

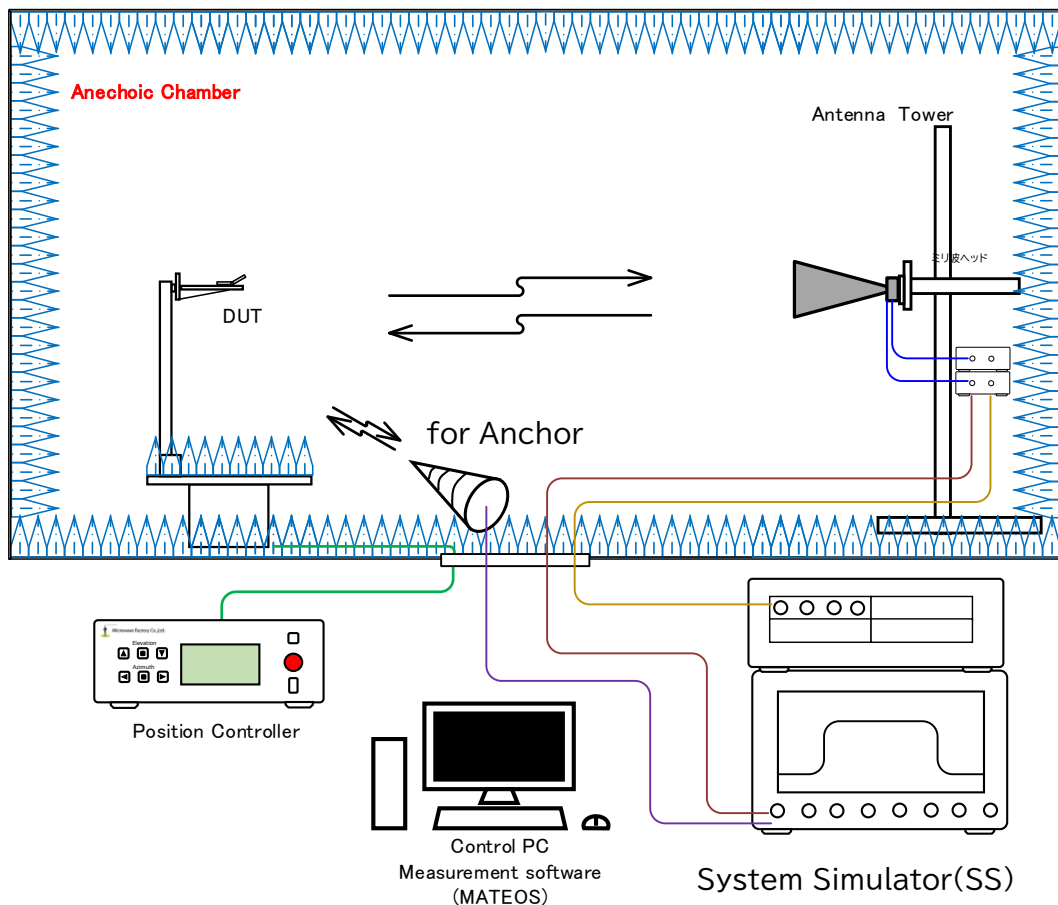


5G NR OTA Measurement System

System Overview

5G devices is increasing on market, which is demanded to be tested at new frequency band and wideband modulation, the high-technologies like the beamforming & array-antenna for mm-wave band. 5G devices don't have antenna connector, so it is essential for that devices OTA test. Our OTA test system is available to install to the current chamber room and box with suitable for Direct Far Field (DFF) solution, which is one of OTA test method (another one is Compact Antenna Test Range (CATR)). Available OTS test not only FR1/FR2 of NSA (Non Stand Alone) devices but also SA (Stand Alone) devices.

Example FR2 System (NSA)

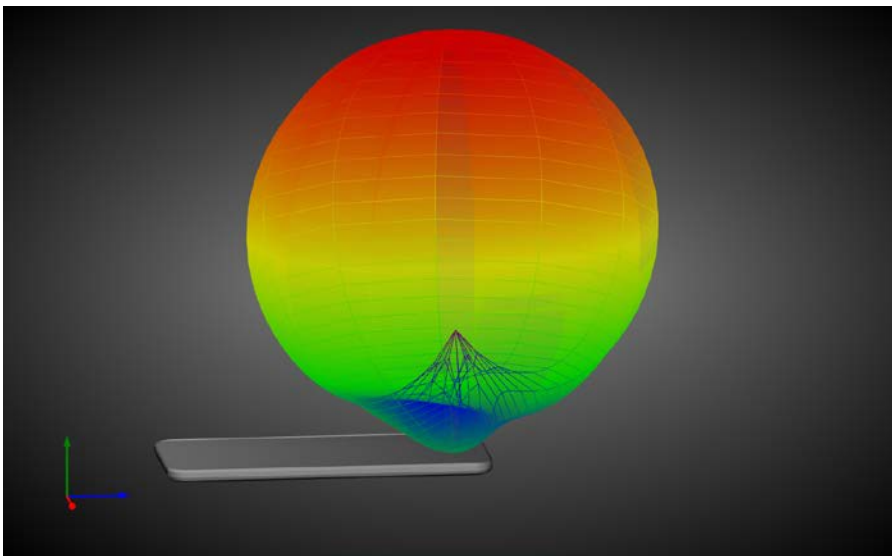


- Available system ;
 5G NR
 ■ NSA FR1/FR2
 ■ SA FR1
 (UE Beamlock Function)



MATEOS.NET ; Auto Test software

MATEOS.NET supports 5G NR OTA Test, which could make it Automation. We could support the accelerated development of 5G devices on market by automatically measurement for the Output Power and sensitivities of DUT (Device Under Test) on this solution.



基本設定 測定器 ポジショナ	
LTE settings	
Target Cell	1
Cell Power(dBm/15kHz)	-75.00
Duplex Mode	FDD
Band	1
DL Bandwidth	20MHz
UL Bandwidth	20MHz
Cell ID	0
DL MCS Index	2
Expected Input Power(dBm/15kHz)	-20.00
DL RB Allocation	99.1
SIM Type	TEST3GPP
EPS Bearer IP Address	192.168.2.2
NR settings	
Target Cell	1
Frequency Range	FR1
Duplex Mode	TDD
Band(FR1 TDD)	N78
SCS Common	MU1(30kHz)
Test Channel	LOW
Reference Signal Power(dBm/SCS)	-82.00
Expected Input Power(Mode)	Manual
Expected Input Power(dBm/BW)	15.00
Quick Configuration	UL_RMC
UL Transform Precoding	Disabled
NR settings(UL RMC)	
PRB Count	270
PRB Start	0
MCS Table	Q64Lse
MCS Index	0
NR settings(DL RMC)	
PRB Count	273
PRB Start	0
MCS Table	Q64
MCS Index	4
RRH settings	

FR2 system connection (sample)



NR SA TxMeas	 SA PCC n78 -44.85 dBm/BW BW: 100 MHz Freq: D: 3549.99 U: 3549.99 CONNECTED	 SA SCC n77 -19.85 dBm/BW BW: 100 MHz Freq: D: 3350.01 U: 3350.01 OFF	
Throughput Summary	DL/UL OTA Graph	UL OTA	DL OTA