

	pectrum Analyz												- 0 ×
🗶 RL	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUT		22 PM Sep 10, 2021	Fre	equency
PASS				PNO: Fa IFGain:L	ist ⊶⊶ ow	Trig: Fre Atten: 1		"a)r					
10 dB/div	Ref 0.0	00 dBn	n						Μ	kr1 26. -5	659 0 GHz 7.469 dBm		Auto Tune
Log Trac	e 1 Pass						Ĭ					c	enter Freq
-10.0												21.000	000000 GHz
-20.0													Start Freq
-30.0												15.000	000000 GHz
-40.0													Stop Fred
-50.0												27.000	000000 GHz
-60.0													CF Step
		*****		****								1.200 <u>Auto</u>	000000 GHz Man
-70.0													reg Offsel
-80.0													0 Hz
-90.0													Scale Type
Start 15.0	000 GHz									Stor	27.000 GHz		Lin
#Res BW		2		#	VBW	3.0 MH;	2	s	weep	20.80 m	s (24001 pts)		
MSG									ST/	ATUS			

Plot 7-110. Conducted Spurious Plot (LTE Band 7 – 20MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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LTE Band 41(PC2)

	ectrum Analyzer -	Swept SA									ð 💌
X RLT	RF 5	0Ω DC	CORREC	SENS	E:INT		ALIGN AUTO	12:05:48 AM		Frequer	ncv
PASS	Gate: LO		PNO: Fast 📮 IFGain:Low	Trig: Free Atten: 30 d	Run	#Avg Typ	e: RMS	TYPE	123456 MWWWWW ANNNNN		
10 dB/div	Ref 20.0	0 dBm					Mk	r1 2.315 -46.73	5 GHz 0 dBm	Auto	Tur
Log Trac	e 1 Pass			Ĭ						Conto	
10.0										Cente 1.2525000	
10.0										1.2525000	00 Gr
0.00											
										Star	tFre
-10.0										30.0000	00 M
-20.0										Sto	n Er
										2.4750000	
-30.0										2.4700000	00 01
40.0									1	244.5000	F St
									• • · ·]	Auto	M
-50.0			و و من من من من من من من من	attern solarited					cial Allender		
				A State of the second s						Freq	Offs
-60.0										iicq	0
70.0										Deals	
										Scale	ery
Start 0.03	0 GHz							Stop 2.	475 GHz	Log	L
#Res BW			#VBW	/ 3.0 MHz		-	Sweep 2	4.45 ms (4	891 pts)		
ISG							STATUS	5			

Plot 7-111. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



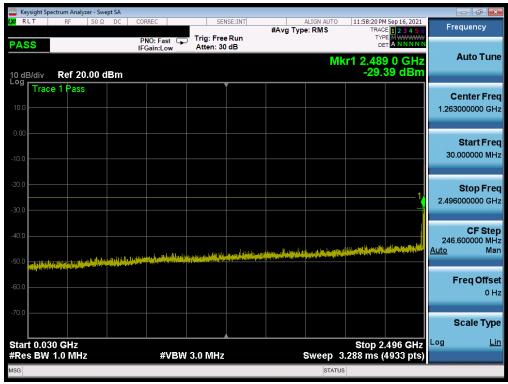
Plot 7-112. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ elected	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Swe	pt SA								
L <mark>XI</mark> RLT	RF 50 Ω	DC COP	REC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Sep 17, 2021	Frequency
PASS	Gate: LO	PI IFC	NO:Fast 🖵 Gain:Low	Trig: Free Atten: 10		•		TYF DE		Auto Tur
10 dB/div	Ref 0.00 dE	ßm					Mk	r1 26.11 -52.8	7 0 GHz 70 dBm	Auto Tun
-10.0	e 1 Pass									Center Fre 21.000000000 GH
-20.0										Start Fre 15.000000000 GH
-40.0									1 Mine di di	Stop Fre 27.000000000 GH
-60.0	di Larite franco di su in di su indi		an a than the set of the later		Angenden gestillingen sold.					CF Ste 1.200000000 GH <u>Auto</u> Ma
-80.0										Freq Offse 0 H
-90.0								0 4 07		Scale Typ
Start 15.0 #Res BW			#VBW	3.0 MHz		s	weep 1	20.0 ms (2	.000 GHz 4001 pts)	
MSG							STATU	s		

Plot 7-113. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



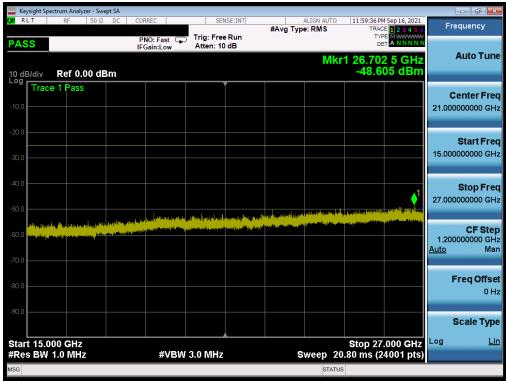
Plot 7-114. Conducted Spurious Plot (LTE Band 41(PC2) – 20MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		trum Analy												
L <mark>XI</mark> RI	LT	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Sep 16, 2021	Fr	equency
PAS	S				PNO: F IFGain:	Fast 🖵	Trig: Fre Atten: 3		•		TY	PE MWWWWW ET A N N N N N		
					IF Galli.	LUW	/ttern.e	o ub		Mkr	1 14 19	1 5 GHz		Auto Tune
10 dE Log	3/div	Ref 20).00 d	Bm							-35.0	57 dBm		
	Trace	1 Pass	;					Ĭ						Center Freq
10.0														5000000 GHz
0.00														Start Freq
-10.0													2.69	0000000 GHz
-10.0														
-20.0														Stop Freq
													15.00	0000000 GHz
-30.0												↓ 1		
-40.0		- 	1. 1. 1. 1.		-	11.11.11.00	and a set of the state	a dy Branca Pri	and a grand second states	dependence and september of the	and a second second			CF Step
	and the state of a					n Araithte	والترجيقي والترجيقي	a Bassila aire aire		and the second	and the state of the second		1.23 Auto	1000000 GHz Man
-50.0	La Dilliona													
														Freq Offset
-60.0														0 Hz
-70.0														
														Scale Type
Star	t 2.690	GHz									Stop 15	.000 GHz	Log	Lin
		.0 MH:	z			#VBW	3.0 MH;	z	9	weep 21	.34 ms (2	24621 pts)		
MSG										STATUS	5			

Plot 7-115. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-116. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U	PCTEST* Proud to be part of @ electrical	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ysight Spect	-												
l xi Ri	LT	RF	50 Ω	DC	CORREC			NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Sep 17, 2021	Fr	equency
PAS	S	Gate: LO			PNO: IFGain	Fast 🖵	Trig: Fre Atten: 3				TY D	ET A N N N N N		
					II Ouiii					Mk	r1 2.47	0 0 GHz		Auto Tune
10 dE	3/div	Ref 20	.00 dl	Bm							-45.9	63 dBm		
Log	Trace	1 Pass						Ĭ						Center Freq
10.0														3000000 GHz
0.00														Start Freq
-10.0													30	0.000000 MHz
-10.0														
-20.0														Stop Freq
													2.49	6000000 GHz
-30.0														
-40.0														CF Step
40.0												I 👌	246 Auto	6.600000 MHz Man
-50.0	1	_				و وروالي المعادية	المغتقد أرفعته ما	ar Distriction of the star		Line of the state		a ang ilang da katalan ang ing pang ang pang ang pang ang pang ang pang ang pang ang pang p		
							Sec. 10 (Sec. 1 and a sec.							Freq Offset
-60.0														0 Hz
-70,0														
														Scale Type
Star	t 0.030	CH7									Stop 2	.496 GHz	Log	Lin
	s BW 1					#VBW	3.0 MHz	z		Sweep 2	4.66 ms	(4933 pts)		
MSG										STATUS				

Plot 7-117. Conducted Spurious Plot (LTE Band 41(PC2) – 20MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 7-118. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U	Pout to be part of & element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		trum Analyz	er - Swept	SA										
LXI RL	T	RF	50 Ω I	DC CO	ORREC		SEI	NSE:INT	#Avg Typ	ALIGN AUTO		AM Sep 17, 2021	Fr	equency
PAS	S	Gate: LO			PNO: Fa FGain:Lo	st 🖵 ow	Trig: Fre Atten: 10				Т			
10 dBi Log r	/div	Ref 0.0	10 dBn	า						M	kr1 26.64 -53.1	48 0 GHz 107 dBm		Auto Tune
-10.0	Trace	1 Pass												Center Freq 0000000 GHz
-20.0 -30.0													15.00	Start Freq 0000000 GHz
-40.0 -												1	27.00	Stop Freq 0000000 GHz
-60.0				i i secolul secolul Alexandri alexandri Alexandri alexandri		an an Andria an A							1.20 <u>Auto</u>	CF Step 0000000 GHz Man
-80.0														F req Offset 0 Hz
-90.0														Scale Type
		0 GHz .0 MHz			#	VBW	3.0 MHz		s	weep	Stop 2 120.0 ms (7.000 GHz 24001 pts)	Log	<u>Lin</u>
MSG										STA				

Plot 7-119. Conducted Spurious Plot (LTE Band 41(PC2) – 20MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

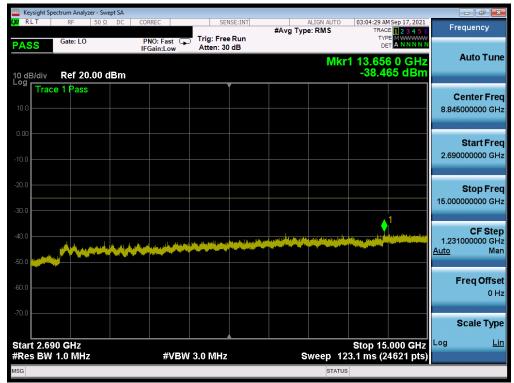
FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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LTE Band 41(PC3)/38

	pectrum Analyzer - Swe								- # - X
XI RLT	RF 50 Ω	DC CORRE	C	SENSE:INT		ALIGN AUTO	03:02:32 AM Sep 17, 2		iency
PASS	Gate: LO	PNO: IFGai		: Free Run n: 30 dB	#Avg Typ	e: RMS	TRACE 1 2 3 4 TYPE MWWW DET A NNN		
10 dB/div	Ref 20.00 d	IBm				M	kr1 2.457 5 G -46.658 dE	1 74	ito Tur
Log Trac	ce 1 Pass								
									ter Fre
10.0								1.25250	0000 GI
0.00									
									artFr
-10.0								30.00	M 0000
20.0									top Fr
								2.47500	
30.0								2.47500	0000 G
40.0									CF St
40.0								244.50	
							الاستيمر ليأت فالعداديان الدارات وا	Auto	М
50.0	البراهرين		الموسف والمدورة والموجوع فالتوري	and the state of the state of the					
No second		Contrast, M. Landstilling						Fre	q Offs
-60.0									0
70.0									
								Sci	ale Ty
							Ot	Log	L
Start 0.0	30 GHz / 1.0 MHz		#VBW 3.0 N			Swoon-1	Stop 2.475 G		-
	T.U WHZ		#VEW 3.0 N			Sweep 2	24.45 ms (4891 p	ns)	
ISG						STATUS	S		

Plot 7-120. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



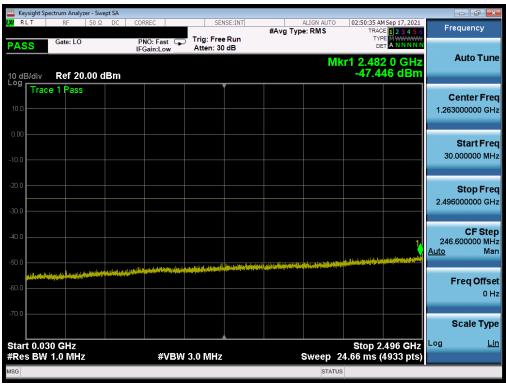
Plot 7-121. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Swe										d X
L <mark>XI</mark> RLT	RF 50 Ω	DC CC	RREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Sep 17, 2021	Frequ	ency
PASS	Gate: LO	F	NO: Fast 🖵 Gain:Low	Trig: Free Atten: 10				TYF DE			_
10 dB/div Log	Ref 0.00 dE	3m					Mk	r1 26.18 -52.9	9 5 GHz 28 dBm	Au	to Tune
-10.0	e 1 Pass									Cent 21.000000	t er Freq 000 GHz
-20.0										Sta 15.000000	a rt Freq 000 GHz
-40.0									1	Sto 27.000000	o p Freq 000 GHz
-60.0	a a su a			ing a faile of a part of the second secon							CF Step 000 GHz Man
-80.0										Free	q Offset 0 Hz
-90.0										Sca	le Type
Start 15.0 #Res BW			#VBW	3.0 MHz		s	weep 1	Stop 27 20.0 ms (2	.000 GHz 4001 pts)	Log	<u>Lin</u>
MSG							STATU	JS			

Plot 7-122. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-123. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyz											
LXU RLT	RF	50 Ω D(C CORR	EC	SE	NSE:INT	#Avg Typ	ALIGN AUTO	TRA	M Sep 17, 2021	Fre	quency
PASS	Gate: LO		PN	D:Fast ⊂ ain:Low	Trig: Fre Atten: 3				TY D	PE MWWWW ET A N N N N N		
			1100					Mk	r1 14.26	9 5 GHz	1	Auto Tune
10 dB/div	Ref 20	.00 dBn	n						-38.1	64 dBm		
Log Trac	e 1 Pass					Ť					C	enter Freg
10.0												000000 GHz
0.00												Start Freq
-10.0												000000 GHz
-10.0												
-20.0												Stop Freq
												000000 GHz
-30.0										1		
-40.0										the shall be a first of the		CF Step
	AAN	mile in a star A									1.231 Auto	000000 GHz Man
-50.0												
											F	req Offset
-60.0												0 Hz
-70.0												
											S	cale Type
Start 2.69	0 GH7								Stop 15	.000 GHz	Log	Lin
#Res BW				#VBN	/ 3.0 MHz		S	weep 1	23.1 ms (2	24621 pts)		
MSG								STATU	JS			

Plot 7-124. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-125. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @elected	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyze									
LXI RLT	RF	50 Ω DC	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		Sep 17, 2021	Frequency
PASS	Gate: LO		PNO: Fast G	Trig: Free Atten: 30		• ,,		TYF		
			IFGalli.Low	/titelit oc	ub .		M	(r1 2.48	0 GHz	Auto Tun
10 dB/div	Ref 20.	.00 dBm						-46.9	22 dBm	
Log Trac	e 1 Pass				Í					
10.0										Center Free 1.263000000 GH
										1.20500000 GH
0.00										
										Start Free 30.000000 MH
-10.0										30.000000 MIH
-20.0										
-20.0										Stop Free 2.496000000 GH
-30.0										2.496000000 GH
										CF Step
-40.0									1	246.600000 MH
								والمتعادية والمتعاط	. La characteritation	<u>Auto</u> Ma
-50.0	فالاغانية وتأولا فحر ورو	والمحد ورواياته وال	ومرما والإندارية المراجعونين		Applices, Augus		Strengt Strengthere and	- Water State - State		
-60.0		a line in the line								Freq Offse
										0 H
-70.0										
										Scale Type
Start 0.03	0 GHz							Stop 2	.496 GHz	Log <u>Li</u> i
#Res BW	1.0 MHz		#VBW	/ 3.0 MHz			Sweep 2	24.66 ms (4933 pts)	
MSG							STATUS	5		

Plot 7-126. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-127. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U	PCTEST* Proud to be part of @ electrical	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analy:												
(XI) RL	RF	50 Ω	DC	CORREC			NSE:INT	#Avg Ty	ALIGN AUT		50 PM Nov 05, 2021 TRACE 1 2 3 4 5 (requency
PASS	Gate: LO			PNO: Fa		Trig: Fre Atten: 1							
									M	kr1 25.	680 0 GHz 5.743 dBm		Auto Tune
10 dB/div	Ref 0.0 e 1 Pass		n				v			-31	0.745 UBII		
	e i Fass												Center Freq
-10.0												21.0	0000000 GHz
-20.0													
												15.0	Start Freq
-30.0												10.0	
-40.0													Stop Freq
												27.0	00000000 GHz
-50.0											•1		
-60.0	and the second second		ومعربه إطارت				to all all		an an an Anna an Anna Anna Anna Anna Anna Anna			1.2	CF Step
												Auto	Man
-70.0													
-80.0													Freq Offset 0 Hz
													0112
-90.0													Scale Type
Start 15.0										Ston	27.000 GHz	Log	Lin
#Res BW				#	VBW :	3.0 MHz		\$	Sweep	120.0 m	27.000 GH2 6 (24001 pts)		200
MSG									STA	TUS			

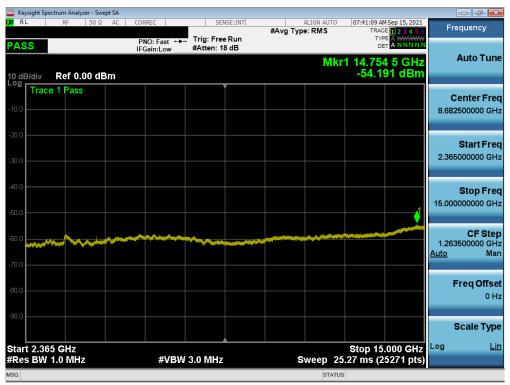
Plot 7-128. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ eliensed	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n30 – Ant B

	ight Spectru	um Analyzer - Sw									_	
L <mark>XI</mark> RL		RF 50 Ω	AC	CORREC		NSE:INT	#Avg	ALIGN AUT Type: RMS	TRA	AM Sep 15, 2021 ACE 1 2 3 4 5 6	Fi	requency
PASS	5			PNO: Fast ↔ IFGain:Low	Trig: Fre Atten: 30				T) [
									Mkr1 2.22	28 5 GHz		Auto Tune
10 dB/		Ref 20.00 d	dBm						-48.	563 dBm		
	Trace 1	Pass				Ĭ						Center Fred
10.0												9000000 GH:
0.00												Start Fred
-10.0											30	0.000000 MHz
-20.0												Stop Freq
-30.0											2.28	8000000 GHz
-40.0											225	CF Step 5.800000 MH;
50.0										♦	<u>Auto</u>	Mar
-50.0	fatering all designed	-	-		her alf for a start when	en contraction of the	ale strates	1996 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	and a first of the state of the			
-60.0												Freq Offset
												0 Hz
-70.0												Scale Type
	0.030 (BW 1.			#\/D\/	V 3.0 MHz			Swoon	Stop 3.011 ms	2.288 GHz	Log	Lin
#Res	DW I.	0-1911-12		#VDV	Y 3.0 Y 112					(4517 pts)		
								31/				



Plot 7-129. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant B)

Plot 7-130. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant B)

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🔤 Keysight Spectrum Analyze								
LXIRL RF	50 Ω AC COR	REC	SENSE:INT	#Avg Typ	ALIGN AUTO		Sep 15, 2021	Frequency
PASS			rig: Free Run Atten: 10 dB			TYP		
					Mkr	1 25.784	5 GHz	Auto Tune
10 dB/div Ref 0.0	0 dBm					-51.46	60 dBm	
Trace 1 Pass								Center Freq
-10.0								21.000000000 GHz
-20.0								Start Freq
-30.0								15.00000000 GHz
-40.0								Stop Freq
-50.0							1	27.00000000 GHz
-30.0					man	and the second s	Mar and Ma Mar and Mar	
-60.0	And the second second		and the second					CF Step 1.20000000 GHz
and the second sec								Auto Man
-70.0								
-80.0								Freq Offset
66.0								0 Hz
-90.0								
								Scale Type
Start 15.000 GHz						Stop 27.	000 0112	Log <u>Lin</u>
#Res BW 1.0 MHz		#VBW 3.0) MHz	8	weep 30	.40 ms (24	1001 pts)	
MSG					STATUS			

Plot 7-131. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant B)

FCC ID: A3LSMS901U	Proved to be port of the element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	Spectrum Analyzer - Swe										
LXI RL	RF 50 Ω	DC C	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO		MOct 14, 2021	Fr	requency
PASS			PNO: Fast ++- IFGain:Low	Trig: Free Atten: 30				TYP			
			II Gam. Eo.				Mł	(r1 2.433	3 0 GHz		Auto Tune
10 dB/div Log	Ref 20.00 d	lBm						-48.	33 dBm		
Tra	ice 1 Pass										Center Freq
10.0											2500000 GHz
0.00											Start Freq
-10.0										30	0.000000 MHz
-20.0											Stop Freq
										2.47	5000000 GHz
-30.0											
-40.0											CF Step
									4	244 <u>Auto</u>	4.500000 MHz Man
-50.0									and and an entropy of the second s		
-60.0	nen ander in standarden er andere er al fer									I	Freq Offset
-60.0											0 Hz
-70.0								کی			
											Scale Type
Start 0.0	30 GHz							Stop 2	.473 0112	Log	Lin
	V 1.0 MHz		#VBW	V 3.0 MHz			Sweep 3	.260 ms (4891 pts)		
MSG							STATUS	1			

Plot 7-132. Conducted Spurious Plot (NR Band n7 - 40MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant B)



Plot 7-133. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – Low Channel Ant B)

FCC ID: A3LSMS901U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - :	Swept SA						- 7
XIRL	RF 50	ΩDC	CORREC	SENSE:INT	ALIGN #Avg Type: RM		Oct 14, 2021	Frequency
PASS			PNO: Fast ↔ IFGain:Low	Trig: Free Run Atten: 10 dB		TYPE	AWWWWW	
10 dB/div	Ref 0.00	dBm				Mkr1 26.312 -57.16	5 GHz 4 dBm	Auto Tun
^{-og} Trac	e 1 Pass			Ĭ				
10.0								Center Fre 21.00000000 GH
10.0								21.00000000 GF
20.0								
								Start Fre
-30.0								15.00000000 GH
-40.0								Stop Fre
-50.0								27.00000000 GH
							↓ ¹	
-60.0						tele an anna taona de		CF Ste 1.20000000 GF
a the second								Auto Ma
70.0								
								Freq Offse
-80.0								0 F
-90.0								
								Scale Typ
								Log <u>Li</u>
Start 15.0 #Res BW	000 GHz 1.0 MHz		#VBM	3.0 MHz	Sweet	Stop 27. p 20.80 ms (24	000 0112	
ISG	110 11112					STATUS	less hres)	
G						STATUS		

Plot 7-134. Conducted Spurious Plot (NR Band n7 - 40MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant B)

		ctrum Anal													
ol RL		RF	50 Ω	DC	CORRE	:Fast +	Tr	SEN	Run	#Avg Ty	ALIGN AUTO		41 PM Oct 14, 2021 TRACE 1 2 3 4 5 6 TYPE A WWWWW	F	requency
		Ref 2	0.00 d	IBm	IFGai	in:Low	At	tten: 30	dB		N	/kr1 2. -4	390 0 GHz 48.39 dBm		Auto Tun
10.0	Trace	e 1 Pas	S												Center Fre 2500000 G⊦
0.00 10.0 -														3(Start Fre 0.000000 M⊦
20.0 30.0														2.47	Stop Fre 5000000 GF
40.0 50.0											nata an indicator 17 M		1	24 <u>Auto</u>	CF Ste 4.500000 MH Ma
60.0	ng interketer														Freq Offs 0 H
70.0 Stari	0.03	0 GHz										Sto	p 2.475 GHz	Log	Scale Typ
		1.0 MH	z			#VB	W 3.0	MHz			Sweep		ns (4891 pts)		
SG											STA				

Plot 7-135. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel Ant B)

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Keysight Sp RL	ectrum Analy: RF		t SA DC	CORREC		CE	NSE:INT		ALIGN AUTO	09:45:07.0	M Oct 14, 2021	_	- 0 -
KL	KF	20.75	DC					#Avg Typ		TRA	CE 123456	Freq	luency
PASS				PNO: Fa	ow	Atten: 3				D			
									Mkı	1 14.36	10 GHz	A	uto Tun
I0 dB/div _og	Ref 20		3m							-43.2	36 dBm		
Trac	e 1 Pass						Ĭ					Ce	nter Fre
10.0												8.7850	00000 GI
0.00													
0.00												S	Start Fr
10.0												2.5700	00000 GI
20.0												ş	Stop Fr
30.0												15.0000	00000 GI
50.0													
40.0											⊢_ • ¹ –	1 2430	CF St 00000 G
	. Ma	~	\sim	m	~~~	and the second	~~~~	-	- Martine	min		Auto	M
50.0													
50.0												Fr	eq Offs
													0
70.0													
												S	cale Ty
itart 2.57										Stop 15	.000 GHz	Log	L
Res BW	1.0 MHz	4		#	VBW	3.0 MHz		s	weep 21	.55 ms (2	24861 pts)		
SG									STATU	S			

Plot 7-136. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel Ant B)



Plot 7-137. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel Ant B)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	Spectrum Analy	zer - Swept SA						
L <mark>XI</mark> RL	RF	50 Ω DC	CORREC	SENSE:	#Avg Type	ALIGN AUTO E: RMS	09:02:00 PM Oct 14, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS			PNO: Fast ↔ IFGain:Low	Trig: Free Ru Atten: 30 dB			DET A NNNN	
10 dB/div	Ref 20	0.00 dBm	1			Mkr	1 2.442 5 GHz -48.56 dBm	Auto Tune
Log	ice 1 Pass			Ĭ				Center Fred
10.0								1.252500000 GHz
0.00								
								Start Fred
-10.0								30.000000 MHz
-20.0								Stop Fred
								2.475000000 GH
-30.0								
-40.0								CF Step 244.500000 MH
-50.0								<u>Auto</u> Mar
-30.0	التوزية مدرسية والمل			and a subflate of the state of the	References and and any front affer any short of a	*****		E
-60.0								Freq Offset 0 Hz
-70.0								
								Scale Type
Start 0.0							0100 2.470 0112	Log <u>Lir</u>
	V 1.0 MH	z	#VBW	3.0 MHz			260 ms (4891 pts)	
MSG						STATUS		

Plot 7-138. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – High Channel Ant B)



Plot 7-139. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – High Channel Ant B)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyz	er - Swept S	SA										- I I X
LXU RL	RF	50 Ω [DC	CORREC		SI	ENSE:INT	#Avg Ty	ALIGN AUTO		4 PM Nov 05, 2021 RACE 1 2 3 4 5 6	Fre	quency
PASS				PNO: Fa IFGain:L	ist ⊶⊶ ow	Trig: Fre Atten: 1		#/.vg iy					
10 dB/div Log	Ref 0.0	0 dBm	n						M	kr1 26.0 -57.	07 5 GHz 467 dBm	· · ·	Auto Tune
-10.0 Trac	e 1 Pass												enter Freq 000000 GHz
-20.0													Start Freq 000000 GHz
-40.0													Stop Freq 000000 GHz
-60.0					*****	~~~~~						1.2000 <u>Auto</u>	CF Step 000000 GHz Man
-80.0												F	req Offset 0 Hz
-90.0													cale Type
Start 15.0 #Res BW				#	VBW	3.0 MH:	2		Sweep	Stop 2 20.80 ms	27.000 GHz (24001 pts)	Log	Lin
MSG									STA				

Plot 7-140. Conducted Spurious Plot (NR Band n7 – 40MHz QPSK – RB Size 1, RB Offset 0 – High Channel Ant B)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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NR Band n41 – Ant F

wept SA KEYSIGHT Input: RF L ↔ Coupling: DC Align: Auto V PASS	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Off	Atten: 32 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	r (RMS <mark>123456</mark> M WWWW A N N N N N	Center Frequency 1.25000000 GHz	Settings
Spectrum v cale/Div 10 dB		Ref Level 20.00	dBm	Mkr1	2.333 3 GHz -36.88 dBm	Span 2.44000000 GHz Swept Span Zero Span	
0.00 Trace 1 Pass						Full Span Start Freq	
						30.000000 MHz Stop Freq 2.470000000 GHz	1
10.0 40.0	lada - i ka ga yiki ginaiti te kuluanda.	unders det son sit findering af finder og skøler for	the platine and a state of the section of the section of the		hatera and share a state of the	AUTO TUNE CF Step 244.000000 MHz	
						Auto Man Freq Offset	
70.0 tart 0.030 GHz Res BW 1.0 MHz		#Video BW 3.0	MHz	Sweep	Stop 2.470 GHz 3.26 ms (4891 pts)		
1 n c 🗌	Sep 18, 2021 1:49:46 AM	\Box				Signal Track (Span Zoom)	

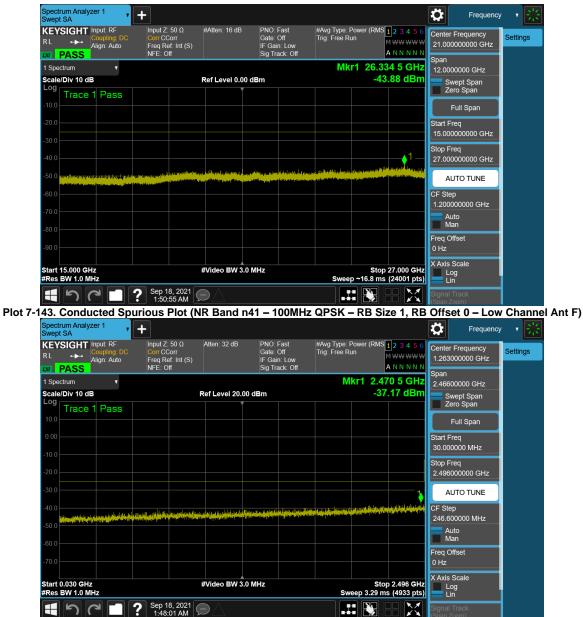
Plot 7-141. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant F)



Plot 7-142. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant F)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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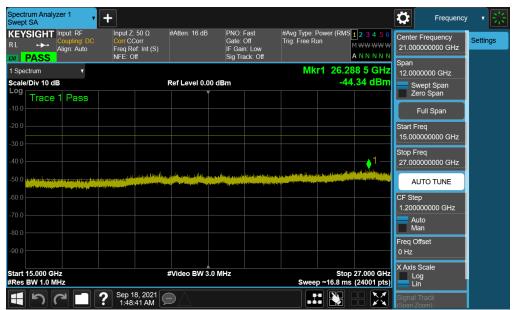
Plot 7-144. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel Ant F)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Align: Auto	Corr CCorr Freq Ref: Int (S) NFE: Off	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off		VWWW 8.845000000 GHz Setting
Spectrum v			Mkr1 14.987 0	GHz 12.3100000 GHz
cale/Div 10 dB	Ref Level 20.0	00 dBm	-32.61	dBm Swept Span Zero Span
10.0 Trace 1 Pass				Full Span
				Start Freq 2.69000000 GHz
				Stop Freq 15.00000000 GHz
	te a sur utasite con a	ali nya kuna darima tu da sa dariha dalaka tat	de en an de bleerbinstelen 1911 v.e mar	
40.0 development of the second se			and the second	CF Step 1.231000000 GHz
50.0				Auto Man
				Freq Offset 0 Hz
tart 2.690 GHz Res BW 1.0 MHz	#Video BW 3.	0 MHz	Stop 15.0 Sweep ~17.5 ms (246	

Plot 7-145. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel Ant F)



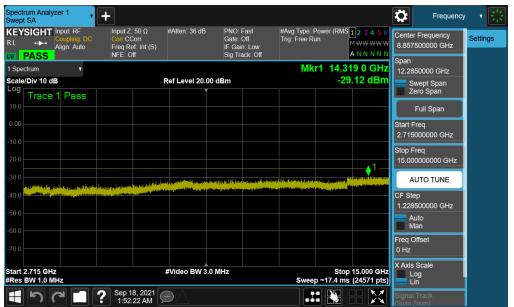
Plot 7-146. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel Ant F)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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EYSIGHT Input: RF L + Align: Auto	Input Z: 50 Ω Atte Corr CCorr Freq Ref: Int (S) NFE: Off	en: 32 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: O		1.263000000 GHz
Spectrum v cale/Div 10 dB	Ref	Level 20.00 dBm	Mkr1 2.363 5 GH -36.59 dBn	Swept Span
Trace 1 Pass				Full Span
0.0				Start Freq 30.000000 MHz Stop Freq
			_	2.496000000 GHz
	Bergeren in der Sterinstein der Anterinstein der Anterinstein der Anterinstein der Anterinstein der Anterinstein		e para dan dan pangan kang panan kang panan kanan k	CF Step 246.600000 MHz
				Auto Man Freq Offset
0.0 art 0.030 GHz	#Vio	deo BW 3.0 MHz	Stop 2.496 GH	0 Hz X Axis Scale Log

Plot 7-147. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel Ant F)



Plot 7-148. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel Ant F)

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KEYSIGHT Input: RF R L +++ Coupling: DC Align: Auto Align: Auto	Input Z: 50 Ω #Atten: 18 dl Corr CCorr Freq Ref: Int (S) NFE: Off	B PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS 1 2 3 4 5 Trig: Free Run A N N N N	21.00000000 GHz
Scale/Div 10 dB	Ref Level 0	.00 dBm	Mkr1 26.054 0 GH -41.69 dBr	2 12.0000000 GHz 1 Swept Span
Trace 1 Pass				Zero Span Full Span
				Start Freq 15.00000000 GHz
40.0	na se tra da na da da da na	t , is a satisfying start and the sector division	1	Stop Freq 27.00000000 GHz
50.0 Contraction of the second se				AUTO TUNE CF Step
				1.200000000 GHz Auto Man
				Freq Offset 0 Hz
tart 15.000 GHz Res BW 1.0 MHz	#Video BW	3.0 MHz	Stop 27.000 GH Sweep ~16.8 ms (24001 pts	

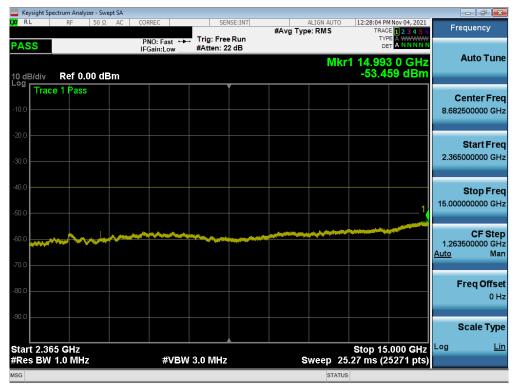
Plot 7-149. Conducted Spurious Plot (NR Band n41 – 100MHz QPSK – RB Size 1, RB Offset 0 – High Channel Ant F)

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	ectrum Analy												
RL	RF	50 Ω /	AC (CORREC		SEI	NSE:INT		ALIGN AUTO		M Nov 04, 2021	Fr	requency
ASS				PNO: Fa		Trig: Free		#Avg Typ	DE: RIVIS	TY	CE 1 2 3 4 5 6 PE A WWWW ET A NNNNN		
435				IFGain:L	ow	Atten: 30) dB						
									M	kr1 2.15	5 5 GHz		Auto Tur
dB/div	Ref 20).00 dBi	m							-52.2	00 dBm		
^{'9} Trac	e 1 Pass					,							
													Center Fre
0.0												1.15	9000000 GI
.00													
													Start Fr
D.O												30	0.000000 MI
D.O													
5.0													Stop Fr
												2.28	8000000 GI
3.0													
													CF Ste
0.0												225	сг эц 5.800000 М
												Auto	M 000000
D.O													
									and the second second second	ونعاذي وزمؤهمه وزواوه			_
		pro-publication		-		CALCULATION OF THE OWNER OF THE O	- Calledon						Freq Offs
													0
0.0													0
													Scale Typ
						,				Ot		Log	L
tart 0.03	30 GHZ 1.0 MH:	-		_	AVD14	3.0 MHz			Swoon -	Stop 2	.200 0112	209	
CES DW	T.U MIH.	4		#	VDW	J.U IVIMZ			Sweep 3	SOTTINS ((4517 pts)		
G									STATU	S			

Plot 7-150. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)



Plot 7-151. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)

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www.www.com analyzer - Swept SA					
LXIRL RF 50Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	12:28:21 PM Nov 04, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Fast ↔→ IFGain:Low	Trig: Free Run Atten: 10 dB	"	TYPE A WWWWW DET A N N N N N	
	in Gameon		Mkr	1 25.362 5 GHz	Auto Tune
10 dB/div Ref 0.00 dBm				-54.205 dBm	
Trace 1 Pass		Ĭ			Center Freq
-10.0					21.000000000 GHz
-20.0					Start Freq
-30.0					15.00000000 GHz
-40.0					Stop Freq
					27.00000000 GHz
-50.0				├── ∳' <u></u> <u>॑</u> ──┨	
-60.0				www.	CF Step
		and marken			1.200000000 GHz Auto Man
-70.0					
					Freq Offset
-80.0					0 Hz
-90.0					
					Scale Type
Start 15.000 GHz				Stop 27.000 GHz	Log <u>Lin</u>
#Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 30	0.40 ms (24001 pts)	
MSG			STATUS	3	

Plot 7-152. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)

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NR Band n30 – Ant A

🔤 Keysight Spectrum Analy							
KK RL RF	50 Ω AC	CORREC	SENSE:INT		ALIGN AUTO Type: RMS	01:15:12 PM Sep 28, 2021 TRACE 1 2 3 4 5	
PASS		PNO: Fast +++ IFGain:Low	Trig: Free Run Atten: 30 dB				Auto Tune
Log	0.00 dBm					-48.315 dBn	
10.0							Center Freq 1.159000000 GHz
-10.0							Start Fred 30.000000 MHz
-20.0							Stop Fred 2.288000000 GHz
-40.0							CF Step 225.800000 MH: <u>Auto</u> Mar
-50.0 -60.0	agadh y chang a la china an an an An		ny Martin Barran André di Andrew yan ben	tulos tyryst tystostict			Freq Offse
-70.0							Scale Type
Start 0.030 GHz #Res BW 1.0 MHz	z	#VBW	3.0 MHz		Sweep	Stop 2.288 GHz 3.011 ms (4517 pts	Log <u>Lin</u>
MSG					STAT		

[🔤] Keysight Spectrum Analyzer - Swept SA 01:15:33 PM Sep 28, 2021 TRACE 1 2 3 4 5 6 TYPE A WWWWW X/ RL SENSE:INT AI IGN AUTO Frequency #Avg Type: RMS Trig: Free Run #Atten: 20 dB PNO: Fast ↔→→ IFGain:Low DET PASS Auto Tune Mkr1 14.899 5 GHz -52.024 dBm 10 dB/div Log Ref 0.00 dBm Trace 1 Pass **Center Freq** 8.682500000 GHz Start Freq 2.365000000 GHz Stop Freq 15.000000000 GHz CF Step 1.263500000 GHz Man Auto Freq Offset 0 Hz Scale Type Start 2.365 GHz #Res BW 1.0 MHz Log Lin Stop 15.000 GHz #VBW 3.0 MHz Sweep 25.27 ms (25271 pts)

Plot 7-153. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)

Plot 7-154. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)

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	ectrum Analyzer - Sw									
LXI RL	RF 50 Ω	AC	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO		M Sep 28, 2021	Frequency
PASS			PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 10		• //		TYP		
10 dB/div Log	Ref 0.00 d	Bm					Mkr	1 25.78 -51.1	6 5 GHz 86 dBm	Auto Tur
Trac	e 1 Pass									Center Fre
-10.0										21.000000000 GH
-20.0										Start Fre
-30.0										15.00000000 GH
-40.0										Stop Fre
-50.0									1	27.00000000 GH
-60.0					_	have		~~~~	~~~~~	CF Ste
										1.20000000 GH <u>Auto</u> Ma
-70.0										F act a Of
-80.0										Freq Offs 0 H
-90.0										Qeele Tra
Otor# 15-0								Oton 07		Scale Typ
Start 15.0 #Res BW			#VBW	/ 3.0 MHz		s	weep 30	5top 27).40 ms (2	.000 GHz 4001 pts)	
MSG							STATUS	S		

Plot 7-155. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant A)

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NR Band n30 – Ant F

Keysight S RL	pectrum Analy RF	/zer - Swej 50 Ω	AC AC	CORREC		SE	NSE:INT		ALIG	N AUTO	08:59:24	AM Sep 28, 2021		
								#Avg	J Type: R		TRA	ACE 1 2 3 4 5 6	Fi	requency
PASS				PNO: IFGain	Fast ↔ :Low	Atten: 3								
										Mk	r1 2.28	36 5 GHz		Auto Tun
I0 dB/div	Ref 2		Bm								-47.8	353 dBm		
Tra	ce 1 Pass	8					Ĭ							Center Fre
10.0														9000000 GH
0.00														Start Fre
10.0													30	0.000000 MH
· IU.U														
20.0														Otan Eng
													2.28	Stop Fre 8000000 GH
30.0													2.20	8000000 GI
														CF Ste
40.0												1	225	5.800000 MH
													<u>Auto</u>	Ma
-50.0			March Street		a la faire ann an tha a	ففار بجانير بايتي	length low (length (life	and the state of the second	an a			and and a summer della		
-60.0														Freq Offse
														0⊢
70.0														
														Scale Typ
Start 0.0	30 GHz						<u> </u>				Ston	2.288 GHz	Log	Li
	1.0 MH	z			#VBW	3.0 MHz			Sw	eep <u>3</u>	.011 ms	(4517 pts)		
ISG										STATUS				

Plot 7-156. Conducted Spurious Plot (NR Band n30 – 10MHz QPSK – RB Size 1, RB Offset 0 – Ant F)



Plot 7-157. Conducted Spurious Plot (NR Band n30 – 10MHz QPSK – RB Size 1, RB Offset 0 – Ant F)

FCC ID: A3LSMS901U	PCTEST Preud to be part of @ wherevert	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ctrum Analyzer - Swept					
LXI RL	RF 50 Ω	AC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	09:00:21 AM Sep 28, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		PNO: Fast +++	Trig: Free Run Atten: 10 dB			
10 dB/div Log	Ref 0.00 dBn	n		Mk	1 25.377 0 GHz -50.213 dBm	Auto Tune
-10.0	e 1 Pass					Center Freq 21.000000000 GHz
-20.0						Start Freq 15.00000000 GHz
-40.0					1	Stop Freq 27.000000000 GHz
-60.0						CF Step 1.20000000 GHz <u>Auto</u> Man
-80.0						Freq Offset 0 Hz
-90.0 Start 15.0					Stop 27.000 GHz	Scale Type
#Res BW	1.0 MHz	#VBW	3.0 MHz	Sweep 3	0.40 ms (24001 pts)	
MSG				STATU	S	

Plot 7-158. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0 - Ant F)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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7.5 Uplink Carrier Aggregation §27.53(m)

Test Overview

The EUT is set up to transmit two contiguous LTE channels. The power level of both carriers and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

For Band 41/38 the minimum permissible attenuation level of any spurious emission is $55 + 10 \log_{10}(P_{[Watts]})$.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

- 1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
- 2. Detector = RMS
- 3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 4. Sweep time = auto couple
- 5. The trace was allowed to stabilize
- 6. Please see test notes below for RBW and VBW settings

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-4. Test Instrument & Measurement Setup

Test Notes

- 1. Conducted power and spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device. The worst case (highest) powers were found while operating with QPSK modulation with both carriers set to transmit using 1RB.
- 2. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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Uplink CA Configuration 41C

Power State Band	Bandwidth (PCC + SCC)	PCC						ULCA Tx.										
		Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Power [dBm]						
			39750	2506.0	1	99		39948	2525.8	1	0	26.59						
		QPSK	40620	2593.0	1	99	QPSK	40818	2612.8	1	0	26.24						
				41490	2680.0	1	0		41292	2660.2	1	99	26.39					
Max	LTE B41 (PC2)	20MHz + 20MHz	QPSK	39750	2506	100	0	QPSK	39948	2525.8	100	0	24.51					
			i i					16-QAM	39750	2506	100	0	16-QAM	39948	2525.8	100	0	23.51
		64-QAM	39750	2506	100	0	64-QAM	39948	2525.8	100	0	23.46						
		256-QAM	39750	2506	100	0	256-QAM	39948	2525.8	100	0	21.54						

Table 7-159. Conducted Power Data (ULCA LTE B41(PC2))

Power State Band		Band Bandwidth (PCC + SCC)	PCC				scc				ULCA Tx.		
	Band		Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Power [dBm]
			39750	2506.0	1	99		39948	2525.8	1	0	25.00	
		20MHz + 20MHz	QPSK	40620	2593.0	1	99	QPSK	40818	2612.8	1	0	25.25
				41490	2680.0	1	0		41292	2660.2	1	99	25.36
Max	LTE B41 (PC3)		QPSK	41490	2680	100	0	QPSK	41292	2660.2	100	0	22.90
			16-QAM	41490	2680	100	0	16-QAM	41292	2660.2	100	0	21.95
		64-QAM	41490	2680	100	0	64-QAM	41292	2660.2	100	0	21.86	
			256-QAM	41490	2680	100	0	256-QAM	41292	2660.2	100	0	19.96

Table 7-160. Conducted Power Data (ULCA LTE B41(PC3))

ULCA – LTE B41(PC2)

Keysight Spectrun			000050	0.51	000 11/2			00.57.47.01		
	RF 50 Ω	AC (CORREC			#Avg Typ	ALIGN AUTO	TRAC	E 2 3 4 5 6	Frequency
0 dB/div R	ef 40.00 d		PNO: Fast ↔ IFGain:Low	Atten: 50			Mk	□ r1 2.516	ANNNN	Auto Tui
30.0	¹ 1									Center Fre 2.593000000 GI
10.0	ł									Start Fre 2.496000000 Gi
										Stop Fre 2.69000000 GF
20.0 	N. Noticitation		nakat - ba arkatakata da mayang bahan sa arang			ter provident total Celera Dipological	a torige (and a state of a state o	in particularia	dati alikatudi ole j Manggat anto segut	CF Ste 19.400000 Mi <u>Auto</u> M
40.0										Freq Offs 0
30.0										Scale Ty
tart 2.49600 Res BW 1.0			#VBW	/ 3.0 MHz			Sweep	Stop 2.69 1.315 ms (Log <u>L</u>
SG							STATU	JS		

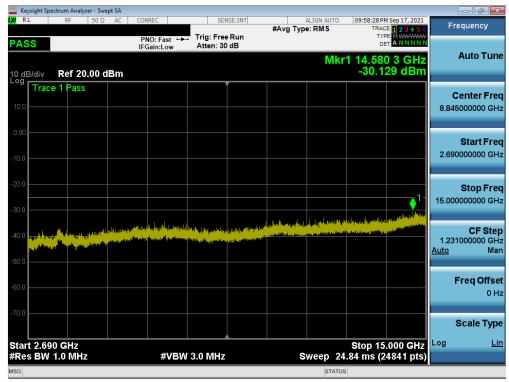
Plot 7-161. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

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	ectrum Analyzer - Swe										
L <mark>XI</mark> RL	RF 50 Ω	AC COR	REC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		M Sep 17, 2021	Frequ	lency
PASS			NO: Fast ↔→ Gain:Low	Trig: Free Atten: 30		•		TY	PE MWWWWW T A N N N N N		
		IFC	sain:Low	Atten: 30	ub		N	lkr1 2.45		Au	ito Tune
10 dB/div	Ref 20.00 d	Bm							70 dBm		
Log	e 1 Pass			,							
											nter Freq
10.0										1.25250	0000 GHz
0.00											
0.00										S	tart Freq
-10.0										30.00	0000 MHz
-20.0										s	top Freq
											0000 GHz
-30.0											
											CF Step
-40.0	والمراجلة والمراجع	. Inc. 1	and all there is a local			a ang ang ang ang ang ang ang ang ang an	and a literation				0000 MHz
o Andr				Supervision and the second	والطعا ألأفاه والراد الأوا	Telefold and a second	التلقار الأحاتيين أر			<u>Auto</u>	Man
-30.0											
-60.0										Fre	eq Offset
											0 Hz
-70.0											
										Sc	ale Type
Start 0.03	30 GHz							Stop 2	.475 GHz	Log	Lin
#Res BW			#VBW	3.0 MHz			Sweep	3.275 ms	4913 pts)		
MSG							STAT	rus			

Plot 7-162. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



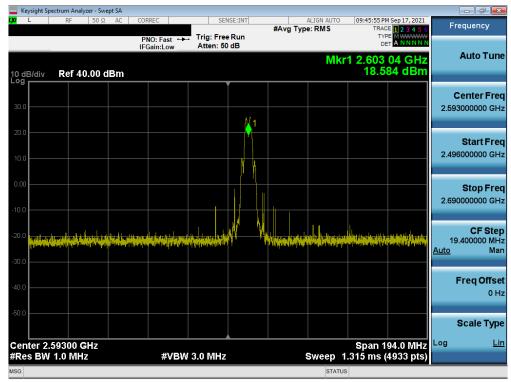
Plot 7-163. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keysight Spectrum An						
LXU RL RF	50 Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	09:58:48 PM Sep 17, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		PNO: Fast ↔→ IFGain:Low	Trig: Free Run Atten: 10 dB		DET A NNNN	
Log	0.00 dBm			MI	kr1 25.335 5 GHz -39.786 dBm	Auto Tune
-10.0	SS					Center Freq 21.000000000 GHz
-30.0						Start Freq 15.000000000 GHz
-40.0	and the first state of the first state of the second	. The state of the state of the state of the	a statistica a stati		Lilles for the transmission of the second	Stop Freq 27.000000000 GHz
-60.0		The Control of the Co				CF Step 1.200000000 GHz <u>Auto</u> Man
-80.0						Freq Offset 0 Hz
-90.0						Scale Type
Start 15.000 GH #Res BW 1.0 M		#VBW	3.0 MHz	Sweep 3	Stop 27.000 GHz 30.40 ms (24001 pts)	
MSG				STAT		

Plot 7-164. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



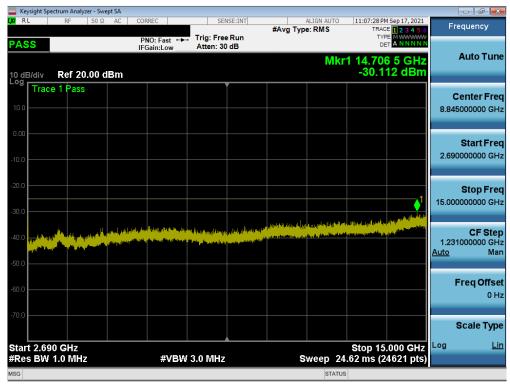
Plot 7-165. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U	PCTEST. Poud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Swej										d X
LXU RL	RF 50 Ω	AC COF	RREC	SEI	ISE:INT	#Avg Ty	ALIGN AUTO		4 Sep 17, 2021	Frequen	ıcy
PASS			NO:Fast ↔ Gain:Low	Trig: Free Atten: 30				TYP			
10 dB/div	Ref 20.00 d						Μ	kr1 2.02 -38.	5 7 GHz 39 dBm	Auto	Tune
10.0	e 1 Pass									Cente 1.2630000	
-10.0										Star 30.00000	t Freq 00 MHz
-20.0										Stoj 2.4960000	p Freq 00 GHz
-40.0			a sia da di di sa a pira Paga paga pira	le sectore bile trans	Line by a that and b goad by particular to	n sa ka ka sa sa sa ka ka Langan ngan ngan ngan			ann a chuidh an tha ann an tha an tha ann an tha an tha ann an tha Tha ann an tha ann an t	CF 246.60000 <u>Auto</u>	5 Step 00 MHz Man
-60.0										Freq	Offset 0 Hz
-70.0 Start 0.03	0 GHz							Stop 2	.496 GHz		e Type <u>Lin</u>
#Res BW			#VBV	V 3.0 MHz			Sweep 3	3.052 ms (
MSG							STATU	IS			

Plot 7-166. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



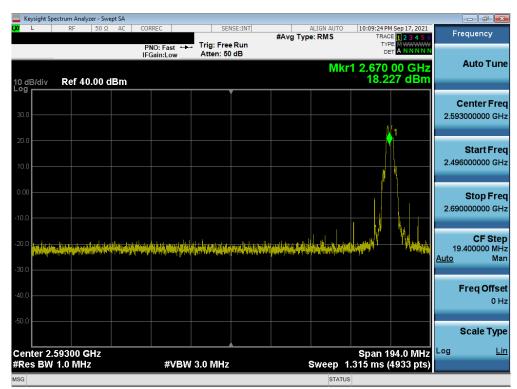
Plot 7-167. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keysight Spectrum Analyzer - Swept SA					- J J
LX RL RF 50 Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:07:46 PM Sep 17, 2021 TRACE 1 2 3 4 5	Frequency
PASS	PNO: Fast ↔→→ IFGain:Low	Trig: Free Run Atten: 10 dB		TYPE MWWWW DET A N N N N	* N
	II Gam.Low		Mk	r1 25.385 0 GHz	Auto Tune
10 dB/div Ref 0.00 dBm				-39.142 dBm	
Trace 1 Pass		ľ			Center Freq
-10.0					21.00000000 GHz
-20.0					Start Freq
-30.0					15.000000000 GHz
-30.0				1	
-40.0					Stop Freq
		مدينهم الديني من يعان بو عن	and the state of the		27.000000000 GHz
-50.0 Patronal and a period	n an		The second s		
-60.0					CF Step
					1.200000000 GHz Auto Man
-70.0					
					Freq Offset
-80.0					0 Hz
-90.0					
					Scale Type
Start 15.000 GHz		X		Stop 27.000 GHz	Log <u>Lin</u>
#Res BW 1.0 MHz	#VBW 3	.0 MHz	Sweep 3	30.40 ms (24001 pts	
MSG			STAT	US	

Plot 7-168. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



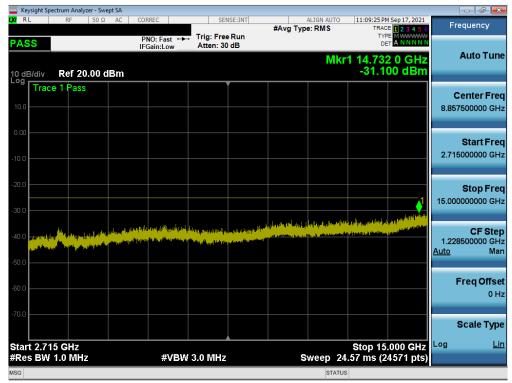
Plot 7-169. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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🔤 Keysight Spectrum Analyzer - Swept SA					
LX RL RF 50Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS) 11:09:05 PM Sep 17, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Fast ↔	Trig: Free Run Atten: 30 dB	• ,	TYPE M WWWWWW DET A N N N N N	
	IFGain:Low	Atten: 30 dB		lkr1 2.475 9 GHz	Auto Tune
10 dB/div Ref 20.00 dBm				-38.180 dBm	
Log Trace 1 Pass		Ť			
					Center Freq
10.0					1.263000000 GHz
0.00					Start Freq
-10.0					30.000000 MHz
-10.0					
-20.0					
					Stop Freq 2.49600000 GHz
-30.0					2.496000000 GHZ
				1 1	
-40.0					CF Step 246.600000 MHz
-40.0 ut bin hap, this of this way but				the solution of the second	Auto Man
-50.0 Anarahyu. Ligar (Lards) a diri bir bir bir bir bir bir bir bir bir	ALCOLOU OF				
					Freq Offset
-60.0					0 Hz
-70.0					Scale Type
					Scale Type
Start 0.030 GHz				Stop 2.496 GHz	Log <u>Lin</u>
#Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	3.096 ms (5161 pts)	
MSG			STAT	US	

Plot 7-170. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



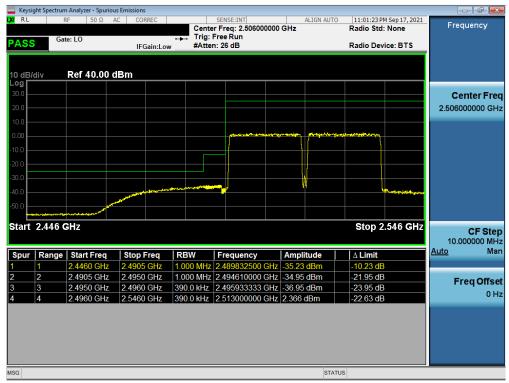
Plot 7-171. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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www.www.com.com.com.com.com.com.com.com.com.com							
LX RL RF 50Ω AC	CORREC	SENS		ALIGN AUT		E 1 2 3 4 5 6	Frequency
PASS	PNO: Fast ↔→ IFGain:Low	Trig: Free F Atten: 10 d	Run	•	TYP		
	IFGain:Low	Atten. 100	10	M	kr1 26.58		Auto Tun
10 dB/div Ref 0.00 dBm					-39.8	61 dBm	
Log Trace 1 Pass		Y					
							Center Fre
-10.0							21.00000000 GH
-20.0							Start Fre
-30.0							15.00000000 GH
-30.0						. 1	
-40.0						♦ *	Oton Eng
					A Date State	and the first of the second	Stop Free 27.00000000 GH
-50.0	and all the set of the set of the set of	the local states of the	a Mandra ann an 1946 an 1946 an 1966 an 1966 an 1966 an 1976 a Tha an tao an	and the second s			27.00000000 GH
in the second	and the second						
-60.0							CF Stej 1.20000000 GH
							Auto Ma
-70.0							
							Freq Offse
-80.0							он
00.0							
-90.0							Scale Type
Start 15.000 GHz					Stop 27	.000 GHZ	Log <u>Li</u>
#Res BW 1.0 MHz	#VBW	3.0 MHz			30.40 ms (2	4001 pts)	
MSG				STA	TUS		

Plot 7-172. Conducted Spurious Plot (ULCA LTE B41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-173. Lower ACP Plot (ULCA LTE B41(PC2) - 20MHz QPSK - Full RB)

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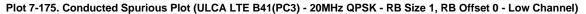
			rious Emiss										
K/RL	F	RF 50 Ω	AC	CORREC		Canta	SENSE:INT	000000		ALIGN AUTO		5 PM Sep 17, 2021 td: None	Frequency
	Cat	te: LO					Free Run	8000000	GHZ		Radio S	ta: None	, , , , , , , , , , , , , , , , , , , ,
PASS	S	le: LO		IFGain:L	-		n: 26 dB				Radio D	evice: BTS	
10 dB/	(din	Ref 40.00	dBm										
		Kei 40.00	, abiii										
30.0												_	Center Fred
20.0													2.68000000 GH;
10.0													
0.00		1 martine					1						
10.0							- H			1			
-20.0													
-30.0													
		1		0.0									
10 0 V	and the particulation of the second									State of the local division of the local div			
	and a start of the second s										and the second	Property line	
-40.0 🖆 -50.0 —	and a second second												
-50.0											Cto		
-50.0	2.64 GI										Sto	p 2.74 GHz	
50.0 Start	2.64 GI	Hz											10.000000 MH
50.0 Start	2.64 GI	HZ Start Freq		op Freq			Frequen	icy	Ampl		∆ Limi		10.000000 MH
50.0 Start Spur	2.64 GI	Hz Start Freq 2.6400 GH	z 2.69	900 GHz	z 390	.0 kHz	Frequen 2.686166	icy 667 GH;	z 3.128	dBm	∆ Limit	dB	10.000000 MH: <u>Auto</u> Mar
50.0 Start Spur 1 2	2.64 GI	Hz Start Freq 2.6400 GH 2.6900 GH	z 2.69 z 2.69	9 <mark>00 GHz</mark> 910 GHz	z <mark>390</mark> z 390	. <mark>0 kHz</mark> .0 kHz	Frequen 2.686166 2.690105	icy 6667 GHz 000 GHz	z <mark>3.128</mark> z -34.03	dBm dBm	∆ Limit -21.87 -24.03	<mark>1B</mark> 1B	10.000000 MH <u>Auto</u> Mar
-50.0 Start Spur 1 2 3	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH	z 2.69 z 2.69 z 2.69	900 GHz 910 GHz 950 GHz	z <mark>390</mark> z 390 z 1.00	.0 kHz .0 kHz)0 MHz	Frequen 2.686166 2.690105 2.691113	667 GHz 000 GHz 333 GHz	z 3.128 z -34.03 : -31.20	dBm dBm dBm	∆ Limit -21.87 -24.03 -21.20	18 18 18	10.000000 MH <u>Auto</u> Mar Freq Offse
50.0 Start Spur 1 2 3 4	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH 2.6950 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz 100 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113 2.696000	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	Δ Limit -21.87 -24.03 -21.20 -19.02	<mark>18</mark> 18 18 18	10.000000 MHz <u>Auto</u> Mar Freq Offset
-50.0 Start Spur 1 2	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	∆ Limit -21.87 -24.03 -21.20	<mark>18</mark> 18 18 18	CF Step 10.00000 MHz <u>Auto</u> Man Freq Offset 0 Hz
50.0 Start Spur 1 2 3 4	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH 2.6950 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz 100 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113 2.696000	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	Δ Limit -21.87 -24.03 -21.20 -19.02	<mark>18</mark> 18 18 18	10.000000 MHz <u>Auto</u> Man Freq Offset
50.0 Start Spur 1 2 3 4	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH 2.6950 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz 100 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113 2.696000	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	Δ Limit -21.87 -24.03 -21.20 -19.02	<mark>18</mark> 18 18 18	10.000000 MH <u>Auto</u> Mar Freq Offse
50.0 Start Spur 1 2 3 4	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH 2.6950 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz 100 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113 2.696000	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	Δ Limit -21.87 -24.03 -21.20 -19.02	<mark>18</mark> 18 18 18	10.000000 MH <u>Auto</u> Mar Freq Offse
50.0 Start Spur 1 2 3 4	2.64 GI	Hz 2.6400 GH 2.6900 GH 2.6910 GH 2.6950 GH	z 2.69 z 2.69 z 2.69 z 2.69 z 2.71	900 GHz 910 GHz 950 GHz 100 GHz	z 390 z 390 z 1.00 z 1.00	.0 kHz .0 kHz 00 MHz 00 MHz	Frequen 2.686166 2.690105 2.691113 2.696000	icy 667 GHz 000 GHz 333 GHz 000 GHz	z 3.128 z -34.03 : -31.20 z -32.02	dBm dBm dBm dBm	Δ Limit -21.87 -24.03 -21.20 -19.02	<mark>18</mark> 18 18 18	10.000000 MH <u>Auto</u> Mar Freq Offse

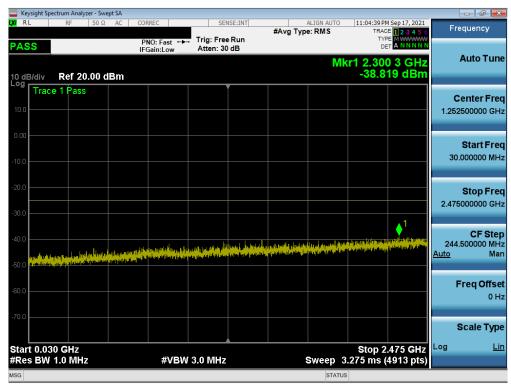
Plot 7-174. Upper ACP Plot (ULCA LTE B41(PC2) - 20MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	EUT Type:	
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Keysight Spectrum											
LR	F 50 Ω	AC	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO		M Sep 17, 2021	Fr	equency
			PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 50			e. Ruis	TY			
	ef 40.00 d	dBm					Mk	r1 2.516 17.2	00 GHz 60 dBm		Auto Tu
30.0	1.										Center Fi 3000000 G
10.0										2.49	Start F 6000000 (
0.00										2.69	Stop F
	N Majilana			alariyya tarara di biri Tara ya jarara ya sa	r filmi filmi ya jerina 1949 - Aliferia		i na pinya (jina tinya A ije Alasiya (ilan	al an sing a san san san san san san san san san s		19 <u>Auto</u>	CF S 400000 r
40.0											Freq Off (
50.0											Scale Ty
enter 2.5930								Span 1	31.0 14112	Log	
Res BW 1.0	MHz		#VBW	/ 3.0 MHz			Sweep	1.315 ms	(4933 pts)		





Plot 7-176. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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🔤 Keysight Spectrum Analyzer -										
LXURL RF 5	0Ω AC C	ORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Sep 17, 2021	Frequ	ency
PASS		PNO:Fast ↔⊷ FGain:Low	Trig: Free Atten: 30		•		TY	PE MWWWWW ET A NNNNN		
		FGain:Low	Atten: 30	ub		ML	(r1 14.77	3.5.047	Au	to Tune
10 dB/div Ref 20.0	0 dBm					IVIP	-30.9	69 dBm		
Log Trace 1 Pass										
										ter Freq
10.0									8.845000	0000 GHz
0.00										
0.00									St	art Freq
-10.0									2.69000	0000 GHz
-20.0									St	op Freq
								1	15.000000	
-30.0								n 11 0000	10.000000	
	وساور الراير ال	te del la differencia alla	Mada ana art 1.	فليستر محمد والمح	and the second started and the second and the	al ^{ti} ndentingentite		and a second		CF Step
-40.0 muchthere alle hand	and the second secon	المردهينية المريسة والأريط	and the second second	الإسلامية بتلازيهم والا	مى يەلى <u>م ياقتۇ ئىلام بىما</u> ر م	u , a, diantati	وغائلته فحنصناكر الأور			0000 GHz
									<u>Auto</u>	Man
-50.0										
-60.0									Fre	q Offset
-60.0										0 Hz
-70.0										
									Sca	ale Type
									Log	Lin
Start 2.690 GHz #Res BW 1.0 MHz		#\/B\M	3.0 MHz		8	ween 2	24.84 ms (2	.000 0112	_	
MSG		# ¥ D ¥ ¥	0.0111112			STAT		aloari pto)		
						JIAI				

Plot 7-177. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



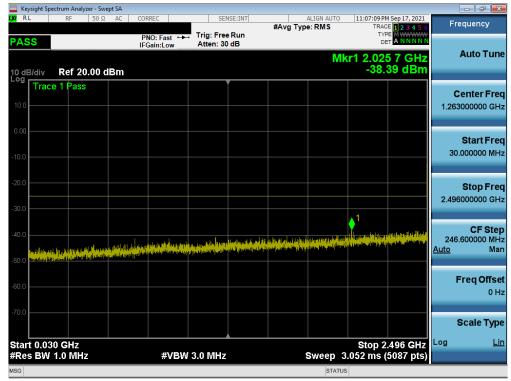
Plot 7-178. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 119 of 242
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Keysight Spectrum Analyzer - Swept SA						
L RF 50 Ω AC	CORREC	SENSE:INT	#Avg Typ	ALIGN AUTO e: RMS	11:06:25 PM Sep 17, 2021 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run Atten: 50 dB			DET A N N N N N	
10 dB/div Ref 40.00 dBm				Mk	r1 2.603 00 GHz 16.731 dBm	Auto Tune
30.0		N				Center Freq 2.593000000 GHz
10.0		^				Start Freq 2.496000000 GHz
-10.0						Stop Freq 2.69000000 GHz
	na je dina da stiroteni e da se se Pravi preve na se terre patrikana				a di tanan si kina si kata kata kata kata kata kata kata kat	CF Step 19.400000 MHz <u>Auto</u> Man
-40.0						Freq Offsel 0 Hz
-50.0						Scale Type
Start 2.49600 GHz #Res BW 1.0 MHz	#VBW 3	3.0 MHz		Sweep	Stop 2.69000 GHz 1.315 ms (4933 pts)	Log <u>Lin</u>
MSG				STATU		

Plot 7-179. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-180. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 120 of 242
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	ctrum Analyzer - Swept							- 7 -
LXU RL	RF 50 Ω	AC CORREC	SEI	NSE:INT	ALIGN AU Avg Type: RMS		Sep 17, 2021	Frequency
PASS		PNO: Fa IFGain:Lo			• //	TYP		
		IFGalli:Lo	JW Atten. or	, ub	N	lkr1 14.70	5 GHz	Auto Tune
10 dB/div	Ref 20.00 dB	m				-30.1	12 dBm	
Log Trace	e 1 Pass							Center Freq
10.0								8.84500000 GHz
								0.040000000 0112
0.00								
								Start Freq 2.69000000 GHz
-10.0								2.09000000 GH2
-20.0								
20.0							1	Stop Freq 15.00000000 GHz
-30.0								15.00000000 GH2
	a 11	فمرتفظ مخرفتها وتعرال	hand and a state of the second states of the second	the sheat as a late	and the construction of the	and the standard and a second		CF Step
-40.0 (1971) - 40.0			a distanti di si su	and the second	a a la califica de la calificación	a na sina a marana a marana da sina da serie da	1644.	1.231000000 GHz
-50.0								<u>Auto</u> Man
-50.0								
-60.0								Freq Offset
								0 Hz
-70.0								O a si a T
								Scale Type
Start 2.69						Stop 15	000 GHz	Log <u>Lin</u>
#Res BW	1.0 MHz	#	VBW 3.0 MHz		Sweep	24.62 ms (2	4621 pts)	
MSG					ST	ATUS		

Plot 7-181. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



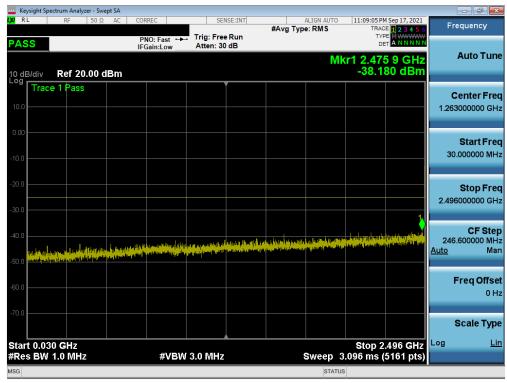
Plot 7-182. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 101 of 040	
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	sight Spe		nalyzer - Sv										
L <mark>XI</mark> L		RF	50 Ω	2 AC	CORRE	EC		ENSE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Sep 17, 2021	Frequency
):Fast ↔ in:Low	Trig: Fre Atten: 5			Mk	۲۲ ס 12.670		Auto Tune
10 dB Log r	/div	Ref	40.00	dBm							16.3	09 dBm	
30.0								Ĭ					Center Freq
												1	2.593000000 GHz
20.0													Start Freq 2.496000000 GHz
10.0													2.49600000 GH2
0.00											ſ		Stop Freq 2.69000000 GHz
-10.0										J. I.		N I	CF Step
ľ							ded production of the					, With Hard	19.400000 MHz <u>Auto</u> Man
-30.0													
-40.0													Freq Offset 0 Hz
-50.0 -													
													Scale Type
	2.49										Stop 2.6	9000 GHz	Log <u>Lin</u>
	BW	1.0 N	IHZ			#VBV	V 3.0 MH:	2			1.315 ms	4933 pts)	
MSG										STAT	US		

Plot 7-183. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



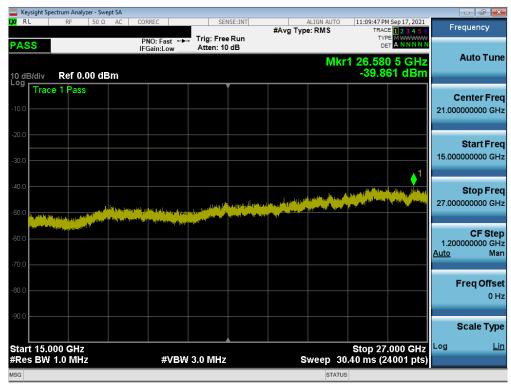
Plot 7-184. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	eport S/N: Test Dates: EUT Type:			Dogo 122 of 242
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	ectrum Analyzer - Swe										
LXIRL	RF 50 Ω	AC CO	RREC	SEI	ISE:INT	#Avg Typ	ALIGN AUT		M Sep 17, 2021	Free	quency
PASS			NO: Fast 🔸	Trig: Free Atten: 30				T			
TASS		IF	Gain:Low	Atten: 30	dB			-	,	4	uto Tune
	B - C -						IVI	kr1 14.73	00 dBm		
10 dB/div Log	Ref 20.00 d	IBM				_		-01.1			
Trac	e 1 Pass									Ce	nter Freq
10.0										8.8575	00000 GHz
0.00											
											Start Freq
-10.0										2.7150	00000 GHz
-20.0										:	Stop Freq
									1	15.0000	00000 GHz
-30.0								an best and pressound lived			
	in a contrata	الالبعاد الرووان	a sociality for the		, apple of the second s	A dector Chattala		and a state in the state of the	and the second se		CF Step
-40.0		الادا الدريساني ومتم	n fa the sufficient sufficiency	a Baile all coald de la	Annalitation	A COLUMN AND A COL					00000 GHz
-50.0										<u>Auto</u>	Man
-50.0											_
-60.0										Fr	eq Offset
-00.0											0 Hz
-70.0											
10.0										S	cale Type
				<u> </u>							
Start 2.71								Stop 1	7.000 GHZ	Log	Lin
#Res BW	T.U MIHZ		#VBV	/ 3.0 MHz		\$		24.57 ms (2	2457 T pts)		
MSG							STA	ATUS			

Plot 7-185. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



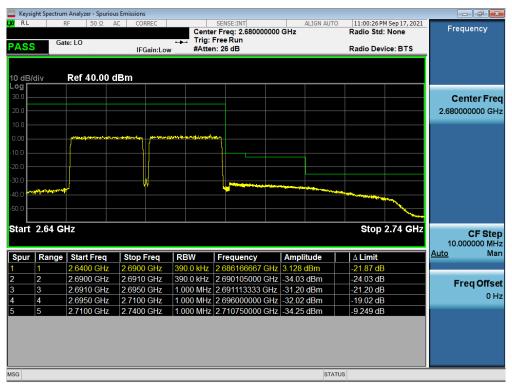
Plot 7-186. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMS901U	Pecud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Spu	rious Emissio	ns						
LX/RL	RF 50 Ω	AC C	ORREC		SENSE:INT r Freq: 2.506000000 Free Run	ALIGN AUTO	Radio Std:	Sep 17, 2021	Frequency
PASS	Gate: LO		FGain:Lov		n: 26 dB		Radio Devi	ice: BTS	
	1								
10 dB/div	Ref 40.00	0 dBm							
Log 30.0									Center Freq
20.0									2.506000000 GHz
10.0									
0.00					A Contraction of the owner owner	manipa photos and	-		
-10.0									
-20.0									
-30.0									
-40.0			Secondary	meren and the second second		W	l	b us as lates	
		- Martin Martin							
-50.0									
Start 2.4	46 GHz						Stop 2	.546 GHz	CF Step 10.000000 MHz
Spur Ra	inge Start Freq	Stop	Freq	RBW	Frequency	Amplitude	∆ Limit		<u>Auto</u> Man
1 1	2.4460 GH)5 GHz		2.489832500 GHz		-10.23 dB		
2 2	2.4905 GH		50 GHz		2.494610000 GHz		-21.95 dB		Freq Offset
	2.4950 GH		60 GHz		2.495933333 GHz		-23.95 dB		0 Hz
-			60 GHz	390 0 kHz	2.513000000 GHz	2 366 dBm	-22.63 dB		0112
3 3 4 4	2.4960 GH	2 2.540		000.0 1112					
-	2.4960 GH	Z 2.540							

Plot 7-187. Lower ACP Plot (ULCA LTE B41(PC3) - 20MHz QPSK - Full RB)



Plot 7-188. Upper ACP Plot (ULCA LTE B41(PC3) - 20MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Uplink CA Configuration n30-n77

		PCC					SCC					
PCC Band	PCC Bandwidth [MHz]	PCC (UL) channel	Mod.	PCC UL RB#/Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) channel	Mod.	SCC UL RB#/Offset	PCC Conducted Power [dBm]	SCC Conducted Power [dBm]	Inter-Band ULCA Total Tx. Power (dBm)
			π/2 BPSK	1/39				π/2 BPSK	1/205	21.01	20.77	23.9
			QPSK	50/0				QPSK	270/0	20.17	20.00	23.1
	10	Mid	QPSK	1/13	~ 77	100	Mid	QPSK	1/68	20.80	20.71	23.77
n30	10	Mid	QPSK	1/26	n77	100	Mid	QPSK	1/137	[dBm] [dBm] / 205 21.01 2 70 / 0 20.17 2 1 / 68 20.80 2 / 137 20.86 2	20.83	23.86
			QPSK	1/39				QPSK	1/205	20.89	20.82	23.87
			16Q	1/39				16Q	1/205	20.88	20.69	23.8

Table 7-189. Conducted Power Data (ULCA NR Bands n30 – n77)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:			
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Uplink CA Configuration n41-n66

		PCC					SCC					
PCC Band	PCC Bandwidth [MHz]	PCC (UL) channel	Mod.	PCC UL RB#/Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) channel	Mod.	SCC UL RB#/Offset	Power	SCC Conducted Power [dBm]	Inter-Band ULCA Total Tx. Power (dBm)
			π/2 BPSK	1/205				π/2 BPSK	1/162	22.31	20.77	24.62
		Low	QPSK	270/0		Low		QPSK	216/0	21.32	20.11	23.77
			QPSK	1/68			Low	QPSK	1/54	21.77	20.44	24.17
		LOW	QPSK	1/137			LOW	QPSK	1/108	21.86	20.77	24.36
			QPSK	1/205	n66			QPSK	1/162	22.14	20.57	24.44
			16Q	1/205		40		16Q	1/162	22.02	20.33	24.27
		Mid	π/2 BPSK	1/68			Mid	π/2 BPSK	1/54	21.98	19.77	24.02
			QPSK	270/0				QPSK	216/0	19.23	19.10	22.18
n41	100		QPSK	1/68				QPSK	1/54	22.02	19.82	24.07
1141	100	IVIIG	QPSK	1/137				QPSK	1/108	20.67	20.01	23.36
			QPSK	1/205				QPSK	1/162	20.38	20.25	23.33
			16Q	1/68				Mod. SCC UL RB#/Offset PCC Conducted Power [dBm] SCC Power [dBm] π/2 BPSK 1/162 22.31 20.7 QPSK 216/0 21.32 20.7 QPSK 1/54 21.77 20.4 QPSK 1/162 22.31 20.7 QPSK 1/54 21.77 20.4 QPSK 1/162 22.14 20.7 QPSK 1/162 22.14 20.7 QPSK 1/162 22.02 20.3 QPSK 1/162 22.02 20.3 Mod. 1/162 22.02 20.3 QPSK 1/54 21.98 19.3 QPSK 1/108 20.67 20.0 QPSK 1/108 20.67 20.0 QPSK 1/108 20.7 20.4 QPSK 1/108 20.7 20.7 QPSK 1/108 20.67 20.0 QPSK 1/108 20.7 20.7 QPSK <	19.80	23.88		
			π/2 BPSK	1/137				π/2 BPSK	1/108	21.77	20.48	24.18
			QPSK	270/0		40 Mid QPSK 1/54 QPSK 1/108 QPSK 1/108 QPSK 1/162 16Q 1/54 π/2 BPSK 1/108 QPSK 216/0	21.49	20.11	23.86			
		High	QPSK	1/68			High	QPSK	1/54	21.88	20.34	24.19
		ingli	QPSK	1/137			ingli	QPSK	1/108	22.03	20.58	24.38
			QPSK	1 / 205				QPSK	1/162	22.08	20.43	24.34
			16Q	1/137				16Q	1/108	22.04	20.19	24.22

Table 7-190. Conducted Power Data (ULCA NR Bands n41 – n66)

FCC ID: A3LSMS901U	PctEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Uplink CA Configuration n41-n71

		PCC					SCC					
PCC Band	PCC Bandwidth [MHz]	PCC (UL) channel	Mod.	PCC UL RB#/Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) channel	Mod.	SCC UL RB#/Offset	PCC Conducted Power [dBm]	SCC Conducted Power [dBm]	Inter-Band ULCA Total Tx. Power (dBm)
			π/2 BPSK	1/205				π/2 BPSK	1/79	21.26	19.91	23.65
		Low	QPSK	270/0			Low	QPSK	100/0	20.89	19.57	23.29
			QPSK	1/68				QPSK	1/26	21.18	19.71	23.52
	-		QPSK	1/137			LOW	QPSK	1/53	21.18	19.70	23.51
			QPSK	1/205	n71			QPSK	1/79	21.22	19.80	23.58
			16Q	1/205		SCC band SCC [MHz] SCC (UL) channel Mod. SCC UL RB#/Offset Control RB#/Offset Control RB#/Offset Low π/2 BPSK 1 / 79 0 QPSK 100 / 0 0 0 QPSK 1/26 0 0 QPSK 1 / 79 16Q 1 / 79 16Q 1 / 79 16Q 1 / 79 QPSK 100 / 0 0 0 QPSK 100 / 0 0 0 QPSK 100 / 0 0 0 QPSK 100 / 0 0 0		16Q	1/79	21.01	19.60	23.37
		Mid	π/2 BPSK	1/205			Mid	π/2 BPSK	1/79	22.17	19.87	24.18
			QPSK	270/0				QPSK	100/0	21.67	19.62	23.78
n41	100		QPSK	1/68				QPSK	1/26	22.22	19.78	24.18
1141	100	IVIIU	QPSK	1/137				QPSK	1/53	22.18	19.70	24.12
			QPSK	1/205				QPSK	1/79	22.32	19.99	24.32
			16Q	1/205			21.99	19.89	24.08			
			π/2 BPSK	1/68	n71 20 Mid QPSK 1/3 QPSK 1/3 16Q 1/3 R/2 BPSK 1/3 QPSK 1/3 DC 1/3 QPSK 1/3 DC 1/3 QPSK 1/3 DC 1/3 QPSK 1/3 DC 1/3 D	1/26	21.68	19.88	23.88			
			QPSK	270/0				QPSK	100/0	21.41	19.67	23.64
		High	QPSK	1/68			High	QPSK	1/26	21.73	19.95	23.94
		nign	QPSK	1/137			півц	QPSK	1/53	21.67	19.72	23.81
			QPSK	1/205				QPSK	1/79	21.45	19.66	23.66
			16Q	1/68				16Q	1/26	21.63	19.94	23.88

Table 7-191. Conducted Power Data (ULCA NR Bands n41 – n71)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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7.6 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level for Band 30 is > $43 + 10 \log 10$ (P[Watts] at 2300-2305MHz & 2345-2360MHz, > $55 + 10 \log 10$ (P[Watts]) at 2320-2324MHz & 2341-2345MHz, > $61 + 10 \log 10$ (P[Watts]) at 2324-2328MHz & 2337-2341MHz, > $67 + 10 \log 10$ (P[Watts]) at 2288-2292MHz & 2328-2337MHz, and > $70 + 10 \log 10$ (P[Watts]) at frequencies < 2288MHz & >2365MHz.

The minimum permissible attenuation level for Band 7 and 41 is as noted in the Test Notes on the following page.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 6.0

Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- 4. VBW \geq 3 x RBW
- 5. Detector = RMS
- 6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
- 7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-5. Test Instrument & Measurement Setup

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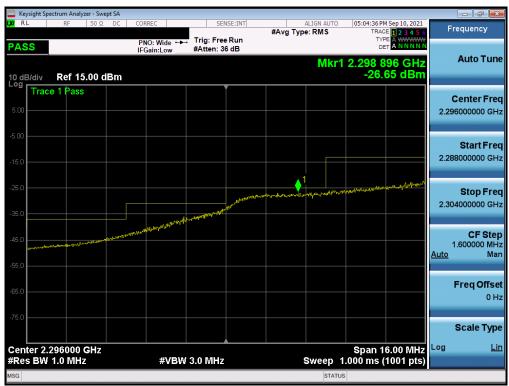
- 1. Per 27.53(a)(5) in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
- 2. Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.
- 3. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

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	ctrum Analyzer										
X/RL	RF	50 Ω DC	CORREC	SENSE	:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	Sep 10, 2021	F	requency
PASS			PNO: Wide ↔ IFGain:Low	Trig: Free R #Atten: 36 d				TYP DE			A
10 dB/div Log	Ref 25.0	00 dBm					Mkr1	2.304 9 -28.	68 GHz 54 dBm		Auto Tun
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15.0										2.30)5000000 GH
5.00											
											Start Fre
-5.00										2.30)1000000 GH
15.0											Oton Eng
					j					2.30	Stop Fre
-25.0					-f ⁿ						
35.0	and the second	www.energenetersel	Harris and a some	and the state of t							CF Ste 800.000 kH
										<u>Auto</u>	800.000 Kr Ma
45.0											
55.0											Freq Offs
											UF
-65.0											Scale Typ
Center 2.3	205000-0	U						Enon 9		Log	L
Res BW		ΠZ	#VBW	430 kHz			Sweep 1	span 8. 3.33 ms (1	000	9	
SG							STATUS	3			

Plot 7-192. Lower Band Edge Plot (LTE Band 30 - 10MHz QPSK - Full RB - Ant B)



Plot 7-193. Extended Lower Band Edge Plot (LTE Band 30 - 10MHz QPSK – Full RB – Ant B)

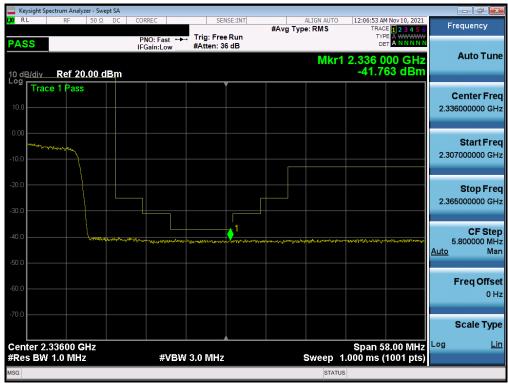
FCC ID: A3LSMS901U	Portest*	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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	Spectrum Analyz	er - Swept SA	4										
KAN RL	RF	50 Ω D(CORREC		SEN	NSE:INT	#Avg Ty	ALIGN AUTO		M Sep 10, 2021	F	requency	
PASS			PNO: N IFGain	Vide ↔→ Low	Trig: Free #Atten: 3				TYI Di				
10 dB/div	Ref 25	.00 dBn	n					Mkr1	2.315 (-29.)32 GHz 63 dBm		Auto Tune	
Log Tra	ace 1 Pass											Center Fred	
5.00	*****	nege Marthan	Ny 78 I Y Ny Tan a Amang	without the							2.31	Start Free	
-15.0					h,	1					2.31	Stop Fred 9000000 GH	
-35.0					Υų 	Contraction of the second	สาวสารส ุษท าวไปสายไปสายไ	nakleyndet wersyneter	and the second	anter and a state of the state	<u>Auto</u>	CF Stej 800.000 kH Ma	
-45.0												Freq Offse 0 H	
-65.0												Scale Typ	
	2.315000								Span 8	.000 MHz	Log	<u>Lir</u>	
	N 120 kHz			#VBW -	430 kHz					(1001 pts)			
ISG								STATU	S				

Plot 7-194. Upper Band Edge Plot (LTE Band 30 - 10MHz QPSK - Full RB - Ant B)



Plot 7-195. Extended Upper Band Edge Plot (LTE Band 30 - 10MHz QPSK - Full RB - Ant B)

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	trum Analyzer - S						
X/RL	RF 50	ΩDC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	05:09:09 PM Sep 10, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS			PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB	- //	DET A WWWWW	
10 dB/div Log	Ref 25.00	dBm			Mkr1	2.305 000 GHz -25.307 dBm	Auto Tune
15.0 Trace	1 Pass						Center Freq 2.305000000 GHz
-5.00						an an ann an ann an ann an ann an ann an a	Start Freq 2.303000000 GHz
-15.0				1 and			Stop Freq 2.307000000 GHz
-35.0 	ngalyhen dae da gad da	en fakanfi	-manipust-make	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			CF Step 400.000 kHz <u>Auto</u> Man
-55.0							Freq Offset 0 Hz
-65.0							Scale Type
Center 2.3 #Res BW (05000 GH; 62 kHz	Z	#VBW	220 kHz	Sweep 6	Span 4.000 MHz 5.667 ms (1001 pts)	Log <u>Lin</u>
MSG					STATUS	3	

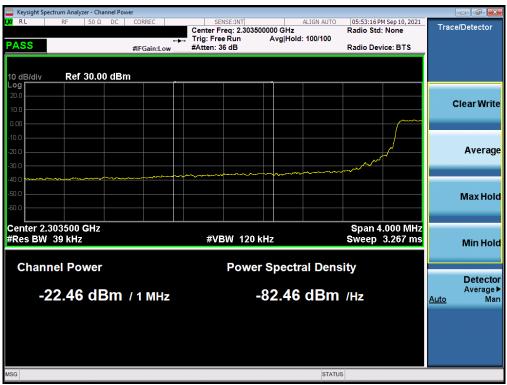
Plot 7-196. Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB - Ant B)



Plot 7-197. Extended Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB - Ant B)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ elected	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-198. Extended Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB – Ant B)



Plot 7-199. Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB – Ant B)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	pectrum Analyze		SA										
<mark>(</mark> RL	RF	50 Ω	AC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO	01:28:47 AM TRACE	Sep 16, 2021	Fr	equency
PASS				PNO: Fa IFGain:L	ast ↔⊷ .ow	Trig: Fre #Atten: 3				TYPE	A WWWWW A NNNNN		
0 dB/div	Ref 20.	00 dE	Im						Mkr1	2.320 0	50 GHz I0 dBm		Auto Tun
	e 1 Pass						Ĭ					c	enter Fre
10.0												2.33	5000000 GH
0.00													Start Fre
10.0												2.30	7000000 GH
20.0												0.26	Stop Fre
30.0		* VILVI	<u>∲</u> 1									2.30	5000000 GF
40.0			'Whyne	h								5	CF Ste .800000 MH
50.0				"And Bland	had the second	૬	and reason			to and the second second	****	<u>Auto</u>	Ma
io.o												I	Freq Offs
^{70.0}													01
													Scale Typ
	.33600 GH	lz		#	¢VBW	3.0 MHz			Sweep 1	Span 58 .000 ms (1	3.00 MHz 1001 pts)	Log	L
SG									STATUS				

Plot 7-200. Extended Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB - Ant B)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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IGN AUTO 07:31:06 PM Sep 10, 2021 Radio Std: None Frequency Radio Device: BTS	ALIGN AUTO			Emissions	n Analyzer - Spuriou		
Radio Device: BTS) GHz	SENSE:INT ter Freq: 2.50000000 : Free Run		CORREC	RF 50Ω D		<mark>0</mark> RL
		en: 36 dB		IFGain:Lov		s	PAS
				Bm	Ref 40.00 d	//div	10 dB
Center Fre							- og 30.0
2.500000000 GH							20.0
							10.0
- Martine - Ma							0.00
							10.0
							20.0
							30.0
March Marcal			month m.	مرور میرور میرو میرو	مسمر		
		N/N			⁰		40.0
		- ^v (V				50.0
Stop 2.525 GHz CF Ste					GHz	2.475 C	Start
516.000000 MH							
de 🛛 🛆 Limit Auto Ma	Amplitude	Frequency	RBW	Stop Freq	Start Freq	Range	Spur
		z 2.483680000 GHz		2.4905 GHz	2.4750 GHz	1	1
Eredonse		z 2.495780000 GHz		2.4960 GHz	2.4905 GHz	2	2
3m -20.27 dB		z 2.499000000 GHz		2.4990 GHz	2.4960 GHz	3	3
Bm -19.19 dB		2.499770000 GHz		2.5000 GHz	2.4990 GHz	4	4
Sm -22.21 dB	2.791 dBm	2.506884058 GHz	240.0 kHz	2.5250 GHz	2.5000 GHz	5	5

Plot 7-201. Lower ACP Plot (LTE Band 7 - 20MHz QPSK - Full RB)



Plot 7-202. Upper ACP Plot (LTE Band 7 - 20MHz QPSK - Full RB)

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	ght Spectrum																	
K <mark>XI</mark> RL	R	RF 50	ΟΩ	DC	CORR	EC		Cente		SE:INT eq: 2.50000	0000		ALIGN AUT	0	07:48:15 P	4 Sep 10, 2021		Frequency
							+	Trig:	Free	Run		0112						
PASS					IFGa	ain:Lov	N	#Atte	n: 36	dB					Radio Dev	ice: BTS		
10 dB/c	div	Ref 40	.00	dBm														
Log																		
30.0																		Center Fre
20.0																	2.5	00000000 GH
10.0 —																		
0.00											l	~~ <u>~</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		7				
-10.0														Ţ				
-20.0										Í								
-30.0				~	~~~~.	-	whe	•//	WY,	4				ļ	MAN IN .			
-40.0 —			mar	~/				•							ՙ՟ՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠ	, hunder have been a served as the served of		
-50.0																		
	0.475.6														0 40	505 O U-		
start	2.475 G	϶ĦΖ													Stop 2	.525 GHz		CF Step
																	Auto	3.750000 MH
Spur	Range				op Fi		RE			equency		Ampli			∆ Limit		Auto	IVIAI
1		2.4750			905 (88175000					-9.897 dB			
2	2	2.4905			960 (95890000					-20.09 dB			Freq Offse
3 4	-	2.4960			990 (000 (98340000 99180000					-16.88 dB			он
	4 5	2.5000			250 (_			11594203					-23.01 dB			
5	5	2.3000	OHZ	2.0	200 (0112	2-1	.0 KHZ	2.0	11004200	OHZ	0.001	abm		-21.40 GD			
														_				
ISG													STA	TUS	5			

Plot 7-203. Lower ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB)



Plot 7-204. Upper ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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0 dB/div og 0.0 0.0 0.0 0.0	/	Ref 40.00	dBm								
10.0											
											Center Fre 2.500000000 G⊢
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0.0					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	h		՝ ՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝՝	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
0.0			and the second		V					^I Wyland	
tart 2.	.475 G	iHz							Stop 2	.525 GHz	CF Ste 2.500000 MH
Spur   F	Range	Start Freq	Stop F	req	RBW	Frequency	A	nplitude	∆ Limit		<u>Auto</u> Ma
1		2.4750 GHz	2.4905	GHz	1.000 MHz	2.490345000	GHz -4(	).22 dBm	-15.22 dB		
2		2.4905 GHz	2.4960	GHz	1.000 MHz	2.495780000	GHz -3	.70 dBm	-18.70 dB		Freq Offs
3		2.4960 GHz	2.4990			2.498160000			-12.37 dB		
4		2.4990 GHz				2.499880000			-17.05 dB		UF
5		2.5000 GHz	2.5250	GHz	240.0 kHz	2.507850242	GHz 5.4	91 dBm	-19.51 dB		

Plot 7-205. Lower ACP Plot (LTE Band 7 - 10MHz QPSK - Full RB)



Plot 7-206. Upper ACP Plot (LTE Band 7 - 10MHz QPSK – Full RB)

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X/RL			us Emissions					- 7
KL	R	RF 50 Ω	DC CORREC		SENSE:INT r Freq: 2.50000000 Free Run	ALIGN AUTO	08:10:18 PM Sep Radio Std: No	
PAS	S		IFGain:Lo		n: 36 dB		Radio Device:	BTS
10 dB	Idio	Ref 40.00	dBm					
-og [	NUIV	Kei 40.00						
30.0								Center Fr
20.0								2.50000000 G
10.0					marrielline Torthe			
0.00								
10.0								
20.0								
30.0						wwwy		
40.0				America	- <mark>\ `</mark>			
50.0					. F	- Willy		
L						100 No.	har were the second second	
start	t 2.475 G	2117					Stop 2.52	25 GHz CF St
- All		302						1.250000 M
		Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	
Spur	r Range	Start Freq 2.4750 GHz	Stop Freq 2.4940 GHz	1.000 MHz	2.494000000 GH	-40.07 dBm	-15.07 dB	1.250000 M
Spur	r Range 1 2	<b>Start Freq</b> <b>2.4750 GHz</b> 2.4940 GHz	2.4940 GHz 2.4960 GHz	1.000 MHz 1.000 MHz	2.494000000 GH 2.495980000 GH	-40.07 dBm -31.59 dBm	-15.07 dB -18.59 dB	1.250000 M Auto M
Spur 1 2 3	r Range 1 2 3	Start Freq           2.4750 GHz           2.4940 GHz           2.4960 GHz	2.4940 GHz 2.4960 GHz 2.4990 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.49400000 GH 2.495980000 GH 2.497290000 GH	-40.07 dBm -31.59 dBm -21.83 dBm	-15.07 dB -18.59 dB -11.83 dB	Auto Freq Offs
<b>Spur</b> 1 2 3	r Range 1 2 3 4	Start Freq           2.4750 GHz           2.4940 GHz           2.4960 GHz           2.4990 GHz	2.4940 GHz 2.4960 GHz 2.4990 GHz 2.5000 GHz	1.000 MHz 1.000 MHz 1.000 MHz 91.00 KHz	2.49400000 GH: 2.495980000 GH: 2.497290000 GH: 2.499880000 GH:	<ul> <li>-40.07 dBm</li> <li>-31.59 dBm</li> <li>-21.83 dBm</li> <li>-28.08 dBm</li> </ul>	-15.07 dB -18.59 dB -11.83 dB -18.08 dB	1.250000 M Auto M
<b>Spur</b> 1 2 3 4 5	r Range 1 2 3	Start Freq           2.4750 GHz           2.4940 GHz           2.4960 GHz	2.4940 GHz 2.4960 GHz 2.4990 GHz	1.000 MHz 1.000 MHz 1.000 MHz 91.00 KHz	2.49400000 GH 2.495980000 GH 2.497290000 GH	<ul> <li>-40.07 dBm</li> <li>-31.59 dBm</li> <li>-21.83 dBm</li> <li>-28.08 dBm</li> </ul>	-15.07 dB -18.59 dB -11.83 dB	Auto Freq Offs
<b>Spur</b> 1 2 3	r Range 1 2 3 4	Start Freq           2.4750 GHz           2.4940 GHz           2.4960 GHz           2.4990 GHz	2.4940 GHz 2.4960 GHz 2.4990 GHz 2.5000 GHz	1.000 MHz 1.000 MHz 1.000 MHz 91.00 KHz	2.49400000 GH: 2.495980000 GH: 2.497290000 GH: 2.499880000 GH:	<ul> <li>-40.07 dBm</li> <li>-31.59 dBm</li> <li>-21.83 dBm</li> <li>-28.08 dBm</li> </ul>	-15.07 dB -18.59 dB -11.83 dB -18.08 dB	Auto Freq Offs

Plot 7-207. Lower ACP Plot (LTE Band 7 - 5MHz QPSK - Full RB)



Plot 7-208. Upper ACP Plot (LTE Band 7 - 5MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST Proved to be post of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keys Keys	ight Spect					250			OFN	- ANT		1		_	2.04.50		17.0004		
RL.	1	RF	50 Ω	DC	COR	KEC		Cente		GE:INT g: 2.50600	00000	GHz	ALIGN AUTO		adio St		one 17, 2021	F	requency
PAS		Gate: LO					+	Trig:	Free	Run									
AS	<u> </u>				IFG	ain:Lov	N	#Atte	n: 30	dB				Ra	adio D	evice	BTS		
10 dB	/div	Ref	40.00	) dBr	n														
Log 30.0																			
																			Center Fre
20.0																		2.5	06000000 GH
10.0										All shares and shares		way wayson	an a	وياسمون	-				
0.00										{~~~~~					- (	<b>\</b> —			
-10.0										-									
-20.0																			
-30.0						1114	ALL MAR	المراجع المراجع	1							mark	Marana.		
			Albert	MARINE V	phase in the	and a		la di an	" <mark>-</mark> "							-	Li hallahaa		
-40.0	whereast	and the second	e a a a a a a a a a a a a a a a a a a a																
-50.0	- Martin																		
L	2.471														Oton	2.51	21 GHz		
Start	2.47	0HZ													Stop	2.57	21 982		CF Ste
																		Auto	5.000000 MH Ma
Spur	Rang		t Freq		top F		RE			quency		Ampl			Limit				
2	2		10 GH: 05 GH:		4905 4950					9785000 4760000					2.163 ( ).992 (				
3	3		50 GH		4960					5826667				_	3.21 0				Freq Offse
4	4		60 GH		5210					1875000					6.17 c				0 H
ISG	_	_	_	_	_	_	-	_	-		_	_	STAT	us	_	-			
			_	_		_			_				STAT		_				

Plot 7-209. Lower ACP Plot (LTE Band 41(PC2) - 20MHz QPSK - Full RB )



Plot 7-210. Upper ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST Proud to be port of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		n Analyzer - Spuri						
PASS		RF 50 Ω te: LO	DC CORREC	+++ Trig:	SENSE:INT Freq: 2.503500000 Free Run n: 30 dB	ALIGN AUTO	12:22:45 AM Sep 17, 2021 Radio Std: None Radio Device: BTS	Frequency
10 dB/d Log ┏	'div	Ref 40.00						
30.0 — 20.0 —								Center Freq 2.503500000 GHz
10.0 0.00								
-20.0				مورومورومورومورومورومورومورومورومورومور	1 1			
-40.0								
Start	2.477 0	GHz					Stop 2.515 GHz	CF Step 3.750000 MHz
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	<u>Auto</u> Mar
1	1	2.4773 GHz	2.4905 GHz	1.000 MHz	2.489837500 GHz	-27.74 dBm	-2.735 dB	
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494865000 GHz	-24.94 dBm	-11.94 dB	Freq Offse
3	3	2.4950 GHz	2.4960 GHz	300.0 kHz	2.495850000 GHz	-27.19 dBm	-14.19 dB	
4	4	2.4960 GHz	2.5148 GHz	300.0 kHz	2.507625000 GHz	7.452 dBm	-17.55 dB	0 H:
MSG	_					STATU	JS	

Plot 7-211. Lower ACP Plot (LTE Band 41(PC2) - 15MHz QPSK - Full RB)



Plot 7-212. Upper ACP Plot (LTE Band 41(PC2) - 15MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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X/ RLT	R	Analyzer - Spuri F 50 Ω	ious Emissions DC CORREC	Cente	SENSE:INT r Freq: 2.50100000 Free Run	ALIGN AUTO	Radio Std: None	Frequency
<b>PASS</b> 10 dB/di	iv	Ref 40.00	IFGain:	Low #Atte	n: 26 dB		Radio Device: BTS	-
- <b>og</b> 30.0 20.0								Center Fre 2.501000000 GH
0.00						and and a standard for the standard		
-20.0								
-40.0	~							
Start 2	2.484 G	SHz					Stop 2.509 GHz	2.500000 MH
Spur	Range	Start Freq	Stop Free	RBW	Frequency	Amplitude	∆ Limit	<u>Auto</u> Ma
1 1		2.4835 GHz			2.490255000 GHz		-4.630 dB	
2 2		2.4905 GHz			2.495000000 GHz		-9.752 dB	Freq Offs
3 3	3	2.4950 GHz	2.4960 GH	z 200.0 kHz	2.495993333 GHz	-30.05 dBm	-17.05 dB	0+
4 4	4	2.4960 GHz	2.5085 GH	z 200.0 kHz	2.499875000 GHz	7.083 dBm	-17.92 dB	UF

Plot 7-213. Lower ACP Plot (LTE Band 41(PC2) - 10MHz QPSK - Full RB)



Plot 7-214. Upper ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB)

FCC ID: A3LSMS901U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 141 of 242
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	ight Spectru	m Analyz		ious Em	issions													
L <mark>XI</mark> RL		RF	50 Ω	DC	CORR	EC			r Fre	SE:INT eq: 2.498	500000		ALIGN AUT	0	12:52:50 Radio St	AM Sep 17, 2021 d: None		Frequency
PAS	S Ga	ate: LO			IFGa	in:Low		#Atten							Radio De	vice: BTS	_	
		_																
10 dB Log <b>[</b>	/div	Ref	40.00	dBn	n I												_	
30.0																		<b>Center Freq</b>
20.0																	2	.498500000 GHz
10.0										phillippealus	whopomet	isly garage	2					
0.00																		
-10.0 -																		
-20.0								ر <mark>المعمد ا</mark>	<b>.</b>				Western Barrow	.du.				
-30.0 -								<mark>ŋ(J</mark>	Y.					i Y I	and the work	<b>۳۱</b>		
-50.0 =	-															Wall and the		
L																		
Start	2.485	GHz													Stop	2.508 GHz		CF Step 1.250000 MHz
Spur	Range	Star	t Freq	S	top Fr	eq	RBW		Fre	quency	/	Ampli	itude		∆ Limit		Aut	<u>o</u> Man
1	1		45 GHz		4905 G					9032000					-10.53 d			
2	2		05 GHz		4950 G					9486500					-8.806 d			Freq Offset
3 4	3		50 GHz		4960 @					9578500					-9.829 d			0 Hz
4	4	2.490	60 GHz	Z.	5075 G	HZ	110.0	KHZ	2.4	9906666	07 GHZ	9.574	авт		-15.43 d	В		
MSG													STA	TUS				

Plot 7-215. Lower ACP Plot (LTE Band 41(PC2) - 5MHz QPSK - Full RB)



Plot 7-216. Upper ACP Plot (LTE Band 41(PC2) - 5MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 142 of 242
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Keys RL	ight Spectru			us Emis	sions CORRE(	-		CEI	NSE:INT			ALIGN AUTO	02:00:11	AM Sep 17, 2021	_	
KL.	1	KF J	0.35	DC	CURREN	-		ter Fi	req: 2.50600	0000 G		ALIGN AUTO	Radio Ste		F	requency
AS	Ga	te: LO							e Run				D			
A0.	<u> </u>				IFGair	n:Low	#At	ten: 3	0 dB				Radio De	vice: BTS		
IO dB	/div	Ref 40	0.00	dBm												
- <b>°g</b> 30.0																Contor Era
20.0																Center Fre
															2.5	06000000 GH
10.0									mound	an a			contraction and an	entral-minuture		
0.00																
10.0																
20.0																
30.0					_									114		
40.0	,	A North Contraction	nnungin	Mar Harris	alley Williams	College College	and the state	<del>سر الثلة</del>	<u>.</u>					<b>  </b> /%]		
-50.0 <b>4</b>	and the second s															
Ľ																
Start	2.475	GHz											Stop	2.517 GHz		CF Ste
																5.000000 MH
Spur	Range	Start F	req	St	op Fre	q	RBW	F	equency		Ampli	tude	∆ Limit		<u>Auto</u>	Ma
1	1	2.4750	GHz	2.4	905 GI	Ηz	1.000 MH	Iz 2.4	188200833	GHz -	32.56	dBm	-7.562 d	B		
2	2	2.4905			950 GI	_			94985000				-15.91 d			Freq Offs
3	3	2.4950			960 GI				95911667 (				-18.02 d			01
4	4	2.4960	GHz	2.5	170 GI	ΙZ	430.0 kH	z  2.4	99010000	GHz   6	6.429 (	dBm	-18.57 d	8		•1
				_												
SG												STATU	IS			

Plot 7-217. Lower ACP Plot (LTE Band 41(PC3) - 20MHz QPSK - Full RB)



Plot 7-218. Upper ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 142 of 242
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		Analyzer - Spu						
N RLT	6-1	F 50 Ω e: LO	DC CORREC	Trig:	SENSE:INT er Freq: 2.503500000 Free Run n: 26 dB	) GHz	03:46:14 AM Sep 17, 202 Radio Std: None Radio Device: BTS	Frequency
10 dB/c Log	div	Ref 40.00	) dBm					
30.0 — 20.0 —								Center Fre 2.503500000 GH
0.00						ŊŶġĔĸĿĿĬţĊĸĸĸĔĬŎŗĊĸĔĸŨ ^{ĸŢĸ} ĸĔĸŨ ^{ĸŢĸ} ĸĔĸŨĬ ^ĸ ĬĸŔĸĬŎĬĬĬŎŎĸĔĸĬŎ		
-10.0 -20.0								
-30.0	<u>,</u>	nnnitretere	rtreesadabballaag				Manage Aread And And And And And And And And And An	
	2.475 0						Stop 2.517 GH	CF Ste 3.750000 MH
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	Auto Ma
1		2.4750 GH			2.486960833 GHz		-7.072 dB	
2		2.4905 GH			2.493447500 GHz		-16.19 dB	<b>F</b> === 0#=
		2.4950 GH			2.495978333 GHz		-17.04 dB	Freq Offs
4	4	2.4960 GH	z 2.5170 GH		2.508530000 GHz		-18.81 dB	0 +

Plot 7-219. Lower ACP Plot (LTE Band 41(PC3) - 15MHz QPSK - Full RB)



Plot 7-220. Upper ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keysig XI RLT	Г   F	n Analyzer - Spuri F 50 Ω	ious Emissions DC CORREC		SENSE:INT r Freq: 2.50100000 Free Run	ALIGN AUTO	04:03:06 AM Sep 17, 2021 Radio Std: None	Frequency
PASS		te: LO	IFGain:Lo		n: 26 dB		Radio Device: BTS	
10 dB/ Log 30.0 20.0	div	Ref 40.00	dBm					Center Fred 2.501000000 GH:
10.0					of Harmon of Maryalars	alerial fragment		
-20.0 -30.0 -40.0		ware and the second				theory of the second seco	Histopromyterigt och at provide	
Start	2.475 (	GHz					Stop 2.517 GHz	CF Ster 2.500000 MH
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	<u>Auto</u> Ma
1	1	2.4750 GHz		1.000 MHz	2.488175000 GHz		-7.541 dB	
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494002500 GHz	-30.76 dBm	-17.76 dB	Freq Offse
3	3	2.4950 GHz	2.4960 GHz	200.0 kHz	2.495968333 GHz	-32.17 dBm	-19.17 dB	
4	4	2.4960 GHz	2.5170 GHz	200.0 kHz	2.502965000 GHz	6.412 dBm	-18.59 dB	0 H

Plot 7-221. Lower ACP Plot (LTE Band 41(PC3) - 10MHz QPSK - Full RB)



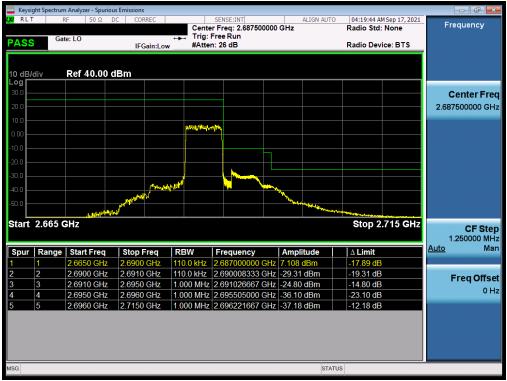
Plot 7-222. Upper ACP Plot (LTE Band 41(PC3) - 10MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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🔤 Keys	ight Spectrur			ous Emis	sions															
L <mark>XI</mark> RL			50 Ω	DC	CORR	EC		Talant	r Fre	SE:INT eq: 2.498	350000	0 GHz	ALIGN AU	то	04:17:4 Radio S		ep 17, 20 one	021	F	requency
PAS	S Ga	te: LO			IFGa	in:Lo	* 🕇	#Atte							Radio D	evice	e: BTS	_		
10 dB Log <b>[</b>	/div	Ref 4	0.00	dBm																
30.0																			,	Center Freq
20.0																			2.49	98500000 GHz
10.0										Lingh-Jong/H	awand									
0.00																				
-10.0							F													
-20.0																				
-30.0 -									5			had a firm	la la							
-40.0						and the second						17.6	WHEN	New.						
-50.0 –	*****	ane manage		and the owner of the owner.										_	"Ily gently	Hun I				
Start	2.475	GHz															17 Gł	ΗZ		CF Step 1.250000 MHz
Spur	Range	Start	Freq	St	op Fr	eq	RE	3W	Fre	quency	/	Amp	litude	1	∆ Limi	t			<u>Auto</u>	Man
1	1	2.4750			905 (					9031916					-12.11					
2	2	2.4905			950 (					9486500					-15.90					Freq Offset
3	3	2.4950			960 (					9593166		_			-15.74					0 Hz
4	4	2.4960	) GHz	2.5	170 (	jΗz	110	.0 kHz	2.5	0065500	JU GH	z 7.990	dBm		-17.01	dΒ				
MSG		_	_	_	_	_	_		_	_	_	_	ST	ATUS		_	_			

Plot 7-223. Lower ACP Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB)



Plot 7-224. Upper ACP Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB )

FCC ID: A3LSMS901U	PCTEST. Preud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		n Analyzer - Spuri												_	
XI RLT	T R	RF 50 Ω	DC C	ORREC			SENSE:INT Freq: 2.58000	0000		ALIGN AUTO	04:48 Radio		Sep 17, 2021	Fr	equency
	Gat	te: LO					ree Run	0000	GHZ		Raulo	Stu. I	None		
PASS	S	le. LO		FGain:Lo			: 30 dB				Radio	Devic	e: BTS		
		B-640.00													
10 dB/ Log <b>[</b>	/div	Ref 40.00	авт												
30.0															Center Fre
20.0														2.58	0000000 GH
10.0							Jacommond		بالد ويوشيه أر الرواه		Ydanariyadigadanayaa	~~			
0.00															
-10.0							{								
							1								
-20.0												1			
-30.0			*****				1					— k	Vierwayshipele		
-40.0 🗖							<u></u>								
-50.0															
-50.0															
	2.545 0	GHz									Sto	p 2.(	595 GHz		05.044
	2.545 0	GHz									Sto	p 2.:	595 GHz	1	
Start			L 840	Frog					Amplié	tudo -			595 GHz	1 Auto	.250000 MH
	Range	Start Freq		o Freq	RBW		Frequency		Amplit		∆ Lin	nit	595 GHz		<b>CF Stej</b> .250000 MH Ma
Start Spur 1	Range	Start Freq 2.5450 GHz	2.550	)0 GHz	1.000	MHz :	2.549858333		-39.95	dBm	∆ Lin -14.9	nit 5 dB	595 GHz	<u>Auto</u>	.250000 MH Ma
Start Spur 1 2	Range 1 2	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz	2.550 2.565	00 GHz 50 GHz	1.000 1.000	MHz : MHz :	2.549858333 2.553950000	GHz	-39.95 -31.34	dBm dBm	∆ Lin -14.9 -18.34	nit 5 dB 4 dB	595 GHz	<u>Auto</u>	.250000 MH Ma
Start Spur 1 2 3	Range 1 2 3	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz	2.550 2.565 2.569	00 GHz 50 GHz 90 GHz	1.000 1.000 1.000	MHz MHz MHz	2.549858333 2.553950000 2.568166667	GHz GHz	-39.95 -31.34 -30.43	dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4	nit 5 dB 4 dB 3 dB	595 GHz	<u>Auto</u>	.250000 MH Ma Freq Offse
Start Spur 1 2 3 4	Range           1           2           3           4	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz 2.5690 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667 2.569920000	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4 -23.3	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	.250000 MH Ma Freq Offse
Start Spur 1 2	Range 1 2 3	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	.250000 MH
Start Spur 1 2 3 4	Range           1           2           3           4	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz 2.5690 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667 2.569920000	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4 -23.3	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	.250000 MH Ma Freq Offse
Start Spur 1 2 3 4	Range           1           2           3           4	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz 2.5690 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667 2.569920000	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4 -23.3	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	.250000 MH Ma Freq Offse
Start Spur 1 2 3 4	Range           1           2           3           4	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz 2.5690 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667 2.569920000	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4 -23.3	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	.250000 M⊢ Ma Freq Offse
Start Spur	Range           1           2           3           4	<b>Start Freq</b> 2.5450 GHz 2.5500 GHz 2.5650 GHz 2.5690 GHz	2.550 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 90 GHz	1.000 1.000 1.000 220.0	MHz MHz MHz kHz	2.549858333 2.553950000 2.568166667 2.569920000	GHz GHz GHz	- <mark>39.95</mark> -31.34 -30.43 -33.32	dBm dBm dBm dBm	Δ Lin -14.9 -18.3 -20.4 -23.3	nit 5 dB 4 dB 3 dB 2 dB	595 GHz	<u>Auto</u>	E250000 MH Ma

Plot 7-225. Lower Band Edge Plot (LTE Band 38 - 20MHz QPSK - Full RB)



Plot 7-226. Upper Band Edge Plot (LTE Band 38 - 20MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST Proud to be part of & element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:		Page 147 of 242		
1M2109080099-05-R3.A3L	09/08/2021 - 11/10/2021	Portable Handset	ble Handset			
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		n Analyzer - Spur											
LXI RLT		kF 50 Ω	DC COI	RREC	++ Trig:	Free Run	577500000		ALIGN AUTO	Radio St		Fr	equency
PASS			IFO	Gain:Low	, #Atte	n: 26 dB				Radio D	evice: BTS		
10 dB/ Log 🔽	div	Ref 40.00	dBm	1									
30.0												c	enter Freq
20.0													7500000 GHz
10.0									******	And the second s			
0.00						1							
-10.0						(					$\mathbf{N}$		
-20.0													
-30.0 —		A second	*****		and the second design of the s						A share a second		
-40.0 🧰		a se a canta a											
-50.0													
∟ Start	2.551 (	SH7								Ston	2.589 GHz		
												1	CF Step .250000 MHz
Spur	Range	Start Freq	Stop	reg	RBW	Freque	ncv	Amplit	ude	∆ Limit		Auto	Mar
1	1	2.5513 GHz			1.000 MHz					-13.72 (			
2	2	2.5550 GHz			1.000 MHz					-17.43 (			Freq Offse
3	3	2.5650 GHz	2.5690	GHz	1.000 MHz	2.56836	0000 GHz	-29.53	dBm	-19.53 (	B		•
4	4	2.5690 GHz	2.5700	GHz	220.0 kHz	2.56983	3333 GHz	-32.12 (	dBm	-22.12 (	B		0 H:
5	5	2.5700 GHz	2.5888	GHz	1.000 MHz	2.58265	6250 GHz	11.18 d	Bm	-13.82 (	B		

Plot 7-227. Lower Band Edge Plot (LTE Band 38 - 15MHz QPSK - Full RB)



Plot 7-228. Upper Band Edge Plot (LTE Band 38 - 15MHz QPSK – Full RB)

FCC ID: A3LSMS901U	PCTEST. Proud to be part of @ elected	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 149 of 242	
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