

# Antenna Reports

**Issue date :08/23/2024**

**Test Engineer : Guanwei**

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## General information

Antenna number	Three in one: T553-14LB-045
Model name	WM101010s
Antenna Type	PIFA
Manufacturer	SHENZHEN Xingyuanchuang TECHNOLOGY CO.,LTD
Manufacturer Address	1506, Tangwei Stock Business Building, Tangwei Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong Province
Dimension	

## Test environment

Test lab	SHENZHEN Xingyuanchuang TECHNOLOGY CO.,LTD
Lab address	1506, Tangwei Stock Business Building, Tangwei Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong Province
Test environment (chamber)	OTA Laboratory
Test the equipment and calibration date	8753E Network Analyzer \ June 15, 2023
Test the software	OuTuo

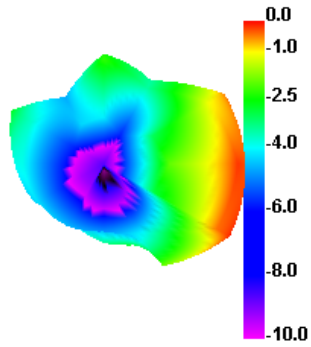
# Test result

## ANT 1

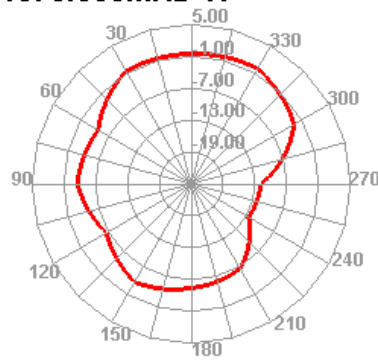
Frequency Bands	Frequency [MHz]	Peak Gain	Polarization
GPS	1575	-0.01	
WIFI2.4G/BT	2400-2500	-0.45	
WIFI5G	5150-5850	1.78	
	5250-5350	0.7	
	5470-5725	0.07	
	5725-5850	0.68	

**Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.**

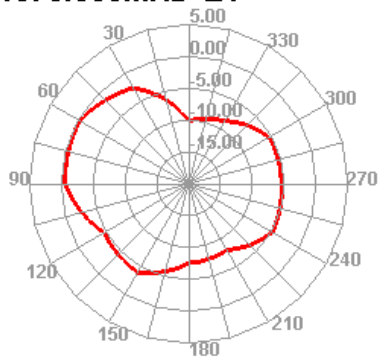
1575.000MHz



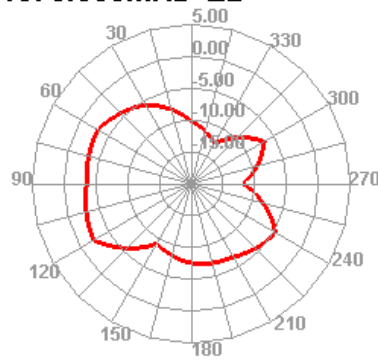
1575.000MHz H



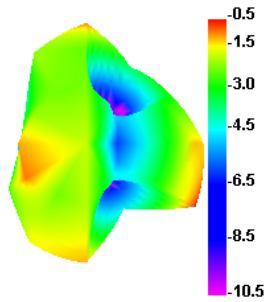
1575.000MHz E1



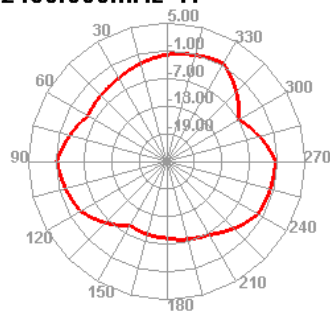
1575.000MHz E2



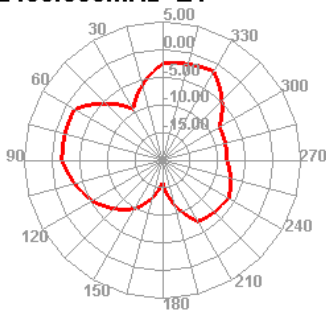
2450.000MHz



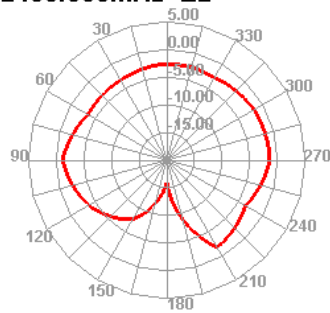
2450.000MHz H



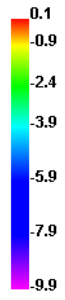
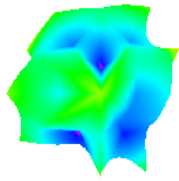
2450.000MHz E1



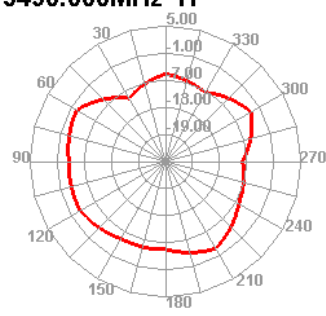
2450.000MHz E2



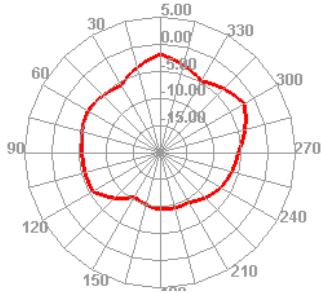
5490.000MHz



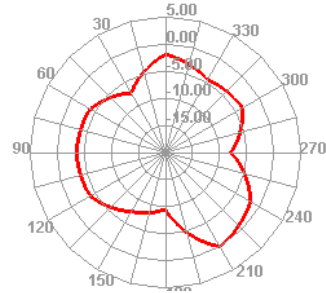
5490.000MHz H



5490.000MHz E1



5490.000MHz E2



## GPS star search test



## WIFI Antenna test



## WIFI RVR test

**TX**

**RX**

WiFi RvR 测试报表(2G_ac_20M_CH1)						WiFi RvR 测试报表(2G_ac_20M_CH1)					
角度\衰减	0dB	10dB	20dB	30dB	40dB	角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	76.1	75.9	76	76	75.4	0.0°	77.5	76.4	74.9	74.8	72.9
90.0°	76	75.9	76	76	75.6	90.0°	78.1	77.6	74.8	75.2	72.8
180.0°	76	75.9	76	76.1	75.8	180.0°	77.2	75.4	78.7	73.4	74.3
270.0°	76	75.9	76	75.9	75.9	270.0°	76.9	75.9	77.2	74.2	74.6
平均	76.00	75.90	76.00	76.00	75.70	平均	77.40	76.30	76.40	74.40	73.70
方差	0.00	0.00	0.00	0.10	0.20	方差	0.50	0.90	1.90	0.80	0.90

**TX**

**RX**

WiFi RvR 测试报表(5G_ac_80M_CH36)						WiFi RvR 测试报表(5G_ac_80M_CH36)					
角度\衰减	0dB	10dB	20dB	30dB	40dB	角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	369	369	368	328	157	0.0°	341	338	334	261	129
90.0°	369	370	369	366	230	90.0°	341	340	326	279	157
180.0°	368	369	368	274	136	180.0°	349	340	327	229	93
270.0°	368	369	369	360	190	270.0°	344	337	323	250	133
平均	368.50	369.30	368.50	332.00	178.30	平均	343.80	338.80	327.50	254.80	128.00
方差	0.60	0.50	0.60	42.10	41.00	方差	3.80	1.50	4.70	20.90	26.40