

Unlicensed Band Antenna Gain

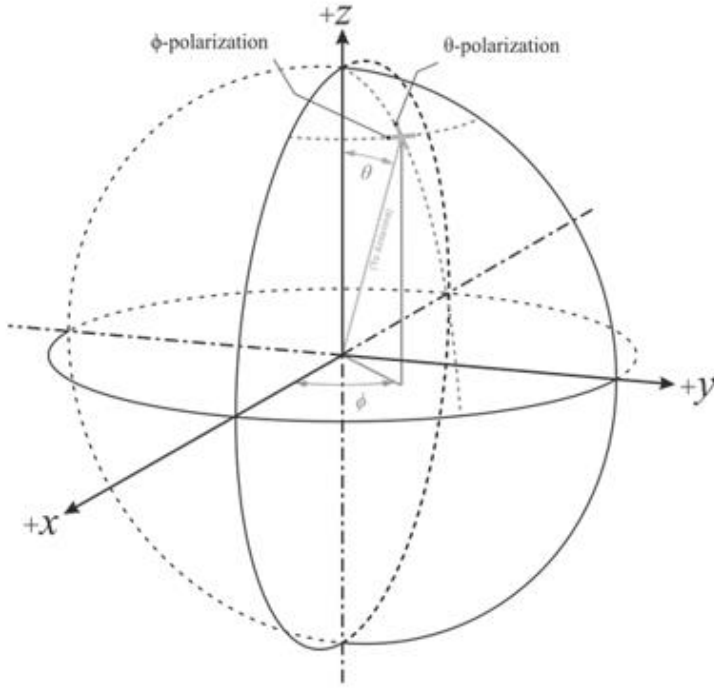
Model : E7200

FCC ID : V65E7200

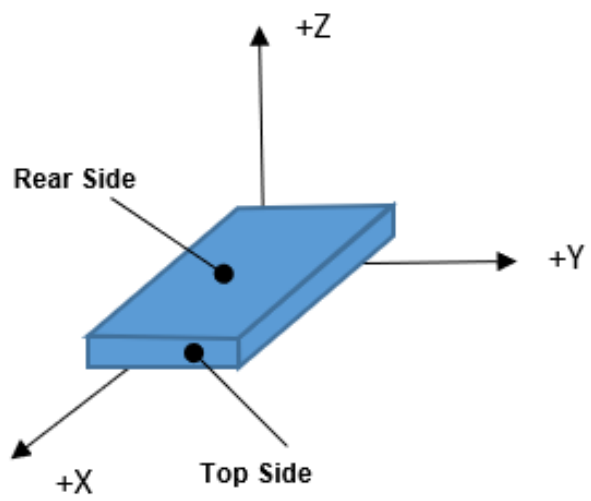
Antenna Gain

Antenna Gain	CH0	Bluetooth	-0.1 dBi
		WLAN2.4G	-0.1 dBi
		WLAN5G	3.2 dBi
		WLAN6G	1.8 dBi
	CH1	Bluetooth	-0.6 dBi
		WLAN2.4G	-0.6 dBi
		WLAN5G	2.1 dBi
		WLAN6G	2 dBi

Coordinate System



DUT default alignment to coordinate system

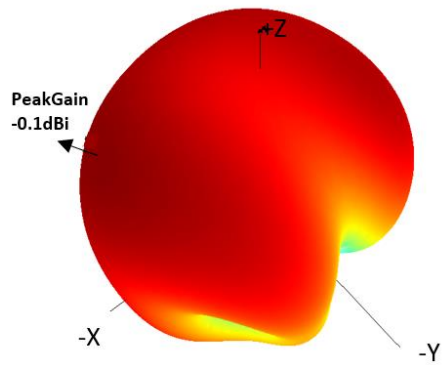


Peak Gain Position

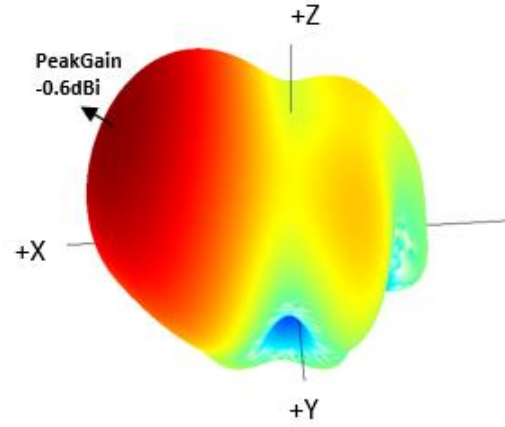
	Freq [MHz]	peak Gain	Phi	Theta
			deg	deg
CH0 (ANT3)	Bluetooth	-0.1	156	50
	WLAN2.4G	-0.1	156	50
	WLAN5G	3.2	24	52
	WLAN6G	1.8	56	56
CH1 (ANT5)	Bluetooth	-0.6	6	42
	WLAN2.4G	-0.6	6	42
	WLAN5G	2.1	108	-50
	WLAN6G	2.0	102	-98

Radiated Pattern

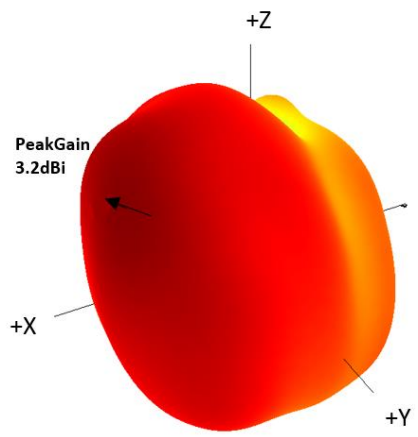
ANT3 Bluetooth/WLAN2.4G



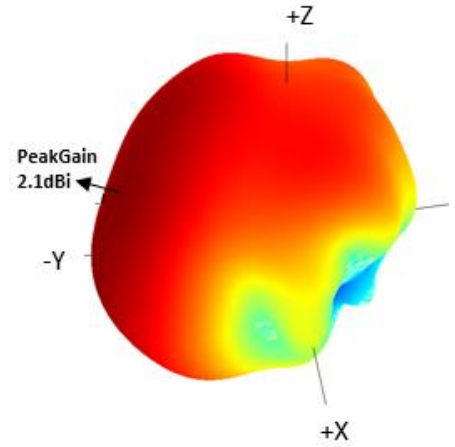
ANT5 Bluetooth/WLAN2.4G



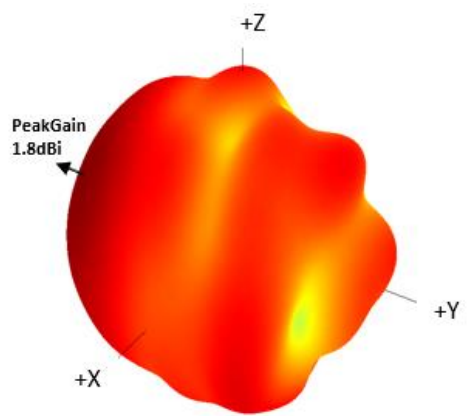
ANT3 WLAN5G



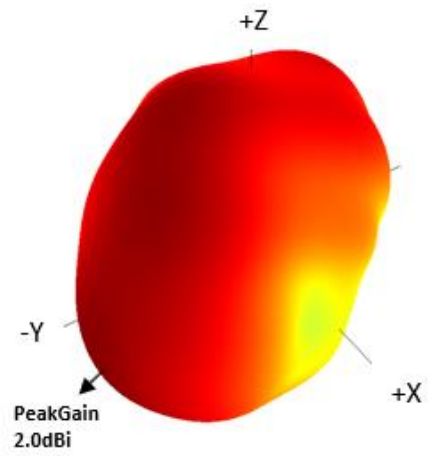
ANT5 WLAN5G



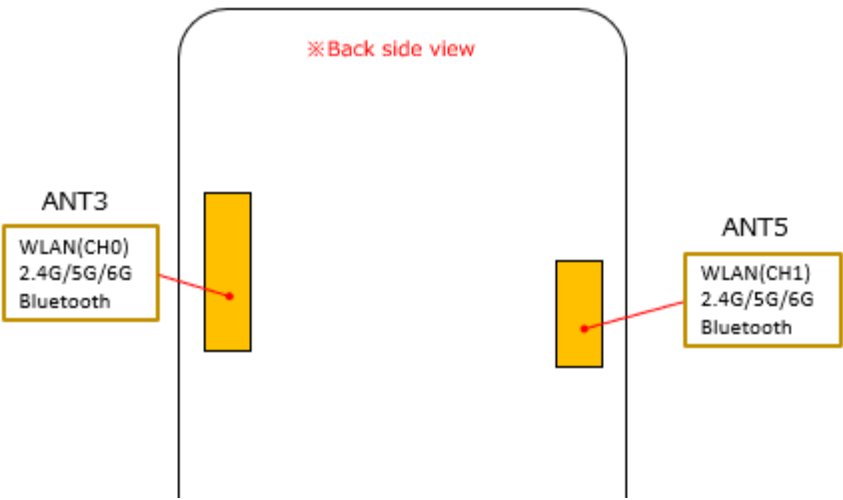
ANT3 WLAN6G



ANT5 WLAN6G

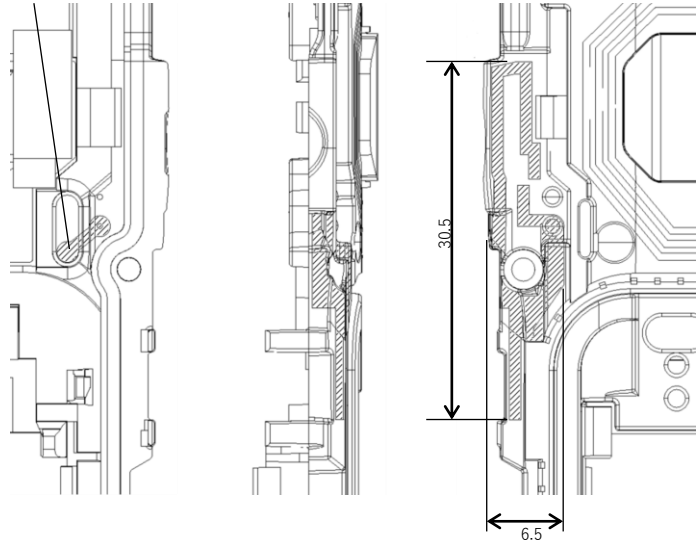


Antenna Description

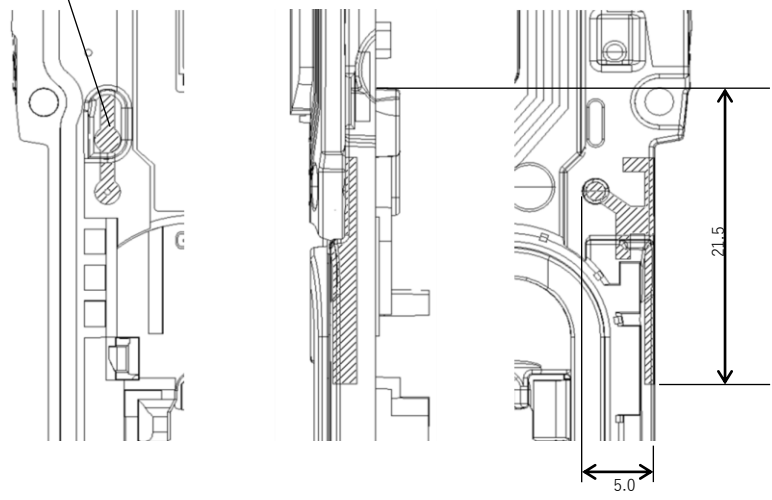


External view of antenna (Bluetooth/WLAN antenna)

ANT3 antenna



ANT5 antenna



Test Description

Antennas tested for Gain and Radiated Pattern must be assembled into the enclosure and tested in the fully assembled and operating E7200 handset. The antenna is tested in free space in the anechoic chamber in the H, E planes. The radiated patterns are measured at the center of transmit bands.

Measurement Procedure

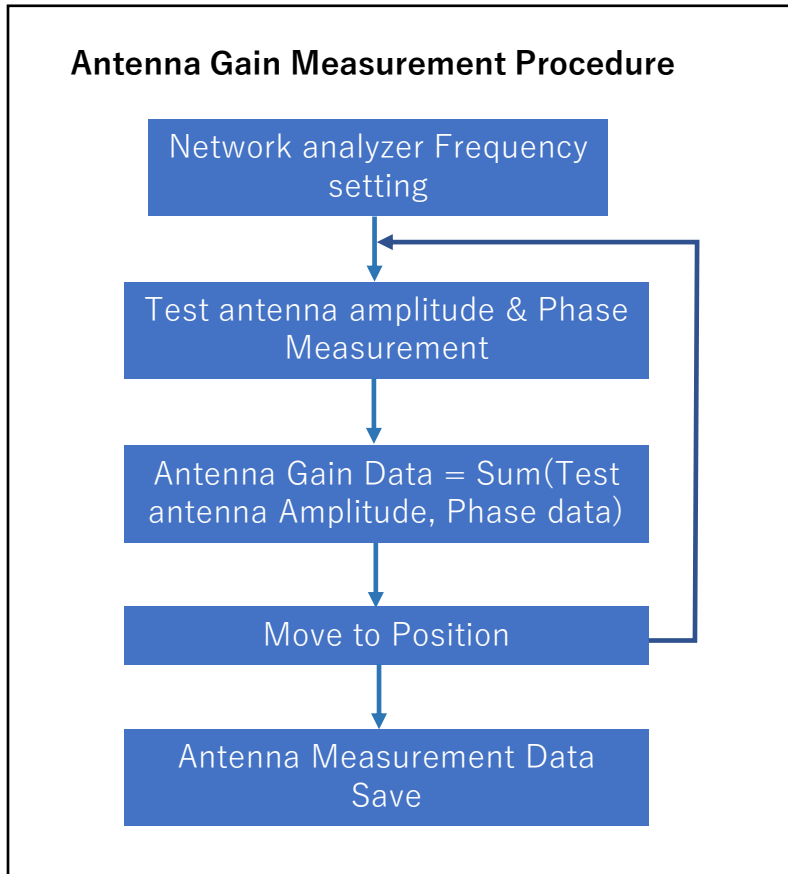
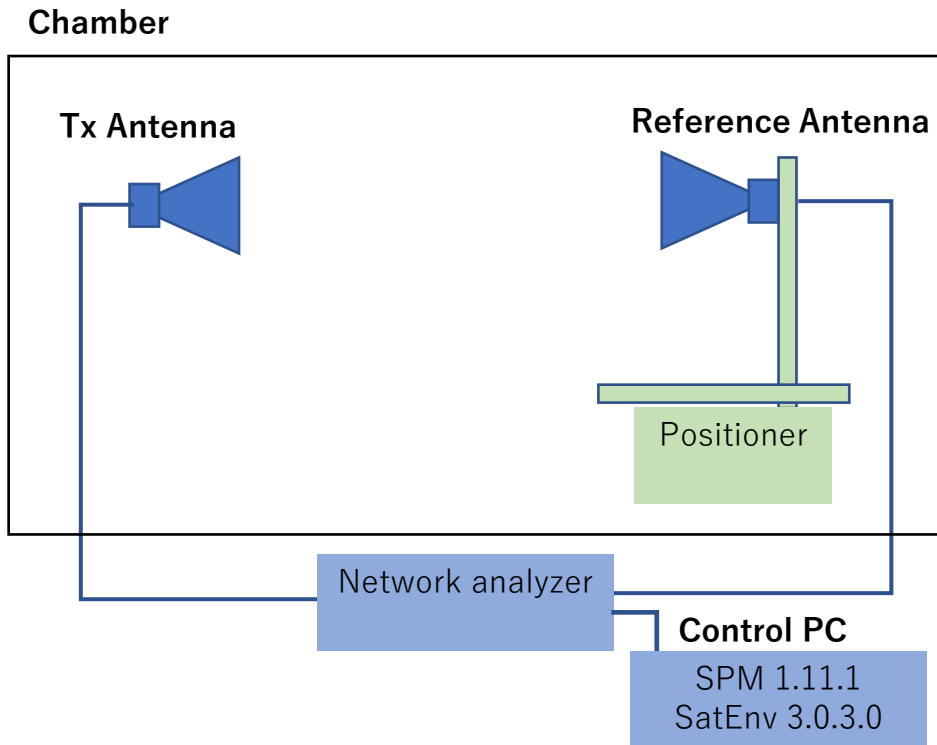


Table of calibrated equipment



Part	Model Name	Specification	Note
Chamber	StarLabSystem	0.8GHz to 6.0GHz	Calibrated date : 2022.10.1 Cal. Due date : 2023.9.30
Tx Antenna			
Positioner			
Reference Antenna	SH800-228	0.8GHz to 12GHz	
Network Analyzer	Agilent E5017C	9.0KHz to 6.5GHz	Calibrated date : 2021.10.27 Cal. Due date : 2023.11.30
Network Analyzer	Anritsu MS46131A	1.0MHz to 8.0GHz	Calibrated date : 2021.2.10 Cal Due date : 2023.3.31
Measurement Software	SPM 1.11.1		
	SatEnv 3.0.3.0		

Test dates

2023.1.16 ~ 2023. 1.20

Names of test personnel

Takanori Hashizume

Names of commercial test software being used

SPM 1.11.1

SatEnv 3.0.3.0