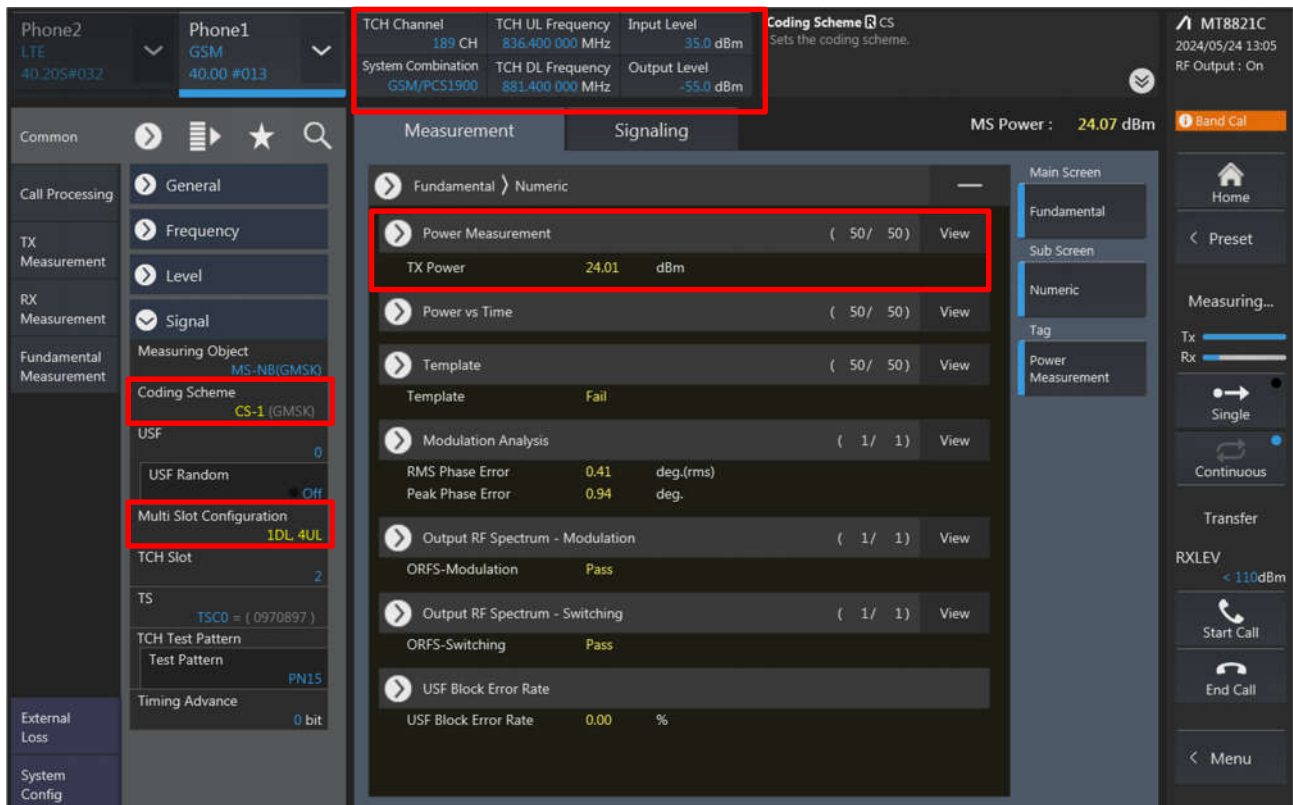


Power measurement connection diagram:

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.

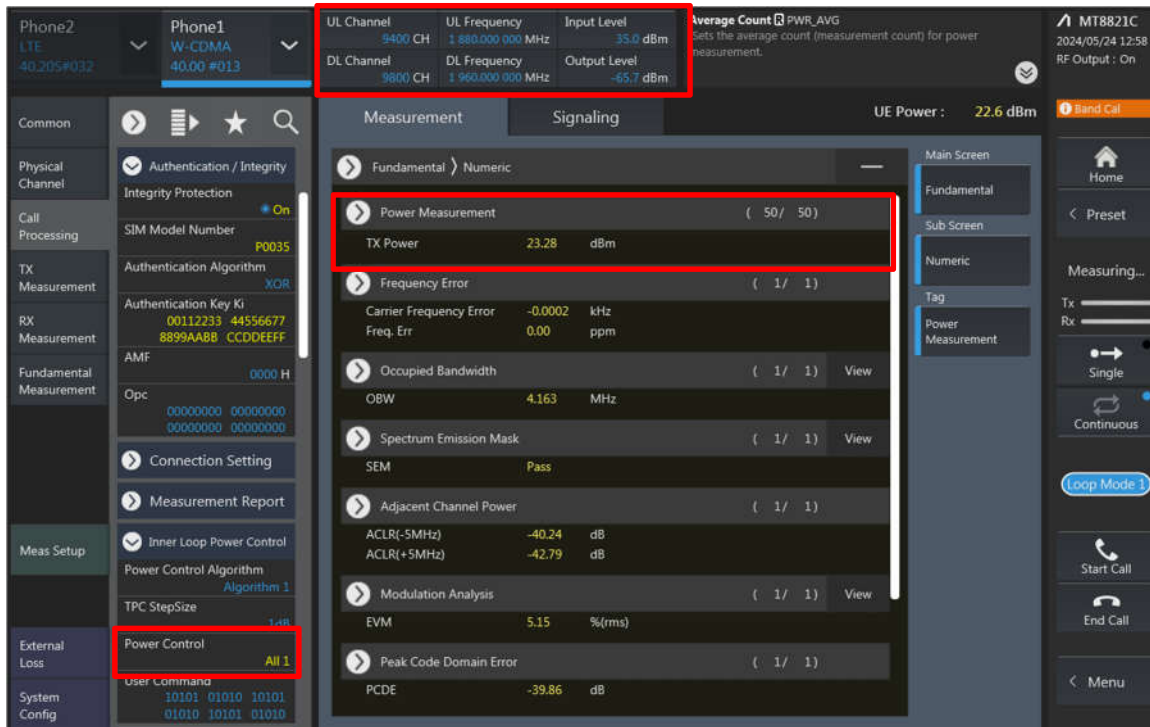
<GSM>



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

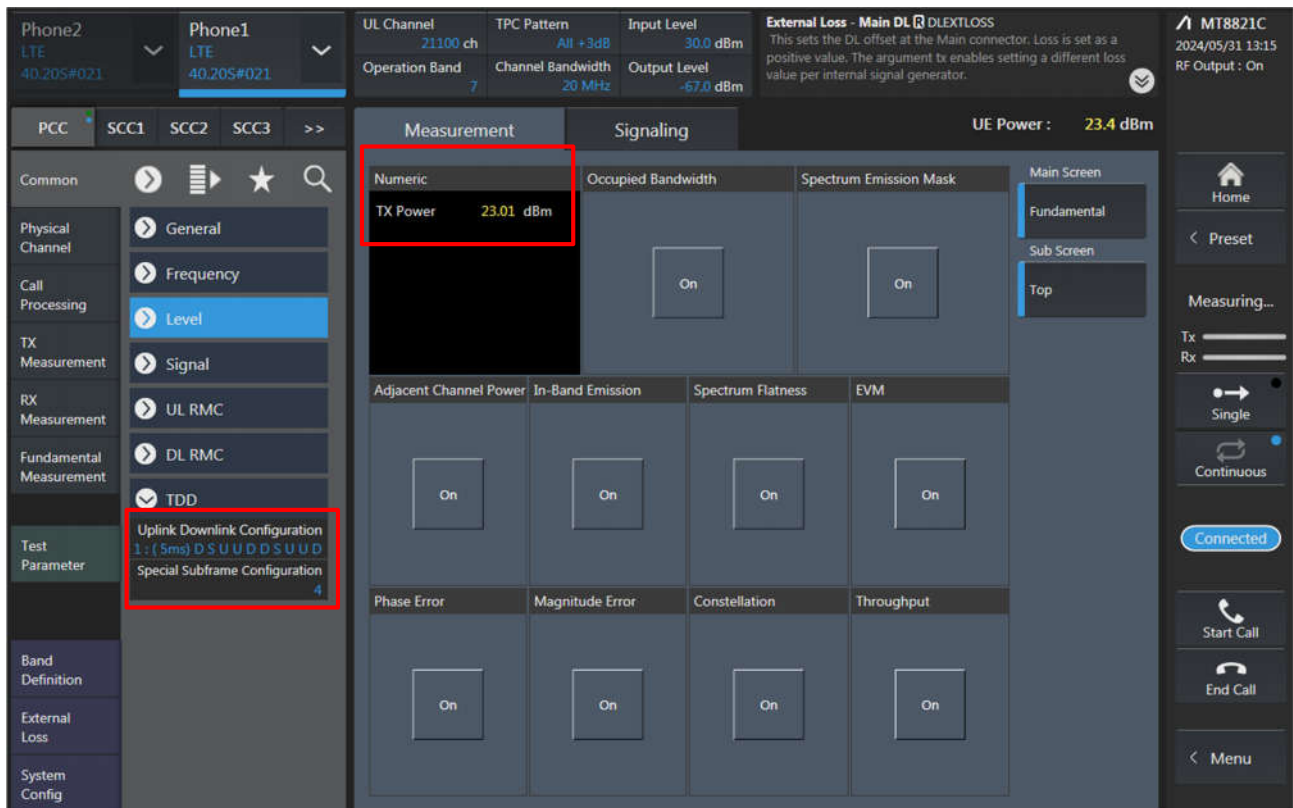
- Top Bar:** Shows Phone2 (LTE 40.205#032) and Phone1 (GSM 40.00 #013). The TCH Channel is 189 CH, TCH UL Frequency is 836.400 000 MHz, Input Level is 35.0 dBm, TCH DL Frequency is 881.400 000 MHz, and Output Level is -55.0 dBm. The Coding Scheme is CS.
- Left Sidebar:** Contains navigation options like Call Processing, TX Measurement, RX Measurement, Fundamental Measurement, and External Loss. The 'Fundamental Measurement' section is expanded, showing 'Coding Scheme' as CS-1 (GMSK) and 'Multi Slot Configuration' as 1DL, 4UL.
- Main Area:** Displays 'Measurement' and 'Signaling' tabs. The 'Measurement' tab is active, showing 'Power Measurement' with a value of 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' with 'Fundamental' and 'Sub Screen' options. It also displays 'MS Power: 24.07 dBm' and 'Band Cal' button.

<WCDMA>



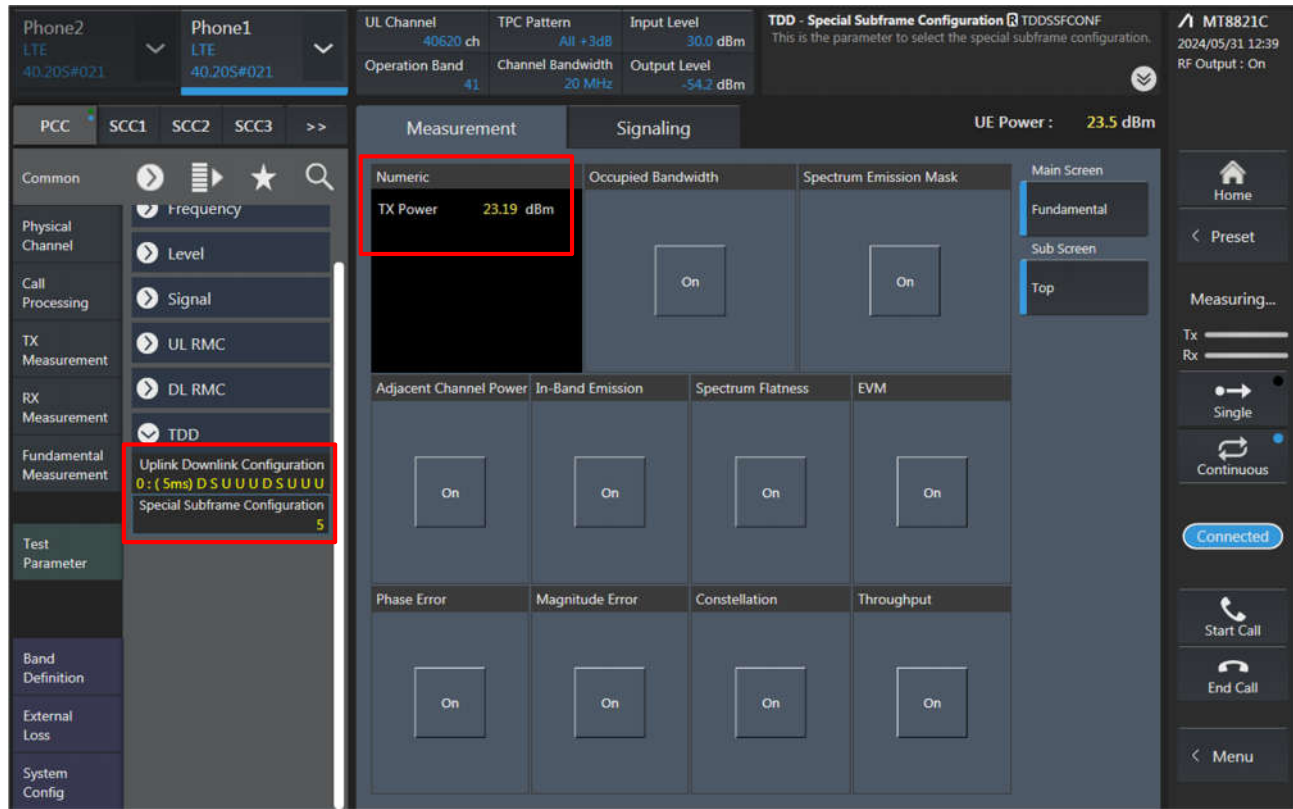
The screenshot shows the WCDMA measurement interface. The top bar displays 'Phone2 LTE 40.205#032' and 'Phone1 W-CDMA 40.00 #013'. The 'Measurement' tab is active, showing various parameters. A red box highlights the 'UL Channel' (9400 CH) and 'DL Channel' (9800 CH) settings. Another red box highlights the 'Power Measurement' section, showing 'TX Power' at 23.28 dBm. The 'Fundamental' section shows 'Carrier Frequency Error' at -0.0002 kHz and 'Freq. Err' at 0.00 ppm. The 'Occupied Bandwidth' section shows 'OBW' at 4.163 MHz. The 'Spectrum Emission Mask' section shows 'SEM' as 'Pass'. The 'Adjacent Channel Power' section shows 'ACLR(-5MHz)' at -40.24 dB and 'ACLR(+5MHz)' at -42.79 dB. The 'Modulation Analysis' section shows 'EVM' at 5.15 % (rms). The 'Peak Code Domain Error' section shows 'PCDE' at -39.86 dB. The 'UE Power' is 22.6 dBm. The 'Main Screen' shows 'Fundamental' and 'Sub Screen' options. The 'Tag' section shows 'Power Measurement'. The 'Loop Mode' is set to 'Continuous'. The 'Start Call' and 'End Call' buttons are visible on the right side.

<LTE>



The screenshot shows the LTE measurement interface. The top bar displays 'Phone2 LTE 40.205#021' and 'Phone1 LTE 40.205#021'. The 'Measurement' tab is active, showing various parameters. A red box highlights the 'TX Power' at 23.01 dBm. The 'Occupied Bandwidth' section shows 'On'. The 'Spectrum Emission Mask' section shows 'On'. The 'Adjacent Channel Power' section shows 'On'. The 'In-Band Emission' section shows 'On'. The 'Spectrum Flatness' section shows 'On'. The 'EVM' section shows 'On'. The 'Phase Error' section shows 'On'. The 'Magnitude Error' section shows 'On'. The 'Constellation' section shows 'On'. The 'Throughput' section shows 'On'. The 'UE Power' is 23.4 dBm. The 'Main Screen' shows 'Fundamental' and 'Sub Screen' options. The 'Tag' section shows 'Top'. The 'Loop Mode' is set to 'Connected'. The 'Start Call' and 'End Call' buttons are visible on the right side. The 'Uplink Downlink Configuration' is set to '1: (5ms) D S U U D D S U U D' and the 'Special Subframe Configuration' is set to '4'.

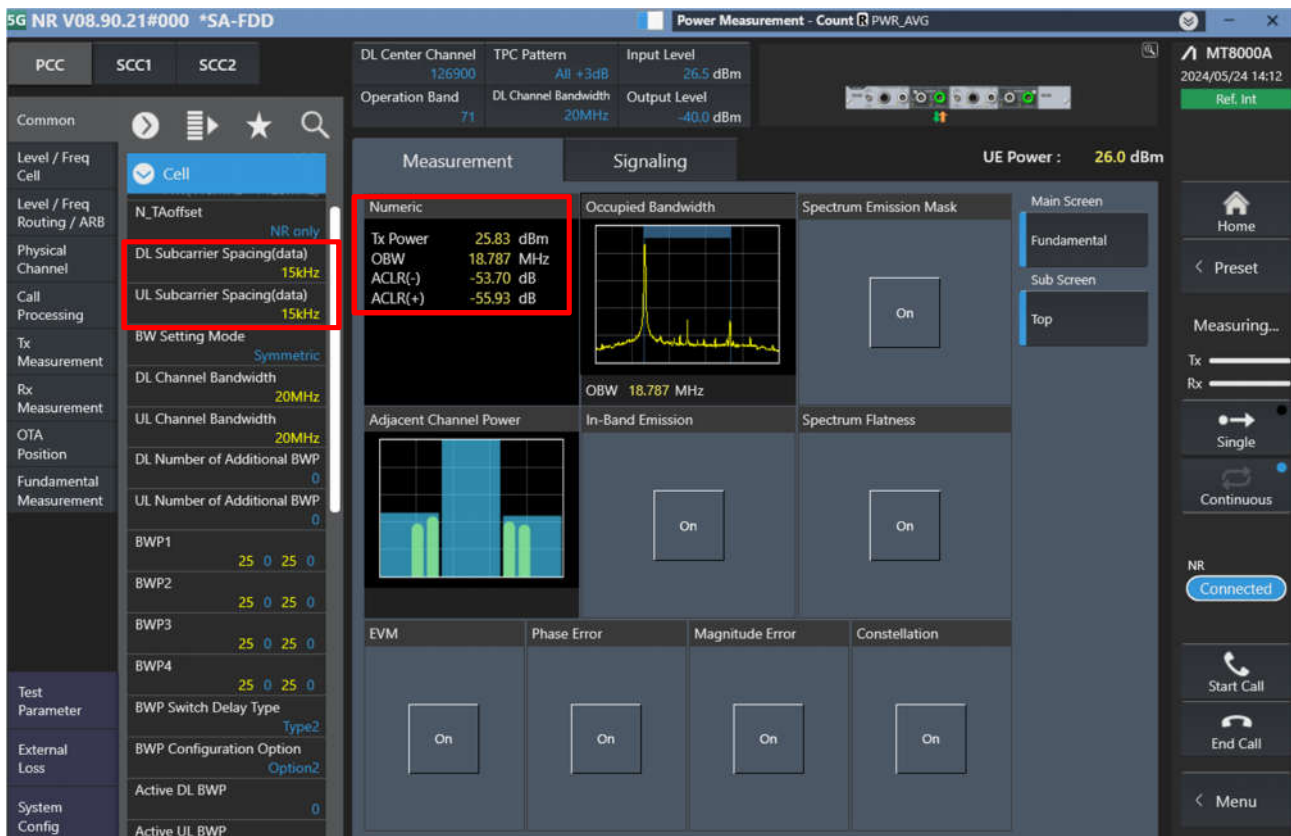
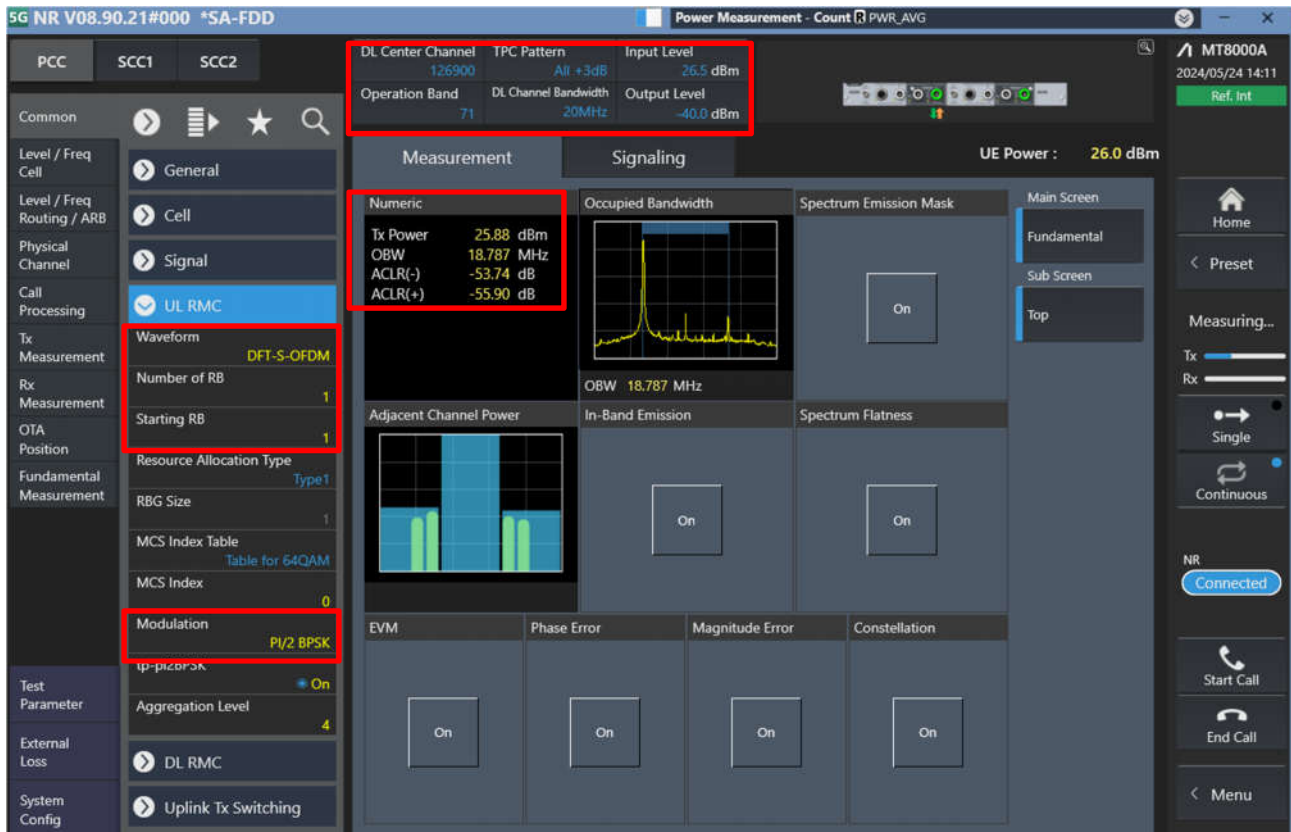
<LTE TDD Power class 3>

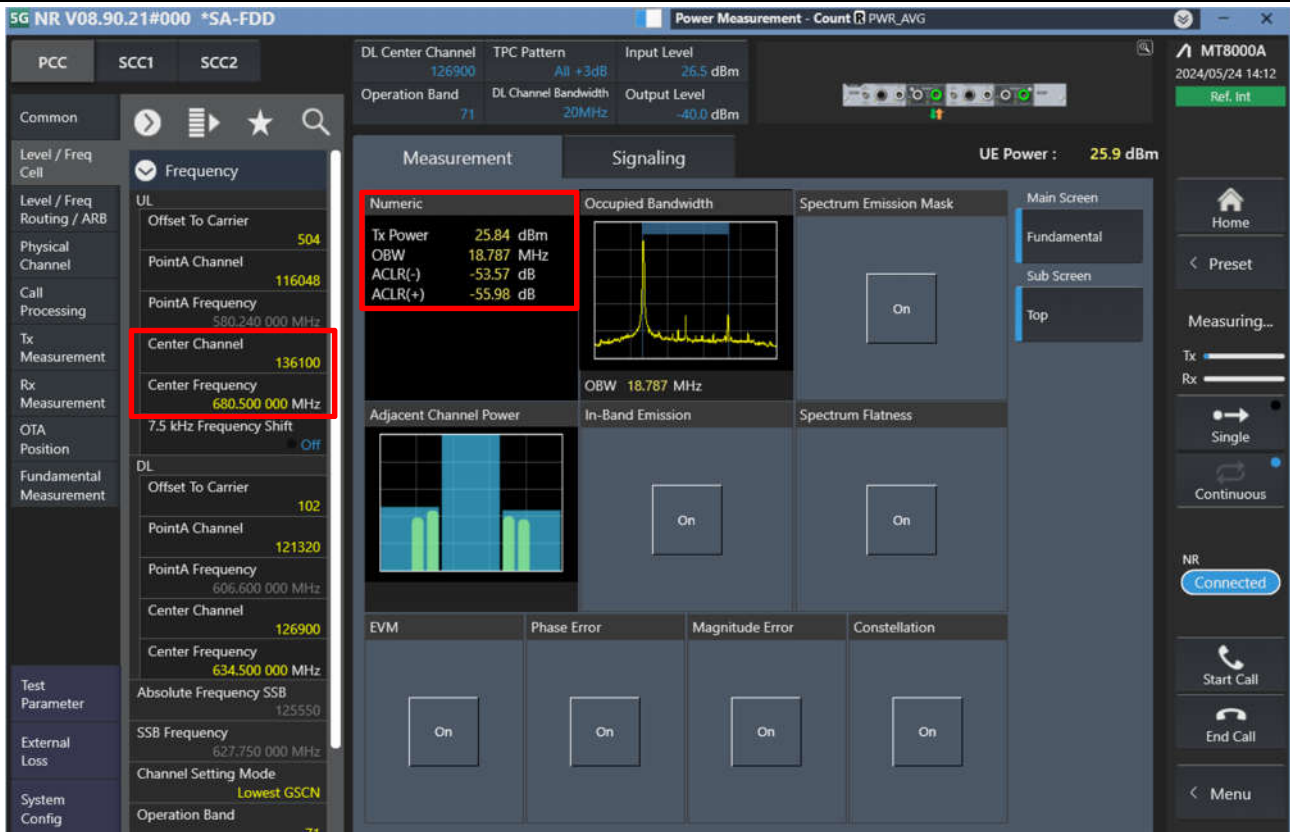


The screenshot displays the SPORTON LAB. LTE TDD Power class 3 configuration interface. The interface is divided into several sections:

- Top Bar:** Shows Phone2 (LTE, 40.20S#021) and Phone1 (LTE, 40.20S#021). It also displays UL Channel (40620 ch), TPC Pattern (All +3dB), Input Level (30.0 dBm), Operation Band (41), Channel Bandwidth (20 MHz), and Output Level (-54.2 dBm). The TDD - Special Subframe Configuration is set to TDDSSFCNF, and the UE Power is 23.5 dBm.
- Left Sidebar:** Contains various configuration options including Physical Channel, Call Processing, TX Measurement, RX Measurement, Fundamental Measurement, Test Parameter, Band Definition, External Loss, and System Config.
- Main Area:**
 - Measurement:** A red box highlights the 'TX Power' measurement value of 23.19 dBm.
 - Signaling:** Includes options for Occupied Bandwidth, Spectrum Emission Mask, Adjacent Channel Power, In-Band Emission, Spectrum Flatness, EVM, Phase Error, Magnitude Error, Constellation, and Throughput. Each option has an 'On' button.
 - Uplink Downlink Configuration:** A red box highlights the configuration '0: (5ms) D S U U U D S U U U'.
 - Special Subframe Configuration:** A red box highlights the configuration '5'.
- Right Sidebar:** Includes a 'Main Screen' section with 'Fundamental' and 'Sub Screen' options, a 'Connected' status indicator, and buttons for 'Start Call' and 'End Call'.

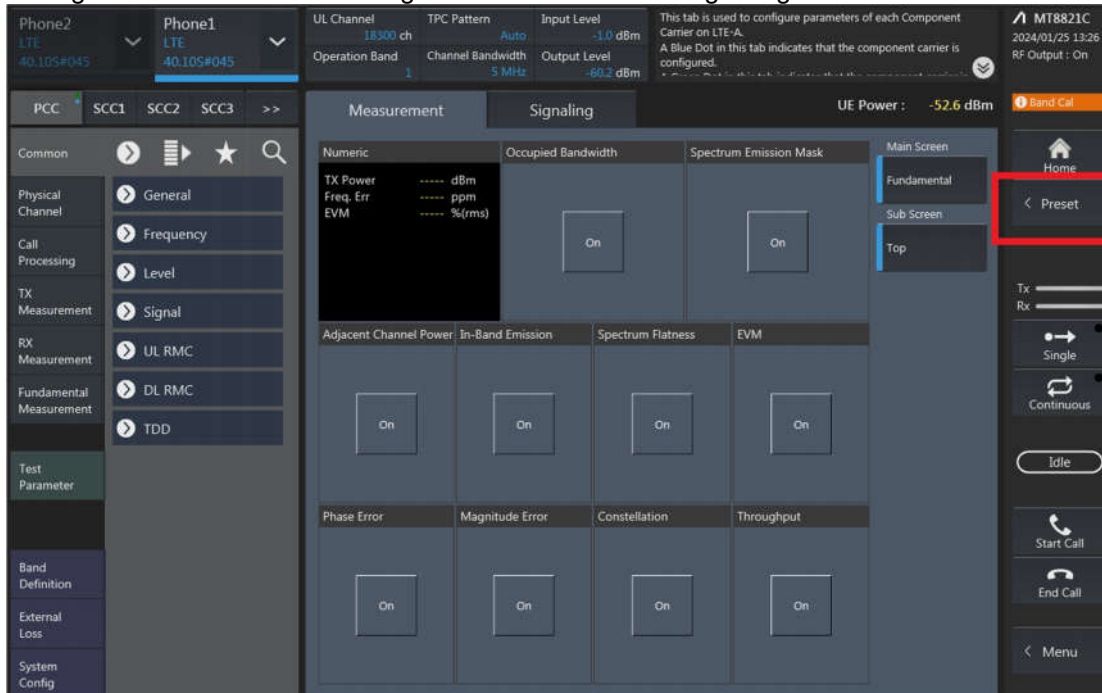
<5G NR FR1>





LTE Uplink and Downlink Carrier Aggregation configurations:

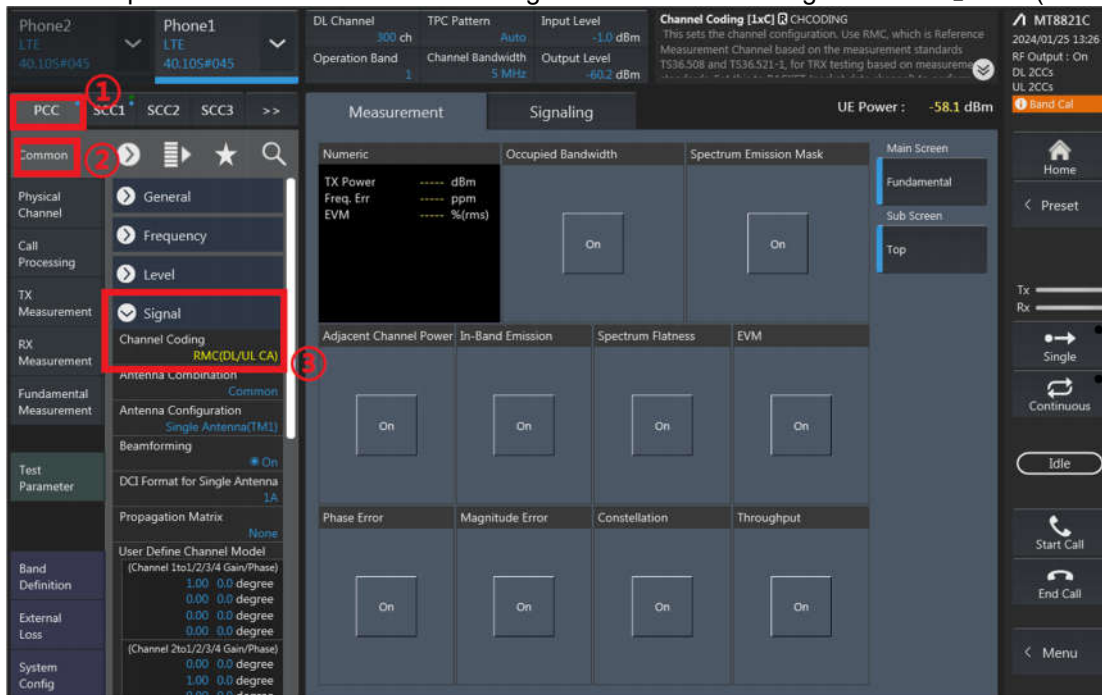
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



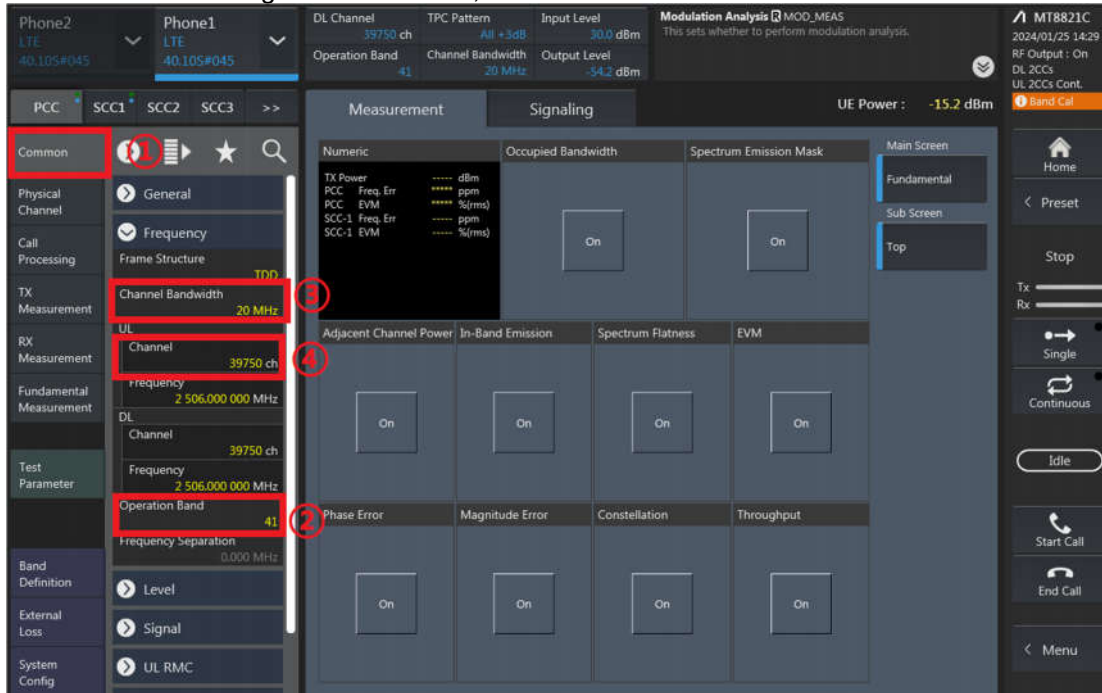
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

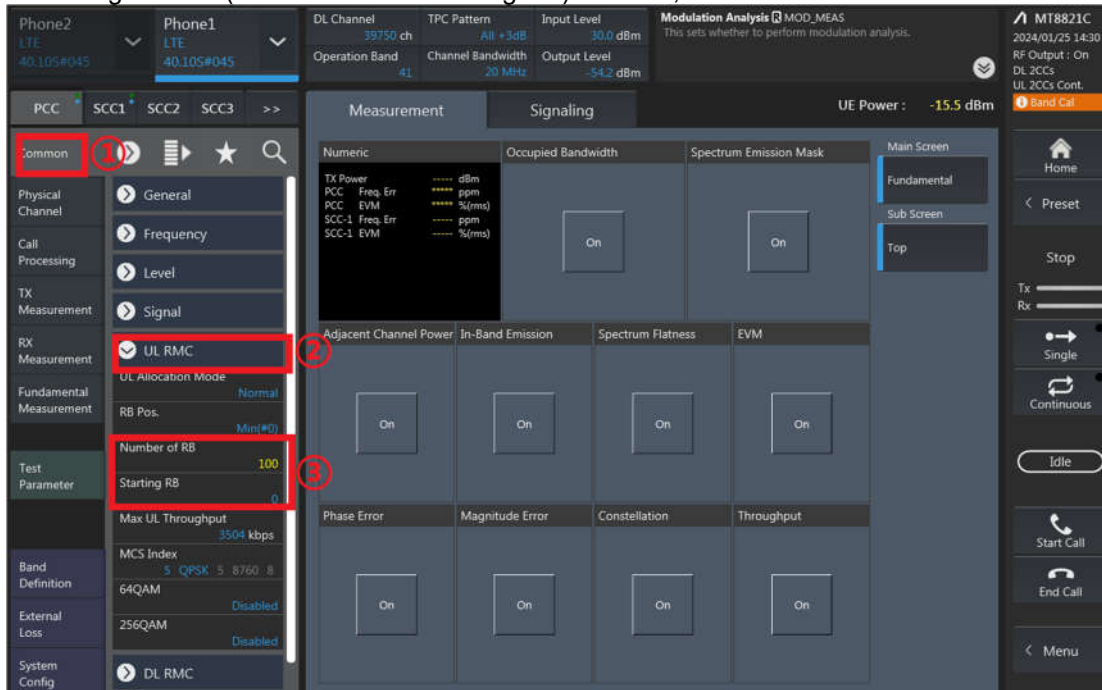
Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



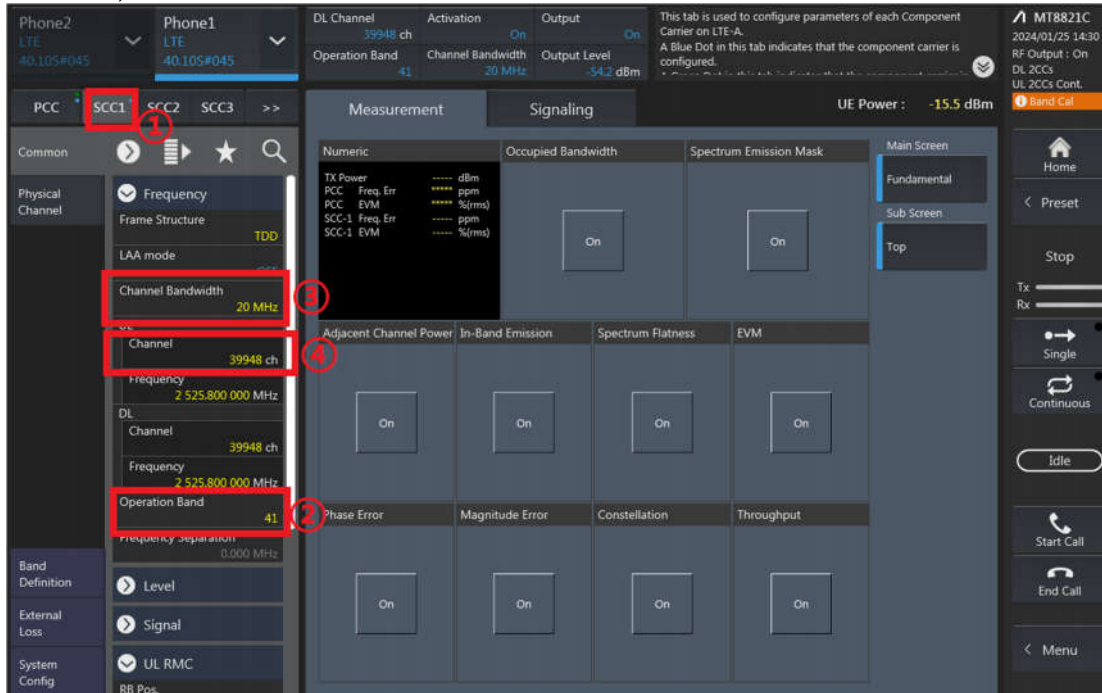
3. PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



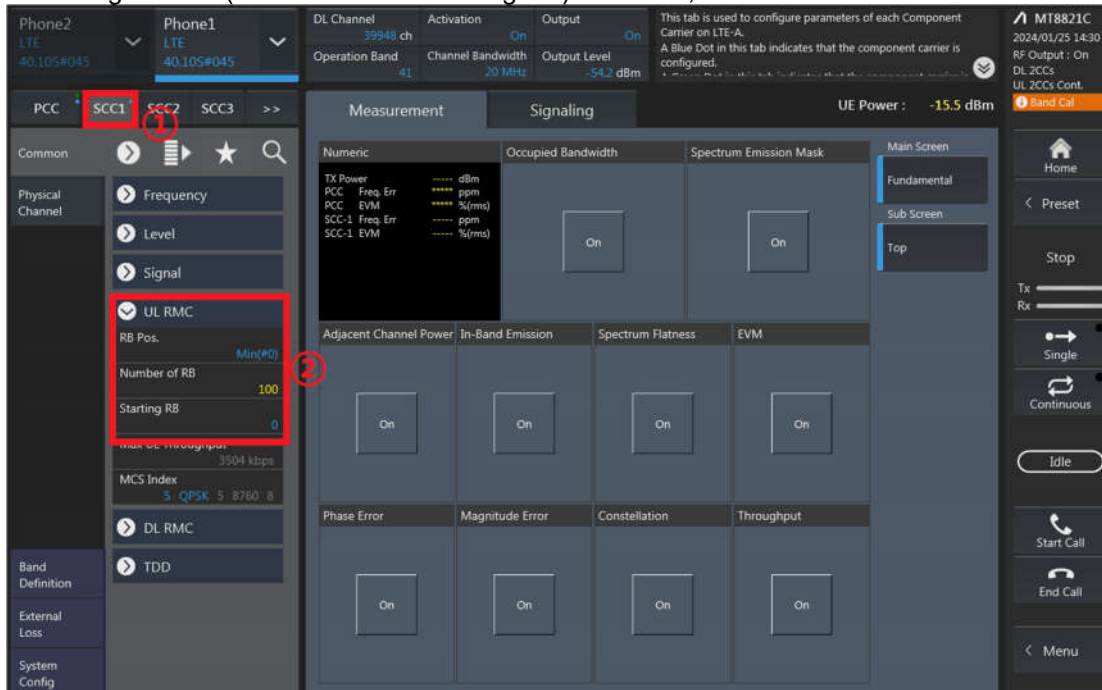
RB configurations (Number of RB / Starting RB) for PCC;



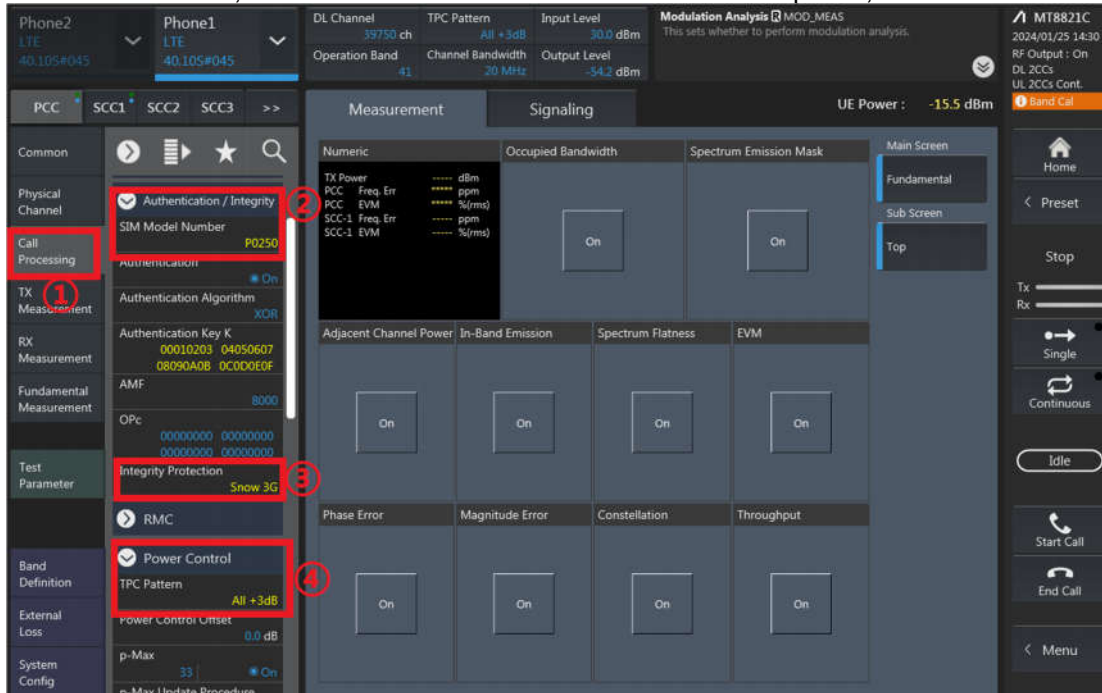
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



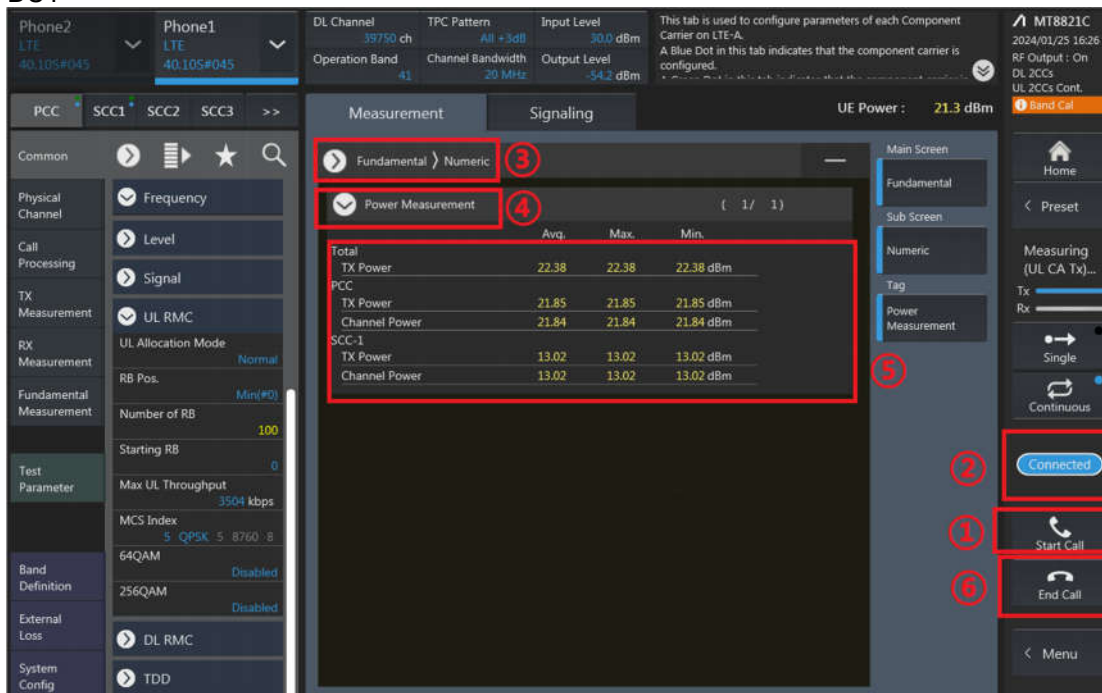
RB configurations (Number of RB / Starting RB) for SCC1;



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.

CA_3IC_Ant 1											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC				Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
37550	38048	QPSK	1	0	0	0	1	0	Default	22.16	24.00
37901	38099	QPSK	1	0	0	0	1	0	Default	22.25	24.00
38150	37952	QPSK	1	0	0	0	1	0	Default	22.18	24.00
37850	38048	QPSK	1	0	0	0	1	0	Rec on	22.16	24.00
37901	38099	QPSK	1	0	0	0	1	0	Rec on	22.25	24.00
38150	37952	QPSK	1	0	0	0	1	0	Rec on	22.18	24.00
37850	38048	QPSK	1	0	0	0	1	0	Sensor on	20.64	22.50
37901	38099	QPSK	1	0	0	0	1	0	Sensor on	20.70	22.50
38150	37952	QPSK	1	0	0	0	1	0	Sensor on	20.64	22.50
37850	38048	QPSK	1	0	0	0	1	0	Handheld	21.08	23.00
37901	38099	QPSK	1	0	0	0	1	0	Handheld	21.23	23.00
38150	37952	QPSK	1	0	0	0	1	0	Handheld	21.10	23.00
37850	38048	QPSK	1	0	0	0	1	0	Hotspot	20.84	22.50
37901	38099	QPSK	1	0	0	0	1	0	Hotspot	20.70	22.50
38150	37952	QPSK	1	0	0	0	1	0	Hotspot	20.64	22.50
37850	38048	QPSK	1	0	0	0	1	0	Sensor off	22.16	24.00
37901	38099	QPSK	1	0	0	0	1	0	Sensor off	22.25	24.00
38150	37952	QPSK	1	0	0	0	1	0	Sensor off	22.18	24.00

CA_41C_Ant 1													
Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	SCC Channel	Modulation	PCC				SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	RB Size	RB offset					
39750	39948	QPSK	1	0	0	0	0	1	0	Default	22.35	24.00	
40185	40383	QPSK	1	0	0	0	0	1	0	Default	22.37	24.00	
40620	40818	QPSK	1	0	0	0	0	1	0	Default	22.39	24.00	
41055	41253	QPSK	1	0	0	0	0	1	0	Default	22.48	24.00	
41490	41292	QPSK	1	0	0	0	0	1	0	Default	22.41	24.00	
39750	39948	QPSK	1	0	0	0	0	1	0	Rec on	22.35	24.00	
40185	40383	QPSK	1	0	0	0	0	1	0	Rec on	22.37	24.00	
40620	40818	QPSK	1	0	0	0	0	1	0	Rec on	22.39	24.00	
41055	41253	QPSK	1	0	0	0	0	1	0	Rec on	22.48	24.00	
41490	41292	QPSK	1	0	0	0	0	1	0	Rec on	22.41	24.00	
39750	39948	QPSK	1	0	0	0	0	1	0	Sensor on	20.73	22.50	
40185	40383	QPSK	1	0	0	0	0	1	0	Sensor on	20.72	22.50	
40620	40818	QPSK	1	0	0	0	0	1	0	Sensor on	20.65	22.50	
41055	41253	QPSK	1	0	0	0	0	1	0	Sensor on	20.89	22.50	
41490	41292	QPSK	1	0	0	0	0	1	0	Sensor on	20.84	22.50	
39750	39948	QPSK	1	0	0	0	0	1	0	Handheld	21.24	23.00	
40185	40383	QPSK	1	0	0	0	0	1	0	Handheld	21.41	23.00	
40620	40818	QPSK	1	0	0	0	0	1	0	Handheld	21.26	23.00	
41055	41253	QPSK	1	0	0	0	0	1	0	Hotspot	20.64	22.50	
41490	41292	QPSK	1	0	0	0	0	1	0	Hotspot	20.73	22.50	
39750	39948	QPSK	1	0	0	0	0	1	0	Hotspot	20.65	22.50	
40185	40383	QPSK	1	0	0	0	0	1	0	Hotspot	20.72	22.50	
40620	40818	QPSK	1	0	0	0	0	1	0	Hotspot	20.65	22.50	
41055	41253	QPSK	1	0	0	0	0	1	0	Hotspot	20.89	22.50	
41490	41292	QPSK	1	0	0	0	0	1	0	Hotspot	20.84	22.50	
39750	39948	QPSK	1	0	0	0	0	1	0	Sensor off	22.35	24.00	
40185	40383	QPSK	1	0	0	0	0	1	0	Sensor off	22.37	24.00	
40620	40818	QPSK	1	0	0	0	0	1	0	Sensor off	22.39	24.00	
41055	41253	QPSK	1	0	0	0	0	1	0	Sensor off	22.48	24.00	
41490	41292	QPSK	1	0	0	0	0	1	0	Sensor off	22.41	24.00	

CA_42C_Ant 6									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction
			RB Size	RB offset	RB Size	RB offset			
43190	43388	QPSK	1	0	0	0	1	0	Default
43241	43439	QPSK	1	0	0	0	1	0	Default
43292	43490	QPSK	1	0	0	0	1	0	Default
43190	43388	QPSK	1	0	0	0	1	0	Rec on
43241	43439	QPSK	1	0	0	0	1	0	Rec on
43292	43490	QPSK	1	0	0	0	1	0	Rec on
43190	43388	QPSK	1	0	0	0	1	0	Sensor on
43241	43439	QPSK	1	0	0	0	1	0	Sensor on
43292	43490	QPSK	1	0	0	0	1	0	Sensor on
43190	43388	QPSK	1	0	0	0	1	0	Handheld
43241	43439	QPSK	1	0	0	0	1	0	Handheld
43292	43490	QPSK	1	0	0	0	1	0	Handheld
43190	43388	QPSK	1	0	0	0	1	0	Hotspot
43241	43439	QPSK	1	0	0	0	1	0	Hotspot
43292	43490	QPSK	1	0	0	0	1	0	Hotspot
43190	43388	QPSK	1	0	0	0	1	0	Sensor off
43241	43439	QPSK	1	0	0	0	1	0	Sensor off
43292	43490	QPSK	1	0	0	0	1	0	Sensor off