



	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	en: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Ho	Freq: 2.51250 old: 100.00% of Std. None		Center Frequ 2.51250000	
Graph cale/Div 10 d	₹ B			vi Offset 27. alue 30.0 dB					CF Step 10.000000 M	MHz
og 0.0								Relative Limit	Man	
10.0 ).00									Freq Offset 0 Hz	
10.0 20.0 30.0								Absolute Limit		
10.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						Spectrum		
50.0 50.0										
isp Center 2.	51250 GHz	Cha	n Det: Ave	erage, #Offs	Det: Average			oan 100.00 MHz 01 pts		
Table	۲	Powe 22.60 dB	er m / 25 MH	IZ						
				Lower			Upper			
	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)		
Start Freq	13.50 MHz	510.0 kHz		()		-21.42	(-11.42)	12.50 M		
12.50 MHz		1.000 MHz		()		-21.87 -22.88	(-11.87) (-9.88)	13.50 M 23.00 M		
12.50 MHz 13.50 MHz	17.50 MHz	1 000 MH=				-22.68	(-9.68)			
12.50 MHz 13.50 MHz 17.50 MHz	37.50 MHz	1.000 MHz		()		_40 20	(-15.20)	37 50 M		Loc
12.50 MHz 13.50 MHz		1.000 MHz 1.000 MHz 360.0 kHz	  -22.72	() ()	 -12.50 M	-40.20	(-15.20)	37.50 M		Loc

## Low Channel Edge Plot (25 MHz BPSK)-2





#### Mid Channel Edge Plot (25 MHz BPSK)







#### High Channel Edge Plot (25 MHz BPSK RB 1)





				0	0	,	,				
Spectrum Analy SEM	zer 1 🔻	+								Frequency	<b>→</b> 😤
KEYSIGHT	Input: RF	Input Z: 50 Ω		en: 20 dB	Trig: Free Ru		r Freq: 2.55750		Center I	requency	Cattinga
RL ++-	Coupling: DC Align. Auto	Corr CCorr Freq Ref. Int (		amp: Off	Gate: Off IF Gain. Low		old: 100.00% o Std. None	120		00000 GHz	Settings
PASS	r light r lato	NFE: Adaptive			in Gain. Low	, and a second					
1 Graph									CF Step	The reaction of the second second	
				VI Offset 27.					1	DOO MHz	
cale/Div 10 dl	В		Ref Va	alue 30.0 dB	am			Learner	Aut		
<b>.og</b> 20.0								Relative Limit	Ma	n	
10.0									Freq Off	iset	
0.00	_								0 Hz		
10.0											
20.0			- Jam					Absolute Limit			
30.0											
40.0											
50.0								Spectrum			
50.0											
isp Center 2.	55750 GHz	Chan	Det: Ave	erage, #Offs	Det: Average	;	Sp	oan 100.00 MHz			
							20	01 pts			
? Table		Power									
		22.98 dBn	n / 25 MH	z							
				Lower			Upper				
Start Freq	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)			
12.50 MHz	13.50 MHz	510.0 kHz	-18.78	(-8.78)	-12.52 M	-21.96	(-11.96)	12.51 M			
13.50 MHz	17.50 MHz	1.000 MHz	-18.78	(-8.78)	-13.58 M	-20.70	(-10.70)	13.50 M			
17.50 MHz	37.50 MHz	1.000 MHz	-22.87	(-9.87)	-24.30 M	-23.42	(-10.42)	21.60 M			
37.50 MHz	50.00 MHz	1.000 MHz	-39.61	(-14.61)	-42.00 M	-49.84	(-24.84)	37.56 M			Local
8.000 MHz	12.50 MHz	1.000 MHz		()			( )				
12 50 MHz	15 00 MHz	1 000 MHz		()			· · · · · · · · · · · · · · · · · · ·				
150		May 31, 202 2:48:39 PM									
	كالألبي التهم	<ul> <li>Z:40:39 PI</li> </ul>									

## High Channel Edge Plot (25 MHz BPSK)





Spectrum Analy SEM		+	8			an an			\$	Frequency	- 7 😤
KEYSIGHT RL +++ M PASS	Input: RF <mark>Coupling: DC</mark> Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptive	Prea (S)	n: 20 dB amp: Off	Trig: Free Rui Gate: Off IF Gain. Low	Avg Ho	Freq: 2.51500 Id: 100.00% o Std. None		2.5150	Frequency 000000 GHz	Settings
1 Graph Scale/Div 10 dl Log 20.0 10.0 0.00	B	^		vl Offset 27. Nue 30.0 dB				Acsolutelliimit	AL Ma	000 MHz ito an	
-10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Disp Center 2.5	51500 GHz	Chan		rage, #Offs	Det: Average	1		Spectrum	0 Hz		
2 Table	v	Powe 22.37 dBr		z			20	001 pts			
Start Freq 15.00 MHz 16.00 MHz 19.00 MHz 24.50 MHz 15.00 MHz 12 50 MHz	Stop Freq 16.00 MHz 19.00 MHz 24.50 MHz 44.50 MHz 44.50 MHz 15.00 MHz	Integ BW 30.00 kHz 1.000 MHz 1.000 MHz 1.000 MHz 270.0 kHz 1.000 MHz	dBm -45.03 -35.51 -42.26 -39.04	Lower ∆Limit(dB) (-35.03) (-25.51) (-29.26) (-14.04) () ()	Freq (Hz) -15.01 M -16.75 M -19.91 M -28.70 M 	dBm     -41.68	Upper ∆Limit(dB) () () () () (-91.68) ()	Freq (Hz)			Local
15		May 31, 20 2:52:45 Pt									

## Low Channel Edge Plot (30 MHz BPSK RB 1)-1





Spectrum Analy. SEM	, i l	+	14							Frequency	· v 影
KEYSIGHT RL ++- M PASS	Input: RF Coupling: DC Align. Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	n: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg H	r Freq: 2.51500 old: 100.00% o Std. None		Center Fre 2.515000		Settings
1 Graph Scale/Div 10 dl	<b>т</b> З			vl Offset 27. alue 30.0 dB					CF Step 8.900000	MHz	
20.0								And a fute Limit	Man		
10.0		(							Freq Offse 0 Hz	۱	
-10.0 -20.0 -30.0							<u>^</u>	Spectrum			
-40.0							$\sim$				
-60.0											
Disp Center 2.5	51500 GHz	Char	1 Det: Ave	erage, #Offs	Det: Average			oan 89.000 MHz 001 pts			
2 Table	۲	Powe 22.46 dBr		z							
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Limit(dB)	Freq (Hz)	dBm	Upper ∆Limit(dB)	Freq (Hz)			
15.00 MHz	16.00 MHz	620.0 kHz	-20.45	(-10.45)	-15.01 M		- ()				
16.00 MHz	19.00 MHz	1.000 MHz	-22.19	(-12.19)	-16.00 M		( )				
19.00 MHz	24.50 MHz	1.000 MHz	-25.91	(-12.91)	-19.17 M		( )				Local
24.50 MHz	44.50 MHz	1.000 MHz	-31.04	(-6.04)	-29.00 M		( )				LOCAI
15.00 MHz	44.50 MHz	270.0 kHz		()		-22.93	(-72.93)	15.00 M			
12.50 MHz	15 00 MHz	1 000 MHz	24	()							
50		May 31, 20 2:51:33 Pl									

## Low Channel Edge Plot (30 MHz BPSK)-1





					5		_				
Spectrum Analy. SEM	zer 1 ,	+							<b>\</b>	Frequency	- • P
	Input: RF Coupling: DC Align. Auto	Input Z: 50 C Corr CCorr Freq Ref. Int NFE: Adapti	Pre (S)	en: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Ho	Freq: 2.51500 old: 100.00% of Std. None		2.51500	requency 0000 GHz	Settings
Graph			<b>D</b> -41-		07				CF Step 12.0000		
cale/Div 10 dl	-			vl Offset 27. alue 30.0 dB					1		
	-		KEI V					Relative Limit	Auto Man		
<b>.og</b> 20.0			λ.					Trefative Linni	Ivial	R)	
10.0									Freq Offs	et	
0.00									0 Hz		
10.0											
20.0								Absolute Limit			
30.0				<u>∧</u>							
40.0		Amer	Nº M	mall			^	Spectrum			
50.0		man hand									
60.0											
isp Center 2.5	51500 GHz	Cha	n Det: Ave	erage, #Offs	Det: Average			oan 120.00 MHz 01 pts			
2 Table	<b>v</b>	Powe	er								
		22.37 dB	m / 30 MH	z							
				Lower			Upper				
Start Freq	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)			_
15.00 MHz	16.00 MHz	30.00 kHz		()		-57.28	(-47.28)	15.04 M			
16.00 MHz	20.00 MHz	1.000 MHz		()		-41.78	(-31.78)	19.94 M			
20.00 MHz	45.00 MHz	1.000 MHz		()		-39.34	(-26.34)	42.88 M			
45.00 MHz	60.00 MHz	1.000 MHz		()		-45.87	(-20.87)	47.03 M			Loc
15.00 MHz	60.00 MHz	430.0 kHz	-26.28	(-76.28)	-15.00 M		()				
12 50 MHz	15 00 MHz	1 000 MH7		()			()				
150		May 31, 20 2:53:21 P									

## Low Channel Edge Plot (30 MHz BPSK\_RB1)-2





PASS	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	n: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Ho	Freq: 2.515000 old: 100.00% of Std. None		Center Frequency 2.515000000 GHz	Settings
Graph cale/Div 10 d	₹ B			/I Offset 27. alue 30.0 dB					CF Step 12.000000 MHz	
og								Relative Limit	Man	
0.0									Freq Offset 0 Hz	
0.0								Absolute Limit		
0.0								Spectrum		
50.0 50.0										
isp Center 2.	51500 GHz	Char	n Det: Ave	erage,#Offs	Det: Average			an 120.00 MHz 01 pts		
Table	×	Powe	r							
Table	¥		er m / 30 MH	z						
		22.47 dB	m / 30 MH	Lower			Upper			
Start Freq	Stop Freq	22.47 dB Integ BW		Lower ∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)		
Start Freq 15.00 MHz	Stop Freq 16.00 MHz	22.47 dB Integ BW 620.0 kHz	m / 30 MH	Lower ∆Limit(dB) ()	Freq (Hz) 	-19.02	∆Limit(dB) (-9.02)	15.00 M		
Start Freq 15.00 MHz 16.00 MHz	Stop Freq 16.00 MHz 20.00 MHz	22.47 dB Integ BW 620.0 kHz 1.000 MHz	m / 30 MH dBm	Lower ∆Limit(dB) ()		-19.02 -19.88	∆Limit(dB) (-9.02) (-9.88)	15.00 M 16.00 M		
Start Freq 15.00 MHz 16.00 MHz 20.00 MHz	Stop Freq 16.00 MHz 20.00 MHz 45.00 MHz	22.47 dB Integ BW 620.0 kHz 1.000 MHz 1.000 MHz	m / 30 MH dBm  	Lower ∆Limit(dB) () ()	 	-19.02 -19.88 -23.04	∆Limit(dB) (-9.02) (-9.88) (-10.04)	15.00 M 16.00 M 20.00 M		
15.00 MHz 16.00 MHz	Stop Freq 16.00 MHz 20.00 MHz	22.47 dB Integ BW 620.0 kHz 1.000 MHz	m / 30 MH dBm 	Lower ∆Limit(dB) ()		-19.02 -19.88	∆Limit(dB) (-9.02) (-9.88)	15.00 M 16.00 M		Lo

## Low Channel Edge Plot (30 MHz BPSK)-2





#### Mid Channel Edge Plot (30 MHz BPSK)





KEYSIGHT RL +++ M PASS	Input: RF Coupling: DC Align. Auto	Input Z: 50 C Corr CCorr Freq Ref. Int NFE: Adaptiv	Pre (S)	en: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Ho	Freq: 2.55500 Id: 100.00% o Std. None		Center Frequency 2.555000000 GHz CF Step	Settings
Graph cale/Div 10 d	<b>▼</b> B			vl Offset 27.3 alue 30.0 dB					12.000000 MHz	
og								Relative Limit	Man	
20.0 10.0 0.00									Freq Offset 0 Hz	
10.0								Absolute Limit		
-30.0 -40.0 -50.0				^h	~~~~/~	~~~~		Spectrum		
isp Center 2.	55500 GHz	Cha	n Det: Ave	erage,#Offs	Det: Average			pan 120.00 MH 001 pts	z	
2 Table	▼	Powe								
		22.78 dB	m / 30 MH	z						
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Limit(dB)	Freq (Hz)	dBm	Upper ∆Limit(dB)	Freq (Hz)		
15.00 MHz	16.00 MHz	30.00 kHz	-56.22	(-46.22)	-15.44 M	-44.19	(-34.19)	15.00 M		
16.00 MHz	20.00 MHz	1.000 MHz	-40.58	(-30.58)	-16.56 M	-35.87	(-25.87)	16.66 M		
20.00 MHz	45.00 MHz	1.000 MHz	-36.89	(-23.89)	-42.88 M	-34.71	(-21.71)	28.63 M		Loc
45.00 MHz	60.00 MHz 12.50 MHz	1.000 MHz 1.000 MHz	-44.21	(-19.21) ()	-47.18 M	-54.86	(-29.86)	51.75 M		LUC
8.000 MHz							()			

## High Channel Edge Plot (30 MHz BPSK RB 1)





Spectrum Analyz SEM	, i l	+							F	requency v
КЦ 🔸	Input: RF Coupling: DC Align. Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref. Int (S NFE: Adaptive	Atten: Pream )		Trig: Free Rui Gate: Off IF Gain. Low	Avg H	r Freq: 2.55500 old: 100.00% of Std. None		Center Freque 2.555000000	Jellings
Diamond     Diamond       1 Graph       Scale/Div 10 dl	v 3	NFE. Adaptive		Offset 27.3 ie 30.0 dB					CF Step 12.000000 M	Hz
Log 20.0 10.0 0.00								Relative Limit	Man Freq Offset 0 Hz	
-10.0 -20.0 -30.0						~~~~		Absolute Limit		
-40.0 -50.0 -60.0								Spectrum		
Disp Center 2.5	5500 GHz	Chan I	Det: Avera	ge, #Offs	Det: Average			oan 120.00 MHz 01 pts		
2 Table	v	Power 22.89 dBm	/ 30 MHz							
Start Freq	Stop Freq			Lower Limit(dB)	Freq (Hz)	dBm	Upper ∆Limit(dB)	Freq (Hz)		
15.00 MHz 16.00 MHz	16.00 MHz 20.00 MHz	1.000 MHz	-17.65 -19.13	(-7.65) (-9.13)	-15.00 M -16.00 M	-19.62	(-10.13)	15.00 M 16.00 M		
20.00 MHz 45.00 MHz 8.000 MHz	45.00 MHz 60.00 MHz 12.50 MHz		-19.61 -38.56 	(-6.61) (-13.56) ()	-23.13 M -51.45 M 	-21.87 -54.62	(-8.87) (-29.62) - ()	20.00 M 45.45 M		Local
12 50 MHz		1 000 MHz May 31, 2024 2:59:51 PM		<u>`</u> `.						

# High Channel Edge Plot (30 MHz BPSK)





Spectrum Analyz SEM	zer 1	+	8		45	45			\$	Frequency	
	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int ( NFE: Adaptive	Prea (S)	n: 20 dB imp: Off	Trig: Free Ru Gate: Off IF Gain. Low	Avg Ho	Freq: 2.51750 old: 100.00% of Std. None			Frequency 00000 GHz	Settings
Log     20.0	<b>7</b> 3		Ref Lv	I Offset 27.3 Iue 30.0 dB				AbsoluteLlimit	CF Step 9.4000 Aut Ma	00 MHz :o n	
10.0 0.00 -10.0 -20.0 -30.0 -40.0									Freq Off 0 Hz	set	
-50.0 -50.0 Disp Center 2.5	1750 GHz	Chan	Det: Ave	rage, #Offs	Det: Average			Dan 94.000 MHz			
2 Table	V	Power 22.37 dBn		z							
Start Freq 17.50 MHz	Stop Freq 18.50 MHz	Integ BW 30.00 kHz	-45.56	Lower ∆Limit(dB) (-35.56)	Freq (Hz) -17.51 M	dBm 	Upper ∆Limit(dB) ()	Freq (Hz)			
18.50 MHz 21.50 MHz 27.00 MHz 17.50 MHz	21.50 MHz 27.00 MHz 47.00 MHz 47.00 MHz	1.000 MHz 1.000 MHz 1.000 MHz 270.0 kHz	-34.09 -41.20 -40.18 	(-24.09) (-28.20) (-15.18) ()	-19.19 M -22.82 M -33.70 M 	  -44.50	() () (-94.50)	  29.25 M			Local
12 50 MHz	15 00 MHz	1 000 MHz May 31, 202 3:04:16 PM		<u>``</u>							

## Low Channel Edge Plot (35 MHz BPSK RB 1)-1





Spectrum Analy. SEM	<u> </u>	+	.8						₽	Frequency	· ₹
KEYSIGHT RL ++- M PASS	Input: RF Coupling: DC Align. Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	n: 20 dB amp: Off	Trig: Free Rui Gate: Off IF Gain. Low	Avg Hc	Freq: 2.51750 Id: 100.00% o Std. None		Center Fre 2.517500 CF Step		Settings
1 Graph Scale/Div 10 dl	v B			/I Offset 27. alue 30.0 dE					9.400000	MHz	
Log 20.0 10.0 0.00				- · · · · · · · · · · · · · · · · · · ·		7		Aasolute Limit	Man Freq Offse 0 Hz	t	
-10.0 -20.0 -30.0						L.		Spectrum			
-40.0 -50.0 -50.0											
Disp Center 2.5	51750 GHz	Char	Det: Ave	erage, #Offs	Det: Average			pan 94.000 MHz 001 pts			
2 Table	V	Powe 22.46 dBi		z							
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Limit(dB)	Freq (Hz)	dBm	Upper ∆Limit(dB)	Freq (Hz)			
17.50 MHz 18.50 MHz 21.50 MHz	18.50 MHz 21.50 MHz 27.00 MHz	680.0 kHz 1.000 MHz 1.000 MHz	-20.73 -22.31 -25.57	(-10.73) (-12.31) (-12.57)	-17.51 M -18.52 M -21.50 M	 	() ()				
27.00 MHz 27.00 MHz 17.50 MHz	47.00 MHz 47.00 MHz 47.00 MHz	1.000 MHz 270.0 kHz 1.000 MHz	-31.28	(-6.28) ()	-28.30 M	-25.24	()				Local
		May 31, 20 3:03:02 P									

## Low Channel Edge Plot (35 MHz BPSK)-1





						•		,			
Spectrum Analyz SEM	zer 1 💡	+								Frequency	· · · ※
KEYSIGHT RL +→- ™ PASS	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	en: 20 dB amp: Off	Trig: Free Rui Gate: Off IF Gain. Low	Avg H	r Freq: 2.51750 old: 100.00% of Std. None			requency 00000 GHz	Settings
1 Graph	•		Bofly	Offeet 27	27 dB					000 MHz	
Scale/Div 10 dl	B			vl Offset 27. alue 30.0 dB							
20.0								Relative Limit	Aut Ma		
			Å								
10.0									Freq Off	set	
-10.0									0 Hz		
-20.0								Absolute Limit			
-30.0				A							
-40.0		1	m m	mal				Spectrum			
-50.0		- And - All						Spectrum			
-60.0											
Disp Center 2.5	51750 GHz	Cha	n Det: Ave	erage, #Offs	Det: Average			oan 140.00 MHz 01 pts			
2 Table	•	Powe	er								
		22.38 dB	m / 35 MH	z							
				Lower			Upper				
Start Freq	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)			
17.50 MHz	18.50 MHz	30.00 kHz		()		-56.15	· · /	17.67 M			
18.50 MHz	22.50 MHz	1.000 MHz		()		-40.97	(-30.97)	20.18 M			
22.50 MHz	52.50 MHz	1.000 MHz		()		-40.14	(-27.14)	50.55 M			Local
52.50 MHz 17.50 MHz	70.00 MHz 70.00 MHz	1.000 MHz 510.0 kHz	 -17.25	() (-67.25)	 -17.50 M	-49.55	(-24.55)	52.59 M			Loodi
12.50 MHz	15.00 MHz	1 000 MHz	-17.20	(-07.23)	-17.50 M		· ()				
150		May 31, 20 3:04:52 P		$\wedge$							

## Low Channel Edge Plot (35 MHz BPSK\_RB1)-2





	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	en: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Ho	Freq: 2.51750 old: 100.00% of Std. None		2.517	Frequency 500000 GHz	Settings
Graph cale/Div 10 d	T B			vi Offset 27. alue 30.0 dB					1	p 0000 MHz uto	J
. <b>og</b>								Relative Limit	M		
10.0 0.00									Freq O 0 Hz	offset	
10.0 20.0 30.0						~	~	Absolute Limit			
10.0		~~						Spectrum			
50.0		/						× ~~~~~			
i0.0	51750 GHz	Char	n Det: Ave	erage, #Offs	Det: Average			pan 140.00 MHz 01 pts			
isp Center 2.	51750 GHz v	Powe			Det: Average						
isp Center 2.	▼ Stop Freq	Powe 22.46 dB Integ BW	er		Det: Average	dBm					
isp Center 2. Table	V	Powe 22.46 dB Integ BW 680.0 kHz	er m / 35 MH	z Lower		dBm -21.67	20 Upper	01 pts			
50.0 isp Center 2. Table Start Freq 17.50 MHz 18.50 MHz	Stop Freq 18.50 MHz 22.50 MHz	Powe 22.46 dB Integ BW 680.0 kHz 1.000 MHz	er m / 35 MH dBm	z Lower ∆Limit(dB)	Freq (Hz)	-21.67 -19.85	20 Upper ∆Limit(dB)	01 pts Freq (Hz) 17.50 M 18.50 M			
isp Center 2. Table Start Freq 17.50 MHz 18.50 MHz 22.50 MHz	Stop Freq 18.50 MHz 22.50 MHz 52.50 MHz	Powe 22.46 dB Integ BW 680.0 kHz 1.000 MHz 1.000 MHz	er m / 35 MH dBm 	z Lower ∆Limit(dB) ()	Freq (Hz)	-21.67 -19.85 -23.48	Upper ∆Limit(dB) (-11.67) (-9.85) (-10.48)	01 pts Freq (Hz) 17.50 M 18.50 M 22.50 M			
50.0 isp Center 2. Table Start Freq 17.50 MHz 18.50 MHz	Stop Freq 18.50 MHz 22.50 MHz	Powe 22.46 dB Integ BW 680.0 kHz 1.000 MHz	er m / 35 MH dBm  	z ∆Limit(dB) ()	Freq (Hz) 	-21.67 -19.85	20 Upper ∆Limit(dB) (-11.67) (-9.85)	01 pts Freq (Hz) 17.50 M 18.50 M			Loc

## Low Channel Edge Plot (35 MHz BPSK)-2





#### Mid Channel Edge Plot (35 MHz BPSK)





Input: RF Coupling: DC Align. Auto		Pre (S)	en: 20 dB amp: Off	Trig: Free Run Gate: Off IF Gain. Low	Avg Hc			Center Frequency 2.552500000 GHz	Settings
T								14.000000 MHz	
В		Ref V	alue 30.0 dB	m			Relative Limit	Auto Man	
								Freq Offset 0 Hz	
							Absolute Limit		
		mff	 	~~~~~~ (~~	~~~^		Spectrum		
55250 GHz	Chai	n Det: Ave	erage,#Offs	Det: Average				Z	
•			z						
Stop Freg	Integ BW	dBm	Lower	Freg (Hz)	dBm	Upper	Freg (Hz)		
18.50 MHz	30.00 kHz	-52.58	(-42.58)	-17.69 M	-42.73	(-32.73)	17.51 M		
22.50 MHz	1.000 MHz	-40.36	(-30.36)	-20.38 M	-35.52	(-25.52)	19.12 M		
52.50 MHz	1.000 MHz	-38.04	(-25.04)	-50.40 M	-35.63	(-22.63)	33.60 M		
		-48.71	(-23.71)	-52.50 M	-54.78	(-29.78)	57.49 M		Loc
70.00 MHz 12.50 MHz	1.000 MHz 1.000 MHz	-40.71	(-20.71)	-02.00 101	01.10	(====)			
	Coupling: DC Align. Auto	Coupling: DC Align. Auto IB 55250 GHz Char Freq Ref. Int NFE: Adaptiv Stop Freq 18.50 MHz Stop Freq 18.50 MHz Stop Kreq 18.50 MHz Stop Kreq 18.50 MHz	Coupling: DC Align. Auto V Freq Ref. Int (S) NFE: Adaptive V Ref Lint Ref Vi Stop Freq 18.50 MHz Stop Freq 18.50 MHz Stop Freq 18.50 MHz Stop Freq 18.50 MHz Stop Kerep 18.50 MHz Stop Kerep	Coupling: DC Align. Auto       Corr Corr Freq Ref. Int (S) NFE: Adaptive       Preamp. Off         Ref Lvl Offset 27.: IB       Ref Value 30.0 dB         Stop Freq       Chan Det: Average , #Offs         Power       22.79 dBm / 35 MHz         Stop Freq       Integ BW       dBm       ALimit(dB)         18.50 MHz       30.00 kHz       -52.58       (-42.58)	Coupling: DC Align: Auto       Corr CCorr Freq Ref. Int (S) NFE: Adaptive       Preamp: Off       Gate: Off IF Gain: Low         Ref Lvi Offset 27.37 dB       Ref Value 30.0 dBm         B       Ref Value 30.0 dBm         55250 GHz       Chan Det: Average , #Offs Det: Average         Y       Power 22.79 dBm / 35 MHz         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)         18.50 MHz       Stop Freq (Hz)       30.00 kHz       -52.58       (-42.58)       -17.69 M	Coupling: DC Align: Auto       Corr CCorr Freq Ref. Int (S) NFE: Adaptive       Preamp: Off       Gate: Off IF Gain. Low       Avg Hc Radio 1         Ref Lvl Offset 27.37 dB       Ref Lvl Offset 27.37 dB         IB       Ref Lvl Offset 27.37 dB         B       Ref Lvl Offset 27.37 dB         Stop Freq       Chan Det: Average, #Offs Det: Average         Y       Power 22.79 dBm / 35 MHz         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm	Coupling: DC Align. Auto       Corr CCorr Freq Ref. Int (S) NFE: Adaptive       Preamp: Off IF Gain. Low       Gate: Off IF Gain. Low       Avg Hold: 100.00% o Radio Std. None         Ref LvI Offset 27.37 dB IB       Ref Value 30.0 dBm       Preamp: Off       Gate: Off IF Gain. Low       Avg Hold: 100.00% o Radio Std. None         Stop Freq       Chan Det: Average, #Offs Det: Average       Si 20         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm       Autimit(dB)         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm       Autimit(dB)	Coupling: DC Align: Auto       Corr CCorr Freq Ref. Int (S) NFE: Adaptive       Preamp: Off       Gate: Off IF Gain: Low       Avg Hold: 100.00% of 20 Radio Std. None         Ref Lvi Offset 27.37 dB IB       Ref Lvi Offset 27.37 dB       Ref Lvi Offset 27.37 dB       Ref Lvi Offset 27.37 dB         B       Ref Value 30.0 dBm       Ref unit       Ref Lvi Offset 27.37 dB       Ref unit         55250 GHz       Chan Det: Average , #Offs Det: Average       Span 140.00 MH: 2001 pts         Y       Power 22.79 dBm / 35 MHz       Lower       Upper 4Bm       Upper 4Limit(dB)       Upper Freq (Hz)         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm       ALimit(dB)       Freq (Hz)         Stop Freq       Integ BW       dBm       ALimit(dB)       Freq (Hz)       dBm       ALimit(dB)       Freq (Hz)	Coupling DC Align. Auto       Corr CCorr Freq Ref. Int (S) NFE: Adaptive       Preamp: Off IF Gain. Low       Arg Hold: 100,00% of 20 Radio Std. None       CF Step 14.000000 GHz         Ref Lvl Offset 27.37 dB IB       Ref Value 30.0 dBm       Ref Value 30.0 dBm       Relative Limit Man         IB       Ref Value 30.0 dBm       Relative Limit       Auto Man         IB       Ref Value 30.0 dBm       Relative Limit       Auto Man         IB       Ref Value 30.0 dBm       Relative Limit       Auto Man         IB       Ref Value 30.0 dBm       Relative Limit       Auto         IB       Ref Value 30.0 dBm       Spectrum       Spectrum         ISS250 GHz       Chan Det: Average , #Offs Det: Average       Span 140.00 MHz         ISS0 MHz       Dower       Upper       22.79 dBm / 35 MHz         Lower       Upper       Upper       GBm ALimit(dB)       Freq (Hz)         18.50 MHz       30.00 kHz       -52.58 (-42.58) -17.69 M       -42.73 (-32.73) 17.51 M

## High Channel Edge Plot (35 MHz BPSK RB 1)





#### High Channel Edge Plot (35 MHz BPSK)





Spectrum Analy SEM	zer 1 ,	+							Frequency	· · · 影
	Input: RF Coupling: DC Align. Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Pre (S)	en: 20 dB amp: Off	Trig: Free Ru Gate: Off IF Gain. Low	Avg Hc	Freq: 2.52000 Id: 100.00% o Std. None		Center Frequency 2.520000000 GHz	Settings
1 Graph	•		Pofly	vl Offset 27.	37 dB				9.900000 MHz	
Scale/Div 10 dl	в			alue 30.0 dB					Auto	
Log								Absolute Limit	Man	
20.0		<u>^</u>								
10.0									Freq Offset	
0.00									0 Hz	
-10.0										
-20.0										
-30.0		a h		/\		Λ				
-40.0	A	1 man	m	$\sim$			~~~.	Spectrum		
-50.0		· · · ·								
-60.0										
Disp Center 2.	52000 GHz	Char	Det: Ave	erage, #Offs	Det: Average	•		oan 99.000 MHz 001 pts		
		_					20	orpis		
2 Table	•	Powe								
		22.24 dBi	m / 40 IVIH							
				Lower			Upper			
Start Freq	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)		
20.00 MHz	21.00 MHz	30.00 kHz	-42.05	(-32.05)	-20.00 M		()			
21.00 MHz 24.00 MHz	24.00 MHz 29.50 MHz	1.000 MHz 1.000 MHz	-34.80 -40.43	(-24.80)	-21.62 M		()			
24.00 MHZ 29.50 MHZ	29.50 MHz 49.50 MHz	1.000 MHz 1.000 MHz	-40.43	(-27.43) (-19.10)	-25.38 M -38.70 M		()			Local
29.50 MHZ 20.00 MHZ	49.50 MHz 49.50 MHz	270.0 kHz	-44.10	(-19.10)		-46.62	() (-96.62)	 25.81 M		
12 50 MHz	45.50 MHz	1 000 MHz		()		-40.02	(-30.02)	20.01 1		
<b>4</b> 50		May 31, 20 3:15:22 P		$\wedge$						

## Low Channel Edge Plot (40 MHz BPSK RB 1)-1



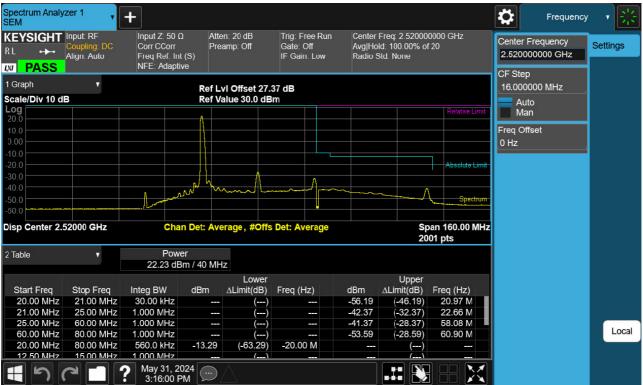


pectrum Analy EM	, I	+ Input Ζ: 50 Ω	Atte	en: 20 dB	Trig: Free Run	Contor	Freg: 2.52000		Frequer	icy Y
	Coupling: DC Align. Auto	Corr CCorr Freq Ref. Int NFE: Adaptiv	Pre (S)	amp: Off	Gate: Off IF Gain. Low	Avg Ho	old: 100.00% of Std. None		Center Frequency 2.520000000 GHz	Settings
PASS     Graph     cale/Div 10 d	₹ B	In E. Adupti	Ref L	vi Offset 27. alue 30.0 dB					CF Step 9.900000 MHz	
og								Absolute Limit	Man	
0.0									Freq Offset 0 Hz	
0.0								Spectrum		
0.0										
0.0										
	52000 GHz	Chai	n Det: Ave	erage,#Offs	Det: Average			oan 99.000 MHz 01 pts		
o.o sp Center 2. Table	52000 GHz	Powe	er		Det: Average					
sp Center 2.	_	Powe			Det: Average					
sp Center 2.	•	Powe 22.35 dB	er m / 40 MH	lz Lower	-	dDee	20 Upper	01 pts		
sp Center 2. Table Start Freq	▼ Stop Freq	Powe 22.35 dB Integ BW	er m / 40 MH dBm	lz Lower ∆Limit(dB)	Freq (Hz)	dBm	20 Upper ∆Limit(dB)	01 pts Freq (Hz)		
sp Center 2. Fable Start Freq 20.00 MHz	▼ Stop Freq 21.00 MHz	Powe 22.35 dB Integ BW 820.0 kHz	er m / 40 MH dBm -15.13	lz Lower ∆Limit(dB) (-5.13)	Freq (Hz) -20.00 M		20 Upper ∆Limit(dB) ()	01 pts Freq (Hz) 		
Start Freq 20.00 MHz 21.00 MHz	Stop Freq 21.00 MHz 24.00 MHz	Powe 22.35 dB Integ BW 820.0 kHz 1.000 MHz	er m / 40 MH dBm -15.13 -22.81	Z Lower ∆Limit(dB) (-5.13) (-12.81)	Freq (Hz) -20.00 M -21.00 M		20 Upper ∆Limit(dB) () ()	01 pts Freq (Hz) 		
sp Center 2.3 Table Start Freq 20.00 MHz 21.00 MHz 24.00 MHz	Stop Freq 21.00 MHz 24.00 MHz 29.50 MHz	Powe 22.35 dB Integ BW 820.0 kHz 1.000 MHz 1.000 MHz	er m / 40 MH dBm -15.13 -22.81 -25.73	Z Lower ∆Limit(dB) (-5.13) (-12.81) (-12.73)	Freq (Hz) -20.00 M -21.00 M -24.03 M		20 Upper ∆Limit(dB) () ()	01 pts Freq (Hz) 		Loc
sp Center 2.1 Table Start Freq 20.00 MHz 21.00 MHz	Stop Freq 21.00 MHz 24.00 MHz	Powe 22.35 dB Integ BW 820.0 kHz 1.000 MHz	er m / 40 MH dBm -15.13 -22.81	Z Lower ∆Limit(dB) (-5.13) (-12.81)	Freq (Hz) -20.00 M -21.00 M		20 Upper ∆Limit(dB) () ()	01 pts Freq (Hz) 		Loc

## Low Channel Edge Plot (40 MHz BPSK)-1







#### Low Channel Edge Plot (40 MHz BPSK\_RB1)-2





Spectrum Analy. SEM		+	.0		- X-				Frequency	· · · <del>  ※</del>
KEYSIGHT RL +++ IVI PASS	Input: RF Coupling: DC Align. Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref. Int NFE: Adaptiv	Prea (S)	en: 20 dB amp: Off	Trig: Free Rui Gate: Off IF Gain. Low	Avg H	r Freq: 2.52000 old: 100.00% o Std. None		Center Frequency 2.520000000 GHz	Settings
1 Graph	V		Ref L	VI Offset 27.	37 dB				16.000000 MHz	
Scale/Div 10 dl	3		Ref Va	alue 30.0 dB	m				Auto	
Log								Relative Limit	Man	
20.0 10.0 0.00									Freq Offset 0 Hz	
-10.0 -20.0 -30.0							- ~~	Absolute Limit		
-40.0 -50.0 -50.0								Spectrum		
Disp Center 2.5	52000 GHz	Char	n Det: Ave	erage,#Offs	Det: Average			oan 160.00 MHz 001 pts		
2 Table		Powe	r							
		22.35 dB	m / 40 MH	z						
				Lower			Upper			
Start Freq	Stop Freq	Integ BW	dBm	∆Limit(dB)	Freq (Hz)	dBm	∆Limit(dB)	Freq (Hz)		
20.00 MHz	21.00 MHz	820.0 kHz		()		-14.99		20.00 M		
21.00 MHz	25.00 MHz	1.000 MHz		()		-20.50		21.02 M		
25.00 MHz	60.00 MHz	1.000 MHz		()		-24.49	(-11.49)	25.00 M		
60.00 MHz	80.00 MHz	1.000 MHz		()		-40.63	(-15.63)	60.00 M		Local
20.00 MHz	80.00 MHz	560.0 kHz	-23.03	(-73.03)	-20.00 M		- ()			
12.50 MHz	15 00 MHz	1 000 MH7		()			. ()			
150		May 31, 20 3:14:47 P								

## Low Channel Edge Plot (40 MHz BPSK)-2





#### Mid Channel Edge Plot (40 MHz BPSK)