

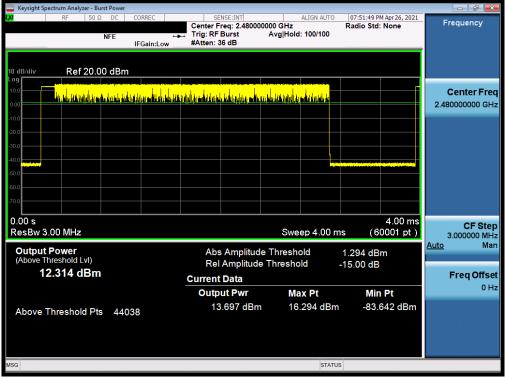
Plot 7-205. Average Conducted Power (2Mbps, ePA – Ch. 0) – ANT1 (Q)



Plot 7-206. Average Conducted Power (2Mbps, ePA - Ch. 39) - ANT1 (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-207. Average Conducted Power (2Mbps, ePA – Ch. 78) – ANT1 (Q)



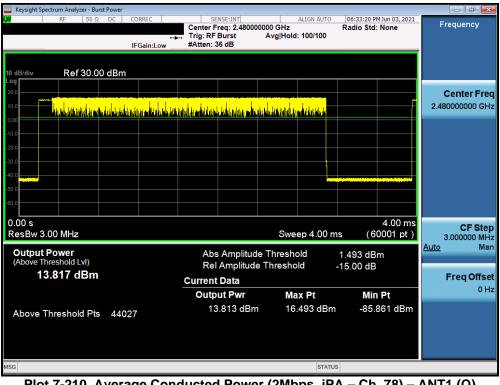
Plot 7-208. Average Conducted Power (2Mbps, iPA – Ch. 0) – ANT1 (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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🗶 RF 50 Ω DC CORREC		Radio Std: None Frequency
IFGain:Low	#Atten: 36 dB	
10 dB/div Ref 30.00 dBm		
20.0		Center Freq
10.0	ter fer han de state de la servicie per andre servicie de de servicie de servicie de servicie de servicie de s	2.441000000 GHz
-10.0		
-20.0		
-30.0		
-40.0		
-50.0		
-60.0		
0.00 s ResBw 3.00 MHz	Sweep 4.00 m	3.000000 WIHZ
Output Power	Abs Amplitude Threshold	1.982 dBm
(Above Threshold Lvl)		-15.00 dB
14.315 dBm	Current Data	Freq Offset
	Output Pwr Max Pt	Min Pt
Above Threshold Pts 44027	14.305 dBm 16.982 dBm	-84.104 dBm
MSG	STATUS	\$

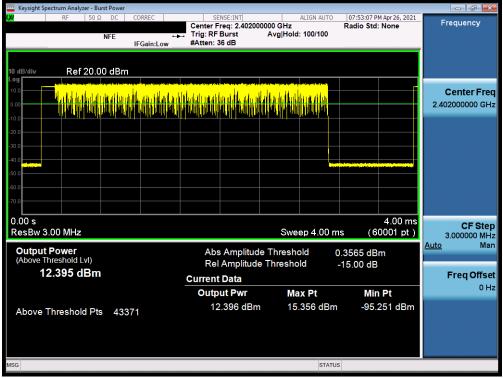
Plot 7-209. Average Conducted Power (2Mbps, iPA - Ch. 39) - ANT1 (Q)



Plot 7-210. Average Conducted Power (2Mbps, iPA – Ch. 78) – ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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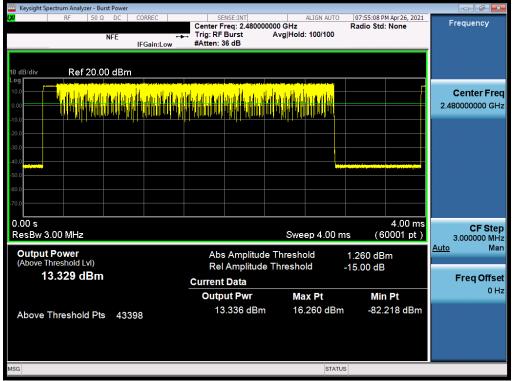
Plot 7-211. Average Conducted Power (3Mbps, ePA - Ch. 0) - ANT1 (Q)



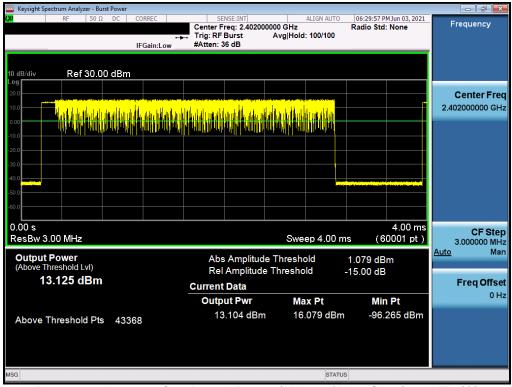
Plot 7-212. Average Conducted Power (3Mbps, ePA - Ch. 39) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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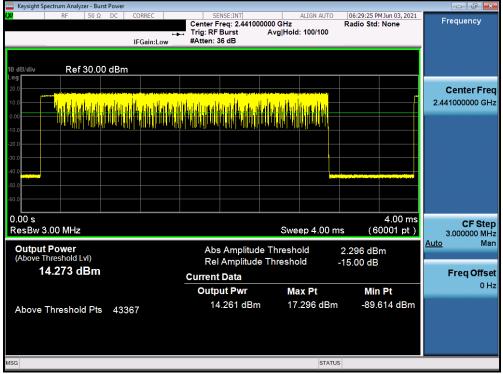
Plot 7-213. Average Conducted Power (3Mbps, ePA – Ch. 78) – ANT1 (Q)



Plot 7-214. Average Conducted Power (3Mbps, iPA - Ch. 0) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-215. Average Conducted Power (3Mbps, iPA - Ch. 39) - ANT1 (Q)



Plot 7-216. Average Conducted Power (3Mbps, iPA – Ch. 78) – ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 107 of 000
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7.4 Band Edge Compliance §15.247 (d); RSS-247 [5.5]

Test Overview and Limits

EUT operates in hopping and non-hopping transmission mode. Measurement is taken at the highest point located outside of the emission bandwidth. *The maximum permissible out-of-band emission level is 20 dBc.*

Test Procedure Used

ANSI C63.10-2013 – Section 6.10.4

Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW = 100kHz
- 4. VBW = 300kHz
- 5. Detector = Peak
- 6. Number of sweep points \geq 2 x Span/RBW
- 7. Trace mode = max hold
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize

Test Setup

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



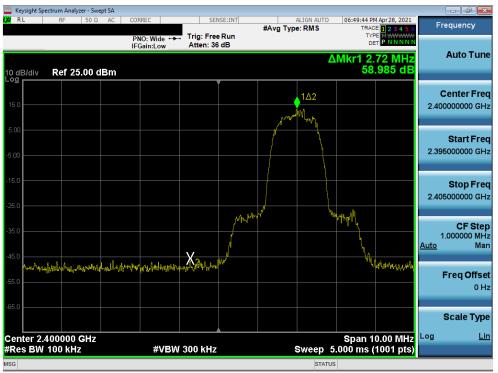
Figure 7-3. Test Instrument & Measurement Setup

FCC ID: A3LSMF711U	PCTEST"	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Test Notes

- 1. Out of band conducted spurious emissions at the band edge were investigated for all data rates in hopping and non-hopping modes. The worst case emissions were found with the EUT transmitting at 3 Mbps. Band edge emissions were also investigated with the EUT transmitting in all data rates. Plots of the worst case emissions are shown below.
- 2. This device will be manufactured using two different WIFI chipsets (N and Q). Both two chipsets are tested, and both conducted emissions data is shown in this report.



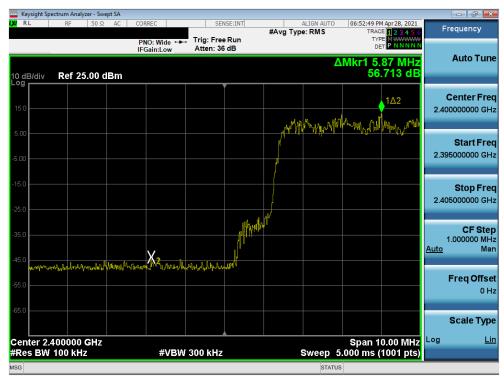
Plot 7-217. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps – Ch. 0) – ANT0 (N)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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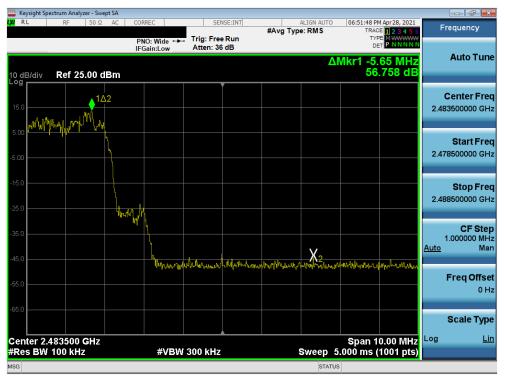
Plot 7-218. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 78) - ANTO (N)



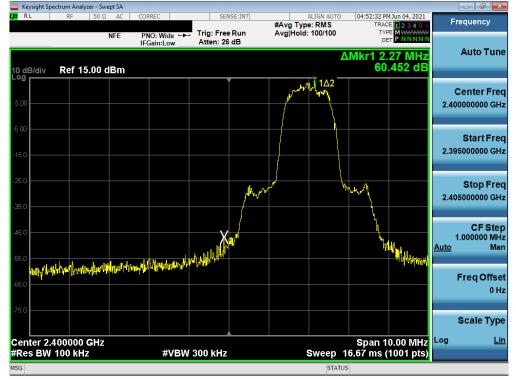
Plot 7-219. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps – Ch. 0) – ANT0 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 120 of 222
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Plot 7-220. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps – Ch. 78) – ANT0 (N)



Plot 7-221. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 0) - ANTO (N)

FCC ID: A3LSMF711U	Proud to be part of (e) element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 121 of 222
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Plot 7-222. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 78) - ANTO (N)



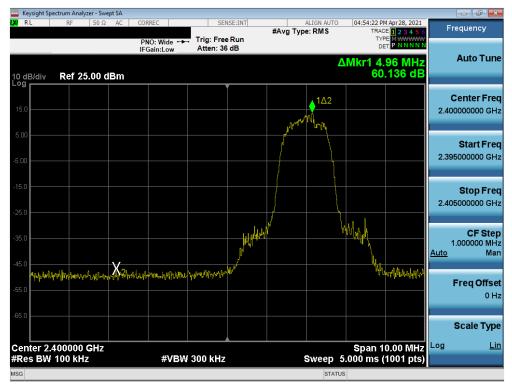
Plot 7-223. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch. 0) - ANTO (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 132 of 233
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Plot 7-224. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.78) - ANTO (N)



Plot 7-225. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 0) - ANTO (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ctrum Analyzer - Swe									
LXI RL	RF 50 Ω		DRREC		ISE:INT	#Avg Ty	ALIGN AUTO	TRAC	M Apr 28, 2021	Frequency
10 dB/div	Ref 25.00 d	IF	PNO: Wide ↔ FGain:Low	Atten: 36			1	□ <mark>∆Mkr1 -6</mark>		Auto Tune
15.0	10 10	.2								Center Freq 2.483500000 GHz
-5.00										Start Freq 2.478500000 GHz
-15.0										Stop Freq 2.488500000 GHz
-35.0			M.							CF Step 1.000000 MHz <u>Auto</u> Man
-55.0			ՠղիանի	had a n Norm	^պ ր. Նուչեն Այթ	nin yn arlindiyr	llaunauad	Vitho March March	Yrvaaly/Yirtan	Freq Offset 0 Hz
-65.0 Center 2.4	183500 GHz							Span 1	0.00 MHz	Scale Type Log <u>Lin</u>
#Res BW			#VBW	300 kHz			Sweep	5.000 ms	(1001 pts)	
MSG							STAT	rus		

Plot 7-226. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 78) - ANTO (Q)



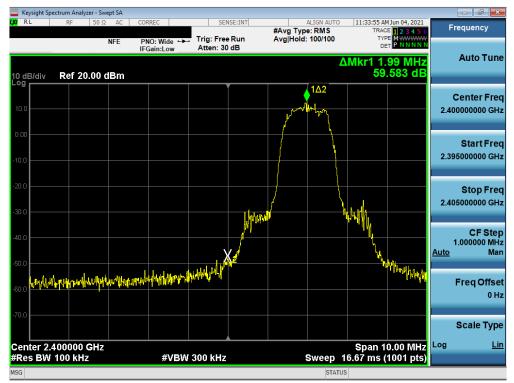
Plot 7-227. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps- Ch. 0) - ANTO (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyz												
RL	RF	50 Ω	AC	PNO: W	/ide ↔→			#Avg Ty	PR: RMS	TRAC	Apr 28, 2021 E 1 2 3 4 5 6 E M WWWWW T P N N N N	F	requency
dB/div	Ref 25	.00 di	3m	in Gain.					Δ	Mkr1 -8. 55	86 MHz 703 dB		Auto Tur
5.0	1∆2 Ուլի∬ ա ^{գիվ} ե	Arviva.											Center Fre
												2.47	Start Fr 8500000 G
5.0												2.48	Stop Fr 8500000 G
5.0			Ъци	W.	llea ha .						Xa	Auto	CF Sto 1.000000 M M
5.0					(Markey)	YPW-mUllfwQd	frikulattappelud	haballonan	huh fhrad flag-and	hallandended	waxan Yobarkaan		Freq Offs 0
5.0	483500 (<u>~Ц-</u>								Snan 1		Log	Scale Ty
	483500 (100 kHz				#VBW	300 kHz			Sweep 5	5000 ms (0.00 191112		
											100/		

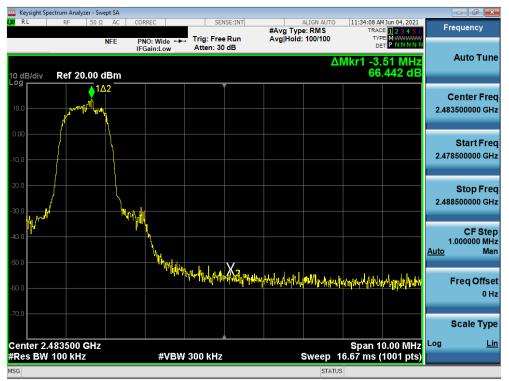
Plot 7-228. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps- Ch. 78) - ANTO (Q)



Plot 7-229. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 0) - ANTO (Q)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-230. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 78) - ANTO (Q)



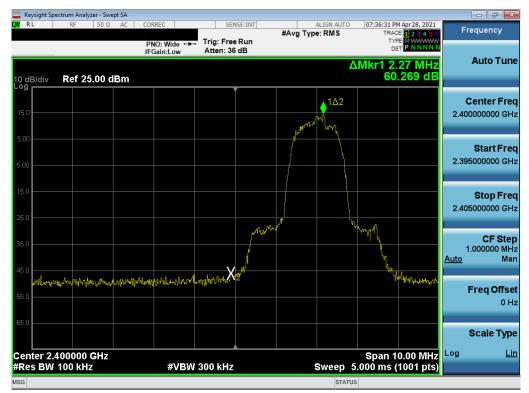
Plot 7-231. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.0) - ANT0 (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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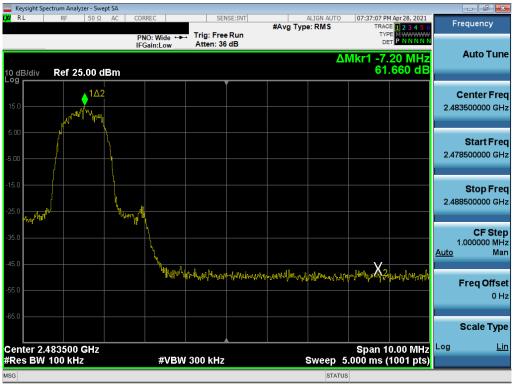
Plot 7-232. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.78) - ANTO (Q)



Plot 7-233. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 0) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-234. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 78) - ANT1 (N)



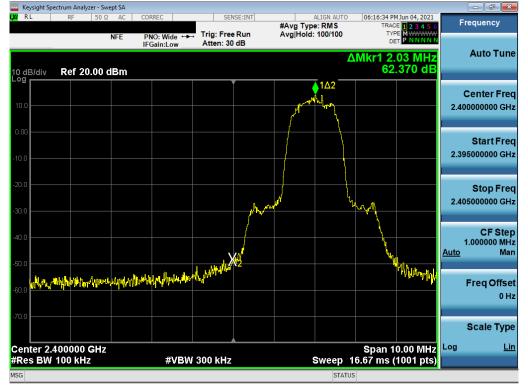
Plot 7-235. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps - Ch.0) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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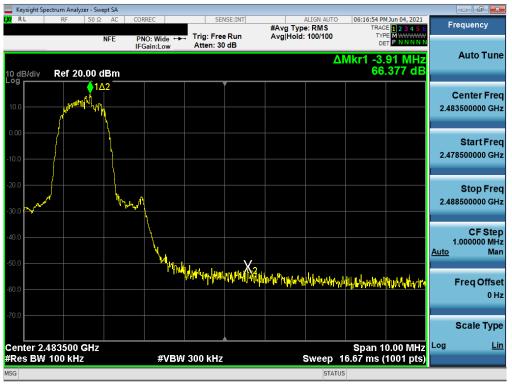
Plot 7-236. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps – Ch.78) – ANT1 (N)



Plot 7-237. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 0) - ANT1 (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 222
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Plot 7-238. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 78) - ANT1 (N)



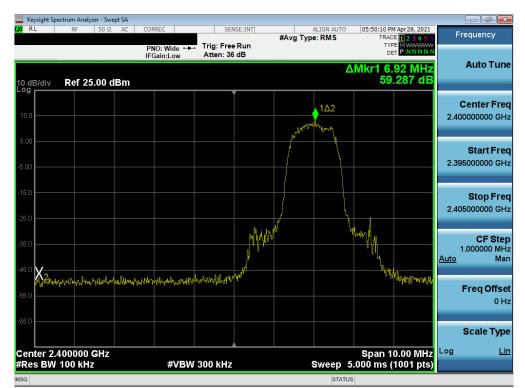
Plot 7-239. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.0) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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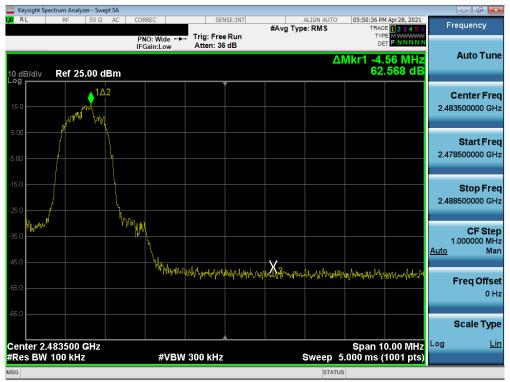
Plot 7-240. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.78) - ANT1 (N)



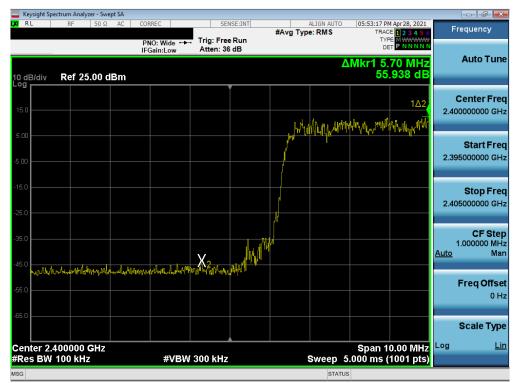
Plot 7-241. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps - Ch. 0) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-242. Band Edge Plot (Bluetooth with Hopping Disabled, ePA, 3 Mbps – Ch. 78) – ANT1 (Q)



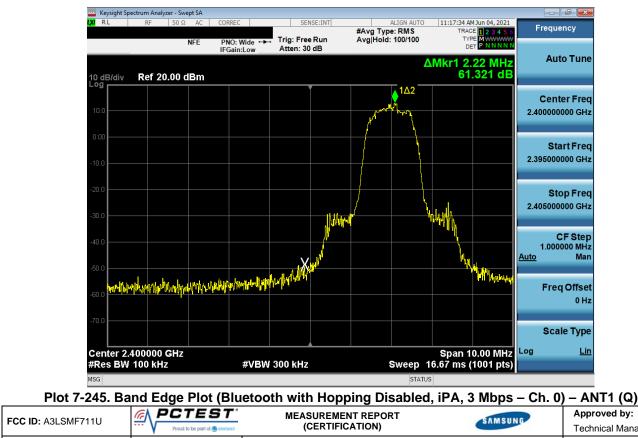
Plot 7-243. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps - Ch.0) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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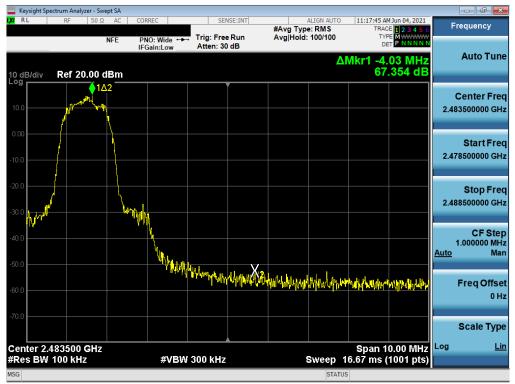
	ectrum Analyzer												
KI RL	RF	50Ω AC	COR	REC		SEN	ISE:INT	#Avg Typ	ALIGN AUTO		M Apr 28, 2021	F	equency
				O: Wide		Trig: Free Atten: 36				TY	PE MWWWWW ET P NNNNN		
			IFG	ain:Low	/	Atten: 30	uD		Λ		.62 MHz		Auto Tune
I0 dB/div	Ref 25.0	0 dBm							Δ	58	.203 dB		
	1Δ2					1	Í						Center Fred
15.0													3500000 GHz
5.00	North Marily	Mary Na Carl											
5.00		ł											Start Free
-5.00												2.47	8500000 GHz
		h											
15.0													Stop Fred
												2.48	8500000 GHz
25.0			ł٩, "										
35.0													CF Step
			wyr	1								Auto	000000 MHz. Mar
45.0				- Louter	nNewAll	Mushahland	munn	A AZ NAMAN	and market a set	and when the second	handrean da Marka Nam		
						e selare dese	et a sere chardede	a a l de 14 a contituir	e a due a la contra la .	. Cont. A 1040.	ALL AND		Freq Offse
55.0													0 Hz
65.0													
													Scale Type
Center 2.	483500 G	Hz								Span 1	0.00 MHz	Log	Lin
≉Res BW				#V	BW 3	800 kHz			Sweep 🗄	5.000 ms ((1001 pts)		
ISG									STATU	s			

Plot 7-244. Band Edge Plot (Bluetooth with Hopping Enabled, ePA, 3 Mbps - Ch.78) - ANT1 (Q)

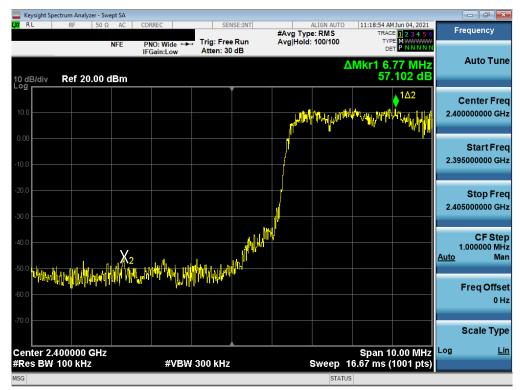


	Proud to be part of @ element	(CERTIFICATION)	Technical Manager
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Plot 7-246. Band Edge Plot (Bluetooth with Hopping Disabled, iPA, 3 Mbps - Ch. 78) - ANT1 (Q)



Plot 7-247. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.0) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-248. Band Edge Plot (Bluetooth with Hopping Enabled, iPA, 3 Mbps - Ch.78) - ANT1 (Q)

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7.5 Carrier Frequency Separation §15.247 (a.1); RSS-247 [5.1(2)]

Test Overview and Limit

Measurement is made with EUT operating in hopping mode. The minimum permissible channel separation for this system is 2/3 the value of the 20dB BW.

Test Procedure Used

ANSI C63.10-2013 - Section 7.8.2

Test Settings

- 1. Span = Wide enough to capture peaks of two adjacent channels
- 2. RBW = 30% of channel spacing. Adjust as necessary to best identify center of each individual channel
- 3. VBW ≥ RBW
- 4. Sweep = Auto
- 5. Detector = Peak
- 6. Trace mode = max hold
- 7. The trace was allowed to stabilize.
- 8. Marker-delta function used to determine separation between peaks of the adjacent channels

Test Setup

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



Figure 7-4. Test Instrument & Measurement Setup

Test Notes

- 1. The EUT complies with the minimum channel separation requirement when it is operating in 1x/EDR mode using 79 channels and when operating in AFH mode using 20 channels.
- 2. This device will be manufactured using two different WIFI chipsets (N and Q). Both two chipsets are tested, and both conducted emissions data is shown in this report.

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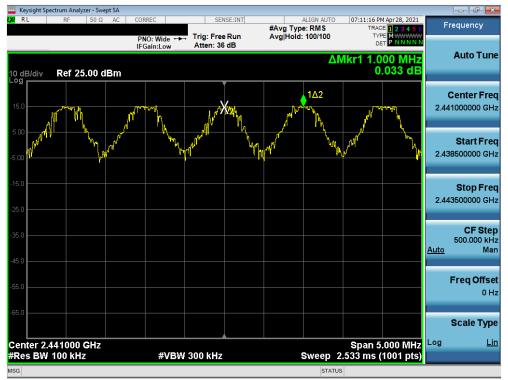


Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Min. Channel Separation [MHz] (N)	Min. Channel Separation [MHz] (Q)
2402	1.0	GFSK	ePA	0	0.570	0.614
2441	1.0	GFSK	ePA	39	0.608	0.622
2480	1.0	GFSK	ePA	78	0.608	0.624
2402	1.0	GFSK	iPA	0	0.615	0.617
2441	1.0	GFSK	iPA	39	0.610	0.622
2480	1.0	GFSK	iPA	78	0.624	0.626
2402	2.0	π/4-DQPSK	ePA	0	0.888	0.876
2441	2.0	π/4-DQPSK	ePA	39	0.882	0.895
2480	2.0	π/4-DQPSK	ePA	78	0.894	0.902
2402	2.0	π/4-DQPSK	iPA	0	0.866	0.902
2441	2.0	π/4-DQPSK	iPA	39	0.900	0.854
2480	2.0	π/4-DQPSK	iPA	78	0.852	0.905
2402	3.0	8DPSK	ePA	0	0.884	0.901
2441	3.0	8DPSK	ePA	39	0.867	0.798
2480	3.0	8DPSK	ePA	78	0.895	0.861
2402	3.0	8DPSK	iPA	0	0.874	0.840
2441	3.0	8DPSK	iPA	39	0.840	0.879
2480	3.0	8DPSK	iPA	78	0.887	0.866

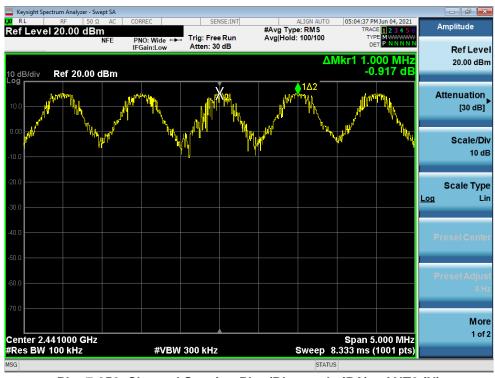
Table 7-8. Minimum Channel Separation – ANT0

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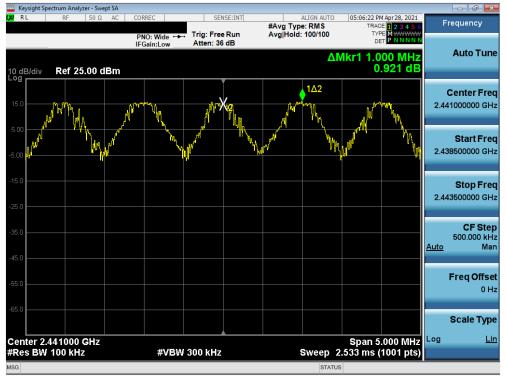
Plot 7-249. Channel Spacing Plot (Bluetooth, ePA) – ANT0 (N)



Plot 7-250. Channel Spacing Plot (Bluetooth, iPA) - ANT0 (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-251. Channel Spacing Plot (Bluetooth, ePA) - ANTO (Q)



Plot 7-252. Channel Spacing Plot (Bluetooth, iPA) - ANT0 (Q)

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Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Min. Channel Separation [MHz] (N)	Min. Channel Separation [MHz] (Q)
2402	1.0	GFSK	ePA	0	0.614	0.617
2441	1.0	GFSK	ePA	39	0.622	0.622
2480	1.0	GFSK	ePA	78	0.624	0.626
2402	1.0	GFSK	iPA	0	0.618	0.619
2441	1.0	GFSK	iPA	39	0.624	0.631
2480	1.0	GFSK	iPA	78	0.619	0.635
2402	2.0	π/4-DQPSK	ePA	0	0.876	0.902
2441	2.0	π/4-DQPSK	ePA	39	0.895	0.854
2480	2.0	π/4-DQPSK	ePA	78	0.902	0.905
2402	2.0	π/4-DQPSK	iPA	0	0.917	0.863
2441	2.0	π/4-DQPSK	iPA	39	0.843	0.833
2480	2.0	π/4-DQPSK	iPA	78	0.880	0.874
2402	3.0	8DPSK	ePA	0	0.901	0.840
2441	3.0	8DPSK	ePA	39	0.798	0.879
2480	3.0	8DPSK	ePA	78	0.861	0.866
2402	3.0	8DPSK	iPA	0	0.875	0.842
2441	3.0	8DPSK	iPA	39	0.873	0.883
2480	3.0	8DPSK	iPA	78	0.828	0.865

Table 7-9. Minimum Channel Separation – ANT1

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-253. Channel Spacing Plot (Bluetooth, ePA) - ANT1 (N)



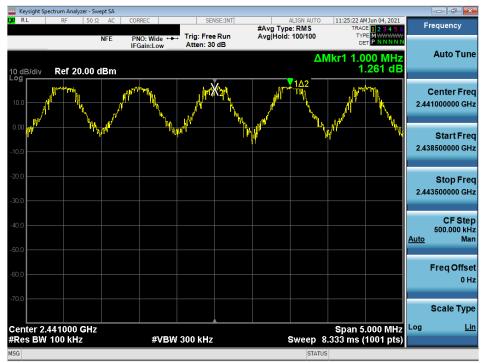
Plot 7-254. Channel Spacing Plot (Bluetooth, iPA) – ANT1 (N)

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Plot 7-255. Channel Spacing Plot (Bluetooth, ePA) - ANT1 (Q)



Plot 7-256. Channel Spacing Plot (Bluetooth, iPA) – ANT1 (Q)

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7.6 Time of Occupancy §15.247 (a.1.iii); RSS-247 [5.1(4)]

Test Overview and Limit

Measurement is made while EUT is operating in hopping mode with the spectrum analyzer set to zero span. *The maximum permissible time of occupancy is 400 ms within a period of 400ms multiplied by the number of hopping channels employed.*

Test Procedure Used

ANSI C63.10-2013 - Section 7.8.4

Test Settings

- 1. Span = zero span, centered on a hopping channel
- 2. RBW \leq channel spacing and >> 1/T, where T is expected dwell time per channel
- 3. Sweep = as necessary to capture entire dwell time. Second plot may be required to demonstrate two successive hops on a channel
- 4. Trigger is set with appropriate trigger delay to place pulse near the center of the plot
- 5. Detector = peak
- 6. Trace mode = max hold
- 7. Marker-delta function used to determine transmit time per hop

Test Setup

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



Figure 7-5. Test Instrument & Measurement Setup

Test Notes

This device will be manufactured using two different WIFI chipsets (N and Q). Both two chipsets are tested, and both conducted emissions data is shown in this report.

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Keysight Spectrum Analyzer - Swept SA					
LX/ RL RF 50Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:08:25 PM Apr 28, 2021 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm		Frig: Video Atten: 36 dB	Δ	Mkr1 2.893 ms -46.47 dB	Auto Tune
15.0 X2	<u> </u>			TRIG LVL	Center Freq 2.441000000 GHz
5.00					Start Freq 2.441000000 GHz
-15.0		1Δ2			Stop Freq 2.441000000 GHz
-35.0 -45.0 00000000000000000000000000000000000		Walkportelling	utulyeurengebischelsenhe	hleilistenen sitte	CF Step 1.000000 MHz <u>Auto</u> Man
-55.0					Freq Offset 0 Hz
Center 2.441000000 GHz				Sparronz	Scale Type Log <u>Lin</u>
Res BW 1.0 MHz	#VBW 3.	0 MHz		.533 ms (1001 pts)	
MSG			STATUS		

Plot 7-257. Time of Occupancy Plot (Bluetooth, ePA) – ANT0 (N)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.893 ms/channel = 308.60 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- o Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- o 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.893 ms/channel = 154.31 ms (worst case dwell time for one channel in AFH mode)

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LX/ RL RF 50 Ω AC	CORREC	SENSE:INT Trig Delay-714.8 µs	ALIGN AUTO #Avg Type: RMS	05:03:59 PM Apr 28, 2021 TRACE 1 2 3 4 5 6	Frequency
	PNO: Wide ↔ IFGain:Low	Trig: Video Atten: 36 dB	• //	DET PNNNN	Auto Tune
10 dB/div Ref 25.00 dBm				Mkr1 2.893 ms -49.49 dB	Auto Tune
15.0 X2		<u></u>			Center Freq 2.441000000 GHz
5.00				TRIG LVL	
-5.00					Start Freq 2.441000000 GHz
-15.0					Stop Freq 2.441000000 GHz
-25.0		↓1∆2			CF Step
-45.0		hayarhidan yayaya		han the state of the	1.000000 MHz <u>Auto</u> Man
-65.0					Freq Offset 0 Hz
-65.0					Scale Type
Center 2.441000000 GHz				o pair v Hz	Log <u>Lin</u>
Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 7	.533 ms (1001 pts)	
MSG			STATUS		

Plot 7-258. Time of Occupancy Plot (Bluetooth, ePA) – ANT0 (Q)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

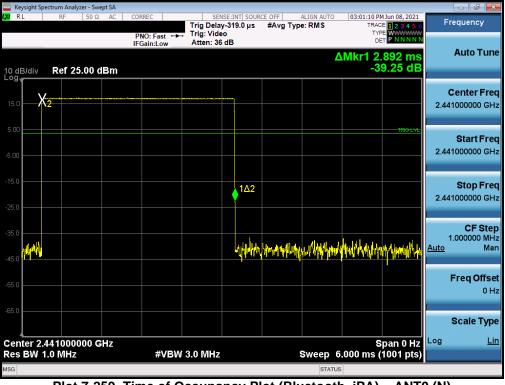
- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.893 ms/channel = 308.60 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- o 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- o 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.893 ms/channel = 154.31 ms (worst case dwell time for one channel in AFH mode)

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Plot 7-259. Time of Occupancy Plot (Bluetooth, iPA) – ANT0 (N)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

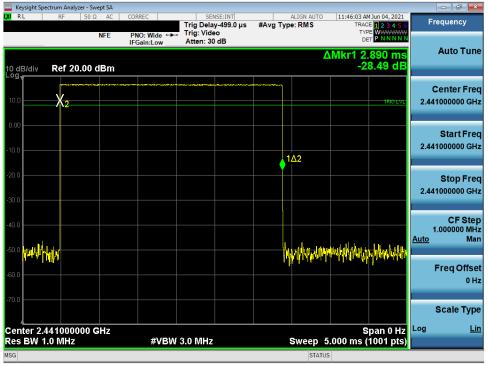
- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.892 ms/channel = 308.49 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- o Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- o 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- o 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.892 ms/channel = 154.26 ms (worst case dwell time for one channel in AFH mode)

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Plot 7-260. Time of Occupancy Plot (Bluetooth, iPA) - ANT0 (Q)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.890 ms/channel = 308.28 ms (worst case dwell time for one channel in 1x/EDR modes)

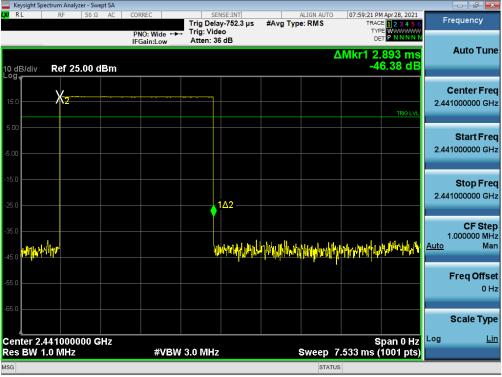
With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- o 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- 53.34 hops x 2.890 ms/channel = 154.15 ms (worst case dwell time for one channel in AFH mode)

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Plot 7-261. Time of Occupancy Plot (Bluetooth, ePA) – ANT1 (N)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.893 ms/channel = 308.60 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- o Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.893 ms/channel = 154.31 ms (worst case dwell time for one channel in AFH mode)

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Keysight Spectrum Analyzer - Swept SA				
LXX RL RF 50Ω AC	Trig Dela	NSE:INT ALIGN Ny-499.0 µs #Avg Type: RM	IS TRACE 1 2 3 4 5 6	Frequency
	PNO: Wide +++ Trig: Vide IFGain:Low Atten: 36		DET PNNNN	
10 dB/div Ref 25.00 dBm			ΔMkr1 2.885 ms -27.77 dB	Auto Tune
15.0 X2			TRIG LVL	Center Freq 2.441000000 GHz
-5.00	1Δ2			Start Freq 2.441000000 GHz
-15.0				Stop Freq 2.441000000 GHz
-36.0		ranik kuruh kupun kuruhan ana kupun kupun kupun kuruh kuruh kuruh kuruh kuruh kuruhan kuruhan kuruhan kuruhan k	durunhalalahanyadaanalahta	CF Step 1.000000 MHz <u>Auto</u> Man
-55.0				Freq Offset 0 Hz
				Scale Type
Center 2.441000000 GHz Res BW 1.0 MHz	#VBW 3.0 MHz	Swe	Span 0 Hz ep 7.533 ms (1001 pts)	
MSG			STATUS	

Plot 7-262. Time of Occupancy Plot (Bluetooth, ePA) – ANT1 (Q)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

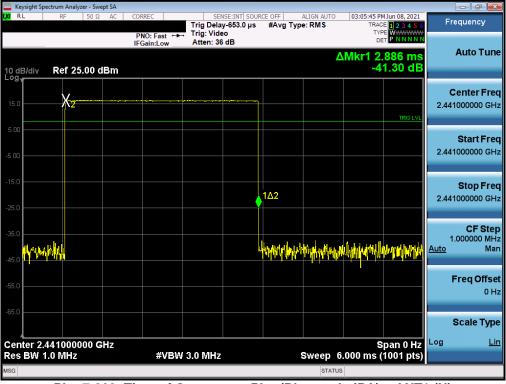
- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.885 ms/channel = 307.74 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- o 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.885 ms/channel = 153.89 ms (worst case dwell time for one channel in AFH mode)

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Plot 7-263. Time of Occupancy Plot (Bluetooth, iPA) – ANT1 (N)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.886 ms/channel = 307.85 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- o Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- o 53.34 hops x 2.886 ms/channel = 153.94 ms (worst case dwell time for one channel in AFH mode)

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Keysight Spectrum Analyzer - Swept				
L RF 50Ω M	SENSE:INT Trig Delay-499.0 µs Trig: Video Atten: 30 dB	ALIGN AUTO #Avg Type: RMS	11:23:39 AM Jun 04, 2021 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P N N N N N	Frequency
10 dB/div Ref 20.00 dB	Atten. oo dB	Δ	Mkr1 2.890 ms -12.27 dB	Auto Tune
10.0				Center Freq 2.444000000 GHz
-10.0		1Δ2		Start Freq 2.444000000 GHz
-20.0				Stop Freq 2.444000000 GHz
-40.0		ult anstar and as	restistallandimed (Adeida	CF Step 1.000000 MHz <u>Auto</u> Man
-60.0		n tə <mark>r dirə</mark> yiləri, ath.	affiliasla, atdila Alaikat	Freq Offset 0 Hz
-70.0 Center 2.444000000 GH; Res BW 1.0 MHz	3.0 MHz	Sween 5	Span 0 Hz .000 ms (1001 pts)	Scale Type Log <u>Lin</u>
MSG		STATUS		

Plot 7-264. Time of Occupancy Plot (Bluetooth, iPA) - ANT1 (Q)

Typically, Bluetooth 1x/EDR mode has a channel hopping rate of 1600 hops/s. Since 1x/EDR modes use 5 transmit and 1 receive slot, for a total of 6 slots, the Bluetooth transmitter is actually hopping at a rate of 1600 / 6 = 266.67 hops/s/slot

- 400ms x 79 hopping channels = 31.6 sec (Time of Occupancy Limit)
- Worst case BT has 266.67 hops/second (for 1x/EDR modes with DH5 operation)
- 266.67 hops/second / 79 channels = 3.38 hops/second (# of hops/second on one channel)
- 3.38 hops/second/channel x 31.6 seconds = 106.67 hops (# hops over a 31.6 second period)
- 106.67 hops x 2.890 ms/channel = 308.28 ms (worst case dwell time for one channel in 1x/EDR modes)

With AFH, the number of channels is reduced to a minimum of 20 channels and the channel hopping rate is reduced by 50% to 800 hops/s. AFH mode also uses 6 total slots so the Bluetooth transmitter hops at a rate of 800 / 6 = 133.3 hops/s/slot

- 400ms x 20 hopping channels = 8 sec (Time of Occupancy Limit)
- Worst case BT has 133.3 hops/second/slot (for AFH mode with DH5 operation)
- 133.3 hops/s / 20 channels = 6.67 hops/second (# of hops/second on one channel)
- 6.67 hops/s / channel x 8 seconds = 53.34 hops (# hops over a 8 second period)
- 53.34 hops x 2.890 ms/channel = 154.15 ms (worst case dwell time for one channel in AFH mode)

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7.7 Number of Hopping Channels §15.247 (a.1.iii); RSS-247 [5.1(4)]

Test Overview and Limit

Measurement is made while EUT is operating in hopping mode. *This frequency hopping system must employ a minimum of 15 hopping channels.*

Test Procedure Used

ANSI C63.10-2013 - Section 7.8.3

Test Settings

- 1. Span = frequency of band of operation (divided into two plots)
- 2. RBW < 30% of channel spacing or 20dB bandwidth, whichever is smaller.
- 3. VBW ≥ RBW
- 4. Sweep = auto
- 5. Detector = peak
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

Test Setup

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



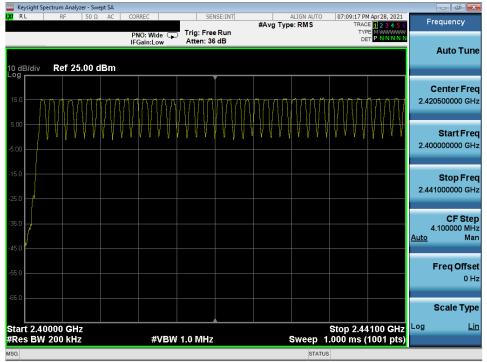
Figure 7-6. Test Instrument & Measurement Setup

Test Notes

The frequency spectrum was broken up into two sub-ranges to clearly show all of the hopping frequencies. In AFH mode, this device operates using 20 channels so the requirement for minimum number of hopping channels is satisfied.

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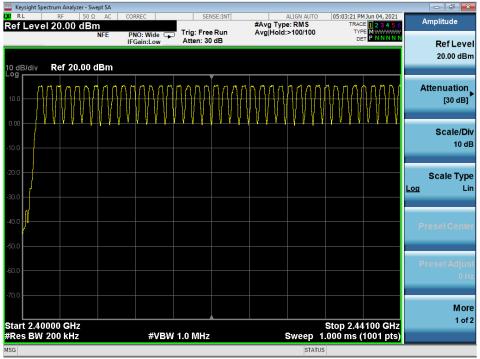
Plot 7-265. Low End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANTO (N)



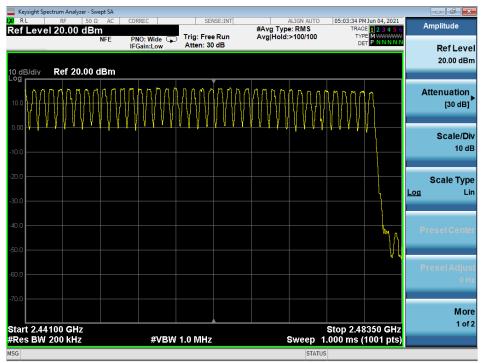
Plot 7-266. High End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT0 (N)

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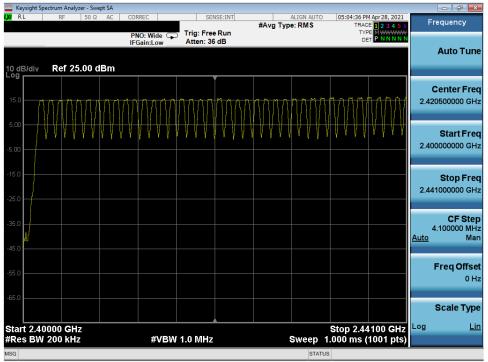
Plot 7-267. Low End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANTO (N)



Plot 7-268. High End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANT0 (N)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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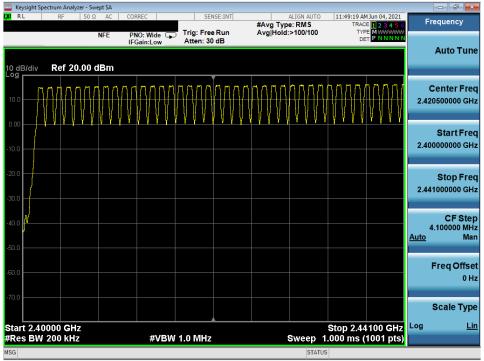
Plot 7-269. Low End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT0 (Q)



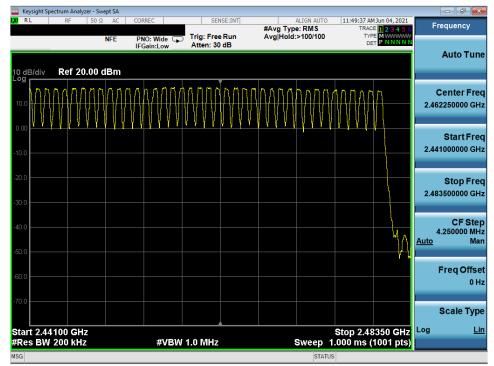
Plot 7-270. High End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT0 (Q)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-271. Low End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANT0 (Q)



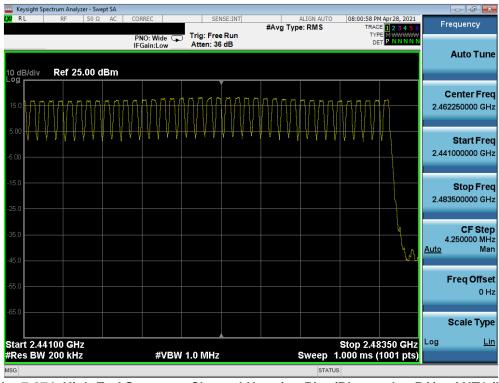
Plot 7-272. High End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANT0 (Q)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Keysight Spectrum Analyzer - Swept SA					
RL RF 50Ω AC		ISE:INT #Avg Ty		00:06 PM Apr 28, 2021 TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 25.00 dBm	PNO: Wide Trig: Free IFGain:Low Atten: 36	⊧Run dB		TYPE M WWWWW DET PNNNNN	Auto Tune
					Center Freq 2.420500000 GHz
5.00					Start Freq 2.400000000 GHz
-15.0					Stop Freq 2.441000000 GHz
-36.0 45.0					CF Step 4.100000 MHz <u>Auto</u> Man
65.0					Freq Offset 0 Hz
					Scale Type
Start 2.40000 GHz #Res BW 200 kHz	#VBW 1.0 MHz		Stoj Sweep 1.000	p 2.44100 GHz ms (1001 pts)	Log <u>Lin</u>
ISG			STATUS		

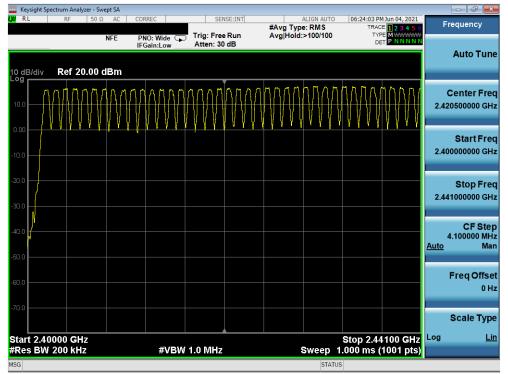
Plot 7-273. Low End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT1 (N)



Plot 7-274. High End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT1 (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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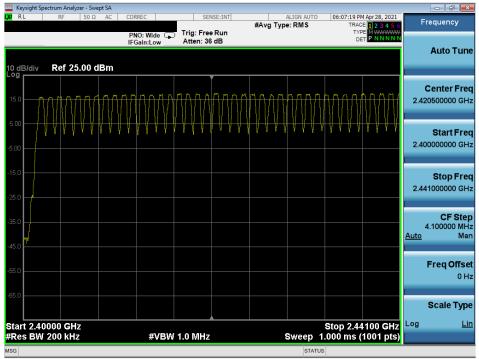
Plot 7-275. Low End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANT1 (N)



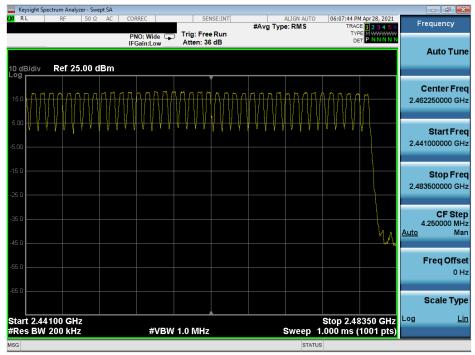
Plot 7-276. High End Spectrum Channel Hopping Plot (Bluetooth, iPA) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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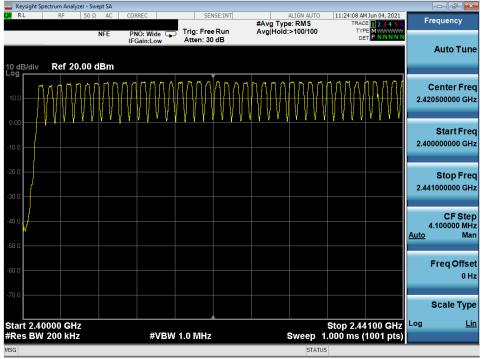
Plot 7-277. Low End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT1 (Q)



Plot 7-278. High End Spectrum Channel Hopping Plot (Bluetooth, ePA) – ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-279. Low End Spectrum Channel Hopping Plot (Bluetooth, iPA) - ANT1 (Q)



Plot 7-280. High End Spectrum Channel Hopping Plot (Bluetooth, iPA) – ANT1 (Q)

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7.8 Conducted Spurious Emissions §15.247 (d); RSS-247 [5.5]

Test Overview and Limit

Conducted out-of-band spurious emissions were investigated from 30MHz up to 25GHz to include the 10th harmonic of the fundamental transmit frequency. *The maximum permissible out-of-band emission level is* 20 dBc.

Test Procedure Used

ANSI C63.10-2013 - Section 7.8.8

Test Settings

- 1. Start frequency was set to 30MHz and stop frequency was set to 25GHz (separated into two plots per channel)
- 2. RBW = 1MHz* (See note below)
- 3. VBW = 3MHz
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep time = auto couple
- 7. The trace was allowed to stabilize

Test Setup

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



Figure 7-7. Test Instrument & Measurement Setup

Test Notes

1. Out-of-band conducted spurious emissions were investigated for all data rates and the worst case emissions were found with the EUT transmitting at 1Mbps. The display line shown in the following plots is the limit at 20dB below the fundamental emission level measured in a 100kHz bandwidth. However, the traces in the following plots are measured with a 1MHz RBW to reduce test time, so the display line may not necessarily appear to be 20dB below the level of the fundamental in a 1MHz bandwidth.

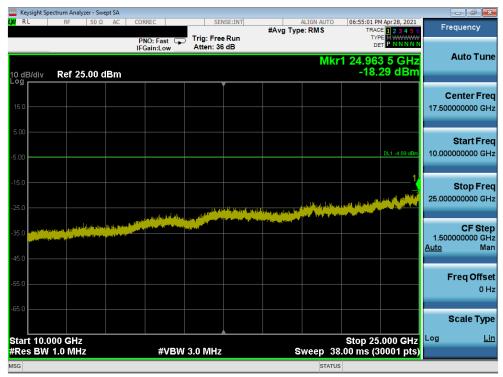
2. This device will be manufactured using two different WIFI chipsets (N and Q). Both two chipsets are tested, and both conducted emissions data is shown in this report.

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	ectrum Analyzer -											
L <mark>XI</mark> RL	RF 50	Ω AC	CORF	REC	SEI	ISE:INT	#Avg Ty	ALIGN AUTO		M Apr 28, 2021	Frequ	ency
10 dB/div	Ref 25.00) dBm		O: Fast ⊊ ain:Low	Trig: Free Atten: 36				۲۲ ס kr1 6.91	8 6 GHz 24 dBm	Au	to Tune
	Rei 25.00											ter Freq 0000 GHz
-5.00										DL1 -4.89 dBm		art Freq 0000 MHz
-15.0								1			St 10.000000	op Freq 0000 GHz
-35.0	Jules, Debenered		Martin and S				ni (ili higʻirgangar Manting fasharad		ala ang ang ang ang ang ang ang ang ang an	a state a second state a second s		CF Step 0000 MHz Man
-55.0											Fre	q Offset 0 Hz
-65.0											Sca Log	ale Type Lin
Start 30 N #Res BW				#VBW	/ 3.0 MHz		ę	Sweep 1	Stop 10 8.00 ms (3	0.000 GHz 00001 pts)	LUg	
MSG								STATU				

Plot 7-281. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANTO (N)



Plot 7-282. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANTO (N)

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	ectrum Analyzer - Sv										f X
X/RL	RF 50 S	2 AC	CORREC		ISE:INT	#Avg Ty	ALIGN AUTO	TRA	M Apr 28, 2021	Frequer	су
10 dB/div	Ref 25.00	dBm	PNO: Fast IFGain:Low	Trig: Free Atten: 36			M	⊳ kr1 6.23	9 6 GHz 85 dBm	Auto	Tune
15.0										Cente 5.0150000	
-5.00									DL1 -4.37 dBm	Star 30.0000	t Freq 00 MHz
-15.0										Stoj 10.0000000	o Freq 00 GHz
-35.0								ingen in Stargensen en in fargen ingen in Legendon anderen an	y ny na polo y katalo y katalo na katalo y katalo na	CI 997.00000 <u>Auto</u>	Step 00 MHz Man
-55.0										Freq	Offset 0 Hz
-65.0											Type
Start 30 N #Res BW			#VBW	/ 3.0 MHz		ę	Sweep 1	Stop 10 8.00 ms (3	0.000 GHz 00001 pts)	Log	Lin
MSG							STATU	s			

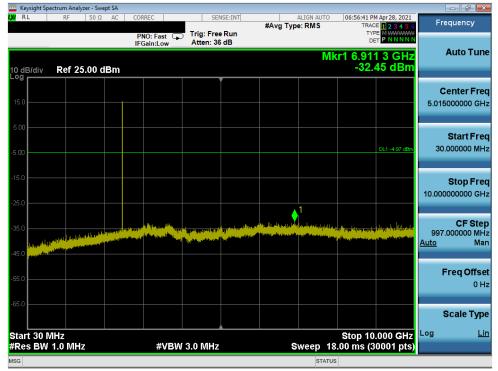
Plot 7-283. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, ePA) - ANTO (N)



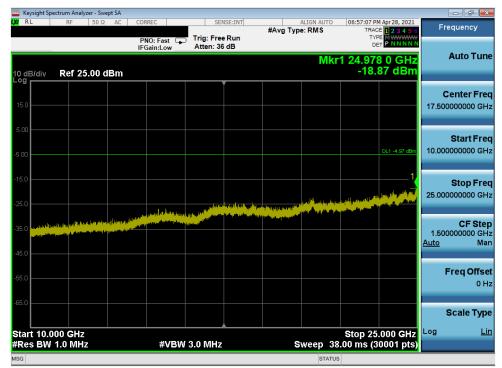
Plot 7-284. Conducted Spurious Plot (Bluetooth, 1Mbps – Ch. 39, ePA) – ANTO (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-285. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANTO (N)



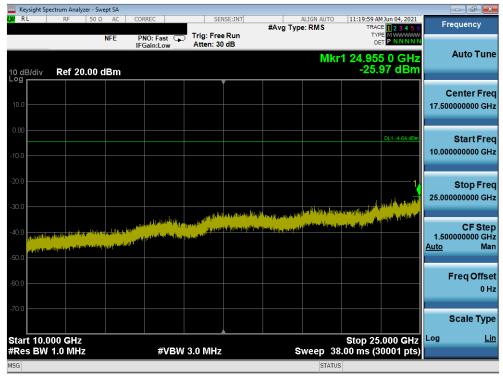
Plot 7-286. Conducted Spurious Plot (Bluetooth, 1Mbps – Ch. 78, ePA) – ANTO (N)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Sw	ept SA									
LXI RL	RF 50 Ω	AC C	ORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUT		AJun 04, 2021	Fre	quency
		NFE	PNO: Fast 🕞 FGain:Low	Trig: Free Atten: 26		#rrtg 19P		TYP			
10 dB/div Log	Ref 15.00 c	lBm					Ν	/lkr1 4.804 -37.5	4 3 GHz 51 dBm	,	Auto Tune
											enter Freq
5.00										5.015	000000 GHz
-5.00									DL1 -4.69 dBm		Start Freq
-15.0										30.0	000000 MHz
-25.0											Stop Freq
25.0				1							000000 GHz
-35.0											05.04.0
-45.0	La strene pages indention fo		in standardina allahatari	and a state of the second s	dia.			in an		997.0 Auto	CF Step 000000 MHz Man
-55.0	ng sherre (Pary to State and state for In Section of the State and states	فاللعظ لنطريا		للروية والكرور والكرور وال	A CALIFORNIA		البيا بليوا برا	ingeneration aread	de gekaslater diffesilt	Auto	Wall
-65.0										F	req Offset
75.0											0 Hz
-75.0										S	cale Type
Start 30 N	MHz							Stop 10	.000 GHz	Log	Lin
#Res BW			#VBW	3.0 MHz		S	weep	18.00 ms (3	0001 pts)		
MSG							STA	TUS			





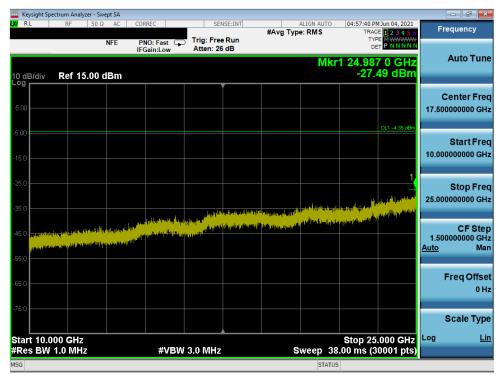
Plot 7-288. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANTO (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	trum Analyzer - Sw										×
X/RL	RF 50 Ω	AC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		M Jun 04, 2021	Frequenc	v
		NFE	PNO: Fast G	Trig: Free Atten: 26		#Avg Typ		T) C			
10 dB/div Log	Ref 15.00 c	lBm					N	/kr1 4.88 -39	1 7 GHz .30 dBm	Auto	Tune
3					1					Center	Freq
5.00										5.01500000	0 GHz
-5.00									DL1 -4.35 dBm		
0.000										Start	Freq
-15.0										30.00000	0 MHz
25.0										Stop	Freq
35.0					1					10.0000000	0 GHz
-33.0				•							
45.0		1	a and a second				and Dispensed replace		a a a ha a si ka kati	CF 997.00000	Step
. sabili				index findering the	المراجع ومعالم مراجع المراجع ومراجع المراجع ومراجع ومراجع المراجع ومراجع ومراجع ومراجع ومراجع ومراجع ومراجع وم المراجع المراجع ومراجع ومراجع المراجع ومراجع ومر	المتحسر السائليان		e service de la constant adjutenting de la constant		Auto	Man
55.0 North Mark	فأستخدر فيتخر ويتقر		469.	Augusta and Aug Augusta and Augusta and August							
.65.0										Freq C	offset
03.0											0 Hz
75.0											
										Scale	Туре
Start 30 Mi								Stop 1	2.000 GHZ	Log	<u>Lin</u>
#Res BW 1	.0 MHz		#VBW	3.0 MHz		s	weep ′	18.00 ms (30001 pts)		
SG							STAT	rus			

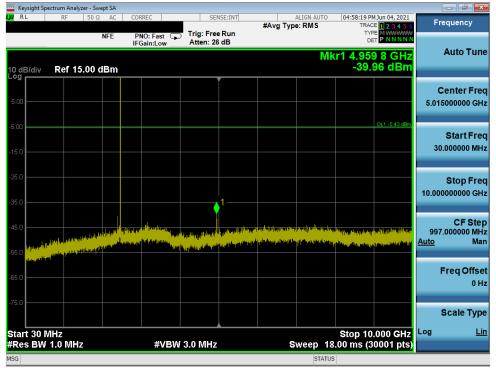
Plot 7-289. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, iPA) - ANTO (N)



Plot 7-290. Conducted Spurious Plot (Bluetooth, 1Mbps – Ch. 39, iPA) – ANTO (N)

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Plot 7-291. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, iPA) - ANTO (N)

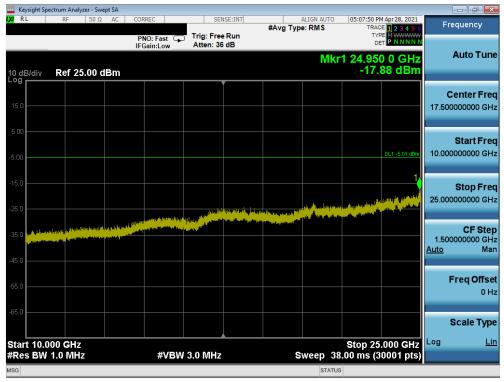


Plot 7-292. Conducted Spurious Plot (Bluetooth, 1Mbps – Ch. 78, iPA) – ANTO (N)

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Keysight Spectrum Analyzer - Swept SA					
ΙΧΊ R L RF 50 Ω ΑΙ	C CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	05:07:21 PM Apr 28, 2021 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 36 dB		DET P NNNN	
10 dB/div Ref 25.00 dBn	n		Mł	r1 6.902 3 GHz -31.68 dBm	Auto Tune
15.0					Center Freq 5.015000000 GHz
-5.00				DL1 -5.01 dBm	Start Freq 30.000000 MHz
-15.0					Stop Freq 10.000000000 GHz
-35.0		ALEA DIVERSION OF THE ADDRESS OF THE		agan bagan karang ka Karang karang	CF Step 997.000000 MHz <u>Auto</u> Man
-45.0 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Freq Offset 0 Hz
-65.0					Scale Type
Start 30 MHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 18	Stop 10.000 GHz .00 ms (30001 pts)	Log <u>Lin</u>



Plot 7-293. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANTO (Q)

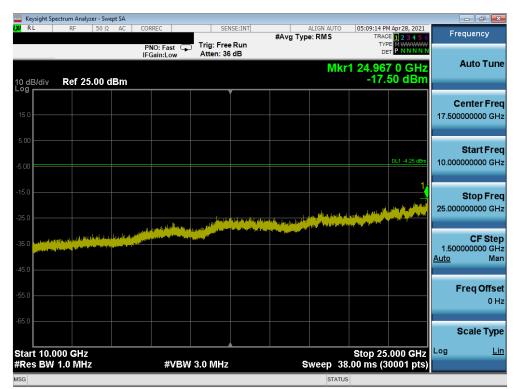
Plot 7-294. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANTO (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Sw										x
L <mark>XI</mark> RL	RF 50 Ω	AC	CORREC	SEI	SE:INT	#Avg Typ	ALIGN AUTO		Apr 28, 2021	Frequency	
10 dB/div	Ref 25.00	dBm	PNO: Fast IFGain:Low	Trig: Free Atten: 36	e Run 6 dB		MI	TYF DE kr1 6.40 4		Auto Tu	ine
15.0										Center Fr 5.015000000 G	
-5.00									DL1 -4.25 dBm	Start Fr 30.000000 M	
-15.0										Stop Fr 10.000000000 G	
	January of the Southeast States					aling ben from the solution They ben when the solution	in Brond (sold for the sold sold sold sold sold sold sold sold	la filosofii en tragen her	a para para ang bagana para para para para para para para p	CF Sto 997.000000 M <u>Auto</u> M	
-45.0										Freq Offs 0	set Hz
-65.0										Scale Ty	/pe Lin
Start 30 N #Res BW			#VBW	3.0 MHz		\$	weep 18	Stop 10 3.00 ms (3	.000 GHz 0001 pts)	-	<u>c.n</u>
MSG							STATU	s			

Plot 7-295. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, ePA) - ANTO (Q)



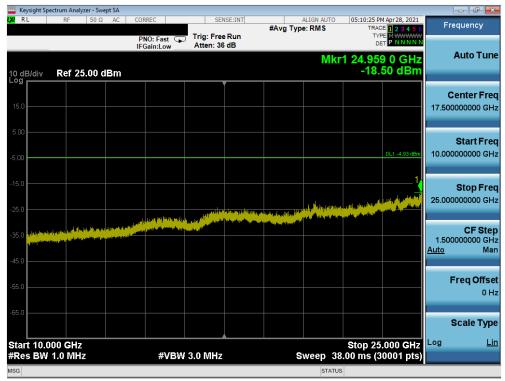
Plot 7-296. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, ePA) - ANTO (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Swe										ð 🗙
X/RL	RF 50 Ω	AC C	ORREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Apr 28, 2021	Frequer	су
			PNO: Fast 🕞 FGain:Low	Trig: Free Atten: 36				TYF			
10 dB/div	Ref 25.00 c	IBm					Mk	r1 6.07 -32.	4 5 GHz 08 dBm	Auto	Tune
15.0										Cente 5.0150000	
-5.00									DL1 -4.93 dBm	Star 30.0000	t Freq 00 MHz
-15.0										Stoj 10.0000000	o Freq 00 GHz
-35.0	politica dan karaka jak	a and second and a second s					a sun d ^{ar} des des processes y da	an a first and a start for the start of the	i i fergi ^k i iniyaksilari Manganaksilari sebelaraksi	CF 997.00000 <u>Auto</u>	Step 00 MHz Man
-45.0										Freq	Offset 0 Hz
-65.0										Scale	e Type
Start 30 N #Res BW			#VBW	3.0 MHz		s	weep 18	Stop 10 00 ms <u>(</u> 3	.000 GHz 0001 pts)		<u>Lin</u>
MSG							STATUS				

Plot 7-297. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANTO (Q)



Plot 7-298. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANTO (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer -										
LXU RL	RF 5	0Ω AC	CORREC	C	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		AM Jun 04, 2021 ACE 1 2 3 4 5 6	Frequency
		NFE	PNO: IFGair	Fast 🖵 n:Low	Trig: Free Atten: 30				т		Auto Tune
10 dB/div Log	Ref 20.0	0 dBm							-39	51 5 GHz .81 dBm	
											Center Freq
10.0											5.015000000 GHz
0.00										DL1 -5.00 dBm	Start Freq
-10.0											30.000000 MHz
-20.0											
-30.0											Stop Freq 10.000000000 GHz
									♦ ¹		CF Step
-40.0		and have a star	i a la paga de la comunicación de l Comunicación de la comunicación de l	hanan ang an Anang ang ang ang ang ang ang ang ang ang	level all the state of the stat	la politica de la compositiva de la com	olihalan kanalan kalan Arabuman kanalan	n al anna an Anna Anna An Anna an Anna Anna	Nije (Minaganagana Maadhika sina da m	n filmen han sekter Les signe plans sign	997.000000 MHz <u>Auto</u> Man
-50.0 <mark>Hydroll^a Marw^{alla}</mark>	and the print part of	A CONTRACTOR			التطعالاتين إغاده رية					ter to the second	
-60.0											Freq Offset
70.0											0 Hz
-70.0											Scale Type
Start 30 I										0.000 GHz	Log <u>Lin</u>
#Res BW					3.0 MHz		s		_	(30001 pts)	
MSG VPoir	nts changed; a	all traces	cleared					STAT	IUS		

Plot 7-299. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANTO (Q)



Plot 7-300. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANTO (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 191 of 222
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	ectrum Analyzer - S										
Center F	RF 50 req 5.0150	Ω AC	CORREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Jun 04, 2021	Fre	equency
		NFE	PNO: Fast G	Trig: Free Atten: 30							
			II Gam.Eow				M	kr1 7.72	2 5 GHz		Auto Tune
10 dB/div	Ref 20.00	dBm						-40.	37 dBm		
Log				Ì						с	enter Frea
10.0										-	5000000 GHz
0.00									DL1 -4.09 dBm		Start Freq
-10.0										30.	.000000 MHz
10.0											
-20.0											Stop Freq
										10.000	000000 GHz
-30.0											
-40.0							•				CF Step
	Literateland	departure of	and a specific the data state of the specific test of te	Service and the second	Benderstellenbergen			And Andrew Control of the		997. Auto	.000000 MHz Man
-50.0 madrilu	and the second second second	نىڭ ۋارىرىنى 1000-يىلىرىنى	teringi ya katala katala ya s	الادرسالة ويعراقه عرأه		The sector of the	de la contratación	al literation de la constante d	الأيالة التعر إلان عقائل		
Station .										F	req Offset
-60.0											0 Hz
-70.0											
										5	Scale Type
Start 30 N	MHz			,				Stop 10	.000 GHz	Log	Lin
#Res BW			#VBW	/ 3.0 MHz		s	weep 1	8.00 ms (3			
мsg 🧼 Poin	its changed; al	II traces	cleared				STATU	IS			





Plot 7-302. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, iPA) - ANTO (Q)

FCC ID: A3LSMF711U	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 182 of 233
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	ectrum Analyzer - S	Swept SA										
LX/RL	RF 50	Ω AC	CORR	EC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		AM Jun 04, 2021	Fr	equency
		NFE	PN	0:Fast ⊂ ain:Low	Trig: Free Atten: 30				T			
			IFGa	ain:Low	Atten. 30	ub .		N	/kr1 6.65	0 1 GHz		Auto Tune
10 dB/div Log	Ref 20.00) dBm							-40	.12 dBm		
Log											C	enter Frea
10.0												5000000 GHz
0.00										DL1 -4.89 dBm		Start Freq
-10.0											30	.000000 MHz
-10.0												
-20.0												Stop Freq
											10.00	0000000 GHz
-30.0							-					
-40 0							<u> </u>					CF Step
	part for an a long fitter of	المهلية مري	in h _{an} ang ng n	nor de protector	Audin planta	Contraction of the second	an a	a la fan de de de la fan de la Fan de la fan de la fa	nda dalampedisaripiti 1	in the search of the life of t	997 Auto	.000000 MHz Man
-50.0 <mark>#####</mark> #	The state of the s	L. A. BARLER	الارتجامين	and the second	فالأر والكامل ومحمد الألا	Contraction of the local data	a second s	a I., tunt i da	مرالي يشتري فلاحالك	التكليف فللتلور إحديد		
												Freq Offset
-60.0												0 Hz
-70.0												
											:	Scale Type
Start 30 N	1Hz								Stop 1	0.000 GHz	Log	Lin
#Res BW				#VBW	/ 3.0 MHz		S	weep	18.00 ms (
MSG 🗼 Poin	ts changed; a	II traces	cleare	d				STA	TUS			

Plot 7-303. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, iPA) - ANTO (Q)



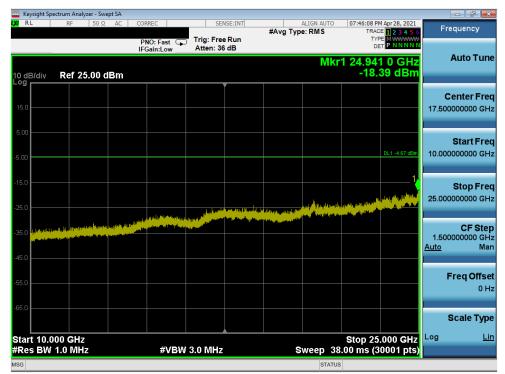
Plot 7-304. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, iPA) - ANTO (Q)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Swe									_	
LXI RL	RF 50 Ω		RREC		ISE:INT	#Avg Typ	ALIGN AUT e: RMS	TRA	M Apr 28, 2021 CE 1 2 3 4 5 6 PE M WWWWW	Frequ	lency
10 dB/div	Ref 25.00 c	IF	NO: Fast ⊊ Gain:Low	Atten: 36			N	₀ /kr1 6.39	et <mark>P NNNNN</mark>	Αι	ito Tune
15.0											n ter Freq 0000 GHz
-5.00									DL1 -4.67 dBm		t art Freq 0000 MHz
-15.0											top Freq 0000 GHz
-35.0							ayaa Mitti Mitti ayaa ayaa Mitti Mitti ayaa		<mark>y nyen yang berkening salah salah</mark>		CF Step 0000 MHz Man
-55.0										Fre	e q Offset 0 Hz
-65.0 Start 30 M	ЛНz							Stop 10	.000 GHz	Sc Log	ale Type <u>Lin</u>
#Res BW			#VBW	3.0 MHz		S	weep	18.00 ms (3	30001 pts)		
MSG							STA	TUS			





Plot 7-306. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANT1 (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analy		it SA										
LX/RL	RF	50 Ω	AC	CORREC		SEI	NSE:INT	#Avg T	ALIGN AUT		7 PM Apr 28, 2021 RACE 1 2 3 4 5 6	Fn	equency
10 dB/div	Ref 2	5.00 di	Зm	PNO: IFGain	Fast 🖵 :Low	Trig: Free Atten: 30				<u>/kr1 7,1</u>	00 1 GHz 2.19 dBm		Auto Tune
15.0													Center Freq 5000000 GHz
-5.00											DL1 -3.61 dBm	30	Start Freq .000000 MHz
-15.0												10.000	Stop Freq
-35.0								n per distriction per			anna i an airte airte Airte airte airt	997 <u>Auto</u>	CF Step .000000 MHz Man
-55.0												i	Freq Offset 0 Hz
-65.0	MU									Stop	10.000 GHz	Log	Scale Type Lin
#Res BW		Z			#VBW	3.0 MHz			Sweep	3.00 18.00 ms	(30001 pts)		
MSG									STA	TUS			





Plot 7-308. Conducted Spurious Plot (Bluetooth, 1Mbps – Ch. 39, ePA) – ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Sw										
LX/IRL	RF 50 Ω	AC CO	RREC		ISE:INT	#Avg Type	ALIGN AUTO e: RMS	TRA	M Apr 28, 2021 CE 1 2 3 4 5 6	Frequenc	су
10 dB/div	Ref 25.00 c	IF	NO: Fast 🕞 Gain:Low	Atten: 36			N	/kr1 6.91 -32.	2 3 GHz 45 dBm	Auto	Tune
15.0										Center 5.01500000	
-5.00									DL1 -2.80 dBm	Start 30.00000	t Freq 10 MHz
-15.0							4			Stop 10.00000000	Freq 00 GHz
-35.0							Alay at the state of the	and the production of the second states and	ny fan yw fan y heferiae fa	CF 997.00000 <u>Auto</u>	Step 0 MHz Man
-55.0										Freq C	Offset 0 Hz
-65.0 Start 30 M	MHz							Stop 10	.000 GHz	Scale	Type
#Res BW			#VBW	3.0 MHz		s	weep	18.00 ms (3	80001 pts)		
MSG							STA	TUS			

Plot 7-309. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANT1 (N)



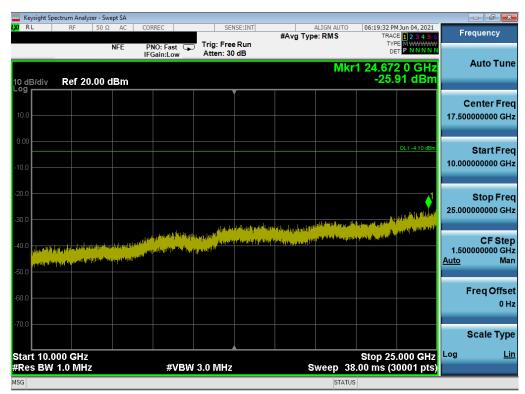
Plot 7-310. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - Sv										×
LXI RL	RF 50 S	2 AC C	ORREC		SE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	4 Jun 04, 2021 E 1 2 3 4 5 6	Frequenc	y
		NFE	PNO: Fast 🕞 FGain:Low	Trig: Free Atten: 30			M	cr1 6.20		Auto	Tune
10 dB/div Log	Ref 20.00	dBm						-39.9	94 dBm		
10.0										Center 5.01500000	
-10.0									DL1 -4.10 dBm	Start 30.000000	
-20.0										Stop 10.00000000	
-40.0	unterchaller by the data by the first of the	A Physical Holice		ing a start of the	n _{pe} dina (phylia) In a felix cardiala		uranya restanting		with lives to a part lives "	CF 997.000000 <u>Auto</u>	Step 0 MHz Man
-60.0	and and a second se									Freq C	Offset 0 Hz
-70.0 Start 30 M	ΛЦ-7							Stop 10	.000 GHz	Scale	Type Lin
#Res BW			#VBW	/ 3.0 MHz		s	weep 18	3.00 ms (3	.000 GH2 0001 pts)		2000
MSG							STATU	5			

Plot 7-311. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANT1 (N)



Plot 7-312. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 197 of 222
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	ectrum Analyze										
X RL Center F		50 Ω AC		SEI	NSE:INT	#Avg Typ	ALIGN AUTO e: RMS		M Jun 04, 2021	Freq	uency
Centerr	164 J.01	NFE	PNO: Fast					T			
			IFGain:Lov	Atten: 30	Jub		NA1	-4 7 70	2 5 GHz	A	uto Tune
10 dB/div Log	Ref 20.0	00 dBm					IVIT		.37 dBm		
					Ĭ					Ce	nter Freg
10.0											00000 GHz
											_
0.00									DL1 -4.09 dBm		tart Freq
											00000 MHz
-10.0											
-20.0											
-20.0											top Freq
-30.0										10.0000	00000 GHz
							1				
-40.0						and the second state				007.00	CF Step
	A STATE OF STREET		kerikang and finite All hide		n <mark>jenicestinen</mark> t					Auto	Man
-50.0 <mark>mətr^{ilu}</mark>	and the second s	an a	ALCAR - FILME	alle and a second second second					True Collection		
الافادا ويعل										En	eq Offset
-60.0											0 Hz
70.0											
-70.0										Sc	ale Type
Start 30 N			-43			_			0.000 GHz	Log	Lin
#Res BW				/BW 3.0 MHz		S			30001 pts)		
ISG 🕹 Poin	ts changed	; all traces	cleared				STATUS	5			

Plot 7-313. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, iPA) - ANT1 (N)



Plot 7-314. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, iPA) - ANT1 (N)

FCC ID: A3LSMF711U	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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X RL RF 50 Ω AC CORREC SENSE:INT ALIGN AUTO 11:44:47 AM Jun 04,2021 #Avg Type: RMS TRACE 12:3:45:6 Trig: Free Run Type NFE PNO: Fast PLOYE Fast PLOYE Attack: 20 dP	Frequency
10 dB/div Ref 20.00 dBm -40.12 dBm	Auto Tune
	Center Freq 5.015000000 GHz
0.00 DL1 -4,99 dBm	Start Freq 30.000000 MHz
-20.0	Stop Freq 10.000000000 GHz
	CF Step 997.000000 MHz <u>Auto</u> Man
-60.0	Freq Offset 0 Hz
Start 30 MHz Stop 10.000 GHz	Scale Type _og <u>Lin</u>
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 18.00 ms (30001 pts)	

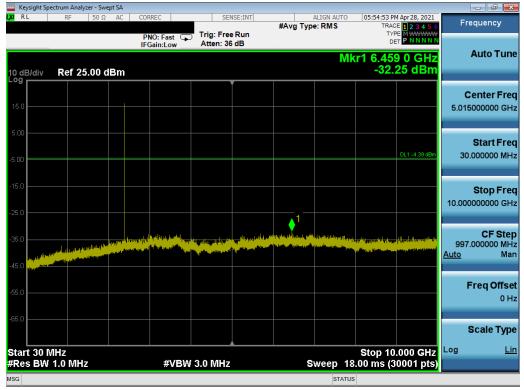




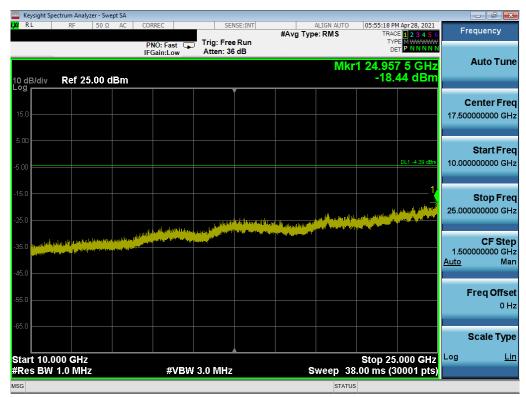
Plot 7-316. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, iPA) - ANT1 (N)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-317. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANT1 (Q)



Plot 7-318. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, ePA) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 100 of 222
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	ectrum Analyzer - Sw								
X/RL	RF 50 Ω		RREC		#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Apr 28, 2021	Frequency
10 dB/div	Ref 25.00	IF	NO: Fast Ģ Gain:Low	Atten: 36		Mk	DE 71 6.41	^{P NNNNN} 8 8 GHz 49 dBm	Auto Tune
15.0									Center Freq 5.015000000 GHz
-5.00								DL1 -3.05 dBm	Start Freq 30.000000 MHz
-15.0					<u> </u>				Stop Fred 10.000000000 GHz
45.0							ر ا - رو بر	a daga sa ki da ƙasar	CF Step 997.000000 MH2 <u>Auto</u> Mar
55.0									Freq Offse 0 Hi
-65.0	MH2						Stop 10	.000 GHz	Scale Type
#Res BW			#VBW	3.0 MHz	s	weep 18	.00 ms (3	.000 GH2 0001 pts)	
ISG						STATUS	;		

Plot 7-319. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, ePA) - ANT1 (Q)



Plot 7-320. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 39, ePA) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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PNO: Fast Trig: Free Run #Avg Type: RMS Trace 12.34 35 or provide 12.34 36 or provide 12.3		ectrum Analyzer - Sw			1					
Atten: 36 dB Mkr1 3.688 7 GHz -32.02 dBm Center Free 5.01500000 GH 150 0 0 0 0 0 0 0 0 0 0 0 0 0	XI RL	RF 50 S						TRAC	E 1 2 3 4 5 6	Frequency
150 Center Free 500 Cull -291 den 500 Cull -90 den -90	10 dB/div	Ref 25.00	IF				Mk	r1 3.68	TPNNNN 37GHz	Auto Tune
Start Free Start Free S	15.0									Center Freq 5.015000000 GHz
250 Stop Free 350 Stop Free 30	-5.00								DL1 -2.91 dBm	Start Freq 30.000000 MHz
997.00000 MH Auto Ma Freq Offse 0 H Stop 10.000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 18.00 ms (30001 pts)	-15.0			. 1						Stop Fred 10.000000000 GHz
550 Freq Offse 550 Scale Typ 550 Start 30 MHz Stop 10.000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 18.00 ms (30001 pts)	-35.0	الم المراجع من المراجع المراجع المراجع المراجع					a Marsha Tina Karga Lennan San Marka Andrea San Jawa San Marka Andrea San Jawa	ng ang ting in a sing sa sing s Sa sing sing sa	n being per statistic op bitser per st aller an op bitser per statistic op bitser per statistic op bitser per statistic op bitser per statistic op bits	CF Step 997.000000 MH2 <u>Auto</u> Mar
tart 30 MHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 18.00 ms (30001 pts)	.55.0									Freq Offse 0 H:
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 18.00 ms (30001 pts)								Stop 10	.000 GHz	Scale Type
	#Res BW	1.0 MHz		#VBW	3.0 MHz	S		.00 ms (3	0001 pts)	

Plot 7-321. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANT1 (Q)



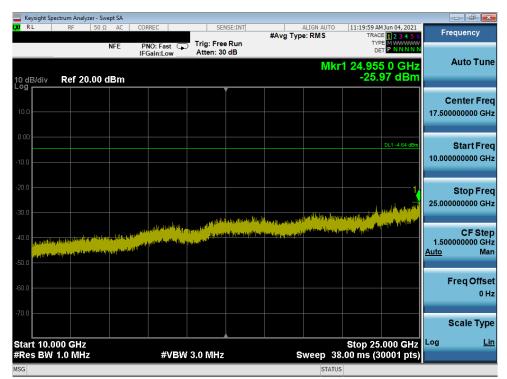
Plot 7-322. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 78, ePA) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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	ectrum Analyzer - S										d x
LXI RL	RF 50	Ω AC	CORREC		NSE:INT	#Avg T	ALIGN AUTO	TR	AM Jun 04, 2021 ACE 1 2 3 4 5 6	Frequ	iency
10 dB/div	Ref 20.00	NFE dBm	PNO: Fast IFGain:Low	Trig: Fre Atten: 3			N	lkr1 7.6	67 0 GHz	Αι	ito Tune
10.0											iter Freq 0000 GHz
-10.0									DL1 -4.64 dBm		art Freq 0000 MHz
-20.0											top Freq 0000 GHz
-40.0	and the particular of the second s	real fails for	liter gest fill finder states se states	Sing the Angulan to pycate the Angulan to pycate the Angulan to pycate the Angulan to pycate the Angulan to the					ng ja pheal ya para sa shi ta ya n Ana fana da pata shi na a ƙasa M		CF Step 0000 MHz Man
-60.0										Fre	q Offset 0 Hz
-70.0 Start 30 F								Stop 1	0.000 GHz	Sc: Log	ale Type <u>Lin</u>
#Res BW			#V	3W 3.0 MHz				18.00 ms	(30001 pts)		
MSG							STAT	US			

Plot 7-323. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANT1 (Q)



Plot 7-324. Conducted Spurious Plot (Bluetooth, 1Mbps - Ch. 0, iPA) - ANT1 (Q)

FCC ID: A3LSMF711U	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 102 of 222
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