

# 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

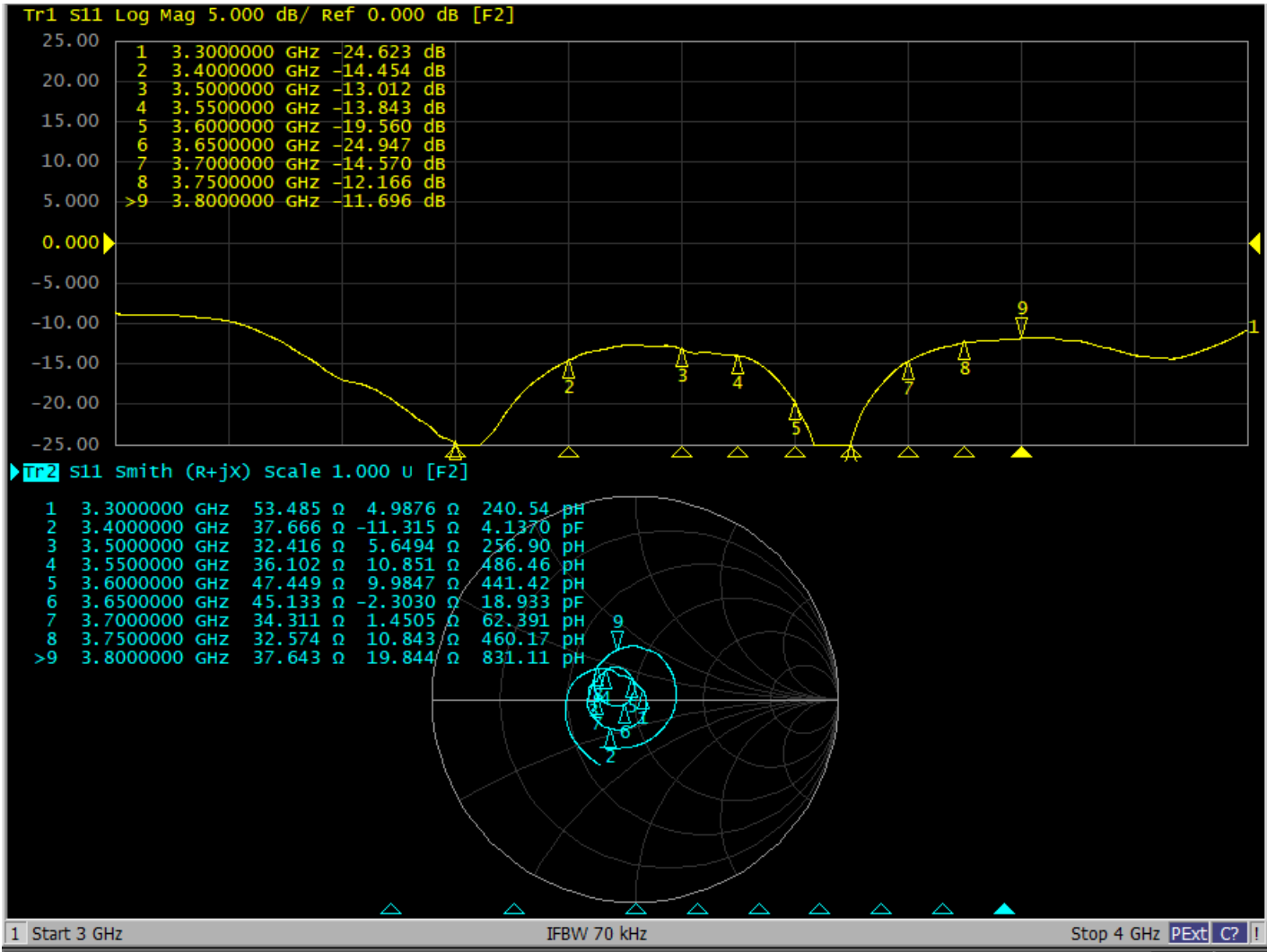
Item	Model	n48/n78 band
1	Antenna type	Dipole
2	Antenna Brand	Pegatron
3	Frequency Range	3.3~3.8GHz
4	Antenna No.	1415-0BAQ000
5	Antenna size	395x25x13mm <sup>3</sup>
6	Impedance	50Ω
7	S11	< -10dB Min
8	Radiation	Omni-directional
9	Gain(Peak)	7.91dBi
10	Efficiency	>-2dB
11	Polarization	Linear
12	Connector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

(a)Antenna specification



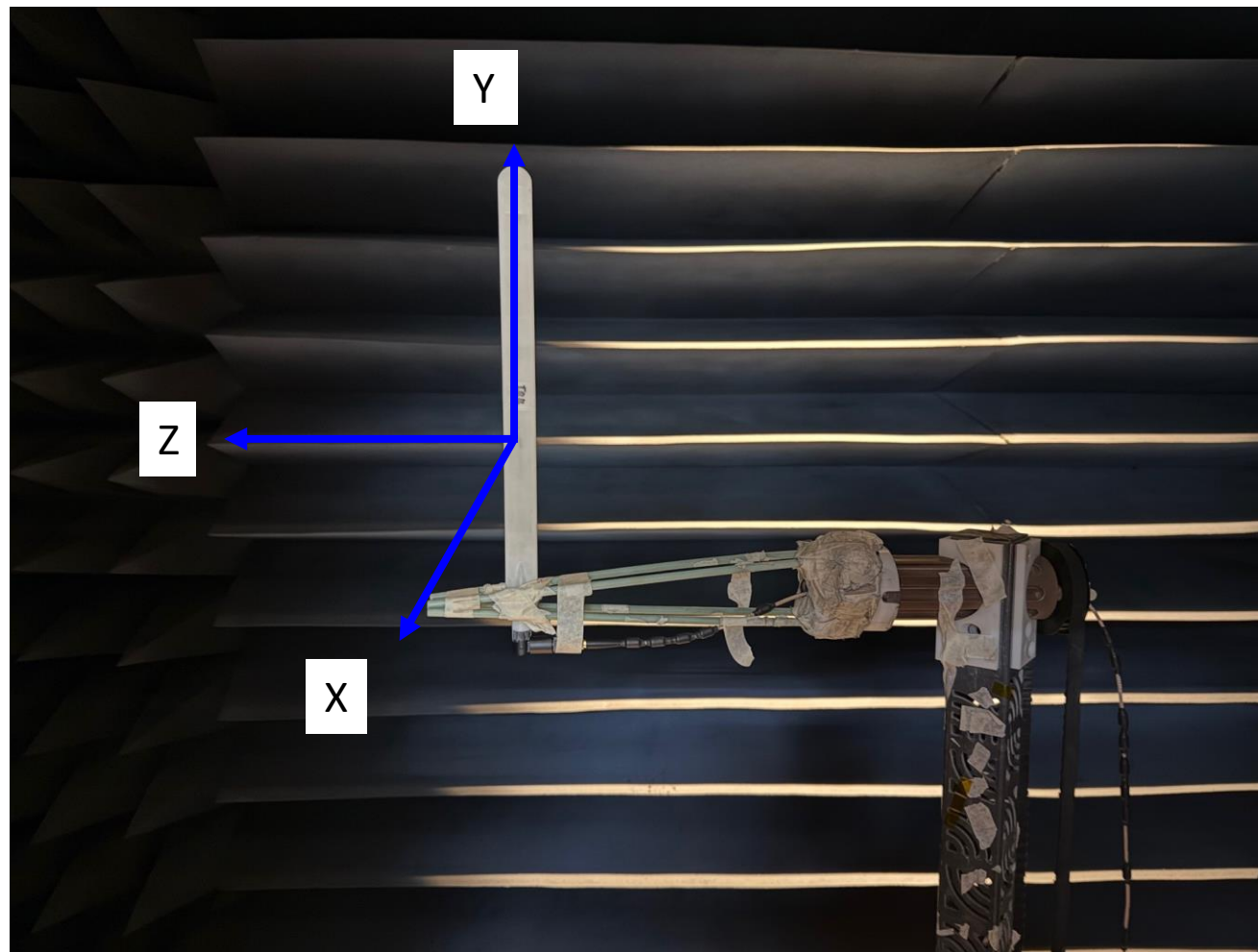
(b)Antenna structure and dimension

# S11 Results



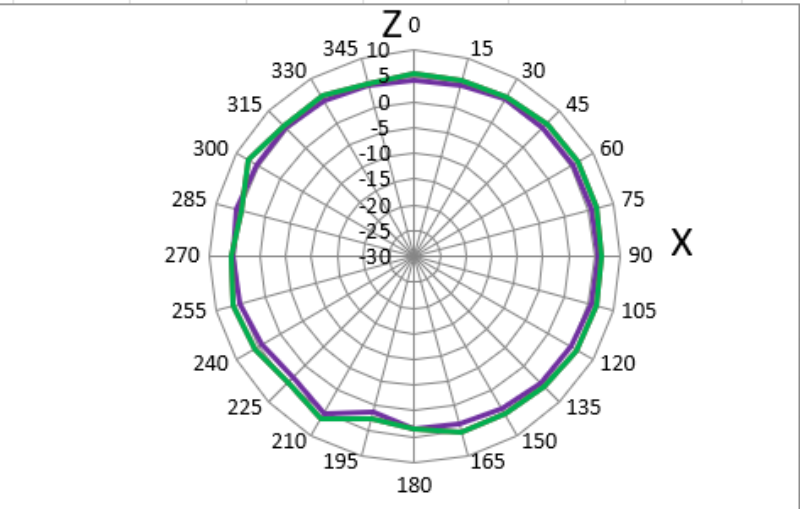
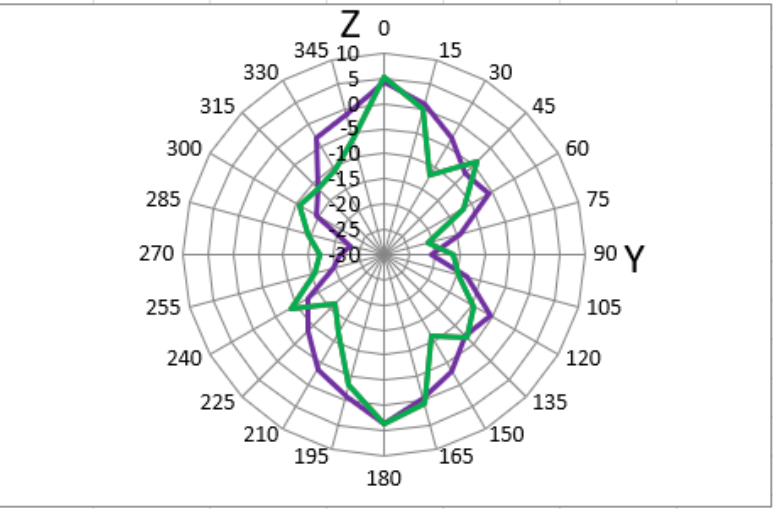
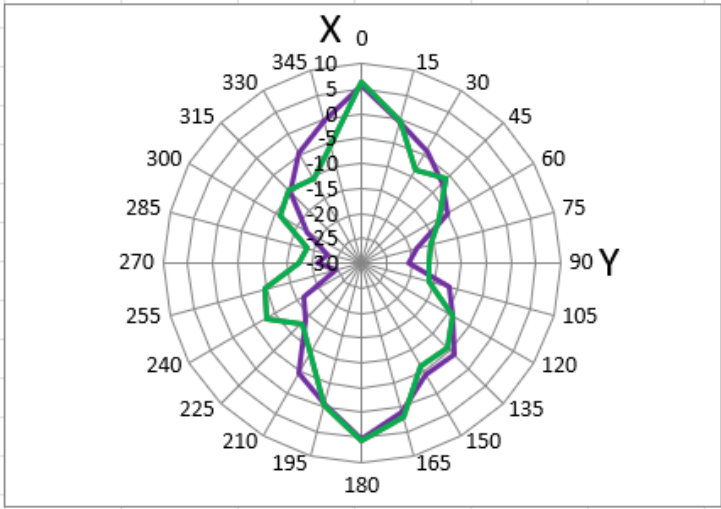
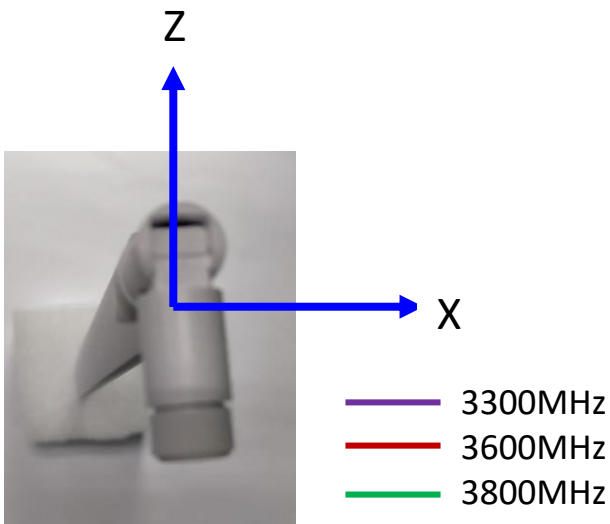
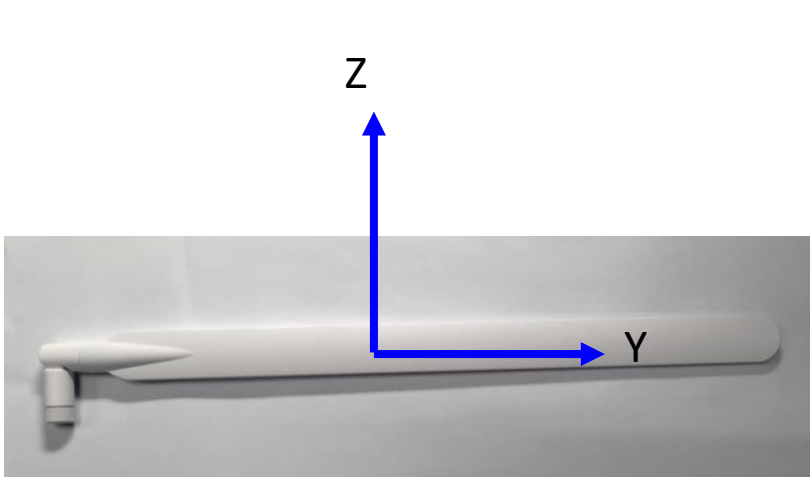
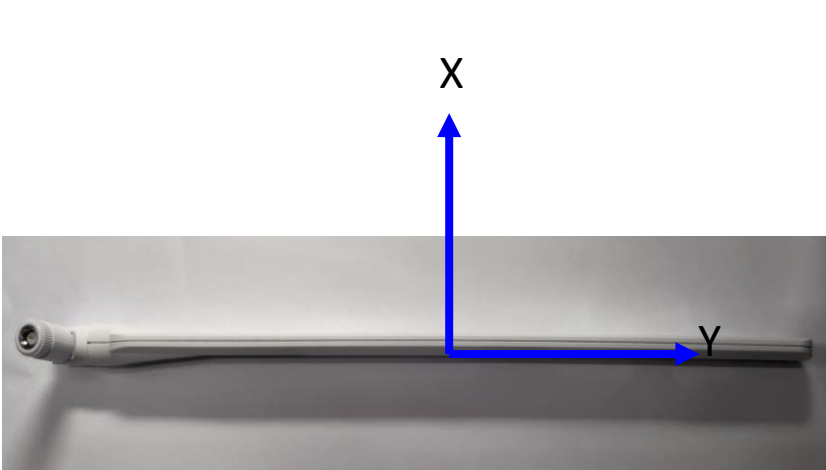
(a)Antenna S11 Results

# 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