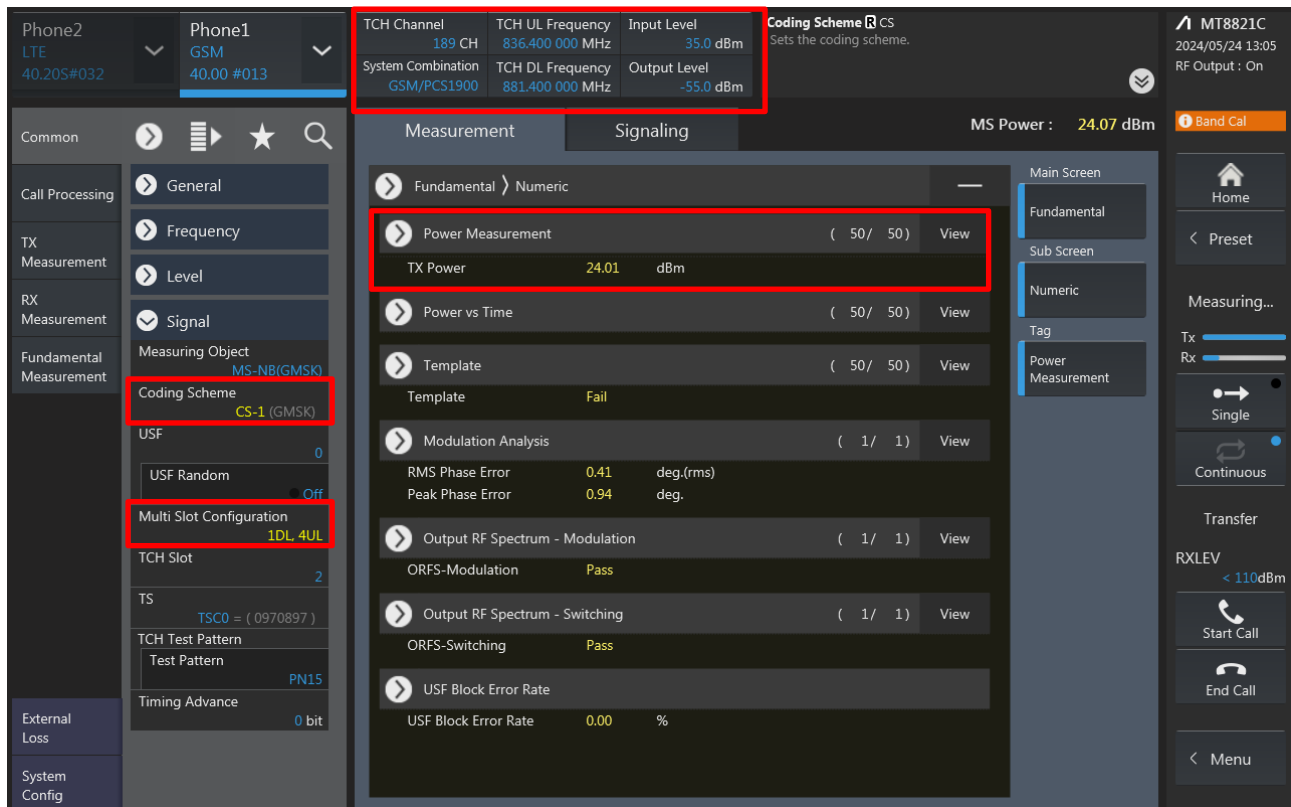


Power measurement connection diagram:

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.

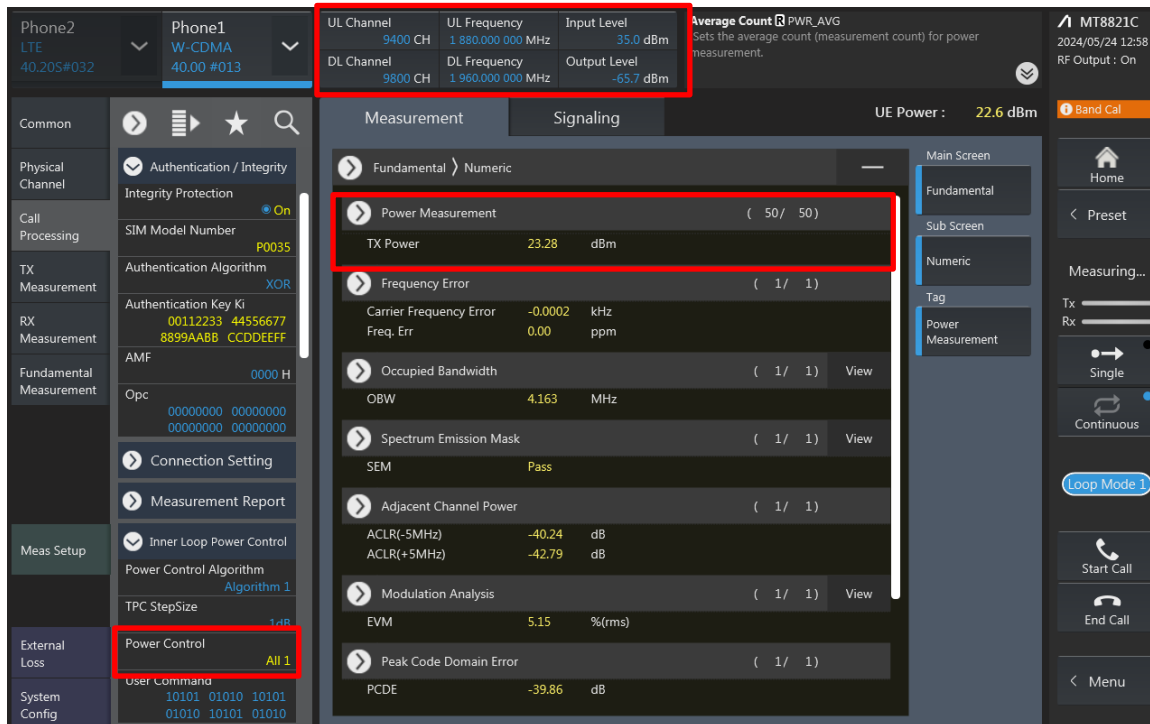
<GSM>



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 options for General, Frequency, Level, Signal, and Measuring Object (MS-NB(GMSK)).
- Main Area:** Displays the 'Measurement' tab with a 'Fundamental' sub-tab. The 'Power Measurement' section shows TX Power at 24.01 dBm. Other sections include 'Power vs Time', 'Template' (Fail), 'Modulation Analysis' (RMS Phase Error: 0.41 deg.(rms), Peak Phase Error: 0.94 deg.), 'Output RF Spectrum - Modulation' (ORFS-Modulation: Pass), 'Output RF Spectrum - Switching' (ORFS-Switching: Pass), and 'USF Block Error Rate' (USF Block Error Rate: 0.00 %).
- Right Sidebar:** Shows the 'Main Screen' with options for Fundamental, Sub Screen, Numeric, and Tag. It also displays the 'MS Power' as 24.07 dBm and the 'Band Cal' status as On.

<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, Average Count: PWR_AVG, DL Channel: 9800 CH, DL Frequency: 1 960.000 000 MHz, Output Level: -65.7 dBm

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, 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

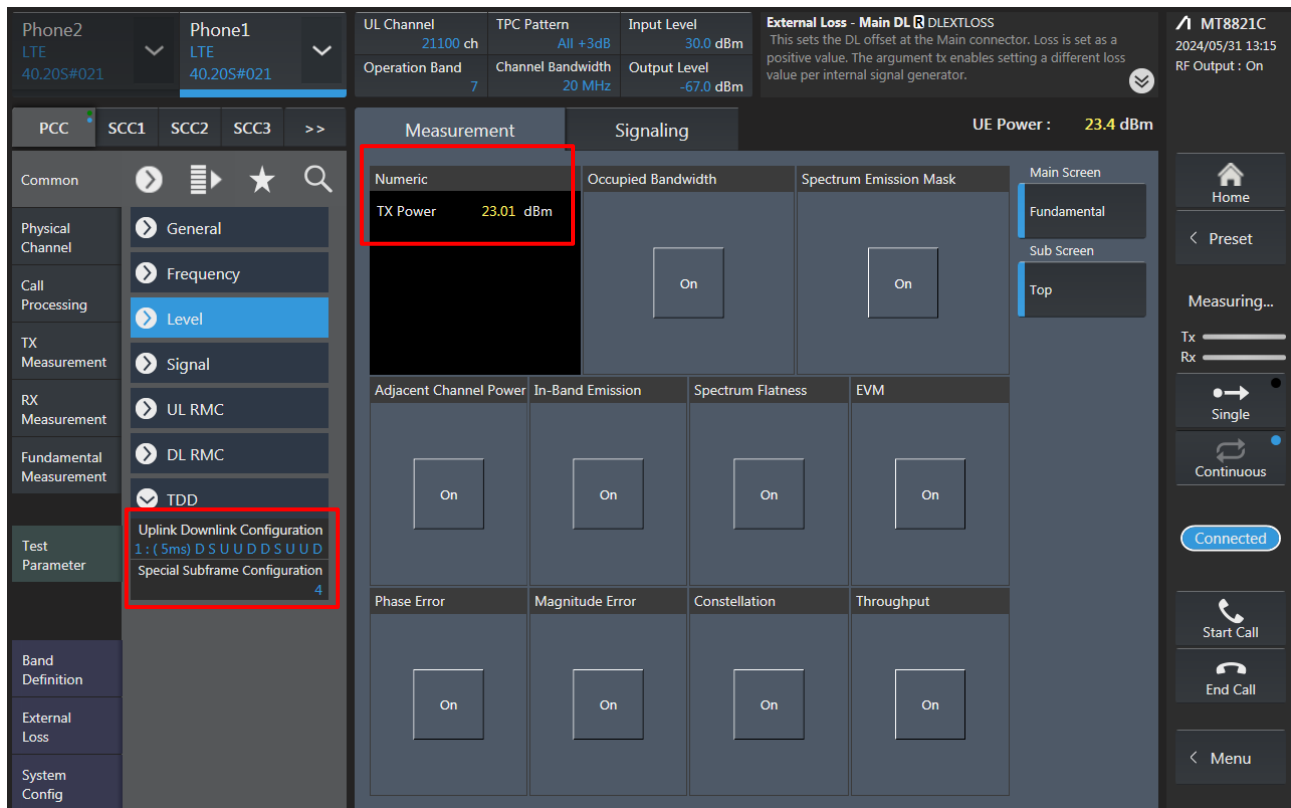
External Loss: Power Control All 1

User Command: 10101 01010 10101 01010 10101 01010

System Config: 10101 10101 01010

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

<LTE>



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

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

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

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

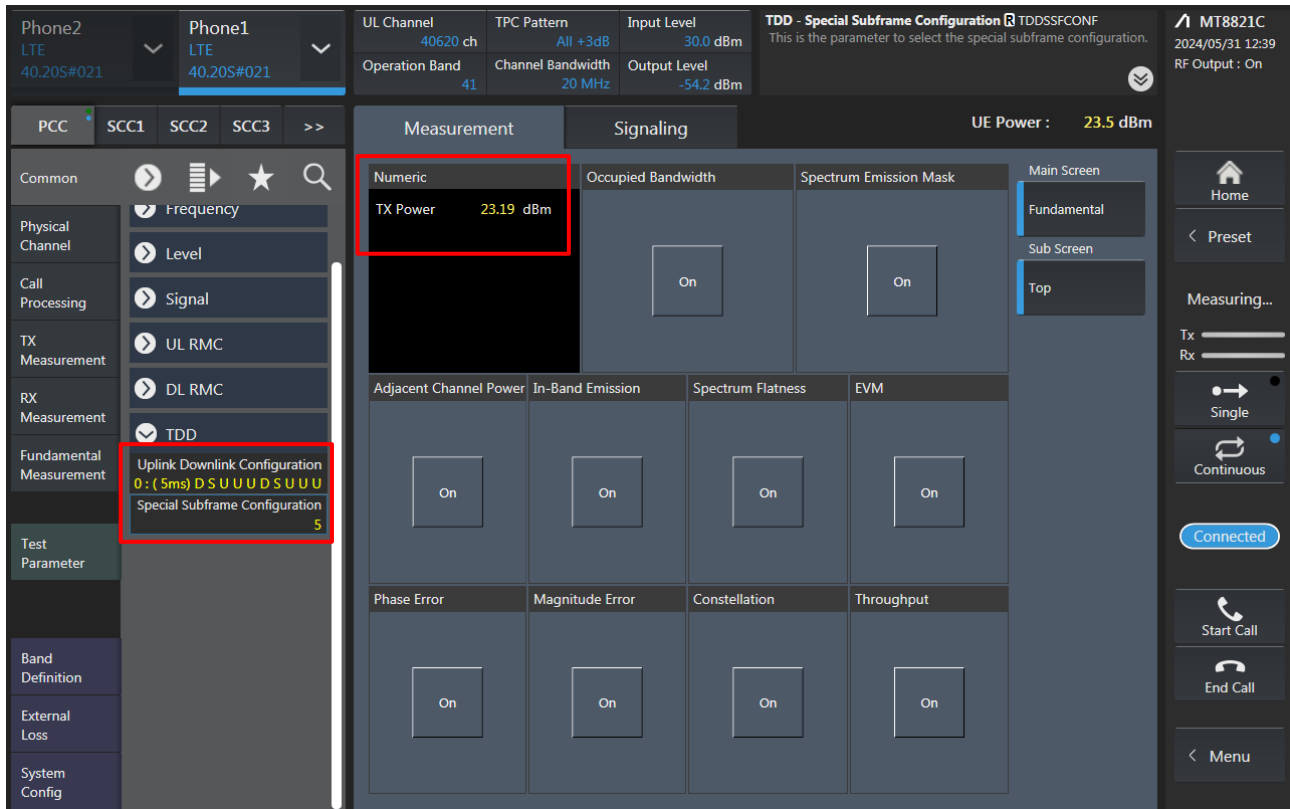
Band Definition: Connected

External Loss: Connected

System Config: Connected

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

<LTE TDD Power class 3>



Phone2 LTE 40.20S#021 Phone1 LTE 40.20S#021

UL Channel 40620 ch TPC Pattern All +3dB Input Level 30.0 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

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

UE Power : 23.5 dBm

Measurement Signaling

Numeric TX Power 23.19 dBm

Occupied Bandwidth Spectrum Emission Mask

On On

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

On On On On

Phase Error Magnitude Error Constellation Throughput

On On On On

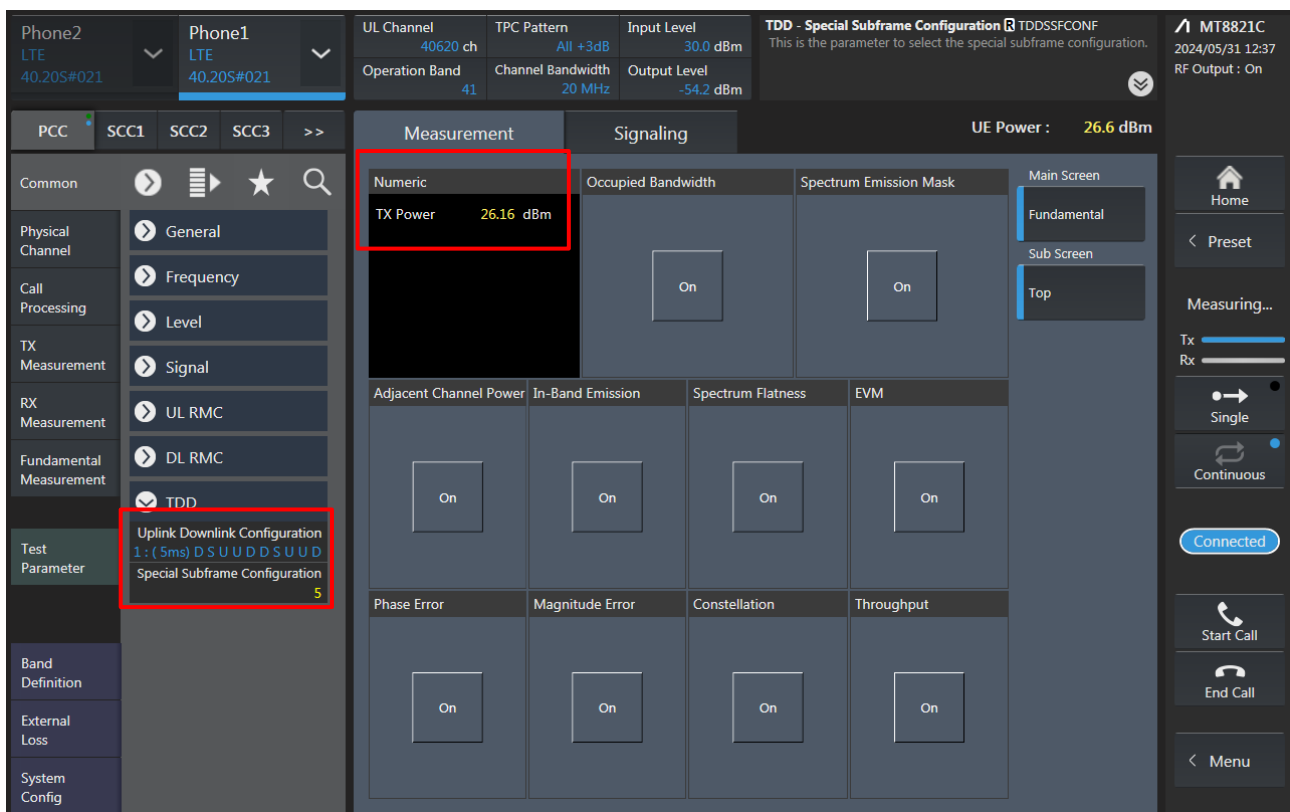
Common Frequency Level Signal UL RMC DL RMC TDD Uplink Downlink Configuration 0 : (5ms) D S U U U D S U U U Special Subframe Configuration 5

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

Main Screen Fundamental Sub Screen Top

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

<LTE TDD Power class 2>



Phone2 LTE 40.20S#021 Phone1 LTE 40.20S#021

UL Channel 40620 ch TPC Pattern All +3dB Input Level 30.0 dBm TDD - Special Subframe Configuration TDDSSFCNF This is the parameter to select the special subframe configuration. MT8821C 2024/05/31 12:37 RF Output : On

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

UE Power : 26.6 dBm

Measurement Signaling

Numeric TX Power 26.16 dBm

Occupied Bandwidth Spectrum Emission Mask

On On

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

On On On On

Phase Error Magnitude Error Constellation Throughput

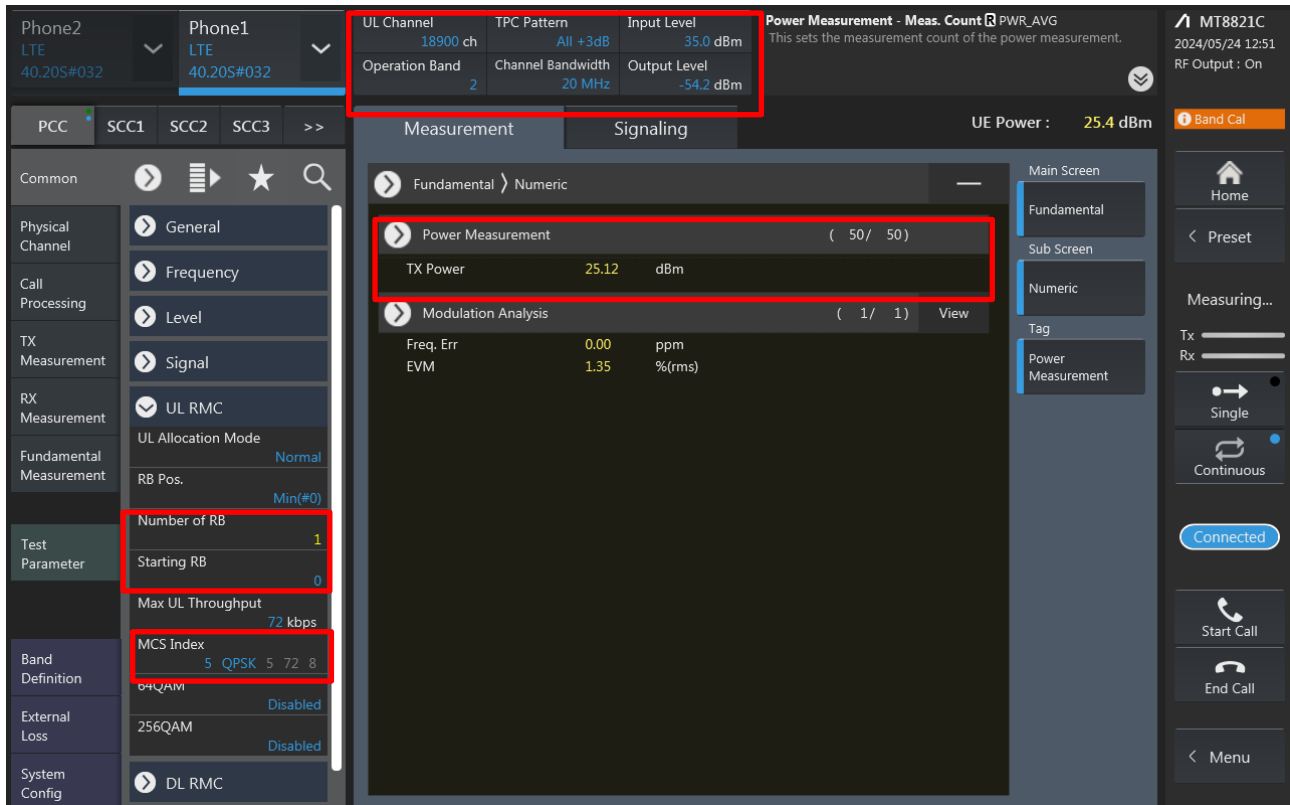
On On On On

Common General Frequency Level Signal UL RMC DL RMC TDD Uplink Downlink Configuration 1 : (5ms) D S U U U D 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

Main Screen Fundamental Sub Screen Top

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



Phone2 LTE 40.20S#032

Phone1 LTE 40.20S#032

UL Channel 18900 ch

TPC Pattern All +3dB

Input Level 35.0 dBm

Operation Band 2

Channel Bandwidth 20 MHz

Output Level -54.2 dBm

Power Measurement - Meas. Count PWR_AVG

This sets the measurement count of the power measurement.

MT8821C

2024/05/24 12:51

RF Output : On

UE Power : 25.4 dBm

Band Cal

Home

Preset

Measuring...

Tx

Rx

Single

Continuous

Connected

Start Call

End Call

Menu

Common

Physical Channel

Call Processing

TX Measurement

RX Measurement

Fundamental Measurement

Test Parameter

Band Definition

External Loss

System Config

General

Frequency

Level

Signal

UL RMC

UL Allocation Mode Normal

RB Pos. Min(#0)

Number of RB 1

Starting RB 0

Max UL Throughput 72 kbps

MCS Index 5 QPSK 5 72 8

DL RMC

Measurement

Signaling

Fundamental

Numeric

Power Measurement (50 / 50)

TX Power 25.12 dBm

Modulation Analysis (1 / 1) View

Freq. Err 0.00 ppm

EVM 1.35 % (rms)

Main Screen

Fundamental

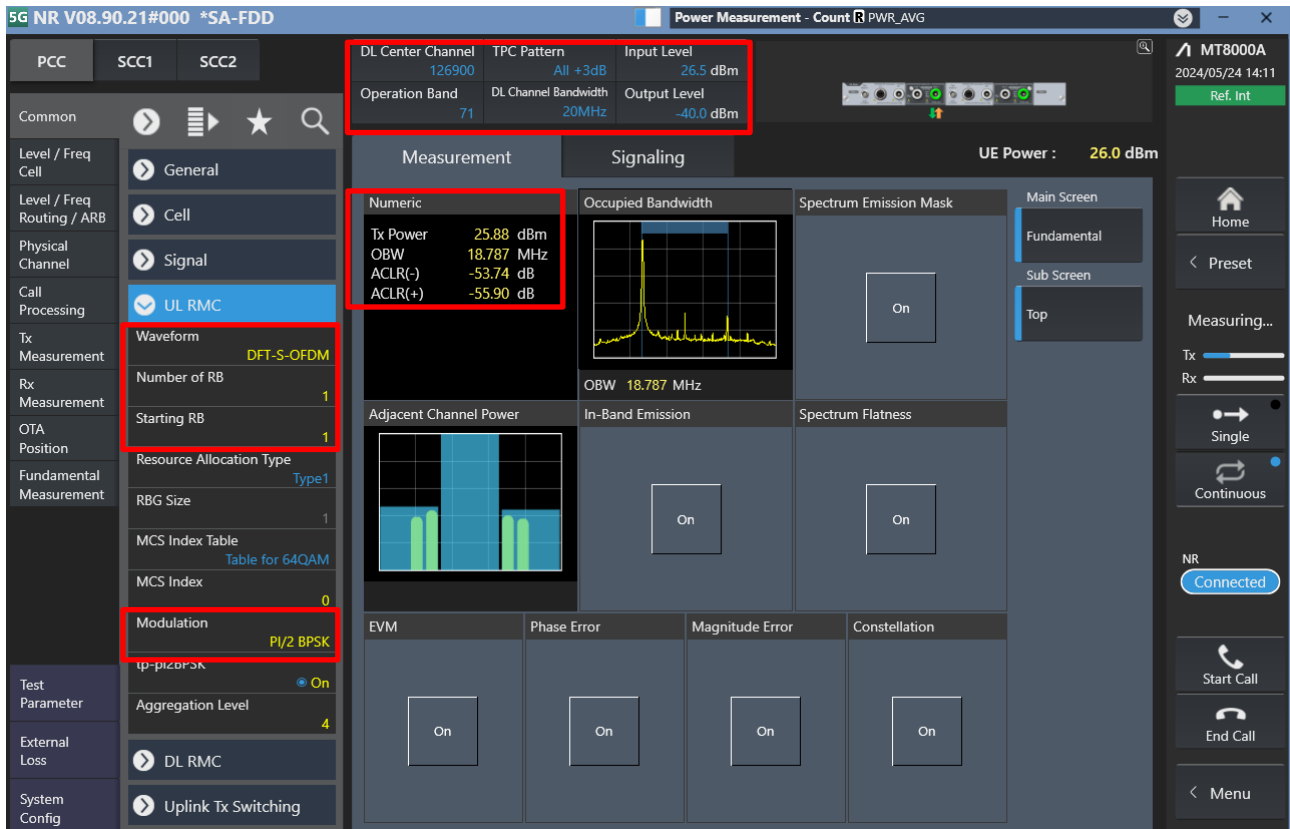
Sub Screen

Numeric

Tag

Power Measurement

<5G NR FR1>



5G NR V08.90.21#000 *SA-FDD

Power Measurement - Count PWR_AVG

MT8000A

2024/05/24 14:11

Ref. Int

UE Power : 26.0 dBm

Home

Preset

Measuring...

Tx

Rx

Single

Continuous

Connected

Start Call

End Call

Menu

Common

Level / Freq Cell

Level / Freq Routing / ARB

Physical Channel

Call Processing

TX Measurement

Rx Measurement

OTA Position

Fundamental Measurement

Test Parameter

External Loss

System Config

General

Cell

Signal

UL RMC

Waveform DFT-S-OFDM

Number of RB 1

Starting RB 1

Resource Allocation Type Type1

RBG Size 1

MCS Index Table Table for 64QAM

MCS Index 0

Modulation Pl/2 BPSK

DL Center Channel 126900

TPC Pattern All +3dB

Input Level 26.5 dBm

Operation Band 71

DL Channel Bandwidth 20MHz

Output Level -40.0 dBm

Measurement

Signaling

Numeric

Tx Power 25.88 dBm

OBW 18.787 MHz

ACLR(-) -53.74 dB

ACLR(+) -55.90 dB

Occupied Bandwidth

Spectrum Emission Mask

On

Adjacent Channel Power

In-Band Emission

Spectrum Flatness

On

On

EVM

Phase Error

Magnitude Error

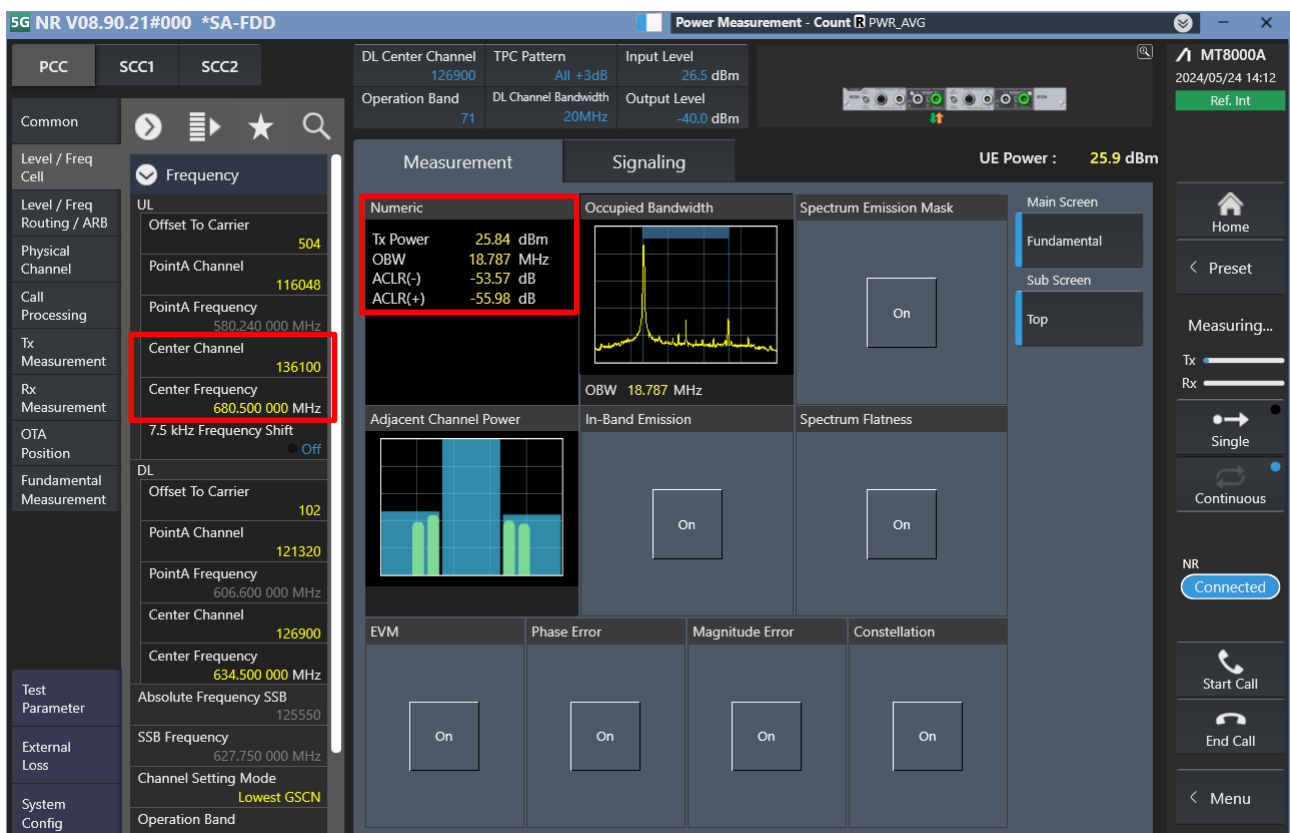
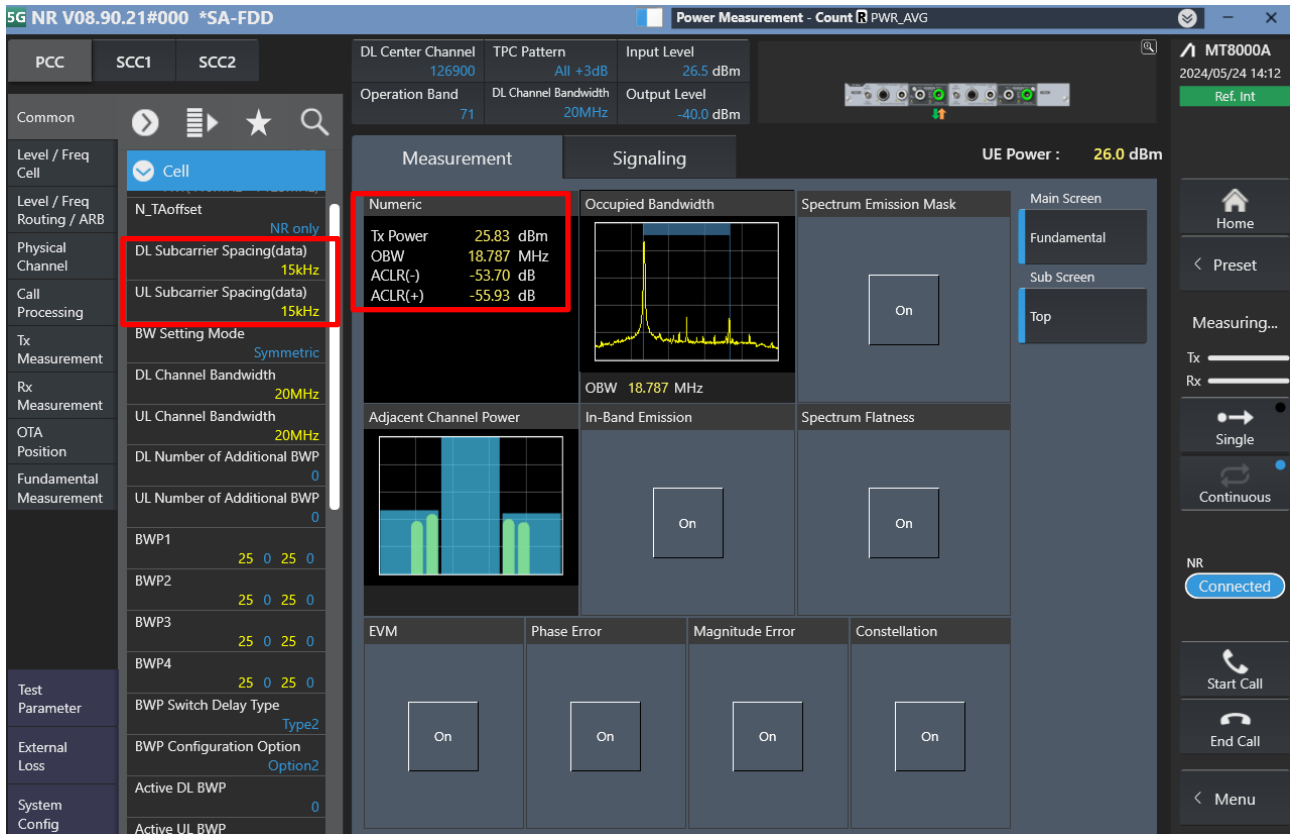
Constellation

On

On

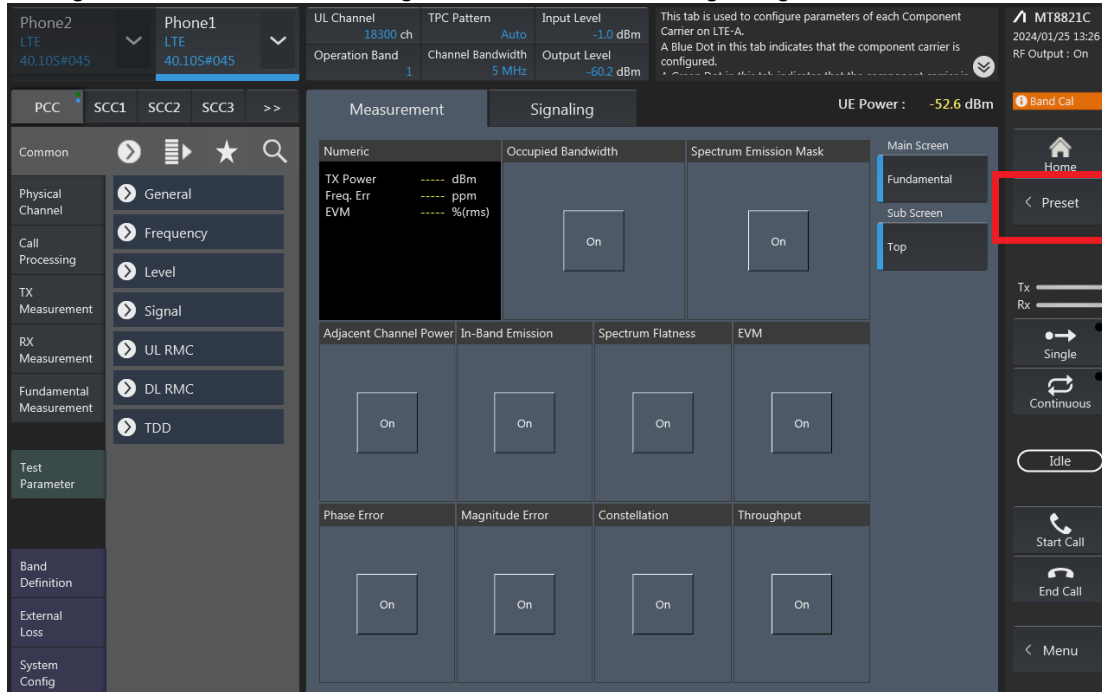
On

On



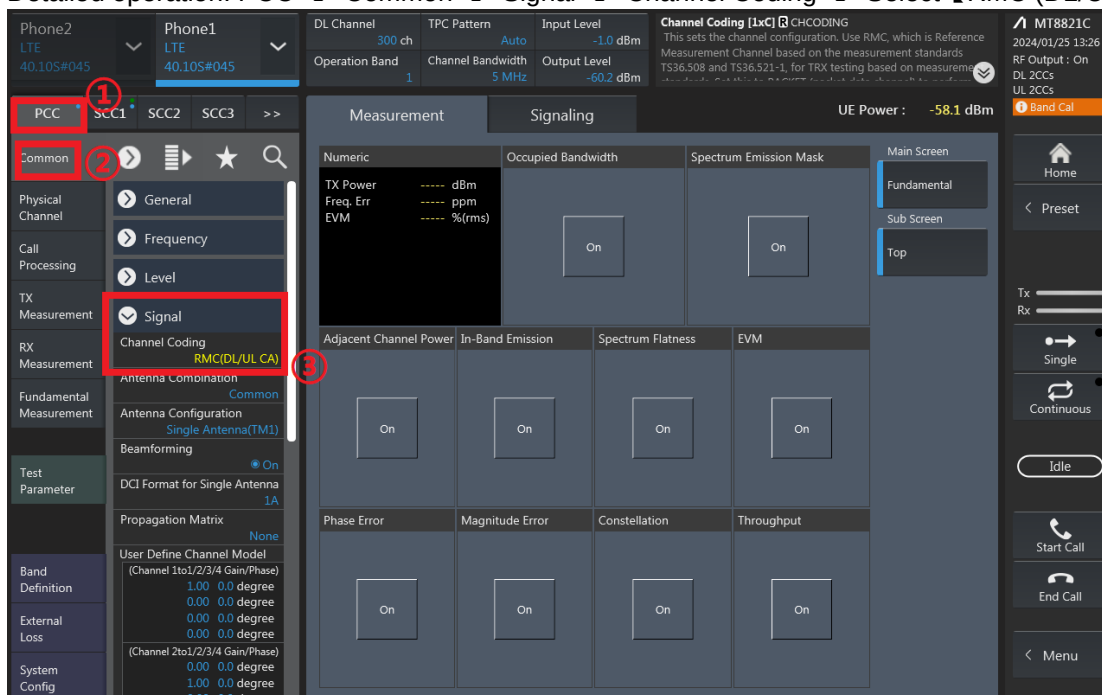
LTE Uplink and Downlink Carrier Aggregation configurations:

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

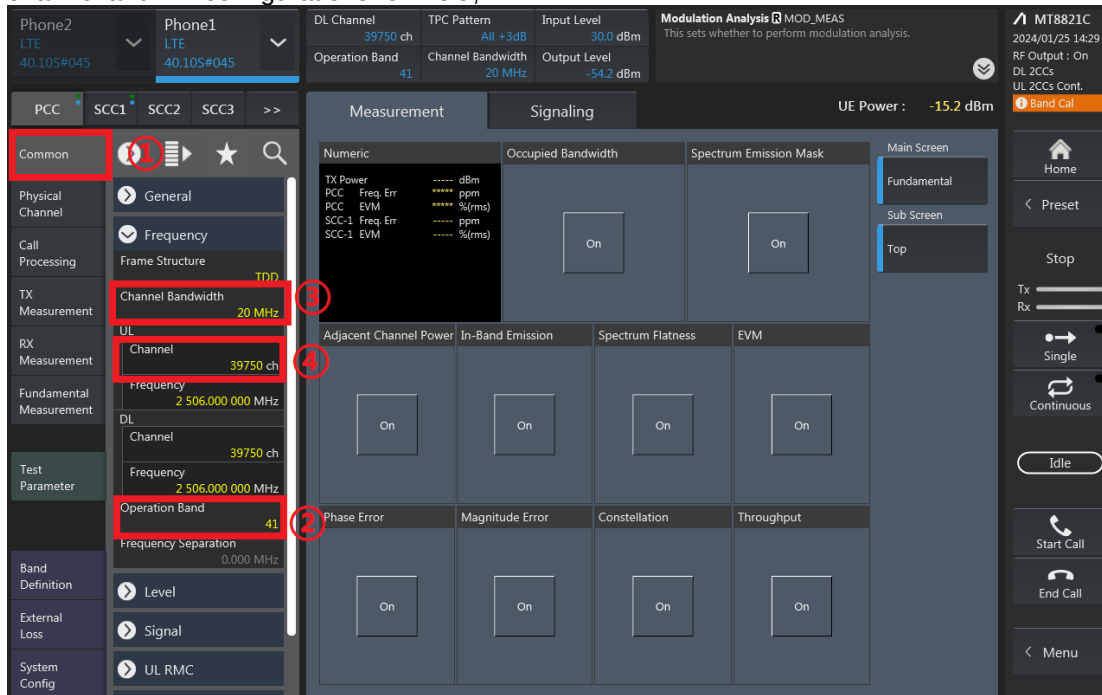


2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.
For example, Uplink Carrier Aggregation:

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 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

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

Occupied Bandwidth

Spectrum Emission Mask

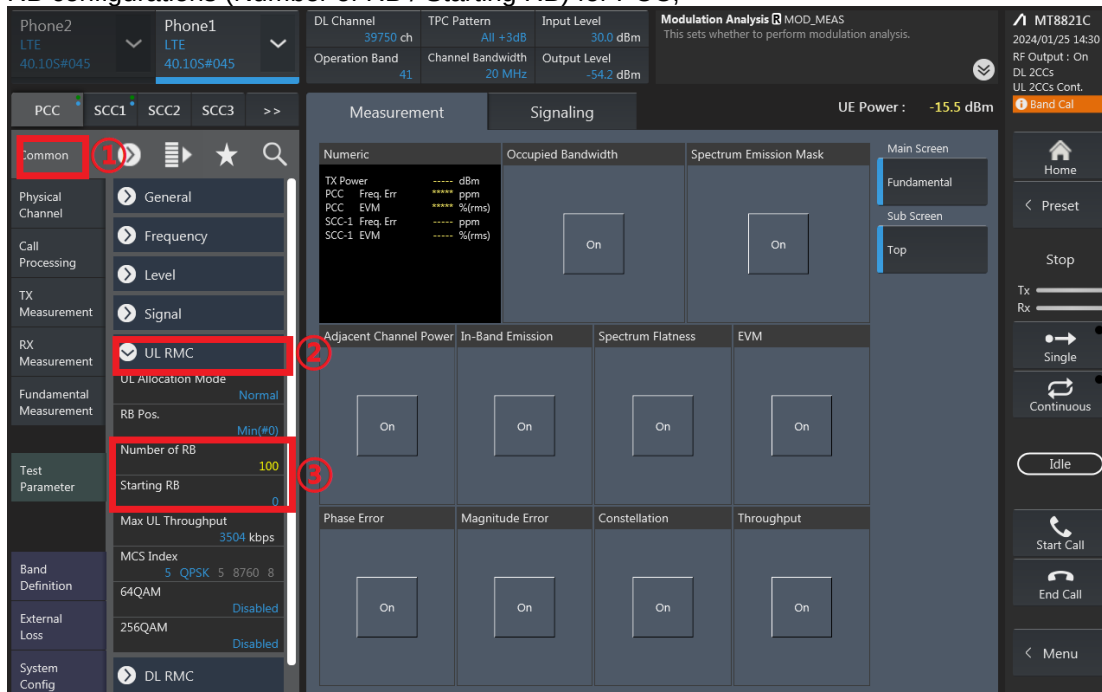
Main Screen Fundamental Sub Screen Top

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

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.

UE Power : -15.5 dBm

Measurement Signaling

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

External Loss

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

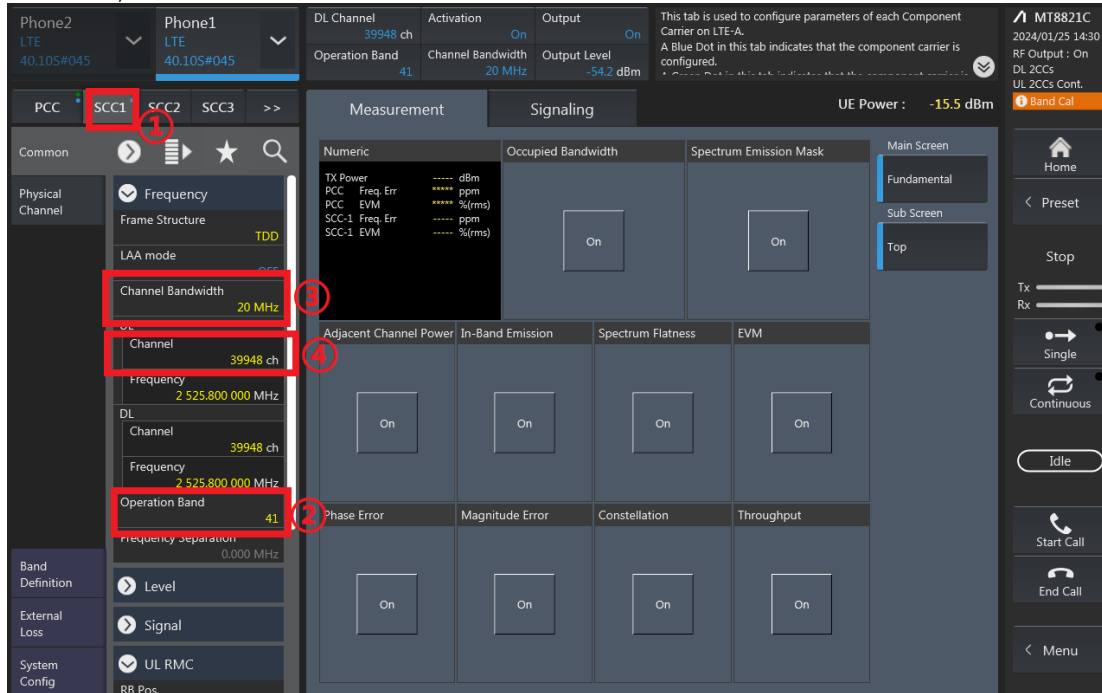
Main Screen Fundamental Sub Screen Top

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

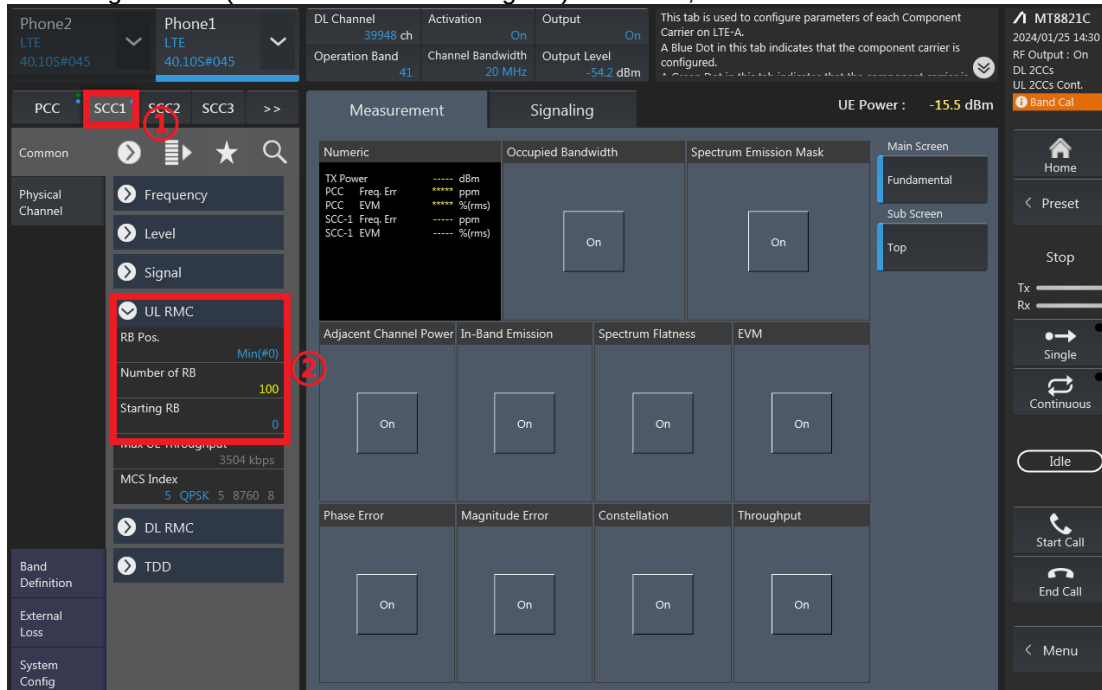
Phase Error Magnitude Error Constellation Throughput

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

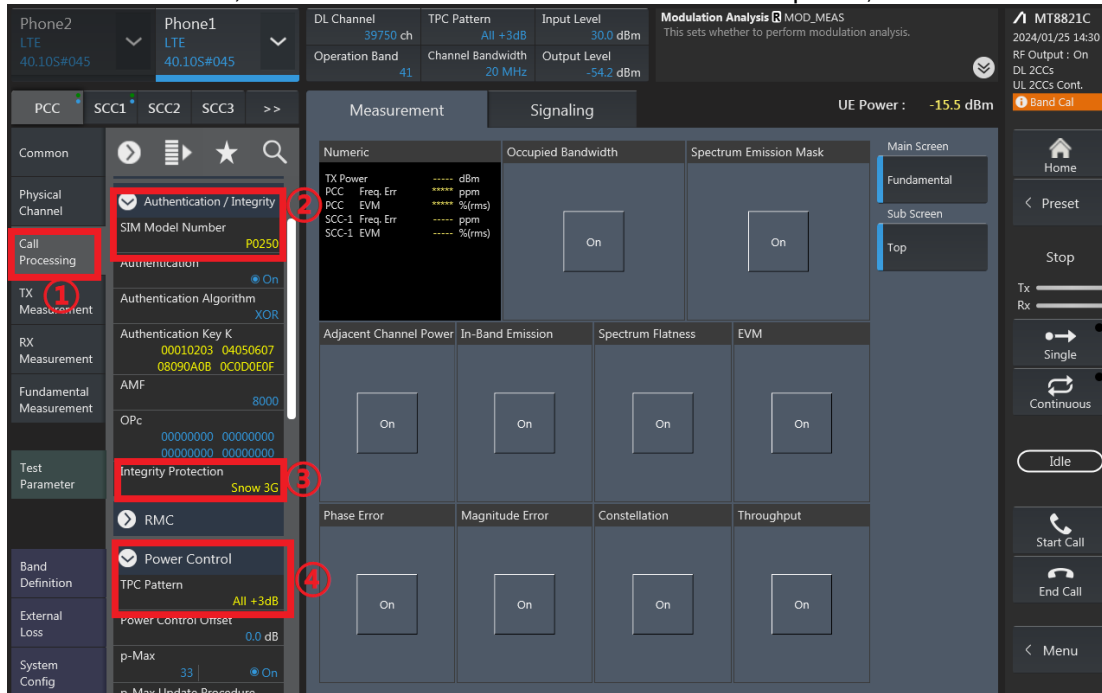
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



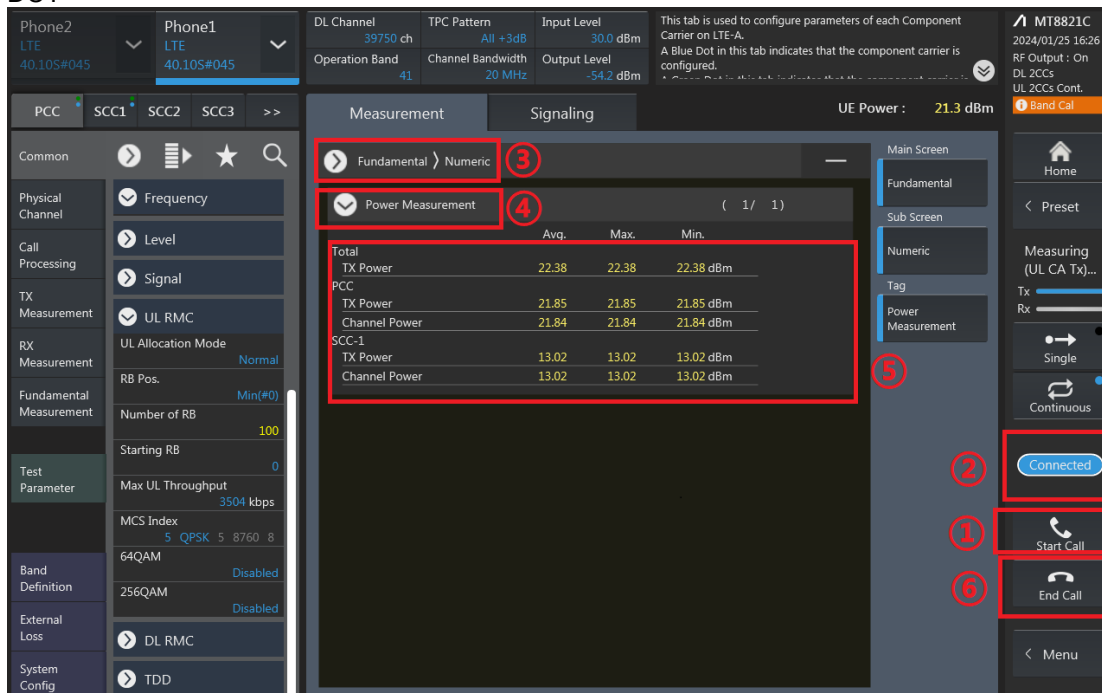
RB configurations (Number of RB / Starting RB) for SCC1;



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



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_7C_Ant 5											
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					
20850	21048	QPSK	1	0	0	0	1	0	Full	24.35	25.00
21100	21298	QPSK	1	0	0	0	1	0	Full	24.40	25.00
21350	21152	QPSK	1	0	0	0	1	0	Full	24.33	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	24.35	25.00
21100	21298	QPSK	1	0	0	0	1	0	ECI 5	24.40	25.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	24.33	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 10	24.35	25.00
21100	21298	QPSK	1	0	0	0	1	0	ECI 10	24.40	25.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 10	24.33	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	18.74	19.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 3	18.82	19.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	18.77	19.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 8	18.74	19.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 8	18.82	19.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 8	18.77	19.50

CA_7C_Ant 6											
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					
20850	21048	QPSK	1	0	0	0	1	0	Full	23.68	24.50
21100	21298	QPSK	1	0	0	0	1	0	Full	23.79	24.50
21350	21152	QPSK	1	0	0	0	1	0	Full	23.75	24.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	15.50	16.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 5	15.60	16.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	15.49	16.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 10	14.42	15.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 10	14.60	15.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 10	14.55	15.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	18.70	19.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 3	18.80	19.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	18.77	19.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 8	16.30	17.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 8	16.50	17.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 8	16.38	17.50

CA_7C_Ant 11											
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					
20850	21048	QPSK	1	0	0	0	1	0	Full	23.83	24.40
21100	21298	QPSK	1	0	0	0	1	0	Full	23.89	24.40
21350	21152	QPSK	1	0	0	0	1	0	Full	23.80	24.40
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	16.70	17.40
21100	21298	QPSK	1	0	0	0	1	0	ECI 5	16.78	17.40
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	16.74	17.40
20850	21048	QPSK	1	0	0	0	1	0	ECI 10	15.80	16.40
21100	21298	QPSK	1	0	0	0	1	0	ECI 10	15.87	16.40
21350	21152	QPSK	1	0	0	0	1	0	ECI 10	15.78	16.40
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	18.72	19.40
21100	21298	QPSK	1	0	0	0	1	0	ECI 3	18.79	19.40
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	18.75	19.40
20850	21048	QPSK	1	0	0	0	1	0	ECI 8	16.70	17.40
21100	21298	QPSK	1	0	0	0	1	0	ECI 8	16.78	17.40
21350	21152	QPSK	1	0	0	0	1	0	ECI 8	16.74	17.40

CA_7C_Ant 7											
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					
20850	21048	QPSK	1	0	0	0	1	0	Full	19.30	21.00
21100	21298	QPSK	1	0	0	0	1	0	Full	19.72	21.00
21350	21152	QPSK	1	0	0	0	1	0	Full	19.96	21.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	15.85	17.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 5	16.25	17.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	16.40	17.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 10	13.87	15.50
21100	21298	QPSK	1	0	0	0	1	0	ECI 10	14.26	15.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 10	14.52	15.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	19.30	21.00
21100	21298	QPSK	1	0	0	0	1	0	ECI 3	19.72	21.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	19.96	21.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 8	17.45	19.00
21100	21298	QPSK	1	0	0	0	1	0	ECI 8	17.97	19.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 8	18.23	19.00

CA_38C_Ant 5											
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					
37850	38048	QPSK	1	0	0	0	1	0	Full	24.35	25.00
37901	38099	QPSK	1	0	0	0	1	0	Full	24.42	25.00
38150	37952	QPSK	1	0	0	0	1	0	Full	24.30	25.00
37850	38048	QPSK	1	0	0	0	1	0	ECI 5	24.35	25.00
37901	38099	QPSK	1	0	0	0	1	0	ECI 5	24.42	25.00
38150	37952	QPSK	1	0	0	0	1	0	ECI 5	24.30	25.00
37850	38048	QPSK	1	0	0	0	1	0	ECI 10	24.35	25.00
37901	38099	QPSK	1	0	0	0	1	0	ECI 10	24.42	25.00
38150	37952	QPSK	1	0	0	0	1	0	ECI 10	24.30	25.00
37850	38048	QPSK	1	0	0	0	1	0	ECI 3	20.74	21.50
37901	38099	QPSK	1	0	0	0	1	0	ECI 3	20.81	21.50
38150	37952	QPSK	1	0	0	0	1	0	ECI 3	20.77	21.50
37850	38048	QPSK	1	0	0	0	1	0	ECI 8	20.74	21.50
37901	38099	QPSK	1	0	0	0	1	0	ECI 8	20.81	21.50
38150	37952	QPSK	1	0	0	0	1	0	ECI 8	20.77	21.50

CA_38C_Ant 6											
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					
37850	38048	QPSK	1	0	0	0	1	0	Full	23.72	24.40
37901	38099	QPSK	1	0	0	0	1	0	Full	23.80	24.40
38150	37952	QPSK	1	0	0	0	1	0	Full	23.69	24.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 5	17.77	18.40
37901	38099	QPSK	1	0	0	0	1	0	ECI 5	17.83	18.40
38150	37952	QPSK	1	0	0	0	1	0	ECI 5	17.65	18.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 10	17.18	17.90
37901	38099	QPSK	1	0	0	0	1	0	ECI 10	17.20	17.90
38150	37952	QPSK	1	0	0	0	1	0	ECI 10	17.15	17.90
37850	38048	QPSK	1	0	0	0	1	0	ECI 3	19.72	20.40
37901	38099	QPSK	1	0	0	0	1	0	ECI 3	19.76	20.40
38150	37952	QPSK	1	0	0	0	1	0	ECI 3	19.69	20.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 8	18.15	18.90
37901	38099	QPSK	1	0	0	0	1	0	ECI 8	18.22	18.90
38150	37952	QPSK	1	0	0	0	1	0	ECI 8	18.18	18.90

CA_38C_Ant 11											
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					
37850	38048	QPSK	1	0	0	0	1	0	Full	24.00	24.40
37901	38099	QPSK	1	0	0	0	1	0	Full	24.05	24.40
38150	37952	QPSK	1	0	0	0	1	0	Full	23.97	24.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 5	15.30	15.90
37901	38099	QPSK	1	0	0	0	1	0	ECI 5	15.38	15.90
38150	37952	QPSK	1	0	0	0	1	0	ECI 5	15.28	15.90
37850	38048	QPSK	1	0	0	0	1	0	ECI 10	14.77	15.40
37901	38099	QPSK	1	0	0	0	1	0	ECI 10	14.83	15.40
38150	37952	QPSK	1	0	0	0	1	0	ECI 10	14.75	15.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 3	19.85	20.40
37901	38099	QPSK	1	0	0	0	1	0	ECI 3	19.96	20.40
38150	37952	QPSK	1	0	0	0	1	0	ECI 3	19.88	20.40
37850	38048	QPSK	1	0	0	0	1	0	ECI 8	18.16	18.90
37901	38099	QPSK	1	0	0	0	1	0	ECI 8	18.24	18.90
38150	37952	QPSK	1	0	0	0	1	0	ECI 8	18.20	18.90