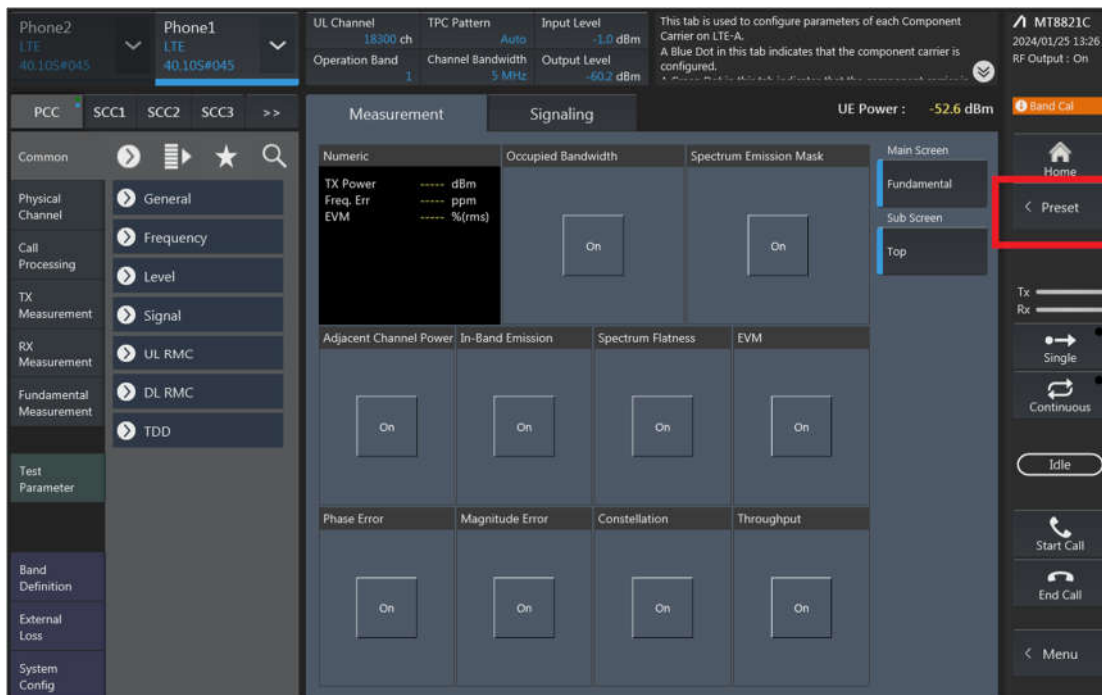


LTE Uplink and Downlink Carrier Aggregation configurations:

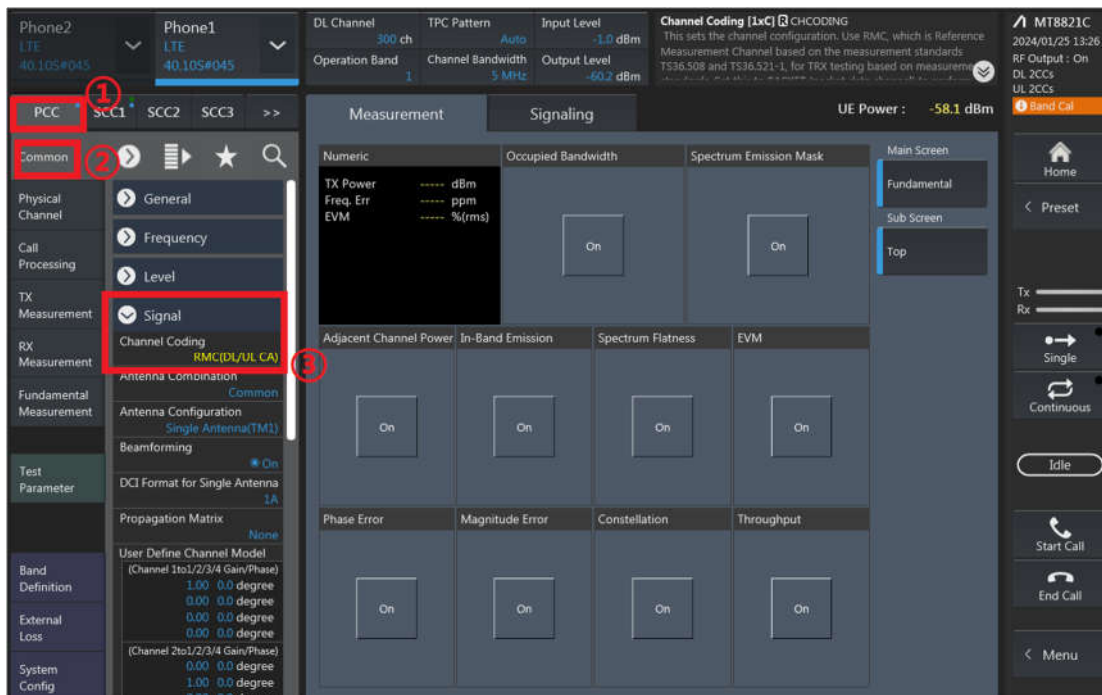
1. Change the Scenario in the Configuration of LTE Signaling and Preset.



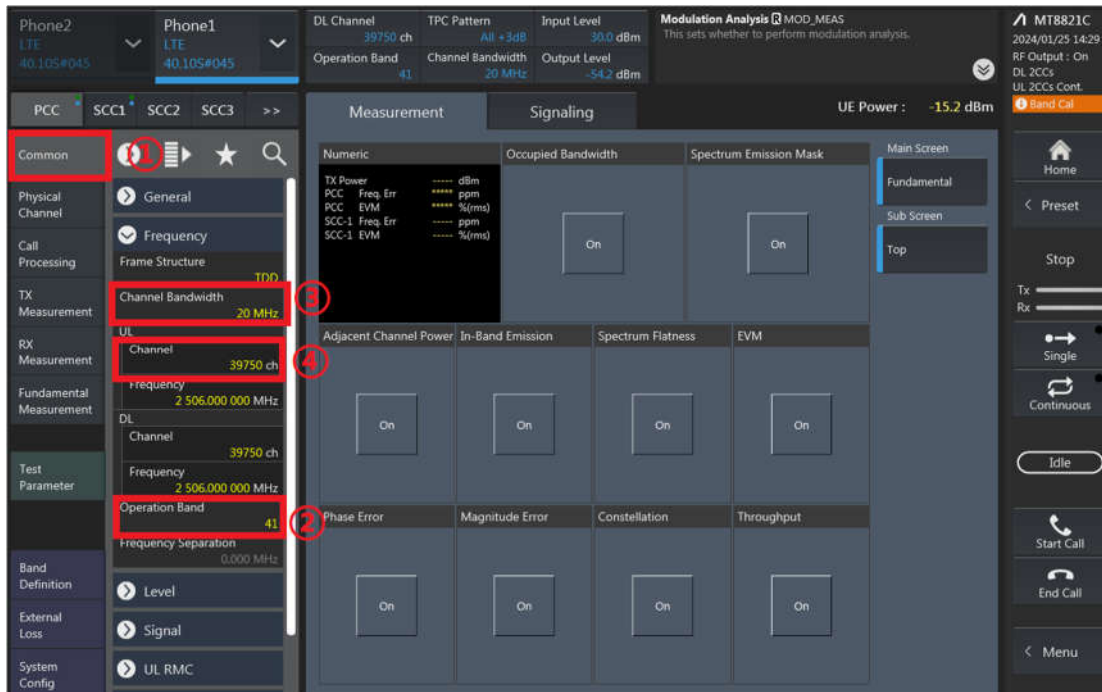
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

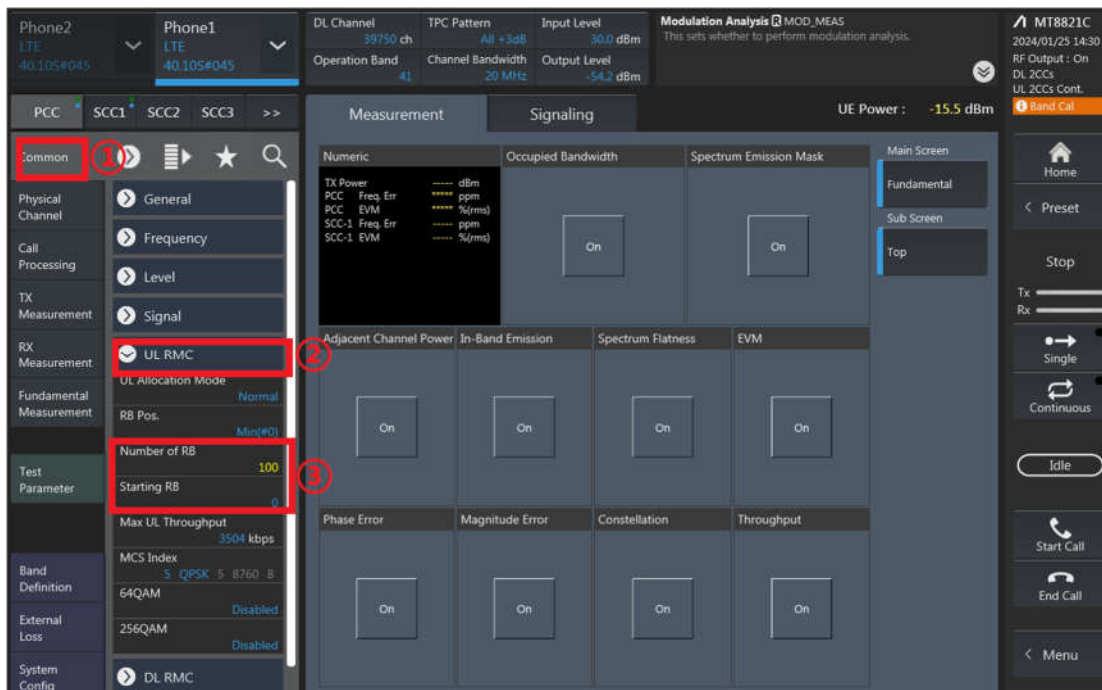
Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



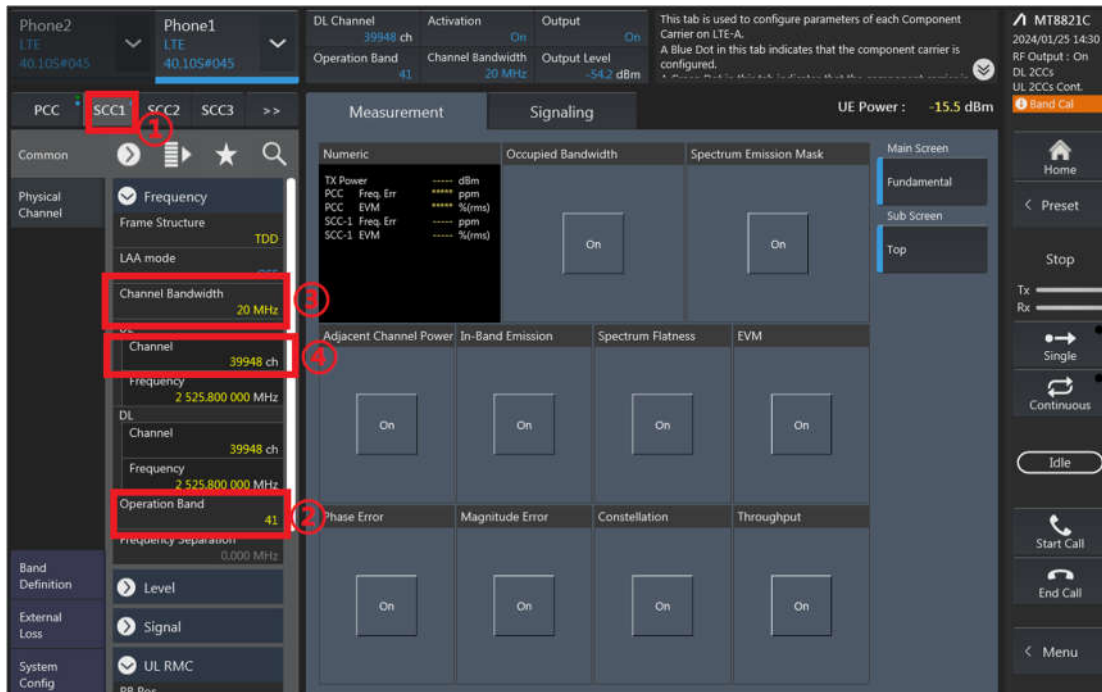
- PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



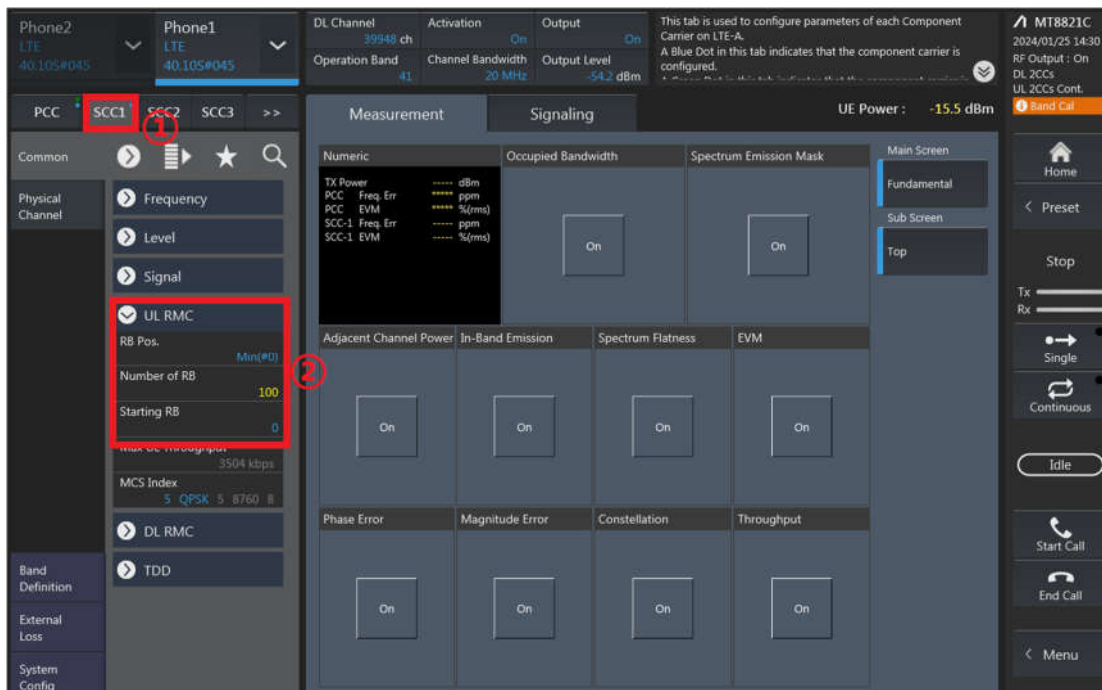
RB configurations (Number of RB / Starting RB) for PCC;



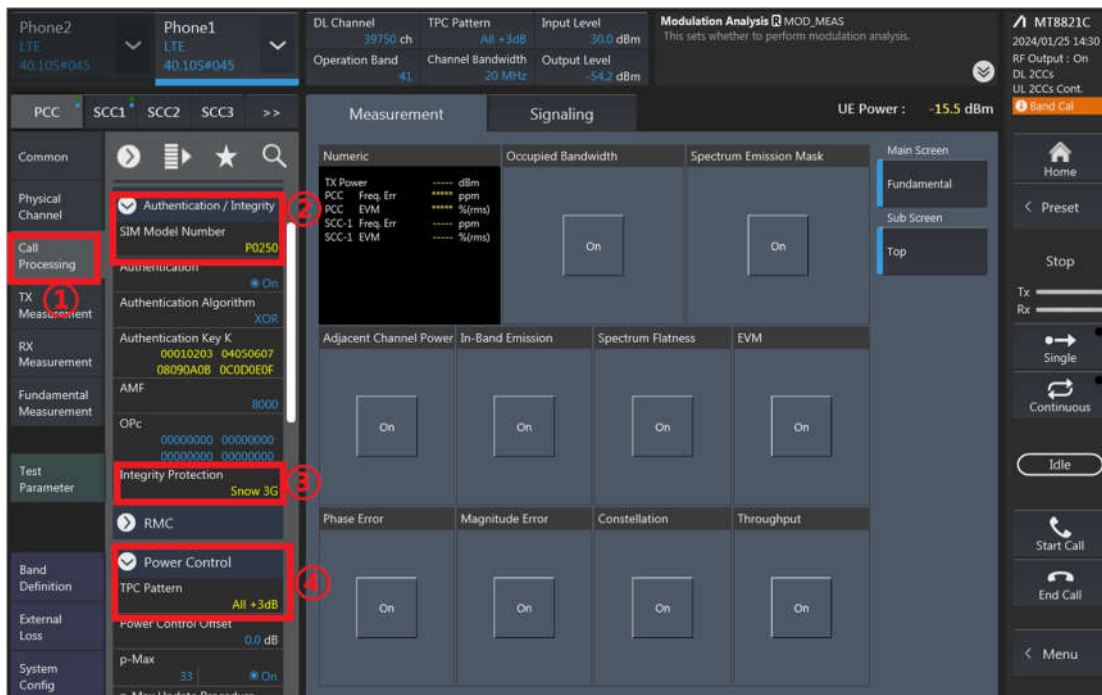
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



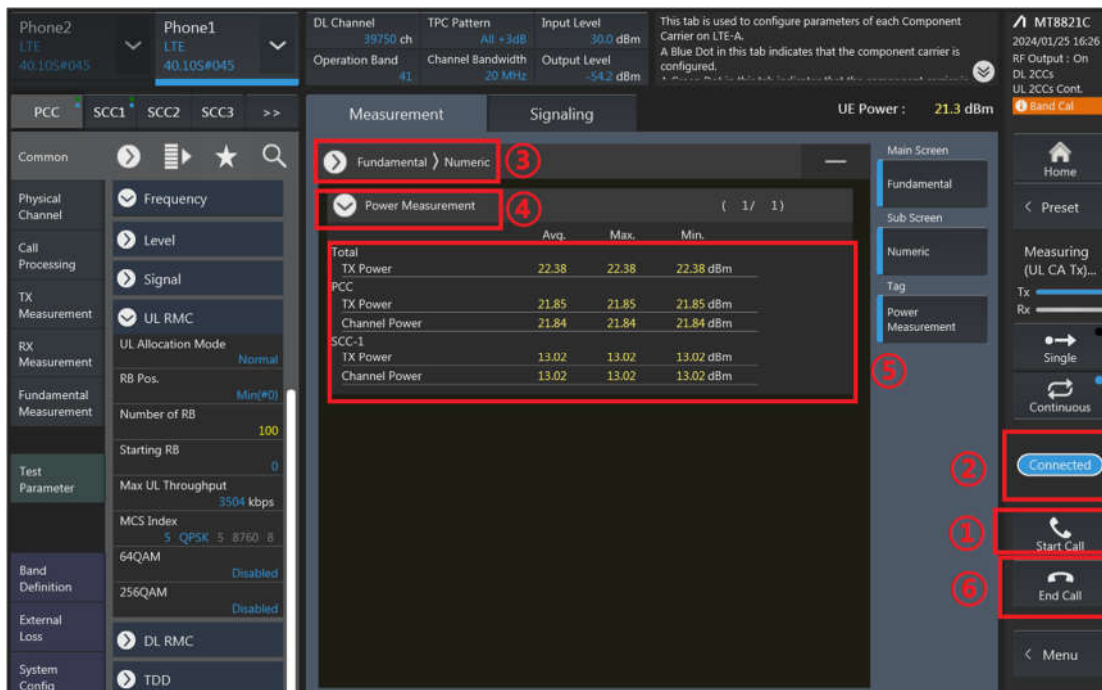
RB configurations (Number of RB / Starting RB) for SCC1;



- Select the PCC tab, then set “SIM Model Number” and select max power;



- Click the “Connect” button at the Right of the screen, if necessary, turn the Airplane mode on/off in the DUT



- 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

CA_7C_Ant 4											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power State	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	24.52	25.70
21100	20902	QPSK	1	0	0	0	1	0	Full	24.48	25.70
21350	21152	QPSK	1	0	0	0	1	0	Full	24.46	25.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 1	18.58	19.70
21100	20902	QPSK	1	0	0	0	1	0	ECI 1	18.46	19.70
21350	21152	QPSK	1	0	0	0	1	0	ECI 1	18.53	19.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	20.10	21.20
21100	20902	QPSK	1	0	0	0	1	0	ECI 3	20.05	21.20
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	19.93	21.20
20850	21048	QPSK	1	0	0	0	1	0	ECI 4	24.53	25.70
21100	20902	QPSK	1	0	0	0	1	0	ECI 4	24.51	25.70
21350	21152	QPSK	1	0	0	0	1	0	ECI 4	24.47	25.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	18.46	19.70
21100	20902	QPSK	1	0	0	0	1	0	ECI 5	18.48	19.70
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	18.46	19.70

CA_7C_Ant 2											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power State	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	23.94	25.00
21100	20902	QPSK	1	0	0	0	1	0	Full	23.78	25.00
21350	21152	QPSK	1	0	0	0	1	0	Full	23.88	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 1	23.88	25.00
21100	20902	QPSK	1	0	0	0	1	0	ECI 1	23.73	25.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 1	23.89	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	21.08	22.00
21100	20902	QPSK	1	0	0	0	1	0	ECI 3	20.75	22.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	20.90	22.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 4	23.89	25.00
21100	20902	QPSK	1	0	0	0	1	0	ECI 4	23.76	25.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 4	23.85	25.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	20.94	22.00
21100	20902	QPSK	1	0	0	0	1	0	ECI 5	20.81	22.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	20.83	22.00

CA 7C Ant 5											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power State	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	24.80	25.70
21100	20902	QPSK	1	0	0	0	1	0	Full	24.75	25.70
21350	21152	QPSK	1	0	0	0	1	0	Full	24.78	25.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 1	20.23	21.20
21100	20902	QPSK	1	0	0	0	1	0	ECI 1	20.24	21.20
21350	21152	QPSK	1	0	0	0	1	0	ECI 1	20.28	21.20
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	21.74	22.70
21100	20902	QPSK	1	0	0	0	1	0	ECI 3	21.72	22.70
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	21.78	22.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 4	21.68	22.70
21100	20902	QPSK	1	0	0	0	1	0	ECI 4	21.62	22.70
21350	21152	QPSK	1	0	0	0	1	0	ECI 4	21.67	22.70
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	20.23	21.20
21100	20902	QPSK	1	0	0	0	1	0	ECI 5	20.20	21.20
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	20.25	21.20

CA_7C_Ant 3											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power State	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	23.49	25.50
21100	20902	QPSK	1	0	0	0	1	0	Full	23.45	25.50
21350	21152	QPSK	1	0	0	0	1	0	Full	23.47	25.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 1	16.63	18.50
21100	20902	QPSK	1	0	0	0	1	0	ECI 1	16.57	18.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 1	16.62	18.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 3	17.07	19.00
21100	20902	QPSK	1	0	0	0	1	0	ECI 3	17.03	19.00
21350	21152	QPSK	1	0	0	0	1	0	ECI 3	17.05	19.00
20850	21048	QPSK	1	0	0	0	1	0	ECI 4	23.52	25.50
21100	20902	QPSK	1	0	0	0	1	0	ECI 4	23.51	25.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 4	23.50	25.50
20850	21048	QPSK	1	0	0	0	1	0	ECI 5	16.55	18.50
21100	20902	QPSK	1	0	0	0	1	0	ECI 5	16.53	18.50
21350	21152	QPSK	1	0	0	0	1	0	ECI 5	16.52	18.50

CA_38C_Ant 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Power State	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	Full	24.35	25.70
37901	38099	QPSK	1	0	0	0	1	Full	24.45	25.70
38150	37952	QPSK	1	0	0	0	1	Full	24.31	25.70
37850	38048	QPSK	1	0	0	0	1	ECI 1	19.62	20.70
37901	38099	QPSK	1	0	0	0	1	ECI 1	19.58	20.70
38150	37952	QPSK	1	0	0	0	1	ECI 1	19.52	20.70
37850	38048	QPSK	1	0	0	0	1	ECI 3	21.06	22.20
37901	38099	QPSK	1	0	0	0	1	ECI 3	21.14	22.20
38150	37952	QPSK	1	0	0	0	1	ECI 3	21.00	22.20
37850	38048	QPSK	1	0	0	0	1	ECI 4	24.39	25.70
37901	38099	QPSK	1	0	0	0	1	ECI 4	24.45	25.70
38150	37952	QPSK	1	0	0	0	1	ECI 4	24.26	25.70
37850	38048	QPSK	1	0	0	0	1	ECI 5	19.41	20.70
37901	38099	QPSK	1	0	0	0	1	ECI 5	19.64	20.70
38150	37952	QPSK	1	0	0	0	1	ECI 5	19.47	20.70

CA_38C_Ant 2										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Power State	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	Full	23.45	24.50
37901	38099	QPSK	1	0	0	0	1	Full	23.55	24.50
38150	37952	QPSK	1	0	0	0	1	Full	23.49	24.50
37850	38048	QPSK	1	0	0	0	1	ECI 1	23.47	24.50
37901	38099	QPSK	1	0	0	0	1	ECI 1	23.52	24.50
38150	37952	QPSK	1	0	0	0	1	ECI 1	23.50	24.50
37850	38048	QPSK	1	0	0	0	1	ECI 3	23.45	24.50
37901	38099	QPSK	1	0	0	0	1	ECI 3	23.50	24.50
38150	37952	QPSK	1	0	0	0	1	ECI 3	23.47	24.50
37850	38048	QPSK	1	0	0	0	1	ECI 4	23.48	24.50
37901	38099	QPSK	1	0	0	0	1	ECI 4	23.52	24.50
38150	37952	QPSK	1	0	0	0	1	ECI 4	23.49	24.50
37850	38048	QPSK	1	0	0	0	1	ECI 5	23.44	24.50
37901	38099	QPSK	1	0	0	0	1	ECI 5	23.49	24.50
38150	37952	QPSK	1	0	0	0	1	ECI 5	23.46	24.50

CA_38C_Ant 5										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Power State	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	Full	24.61	25.70
37901	38099	QPSK	1	0	0	0	1	Full	24.65	25.70
38150	37952	QPSK	1	0	0	0	1	Full	24.58	25.70
37850	38048	QPSK	1	0	0	0	1	ECI 1	21.35	22.20
37901	38099	QPSK	1	0	0	0	1	ECI 1	21.41	22.20
38150	37952	QPSK	1	0	0	0	1	ECI 1	21.33	22.20
37850	38048	QPSK	1	0	0	0	1	ECI 3	22.35	23.20
37901	38099	QPSK	1	0	0	0	1	ECI 3	22.38	23.20
38150	37952	QPSK	1	0	0	0	1	ECI 3	22.33	23.20
37850	38048	QPSK	1	0	0	0	1	ECI 4	22.37	23.20
37901	38099	QPSK	1	0	0	0	1	ECI 4	22.42	23.20
38150	37952	QPSK	1	0	0	0	1	ECI 4	22.35	23.20
37850	38048	QPSK	1	0	0	0	1	ECI 5	21.35	22.20
37901	38099	QPSK	1	0	0	0	1	ECI 5	21.38	22.20
38150	37952	QPSK	1	0	0	0	1	ECI 5	21.37	22.20



Full Power															
2CC															
Configure		CA Configuration (BCS)	PCC						SCC				Power		
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		CA_26A-38A	Band 26	15M	831.5	26865	QPSK	1	0	Band 38	20M	2595	38000	24.85	25.05
		CA_26A-41A	Band 26	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620	24.93	25.05
		CA_2A-26A	Band 2	20M	1880	18900	QPSK	1	0	Band 26	15M	876.5	8865	24.03	24.15
		CA_7A-26A	Band 7	20M	2535	21100	QPSK	1	0	Band 26	15M	876.5	8865	25.06	25.26
		CA_2A-38A	Band 7	20M	2535	21100	QPSK	1	0	Band 38	20M	2595	38000	24.01	24.15
Intra-Band	Non-Contiguous	CA_2A-2A	Band 2	20M	1880	18900	QPSK	1	0	Band 2	5M	1987.5	1175	24.06	24.15
		CA_2C	Band 2	20M	1880	18900	QPSK	1	0	Band 2	20M	1979.80	1098	24.03	24.15
	Contiguous	CA_38C	Band 38	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.80	38198	24.95	25.05
		CA_41C	Band 41	20M	2593	40620	QPSK	1	0	Band 41	20M	2612.80	40818	25.11	25.25
		CA_66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.80	67084	24.52	24.61
		CA_66B	Band 66	15M	1745	132322	QPSK	1	0	Band 66	5M	2164.30	66979	24.55	24.61

3CC																			
Configure		CA Configuration (BCS)	PCC							SCC1				SCC2				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		CA_2A-4A-5A	Band 2	20M	1880	18900	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	24.06	24.15
		CA_2A-5A-7A	Band 2	20M	1880	18900	QPSK	1	0	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	24.01	24.15
		CA_2A-7A-66A	Band 2	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 66	20M	2155	66886	23.95	24.15
		CA_5A-7C	Band 5	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.74	24.86
		CA_7A-66A-66A	Band 7	20M	2535	21100	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	25.14	25.26
		CA_2A-4A-7A	Band 2	20M	1880	18900	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	24.11	24.15
		CA_2A-7A-7A	Band 2	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	24.08	24.15
		CA_2A-7C	Band 2	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.01	24.15
		CA_4A-4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	25.02	25.15
		CA_4A-7C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	25.03	25.15
		CA_5A-7A-66A	Band 5	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 66	20M	2155	66886	24.77	24.86
		CA_5A-7A-7A	Band 5	10M	836.5	20525	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	24.68	24.86
Intra-Band	Non-Contiguous	CA_41A-41A-41A	Band 41	20M	2593	40620	QPSK	1	0	Band 41	20M	2506	39750	Band 41	20M	2680	41490	25.17	25.26
	Contiguous	CA_41D	Band 41	20M	2680	41490	QPSK	1	0	Band 41	20M	2660.2	41292	Band 41	20M	2640.4	41094	25.19	25.25