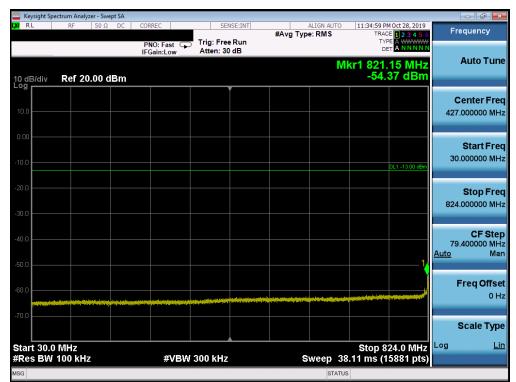


Plot 7-188. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-189. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	ectrum Analyzer - S	wept SA									×
L <mark>XI</mark> RL	RF 50 9	Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		HOct 28, 2019	Frequency	
			PNO: Fast IFGain:Low	Trig: Free Atten: 30		- //		TYP DE		Auto Tur	ne
10 dB/div Log	Ref 20.00	dBm					M	kr1 849. -61.	80 MHZ 82 dBm		
										Center Fre	
10.0										924.500000 Mł	Ηz
0.00										Start Fre	eq
-10.0									DL1 -13.00 dBm	849.000000 Mł	Ηz
-20.0										Stop Fre	eq
-30.0										1.000000000 GI	Hz
-40.0										CF Ste	
										15.100000 Mi <u>Auto</u> Ma	Hz an
-50.0										Erog Offo	ot
-60.0	,	upalar Papersonal d	winter gerange angeren vie	ىنى يۇر، ئىرىمەر ئىلىيەر يۇرام	land and the second second		~~~	-	, <del>3.), </del>	Freq Offs 0 H	Hz
-70.0										Coolo Tur	
								<b>0</b> 4 4 04		Scale Typ	_in
Start 0.84 #Res BW			#VBW	300 kHz			Sweep 7	Stop 1.00 .248 ms (	0000 GHz 3021 pts)		1
MSG							STATUS	5			

Plot 7-190. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



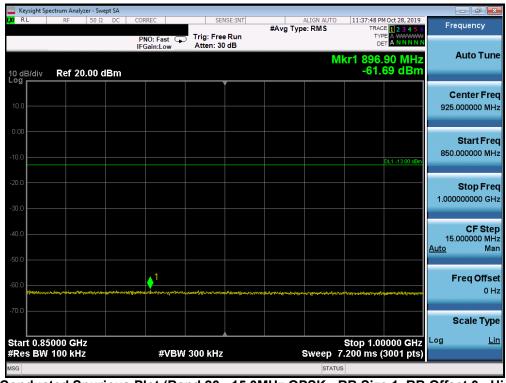
Plot 7-191. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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			lyzer - Swe	pt SA										
<b>l,XI</b> R	L	RF	50 Ω	DC	CORREC		SEI	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Oct 28, 2019 CE 1 2 3 4 5 6	F	requency
					PNO: IFGair	Fast 😱 n:Low	Trig: Free Atten: 30			N	7 /kr1 820			Auto Tune
10 di Log	B/div	Ref 2	0.00 d	Bm							-59	.07 dBm		
10.0														<b>Center Freq</b> 7.000000 MHz
0.00 -10.0												DL1 -13.00 dBm	31	Start Freq 0.000000 MHz
-20.0 -30.0													82	Stop Freq 4.000000 MHz
-40.0													7! <u>Auto</u>	<b>CF Step</b> 9.400000 MHz Man
-50.0			fer startigets									1		Freq Offset 0 Hz
-70.0														Scale Type
	t 30.0 s BW	MHz 100 kH	z			#VBW	300 kHz		s	weep 3	Stop 8 8.11 ms (*	324.0 MHz 15881 pts)	Log	Lin
MSG										STAT				

Plot 7-192. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-193. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 110 of 497
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		ctrum Analy											
<b>l,Xi</b> F	IL	RF	50 Ω	DC	CORREC		SEN	ISE:INT	#Avg Typ	ALIGN AUTO		MOct 28, 2019	Frequency
					PNO: F IFGain:	ast 🖵 Low	Trig: Free #Atten: 3				TYI Di		
10 d Log	B/div	Ref 0.	00 dB	m						MI	kr1 9.75 -40.	3 0 GHz 02 dBm	Auto Tune
-10.0												DL1 -13.00 dBm	Center Freq 5.50000000 GHz
-20.0 -30.0													<b>Start Freq</b> 1.000000000 GHz
-40.0 -50.0					~	<b>\</b>	¢.	~~~			y internet of the second s		<b>Stop Freq</b> 10.000000000 GHz
-60.0													CF Step 900.000000 MHz <u>Auto</u> Man
-80.0													<b>Freq Offset</b> 0 Hz
-90.0													Scale Type
	rt 1.00 Is BW	0 GHz 1.0 MH:	7			#VBW	3.0 MHz		s	weep 1:	Stop 10 5.60 ms (1	.000 GHz 8001 pts)	
MSG										STATU			

Plot 7-194. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Spectrum Analyzer - Sw					- đ <del>-</del> ×
K <mark>RL RF 50 Ω</mark>	2 DC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	12:41:48 AM Oct 29, 2019	Frequency
	PNO: Fast G IFGain:Low	Trig: Free Run Atten: 30 dB		TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	
10 dB/div Ref 20.00	dBm		Mł	r1 1.702 0 GHz -25.78 dBm	Auto Tun
		Ĭ			Center Fre
10.0					869.500000 MH
0.00					Start Fre
10.0				DL1 -13.00 dBm	30.000000 MH
20.0				1	Stop Fre
30.0				•	1.709000000 GH
					CF Ste
40.0					167.900000 MH Auto Ma
50.0			1.000 0.0100000000000000000000000000000	Amile 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	
60.0					Freq Offs
70.0					
					Scale Typ
Start 0.0300 GHz Res BW 1.0 MHz	#\/B\	V 3.0 MHz	Sween 2	Stop 1.7090 GHz 2.239 ms (3359 pts)	Log <u>L</u>
	#000	V 5.0 WI112	Sweep 2		

Plot 7-195. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-196. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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PNO: Fast (FGain:Low)       Trig: Free Run Atten: 10 dB       #Avg Type: RMS       Trig: Free Run Atten: 10 dB       Auto Tune         10 dB/div       Ref 0.00 dBm       -54.99 dBm       -54.99 dBm       -64.99 dBm       <		ight Spec	trum Anal	yzer - Swe	pt SA										
Phot-Fast IF GeintLow       Trig: Free Run Atten: 10 dB       Mikr1 19.972 5 GHz -54.99 dBm         100 dB/div       Ref 0.00 dBm       -54.99 dBm         -000       -000       -000       -000         -000       -000       -000       -000         -000       -000       -000       -000       -000         -000       -000       -000       -000       -000       -000         -000	LXI RL		RF	50 Ω	DC	CORRE	C	SEN	ISE:INT					Fr	equency
Mikit         19.97/2 3 GHz           100         -54.99 dBm           -100         -54.99 dBm           -100         -54.99 dBm           -100         -11.1300dEm           -11.1300dEm         -11.1300dEm           -11.1300dEm <td></td> <td></td> <td></td> <td></td> <td></td> <td>PNO IFGai</td> <td>:Fast 🖵 in:Low</td> <td></td> <td></td> <td></td> <td></td> <td>TY Di</td> <td></td> <td></td> <td>Auto Tune</td>						PNO IFGai	:Fast 🖵 in:Low					TY Di			Auto Tune
100       1	10 dB. Log <b>r</b>	/div	Ref 0	.00 dB	m							-54.	2 5 GHZ 99 dBm		
2000       DL 13000456       NUMODOCOUCOUNT         2000       DL 13000456       NUMODOCOUCOUNT         3000       DL 13000456       Start Freq         4000       DL 13000456       DL 13000456         4000       DL 13000456       DL 10000466	-10.0														
300       Image: Start Freq         400       Image: S													DL1 -13.00 dBm	13.000	000000 GHZ
-40.0 -40.0 -40.0 -5	-20.0													40.000	
-500 -500 -600	-30.0													10.000	000000 GH2
-500 -500 -600 -700 -700 -700 -700	-40.0														
<ul> <li>4.000 and the second sec</li></ul>	-50.0												1	20.000	J000000 GHZ
.700	-60.0		The second second	et age of barry	-		tigener för er	مراد به ما ماین در از میروند مامانی را و رهیدو آلایی د	for the standard statement in the	و مارستان می از ایروند و را از از انتقاع می مارسوانی و		a da la constanta da constanta d	ternetter för fölssande Verande sitte Milane äre	1.000	
300 300 Start 10.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Start 10.001 GHz #VBW 3.0 MHz Sweep 17.33 ms (20001 pts)	-70.0				inden der		····							<u>Auto</u>	Man
2000 Start 10.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 17.33 ms (20001 pts)	-80.0													I	-
Start 10.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 17.33 ms (20001 pts)															0 Hz
#Res BW 1.0 MHz         #VBW 3.0 MHz         Sweep         17.33 ms (20001 pts)	-90.0														Scale Type
							#VBW	3.0 MHz		8	ween 1	Stop 20	.000 GHz	Log	Lin
	MSG		NO MIT	2			# V D V V	5.0 10112				·	ooor pts)		

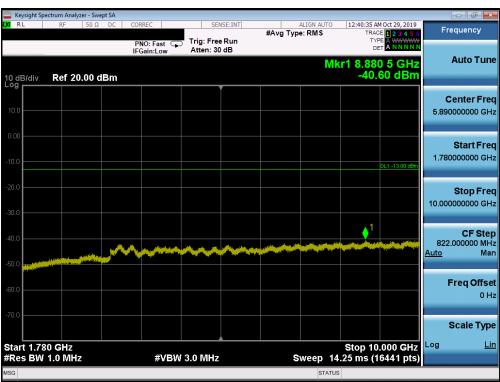
Plot 7-197. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



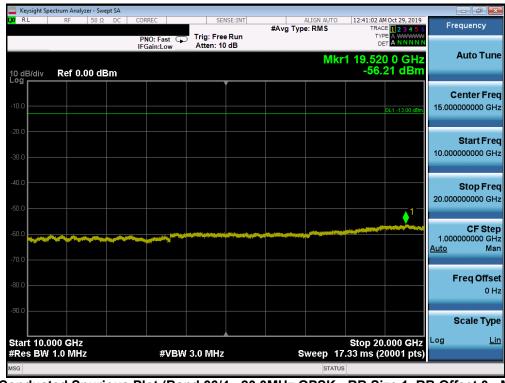
Plot 7-198. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-199. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



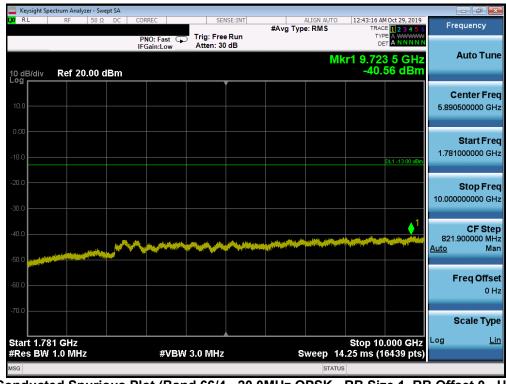
Plot 7-200. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	ectrum Analyzer - Swep	ot SA									
LX/RL	RF 50 Ω	DC CO	RREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		Oct 29, 2019	Fr	equency
		P IF	NO: Fast 🕞 Gain:Low	Trig: Free Atten: 30		• //	Mk	TYP DE			Auto Tune
10 dB/div Log	Ref 20.00 dE	Bm						-49.	88 dBm		
10.0											enter Freq .000000 MHz
-10.0									DL1 -13.00 dBm	30	Start Freq .000000 MHz
-20.0										1.710	<b>Stop Freq</b> 0000000 GHz
-40.0									•	168 <u>Auto</u>	<b>CF Step</b> .000000 MHz Man
-60.0	***************************************			an a		in and the second s	an gang da si kanan da gang da ga da gang da g	41		i	F <b>req Offset</b> 0 Hz
-70.0											Scale Type <sub>Lin</sub>
Start 0.03 #Res BW			#VBW	3.0 MHz			Sweep 2	Stop 1.7 .240 ms (	'100 GHz 3361 pts)		
MSG							STATUS				

Plot 7-201. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-202. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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		ctrum Anal												×
l <mark>xi</mark> Ri	L	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO		MOct 29, 2019	Frequency	
					PNO: IFGair	Fast 🖵	Trig: Free Atten: 10				TY			
10 dB Log	3/div	Ref 0	.00 dE	m						MI	kr1 19.53 -55.	7 0 GHz 83 dBm	Auto Tu	une
-10.0												DL1 -13.00 dBm	Center F 15.000000000	
-20.0 -30.0													Start F 10.0000000000	
-40.0 -50.0												1_	Stop F 20.0000000000	
-60.0									y an began beta yan beta ya ma				CF S 1.000000000 ( <u>Auto</u> I	
-80.0													<b>Freq Off</b> ر	<b>fset</b> 0 Hz
-90.0													Scale Ty	ype Lin
		00 GHz 1.0 MH				#VBW	3.0 MHz		s	weep	20 Stop 17.33 ms	.000 GHz 0001 pts)	LUY	<u>_m</u>
MSG										STAT				

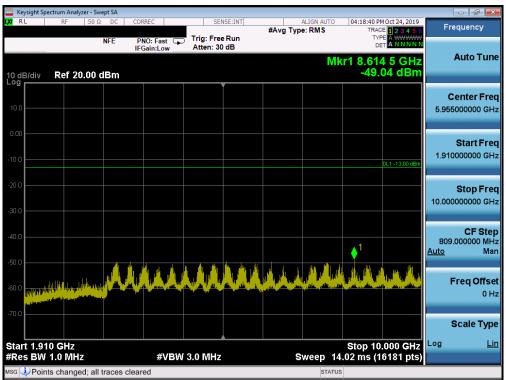
Plot 7-203. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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NFE       PNO: Fast       Trig: Free Run       #Avg Type: RMS       Trace       12 3 4 5 6       Frequency         NFE       PNO: Fast       Trig: Free Run       Mkr1 1.849 0 GHz       Auto Tu         0 dB/div       Ref 20.00 dBm       -51.81 dBm       Center Fr         99       Image: Start Fr       30.00000 M       Start Fr         0.0       Image: Start Fr       30.00000 M       Start Fr         0.0       Image: Start Fr       30.00000 M       Start Fr         0.0       Image: Start Fr       Start Fr       30.00000 M         0.0       Image: Start Fr       Start Fr       30.00000 M         0.0       Image: Start Fr       Image: Start Fr       30.00000 M         0.0       Image: Start Fr       Image: Start Fr       30.00000 M         0.0       Image: Start Fr       Image: Start Fr       Image: Start Fr         0.00       Image: Start Fr       Image: Start Fr       Image: Start Fr         0.00       Image: Start Fr       Image: Start Fr       Image: Start Fr         0.00       Image: Start Fr       Image: Start Fr       Image: Start Fr         0.00       Image: Start Fr       Image: Start Fr       Image: Start Fr         0.00       Image: Start Fr			alyzer - Swep	it SA								- Ø
IPGaminLow       Atten 30 dB         Mkr1 1.849 0 GHz -51.81 dBm       Auto Tu         00       -51.81 dBm         010       -51.81 dBm         010       -51.81 dBm         010       -51.81 dBm         011       -51.81 dBm         012       -51.81 dBm         013       -51.81 dBm         014       -51.81 dBm         015       -51.81 dBm         016       -51.81 dBm         017       -51.81 dBm         018       -51.81 dBm         019       -51.81 dBm         0100       -51.81 dBm         011       -51.81 dBm         012       -51.81 dBm         013	U RL	RF	50 Ω N	FE	PNO: Fast	Trig: Fre	e Run	#Avg Typ		TRAC	<b>1 2 3 4 5 </b> 6	Frequency
Image: Control of the second secon	0 dB/div	Ref 2	20.00 di		IFGain:Low	Atten: 30	) dB		M	kr1 1.849	0 GHz	Auto Ti
0.0       0.1       0	10.0											
0.0     Image: Stop Fr       0.0     Image: Stop Fr <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>DL1 -13.00 dBm</td><td></td></t<>											DL1 -13.00 dBm	
1111.900000 M           1111.90000 M           1111.900000 M           1111.90000 M           11												
0.0 من											1	181.900000
tart 0.0300 GHz Stop 1.8490 GHz	:0.0	. L 11 1		ار عنداله در	Land to the structure of the	. Jada Handandara			, and the state of	n himmen an himmen	n national all and	
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 2.425 ms (3639 pts)	tart 0.0	300 GH	z							Stop <u>1.8</u>	430 GHZ	Log
					#VB	W 3.0 MHz			Sweep 2	2.425 ms (	3639 pts)	

Plot 7-204. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-205. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

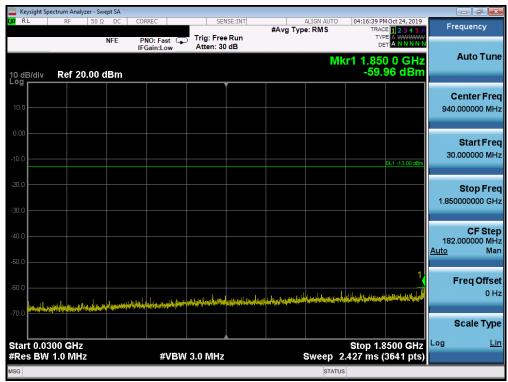
FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Sp	pectrum Analyze	r - Swept SA										- 0 ×
(X/ RL	RF	50 Ω DC	CORRE			NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRA	M Oct 24, 2019 CE 1 2 3 4 5 6	Fr	equency
	_	NFE	PNC IFGa	:Fast 🖵 in:Low	Atten: 10			M	kr1 19.55			Auto Tune
10 dB/div Log	Ref 0.0	0 dBm							-64.	40 dBm		
-10.0										DL1 -13.00 dBm		<b>Center Freq</b> 0000000 GHz
-20.0											10.000	Start Freq
-40.0											20.000	Stop Freq
-60.0	<u></u>					n . a. dil. tablara					1.000 <u>Auto</u>	<b>CF Step</b> 0000000 GHz Man
-80.0					Hay Day Diversity Marking and Assetting		formelik sessering som			elle, aver, på Affrika de s	F	Freq Offset 0 Hz
-90.0												Scale Type
Start 10.0 #Res BW	000 GHz 1.0 MHz			#VBW	3.0 MHz		s	weep	Stop 20 17.33 ms (2	).000 GHz 20001 pts)	Log	<u>Lin</u>
мsg 🗼 Poir	nts changed	; all trace	s cleared	1				STA	TUS			

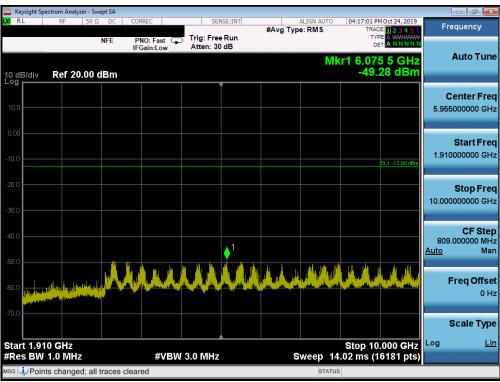
Plot 7-206. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



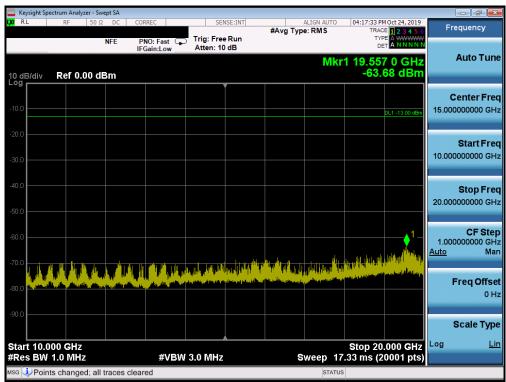
Plot 7-207. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-208. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



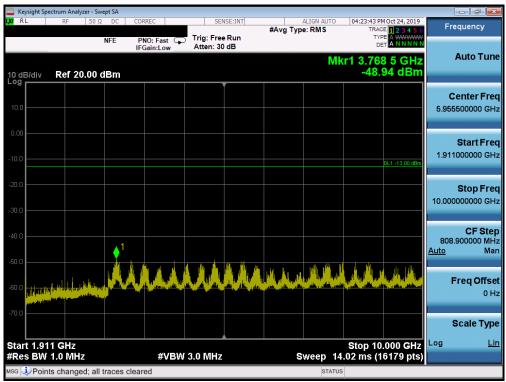
Plot 7-209. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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🔤 Ke	ysight Spec	trum Anal	yzer - Swep	it SA										x
l <b>,XI</b> R	L	RF	<u>50 Ω</u>	DC	CORREC		SEI	NSE:INT	#Avg Typ	ALIGN AUTO		MOct 24, 2019	Frequency	
			N	IFE	PNO: Fas IFGain:Lo	st 😱	Trig: Free Atten: 30				TYP			
10 di Log	B/div	Ref 2	0.00 di	Зm							Mkr1 77 -59.	1.5 MHz 82 dBm	Auto Tu	Ine
10.0													Center F 940.000000 M	
0.00 -10.0												DL1 -13.00 dBm	Start F 30.000000 N	
-20.0 -30.0													Stop F 1.850000000 (	
-40.0 -50.0													CF Si 182.000000 M <u>Auto</u>	
-60.0	و منابق م	Marin Inde A	المعامدا والم	والمراجع والمراجع	Arian birthan barba	i galer, terfe	1 بالانهام الانها	الاية إندادها ما برانية	na hui Kuisina itu	alter District States	in subditions	Angleich Martabell	Freq Off C	f <b>set</b> ) Hz
-70.0	ados et alta da		1. ((Array (Array))										Scale Ty	
	1:0.030 sBW 1				#`	VBW :	3.0 MHz			Sweep	Stop 1.8 2.427 ms (	3500 GHz 3641 pts)	Log	<u>Lin</u>
MSG										STAT	JS			

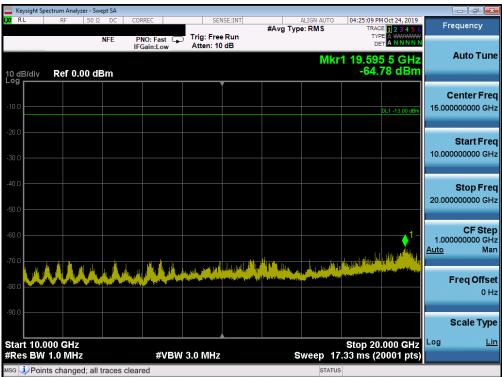
Plot 7-210. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-211. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager				
Test Report S/N:	Test Dates:	EUT Type:	Daga 120 of 497				
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Plot 7-212. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

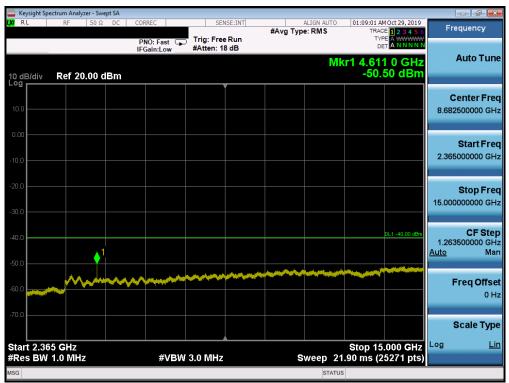
FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 120 of 497
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Band 30

	ctrum Analyzer - Swept						
XI RL	RF 50 Ω	DC CORREC	SENSE:INT	#Avg Type	ERMS	01:07:33 AM Oct 29, 2019 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
10 dB/div	Ref 20.00 dE	PNO: Fast G IFGain:Low _ Bm	Atten: 30 dB		Mk	<sup>Det</sup> ANNNNN r1 2.287 0 GHz -48.12 dBm	Auto Tun
10.0							Center Fre 1.159000000 GF
-10.0							<b>Start Fro</b> 30.000000 Mi
-20.0							<b>Stop Fr</b> 2.288000000 G
40.0				n a fall an i tra dida malayi ka barada		DL1 -40.00 dBm 1	CF Sto 225.800000 M <u>Auto</u> M
60.0	Andream of Market Andream Andre						Freq Offs 0
-70.0 Start 0.030 #Res BW 7		4\/B\	V 3.0 MHz		Ducon 2	Stop 2.288 GHz	Scale Tyj
		#VBI	V 3.0 WINZ		sweep 3.	011 ms (4517 pts)	

Plot 7-213. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-214. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ght Spectr	um Analy												×
L <mark>XI</mark> RL		RF	50 Ω	DC	CORREC			ISE:INT	#Avg Typ	ALIGN AUTO	TRA	M Oct 29, 2019	Frequency	
					PNO: F IFGain:	ast 🖵 Low	Trig: Free #Atten: 1			M	(r1 26.98 -50.		Auto Tu	ine
10 dB/e	div	Ref 0.	00 dB	m							-50.	89 dBm		
-10.0													<b>Center Fr</b> 21.000000000 G	
-20.0													<b>Start Fr</b> 15.000000000 G	
-40.0 —												DL1 -40.00 dBm	Stop Fr 27.000000000 G	_
-50.0	line of the			an James and Parks				Terphonic I and the					CF St	ер
-70.0		alla subor alla	and a										1.200000000 G <u>Auto</u> M	Aan
-80.0													Freq Offs 0	set Hz
-90.0													Scale Ty	pe
Start #Res	15.000 BW 1.					#VBW	3.0 MHz		s	weep_2	Stop 27 20.80 ms (2	1000 OFIZ	-	<u>Lin</u>
MSG										STAT	US			

Plot 7-215. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

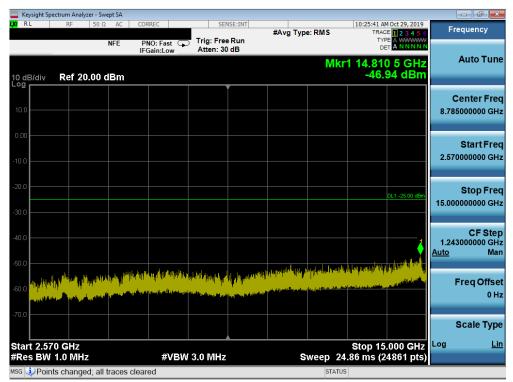
FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 122 of 497
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### Band 7

	ctrum Analyz	er - Swept SA									
XV RL	RF	50 Ω AC NFE	PNO: IFGain	Fast 🗔	Trig: Free Atten: 30	#Avg Typ	e: RMS	TRAC	1 Oct 29, 2019 E 1 2 3 4 5 6 E A WWWW T A N N N N N	Fi	requency
10 dB/div	Ref 20.	.00 dBm	IFGain	LOW_	Atten. oc		N	/kr1 2.40 -56.	4 0 GHz 12 dBm		Auto Tune
10.0											Center Freq 2500000 GHz
-10.0										30	Start Fred 0.000000 MH2
-20.0									DL1 -25.00 dBm	2.47	Stop Free 5000000 GHa
-40.0									1	244 <u>Auto</u>	CF Step 1.500000 MH Mar
-60.0	المنه بعل بن المجال إليا				hilling of the state of the sta						Freq Offset 0 Hz
											Scale Type
Start 0.03 #Res BW				#VBW	3.0 MHz		Sweep	Stop 2 3.260 ms (	.475 GHz 4891 pts)	Log	Lin
MSG							STAT	rus			

Plot 7-216. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



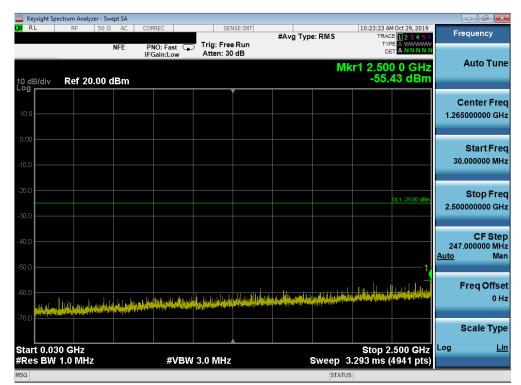
Plot 7-217. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 122 of 497
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🔤 Keysight Spectrum Analyzer - Sw					
LX/ RL RF 50Ω	AC CORREC	SENSE:INT	#Avg Type: RMS	10:25:59 AM Oct 29, 2019 TRACE 1 2 3 4 5 6	Frequency
	NFE PNO: Fast G IFGain:Low	☐ Trig: Free Run Atten: 10 dB	Mk	r1 25.467 5 GHz	Auto Tune
10 dB/div Ref 0.00 dl	Bm			-56.76 dBm	
-10.0					Center Freq 21.000000000 GHz
-20.0				DL1 -25.00 dBm	Start Freq 15.000000000 GHz
-40.0					Stop Freq 27.000000000 GHz
	n a thur and the state of the s	an an atan a sa an	In the part of the part of the and the part of the par		CF Step 1.20000000 GHz <u>Auto</u> Man
-70.0					Freq Offset 0 Hz
-90.0					Scale Type
Start 15.000 GHz #Res BW 1.0 MHz	#VB\	V 3.0 MHz	Sweep 3	Stop 27.000 GHz 0.40 ms (24001 pts)	Log <u>Lin</u>
мsg 🗼 Points changed; all			STATU		

Plot 7-218. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



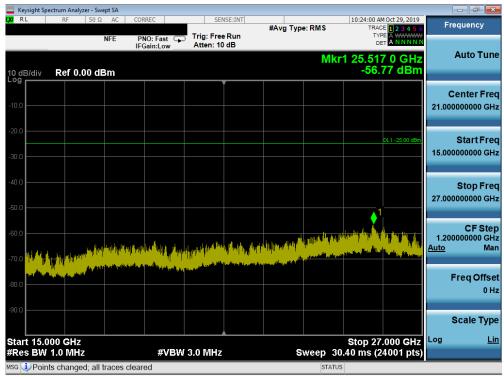
Plot 7-219. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 124 of 497
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🔤 Keysight Spectrum Analyzer - Sv									-	- d ×
LX/ RL RF 50 S	2 AC CO	RREC	SEN	NSE:INT	#Avg Typ	e: RMS		M Oct 29, 2019 CE 1 2 3 4 5 6	Fred	quency
10 dB/div Ref 20.00	IF	NO: Fast ⊂ <sub>▶</sub> Gain:Low	Trig: Free Atten: 30				kr1 14.63		۵	uto Tune
10.0										nter Freq 00000 GHz
-10.0										Start Freq 00000 GHz
-20.0								DL1 -25.00 dBm		Stop Freq 00000 GHz
-40.0								a scalled	1.2430 <u>Auto</u>	CF Step 000000 GHz Man
-60.0		n Nava ya Kata Mada Mana Mana Mada		n <mark>a dhanarana</mark>		adaq <mark>ki jajilan</mark> ayang sanang d	re and a local of the spectrum	a <b>di pan</b> ing kanala kalika Luan, Kalika di Kalika	Fr	eq Offset 0 Hz
-70.0 Start 2.570 GHz							Stop 4	5 000 CH-	S	cale Type Lin
#Res BW 1.0 MHz		#VBW	3.0 MHz		s	weep	24.86 ms (2	7.000 OHZ		
мsg 🔱 Points changed; all	traces clear	red					ATUS			

Plot 7-220. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



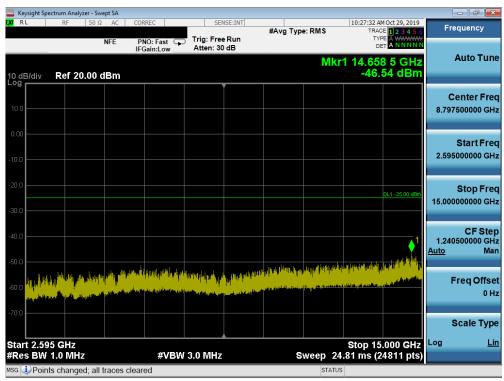
Plot 7-221. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager		
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	um Analyzer - Sw										
LXI RL	RF 50 Ω	AC CO	DRREC		ISE:INT	#Avg Typ	e: RMS	TRAC	1 Oct 29, 2019 E 1 2 3 4 5 6	Fre	quency
		NFE I	PNO: Fast 🕞 Gain:Low	Trig: Free Atten: 30							
							M	lkr1 2.41	2 0 GHz		Auto Tune
10 dB/div	Ref 20.00 d	lBm						-55.	67 dBm		
				Ì						С	enter Freg
10.0											000000 GHz
0.00											Start Freq
-10.0										30.	000000 MHz
-20.0									DL1 -25.00 dBm		Stop Freq
									UCT -25.00 dBm	2.500	000000 GHz
-30.0											
-40.0										247	CF Step
										Auto	Man
-50.0									<b>1</b> −		
-60.0					1.0.			. հեր շատես		F	req Offset
ليواريل م	الملح والتسبيل				tenni filma Alfred film Karlansa Kina alfred		This is a set to set		CLASSIC STATISTICS		0 Hz
-70.0	and the state of the	and a built of a ball									
										5	Scale Type
Start 0.030								Stop 2	.500 GHz	Log	Lin
#Res BW 1.	0 MHz		#VBW	3.0 MHz				3.293 ms (	4941 pts)		
MSG							STAT	US			

Plot 7-222. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-223. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dage 126 of 497		
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	pectrum Analyzer										
LXI RL	RF	50 Ω AC	CORREC	SEN	NSE:INT	#Avg Typ			AM Oct 29, 2019	Fr	equency
		NFE	PNO: Fast 🕞	Trig: Free		#7118 I.JP	e. 10110	T			
			IFGain:Low	Atten: 10	dB			-			Auto Tune
							N	lkr1 25.52	.85 GHZ .77 dBm		Auto Tullo
10 dB/div Log	Ref 0.00	) dBm						-50			
					Í					c	enter Freq
-10.0											0000000 GHz
-20.0											
									DL1 -25.00 dBm		Start Freq
-30.0										15.00	0000000 GHz
-40.0											Stop Freq
										27.00	0000000 GHz
-50.0									1		
								- L			CF Step
-60.0					Long I		t proprietan		1.46.61		0000000 GHz
	մ է յլուտմ		AN LANGER	has bally the second	and the head of the	leathadh ann '	1	A DESCRIPTION OF THE OWNER OF THE	a Bastley Aller	<u>Auto</u>	Man
-70.0	, <b>The Second Project</b>	والمتحدث فترسى	والمحافظة المحافظة فأتعاق	القسادين أندادت وال	والأفديا والدائلا وال	sa filma afficia di bila di					
-80.0	and a sublim									1	Freq Offset
-00.0											0 Hz
-90.0											
00.0											Scale Type
Start 15.			43/03/	/ 2 A MU-				Stop 2	.000 0112	Log	Lin
#Res BW				/ 3.0 MHz		S	_	30.40 ms (	24001 pts)		
MSG 🤍 Poir	nts changed;	all traces cl	eared				ST	ATUS			

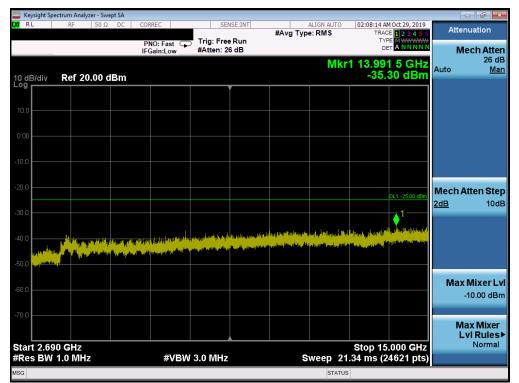
Plot 7-224. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	MSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Degs 127 of 497
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		trum Analyzer -		_								- 6 ×
l <b>XI</b> R	L	RF 50	Ω DC	CORREC	SE	NSE:INT	#Avg Typ	ALIGN AUTO		M Oct 29, 2019 DE 1 2 3 4 5 6	Fre	quency
				PNO: Fast G	Trig: Fre		• • •		TY			
				II Gam.Low	,			N	lkr1 2.40	6 5 GHz		Auto Tune
10 di	3/div	Ref 20.00	) dBm						-38.	37 dBm		
Log						Ĭ					-	optor From
10.0												enter Freq 500000 GHz
											1.202	000000 0112
0.00												
												Start Freq 000000 MHz
-10.0											30.	J00000 IVIH2
-20.0												
-20.0										DL1 -25.00 dBm		Stop Freq
-30.0											2.475	000000 GHz
										1		
-40.0						الم محتد الم	lana na salanakhakhadi			i seli de belle belle	244.	CF Step 500000 MHz
			الوار والدو البرار				A & Long. House bills 1841. Ber	and an an a state of a			<u>Auto</u>	Man
-50.0												
-60.0											F	req Offset
00.0												0 Hz
-70.0												
											S	Scale Type
Star	L t 0.030	GH7				<u> </u>			Stop 2	.475 GHz	Log	Lin
		.0 MHz		#VB\	N 3.0 MHz			Sweep	3.260 ms			
MSG								STAT	US			

Plot 7-225. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



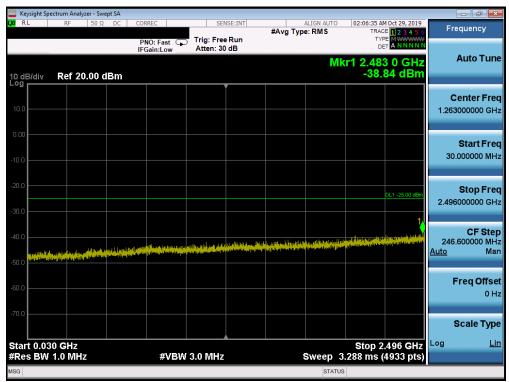
Plot 7-226. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 129 of 497
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	pectrum Analyzer - Sw										
L <mark>XI</mark> RL	RF 50 Ω	2 DC	CORREC	SEN	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Oct 29, 2019 DE 1 2 3 4 5 6	Fred	quency
			PNO: Fast IFGain:Low	Trig: Free #Atten: 1		0 ,1		TY D		Δ	uto Tune
10 dB/div Log	Ref 0.00 d	Bm					MI	(r1 26.98 -44.	7 0 GHz 49 dBm		
-10.0											enter Freq
-20.0										21.0000	00000 GH2
-20.0									DL1 -25.00 dBm		Start Freq
-30.0										15.0000	00000 GHz
-40.0									1	;	Stop Freq
-50.0			and the state of the	tradition tradital state	and and the second	a de a de anti de la	and the set	ala (Pakenaliment	Log-Block prov	27.0000	00000 GHz
A DURAN	al for a state of the state of			well is not as and	and the staff of the second second	الهدينار أتتسمينان ريظمروا	وكالبحالك وبغا	No. (or ) and a second			
-60.0										1.2000 <u>Auto</u>	CF Step 000000 GHz Man
-70.0											
-80.0										Fr	r <b>eq Offset</b> 0 Hz
-90.0											
										S	cale Type
Start 15. #Res BW	000 GHz / 1.0 MHz		#VBW	/ 3.0 MHz	•	s	weep 2	Stop 27 20.80 ms (2	.000 0112	Log	<u>Lin</u>
MSG							STAT	-			

Plot 7-227. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-228. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Spectrum Analyzer - Swept SA					
<b>LX/ RL</b> RF 50Ω DC	CORREC PNO: Fast T	SENSE:INT	ALIGN AUTO #Avg Type: RMS	02:06:50 AM Oct 29, 2019 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Attenuation
		Atten: 26 dB	<b>N</b> iles		Mech Atten 26 dB
10 dB/div Ref 20.00 dBm			IVIKI	1 14.367 0 GHz -35.40 dBm	Auto <u>Man</u>
Log		Ĭ			
10.0					
0.00					
-10.0					
-10.0					
-20.0				DL1 -25.00 dBm	Mech Atten Step
-30.0				1	<u>2dB</u> 10dB
-40.0	to all a la ar	un diterten om dela rectablise	a particular de la construction de la constitución y a sont	the statement of the party of the state of the	
	and a second	daarta diista <sup>dii</sup> sta digaalaa diibad	and a state of the s	The local section of the section of the sector sector	
-50.0					
-60.0					Max Mixer Lvl -10.00 dBm
-70.0					
					Max Mixer Lvl Rules►
Start 2.690 GHz	#\/D\ <u>M_2</u>		Succes 24	Stop 15.000 GHz	Normal
#Res BW 1.0 MHz	#VBW 3.0		Sweep 21	.34 ms (24621 pts)	

Plot 7-229. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



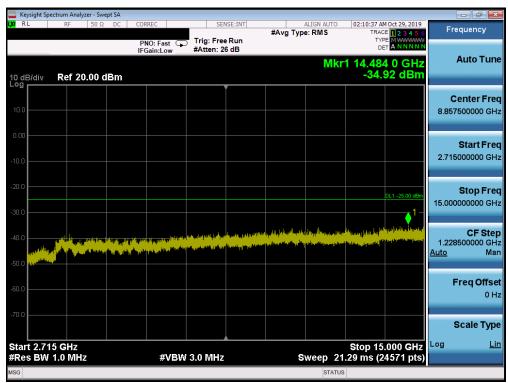
Plot 7-230. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	Spectrum Analyzer - Sw										
LXU RL	RF 50 Ω	DC CO	RREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		HOct 29, 2019	Frequer	псу
	_		NO: Fast 🕞	Trig: Free Atten: 30		0 ,1		TYF DE		Auto	Tune
10 dB/div Log	Ref 20.00 d	lBm					M	kr1 2.489 -38.3	9 0 GHz 29 dBm	Auto	Tune
											er Freq
10.0										1.2630000	00 GHz
0.00											rt Freq
-10.0										30.0000	00 MHz
-20.0									DL1 -25.00 dBm	Sto	p Freq
-30.0										2.4960000	00 GHz
-40.0									1		F Step
la la ju-		وارد. المراجع فقار الم	a la	i na tali na ini na	بالتير وواتنا ود				an an an South all from	246.6000 <u>Auto</u>	00 MHz Man
-50.0										Fred	Offset
-60.0										Treq	0 Hz
-70.0										Scal	е Туре
Start 0.0	130 GHz							Stop 2	.496 GHz	Log	Lin
	V 1.0 MHz		#VBW	3.0 MHz			Sweep 3	1.288 ms (	4933 pts)		
MSG							STATUS	5			

Plot 7-231. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-232. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ight Spect	rum Analyze		t SA								
L <mark>XI</mark> RL		RF	50 Ω	DC O	DRREC		SENSE:INT	#Avg Typ	ALIGN AUTO		Oct 29, 2019	Frequency
				1	PNO: Fast FGain:Low		Free Run n: 10 dB	• • •		TYP		
10 dB Log r	/div	Ref 0.0	0 dBr	n					Mk	r1 26.246 -44.8	35 GHz 84 dBm	Auto Tune
-10.0 -												Center Freq 21.000000000 GHz
-20.0 - -30.0 -											DL1 -25.00 dBm	<b>Start Freq</b> 15.000000000 GHz
-40.0 -	an a atala	ماليون مع	مناطبته با	. Ukar pikkar	and the state of the	root, algebra opp	a na she na ka ta na she a she a she		al magnific datab	er (daar (1997) - Daar Fier		<b>Stop Freq</b> 27.000000000 GHz
-60.0	i la transferi da si	n yan dan yang dan ya	den state de la seconda de	n an		ollana ta sa kua di jata	den propies de la completa de la com El completa de la comp					<b>CF Step</b> 1.200000000 GHz <u>Auto</u> Man
-80.0 -												Freq Offset 0 Hz
-90.0	15.00	n GHz								Stop 27	.000 GHz	Scale Type
		0 MHz			#VE	3W 3.0 M	Hz	s	weep 2	0.80 ms (2		
MSG									STATU	IS		

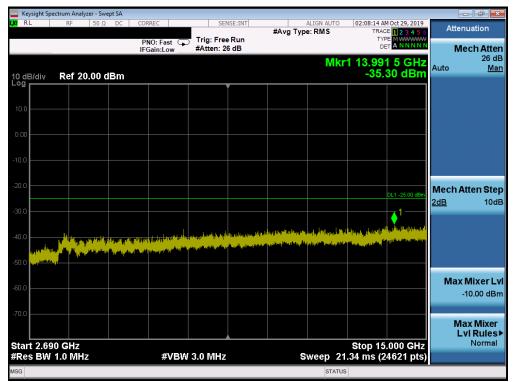
Plot 7-233. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight S	pectrum Analy:	zer - Swep	t SA									
X/RL	RF	50 Ω	DC CC	DRREC	SE	NSE:INT	#Avg Typ	ALIGN AUTO		M Oct 29, 2019	Fre	equency
			I	PNO: Fast C Gain:Low	Trig: Fre		• ,,		TY			
			11	-Gain:Low _	Atten: 0	, and		MI	r1 2 40	6 5 GHz		Auto Tune
10 dB/div	Ref 20	.00 di	Зm						-38.	37 dBm		
						Ĭ					_	enter Fre
10.0												500000 GH
0.00												Start Fre
40.0											30	000000 MH
-10.0												
-20.0												Stop Fre
										DL1 -25.00 dBm	2.475	5000000 GH
30.0										. 1		
										<b>♦</b> '		CF Ste
-40.0		ا بر مراد	مساير ا	المريول المريول	i yan baranin di din	Marine Marine Marine Marine M	han se salat di Attad	der alle states als				500000 MH. Ma
-50.0			anda kaka (1 <sup>114</sup> )	ar (jeditelation)							<u>Auto</u>	IVIa
												req Offse
-60.0												0 H
-70.0												Scale Typ
Start 0.0 #Res BM	30 GHz / 1.0 MHz	,		#\/B	W 3.0 MHz			Sween_3	Stop 2	.475 GHz 4891 pts)	Log	Li
ISG	The Willia			#VD	W 0.0 WI12			SWEEP D		ros r pts)		
											_	

Plot 7-234. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



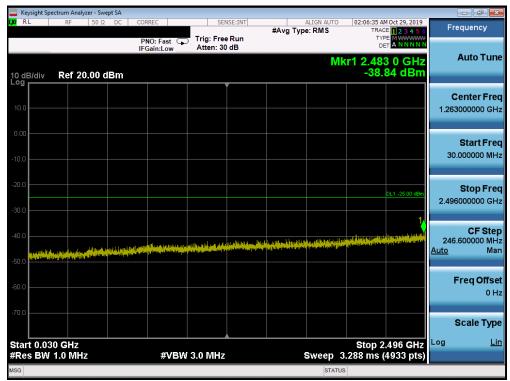
Plot 7-235. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager				
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	ectrum Analyzer - Swe										
L <mark>XI</mark> RL	RF 50 Ω	DC CC	DRREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Oct 29, 2019	Fr	equency
		I	PNO: Fast 🕞 Gain:Low	Trig: Free #Atten: 1				TYF DE (r1 26.98			Auto Tune
10 dB/div Log	Ref 0.00 dE	ßm						-44.	49 dBm		
-10.0											enter Freq 0000000 GHz
-20.0									DL1 -25.00 dBm	15.000	Start Freq 0000000 GHz
-40.0			يرافدون الموالية بي ا	alling strated with data		a <mark>a kalina se di kinina s</mark>	(ADDATE)	a an		27.000	<b>Stop Freq</b> 0000000 GHz
Contraction of the second s	t f ( yend) <sup>a</sup> n t f yende her nage dit di Grandslag a grand i territor av all the			instiller, not as my			in the second	and a set of		1.200 <u>Auto</u>	<b>CF Step</b> 0000000 GHz Man
-80.0										i	F <b>req Offset</b> 0 Hz
-90.0										Log	Scale Type Lin
Start 15.0 #Res BW			#VBW	3.0 MHz		s	weep 2	27 Stop 20.80 ms	.000 0112	LUg	
MSG							STAT	US			

Plot 7-236. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



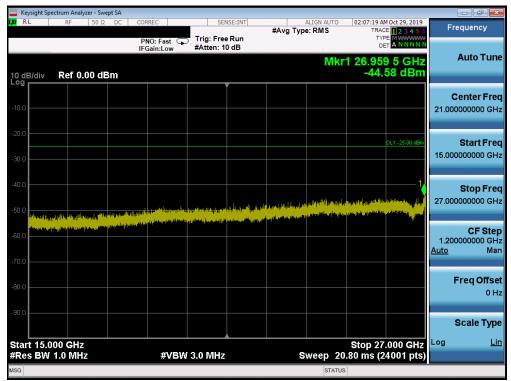
Plot 7-237. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
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🔤 Keysight Spectrum Analyzer - Swept SA					
<b>LX/ RL</b> RF 50Ω DC	CORREC PNO: Fast T	SENSE:INT	ALIGN AUTO #Avg Type: RMS	02:06:50 AM Oct 29, 2019 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Attenuation
		Atten: 26 dB	<b>N</b> iles		Mech Atten 26 dB
10 dB/div Ref 20.00 dBm			IVIKI	1 14.367 0 GHz -35.40 dBm	Auto <u>Man</u>
Log		Ĭ			
10.0					
0.00					
-10.0					
-10.0					
-20.0				DL1 -25.00 dBm	Mech Atten Step
-30.0				1	<u>2dB</u> 10dB
-40.0	to all a la ar	un diterten om dela rectablise	a particular de la constante de la propriéta pous a sont.	the statement of the party of the state of the	
	and a second	daarta diista <sup>dii</sup> sta digaalaa diibad	and a state of the s	The local section of the section of the sector sector	
-50.0					
-60.0					Max Mixer Lvl -10.00 dBm
-70.0					
					Max Mixer Lvl Rules►
Start 2.690 GHz	#\/D\ <u>M_2</u>		Succes 24	Stop 15.000 GHz	Normal
#Res BW 1.0 MHz	#VBW 3.0		Sweep 21	.34 ms (24621 pts)	

Plot 7-238. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



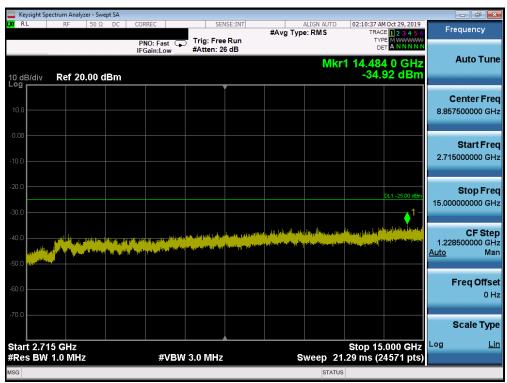
Plot 7-239. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager				
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	ectrum Analyzer - Sw										
L <mark>XI</mark> RL	RF 50 Ω	DC CC	RREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		HOct 29, 2019	Frequer	псу
			NO: Fast 🕞 Gain:Low	Trig: Free Atten: 30				TYF DE		Auto	Tune
10 dB/div Log	Ref 20.00 (	dBm	_				MI	kr1 2.489 -38.3	9 0 GHz 29 dBm	Auto	Tune
											r Freq
10.0										1.2630000	00 GHz
0.00											tFreq
-10.0										30.0000	00 MHz
-20.0									DL1 -25.00 dBm	Sto	p Freq
-30.0									021-23.00 dbm	2.4960000	00 GHz
-40.0									1.		- Step
			a la		بالتير وواتنا ود				an an an South all from	246.60000 <u>Auto</u>	00 MHz Man
-50.0										Erea	Offset
-60.0										rieq	0 Hz
-70.0										Scale	е Туре
Stort 0.02								Stop 2		Log	Lin
Start 0.03 #Res BW			#VBW	/ 3.0 MHz			Sweep 3	stop 2 1.288 ms (	400 0112	-	<u></u>
MSG							STATU				

Plot 7-240. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-241. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager					
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	ight Spect	rum Analyze		t SA								
L <mark>XI</mark> RL		RF	50 Ω	DC O	DRREC		SENSE:INT	#Avg Typ	ALIGN AUTO		Oct 29, 2019	Frequency
				1	PNO: Fast FGain:Low		Free Run n: 10 dB	• • •		TYP		
10 dB Log r	/div	Ref 0.0	0 dBr	n					Mk	r1 26.246 -44.8	35 GHz 84 dBm	Auto Tune
-10.0 -												Center Freq 21.000000000 GHz
-20.0 - -30.0 -											DL1 -25.00 dBm	<b>Start Freq</b> 15.000000000 GHz
-40.0 -	an a atala	ماليون مع	مناطبته با	. Ukar jukara	and the state of the	root, and store pay	a na she na ka ta na she a she a she		al magnific datab	er (daar (1997) - Daar Fier		<b>Stop Freq</b> 27.000000000 GHz
-60.0	i la transferi da si	n yan dan yang dan ya	den state de la seconda de	n an		ollana ta sa kua di jata	den propiester en egister en ers den politiketer en egister en ers					<b>CF Step</b> 1.200000000 GHz <u>Auto</u> Man
-80.0 -												Freq Offset 0 Hz
-90.0	15.00	n GHz								Stop 27	.000 GHz	Scale Type
		0 MHz			#VE	3W 3.0 M	Hz	s	weep 2	0.80 ms (2		
MSG									STATU	IS		

Plot 7-242. Conducted Spurious Plot (Band 41 PC3 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - 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 > 1% of the emission bandwidth
- 4. VBW <u>></u> 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.

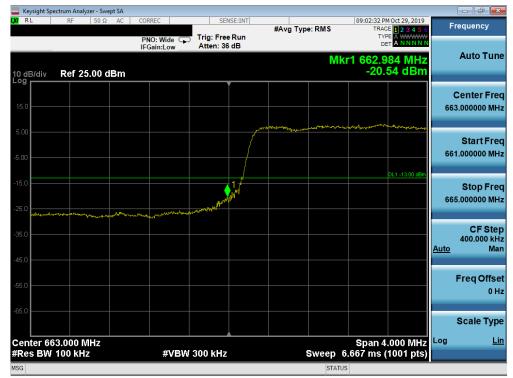
Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than  $40 + 10 \log (P) dB$  on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P) dB$  on all frequencies between 5 megahertz and X megahertz from the channel edge, 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.

Per 96.41(e) for operations in the 3.5 GHz band, the limits for emission outside the fundamental are as follows:

- within 0 MHz to 10 MHz above and below the assigned channel ≤ –13 dBm/MHz
- greater than 10 MHz above and below the assigned channel  $\leq -25$  dBm/MHz
- any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz

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Plot 7-243. Lower Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-244. Upper Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)

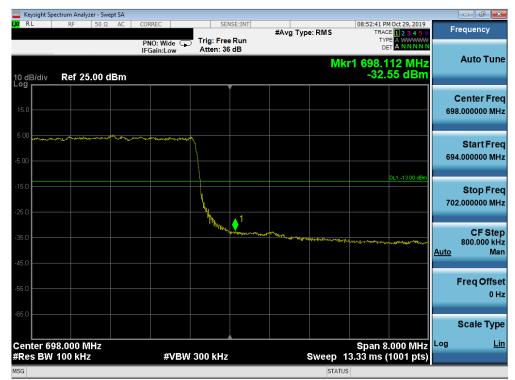
FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Keysight Spectrum Analyzer - Swept SA						
X RL RF 50Ω AC		NSE:INT	#Avg Type:		19:51 PM Oct 29, 2019 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
10 dB/div <b>Ref 25.00 dBm</b>	PNO: Wide Trig: Free IFGain:Low Atten: 36			Mkr1 6	62.984 MHz -25.98 dBm	Auto Tune
15.0						Center Freq 663.000000 MHz
-5.00			hann filman fallen fan sen fallen fan sen fallen fallen fan sen fallen fan sen fallen fallen fan sen fallen fa	ananan ang panakan ang panakan kanakan kanakan kanakan kanakan kanakan kanakan kanakan kanakan kanakan kanakan Kanakan kanakan k	ი	Start Freq 659.000000 MHz
-15.0	New Contraction	1			01-13.00 0811	Stop Fred 667.000000 MH;
-35.0	m Montante administration					CFStep 800.000 kH <u>Auto</u> Mar
-55.0						Freq Offse 0 H:
-05.0 Center 663.000 MHz				Sr	an 8.000 MHz	Scale Type
#Res BW 100 kHz	#VBW 300 kHz		S	weep 13.33	ms (1001 pts)	
MSG				STATUS		

Plot 7-245. Lower Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)



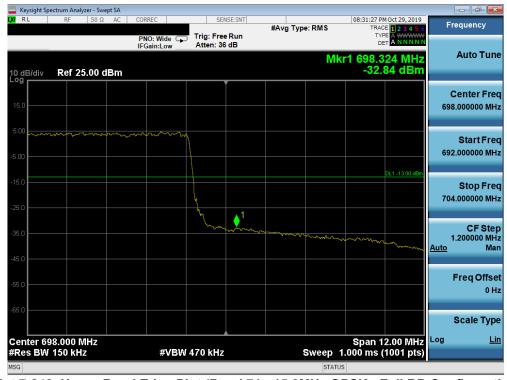
Plot 7-246. Upper Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	NG	Approved by: Quality Manager
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🥶 Keysight Spectrum Analyzer - Swept SA				
XVIRL RF 50Ω AC		#Avg Typ		2 3 4 5 6 Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide F Irig: Free IFGain:Low Atten: 36		Mkr1 662.95 -28.92	2 MHz Auto Tune
15.0				Center Freq 663.000000 MHz
-5.00				Start Freq 657.000000 MHz
-15.0		1		Stop Fred 669.000000 MHz
-35.0				CF Step 1.200000 MH <u>Auto</u> Mar
-55.0				Freq Offse 0 Ha
-65.0 Center 663.000 MHz	#\/DW/470-1-1-		Span 12.	Scale Type Scale Type
#Res BW 150 kHz	#VBW 470 kHz		Sweep 1.000 ms (10 STATUS	or pis)

Plot 7-247. Lower Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-248. Upper Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)

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Keysight Spectrum Analyzer - Swept SA					
🗶 RL RF 50Ω AC		ENSE:INT	#Avg Type: RN	08:08:28 PM Oct 29, 2019 S TRACE 2 3 4 5 6 TYPE A WWWW	Frequency
10 dB/div <b>Ref 25.00 dBm</b>	PNO: Wide Trig: Fr IFGain:Low Atten:			Mkr1 662.856 MHz -24.24 dBm	Auto Tune
15.0					Center Freq 663.000000 MHz
-5.00			-A-Mannara Anna		Start Fred 655.000000 MHz
-15.0		 مي		DL1 -13.00 dBm	Stop Frec 671.000000 MHz
35.0					CF Stej 1.600000 MH <u>Auto</u> Ma
-45.0 -55.0					Freq Offse 0 H
-65.0 Center 663.000 MHz				Span 16.00 MHz	Scale Type Log <u>Lir</u>
#Res BW 200 kHz	#VBW 620 kH	Z	Swe	ep 1.000 ms (1001 pts)	

Plot 7-249. Lower Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)

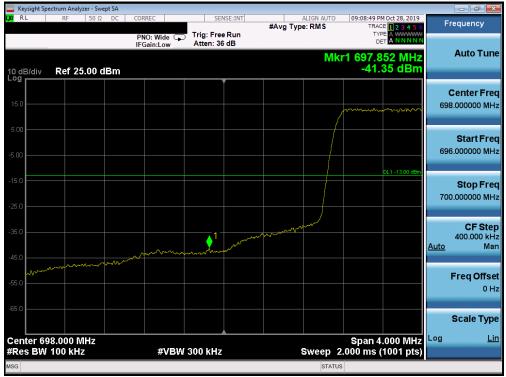


Plot 7-250. Upper Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)

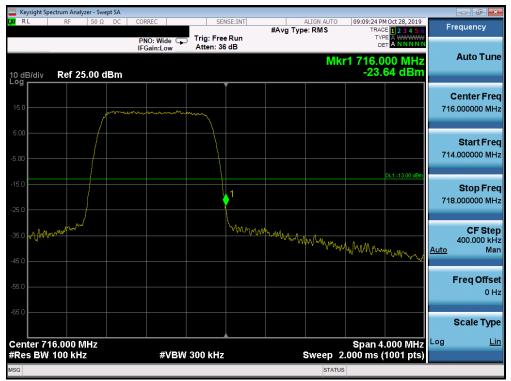
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## Band 12



Plot 7-251. Lower Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)



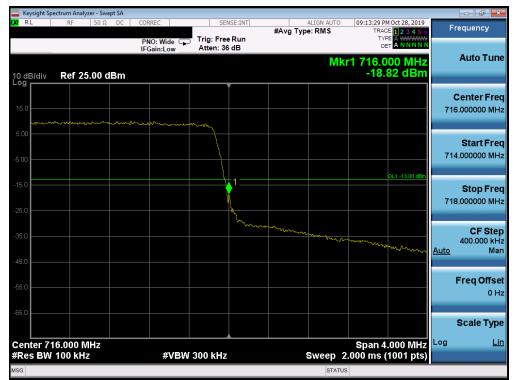
Plot 7-252. Upper Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL	RF	50 Ω D	C CORRE		SE	NSE:INT		ALIGN AUTO		M Oct 28, 2019	F	requency
			PNO.	Wide 🗔	Trig: Fre		#Avg Typ	e:RMS	TY	DE 123456 PE A WWWW		requeitcy
			IFGai	n:Low	Atten: 36	6 dB			-			Auto Tun
0 dB/div	Ref 25	.00 dBr	n					Mk	r1 697.8 -35.	800 MHz 84 dBm		AutoTur
°g						Ĭ						Center Fre
15.0												8.000000 Mi
									- Res Product And	many		
5.00												
												Start Fre
i.00								$\vdash$			69	6.000000 MI
										DL1 -13.00 dBm		
5.0												Stop Fre
											70	0.000000 MI
25.0												
					1							CF Ste
15.0			m	mm	m	www.t.	whether the second s					400.000 kl
15.0		man									<u>Auto</u>	M
~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~											
5.0												Freq Offs
												0 H
i5.0												
												Scale Typ
ontor 6	98.000 M	U-7				<u> </u>			Snap /	.000 MHz	Log	L
	98.000 M / 100 kHz			#VBW	300 kHz			Sweep_2	opan 4.	(1001 pts)		-
G								STATUS			_	

Plot 7-253. Lower Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-254. Upper Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)

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🤤 Keysight Spectrum Analyzer - Swept SA 🚽			
<mark>ΙΧΙ</mark> RL RF 50Ω DC	CORREC SENSE:INT		ACE 1 2 3 4 5 6 Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide 🖵 Trig: Free Run IFGain:Low Atten: 36 dB	Mkr1 697.	
15.0			Center Free 698.000000 MH
-5.00			01.1 -13.00 uBm
-15.0			Stop Free 700.000000 MH
-35.0	1 Marina Marina Marina Marina Marina M	monit	CF Step 400.000 kH <u>Auto</u> Mar
-55.0			Freq Offse 0 H
-65.0			Scale Type
Center 698.000 MHz #Res BW 100 kHz	#VBW 300 kHz	Span Sweep 2.000 ms	4.000 MHz Log Li
MSG	<b># BH 500</b> KHZ	STATUS	

Plot 7-255. Lower Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-256. Upper Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Keysight Spectrum Analyzer - Swept SA				
XX RL RF 50Ω DC	CORREC SENSE:IM	#Avg Type: RMS	09:21:01 PM Oct 28, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide Trig: Free Run IFGain:Low Atten: 36 dB		r1 698.000 MHz -40.80 dBm	Auto Tune
15.0				Center Freq 698.000000 MHz
-5.00		/ / Maria gas Aparts	и, стали и полокому и п DL1 -13.00 dBm	<b>Start Freq</b> 694.000000 MHz
-15.0		, J <sup>ul</sup>		<b>Stop Freq</b> 702.000000 MHz
-35.0	1-			CF Step 800.000 kHz <u>Auto</u> Mar
-65.0				Freq Offse 0 H:
-85.0				Scale Type
Center 698.000 MHz #Res BW 100 kHz	#VBW 300 kHz	Sweep 4	Span 8.000 MHz I.000 ms (1001 pts)	Log <u>Lin</u>
MSG		STATU	S	

Plot 7-257. Lower Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-258. Upper Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-259. Lower Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

K RL RF	50 Ω DC	CORREC	SENSE:INT	ALIGN AUTO	09:30:54 PM Oct 28, 2019	Frequency
		PNO: Wide ++- IFGain:Low	Trig: Free Run Atten: 36 dB	#Avg Type: RMS	TRACE <b>1 2 3 4 5 6</b> TYPE A <del>WWWW</del> DET <b>A N N N N</b>	
0 dB/div Rei	f 25.00 dBm			Mk	r1 774.988 MHz -66.13 dBm	Auto Tur
5.0						Center Fre 769.000000 Mi
00						<b>Start Fr</b> 763.000000 M
5.0						<b>Stop Fr</b> 775.000000 M
5.0					DL1 -35.00 dBm	CF Sto 1.200000 M <u>Auto</u> M
5.0						Freq Offs 0
5.0		alant Martin and an analysis and	uyong traditiona and a star mangalan ang tang tang tang tang tang tang tan		and to reason of the same provention of the same of th	Scale Ty
tart 763.000 Res BW 6.2 I		#VBW	30 kHz	#Sween	Stop 775.000 MHz 1.000 s (1001 pts)	Log <u>L</u>

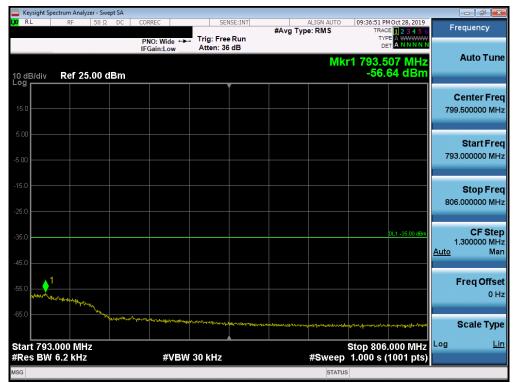
Plot 7-260. Lower Emission Mask Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	ISUNG	Approved by: Quality Manager
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RL	Spectrum Analyz RF	50 Ω DC		C	SE	NSE:INT		ALIGN AUTO		1 Oct 28, 2019	-	
			PNO	:Wide 🕞	Trig: Fre		#Avg Typ	e:RMS	TRAC TYP	E 1 2 3 4 5 6 E A WWWW T A N N N N N	F	equency
			IFGai	in:Low	Atten: 3	6 dB		Mk	r1 787.0			Auto Tun
0 dB/div	Ref 25.	.00 dBm	1						-26.	01 dBm		
.09						Ĭ					(	Center Fre
15.0											78	.000000 MH
5.00	······	r mm	and the second s	www	m							
											70	Start Fre
5.00											78:	5.000000 MIF
15.0										DL1 -13.00 dBm		Stop Fre
					h y	1					78	9.000000 MH
25.0						No.						
35.0						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.	······································	will the second		CF Ste 400.000 kH
											<u>Auto</u>	Ma
45.0												_
55.0												Freq Offs ۱۰
65.0												
00.0												Scale Typ
enter 7	787.000 M	Hz				<u> </u>			Span 4	.000 MHz	Log	L
	V 100 kHz			#VBW	/ 300 kHz	2		Sweep 2	.000 ms (	1001 pts)		
SG								STATUS	3			

Plot 7-261. Upper Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



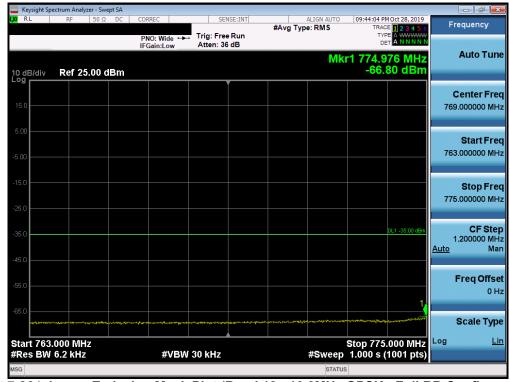
Plot 7-262. Upper Emission Mask Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Spectrum An										
<b>X</b> RL RF	50 Ω DC	CORREC	SEN	SE:INT	#Avg Typ	ALIGN AUTO e: RMS		I Oct 28, 2019	F	equency
		PNO: Wide IFGain:Low	Trig: Free Atten: 36		0 //		TYP DE			Auto Tune
10 dB/div Ref :	25.00 dBm					Mk	r1 777.0 -30.2	00 MHz 71 dBm		Auto Tulk
									(	Center Free
15.0									777	.000000 MH:
5.00				ملمقه	water hugeter there	water	ᡗᢦᠬᡗᡶᢛᡗ᠕ᡊ᠕ᠼᢁ᠕ᡟᢦᡢ	nova (holan yong)a		Start Free
-5.00									773	3.000000 MH
-15.0								DL1 -13.00 dBm		
									78 <sup>.</sup>	Stop Free 1.000000 MH
-25.0				1 M						05.044
-35.0		Martin Martin	and the faither						<u>Auto</u>	CF Ste 800.000 kH Ma
45.0		1								
55.0 Junemonton	mu wywwwwwwww									Freq Offse 0 H
65.0										
										Scale Typ
Center 777.000 #Res BW 100 k		#VBW	300 kHz			Sween_4	Span 8 1.000 ms (		Log	Li
ISG	1115		000 1112			STATU		roor pts)		

Plot 7-263. Lower Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-264. Lower Emission Mask Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Spectrum Analyzer - Swept SA 🚽					
<b>LX/</b> RL RF 50Ω DC	CORREC SE	NSE:INT #Avg Typ		Oct 28, 2019 CE 1 2 3 4 5 6	Frequency
	PNO: Wide Trig: Fre IFGain:Low Atten: 30	e Run	۳۷ D Mkr1 787.0		Auto Tune
10 dB/div Ref 25.00 dBm			-31.	63 dBm	
15.0					<b>Center Freq</b> 787.000000 MHz
5.00	way and a superior				Start Freq 783.000000 MHz
-15.0				DL1 -13.00 dBm	Stop Freq 791.000000 MHz
-35.0	······································		man and a second and	Aut	<b>CF Step</b> 800.000 kHz <u>o</u> Mar
-55.0					<b>Freq Offset</b> 0 Hz
-65.0					Scale Type
Center 787.000 MHz #Res BW 100 kHz	#VBW 300 kHz		Span 8 Sweep 4.000 ms	3.000 MHz <sup>Log</sup> (1001 pts)	) <u>Lin</u>
MSG			STATUS		

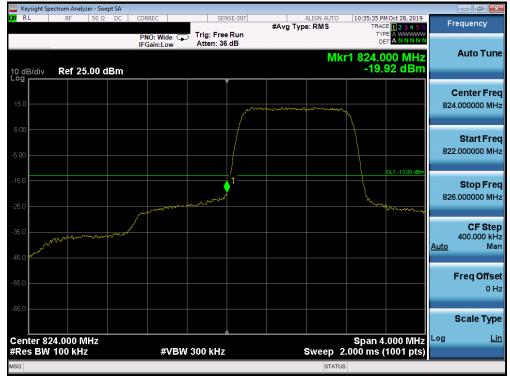
Plot 7-265. Upper Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-266. Upper Emission Mask Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-267. Lower Band Edge Plot (Band 26/5 - 1.4MHz QPSK - Full RB Configuration)



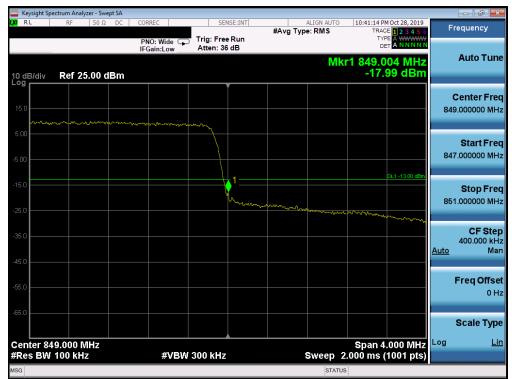
Plot 7-268. Upper Band Edge Plot (Band 26/5 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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KI RL	RF	50 Ω	DC	CORREC		SEI	NSE:INT		ALIGN AUTO		M Oct 28, 2019	F	requency
				PNO: Wide		Trig: Free		#Avg Typ	e:RMS	TRAC TYI	CE 1 2 3 4 5 6 PE A WWWW ET A NNNNN		requeriey
				IFGain:Lov	v _	Atten: 36	dB						Auto Tun
									Mk	r1 823.9	84 MHz		Auto Tun
10 dB/div _og	Ref 25	.00 dl	Зm							-19.	79 dBm		
							Í						Center Fre
15.0													4.000000 MH
							~~	m		ᠰ᠁᠇ᠵ᠊ᡧᡗᡟᢦᢦᡐᠬᡆ	man		
5.00							-/						
													Start Fre
-5.00												82	2.000000 MH
							1				DL1 -13.00 dBm		
-15.0							1						Stop Fre
						Ĵ	ſ					82	6.000000 MH
-25.0		mm		mm	m	m							
~~~~	mun												CF Ste
-35.0													400.000 kH
-45.0												<u>Auto</u>	Ma
-45.0													
-55.0													Freq Offs
00.0													0 H
-65.0													
													Scale Typ
												Log	
	324.000 M V 100 kHz			#1	(D)AL	300 kHz			Swoon_	Span 4	.000 MHz (1001 pts)	Log	L
INCS DV	V 100 KHZ			# V	DVV	300 KHZ			Sweep 2	.000 IIIS (	(100 Ppts)		

Plot 7-269. Lower Band Edge Plot (Band 26/5 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-270. Upper Band Edge Plot (Band 26/5 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🤤 Keysight Spectrum Analyzer - Swept SA 🚽					
LX/RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	10:44:15 PM Oct 28, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm		Trig: Free Run Atten: 36 dB	Mk	TYPE A WWWW DET A NNNNN 1 823.968 MHz -25.06 dBm	Auto Tune
					Center Freq 824.000000 MHz
-5.00				DL1 -13.00 dBm	Start Freq 822.000000 MHz
-15.0		1.			Stop Freq 826.000000 MHz
-35.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				CF Step 400.000 kHz <u>Auto</u> Man
-55.0					Freq Offset 0 Hz
-65.0					Scale Type
Center 824.000 MHz #Res BW 100 kHz	#VBW 3	00 kHz	Sweep 2	Span 4.000 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG			STATUS	3	

Plot 7-271. Lower Band Edge Plot (Band 26/5 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-272. Upper Band Edge Plot (Band 26/5 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Spectrum Analyzer - Swe					
<b>LX/</b> RL RF 50 Ω	DC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:31:19 PM Oct 28, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 d	PNO: Wide 🖵 IFGain:Low	Trig: Free Run Atten: 36 dB	Mk	1 823.944 MHz -32.95 dBm	Auto Tune
					Center Freq 824.000000 MHz
-5.00			and and a second s	ראשערע איז	Start Freq 820.000000 MHz
-15.0		11			Stop Freq 828.000000 MHz
-35.0	and a faith and a faith and a faith and a faith	yiyi "			CF Step 800.000 kHz <u>Auto</u> Mar
-55.0					Freq Offse 0 Ha
Center 824.000 MHz				Span 8.000 MHz	Scale Type
#Res BW 100 kHz	#VBW	300 kHz	Sweep 4	.000 ms (1001 pts)	
MSG			STATUS	; ;	

Plot 7-273. Lower Band Edge Plot (Band 26/5 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-274. Upper Band Edge Plot (Band 26/5 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	ISUNG	Approved by: Quality Manager
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Keysight Spectrum Analyzer - Swept SA					
XIRL RF 50Ω DC	CORREC	SENSE:INT	#Avg Type: RMS	11:37:02 PM Oct 28, 2019 TRACE 1 2 3 4 5 6	Frequency
	PNO: Wide 🖵 IFGain:Low	Trig: Free Run Atten: 36 dB	-		Auto Tune
10 dB/div Ref 25.00 dBm				-33.01 dBm	
15.0					Center Freq 824.000000 MHz
-5.00			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	un and a second and a second a	Start Fred 818.000000 MHz
-15.0				DL1 -13.00 dBm	Stop Freq 830.000000 MHz
-35.0	mm man				<b>CF Step</b> 1.200000 MH: <u>Auto</u> Mar
-55.0					Freq Offse 0 H
-65.0					Scale Type
Center 824.000 MHz #Res BW 150 kHz	#VBW 4	170 kHz	Sweep	Span 12.00 MHz 1.000 ms (1001 pts)	Log <u>Lin</u>
MSG			STATU	JS	

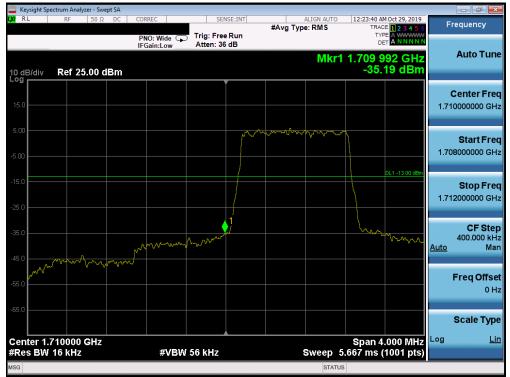
Plot 7-275. Lower Band Edge Plot (Band 26 - 15.0MHz QPSK - Full RB Configuration)



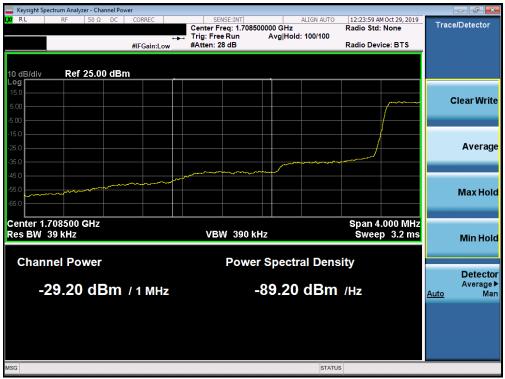
Plot 7-276. Upper Band Edge Plot (Band 26 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-277. Lower Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



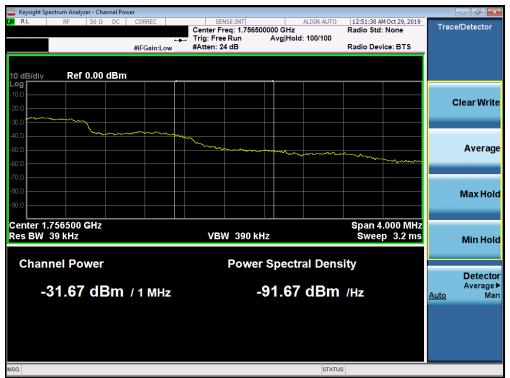
Plot 7-278. Lower Extended Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Sp RL	ectrum Analyzer - Swept S RF 50 Ω E		SENSE:	INT	ALIGN AUTO	12:51:24 AM Oc	+ 20 2010	
	req 1.7550000			#Avg	Type: RMS	TRACE	<b>2 3 4 5</b> 6	Frequency
) dB/div	Ref 25.00 dBi				Mkr1	1.755 004 -32.51	4 GHz dBm	Auto Tur
og								<b>Center Fre</b> 1.755000000 GH
.00								<b>Start Fr</b> 1.753000000 GI
5.0							-13.00 dBm	<b>Stop Fr</b> 1.757000000 G
5.0		hum	www.www		m		Au	CF Ste 400.000 ki to M
5.0						hower	104.000	Freq Offs 0
5.0								Scale Typ
enter 1. Res BW	755000 GHz 16 kHz	#VE	SW 56 kHz		Sweep 5	Span 4.00 .667 ms (10	00 MHz <sup>Lo</sup> 01 pts)	g <u>L</u>
G					STATUS			

Plot 7-279. Upper Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)



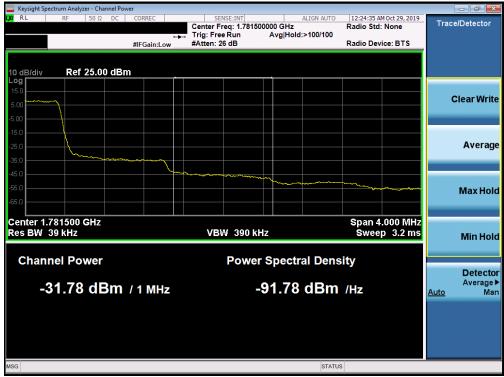
Plot 7-280. Upper Extended Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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<b>ά RL</b> RF 50 Ω DC	PNO: Wide 🕞 Trig: Fre		ALIGN AUTO Type: RMS	12:24:27 AM Oct 29, 2019	English
			Type. Rivio	TRACE 1 2 3 4 5 6 TYPE A WWWW	Frequency
0 dB/div Ref 25.00 dBm	IFGain:Low Atten: 3	36 dB	Mkr1	1.780 016 GHz -33.01 dBm	Auto Tun
15.0					<b>Center Fre</b> 1.780000000 GH
5.00				DL1 -13.00 dBm	Start Fre 1.778000000 G⊦
25.0		1			<b>Stop Fre</b> 1.782000000 GF
35.0		M. Windowski			CF Ste 400.000 kH <u>Auto</u> Ma
55.0				Mar Mary	Freq Offs 0 F
66.0					Scale Typ
Center 1.780000 GHz Res BW 16 kHz	#VBW 56 kHz		Sweep {	Span 4.000 MHz 5.667 ms (1001 pts)	Log <u>L</u>

Plot 7-281. Upper Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)



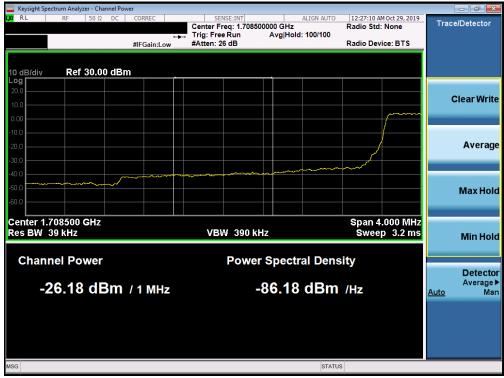
Plot 7-282. Upper Extended Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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🔤 Keysight Spectrum Ana										
<b>X</b> RL RF	50 Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	12:26:55 AM TRACE	Oct 29, 2019	Fr	equency
		PNO: Wide 😱 IFGain:Low	Trig: Free Atten: 36		0 71		TYPE DET	A WWWWW A N N N N N		Auto Tune
10 dB/div Ref 2	25.00 dBm					WIKE	1.710 00 -26.7	4 dBm		
15.0										Center Fred
5.00				$\sim$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~	1 70	Start Free
-5.00							C	)L1 -13.00 dBm		
-15.0				1					1.71	<b>Stop Fre</b> 2000000 GH
35.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~						Auto	CF Ste 400.000 k⊢ Ma
45.0										Freq Offse
65.0										0 H
										Scale Typ
Center 1.710000 #Res BW 36 kH		#VBW	130 kHz			Sweep 2	Span 4.0 .000 ms (1		Log	Li
ISG						STATUS				

Plot 7-283. Lower Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



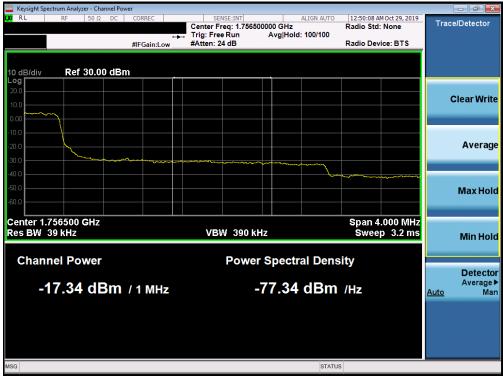
Plot 7-284. Lower Extended Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Spectrur									
LXI RL	RF 50 Ω	DC	CORREC		SENSE:INT	#Avg Typ	ALIGN AUTO	12:50:01 AM Oct 29, 2019 TRACE 1 2 3 4 5 6	Frequency
			PNO: Wide IFGain:Low		Free Run n: 36 dB			TYPE A WWWWW DET A NNNNN	Auto Tune
10 dB/div R	ef 25.00 d	Bm						-21.933 dBm	
15.0									Center Freq 1.755000000 GHz
-5.00									Start Freq 1.753000000 GHz
-15.0								DL1 -13.00 dBm	<b>Stop Freq</b> 1.757000000 GHz
-35.0									CF Step 400.000 kHz <u>Auto</u> Man
-55.0									Freq Offset 0 Hz
-65.0									Scale Type
Center 1.755 #Res BW 62			#VI	BW 220 I	Hz		Sweep :	Span 4.000 MHz 2.000 ms (1001 pts)	Log <u>Lin</u>
MSG							STATU		

Plot 7-285. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)



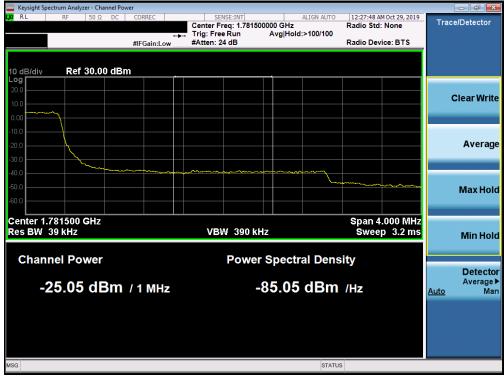
Plot 7-286. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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					Keysight Spectrum Analyzer - Swept S
Frequency	12:27:41 AM Oct 29, 2019 TRACE 1 2 3 4 5 6	ALIGN AUTO #Avg Type: RMS	SENSE:INT	DC CORREC	RL RF 50 Ω D
	DET A WWWWW	• //	Trig: Free Run Atten: 36 dB	PNO: Wide G	
Auto Tune	1.780 000 GHz -27.515 dBm	Mkr1		dBm	dB/div Ref 25.00 dBr
Center Fred 1.780000000 GH:					5.0
Start Fred 1.778000000 GH:	0L1 -13.00 dBm				
<b>Stop Fred</b> 1.782000000 GH			1		5.0
CF Stej 400.000 kH <u>Auto</u> Ma			- hon		5.0
Freq Offse 0 H					5.0
Scale Type					5.0
Log <u>Lir</u>	Span 4.000 MHz 2.000 ms (1001 pts)	Sweep 2	130 kHz		enter 1.780000 GHz Res BW 36 kHz
		STATUS			G

Plot 7-287. Upper Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



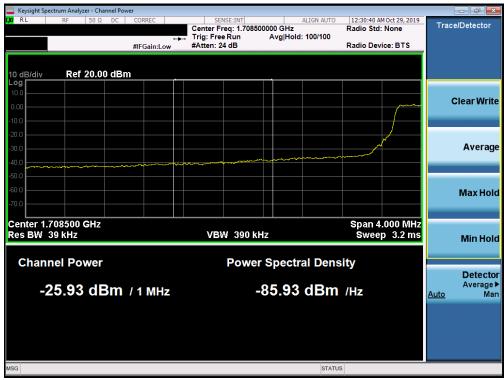
Plot 7-288. Upper Extended Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

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🔤 Keysight Spectrum Analyzer - Swep	ot SA				
<b>LXI</b> RL RF 50 Ω	DC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	12:30:32 AM Oct 29, 2019 TRACE 1 2 3 4 5 6	Frequency
	PNO: Wide 🖵 IFGain:Low	Trig: Free Run Atten: 36 dB	• //	DET A WWWW	
10 dB/div Ref 25.00 dl	Bm		Mkr1	1.710 000 GHz -29.290 dBm	Auto Tune
15.0					Center Freq 1.710000000 GHz
-5.00				DL1 -13.00 dBm	Start Freq 1.708000000 GHz
-15.0					<b>Stop Freq</b> 1.712000000 GHz
-35.0					CF Step 400.000 kH: <u>Auto</u> Mar
-55.0					Freq Offse 0 H:
-65.0					Scale Type
Center 1.710000 GHz #Res BW 62 kHz	#VBW	200 kHz	Sweep 2	Span 4.000 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG			STATUS	3	

Plot 7-289. Lower Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-290. Lower Extended Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

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