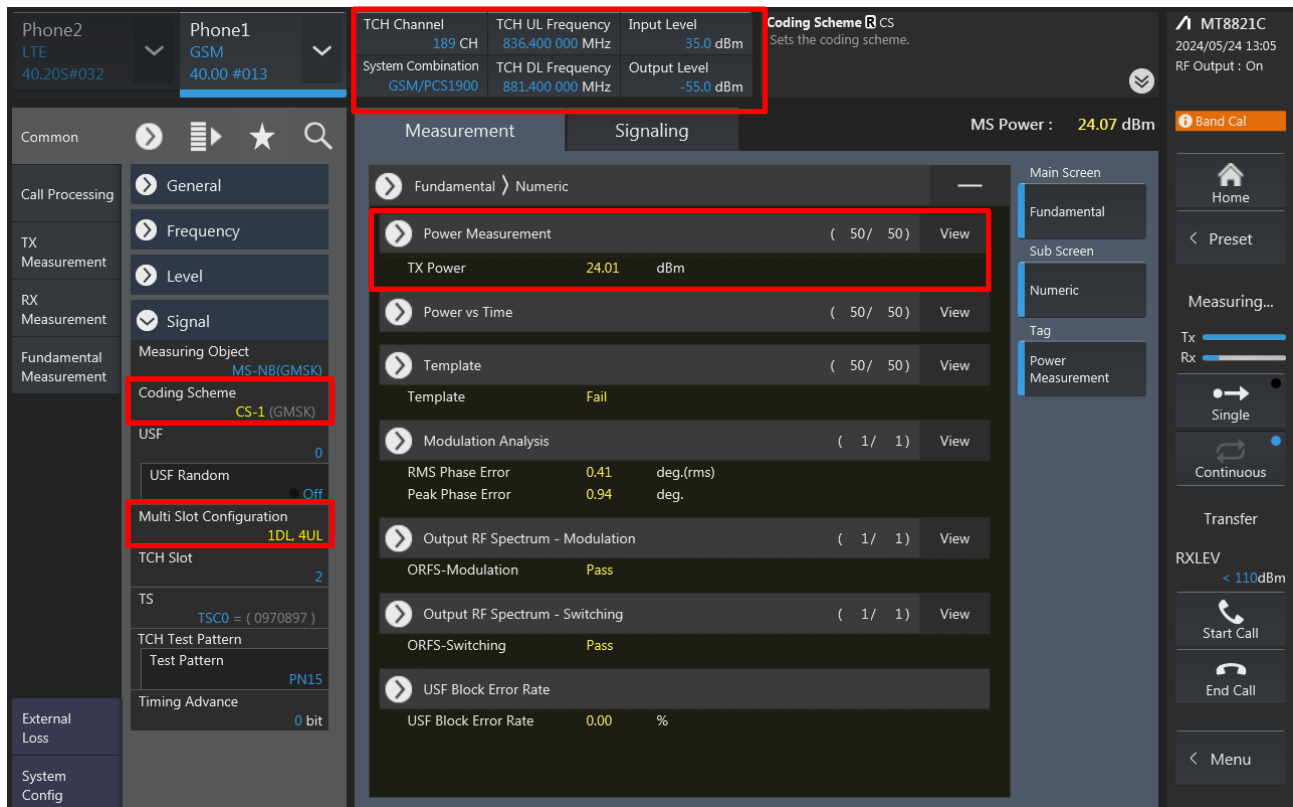


Power measurement connection diagram:

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.

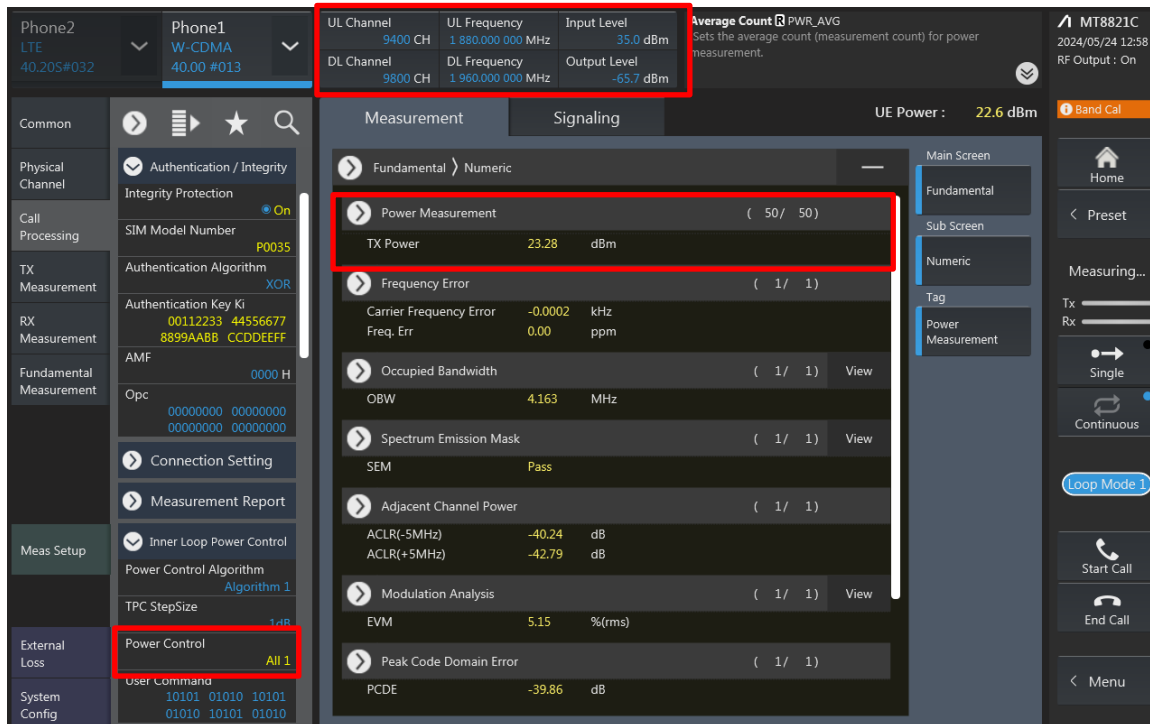
<GSM>



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

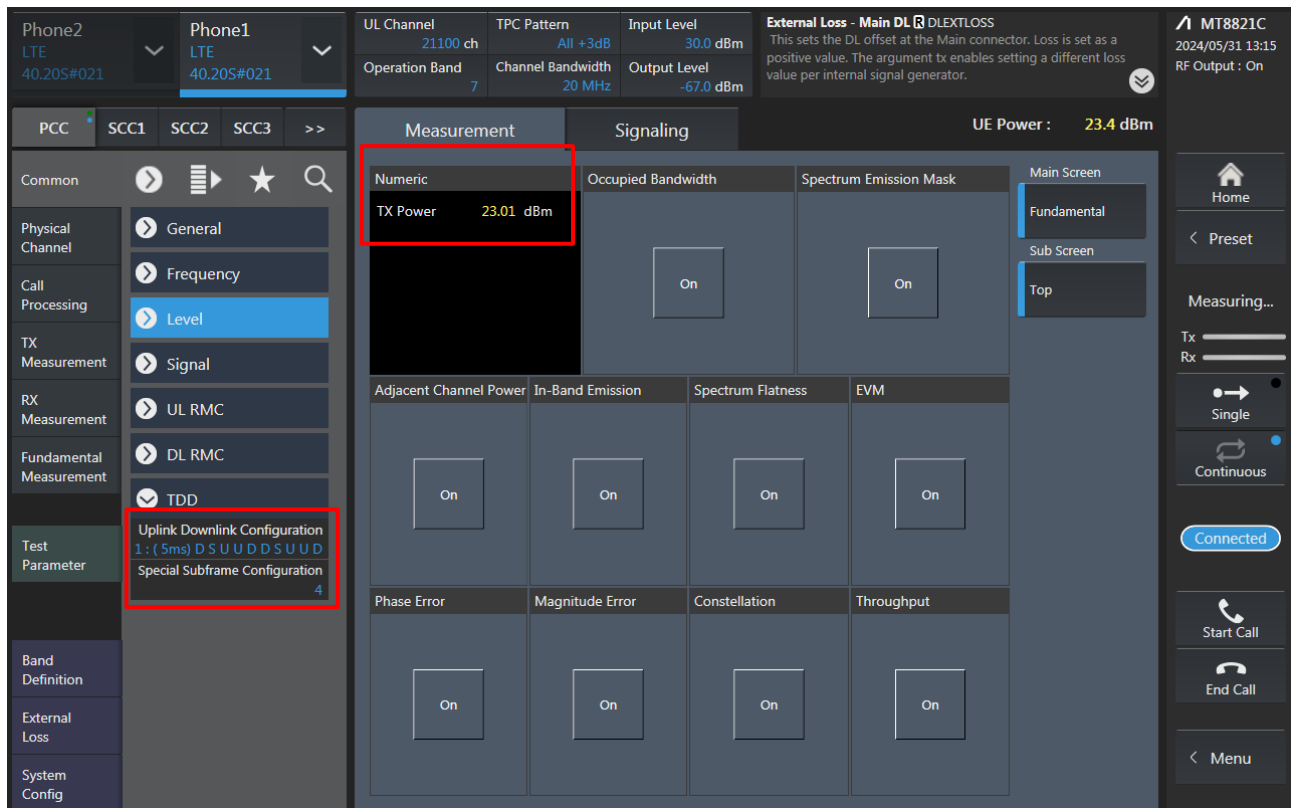
- Top Bar:** Shows Phone2 (LTE, 40.205#032) and Phone1 (GSM, 40.00 #013). The TCH Channel is 189 CH, TCH UL Frequency is 836.400 000 MHz, Input Level is 35.0 dBm, and TCH DL Frequency is 881.400 000 MHz. The Coding Scheme is CS.
- Left Sidebar:** Contains navigation options like Call Processing, TX Measurement, RX Measurement, Fundamental Measurement, and External Loss.
- Main Area:**
 - Measurement Tab:** Displays various measurement results. The 'Power Measurement' section shows TX Power as 24.01 dBm. Other sections include Power vs Time, Template, Modulation Analysis, Output RF Spectrum - Modulation, Output RF Spectrum - Switching, and USF Block Error Rate.
 - Signaling Tab:** Shows signaling information.
- Right Sidebar:** Includes a 'Main Screen' section with 'Fundamental', 'Sub Screen', 'Numeric', and 'Tag' options. It also features a 'Band Cal' button and a 'Measuring...' section with 'Single' and 'Continuous' modes.

<WCDMA>

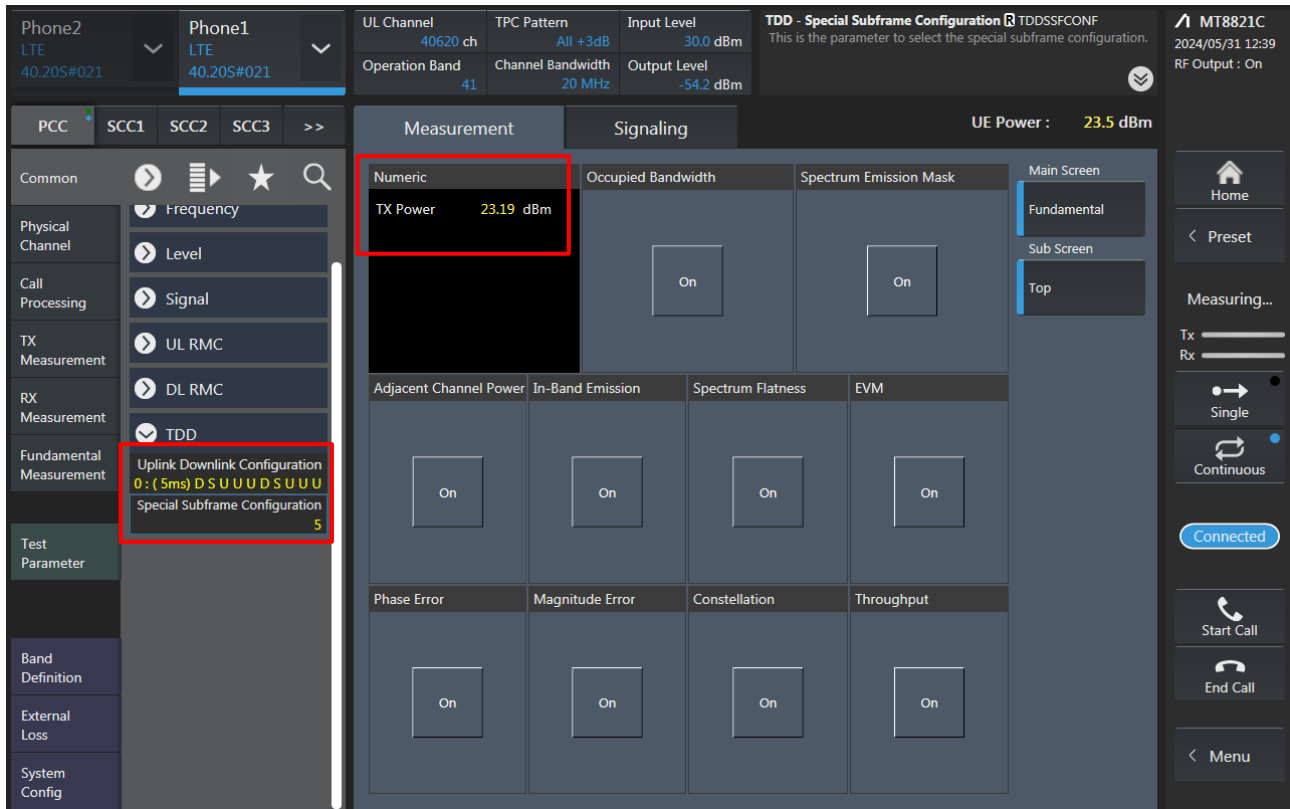


The screenshot shows the WCDMA measurement interface. The top bar displays 'Phone2 LTE 40.20S#032' and 'Phone1 W-CDMA 40.00 #013'. The 'Measurement' tab is active, showing 'Fundamental' and 'Numeric' views. The 'Power Measurement' section is highlighted with a red box, showing 'TX Power' at 23.28 dBm. The 'Occupied Bandwidth' section shows 'OBW' at 4.163 MHz. 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 'Band Cal' button is visible on the right. The 'Common' sidebar on the left includes 'Physical Channel', 'Call Processing', 'TX Measurement', 'RX Measurement', 'Fundamental Measurement', 'Meas Setup', 'External Loss', 'System Config', and 'Power Control' (highlighted with a red box).

<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 'Numeric' and 'Occupied Bandwidth' views. The 'Power Measurement' section is highlighted with a red box, showing 'TX Power' at 23.01 dBm. The 'Occupied Bandwidth' section shows 'OBW' at 20 MHz. 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 23.4 dBm. The 'Band Cal' button is visible on the right. The 'Common' sidebar on the left includes 'Physical Channel', 'Call Processing', 'TX Measurement', 'RX Measurement', 'Fundamental Measurement', 'Meas Setup', 'External Loss', 'System Config', and 'Power Control' (highlighted with a red box). The 'Test Parameter' section shows 'Uplink Downlink Configuration 1: (5ms) D S U U D D S U U D' and '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
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

Physical Channel
Call Processing
TX Measurement
RX Measurement
Fundamental Measurement
Test Parameter
Band Definition
External Loss
System Config

Measurement
Signaling

UE Power : 23.5 dBm

Numeric
TX Power 23.19 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

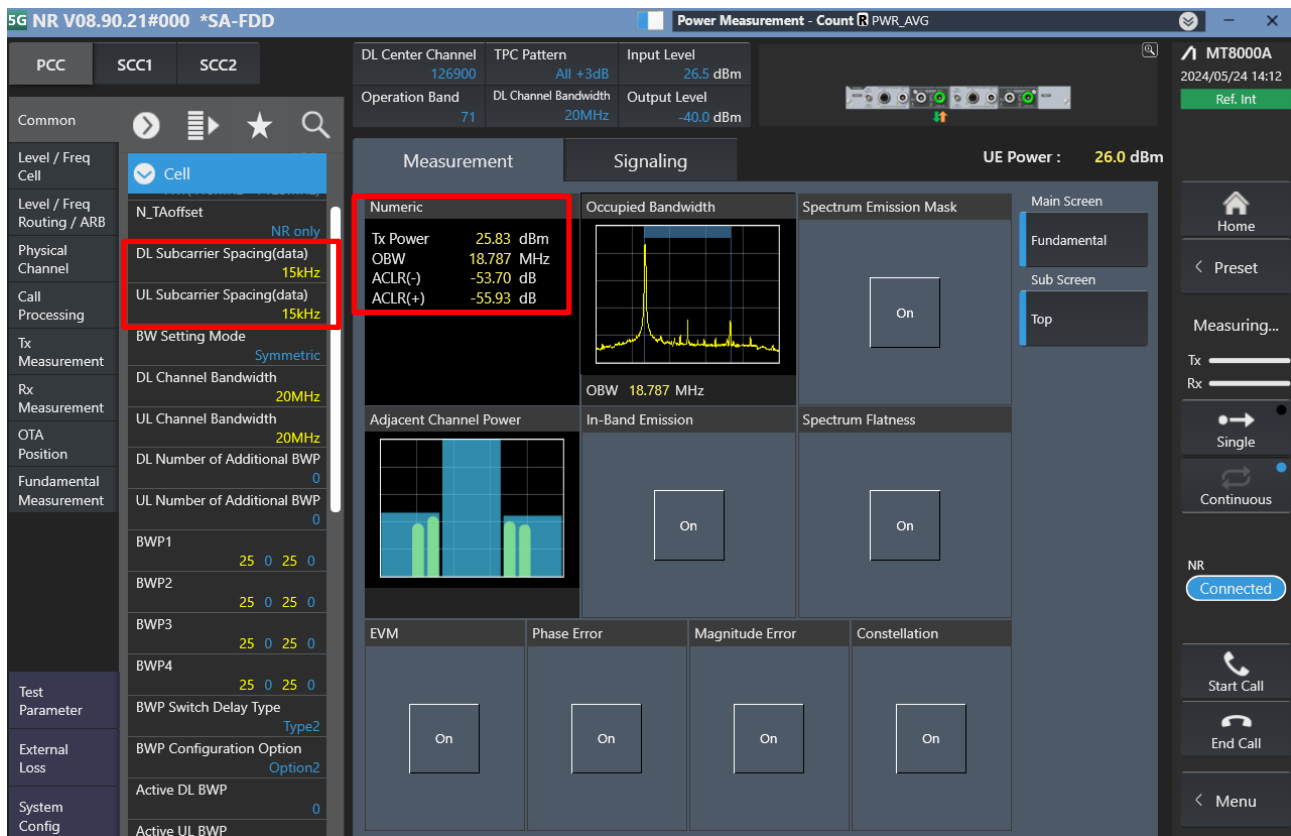
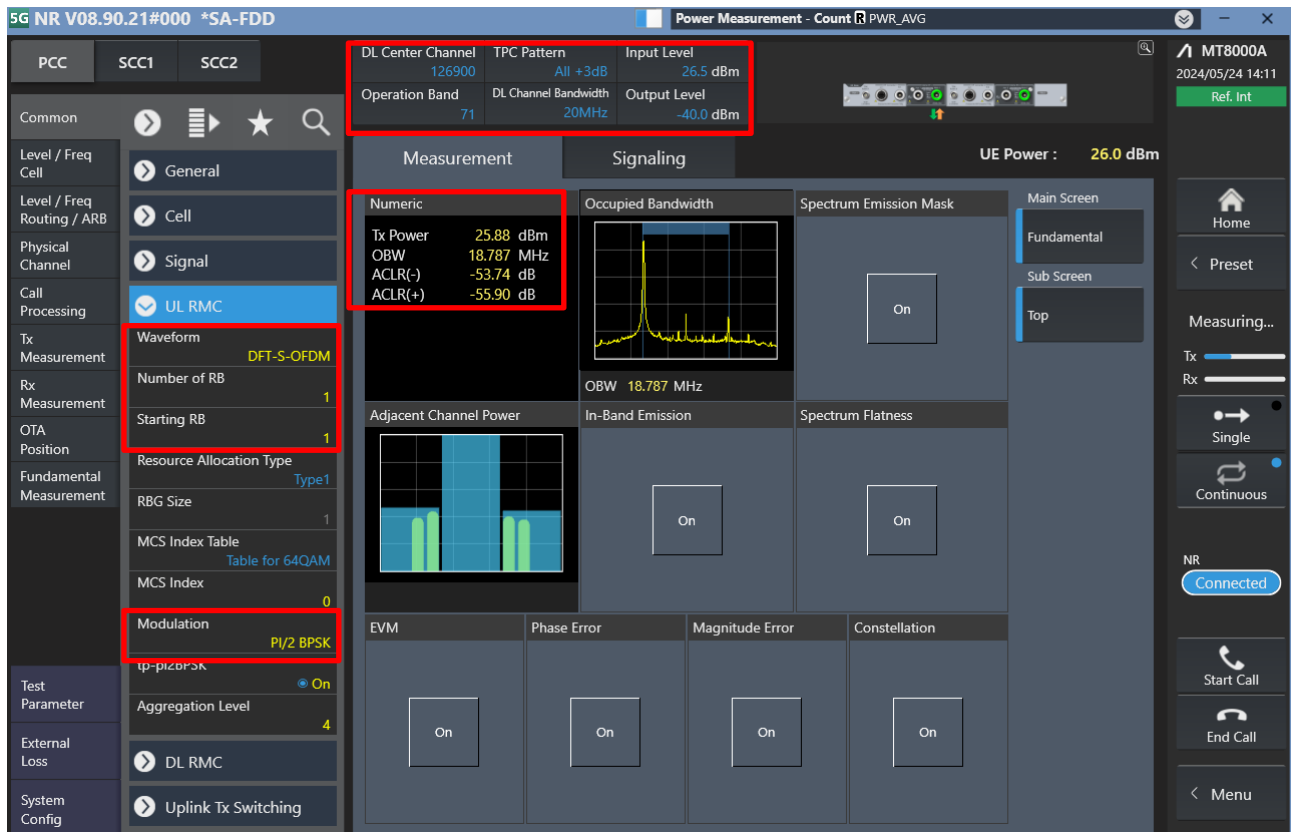
Constellation
On

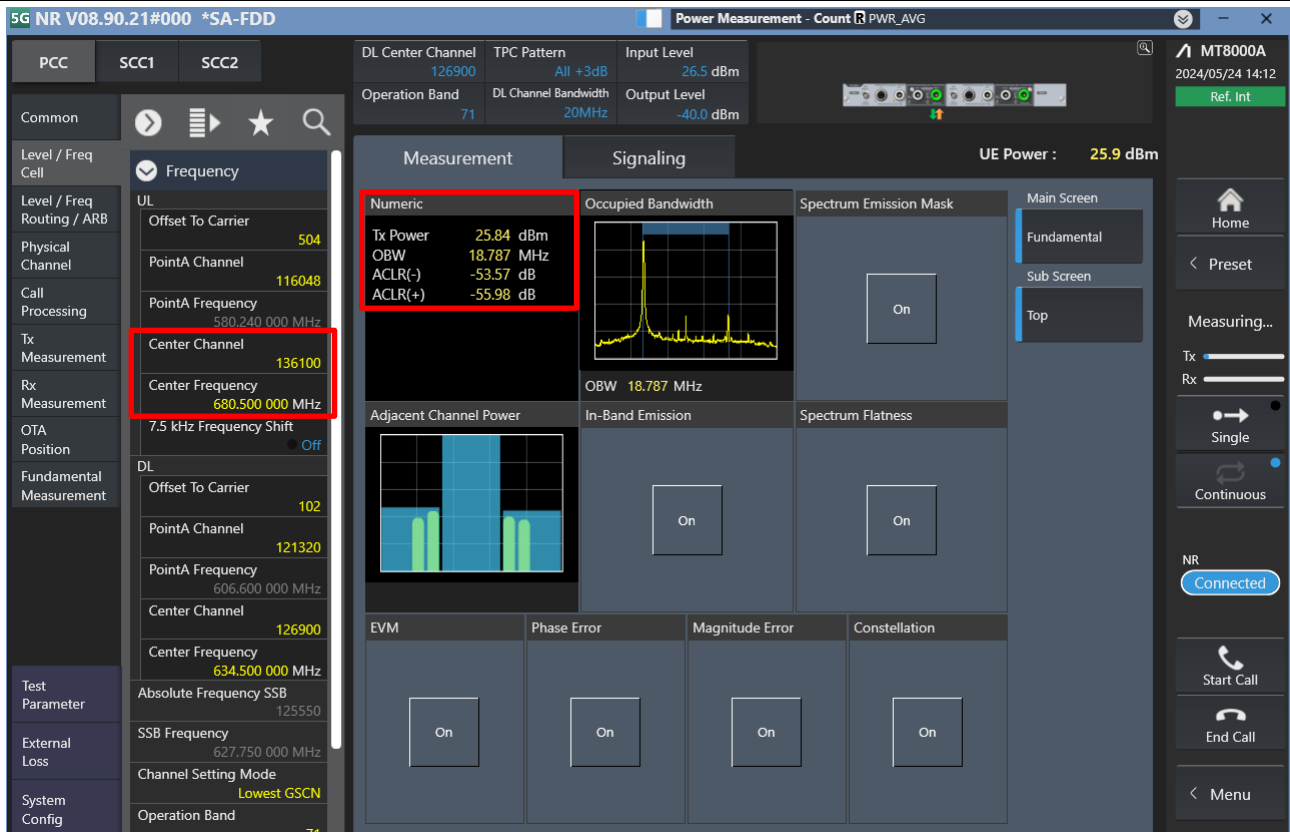
Throughput
On

Main Screen
Fundamental
Sub Screen
Top

Home
Preset
Measuring...
Tx
Rx
Single
Continuous
Connected
Start Call
End Call
Menu

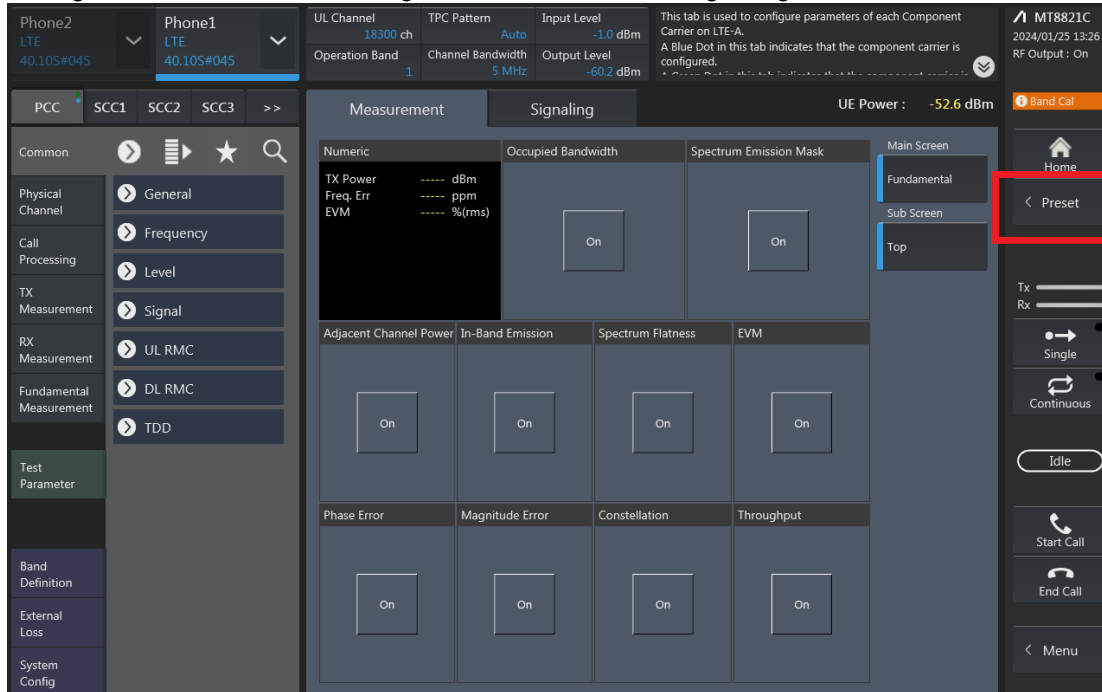
<5G NR FR1>





LTE Uplink and Downlink Carrier Aggregation configurations:

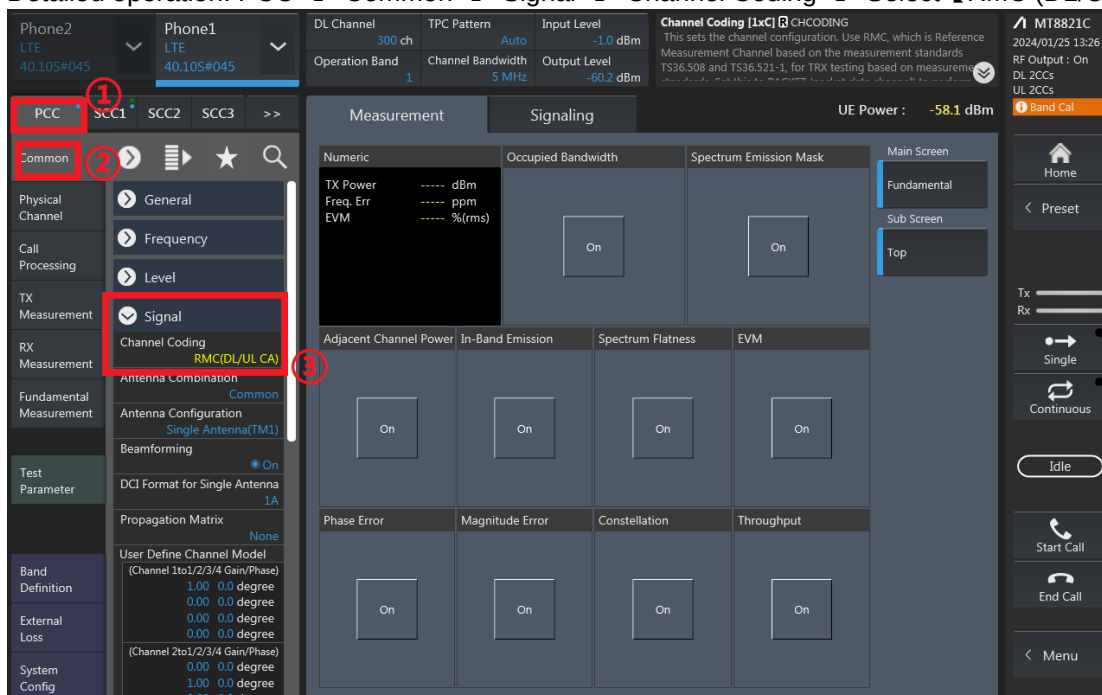
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



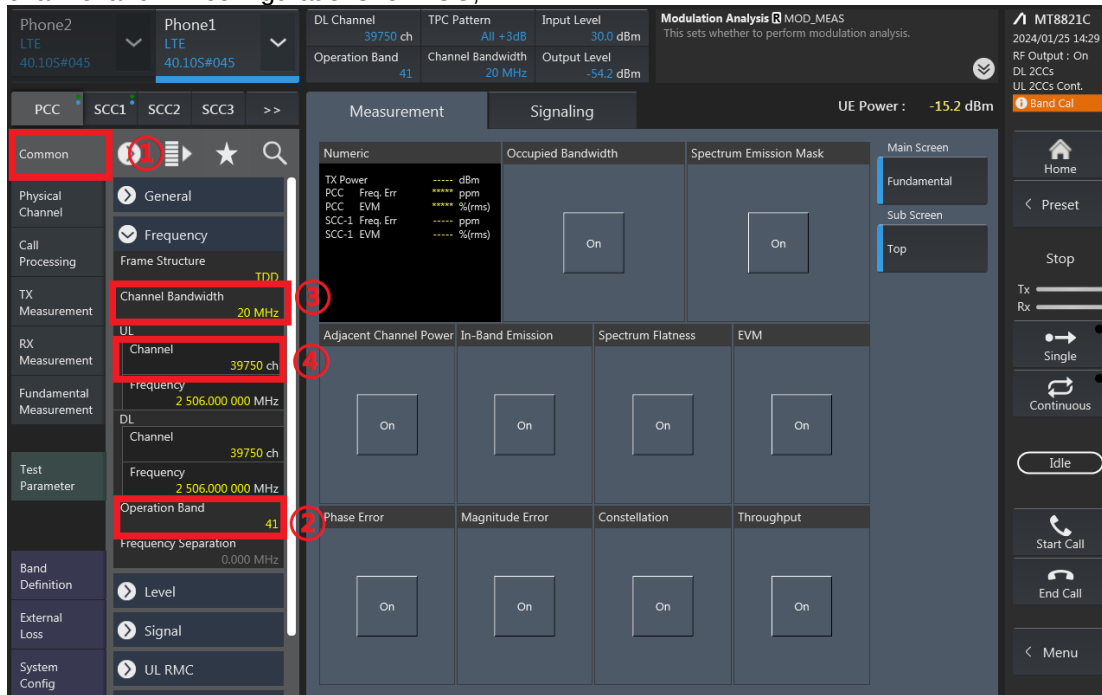
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

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.

PCC SCC1 SCC2 SCC3 >>

Measurement Signaling UE Power : -15.2 dBm

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 Channel 39750 ch Frequency 2 506.000 000 MHz Operation Band 41 Frequency Separation 0.000 MHz

Band Definition Level

External Loss Signal

System Config UL RMC

Numeric Occupied Bandwidth Spectrum Emission Mask

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

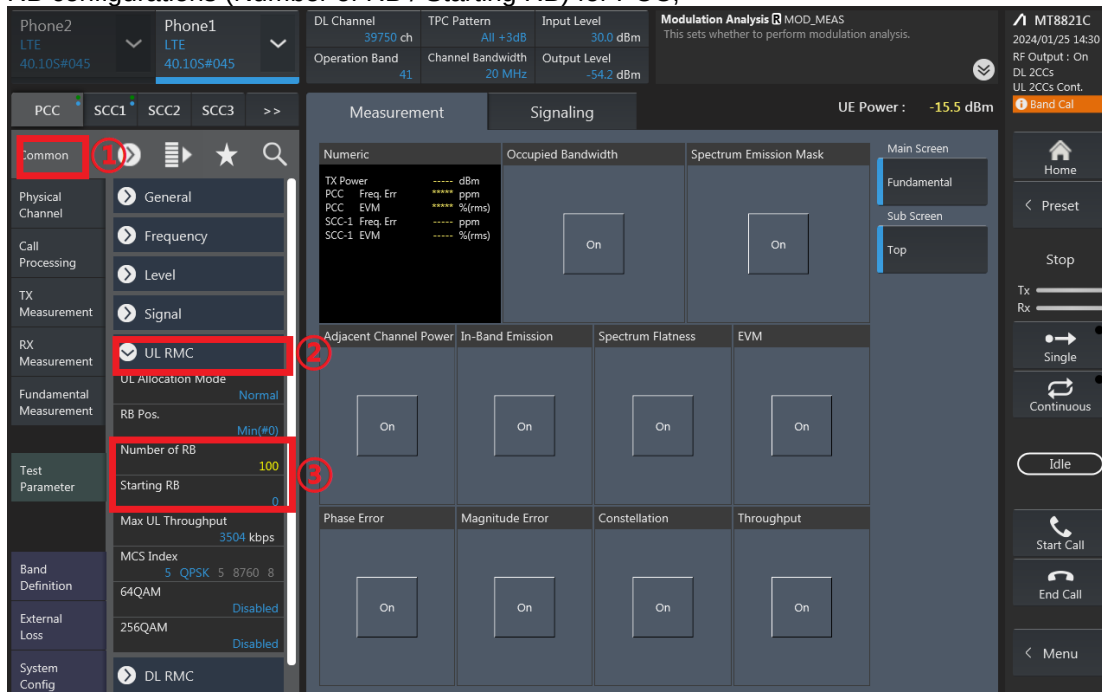
Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

Main Screen Fundamental Sub Screen Top

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

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.

PCC SCC1 SCC2 SCC3 >>

Measurement Signaling UE Power : -15.5 dBm

Common

Physical Channel General

Call Processing Frequency

TX Measurement Level

RX Measurement Signal

Fundamental Measurement UL RMC

Test Parameter 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 Disabled

Band Definition DL RMC

Numeric Occupied Bandwidth Spectrum Emission Mask

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

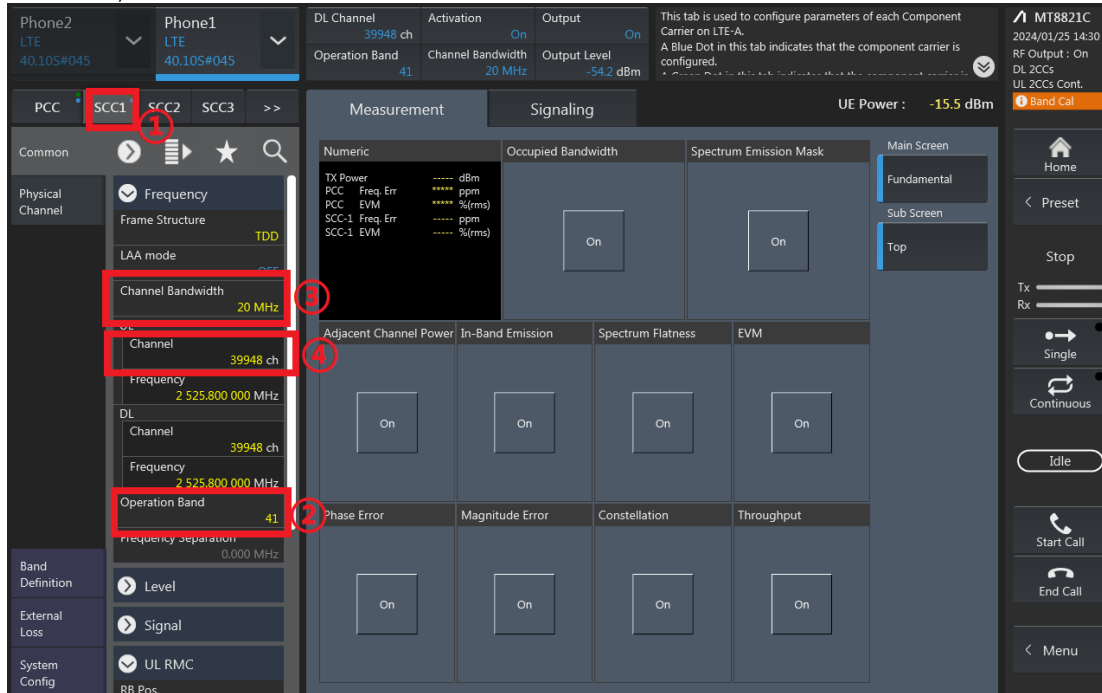
Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

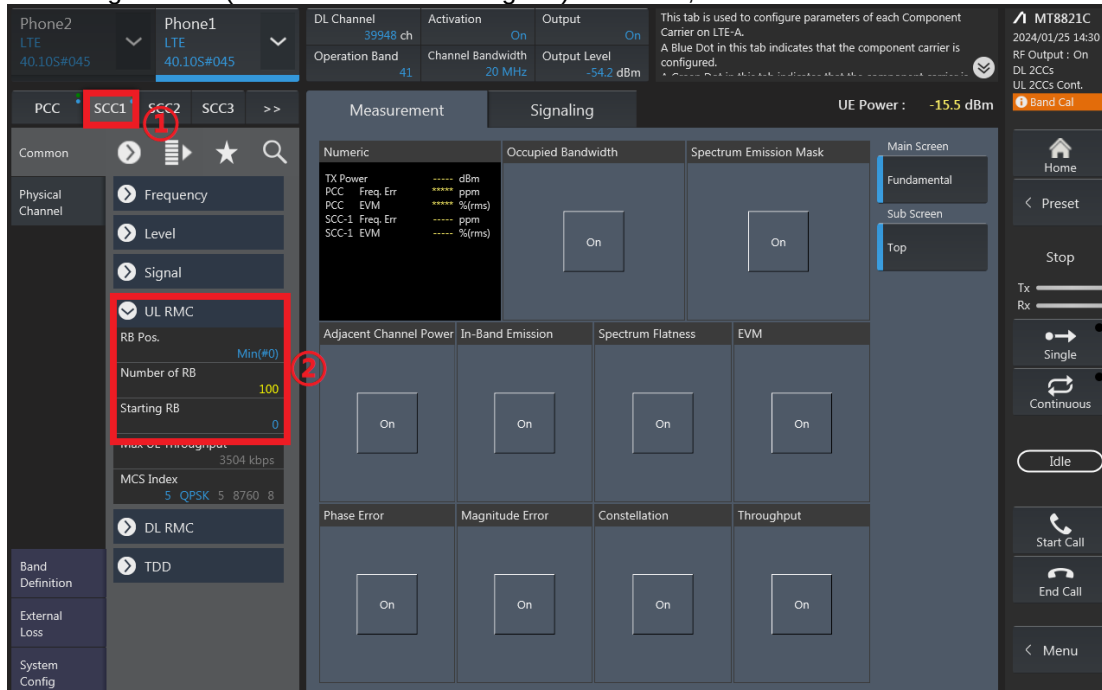
Main Screen Fundamental Sub Screen Top

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

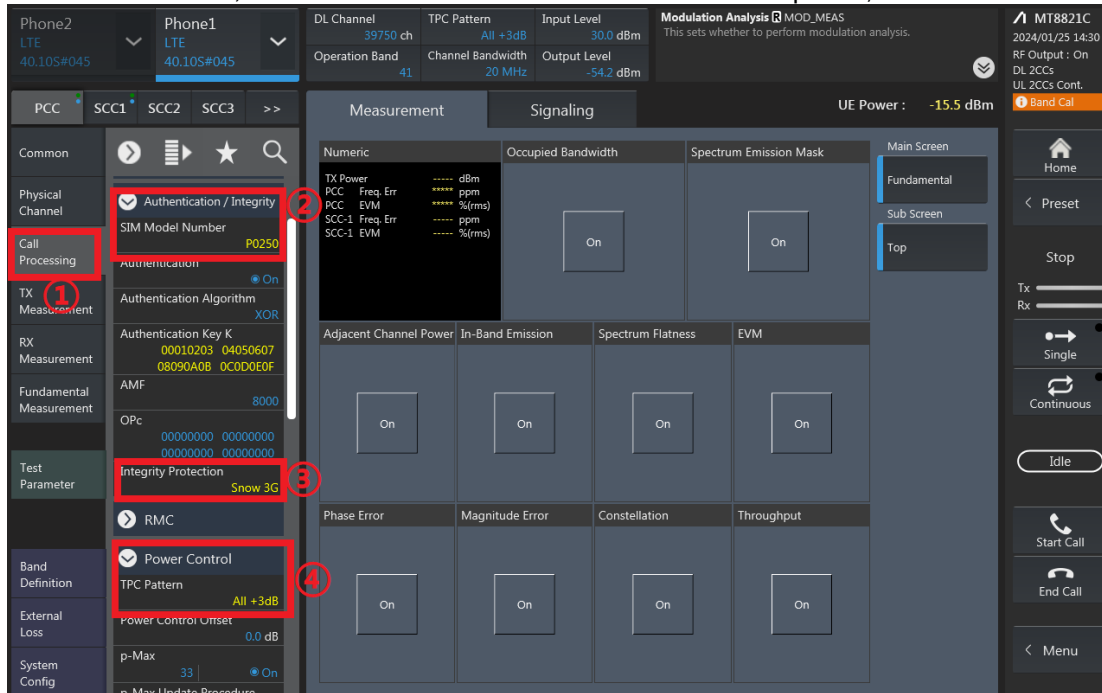
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



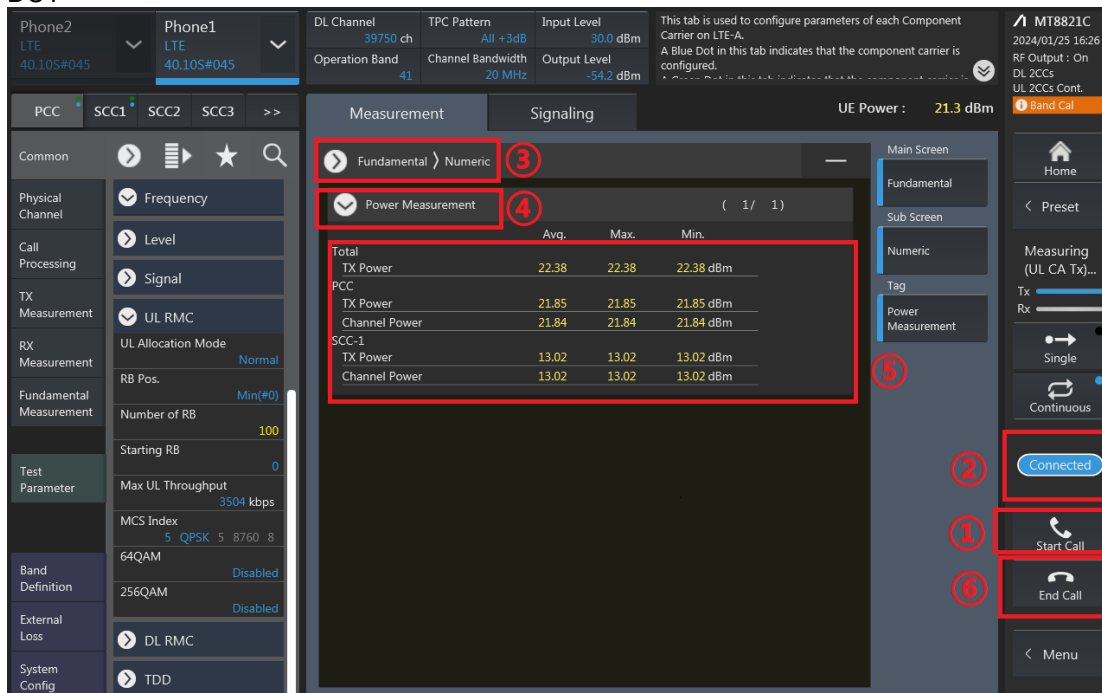
RB configurations (Number of RB / Starting RB) for SCC1;



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.



Intra-Band Power Measurement

UL CA_Full powerr

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	23.32	23.70
21100	21298	QPSK	1	99	1	0	23.38	23.70
21350	21152	QPSK	1	0	1	99	23.33	23.70
20850	21048	QPSK	50	50	50	0	22.43	22.70
21100	21298	QPSK	50	50	50	0	22.46	22.70
21350	21152	QPSK	50	0	50	50	22.47	22.70

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	22	23.00
21100	21298	QPSK	1	99	1	0	22.05	23.00
21350	21152	QPSK	1	0	1	99	21.96	23.00
20850	21048	QPSK	50	50	50	0	21.08	22.00
21100	21298	QPSK	50	50	50	0	21.15	22.00
21350	21152	QPSK	50	0	50	50	21.89	22.00

CA 7C 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		
20850	21048	QPSK	1	99	1	0	22.73	23.50
21100	21298	QPSK	1	99	1	0	22.78	23.50
21350	21152	QPSK	1	0	1	99	22.70	23.50
20850	21048	QPSK	50	50	50	0	21.82	22.50
21100	21298	QPSK	50	50	50	0	21.85	22.50
21350	21152	QPSK	50	0	50	50	21.81	22.50

CA 7C Ant 7								
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	21.48	22.50
21100	21298	QPSK	1	99	1	0	21.58	22.50
21350	21152	QPSK	1	0	1	99	21.50	22.50
20850	21048	QPSK	50	50	50	0	20.45	21.50
21100	21298	QPSK	50	50	50	0	20.57	21.50
21350	21152	QPSK	50	0	50	50	20.55	21.50

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	23.41	23.70
37901	38099	QPSK	1	99	1	0	23.48	23.70
38150	37952	QPSK	1	0	1	99	23.45	23.70
37850	38048	QPSK	50	50	50	0	22.38	22.70
37901	38099	QPSK	50	50	50	0	22.47	22.70
38150	37952	QPSK	50	0	50	50	22.44	22.70

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	21.75	23.00
37901	38099	QPSK	1	99	1	0	21.85	23.00
38150	37952	QPSK	1	0	1	99	21.81	23.00
37850	38048	QPSK	50	50	50	0	20.78	22.00
37901	38099	QPSK	50	50	50	0	20.87	22.00
38150	37952	QPSK	50	0	50	50	20.84	22.00

CA 38C 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		
37850	38048	QPSK	1	99	1	0	22.82	23.50
37901	38099	QPSK	1	99	1	0	22.86	23.50
38150	37952	QPSK	1	0	1	99	22.78	23.50
37850	38048	QPSK	50	50	50	0	21.83	22.50
37901	38099	QPSK	50	50	50	0	21.89	22.50
38150	37952	QPSK	50	0	50	50	21.86	22.50

CA 38C Ant 7								
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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	21.76	22.50
37901	38099	QPSK	1	99	1	0	21.87	22.50
38150	37952	QPSK	1	0	1	99	21.84	22.50
37850	38048	QPSK	50	50	50	0	20.84	21.50
37901	38099	QPSK	50	50	50	0	20.89	21.50
38150	37952	QPSK	50	0	50	50	20.87	21.50

UL CA_DSI 1

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	16.33	17.20
21100	21298	QPSK	1	99	1	0	16.38	17.20
21350	21152	QPSK	1	0	1	99	16.31	17.20
20850	21048	QPSK	50	50	50	0	16.33	17.20
21100	21298	QPSK	50	50	50	0	16.37	17.20
21350	21152	QPSK	50	0	50	50	16.35	17.20

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	15.88	17.00
21100	21298	QPSK	1	99	1	0	15.93	17.00
21350	21152	QPSK	1	0	1	99	15.81	17.00
20850	21048	QPSK	50	50	50	0	15.81	17.00
21100	21298	QPSK	50	50	50	0	15.89	17.00
21350	21152	QPSK	50	0	50	50	15.83	17.00

CA_7C 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		
20850	21048	QPSK	1	99	1	0	22.98	23.50
21100	21298	QPSK	1	99	1	0	23.03	23.50
21350	21152	QPSK	1	0	1	99	22.95	23.50
20850	21048	QPSK	50	50	50	0	22.07	22.50
21100	21298	QPSK	50	50	50	0	22.1	22.50
21350	21152	QPSK	50	0	50	50	22.06	22.50

CA_7C Ant 7								
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	16.15	17.50
21100	21298	QPSK	1	99	1	0	16.21	17.50
21350	21152	QPSK	1	0	1	99	16.11	17.50
20850	21048	QPSK	50	50	50	0	16.08	17.50
21100	21298	QPSK	50	50	50	0	16.19	17.50
21350	21152	QPSK	50	0	50	50	16.12	17.50

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	18.41	19.20
37901	38099	QPSK	1	99	1	0	18.48	19.20
38150	37952	QPSK	1	0	1	99	18.42	19.20
37850	38048	QPSK	50	50	50	0	18.44	19.20
37901	38099	QPSK	50	50	50	0	18.41	19.20
38150	37952	QPSK	50	0	50	50	18.43	19.20

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	18.32	19.50
37901	38099	QPSK	1	99	1	0	18.42	19.50
38150	37952	QPSK	1	0	1	99	18.35	19.50
37850	38048	QPSK	50	50	50	0	18.33	19.50
37901	38099	QPSK	50	50	50	0	18.38	19.50
38150	37952	QPSK	50	0	50	50	18.37	19.50

CA_38C Ant 6								
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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	22.82	23.50
37901	38099	QPSK	1	99	1	0	22.86	23.50
38150	37952	QPSK	1	0	1	99	22.78	23.50
37850	38048	QPSK	50	50	50	0	21.83	22.50
37901	38099	QPSK	50	50	50	0	21.89	22.50
38150	37952	QPSK	50	0	50	50	21.86	22.50
CA_38C Ant 7								
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	19.15	20.50
37901	38099	QPSK	1	99	1	0	19.28	20.50
38150	37952	QPSK	1	0	1	99	19.19	20.50
37850	38048	QPSK	50	50	50	0	19.25	20.50
37901	38099	QPSK	50	50	50	0	19.23	20.50
38150	37952	QPSK	50	0	50	50	19.17	20.50

UL CA_DSI 3

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	18.23	18.70
21100	21298	QPSK	1	99	1	0	18.31	18.70
21350	21152	QPSK	1	0	1	99	18.26	18.70
20850	21048	QPSK	50	50	50	0	18.23	18.70
21100	21298	QPSK	50	50	50	0	18.28	18.70
21350	21152	QPSK	50	0	50	50	18.25	18.70
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	17.78	19.00
21100	21298	QPSK	1	99	1	0	17.89	19.00
21350	21152	QPSK	1	0	1	99	17.87	19.00
20850	21048	QPSK	50	50	50	0	17.81	19.00
21100	21298	QPSK	50	50	50	0	17.85	19.00
21350	21152	QPSK	50	0	50	50	17.77	19.00
CA_7C 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		
20850	21048	QPSK	1	99	1	0	18.31	19.50
21100	21298	QPSK	1	99	1	0	18.35	19.50
21350	21152	QPSK	1	0	1	99	18.32	19.50
20850	21048	QPSK	50	50	50	0	18.3	19.50
21100	21298	QPSK	50	50	50	0	18.32	19.50
21350	21152	QPSK	50	0	50	50	18.29	19.50
CA_7C Ant 7								
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	17.22	18.50
21100	21298	QPSK	1	99	1	0	17.25	18.50
21350	21152	QPSK	1	0	1	99	17.19	18.50
20850	21048	QPSK	50	50	50	0	17.15	18.50
21100	21298	QPSK	50	50	50	0	17.23	18.50
21350	21152	QPSK	50	0	50	50	17.21	18.50

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	19.38	20.20
37901	38099	QPSK	1	99	1	0	19.48	20.20
38150	37952	QPSK	1	0	1	99	19.46	20.20
37850	38048	QPSK	50	50	50	0	19.38	20.20
37901	38099	QPSK	50	50	50	0	19.46	20.20
38150	37952	QPSK	50	0	50	50	19.45	20.20
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	19.75	21.00
37901	38099	QPSK	1	99	1	0	19.86	21.00
38150	37952	QPSK	1	0	1	99	19.81	21.00
37850	38048	QPSK	50	50	50	0	19.79	21.00
37901	38099	QPSK	50	50	50	0	19.85	21.00
38150	37952	QPSK	50	0	50	50	19.83	21.00
CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.23	21.50
37901	38099	QPSK	1	99	1	0	20.39	21.50
38150	37952	QPSK	1	0	1	99	20.32	21.50
37850	38048	QPSK	50	50	50	0	20.25	21.50
37901	38099	QPSK	50	50	50	0	20.35	21.50
38150	37952	QPSK	50	0	50	50	20.27	21.50
CA_38C Ant 7								
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	19.15	20.50
37901	38099	QPSK	1	99	1	0	19.28	20.50
38150	37952	QPSK	1	0	1	99	19.19	20.50
37850	38048	QPSK	50	50	50	0	19.25	20.50
37901	38099	QPSK	50	50	50	0	19.23	20.50
38150	37952	QPSK	50	0	50	50	19.17	20.50

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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	23.32	23.70
21100	21298	QPSK	1	99	1	0	23.38	23.70
21350	21152	QPSK	1	0	1	99	23.33	23.70
20850	21048	QPSK	50	50	50	0	22.43	22.70
21100	21298	QPSK	50	50	50	0	22.46	22.70
21350	21152	QPSK	50	0	50	50	22.47	22.70
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	22	23.00
21100	21298	QPSK	1	99	1	0	22.05	23.00
21350	21152	QPSK	1	0	1	99	21.96	23.00
20850	21048	QPSK	50	50	50	0	21.08	22.00
21100	21298	QPSK	50	50	50	0	21.15	22.00
21350	21152	QPSK	50	0	50	50	21.89	22.00
CA_7C 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		
20850	21048	QPSK	1	99	1	0	18.31	19.50
21100	21298	QPSK	1	99	1	0	18.35	19.50
21350	21152	QPSK	1	0	1	99	18.32	19.50
20850	21048	QPSK	50	50	50	0	18.3	19.50



21100	21298	QPSK	50	50	50	0	18.32	19.50
21350	21152	QPSK	50	0	50	50	18.29	19.50
CA_7C Ant 7								
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	17.22	18.50
21100	21298	QPSK	1	99	1	0	17.25	18.50
21350	21152	QPSK	1	0	1	99	17.19	18.50
20850	21048	QPSK	50	50	50	0	17.15	18.50
21100	21298	QPSK	50	50	50	0	17.23	18.50
21350	21152	QPSK	50	0	50	50	17.21	18.50

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	23.41	23.70
37901	38099	QPSK	1	99	1	0	23.48	23.70
38150	37952	QPSK	1	0	1	99	23.45	23.70
37850	38048	QPSK	50	50	50	0	22.38	22.70
37901	38099	QPSK	50	50	50	0	22.47	22.70
38150	37952	QPSK	50	0	50	50	22.44	22.70

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	21.75	23.00
37901	38099	QPSK	1	99	1	0	21.85	23.00
38150	37952	QPSK	1	0	1	99	21.81	23.00
37850	38048	QPSK	50	50	50	0	20.78	22.00
37901	38099	QPSK	50	50	50	0	20.87	22.00
38150	37952	QPSK	50	0	50	50	20.84	22.00

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.23	21.50
37901	38099	QPSK	1	99	1	0	20.39	21.50
38150	37952	QPSK	1	0	1	99	20.32	21.50
37850	38048	QPSK	50	50	50	0	20.25	21.50
37901	38099	QPSK	50	50	50	0	20.35	21.50
38150	37952	QPSK	50	0	50	50	20.27	21.50

CA_38C Ant 7								
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	19.15	20.50
37901	38099	QPSK	1	99	1	0	19.28	20.50
38150	37952	QPSK	1	0	1	99	19.19	20.50
37850	38048	QPSK	50	50	50	0	19.25	20.50
37901	38099	QPSK	50	50	50	0	19.23	20.50
38150	37952	QPSK	50	0	50	50	19.17	20.50

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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	16.33	17.20
21100	21298	QPSK	1	99	1	0	16.38	17.20
21350	21152	QPSK	1	0	1	99	16.31	17.20
20850	21048	QPSK	50	50	50	0	16.33	17.20
21100	21298	QPSK	50	50	50	0	16.37	17.20
21350	21152	QPSK	50	0	50	50	16.35	17.20
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	15.88	17.00
21100	21298	QPSK	1	99	1	0	15.93	17.00



21350	21152	QPSK	1	0	1	99	15.81	17.00
20850	21048	QPSK	50	50	50	0	15.81	17.00
21100	21298	QPSK	50	50	50	0	15.89	17.00
21350	21152	QPSK	50	0	50	50	15.83	17.00

CA_7C 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		
20850	21048	QPSK	1	99	1	0	18.31	19.50
21100	21298	QPSK	1	99	1	0	18.35	19.50
21350	21152	QPSK	1	0	1	99	18.32	19.50
20850	21048	QPSK	50	50	50	0	18.3	19.50
21100	21298	QPSK	50	50	50	0	18.32	19.50
21350	21152	QPSK	50	0	50	50	18.29	19.50

CA_7C Ant 7

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	16.15	17.50
21100	21298	QPSK	1	99	1	0	16.21	17.50
21350	21152	QPSK	1	0	1	99	16.11	17.50
20850	21048	QPSK	50	50	50	0	16.08	17.50
21100	21298	QPSK	50	50	50	0	16.19	17.50
21350	21152	QPSK	50	0	50	50	16.12	17.50

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	18.41	19.20
37901	38099	QPSK	1	99	1	0	18.48	19.20
38150	37952	QPSK	1	0	1	99	18.42	19.20
37850	38048	QPSK	50	50	50	0	18.44	19.20
37901	38099	QPSK	50	50	50	0	18.41	19.20
38150	37952	QPSK	50	0	50	50	18.43	19.20

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	18.32	19.50
37901	38099	QPSK	1	99	1	0	18.42	19.50
38150	37952	QPSK	1	0	1	99	18.35	19.50
37850	38048	QPSK	50	50	50	0	18.33	19.50
37901	38099	QPSK	50	50	50	0	18.38	19.50
38150	37952	QPSK	50	0	50	50	18.37	19.50

CA_38C 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		
37850	38048	QPSK	1	99	1	0	20.23	21.50
37901	38099	QPSK	1	99	1	0	20.39	21.50
38150	37952	QPSK	1	0	1	99	20.32	21.50
37850	38048	QPSK	50	50	50	0	20.25	21.50
37901	38099	QPSK	50	50	50	0	20.35	21.50
38150	37952	QPSK	50	0	50	50	20.27	21.50

CA_38C Ant 7

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	19.15	20.50
37901	38099	QPSK	1	99	1	0	19.28	20.50
38150	37952	QPSK	1	0	1	99	19.19	20.50
37850	38048	QPSK	50	50	50	0	19.25	20.50
37901	38099	QPSK	50	50	50	0	19.23	20.50
38150	37952	QPSK	50	0	50	50	19.17	20.50