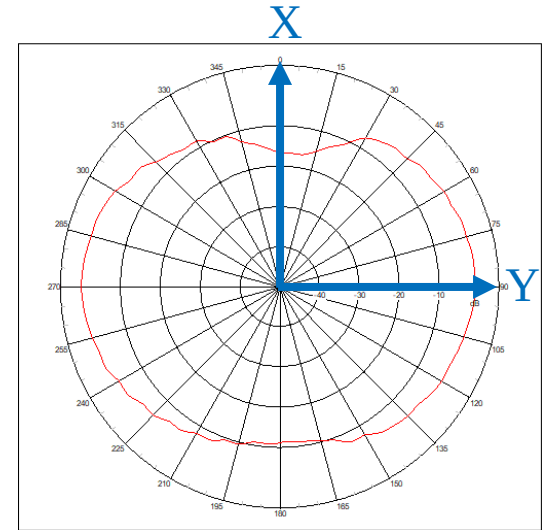
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

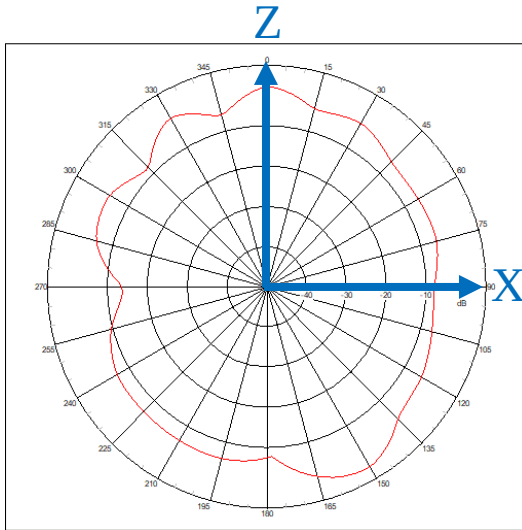
min: -50dB

2D Antenna Pattern

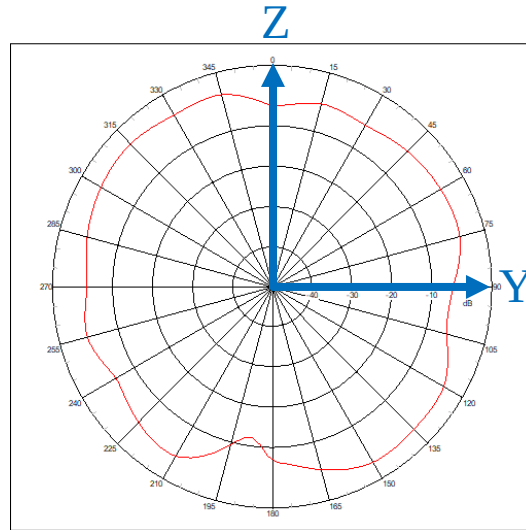
ARY196-0383-040-H0

Frequency : 5600 MHz

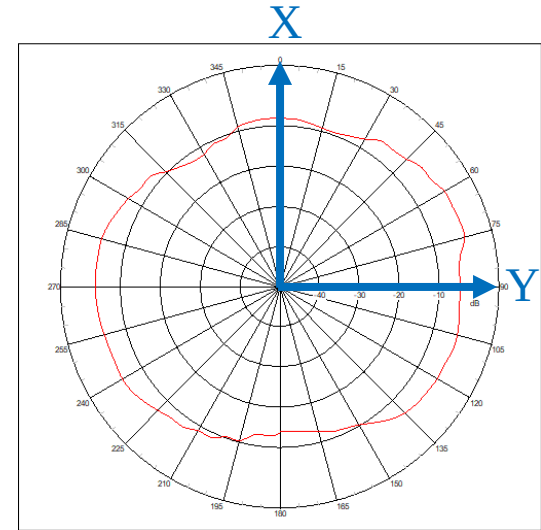
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

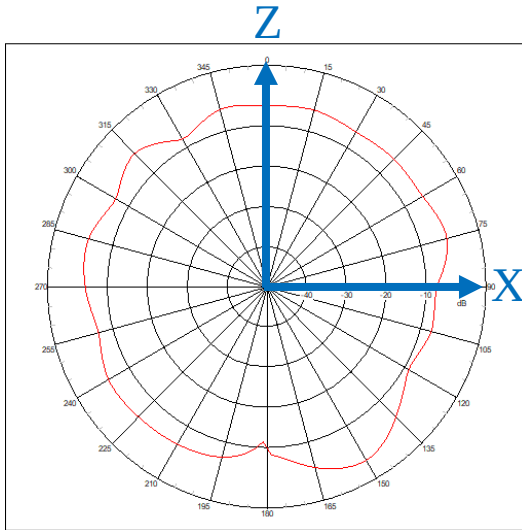
min: -50dB

2D Antenna Pattern

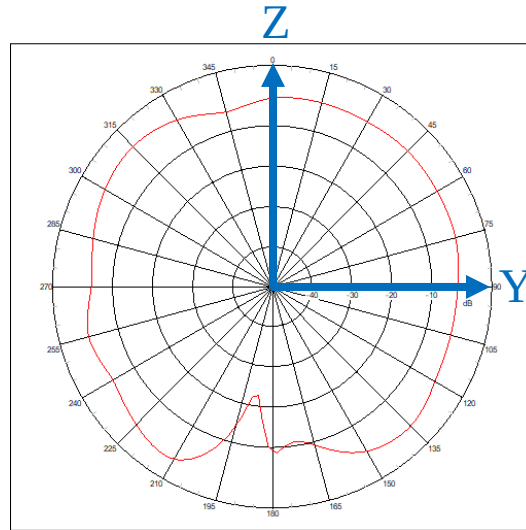
ARY196-0383-040-H0

Frequency : 6525 MHz

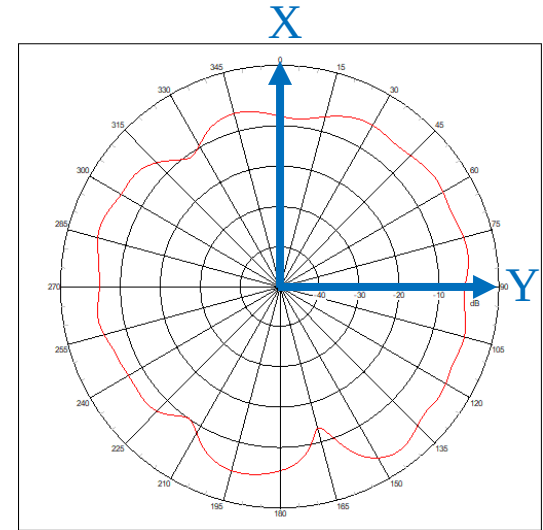
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

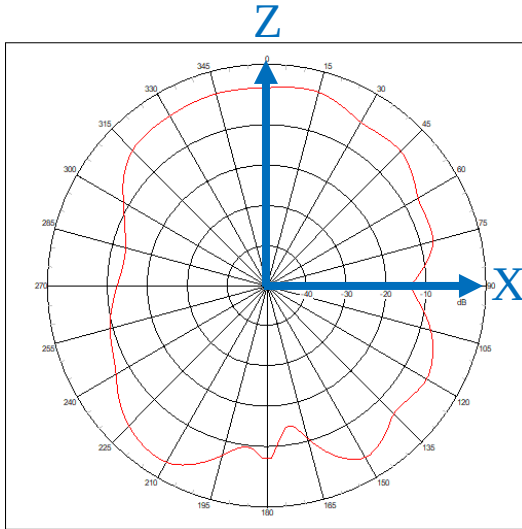
min: -50dB

2D Antenna Pattern

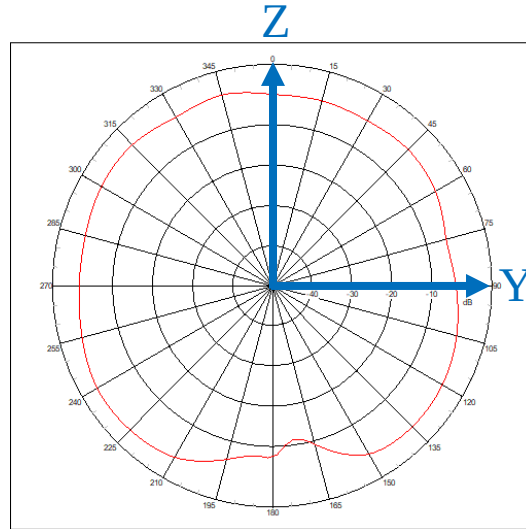
ARY196-0383-041-H0

Frequency : 2450 MHz

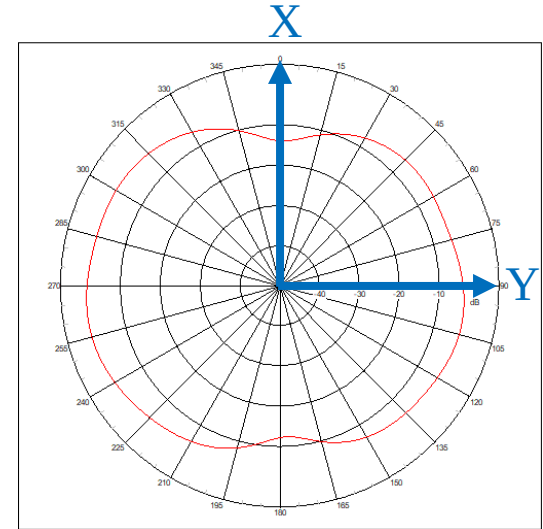
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

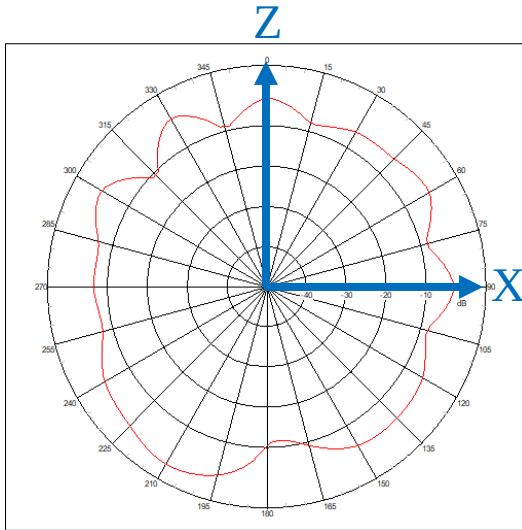
min: -50dB

2D Antenna Pattern

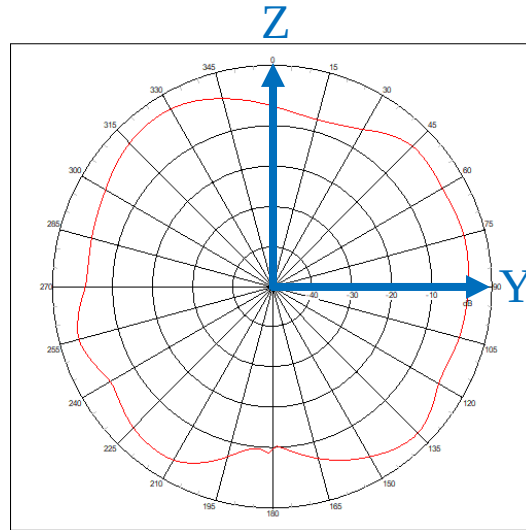
ARY196-0383-041-H0

Frequency : 5600 MHz

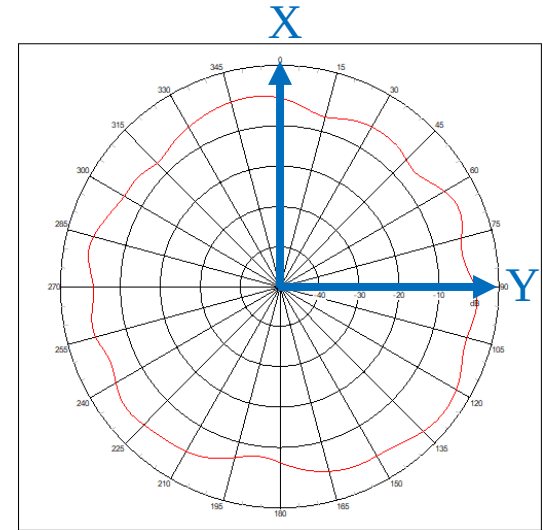
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

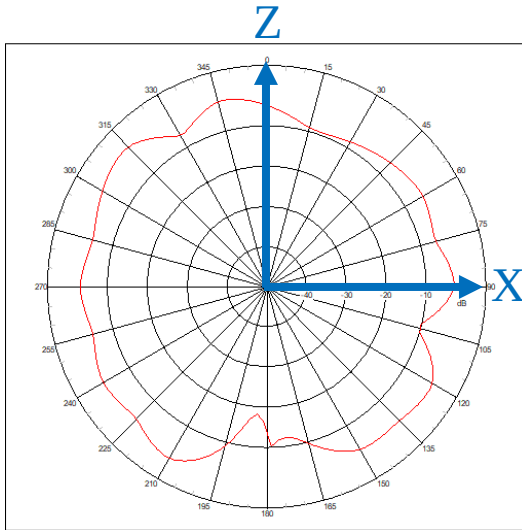
min: -50dB

2D Antenna Pattern

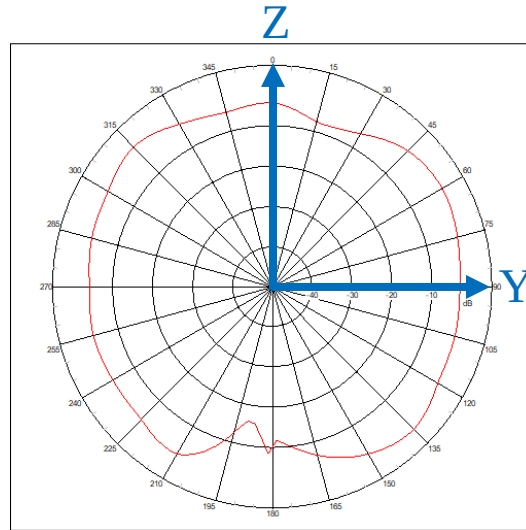
ARY196-0383-041-H0

Frequency : 6525 MHz

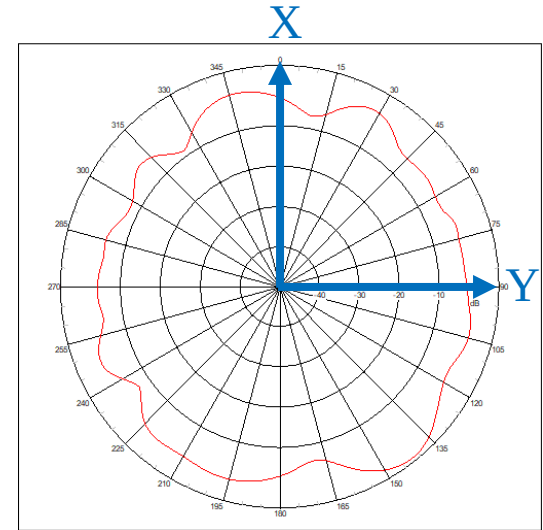
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

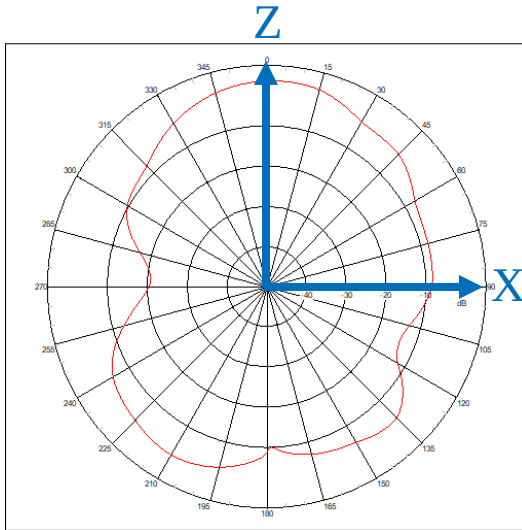
min: -50dB

2D Antenna Pattern

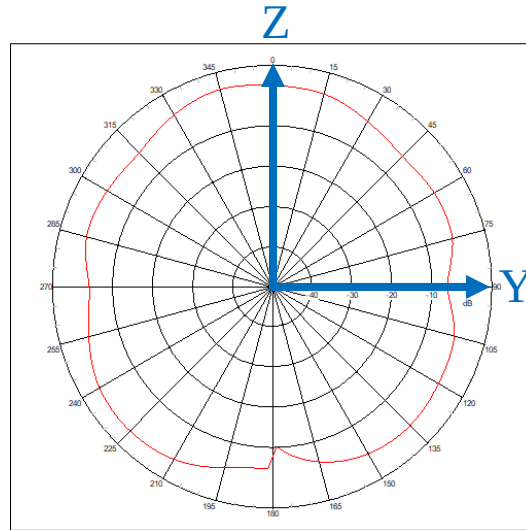
ARY196-0383-042-H0

Frequency : 2450 MHz

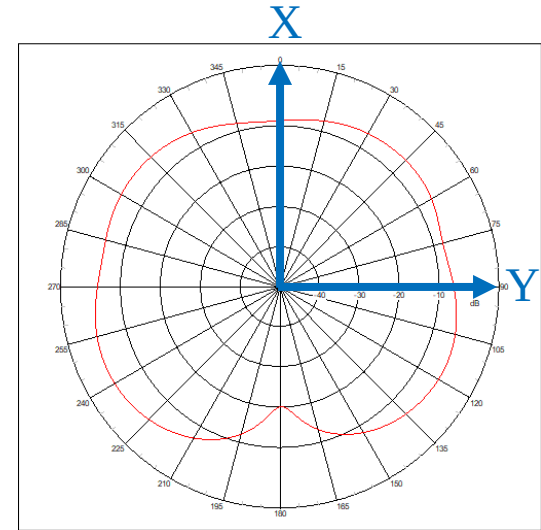
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB



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MAKING THE PERFECT CONNECTION

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CERTIFICATE

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Unified Social Credit Code: 914419006181620014

WIESON Technologies (Dongguan) Co., Ltd.

Registered Address: Xinbaowei Industrial Building, Huangang Industrial Zone, Houjie Town, Dongguan City | 523946 Guangdong | China

Operation Address: Xinbaowei Industrial Building, Huangang Industrial Zone, Houjie Town (Exclusion of A Building and 4F, B Building), Dongguan City | 523946 Guangdong | China

has been assessed and certified as meeting the requirements of:

ISO 9001:2015

for the following activities:

Design, Manufacture and Sales of Electronic and Automotive Connectors, Cables, Wire Harnesses, RF (Radio Frequency) and Antenna Products, Plastic Injection Parts, Stamping Parts, Plastic & Hardware Molds

This certificate is valid from 26/01/2024 until 25/01/2027

Issued: 26/01/2024

Certificate № CA00525-EN

This registration is subject to the company maintaining a Quality Management System to the above standard, which will be monitored by TÜV Saarland Certification.
The validity of this certificate may be verified on both CNCA's website (www.cnca.gov.cn) and the website of TÜV Saarland Certification (www.tuv-saar.cn).

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