

2-3. VSWR ,Efficiency ,Matching and Active Data :

2-3.1 VSWR:

| Frequency Band | 880 | 960 | 1710 | 2170 | 2500 | 2690 |
|-----------------------|----------|------------|----------|------------|----------|----------|
| 2-3-1. Typical Value: | ≤ 3 | ≤ 3.5 | ≤ 2 | ≤ 2.0 | ≤ 2 | ≤ 3 |

| | |
|------------------------|--|
| 2-3-2 Measuring Method | <ol style="list-style-type: none"> 1. A 50Ω coaxial cable is connected to the pcb antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm. |
|------------------------|--|



2-4. Measure and Chamber

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

DRAWN BY : 黄土勇 CHECKED BY : 肖坤雄

DESIGNED BY : 骆业辉 APPROVED BY : 王伟

TITLE : **GH6321-LTE-ANT-V2.0 Specification**



深圳市可信华成通信科技有限公司

SHENZHEN CITY KEXIN HUACHENG COMMUNICATION TECHNOLOGY CO.,LTD

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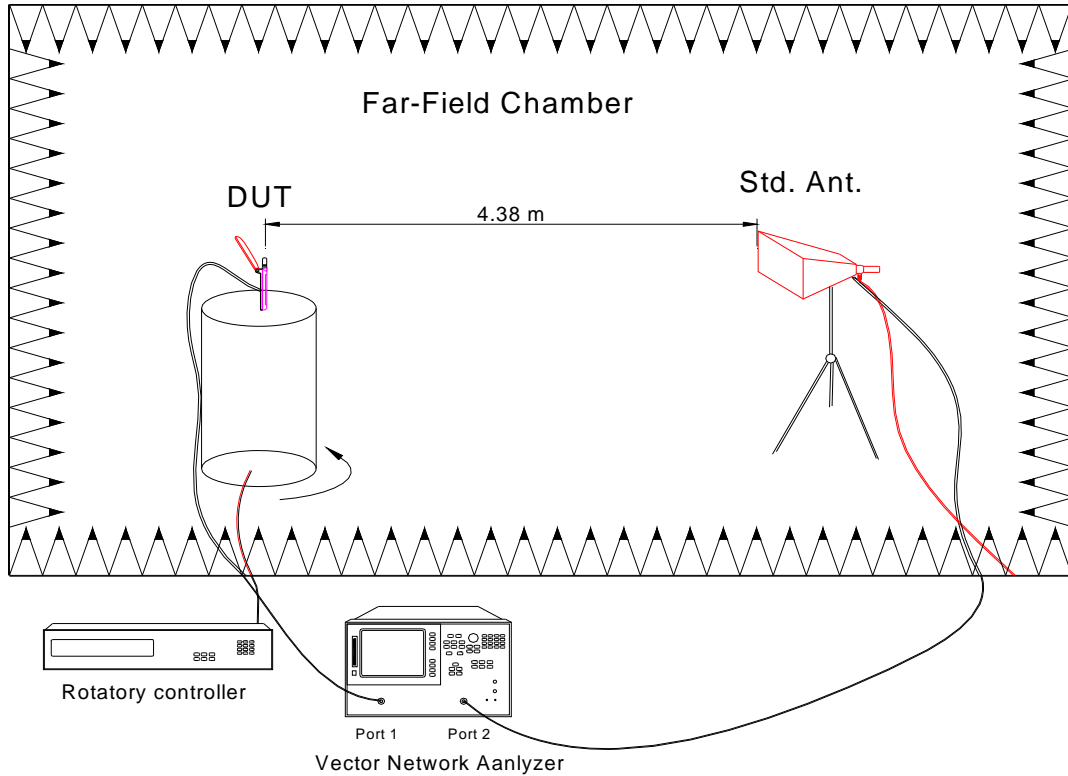
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2-4-1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

2-4-2 Chamber definition



1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

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2-4-3 Antenna OTA

2-4-4 Antenna Efficiency

| Frequency (MHz) | RF1 | | | RF2 | | | RF3 | | | RF4 | | |
|-----------------|------------|-----------------|----------------|------------|-----------------|----------------|------------|-----------------|----------------|------------|-----------------|----------------|
| | Gain (dBi) | Efficiency (dB) | Efficiency (%) | Gain (dBi) | Efficiency (dB) | Efficiency (%) | Gain (dBi) | Efficiency (dB) | Efficiency (%) | Gain (dBi) | Efficiency (dB) | Efficiency (%) |
| 700 | -17.96 | -21.48 | 1% | -14.37 | -17.56 | 2% | -13.06 | -15.99 | 3% | -8.48 | -11.77 | 7% |
| 710 | -17.74 | -21.31 | 1% | -13.79 | -17.06 | 2% | -12.82 | -15.94 | 3% | -7.62 | -10.99 | 8% |
| 720 | -17.57 | -21.23 | 1% | -13.39 | -16.59 | 2% | -11.77 | -14.88 | 3% | -6.72 | -10.20 | 10% |
| 730 | -17.43 | -21 | 1% | -12.95 | -15.93 | 3% | -11.24 | -14.61 | 3% | -5.87 | -9.53 | 11% |
| 740 | -17.61 | -21.03 | 1% | -12.13 | -15.19 | 3% | -10.00 | -13.42 | 5% | -5.08 | -8.94 | 13% |
| 750 | -17.65 | -21.34 | 1% | -11.28 | -14.65 | 3% | -8.95 | -12.72 | 5% | -4.24 | -8.55 | 14% |
| 760 | -17.24 | -21.1 | 1% | -10.89 | -14.42 | 4% | -8.64 | -12.87 | 5% | -4.11 | -8.61 | 14% |
| 770 | -16.43 | -19.97 | 1% | -10.88 | -14.27 | 4% | -8.15 | -12.09 | 6% | -4.69 | -9.15 | 12% |
| 780 | -15.72 | -19.07 | 1% | -10.67 | -13.98 | 4% | -8.00 | -12.07 | 6% | -5.23 | -9.66 | 11% |
| 790 | -15.09 | -18.58 | 1% | -10.16 | -13.70 | 4% | -7.12 | -10.91 | 8% | -5.50 | -10.11 | 10% |
| 800 | -14.67 | -18.25 | 1% | -9.76 | -13.40 | 5% | -6.70 | -10.67 | 9% | -6.09 | -10.84 | 8% |
| 810 | -14.21 | -17.8 | 2% | -9.31 | -12.98 | 5% | -6.09 | -9.87 | 10% | -6.57 | -11.18 | 8% |
| 820 | -14.15 | -17.58 | 2% | -8.81 | -12.64 | 5% | -5.45 | -9.30 | 12% | -7.01 | -12.08 | 6% |
| 830 | -14.15 | -17.53 | 2% | -8.55 | -12.51 | 6% | -5.14 | -8.78 | 13% | -7.63 | -12.68 | 5% |
| 840 | -13.88 | -17.32 | 2% | -8.03 | -12.32 | 6% | -4.88 | -8.66 | 14% | -8.09 | -13.38 | 5% |
| 850 | -13.47 | -17.01 | 2% | -7.01 | -11.87 | 7% | -4.34 | -8.40 | 14% | -8.73 | -14.41 | 4% |
| 860 | -13.34 | -17 | 2% | -6.52 | -11.79 | 7% | -4.22 | -8.52 | 14% | -9.41 | -14.63 | 3% |
| 870 | -13.06 | -16.99 | 2% | -6.00 | -11.45 | 7% | -4.21 | -8.68 | 14% | -9.96 | -15.35 | 3% |
| 880 | -12.41 | -16.28 | 2% | -5.24 | -10.54 | 9% | -4.31 | -8.94 | 13% | -10.43 | -15.90 | 3% |
| 890 | -12.22 | -16.18 | 2% | -5.05 | -9.92 | 10% | -4.73 | -9.36 | 12% | -11.26 | -16.57 | 2% |
| 900 | -12.02 | -16.02 | 3% | -4.96 | -9.64 | 11% | -4.99 | -9.73 | 11% | -11.75 | -17.19 | 2% |
| 910 | -11.27 | -15.38 | 3% | -4.64 | -9.39 | 12% | -5.18 | -10.15 | 10% | -12.11 | -17.71 | 2% |
| 920 | -10.81 | -15.08 | 3% | -4.55 | -9.43 | 11% | -5.62 | -10.80 | 8% | -12.77 | -18.57 | 1% |
| 930 | -10.41 | -15.08 | 3% | -4.36 | -9.55 | 11% | -5.91 | -11.41 | 7% | -13.28 | -19.37 | 1% |
| 940 | -9.88 | -14.83 | 3% | -4.31 | -9.76 | 11% | -6.23 | -11.95 | 6% | -13.62 | -19.97 | 1% |
| 950 | -9.82 | -14.71 | 3% | -4.86 | -10.19 | 10% | -7.14 | -12.71 | 5% | -14.52 | -20.73 | 1% |
| 960 | -10.04 | -14.62 | 3% | -5.59 | -10.66 | 9% | -8.40 | -13.68 | 4% | -15.92 | -21.85 | 1% |

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±

SCALE :

UNIT : mm

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|------|-------|-------|-----|-------|-------|-----|-------|--------|-----|-------|-------|-----|
| 1710 | -0.35 | -5.13 | 31% | -3.60 | -8.73 | 13% | -4.97 | -9.39 | 11% | -3.44 | -8.60 | 14% |
| 1720 | -0.18 | -4.94 | 32% | -3.36 | -8.26 | 15% | -5.25 | -9.68 | 11% | -3.43 | -8.48 | 14% |
| 1730 | 0.01 | -4.68 | 34% | -3.03 | -7.63 | 17% | -4.78 | -9.54 | 11% | -3.33 | -8.18 | 15% |
| 1740 | 0.12 | -4.52 | 35% | -2.51 | -7.15 | 19% | -4.56 | -9.57 | 11% | -3.28 | -8.00 | 16% |
| 1750 | 0.15 | -4.47 | 36% | -2.36 | -6.92 | 20% | -4.90 | -10.02 | 10% | -3.49 | -8.10 | 15% |
| 1760 | 0.26 | -4.27 | 37% | -2.11 | -6.54 | 22% | -4.60 | -10.17 | 10% | -3.65 | -8.06 | 16% |
| 1770 | 0.56 | -4.08 | 39% | -1.59 | -6.14 | 24% | -3.92 | -10.06 | 10% | -3.56 | -7.88 | 16% |
| 1780 | 0.61 | -4.16 | 38% | -1.46 | -6.13 | 24% | -4.27 | -10.52 | 9% | -3.78 | -8.09 | 16% |
| 1790 | 0.48 | -4.27 | 37% | -1.50 | -6.14 | 24% | -4.54 | -10.92 | 8% | -4.09 | -8.28 | 15% |
| 1800 | 0.45 | -4.14 | 39% | -1.41 | -5.88 | 26% | -4.24 | -10.73 | 8% | -4.00 | -8.03 | 16% |
| 1810 | 0.23 | -4.31 | 37% | -1.55 | -5.95 | 25% | -4.63 | -10.69 | 9% | -3.82 | -7.92 | 16% |
| 1820 | -0.24 | -4.6 | 35% | -1.90 | -6.17 | 24% | -5.16 | -10.66 | 9% | -3.69 | -7.90 | 16% |
| 1830 | -0.33 | -4.63 | 34% | -1.83 | -6.13 | 24% | -5.09 | -10.07 | 10% | -3.13 | -7.51 | 18% |
| 1840 | -0.17 | -4.56 | 35% | -1.46 | -5.99 | 25% | -4.13 | -9.10 | 12% | -2.27 | -6.90 | 20% |
| 1850 | -0.39 | -4.7 | 34% | -1.49 | -6.08 | 25% | -3.18 | -8.20 | 15% | -1.76 | -6.45 | 23% |
| 1860 | -0.68 | -4.68 | 34% | -1.60 | -6.05 | 25% | -2.61 | -7.39 | 18% | -1.57 | -6.05 | 25% |
| 1870 | -0.56 | -4.56 | 35% | -1.47 | -5.86 | 26% | -1.95 | -6.55 | 22% | -1.22 | -5.59 | 28% |
| 1880 | -0.94 | -4.7 | 34% | -1.63 | -6.00 | 25% | -1.58 | -6.14 | 24% | -1.24 | -5.49 | 28% |
| 1890 | -1.04 | -4.88 | 33% | -2.00 | -6.32 | 23% | -1.63 | -6.11 | 25% | -1.53 | -5.63 | 27% |
| 1900 | -0.93 | -4.91 | 32% | -1.95 | -6.49 | 22% | -1.82 | -6.08 | 25% | -1.47 | -5.69 | 27% |
| 1910 | -1.08 | -4.91 | 32% | -2.19 | -6.71 | 21% | -1.99 | -6.05 | 25% | -1.65 | -5.71 | 27% |
| 1920 | -1.15 | -4.9 | 32% | -2.56 | -7.04 | 20% | -2.01 | -6.03 | 25% | -1.76 | -5.75 | 27% |
| 1930 | -1.22 | -4.99 | 32% | -3.03 | -7.49 | 18% | -2.23 | -6.20 | 24% | -1.98 | -5.91 | 26% |
| 1940 | -1.23 | -4.95 | 32% | -3.32 | -7.88 | 16% | -2.43 | -6.19 | 24% | -2.15 | -5.90 | 26% |
| 1950 | -1.07 | -4.86 | 33% | -3.83 | -8.28 | 15% | -2.29 | -6.06 | 25% | -2.01 | -5.78 | 26% |
| 1960 | -0.99 | -4.92 | 32% | -4.38 | -8.75 | 13% | -2.20 | -6.09 | 25% | -1.93 | -5.81 | 26% |
| 1970 | -0.94 | -4.93 | 32% | -4.82 | -9.05 | 12% | -2.13 | -6.07 | 25% | -1.84 | -5.81 | 26% |
| 1980 | -0.59 | -4.69 | 34% | -4.31 | -9.01 | 13% | -1.69 | -5.77 | 27% | -1.43 | -5.53 | 28% |
| 1990 | -0.64 | -4.7 | 34% | -4.22 | -9.14 | 12% | -1.65 | -5.74 | 27% | -1.42 | -5.52 | 28% |
| 2000 | -0.79 | -4.8 | 33% | -4.09 | -9.12 | 12% | -1.90 | -5.83 | 26% | -1.65 | -5.62 | 27% |
| 2010 | -0.27 | -4.61 | 35% | -3.41 | -8.53 | 14% | -1.30 | -5.59 | 28% | -1.05 | -5.39 | 29% |
| 2020 | -0.17 | -4.57 | 35% | -3.11 | -8.07 | 16% | -1.16 | -5.51 | 28% | -0.92 | -5.32 | 29% |
| 2030 | -0.51 | -4.75 | 33% | -3.31 | -7.94 | 16% | -1.50 | -5.69 | 27% | -1.29 | -5.50 | 28% |
| 2040 | -0.29 | -4.74 | 34% | -2.87 | -7.60 | 17% | -1.29 | -5.67 | 27% | -1.08 | -5.48 | 28% |
| 2050 | -0.08 | -4.6 | 35% | -2.45 | -7.17 | 19% | -1.06 | -5.50 | 28% | -0.83 | -5.30 | 29% |
| 2060 | -0.22 | -4.67 | 34% | -2.40 | -7.04 | 20% | -1.05 | -5.55 | 28% | -0.84 | -5.38 | 29% |
| 2070 | 0.17 | -4.65 | 34% | -1.79 | -6.85 | 21% | -0.70 | -5.53 | 28% | -0.49 | -5.35 | 29% |
| 2080 | 0.65 | -4.46 | 36% | -1.11 | -6.43 | 23% | -0.14 | -5.28 | 30% | 0.06 | -5.11 | 31% |
| 2090 | 0.31 | -4.57 | 35% | -1.31 | -6.38 | 23% | -0.44 | -5.37 | 29% | -0.24 | -5.21 | 30% |
| 2100 | 0.29 | -4.64 | 34% | -1.21 | -6.33 | 23% | -0.43 | -5.45 | 28% | -0.26 | -5.29 | 30% |
| 2110 | 0.5 | -4.66 | 34% | -0.89 | -6.24 | 24% | -0.20 | -5.50 | 28% | -0.04 | -5.34 | 29% |
| 2120 | 0.19 | -4.79 | 33% | -1.01 | -6.23 | 24% | -0.46 | -5.66 | 27% | -0.31 | -5.52 | 28% |
| 2130 | 0.22 | -4.79 | 33% | -0.87 | -6.17 | 24% | -0.45 | -5.75 | 27% | -0.24 | -5.60 | 28% |

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±

SCALE :

UNIT : mm

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| 2140 | 0.59 | -4.62 | 35% | -0.47 | -5.98 | 25% | -0.16 | -5.68 | 27% | 0.06 | -5.52 | 28% |
| 2150 | 0.39 | -4.62 | 34% | -0.60 | -5.90 | 26% | -0.47 | -5.78 | 26% | -0.23 | -5.63 | 27% |
| 2160 | 0.19 | -4.65 | 34% | -0.55 | -5.80 | 26% | -0.66 | -5.89 | 26% | -0.48 | -5.74 | 27% |
| 2170 | 0.48 | -4.52 | 35% | 0.03 | -5.67 | 27% | -0.28 | -5.89 | 26% | -0.24 | -5.74 | 27% |
| | | | | | | | | | | | | |
| 2300 | -0.32 | -4.63 | 34% | 1.00 | -5.67 | 27% | 0.50 | -5.95 | 25% | 0.68 | -5.86 | 26% |
| 2310 | -0.62 | -4.79 | 33% | 0.90 | -5.82 | 26% | 0.43 | -6.07 | 25% | 0.61 | -5.98 | 25% |
| 2320 | -0.24 | -4.56 | 35% | 1.46 | -5.60 | 28% | 1.00 | -5.84 | 26% | 1.20 | -5.76 | 27% |
| 2330 | -0.26 | -4.49 | 36% | 1.37 | -5.55 | 28% | 0.93 | -5.77 | 26% | 1.11 | -5.69 | 27% |
| 2340 | -0.6 | -4.69 | 34% | 0.93 | -5.75 | 27% | 0.50 | -5.96 | 25% | 0.65 | -5.88 | 26% |
| 2350 | -0.02 | -4.56 | 35% | 1.42 | -5.56 | 28% | 1.01 | -5.79 | 26% | 1.11 | -5.72 | 27% |
| 2360 | 0.32 | -4.32 | 37% | 1.50 | -5.44 | 29% | 1.17 | -5.64 | 27% | 1.25 | -5.57 | 28% |
| 2370 | 0 | -4.32 | 37% | 1.18 | -5.37 | 29% | 0.88 | -5.57 | 28% | 0.94 | -5.53 | 28% |
| 2380 | 0.43 | -4.2 | 38% | 1.58 | -5.21 | 30% | 1.30 | -5.43 | 29% | 1.38 | -5.38 | 29% |
| 2390 | 1.08 | -3.89 | 41% | 1.95 | -4.95 | 32% | 1.68 | -5.17 | 30% | 1.75 | -5.14 | 31% |
| 2400 | 0.85 | -3.82 | 41% | 1.48 | -5.02 | 31% | 1.20 | -5.25 | 30% | 1.21 | -5.24 | 30% |
| | | | | | | | | | | | | |
| 2500 | 2.09 | -3.2 | 48% | 0.41 | -4.91 | 32% | 0.91 | -4.74 | 34% | 0.34 | -4.64 | 34% |
| 2510 | 2.56 | -2.99 | 50% | 0.72 | -4.71 | 34% | 1.16 | -4.56 | 35% | 0.65 | -4.46 | 36% |
| 2520 | 2.64 | -2.87 | 52% | 0.68 | -4.51 | 35% | 1.03 | -4.39 | 36% | 0.63 | -4.27 | 37% |
| 2530 | 2.3 | -2.94 | 51% | 0.29 | -4.53 | 35% | 0.55 | -4.42 | 36% | 0.24 | -4.26 | 37% |
| 2540 | 2.28 | -2.95 | 51% | 0.34 | -4.46 | 36% | 0.53 | -4.38 | 36% | 0.29 | -4.20 | 38% |
| 2550 | 2.24 | -2.99 | 50% | 0.33 | -4.39 | 36% | 0.42 | -4.31 | 37% | 0.34 | -4.13 | 39% |
| 2560 | 2.03 | -3.24 | 47% | 0.17 | -4.49 | 36% | 0.30 | -4.41 | 36% | 0.27 | -4.21 | 38% |
| 2570 | 2.21 | -3.34 | 46% | 0.44 | -4.44 | 36% | 0.58 | -4.36 | 37% | 0.60 | -4.15 | 38% |
| 2580 | 2.4 | -3.32 | 47% | 0.62 | -4.34 | 37% | 0.80 | -4.23 | 38% | 0.85 | -4.02 | 40% |
| 2590 | 2.44 | -3.37 | 46% | 0.63 | -4.28 | 37% | 0.84 | -4.14 | 39% | 0.92 | -3.94 | 40% |
| 2600 | 2.47 | -3.39 | 46% | 0.72 | -4.14 | 39% | 0.93 | -3.99 | 40% | 1.02 | -3.81 | 42% |
| 2610 | 2.14 | -3.42 | 45% | 0.40 | -4.11 | 39% | 0.68 | -3.89 | 41% | 0.82 | -3.71 | 43% |
| 2620 | 1.92 | -3.45 | 45% | 0.50 | -4.05 | 39% | 0.57 | -3.81 | 42% | 0.70 | -3.67 | 43% |
| 2630 | 2.02 | -3.49 | 45% | 0.73 | -3.91 | 41% | 0.97 | -3.65 | 43% | 1.08 | -3.53 | 44% |
| 2640 | 1.66 | -3.78 | 42% | 0.55 | -3.98 | 40% | 0.99 | -3.66 | 43% | 1.13 | -3.56 | 44% |
| 2650 | 1.5 | -3.96 | 40% | 0.57 | -4.01 | 40% | 1.05 | -3.68 | 43% | 1.16 | -3.61 | 44% |
| 2660 | 1.85 | -3.93 | 41% | 1.21 | -3.78 | 42% | 1.70 | -3.46 | 45% | 1.78 | -3.40 | 46% |
| 2670 | 1.49 | -4.09 | 39% | 1.15 | -3.72 | 42% | 1.67 | -3.41 | 46% | 1.74 | -3.37 | 46% |
| 2680 | 0.89 | -4.48 | 36% | 0.85 | -3.84 | 41% | 1.37 | -3.58 | 44% | 1.42 | -3.56 | 44% |
| 2690 | 1.54 | -4.36 | 37% | 1.68 | -3.60 | 44% | 2.18 | -3.38 | 46% | 2.29 | -3.39 | 46% |

3. Antenna 3D Radiation Pattern

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±



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SCALE :

UNIT : mm

DRAWN BY : 黄土勇

CHECKED BY : 肖坤雄

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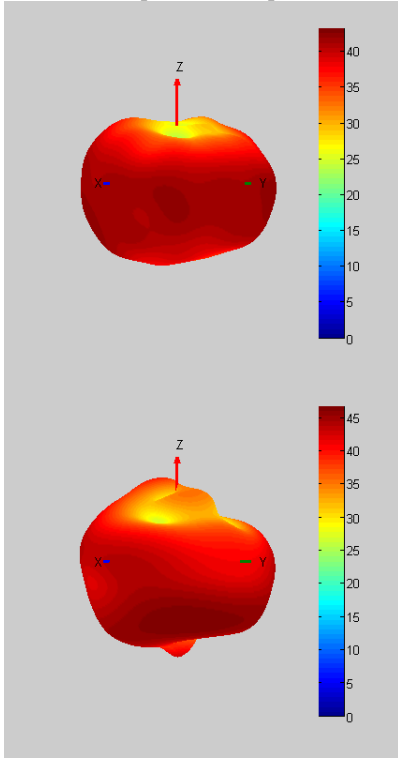
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4.

5. -LTE B28[700MHz]

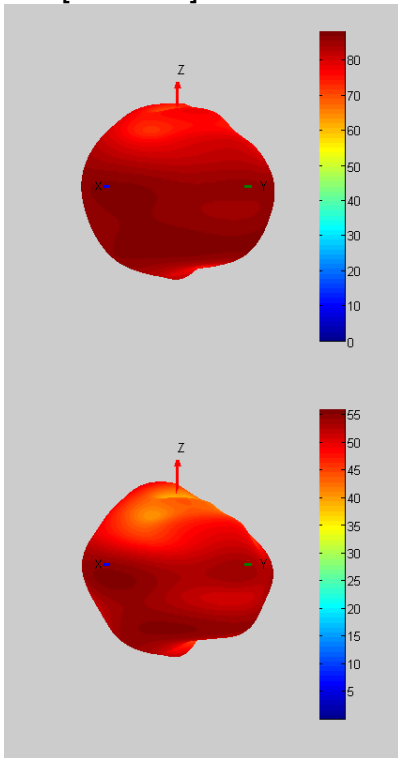


6.

7.

8. -LTE B28[800MHz]

9. -LTE B5[820MHz]



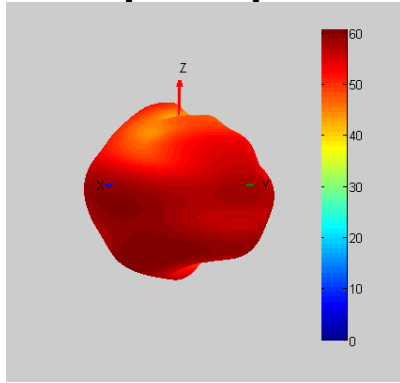
10.

11.

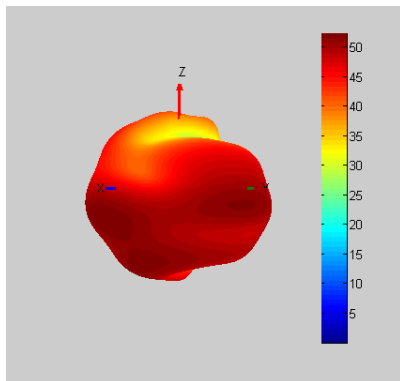
| | | | | | | |
|---|-------------------------|--|---------------------|------------------|--|-----------|
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| $X = \pm 2$ $X.X = \pm 0.1$ $X.XX = \pm 0.05$ ANGLES = ± HOLEDIA = ± | | | | | | |
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| DRAWN BY : 黄土勇 | CHECKED BY : 肖坤雄 | | | | | |
| DESIGNED BY : 骆业辉 | APPROVED BY : 王伟 | | | | | |
| TITLE : <u>GH6321-LTE-ANT-V2.0</u>Specification | | <table border="1"> <tr> <td>DOCUMENT NO.</td> <td>PAGE REV.</td> </tr> <tr> <td></td> <td>A0</td> </tr> </table> | DOCUMENT NO. | PAGE REV. | | A0 |
| DOCUMENT NO. | PAGE REV. | | | | | |
| | A0 | | | | | |

12. -LTE B5[890MHz]-

13. -LTE B8[880MHz]



14.

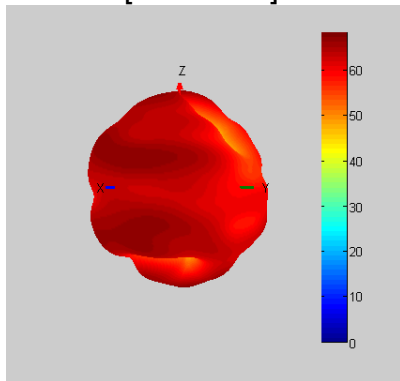


15.

16. -LTE B8[960MHz]

17.

18. -LTE B1[1920MHz]



19.

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

DRAWN BY : 黄土勇 CHECKED BY : 肖坤雄

DESIGNED BY : 骆业辉 APPROVED BY : 王伟

TITLE : GH6321-LTE-ANT-V2.0Specification



深圳市可信华成通信科技有限公司

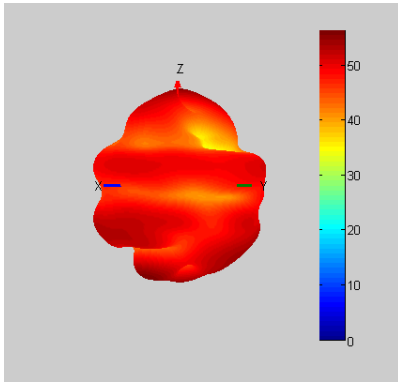
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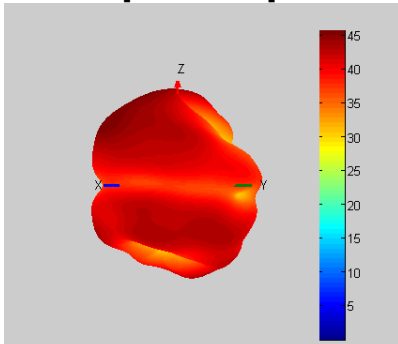
20.



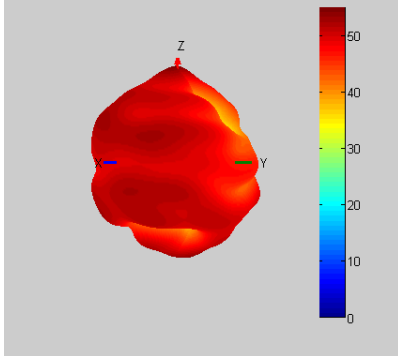
21. -LTE B[2170MHz]

22. -LTE B3[1710MHz]

23.



24.

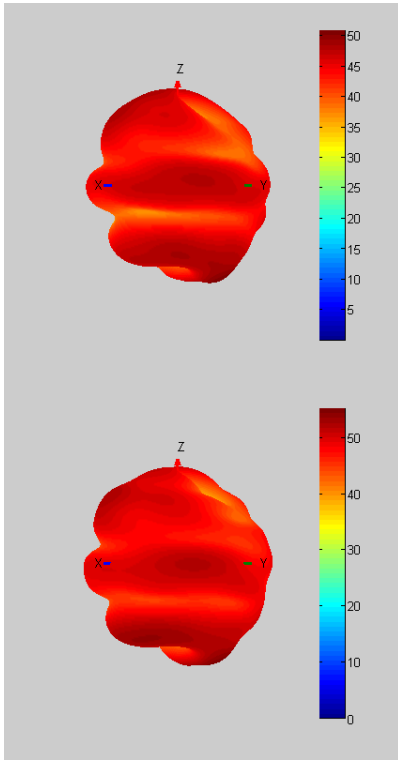


25. -LTE B3[1880MHz]

26. -LTE B7[2500MHz]

| | | |
|---|------------------|--|
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27.




28.

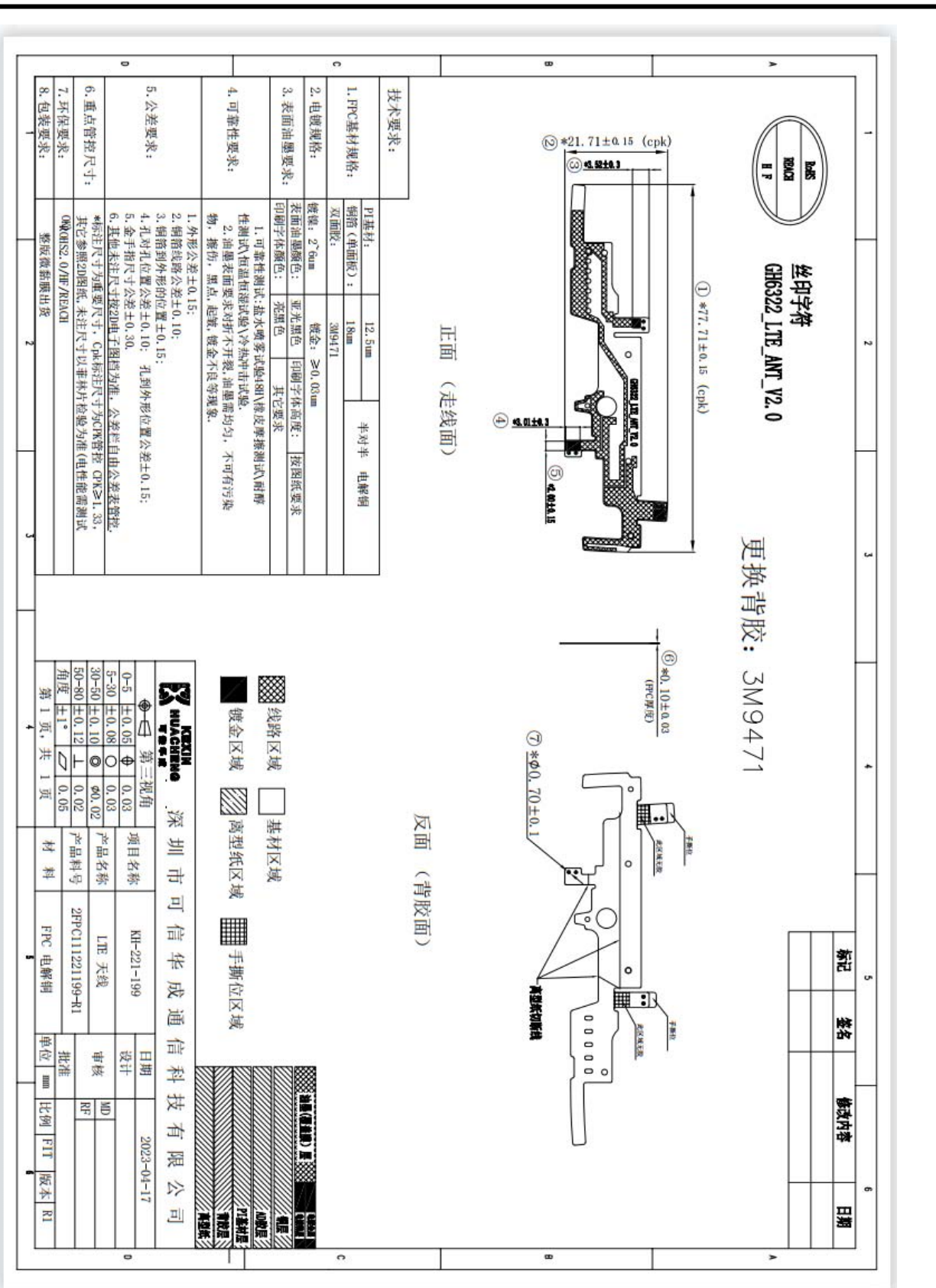
29.

-LTE B7[2690MHz]

30.

Antenna Dimensions:

| | | |
|---|---------------------|--|
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| X=±2 | X.X=±0.1 X.XX=±0.05 | |
| ANGLES=± | | |
| HOLEDIA=± | | |
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| TITLE : <u>GH6321-LTE-ANT-V2.0</u> Specification | | DOCUMENT NO. |
| | | PAGE REV. A0 |



技术要求:

| | | | | |
|-------------|--|-------------|---------|-------|
| 1. FPC基材规格: | PI基材: | 12.5mm | 半对半 | 电解铜 |
| 2. 电镀规格: | 铜箔(单面版): | 18um | | |
| 3. 表面油墨要求: | 双面胶: | 3M9471 | | |
| 4. 可靠性要求: | 电镀: 2*6um | 镀金: ≥0.03um | | |
| 5. 公差要求: | 表面油墨颜色: | 亚光黑色 | 印刷字体高度: | 按图纸要求 |
| 6. 重点管控尺寸: | 印刷字体颜色: | 亮黑色 | 其它要求 | |
| 7. 环保要求: | 1. 可靠性测试: 盐水喷雾试验180V/橡皮摩擦测试/耐酸性测试/恒温恒湿试验/冷热冲击试验. | | | |
| 8. 包装要求: | 2. 油墨表面要求: 对不干胶, 油墨需均匀, 不可有污染物, 擦伤, 黑点, 起胶, 镀金不良等现象. | | | |

技术要求:

| | | | | | |
|---|-----------------|-------------------|------------------|------------------|---------------------------------|
| 1. 外形公差±0.15; | 2. 铜箔线路公差±0.10; | 3. 铜箔到外形的位置±0.15; | 4. 孔到孔位置公差±0.10; | 5. 金手指尺寸公差±0.30; | 6. 其他未注尺寸按2D电子图档为准, 公差按自由公差差管控. |
| *标注尺寸为重要尺寸, Cpk标注尺寸为CIR管控 Cpk≥1.33, 其它参照2D图档, 未注尺寸以菲林片检测为准(但性能需测试 OK) QW/QHSZ, 0/HF/AREA/II | | | | | |

第三视角

| | | | | | | |
|--------|-------|------|--------------|-----------------|----|------------|
| 0-5 | ±0.05 | 0.03 | 项目名称 | KH-221-199 | 日期 | 2023-04-17 |
| 5-30 | ±0.08 | 0.03 | 产品名称 | LTE 天线 | 设计 | MD |
| 30-50 | ±0.10 | 0.02 | 产品料号 | 2PFC11221199-R1 | 审核 | RF |
| 50-80 | ±0.12 | 0.02 | 材料 | FPC 电解铜 | 批准 | |
| 角度 ±1° | | 0.05 | 第 1 页, 共 1 页 | | 比例 | 1:1 |

图例:

- 线路区域
- 基材区域
- 镀金区域
- 离型纸区域
- 手撕位区域

层数: 铜层, 铜箔层, 油墨层, 铜箔层, 铜层

| | | | |
|----|----|------|----|
| 标记 | 签名 | 修改内容 | 日期 |
| | | | |

31.

| | | | |
|---|------------------|--|--|
| UNLESS OTHER SPECIFIED TOLERANCES ON : X=±2 X.X=±0.1 X.XX=±0.05 ANGLES=± HOLEDIA=± | | 深圳市可信华成通信科技有限公司 SHENZHEN CITY KEXIN HUACHENG COMMUNICATION TECHNOLOGY CO.,LTD | |
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