

# Series: AP5881

**Description**: WIFI-6E EXTERNAL ANTENNA RP-SMA

**Ampak PART NUMBER:** PART NUMBER:TZ2412W



Customer Name: Ampak Technology Corporation Customer Part No. :

Pulse Part No:TZ2412W Product Mode: China

客戶承認		
審核	承認者	承認單位

Pulse	
審核	製作

供應商:新加坡商普思電子有限公司

Supplier: PULSE ELECTRONICS (SINGAPORE) PTE LTD

Adress: 3F., No. 233-1, Baogiao Rd., Xindian Dist., New Taipei City, Taiwan (R.O.C.) In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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# **ELECTRICAL SPECIFICATIONS**

Antenna Type	WiFi-6e External	
Frequency	2.4~2.5/5.15~5.85GHz	
	5.925~7.125GHz	
Nominal Impedance	50 Ω	
VSWR	3.0(Max)	
Gain	4dBi (Typ.)	
Radiation	Omni-directional	
Polarization	Linear	
Power Withstanding	1W	

#### **MECHANICAL SPECIFICATIONS**

Antenna Cover	TPEE
Antenna Base	PC + PBT
Connector type	RP-SMA-PLUG
Cable type)	RG-178
Color	White

ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	-20~65° C	
Storage Temperature	-30~75° C	
RoHS Compliant	Yes	
Life Time	1 year	

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TECHNICAL DATA SHEET

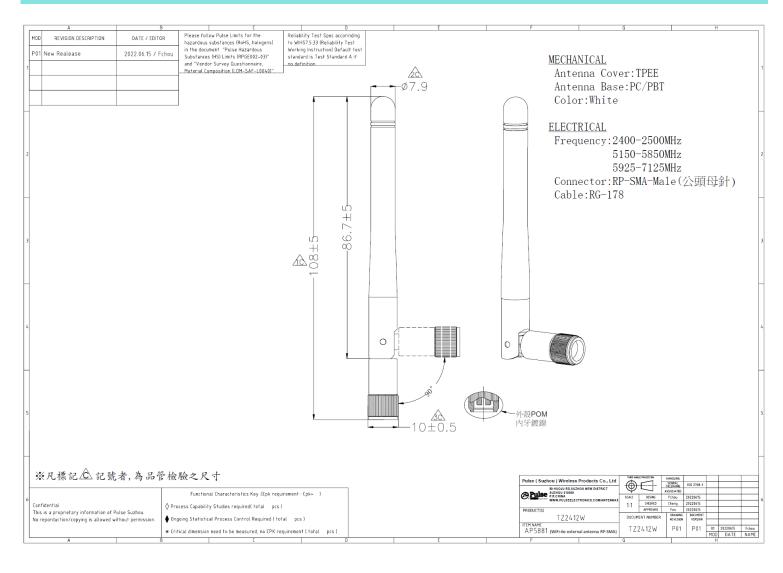
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#### **Description**:

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#### **MECHANICAL DRAWING**



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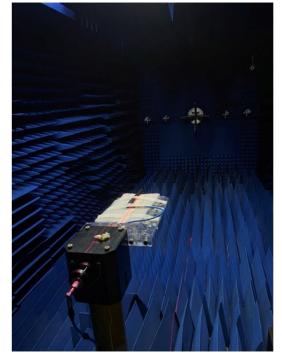
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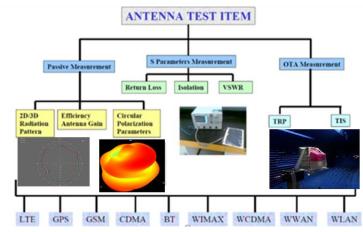
#### Measurement setup info.



TRC Chamber



S11 measurements were taken with Agilent E5071C ENA, 9kHz- 8.5GHz



Item	Measuring equipment	Calibrate Date
S-parameter	Agilent E5071C Keysight	2024/04/15
Passive Gain	TRC Chamber 400MHz ~ 8GHz (7mx3mx3m)	2023/12/20

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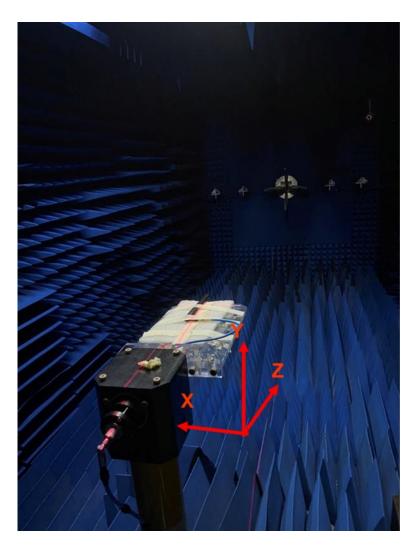
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**Test Method** 

# DUT orientation setting



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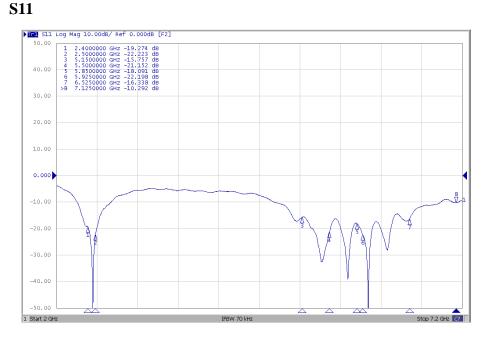
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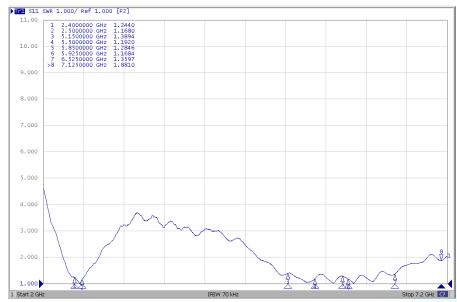
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### **Ampak PART NUMBER:** PART NUMBER:TZ2412W

# **TEST REPORT**



#### **VSWR**



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Description:

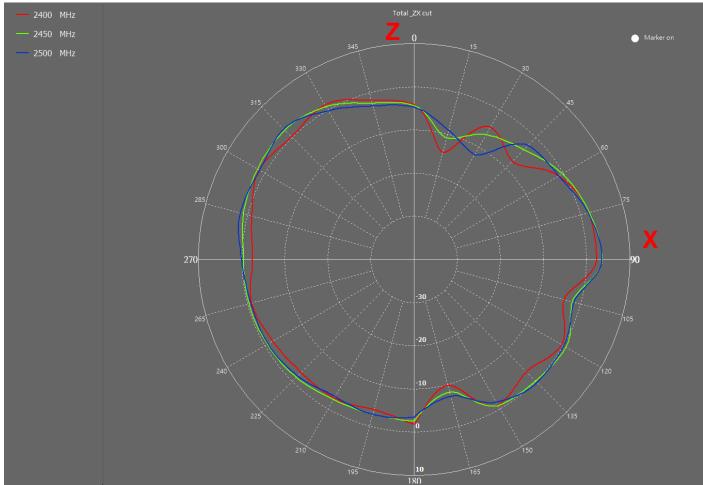
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### Ampak PART NUMBER: PART NUMBER:TZ2412W

# **TEST REPORT**

2D Gain Pattern

2400-2500MHz



ZX Cut

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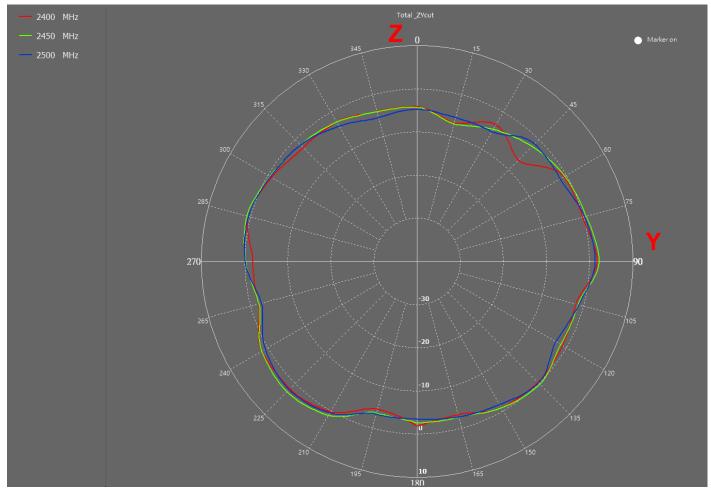
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### **Ampak PART NUMBER:** PART NUMBER:TZ2412W

# **TEST REPORT**

**2D** Gain Pattern

2400-2500MHz



**ZY** Cut

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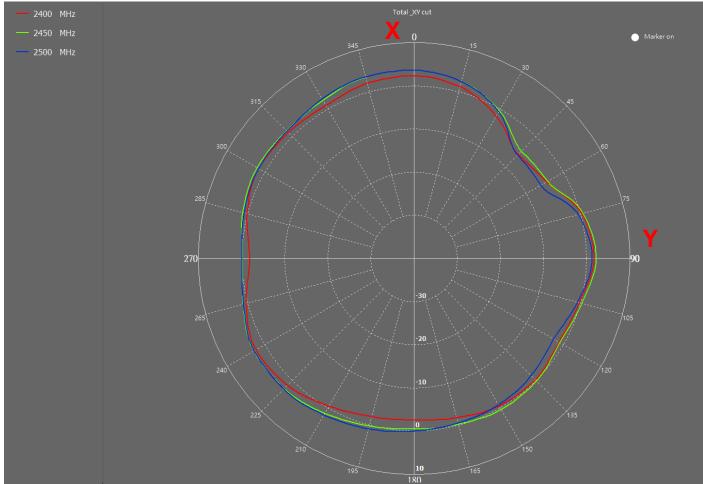
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# **TEST REPORT**

2D Gain Pattern

2400-2500MHz



XY Cut

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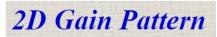
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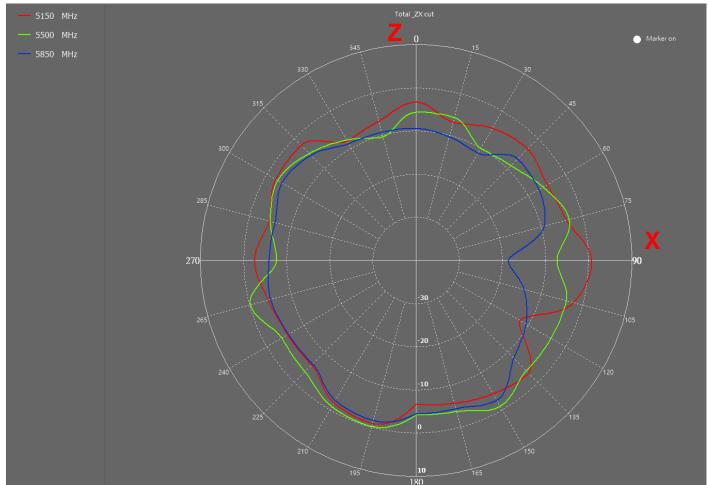
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### Ampak PART NUMBER: PART NUMBER:TZ2412W

# **TEST REPORT**



5150-5850MHz



**ZX** Cut

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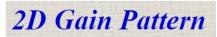
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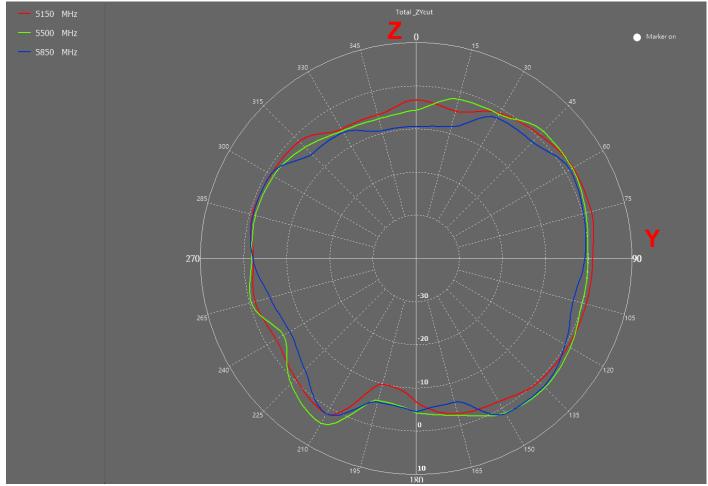
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### **Ampak PART NUMBER:** PART NUMBER:TZ2412W

# **TEST REPORT**



5150-5850MHz



**ZY** Cut

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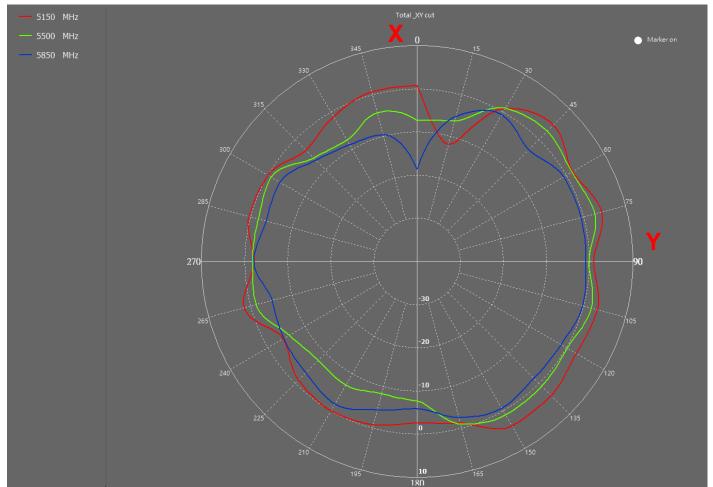
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### **Ampak PART NUMBER:** PART NUMBER:TZ2412W

# **TEST REPORT**

**2D** Gain Pattern

5150-5850MHz



**XY Cut** 

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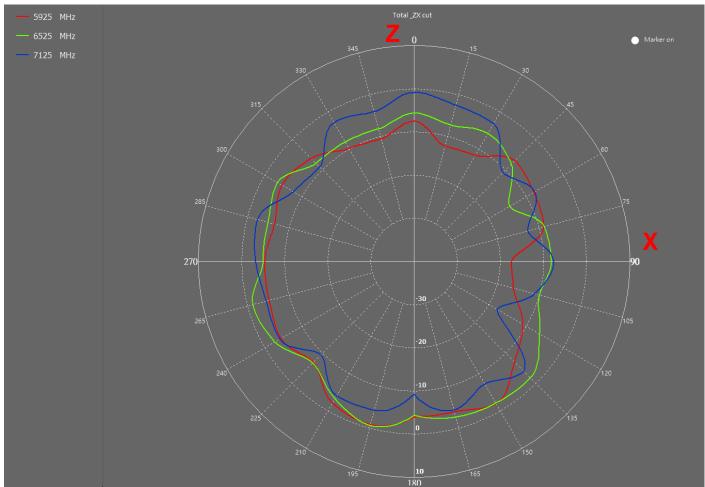
WIFI-6E EXTERNAL ANTENNA RP-SMA

#### Ampak PART NUMBER: PART NUMBER:TZ2412W

# **TEST REPORT**



5925-7125MHz



# **ZX** Cut

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14

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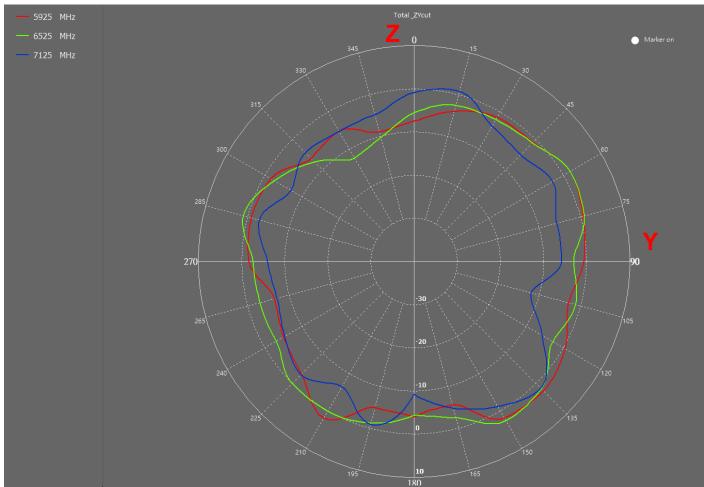
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#### **TEST REPORT**



5925-7125MHz



**ZY** Cut

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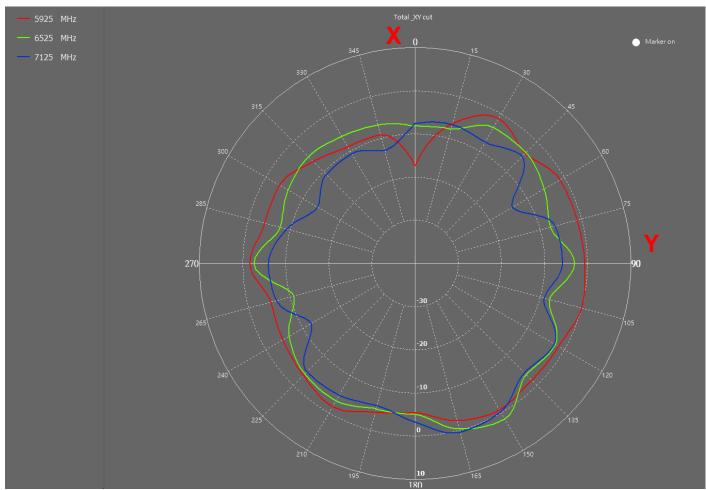
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# **TEST REPORT**



5925-7125MHz



# **XY Cut**

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# **TEST REPORT**

# **3D Peak Gain & Efficiency**

Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	-0.72	84.77	3.13
2450	-0.50	89.15	3.60
2500	-0.93	80.70	3.59

Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
5150	-0.55	88.07	4.68
5200	-0.77	83.84	4.23
5250	-0.82	82.83	4.41
5300	-1.39	72.53	3.33
5350	-1.14	76.93	3.99
5400	-0.87	81.83	4.44
5450	-0.96	80.09	4.35
5500	-0.68	85.46	4.42
5550	-0.77	83.69	4.97
5600	-1.54	70.17	4.31
5650	-1.46	71.40	4.51
5700	-1.16	76.55	4.53
5750	-1.58	69.57	4.74
5800	-2.02	62.76	4.34
5850	-2.03	62.66	4.43

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# **TEST REPORT**

# **3D Peak Gain & Efficiency**

Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
5925	-2.00	63.03	4.55
6025	-2.11	61.47	4.37
6125	-1.97	63.60	4.58
6225	-1.75	66.86	4.61
6325	-1.78	66.31	4.66
6425	-1.90	64.51	4.99
6525	-1.67	68.00	4.73
6625	-2.07	62.14	4.36
6725	-1.89	64.74	4.17
6825	-2.20	60.25	4.44
6925	-2.38	57.78	4.55
7025	-2.75	53.10	4.24
7125	-2.61	54.79	4.06

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TECHNICAL DATA SHEET

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# **Description**:

WIFI-6E EXTERNAL ANTENNA RP-SMA

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# **Revision History**

Revision	Date Change Notification	Description
P01	2022.06.15	New Release
P02	2024.04.11	Re-test sample result

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18