

MB-GX2421-BT-P Specification

1. Explanation of part number :

MB – GX2421 – LTE – P
 (1) (2) (3) (4)

- (1) Supplier : MB
- (2) Model Name : GX2421
- (3) Frequency : 2400-2500 Mhz
- (4) Material :PCB

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
BT	2400-2500Mhz

2-2. Impedance

50 ohm nominal

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

2-3.1 VSWR:

UNLESS OTHER SPECIFIED TOLERANCES ON :		
X=±2	X.X=±0.1	X.XX=±0.05
ANGLES=±	HOLEDIA=±	
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Frequency Band	2402	2441	2480	2500		
2-3-1. Typical Value:	≤5.5	≤5.5	≤5.5	≤5.5		

2-3-2 Measuring Method

1. A 50Ω coaxial cable is connected to the fpcb 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.



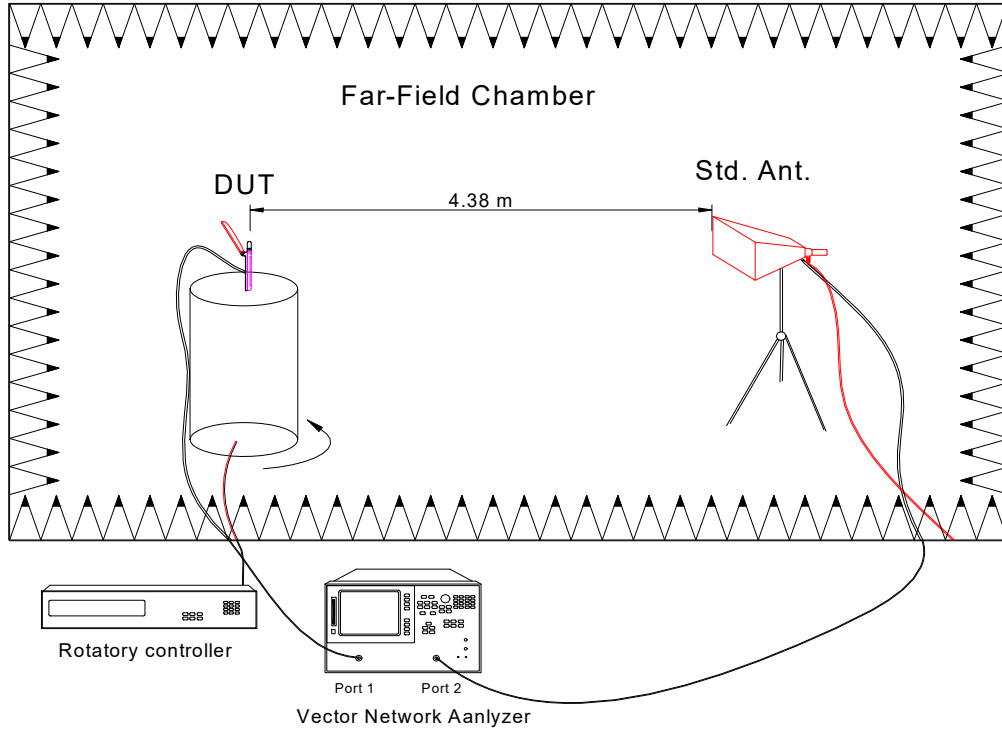
2-4. Measure and Chamber

2-4-1 Measure method

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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



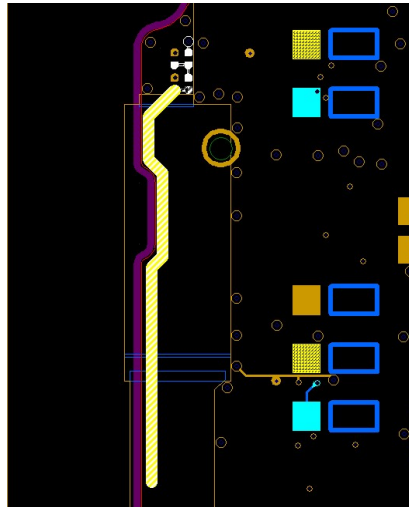
1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn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

2-4-3 PCB BT Antenna Efficiency

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Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
2400	-2.29	-5.90	25.72
2402	-1.83	-5.53	28.01
2410	-2.24	-5.76	26.54
2420	-2.03	-5.51	28.12
2430	-2.00	-5.55	27.86
2440	-2.17	-5.76	26.53
2441	-2.23	-5.77	26.48
2450	-2.02	-5.70	26.89
2460	-1.68	-5.33	29.29
2470	-1.52	-5.28	29.63
2480	-1.79	-5.62	27.42
2490	-1.75	-5.57	27.73
2500	-1.80	-5.61	27.48

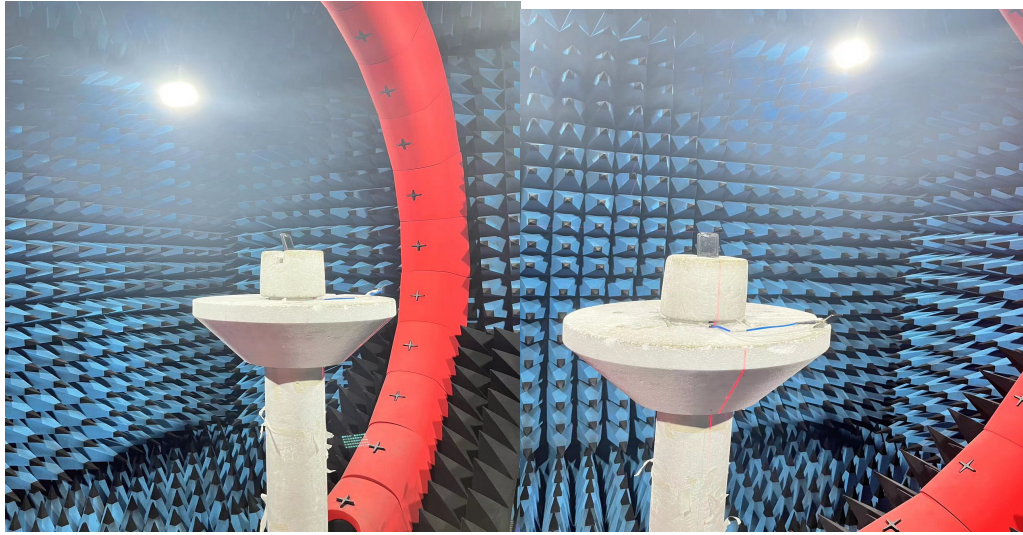
3-3 PCB BT Antenna Dimensions (mm)



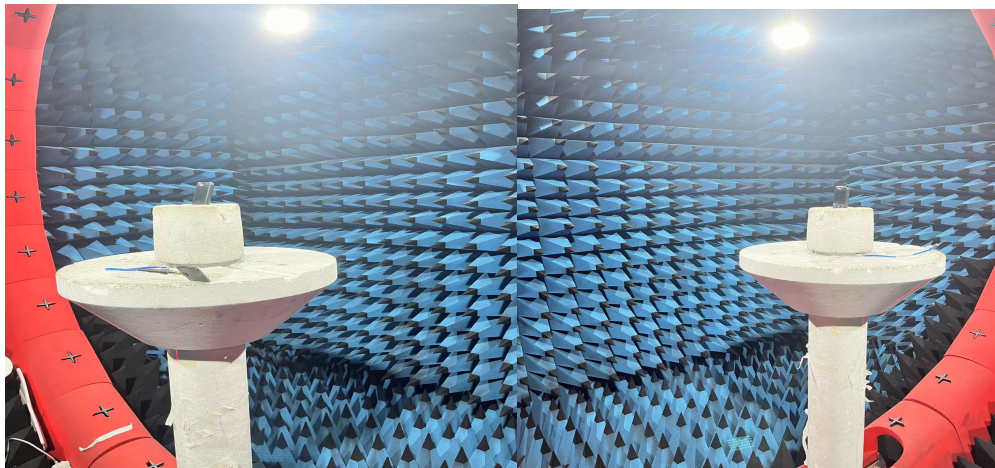
3-3 Testing Environment

Passive Test

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Active Test



4.3D Radiation Pattern

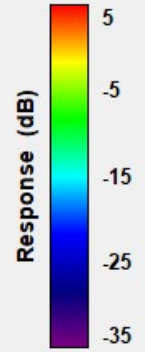
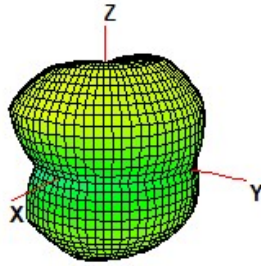
- BT

[2441MHz]

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Total

Azimuth = 100.0
 Elevation = -30.0
 Roll = -70.0



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