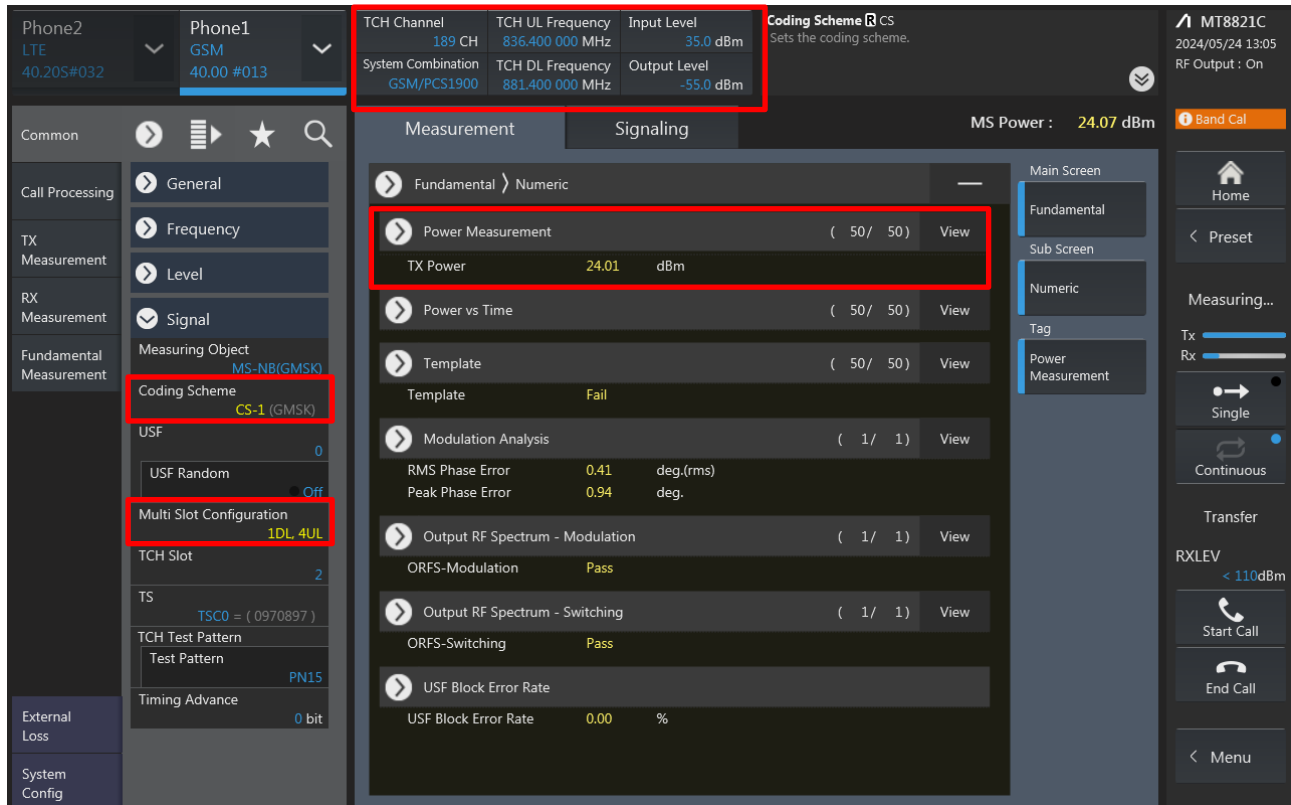


Power measurement connection diagram:

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.

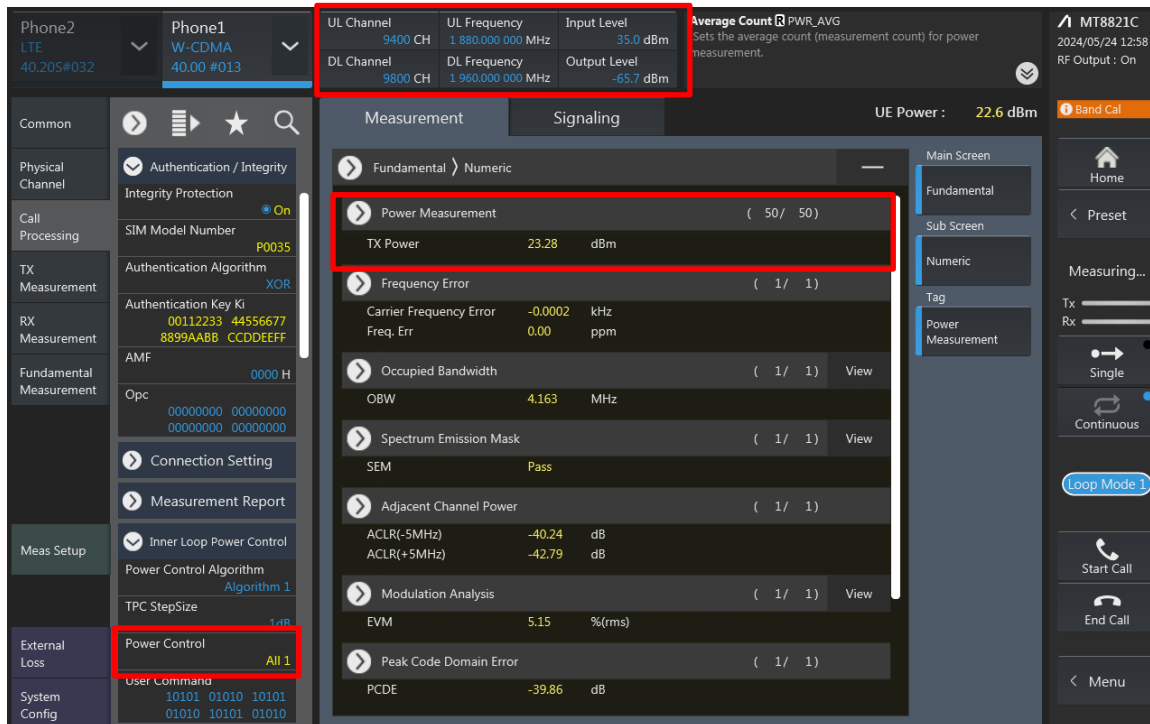
<GSM>



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

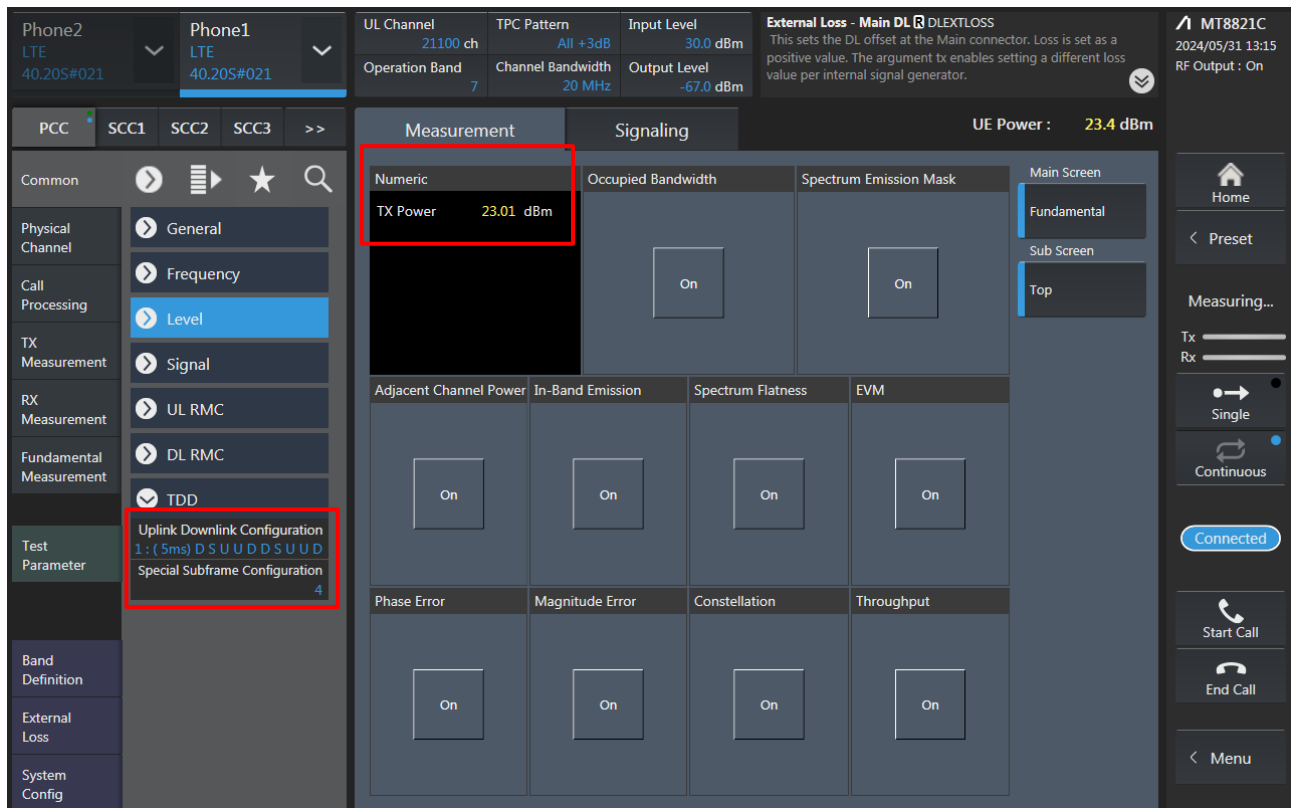
- Top Bar:** Shows Phone2 (LTE, 40.205#032) and Phone1 (GSM, 40.00 #013). The TCH Channel is 189 CH, TCH UL Frequency is 836.400 000 MHz, Input Level is 35.0 dBm, and TCH DL Frequency is 881.400 000 MHz. The Coding Scheme is CS.
- Left Sidebar:** Contains navigation options like Common, Call Processing, 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' as 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 'MT8821C' with a timestamp of 2024/05/24 13:05 and 'RF Output : On'. It also includes a 'Band Cal' button and a 'Main Screen' section with 'Fundamental', 'Sub Screen', 'Numeric', and 'Tag' options.

<WCDMA>

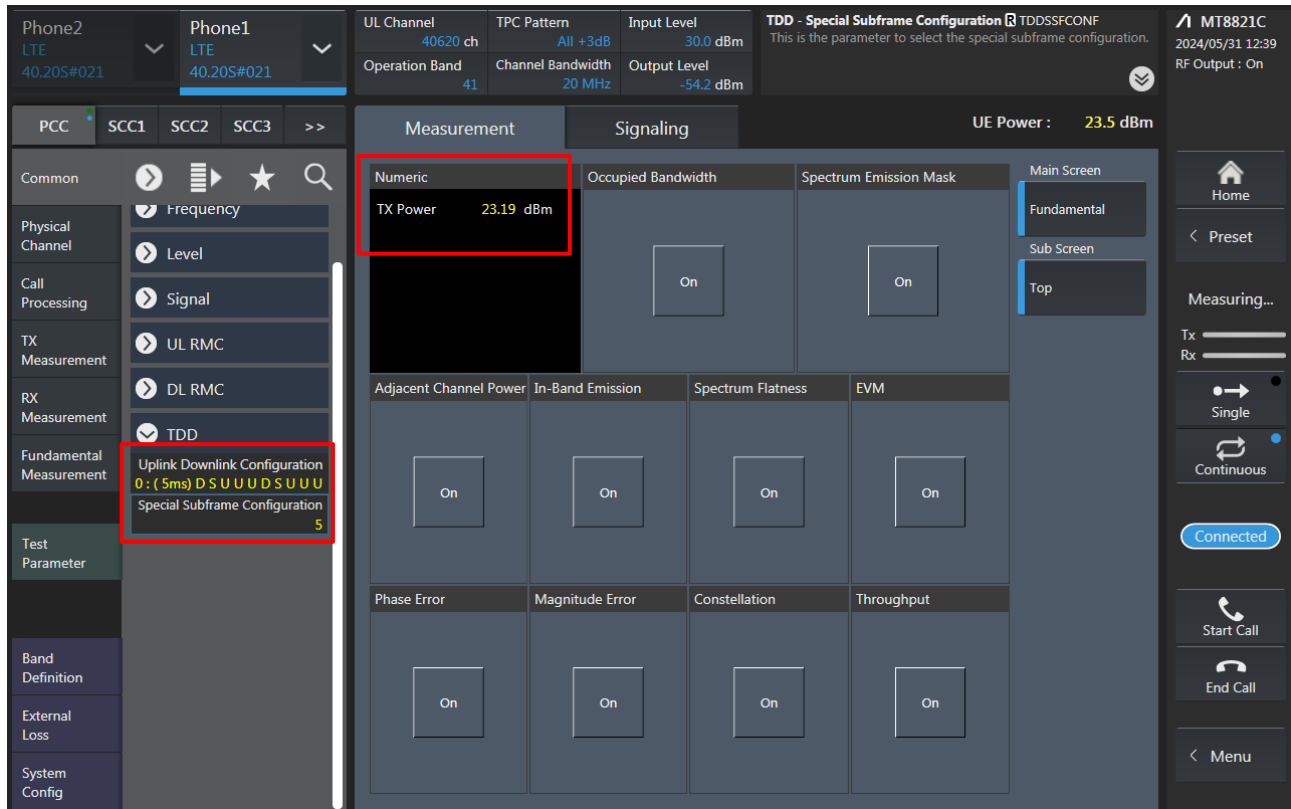


The screenshot shows the WCDMA measurement interface. The top bar displays 'Phone2 LTE 40.20S#032' and 'Phone1 W-CDMA 40.00 #013'. The 'Measurement' tab is active, showing a list of metrics. A red box highlights the 'Power Measurement' section, which includes 'TX Power' at 23.28 dBm. Another red box highlights the 'Power Control' section in the 'Meas Setup' tab, showing 'Power Control' set to 'All 1'. The 'UE Power' is 22.6 dBm. The 'Main Screen' on the right shows 'Fundamental' and 'Sub Screen' options.

<LTE>



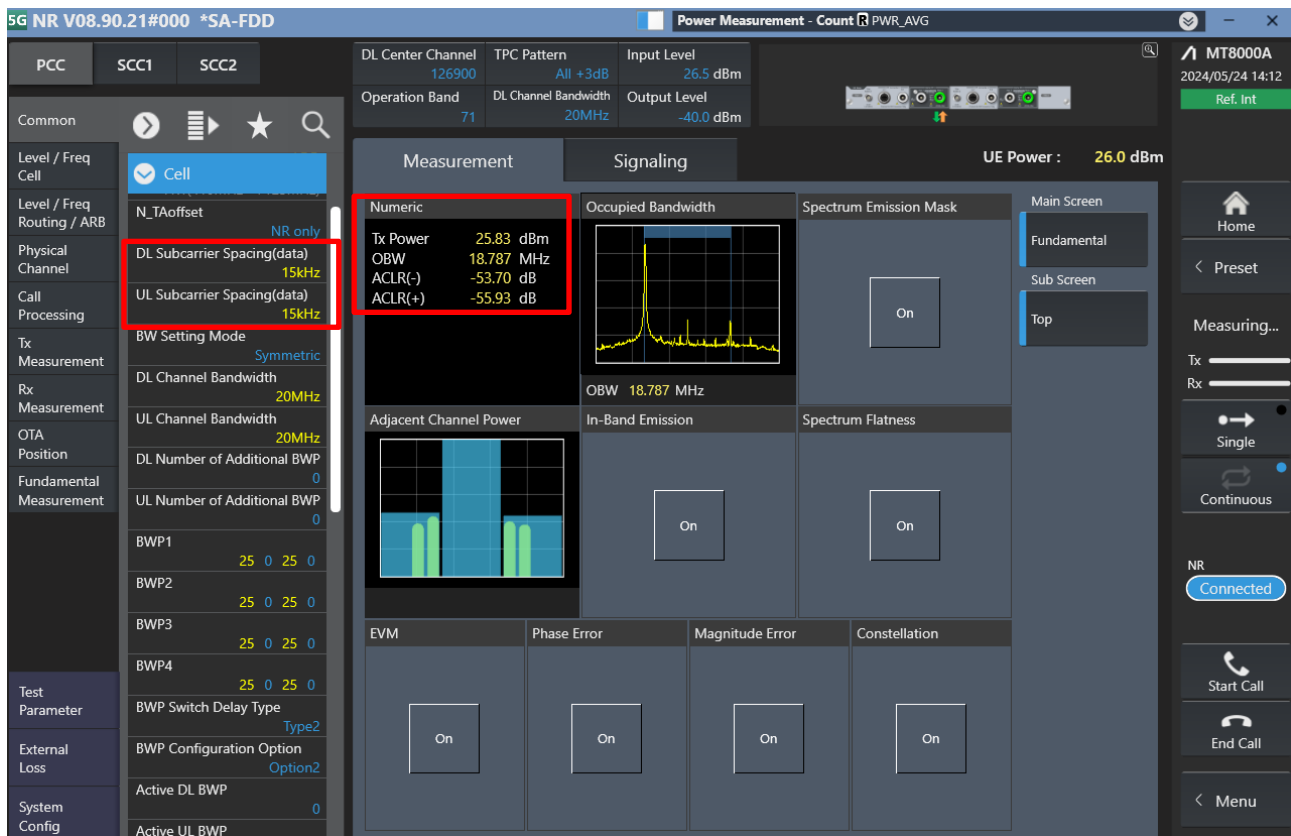
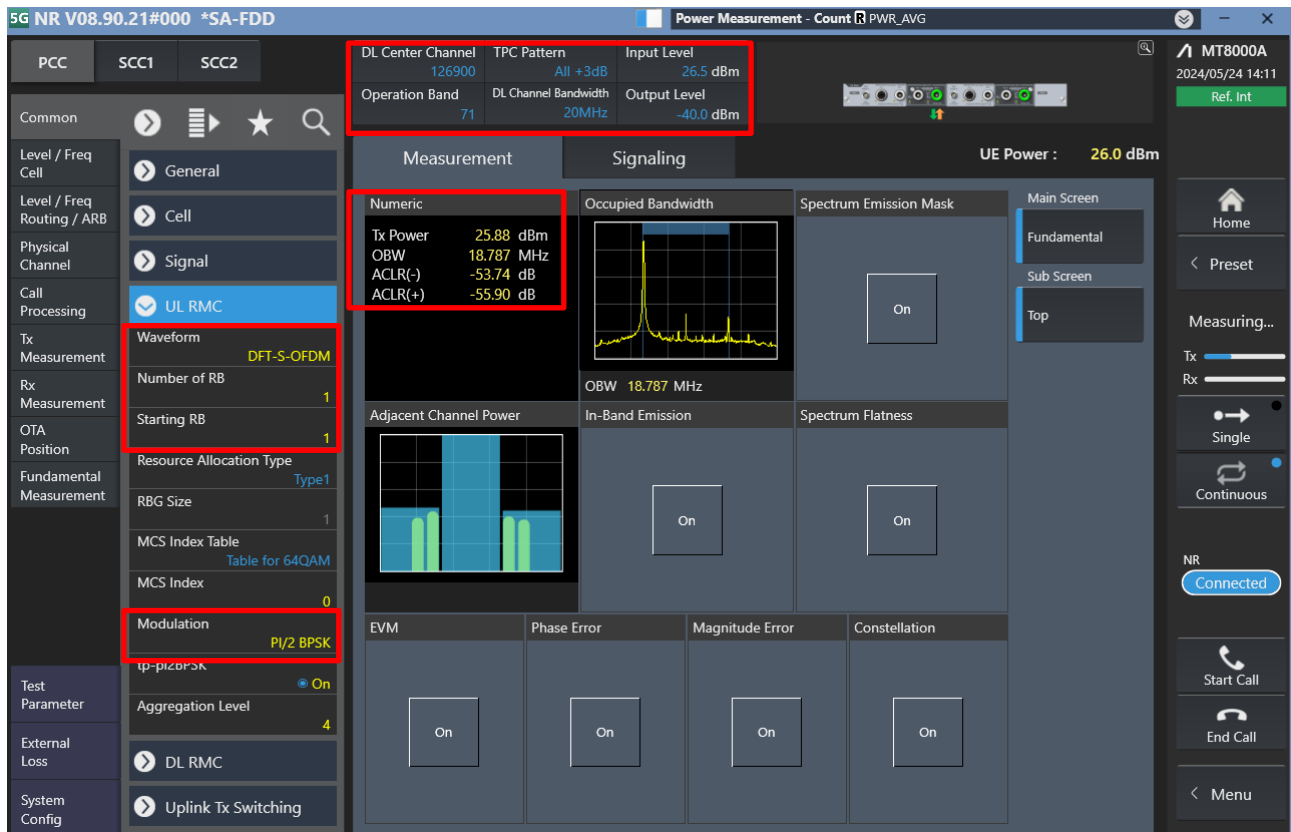
The screenshot shows the LTE measurement interface. The top bar displays 'Phone2 LTE 40.20S#021' and 'Phone1 LTE 40.20S#021'. The 'Measurement' tab is active, showing a list of metrics. A red box highlights the 'Power Measurement' section, which includes 'TX Power' at 23.01 dBm. Another red box highlights the 'Uplink Downlink Configuration' section in the 'Test Parameter' tab, showing 'Uplink Downlink Configuration 1: (5ms) D S U U D D S U U D' and 'Special Subframe Configuration 4'. The 'UE Power' is 23.4 dBm. The 'Main Screen' on the right shows 'Fundamental' and 'Sub Screen' options.

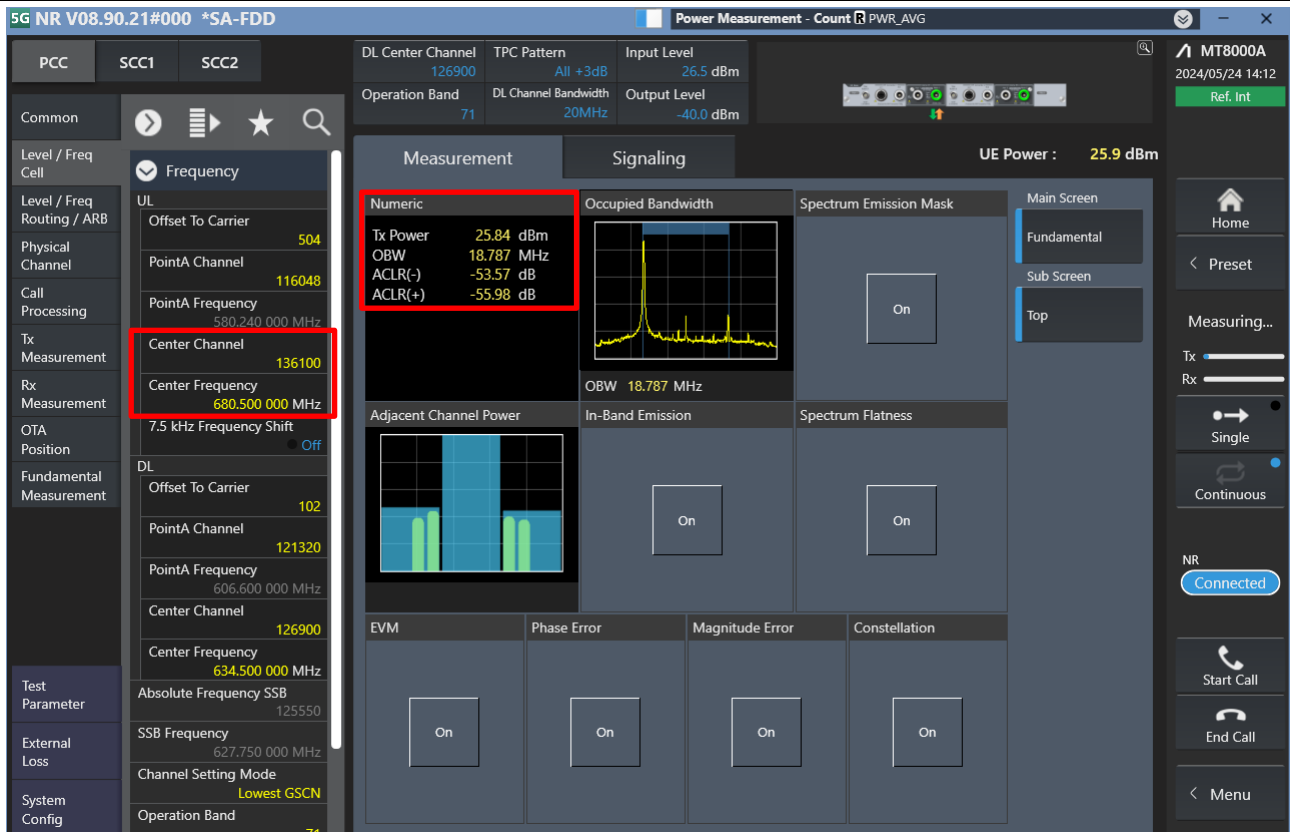
<LTE TDD Power class 3>

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

- Phone Configuration:** Phone2 (LTE, 40.20S#021) and Phone1 (LTE, 40.20S#021).
- Channel and Power Parameters:** 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).
- TDD - Special Subframe Configuration:** TDDSSFCNF (This is the parameter to select the special subframe configuration).
- Measurement Section:** A red box highlights the 'TX Power' measurement value of 23.19 dBm.
- Fundamental Measurement Section:** A red box highlights the 'TDD' option, showing the Uplink Downlink Configuration 0: (5ms) D S U U U D S U U U and Special Subframe Configuration 5.
- Measurement Options:** A grid of measurement options, each with an 'On' button: Occupied Bandwidth, Spectrum Emission Mask, Adjacent Channel Power, In-Band Emission, Spectrum Flatness, EVM, Phase Error, Magnitude Error, Constellation, and Throughput.
- Right Panel:** Includes a 'Main Screen' section with 'Fundamental' and 'Sub Screen' options, a 'Connected' status indicator, and buttons for 'Start Call' and 'End Call'.

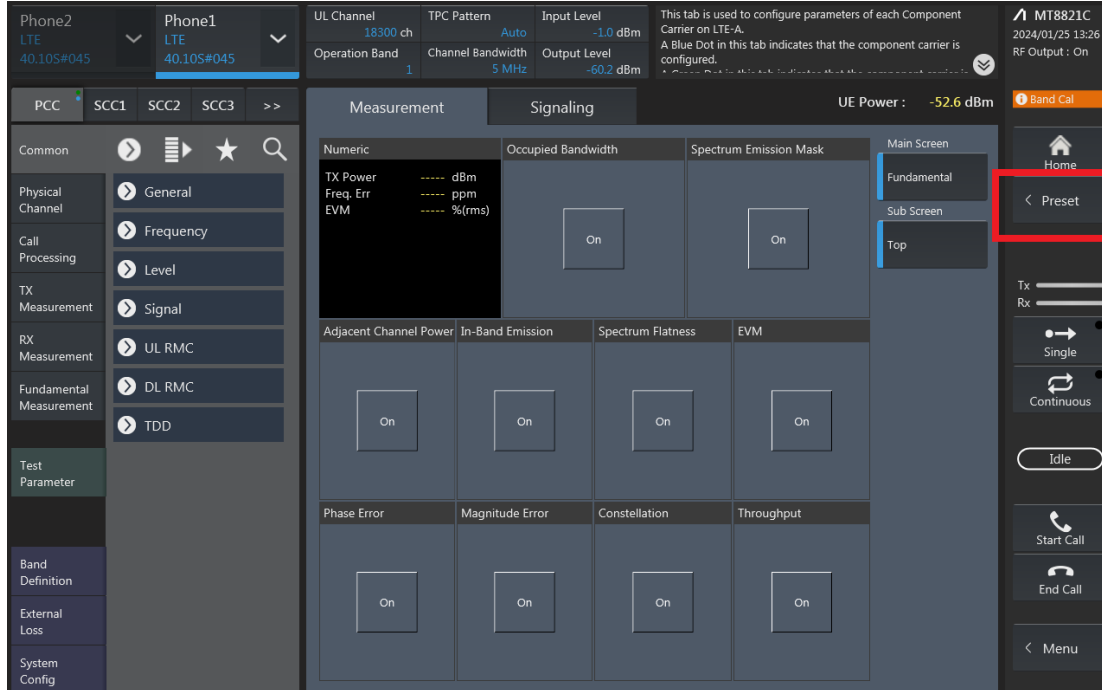
<5G NR FR1>





LTE Uplink and Downlink Carrier Aggregation configurations:

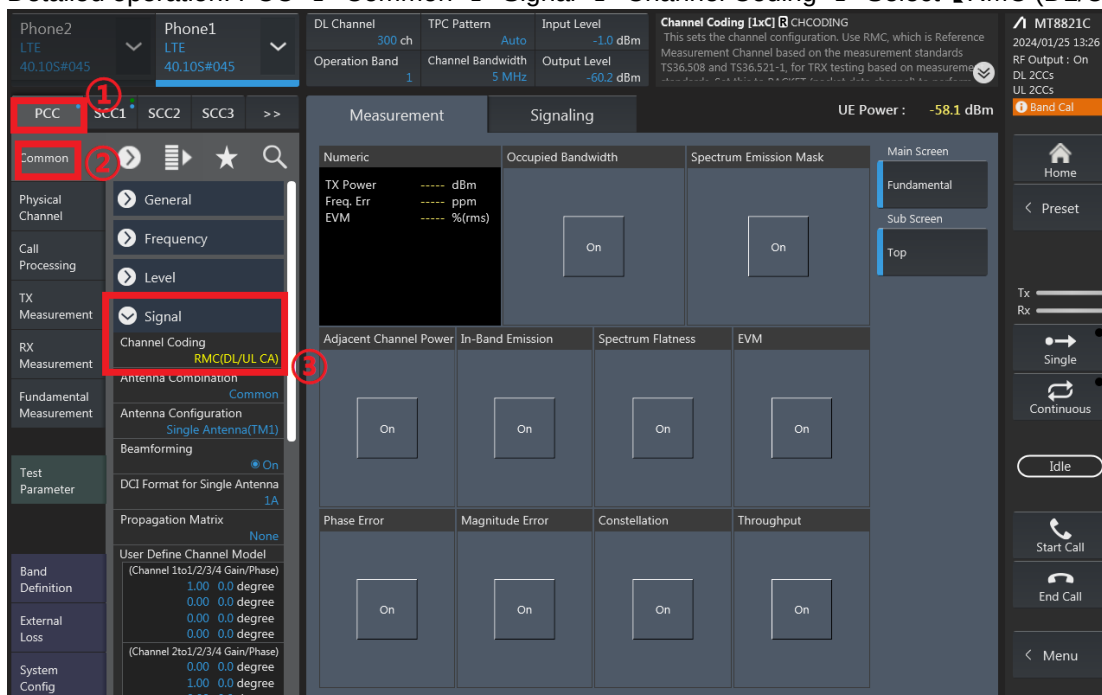
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



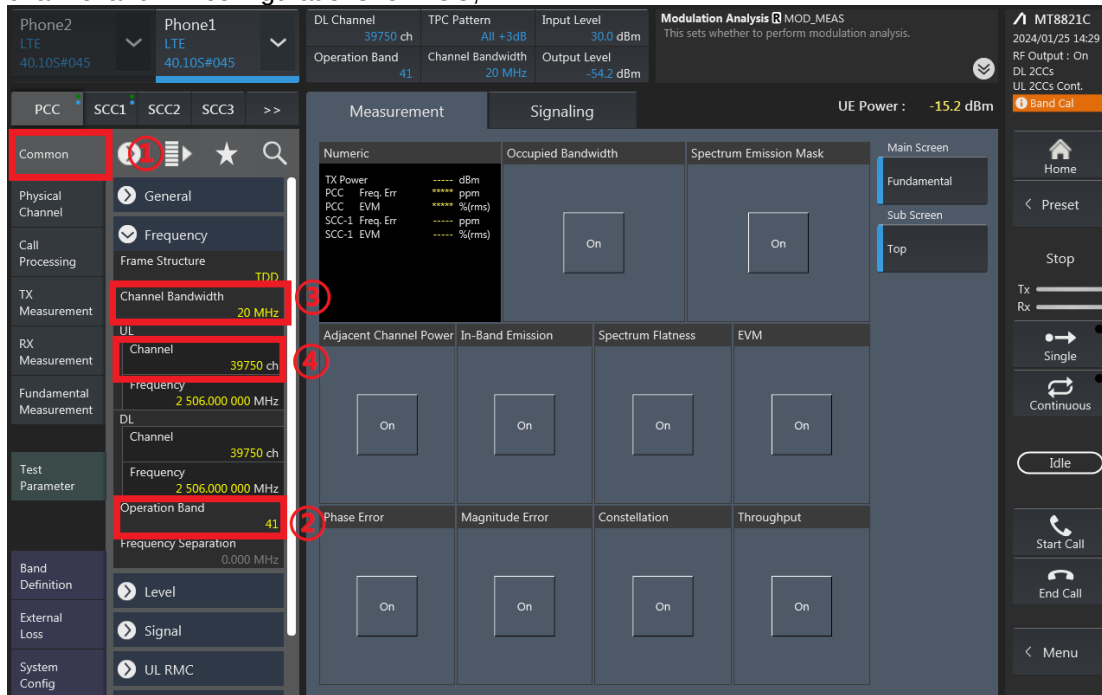
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

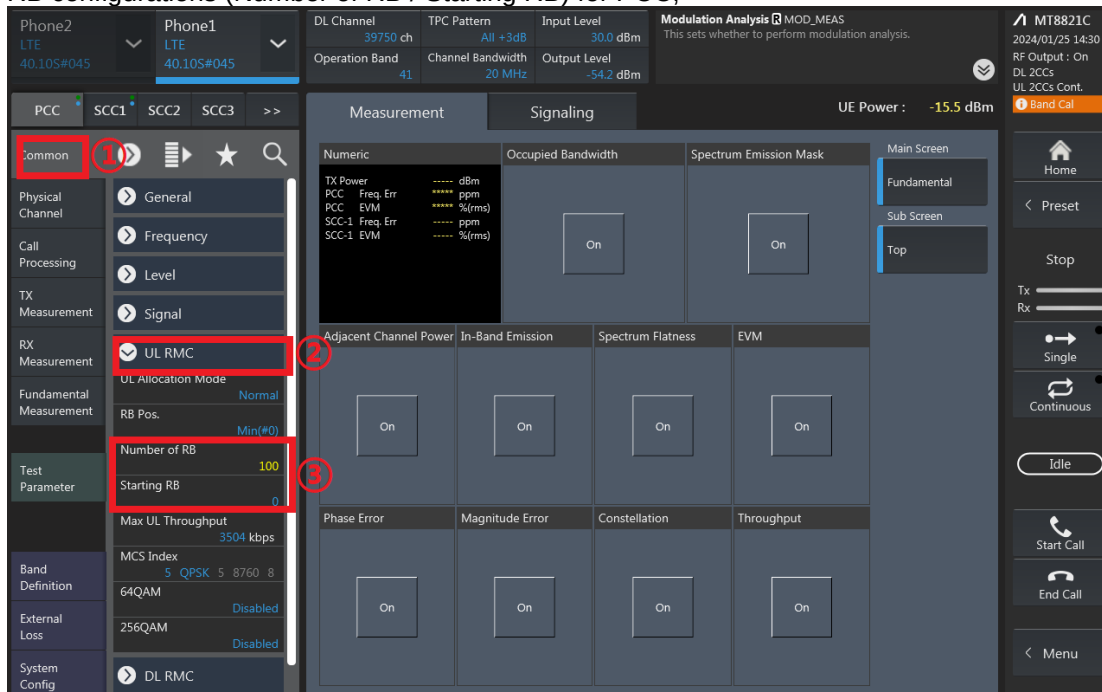
Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



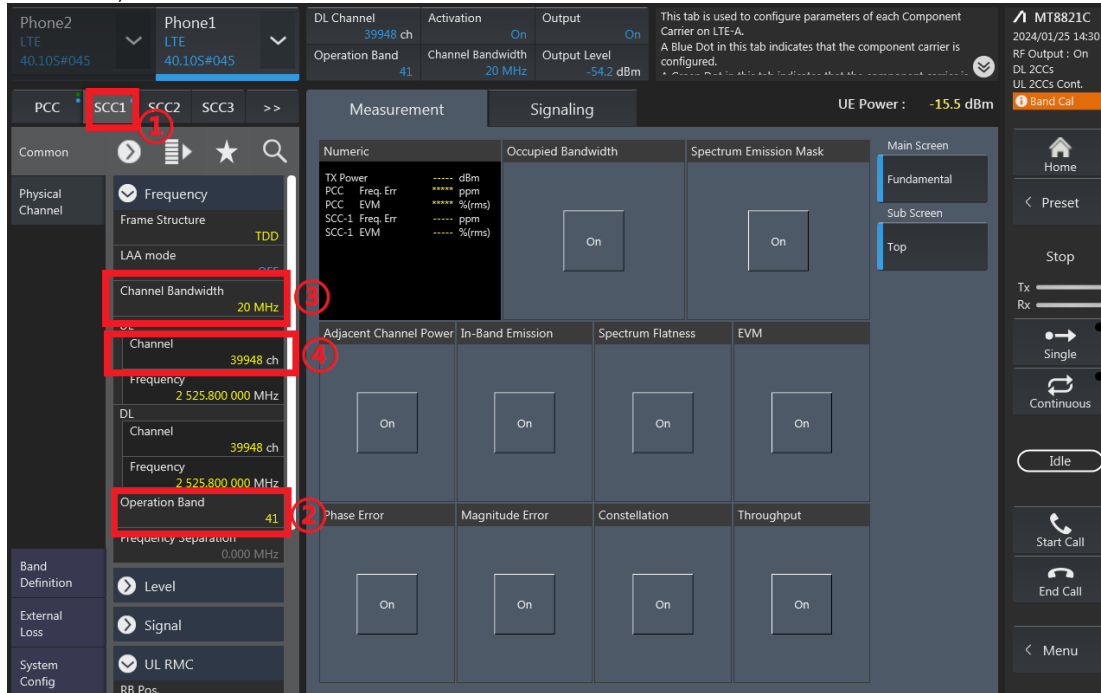
3. PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



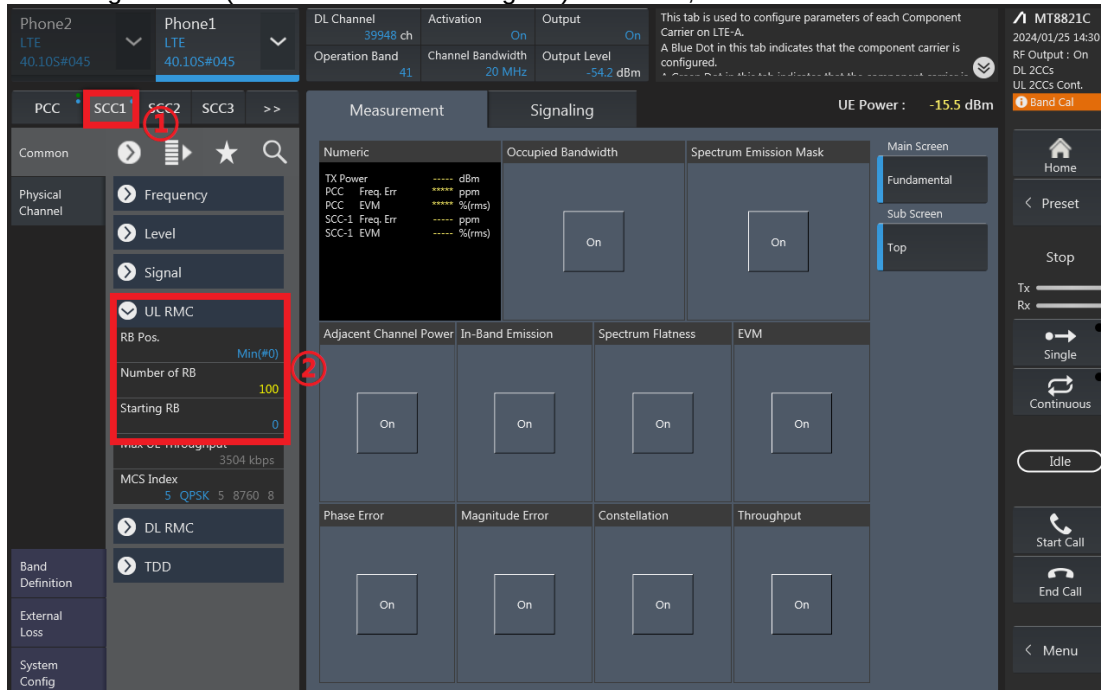
RB configurations (Number of RB / Starting RB) for PCC;



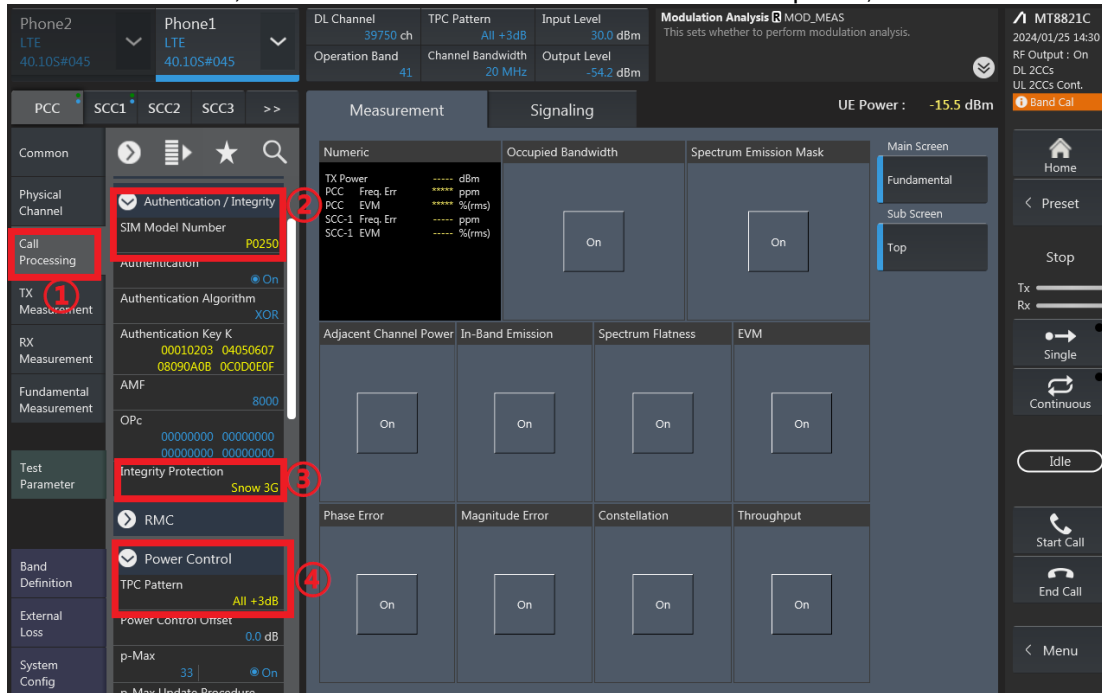
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



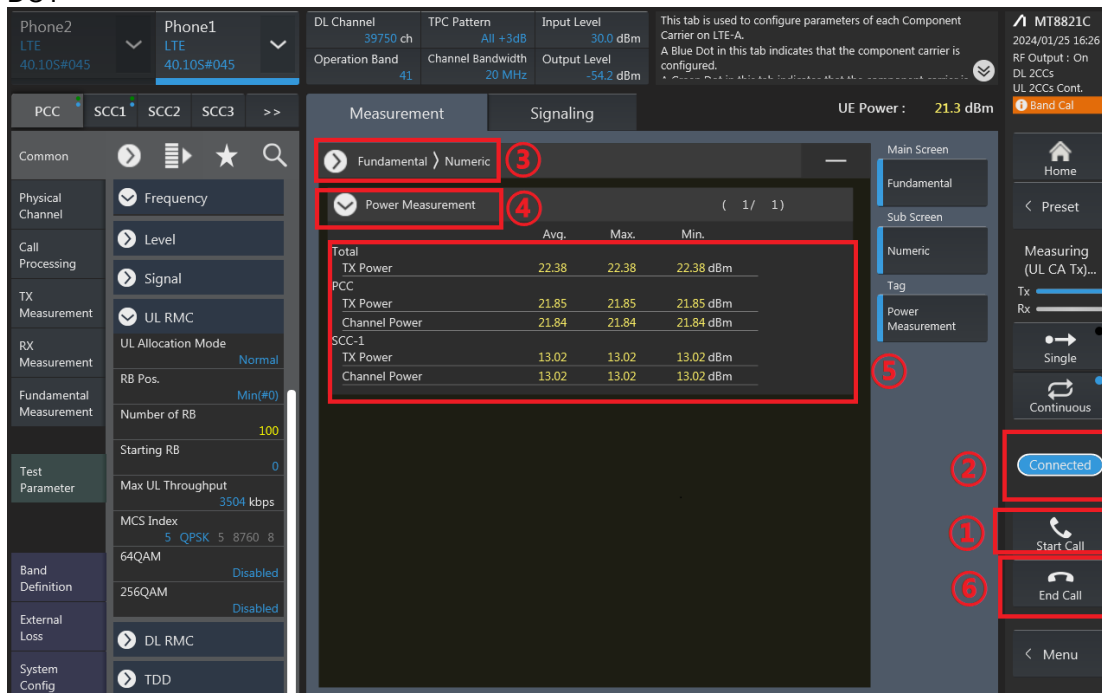
RB configurations (Number of RB / Starting RB) for SCC1;



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



	Avg.	Max.	Min.
Total TX Power	22.38	22.38	22.38 dBm
PCC TX Power	21.85	21.85	21.85 dBm
Channel Power	21.84	21.84	21.84 dBm
SCC-1 TX Power	13.02	13.02	13.02 dBm
Channel Power	13.02	13.02	13.02 dBm

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

<Full & Default Power Mode>

CA_7C Ant 2								
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	25.1	25.70
21100	21298	QPSK	1	99	1	0	25.21	25.70
21350	21152	QPSK	1	0	1	99	25.2	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	25.12	25.70
21100	21298	QPSK	1	99	1	0	25.16	25.70
21350	21152	QPSK	1	0	1	99	25.09	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	24.43	25.70
21100	21298	QPSK	1	99	1	0	24.48	25.70
21350	21152	QPSK	1	0	1	99	24.41	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	23.26	24.50
21100	21298	QPSK	1	99	1	0	23.51	24.50
21350	21152	QPSK	1	0	1	99	23.38	24.50

CA_38C Ant 2								
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	25.16	25.70
37901	38099	QPSK	1	99	1	0	25.33	25.70
38150	37952	QPSK	1	0	1	99	25.28	25.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	25.18	25.70
37901	38099	QPSK	1	99	1	0	25.36	25.70
38150	37952	QPSK	1	0	1	99	25.23	25.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	24.39	25.50
37901	38099	QPSK	1	99	1	0	24.42	25.50
38150	37952	QPSK	1	0	1	99	24.33	25.50

CA_38C 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		
37850	38048	QPSK	1	99	1	0	23.19	24.50
37901	38099	QPSK	1	99	1	0	23.23	24.50
38150	37952	QPSK	1	0	1	99	23.13	24.50

<Reduced Power Mode for ECI1>

CA_7C Ant 2								
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	17.12	17.70
21100	21298	QPSK	1	99	1	0	17.2	17.70
21350	21152	QPSK	1	0	1	99	17.08	17.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	17.61	18.20
21100	21298	QPSK	1	99	1	0	17.66	18.20
21350	21152	QPSK	1	0	1	99	17.63	18.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	24.43	25.70
21100	21298	QPSK	1	99	1	0	24.48	25.70
21350	21152	QPSK	1	0	1	99	24.41	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	17.39	18.50
21100	21298	QPSK	1	99	1	0	17.43	18.50
21350	21152	QPSK	1	0	1	99	17.35	18.50

CA_38C Ant 2								
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	19.05	19.70
37901	38099	QPSK	1	99	1	0	19.15	19.70
38150	37952	QPSK	1	0	1	99	19.04	19.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	19.72	20.20
37901	38099	QPSK	1	99	1	0	19.78	20.20
38150	37952	QPSK	1	0	1	99	19.69	20.20

CA_38C 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		
37850	38048	QPSK	1	99	1	0	24.39	25.50
37901	38099	QPSK	1	99	1	0	24.42	25.50
38150	37952	QPSK	1	0	1	99	24.33	25.50

CA_38C 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		
37850	38048	QPSK	1	99	1	0	19.05	20.50
37901	38099	QPSK	1	99	1	0	19.17	20.50
38150	37952	QPSK	1	0	1	99	19.1	20.50

<Reduced Power Mode for ECI3>

CA_7C Ant 2								
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	17.74	18.20
21100	21298	QPSK	1	99	1	0	17.85	18.20
21350	21152	QPSK	1	0	1	99	17.77	18.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	19.19	19.70
21100	21298	QPSK	1	99	1	0	19.23	19.70
21350	21152	QPSK	1	0	1	99	19.07	19.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	20.19	21.20
21100	21298	QPSK	1	99	1	0	20.24	21.20
21350	21152	QPSK	1	0	1	99	20.15	21.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	18.88	20.00
21100	21298	QPSK	1	99	1	0	19.06	20.00
21350	21152	QPSK	1	0	1	99	18.93	20.00

CA_38C Ant 2								
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	19.05	19.70
37901	38099	QPSK	1	99	1	0	19.15	19.70
38150	37952	QPSK	1	0	1	99	19.04	19.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	21.79	22.20
37901	38099	QPSK	1	99	1	0	21.82	22.20
38150	37952	QPSK	1	0	1	99	21.68	22.20

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.91	22.00
37901	38099	QPSK	1	99	1	0	20.99	22.00
38150	37952	QPSK	1	0	1	99	20.93	22.00

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.82	22.00
37901	38099	QPSK	1	99	1	0	20.83	22.00
38150	37952	QPSK	1	0	1	99	20.72	22.00

<Reduced Power Mode for ECI4>

CA_7C Ant 2								
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	25.1	25.70
21100	21298	QPSK	1	99	1	0	25.21	25.70
21350	21152	QPSK	1	0	1	99	25.2	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	25.12	25.70
21100	21298	QPSK	1	99	1	0	25.16	25.70
21350	21152	QPSK	1	0	1	99	25.09	25.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	20.19	21.20
21100	21298	QPSK	1	99	1	0	20.24	21.20
21350	21152	QPSK	1	0	1	99	20.15	21.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	18.88	20.00
21100	21298	QPSK	1	99	1	0	19.06	20.00
21350	21152	QPSK	1	0	1	99	18.93	20.00

CA_38C Ant 2								
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	25.16	25.70
37901	38099	QPSK	1	99	1	0	25.33	25.70
38150	37952	QPSK	1	0	1	99	25.28	25.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	25.18	25.70
37901	38099	QPSK	1	99	1	0	25.36	25.70
38150	37952	QPSK	1	0	1	99	25.23	25.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.91	22.00
37901	38099	QPSK	1	99	1	0	20.99	22.00
38150	37952	QPSK	1	0	1	99	20.93	22.00

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.82	22.00
37901	38099	QPSK	1	99	1	0	20.83	22.00
38150	37952	QPSK	1	0	1	99	20.72	22.00

<Reduced Power Mode for ECI5>

CA_7C Ant 2								
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	17.12	17.70
21100	21298	QPSK	1	99	1	0	17.2	17.70
21350	21152	QPSK	1	0	1	99	17.08	17.70

CA_7C 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		
20850	21048	QPSK	1	99	1	0	17.61	18.20
21100	21298	QPSK	1	99	1	0	17.66	18.20
21350	21152	QPSK	1	0	1	99	17.63	18.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	20.19	21.20
21100	21298	QPSK	1	99	1	0	20.24	21.20
21350	21152	QPSK	1	0	1	99	20.15	21.20

CA_7C 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		
20850	21048	QPSK	1	99	1	0	17.39	18.50
21100	21298	QPSK	1	99	1	0	17.43	18.50
21350	21152	QPSK	1	0	1	99	17.35	18.50

CA_38C Ant 2								
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	19.05	19.70
37901	38099	QPSK	1	99	1	0	19.15	19.70
38150	37952	QPSK	1	0	1	99	19.04	19.70

CA_38C 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		
37850	38048	QPSK	1	99	1	0	19.72	20.20
37901	38099	QPSK	1	99	1	0	19.78	20.20
38150	37952	QPSK	1	0	1	99	19.69	20.20

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.91	22.00
37901	38099	QPSK	1	99	1	0	20.99	22.00
38150	37952	QPSK	1	0	1	99	20.93	22.00

CA_38C 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		
37850	38048	QPSK	1	99	1	0	19.05	20.50
37901	38099	QPSK	1	99	1	0	19.17	20.50
38150	37952	QPSK	1	0	1	99	19.1	20.50