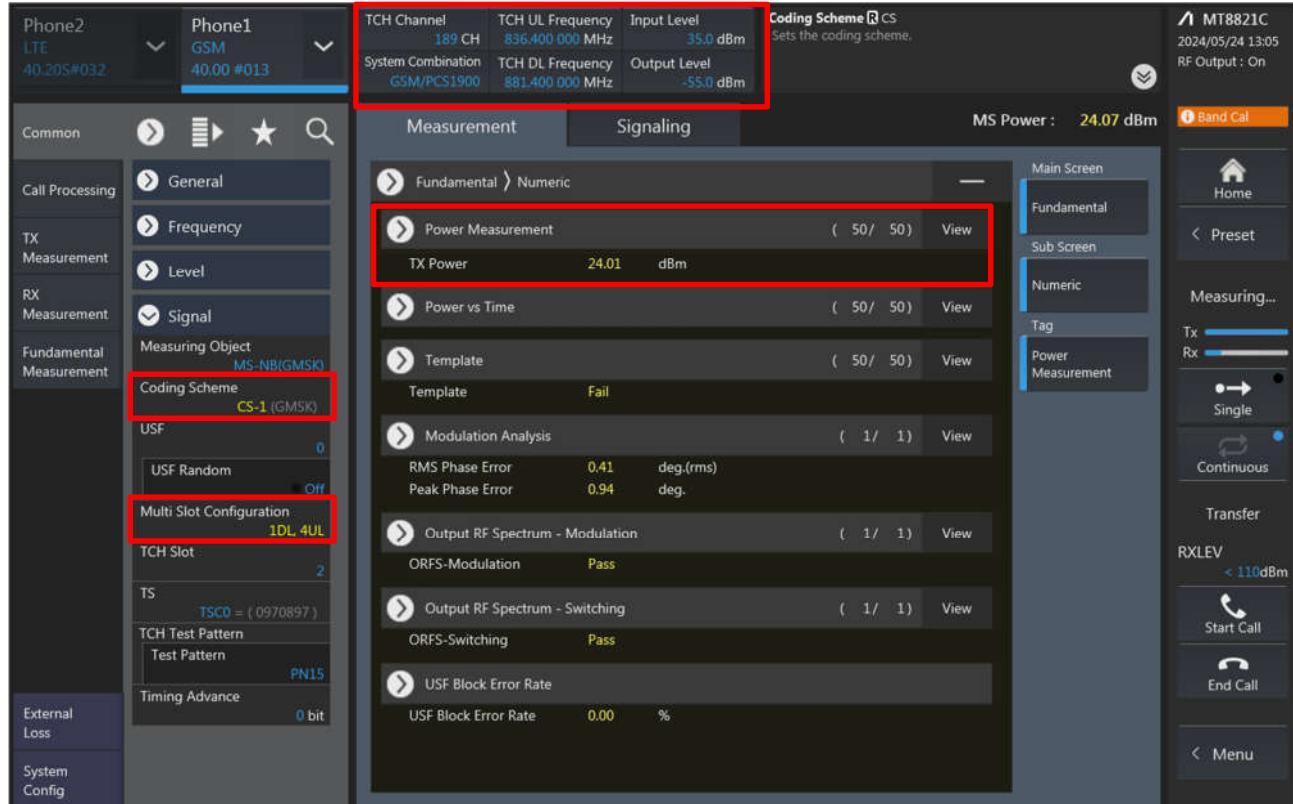


Power measurement connection diagram:

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.

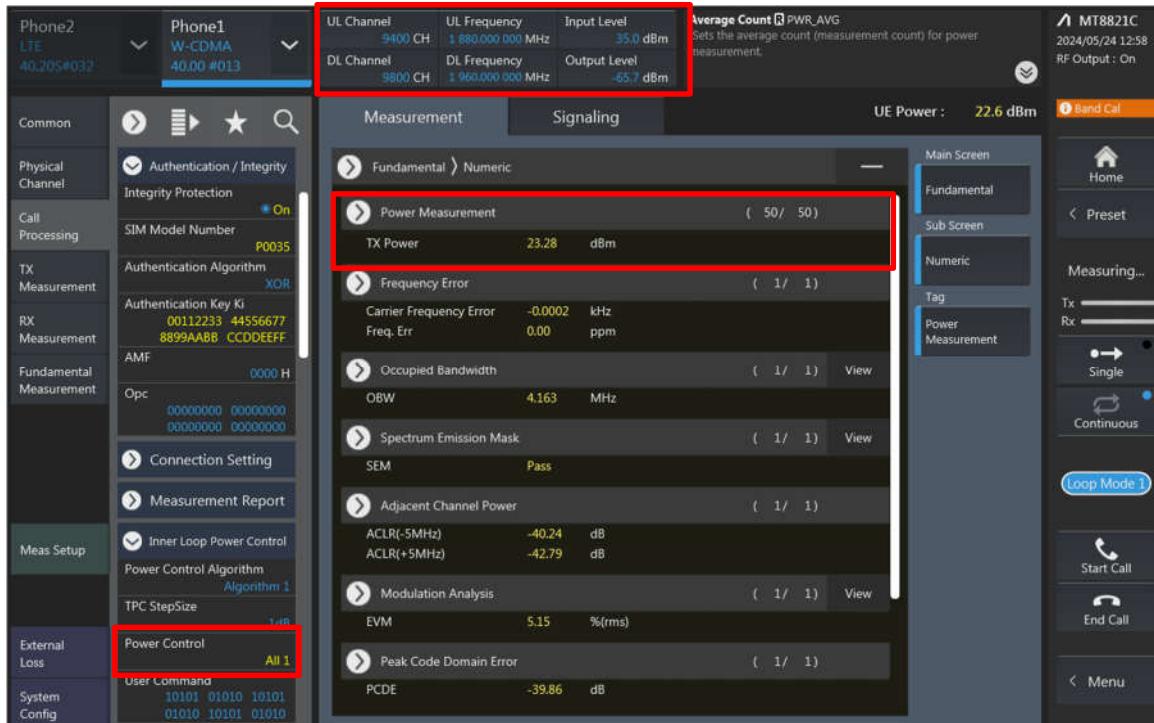
Hereunder is screenshot call box connection information for 2G/3G/LTE/5G FR1/UL and DL CA.

<GSM>

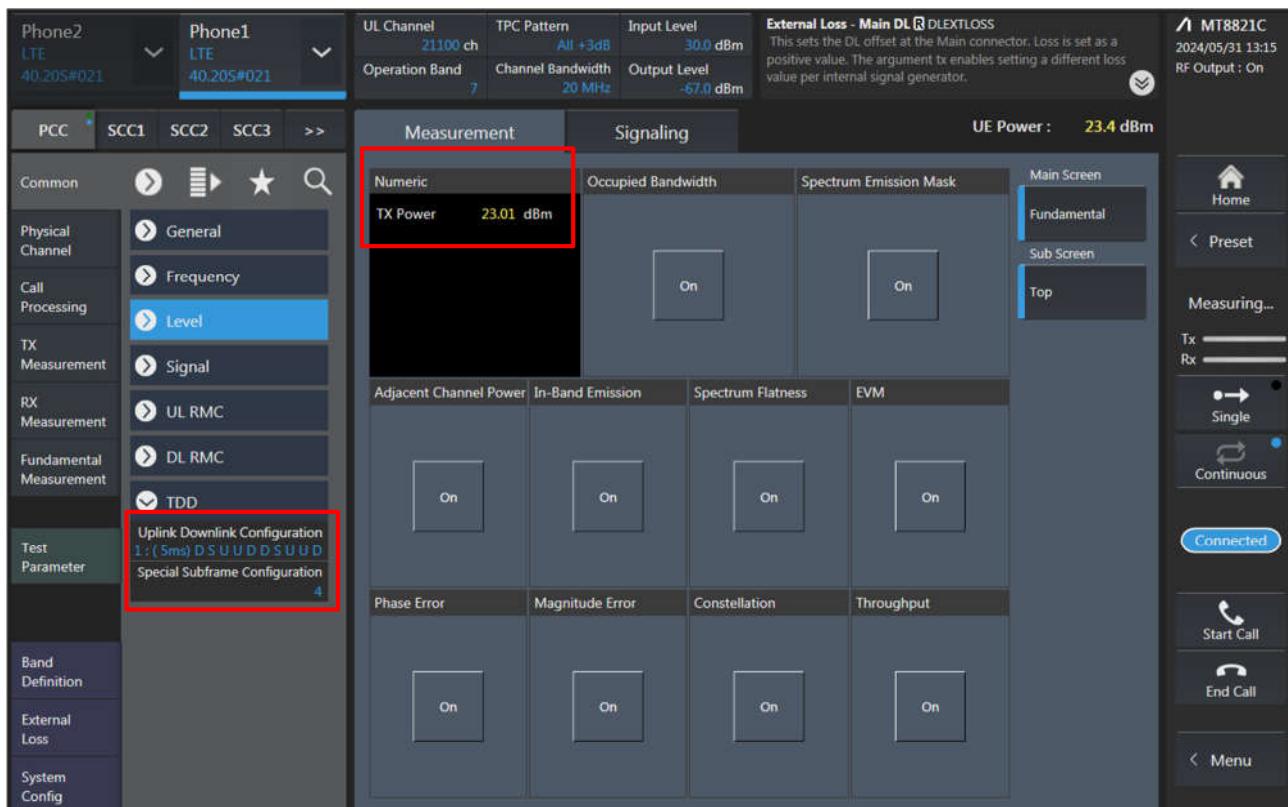




<WCDMA>

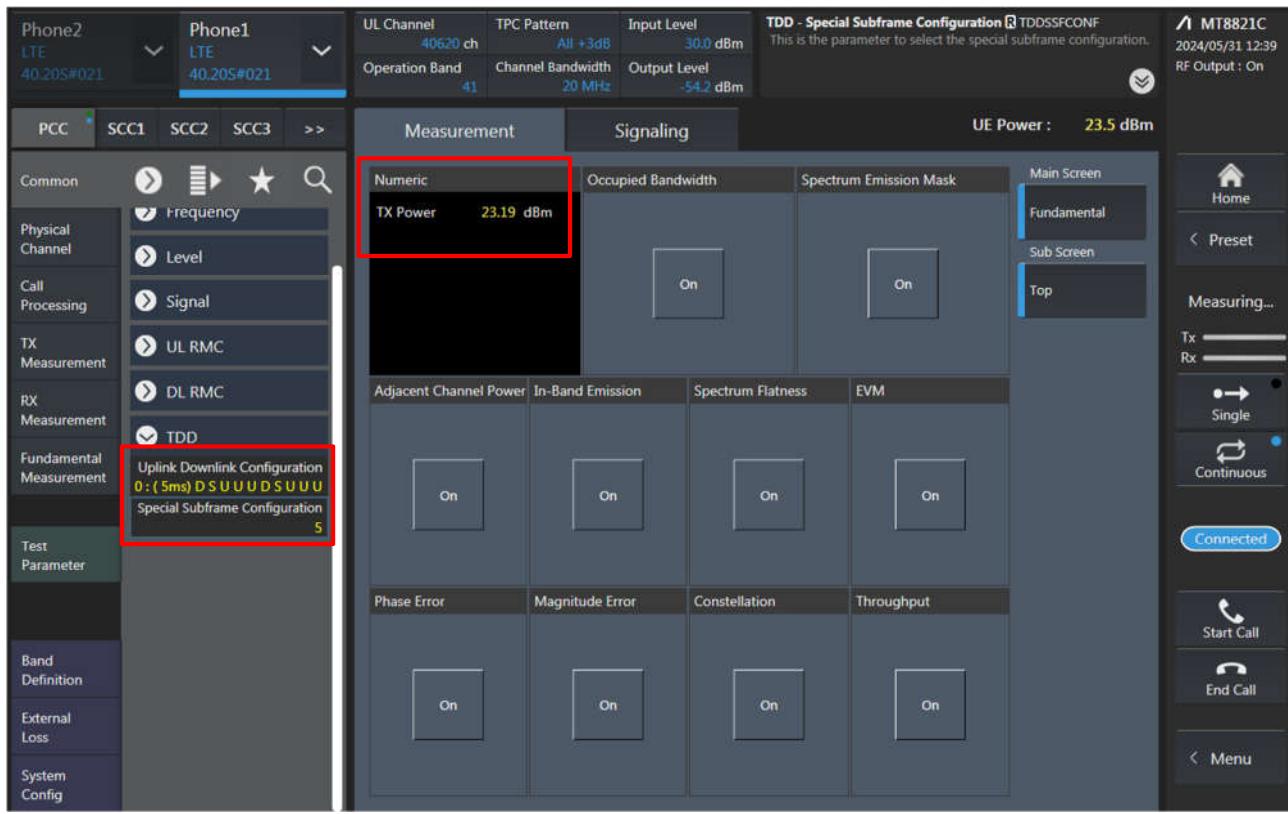


<LTE>

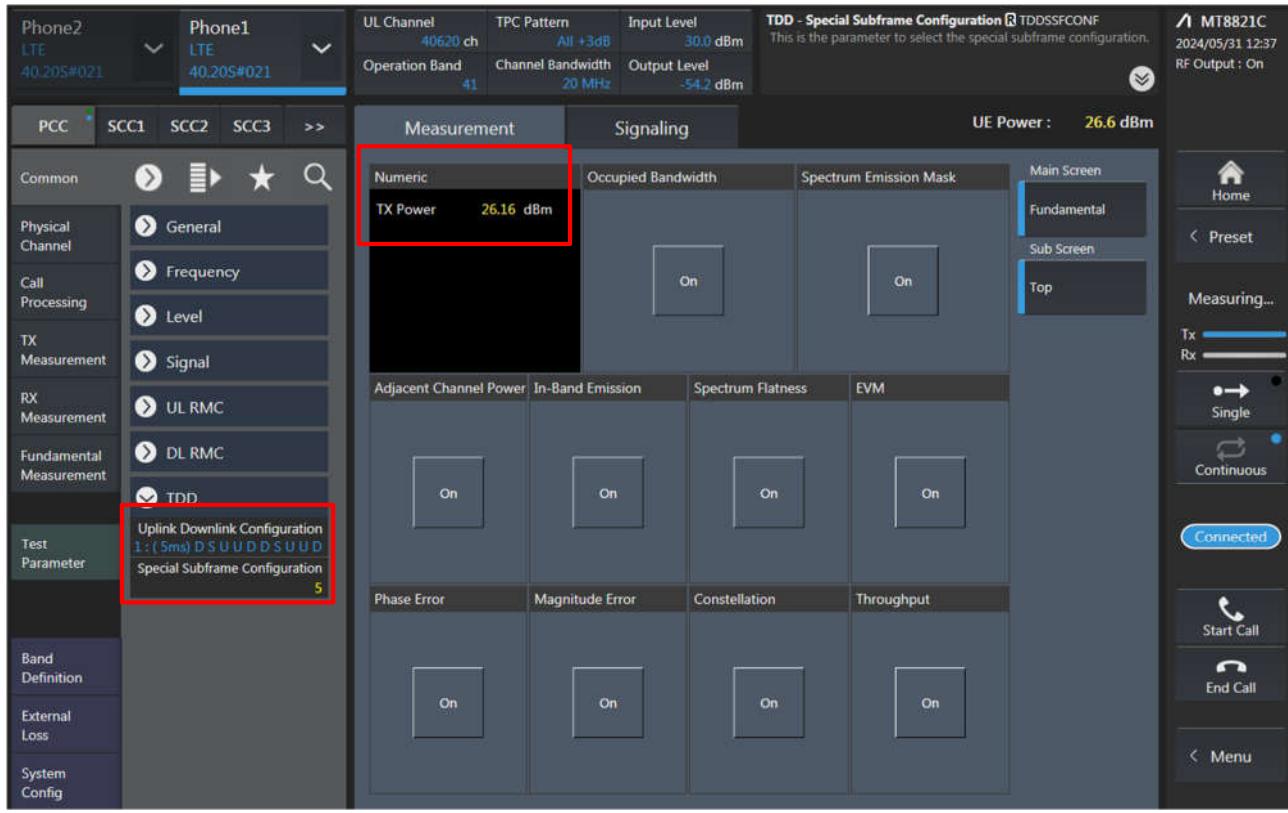


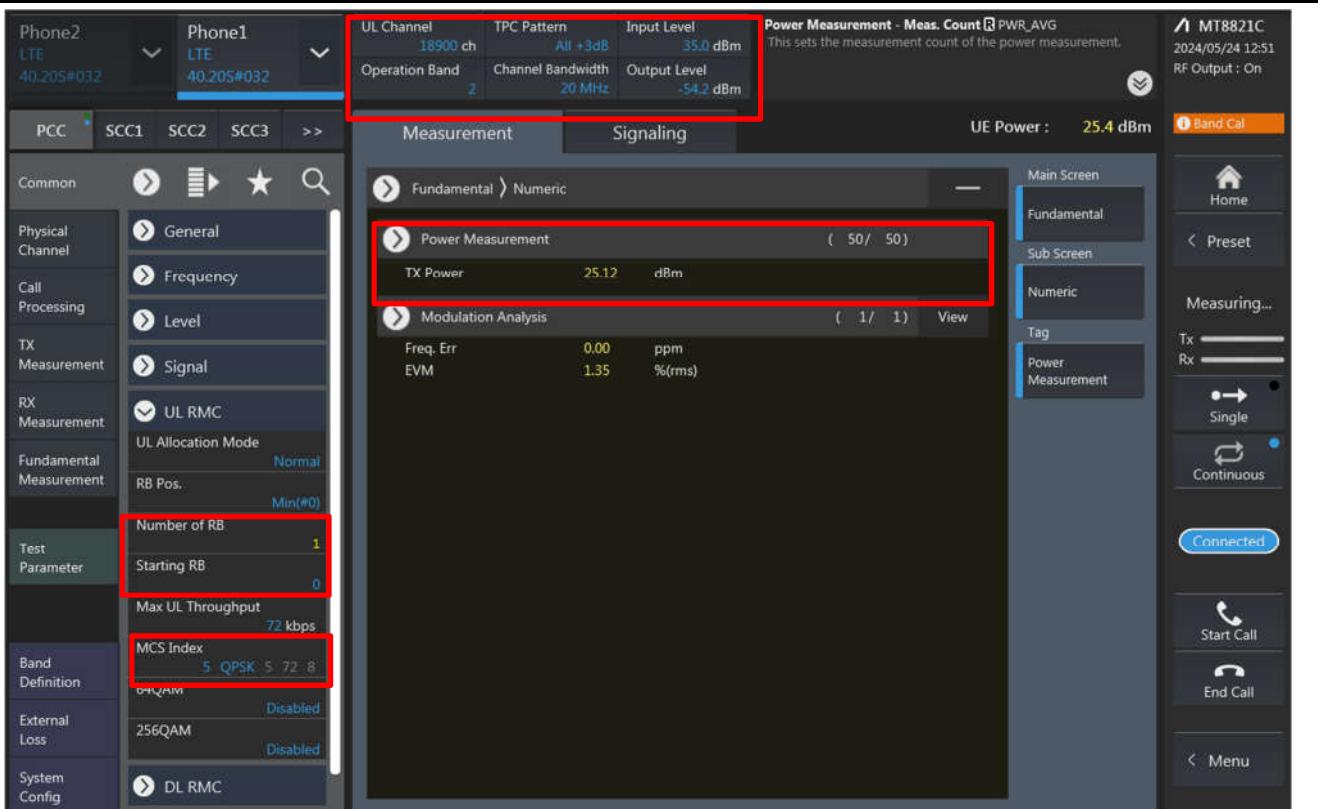


<LTE TDD Power class 3>

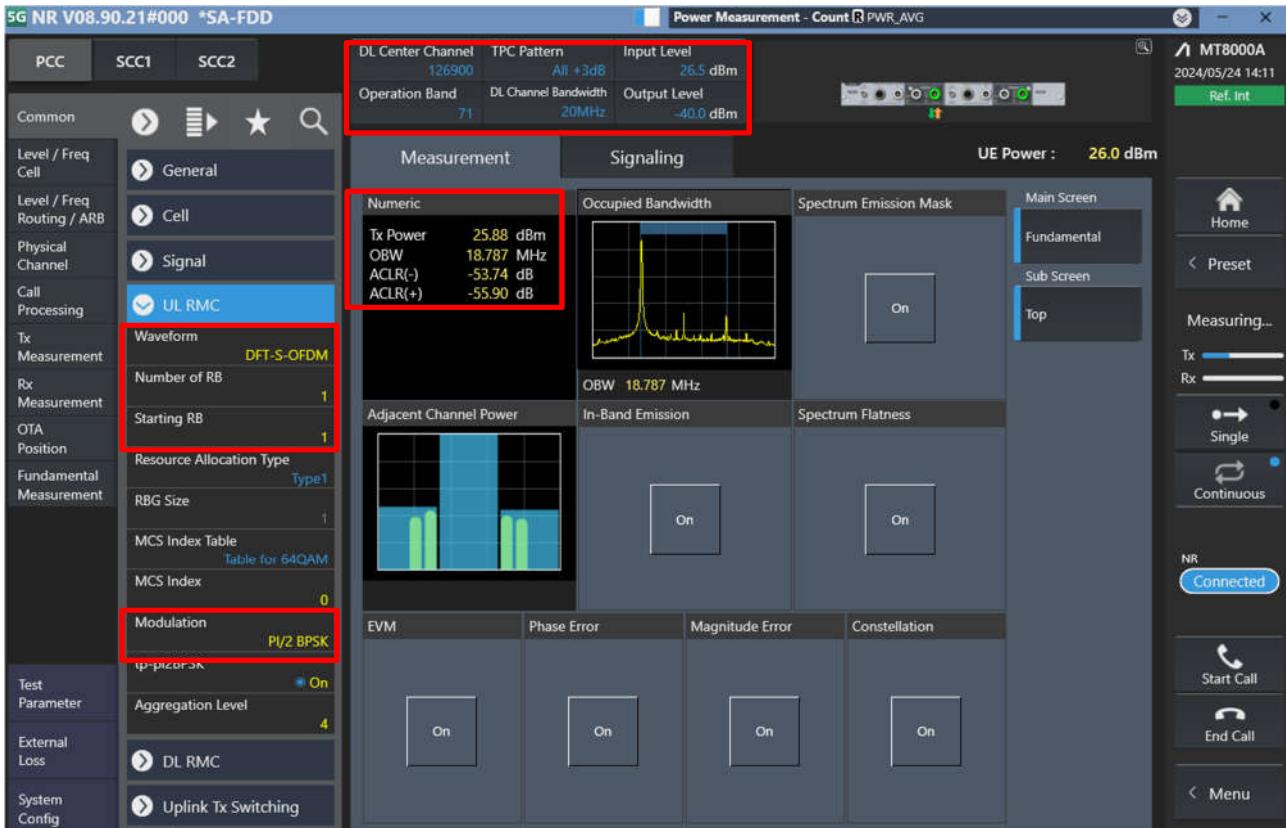


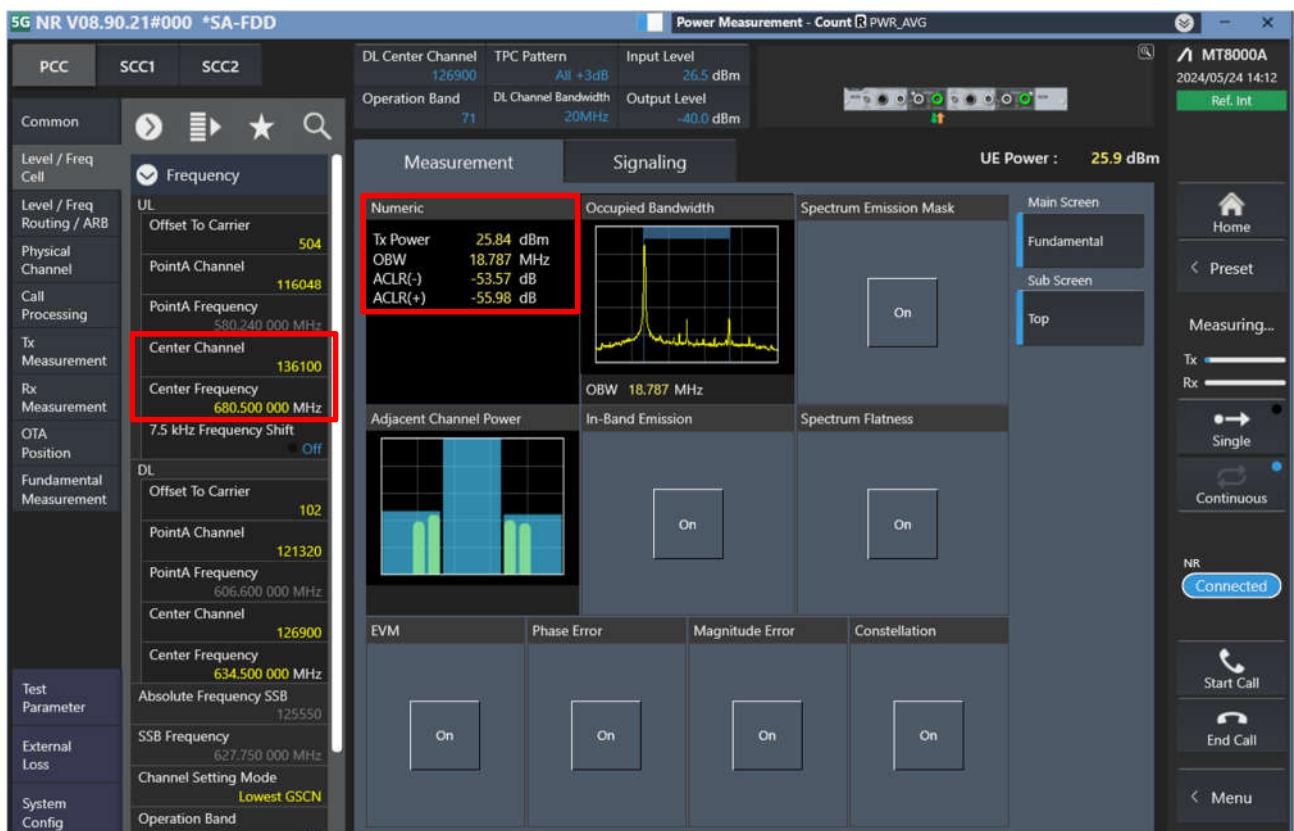
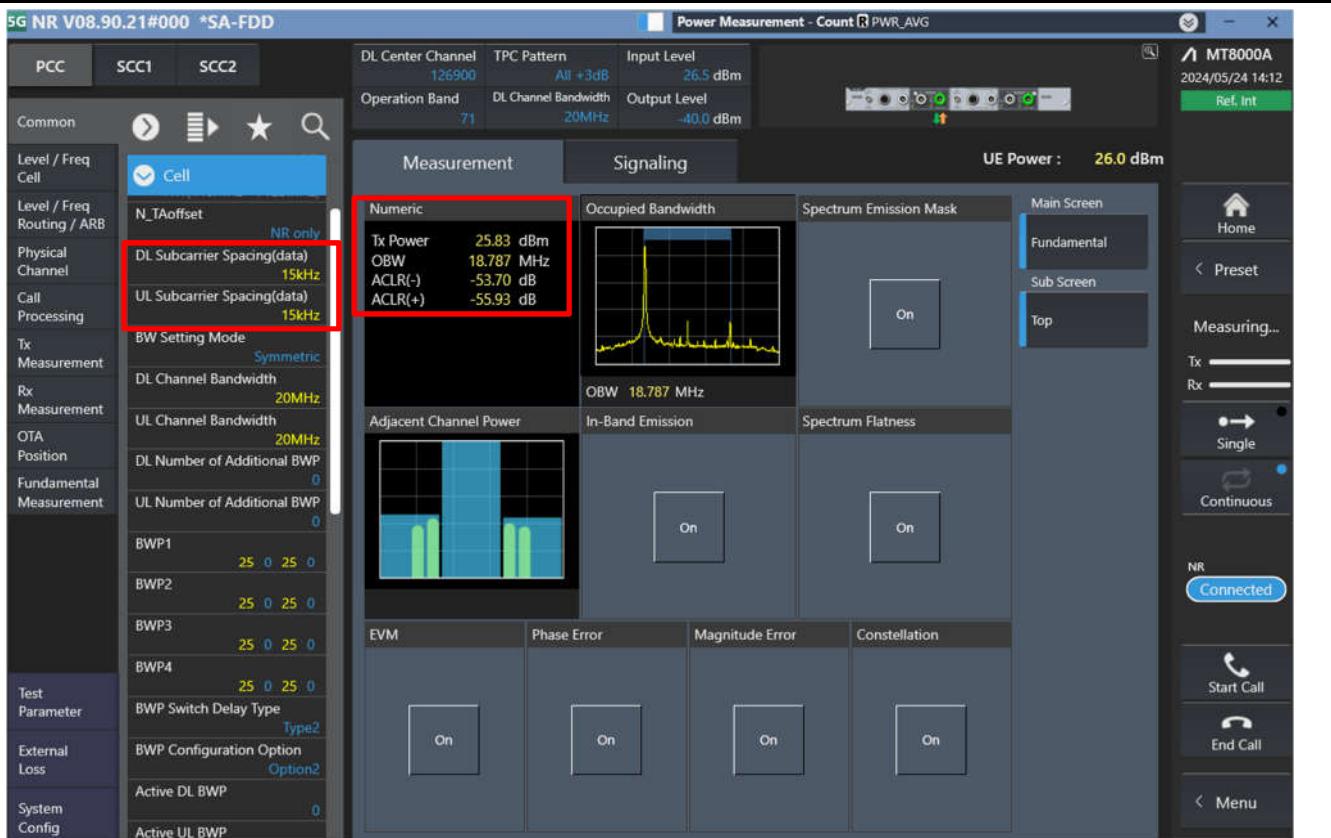
<LTE TDD Power class 2>





<5GNR FR1>

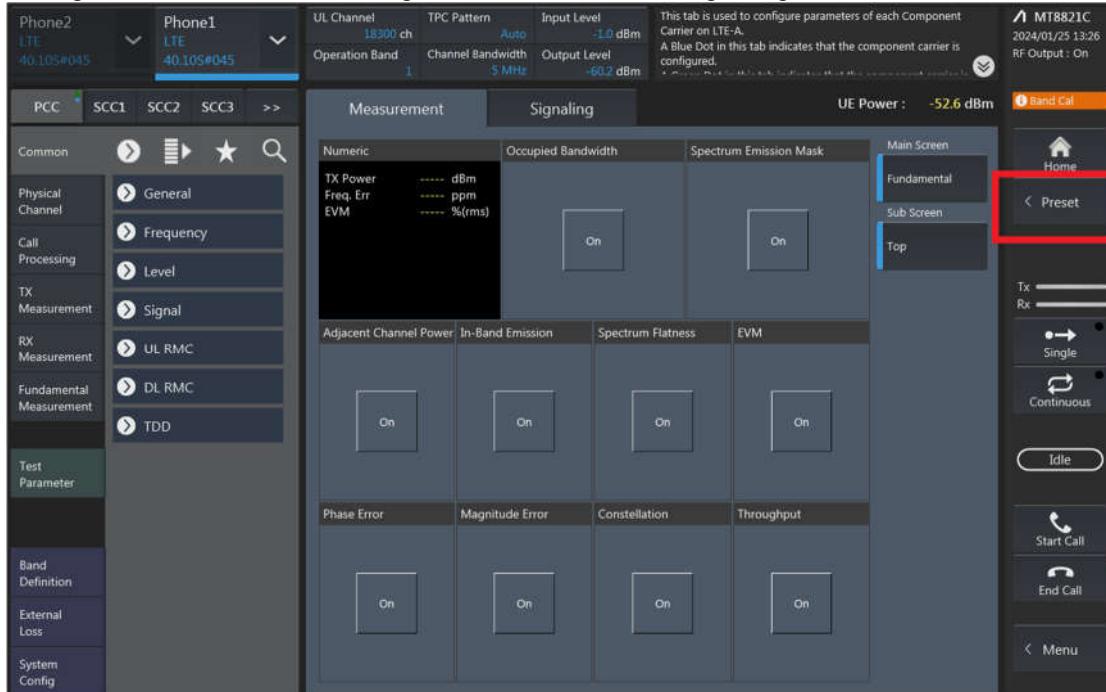






LTE Uplink and Downlink Carrier Aggregation configurations:

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

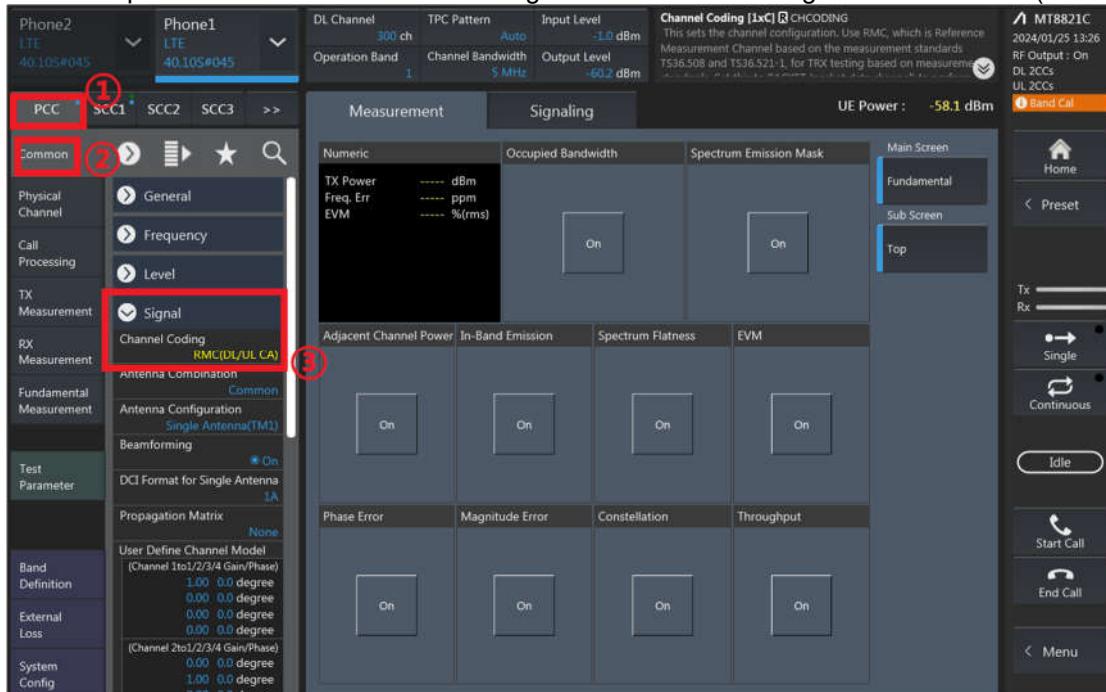


2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;

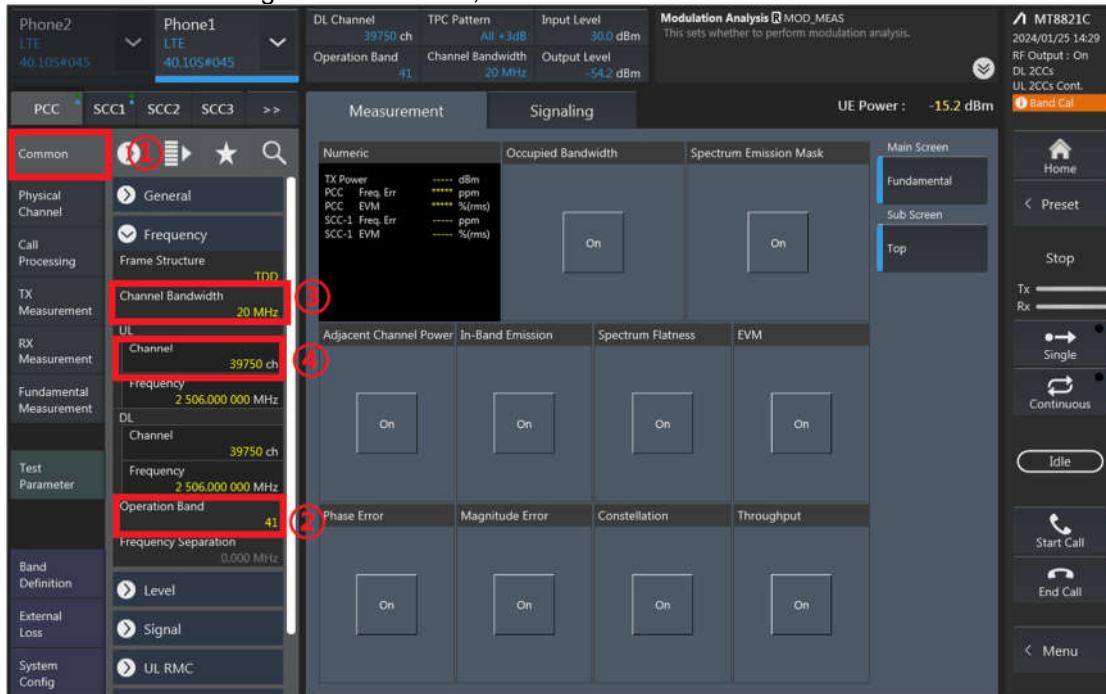
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

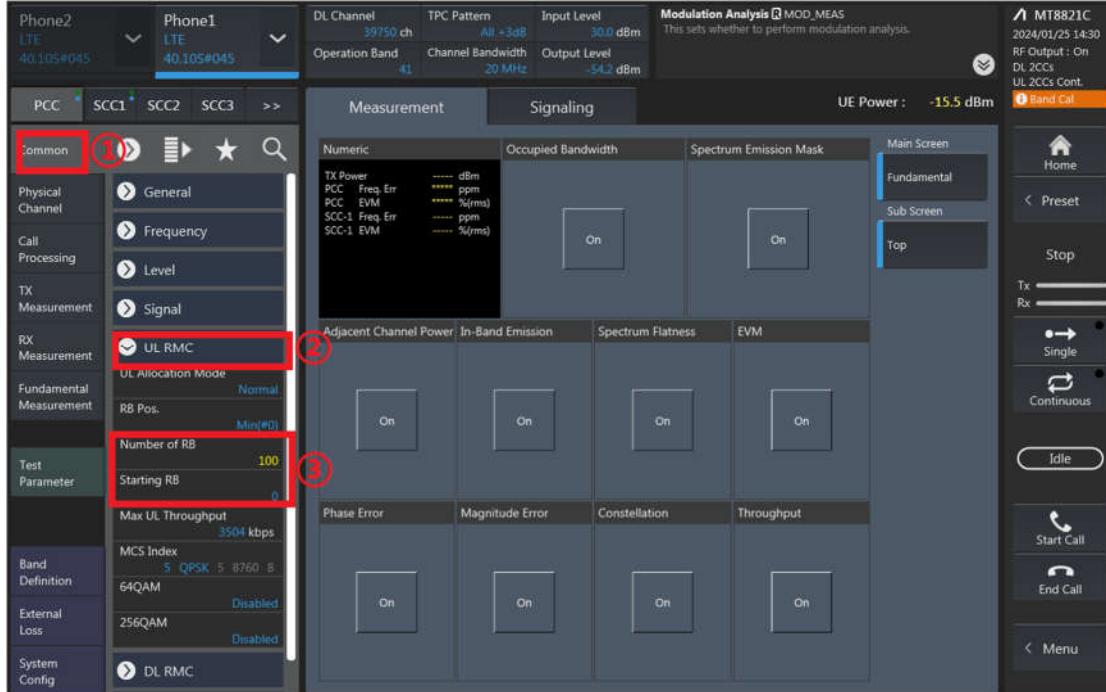
Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



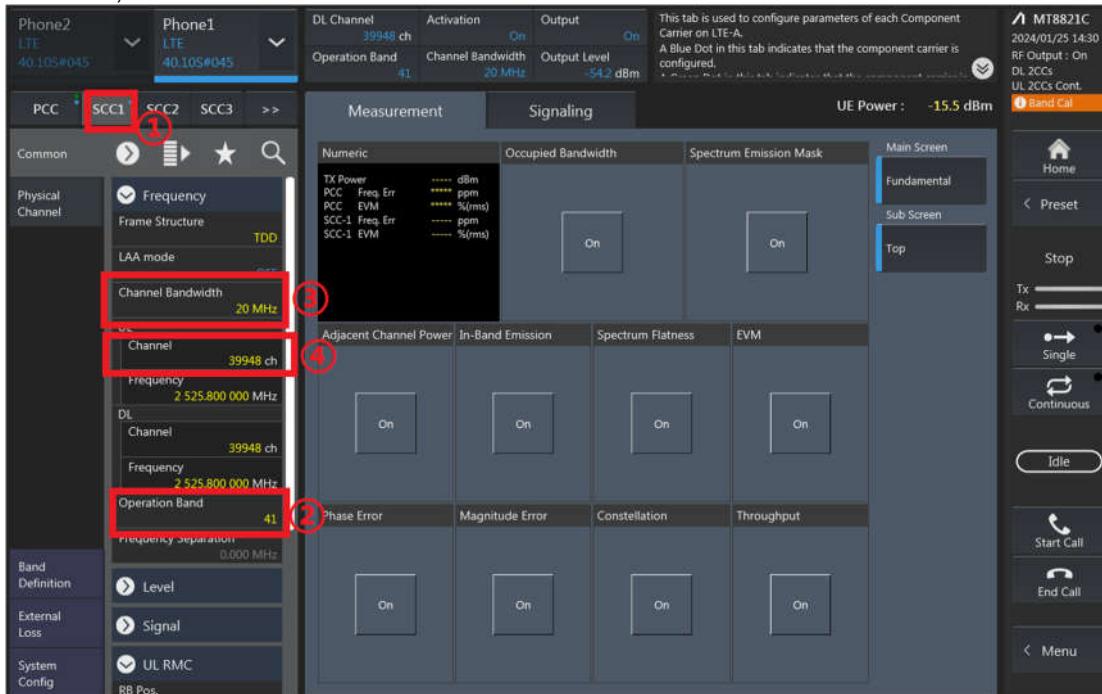
3. PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



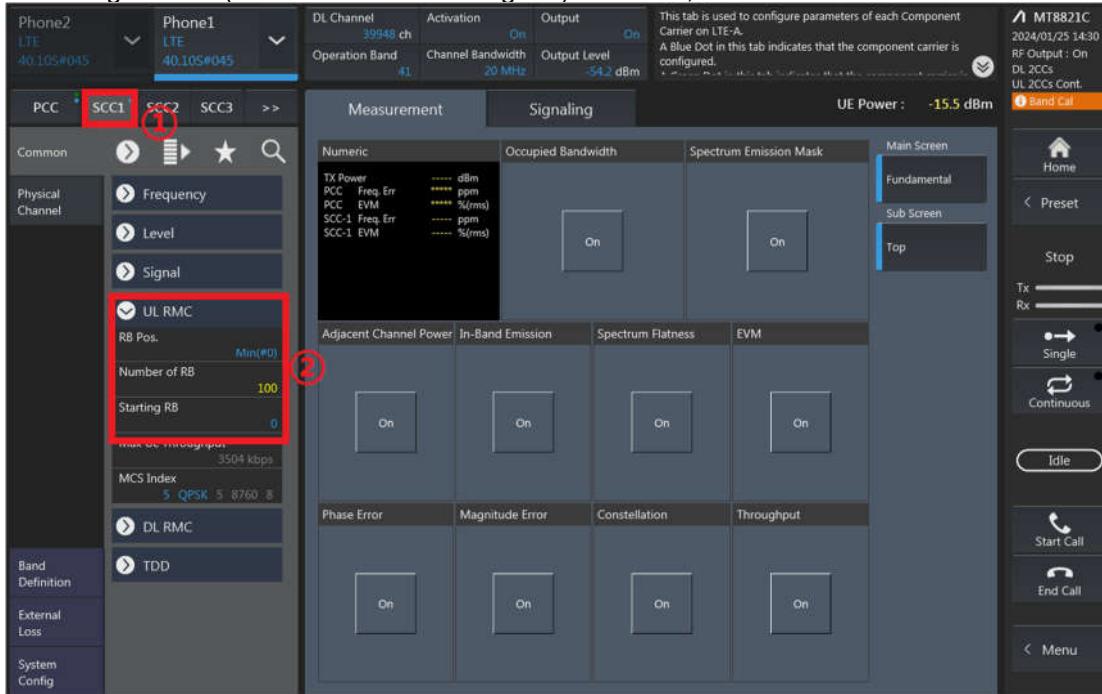
RB configurations (Number of RB / Starting RB) for PCC;



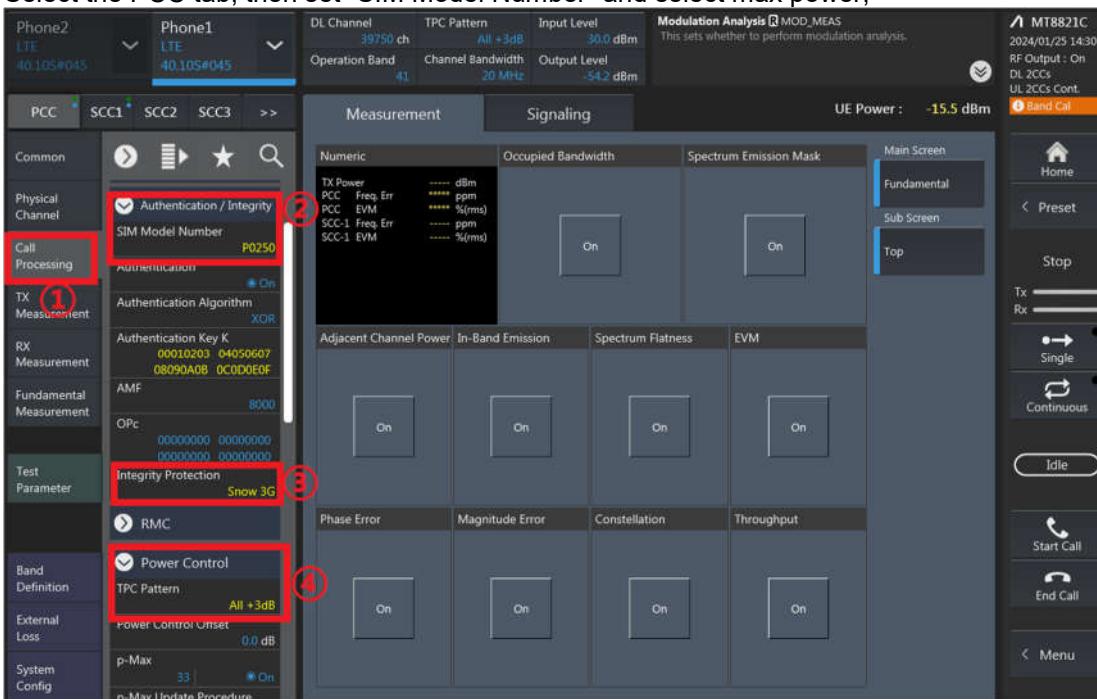
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



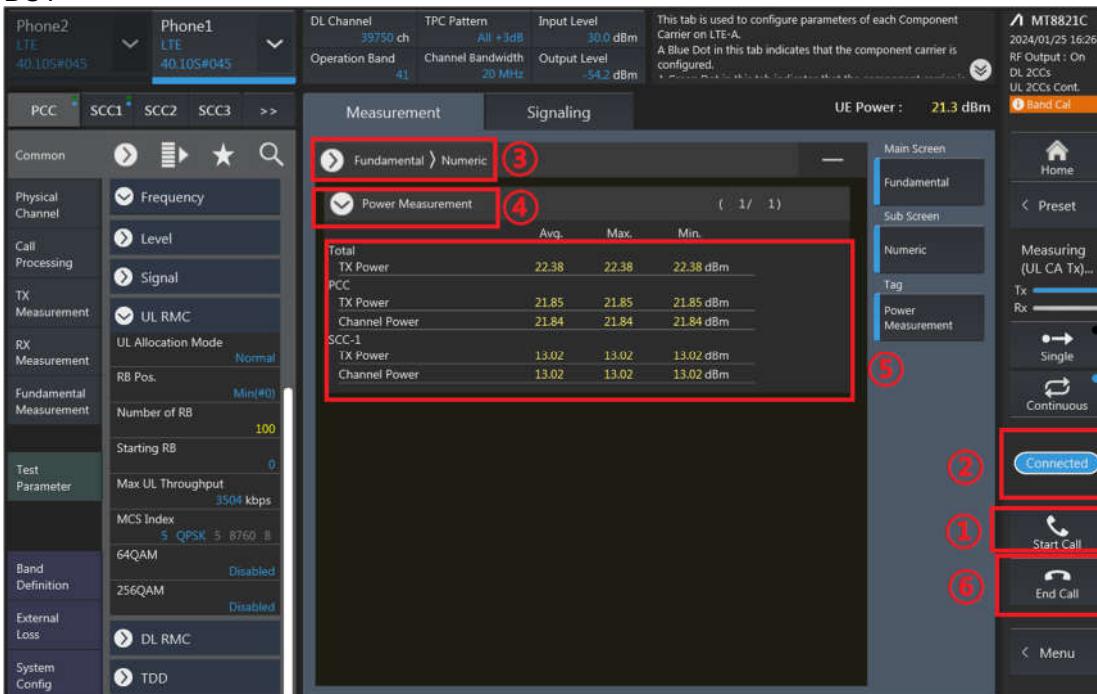
RB configurations (Number of RB / Starting RB) for SCC1;



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.

Uplink CA Power Full&Default Power Mode								
CA_66B Ant 2								
Combination 15MHz+5MHz (75RB+25RB)			PCC	SCC	Measured	Tune up	PCC	SCC
PCC Channel	SCC Channel	Modulation	RB Size	RB offset	RB Size	RB offset	Power (dBm)	Power (dBm)
132047	132140	QPSK	1	74	1	0	22.56	24.00
132322	132415	QPSK	1	74	1	0	22.82	24.00
132597	132504	QPSK	1	0	1	24	22.75	24.00

CA_66B Ant 3								
CA_66C Ant 2								
Combination 15MHz+5MHz (75RB+25RB)			PCC	SCC	Measured	Tune up	PCC	SCC
PCC Channel	SCC Channel	Modulation	RB Size	RB offset	RB Size	RB offset	Power (dBm)	Power (dBm)
132047	132140	QPSK	1	74	1	0	22.19	24.00
132322	132415	QPSK	1	74	1	0	22.25	24.00
132597	132504	QPSK	1	0	1	24	22.19	24.00

CA_66B Ant 0								
CA_66C Ant 3								
Combination 15MHz+5MHz (75RB+25RB)			PCC	SCC	Measured	Tune up	PCC	SCC
PCC Channel	SCC Channel	Modulation	RB Size	RB offset	RB Size	RB offset	Power (dBm)	Power (dBm)
132047	132140	QPSK	1	74	1	0	22.23	24.00
132322	132415	QPSK	1	74	1	0	22.26	24.00
132597	132504	QPSK	1	0	1	24	22.20	24.00

CA_66B Ant 1								
CA_66C Ant 0								
Combination 20MHz+20MHz (100RB+100RB)			PCC	SCC	Measured	Tune up	PCC	SCC
PCC Channel	SCC Channel	Modulation	RB Size	RB offset	RB Size	RB offset	Power (dBm)	Power (dBm)
132072	132270	QPSK	1	99	1	0	22.12	24.00
132322	132520	QPSK	1	99	1	0	22.29	24.00
132572	132374	QPSK	1	0	1	99	22.20	24.00

CA_42C Ant 4								
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	15.42	16.90
42590	42788	QPSK	1	99	1	0	15.49	16.90
42990	42792	QPSK	1	0	1	99	15.37	16.90

CA_42C Ant 6								
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	13.96	15.50
42590	42788	QPSK	1	99	1	0	14.08	15.50
42990	42792	QPSK	1	0	1	99	14.02	15.50

CA_42C Ant 3								
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	14.35	15.80
42590	42788	QPSK	1	99	1	0	14.46	15.80
42990	42792	QPSK	1	0	1	99	14.33	15.80

CA_42C Ant 8								
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	21.91	23.50
42590	42788	QPSK	1	99	1	0	22.01	23.50
42990	42792	QPSK	1	0	1	99	21.91	23.50

Reduced Power Mode for EC110

Combination 15MHz+5MHz (75RB+25RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132047	132140	QPSK	1	74	1 0 12.21 13.80
132322	132415	QPSK	1	74	1 0 12.39 13.80
132597	132504	QPSK	1	0	1 24 12.37 13.80

Combination 20MHz+20MHz (100RB+100RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132072	132270	QPSK	1	99	1 0 12.20 13.80
132322	132520	QPSK	1	99	1 0 12.48 13.80
132572	132374	QPSK	1	0	1 99 12.44 13.80

Combination 15MHz+5MHz (75RB+25RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132047	132140	QPSK	1	74	1 0 19.47 21.20
132322	132415	QPSK	1	74	1 0 19.54 21.20
132597	132504	QPSK	1	0	1 24 19.46 21.20

Combination 20MHz+20MHz (100RB+100RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132072	132270	QPSK	1	99	1 0 19.52 21.20
132322	132520	QPSK	1	99	1 0 19.59 21.20
132572	132374	QPSK	1	0	1 99 19.51 21.20

Combination 15MHz+5MHz (75RB+25RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132047	132140	QPSK	1	74	1 0 15.98 17.30
132322	132415	QPSK	1	74	1 0 16.11 17.30
132597	132504	QPSK	1	0	1 24 16.07 17.30

Combination 20MHz+20MHz (100RB+100RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132072	132270	QPSK	1	99	1 0 16.04 17.30
132322	132520	QPSK	1	99	1 0 16.15 17.30
132572	132374	QPSK	1	0	1 99 16.03 17.30

Combination 15MHz+5MHz (75RB+25RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132047	132140	QPSK	1	74	1 0 16.48 17.80
132322	132415	QPSK	1	74	1 0 16.57 17.80
132597	132504	QPSK	1	0	1 24 16.55 17.80

Combination 20MHz+20MHz (100RB+100RB)					
PCC Channel	SCC Channel	Modulation	PCC RB Size	SCC RB Size	Measured Power (dBm)
			RB offset	RB offset	Tune up Power (dBm)
132072	132270	QPSK	1	99	1 0 16.50 17.80
132322	132520	QPSK	1	99	1 0 16.61 17.80
132572	132374	QPSK	1	0	1 99 16.58 17.80

