



Plot 7-85. Lower Band Edge Plot (LTE Band 12 - 3MHz QPSK - Full RB)

Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+				Frequenc	y ,
KEYSIGHT RLT ↔ Coupling DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB μW Path: Standard	PNO: Balanced Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (Trig: Free Run	RMS 1 2 3 4 5 6 A WW WW W A P N N N N	Center Frequency 716.000000 MHz	Settings
1 Spectrum			ļ		16.004 MHz	Span 4.00000000 MHz	
Scale/Div 10 dB		Ref Level 25.00 dl	3m		16.659 dBm	Swept Span Zero Span	
15.0						Full Span	
5.00						Start Freq 714.000000 MHz	
5.0		1_				Stop Freq 718.000000 MHz	
		h	hann	0.		AUTO TUNE	
					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	CF Step 400.000 kHz	
						Auto Man	
55.0						Freq Offset 0 Hz	
enter 716.000 MHz		#Video BW 300 k	Hz		Span 4.000 MHz	X Axis Scale	
Res BW 100 kHz		WILLEO BW 500 K		Sweep 1.	00 ms (1001 pts)	Log Lin	
	<b>Jan 06, 2022</b> 12:48:11 PM	$\Box$				Signal Track (Span Zoom)	

Plot 7-86. Upper Band Edge Plot (LTE Band 12 - 3MHz QPSK – Full RB)

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Plot 7-87. Lower Band Edge Plot (LTE Band 12 – 1.4MHz QPSK – Full RB)



Plot 7-88. Upper Band Edge Plot (LTE Band 12 – 1.4MHz QPSK – Full RB)

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## LTE Band 13



Plot 7-89. Lower Band Edge Plot (LTE Band 13 - 10MHz QPSK – Full RB)

Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+		Frequency	, 米
KEYSIGHT Input: RF R L T +++ Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB PNO: Bes µW Path: Standard Gate: Off IF Gain: L Sig Track	Trig: Free Run A∀	VWWWW 769.000000 MHz	tings
1 Spectrum v Scale/Div 10 dB		Ref Level 15.00 dBm	Mkr1 774.92 -61.82	1 dBm Swept Span	
Log 5.00 Trace 1 Pass				Full Span	
-5.00				Start Freq 763.000000 MHz	
				Stop Freq 775.000000 MHz	
-35.0				AUTO TUNE CF Step	
				1.200000 MHz	
-65.0		น่านการสารที่สารการสารทำใหญ่การสารทำให้หารูประหารู้หารูประหารูประหารูประหารูประหารูประหารูประหารูประหารูประหาร	underungen under Allen under einen sollen einen eine	Freq Offset 0 Hz	
Center 769.000 MHz #Res BW 6.8 kHz		#Video BW 30 kHz	Span 1 Sweep 81.9 ms (	2.00 MHz 4001 pts)	Local
	<b>?</b> Jan 06, 2022 1:25:31 PM			Signal Track (Span Zoom)	

Plot 7-90. Lower Emission Mask Plot (LTE Band 13 - 10MHz QPSK – Full RB)

FCC ID: A3LSMA135U	POLTEST* Poud to be part of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+				Frequence	y <b>₹</b>
KEYSIGHT Input: RF R L T ↔ Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB µW Path: Standard	PNO: Balanced Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Powe Trig: Free Run	r (RMS <mark>123456</mark> A <del>WW WW W</del> A N N N N N	Center Frequency 787.000000 MHz	Settings
Spectrum v				Mkr1	787.020 MHz	Span 4.00000000 MHz	
Cole/Div 10 dB		Ref Level 25.00 dE	3m		-25.462 dBm	Swept Span Zero Span	
						Full Span	
5.00						Start Freq 785.000000 MHz	
15.0						Stop Freq 789.000000 MHz	
		My 1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			AUTO TUNE	
						CF Step 400.000 kHz	
55.0						Auto Man	
						Freq Offset 0 Hz	
center 787.000 MHz Res BW 100 kHz		#Video BW 300 kl	Hz	Sweep	Span 4.000 MHz 1.00 ms (1001 pts)	X Axis Scale Log Lin	
	<b>?</b> Jan 06, 2022 1:25:59 PM					Signal Track (Span Zoom)	1

Plot 7-91. Upper Band Edge Plot (LTE Band 13 - 10MHz QPSK - Full RB)

Spectrum Analyzer 1	Spectrum Analyzer 2 Channel Power	+				Frequer	icy 🔻 🕌
KEYSIGHT     Input: RF       R L T     Imput: RF       Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB μW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: F Trig: Free Ri	Power (RMS <mark>12345</mark> un AWWWW ANNNN	799.500000 MHz	Settings
Spectrum v	I			Mkr1	793.120 25 MH	Span 2 13.0000000 MHz	
cale/Div 10 dB		Ref Level 20.00 dE	3m		-49.100 dBr	Swept Span Zero Span	
10.0						Full Span	
0.00						Start Freq 793.000000 MHz	
						Stop Freq 806.000000 MHz	
						AUTO TUNE	
10.0						CF Step 1.300000 MHz	
	<b>h</b> .					Auto Man	
	La company and the second		warennengedernenaferstel	*************************	an-generation and all a the general states	Freq Offset 0 Hz	
enter 799.500 MHz Res BW 6.8 kHz		#Video BW 30 kH	z	Sw	Span 13.00 MH eep 88.5 ms (4001 pts	LOG	
	<b>J</b> an 06, 2022 1:27:05 PM					Signal Track (Span Zoom)	

Plot 7-92. Upper Emission Mask Plot (LTE Band 13 - 10MHz QPSK – Full RB)

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Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+		Frequency 🔹
KEYSIGHT     Input: RF       R L T     Imput: RF       Align: Auto		#Atten: 36 dB µW Path: Standard Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS <mark>1</mark> 23456 Trig: Free Run A WWWWW A N N N N N	Center Frequency 777.000000 MHz Span
Spectrum v scale/Div 10 dB		Ref Level 25.00 dBm	Mkr1 776.996 MHz -19.757 dBm	4.00000000 MHz
og Trace 1 Pass				Zero Span
				Full Span
5.00				Start Freq 775.000000 MHz
5.0		1		Stop Freq 779.000000 MHz
				AUTO TUNE
5.0	, marine			CF Step 400.000 kHz
i5.0				Auto Man
				Freq Offset 0 Hz
enter 777.000 MHz Res BW 100 kHz		#Video BW 300 kHz	Span 4.000 MHz Sweep 1.00 ms (1001 pts)	X Axis Scale Log Lin
- n n -	<b>?</b> Jan 06, 2022 1:28:30 PM			Signal Track (Span Zoom)

Plot 7-93. Lower Band Edge Plot (LTE Band 13 - 5MHz QPSK - Full RB)

Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+		Frequency	・栄
KEYSIGHT Input: RF R L T + A Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB PNO: Best Wide µW Path: Standard Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS <mark>1</mark> 23456 Trig: Free Run A <del>WWWW</del> ANNNN	Center Frequency 769.000000 MHz	Settings
1 Spectrum v Scale/Div 10 dB		Ref Level 15.00 dBm	Mkr1 774.991 MHz -58.755 dBm	Swept Span	
Log 5.00 Trace 1 Pass				Zero Span Full Span	
-5.00				Start Freq 763.000000 MHz	
-25.0				Stop Freq 775.000000 MHz	
-45.0				AUTO TUNE CF Step 1.200000 MHz	
-55.0			1	Auto Man	
-75.0	Colorania da na da na da na da na da	anteren eta anteren ante		Freq Offset 0 Hz X Axis Scale	Local
Center 769.000 MHz #Res BW 6.8 kHz		#Video BW 30 kHz	Span 12.00 MHz Sweep 81.9 ms (4001 pts)	Log	Looar
1 C L	<b>?</b> Jan 06, 2022 1:28:58 PM	$\square$		Signal Track (Span Zoom)	

Plot 7-94. Lower Emission Mask Plot (LTE Band 13 - 5MHz QPSK - Full RB)

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Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power Input Ζ: 50 Ω	#Atten: 36 dB PNO: B	Balanced #Avg Type: Powe		Frequency	y <b>1</b> 2
KEYSIGHT Input: RF L + A Coupling: DC Align: Auto		#Atten: 36 dB PNO. Ε μW Path: Standard Gate: C IF Gain Sig Tra	Off Trig: Free Run	r(RMS <mark>1</mark> 23456 A <del>WWWWW</del> ANNNNN	Center Frequency 787.000000 MHz	Settings
Spectrum v Scale/Div 10 dB	F	ef Level 25.00 dBm	Mkr1	787.000 MHz -20.822 dBm	Span 4.00000000 MHz Swept Span Zero Span	
Trace 1 Pass					Full Span	
5.00					Start Freq 785.000000 MHz	
15.0		1			Stop Freq 789.000000 MHz	
5.0		how	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	AUTO TUNE	
					400.000 kHz	
55.0					Man Freq Offset 0 Hz	
Senter 787.000 MHz Res BW 100 kHz		Video BW 300 kHz	Sweep	Span 4.000 MHz 1.00 ms (1001 pts)	X Axis Scale	
1 n C I	Jan 06, 2022 1:29:45 PM		(LTE Band 13 - 5		Signal Track (Span Zoom)	

Plot 7-95. Upper Band Edge Plot (LTE Band 13 - 5MHz QPSK - Full RB)

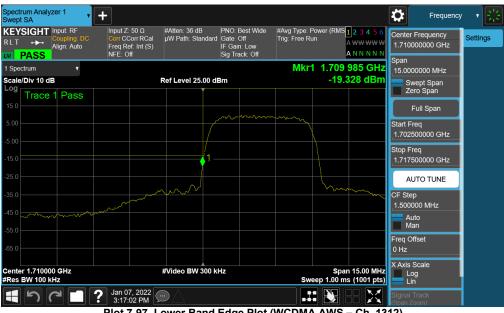
Spectrum Analyzer 1 Swept SA	Spectrum Analyzer 2 Channel Power	+		Frequency	· · · 😤
KEYSIGHT Input: RF R L T + A Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB PNO: Best μW Path: Standard Gate: Off IF Gain: Lo Sig Track:	Trig: Free Run AWWWW	Center Frequency 799.500000 MHz	Settings
Spectrum v			Mkr1 793.191 75 MHz	Span 13.0000000 MHz	
cale/Div 10 dB		Ref Level 20.00 dBm	-60.509 dBm	Swept Span Zero Span	
				Full Span	
				Start Freq 793.000000 MHz	
				Stop Freq 806.000000 MHz	
0.0				AUTO TUNE	
				CF Step 1.300000 MHz	
60.0 60.0				Auto Man	
70.0		นอนทุ่มไปที่มีประชาวอาการกำเหลือการกำเหลือการการการการการ	฿๛ๅ๚๚๛๛๚๛๚๚๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛	Freq Offset 0 Hz	
enter 799.500 MHz Res BW 6.8 kHz		#Video BW 30 kHz	Span 13.00 MHz Sweep 88.5 ms (4001 pts		Local
<b>1</b> 50	<b>7</b> Jan 06, 2022 1:30:07 PM	$\mathbf{D}$		Signal Track (Span Zoom)	

Plot 7-96. Upper Emission Mask Plot (LTE Band 13 - 5MHz QPSK - Full RB)

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## WCDMA AWS



Plot 7-97. Lower Band Edge Plot (WCDMA AWS – Ch. 1312)

Spectrum Analyzer 1	+			Frequency 🕇 🔆
KEYSIGHT       Input: RF         L       →→         Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB PNO: Fast µW Path: Standard Gate: Off IF Gain: Lo Sig Track: (		Center Frequency 1.707000000 GHz Span
1 Spectrum			Mkr1 1.709 000 GHz	4.00000000 MHz
Scale/Div 10 dB		Ref Level 25.00 dBm	-14.844 dBm	Swept Span Zero Span
15.0				Full Span
5.00				Start Freq 1.705000000 GHz
-5.00				Stop Freq 1.709000000 GHz
-25.0	a a sta (Martala Arayan Sada	and the second and the second second	Way ( shared are see marphage a character and a strategy of the second second second second second second second	AUTO TUNE
-35.0	ALT WAR AND A CONTRACTOR			CF Step 400.000 kHz
-45.0				Auto Man
-65.0				Freq Offset 0 Hz
Center 1.707000 GHz #Res BW 1.0 MHz		#Video BW 3.0 MHz	Span 4.000 MHz Sweep 1.00 ms (1001 pts)	
1 C C C	2 Jan 07, 2022 3:17:28 PM			Signal Track (Span Zoom)

Plot 7-98. Lower Extended Band Edge Plot (WCDMA AWS - Ch. 1312)

FCC ID: A3LSMA135U	POIL to be part of the element	PART 27 MEASUREMENT REPORT	SUNG	Approved by: Technical Manager	
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EYSIGHT Input: RF L T +++ Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	µW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pov Trig: Free Run	wer (RMS <mark>123456</mark> A <del>WW WW W</del> A N N N N N	Center Frequency 1.755000000 GHz Span	Setting
Spectrum v cale/Div 10 dB		Ref Level 25.00 dE	Bm	Mkr1	1.755 015 GHz -21.466 dBm	15.0000000 MHz	
		~~~~~				Full Span	
.00						Start Freq 1.747500000 GHz	
		1				Stop Freq 1.762500000 GHz	
5.0		. h.					
5.0			, mult		······································	CF Step 1.500000 MHz	
5.0						Man Freq Offset	
5.0						0 Hz	
enter 1.755000 GHz Res BW 100 kHz		#Video BW 300 kł	łz	Swee	Span 15.00 MHz p 1.00 ms (1001 pts)	X Axis Scale Log Lin	

Plot 7-99. Upper Band Edge Plot (WCDMA AWS – Ch. 1513)

Spectrum Analyzer 1 Swept SA	+					Frequency	, • 🐺
KEYSIGHT Input: RF R L T →→ Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	µW Path: Standard	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Rur	wer (RMS <mark>1</mark> 23456 A W W W W A N N N N N	Center Frequency 1.758000000 GHz	Settings
1 Spectrum				Mkr1	1.756 000 GHz	4.00000000 101112	
Scale/Div 10 dB		Ref Level 25.00 dE	m		-15.366 dBm	Swept Span Zero Span	
15.0 Trace 1 Pass						Full Span	
5.00						Start Freq 1.756000000 GHz	
-5.00						Stop Freq 1.760000000 GHz	
25.0	and the second of the second o	near his manager and the first	Amagen			AUTO TUNE	
				hon all horas	๛๛ๅ๛๛๚๚๛๚๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛	CF Step 400.000 kHz	
.45.0						Auto Man	
-65.0						Freq Offset 0 Hz	
Center 1.758000 GHz #Res BW 1.0 MHz		#Video BW 3.0 MH	lz	Swee	Span 4.000 MHz ep 1.00 ms (1001 pts)	X Axis Scale Log	
	Jan 07, 2022 3:18:33 PM					Signal Track (Span Zoom)	

Plot 7-100. Upper Extended Band Edge Plot (WCDMA AWS - Ch. 1513)

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LTE Band 66/4



Plot 7-101. Lower Band Edge Plot (LTE Band 66/4 - 20MHz QPSK - Full RB)

Spectrum Analyzer 1				Trace	- * 崇
RLT + Coupling: DC Align: Auto Fre	but Z: 50 Ω Atten: 36 dB rr CCorr RCal μW Path: Stan eq Ref: Int (S) #PNO: Fast E: Off	Trig: Free Run dard Gate: Off #IF Gain: Low	Center Freq: 1.708500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph 🔹				Trace Average	Deteotor
Scale/Div 10.0 dB	Ref Value 10.0	00 dBm		Max Hold	
0.00				Min Hold	
-20.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Restart Averaging	
-40.0					
-70.0 -80.0					
Center 1.708500 GHz #Res BW 150.00 kHz	Video BW 1.50	00 MHz*	Span 4 Sweep 1.00 ms (1001		
2 Metrics					
Total Channel Power -20.	.96 dBm / 1.00 MHz				
Total Power Spectral Density	-80.96 dBm/Hz				
	an 06, 2022 💭 🛆				

Plot 7-102. Lower Extended Band Edge Plot (LTE Band 66/4 - 20MHz QPSK - Full RB)

FCC ID: A3LSMA135U	PCTEST Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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CEYSIGHT Input: RF Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	µW Path: Standard (PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS Trig: Free Run	8 <mark>123456</mark> A₩₩₩₩₩ ANNNNN	Center Frequency 1.755000000 GHz	Settings
Spectrum v cale/Div 10 dB		Ref Level 25.00 dB	m	Mkr1 1.755 -25	542 GHz	Span 16.0000000 MHz Swept Span Zero Span	
5.0 Trace 1 Pass	and the second	uter Mary				Full Span Start Freq	
5.00						1.747000000 GHz	
						Stop Freq 1.763000000 GHz	
15.0		Million and	mound	and works and the second	and the second and the second s	AUTO TUNE	
						1.600000 MHz	
						Man Freq Offset	
65.0						0 Hz X Axis Scale	
enter 1.755000 GHz Res BW 470 kHz		#Video BW 1.6 MH	z		an 16.00 MHz ns (1001 pts)	Log Lin	

Plot 7-103. Upper Band Edge Plot (LTE Band 4 - 20MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	• +				Trace	- * 崇
KEYSIGHT Input: RF R L T Image: Coupling: D JW PASS	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB μW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.756500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph 🔹					Trace Average	
Scale/Div 10.0 dB Log		Ref Value 10.00 d	Bm		Max Hold	
					Min Hold	
-20.0 -30.0 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	······	~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Restart Averaging	
Center 1.756500 GHz #Res BW 150.00 kHz		Video BW 1.5000 N	1Hz*	Span 4 M Sweep 1.00 ms (1001 p		
2 Metrics						
Total Channel Power	-26.85 dBm / 1.0	0 MHz				
Total Power Spectral De	ensity -86.85 d	Bm/Hz				
1 50	10:02:38 AM				1	

Plot 7-104. Upper Extended Band Edge Plot (LTE Band 4 - 20MHz QPSK – Full RB)

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Swept SA KEYSIGHT Input: RF R L T ↔ Coupling: DC Align: Auto	T Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	µW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pow Trig: Free Run	er (RMS <mark>1</mark> 23456 A WW WW W A N N N N N	Center Frequency 1.78000000 GHz	Settings
Spectrum v cale/Div 10 dB - ^{og} Trace 1 Pass		Ref Level 25.00 dB	m	Mkr1	1.780 176 GHz -26.815 dBm	Span 16.0000000 MHz Swept Span Zero Span	1
5.00	warn dawar hand and and and and	un non				Full Span Start Freq	
5.00						1.772000000 GHz Stop Freq 1.788000000 GHz	
		11	Marthane Martine Martine	Without state		AUTO TUNE	
45.0					and and the second second second	CF Step 1.600000 MHz Auto Man	
55.0						Freq Offset 0 Hz	
enter 1.780000 GHz Res BW 470 kHz		#Video BW 1.6 MH	z	Sweep	Span 16.00 MHz 1.00 ms (1001 pts)	X Axis Scale Log Lin	
	2 Jan 06, 2022 10:19:53 AM					Signal Track (Span Zoom)	1

Plot 7-105. Upper Band Edge Plot (LTE Band 66 - 20MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power KEYSIGHT Investment KEYSIGHT Coupling. DC Align: Auto MY PASS	+ Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.781500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph Scale/Div 10.0 dB Uog 0.00 -10.0 -20.0 -30.0 -40.0 -20.0		Ref Value 10.00 dl	Bm I I I I I I I	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Trace Average Max Hold Min Hold Restart Averaging	
50.0 60.0 70.0 80.0 Senter 1.781500 GHz Ress EW 150.00 KHz		Video BW 1.5000 N	IHz*	Span 4 Sweep 1.00 ms (100		
2 Metrics					X	

Plot 7-106. Upper Extended Edge Plot (LTE Band 66 - 20MHz QPSK – Full RB)

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Imput: RF L T →→ Align: Auto		#Atten: 36 dB μW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off		******	enter Frequency I.710000000 GHz	Settings
Spectrum v cale/Div 10 dB	F	tef Level 25.00 dE	ßm	Mkr1 1.709 59 -24.10		pan 2.0000000 MHz Swept Span Zero Span	
5.0 Trace 1 Pass					2	Full Span	
5.00						tart Freq I.704000000 GHz top Freq	
25.0	and the start of the second start of the secon	1	may	Local Barrier		AUTO TUNE	
5.0						F Step I.200000 MHz	
						Auto Man	
65.0					C	req Offset) Hz Axis Scale	
enter 1.710000 GHz Res BW 360 kHz	Jan 06, 2022	#Video BW 1.2 Mi	Ηz	Span 1 Sweep 1.00 ms (2.00 MHz	Lin	

Plot 7-107. Lower Band Edge Plot (LTE Band 66/4 - 15MHz QPSK - Full RB)

Spectrum Analyzer 1 Channel Power	• +				Trace	- * 亲
KEYSIGHT Input: RF R L T Imput: RF Data Align: Autor Data PASS		Atten: 36 dB μW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.708500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph 🔹					Trace Average	
Scale/Div 10.0 dB		Ref Value 10.00 dl	Bm		Max Hold	
-10.0					Min Hold	
-20.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				- Restart Averaging	
-40.0						
-70.0						
Center 1.708500 GHz #Res BW 110.00 kHz		Video BW 1.1000 N	∣ ↓ 1Hz*	Span 4 MH Sweep 1.00 ms (1001 pt		
2 Metrics v						
Total Channel Power	-20.64 dBm / 1.0	0 MHz				
Total Power Spectral I	Density -80.64 d	3m/Hz				
	Jan 06, 2022 10:23:00 AM					

Plot 7-108. Lower Extended Band Edge Plot (LTE Band 66/4 - 15MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST Proved to be part of the element	PART 27 MEASUREMENT REPORT	MSUNG	Approved by: Technical Manager
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EYSIGHT Input: RF L T ↔ Coupling DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB µW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pow Trig: Free Run	ver (RMS <mark>1</mark> 23456 A WWWWW ANNNNN	Center Frequency 1.755000000 GHz	Settings
Spectrum v cale/Div 10 dB		Ref Level 25.00 dE	Bm	Mkr1	1.755 012 GHz -22.383 dBm	Span 12.0000000 MHz Swept Span Zero Span	
Trace 1 Pass	and the court of the	some to the second				Full Span Start Freq	
5.0						1.749000000 GHz Stop Freq 1.761000000 GHz	
5.0			porter	man and a second	an marine and the second	AUTO TUNE CF Step 1.200000 MHz	
5.0						Auto Man Freq Offset 0 Hz	
enter 1.755000 GHz es BW 360 kHz		#Video BW 1.2 M	Hz	Sweep	Span 12.00 MHz p 1.00 ms (1001 pts)	X Axis Scale	

Plot 7-109. Upper Band Edge Plot (LTE Band 4 - 15MHz QPSK – Full RB)

Spectrum Ana Channel Powe	lyzer 1	+					Trace	- * 崇
KEYSIGHT RLT →→→ PASS	Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB μW Path: Standar #PNO: Fast	Trig: Free Run d Gate: Off #IF Gain: Low	Center Freq: 1.75650000 Avg Hold: 100/100 Radio Std: None	00 GHz	Trace Type Clear / Write	Trace Control
1 Graph	•						Trace Average	
Scale/Div 10.	0 dB		Ref Value 10.00	dBm			Max Hold	
0.00								
-10.0							Min Hold	
-20.0							Restart Averaging	
-30.0	m	·					Restart Averaging	
-40.0								
-60.0								
-70.0								
-80.0								
Center 1.7565			Video BW 1.1000	MHz*		Span 4 MHz		
#Res BW 110					Sweep 1.00 m	ns (1001 pts)		
2 Metrics	v							
Total Chan	nel Power	-24.73 dBm / 1.0) MHz					
	r Spectral Density							
Total Powe	- opectrar Density	-04.73 0						
) Jan 06, 2022						
		10:25:43 AM	\sim \sim \sim					

Plot 7-110. Upper Extended Band Edge Plot (LTE Band 4 - 15MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST Poud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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Mkr1 1.780 024 Span -23.789 Bm 12.0000000 MHz Zero Span Full Span Start Freq 1.77400000 GHz Stop Freq Stop Freq
Full Span Start Freq 1.774000000 GHz Stop Freq
1.774000000 GHz Stop Freq
1.786000000 GHZ AUTO TUNE
CF Step 1.200000 MHz
Auto Man Freq Offset
Span 12.00 MHz Sweep 1.00 ms (1001 pts)

Plot 7-111. Upper Band Edge Plot (LTE Band 66 - 15MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	• +				Trace	- * 崇
KEYSIGHT Input: RF R L T → Coupling: I DVI PASS		Atten: 36 dB μW Path: Standard #PNO: Fast	Trig: Free Run I Gate: Off #IF Gain: Low	Center Freq: 1.781500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph 🔹					Trace Average	
Scale/Div 10.0 dB		Ref Value 10.00 d	Bm		Max Hold	
0.00						
-10.0					Min Hold	
-20.0					Restart Averaging	
-30.0	m				Restart Averaging	
-40.0						
-60.0						
-70.0						
-80.0						
Center 1.781500 GHz #Res BW 110.00 kHz		Video BW 1.1000 N	/Hz*	Span 4 Sweep 1.00 ms (100		
2 Metrics				Sweep 1.00 ms (100	r pts)	
Total Channel Power	-25.96 dBm / 1.0	0 MHz				
Total Power Spectral D	ensity -85.96 d	Bm/Hz				
1001	Jan 06, 2022 10:27:41 AM	$\odot \land$				

Plot 7-112. Upper Extended Band Edge Plot (LTE Band 66 - 15MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be perfect of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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EYSIGHT Input: RF L T ↔ Coupling: DC Align: Auto	Input Z: 50 Ω #Atten: 36 dB Corr CCorr RCal μW Path: Sta Freq Ref: Int (S) NFE: Off		Avg Type: Power (RMS123456 rig: Free Run A WWWWW A N N N N N	1.710000000 GHz
Spectrum v cale/Div 10 dB	Ref Level 25.	00 dBm	Mkr1 1.710 000 GH -19.914 dBn	2 8.0000000 MHz
Trace 1 Pass		munn	umumumum	Full Span Start Freq
5.0		1		1.706000000 GHz Stop Freq 1.714000000 GHz
5.0	Marin and Concerning Marine Marily	V		AUTO TUNE CF Step 800.000 kHz
5.0				Auto Man Freq Offset
5.0 enter 1.710000 GHz Res BW 240 kHz	#Video BW 7	750 kHz	Span 8.000 MH Sweep 1.00 ms (1001 pts	

Plot 7-113. Lower Band Edge Plot (LTE Band 66/4 - 10MHz QPSK - Full RB)

Spectrum Analyzer Channel Power	r1 🕴 🕇	F								Tra	ace 🔻 🔆
	out: RF oupling: DC ign: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Stand #PNO: Fast	lard Ga	ig: Free ate: Off F Gain:		Center Freq: Avg Hold: 10 Radio Std: N	0/100	00 GHz	Trace Type Clear / Write	Trace Control Detector
1 Graph	•									Trace Average	
Scale/Div 10.0 dE	3		Ref Value 20.0	0 dBm		•				Max Hold	
10.0											
0.00									/	Min Hold	
-10.0									+/	Destant Average	
-20.0									\sim	Restart Averagi	ing
-30.0		~~~~~		~~~~~							
-50.0											
-60.0											
-70.0											
Center 1.708500 (<u> </u>	/ideo BW 750.0)0 kHz	*	1			Span 4 MHz		
#Res BW 75.000 F	kHz						Swe	eep 1.00 n	ns (1001 pts)		
2 Metrics	•										
Total Channel F		-19.95 dBm / 1.00									
Total Power Sp	ectral Density	-79.95 dB	im/Hz								
4 50	2	Jan 06, 2022 10:31:21 AM									

Plot 7-114. Lower Extended Band Edge Plot (LTE Band 66/4 - 10MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be part of @element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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Input: RF Coupling: DC ALT Align: Auto		#Atten: 36 dB PNO: E μW Path: Standard Gate: 0 IF Gair Sig Tra	Off Trig: Free Ru h: Low	ower (RMS <mark>123456</mark> n A WWWW A N N N N N	Center Frequency 1.755000000 GHz Span	Settings
Spectrum v cale/Div 10 dB	F	ef Level 25.00 dBm	Mkr1	1.755 000 GHz -21.805 dBm	8.00000000 MHz	
5.0 Trace 1 Pass	Ann a Marilla and a Mariana				Full Span	
					Start Freq 1.751000000 GHz Stop Freq	
					1.759000000 GHz	
5.0		MWVwm	www.	www.www.www.www.www.www.www.www.www.ww	CF Step 800.000 kHz	
5.0					Auto Man	
5.0					Freq Offset 0 Hz X Axis Scale	Loca
enter 1.755000 GHz Res BW 240 kHz	# Jan 06, 2022	#Video BW 750 kHz	Swe	Span 8.000 MHz eep 1.00 ms (1001 pts)	Log	

Plot 7-115. Upper Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	+					Trace	- * ※
KEYSIGHT Input: RF R L T Input: RF Align: Auto Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free Run I Gate: Off #IF Gain: Low	Center Freq: 1.756500000 Avg Hold: 100/100 Radio Std: None	GHz	Trace Type Clear / Write	Trace Control
1 Graph 🔹						Trace Average	
Scale/Div 10.0 dB Log		Ref Value 20.00 d	Bm			Max Hold	
10.0							
0.00						Min Hold	
-10.0						Restart Averaging	
-30.0							
-40.0	~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~		
-50.0							
-60.0							
Center 1.756500 GHz		Video BW 750.00 I	kUz*		pan 4 MHz		
#Res BW 75.000 kHz		VILLEO BVV / 50.001	ND2	Sweep 1.00 ms			
2 Metrics							
Total Channel Power	-26.28 dBm / 1.00						
Total Power Spectral Density	-86.28 dE	3m/Hz					
) Jan 06, 2022 🖌	\frown \land					
	10:33:00 AM	\square					

Plot 7-116. Upper Extended Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Swept SA KEYSIGHT Input: RF RLT → Coupling: DC Align: Auto War	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB µW Path: Standard	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Run	A₩	3456 ////////////////////////////////////	Frequency Center Frequency 1.78000000 GHz	Settings
Spectrum v icale/Div 10 dB		Ref Level 25.00 dB	3m	Mkr1	1.780 00 -23.05)8 GHz 5 dBm	Span 8.00000000 MHz Swept Span Zero Span	
Trace 1 Pass 15.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~					Full Span	
5.00							1.776000000 GHz Stop Freq 1.784000000 GHz	
		When	Mmmmmm	her when	hanner manne	chan Connerson	AUTO TUNE CF Step 800.000 kHz	
							Auto Man Freq Offset	
65.0 enter 1.780000 GHz Res BW 240 kHz		#Video BW 750 kl	Hz	Swee	Span 8 sp 1.00 ms (*	.000 MHz 1001 pts)	0 Hz X Axis Scale Log	Loca
fres BW 240 kHz	Jan 06, 2022 10:34:04 AM			Swee		1001 pts)	Lin Signal Track (Span Zoom)	

Plot 7-117. Upper Band Edge Plot (LTE Band 66 - 10MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	• +				Trace	* 亲
KEYSIGHT Input: R RLT → Ø Align: A	g: DC Corr CCorr RCal	Atten: 36 dB μW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.781500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph	•				Trace Average	
Scale/Div 10.0 dB		Ref Value 10.00 dl	3m		Max Hold	
0.00					Min Hold	
-20.0 -30.0 -40.0 -50.0	······			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Restart Averaging	
-60.0 -70.0 -80.0						
Center 1.781500 GHz #Res BW 75.000 kHz		Video BW 750.00 k	Hz*	Span 4 M Sweep 1.00 ms (1001		
2 Metrics	۲					
Total Channel Powe	r -27.11 dBm / 1.0	0 MHz				
Total Power Spectra	l Density -87.11 di	3m/Hz				
	Jan 06, 2022 10:34:26 AM				<	

Plot 7-118. Upper Extended Band Edge Plot (LTE Band 66 - 10MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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T → Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB µW Path: Standard	PNO: Balanced Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (R Trig: Free Run	MS <mark>123456</mark> A wwwww Annnn	Center Frequency 1.710000000 GHz	Settings
Spectrum ale/Div 10 dB		Ref Level 25.00 dE	3m		09 972 GHz I6.966 dBm	Span 4.00000000 MHz Swept Span Zero Span	
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Full Span Start Freq	
		1/ 				1.708000000 GHz Stop Freq 1.712000000 GHz	
						AUTO TUNE CF Step 400.000 kHz	
						Auto Man Freq Offset 0 Hz	
nter 1.710000 GHz es BW 120 kHz		#Video BW 390 kl	Hz		Span 4.000 MHz 0 ms (1001 pts)	X Axis Scale Log Lin	

Plot 7-119. Lower Band Edge Plot (LTE Band 66/4 - 5MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	<b>+</b>				Trace	- 米
KEYSIGHT     Input: F       R L T     +→       Couplin       Align: A	g: DC Corr CCorr RCal	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.708500000 GHz Avg[Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control
1 Graph	•				Trace Average	
Scale/Div 10.0 dB		Ref Value 30.00 d	Bm		Max Hold	
20.0						
10.0					Min Hold	
0.00				<u> </u>		
-10.0					Restart Averaging	
-20.0				i mana and a second		
-40.0	·····		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Center 1.708500 GHz		Video BW 390.00 k	 (Hz*	Span 4	4 MHz	
Res BW 39.000 kHz				Sweep 3.20 ms (100	1 pts)	
2 Metrics	•					
Total Channel Powe						
Total Power Spectra	al Density -77.92 d	Bm/Hz				
	Jan 06, 2022	$\frown$				

Plot 7-120. Lower Extended Band Edge Plot (LTE Band 66/4 - 5MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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Plot 7-121. Upper Band Edge Plot (LTE Band 4 - 5MHz QPSK - Full RB)



Plot 7-122. Upper Extended Band Edge Plot (LTE Band 4 - 5MHz QPSK – Full RB)

FCC ID: A3LSMA135U	Pour to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
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Plot 7-123. Upper Band Edge Plot (LTE Band 66 - 5MHz QPSK - Full RB)

Spectrum Analyzer 1			🗱 Trace 🔻 🎇
KEYSIGHT         Input: RF         Input Z: 50 Ω           R L T         →→         Coupling: DC         Corr Ccorr RCal           Juny         PASS         Freq Ref: Int (S)         NFE: Off		Center Freq: 1.781500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Trace Control
1 Graph v			Trace Average
Scale/Div 10.0 dB Log	Ref Value 30.00 dBm		Max Hold
20.0			Min Hold
0.00 -10.0 -20.0			Restart Averaging
-20.0 -30.0 -40.0			
-50.0			
Center 1.781500 GHz Res BW 39.000 kHz	Video BW 390.00 kHz*	Span 4 MHz Sweep 3.20 ms (1001 pts	
2 Metrics v		· · · · ·	
Total Channel Power -24.78 dBm / 1.0	00 MHz		
Total Power Spectral Density -84.78 d	Bm/Hz		
Jan 06, 2022 10:40:05 AM	•••		

Plot 7-124. Upper Extended Band Edge Plot (LTE Band 66 - 5MHz QPSK - Full RB)

FCC ID: A3LSMA135U	PCTEST Poud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
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wept SA       KEYSIGHT       Input: RF       RLT       →       Coupling DC       Align: Auto       xr       PASS	Input Z: 50 Ω         #Atten: 36 dE           Corr CCorr RCal         μW Path: Sta           Freq Ref. Int (S)         NFE: Off	B PNO: Balanced Indard Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS123456 Trig: Free Run A WWWW A N N N N	1.71000000 GHz
Spectrum v cale/Div 10 dB	Ref Level 25	.00 dBm	Mkr1 1.709 996 GHz -17.430 dBm	4.0000000 1011 12
5.0 Trace 1 Pass				Full Span
				Start Freq 1.708000000 GHz
15.0	~~~~	1		Stop Freq 1.712000000 GHz
5.0				AUTO TUNE CF Step
				400.000 kHz Auto Man
				Freq Offset 0 Hz
enter 1.710000 GHz Res BW 75 kHz	#Video BW	240 kHz	Span 4.000 MH: Sweep 1.00 ms (1001 pts	
	Jan 06, 2022		Band 66/4 - 3MHz OPSK	Signal Track (Span Zoom)

Plot 7-125. Lower Band Edge Plot (LTE Band 66/4 - 3MHz QPSK – Full RB)

Spectrum Analyz Channel Power	zer 1	Þ							Trac	• • 🔆
	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free I Gate: Off #IF Gain:		Center Freq: Avg Hold: 10 Radio Std: N	0/100	0 GHz	Trace Type Clear / Write	Trace Control Detector
1 Graph	•								Trace Average	
Scale/Div 10.0 c	dB		Ref Value 30.00 d	Bm	•				Max Hold	
20.0										
10.0									Min Hold	
0.00									Restart Averaging	
-10.0								/	Restart Averaging	
-30.0						· ·····	and and a start			
-40.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
-50.0										
-60.0										
Center 1.708500 #Res BW 22.000		V	/ideo BW 220.00 I	kHz*		Sur		Span 4 MHz s (1001 pts)		
2 Metrics	v KH2					Swe	ep 9.67 m	5 (1001 pts)		
2 1100100										
Total Channe	l Power	-17.74 dBm / 1.00	MHz							
Total Power S	Spectral Density	-77.74 dB	m/Hz							
<b>1</b> 5	? 🗖 🖻	Jan 06, 2022 10:42:06 AM	$\square$							

Plot 7-126. Lower Extended Band Edge Plot (LTE Band 66/4 - 3MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST* Proud to be perfect of @element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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L T + Alton PASS		utten: 36 dB V Path: Standard Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS <mark>1</mark> 23456 Trig: Free Run A WWWW A N N N N N	Center Frequency 1.755000000 GHz
Spectrum v cale/Div 10 dB	Ref	Level 25.00 dBm	Mkr1 1.755 000 GHz -17.017 dBm	4.00000000 MHz
Trace 1 Pass		~~		Full Span
5.00		1		Start Freq 1.753000000 GHz Stop Freq
				1.757000000 GHz AUTO TUNE
				CF Step 400.000 kHz
5.0				Auto Man Freq Offset
55.0 enter 1.755000 GHz Res BW 75 kHz	#V	ideo BW 240 kHz	Span 4.000 MHz Sweep 1.00 ms (1001 pts)	

Plot 7-127. Upper Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB)

Spectrum Analyze Channel Power	r 1 🛛 🕇	-					<b>Č</b> Trace	- * 条
	put: RF pupling: DC ign: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.75650000 Avg Hold: 100/100 Radio Std: None	00 GHz	Trace Type Clear / Write	Trace Control Detector
1 Graph	•						Trace Average	
Scale/Div 10.0 dE	3		Ref Value 30.00 dl	Bm			Max Hold	
20.0							Min Hold	
0.00	,						Restart Averaging	
-30.0	Manna							
-50.0								
Center 1.756500 #Res BW 22.000		v	ideo BW 220.00 k	Hz*	Sweep 9.87 n	Span 4 MHz ns (1001 pts)		
2 Metrics	¥							
Total Channel F	Power	-23.56 dBm / 1.00	MHz					
Total Power Sp	ectral Density	-83.56 dBi	m/Hz					
<b>ب</b> ل	2	Jan 06, 2022 10:44:53 AM						

Plot 7-128. Upper Extended Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB)

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EYSIGHT Input: RF L T +++ Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 36 dB PNO: Balan µW Path: Standard Gate: Off IF Gain: Low Sig Track: C	Trig: Free Run	V 1.780000000 GHz
Spectrum v ale/Div 10 dB		Ref Level 25.00 dBm	Mkr1 1.780 008 GH -19.037 dBi	4.00000000 Min Iz
Trace 1 Pass				Full Span Start Freq
				1.778000000 GHz Stop Freq 1.782000000 GHz
			······································	CF Step 400.000 kHz Auto
				Man Freq Offset 0 Hz
nter 1.780000 GHz es BW 75 kHz		#Video BW 240 kHz	Span 4.000 Mł Sweep 1.00 ms (1001 pt	

Plot 7-129. Upper Band Edge Plot (LTE Band 66 - 3MHz QPSK - Full RB)

Spectrum Ana Channel Powe	lyzer 1 🔹	+					Trace	- * 崇
KEYSIGH RLT +++ IM PASS	Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB µW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.78150000 Avg Hold: 100/100 Radio Std: None	00 GHz	Trace Type Clear / Write	Trace Control Detector
1 Graph	•						Trace Average	
Scale/Div 10.	0 dB		Ref Value 30.00 d	Bm			Max Hold	
20.0							Min Hold	
-10.0							Restart Averaging	
	man	~	······································	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Center 1.781 #Res BW 22.0			Video BW 220.00 F	∖ KHz*	Sweep 9.87 m	Span 4 MHz ns (1001 pts)		
2 Metrics	۲							
Total Chan	nel Power	-23.98 dBm / 1.00	) MHz					
Total Powe	r Spectral Density	-83.98 dE	βm/Hz					
<b>1</b> 5		Jan 06, 2022 10:46:32 AM	$\mathbb{D}$					

Plot 7-130. Upper Extended Band Edge Plot (LTE Band 66 - 3MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST Poud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dege 92 of 101	
1M2112270166-04.A3L	01/03/2022 - 01/26/2022	Portable Handset		Page 83 of 121	
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Plot 7-131. Lower Band Edge Plot (LTE Band 66/4 – 1.4MHz QPSK – Full RB)

Spectrum Analyzer 1 Channel Power	+				Trace	<ul> <li>▼ ²/₁×</li> </ul>
KEYSIGHT       Input: RF         RLT       Coupling: DC         Align: Auto       Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	Atten: 36 dB μW Path: Standard #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.708500000 GHz Avg Hold: 100/100 Radio Std: None	Trace Type Clear / Write	Trace Control Detector
1 Graph 🔹					Trace Average	
Scale/Div 10.0 dB		Ref Value 30.00 dl	3m		Max Hold	
20.0					Min Hold	
-10.0				<u>_</u>	Restart Averaging	
-20.0						
-50.0 -60.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	n war war war war				
Center 1.708500 GHz #Res BW 10.000 kHz		Video BW 100.00 k	<u> </u> Hz*	Span Sweep 47.7 ms (100		
2 Metrics v						
Total Channel Power	-24.24 dBm / 1.0	0 MHz				
Total Power Spectral Der	-84.24 dl	3m/Hz				
	Jan 06, 2022 10:48:24 AM	$\Box$			X	

Plot 7-132. Lower Extended Band Edge Plot (LTE Band 66/4 – 1.4MHz QPSK – Full RB)

FCC ID: A3LSMA135U	PCTEST Poud to be part of @ element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 84 of 121
1M2112270166-04.A3L	01/03/2022 - 01/26/2022	Portable Handset		
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