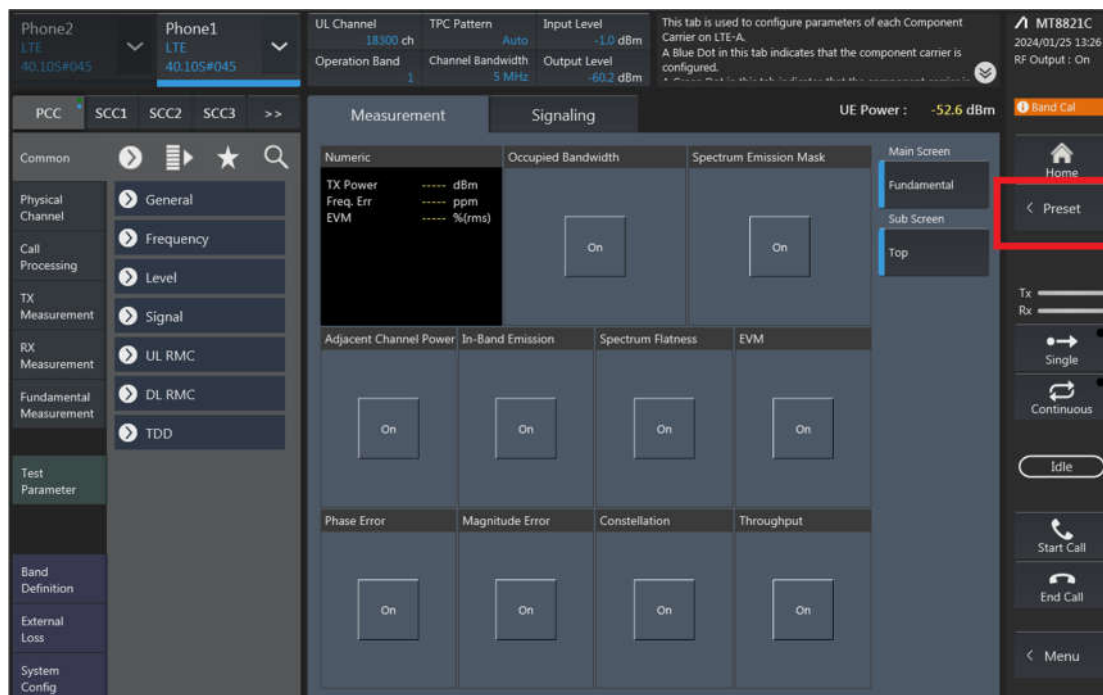


LTE Uplink and Downlink Carrier Aggregation configurations:

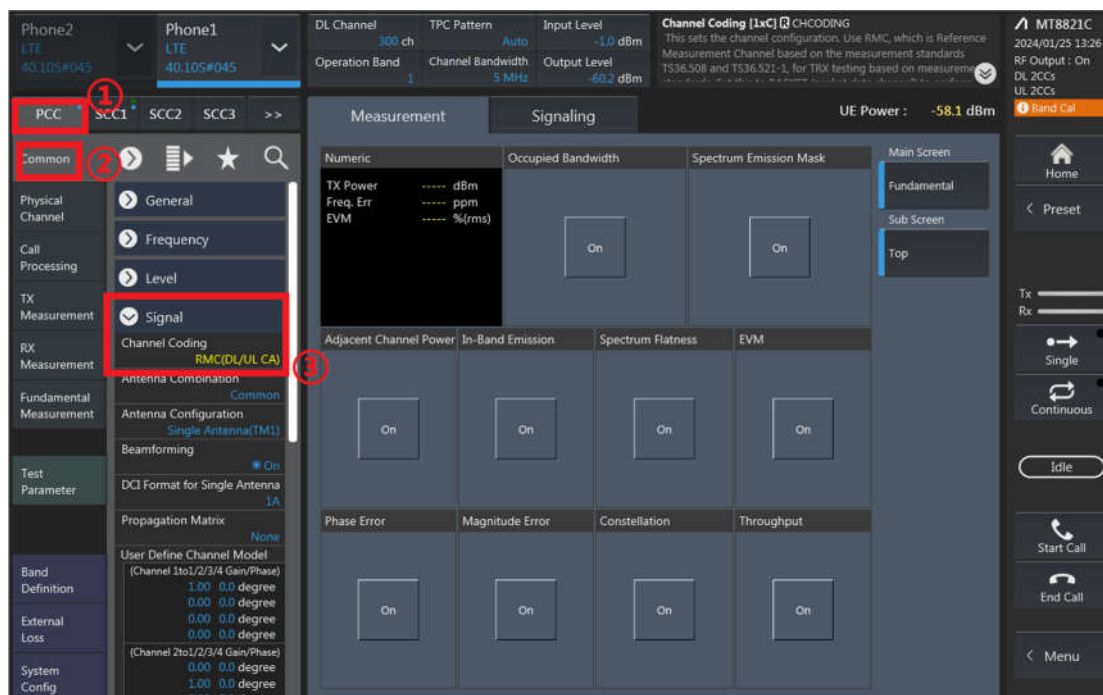
1. Change the Scenario in the Configuration of Phone1 LTE Signaling and Preset.



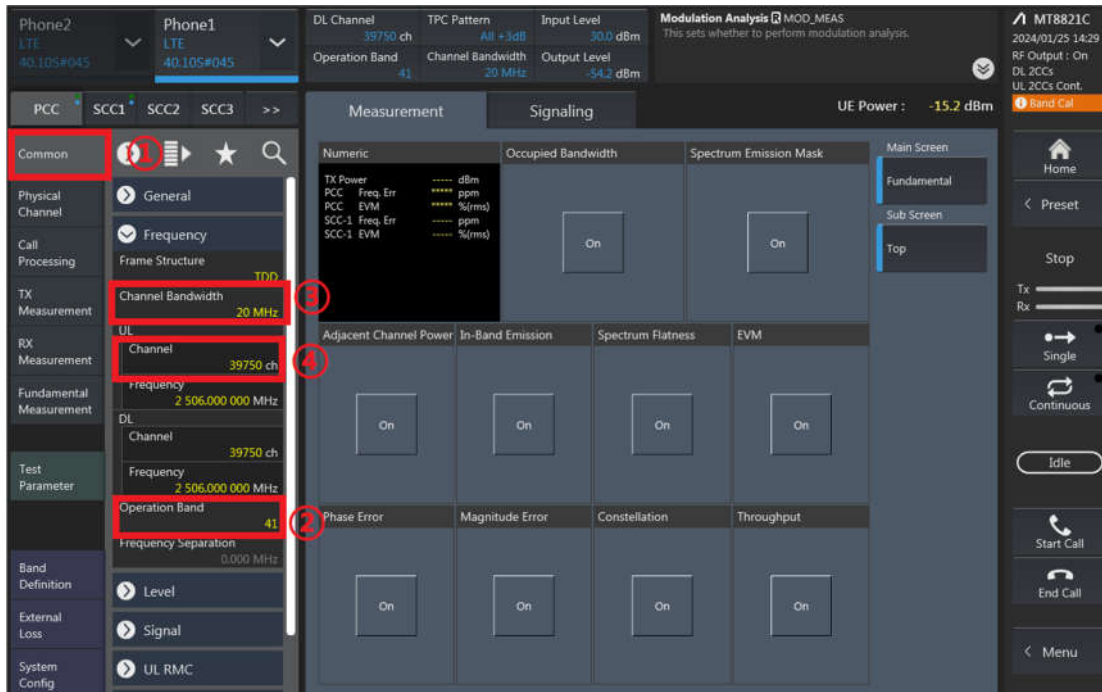
2. If Select "RMC (DL/UL CA)" for Uplink Carrier Aggregation;
If Select "RMC (DL CA)" for Downlink Carrier Aggregation.

For example, Uplink Carrier Aggregation:

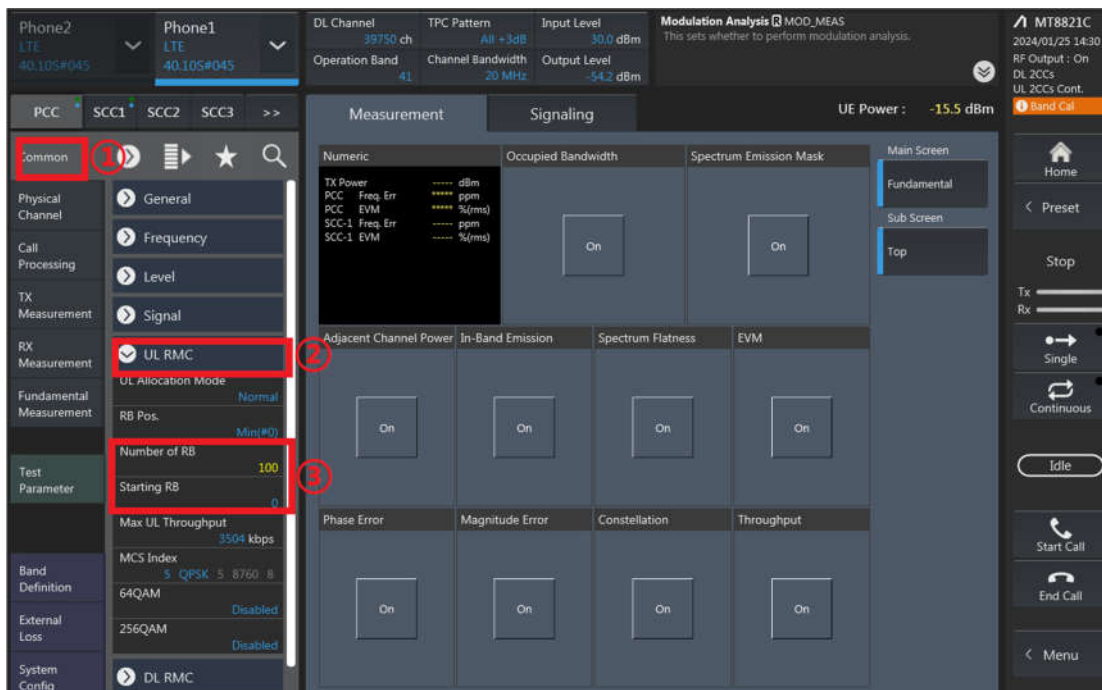
Detailed operation: PCC → Common → Signal → Channel Coding → Select 【RMC (DL/UL CA)】



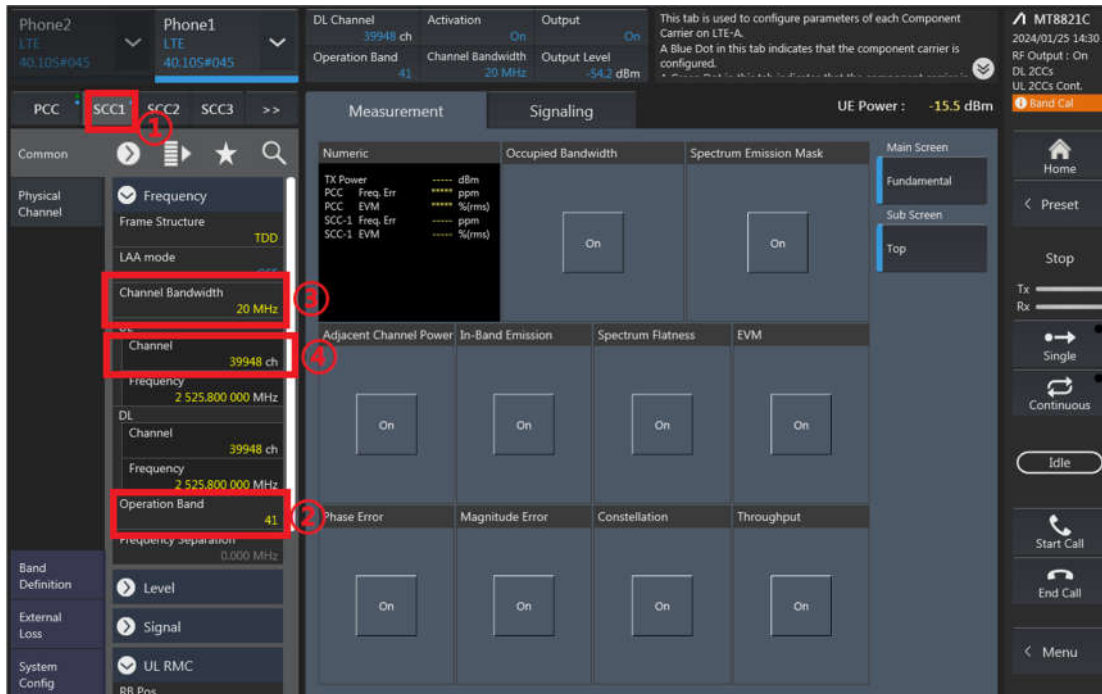
- PCC parameter Settings: on the screen, and then select the PCC tab and Set operating band, BW, channel and RB configurations for PCC;



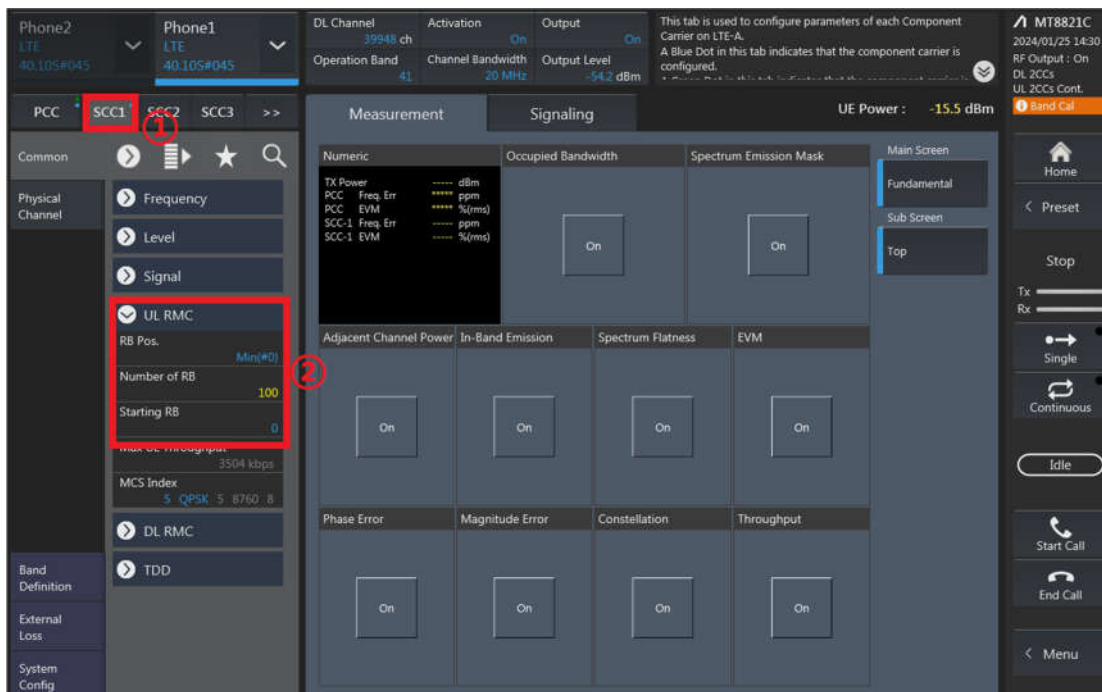
RB configurations (Number of RB / Starting RB) for PCC;



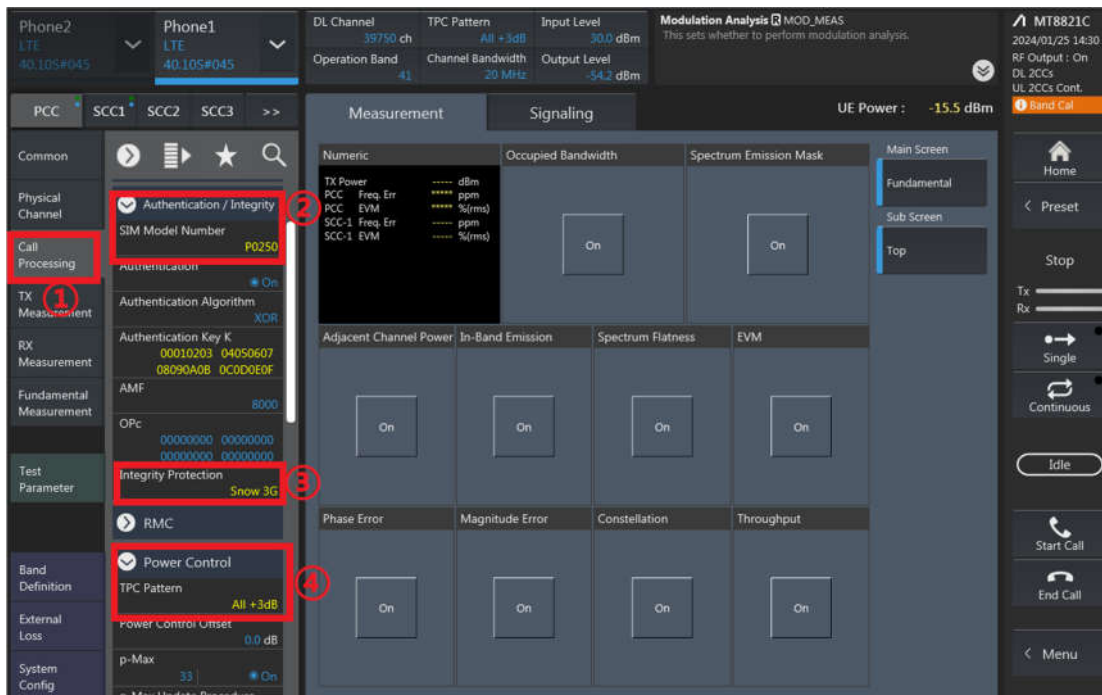
4. SCC parameter Settings: Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1;



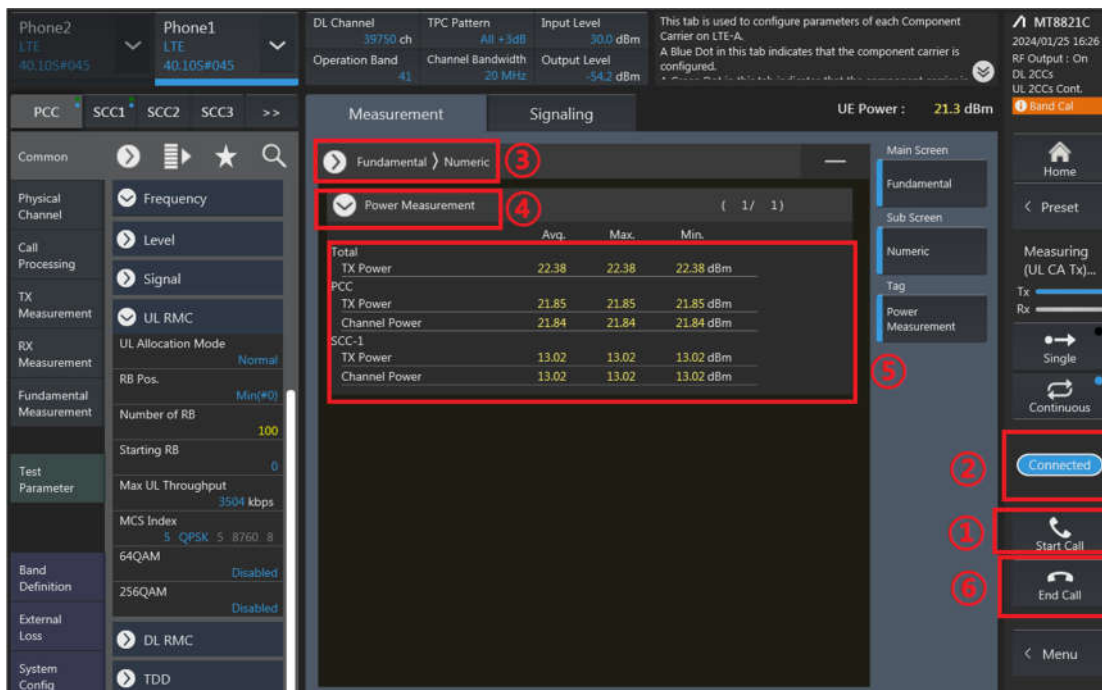
RB configurations (Number of RB / Starting RB) for SCC1;



- 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.

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_2A-5A	Band 2	20M	1880	18900	QPSK	1	49	Band 5	10M	881.5	2525	22.65	22.58
		CA_38C	Band 38	20M	2595	38000	QPSK	1	0	Band 38	20M	2614.8	38198	22.75	22.84
		CA_5A-7A	Band 5	10M	836.5	20525	QPSK	1	25	Band 7	20M	2655	3100	22.57	22.75
		CA_66A-66A	Band 66	20M	1745	132322	QPSK	1	49	Band 66	20M	2155	66886	22.45	22.51
		CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	0	Band 41	20M	2506	39750	23.41	23.70
		CA_66B	Band 66	20M	1745	132322	QPSK	1	49	Band 66	5M	2164.3	66979	22.41	22.38
		CA_66C	Band 66	20M	1745	132322	QPSK	1	49	Band 66	20M	2174.8	67084	22.50	22.47
		CA_7A-7A	Band 7	20M	2535	21100	QPSK	1	49	Band 7	5M	2687.5	3425	22.98	22.91
Intra-Band	Non-Contiguous	CA_7B	Band 7	15M	2535	21100	QPSK	1	37	Band 7	5M	2664.3	3193	22.90	23.00
	Contiguous	CA_7C	Band 7	20M	2535	21100	QPSK	1	49	Band 7	20M	2674.80	3298	23.05	22.94

UL CA Power

CA_7C_Ant 2													
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	RB Size	RB offset					
20850	21048	QPSK	1	0	0	0	1	0	0	Full	23.10	24.00	
21100	20902	QPSK	1	0	0	0	1	0	0	Full	23.22	24.00	
21350	21152	QPSK	1	0	0	0	1	0	0	Full	23.17	24.00	
20850	21048	QPSK	1	0	0	0	1	0	0	DSI 2	23.10	24.00	
21100	20902	QPSK	1	0	0	0	1	0	0	DSI 2	23.22	24.00	
21350	21152	QPSK	1	0	0	0	1	0	0	DSI 2	23.17	24.00	
20850	21048	QPSK	1	0	0	0	1	0	0	DSI 3	21.10	22.40	
21100	20902	QPSK	1	0	0	0	1	0	0	DSI 3	21.18	22.40	
21350	21152	QPSK	1	0	0	0	1	0	0	DSI 3	21.05	22.40	
20850	21048	QPSK	1	0	0	0	1	0	0	DSI 4	23.10	24.00	
21100	20902	QPSK	1	0	0	0	1	0	0	DSI 4	23.22	24.00	
21350	21152	QPSK	1	0	0	0	1	0	0	DSI 4	23.17	24.00	
20850	21048	QPSK	1	0	0	0	1	0	0	DSI 6	21.82	22.90	
21100	20902	QPSK	1	0	0	0	1	0	0	DSI 6	21.69	22.90	
21350	21152	QPSK	1	0	0	0	1	0	0	DSI 6	21.54	22.90	
20850	21048	QPSK	1	0	0	0	1	0	0	DSI 7	18.65	19.90	
21100	20902	QPSK	1	0	0	0	1	0	0	DSI 7	18.70	19.90	
21350	21152	QPSK	1	0	0	0	1	0	0	DSI 7	18.67	19.90	

CA_7C_Ant 1											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level	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	22.75	24.00
21100	20902	QPSK	1	0	0	0	1	0	Full	22.88	24.00
21350	21152	QPSK	1	0	0	0	1	0	Full	22.77	24.00
20850	21048	QPSK	1	0	0	0	1	0	DSI 2	16.43	17.70
21100	20902	QPSK	1	0	0	0	1	0	DSI 2	16.52	17.70
21350	21152	QPSK	1	0	0	0	1	0	DSI 2	16.47	17.70
20850	21048	QPSK	1	0	0	0	1	0	DSI 3	16.43	17.70
21100	20902	QPSK	1	0	0	0	1	0	DSI 3	16.52	17.70
21350	21152	QPSK	1	0	0	0	1	0	DSI 3	16.47	17.70
20850	21048	QPSK	1	0	0	0	1	0	DSI 4	22.75	24.00
21100	20902	QPSK	1	0	0	0	1	0	DSI 4	22.88	24.00
21350	21152	QPSK	1	0	0	0	1	0	DSI 4	22.77	24.00
20850	21048	QPSK	1	0	0	0	1	0	DSI 6	21.12	22.20
21100	20902	QPSK	1	0	0	0	1	0	DSI 6	21.18	22.20
21350	21152	QPSK	1	0	0	0	1	0	DSI 6	21.14	22.20
20850	21048	QPSK	1	0	0	0	1	0	DSI 7	15.18	16.20
21100	20902	QPSK	1	0	0	0	1	0	DSI 7	15.22	16.20
21350	21152	QPSK	1	0	0	0	1	0	DSI 7	15.15	16.20

CA_7C_Ant 0											
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	22.32	24.00
21100	20902	QPSK	1	0	0	0	1	0	Full	22.35	24.00
21350	21152	QPSK	1	0	0	0	1	0	Full	22.30	24.00
20850	21048	QPSK	1	0	0	0	1	0	DSI 2	22.32	24.00
21100	20902	QPSK	1	0	0	0	1	0	DSI 2	22.35	24.00
21350	21152	QPSK	1	0	0	0	1	0	DSI 2	22.30	24.00
20850	21048	QPSK	1	0	0	0	1	0	DSI 3	18.38	20.20
21100	20902	QPSK	1	0	0	0	1	0	DSI 3	18.43	20.20
21350	21152	QPSK	1	0	0	0	1	0	DSI 3	18.38	20.20
20850	21048	QPSK	1	0	0	0	1	0	DSI 4	22.32	24.00
21100	20902	QPSK	1	0	0	0	1	0	DSI 4	22.35	24.00
21350	21152	QPSK	1	0	0	0	1	0	DSI 4	22.30	24.00
20850	21048	QPSK	1	0	0	0	1	0	DSI 6	19.43	21.20
21100	20902	QPSK	1	0	0	0	1	0	DSI 6	19.48	21.20
21350	21152	QPSK	1	0	0	0	1	0	DSI 6	19.43	21.20
20850	21048	QPSK	1	0	0	0	1	0	DSI 7	17.57	19.20
21100	20902	QPSK	1	0	0	0	1	0	DSI 7	17.63	19.20
21350	21152	QPSK	1	0	0	0	1	0	DSI 7	17.55	19.20

CA_38C_Ant 2											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	SCC				Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			PCC RB Size	PCC RB offset	SCC RB Size	SCC RB offset					
37850	38048	QPSK	1	0	0	0	1	0	Full	22.60	24.00
37901	38099	QPSK	1	0	0	0	1	0	Full	22.72	24.00
38150	37952	QPSK	1	0	0	0	1	0	Full	22.65	24.00
37850	38048	16QAM	1	0	0	0	1	0	DSI 2	22.60	24.00
37901	38099	16QAM	1	0	0	0	1	0	DSI 2	22.72	24.00
38150	37952	16QAM	1	0	0	0	1	0	DSI 2	22.65	24.00
37850	38048	64QAM	1	0	0	0	1	0	DSI 3	22.60	24.00
37901	38099	64QAM	1	0	0	0	1	0	DSI 3	22.72	24.00
38150	37952	64QAM	1	0	0	0	1	0	DSI 3	22.65	24.00
37850	38048	256QAM	1	0	0	0	1	0	DSI 4	22.60	24.00
37901	38099	256QAM	1	0	0	0	1	0	DSI 4	22.72	24.00
38150	37952	256QAM	1	0	0	0	1	0	DSI 4	22.65	24.00
37850	38048	64QAM	1	0	0	0	1	0	DSI 6	22.60	24.00
37901	38099	64QAM	1	0	0	0	1	0	DSI 6	22.72	24.00
38150	37952	64QAM	1	0	0	0	1	0	DSI 6	22.65	24.00
37850	38048	256QAM	1	0	0	0	1	0	DSI 7	20.88	22.00
37901	38099	256QAM	1	0	0	0	1	0	DSI 7	20.96	22.00
38150	37952	256QAM	1	0	0	0	1	0	DSI 7	20.90	22.00

CA_38C_Ant 1											
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	22.80	24.00
37901	38099	QPSK	1	0	0	0	1	0	Full	22.86	24.00
38150	37952	QPSK	1	0	0	0	1	0	Full	22.78	24.00
37850	38048	16QAM	1	0	0	0	1	0	DSI 2	18.22	19.30
37901	38099	16QAM	1	0	0	0	1	0	DSI 2	18.28	19.30
38150	37952	16QAM	1	0	0	0	1	0	DSI 2	18.24	19.30
37850	38048	64QAM	1	0	0	0	1	0	DSI 3	20.25	21.30
37901	38099	64QAM	1	0	0	0	1	0	DSI 3	20.30	21.30
38150	37952	64QAM	1	0	0	0	1	0	DSI 3	20.22	21.30
37850	38048	256QAM	1	0	0	0	1	0	DSI 4	22.80	24.00
37901	38099	256QAM	1	0	0	0	1	0	DSI 4	22.86	24.00
38150	37952	256QAM	1	0	0	0	1	0	DSI 4	22.78	24.00
37850	38048	64QAM	1	0	0	0	1	0	DSI 6	22.20	23.30
37901	38099	64QAM	1	0	0	0	1	0	DSI 6	22.27	23.30
38150	37952	64QAM	1	0	0	0	1	0	DSI 6	22.24	23.30
37850	38048	256QAM	1	0	0	0	1	0	DSI 7	16.52	17.30
37901	38099	256QAM	1	0	0	0	1	0	DSI 7	16.60	17.30
38150	37952	256QAM	1	0	0	0	1	0	DSI 7	16.55	17.30

CA_38C_Ant 0											
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	22.82	24.00
37901	38099	QPSK	1	0	0	0	1	0	Full	22.88	24.00
38150	37952	QPSK	1	0	0	0	1	0	Full	22.79	24.00
37850	38048	16QAM	1	0	0	0	1	0	DSI 2	22.82	24.00
37901	38099	16QAM	1	0	0	0	1	0	DSI 2	22.88	24.00
38150	37952	16QAM	1	0	0	0	1	0	DSI 2	22.79	24.00
37850	38048	64QAM	1	0	0	0	1	0	DSI 3	22.30	23.50
37901	38099	64QAM	1	0	0	0	1	0	DSI 3	22.38	23.50
38150	37952	64QAM	1	0	0	0	1	0	DSI 3	22.33	23.50
37850	38048	256QAM	1	0	0	0	1	0	DSI 4	22.44	24.00
37901	38099	256QAM	1	0	0	0	1	0	DSI 4	22.48	24.00
38150	37952	256QAM	1	0	0	0	1	0	DSI 4	22.79	24.00
37850	38048	16QAM	1	0	0	0	1	0	DSI 6	22.82	24.00
37901	38099	64QAM	1	0	0	0	1	0	DSI 6	22.88	24.00
38150	37952	64QAM	1	0	0	0	1	0	DSI 6	22.79	24.00
37850	38048	256QAM	1	0	0	0	1	0	DSI 7	19.84	21.60
37901	38099	256QAM	1	0	0	0	1	0	DSI 7	19.87	21.60
38150	37952	256QAM	1	0	0	0	1	0	DSI 7	19.80	21.60



CA_41C_Ant 2											
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					
39750	39948	QPSK	1	0	0	0	1	0	Full	23.30	24.00
40185	39987	QPSK	1	0	0	0	1	0	Full	23.38	24.00
40620	40422	QPSK	1	0	0	0	1	0	Full	23.60	24.00
41055	40857	QPSK	1	0	0	0	1	0	Full	23.45	24.00
41490	41292	QPSK	1	0	0	0	1	0	Full	23.42	24.00
39750	39948	16QAM	1	0	0	0	1	0	DSI 2	23.30	24.00
40185	39987	16QAM	1	0	0	0	1	0	DSI 2	23.38	24.00
40620	40422	16QAM	1	0	0	0	1	0	DSI 2	23.60	24.00
41055	40857	16QAM	1	0	0	0	1	0	DSI 2	23.45	24.00
41490	41292	16QAM	1	0	0	0	1	0	DSI 2	23.42	24.00
39750	39948	64QAM	1	0	0	0	1	0	DSI 3	23.30	24.00
40185	39987	64QAM	1	0	0	0	1	0	DSI 3	23.38	24.00
40620	40422	64QAM	1	0	0	0	1	0	DSI 3	23.60	24.00
41055	40857	64QAM	1	0	0	0	1	0	DSI 3	23.45	24.00
41490	41292	64QAM	1	0	0	0	1	0	DSI 3	23.42	24.00
39750	39948	256QAM	1	0	0	0	1	0	DSI 4	23.30	24.00
40185	39987	256QAM	1	0	0	0	1	0	DSI 4	23.38	24.00
40620	40422	256QAM	1	0	0	0	1	0	DSI 4	23.60	24.00
41055	40857	256QAM	1	0	0	0	1	0	DSI 4	23.45	24.00
41490	41292	256QAM	1	0	0	0	1	0	DSI 4	23.42	24.00
39750	39948	256QAM	1	0	0	0	1	0	DSI 6	23.30	24.00
40185	39987	256QAM	1	0	0	0	1	0	DSI 6	23.38	24.00
40620	40422	256QAM	1	0	0	0	1	0	DSI 6	23.60	24.00
41055	40857	256QAM	1	0	0	0	1	0	DSI 6	23.45	24.00
41490	41292	256QAM	1	0	0	0	1	0	DSI 6	23.42	24.00
39750	39948	256QAM	1	0	0	0	1	0	DSI 6	23.45	24.00
40185	39987	256QAM	1	0	0	0	1	0	DSI 6	23.42	24.00
40620	40422	256QAM	1	0	0	0	1	0	DSI 6	23.42	24.00
41055	40857	256QAM	1	0	0	0	1	0	DSI 6	23.42	24.00
41490	41292	256QAM	1	0	0	0	1	0	DSI 6	23.42	24.00
39750	39948	256QAM	1	0	0	0	1	0	DSI 7	20.99	22.00
40185	39987	256QAM	1	0	0	0	1	0	DSI 7	21.02	22.00
40620	40422	256QAM	1	0	0	0	1	0	DSI 7	20.94	22.00
41055	40857	256QAM	1	0	0	0	1	0	DSI 7	20.94	22.00
41490	41292	256QAM	1	0	0	0	1	0	DSI 7	21.00	22.00

CA_41C_Ant 1											
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					
39750	39948	QPSK	1	0	0	0	1	0	Full	23.15	24.00
40185	39987	QPSK	1	0	0	0	1	0	Full	23.22	24.00
40620	40422	QPSK	1	0	0	0	1	0	Full	23.26	24.00
41055	40857	QPSK	1	0	0	0	1	0	Full	23.09	24.00
41490	41292	QPSK	1	0	0	0	1	0	Full	23.13	24.00
39750	39948	16QAM	1	0	0	0	1	0	DSI 2	18.30	19.30
40185	39987	16QAM	1	0	0	0	1	0	DSI 2	18.28	19.30
40620	40422	16QAM	1	0	0	0	1	0	DSI 2	18.37	19.30
41055	40857	16QAM	1	0	0	0	1	0	DSI 2	18.33	19.30
41490	41292	16QAM	1	0	0	0	1	0	DSI 2	18.25	19.30
39750	39948	64QAM	1	0	0	0	1	0	DSI 3	20.27	21.30
40185	39987	64QAM	1	0	0	0	1	0	DSI 3	20.22	21.30
40620	40422	64QAM	1	0	0	0	1	0	DSI 3	20.33	21.30
41055	40857	64QAM	1	0	0	0	1	0	DSI 3	20.29	21.30
41490	41292	64QAM	1	0	0	0	1	0	DSI 3	20.25	21.30
39750	39948	256QAM	1	0	0	0	1	0	DSI 4	23.15	24.00
40185	39987	256QAM	1	0	0	0	1	0	DSI 4	23.22	24.00
40620	40422	256QAM	1	0	0	0	1	0	DSI 4	23.26	24.00
41055	40857	256QAM	1	0	0	0	1	0	DSI 4	23.09	24.00
41490	41292	256QAM	1	0	0	0	1	0	DSI 4	23.13	24.00
39750	39948	256QAM	1	0	0	0	1	0	DSI 6	22.25	23.30
40185	39987	256QAM	1	0	0	0	1	0	DSI 6	22.20	23.30
40620	40422	256QAM	1	0	0	0	1	0	DSI 6	22.35	23.30
41055	40857	256QAM	1	0	0	0	1	0	DSI 6	22.27	23.30
41490	41292	256QAM	1	0	0	0	1	0	DSI 6	22.29	23.30
39750	39948	256QAM	1	0	0	0	1	0	DSI 7	16.54	17.30
40185	39987	256QAM	1	0	0	0	1	0	DSI 7	16.50	17.30
40620	40422	256QAM	1	0	0	0	1	0	DSI 7	16.60	17.30
41055	40857	256QAM	1	0	0	0	1	0	DSI 7	16.48	17.30
41490	41292	256QAM	1	0	0	0	1	0	DSI 7	16.55	17.30

CA_41C_Ant 0											
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					
39750	39948	QPSK	1	0	0	0	1	0	Full	22.88	24.00
40195	39987	QPSK	1	0	0	0	1	0	Full	22.90	24.00
40300	40422	QPSK	1	0	0	0	1	0	Full	22.98	24.00
41055	40857	QPSK	1	0	0	0	1	0	Full	22.94	24.00
41490	41292	QPSK	1	0	0	0	1	0	Full	22.92	24.00
39750	39948	16QAM	1	0	0	0	1	0	DS1 2	22.88	24.00
40195	39987	16QAM	1	0	0	0	1	0	DS1 2	22.90	24.00
40300	40422	16QAM	1	0	0	0	1	0	DS1 2	22.98	24.00
41055	40857	16QAM	1	0	0	0	1	0	DS1 2	22.94	24.00
41490	41292	16QAM	1	0	0	0	1	0	DS1 2	22.92	24.00
39750	39948	64QAM	1	0	0	0	1	0	DS1 3	22.25	23.50
40195	39987	64QAM	1	0	0	0	1	0	DS1 3	22.32	23.50
40300	40422	64QAM	1	0	0	0	1	0	DS1 3	22.38	23.50
41055	40857	64QAM	1	0	0	0	1	0	DS1 3	22.27	23.50
41490	41292	64QAM	1	0	0	0	1	0	DS1 3	22.22	23.50
39750	39948	256QAM	1	0	0	0	1	0	DS1 4	22.88	24.00
40195	39987	256QAM	1	0	0	0	1	0	DS1 4	22.90	24.00
40300	40422	256QAM	1	0	0	0	1	0	DS1 4	22.98	24.00
41055	40857	256QAM	1	0	0	0	1	0	DS1 4	22.94	24.00
41490	41292	256QAM	1	0	0	0	1	0	DS1 4	22.92	24.00
39750	39948	256QAM	1	0	0	0	1	0	DS1 6	22.88	24.00
40195	39987	256QAM	1	0	0	0	1	0	DS1 6	22.90	24.00
40300	40422	256QAM	1	0	0	0	1	0	DS1 6	22.98	24.00
41055	40857	256QAM	1	0	0	0	1	0	DS1 6	22.94	24.00
41490	41292	256QAM	1	0	0	0	1	0	DS1 6	22.92	24.00
39750	39948	256QAM	1	0	0	0	1	0	DS1 7	19.93	21.60
40195	39987	256QAM	1	0	0	0	1	0	DS1 7	19.97	21.60
40300	40422	256QAM	1	0	0	0	1	0	DS1 7	20.02	21.60
41055	40857	256QAM	1	0	0	0	1	0	DS1 7	19.90	21.60
41490	41292	256QAM	1	0	0	0	1	0	DS1 7	19.95	21.60