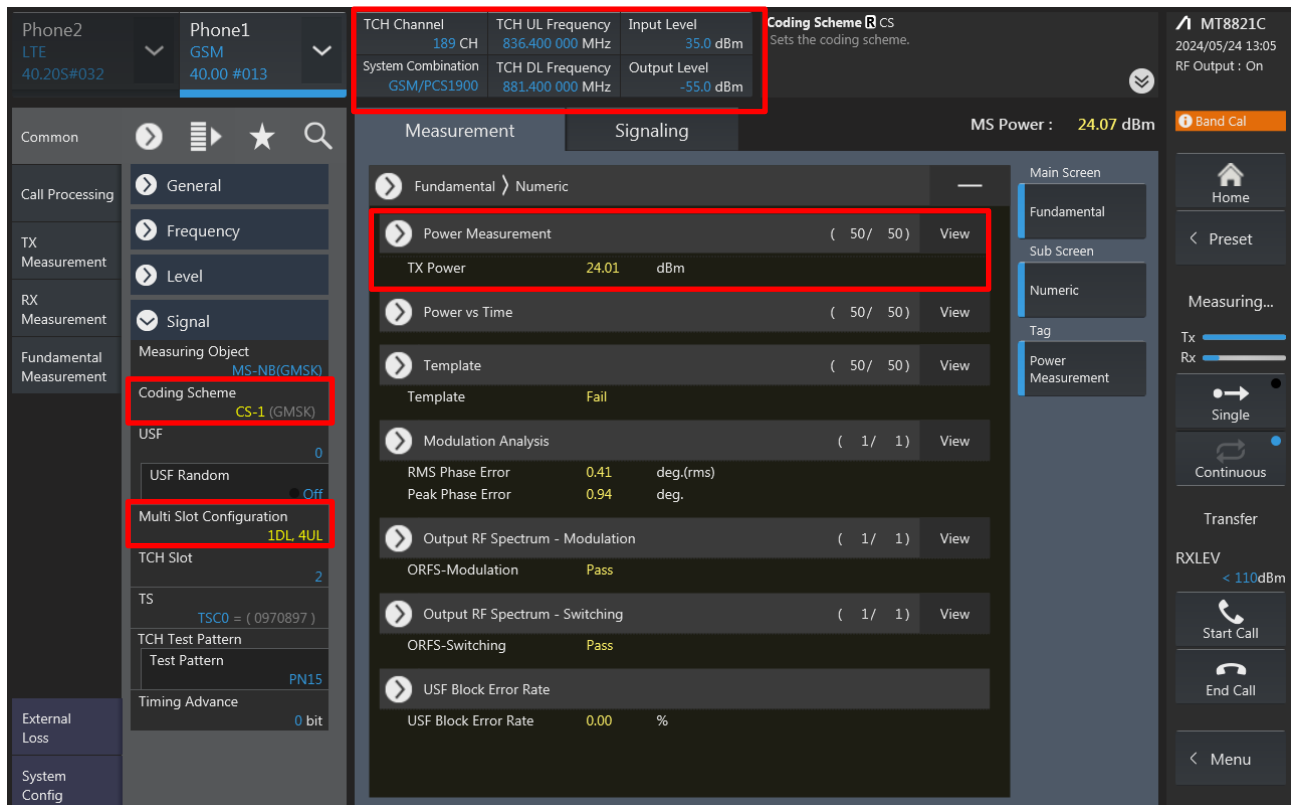


Power measurement connection diagram:

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.

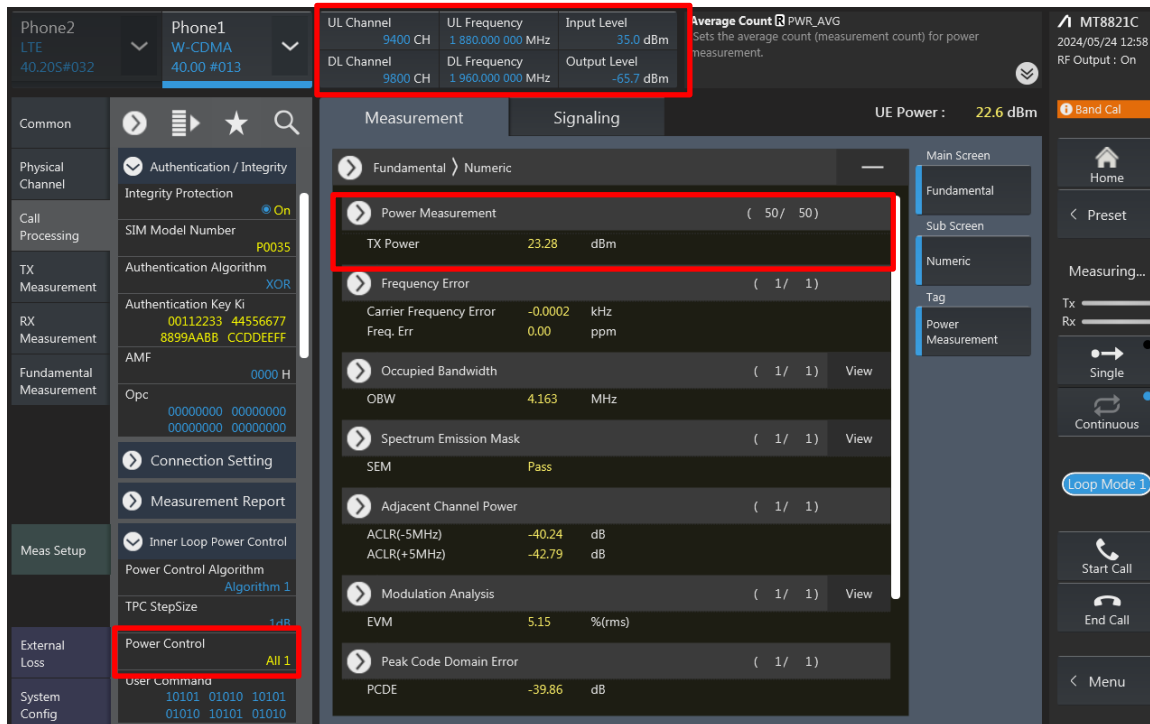
<GSM>



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

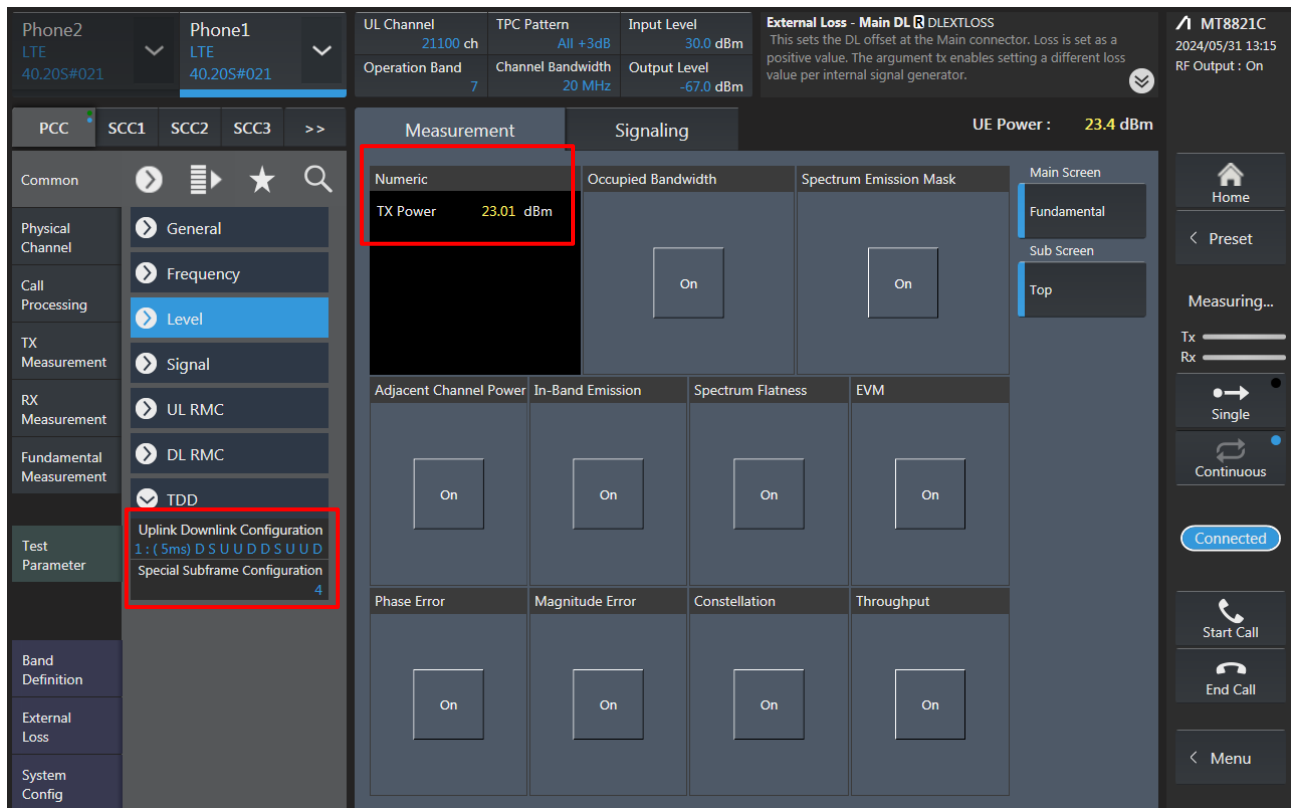
- Top Bar:** Shows Phone2 (LTE, 40.205#032) and Phone1 (GSM, 40.00 #013). It also displays TCH Channel (189 CH), TCH UL Frequency (836.400 000 MHz), Input Level (35.0 dBm), TCH DL Frequency (881.400 000 MHz), and Output Level (-55.0 dBm). The Coding Scheme is set to CS.
- Left Sidebar:** Contains navigation options like Common, Call Processing, TX Measurement, RX Measurement, Fundamental Measurement, and External Loss. The 'Fundamental Measurement' section is expanded, showing options like General, Frequency, Level, Signal, and Coding Scheme (CS-1 (GMSK)).
- Main Area:** Displays the 'Measurement' tab with various metrics:
 - Power Measurement:** TX Power is 24.01 dBm.
 - Power vs Time:** (50/ 50) View
 - Template:** (50/ 50) View
 - Modulation Analysis:** (1/ 1) View
 - RMS Phase Error: 0.41 deg.(rms)
 - Peak Phase Error: 0.94 deg.
 - Output RF Spectrum - Modulation:** (1/ 1) View
 - ORFS-Modulation: Pass
 - Output RF Spectrum - Switching:** (1/ 1) View
 - ORFS-Switching: Pass
 - USF Block Error Rate:** USF Block Error Rate is 0.00 %
- Right Sidebar:** Shows the 'Main Screen' with options like Fundamental, Sub Screen, Numeric, and Tag. It also displays the 'MS Power' as 24.07 dBm and the 'Band Cal' status as On.

<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' as 23.28 dBm. The 'Occupied Bandwidth' section shows 'OBW' as 4.163 MHz. The 'Adjacent Channel Power' section shows 'ACLR(-5MHz)' as -40.24 dB and 'ACLR(+5MHz)' as -42.79 dB. The 'Modulation Analysis' section shows 'EVM' as 5.15 % (rms). The 'Peak Code Domain Error' section shows 'PCDE' as -39.86 dB. The 'UE Power' is 22.6 dBm. The 'Band Cal' button is visible on the right. The 'Meas Setup' section on the left shows 'Power Control' set to 'All 1'.

<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' as 23.01 dBm. The 'Occupied Bandwidth' section shows 'OBW' as 20 MHz. The 'Adjacent Channel Power' section shows 'ACLR(-5MHz)' as -40.24 dB and 'ACLR(+5MHz)' as -42.79 dB. The 'Modulation Analysis' section shows 'EVM' as 5.15 % (rms). The 'Peak Code Domain Error' section shows 'PCDE' as -39.86 dB. The 'UE Power' is 23.4 dBm. The 'Band Cal' button is visible on the right. The 'Meas Setup' section on the left shows 'Uplink Downlink Configuration' set to '1: (5ms) D S U U D D S U U D' and 'Special Subframe Configuration' set to '4'.

<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

PCC SCC1 SCC2 SCC3 >>

Common

Physical Channel

Call Processing

TX Measurement

RX Measurement

Fundamental Measurement

Test Parameter

Band Definition

External Loss

System Config

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

Measurement

Signaling

Numeric

Occupied Bandwidth

Spectrum Emission Mask

Main Screen

Fundamental

Sub Screen

Top

TX Power
23.19 dBm

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

UE Power : 23.5 dBm

Home

Preset

Measuring...

Tx

Rx

Single

Continuous

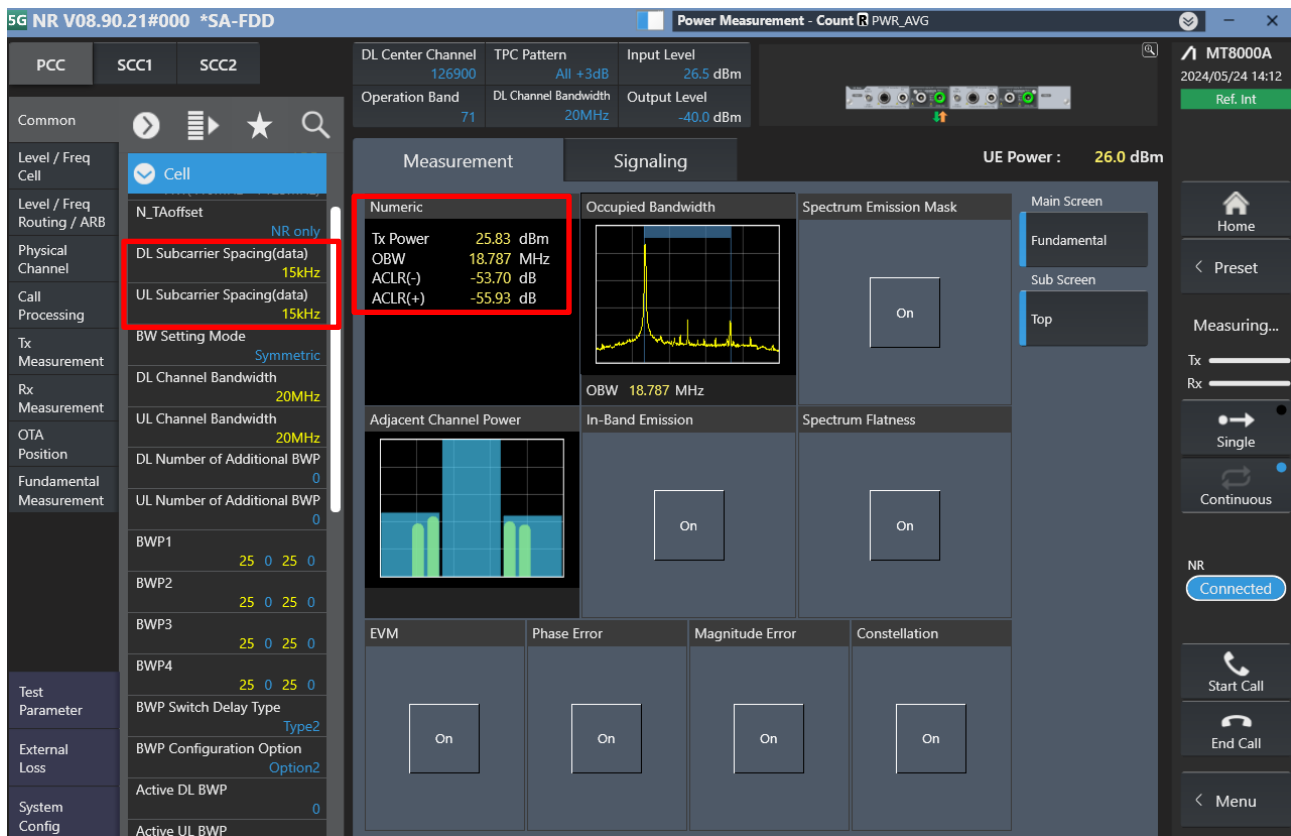
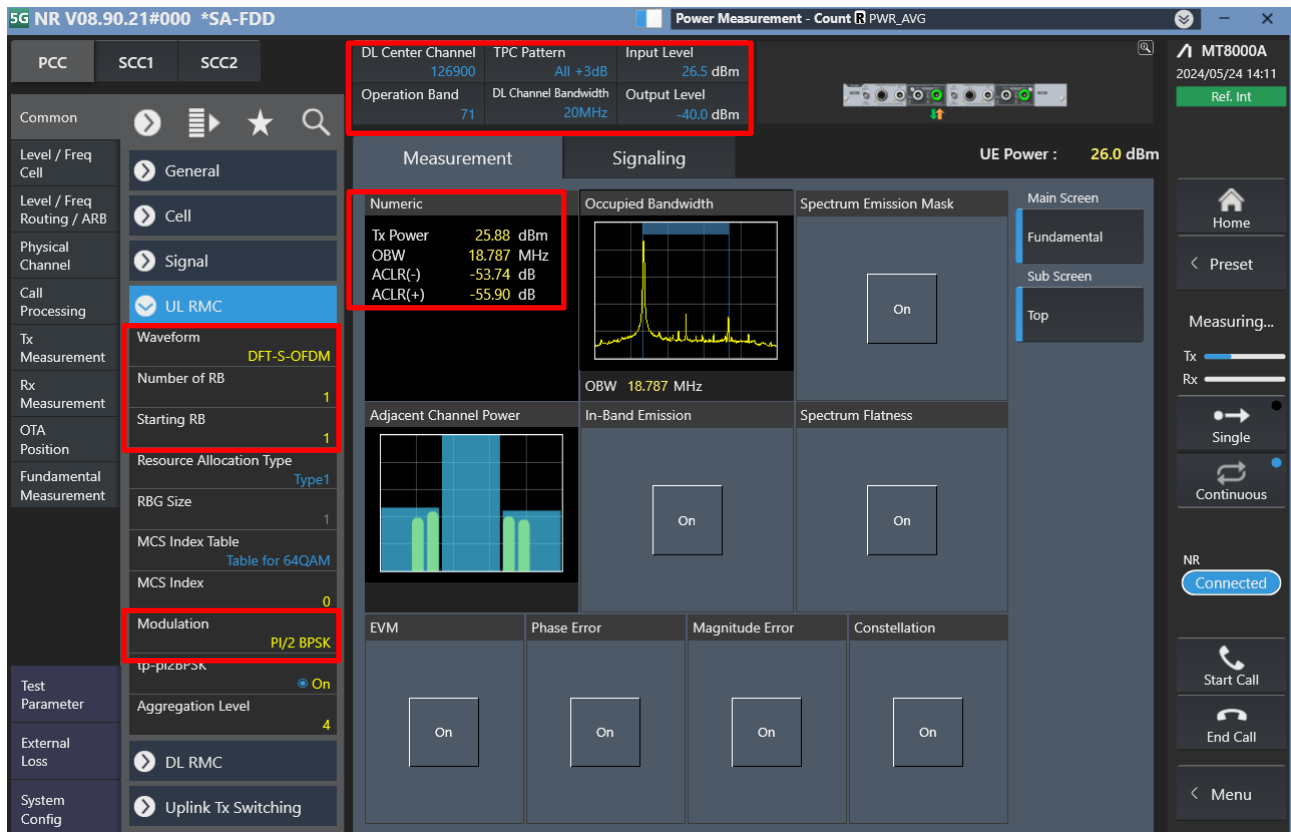
Connected

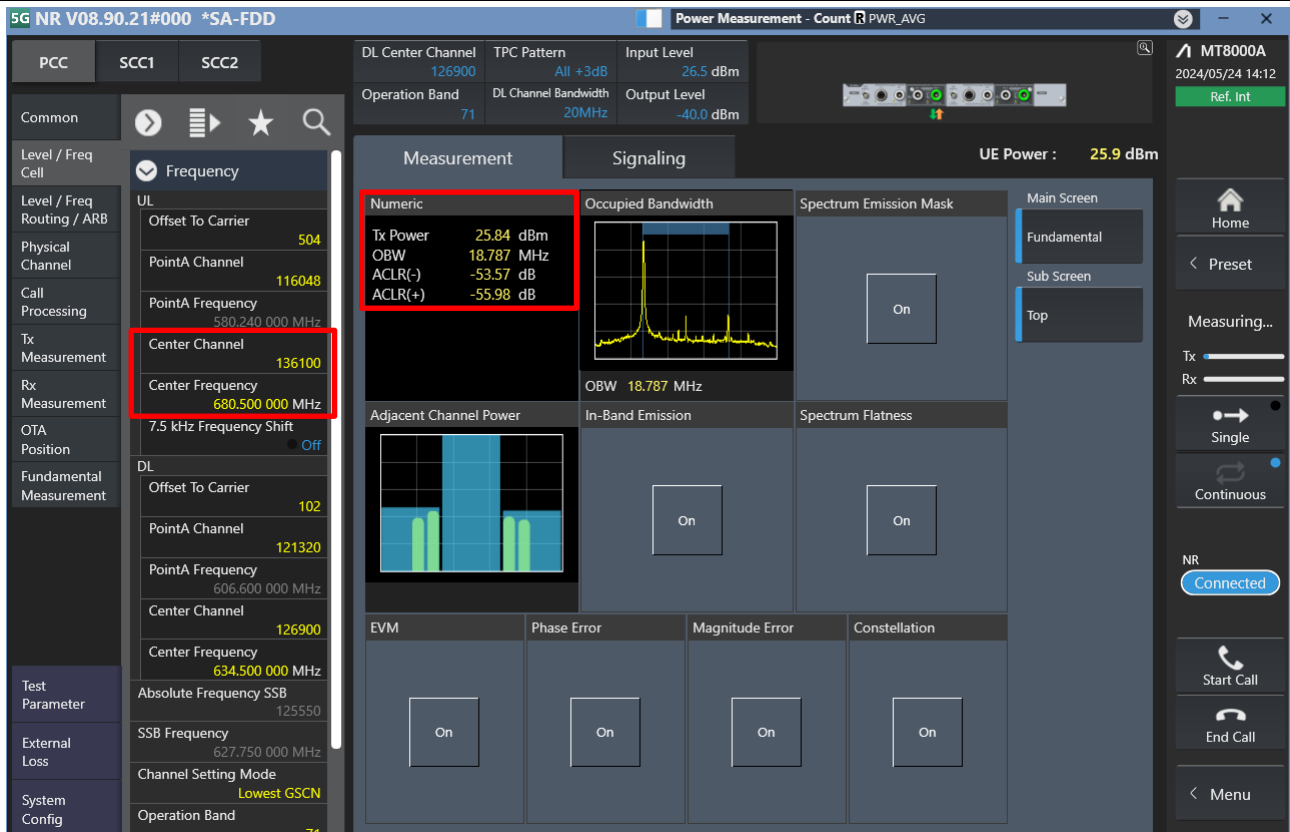
Start Call

End Call

Menu

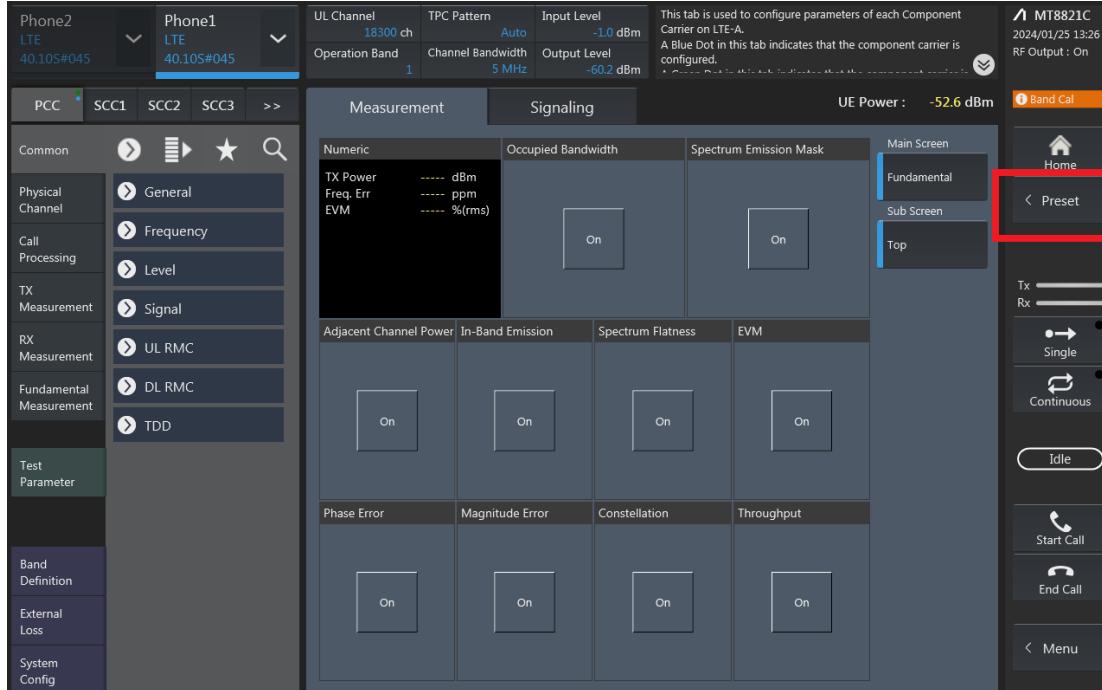
<5G NR FR1>





LTE Uplink and Downlink Carrier Aggregation configurations:

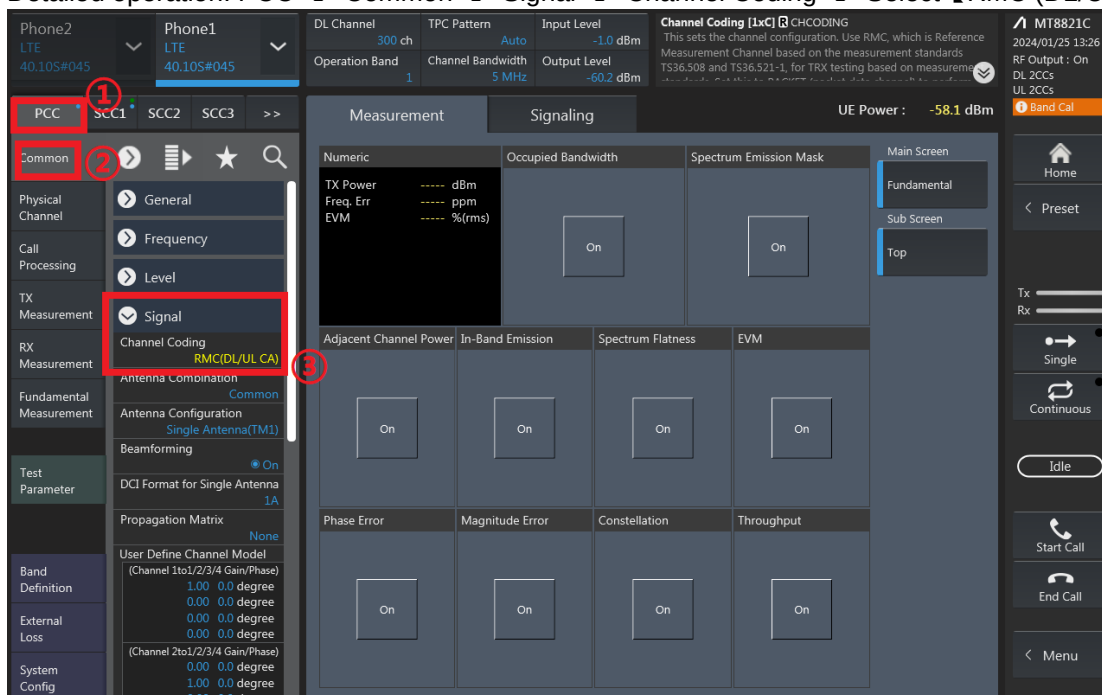
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



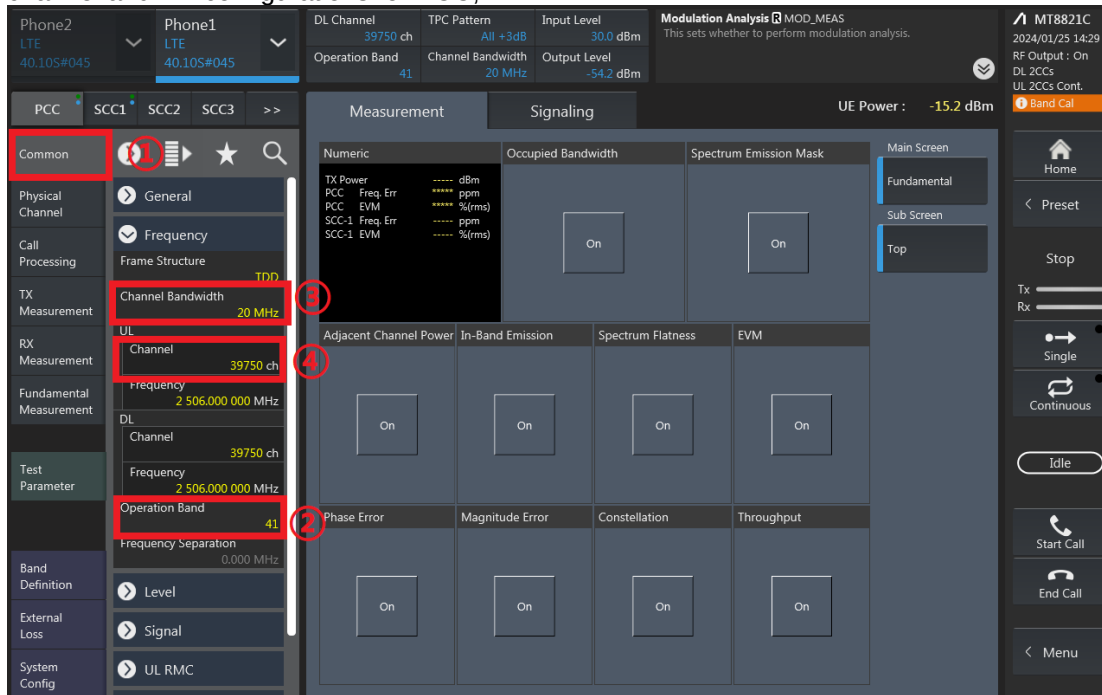
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

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.

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 PPM PCC EVM % (rms) SCC-1 Freq. Err. PPM SCC-1 EVM % (rms)

Occupied Bandwidth

Spectrum Emission Mask

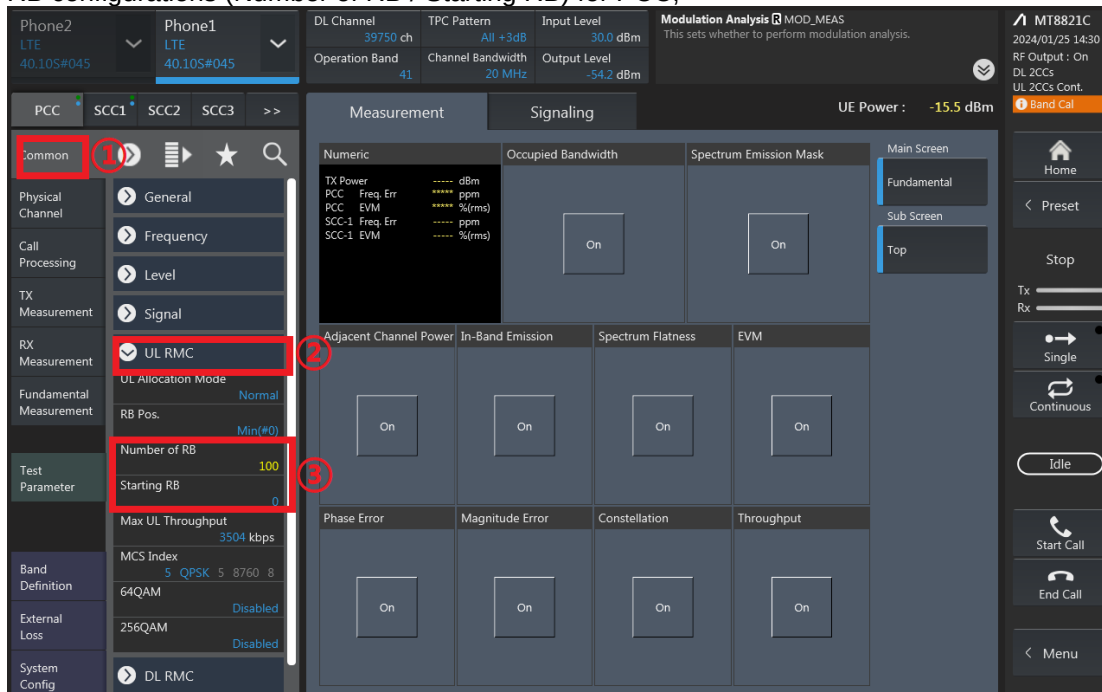
Main Screen Fundamental Sub Screen Top

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

Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

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 DL RMC

Numeric

TX Power PCC Freq. Err. dBm PPM PCC EVM % (rms) SCC-1 Freq. Err. PPM SCC-1 EVM % (rms)

Occupied Bandwidth

Spectrum Emission Mask

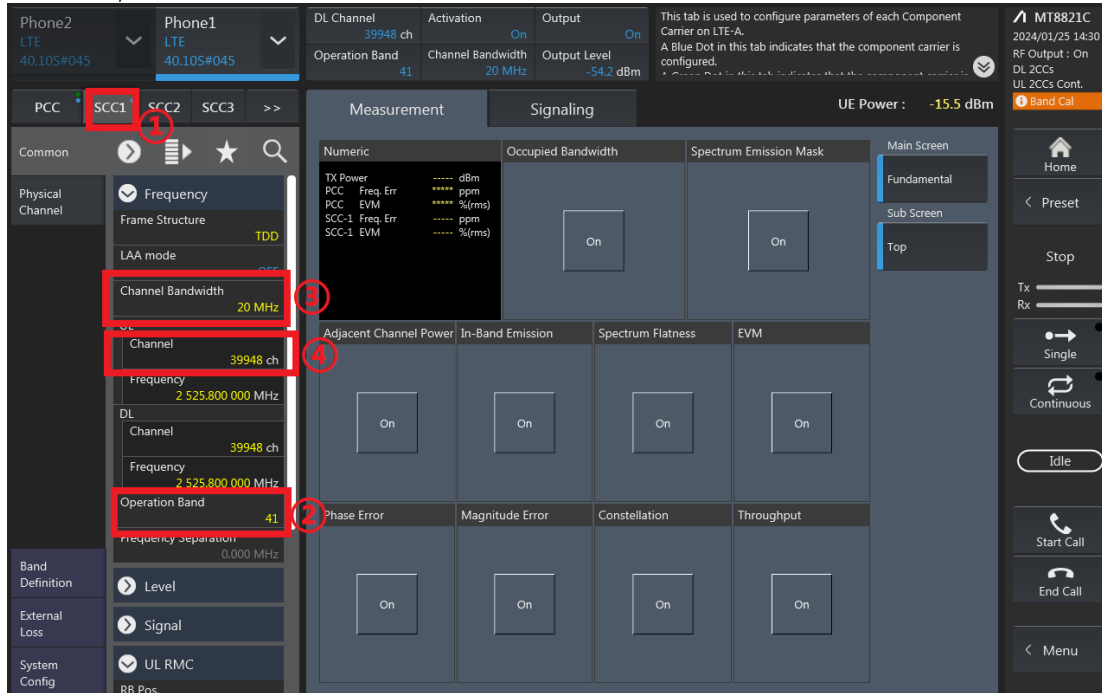
Main Screen Fundamental Sub Screen Top

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

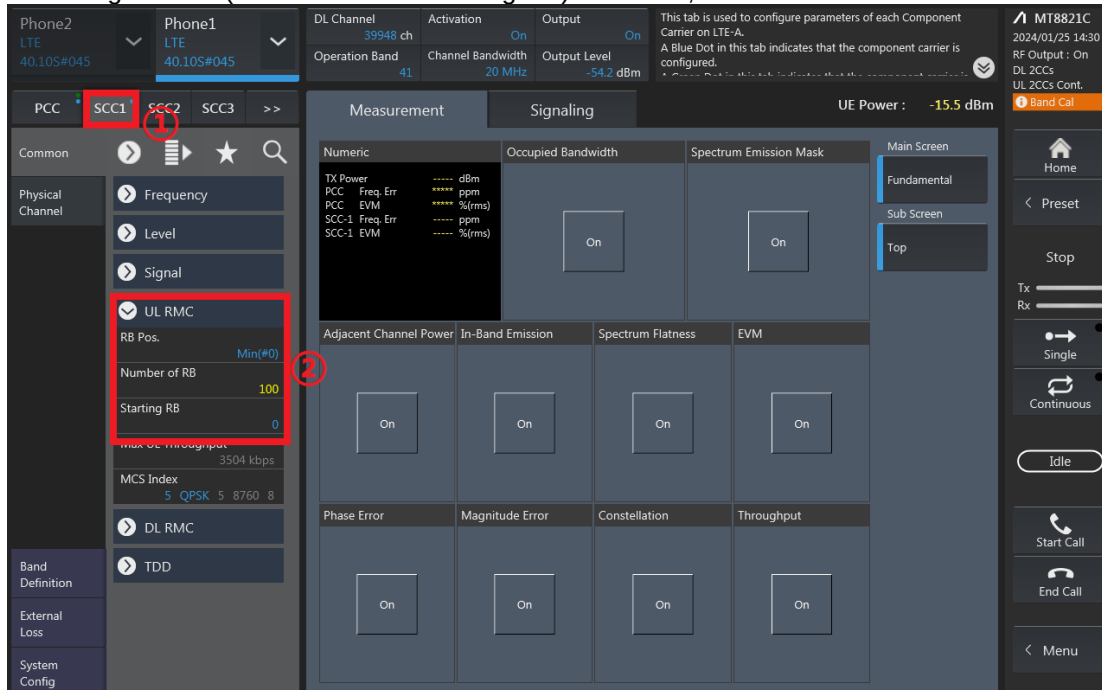
Adjacent Channel Power In-Band Emission Spectrum Flatness EVM

Phase Error Magnitude Error Constellation Throughput

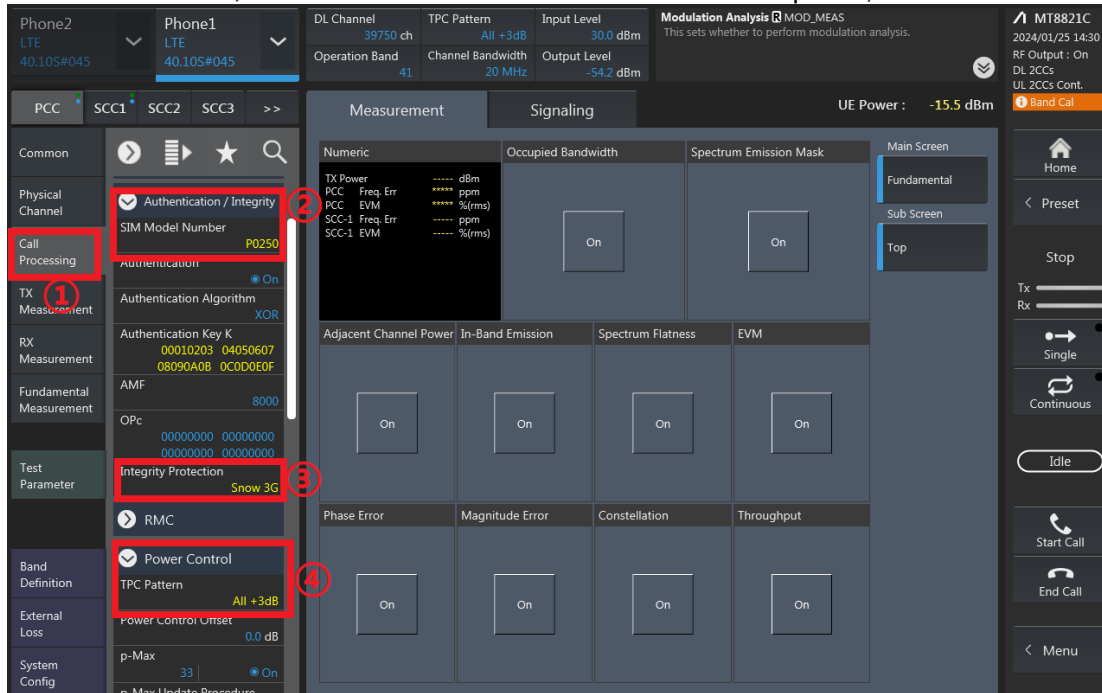
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



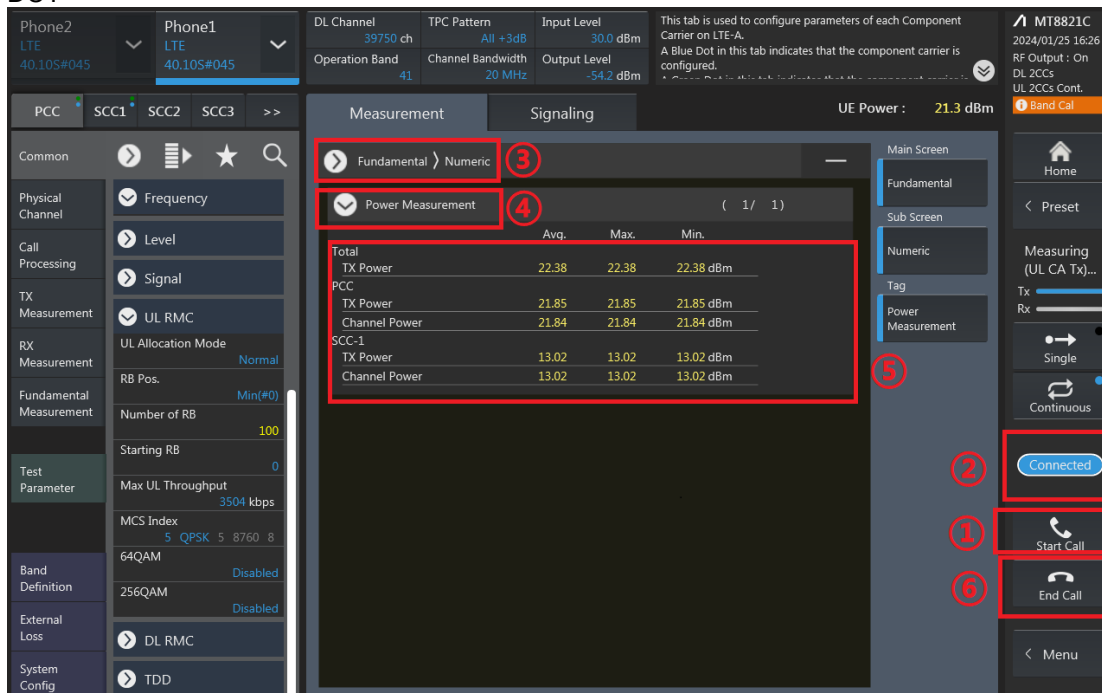
RB configurations (Number of RB / Starting RB) for SCC1;



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_7C Ant 4							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	1	99	1	0	24.11
21100	21298	QPSK	1	99	1	0	24.02
21350	21152	QPSK	1	0	1	99	24.22
20850	21048	QPSK	50	50	50	0	23.96
21100	21298	QPSK	50	50	50	0	24.11
21350	21152	QPSK	50	0	50	50	24.06

CA_38C Ant 4							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	99	1	0	24.25
37901	38099	QPSK	1	99	1	0	24.22
38150	37952	QPSK	1	0	1	99	24.39
37850	38048	QPSK	50	50	50	0	24.17
37901	38099	QPSK	50	50	50	0	24.26
38150	37952	QPSK	50	0	50	50	24.31

CA_7C Ant 5							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	1	99	1	0	23.43
21100	21298	QPSK	1	99	1	0	23.67
21350	21152	QPSK	1	0	1	99	23.50
20850	21048	QPSK	50	50	50	0	23.33
21100	21298	QPSK	50	50	50	0	23.54
21350	21152	QPSK	50	0	50	50	23.34

CA_38C Ant 5							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	99	1	0	23.61
37901	38099	QPSK	1	99	1	0	23.73
38150	37952	QPSK	1	0	1	99	23.72
37850	38048	QPSK	50	50	50	0	23.6
37901	38099	QPSK	50	50	50	0	23.65
38150	37952	QPSK	50	0	50	50	23.57

CA_7C Ant 6							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	1	99	1	0	22.98
21100	21298	QPSK	1	99	1	0	23.11
21350	21152	QPSK	1	0	1	99	23.09
20850	21048	QPSK	50	50	50	0	22.97
21100	21298	QPSK	50	50	50	0	23.05
21350	21152	QPSK	50	0	50	50	23.04

CA_38C Ant 6							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	99	1	0	23.22
37901	38099	QPSK	1	99	1	0	23.24
38150	37952	QPSK	1	0	1	99	23.17
37850	38048	QPSK	50	50	50	0	23.14
37901	38099	QPSK	50	50	50	0	23.09
38150	37952	QPSK	50	0	50	50	23.1

CA_7C Ant 7							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	1	99	1	0	22.11
21100	21298	QPSK	1	99	1	0	22.19
21350	21152	QPSK	1	0	1	99	22.35
20850	21048	QPSK	50	50	50	0	22
21100	21298	QPSK	50	50	50	0	22.17
21350	21152	QPSK	50	0	50	50	22.21

CA_38C Ant 7							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	99	1	0	22.5
37901	38099	QPSK	1	99	1	0	22.21
38150	37952	QPSK	1	0	1	99	22.57
37850	38048	QPSK	50	50	50	0	22.39
37901	38099	QPSK	50	50	50	0	22.14
38150	37952	QPSK	50	0	50	50	22.5

Reduced Power Mode for DS11

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	16.92	17.20
21100	21298	QPSK	1	99	1	0	16.97	17.20
21350	21152	QPSK	1	0	1	99	16.8	17.20
20850	21048	QPSK	50	50	50	0	16.61	17.20
21100	21298	QPSK	50	50	50	0	16.8	17.20
21350	21152	QPSK	50	0	50	50	16.66	17.20

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	18.35	18.70
37901	38099	QPSK	1	99	1	0	18.35	18.70
38150	37952	QPSK	1	0	1	99	18.38	18.70
37850	38048	QPSK	50	50	50	0	18.14	18.70
37901	38099	QPSK	50	50	50	0	18.26	18.70
38150	37952	QPSK	50	0	50	50	17.98	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	15.7	16.50
21100	21298	QPSK	1	99	1	0	15.82	16.50
21350	21152	QPSK	1	0	1	99	15.76	16.50
20850	21048	QPSK	50	50	50	0	15.62	16.50
21100	21298	QPSK	50	50	50	0	15.79	16.50
21350	21152	QPSK	50	0	50	50	15.54	16.50

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	17.58	18.50
37901	38099	QPSK	1	99	1	0	17.8	18.50
38150	37952	QPSK	1	0	1	99	17.53	18.50
37850	38048	QPSK	50	50	50	0	17.34	18.50
37901	38099	QPSK	50	50	50	0	17.68	18.50
38150	37952	QPSK	50	0	50	50	17.52	18.50

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	24.20
21100	21298	QPSK	1	99	1	0	23.11	24.20
21350	21152	QPSK	1	0	1	99	23.09	24.20
20850	21048	QPSK	50	50	50	0	22.97	24.20
21100	21298	QPSK	50	50	50	0	23.05	24.20
21350	21152	QPSK	50	0	50	50	23.04	24.20

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	23.22	24.20
37901	38099	QPSK	1	99	1	0	23.24	24.20
38150	37952	QPSK	1	0	1	99	23.17	24.20
37850	38048	QPSK	50	50	50	0	23.09	24.20
37901	38099	QPSK	50	50	50	0	23.14	24.20
38150	37952	QPSK	50	0	50	50	23.1	24.20

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	18.1	19.00
21100	21298	QPSK	1	99	1	0	18.29	19.00
21350	21152	QPSK	1	0	1	99	18.12	19.00
20850	21048	QPSK	50	50	50	0	18.05	19.00
21100	21298	QPSK	50	50	50	0	18.07	19.00
21350	21152	QPSK	50	0	50	50	17.99	19.00

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	20.26	21.20
37901	38099	QPSK	1	99	1	0	20.35	21.20
38150	37952	QPSK	1	0	1	99	20.22	21.20
37850	38048	QPSK	50	50	50	0	20.07	21.20
37901	38099	QPSK	50	50	50	0	20.23	21.20
38150	37952	QPSK	50	0	50	50	20.03	21.20

Reduced Power Mode for DSI3

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	17.71	18.20
21100	21298	QPSK	1	99	1	0	17.88	18.20
21350	21152	QPSK	1	0	1	99	17.74	18.20
20850	21048	QPSK	50	50	50	0	17.54	18.20
21100	21298	QPSK	50	50	50	0	17.69	18.20
21350	21152	QPSK	50	0	50	50	17.78	18.20

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	19.87	20.20
37901	38099	QPSK	1	99	1	0	19.85	20.20
38150	37952	QPSK	1	0	1	99	19.9	20.20
37850	38048	QPSK	50	50	50	0	19.53	20.20
37901	38099	QPSK	50	50	50	0	19.77	20.20
38150	37952	QPSK	50	0	50	50	19.6	20.20

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	17.64	18.50
21100	21298	QPSK	1	99	1	0	17.86	18.50
21350	21152	QPSK	1	0	1	99	17.76	18.50
20850	21048	QPSK	50	50	50	0	17.47	18.50
21100	21298	QPSK	50	50	50	0	17.74	18.50
21350	21152	QPSK	50	0	50	50	17.62	18.50

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	18.53	19.50
37901	38099	QPSK	1	99	1	0	18.68	19.50
38150	37952	QPSK	1	0	1	99	18.59	19.50
37850	38048	QPSK	50	50	50	0	18.56	19.50
37901	38099	QPSK	50	50	50	0	18.58	19.50
38150	37952	QPSK	50	0	50	50	18.52	19.50

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	19.2	20.70
21100	21298	QPSK	1	99	1	0	19.39	20.70
21350	21152	QPSK	1	0	1	99	19.37	20.70
20850	21048	QPSK	50	50	50	0	19.25	20.70
21100	21298	QPSK	50	50	50	0	19.35	20.70
21350	21152	QPSK	50	0	50	50	19.20	20.70

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	20.57	21.70
37901	38099	QPSK	1	99	1	0	20.75	21.70
38150	37952	QPSK	1	0	1	99	20.53	21.70
37850	38048	QPSK	50	50	50	0	20.44	21.70
37901	38099	QPSK	50	50	50	0	20.67	21.70
38150	37952	QPSK	50	0	50	50	20.38	21.70

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	20.19	21.00
21100	21298	QPSK	1	99	1	0	20.23	21.00
21350	21152	QPSK	1	0	1	99	20.12	21.00
20850	21048	QPSK	50	50	50	0	19.89	21.00
21100	21298	QPSK	50	50	50	0	20.1	21.00
21350	21152	QPSK	50	0	50	50	20.01	21.00

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	18.74	19.70
37901	38099	QPSK	1	99	1	0	18.76	19.70
38150	37952	QPSK	1	0	1	99	18.77	19.70
37850	38048	QPSK	50	50	50	0	18.59	19.70
37901	38099	QPSK	50	50	50	0	18.73	19.70
38150	37952	QPSK	50	0	50	50	18.62	19.70

Reduced Power Mode for DSI4

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	23.34	23.70
21100	21298	QPSK	1	99	1	0	23.35	23.70
21350	21152	QPSK	1	0	1	99	23.26	23.70
20850	21048	QPSK	50	50	50	0	23.15	23.70
21100	21298	QPSK	50	50	50	0	23.29	23.70
21350	21152	QPSK	50	0	50	50	23.24	23.70

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	24.25	24.70
37901	38099	QPSK	1	99	1	0	24.22	24.70
38150	37952	QPSK	1	0	1	99	24.39	24.70
37850	38048	QPSK	50	50	50	0	24.08	24.70
37901	38099	QPSK	50	50	50	0	24.20	24.70
38150	37952	QPSK	50	0	50	50	24.02	24.70

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	17.64	18.50
21100	21298	QPSK	1	99	1	0	17.86	18.50
21350	21152	QPSK	1	0	1	99	17.76	18.50
20850	21048	QPSK	50	50	50	0	17.47	18.50
21100	21298	QPSK	50	50	50	0	17.74	18.50
21350	21152	QPSK	50	0	50	50	17.62	18.50

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	18.53	19.50
37901	38099	QPSK	1	99	1	0	18.68	19.50
38150	37952	QPSK	1	0	1	99	18.59	19.50
37850	38048	QPSK	50	50	50	0	18.56	19.50
37901	38099	QPSK	50	50	50	0	18.58	19.50
38150	37952	QPSK	50	0	50	50	18.52	19.50

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	24.20
21100	21298	QPSK	1	99	1	0	23.11	24.20
21350	21152	QPSK	1	0	1	99	23.09	24.20
20850	21048	QPSK	50	50	50	0	22.97	24.20
21100	21298	QPSK	50	50	50	0	23.05	24.20
21350	21152	QPSK	50	0	50	50	23.04	24.20

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	23.22	24.20
37901	38099	QPSK	1	99	1	0	23.24	24.20
38150	37952	QPSK	1	0	1	99	23.17	24.20
37850	38048	QPSK	50	50	50	0	23.09	24.20
37901	38099	QPSK	50	50	50	0	23.14	24.20
38150	37952	QPSK	50	0	50	50	23.1	24.20

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	20.19	21.00
21100	21298	QPSK	1	99	1	0	20.23	21.00
21350	21152	QPSK	1	0	1	99	20.12	21.00
20850	21048	QPSK	50	50	50	0	19.89	21.00
21100	21298	QPSK	50	50	50	0	20.1	21.00
21350	21152	QPSK	50	0	50	50	20.01	21.00

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	18.74	19.70
37901	38099	QPSK	1	99	1	0	18.76	19.70
38150	37952	QPSK	1	0	1	99	18.77	19.70
37850	38048	QPSK	50	50	50	0	18.59	19.70
37901	38099	QPSK	50	50	50	0	18.73	19.70
38150	37952	QPSK	50	0	50	50	18.62	19.70

Reduced Power Mode for DSI5

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	16.92	17.20
21100	21298	QPSK	1	99	1	0	16.97	17.20
21350	21152	QPSK	1	0	1	99	16.8	17.20
20850	21048	QPSK	50	50	50	0	16.61	17.20
21100	21298	QPSK	50	50	50	0	16.8	17.20
21350	21152	QPSK	50	0	50	50	16.66	17.20

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	18.35	18.70
37901	38099	QPSK	1	99	1	0	18.35	18.70
38150	37952	QPSK	1	0	1	99	18.38	18.70
37850	38048	QPSK	50	50	50	0	18.14	18.70
37901	38099	QPSK	50	50	50	0	18.26	18.70
38150	37952	QPSK	50	0	50	50	17.98	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	15.7	16.50
21100	21298	QPSK	1	99	1	0	15.82	16.50
21350	21152	QPSK	1	0	1	99	15.76	16.50
20850	21048	QPSK	50	50	50	0	15.62	16.50
21100	21298	QPSK	50	50	50	0	15.79	16.50
21350	21152	QPSK	50	0	50	50	15.54	16.50

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	17.58	18.50
37901	38099	QPSK	1	99	1	0	17.8	18.50
38150	37952	QPSK	1	0	1	99	17.53	18.50
37850	38048	QPSK	50	50	50	0	17.34	18.50
37901	38099	QPSK	50	50	50	0	17.68	18.50
38150	37952	QPSK	50	0	50	50	17.52	18.50

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	19.2	20.70
21100	21298	QPSK	1	99	1	0	19.39	20.70
21350	21152	QPSK	1	0	1	99	19.37	20.70
20850	21048	QPSK	50	50	50	0	19.25	20.70
21100	21298	QPSK	50	50	50	0	19.35	20.70
21350	21152	QPSK	50	0	50	50	19.20	20.70

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	20.57	21.70
37901	38099	QPSK	1	99	1	0	20.75	21.70
38150	37952	QPSK	1	0	1	99	20.53	21.70
37850	38048	QPSK	50	50	50	0	20.44	21.70
37901	38099	QPSK	50	50	50	0	20.67	21.70
38150	37952	QPSK	50	0	50	50	20.38	21.70

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	18.1	19.00
21100	21298	QPSK	1	99	1	0	18.29	19.00
21350	21152	QPSK	1	0	1	99	18.12	19.00
20850	21048	QPSK	50	50	50	0	18.05	19.00
21100	21298	QPSK	50	50	50	0	18.07	19.00
21350	21152	QPSK	50	0	50	50	17.99	19.00

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	18.74	19.70
37901	38099	QPSK	1	99	1	0	18.76	19.70
38150	37952	QPSK	1	0	1	99	18.77	19.70
37850	38048	QPSK	50	50	50	0	18.59	19.70
37901	38099	QPSK	50	50	50	0	18.73	19.70
38150	37952	QPSK	50	0	50	50	18.62	19.70