

KEYSIGHT     Input: RF       RL     Image: Coupling: DC       Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pov Trig: Free Run	ver (RMS <mark>123456</mark> AWWWWW AAAAAA	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d		Mkr1	1.850 000 GHz -27.035 dBm	4.00000000 MHz	
7.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
2.8		1	/			AUTO TUNE	
2.8						CF Step 400.000 kHz	
2.8						Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 150 kHz		#Video BW 470	kHz	#Swee	Span 4.000 MHz ep ~1.01 s (1001 pts)		Loc
- n C	<b>May 21, 2024</b> 11:51:10 AM	$\square$				Signal Track (Span Zoom)	

### 15 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	/zer 1	+					*	Frequency	( - ] 😤
KEYSIGHT RL +→	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1 Avg Hold: 300 Radio Std: No			Frequency 00000 GHz	Settings
1 Graph Scale/Div 10.0	•		Ref LvI Offset 27				4.0000	MHz	
20.0 10.0 10.0 20.0 10.0 20.0			Ref Value 30.00			RMS AVG	CF Step 400.00 Au Ma Freq Of 0 Hz	0 kHz o n	
40.0 50.0 60.0 Center 1.84850 Res BW 39.000			Video BW 390.0	0 kHz*		Span 4 MH; ep 3.20 ms (1001 pts			
2 Metrics	T				Swee	2p 3.20 ms (1001 pts	2		
Total Chann Total Power	el Power Spectral Density	-31.42 dBm / 1.0 y -91.42 d							Local
<b>1</b>		May 21, 2024 11:51:20 AM	$\square$						

### 15 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT     Input: RF       RL     ++     Coupling: DC       Align: Auto     Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Powe Trig: Free Run	r (RMS <mark>1</mark> 23456 A <del>WW WW W</del> A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d		Mkr1 1	.915 004 GHz -40.358 dBm	4.00000000 MHz Swept Span Zero Span	
7.2	~	7				Full Span	
2.84						Start Freq 1.913000000 GHz	
12.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
22.8						AUTO TUNE	
12.8						CF Step 400.000 kHz	
52.8				him is a company	RMS	Auto Man Freq Offset	
52.8						0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Lor
1 7 C 1	? May 21, 2024 11:56:46 AM	$\square$				Signal Track (Span Zoom)	

# 15 M\_Band Edge\_High\_BPSK\_1RB



KEYSIGHT     Input: RF       Coupling: DC       Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Run	wer (RMS <mark>123456</mark> A <del>WW WW W</del> A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d		Mkr1	1.915 016 GHz -39.792 dBm	4.00000000 MHz	
.2						Full Span	
.84						Start Freq 1.913000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8						AUTO TUNE	
2.8		1			RMS	CF Step 400.000 kHz	
2.8						Auto Man Freq Offset	
2.8						0 Hz	Lo
enter 1.915000 GHz tes BW 150 kHz		#Video BW 470	kHz	#Swe	Span 4.000 MHz ep ~1.01 s (1001 pts)		20
1761	? May 21, 2024 11:56:14 AM	$\square$				Signal Track (Span Zoom)	1

### 15 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	/zer 1	+					\$	Frequency	y • 🔆
KEYSIGHT <sup>RL</sup> →→→	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.9165000 Avg Hold: 300/300 Radio Std: None	00 GHz	president and a second second	Frequency 00000 GHz	Settings
Graph	*		Ref LvI Offset 27				4.0000	MHz	
cale/Div 10.0 .0g 20.0 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000 Aut Mar	0 kHz	
0.00							Freq Off 0 Hz	<u> </u>	
40.0 50.0 50.0						RMS AVG			
enter 1.91650 es BW 39.000			Video BW 390.0	0 kHz*	Sweep 3.20 r	Span 4 MHz ns (1001 pts)			
Metrics	٣								
Total Chann	el Power	-34.56 dBm / 1.0	0 MHz						Loca
Total Power	Spectral Densit	y -94.56 d	Bm/Hz						LUCA
<b>1</b> 5	C [] (	May 21, 2024 11:56:23 AM	$\odot$						

### 15 M\_Extended Band Edge\_High\_BPSK\_FullRB



EYSIGHT Input: RF L + Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	(RMS <mark>123456</mark> A WW WW W A A A A A A A	Center Frequency 1.850000000 GHz Span	Setting
Spectrum v cale/Div 10 dB		Ref LvI Offset 27.7 Ref Level 27.16 dB			850 000 GHz -39.760 dBm	4.00000000 MHz Swept Span Zero Span	
			M			Full Span	
.16						Start Freq 1.848000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
2.8			/	$\land$		AUTO TUNE	
2.8		1	/			CF Step 400.000 kHz	
2.8	and the second second second				RMS	Auto Man Freq Offset	
2.8						0 Hz	
nter 1.850000 GHz es BW 30 kHz		#Video BW 1.0 M	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Lo
561	? May 21, 2024 11:59:02 AM					Signal Track (Span Zoom)	

### 20 M\_Band Edge\_Low\_BPSK\_1RB



KEYSIGHT Input: RF RL +++ Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (R Trig: Free Run	MS <mark>123456</mark> A <del>wwwww</del> AAAAAA	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			50 000 GHz 28.521 dBm	4.00000000 MHz Swept Span Zero Span	
7.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
2.8		1	+			AUTO TUNE	
2.8						CF Step 400.000 kHz	
2.8						Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 200 kHz		#Video BW 620	kHz		Span 4.000 MHz .01 s (1001 pts)		Loc
- <b>5</b> -	<b>?</b> May 21, 2024 11:58:30 AM	$\Theta \triangle$				Signal Track (Span Zoom)	

### 20 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	/zer 1	+					*	Frequency	- 😤
KEYSIGHT RL +→-	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.848500 Avg Hold: 300/300 Radio Std: None	0000 GHz	provide and the second second	requency 00000 GHz	Settings
1 Graph	*		Ref LvI Offset 27				4.0000	MHz	
Scale/Div 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000	) kHz	
0.00						RMS AVG	Mar Freq Off: 0 Hz		
-20.0 -30.0 -40.0						m			
-50.0									
Center 1.84850 Res BW 39.000			Video BW 390.0	0 kHz*	Sweep 3.20	Span 4 MHz ms (1001 pts)			
2 Metrics	T								
Total Channe	el Power	-30.85 dBm / 1.0	0 MHz						Local
Total Power	Spectral Densit	y -90.85 d	Bm/Hz						Locar
<b>ا د</b>	2	May 21, 2024 11:58:40 AM	$\odot$						

### 20 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT     Input: RF       RL     Coupling: DC       Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Run		1 2 3 4 5 6 A <del>WW WW W</del> A A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d		Mkr1		004 GHz 522 dBm	4.00000000 MHz Swept Span Zero Span	
7.2	~~~~						Full Span	
.16							Start Freq 1.913000000 GHz	
12.8	/					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
22,8							AUTO TUNE	
2.8		1					CF Step 400.000 kHz	
52.8			and a grant a second state	-	m	RMS	Auto Man	
32.8							Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Swe		n 4.000 MHz s (1001 pts)	X Axis Scale Log Lin	Lo
- - - - - - - - - - - - - -	May 21, 2024 12:04:06 PM	$\square$					Signal Track (Span Zoom)	

## 20 M\_Band Edge\_High\_BPSK\_1RB



L +++ Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (F Trig: Free Run	RMS123456 Awwwww AAAAAA	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref Lvi Offset 27.1 Ref Level 27.16 dB			15 760 GHz 36.790 dBm	4.00000000 MHz Swept Span Zero Span	
7.2						Full Span	
16						Start Freq 1.913000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8						AUTO TUNE	
2.8				1	RMS	CF Step 400.000 kHz Auto Man	
2.8						Freq Offset 0 Hz	
enter 1.915000 GHz tes BW 200 kHz		#Video BW 620 k	Hz		Span 4.000 MHz .01 s (1001 pts)	X Axis Scale Log Lin	Lor
- n c - ?	May 21, 2024 12:03:33 PM					Signal Track (Span Zoom)	

### 20 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	r v	+					<b>\$</b>	Frequency	y y 💽
EYSIGHT ⊥ +++ ₪	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.91650000 Avg Hold: 300/300 Radio Std: None		Center Fr 1.916500 Span	equency 1000 GHz	Settings
Graph	*		Ref LvI Offset 27				4.0000 N	IHz	
cale/Div 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000	kHz	1
0.0							Auto Man		
10.0							Freq Offs 0 Hz	et	
10.0 10.0									ί.
50.0						RMS AVG			
enter 1.91650			Video BW 390.0	0 kHz*		Span 4 MHz			
Metrics	U KHZ T				Sweep 3.20 m	s (1001 pts)			
Total Chann	el Power	-33.54 dBm / 1.0	0 MHz						Loca
Total Power	Spectral Density	y -93.54 d	Bm/Hz						2008
15		May 21, 2024 12:03:43 PM	$\odot$						

### 20 M\_Extended Band Edge\_High\_BPSK\_FullRB



CEYSIGHT Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	(RMS <mark>123456</mark> A <del>WWWWW</del> AAAAAAA	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			850 000 GHz -43.941 dBm	4.00000000 MHz Swept Span Zero Span	
7.2			$\square$			Full Span	
2.84						Start Freq 1.848000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
22.8						AUTO TUNE	
12.8		1		1		CF Step 400.000 kHz	
j2.8	Conservation of the second second				RMS	Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Sweep -	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Lo
- n C	<b>May 21, 2024</b> 12:06:16 PM	$\odot$				Signal Track (Span Zoom)	

### 25 M\_Band Edge\_Low\_BPSK\_1RB



KEYSIGHT RL +++ Coupling DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (R Trig: Free Run	MS <mark>123456</mark> A <del>wwwww</del> AAAAAA	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			49 996 GHz 25.346 dBm	4.00000000 MHz Swept Span Zero Span	
17.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
12.8			-A-		DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
22.8		1				AUTO TUNE	
12.8						CF Step 400.000 kHz	
52.8						Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 270 kHz		#Video BW 910	kHz		Span 4.000 MHz .01 s (1001 pts)		Loc
1500	? May 21, 2024 12:05:44 PM	$\square$				Signal Track (Span Zoom)	

### 25 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	/zer 1	+					<b>*</b>	Frequency	• 影
KEYSIGHT RL ↔	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.84 Avg Hold: 300/30 Radio Std: None	0	president and a second second	requency 10000 GHz	Settings
1 Graph			Ref LvI Offset 2	27.16 dB			4.0000	MHz	
Scale/Div 10.0	dB		Ref Value 30.00	dBm			CF Step		
20.0							400.000	kHz	
10.0							Aut Mar		
						RMS AVG	Freq Off 0 Hz	set	
-20.0							-		
-40.0						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
-50.0									
-60.0									
Center 1.84850 Res BW 39.000			Video BW 390.	00 kHz*	Sweep	Span 4 MHz 3.20 ms (1001 pts)			
2 Metrics	*								
Total Channe	al Douvor	-29.97 dBm / 1.0							
									Local
Total Power	Spectral Density	y -89.97 d	IBM/HZ						
 まり		May 21, 2024 12:05:53 PM	$\square$						

### 25 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT     Input: RF       Coupling: DC:     Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Po Trig: Free Run	wer (RMS <mark>123456</mark> A WWWWW A A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d		Mkr1	1.915 000 GHz -44.119 dBm	4.00000000 MHz	
7.2	$\sim$					Full Span	
84						Start Freq 1.913000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8						AUTO TUNE	
2.8		1				CF Step 400.000 kHz	
2.8			and the second second second		RMS	Auto Man	
2.8						Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Swe	Span 4.000 MHz ep ~1.01 s (1001 pts)		Loc
	<b>May 21, 2024</b> 12:11:25 PM	$\square$				Signal Track (Span Zoom)	

## 25 M\_Band Edge\_High\_BPSK\_1RB



KEYSIGHT Input R RL +++ Coupling Align: A	DC Corr uto Freq		#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pov Trig: Free Run	ver (RMS <mark>123456</mark> A WW WW W A A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum cale/Div 10 dB			of LvI Offset 27. of Level 27.16 d		Mkr1	1.915 020 GHz -35.867 dBm	4.00000000 MHz Swept Span Zero Span	
16							Full Span Start Freq 1.913000000 GHz	
2.8						DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8		and and a start of the start of	1			HMS	AUTO TUNE CF Step 400.000 kHz	
12.8 52.8							Auto Man Freq Offset	
enter 1.915000 GHz			¥Video BW 910	kHz		Span 4.000 MHz	0 Hz X Axis Scale	Loo
Res BW 270 kHz	<b>?</b> May 12:	21, 2024 10:53 PM	$\Box$		#Swee	ep ~1.01 s (1001 pts)	Signal Track	

### 25 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	zer 1	+					<b>\$</b>	Frequency	· • 🔆
KEYSIGHT RL +→+ ™	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.91650000 Avg Hold: 300/300 Radio Std: None	) GHz	Center Fre 1.916500 Span	And some state of the second se	Settings
1 Graph	*		Ref LvI Offset 2				4.0000 M	Hz	
Scale/Div 10.0 Log 20.0 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000 k	(Hz	
0.00							Man Freq Offse 0 Hz	:t	
30.0		······				RMS AVG			
-50.0 -60.0 Center 1.91650	00 GHz		Video BW 390.0	10 kHz*		Span 4 MHz			
Res BW 39.000					Sweep 3.20 m	s (1001 pts)			
2 Metrics	۲								
Total Channe	el Power	-31.46 dBm / 1.0	00 MHz						Local
Total Power	Spectral Density	/ -91.46 d	IBm/Hz						Local
<b>ま</b> り		May 21, 2024 12:11:03 PM	$\square$						

### 25 M\_Extended Band Edge\_High\_BPSK\_FullRB



KEYSIGHT Input: RF RL +++ Coupling: Align: Aut			PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS Trig: Free Run	<b>1 2 3 4 5 6</b> A WW WW W A A A A A A A	Center Frequency 1.850000000 GHz Span	Setting
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16		Mkr1 1.848 -40	788 GHz .891 dBm	4.00000000 MHz Swept Span Zero Span	
.16						Full Span Start Freq	
2.84					DL1 -13.00 dBm	1.848000000 GHz Stop Freq 1.852000000 GHz	
22.8						AUTO TUNE	
12.8					RMS	400.000 kHz Auto Man	
2.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	Spa #Sweep ~1.01	an 4.000 MHz I s (1001 pts)	X Axis Scale Log Lin	
1 う つ 「	May 21, 202 12:13:47 Pt					Signal Track (Span Zoom)	

### 30 M\_Band Edge\_Low\_BPSK\_1RB



KEYSIGHT     Input: RF       Coupling: DC       Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RM Trig: Free Run	S <mark>1 2 3 4 5 6</mark> A <del>wwww</del> w A A A A A A A	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v scale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d		Mkr1 1.85 -24	0 000 GHz .759 dBm	4.00000000 MHz Swept Span Zero Span	
17.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
12.8					DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
22.8		1				AUTO TUNE	
2.8						CF Step 400.000 kHz	
52.8						Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 300 kHz		#Video BW 1.0	MHz		an 4.000 MHz 1 s (1001 pts)		Loc
4 7 C -	? May 21, 2024 12:13:15 PM	$\square$				Signal Track (Span Zoom)	

### 30 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	zer 1	+						Frequency	▼
KEYSIGHT RL +→- ™	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.848500 Avg Hold: 300/300 Radio Std: None	000 GHz		requency 10000 GHz	Settings
1 Graph			Ref LvI Offset 2	7.16 dB			4.0000	MHz	
Scale/Div 10.0 Log 20.0 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000	>	
						RMS AVG	Mar Freq Off: 0 Hz		
-30.0						m			
-60.0 Center 1.84850 Res BW 39.000			Video BW 390.0	0 kHz*	Sweep 3.20	Span 4 MHz ms (1001 pts)			
2 Metrics	v								
Total Channe	el Power	-27.59 dBm / 1.0	0 MHz						Local
Total Power	Spectral Density	y -87.59 d	Bm/Hz						Local
<b>۲</b>	2	May 21, 2024 12:13:25 PM	$\square$						

### 30 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT     Input: RF       RL     ++     Coupling: DC       Align: Auto     Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	(RMS <mark>123456</mark> A <del>WWWWW</del> AAAAAA	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v icale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			916 160 GHz -41.185 dBm	4.00000000 MHz Swept Span Zero Span	
7.2	m					Full Span	
2.84						Start Freq 1.913000000 GHz	
12.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
22.8						AUTO TUNE	
12.8	/	Lun		1		CF Step 400.000 kHz	
j2.8			and the second s	- Lannah	RMS	Auto Man	
32.8						Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Loc
-	<b>?</b> May 21, 2024 12:18:57 PM	$\square$				Signal Track (Span Zoom)	

## 30 M\_Band Edge\_High\_BPSK\_1RB



KEYSIGHT     Input: RF       R L     +++     Coupling: DC       Align: Auto     Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS Trig: Free Run	<b>1 2 3 4 5 6</b> A WW WW W A A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d		Mkr1 1.915 -27	000 GHz .020 dBm	4.00000000 MHz Swept Span Zero Span	
.16						Full Span Start Freq 1.913000000 GHz	
2.84					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8			Manthian Tanahan ana tanahan tanahan tanahan ta	1.50 <sup>4</sup> (1.5 <sup>1</sup> )1.920 <sup>4</sup> (1.5 <sup>1</sup> )1. <sup>10</sup> 1. <sup></sup>	RMS	AUTO TUNE CF Step 400.000 kHz	
52.8						Auto Man Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 300 kHz		#Video BW 1.0	MHz	Sp: #Sweep ~1.01	an 4.000 MHz I s (1001 pts)	X Axis Scale	Loo
- n c	May 21, 2024 12:18:24 PM					Signal Track (Span Zoom)	

### 30 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	/zer 1	+					\$	Frequency	( • • 🕌
KEYSIGHT	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.91650000 Avg Hold: 300/300 Radio Std: None	00 GHz		requency 00000 GHz	Settings
Graph			Ref LvI Offset 27				5pan 4.0000	MHz	
cale/Div 10.0	dB		Ref Value 30.00 (	dBm			CF Step 400.000 Aut		
0.00							Ma	1	
							Freq Off 0 Hz	set	
30.0 <b>~~~~</b> 40.0	m								
50.0 60.0					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	RMS AVG			
enter 1.91650 es BW 39.000			Video BW 390.0	0 kHz*	Sweep 3.20 m	Span 4 MHz ns (1001 pts)			
Metrics	•								
Total Chann	el Power	-31.46 dBm / 1.0	0 MHz						-
Total Power	Spectral Density	y -91.46 d	Bm/Hz						Loca
15	C [ ]	May 21, 2024 12:18:34 PM	$\odot$						

### 30 M\_Extended Band Edge\_High\_BPSK\_FullRB



	ut: RF upling: DC gn: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (R) Trig: Free Run	MS <mark>123456</mark> A WWWWW A A A A A A A	Center Frequency 1.850000000 GHz Span	Settings
Spectrum cale/Div 10 dB	•		Ref LvI Offset 27 Ref Level 27.16 c			l8 728 GHz 9.195 dBm	4.00000000 MHz Swept Span Zero Span	
16				$\bigwedge$			Full Span	
.84						DL1 -13.00 dBm	1.848000000 GHz Stop Freq	
2.8							1.852000000 GHz AUTO TUNE	
2.8	A1					RMS.	CF Step 400.000 kHz Auto	
2.8	Arrent 1	an a					Man Freq Offset 0 Hz	
enter 1.850000 G tes BW 30 kHz	ЭНz		#Video BW 1.0	MHz		pan 4.000 MHz 01 s (1001 pts)	X Axis Scale	Lor
50		May 21, 2024 12:21:34 PM	$\mathbb{D}$				Signal Track (Span Zoom)	

### 35 M\_Band Edge\_Low\_BPSK\_1RB



KEYSIGHT RL +++ Coupling DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide 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 A A A A A A	Center Frequency 1.850000000 GHz Span	Settings
Spectrum ▼ cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d			.849 996 GHz -20.863 dBm	4.00000000 MHz Swept Span Zero Span	
7.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
12.8		1	$\square$		DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
22.8	and the strength of the streng	and the state of t				AUTO TUNE	
12.8						CF Step 400.000 kHz	
52.8						Auto Man	
62.8						Freq Offset 0 Hz	
enter 1.850000 GHz Res BW 430 kHz		#Video BW 1.3	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Loc
- - - - - - - - - - - - - -	? May 21, 2024 12:21:03 PM	$\square$				Signal Track (Span Zoom)	

### 35 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	zer 1	+					₿	Frequency	• 🔆
KEYSIGHT RL +→++ ™	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.8485000 Avg Hold: 300/300 Radio Std: None	000 GHz		requency 00000 GHz	Settings
1 Graph			Ref LvI Offset 2	7.16 dB			4.0000	MHz	
Scale/Div 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000 Aut	) kHz	
0.00							Mar	'n	
						RMS AVG	Freq Off 0 Hz	set	
-30.0									
-50.0									
Center 1.84850 Res BW 39.000			Video BW 390.0	00 kHz*	Sweep 3.20	Span 4 MHz ms (1001 pts)			
2 Metrics	Y								
Total Channe	el Power	-26.78 dBm / 1.0	0 MHz						
Total Power	Spectral Density	y -86.78 d	Bm/Hz						Local
<b>1</b> 5		May 21, 2024 12:21:12 PM	$\square$						

### 35 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT     Input: RF       RL     +++     Coupling: DC       Align: Auto     Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RI Trig: Free Run	MS <mark>123456</mark> A WW WW W A A A A A A A	Center Frequency 1.915000000 GHz	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			6 208 GHz 9.523 dBm	Span 4.00000000 MHz Swept Span Zero Span	
7.2	m					Full Span	
.16						Start Freq 1.913000000 GHz	
12.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
22.8		$\mathbf{h}$				AUTO TUNE	
12.8		1		1		CF Step 400.000 kHz	
52.8			an and the second		RMS	Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz		pan 4.000 MHz 01 s (1001 pts)	X Axis Scale Log Lin	Lor
-	<b>?</b> May 21, 2024 12:26:45 PM	$\square$				Signal Track (Span Zoom)	

## 35 M\_Band Edge\_High\_BPSK\_1RB



REYSIGHT L +++ Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Pow Trig: Free Run	er (RMS <mark>123456</mark> A <del>WW WW W</del> A A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d		Mkr1	1.915 020 GHz -32.108 dBm	4.00000000 MHz Swept Span Zero Span	
16						Full Span Start Freq 1.913000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
2.8		1			RMS.	AUTO TUNE CF Step 400.000 kHz Auto	
2.8						Man Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 430 kHz		#Video BW 1.3	MHz	#Swee	Span 4.000 MHz p ~1.01 s (1001 pts)	X Axis Scale Log Lin	Loc
- <b>~</b> ~ ~	May 21, 2024 12:26:13 PM	$\square$				Signal Track (Span Zoom)	1

### 35 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	rzer 1	+						Frequency	- <b>1</b> 😤
KEYSIGHT <sup>RL</sup> ↔→→	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.9165000 Avg Hold: 300/300 Radio Std: None	00 GHz	provide and a subscription of the	requency 10000 GHz	Settings
l Graph	*		Ref LvI Offset 27				4.0000	MHz	
cale/Div 10.0 .0g 20.0 10.0	dB		Ref Value 30.00	dBm			CF Step 400.000 Auto	2	
0.00							Mar Freq Off: 0 Hz		
30.0 40.0 50.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	·/····		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	RMS AVG			
60.0 enter 1.91650			Video BW 390.0	0 kHz*	Sweep 3.20 n	Span 4 MHz			
Metrics	T T				Sweep 3.20 h	iis (1001 pts)			
Total Channe		-30.41 dBm / 1.0							Loca
Total Power	Spectral Density	y -90.41 d	Bm/Hz						
י ג ד	2	May 21, 2024 12:26:22 PM	$\square$						

### 35 M\_Extended Band Edge\_High\_BPSK\_FullRB



CEYSIGHT Input: RF Coupling DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	(RMS <mark>123456</mark> A WW WW W A A A A A A A	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			848 752 GHz -38.306 dBm	4.00000000 MHz Swept Span Zero Span	
16						Full Span	
2.84					DL1 -13.00 dBm	1.848000000 GHz Stop Freq	
22.8						1.852000000 GHz AUTO TUNE	
12.8 12.8	1				RMS	CF Step 400.000 kHz	
2.8	1					Man Freq Offset	
enter 1.850000 GHz Res BW 30 kHz		#Video BW 1.0	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	0 Hz X Axis Scale Log Lin	Lo
500	? May 21, 2024 12:29:04 PM	$\square$				Signal Track (Span Zoom)	

### 40 M\_Band Edge\_Low\_BPSK\_1RB



KEYSIGHT Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power Trig: Free Run	(RMS <mark>123456</mark> AWWWWW AAAAAA	Center Frequency 1.850000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d			.850 000 GHz -23.009 dBm	4.00000000 MHz Swept Span Zero Span	
7.2						Full Span	
2.84					RMS	Start Freq 1.848000000 GHz	
2.8		1			DL1 -13.00 dBm	Stop Freq 1.852000000 GHz	
2.8						AUTO TUNE	
2.8						CF Step 400.000 kHz	
52.8						Auto Man	
52.8						Freq Offset 0 Hz	_
enter 1.850000 GHz Res BW 430 kHz		#Video BW 1.3	MHz	#Sweep	Span 4.000 MHz ~1.01 s (1001 pts)	X Axis Scale Log Lin	Loc
- <b>5</b> C	? May 21, 2024 12:28:32 PM	$\square$				Signal Track (Span Zoom)	

### 40 M\_Band Edge\_Low\_BPSK\_FullRB



Spectrum Analy Channel Power	zer 1	+					\$	Frequency	
KEYSIGHT RL ↔	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.84850 Avg Hold: 300/300 Radio Std: None	0000 GHz	1.8485	requency 00000 GHz	Settings
1 Graph			Ref LvI Offset 27				Span 4.0000	MHz	
Scale/Div 10.0	dB		Ref Value 30.00 (	dBm			CF Step 400.00		
10.0							Aut	0	
-10.0						RMS AVG	Freq Of 0 Hz	'set	
						m			
-50.0									
Center 1.84850 Res BW 39.000			Video BW 390.0	0 kHz*	Sweep 3.20	Span 4 MHz 0 ms (1001 pts)			
2 Metrics									
Total Channe	el Power	-29.41 dBm / 1.0	0 MHz						-
Total Power	Spectral Density	-89.41 d	Bm/Hz						Local
<b>ま</b> り (		May 21, 2024 12:28:42 PM	$\bigcirc \triangle$						

### 40 M\_Extended Band Edge\_Low\_BPSK\_FullRB



KEYSIGHT Input: RF RL +++ Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (F Trig: Free Run	RMS <mark>123456</mark> A <del>WWWWW</del> AAAAAA	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v cale/Div 10 dB		Ref LvI Offset 27. Ref Level 27.16 d			16 224 GHz 39.185 dBm	4.00000000 MHz Swept Span Zero Span	
7.2	$\square$					Full Span	
2.84						Start Freq 1.913000000 GHz	
22.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
32.8				1		AUTO TUNE CF Step 400.000 kHz	
52.8			and a second sec		RMS	Auto Man	
52.8						Freq Offset 0 Hz	
enter 1.915000 GHz Res BW 30 kHz		#Video BW 1.0	MHz		Span 4.000 MHz 1.01 s (1001 pts)	X Axis Scale Log Lin	Lo
4 5 C -	? May 21, 2024 12:34:17 PM	$\square$				Signal Track (Span Zoom)	

## 40 M\_Band Edge\_High\_BPSK\_1RB



KEYSIGHT Input: RF Coupling: DC Align: Auto	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	#Atten: 20 dB Preamp: Off	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Powe Trig: Free Run	r (RMS <mark>1</mark> 23456 A <del>WWWWW</del> A A A A A A	Center Frequency 1.915000000 GHz Span	Settings
Spectrum v scale/Div 10 dB		Ref LvI Offset 27 Ref Level 27.16 d		Mkr1 1	.915 000 GHz -24.229 dBm	4.0000000 MHz Swept Span Zero Span	
7.2						Full Span Start Freq 1.913000000 GHz	
2.8					DL1 -13.00 dBm	Stop Freq 1.917000000 GHz	
32.8				Skent, and second and second	RMS	AUTO TUNE CF Step 400.000 kHz	
52.8						Auto Man Freg Offset	
62.8 enter 1.915000 GHz Res BW 430 kHz		#Video BW 1.3	MHz	#Sweep	Span 4.000 MHz ∼1.01 s (1001 pts)	0 Hz X Axis Scale Log	Loc
1 n C .	May 21, 2024 12:33:44 PM					Signal Track (Span Zoom)	

### 40 M\_Band Edge\_High\_BPSK\_FullRB



Spectrum Analy Channel Power	zer 1	+					4	Frequenc	y 🔻 💥
KEYSIGHT <sup>RL</sup> +→	Input. RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off #PNO: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.9165000 Avg Hold: 300/300 Radio Std: None	000 GHz	president and a second second	requency 00000 GHz	Settings
1 Graph	*		Ref LvI Offset 27				4.0000	MHz	,
cale/Div 10.0	dB		Ref Value 30.00 o	iBm			CF Step 400.000 Aut Mai	) kHz o	
0.00							Freq Off 0 Hz	¥	
50.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	RMS AVG			
60.0 Senter 1.91650 Ses BW 39.000			Video BW 390.00	0 kHz*	Sweep 3.20 I	Span 4 MHz ms (1001 pts)			
Metrics	Ŧ								
Total Chann Total Power	el Power Spectral Density	-31.96 dBm / 1.0 y -91.96 d							Local
<b>1</b> 5		May 21, 2024 12:33:54 PM	$\odot$						

### 40 M\_Extended Band Edge\_High\_BPSK\_FullRB



Report No. HCT-RF-2407-FC037

## 11. TEST PLOTS(ANT F)



	Coupling: DC	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	÷			Adjust Atten for Min Clipping	Attenua
Average F	Power	Gaussia 100 %	in 👘			Mech Atten Step 2 dB	Signal F
	22.36 dBm					10 dB	
	50.61 % at 0 dB	10 %					
10.0 %	1.84 dB						
1.0 %	3.29 dB	1%					
0.1 %	4.00 dB						
0.01 %	4.53 dB	0.1 %		$\rightarrow$			
0.001 %	4.92 dB						
0.0001 %	5.20 dB	0.01 %					
	5.22 dB	0.001 %					
Peak	27.58 dBm						
		0.0001 % 0.00 dB Info BW 5	.0000 MHz		20.00	зВ	Lo

#### 5 M\_PAR\_Mid\_BPSK\_FullRB



	Ipling: DC Co	out Z: 50 Ω nr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
atrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussi	an			Mech Atten Step 2 dB	Signal Pa
9	21.86 dBm					10 dB	
4	9.34 % at 0 dB	10 %	$\mathcal{N}$				
10.0 %	2.27 dB						
1.0 %	4.06 dB	1.%					
0.1 %	5.09 dB	F					
0.01 %	5.68 dB	0.1 %					
0.001 %	6.30 dB						
0.0001 %	6.50 dB	0.01 %					
	6.50 dB	0.001 %					
Peak	28.36 dBm						
		0.0001 % 0.00 dB	5.0000 MHz		20.0	0 dB	Loca

## 5 M\_PAR\_Mid\_QPSK\_FullRB





	ipling: DC C	iput Ζ: 50 Ω orr CCorr req Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuat
Average Pow	ver	Gaussi 100 %	an			Mech Atten Step 2 dB	Signal P
	20.86 dBm	NI.				10 dB	
4	7.30 % at 0 dB	10 %					
10.0 %	2.74 dB						
1.0 %	4.60 dB	1%					
0.1 %	5.69 dB	F					
0.01 %	6.38 dB	0.1 %					
0.001 %	6.84 dB						
0.0001 %	7.03 dB	0.01 %					
	7.06 dB	0.001 %					
Peak	27.92 dBm						
		0.0001 % 0.00 dB Info BW 5	5.0000 MHz		20.00	) dB	Loc

# 5 M\_PAR\_Mid\_16QAM\_FullRB



	ipling DC Co	put Z: 50 Ω orr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	Ŧ			Adjust Atten for Min Clipping	Attenuat
Average Pow	ver	Gaussia 100 %	an			Mech Atten Step	Signal P
	20.37 dBm					10 dB	
4	5.73 % at 0 dB	10 %					
10.0 %	2.81 dB						
1.0 %	4.69 dB	1%					
0.1 %	5.79 dB						
0.01 %	6.43 dB	0.1 %					
0.001 %	6.75 dB						
0.0001 %	6.89 dB	0.01 %					
	6.99 dB	0.001 %					
Peak	27.36 dBm						-
		0.0001 % 0.00 dB Info BW 5	5.0000 MHz		20.00	) dB	Loo

#### 5 M\_PAR\_Mid\_64QAM\_FullRB



	pling DC Corr		tten: 20 dB reamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	¥			Adjust Atten for Min Clipping	Attenuati
Average Pow	ver	Gaussian				Mech Atten Step 2 dB	Signal Pa
5	18.34 dBm	N.				10 dB	
4	5.65 % at 0 dB	10 %					
10.0 %	2.83 dB						
1.0 %	4.78 dB	1.%					
0.1 %	5.99 dB						
0.01 %	6.85 dB	0.1 %					
0.001 %	7.26 dB						
0.0001 %	7.69 dB	0.01 %					
	7.70 dB	0.001 %					
Peak	26.04 dBm						
		0.0001 % 0.00 dB Info BW 5.00	000 MHz		20.0	0 dB	Loc

## 5 M\_PAR\_Mid\_256QAM\_FullRB



	pling: DC C	put Z: 50 Ω orr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics		2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pow	ier	Gaussia 100 %	in			Mech Atten Step 2 dB	Signal Pa
Arenager en	22.36 dBm					10 dB	
5	0.53 % at 0 dB	10 %					
10.0 %	1.79 dB						
1.0 %	3.14 dB	1%					
0.1 %	4.01 dB						
0.01 %	4.58 dB	0.1 %					
0.001 %	4.91 dB						
0.0001 %	5.10 dB	0.01 %					
-	5.15 dB	0.001 %					
Peak	27.51 dBm						
		0.0001 % 0.00 dB Info BW 1	0.000 MHz		20.0	00 dB	Loc

# 10 M\_PAR\_Mid\_BPSK\_FullRB



	pling: DC Co	out Ζ: 50 Ω orr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
atrics	•	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Pow	rer	Gaussia 100 %	an			Mech Atten Step 2 dB	Signal Pa
	21.85 dBm					10 dB	
4	9.32 % at 0 dB	10 %					
10.0 %	2.19 dB						
1.0 %	4.06 dB	1%		$\rightarrow$			
0.1 %	5.10 dB						
0.01 %	5.72 dB	0.1 %					
0.001 %	6.26 dB						
0.0001 %	6.54 dB	0.01 %					
	6.58 dB	0.001 %					
Peak	28.43 dBm						
		0.0001 % 0.00 dB	0.000 MHz		20.0	0 dB	Loca

## 10 M\_PAR\_Mid\_QPSK\_FullRB



Alig	pling: DC Corr		en: 20 dB eamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	v			Adjust Atten for Min Clipping	Attenuatio
Average Pow	ver	Gaussian				Mech Atten Step 2 dB	Signal Pa
	20.84 dBm					10 dB	
4	7.51 % at 0 dB	10 %					
10.0 %	2.69 dB						
1.0 %	4.59 dB	1%					
0.1 %	5.70 dB						
0.01 %	6.37 dB	0.1 %					
0.001 %	6.88 dB						
0.0001 %	7.12 dB	0.01 %					
	7.28 dB	0.001 %					
Peak	28.12 dBm						
		0.0001 % 0.00 dB Info BW 10.00	0 MHz		20.0	0 dB	Loc

## 10 M\_PAR\_Mid\_16QAM\_FullRB



	upling DC Corr	t Z: 50 Ω CCorr Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph	Ŧ			Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussia	n			Mech Atten Step 2 dB	Signal Pa
Arenager er	20.33 dBm	M				10 dB	
4	45.75 % at 0 dB	10 %					
10.0 %	2.75 dB						
1.0 %	4.74 dB	1.%					
0.1 %	5.92 dB						
0.01 %	6.54 dB	0.1 %					
0.001 %	6.94 dB						
0.0001 %	7.13 dB	0.01 %					
	7.18 dB	0.001 %					
Peak	27.51 dBm						
		0.0001 % 0.00 dB	0.000 MHz		20.0	0 dB	Loca

## 10 M\_PAR\_Mid\_64QAM\_FullRB



Aliq	upling: DC Corr		Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std. None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph	-			Adjust Atten for Min Clipping	Attenuatio
Average Pov	wer	Gaussian				Mech Atten Step 2 dB	Signal Pa
, incluger er	18.31 dBm					10 dB	
	45.78 % at 0 dB	10 %					
10.0 %	2.76 dB						
1.0 %	4.74 dB	1.%					
0.1 %	5.96 dB						
0.01 %	6.55 dB	0.1 %					
0.001 %	7.06 dB						
0.0001 %	7.51 dB	0.01 %					
-	7.94 dB	0.001 %					
Peak	26.25 dBm						
		0.0001 % 0.00 dB Info BW 10	000 MHz		20.0	0 dB	Loc

# 10 M\_PAR\_Mid\_256QAM\_FullRB



	Ipling: DC Co	out Ζ: 50 Ω orr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuati
Average Pov	ver	Gaussia 100 %	an			Mech Atten Step	Signal Pa
	22.38 dBm					10 dB	
Ę	i0.18 % at 0 dB	10 %					
10.0 %	1.71 dB						
1.0 %	3.06 dB	1%					
0.1 %	3.93 dB						
0.01 %	4.48 dB	0.1 %					
0.001 %	4.86 dB						
0.0001 %	5.15 dB	0.01 %					
_	5.19 dB	0.001 %					
Peak	27.57 dBm						-
		0.0001 % 0.00 dB	15.000 MHz		20.0	0 dB	Loc

# 15 M\_PAR\_Mid\_BPSK\_FullRB



	Ipling DC Co	out Z: 50 Ω err CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussia 100 %	n			Mech Atten Step 2 dB 10 dB	Signal Pa
	21.88 dBm						
4	9.17 % at 0 dB	10 %					
10.0 %	2.13 dB						
1.0 %	4.01 dB	1 %					
0.1 %	5.03 dB						
0.01 %	5.60 dB	0.1 %					
0.001 %	5.99 dB						
0.0001 %	6.14 dB	0.01 %					
	6.17 dB	0.001 %					
Peak	28.05 dBm						
		0.0001 % 0.00 dB Info BW 1	5.000 MHz		20.0	) dB	Loca

#### 15 M\_PAR\_Mid\_QPSK\_FullRB



	upling: DC Cor	ut Z: 50 Ω rr CCorr q Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	•			Adjust Atten for Min Clipping	Attenuat
Average Po	wer	Gaussia 100 %	in			Mech Atten Step 2 dB 10 dB	Signal Pa
	20.88 dBm					10 UD	
	47.68 % at 0 dB	10 %					
10.0 %	2.66 dB	1 %=					
1.0 %	4.53 dB						
0.1 %	5.67 dB	F					
0.01 %	6.28 dB	0.1 %		$\backslash$			
0.001 %	6.99 dB						
0.0001 %	7.23 dB	0.01 %					
	7.25 dB	0.001 %=					
Peak	28.13 dBm						-
		0.0001 % 0.00 dB Info BW 1	5.000 MHz		20.00	) dB	Loc

## 15 M\_PAR\_Mid\_16QAM\_FullRB



Ali	upling DC Cor	ut Z: 50 Ω r CCorr q Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2 00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Po	wer	Gaussi 100 %	an			Mech Atten Step 2 dB	Signal Pa
	20.39 dBm	1				10 dB	
	45.69 % at 0 dB	10 %					
10.0 %	2.75 dB						
1.0 %	4.72 dB	1.%					
0.1 %	5.87 dB	F					
0.01 %	6.59 dB	0.1 %					
0.001 %	7.10 dB						
0.0001 %	7.18 dB	0.01 %					
	7.31 dB	0.001 %					
Peak	27.70 dBm						
		0.0001 % 0.00 dB	15.000 MHz		20.0	0 dB	Loc

#### 15 M\_PAR\_Mid\_64QAM\_FullRB



	upling: DC Corr		en: 20 dB eamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atter 20 dB	1	Y Scale
etrics	*	2 Graph	v				ten for Min oping	Attenuat
Average Pov	ver	Gaussian				Mech Atter 2 dB		Signal P
	18.36 dBm					10 dB		
	15.76 % at 0 dB	10 %						
10.0 %	2.76 dB							
1.0 %	4.77 dB	1%						
0.1 %	5.95 dB							
0.01 %	6.82 dB	0.1 %						
0.001 %	7.62 dB							
0.0001 %	7.75 dB	0.01 %						
	7.85 dB	0.001 %						
Peak	26.21 dBm							
		0.0001 % 0.00 dB Info BW 15.00	0 MHz		20.0	00 dB		Loc

# 15 M\_PAR\_Mid\_256QAM\_FullRB



	upling: DC Co	put Z: 50 Ω orr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph	•			Adjust Atten for Min Clipping	Attenuati
Average Pov	ver	Gaussi 100 %	an			Mech Atten Step 2 dB 10 dB	Signal Pa
	22.40 dBm					10 db	
ę	50.85 % at 0 dB	10 %					
10.0 %	1.69 dB	1 %					
1.0 %	3.22 dB	1.70					
0.1 %	3.89 dB						
0.01 %	4.41 dB	0.1 %		$ \rightarrow $			
0.001 %	4.81 dB						
0.0001 %	5.05 dB	0.01 %					
	5.15 dB	0.001 %					
Peak	27.55 dBm						
		0.0001 % 0.00 dB Info BW 2	20.000 MHz		20.0	0 dB	Loc

## 20 M\_PAR\_Mid\_BPSK\_FullRB



	pling DC C	put Z: 50 Ω orr CCorr req Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics	*	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Pow	er	Gaussi 100 %	an			Mech Atten Step 2 dB 10 dB	Signal Pa
	21.88 dBm					10 05	
5	0.09 % at 0 dB	10 %					
10.0 %	2.17 dB						
1.0 %	4.00 dB	1%					
0.1 %	5.03 dB						
0.01 %	5.65 dB	0.1 %					
0.001 %	6.01 dB						
0.0001 %	6.34 dB	0.01 %					
	6.37 dB	0.001 %					
Peak	28.25 dBm						
		0.0001 % 0.00 dB	20.000 MHz		20.0	0 dB	Loca

## 20 M\_PAR\_Mid\_QPSK\_FullRB



	upling: DC Corr	t Z: 50 Ω CCorr  Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Po	Ner	Gaussia	n			Mech Atten Step 2 dB	Signal Pa
Average 10	20.87 dBm					10 dB	
	48.39 % at 0 dB	10 %					
10.0 %	2.71 dB						
1.0 %	4.54 dB	1%					
0.1 %	5.63 dB						
0.01 %	6.27 dB	0.1 %					
0.001 %	6.73 dB						
0.0001 %	7.28 dB	0.01 %					
	7.33 dB	0.001 %=					
Peak	28.20 dBm						
		0.0001 % 0.00 dB	0.000 MHz		20.0	0 dB	Loc

## 20 M\_PAR\_Mid\_16QAM\_FullRB



	upling: DC Con		ten: 20 dB eamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuati
Average Pov	wer	Gaussian				2 dB	Signal Pa
	20.35 dBm					10 dB	
	46.92 % at 0 dB	10 %					
10.0 %	2.79 dB						
1.0 %	4.72 dB	1%					
0.1 %	5.79 dB						
0.01 %	6.38 dB	0.1 %					
0.001 %	7.06 dB						
0.0001 %	7.43 dB	0.01 %					
	7.55 dB	0.001 %					
Peak	27.90 dBm						
		0.0001 % 0.00 dB Info BW 20.0	00 MHz		20	0.00 dB	Loc

#### 20 M\_PAR\_Mid\_64QAM\_FullRB



	pling: DC Corr	t Z: 50 Ω CCorr Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	*	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Pov	ior	Gaussia 100 %	n			Mech Atten Step	Signal Pa
Average For	18.35 dBm					10 dB	
4	6.79 % at 0 dB	10 %					
10.0 %	2.83 dB						
1.0 %	4.75 dB	1%		$\mathbf{\lambda}$			
0.1 %	5.86 dB						
0.01 %	6.68 dB	0.1 %					
0.001 %	6.97 dB						
0.0001 %	7.21 dB	0.01 %					
	7.25 dB	0.001 %					
Peak	25.60 dBm						
		0.0001 % 0.00 dB	0.000 MHz		20.0	0 dB	Loc

# 20 M\_PAR\_Mid\_256QAM\_FullRB



	pling DC	nput Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics	•	2 Graph	-			Adjust Atten for Min Clipping	Attenuati
Average Pow	ver	Gaussia	an 👘 👘			Mech Atten Step 2 dB 10 dB	Signal P
	22.36 dBm					10 dB	
5	0.04 % at 0 dB	10 %					
10.0 %	1.82 dB						
1.0 %	3.20 dB	1%					
0.1 %	4.00 dB						
0.01 %	4.57 dB	0.1 %					
0.001 %	4.93 dB						
0.0001 %	5.23 dB	0.01 %					
-	5.23 dB	0.001 %					
Peak	27.59 dBm						
		0.0001 % 0.00 dB Info BW 2	25.000 MHz		20.0	0 dB	Loc

## 25 M\_PAR\_Mid\_BPSK\_FullRB



	pling: DC C	nput Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics	•	2 Graph	Ŧ			Adjust Atten for Min Clipping	Attenuat
Average Pow	er	Gaussia	an			Mech Atten Step 2 dB 10 dB	Signal P
	21.85 dBm					IU dB	
4	9.48 % at 0 dB	10 %					
10.0 %	2.26 dB						
1.0 %	4.05 dB	1%					
0.1 %	5.12 dB						
0.01 %	5.78 dB	0.1 %					
0.001 %	6.18 dB						
0.0001 %	6.56 dB	0.01 %					
	6.81 dB	0.001 %					
Peak	28.66 dBm						
		0.0001 % 0.00 dB Info BW 2	25.000 MHz		20.00	dB	Loc

## 25 M\_PAR\_Mid\_QPSK\_FullRB



	pling DC Con	it Ζ: 50 Ω r CCorr a Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph	•			Adjust Atten for Min Clipping	Attenuat
Average Pov	ver	Gaussia 100 %	in			Mech Atten Step 2 dB	Signal Pa
	20.85 dBm					10 dB	
4	7.76 % at 0 dB	10 %					
10.0 %	2.74 dB						
1.0 %	4.58 dB	1.%					
0.1 %	5.73 dB	-					
0.01 %	6.43 dB	0.1 %					
0.001 %	6.86 dB						
0.0001 %	7.14 dB	0.01 %					
	7.16 dB	0.001 %=					
Peak	28.01 dBm						
		0.0001 % 0.00 dB Info BW 2	5.000 MHz		20.0	D dB	Loc

## 25 M\_PAR\_Mid\_16QAM\_FullRB



	oupling: DC Cor	ut Z: 50 Ω r CCorr q Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Po	wer	Gaussia 100 %	an			Mech Atten Step 2 dB	Signal Pa
	20.34 dBm					10 dB	4
	46.16 % at 0 dB	10 %					
10.0 %	2.82 dB						
1.0 %	4.74 dB	1%					
0.1 %	5.92 dB						
0.01 %	6.58 dB	0.1 %					
0.001 %	7.10 dB						
0.0001 %	7.21 dB	0.01 %					
	7.28 dB	0.001 %					
Peak	27.62 dBm						
		0.0001 % 0.00 dB	25.000 MHz		20.0	0 dB	Loca

#### 25 M\_PAR\_Mid\_64QAM\_FullRB



	Ipling: DC C	iput Z: 50 Ω orr CCorr req Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
atrics	•	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Pov		Gaussia 100 %	an			Mech Atten Step 2 dB 10 dB	Signal Pa
4	18.33 dBm 6.08 % at 0 dB	10 %					
10.0 %	2.84 dB						
1.0 %	4.78 dB	1.%					
0.1 %	5.97 dB						
0.01 %	6.70 dB	0.1 %					
0.001 %	7.13 dB						
0.0001 %	7.41 dB	0.01 %					
Peak	7.71 dB	0.001 %					
reak	26.04 dBm						_
		0.0001 % 0.00 dB Info BW 2	25.000 MHz		20.0	0 dB	Loc

# 25 M\_PAR\_Mid\_256QAM\_FullRB



	pling DC Co	ut Z: 50 Ω rr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
trics	•	2 Graph				Adjust Atten for Min Clipping	Attenuati
Average Pow	er	Gaussia 100 %	n			Mech Atten Step 2 dB 10 dB	Signal Pa
	22.28 dBm					i du	
4	9.43 % at 0 dB	10 %					
10.0 %	1.78 dB						
1.0 %	3.20 dB	1%					
0.1 %	3.98 dB						
0.01 %	4.57 dB	0.1 %					
0.001 %	4.98 dB						
0.0001 %	5.16 dB	0.01 %					
-	5.56 dB	0.001 %					
Peak	27.84 dBm						-
		0.0001 % 0.00 dB Info BW 3	0.000 MHz		20.0	0 dB	Loc

## 30 M\_PAR\_Mid\_BPSK\_FullRB



	pling DC C	iput Z: 50 Ω orr CCorr req Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
atrics	•	2 Graph	•			Adjust Atten for Min Clipping	Attenuatio
Average Pow		Gaussia 100 %	an			Mech Atten Step 2 dB 10 dB	Signal Pa
4	21.78 dBm 8.91 % at 0 dB	10 %	$\mathcal{N}$				
10.0 %	2.22 dB						
1.0 %	4.04 dB	1.%					
0.1 %	5.11 dB						
0.01 %	5.78 dB	0.1 %					
0.001 %	6.23 dB						
0.0001 %	6.40 dB	0.01 %					
Death	6.47 dB	0.001 %					
Peak	28.25 dBm						
		0.0001 % 0.00 dB Info BW 3	80.000 MHz		20.0	0 dB	Loca

## 30 M\_PAR\_Mid\_QPSK\_FullRB



	Jpling DC Corr		en: 20 dB eamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics		2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussian				Mech Atten Step	Signal Pa
Average 1 of	20.77 dBm					10 dB	
4	7.15 % at 0 dB	10 %					
10.0 %	2.71 dB						
1.0 %	4.54 dB	1.%					
0.1 %	5.65 dB						
0.01 %	6.35 dB	0.1 %					
0.001 %	6.94 dB						
0.0001 %	7.10 dB	0.01 %					
	7.13 dB	0.001 %					
Peak	27.90 dBm						
		0.0001 % 0.00 dB Info BW 30.00	0 MHz		20	.00 dB	Loc

## 30 M\_PAR\_Mid\_16QAM\_FullRB



	pling: DC Corr		Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std. None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussian				Mech Atten Step 2 dB	Signal Pa
5	20.25 dBm					10 dB	
4	5.88 % at 0 dB	10 %					
10.0 %	2.78 dB						
1.0 %	4.76 dB	1.%					
0.1 %	5.85 dB						
0.01 %	6.61 dB	0.1 %					
0.001 %	7.34 dB						
0.0001 %	7.46 dB	0.01 %					
	7.49 dB	0.001 %					
Peak	27.74 dBm						
		0.0001 % 0.00 dB Info BW 30.	000 MHz		20.0	0 dB	Loca

## 30 M\_PAR\_Mid\_64QAM\_FullRB



	upling: DC Co	put Ζ: 50 Ω prr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Mech Atten 20 dB	Y Scale
etrics	•	2 Graph				Adjust Atten for Min Clipping	Attenuatio
Average Pov	ver	Gaussia	in			Mech Atten Step 2 dB 10 dB	Signal Pa
	18.24 dBm					10 05	
4	45.81 % at 0 dB	10 %					
10.0 %	2.80 dB	1 %					
1.0 %	4.74 dB						
0.1 %	5.94 dB	E					
0.01 %	6.80 dB	0.1 %		$\lambda $			
0.001 %	7.34 dB						
0.0001 %	7.49 dB	0.01 %					
	7.66 dB	0.001 %					
Peak	25.90 dBm						
		0.0001 % 0.00 dB	0.000 MHz		20.0	0 dB	Loc

# 30 M\_PAR\_Mid\_256QAM\_FullRB



	Ipling DC Co	ut Ζ: 50 Ω rr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq. 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	•	2 Graph	•			CF Step 40.000000 MHz	
Average Pov	ver	Gaussia 100 %	in			Auto Man	
Arenager er	22.39 dBm					Freq Offset	-
4	8.83 % at 0 dB	10 %				0 Hz	
10.0 %	2.06 dB						
1.0 %	3.52 dB	1 %		$\mathbf{X}$			
0.1 %	4.09 dB						
0.01 %	4.60 dB	0.1 %					
0.001 %	4.97 dB						
0.0001 %	5.33 dB	0.01 %					
	5.40 dB	0.001 %=					
Peak	27.79 dBm						
		0.0001 % 0.00 dB	5.000 MHz		20.00	) dB	Loc

#### 35 M\_PAR\_Mid\_BPSK\_FullRB



	Ipling: DC Co	out Z: 50 Ω rr CCorr eq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	•	2 Graph Gaussia	<b>▼</b> an			CF Step 35.000000 MHz Auto	
Average Pov		100 %				Man	
4	21.88 dBm 8.06 % at 0 dB	10 %				Freq Offset 0 Hz	
10.0 %	2.51 dB	1 %					
1.0 %	4.11 dB						
0.1 %	5.11 dB						
0.01 %	5.73 dB	0.1 %					
0.001 %	6.15 dB						
0.0001 %	6.53 dB	0.01 %					
Peak	6.57 dB	0.001 %					
r cak	28.45 dBm						-
		0.0001 % 0.00 dB Info BW 3	85.000 MHz		20.00	) dB	Loc

## 35 M\_PAR\_Mid\_QPSK\_FullRB



	Ipling DC Con	it Z: 50 Ω r CCorr a Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	•	2 Graph				CF Step 35.000000 MHz	
Average Pov	ver	Gaussi 100 %	an			Auto Man	
	20.87 dBm	M				Freq Offset	
4	6.41 % at 0 dB	10 %				0 Hz	
10.0 %	2.90 dB						
1.0 %	4.56 dB	1.%					
0.1 %	5.68 dB						
0.01 %	6.31 dB	0.1 %		$\setminus$			
0.001 %	6.76 dB						
0.0001 %	6.96 dB	0.01 %					
_	7.30 dB	0.001 %					
Peak	28.17 dBm						
		0.0001 % 0.00 dB	35.000 MHz		20.0	0 dB	Loc

## 35 M\_PAR\_Mid\_16QAM\_FullRB



YSIGHT Inp Alic	upling DC Corr	t Z: 50 Ω CCorr   Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	•	2 Graph				CF Step 35.000000 MHz	
Average Pov	ver	Gaussia 100 %	an			Auto Man	
	20.38 dBm	M				Freq Offset	
4	15.10 % at 0 dB	10 %				0 Hz	
10.0 %	3.00 dB						
1.0 %	4.73 dB	1%					
0.1 %	5.79 dB						
0.01 %	6.45 dB	0.1 %					
0.001 %	7.09 dB						
0.0001 %	7.30 dB	0.01 %					
Deelk	7.34 dB	0.001 %					
Peak	27.72 dBm						
		0.0001 % 0.00 dB Info BW 3	35.000 MHz		20.00	) dB	Loc

## 35 M\_PAR\_Mid\_64QAM\_FullRB



	Ipling: DC Cor	ut Ζ: 50 Ω r CCorr q Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	¥	2 Graph	•			CF Step 35.000000 MHz	
Average Pov	ver	Gaussia	an			Auto Man	
	18.35 dBm	M.				Freq Offset	
4	4.85 % at 0 dB	10 %				0 Hz	
10.0 %	3.01 dB						
1.0 %	4.75 dB	1%					
0.1 %	5.96 dB						
0.01 %	6.66 dB	0,1 %					
0.001 %	7.00 dB						
0.0001 %	7.17 dB	0.01 %					
	7.25 dB	0.001 %					
Peak	25.60 dBm						
		0.0001 % 0.00 dB Info BW 3	35.000 MHz		20.00	dB	Lor

# 35 M\_PAR\_Mid\_256QAM\_FullRB



	Ipling: DC C	iput Ζ: 50 Ω orr CCorr req Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
ətrics	•	2 Graph Gaussia	• an			CF Step 40.000000 MHz Auto	
Average Pov		100 %				Man	
	22.41 dBm					Freq Offset	
4	7.81 % at 0 dB	10 %				0 Hz	
10.0 %	2.02 dB						
1.0 %	3.68 dB	1.%					
0.1 %	4.57 dB						
0.01 %	4.77 dB	0.1 %					
0.001 %	4.96 dB						
0.0001 %	5.26 dB	0.01 %					
	5.38 dB	0.001 %					
Peak	27.79 dBm						
		0.0001 % 0.00 dB	10.000 MHz		20.0	0 dB	Loc

# 40 M\_PAR\_Mid\_BPSK\_FullRB



	upling: DC Co	ut Z: 50 Ω rr CCorr iq Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	¥	2 Graph Gaussi	₹			CF Step 40.000000 MHz Auto	
Average Pov		100 %				Man	
4	21.90 dBm 7.05 % at 0 dB	10 %				Freq Offset 0 Hz	
10.0 %	2.50 dB	1 %					
1.0 %	4.29 dB	1.%		$\rightarrow$			
0.1 %	5.13 dB						
0.01 %	5.73 dB	0.1 %					
0.001 %	6.11 dB						
0.0001 %	6.39 dB	0.01 %					
Peak	6.74 dB	0.001 %					
r cak	28.64 dBm						
		0.0001 % 0.00 dB Info BW 4	40.000 MHz		20.00	) dB	Loc

## 40 M\_PAR\_Mid\_QPSK\_FullRB



	upling: DC Corr	t Z: 50 Ω · CCorr t Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	•	2 Graph	÷.			CF Step 40.000000 MHz	1
Average Pov	ver	Gaussia 100 %	n			Auto Man	
	20.89 dBm	M				Freq Offset	1
4	5.15 % at 0 dB	10 %				0 Hz	
10.0 %	2.95 dB						
1.0 %	4.71 dB	1%					
0.1 %	5.74 dB	F					
0.01 %	6.44 dB	0.1 %					
0.001 %	6.97 dB						
0.0001 %	7.36 dB	0.01 %					
	7.50 dB	0.001 %					
Peak	28.39 dBm						
		0.0001 % 0.00 dB Info BW 4	0.000 MHz		20.00	) dB	Loc

## 40 M\_PAR\_Mid\_16QAM\_FullRB



	upling DC Corr		Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	*	2 Graph	•			CF Step 40.000000 MHz	
Average Pov	ver	Gaussian				Auto Man	
	20.36 dBm					Freq Offset	1
4	4.02 % at 0 dB	10 %				0 Hz	
10.0 %	3.05 dB						
1.0 %	4.79 dB	1%					
0.1 %	5.80 dB						
0.01 %	6.58 dB	0.1 %		$\setminus$			
0.001 %	7.21 dB						
0.0001 %	7.44 dB	0.01 %					
	7.50 dB	0.001 %					
Peak	27.86 dBm						
		0.0001 % 0.00 dB Info BW 40	.000 MHz		20.00	) dB	Loc

#### 40 M\_PAR\_Mid\_64QAM\_FullRB



	upling: DC Con	t Z: 50 Ω ·CCorr ι Ref: Int (S)	Atten: 20 dB Preamp: Off	Trig: Free Run #IF Gain: Low	Center Freq: 1.882500000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None	Center Frequency 1.882500000 GHz	Settings
etrics	¥	2 Graph	•			CF Step 40.000000 MHz	
Average Pov	ver	Gaussia 100 %	an 🛛			Auto Man	
	18.33 dBm					Freq Offset	
4	3.79 % at 0 dB	10 %				0 Hz	
10.0 %	3.06 dB						
1.0 %	4.87 dB	1%					
0.1 %	5.94 dB						
0.01 %	6.87 dB	0.1 %					
0.001 %	7.71 dB	E					
0.0001 %	7.93 dB	0.01 %					
	8.02 dB	0.001 %=					
Peak	26.35 dBm						
		0.0001 % 0.00 dB Info BW 4	10.000 MHz		20.0	0 dB	Loc

# 40 M\_PAR\_Mid\_256QAM\_FullRB





ectrum Analyzer 1 cupied BW	+					₽	Frequency	
EYSIGHT Input RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 20 dB Preamp: Off	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 1.8 Avg Hold: 500/5 Radio Std: None	00	1.8825	Frequency 000000 GHz	Settings
Graph v ale/Div 10.0 dB		Ref LvI Offset 27 Ref Value 40.00				Span 10.000	MHz	
<b>g</b>		Rei Value 40.00				CF Ste 1.0000	p 100 MHz	
0			anon him a	~~		Au Ma		
0 ummen war				- An	PEA	Freq O 0 Hz	lfset	
0								
nter 1.882500 GHz es BW 100.00 kHz		#Video BW 390.	00 kHz	Sweer	Span 10 MH 5 16.7 ms (1001 pts			
letrics 🔻								
Occupied Bandwidth			_					
	215 MHz		Total Power		31.2 dBm			
Transmit Freq Error x dB Bandwidth	-6.232 H 5.301 M		% of OBW Pow x dB	ver	99.00 % -26.00 dB			Loc
1 5 9 1	May 30, 2024 4:24:27 PM	$\bigcirc \land$				1		

## 5 M\_OBW\_Mid\_BPSK\_FullRB





Spectrum Analyzer 1	+						Frequency	• • 👫
KEYSIGHT     Input: RF       Coupling: DC       Align: Auto	Coupling: DC Corr CCorr Preamp: Off Gate: Off Avg Hol Align: Auto Freq Ref: Int (S) #IF Gain: Low Radio S					Center Frequency 1.882500000 GHz		Settings
1 Graph 🔹		Ref LvI Offset 27				Span 10.000	MHz	
cale/Div 10.0 dB		Ref Value 40.00	dBm	$\square$		CF Step 1.0000	o 00 MHz	
20.0	Juman		ann an an an ann an an an an an an an an	~~~		Au Ma		
20.0					PEAJ	Freq Of 0 Hz	fset	
30.0 40.0 50.0								
enter 1.882500 GHz Res BW 100.00 kHz	I	#Video BW 390.	00 kHz		Span 10 MH weep 16.7 ms (1001 pts			
Metrics v								
Occupied Bandwidth	68 MHz		Total Power		30.9 dBm			
Transmit Freq Error	-4.754 k		% of OBW Pov	ver	99.00 %			-
x dB Bandwidth	5.330 M		x dB		-26.00 dB			Local
1500	May 30, 2024 4:24:58 PM	$\odot$						

## 5 M\_OBW\_Mid\_QPSK\_FullRB





cupied BW		+ Input Ζ: 50 Ω	Atten: 20 dB	Trig: Free Run	Contor Fre	g: 1.882500000 GHz		Frequency	
. +•	Coupling: DC Align: Auto	Corr CCorr Freq Ref: Int (S)	Preamp: Off	Gate: Off #IF Gain: Low	Avg Hold: Radio Std:	500/500	and a second sec	requency 00000 GHz	Settings
PASS Graph	·	NFE: Adaptive	Ref LvI Offset 27	7.32 dB			Span 10.000	MHz	
g	0 dB		Ref Value 40.00	dBm			CF Step	00 MHz	
o o		Januar					Aut Ma	0	
0	and the second				William .	W PE		set	
.0									
nter 1.8825			#Video BW 390.	00 kHz	s	Span 10 M weep 16.7 ms (1001 p			
letrics	۲						-		
Occu	pied Bandwidth								
	4.525	7 MHz		Total Power		29.9 dBm			
	smit Freq Error Bandwidth	-275 5.439 M		% of OBW Pow x dB	ver	99.00 % -26.00 dB			Loc
		May 30, 2024	-			H 💦 🗕 🕅			

## 5 M\_OBW\_Mid\_16QAM\_FullRB