

Antenna Specifications

CUSTOMER		FPC Antenna	
CS P/N		MDT781-USA	
HX P/N		A20-157-MDT781-USA	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

1. General Description

This document provides the antenna specifications on electric, mechanic and reliability. The testing conditions and related pictures are also included.

1.1 Print Acceptance

Samples and Antenna Specifications are to be sent to customer. When they are approved, the approval form should be completed, signed, and sent back to HX before further mass production batches can be delivered.

1.2 Coordinate System

The coordinate system for the phone is defined as follows:

- Origin in center of gravity.
- Positive X axis is perpendicular to, and directed from, front plane.
- Positive Y axis is perpendicular to, and directed from, right side plane (as seen from front).
- Positive Z axis is perpendicular to, and directed from, top plane.

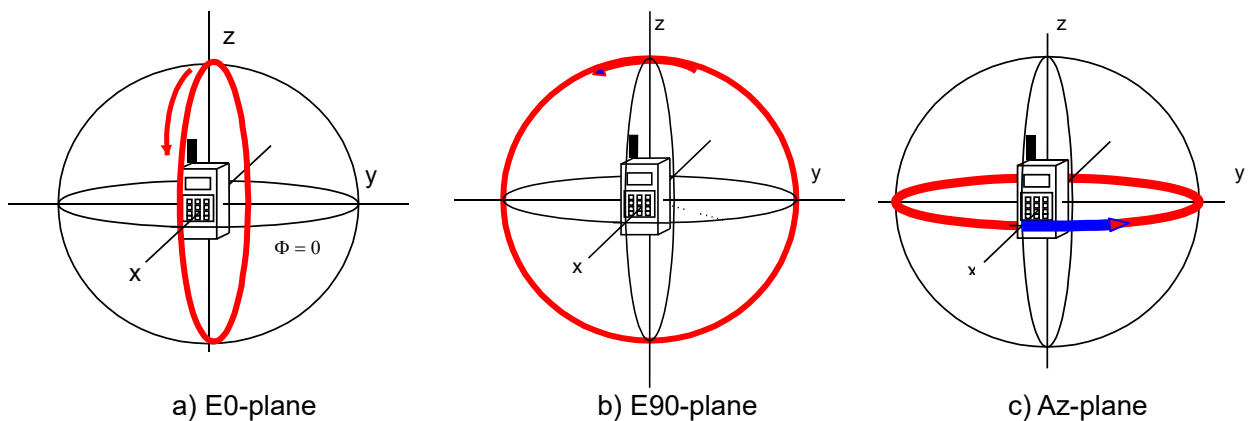


Figure 1-1 The coordinate system for the phone

2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ---MDT781 Figure 2-1 shows the antenna designed by HX & The fixturing of MDT781

2.1 Frequency Band

2.2 Impedance

2.2.1 Nominal

Nominal Impedance(including matching circuit) : 50 ohms

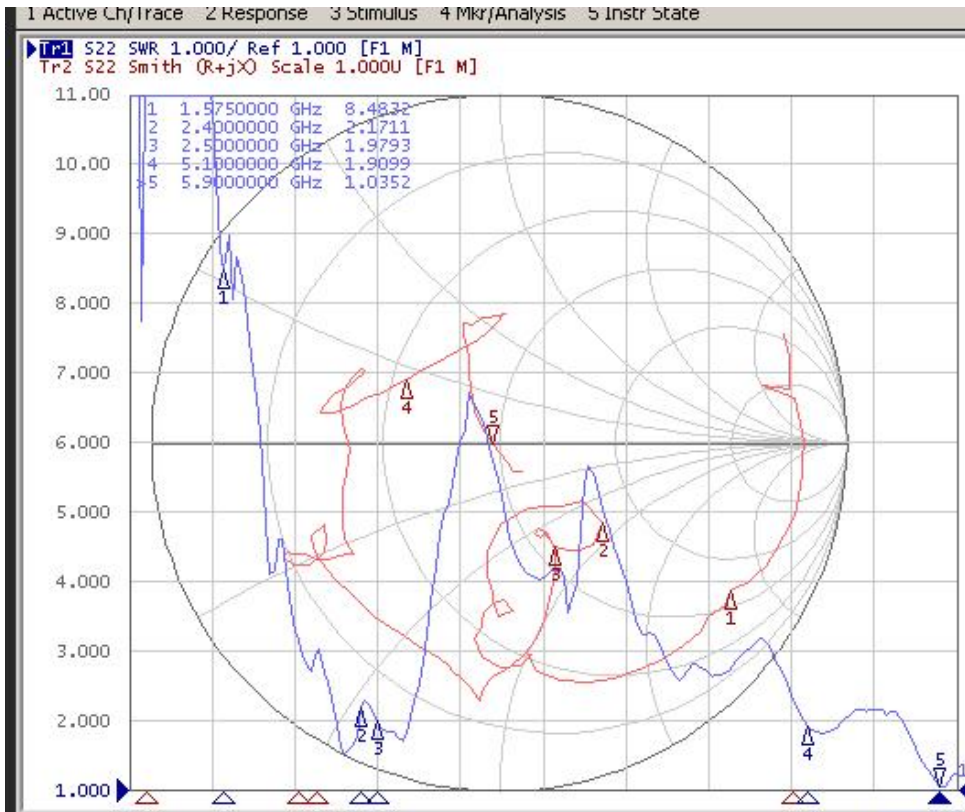
2.2.2 Matching Circuit

2.3 Passive Measurements

2.3.1 S11 of the Typical Sample

Figure 2-1 The antenna designed by HX & The fixturing of MDT781

2.4G/5GWIFI



Antenna Specifications
SHENZHEN HENGXIANGTONG ANTENNA TECHNOLOGY CO., LTD.

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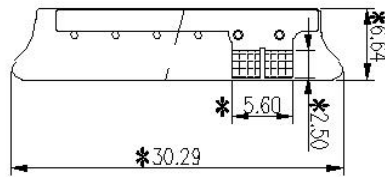
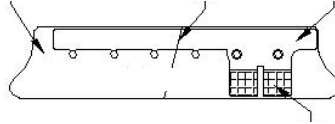
(MHz)	Ave Gain (dB)	Peak Gain (dBi)	Effi (%)
2390	-3.99	1.33	39.9
2400	-4.07	1.29	39.19
2410	-4.28	0.96	37.28
2420	-4.29	0.96	37.2
2430	-4.39	0.77	36.43
2440	-4.33	0.76	36.87
2450	-4.41	0.72	36.19
2460	-4.47	0.8	35.71
2470	-4.45	0.76	35.92
2480	-4.44	0.87	35.94
2490	-4.29	1.11	37.21
2500	-4.22	1.18	37.85
2510	-4.32	1.26	37.01
2520	-4.52	0.91	35.34
2530	-4.63	0.8	34.41

(MHz)	Ave Gain (dB)	Peak Gain (dBi)	Effi (%)
5180	-4.76	0.45	33.45
5200	-4.78	0.04	33.28
5220	-4.54	0.27	35.18
5240	-4.76	-0.45	33.43
5260	-4.96	-0.5	31.89
5280	-4.79	-0.8	33.19
5300	-5.12	-0.7	30.78
5320	-5.1	-0.35	30.91
5340	-5.03	-0.06	31.38
5360	-5.33	-0.41	29.31
5380	-4.76	0.51	33.45
5400	-4.86	0.23	32.68
5420	-5.04	0.18	31.35
5440	-5.25	0.19	29.87
5460	-5.42	0.08	28.71
5480	-5.25	-0.18	29.87
5500	-4.98	0.33	31.8
5520	-5.09	-0.63	31
5540	-4.92	0.21	32.23
5560	-4.95	0.11	31.97
5580	-4.6	0.17	34.63
5600	-4.62	0.63	34.48
5620	-4.31	1.49	37.04
5640	-4.52	1.33	35.35
5660	-4.58	1.18	34.87
5680	-4.67	0.87	34.15
5700	-4.59	0.75	34.76
5720	-4.62	0.98	34.5
5740	-4.67	0.44	34.12
5760	-4.89	0.87	32.43
5780	-4.75	1.08	33.47
5800	-4.73	0.68	33.66
5820	-4.68	0.77	34.04
5840	-4.72	0.95	33.7
5860	-5.07	0.91	31.15
5880	-5.19	0.77	30.23

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4. Specifications Drawings

unit: mm



5. Environmental Characteristic

Test Item	Test description
1. Low Temperature	Temp.: -20 °C Time: 24 hours
2. High Temperature	Temp.: 80℃ Time: 24 hours
3. Salt Fog	5±0.1% Nad salt fog PH Value: 6.5-7.2 Temp: 35±1℃ Time:24 hours