

Keysight Spectrum Analyzer - Occupied BW				
XI T RF 50 Ω DC CORRE	Center Freq: 2.593020000 GH	z Radio Std:	Jun 26, 2020 None	Trace/Detector
#IFGai		old: 100/100 Radio Devi	ce: BTS	
10 dB/div Ref 40.00 dBm				
Log 30.0				
20.0				Clear Write
10.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~		
0.00				
-10.0				Average
				Average
		manum	multin	
-30.0				
-40.0				Max Hold
-50.0				
Center 2.5930 GHz		Span 20	0.0 MHz	
Res BW 1.8 MHz	#VBW 6 MHz	Swe	ep 1 ms	Min Hold
Occupied Bandwidth	Total Power	32.1 dBm		
		52.1 ubiii		
//.21	8 MHz			Detector Peak▶
Transmit Freq Error -22	26.39 kHz % of OBW Po	wer 99.00 %	F	Auto <u>Man</u>
x dB Bandwidth 8	1.60 MHz x dB	-26.00 dB		
MSG		STATUS		

Plot 7-249. Occupied Bandwidth Plot (n41 80MHz BPSK-DFT-s-OFDM - Full RB Configuration)



Plot 7-250. Occupied Bandwidth Plot (n41 80MHz QPSK-CP-OFDM - Full RB Configuration)

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🔤 Keysight Spec	trum Analyzer - Occupied BW						-	
(X) T	RF 50 Ω DC		SENSE:INT Center Freq: 2.59302 Trig: Free Run #Atten: 26 dB		Radio Std		Trace/E	etector
10 dB/div Log	Ref 30.00 dBm							
20.0 10.0		procession of the second se	~^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m			Cle	ear Write
0.00 -10.0 -20.0								Average
-30.0					munical mark	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Average
-50.0 -60.0							Ν	lax Hold
Center 2.5 Res BW 1			#VBW 6 MH	z		200.0 MHz eep 1 ms		Vin Hold
Occup	ied Bandwidt 77	^h ′.080 MHz	Total P Z	ower	31.4 dBm			Detector
	nit Freq Error	-200.04 kH		3W Power	99.00 %		Auto	Peak▶ <u>Man</u>
x dB Ba	andwidth	81.56 MH	z xdB		-26.00 dB			
MSG					STATUS			

Plot 7-251. Occupied Bandwidth Plot (n41 80MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-252. Occupied Bandwidth Plot (n41 80MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Keysight Spectrum Analyzer - Occupied					
μα Τ RF 50 Ω DC	C →→ T #IFGain:Low #/	SENSE:INT enter Freq: 2.593020000 G rig: Free Run Avg Atten: 26 dB	Hz Radio St Hold: 100/100	AM Jun 26, 2020 d: None evice: BTS	Trace/Detector
10 dB/div Ref 30.00 dE Log 200 100 0.00		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~		Clear Write
-10.0 -20.0 -30.0 -40.0	,		- Inne horan		Average
-50.0					Max Hold
Center 2.5930 GHz Res BW 1.8 MHz Occupied Bandwid	dth	#VBW 6 MHz Total Power	Sv	200.0 MHz /eep 1 ms	Min Hold
7	7.529 MHz				Detector Peak▶ Auto Man
Transmit Freq Error x dB Bandwidth	-135.83 kHz 81.85 MHz		ower 99.00 % -26.00 dB		Auto <u>Man</u>
MSG			STATUS		

Plot 7-253. Occupied Bandwidth Plot (n41 80MHz 256QAM-CP-OFDM- Full RB Configuration)



Plot 7-254. Occupied Bandwidth Plot (n41 90MHz BPSK-DFT-s-OFDM - Full RB Configuration)

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Keysight Spectrum Analyzer - Occupied BW						-	- 6 🔀
LX RLT RF 50 Ω DC (CORREC	SENSE:INT enter Freg: 2.59302		AUTO 02:15:41 A Radio Std	M Jun 26, 2020	Trace	Detector
	T	rig: Free Run	Avg Hold: 100/	/100			
#	#FGain:Low #	Atten: 30 dB		Radio Dev	rice: BTS		
10 dB/div Ref 40.00 dBm							
Log 30.0							
						С	ear Write
20.0		······	ma				
10.0			l N				
0.00							
-10.0							Average
-20.0 monormon Madesta mendenal			horust	Mar Mar Martin and	antitation and a second		
-30.0							
-40.0							Max Hold
-50.0							Maxinoiu
Center 2.5930 GHz					25.0 MHz		
Res BW 2.2 MHz		#VBW 8 MH	Z	Swe	eep 1 ms		Min Hold
Occupied Bandwidth		Total P	ower	32.5 dBm			
				02.0 4811			
87.	450 MHz						Detector
Transmit Freq Error	-439.36 kHz	w of OF	3W Power	99.00 %		Auto	Peak▶ Man
x dB Bandwidth	92.38 MHz	z x dB		-26.00 dB			
MSG				STATUS			

Plot 7-255. Occupied Bandwidth Plot (n41 90MHz QPSK-CP-OFDM - Full RB Configuration)



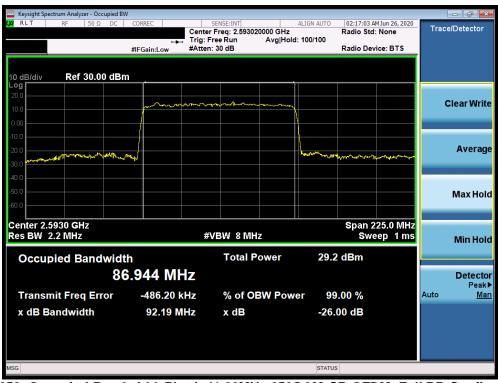
Plot 7-256. Occupied Bandwidth Plot (n41 90MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMF707U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
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Keysight Spectrum Analyzer - Occupied BW	1				- 6 🗙
LXIRLT RF 50Ω DC		SENSE:INT enter Freq: 2.5930200 rig: Free Run Atten: 30 dB	ALIGN AUTO 000 GHz Avg Hold:>100/100	02:16:42 AM Jun 26, 202 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 40.00 dBm	۱				
30.0					Clear Write
20.0		h	~~		
0.00	_				
-10.0					Average
-30.0				an and a share a s	
-40.0					Max Hold
Center 2.5930 GHz				Span 225.0 MH	z
Res BW 2.2 MHz		#VBW 8 MHz		Sweep 1 m	s Min Hold
Occupied Bandwidt		Total Po	wer 30.9	dBm	
	6.977 MHz				Detector Peak►
Transmit Freq Error x dB Bandwidth	-479.61 kHz 92.14 MHz			0.00 % 00 dB	Auto <u>Man</u>
	92.14 WHZ	ХИВ	-20.	00 08	
MSG			STATUS	5	

Plot 7-257. Occupied Bandwidth Plot (n41 90MHz 64QAM-CP-OFDM- Full RB Configuration)



Plot 7-258. Occupied Bandwidth Plot (n41 90MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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🔤 Keysight Spee	trum Analyzer - Occupied B	3W					- ē 🔀
	RF 50 Ω DC	CORREC #IFGain:Low	SENSE:INT Center Freq: 2.59300 Trig: Free Run #Atten: 30 dB		Radio Std:		Trace/Detector
10 dB/div Log	Ref 40.00 dB	m					
30.0 20.0 10.0		protection and the second	marcher				Clear Write
0.00	Mar Werney Martinet armation	-Jauro			allan grander agreed of	and the second	Average
-30.0 / -40.0 -50.0							Max Hold
Center 2.5 Res BW 2			#VBW 8 MH	z		50.0 MHz ep 1 ms	Min Hold
Occup	oied Bandwid 9	th 8.977 MH	Total P	ower	33.1 dBm		Detector Peak▶
	nit Freq Error andwidth	-537.15 k 203.5 M		3W Power	99.00 % -26.00 dB		Auto <u>Man</u>
MSG					STATUS		

Plot 7-259. Occupied Bandwidth Plot (n41 100MHz BPSK-DFT-s-OFDM - Full RB Configuration)



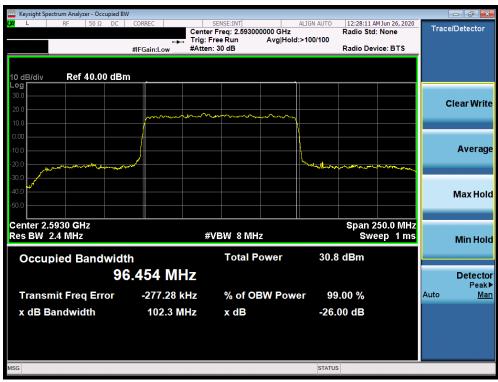
Plot 7-260. Occupied Bandwidth Plot (n41 100MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Keysight Spectrum Analyzer - Occupies					- ē 🔀
L RF 50 Ω D0		SENSE:INT enter Freq: 2.593000000 GH		0 AM Jun 26, 2020	Trace/Detector
	T	rig: Free Run Avg H	lold:>100/100		
	#IFGain:Low #/	Atten: 30 dB	Radio I	Device: BTS	
10 dB/div Ref 40.00 d	Bm				
30.0					
20.0					Clear Write
10.0	m	service and the service of the servi	~		
0.00					
-10.0					Average
-20.0	المتعريد		have been allow and	And the second second	5
-30.0				a an window	
-40.0					
-50.0					Max Hold
-30.0					
Center 2.5930 GHz				1 250.0 MHz	
Res BW 2.4 MHz		#VBW 8 MHz	S	weep 1ms	Min Hold
Occupied Bandwi	dth	Total Power	31.0 dBm		
	96.658 MHz				Detector Peak▶
Transmit Freq Error	-215.87 kHz	% of OBW Po	ower 99.00 %		Auto <u>Man</u>
x dB Bandwidth	102.6 MHz	x dB	-26.00 dB		
	102.0 MI12		-20100 UB		
100			074710		
MSG			STATUS		

Plot 7-261. Occupied Bandwidth Plot (n41 100MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-262. Occupied Bandwidth Plot (n41 100MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Spectrum Analyzer - Occupied BW					- 6 💌
	😛 Trig:	SENSE:INT Freq: 2.593000000 GHz Free Run Avg Hol n: 30 dB	Radio St d: 100/100	AM Jun 26, 2020 d: None evice: BTS	Trace/Detector
10 dB/div Ref 30.00 dBm	<u> </u>				
Log 20.0 10.0		~~~~			Clear Write
-10.0 -20.0 -30.0			apple and a second	hereperatur	Average
-40.0					Max Hold
Center 2.5930 GHz Res BW 2.4 MHz		¢VBW 8 MHz	Sw	250.0 MHz veep 1 ms	Min Hold
	.935 MHz	Total Power	27.6 dBm		Detector Peak►
Transmit Freq Error x dB Bandwidth	-393.15 kHz 102.4 MHz	% of OBW Pow x dB	ver 99.00 % -26.00 dB		Auto <u>Man</u>
MSG			STATUS		

Plot 7-263. Occupied Bandwidth Plot (n41 100MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMF707U	PCTEST Prout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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7.3 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

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

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

For Band 30, the minimum permissible attenuation level of any spurious emission <2288MHz and >2365MHz is 70 + 10 log10(P[Watts]).

For Band 7 and 41, the minimum permissible attenuation level of any spurious emission is 55 + 10 log₁₀(*P*[*w*atts]).

Test Procedure Used

KDB 971168 D01 v03r01 - Section 6.0

Test Settings

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

Test Setup

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



Figure 7-2. Test Instrument & Measurement Setup

Test Notes

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. 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.

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Band 71

	ectrum Analyze											×
RL	RF	50 Ω DC NFE	PNO: F		Trig: Free Atten: 30		#Avg Typ	ALIGN AUTO e: RMS	TRAC	I Jun 05, 2020 E 1 2 3 4 5 6 E A WWWW T A N N N N N	Frequenc	ÿ
I0 dB/div	Ref 20.	00 dBm	IFGain:I	LOW	Atten: 30	σ α Β		М	kr1 661.	.,	Auto ⁻	Tun
10.0											Center 346.000000	
10.0										DL1 -13.00 dBm	Start 30.000000	
20.0											Stop 662.000000	
40.0										1	CF 63.200000 <u>Auto</u>	
60.0											Freq O	Offs 0
70.0	MHz	de la contra de	ddinae Alberth	eladatela	ia, aphydai)	ha bha an a bha bha				62.0 MHz	Scale	Typ _⊥
Res BW				#VBW 3	00 kHz		s	weep 30	0.34 ms (1			

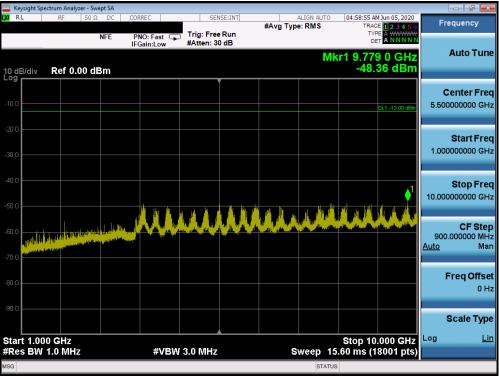
Plot 7-264. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



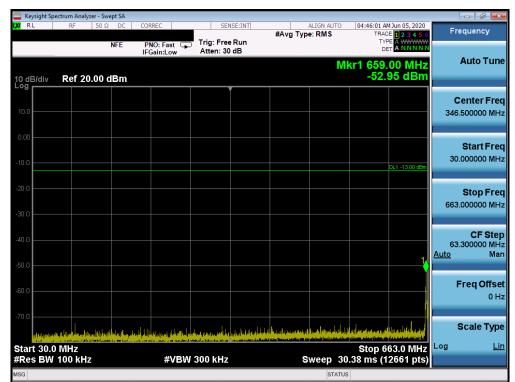
Plot 7-265. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Preud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Plot 7-266. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



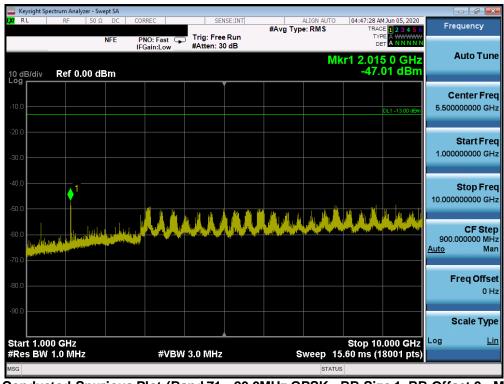
Plot 7-267. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Center Free 00 Center Free 00 Start Free 00 0.1 - 1300 dbm 000 0.1 - 1300 dbm 0.1 - 1300 dbm 0.1 - 1300 dbm		ectrum Analyzer - S										
NFE PNO: FastTrig: Free Run Atten: 30 dB Trig: Free Run Atten: 30 dB Auto Tune 0 dE/div Ref 20.00 dBm	L <mark>XI</mark> RL	RF 50	ΩDC	CORREC	SEN	SE:INT					Freque	ncy
Bildiv Ref 20.00 dBm -70.95 dBm 00 Center Freq 849.00000 MH2 Start Freq 698.000000 MH2 00 DL1-1300 dBm Start Freq 698.000000 MH2 00 DL1-1300 dBm Center Freq 849.00000 MH2 00 DL1-1300 dBm Start Freq 698.000000 MH2 00 DL1-1300 dBm CF Step 30.20000 MH2			NFE				0 ,1		DE kr1 925.	40 MHz	Auto	o Tune
0.0 Image: constraint of the second of t	10 dB/div Log	Ref 20.00	dBm						-70.9	95 dBm		
0.0 Start Free 0.0 0.1 + 13.00 dem 0.0 0.1 + 13.00 dem 0.0 Stop Free 0.0 Stop Free </td <td>10.0</td> <td></td>	10.0											
0.0 0.0 0.1 0.0 0.1 0.0 <td>0.00</td> <td></td>	0.00											
0.0 Stop Fred 1.00000000 GHz 0.0 CF Step 30.20000 MHz Auto Mar	-10.0											
0.0 CF Step 30.200000 MH Auto Mar	-20.0									DL1 -13.00 dBm		_
0.0 CF Step 30.200000 MHz Auto Mar	-30.0											
30.200000 HHz Auto Mar											с	F Step
												00 MHz Man
Fred Offse	-50.0										Freg	Offset
	-60.0							1				0 Hz
0.0 La	-70.0	والمعانة المقاومة أو	and the state of the	أوجافتهما المهرونا والمقار	ak day na kiliku na kiliku	digi. Abushabili da	. Alla I a dal Gradina dal	ورويد المترويدا فر		والمراد المارية والم	Scal	е Туре
		80 GHz	L						Stop 1.0	000 9112	Log	<u>Lin</u>
	MSG			<i>"</i> v B v	- 000 KH12				-			

Plot 7-268. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



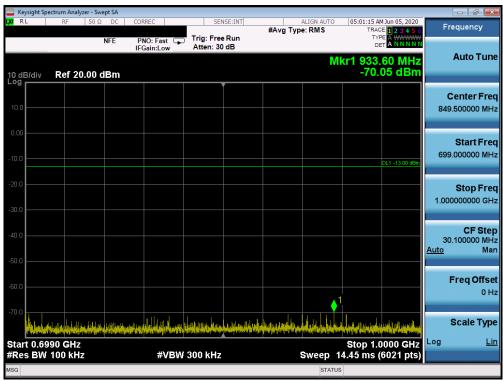
Plot 7-269. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Nout to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ctrum Analyzer - Sv										
L <mark>XI</mark> RL	RF 50 9	DC DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS		1 Jun 05, 2020	F	requency
		NFE	PNO: Fast G	Trig: Free Atten: 30				TYP DE			
10 dB/div Log	Ref 20.00	dBm					M	kr1 661. -54.(00 MHz 05 dBm		Auto Tune
											Center Freq
10.0										340	6.500000 MHz
0.00											Start Freq
-10.0									DL1 -13.00 dBm	30	0.000000 MHz
-20.0											Stop Freq
-30.0										663	3.000000 MHz
-40.0											CF Step
-50.0									1.	Auto	3.300000 MHz Man
											Freq Offset
-60.0											0 Hz
-70.0			u. u. l. l		aldaa ka	al care a s	ar		الاعتبار المعالم		Scale Type
Start 30.0	NULL-	al a la caracteria Al anna anna anna anna anna anna anna an	an a	na por traja de selo		and the second second	and the second second	and a search of	63.0 MHz	Log	Lin
#Res BW			#VBW	300 kHz		s	weep 30	.38 ms (1	2661 pts)		
MSG							STATUS				

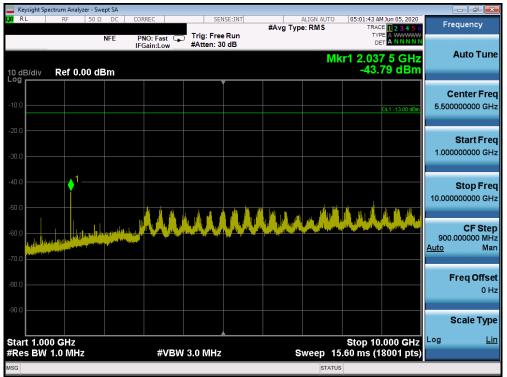
Plot 7-270. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-271. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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Plot 7-272. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

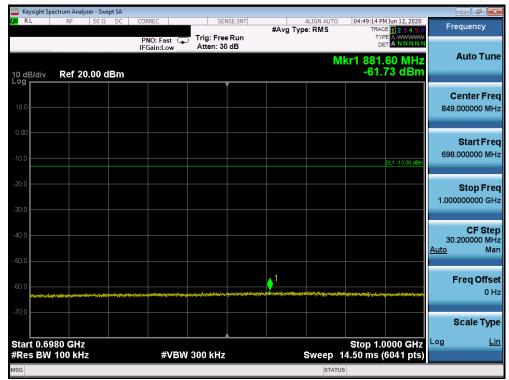
FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENTREPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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NR Band n71

M RL RF SO 0 DC CORREC SENSE:NT ALIGN AUTO 044908 PMon 12, 2020 Freequency M PNO: Fast IFGainLow Trig: Free Run Atten: 30 dB Mkr1 660.70 MHz -61.02 dBm Trig: GainLow Auto Tune 000 Center Freq 346.000000 MHz Start Freq 346.000000 MHz Start Freq 30.00000 MHz Start Freq 30.00000 MHz Start Freq 30.00000 MHz Start Freq 30.00000 MHz 200 C C C C Start Freq 30.00000 MHz Start Freq 9.0000 MHz Start Freq 9.0000 MHz Start Freq 9.00000 MHz Start Freq 9.00000 MHz Start Freq 9.00000 MHz Start Freq 9.000000 MHz Start Freq 9.000000000000000000000000000000000000	Keysight Spectrum Analyzer - Swept SA				- # *
PRO: Fast IFGain:Low Trig: Free Run Atten: 30 dB Mkr1 660.70 MHz 661.02 dBm Auto Tune 000	LXU RL RF 50Ω DC	CORREC SENSE:			Frequency
100 Image: Center Freq 346.000000 MHz 100 Image: Center Freq 346.000000 MHz 100 Image: Center Freq 346.000000 MHz 100 Image: Center Freq 30.00000 MHz 100 Image: Center Freq 662.00000 MHz 100 Image: Center Freq 662.00000 MHz 100 Image: Center Freq 663.200000 MHz 100 </th <th></th> <th></th> <th>un</th> <th>TYPE A WWWW DET A N N N N N</th> <th>Auto Tune</th>			un	TYPE A WWWW DET A N N N N N	Auto Tune
-100	10.0				
-300 -300				DL1 -13.00 dBm	
4400 4400 4600					
3000 30000 300000 300000 300000 <td></td> <td></td> <td></td> <td></td> <td>63.200000 MHz</td>					63.200000 MHz
Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 30.34 ms (12641 pts)					
#Res BW 100 kHz #VBW 300 kHz Sweep 30.34 ms (12641 pts)	-70.0				Scale Type
		#VBW 300 kHz	Swee	0100 002.0 10112	Log <u>Lin</u>
	H				

Plot 7-273. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



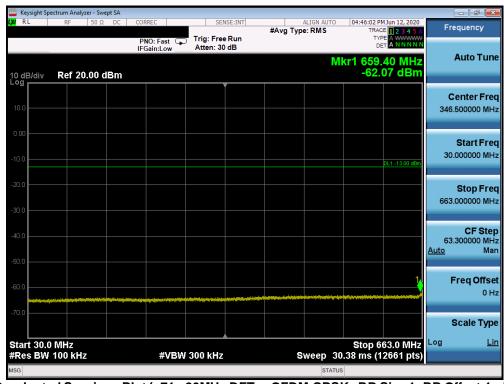
Plot 7-274. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 156 of 467	
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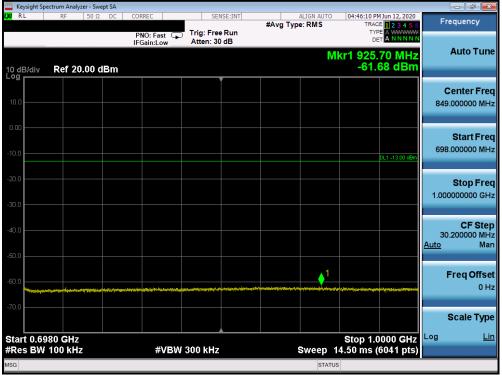
Plot 7-275. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



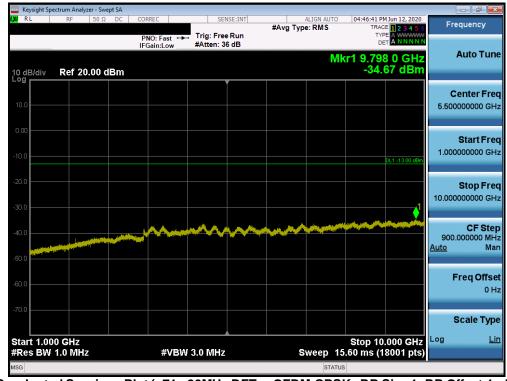
Plot 7-276. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 157 of 467	
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Plot 7-277. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)



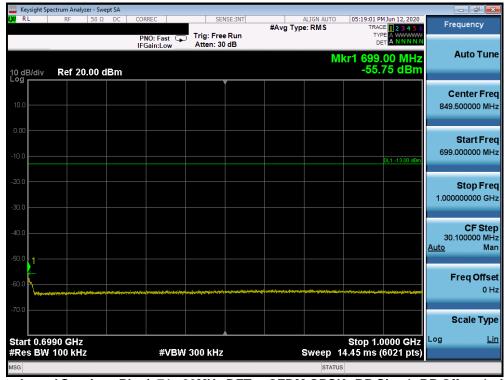
Plot 7-278. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Poul lo be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 158 of 467	
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	ctrum Analyzer - Swept SA					
L <mark>XI</mark> RL	RF 50 Ω DC		ALIGN AU #Avg Type: RMS	TRAC	1 Jun 12, 2020 E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dBm	PNO: Fast Trig: Free IFGain:Low Atten: 30		Mkr1 652.	50 MHz 52 dBm	Auto Tune
10.0						Center Freq 346.500000 MHz
-10.0					DL1 -13.00 dBm	Start Freq 30.000000 MHz
-20.0						Stop Freq 663.000000 MHz
-40.0						CF Step 63.300000 MHz <u>Auto</u> Man
-60.0		erelijsterelij nativeren i statevljeti grantin strjenoverentere	generating der Nationiques Mandradighundig M	n te an	•	Freq Offset 0 Hz
-70.0						Scale Type
Start 30.0 #Res BW		#VBW 300 kHz	Sweep	Stop 6 30.38 ms (1	33.0 WITE	Log <u>Lin</u>
MSG			ST	ATUS		

Plot 7-279. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-280. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMF707U	PCTEST Proud b be period &	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
Test Report S/N:	Test Dates:	EUT Type:		Page 159 of 467			
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Plot 7-281. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

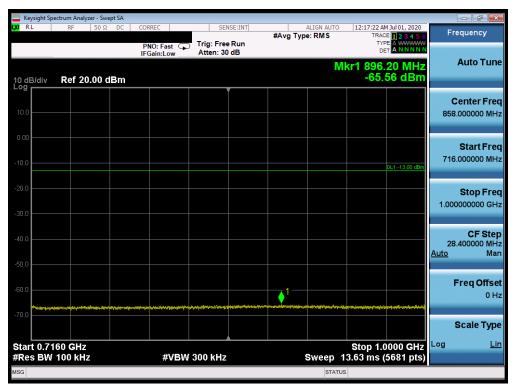
FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENTREPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 160 of 467
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Band 12

🔤 Ke	ysight Spec	trum Ana	lyzer - Swe	pt SA										- 6 🗙
lxi R	L	RF	50 Ω	DC	CORREC		SEN	SE:INT	#Avg Typ	ALIGN AUT		15 AM Jul 01, 2020 TRACE 1 2 3 4 5 6		requency
					PNO: F IFGain:	ast 🖵 Low	Trig: Free Atten: 30		• //					
10 de Log	3/div	Ref 2	0.00 d	Bm						I	Mkr1 6 -{	93.35 MHz 53.46 dBm		Auto Tune
10.0														Center Freq 33.950000 MHz
0.00 -10.0												DL1 -13.00 dBm	3	Start Freq 30.000000 MHz
-20.0 -30.0													69	Stop Freq 07.900000 MHz
-40.0 -50.0												1	e <u>Auto</u>	CF Step 6.790000 MHz Man
-60.0									r	leng dasa falle sites part	en en den internetien			Freq Offset 0 Hz
-70.0				A ALL AND L	The provide the theory		teneret pitajad in tajar	- In a sur diale to and disc	an an a ha sin i sa an	a for an	an ta di se pinente punto da terditi			Scale Type
	t 30.0 s BW ′		z			#VBW	300 kHz		s	weep	Sto 32.06 m	p 697.9 MHz s (13359 pts)	Log	Lin
MSG											TUS			

Plot 7-282. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-283. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Procet to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 161 of 467
1M2005040080-03.A3L	05/04 - 07/11/2020	Portable Handset		Fage 101 01 407
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Plot 7-284. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



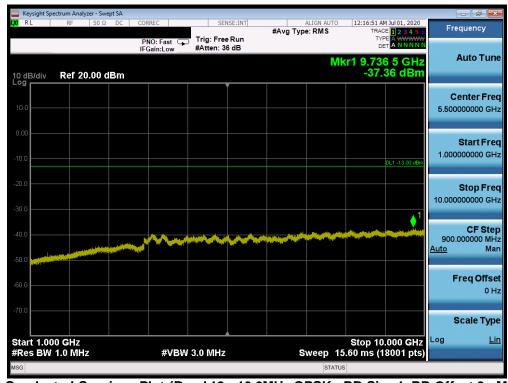
Plot 7-285. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 162 of 467	
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	ectrum Analyzer -										7 X
L <mark>XI</mark> RL	RF 50	Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	12:16:25 AI TRAC	4 Jul 01, 2020 E 1 2 3 4 5 6	Frequen	су
			PNO: Fast 🖵	Trig: Free Atten: 30				TYP			
			IFGain:Low	Atten: 30	ab					Auto	Tune
10 dB/div	Ref 20.00	dBm					IVII	-63	00 MHz 22 dBm		
	Kei 20.00	UBIII									
										Center	Freq
10.0										858.00000	0 MHz
0.00										Start	Freq
-10.0										716.00000	
-10.0									DL1 -13.00 dBm		
-20.0										0 4	-
										1.00000000	Freq
-30.0										1.00000000	U GHZ
-40.0										28,40000	Step
										Auto	Man
-50.0											
										FreqC	Offset
-60.0											0 Hz
-70.0	***		4940-4 ¹ 44-4 ¹ 41-4 ¹ 49-4 ¹	han an a		*****	al der stär sich för der haftet konstande				
-70.0										Scale	Туре
Start 0.71 #Res BW			-#\/D\M	300 kHz			Bureen d	Stop 1.0	0000 GHz	Log	Lin
	TOU KHZ		#VBW	300 KHZ					5681 pts)		
MSG							STATUS				

Plot 7-286. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



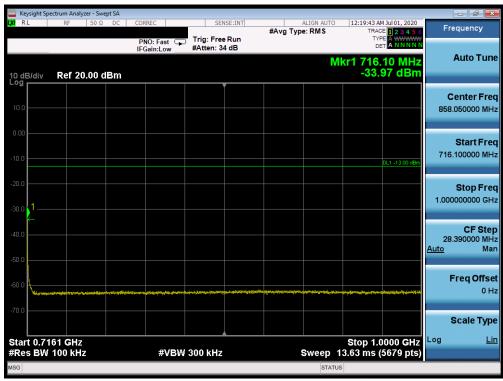
Plot 7-287. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Nout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 163 of 467	
1M2005040080-03.A3L	05/04-07/11/2020	Portable Handset			
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	ectrum Analyze										
LXI RL	RF	50 Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	4 Jul 01, 2020 E 1 2 3 4 5 6	Fre	equency
			PNO: Fast IFGain:Low	Trig: Free #Atten: 3				TYF DE			
			II Gam.cow				M	(r1 691.	20 MHz		Auto Tune
10 dB/div Log	Ref 20.	00 dBm						-58.4	00 dBm		
209										C	enter Freq
10.0											.000000 MHz
0.00											Start Freq
-10.0									DL1 -13.00 dBm	30	.000000 MHz
									OLT-TO:00 GDIN		
-20.0											Stop Freq
-30.0										698	.000000 MHz
-40.0										66	CF Step 800000 MHz
-50.0										<u>Auto</u>	Man
-50.0									1		
-60.0										F	req Offset 0 Hz
						And a second statement	the state of the second	alah pang da pang da s	and a set of the set of the set of		0 112
-70.0											Scale Type
										Log	Lin
Start 30. #Res BW	0 MHz 100 kHz		#VB	W 300 kHz		s	weep 32	Stop 6 06 ms (1	98.0 MHz 3361 pts)	Log	<u></u>
MSG							STATUS				

Plot 7-288. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-289. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	Rout ble part of B	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 164 of 467	
1M2005040080-03.A3L	05/04-07/11/2020	Portable Handset			
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Plot 7-290. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

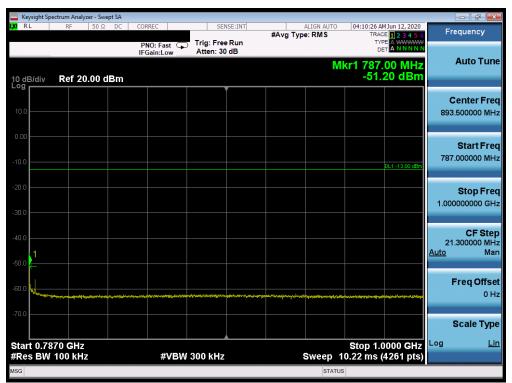
FCC ID: A3LSMF707U	PCTEST Neutlobe part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 165 of 467	
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Band 13

	ght Spectrum		wept SA										- 7 ×
L <mark>XI</mark> RL	R	F 50 9	Ω DC	CORREC		SEI	SE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	4 Jun 12, 2020 E 1 2 3 4 5 6	F	requency
				PNO: F IFGain:	ast 🖵 Low	Trig: Free Atten: 30				TYF De			
10 dB/ Log —	div Re	f 20.00	dBm						Μ	lkr1 777. -27.	00 MHz 58 dBm		Auto Tune
10.0													Center Freq 3.500000 MHz
-10.0											DL1 -13.00 dBm	31	Start Freq 0.000000 MHz
-20.0											1	77	Stop Freq 7.000000 MHz
-40.0												7. <u>Auto</u>	CF Step 4.700000 MHz Man
-60.0				negit dagan jing da kini tini kan					in the second state of the second state				Freq Offset 0 Hz
-70.0													Scale Type
	30.0 MH BW 100				#VBW	300 kHz		s	weep 3	5.86 ms (1	77.0 MHz 4941 pts)	Log	Lin
MSG									STATU	_			

Plot 7-291. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)



Plot 7-292. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: A3LSMF707U	PCTEST Next to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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1M2005040080-03.A3L	05/04-07/11/2020	Portable Handset		
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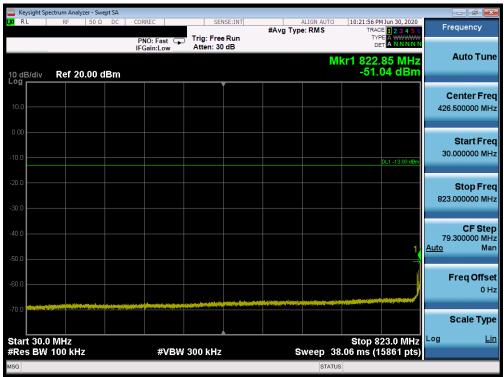
	ectrum Analyzer - Swep					
LXI RL	RF 50 Ω	DC CORREC	Trig: Free Run	ALIGN AUTO #Avg Type: RMS	04:11:01 AM Jun 12, 2020 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
		PNO: Fast 🕶 IFGain:Low	#Atten: 36 dB		DET ANNNN	Auto Tune
10 dB/div Log	Ref 20.00 dl	Bm		Mł	r1 9.739 0 GHz -34.77 dBm	Auto Tune
						Center Freq
10.0						5.500000000 GHz
0.00						Start Freq
-10.0					DL1 -13.00 dBm	1.000000000 GHz
-20.0						Stop Freq
-30.0					1	10.000000000 GHz
-40.0		\sim	~~~~~	the second s		CF Step
-50.0	Land and the second					900.000000 MHz <u>Auto</u> Man
						Freq Offset
-60.0						0 Hz
-70.0						Scale Type
Start 1.00	0 GHz				Stop 10.000 GHz	Log <u>Lin</u>
#Res BW	1.0 MHz	#VBV	3.0 MHz	Sweep 15	.60 ms (18001 pts)	
MSG				STATUS	5	

Plot 7-293. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

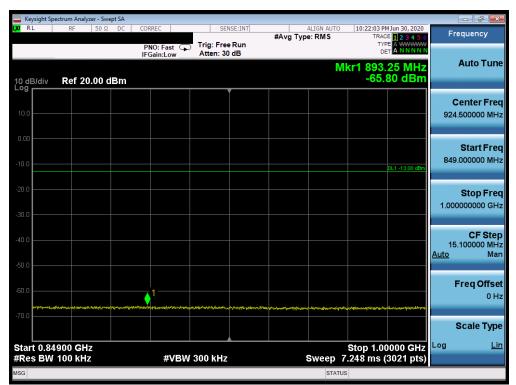
FCC ID: A3LSMF707U	PCTEST Hout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 167 of 467	
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Band 26/5



Plot 7-294. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



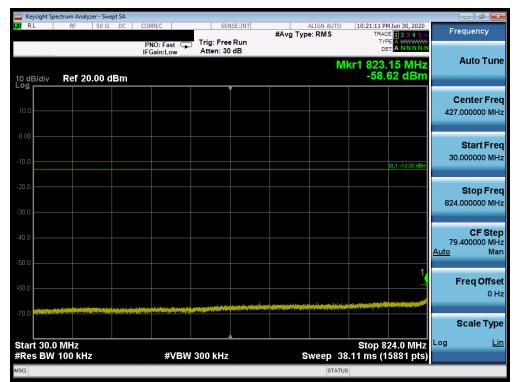
Plot 7-295. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Prout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 168 of 467	
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Plot 7-296. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-297. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 169 of 467	
1M2005040080-03.A3L	05/04-07/11/2020	Portable Handset			
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	ctrum Analyzer - Swept	SA				
LXI RL	RF 50 Ω	DC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	10:21:16 PM Jun 30, 2020 TRACE 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dB	PNO: Fast Ģ IFGain:Low	Trig: Free Run Atten: 30 dB	• //	kr1 849.65 MHz -65.40 dBm	Auto Tune
						Center Freq 924.500000 MHz
-10.0					DL1 -13.00 dBm	Start Freq 849.000000 MHz
-20.0						Stop Freq 1.000000000 GHz
-40.0						CF Step 15.100000 MHz <u>Auto</u> Man
-60.0 - 1	unturi-nikelpeksagnasternyterkassee/he		gertentstyleluspurers/Articellerustylyl		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Freq Offset 0 Hz
-70.0 Start 0.84	900 GHz				Stop 1.00000 GHz	Scale Type
#Res BW		#VBW	300 kHz	Sweep 7	2.248 ms (3021 pts)	
мsg 🧼 Point	s changed; all tra	ces cleared		STATU	S	

Plot 7-298. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



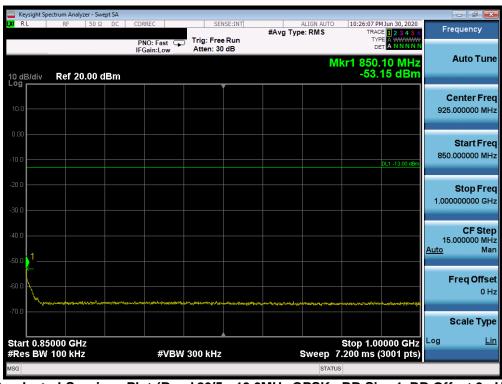
Plot 7-299. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	Rout ble period	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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	ectrum Analyzer - Swep										
LXI RL	RF 50 Ω	DC COR	REC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		4 Jun 30, 2020 E 1 2 3 4 5 6	Fr	equency
		PN IFG	IO: Fast 😱 Sain:Low	Trig: Free Atten: 30				TYF DE			Auto Tune
10 dB/div Log	Ref 20.00 dE	3m					IVII	-64.	27 dBm		
10.0											Center Freq
0.00											
-10.0										30	Start Freq
-20.0									DL1 -13.00 dBm		
-30.0										824	Stop Freq
-40.0											CF Step
-40.0										79 <u>Auto</u>	.400000 MHz Man
											Freq Offset
-60.0	an ey de sale de Hanilit I elevicionis (mai) al es	والمراجع والمراجع والمراجع والمراجع	والمراجع والمراجع المالية والمراجع			a dha Shikab (ng Galaran da G					0 Hz
-70.0	یند. بعد هر بر النام بازیک اطلال میکند و این می بر این از این این این ا	er nest sak die angeselle.	د ایر آن جاند <u>مرح خاطیت و مخ</u>	LAND OF THE LOCAL CONTRACT		i kulturala politika kultuko estat					Scale Type
Start 30.0 #Res BW			#VBW	300 kHz		s	weep 38	Stop 8	24.0 MHz 5881 pts)	Log	Lin
MSG							STATUS		, p,		

Plot 7-300. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-301. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	PCTEST Prove to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-302. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

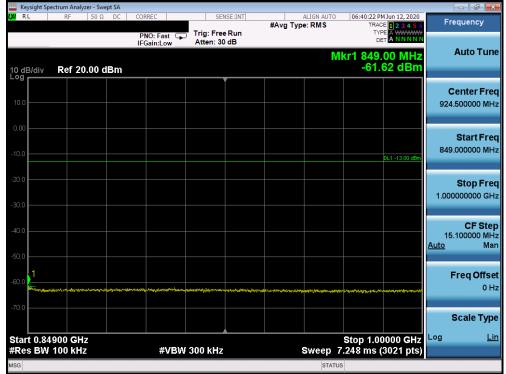
FCC ID: A3LSMF707U	PCTEST Next to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 172 of 467
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NR Band n5

Keysight Spectrum Analyzer - Swept K RL RF 50 Ω	DC CORREC	SENSE:INT	ALIGN AL	ITO 06:39:43 PM Jun 12, 2020	
10 001		Trig: Free Run	#Avg Type: RMS		Frequency
	PNO: Fast 🖵 IFGain:Low	Atten: 30 dB		DETANNNN	
				Mkr1 822.00 MHz -60.11 dBm	Auto Tur
10 dB/div Ref 20.00 dB	m	•		-00.11 0.011	
					Center Fre
10.0					426.500000 M
0.00					
					Start Fr
10.0				DL1 -13.00 dBm	30.000000 M
20.0					Stop Fr
30.0					823.000000 M
					CF St
40.0					79.300000 M
50.0					<u>Auto</u> N
33.0				1,	
60.0					Freq Offs 0
					Ů
70.0					Scale Ty
Start 30.0 MHz Res BW 100 kHz	#VBW	300 kHz	Sweep	Stop 823.0 MHz 38.06 ms (15861 pts)	
SG				TATUS	

Plot 7-303. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-304. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Neut to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-305. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-306. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Neutlobe part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 174 of 467	
1M2005040080-03.A3L	05/04-07/11/2020	Portable Handset		Fage 174 01 407	
© 2020 PCTEST				V 9.0 02/01/2019	



Keysight Spectrum Analyzer - Swept SA								
LX/RL RF 50Ω DC	CORREC	SEN	SE:INT	#Avg Typ	ALIGN AUTO e: RMS		1 Jun 12, 2020 E 1 2 3 4 5 6	Frequency
10 dB/div Ref 20.00 dBm	PNO: Fast 🕞	Trig: Free Atten: 30		0 ,1		TYF DE kr1 849.		Auto Tune
10.0								Center Freq 924.500000 MHz
-10.0							DL1 -13.00 dBm	Start Freq 849.000000 MHz
-20.0								Stop Freq 1.000000000 GHz
-40.0								CF Step 15.100000 MHz <u>Auto</u> Man
-60.0	nghud te ⁿ ganjuya nghyanganga	n Filin i tean tha an	+ieron-siastespekosp	etropolyristic privacy and	an and successive and a successive successive successive successive successive successive successive successive	nafatritrijuri, antara ipte	an an thur have a state of the state	Freq Offset 0 Hz
-70.0								Scale Type
Start 0.84900 GHz #Res BW 100 kHz	#VBW	300 kHz			Sweep 7	Stop 1.00 7.248 ms (000 0112	Log <u>Lin</u>
MSG					STATU		p.co/	

Plot 7-307. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)



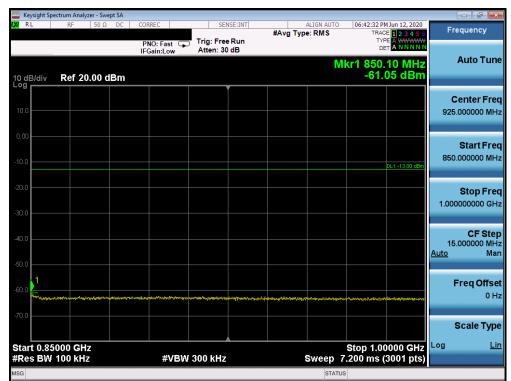
Plot 7-308. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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#Avg Type: RMS TRACE 12.3.4.5.0 Frequency PNO: Fast Trig: Free Run Mkr1 823.55 MHz Auto Tune 10 dB/div Ref 20.00 dBm -61.01 dBm Center Freq 000		ectrum Analyzer - Swept SA									7 ×
PNO: Fast (FGain:Low) Trig: Free Run Atten: 30 dB Trig: Free Run Atten: 30 dB Mkr1 823.55 MHz -61.01 dBm Auto Tune 00 dE/div Ref 20.00 dBm	LXI RL	RF 50 Ω DC	CORREC	SEN	ISE:INT					Frequen	су
Log Center Freq 100 Center Freq 100 Cut 1300 dem	10 dB(div	Ref 20.00 dBm				• /	M	TYP DE kr1 823.	55 MHz	Auto	Tune
100 0	Log				/						
300 Stop Freq 824.00000 MHz 400 CF Step 79.400000 MHz 600 Treq Offset 0 Hz 700 Stop 824.0 MHz	-10.0								DL1 -13.00 dBm		
4400 - 79.40000 MHz -50.0 - 60	-20.0										-
-600	-40.0									79.40000	0 MHz
Start 30.0 MHz Stop 824.0 MHz Log Lin	-60.0		an sing a state of the state of						1	Freq	
	-70.0										
webw rookinz webw sookinz sweep solitinis (13681 pts)			#\/R\A	(300 kHz			ween 39		24.0 191112	Log	Lin
STATUS	#Res DW	100 KH2	#VDV	-500 KHZ		3			566 i prs)		

Plot 7-309. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-310. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be perford &	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 176 of 467	
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Plot 7-311. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	Rout ble period	MEASUREMENTREPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 177 of 467
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Band 66/4

	ectrum Analyz												
LXI RL	RF	50 Ω	DC	CORRECT PNO:	Fast 🔾			#Avg Typ	e: RMS	TI	5 PM May 19, 2020 RACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N	F	requency
10 dB/div	Ref 20	.00 dE	Зm	IFGair	n:Low	Atten: 3			Μ	lkr1 1.7 -3	09 0 GHz 3.69 dBm		Auto Tune
10.0													Center Fred 9.500000 MHz
-10.0											DL1 -13.00 dBm	3	Start Free 0.000000 MH
-20.0											1	1.70	Stop Fred 9000000 GH
-40.0												16 <u>Auto</u>	CF Stej 7.900000 MH Ma
-60.0		******			6-45-14 		, , , , , , , , , , , , , , , , , , ,						Freq Offse 0 H
-70.0 Start 0.03	00 GHz									Stop	1.7090 GHz	Log	Scale Type <u>Lir</u>
#Res BW		:			#VBW	/ 3.0 MH:	z		Sweep	2.239 m	s (3359 pts)		
ISG									STAT	US			

Plot 7-312. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-313. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Prout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	est Report S/N: Test Dates: EUT Type:			Dogo 179 of 467	
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	pectrum Analy	zer - Swep	t SA										
(X) RL	RF	50 Ω	DC	CORREC PNO: Fa	ast 🖵	Trig: Fre		#Avg Typ	e:RMS	TR	PM May 19, 2020 ACE 1 2 3 4 5 6 YPE A WWWWW DET A NNNNN	Fre	equency
10 dB/div	Ref 1	0.00 dE	3m	IFGain:L	.ow	Atten: 2			Mk	r1 19.5	52 5 GHz 2.73 dBm		Auto Tune
0.00							• •						enter Freq 0000000 GHz
-10.0											DL1 -13.00 dBm	10.000	Start Freq
-30.0											1	20.000	Stop Freq 0000000 GHz
-50.0						a a dia 2014 Marca di ka mara						1.000 <u>Auto</u>	CF Step 0000000 GHz Man
-70.0												F	F req Offset 0 Hz
Start 10.0	000 GHz									Stop 2	0.000 GHz	tog (Scale Type <u>Lin</u>
#Res BW				#	#VBW	3.0 MHz		s		7.33 ms ((20001 pts)		
MSG									STAT	US			

Plot 7-314. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



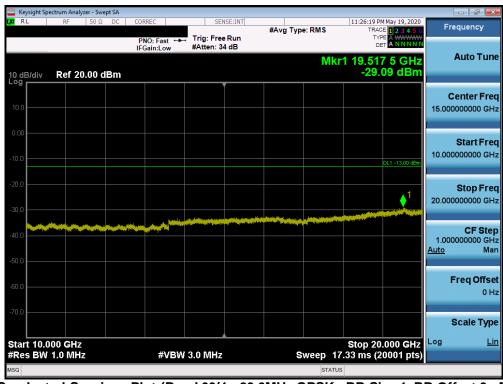
Plot 7-315. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 179 of 467	
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Plot 7-316. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-317. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Preud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 180 of 467
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	ctrum Analyzer - Swept					
LX/RL	RF 50 Ω	DC CORREC	SENSE:INT	#Avg Type: RMS	11:29:04 PM May 19, 2020 TRACE 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 dB	PNO: Fast G IFGain:Low	Trig: Free Run #Atten: 32 dB		түре а милими Det A NNNN Mkr1 1.669 0 GHz -47.47 dBm	
10.0						Center Freq 870.000000 MHz
-10.0					DL1 -13.00 dBm	Start Freq 30.000000 MHz
-20.0						Stop Freq 1.710000000 GHz
-40.0				a tan tan dan sana ang sana a		CF Step 168.000000 MHz <u>Auto</u> Man
-60.0	terforgenegenegenegenegenegenegenegenegenegen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Freq Offset 0 Hz
-70.0						Scale Type
Start 0.03 #Res BW		#VBW	3.0 MHz	Sweep	Stop 1.7100 GHz 2.240 ms (3361 pts)	Log <u>Lin</u>
MSG				ST/	ATUS	

Plot 7-318. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-319. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	PCTEST Proud b be period &	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 191 of 467	
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	ectrum Analyzer - Swept SA									
(XVI RL	RF 50 Ω DC	CORREC		SE:INT	#Avg Typ	e: RMS	TRAC	May 19, 2020	Frequ	iency
10 dB/div	Ref 20.00 dBm	PNO: Fast ↔ IFGain:Low	↓ Trig: Free #Atten: 32			Mk	r1 19.522	2 0 GHz 01 dBm	Au	ito Tune
10.0										i ter Freq 0000 GHz
-10.0								DL1 -13.00 dBm		art Freq 0000 GHz
-20.0								1 Interest from the		t op Freq 0000 GHz
-40.0										CF Step 0000 GHz Man
-60.0									Fre	q Offset 0 Hz
-70.0										ale Type
Start 10.0 #Res BW		#VBW	(3.0 MHz		s	weep 1	Stop 20. 7.33 ms (2	OUD GHZ	Log	Lin
MSG						STATI		prov		

Plot 7-320. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	PCTEST Prove to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 182 of 467
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NR Band n66

Keysight Spectrum Analyz	er - Swept SA						
LXIR TRF		ORREC	SENSE:INT	ALIGN #Avg Type: RI	MS TR/	PM Jun 29, 2020 ACE 1 2 3 4 5 6 AVPE A WWWWW	Frequency
PASS	I	PNO: Fast 😱 FGain:Low	Atten: 30 dB		Mkr1 1.70	9 0 GHz	Auto Tune
10 dB/div Ref 20	.00 dBm				-48	.03 dBm	
10.0 Trace 1 Pass							Center Freq 870.000000 MHz
-10.0							Start Freq 30.000000 MHz
-20.0							Stop Freq 1.710000000 GHz
-30.0							CF Step 168.000000 MHz
-50.0	1.1		ي وي المركز ا		and have a second of the second se	1	<u>Auto</u> Man
-60.0							Freq Offset 0 Hz
-70.0							Scale Type
Start 0.0300 GHz #Res BW 1.0 MHz		#VBW	3.0 MHz	Swe	Stop 1 ep 2.240 ms	.7100 GHz (3361 pts)	Log <u>Lin</u>
MSG					STATUS		

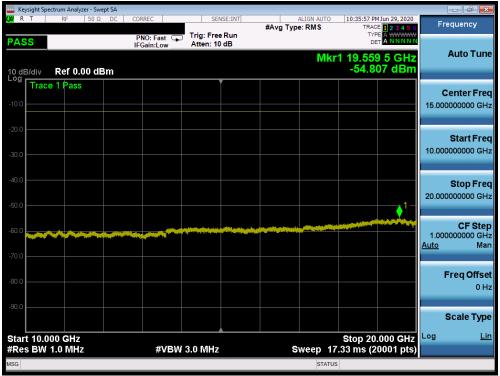
Plot 7-321. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



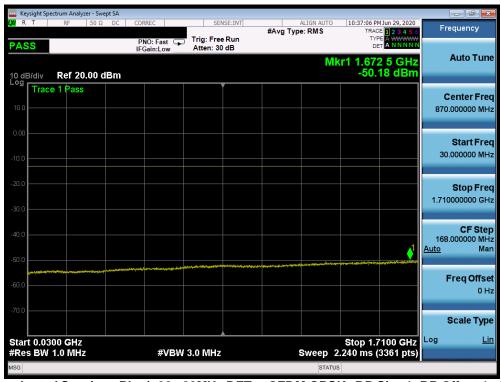
Plot 7-322. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMF707U	Rout ble period	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-323. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



Plot 7-324. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Field (ble part of (b)	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 184 of 467	
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	um Analyzer - Swept SA									- 6 💌
(XI RT	RF 50 Ω DC	CORREC	SENSI		Avg Type:	IGN AUTO		Jun 29, 2020	Fr	equency
PASS		PNO: Fast 🖵 IFGain:Low	Trig: Free F Atten: 30 d			Mk	TYP DE	2 0 GHz 16 dBm		Auto Tune
Log	Ref 20.00 dBm						-50.1	l6 dBm		
10.0	1 Pass									Center Freq .000000 MHz
-10.0									30	Start Freq .000000 MHz
-20.0									1.710	Stop Freq 0000000 GHz
-40.0								♦ ¹	168 <u>Auto</u>	CF Step .000000 MHz Man
-60.0	igen ingen en landen in den som en		a few years and a star of the	alan yang maka sang sang sang sang sang sang sang san	**************************************	r dji indati in in in				Freq Offset 0 Hz
-70.0										Scale Type
Start 0.0300 #Res BW 1.		#VBW	3.0 MHz		s	weep 2.	Stop 1.7 240 ms (100 GHz 3361 pts)	Log	<u>Lin</u>
MSG						STATUS				

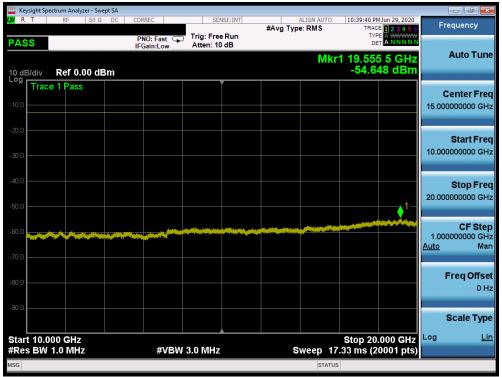
Plot 7-327. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-328. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMF707U	PCTEST Fixed to be part of the	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
Test Report S/N: Test Dates:		EUT Type:		Page 186 of 467			
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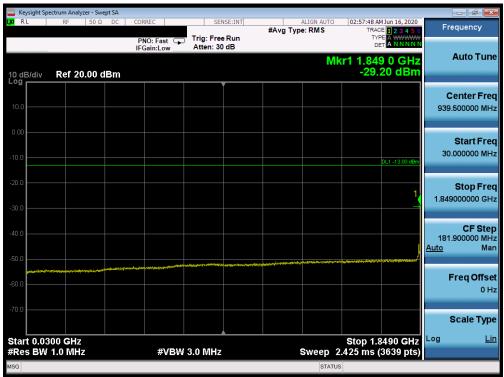


Plot 7-329. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMF707U	PCTEST Prout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 25/2



Plot 7-330. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



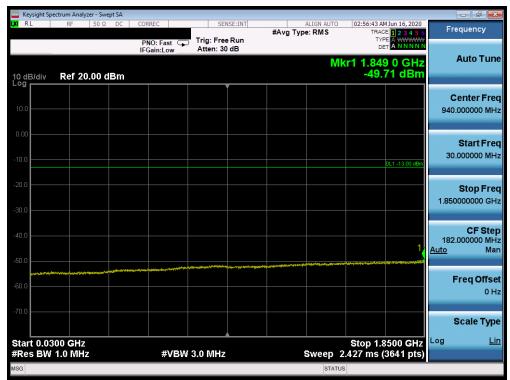
Plot 7-331. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMF707U	PCTEST Prout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	ectrum Analyzer - Swept SA					
LXI RL	RF 50 Ω D0	C CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	02:58:19 AM Jun 16, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Fast 😱 IFGain:Low	Trig: Free Run #Atten: 20 dB			
				Mkr	1 19.456 5 GHz	Auto Tune
10 dB/div Log	Ref 20.00 dBn	n			-45.07 dBm	
			Ĭ			Center Freq
10.0						15.00000000 GHz
0.00						
0.00						Start Freq
-10.0					DL1 -13.00 dBm	10.00000000 GHz
-20.0						
-20.0						Stop Freq 20.00000000 GHz
-30.0						20.000000000 GH2
-40.0						CF Step
-40.0						1.000000000 GHz Auto Man
-50.0			و المام من منافقة إسمالية المام . و المام من منافقة إسمالية المام . و مساوي و المام من و معالم من المام المام المام .			<u>Auto</u> marr
						Freq Offset
-60.0						0 Hz
-70.0						
						Scale Type
Start 10.0			A		O(0) 20,000 O(12)	Log <u>Lin</u>
#Res BW	1.0 MHz	#VBW	3.0 MHz		.33 ms (20001 pts)	
MSG				STATUS		

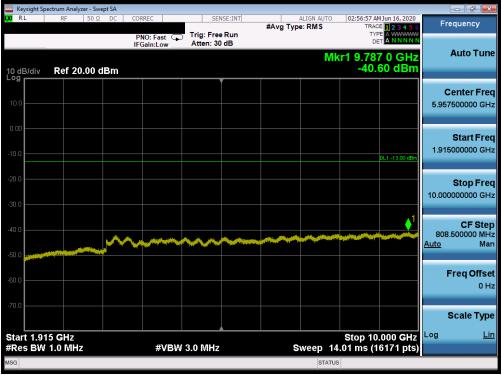
Plot 7-332. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-333. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-334. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-335. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMF707U	PCTEST Nout to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
Test Report S/N: Test Dates:		EUT Type:		Page 190 of 467			
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	ectrum Analyzer - Sw										
LXI RL	RF 50 Ω	2 DC	CORREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	1 Jun 16, 2020 E 1 2 3 4 5 6	Fr	equency
			PNO: Fast IFGain:Low	Trig: Free Atten: 30				TYF			
							Mk	r1 1.84	3 0 GHz		Auto Tune
10 dB/div Log	Ref 20.00	dBm						-49.	75 dBm		
209										c	Center Freq
10.0											.000000 MHz
0.00											Start Freq
-10.0									DL1 -13.00 dBm	30	.000000 MHz
									ULT-13.00 GBM		
-20.0											Stop Freq
-30.0										1.85	0000000 GHz
-30.0											
-40.0										182	CF Step
									1	Auto	Man
-50.0								a a substantia de la constantia de la const			
-60.0										I	Freq Offset
											0 Hz
-70.0											Outle Trees
											Scale Type
Start 0.03			//) (Think	0.0.0411-				Stop 1.8		Log	<u>Lin</u>
#Res BW	1.U WIHZ		#VBW	3.0 MHz					3641 pts)		
MSG		_					STATUS				

Plot 7-336. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-337. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMF707U	PCTEST Proud to be part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager			
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