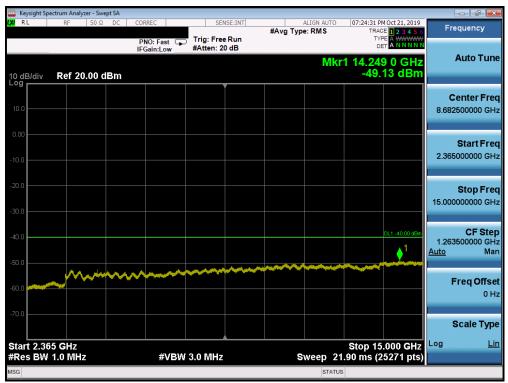


Band 30

	ectrum Analyzer - S									E	- 6 <b>-</b>
X/RL	RF 50	Ω DC	CORREC			#Avg Typ	ALIGN AUTO e: RMS	TRAC TYP	MOct 21, 2019 E 1 2 3 4 5 6 E A WWWW	Free	quency
			IFGain:Low	#Atten: 2	0 dB					,	uto Tun
10 dB/div	Ref 20.00	dBm					M	kr1 2.27 -58.	0 5 GHz 30 dBm		
										Ce	enter Fre
10.0										1.1590	00000 GH
0.00											
											Start Fre
-10.0										30.0	00000 MI
-20.0											Stop Fr
											00000 G
-30.0											
-40.0									DL1 -40.00 dBm	225.8	CF Ste 00000 M
-50.0										<u>Auto</u>	М
-50.0									1	_	
-60.0				ر د مارور ورور رور رور رور رور رور رور رور رو		ويوجوا والمعارية والمراجع			and the second	FI	eq Offs 0
-70.0	and the second										
										S	cale Ty
Start 0.03	0 GHz							Stop 2	.288 GHz	Log	L
#Res BW			#VBV	/ 3.0 MHz			Sweep 🗧	3.011 ms (	4517 pts)		
ISG							STATU	s			

Plot 7-193. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-194. Conducted Spurious Plot (Band 20 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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		ctrum Analy											[	
<b>l,XI</b> R	L	RF	50 Ω	DC	CORREC		SEI	ISE:INT	#Avg Typ	ALIGN AUTO		M Oct 21, 2019 E 1 2 3 4 5 6	Fre	quency
					PNO: F IFGain:	∃ast Low	Trig: Free #Atten: 8				TY			
10 d Log	B/div	Ref 0.	00 dB	im						Mk	r1 26.51 -55.	1 0 GHz 10 dBm		Auto Tune
-10.0														<b>enter Freq</b> 000000 GHz
-20.0 -30.0														<b>Start Freq</b> 000000 GHz
-40.0												DL1 -40.00 dBm		<b>Stop Freq</b> 000000 GHz
-60.0						a a canada da da sera a	and the second secon						1.200 <u>Auto</u>	<b>CF Step</b> 000000 GHz Man
-70.0 -80.0													F	<b>req Offset</b> 0 Hz
-90.0														cale Type
		00 GHz 1.0 MH:				#VBW	3.0 MHz		s	weep 2	Stop 27 0.80 ms (2	.000 GHz 4001 pts)	Log	Lin
MSG										STATU				

Plot 7-195. Conducted Spurious Plot (Band 20 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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## Band 7

	ectrum Analyzer - Swept					
UX/RL	RF 50 Ω 1	DC CORREC	Trig: Free Run Atten: 30 dB	ALIGN AUTO #Avg Type: RMS	11:15:50 PM Oct 15, 2019 TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N	Frequency
10 dB/div	Ref 20.00 dB	IFGain:Low	Atten: 30 dB	MI	r1 2.472 0 GHz -47.00 dBm	Auto Tune
10.0						Center Freq 1.252500000 GHz
-10.0						Start Freq 30.000000 MHz
-20.0					DL1 -25.00 dBm	Stop Freq 2.475000000 GHz
-40.0					1	CF Step 244.50000 MH Auto Mar
-60.0	17.000 1000 1000 1000 1000 1000 1000 100		<u></u>			Freq Offse 0 H:
-70.0						Scale Type
Start 0.03 #Res BW		#VE	W 3.0 MHz	Sweep 3	Stop 2.475 GHz .260 ms (4891 pts)	Log <u>Lir</u>
MSG				STATUS	3	

Plot 7-196. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



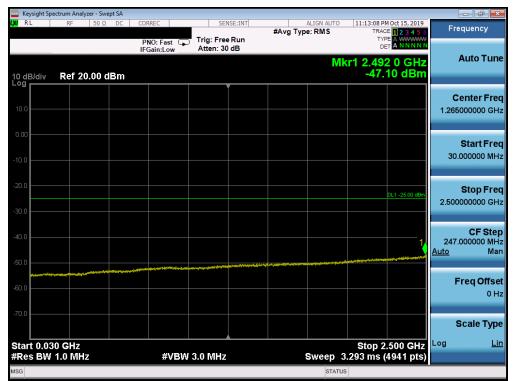
Plot 7-197. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Sp	ectrum Analyz RF		DC DC	CORREC			INCENT		ALIGN AUTO	11:16:25.0	MOct 15 2010		
KL	KF	50 Ω	DC	CORREC		5	ENSE:INT	#Avg Typ		TRAC	M Oct 15, 2019 CE 1 2 3 4 5 6	Fred	uency
				PNO: F IFGain:	ast 🖵 Low	Trig: Fro Atten: 1				TY			
I0 dB/div	Ref 0.0	00 dB	m						Mkr	1 26.24 -52.	0 0 GHz 81 dBm	A	uto Tun
-10.0													nter Fre 00000 GH
30.0											DL1 -25.00 dBm		Start Fre
40.0 50.0											<b>1</b>		Stop Fre 00000 G⊦
70.0		-										1.2000 <u>Auto</u>	CF Ste 00000 G⊦ Ma
80.0												Fr	e <b>q Offs</b> 0 H
90.0												S	ale Typ
start 15.0 Res BW					#VBW	3.0 MH	z	S	weep 20	Stop 27 0.80 ms (2	.000 GHz 24001 pts)	Log	L
ISG									STATUS				

Plot 7-198. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-199. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analyzei											×
L <mark>XI</mark> RL	RF	50Ω DC	CORF	REC	SEI	ISE:INT	#Avg Typ	ALIGN AUTO		M Oct 15, 2019 CE 1 2 3 4 5 6	Frequency	
			PN IFG	0: Fast 🖵 ain:Low	Trig: Free Atten: 30				TY D			
10 dB/div Log	Ref 20.0	00 dBm	1					Mk	r1 14.62 -38.	5 0 GHz 76 dBm	Auto Tur	ne
10.0											Center Fre 8.785000000 GH	
-10.0											<b>Start Fre</b> 2.570000000 GH	
-20.0										DL1 -25.00 dBm	<b>Stop Fre</b> 15.000000000 GH	
-40.0		~~~~~	~		****	~~~~					CF Ste 1.243000000 GH <u>Auto</u> Ma	Hz
-60.0											Freq Offs 0 H	et Hz
-70.0											Scale Typ	pe .in
Start 2.57 #Res BW				#VBW	3.0 MHz		s	weep 2	stop 1: 1.55 ms (2	5.000 GHz 24861 pts)		
MSG								STATU	IS			

Plot 7-200. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



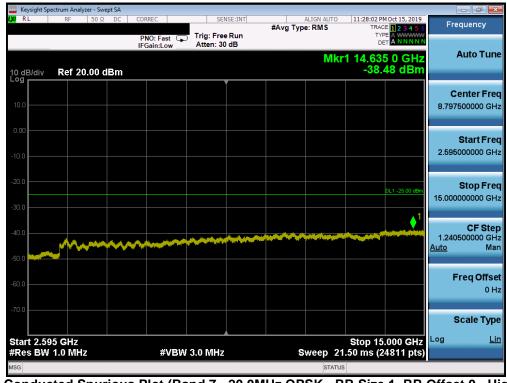
Plot 7-201. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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			lyzer - Swe											
<b>lxi</b> Rl		RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	MOct 15, 2019	Fr	equency
					PNO: IFGain	Fast 🖵	Trig: Fre Atten: 3		• 71		TYF			
					IFGain	1:LOW	Atten. 5	Jub		ML		,		Auto Tune
10 dB	3/div	Ref 2	0.00 d	Bm							-47.	5 0 GHz 05 dBm		
Log								Ĭ						
10.0														Center Freq 5000000 GHz
													1.20	5000000 GHZ
0.00														
														Start Freq
-10.0													30	0.000000 MHz
-20.0												DL1 -25.00 dBm		Stop Freq
-30,0													2.50	0000000 GHz
00.0														
-40.0													247	CF Step 2.000000 MHz
													Auto	Man
-50.0							-					and the second descent second descent second descent second descent second descent second descent second descen		
	eritediriya iny			-										Freq Offset
-60.0														0 Hz
-70,0														
														Scale Type
													Log	Lin
	t 0.030 s BW	) GHZ 1.0 MH	7			#VBW	3.0 MHz			Sween 3	Stop 2 .293 ms (	.500 GHz 4941 pts)	LUg	<u>L111</u>
MSG										STATUS		re r pro)		
	_	_	_	_	_									

Plot 7-202. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-203. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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Og       Center Fre         Og       Delta 2000         Delta 2000       Delta 2000         Og       Delta 2000         Delta 2000       Delta 2000         Delta 2000 <th></th> <th>ectrum Analyz</th> <th>er - Swept S</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>[</th> <th></th>		ectrum Analyz	er - Swept S									[	
PN: Fast       Trig: Free Run Atten: 10 dB       Mikr1 26,495 0 GHz -53,00 dBm       Auto Tun         00 GB/div       Ref 0.00 dBm       -53,00 dBm       -53,00 dBm       Center Fre 21.00000000 GH         00 G       0 G	XI RL	RF	50Ω D	DC COI	RREC	SEN	ISE:INT			TRAC	E 1 2 3 4 5 6	Fre	quency
Miki 128.495 U GHZ -53.00 dBm         OB       Center Fre 21.00000000 GH         OB       OLL2500 dEm         OD       OLL2500 dEm         OD <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TYF DE</th> <th></th> <th></th> <th></th>										TYF DE			
Center Fre 21.00000000 GH Start Fre 15.0000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 20.80 ms (244001 pts)	10 dB/div Log	Ref 0.0	0 dBm	1					Mkr	1 26.49 -53.	5 0 GHz 00 dBm		Auto Tune
Start Fre 15.00000000 GH 12.0000000 GH 12.00000000 GH 12.0000000 GH 12.0000000 GH 12.00000000 GH 12.0000000 GH 12.000000 GH 12.0000000 GH 12.0000000 GH 12.000000 GH 12.000000 GH 12.000000 GH 12.000000 GH 12.000000 GH 12.00000 GH 12.0000 GH 12.00000 GH 12.00000 GH 12.0000 GH 12.000	-10.0												
Stop Fre 27.00000000 GH CF Ste Auto Ma Freq Offse 0 tart 15.000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 20.80 ms (24001 pts)	-20.0										DL1 -25.00 dBm		Start Fred
CF Ste 1.20000000 GHz Treq Offso 1.2000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 20.80 ms (24001 pts)	-40.0										1		<b>Stop Fred</b> 000000 GH:
Image: Constraint of the second state of the second sta	-50.0		_									1.200	<b>CF Ste</b> j 000000 GH
00 00 00 00 00 00 00 00 00 00	70.0												Ma
tart 15.000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 20.80 ms (24001 pts)	.80.0												0 H
					#\/B\0	2.0 844-				Stop 27	.000 GHz		cale Typ
					#VDV	3.0 WIH2		5	status		400 T pts)		

Plot 7-204. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

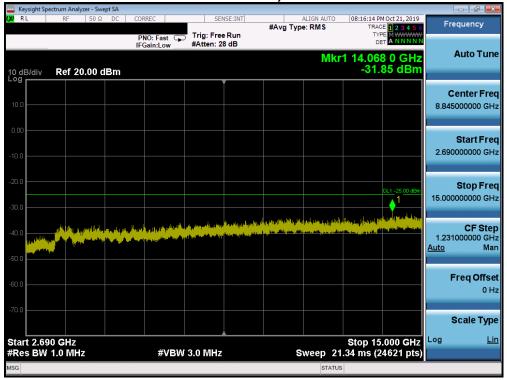
FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 41 PC<u>3</u>

	sight Spectr		/zer - Swe	pt SA									
X/RL		RF	50 Ω	DC	CORRE	:Fast 🕞		NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Oct 21, 2019 CE 1 2 3 4 5 6 DE M WWWWW A N N N N N	Frequency
10 dB	3/div	Ref 20	0.00 d	Bm	IFGa	in:Low	#Atten: 2			M	(r1 2.37	8 5 GHz 07 dBm	Auto Tu
10.0													Center Fro 1.252500000 G
0.00 - 10.0 -													<b>Start Fr</b> 30.000000 M
20.0 30.0												DL1 -25.00 dBm	<b>Stop Fr</b> 2.475000000 G
40.0 50.0												1	CF Ste 244.500000 MI <u>Auto</u> M
50.0 60.0			ilyini filiki ng	ahora traasad				ditan banditan					Freq Offs 0
-70.0	t 0.030	CH7									Stop 2	.475 GHz	Scale Typ
	BW 1.		z			#VBW	/ 3.0 MHz			Sweep 3	.260 ms (	4891 pts)	
ISG										STATUS	6		

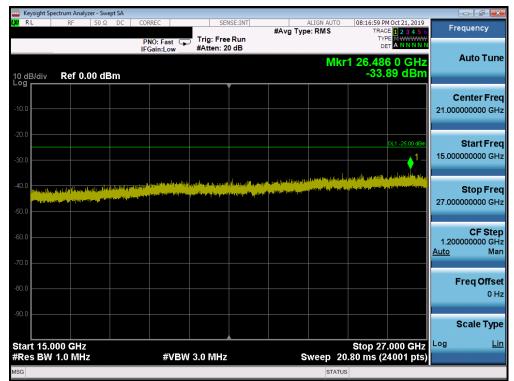
Plot 7-205. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



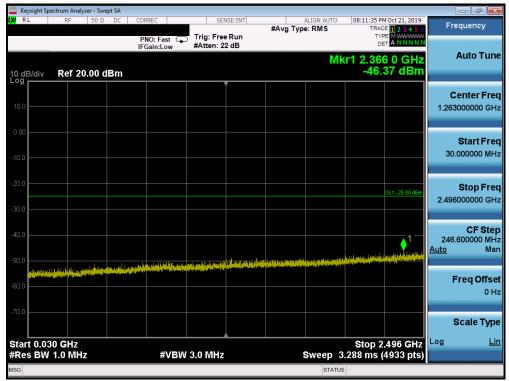
Plot 7-206. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-207. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



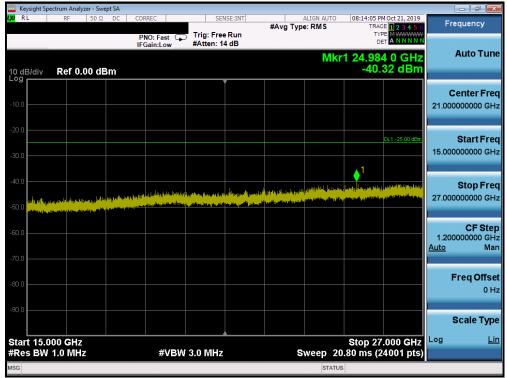
Plot 7-208. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight S		nalyzer - Swe	ept SA									
X/RL	RF	50 Ω	DC	CORREC	SE	NSE:INT	#Avg Typ	ALIGN AU		PM Oct 21, 2019 ACE 1 2 3 4 5 6	Fr	equency
				PNO: Fast	Trig: Fre		#/(vg iyp	e. Kwis	т	YPE MWWWWW DET ANNNN		
				IFGain:Low	#Atten: 2	8 dB		_				Auto Tune
								N	lkr1 14.04	16 5 GHz .79 dBm		Auto Tun
10 dB/div	Ref	20.00 d	Bm						-01	.79 0.611		
						Ĭ					0	Center Free
10.0												5000000 GH
0.00												
												Start Free
-10.0											2.69	0000000 GH:
-20.0												Stop Free
										DL1 -25.00 dBm	15.00	0000000 GH;
-30.0												
	له له.	and an a	أراريم المراجع	k	an le standard	ally region of the	المراط ومالوه والر	und textily	path Rushing a track			CF Ster
40.0			n nen nye nye. Nya kanala	And Description of the	فالاستثار والبريان وت	ش	ىلەر خىللە مىلىغى يەن. م	a contra a staticitar, as a se	كمدغري غريك ليكلف		1.23	1000000 GH
- Janford	The start										<u>Auto</u>	Mar
-50.0												
-60.0												Freq Offse
00.0												0 H:
70.0												
10.0												Scale Type
Start 2.6				-10 (5)						5.000 GHz	Log	Lir
≠Res BV	v 1.0 M	HZ		#VB	W 3.0 MHz		5	weep	21.34 ms (	24621 pts)		
ISG								ST	ATUS			

Plot 7-209. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



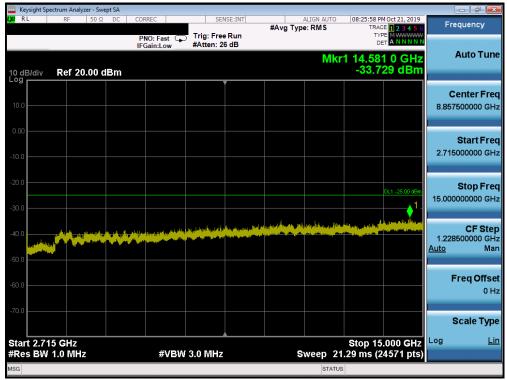
Plot 7-210. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Analy	yzer - Swej	pt SA										-
XI RL	RF	50 Ω	DC	CORREC			ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Oct 21, 2019	Fr	equency
				PNO: Fas IFGain:Lo		rig: Free Atten: 30			M	ام الا <b>r1 2.44</b>			Auto Tune
10 dB/div Log	Ref 2	0.00 d	Bm							-38.	30 dBm		
10.0													enter Free 3000000 GH
0.00													
-10.0												30	Start Free
-20.0											DL1 -25.00 dBm	2.49	<b>Stop Fre</b> 5000000 GH
30.0											1		CF Ste
40.0 50.0					idirial poly	de dame da						246 <u>Auto</u>	.600000 MH Ma
30.0													Freq Offs
60.0													0 H
70.0													
												:	Scale Typ
Start 0.0	30 GHz									Stop 2	.496 GHz	Log	Li
¢Res BW	/ 1.0 MH	z		#	VBW 3.0	0 MHz			Sweep	3.288 ms (	4933 pts)		
ISG									STAT	US			

Plot 7-211. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)



Plot 7-212. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 99 – High Channel)

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							t SA	Analyzer - Swej	
Frequency	08:26:52 PM Oct 21, 2019 TRACE 1 2 3 4 5 6		#Avg Typ	NSE:INT	SEI	EC	DC COF	F 50 Ω	L F
					Trig: Free #Atten: 2	0:Fast 🖵 ain:Low	PI IFC		
Auto Tun	26.888 0 GHz -34.60 dBm	Mkr1					n	f 0.00 dB	3/div <b>R</b> e
Center Fre									
21.000000000 GH									
Start Fre	DL1 -25.00 dBm								
15.000000000 GH									
Stop Fre		na yayan danagayan Managayan	Halmadaaa	alla an anna an	aan ahali maala ta	- in a start of the start of th	ى، بىر لىلمىشىرى	ر. المراقعة المراقع م	ويقابد المتنبيات
27.00000000 GH					لانامارين ولي <b>مناليري</b> ان	a an	el esté la chercitation	6 har.	Life (neg Lenis, with
CF Ste									
1.200000000 G⊢ <u>Auto</u> Ma									
Freq Offse 0 ⊢									
Scale Typ									
Log Li	Stop 27.000 GHz								Lt 15.000 ·

Plot 7-213. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)

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# 7.4 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 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.

# The minimum permissible attenuation level of any spurious emission is $43 + 10 \log_{10}(P_{[Watts]})$ , where P is the transmitter power in Watts.

The minimum permissible attenuation level for Band 30 is > 43 + 10 log10 (P[Watts] at 2300-2305MHz & 2345-2360MHz, > 55 + 10 log10 (P[Watts]) at 2320-2324MHz & 2341-2345MHz, > 61 + 10 log10 (P[Watts]) at 2324-2328MHz & 2337-2341MHz, > 67 + 10 log10 (P[Watts]) at 2288-2292MHz & 2328-2337MHz, and > 70 + 10 log10 (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  $\geq$  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 7-3. Test Instrument & Measurement Setup

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#### Test Notes

Per 22.917(b) 24.238(a) 27.53(h) 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 to demonstrate compliance with the out-of-band emissions limit. 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 emission are attenuated at least 26 dB below the transmitter power.

Per 27.53(g) for operations in the 698-746 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

Per 27.53(c)(5) for operations in the 776-788 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

For all plots showing emissions in the 763 – 775MHz and 793 – 805MHz band, the FCC limit per 27.53(c)(4) is 65 + 10  $\log_{10}(P) = -35$ dBm in a 6.25kHz bandwidth.

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.

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.

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Plot 7-214. Lower Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)



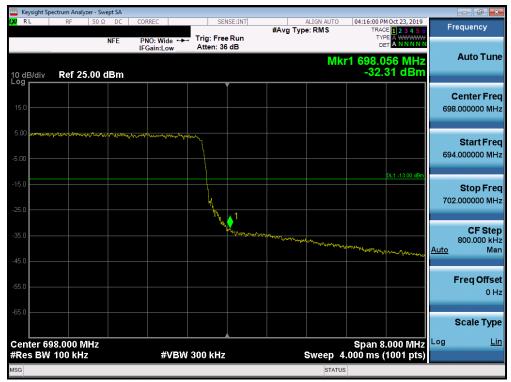
Plot 7-215. Upper Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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KI RL	RF	50 Ω	DC	CORREC	SEI	NSE:INT		ALIGN AUTO	04:14:44 PM Oct 23, 2019	-	
			NFE	PNO: Wide ← IFGain:Low	► Trig: Free Atten: 36		#Avg Ty	pe: RMS	TRACE 1 2 3 4 5 TYPE A WWWW DET A NNNN		equency
10 dB/div	Ref 2	5.00 d	Bm					Mk	1 663.000 MH -30.054 dBn		Auto Tur
15.0											Center Fre
-5.00							un an	an a		659	<b>Start Fre</b> .000000 Mi
-15.0						- 1 <sub>2</sub> m			DL1 -13.00 dBr	667	<b>Stop Fr</b> .000000 MI
-35.0	Mr. Carling	እናት-ት፦-ት/ሥኑ	-and applying the	an we have the second						<u>Auto</u>	CF Ste 800.000 kl M
55.0											Freq Offs 0
-65.0											Scale Ty
Center 66 #Res BW				#VB	W 300 kHz			Sweep 4	Span 8.000 MH: .000 ms (1001 pts	Log	L

Plot 7-216. Lower Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-217. Upper Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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XIRL RF 50Ω DC	CORREC	SENSE:INT			:44:49 PM Oct 23, 2019	Frequency
	PNO: Wide	Trig: Free Run Atten: 36 dB	#Avg Type	e:RMS	TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	riequency
10 dB/div Ref 25.00 dBm	I Guilleow			Mkr1 6	62.976 MHz -32.45 dBm	Auto Tun
15.0						Center Fre 663.000000 MH
5.00				and the second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Start Fre 657.000000 M⊦
-15.0					DL1 -13.00 dBm	Stop Fre 669.000000 MF
35.0		11				CF Ste 1.200000 MH <u>Auto</u> Ma
-55.0						Freq Offs 0 F
-65 0 Center 663.000 MHz				S	pan 12.00 MHz	Scale Typ
#Res BW 150 kHz	#VBW	470 kHz		Sweep 1.000	) ms (1001 pts)	

Plot 7-218. Lower Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)



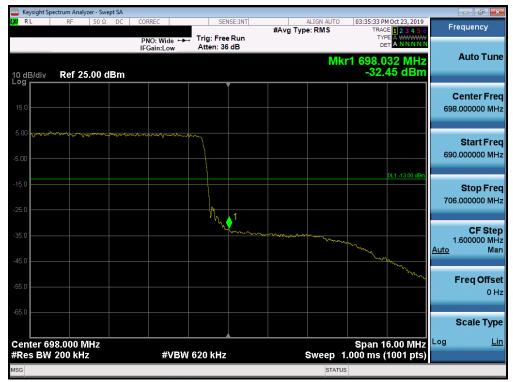
Plot 7-219. Upper Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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X RL	pectrum Analy RF	50 Ω		SENSE:INT	ALIGN AUTO	03:31:37 PM Oct 23, 2019	Frequency
			PNO: Wide + IFGain:Low	► Trig: Free Run Atten: 36 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Frequency
10 dB/div Log	Ref 25	5.00 dB			Mk	r1 662.936 MHz -30.48 dBm	Auto Tun
15.0							Center Fre 663.000000 MF
-5.00					ver and a second and	and and a set of the s	Start Fre 655.000000 MH
-15.0				1.		DL1 -13.00 dBm	Stop Fre 671.000000 MH
35.0		mm	man and a manuful				CF Ste 1.600000 MH <u>Auto</u> Ma
-55,0	<u></u>						Freq Offs 0 F
Center 6			#VB	W 620 kHz	Sween	Span 16.00 MHz 1.000 ms (1001 pts)	Scale Typ
WSG	200 111				STATU		

Plot 7-220. Lower Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)



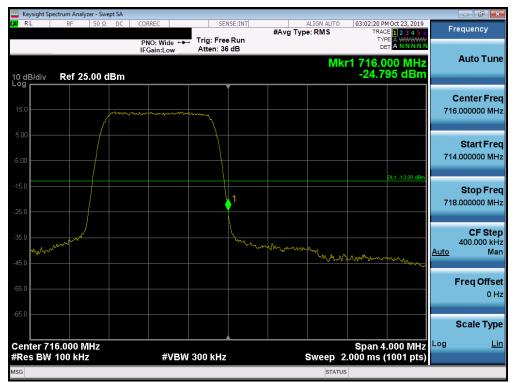
Plot 7-221. Upper Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-222. Lower Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)



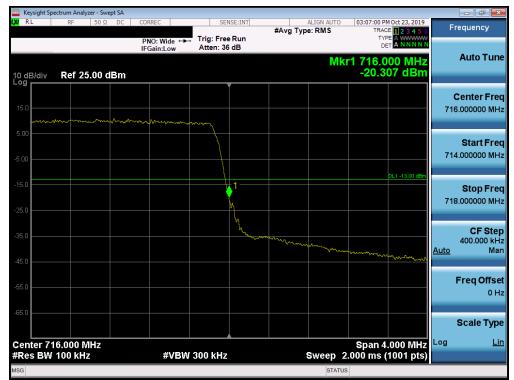
Plot 7-223. Upper Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL RF 50Ω DC	CORREC     SENSE:INT       PNO: Wide     →→       IFGain:Low     Atten: 36 dB	ALIGN AUTO #Avg Type: RMS	03:06:13 PM Oct 23, 2019 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Frequency
0 dB/div Ref 25.00 dBm		Mkr1	697.772 MHz -35.86 dBm	Auto Tun
15.0			and the second and the second s	Center Fre 698.000000 MH
5.00				Start Fre 696.000000 MH
25.0			DL1 -13.00 dBm	Stop Fre 700.000000 MH
45.0 man	e	mannar		CF Ste 400.000 kH Auto Ma
56.0				Freq Offs 0 F
26 0 Center 698.000 MHz Res BW 100 kHz	#VBW 300 kHz	Sweep 2.0	Span 4.000 MHz 00 ms (1001 pts)	Scale Typ Log <u>L</u>
SG		STATUS		

Plot 7-224. Lower Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)



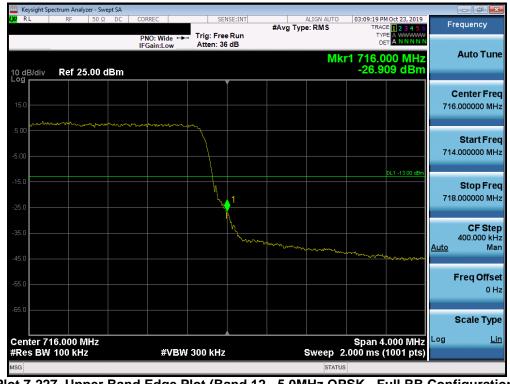
Plot 7-225. Upper Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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XU RL RF 50Ω DC	CORREC SENSE:INT PNO: Wide ↔ Trig: Free Run IFGain:Low Atten: 36 dB	ALIGN AUTO 03:08:19 PM Oct 23, #Avg Type: RMS TRACE 2 A TYPE A WW DET A NN	456 Frequency
10 dB/div Ref 25.00 dBm	in Guineou	Mkr1 697.928 M -38.50 dl	Hz Auto Tun Bm
15.0			Center Free 698.000000 MH
5.00			Start Fre 696.000000 MH
25.0		DL1-130	0 dBm Stop Fre 700.000000 MH
35.0 	unnun un annun		CF Ste 400.000 kH Auto Ma
55.0			Freq Offse 0 H
-65.0 Center 698.000 MHz		Span 4.000 M	Scale Typ
#Res BW 100 kHz	#VBW 300 kHz	Sweep 2.000 ms (1001	pts)

Plot 7-226. Lower Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-227. Upper Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
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RL	RF	50 Ω	DC	CORREC		SENSE:IN			IGN AUTO		M Oct 23, 2019	-	requency
				PNO: Wide	Trig	g: Free Run	#Avg	Type:	RMS	TRA ΤΥ	CE 1 2 3 4 5 6 PE A WWWWW ET A NNNNN	-	requeitcy
				IFGain:Low		ten: 36 dB							A
									Mkr	1 695.	528 MHz		Auto Tur
0 dB/div og ┏━━━	Ref 2	25.00 d	Bm								.14 dBm		
						Ĭ							Center Fre
15.0													8.000000 MH
5.00									www.phala	and the first the start of the	hallowylaw (national and a start of the star		
								- {					Start Fre
5.00												69	4.000000 MI
											DL1 -13.00 dBm		
15.0													Stop Fre
25.0								Ý				70	2.000000 MI
25.0							A						
35.0							p <sup>N'</sup>						CF Ste
			1				A.M.					Auto	800.000 kl M
15.0				Hentermanner	winnerground	menonend	m					<u>/ (uto</u>	
envi o	an an an I al sub a fair	www.	Transfer and										
i5.0 <b></b>													Freq Offs
													01
i5.0													
													Scale Typ
enter 6	698.000	MHz								Span 8	3.000 MHz	Log	L
Res BV	V 100 ki	IZ		#V	BW 300	kHz		S	weep 4	.000 ms	(1001 pts)		
G									STATUS				

Plot 7-228. Lower Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)



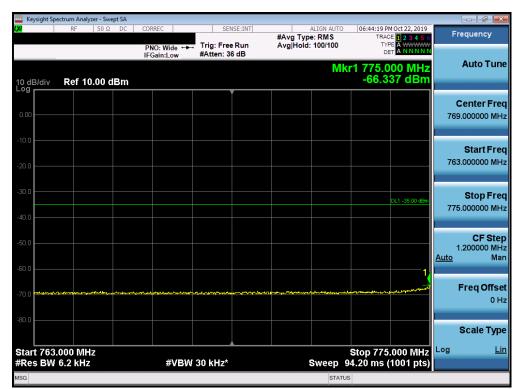
Plot 7-229. Upper Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-230. Lower Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



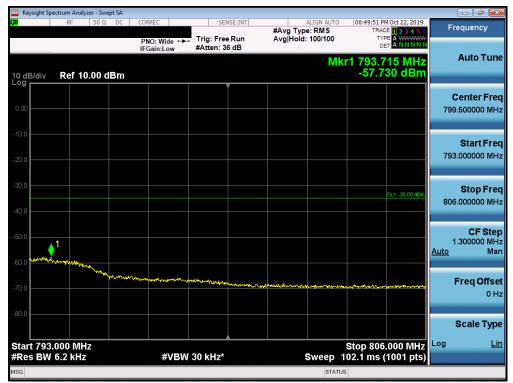
Plot 7-231. Lower Emission Mask Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analy RF			CORREC		SE	NSE:INT		ALIGN AUTO		PM Oct 22, 2019		requency
				PNO: Wide		Trig: Fre	e Run	#Avg Ty AvalHold	pe:RMS i:100/100	т	ACE 1 2 3 4 5 6 YPE A WWWW		requency
				IFGain:Lov		#Atten: 3				I	DET A NNNNN		
									Mk	r1 787.	012 MHz		Auto Tun
0 dB/div	Ref 2	5.00 dB	3m							-24.8	383 dBm		
°g							Ĭ						Center Fre
15.0													7.000000 MH
10.0												/ 6	
5.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~							
						$\mathbf{i}$							Start Fre
5.00												78	5.000000 MH
						}					DL1 -13.00 dBm		
15.0						=					DET -15.00 GBII		Stop Fre
						1 1	1					78	9.000000 MH
25.0						v-	<b>X</b>					-	
							Sur a	mm	man				OE Oto
35.0									· · · · · · · · · · · · · · · · · · ·	mon	m		CF Ste 400.000 kH
												<u>Auto</u>	Ma
45.0													
													Freq Offs
55.0													0 H
65.0													Scale Typ
													e cuic i yp
enter 78										Span	1.000 10112	Log	L
Res BW	100 kH	Z		#\	/BW :	300 kHz	*		Sweep 2	2.000 ms	(1001 pts)		
SG									STATUS	5			

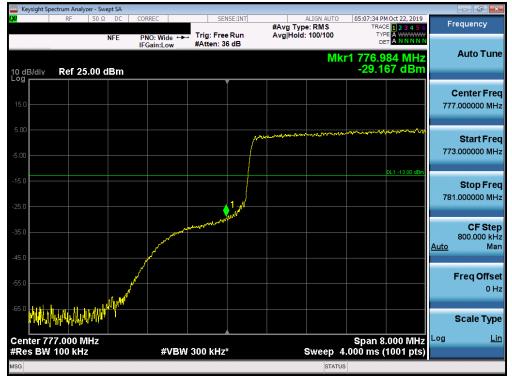
Plot 7-232. Upper Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



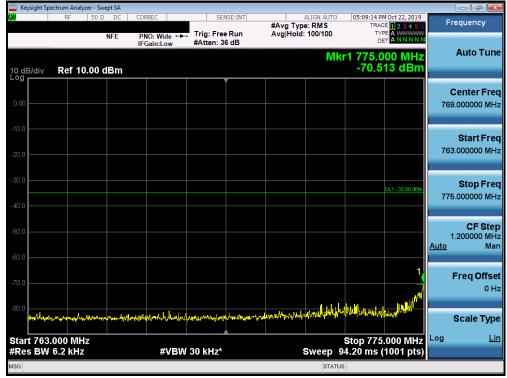
Plot 7-233. Upper Emission Mask Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Plot 7-234. Lower Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-235. Lower Emission Mask Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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	Spectrum Ana RF	50 Ω		CORREC		SI	ENSE:INT		ALIGN AUTO	05:01:51 P	M Oct 22, 2019	_	
		1	NFE		/ide ↔→	Trig: Fre		#Avg Ty Avg Hold	pe: RMS d: 100/100	TRAI TY	CE 1 2 3 4 5 6 PE A WWWWW ET A N N N N N	F	requency
) dB/div	Dof 2	5.00 d	Bm	IFGain:	Low	#Atten:	36 dB		Mk	r1 787.0	)24 MHz 38 dBm		Auto Tun
	Kel 2	J.00 u	5111				Ť						
5.0													Center Fre 7.000000 MH
												10	7.000000 111
.00 <b></b>	and and all and a second	••••••••••••••••••••••••••••••••••••••	al and the state of the state o	and any	****	ing							Start Fre
i.oo						$\downarrow$						78	3.000000 MI
											DL1 -13.00 dBm		
5.0						\							Stop Fr
5.0						\	1					79	1.000000 MI
						۳	her war	mallows	and the second s				CF Ste
5.0									and the second of the second o	***************************************	mar provens hours	Auto	800.000 ki
5.0												Auto	IVI
_													Freq Offs
5.0													01
5.0													
													Scale Typ
	787.000				#\/D\M	200 644	*		Burean	Span 8	.000 MHz	Log	L
Res BV	V 100 kl	Z			#VBW	300 kH:	2		Sweep 4	1.000 ms	(1001 pts)		

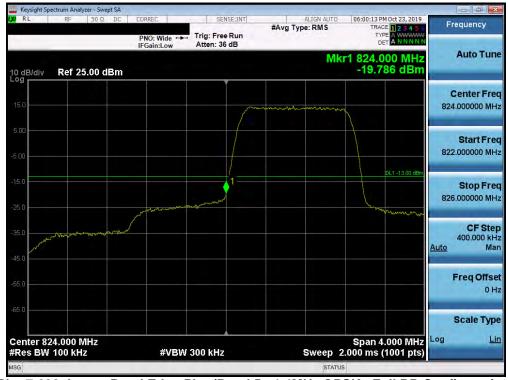
Plot 7-236. Upper Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

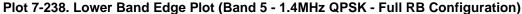


Plot 7-237. Upper Emission Mask Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

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Plot 7-239. Upper Band Edge Plot (Band 5 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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				NSE:INT		ALIGN AUTO		4 Oct 23, 2019		
					#Avg Typ	e: RMS	TRAC TYP DE	E 1 2 3 4 5 6 E A WWWWW A N N N N N	F	requency
Ref 25.00 c	lBm	II GUIILEGW				Mk	r1 824.0 -18.	00 MHz 94 dBm		Auto Tun
					som manyor	-v-www.	m	anne		Center Fre 4.000000 MF
									82:	Start Fre 2.000000 Mł
		and the second s	man	1				UC1 -13:00 dBm	820	<b>Stop Fr</b> 5.000000 Mi
									<u>Auto</u>	<b>CF Ste</b> 400.000 kl M
										Freq Offs 0
										Scale Typ
000 MHz 00 kHz		#VB	W 300 kHz			Sweep 2	Span 4 .000 ms (		Log	L
	000 MHz	000 MHz	Ref 25.00 dBm	Ref 25.00 dBm	IFGain:Low     Atten: 36 dB       Ref 25.00 dBm	Ref 25.00 dBm	Atten: 36 dB       Ref 25.00 dBm	PNO: Wide       Trig: Free Run       Trig: Atten: 36 dB         Mkr1 824.0       .18.         Carl 25.00 dBm       -18.         Image: State of the state of th	PNO: Wilds         Trig: Free Run Atten: 36 dB         Mkr1 824.000 MHz           Ref 25.00 dBm         -18.94 dBm	PNO: Wide       Trig: Free Run Atten: 36 dB       Mkr1 824.000 MHz -18.94 dBm         Ref 25.00 dBm       -18.94 dBm       -18.94 dBm         0       0       0       0       0       0       0       82         0       0       0       0       0       0       82       82         0       0       0       0       0       0       0       82         0       0       0       0       0       0       0       0       82         0       0       0       0       0       0       0       0       82         0       0       0       0       0       0       0       0       82         0       0       0       0       0       0       0       0       82         0

Plot 7-240. Lower Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-241. Upper Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)

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		SENSE:INT	ALIGN AUTO #Avg Type: RMS	05:43:48 PM Oct 23, 2019 TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Frequency
0 dB/div Ref 25.00 dBm	IFGain:Low A	tten: 36 dB	Mk	r1 823.976 MHz -24.62 dBm	Auto Tun
<b>0</b> 9					Center Fre 824.000000 MH
5.00				anawin, Minneditrana	Start Fre 822.000000 MH
25.0	-	1 pr		DL1 -13.00 dBm	Stop Fre 826.000000 MH
35.0					CF Ste 400.000 kF Auto Ma
55.0					Freq Offs 0 F
Center 824.000 MHz	#\/B\// 20	0 // 1/7	Swoon-2		Scale Typ
Center 824.000 MHz Res BW 100 kHz	#VBW 30	0 kHz	Sweep 2	.000 ms (1001 pts)	Log

Plot 7-242. Lower Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-243. Upper Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)

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PNO: Wide         Trig: Free Run Atten: 36 dB         Mkr1 824.0000 MHz -29.053 dBm         Auto T           10 dB/div         Ref 25.00 dBm         -29.053 dBm         Center I           500         - <t< th=""><th>X/ RL</th><th>Spectrum Anal RF</th><th></th><th>DC</th><th>CORREC</th><th></th><th>SE</th><th>NSE:INT</th><th></th><th>ALIGN AUTO</th><th></th><th>M Oct 23, 2019</th><th>-</th><th>requency</th></t<>	X/ RL	Spectrum Anal RF		DC	CORREC		SE	NSE:INT		ALIGN AUTO		M Oct 23, 2019	-	requency
Mkr1 824.000 MHz       Auto T         0 dB/div       Ref 25.00 dBm       Center I         0 dB/div       Ref 25.00 dBm       Stop I         0 dB/div       Ref 25.00 dB									#Avg Ty	pe: RMS	TRAC TYF DE	E 1 2 3 4 5 6 E A WWWW T A NNNNN	- F	requency
15.0	0 dB/div	Ref 2	5.00 dl	Bm	IFGain:	_ow	Atten: 5			Mł				Auto Tun
Start I         Start I           500         0         0.1.1.13.00.0EH         Start I           150         0         0.1.1.13.00.0EH         Start I           250         0         0         0         0.1.1.13.00.0EH         Start I           250         0         0         0         0         Start I           260         0														Center Fre 4.000000 M⊦
150       1									and and a second se	₩₽₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	45 <sup>4</sup> 04-105-105-105-10		82	Start Fre 0.000000 M⊦
350     550 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.</td> <td></td> <td></td> <td></td> <td></td> <td>82</td> <td><b>Stop Fre</b> 8.000000 MH</td>								1.					82	<b>Stop Fre</b> 8.000000 MH
sto state 1 Span 8.000 MHz Log		and the second sec	www.	and the second	v.lether dealer and	Jershaare	ertennetonovertent	44.9					<u>Auto</u>	CF Ste 800.000 kH Ma
enter 824.000 MHz Span 8.000 MHz														Freq Offs 0 I
		224 000 8	/1117								Snan 8	000 MHz	Log	Scale Typ
Res BW 100 kHz #VBW 300 kHz Sweep 4.000 ms (1001 pts)					-	#VBW	300 kHz			Sweep 4	4.000 ms (	1001 pts)		

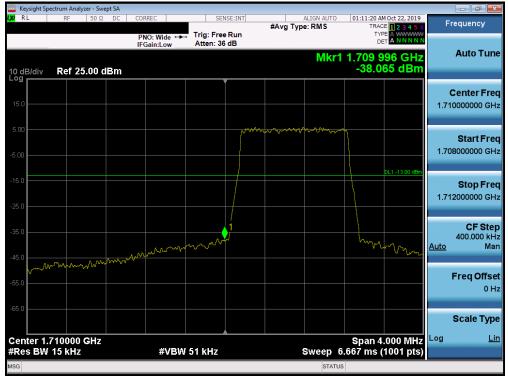
Plot 7-244. Lower Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)



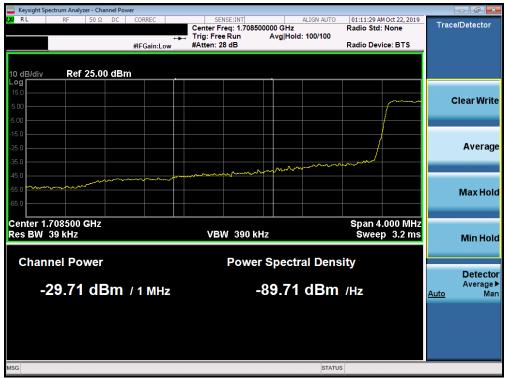
Plot 7-245. Upper Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-246. Lower Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



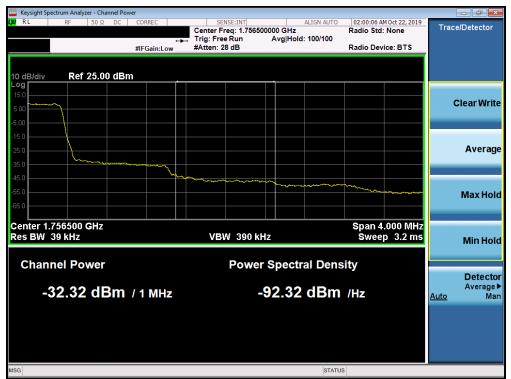
Plot 7-247. Lower Extended Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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RL	RF	50 Ω	DC	CORREC		SE	INSE:INT	#Avg Typ	ALIGN AUTO		M Oct 22, 2019 CE 1 2 3 4 5 6	Fr	equency
				PNO: Wid IFGain:Lo		Trig: Fre Atten: 3		#Avg iyp	Je. KWIJ	TY D			
) dB/div	Ref 25	.00 dE	Вm						Mkr1	1.755 ( -35.0	024 GHz 035 dBm		Auto Tur
5.0													Center Fre 5000000 GI
.00			her and	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~							1.753	<b>Start Fr</b> 3000000 G
5.0											DL1 -13.00 dBm	1.75	<b>Stop Fr</b> 7000000 G
5.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				<u>Auto</u>	<b>CF St</b> 400.000 k M
5.0									كوكمير	· · · · · · · · · · · · · · · · · · ·	unn nn h		Freq Offs 0
5.0													Scale Ty
	1.755000 ( N 16 kHz	GHz		#\	/BW	56 kHz			Sweep 5	Span 4 .667 ms	.000 MHz (1001 pts)	Log	Ţ

Plot 7-248. Upper Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)



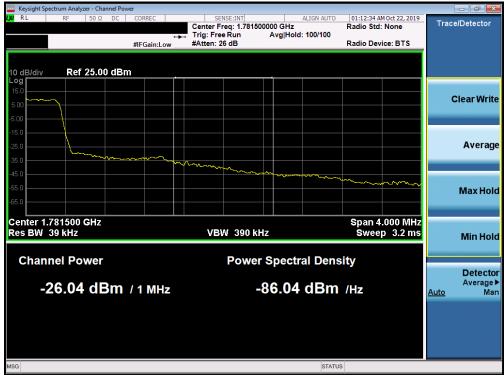
Plot 7-249. Upper Extended Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	ING	Approved by: Quality Manager
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RL	RF 5	0Ω DC	CORR	C	S	ENSE:INT		ALIGN AUTO		M Oct 22, 2019	-	
				:Wide ↔ in:Low	Trig: Fr Atten:		#Avg Typ	e:RMS	TRAC TY D	CE 1 2 3 4 5 6 PE A WWWW ET A NNNNN		quency
0 dB/div	Ref 25.0	0 dBm	1					Mkr1	1.780 ( -33.6	028 GHz 71 dBm		Auto Tun
15.0												e <b>nter Fre</b> 000000 GH
i.oo			gandy-daugyd <sup>y</sup> an	~~~~~								Start Fre
5.0										DL1 -13.00 dBm		Stop Fre
5.0	man				1	winner	m	w www.	Mun		Auto	CF Ste 400.000 kl M
5.0										ale and a second se	F	req Offs 0 I
65.0											S	cale Typ
	.780000 GH 15 kHz	iz		#VBW	51 kHz			Sweep 6	Span 4 .667 ms	.000 MHz (1001 pts)	Log	L

Plot 7-250. Upper Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)



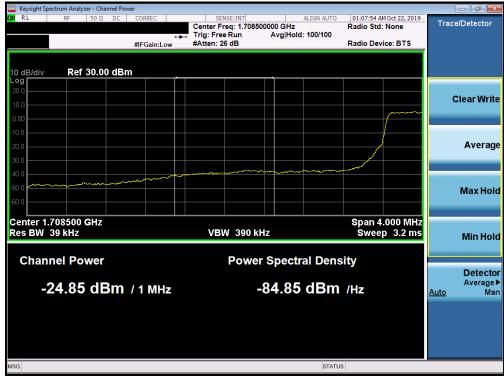
Plot 7-251. Upper Extended Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 450 of 404
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RL RL	t Spectrum Analyze RF	50 Ω DC	CORREC	SENSE	INT		ALIGN AUTO	01:07:38 AM	Oct 22, 2019		
		50 A D C	PNO: Wide ↔ IFGain:Low		un	#Avg Typ		TRACE	<b>1 2 3 4 5</b> 6 A WWWWW A N N N N N	Fr	equency
0 dB/div	v Ref 25.	00 dBm					Mkr1	1.709 9 -26.61	92 GHz I5 dBm		Auto Tun
15.0											Center Fre
5.00								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3	1.70	Start Fre 8000000 G⊦
25.0				1 <sup>1</sup>	ļ				0L1 -13.00 dBm	1.71	<b>Stop Fre</b> 2000000 G⊦
35.0		~~~~		~~~						Auto	CF Ste 400.000 kH Ma
i5.0 ——											F <b>req Offs</b> 0 F
65.0											Scale Typ
	1.710000 C W 36 kHz	Hz	#VBW	130 kHz			Sweep 2	.9 Span 4. /) 000 ms.	000 MHz 1001 pts)	Log	Ŀ
SG							STATUS	_			

Plot 7-252. Lower Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



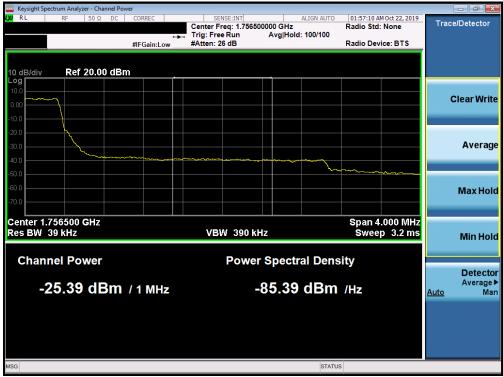
Plot 7-253. Lower Extended Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 454 at 494
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Keysight Sp RL	RF 50	Swept SA	CORREC	SEI	NSE:INT		ALIGN AUTO	01:56:50 //	10ct 22, 2019		- 6
	14 30	32 DC	PNO: Wide ↔		Run	#Avg Typ		TRAC	E 1 2 3 4 5 6 E A WWWWW T A N N N N N		quency
0 dB/div	Ref 25.00	) dBm					Mkr1	1.755 0 -26.6	04 GHz 14 dBm	4	Auto Tun
15.0											<b>enter Fre</b> 000000 G⊦
5.00	~~~~~	~~~~~	·····								Start Fre
25.0					1				DL1 -13.00 dBm		<b>Stop Fre</b> 000000 GI
5.0									<u> </u>	Auto	CF Ste 400.000 kl M
5.0										F	req Offs 0
5.0											Scale Typ
	.755000 GH 36 kHz	z	#VBW	/ 130 kHz			Sweep 2	Span 4. .000 m <u>s (</u>	.000 MHz 1001 pts)	Log	L
G							STATUS				

Plot 7-254. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)



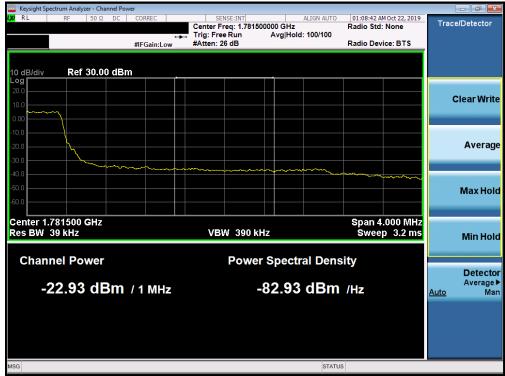
Plot 7-255. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 152 of 434	
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RL RL	pectrum Analyz RF	er - Swept SA 50 Ω DC	CORREC		SENSE:INT		ALIGN AUTO	01:08:32 AM	Oct 22, 2010	_	- F
KL	NP NP	50 32 DC	PNO: Wide IFGain:Low		Free Run h: 36 dB	#Avg Typ		TRACE	<b>1</b> 2 3 4 5 6 A WWWWW A N N N N N	Fr	equency
0 dB/div	Ref 25	.00 dBm					Mkr1	1.780 0 -25.02	04 GHz 28 dBm		Auto Tur
15.0											Center Fre
5.00 <b></b>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		^	-trong						1.77	Start Fre
5.0					1				DL1 -13.00 dBm	1.78	<b>Stop Fr</b> 2000000 G
5.0						<del>0-0-0-0</del>	······································	·		<u>Auto</u>	<b>CF St</b> 400.000 k M
5.0										1	Freq Offs 0
i5.0											Scale Ty
	.780000 ( ∮ 36 kHz	GHZ	#V	BW 130 k	Hz		Sweep 2	.000 ms (1	000 MHz 1001 pts)	LUg	L
G							STATUS				

Plot 7-256. Upper Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



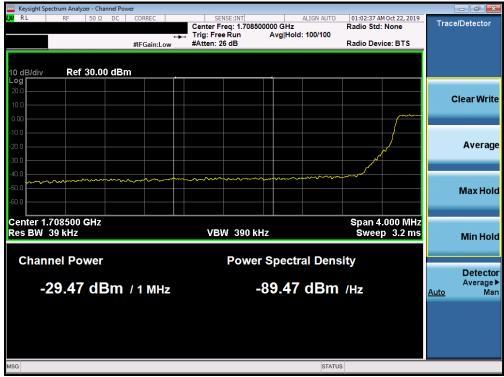
Plot 7-257. Upper Extended Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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REYSIGIN	Spectrum Analyze	50 Ω DC	CORREC	SENSE:INT		ALIGN AUTO	01:02:16 AM Oct 22, 2019	
			PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB	#Avg T	ype: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N	
0 dB/div	Ref 25.	00 dBm				Mkr1	1.709 996 GHz -29.601 dBm	Auto Tur
15.0								Center Fre 1.710000000 GF
5.00						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and the state of t	Start Fre 1.708000000 GF
25.0				1			DL1 -13.00 dBm	<b>Stop Fre</b> 1.712000000 GF
35.0 \$5.0	man	hmm	www	~~~~				CF Ste 400.000 kl <u>Auto</u> Ma
i5.0 ——								Freq Offs 0 F
65.0								Scale Typ
	1.710000 G W 62 kHz	Hz	#VBW	220 kHz		Sweep 2	Span 4.000 MHz .000 ms (1001 pts)	Log <u>L</u>
SG						STATUS		

Plot 7-258. Lower Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



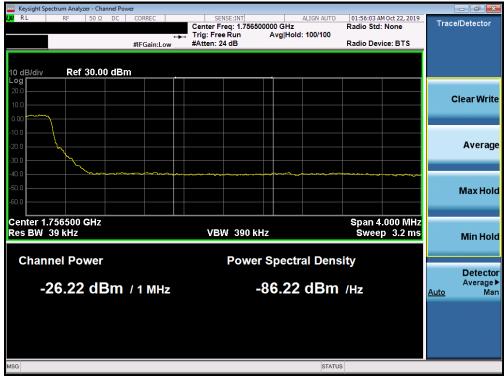
Plot 7-259. Lower Extended Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 454 at 404
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RF			CORREC		SEI	NSE:INT		ALIGN AUTO	01:55:46 A	M Oct 22, 2019		
			PNO: W		Trig: Free	Run	#Avg Typ		TRA	CE 1 2 3 4 5 6		equency
Ref 2	5.00 d	Bm						Mkr1	1.755 ( -30.8	004 GHz 87 dBm		Auto Tun
												<b>Center Fre</b> 5000000 GH
	~~~~	or for and	mm	~~~~							1.753	Start Fre
						1				UL1 -13.00 dbm	1.757	<b>Stop Fr</b> 7000000 GI
						M	y.M.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	honor	www	<u>Auto</u>	CF Ste 400.000 kl M
											ł	Freq Offs 0
												Scale Typ
.755000 / 62 kHz			#	VBW	220 kHz			Sweep 2	Span 4 .000 ms	.000 MHz (1001 pts)	Log	L
	Ref 2	Ref 25.00 d	Ref 25.00 dBm	RF         50 Ω         DC         CORREC           PNO: W         IFGain:L           Ref 25.00 dBm	RF     50 Ω     DC     CORREC       PNO: Wide     →       IFGain:Low	RF       50 Ω       DC       CORREC       SEI         PNO: Wide        Trig: Free         IFGain:Low        Trig: Free         Ref 25.00 dBm	RF     50 Ω     DC     CORREC     SENSE:INT       PNO: Wide     Trig: Free Run Atten: 36 dB   Ref 25.00 dBm	RF     50 Ω     DC     CORREC     SENSE:INT       PNO: Wide     Trig: Free Run       Ref 25.00 dBm	RF     50 Ω     DC     CORREC     SENSE:INT     ALIGN AUTO       PNO: Wide     Trig: Free Run Atten: 36 dB     #Avg Type: RMS       Ref 25.00 dBm     Image: Constant of the sense: Sen	RF         50 Ω         DC         CORREC         SENSE:INT         ALIGN AUTO         01:55:46 A           PNO: Wide         Trig: Free Run         #Avg Type: RMS         Tradition         Trig: Free Run         Trig: Free Run	RF         50 Ω         DC         CORREC         SENSE:INT         ALIGN AUTO         01:55:46 AM oct 22, 2019           PNO: Wide         Trig: Free Run Atten: 36 dB         Trig: Free Run Atten: 36 dB         Trig: Tree Run Atten: 36 dB         Trig: Tree Run Atten: 36 dB         Trig: Tree Run -30.887 dBm           Ref 25.00 dBm         0.01.1755 004 GHz         0.01.1300 dBm         0.01.1300 dBm         0.01.1300 dBm           0.01.1300 dBm         0.01.1300 dBm         0.01.1300 dBm         0.01.1300 dBm         0.01.1300 dBm           0.01.755000 GHz         Span 4.000 MHz         0.000 MHz         0.000 MHz         0.000 MHz	RF         50 Ω         DC         CORREC         SENSE:INT         ALIGN AUTO         01:55:46 AM Oct 22, 2019         Fr           PNO: Wide         Trig: Free Run IFGein:Low         Trig: Free Run Atten: 36 dB         #Avg Type: RMS         Trace         D2:43:50         D2:43:50

Plot 7-260. Upper Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)



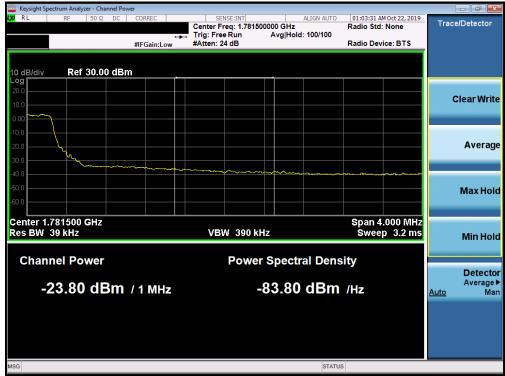
Plot 7-261. Upper Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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RL RL	Spectrum Ana RF	yzer - Swe 50 Ω	DC	CORREC		SE	NSE:INT		ALIGN AUTO		M Oct 22, 2019		
				PNO: W IFGain:	/ide ↔ Low	Trig: Fre Atten: 3		#Avg Typ	e:RMS	TRAI TY D	CE 1 2 3 4 5 6 PE A WWWWW ET A NNNNN	F	requency
0 dB/div	Ref 2	5.00 d	Bm						Mkr1	1.780 ( -27.8	004 GHz 39 dBm		Auto Tun
15.0													Center Fre 80000000 G⊦
5.00 <b></b>		~~~~	<u>~~~</u>		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							1.77	<b>Start Fre</b> 8000000 GF
25.0							1				DL1 -13.00 dBm	1.78	<b>Stop Fre</b> 2000000 GF
15.0								······	·····	- 	W. Mark	<u>Auto</u>	<b>CF Ste</b> 400.000 ki Ma
i5.0													Freq Offs 0 F
65.0													Scale Typ
	1.780000 V 62 kHz				#VBW	220 kHz			Sweep 2	Span 4 2.000 ms	.000 MHz (1001 pts)	Log	L
SG									STATU				

Plot 7-262. Upper Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)



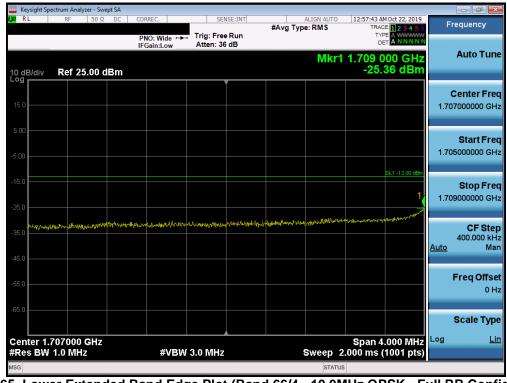
Plot 7-263. Upper Extended Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight S	Spectrum Anal			CORREC		CENCE INT			10.57.01.4	10-+22.2010		
M KL	KF	50 Ω	DC	CORREC		SENSE:INT	#Avg Typ	ALIGN AUTO	TRAC	MOct 22, 2019	Fr	equency
				PNO: Wide IFGain:Low	Trig: Fi Atten:	ree Run 36 dB			TYP De			Auto Tur
I0 dB/div	Ref 2	5.00 dl	Зm					Mkr1	1.709 9 -32.6	984 GHz 25 dBm		Auto Tur
- <sup>og</sup>						Ĭ					c	enter Fre
15.0											1.710	000000 GH
5.00							and the state of t		-	-e		
						/**					4 70	Start Fre
-5.00											1.700	000000 Gr
15.0										DL1 -13.00 dBm		Stop Fre
						l					1.714	1000000 GH
25.0						1.4						
35.0				menymanym	her and the second second	EV.						CF Ste 800.000 kH
45.0	N MARTE MARY	man providence	hand the start of	White A freed of the law.							<u>Auto</u>	Ma
10.0												Freq Offs
55.0												01
65.0												
											1	Scale Typ
	.710000								Span 8	.000 10112	Log	L
Res BV	V 120 kH	Z		#VE	W 430 kH	Z		Sweep 4	.000 ms (	1001 pts)		

Plot 7-264. Lower Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-265. Lower Extended Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight S RL	Spectrum Analy RF	/zer - Swep 50 Ω		CORREC	-		NSE:INT		ALIGN AUTO	01-52-11.4	M Oct 22, 2019	_	
		20.25	DC	PNO: W	de⊶⊷	Trig: Fre	e Run	#Avg Typ		TRA	CE 1 2 3 4 5 6 PE A WWWW ET A NNNNN	F	requency
0 dB/div	Ref 2	5.00 dl	3m	IFGain:L	ow	Atten: 3	6 dB		Mkr1	1.755 (	032 GHz 91 dBm		Auto Tun
. <b>og</b>													Center Fre 5000000 G⊦
5.00	เรือดารหรืออย่างสามา	Canada and Canada	and an and and and and and and and and a	hermeterie	n and and and and and and and and and an						DL1 -13.00 dBm	1.75	<b>Start Fre</b> 1000000 GH
25.0							1					1.75	<b>Stop Fre</b> 9000000 GF
15.0							an and a start a	ig produce the field shake	A. M. Marriellingel	the the Andrew Start Corport		<u>Auto</u>	CF Ste 800.000 kl M
5.0													Freq Offs 01
i5.0													Scale Typ
	1.755000 V 120 kH			#	VBW	430 kHz			Sweep 4	Span 8 1.000 ms	3.000 MHz (1001 pts)	Log	Ŀ
SG									STATU	s			

Plot 7-266. Upper Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-267. Upper Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL RL	pectrum Anal RF	50 Ω		CORREC		S	ENSE:INT		ALIGN AUTO	12:58:27.4	M Oct 22, 2019	_	
					/ide ⊶⊷			#Avg Typ		TRA	CE 1 2 3 4 5 6 PE A WWWWW ET A NNNN	Fr	equency
				IFGain:		Atten:	36 dB						Auto Tun
0 dB/div	Ref 2	5.00 dl	Bm						Mkr1	1.780 ( -31.3	064 GHz 20 dBm		Auto Tun
.ºg							Ĭ						enter Fre
15.0													0000000 GH
E 00													
5.00 <del></del>		and and a second se	والالاك يحتادهما الم			men							Start Fre
5.00						-						1.77	5000000 GH
											DL1 -13.00 dBm		
15.0						\							Stop Fre
25.0						Ľų.	<u> </u>					1.78	4000000 GI
						٦	₩ <b>⊘</b> 1						
35.0							and the second s	Jane Barran	Warman Marcuna				CF Ste 800.000 kl
										and the second standing	an shall any for a far	<u>Auto</u>	M
15.0													
5.0												I	Freq Offs
													0
65.0													
													Scale Typ
	.780000								_	Span 8	1000 11112	Log	L
Res BW	/ 120 kH	Z			#VBW	430 kH	Z		Sweep 4	.000 ms	(1001 pts)		

Plot 7-268. Upper Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-269. Upper Extended Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL	RF	50 Ω	DC	CORREC		SE	NSE:INT		ALIGN AUTO		M Oct 22, 2019	<b>F</b> -1	
				DNO 1	Vide ↔	, Trig: Fre	e Run	#Avg Typ	e:RMS	TRAC TY	DE 1 2 3 4 5 6	Fre	equency
				IFGain:		Atten: 3				D			
									Mkr1	1.709 9	940 GHz		Auto Tun
0 dB/div	Ref 2	5.00 d	Bm							-31.7	21 dBm		
.°9							Y					0	enter Fre
15.0													0000000 GH
												1.1110	
5.00								- martine	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	wards wards	-		
													Start Fre
5.00												1.704	1000000 GH
											DL1 -13.00 dBm		
15.0													Stop Fre
												1.716	5000000 GH
25.0							1 7						
							مى مەر مەر بى						CF Ste
35.0		m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	w	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~ v						1	.200000 MI
	- (1- off -											<u>Auto</u>	Ma
45.0													
55.0												F	req Offs
33.0													0 H
65.0													
												;	Scale Typ
Center 1. Res BW					#\/D\4	( 600 kH=			Curoon 4	Span 1	2.00 MHz (1001 pts)	Log	L
Res BW	180 KF	Z			#VBW	/ 620 kHz			sweep 1	.000 ms (	(1001 pts)		

Plot 7-270. Lower Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-271. Lower Extended Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 160 of 121
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RL	RF	50 Ω	DC	CORREC		SE	NSE:INT		ALIGN AUTO	01:50:56 A	M Oct 22, 2019		
	_			PNO: W IFGain:L	ide ↔ _ow	Trig: Fre Atten: 30		#Avg Typ	e:RMS	TRAI TY D	CE 1 2 3 4 5 6 PE A WWWWW ET A NNNNN		uency
0 dB/div	Ref 2	5.00 d	Bm						Mkr1	1.755 ( -32.	048 GHz 03 dBm	A	uto Tun
15.0													n <b>ter Fre</b> 00000 GH
5.00	un to				********						DL1 -13.00 dBm		t <b>art Fre</b> 00000 G⊦
25.0							1						t <b>op Fre</b> 00000 GH
15.0						ΨĮ		<u></u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1.20 <u>Auto</u>	CF Ste 00000 MH Ma
55.0												Fr	e <b>q Offs</b> 0 H
65.0													ale Typ
	.755000 V 180 kH				#VBW	620 kHz			Sweep 1	Span 1 .000 ms	2.00 MHz (1001 pts)	Log	L

Plot 7-272. Upper Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)



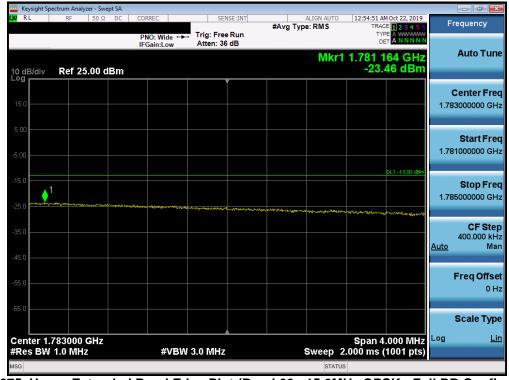
Plot 7-273. Upper Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL	RF	50 Ω	DC	CORREC		SE	NSE:INT		ALIGN AUTO		M Oct 22, 2019	-	
				PNO: W IFGain:I	lide ↔ _ow	Trig: Fre Atten: 36		#Avg Typ	e: RMS	TRA TY D	DE 123456 PE A WWWWW ET A NNNNN		uency
0 dB/div	Ref 2	25.00 d	Bm						Mkr1	1.780 ( -28.6	024 GHz 48 dBm	A	uto Tun
15.0													nter Fre 00000 GH
5.00	<b>han na han</b> a na hana n Ia hana na hana n Ia hana na hana n Ia hana na		······	^									<b>Start Fre</b> 00000 G⊦
25.0						- John Start	1				DL1 -13.00 dBm		Stop Fre
35.0 <b></b>								~~~~~~	man	marga	·····	1.20 <u>Auto</u>	CF Ste 00000 MH Ma
i5.0												Fr	e <b>q Offs</b> 0 I
65.0													ale Typ
enter 1. Res BW				-	#VBW	620 kHz			Sweep 1	Span 1 .000 ms	2.00 MHz (1001 pts)	Log	L

Plot 7-274. Upper Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-275. Upper Extended Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 162 of 124
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RL	RF	50 Ω	DC	CORREC		SEI	NSE:INT		ALIGN AUTO		4 Oct 22, 2019	Fre	quency
				PNO: W	ide ↔→	Trig: Free Atten: 36		#Avg Typ	e: RIVIS	TYI	E 1 2 3 4 5 6 E A WWWW A NNNNN		queney
0 dB/div	Ref 2	5.00 d	Bm						Mkr1	1.709 8 -32.5	88 GHz 20 dBm		Auto Tur
- <b>og</b> 15.0													<b>enter Fre</b> 000000 G⊦
5.00								en and an	a frankrinn hraft for der	and and an and an and an and an an and an	DL1 -13.00 dBm		Start Fre
25.0							1 /					1.718	<b>Stop Fre</b> 000000 GF
45.0	- marker	~~~~	ليهجروماند	hadren handinar	-Menter	· ····································	لعلم					1. <u>Auto</u>	CF Ste 600000 MI Ma
55.0												F	r <b>eq Offs</b> 0 I
65.0													Scale Typ
enter 1. Res BW				į	≠vbw	820 kHz			Sweep 1	Span 1 .000 ms (	6.00 MHz 1001 pts)	Log	L

Plot 7-276. Lower Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-277. Lower Extended Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 162 of 124
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RL RF	malyzer - Swept S	C CORREC	SEN	SE:INT		ALIGN AUTO	01:48:59 AM	Oct 22, 2019	_	
		PNO: Wide IFGain:Low	Trig: Free	Run	#Avg Typ	e: RMS	TRACI	123456 A WWWWW A N N N N N	Frequer	
0 dB/div Ref	25.00 dBr	n				Mkr1	1.755 0 -32.10	32 GHz 68 dBm	Auto	Tun
15.0									Cente 1.7550000	
5.00	anana patron ta								Star 1.7470000	t <b>Fre</b> 00 G⊦
25.0				.1				DL1 -13.00 dBm	<b>Stoj</b> 1.7630000	pFre 00 G⊦
15.0				and a second and a s	- An some of	- water and a second	nn an the	an an Charlan an An	CF 1.60000 <u>Auto</u>	= Ste DO MI Ma
5.0									Freq	Offs 0 I
65.0									Scale	
enter 1.7550 Res BW 240		#V	BW 820 kHz			Sweep 1	Span 10 .000 ms (*	6.00 MHz 1001 pts)	Log	L

Plot 7-278. Upper Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-279. Upper Extended Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	Spectrum Analyze										r X
XI RL	RF	50 Ω DC	CORREC			#Avg Typ	ALIGN AUTO	TRACE	Oct 22, 2019	Freque	ncy
10 dB/div	Ref 25.0	00 dBm	IFGain:Low	Atten: 36			Mkr1	1.780 0	32 GHz 52 dBm	Auto	o Tun
15.0										Cente 1.7800000	
5.00		**************		vv					DL1 -13.00 dBm	Sta 1.7720000	rt <b>Fre</b> 00 G⊦
25.0				- how	1					<b>Sto</b> 1.7880000	<b>p Fre</b> 00 GH
35.0					and the second			mmm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<b>C</b> 1.6000 <u>Auto</u>	F Ste 00 MF Ma
55.0										Freq	Offs 0 H
65.0										Scal	е Тур
	1.780000 G W 240 kHz	Hz	#VBW	820 kHz			Sweep 1	Span 10 .000 ms (′	0.00 IVII 12	Log	Li
ISG							STATUS				

Plot 7-280. Upper Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)



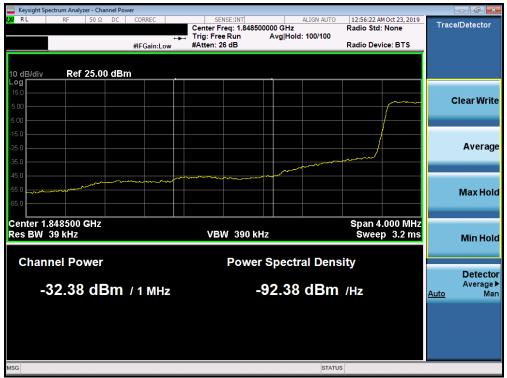
Plot 7-281. Upper Extended Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-282. Lower Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)



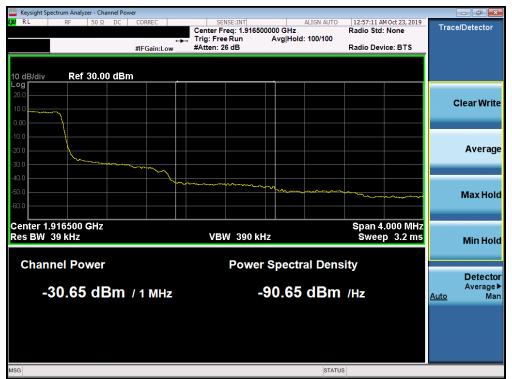
Plot 7-283. Lower Extended Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 100 of 121
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Plot 7-284. Upper Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)



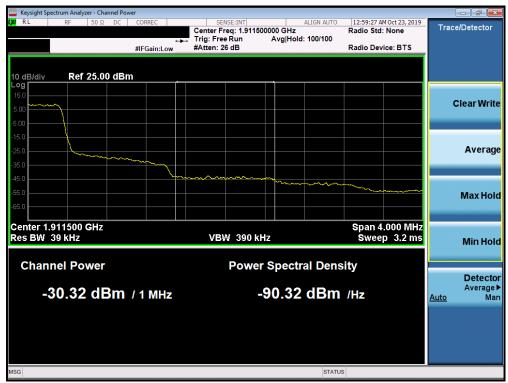
Plot 7-285. Upper Extended Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 167 of 424
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	Spectrum Analyze											
<mark>(</mark> RL	RF	50 Ω	CORREC			e Run	#Avg Ty	ALIGN AUTO pe: RMS	TRAC	M Oct 23, 2019 DE 1 2 3 4 5 6 PE A WWWWW	F	requency
0 dB/div	Ref 25.	00 dB	IFGain:L	ow	Atten: 3			Mkr1	1.910 0	)28 GHz 38 dBm		Auto Tur
. <b>og</b>												Center Fre
5.00			 white	~~~~~						DL1 -13.00 dBm	1.90	<b>Start Fre</b> 8000000 GF
25.0						1					1.91	<b>Stop Fre</b> 2000000 Gi
35.0 <del>~~</del> 45.0 <b>~</b> ~	www.	<u>ر</u>				- www.	-				<u>Auto</u>	CF Ste 400.000 kl Ma
55.0								" ward	mmm	www		Freq Offs 0 I
55.0	1.910000 G	·U-7							Spap 4	.000 MHz	Loa	Scale Typ
	N 15 kHz	9112	#	ŧvвw	51 kHz			Sweep 6	.667 m <u>s (</u>	(1001 pts)	3	
SG								STATUS				

Plot 7-286. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



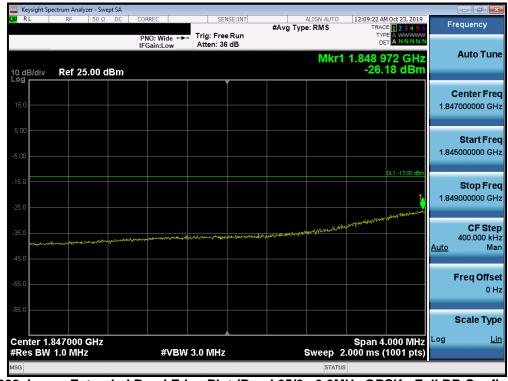
Plot 7-287. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 169 of 424	
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X RL RF 50 Ω DC	CORREC SENSE:INT	ALIGN AUTO 12:09:01 AM	
	PNO: Wide ↔ Trig: Free Run IFGain:Low Atten: 36 dB	TYPE	1 2 3 4 5 6 Frequency A WWWW A N N N N N
10 dB/div Ref 25.00 dBm	I Guilleon	Mkr1 1.849 99 -36.55	2 GHz Auto Tun 1 dBm
15.0			Center Fre 1.850000000 GH
5.00			Start Fre 1.848000000 GH
25.0			L1 -13 00 dBm Stop Fre 1.852000000 GH
35.0	1		CF Ste 400.000 kH Auto Ma
56.0			Freq Offs 0 H
65.0			Scale Typ
Center 1.850000 GHz #Res BW 36 kHz	#VBW 130 kHz	Span 4.0 Sweep 2.000 ms (1	
ISG		STATUS	

Plot 7-288. Lower Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-289. Lower Extended Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 160 of 424	
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