

CUSTOMER'S PART NO. _____

Dipole Antenna

- **RFDPA870920IMAB305 for Single Band 2.4 GHz Application**

ELECTRICAL CHARACTERISTICS

Item	Specification
Working Frequency Range	2.4 ~ 2.5 GHz (Note-1)
Gain	1.82 dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20°C ~ +65°C

*Note 1. Central Frequency should be defined after customers' application approval.

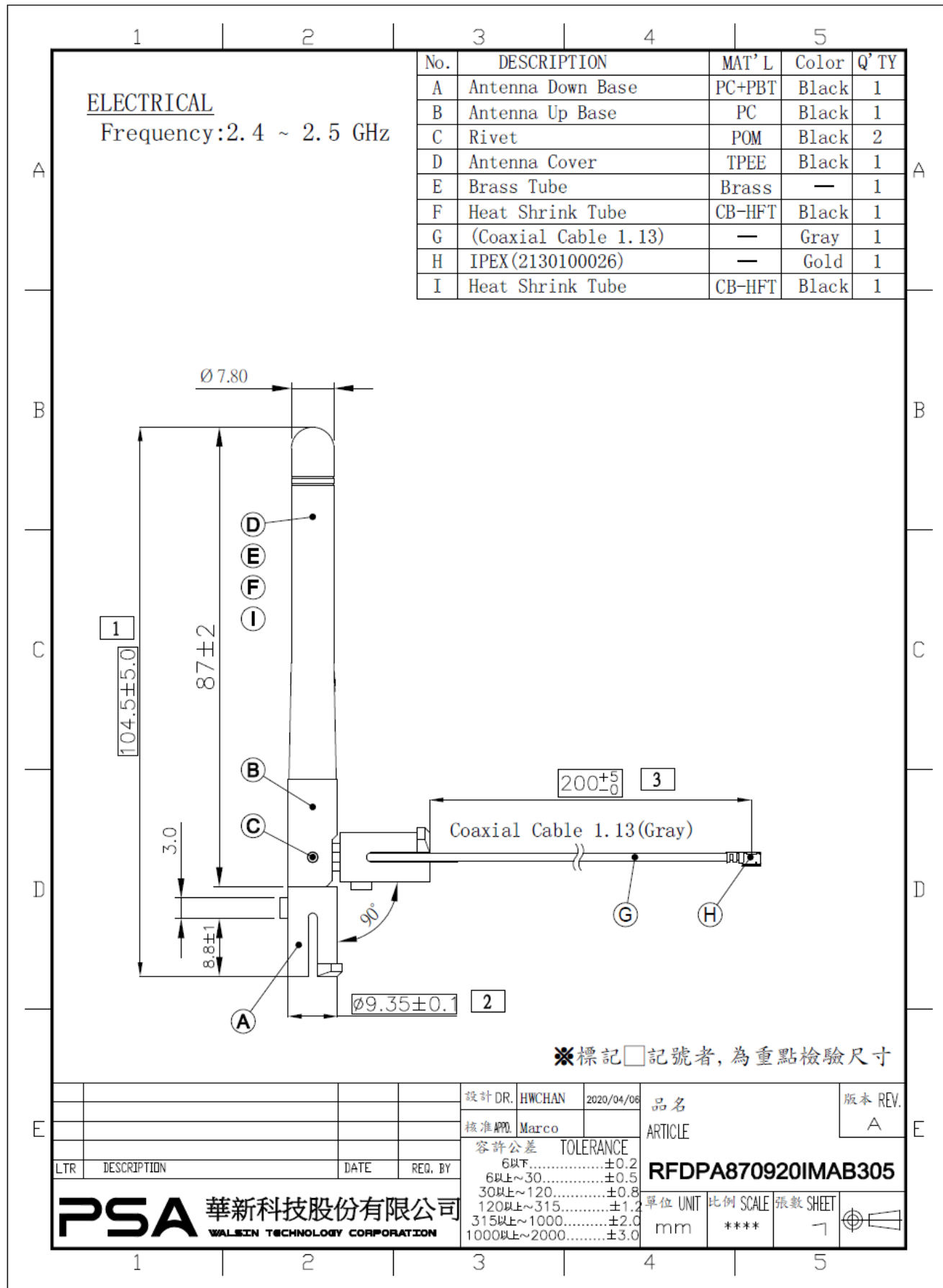
MATERIAL TABLE

Items	Description
Cable	Coaxial Cable Ø1.13 (Gray)
Antenna Cover	TPEE
Antenna Base	PC/PBT
Connector	IPEX
Color	Black
Brass Tube	Brass
Heat Shrink Tube	Black
Heat Shrink Tube	Black

ORDERING RULE

RF	DPA	8709	20	I	M	A	B	3	05
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 8709 Length: 87mm, Width: 9.4mm	2 digits for cable length e.g.: 20 Cable Length: 20cm	A: N C: MCX D: IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U: MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5 GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC band T: LTE band W: WCDMA band	B: MP T: During Test X: Pile Run	0: None 1: Ø0.81 3: Ø1.13 6: RG316 7: Ø1.37 8: RG178	01~99 series number

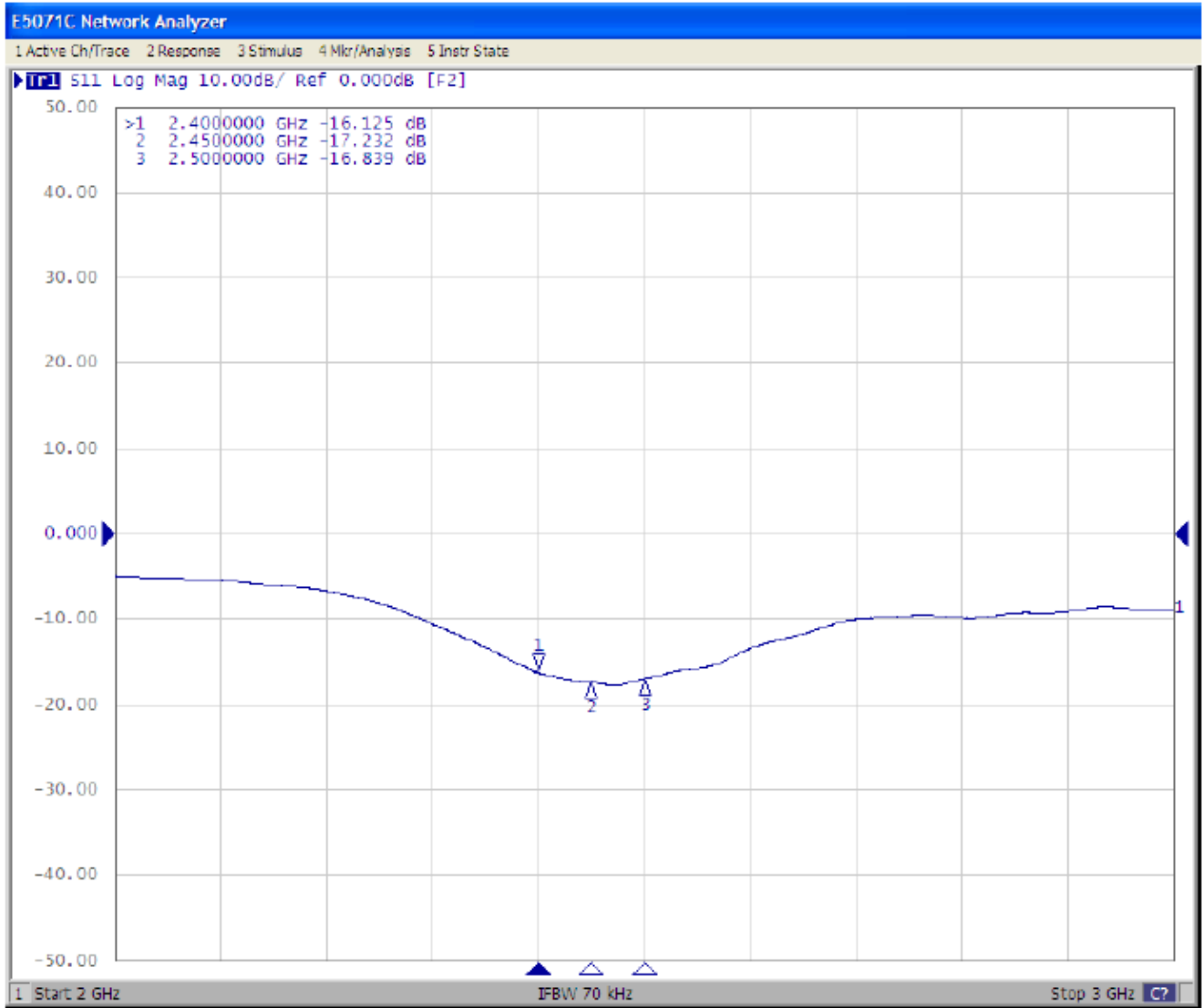
DIMENSIONS



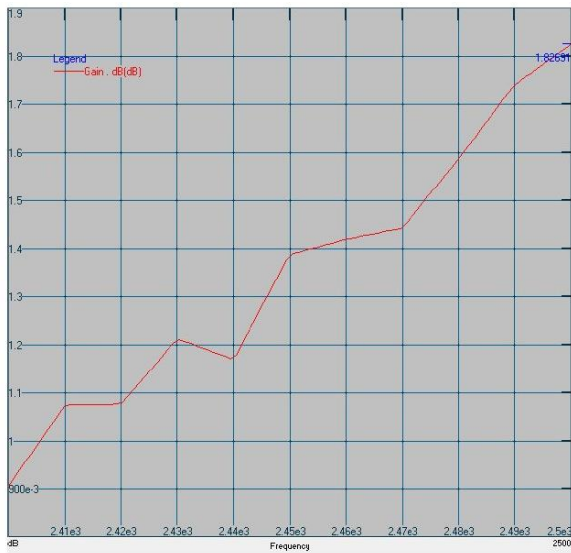
Test Report

ELECTRICAL CHARACTERISTICS

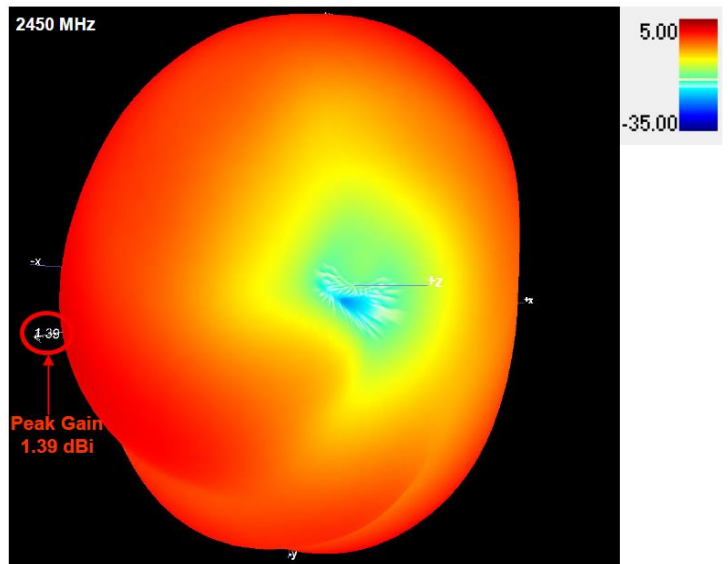
Return Loss



Antenna Peak Gain



Maximum Peak Gain at 2500 MHz : 1.82 dBi



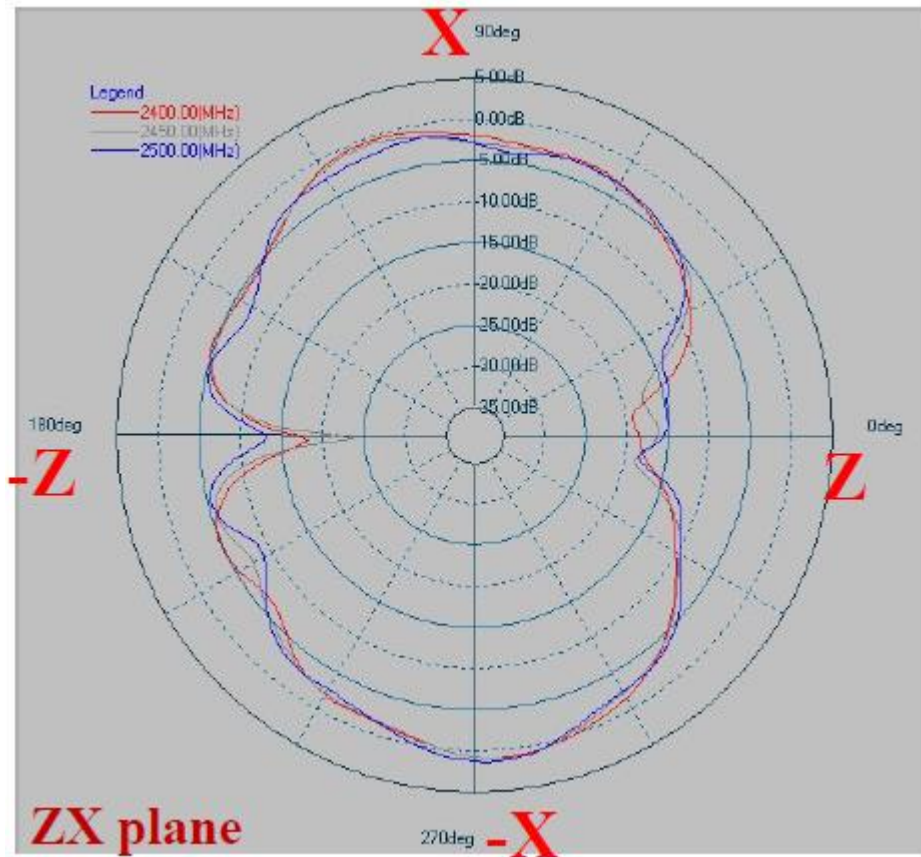
RADIATION PATTERN

2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



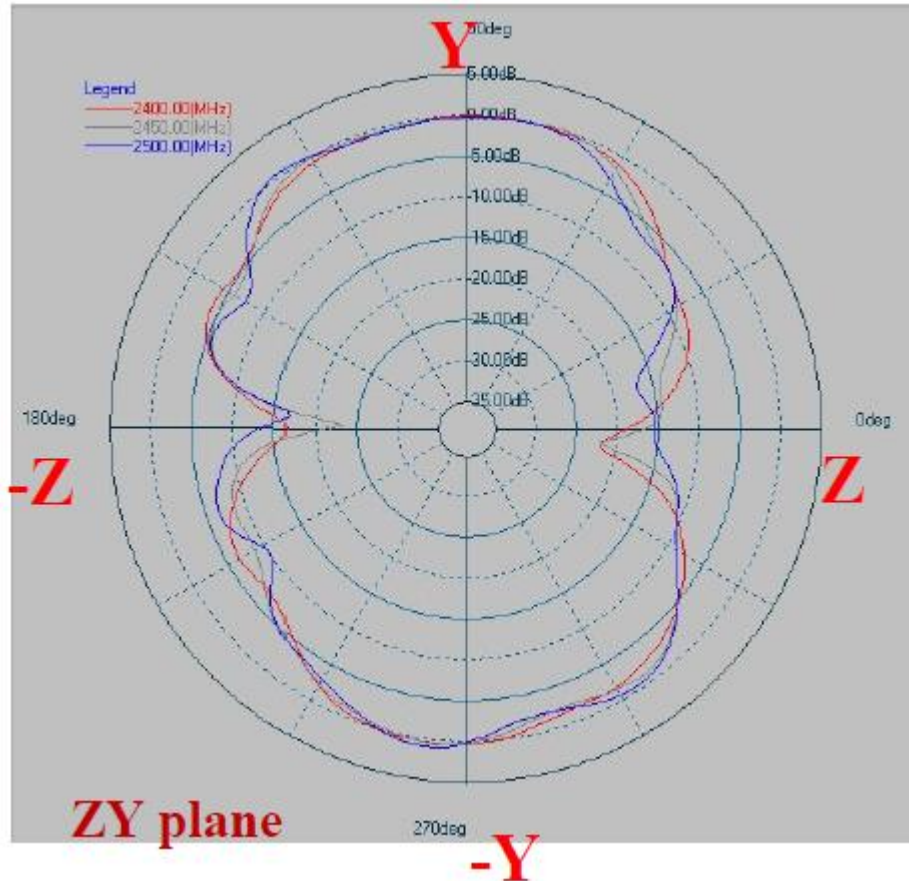
	ZX plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.83	-3.77
2450	0.94	-3.96
2500	1.26	-4.00

2400~2500 MHz

Y-Z Plane

Phi=90.00deg

Gain . dB



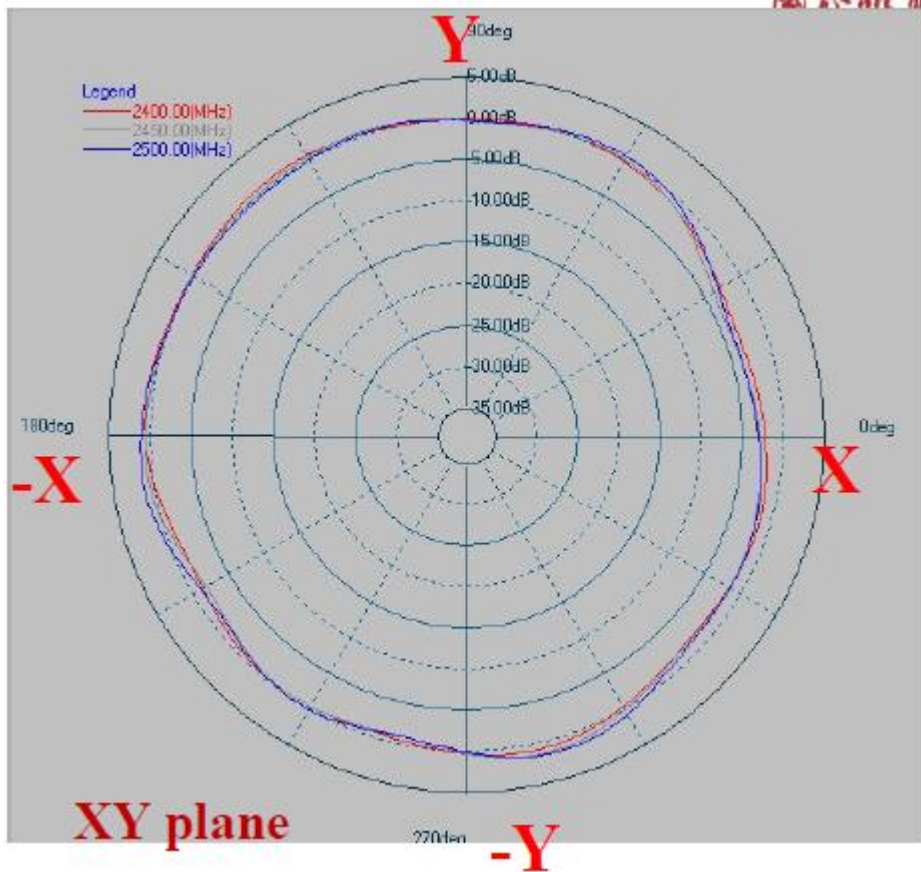
	ZY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.24	-3.35
2450	0.38	-3.47
2500	0.78	-3.43

2400~2500 MHz

X-Y Plane

Theta=90.00deg

Gain . dB



	XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.75	-0.54
2450	1.23	-0.62
2500	1.53	-0.42