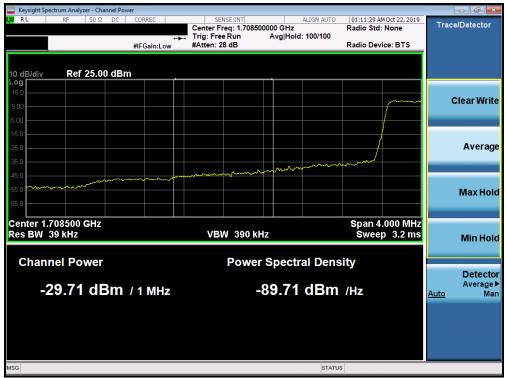




Plot 7-286. Lower Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



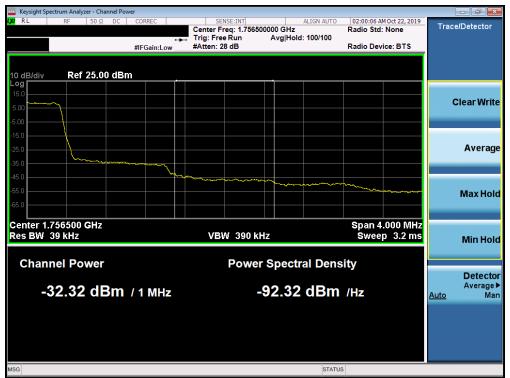
Plot 7-287. Lower Extended Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL	Spectrum Analyzer - RF 5	Swept SA DΩ DC	CORREC	SEN	SE:INT		ALIGN AUTO	01:59:57 4	M Oct 22, 2019	_	
			PNO: Wide ↔ IFGain:Low		Run	#Avg Typ		TRAC	CE 1 2 3 4 5 6 CE A WWWW A NNNNN	F	requency
0 dB/div	Ref 25.0	0 dBm					Mkr1	1.755 (-35.0	24 GHz 35 dBm		Auto Tur
5.0											Center Fre
.00									DL1 -13.00 dBm	1.75	Start Fr 3000000 G
5.0										1.75	Stop Fr 7000000 G
5.0	m				1	mm	m			<u>Auto</u>	CF Ste 400.000 k M
5.0							- ANA		mm		Freq Offs 0
5.0											Scale Ty
	I.755000 GH V 16 kHz	z	#VBW	56 kHz			Sweep 5	Span 4 .667 ms (.000 MHz 1001 pts)	Log	L
G							STATUS				

Plot 7-288. Upper Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)



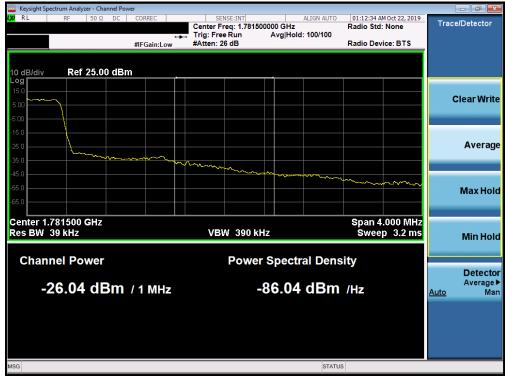
Plot 7-289. Upper Extended Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Analyze											
XI RL	RF	50 Ω D	C CORR	C		NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	MOct 22, 2019	Fi	equency
	_		PNO IFGa	:Wide ↔ in:Low	Trig: Fre Atten: 3				TYF DE			
I0 dB/div	Ref 25.	00 dBn	n					Mkr1	1.780 0 -33.6	28 GHz 71 dBm		Auto Tun
15.0												Center Fre 0000000 G⊦
5.00			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	******						DL1 -13.00 dBm	1.77	Start Fre 8000000 G⊦
25.0											1.78	Stop Fre 2000000 GH
35.0 	Man				ļ	1 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mm	m de la construcción de la const	mm		<u>Auto</u>	CF Ste 400.000 kH Ma
55.0										Marrie Marr		Freq Offs 0 H
65.0												Scale Typ
	.780000 Q / 15 kHz	Hz		#VBW	51 kHz			Sweep 6	Span 4 .667 ms (.000 MHz 1001 pts)	Log	L
SG								STATUS	3			

Plot 7-290. Upper Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)



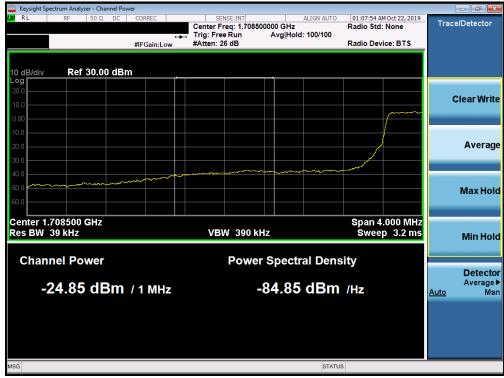
Plot 7-291. Upper Extended Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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🔤 Keysight Spectr											
X/RL	RF 50	Ω DC	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	01:07:38 AM TRACE	Oct 22, 2019	Fr	equency
			PNO: Wide ↔ IFGain:Low	Atten: 36		•		TYPI DE	A WWWWW A N N N N N		A
10 dB/div	Ref 25.00	dBm					Mkr1	1.709 9 -26.61	92 GHz 5 dBm		Auto Tun
										(Center Free
15.0										1.71	0000000 GH
5.00					~~~	www.~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	᠆᠆᠆᠆᠆		Start Fre
-5.00										1.70	8000000 GH
15.0									0L1 -13.00 dBm		Stop Fre
-25.0					1					1.71	2000000 GH
				Ĵ							CF Ste
45.0	~~~~~	~~~~		and the second						<u>Auto</u>	400.000 kH
											Freq Offse
-55.0											0 H
65.0											Scale Typ
Center 1.71 Res BW 3		z	#\/B\/	/ 130 kHz			Sween_2	Span 4. 2.000 ms (1	000 MHz	Log	Li
	0 KH2		#VDV	7 150 KH2			status		loo Ppts)		

Plot 7-292. Lower Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



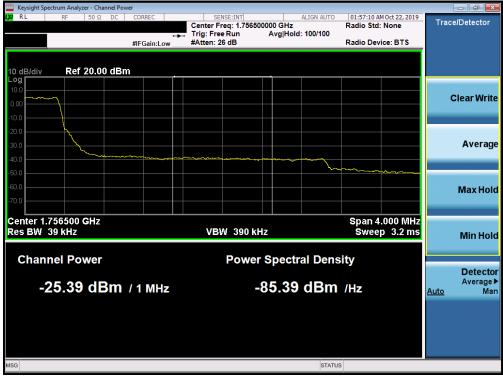
Plot 7-293. Lower Extended Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	ectrum Analyz		A											
LXI RL	RF	50 Ω D	C CC	ORREC			SENSE:INT	#Ava	ALIGN			M Oct 22, 2019 CE 1 2 3 4 5 6	F	requency
			F	PNO: Wi FGain:Lo	de ↔→ ow	Trig: F Atten:	ree Run 36 dB				TY D			
10 dB/div Log	Ref 25	.00 dBr	n						N	lkr1	1.755 (-26.6	004 GHz 14 dBm		Auto Tune
15.0														Center Freq 5000000 GHz
-5.00			~~~~~		~~~								1.75	Start Freq 3000000 GHz
-15.0							1					DL1 -13.00 dBm	1.75	Stop Freq 7000000 GHz
-35.0								~~~~~	~~~~	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····	<u>Auto</u>	CF Step 400.000 kH Mar
-55.0														Freq Offse 0 Hi
-65.0														Scale Type
Center 1. #Res BW		GHz		#	VBW	130 kH	Iz		Swe	ep <u>2.</u>	Span 4 000 m <u>s</u>	.000 MHz (1001 pts)	Log	Lin
MSG										STATUS				

Plot 7-294. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)



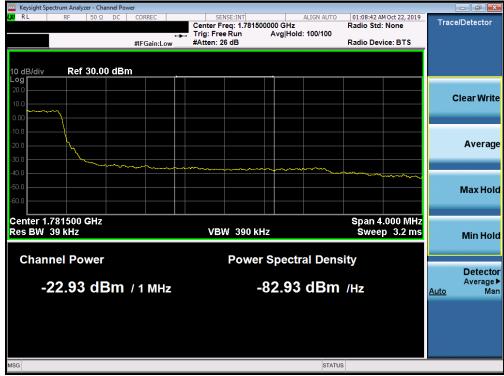
Plot 7-295. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Mikit 1.1.760 0044 GFI2 Center Fir 2 -25.028 dBm -27.028 dBm 2 -27.028 dBm -27.028 dBm 2	Keysight Spectrum Ana	ilyzer - Swept SA								
Incluing Mkr1 1.780 004 GHz -25.028 dBm Auto Tu Auto Tu Center Fr 1.78000000 G Start Fr 1.78000000 G 00 01 - 100 mb Start Fr 1.78000000 G 00 01 - 100 mb Start Fr 1.7800000 G 00 01 - 100 mb Start Fr 1.7800000 G 00 01 - 100 mb Start Fr 1.7800000 G 00 01 - 100 mb Start Fr 1.78200000 G 00 01 - 100 mb Start Fr 1.7820000 G 00 01 - 100 mb Start Fr 1.78200000 G 00 01 - 100 mb Start Fr 1.7820000 G 00 01 - 100 mb Start Fr 00 01 - 100 mb Start Fr 00 01 - 100 mb Start Fr 00 00 mb Start Fr <th>C RL RF</th> <th>50 Ω DC</th> <th>PNO: Wide ↔</th> <th>Trig: Free</th> <th>Run</th> <th></th> <th>TRAC</th> <th>E 1 2 3 4 5 6</th> <th>F</th> <th>requency</th>	C RL RF	50 Ω DC	PNO: Wide ↔	Trig: Free	Run		TRAC	E 1 2 3 4 5 6	F	requency
Center Fr 1.78000000 G Center Fr 1.78000000 G Center Fr 1.78000000 G Center Fr 1.78000000 G Center Fr 1.7800000 G Center Fr 1.78000000 G CE Start Fr 1.78200000 G CF Start 400.000 k Auto M Freq Offs 0 Scale Ty Log	0 dB/div Ref 2	25.00 dBm	IFGain:Low	Atten: 36	dB	Mkr1				Auto Tun
Start Fr 00 0.1 1300 dBt 50 0.1 1300 dBt <td>15.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	15.0									
50 1	5.00								1.77	Start Fre 8000000 GH
400.000 k 400.000 k 400.000 k Auto M Freq Offs 0 50 50 50 50 50 50 50 50 50	25.0				1			DL1 -13.00 dBm	1.78	Stop Fre 2000000 Gi
50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.0					 ~~~~~~	·	~~~~~	<u>Auto</u>	CF Ste 400.000 kl M
enter 1.780000 GHz Scale Ty	5.0									Freq Offs 0 I
Res BW 36 kHz #VBW 130 kHz Sweep 2.000 ms (1001 pts)							Span 4	.000 MHz		Scale Tyr
STATUS	Res BW 36 kH: se	Z	#VBW	130 kHz				1001 pts)		

Plot 7-296. Upper Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



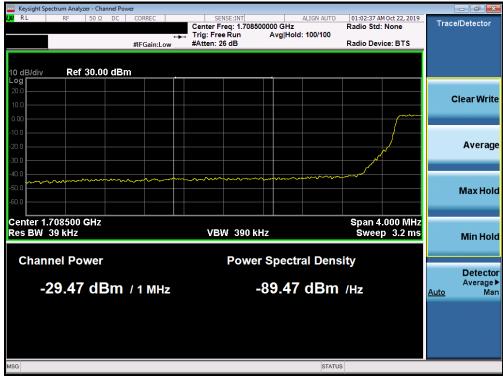
Plot 7-297. Upper Extended Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Anal												
XI RL	RF	50 Ω	DC	CORREC		S	ENSE:INT	#Avg Typ	ALIGN AUTO		M Oct 22, 2019	F	requency
				PNO: W IFGain:L	ide ↔ .ow	Trig: Fr Atten:		• /		TY D			Auto Tune
10 dB/div Log	Ref 2	5.00 di	3m						Mkr1	1.709 9 -29.6	996 GHz 01 dBm		Auto Tun
													Center Free
15.0												1.71	0000000 GH
5.00							-				-		Start Fre
-5.00												1.70	8000000 GH
-15.0											DL1 -13.00 dBm		Oton Eng
							- 5					1.71	Stop Fre 2000000 GH
25.0							<u>^</u> '						05.044
-35.0	m	mh m	<u>_^^~</u>	~~~~	www	m						<u>Auto</u>	CF Ste 400.000 k⊢ Ma
													Freq Offse
-55.0													0 H
-65.0													Scale Typ
Center 1.										Span 4	.000 MHz	Log	Li
Res BW	62 kHz			;	₽VBW	220 kH	Z		Sweep 2		(1001 pts)		

Plot 7-298. Lower Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



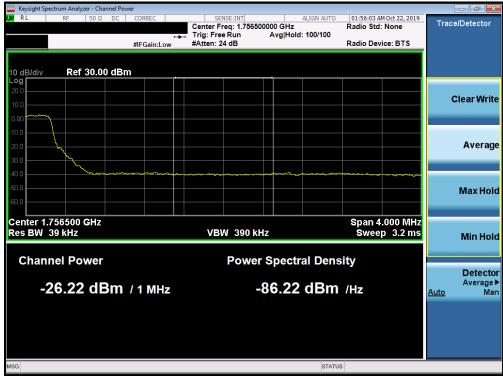
Plot 7-299. Lower Extended Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	NG	Approved by: Quality Manager	
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🔤 Keysight Sp	ectrum Analy:	zer - Swept S	A									-
XI RL	RF	50 Ω D	PN	D: Wide 🔸	Trig: Fre		#Avg Typ	ALIGN AUTO e: RMS	TRAC	MOct 22, 2019 E 1 2 3 4 5 6 E A WWWW T A N N N N N	Fr	equency
10 dB/div Log	Ref 25	.00 dBr		ain:Low	Atten: 3	6 dB		Mkr1	1.755 0	04 GHz 87 dBm		Auto Tun
15.0												Center Fre 5000000 GH
5.00	- mart form		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							DL1 -13.00 dBm	1.75	Start Fre 3000000 GH
-15.0						1					1.75	Stop Fre 7000000 GH
45.0						h	mm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	him	MMM	<u>Auto</u>	CF Ste 400.000 kH Ma
55.0												F req Offs 0 H
-65.0											Log	Scale Typ
Center 1. #Res BW	.755000 62 kHz	GHZ		#VBW	220 kHz			Sweep 2	Span 4 .000 ms (.000 MHz 1001 pts)	LUg	
ISG								STATUS				

Plot 7-300. Upper Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)



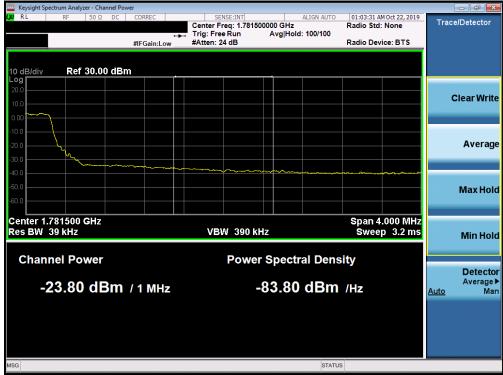
Plot 7-301. Upper Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager				
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Keysight Spectrum Analy	zer - Swept SA									
RL RF	50Ω DC	CORREC	Trig: Free		#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Oct 22, 2019 E 1 2 3 4 5 6 E A WWWW A N N N N N	Fr	equency
0 dB/div Ref 2	5.00 dBm	IFGain:Low	Atten: 36	dB		Mkr1		04 GHz 39 dBm		Auto Tun
15.0										Center Fre 0000000 G⊦
5.00	<u>~~~~~~~</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								1.77	Start Fre 3000000 GH
25.0			M	1				DL1 -13.00 dBm	1.78	Stop Fre 2000000 GH
5.0				Server and a server a ser Server a server a se	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ma		w	<u>Auto</u>	CF Ste 400.000 kl M
5.0									1	Freq Offs 0
enter 1.780000	GHz						Span 4	.000 MHz	Log	Scale Typ
Res BW 62 kHz		#VBW	220 kHz			Sweep 2	.000 ms (1001 pts)		

Plot 7-302. Upper Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)



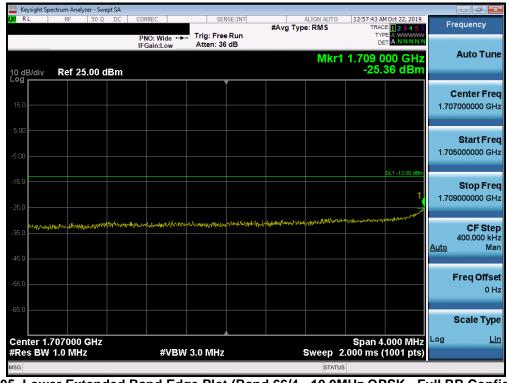
Plot 7-303. Upper Extended Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager				
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Keysight Spectrum Analy:		CORREC	CEN	CE-INT			12,57,21,41	10+122 2010	_	
	50 Ω DC	CORREC		SE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	MOct 22, 2019 E 1 2 3 4 5 6 E A WWWWW	Fr	equency
		PNO: Wide +++ IFGain:Low	Atten: 36				DE			Auto Tun
10 dB/div Ref 25	i.00 dBm					Mkr1	1.709 9 -32.6	84 GHz 25 dBm		Auto Tun
-09									0	Center Fre
15.0									1.71	0000000 GH
5.00					of the and the owned	64 ⁴ 48,44 ¹ 6,4 ⁴ -14 ⁴ -14	hot-standarthe	-		
					in the orthograph (100 and a				4 70	Start Fre
-5.00									1.70	6000000 GH
15.0								DL1 -13.00 dBm		Stop Fre
									1.71	4000000 GH
-25.0				14						
-35.0			warrow wet	N.						CF Ste 800.000 kH
-45.0	way of the here was	ere vise of the second							<u>Auto</u>	Ma
-45.0										
-55.0										F req Offs ۱۰
65.0										
										Scale Typ
Center 1.710000	GHz						Span 8	.000 191112	Log	L
Res BW 120 kHz		#VBW	430 kHz			Sweep 4	.000 ms (1001 pts)		
ISG						STATUS				

Plot 7-304. Lower Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



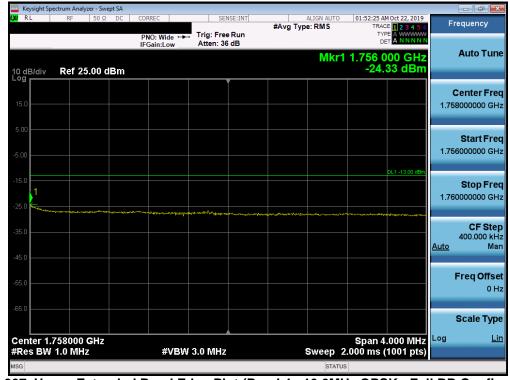
Plot 7-305. Lower Extended Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager				
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🔤 Keysight Spectrum Analyzer - Swept SA 🚽					
XIRL RF 50Ω DC	CORREC	SENSE:INT	#Avg Type: RMS	01:52:11 AM Oct 22, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dB m	PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB	Mkr1	1.755 032 GHz -32.091 dBm	Auto Tune
					Center Freq 1.755000000 GHz
5.00	1944 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 19			DL1 -13.00 dBm	Start Freq 1.751000000 GHz
-15.0					Stop Freq 1.759000000 GHz
-35.0			ig produme Mangalin - nannaging si Je	and a subserved on the second of the second	CF Step 800.000 kHz <u>Auto</u> Mar
-55.0					Freq Offse 0 H;
-66.0					Scale Type
Center 1.755000 GHz #Res BW 120 kHz	#VBW	430 kHz	Sweep 4	Span 8.000 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG			STATUS		

Plot 7-306. Upper Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-307. Upper Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
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	ctrum Analyzer - Swept S						
LX/RL	RF 50 Ω D	C CORREC	SENSE:INT	#Avg Type	ALIGN AUTO	12:58:27 AM Oct 22, 2019 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB			DET A WWWWW	
10 dB/div Log	Ref 25.00 dBi	m			Mkr1	1.780 064 GHz -31.320 dBm	Auto Tune
15.0							Center Fred 1.780000000 GH:
-5.00	and many days of the provide of the	مان میرین میرون میرو میرون میرون می	Pres				Start Free 1.776000000 GH
-15.0						DL1 -13.00 dBm	Stop Fre 1.784000000 GH
-35.0			and the second	46/2441_0-1#1274548-v492-486794.s	manna	when in this the lange when the part of the	CF Stej 800.000 kH <u>Auto</u> Ma
-55.0							Freq Offse 0 H
-65.0							Scale Typ
Center 1.7 #Res BW	780000 GHz 120 kHz	#VBW	430 kHz	s	Sweep 4.	Span 8.000 MHz 000 ms (1001 pts)	Log <u>Lir</u>
MSG					STATUS		

Plot 7-308. Upper Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-309. Upper Extended Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

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Exercise Sectrum Analyzer - Swept SA					
IXI RL RF 50Ω DC	CORREC	SENSE:INT	#Avg Type: RMS	12:53:50 AM Oct 22, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm		: Free Run en: 36 dB	Mkr1	1.709 940 GHz -31.721 dBm	Auto Tune
					Center Freq 1.710000000 GHz
-5.00				DL1 -13.00 dBm	Start Freq 1.704000000 GHz
-15.0		170			Stop Freq 1.716000000 GHz
-35.0	www.com	and the second s			CF Step 1.200000 MH: <u>Auto</u> Mar
-55.0					Freq Offse 0 H
-65.0				Onon 42.00 Mile	Scale Type
Center 1.710000 GHz #Res BW 180 kHz	#VBW 620	kHz	Sweep 1	Span 12.00 MHz I.000 ms (1001 pts)	
MSG			STATU	S	

Plot 7-310. Lower Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



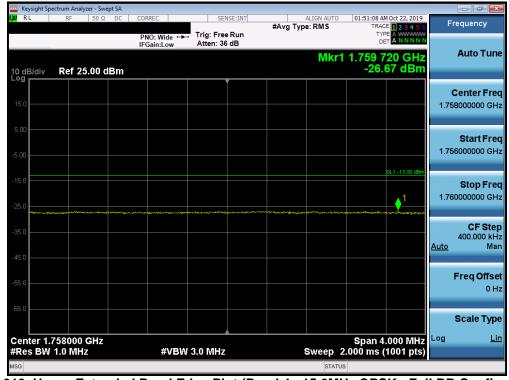
Plot 7-311. Lower Extended Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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🔤 Keysight Spectrum A							
XIRL RF	50 Ω DC	CORREC	SENSE:IN	#Avg Typ	ALIGN AUTO e: RMS	01:50:56 AM Oct 22, 2019 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB	1		TYPE A WWWW DET A NNNNN	
10 dB/div Ref	25.00 dBm	1			Mkr1	1.755 048 GHz -32.03 dBm	Auto Tune
15.0							Center Free 1.755000000 GH
5.00	teres of the second						Start Fre 1.749000000 GH
25.0						DL1 -13.00 dBm	Stop Fre 1.761000000 GH
35.0				- marine on samladan.	∞∽₊,∝∽ ⊵∆₽	and we are and a second	CF Ste 1.200000 MH <u>Auto</u> Ma
55.0							Freq Offse 0 ⊦
65.0							Scale Typ
Center 1.7550 #Res BW 180		#VBW	620 kHz		Sweep 1.	Span 12.00 MHz .000 ms (1001 pts)	Log <u>Li</u>
ISG					STATUS		

Plot 7-312. Upper Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-313. Upper Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	pectrum Anal												
🗶 RL	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Ty	ALIGN AUTO		AM Oct 22, 2019 CE 1 2 3 4 5 6	Frequenc	сy
				PNO: Wi IFGain:L		Trig: Fre Atten: 3			•	דו		Auto ⁻	Tur
10 dB/div Log	Ref 2	5.00 dE	3m						Mkr1	1.780 -28.6	024 GHz 648 dBm	Auto	run
15.0							Ĭ					Center	
												1.78000000	D GH
5.00	*****		~~~~~~									Start	
-5.00											DL1 -13.00 dBm	1.774000000	U GI
-15.0												Stop 1.78600000	
25.0						N	· ·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
35.0										mer wyrag	·····	CF 1.200000 Auto	
45.0												Freg O	offe
55.0												Fiedo	01
65.0												Scale [*]	Тур
Center 1 #Res BW					WRM	620 kH;			Sween 1	Span '	12.00 MHz (1001 pts)	Log	L
ISG		-		#		020 KH			SWEEP		(1001 pts)		

Plot 7-314. Upper Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)



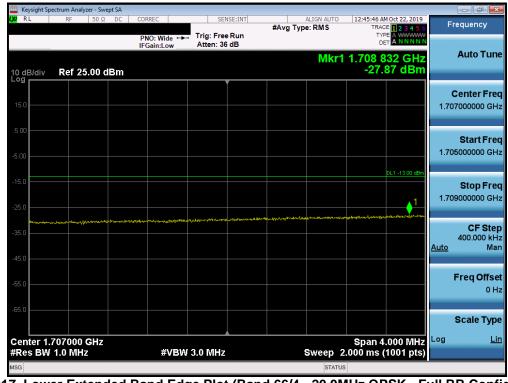
Plot 7-315. Upper Extended Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Keysight Spectrum Anal										
RL RF	50 Ω DC	CORREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRA	AM Oct 22, 2019 CE 1 2 3 4 5 6	Fi	requency
		PNO: Wide ↔ IFGain:Low	Trig: Free Atten: 36				0			A
10 dB/div Ref 2	5.00 dBm					Mkr1	1.709 -32.	888 GHz 520 dBm		Auto Tune
			,						(Center Free
15.0									1.71	0000000 GH
5.00					v	al and a second	the second s	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Start Fre
-5.00									1.70	2000000 GH
								DL1 -13.00 dBm		
-15.0									1 71	Stop Fre 8000000 GH
-25.0				1 / ⁴						
-35.0	manne	ware a start		^{مر} لہ						CF Ste
-45.0									<u>Auto</u>	Ma
43.0										Freq Offse
-55.0										0 H
-65.0										
										Scale Type
Center 1.710000 #Res BW 240 kH		#VBW	820 kHz			Sweep	Span 1.000 ms	16.00 MHz (1001 pts)	Log	Li
ISG						STATU	IS			

Plot 7-316. Lower Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-317. Lower Extended Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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weysight Spectrum Analyzer - Swept SA				
LX RL RF 50Ω DC	CORREC SENSE:I	ALIGN AUTO #Avg Type: RMS	01:48:59 AM Oct 22, 2019 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide +++ Trig: Free Ru IFGain:Low Atten: 36 dB		1.755 032 GHz -32.168 dBm	Auto Tune
15.0				Center Freq 1.755000000 GHz
5.00			DL1 -13.00 dBm	Start Freq 1.747000000 GHz
-15.0				Stop Fred 1.763000000 GHz
-35.0			and a second	CF Step 1.600000 MH: <u>Auto</u> Mar
-65.0				Freq Offse 0 H:
-65.0				Scale Type
Center 1.755000 GHz #Res BW 240 kHz	#VBW 820 kHz	Sweep 1	Span 16.00 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG		STATUS		

Plot 7-318. Upper Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-319. Upper Extended Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analyzer - Swe										
LXI RL	RF 50 Ω	DC CC	ORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		MOct 22, 2019	Fr	equency
		F	NO: Wide ↔ Gain:Low	Trig: Free Atten: 36				TYP De			Auto Tune
10 dB/div Log	Ref 25.00 d	Bm					Mkr1	1.780 0 -28.4	032 GHz 62 dBm		Auto Tune
15.0											Center Fred
-5.00			and the second							1.772	Start Free 2000000 GH
-15.0					1				DL1 -13.00 dBm	1.78	Stop Fre 3000000 GH
-35.0					hansen menere	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.	mm	- Maria	1 <u>Auto</u>	CF Ste .600000 MH Ma
-55.0										ľ	Freq Offse 0 H
-65.0											Scale Typ
Center 1. #Res BW	780000 GHz 240 kHz		#VBW	820 kHz			Sweep 1	Span 1 .000 ms (6.00 MHz 1001 pts)	Log	Li
MSG							STATUS	6			

Plot 7-320. Upper Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)



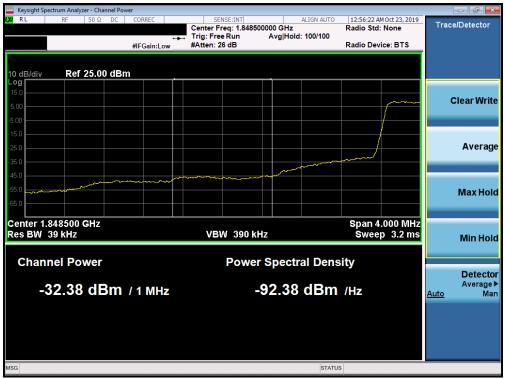
Plot 7-321. Upper Extended Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-322. Lower Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)



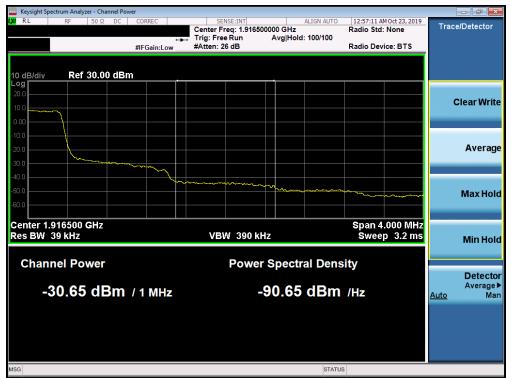
Plot 7-323. Lower Extended Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 of 405	
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Plot 7-324. Upper Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)



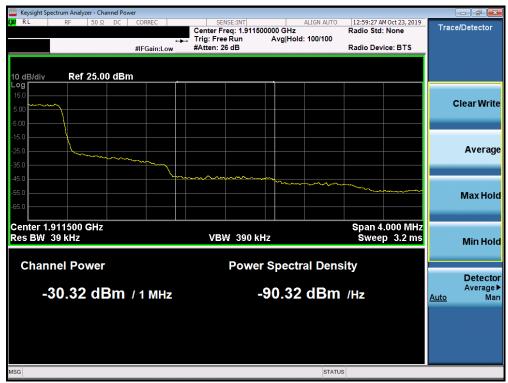
Plot 7-325. Upper Extended Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	Spectrum Analyze		1									
🗶 RL	RF	50 Ω DC	CORREC		SEI	NSE:INT	#Avg Ty	ALIGN AUTO		M Oct 23, 2019	F	requency
			PNO: V IFGain:		Trig: Free Atten: 36				TYI Di			A
10 dB/div Log	Ref 25.	00 dBn	ı					Mkr1	1.910 (-30.7)28 GHz 38 dBm		Auto Tun
15.0												Center Fre 0000000 GH
5.00			an frank frank	m						DL1 -13.00 dBm	1.90	Start Fre 8000000 G⊦
25.0						1				DET-13.00 dBm	1.91	Stop Fre 2000000 G⊦
35.0 " ~ ~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~]				- man	men and	Mry J			<u>Auto</u>	CF Ste 400.000 kH Ma
55.0								woord	mm	www		Freq Offs 0 H
65.0											Log	Scale Typ
	l.910000 G V 15 kHz	θHZ		#VBW 5	i1 kHz			Sweep 6		.000 MHz (1001 pts)		<u> </u>
ISG								STATUS				

Plot 7-326. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



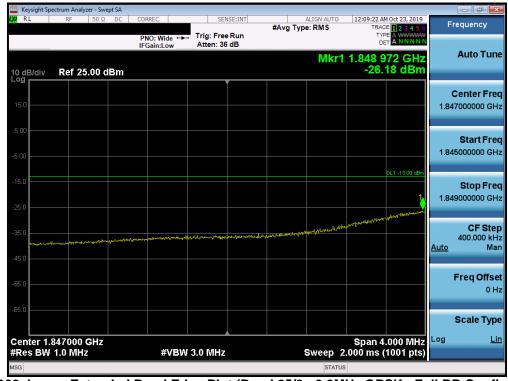
Plot 7-327. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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🤤 Keysight Spectrum Analyzer - Swept SA 🚽			
LX/ RL RF 50Ω DC	CORREC SENSE:INT	ALIGN AUTO 12:09:01 AM Oct 23, 201 #Avg Type: RMS TRACE 1 2 3 4 5	
10 dB/div Ref 25.00 dBm	PNO: Wide +++ Trig: Free Run IFGain:Low Atten: 36 dB	туре Балини Deт Балини Mkr1 1.849 992 GH -36.551 dBr	Auto Tune
15.0			Center Freq 1.85000000 GHz
-5.00		DL1-1300 dB	Start Freq 1.848000000 GHz
-15.0			Stop Freq 1.852000000 GHz
-35.0	1		CF Step 400.000 kHz <u>Auto</u> Mar
-55.0			Freq Offset 0 Hz
-65.0			Scale Type
Center 1.850000 GHz #Res BW 36 kHz	#VBW 130 kHz	Span 4.000 MH Sweep 2.000 ms (1001 pts	<u> </u>
MSG		STATUS	

Plot 7-328. Lower Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)



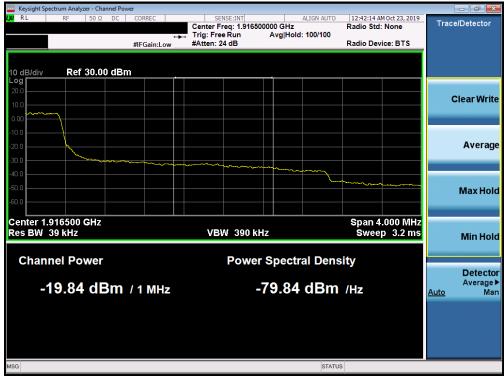
Plot 7-329. Lower Extended Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analy												
L <mark>XI</mark> RL	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Typ	ALIGN AUTO		AM Oct 23, 2019 CE 1 2 3 4 5 6	Fi	equency
				PNO: Wi IFGain:L		Trig: Fre Atten: 36		"a)r		T\ [A
10 dB/div Log	Ref 2	5.00 dE	3m						Mkr	1 1.915 (-25.5	004 GHz 584 dBm		Auto Tune
							Ĭ						Center Freq
15.0												1.91	5000000 GHz
5.00	~~~~~	~~~~~	~~~~		~~~~	m							Start Free
-5.00												1.91	3000000 GHz
-15.0											DL1 -13.00 dBm		Stop Free
-25.0							1					1.91	7000000 GHz
-35.0													CF Step
-45.0												<u>Auto</u>	400.000 kH Mar
-45.0													Freq Offse
-55.0													0 H:
-65.0													Scale Type
Center 1.	915000	GHz								Span 4	4.000 MHz		Lir
#Res BW				#	VBW	130 kHz			Sweep	2.000 ms	(1001 pts)		
MSG									STAT	JS			

Plot 7-330. Upper Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)



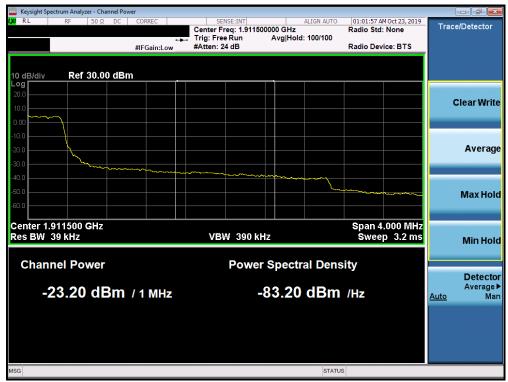
Plot 7-331. Upper Extended Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	pectrum Analy												
RL	RF	50 Ω	DC	CORREC		S	ENSE:INT	#Avg Ty	ALIGN AUTO	TRAC	M Oct 23, 2019 DE 1 2 3 4 5 6	F	requency
				PNO: W IFGain:L	ide ↔ ₋ow	Trig: Fr Atten: 3				TYI DI			
0 dB/div	Ref 2	5.00 d	Bm						Mkr	1.910 (-25.1	04 GHz 28 dBm		Auto Tun
							Ĭ						Center Fre
15.0												1.91	0000000 GH
5.00	~~~~~	~~~~	~~~~	~~~~	~~~~	\sim							Start Fre
5.00						<u> </u>					DL1 -13.00 dBm	1.90	8000000 GI
15.0						=	1				DET 113.00 UDIT		Stop Fre
25.0							? '					1.91	2000000 GI
i5.0							Ś		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m	1.000.000		CF Ste 400.000 ki
15.0												<u>Auto</u>	Ma
i5.0													Freq Offs
i5.0													01
													Scale Typ
enter 1.	.910000 36 kHz	GHz			±\/R\4	130 kH	,		Sween	Span 4	.000 MHz (1001 pts)	Log	L
SG	50 MHZ				- -	FOU KI			Sweep		roor pis)		

Plot 7-332. Upper Band Edge Plot (Band 2 – 3.0MHz QPSK - Full RB Configuration)



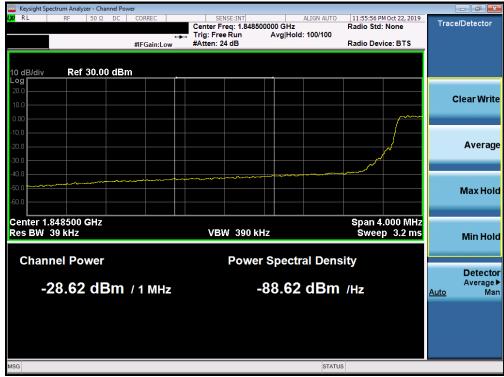
Plot 7-333. Upper Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analy												
X/RL	RF	50 Ω	DC	CORREC		SE	NSE:INT	#Avg Ty	ALIGN AUTO		CE 1 2 3 4 5 6	F	requency
				PNO: V IFGain:	/ide ↔→ Low	Trig: Fre Atten: 3		0,		TY D			Auto Turo
10 dB/div Log	Ref 2	5.00 dl	Зm						Mkr	1.850 (-29.5	000 GHz 13 dBm		Auto Tune
							Ĭ						Center Free
15.0												1.85	0000000 GH
5.00								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	······	- marine			Start Fre
-5.00												1.84	8000000 GH
15.0											DL1 -13.00 dBm		Stop Fre
-25.0							1					1.85	2000000 GH
						~	2						CF Ste
45.0	~~~~	~~~~~	~~~		~~~~	man						<u>Auto</u>	400.000 kH Ma
													Freq Offs
-55.0													0 H
.65.0													Scale Typ
Center 1.		GHz			4) (D) (4)	200 64				Span 4	1.000 MHz	Log	Li
≉Res BW ™	02 KHZ				#VBW	200 kHz			Sweep 3		(1001 pts)		

Plot 7-334. Lower Band Edge Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)



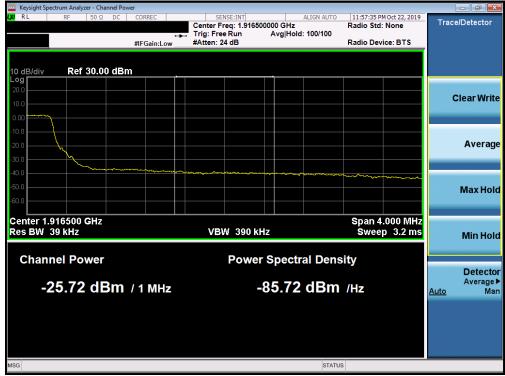
Plot 7-335. Lower Extended Band Edge Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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PNO: Wide Trig: Free Run Atten: 36 dB Trace Det Auto Tur Det Auto Tur Det Auto Tur 0dB/div Ref 25.00 dBm Center Fre 1.91500000 GF Center Fre 1.91500000 GF 00 0 0 0 0 00 0 0 0 0 00 0 0 0 0 0 00 0 0 0 0 0 00 0 0 0 0 0 00 0 0 0 0 0 00 0 0 0 0 0 0 00 0 0 0 0 0 0 0 00 0		ectrum Analy:	zer - Swep	ot SA										
International Mkr1 1.915 0004 GHz -29,925 dBm Auto Tur Center Fre 1.9150000 GHz 00 0	<mark>()</mark> RL	RF	50 Ω	DC	PNO: W		Trig: Free	Run			TRAC	E 1 2 3 4 5 6	F	requency
Center Fre Center Fre Center Fre Center Fre Start F	0 dB/div	Ref 25	.00 di	Bm	IFGain:L	<u>.ow</u>	Atten: 36	dB		Mkr1				Auto Tun
00 0	15.0													
50 50 50 50 50 50 50 50 50 50	5.00		·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~/~~~	~~~~~							1.91	
400.000 kH 50 50 50 50 50 50 50 50 50 50	25.0							1				DL1 -13.00 dBm	1.91	
50 Image: Solution of the second se	15.0								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····	~~~~~	<u>Auto</u>	400.000 ki
enter 1.915000 GHz Res BW 62 kHz #VBW 200 kHz Sweep 2.000 ms (1001 pts)	6.0													•
			GHz								Span 4	.000 MHz		Scale Tyr <u>L</u>
	Res BW	62 kHz			;	≠VBW :	200 kHz			Sweep 2	.000 ms (1001 pts)		

Plot 7-336. Upper Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)



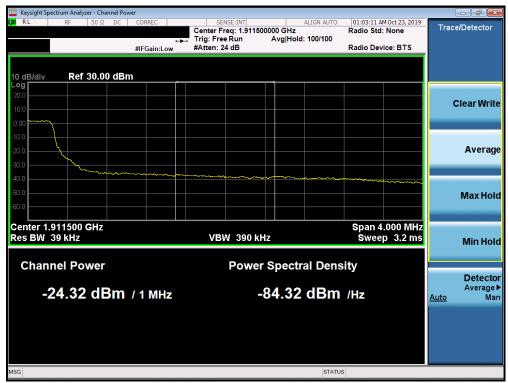
Plot 7-337. Upper Extended Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	UNG	Approved by: Quality Manager
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	pectrum Analy												
K <mark>u</mark> Rl	RF	50 Ω	DC	CORREC			ISE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Oct 23, 2019 DE 1 2 3 4 5 6	F	requency
				PNO: W IFGain:L	ide ↔ ₋ow	Trig: Free Atten: 36			Micud				Auto Tun
0 dB/div	Ref 2	5.00 d	Bm						WIKF	-29.0	012 GHz 29 dBm		
												(Center Fre
15.0												1.91	0000000 GH
5.00	www.	~~~~	$\sim \sim \sim \sim$	~~~~~	~~~~~	\sim							Start Fre
5.00						\rightarrow						1.90	8000000 GI
15.0											DL1 -13.00 dBm		Stop Fre
25.0						W1	1					1.91	2000000 GI
23.0						۷L	·						05.04
15.0 							mun	<u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u>		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	hmman	<u>Auto</u>	CF Ste 400.000 kl M
													Freq Offs
55.0													01
i5.0													Scale Typ
enter 1	.910000	GHz								Span 4	.000 MHz	Log	
	62 kHz			;	#VBW	220 kHz			Sweep 2	.000 ms (1001 pts)		
SG									STATU	3			

Plot 7-338. Upper Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-339. Upper Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	pectrum Anal												
XVI RL	RF	50 Ω	DC C	ORREC			NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Oct 22, 2019	F	requency
40 40 40	Dof 2	5.00 dE	1	PNO: Wide FGain:Lov	e ⊷⊷ v	Trig: Free Atten: 36			Mkr1	DE 1.849 9	84 GHz 66 dBm		Auto Tune
10 dB/div Log		5.00 UE	5111			,							Center Freq 6000000 GHz
-5.00									เกาะคริงงาราช เกาะสา	and the second	DL1 -13.00 dBm	1.84	Start Freq 6000000 GHz
-15.0							1 al					1.85	Stop Fred 4000000 GH2
-35.0	and and a second se	en aleman are	n an air an a	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								<u>Auto</u>	CF Step 800.000 kH Mar
-55.0													Freq Offse 0 H
Center 1	.850000	GHz								Span 8	.000 MHz		Scale Type
#Res BW				#V	'BW 4	430 kHz				.000 ms ((1001 pts)		
MSG									STATUS	5			

Plot 7-340. Lower Band Edge Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-341. Lower Extended Band Edge Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	Spectrum Anal												
X/RL	RF	50 Ω	DC C	ORREC		S	ENSE:INT	#Avg Typ	ALIGN AUTO		M Oct 22, 2019 DE 1 2 3 4 5 6	F	requency
				PNO: Wi FGain:L		Trig: Fr Atten: 3		0.71		TY D			
10 dB/div	Ref 2	5.00 dB	m						Mkr1	1.915 (-28.9)08 GHz 52 dBm		Auto Tun
15.0													Center Fre 5000000 GH
5.00 ,,,,,,,,,	alman	whenever	***+****	nv(myth)v	m	dring						1.91	Start Fre 1000000 GH
-15.0							. 1				DL1 -13.00 dBm	1.91	Stop Fre 9000000 G⊦
35.0							marrier	halla har frank and a	Jac-Subertaling and all the	litter marging	Securit and the failed	<u>Auto</u>	CF Ste 800.000 kH Ma
45.0 55.0													Freq Offs 0 F
65.0													Scale Typ
	.915000 V 120 kH			#	VBW	430 kH	z		Sweep 4	Span 8 .000 ms (.000 MHz (1001 pts)	Log	L
/ISG									STATUS	3			

Plot 7-342. Upper Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)



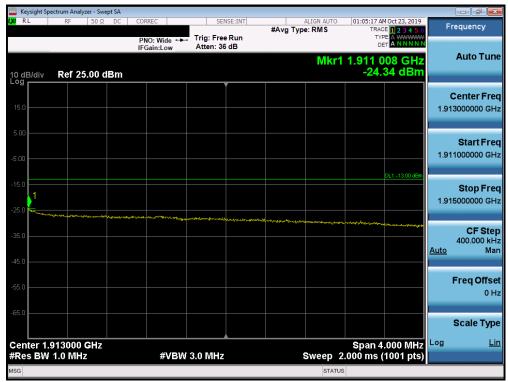
Plot 7-343. Upper Extended Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analyz										_	
(X/RL	RF	50 Ω DC	C CORR	EC		NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	HOct 23, 2019	Fi	requency
			IFGa	:Wide 🔸	Atten: 3			Mkr1	TYF DE 1.910 0			Auto Tune
10 dB/div Log	Ref 25.	.00 dBn	n						-31.8	07 dBm		
15.0												Center Fred 0000000 GHz
5.00	and the second sec	at a construction of the second se	-	v-ph/h _e v-stayn							1.90	Start Free 6000000 GH:
-15.0										DL1 -13.00 dBm	1.91	Stop Fred 4000000 GHz
-35.0					" Altro	1	and the second second	a maralleller af the particular	wayana waxaya	and Manual Manual	<u>Auto</u>	CF Step 800.000 kH Mar
-55.0												Freq Offse 0 H
-65.0												Scale Type
Center 1.9 #Res BW				#VBW	430 kHz			Sweep_4	Span 8 .000 m <u>s (</u>	.000 MHz 1001 pts)	Log	Lir
MSG								STATU				

Plot 7-344. Upper Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-345. Upper Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Spectrum Analyze						
LXV RL RF	50 Ω DC CORREC	SENSE:IN	#Avg Type	RMS TR	PM Oct 22, 2019 ACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.	IFGain:L	ide ↔ Trig: Free Run .ow Atten: 36 dB		Mkr1 1.849	940 GHz 062 dBm	Auto Tune
15.0						Center Freq 1.85000000 GHz
-5.00				han an the second s	DL1 -13.00 dBm	Start Freq 1.844000000 GHz
-15.0		1,1				Stop Fred 1.856000000 GHz
-35.0	mannen				Au	CF Step 1.200000 MH to Mar
-55.0						Freq Offse 0 H
-65.0 Center 1.850000 G	iHz			Span	12.00 MHz	Scale Type
#Res BW 180 kHz		≇VBW 620 kHz	\$	Sweep 1.000 ms	(1001 pts)	
MSG				STATUS		

Plot 7-346. Lower Band Edge Plot (Band 25/2 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-347. Lower Extended Band Edge Plot (Band 25/2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Anal													- đ -
XV RL	RF	50 Ω	DC CC	ORREC			SENSE:IN	IT	#Avg Typ	ALIGN AUTO		6 PM Oct 22, 2019 RACE 1 2 3 4 5 6	F	requency
			F	NO: Wic Gain:Lo	le ↔→ w		Free Run 1: 36 dB	ı						Auto Tun
10 dB/div Log	Ref 2	5.00 dB	m							Mkr	1 1.915 -29	012 GHz 740 dBm		AutoTun
														Center Fre
15.0													1.91	15000000 GH
5.00	And the second second	and and a second se	man	vvv	J.	~								Start Fre
5.00													1.90	9000000 GH
15.0												DL1 -13.00 dBm		Stop Fre
25.0						\ 	- 1 -						1.92	21000000 GH
							"have	ᡐ᠆ᢦᢇᡐ᠕ᠰᡐ	m	m				CF Ste
35.0												w	<u>Auto</u>	1.200000 MH Ma
45.0														
-55.0														Freq Offs 0 H
65.0														Seele Tre
													Log	Scale Typ
Center 1 Res BW				#	VBW	620 k	Hz			Sweep	Span 1.000 m	12.00 MHz s (1001 pts)		L
ISG										STAT	US			

Plot 7-348. Upper Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-349. Upper Extended Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 201 of 405
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	pectrum Analy												
(<mark>RL</mark>	RF	50 Ω	DC	CORREC				#Avg Ty	ALIGN AUTO	TRAC	M Oct 23, 2019 DE 1 2 3 4 5 6 DE 0 444444	Fr	requency
0 dB/div	Ref 25	i.00 dB	m	PNO: Wi IFGain:L	ide ↔ .ow	Atten: 36			Mkr1)12 GHz 88 dBm		Auto Tun
15.0													Center Fre 0000000 G⊦
5.00	-444	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	n n n n n n n n n n n n n n n n n n n						DL1 -13.00 dBm	1.90	Start Fre 4000000 GF
25.0						4	.1—					1.91	Stop Fre 6000000 Gi
5.0						~	······			**************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Auto ¹	CF Ste .200000 MI M
5.0													Freq Offs 0 I
65.0	.910000	CH-7								Spap.4	2.00 MHz		Scale Typ
	.910000 180 kHz			#	¢VBW	620 kHz			Sweep	1.000 m <u>s (</u>	2.00 MH2 (1001 pts)	_	
SG									STATU				

Plot 7-350. Upper Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



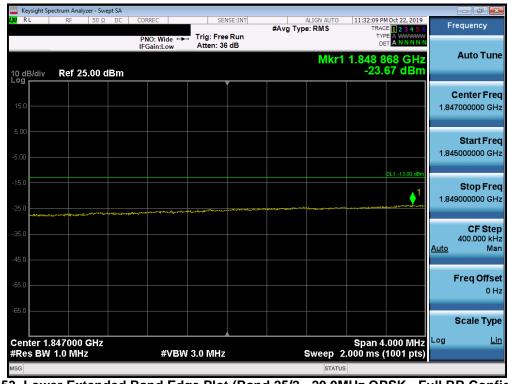
Plot 7-351. Upper Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Anal											
LXI RL	RF	50 Ω	DC C	ORREC		NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRACE	Oct 22, 2019	Freq	uency
	Def 0	5.00 dE	1	PNO: Wide FGain:Low	Trig: Fre Atten: 3			Mkr1	DE 1.849 9	36 GHz 57 dBm	A	uto Tune
10 dB/div Log		5.00 de	5111									n ter Freq 00000 GHz
-5.00							^a n an		anaran (n	DL1 -13.00 dBm		t art Freq 00000 GHz
-15.0						1				DET = 13.00 dBm		top Fred
-35.0	max - to a former	~~~~	man Mar	~~~~~							1.60 <u>Auto</u>	CF Step 00000 MH Ma
-55.0											Fr	e q Offse 0 H
-65.0												ale Type
Center 1 #Res BW				#VE	3W 820 kHz			Sweep 1	30 Span ') 000 ms.	6.00 MHz 1001 pts)	Log	Lir
MSG								STATUS	6			

Plot 7-352. Lower Band Edge Plot (Band 25/2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-353. Lower Extended Band Edge Plot (Band 25/2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Analy.										
X/RL	RF	50 Ω DC	CORREC	SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		CE 1 2 3 4 5 6	Fre	quency
			PNO: Wide ↔ IFGain:Low	Atten: 36				TY D			
10 dB/div Log	Ref 25	.00 dBm					Mkr1	1.915 (-32.6	032 GHz 11 dBm		Auto Tun
15.0											enter Fre 000000 G⊦
5.00		m	WY water and a second								Start Fre 000000 G⊦
25.0									DL1 -13.00 dBm		Stop Fre 000000 G⊦
35.0				Mr.	1 martan	and a second	ener and		maria	1.6 <u>Auto</u>	CF Ste 500000 MH Ma
55.0										F	r eq Offs 0 H
-65.0											cale Typ
	.915000 240 kHz		#VBV	V 820 kHz			Sweep 1	Span ′ .000 ms	16.00 MHz (1001 pts)	Log	L
ISG							STATU	5			

Plot 7-354. Upper Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-355. Upper Extended Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 204 of 405
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	ectrum Analyz											
X/RL	RF	50 Ω DO	C COR	REC	SE	NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Oct 23, 2019	Free	quency
			PN IFG	O: Wide ↔ ain:Low	, Trig: Fre Atten: 3				TYP De		A	uto Tune
10 dB/div Log	Ref 25.	.00 dBn	n					MKM	1.910 0 -29.6	12 dBm		
15.0						Ĭ						enter Fred
											1.9100	00000 GH:
5.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.		m							Start Free
-5.00										DL1 -13.00 dBm	1.9020	00000 GH
-15.0										DET TI SIGG GBIII		Stop Fre
-25.0					han han	1					1.9180	00000 GH
35.0							marge and		Marrie Marrie	Mary Mary	1.6	CF Ste 00000 MH
45.0											<u>Auto</u>	Ma
-55.0											Fi	eq Offse
												0 H
-65.0											S	cale Typ
Center 1.									Span 1	6.00 MHz	Log	Li
#Res BW	240 kHz			#VBV	V 820 kHz				1.000 ms (1001 pts)		
ISG								STATU	s			

Plot 7-356. Upper Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-357. Upper Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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RL	ectrum Analyze	50 Ω DC	CORREC	SENSE:1	NT		ALIGN AUTO	07:41:10 P	M Oct 21, 2019	_	
	10	5632 00	PNO: Wide ↔ IFGain:Low	Trig: Free Ru Atten: 36 dB	ın	#Avg Type		TRAC	DE 1 2 3 4 5 6 DE A WWWW T A NNNN	Fi	requency
0 dB/div	Ref 25.	00 dBm					Mkr1	2.304 9 -29.3	96 GHz 83 dBm		Auto Tun
15.0											Center Fre 5000000 G⊦
5.00						~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			2.30	Start Fre 3000000 GH
25.0				1!					DL1 -13.00 dBm	2.30	Stop Fre 7000000 GF
45.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									<u>Auto</u>	CF Ste 400.000 kł Ma
55.0											Freq Offs 0 I
65.0											Scale Typ
L Center 2. Res B₩	305000 G 62 kHz	Hz	#VBW	220 kHz			Sweep 2	Span 4 .000 ms (.000 MHz (1001 pts)	Log	L

Plot 7-358. Lower Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



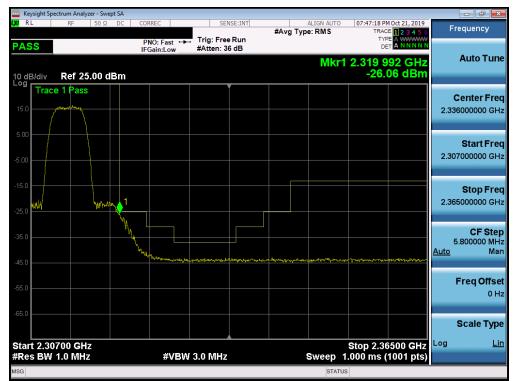
Plot 7-359. Lower Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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REys RL	ight Spect	RF	50 Ω	DC	CORREC			SEN	SE:INT		ALIGN AUTO	07:45:22	PM Oct 21, 2019		
		14	00 10				Tria	: Free		#Avg T	ype: RMS	TR/	ACE 1 2 3 4 5 6	F	requency
					IFGain	Nide ↔ :Low		en: 36				[DET A NNNNN		
0 dB	/div	Ref 2	5.00 d	Bm							Mki	1 2.315 -29.2	5 01 GHz 205 dBm		Auto Tur
^{.og}								Ĭ							Center Fre
15.0															15000000 GH
5.00 -	for	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	han Maria	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mannud	www	7							Start Fre
5.00														2.3	10000000 GH
	ļ												DL1 -13.00 dBm		
15.0 -								ł							Stop Fre
25.0	/								1					2.3	20000000 GH
								Ň	the and when	al man		and the second sector	~~~~		CF Ste
35.0 -											**************************************		winner	Auto	1.000000 MH
45.0														Auto	IVIC
															Freq Offs
55.0															0H
65.0															
															Scale Typ
	er 2.31											Span	10.00 10112	Log	L
Res	BW 6	2 kHz				#VBW	220	kHz			Sweep :	5.000 ms	(1001 pts)		
SG											STATU	S			

Plot 7-360. Upper Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-361. Upper Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🚾 Keysight Spectrum Analyzer - Swept SA 🚽					
LX/ RL RF 50Ω DC	CORREC S	ENSE:INT	#Avg Type: RMS	07:28:01 PM Oct 21, 2019 TRACE 1 2 3 4 5 6	Frequency
	PNO: Wide Trig: Fr IFGain:Low Atten: 3		Mkr1	2.304 968 GHz -30.640 dBm	Auto Tune
10 dB/div Ref 25.00 dBm					Center Free 2.305000000 GH
5.00			يەرىمىرىمىرىمىدىما <mark>مىمىرەسىلىرىمىرىم</mark>	and the advertising the second se	Start Free 2.301000000 GH
-15.0		1		DL1 -13.00 dBm	Stop Fre 2.309000000 GH
-35.0	and a state of the second	, and			CF Ste 800.000 kH <u>Auto</u> Ma
-55.0					Freq Offso 0 ⊦
-65.0					Scale Typ
Center 2.305000 GHz #Res BW 120 kHz	#VBW 430 kH	z	Sweep 4	Span 8.000 MHz .000 ms (1001 pts)	
MSG			STATUS	3	

Plot 7-362. Lower Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-363. Lower Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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🔤 Keysight Spectrum Analyzer - Swept SA 👘				
IXI RF 50Ω DC	CORREC SE	#Avg Typ	e: RMS TRAC	I 2 3 4 5 6 Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide ++ Trig: Fre IFGain:Low Atten: 3		DE Mkr1 2.315	01 GHz Auto Tun 74 dBm
15.0				Center Fre 2.315000000 GH
5.00	the second second			Start Fre 2.310000000 GH
-15.0				2.320000000 GH
-35.0	ار	I Construction and the second se	andar and a state of the state	CF Ste 1.000000 MH <u>Auto</u> Ma
-65.0				Freq Offse 0 ⊢
-65.0				Scale Typ
Center 2.315000 GHz #Res BW 120 kHz	#VBW 430 kHz	z	Span 10 Sweep 5.000 ms (*	0.00 MHz ^{Log} Li 1001 pts)
MSG			STATUS	

Plot 7-364. Upper Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-365. Upper Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

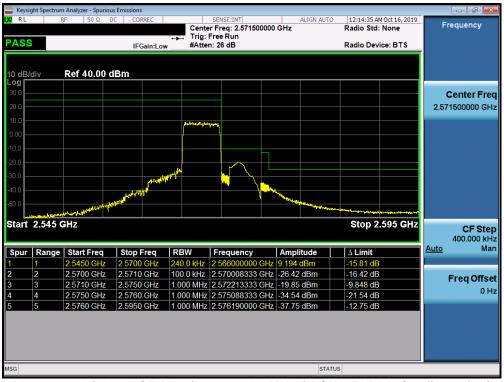
FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 7



Plot 7-366. Lower ACP Plot (Band 7 - 5.0MHz QPSK - Full RB Configuration)



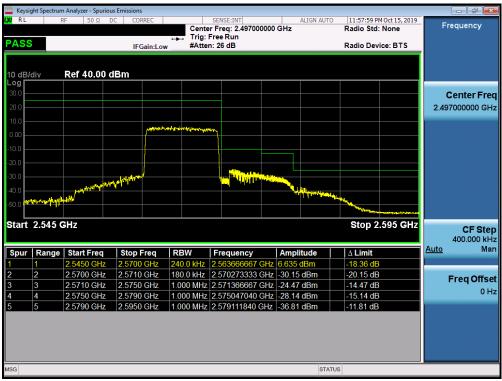
Plot 7-367. Higher ACP Plot (Band 7 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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X/RL	R	F 50 Ω	DC CORREC		SENSE:INT Freq: 2.535000000 Free Run	ALIGN AUTO	11:56:30 PM Oct 15, 2019 Radio Std: None	Frequency
PASS	s		IFGain:L		n: 26 dB		Radio Device: BTS	_
10 dB/	/div	Ref 40.00	dBm					
30.0 -								Center Fre 2.535000000 GH
10.0 0.00					Mana and a start	*~******		
·10.0								
-30.0						where we are a set of the set of	ha he have he	
	2.475 0	SHz					Stop 2.525 GHz	CF SIE
50.0 Start Spur			Stop Freq	RBW	Frequency	Amplitude		CF Ste 5.000000 Mi <u>Auto</u> Ma
Start	Range				Frequency 2.490370833 GHz		Stop 2.525 GHz	5.000000 Mi
Start	Range 1	Start Freq	2.4905 GHz	1.000 MHz		-41.41 dBm	Stop 2.525 GHz	5.000000 Mi <u>Auto</u> Ma
Start Spur	Range 1 2	Start Freq 2.4750 GHz	2.4905 GHz 2.4960 GHz	1.000 MHz 1.000 MHz	2.490370833 GHz	-41.41 dBm -29.53 dBm	Stop 2.525 GHz	5.000000 Mi Auto Mi
Start	Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz	2.4905 GHz 2.4960 GHz 2.4990 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.490370833 GHz 2.495990833 GHz	-41.41 dBm -29.53 dBm -25.54 dBm	Stop 2.525 GHz Δ Limit -16.41 dB -16.53 dB	5.000000 M Auto M
Start	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.4905 GHz 2.4960 GHz 2.4990 GHz 2.5000 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490370833 GHz 2.495990833 GHz 2.498985000 GHz	-41.41 dBm -29.53 dBm -25.54 dBm -32.40 dBm	Δ Limit -16.41 dB -16.53 dB -15.54 dB	5.000000 Mi Auto Mi
Start	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz 2.4990 GHz	2.4905 GHz 2.4960 GHz 2.4990 GHz 2.5000 GHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 180.0 kHz	2.490370833 GHz 2.495990833 GHz 2.498985000 GHz 2.499581667 GHz	-41.41 dBm -29.53 dBm -25.54 dBm -32.40 dBm	Δ Limit -16.41 dB -16.53 dB -15.54 dB -22.40 dB	5.000000 Mi

Plot 7-368. Lower ACP Plot (Band 7 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-369. Higher ACP Plot (Band 7 - 10.0MHz QPSK - Full RB Configuration)

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XI RL		n Analyzer - Spuri F 50 Ω		ORREC	Cont	SENSE:INT er Freg: 2.535000		ALIGN AUT	0 11:51:18 P Radio Std	M Oct 15, 2019	Frequency
PASS	S		IF	Gain:L	Trig:	Free Run en: 26 dB	000 GH2		Radio Dev		
10 dB/ Log F	/div	Ref 40.00	dBm								
30.0 — 20.0 —											Center Fre 2.535000000 GH
10.0 - 0.00 -						pinneng	en:minuter	and the second	٩		
10.0											
-30.0			ي. موجد المر	- Jairetti		" <mark></mark>			A STRATEGICS	hall the second states of the	
L		ملده.	يتحظيهمان								
50.0											
~	2.475 0	GHZ							Stop 2	.525 GHz	
Start		Hz Start Freq	Stop	Freq	RBW	Frequency	Amp	itude	Stop 2	.525 GHz	5.000000 MI
Start	Range					Frequency					5.000000 M
Start	Range	Start Freq	2.490		1.000 MHz		GHz -37.06	∂dBm	∆ Limit		5.000000 MI <u>Auto</u> Mi
Start	Range 1 2	Start Freq 2.4750 GHz	2.490 2.496	5 GHz	1.000 MHz 1.000 MHz	2.489182500 0	GHz -37.06 GHz -32.45	idBm dBm	∆ Limit -12.06 dB		5.000000 Mi <u>Auto</u> Mi Freq Offs
Start	Range 1 2 3	Start Freq 2.4750 GHz 2.4905 GHz	2.490 2.496 2.499	5 GHz 0 GHz	1.000 MHz 1.000 MHz 1.000 MHz	2.489182500 (2.495569167 (GHz -37.00 GHz -32.45 GHz -28.28	<mark>) dBm</mark>) dBm) dBm	Δ Limit -12.06 dB -19.45 dB		5.000000 MI <u>Auto</u> M Freq Offs
~	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz	2.490 2.496 2.499 2.500	<mark>5 GHz</mark> 0 GHz 0 GHz	1.000 MHz 1.000 MHz 1.000 MHz 270.0 kHz	2.489182500 (2.495569167 (2.498820000 (GHz -37.06 GHz -32.45 GHz -28.28 GHz -31.77	dBm dBm dBm dBm dBm	Δ Limit -12.06 dB -19.45 dB -18.28 dB		CF Ste 5.000000 Mł <u>Auto</u> Mł Freq Offs 0 ł
Start	Range 1 2 3 4	Start Freq 2.4750 GHz 2.4905 GHz 2.4960 GHz 2.4990 GHz	2.490 2.496 2.499 2.500	5 GHz 0 GHz 0 GHz 0 GHz 0 GHz	1.000 MHz 1.000 MHz 1.000 MHz 270.0 kHz	2.489182500 (2.495569167 (2.498820000 (2.499931667 (GHz -37.06 GHz -32.45 GHz -28.28 GHz -31.77	dBm dBm dBm dBm dBm	Δ Limit -12.06 dB -19.45 dB -18.28 dB -21.77 dB		5.000000 Mi <u>Auto</u> Mi Freq Offs

Plot 7-370. Lower ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-371. Higher ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)

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RL		F 50 Ω	DC (CORREC		enter Fre	SE:INT q: 21.0000	00000 G	ALIGN AU		11:17:07 adio Sto	PM Oct 15, 2019 i: None	Frequency
PASS	S			IFGain:L	-	ig: Free Atten: 26				R	adio De	vice: BTS	
I0 dB/ -∘g Γ	/div	Ref 40.00) dBm										
30.0 — 20.0 —													Center Fre 21.000000000 G
10.0 0.00 10.0								le-g-p-g-la ^g	120-i-b-r #124,194-104	-y-type-bolger (traje	alige states		
20.0 - 30.0 -													
40.0				er nij staliki		nin <mark>ee</mark>	ł					na saa na ang ng n	
50.0			and the second s										
-	2.475 0	GHz									Stop 2	2.525 GHz	CF St e 1.20000000 G
tart				p Freq	RBW	Fre	quency		mplitude		Stop 2	2.525 GHz	
tart			Sto		RBW	Fre	equency 39880000						1.20000000 G
tart	Range	Start Freq	z 2.49	p Freq	RBW	Fre		GHz -3	9.72 dBm	-	A Limit	B	1.200000000 G <u>Auto</u> M
itart Spur	Range 1 2	Start Freq 2.4750 GH	z 2.49 z 2.49	p Freq 05 GHz	RBW 1.000 M 1.000 M	Fre 1Hz 2.48 1Hz 2.49	39880000	GHz -3 GHz -3	9.72 dBm 6.00 dBm		∆ Limit 14.72 dl	B B	1.200000000 GI <u>Auto</u> M Freq Offs
spur	Range 1 2 3 4	Start Freq 2.4750 GH 2.4905 GH	z 2.49 z 2.49 z 2.49	p Freq 05 GHz 60 GHz	RBW 1.000 M 1.000 M 1.000 M	Fre 1Hz 2.48 1Hz 2.49 1Hz 2.49	39880000 94945833	GHz -3 GHz -3 GHz -3	9.72 dBm 6.00 dBm 3.18 dBm		∆ Limit 14.72 dl 23.00 dl	B B B	1.200000000 Gi <u>Auto</u> M
Spur	Range 1 2 3	Start Freq 2.4750 GH 2.4905 GH 2.4960 GH	z 2.49 z 2.49 z 2.49 z 2.50	p Freq 05 GHz 60 GHz 90 GHz	RBW 1.000 M 1.000 M 1.000 M 360.0 kl	Fre IHz 2.48 IHz 2.49 IHz 2.49 Hz 2.49	39880000 94945833 98765000	GHz -3 GHz -3 GHz -3 GHz -3 GHz -3	9.72 dBm 6.00 dBm 3.18 dBm 5.56 dBm		∆ Limit 14.72 dl 23.00 dl 23.18 dl	B B B B B	1.200000000 GI <u>Auto</u> M Freq Offs
Spur	Range 1 2 3 4	Start Freq 2.4750 GH 2.4905 GH 2.4960 GH 2.4990 GH	z 2.49 z 2.49 z 2.49 z 2.50	p Freq 05 GHz 60 GHz 90 GHz 00 GHz	RBW 1.000 M 1.000 M 1.000 M 360.0 kl	Fre IHz 2.48 IHz 2.49 IHz 2.49 Hz 2.49	39880000 94945833 98765000 99963333	GHz -3 GHz -3 GHz -3 GHz -3 GHz -3	9.72 dBm 6.00 dBm 3.18 dBm 5.56 dBm		∆ Limit 14.72 dl 23.00 dl 23.18 dl 25.56 dl	B B B B B	1.200000000 GI <u>Auto</u> M Freq Offs

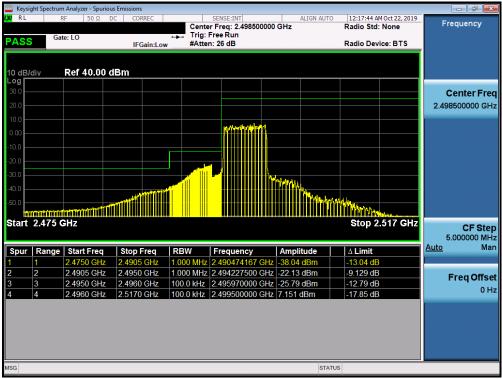
Plot 7-372. Lower ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)



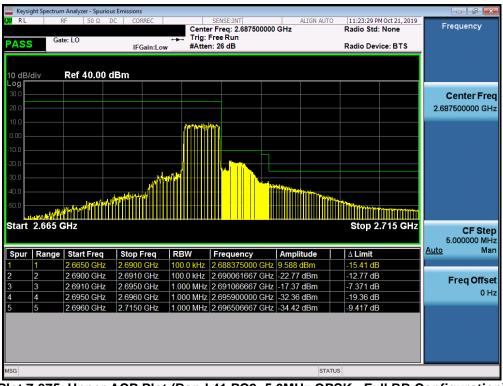
Plot 7-373. Higher ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)

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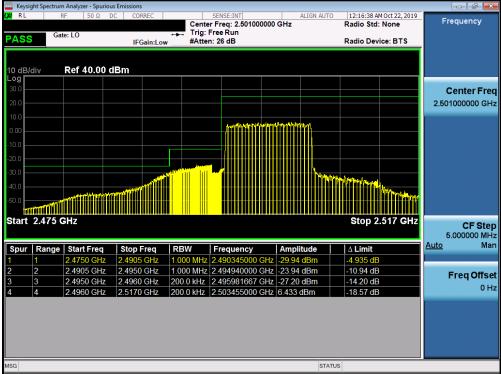
Plot 7-374. Lower ACP Plot at 2496 MHz (Band 41 PC2- 5.0MHz QPSK - Full RB Configuration)



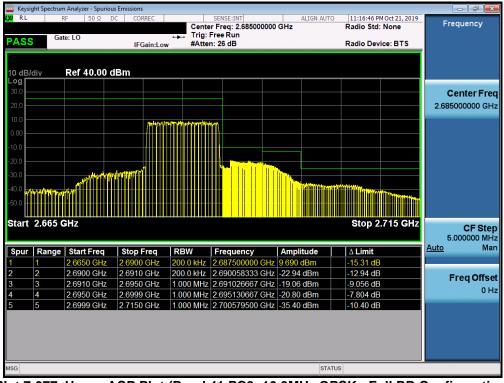
Plot 7-375. Upper ACP Plot (Band 41 PC2- 5.0MHz QPSK - Full RB Configuration)

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Plot 7-376. Lower ACP Plot at 2496 MHz (Band 41 PC2- 10.0MHz QPSK - Full RB Configuration)



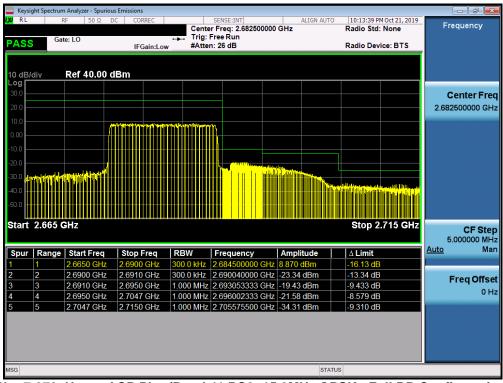
Plot 7-377. Upper ACP Plot (Band 41 PC2- 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager		
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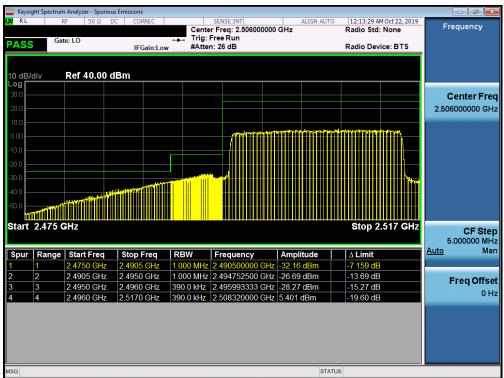
Plot 7-378. Lower ACP Plot at 2496 MHz (Band 41 PC2- 15.0MHz QPSK - Full RB Configuration)



Plot 7-379. Upper ACP Plot (Band 41 PC2- 15.0MHz QPSK - Full RB Configuration)

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Plot 7-380. Lower ACP Plot at 2496 MHz (Band 41 PC2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-381. Upper ACP Plot (Band 41 PC2 - 20.0MHz QPSK - Full RB Configuration)

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