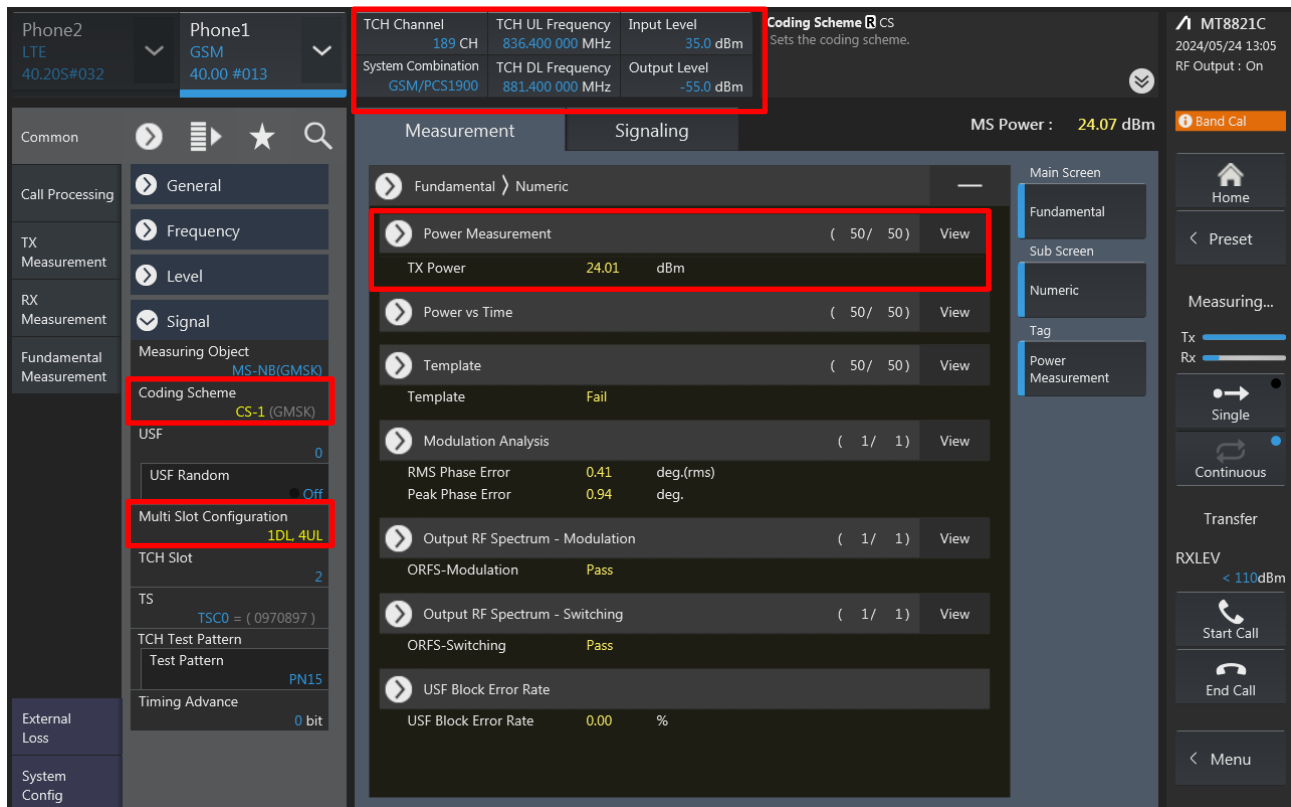


Power measurement connection diagram:

The power measurement for 2G/3G/LTE/5G FR1/UL and DL CA is to establish a connection between device and call box, and via call box to configure Bands, channel, BWs, RB size, carrier aggregation of CA, frequency channels, SCS and maximum output power. Hereunder is screenshot call box connection information for 2G/3G/LTE/5G FR1/UL and DL CA.

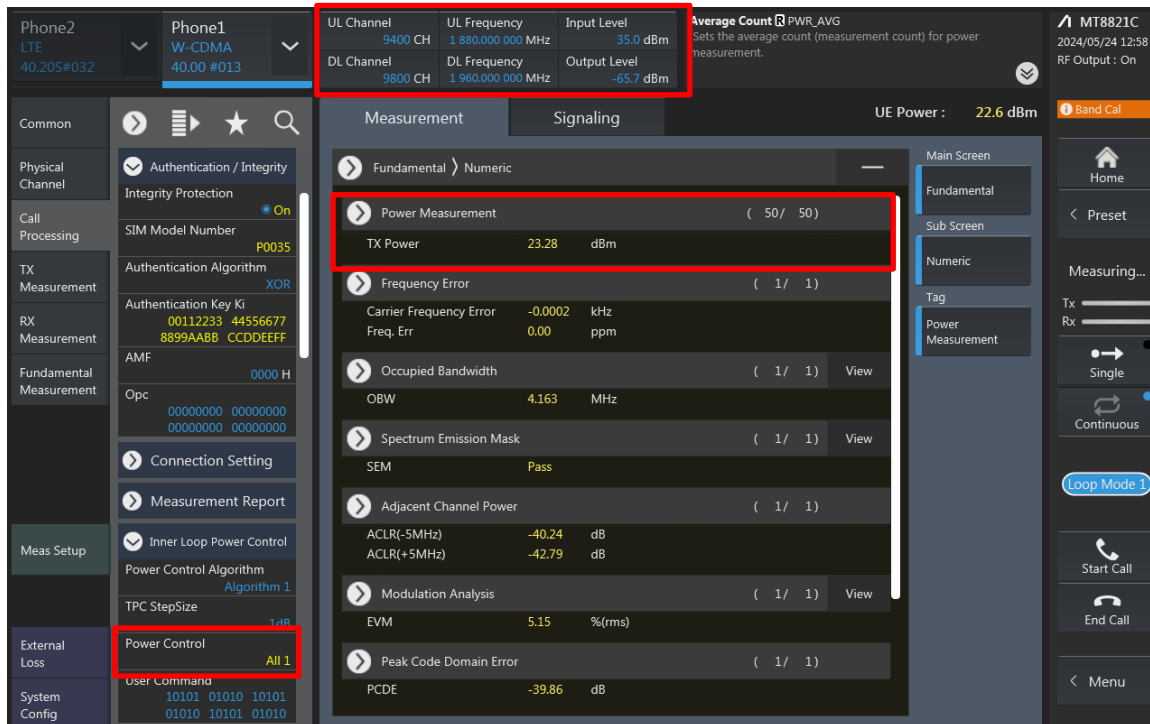
<GSM>



The screenshot displays the SPORTON LAB. software interface for GSM power measurement. The interface is divided into several sections:

- Top Bar:** Shows Phone2 (LTE, 40.205#032) and Phone1 (GSM, 40.00 #013). It also displays TCH Channel (189 CH), TCH UL Frequency (836.400 000 MHz), Input Level (35.0 dBm), TCH DL Frequency (881.400 000 MHz), and Output Level (-55.0 dBm). The Coding Scheme is set to CS.
- Left Sidebar:** Contains navigation options like Common, Call Processing, TX Measurement, RX Measurement, Fundamental Measurement, and External Loss. The 'Fundamental Measurement' section is expanded, showing 'Coding Scheme' (CS-1 (GMSK)) and 'Multi Slot Configuration' (1DL, 4UL).
- Main Area:** Displays 'Measurement' and 'Signaling' tabs. The 'Measurement' tab is active, showing 'Fundamental' and 'Numeric' views. The 'Power Measurement' section is highlighted, showing 'TX Power' (24.01 dBm). Other measurements include 'Power vs Time', 'Template', 'Modulation Analysis', 'Output RF Spectrum - Modulation', 'Output RF Spectrum - Switching', and 'USF Block Error Rate'.
- Right Sidebar:** Shows 'Main Screen' and 'Sub Screen' options. It also displays 'MT8821C' and '2024/05/24 13:05'.

<WCDMA>



Phone2: LTE 40.20S#032, Phone1: W-CDMA 40.00 #013

UL Channel: 9400 CH, UL Frequency: 1 880.000 000 MHz, Input Level: 35.0 dBm
DL Channel: 9800 CH, DL Frequency: 1 960.000 000 MHz, Output Level: -65.7 dBm

Average Count: PWR_AVG (Sets the average count (measurement count) for power measurement.)

MT8821C 2024/05/24 12:58, RF Output: On

UE Power: 22.6 dBm

Measurement: Fundamental > Numeric

Power Measurement (50/50): TX Power 23.28 dBm

Frequency Error (1/1): Carrier Frequency Error -0.0002 kHz, Freq. Err 0.00 ppm

Occupied Bandwidth (1/1): OBW 4.163 MHz

Spectrum Emission Mask (1/1): SEM Pass

Adjacent Channel Power (1/1): ACLR(-5MHz) -40.24 dB, ACLR(+5MHz) -42.79 dB

Modulation Analysis (1/1): EVM 5.15 %(rms)

Peak Code Domain Error (1/1): PCDE -39.86 dB

Connection Setting: Authentication / Integrity, Integrity Protection On, SIM Model Number P0035, Authentication Algorithm XOR, Authentication Key Ki 00112233 44556677 8899AABB CCDDDEFF, AMF 0000 H, Opc 00000000 00000000 00000000 00000000

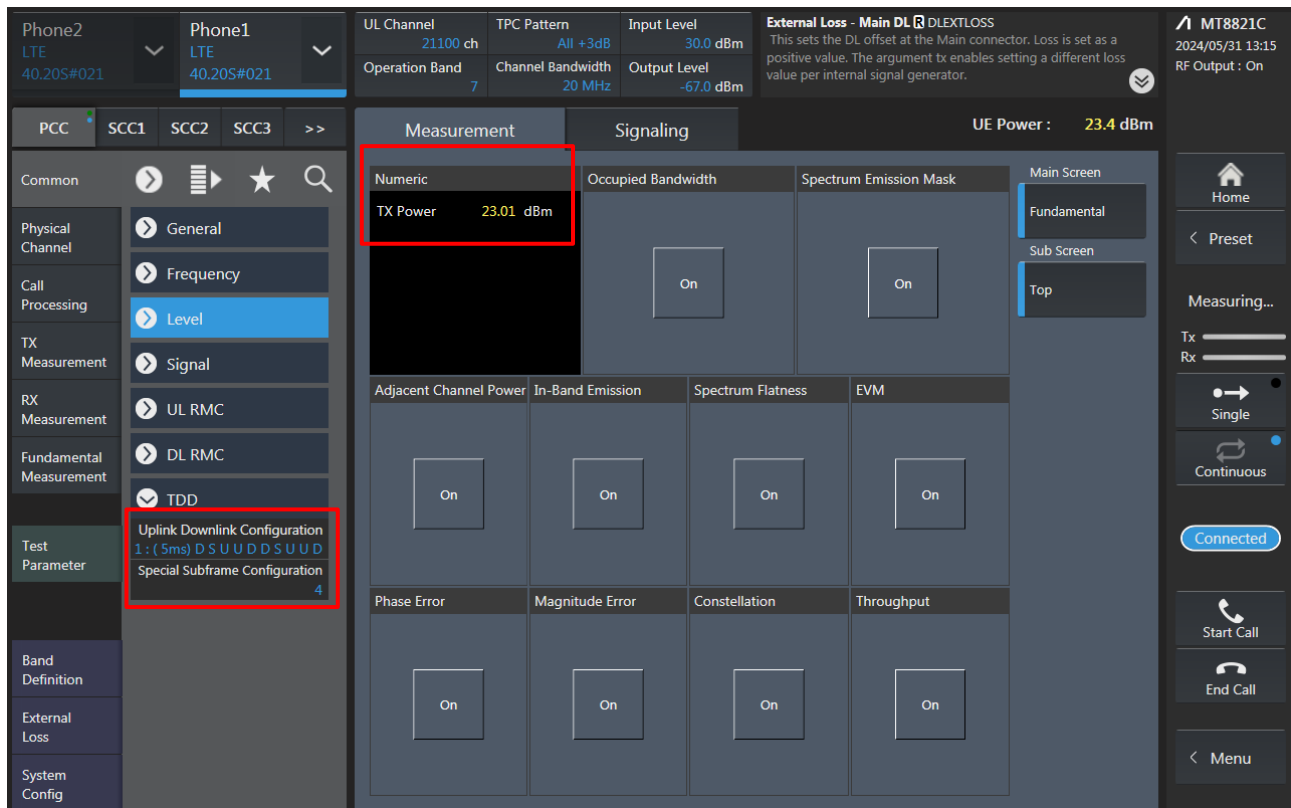
Measurement Report: Connection Setting, Measurement Report

Meas Setup: Inner Loop Power Control, Power Control Algorithm Algorithm 1, TPC StepSize 1

External Loss: Power Control All 1

User Command: 10101 01010 10101 01010 10101 01010

<LTE>



Phone2: LTE 40.20S#021, Phone1: LTE 40.20S#021

UL Channel: 21100 ch, TPC Pattern All +3dB, Input Level: 30.0 dBm
Operation Band: 7, Channel Bandwidth: 20 MHz, Output Level: -67.0 dBm

External Loss - Main DL DLEXTLOSS (This sets the DL offset at the Main connector. Loss is set as a positive value. The argument tx enables setting a different loss value per internal signal generator.)

MT8821C 2024/05/31 13:15, RF Output: On

UE Power: 23.4 dBm

Measurement: Numeric

TX Power 23.01 dBm

Occupied Bandwidth: On

Spectrum Emission Mask: On

Adjacent Channel Power: On

In-Band Emission: On

Spectrum Flatness: On

EVM: On

Phase Error: On

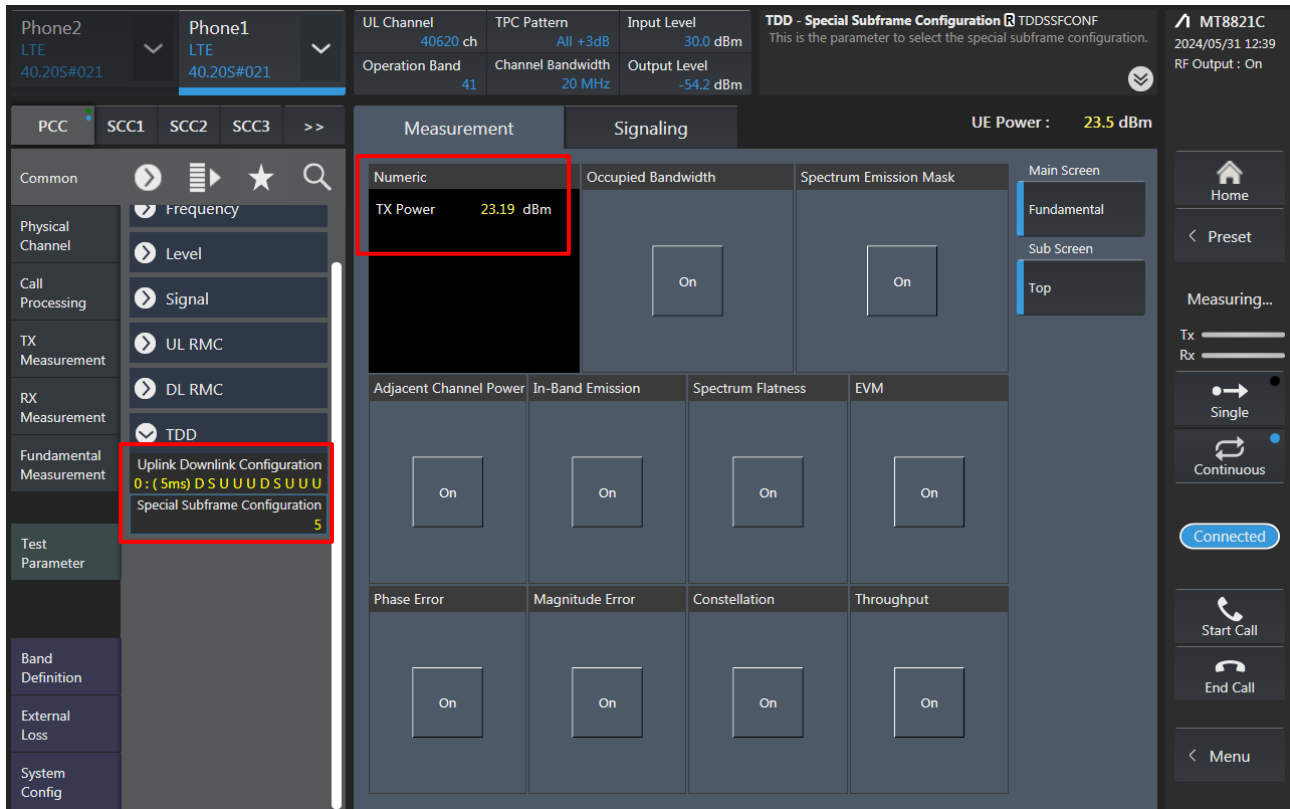
Magnitude Error: On

Constellation: On

Throughput: On

Uplink Downlink Configuration 1: (5ms) D S U U D D S U U D, Special Subframe Configuration 4

<LTE TDD Power class 3>



Phone2
LTE
40.20S#021

Phone1
LTE
40.20S#021

UL Channel 40620 ch
Operation Band 41

TPC Pattern All +3dB
Channel Bandwidth 20 MHz

Input Level 30.0 dBm
Output Level -54.2 dBm

TDD - Special Subframe Configuration TDDSSFCNF
This is the parameter to select the special subframe configuration.

MT8821C
2024/05/31 12:39
RF Output : On

PCC SCC1 SCC2 SCC3 >>

Common

Physical Channel

Call Processing

TX Measurement

RX Measurement

Fundamental Measurement

Test Parameter

Band Definition

External Loss

System Config

Frequency

Level

Signal

UL RMC

DL RMC

TDD

Uplink Downlink Configuration 0: (5ms) D S U U U D S U U U

Special Subframe Configuration 5

Measurement

Numeric

TX Power 23.19 dBm

Occupied Bandwidth

Spectrum Emission Mask

Main Screen

Fundamental

Sub Screen

Top

Adjacent Channel Power

In-Band Emission

Spectrum Flatness

EVM

Phase Error

Magnitude Error

Constellation

Throughput

UE Power : 23.5 dBm

Home

Preset

Measuring...

Tx

Rx

Single

Continuous

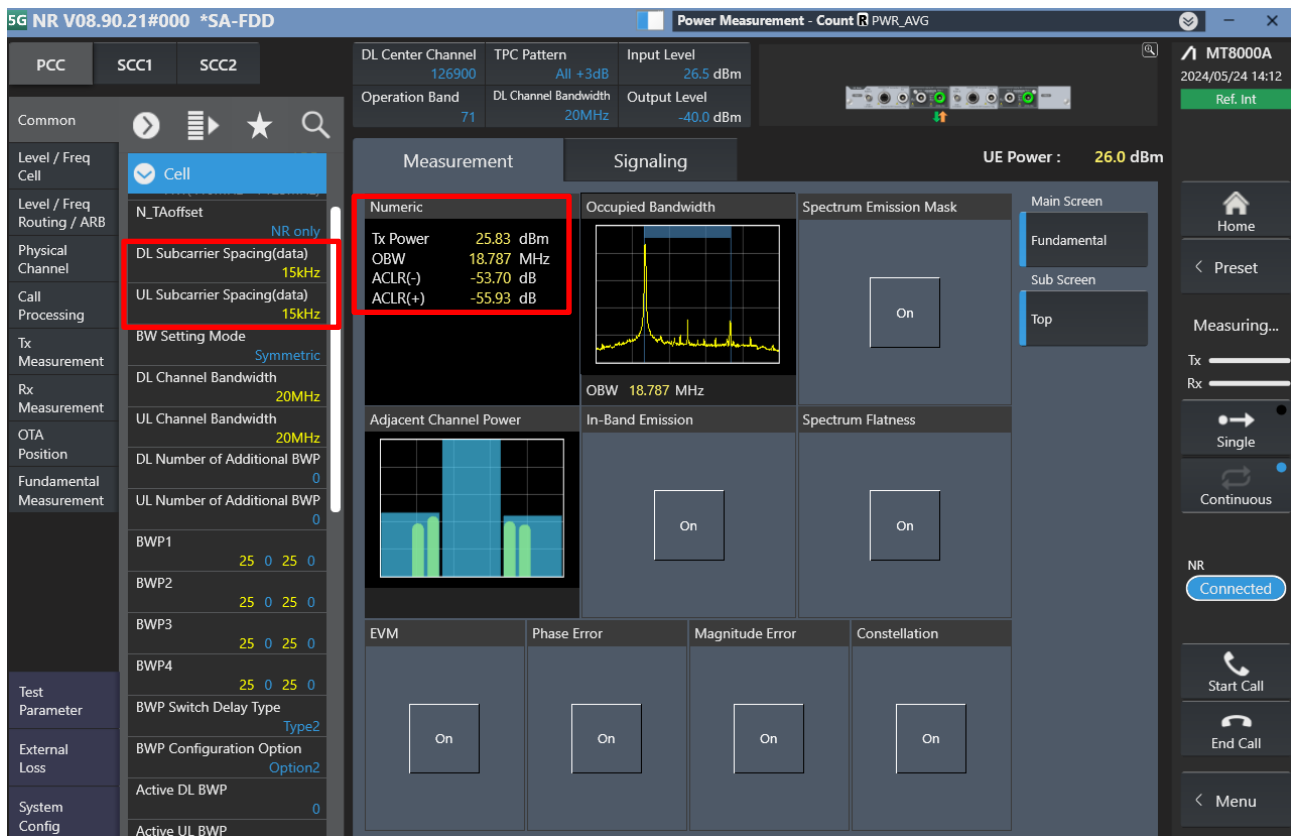
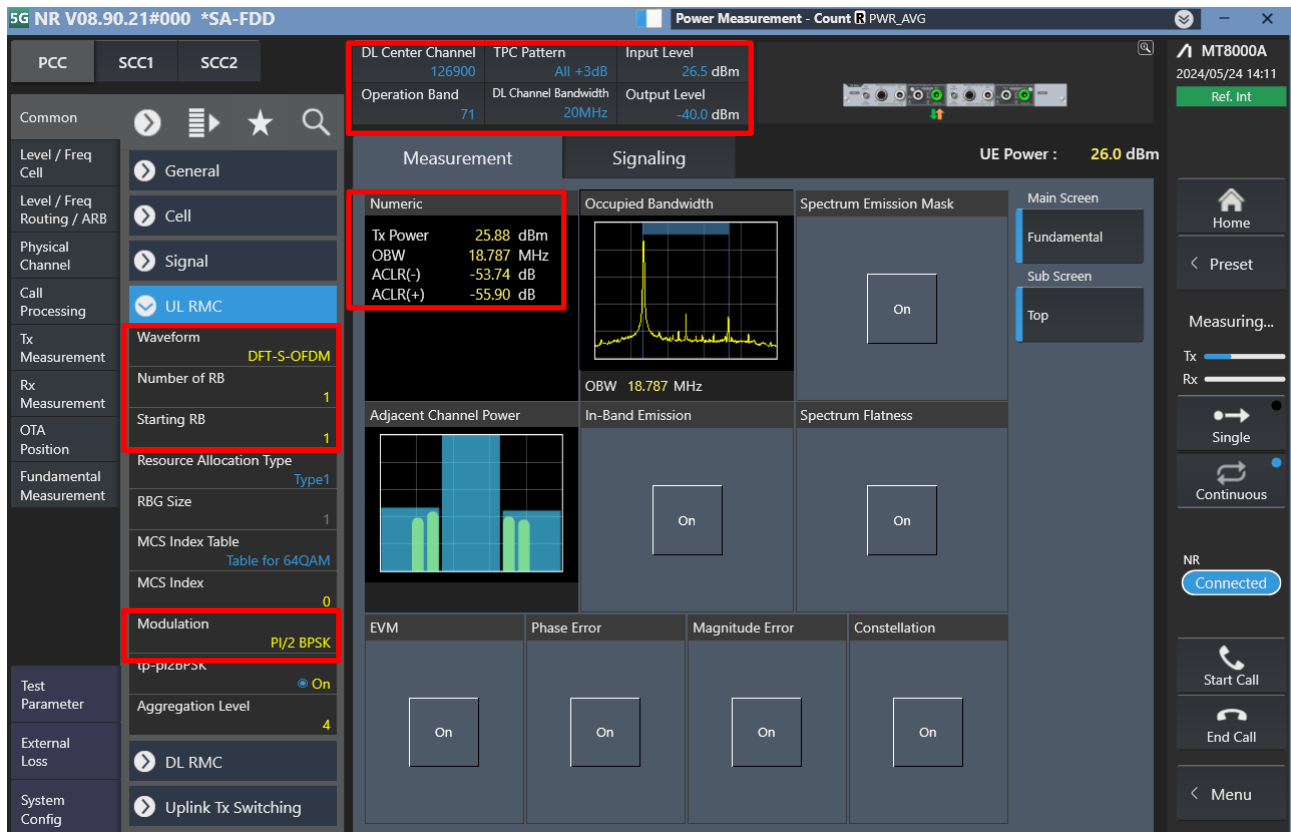
Connected

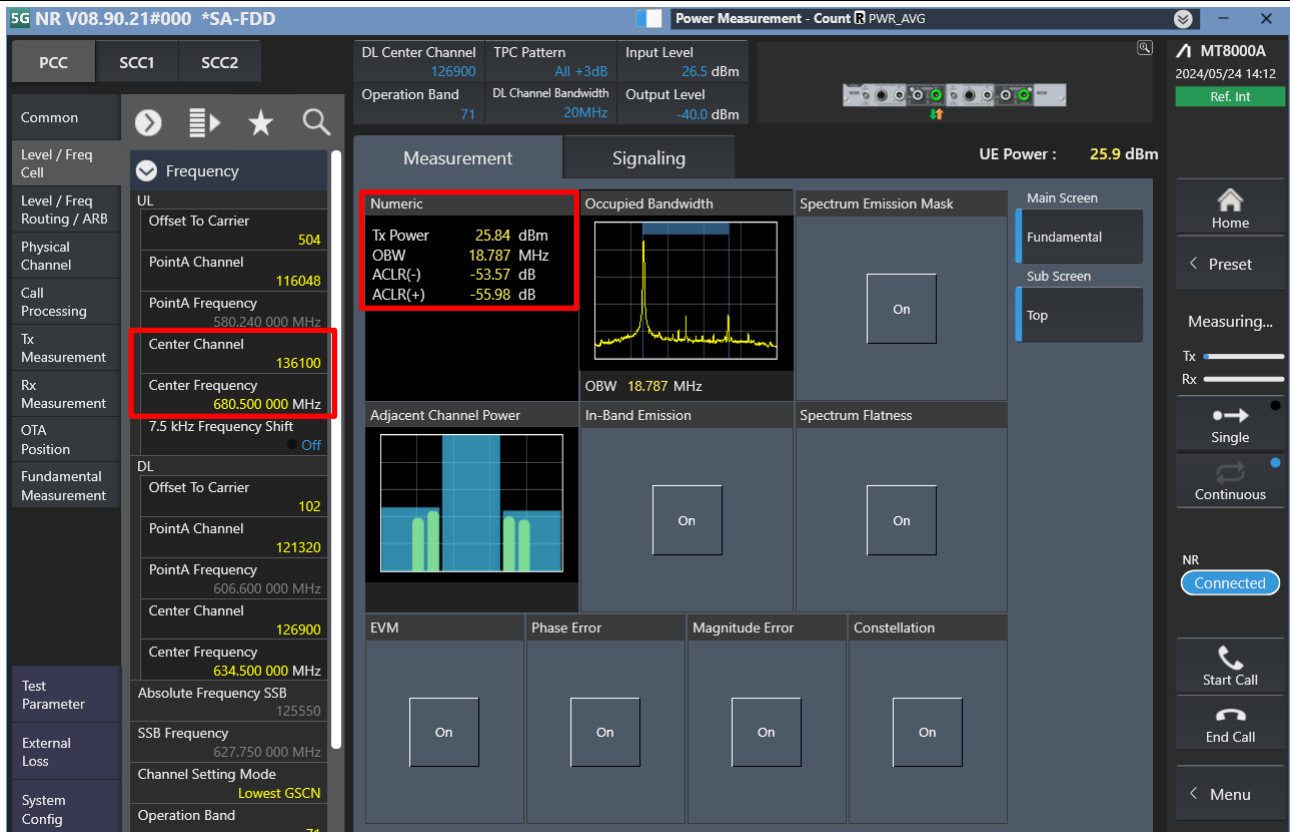
Start Call

End Call

Menu

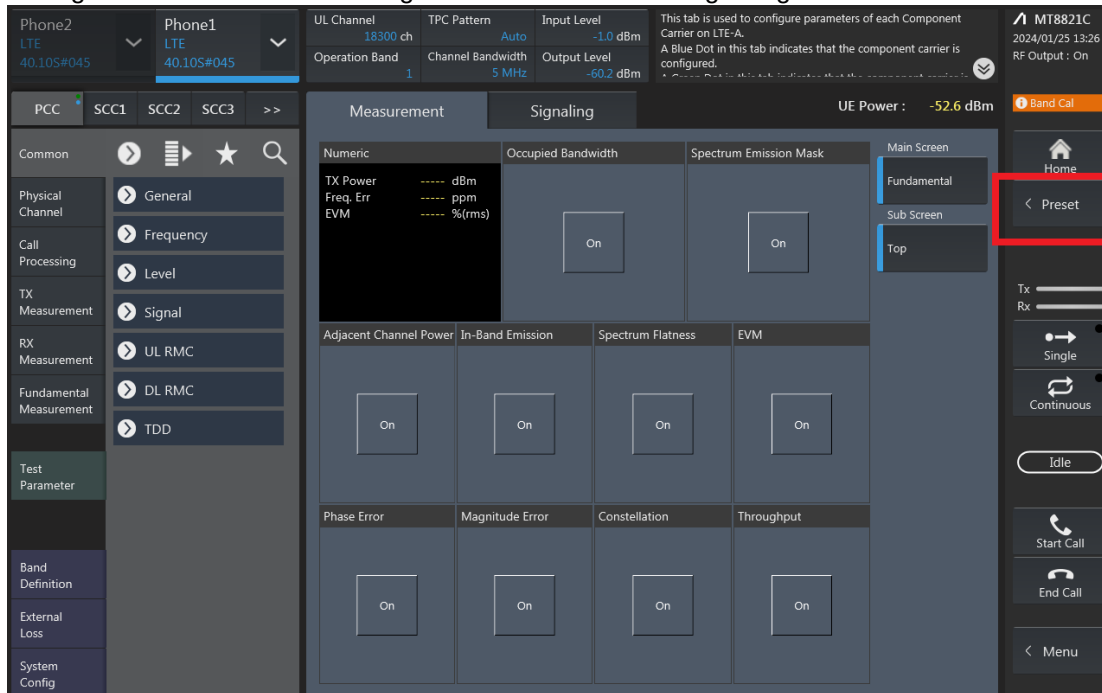
<5G NR FR1>





LTE Uplink and Downlink Carrier Aggregation configurations:

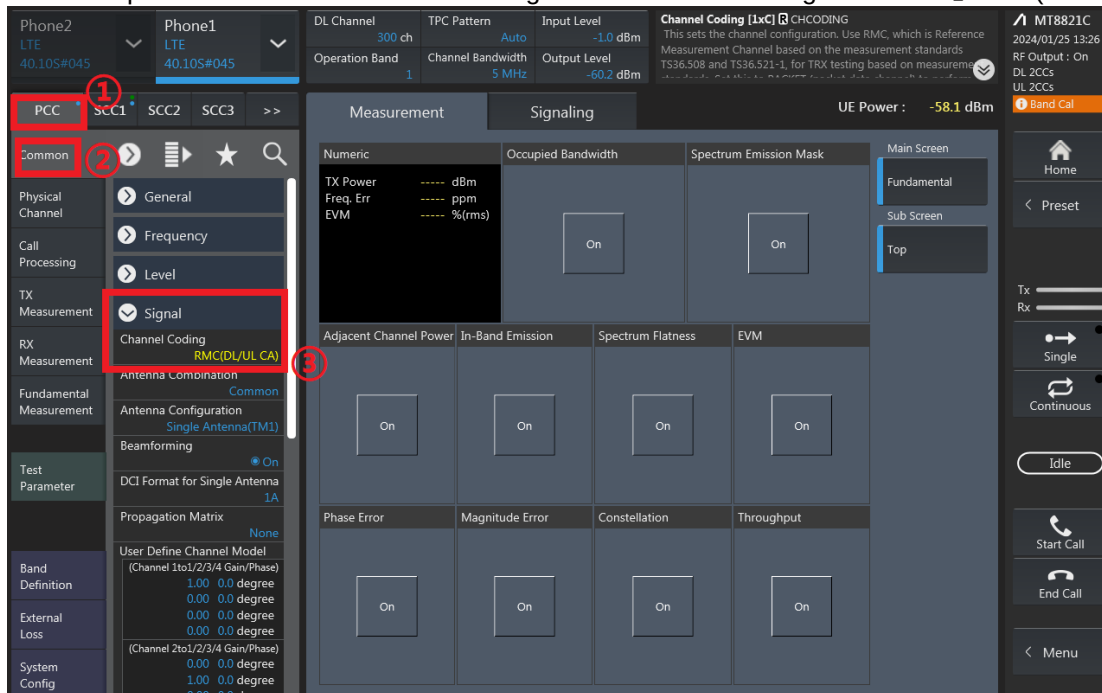
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



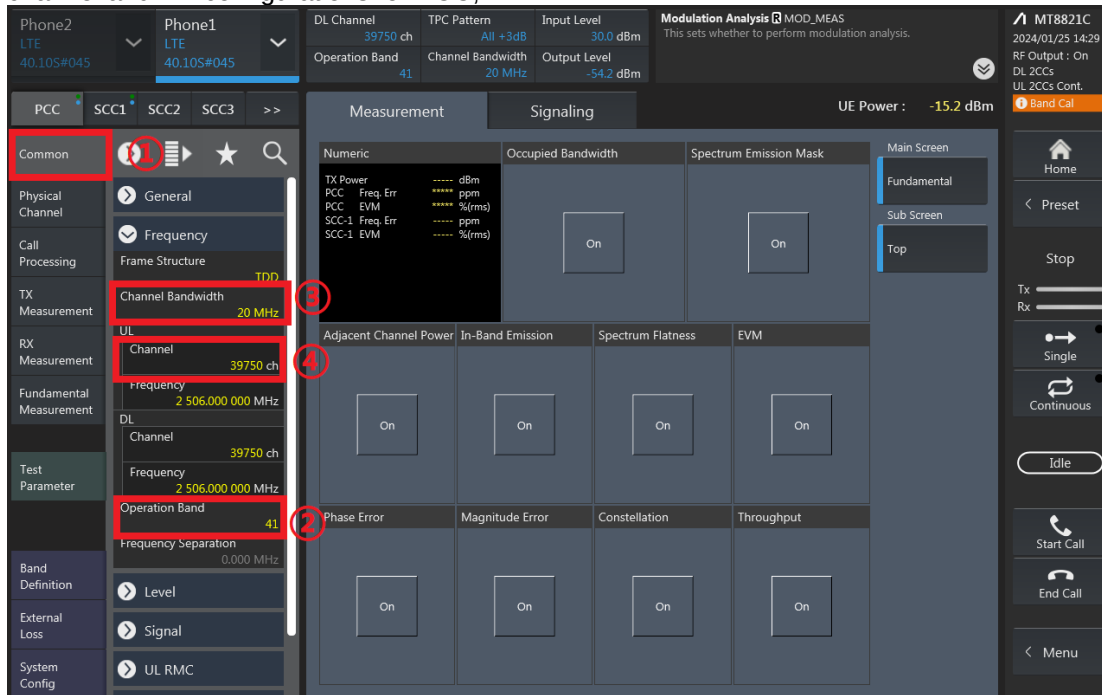
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



3. PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



Phone2 LTE 40.10S#045 Phone1 LTE 40.10S#045

DL Channel 39750 ch TPC Pattern All +3dB Input Level 30.0 dBm Modulation Analysis MOD_MEAS This sets whether to perform modulation analysis.

Operation Band 41 Channel Bandwidth 20 MHz Output Level -54.2 dBm

MT8821C 2024/01/25 14:29 RF Output : On DL 2CCs UL 2CCs Cont.

UE Power : -15.2 dBm

Measurement Signaling

Common

Physical Channel General

Call Processing Frequency

TX Measurement Channel Bandwidth 20 MHz

RX Measurement Channel 39750 ch

Fundamental Measurement Frequency 2 506.000 000 MHz

Test Parameter Frequency 39750 ch

Operation Band 41

Frequency Separation 0.000 MHz

Band Definition Level

External Loss Signal

System Config UL RMC

Numeric

TX Power PCC Freq. Err. dBm PCC EVM ppm SCC-1 Freq. Err. ppm SCC-1 EVM ppm

Occupied Bandwidth

Spectrum Emission Mask

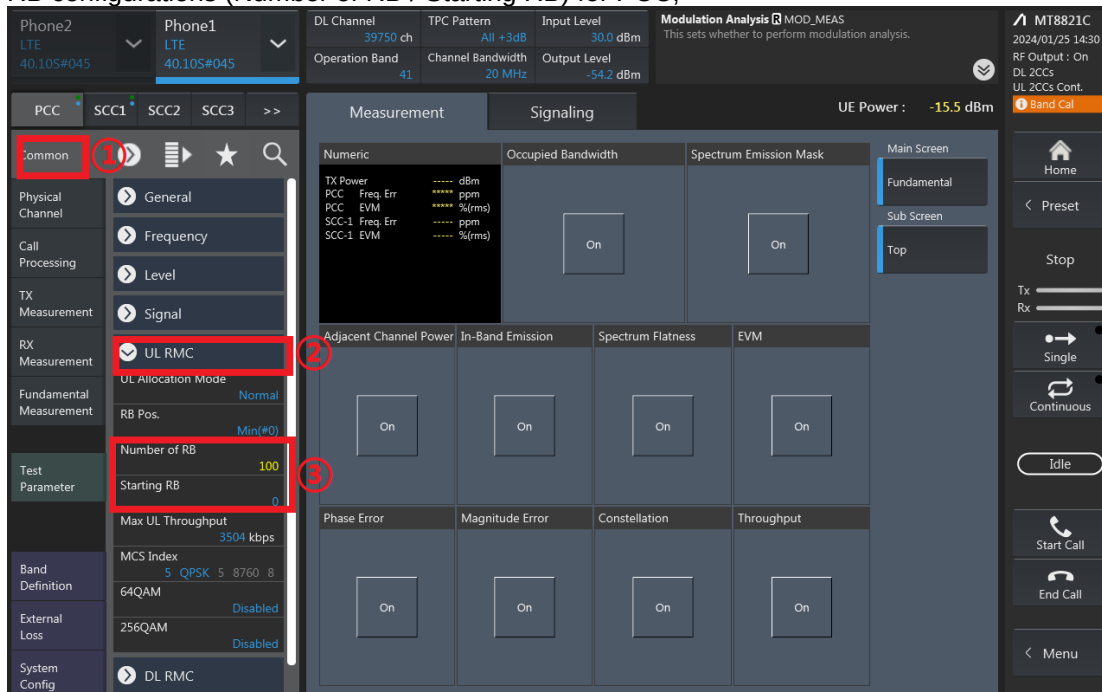
Main Screen Fundamental Sub Screen Top

Home Preset Stop Tx Rx Single Continuous Idle Start Call End Call Menu

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

RB configurations (Number of RB / Starting RB) for PCC;



Phone2 LTE 40.10S#045 Phone1 LTE 40.10S#045

DL Channel 39750 ch TPC Pattern All +3dB Input Level 30.0 dBm Modulation Analysis MOD_MEAS This sets whether to perform modulation analysis.

Operation Band 41 Channel Bandwidth 20 MHz Output Level -54.2 dBm

MT8821C 2024/01/25 14:30 RF Output : On DL 2CCs UL 2CCs Cont.

UE Power : -15.5 dBm

Measurement Signaling

Common

Physical Channel General

Call Processing Frequency

TX Measurement Level

RX Measurement Signal

Fundamental Measurement UL RMC

UL Allocation Mode Normal

RB Pos. Min(#0)

Number of RB 100

Starting RB 0

Max UL Throughput 3504 kbps

MCS Index 5 QPSK 5 8760 8

64QAM

256QAM Disabled

Band Definition

External Loss Disabled

System Config DL RMC

Numeric

TX Power PCC Freq. Err. dBm PCC EVM ppm SCC-1 Freq. Err. ppm SCC-1 EVM ppm

Occupied Bandwidth

Spectrum Emission Mask

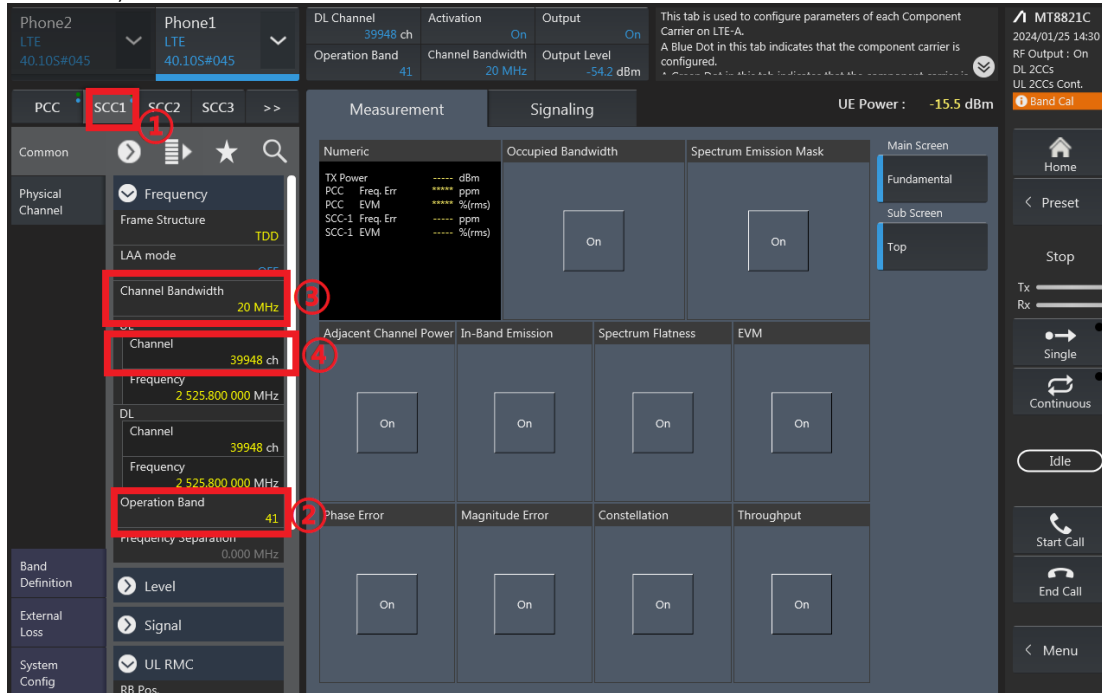
Main Screen Fundamental Sub Screen Top

Home Preset Stop Tx Rx Single Continuous Idle Start Call End Call Menu

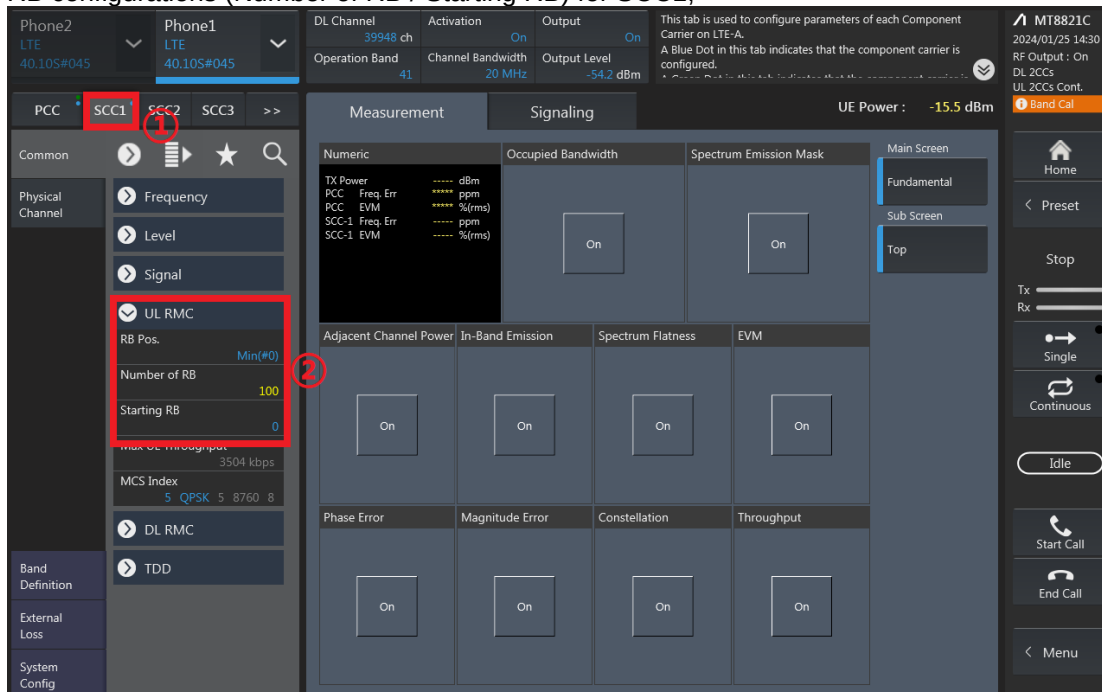
Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

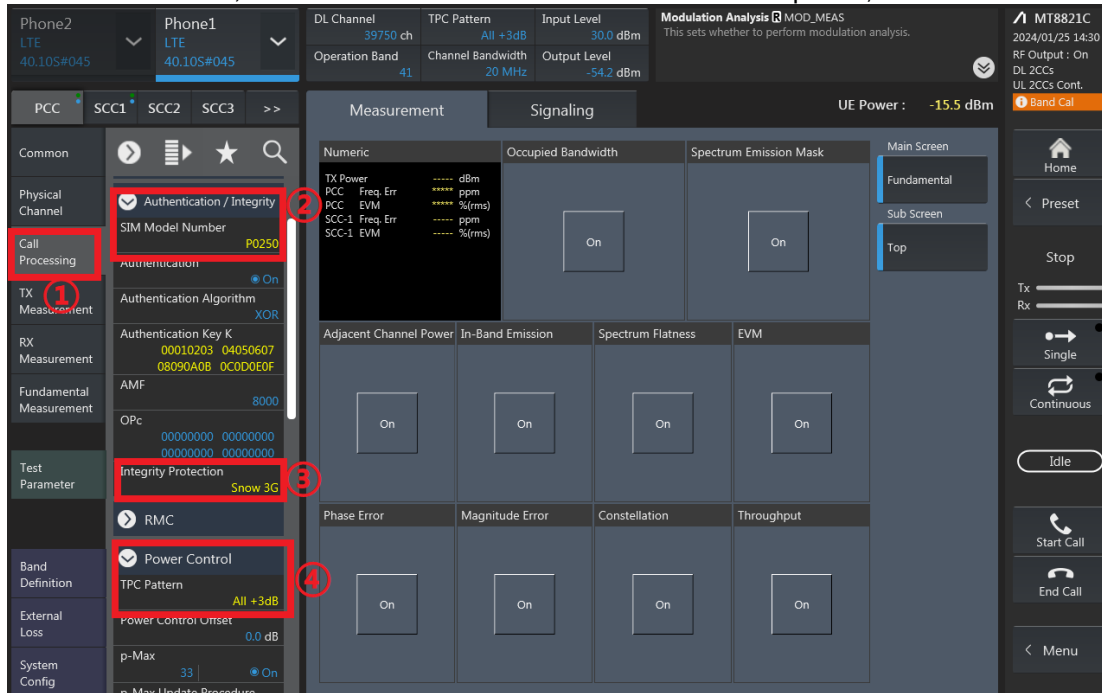
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



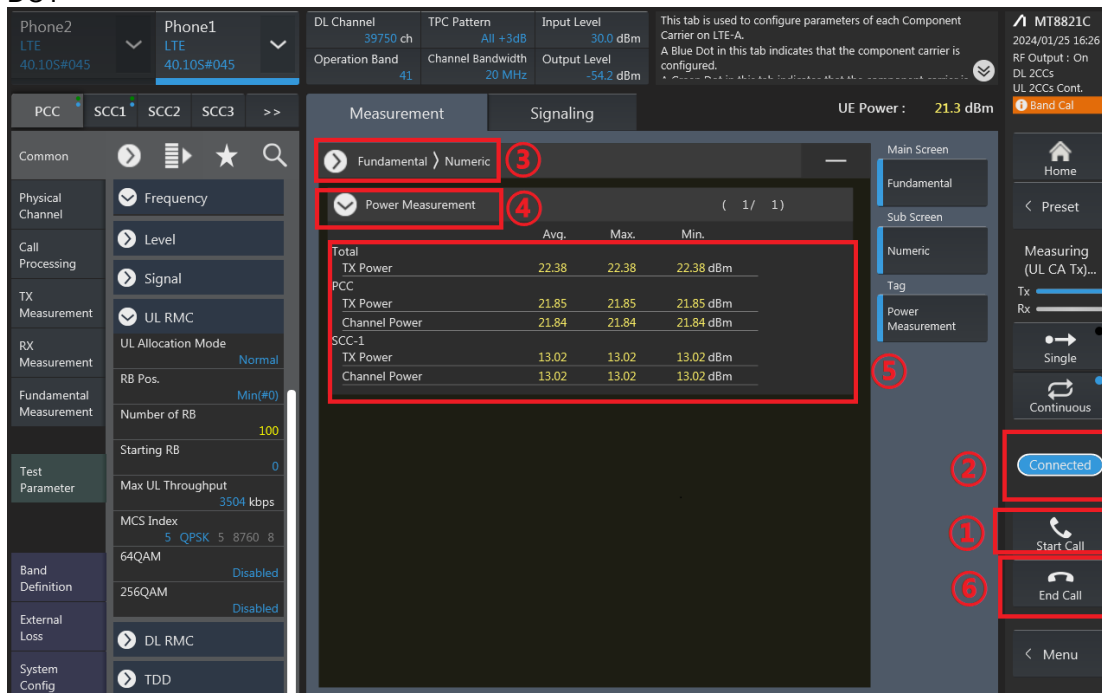
RB configurations (Number of RB / Starting RB) for SCC1;



5. Select the PCC tab, then set “SIM Model Number” and select max power;



6. Click the “Connect” button at the Right of the screen, if necessary, turn the Airplane mode on/off in the DUT



7. The inter-band ULCA test method is similar to intra-band ULCA, and DLCA test method is similar to intra-band ULCA too.

UL CA power

Full Power&DSI2

CA_7C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.91	24.00
21100	21298	QPSK	1	99	1	0	23.01	24.00
21350	21152	QPSK	1	0	1	99	22.95	24.00

Full Power&DSI2&DSI3

CA_38C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	23.05	24.00
37901	38099	QPSK	1	99	1	0	23.11	24.00
38150	37952	QPSK	1	0	1	99	23.08	24.00

Full Power&DSI2&DSI3

CA_41C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.04	24.00
40185	40383	QPSK	1	99	1	0	23.06	24.00
40620	40818	QPSK	1	99	1	0	23.13	24.00
41055	41253	QPSK	1	99	1	0	23.01	24.00
41490	41292	QPSK	1	0	1	99	23.11	24.00

Full Power&DSI2&DSI3

CA_42C Ant 5								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	23.01	24.00
42590	42788	QPSK	1	99	1	0	23.04	24.00
42990	42792	QPSK	1	0	1	99	22.98	24.00

UL CA power

DSI 3

CA_7C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.57	23.50
21100	21298	QPSK	1	99	1	0	22.65	23.50
21350	21152	QPSK	1	0	1	99	22.59	23.50

DSI 7

CA_7C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.78	21.80
21100	21298	QPSK	1	99	1	0	20.85	21.80
21350	21152	QPSK	1	0	1	99	20.72	21.80

DSI 6

CA_7C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.78	21.80
21100	21298	QPSK	1	99	1	0	20.85	21.80
21350	21152	QPSK	1	0	1	99	20.72	21.80

DSI 7

CA_38C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	23.05	24.00
37901	38099	QPSK	1	99	1	0	23.11	24.00
38150	37952	QPSK	1	0	1	99	23.08	24.00

DSI 6

CA_38C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	23.05	24.00
37901	38099	QPSK	1	99	1	0	23.11	24.00
38150	37952	QPSK	1	0	1	99	23.08	24.00

DSI 2

CA_42C Ant 5								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	17.25	18.60
42590	42788	QPSK	1	99	1	0	17.34	18.60
42990	42792	QPSK	1	0	1	99	17.27	18.60

DSI 3

CA_42C Ant 5								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	17.25	18.10
42590	42788	QPSK	1	99	1	0	17.34	18.10
42990	42792	QPSK	1	0	1	99	17.27	18.10

DSI 7

CA_41C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.04	24.00
40185	40383	QPSK	1	99	1	0	23.06	24.00
40620	40818	QPSK	1	99	1	0	23.13	24.00
41055	41253	QPSK	1	99	1	0	23.01	24.00
41490	41292	QPSK	1	0	1	99	23.11	24.00

DSI 7

CA_42C Ant 5								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	15.77	16.70
42590	42788	QPSK	1	99	1	0	15.82	16.70
42990	42792	QPSK	1	0	1	99	15.71	16.70

DSI 6

CA_41C Ant 1								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.04	24.00
40185	40383	QPSK	1	99	1	0	23.06	24.00
40620	40818	QPSK	1	99	1	0	23.13	24.00
41055	41253	QPSK	1	99	1	0	23.01	24.00
41490	41292	QPSK	1	0	1	99	23.11	24.00

DSI 6

CA_42C Ant 5								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
42190	42388	QPSK	1	99	1	0	20.17	21.60
42590	42788	QPSK	1	99	1	0	20.22	21.60
42990	42792	QPSK	1	0	1	99	20.15	21.60

2CA DL																
CA List	PCC								SCC					Power		
	LTE	BW	BW	UL	UL	Mod.	UL	UL	LTE	BW	DL	DL	DL	With CA	Without CA	
	Band	Ant	(MHz)	Freq. (MHz)	Channel		RB	RB Offset	Band	(MHz)	Freq. (MHz)	Channel	DL Antenna Configuration	(dBm)	(dBm)	
CA_26A-41A	Band 26	Ant 0	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620		22.91	23.06	
	Band 26	Ant 4	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620		22.80	22.97	
	Band 41	Ant 1	20M	2593	40620	QPSK	1	0	Band 26	15M	876.5	8865		22.97	23.17	
	Band 41	Ant 4	20M	2593	40620	QPSK	1	0	Band 26	15M	876.5	8865		22.48	22.58	
CA_2A-26A	Band 2	Ant 1	20M	1880	18900	QPSK	1	0	4xMMMO	Band 26	15M	876.5	8865	22.91	22.92	
	Band 2	Ant 4	20M	1880	18900	QPSK	1	0	4xMMMO	Band 26	15M	876.5	8865	22.04	22.18	
	Band 26	Ant 0	15M	831.5	26865	QPSK	1	0	Band 2	20M	1960	900	4xMMMO	22.93	23.06	
	Band 26	Ant 4	15M	831.5	26865	QPSK	1	0	Band 2	20M	1960	900	4xMMMO	22.86	22.97	
CA_38C	Band 38	Ant 1	20M	2580	37850	QPSK	1	0	Band 38	20M	2599.8	38048		22.91	22.96	
CA_41C	Band 38	Ant 4	20M	2580	37850	QPSK	1	0	Band 38	20M	2599.8	38048		22.42	22.54	
	Band 41	Ant 1	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.8	40818		23.04	23.17	
CA_41A-42A	Band 41	Ant 4	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.8	40818		22.41	22.58	
	Band 41	Ant 1	20M	2593	40620	QPSK	1	0	Band 42	20M	3500	42590	4xMMMO	23.05	23.17	
	Band 42	Ant 4	20M	3500	42590	QPSK	1	0	Band 42	20M	3500	42590	4xMMMO	22.44	22.58	
	Band 42	Ant 5	20M	3500	42590	QPSK	1	0	4xMMMO	Band 41	20M	2593	40620	23.05	23.15	
CA_42A-42A	Band 42	Ant 5	20M	3500	42590	QPSK	1	0	4xMMMO	Band 5M	3547.5	43065	4xMMMO	22.91	23.15	
CA_66B	Band 66	Ant 1	15M	1745	132322	QPSK	1	0	4xMMMO	Band 66	5M	2164.3	66979	4xMMMO	22.91	22.97
	Band 66	Ant 4	15M	1745	132322	QPSK	1	0	4xMMMO	Band 66	5M	2164.3	66979	4xMMMO	22.03	22.15
CA_7A-42A	Band 7	Ant 1	20M	2535	21100	QPSK	1	0	4xMMMO	Band 42	20M	3500	42590	4xMMMO	22.94	23.03
	Band 7	Ant 4	20M	2535	21100	QPSK	1	0	4xMMMO	Band 42	20M	3500	42590	4xMMMO	22.62	22.74
	Band 42	Ant 5	20M	3500	42590	QPSK	1	0	4xMMMO	Band 7	20M	2655	3100	4xMMMO	23.03	23.15

3CA DL																									
3CA List	PCC								SCC1				SCC2				Power								
	LTE	BW	BW	UL	UL	UL#	UL	DL Antenna Configuration	LTE	BW	DL	DL	DL Antenna Configuration	LTE	BW	DL	DL	DL Antenna Configuration	With CA	Without CA					
	Band	Ant	(MHz)	Freq. Channel	Mod.	RB	RB Offset		Band	(MHz)	Freq. Channel			Band	(MHz)	Freq. Channel			Tx. Power (dBm)	Tx. Power (dBm)					
CA_2A-2A-66A	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.79	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.04	22.18							
	Band 66	Ant 1	20M	1745 132322	QPSK	1	0	4xMIMO	Band 2	20M	1880 900	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	22.79	22.97							
CA_2A-2A-7A	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	Band 2	5M	2655 3100	4xMIMO	22.76	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.03	22.18							
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	5M	1987.5 1175	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	22.87	23.03							
CA_2A-4A-4A	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 4	20M	1732.5 20175	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	22.54	22.74							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 4	20M	1732.5 20175	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	22.74	22.92							
	Band 4	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	Band 2	1880 900	4xMIMO	22.02	22.18								
CA_2A-4A-7A	Band 2	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	Band 2	1880 900	4xMIMO	21.89	22.10								
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	Band 2	20M	2655 3100	4xMIMO	22.76	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.08	22.18							
CA_2A-5A-66A	Band 2	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.78	22.94								
	Band 4	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	21.91	22.10								
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	22.85	23.03								
CA_2A-5A-7A	Band 2	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	22.53	22.74								
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.72	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.08	22.18							
CA_2A-66A-66A	Band 5	Ant 0	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 66	20M	2155 66886	4xMIMO	Band 2	1960 900	4xMIMO	22.84	22.94								
	Band 5	Ant 4	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 66	20M	2155 66886	4xMIMO	Band 2	1960 900	4xMIMO	22.78	22.89								
	Band 66	Ant 1	20M	1745 132322	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	22.83	22.97								
CA_2A-7A-38A	Band 66	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	21.95	22.15								
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.74	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.09	22.18							
CA_2A-7A-66A	Band 5	Ant 0	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.80	22.94								
	Band 5	Ant 4	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.69	22.89								
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	22.84	23.03								
CA_2A-7C-66A	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	22.54	22.74								
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 66	20M	2155 66886	4xMIMO	Band 66	5M	2197.5 67311	4xMIMO	22.75	22.92							
	Band 66	Ant 1	20M	1745 132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5 67311	4xMIMO	Band 2	1960 900	4xMIMO	22.08	22.18								
CA_2A-7A-7A	Band 66	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5 67311	4xMIMO	Band 2	1960 900	4xMIMO	22.80	22.97								
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 38	20M	2599.8 38048	4xMIMO	Band 2	1960 900	4xMIMO	22.00	22.15								
	Band 2	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 38	20M	2599.8 38048	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.82	22.92							
CA_2A-7A-7A	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 38	20M	2599.8 38048	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.06	22.18							
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 38	20M	2599.8 38048	4xMIMO	22.89	23.03								
	Band 7	Ant 4	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 38	20M	2599.8 38048	4xMIMO	22.84	22.74								
CA_2A-7A-7A	Band 38	Ant 1	20M	2590 37850	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.84	22.96								
	Band 38	Ant 4	20M	2590 37850	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.37	22.54								
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 66	20M	2155 66886	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.81	22.92							
CA_2A-7A-7A	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 66	20M	2155 66886	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.06	22.18							
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.86	23.03								
	Band 7	Ant 4	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.58	22.74								
CA_2A-7C-7C	Band 66	Ant 1	20M	1745 132322	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	22.78	22.97								
	Band 66	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 2	1960 900	4xMIMO	21.98	22.15								
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 7	20M	2554.8 3298	4xMIMO	22.79	22.92							
CA_2A-7C-7C	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 7	20M	2554.8 3298	4xMIMO	22.05	22.18							
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 7	20M	2554.8 3298	4xMIMO	Band 2	1960 900	4xMIMO	22.86	23.03								
	Band 7	Ant 4	20M	2535 21100	QPSK	1	0	4xMIMO	Band 7	20M	2554.8 3298	4xMIMO	Band 2	1960 900	4xMIMO	22.54	22.74								
CA_2A-7A-7A	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 7	5M	2687.5 3425	4xMIMO	22.72	22.92							
	Band 2	Ant 4	20M	1880 18900	QPSK	1	0	4xMIMO	Band 7	20M	2655 3100	4xMIMO	Band 7	5M	2687.5 3425	4xMIMO	21.97	22.18							
	Band 7	Ant 1	20M	2535 21100	QPSK	1	0	4xMIMO	Band 7	5M	2687.5 3425	4xMIMO	Band 2	1960 900	4xMIMO	22.87	23.03								
CA_2C-66A	Band 7	Ant 4	20M	2535 21100	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 2	1960 900	4xMIMO	22.57	22.74									
	Band 2	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	1979.8 1098	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.76	22.92								
	Band 66	Ant 1	20M	1880 18900	QPSK	1	0	4xMIMO	Band 2	1979.8 1098	4xMIMO	Band 66	20M	2155 66886	4xMIMO	22.03	22.18								
CA_4A-4A-4A	Band 66	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 2	1979.8 1098	4xMIMO	22.77	22.97									
	Band 66	Ant 4	20M	1745 132322	QPSK	1	0	4xMIMO	Band 2	1960 900	4xMIMO	Band 2	1979.8 1098	4xMIMO	22.06	22.15									
	Band 42	Ant 5	20M	3500 42590	QPSK	1	0	4xMIMO	Band 42	20M	3519.8 42788	4xMIMO	Band 42	20M	3500 42590	4xMIMO	22.97	23.15							
CA_4A-4A-5A	Band 4	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	22.82	22.94							
	Band 4	Ant 4	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	Band 5	10M	881.5 2525	4xMIMO	21.94	22.10							
	Band 5	Ant 0	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	22.79	22.94							
CA_4A-4A-7A	Band 5	Ant 4	10M	836.5 20525	QPSK	1	0	4xMIMO	Band 4	20M	2132.5 2175	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	22.74	22.89							
	Band 4	Ant 1	20M	1732.5 20175	QPSK	1	0	4xMIMO	Band 4	5M	2152.5 2375	4xMIMO	Band 7	20M	2655 3100	4xMIMO	22.74	22.94							
	Band 4	Ant 4	20M	1732.5 20175	QPSK	1	0																		

4CA DL

Configure	PCC										SCC1					SCC2					SCC3					Power																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	LTE	BW	BW	UL	UL	Mod.	UL	DL	DL	DL	LTE	BW	DL	DL	DL	LTE	BW	DL	DL	DL	LTE	BW	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL	DL</