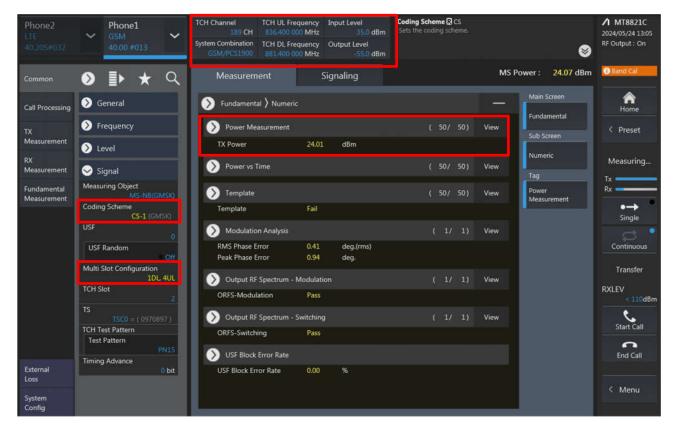


Power measurement connection diagram:

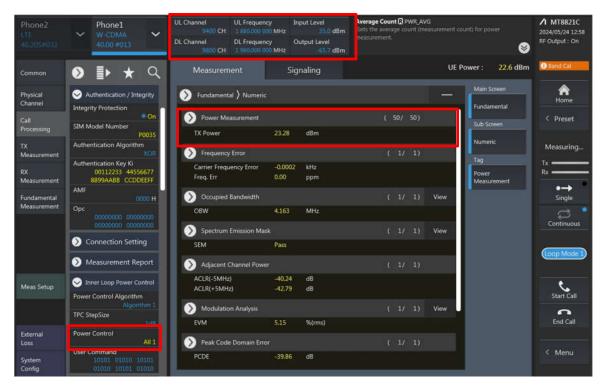
The power measurement for 2G/3G/LTE/5G FR1/UL and DL CA is to establish a connection between device and call box, and via call box to configure Bands, channel, BWs, RB size, carrier aggregation of CA, frequency channels, SCS and maximum output power. Hereunder is screenshot call box connection information for 2G/3G/LTE/5G FR1/UL and DL CA.

<u><GSM></u>





<WCDMA>

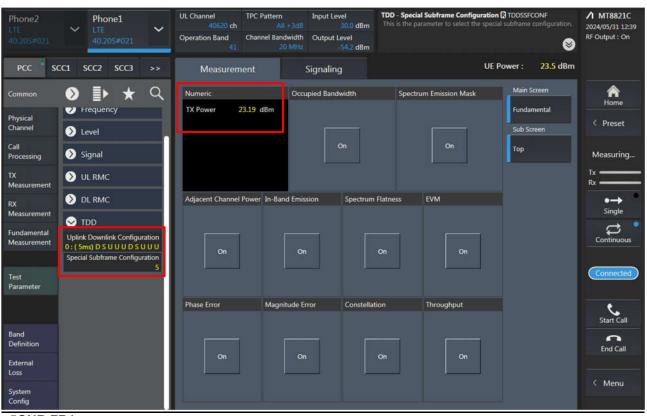


<u> <LTE></u>

Phone2 LTE 40.205#021	~	Phone1 LTE 40.205#02	1 ~	UL Channel 21100 ch Operation Band 7	Channel Bar		Level 30.0 dBm t Level -67.0 dBm	This sets the l positive value.	- Main DL R DLEXTI DL offset at the Main The argument tx en- mal signal generator.	connector. Loss i ables setting a dif		MT8821C 2024/05/31 13:15 RF Output : On
PCC SC	C1	scc2 scc	3 >>	Measuren	nent	Signali	ng			UE Power :	23.4 dBm	
Common	۲		r Q	Numeric		Occupied Ba	ndwidth	Spectru	ım Emission Mask	Main 5	icreen	A
Physical Channel	0	ieneral		TX Power	23.01 dBm	_				Funda Sub Sc	mental	< Preset
Call Processing		requency					On		On	Тор		Measuring
тх	0 1		_									Tx
Measurement RX	2			Adjacent Channe	Power In-Ba	nd Emission	Spectrum	Flatness	EVM			• → •
Measurement	No. of Concession, Name	IL RMC										Single
Fundamental Measurement) [OL RMC										Continuous
11.51.226.5555.00.0126	01			On		On		On	On			
Test Parameter	1:(Sr	Cownlink Con ns) D S U U D I I Subframe Con	DSUUD									Connected
	-		4	Phase Error	Magr	iitude Error	Constellat	lion	Throughput			Start Call
Band Definition												End Call
External Loss				On	ę	On		On	On			
System Config												< Menu



<LTE TDD Power class 3>



<5GNR FR1>

G NR V08.9	0.21#000 *SA-FDD		Power Measurer	nent - Count 🖪 PWR_AVG		😣 – 🗙
PCC Common	scc1 scc2	Operation Band DL Channel Ba	il +3dB 26.5 dBm		9 9 9 9	MT8000A 2024/05/24 14:11 Ref. Int
Level / Freq Cell	Seneral	Measurement	Signaling	Ŭ	E Power : 26.0 dBm	
Level / Freq Routing / ARB	🔊 Cell	Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen	A Home
Physical Channel	🔊 Signal	Tx Power 25.88 dBm OBW 18.787 MHz ACLR(-) -53.74 dB			Fundamental Sub Screen	< Preset
Call Processing	S UL RMC	ACLR(+) -55.90 dB		On	Top	Measuring
lx Measurement	Waveform DFT-S-OFDM		and welned			Tx
े. Measurement	Number of RB 1		OBW 18,787 MHz			Rx
OTA Position	Starting RB 1	Adjacent Channel Power	In-Band Emission	Spectrum Flatness		• > Single
undamental Measurement	Resource Allocation Type Type1			r		Continuous
vieasurement	RBG Size		On	On		Continuous
	MCS Index Table Table for 64QAM					NR
	MCS Index 0					Connected
	Modulation PI/2 BPSK	EVM Phase	e Error Magnitude Er	rror Constellation		•
lest	цр-ріголок • Оп					Start Call
Parameter	Aggregation Level 4	On	On On	On		End Call
xternal .oss	🔊 DL RMC					
System Config	Oplink Tx Switching					< Menu



CC2 Operation Ba	and DL Channel Band	HIPUL Level 26.5 dBm Output Level 26.5 dBm Output Level -40.0 dBm Signaling Occupied Bandwidth	Spectrum Emission Mask	JE Power : 26.0 dBm Main Screen Fundamental Sub Screen Top	∧ MT8000A 2024/05/24 14:13 Ref. int Home < Preset Measuring Tx Rx Single
NR only er Spacing(data) 15kHz er Spacing(data) 15kHz mode Symmetric Bandwidth 20MHz of Additional BWP 0	25.83 dBm 18.787 MHz -53.70 dB -55.93 dB	Occupied Bandwidth	Spectrum Emission Mask	Main Screen Fundamental Sub Screen	Home C Preset Measuring Tx Rx Single
NR only er Spacing(data) 15kHz er Spacing(data) 15kHz Mode Symmetric Bandwidth 20MHz of Additional BWP	18,787 MHz -53,70 dB -55,93 dB	OBW 18.787 MHz		Fundamental Sub Screen	Home C Preset Measuring Tx Rx Single
er Spacing(data) 15kHz er Spacing(data) 15kHz ACLR(-)	18,787 MHz -53,70 dB -55,93 dB			Sub Screen	Measuring Tx Rx Single
15kHz Head of J Mode Symmetric Bandwidth 20MHz Adjacent Ch of Additional BWP 0				Тор	Tx Rx ↓ Single
Symmetric Bandwidth 20MHz: Bandwidth 20MHz: of Additional BWP 0	hannel Power		Spectrum Flatness		Tx Rx ↓ Single
20MHz Bandwidth Adjacent Ch 20MHz of Additional BWP	hannel Power		Spectrum Flatness		●→ Single
20MHz of Additional BWP 0		In Dana Chillippin	spectrum namess		Single
0 of Additional BWP					
	1	On	On		Continuous
25 0 25 0					NR Connected
25 0 25 0 EVM	Phase E	Error Magnitude	Error Constellation		
	- Î	(Start Call
energy and the second	Dn	on c	On On		End Call
0					< Menu
9	25.0 25 0 25.0 25 0 25.0 25 0 1 Delay Type Type2 guration Option Option2 WP	25 0 25 0 25 0 25 0 25 0 25 0 10 Delay Type Type2 guration Option Option2 WP 0	25 0 25 0 25 0 25 0 10 Delay Type Type2 guration Option2 WP 0	25 0 25 0 25 0 25 0 10 Delay Type Type2 guration Option2 WP 0	25 0 25 0 25 0 25 0 10 Delay Type Type2 guration Option2 WP 0

PCC	scc1 s	cc2	0		d DL Channel Ba		26.5 dBm	1 0 00 0		۵	MT8000A 2024/05/24 14:12 Ref. int
			Q							25.0 10	
Level / Freq Cell	😔 Freque	ency		Measu	irement	Signalir	ig		UE Power :	25.9 dBm	
Level / Freq Routing / AR	UL B Offset To	e		Numeric		Occupied Ban	dwidth	Spectrum Emission	Mask Main S	creen	A
Physical Channel	PointA Ch		504	Tx Power OBW	25.84 dBm 18.787 MHz				Fundar	nental	Home < Preset
Call			116048	ACLR(-) ACLR(+)	-53.57 dB -55.98 dB			8	Sub Sc	reen	× Preset
Processing	PointA Fre	equency 580,240 0	00 MHz	Hern(+)	55.50 00			On	Тор		Measuring
Tx Measuremen	t Center Ch	annel	136100			and a	dela se de la construcción de la		-		Tx
Rx Measuremen	Center Fre	equency 680.500 0	00 MHz			OBW 18.787					Rx
OTA Position	7.5 kHz Fr			Adjacent Cha	nnel Power	In-Band Emiss	ion	Spectrum Flatness			• > Single
Fundamental	Offect To J	Corrier				12					\Rightarrow
Measuremen			102				On	On			Continuous
	PointA Ch	annel	121320				- Chi	Gir			
	PointA Fre	equency 606.600 (00 MHz								NR Connected
	Center Ch	annel	126900	EVM	Phase	Error	Magnitude Erro	r Constellatio	on:		
	Center Fre	equency 634,500 0									د.
Test Parameter	Absolute Fr					·	-	-1 1			Start Call
External	SSB Freque	ncy 627,750 (On		On	On		On		End Call
Loss	Channel Set	tting Mode	e								
System Config	Operation E		st GSCN 71								< Menu



LTE Uplink and Downlink Carrier Aggregation configurations:

Phone2 LTE 40.105=045	✓ Phone1 LTE 40.105≠045		h Input Level Auto -1.0 dBm ndwidth Output Level S MHz -60.2 dBm	This tab is used to configure paramete Carrier on LTE-A. A Blue Dot in this tab indicates that th configured.	e component carrier is	MT8821C 2024/01/25 13:26 RF Output : On
PCC S	cci sccz scc3 >>	Measurement	Signaling	Ŭ	E Power : -52.6 dBm	Band Cal
		Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen	A Home
Physical Channel	Ø General	TX Power dBm Freq. Err ppm EVM %(rms)			Fundamental Sub Screen	< Preset
Call	Frequency		On		Тор	
Processing	🔊 Level					Tx
TX Measurement	📎 Signal					Rx
RX Measurement	UL RMC	Adjacent Channel Power In-Ba	nd Emission Spectrum	Flatness EVM		•→ Single
Fundamental Measurement	DL RMC	r				Continuous
measurement	DDT 📀	On				
Test Parameter						Idle
		Phase Error Magi	nitude Error Constellat	tion Throughput		Start Call
Band Definition		<u> </u>				End Call
External Loss		On	On	On On		
System Config						< Menu

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

 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)]

Phone2 17E 40.105#045		DL Channel TPC Patter 200 ch Operation Band Channel Br 1	Auto -1.0 dBm	Channel Coding [1xC] © CHCODING This sets the channel configuration. Us Measurement Channel based on the ma TS365/08 and TS36521-1, for TRX testin	easurement standards g based on measureme	MT8821C 2024/01/25 13:26 RF Output : On DL 2CCS UL 2CCS
PCC S	cc1 scc2 scc3 >>	Measurement	Signaling	UE	Power : -58.1 dBm	Band Cal
	🔊 🗈 \star Q	Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen	A
Physical Channel	📎 General	TX Power dBm Freq. Err ppm EVM %(rm)	s)	,	Fundamental Sub Screen	< Preset
Call	> Frequency		On		Тор	
Processing	Level					Tx
TX Measurement	😔 Signal					Rx
RX Measurement	Channel Coding RMC(DL/UL CA)	Adjacent Channel Power In-B	land Emission Spectrum Fl	atness EVM		● → Single
Fundamental	Antenna Combination Common	<i>•</i>				0
Measurement	Antenna Configuration Single Antenna(TML)			in On		Continuous
	Beamforming					Idle
Test Parameter	DCI Format for Single Antenna 1A					
	Propagation Matrix None	Phase Error Mag	gnitude Error Constellatio	n Throughput		٤.
Band	User Define Channel Model (Channel 1to1/2/3/4 Gain/Phase)					Start Call
Definition	1.00 0.0 degree 0.00 0.0 degree					End Call
External	0.00 0.0 degree 0.00 0.0 degree			on On		-
Loss	(Channel 2to1/2/3/4 Gain/Phase)					< Menu
System Config	0.00 0.0 degree 1.00 0.0 degree 0.00 0.0 degree					



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 17E 40.105#045	✓ Phone1 LTE 40.105#045	DL Channel TPC Pat 39750 ch Operation Band Channel 41	tern Input Level All +3d8 30.0 dBm Bandwidth 20 MHz -542 dBm	Modulation Analysis (3 MOD_MEAS This sets whether to perform modulatio	8	▲ MT8821C 2024/01/25 14:29 RF Output : On DL 2CCS UL 2CCS Cont.
PCC SC	cc1° scc2 scc3 >>	Measurement	Signaling	UE	Power: -15.2 dBm	Band Cal
Common	() * <	Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen	A Home
Physical Channel	📎 General	TX Power dB PCC Freq. Err pp PCC EVM % SCC-1 Freq. Err pp	m rms)		Fundamental Sub Screen	< Preset
Call Processing	Frequency Frame Structure	SCC-1 EVM %	On .		Тор	Stop
TX Measurement	Channel Bandwidth 20 MHz	3				Tx
RX Measurement	UL Channel 39750 ch	Adjacent Channel Power In	-Band Emission Spectrum	Flatness EVM		●→ Single
Fundamental Measurement	Prequency 2 506.000 000 MHz DL	On		on On		
Test Parameter	Channel 39750 ch Frequency 2 506,000 000 MHz					Idle
	Operation Band 41 (Phase Error N	agnitude Error Constellat	tion Throughput		Start Call
Band Definition	Level					End Call
External Loss	Signal	On	On	On On		< Menu
System Config	UL RMC					s Mienu

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

Phone2 LTE 40.105#045	✓ Phone1 LTE 40.105#045	39750 ch Operation Band C	PC Pattern All +3d8 hannel 8andwidth 20 MHz	Input Level 30.0 dBm Output Level	Modulation Analysis (3 MOD_MEAS This sets whether to perform modulation	i analysis.	MT8821C 2024/01/25 14:30 RF Output : On DL 2CCs
PCC SC	cc1 scc2 scc3 >>	Measuremer		-542 dBm Signaling	UE F	•ower: - <u>15.5</u> dBm	UL 2CCs Cont. Band Cal
	🕨 🗈 \star 🔍	Numeric	1000 C	pied Bandwidth	Spectrum Emission Mask	Main Screen	A
Physical Channel	📎 General	PCC Freq Err PCC EVM	d8m ppm %(mts)			Fundamental Sub Screen	< Preset
Call Processing	Frequency		%(ms)			Тор	Stop
TX Measurement	Devel Signal						Tx
RX Measurement	UL RMC	Adjacent Channel Po	wer In-Band Emiss	ion Spectrum	Flatness EVM		•> Single
Fundamental	UL Allocation Mode						Continuous
Measurement	RB Pos. Min(#D)	On					Commodus
Test Parameter	100 Starting R8	3					Idle
	Max UL Throughput 3504 kbps	Phase Error	Magnitude En	ror Constellat	ion Throughput		Start Call
Band Definition	MCS Index 5 QPSK 5 8760 8 64QAM						C End Call
External Loss	Disabled 256QAM Disabled	On	On		On On		
System Config	DL RMC						< Menu



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

Phone2 17E 40.105#045	✓ Phone1 LTE 40.105#045	DL Channel Activatio 39948 ch Operation Band Channel 1 41	n Output On Sandwidth Output Level 20 MHz -542 dBm	This tab is used to configure paramete Carrier on LTE-A. A Blue Dot in this tab indicates that th configured.	e component carrier is	MT8821C 2024/01/25 14:30 RF Output : On DL 2CCs UL 2CCs Cont.
PCC s	scc1 scc2 scc3 >>	Measurement	Signaling	u	E Power : -15.5 dBm	Band Cal
Common	 	Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen	A Home
Physical Channel	Frequency Frame Structure TDD LAA mode	TX Power dBr PCC Freq.Err ppr PCC EVM ***********************************	n ms)	On	Fundamental Sub Screen Top	< Preset Stop
	Channel Bandwidth 20 MHz	Adjacent Channel Power In-	Band Emission Spectrum	Flatness EVM		Tx
	Channel 39948 ch Frequency	0	and constant aperiod			
	2 525,800 000 MHz DL Channel 39948 ch	On		On On		Continuous
	Frequency 2 525,800 000 MHz Operation Band					
	41 riequeixy separation	Phase Error Ma	agnitude Error Constella	tion Throughput		Start Call
Band Definition	0.000 MHz					End Call
External Loss	🔊 Signał	On	On	On On		< Menu
System Config	UL RMC					N Mienu

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

Phone2 LTE 40.105#045	Phone1 LTE ~ 40.105#045	DL Channel Activation 39948 ch Operation Band Channel Band 41 24	On On dwidth Output Level 0 MHz -54.2 dBm	This tab is used to configure parameters o Carrier on LTE-A A Blue Dot in this tab indicates that the co configured.	mponent carrier is Sector 2024/01/25 14: RF Output : On DL 2CCS UL 2CCS Cont.	30
PCC S	cc1 sec2 scc3 >>	Measurement	Signaling	UE Po	ower: -15.5 dBm 🚺 Band Cal	
		Numeric	Occupied Bandwidth	Spectrum Emission Mask	Main Screen 6	
Physical Channel	Frequency	TX Power d8m PCC Freq. Err ppm PCC EVM			Fundamental Sub Screen	
	Level	SCC-1 EVM %(rms)	On		Top Stop	
	Signal				Тх ———	_
	S UL RMC		New March		Rx	
	RB Pos. Min(#0)	Adjacent Channel Power In-Ban	d Emission Spectrum	Flatness EVM	•> Single	
	Number of R8	2			C	•
	Starting RB				Continuous	
	and of mongriput				Idle	5
	MCS Index 5 QPSK 5 8760 a					
	DL RMC	Phase Error Magni	tude Error Constellati	ion Throughput	Start Call	
Band Definition	DD 🕥				End Call	
External Loss		On	On	On On		
System Config					< Menu	



5. Select the PCC tab, then set "SIM Model Number" and select max power;

Phone2 17E 40.105#045	V Phone1 LTE V 40.105#045	DL Channel TPC Patte 59750 ch Operation Band Channel B 41	All +5d8 30.0 dBm	Modulation Analysis @ MOO. MEAS This sets whether to perform modulation analysis.	MT8821C 2024/01/25 14:30 RF Output : On DL 2CCs UL 2CCs Cont.
PCC SC	cc1* scc2 scc3 >>	Measurement	Signaling	UE Power :	-15.5 dBm 🔒 Band Cal
Common Physical Channel Call Processing TX	Authentication / Integrity SiM Model Number P0250 Authentication / Integrity Gin Authentication / Integrity Gin	Numeric TX Power dBm PCC Freq. Er pom PCC EVM %m SCC-1 EVM %m	ns)	Spectrum Emission Mask	I Screen Home Isamental Contract Preset Screen Stop
Measurement RX Measurement Fundamental Measurement Test	XXII Authentication Key K 00010203 04050607 08050A0B 00000007 AMF 8000 OPc 00000000 00000000 00000000 Integrity Protection 000	Adjacent Channel Power In-I	Band Emission Spectrum	n Flatness EVM	Rx
Parameter Band Definition External Loss System Config	Snow 3G Snow	Phase Error Ma	gnitude Error Constella	tion Throughput	Start Call End Call

6. Click the "Connect" button at the Right of the screen, if necessary, turn the Airplane mode on/off in the DUT

Phone2 17E 40.105#045	✓ Phone1 LTE 40.105#045	DL Channel TPC Pattern 39750 ch All = 3dl Operation Band 41 20 MHz	Output Level	This tab is used to configure parameters Carrier on LTE-A. A Blue DOt in this tab indicates that the o configured.	omponent carrier is	▲ MT8821C 2024/01/25 16:26 RF Output : On DL 2CCs UL 2CCs Cont.
PCC S	cc1° scc2 scc3 >>	Measurement	Signaling	UEI	Power : 21.3 dBm	Band Cal
Common	● ■ ★ Q	Sundamental > Numeric	D	-	Main Screen	A Home
Physical Channel	Since Frequency	Sover Measurement			Sub Screen	< Preset
	Level		Avg. Max.	Min.	Sub Screen	
Call Processing		Total TX Power	22.38 22.38	22.38 dBm	Numeric	Measuring
Characterization and the	📎 Signal	PCC	22.36 22.36	22.36 0bm	Tag	(UL CA Tx) Tx
TX Measurement		TX Power	21.85 21.85	21.85 dBm	Power	Rx
measurement	UL RMC	Channel Power	21.84 21.84	21.84 dBm	Measurement	
RX.	UL Allocation Mode	SCC-1 TX Power	13.02 13.02	13.02 dBm		•> Single
Measurement	RB Pos.	Channel Power	13.02 13.02	13.02 dBm	(5)	
Fundamental	Min(#0)				\sim	
Measurement	Number of RB					Continuous
	100 Starting RB					
Test	Starting No				2	Connected
Parameter	Max UL Throughput 3504 kbps				U U	
	MCS Index 5 QP5K 5 8760 8				രി	S.
	64QAM					Start Call
Band	Disabled					2
Definition	256QAM Disabled				6	End Call
External						
Loss	DL RMC					< Menu
System Config	🔊 TDD					x menu