

	trum Analyzer - Char						
Center Fr	RF 50 Ω eq 1.70850	00000 GHz	Center Freq: 1.7085 Trig: Free Run #Atten: 20 dB	ALIGN AUTO 500000 GHz Avg Hold: 300/300	02:48:33 PM May 27, 2024 Frequency Radio Std: None Frequency Radio Device: BTS Frequency		
10 dB/div	Ref Offset Ref 30.0						
20.0						Center Freq 1.708500000 GHz	
0.00 -10.0							
-20.0 -30.0							
-40.0							
-60.0 Center 1.	709 GHz				Span 4 MHz	CF Step 400.000 kHz Auto Man	
Res BW 3	9 kHz		VBW 390 k	Hz	Sweep 3.2 ms		
Chanr	nel Power		Powe	r Spectral Dens	Dectral Density Freq Offse		
-2	8.14 dE	3m / 1 MHz		-88.14 dBm			
MSG				STATU	ę		
				of the			

LTE B66_15 M_Extended Band Edge_Low_QPSK_FullRB



	ctrum Analyzer - Swept SA		_				
Center F	RF 50 Ω AC req 1.780000000	GHz	SENSE:IN	#Avg T	ALIGN AUTO	02:54:00 PM May 27, 202 TRACE 1 2 3 4 5	Frequency
	Ref Offset 27 dB	PNO: Wide	Trig: Free Run #Atten: 20 dB		Mkr1	1.780 004 GHz -23.221 dBn	A
10 dB/div Log	Ref 27.00 dBm					-23.221 dBm	
17.0		\frown					Center Freq 1.780000000 GHz
-3.00							Start Freq 1.778000000 GHz
-13.0			1			-13.00 dBr	Stop Freq 1.782000000 GHz
-33.0						RM	CF Step 400.000 kHz <u>Auto</u> Man
-53.0							Freq Offset 0 Hz
-63.0 Center 1.	780000 GHz					Span 4.000 MH	
#Res BW	150 kHz	#VBW	470 kHz			1.000 s (1001 pts)
MSG					STATUS		

LTE B66_15 M_Band Edge_High_QPSK_1RB



	trum Analyzer - Swept SA		_			- d - X
Center F	RF 50 Ω AC req 1.78000000	0 GHz PNO: Wide ↔	Trig: Free Run	#Avg Type: RMS	02:53:23 PM May 27, 2024 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
I0 dB/div	Ref Offset 27 dB Ref 27.00 dBm	IFGain:Low	#Atten: 20 dB	Mkr1	1.780 020 GHz -30.135 dBm	Auto Tun
17.0						Center Fre 1.780000000 GH
3.00						Start Fre 1.778000000 GF
23.0					-13.00 dBm	Stop Fre 1.782000000 G⊦
3.0			and a start		RMS	CF Ste 400.000 kH Auto Ma
3.0						Freq Offs 0 H
enter 1.7	780000 GHz 150 kHz	#VBW	/ 470 kHz	#Sweep	Span 4.000 MHz 1.000 s (1001 pts)	
SG				STATU		

LTE B66_15 M_Band Edge_High_QPSK_FullRB



	trum Analyzer - Chani							- d X		
Center Fr	req 1.78150	AC 0000 GHz #IFGair		SENSE:INT Center Freq: 1.781500 Trig: Free Run #Atten: 20 dB	ALIGN AUTO 000 GHz Avg Hold: 300/300	02:53:32 PM May 27, 2024 Radio Std: None Radio Device: BTS				
10 dB/div	Ref Offset 2 Ref 30.00									
20.0								Center Freq 1.781500000 GHz		
-10.0										
-20.0										
-40.0	~~~~			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
-60.0								CF Step 400.000 kHz		
Center 1. Res BW 3	782 GHZ 89 kHz			VBW 390 kH:	Z		n 4 MHz 3.2 ms	Z <u>Auto</u> Man		
Chanr	nel Power			Power	Spectral Density Freq Offe					
-2	-28.69 dBm / 1 MHz			-8	-88.69 dBm /нz					
MSG					STATU	S				

LTE B66_15 M_Extended Band Edge_High_QPSK_FullRB



Milent Spectrum Analyzer			L		
Center Freq 1.71	50 Ω AC 0000000 GHz	SENSE:INT	#Avg Type: RMS	03:00:17 PM May 27, 2024 TRACE 1 2 3 4 5 6	Frequency
Ref Offse 10 dB/div Ref 27.	PNO: Wide → IFGain:Low	Trig: Free Run #Atten: 20 dB	Mkr1	1.710 000 GHz -32.454 dBm	Auto Tune
17.0					Center Freq 1.710000000 GHz
-3.00				RMS	Start Fred 1.708000000 GHz
-13.0				-13.00 dBm	Stop Fred 1.712000000 GH2
43.0					CF Step 400.000 kH <u>Auto</u> Mar
53.0					Freq Offse 0 H
-63.0 Center 1.710000 G #Res BW 200 kHz	Hz #VBV	V 620 kHz	#Sweep	Span 4.000 MHz 1.000 s (1001 pts)	
MSG			STATUS		

LTE B66_20 M_Band Edge_Low_QPSK_1RB



	ctrum Analyzer - Swept SA		_			
Center F	RF 50 Ω AC req 1.71000000	PNO: Wide ->	Trig: Free Run #Atten: 20 dB	ALIGN AUTO #Avg Type: RMS	02:59:42 PM May 27, 2024 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A A A A A A	Frequency
I0 dB/div	Ref Offset 27 dB Ref 27.00 dBm	IFGain:Low	#Atten: 20 dB	Mkr	1 1.709 992 GHz -31.548 dBm	Auto Tune
17.0						Center Fre 1.710000000 GH
3.00					RMS	Start Fre 1.708000000 G⊢
23.0					-13.00 dBm	Stop Fre 1.712000000 G⊦
3.0			1			CF Ste 400.000 kF Auto Ma
3.0						Freq Offs 0 I
	710000 GHz 200 kHz	#VB/	€20 kHz	#Sweet	Span 4.000 MHz 5 1.000 s (1001 pts)	
G				STAT		

LTE B66_20 M_Band Edge_Low_QPSK_FullRB



	rum Analyzer - Chan							
Center Fr	RF 50 Ω eq 1.70850	AC 0000 GHz #IFGain:Low	SENSE:INT Center Freq: 1.7085000 Trig: Free Run #Atten: 20 dB	ALIGN AUTO 000 GHz Avg Hold: 300/300	02:59:51 PM May 27, 2024 Radio Std: None Radio Device: BTS	Frequency		
10 dB/div	Ref Offset 2 Ref 30.00			,				
20.0						Center Freq 1.708500000 GHz		
0.00 -10.0								
-20.0								
-40.0								
Center 1.7 Res BW 3			VBW 390 kHz		Span 4 MHz	CF Step 400.000 kHz <u>Auto</u> Man		
	el Power			Spectral Dens	Sweep 3.2 ms Freq Offs			
-2	8.74 dE	Sm / 1 MHz	-8	8.74 dBm	IBm /Hz			
MSG				STATU	S			

LTE B66_20 M_Extended Band Edge_Low_QPSK_FullRB



	ctrum Analyzer - Swept SA					
Center F	RF 50 Ω AC req 1.78000000) GHz	SENSE:INT	ALIGN AUTO #Avg Type: RMS	03:05:19 PM May 27, 2024 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ++ IFGain:Low	., Trig: Free Run #Atten: 20 dB		TRACE 1 2 3 4 5 5 TYPE A WWWWW DET A A A A A A	
10 dB/div Log	Ref Offset 27 dB Ref 27.00 dBm			Mkr1	1.780 000 GHz -32.187 dBm	Auto Tune
17.0						Center Free 1.78000000 GH:
3.00						Start Free 1.778000000 GH
-13.0					-13.00 dBm	Stop Fred 1.782000000 GH:
33.0					RMS	CF Step 400.000 kH Auto Mar
53.0						Freq Offse 0 H
	780000 GHz	43101			Span 4.000 MHz	
#Res BW	200 KH2	#VBV	620 kHz	#Sweep	1.000 s (1001 pts)	
				o nito		

LTE B66_20 M_Band Edge_High_QPSK_1RB



	ectrum Analyzer - Swept SA					
	RF 50 Ω AC	00 GHz	SENSE:INT	ALIGN AUTO #Avg Type: RMS	03:04:40 PM May 27, 2024 TRACE 1 2 3 4 5 6	Frequency
10 dB/div	Ref Offset 27 dB Ref 27.00 dBm	PNO: Wide ↔ IFGain:Low	 Trig: Free Run #Atten: 20 dB 	Mkr1	1.780 012 GHz -32.027 dBm	Auto Tune
17.0						Center Freq 1.780000000 GHz
-3.00						Start Freq 1.778000000 GHz
-13.0					-13.00 dBm	Stop Freq 1.782000000 GHz
-33.0		Markine.	Manager and 1		RMS	CF Step 400.000 kHz Auto Mar
-53.0						Freq Offse 0 Ha
Center 1. #Res BW	780000 GHz 200 kHz	# <u>v</u> Bw	/ 620 kHz	#Sweep	Span 4.000 MHz 1.000 s (1001 pts)	
ISG				STATU		

LTE B66_20 M_Band Edge_High_QPSK_FullRB



	um Analyzer - Cł		_						
Center Fre	RL RF 50 Ω AC Center Freq 1.781500000 GHz #FGain:Low			SENSE:INT Center Freq: 1.781 Trig: Free Run #Atten: 20 dB	ALIGN / 500000 GHz Avg Hold: 300/3	Radio Std:	03:04:50 PM May 27, 2024 Frequency Radio Std: None Frequency Radio Device: BTS Frequency		
10 dB/div	Ref Offse Ref 30.	et 27 dB 00 dBm							
20.0								Center Freq 1.781500000 GHz	
0.00 -10.0									
-20.0									
-40.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~			~~~~~~		~~~~~		
-60.0 Center 1.7							an 4 MHz	CF Step 400.000 kHz Auto Man	
Res BW 3	9 kHz			VBW 390 I	KHz	Swee	p 3.2 ms		
Chann	Channel Power -29.87 dBm / 1 MHz			Powe	er Spectral D	ensity Freq Offset			
-2					-89.87 dBm /нz				
MSG						STATUS			

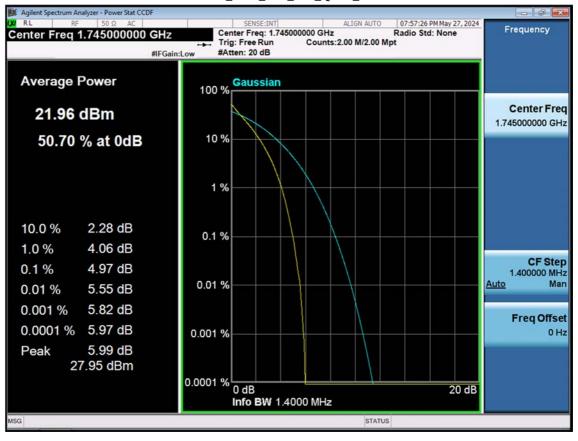
LTE B66_20 M_Extended Band Edge_High_QPSK_FullRB



Report No. HCT-RF-2407-FC015

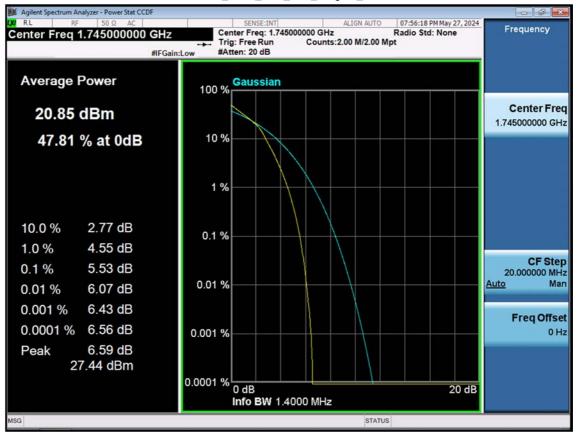
11. TEST PLOTS(Sub 5 Ant)





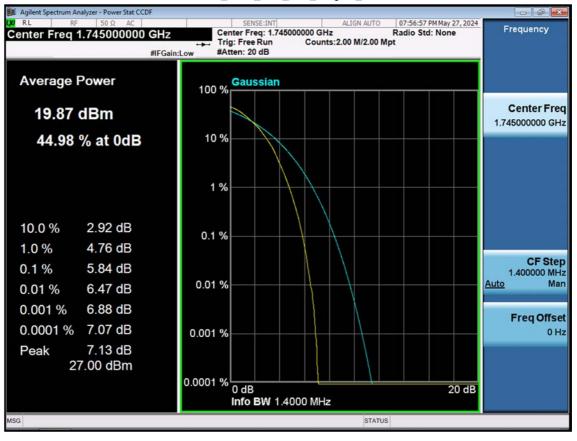
LTE B66_1.4M_PAR_Mid_QPSK_FullRB





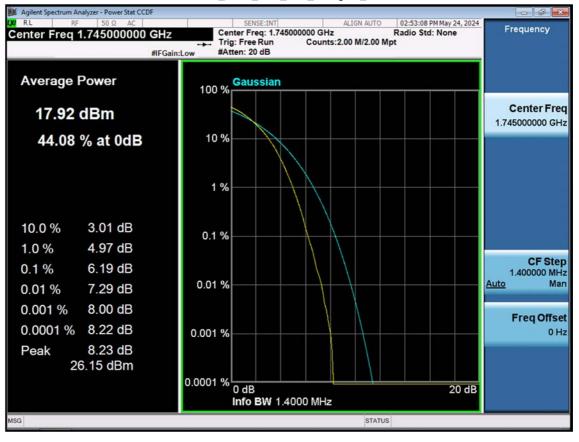
LTE B66_1.4M_PAR_Mid_16QAM_FullRB





LTE B66_1.4M_PAR_Mid_64QAM_FullRB

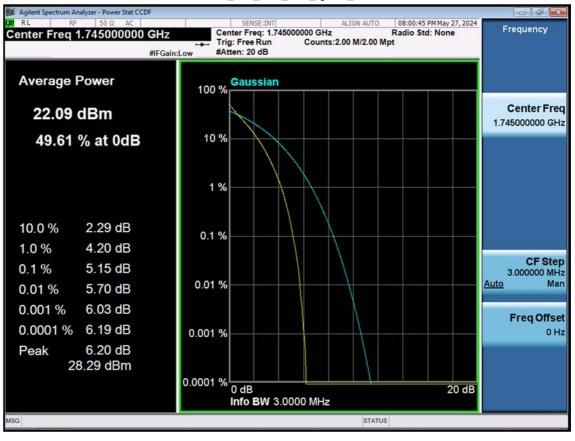




LTE B66_1.4M_PAR_Mid_256QAM_FullRB

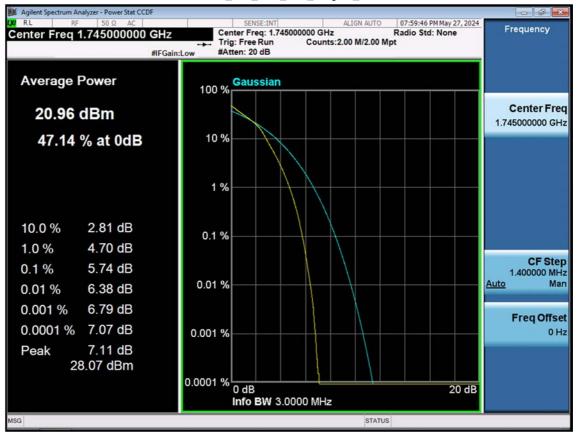






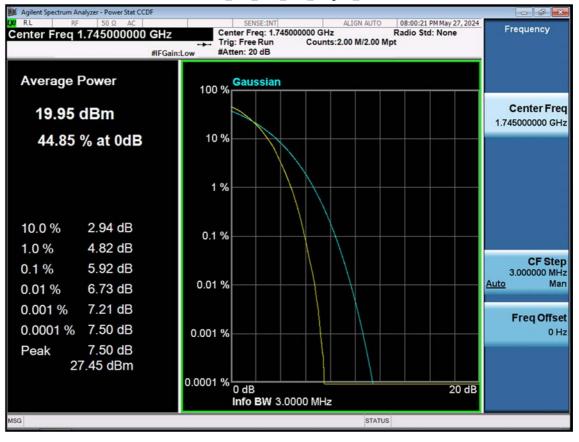
LTE B66_3 M_PAR_Mid_QPSK_FullRB





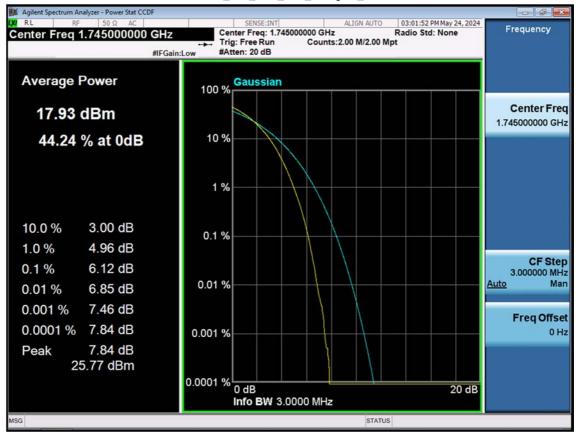
LTE B66_3 M_PAR_Mid_16QAM_FullRB





LTE B66_3 M_PAR_Mid_64QAM_FullRB

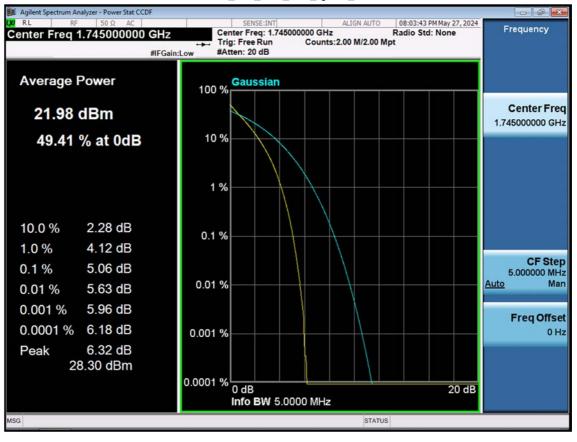




LTE B66_3 M_PAR_Mid_256QAM_FullRB







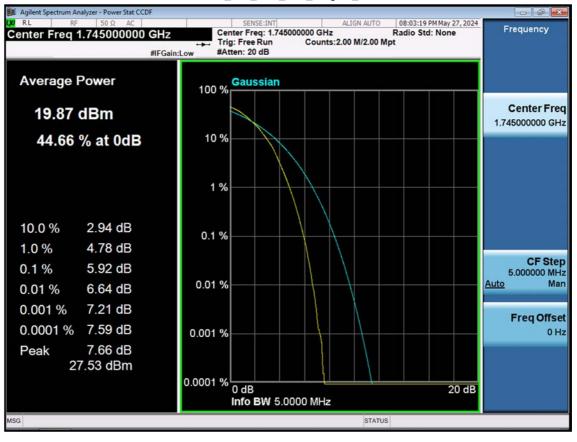
LTE B66_5 M_PAR_Mid_QPSK_FullRB





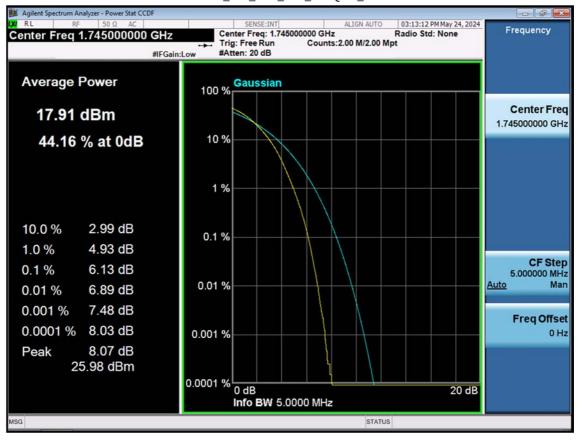
LTE B66_5 M_PAR_Mid_16QAM_FullRB





LTE B66_5 M_PAR_Mid_64QAM_FullRB

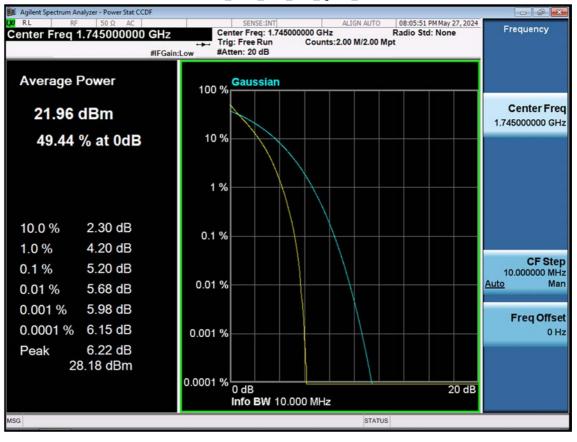




LTE B66_5 M_PAR_Mid_256QAM_FullRB

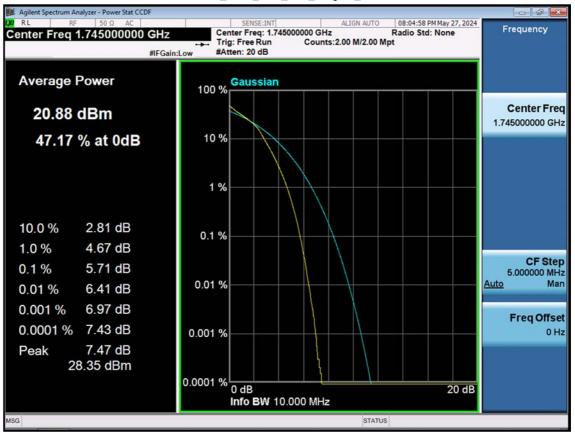
F-TP22-03 (Rev. 06)





LTE B66_10 M_PAR_Mid_QPSK_FullRB





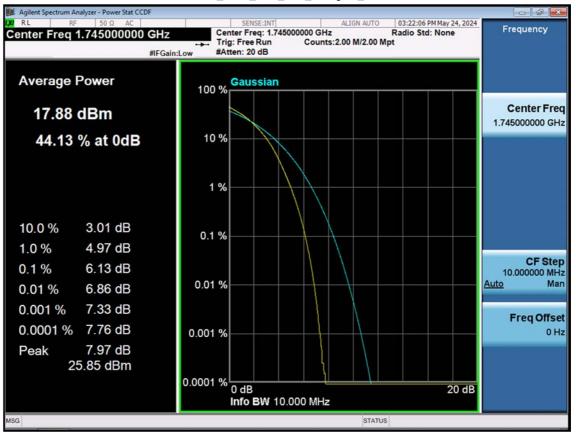
LTE B66_10 M_PAR_Mid_16QAM_FullRB





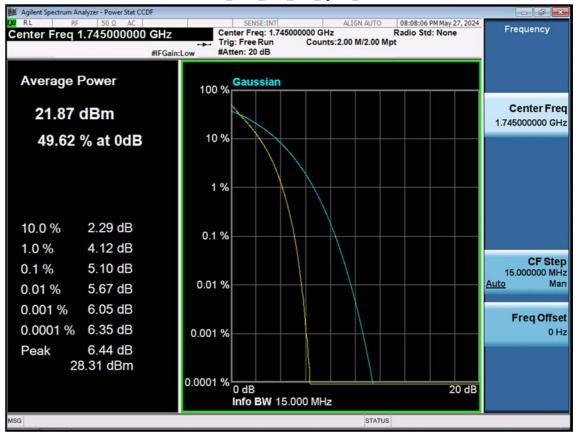
LTE B66_10 M_PAR_Mid_64QAM_FullRB





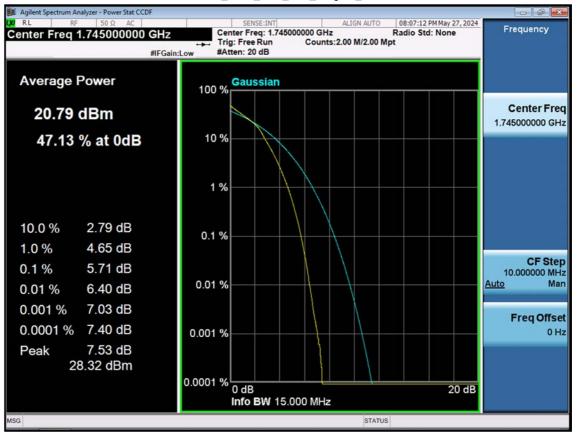
LTE B66_10 M_PAR_Mid_256QAM_FullRB





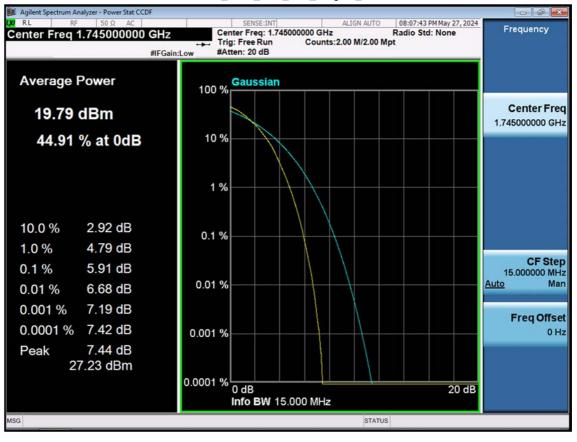
LTE B66_15 M_PAR_Mid_QPSK_FullRB





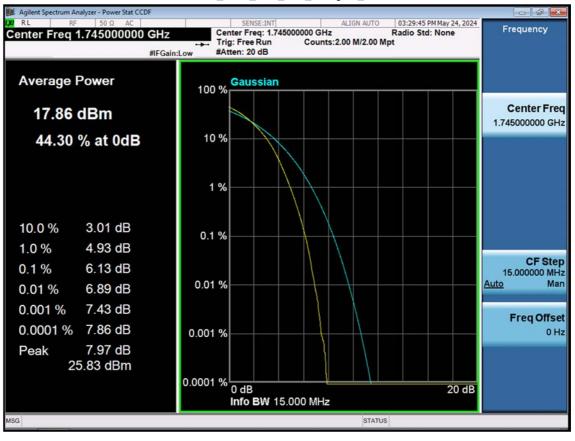
LTE B66_15 M_PAR_Mid_16QAM_FullRB





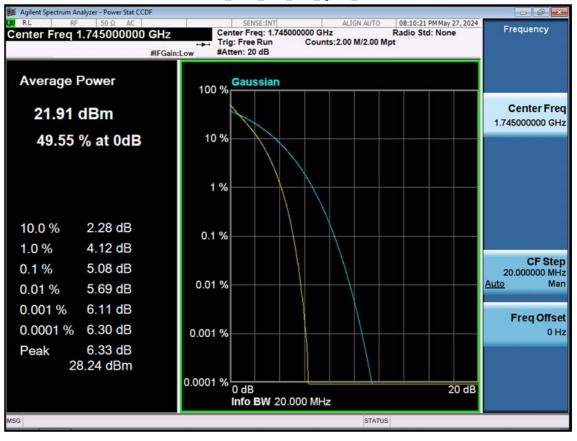
LTE B66_15 M_PAR_Mid_64QAM_FullRB





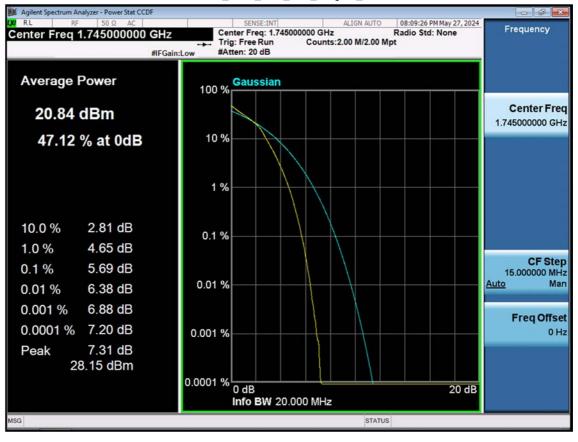
LTE B66_15 M_PAR_Mid_256QAM_FullRB





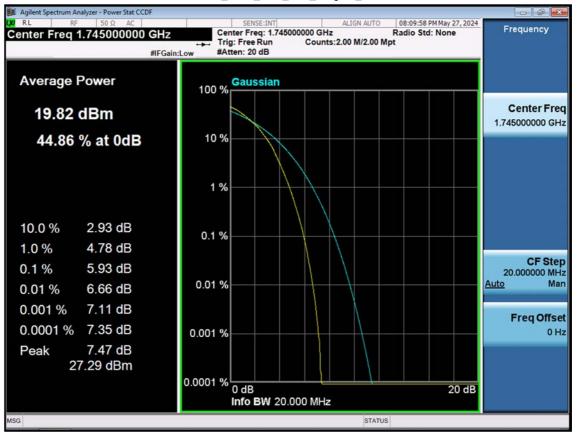
LTE B66_20 M_PAR_Mid_QPSK_FullRB





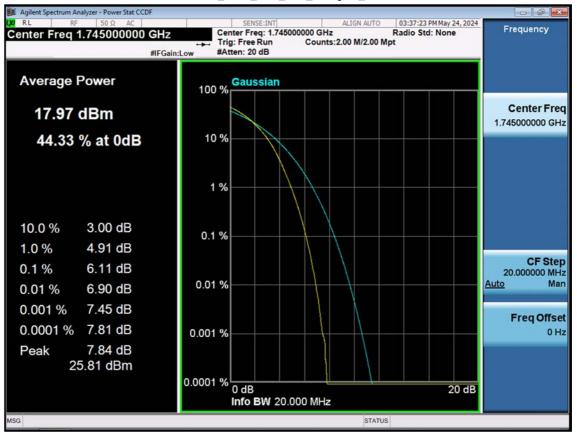
LTE B66_20 M_PAR_Mid_16QAM_FullRB





LTE B66_20 M_PAR_Mid_64QAM_FullRB





LTE B66_20 M_PAR_Mid_256QAM_FullRB





Agilent Spectrum Analyzer - Occupied BV	V	L annual start	_			
RL RF 50Ω AC Center Freq 1.74500000 PASS	0 GHz #IFGain:Low	SENSE:INT Center Freq: 1.7450 Trig: Free Run #Atten: 20 dB	ALIGN 00000 GHz Avg Hold: 500/5	Radio Std:		Frequency
Ref Offset 27 dE 10 dB/div Ref 40.00 dB						
30.0 20.0						Center Fred 1.745000000 GHz
10.0	from	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mund			
0.00 -10.0 -20.0 non-mana har mark			\	mon	and the	
-40.0						05.01
Center 1.745 GHz Res BW 27 kHz		#VBW 110	kHz		n 2.8 MHz 3.667 ms	CF Step 280.000 kH Auto Mar
Occupied Bandwidth 1.0998 MHz		Total F - Z	ower	30.6 dBm		Freq Offset 0 Hz
Transmit Freq Error 5.94		Hz OBW F	OBW Power 99.00 %			
x dB Bandwidth	1.345 N	IHz x dB	x dB -26.00 dB			
ISG				STATUS		

LTE B66_1.4M_OBW_Mid_QPSK_FullRB



Agilent Spectrum Analyzer - Occupied BW	1			-	T		
RL RF 50 Ω AC Center Freq 1.745000000 PASS PASS PASS) GHz #IFGain:Low	Center Free Trig: Free F #Atten: 20 d	q: 1.745000000 Gi Run Avg	ALIGN AUTO Hz Hold: 500/500	Radio Std: Radio Dev		Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dBr							
20.0							Center Freq 1.745000000 GHz
10.0	Janan	hermon	mann	m			
-10.0 -20.0				- Way	human	mmm	
-30.0							
Center 1.745 GHz		#\/B\/	2 440 kHz			1 2.8 MHz	CF Step 280.000 kHz <u>Auto</u> Man
Res BW 27 kHz	ile.		V 110 kHz Γotal Power	20	Sweep 4 dBm	3.667 ms	Freq Offset
Occupied Bandwid 1.	0958 MI			25.	+ ubili		0 Hz
Transmit Freq Error	1.980	(Hz C	DBW Power	99	9.00 %		
x dB Bandwidth	1.317 N	IHz x	dB	-26.	.00 dB		
MSG				STATU	S		

LTE B66_1.4M_OBW_Mid_16QAM_FullRB





Agilent Spectrum Analyzer - Occupied BW	(E						
047 RL RF 50 Ω AC Center Freq 1.745000000 PASS) GHz #IFGain:Low			GHz g Hold: 500/500	Radio Std		Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dBr							
30.0							Center Freq 1.745000000 GHz
10.0	mm	h	when when	m			
-10.0	prod			he h	000 000		
-30.0						mon	
-40.0							CF Step 280.000 kHz
Center 1.745 GHz Res BW 27 kHz		#VB	W 110 kHz			n 2.8 MHz 3.667 ms	
Occupied Bandwidt	th 1016 M		Total Powe	er 28.	4 dBm		Freq Offset 0 Hz
Transmit Freq Error	3.002		OBW Powe	er 9	9.00 %		
x dB Bandwidth	1.320 M	/Hz	x dB	-26	.00 dB		
MSG				STAT	ıs		

LTE B66_1.4M_OBW_Mid_64QAM_FullRB





M Agilent Spectrum Analyzer - Occup RL RF 50 Ω Center Freq 1.745000 PASS	AC	Center Trig: F	SENSE:INT Freq: 1.74500 ree Run : 20 dB		ALIGN AUTO	02:52:44 P Radio Std		Frequency
Ref Offset 2 10 dB/div Ref 40.00					1			
20.0								Center Free 1.745000000 GH
10.0 D.00	m	man	mmmm	manner)			
10.0 20.0 30.0 ml.	and the second se				words and a second	· ·····	Wall Ame	
10.0								CF Ste
Center 1.745 GHz Res BW 27 kHz		#	VBW 110 k	(Hz			n 2.8 MHz 3.667 ms	280.000 kH
Occupied Bandy	vidth 1.0964 M	Hz	Total P	ower	26.6	dBm		Freq Offse 0 H
Transmit Freq Erro	r 563	3 Hz	OBW P	ower	99	0.00 %		
x dB Bandwidth	1.329 M	MHz	x dB		-26.	00 dB		
SG					STATU	s		

LTE B66_1.4M_OBW_Mid_256QAM_FullRB





Agilent Spectrum Analyzer - Occupied BW			SENSE:INT		ALIGN AUTO	08:00:37	PM May 27, 2024	
Center Freq 1.74500000 PASS) GHz #IFGain:Low	Center Trig: F	Freq: 1.7450 ree Run : 20 dB		-	Radio Sto Radio De	i: None	Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dBr Log								
20.0								Center Fred 1.745000000 GH:
10.0	hann	- marine		www	h h			
10.0					- Sol	himm	hommon	
40.0								
50.0								CF Ster 600.000 kH
Center 1.745 GHz #Res BW 62 kHz		#	VBW 240	kHz		Sweep	oan 6 MHz 1.533 ms	<u>Auto</u> Mar
Occupied Bandwidt	th 7148 Mi	Hz	Total F	ower	30.	.7 dBm		Freq Offse 0 Ha
Transmit Freq Error	5.277		OBW F	ower	9	9.00 %		
x dB Bandwidth	3.144 M	IHz	x dB		-26	5.00 dB		
ISG					STAT	US		

LTE B66_3 M_OBW_Mid_QPSK_FullRB





Agilent Spectrum Analyzer - Occupied BV	1				
RL RF 50 Ω AC Center Freq 1.745000000 PASS PASS) GHz #IFGain:Low	SENSE:INT Center Freq: 1.745000000 G Trig: Free Run Avg #Atten: 20 dB	Hz R Hold: 500/500	07:59:37 PM May 27, 2024 adio Std: None adio Device: BTS	Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dBr Log					
30.0 20.0					Center Fred 1.745000000 GHz
10.0	providence	mmmmmm	m		
-10.0 V	/		- Vo		
-20.0				Munne	
-40.0					
Center 1.745 GHz				Span 6 MHz	CF Step 600.000 kHz
#Res BW 62 kHz		#VBW 240 kHz	s	weep 1.533 ms	<u>Auto</u> Mar
Occupied Bandwid	th 7108 MH	Total Power	29.5 d	Bm	Freq Offset 0 Hz
Transmit Freq Error	11.129 kH	z OBW Power	99.0	0 %	
x dB Bandwidth	3.135 MH	lz x dB	-26.00	dB	
MSG			STATUS		

LTE B66_3 M_OBW_Mid_16QAM_FullRB





Agilent Spectrum Analyzer - Occupied B K RL RF 50 Ω AC	w		THOR THE			00.00.00		
Center Freq 1.74500000 PASS	00 GHz #IFGain:Low	Center			ALIGN AUTO	Radio Sto		Frequency
Ref Offset 27 d 10 dB/div Ref 40.00 dE								
20.0								Center Freq 1.745000000 GHz
10.0	mm	n	www	Yanna Mara	~~			
10.0	£				- And	A		
30.0						Ancher	- mar	
50.0								CF Step
Center 1.745 GHz #Res BW 62 kHz		#\	/BW 240 k	(Hz		Sı Sweep	oan 6 MHz 1.533 ms	600.000 kHz <u>Auto</u> Man
Occupied Bandwic	ith 7085 MI	Ηz	Total P	ower	28.	5 dBm		Freq Offset 0 Hz
Transmit Freq Error	6.732		OBW P	ower	9	9.00 %		
x dB Bandwidth	3.098 N	lHz	x dB		-26	.00 dB		
MSG					STATU	JS		

LTE B66_3 M_OBW_Mid_64QAM_FullRB





Agilent Spectrum Analyzer - Occupied		_						
RL RF 50 Ω AU Center Freq 1.7450000 PASS		Center Trig: F	SENSE:INT Freq: 1.74500 Free Run 1: 20 dB		ALIGN AUTO	Radio Sto	PM May 24, 2024 d: None vice: BTS	Frequency
Ref Offset 27 of 10 dB/div Ref 40.00 d								
20.0								Center Free 1.745000000 GH
0.00	p mana and	mana	magnam	- Marine	h			
10.0 20.0 30.0	×				- And	· ·······	wwww	
0.0 0.0								CF Ste 600.000 k⊦
Center 1.745 GHz Res BW 62 kHz		#	VBW 240 I	kHz		Sweep	pan 6 MHz 1.533 ms	<u>Auto</u> Ma
Occupied Bandwi	dth 2.7172 M	Hz	Total P	ower	26.	5 dBm		Freq Offse 0 H
Transmit Freq Error	7.381	kHz	OBW P	ower	9	9.00 %		
x dB Bandwidth	3.126 M	/Hz	x dB		-26	.00 dB		
ISG					STATU	JS		

LTE B66_3 M_OBW_Mid_256QAM_FullRB





Agilent Spectrum Analyzer - Occupied BV	1							- -
M RL RF 50 Ω AC Center Freq 1.74500000 PASS PASS	O GHz #IFGain:Low	Center Fre	Run		ALIGN AUTO	Radio Sto		Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dB Log								
30.0 20.0								Center Freq 1.745000000 GHz
0.00	mmm			hundhound				
-10.0 -20.0 mana anno mar					Jue ye	Mun	mm	
-30.0								
-50.0 Center 1.745 GHz						Sn	an 10 MHz	CF Step 1.000000 MHz Auto Man
#Res BW 100 kHz		#VB\	N 390 k	Hz			eep 1 ms	Auto Man
Occupied Bandwid	th .5305 MI		Total P	ower	30.	6 dBm		Freq Offset 0 Hz
Transmit Freq Error	10.610		OBW P	ower	9	9.00 %		
x dB Bandwidth	5.305 N	1Hz >	x dB		-26	.00 dB		
MSG					STATU	JS		

LTE B66_5 M_OBW_Mid_QPSK_FullRB





Agilent Spectrum Analyzer - Occupied BV	v			
RL RF 50 Ω AC Center Freq 1.74500000 PASS Ref Offset 27 dE 10 dB/diy Ref 40.00 dB	#IFGain:Low #At	sense:INT hter Freq: 1.745000000 GHz g: Free Run Avg Hold ten: 20 dB	ALIGN AUTO 08:02:39 PM M Radio Std: N d: 500/500 Radio Device	one Frequency
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Center Freq 1.745000000 GHz
10.0 0.00 -10.0 -20.0 -30.0 -40.0				aron hin
-50.0 Center 1.745 GHz #Res BW 100 kHz		#VBW 390 kHz		10 MHz Auto Man 0 1 ms
Occupied Bandwid	th .5323 MHz	Total Power	29.6 dBm	Freq Offset 0 Hz
Transmit Freq Error x dB Bandwidth	15.675 kHz 5.439 MHz	OBW Power x dB	99.00 % -26.00 dB	
MSG			STATUS	

# LTE B66_5 M_OBW_Mid_16QAM_FullRB





Agilent Spectrum Analyzer - Occupied BV	1	SENSE:INT			00.00.00	M May 27, 2024	
Center Freq 1.74500000	0 GHz #IFGain:Low	Center Freq: 1.	745000000 GHz	ALIGN AUTO	Radio Std Radio Dev	None	Frequency
Ref Offset 27 dE 10 dB/div Ref 40.00 dB							
30.0 20.0							Center Fred 1.745000000 GH:
10.0	M	mm	mm m	M			
10.0	1			A A	1 A Amore		
30.0						Munner	
40.0							CF Step 1.000000 MH;
Center 1.745 GHz #Res BW 100 kHz		#VBW 3	90 kHz			n 10 MHz ep 1 ms	<u>Auto</u> Mar
Occupied Bandwid	th .5427 MI		al Power	28.	4 dBm		Freq Offse 0 Ha
Transmit Freq Error	18.559 k	Hz OB	V Power	9	9.00 %		
x dB Bandwidth	5.327 N	IHz x di	3	-26	.00 dB		
ISG				STATU	JS		

# LTE B66_5 M_OBW_Mid_64QAM_FullRB





Agilent Spectrum Analyzer - Occupied B	v							
M         RL         RF         50 Ω         AC           Center Freq 1.74500000         PASS         PASS	0 GHz #IFGain:Low	Center F			ALIGN AUTO	Radio Std		Frequency
Ref Offset 27 dE 10 dB/div Ref 40.00 dB								
30.0								Center Freq 1.745000000 GHz
0.00	Jours	m	mmm	mm	why he			
-10.0 -20.0 -30.0					- Ny	munn	m	
-40.0								CF Step 1.000000 MHz
Center 1.745 GHz #Res BW 100 kHz		#V	BW 390 k	KHz			n 10 MHz ep 1 ms	
Occupied Bandwid 4	th .5148 MI	Hz	Total P	ower	26.	5 dBm		Freq Offset 0 Hz
Transmit Freq Error x dB Bandwidth	17.521   5.306 N		OBW P x dB	ower		9.00 % .00 dB		
MSG					STATU	IS		

# LTE B66_5 M_OBW_Mid_256QAM_FullRB





Agilent Spectrum Analyzer - Occupied BV	V		_				
RL         RF         50 Ω         AC           Center Freq 1.74500000         PASS         Ref Offset 27 dE	↔ #IFGain:Low	SENSE:INT Center Freq: 1.74 Trig: Free Run #Atten: 20 dB		ALIGN AUTO	08:05:44 P Radio Std: Radio Dev		Frequency
10 dB/div Ref 40.00 dB 20 0 20 0	m						Center Freq 1.745000000 GHz
10.0 0.00 -10.0 -20.0 -30.0 -40.0						man	
Center 1.745 GHz #Res BW 200 kHz		#VBW 82	0 kHz			n 20 MHz ep 1 ms	CF Step 2.000000 MHz <u>Auto</u> Man
Occupied Bandwid	th .0313 MI		Power	30.3	3 dBm		Freq Offset 0 Hz
Transmit Freq Error x dB Bandwidth	30.671   10.59 N		Power		9.00 % 00 dB		
MSG				STATU	S		

### LTE B66_10 M_OBW_Mid_QPSK_FullRB





RL RF 50Ω AC Center Freq 1.74500000 PASS	00 GHz #IFGain:Low	. Trig: I	SENSE:INT r Freq: 1.7450 Free Run n: 20 dB	PM May 27, 2024 I: None vice: BTS	Frequency			
Ref Offset 27 d 10 dB/div Ref 40.00 dE					_			
20.0								Center Fre 1.745000000 GH
10.0	nonnon	manna	eneral March and Shallow	mulum	we L			
0.00 0.0 0.0 00000000000000000000000000	pr				Jun North	monton	mag A	
0.0								CF Ste 2.000000 MH
enter  1.745 GHz Res BW  200 kHz		#	VBW 820	kHz			an 20 MHz eep 1 ms	<u>Auto</u> Ma
Occupied Bandwig	ith .0597 M	Hz	Total F	Power	29.3 dBm			Freq Offse 0 H
Transmit Freq Error	33.295	kHz	OBW F	ower	9	9.00 %		
x dB Bandwidth	10.48 M	<b>/Hz</b>	x dB		-26	6.00 dB		
SG					STAT	US		

# LTE B66_10 M_OBW_Mid_16QAM_FullRB





Agilent Spectrum Analyzer - Occupiec RL RF 50 Ω A Center Freq 1.7450000	c		SENSE:INT		ALIGN AUTO	08:05:14 P Radio Std	M May 27, 2024 None	Frequency
PASS	↔ #IFGain:Low		Free Run h: 20 dB	Avg Hold	d: 500/500	Radio Dev	ice: BTS	
Ref Offset 27 10 dB/div Ref 40.00 d						_		
30.0 20.0								Center Fre 1.745000000 GH
10.0	man	mm	mulin	were worked	-m h			
10.0	Mart				les de la companya de			
20.0 prosperation of the p					<b>،</b> ک	hadhannan	www.ww	
40.0								
0.0								CF Ste 2.000000 MH
enter 1.745 GHz Res B₩ 200 kHz		#	VBW 820	kHz			n 20 MHz ep 1 ms	<u>Auto</u> Ma
Occupied Bandwi	dth		Total I	Power	28.	4 dBm		Freq Offse
	9.0124 M	Hz						UH
Transmit Freq Error	25.789	kHz	OBW F	Power	9	9.00 %		
x dB Bandwidth	10.45 M	<b>IHz</b>	x dB		-26	.00 dB		
SG					STAT	10		

# LTE B66_10 M_OBW_Mid_64QAM_FullRB





Agilent Spectrum Analyzer - Occupied BV     RL RF 50 Q AC	/		SENSE:INT						
Center Freq 1.745000000 PASS	O GHz #IFGain:Low	Center Freq: 1.745000000 GHz				Radio Std		Frequency	
Ref Offset 27 dB 10 dB/div Ref 40.00 dB Log									
30.0 20.0								Center Fred 1.745000000 GH2	
0.00	Junanna	Annalm	n na	Anna	m				
10.0 -20.0 -30.0	¥				- North	howeverse	ologunger Jyre		
40.0								CF Step 2.000000 MH	
Center 1.745 GHz #Res BW 200 kHz		#	VBW 820 H	Hz			an 20 MHz eep 1 ms	<u>Auto</u> Mar	
Occupied Bandwid	th .0344 M	Hz	Total P	ower	26.	4 dBm		Freq Offset 0 Hz	
Transmit Freq Error	35.489	kHz	OBW P	ower	9	9.00 %			
x dB Bandwidth	10.31 M	ЛНz	x dB		-26	.00 dB			
MSG					STAT	US			

#### LTE B66_10 M_OBW_Mid_256QAM_FullRB





Agilent Spectrum Analyzer - Occupied  Agilent Spectrum Analyzer - Oc		SENSE:I	NT	ALIGN AUTO	08:07:59 PM	May 27, 2024	
Center Freq 1.7450000 PASS		Center Freq:	None e: BTS	Frequency			
Ref Offset 27 d 10 dB/div Ref 40.00 dB							
20.0							Center Fre 1.745000000 GH
10.0	an warman and a second	man and a second and a second second	minunganapang	m			
0.00 10.0 20.0 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016 - 2016	en de la companya de			Vhore and the second	maundry	Millioninia	
30.0							
50.0							CF Ste 3.000000 MH
Center 1.745 GHz Res BW 300 kHz		#VBW	1.2 MHz			30 MHz ep 1 ms	Auto Ma
Occupied Bandwi	dth  3.494 M		otal Power	30.3 dBm			<b>Freq Offse</b> 0 H
Transmit Freq Error	46.944	KHz OE	BW Power	99	.00 %		
x dB Bandwidth	15.54 N	1Hz x d	B	-26.	00 dB		
ISG				STATUS	3		

## LTE B66_15 M_OBW_Mid_QPSK_FullRB





Agilent Spectrum Analyzer - Occupied B	V	1.0	ENSE:INT		ALIGN AUTO				
RL         RF         50 Ω         AC           Center Freq 1.74500000         PASS         PASS	0 GHz #IFGain:Low	SENSE:INT          ALIGN AUTO         08:07:05 PM May 27, 2024           Center Freq: 1.745000000 GHz         Radio Std: None         -           Trig: Free Run         Avg Hold: 500/500         #Atten: 20 dB         Radio Device: BTS						Frequency	
Ref Offset 27 dE 10 dB/div Ref 40.00 dB			,		_				
20.0								Center Free 1.745000000 GH:	
10.0	ronwork	anneann an the second sec	topping the state	malasm					
-10.0									
-20.0 When were more than with					"Non	an marine	Martinary		
-30.0									
-50.0								CF Step 3.000000 MH	
Center  1.745 GHz #Res BW  300 kHz		#V	'BW 1.2 MI	łz			n 30 MHz ep 1 ms	<u>Auto</u> Mar	
Occupied Bandwid			Total Po	ower	29.4	dBm		Freq Offset	
1	3.529 MI	ΗZ							
Transmit Freq Error	46.815	kHz	OBW Po	wer	99	0.00 %			
x dB Bandwidth	15.34 N	MHz	x dB		-26.	00 dB			
MSG					STATU	S			

## LTE B66_15 M_OBW_Mid_16QAM_FullRB



Agilent Spectrum Analyzer - Occupied BV	r	_	_					
X         RL         RF         50 Ω         AC           Center Freq 1.745000000         PASS         PASS	) GHz #IFGain:Low	Center Freq: 1.745000000 GHz R Trig: Free Run Avg Hold: 500/500					PM May 27, 2024 d: None vice: BTS	Frequency
Ref Offset 27 dB 10 dB/div Ref 40.00 dBr						_		
30.0								Center Freq 1.745000000 GHz
10.0	makener	ant marked	uhunn	~D ^a n,WHAnn,	way			
-10.0 -20.0	<i>k</i>				War	hendremonthy	- Margon Arabi	
-30.0								
-50.0								CF Step 3.000000 MHz
Center 1.745 GHz #Res BW 300 kHz		#V	/BW 1.2 N	1Hz			an 30 MHz eep 1 ms	<u>Auto</u> Man
Occupied Bandwid	th 3. <b>497 M</b> I	Hz	Total P	ower	28.	3 dBm		<b>Freq Offset</b> 0 Hz
Transmit Freq Error	48.320	kHz	OBW P	ower	9	9.00 %		
x dB Bandwidth	15.25 N	MHz	x dB		-26	.00 dB		
MSG					STATU	JS		

# LTE B66_15 M_OBW_Mid_64QAM_FullRB





J Agilent Spectrum Analyzer - Occupied BV	1	-		_				
RL         RF         50 Ω         AC           Center Freq 1.74500000         PASS         Ref Offset 27 dB	#IFGain:Low	Center			ALIGN AUTO	Radio St	PM May 24, 2024 d: None evice: BTS	Frequency
10 dB/div Ref 40.00 dBr					_			
20.0								Center Freq 1.745000000 GHz
0.00	monor	popone and	www.washer	atter and reading and the second	Any			
-10.0	₩ 				- K			
-20.0 -30.0 -40.0						nantom	manner	
-50.0								CF Step 3.000000 MHz
Center 1.745 GHz #Res BW 300 kHz		#V	/BW 1.2 M	ЛНz			an 30 MHz /eep 1 ms	<u>Auto</u> Man
Occupied Bandwid	th 3.513 MI	Hz	Total F	Power	26.	3 dBm		<b>Freq Offset</b> 0 Hz
Transmit Freq Error	17.868		OBW P	ower	9	9.00 %		
x dB Bandwidth	15.14 N	lHz	x dB		-26	.00 dB		
MSG					STATU	JS		

### LTE B66_15 M_OBW_Mid_256QAM_FullRB





J Agilent Spectrum Analyzer - Occupied I		SEN	ISE:INT		ALIGN AUTO	08-10-14 0	M May 27, 2024		
Center Freq 1.74500000		Center Freq: 1.745000000 GHz Radio Std: None						Frequency	
Ref Offset 27 d 10 dB/div Ref 40.00 dE					_				
20.0								Center Free 1.745000000 GH	
10.0	manner	monton	syntrolown	hornor and	en l				
0.00 10.0					thomas	mahna	Martin I.		
30.0									
40.0 50.0								CF Step	
Center 1.745 GHz #Res BW 390 kHz		#VB	W 1.6 N	1Hz			n 40 MHz eep 1 ms	4.000000 MH <u>Auto</u> Mar	
Occupied Bandwid	_{dth}  8.017 MI	Ηz	Total P	ower	30.	5 dBm		Freq Offse 0 H	
Transmit Freq Error	43.725		OBW P	ower	9	9.00 %			
x dB Bandwidth	20.31 N	lHz	x dB		-26	.00 dB			
ISG					STATU	JS			

# LTE B66_20 M_OBW_Mid_QPSK_FullRB





Agilent Spectrum Analyzer - Occupied B  K RL RF 50 Ω AC	w		SENSE:INT		ALIGN AUTO	02:00:201	PM May 27, 2024		
Center Freq 1.74500000 PASS	00 GHz #IFGain:Low	Center Freq: 1.745000000 GHz Radio S Trig: Free Run Avg Hold: 500/500						Frequency	
Ref Offset 27 d 10 dB/div Ref 40.00 dE									
20.0								Center Fred 1.745000000 GH:	
10.0	jukannya antony	huun on the	ind the short	A-RSW+4444-14	an				
0.00 -10.0 -20.0 Manualiter on the start of	/				A Como	mmunhan	Mahmun .		
-30.0									
-40.0								CF Step 4.000000 MH	
Center 1.745 GHz #Res BW 390 kHz		#	VBW 1.6 N	ЛНz			an 40 MHz eep 1 ms	<u>Auto</u> Mar	
Occupied Bandwic	ith 7.976 MI	Hz	Total F	ower	29.	5 dBm		Freq Offset 0 Hz	
Transmit Freq Error	50.071	kHz	OBW F	ower	9	9.00 %			
x dB Bandwidth	20.03 N	IHz	x dB		-26	.00 dB			
MSG					STAT	US			

# LTE B66_20 M_OBW_Mid_16QAM_FullRB





Agilent Spectrum Analyzer - Occupied           RL         RF         50 Ω         AC			SENSE:INT		ALIGN AUTO		M May 27, 2024	
enter Freq 1.7450000 ASS	00 GHz #IFGain:Low	. Trig: F	Center Freq: 1.745000000 GHz Trig: Free Run Avg Hold: 500/500 #Atten: 20 dB			Radio Std Radio Dev		Frequency
Ref Offset 27 d 0 dB/div Ref 40.00 dB					_			
0.0								Center Fre 1.745000000 GH
0.0	manshan	manyun	- Werner	where where the second second	m			
0.00	1				- Ky			
0.0 when men want want	er fal				Mrn	And the second	-and and a state of the state o	
3.0								
.0								CF Ste
enter 1.745 GHz Res BW 390 kHz	<b>I</b>	#	VBW 1.6 N	IHz			n 40 MHz ep 1 ms	4.000000 MH <u>Auto</u> Ma
Occupied Bandwi	dth		Total P	ower	28.	4 dBm		Freq Offs
1	7.990 M	Hz						01
Transmit Freq Error	44.285	kHz	OBW P	ower	9	9.00 %		
x dB Bandwidth	20.04	lHz	x dB		-26	.00 dB		

# LTE B66_20 M_OBW_Mid_64QAM_FullRB





Agilent Spectrum Analyzer - Occupied E	w		SENSE:INT		ALIGN AUTO				
RL         RF         50 Ω         AC           Center Freq         1.74500000         PASS         PASS	00 GHz #IFGain:Low	Center Trig: F	Center Freq: 1.745000000 GHz Trig: Free Run Avg Hold: 500/500				PM May 24, 2024 d: None wice: BTS	Frequency	
Ref Offset 27 d 10 dB/div Ref 40.00 dE					_				
20.0								Center Fred 1.745000000 GHz	
0.00	- por monoral and		manhana	handrown	-				
-10.0 -20.0 -30.0	/				- Andrew	Muninniann	manna		
-40.0								CF Step	
Center 1.745 GHz #Res BW 390 kHz		#	VBW 1.6 N	1Hz			an 40 MHz reep 1 ms	4.000000 MHz	
Occupied Bandwic	ith 7.954 M	Hz	Total P	ower	26.	6 dBm		Freq Offset 0 Hz	
Transmit Freq Error	49.578	kHz	OBW P	ower	9	9.00 %			
x dB Bandwidth	19.84 M	ЛНz	x dB		-26	.00 dB			
MSG					STATU	JS			

### LTE B66_20 M_OBW_Mid_256QAM_FullRB



RL	ectrum Analy RF	Sector Constant of the	AC		SE	NSE:INT		ALIGN AUTO	02:50:53 P	M May 24, 2024	
enter F	req 5.0	15000		PNO: Fast		e Run	#Avg Ty		TRAC	E 1 2 3 4 5 6 PE A WWWWWW T A A A A A A A	Frequency
0 dB/div	Ref 1	0.00 dB	₿m					M	(r1 3.702 -67.22	2 4 GHz 29 dBm	Auto Tun
0.00 10.0 20.0		2 									Center Fre 5.015000000 GH
0.0 0.0 0.0											Start Fre 30.000000 MH
50.0 70.0 50.0					1						Stop Fre 10.00000000 GF
tart 30 Res BW	1.0 MH	z	X	#VB	W 3.0 MHz			Sweep 17	7.33 ms (2	.000 GHz 0001 pts)	CF Ste 997.000000 Mi <u>Auto</u> Ma
1 N 2 N 3 4 5 6	1 f 1 f		3.70 1.71	2 4 GHz 0 9 GHz	-67.229 d -4.999 d	Bm Bm					Freq Offs 0 F
7 8 9 10											

# LTE B66_1.4M_Conducted Spurious(30 M-10 G)_Low_QPSK_1RB



RL	RF	er - Swept SA 50 Ω A	c		SEN	SE:INT		ALIGN AUTO	02:53:59 P	M May 24, 2024	
enter Freq 5.015000					Trig: Free			#Avg Type: RMS		CE 1 2 3 4 5 6 PE A WWWWW ET A A A A A A A	Frequency
0 dB/div Ref 10.00 dBm -67.341 dBm										Auto Tu	
0.0		<mark>2</mark>									Center Fre 5.015000000 GF
30.0 40.0 50.0											Start Fre 30.000000 MH
50.0 70.0 50.0				1				New Property of the second of		RMS	Stop Fre 10.00000000 GF
tart 30 M Res BW 1	1.0 MH			#VBW	/ 3.0 MHz	510		Sweep 17	.33 ms (2	.000 GHz 0001 pts)	CF Ste 997.000000 MH Auto Ma
KR MODE TRO 1 N 1 2 N 1 3 4 5 5 6	f		× 3.698 0 1.745 3	GHz GHz	-67.341 dB -5.382 dB	m	PU		FUNCTI		Freq Offs 0 H
7											
9 0 1					m j					-	

# LTE B66_1.4M_Conducted Spurious(30 M-10 G)_Mid_QPSK_1RB



RL	RF	50 Ω A			SENSE:INT		ALIGN AUTO		May 24, 2024	-
enter F	nter Freq 5.015000000		PNO: Fast IFGain:Lov		#Av rig: Free Run Atten: 20 dB		pe: RMS	TRACE 1 2 3 4 5 5 TYPE A WWWW DET A A A A A A		and the second sec
0 dB/div Ref 10.00 dBm -67.253 dBm										Auto Tu
og 0.00 0.0 0.0		²								Center Fre 5.015000000 GH
0.0 0.0 0.0										Start Fre 30.000000 Mł
i0.0 10.0 10.0									RMS	<b>Stop Fre</b> 10.00000000 GF
tart 30 I Res BW	1.0 MH	z		BW 3.0 MH			Sweep 17	Stop 10. .33 ms (20		CF Ste 997.000000 Mi <u>Auto</u> Mi
1 N 2 2 N 3 4 5	1 f		X 3.705 4 GHz 1.780 2 GHz	-67 <u>.253</u> -5.193	dBm			FUNCTIO	E	Freq Offs 0 F
6 7 8 9 0										
G				m				7		
							STATUS	5		

# LTE B66_1.4M_Conducted Spurious(30 M-10 G)_High_QPSK_1RB