Dt&C

Keysight Spectrum Analyzer - Occupied E						- 6 -
KL RF 50 Ω AC Center Freq 1.88000000	O GHZ	SENSE:INT Center Freq: 1.8800	00000 GHz	Radio Std	M May 16, 2024 : None	Frequency
	#IFGain:Low	Trig: Free Run #Atten: 44 dB	Avg Hold: 30)/30 Radio Dev	rice: BTS	
	Gunteon					
10 dB/div Ref 30.00 dB	m					
Log 20.0						Center Fred
10.0	hadren all market a	man	www.			1.88000000 GHz
0.00		he wills about a marked				
-10.0	/					
-20.0	4		1			
-30.0 person share and a strategy the state				he mounded whith	and the light of	
-40.0						
-50.0						
-60.0						
Center 1.88000 GHz				Span 3	0.00 MHz	CF Step
#Res BW 150 kHz		#VBW 3 MH	IZ	Swe	ep 20 ms	3.000000 MHz
Occupied Bandwid	th	Total F	Power	28.4 dBm		<u>Auto</u> Man
	3.411 M⊦	1 -7				
	5.411 WIF					Freq Offset 0 Hz
Transmit Freq Error	-370.79 k	Hz % of O	BW Power	99.00 %		0 H2
x dB Bandwidth	14.10 M	Hz x dB		-26.00 dB		
SG			1	STATUS		

15 MHz / 16QAM / FULL RB Size



15 MHz / 64QAM / FULL RB Size



Keysight Spectrum Analyzer - Occupied	BW				
X RL RF 50Ω AC		SENSE:INT	ALIGN OFF	04:58:17 PM May 16, 2024 Radio Std: None	Frequency
Center Freq 1.8575000	JU GHZ	Trig: Free Run	Avg Hold: 30/30		
	#IFGain:Low	#Atten: 44 dB		Radio Device: BTS	
10 dB/div Ref 30.00 dl	3m _.				
20.0					0
10.0					Center Freq
	nonantal	2. Aberthean tor With the work	nonlogrammenter		1.857500000 GHz
0.00					
-10.0					
-20.0	/				
-30.0	8.		wm	him where prover the method	
-40.0					
-50.0					
-60.0					
Center 1.85750 GHz #Res BW 150 kHz		#VBW 3 MH	-	Span 30.00 MHz Sweep 20 ms	CF Step
#Res Div 150 km2		#VDVV JIVIN	ΙΖ.	aweep 20 ms	3.000000 MHz Auto Man
Occupied Bandwig	dth	Total P	ower 25.9	dBm	Auto
	3.376 MH	-			
	3.370 IVIT	Z			Freq Offset
Transmit Freq Error	-345.01 ki	Iz % of O	BW Power 99	0.00 %	0 Hz
x dB Bandwidth	14.15 MH	Hz xdB	-26	00 dB	
	14.15 Mil		-20.		
			4		
MSG				S	

15 MHz / 256QAM / FULL RB Size



Keysight Spectrum Analyzer - Occupied I	BW				- đ -
Image: Wight of the second state in the se	Trig	SENSE:INT // ter Freq: 1.880000000 GHz : Free Run Avg Holo en: 44 dB	Radio 1: 30/30	0:09 PM May 16, 2024 0 Std: None 0 Device: BTS	Frequency
10 dB/div Ref 30.00 dB	۲m				
20.0	- mouth the contraction	to an advantage and the second	kre		Center Freq 1.88000000 GHz
-10.0					
-30.0 -40.0			Muna wantan	n Welder and the second	
-60.0					
Center 1.88000 GHz #Res BW 100 kHz		#VBW 3 MHz		an 20.00 MHz weep 20 ms	CF Step 2.000000 MHz <u>Auto</u> Man
Occupied Bandwid	Ith .9351 MHz	Total Power	29.4 dBn	1	Freq Offset
Transmit Freq Error	-176.31 kHz	% of OBW Pow	er 99.00 %	6	0 Hz
x dB Bandwidth	9.573 MHz	x dB	-26.00 di	3	
MSG			STATUS		



10 MHz / QPSK / FULL RB Size

🛈 Dt&C

Keysight Spectrum Analyzer - Occup	pied BW				
<mark>(XI</mark> R L RF 50 Ω	AC CORREC	SENSE:INT	ALIGN OFF	06:48:27 PM May 16, 20	24
Center Freg 1.855000)000 GHz	Center Freq: 1.85500		Radio Std: None	Frequency
	+	Trig: Free Run	Avg Hold: 30/30		
	#IFGain:Low	#Atten: 44 dB		Radio Device: BTS	
10 dB/div Ref 30.00	dBm				
Log					
20.0					Center Freq
10.0	1. No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	when and the work of the second se	Charles and the		1.855000000 GHz
	Potto and a state	An a shirt of a shirt of the second	Music Lance La		
0.00					
-10.0			h		
	/				
-20.0			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
-30.0	rhw -		Part Alexa	montenantesperature	24
-40.0					
-50.0					_
-60.0					
-00.0					
Center 1.85500 GHz				Enon 20.00 MH	1-
				Span 20.00 MH	
#Res BW 100 kHz		#VBW 3 MH	z	Sweep 20 m	1S 2.000000 MHz
					Auto Man
Occupied Bandy	vidth	Total P	ower 28.1	dBm	
	8.9676 MI	1Z			Freq Offset
					0 Hz
Transmit Freq Erro	or -177.23	KHz % of O	3W Power 99	0.00 %	UHZ
	0.570.5				
x dB Bandwidth	9.573 N	lHz xdB	-26.	00 dB	
			1		
MSG			I STATU:	B	

10 MHz / 16QAM / FULL RB Size



10 MHz / 64QAM / FULL RB Size



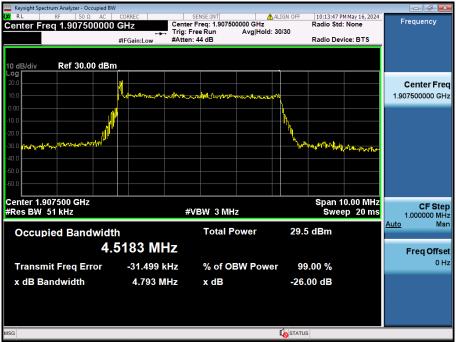
	ectrum Analyzer - Oc	cupied BW								- 6 -
Center F	RF 50 Ω req 1.88000	00000 G	DRREC HZ FGain:Low	Center Fr			LIGN OFF 80/30	07:42:20 P Radio Std Radio Dev		Frequency
10 dB/div Log	Ref 30.0	0 dBm								
20.0 10.0 0.00		M	uter water	har ^{nu} narlanta	mmm.Mr	_{นาง} างจุษาว _{ิส} าก				Center Freq 1.88000000 GHz
-10.0		/								
-30.0 -40.0	April a all a a	eventer						vhahihihin	^{୳ଡ଼ୡ} ୗୄ୶ୖ୷୲୲୵୳୶ୄ୵ଢ଼୶ଽୖ	
-50.0 -60.0										
	88000 GHz 100 kHz			#VE	SWI 3 MH	z			0.00 MHz ep 20 ms	CF Step 2.000000 MHz Auto Man
Occu	pied Band		327 MI	47	Total P	ower	25.3	dBm		
Trans	mit Freq Eri		-189.88		% of O	BW Power	99	.00 %		Freq Offset 0 Hz
x dB E	Bandwidth		9.474 N	IHz	x dB		-26.	00 dB		
100							1 otota			
MSG										

10 MHz / 256QAM / FULL RB Size





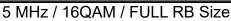




5 MHz / QPSK / FULL RB Size









5 MHz / 64QAM / FULL RB Size



Keysight Spectrum Analyzer - Occupied					- 6 💌
KE RF 50 Ω AC Center Freq 1.90750000		SENSE:INT Center Freq: 1.9075	ALIGN OFF	10:27:42 AM May 17, 2024 Radio Std: None	Frequency
	#IFGain:Low	Trig: Free Run #Atten: 44 dB	Avg Hold: 30/30	Radio Device: BTS	
	#IFGain:Low	#Atten: 44 db		Radio Device: D13	
10 dB/div Ref 30.00 dE	m				
20.0	-/N				Center Freq
10.0	and the second s	Marriellonoral			1.907500000 GHz
0.00	-		when we wanted		
-10.0	₩		\ ∖		
-20.0					
-30.0			\\\\\	www.	
-40.0				and a stratter	
-50.0					
-60.0					
Center 1.907500 GHz		II		Span 10.00 MHz	CF Step
#Res BW 51 kHz		#VBW 3 MH	lz	Sweep 20 ms	1.000000 MHz
Occupied Bandwic	lth	Total F	ower 28.	6 dBm	<u>Auto</u> Man
- ·	.5033 MI	47			
	.5055 141				Freq Offset
Transmit Freq Error	-43.555	kHz % of O	BW Power 99	9.00 %	0 Hz
x dB Bandwidth	4.748 N	lHz xdB	-26	.00 dB	
MSG			I o statu	s	

5 MHz / 256QAM / FULL RB Size

8.1.8. NR Band n7





20 MHz / QPSK / FULL RB Size



KEYSIGHT Input RF R T +++ Coupling DC Align Off	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten 44 dB Preamp Off µW Path St		Center Fr Avg Hold Radio Sto		00 GHz	Center Frequency 2.535000000 GHz	Settings
1 Graph 🔹	ni z naprio						Span 40.000 MHz	
Scale/Div 10.0 dB	to one Mart from the	Ref Value 3	0.00 dBm				CF Step 4.000000 MHz	
0.00							Auto Man	
-10.0 -20.0 -30.0 -40.0 -50.0 -50.0				Loun	Sala New Isra	unwhetelaydhyd	Freq Offset 0 Hz	
Center 2.53500 GHz #Res BW 200.00 kHz		#Video BW 3	.0000 MHz			Span 40 MHz ns (1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trad			_		
	50 MHz		Total Power		28.8	dBm		
Transmit Freq Error x dB Bandwidth	-527.38 k 18.61 M		% of OBW Po x dB	wer	99.0 -26.0	00 % 0 dB		Local

20 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1					Community -		Frequenc	v •
R T +++ Coupling DC Align: Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 44 dB Preamp: Off µW Path: Standard	Trig: Free Run Gate: Off 1 #IF Gain: Low	Center Freq Avg Hold 30 Radio Std: N		and the second se	requency 00000 GHz	Settings
1 Graph v	NFE Adaptive					Span 40.000 I	MHz	
Scale/Div 10.0 dB		Ref Value 30.00 c	IBm			CF Step		
20 0						4.00000	0 MHz	
10.0		montenan	- Andrew Color			Auto Mar		
20.0 30.0 may provide the second second	with			A DING	ha Maredagtanghing and reversion	Freq Offs 0 Hz	set	
-40.0							_	
-50.0								
Center 2.56000 GHz Res BW 200.00 kHz		#Video BW 3.0000	MHz	Sw	Span 40 M eep 20.0 ms (1001 p			
2 Metrics v								
			Measure Trace		-			
Occupied Bandwidth 17.84	10 MHz		Total Power		28.5 dBm			
Transmit Freq Error x dB Bandwidth	-533.87 kł 18.65 Mł		% of OBW Pow x dB	ver	99.00 % -26.00 dB			Loca
501	Jun 13, 2024 10:25:32 AM							

20 MHz / 64QAM / FULL RB Size



EYSIGHT Input RF T + Coupling: DC Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S)	Atten: 44 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Freg: Avg Hold 30 Radio Std: N		Center Frequency 2.560000000 GHz	Settings
Graph v	NFE Adaptive	1				Span 40.000 MHz	
cale/Div 10.0 dB		Ref Value 30.00) dBm			CF Step 4.000000 MHz	
0.0	month	Person and a second	Repart Contraction Contraction	~		Auto Man	
0.0 0.0 0.0 0.0	ww				venilien-andreaning	Freq Offset 0 Hz	
50,0							
enter 2.56000 GHz Res BW 200.00 kHz		#Video BW 3.000	JU MHZ	Sw	Span 40 M eep 20.0 ms (1001 p		
Metrics			Measure Trace	7.2			
	75 MHz		Total Power		26.4 dBm		
Transmit Freq Error x dB Bandwidth	-538.77 kl 18.69 Ml		% of OBW Pov x dB	ver	99.00 % -26.00 dB		Loc

20 MHz / 256QAM / FULL RB Size



R T ++ Align Off	Input Z. 5 Con CCo Freq Ref NFE Ada	n Int (S)	Atten 44 dB Preamp Off µW Path Stand	Gate		Center Fre Avg Hold 3 Radio Std		0 GHz	Center Frequency 2.535000000 GHz	Settings
1 Graph 🔹									Span 30.000 MHz	
Scale/Div 10.0 dB			Ref Value 30.0	0 dBm					CF Step 3.000000 MHz	
0.00		diama. 1.4							Auto Man	
-20.0	~~					han	many	mm	Freq Offset 0 Hz	
-40.0 -50.0 -60.0										
Center 2.53500 GHz #Res BW 150.00 kHz	+	#	Video BW 3.00	000 MHz		S		pan 30 MHz s (1001 pts)		
2 Metrics										
Occupied Bandwidth				Mea						
	71 MHz			Tota	l Power		30.0 d	Bm		
Transmit Freq Error x dB Bandwidth		27.96 k⊦ 4.17 M⊦		% of x dE	f OBW Powe	er	99.00 -26.00			Loc

Spectrum Analyzer 1	+						¢	Frequency	12 12 12 12 12 12 12 12 12 12 12 12 12 1
R T + Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S)		Tng: Free Run Gate: Off #IF Gain: Low	Center Freg: Avg/Hold 30 Radio Std: N		GHz	Center Freq 2.56250000		Settings
1 Graph T	NFE Adaptive						Span 30.000 MH;	z	
Scale/Div 10.0 dB Log 20 0 10.0	flare frances and the	Ref Value 30.00 dB	Sm	7			CF Step 3.000000 M Auto	IHz	
-10,0							Man Freq Offset	_	
-30.0 restructed and restored a				un the of the	⁹⁶⁴	haventuring	0 Hz	_	
Center 2.56250 GHz #Res BW 150.00 kHz		#Video BW 3.0000 N	ſHz	Swe	Sp eep 20.0 ms	an 30 MHz (1001 pts)			
2 Metrics									
Occupied Bandwidth			Measure Trace	7/ 201	۱. 				
	05 MHz		Total Power		29.6 dB	m			
Transmit Freq Error x dB Bandwidth	-356.25 kł 14.14 Mł		% of OBW Powe x dB	er	99.00 -26.00 d				Local
4 n c 1 '	11:32:23 AM								

15 MHz / QPSK / FULL RB Size



EYSIGHT Input RF T + Coupling DC Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE. Adaptive	Atten: 44 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Fre Avg Hold Radio Std		GHz	Center Frequency 2.507500000 GHz	Settings
Graph 🔹	NFE Adaptive						Span 30.000 MHz	
cale/Div 10.0 dB	and the fight of the and a fight	Ref Value 30.00	dBm	~			CF Step 3.000000 MHz Auto Man	
0.0 0.0 0.0 0.0 0.0 0.0 0.0	rent			happing		witherworkspress	Freq Offset 0 Hz	
enter 2.50750 GHz tes BW 150.00 kHz	1	#Video BW 3.000	0 MHz	s	Sp weep 20.0 ms	an 30 MHz (1001 pts)		
Metrics			Measure Trace	: 1 13				
13.41 Transmit Freq Error x dB Bandwidth	-349.67 kł 14.09 Mł		Total Power % of OBW Pow x dB	ver	27.8 dB 99.00 -26.00 d	%		Loo

15 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1 Occupied BW	+						Freque	ncy 🔻 💥
R T +++ Align Off	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 44 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off rd: #IF Gain: Low	Center Freq Avg Hold 3 Radio Std 1		łz	Center Frequency 2.562500000 GHz	Settings
1 Graph T	NFE Adaptive						Span 30.000 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm				CF Step	-
20 0							3.000000 MHz	
10.0	Aller and Barrow and		lander the first and for and				Auto Man	
-10.0	in a bird			Longhan			Freq Offset 0 Hz	
-30.0 martingroup the regime and addition of the					and a for the approxim	-anther the part	0112	-
-50,0								
-60.0								
Center 2.56250 GHz #Res BW 150.00 kHz		Video BW 3.000) MHz	Sw	Spar /eep 20.0 ms (1	30 MHz 001 pts)		
2 Metrics								
			Measure Trace					
Occupied Bandwidth 13.37	79 MHz		Total Power		28.1 dBm			
Transmit Freq Error x dB Bandwidth	-350.80 kł 14.11 Mł		% of OBW Pow x dB	ver	99.00 % -26.00 dB			Local
1501	Jun 13, 2024 11:41:56 AM)				X		

15 MHz / 64QAM / FULL RB Size



Coupling: DC	1 2 6 8					الشمك	Frequence	
Algn: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 44 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Fr Avg Hold Radio Std		NUMBER OF TAXABLE PARTY	requency 00000 GHz	Settings
Graph 🔹		e casa baras				Span 30.000	MHz	
Cale/Div 10.0 dB		Ref Value 30.00				CF Step 3.00000	00 MHz	
0.00	- Caluman to Co	Mapping low to make the	Connection of Sub- Instantion			Auto Mar		
20.0 30.0 40.0				him	an and for a part of the second of the second	Freq Off 0 Hz	set	
50.0 60.0								
enter 2.56250 GHz Res BW 150.00 kHz		#Video BW 3.000	0 MHz	s	Span 30 Sweep 20.0 ms (1001			
2 Metrics			1			1		
Occupied Bandwidth			Measure Trace					
13.399	MHz		Total Power		26.0 dBm			1.000
Transmit Freq Error x dB Bandwidth	-350.30 kł 14.03 Mł		% of OBW Pov x dB	ver	99.00 % -26.00 dB			Loca
	Jun 13, 2024 11:46:41 AM			11		A		

15 MHz / 256QAM / FULL RB Size



Coupling DC Corr CCorr Pre	p Off Gate Off Avg	inter Freq: 2.505000000 GHz g Hold` 30/30 idio Std: None	Center Frequency 2.505000000 GHz	Settings
	and a second		Span 20.000 MHz	
r 10.0 dB Ref	ue 30.00 dBm		CF Step 2.000000 MHz	1
	And the second and the second		Auto Man	
on an and the second states and the second s		Munner mandation	Freq Offset 0 Hz	
50500 GHz #Vide 100.00 kHz	30000 MHz	Span 20 MHz Sweep 20.0 ms (1001 pts)		
19				
Occupied Bandwidth	Measure Trace	70.02-7		
8.9198 MHz	Total Power	28.9 dBm		
Transmit Freq Error -188.76 kHz x dB Bandwidth 9.397 MHz	% of OBW Power x dB	99.00 % -26.00 dB		Lo

Spectrum Analyzer 1	+					Frequen	icy v sta
KEYSIGHT Input: RF R T ++ Coupling: DC Align: Off	Input Ζ: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 44 dB Preamp: Off μW Path: Standa	Trig: Free Run Gate: Off rd #IF Gain: Low	Center Freq Avg/Hold 30 Radio Std: N		Center Frequency 2.505000000 GHz	Settings
1 Graph T	NFE Adaptive					Span 20.000 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm			OF Phen	-
20 0						CF Step 2.000000 MHz	
10.0	Johnson		rulleamouthingnessionen	~		Auto	
-10.0 -20.0 -30.0	inst .			begungen	hand been and the states	Freq Offset 0 Hz	
-40.0							
-50.0							
-60.0							
Center 2.50500 GHz #Res BW 100.00 kHz	;	Video BW 3.000	0 MHz	Sw	Span 20 MH eep 20.0 ms (1001 pts		
2 Metrics							
			Measure Trace		a - 1		
Occupied Bandwidth	66 MHz		Total Power		28.6 dBm		
Transmit Freq Error x dB Bandwidth	-179.76 kł 9.540 Mł		% of OBW Pov x dB	/er	99.00 % -26.00 dB		Local
				10			
1 n C 1	Jun 13, 2024 11:59:01 AM				: 🔛 🖃 🔀		
	1				B Sizo		

10 MHZ / QPSK / FULL RB Size



KEYSIGHT, Input RF Coupling: DC Align: Off			Atten 44 dB Preamp Off µW Path Stan	Trig: Free Run Gate Off dard #IF Gain Low	Center Fro Avg Hold Radio Std		0 GHz	Center Frequency 2,505000000 GHz	Settings
1 Graph 🔹								Span 20.000 MHz	
Scale/Div 10.0 dB Log 20 0			Ref Value 30.0	00 dBm				CF Step 2.000000 MHz	
10.0	Jan W	herdown there was	maprime	man and the states of the stat	- M			Auto Man	
20.0 30.0 40.0	nd				han	and the second	viconteching	Freq Offset 0 Hz	
50.0 60.0									
Center 2.50500 GHz Res BW 100.00 kHz		*	fVideo BW 3.0	000 MHz	s	S weep 20.0 m	pan 20 MHz s (1001 pts)		
2 Metrics									
Occupied Bandwidth				Measure Trac	e he	51			
	39 MHz			Total Power		27.5 dl	Bm		
Transmit Freq Error x dB Bandwidth		-176.78 kH 9.436 MH		% of OBW Por x dB	wer	99.00 -26.00			Lo

10 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1 Occupied BW	+					Q	Frequenc	y v <mark>≥</mark> 12
R T +++ Align: Of	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S)		Ing: Free Run Gate: Off #IF Gain: Low	Center Free Avg Hold 3 Radio Std 1		and the second second second	requency 00000 GHz	Settings
1 Graph T	NFE Adaptive					Span 20.000	MHz	
Scale/Div 10.0 dB		Ref Value 30.00 dB	m			CF Step 2.00000	10 MHz	1
10.0		an hour many non in the start	there when a white the			Auto Mar		
-20.0 -30.0 -40.0	ner Accessor			Viencom	hander and the second of the s	Freq Offs	set.	
-50,0								
Center 2.50500 GHz #Res BW 100.00 kHz		#Video BW 3.0000 M	Hz	Sv	Span 20 M veep 20.0 ms (1001 p			
2 Metrics V								
Occupied Bandwid	h		Measure Trace	5.2	÷			
8.9	189 MHz		Total Power		26.9 dBm			A
Transmit Freq Erro x dB Bandwidth	-181.11 k 9.446 M		% of OBW Powe x dB	r	99.00 % -26.00 dB			Local
150	? Jun 13, 2024 12:08:39 PM							
	Carlo o Marco Casto L							

10 MHz / 64QAM / FULL RB Size



KEYSIGHT Input RF R T ++- Coupling Align: Off	DC Corr CCorr	Preamp Off (S) µW Path St		Center Free Avg[Hold 3 Radio Std		SHz	Center Frequency 2.565000000 GHz	Settings
1 Graph							Span 20.000 MHz	
Scale/Div 10.0 dB		Ref Value 30	0.00 dBm				CF Step 2.000000 MHz	1
10.0	honorm	~hulans-Pronoitinish-ih-	www.www.				Auto Man	
20.0 30.0 40.0 50.0				hun	an manufacture	erin margard	Freq Offset 0 Hz	
60.0 Center 2.56500 GHz Res BW 100.00 kHz		#Video BW 3	.0000 MHz	sv	Spa weep 20.0 ms	an 20 MHz (1001 pts)		
2 Metrics			Measure Trace	- h e	-7		1	
Occupied Banc	dwidth 8.9385 MHz		Total Power		25.8 dBn	n		
Transmit Freq x dB Bandwidt		36 kHz 0 MHz	% of OBW Pov x dB	ver	99.00 % -26.00 dE			Lo

10 MHz / 256QAM / FULL RB Size

🛈 Dt&C

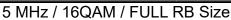
Keysight Spectrum Analyzer - Occupied B ¹	W					- 7
X RL RF 50 Ω AC	CORREC	SENSE:INT Center Freg: 2.53500			1:57:35 AM Jun 17, 2024 dio Std: None	Frequency
Center Freq 2.53500000) GHZ	Trig: Free Run	Avg Hold: 30		alo sta: None	
	#IFGain:Low	#Atten: 44 dB			dio Device: BTS	
10 dB/div Ref 30.00 dBr	m					
Log						
20.0	10v					Center Frea
10.0	1 Longe Cherry	www.markateresthalite	halpertrang			2.535000000 GHz
0.00						
-10.0				۱, I		
111				X I		
20.0				Jaw mar	ha mar	
-30.0 mm Www.					Anna port	
-40.0						
-50.0						
-60.0						
-80.0						
Center 2.535000 GHz				s	pan 10.00 MHz	
#Res BW 51 kHz		#VBW 3 MH	z		Sweep 20 ms	CF Step 1.000000 MHz
						Auto Man
Occupied Bandwid	th	Total P	ower	30.8 di	3m	<u>rato</u> mari
	5305 MH	-				
4.	3303 IVIE	Z				Freq Offset
Transmit Freq Error	-37.982 kl	z % of OF	3W Power	99.00	%	0 Hz
· ·						
x dB Bandwidth	4.759 MI	lz x dB		-26.00	dB	
				1		



5 MHz / QPSK / FULL RB Size









5 MHz / 64QAM / FULL RB Size



5 MHz / 256QAM / FULL RB Size

8.1.9. NR Band n41

Graph v	NFE: Adaptive	pw rain Stanoa	ard #IF Ga	Off ain: Low		Hold 31 o Std N				requency 0000 GHz	Settin
	HIL Mulphvo								Span 200.00 M	MHz	
cale/Div 10.0 dB	-	Ref Value 30.00	dBm						CF Step		1
20 0	prentretorinemonion			marian	www	_			20.0000 Auto		
0.00									Man		
10,0 20,0 30,0 version allow person and a set of the se	~~~					Lungan	The second	NI LIGAN	Freq Offs 0 Hz	set	
40.0		و محمد و						Manaparan	UHZ		
50.0											
enter 2.5930 GHz Res BW 1.0000 MHz		#Video BW 3.000	0 MHz			SW	Sp veep 20.0 ms	an 200 MHz s (1001 pts)			
Metrics											
Occupied Bandwidth			Meas			~ ~	÷				
96.444	MHz		Total	Power			31.5 dE	ßm			
Transmit Freq Error x dB Bandwidth	-545.21 kł 104.1 Mł		% of x dB	OBW Powe	er		99.00 -26.00				C.

100 MHz / π/2 BPSK / FULL RB Size



100 MHz / QPSK / FULL RB Size



Spectrum Analy Occupied BW		t							0	Frequence	ey 🔻 🚉
	Input RF Coupling: DC Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ind: #IF Gain: Low	Avgi	er Frec Hold 3 o Std: I		0 GHz		Frequency 90000 GHz	Settings
1 Graph	*	THE TROPHED							Span 200.00	MHz	
Scale/Div 10.0	dB	- Artutrante son ins	Ref Value 30.00	dBm					CF Step 20.000 Aut Ma	000 MHz to	1
-10.0 -20.0 -30.0 -40.0 -50.0	der an internation	prograd				Lynkp.		water from the last	Freq Of 0 Hz	fset	
-60.0 Center 2.5930 #Res BW 1.00			≇Video BW 3.000	0 MHz		Sv	Sp veep 20.0 m	an 200 MHz s (1001 pts)			
2 Metrics											
Occu	pied Bandwidth			Measure Trace							
0000		7 MHz		Total Power			30.2 dl	Зm			
	mit Freq Error Bandwidth	-610.35 kł 99.69 Mł		% of OBW Pov x dB	ver		99.00 -26.00				Local
45	272	Jun 13, 2024 7:00:29 PM)					- 53			

100 MHz / 16QAM / FULL RB Size

KEYSIGHT Input RF Coupling DC Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standard	Trig: Free Run Gate: Off d #IF Gain: Low	Center Freq: 2.5 Avg Hold: 30/30 Radio Std: None		Center Frequency 2.592990000 GHz	Settings
1 Graph 🔹	NFE: Adaptive					Span 200.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00 c	IBM	~~~~		CF Step 20.000000 MHz Auto Man	
10.0 20.0 30.0 m² m² m² m² m² m² m² m² 	FROM				after of the standard	Freq Offset 0 Hz	
Center 2.5930 GHz Res BW 1.0000 MHz		#Video BW 3.0000	MHz	Sweep	Span 200 MHz 20.0 ms (1001 pts)		
2 Metrics •			Measure Trace	20			
96.4 Transmit Freq Error x dB Bandwidth	46 MHz -550.49 ki 99.67 Mi		Total Power % of OBW Pow x dB	ver	29.8 dBm 99.00 % -26.00 dB		Local

100 MHz / 64QAM / FULL RB Size



R T + Align: Auto		Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low	Avg	ter Freg: 2 Hold: 30/3 io Std: Noi) GHz	Center Frequency 2.592990000 GHz	Setting
1 Graph 🔹 🔻								Span 200.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	0 dBm					CF Step	
Log 20 0								20.000000 MHz	
10.0	parment	and programmer	mananam	mathe				Auto	
-10.0								Man	
-20.0								Freq Offset	
-30.0 Horpersectional data mapped when the	Ange a start				Velotforman	en following an a feature of the second	terr monthly preserved	0 Hz	
-50.0									
Center 2.5930 GHz Res BW 1.0000 MHz		#Video BW 3.00	00 MHz		Swee		an 200 MHz s (1001 pts)		
2 Metrics									
			Measure Trace						
Occupied Bandy	96.419 MHz		Total Power			27.7 dE	3m		
Transmit Freq E			% of OBW Pov	ver		99.00			Lo
x dB Bandwidth	99.59 M	Hz	x dB			-26.00	dB		

100 MHz / 256QAM / FULL RB Size



KEYSIGHT, Input RF Coupling: DC Align: Auto	Corr C Freq R	2 50 Ω Corr tef: Int (S) Adaptive	Atten 42 dB Preamp Off µW Path Sta	Gate		Avg	ter Frec Hold 3 io Std: I) GHz	Center Frequency 2.592990000 GHz	Setting
1 Graph v										Span 180.00 MHz	
Scale/Div 10.0 dB		n goring and the second second	Ref Value 30	.00 dBm	per tilenstring	-				CF Step 18.000000 MHz Auto	
0.00 -10.0 -20.0 -30.0	-							Marine James	hydra ligger and a first	Man Freq Offset 0 Hz	
-40.0 -50.0 -60.0											
Center 2.59299 GHz #Res BW 910.00 kHz		#\	/ideo BW 3.0	0000 MHz			Sv	Sp veep 20.0 ms	an 180 MHz s (1001 pts)		
2 Metrics				₩ē:	asure Trace		°) ≥	÷.			
	0 MHz			Tota	al Power			31.6 dE	3m		
Transmit Freq Error x dB Bandwidth		-978.06 kH; 88.72 MH;		% c x df	of OBW Powe 3	er		99.00 -26.00			L

Spectrum Analyzer 1 v +						Freque	ncy v 💦
R T + Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off d #IF Gain: Low	Center Freq Avg Hold 3 Radio Std: N		Center Frequency 2.592990000 GHz	Settings
1 Graph	NFE Adaptive					Span 180.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm			CF Step	
20 0	Anne All annua	um mangh timona a saula	Contain Road Street			18.000000 MHz	
10.0		AN ALL MARKED MICHAEL - parties	n an an the second s			Auto Man	
-20.0 -30.0 regularitant for the section of the	al			ham	And man make for an address	Freq Offset 0 Hz	
-40.0						Particular.	-
-50.0							
Center 2.59299 GHz #Res BW 910.00 kHz	#	¢Video BW 3.0000) MHz	Sw	Span 180 MHz /eep 20.0 ms (1001 pts)		
2 Metrics							
			Measure Trace		• II		
Occupied Bandwidth 85.629	MHz		Total Power		31.0 dBm		
Transmit Freq Error x dB Bandwidth	-1.0002 MH 88.53 MH		% of OBW Pow x dB	/er	99.00 % -26.00 dB		Local
	1.0.000.00007			1.07			
?	Jun 13, 2024 8:11:31 PM						

90 MHz / QPSK / FULL RB Size



EYSIGHT Input RF T +++ Align Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate Off ard #IF Gain: Low	Avg	iter Freg: 2.5929900 Hold: 30/30 lio Std: None	00 GHz	Center Frequency 2.592990000 GHz	Setting
Graph 🔻	an opening op	e un ha					Span 180.00 MHz	
cale/Div 10.0 dB		Ref Value 30.00	dBm	_			CF Step	
og 0 0							18.000000 MHz	
0.0		- Carden and the Carlot of the second	an that a she was a special provide the she w	and from the			Auto Man	
0.0 malinetherestingen Inderstand	vision				- Mary and marked	ana hayalaya haya ya	Freq Offset 0 Hz	
							Part of the local division of the local divi	
i0.0 60.0								
enter 2.59299 GHz Res BW 910.00 kHz		#Video BW 3.000	0 MHz		Sweep 20.0 n	pan 180 MHz ns (1001 pts)		
Metrics •								
			Measure Trace					
Occupied Bandwidth 85.7	13 MHz		Total Power		30.1 (dBm		
Transmit Freq Error x dB Bandwidth	-951.12 k 88.57 M		% of OBW Pov x dB	ver	.99.0 -26.00			L

90 MHz / 16QAM / FULL RB Size



90 MHz / 64QAM / FULL RB Size



KEYSIGHT R T ++-	Input RF Coupling DC Align Auto	Input Z: 50 Ω Con CCon Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Stand	Trig: Free Run Gate: Off ard #IF Gain: Low	Avg	iter Freg: 2.5929 Hold: 30/30 lio Std: None	990000 GHz	Center Frequency 2.592990000 GHz	Settings
1 Graph								Span 180.00 MHz	
Scale/Div 10.0) dB		Ref Value 30.00) dBm				CF Step	-
20 0								18.000000 MHz	
10.0			allegene where a second	๛๛฿๛๛๛๛๛๛๛๛๛๛๛๛	mellinger			Auto Man	
-20.0 -30.0 //papental*	Hentpotentitestates					hearthytelographic	asaaguurtetaaninimadaasaya	Freq Offset 0 Hz	
-40.0									
Center 2.5929 #Res BW 910.			Video BW 3.00	00 MHz		Sweep 20	Span 180 MH 0.0 ms (1001 pts		
2 Metrics	1.								
Осси	pied Bandwidth			Measure Trace	8	°r ≥÷			
		05 MHz		Total Power		2	7.7 dBm		
	smit Freq Error Bandwidth	-1.0330 Mł 88.60 Mł		% of OBW Po x dB	wer		99.00 % 26.00 dB		Lo

90 MHz / 256QAM / FULL RB Size



KEYSIGHT, Input RF Coupling: DC Align: Auto	Corr C Freq R	Z: 50 Ω Corr Ref: Int (S) Adaptive	Atten 42 dB Preamp Off µW Path Sta	Gate		AvgiHold 30/30 Cer ow Radio Std None 2.5			d 30/30 Center Frequen		
1 Graph v										Span 160.00 MHz	
Scale/Div 10.0 dB			Ref Value 30.							CF Step 16.000000 MHz	1
10.0		and a start and a start a	ar ^{an} Bandonna an an An	Wysiesensystems	Barnatoria	erde-met				Auto Man	
-20.0 -30.0 -40.0	amed						Brenth	white mark	Lafanger Laboration (100%)	Freq Offset 0 Hz	
-50.0											
Center 2.59299 GHz #Res BW 820.00 kHz		#	/ideo BW 3.0	0000 MHz			Sw		an 160 MHz s (1001 pts)		
2 Metrics											
Occupied Bandwidth				Iviea	isure Trace		~) ~=	•			
77.11	9 MHz			Tota	l Power			31.5 d	Bm		
Transmit Freq Error x dB Bandwidth		-244.35 kH 79.87 MH		% of x dE	f OBW Pow	er		99.00 -26.00			L

Spectrum Analyzer 1 Occupied BW	+					and second as a		Frequenc	y
Align	ing DC C Αυτο F	nput Ζ: 50 Ω Com CCorr req Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate Off d #IF Gain Low	Center Fr Avg Hold Radio Sto			Center Frequency 2.592990000 GHz	Settings
1 Graph	Tr.	IFE Adaptive						span 160.00 MHz	
Scale/Div 10.0 dB			Ref Value 30.00 (dBm			C	F Step	
20 0					2 22 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2			16.000000 MHz	
10.0		manadoment	a	and more thank	marchang				
0.00		<u> </u>						Auto Man	
							T	req Offset	
-30.0 And management	mannerstand				5	mentionennessimalestenessia) Hz	
-40.0							2		
-50.0									
-60.0									
Center 2.59299 GHz #Res BW 820.00 kHz		*	Video BW 3.0000	MHz		Span 160 Sweep 20.0 ms (1001			
2 Metrics	07								
				Measure Trace		29			
Occupied Ba									
	77.232 M	HZ		Total Power		31.0 dBm			L
Transmit Fre x dB Bandw		-193.54 kł 79.96 Mł		% of OBW Pov x dB	ver	99.00 % -26.00 dB			Local
45C	2	Jun 13, 2024 9:25:17 PM					X		F
		0			-1 11 1				

80 MHz / QPSK / FULL RB Size



KEYSIGHT, Input RF R T + Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Star	Trig: Free Run Gate Off ndard #IF Gain Low	Center Fr Avg Hold Radio Sto		Center Frequency 2.592990000 GHz	Setting
1 Graph 🔹						Span 160.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.	00 dBm			CF Step 16.000000 MHz	
10.0	- for an and the	hter al constituted age show	galloninerarine polonithe and an			Auto Man	
-20.0 -30.0 Nelson and aparts and a particular to a free	n Mau			hore	montablemana	Freq Offset 0 Hz	
-40.0							
Center 2.59299 GHz #Res BW 820.00 kHz		#Video BW 3.0	000 MHz		Span 160 Mi Sweep 20.0 ms (1001 pt		
2 Metrics 🔹			6				
Occupied Bandwidth			Measure Trace		>1		
	7 MHz		Total Power		30.1 dBm		
Transmit Freq Error x dB Bandwidth	-209.20 I 79.72 M		% of OBW Por x dB	wer	99.00 % -26.00 dB		Lo

80 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1						Ċ.	Frequency	x * 🔅
R T +++ Coupling DC Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE. Adaptive	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off d #IF Gain: Low	Center F Avg Holo Radio St		Center Fre 2.592990		Settings
1 Graph	NFE Adaptive					Span 160.00 Mi	Нz	
Scale/Div 10.0 dB		Ref Value 30.00 c	iBm			CF Step		
20 0						16.00000	MHz	
10.0	1 marine	***************************************	an a	www		Auto		
-10.0						Freq Offse		
-20.0 -30.0 mynaminan	h			l.	and allow and work of more of	0 Hz		
-40.0								
-50.0								
-60.0								
Center 2.59299 GHz #Res BW 820.00 kHz		¢Video BW 3.0000	MHz		Span 160 M Sweep 20.0 ms (1001 p			
2 Metrics								
			Measure Trace		~			
Occupied Bandwidth 77.111	MHz		Total Power		29.4 dBm			
Transmit Freg Error	-235.87 kł	Ηz	% of OBW Pow	er	99.00 %			
x dB Bandwidth	79.83 Mi		x dB		-26.00 dB			Local
	Jun 13, 2024			1		-		
+ n C _ ?	9:34:51 PM)			.# 🚵 🚽 🕽			
	0							

80 MHz / 64QAM / FULL RB Size



KEYSIGHT Input RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ind: #IF Gain: Low	Avg	ter Freq: 2.592990000 GHz Hold: 30/30 io Std: None	Center Frequency 2.592990000 GHz	Setting
1 Graph v		a				Span 160.00 MHz	
Scale/Div 10.0 dB	altrastrastantantantan	Ref Value 30.00	dBm	m		CF Step 16.000000 MHz	
0.00 10.0 -20.0 -30.0	s.eed				hand a start of the start of th	Man Freq Offset 0 Hz	
-40.0							
Center 2.59299 GHz #Res BW 820.00 kHz		Video BW 3.000	0 MHz		Span 160 M Sweep 20.0 ms (1001 p		
2 Metrics •			Measure Trace		°r ≫*		
77.17 Transmit Freq Error x dB Bandwidth	/1 MHz -210.86 ki 79.82 Mi		Total Power % of OBW Pov x dB	wer	27.4 dBm 99.00 % -26.00 dB		Lo

80 MHz / 256QAM / FULL RB Size



EYSIGHT Input RF T +- Align: Auto	Input Z. 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Avgl	ier Freg: 2.6599800 Hold: 30/30 o Std: None	00 GHz	Center Frequency 2.659980000 GHz	Setting
Graph v							Span 120.00 MHz	
cale/Div 10.0 dB		Ref Value 30.00) dBm	_	<u>.</u>	_	CF Step	
og		manan					12.000000 MHz	
0.0		Low-Andread a party of	and the second	And Recoursed			Auto Man	
20.0	www.hl				hummin	www.walanguaranderen.ws	Freq Offset 0 Hz	
10.0								
50.0								
enter 2.65998 GHz Res BW 620.00 kHz		#Video BW 3.000	00 MHz		↓ Sweep 20.0 n	pan 120 MHz ns (1001 pts)		
Metrics v								
			Measure Trace					
Occupied Bandwidth 57.8	374 MHz		Total Power		31.6 (dBm		
Transmit Freq Error x dB Bandwidth	62.674 k 59.99 M		% of OBW Pov x dB	ver	99.0 -26.00			L



60 MHz / QPSK / FULL RB Size



R T ++- Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref Int (S) NFE Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off lard: #IF Gain: Low	AvgiHo	Freq: 2.592990000 C Id: 30/30 itd: None	SHz	Center Frequency 2.592990000 GHz	Settings
1 Graph 🔹	ML Audplive						Span 120.00 MHz	
Scale/Div 10.0 dB	- main angu	Ref Value 30.0	0 dBm	~~~			CF Step 12.000000 MHz	
-10.0 -20.0 -30.0 -40.0	white				nhaineannaichtagaistea	on almhining og og	Man Freq Offset 0 Hz	
-50.0 -60.0 Center 2.59299 GHz #Res BW 620.00 kHz		#Video BW 3.00	00 MHz		Span Sweep 20.0 ms (120 MHz 1001 pts)		
2 Metrics								
Occupied Bandwidth 57.8	64 MHz		Total Power		29.8 dBm	1		
Transmit Freq Error	-57.734 k	Hz	% of OBW Pov x dB	ver	99.00 % -26.00 dE			Lo

60 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1								0	Frequenc	у 🔻 🛃
KEYSIGHT, Input RF R T ↔ Coupling DC Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off rd: #IF Gain: Low	Avg	ter Fred Hold 3 io Std: 1) GHz	Second second second	Frequency 90000 GHz	Settings
1 Graph 🔹	NFE Adaptive							Span 120.00	MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm					CF Step	2	
Log 20 0								and the second se	, 000 MHz	
	million	www.www.www.www.www.www.www.www.www.ww	متلاله للمعيدة المسيطانين بالهداللامقان	show	1			Au		
0.00					ł.			Ma		
-10,0					1			Freq Of	fset	
30.0 with summer root and month we	hand?				men	Kuth anone they	when the providence of the	0 Hz	1961	
								Personal Person and Pe	_	
					-					
-60.0					1					
Center 2.59299 GHz #Res BW 620.00 kHz		Video BW 3.000	0 MHz		SW	Sp veep 20.0 m	an 120 MHz s (1001 pts)			
2 Metrics										
			Measure Trace							
Occupied Bandwidth 57.855	5 MHz		Total Power			29.4 di	3m			
Transmit Freq Error x dB Bandwidth	-83.182 kł 59.97 Mł		% of OBW Pov x dB	ver		99.00 -26.00				Loca
1501?	Jun 13, 2024 10:48:09 PM)								

60 MHz / 64QAM / FULL RB Size



KEYSIGHT Input RF Coupling DC Align Auto	Ipling DC Corr CCorr Preamp Off Gate Off Av				Freq: 2.5929900 old: 30/30 Std: None	00 GHz	Center Frequency 2.592990000 GHz	Settings
1 Graph 🔹 🔻							Span 120.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.0	00 dBm				CF Step	-
20 0	ويعتم التلغ التلعا						12.000000 MHz	
	wendertonton	unanterra	and a low many start free low works	raining		_	Auto	
0.00							Man	
-20.0							Freq Offset	
30.0 physical and the second second	was lighted				www.waters.orgen.waters.org	-	0 Hz	
-40.0								
-50.0								
Center 2.59299 GHz Res BW 620.00 kHz		#Video BW 3.0	000 MHz		S Sweep 20.0 n	pan 120 MHz ns (1001 pts)		
2 Metrics								
Occupied Bandwid	th		Measure Trace	. 5	61			
	.927 MHz		Total Power		27.5 0	iBm		
Transmit Freq Erro	r -28.959 kl	Hz	% of OBW Pow	ver	99.0	0 %		
x dB Bandwidth	60.10 M	Hz	x dB		-26.00) dB		Lo

60 MHz / 256QAM / FULL RB Size



Image: Construction of the second s		oan D0.00 MHz 5 Step D.000000 MHz Auto Man	
Log 200 0.00 -0.00 -0.00 -20.0 -30.0		0.000000 MHz Auto Man	
20.0 30.0 30.0	Fre	Man	
-20.0 -30.0	Fre		
	manager and the OI	eq Offset Hz	
40.0 -50.0 -60.0			
Center 2.59299 GHz #Video BW 3.0000 MHz	Span 100 MHz veep 20.0 ms (1001 pts)		
2 Metrics			
Occupied Bandwidth	*		
45.697 MHz Total Power	31.2 dBm		
Transmit Freg Error -925.41 kHz % of OBW Power x dB Bandwidth 47.51 MHz x dB	99.00 % -26,00 dB		Lor



50 MHz / QPSK / FULL RB Size



R T ++- Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S NFE. Adaptive	Atten: 42 dB Preamp: Off i) µW Path: St		Center F Avg Holo Radio Sl		Center Frequency 2.592990000 GHz	Setting
1 Graph 🔹						Span 100.00 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30	0.00 dBm			CF Step 10.000000 MHz	1
10.0		han fathag kayan di fitaka ang ang ang ang ang ang ang ang ang an	And the second later the address of the second later addre	~~~		Auto Man	
-20.0 -30.0 Kanger March March March March	mont			have	the the sum or working the row down	Freq Offset	
-50.0							
Center 2.59299 GHz #Res BW 510.00 kHz	· · ·	#Video BW 3	.0000 MHz		Span 100 Sweep 20.0 ms (1001		
2 Metrics							
Occupied Bandwidth	1		Measure Trace	: P	~		
45.7	707 MHz		Total Power		29.8 dBm		
Transmit Freq Error x dB Bandwidth	-978.28	kHz MHz	% of OBW Pov x dB	ver	99.00 % -26.00 dB		L

50 MHz / 16QAM / FULL RB Size

Cocupied BW	₹F	Input Z: 50 Ω	Atten: 44 dB	Trig: Free Run	Center Ereo	: 2.521020000 GHz				
R T 🔸 Couplin Align A	ig DC Auto	Con CCorr Freq Ref Int (S) NFE Adaptive	Preamp Off	Gate: Off rd: #IF Gain: Low	Avg Hold 3 Radio Std: N	0/30		Center Freque 2.521020000		Settings
1 Graph	•	NFE Adaptive						Span 100.00 MHz		
Scale/Div 10.0 dB			Ref Value 30.00	dBm				CF Step		
20 0								10.000000 MI	Hz	
10.0		formant	and a second	and an				Auto Man		
20.0	errounced all words	w l			home	- Annound and - States	Maylana	Freq Offset 0 Hz		
40.0										
-50.0										
Center 2.52102 GHz Res BW 510.00 kHz			Video BW 3.000	0 MHz	 Sw	Span 10 veep 20.0 ms (10				
2 Metrics	1									
0.15	1.1.10			Measure Trace		÷				
Occupied Bar	45.709 N	MHz		Total Power		29.2 dBm				
Transmit Free x dB Bandwid		-823.38 kł 47.72 Mł		% of OBW Pov x dB	wer	99.00 % -26.00 dB				Loca
150	1?	Jun 13, 2024 11:38:00 PM					X			

50 MHz / 64QAM / FULL RB Size



R T → Coupling DC Corr Corr Preamp Off R T → Align Autor Freq Ref Int (S) µW Path Stan NFE Kadaptive NFE Adaptive NFE Adaptive			Trig: Free Run Center Freq: 2.664990000 GHz Gate: Off Avg Hold: 30/30 rd: #IF Gain: Low Radio Std: None			GHz	Center Frequency 2.664990000 GF	Setungs		
1 Graph			a and and						Span 100.00 MHz	
Scale/Div 10.0	dB		Ref Value 30.00) dBm					CF Step 10.000000 MHz	
10.0		norman	un fair a fair	w ^a lwaanseely	jirre e e e e e e e e e e e e e e e e e e				Auto Man	
-20.0	rhan hand selling a factor	around				Wednesd	an the second second of the	^{ny} ~p ⁿ aryo ^t ya-o _t ogeti	Freq Offset 0 Hz	
-50.0 -60.0 Center 2.66499			#Video BW 3.00					an 100 MHz		
#Res BW 510.0			FVIDEO BW 3.000	JU MHZ		Sv	veep 20.0 ms			
2 Metrics Occur	vied Bandwidth			Measure Trace		- -	-			
	45.86	61 MHz		Total Power			27.4 dB			
	mit Freq Error Bandwidth	-883.84 ki 47.53 Mi		% of OBW Pov x dB	wer		99.00 -26.00 c			Loc

50 MHz / 256QAM / FULL RB Size



Lvg NFE A 1 Graph * Scale/Div 10.0 dB • Log • 10.0 • 0.00 • -10.0 • -20.0 • -30.0 •	Ref Value 30.0	0 dBm		Span 80.000 MHz CF Step 8.000000 MHz Auto	
Log 200 10.0 0.00 -10.0				8.000000 MHz	
0.00			N N		
22.0				Man	
-30.0			hundre hand and a stand	Freq Offset	
-50.0					
Center 2.59299 GHz #Res BW 390.00 kHz	#Video BW 3.00	00 MHz	Span 80 Sweep 20.0 ms (1001		
2 Metrics		5			
Occupied Bandwidth		Measure Trace	71-2-7		
35.736 MHz		Total Power	31.1 dBm		
	1.1152 MHz 37.58 MHz	% of OBW Pow x dB	ver 99.00 % -26.00 dB		Loc



40 MHz / QPSK / FULL RB Size



Spectrum Analyzer 1 Occupied BW	+			_			Frequent	cy 🔨 🗾
R T +++ Align Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Star	Trig: Free Run Gate: Off ndard: #IF Gain: Low	Center F Avg Hold Radio St		GHz	Center Frequency 2.592990000 GHz	Settings
1 Graph 🔹	THE Roupere						Span 80.000 MHz	
Scale/Div 10.0 dB		Ref Value 30.	00 dBm				CF Step 8.000000 MHz	1
10.0		koomennhennab	mportaneo anteresta	dan y			Auto Man	
20.0 30.0 address of the harves of the second	www			- Contraction	withing and within the second	www.	Freq Offset 0 Hz	1
40.0								
Center 2.59299 GHz #Res BW 390.00 kHz		#Video BW 3.0	000 MHz		Sp Sweep 20.0 ms	an 80 MHz (1001 pts)		
2 Metrics								
On the second states			Measure Trace					
Occupied Bandwidth 35.69	96 MHz		Total Power		29.9 dB	m		
Transmit Freq Error x dB Bandwidth	-1.1111 N 37.45 N		% of OBW Pov x dB	ver	99.00 -26.00 c			Loc
		~		10				
1961	Jun 14, 2024 1:11:17 AM	···						

40 MHz / 16QAM / FULL RB Size

Spectrum Analyzer	+						Q	Frequency	y y 10	
Aligr	t RF pling DC 1 Auto	Input Z: 50 Ω Con CCorr Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Freg Avg Hold 30 Radio Std N		and the second se	requency 00000 GHz	Settings	
1 Graph		NFE Adaptive					Span 80.000 I	MHz		
Scale/Div 10.0 dB Log 20 0 10.0 0.00		fran my draw way	Ref Value 30.00	dBm which provide the second			CF Step 8.00000 Auto Man	0		
-10.0 -20.0 -30.0 -40.0 -50.0	aa.aahoraa.h);				- Colorenter	and and a straight an	Freq Offs 0 Hz	iet		
Center 2.67000 GH #Res BW 390.00 kH			#Video BW 3.000	0 MHz	Sw	Span 80 MH eep 20.0 ms (1001 pts				
2 Metrics Occupied 8	Bandwidth			Measure Trace	e ² i >	•				
	35.710			Total Power		29.2 dBm			la marte	
Transmit F x dB Band		-1.0701 M 37.35 M		% of OBW Por x dB	wer	99.00 % -26.00 dB			Local	
150	2?	Jun 14, 2024 1:40:30 AM								

40 MHz / 64QAM / FULL RB Size



к I —	Input RF Coupling DC Align Auto	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Freq Avg Hold 30 Radio Std: N		Center Frequency 2.592990000 GHz	Settings
1 Graph	*	NEL Augure	مريعهم المعط				Span 80.000 MHz	
Scale/Div 10.0 (20 0 10 0	dB		Ref Value 30.00) dBm			CF Step 8.000000 MHz	
0.00							Auto Man	
-20.0 -30.0	a the advertised of	and				PM MANA AND AND AND AND AND AND AND AND AND	Freq Offset O Hz	
-50.0								
Center 2.59299 #Res BW 390.0			≇Video BW 3.000	00 MHz	Sw	Span 80 M eep 20.0 ms (1001		
2 Metrics	19							
Occup	ied Bandwidth			Measure Trace	- n =	i.		
	35.74	19 MHz		Total Power		27.2 dBm		
	nit Freq Error andwidth	-1.1209 Mł 37.40 Mł		% of OBW Pov x dB	ver	99.00 % -26.00 dB		Loc

40 MHz / 256QAM / FULL RB Size



EYSIGHT Input RF T ++ Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	A	enter Fre vg Hold 3 adio Std) GHz	Center Frequency 2.592990000 GHz	Settings
Graph v		ensert and						Span 40.000 MHz	
cale/Div 10.0 dB		Ref Value 30.00	dBm					CF Step 4.000000 MHz	
0.00								Auto Man	
20.0 moundary warded	mat				how	AR HARD - AND - MA	And advant	Freq Offset 0 Hz	
10.0 50.0									
enter 2.59299 GHz Res BW 200.00 kHz		#Video BW 3.000	0 MHz		l Si	S weep 20.0 m	pan 40 MHz s (1001 pts)		
Metrics •			T						
Occupied Bandwidth			Measure Trai						
	93 MHz		Total Power			30.8 dl	Зm		
Transmit Freq Error x dB Bandwidth	-206.12 k 19.11 M		% of OBW Pe x dB	ower		99.00 -26.00			Lo



20 MHz / QPSK / FULL RB Size



	vgiHold 30/30)ff 🛛	Gate	Atten 42 dB Preamp Off µW Path Sta	ut Ζ: 50 Ω r CCorr q Ref. Int (S) Ξ. Adaptive	Cor Free	Input RF Coupling: DC Align: Auto	KEYSIGHT
Span 40.000 MHz							*	1 Graph
30.00 dBm CF Step 4.000000 MHz			00 dBm	Ref Value 30			dB	Scale/Div 10.0
Auto Man	1	ſ₩₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	walker wap-es	and the second second	an gay and the second of the	/		10.0
Market and Managenetic Angenetic Offset	Windowshim					want	wound of the	-20.0 -30.0
								-40.0 -50.0 -60.0
3.0000 MHz Span 40 MHz Sweep 20.0 ms (1001 pts)	• Swee		000 MHz	Video BW 3.0	;			Center 2.6799 Res BW 200.
							17	2 Metrics
Measure Trace	°n ≥ 1		Meas				bied Bandwidth	Occu
Total Power 29.2 dBm		Power	Total			937 MHz		0000
% of OBW Power 99.00 % x dB -26.00 dB							mit Freq Error Bandwidth	

20 MHz / 16QAM / FULL RB Size



20 MHz / 64QAM / FULL RB Size



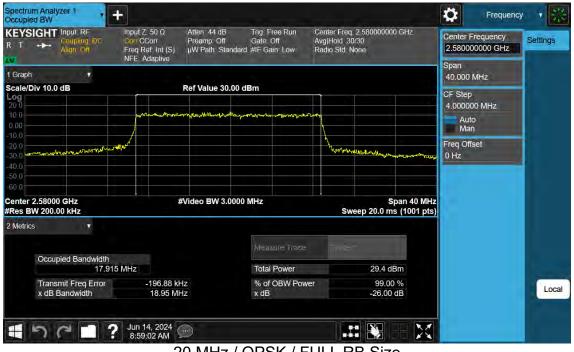
KEYSIGHT Input RF Coupling: DC Align: Auto	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Freq Avg Hold 30 Radio Std: N		Center Frequency 2.592990000 GHz	Setting
1 Graph 🔹		والمعادية المحدودات				Span 40.000 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00) dBm			CF Step 4.000000 MHz	
10.0	1 martin and 1 million	Potra Maria Maria	man and a second s	-		Auto Man	
20.0 30.0 month provident and and and	-			- Univer	นอุษณาสารณ์สารสาราสารการการ	Freq Offset 0 Hz	
40.0 50.0 60.0							
Center 2.59299 GHz Res BW 200.00 kHz		#Video BW 3.000	00 MHz	Sw	Span 40 M eep 20.0 ms (1001 p		
2 Metrics 🔹 🔻			1				
Occupied Bandwidth			Measure Trace	5.00	-		
	79 MHz		Total Power		26.8 dBm		
Transmit Freq Error x dB Bandwidth	-201.79 ki 19.06 Mi		% of OBW Pow x dB	ver	99.00 % -26.00 dB		Lo

20 MHz / 256QAM / FULL RB Size

8.1.10. NR Band n38

EYSIGHT Input RF T +++ Coupling DC Align Off	Coupling DC Corr CCorr Preamp. Off				Trig: Free Run Center Freq. 2:595000000 GHz Gate: Off Avg Hold: 30/30 #IF Gain: Low Radio Std. None			Center Frequency 2.595000000 GHz	
Graph v	NFL Auapine						Span 40.000 N	ИHz	
cale/Div 10.0 dB	hand the second s	Ref Value 30.00	dBm 	~~~~			CF Step 4.00000 Auto Man)	1
10.0 martin Carlo Martin Constanting	w			humana	renterstructure	mpthymas	Freq Offs 0 Hz		
0.0 0.0 enter 2.59500 GHz Res BW 200.00 kHz		#Video BW 3.000	0 MHz		Spa veep 20.0 ms	an 40 MHz (1001 pts)			
Metrics •			Measure Trace	7// 2=	~				
Occupied Bandwidth 17.8	46 MHz		Total Power		29.8 dBr	n			
Transmit Freq Error x dB Bandwidth	-211.92 kl 19.04 Mi		% of OBW Pow x dB	ver	99.00 % -26.00 di				Lo

20 MHz / π/2 BPSK / FULL RB Size



20 MHz / QPSK / FULL RB Size



EYSIGHT Input RF Coupling DC Align: Off	Co Fre	ut Z: 50 Ω n CCorr q Ref: Int (S) E: Adaptive	Atten 44 dB Preamp Off µW Path Star	Trig: Frei Gate: Off ndard: #IF Gain	t J	Center Fr Avg Hold Radio Std) GHz	Center Frequency 2.580000000 GHz	Setting
Graph v		e respons							Span 40.000 MHz	
Cale/Div 10.0 dB		-	Ref Value 30.	00 dBm	artub word				CF Step 4.000000 MHz Auto	
10.0 20.0 30.0 40.0	und					winter	A Harrison Argent	allower white we have	Man Freq Offset 0 Hz	
50.0 60.0 Senter 2.58000 GHz			#Video BW 3.0	000 MHz			Si	pan 40 MHz		
Res BW 200.00 kHz Metrics						s	weep 20.0 m			
Occupied Bandwidth				Measu	ie Trace	5	87			
17.88	30 MH2	z		Total P	ower		28.5 dE	3m		
Transmit Freq Error x dB Bandwidth		-198.04 kl 19.02 Ml		% of O x dB	BW Power		99.00 -26.00			Ŀ

20 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1	+					\$	Frequency	y v sta
KEYSIGHT Input RF R T +++ Coupling DC Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standard	Trig: Free Run Gate: Off I #IF Gain: Low	Center Freq Avg/Hold 30 Radio Std: N		Second Second Second	Frequency 00000 GHz	Settings
1 Graph 🔹	NFE Adaptive					Span 40.000	MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00 d	Bm			CF Step 4.00000		
10.0	han the three sectors and the sector sectors and the sector sectors and the sector sectors and the sector sectors and the sect	- al-un - marker ale	Warner P - 10 - 20 Horn Par			Aut Mai		
-20.0 -30.0 -40.0 -50.0	mal ⁴			- Concourse	Analderheitetterteiligikerveitettere	Freq Off 0 Hz	set	
60.0 Center 2.61000 GHz #Res BW 200.00 kHz		#Video BW 3.0000	MHz		Span 40 MHz eep 20.0 ms (1001 pts)			
2 Metrics								
Occupied Bandwidth			Measure Trace	711 2	-			
	58 MHz		Total Power		28.3 dBm			
Transmit Freq Error x dB Bandwidth	-223.03 kł 19.10 Mł		% of OBW Pow x dB	/er	99.00 % -26,00 dB			Local
1101	10:14:22 AM							

20 MHz / 64QAM / FULL RB Size



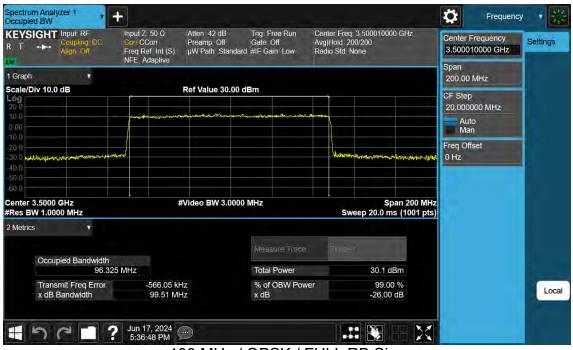
R T +++ Align Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE. Adaptive	Atten 42 dB Preamp Off µW Path Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Fre Avg Hold Radio Std		6Hz	Center Frequency 2.595000000 GHz	Setting
1 Graph							Span 40.000 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00					CF Step 4.000000 MHz	
10.0		war war war and a second	angelikerp.p.n.n.dr.graansensense	por man			Auto Man	
20.0	www			how	enterrational postation	almontantin a	Freq Offset 0 Hz	
40.0 50.0 60.0								
Center 2.59500 GHz Res BW 200.00 kHz	;	#Video BW 3.00	00 MHz	S	Spa weep 20.0 ms (n 40 MHz 1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trace	e he	4			
	08 MHz		Total Power		25.9 dBm			
Transmit Freq Error x dB Bandwidth	-197.43 kł 19.17 Mł		% of OBW Pov x dB	wer	99.00 % -26.00 dB			L

20 MHz / 256QAM / FULL RB Size

8.1.11. NR Band n78 (3 450 ~ 3 550 MHz)

EYSIGHT Input RF T ++- Coupling DC Align: Off	Coupling DC Corr CCorr Preamp Off		Trig: Free Run Center Freq: 3 500010000 GHz Gate: Off Avg Hold 200/200 rd #IF Gain: Low Radio Std: None			Center Frequency 3.500010000 GHz	Settings
Graph T	THE TOOPHIO	at marking a				Span 200.00 MHz	
cale/Div 10.0 dB		Ref Value 30.00 (dBm mada,madquada.ongen,adq	6,ndri		CF Step 20.000000 MHz Auto Man	
0.0 0.0 0.0 0.0 0.0 0 0 0	orthol			and and an and a second s		Freq Offset 0 Hz	
enter 3.5000 GHz Res BW 1.0000 MHz		#Video BW 3.0000) MHz	Span Sweep 20.0 ms ('	200 MHz 1001 pts)		
Metrics •	1		Measure Trace	10 ST			
	101 MHz		Total Power	30.5 dBm			
Transmit Freq Error x dB Bandwidth	-393.74 k 99.57 M		% of OBW Pow x dB	ver 99.00 % -26.00 dB			Lo

100 MHz / π/2 BPSK / FULL RB Size



100 MHz / QPSK / FULL RB Size



Ceysight Input RF R T ↔→ Coupling DC Align Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Avgil	er Freq: 3 5000100 Hold: 200/200 o Std: None	000 GHz	Center Frequency 3.500010000 GHz	Settings
1 Graph	The Producto						Span 200.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm				CF Step 20.000000 MHz	
0.00			ويرا براجار وسرعين والمراسية بالمراسية برايوا والمراسية				Auto Man	
20.0 30.0 Malenno incolection activ 40.0	hisper				watchy blog owner	hand an an and a second se	Freq Offset 0 Hz	
50.0 60.0 Center 3.5000 GHz		#Video BW 3.000				Span 200 MHz		
Res BW 1.0000 MHz		#1000 844 5.000				ms (1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trace		71425-7			
	19 MHz		Total Power		29.3	dBm		
Transmit Freq Error x dB Bandwidth	-502.39 k 99.43 M		% of OBW Pow x dB	ver	99. -26.0	00 % 0 dB		Loca

Spectrum Analyzer 1 Occupied BW	P						Q	Frequenc	y y 32	
R T +++ Coupling DC Align Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standar					State of the state of the state	Center Frequency 3.500010000 GHz		
1 Graph	NFE Adaptive						Span 200.00) MHz		
Scale/Div 10.0 dB		Ref Value 30.00	dBm				CF Ste	n		
20 0							and the second second	- 0000 MHz		
10.0		and a second	and the second	mm	-		Au Ma			
-10.0					· ····		Freq O	ffset		
-30.0 any manufacture all man more than	and				Wanter	aboversities the second second	0 Hz			
-40.0								_		
-50.0										
Center 3.5000 GHz		#Video BW 3.000				Span 200 MH				
#Res BW 1.0000 MHz		4VIdeo BW 5.000			Sw	eep 20.0 ms (1001 pt				
2 Metrics										
			Measure Trace			a				
Occupied Bandwidth 96.241	MHZ		Total Power			28.7 dBm				
Transmit Freq Error	-531.66 kł		% of OBW Pov	VOT		99.00 %			1	
x dB Bandwidth	-551.00 Ki 99.64 Mi		x dB	VCI		-26.00 dB			Local	
	h = 47 0004	~		_						
1761?	Jun 17, 2024 6:15:37 PM)								
	10			F LL	1.1					

100 MHz / 64QAM / FULL RB Size



KEYSIGHT Input RF R T ↔→ Coupling DC Align Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Stand	Trig: Free Run Gate Off ard #IF Gain: Low		req: 3.50001000 1.200/200 td: None	10 GHz	Center Frequency 3.500010000 GHz	Settings
1 Graph 🔹							Span 200.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00) dBm				CF Step 20.000000 MHz	
0.00							Auto Man	
20.0 30.0 40.0 50.0 60.0	ww.				lee' pyrawdar dalar	General (การเขา) (การเขา) (การเขา)	Freq Offset 0 Hz	
Center 3.5000 GHz Res BW 1.0000 MHz		#Video BW 3.00	00 MHz		Sp Sweep 20.0 m	oan 200 MHz is (1001 pts)		
2 Metrics 🔹								
Occupied Bandwidth			Measure Trace	: T()	5-1			
	8 MHz		Total Power		26.6 d			Sec.
Transmit Freq Error x dB Bandwidth			% of OBW Pov x dB	of OBW Power 99.00 % B -26.00 dB				Lo

100 MHz / 256QAM / FULL RB Size



EYSIGHT Input RF Coupling DC Align Off	Input Z. 50 Corr CCorr Freq Ref In NFE Adap	nt (S)	Atten: 42 dB Preamp: Off µW Path: Stan	Gate		Avg H	r Freg: 3.5049 old: 200/200 Std: None	90000 GHz	Center Frequency 3.504990000 GHz	Settings
Graph v	the state service p			ALC: N					Span 180.00 MHz	
cale/Div 10.0 dB	Jungana	r www.wall.com	Ref Value 30.0	00 dBm		m			CF Step 18.000000 MHz	
0.00									Auto Man	
20.0 30.0 Juniorgram.confred.a.b.							My and a second second	๛๛๚๛๛๛๚๛๛๛๛๛๚๛๛๚	Freq Offset 0 Hz	
50.0										
enter 3.50499 GHz Res BW 910.00 kHz		#\	ideo BW 3.0	000 MHz			Sweep 20	Span 180 MH .0 ms (1001 pts		
Metrics •										
Occupied Bandwidth				Mea	sure Trace		124			
	24 MHz			Total	Power		30).2 dBm		
Transmit Freq Error x dB Bandwidth		8.67 kHz .48 MHz		% of x dB	OBW Powe	r		99.00 % 6.00 dB		La

Spectrum Analyzer 1 ,	t						Ø	Frequency	() (<mark>2</mark> 12)
R T ++++ Align: Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standard	Trig: Free Run Gate: Off I #IF Gain: Low	Center Fre Avg Hold Radio Std) GHz	And a second second second	requency 00000 GHz	Settings
1 Graph T	NFE. Adaptive						Span 180.00	MHz	
Scale/Div 10.0 dB		Ref Value 30.00 d	IBM	~~~_			Auto		
-10.0 -20.0 -30.0 -40.0					manutur	tanna qubuvdaha	Mar Freq Off: 0 Hz		
-50.0 -60.0 Center 3.50499 GHz #Res BW 910.00 kHz		≇Video BW 3.0000	MHz	s	Sp weep 20.0 ms	an 180 MHz s (1001 pts)			
2 Metrics									
Occupied Bandwidth	9 MHz		Measure Trace	714 3					
Transmit Freq Error x dB Bandwidth	-809.95 kl 88.51 Mł		% of OBW Pov x dB	ver	29.8 dE 99.00 -26.00	%			Local
1501	8:20:47 PM								

90 MHz / QPSK / FULL RB Size



(EYSIGHT Input RF T +++ Coupling D Align Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE. Adaptive	Atten 42 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Avg	ter Freq: 3 5000100 Hold: 200/200 io Std: None	100 GHz	Center Frequency 3.500010000 GHz	Settings
Graph v							Span 180.00 MHz	
cale/Div 10.0 dB		Ref Value 30.00	dBm				CF Step	
.0g							18.000000 MHz	
10.0	for the second s	anal and the second second	a Constant with which is a survice provide	ndramana dan			Auto Man	
20.0 30.0	extra provid				hundrundrundenty	clashesmantination	Freq Offset 0 Hz	
40.0								
60.0								
enter 3.50001 GHz Res BW 910.00 kHz	-	#Video BW 3.000	00 MHz			pan 180 MHz ns (1001 pts)		
Metrics •								
			Measure Trace					
Occupied Bandw	85.587 MHz		Total Power	- 1	28.8	dBm		
Transmit Freq El x dB Bandwidth	rtor -754.02 k 88.63 M		% of OBW Pov x dB	ver	99.0 -26.0	00 % 0 dB		Lo

Spectrum Analyzer 1 V							Frequence	ey 🔹 🔡
R T +++ Coupling DC Align: Off	Input Z: 50 Ω Con CCorr Freq Ref Int (S) NFE Adaptive	Atten 42 dB Trig: Free Run Center Freq: 3.495000000 GHz Preamp. Off Gate. Off Avg Hold 200/200 µW Path Standard #IF Gain: Low Radio Std: None				00 GHz	Center Frequency 3.495000000 GHz	Settings
1 Graph v	NFE Adaptive						Span 180.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm				OF DU-	-
Log 20 0							CF Step 18.000000 MHz	
10.0	freedoment	and a stand and a families a shore		many			Auto Man	
-20.0							Freq Offset	
-30.0 velageofernantering allowed approved appro	1				Male and month more	nationalistication	0 Hz	
-40.0								
-50.0								
-60.0								
Center 3.49500 GHz #Res BW 910.00 kHz	1	#Video BW 3.000) MHz		Sy Sweep 20.0 m	oan 180 MHz is (1001 pts)		
2 Metrics v								
			Measure Trace					
Occupied Bandwidth			Tatal Dawar		20.2.4	Dee		
85.453			Total Power		28.3 d			1.000
Transmit Freq Error x dB Bandwidth	-821.98 ki 88.66 Mi		% of OBW Pov x dB	ver	99.0 -26.00			Local
15C1?	Jun 17, 2024 7:29:50 PM							

90 MHz / 64QAM / FULL RB Size



EYSIGHT Input RF T +- Coupling Di Align: Off	Input Z: 50 Ω C Corr Freq Ref: Int NFE: Adaptiv	Preamp Off (S) µW Path Star				0 GHz	Center Frequency 3.500010000 GHz	Setting
Graph v							Span 180.00 MHz	
cale/Div 10.0 dB		Ref Value 30.	00 dBm				CF Step	
.00 20 0	<u>م من معم م</u>						18.000000 MHz	
10.0	nom	white the second s	why way and	manan			Auto	
10.0							Man Man	
20.0							Freq Offset	
30.0 mart and shirted and all should	southand			L.,	-	and polinera Million	0 Hz	
40.0								
50.0								
enter 3.50001 GHz		#Video BW 3.0	000 841-			an 180 MHz		
Res BW 910.00 kHz		#video Bvv 3.0	OOO MHZ		Sweep 20.0 m			
Metrics •								
Occupied Bandwi	-141-		Measure Tracs					
	5.624 MHz		Total Power		26.3 d	Bm		
Transmit Freq Err		98 kHz	% of OBW Pov	ver	99.00			
x dB Bandwidth	88.7	4 MHz	x dB	-26.00 dB		dB		

90 MHz / 256QAM / FULL RB Size



KEYSIGHT Input RF Coupling DC Align Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE. Adaptive	Atten 42 dB Preamp Off µW Path Sta	Trig: Free Run Gate: Off ndard: #IF Gain: Low	AvgiHo	Freq: 3.510000 ld: 200/200 ltd: None	000 GHz	Center Frequency 3.510000000 GHz	Settings
1 Graph 🔹							Span 160.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.	00 dBm				CF Step 16.000000 MHz	
0.00							Auto Man	
20.0 30.0					n mangalanta ana ang a	how with the state of the state	Freq Offset 0 Hz	
50.0 60.0 Center 3.51000 GHz		#Video BW 3.0				Prop 460 MHz		
Res BW 820.00 kHz		#VIGEO BVV 3.0	JUUU MHZ			Span 160 MHz ms (1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trac	e 7)	6-1			
77.00	04 MHz		Total Power		30.4	dBm		
Transmit Freq Error x dB Bandwidth	-142.82 kl 79.99 Mi		% of OBW Po x dB	wer		00 % 00 dB		La

Spectrum Analyzer 1	t		and the second second	Frequenc	y v <mark>sta</mark>
R T +++ Align: Of	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Trig Free Ru Preamp Off Gate Off µW Path Standard #IF Gain Lov	Avg Hold 200/200	Center Frequency 3.500010000 GHz	Settings
1 Graph v	NFE Adaptive			Span 160.00 MHz	1
Scale/Div 10.0 dB		Ref Value 30.00 dBm		CF Step	
Log 20.0				16.000000 MHz	
10.0				Auto Man	
-20.0 -30.0 any water and any and and any and any and any	wat		Hubber He more hand a character	Freq Offset 0 Hz	
-40.0					
-60.0					
Center 3.50001 GHz #Res BW 820.00 kHz	;	#Video BW 3.0000 MHz	Span 160 M Sweep 20.0 ms (1001 p		
2 Metrics					
		Measure T	iace TILLET		
Occupied Bandwidth 76.97	4 MHz	Total Powe	er 29.8 dBm		
Transmit Freq Error x dB Bandwidth	-154.76 kł 79.98 Mł		Power 99.00 % -26.00 dB		Local
1	Jun 17, 2024 10:05:53 PM				
					-

80 MHz / QPSK / FULL RB Size



KEYSIGHT Input RF Coupling DC Align Off	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off lard: #IF Gain: Low	Center Fre Avg Hold 2 Radio Std) GHz	Center Frequency 3.510000000 GHz	Setting
1 Graph 🔹	THE COOPERS						Span 160.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.0	0 dBm				CF Step 16.000000 MHz	
0.00	- hanne	~*************************************	and a second provide a second s				Auto Man	
10.0 20.0 30.0 	north			Ymau	Marthansonalises	an a	Freq Offset 0 Hz	
50.0								
Center 3.51000 GHz Res BW 820.00 kHz		#Video BW 3.00	00 MHz	SI	Sp weep 20.0 m	an 160 MHz s (1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trace					
	92 MHz		Total Power		28.9 di	3m		
Transmit Freq Error x dB Bandwidth	-86.577 kl 79.95 Mi		% of OBW Pow x dB	ver	99.00 -26.00			L

Spectrum Analyzer 1						0	Frequenc	y 10,5	
R T +++ Align Of	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standar					enter Frequency .510000000 GHz		
1 Graph v	NFE Adaptive					Span 160.00	MHz		
Scale/Div 10.0 dB		Ref Value 30.00 c	dBm			CF Step)		
20 0						and the second se	000 MHz		
10.0	provinsion and	and and the harmonic and a subscription	and the second			Au Ma			
-20.0						Freq Of	fset		
-30.0 mental men	anting			ha	and the second second second second second	and the second second			
-40.0								2	
-50.0									
-60.0									
Center 3.51000 GHz #Res BW 820.00 kHz		#Video BW 3.0000	MHz		Span 160 M Sweep 20.0 ms (1001)				
2 Metrics •									
			Measure Trace		œ-				
Occupied Bandwidtl 77	1 125 MHz		Total Power		28.3 dBm				
Transmit Freq Error		HZ	% of OBW Pov	ver	99.00 %				
x dB Bandwidth	79.77 M		x dB		-26.00 dB			Local	
	Jun 17, 2024	_							
176	10:54:46 PM)			🖽 💥 — 👂				

80 MHz / 64QAM / FULL RB Size



CEYSIGHT Input RF Coupling DC Align Of	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate Off ard #IF Gain: Low	Off Avg/Hold 200/200			Center Frequency 3.510000000 GHz	Settings
1 Graph v	SHIE PROPERTY						Span 160.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00) dBm	Ħ			CF Step 16.000000 MHz	
0.00		-lever-leverserender	hand an				Auto Man	
20.0 20.0 40.0 50.0	Ward .				warabbararkaawaana	rwannahm	Freq Offset 0 Hz	
60 0 Center 3.51000 GHz Res BW 820.00 kHz		#Video BW 3.00	00 MHz		Spa Sweep 20.0 ms	an 160 MHz (1001 pts)		
2 Metrics 🔹			Measure Trace	. 11	61			
Occupied Bandwidth 77.00	60 MHz		Total Power		26.3 dB	m		
Transmit Freq Error x dB Bandwidth	-178.90 k 79.93 M		% of OBW Pov x dB	ver	99.00 -26.00 c			Loc

80 MHz / 256QAM / FULL RB Size



	out RF upling DC gn: Qff	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard #IF Gain: Low	Avg	nter Freq: 3 5150100 j Hold_200/200 dio Std: None	00 GHz	Center Frequency 3.515010000 GHz	Setting
Graph	*							Span 140.00 MHz	
cale/Div 10.0 dB			Ref Value 30.00) dBm				CF Step	
.0g		22 GE (200						14.000000 MHz	
10.0		mannon	man and and and and and and and and and a	and any set of the set of the set of the set				Auto	
0.00								Man	
20.0								Freq Offset	
30.0 Millionstructure	un hyperson and high	~~l			1	What when the work of the work	Anter the here the second	0 Hz	
40.0									-
50,0									
enter 3.51501 G				00 5411-			440 MU-		
Res BW 680.00 k			#Video BW 3.000	DU WINZ		Sweep 20.0 n	pan 140 MHz ns (1001 pts)		
Metrics	100								
				Measure Trac					
Occupied	Bandwidth 64.348	8 MHz		Total Power		29.6 0	dBm		
Transmit	Freq Error	-1.6175 MH	Iz	% of OBW Po	wer	99.0	0 %		
	dwidth	66.78 M	1-	x dB		-26.00			L



70 MHz / QPSK / FULL RB Size



	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Frei Avg Hold 2 Radio Std		GHz	Center Frequency 3.515010000 GHz	Setting
1 Graph	The roopers						Span 140.00 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00) dBm			_	CF Step 14.000000 MHz	
10.0	and the star star star star	approximation of the second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Auto Man	
-20.0 -30.0 moleculos and the second				- Indiation	a willinke unterlighted	er lans _{han f} -Lakerand f	Freq Offset 0 Hz	
-60.0 Center 3.51501 GHz #Res BW 680.00 kHz		≠Video BW 3.000	00 MHz		Spa weep 20.0 ms	n 140 MHz (1001 pts)		
2 Metrics			1					
Occupied Bandwidth			Measure Trace	78.2				
64.19 Transmit Freq Error	-1.6542 MI	Hz	Total Power % of OBW Pov	ver	28.4 dB 99.00			
x dB Bandwidth	66.87 M		x dB		-26.00 d			L

70 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1 Occupied BW	+						Ö	Frequency	() × 2.5
R T +++ Align Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S)	Atten 42 dB Trig: Preamp Off Gate µW Path Standard #IF G	Off A	enter Freg: 3 vg Hold 200 adio Std: Noi			Center Fre 3.5150100		Settings
1 Graph	NFE Adaptive					5	Span 140.00 MH	iz	
Scale/Div 10.0 dB Log 20.0 10.0 0.00	manan	Ref Value 30.00 dBm	and the array of the second				CF Step 14.000000 Auto Man	MHz	
-10.0 -20.0 -30.0 -40.0 -50.0 -50.0	wyaky W			heaven	derardarat (n. 161, 1710), gingta		Freq Offsel 0 Hz	1	
Center 3.51501 GHz #Res BW 680.00 kHz		∜Video BW 3.0000 MHz		Swee	Span 14 ep 20.0 ms (100				
2 Metrics		Me	asure Trace	71 (201					
	273 MHz	Tota	al Power		27.9 dBm				
Transmit Freq Error x dB Bandwidth	-1.6298 Mł 66.48 Mł		f OBW Power 3		99.00 % -26.00 dB				Local
1 5 C 1	1:04:40 AM					X			

70 MHz / 64QAM / FULL RB Size



R T +- Align Off	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low		req: 3 50001000 1 200/200 td: None	0 GHz	Center Frequency 3.500010000 GHz	Settings
1 Graph 🔹							Span 140.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00) dBm				CF Step 14.000000 MHz	
0.00	- marine ma	and the second	manna	-er-m			Auto Man	
-20.0					Heavy approximates and	the offet play and a second	Freq Offset 0 Hz	
-40.0 -50.0 -60.0								
Center 3.50001 GHz #Res BW 680.00 kHz		#Video BW 3.00	00 MHz		Sp Sweep 20.0 m	an 140 MHz s (1001 pts)		
2 Metrics								
Occupied Bandwidth			Measure Trace	. 7/	5-1			
	91 MHz		Total Power		25.8 dl	Зm		
Transmit Freq Error x dB Bandwidth	-1.5445 Mi 66.70 Mi		% of OBW Pov x dB	ver	99.00 -26.00			Lo

70 MHz / 256QAM / FULL RB Size



KEYSIGH R T ++-	Input RF Coupling DC Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off Jard: #IF Gain: Low	Avgi	ter Freq: 3 5199900 Hold 200/200 io Std: None	000 GHz	Center Frequency 3.519990000 GHz	Settings
1 Graph	*							Span 120.00 MHz	
Scale/Div 10.	0 dB	and	Ref Value 30.0	0 dBm	mmenne			CF Step 12.000000 MHz	
0.00								Auto Man	
-20.0 -30.0	where the second states and the second se	1,44 M				hour group alough have good	Marth Mary Mar Mar Mar	Freq Offset 0 Hz	
40.0									
Center 3.5199 #Res BW 620			∜Video BW 3.00	000 MHz			Span 120 MHz ms (1001 pts)		
2 Metrics	U.								
0.00	upied Bandwidth			Measure Trac					
000		26 MHz		Total Power		29.8	dBm		
	smit Freq Error Bandwidth	6.276 kł 59.87 Mł		% of OBW Po x dB	wer	99. -26.0	00 % 0 dB		Loc
15	2	Jun 18, 2024 2:40:17 AM)				- S		

Spectrum Analyzer 1 Occupied BW	+						Frequenc	y v v
R T + Align Of	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off d #IF Gain: Low	Center Fro Avg Hold Radio Std		iHz	Center Frequency 3.519990000 GHz	Settings
1 Graph T	NFE Adaptive						Span 120.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm				CF Step	
20.0							12,000000 MHz	
10.0	pi-indm	gener til Broker og med med herere	and the second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Auto Man	
-10.0							Freq Offset	
-30.0 graden and market and the market	need			hard	war and a state of the second	(wayorana)	0 Hz	
-40.0								
-60.0								
Center 3.51999 GHz #Res BW 620.00 kHz		≠Video BW 3.0000) MHz	s	Span weep 20.0 ms (120 MHz 1001 pts)		
2 Metrics			-					
			Measure Trace					
Occupied Bandwidth 57.78	39 MHz		Total Power		29.3 dBm			
Transmit Freq Error	-16.227 kl		% of OBW Pow x dB	/er	99.00 % -26.00 dB			Local
x dB Bandwidth	60.15 M	12	X UD		-26.00 dB			
1701	Jun 18, 2024 2:51:51 AM					X		
	6							

60 MHz / QPSK / FULL RB Size



Spectrum Analyzer 1 Cccupied BW	Τ Input Z: 50 Ω	40.00	700 600 600	6	5 0 100	000000 011	0	Frequence	
R T +++ Align Of	Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard: #IF Gain: Low	Avg H	old 200/200 Std: None	000000 GHz	Center Fre 3.480000		Settings
1 Graph 🔹							Span 120.00 Mi	Hz	
Scale/Div 10.0 dB _0g 20 0		Ref Value 30.0	0 dBm	T			CF Step 12.000000	0 MHz	1
10.0	for makent and and	an a	n fran fran fran fran fran fran fran fra	munne			Auto Man		
-20.0 -30.0	wa				-	wayaanti yaadhaantaa	Freq Offse	t	
-40.0 -50.0 -60.0									
Center 3.48000 GHz #Res BW 620.00 kHz		≇Video BW 3.00	00 MHz	•	Sweep 2	Span 120 M 0.0 ms (1001 p			
2 Metrics			5						
Occupied Bandwidth			Measure Trace		112-				
	89 MHz		Total Power		1	28.3 dBm			
Transmit Freq Error x dB Bandwidth	75.468 ki 60.20 Mi		% of OBW Pov x dB	ver	÷	99.00 % 26.00 dB			Loc
	Jun 18, 2024	~							

60 MHz / 16QAM / FULL RB Size

Occupied BW				-					Frequenc	a . 1
R T + Coupling DC	Input Z: 50 Ω Con CCorr Freq Ref. Int (S)	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off rd: #IF Gain: Low	Avgit	er Freg: Hold 20 Std: N		SHz	And in case of the local division of the loc	Frequency 90000 GHz	Settings
1 Graph	NFE Adaptive							Span 120.00	MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm					CF Step		
20 0									000 MHz	
10.0	mannant	howardshare	and and a second se	minale				Aut Ma		
-10.0								Freq Off	set	
-30.0 Hander lune and the manufacture	minul				ared get al	withman periodicity	why white that	0 Hz		
-40.0										
-60.0										
Center 3.51999 GHz #Res BW 620.00 kHz	;	Video BW 3.000	MHz		Sw	Spar eep 20.0 ms	n 120 MHz (1001 pts)			
2 Metrics										
			Measure Trac							
Occupied Bandwidth 57.1	1 790 MHz		Total Power			27.9 dBn	n			
Transmit Freq Error x dB Bandwidth	16.126 kł 60.08 Mł		% of OBW Por x dB	wer		99.00 % -26.00 dE				Local
			A GP			20,00 4				
1501	? Jun 18, 2024 3:14:52 AM)					- 56			

60 MHz / 64QAM / FULL RB Size



	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate: Off ard #IF Gain: Low	Avgit	er Freq: 3 50001 Iold: 200/200 Std: None	0000 GHz	Center Frequency 3.500010000 GHz	Settings
1 Graph 🔹	0.00000000						Span 120.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00) dBm				CF Step 12.000000 MHz	
10.0	m		Part and a second s	manna			Auto Man	
-20.0	watha				howman	-duritor the states	Freq Offset 0 Hz	
-40.0 -50.0 -60.0								
Center 3.50001 GHz #Res BW 620.00 kHz		≠Video BW 3.00	00 MHz		Sweep 20.0	Span 120 MH) ms (1001 pts		
2 Metrics			P					
Occupied Bandwidth			Measure Trace		1/12=*			
	20 MHz		Total Power		25.	6 dBm		
Transmit Freq Error x dB Bandwidth	23.034 ki 60.22 Mi		% of OBW Pov x dB	wer		9.00 % .00 dB		Lo

60 MHz / 256QAM / FULL RB Size



KEYSIGHT Input RF R T ++ Coupling DC Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Fr Avg Hold Radio Sto		Center Frequency 3.475020000 GHz	Setting
1 Graph 🔹						Span 100.00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00	dBm			CF Step	
20 0						10.000000 MHz	
	Marine Marine	winner and the second	man and a state of the second state of the sec	man -		Auto	
0.00						Man Man	
20.0						Freq Offset	
30.0 Almanananan	upent			hurs	narrowly was have a subscription of the subscr	0 Hz	
							-
50.0							
Center 3.47502 GHz		#Video BW 3.000	00 MHz		Span 100 M		
Res BW 510.00 kHz				4	Sweep 20.0 ms (1001 p	ots)	
2 Metrics							
			Measure Trace		51		
Occupied Bandwidt 45.	1 772 MHz		Total Power		29.4 dBm		
Transmit Freq Error	-895.42 k	Hz	% of OBW Pov	ver	99.00 %		
Transmit Freq Error		Hz	x dB		-26.00 dB		Lo



50 MHz / QPSK / FULL RB Size



R T +++ Align Of	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dE Preamp Off µW Path St		Center Fre Avg Hold Radio Std		Center Frequency 3.475020000 GHz	Setting
1 Graph v						Span 100.00 MHz	
Scale/Div 10.0 dB Log 20 0 10.0		Ref Value 3	0.00 dBm	more		CF Step 10.000000 MHz	
0.00 -10.0 -20.0 -30.0 -40.0 -50.0	purgilipative				erilan mundul Multinensians	Man Freq Offset Mrte	
-60.0 Center 3.47502 GHz #Res BW 510.00 kHz		#Video BW 3	.0000 MHz	s	Span 100 M weep 20.0 ms (1001 p		
2 Metrics 🔹			Measure Trace	a Tr :	-		
Occupied Bandwidth 45.6	96 MHz		Total Power	-	28.0 dBm		
Transmit Freq Error	-854.06	kHz /IHz	% of OBW Por x dB	wer	99.00 % -26.00 dB		

50 MHz / 16QAM / FULL RB Size

Occupied BW			-					Frequenc	, <u>,</u>
R T +++ Align Of	Input Z: 50 Ω Con CCon Freq Ref. Int (S) NFE. Adaptive	Atten: 42 dB Preamp: Off µW Path: Standar	Trig: Free Run Gate: Off d: #IF Gain: Low	e Off Avg Hold 200/200		100 GHz		requency 20000 GHz	Settings
1 Graph	инс Асартие						Span 100.00	MHz	
Scale/Div 10.0 dB		Ref Value 30.00 c	dBm	-		_	CF Step	1	
20.0							and the second se	000 MHz	
10.0	houston	monte and the second	an and a free allowed	ma			Aut Mai		
-20.0							Freq Off	set	
-30.0	professor -			hypety	millionantantantan	mandown	0 Hz		
-40.0									
-60.0									
Center 3.47502 GHz #Res BW 510.00 kHz		#Video BW 3.0000	MHz	4		Span 100 MHz ms (1001 pts)			
2 Metrics									
			Measure Tracs						
Occupied Bandwidth 45.6	69 MHz		Total Power		27.4	dBm			
Transmit Freq Error x dB Bandwidth	-857.37 kł 47.69 Mł		% of OBW Pov x dB	ver	99.0 -26.0	00 % 0 dB			Loca
1501	Jun 18, 2024 4:11:11 AM					5			

50 MHz / 64QAM / FULL RB Size

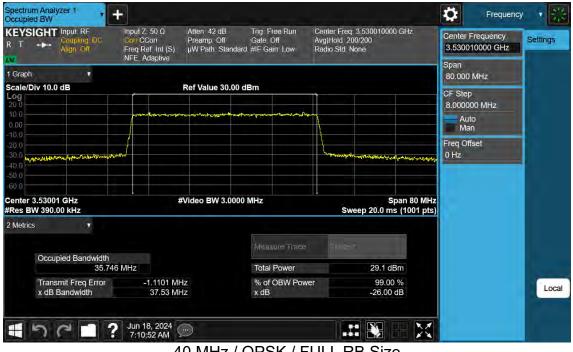


KEYSIGHT, Input RF Coupling DC Align: Off	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	AvgiHol	Freq: 3 50001000 d 200/200 itd: None	0 GHz	Center Frequency 3.500010000 GHz	Setting
1 Graph 🔹	and the second process						Span 100.00 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00) dBm				CF Step 10.000000 MHz	1
10.0	for the second	www.menere	whater and the second	1			Auto Man	
20.0 30.0					merchandersonation		Freq Offset 0 Hz	
40.0	0.0							
Center 3.50001 GHz Res BW 510.00 kHz	#Video BW 3.0000 MHz				Sp Sweep 20.0 m	an 100 MHz s (1001 pts)		
2 Metrics 🔹 🔻								
Occupied Bandwidth	Occupied Bandwidth		Measure Trace	Measure Trace				
	45.788 MHz		Total Power	Total Power 25.6		Зm		
		% of OBW Pov x dB	99.00 % -26.00 dB				Lo	

50 MHz / 256QAM / FULL RB Size



KEYSIGHT Input RF R T ↔ Align Of	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Standa	Trig: Free Run Gate: Off ard: #IF Gain: Low	Center Freq: Avg Hold 20 Radio Std: N		Center Frequency 3.470010000 GH	
1 Graph v	an our compress					Span 80.000 MHz	
Scale/Div 10.0 dB Log 20 0 10.0 0.00		Ref Value 30.00	dBm what a prosperation			CF Step 8.000000 MHz Auto Man	
10.0 20.0 30.0 40.0 50.0 60.0	manna			Jungensen	and and the standards	Freq Offset 0 Hz	
Center 3.47001 GHz #Res BW 390.00 kHz		#Video BW 3.000	00 MHz	Sw	Span 80 M eep 20.0 ms (1001 p		
2 Metrics 🔹			Measure Trace	7/ 25			
Occupied Bandwin 3	dwidth		Total Power		29.5 dBm		
Transmit Freq Err x dB Bandwidth			% of OBW Pov x dB	ver	99.00 % -26.00 dB		Loc
	📕 🔄 🔿 Jun 18, 2024 📖				• 🔊 🔊		



40 MHz / QPSK / FULL RB Size



Cocupied BW	Input Z: 50 Ω	Atten: 42 dB	Trig: Free Run		eq: 3 500010000	GHz	Frequer Center Frequency	
R T +++ Coupling DC Align: Off	Con CCorr Freq Ref. Int (S) NFE: Adaptive	Preamp Off µW Path Stand	Gate Off ard #IF Gain Low	Avg Hold Radio Sto			3.500010000 GHz	Settings
1 Graph 🔹							Span 80.000 MHz	
cale/Div 10.0 dB .00		Ref Value 30.00) dBm				CF Step 8.000000 MHz	
10.0		and a set of the set o	analation of the particular of				Auto Man	
-20.0	-mal			Aurora	Marthal Martine Martine Parameter	Mural Mark Mark	Freq Offset 0 Hz	
-40.0								
Center 3.50001 GHz #Res BW 390.00 kHz	+	#Video BW 3.0000 MHz			Sp Sweep 20.0 ms	an 80 MHz (1001 pts)		
2 Metrics			h-					
Occupied Bandwidth	Measure Trace			- 10-	27			
	17 MHz	Total Power			28.5 dBm			
Transmit Freq Error x dB Bandwidth		-1.0688 MHz % of OBW Power 37.44 MHz x dB			99.00 -26.00 d			Loc
💶 👝 👩 🖸 🤈 Jun 18, 2024 📖			h	# N				

Spectrum Analyzer 1	F			a start and a start of the	Frequen	cy 🔹 🔛
R T +++ Align: Off	Input Z: 50 Ω Con CCorr Freq Ref Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off μW Path: Standard	Trig: Free Run Gate: Off I #IF Gain: Low	Center Freq: 3 530010000 GHz Avg Hold 200/200 Radio Std: None	Center Frequency 3.530010000 GHz	Settings
1 Graph v	NFL AUAPUVE				Span 80.000 MHz	
Scale/Div 10.0 dB		Ref Value 30.00 d			CF Step 8.000000 MHz	
0.00	marianter	ente stanting and a state	man repairing the second se		Auto Man	
-20.0	-30.0 Utruthing Hada wrong had and h			Anna Million round marked and a real	Freq Offset 0 Hz	
-60.0 Center 3.53001 GHz #Res BW 390.00 kHz		#Video BW 3.0000	MHz	Span 80 MHz Sweep 20.0 ms (1001 pts)		
2 Metrics v			Measure Trace	70 > 1		
Occupied Bandwidth 35.73	5 MHz		Total Power	27.7 dBm		
Transmit Freq Error x dB Bandwidth	-1.0543 Mi 37.37 Mi		% of OBW Powe x dB	er 99.00 % -26.00 dB		Local
4 n c 1 ?	Jun 18, 2024 7:33:22 AM	9				

40 MHz / 64QAM / FULL RB Size



KEYSIGHT Input RF R T +++ Align Off	Input Z: 50 Ω Con CCorr Freq Ref. Int (S) NFE. Adaptive	Atten: 42 dB Preamp: Off µW Path: Standa	Trig: Free Run Center Freq: 3,530010000 GHz Gate: Off Avg Hold: 200/200 andard #IF Gain: Low Radio Std: None				Center Frequency 3.530010000 GHz	Setting
1 Graph 🔹		فيصفر بمصاد					Span 80.000 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.00	dBm				CF Step 8.000000 MHz	
10.0	hower	ann an	Manufacture and a second s	~~~~			Auto Man	
-20.0 -30.0 -40.0	med			hourse	MeddenserilesMyrticeneers		Freq Offset 0 Hz	
-50.0								
Center 3.53001 GHz #Res BW 390.00 kHz		#Video BW 3.000	00 MHz	s	Span weep 20.0 ms (10	80 MHz 001 pts)		
2 Metrics								
Occupied Bandwidth	d Bandwidth		Measure Trace Tri := "					
	35.754 MHz		Total Power	Total Power				
Transmit Freq Error -1.0769 MHz x dB Bandwidth 37.36 MHz		% of OBW Pov x dB	% of OBW Power 99.00 % x dB -26.00 dB				Lo	

40 MHz / 256QAM / FULL RB Size



KEYSIGHT, Input RF Coupling DC Align: Off	Input Z: 50 Ω Con CCon Freq Ref. Int (S) NFE. Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Center Freq: 3.534990000 GHz Gate: Off Avg Hold 200/200 ard #IF Gain: Low Radio Std. None			Center Frequency 3.534990000 GHz	Settings
1 Graph 🔹						Span 60.000 MHz	
Scale/Div 10.0 dB Log 20 0 10.0 0.00	form	Ref Value 30.00) dBm 			CF Step 6.000000 MHz Auto Man	
10.0 20.0 30.0 50.0 50.0 50.0 50.0			- United	hand the provide the second	Freq Offset		
Center 3.53499 GHz Res BW 300.00 kHz		Video BW 3.000	0 MHz	s	Span 60 M Sweep 20.0 ms (1001		
2 Metrics •			Measure Trace	711	-		
26.8 Transmit Freq Error x dB Bandwidth	25 MHz -522.13 kł 28.42 Mł		Total Power % of OBW Pov x dB	/er	29.7 dBm 99.00 % -26.00 dB		Loc



30 MHz / QPSK / FULL RB Size



KEYSIGHT Input RF Coupling DC Align Off	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Stand	Trig: Free Run Gate Off ard #IF Gain: Low	Center Fre Avg Hold Radio Std		0 GHz	Center Frequency 3.534990000 GHz	Setting
1 Graph							Span 60.000 MHz	
Scale/Div 10.0 dB Log 20.0		Ref Value 30.00	0 dBm	TÍ –			CF Step 6.000000 MHz	
10.0		ne more and	naphil ^a naphan <mark>an</mark> tan Maslana	where the second s			Auto Man	
20.0 30.0 40.0	nw			how	And the tolder Antonine by	Americantrathytem	Freq Offset 0 Hz	
50.0								
Center 3.53499 GHz Res BW 300.00 kHz		Video BW 3.0000 MHz				pan 60 MHz s (1001 pts)		
2 Metrics								
Occupied Rendwidth	Occupied Bandwidth							
	26.846 MHz Total Power				28.5 dBm			
Transmit Freq Error-492.89 kHz% of OBWx dB Bandwidth28.36 MHzx dB			% of OBW Pow x dB	/er	99.00 -26.00			L

30 MHz / 16QAM / FULL RB Size

Spectrum Analyzer 1	+				the second	0	Frequenc	ay y 👔
R T +++ Align: Off	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive	Atten: 42 dB Preamp: Off µW Path: Standard	Trig: Free Run Gate: Off 1 #IF Gain: Low	Center Fre Avg/Hold 3 Radio Std:			er Frequency 5000000 GHz	Settings
1 Graph	NFE Adaptive					Span 60.0	00 MHz	
Scale/Div 10.0 dB		Ref Value 30.00 c	iBm			CF St 6.00	tep 0000 MHz	1
10.0		·~~~Tree from all to only a street of the second st	m Rulin was a finite damas				Auto Man	
-20.0 -30.0	collast			higheren	··· ware to a property and the second s	Freq 0 Hz		
-40.0 -50.0 -60.0	-50.0							
Center 3.46500 GHz #Res BW 300.00 kHz	- +	Video BW 3.0000	MHz	s	Span 60 weep 20.0 ms (1001			
2 Metrics			6					
Occupied Bandwidth			Measure Trace	11 a	- A			
	1 MHz	Total Power			27.3 dBm			
Transmit Freq Error x dB Bandwidth	-543.56 kł 28.27 Mł		% of OBW Pow x dB	ver	99.00 % -26.00 dB			Local
	Jun 18, 2024	2				A		
	8:29:12 AM							

30 MHz / 64QAM / FULL RB Size



KEYSIGHT, Input RF Coupling DC Align Off	Input Z: 50 Ω Con CCorr Freq Ref: Int (S) NFE: Adaptive	Atten 42 dB Preamp Off µW Path Stan	Trig. Free Run Center Freq. 3 500010000 Gate. Off Avg Hold. 200/200 Iard #IF Gain. Low Radio Std. None			Ce	enter Frequency 500010000 GHz	Setting
1 Graph 🔹 🔻		Rof Value 20.00 dBm				and the second se	oan 0.000 MHz	
Scale/Div 10.0 dB Log 20 0		Ref Value 30.0	0 dBm			the second second	- Step .000000 MHz	1
10.0	an marine		marine have make and have a marine	~~			Auto Man	
20.0 30.0 40.0 kganstranskillarter and here and	uAufri			Manutar	handrathan han han han han han han han han han	n	eq Offset Hz	
-50.0								
Center 3.50001 GHz #Res BW 300.00 kHz		Video BW 3.00	00 MHz	SI	Span 6 veep 20.0 ms (100			
2 Metrics								
Occupied Bandwidth			Measure Trace	1/102	-			
	3 MHz Total F		Total Power		26.2 dBm			
Transmit Freq Error x dB Bandwidth	-548.30 k 28.05 M		% of OBW Pov x dB	ver	99.00 % -26.00 dB			Lo

30 MHz / 256QAM / FULL RB Size



1 Graph Scale/Div 10.0 dB Ref Value 30.00 dBm 200 200 200 200 200 200 200 20	R T +- Align Of	Input Z 50 Ω Corr CCorr Freq Ref Int (S) NFE Adaptive	Atten 42 dB Preamp Off µW Path Stand	Trig: Free Run Gate: Off lard: #IF Gain: Low	Avg Ho	Freg: 3 540000 d: 200/200 itd: None	000 GHz	Center Frequency 3.540000000 GHz	Settings
Log 200 200 200 200 200 200 200 20									
Auto Auto Measure Trace			Ref Value 30.0	0 dBm				CF Step	
0.00 0.00	20.0	ويعالن تدعم							
000 100 100 100 100 100 100 100		mannam	provision mana	www.weekengaline.gentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegentlegen	mm		_	Auto	
200 30.0 40.0 50.0 60.0 Center 3.54000 GHz #Video BW 3.0000 MHz Sweep 20.0 ms (1001 pts) 2 Metrics									
30.0 10.0					\rightarrow			Freq Offset	
4000 40000 4000 <t< td=""><td>20.0</td><td>and the second</td><td></td><td></td><td>- 74</td><td>A Martin a such the</td><td>allow mark mark</td><td>A REAL PROPERTY AND A</td><td></td></t<>	20.0	and the second			- 74	A Martin a such the	allow mark mark	A REAL PROPERTY AND A	
4600 #Video BW 3.0000 MHz Span 40 MHz Center 3.54000 GHz #Video BW 3.0000 MHz Sweep 20.0 ms (1001 pts) #Res BW 200.00 kHz Sweep 20.0 ms (1001 pts) Sweep 20.0 ms (1001 pts) 2 Metrics *	-40.0					A MANY AND			-
Center 3.54000 GHz #Video BW 3.0000 MHz Span 40 MHz #Res BW 200.00 KHz Sweep 20.0 ms (1001 pts) 2 Metrics *									
#Res BW 200.00 kHz Sweep 20.0 ms (1001 pts) 2 Metrics • IMeasure Trace 11 cont									
			#Video BW 3.00	00 MHz		Sweep 20.0			
	2 Metrics								
Occupied Bandwidth				Measure Trace					
17.898 MHz Total Power 29.7 dBm						29.7	dBm		
Transmit Freq Error -167.68 kHz % of OBW Power 99.00 %	Transmit Freg Error	Transmit Freq Error -167.68 kHz % of OBW Pow			ver	99	00 %		
x dB Bandwidth 19.08 MHz x dB -26.00 dB					· ·				Lo



20 MHz / QPSK / FULL RB Size



EYSIGHT Input RF T +++ Coupling DC Align Off	Con Free	ut Ζ: 50 Ω r CCorr q Ref: Int (S) Ξ: Adaptive	Preamp Off Gate Off Avg Hol			Center Fre Avg Hold 3 Radio Std		GHz	Center Frequency 3.540000000 GHz	Setting
Graph v				Ref Value 30.00 dBm					Span 40.000 MHz	
ale/Div 10.0 dB									CF Step 4.000000 MHz	1
00	/	rwww.mork.	and the second se	all permitted and a second	งารสาราร	~			Auto Man	
0.0 0.0 0.0	and					Jun	an the mapping	henderen fran frige here og e	Freq Offset 0 Hz	
0.0 0.0										
nter 3.54000 GHz es BW 200.00 kHz		;	∜Video BW 3.0000 MHz			s	Sp weep 20.0 ms	an 40 MHz (1001 pts)		
Metrics v										
Occupied Bandwidth			Measure Trace			$70 \approx 7$				
	922 MHz			Total Power			28.3 dBr	n		
Transmit Freq Error x dB Bandwidth		-178.86 kł 19.09 Mł		% of OBW Power x dB			99.00 9 -26.00 d			L

20 MHz / 16QAM / FULL RB Size

CCCUPIED BW CEYSIGHT Input RF	Input Z: 50 Ω	Atten: 42 dB	Trig: Free Run	Center Free	: 3.540000000 GHz		
R T →→ Coupling DC Align: Off	Gon CCorr Freq Ref. Int (S) NFE: Adaptive	Preamp: Off	Gate Off ard #IF Gain Low	Avg Hold 20 Radio Std: N	00/200	Center Frequent 3.540000000 G	Setunus
1 Graph 🔹	NFE Adaptive					Span 40.000 MHz	
Scale/Div 10.0 dB		Ref Value 30.00) dBm			CF Step	
20.0						4.000000 MHz	
10.0	and the state	manda	af the second			Auto Man	
-20.0	man			manufactor	Annan	Freq Offset 0 Hz	
40.0 merced and marked marked and the second and th				Mic 1-	Millette Innonintentention	1	
50.0							
Center 3.54000 GHz #Video BW 3.0000 MHz #Res BW 200.00 kHz			00 MHz	Sw	Span 40 Mi eep 20.0 ms (1001 pt		
2 Metrics •							
			Measure Trace				
Occupied Bandwidth 17.8	89 MHz		Total Power		27.9 dBm		
Transmit Freq Error -172.13 kHz x dB Bandwidth 18.92 MHz		% of OBW Pov x dB	wer	99.00 % -26.00 dB		Loca	
1601	2 Jun 18, 2024 11:51:01 AM				• 🛐 🔲 😽		

20 MHz / 64QAM / FULL RB Size