
Antenna SPEC

Customer Name/客户名称:	Realme
Project Name /项目名称:	C11-Marble
Antenna Name/天线名称:	Marble-R-V04
Material Category/天线类型:	Monopole
Antenna material/天线材质:	FPC
Antenna specifications/天线规格:	22.49mm*5.67mm
Antenna Frequency/使用频率:	2.4GHz-2.48GHz
Antenna Version/天线版本:	V04
Material Code/物料编号:	290000-019628
Compilation Date/编撰日期:	2025-03-10

1、Debugging and testing equipment /调试测试设备

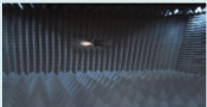
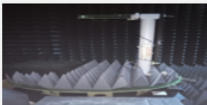
1.1 Debugging equipment/调试设备



Keysight E5080A

1.2 Passive testing equipment/测试设备

Main Test Equipment

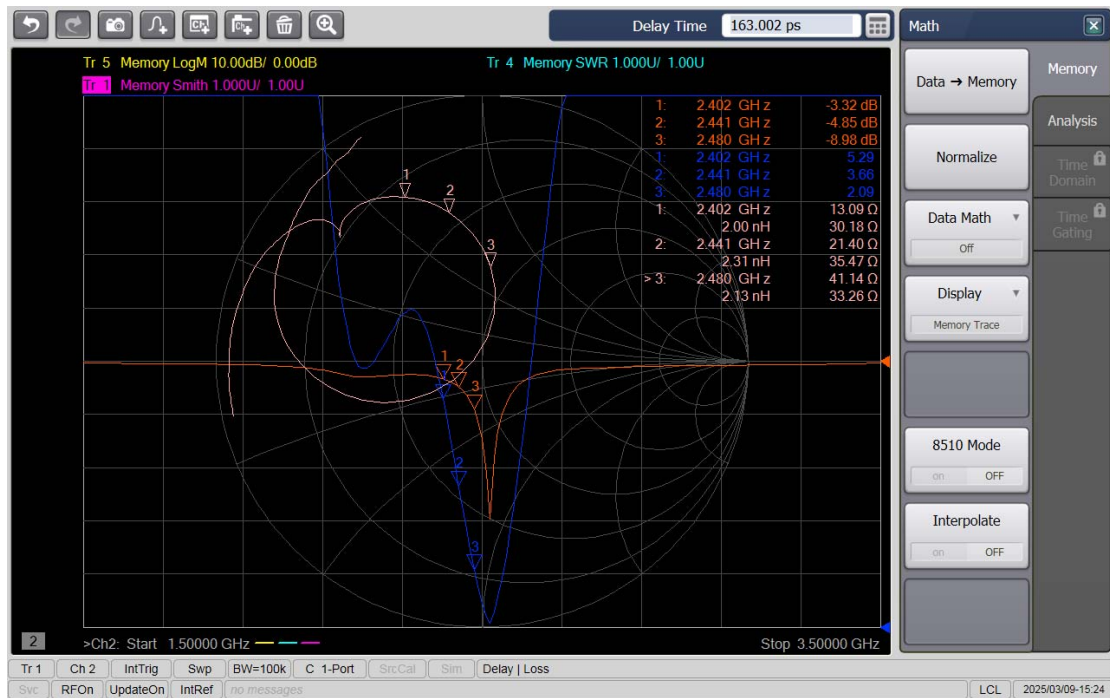
NO.	Model Name	Picture	NO.	Model Name	Picture
1	OTA Anechoic Chamber Size: 7m*4m*4m		6	Turntable Controller	
2	Test Turntable		7	Radio Frequency Controller	
3	Network Analyzer E5071C: 100KHz-6.5GHz		8	Dipole Antenna	
4	OTA Test Head Model		9	CMW270 Wireless Connectivity Tester : BT / BLE test and WIFI test (2.4G\5G)	
5	OTA Test Artificial Arm				

Manufacturer: Boyongkai Electronic Technology Co., Ltd

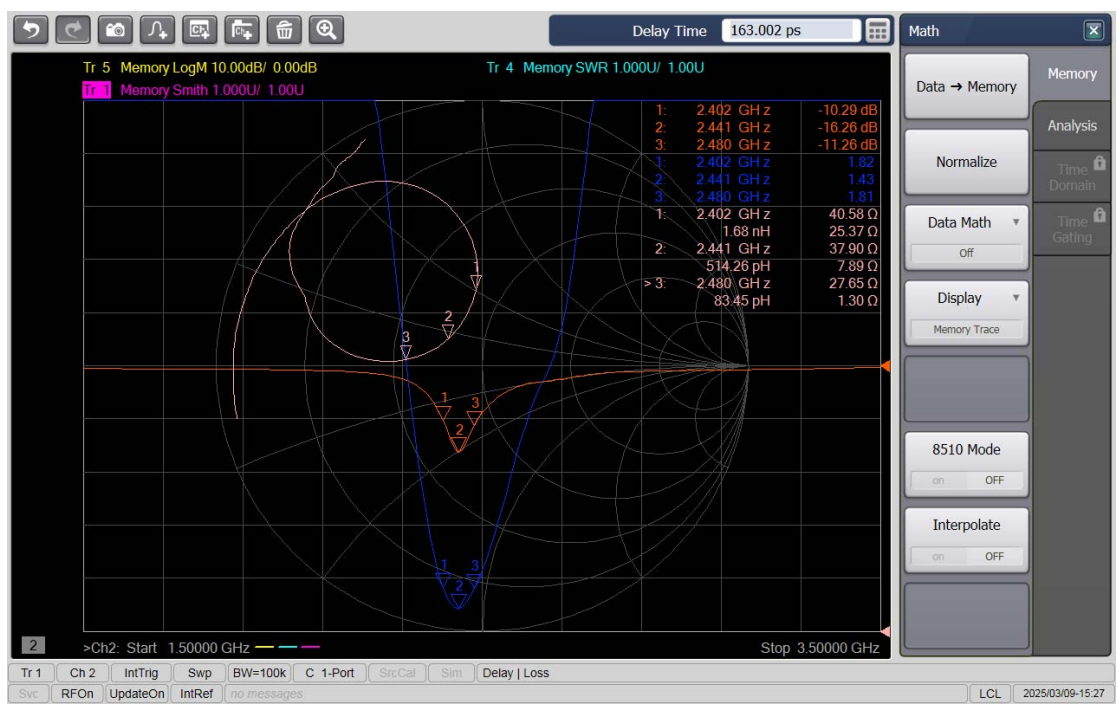
Address: Fenghuangshan Industrial Zone, Shajiao, Humen, Dongguan City

2、Passive test data/无源测试数据

2.1 S11-Right Ear Free Space/S11-右耳自由空间



2.2 S11-worn on Right ear head model/S11-右耳头模佩戴



2.3 Efficiency & Gain Data-Right Ear Free Space Data/效率&增益数据-右耳自由空间数据

Free space data/自由空间数据			
Frequency(GHz)	Efficiency(dB)	Efficiency(%)	Gain(dB)
2.400	-9.15	12.15	-4.00
2.410	-9.11	12.27	-3.98
2.420	-8.68	13.57	-3.57
2.430	-8.20	15.15	-3.12
2.440	-7.78	16.67	-2.71
2.450	-7.48	17.85	-2.43
2.460	-7.16	19.24	-2.27
2.470	-6.87	20.54	-2.09
2.480	-6.74	21.17	-2.01

2.4 Efficiency & Gain Data-Right Ear Head Model Data/效率&增益数据-右耳头模数据

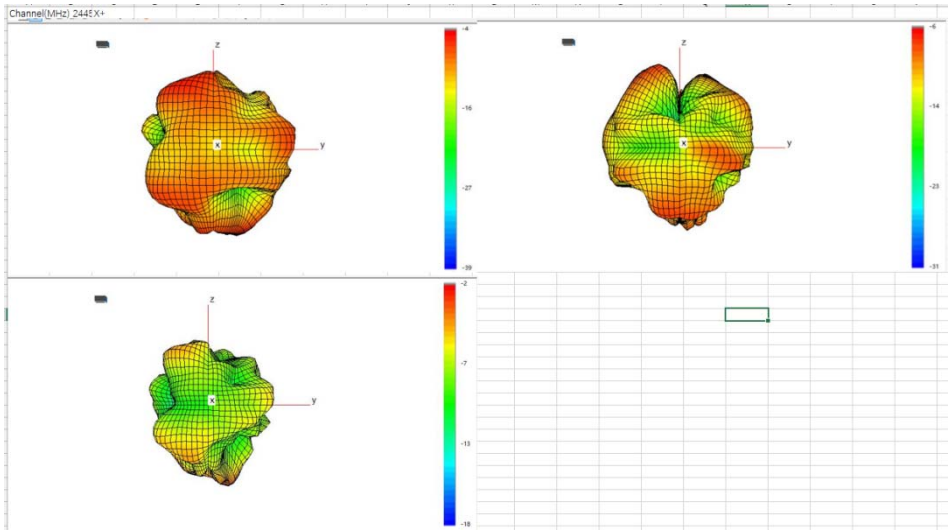
Manufacturer: Boyongkai Electronic Technology Co., Ltd

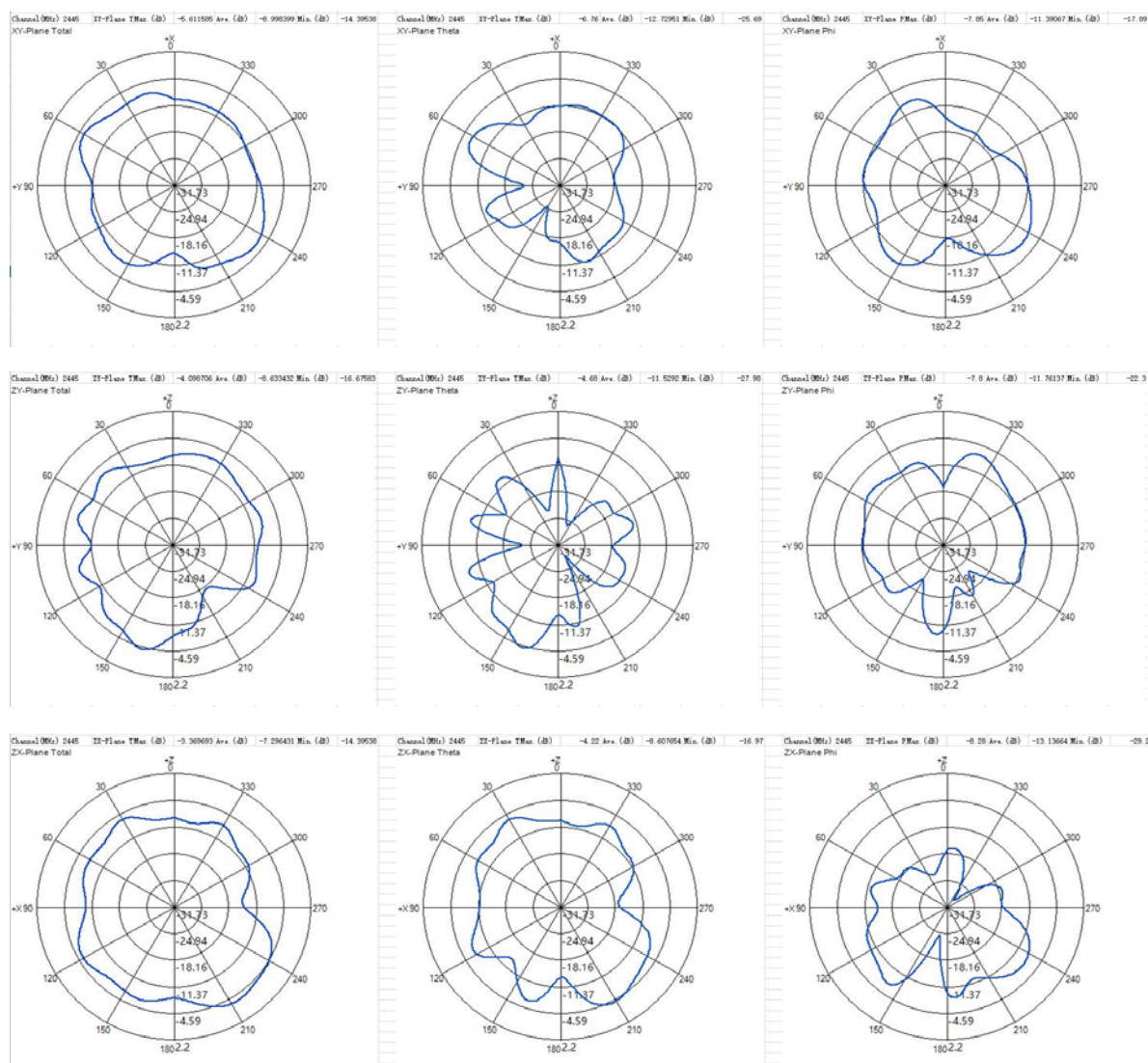
Address: Fenghuangshan Industrial Zone, Shajiao, Humen, Dongguan City

耳头模数据

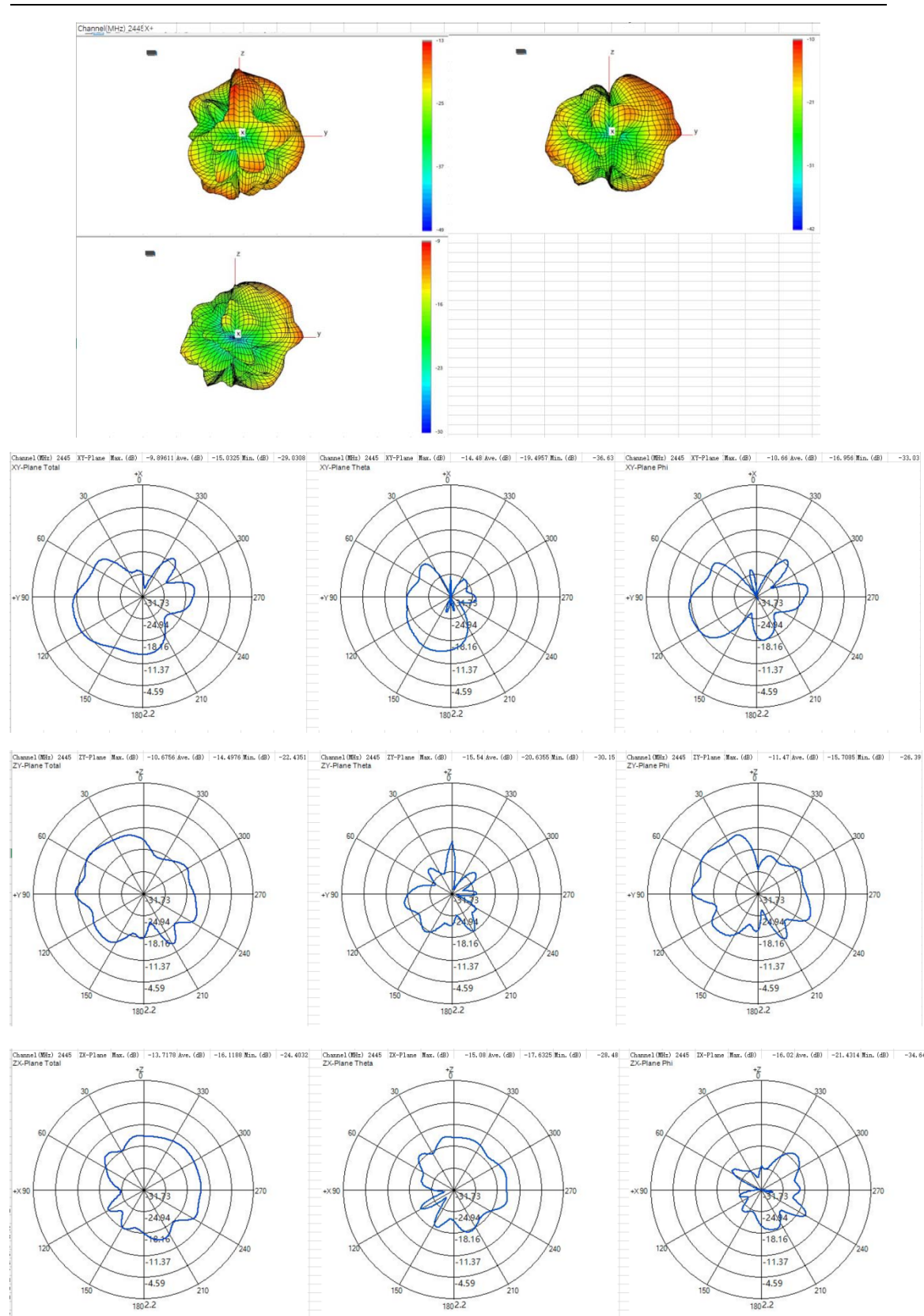
Head model data/头模数据			
Frequency(GHz)	Efficiency(dB)	Efficiency(%)	Gain(dB)
2.400	-17.60	1.74	-11.50
2.410	-17.53	1.76	-11.61
2.420	-16.99	2.00	-11.10
2.430	-16.31	2.34	-10.61
2.440	-15.66	2.72	-9.88
2.450	-15.12	3.08	-9.59
2.460	-14.56	3.50	-9.07
2.470	-14.08	3.91	-8.66
2.480	-13.77	4.20	-8.43

2.5 Passive antenna pattern-Right ear free space pattern/天线无源方向图-右耳自由空间方向图





2.6 Passive antenna pattern-Right ear head pattern/天线无源方向图-右耳头模方向图



3、Active test data/有源测试数据

Manufacturer: Boyongkai Electronic Technology Co., Ltd

Address: Fenghuangshan Industrial Zone, Shajiao, Humen, Dongguan City

3.1 Conducting test data/传导测试数据

传导数据	L		R	
Channels	Tx power	Sensitivity	Tx power	Sensitivity
0	10.23	-94.50	10.12	-94.50
39	9.93	-95.00	10.16	-95.00
78	10.00	-94.50	10.43	-95.00

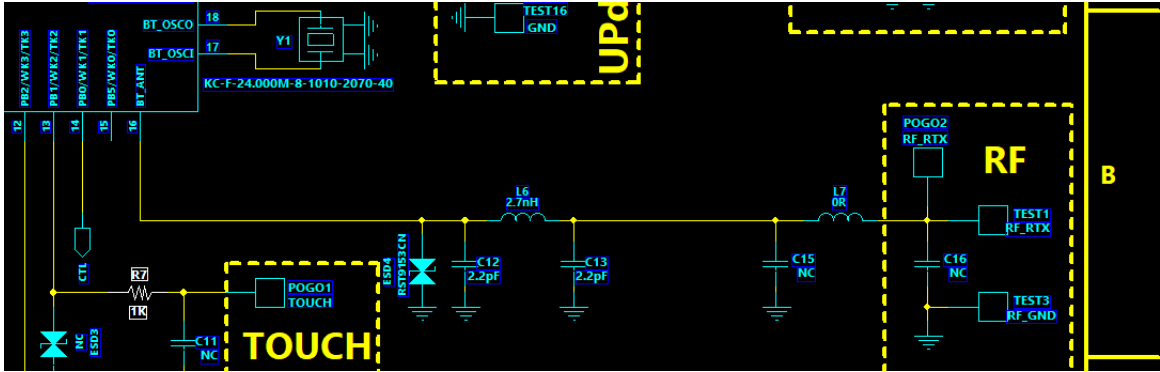
3.2 Active testing data in darkroom/暗室有源测试数据

6#样机	L-头模		R-头模	
Channels	TRP	TIS	TRP	TIS
0	-3.33	-83.94	-3.23	-83.35
39	0.53	-83.09	0.66	-83.73
78	-0.13	-84.22	-1.45	-83.9

2#样机	L-头模		R-头模	
Channels	TRP	TIS	TRP	TIS
0	-3.22	-82.85	-3.34	-84.09
39	0.7	-82.98	0.39	-83.59
78	0.03	-83.58	-2.22	-84.04

4、Antenner Matching circuit/天线匹配电路

4.1 Principle diagram of Right ear antenna matching/右耳天线匹配原理图



4.2 Material List for Matching Right Ear Antenna/右耳天线匹配物料表

Tag number 位号	Value of the right ear material 右耳料值
C15	NC
L7	0 Ω
C16	2.5pf