Product specification

Quick Reference Date

	Antenna module on the system board	
Antenna type	PCB	
Frequency	2 45GHz*1	
Ant. Port Input Pwr. (dBm)	0 (Typ. BT class 2 output power)	
Tot. Rad. Pwr. (dBm)	-2.3 (Input pwr ?loss pwr)	
Peak EIRP(dBm)	1.3	
Directivity (dBi)	1 (all direction antenna)	
Efficiency (dB)	-2.3 (58.5%)	
Gain (dBi)	2 (Peak Gain X Z-plane)	
Maximum Power (dBm)	1.3 (XY-plane)	
Minimum Power (dBm)	-4(XY-plane)	
Avg. Power (dBm)	-0.5(XY-plane)	
Max/Min Ratio (dB)	5.3(XY-plane)	
Max/Avg Ratio (dB)	1 8(XY-plane)	
Min/Avg Ratio (dB)	-3 5(XY-plane)	
Average Gain (dB)	-0.5 (Avg Gain XY-plane)	

All the technical data and information contained herein are subject to change without prior notice

Antenna Gain

Unit in dBi @2.44GHz	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	1.3	-0.5	2	-3.8	LI	-3.0	58.5%

UNLESS OTHER SPECIFIED TOLERANCES ON:
X=± X.X=± X.XX=
ANGLES = ± HOLEDIA = ±

江门市永旭电路板有限公司

SCALE: N/ A	UNIT: mm
DRAWN BY : Sera	CHECKED BY: XD
DESIGNED BY: Sera	APPROVED BY: XD

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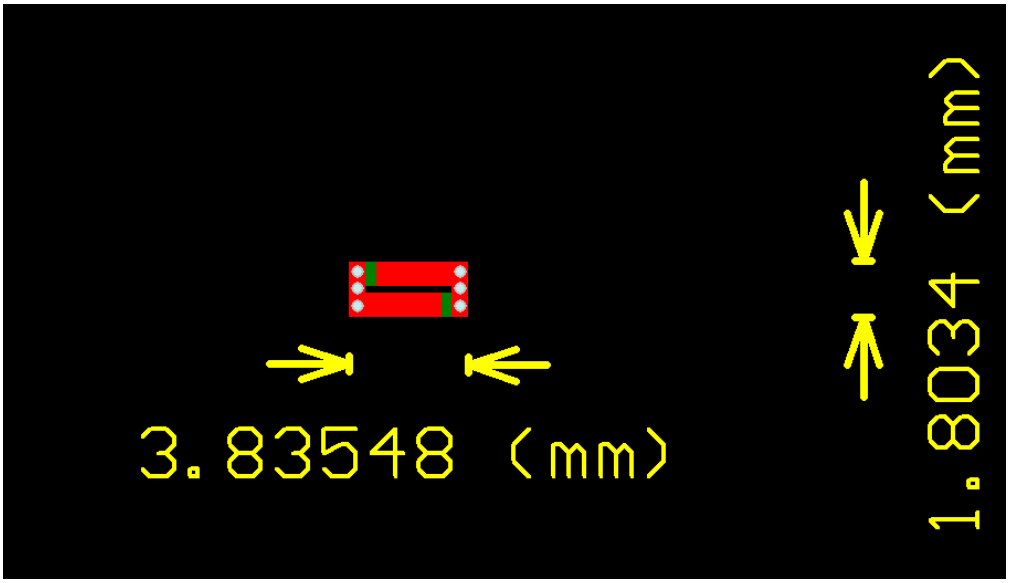
Antenna Layout & module on the system board



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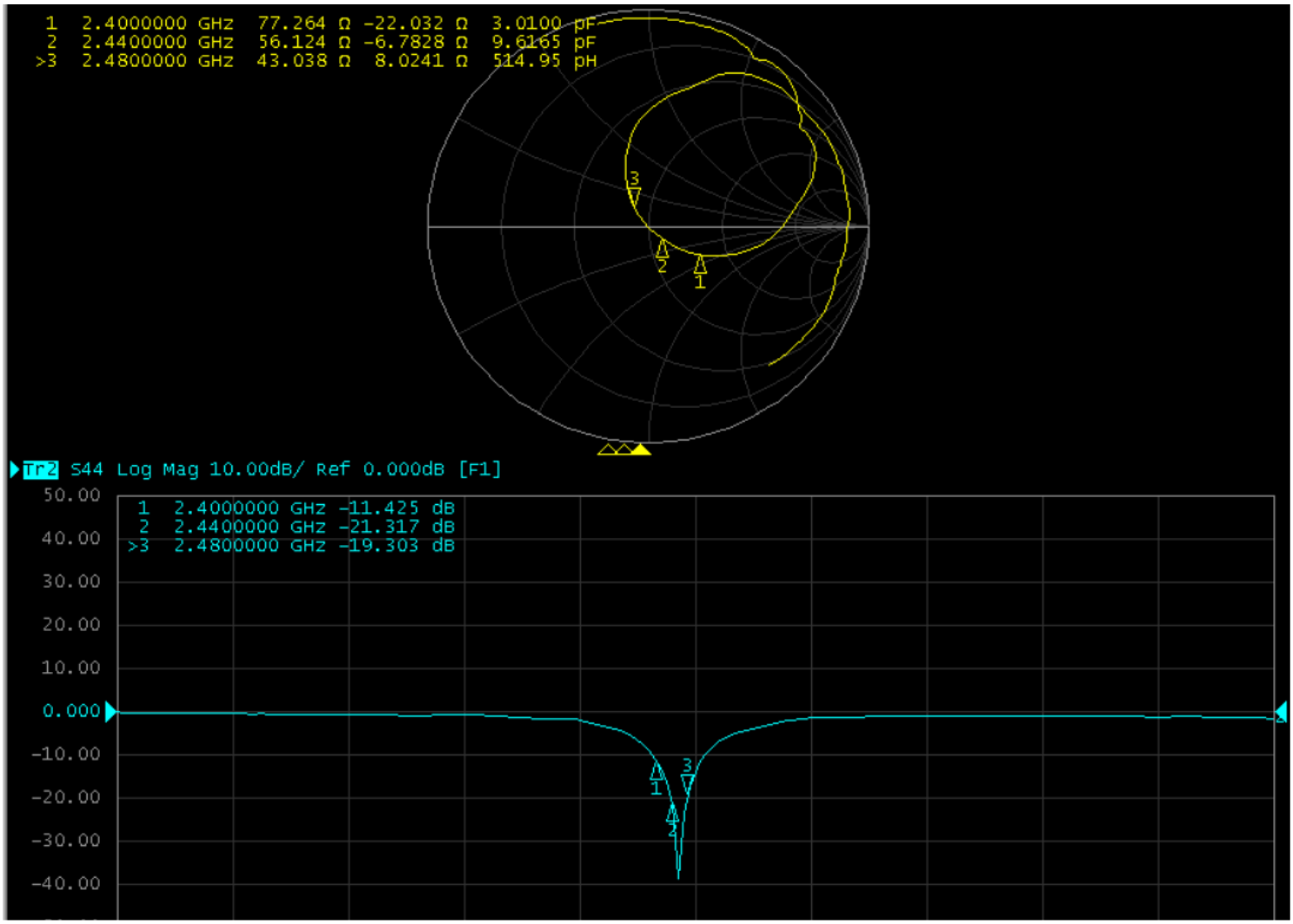
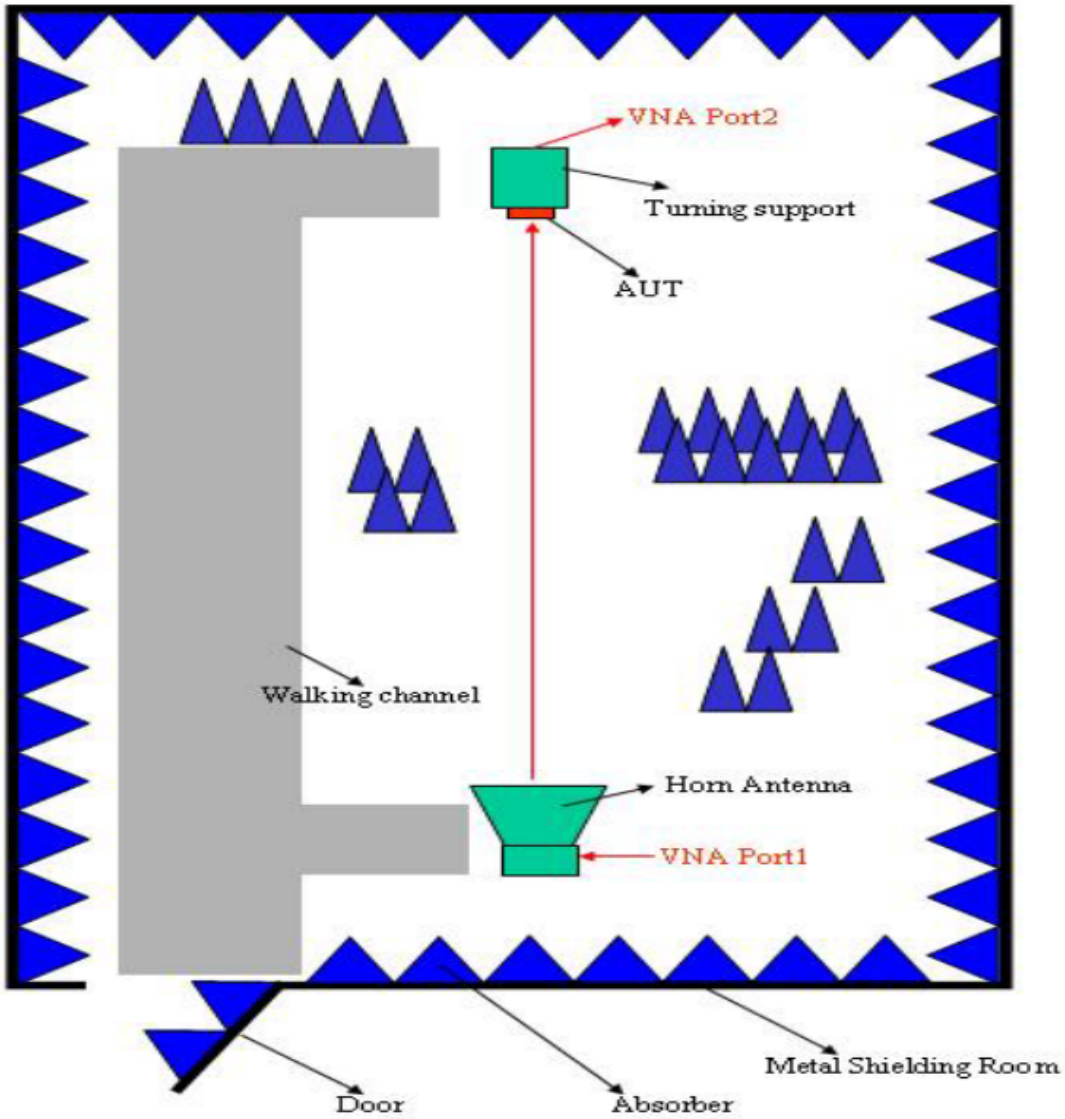
Return Loss


1 2.4000000 GHz 77.264 Ω -22.032 Ω 3.0100 pF
2 2.4400000 GHz 56.124 Ω -6.7828 Ω 9.6165 pF
>3 2.4800000 GHz 43.038 Ω 8.0241 Ω 514.95 pH
Tr2 S44 Log Mag 10.00dB/ Ref 0.000dB [F1]
1 2.4000000 GHz -11.425 dB
2 2.4400000 GHz -21.317 dB
>3 2.4800000 GHz -19.303 dB
50.00
40.00
30.00
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00

The Environment of Antenna Radiation Pattern



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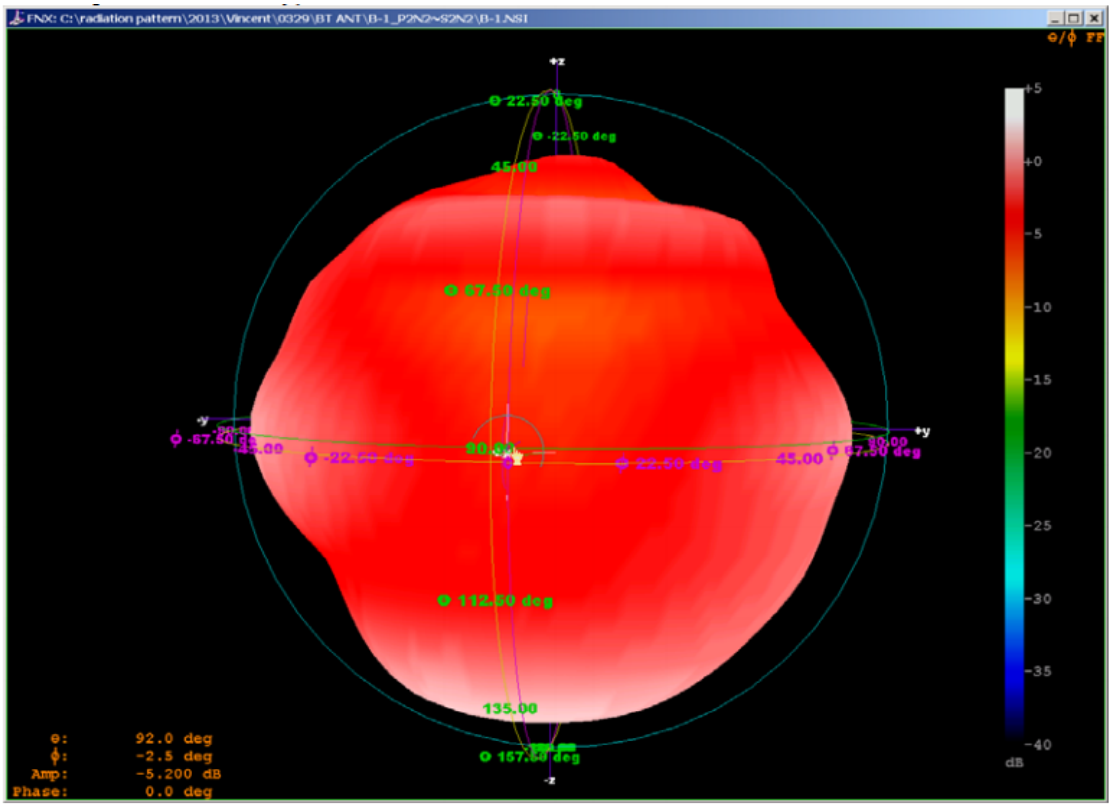
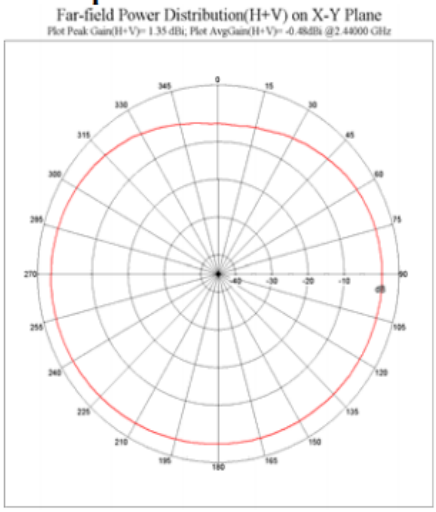
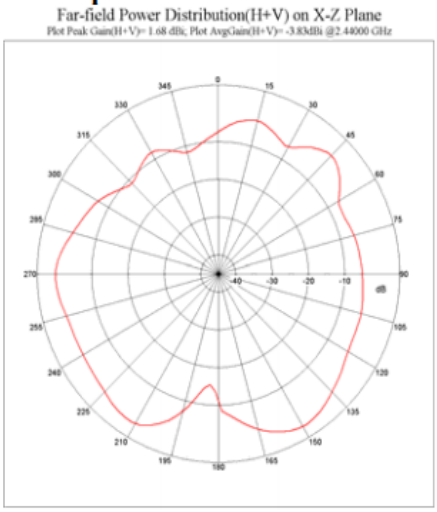
3D radiation pattern diagram



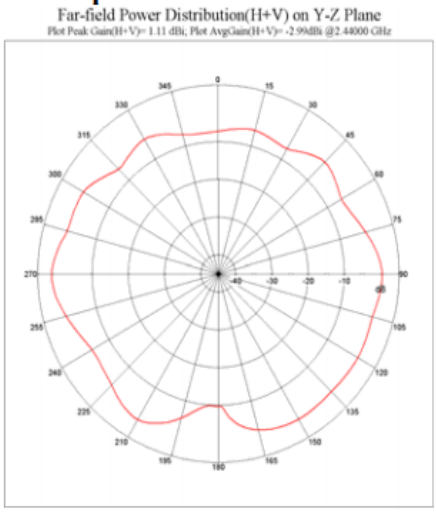
XY-plane



XZ-plane



YZ-plane



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