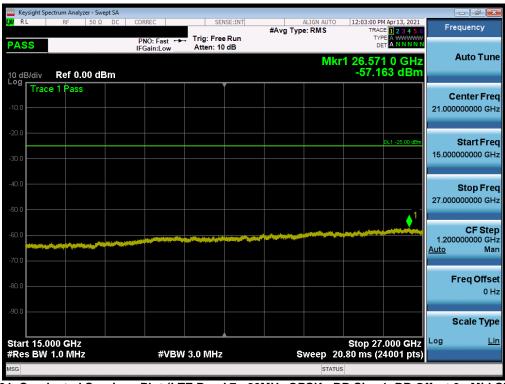


🔤 Keysight Sp	ectrum Analyz												- # ×
LXI RL	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO		PM Apr 13, 2021	Fre	quency
PASS				PNO: Fa	ast ↔	Trig: Fre Atten: 3				T) E			
				IF Gallin	_0w	71110111	, and		Mkr	1 14 28	8 0 GHz		Auto Tune
10 dB/div	Ref 20	.00 dl	Bm							-43.0	045 dBm		
Trac	e 1 Pass						Ĭ					C	enter Freq
10.0													000000 GHz
0.00													Start Freq
-10.0													000000 GHz
-20.0													Stop Freq
											DL1 -25.00 dBm	15.000	000000 GHz
-30.0													
-40.0											<u>1</u>	1.042	CF Step
								h	-	No. Contraction		1.243 Auto	Man
-50.0	J			A manual		****							
-60.0												F	req Offset
-00.0													0 Hz
-70.0													
												S	Scale Type
Start 2.57	0 GHz						A			Stop 1	5.000 GHz	Log	Lin
#Res BW	1.0 MHz	-		;	#VBW	3.0 MHz		s	weep 21	.55 ms (24861 pts)		
MSG									STATUS	;			

Plot 7-90. Conducted Spurious Plot (LTE Band 7 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-91. Conducted Spurious Plot (LTE Band 7 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyz												
lxi rl	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TF	PM Apr 13, 2021 ACE 1 2 3 4 5 6	Fre	equency
PASS				PNO: Fa	ist ↔→	Trig: Fre Atten: 3							
				II Guin.E					M	kr1 2.4	70 5 GHz		Auto Tune
10 dB/div	Ref 20	.00 dB	3m							-51.	367 dBm		
Log	e 1 Pass						Ĭ					- -	enter Freg
10.0													000000 GHz
0.00													Start Freq
-10.0												30.	000000 MHz
-10.0													
-20.0													Stop Freq
											DL1 -25.00 dBm	2.500	000000 GHz
-30.0													
-40.0													CF Step
40.0											4	247. <u>Auto</u>	000000 MHz Man
-50.0													
	فالحديد المعاديات المست	مراد از مردونان. مراد از مردونان			-	tersteinigen der erst	and the state of the		an the start of th	and a second		F	req Offset
-60.0													0 Hz
-70.0													
												5	Scale Type
Start 0.03	0 GHz						<u> </u>			Stop	2.500 GHz	Log	Lin
#Res BW				#	VBW	3.0 MHz			Sweep		2.300 GH2 (4941 pts)		
MSG									STAT				

Plot 7-92. Conducted Spurious Plot (LTE Band 7 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-93. Conducted Spurious Plot (LTE Band 7 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	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 63 of 169
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	Spectrum Analy										
LXI RL	RF	50 Ω D	C CORF	REC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Apr 13, 2021	Frequency
PASS			PN	O: Fast ↔ ain:Low	Trig: Free Atten: 10		•		TYF		
	_		IFG	ain:Low	Atten. It	, ab		Mk	1 26.19		Auto Tune
10 dB/div	Ref 0.	00 dBm							-57.5	21 dBm	
	ace 1 Pass					Ĭ					Center Freq
-10.0											21.000000000 GHz
-20.0										DL1 -25.00 dBm	Otort Error
										UL1 -25.00 dBm	Start Freq 15.00000000 GHz
-30.0											10.00000000000000
-40.0											
											Stop Freq 27.00000000 GHz
-50.0										4	27.000000000 GH2
										. ♦ '	CF Step
-60.0				and the second secon	-	and the second			and the second division of the second divisio		1.200000000 GHz
-70.0											<u>Auto</u> Man
-70.0											
-80.0											Freq Offset 0 Hz
											0 HZ
-90.0											Ocole Trme
											Scale Type
	.000 GHz								Stop 27	.000 GHz	Log <u>Lin</u>
	W 1.0 MH:	Z		#VBW	/ 3.0 MHz		S		-	4001 pts)	
MSG								STATU	S		

Plot 7-94. Conducted Spurious Plot (LTE Band 7 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

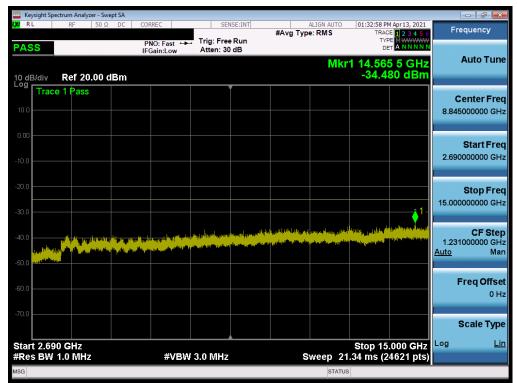
FCC ID: A3LSMF711U	Postest* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 64 of 169
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LTE Band 41(PC2)

- Key	ysight Spect	trum Analy:	zer - Swe	pt SA									
lxi Ri	L	RF	50 Ω	DC	CORREC		NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	Apr 13, 2021	Fre	quency
PAS	S				PNO: Fast ↔ IFGain:Low	Atten: 30				TYF DE (r1 2.44			Auto Tune
10 dE Log i	3/div	Ref 20	.00 d	Bm					IVII	-42.3	43 dBm		
208	Trace	1 Pass					Ĭ					C	enter Freq
10.0												1.252	500000 GHz
0.00													Start Freq
-10.0												30.0	000000 MHz
-20.0													Stop Freq
-30.0													000000 GHz
											1		CF Step
-40.0					والمتعاط أطريها والمالي	n an isterne en deline deline	ر. مىنارو(رايامەر	lagen mill kandinat. Akaa		بالمعرافا برياسي بالم	aine and a subject	244.9 <u>Auto</u>	500000 MHz Man
-50.0						و للمنظور ، والاور و	منة (الأصطاعة الأمريض علم إلى ا	an in the second se					
-60.0												F	req Offset 0 Hz
-70.0													
													cale Type
	t 0.030 s BW 1		2		#VB	V 3.0 MHz			Sweep 3	Stop 2 1.260 ms (-1 0 OH2	Log	Lin
MSG									STATU	-			

Plot 7-95. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



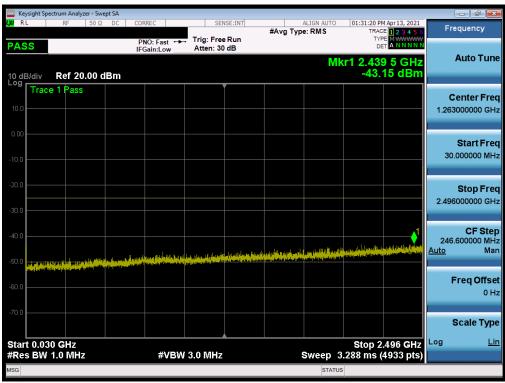
Plot 7-96. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF711U	POTEST* Prode to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 65 of 169
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	ctrum Analyz											
LXI RL	RF	50 Ω D	C COF	REC	SE	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Apr 13, 2021	Fr	equency
PASS				NO:Fast ↔ Gain:Low	Trig: Fre Atten: 10				TY			
								Mk	(r1 26.77	7 5 GHz		Auto Tune
10 dB/div	Ref 0.0	0 dBm							-48.5	53 dBm		
Log Trac	e 1 Pass					Ĭ						Center Freq
-10.0												0000000 GHz
-20.0												Start Freq
-30.0											15.00	0000000 GHz
-50.0												
-40.0												Stop Freq
											27.00	0000000 GHz
-50.0					والمتعالمين والمتعالم	والمقاد ومتشار ورغدهم	a and a state of the second	unestal hund	alige ang galogalan "Princ	And rates		
-60.0		and the second secon	rent de la competition de la competition La competition de la c	an a	a all a substantion	فرواف والأمير الأوراني		and and the pattern of	ala da serie da la constante de la constante d			CF Step
											1.20 Auto	0000000 GHz Man
-70.0												
												Freq Offset
-80.0												0 Hz
-90.0												
												Scale Type
Start 15.0	00 GHz								Stop 27	.000 GHz	Log	Lin
#Res BW				#VBW	/ 3.0 MHz		S	weep 2	20.80 ms (2	4001 pts)		
MSG								STAT	US			

Plot 7-97. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-98. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST* Proad to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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🔤 Keysight Sp	ectrum Analyz	er - Swept SA										d X
LXI RL	RF	50 Ω DC	CORF	REC		NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Apr 13, 2021	Freque	ency
PASS				O: Fast ↔ ain:Low	Trig: Fre Atten: 30				TYF			
								Mkr	1 14.89	75GHz	Aut	o Tune
10 dB/div	Ref 20.	.00 dBm	1						-34.4	41 dBm		
Log Trac	e 1 Pass					Ĭ					Cent	er Freg
10.0											8.845000	
0.00											Sta	art Freq
-10.0											2.690000	
-20.0											Sto	p Freq
										4	15.000000	000 GHz
-30.0										<u> </u>		
-40.0	ىرى ئۇرۇش					and a state of the	in the second	In the second	alling the state of the state o	and the second secon	1.231000	F Step
a particular	A CAN		والمراهمي	وأفريطاة يعاور والم	فيغافر وبالأستان رواب	ining a filling a tana ta balin a bia	,	a. 141. alutitar			<u>Auto</u>	Man
-50.0 m -³⁴⁶¹⁰	ALÍ											
-60.0											Fred	Offset
00.0												0 Hz
-70.0												
											Sca	Іе Туре
Start 2.69									Stop 15	.000 GHZ	Log	<u>Lin</u>
#Res BW	1.0 MHz			#VBW	/ 3.0 MHz		S			4621 pts)		
MSG								STATUS	3			

Plot 7-99. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



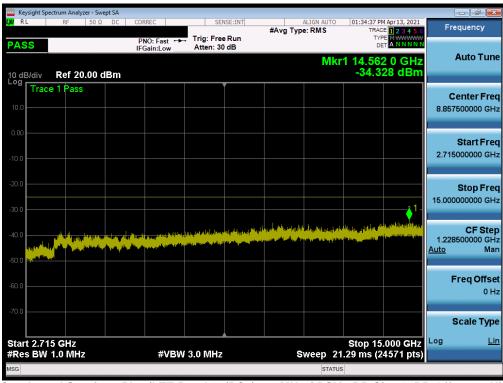
Plot 7-100. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST Proad to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 67 of 169
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Keysight Specific	ectrum Analyzei	- Swept SA									a 🗙
LXI RL	RF	50 Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	Apr 13, 2021	Frequen	су
PASS			PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 30				TYF			
							Mk	r1 2.13	5 5 GHz	Auto	Tune
10 dB/div Log	Ref 20.0	00 dBm						-42.8	33 dBm		
Trac	e 1 Pass)	Í					Center	r Frea
10.0										1.26300000	
0.00										Star	t Freq
-10.0										30.00000	0 MHz
-20.0											Freq
-30.0										2.49600000	00 GHz
								4		05	04.0
-40.0								<u> </u>		246.60000	
-50.0			والمراجع والمراجع والمراجع	وأساليا أحما إسارهما م					A PROPERTY	<u>Auto</u>	Man
and here		and a strength on the								_	
-60.0										Frequ	Offset 0 Hz
-70.0										Scale	Туре
								<u></u>	400.00		Lin
Start 0.03 #Res BW			#VB	N 3.0 MHz			Sweep 3	Stop 2 .288 ms (496 GHz 4933 pts)	9	<u>1</u>
MSG							STATUS	-			_

Plot 7-101. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-102. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	PCTEST Provide be port of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analy:													- ē 🗙
LX/ RL	RF	50 Ω	DC O	ORREC		SEI	ISE:INT	#Avg Typ	ALIGN AUT	ro 01:3		Apr 13, 2021	Fi	requency
PASS				PNO: Fa FGain:L	ist ⊶⊷ ow	Trig: Free Atten: 10					TYP	EMWWWWW TANNNN		
				Guine					Μ	kr1 24	.75	0 GHz		Auto Tune
10 dB/div	Ref 0.0	00 dBn	n							-4	9.2	10 dBm		
Log Trac	e 1 Pass					,								Center Freq
-10.0														0000000 GHz
-20.0														Start Freq
-30.0													15.00	0000000 GHz
-50.0														
-40.0														Stop Freq
										↓ ¹			27.00	0000000 GHz
-50.0				م المالية الم	والدو وبالم وسارية		وريعان الالر	مى مەربىرىي قال تەربى مەربىلەر بىرى قال تەربى	, _{Alexand} (filme	IN STATE AND IN STATE	H. Martin	AND NOT AND A DESCRIPTION OF A DESCRIPTI		
<mark>ตรีแสปรุญ</mark> -60.0 <mark>เสียงเป็นไ</mark>	nggal Connailly a connaille ann	telason (PARsona	an a			and the state of the		Na		hall a shareful				CF Step
	Land												1.20 <u>Auto</u>	0000000 GHz Man
-70.0														
														Freq Offset
-80.0														0 Hz
-90.0														
														Scale Type
Start 15.0	00 GH7									Sto	n 97	.000 GHz	Log	Lin
#Res BW				#	VBW	3.0 MHz		s	weep	20.80 n	ns (2	4001 pts)		
MSG									ST/	ATUS				

Plot 7-103. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

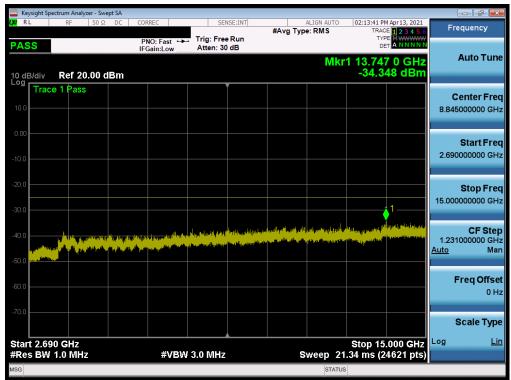
FCC ID: A3LSMF711U	PCTEST Prod to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 69 of 169
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LTE Band 41(PC3)/38

- Key		ectrum Ana	ilyzer - Swe	pt SA									
l XI RI	L	RF	50 Ω	DC C	ORREC	SE	NSE:INT	#Avg Typ	ALIGN AUTO		M Apr 13, 2021	E	requency
DAG					PNO: Fast +	🛻 Trig: Fre		#Avg iyp	e: RIVIS	TYP	E 1 2 3 4 5 6 E MWWWW A NNNN		
PAS	5				FGain:Low	Atten: 30) dB						Auto Tune
				_					Mk	r1 2.47	2 0 GHz 01 dBm		Auto Tune
10 dE Log I			20.00 d	Bm						-40.7			
	Trace	e 1 Pas	S										Center Freq
10.0													2500000 GHz
0.00													Start Freq
												3(Start Freq 0.000000 MHz
-10.0													5.000000 Mil 12
-20.0													
-20.0													Stop Freq
-30.0												2.47	5000000 GHz
											1		
-40.0												24	CF Step 4.500000 MHz
									ومراوا ودرا فرر بال	a bill and the state of		Auto	Man
-50.0		day for a suff					A REAL PROPERTY AND	Int distant instant					
													Freq Offset
-60.0													0 Hz
70.5													
-70.0													Scale Type
		0 GHz							_	Stop 2	.475 GHz	Log	Lin
	SBW	1.0 MH	12		#VB	W 3.0 MHz					4891 pts)		
MSG									STATUS				

Plot 7-104. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



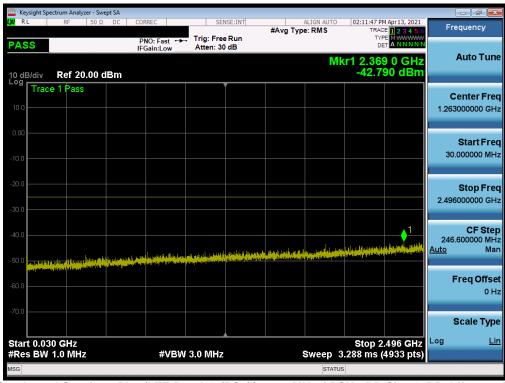
Plot 7-105. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		trum Analy												
lxi ri	L	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUT		M Apr 13, 2021	F	requency
PAS	S				PNO: IFGair	Fast ↔	Trig: Fre				TY	PE MWWWWW ET A NNNNN		
					IFGain	I:LOW	Atten. It	u B		M	kr1 25.94			Auto Tune
10 dE	3/div	Ref 0.	00 dB	m							-49.0	57 dBm		
Log	Trace	1 Pass	;					Ĭ						
-10.0														Center Freq 0000000 GHz
-10.0													21.00	0000000 GHZ
-20.0														
														Start Freq
-30.0													15.00	0000000 GHz
-40.0												<u>1</u>		Stop Freq
-50.0													27.00	0000000 GHz
-50.0			و او د	o contrata.	ەدلىقىيى	and data	والمراجعة والمراقيين	de la competencia de	أمومها بدون العابلي	^{Nation} Sector S	and a state of a state	telitine to south		
-60.0	and the second	Andreas and a second	nan sama	and a large	أقرارك أنتجيد ورد	elite a filipatea a	Local Integrate Associa	and a second second	ر است منطقات الم	a dan kasal dalam kasal Kasal dalam kasal dalam kasal dalam kasal dalam kasal dalam kasal dalam kasal dalam kas Kasal dalam kasal dalam kas			4.00	CF Step
	and a second t	1											Auto	Man
-70.0														
														Freq Offset
-80.0														0 Hz
-90.0														
-90.0														Scale Type
													Log	Lin
		00 GHz 1.0 MH				#VBM	3.0 MHz		-	ween	27 Stop 20.80 ms	.000 GHz	-	Lin
MSG	5 - 544	NO INITI				# ¥ D ¥ ¥	- 3. 0 1911 12			STA		-nor pts)		
				_						514				

Plot 7-106. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



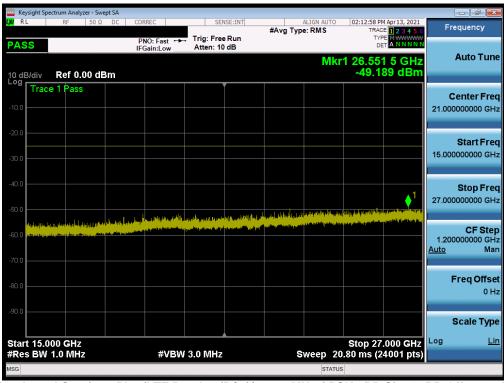
Plot 7-107. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyz												
LXI RL	RF	50 Ω	DC	CORREC		SEI	NSE:INT	#Avg Typ	ALIGN AUT e: RMS	TR	PM Apr 13, 2021 ACE 1 2 3 4 5 6	F	requency
PASS				PNO: F	ast ↔→	Trig: Free Atten: 30				٦			
				IF Gallin	LOW	7111011100			М	kr1 14 8	21 0 GHz		Auto Tune
10 dB/div	Ref 20	.00 dE	3m							-34.	711 dBm		
Log Trac	e 1 Pass												Contor From
10.0													Center Freq 5000000 GHz
												0.04	
0.00													Otherst Frank
												2.69	Start Freq 0000000 GHz
-10.0												2.03	0000000000112
-20.0													
												15.00	Stop Freq
-30.0											<u>^</u>	15.00	0000000 GH2
									i da da da la traca	under Marchelle geber der	and the state of t		CF Step
-40.0	P	in straige	क के ला	uta a single a single a	and the second secon	uring devices and failer T	a dina seletar di se di se di se di se di se Se di se d		i pica di supergi	a latel a filler da su a su de sa late		1.23	1000000 GHz
-50.0 p.a.		and the other of the	الم المراجع		5.0480 DE 10.							<u>Auto</u>	Man
-50.0													
-60.0													Freq Offset
													0 Hz
-70.0													
													Scale Type
Start 2.69											5.000 GHz		<u>Lin</u>
#Res BW	1.0 MHz	-		3	#VBW	3.0 MHz		S			(24621 pts)		
MSG									STA	TUS			

Plot 7-108. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



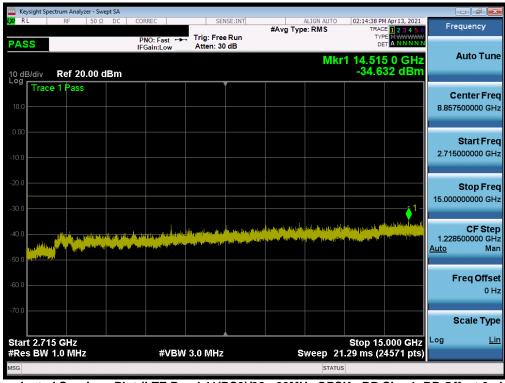
Plot 7-109. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keysight Spec	trum Analyzer -	Swept SA								
LXI RL	RF 50	Ω DC	CORREC	SEN	SE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	Apr 13, 2021	Frequency
PASS			PNO: Fast ++	. Trig: Free Atten: 30				TYF		
			II Gam.cow				Mk	r1 2.44	3 5 GHz	Auto Tune
10 dB/div	Ref 20.00	0 dBm						-42.9	13 dBm	
Log Trace	1 Pass									Center Freq
10.0										1.263000000 GHz
0.00										Start Freq
-10.0										30.000000 MHz
-10.0										
-20.0										Stop Freq
										2.496000000 GHz
-30.0										
-40.0									1	CF Step
					ud to booter	. In the second starts	ha dadarda di	Level Marthalton	a disk og ski ber parke	246.600000 MHz <u>Auto</u> Man
-50.0 Term eller			لدارويدا المحملات والمنابع			والمتنابية المتنادين	(and a fact of the second states)			
	and the state									Freq Offset
-60.0										0 Hz
-70.0										
										Scale Type
Start 0.030	GHz							Stop 2	.496 GHz	Log <u>Lin</u>
#Res BW 1			#VBW	3.0 MHz			Sweep 3	.288 ms (4933 pts)	
MSG							STATUS			

Plot 7-110. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-111. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	PCTEST [*] Pood to be part of @ identeed	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		ctrum Anal	yzer - Swe	pt SA										
l,XI RI	L	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Ty	ALIGN AUT pe: RMS		:56 PM Apr 13, 2021 TRACE 1 2 3 4 5 6	F	requency
PAS	S				PNO: IFGair	Fast ↔ h:Low	Trig: Fre Atten: 10			_				
10 dE		Dof 0	.00 dE							М	.kr1 26	589 0 GHz 9.225 dBm		Auto Tune
Log		e 1 Pas		ып			1	Y						
	Hace	= 11 as	5											Center Freq
-10.0													21.00	0000000 GHz
-20.0														
														Start Freq
-30.0													15.00	0000000 GHz
-40.0												<u>1</u>		Stop Freq
-50.0												Auto tek bartet lieu	27.00	0000000 GHz
	أرجلونه باولا	الرتيل المحمد ال	a nas Laikin	dia dela cont	() all the second	ister and shall		likitawa	nationalitation and a state of the state	n a state de la seconda de Na seconda de la seconda de	rayar Newsyara	an a		05.04
-60.0		t pilopiloti	a na an	فقر وأزهرته	أناقط بتعبر معر	والوالا إلى أنه	<u>والتصنية بالمتناقين و</u>	de fallen solden so Solden solden	all of the second			na a dhiste an a' chuile an a' chuile ain an	1.20	CF Step 0000000 GHz
70.0													<u>Auto</u>	Man
-70.0														
-80.0														Freq Offset 0 Hz
														UHZ
-90.0														Scale Type
		00 GHz				41/014						27.000 GHz		<u>Lin</u>
	SBW	1.0 MH	Z			#VBV	/ 3.0 MHz					s (24001 pts)		
MSG										STA	TUS			

Plot 7-112. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	Pood to be pet of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n30

C R		RF	er - Swept 50 Ω		CORREC		0.00	NSE:INT		ALIGN AUTO	00.57.52.5	M Apr 19, 2021	
u K		KF	20.75		CURREC				#Avg T	ype: RMS	TRA	CE 1 2 3 4 5 6	Frequency
PAS	S				PNO: Fast IFGain:Low		Trig: Free Atten: 30				TY D		
	3/div	Ref 20	.00 dE	3m						Mł	(r1 2.28 -48	2 5 GHz 72 dBm	Auto T
_og	Trace	1 Pass											Center F
													1.159000000
													1.10000000
													Start F
													30.0000001
20.0													Stop F
30.0													2.288000000
40.0												DL1 -40.00 dBm	CF S 225.800000
												1	225.800000 I Auto
	- Andrewski - A Andrewski - Andrewski - Andr	9.1.19 (P [.] 11)	water water and	- ang din sign to a									Freq Of
													(
													Scale T
	t 0.030				43.0					Cureen 2	Stop 2	2.288 GHz (4517 pts)	Log
sg	s BW 1	.0 WIH2			#VI	ວໜ່ວ.	.0 MHz			Sweep a		(4517 pts)	

Plot 7-113. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0)



Plot 7-114. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: A3LSMF711U	PCTEST. Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ht Spectre	um Analyz	er - Swej	ot SA										
L XI RL		RF	50 Ω	DC	CORRE	C	SE	NSE:INT	#Avg Typ	ALIGN AUTO		M Apr 19, 2021	Fr	equency
PASS						:Fast ↔ in:Low	Trig: Fre Atten: 10				TY D			Auto Tune
10 dB/d	liv -	Ref 0.0	0 dB	m						Mk	r1 26.15 -55.2	5 0 GHz 93 dBm		Auto Tune
-10.0	race 1	Pass												Center Freq
-20.0													15.000	Start Freq 0000000 GHz
-40.0												DL1 -40.00 dBm	27.000	Stop Freq 0000000 GHz
-60.0			~										1.200 <u>Auto</u>	CF Step 0000000 GHz Man
-80.0													-	F req Offset 0 Hz
-90.0														Scale Type Lin
Start 1 #Res E						#VBV	/ 3.0 MHz		s	weep 2	Stop 27 0.80 ms (2	.000 GHz 24001 pts)	Log	<u></u>
MSG										STATL				

Plot 7-115. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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Spectrum Analyzer 1 Swept SA	÷			Frequency
KEYSIGHT Input: RF R L Coupling: DC Align: Auto/No RF	Input Z: 50 Ω Atten: 30 d Corr CCorr Freq Ref: Int (S) NFE: Off	B PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS12345) Trig: Free Run A N N N N	1.250000000 GHz
Scale/Div 10 dB	Ref Level 2		Mkr1 2.147 2 GH: -39.14 dBn	Span 2.44000000 GHz
-og Trace 1 Pass				Zero Span
0.00				Full Span Start Freq
20.0				30.000000 MHz Stop Freq
				2.470000000 GHz
	and the state of the	dagi yan dalam ta sa dalam ta sa da	verifestilligeting the product of the Distribution of the Product	CF Step 244.000000 MHz
50.0				Auto Man
				Freq Offset 0 Hz
tart 0.030 GHz Res BW 1.0 MHz	#Video BV	V 3.0 MHz	Stop 2.470 GH Sweep 3.26 ms (4891 pts	
	May 06, 2021			Signal Track (Span Zoom)

Plot 7-116. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



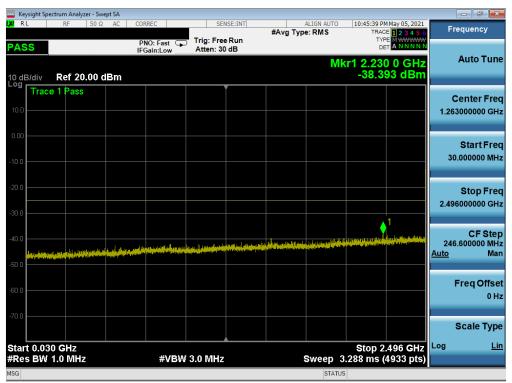
Plot 7-117. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF711U	PCTEST. Provid to be part of @ internet	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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L Coupling: DC Co Align: Auto/No RF	out Z: 50 Ω #Atten: 30 dB orr CCorr eq Ref: Int (S) E: Off	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
Spectrum v cale/Div 10 dB	Ref Level 20.00	dBm	Mkr1 26.280 0 GH -27.88 dBi	M Swept Span
Trace 1 Pass				Zero Span Full Span
0.00				Start Freq 15.00000000 GHz
			1	Stop Freq 27.00000000 GHz
10.0 The feature state of the last of the				AUTO TUNE CF Step
50.0				1.20000000 GHz Auto Man
70.0				Freq Offset 0 Hz
tart 15.000 GHz Res BW 1.0 MHz	#Video BW 3.0	MHz	Stop 27.000 GF Sweep ~23.0 ms (24001 pt	

Plot 7-118. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-119. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST. Poor lo las part ef @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyze	r - Swept SA	1								d X
X/RL	RF	50 Ω AC	1		_	#Avg Typ	ALIGN AUT e: RMS	TRA	PM May 05, 2021 CE 1 2 3 4 5 6 (PE M WWWWW	Freque	ncy
PASS	Ref 20.	00 dBm	IFG	IO: Fast 🕞 Gain:Low	Atten: 30		M	، kr1 15.00			o Tune
Log Trac	e 1 Pass									Cente 8.8450000	er Freq 000 GHz
-10.0										Sta 2.6900000	rt Freq 100 GHz
-20.0									1	Sto 15.0000000	p Freq 000 GHz
-40.0		d profile anno 193 Anno Anno Albert	a San Jana a Ba	an a	anta <mark>ny Kapapanjara</mark> ^{Mana} rahi panapatan	a da ang da a Sa ang da ang	a y y ang dalam dili sa	ay himo is polyty a tank bitay 		C 1.2310000 <u>Auto</u>	F Step 000 GHz Man
-60.0										Freq	Offset 0 Hz
-70.0 Start 2.69	IO GHz							Stop 1:	5.000 GHz		e Type <u>Lir</u>
#Res BW	1.0 MHz			#VBW	3.0 MHz	s	weep	24.62 ms (24621 pts)		
MSG							STA	TUS			

Plot 7-120. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-121. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	Post is be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	Freq Ref: Int (S) NFE: Off	Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run MWWWWW A N N N N N	1.263000000 GHz	ngs
Spectrum v cale/Div 10 dB	Ref Level 20.	00 dBm	Mkr1 2.424 0 GHz -38.35 dBm		
Trace 1 Pass				Swept Span Zero Span	
0.00				Full Span	
0.0				Start Freq 30.000000 MHz	
				Stop Freq 2.496000000 GHz	
			_ 1	AUTO TUNE	
0.0	anging the forest of the state	n de film fan de fering fan de feitige felder felder feringe b	an de sei en fordet de ser en d	CF Step 246.600000 MHz	
0.0				Auto Man	
				Freq Offset 0 Hz	
art 0.030 GHz Res BW 1.0 MHz	#Video BW 3	3.0 MHz	Stop 2.496 GHz Sweep 3.29 ms (4933 pts		

Plot 7-122. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-123. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	PCTEST Provid to be post of @ intersect	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Spectrum Analyzer 1 Swept SA	+					Frequen
KEYSIGHT Input: RF RL Coupling: DC Align: Auto/N	Corr CCorr	Atten: 10 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Run	wer (RMS <mark>1</mark> 23456 M WWWW ANNNNN	Center Frequency 21.000000000 GHz
1 Spectrum Scale/Div 10 dB		Ref Level 0.00	dBm	Mkr	1 25.959 5 GHz -48.71 dBm	Span 12.0000000 GHz
Log Trace 1 Pass					10.11 0.011	Swept Span Zero Span
-10.0						Full Span
-20.0						Start Freq 15.000000000 GHz
-30.0						Stop Freq
-40.0					<u> </u>	27.000000000 GHz
-50.0	de at deserve a del sin della se desiderate	Reliance solutions, and the second	and the property of the proper			AUTO TUNE
-60.0	and inclusion on a side of the distribution of the second se	in in the second se	a de la la capacita de la casa de			CF Step 1.200000000 GHz
-70.0						Auto
-80.0						Man Freq Offset
-90.0						0 Hz
Start 15.000 GHz		#Video BW 3.0	MHz		Stop 27.000 GHz	X Axis Scale Log

Plot 7-124. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	Postest* Post to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n41 (PC3)

Swept			+								₽	Frequency	· • ※
RL		Input: RF Coupling: DC Align: Auto	Input Z: Corr CC Freq Re NFE: Of	orr f: Int (S)	Atten: 30 dB			#Avg Type: F Trig: Free Ru	Power (RM In	AS <mark>123456</mark> MWWWWW ANNNNN	Center Freq 1.25000000 Span		Settings
1 Spe		•						M		278 4 GHz	2.44000000) GHz	
Scale Log	/Div 10 dE				Ref Level 20.	00 dBm			-	39.00 dBm	Swept S Zero Sp		
10.0	Trace	1 Pass									Full S	pan	
0.00											Start Freq 30.000000	MHz	
-10.0 · -20.0 ·											Stop Freq 2.47000000	00 GHz	
-30.0										▲ 1	AUTO	TUNE	
-40.0	und of the latest	in the state of the	مىمۇد <mark>ئىرزەردەر</mark> يەر بۇرورىرا	and the second		history southers	depictus completed com	ng an Amalana an Indonésia an An		ta na manana ang kana kang kang kang kang kang	CF Step 244.000000) MHz	
-60.0											Auto Man		
-70.0											Freq Offset 0 Hz		
	0.030 GHz BW 1.0 M				#Video BW 3	.0 MHz		Swe		top 2.470 GHz ms (4891 pts)	X Axis Scale Log Lin		
	5		? May 08 7:15:3	3, 2021 36 AM	\mathbb{D}						Signal Track (Span Zoom)		

Plot 7-125. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

Spect Swept	rum Analyz : SA	er 1 🔻	+								\$	Frequency		涤
RL		nput: RF Coupling: DC Align: Auto	Corr C	tef: Int (S)	Atten: 30 dB			#Avg Type: Po Trig: Free Run		123456 MWWWWW ANNNNN		Frequency 00000 GHz	Settings	6
1 Spe		v						Mkr		67 0 GHz	•	0000 GHz		
Scale Log	/Div 10 dB				Ref Level 20.	00 dBm			-31	.57 dBm		ept Span o Span		
10.0	Trace '	1 Pass									FI	ull Span		
0.00											Start Fre			
-10.0												00000 GHz		
-20.0											Stop Fre 15.0000	eq 000000 GHz		
-30.0					alde, of a star of the defined of the star		i.e.d.e.stasma	al and the second s	البطرين رس	dana kan filikan da	AU	TO TUNE		
-40.0						en ander ander ander ander ander ander		ana analahi sa hana. Mi ya shika si ba		a din printi Minarisi Adila	CF Step	00000 GHz		
-50.0											Aut Mar	o		
-60.0											Freq Off			
-70.0											0 Hz			
	2.690 GHz BW 1.0 MH				#Video BW 3	.0 MHz		Sweep		15.000 GHz (24621 pts)	X Axis S Log Lin	, ,		
	5		? May 7:16	08, 2021 5:00 AM	PA						Signal Ti (Span Zo			

Plot 7-126. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF711U	POINTEST. Provide be port of @ comment	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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EYSIGHT Input: RF L Coupling: DC Align: Auto	Input Z: 50 Ω Atten: 10 dB Corr CCorr Freq Ref: Int (S)	PNO: Fast Gate: Off IF Gain: Low	#Avg Type: Power (RMS 1 2 3 4 5 Trig: Free Run M WWWW	
PASS	NFE: Off	Sig Track: Off		Span
Spectrum v cale/Div 10 dB	Ref Level 0.00) dBm	Mkr1 25.758 5 GH -45.91 dB	12.0000000000112
^{0.0} Trace 1 Pass				Full Span
0.0				Start Freq 15.00000000 GHz
			1	Stop Freq 27.00000000 GHz
0.0				AUTO TUNE
				CF Step 1.20000000 GHz
				Auto Man
				Freq Offset 0 Hz
art 15.000 GHz Res BW 1.0 MHz	#Video BW 3.	0 MHz	Stop 27.000 G Sweep ~23.0 ms (24001 p	

Plot 7-127. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-128. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

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EYSIGHT L Coupling: DC Align: Auto	Input Z: 50 Ω A Corr CCorr Freq Ref: Int (S) NFE: Off	tten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RM Trig: Free Run	1S <mark>123456</mark> M₩₩₩₩₩ ANNNNN	0.04000000 GHZ	Settings
Spectrum v cale/Div 10 dB	Re	ef Level 20.00 d	IBm		530 5 GHz 32.31 dBm	12.0100000 0112	
Trace 1 Pass 0.0						Full Span Start Freq	
0.0						2.690000000 GHz Stop Freq 15.000000000 GHz	
	والمتلك والمروحين والمتعاقب المرواني	و المادية (مريسيون المريسيون) والمادية (مريسيون مريسيون) والمريسيون مريسيون مريسيون	Litan haifan da silan arandarian	a an a that was a second system of the transmission of the second system of the second s		AUTO TUNE CF Step 1.231000000 GHz	
						Auto Man	
10.0 tart 2.690 GHz	#	video BW 3.0 N	ЛНz	Ste	op 15.000 GHz	0 Hz X Axis Scale	

Plot 7-129. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-130. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF711U	PCTEST Proof to be part of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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EYSIGHT Input: RF L PASS	Input Z: 50 Ω Atten: 30 dE Corr CCorr Freq Ref: Int (S) NFE: Off	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run A N N N N N	1.263000000 GHz
Spectrum v			Mkr1 2.441 0 GHz	E. TOODOOD OT IL
cale/Div 10 dB	Ref Level 2	0.00 dBm	-38.96 dBm	Swept Span Zero Span
^{0.0} Trace 1 Pass				Full Span
				Start Freq 30.000000 MHz
0.0				Stop Freq 2.496000000 GHz
				AUTO TUNE
0.0 hethericitic depiction	ating same dia particular at stands di sila dina partamente instantini di	n meditersterningssprachtellerkers oder betreicherheite	n die verschie die beste die seine die die die die die die die die die di	CF Step 246.600000 MHz
				Auto Man
				Freq Offset 0 Hz
art 0.030 GHz Res BW 1.0 MHz	#Video BW	3.0 MHz	Stop 2.496 GHz Sweep 3.29 ms (4933 pts)	

Plot 7-131. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-132. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF711U	PCTEST. Proad to be part of @ vienness	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Spectrum Analyzer 1 Swept SA	• +			Fre
KEYSIGHT Input: RF R L Coupling: DO Align: Auto DV PASS	Input Ζ: 50 Ω Atten: 10 dB Corr CCorr Freq Ref: Int (S) NFE: Off	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off		21.00000000
1 Spectrum 🔹			Mkr1 25.792	12.000000000
Scale/Div 10 dB	Ref Level 0.0) dBm	-46.6	7 dBm Swept Spa Zero Span
Trace 1 Pass				Full Spar
-20.0				Start Freq
-30.0				15.000000000
-40.0				Stop Freq 27.00000000
and the second		a particular de la construcción de La construcción de la construcción d		
-00.0				CF Step 1.200000000 0
-70.0				Auto Man
-80.0				Freq Offset
				0 Hz

Plot 7-133. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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7.5 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 7-4. 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.

FCC ID: A3LSMF711U	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					
<mark>(/ RL</mark> RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:46:28 AM Apr 13, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 36 dB		DET A WWWWW	
			Mkr1	2.304 976 GHz -29.52 dBm	Auto Tun
O dB/div Ref 25.00 dBm		· · · · · · · · · · · · · · · · · · ·		20.02 dBm	
					Center Free
15.0					2.30500000 GH
5.00					
3.88			and the second sec	angereed where your leave and person a second	Start Free
-5.00					2.301000000 GH
-15.0					Stop Free
-25.0		11			2.309000000 GH
-25.0					
-35.0 manuna	ware and the ware and	~ let te the test			CF Stej 800.000 kH
					Auto Ma
-45.0					
55.0					Freq Offse
-55.0					0 H
-65.0					
					Scale Type
Center 2.305000 GHz				Span 8.000 MHz	Log <u>Li</u> i
#Res BW 120 kHz	#VBW	430 kHz	Sweep 4	.000 ms (1001 pts)	
ISG			STATUS	3	

Plot 7-134. Lower Band Edge Plot (LTE Band 30 - 10MHz QPSK - Full RB)



Plot 7-135. Extended Lower Band Edge Plot (LTE Band 30 - 10MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
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Keysight Spectrum Analyzer - Swept SA					- đ <mark>-</mark>
XIRL RF 50Ω DC	PNO: Wide ↔→	SENSE:INT	#Avg Type: RMS	11:48:21 AM Apr 13, 2021 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A NNNNN	Frequency
PASS 10 dB/div Ref 25.00 dBm	IFGain:Low	#Atten: 36 dB	Mkr1	2.315 016 GHz -28.58 dBm	Auto Tune
15.0 Trace 1 Pass					Center Fre 2.315000000 GH
5.00					Start Fre 2.311000000 GH
-15.0		1			Stop Fre 2.319000000 GH
45.0		- Marconne	mar and a second se		CF Ste 800.000 kł <u>Auto</u> Ma
55.0					Freq Offs 0 I
65.0					Scale Typ
Center 2.315000 GHz #Res BW 120 kHz	#VBW	430 kHz	Sweep 4	Span 8.000 MHz .000 ms (1001 pts)	Log <u>L</u>
ISG			STATU	6	

Plot 7-136. Upper Band Edge Plot (LTE Band 30 - 10MHz QPSK – Full RB)



Plot 7-137. Extended Upper Band Edge Plot (LTE Band 30 - 10MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST [•] Proad to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Keysight Spectrum Analyzer - Swept S.	A				
LXI RL RF 50 Ω D	C CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:51:26 AM Apr 13, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB	- //		Auto Tune
10 dB/div Ref 25.00 dBr	n		Mkr1	2.304 996 GHz -29.99 dBm	Autorune
Trace 1 Pass		Ĭ			Center Freq
15.0					2.305000000 GHz
5.00			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	······	Start Freq
-5.00					2.303000000 GHz
0.00					
-15.0					Stop Freq
-25.0		1			2.307000000 GHz
		.			05.04+
-35.0	m	hand the second se			CF Step 400.000 kHz
-45.0					<u>Auto</u> Man
					Freq Offset
-55.0					0 Hz
-65.0					
					Scale Type
Center 2.305000 GHz				Span 4.000 MHz	Log <u>Lin</u>
#Res BW 62 kHz	#VBW	220 kHz		.000 ms (1001 pts)	
MSG			STATU	s .	

Plot 7-138. Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB)



Plot 7-139. Extended Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB)

FCC ID: A3LSMF711U	PCTEST Proad to be part of @ identeed	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Keysight Spectrum An	50 Ω		CORREC			SENSE:INT		ALIGN AUTO	05:53:50 P	M Apr 16, 2021	_	
10	00 20	00	0010120			Freq: 2.303	00000 GHz	ALIGHT HOTO	Radio Std		Trac	e/Detector
				+		ree Run	Avg Hol	d: 100/100				
			#IFGain:l	.ow	#Atten	: 36 dB			Radio Dev	ice: BTS		
10 dB/div Re	ef 30.00	dBm										
	-1 JU.00	ubili		_					1			
20.0												
10.0												Clear Writ
0.00												
10.0												
20.0												Avera
									/	- A		
0.0									5			
10.0		A					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
50.0		00-0										Max Ho
50.0												Max HU
0.0												
enter 2.30350	0 GHz								Snan 4	.000 MHz		
tes BW 39 kHz					#VBW 120 kHz				3.267 ms			
					#VBVV 120 K112			Oncep	0.201 1113		Min Ho	
Channel P	ower					Powe	r Spect	ral Dens	sity			
												Detect
-28.1		m	4 646				.00 10) dBm	/11-			Average
-20.1	ง นม			12			-00.10		/62		<u>Auto</u>	М
G								07.7				
3								STATU	>			

Plot 7-140. Extended Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK - Full RB) - 2303-2304MHz



Plot 7-141. Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST Pool to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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	rum Analyzer - Sw								
LXI RL	RF 50 Ω	2 DC	CORREC		ISE:INT	#Avg Typ	ALIGN AUTO	05:48:44 PM Apr 16, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS			PNO: Fast • IFGain:Low	Trig: Free #Atten: 3				DET A WWWWW	
10 dB/div	Ref 20.00	dBm					Mkr1	2.328 112 GHz -46.13 dBm	Auto Tune
10.0 Trace	1 Pass								Center Freq 2.336000000 GHz
-10.0									Start Freq 2.307000000 GHz
-20.0									Stop Freq 2.365000000 GHz
-40.0		him	and a survey of the second sec		n fan sterne		ang mang ang ang kang kang kang kang kang kan		CF Step 5.800000 MHz <u>Auto</u> Man
-60.0									Freq Offset 0 Hz
-70.0									Scale Type
Center 2.33 #Res BW 1			#VB	W 3.0 MHz			Sweep 1	Span 58.00 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG							STATU	3	

Plot 7-142. Extended Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST [®] Proud to be part of @ vienneed	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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X RL	2 .	n Analyzer - Spurio RF 50 Ω	DC CORREC		SENSE:INT	ALIGN AUTO	12:04:56 PM Apr 13, 2021	
PASS		0 20 32	IFGain:Lov	Trig: I	r Freq: 2.500000000 Free Run h: 36 dB		Radio Std: None Radio Device: BTS	Frequency
10 dB/ Log Г	/div	Ref 40.00						
30.0 20.0								Center Free 2.500000000 GH:
-10.0 -10.00						ment-markethy mark	norman and a second sec	
-20.0 -30.0				ing a table to the second second				
-40.0		and a start and a start						
							Stop 2.525 GHz	
Start	2.475 0	GHz						516.000000 MH
Start Spur	2.475 C	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	CF SIE
Spur 1	Range	Start Freq 2.4750 GHz	2.4905 GHz	1.000 MHz	2.490345000 GHz	-30.28 dBm	Δ Limit -5.276 dB	516.000000 MH
Spur 1 2	Range 1 2	Start Freq 2.4750 GHz 2.4905 GHz	2.4905 GHz 2.4960 GHz	1.000 MHz 1.000 MHz	2.490345000 GHz 2.495890000 GHz	-30.28 dBm -26.68 dBm	Δ Limit -5.276 dB -13.68 dB	516.000000 MH Auto Ma
Spur 1 2 3	Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.4905 GHz 2.4960 GHz 2.4990 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.490345000 GHz 2.495890000 GHz 2.498850000 GHz	-30.28 dBm -26.68 dBm -24.83 dBm	Δ Limit -5.276 dB -13.68 dB -14.83 dB	Auto Ma
Spur 1 2 3 4	Range 1 2	Start Freq 2.4750 GHz 2.4905 GHz	2.4905 GHz 2.4960 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.490345000 GHz 2.495890000 GHz	-30.28 dBm -26.68 dBm -24.83 dBm	Δ Limit -5.276 dB -13.68 dB	516.000000 MH
Spur 1 2 3	Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.4905 GHz 2.4960 GHz 2.4990 GHz	1.000 MHz 1.000 MHz 1.000 MHz 360.0 kHz	2.490345000 GHz 2.495890000 GHz 2.498850000 GHz	-30.28 dBm -26.68 dBm -24.83 dBm -28.47 dBm	Δ Limit -5.276 dB -13.68 dB -14.83 dB	Er Ste 516.000000 MH Auto Ma

Plot 7-143. Lower ACP Plot (LTE Band 7 - 20MHz QPSK – Full RB)



Plot 7-144. Upper ACP Plot (LTE Band 7 - 20MHz QPSK – Full RB)

FCC ID: A3LSMF711U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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XI RL		F Analyzer - Spurio 50 Ω		ORREC		SENSE:INT		ALIGN AUTO		5 PM Apr 13, 2021		
PASS	6		1	FGain:Lo	Trig:	er Freq: 2.50000 Free Run en: 36 dB	0000 GHz			td: None evice: BTS	Frequenc	У
10 dB/	/div	Ref 40.00	dBm								-	
Log 30.0 -											Center 2.500000000	
10.0 - 0.00 - -10.0 -									η 			
-20.0 - -30.0 -			ward and a start and	~~~~~						physical spectra		
-50.0	2 475 0	SH7							Ston	2 525 GHz		
	2.475 0	GHz							Stop	2.525 GHz	CF \$	мн
		SHZ Start Freq	Stop	Freq	RBW	Frequency	Am	plitude	∆ Limi			мн
Start Spur	Range	Start Freq 2.4750 GHz	2.490)5 GHz	1.000 MHz	2.490500000	GHz -32.0	06 dBm	∆ Limi	t dB	5.000000	мн
Start Spur 1 2	Range	Start Freq	2.490		1.000 MHz		GHz -32.0	06 dBm	∆ Limi	t dB	5.000000 <u>Auto</u>	MH Ma
Start Spur 1 2 3	Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.490 2.496 2.499	05 GHz 60 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.490500000 2.495835000 2.498880000	GHz -32.0 GHz -28.1 GHz -24.8	06 dBm 18 dBm 81 dBm	∆ Limit -7.060 -15.18 -14.81	18 18 18	5.000000	Mai Mai
Start Spur 1 2 3 4	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz 2.4990 GHz	2.490 2.496 2.499 2.500	05 GHz 60 GHz 90 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490500000 2.495835000 2.498880000 2.499940000	GHz -32.0 GHz -28.1 GHz -24.8 GHz -30.8	06 dBm 18 dBm 81 dBm 86 dBm	Δ Limit -7.060 -15.18 -14.81 -20.86	1 <mark>8</mark> 18 18 18 18	5.000000 <u>Auto</u>	MH Ma
Start Spur 1 2	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.490 2.496 2.499 2.500	05 GHz 60 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490500000 2.495835000 2.498880000	GHz -32.0 GHz -28.1 GHz -24.8 GHz -30.8	06 dBm 18 dBm 81 dBm 86 dBm	∆ Limit -7.060 -15.18 (-14.81	1 <mark>8</mark> 18 18 18 18	5.000000 <u>Auto</u>	Ma Ma
Start Spur 1 2 3 4	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz 2.4990 GHz	2.490 2.496 2.499 2.500	05 GHz 60 GHz 90 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490500000 2.495835000 2.498880000 2.499940000	GHz -32.0 GHz -28.1 GHz -24.8 GHz -30.8	06 dBm 18 dBm 81 dBm 86 dBm	Δ Limit -7.060 -15.18 -14.81 -20.86	1 <mark>8</mark> 18 18 18 18	5.000000 <u>Auto</u>	Ma Ma

Plot 7-145. Lower ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB)



Plot 7-146. Upper ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST Prod to be part of @ wiemand	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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X/RL		n Analyzer - Spuri RF 50 Ω		CORREC		SENSE:INT		ALIGN AUTO		PM Apr 13, 2021	
PAS	S		I	IFGain:Lo	Trig:	er Freq: 2.50000 Free Run n: 36 dB	0000 GHz		Radio Sto Radio De	d: None vice: BTS	Frequency
10 dE Log [3/div	Ref 40.00	dBm								
30.0 20.0											Center Fre 2.500000000 GH
10.0 0.00 -						re-grm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\ \			
-10.0											
-30.0 -40.0				~~~~	warmen and the second se			Jawa allow	Month .		
40.0										all in Terration in a sur	
50.0											
L	t 2.475 C	GHz							Stop	2.525 GHz	
Star			Stop	p Freq	RBW	Frequency	Amp	litude	Stop :	2.525 GHz	15.000000 MH
Star				p Freq 05 GHz		Frequency					15.000000 MH
Stari Spur	r Range	Start Freq	2.49		1.000 MHz		GHz -36.8	4 dBm	∆ Limit	B	15.000000 MH <u>Auto</u> Ma
Start Spur	r Range	Start Freq 2.4750 GHz	2.490 2.490	05 GHz	1.000 MHz 1.000 MHz	2.490345000	GHz -36.8 GHz -29.2	4 dBm 4 dBm	∆ Limit -11.84 d	B B	15.000000 MH <u>Auto</u> Ma Freq Offs
Start	r Range 1 2	Start Freq 2.4750 GHz 2.4905 GHz	2.490 2.490 2.499	05 GHz 60 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.490345000 2.495780000	GHz -36.8 GHz -29.2 GHz -25.3	4 dBm 4 dBm 5 dBm	∆ Limit -11.84 d -16.24 d	B B B	15.000000 MH <u>Auto</u> Ma Freq Offs
50.0 - Start Spur 1 2 3 4 5	r Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.490 2.490 2.499 2.499 2.500	05 GHz 60 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490345000 2.495780000 2.498970000	GHz -36.8 GHz -29.2 GHz -25.3 GHz -30.7	4 dBm 4 dBm 5 dBm 4 dBm	∆ Limit -11.84 d -16.24 d -15.35 d	B B B B B	CF Ste 15.00000 MH <u>Auto</u> Ma Freq Offso 0 H
Start	r Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz 2.4990 GHz	2.490 2.490 2.499 2.499 2.500	05 GHz 60 GHz 90 GHz 00 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490345000 (2.495780000 (2.498970000 (2.500000000 (GHz -36.8 GHz -29.2 GHz -25.3 GHz -30.7	4 dBm 4 dBm 5 dBm 4 dBm	∆ Limit -11.84 d -16.24 d -15.35 d -20.74 d	B B B B B	15.000000 MH <u>Auto</u> Ma Freq Offso

Plot 7-147. Lower ACP Plot (LTE Band 7 - 10MHz QPSK – Full RB)



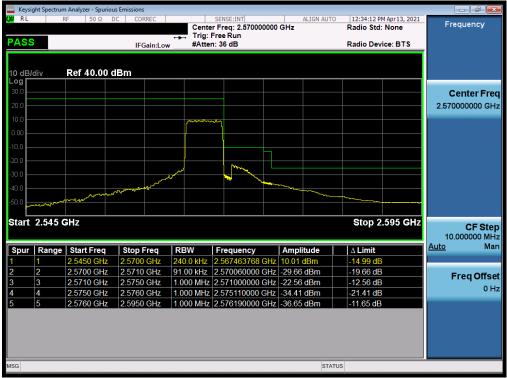
Plot 7-148. Upper ACP Plot (LTE Band 7 - 10MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST Prod to be past of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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		n Analyzer - Spurio F 50 Ω	DC CORREC	Cente	SENSE:INT r Freq: 2.500000000 Free Run	GHz	12:33:57 PM Apr 13, 2021 Radio Std: None	Frequency
PAS	S		IFGain:Lo	-	n: 36 dB		Radio Device: BTS	T
10 dB	/div	Ref 40.00	dBm					
- °g 30.0								Center Fre
20.0								2.500000000 GH
10.0					1000000000			
0.00								
10.0								
20.0								
30.0					-1			
40.0			~			Land a		
							heren	
							here here here here here here here here	
50.0	: 2.475 C	GHz					Stop 2.525 GHz	CF Ste 10.000000 M⊦
50.0		Hz Start Freq	Stop Freq	RBW	Frequency	Amplitude	Stop 2.525 GHz	CF SIE
50.0 Start	Range	Start Freq 2.4750 GHz	2.4940 GHz	1.000 MHz	2.493240000 GHz	-36.86 dBm	∆ Limit -11.86 dB	10.000000 MH
50.0 Start	Range	Start Freq 2.4750 GHz 2.4940 GHz	2.4940 GHz 2.4960 GHz	1.000 MHz 1.000 MHz	2.493240000 GHz 2.495980000 GHz	-36.86 dBm -33.51 dBm	Δ Limit -11.86 dB -20.51 dB	10.000000 Mi Auto Ma
50.0 - Start Spur	Range Range 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	2.493240000 GHz 2.495980000 GHz 2.498910000 GHz	-36.86 dBm -33.51 dBm -24.49 dBm	Δ Limit -11.86 dB -20.51 dB -14.49 dB	Auto Ma
Spur	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	2.493240000 GHz 2.495980000 GHz 2.498910000 GHz 2.500000000 GHz	-36.86 dBm -33.51 dBm -24.49 dBm -28.97 dBm	Δ Limit -11.86 dB -20.51 dB -14.49 dB -18.97 dB	10.000000 MH Auto Ma
50.0 Start	Range Range 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	2.493240000 GHz 2.495980000 GHz 2.498910000 GHz	-36.86 dBm -33.51 dBm -24.49 dBm -28.97 dBm	Δ Limit -11.86 dB -20.51 dB -14.49 dB	Auto Ma
start	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	2.493240000 GHz 2.495980000 GHz 2.498910000 GHz 2.500000000 GHz	-36.86 dBm -33.51 dBm -24.49 dBm -28.97 dBm	Δ Limit -11.86 dB -20.51 dB -14.49 dB -18.97 dB	Auto Ma

Plot 7-149. Lower ACP Plot (LTE Band 7 - 5MHz QPSK - Full RB)



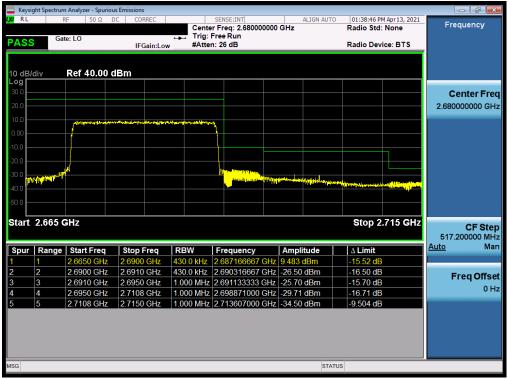
Plot 7-150. Upper ACP Plot (LTE Band 7 - 5MHz QPSK – Full RB)

FCC ID: A3LSMF711U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 97 of 169
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	ght Spectrum														_			
L <mark>XI</mark> RL	R	F 5	ΟΩ	DC	CORR	EC		Cente		SE:INT c: 2.50600	0000		ALIGN AUT			PM Apr 13, 2021		Frequency
PASS	Gat	e: LO					. 	Trig:	Free	Run		0.1.2						
PASS					IFGa	in:Low		#Atter	n: 30	dB					Radio D	evice: BTS	-	
10 dB/o	div	Ref 40	0.00	dBm														
Log 30.0																		Center Freq
20.0																	2	506000000 GHz
																	2.	506000000 GH2
10.0										Summer	*****	an she area	and the second second	1	Warnel arrival			
0.00																		
-10.0									=									
-20.0										_						t –		
-30.0		1	antinen	ripper table	tion Laws	pretraind	ppilline.	Marinali								" And many shirts		
-40.0 🚌		peternal.																
-50.0																		
Start	2.471 G	۰u-,													Ston	2.521 GHz		
Start	2.4710	9112													Stop	2.521 6112	ŧ	CF Step 517.200000 MHz
Spur	Range	Start F	req	St	op Fr	eq	RBW	V	Fre	quency		Ampl	itude		∆ Limit		Auto	<u>o</u> Man
1		2.4710			905 G					86860000					-2.489 (
2		2.4905			950 @					93777500					-11.56 (Freq Offset
3		2.4950 2.4960			960 G					96000000 99916667					-13.03 (-15.60 (0 Hz
		2.4300	OFIZ	2.0	210 C	2112			2.0	0001	OFIZ	0.402	dom		-10.001			
MSG													STA	TUS				
														-				

Plot 7-151. Lower ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB)

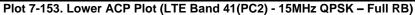


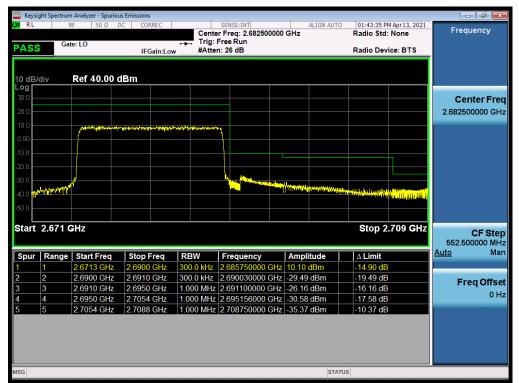
Plot 7-152. Upper ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST Proat to be part of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 98 of 169	
1M2104070032-05.A3L	04/12/2021 - 06/11/2021	Portable Handset			
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10 dB/div Log	RF 50 Ω Sate: LO Ref 40.00	DC CORREC	Trig: I	SENSE:INT r Freq: 2.503500000 Free Run	GHz	01:40:20 PM Apr 13, 2021 Radio Std: None	Frequency
Log 30.0	Ref 40.00	IFGall.EOW				Radio Device: BTS	
30.0		dBm					Ĩ
20.0							Center Free 2.503500000 GH
10.0 0.00 10.0				aligner of the second sec	in older and a state of the second	Transferment	
-10.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
40.0 mmmili						The second se	
Start 2.477	' GHz					Stop 2.515 GHz	CF Ste 3.750000 M⊦
Spur Rang	e Start Freq	Stop Freg	RBW	Frequency	Amplitude	∆ Limit	Auto Ma
1	2.4773 GHz	2.4905 GHz	1.000 MHz	2.489992083 GHz		-1.927 dB	
2 2	2.4905 GHz	2.4950 GHz		2.494797500 GHz		-13.17 dB	Freq Offs
3 3	2.4950 GHz	2.4960 GHz		2.495493333 GHz		-16.14 dB	0+
4	2.4960 GHz	2.5148 GHz	300.0 kHz	2.504750000 GHz	9.064 dBm	-15.94 dB	
sg					STATU	JS	J





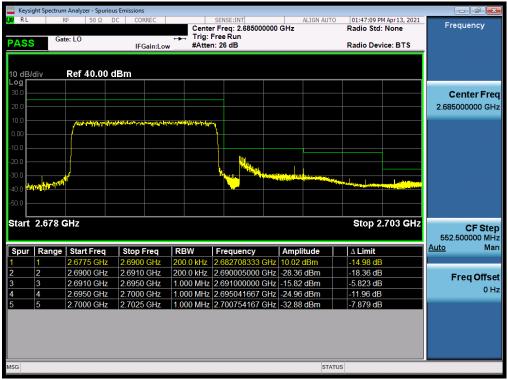
Plot 7-154. Upper ACP Plot (LTE Band 41(PC2) - 15MHz QPSK - Full RB)

FCC ID: A3LSMF711U	Postest Provid to be part of the element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 99 of 169	
1M2104070032-05.A3L	04/12/2021 - 06/11/2021	Portable Handset			
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_	sight Spectrum					1										
X/RL		RF 50	Ω DC	00	RREC			nse:INT req: 2.50100	00000		ALIGN AUTO			M Apr 13, 2021 : None	Fre	quency
PAS	S Gat	te: LO		IF	Gain:Lo		tten: 2					Radi	o Dev	vice: BTS		
10 dB	//div	Ref 40.	.00 dE	3m												
Log 30.0															C	enter Fred
20.0																000000 GHz
10.0															2.501	JUUUUU GH2
0.00									e jizhen	al a first state of the	~18-1/18/18/18/18/18/18	and a straight of the second	1			
-10.0																
-20.0						Marine Marine	·"	1					Ì			
-30.0	erent to be for the second	and the second states of	And the second													
-40.0														· · ·		
-50.0 -																
⊾ Start	2.484 0	GHz										St	op 2	2.509 GHz		
															552.	CF Step 500000 MHz
Spur	Range	Start Fr	eq	Stop	Freq	RBW	F	requency		Ampli	itude	ΔL	imit		<u>Auto</u>	Man
1	1	2.4835 0	GHz	2.4905	5 GHz	1.000 N		489823333	GHz	-26.82	dBm	-1.8	24 dE	3		
2	2	2.4905 0		2.4950				494985000					03 dE		F	req Offset
3	3	2.4950 0		2.4960				495925000					57 dE			0 Hz
4	4	2.4960 0	GHz	2.5085	5 GHz	200.0 k	Hz 2.	503520833	GHz	10.03	dBm	-14.	97 dE	3		0112
	4	2.4900	382	2.000	J GHZ	200.0 K	12 2.	303320833	GHZ	10.05	dBIII	-14.	97 di	,		

Plot 7-155. Lower ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB)



Plot 7-156. Upper ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB)

FCC ID: A3LSMF711U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 100 of 169	
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		m Analyzer - Spurio						
MAS		RF 50 Ω ite: LO	DC CORREC	Trig: F	SENSE:INT r Freq: 2.498500000 Free Run h: 30 dB	GHz	01:57:07 PM Apr 13, 2021 Radio Std: None Radio Device: BTS	Frequency
10 dB Log F	3/div	Ref 40.00	dBm					
30.0 20.0								Center Fre 2.498500000 GH
10.0					fantan Manual Manya	www.artertool		
-10.0								
-20.0 -30.0 -40.0						he wat he was	f where have have a second	
-50.0	and a second second second	Martena and					The second s	
Start	t 2.485 (GHz					Stop 2.508 GHz	CF Ste 552.500000 MH
Spur	r Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	<u>Auto</u> Ma
100	1	2.4845 GHz	2.4905 GHz	1.000 MHz	2.490470000 GHz	-33.78 dBm	-8.778 dB	
1			2.4950 GHz	1.000 MHz	2.494632500 GHz	-19.53 dBm	-6.535 dB	Freq Offs
1	2	2.4905 GHz	2.4900 GHZ					
1 2	2 3	2.4905 GHz 2.4950 GHz	2.4950 GHZ 2.4960 GHZ		2.495451667 GHz	-24.70 dBm	-11.70 dB	
1 2 3 4	_			110.0 kHz	2.495451667 GHz 2.499718333 GHz		-11.70 dB -14.32 dB	
1 2 3	3	2.4950 GHz	2.4960 GHz	110.0 kHz				0+

Plot 7-157. Lower ACP Plot (LTE Band 41(PC2) - 5MHz QPSK - Full RB)



Plot 7-158. Upper ACP Plot (LTE Band 41(PC2) - 5MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST. Proad to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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		n Analyzer - Spu	urious Emissio	ons								P X
L <mark>XI</mark> RL	F	RF 50 Ω	DC (CORREC	Cent	SENSE:INT er Freg: 2.50600	0000 GF	ALIGN AUT	0 02:28:20 Radio Ste	PM Apr 13, 2021	Frequ	iency
D A O	Gat	te: LO			Trig:	Free Run		12				
PAS	s		I	IFGain:Lo	w #Atte	en: 26 dB			Radio De	vice: BTS		
10 dB	/div	Ref 40.0	0 dBm									
Log 30.0											0	4
20.0												ter Freq
											2.50600	0000 GHz
10.0						parameter and			monorm			
0.00												
-10.0												
-20.0												
-30.0			البلاليليندوراور	A LOOK AND A						Walking and what he a		
-40.0		. Jund	and the state of t	"TT" '	a all the states							
-50.0	-water water	Nert States and States										
Start	2.471 0	GHz							Stop	2.521 GHz		CF Step
Spur	Range	Start Free	Sto	p Freq	RBW	Frequency	A	mplitude	∆ Limit		<u>Auto</u>	Man
1	1	2.4710 GH	z 2.49	05 GHz	1.000 MHz	2.490110000	GHz -2	9.36 dBm	-4.362 d	В		
2	2	2.4905 GH		50 GHz	_	2.493650000			-13.03 d		Fre	q Offset
3	3	2.4950 GH		60 GHz		2.495986667			-15.02 d			0 Hz
4	4	2.4960 GH	z 2.52	10 GHz	430.0 KHZ	2.509458333	GHZ 6.	/16 dBm	-18.28 d	В		
MSG	_			_			_	STA	TUS			
								314	100			

Plot 7-159. Lower ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB)



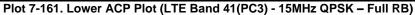
Plot 7-160. Upper ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB)

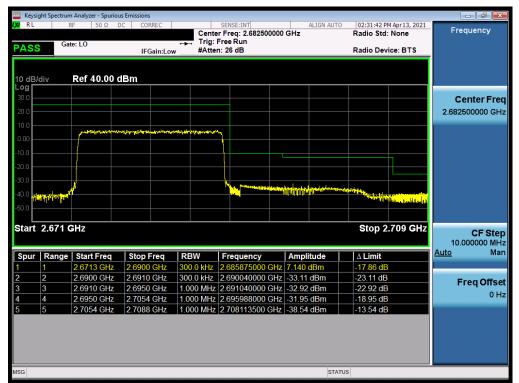
FCC ID: A3LSMF711U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 102 of 169	
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	sight Spectre			ious Emis	sions													
l xi Ri		RF	50 Ω	DC	CORRE	C			SENSE:INT Freq: 2.50	3500000	CH-	ALIGN AUT		02:30:3 Radio S		pr13, 2021	Fr	equency
_		ate: LO					- - - 1	rig: Fi	ree Run	5500000	GHZ							
PAS	s				IFGai	n:Low	, #	Atten:	26 dB				F	Radio D	evice	BTS		
10 di	3/div	Ref 4	0.00	dBm														
Log																		
30.0																	C	enter Freq
20.0																	2.50	3500000 GHz
10.0																		
0.00									- Coming	the second second	i an ait anna	and the second secon	all a sector		\downarrow			
-10.0															1			
-20.0																		
-30.0									كبر						L.			
-30.0				www.	WHIT V	Lulu.									in the	WWWWWWW		
-40.0		denti viti	phi an T															
-50.0	al-mandadaya	M 111																
	t 2.477													Oton	2.5	15 GHz		
Star	L 2.477	GHZ												διομ	2.3	15 GHZ	10	CF Step .000000 MHz
Spu	r Rang	e Start I	Freq	St	op Fre	∋q	RBW		Frequenc	y	Ampli	itude		∆ Limi	t		<u>Auto</u>	Man
1	1	2.4773	3 GHz	2.4	905 G	Hz	1.000	MHz 2	2.4901025	00 GHz	-27.78	dBm	ĺ	-2.784	dB			
2	2	2.4905			950 G				2.4943250				+	-13.74				Freq Offset
3	3	2.4950			960 G				2.4959333					-15.35				0 Hz
4	4	2.4960) GHz	2.5	148 G	Hz	300.0	(Hz 2	2.5068437	50 GHz	6.943	dBm	ŀ	-18.06	dB			0112





Plot 7-162. Upper ACP Plot (LTE Band 41(PC3) - 15MHz QPSK - Full RB)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Center Freq: 2.50100000 GHz Radio Std: None Frequency PASS Gate: L0 Frequency Radio Device: BTS Center Freq: 2.50100000 GHz Radio Device: BTS 10 dB/div Ref 40.00 dBm Center Freq: 2.50100000 GHz Center Freq: 2.501000000 GHz Center Freq: 2.501000000 GHz Center Freq: 2.501000000 GHz 200 PASS Ref 40.00 dBm PASS Center Freq: 2.501000000 GHz Center Freq: 2.501000000 GHz 200 PASS Stop Freq: RBW Frequency Amplitude A Limit A Limit 300 Stop Freq: Stop Freq: RBW Frequency Amplitude A Limit A Limit 41 2.4935 GHz 2.4995 GHz 1.000 MHz 2.49941600 GHz 2.723 GHBm -14.21 dB Freq Offsto 3 3 2.4950 GHz 2.4950 GHz 1.000 MHz 2.4951 GHBm -14.21 dB Freq Offsto		ight Spectrur			ious Emis	ssions														
PASS Outer Los #Atten: 26 dB Radio Device: BTS 10 dB/div Ref 40.00 dBm	L XI RL			50 Ω	DC	COR	REC			r Fre	eq: 2.50100	0000	GHz	ALIGN AUTO					-	Frequency
Log Center Fre 200 Center Fre	PASS	Ga	te: LO			IFG	ain:Lo	-							F	Radio I	Devi	ce: BTS		
Log Center Fre 200 Center Fre																				
300 300		/div	Ref 4	10.00	dBm)														
200 200																				Center Freq
0.00 μαλιώση ματογραγιατού του	20.0																		2	
Source Start Freq Stop Freq RBW Frequency Amplitude Δ Limit 1 2.4835 GHz 2.4905 GHz 1.000 MHz 2.489646667 GHz -28.84 dBm -3.842 dB -3.000 MHz 2 2 2.4905 GHz 2.4905 GHz 1.000 MHz 2.494130000 GHz -23.50 dBm -10.50 dB Freq Offset 3 3 2.4950 GHz 2.4960 GHz 2.000 kHz 2.495915000 GHz -27.21 dBm -14.21 dB Freq Offset	10.0														_					
200 300 400 1000 1000 1000 1000 10	0.00										Manut	d for the second		an a	40.444	iyan yang bir	\rightarrow			
30.0 30.0	-10.0																\rightarrow			
40.0 ματρητή ματιληματική ματιληματική ματρητή ματιληματική <thματρική< th=""> ματρητή ματιληματική<td>-20.0</td><td></td><td></td><td></td><td></td><td>\rightarrow</td><td></td><td></td><td></td><td></td><td>ļ</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thματρική<>	-20.0					\rightarrow					ļ									
Start 2.484 GHz Stop 2.509 GHz CF Step 10.00000 MH Spur Range Start Freq Stop Freq RBW Frequency Amplitude Δ Limit Δuto Δuto Ma 1 1 2.4905 GHz 2.4905 GHz 1.000 MHz 2.483846667 GHz -28.84 dBm -3.842 dB Auto Ma 2 2 2.4905 GHz 2.4900 MHz 2.494130000 GHz -23.50 dBm -10.50 dB Freq Offse 3 3 2.4950 GHz 2.960 GHz 2.000 kHz 2.495915000 GHz -27.21 dBm -14.21 dB Guide Auto	-30.0					البنار	Marin		diff of the	tar 🚺	4						<u>_</u>	Marile Asterileti		
Start 2.484 GHz Stop Freq RBW Frequency Amplitude Δ Limit Δ Limit 1 1 2.4835 GHz 2.4905 GHz 1.000 MHz 2.489846667 GHz -28.84 dBm -3.842 dB -3.842 dB Freq Offset 2 2 2.4905 GHz 2.4905 GHz 1.000 MHz 2.494130000 GHz -23.50 dBm -10.50 dB Freq Offset 3 3 2.4950 GHz 2.4960 GHz 2.000 kHz 2.495915000 GHz -27.21 dBm -14.21 dB GU	-40.0 🔐		alway and a	He way	an Britishing					r (j								1.00		
Spur Range Start Freq Stop Freq RBW Frequency Amplitude △ Limit 1 1 2.4835 GHz 2.4905 GHz 1.000 MHz 2.489846667 GHz -28.84 dBm -3.842 dB 2 2 2.4905 GHz 2.4900 MHz 2.49130000 GHz -23.50 dBm -10.50 dB 3 3 2.4950 GHz 2.900 kHz 2.495915000 GHz -27.21 dBm -14.21 dB	-50.0	and should be be																		
Spur Range Start Freq Stop Freq RBW Frequency Amplitude △ Limit 1 1 2.4835 GHz 2.4905 GHz 1.000 MHz 2.489846667 GHz -28.84 dBm -3.842 dB 2 2 2.4905 GHz 2.4900 MHz 2.49130000 GHz -23.50 dBm -10.50 dB 3 3 2.4950 GHz 2.900 kHz 2.495915000 GHz -27.21 dBm -14.21 dB		2 4 9 4 4														Otor		500 CH-		
Spin Range Start Freq Roby Frequency Amplitude A Limit 1 1 2.4935 GHz 2.4905 GHz 1.000 MHz 2.489846667 GHz -28.84 dBm -3.842 dB 2 2 2.4905 GHz 2.4950 GHz 1.000 MHz 2.494130000 GHz -23.50 dBm -10.50 dB 3 3 2.4950 GHz 2.4960 GHz 200.0 kHz 2.495915000 GHz -27.21 dBm -14.21 dB	Start	2.404 \	aπz													ອເບ	J Z.	JU9 GHZ		CF Step 10.000000 MHz
2 2.4905 GHz 2.4950 GHz 1.000 MHz 2.494130000 GHz -23.50 dBm -10.50 dB Freq Offset 3 3 2.4950 GHz 2.4960 GHz 200.0 kHz 2.495915000 GHz -27.21 dBm -14.21 dB	Spur	Range	Start	Freq	St	op F	req	RB	W	Fre	equency		Ampl	litude		Δ Lim	it		Aut	<u>o</u> Man
3 3 2.4950 GHz 2.4960 GHz 200.0 kHz 2.495915000 GHz -27.21 dBm -14.21 dB	1																			
3 3 2.4950 GHz 2.4960 GHz 200.0 KHz 2.495915000 GHz -27.21 dBm -14.21 dB		_																		Freg Offset
4 4 2.4960 GHz 2.5085 GHz 200.0 kHz 2.502520833 GHz 7.182 dBm -17.82 dB		-						_												0 Hz
	4	4	2.496	0 GHz	2.5	085	GHz	200	.0 kHz	2.5	02520833	GHz	7.182	dBm		-17.82	dB			
ISG STATUS	MSG	_	_	-	_	-	-	_	_	-		-	_	STAT	US	-	-			

Plot 7-163. Lower ACP Plot (LTE Band 41(PC3) - 10MHz QPSK – Full RB)



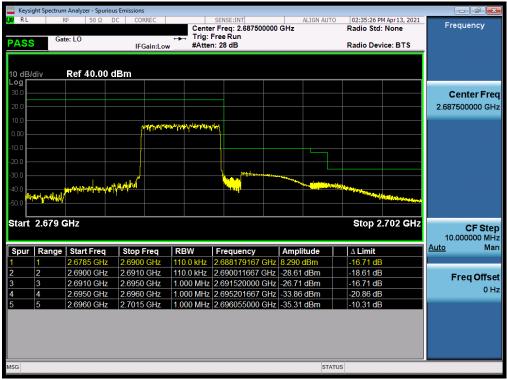
Plot 7-164. Upper ACP Plot (LTE Band 41(PC3) - 10MHz QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST. Proad to be part of @ nienseed	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 104 of 160
1M2104070032-05.A3L	04/12/2021 - 06/11/2021	Portable Handset		Page 104 of 169
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Keysi	ight Spectru							CENCE THE				02:24	22 PM 4	[- 7 💌
PASS		RF 5	50Ω [ORREC FGain:Lo		Center Trig: F	SENSE:INT Freq: 2.498 ree Run : 28 dB	8500000		ALIGN AUTO	Radio	33 PM Apr 13, 202 Std: None Device: BTS	Fre	quency
10 dB/ Log F	/div	Ref 4	0.00 (dBm											
30.0 20.0															enter Fre 500000 GH
10.0 0.00								AN THE WORK	enter the	un Munnha	}				
-10.0 -20.0															
-30.0 - -40.0 -		~~~~~	averan		des and the second						Longington H	Martavy www.	haliyi Hukurdishurna	4	
	2.485	GHz										Sto	p 2.508 GH		CF Ste
Spur	Range	Start F	reg	Stop	Freq	RBW		Frequenc	v	Ampli	tude	ΔLim	it	Auto	Ma
1	1	2.4845)5 GHz			2.4903200				-13.46			
2	2	2.4905		2.495	60 GHz	1.000	MHz 2	2.4949250	00 GHz	-22.89	dBm	-9.895			req Offse
3	3	2.4950	GHz	2.496	60 GHz	110.0	kHz 2	2.4959016	67 GHz	-27.64	dBm	-14.64	dB		
	4	2.4960	GHz	2.507	′5 GHz	110.0	kHz 2	2.5003700	00 GHz	8.154	dBm	-16.85	dB		0 H
4															

Plot 7-165. Lower ACP Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB)



Plot 7-166. Upper ACP Plot (LTE Band 41(PC3) - 5MHz QPSK – Full RB)

FCC ID: A3LSMF711U		PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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				Emissio													
RL		RF 50 te:LO	Ω Αι	C C	ORREC		📕 Trig	ter Fre		000000	GHz	ALIGN AUTO	Ra	adio Sto		F	requency
ASS				, II	FGain:L	.ow	#At	ten: 36	dB				Ra	adio De	vice: BTS		
0 d <u>B/</u>	div	Ref 40	.00 d	Bm													
og 30.0																	
																	Center Fre
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0.0	2.545 0	GHz												Stop 2	2.595 GHz		CESt
0.0	2.545 0	GHz												Stop 2	2.595 GHz		
0.0 tart		GHz Start Fr	req	Stop	Freq		RBW	Fre	quency		Ampl	itude		Stop 2	2.595 GHz	Auto	50.000 k
^{0.0} tart				_	Freq 0 GHz				aquency				Δ				50.000 k
0.0 tart	Range	Start Fr	GHz	2.550 2.565	0 GHz	: 1 : 1	.000 MH	z 2.5 z 2.5	5000000 6492500	<mark>0 GHz</mark> 0 GHz	-45.96 -40.97	dBm dBm	Δ -2	Limit	3		50.000 k <u>M</u>
0.0 tart	Range 1 2 3	Start Fr 2.5450 (2.5500 (2.5650 (GHz GHz GHz	2.550 2.565 2.569	0 GHz 0 GHz 0 GHz	1 1	.000 MH .000 MH .000 MH	z 2.5 z 2.5 z 2.5	5000000 5492500 5884666	<mark>0 GHz</mark> 0 GHz 7 GHz	-45.96 -40.97 -36.31	dBm dBm dBm	-2 -2 -2	20.96 df 27.97 df 26.31 df	3 3 3		50.000 kl <u>M</u> Freq Offs
tart	Range 1 2 3 4	Start Fr 2.5450 (2.5500 (2.5650 (2.5690 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666 5993833	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	Limit 20.96 df 27.97 df 26.31 df 29.06 df	3 3 3 3 3		CF Ste 50.000 kl Mi Freq Offs 0 l
0.0	Range 1 2 3	Start Fr 2.5450 (2.5500 (2.5650 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	20.96 df 27.97 df 26.31 df	3 3 3 3 3		50.000 k M Freq Offs
tart	Range 1 2 3 4	Start Fr 2.5450 (2.5500 (2.5650 (2.5690 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666 5993833	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	Limit 20.96 df 27.97 df 26.31 df 29.06 df	3 3 3 3 3		50.000 k M Freq Offs
0.0 tart	Range 1 2 3 4	Start Fr 2.5450 (2.5500 (2.5650 (2.5690 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666 5993833	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	Limit 20.96 df 27.97 df 26.31 df 29.06 df	3 3 3 3 3		50.000 k M Freq Offs
0.0 tart	Range 1 2 3 4	Start Fr 2.5450 (2.5500 (2.5650 (2.5690 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666 5993833	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	Limit 20.96 df 27.97 df 26.31 df 29.06 df	3 3 3 3 3		50.000 k M Freq Offs
tart	Range 1 2 3 4	Start Fr 2.5450 (2.5500 (2.5650 (2.5690 (GHz GHz GHz GHz	2.550 2.565 2.569 2.570	0 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1 1 1 2	.000 MH .000 MH .000 MH 20.0 kH	IZ 2.5 IZ 2.5 IZ 2.5 IZ 2.5 Z 2.5	5000000 5492500 5884666 5993833	<mark>0 GHz</mark> 0 GHz 7 GHz 3 GHz	-45.96 -40.97 -36.31 -39.06	dBm dBm dBm dBm	-2 -2 -2 -2	Limit 20.96 df 27.97 df 26.31 df 29.06 df	3 3 3 3 3		50.000 k M Freq Offs

Plot 7-167. Lower Band Edge Plot (LTE Band 38 - 20MHz QPSK - Full RB)



Plot 7-168. Upper Band Edge Plot (LTE Band 38 - 20MHz QPSK - Full RB)

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²⁰²¹ PCTEST



		n Analyzer - Spurio						
L <mark>XI</mark> RL	F	F 50 Ω	AC CORREC		SENSE:INT r Freq: 2.577500	ALIGN AUT	0 11:50:41 PM Jun 01, 2021 Radio Std: None	Frequency
PASS	Gat	e: LO	IFGain:Lov		Free Run n: 36 dB		Radio Device: BTS	
10 dBi	div	Ref 40.00 (dBm					
Log								
30.0 -								Center Freq
20.0 -								2.577500000 GHz
10.0								
0.00							<u>}</u>	
-10.0					_			
-20.0								
-30.0								
-40.0					1.		Land and the second sec	
-50.0	-		and the second s					
-30.0								
Start	2.551 (Hz	·				Stop 2.589 GHz	CF Step
								50.000 kHz
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	∆ Limit	Auto <u>Man</u>
1	1	2.5513 GHz	2.5550 GHz	1.000 MHz		iHz -45.78 dBm	-20.78 dB	
2	2	2.5550 GHz	2.5650 GHz			iHz -39.04 dBm	-26.04 dB	Freq Offset
3	3	2.5650 GHz	2.5690 GHz			iHz -33.68 dBm	-23.68 dB	0 Hz
4	4	2.5690 GHz	2.5700 GHz			iHz -35.44 dBm	-25.44 dB	0112
5	5	2.5700 GHz	2.5888 GHz	1.000 MHz	2.579406250 G	Hz 11.21 dBm	-13.79 dB	
MSG						STA	TUS	





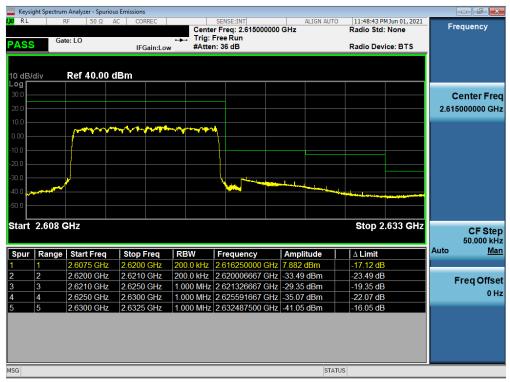
Plot 7-170. Upper Band Edge Plot (LTE Band 38 - 15MHz QPSK - Full RB)

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SS Gate: L0 Center Freq: 2.575000000 GHz Trig: Free Run #Atten: 36 dB Radio Device: BTS dB/div Ref 40.00 dBm Center Freq: 2.675000000 GHz Radio Device: BTS Center Frequency dB/div Ref 40.00 dBm Center Freq: 2.675000000 GHz Center Frequency Center Frequency Center Frequency dB/div Ref 40.00 dBm Center Frequency Center Frequency		.g	n Analyzer - Spur		ns						[- d ×
Image Start Freq Stop Freq RBW Frequency Amplitude Δ Limit 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.5698303 GHz 4.355 dBm -24.86 dB Freq Offsc 2 2.5600 GHz 2.5690 GHz 2.5000 GHz 2.568300 GHz 2.568300 GHz 2.56800 GHz 2.56800 GHz 2.56800 GHz 2.56800 GHz 0.000 MHz 0.000 MH	RL			AC C	ORREC		r Freq: 2.57500000				Fr	equency
g i	PASS		le. LO		FGain:Lo	w #Atter	n: 36 dB		Radio Devi	ce: BTS		
g i												
Center Freq Center Freq 0	i0 dB/ ₋og Г	/div	Ref 40.00	dBm								
0 2.57500000 GHz 0 2.575000000 GHz 0 2.575000000 GHz 0 2.575000000 GHz 0 2.575000 GHz 1 2.5750 GHz 2 2.5600 GHz 2.5600 GHz 2.56	30.0 -										c	enter Fre
CF Step Stop 2.583 GHz CF Step Stop 2.583 GHz Stop 2.583 GHz 2 2.5600 GHz 2.5690 GHz 1.000 MHz 2.5568333 GHz 43.55 dBm -18.55 dB 2 2.5600 GHz 2.5690 GHz 1.000 MHz 2.568333 GHz -24.86 dB -24.86 dB 3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.568980607 GHz -25.40 dB Freq Offset 4 2.5690 GHz 2.5000 GHz 2.500 GHz 2.500 GHz 2.500 GHz 0 Hz	20.0											
CF Step Stop 2.583 GHz CF Step Stop 2.583 GHz Stop 2.580 GHz	10.0 -										2.07	
CF Step Stop 2.583 GHz CF Step Stop 2.583 GHz Stop 2.580 GHz	0.00								<u>۲</u>			
CF Step Stop 2.583 GHz CF Step art 2.5575 GHz 2.5600 GHz 1.000 MHz 2.55956333 GHz 43.55 dBm -18.55 dB 2 2.5600 GHz 2.5690 GHz 1.000 MHz 2.568303GHz -24.86 dB Freq Offsc 3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.56808066 GHz -27.3 dB -24.86 dB Freq Offsc 4 2.5690 GHz 2.5000 GHz 2.56808066 GHz -25.40 dB O H 0 H										1		
CF Step Stop 2.583 GHz CF Step art 2.5575 GHz 2.5600 GHz 1.000 MHz 2.55956333 GHz 43.55 dBm -18.55 dB -43.65 dB -24.86 dB Freq Offsc 2 2.5600 GHz 2.5690 GHz 1.000 MHz 2.564575000 GHz -27.86 dBm -24.86 dB Freq Offsc 3 2.5650 GHz 2.5690 GHz 2.5690 GHz 2.56980060 GHz -25.40 dB -24.86 dB Freq Offsc 4 2.5690 GHz 2.570 GHz 2.2500 GHz 2.5680060 GHz -25.40 dB -24.86 dB Freq Offsc	10.0				_							
CF Step Stop 2.583 GHz CF Step art 2.5575 GHz 2.5600 GHz 1.000 MHz 2.55956333 GHz 43.55 dBm -18.55 dB 2 2.5600 GHz 2.5690 GHz 1.000 MHz 2.564575000 GHz -24.86 dB -24.86 dB 3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.56808066 GHz -27.3 dB -27.3 dB 4 2.5690 GHz 2.5700 GHz 2.20.0 kHz 2.56980000 GHz -35.40 dBm -25.40 dB -25.40 dB	20.0											
Image Start Freq Stop Freq RBW Frequency Amplitude Δ Limit Δ Limit 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.559558333 GHz -18.55 dB -24.86 dB -24.86 dB Freq Offst 2 2.5650 GHz 2.5690 GHz 1.000 MHz 2.564575000 GHz -27.3 dB -27.3 dB Freq Offst 3 2.5650 GHz 2.5690 GHz 3.000 MHz 2.56990 GHz -25.690 GHz 3.000 MHz 2.56990 GHz 3.000 MHz 2.56990 GHz -25.690 GHz 3.000 MHz 0 Hz 4 2.5690 GHz 2.5700 GHz 2.20.0 kHz 2.569980000 GHz -35.40 dB -25.40 dB 0 Hz	30.0 —											
Image Start Freq Stop Freq RBW Frequency Amplitude Δ Limit Δ Limit 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.559558333 GHz -18.55 dB -24.86 dB -24.86 dB Freq Offst 2 2.5650 GHz 2.5690 GHz 1.000 MHz 2.564575000 GHz -27.3 dB -27.3 dB Freq Offst 3 2.5650 GHz 2.5690 GHz 3.000 MHz 2.56990 GHz -25.690 GHz 3.000 MHz 2.56990 GHz 3.000 MHz 2.56990 GHz -25.690 GHz 3.000 MHz 0 Hz 4 2.5690 GHz 2.5700 GHz 2.20.0 kHz 2.569980000 GHz -35.40 dB -25.40 dB 0 Hz	40.0		والتوريب ويتعاربه والمتعاوية	لمبيسا سيرسا سر	ملسلهما	a standard and a				and the second s		
Line Start Freq Stop Freq RBW Frequency Amplitude Δ Limit Auto Matter 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.559558333 GHz 43.55 dBm -18.55 dB <	50.0 🏳											
Line Start Freq Stop Freq RBW Frequency Amplitude Δ Limit Auto Matter 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.559558333 GHz 43.55 dBm -18.55 dB <	_											
Nur Range Start Freq Stop Freq RBW Frequency Ambitude A Limit 1 2.5575 GHz 2.5600 GHz 1.000 MHz 2.55955833 GHz 43.55 dBm -18.55 dB 2 2.5600 GHz 2.5600 GHz 1.000 MHz 2.564575000 GHz 37.86 dBm -24.86 dB 3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.5689667 GHz -22.73 dB -22.73 dB 4 2.5690 GHz 2.5700 GHz 2.20.0 kHz 2.569980000 GHz -35.40 dBm -25.40 dB 0 H		0.550 /	<u></u>						0 4am 0	500 O U-		
2 2.5600 GHz 2.5650 GHz 1.000 MHz 2.564575000 GHz -37.86 dBm -24.86 dB 3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.568806667 GHz -32.73 dBm -22.73 dB 4 2.5690 GHz 2.5700 GHz 220.0 kHz 2.569980000 GHz -35.40 dBm -25.40 dB	Start	2.558 (GHz						Stop 2.	583 GHz		50.000 kH
3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.568806667 GHz -32.73 dBm -22.73 dB 4 2.5690 GHz 2.5700 GHz 220.0 kHz 2.569980000 GHz -35.40 dBm -25.40 dB 0 H	Start Spur			Stop	> Freq					583 GHz	Auto	CF Ste 50.000 kH <u>Ma</u>
3 2.5650 GHz 2.5690 GHz 1.000 MHz 2.568806667 GHz -22.73 dB -22.73 dB 4 2.5690 GHz 2.5700 GHz 220.0 kHz 2.569980000 GHz -35.40 dB -25.40 dB 0 H	Spur	Range	Start Freq 2.5575 GHz	2.560	00 GHz	1.000 MHz	2.559558333 GHz	-43.55 dBm	∆ Limit -18.55 dB	583 GHz	Auto	50.000 kH
4 2.5090 GHZ 2.5700 GHZ 220.0 KHZ 2.509980000 GHZ -35.40 dBM -25.40 dB	Spur	Range	Start Freq 2.5575 GHz 2.5600 GHz	2.560 2.565	00 GHz 50 GHz	1.000 MHz 1.000 MHz	2.559558333 GHz 2.564575000 GHz	-43.55 dBm -37.86 dBm	Δ Limit -18.55 dB -24.86 dB	583 GHz		50.000 kH <u>Ma</u>
	Spur	Range 1 2 3	Start Freq 2.5575 GHz 2.5600 GHz 2.5650 GHz	2.560 2.565 2.569	00 GHz 50 GHz 90 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.559558333 GHz 2.564575000 GHz 2.568806667 GHz	-43.55 dBm -37.86 dBm -32.73 dBm	Δ Limit -18.55 dB -24.86 dB -22.73 dB	583 GHz		50.000 kH <u>Ma</u> Freq Offse
5 2.5700 GHz 2.5825 GHz 1.000 HHz 2.572333333 GHz 12.97 dBm12.03 dB	Spur 1 2 3	Range 1 2 3 4	Start Freq 2.5575 GHz 2.5600 GHz 2.5650 GHz 2.5690 GHz	2.560 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 00 GHz	1.000 MHz 1.000 MHz 1.000 MHz 220.0 KHz	2.559558333 GHz 2.564575000 GHz 2.568806667 GHz 2.569980000 GHz	-43.55 dBm -37.86 dBm -32.73 dBm -35.40 dBm	△ Limit -18.55 dB -24.86 dB -22.73 dB -25.40 dB	583 GHz		50.000 kH <u>Ma</u>
	Spur	Range 1 2 3	Start Freq 2.5575 GHz 2.5600 GHz 2.5650 GHz	2.560 2.565 2.569 2.570	00 GHz 50 GHz 90 GHz 00 GHz	1.000 MHz 1.000 MHz 1.000 MHz 220.0 KHz	2.559558333 GHz 2.564575000 GHz 2.568806667 GHz 2.569980000 GHz	-43.55 dBm -37.86 dBm -32.73 dBm -35.40 dBm	Δ Limit -18.55 dB -24.86 dB -22.73 dB	583 GHz		50.000 kH <u>Ma</u> Freq Offse

Plot 7-171. Lower Band Edge Plot (LTE Band 38 - 10MHz QPSK - Full RB)



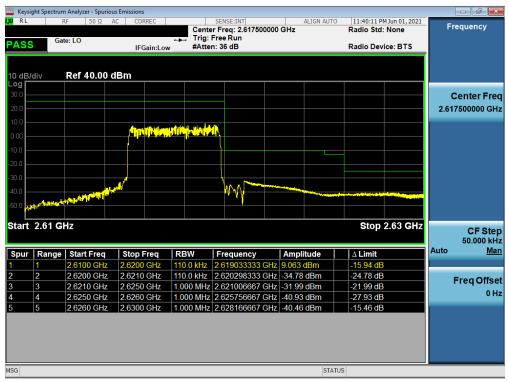
Plot 7-172. Upper Band Edge Plot (LTE Band 38 - 10MHz QPSK – Full RB)

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Frequency	PM Jun 01, 2021		ALIGN AUTO		NSE:INT		REC			n Analyzer - Sp RF 50 S		Keysi RL
requency		Radio Std: Radio Devi		000 GHz		Cente Trig: F #Atter	ain:Low	IF		te: LO	Gat	PASS
								Bm	.00 d	Ref 40.0	div	I0 dB/ ₋og Г
Center Fre 2.572500000 GH												30.0 — 20.0 —
			North Contraction		and the second s							10.0
												0.00 — 10.0 —
												20.0
		mana	(1					30.0
	Carlonder Ballinger	Contract Street Street						alatini a se		la parti di di seconda se pa	-	40.0 50.0
CF Ste 50.000 kH	2.58 GHz	Stop 2								HZ	2.56 G	start
Auto <u>Ma</u>		∆ Limit	tude	Amp	requency	RBW	req	Stop	req	Start Fre	Range	Spur
	3	-16.31 dB	dBm	Hz -41.31	562026667 G	.000 MHz	GHz	2.5640	GHz	2.5600 G	1	1
		-26.72 dB	dBm	Hz 30.71	564891667 G	000 101		2.5650	GHz	2.5640 G	2	2
Fred Offe	3	-20.12 UD	ubiii	112 -00.12	504691007 G	.000 MHZ	GHZ	2.0000			-	
Freq Offs		-18.95 dB			567980000 G			2.5690	GHz	2.5650 G	3	3
Freq Offs 0 F	3 3		dBm dBm	Hz -28.95 Hz -16.68		.000 MHz 00.0 kHz	GHz GHz				_	3 4 5

Plot 7-173. Lower Band Edge Plot (LTE Band 38 - 5MHz QPSK - Full RB)



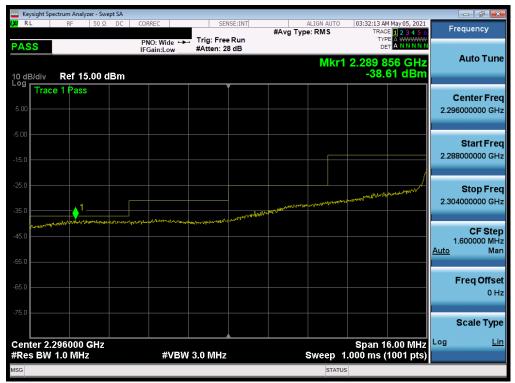
Plot 7-174. Upper Band Edge Plot (LTE Band 38 - 5MHz QPSK – Full RB)

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Keysight Spectrum Analyzer - Swept SA					
X RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	10:25:53 PM Apr 19, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB			
10 dB/div Ref 25.00 dBm			Mkr1	2.304 944 GHz -26.91 dBm	Auto Tun
Trace 1 Pass					Center Fre
15.0					2.305000000 GH
5.00			and a second and a second s	and and a second a second s	Start Fre
-5.00					2.301000000 GH
-15.0					Stop Fre
-25.0		1 [_]			2.309000000 GH
monthing and	and the second	mar war W			
35.0					CF Ste 800.000 kH
45.0					<u>Auto</u> Ma
40.0					
55.0					Freq Offse
65.0					
0.0					Scale Typ
Center 2.305000 GHz				Span 8.000 MHz	Log <u>Li</u>
Res BW 120 kHz	#VBW	430 kHz	Sweep 4	.000 ms (1001 pts)	
ISG			STATUS	3	

Plot 7-175. Lower Band Edge Plot (NR Band n30 - 10MHz CP-OFDM-QPSK – Full RB)



Plot 7-176. Extended Lower Band Edge Plot (NR Band n30 - 10MHz CP-OFDM-QPSK - Full RB)

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Keysight Spectrum Analyzer - Swept SA					
RL RF 50Ω DC	CORREC SE PNO: Wide ↔ Trig: Fre IFGain:Low #Atten: 3	#Avg Type e Run	e:RMS TR. T	PM Apr 19, 2021 ACE 1 2 3 4 5 6 YPE A WWWW DET A P N N N N	Frequency
10 dB/div Ref 25.00 dBm	in Gam. Low		Mkr1 2.315 -29.4	000 GHz 410 dBm	Auto Tune
15.0 Trace 1 Pass					Center Fred 2.315000000 GH:
5.00					Start Free 2.311000000 GH
-15.0		↓			Stop Fre 2.319000000 GH
-35.0		- the manual of the second sec		man ny	CF Ste 800.000 kH Auto Ma
55.0					Freq Offso 0 ⊦
.65.0					Scale Typ
Center 2.315000 GHz #Res BW 120 kHz	#VBW 430 kHz		Span Sweep 4.000 ms		_og <u>Lii</u>
MSG			STATUS		

Plot 7-177. Upper Band Edge Plot (NR Band n30 - 10MHz CP-OFDM-QPSK - Full RB)



Plot 7-178. Extended Upper Band Edge Plot (NR Band n30 - 10MHz CP-OFDM-QPSK - Full RB)

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Keysight Spectrum Analyzer - Swept SA					
LXIRL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:43:30 PM Apr 19, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		g: Free Run tten: 36 dB		2.305 000 GHz	Auto Tune
10 dB/div Ref 25.00 dBm				-28.32 dBm	
Trace 1 Pass		Ĭ			Center Freq
15.0					2.305000000 GHz
5.00					
3.00					Start Freq
-5.00					2.303000000 GHz
-15.0					Stop Freq 2.307000000 GHz
-25.0		1			2.307000000 GHz
		and the second			CF Step
-35.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~			400.000 kHz
-45.0	~				<u>Auto</u> Man
					Freq Offset
-55.0					0 Hz
-65.0					
					Scale Type
Center 2.305000 GHz		k		Span 4.000 MHz	Log <u>Lin</u>
#Res BW 62 kHz	#VBW 220) kHz	Sweep 2	.000 ms (1001 pts)	
MSG			STATUS		

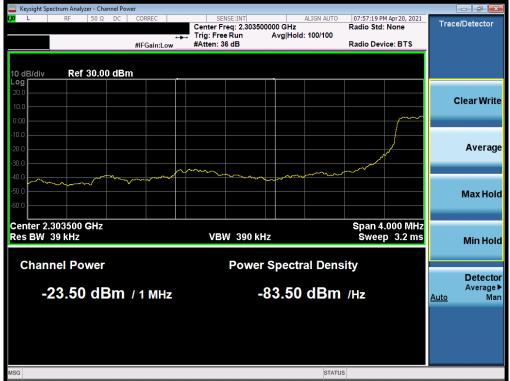
Plot 7-179. Lower Band Edge Plot (NR Band n30 - 5MHz CP-OFDM-QPSK - Full RB)



Plot 7-180. Extended Lower Band Edge Plot (NR Band n30 - 5MHz CP-OFDM-QPSK - Full RB)

FCC ID: A3LSMF711U	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 112 of 169
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Plot 7-181. Extended Lower Band Edge Plot (NR Band n30 - 5MHz CP-OFDM-QPSK - Full RB)



Plot 7-182. Upper Band Edge Plot (NR Band n30 - 5MHz CP-OFDM-QPSK - Full RB)

FCC ID: A3LSMF711U	Pood to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 113 of 169
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	Analyzer - Swept SA					
(XIRL R	F 50 Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	12:09:42 AM Apr 20, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 36 dB		DET A PNNN	Auto Tuno
10 dB/div Re	<u>f 20.00 dB</u> m			Mkr'	1 2.332 926 GHz -44.07 dBm	Auto Tune
10.0 Trace 1	Pass		Ĭ			Center Freq 2.336000000 GHz
-10.0						Start Freq 2.307000000 GHz
-20.0						Stop Freq 2.365000000 GHz
-40.0	North North	Lawler and	1		กับ ๆ และ-สกสสรรษณาสูงสุด-เลยาการสำนักงารรับสิง	CF Step 5.800000 MHz <u>Auto</u> Man
-60.0						Freq Offset 0 Hz
-70.0						Scale Type
Center 2.3360 #Res BW 1.0		#VBW	3.0 MHz	Sweep	Span 58.00 MHz 1.000 ms (1001 pts)	Log <u>Lin</u>
MSG				STATU		

Plot 7-183. Extended Upper Band Edge Plot (NR Band n30 - 5MHz CP-OFDM-QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Plot 7-184. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB)



Plot 7-185. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB)

FCC ID: A3LSMF711U	PCTEST. Prod to be part of @ viewnerd	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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