

VC1108 Antenna Report

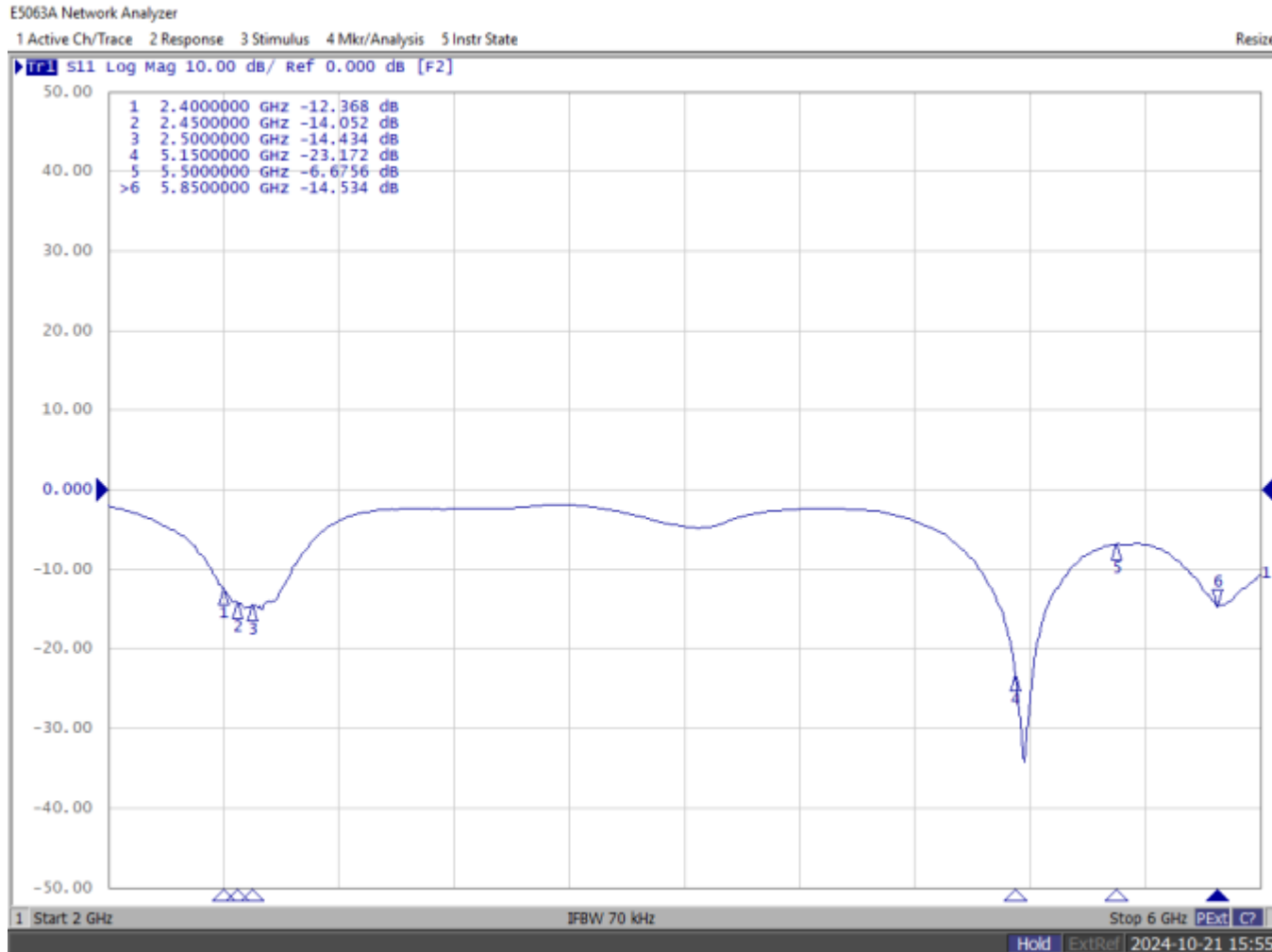
Jasper
2024/11/29

Outline

- Return Loss
- Efficiency and peak gain
- Radiation
- Summary

Return Loss

- Return Loss for PCBA to Antenna.



Frequency (GHz)	Return Loss (dB)
2400MHz	-12.368dB
2450MHz	-14.052dB
2500MHz	-14.434dB
5150MHz	-23.172dB
5500MHz	-6.6756dB
5825MHz	-14.534dB

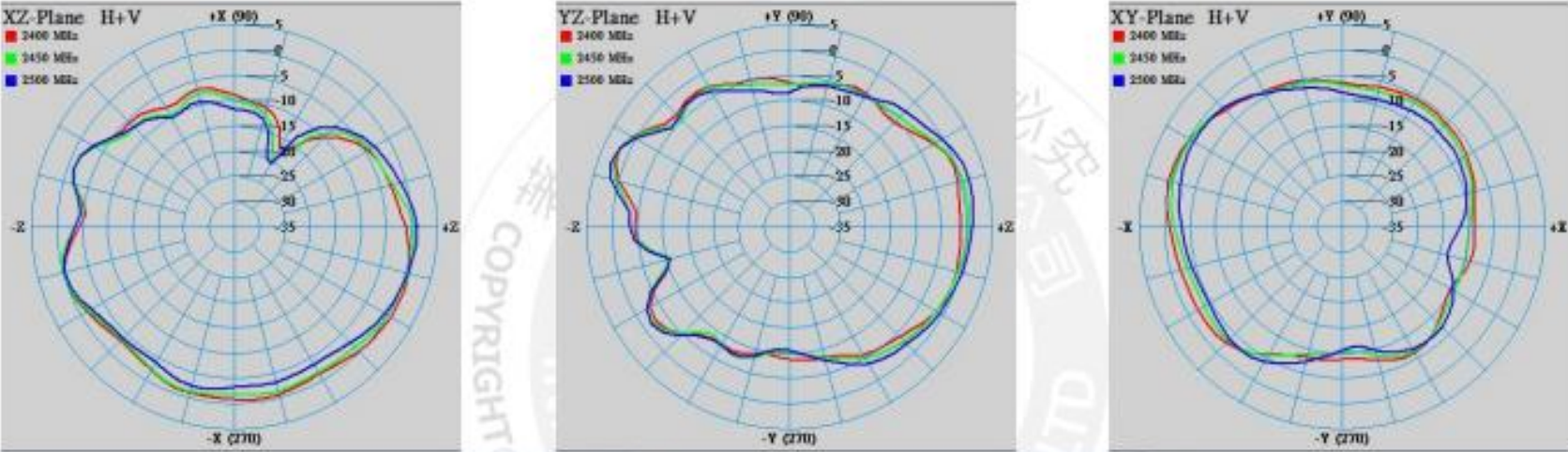
Efficiency and Peak Gain

PCBA fed in to the Antenna

Frequency (GHz)	Efficiency (%)	Peak Gain (dBi)
2400MHz	53.4	1.84
2450MHz	56.5	2.1
2500MHz	54.8	2.79
5150MHz	70.5	3.06
5500MHz	62.8	3.28
5825MHz	65	3.79

Radiation(I)

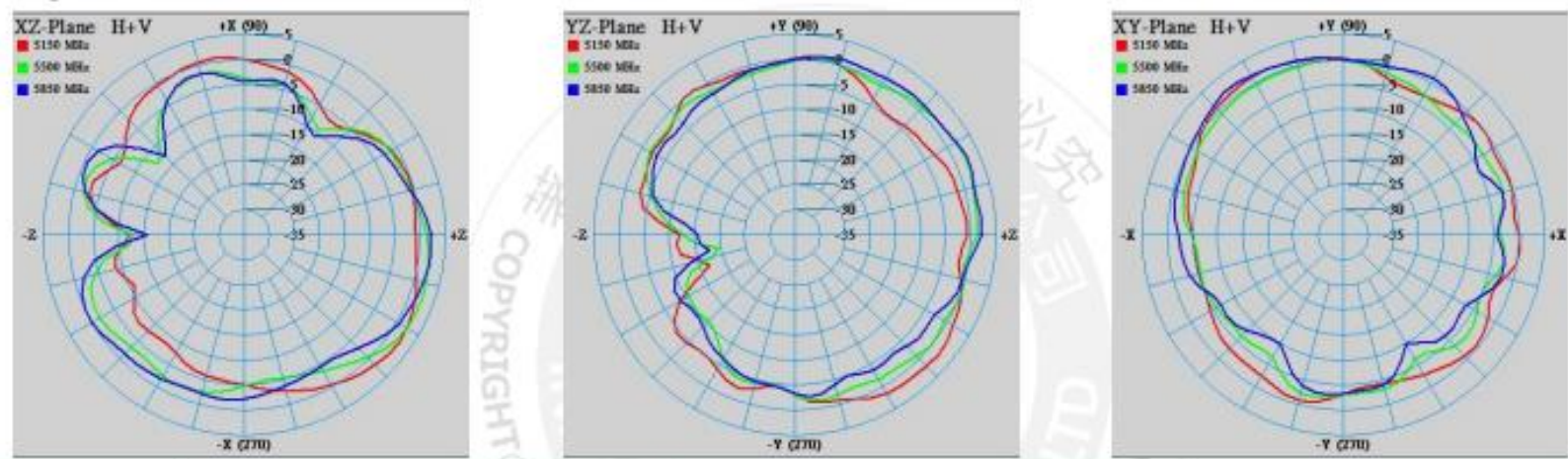
2.4G



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	0.75	-2.62	1.85	-3.52	0.43	-4.40
2450	0.59	-2.83	2.10	-3.16	-0.35	-4.98
2500	1.09	-3.19	2.40	-2.61	-1.15	-5.71

Radiation(II)

5G



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
5150	2.54	-2.03	2.26	-1.65	1.36	-1.49
5500	2.60	-2.24	2.21	-1.61	-0.10	-2.85
5850	2.35	-2.17	2.64	-1.70	1.94	-2.01

Summary

Antenna P/N:RFFPA251104IMLB402

Manufacturer : INPAQ

Address: No. 90, Keyi St., Zhunan Township, Miaoli County 350402 , Taiwan (R.O.C.)

Antenna Spec.

Antenna	Brand Name	Model Name	Ant. Type	Connector	Support	Max Peak Gain	ANTENNA Gain To Cable Loss
Specification	INPAQ	RFFPA251104IMLB402	PIFA	I_PEX	2.4G+5G+BT	2.4G/BT: 2.79dBi 5G: 3.79dBi	Include Cable Loss