

Multi¥iew 📕	Spectrur	บ	X	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectru	m 4 🗙	Spectrur	n 6	x				•
Ref Level Att	25.00) dBm 20 dB	Offse SWT	t 43.94 dB 14 ms	9 ● RB 9 VB	₩ 1 MHz ₩ 3 MHz	Mode A	luto Sweep								SC Cc	GL Sunt 3	100/100
1 Frequence	y Swi	еер															01	.Rm Avg
															M1	[1]		5.59 dBm
20 dBm																4	0.00	0000 GHz
10 dBm																		
									144									
0 dBm															^	1	~	
														ſ	ື (1 L	_
10 40													ſ					
											M	A1						
FCC PART 30																		
-20 dBm																	M1	
													ı				•	
-30 dBm									+				\rightarrow		+			
			I			m	May and	\sim	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	فمسينه	have been		4	and the second		Some	٦ /	
-40 d8m																		
-50 dBm																		
-60 dBm																		
-70 dBm																		
36.75 GHz						700	DI pts			35	0.0 MHz/						-4	J.25 GHz
	~											~	Ready				DA .	19:13:09

19:13:09 04.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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7.6.6 MIMO Band Edge Maximized on Antenna A







Plot 7-538. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-539. Band Edge Plot (50MHz BW 8CC QPSK Low Channel)



Plot 7-540. Band Edge Plot (100MHz BW 8CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 215 of 256
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Plot 7-541. Band Edge Plot (50MHz BW 8CC NC QPSK Low Channel)





FCC ID: A3LAT1K02-A00	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-545. Band Edge Plot (50MHz BW 8CC QPSK High Channel)





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-547. Band Edge Plot (50MHz BW 8CC NC QPSK High Channel)



Plot 7-548. Band Edge Plot (100MHz BW 8CC NC QPSK High Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 210 of 256
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7.6.7 Antenna A Conducted Band Edge Maximized on Antenna B

ACLRResults

Multi¥iew 📑	Spec	brum 🚦	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectru	m 4 🗙	Spectrum 6	×			•
Ref Level	30.	00 dBm	Offs	et 42.57 dB	s ● RBV	/ 1 MHz								9	GL	
Att		25 dB	SWT	14 ms	s ● VBW	3 MHz	Mode Au	to Sweep						(Count	100/100
1 Frequence	cy S	weep													0	
														M1[1]	-	17.84 dBm
20 dBm															37.00	00000 GHz
20 0611																
10 dBm																
10 0011	-															
0 dBm																
-10 dBm-																
FCC PART 38	1															
-20 dBm	·															
-30 dBm																
and the second second second second	1	under na fan fan de		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-			Non-Manageria						en an	United a	in in the second states
-40 dBm																
-50 dBm																
-60 dBm																
36 75 CHz	,					700	1 nte			35						I0 25 CHz
30.73 GH2	_	*				700	n pus			- 33	0.0.101127		Ready			03.03.2020
																20:15:25



ACLRResults Vpper BE 100M X Upper BE 800M Lower BE 100M X Output Power X Lower BE 800M × Offset 42.57 dB RBW 1 MHz SWT 28 ms VBW 3 MHz Mode Auto Sweep Ref Level 23.72 dBm Offse Att 20 dB SWT SGL Count 100/100 Att PA 1 Frequency Sweep o1Rm Avg Limit M1[1] -29.81 dBm 37.000000 GH 35.0 GHz 15000 pts 700.0 MHz/ 42.0 GHz 24.02.2020 14:44:42

14:44:42 24.02.2020

Plot 7-550. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	ASUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 220 of 256
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Ref Level 30.00 dBm Offset 42.57 dB * RBW 1 MHz SGL • Att 20 dB SW1 14 ms * VBW 3 MHz Mode Auto Sweep • 18m Avg • Trequency Sweep • 18m Avg M1[1] • 25.48 dBm 37.000000 GHz 20 dB Image: Control of State 42.57 dB * RBW 1 MHz Image: Control of State 42.57 dB * RBW 1 Mz Image: Control of State 42.57 dB * RBW 1 Mz Image: Control of State 42.57 dB * RBW 1 Mz <t< th=""><th>Multi¥iew 📕</th><th>Spectrum</th><th>×</th><th>Spectrum 3</th><th>×</th><th>Spectrum 5</th><th>></th><th>Spectrum 2</th><th><mark></mark>★ ×</th><th>Spectru</th><th>m 4 🗙</th><th>Spectrum 6</th><th>×</th><th></th><th></th><th>-</th></t<>	Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	>	Spectrum 2	<mark></mark> ★ ×	Spectru	m 4 🗙	Spectrum 6	×			-
1 Frequency Sweep - 0 dbm -	Ref Level Att PA	30.00 dBm 20 dB	Offse SWT	t 42.57 dB 4 14 ms 4	■ RBV ■ VBV	VIMHz VIMHz	Mode #	Auto Sweep						9	GL Count 1	00/100
20 dBm 37.000000 GHz 20 dBm 40 dBm 10 dBm 40 dBm -10 dBm 40 dBm -20 dBm 40 dBm -30 dBm 40 d	1 Frequence	cy Sweep													0 1F	Rm Avg
20 dBm 10 dBm -10 d	00.10													M1[1]	-25 37.000	.48 dBm 000 GHz
10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -20	20 dBm-															
0 dam	10 dBm															
-10 dbm -20 dbm -30 dbm -40 dbm -50 dbm -50 dbm -50 dbm -60 dbm -70	0 dBm		m													
FPC PART 36 Image: Control of C	-10 dBm															
-60 dBm -60 dBm -70 dB	FCC PART 30															
	M	, , , , , , , , , , , , , , , , , , ,														
-40 dBm -50 dBm -60 dBm -70	-30 dBm			William and and	***											
-50 dBm -60 dBm 36.75 GHz 7001 pts 350.0 MHz/ 40.25 GHz Ready C 03.03.2020	-40 dBm				· •••				*****		*****		and the second	******	i daniy ingina d	an a
-60 d8m -60 d8m -70	-50 dBm															
-60 dBm 36.75 GHz 7001 pts 350.0 MHz/ 40.25 GHz Ready 7001 pts 350.0 MHz/ 40.25 GHz	So dom															
36.75 GHz 7001 pts 350.0 MHz/ 40.25 GHz 40.25 GHz	-60 dBm															
36.75 GHz 7001 pts 350.0 MHz/ 40.25 GHz 40.25 GHz 350.0 MHz/ 40.25 GHz																
✓ Ready	36.75 GHz					700	1 pts			35	0.0 MHz/				40	.25 GHz
		~										▼ R	eady		## 03	3.03.2020 21:25:06

21:25:06 03.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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MultiView 📑	Spectrum	×	Spectrum 3	×	Spectrum 5		× Spe	ectrum 2	×	Spectru	1m 4 🗙	Spe	ectrum 6	×			•
Ref Level Att	l 25.00 dBr 20 di	n Offse B SWT	et 42.57 dE 14 ms	8 • RBV 8 • VBV	VIMHz VI3MHz	Mode	Auto S	weep							s	GL ount 1	00/100
1 Frequence	cy Sweep															01	Rm Avg
															M1[1]	-25	.81 dBm
20 dBm																37.000	000 GHz
10 dBm-																	
0 dBm	~ M	~	**	- M	<u> </u>	^	١	×1									
								ļ									
-10 dBm——		T															
FCC PART 30																	
-20 dBm																	
M 1	1																
-30 d8m																	
oo abiii					1			ĮĮ									
mand	Summer	hand	mane 1	\sim	June	Nered .	1		and the second	and the second		and the second		-	and the second	يرت الانتصاف	
-40 dBm																	
-50 dBm																	
-60 dBm																	
70.10																	
-70 aBm																	
36.75 GHz	2				700)1 pts				35	0.0 MHz/					40	.25 GHz
	~											~	Ready	[131 0	4.03.2020 10:52:57

10:52:58 04.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectrum	n 4 🗙	Spectrum 6	x			-
Ref Level Att	30.00 dBm 20 dB	Offse SWT	t 43.94 dB 14 ms	RBW VBW	1 MHz 3 MHz I	Mode Au	ito Sweep						s c	GL ount 1	00/100
1 Frequenc	y Sweep													0 1F	Rm Avg
00 Jan													M1[1]	-20 0.000	.67 dBm 000 GHz
20 060															
10 dBm														M	
0 dBm															
-10 dBm															
FCC PART 30														М1	
-20 dBm														Ĭ	
-30 dBm					al more a				-	a a standard and a standard and a standard a				\downarrow	
-40 dBm			and the second s				lini ant in the second								
-50 dBm															
10.10															
-00 uBM															
36.75 GHz					7001	pts			35	0.0 MHz/				40	.25 GHz
	~										- Read	ly 🔳		W 03	3.03.2020 20:02:46

20:02:46 03.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew	Spectrum	×	Spectrum 3	×	Spectrum 5	>	Spectrum 2	×	Spectru	m 4 🗙	Spectrum 6	×]			•
Ref Level • Att PA	25.00 dBm 15 dB	Offse S₩T	t 43.94 dE 14 ms	8 • RB\ s • VB\	NI 1 MHz NI 3 MHz	Mode)	Auto Sweep							e (GL Count	100/100
1 Frequenc	y Sweep															1Rm Avg
20 dBm													1	41[1]	-3 40.00	5.44 dBm 0000 GHz
10 dBm																
0 dBm													مريب مراجع	in Alberto	. burthe	
-10 dBm-															m	
FCC PART 30																
-20 d8m																
-40 dBm										Sector and the sector of the last		for your proves			M	1
nigen für für förstande som		للجادة (رو العربية الع	arthir street, state				(ardini (a) and a data data									
-50 dBm																
-60 dBm																
-70 dBm																
36.75 GHz					700	1 pts			35	0.0 MHz/					4	0.25 GHz
	v										▼ R	teady			690	04.03.2020 00:54:23

00:54:24 04.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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7.6.8 Antenna B Conducted Band Edge Maximized on Antenna B

ACLRResults

Multi¥iew		ipectrun	n <mark>,</mark>	×	Spectrum 3	×	(Spectrum 5		×	Spectrum 2	×	Spects	rum 4	X	Spectrum 6	×			•
Ref Le [.] • Att PA	vel∶	30.0C) dBm 25 dB	Offs S₩T	et 42.57 d 14 m	B • RE s • VE	3 W 3 W	1 MHz 3 MHz	Mode	Aut	o Sweep		_					(SGL Count	100/100
1 Freque	ency	/ Swe	еер																0	1Rm Avg
20 dBm																		M1[1]	- 37.0	16.57 dBm 00000 GHz
10 d0m																				
0 dBm-	*																			
-10 dBm																				
FCC PART	M1																			
-20 ubm—																				
-30 dBm-	J	-				a vien y de la cala					-									n la contration de la contra
-40 dBm—																				
-50 dBm—																				
-60 dBm—																				
36.75 G	Hz							700	1 pts				35	50.0 MH	lz/					40.25 GHz
																⇒ Re	eady			03.03.2020
20:14:57	03	03.2	020																	



ACLRResults Vpper BE 100M X Upper BE 800M Lower BE 100M X Output Power X Lower BE 800M × Offset 42.57 dB RBW 1 MHz SWT 28 ms VBW 3 MHz Mode Auto Sweep Ref Level 23.72 dBm Offse Att 20 dB SWT SGL Count 100/100 Att PA 1 Frequency Sweep Limit M1[1] -31.33 dBn 37.000000 GHz 35.0 GHz 15000 pts 700.0 MHz/ 42.0 GHz 24.02.2020 14:43:00

14:43:01 24.02.2020

Plot 7-562. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	UNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 206 of 256
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	>	Spectrum 2	<mark></mark> ★ ×	Spectru	m 4 🗙	Spectrum 6	×			-
Ref Level Att	30.00 dBm 20 dB	Offse SWT	t 42.57 dB (14 ms (■ RBV ■ VBV	VIMHz VIMHz	Mode /	Auto Sweep						5	GL ount 1	00/100
1 Frequenc	y Sweep													01	Rm Avg
													M1[1]	-22	.22 dBm
														37.000	000 GHz
	فالمتارية والمتحد أتلحده	the set													
0 d8m															
-10 dBm-															
-20 dBm 1															
-30 dBm															
- Handler and		1	White and the												
and the second se				· / "	read to the second second				Propriet in a	alay hay na hay na shi ka s	ليوبدو المرسوسية		han in ingegraphic participants	*****	
-40 dBm															
36.75 GHz					700	1 pts			35	0.0 MHz/				40	.25 GHz
	~											ndy [696 03	3.03.2020
															21.24.31

21:24:32 03.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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MultiView 🖬 Spectrum 🗙 Spectrum 3 🗙 Spectrum 5 🗙 Spectrum 2 🗶 Spectrum 4 X Spectrum 6	× -
Ref Level 25.00 dBm Offset 42.57 dB RBW 1 MHz ● Att 20 dB SWT 14 ms VBW 3 MHz Mode Auto Sweep PA	SGL Count 100/100
1 Frequency Sweep	• 1Rm Avg
	M1[1] -25.64 dBm
20 dBm	37.000000 GHz
10 dBm-	
-10 dBm	
FCC PART 30	
-20 dBm	
-30 dBm	
	and the second s
-50 dBm-	
-60 dBm-	
-70 dBm-	
36.75 GHz 7001 pts 350.0 MHz/	40.25 GHz
v Ready	04.03.2020 10:52:21

10:52:21 04.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 200 of 256
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Multi¥iew	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectrur	n 4 🗙	Spectrum 6	×			•
RefLevel • Att PA	30.00 dBm 20 dB	Offse SWT	t 43.94 dB 4 14 ms 4	RBW VBW	1 MHz 3 MHz	Mode A	uto Sweep						s c	GL ount 10	00/100
1 Frequenc	y Sweep													O 1 F	tm Avg
													M1[1]	20- 0.000	.67 dBm 000 GHz
20 dBm															
10 dBm														×	
O dBm															
-10 dBm															
FCC PART 30														М1	
-20 dBm															
-30 dBm													and sector to the total	Д	
-40 dBm	ng an dia pangan manga	to any second second second													
-50 dBm															
-60 dBm															
36.75 GHz					7001	pts			35	0.0 MHz/				40	25 GHz
	v										 Read 	y 🛄		999 03	.03.2020 20:02:46

20:02:46 03.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 🗧	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectrur	m 4 🗙	Spectrum 6	x			•
RefLevel • Att PA	25.00 dBm 15 dB	Offse SWT	t 43.94 dB 14 ms	● RBW ● VBW	/ 1 MHz / 3 MHz	Mode A	uto Sweep							SGL Count	100/100
1 Frequenc	y Sweep														1Rm Avg
20 dBm													M1[1	1] -2 40.00	27.90 dBm 00000 GHz
10 dBm															
0 dBm															
-10 dBm-														\square	
FCC PART 30															
-20 uBm															
-40 dBm										1		ynnyenyndd	لم	,	
		مين وروي وياري مراجع المراجع ا													
-50 dBm															
-60 dBm-															
-70 dBm															
36.75 GHz					700	nts			35	0.0 MHz/					0.25 GHz
	*									,		dy [04.03.2020 00:54:50

00:54:50 04.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spect	rum	x	Spectrum 3	×	Spectrum	15	×	Spectrum 2	×	Spectru	ım 4	×	Spectrum 6	×	1			•
Ref Leve • Att PA	1 25.0	00 dBm 20 dB	Offs SWT	et 43.94 d 14 m	IB • RE 1s • VE	3W 1 MH 3W 3 MH	z z Mod	e Aut	o Sweep								:	SGL Count	100/100
1 Frequen	cy Sv	veep																0	LRm Avg
20 dBm																	M1[1]	-2 40.00	0.86 dBm 0000 GHz
10 dBm																		~	
0 dBm											~))					-		
-10 dBm-													ky	M					
FCC PART 30														ΠL.					
-20 dBm																		M	
-30 dBm								4											
					~	\wedge	\sim	$^{\sim}$	$\sim \wedge$	Jun /	~		Lun				/	. J	\sim
-40 dBm	*****	****			~				New Y										
-50 dBm																			
-60 dBm																			
-70 dBm																			
06 75 011													. ,						0.05.011
30.75 GH2	<u> </u>					_ /	UUT PIS				35	50.0 MF	127					4	0.25 GHZ
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15:02:26 0	4.03	.2020																	



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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7.6.9 Antenna C Conducted Band Edge Maximized on Antenna B

ACLRResults







14:45:08 24.02.2020

Plot 7-574. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST* Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Multi¥iew	Spectrum	×	Spectrum 3	×	Spectrum 5	x	Spectrum 2	★ ×	Spectru	m 4 🗙	Spectrum 6	×			•
Ref Level • Att PA	22.57 dBm 10 dB	Offs SWT	et 42.57 dB 14 ms	● RBW ● VBW	V/1 MHz V/3 MHz Mod	de Au	ito Sweep						s	GL ount 100	/100
1 Frequent	cy Sweep												M1[1] ;	• 1Rm -42.99 37.00000	Avg 9 dBm 0 GHz
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FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Ref Level 22.57 dB Offset 42.57 dB RBW 1 MHz Mode Auto Sweep Count 100/100 • Att 10 dB SWT 14 ms • UBW 3 MHz Mode Auto Sweep • IPm Avg 10 fbrequency Sweep • IPm Avg M1[1] - 43.17 dBm 37.000000 GHz 37.000000 GHz 10 dbm • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg • IPm Avg	Multi¥iew 📕	Spectrum	Xs	pectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectru	m 4 🗙	Spectrum 6	×			•
PA 1 Frequency Sweep • • 1Em Avg 20 dim • • • • 11 [1]43.17 dBm 37.000000 GHz 10 dim • • • • • • • • • • • • • • • • • • •	Ref Level Att	l 22.57 dBm 10 dB	Offset SWT	42.57 dB 14 ms	● RBV ● VBW	/ 1 MHz / 3 MHz	Mode A	uto Sweep						e (GL Count 100	/100
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-50 dBm -60 dBm -70 dBm -70 dBm -75 GHz 7001 pts 350.0 MHz/ 40.25 GHz	~~~~	Same L		\sim	4	- Anne	man 1	سبها أسيبه	and the second second	and second se	والمساوية والمدونة ومدمنا والم	hennersterker, steine gebe				(
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ACLRResults





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Multi¥iew	Spect	rum	×	Spectrum 3	×	Spectrum 5		×	Spectrum 2	×	Spectru	m 4 🗙	Spectrum 6	X			-
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ACLRResults



Plot 7-580. Band Edge Plot (100MHz BW 1CC QPSK High Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectru	m 4 🗙	Spectrum 6	X			•
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36.75 GHz					7001	pts			35	0.0 MHz/				40.25	GHz
	v										Ready			999 04.03 00:	.2020 53:51





ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	>	Spectrum	2	X Spe	ctrum	4	×	Spectrum 6	×]			-
Ref Level • Att PA	25.00 dBm 20 dB	Offse SWT	t 43.94 dB 14 ms	● RB₩ ● VBW	/ 1 MHz / 3 MHz	Mode	Auto Sweep									:	SGL Count 1	00/100
1 Frequenc	y Sweep																0 1	Rm Avg
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10 dBm																		
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-10 dBm										┦╢								
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15:01:28 04.03.2020



ACLRResults





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7.6.10 Antenna D Conducted Band Edge Maximized on Antenna B

MultiView Concerning Spectrum Ref Level 30.00 Att 2 PA 1 Frequency Swe 20 dBm 10 dBm	oldBm Offs 20 dB S₩T Ceep	spectrum 3 et 42.57 dB ● 14 ms ●	X Spectrum 5 RBW 1 MHz VBW 3 MHz	Mode Auto Swi	eep	Spectrum 4	Spectrum 6	×	SGL Count 100/100
RefLevel 30.00 Att 2 PA I Frequency Swe 20 dBm 10 dBm	odBm Offs 20dB SWT eep	et 42.57 dB ● 14 ms ●	RBW 1 MHz VBW 3 MHz	Mode Auto Swi	eep				SGL Count 100/100 • 1Rm Avg
20 dBm-	eep								• 1Rm Avg
20 dBm									
								M1	[1] -34.91 dBn 37.000000 GH
FCC PART 30									
-30 d8m									
-40 dBm		and a state of a state of the s	and a subscription of the	**************************************					
36.75 GHz			700	l pts		350.0 MHz/			40.25 GHz
~							Read	·۷	20:16:44



ACLRResults Vpper BE 100M lti¥iew X Output Power X Lower BE 800M X Upper BE 800M x Ref Level 23.72 dBm Offset 42.57 dB RBW 1 MHz Att 25 dB SWT 28 ms VBW 3 MHz Mode Auto Sweep SGL Count 100/100 Att PA 1 Frequency Sweep Limit M1[1] -23.97 dBm dBr Line FCC PART 30 100M BW 37.000000 GH 35.0 GHz 15000 pts 700.0 MHz/ 42.0 GHz 24.02.2020 14:43:35

14:43:35 24.02.2020

Plot 7-586. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST* Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	>	Spectrum 2	×	Spectrum	n 4 🗙	Spectrum 6	×			•
Ref Level	22.57 dBr	n Offse	t 42.57 dE	8 • RB	🛿 1 MHz								s	GL	
Att PA	10 di	B S₩T	14 ms	s 🗢 VB1	N 3 MHz	Mode	Auto Sweep						С	ount 100	/100
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20 dBm													M1[1]	-43.2	2 dBm
													:	37.00000	0 GHz
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لے _															
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FCC PART 30			ab i	1 8.0	M	NA	M								
-20 dBm	h M	N^™	<u> </u>	٩۴											
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-50 dBm															
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36.75 GHz					700	I pts			350	J.U MHZ/				40.2	5 GHz
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ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectrum	n 4 🗙	Spectrum 6	×			•
Ref Level Att	30.00 dBm 20 dB	Offse SWT	t 43.94 dB 14 ms	RBW VBW	1 MHz 3 MHz	Mode Ai	uto Sweep						Si Ci	GL ount 10	0/100
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20:04:02 03.03.2020



ACLRResults



Plot 7-592. Band Edge Plot (100MHz BW 1CC QPSK High Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Multi¥iew 📕	Spectrum 🕌	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectrum	n 4 🗙	Spectrum 6	×		•
Ref Level • Att PA	30.00 dBm 20 dB	Offse SWT	et 42.57 dB 14 ms	● RBV ● VBV	VIMHz VIMHz	Mode A	uto Sweep						9 (GL Count 100/100
1 Frequence	ty Sweep													O1Rm Avg
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oo abiii														
36.75 GHz					700	1 pts			350).0 MHz/				40.25 GHz
	*										~	Ready		03.03.2020 20:16:44

20:16:45 03.03.2020



ACLRResults





FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Multi¥iew 📕	Spectrum	×	Spectrum 3	×	Spectrum 5	×	Spectrum 2	×	Spectru	m 4	×	Spectrum 6	×]			•
Ref Level • Att PA	25.00 dBm 20 dB	Offse SWT	t 43.94 dB 14 ms	● RB¥ ● VB¥	/ 1 MHz / 3 MHz	Mode A	luto Sweep								s c	GL ount 1	00/100
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0 dBm								- M									
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FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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7.6.11 MIMO Band Edge Maximized on Antenna B



Plot 7-597. Band Edge Plot (50MHz BW 1CC QPSK Low Channel)



Plot 7-598. Band Edge Plot (100MHz BW 1CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-599. Band Edge Plot (50MHz BW 8CC QPSK Low Channel)



Plot 7-600. Band Edge Plot (100MHz BW 8CC QPSK Low Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-601. Band Edge Plot (50MHz BW 8CC NC QPSK Low Channel)





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Plot 7-604. Band Edge Plot (100MHz BW 1CC QPSK High Channel)

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Plot 7-605. Band Edge Plot (50MHz BW 8CC QPSK High Channel)





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Plot 7-607. Band Edge Plot (50MHz BW 8CC NC QPSK High Channel)



Plot 7-608. Band Edge Plot (100MHz BW 8CC NC QPSK High Channel)

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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7.7 Frequency Stability / Temperature Variation §2.1055

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Test Procedure Used

ANSI C63.26-2015 Section 5.6

Test Settings

- 1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
- 2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
- 3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup



Figure 7-1. Test Instrument & Measurement Setup

The EUT was measured using horn antenna connected to a spectrum analyzer. The EUT was placed inside an environmental chamber.

Test Notes

None

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Frequency Stability Measurements §2.1055

OPERATING FREQUENCY:

REFERENCE VOLTAGE:		120.00		VAC	
VOLTAGE (%)	POWER (VAC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %		+ 20 (Ref)	38,500,145,744	0	0.0000000
100 %		- 30	38,500,145,702	-42	-0.0000001
100 %	100.00	- 20	38,500,145,709	-35	-0.0000001
100 %		- 10	38,500,145,710	-34	-0.0000001
100 %		0	38,500,145,711	-33	-0.0000001
100 %	120.00	+ 10	38,500,145,712	-32	-0.0000001
100 %		+ 20	38,500,145,744	0	0.0000000
100 %		+ 30	38,500,145,709	-35	-0.0000001
100 %		+ 40	38,500,145,734	-10	0.0000000
100 %		+ 50	38,500,145,734	-10	0.0000000
85 %	102.00	+ 20	38,500,145,707	-37	-0.0000001
115 %	138.00	+ 20	38,500,145,705	-39	-0.0000001

38,499,960,000

Hz

Table 7-27. Frequency Stability Data

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 251 of 256
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Frequency Stability Measurements §2.1055



Figure 7-2. Frequency Stability Graph

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Test Report S/N:	Test Dates:	EUT Type:		Dega 252 of 256
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung 5G Access Unit Model: AT1K02-A00** complies with all the requirements of Part 30.

FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 252 of 256
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9.0 APPENDIX A

9.1 VDI Mixer Verification Certificate

	Suite 309 arlottesville, VA 22902 hone: 434-297-3257 Fax: 434-297-3258
ginia Diodes, Inc.	
Certif	icate of Conformance
PCTEST Engineering Laboratory	From: Virginia Diodes, Inc
6660-B Dobbin Road Columbia, MD 21045	979 2nd St. SE Suite 309
United States	Charlottesville, VA 22902
Shipping Date: 05/14/18	Today's Date: 05/14/18
Module / SN: SAX 252	- Spectrum Analyzer Extension
The VDI product(s) in this shipment meet(s) the accordance with the corresponding Purchase O obtained in accordance with VDI's Quality Mana salibration have been calibrated with equipment NIST) and through NIST to the International Sy	 Spectrum Analyzer Extension guidelines for performance specifications established in rder. Data presented in the User Guide, where applicable, has been gement System. All instruments, used to obtain data, which require traceable to the National Institute of Standards and Technology stem of Units (SI).

FCC ID: A3LAT1K02-A00	Proud to be part of @ element	(CERTIFICATION)	SAMSUNG	Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dago 254 of 256
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Virginia Diodes, Inc 979 2nd St. SE Suite 309 Charlottesville, VA 22902 Phone: 434-297-3257 Fax: 434-297-3258

Certificate of Conformance

To: PCTEST Engineering Laboratory 6660-B Dobbin Road Columbia, MD 21045 United States

From: Virginia Diodes, Inc 979 2nd St. SE Suite 309 Charlottesville, VA 22902

Shipping Date: 05/08/18

Today's Date: 05/08/18

Quantity

Shipped Unit EA 1

Description VDIWR8.0SAX WR8.0SAX - Spectrum Analyzer Extension Module; SN: SAX 253.

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).

Authorized Signature Virginia Diodes, Inc

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FCC ID: A3LAT1K02-A00	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 255 of 256
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Certificate of Conformance

To: PCTEST Engineering Laboratory 6660-B Dobbin Road Columbia, MD 21045 United States From: Virginia Diodes, Inc 979 2nd St. SE Suite 309 Charlottesville, VA 22902

Shipping Date: 05/21/18

Today's Date: 05/22/18

Quantity Shipped 1

Unit Description EA VDIWR5.1SAX

WR5.1SAX - Spectrum Analyzer Extension Module; SN: SAX 254.

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).

Authorized Signature

Virginia Diodes, Inc

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FCC ID: A3LAT1K02-A00	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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