

普宙

样品承认书

Parts Approval Sheet

生产供应商: 国质信

Supplier

适用项目: S200 4G 拓展盒

Type/Spec

品 牌: NQI

Brand

送样日期: 2024.10.14

Send out Date

承认日期:

Approve Date

物料名称: 4G 天线

Parts Name

NQI 料号: NQI-S200-4G-BB56X-ASM-V0

NQI Parts No

客户料号: 35-0324-431

Customer Parts No

文件编号: NQI-RD-SPEC-20241001

Document No

样品版本: V0

Version

Supplier		Customer	
Approved By	Prepared By	Engineering Dept	Quality Dept

联系方式 (Contact): 深圳市龙岗区平吉大道 66 号康利城 7 栋 103 号

Email: nqi@nqi.com.cn

Tel: +86-0755-28500656

Fax: +86-0755-28700656



(Resume)

[illegible]



深圳市国质信网络通讯有限公司
ShenZhen NQI network communication ltd

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一. 样品图片及说明 (Sample picture and description) :

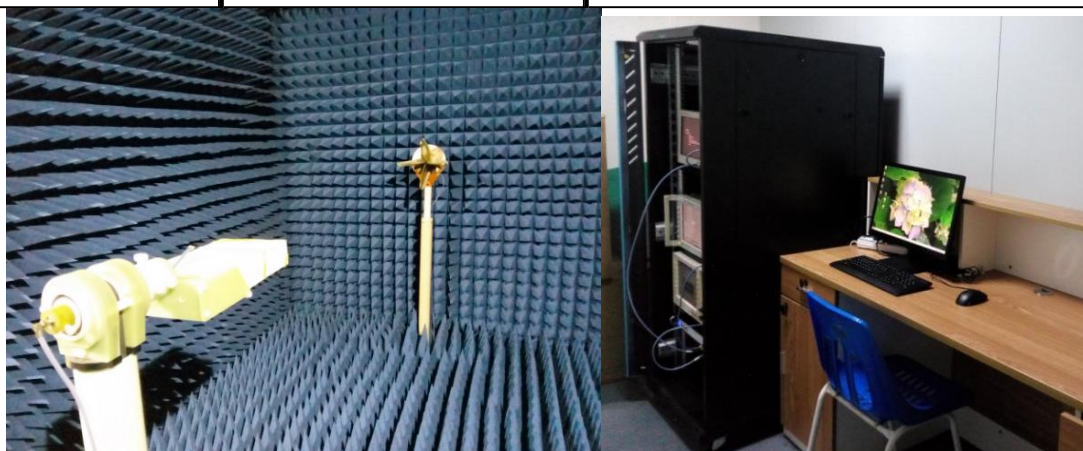


二. 测试设备及项目 (Test equipment and items) :

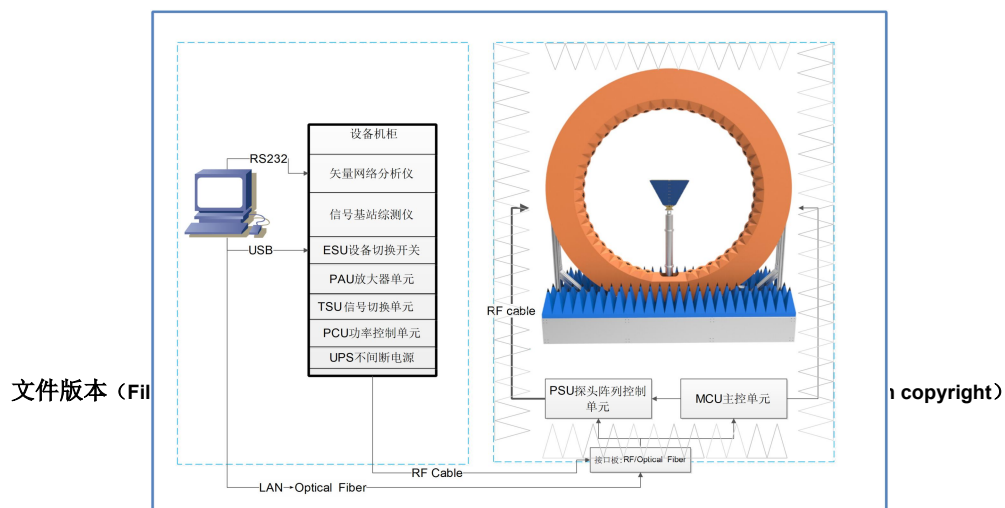
类别 (Class)	测试项目 (Test item)	设备 (Equipment)
1. S parameter	1. 回波损耗(RL) 2. 驻波比 (VSWR) 3. 史密斯原图 (Smith chart)	网分 (VNA) : Agilent E5071B R&S ZVB8 Protek A333
2. 耦合测试 (Coupling testing)	1. 发射功率 (MAX Power) 2. 接收灵敏度 (MIN Sens)	1. 2G/3G Tester: Agilent 8960 2. The coupling box: TESCO TC-5060A 3. 3D Chamber: ETS 3D Chamber (5x3x3)
3. 3D 无源测试 (Passive Test)	1. 效率 (Effeciency) 2. 增益 (Gain) 3. 辐射方向图 (Radiation pattern)	1. 3D Chamber: TEM24 3D Chamber (5x5x5) ETS 3D Chamber (5x3x3) 2. 网分 (VNA) : Agilent E5071B R&S ZVB8
4. 3D 有源测试 (Active Test)	1. 3D 功率 (TRP) 2. 3D 灵敏度 (TIS) 3. 吞吐率 (Throughput rate)	1. 3D Chamber: TEM24 3D Chamber (5x5x5) ETS 3D Chamber (5x3x3) 2. 2G/3G Tester: Agilent 8960 3. 4G Tester: MT8820C/CMW500 4. WIFI/BT/NB-iot Tester: CMW500 5. 5G Tester: SP9500-CTS

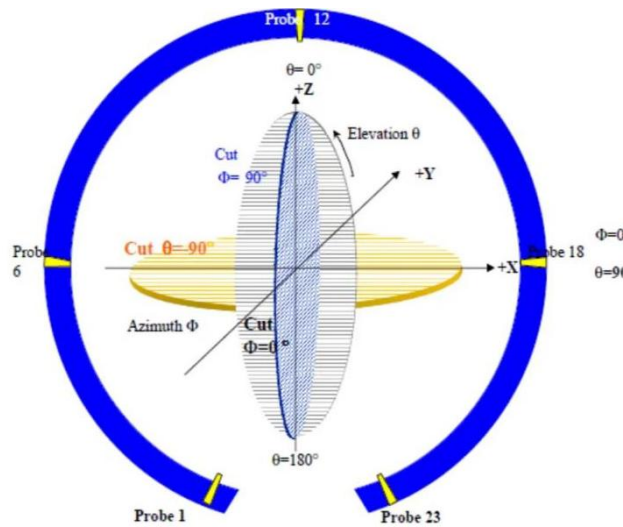


6.Head: HEAD-P10 (FACE-P10)



三. 暗室连接及坐标 (Chamber connection and coordinates) :



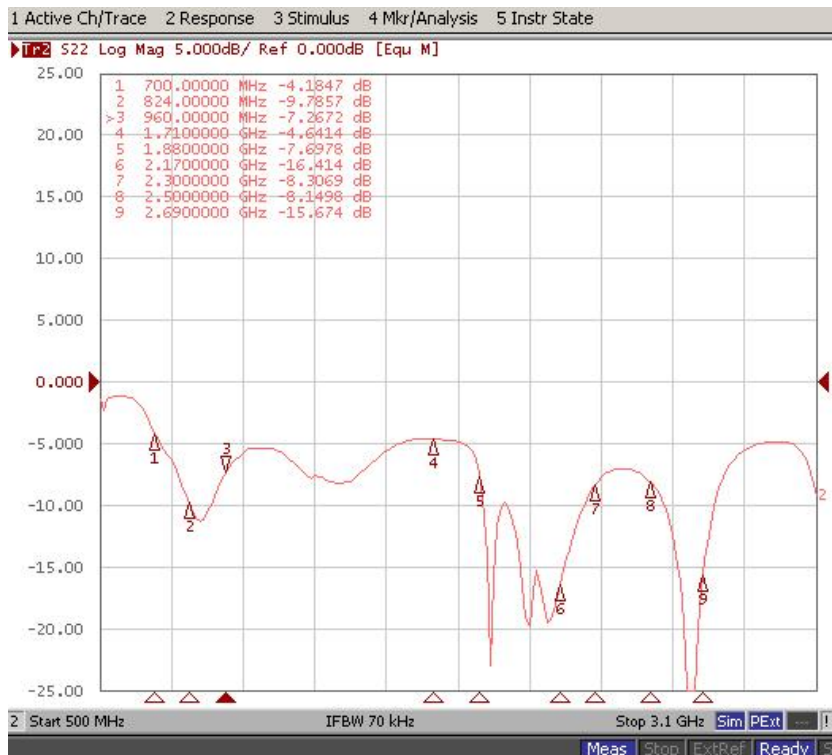


四. 天线装配方式及环境处理 (Antenna assembly and environmental treatment)

五. 天线电性能测试数据 (Antenna electrical performance test data) :

5.1. 天线无源参数 (Antenna passive parameters)

5.1.1. 天线回波损耗 (RL)

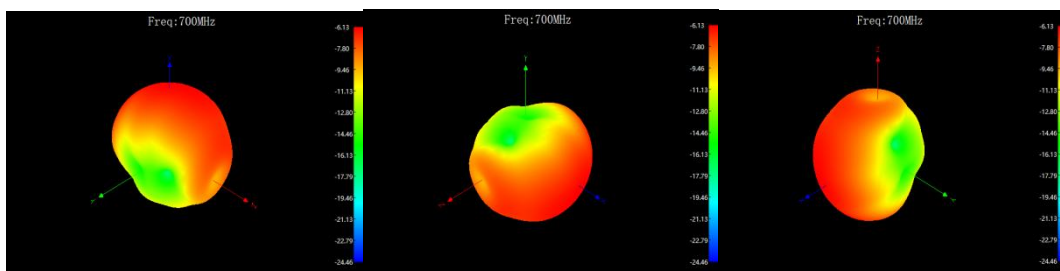




5.1.2. 天线效率/增益/方向图 (Effeciency/Gain/Radiation pattern)

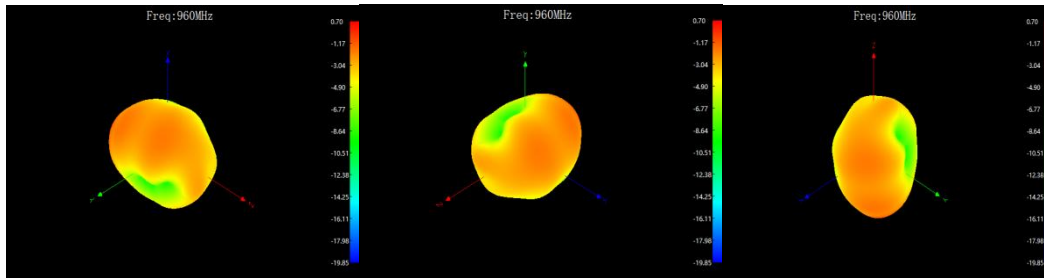
Freq (MHz)	Effi (%)	MAXGai n (dBi)	Freq (MHz)	Effi (%)	MAXGai n (dBi)	Freq (MHz)	Effi (%)	MAXGai n (dBi)	Freq (MHz)	Effi (%)	MAXGai n (dBi)
700	20.28	-6.13	1700	29.24	1.5	2020	43.95	0.95	2500	46.24	1.83
720	21.58	-4.14	1720	27.35	1.42	2040	46.88	1.9	2520	52.6	2.23
740	21.68	-2.59	1740	28.71	1.58	2060	49.89	2.27	2540	55.21	2.78
760	23.88	-1	1760	27.35	0.54	2080	48.75	2.96	2560	57.02	3.09
780	27.99	1.6	1780	26.61	0.31	2100	41.59	2.62	2580	56.1	3.27
800	29.51	2.42	1800	28.05	0.92	2120	44.98	3.69	2600	51.88	3.61
820	28.84	2.1	1820	26.98	0.68	2140	49.66	5.01	2620	52	3.91
840	26	1.84	1840	27.16	0.6	2160	55.21	5.76	2640	51.88	3.93
860	24.43	1.99	1860	24.38	-0.36	2180	57.94	6.4	2660	56.23	4.67
880	25.7	2.46	1880	22.54	-1.08	2300	47.1	0.99	2680	62.23	6.25
900	24.32	1.18	1900	22.49	-1.41	2320	46.99	0.91	2700	63.24	6.85
920	23.55	0.54	1920	26.12	-0.96	2340	50.12	0.81			
940	23.23	0.96	1940	32.51	0.3	2360	52.36	1.52			
960	20.99	0.7	1960	36.64	1.34	2380	55.21	1.89			
			1980	39.72	0.94	2400	55.72	2.01			
			2000	41.3	0.07						

700MHZ

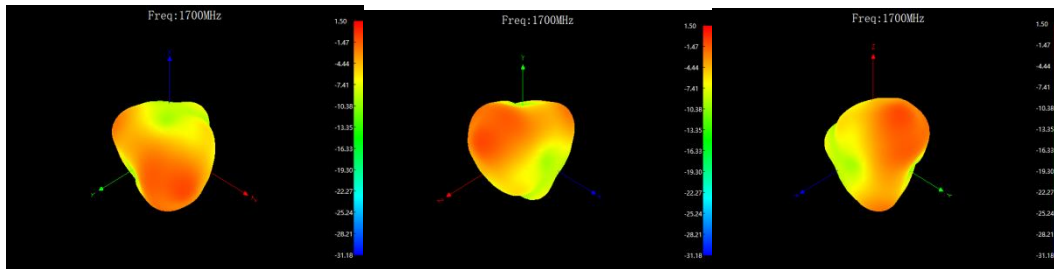




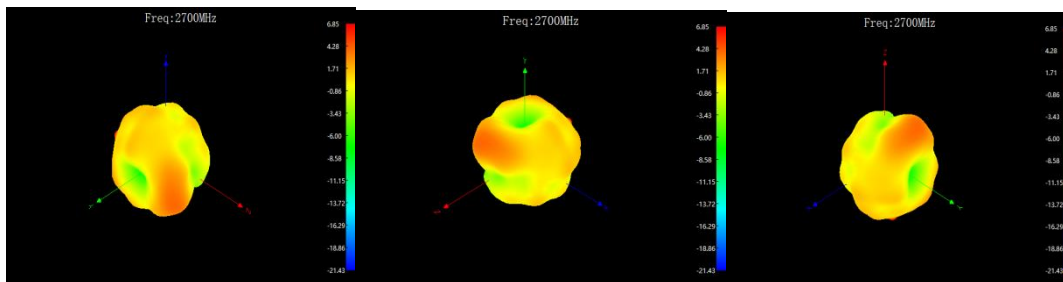
960MHZ



1700MHZ



2700MHZ





六. 天线结构图纸 (Antenna structure drawing) :

