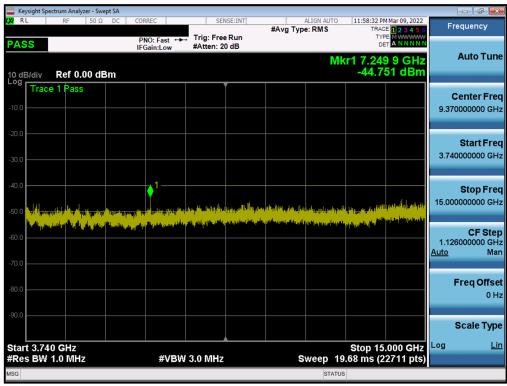


Keysight Spectrum Analyzer - S										- 6 🔀
LXI RL RF 50 9	Ω DC (CORREC	SEI	ISE:INT	#Avg Typ	ALIGN AUTO	11:56:48 PMI TRACE	Mar 09, 2022	Fre	quency
PASS		PNO: Fast ↔ IFGain:Low	Trig: Fre #Atten: 2				TYPE			Auto Tune
10 dB/div Ref 0.00 d	IBm					M	(r1 3.292 -45.52	4 GHz 7 dBm	,	Auto Tune
-10.0										enter Freq 000000 GHz
-20.0										Start Freq 000000 MHz
-40.0 -50.0				and a short fi	يتقاطرون والمراجع	F Gardan Hindi, Akt alberd	lersen Munder under so			Stop Freq 000000 GHz
-60.0	a la _{ser} a la constitución a la constitución de la constitución a la constitución de la constitución de la constitución de la constitución de la constitución de la constitución de			a distante de la serie de la serie	his david its order over the of				348.0 <u>Auto</u>	CF Step 000000 MHz Man
-80.0									Fi	re q Offset 0 Hz
-90.0									S	cale Type
Start 30 MHz #Res BW 1.0 MHz		#VBV	V 3.0 MHz			Sweep 4	Stop 3.5 .767 ms (7		Log	<u>Lin</u>
MSG						STATUS		no prov		

Plot 7-14. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel)



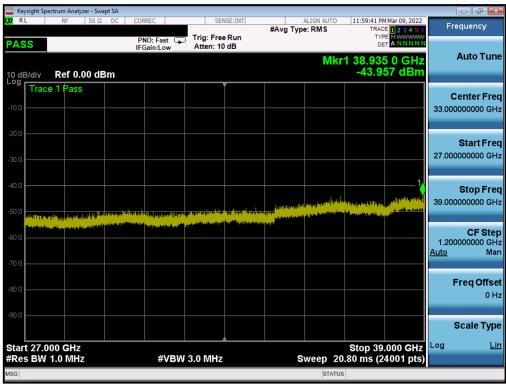
Plot 7-15. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel)

FCC ID: A3LSMG996U	PCTEST Proud to be part of @element	PART 96 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 00 of 40
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	ctrum Analyzer - S							
X/RL	RF 50	Ω DC	CORREC	SENSE:I		ALIGN AUTO	11:58:55 PM Mar 09 TRACE 12	
PASS			PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 10 dB			TYPE MWA DET A N	
10 dB/div	Ref 0.00 (dBm				Mkr	1 26.473 0 0 -49.588 d	9172
Trace	1 Pass			Ĭ				Center Fr
-10.0								21.000000000 G
-20.0								Start Fr
-30.0								15.00000000 G
-40.0								Stop Fr
-50.0							e and the first of the state of	27.00000000 G
	ing the state of the state of the state	and the state	and a street with the street of the street o	a nagar sharaya sana ay	a s _{elect} oria de la constante	 Margari, Breesen, and Providence and Annual Statements 	a a lakas i akan manani i subahati i	CF St
-60.0	handdal marind allang yn y gel	la se iswa wikiki Midit						1.20000000 G <u>Auto</u> M
								Freq Offs
-80.0								0
-90.0								Scale Ty
Start 15.00 #Res BW			#\/R\M	3.0 MHz		Sween 20	Stop 27.000 .80 ms (24001	GHz Log l
	1.0 10112		#0000	5.0 WINZ		Sweep 20		
						SIAIOC		

Plot 7-16. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel)



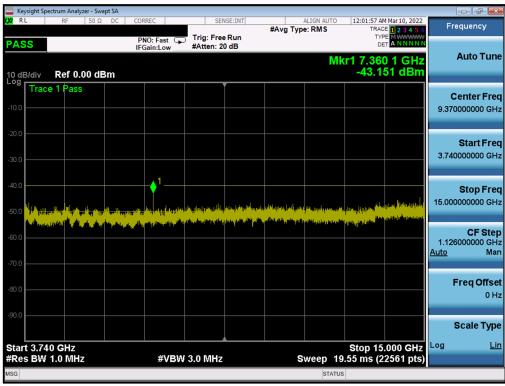
Plot 7-17. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel)

FCC ID: A3LSMG996U	PCTEST Proud to be part of @element	PART 96 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	D 00 (40
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ASS PNO: Fast IFGsini.low Trig: Free Run #Atten: 20 dB #Avg Type: RMS Trig: Free Quency Auto Tune Mkr1 3.598 8 GHz -43.864 dBm Auto Tune 0 dB/div Ref 0.00 dBm -43.864 dBm Center Freq 1.835000000 GHz 000 Trace 1 Pass Image: Center Freq 1.835000000 GHz Start Freq 3.64000000 GHz 000 Image: Center Freq 1.835000000 GHz Image: Center Freq 1.835000000 GHz Start Freq 3.64000000 GHz 000 Image: Center Freq 1.835000000 GHz Image: Center Freq 1.835000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 1.835000000 GHz Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 1.835000000 GHz Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz 000 Image: Center Freq 3.64000000 GHz Image: Center Freq 3.64000000 GHz Image: Cente	Keysight Spectrum Analyzer - Swept SA			- 7 -
ASS PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Mkr1 3.598 8 GHz -43.864 dBm Auto Tune 0 dB/div Ref 0.00 dBm -43.864 dBm -43.864 dBm Center Freq 1.83500000 GHz 000 Image: State of the state of t	LX/ RL RF 50Ω DC	CORREC SENSE:INT		Frequency
og Trace 1 Pass Center Freq 10.0 Start Freq 20.0 Start Freq	PASS 10 dB/div Ref 0.00 dBm		Mkr1 3.598 8 GHz	Auto Tune
S00 Start Freq Start Freq Start	Log			
500 Stop Freq 500 Stop Stop Freq 500 Stop Stop Freq 500 Stop Stop Stop Stop Stop Stop Stop Stop	-20.0			
361.000000 MHz Auto Man Freq Offset 0 Hz Scale Type Log Lin Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.309 ms (7281 pts)	-40.0	and the second		Stop Freq 3.640000000 GHz
tart 30 MHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.309 ms (7281 pts)	-60.0 0000000000000000000000000000000000	a filosof ya Kin kilosof ya kutoka kutoka kutoka kilosofia. Na kutoka kutoka kilosofia kutoka kilosofia kilosofia kilosofia kilosofia kilosofia kilosofia kilosofia kilosofi		361.000000 MHz
tart 30 MHz Stop 3.640 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.309 ms (7281 pts)	-80.0			Freq Offset 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.309 ms (7281 pts)				
STATUS	Start 30 MHZ #Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 6.309 ms (7281 pts)	
	MSG		STATUS	

Plot 7-18. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)



Plot 7-19. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)

FCC ID: A3LSMG996U	PCTEST Proud to be part of @element	PART 96 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		D 04 (40
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Keysight Spectrum Analyzer - Swept					@ <mark></mark>
ΙΧΙ RF 50 Ω	DC CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	12:02:13 AM Mar 10, 2022 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 10 dB			
10 dB/div Ref 0.00 dBn	n		Mkr	1 26.274 0 GHz -49.513 dBm	Auto Tune
-10.0					Center Freq 21.000000000 GHz
-30.0					Start Freq 15.00000000 GHz
-40.0	un dan kanala dan kanala sa	10	مترابط محرور والمرابع		Stop Freq 27.000000000 GHz
-60.0	na di kang panganan kang bertang kang bertang bertang bertang bertang bertang bertang bertang bertang bertang Kang bertang be	ann fa an tha ann an tha a Tha an tha an	angender og for ander angender og for ander angender og for er for ander angender og for er for ander angender Angender og for ander angender og for angender og	a na mang pang sa dina na kang balang na na kang balang kang balang balang balang balang balang balang balang b	CF Step 1.20000000 GHz
-70.0					<u>Auto</u> Man
-80.0					Freq Offset 0 Hz
-90.0					Scale Type
Start 15.000 GHz #Res BW 1.0 MHz	#VBW :	3.0 MHz	Sweep 20	Stop 27.000 GHz .80 ms (24001 pts)	Log <u>Lin</u>
MSG			STATUS	3	

Plot 7-20. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)



Plot 7-21. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)

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Test Report S/N:	Test Dates:	EUT Type:	D 05 (40
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7.5 Band Edge Emissions at Antenna Terminal §2.1051 §96.41(e)(ii)

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed -25 dBm/MHz. The conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 6.0

Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW \geq 1% of the emission bandwidth
- 4. VBW ≥ 3 x RBW
- 5. Detector = RMS
- 6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
- 7. Trace mode = trace average
- 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 7-4. Test Instrument & Measurement Setup

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NR Band n48



Plot 7-22. Channel - Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel)

L	GHT ↔→	Input: RF Coupling: Align: Aut	DC Co o Fro	ut Z: 50 Ω rr CCorr eq Ref: Int (S) E: Off	Atten: 26 dB	Ga	g: Free Run te: LO Gain: Low	Center Freq Radio Std: N	: 3.62500000 Ione	0 GHz	Center Fre 3.625000 CF Step		Settings
All Ran	ge Grap	⊳h ▼									728.0020	00 MHz	
cale/Di	v 10.0	dB			Ref Value 30.	00 dBm					Auto		
. og				ſ							Man		
10.0											Freq Offse 0 Hz	t	1
		_											
20.0													
40.0													
50.0													
tart 3.5	50 GH	z							Sto	p 3.700 GHz			
All Ran	ge Tabl	ə 🔻											
							Measure Tra	ce		Trace 1			
							Тгасе Туре		Trace Avera				
	Spur	Range	Start Freq	Stop Freq	RBW	Free	quency	Amplitude	∆Lim	it			
	1				z 1.000 MHz			-50.26 dBm	-25.20				
	2				z 1.000 MHz			-37.82 dBm	-24.8				
	3			z 3.6050 GH			96667 GHz	-37.01 dBm	-24.0				
	4 5	4		z 3.6450 GH				2.359 dBm	-22.6				
					z 750.0 kHz	2 6450	71667 GHz	-36.04 dBm	-23.04				

Plot 7-23. Channel - Edge Plot (NR Band n48 - 40MHz QPSK - Mid Channel)

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