

Customer Name Customer Name: Awei Technology Project
Name: US 4G-L Flat Antenna

Specifications Product Spec: 4G-L flat antenna, 123MM white flat shell,
Black IPEX-1, RF1.13, black wire L=230MM

Material Number Customer P/
N: _____ edition REV: V1.0
Date: 2025.01.14

Production drawings	Check the audit	Appro- ved

Customer Acknowledges Customer Approve

Check the audit	Appro- ved	Acceptance approval

catalogue

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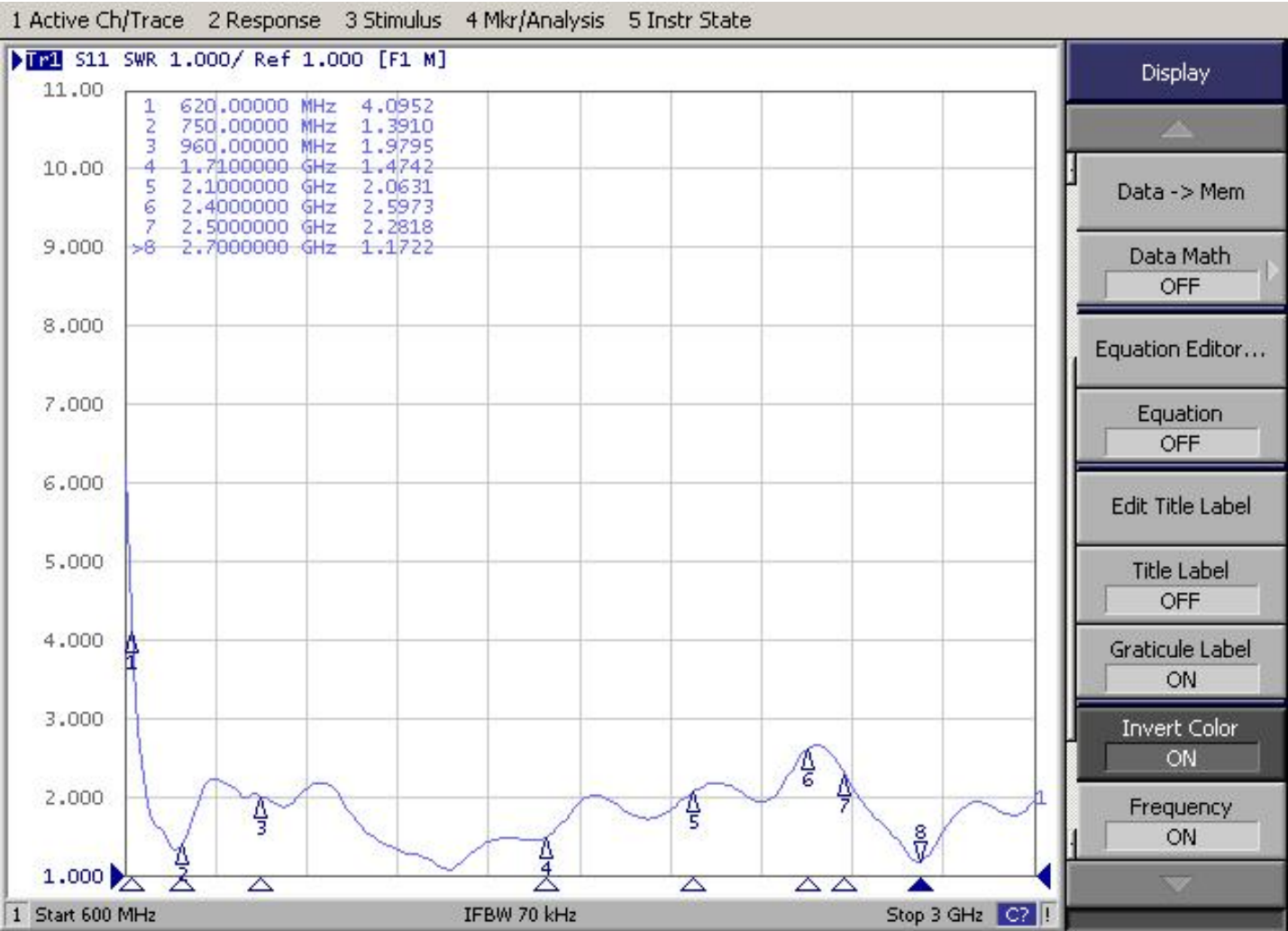
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Electrical performance index

Electrical performance indicators		Electrical Specifications	
frequency range		600-960/1710-2700MHZ	
voltage standing-wave ratio	≤3.0	VSWR	≤3.0
gain	≤3.6 DBI	GAIN	≤3.6 DBI
radiation mode	omnidirectional	Radiation	OMNI
Polarization mode	linear polarization	Polarizatin	LINEAR
input impedence	50 Ω	Input Impedance	50 Ω
Mechanical performance indicators		Mechanical Specifications	
Interface format	IPEX-1	Input connector	IPEX-1
Antenna material	PCB	Antenna materia	PCB
working temperature	-30℃~+80℃	Working Temperature	-30℃~+80℃
Humidity at work	40~85%	Working Humidity	40~85%
Physical installation			

Test report Test report

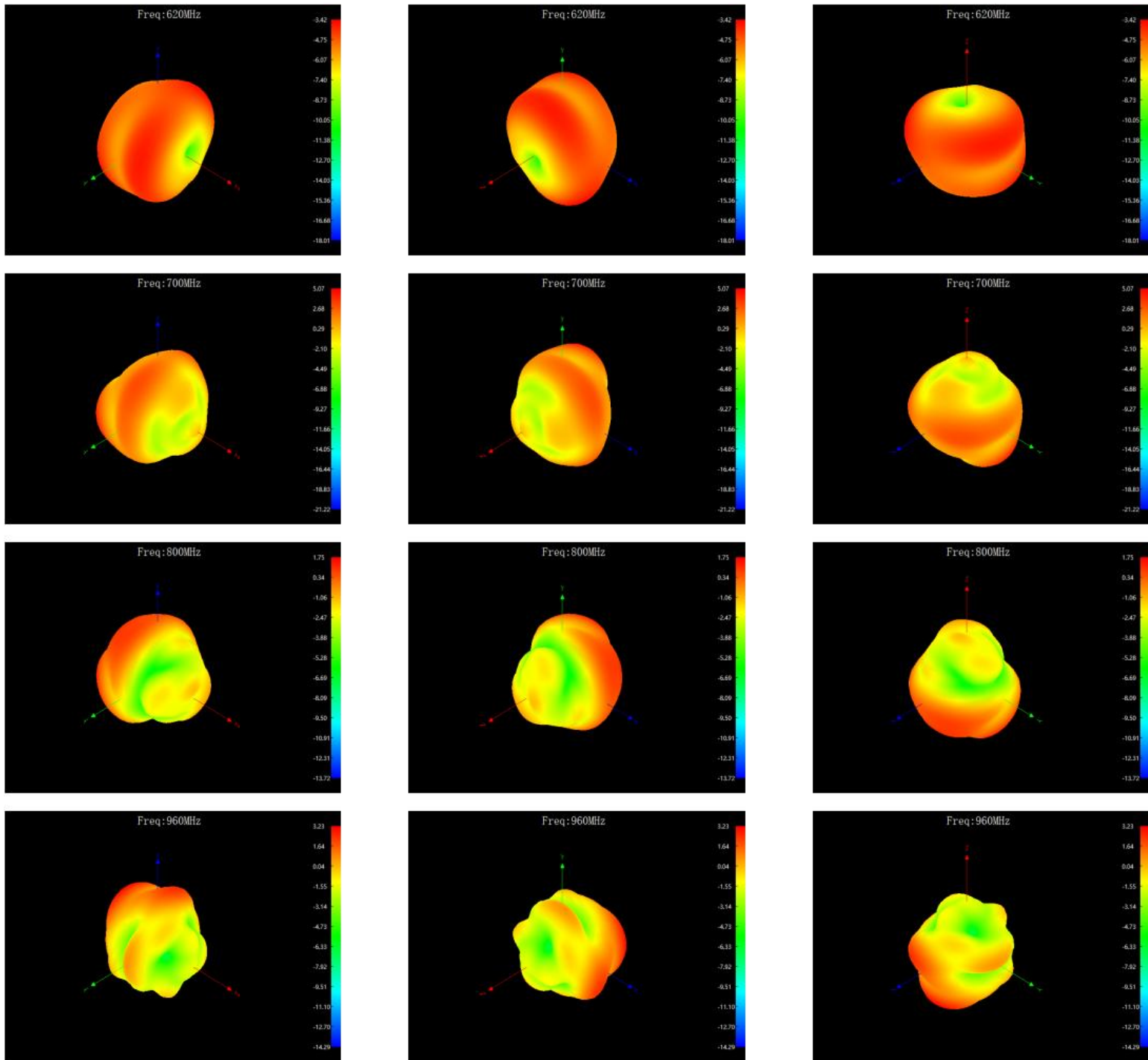
1.Antenna Wave Pattern Antenna Efficiency

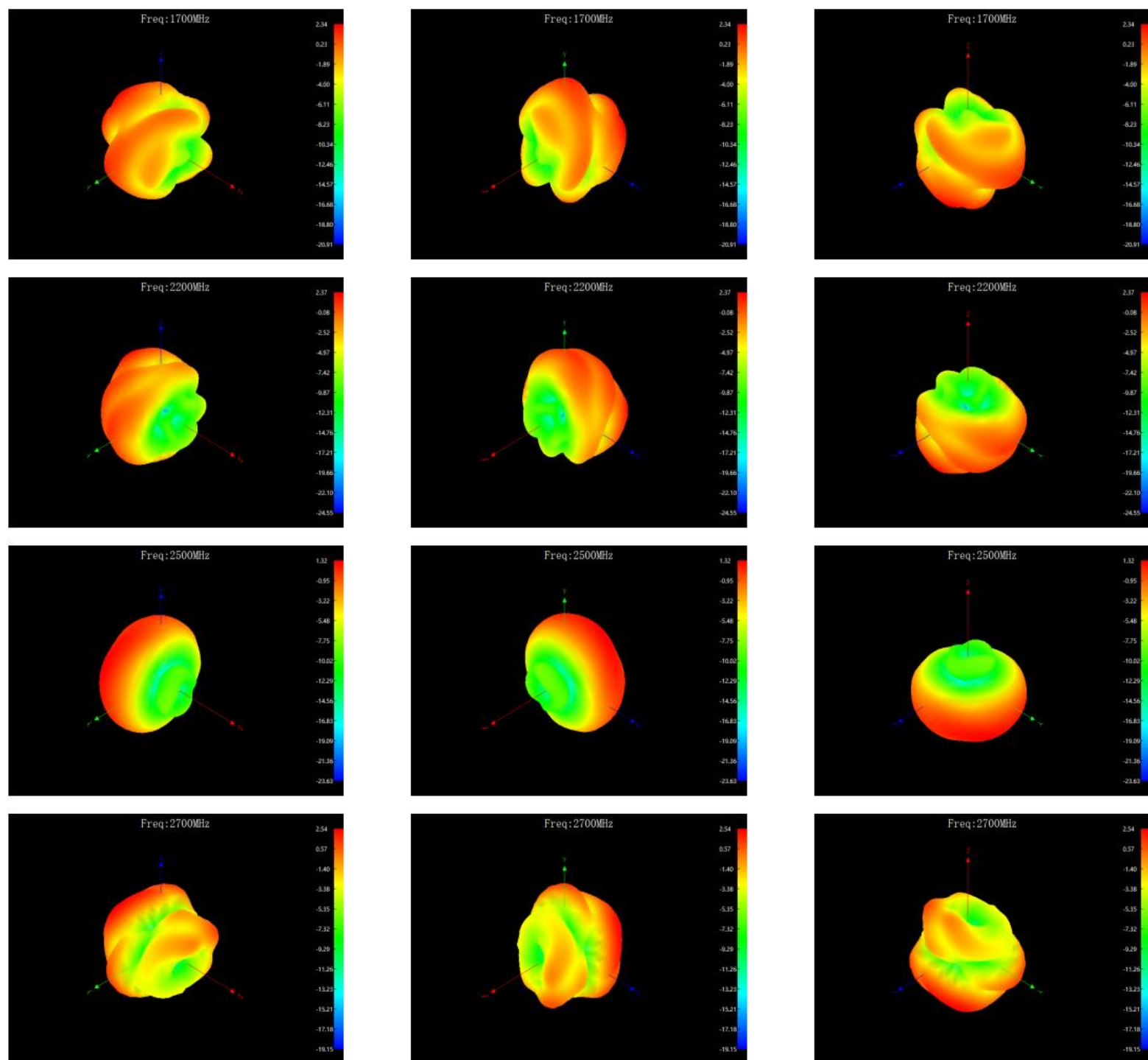


2. Antenna Efficiency

Frequency/Mhz	MaxGain/dBi	Efficiency / %
600	-3.65	17.41
620	-3.42	19.77
640	-0.57	29.72
660	3.4	42.56
680	3.44	49.2
700	5.07	47.86
720	4.39	50.7
740	3.59	45.6
760	4.51	47.42
780	3.69	53.46
800	1.75	54.33
820	1.97	54.7
840	1.57	57.28
860	1.29	53.83
880	1.66	55.98
900	2.08	55.59
920	2.87	57.81
940	3.12	57.68
960	3.23	56.23
1700	2.34	53.58 1750 3.17 53.83
1800	3.14	51.76
1850	4.1	50.7 1900 4.41 54.08
1950	3.41	52.6
2000	2.48	49.2 2050 1.89 48.75
2100	2.25	50.82
2150	1.8	48.42 2200 2.37 48.31
2250	1.52	48.87
2300	1.59	47.97 2350 1.66 50.12
2400	1.01	43.25
2450	1.37	45.81 2500 1.32 44.67
2550	1.83	47.21
2600	2.75	51.88 2650 2.66 53.83
2700	2.54	52.97

3. Antenna Pattern





4G active data:

Measurement	Standard	Band	Channel	Frequency	Total
TRP	FDD_LTE	FDD_B2(10MHz)	18650	1855	19.69
TRP	FDD_LTE	FDD_B2(10MHz)	18900	1880	19.26
TRP	FDD_LTE	FDD_B2(10MHz)	19150	1905	17.6
TIS(RSSI)	FDD_LTE	FDD_B2(10MHz)	1150	1985	-93.29
TRP	FDD_LTE	FDD_B4(10MHz)	20000	1715	20.28
TRP	FDD_LTE	FDD_B4(10MHz)	20175	1732.5	20.62
TRP	FDD_LTE	FDD_B4(10MHz)	20350	1750	20.18
TIS(RSSI)	FDD_LTE	FDD_B4(10MHz)	2350	2150	-93.53
TRP	FDD_LTE	FDD_B5(10MHz)	20450	829	17.97
TRP	FDD_LTE	FDD_B5(10MHz)	20525	836.5	18.02
TRP	FDD_LTE	FDD_B5(10MHz)	20600	844	17.88
TIS(RSSI)	FDD_LTE	FDD_B5(10MHz)	2600	889	-78.7
TRP	FDD_LTE	FDD_B12(10MHz)	23060	704	16.54
TRP	FDD_LTE	FDD_B12(10MHz)	23095	707.5	16.82
TRP	FDD_LTE	FDD_B12(10MHz)	23130	711	17.09
TIS(RSSI)	FDD_LTE	FDD_B12(10MHz)	5130	741	-78.47
TRP	FDD_LTE	FDD_B13(10MHz)	23230	782	16.07
TIS(RSSI)	FDD_LTE	FDD_B13(10MHz)	5230	751	-77.35
TRP	FDD_LTE	FDD_B17(10MHz)	23780	709	16.13
TRP	FDD_LTE	FDD_B17(10MHz)	23790	710	16.52
TRP	FDD_LTE	FDD_B17(10MHz)	23800	711	16.74
TIS(RSSI)	FDD_LTE	FDD_B17(10MHz)	5800	741	-78.36
TRP	FDD_LTE	FDD_B66(10MHz)	132022	1715	19.4
TRP	FDD_LTE	FDD_B66(10MHz)	132322	1745	19.5
TRP	FDD_LTE	FDD_B66(10MHz)	132622	1775	18.59
TIS(RSSI)	FDD_LTE	FDD_B66(10MHz)	67086	2175	-95.7
TRP	FDD_LTE	FDD_B71(10MHz)	133172	668	17.76
TRP	FDD_LTE	FDD_B71(10MHz)	133297	680.5	17.43
TRP	FDD_LTE	FDD_B71(10MHz)	133422	693	17.73
TIS(RSSI)	FDD_LTE	FDD_B71(10MHz)	68836	642	-82.36
TRP	TDD_LTE	TDD_B40(20MHz)	38750	2310	22.16
TRP	TDD_LTE	TDD_B40(20MHz)	39150	2350	21.66

TRP	TDD_LTE	TDD_B40(20MHz)	39550	2390	20.72
TIS(RSSI)	TDD_LTE	TDD_B40(10MHz)	39600	2395	-97.18
TRP	TDD_LTE	TDD_B41(20MHz)	40340	2565	18.74
TRP	TDD_LTE	TDD_B41(20MHz)	40620	2593	19.27
TRP	TDD_LTE	TDD_B41(20MHz)	41140	2645	18.58
TIS(RSSI)	TDD_LTE	TDD_B41(10MHz)	41140	2645	-94.57

Testing Equipment and Principle Testing Equipment and Principle

1. testing facility :

Network Analyzers:

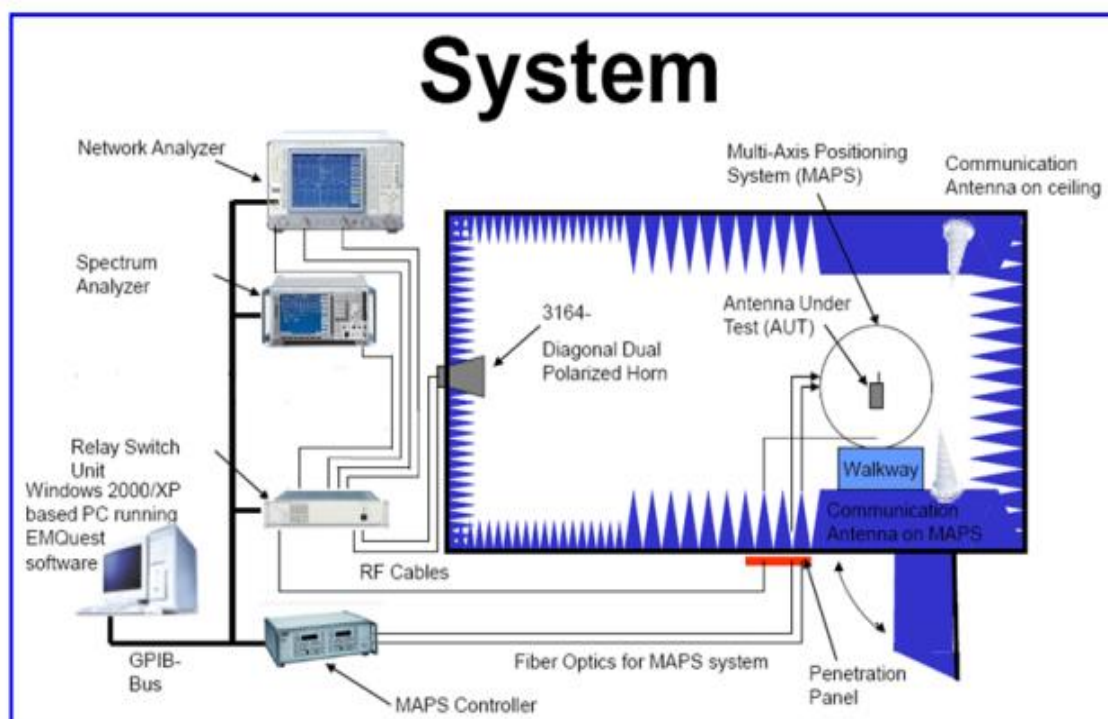
Agilent 8753D 5071B

Comprehensive tester Communications Test Set:

Agilent E5515C

3D Chamber Test System:

2. Test principle:



Engineering drawings Product Drawing

