

Skynet(PS1400) O-RU n48/n78 external Antenna measurement report

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核心技術研發中心-無線通訊處-天線一部

Core Technology RDC-Wireless Comm. Div.-Ant1 Dept.

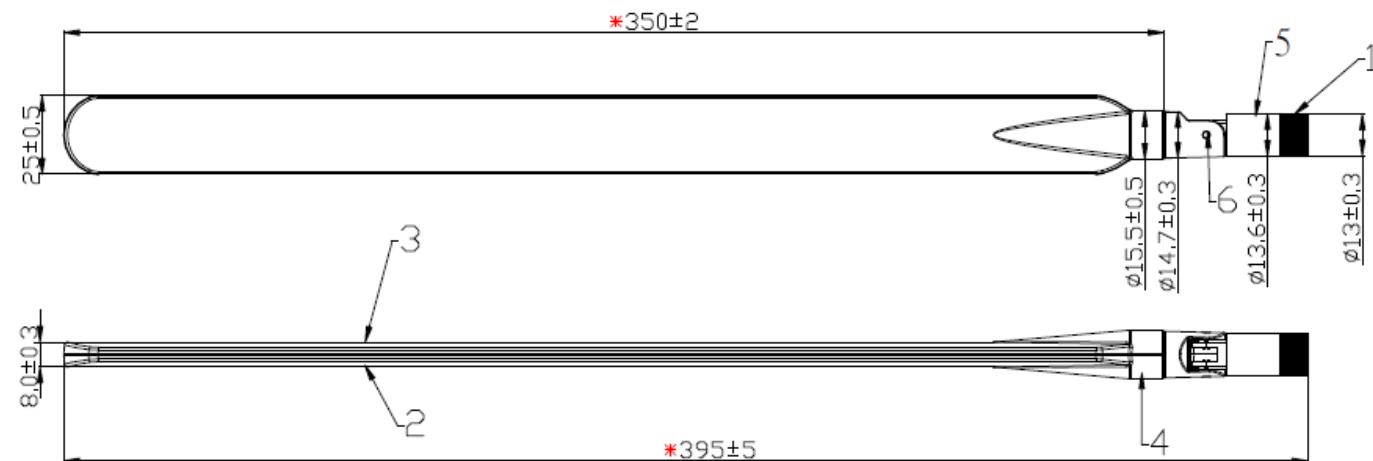
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Antenna structure , measurement condition and specification

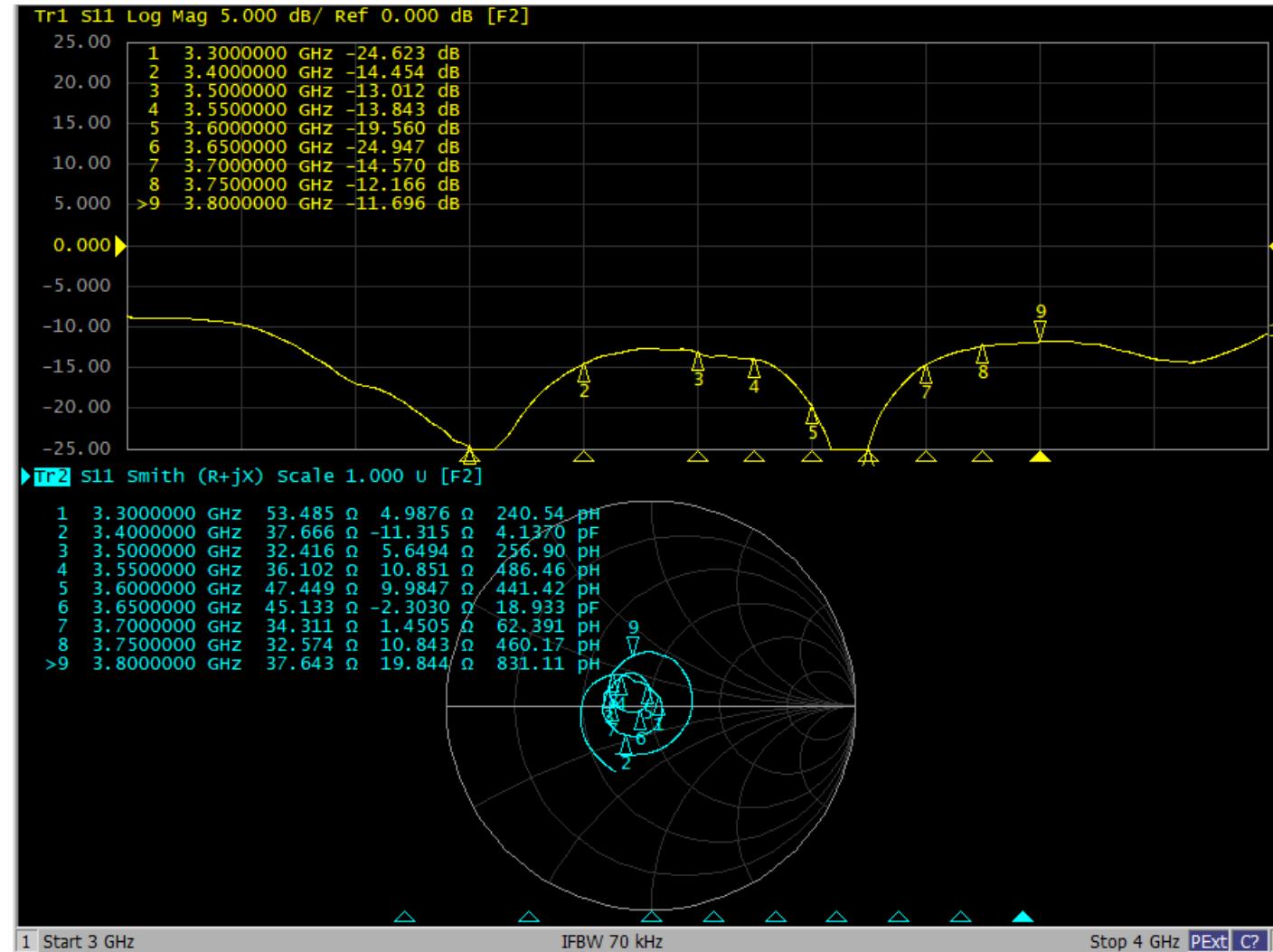
Item	Model	n48/n78 band
1	Antenna type	Dipole
2	Antenna Brand	Pegatron
3	Frequency Range	3.3~3.8GHz
4	Antenna No.	1415-0BAQ000
5	Antenna size	395x25x13mm ³
6	Impedance	50Ω
7	S11	< -10dB Min
8	Radiation	Omni-directional
9	Gain(Peak)	7.91dBi
10	Efficiency	>-2dB
11	Polarization	Linear
12	Connector	SMA
13	Manufacture	INPAQ

(a)Antenna specification



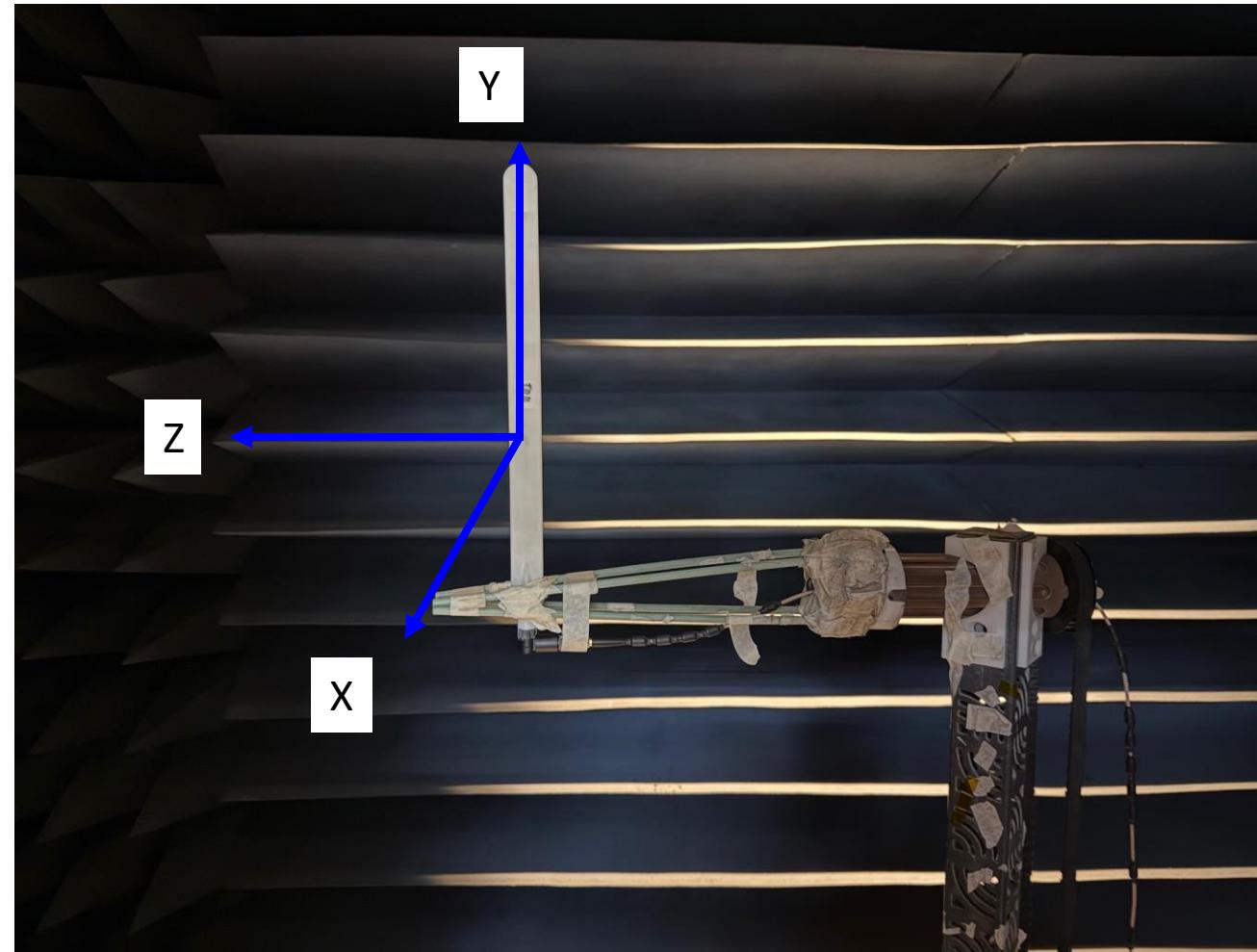
(b)Antenna structure and dimension

S11 Results



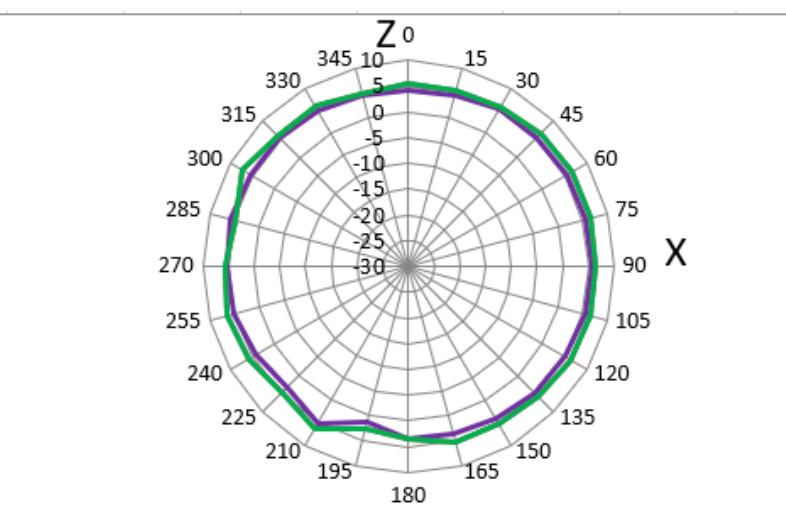
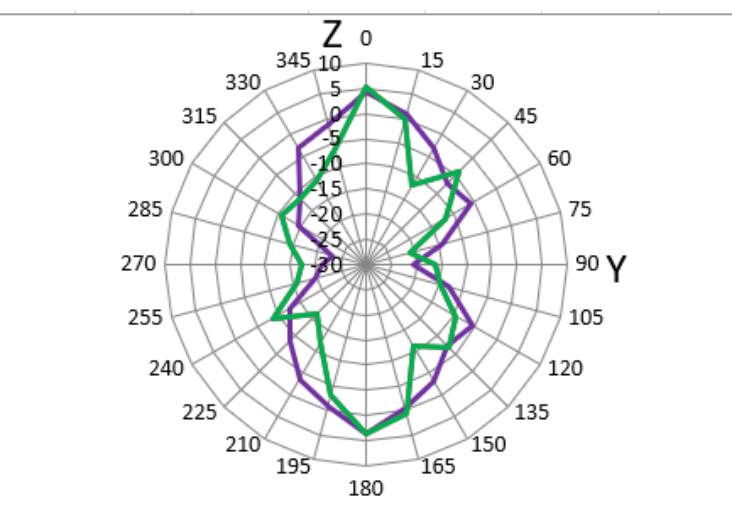
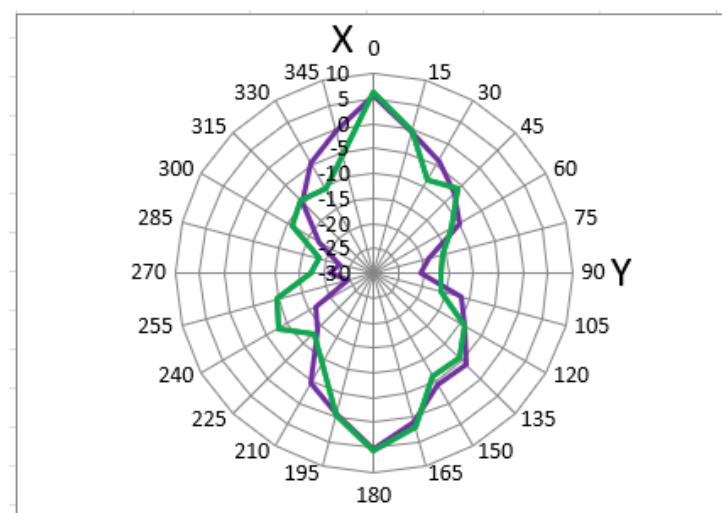
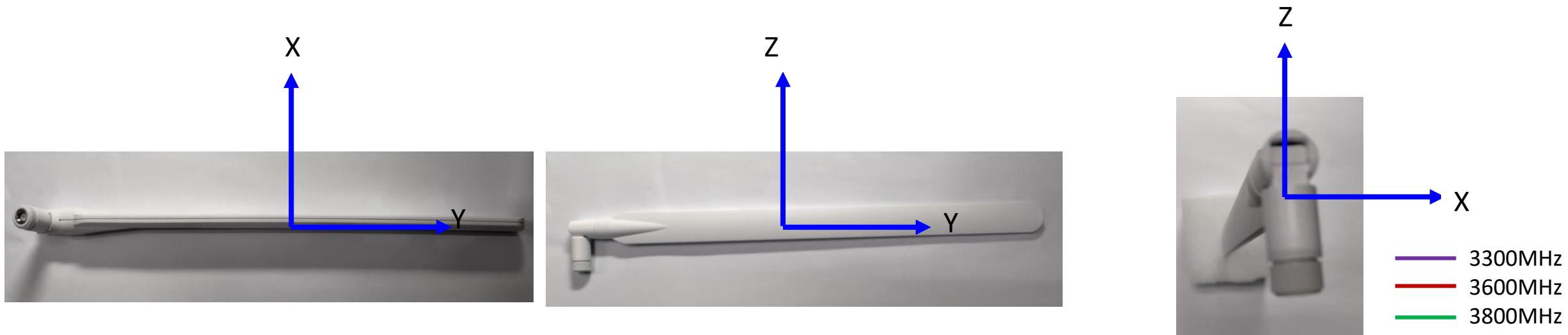
(a)Antenna S11 Results

Antenna Setup For Radiation Patterns Measurement



(a)Antenna Setup in ETS Chamber

2D Radiation Patterns



Antenna Performance

Frequency (MHz)	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800
S11 (dB)	-24.62	-20.88	-14.45	-12.59	-13.01	-13.84	-19.56	-24.95	-14.57	-12.17	-11.70
Peak gain (dBi)	7.65	7.81	7.71	7.38	7.37	7.41	7.91	7.66	7.52	7.39	7.54
Efficiency (dB)	-1.15	-1.16	-1.76	-1.81	-1.73	-1.76	-1.03	-1.31	-1.47	-1.66	-1.83
Efficiency (%)	76.78	76.61	66.59	65.77	67.10	66.65	78.19	74.03	71.30	68.29	65.45