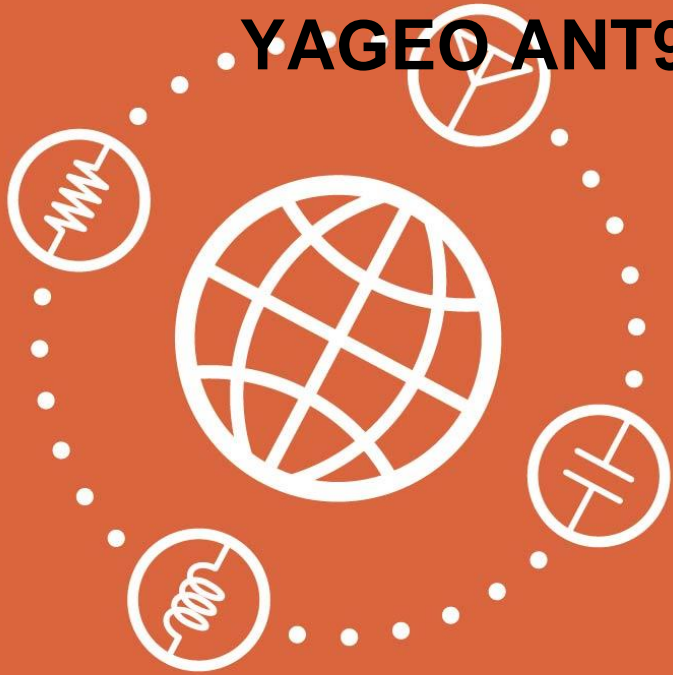


YAGEO ANT9520LL06R2400A Evaluation Board Measurement

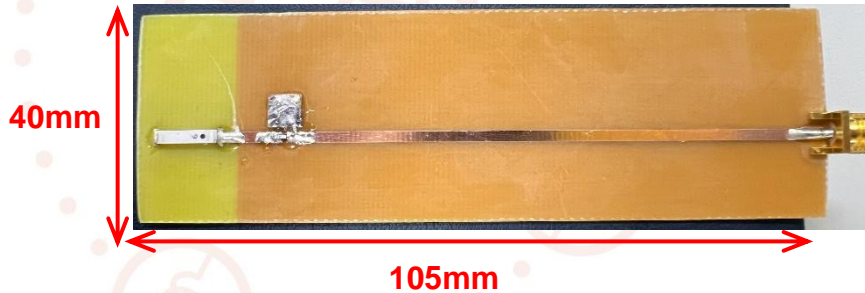


Wireless Components
LTCC R&D
2024/4/12

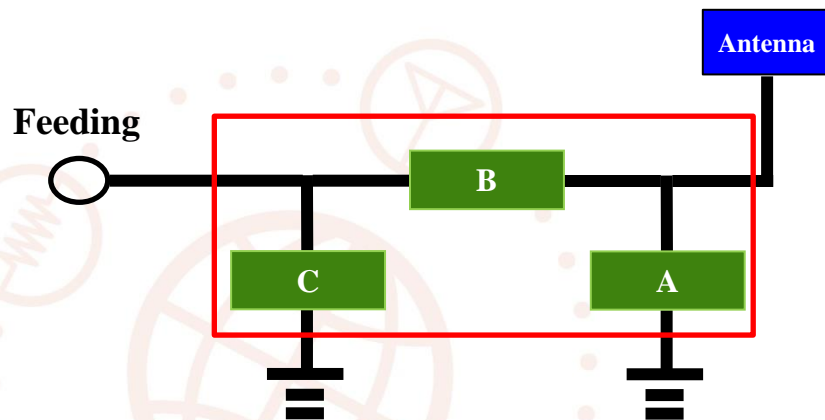
YAGEO 9520 2.4G Chip Antenna Type06

Chip Antenna : ANT9520LL06R2400A

EVB size : 105x40mm



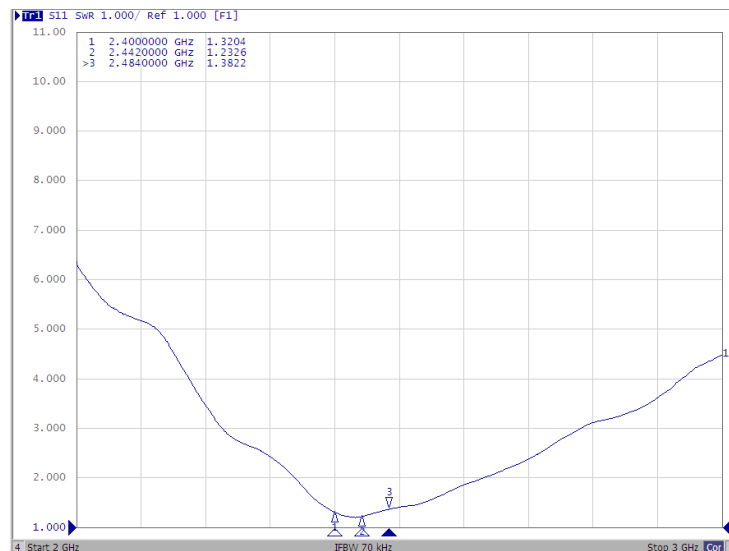
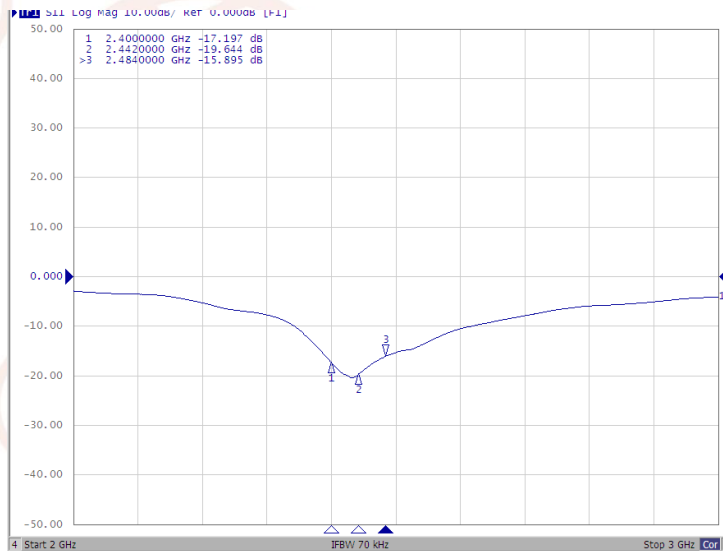
Matching Circuit



Component	Supplier	Value	PN	
A	Open			
B	Ind. _0402	TDK	1.8 nH	MLK1005S1N8ST000
C	Cap. _0402	YAGEO	1.5 pF	CQ0402BRNPO9BN1R5

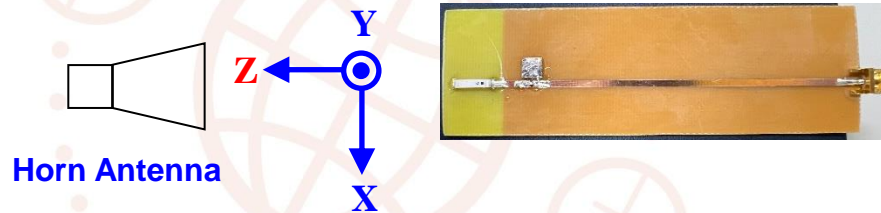
Return Loss & VSWR

	YAGEO 9520 2.4G Chip Antenna Type06 (ANT9520LL06R2400A)		
Frequency (MHz)	2400	2442	2484
R.L. (dB)	-17.2	-19.64	-15.89
VSWR	1.32	1.23	1.38

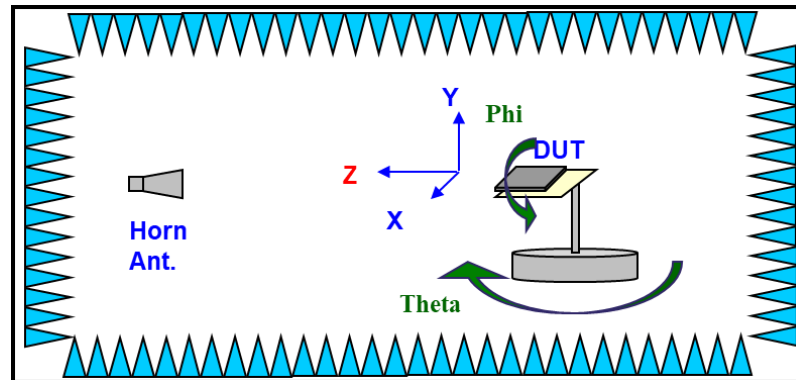


Measurement Configuration

[Direction Definition]



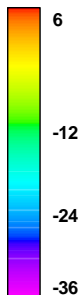
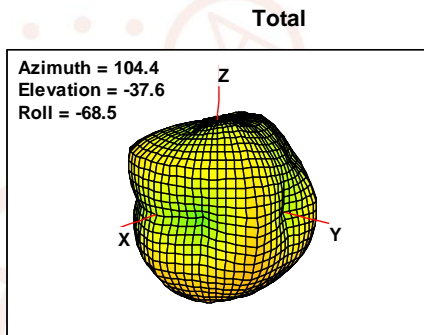
[Anechoic Chamber]



Radiation Pattern

2400 MHz

3D Gain



Max gain : 5.5 dBi

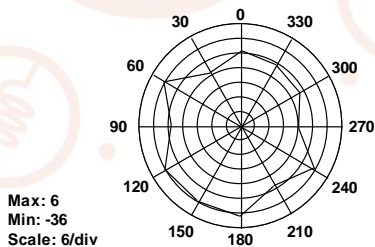
Avg. Gain : -1.1 dBi

Directivity : 6.6 dBi

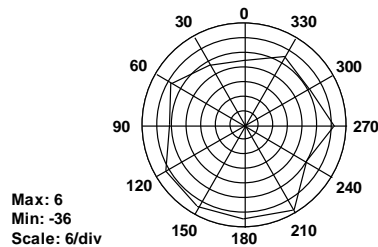
Efficiency : 77.56 %

2D Gain

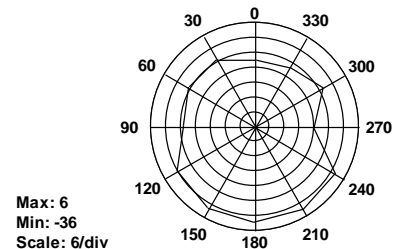
X-Y



Z-X



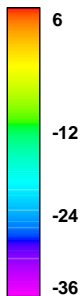
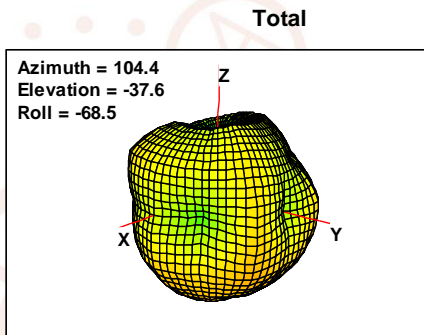
Z-Y



Radiation Pattern

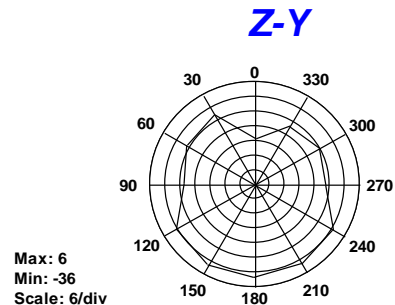
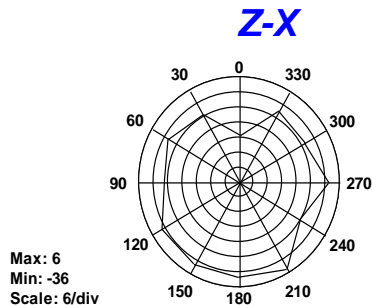
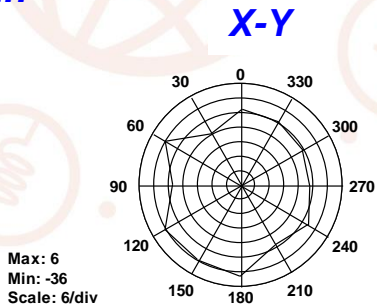
2442 MHz

3D Gain



Max gain : 4.86 dBi
Avg. Gain : -1.33 dBi
Directivity : 6.19 dBi
Efficiency : 73.58%

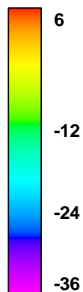
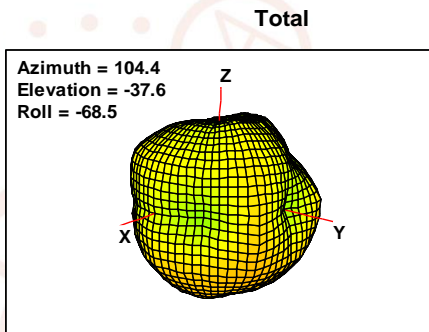
2D Gain



Radiation Pattern

2484 MHz

3D Gain

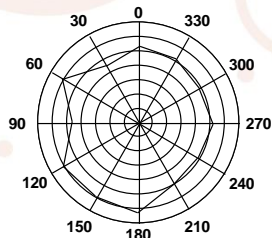


Max gain : 4.62 dBi
Avg. Gain : -1.51 dBi
Directivity : 6.13 dBi
Efficiency : 70.58%

2D Gain

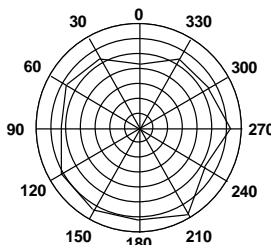
X-Y

Max: 6
Min: -36
Scale: 6/div



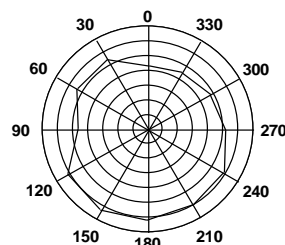
Z-X

Max: 6
Min: -36
Scale: 6/div



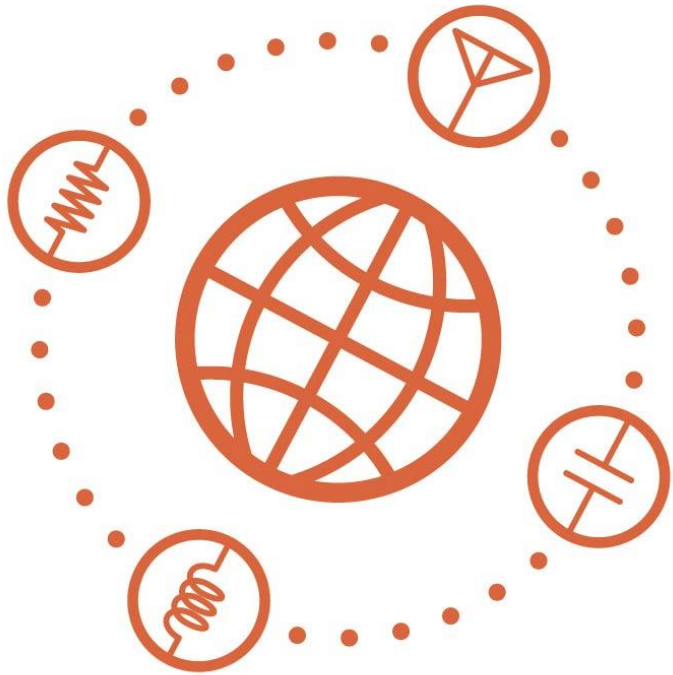
Z-Y

Max: 6
Min: -36
Scale: 6/div



Antenna Performance Summary

Antenna	YAGEO 9520 2.4G Chip Antenna Type06 (ANT9520LL06R2400A)		
Ground plane (mm)	105 x 40		
Frequency (MHz)	2400	2442	2484
R.L. (dB)	-17.2	-19.64	-15.89
VSWR	1.32	1.23	1.38
Max. Gain (dBi)	5.5	4.86	4.62
Avg. Gain (dB)	-1.1	-1.33	-1.51
Efficiency (%)	77.56	73.58	70.58



Thank you!