



深圳通诚无限科技有限公司

Shenzhen Tongcheng infinite Technology Co., Ltd

SPECIFICATION FOR APPROVAL

supplier: ShenzhenTongchengInfinite Technology Co., Ltd
4/F, Jinfulai Complex Building, Dabaolu, Dalang
Community, Xin'an Street, Bao'an District, Shenzhen

Supplierspecifications:2.4/5.8G WiFiantenna

Supplier model: TCNZWJ2458G-0

Customer Name : Shenzhen Jiuzhou Electric Appliance Co., Ltd

Customer Item No : 1.XMR.CAB602

Version No : DTC9757antenna V1.0

Sample delivery date : 2022/12/13

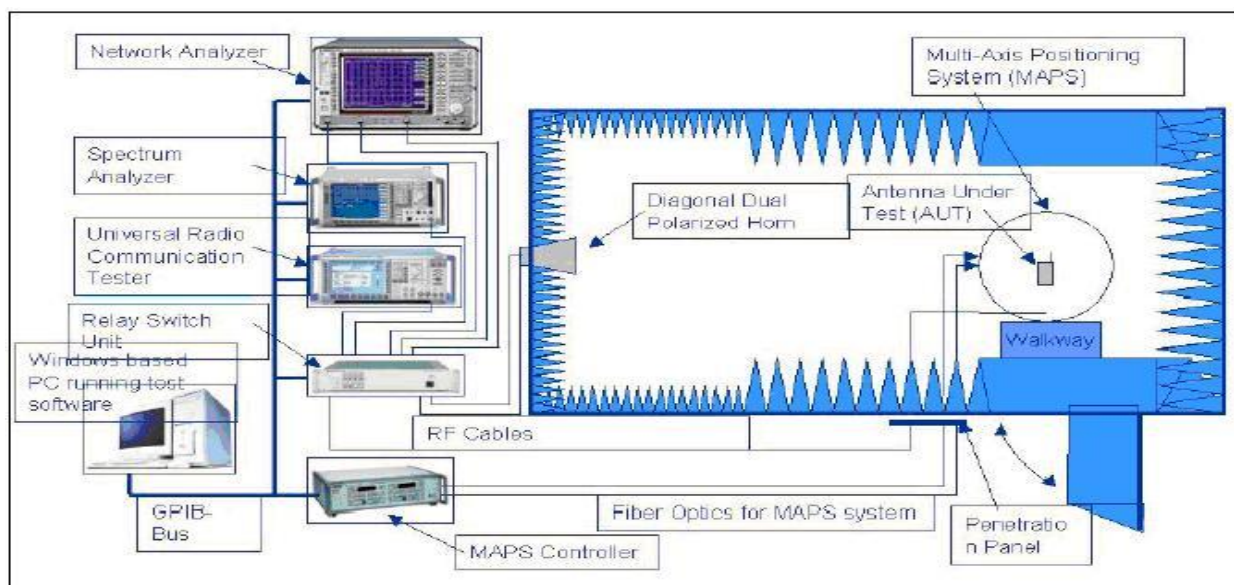
Antenna Type: Metal Antenna

Ackno wledg ment column	supplier	RF Engineer	to examine	approval	file
		Yan Peihao	Zhong Anmin	Feng Juan	Huang Wenmei
	customer	Certified Engineer	to examine	approval	file

Contents

<i>Item</i>	<i>Description</i>
1.....	Test instrument and environment
2.....	Antenna performance
3.....	building-out circuit
4.....	Antenna passive data S11, ReturnLoss, Smith
5.....	Gain of efficiency
6.....	3D antenna orientation diagram
7.....	2D antenna orientation diagram
8.....	Antenna drawing

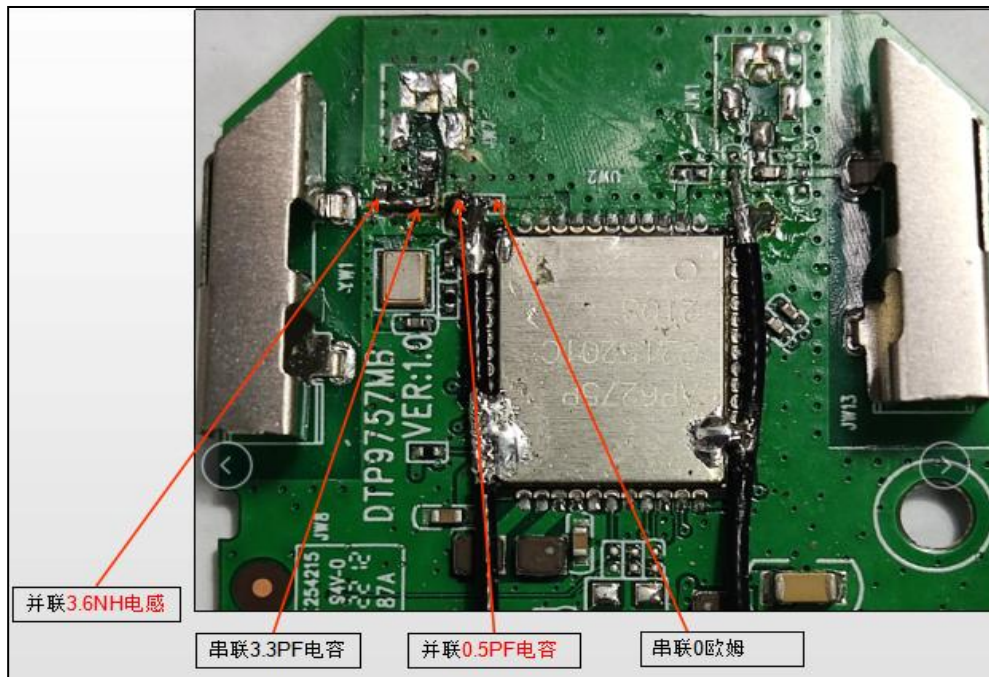
1 . Test instrument and environment: CTIA 743 darkroom, 8960 / 5515c, the mobile phone is placed back to the turntable 4 meters away from the standard horn antenna:



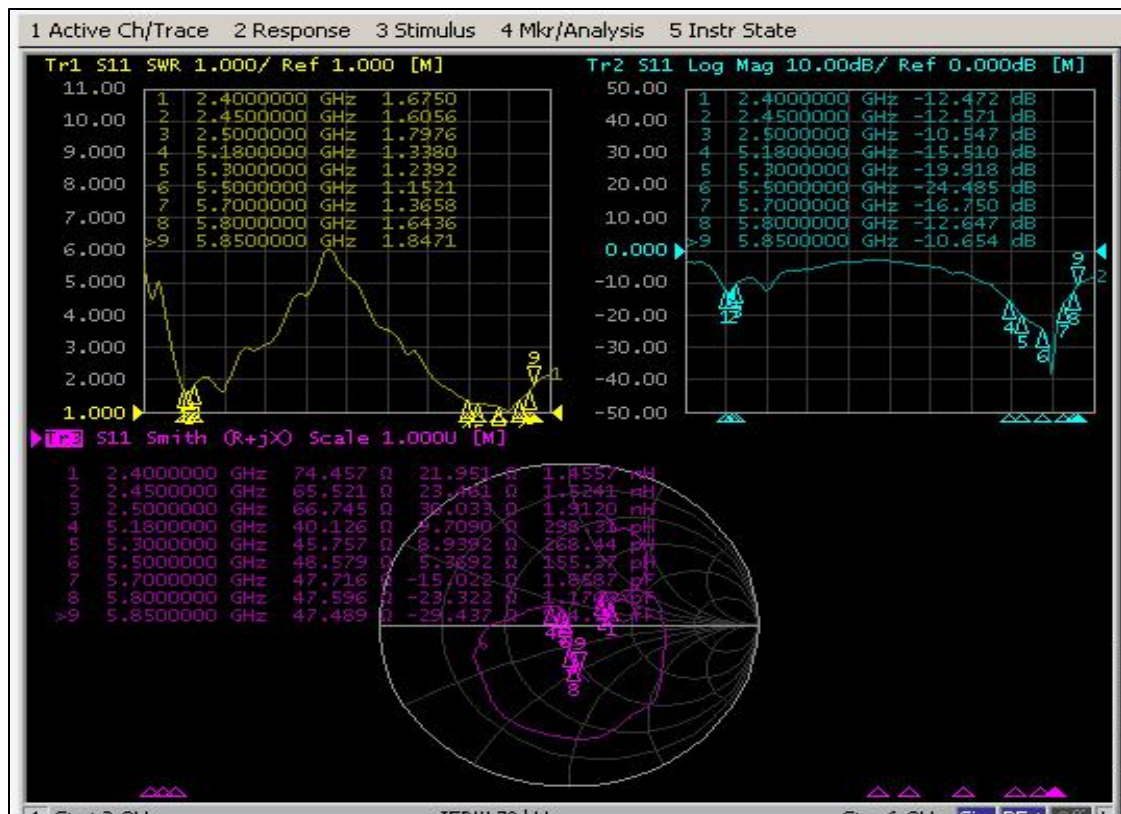
2. Antenna performance:

Serial No	Work index	Working parameters
1	working frequency	2400-2500MHZ/5120-5960MHZ
2	Standing wave ratio	≤ 2.0
3	Return loss	-10dB Max
5	Antenna gain	Peak gain2.4G 2400MHZ-2483.5MHZ:3.5 dBi Peak gain5G 5150MHZ-5250MHZ:2.99 dBi Peak gain5G 5250MHZ-5350MHZ:3.08 dBi Peak gain5G 5470MHZ-5725MHZ:3.5 dBi Peak gain5G 5725MHZ-5850MHZ:3.63 dBi
6	Antenna efficiency	2.4G: $\geq 50\%$ 5.8G: ≥ 50
7	Polarization direction	Vertical / horizontal
8	Interface type	/welding
9	Antenna size	19.7*4.7*8.6MM

3. building-out circuit:



4. Antenna passive data S11, ReturnLoss, Smith :

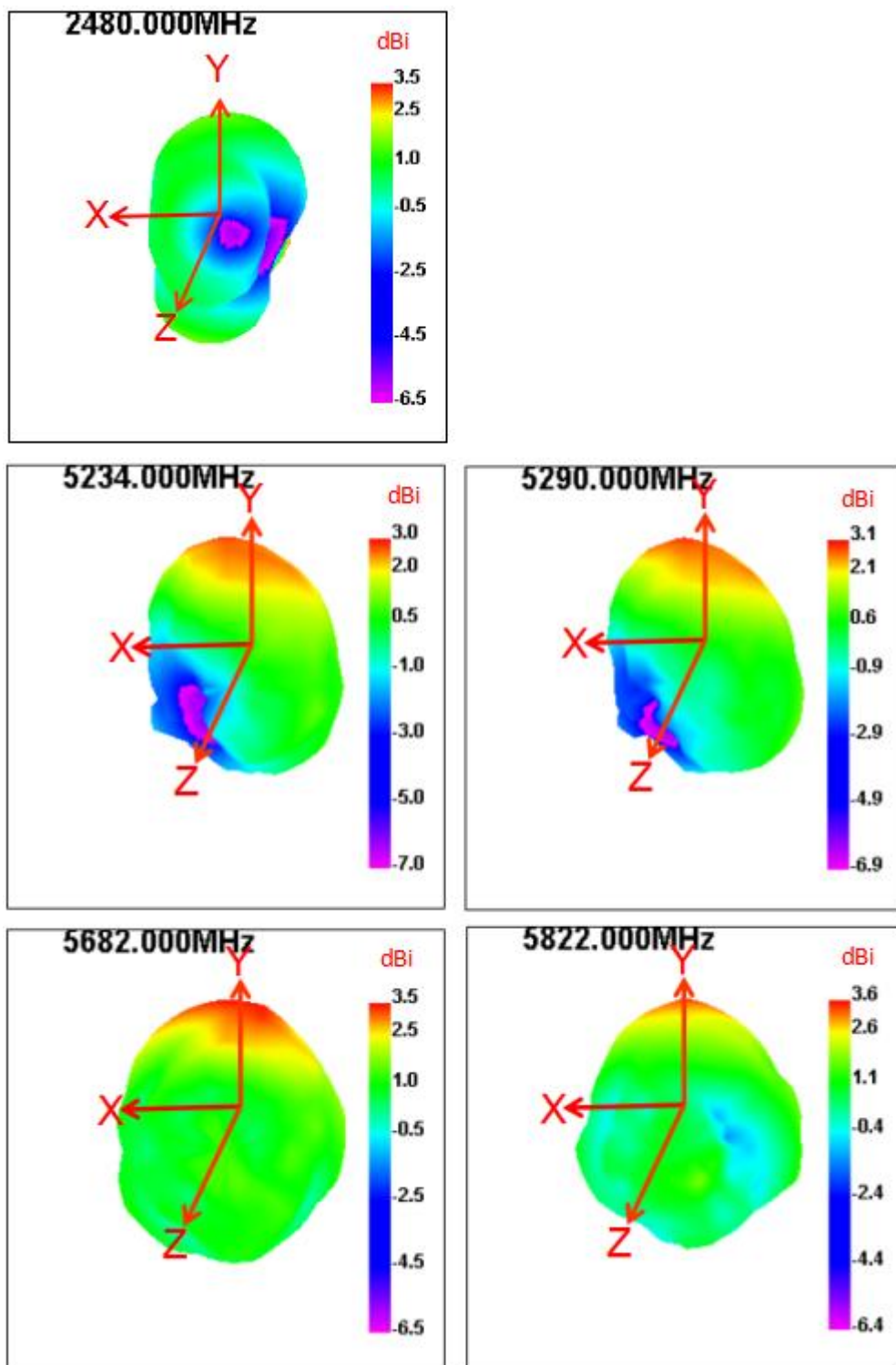


5. Gain of efficiency:

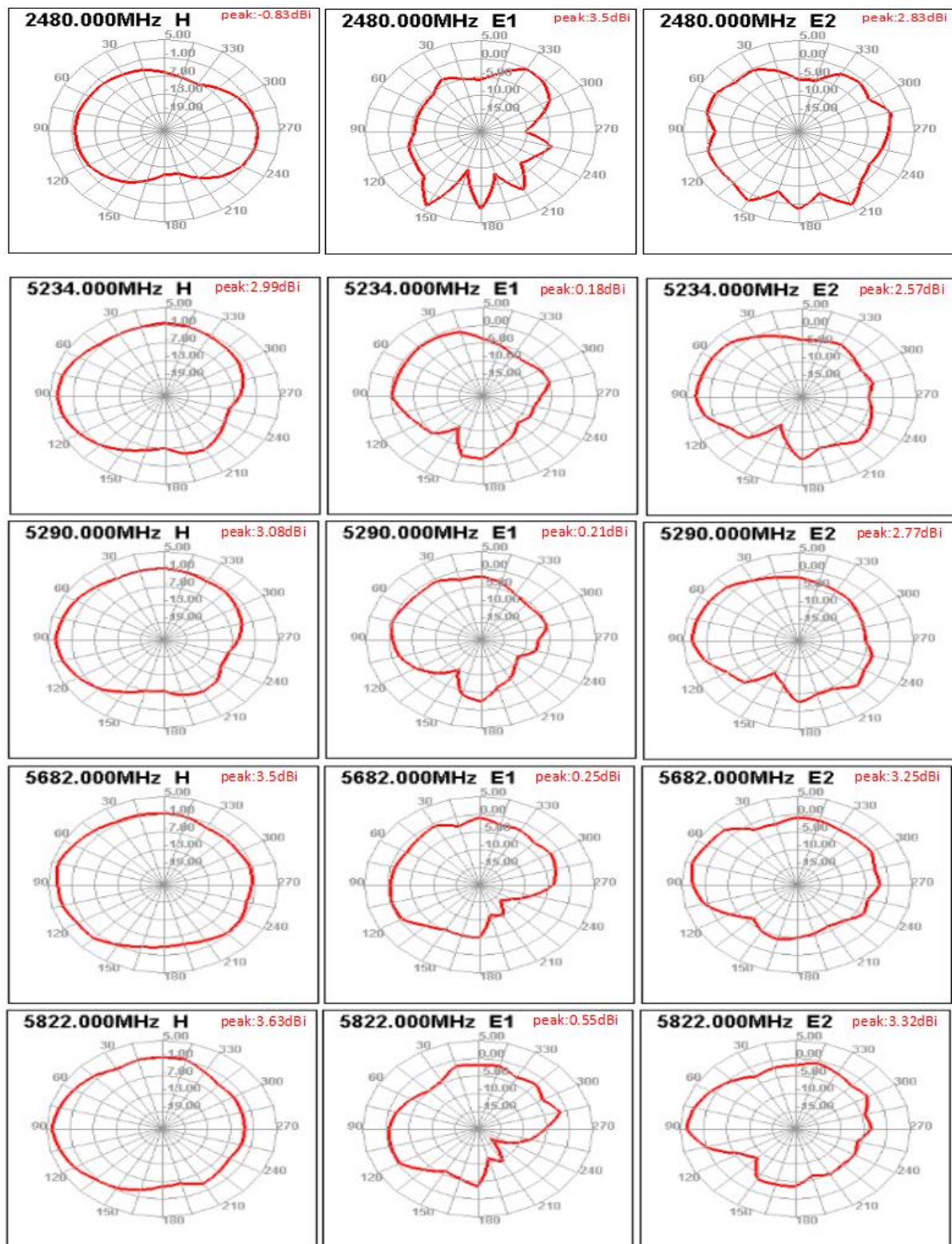
Freq (MHz)	Effi (%)	Gain (dBi)
2400	58.77	2.22
2405	59.03	2.27
2410	58.52	2.26
2415	59.1	2.42
2420	60.7	2.5
2425	61.09	2.55
2430	60.83	2.64
2435	62.94	2.79
2440	64.39	2.91
2445	64.66	2.96
2450	65.43	2.99
2455	64.45	3.06
2460	63.42	3.09
2465	62.49	2.94
2470	62.25	3.11
2475	62.96	3.25
2480	64.5	3.5
2485	66.96	3.72
2490	66.78	3.76
2495	65.28	3.62
2500	65.63	3.78

Freq (MHz)	Effi (%)	Gain (dBi)
5150	50.88	2.25
5178	50.52	2.24
5206	56.82	2.98
5234	57.23	2.99
5262	54.61	2.76
5290	57.22	3.08
5318	57.27	2.7
5346	59.24	2.74
5374	57.53	2.71
5402	66.13	3.12
5430	61.77	2.41
5458	62.37	2.1
5486	56.19	2.13
5514	56.93	2.21
5542	55.57	2.45
5570	56.49	2.68
5598	60.31	3.27
5626	63.34	3.44
5654	62.8	3.23
5682	65.89	3.5
5710	64.88	3.43
5738	66.01	3.31
5766	64.29	3.51
5794	54.54	2.89
5822	56.3	3.63
5850	56.14	2.83

6.3D antenna orientation diagram:



7.2D antenna orientation diagram:



8. Antenna drawing:

