

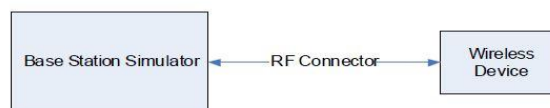
Appendix I. – Down-link CA Power Measurement / 5G NR Call Box Setup

1. LTE Down-link Carrier Aggregation Conducted Powers

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by test product implementation. For those configurations required by April 2018 TCBC Workshop notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only.

Downlink Carrier aggregation:

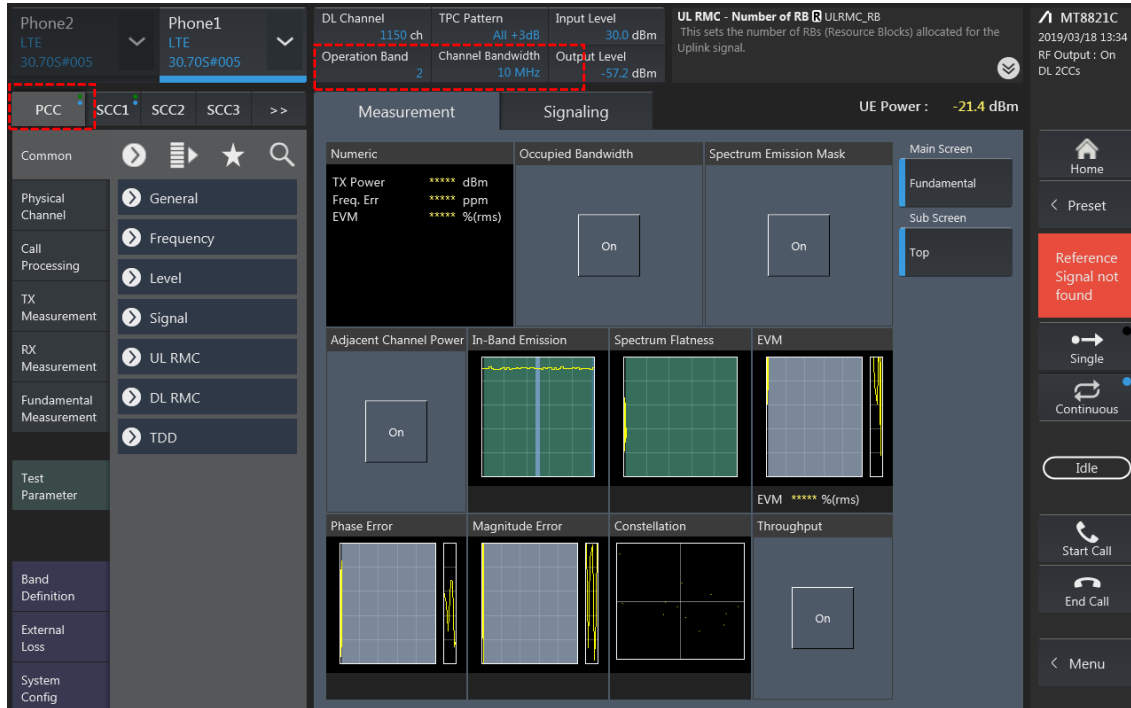
1. This device only supports downlink carrier aggregation. For every supported combination of downlink carrier aggregation, power measurements were performed with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.
2. All control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
3. Per FCC KDB publication 941225 D05A v01r02, Section C)3)b)ii), PCC uplink channel was selected at downlink carrier aggregation combinations. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
4. For continuous intra-band carrier aggregation, the downlink channel spacing between the component carriers was set to multiple of 300kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521.
5. For non-continuous intra-band carrier aggregation, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
6. All selected downlink channels remained fully within the downlink transmission band of the respective component carrier.



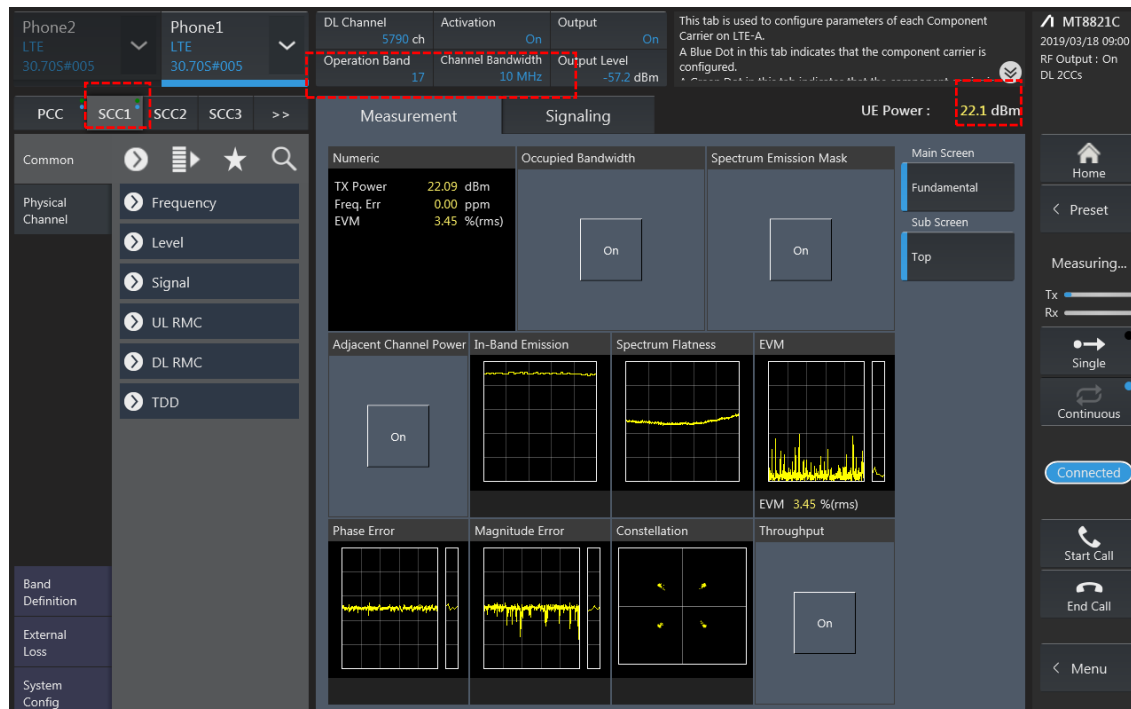
Power Measurement setup

LTE Down Link 2CA Call Setup

PCC Setting : Channel/ RB/ BW/ Modulation



SCC Setting : Channel/ RB/ BW/ Modulation and call Connection

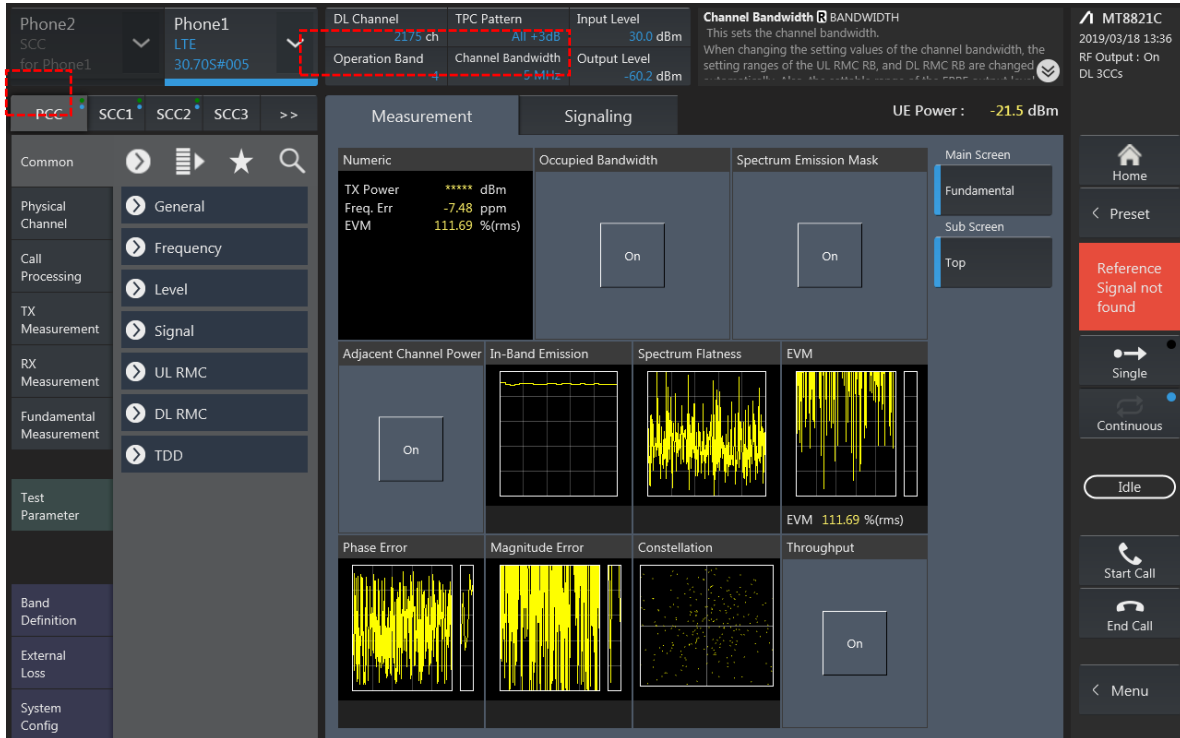


2CA Downlink Carrier aggregation Maximum conducted Powers

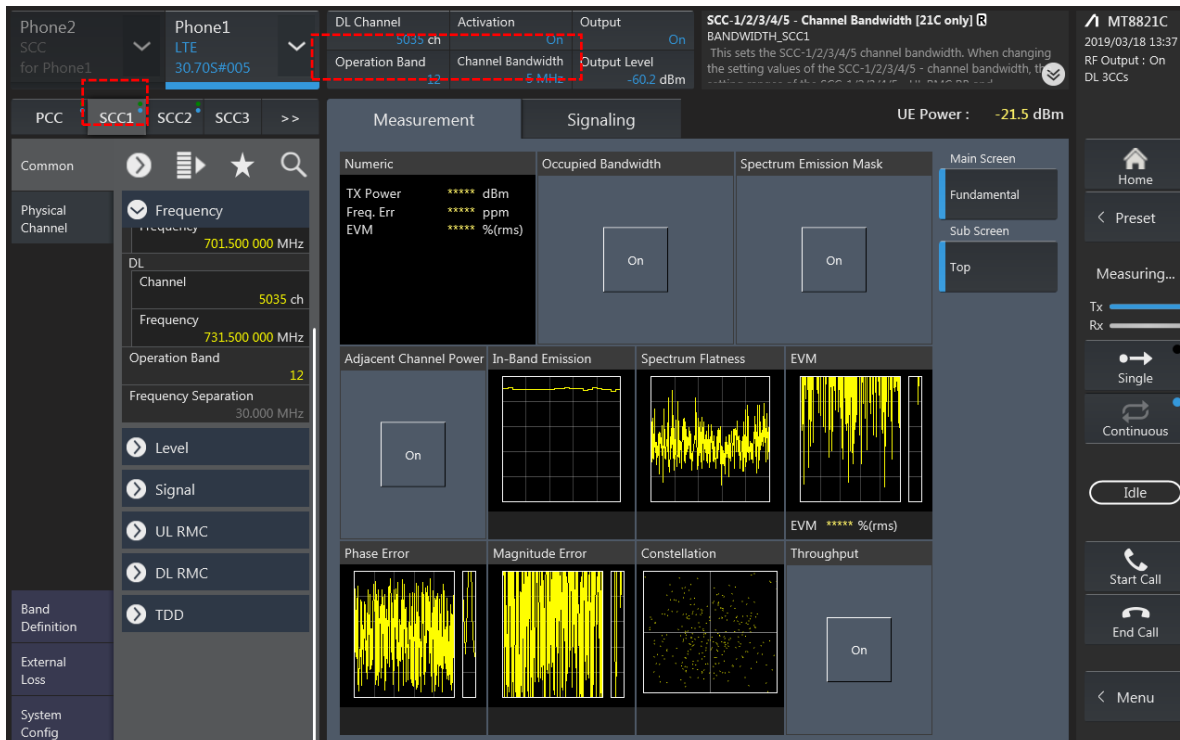
Combination	PCC									SCC				Tx Power		Deviation(dB) (2)-(1)
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled(dBm) (2)	
5A-25A	5	5	20425	826.5	2425	871.5	QPSK	1	12	25	20	8365	1962.5	24.46	24.50	0.04
5A-25A	25	10	26090	1855	8090	1936	QPSK	1	24	5	10	2525	881.5	23.94	23.92	-0.02
5A-41A	5	5	20425	826.5	2425	871.5	QPSK	1	12	41	20	40620	2593	24.46	24.31	-0.15
5A-41A PC3	41	20	40620	2593	40620	2593	QPSK	1	0	5	10	2525	881.5	24.24	24.30	0.06
5A-41A PC2	41	20	40620	2593	40620	2593	QPSK	1	0	5	10	2525	881.5	25.74	25.72	-0.02
12A-25A	12	10	23095	707.5	5095	737.5	QPSK	1	24	25	20	8365	1962.5	24.37	24.39	0.02
12A-25A	25	10	26090	1855	8090	1936	QPSK	1	24	12	10	5095	737.5	23.94	23.87	-0.07
25A-25A(0)	25	10	26090	1855	8090	1936	QPSK	1	24	25	10	8640	1990	23.94	23.86	-0.08
25A-25A(1)	25	10	26090	1855	8090	1936	QPSK	1	24	25	20	8590	1985	23.94	23.86	-0.08
48B	48	10	56690	3695	56690	3695	QPSK	1	49	48	10	56591	3685.1	22.14	22.20	0.06

LTE Down Link 3CA Call Setup

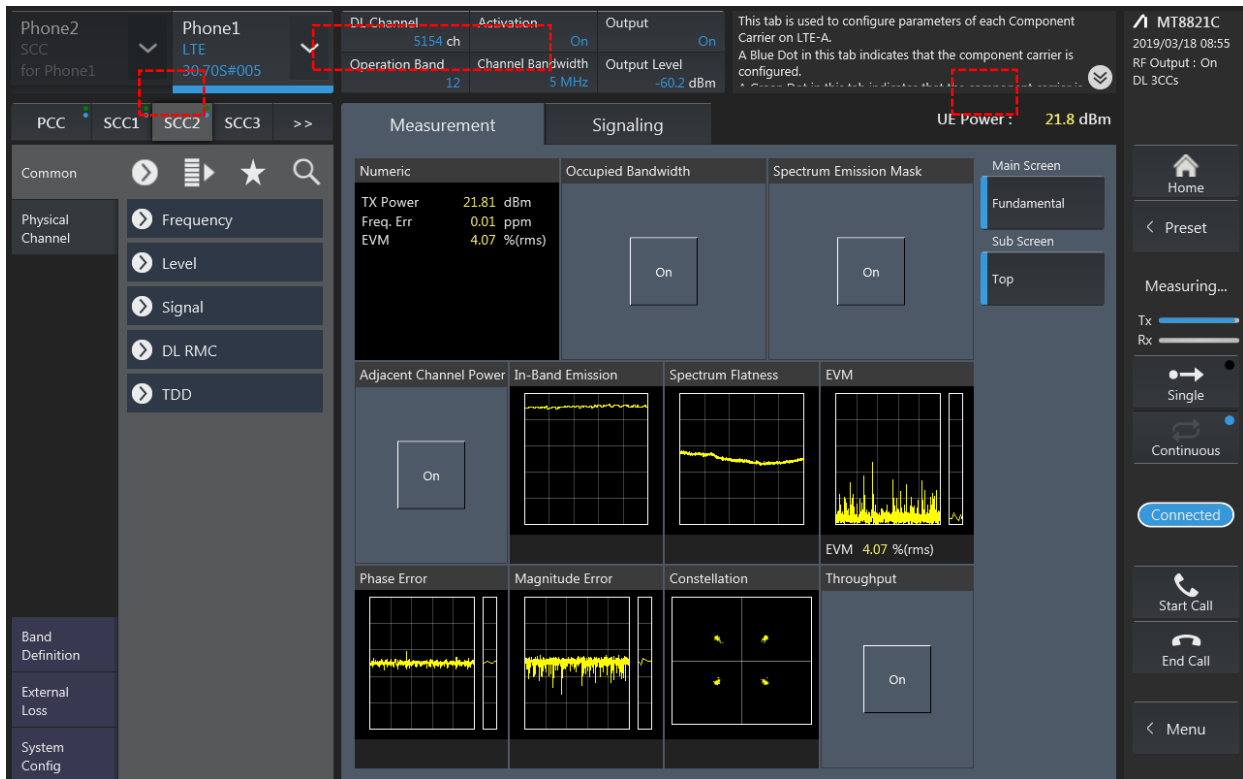
1) PCC Setting: Channel /RB/BW/Modulation



2) SCC1 Setting : Channel /RB/BW/Modulation



3) SCC2 Setting (Channel /RB/BW/Modulation)and call Connection

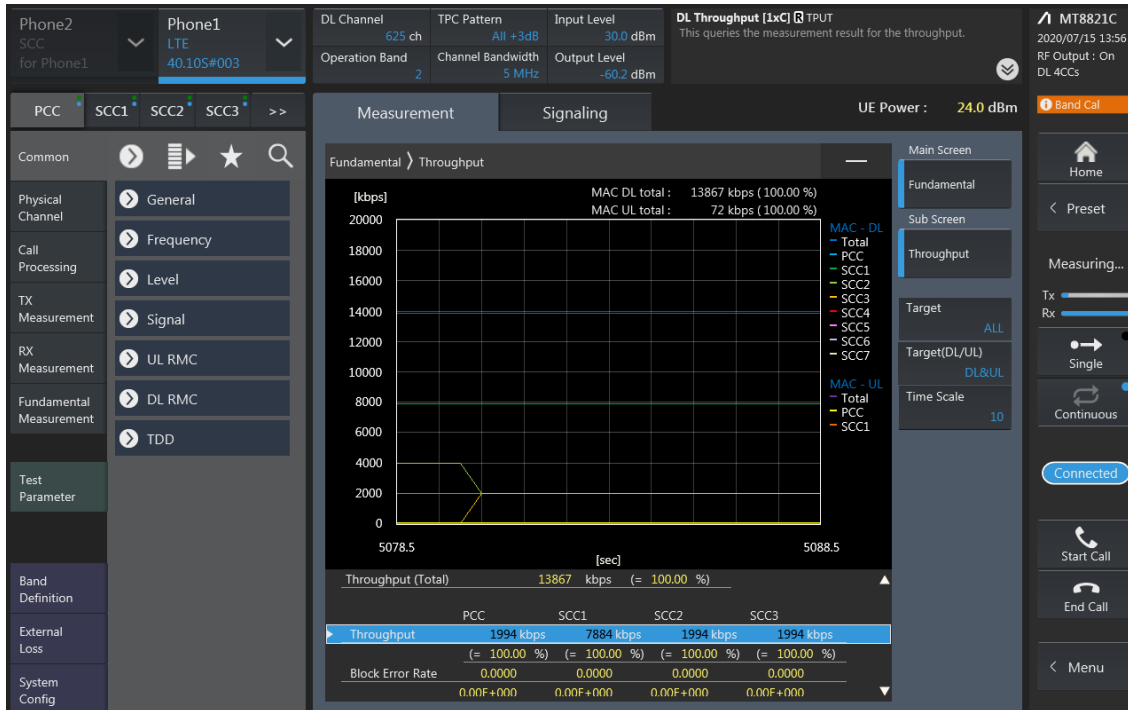


3CA Downlink Carrier aggregation Maximum conducted Powers

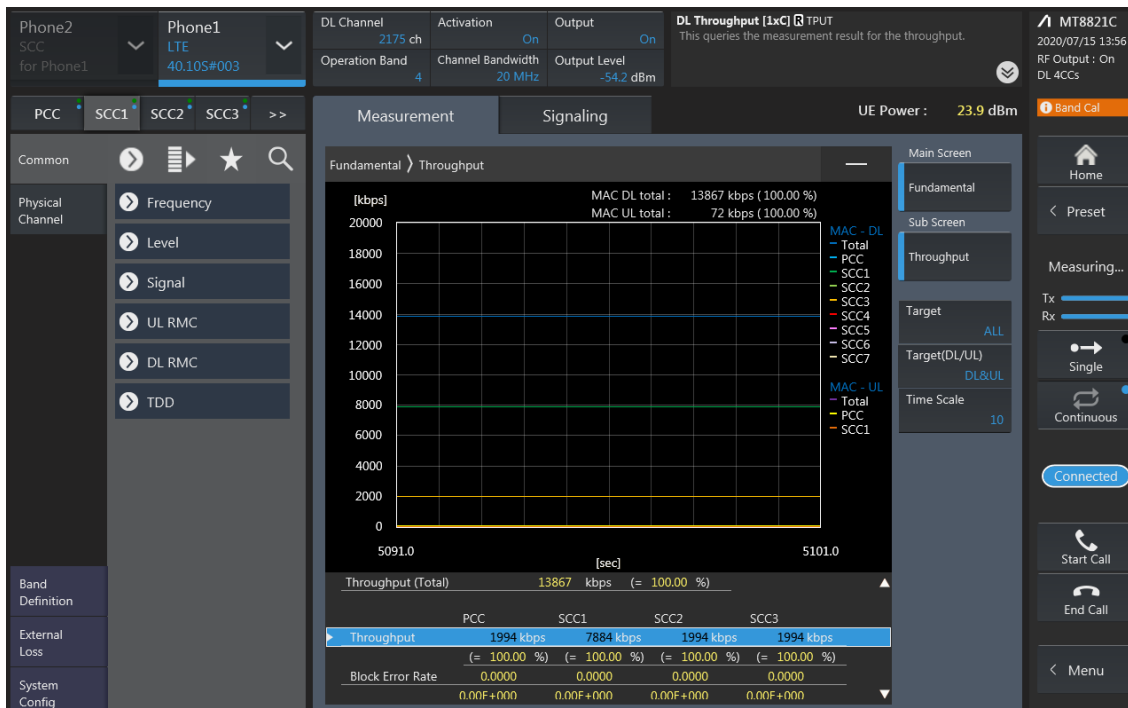
Combination	PCC									SCC				SCC				Tx Power		
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled (dBm) (2)	Devaion(dB) (2)-(1)
2A-4A-13A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	13	10	5230	751	24.15	24.25	0.04
2A-4A-13A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	13	10	5230	751	23.77	23.66	0.04
2A-4A-13A	13	10	23230	782	5230	751	QPSK	1	0	2	20	900	1960	4	20	2175	2132.5	23.98	24.05	0.03
4A-4A-13A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	13	10	5230	751	23.77	23.79	0.06
4A-4A-13A	13	10	23230	782	5230	751	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	23.77	23.86	0.02
4A-4A-71A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	71	20	68761	634.5	23.77	23.76	0.09
4A-4A-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	23.87	23.97	0.05
41A-41C(PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	41292	2660.2	41	20	41490	2680	24.24	24.21	-0.04
41A-41C(PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	41490	2680	24.24	24.18	-0.15
41A-41C(PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	41292	2660.2	41	20	41490	2680	25.74	25.59	0.05
41A-41C(PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	41490	2680	25.74	25.63	-0.02
41D(PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	40224	2553.4	24.24	24.17	-0.08
41D(PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	40224	2553.4	25.74	25.71	-0.14
48A-48A-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	48	20	55990	3625	48	20	56640	3690	23.87	23.77	-0.13
48C-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	48	20	55990	3625	48	20	56188	3644.8	23.87	23.92	-0.02

LTE Down Link 4CA Call Setup

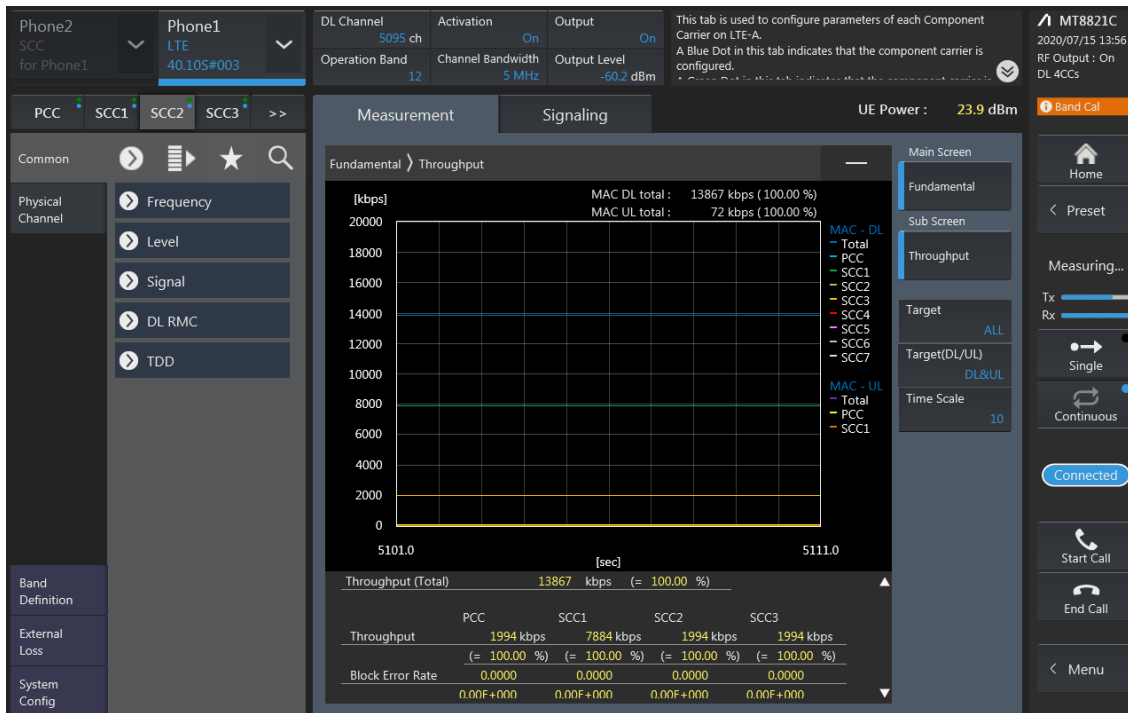
PCC Setting: Channel /RB/BW/Modulation



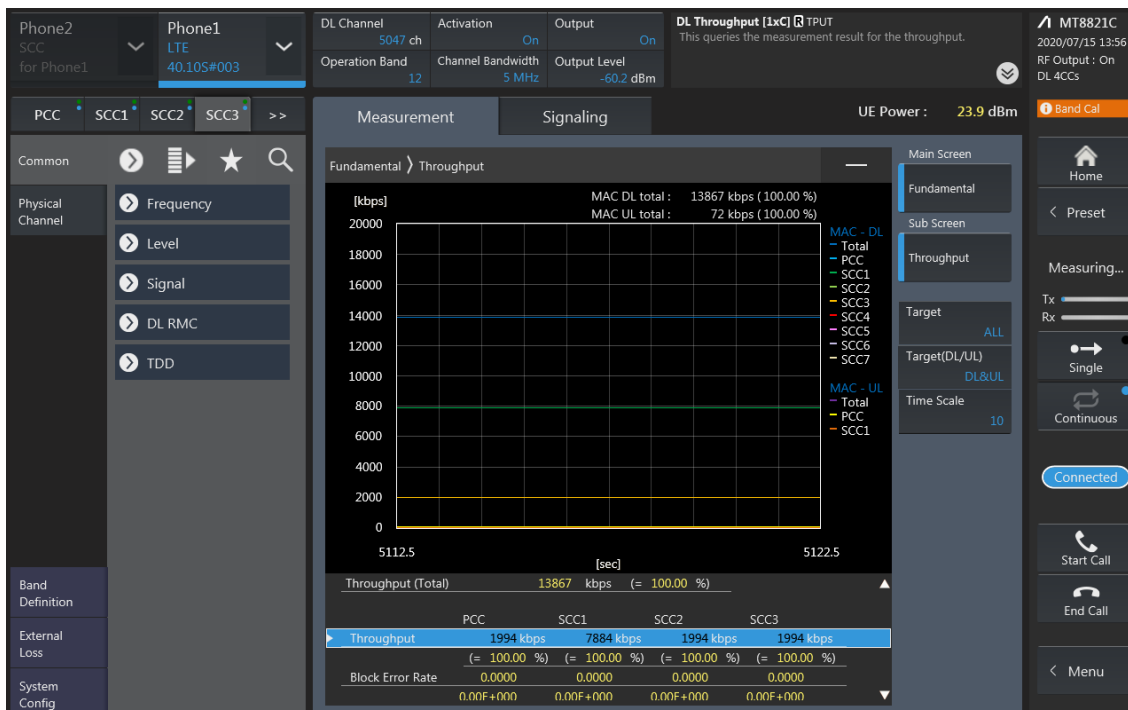
SCC1 Setting (Channel /RB/BW/Modulation)and call Connection



SCC2 Setting (Channel /RB/BW/Modulation)and call Connection



SCC3 Setting (Channel /RB/BW/Modulation)and call Connection

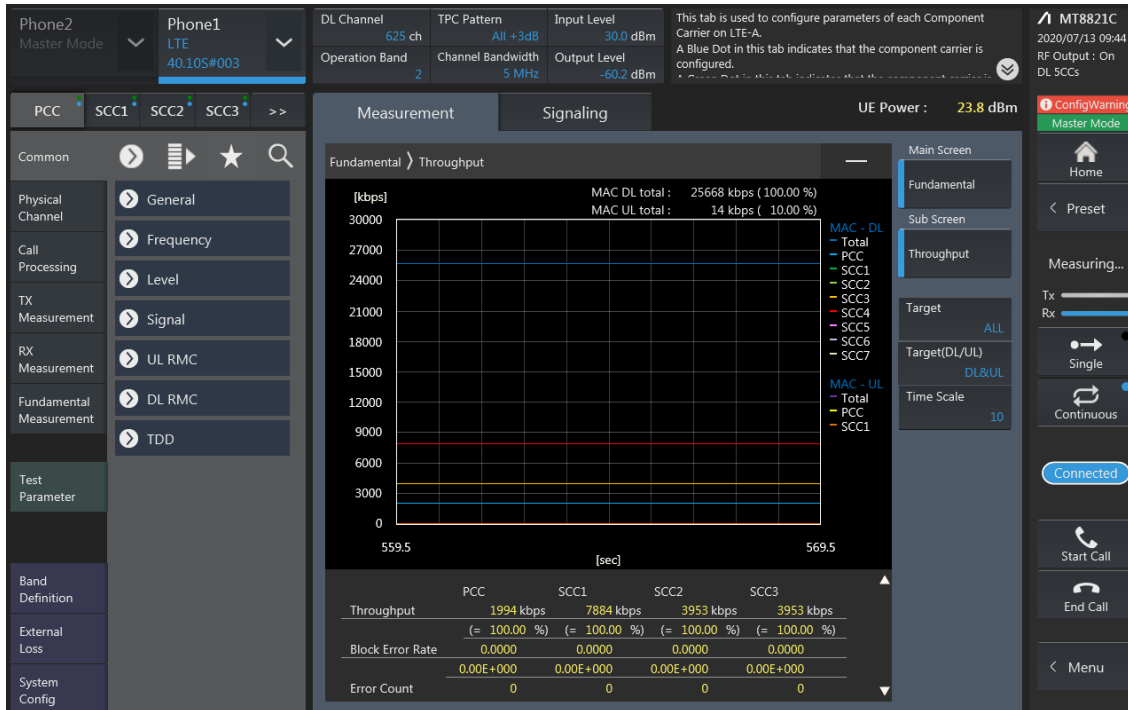


4CA Downlink Carrier aggregation Maximum conducted Powers

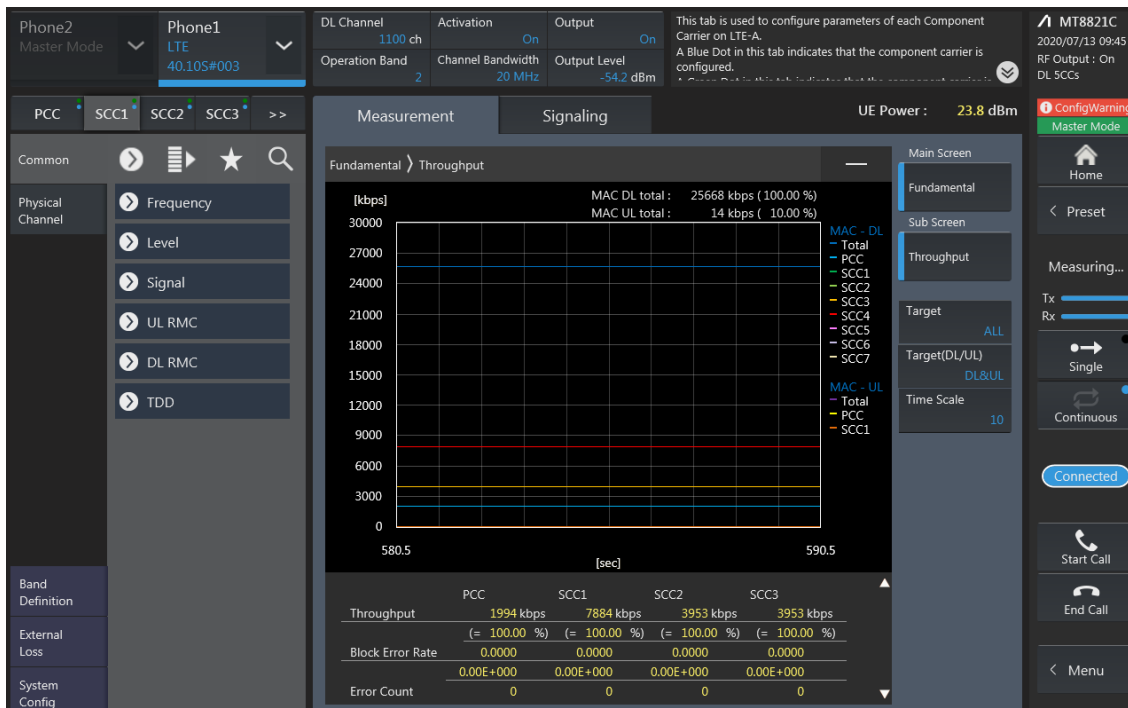
PCC										SCC				SCC				SCC				Tx Power		
Combination	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Station Carrier Tx Power (dBm)	LTE Tx Power with DL CA Enabled (dBm)	Deviation(dB) (2-1)
2A-2A-4A-4A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	4	10	2000	2115	24.15	24.23	0.08
2A-2A-4A-4A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	2	20	1100	1980	23.77	23.69	-0.08
2A-2A-4A-5A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	5	10	2525	881.5	24.15	24.03	-0.12
2A-2A-4A-5A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	23.77	23.75	-0.02
2A-2A-4A-5A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	24.46	24.32	-0.14
2A-2A-4A-12A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	12	10	5095	737.5	24.15	24.10	-0.05
2A-2A-4A-12A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	23.77	23.87	0.10
2A-2A-4A-12A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	24.37	24.34	-0.03
2A-2A-4A-71A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	71	20	68761	634.5	24.15	24.10	-0.05
2A-2A-4A-71A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	71	20	68761	634.5	23.77	23.81	0.04
2A-2A-4A-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	23.87	23.75	-0.12
2A-2A-66A-71A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	66	20	66786	2145	71	20	68761	634.5	24.15	24.03	-0.12
2A-2A-66A-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	71	20	68761	634.5	23.89	23.97	0.08
2A-2A-66A-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	23.87	23.91	0.04
2A-4A-4A-5A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	5	10	2525	881.5	24.15	24.02	-0.13
2A-4A-4A-5A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	5	10	2525	881.5	23.77	23.87	0.10
2A-4A-4A-5A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	4	10	2000	2115	4	10	2000	2115	24.46	24.48	0.02
2A-4A-4A-12A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	12	10	5095	737.5	24.15	24.10	-0.05
2A-4A-4A-12A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	12	10	5095	737.5	23.77	23.73	-0.04
2A-4A-4A-12A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	4	20	2175	2132.5	4	10	2000	2115	24.37	24.38	0.01
2A-4A-12B	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	12	5	5095	737.5	12	5	5047	732.7	24.15	24.07	-0.08
2A-4A-12B	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	12	5	5095	737.5	12	5	5047	732.7	23.77	23.74	-0.03
2A-4A-12B	12	5	23095	707.5	5095	737.5	QPSK	1	12	12	5	5047	732.7	2	20	900	1960	4	20	2175	2132.5	24.07	23.93	-0.14
2A-12A-66C	2	20	19100	1900	1100	1980	QPSK	1	0	12	10	5095	737.5	66	20	66786	2145	66	20	66984	2164.8	24.15	24.19	0.04
2A-12A-66C	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	66	20	66786	2145	66	20	66984	2164.8	24.37	24.25	-0.12
2A-12A-66C	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	12	10	5095	737.5	23.89	23.94	0.05
2A-13A-66C	2	20	19100	1900	1100	1980	QPSK	1	0	13	10	5230	751	66	20	66786	2145	66	20	66984	2164.8	24.15	24.21	0.06
2A-13A-66C	13	10	23230	782	5230	751	QPSK	1	0	66	20	66786	2145	66	20	66786	2145	66	20	66984	2164.8	23.98	23.87	-0.11
2A-13A-66C	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	13	10	5230	751	23.89	23.88	-0.01
2A-66A-66A-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67236	2190	71	20	68761	634.5	24.15	24.24	0.09
2A-66A-66A-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	71	20	68761	634.5	23.89	23.90	0.01
2A-66A-66A-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	66	20	66786	2145	66	20	67236	2190	23.87	23.87	0.00
2C-66A-66A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	902	1960.2	66	20	66786	2145	66	20	67236	2190	24.15	24.07	-0.08
2C-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1098	1979.8	23.89	23.93	0.04
2A-66C-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	71	20	68761	634.5	24.15	24.20	0.05
2A-66C-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	71	20	68761	634.5	23.89	23.81	-0.08
2A-66C-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	66	20	66786	2145	66	20	66984	2164.8	23.87	23.86	-0.01
4A-4A-12B	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	12	5	5095	737.5	12	5	5047	732.7	23.77	23.66	-0.11
4A-4A-12B	12	5	23095	707.5	5095	737.5	QPSK	1	12	12	5	5047	732.7	4	20	2175	2132.5	4	10	2000	2115	24.07	24.09	0.02
13A-48A-66C	13	10	23230	782	5230	751	QPSK	1	0	48	20	55990	3625	66	20	66786	2145	66	20	66984	2164.8	23.98	23.99	0.01
13A-48A-66C	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	13	10	5230	751	48	20	55990	3625	23.89	23.89	0.00
25A-41D	25	10	26090	1855	8090	1936	QPSK	1	24	41	20	40620	2593	41	20	40622	2573.2	41	20	40224	2553.4	23.94	23.87	-0.07
29A-30A-66A-66A	30	5	27685	2307.5	9795	2352.5	QPSK	1	24	29	10	9715	722.5	66	20	66786	2145	66	20	67236	2190	22.4	22.34	-0.06
29A-30A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	29	10	9715	722.5	30	10	9820	2355	23.89	23.82	-0.07
48A-48A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	48	20	55990	3625	48	20	56640	3690	23.89	23.81	-0.08
48C-66C	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	48	20	55990	3625	48	20	56188	3644.8	23.89	23.90	0.01

LTE Down Link 5CA Call Setup

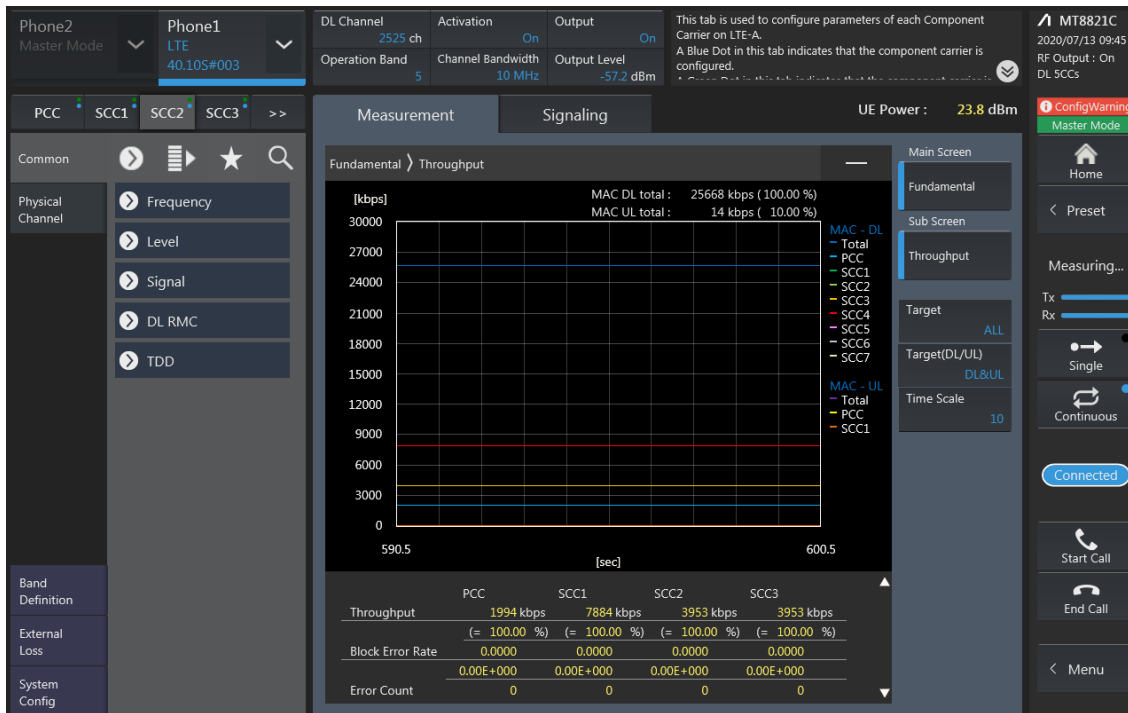
PCC Setting: Channel /RB/BW/Modulation



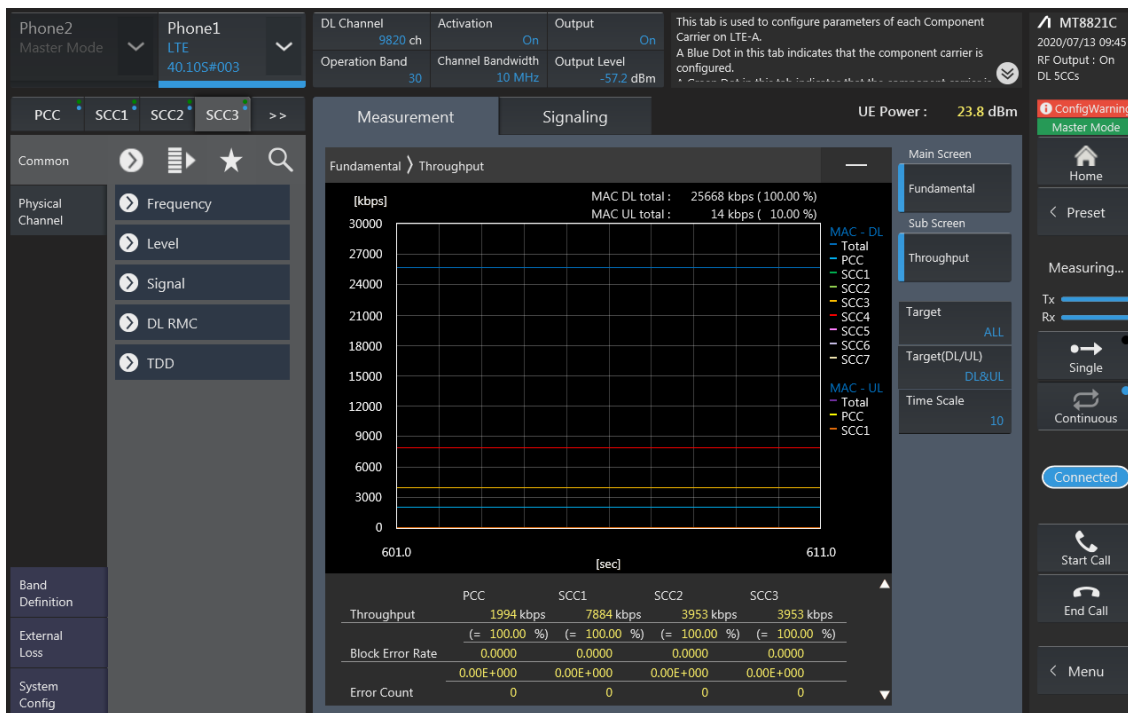
SCC1 Setting (Channel /RB/BW/Modulation)and call Connection



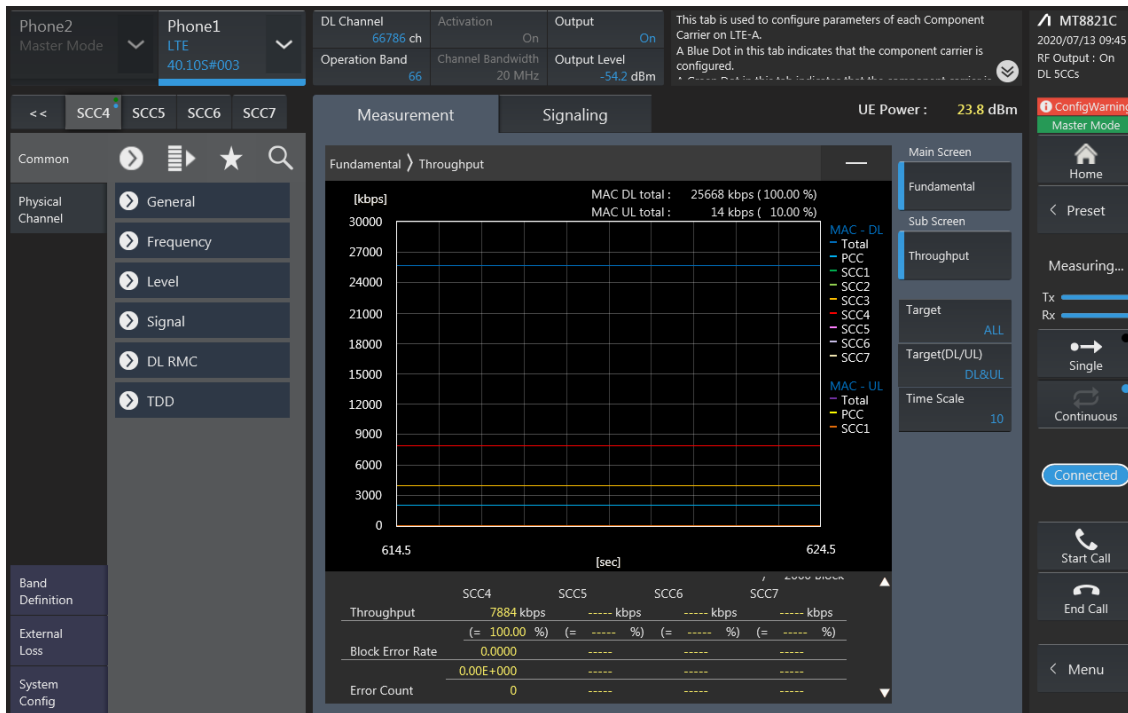
SCC2 Setting (Channel /RB/BW/Modulation)and call Connection



SCC3 Setting (Channel /RB/BW/Modulation)and call Connection



SCC4 Setting (Channel /RB/BW/Modulation)and call Connection

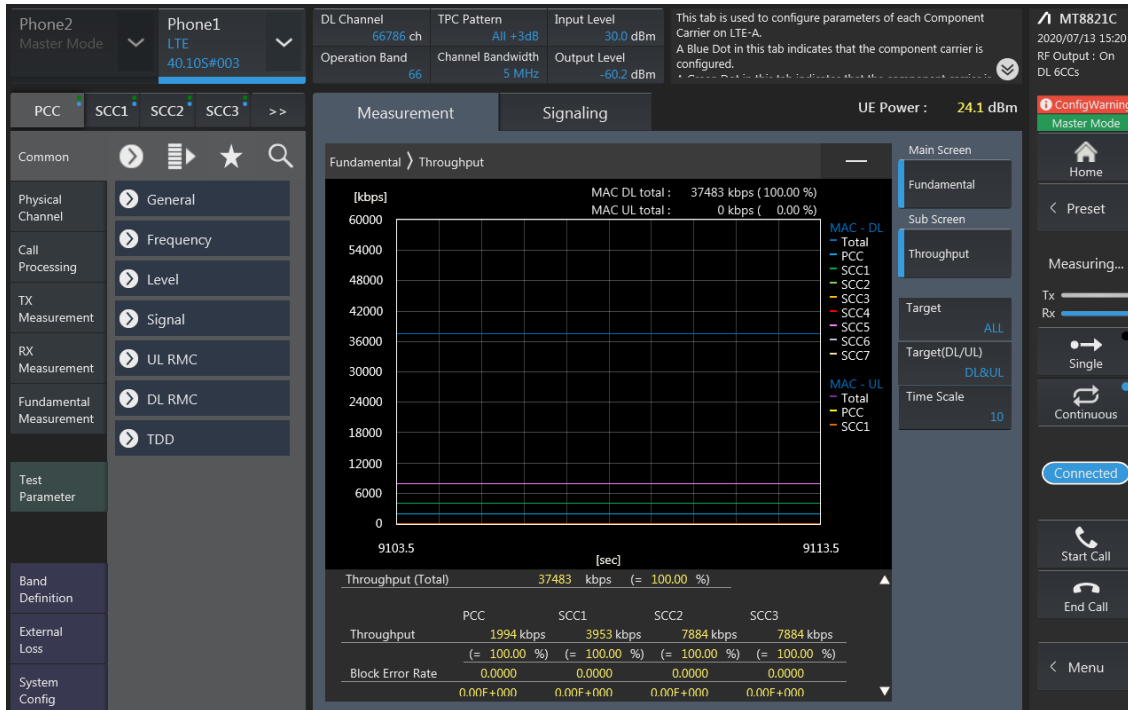


5CA Downlink Carrier aggregation Maximum conducted Powers

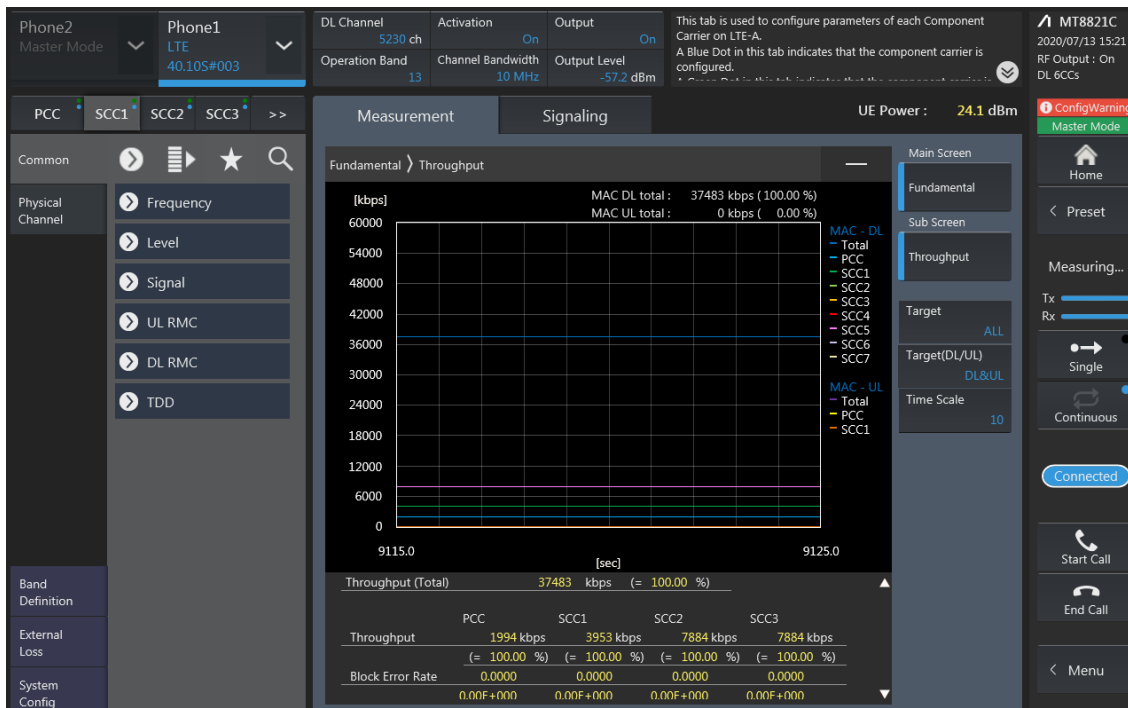
Combination	PCC										SCC										SCC										SCC										Tx Power	
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset		Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	UE Max Tx Power (dBm)	UE Max Tx Power with CA (dBm)	Deviation (dB)									
2A-2A-5A-30A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	5	10	2525	881.5	30	10	9820	2395	66	20	66786	2146	24.15	24.14	-0.01														
2A-2A-5A-30A-66A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2146	24.46	24.38	-0.08														
2A-2A-5A-30A-66A	30	5	27685	2307.5	9796	2362.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	66	20	66786	2146	22.40	22.38	-0.02														
2A-2A-5A-30A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	30	10	9820	2395	23.89	23.74	-0.15														
2A-2A-5A-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	5	10	2525	881.5	66	20	66786	2146	66	20	66786	2146	24.15	24.12	-0.03														
2A-2A-5A-66A-66A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	66	20	66786	2146	66	20	66786	2146	24.46	24.40	-0.06														
2A-2A-5A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	23.89	23.80	-0.09														
2A-2A-12A-30A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	12	10	5095	737.5	30	10	9820	2395	66	20	66786	2146	24.15	24.07	-0.08														
2A-2A-12A-30A-66A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2146	24.37	24.38	0.01														
2A-2A-12A-30A-66A	30	5	27685	2307.5	9796	2362.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	66	20	66786	2146	22.40	22.36	-0.04														
2A-2A-12A-30A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	30	10	9820	2395	23.89	23.87	0.02														
2A-2A-12B-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	12	5	5047	732.7	66	20	66786	2146	66	20	66786	2146	24.15	24.15	0.00														
2A-2A-12B-66A	12	5	23095	707.5	5095	737.5	QPSK	1	12	5	5047	732.7	2	20	900	1960	66	20	66786	2146	66	20	66786	2146	24.37	24.36	0.01															
2A-2A-12B-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	12	5	5047	732.7	12	5	5047	732.7	23.89	23.85	-0.04														
2A-2A-12A-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	13	10	5230	751	66	20	66786	2146	66	20	66786	2146	24.15	24.07	-0.08														
2A-2A-12A-66A-66A	13	10	23230	762	5230	751	QPSK	1	0	2	20	900	1960	2	20	1100	1980	66	20	66786	2146	66	20	66786	2146	23.90	23.90	0.00														
2A-2A-12A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	13	10	5230	751	23.89	23.89	0.00														
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2A-2A-14A-30A-66A	14	10	23230	763	5330	763	QPSK	1	24	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2146	24.08	24.09	0.01														
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2A-2A-14A-66A-66A	14	10	23230	763	5330	763	QPSK	1	24	2	20	900	1960	2	20	1100	1980	66	20	66786	2146	66	20	66786	2146	23.90	23.88	0.02														
2A-2A-14A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	14	10	5330	763	23.89	23.81	0.02														
2A-2A-29A-30A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	29	10	9715	722.5	30	10	9820	2395	66	20	66786	2146	24.15	24.10	-0.05														
2A-2A-29A-30A-66A	30	5	27685	2307.5	9796	2362.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	66	20	66786	2146	22.40	22.27	-0.13														
2A-2A-29A-30A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	30	10	9820	2395	23.89	23.80	-0.09														
2A-2A-29A-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	2	20	700	1940	29	10	9715	722.5	66	20	66786	2146	66	20	66786	2146	24.15	24.07	-0.08														
2A-2A-29A-66A-66A	29	10	9715	722.5	9715	722.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	66	20	66786	2146	23.89	23.84	0.05														
2A-5A-30A-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	5	10	2525	881.5	30	10	9820	2395	66	20	66786	2146	66	20	66786	2146	24.15	24.23	0.08														
2A-5A-30A-66A-66A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	30	10	9820	2395	66	20	66786	2146	66	20	66786	2146	24.46	24.56	0.10														
2A-5A-30A-66A-66A	30	5	27685	2307.5	9796	2362.5	QPSK	1	24	2	20	900	1960	5	10	2525	881.5	66	20	66786	2146	66	20	66786	2146	22.40	22.46	0.06														
2A-5A-30A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	5	10	2525	881.5	30	10	9820	2395	23.89	23.86	-0.03														
2A-5A-48D	2	20	19100	1900	11100	1980	QPSK	1	0	5	10	2525	881.5	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.8	24.15	24.23	0.08														
2A-5A-48D	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.8	24.46	24.32	-0.14														
2A-12A-30A-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	12	10	5095	737.5	30	10	9820	2395	66	20	66786	2146	66	20	66786	2146	24.15	24.11	-0.04														
2A-12A-30A-66A-66A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	30	10	9820	2395	66	20	66786	2146	66	20	66786	2146	24.37	24.38	0.01														
2A-12A-30A-66A-66A	30	5	27685	2307.5	9796	2362.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2146	22.40	22.38	-0.02														
2A-12A-30A-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	12	10	5095	737.5	30	10	9820	2395	23.89	23.88	0.01														
2A-12B-66A-66A	2	20	19100	1900	11100	1980	QPSK	1	0	12	5	5095	737.5	12	5	5047	732.7	66	20	66786	2146	66	20	66786	2146	24.15	24.17	0.02														
2A-12B-66A-66A	12	5	23095	707.5	5095	737.5	QPSK	1	12	12	5	5047	732.7	2	20	900	1960	66	20	66786	2146	66	20	66786	2146	24.37	24.34	-0.03														
2A-12B-66A-66A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	12	5	5047	732.7	12	5	5047	732.7	23.89	23.84	-0.05														
2A-13A-48C-66A	2	20	19100	1900</																																						

LTE Down Link 6CA Call Setup

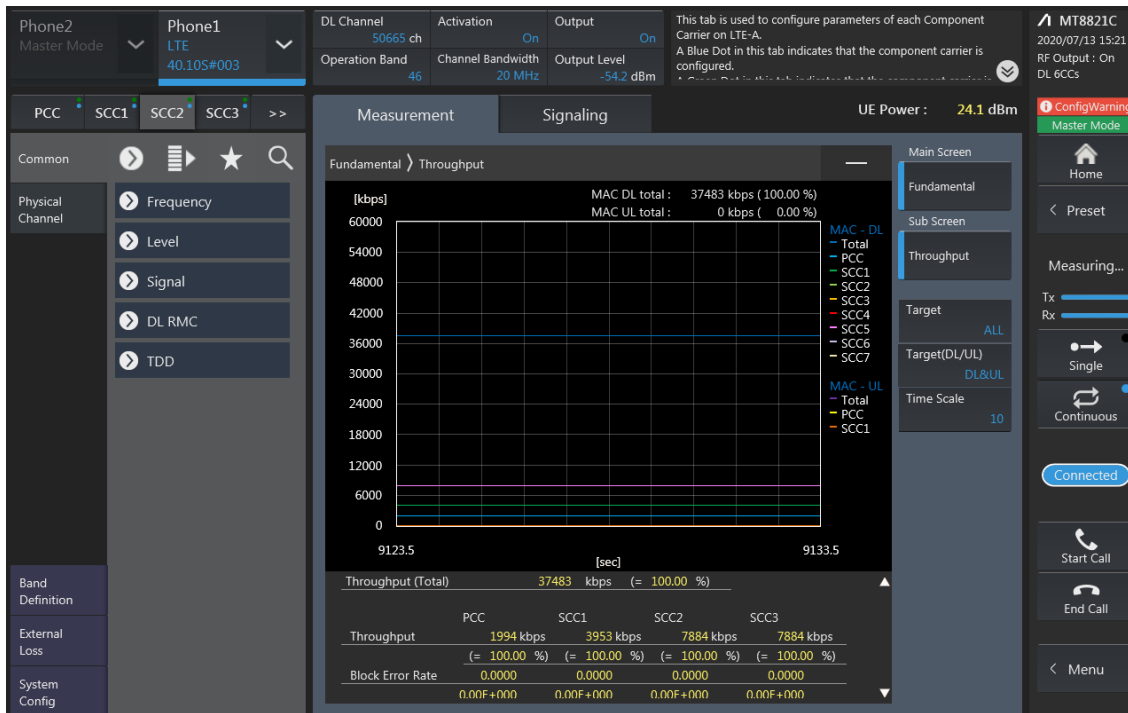
PCC Setting (Channel/ RB/ BW/ Modulation)



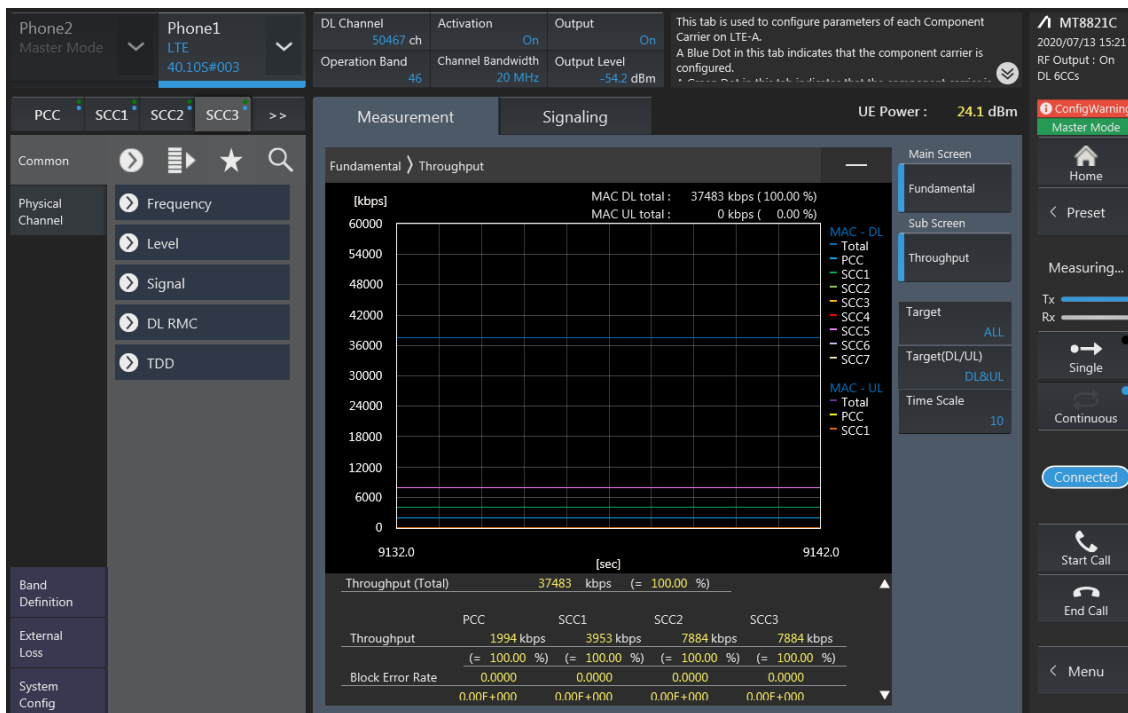
SCC1 Setting (Channel/ RB/ BW/ Modulation) and call Connection



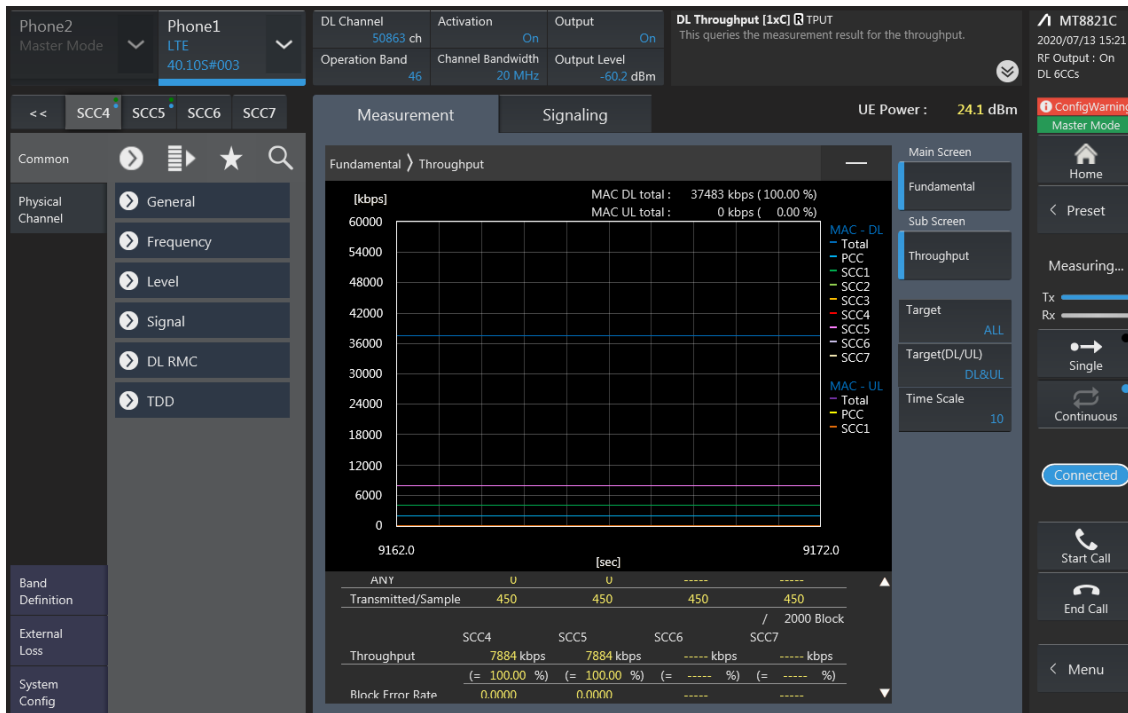
SCC2 Setting (Channel /RB/BW/Modulation) and call Connection



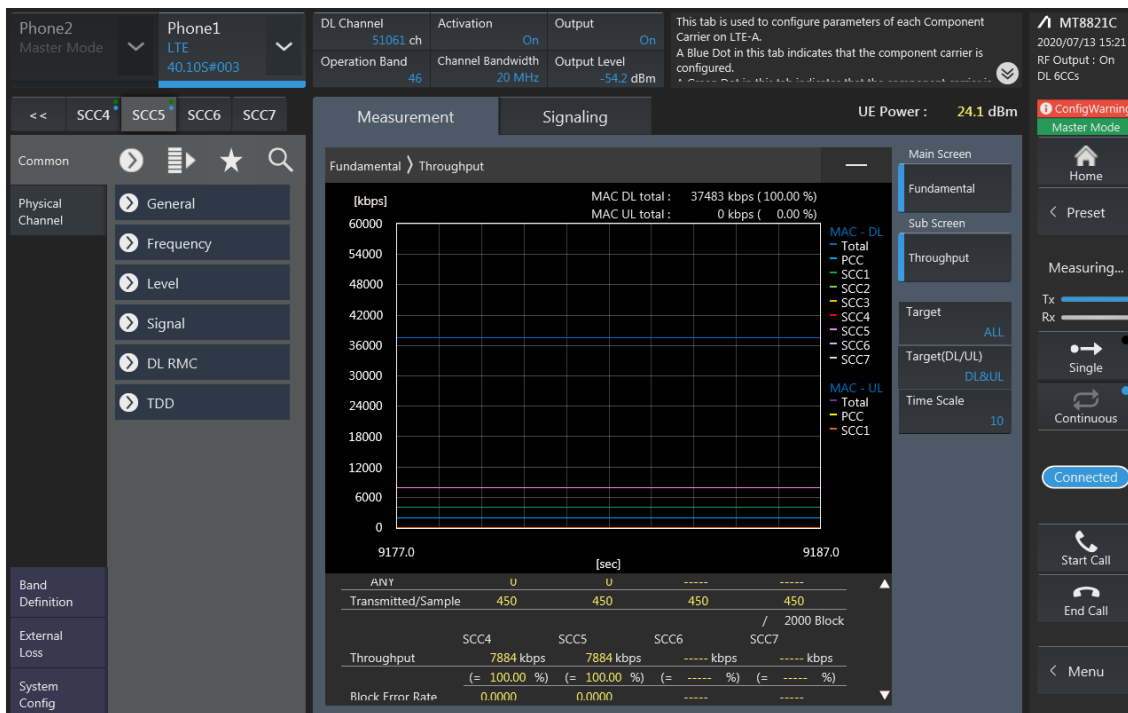
SCC3 Setting (Channel /RB/BW/Modulation) and call Connection



SCC4 Setting (Channel /RB/BW/Modulation) and call Connection



SCC5 Setting (Channel /RB/BW/Modulation) and call Connection

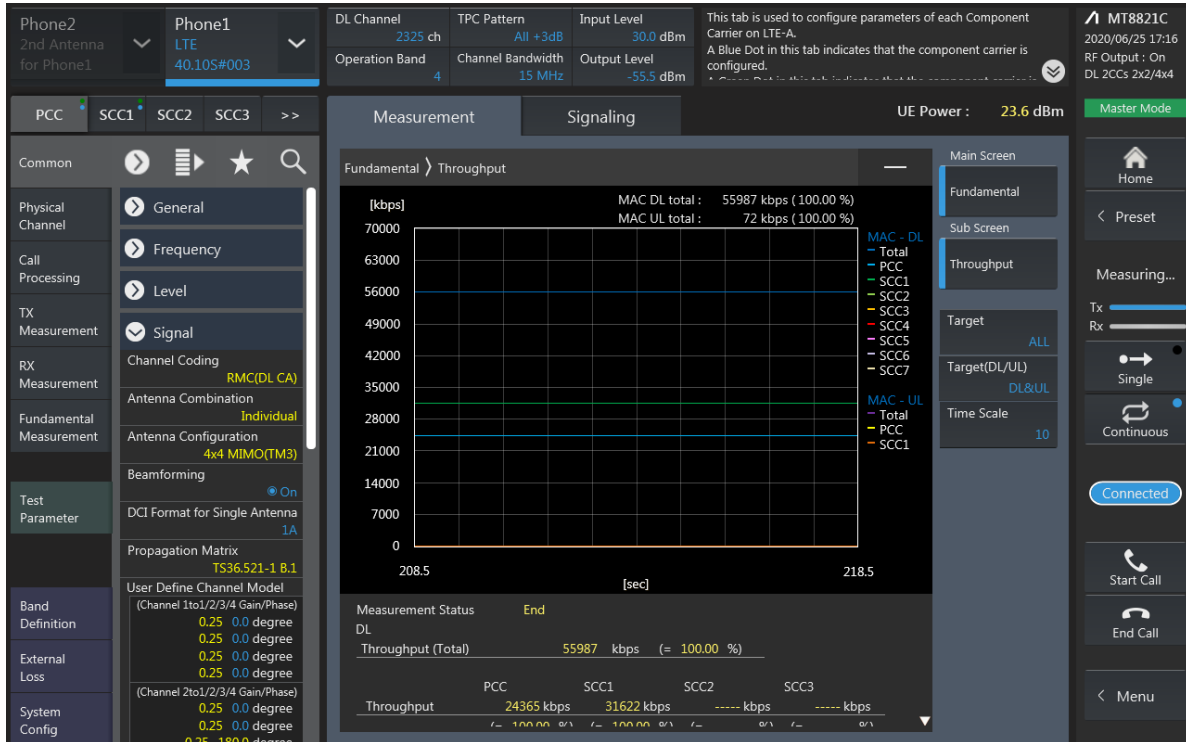


6CA Downlink Carrier aggregation conducted Powers

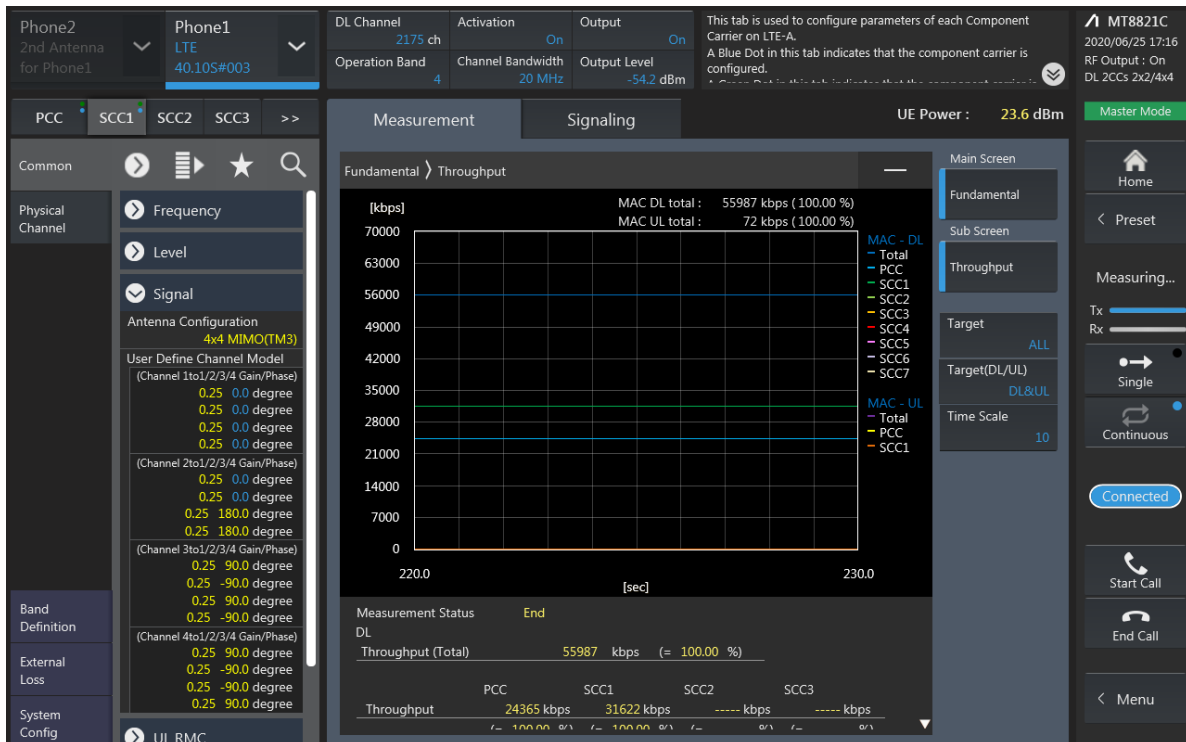
Combination	Band	BW	PCC					Modulation	RB	offset	SCC1				SCC2				SCC3				SCC4				SCC5				Tx Power (dBm)	Deviation(dB) (1) (4)				
			PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Band				BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	15.4dBm Carrier Tx Power (dBm) (1)			15.4dBm with 15.4 dB CA margin (dBm) (2)			
2A-SA-4B-C-6A-6A	2	20	15030	3900	1100	1980	QPSK	1	0	5	10	2525	881.5	48	20	55900	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.15	24.15	0.04				
3A-SA-4B-C-6A-6A	5	5	20425	426.5	2425	871.5	QPSK	1	12	2	20	800	1980	48	20	55900	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.46	24.46	0.01				
2A-SA-4B-C-6A-6A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1980	48	20	55900	3625	48	20	56188	3644.8	48	20	56396	3664.6	48	20	56594	3684.4	23.89	23.90	0.01
2A-4B-E-6A	2	20	15030	3900	1100	1980	QPSK	1	0	48	20	55900	3625	48	20	56188	3644.8	48	20	56396	3664.6	48	20	56594	3684.4	66	20	66786	2145	24.15	24.15	0.04				
2A-4B-E-6A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1980	48	20	55900	3625	48	20	56188	3644.8	48	20	56396	3664.6	48	20	56594	3684.4	23.89	23.94	0.05				
5A-4B-C-6A-6A	5	5	20425	426.5	2425	871.5	QPSK	1	12	6	20	55900	3625	48	20	56188	3644.8	48	20	56396	3664.6	66	20	66786	2145	66	20	67236	2190	24.46	24.47	0.01				
5A-4B-C-6A-6A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	5	10	2525	881.5	48	20	55900	3625	48	20	56188	3644.8	48	20	56396	3664.6	23.89	23.95	0.06				

LTE Down Link 2CA 4x4 MIMO Call Setup

PCC Setting : Channel/ RB/ BW/ Modulation



SCC Setting : Channel/ RB/ BW/ Modulation and call Connection

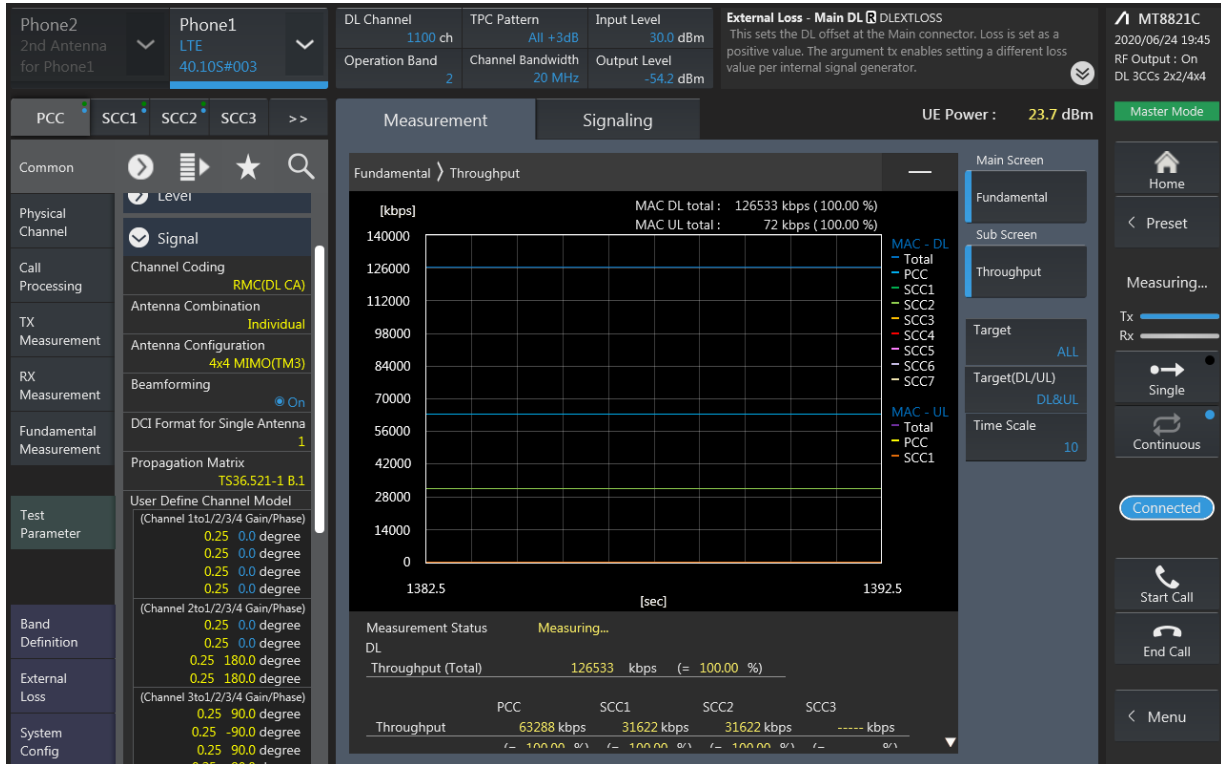


LTE Downlink 2CA 4X4 MIMO Maximum Conducted Power

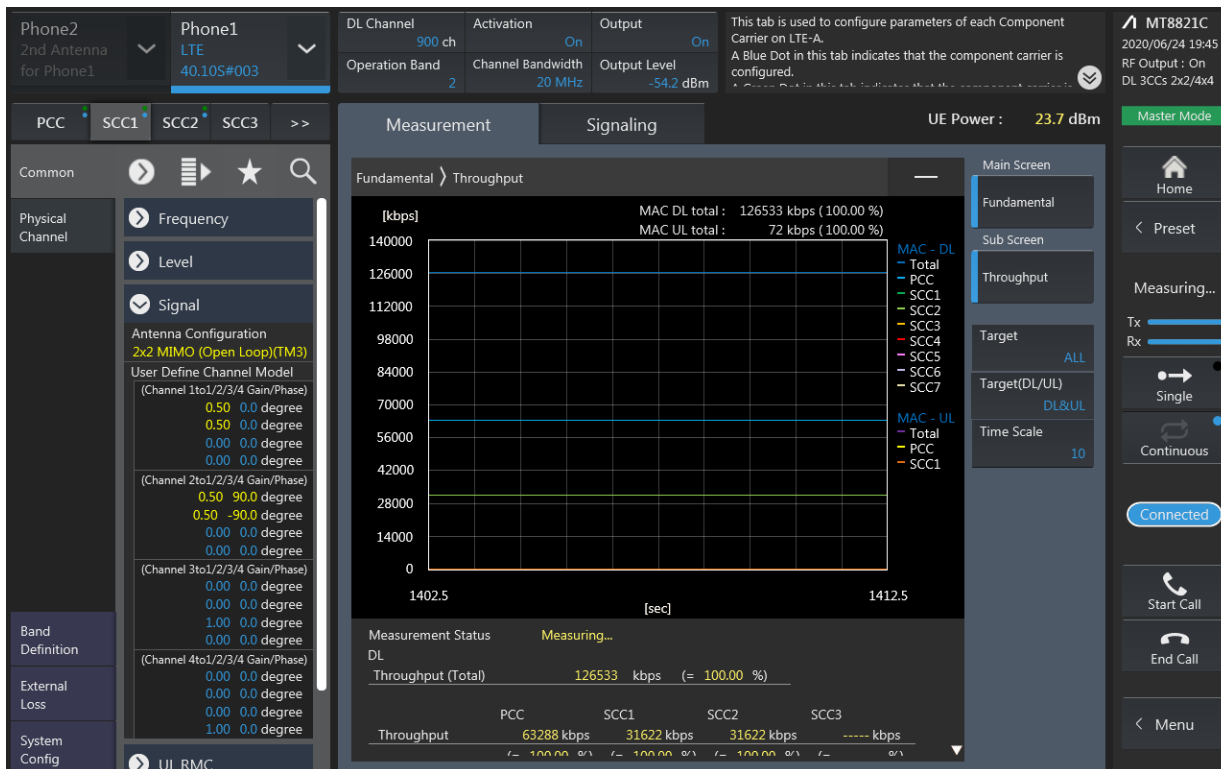
Combination	PCC									SCC				Tx Power		Deviation(dB) (2)-(1)
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled(dBm) (2)	
5A-[25A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	25	20	8365	1962.5	24.46	24.45	-0.01
5A-[25A]	25	10	26090	1855	8090	1936	QPSK	1	24	5	10	2525	881.5	23.94	23.92	-0.02
5A-[41A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	41	20	40620	2593	24.46	24.40	-0.06
5A-[41A] PC3	41	20	40620	2593	40620	2593	QPSK	1	0	5	10	2525	881.5	24.24	24.18	-0.06
5A-[41A] PC2	41	20	40620	2593	40620	2593	QPSK	1	0	5	10	2525	881.5	25.74	25.69	-0.05
12A-[25A]	12	10	23095	707.5	5095	737.5	QPSK	1	24	25	20	8365	1962.5	24.37	24.30	-0.07
12A-[25A]	25	10	26090	1855	8090	1936	QPSK	1	24	12	10	5095	737.5	23.94	24.02	0.08
[25A]-[25A](0)	25	10	26090	1855	8090	1936	QPSK	1	24	25	10	8640	1990	23.94	23.88	-0.06
[25A]-[25A](1)	25	10	26090	1855	8090	1936	QPSK	1	24	25	20	8590	1985	23.94	23.97	0.03
[48B]	48	10	56690	3695	56690	3695	QPSK	1	49	48	10	56591	3685.1	22.14	22.21	0.07

LTE Down Link 3CA 4x4 MIMO Call Setup

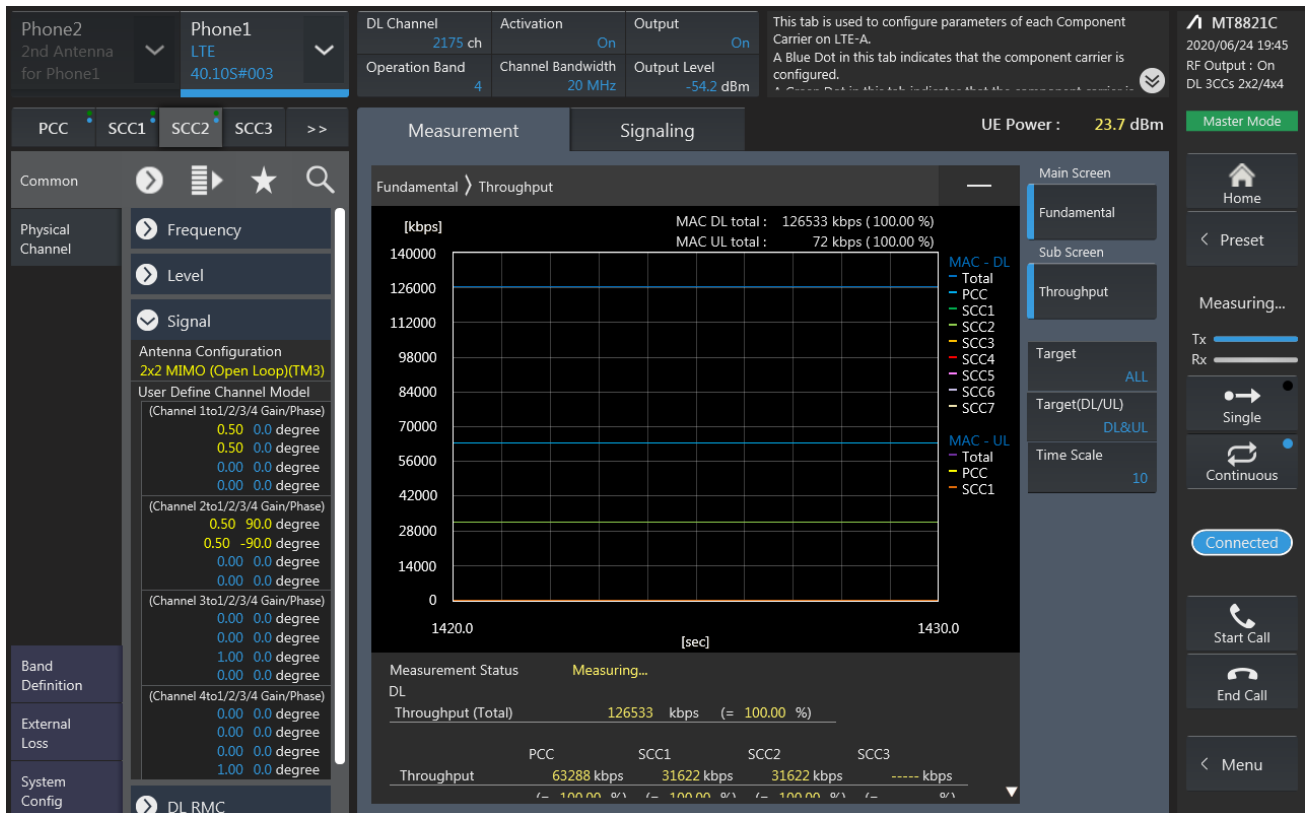
PCC Setting: Channel /RB/BW/Modulation



CC1 Setting : Channel /RB/BW/Modulation



SCC2 Setting (Channel /RB/BW/Modulation)and call Connection

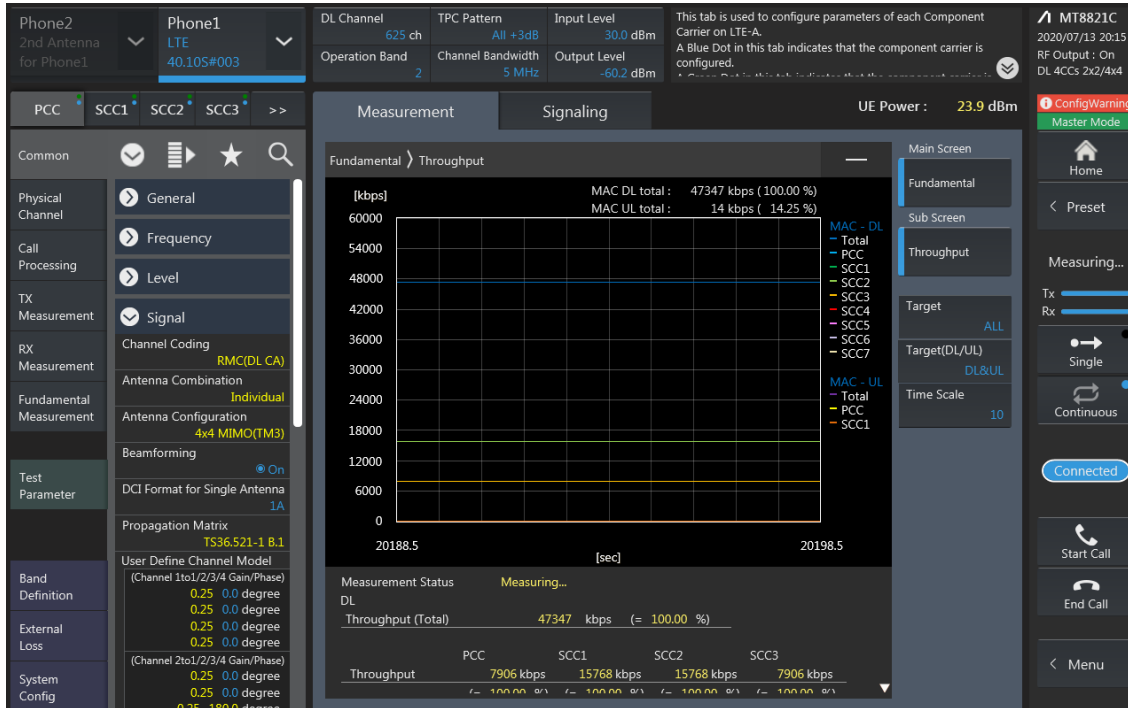


LTE Downlink 3CA 4X4 MIMO Maximum Conducted Power

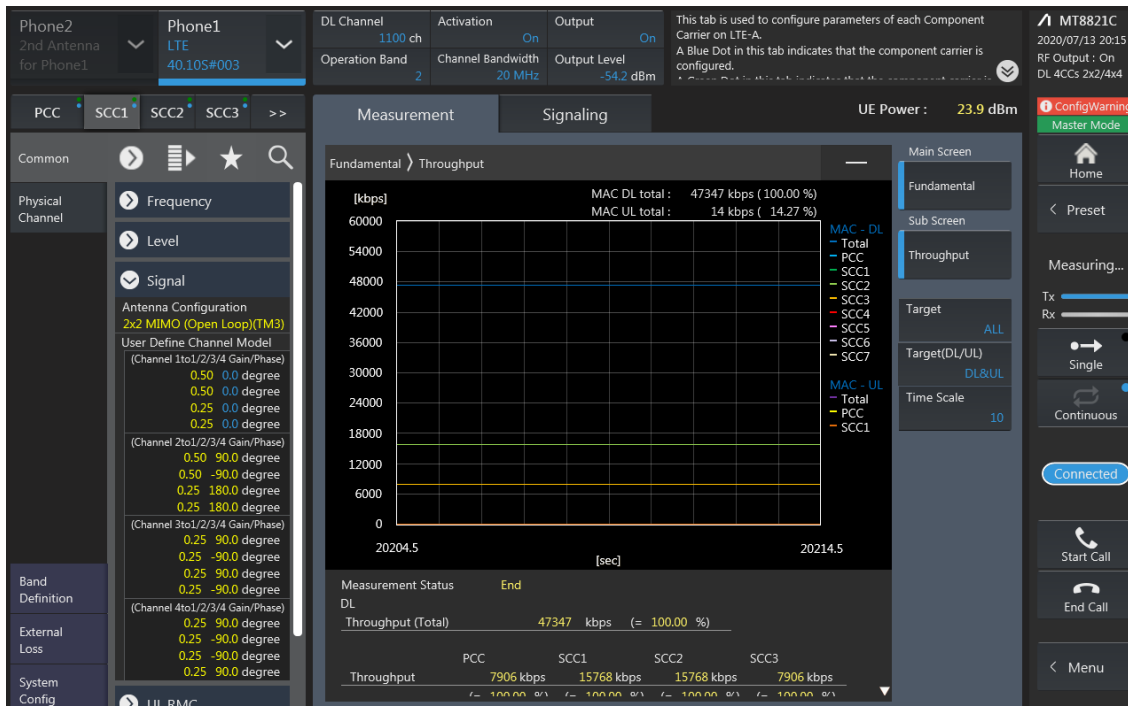
Combination	PCC									SCC				SCC				Tx Power		
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled (dBm) (2)	Devaion(dB) (2)-(1)
[2A]-[4A]-13A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	13	10	5230	751	24.15	24.19	0.04
[2A]-[4A]-13A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	13	10	5230	751	23.77	23.81	0.04
[2A]-[4A]-13A	13	10	23230	782	5230	751	QPSK	1	0	2	20	900	1960	4	20	2175	2132.5	23.98	24.01	0.03
[4A]-[4A]-13A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	13	10	5230	751	23.77	23.83	0.06
[4A]-[4A]-13A	13	10	23230	782	5230	751	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	23.98	24.00	0.02
[4A]-[4A]-71A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	71	20	68761	634.5	23.77	23.86	0.09
[4A]-[4A]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	23.87	23.92	0.05
[41A]-[41C](PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	41292	2660.2	41	20	41490	2680	24.24	24.20	-0.04
[41A]-[41C](PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	41490	2680	24.24	24.09	-0.15
[41A]-[41C](PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	41292	2660.2	41	20	41490	2680	25.74	25.79	0.05
[41A]-[41C](PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	41490	2680	25.74	25.72	-0.02
[41D](PC3)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	40224	2553.4	24.24	24.16	-0.08
[41D](PC2)	41	20	40620	2593	40620	2593	QPSK	1	0	41	20	40422	2573.2	41	20	40224	2553.4	25.74	25.60	-0.14
[48A]-[48A]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	48	20	55990	3625	48	20	56640	3690	23.87	23.74	-0.13
[48C]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	48	20	55990	3625	48	20	56188	3644.8	23.87	23.85	-0.02

LTE Down Link 4CA 4x4 MIMO Call Setup

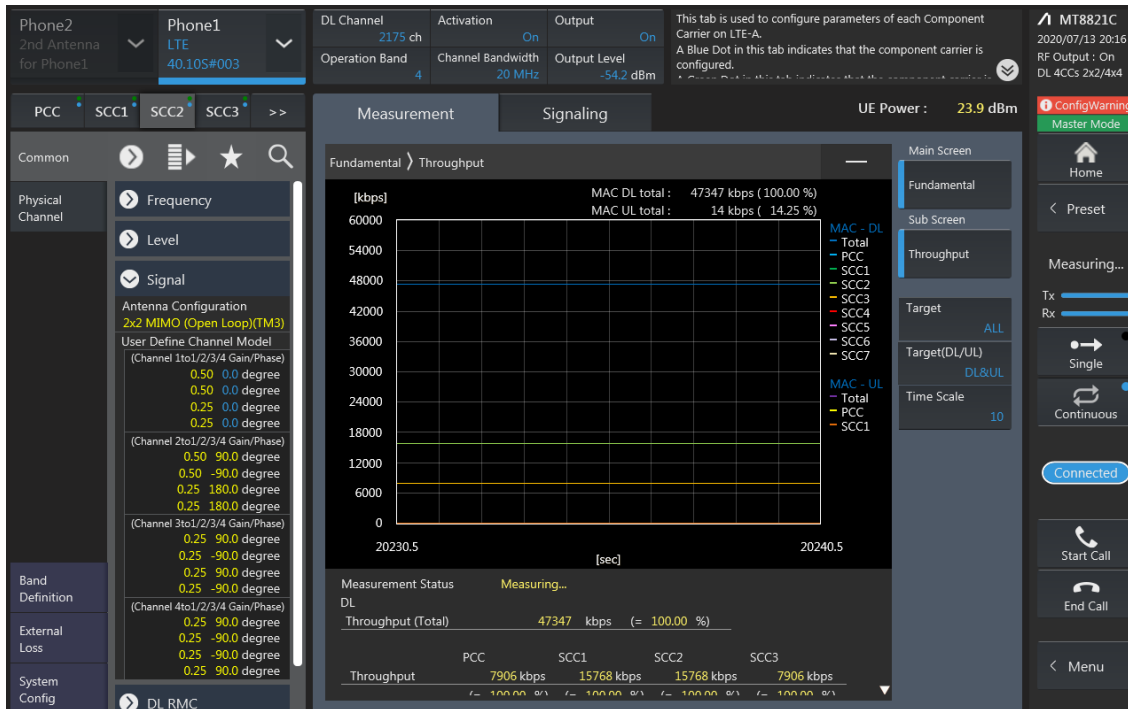
PCC Setting: Channel /RB/BW/Modulation



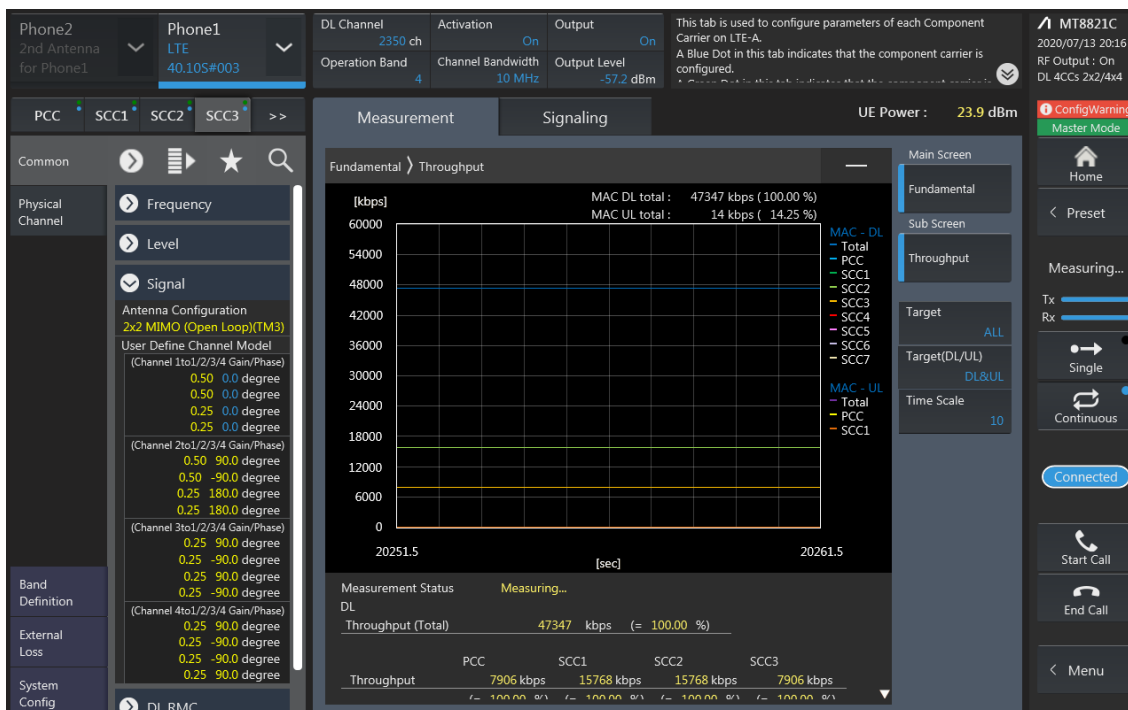
SCC1 Setting : Channel /RB/BW/Modulation



SCC2 Setting (Channel /RB/BW/Modulation) and call Connection



SCC3 Setting (Channel /RB/BW/Modulation) and call Connection

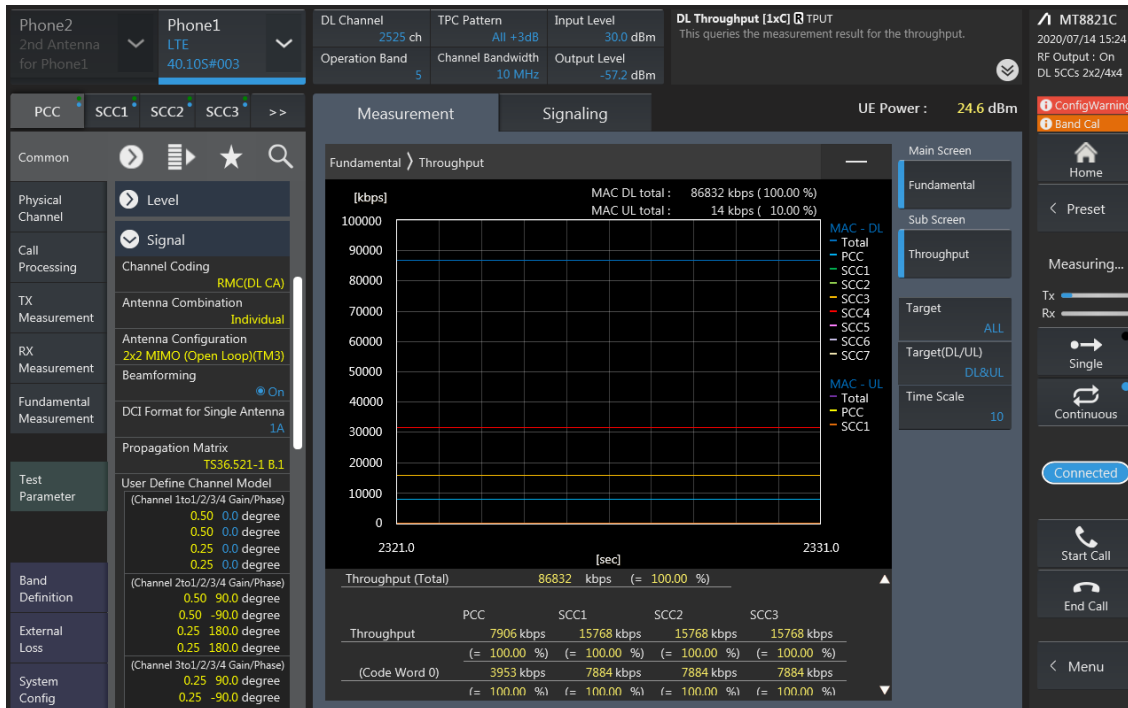


LTE Downlink 4CA 4X4 MIMO Maximum Conducted Power

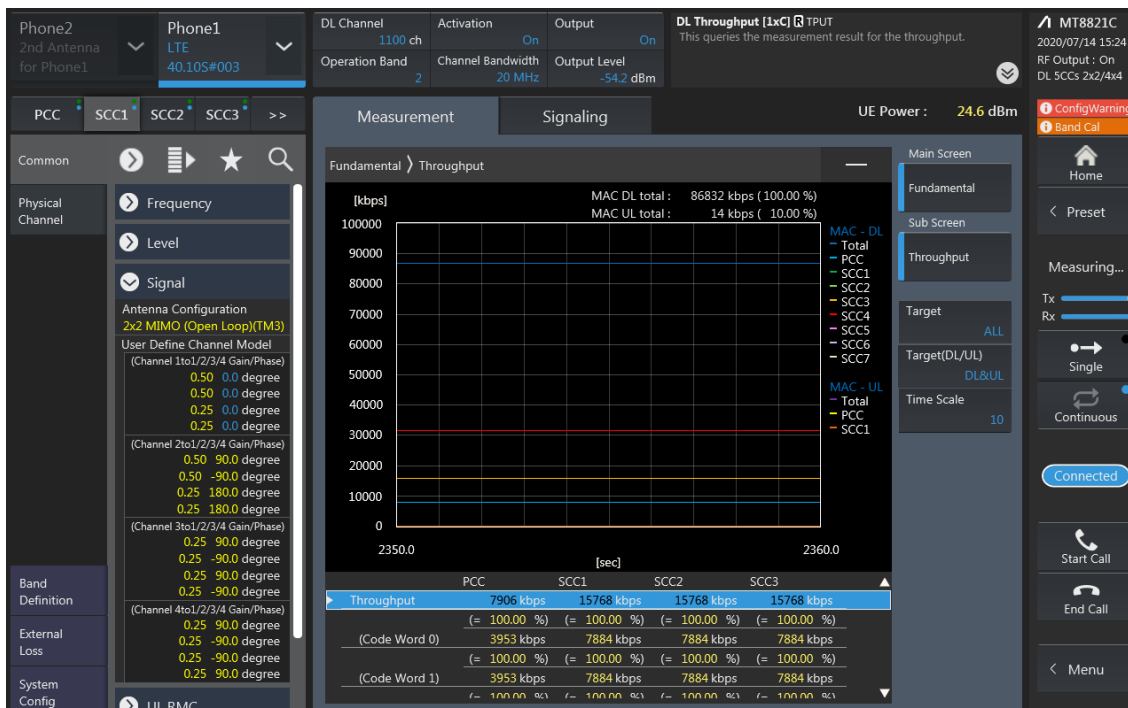
Combination	Band	BW	PCC						offset	SCC				SCC				SCC				Tx Power		
			PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB		Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Simple Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enable (dBm) (2)	Deviation (dB) (2-1)
[2A]-[2A]-[4A]-[4A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	4	10	2000	2115	24.15	24.01	-0.14
[2A]-[2A]-[4A]-[4A]	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	2	20	1100	1980	23.77	23.81	0.04
[2A]-[2A]-[4A]-5A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	5	10	2525	881.5	24.15	24.10	-0.05
[2A]-[2A]-[4A]-5A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	23.77	23.82	0.05
[2A]-[2A]-[4A]-5A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	24.46	24.49	0.03
[2A]-[2A]-[4A]-12A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	12	10	5095	737.5	24.15	24.12	-0.03
[2A]-[2A]-[4A]-12A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	23.77	23.75	-0.02
[2A]-[2A]-[4A]-12A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	24.37	24.28	-0.09
[2A]-[2A]-[4A]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	4	20	2175	2132.5	71	20	68761	634.5	24.15	24.12	-0.03
[2A]-[2A]-[4A]-71A	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	2	20	1100	1980	71	20	68761	634.5	23.77	23.77	0.00
[2A]-[2A]-[4A]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	4	20	2175	2132.5	23.87	23.79	-0.08
[2A]-[2A]-[66A]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	66	20	66786	2145	20	20	66786	2145	24.15	24.05	-0.10
[2A]-[2A]-[66A]-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	71	20	68761	634.5	23.89	23.85	-0.04
[2A]-[2A]-[66A]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	23.87	23.88	0.01
[2A]-[4A]-[4A]-5A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	5	10	2525	881.5	24.15	24.22	0.07
[2A]-[4A]-[4A]-5A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	5	10	2525	881.5	23.77	23.65	-0.12
[2A]-[4A]-[4A]-5A	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	4	20	2175	2132.5	4	10	2000	2115	24.46	24.49	0.03
[2A]-[4A]-[4A]-12A	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	4	10	2000	2115	12	10	5095	737.5	24.15	24.22	0.07
[2A]-[4A]-[4A]-12A	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	2	20	900	1960	12	10	5095	737.5	23.77	23.87	0.10
[2A]-[4A]-[4A]-12A	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	4	20	2175	2132.5	4	10	2000	2115	24.37	24.47	0.10
[2A]-[4A]-12B	2	20	19100	1900	1100	1980	QPSK	1	0	4	20	2175	2132.5	12	5	5047	732.7	12	5	5047	732.7	24.15	24.18	0.03
[2A]-[4A]-12B	4	10	20350	1750	2350	2150	QPSK	1	24	2	20	900	1960	12	5	5095	737.5	12	5	5047	732.7	23.77	23.80	0.03
[2A]-[4A]-12B	12	5	23095	707.5	5095	737.5	QPSK	1	12	12	5	5047	732.7	2	20	900	1960	4	20	2175	2132.5	24.07	24.00	-0.07
[2A]-[12A]-[66C]	2	20	19100	1900	1100	1980	QPSK	1	0	12	10	5095	737.5	66	20	66786	2145	66	20	66984	2164.8	24.15	24.14	-0.01
[2A]-[12A]-[66C]	12	10	23095	707.5	5095	737.5	QPSK	1	24	2	20	900	1960	66	20	66786	2145	66	20	66984	2164.8	24.37	24.40	0.03
[2A]-[12A]-[66C]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66984	2165.8	2	20	900	1960	12	10	5095	737.5	23.89	23.86	-0.03
[2A]-[13A]-[66C]	2	20	19100	1900	1100	1980	QPSK	1	0	13	10	5230	751	66	20	66786	2145	66	20	66984	2164.8	24.15	24.24	0.09
[2A]-[13A]-[66C]	13	10	23230	782	5230	751	QPSK	1	0	2	20	900	1960	66	20	66786	2145	66	20	66984	2164.8	23.98	24.00	0.02
[2A]-[13A]-[66C]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	13	10	5230	751	23.89	23.87	-0.02
[2A]-[66A]-[66A]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67236	2190	71	20	68761	634.5	24.15	24.01	-0.14
[2A]-[66A]-[66A]-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	71	20	68761	634.5	23.89	23.76	-0.13
[2A]-[66A]-[66A]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	66	20	66786	2145	66	20	67236	2190	23.87	23.81	-0.06
[2C]-[66A]-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	902	1960.2	66	20	66786	2145	66	20	67236	2190	24.15	24.20	0.05
[2C]-[66A]-[66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1098	1979.8	23.89	23.99	0.10
[2A]-[66C]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	71	20	68761	634.5	24.15	24.02	-0.13
[2A]-[66C]-71A	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	71	20	68761	634.5	23.89	23.91	0.02
[2A]-[66C]-71A	71	10	133297	680.5	68761	634.5	QPSK	1	0	2	20	900	1960	66	20	66786	2145	66	20	66984	2164.8	23.87	23.88	0.01
[4A]-[4A]-12B	4	10	20350	1750	2350	2150	QPSK	1	24	4	20	2050	2120	12	5	5095	737.5	12	5	5047	732.7	23.77	23.73	-0.04
[4A]-[4A]-12B	12	5	23095	707.5	5095	737.5	QPSK	1	12	12	5	5047	732.7	4	20	2175	2132.5	4	10	2000	2115	24.07	23.97	-0.10
[13A]-[48A]-[66C]	13	10	23230	782	5230	751	QPSK	1	0	48	20	55990	3625	66	20	66786	2145	66	20	66984	2164.8	23.98	23.83	-0.15
[13A]-[48A]-[66C]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	13	10	5230	751	48	20	55990	3625	23.89	23.87	-0.02
[25A]-[41D]	25	10	26090	1855	8090	1936	QPSK	1	24	41	20	40620	2593	41	20	40422	2573.2	41	20	40224	2553.4	23.94	23.95	0.01
29A-[30A]-[66A]-[66A]	30	5	27685	2307.5	9795	2352.5	QPSK	1	24	29	10	9715	722.5	66	20	66786	2145	66	20	67236	2190	22.4	22.43	0.03
29A-[30A]-[66A]-[66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	29	10	9715	722.5	30	10	9620	2355	23.89	23.88	-0.01
[48A]-[48A]-[66A]-[66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	48	20	55990	3625	48	20	56640	3690	23.89	23.95	0.06
[48C]-[66C]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	66994	2165.8	48	20	55990	3625	48	20	56188	3644.8	23.89	23.97	0.08

LTE Down Link 5CA 4x4 MIMO Call Setup

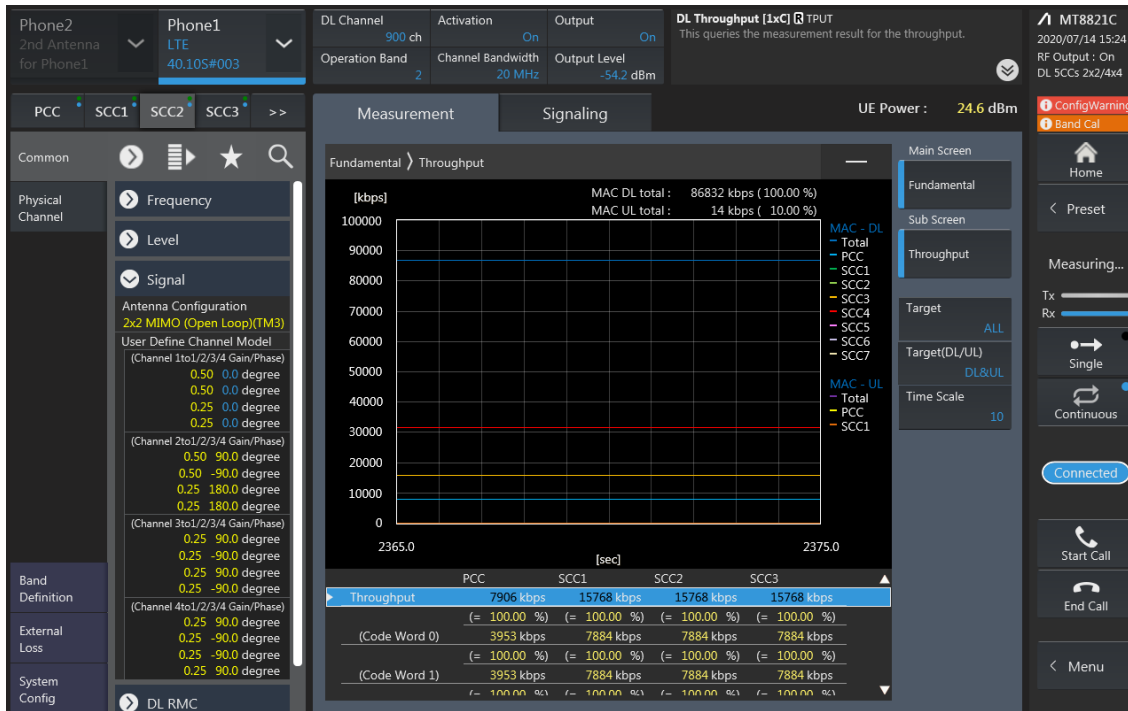
PCC Setting: Channel /RB/BW/Modulation



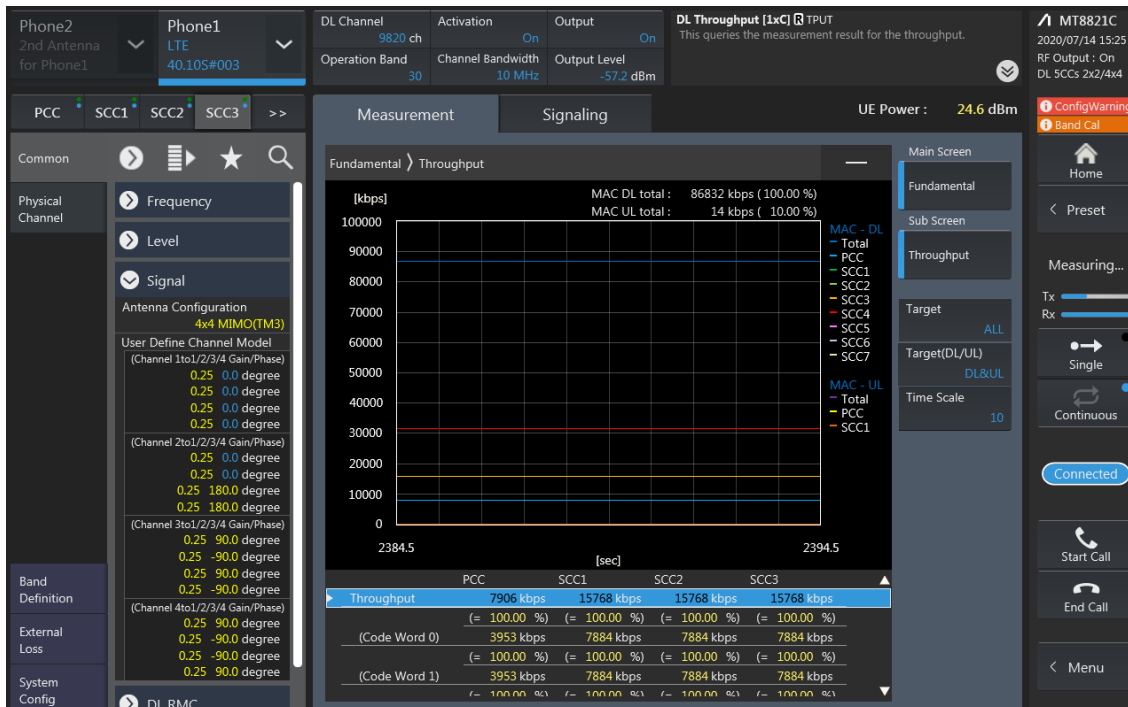
SCC1 Setting : Channel /RB/BW/Modulation



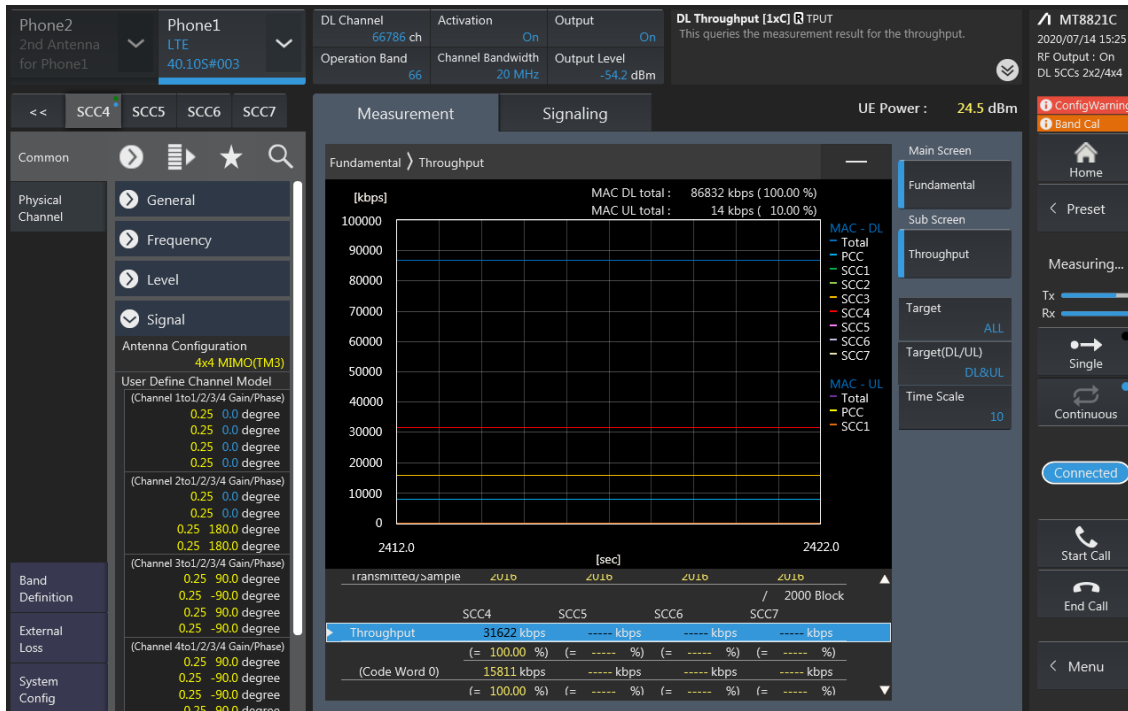
SCC2 Setting (Channel /RB/BW/Modulation) and call Connection



SCC3 Setting (Channel /RB/BW/Modulation) and call Connection



SCC4 Setting (Channel /RB/BW/Modulation) and call Connection



LTE Downlink 5CA 4X4 MIMO Maximum Conducted Power

Combination	PCC										SCC1										SCC2										SCC3										SCC4										Tx Power	
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC1 UL Channel	SCC1 UL Frequency	Band	BW	SCC2 UL Channel	SCC2 UL Frequency	Band	BW	SCC3 UL Channel	SCC3 UL Frequency	Band	BW	SCC4 UL Channel	SCC4 UL Frequency	Band	BW	SCC1 DL Channel	SCC1 DL Frequency	Band	BW	SCC2 DL Channel	SCC2 DL Frequency	LTE-SRS Carrier Tx Power (dBm)	Max Tx Power with 5CA Limitation (dB)	Division (dB)																
[2A][2A][5A][30A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	5	10	2525	881.5	30	10	9820	2395	66	20	66786	2145	2415	2402	-0.13																								
[2A][2A][5A][30A][66A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2145	2415	2402	-0.15																								
[2A][2A][5A][30A][66A]	30	5	27685	2307.5	9795	2382.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	66	20	66786	2145	2240	2226	-0.14																								
[2A][2A][5A][30A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	30	10	9820	2395	2389	2388	-0.01																								
[2A][2A][5A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	5	10	2525	881.5	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.03																								
[2A][2A][5A][66A][66A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	66	20	66786	2145	66	20	66786	2145	66	20	66786	2145	2190	2446	-0.11	-0.05																							
[2A][2A][5A][66A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	2389	2389	0.07																								
[2A][2A][5A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	5	10	2525	881.5	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.10																								
[2A][2A][5A][66A][66A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	66	20	66786	2145	2190	2446	-0.11	-0.15																							
[2A][2A][5A][66C]	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66994	2165.8	2	20	900	1960	2	20	1100	1980	5	10	2525	881.5	2389	2392	0.03																								
[2A][2A][12A][30A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	12	10	5095	737.5	30	10	9820	2395	66	20	66786	2145	2415	2411	-0.04																								
[2A][2A][12A][30A][66A]	12	10	23095	707.5	9095	737.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	30	10	9820	2395	66	20	66786	2145	2437	2423	-0.14																								
[2A][2A][12A][30A][66A]	30	5	27685	2307.5	9795	2382.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	66	20	66786	2145	2240	2245	0.05																								
[2A][2A][12A][30A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	30	10	9820	2395	2389	2380	-0.09																								
[2A][2A][12A][30A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	12	10	5095	737.5	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.05																								
[2A][2A][12A][30A][66A]	12	10	23095	707.5	9095	737.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	66	20	66786	2145	2190	2437	-0.07																								
[2A][2A][12A][30A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	12	10	5095	737.5	2389	2379	-0.10																								
[2A][2A][12B][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	12	5	5047	732.7	12	5	5047	732.7	66	20	66786	2145	2415	2421	0.06																								
[2A][2A][12B][66A]	12	5	23095	707.5	9095	737.5	QPSK	1	12	12	5	5047	732.7	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	2437	2430	-0.07																								
[2A][2A][12B][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	12	5	5095	737.5	12	5	5047	732.7	2389	2386	0.07																								
[2A][2A][13A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	13	10	5230	751	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.01																								
[2A][2A][13A][66A][66A]	13	10	23230	782	5230	751	QPSK	1	0	2	20	900	1960	2	20	1100	1980	66	20	66786	2145	66	20	66786	2145	2190	2388	-0.02																								
[2A][2A][13A][66A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	13	10	5230	751	2389	2380	-0.08																								
[2A][2A][29A][30A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	29	10	9715	722.5	30	10	9820	2395	66	20	66786	2145	2415	2416	0.01																								
[2A][2A][29A][30A][66A]	30	5	27685	2307.5	9795	2382.5	QPSK	1	24	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	66	20	66786	2145	2240	2227	-0.13																								
[2A][2A][29A][30A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	30	10	9820	2395	2389	2386	0.07																								
[2A][2A][29A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	2	20	700	1940	29	10	9715	722.5	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.07																								
[2A][2A][29A][66A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	29	10	9715	722.5	2389	2386	-0.03																								
[2A][5A][30A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	5	10	2525	881.5	30	10	9820	2395	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.02																								
[2A][5A][30A][66A][66A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	30	10	9820	2395	66	20	66786	2145	66	20	66786	2145	2190	2446	-0.13	-0.13																							
[2A][5A][30A][66A][66A]	30	5	27685	2307.5	9795	2382.5	QPSK	1	24	2	20	900	1960	5	10	2525	881.5	66	20	66786	2145	66	20	66786	2145	2190	2240	-0.06																								
[2A][5A][30A][66A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	5	10	2525	881.5	30	10	9820	2395	2389	2377	-0.12																								
[2A][5A][48A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	5	10	2525	881.5	48	20	59990	3625	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.04																								
[2A][5A][48A][66A][66A]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	59990	3625	66	20	66786	2145	66	20	66786	2145	2190	2446	-0.03																								
[2A][5A][48A][66A][66A]	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	5	10	2525	881.5	48	20	59990	3625	2389	2391	0.02																								
[2A][5A][48C]	2	20	19100	1900	1100	1980	QPSK	1	0	5	10	2525	881.5	48	20	59990	3625	48	20	56188	3644.8	48	20	56386	3664.6	2415	2407	-0.08																								
[2A][5A][48C]	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	59990	3625	48	20	56188	3644.8	48	20	56386	3664.6	2446	2448	0.02																								
[2A][12A][30A][66A][66A]	2	20	19100	1900	1100	1980	QPSK	1	0	12	10	5095	737.5	30	10	9820	2395	66	20	66786	2145	66	20	66786	2145	2190	2415	-0.01																								
[2A][12A][30A][66A][66A]	12	10	23095	707.5	9095	737.5	QPSK	1	24	2	20	900	1960	30	10	9820	2395	66	20	66786	2145	66	20	66786	2145	2190	2437	-0.03																								
[2A][12A][30A][66A][66A]	30	5	27685	2307.5	9795	2382.5	QPSK	1	24	2	20	900	1960	12	10	5095	737.5	66	20	66786	2145	66	20	66786	2145																											

LTE Down Link 6CA 4x4 MIMO Call Setup

PCC Setting (Channel/ RB/ BW/ Modulation)

The screenshot displays the HCT test equipment interface for PCC settings and measurement results. The top section shows the configuration for Phone1 (LTE 40.105#003) and Phone2 (2nd Antenna for Phone1). The DL Channel is set to 625 ch, Operation Band to 2, TPC Pattern to All +3dB, Input Level to 30.0 dBm, and Output Level to -60.2 dBm. The External Loss - Main DL is set to 0 dB. The UE Power is 24.0 dBm.

The Measurement section shows the Fundamental and Numeric views. The Fundamental view displays the Throughput and Block Error Rate (BER) for PCC, SCC1, SCC2, and SCC3. The Numeric view shows the Throughput and BER for SCC4, SCC5, SCC6, and SCC7.

Throughput	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	0	0
Transmitted/Sample	2016	2016	2016	2016

The right side of the interface shows the UE Power (24.0 dBm) and a status bar with 'Connected' and 'Start Call' buttons.

SCC1 Setting (Channel/ RB/ BW/ Modulation) and call Connection

The screenshot displays the HCT test equipment interface for SCC1 settings and measurement results. The top section shows the configuration for Phone1 (LTE 40.105#003) and Phone2 (2nd Antenna for Phone1). The DL Channel is set to 5230 ch, Activation to On, Output to On, Operation Band to 13, Channel Bandwidth to 10 MHz, and Output Level to -57.2 dBm. The UE Power is 23.9 dBm.

The Measurement section shows the Fundamental and Numeric views. The Fundamental view displays the Throughput and Block Error Rate (BER) for PCC, SCC1, SCC2, and SCC3. The Numeric view shows the Throughput and BER for SCC4, SCC5, SCC6, and SCC7.

Throughput	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	0	0
Transmitted/Sample	900	900	900	900

The right side of the interface shows the UE Power (23.9 dBm) and a status bar with 'Connected' and 'Start Call' buttons.

SCC2 Setting (Channel/ RB/ BW/ Modulation) and call Connection

The screenshot displays the HCT test equipment interface for SCC2 configuration and measurement. The top bar shows 'Phone2' and 'Phone1' (LTE 40.105#003). The 'DL Channel' is set to 50665 ch, 'Operation Band' is 46, 'Channel Bandwidth' is 20 MHz, 'Output Level' is -54.2 dBm, and 'UE Power' is 23.9 dBm. The 'Measurement' tab is active, showing 'Fundamental' and 'Numeric' views. The 'Throughput' table is displayed, showing results for PCC, SCC1, SCC2, and SCC3. The 'Signal' section on the left shows 'Antenna Configuration' as 2x2 MIMO (Open Loop)(TM3) and 'User Define Channel Model' with various gain/phase settings for different channels. The 'Band Definition' section shows 'Band' as 46, 'Definition' as 46, 'External Loss' as 0.25, and 'System Config' as 90.0 degree.

	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	----	----
Transmitted/Sample	2016	2016	2016	2016
				/ 2000 Block
Throughput	15768 kbps	31622 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
(Code Word 0)	7884 kbps	15811 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
(Code Word 1)	7884 kbps	15811 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
Block Error Rate	0.0000	0.0000	-----	-----

SCC3 Setting (Channel/ RB/ BW/ Modulation) and call Connection

The screenshot displays the HCT test equipment interface for SCC3 configuration and measurement. The top bar shows 'Phone2' and 'Phone1' (LTE 40.105#003). The 'DL Channel' is set to 50467 ch, 'Operation Band' is 46, 'Channel Bandwidth' is 20 MHz, 'Output Level' is -54.2 dBm, and 'UE Power' is 23.9 dBm. The 'Measurement' tab is active, showing 'Fundamental' and 'Numeric' views. The 'Throughput' table is displayed, showing results for PCC, SCC1, SCC2, and SCC3. The 'Signal' section on the left shows 'Antenna Configuration' as 2x2 MIMO (Open Loop)(TM3) and 'User Define Channel Model' with various gain/phase settings for different channels. The 'Band Definition' section shows 'Band' as 46, 'Definition' as 46, 'External Loss' as 0.25, and 'System Config' as 90.0 degree.

	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	----	----
Transmitted/Sample	2016	2016	2016	2016
				/ 2000 Block
Throughput	15768 kbps	31622 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
(Code Word 0)	7884 kbps	15811 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
(Code Word 1)	7884 kbps	15811 kbps	----- kbps	----- kbps
(= 100.00 %)	(= 100.00 %)	(= ----- %)	(= ----- %)	(= ----- %)
Block Error Rate	0.0000	0.0000	-----	-----

SCC4 Setting (Channel/ RB/ BW/ Modulation) and call Connection

The screenshot displays the HCT test equipment interface for SCC4 configuration. The top bar shows 'Phone2' and 'Phone1' (LTE 40.105#003). The 'DL Channel' is set to 50863 ch, 'Operation Band' is 46, 'Channel Bandwidth' is 20 MHz, and 'Output Level' is -54.2 dBm. The 'Activation' and 'Output' are both 'On'. The 'UE Power' is 23.9 dBm. The 'Signal' section shows 'Antenna Configuration' as 2x2 MIMO (Open Loop(TM3)) and 'User Define Channel Model' for (Channel 1to1/2/3/4 Gain/Phase) with values: 0.50 0.0 degree, 0.50 0.0 degree, 0.25 0.0 degree, 0.25 0.0 degree. The 'Band Definition' is 0.25 90.0 degree, 'External Loss' is 0.25 90.0 degree, and 'System Config' is 0.25 90.0 degree. The 'Measurement' tab is active, showing 'Throughput' and 'Block Error Rate' for SCC4, SCC5, SCC6, and SCC7. The 'Call Connection' status is 'Connected'.

	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	----	----
Transmitted/Sample	1800	1800	1800	1800
			/ 2000 Block	

SCC5 Setting (Channel/ RB/ BW/ Modulation) and call Connection

The screenshot displays the HCT test equipment interface for SCC5 configuration. The top bar shows 'Phone2' and 'Phone1' (LTE 40.105#003). The 'DL Channel' is set to 66786 ch, 'Operation Band' is 66, 'Channel Bandwidth' is 20 MHz, and 'Output Level' is -54.2 dBm. The 'Activation' and 'Output' are both 'On'. The 'UE Power' is 23.9 dBm. The 'Signal' section shows 'Antenna Configuration' as 4x4 MIMO(TM3) and 'User Define Channel Model' for (Channel 1to1/2/3/4 Gain/Phase) with values: 0.25 0.0 degree, 0.25 0.0 degree, 0.25 0.0 degree, 0.25 0.0 degree. The 'Band Definition' is 0.25 90.0 degree, 'External Loss' is 0.25 90.0 degree, and 'System Config' is 0.25 90.0 degree. The 'Measurement' tab is active, showing 'Throughput' and 'Block Error Rate' for SCC4, SCC5, SCC6, and SCC7. The 'Call Connection' status is 'Connected'.

	PCC	SCC1	SCC2	SCC3
Throughput	7906 kbps	7906 kbps	15768 kbps	15768 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 0)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
(Code Word 1)	3953 kbps	3953 kbps	7884 kbps	7884 kbps
(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)	(= 100.00 %)
Block Error Rate	0.0000	0.0000	0.0000	0.0000
0.00E+000	0.00E+000	0.00E+000	0.00E+000	0.00E+000
Error Count	0	0	0	0
NACK	0	0	0	0
DTX	0	0	0	0
ANY	0	0	----	----
Transmitted/Sample	2016	2016	2016	2016
			/ 2000 Block	

LTE Downlink 6CA 4X4 MIMO Maximum Conducted Power

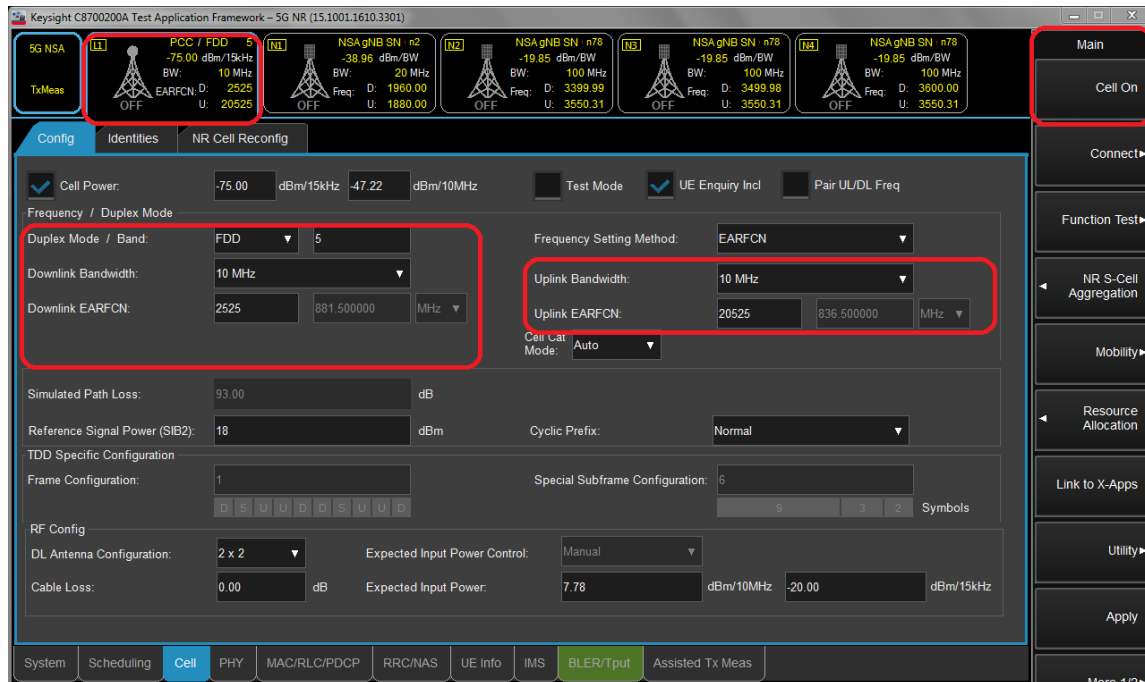
Combination	Band	BW	PCC					Modulation	RB	offset	SCC					SCC					SCC					Tx Power (dBm)	LTE Reference Power (dBm)	Derivation (dB)				
			PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	PCC DL Channel				Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel				SCC DL Frequency			
2A-5A-HSC (SSA) (SSA)	2	20	18000	1900	1100	1880	QPSK	1	0	5	10	2525	881.5	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.15	24.21	0.06
2A-5A-ARC (SSA) (SSA)	2	20	18000	1900	1100	1880	QPSK	1	0	5	10	2525	881.5	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.15	24.13	-0.02
2A-5A-HSC (SSA) (SSA)	2	20	18000	1900	1100	1880	QPSK	1	0	5	10	2525	881.5	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.15	24.11	-0.04
2A-5A-HSC (SSA) (SSA)	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.45	24.52	0.06
2A-5A-ARC (SSA) (SSA)	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.45	24.51	0.05
2A-5A-HSC (SSA) (SSA)	5	5	20425	826.5	2425	871.5	QPSK	1	12	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	66	20	66786	2145	66	20	67236	2190	24.45	24.59	-0.07
2A-5A-HSC (SSA) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	48	20	55990	3625	48	20	56188	3644.8	23.89	23.79	-0.10
2A-5A-ARC (SSA) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	48	20	55990	3625	48	20	56188	3644.8	23.89	23.89	0.00
2A-5A-HSC (SSA) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	2	20	900	1960	2	20	1100	1980	48	20	55990	3625	48	20	56188	3644.8	23.89	23.95	0.07
2A148E) (SSA)	2	20	18000	1900	1100	1880	QPSK	1	0	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.6	48	20	56584	3684.4	66	20	66786	2145	24.15	24.11	-0.04
2A148E) (SSA)	2	20	18000	1900	1100	1880	QPSK	1	0	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.6	48	20	56584	3684.4	66	20	66786	2145	24.15	24.20	0.05
2A148E) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.6	48	20	56584	3684.4	23.89	23.78	-0.11
2A148E) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	2	20	900	1960	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.6	48	20	56584	3684.4	23.89	23.82	-0.07
5A-48E) (SSA) (SSA)	5	5	20425	826.5	2425	871.5	QPSK	1	12	48	20	60990	3625	48	20	56188	3644.8	48	20	56386	3664.6	48	20	56584	3684.4	66	20	67236	2190	24.45	24.40	-0.05
5A-48E) (SSA) (SSA)	66	5	132647	1777.5	67111	2177.5	QPSK	1	0	66	20	67236	2190	5	10	2525	881.5	48	20	55990	3625	48	20	56188	3644.8	48	20	56386	3664.6	23.89	23.87	-0.02

2. 5G NR Call Box Setup

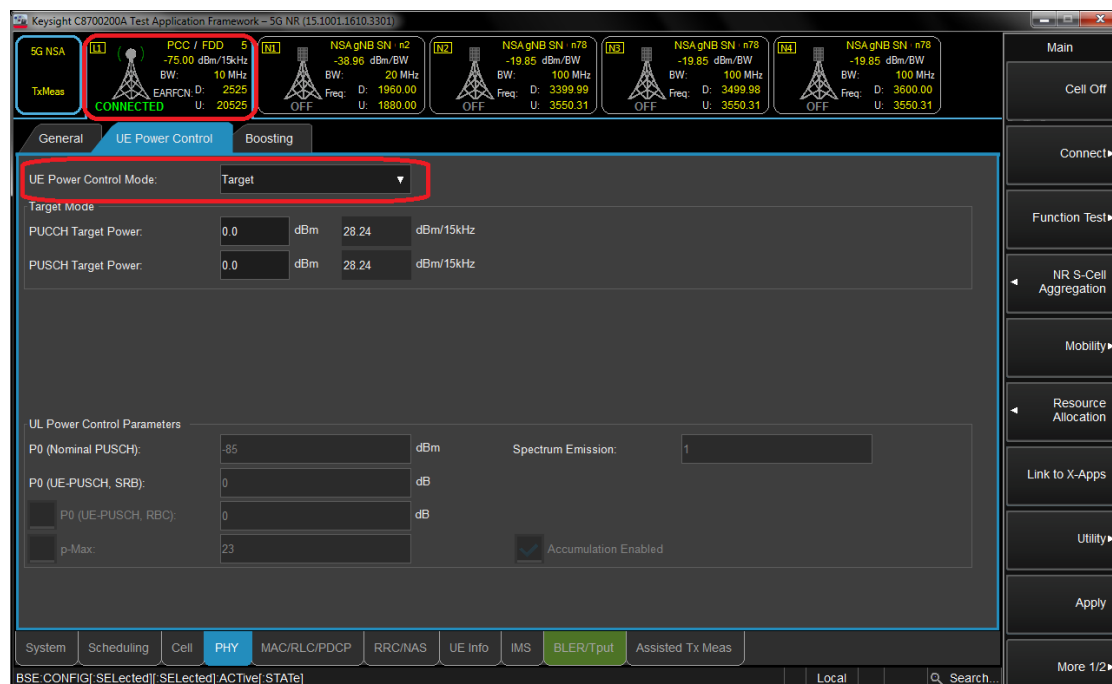
Procedure used to establish output Power measurement for NR Bands

Select operating band, BW and Channel.

- Click Cell on button in the right of Test application screen.
- Turn the LTE Cell On using "ON/OFF" Key.



- Turn the Airplane Mode On and then turn the Airplane mode off.
- Select All down bits for UL Power control Mode in LTE.

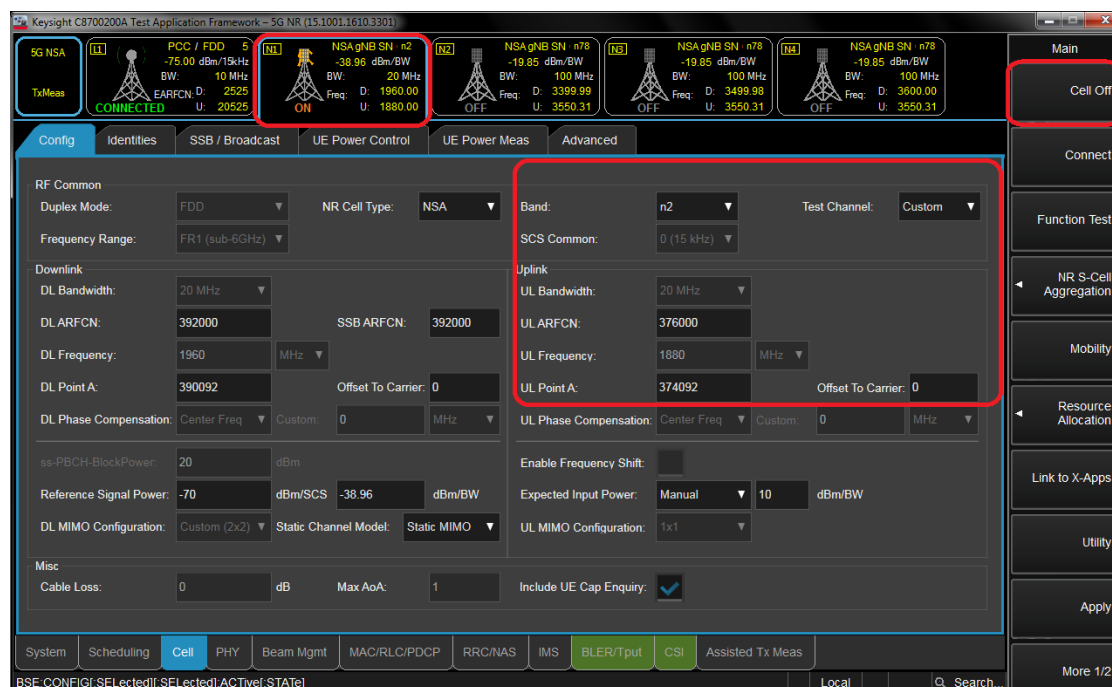


Setup for NR Band

- Select waveform for Setting NR Band (PHY->PUSCH->Enable Transform Precoder)
 - Enable : DFT-s-OFDM, Disable : CP-OFDM

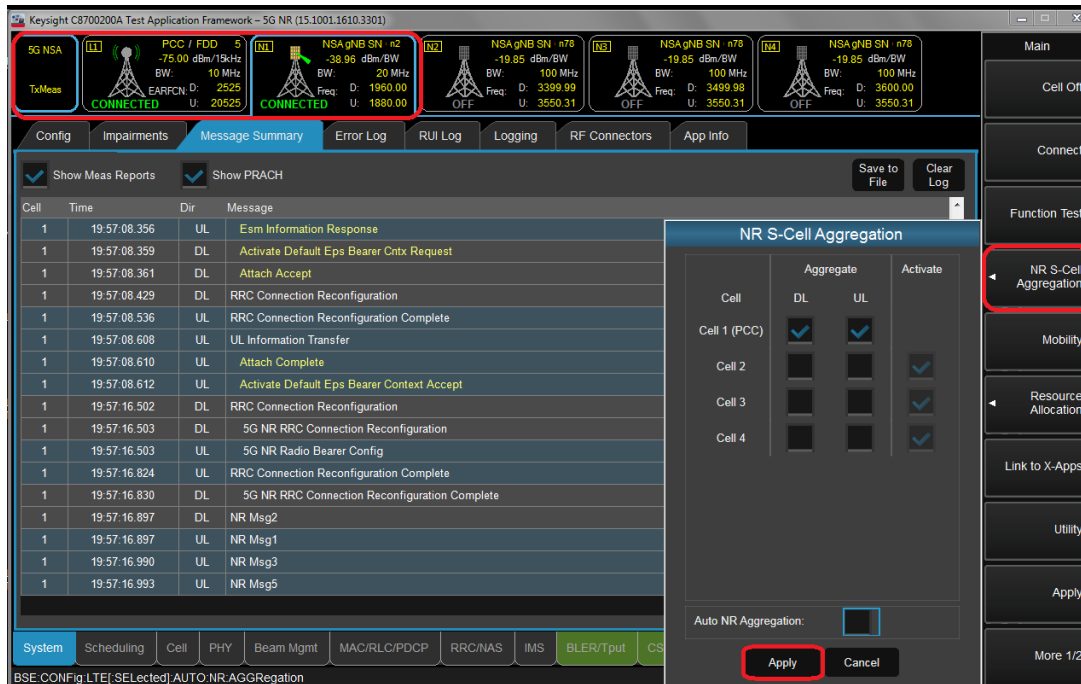


- Select operating band, BW, SCS and Channel.
- Turn the NR Cell On using “ON/OFF” Key.



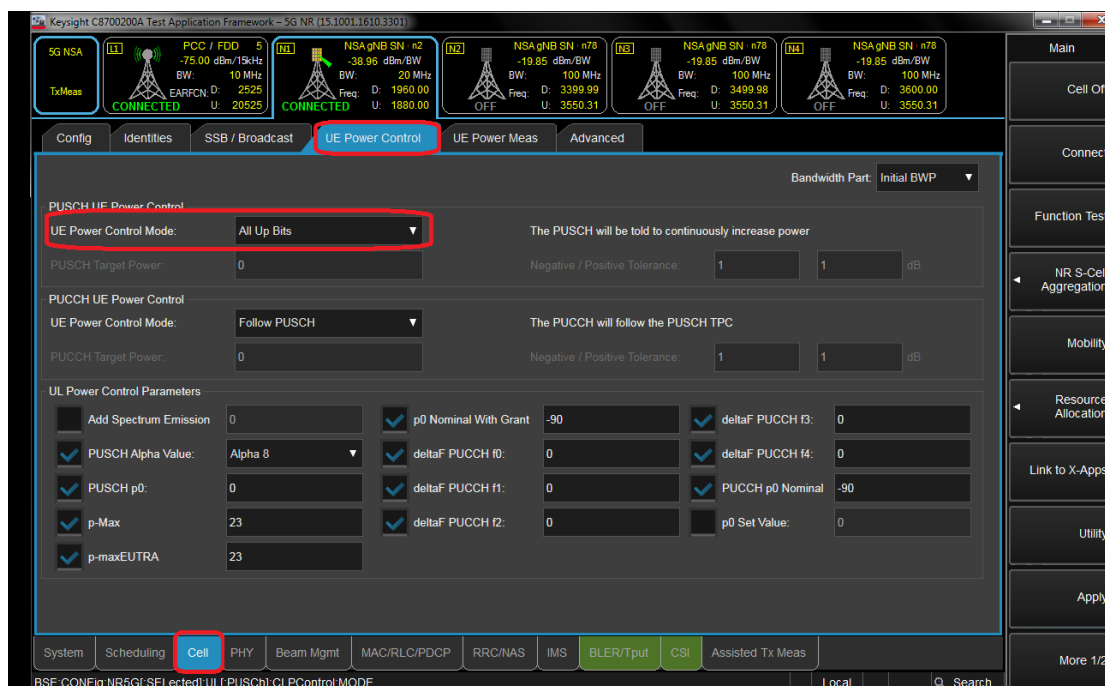
Connect NR S-Cell Aggregation

- Click NR S-Cell Aggregation
- Check the Cell 1's DL and UL box(PCC) and then Click Apply.
- Check the message summary If message shows NR Msg 5, It is connected.



Max Power setting

- Click "Cell in the bottom of screen.
- Click "UE Power control" than change UE Power control mode to All Up bits.



Selecting Start RB/Count/MCS

- Select the each test configuring (Start RB, Count, MCS).



View Tx Power

- Click "Link to X-Apps." (Please refer to Figure-7)
- Select "Channel Power".

