



Agilent Spectrum Analyzer - Occupied RL RF 50 Ω A Center Freq 2.5350000 PASS	c 🔤	Center Fre			IGN AUTO 00/500	Radio Sto	PMJun 04, 2024 d: None vice: BTS	Frequency
Ref Offset 27. 10 dB/div Ref 40.00 d								
20.0								Center Freq 2.535000000 GHz
10.0	1000 march and a	1/200-marching	ኯኊቔጘኯዹኁቔኯኯ፧ዸጚኯ	Veren Black				
-10.0	/				No.			
20.0 Alexander and Marine	A <sup>r</sup>				w	al hand a state	vannany	
40.0 50.0								CF Step
Center 2.535 GHz #Res BW 390 kHz		#VB	W 1.6 MH				an 40 MHz eep 1 ms	4.000000 MHz
Occupied Bandwi	<sub>dth</sub> 17.925 MI		Total Po	ower	29.2	2 dBm		Freq Offsel 0 Hz
Transmit Freq Error	63.241	Hz	OBW Po	wer	99	9.00 %		
x dB Bandwidth	19.86 N	IHz	x dB		-26.	00 dB		
ISG					STATU	S		

### LTE B7\_20 M\_OBW\_Mid\_16QAM\_FullRB





Agilent Spectrum Analyzer - Occupied BV K RL RF 50 Ω AC	v		SENSE:INT			00:10:16	PM Jun 04, 2024	
Center Freq 2.535000000	0 GHz #IFGain:Low	. Trig: F	Freq: 2.5350 Free Run 1: 10 dB	00000 GHz Avg Hold	ALIGN AUTO	Radio Sto Radio De	i: None	Frequency
Ref Offset 27.4 d 10 dB/div Ref 40.00 dB Log					_			
20.0								Center Free 2.535000000 GH
10.0	polementer	nnan mailinne	w. l. marchen	NOWINGNIGH-191-191	hay			
10.0	£							
20.0 However with monority in					\$~~	Brow-Mulseya	monther	
50.0								CF Step
Center 2.535 GHz #Res BW 390 kHz		#	VBW 1.6 M	۷Hz			an 40 MHz eep 1 ms	4.000000 MH <u>Auto</u> Mar
Occupied Bandwid	<sup>th</sup> 7.875 <b>M</b> I	Hz	Total F	ower	28.	1 dBm		<b>Freq Offse</b> 0 H
Transmit Freq Error	67.305		OBW F	Power	9	9.00 %		
x dB Bandwidth	19.76 N	lHz	x dB		-26	.00 dB		
ISG					STAT	JS		

### LTE B7\_20 M\_OBW\_Mid\_64QAM\_FullRB





Agilent Spectrum Analyzer - Occupied B           RL         RF         50 Ω         AC           Center Freq 2.53500000	0 GHz	Center Fr	NSE:INT req: 2.53500	00000 GHz	ALIGN AUTO	09:32:03 Radio Ste	8 PM Jun 04, 2024 d: None	Frequency
PASS	↔ #IFGain:Low	. Trig: Fre #Atten: 1		Avg Hold:	500/500	Radio De	vice: BTS	
Ref Offset 27.4 10 dB/div Ref 40.00 dB								
30.0 20.0								Center Free 2.535000000 GH:
10.0	maria	in Ingelinger and Mark	mannih	and the second at	~			
10.0 20.0	<i>/</i>				<b>AAA</b>			
30.0 williammunaeren minaren minaren 1990						MD-Corrowand	watcher	
50.0								CF Step 4.000000 MH
Center 2.535 GHz #Res BW 390 kHz		#VE	3W 1.6 N	1Hz		Sp Sw	an 40 MHz veep 1 ms	<u>Auto</u> Mar
Occupied Bandwid	<sup>th</sup> 7.949 MI	Ηz	Total P	ower	26.1	1 dBm		Freq Offse 0 Ha
Transmit Freq Error	68.659	Hz	OBW P	ower	99	9.00 %		
x dB Bandwidth	19.79 N	IHz	x dB		-26.	00 dB		
ISG					STATU	s		

### LTE B7\_20 M\_OBW\_Mid\_256QAM\_FullRB



	ctrum Analyzer - Sw	ept SA		_					- # ×
Center F	req 5.0150	00000 GH	IZ NO: Fast ↔	SENSE:	#Av	ALIGN AUTO	08:26:31 PM JU TRACE	a A A A A A	Frequency
10 dB/div	Ref 0.00 d	IF	Gain:Low	#Atten: 10 dE		Mk	r1 3.702 4 -77.425	GHz	Auto Tune
-10.0 -20.0 -30.0		¥2							Center Freq 5.015000000 GHz
-40.0 -50.0 -60.0									Start Freq 30.000000 MHz
-70.0 -80.0 -90.0			<sup>1</sup>					RMS	<b>Stop Freq</b> 10.000000000 GHz
Start 30 N #Res BW	1.0 MHz	X	#VBW	/ 3.0 MHz	FUNCTION	Sweep 17	Stop 10.00 .33 ms (200	01 pts)	CF Step 997.000000 MHz Auto Man
1 N 1		3.702 2.501	4 GHz 1 GHz	-77.425 dBm -5.294 dBm				HE CONTRACTOR	Freq Offset 0 Hz
8 9 10 11				ш				, ,	
ISG						STATUS			

# LTE B7\_5 M\_Conducted Spurious(30 M-10 G)\_Low\_QPSK\_1RB



Agilent Spectrum Analyzer - Swept SA					
RL RF 50 Ω AC Center Freq 5.01500000	0 GHz PNO: Fast ↔	SENSE:INT	ALIGN AUTO #Avg Type: RMS	08:29:19 PM Jun 04, 2024 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
10 dB/div Ref 0.00 dBm	IFGain:Low	#Atten: 10 dB	Mk	r1 3.707 9 GHz -76.903 dBm	Auto Tune
-10.0 -20.0 -30.0	♥2				Center Fred 5.015000000 GHz
-40.0					Start Freq 30.000000 MHz
-70.0 -80.0 -90.0				RMS	Stop Fred 10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz		V 3.0 MHz	Sweep 17	Stop 10.000 GHz .33 ms (20001 pts)	CF Step 997.000000 MH: <u>Auto</u> Mar
1 N 1 F	3.707 9 GHz 2.533 5 GHz	-76.903 dBm -5.790 dBm			Freq Offsel 0 Hz
ISG			STATUS	1	

# LTE B7\_5 M\_Conducted Spurious(30 M-10 G)\_Mid\_QPSK\_1RB



Agilent Spectrum Analyzer - :	12244000.000				
RL RF 5 Center Freq 5.015	PNO: Fast		ALIGN AUTO #Avg Type: RMS	08:30:51 PM Jun 04, 2024 TRACE 2 3 4 5 6 TYPE A WWWW DET A A A A A A	Frequency
0 dB/div Ref 0.00		#Atten: 10 dB	M	r1 3.700 5 GHz -77.382 dBm	Auto Tun
0 g 10.0 20.0 30.0	V2				Center Fre 5.015000000 GH
40.0					Start Fre 30.000000 M⊦
70.0 80.0 90.0		1		RMS	Stop Fre 10.000000000 GH
tart 30 MHz Res BW 1.0 MHz		BW 3.0 MHz	Sweep 17	Stop 10.000 GHz 7.33 ms (20001 pts)	CF Ste 997.000000 MH Auto Ma
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 4 5 6	X 3.700 5 GHz 2.570 4 GHz	-77.382 dBm -6.341 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offse 0 ⊢
7 8 9 10 11		m			
SG			STATU		

# LTE B7\_5 M\_Conducted Spurious(30 M-10 G)\_High\_QPSK\_1RB



1000

RL		0Ω AC			SENSE:INT		ALIGN AUTO		M Jun 04, 2024	
enter F	req 5.015	000000	PNO: Fast IFGain:Low		ree Run 10 dB	#Avg	Гуре: RMS	TYP	E 1 2 3 4 5 6 E A WWWW T A A A A A A A	Frequency
) dB/div	Ref 0.00	dBm					Mk	r1 3.705 -77.55	9 GHz 53 dBm	Auto Tui
o.0 0.0 0.0			2							Center Fro 5.015000000 Gi
0.0 0.0 0.0										Start Fr 30.000000 M
0.0 0.0 0.0	and the second			1					RMS	<b>Stop Fr</b> 10.000000000 G
art 30 F les BW	1.0 MHz	X	#V	BW 3.0 MH		NCTION	Sweep 17	.33 ms (2	000 GHz 0001 pts)	CF St 997.000000 M <u>Auto</u> M
1 N 2 2 N 2 3 4 5 1	1 f	3	.705 9 GHz .501 1 GHz	-77.553 -6.159	dBm					Freq Offs 0
6 7 8 9 0										
				ш				-		
G							STATUS			

# LTE B7\_10 M\_Conducted Spurious(30 M-10 G)\_Low\_QPSK\_1RB



RL RL	ctrum Analyzer - S	Q AC		SENSE:I	NT	ALIGN AUTO	08:58:24 PM Jun	04 2024	
	req 5.015		GHz PNO: Fast - IFGain:Low		#Avg	Type: RMS		3456	Frequency
0 dB/div	Ref 0.00					Mk	r1 3.705 9 -76.889	GHz dBm	Auto Tun
og 10.0 20.0			2						Center Fre 5.015000000 GH
0.0									Start Fro 30.000000 Mi
70.0 80.0 80.0								RMS	<b>Stop Fre</b> 10.000000000 GF
	1.0 MHz		#VB	W 3.0 MHz			Stop 10.000 .33 ms (2000	1 pts)	CF Ste 997.000000 Mi uto M
2 N 7 3 4 5 5	1 f	× 3.1 2.1	705 9 GHz 531 0 GHz	Y -76.889 dBm -6.226 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VA		Freq Offs 0 F
6 7 8 9 10				111					
G				m		STATUS	1		

# LTE B7\_10 M\_Conducted Spurious(30 M-10 G)\_Mid\_QPSK\_1RB



RL	RF 50 Ω A			SENSE:INT		ALIGN AUTO		1 Jun 04, 2024	-
enter Fre	q 5.0150000	000 GHz PNO: Fas IFGain:Lo		ree Run : 10 dB	#Avg Typ	e: RMS	TYPE	<b>1 2 3 4 5 6</b> A <b>MARKA</b> A A A A A A A	Frequency
0 dB/div	Ref 0.00 dBm	1				Mk	r1 3.685 -77.45	0 GHz 3 dBm	Auto Tun
og 0.0 0.0 0.0		¥2							Center Fre 5.015000000 GH
0.0 0.0 0.0									Start Fre 30.000000 Mł
0.0			×1				~~,~,~	RMS	<b>Stop Fre</b> 10.000000000 GF
tart 30 MH Res BW 1	.0 MHz	#\ X	VBW 3.0 MI			weep 17	Stop 10. .33 ms (20	001 pts)	<b>CF Ste</b> 997.000000 MI <u>Auto</u> Mi
N         1           2         N         1           3         -         -           4         -         -           5         -         -           6         -         -	f	<u>3.685 0 GHz</u> 2.569 9 GHz	-77.453 -5.762	dBm					Freq Offs 01
7 8 9 0 1								+	
0.0									

# LTE B7\_10 M\_Conducted Spurious(30 M-10 G)\_High\_QPSK\_1RB



RL	RF 50 Ω	AC		SENSE	INT		ALIGN AUTO	09:02:06 P	M Jun 04, 2024	
enter Fre	eq 5.01500		HZ PNO: Fast ↔ FGain:Low		tun #	Avg Typ		TRAC		Frequency
) dB/div	Ref 0.00 dB						Mk	r1 3.68	6 0 GHz 85 dBm	Auto Tur
og 0.0 0.0 0.0		¥2								Center Fre 5.015000000 GH
).0 ).0 ).0										Start Fr 30.000000 M
).0 ).0 ).0									RMS	<b>Stop Fr</b> 10.000000000 G
art 30 MH es BW 1	.0 MHz	X	#VB\	№ 3.0 MHz	FUNCTIO		weep 17	.33 ms (2	.000 GHz 0001 pts)	CF St 997.000000 M Auto M
N 1 2 N 1 3	f	3.686	6 0 GHz 1 6 GHz	-77.385 dBm -5.618 dBm	n			FONCTION		Freq Offs 0
7 8 9 0 1				m						

# LTE B7\_15 M\_Conducted Spurious(30 M-10 G)\_Low\_QPSK\_1RB



X         RL         RF           Center Freq 5         Ref           -10.0	5.015000000	PNO: Fast ↔ IFGain:Low	SENSE:INT Trig: Free Run #Atten: 10 dB	#Avg Tj	ALIGN AUTO ype: RMS	09:04:49 PM TRACE TYPE DET <b>:r1 3.702</b> -77.300	123456 A A A A A A O GHz	Frequency Auto Tun Center Free 5.01500000 GH
•9					Mk	r1 3.702 -77.300	0 GHz 6 dBm	Center Free 5.015000000 GH
10.0 20.0 30.0 40.0 50.0 50.0		2						5.015000000 GH
50.0								Start Fre
/0.0								30.000000 MH
30.0				****			RMS	Stop Fre 10.00000000 GF
tart 30 MHz Res BW 1.0 N		#VBV	V 3.0 MHz		Sweep 17	Stop 10.0 .33 ms (200	001 pts)	CF Ste 997.000000 MH Auto Ma
KR         MODE         TRC         SCL           1         N         1         f           2         N         1         f           3	3.7	702 0 GHz 529 0 GHz	-77.306 dBm -4.694 dBm	FUNCTION F	UNCTION WIDTH	FUNCTION	VALUE •	Freq Offs 0 H
6 7 8 9 0 1								
G			m		STATUS		•	

# LTE B7\_15 M\_Conducted Spurious(30 M-10 G)\_Mid\_QPSK\_1RB



RL RF	50 Ω AC	SENSE:INT	ALIGN AUTO	09:06:21 PM Jun 04, 2024	
enter Freq 5.0	15000000 GHz PNO: Fast IFGain:Low	++- Trig: Free Run #Atten: 10 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A MANANA DET A A A A A A	Frequency
0 dB/div Ref 0.	00 dBm		Mk	r1 3.677 0 GHz -77.157 dBm	Auto Tur
					Center Fre 5.015000000 GH
0.0					Start Fre 30.000000 Mi
70.0 30.0 30.0				RMS	Stop Fre 10.00000000 GF
tart 30 MHz Res BW 1.0 MHz KR MODE TRC  SCL	z #V	BW 3.0 MHz	Sweep 17	Stop 10.000 GHz .33 ms (20001 pts)	CF Ste 997.000000 Mł <u>Auto</u> Ma
1 N 1 f 2 N 1 f 3 4 4 5 6	3.677 0 GHz 2.569 9 GHz	-77.157 dBm -6.322 dBm		E	Freq Offs 01
7 8 8 9 0 9					

# LTE B7\_15 M\_Conducted Spurious(30 M-10 G)\_High\_QPSK\_1RB



RL		50 Ω AC		SENSE:IN		ALIGN AUTO		Jun 04, 2024	-
enter F	req 5.01	5000000	PNO: Fast IFGain:Low	<ul> <li>Trig: Free Run #Atten: 10 dB</li> </ul>		Type: RMS	TYPE	<b>1</b> 2 3 4 5 6 A WWWWWWW A A A A A A A	Frequency
) dB/div	Ref 0.0					Mk	r1 3.161 -77.35	1 GHz 3 dBm	Auto Tur
og 0.0 0.0		¥	2						Center Fre 5.015000000 GH
0.0 0.0 0.0									Start Fro 30.000000 Mi
0.0 0.0 0.0						<u></u>		RMS	<b>Stop Fre</b> 10.000000000 GF
art 30 F Res BW	1.0 MHz	X	#VB	W 3.0 MHz	FUNCTION	Sweep 17	Stop 10.0 .33 ms (20	001 pts)	CF Ste 997.000000 Mi Auto Mi
1 N 2 2 N 2 3 4 5 5 6	1 f	3	161 1 GHz 501 6 GHz	-77.353 dBm -5.466 dBm	, one now		- one hor	E	Freq Offs 01
7 8 9 0								-	
1				m				- F.	

# LTE B7\_20 M\_Conducted Spurious(30 M-10 G)\_Low\_QPSK\_1RB



Agilent Spectrum Analyze					
Center Freq 5.0	PNO: Fast	SENSE:INT	ALIGN AUTO #Avg Type: RMS	09:11:17 PM Jun 04, 2024 TRACE 2 3 4 5 6 TYPE A WWWWW DET A A A A A A	Frequency
0 dB/div Ref 0.	IFGain:Low	#Atten: 10 dB	M	r1 3.720 9 GHz -77.523 dBm	Auto Tun
0 g 10.0 20.0 30.0	V2				Center Fre 5.015000000 GH
40.0 50.0 50.0					Start Fre 30.000000 M⊦
70.0 80.0 90.0				RMS	Stop Fre 10.000000000 GH
tart 30 MHz Res BW 1.0 MH;	z #V	BW 3.0 MHz	Sweep 17	Stop 10.000 GHz 2.33 ms (20001 pts)	CF Ste 997.000000 MH Auto Ma
1         N         1         f           2         N         1         f           3	3.720 9 GHz 2.526 5 GHz	-77.523 dBm -5.925 dBm	PONCTION YIDTH	FONCTION VALUE	Freq Offse 0 ⊦
7 8 9 10 11					
SG .			STATU	2	

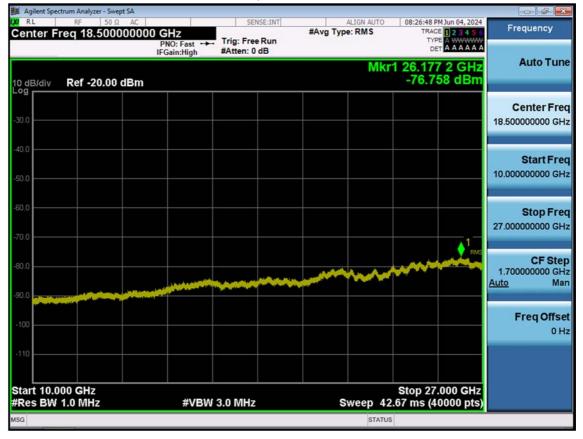
# LTE B7\_20 M\_Conducted Spurious(30 M-10 G)\_Mid\_QPSK\_1RB



RL RF	50 Ω AC	SENSE:INT		09:12:48 PM Jun 04, 2024	Frequency
enter Freq 5.01	15000000 GHz PNO: Fas IFGain:Lo	t →→ Trig: Free Run #Atten: 10 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 5 TYPE A WWWWW DET A A A A A A	
dB/div Ref 0.0	00 dBm		M	kr1 3.683 0 GHz -77.420 dBm	Auto Tur
	♦2				Center Fre 5.015000000 GF
0.0 0.0 0.0					Start Fro 30.000000 Mi
0.0		×1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FMS	Stop Fre 10.00000000 GF
art 30 MHz Res BW 1.0 MHz R MODE TRC SCL	: # ×	VBW 3.0 MHz		Stop 10.000 GHz 7.33 ms (20001 pts)	CF Ste 997.000000 Mi <u>Auto</u> M
1 N 1 f 2 N 1 f 3 4 5	3.683 0 GHz 2.569 4 GHz	-77.420 dBm -7.370 dBm			Freq Offs 0 I
6 7 8 9 0 1					
		m		•	

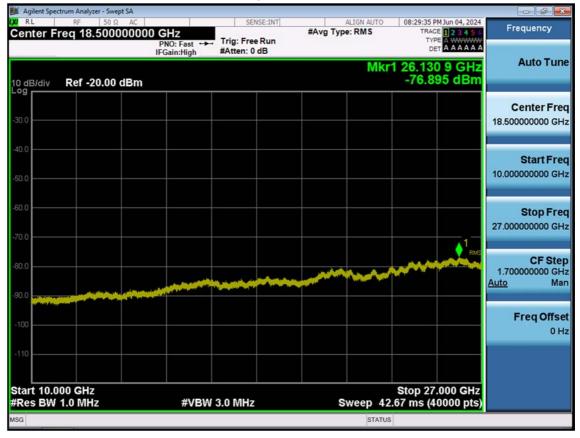
# LTE B7\_20 M\_Conducted Spurious(30 M-10 G)\_High\_QPSK\_1RB





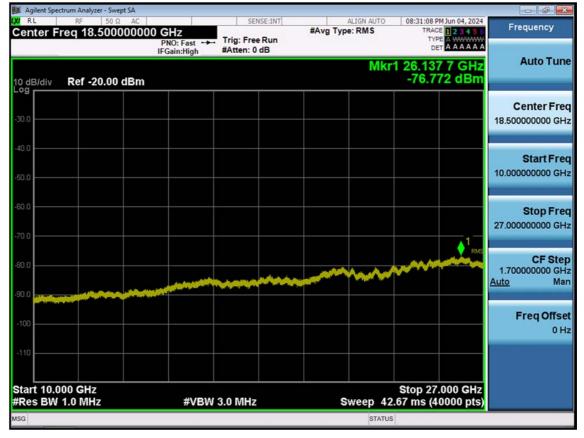
#### LTE B7\_5 M\_Conducted Spurious(10 G-26.5 G)\_Low\_QPSK\_1RB





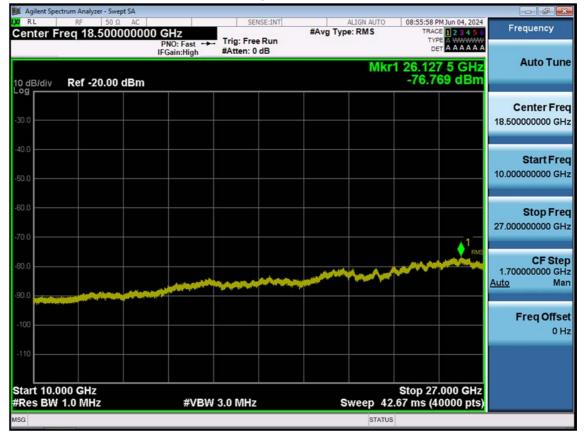
#### LTE B7\_5 M\_Conducted Spurious(10 G-26.5 G)\_Mid\_QPSK\_1RB





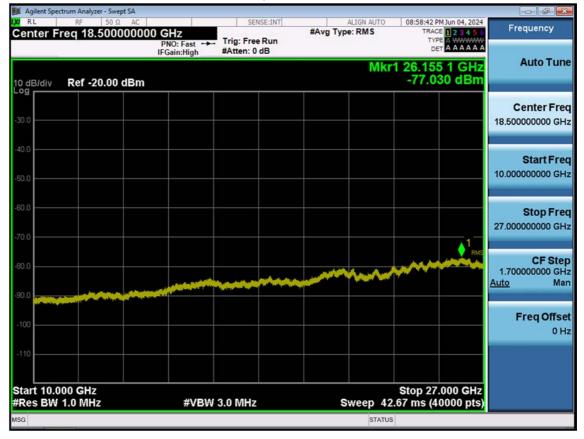
### LTE B7\_5 M\_Conducted Spurious(10 G-26.5 G)\_High\_QPSK\_1RB





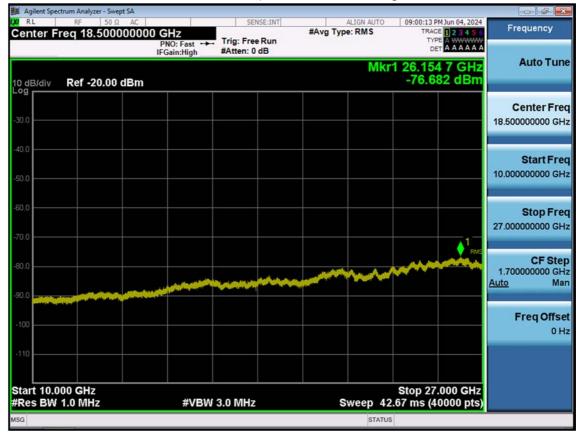
#### LTE B7\_10 M\_Conducted Spurious(10 G-26.5 G)\_Low\_QPSK\_1RB





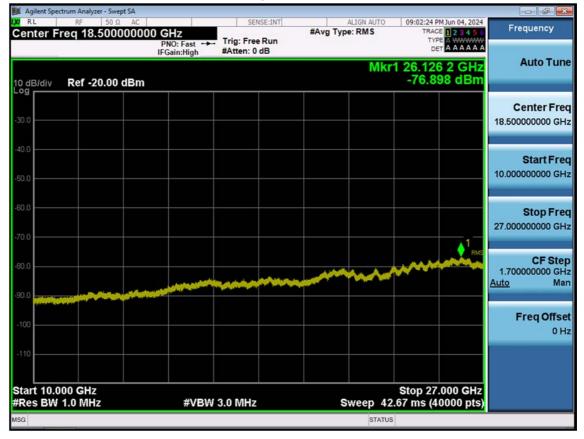
#### LTE B7\_10 M\_Conducted Spurious(10 G-26.5 G)\_Mid\_QPSK\_1RB





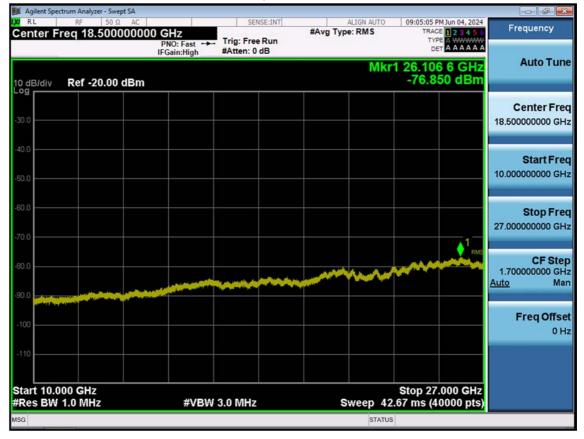
### LTE B7\_10 M\_Conducted Spurious(10 G-26.5 G)\_High\_QPSK\_1RB





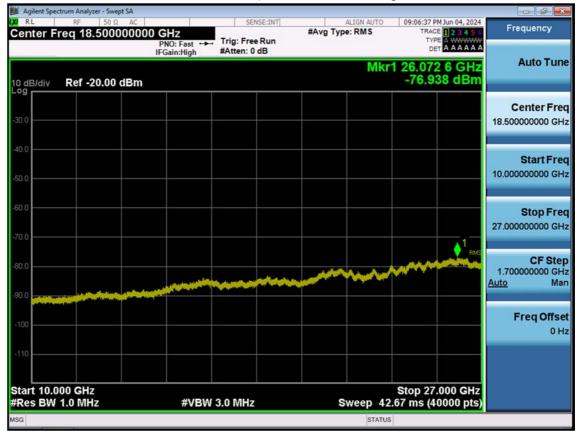
#### LTE B7\_15 M\_Conducted Spurious(10 G-26.5 G)\_Low\_QPSK\_1RB





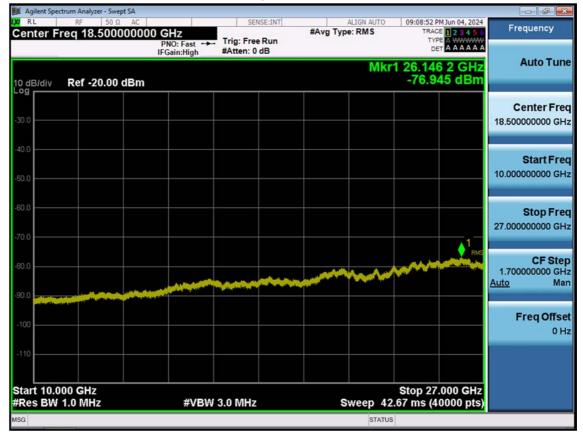
#### LTE B7\_15 M\_Conducted Spurious(10 G-26.5 G)\_Mid\_QPSK\_1RB





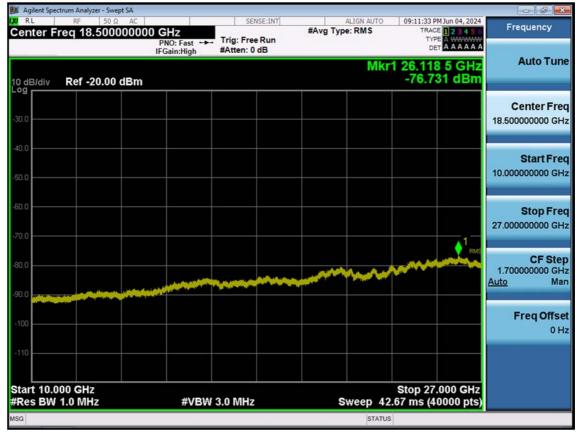
### LTE B7\_15 M\_Conducted Spurious(10 G-26.5 G)\_High\_QPSK\_1RB





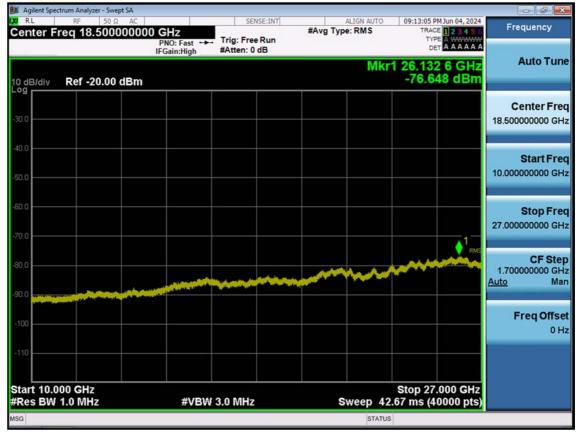
#### LTE B7\_20 M\_Conducted Spurious(10 G-26.5 G)\_Low\_QPSK\_1RB





#### LTE B7\_20 M\_Conducted Spurious(10 G-26.5 G)\_Mid\_QPSK\_1RB





### LTE B7\_20 M\_Conducted Spurious(10 G-26.5 G)\_High\_QPSK\_1RB





	RF 50 Ω AC		Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	502500000 GH	Z 2 100.00% of 2	Radio 20	6:52 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
9 <b>9</b> ).0 ).0								Relative Linit	Center Fre 2.502500000 GH
00 1.0 1.0								Absolute Limit	
).0 ).0			1/	hits				Spectrum	
0.0					Nh-				CF Ste
enter 2.50	3 GHz						ę	Span 30 MHz	3.000000 MH <u>Auto</u> Ma
otal Power	<b>Ref</b> 22.58	dBm / 5 M	Hz	Lower	4	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	
2.500 MHz	3.500 MHz		-18.94	(-8.94)	-2.500 M	-50.31	(-40.31)	3.500 M 🗠	
3.500 MHz	7.500 MHz		-30.65	(-20.65)	-3.500 M	-34.58	(-24.58)	6.460 M ≡	
	8.500 MHz		-41.76	(-28.76)	-8.340 M	-41.33	(-28.33)	7.505 M	
7.500 MHz		1.000 MHz	-41.79	(-16.79)	-8.500 M	-39.09	(-14.09)	9.995 M	
7.500 MHz 8.500 MHz 8.000 MHz	15.00 MHz 12.50 MHz	1.000 MHz		()			()		

# LTE B7\_5 M\_Channel Edge\_Low\_QPSK\_1RB



enter Freq ASS	RF 50 Ω A0 2.5025000		+++ Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	502500000 GH	ALIGN AU Iz 100.00% of	Radio	5:56 PM Jun 04, 2024 Std: None Device: BTS	Frequency
) dB/div	Ref Offset 27.4 Ref 30.0 dB								
og								ASSESSMENT OF THE	
0.0									Center Fre 2.502500000 GH
				an another stands	-m				
.00									
0.0									
1.0									
.0			7/						
						~			
						~			
.0								Spectruit	
0.0									
2 501									CF Ste 3.000000 Mi
enter 2.503	GHZ							Span 30 MHz	Auto Mi
4-1 8									
otal Power	Ref 21.73	3 dBm / 5 l	MHz						Freq Offs
				Lower		Peak ->	Upper		01
			dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	, , , , , , , , , , , , , , , , , , ,
Start Freq	Stop Freq	Integ BW	dDill	acim(ab)					
Start Freq 2.500 MHz	Stop Freq 3.500 MHz	Integ BW 100.0 kHz	-22.39	(-12.39)	-2.500 M		()	···· ^	
2.500 MHz 3.500 MHz	3.500 MHz 6.500 MHz	100.0 kHz 1.000 MHz	-22.39 -24.14	(-12.39) (-14.14)	-3.500 M		() ()	Ê	
2.500 MHz 3.500 MHz 6.500 MHz	3.500 MHz 6.500 MHz 12.00 MHz	100.0 kHz 1.000 MHz 1.000 MHz	-22.39 -24.14 -30.48	(-12.39) (-14.14) (-17.48)	-3.500 M -6.500 M		() ()	<b>^</b>	
2.500 MHz 3.500 MHz	3.500 MHz 6.500 MHz	100.0 kHz 1.000 MHz	-22.39 -24.14	(-12.39) (-14.14)	-3.500 M	   -22.10	()	=  2.500 M	

# LTE B7\_5 M\_Channel Edge\_Lower\_Low\_QPSK\_FullRB



ASS	RF 50 Ω A0 2.5025000		Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	502500000 GH	ALIGN A	Radio 10	6:19 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
<b>9</b> 0.0								Relative Limb	Center Fre
0.0									2.502500000 GI
00			r~	and the second					
.0									
						L			
.0			1		1-			Absolute Limit	
.0			1						
.0		The second						Spectrum	
.0									
.0									
~									CF St
enter 2.50	3 GHz							Span 30 MHz	3.000000 M <u>Auto</u> M
otal Power	Ref 21.74	dBm / 5 M	1Hz						
				Lower		Peak ->	Upper		Freq Offs
			dBm	∆Lim(dB)	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	0
Start Freq	Stop Freq	Integ BW	ubiii	acim(ab)	ricq (riz)	abili			
Start Freq 2.500 MHz	Stop Freq 3.500 MHz	Integ BW 100.0 kHz		()		-21.99	(-11.99)	2.505 M 🔶	
							(-11.99) (-12.97)	2.505 M ^ 3.500 M =	
2.500 MHz 3.500 MHz	3.500 MHz	100.0 kHz		()		-21.99			
2.500 MHz	3.500 MHz 7.500 MHz	100.0 kHz 1.000 MHz		() ()		-21.99 -22.97	(-12.97)	3.500 M ≡	

# LTE B7\_5 M\_Channel Edge\_Upper\_Low\_QPSK\_FullRB





	RF 50 Ω AC				535000000 GH		Radio	7:51 PM Jun 04, 2024 Std: None	Frequency
ASS		IFGain:Lo		g: Free Run tten: 10 dB	Avg: 1	100.00% of 2		Device: BTS	
dB/div	Ref Offset 27.4 Ref 30.0 dB								
g								Relative Limit	
.0									Center Fr 2.535000000 G
			~						
00									
.0									
.0								Absolute Limit	
.0		~~~~	1/						
.0					-			Spectrum	
.0						_			
.0						_			
									CF Ste 3.000000 M
enter 2.53	GHZ							Span 30 MHz	Auto M
otal Power									
otal Power	<b>Ref</b> 21.37	dBm/ 5M	ИHz						Freq Offs
				Lower		Peak ->	Upper	10000	0
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
2.500 MHz	3.500 MHz	100.0 kHz	-23.21	(-13.21)	-2.505 M	-22.90	(-12.90)	2.505 M 🔶	
3.500 MHz	7.500 MHz	1.000 MHz	-27.98	(-17.98)	-3.540 M	-25.68	(-15.68)	3.500 M =	
7.500 MHz	8.500 MHz	1.000 MHz	-34.59	(-21.59)	-7.515 M	-37.30	(-24.30)	7.505 M	
8.500 MHz	15.00 MHz	1.000 MHz	-35.69	(-10.69)	-8.500 M	-38.15	(-13.15)	8.630 M	
8.000 MHz	12.50 MHz	1.000 MHz		()			()		

# LTE B7\_5 M\_Channel Edge\_Mid\_QPSK\_FullRB





	RF 50 Ω AC			SENSE:INT	567500000 GH	ALIGN AU		9:05 PM Jun 04, 2024 Std: None	Frequency
ASS	2.56750000	IFGain:Lov	+++ Tr	g: Free Run tten: 10 dB		100.00% of 2	20	Device: BTS	
dB/div	Ref Offset 27.4 Ref 30.0 dBi								
g								<b>COLONIA</b>	
).0									Center Fre 2.567500000 Gi
00							_		
.0						L			
.0								Absolute Limit	
.0						_			
					hm				
		~~~~		NW	V			Spectrum	
0.0			Lal	and in					
.0									
									CF St 3.000000 M
enter 2.56	8 GHZ							Span 30 MHz	Auto M
otal Power	Ref 21.91	dBm / 5 M	ИHz						-
							· ·		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Lim(dB)	Freq (Hz)	Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)	0
2.500 MHz	3.500 MHz	100.0 kHz	-50.54	(-40.54)	-2.620 M	-20.02	(-10.02)	2.500 M	
3.500 MHz	7.500 MHz	1.000 MHz	-32.51	(-22.51)	-6.460 M	-31.04	(-21.04)	3.500 M =	
7.500 MHz	8.500 MHz	1.000 MHz	-41.10	(-28.10)	-7.505 M	-41.00	(-28.00)	8.500 M	
8.500 MHz	15.00 MHz	1.000 MHz	-39.88	(-14.88)	-10.06 M	-40.93	(-15.93)	8.565 M	
8.000 MHz	12.50 MHz	1.000 MHz		()			()		

# LTE B7\_5 M\_Channel Edge\_High\_QPSK\_1RB





	RF 50 Ω AC <b>2.56750000</b>		Tr	SENSE:INT enter Freq: 2. ig: Free Run atten: 10 dB	567500000 GH	ALIGN AU Iz 100.00% of 2	Radio	8:32 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dBr								
<b>9</b> 0.0 0.0									Center Fre 2.567500000 GH
00									
).0 ).0			V		V			Absolute Limit	
0.0									
enter 2.56	8 GHz						(	Span 30 MHz	CF Ste 3.000000 MI <u>Auto</u> Mi
otal Power	Ref 21.29	dBm/ 5M	ИНz	Lower	<-	Peak ->	Upper		Freq Offs 0
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	
2.500 MHz	3.500 MHz	100.0 kHz	-23.17	(-13.17)	-2.525 M	-22.77	(-12.77)	2.515 M 🔶	
3.500 MHz	7.500 MHz	1.000 MHz	-24.51	(-14.51)	-3.500 M	-23.56	(-13.56)	3.540 M ≡	
7.500 MHz		1.000 MHz	-29.95	(-16.95)	-7.505 M	-31.08	(-18.08)	7.615 M	
8.500 MHz		1.000 MHz	-31.31	(-6.31)	-8.630 M	-32.60	(-7.60) ()	8.500 M	
8.000 MHz	12.50 MHz	1.000 MHz							

# LTE B7\_5 M\_Channel Edge\_High\_QPSK\_FullRB





	RF 50 Ω A <b>2.5050000</b>		+++ Tr	SENSE:INT Inter Freq: 2. ig: Free Run Itten: 10 dB	505000000 GH	ALIGN AL 2 100.00% of 1	Radio 20	0:51 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
<b>9 g</b> 0.0								Keisove Limit	Center Fre 2.505000000 Gi
00								Absolute Limit	
).0 ).0 ).0			v	Mhr	M			Spectrum	
0.0									CF Ste 6.000000 M
enter 2.50								Span 60 MHz	Auto M
otal Power	<b>Ref</b> 22.72	2 dBm / 10 N	MHz	Lower	¢-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
5.000 MHz	6.000 MHz	200.0 kHz	-28.55	(-18.55)	-5.005 M	-49.11	(-39.11)	5.190 M 🔶	
6.000 MHz	10.00 MHz	1.000 MHz	-33.42	(-23.42)	-8.720 M	-38.51	(-28.51)	7.460 M ≡	
10.00 MHz	15.00 MHz	1.000 MHz	-42.37	(-29.37)	-10.00 M	-34.24	(-21.24)	13.20 M	
15.00 MHz	30.00 MHz	1.000 MHz	-48.41	(-23.41)	-21.90 M	-45.70	(-20.70)	15.00 M	
8.000 MHz	12.50 MHz	1.000 MHz		()			()		

# LTE B7\_10 M\_Channel Edge\_Low\_QPSK\_1RB



	RF 50 Ω A 2.5050000		TI	SENSE:INT enter Freq: 2. rig: Free Run Atten: 10 dB	505000000 GH	ALIGN AU	Radio	9:55 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dB								
g								ASSESSMENT IN	
).0 ).0									Center Fre 2.505000000 GH
00			( marine 1						
0.0									
).0		- 1920	1						
).0		······							
1.0								Spectrum	
0.0									
1.0									
									CF Ste
enter 2.50	5 GHz							Span 40 MHz	4.000000 MI Auto M
otal Power	Ref 21.69	9 dBm / 10 M	Hz						Erog Offo
				Lower		Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	ΔLim(dB)	Freq (Hz)	01
5.000 MHz	6.000 MHz	200.0 kHz	-26.68	(-16.68)	-5.000 M		()	^	
6.000 MHz	9.000 MHz	1.000 MHz	-27.53	(-17.53)	-6.060 M		()	=	
9.000 MHz	14.50 MHz	1.000 MHz	-30.98	(-17.98)	-9.083 M		()		
14.50 MHz	20.00 MHz	1.000 MHz	-40.16	(-15.16)	-14.64 M		()		
5.000 MHz	20.00 MHz	200.0 kHz		()		-25.75	(-75.75)	5.000 M	
ter, inc.						1000	TATUS		

### LTE B7\_10 M\_Channel Edge\_Lower\_Low\_QPSK\_FullRB



	RF 50 Ω A 2.5050000		+++ Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	505000000 GH	ALIGN A 2 00.00% of	Radio 10	0:18 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
99 0.0 0.0								Relative Lint	Center Fre 2.505000000 GH
00									
1.0 1.0 1.0					1-			Absolute Limit	
).0 ).0								Spectrum	
enter 2.50	5 GHz							Span 60 MHz	CF Ste 6.000000 Mi <u>Auto</u> Mi
otal Power	<b>Ref</b> 21.68	8 dBm / 10 M	MHz	Lower	6	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	ΔLim(dB)	Freq (Hz)	0
5.000 MHz	6.000 MHz	200.0 kHz		()		-25.54	(-15.54)	5.010 M 🔶	
6.000 MHz	10.00 MHz	1.000 MHz		()		-24.36	(-14.36)	6.000 M =	
10.00 MHz	15.00 MHz	1.000 MHz		()		-27.62	(-14.62)	10.10 M	
15.00 MHz 5.000 MHz	30.00 MHz 30.00 MHz	1.000 MHz 200.0 kHz	-26.89	() (-76.89)	-5.000 M	-37.61	(-12.61) ()	18.15 M	
5.000 WINZ	50.00 WIT12	200.0 KHZ	-20.09	(*10.09)	-3.000 M		()		

# LTE B7\_10 M\_Channel Edge\_Upper\_Low\_QPSK\_FullRB





	RF 50 Ω A 2.5350000		+++ Tr	SENSE:INT nter Freq: 2. ig: Free Run tten: 10 dB	535000000 GH	ALIGN AU z 100.00% of 2	Radio 20	1:50 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB				_				
<b>9 g</b> 0.0 0.0					~			Relative Linit	Center Fre 2.535000000 GF
00 ).0 ).0									
).0			-1		1-			Absolute Limi	
).0								Spectrum	CF Ste
enter 2.53	5 GHz							Span 60 MHz	6.000000 Mi Auto Mi
otal Power	<b>Ref</b> 21.43	3 dBm / 10 №	MHz	Lower	۰.	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
5.000 MHz	6.000 MHz	200.0 kHz	-27.05	(-17.05)	-5.005 M	-25.54	(-15.54)	5.005 M 🔶	
6.000 MHz	10.00 MHz	1.000 MHz	-29.56	(-19.56)	-6.000 M	-26.12	(-16.12)	6.020 M ≡	
10.00 MHz	15.00 MHz	1.000 MHz	-30.35	(-17.35)	-12.48 M	-28.93	(-15.93)	10.10 M	
15.00 MHz 8.000 MHz	30.00 MHz 12.50 MHz	1.000 MHz 1.000 MHz	-38.48	(-13.48)	-15.15 M	-41.54	(-16.54) ()	18.38 M	
		1.000 1111 12		()			()		

#### LTE B7\_10 M\_Channel Edge\_Mid\_QPSK\_FullRB





RL	RF 50 Ω A			SENSE:INT		ALIGN AU		3:04 PM Jun 04, 2024	Frequency
enter Fred ASS	q 2.5650000	IFGain:Lo	+++ Tri	nter Freq: 2. g: Free Run tten: 10 dB	565000000 GH Avg: 1	z 100.00% of 2	20	Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dE								
9 <b>9</b> 0.0 0.0								Relative Linit	Center Fre 2.565000000 GH
00									
1.0 1.0 1.0			$\sim$	Α.	Am			Absolute Limit	
.0			-WL	mlt			~~~	Spectrum	
enter 2.56	5 GHz							Span 60 MHz	CF Ste 6.000000 M Auto M
otal Power	<b>Ref</b> 22.0	2 dBm / 10 l	MHz	Lower	<-	Peak ->	Upper		Freq Offs 0
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
5.000 MHz	6.000 MHz	200.0 kHz	-47.65	(-37.65)	-5.205 M	-27.66	(-17.66)	5.000 M 🔶	
6.000 MHz	10.00 MHz	1.000 MHz	-39.32	(-29.32)	-8.000 M	-33.26	(-23.26)	8.660 M ≡	
10.00 MHz	15.00 MHz	1.000 MHz	-34.13	(-21.13)	-13.23 M	-41.72	(-28.72)	10.75 M	
	30.00 MHz	1.000 MHz	-46.51	(-21.51)	-15.00 M	-45.51	(-20.51)	21.98 M	
15.00 MHz 8.000 MHz	12.50 MHz	1.000 MHz		()			()		

## LTE B7\_10 M\_Channel Edge\_High\_QPSK\_1RB





	RF 50 Ω AC 2.5650000		++ Tr	sense:INT enter Freq: 2. ig: Free Run tten: 10 dB	565000000 GH	ALIGN AU z 100.00% of 2	Radio	2:31 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
<b>9</b> 0.0 0.0									Center Fre 2.565000000 GH
00									
).0 ).0			/		V			Absolute Limit	
0.0								Spectrum	
enter 2.56	5 GHz							Span 60 MHz	CF Ste 6.000000 MI Auto Ma
otal Power	<b>Ref</b> 21.56	3 dBm / 10 l	MHz	Lower	6	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)		∆Lim(dB)	Freq (Hz)	01
5.000 MHz	6.000 MHz	200.0 kHz	-26.21	(-16.21)	-5.010 M	-25.01	(-15.01)	5.005 M 🔶	
6.000 MHz	10.00 MHz	1.000 MHz	-26.40	(-16.40)	-6.060 M	-23.23	(-13.23)	6.040 M =	
10.00 MHz	15.00 MHz	1.000 MHz	-27.26	(-14.26)	-11.33 M	-26.64	(-13.64)	10.00 M	
15.00 MHz	30.00 MHz	1.000 MHz	-32.19	(-7.19)	-15.15 M	-34.60	(-9.60) ()	15.15 M	
8.000 MHz	12.50 MHz	1.000 MHz							

## LTE B7\_10 M\_Channel Edge\_High\_QPSK\_FullRB





	RF 50 Ω AC 2.5075000		+++ Tr	SENSE:INT nter Freq: 2. ig: Free Run tten: 10 dB	507500000 GH	ALIGN AU z 100.00% of 2	Radio 20	4:54 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB				_				
9 0.0 0.0			1					Relative Citil	Center Fre 2.507500000 Gi
00 1.0 1.0									
1.0				M. A.	An			Absolute Limit	
1.0								Spectrum	CF Ste
enter 2.50	8 GHz						5	Span 90 MHz	9.000000 M Auto M
otal Power	<b>Ref</b> 22.74	dBm / 15 N	1Hz	Lower	4.	Peak ->	Upper		Freq Offs 0
Start Freq	Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
7.500 MHz	8.500 MHz	300.0 kHz	-21.31	(-11.31)	-7.500 M	-48.16	(-38.16)	7.780 M 🔶	
8.500 MHz	12.50 MHz	1.000 MHz	-34.02	(-24.02)	-8.500 M	-39.28	(-29.28)	12.16 M ≡	
12.50 MHz	22.50 MHz	1.000 MHz	-36.82	(-23.82)	-13.25 M	-34.47	(-21.47)	19.95 M	
	45.00 MHz	1.000 MHz	-50.52	(-25.52)	-22.61 M	-46.99	(-21.99)	22.50 M	
22.50 MHz 8.000 MHz	12.50 MHz	1.000 MHz		()			()		

### LTE B7\_15 M\_Channel Edge\_Low\_QPSK\_1RB



	Analyzer - Spectrum			SENSE:INT		ALIGN AU	TO 05:11	3:57 PM Jun 04, 2024	
	2.5075000		••• TI		507500000 GH		Radio	Std: None Device: BTS	Frequency
) dB/div	Ref Offset 27. Ref 30.0 dE								
pg									
).0 ).0									Center Fr 2.507500000 G
			(						
.0									
	ſ								
.0									
.0					-				
.0							1	Spectrum	
.0									
									CF Ste
enter 2.50	8 GHz							Span 60 MHz	6.000000 M Auto M
otal Power	<b>Ref</b> 21.7	1 dBm / 15 M	ЛНz						
									Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	Lower		Peak -> dBm	Upper	Frog (Hz)	0
7.500 MHz	8.500 MHz	300.0 kHz	-28.81	∆Lim(dB) (-18.81)	Freq (Hz) -7,500 M	ubiii	∆Lim(dB) ()	Freq (Hz)	
8.500 MHz	11.50 MHz	1.000 MHz	-20.01	(-10.01) (-20.06)	-7.500 M -8.515 M		()		
11.50 MHz	17.00 MHz	1.000 MHz	-32.24	(-19.24)	-11.50 M		()		
17.00 MHz	30.00 MHz	1.000 MHz	-35.26	(-10.26)	-17.13 M		()		
7.500 MHz	30.00 MHz	300.0 kHz		()		-27.23	(-77.23)	7.500 M	
3						ST			

### LTE B7\_15 M\_Channel Edge\_Lower\_Low\_QPSK\_FullRB



enter Fred	r⊧ <u>50 Ω</u> A q 2.5075000		+++ Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	507500000 GH	ALIGN A z 100.00% of	Radio 10	4:20 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dB								
<b>9</b> 0.0 0.0								Relisitive Liftin	Center Fre 2.507500000 GH
00									
).0 ).0					\			Absolute Limi	
).0								Spectrum	
enter 2.50	8 GHz							Span 90 MHz	CF Ste 9.000000 Mi <u>Auto</u> Mi
otal Power	<b>Ref</b> 21.7	1 dBm / 15 M	MHz			Peak ->			Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Lim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	0
7.500 MHz	8.500 MHz	300.0 kHz		()		-26.93	(-16.93)	7.550 M 🔶	
8.500 MHz	12.50 MHz	1.000 MHz		()		-25.33	(-15.33)	8.600 M =	
12.50 MHz	22.50 MHz	1.000 MHz		()		-27.04	(-14.04)	12.75 M	
22.50 MHz 7.500 MHz	45.00 MHz 45.00 MHz	1.000 MHz 300.0 kHz	-29.09	() (-79.09)	-7.500 M	-37.11	(-12.11)	26.78 M	
	10.00 111112	000.0-111-12	20.00	(10.00)	1.000 111				

### LTE B7\_15 M\_Channel Edge\_Upper\_Low\_QPSK\_FullRB





	RF 50 Ω A 2.5350000		++ Tr	SENSE:INT nter Freq: 2. ig: Free Run tten: 10 dB	535000000 GH	ALIGN AU Iz 100.00% of 2	Radio 20	5:53 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
<b>9</b> 0.0 0.0									Center Fre 2.535000000 GF
00			┙						
).0			-1		V			Absolute Limit	
0.0								Spectrum	05.01
enter 2.53	5 GHz						, ,	Span 90 MHz	CF Ste 9.000000 Mi <u>Auto</u> Ma
otal Power	Ref 21.47	7 dBm / 15 l	MHz	Lower	<-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	∆Lim(dB)	Freq (Hz)	
7.500 MHz	8.500 MHz	300.0 kHz	-29.52	(-19.52)	-7.500 M	-27.60	(-17.60)	7.505 M 🔶	
8.500 MHz	12.50 MHz	1.000 MHz	-30.61	(-20.61)	-8.500 M	-26.63	(-16.63)	8.560 M ≡	
12.50 MHz	22.50 MHz	1.000 MHz	-32.93	(-19.93)	-13.40 M	-28.45	(-15.45)	12.55 M	
	45.00 MHz	1.000 MHz	-41.47	(-16.47)	-22.84 M	-42.79	(-17.79)	23.18 M	
22.50 MHz 8.000 MHz	12.50 MHz	1.000 MHz		()			()		

#### LTE B7\_15 M\_Channel Edge\_Mid\_QPSK\_FullRB





enter Fred	RF 50 Ω A 2.5625000	-	+++ Tr	sense:INT enter Freq: 2. ig: Free Run atten: 10 dB	562500000 GH	ALIGN AL 2 100.00% of 1	Radio 20	7:08 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dE							HARANNA 1 IMM	
.0									Center Fre 2.562500000 GH
.0			, I					Absolute Limit	
.0			$\sim 1$	h . shad	tha				
.0								Spectrum	CF Ste
enter 2.56	3 GHz							Span 90 MHz	9.000000 MI <u>Auto</u> Mi
otal Power	<b>Ref</b> 21.8	5 dBm / 15 l	MHz	Lower	<-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	
7.500 MHz	8.500 MHz	300.0 kHz	-48.45	(-38.45)	-8.500 M	-22.42	(-12.42)	7.500 M	
8.500 MHz	12.50 MHz	1.000 MHz	-39.43	(-29,43)	-12.20 M	-34.87	(-24.87)	8.500 M ≡	
8.500 MHZ	22.50 MHz	1.000 MHz	-32.03	(-19.03)	-20.05 M	-35.51	(-22.51)	13.35 M	
12.50 MHz	22.00 111112			100 5 11	22 50 14	-49.54	(-24.54)	22.50 M	
	45.00 MHz 12.50 MHz	1.000 MHz 1.000 MHz	-47.54	(-22.54) ()	-22.50 M	-49.04	(-24.54)	22.30 W	

## LTE B7\_15 M\_Channel Edge\_High\_QPSK\_1RB





	RF 50 Ω A 2.5625000	-	+++ Tr	sense:INT enter Freq: 2. ig: Free Run itten: 10 dB	562500000 GH	ALIGN AU Iz 100.00% of 2	Radio	6:33 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dB								
9 .0 .0								Reistive Linit	Center Fre 2.562500000 GH
.0									
.0			/		5			Absolute Limi	
.0								Spectrum	
enter 2.56	3 GHz							Span 90 MHz	CF Ste 9.000000 Mi <u>Auto</u> Ma
otal Power			MHz	Lower	<-	Peak ->	Upper		Freq Offs 0
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)		∆Lim(dB)	Freq (Hz)	
7.500 MHz	8.500 MHz	300.0 kHz	-28.08	(-18.08)	-7.505 M	-26.45	(-16.45)	7.520 M 🔶	
8.500 MHz	12.50 MHz	1.000 MHz	-28.39	(-18.39)	-8.520 M	-23.71	(-13.71)	8.720 M ≡	
12.50 MHz	22.50 MHz	1.000 MHz	-28.22	(-15.22)	-15.05 M	-25.71	(-12.71)	12.65 M	
	45.00 MHz	1.000 MHz	-34.42	(-9.42)	-22.73 M	-37.14	(-12.14) ()	22.50 M	
22.50 MHz 8.000 MHz	12.50 MHz	1.000 MHz							

## LTE B7\_15 M\_Channel Edge\_High\_QPSK\_FullRB





	Analyzer - Spectrum			SENSE:INT		ALIGN AU	TO 05:3	2:20 PM Jun 04, 2024	
enter Fred	2.5100000	00 GHz IFGain:Lov	Tr	nter Freq: 2. g: Free Run tten: 10 dB	510000000 GH Avg: 1	z 100.00% of 2	20	Std: None Device: BTS	Frequency
dB/div	Ref Offset 27.4 Ref 30.0 dB								
g 								Relative Link	Center Fre
).0									2.510000000 Gi
00			<u>}</u>						
.0							_		
								Absolute Limit	
.0					_			Absolute Linit	
.0			1	A A	A	Δ			
.0			· ·	malin	Jam	NI		Spectrum	
.0									CF Ste
enter 2.51	GHz						S	pan 120 MHz	12.000000 M Auto M
otal Power	Ref 22.64	dBm / 20 M	ИHz						Freq Offs
				Lower	<-	Peak ->	Upper		0
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)		∆Lim(dB)	Freq (Hz)	
10.00 MHz	11.00 MHz	430.0 kHz	-28.60	(-18.60)	-10.00 M	-44.20	(-34.20)	10.39 M 🔶	
11.00 MHz	15.00 MHz	1.000 MHz	-35.14	(-25.14)	-11.20 M	-42.92	(-32.92)	13.92 M ≡	
15.00 MHz	30.00 MHz	1.000 MHz	-38.52	(-25.52)	-17.78 M	-35.24	(-22.24)	26.78 M	
30.00 MHz	60.00 MHz	1.000 MHz	-52.45	(-27.45)	-30.00 M	-48.73	(-23.73)	30.15 M	
8.000 MHz	12.50 MHz	1.000 MHz		()			()		
						ST	CONTRACT IN CONTRACT		A

### LTE B7\_20 M\_Channel Edge\_Low\_QPSK\_1RB



	RF 50 Ω A			SENSE:INT		ALIGN AU	ITO 05-3	1:24 PM Jun 04, 2024	
	2.5100000		TI		510000000 GH		Radio	Std: None Device: BTS	Frequency
) dB/div	Ref Offset 27. Ref 30.0 dE								
og									
0.0									Center Fre 2.510000000 GH
.00									
0.0									
0.0									
).0			1				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
).0 ).0							1	Spectrum	
0.0									
enter 2.51	CH7							Span 80 MHz	CF Ste 8.000000 MH
2.51	GIIZ							spanoo minz	<u>Auto</u> Ma
otal Power	<b>Ref</b> 21.5	1 dBm / 20 M	MHz						
				Lower		Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	ΔLim(dB)	Freq (Hz)	01
10.00 MHz	11.00 MHz	430.0 kHz	-31.92	(-21.92)	-10.02 M		()	^	
11.00 MHz	14.00 MHz	1.000 MHz	-33.14	(-23.14)	-11.00 M		()	=	
14.00 MHz	19.50 MHz	1.000 MHz	-34.31	(-21.31)	-14.19 M		()		
19.50 MHz	40.00 MHz	1.000 MHz	-36.71	(-11.71)	-19.60 M		()		
10.00 MHz	40.00 MHz	430.0 kHz		()		-28.99	(-78.99)	10.00 M	
						_		-	

#### LTE B7\_20 M\_Channel Edge\_Lower\_Low\_QPSK\_FullRB



	RF 50 Ω A 2.5100000		+++ Tri	SENSE:INT nter Freq: 2. g: Free Run tten: 10 dB	510000000 GH	ALIGN AU Z 100.00% of	Radio	1:47 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dB								
9 <b>9</b> ).0 ).0								Kelskve Limit	Center Fre 2.510000000 GF
00									
1.0 1.0 1.0								Absolute Limi	
0.0		$\mathcal{I}$						Spectrum	
enter 2.51	GHz						S	pan 120 MHz	CF Ste 12.000000 Mi <u>Auto</u> Mi
otal Power	<b>Ref</b> 21.5	7 dBm / 20 M	MHz	Lower	<-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	
10.00 MHz	11.00 MHz	430.0 kHz		()		-28.94	(-18.94)	10.02 M	
11.00 MHz	15.00 MHz	1.000 MHz		()		-26.77	(-16.77)	13.64 M =	
15.00 MHz 30.00 MHz 10.00 MHz	30.00 MHz 60.00 MHz 60.00 MHz	1.000 MHz 1.000 MHz 430.0 kHz	-31.84	() () (-81.84)	-10.00 M	-28.00 -38.78 	(-15.00) (-13.78) ()	15.15 M 36.30 M 	
3							TATUS		

# LTE B7\_20 M\_Channel Edge\_Upper\_Low\_QPSK\_FullRB





RL         RF         50 Ω         AC           Center Freq 2.535000000 GHz         AC         AC         AC           ASS         IFGain:Low         AC         AC         AC		+++ Tr	SENSE:INT         ALIGN AUTO           Center Freq: 2.535000000 GHz         Trig: Free Run         Avg: 100.00% of 20           #Atten: 10 dB         Avg: 100.00% of 20         Avg: 100.00% of 20			Radio 20	6:52 PM Jun 04, 2024 Std: None Device: BTS	Frequency	
dB/div	Ref Offset 27. Ref 30.0 dB				_			222030012011	
9 .0 .0									Center Fre 2.535000000 GH
.0									
.0			/					Absolute Limi	
.0								Spectrum	OF Oto
enter 2.53	5 GHz						S	pan 120 MHz	CF Ste 12.000000 MH Auto Ma
otal Power	Ref 21.40	0 dBm / 20 I	MHz	Lower	s-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	01
10.00 MHz	11.00 MHz	430.0 kHz	-31.45	(-21.45)	-10.00 M	-29.43	(-19.43)	10.01 M 🔶	
	15.00 MHz	1.000 MHz	-31.60	(-21.60)	-11.00 M	-28.08	(-18.08)	11.42 M ≡	
11.00 MHz		1 000 1 111-	-33.32	(-20.32)	-15.38 M	-29.43	(-16.43)	15.08 M	
11.00 MHz 15.00 MHz	30.00 MHz	1.000 MHz	-33.32						
11.00 MHz	30.00 MHz 60.00 MHz 12.50 MHz	1.000 MHz 1.000 MHz 1.000 MHz	-33.32	(-18.11)	-31.50 M	-43.48	(-18.48) ()	31.20 M	

#### LTE B7\_20 M\_Channel Edge\_Mid\_QPSK\_FullRB





	RF 50 Ω A 2.5600000		+++ Tr	SENSE:INT nter Freq: 2. ig: Free Run tten: 10 dB	560000000 GH	ALIGN AL z 100.00% of	Radio 20	1:18 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dE				_				
9 .0 .0								Relative Link	Center Fre 2.560000000 GH
.0									
.0			hand	Alan	A han			Absolute Limit	
.0				~ ~ ~ ~				Spectrum	CF Ste
enter 2.56	GHz						s	pan 120 MHz	12.000000 MH Auto Ma
otal Power	<b>Ref</b> 22.0	4 dBm / 20 M	MHz	Lower	<-	Peak ->	Upper		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	$\Delta Lim(dB)$	Freq (Hz)	
10.00 MHz	11.00 MHz	430.0 kHz	-42.97	(-32.97)	-10.30 M	-28.84	(-18.84)	10.01 M 🔶	
11.00 MHz	15.00 MHz	1.000 MHz	-42.49	(-32.49)	-13.82 M	-35.44	(-25.44)	11.02 M ≡	
15.00 MHz	30.00 MHz	1.000 MHz	-31.04	(-18.04)	-26.78 M	-35.69	(-22.69)	17.85 M	
	60.00 MHz	1.000 MHz	-48.04	(-23.04)	-30.15 M	-51.06	(-26.06)	30.00 M	
30.00 MHz 8.000 MHz	12.50 MHz	1.000 MHz		()			()		

## LTE B7\_20 M\_Channel Edge\_High\_QPSK\_1RB





RL     RF     50 Ω     AC       Center Freq 2.560000000 GHz       ASS			+++ Tr	SENSE:INT]         ALIGN AUTO           Center Freq: 2.560000000 GHz         Trig: Free Run         Avg: 100.00% of 20           #Atten: 10 dB         Avg: 100.00% of 20         Avg: 100.00% of 20			Radio 20	0:44 PM Jun 04, 2024 Std: None Device: BTS	Frequency
dB/div	Ref Offset 27. Ref 30.0 dB								
99 ).0 ).0									Center Fre 2.560000000 GF
00									
).0 ).0					6-			Absolute Limi	
1.0								Spectrum	
enter 2.56	GHz						S	pan 120 MHz	CF Ste 12.00000 Mi <u>Auto</u> Mi
otal Power	<b>Ref</b> 21.7	8 dBm / 20 M	ИНz	Lower		Peak ->	Unana		Freq Offs
Start Freq	Stop Freq	Integ BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	01
10.00 MHz	11.00 MHz	430.0 kHz	-29.60	(-19.60)	-10.01 M	-26.84	(-16.84)	10.04 M	
11.00 MHz	15.00 MHz	1.000 MHz	-28.34	(-18.34)	-14.00 M	-24.74	(-14.74)	11.02 M =	
15.00 MHz	30.00 MHz	1.000 MHz	-28.07	(-15.07)	-17.70 M	-25.95	(-12.95)	15.00 M	
13.00 141112	60.00 MHz	1.000 MHz	-37.61	(-12.61)	-30.30 M	-40.66	(-15.66)	30.00 M	
30.00 MHz 8.000 MHz	12.50 MHz	1.000 MHz		()			()		

## LTE B7\_20 M\_Channel Edge\_High\_QPSK\_FullRB



### **12. ANNEX A\_ TEST SETUP PHOTO**

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2407-FC020-P