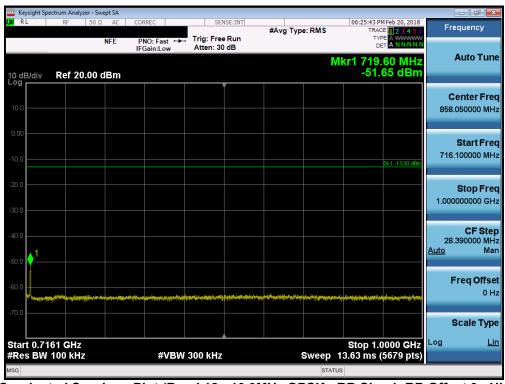


	ectrum Analyzer										
LXU RL	RF 5	50Ω AC	CORREC	SEI	ISE:INT	#Avg Typ	e: RMS		HFeb 20, 2018	Fr	equency
		NFE	PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 30				TYF			
10 dB/div Log	Ref 20.0	0 dBm					N	/kr1 698. -48.	00 MHz 66 dBm		Auto Tune
10.0											Center Freq 1.000000 MHz
-10.0									DL1 -13.00 dBm	30	Start Freq 0.000000 MHz
-20.0										698	Stop Freq 8.000000 MHz
-40.0									1	66 <u>Auto</u>	CF Step 5.800000 MHz Man
-60.0	/ 14 Jan 2 at 10 Jan 20 All All All All All All All All All Al	ti haleger (destate	unte pre della sectiona de la prime della presenta della						a ingana genera mentra di da		Freq Offset 0 Hz
-70.0											Scale Type
Start 30.0 #Res BW			#VBW	/ 300 kHz		s	weep 3	Stop 6 32.06 ms (1	98.0 MHz 3361 pts)	Log	Lin
MSG							STAT				

Plot 7-106. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-107. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 71 of 225
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🔤 Keysight S	spectrum Analyzer - S	wept SA									- 6 ×
L <mark>XI</mark> RL	RF 50	Ω AC	CORREC		SE:INT	#Avg Typ	e: RMS	TRAC	M Feb 20, 2018	Fre	quency
		NFE	PNO: Fast ++ IFGain:Low	#Atten: 26							Auto Tune
10 dB/div Log	Ref 0.00 (dBm					M	kr1 9.97 -45.	5 0 GHz 97 dBm		Auto Tune
-10.0									DL1 -13.00 dBm		enter Freq 000000 GHz
									DET -13.00 (IBM)		
-20.0											Start Freq 000000 GHz
-40.0									1		Stop Freq
-50.0		~	\sim								CF Step
-70.0										900. <u>Auto</u>	000000 MHz Mar
-80.0										F	req Offset 0 Hz
-90.0										S	Scale Type
Start 1.0 #Res BV	00 GHz V 1.0 MHz		#VBW	3.0 MHz		s	weep 1	Stop 10 5.60 ms (1	.000 0112	Log	Lin
MSG							STAT	US			

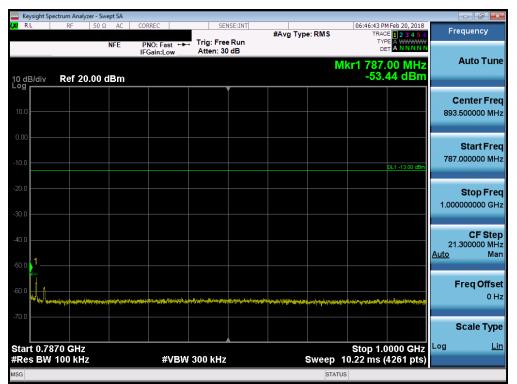
Plot 7-108. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 72 of 225
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X/ RL	um Analyzer - RF 50	Ω AC	CORREC	SEN	SE:INT				M Feb 20, 2018	Frequ	
		NFE	PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 30		#Avg Type	⊧:RMS	TY	CE 1 2 3 4 5 6 PE A WWWW ET A N N N N N		
0 dB/div	Ref 20.0) dBm					MI	kr1 776. -25.	.95 MHz 85 dBm	Αι	ito Tun
- og 10.0											n ter Fre 0000 M⊦
10.00									DL1 -13.00 dBm		t art Fre 0000 M⊦
30.0									1		t op Fre 0000 MH
40.0											CF Ste 0000 MI Mi
60.0		Rity) gain for any star								Fre	e q Offs 0 I
70.0											ale Typ
tart 30.0 N Res BW 10			#VBW	300 kHz		S	weep 35	Stop 7 .86 ms (1	77.0 MHz 4941 pts)	Log	L

Plot 7-109. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)



Plot 7-110. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 72 of 225
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	pectrum Analyz	er - Swept SA						
<mark>0</mark> RL	RF	50 Ω AC NFE	CORREC PNO: Fast ↔ IFGain:Low	Trig: Free F	#Av tun	g Type: RMS	06:47:06 PM Feb 20, 20 TRACE 1 2 3 4 TYPE A WWWA DET A N N N	Frequency
0 dB/div	Ref 0.0	00 dBm	II Guilleow			M	kr1 9.983 0 GH -46.06 dB	lz Auto Tun M
10.0							DL1 -13.00 d	Center Fre 5.50000000 GH
80.0								Start Fre 1.000000000 G⊦
40.0 50.0								1 Stop Fre 10.000000000 GH
50.0 70.0								CF Ste 900.000000 MH Auto Ma
80.0								Freq Offso 0 H
90.0	00 GH7						Stop 10.000 GF	Scale Typ
	1.0 MHz		#VBV	/ 3.0 MHz		Sweep 1	5.60 ms (18001 pt	s)
SG						STATU	S	

Plot 7-111. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

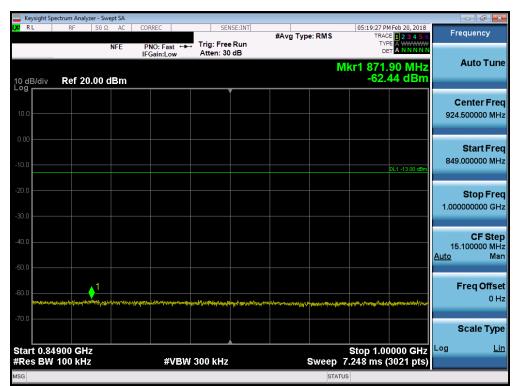
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dago 74 of 225
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Band 5

	ectrum Analyze								_	- # *
RL	RF	50 Ω AC	CORREC PNO: Fast IEGain:Low	Trig: Fre		#Avg Type: R		19:05 PM Feb 20, 2018 TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Free	quency
0 dB/div	Ref 20.0	00 dBm	IFGam:Low	Atten			Mkr1	822.40 MHz -39.36 dBm	£	uto Tun
10.0										enter Fre 00000 MH
10.0								DL1 -13.00 dBm		Start Fre 00000 M⊦
20.0										Stop Fre 00000 M⊦
i0.0								<u> </u>	79.3 <u>Auto</u>	CF Ste 00000 MH Ma
60.0		estadante di provenzio dalla di		(negelige aller previller at 19 aller					FI	req Offs 0 H
70.0	MHz						S	top 823.0 MHz	S Log	cale Typ <u>L</u>
	100 kHz		#VI	BW 300 kH:	z	Swe	ep 38.06 i	ms (15861 pts)		
SG							STATUS			

Plot 7-112. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-113. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

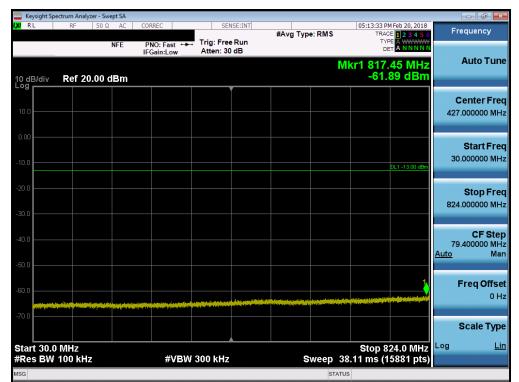
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 75 of 225
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		zer - Swept SA									
L <mark>XI</mark> RL	RF	50 Ω AC	CORREC	SEN	E:INT	#Avg Typ	e: RMS	TRA	M Feb 20, 2018	Free	quency
		NFE	PNO: Fast ++- IFGain:Low	Trig: Free #Atten: 26		• //		TY D			
10 dB/div Log	Ref 0.	00 dBm					N	lkr1 1.64 -44.	9 0 GHz 71 dBm	-	Auto Tune
				Ĭ						Ce	enter Freq
-10.0									DL1 -13.00 dBm	5.5000	000000 GHz
-20.0											
											Start Freq
-30.0										1.0000	00000 GH2
-40.0	<u> </u>										Stop Freq
	Y I					المعادية والمعادية			and the second		000000 GHz
-50.0		بهمو بمعينه	~~~		معنين وينسع من ما ساله			Ť			
-60.0	Manager									900.0	CF Step
-70.0										<u>Auto</u>	Man
-70.0										_	
-80.0										FI	r eq Offset 0 Hz
-90.0											
										S	cale Type
Start 1.00	0 GHz							Stop 10	.000 GHz	Log	Lin
#Res BW		z	#VBW	3.0 MHz		9	weep	15.60 ms (1	8001 pts)		
MSG							STAT	US			

Plot 7-114. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-115. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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🔤 Keysight Sp	ectrum Analyzer	- Swept SA								- 5
X/RL	RF	50 Ω AC	CORREC			¥Avg Type	RMS	TRAC	4 Feb 20, 2018 E 1 2 3 4 5 6	Frequency
		NFE	PNO: Fast ++ IFGain:Low	Atten: 30				DE		
10 dB/div	Ref 20.0	00 dBm					M	kr1 882. -62.	05 MHz 12 dBm	Auto Tune
										Center Fred
10.0										924.500000 MHz
0.00										
										Start Freq 849.000000 MHz
-10.0									DL1 -13.00 dBm	
-20.0										Stop Freq
-30.0										1.000000000 GHz
										CF Step
-40.0										15.100000 MHz Auto Man
-50.0										<u>ritto</u> man
-60.0		≬ 1								Freq Offset
*******	all a second and the second	in the internation	leterterstandigiour trainithy gra	na harangani kingkanj	an a	hainstantenewar	entropy where is a second pro-	*****	tariglar first a taran	0 Hz
-70.0										Scale Type
Start 0.84	900 GHz							Stop 1 00	0000 GHz	Log <u>Lin</u>
#Res BW			#VBW	300 kHz		s			3021 pts)	
MSG							STATUS			

Plot 7-116. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



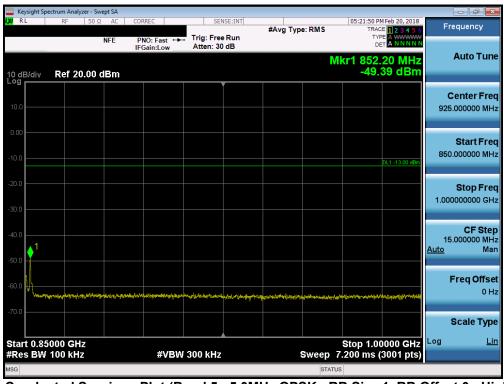
Plot 7-117. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕕 LG	Approved by: Quality Manager
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		yzer - Swept SA									
I <mark>XI</mark> RL	RF	50 Ω AC	CORREC	SEI	NSE:INT	#Avg Typ	e: RMS		M Feb 20, 2018 CE 1 2 3 4 5 6	Fre	quency
		NFE	PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 30		• • •		TY			
			II Gam.Low	,			N	lkr1 781.	00 MHz		Auto Tune
10 dB/div	Ref 2	0.00 dBm						-61.	89 dBm		
					Í					C.	enter Freq
10.0											000000 MHz
0.00											
											Start Freq
-10.0									DL1 -13.00 dBm		000000 1411 12
-20.0											
											Stop Freq
-30.0										024.	
											CF Step
-40.0											400000 MHz
-50.0										<u>Auto</u>	Man
-30.0											
-60.0										F	req Offset
											0 Hz
-70.0										-	
										5	cale Type
Start 30.								Stop 8	24.0 MHz	Log	<u>Lin</u>
#Res BV	V 100 kH	z	#VB	N 300 kHz		S		8.11 ms (1	5881 pts)		
MSG							STATU	JS			

Plot 7-118. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-119. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ectrum Analyzei	- Swept SA									
X/RL	RF	50 Ω AC	CORREC	Trig: Free		#Avg Typ	e: RMS	TRAC	M Feb 20, 2018 CE 1 2 3 4 5 6 PE A WWWWW T A N N N N N	Freque	ncy
10 dB/div Log	Ref 0.00) dBm	IFGain:Low	#Atten: 26	dB		Μ	kr1 1.68		Aut	o Tune
-10.0									DL1 -13.00 dBm	Cent 5.500000	er Freq 000 GHz
-20.0										St a 1.000000	n t Frec 000 GH:
-40.0	1 						~~			Sto 10.000000	op Frec 000 GH2
-60.0										0 900.0000 <u>Auto</u>	F Step 000 MH Mar
-80.0										Fred	I Offse
-90.0								Stop 10	.000 GHz	Sca Log	le Type Lir
#Res BW	1.0 MHz		#VBW	/ 3.0 MHz		S	weep 1	5.60 ms (1	8001 pts)		
MSG							STATU	JS			

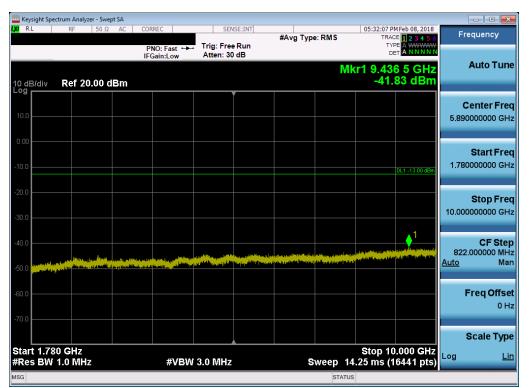
Plot 7-120. Conducted Spurious Plot (Band 5 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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PNO: Fast Trig: Free Run Atten: 30 dB Trace Trig: Free Run Atten: 30 dB Trace Trig: Free Run Atten: 30 dB Trace Trig: Free Run Atten: 30 dB Mkr1 1.709 0 GHz -34.92 dBm A 10 dB/div Ref 20.00 dBm -34.92 dBm -34.92 dBm -34.92 dBm -34.92 dBm -34.92 dBm -30.00 -30.0													nalyzer - Swep			
Image: Nicht 1.709 UGHz -34.92 dBm 100	Frequency	6 Fr	1 2 3 4 5 6	TRACI TYP		e: RMS	#Avg Ty	Run	Trig: Free			AC	50 Ω	RF	L	(<mark> </mark> R
10.0	Auto Tu		0 GHz 2 dBm	1.709 -34.9	Mkr1							Bm	20.00 d	Ref	3/div	0 dl
100 011-13.00000 011-13.00000 011-13.00000 011-13.00000 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100 200 100 100 100 100	Center Fi 69.500000 N															
3000	Start Fi 30.000000 M	30	L1 -13.00 dBm													
	Stop Fr 709000000 G	1.70	1													
	CF S1 67.900000 M		alater and the prior	y jaan ing si Ngeregea.	est de la		and the second secon	even and the fight and the second		V antana ar	and the state of the	an in Suide Martin	**************************************		ager/processo	
s s s	Freq Off 0															
tart 0.0300 GHz Stop 1.7090 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 2.239 ms (3359 pts)	Scale Ty	Z L og	090 GHz 359 pts)	Stop 1.7 39 ms (3	2.2	Sweep			3.0 MHz	≠vbw						tar

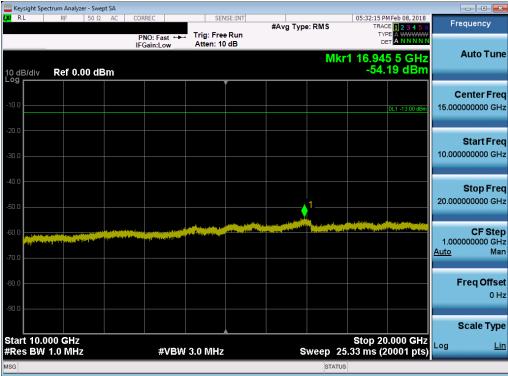
Plot 7-121. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-122. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-123. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



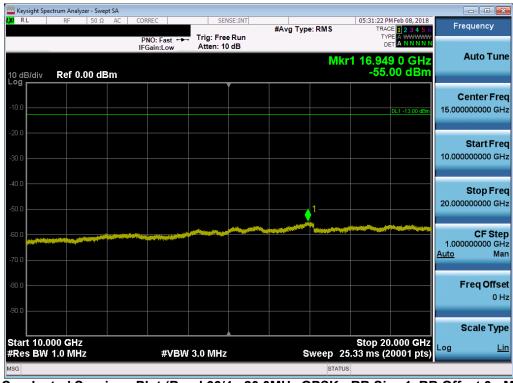
Plot 7-124. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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Keysight Spectrum A						- • •
L <mark>XI R L</mark> RF	50 Ω AC	CORREC	SENSE:INT	#Avg Type: RMS	05:31:09 PM Feb 08, 2018 TRACE 1 2 3 4 5 6	Frequency
		PNO: Fast +++ IFGain:Low	Trig: Free Run Atten: 30 dB		DET A NNNN	
10 dB/div Re	f 20.00 dBm				Mkr1 9.787 0 GHz -42.16 dBm	Auto Tune
10.0						Center Freq 5.890000000 GHz
-10.0					DL1 -13.00 dBm	Start Freq 1.780000000 GHz
-20.0						Stop Freq 10.000000000 GHz
-40.0	The second state of the se					CF Step 822.000000 MHz <u>Auto</u> Man
-60.0						Freq Offset 0 Hz
-70.0 Start 1.780 Gł					Stop 10.000 GHz	Scale Type
#Res BW 1.0	MHz	#VBW	3.0 MHz		14.25 ms (16441 pts)	

Plot 7-125. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



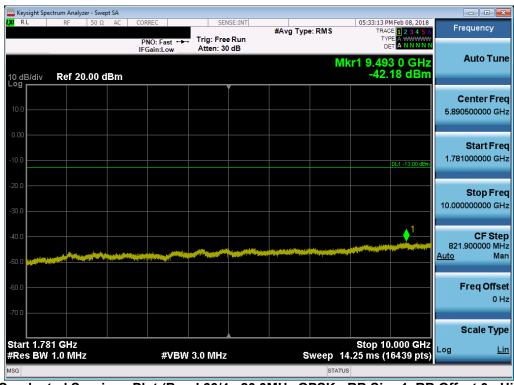
Plot 7-126. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ctrum Analyzer -										- • •
LXI RL	RF 5	0Ω AC	CORREC		Run	#Avg Typ	e: RMS	TRA	PM Feb 08, 2018 CE 1 2 3 4 5 6 (PE A WWWWW DET A NNNNN	Fre	equency
			IFGain:Low	Atten: 30) dB						Auto Tune
10 dB/div Log	Ref 20.0	0 dBm					N	/lkr1 1.69 -48	.32 dBm		
				Ì	Í					С	enter Fred
10.0										870.	.000000 MHz
0.00											Start Free
-10.0									DL1 -13.00 dBm	30.	.000000 MHz
									our rotordam		
-20.0										4 740	Stop Free
-30.0										1.710	000000 GH
-40.0											CF Step
-50.0							and here the state	and the second second second		168. <u>Auto</u>	.000000 MH Mar
~~~~	and a second	and a second									
-60.0										F	F <b>req Offse</b> 0 Hi
-70.0											
										5	Scale Type
Start 0.03 #Res BW			#VBW	/ 3.0 MHz			Sweep	Stop 1. 2.240 ms	.7100 GHz (3361 pts)	Log	<u>Lir</u>
MSG							STAT				

Plot 7-127. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-128. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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🚾 Keysight S	•												
XI RL	RF	50 Ω	AC	CORREC PNO: F	ast ↔→			#Avg Typ	e: RMS		19 PM Feb 08, 2018 RACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	F	requency
10 dB/div Log	Ref 0	).00 dB	m						N	lkr1 16.9 -5	966 5 GHz 3.53 dBm		Auto Tune
-10.0											DL1 -13.00 dBm		Center Fred 0000000 GH
-20.0												10.00	Start Free
-40.0									1			20.00	<b>Stop Fre</b> 0000000 GH
-60.0 <b>gingarisi</b> (Averali	an finan da ing mananan an ang manan an	an the set of the set	p Develop dev agait de vola	attelese setelet Militaren garette	n an	van di malan pikangan di pulatinan pangakangan	a di kacana ya di kacana di ka Kacana di kacana di ka				n an	1.00 <u>Auto</u>	<b>CF Ste</b> 0000000 G⊢ Ma
-80.0													Freq Offse 0 H
Start 10					#VBW	3.0 MHz			weep		20.000 GHz (20001 pts)		Scale Type
//SG										ATUS	-(1000 F pt3)		

Plot 7-129. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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Band 2

Keysight Spectrum Analy.							
XV RL RF	50 Ω AC	CORREC	SENSE:INT	#Avg Type	e: RMS	06:20:43 PM Feb 16, 2018 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
10 dB/div <b>Ref 2</b> 0	0.00 dBm	IFGain:Low	Atten: 30 dB		Mk	r1 1.849 0 GHz -17.38 dBm	Auto Tur
10.0							Center Fre 939.500000 MH
10.0						DL1 -13.00 d 1	Start Fr 30.000000 M
30.0							<b>Stop Fr</b> 1.849000000 G
40.0						a casa mandro daga da manga da sa ang mata na	CF St 181.900000 M <u>Auto</u> M
50.0	an sign of the second	**************************************	an gan an a	9,000,000,000,000,000,000,000,000,000,0	(1		Freq Offs 0
70.0							Scale Ty
Start 0.0300 GHz #Res BW 1.0 MHz		#VBW	3.0 MHz	ş	Sweep 2.	Stop 1.8490 GHz 425 ms (3639 pts)	Log <u>l</u>
ISG					STATUS		

Plot 7-130. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-131. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

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	ectrum Analyz										×
L <mark>XI</mark> RL	RF	50 Ω AC	CORREC		ISE:INT	#Avg Typ	e: RMS		M Feb 16, 2018 CE 1 2 3 4 5 6	Frequency	
		NFE	PNO: Fast ↔ IFGain:Low	Trig: Free Atten: 10				TY			
10 dB/div Log	Ref 0.0	00 dBm					M	lkr1 18.29 -51.	1 0 GHz 37 dBm	Auto Tu	une
-10.0									DL1 -13.00 dBm	Center F 15.000000000 (	
-20.0										Start F 10.000000000 (	
-40.0								1		Stop F 20.0000000000	
-60.0			nd Alban (1997) gang bang bat kawang pang makal 19 dan partak ganang pantakatan kabila pang padat	and a set of the set of						CF Si 1.000000000 ( <u>Auto</u>	
-80.0										Freq Off C	f <b>set</b> 0 Hz
-90.0 Start 10.0								Stop 20	0.000 GHz	Scale Ty	ype Lin
#Res BW			#VBW	3.0 MHz		s	weep	25.33 ms (2	20001 pts)		
MSG							ST	ATUS			

Plot 7-132. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-133. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

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	ight Spectr		er - Swep	it SA										
L <mark>XI</mark> RL		RF	<u>50 Ω</u>	AC	CORREC		SEN	ISE:INT	#Avg Typ	e: RMS		M Feb 16, 2018	Fr	requency
			N	IFE	PNO: F IFGain:	ast ⊶⊷ Low	Trig: Free Atten: 30				۳۲ ۱ <mark>/kr1 9.98</mark>			Auto Tune
10 dB/ Log	div	Ref 20.	.00 dl	Вm							-41.	92 dBm		
10.0														<b>Center Freq</b> 5000000 GHz
-10.0												DL1 -13.00 dBm	1.91	Start Freq 0000000 GHz
-20.0													10.00	<b>Stop Freq</b> 0000000 GHz
-40.0				<b>~</b> ~~		~	parter for participant					1	809 <u>Auto</u>	CF Step 9.000000 MHz Man
-50.0														Freq Offset 0 Hz
-70.0														Scale Type
	1.910 BW 1.					#\/R\//	3.0 MHz			ween	Stop 10 14.02 ms (1	.000 GHz	Log	Lin
MSG		0 101112				~~	5.0 10112		3		14.02 IIIS (1	o to t pisj		
		_	_											

Plot 7-134. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



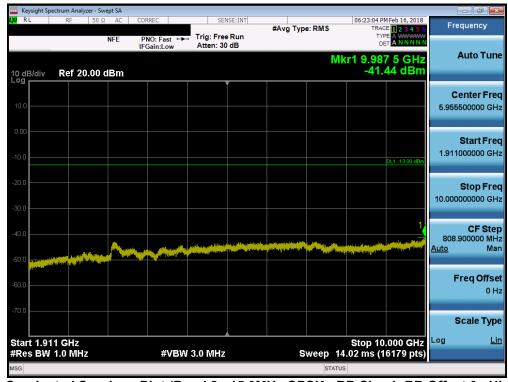
Plot 7-135. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ectrum Analyzer - S									
XU RL	RF 50	Ω AC	CORREC PNO: Fast ↔	Trig: Free		#Avg Typ	e: RMS	TRAC	E 1 2 3 4 5 6 E A WWWWW	Frequency
10 dB/div Log	Ref 20.00		IFGain:Low	Atten: 30	dB		Μ	kr1 1.68		Auto Tun
10.0										Center Fre 940.000000 MH
10.00									DL1 -13.00 dBm	Start Fre 30.000000 MH
-20.0										<b>Stop Fre</b> 1.85000000 GF
40.0						مر المراجع	d a site of the large		<b>↓</b> 1	CF Ste 182.000000 Mi <u>Auto</u> Mi
50.0	<del>Meningan endigenter (endi</del> ter	ing any second		an a fan straff fan sjon straff fan sjon sjon sjon sjon sjon	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Freq Offs 0 I
Start 0.03	300 GHz							Stop 1.8	500 GHz	Scale Typ Log <u>L</u>
≉Res BW	1.0 MHz		#VBW	/ 3.0 MHz				2.427 ms (	3641 pts)	
SG							STATU	15		

Plot 7-136. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-137. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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	ectrum Analyz	er - Swept SA						
LXU RL	RF	50 Ω AC	CORREC	SENSE:INT	#Avg Type: F	RMS TRAC	M Feb 16, 2018 E 1 2 3 4 5 6 PE A WWWWW T A NNNN	Frequency
10 dB/div	Ref 0.0	0 dBm	IFGain:Low	Atten: 10 dB		Mkr1 18.28		Auto Tune
-10.0							DL1 -13.00 dBm	Center Freq 15.000000000 GHz
-20.0								<b>Start Freq</b> 10.000000000 GHz
-40.0						1		<b>Stop Freq</b> 20.000000000 GHz
-60.0								<b>CF Step</b> 1.000000000 GHz <u>Auto</u> Mar
-80.0								Freq Offset 0 Hz
-90.0 Start 10.0						Stop 20	.000 0112	Scale Type
#Res BW	1.0 MHz		#VBW	3.0 MHz	Swe	ep 25.33 ms (2	0001 pts)	

Plot 7-138. Conducted Spurious Plot (Band 2 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

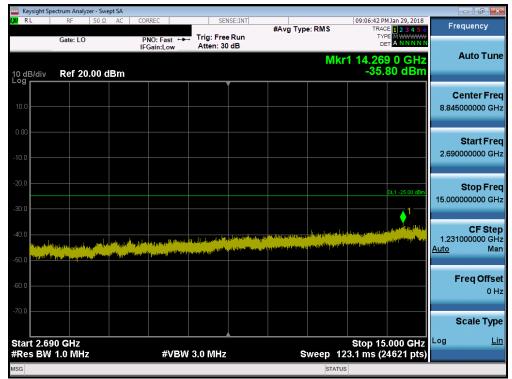
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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Band 41

	ectrum Analy.											
LXI RL	RF	50 Ω	AC CC	ORREC		SE:INT	#Avg Typ	e: RMS	TRAC	MJan 29, 2018 E 1 2 3 4 5 6	Fr	equency
	Gate: LO			PNO: Fast ↔ Gain:Low	Atten: 30				D			Auto Tune
10 dB/div Log	Ref 20	0.00 dE	3m					M	kr1 2.13 -43.	3 5 GHz 63 dBm		Auto Tune
												Center Fred
10.0											1.25	2500000 GH:
0.00												Start Free
-10.0											30	0.000000 MH:
-20.0												Stop Free
-30.0										DL1 -25.00 dBm	2.47	5000000 GH
									. 1			CF Step
-40.0	مرور المعطية	. I a Bakballos	autholes, <b>k</b> and a f	ha delse sugar solation (d. 19 page 19 page	وروبية والمحمد المحمد ال	an in factor that d	and aship a cost	de litter traditio		and the part of the second	244 <u>Auto</u>	1.500000 MH Mar
-50.0	Justicity ( , ed a	ant, a shi kati ta	addet scales	ىدىدە راغلىرى <u>، دەرۇرۇدە بىر</u>	ألاتقا الطنويتين بالغاري	becomen els el Den Dra						
-60.0												Freq Offse 0 Hi
-70.0												
												Scale Type
Start 0.03 #Res BW		z		#VBV	/ 3.0 MHz			Sweep	2 Stop 24.45 ms	.475 GHz 4891 pts)	Log	Lir
MSG								STATU				

Plot 7-139. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



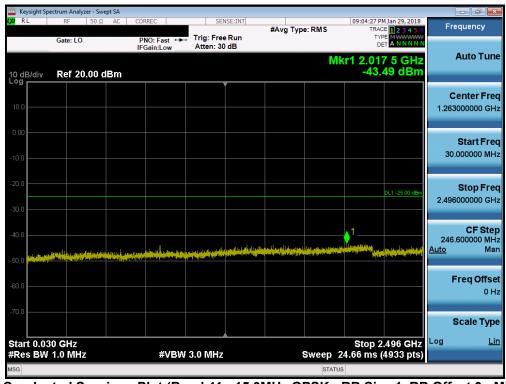
Plot 7-140. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

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	ectrum Analyz	er - Swept S	SA									_	
L <b>XI</b> RL	RF	50 Ω A		RREC	Tri	SEN:	SE:INT	#Avg Typ	e:RMS	TRA	PM Jan 29, 2018 CE 1 2 3 4 5 6	Fred	luency
	Gate: LO			NO: Fast Gain:Low		ten: 10							
10 dB/div Log	Ref 0.0	00 dBm	1						N	lkr1 25.85 -50	0 5 GHz .60 dBm	A	uto Tune
-10.0													<b>nter Freq</b> 00000 GHz
-20.0											DL1 -25.00 dBm		Start Freq 00000 GHz
-40.0										(International States and Sta			<b>Stop Freq</b> 00000 GHz
-60.0			ngan san ang ang ang ang ang ang ang ang ang a		menting digter for	الباني بين ميرين من	ماري المرومية (1931) (1944) المتحد (1945)	n a fransfera y tillin kompetitilingen at d		of the state of the state of a state of the		1.2000 <u>Auto</u>	CF Step 00000 GHz Man
-80.0												Fr	e <b>q Offse</b> 0 Hz
-90.0													cale Type
Start 15.0 #Res BW				#V	BW 3.0	MHz		s	weep	Stop 2 240.0 ms (	1000 0112	Log	Lin
MSG									_	ATUS			

Plot 7-141. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



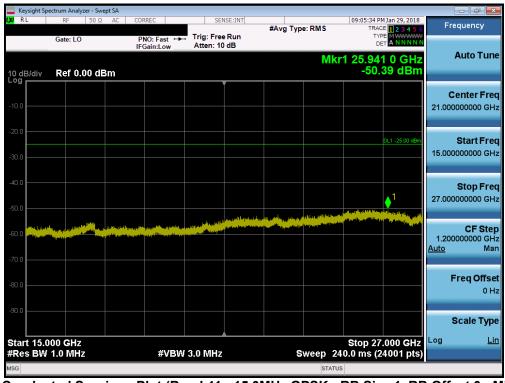
Plot 7-142. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ight Spectrum Ar		ot SA									×
LXI RL	RF	50 Ω	AC CO	RREC	SEN	ISE:INT	#Avg Typ	e: RMS		PM Jan 29, 2018 RACE 1 2 3 4 5 6	Frequency	
	Gate:	LO		NO:Fast ++- Gain:Low	Trig: Free Atten: 30		• •					
			11	Gam.Low	/titeli. oc	ub		М	kr1 14 2	84 0 GHz	Auto Tu	ine
10 dB/	div Ref	20.00 d	Bm						-3(	6.41 dBm		
Log					``````````````````````````````````````						Contor E	
10.0											Center Fi 8.845000000 G	
											0.040000000	
0.00												
											Start Fr 2.69000000 G	
-10.0											2.09000000	2
-20.0												
20.0										DL1 -25.00 dBm	Stop Fr 15.00000000 G	_
-30.0										1	13.000000000	2172
											CF St	an
-40.0	المحملة المحملة المحملة	r. dahara	and a solid state	A Start Property last	the management of	ففق والدرينية فرغنا	مند، مدل روانشند مر روا » 		angelikterengigtetet oorseletikeen oordete		1.231000000	θΗż
-50.0	aleren (1919) er sonn sonn sonn sonn sonn sonn sonn son	and also and the second	ألم ومالك المرا	A STREET STREET	Mund dia secular	فتريش وفتأك بالافتلاس			odined in toler and		<u>Auto</u> N	/lan
-30.0												
-60.0											Freq Off	set Hz
											0	ΠZ
-70.0											Coole Tu	
											Scale Ty	he
	2.690 GH								Stop '	15.000 GHz	Log	<u>Lin</u>
	BW 1.0 M	Hz		#VBW	3.0 MHz		s			(24621 pts)		
MSG								STA	105			

Plot 7-143. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



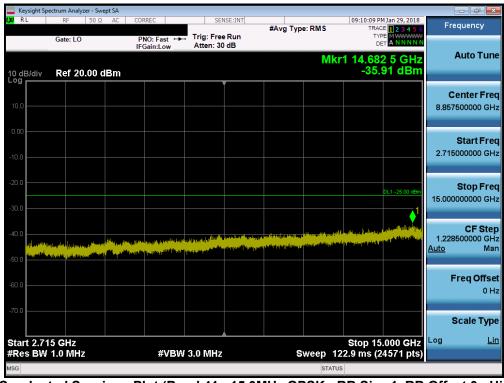
Plot 7-144. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ectrum Analyze	r - Swept SA										d X
LXU RL	RF	50 Ω AC	CORI	REC	SEI	NSE:INT	#Avg Typ	e: RMS		MJan 29, 2018 E <b>1 2 3 4 5 6</b>	Freque	ncy
	Gate: LO		PN IFG	O: Fast ↔ ain:Low	Trig: Free Atten: 30				TYP			
10 dB/div Log	Ref 20.0	00 dBm	ı					MI	(r1 2.04) -42.	9 0 GHz 63 dBm	Auto	o Tune
10.0											Cente 1.2630000	e <b>r Freq</b> 000 GHz
-10.0												<b>rt Freq</b> 000 MHz
-20.0										DL1 -25.00 dBm	<b>Sto</b> 2.4960000	<b>p Freq</b> 000 GHz
-40.0	ار الاردين الدين الدين الدين الدين الدين ال			internation as distantial of				ار مار میراند. مرکز این از میراند و روز این ا			246.6000 Auto	F Step 000 MHz Man
-60.0											Freq	<b>Offset</b> 0 Hz
-70.0												e Type Lin
Start 0.03 #Res BW				#VBV	/ 3.0 MHz			Sweep 2		.496 GHz 4933 pts)	_	<u>L</u>
MSG								STATUS				

Plot 7-145. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-146. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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	/sight Spectrur	n Analyze	r - Swep												
l <b>xi</b> Rl			50 Ω		CORREC	ast ⊶⊷		NSE:INT	#Avg Typ	e:RMS	0	TRAC	1 Jan 29, 2018 E 1 2 3 4 5 6 E M WWWWW	Fr	requency
	Ga	te: LO			IFGain:L		Atten: 1								Auto Tune
10 dE Log r	3/div <b>R</b>	ef 0.0(	0 dB	m						M	lkr1 2	25.378 -50.2	3 5 GHz 20 dBm		Auto Tune
								Ĭ						(	Center Freq
-10.0														21.00	0000000 GHz
-20.0													DL1 -25.00 dBm		Start Freq
-30.0														15.00	0000000 GHz
-40.0															
												▲1		27.00	Stop Freq 0000000 GHz
-50.0			H				nte site	out planator	allange still and street		lange an arrival	an agagar ^{dagan} an bar An an			
-60.0	and and a second se	and Marine Participation	And a	ala salatana Pilanahilana	ante ante ante ante a	angun kanggina Kanadalah part	Aller and a second s	ار از آنانهٔ مانسی خدرد ر ا	los satisfaciones das	a finis statis	. a specie				<b>CF Step</b> 0000000 GHz
-70.0														<u>Auto</u>	Man
-80.0															Freq Offset
															0 Hz
-90.0															Scale Type
	t 15.000										s	top 27		Log	Lin
	s BW 1.0	MHz			\$	¢VB₩	3.0 MHz		8	weep	240.0	) ms (2	4001 pts)		
MSG										ST	ATUS				

Plot 7-147. Conducted Spurious Plot (Band 41 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

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## 7.4 Band Edge Emissions at Antenna Terminal

#### **Test Overview**

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

# The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P_{[Watts]})$ , where P is the transmitter power in Watts.

The minimum permissible attenuation level for Band 41 is as noted in the Test Notes on the following page.

#### Test Procedure Used

KDB 971168 D01 v03 - Section 6.0

#### **Test Settings**

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- 4. VBW <u>></u> 3 x RBW
- 5. Detector = RMS
- 6. Number of sweep points  $\geq 2 \times \text{Span/RBW}$
- 7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize

#### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

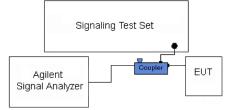


Figure 7-3. Test Instrument & Measurement Setup

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#### Test Notes

Per 22.917(b) 24.238(a) 27.53(h) RSS-130(4.6) RSS-132(5.5) RSS-133(6.5) RSS-139(6.5) RSS-199(4.5) in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

Per 27.53(g) RSS-130(4.6) for operations in the 698-746 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

Per 27.53(c)(5) for operations in the 776-788 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

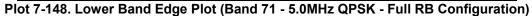
For all plots showing emissions in the 763 - 775MHz and 793 - 805MHz band, the FCC limit per 27.53(c)(4) is  $65 + 10log_{10}(P) = -35dBm$  in a 6.25kHz bandwidth.

Per 27.53(m) RSS-199(4.5) for operations in the BRS/EBS bands, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.

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RL	RF		AC	CORREC			SENSE	:INT			10:05:4	1 PM Feb 20, 2018	_	
						Tria	: Free R		#Avg Typ	e:RMS	т	RACE 1 2 3 4 5 6 TYPE A WWWW	ŀ	requency
		NE	FE	PNO: N IFGain	Nide ↔ :Low		n: 36 d					DET A NNNNN		
										M	kr1 662	.936 MHz		Auto Tur
) dB/div	Ref 25.	.00 dE	3m								-2	5.18 dBm		
° ^g														
														Center Fre
5.0													66	3.000000 MI
5.00														
								- m	or many and the	- Charly Marker	and the state of the	$\sim$		Start Fre
													65	9.000000 MI
5.0												DL1 -13.00 dBm		
							I	1						Stop Fre
15.0								کر					66	57.00000 IVI
				-	and a seal of the	mmm								
IS.0		and when the server	**********	~										CF Ste 800.000 ki
men	and the second												Auto	800.000 ki
5.0														
														Freq Offs
i5.0														01
														01
i5.0														0
														Scale Typ
enter 6	63.000 M	Hz					_				Spar	8.000 MHz	Log	L
	100 kHz				#VBV	/ 300	kHz			Sweep	4.000 m	s (1001 pts)		
G										STAT				

Plot 7-150. Lower Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-151. Upper Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 09 of 225
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	ectrum Analy													
X/RL	RF		AC	CORREC	Vide ↔		SENSE:INT	#A	уд Тур	e: RMS	т	0 PM Feb 20, 2018 RACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	F	requency
10 dB/div	Ref 25	i.00 dl	Bm	IFGain:	Low	Atte	n: 36 dB			M		.000 MHz .675 dBm		Auto Tun
15.0														Center Fre 8.000000 M⊦
5.00									~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		ng man and a start and a start	DL1 -13.00 dBm	657	<b>Start Fre</b> .000000 MH
25.0						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1						669	Stop Fre
35.0 45.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mm	p. M. M	~~~~ 	/								<u>Auto</u>	CF Ste 200000 MH Ma
55.0														Freq Offs 0 I
65.0 Center 66	3.000 N	IHz			40 ( <b>P</b> ) (	470					Spar	12.00 MHz		Scale Typ
Res BW	150 KH2				#VBW	4701	(FIZ			Sweep		s (1001 pts)		

Plot 7-152. Lower Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-153. Upper Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 00 of 225
1M1803050033-03-R1.ZNF	1/29/2018-3/30/2018	Portable Handset		Page 99 of 225
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Keysight Spectrum A	50 Ω AC	CORREC	SENSE:INT		10:14:49 PM Feb 20, 2018	
	NFE	PNO: Wide	Trig: Free Run Atten: 36 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N	Frequency
0 dB/div Ref	25.00 dBm	II Guilleow		M	kr1 663.000 MHz -26.040 dBm	Auto Tur
15.0						Center Fre 663.000000 MH
5.00				more and the second	DL1 -13.00 dBm	<b>Start Fre</b> 655.000000 Mi
25.0			1 mm			<b>Stop Fro</b> 671.000000 Mi
45.0	and the second second	- Martin Martin				<b>CF Ste</b> 1.600000 MI <u>Auto</u> Mi
55.0 mar and a start and a start						Freq Offs 0
65.0						Scale Typ
enter 663.000 Res BW 200 I		#VBW	20 kHz	Sweep	Span 16.00 MHz 1.000 ms (1001 pts)	Log <u>L</u>

Plot 7-154. Lower Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)



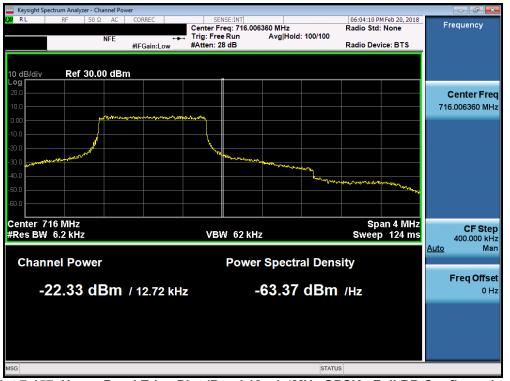
Plot 7-155. Upper Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 100 of 225
1M1803050033-03-R1.ZNF	1/29/2018-3/30/2018	Portable Handset		Page 100 of 225
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Plot 7-156. Lower Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)



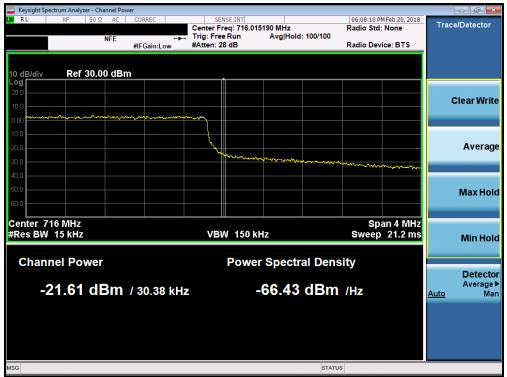
Plot 7-157. Upper Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 101 of 225
1M1803050033-03-R1.ZNF	1/29/2018-3/30/2018	Portable Handset		Page 101 of 225
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K RL	pectrum Analyz RF	50 Ω AC	CORREC	SENSE:INT		06:07:26 PM Feb 20, 2018	
		NFE	PNO: Wide ↔	Trig: Free Run	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Frequency
			IFGain:Low	Atten: 36 dB	MI	(r1 697.964 MHz	Auto Tun
0 dB/div	Ref 25	.00 dBm				-24.25 dBm	
.09							Center Fre
15.0							698.000000 MH
5.00					ļ,		
							Start Fre 696.000000 MH
5.00							090.000000 MIP
15.0						DL1 -13.00 dBm	Stop Fre
.25.0					monorman		700.000000 MH
25.0	سمسم	man	www.				
35.0	man						CF Ste 400.000 kł
45.0							<u>Auto</u> Ma
							Freq Offs
55.0							01
65.0							
							Scale Typ
	98.000 M			· · · · · · · · · · · · · · · · · · ·		Span 4.000 MHz	Log <u>L</u>
Res BW	/ 100 kHz		#VBV	V 300 kHz	Sweep	2.000 ms (1001 pts)	

Plot 7-158. Lower Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-159. Upper Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 102 of 225
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	RF 50 Ω AC NFE ef 25.00 dBm	CORREC PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB	#Avg Type		TRAC TYP DE 1 697.9	96 MHz 91 dBm		uency uto Tune
Log		IFGain:Low			Mkr	DE 1 697.9	96 MHz	A	uto Tune
Log	er 25.00 dBm		Ĭ						
									nter Fre
-5.00							mann		tart Fre
-15.0			1	and the second and the second s	mark		DL1 -13.00 dBm		<b>top Fre</b> 00000 МН
-25.0 		www.how	and for the constraint of the second of the					40 <u>Auto</u>	CF Ste 00.000 kH Ma
55.0								Fr	e <b>q Offs</b> 0 F
									ale Typ
Center 698.0 #Res BW 100		#VBW	300 kHz	5	Sweep 2.		.000 MHz 1001 pts)	Log	Li

Plot 7-160. Lower Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-161. Upper Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 102 of 225	
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Keysight Spectrum Analyz						
XV RL RF	50 Ω AC NFE	CORREC PNO: Wide ↔	SENSE:INT Trig: Free Run Atten: 36 dB	#Avg Type: RMS	06:24:13 PM Feb 20, 2018 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Frequency
10 dB/div Ref 25	.00 dBm	IFGain:Low	Atten: 36 dB	MI	kr1 697.680 MHz -25.94 dBm	Auto Tun
15.0						Center Fre 698.000000 M⊦
5.00					<del>ეკელი "კელი კა </del>	Start Fre 694.000000 M⊦
-15.0			1 where the second second	www.and		Stop Fre 702.000000 M⊦
35.0 45.0						CF Ste 800.000 kH <u>Auto</u> Ma
55.0						Freq Offs 0 I
65.0						Scale Typ
Center 698.000 M #Res BW 100 kHz		#VBW	300 kHz	Sweep	Span 8.000 MHz 4.000 ms (1001 pts)	
ISG				STAT	US	

Plot 7-162. Lower Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-163. Upper Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:		Daga 104 of 225	
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RL RI	Analyzer - Swept SA           F         50 Ω         AC	CORREC	SENSE:INT		06:39:20 PM Feb 20, 2018	
	NFE	PNO: Wide ↔ IFGain:Low	Trig: Free Run Atten: 36 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N	Frequency
0 dB/div Re	f 25.00 dBm			Mł	(r1 776.996 MHz -18.74 dBm	Auto Tur
15.0				an and the second	-American and a second	Center Fre 777.000000 MF
5.00						<b>Start Fre</b> 775.000000 MH
15.0	mennether	the the second	man and		DL1 -13.00 dBm	Stop Fre 779.000000 Mi
15.0						<b>CF Ste</b> 400.000 kł <u>Auto</u> Ma
5.0						Freq Offs 0 I
65.0						Scale Typ
enter 777.00 Res BW 100		#VBW	300 kHz	Sweep	Span 4.000 MHz 2.000 ms (1001 pts)	Log <u>L</u>

Plot 7-164. Lower Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



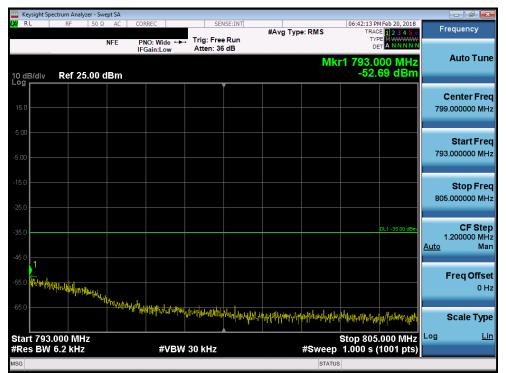
Plot 7-165. Lower Emission Mask Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 105 of 225
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	Spectrum Analy	zer - Swept S/	4									- 6 💌
XI RL	RF	50 Ω Α	PNO:	Wide ++-	Trig: Fre		#Avg Typ	e:RMS	TRACE	Feb 20, 2018 1 2 3 4 5 6 A WWWWW A N N N N N	Fr	equency
10 dB/div	Ref 25	5.00 dBn		n:Low	Atten: 36	αB		Mk	r1 787.0			Auto Tun
15.0	M. Jana Markan	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							Center Fre 0000000 MH
5.00											785	Start Fre .000000 M⊦
-15.0						1-	www.	Nan war and a star		0L1 -13.00 dBm	789	Stop Fre .000000 M⊦
45.0											<u>Auto</u>	CF Ste 400.000 kH Ma
55.0												F <b>req Offs</b> 0 F
	787.000 N								Span 4.	000 1911 12	Log	Scale Typ
	N 100 kHz	z		#VBW	300 kHz				2.000 ms (1	1001 pts)		
SG								STATU	S			

Plot 7-166. Upper Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



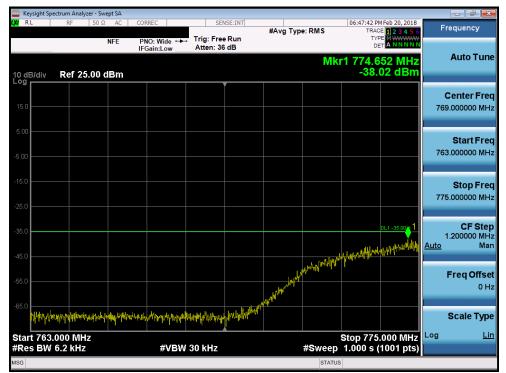
Plot 7-167. Upper Emission Mask (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:		Daga 106 of 225
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	pectrum Analyze									
L <mark>XI</mark> RL	RF	50 Ω AC	CORREC	SENSE		#Avg Type	e: RMS	06:47:32 PM Feb 20, 2 TRACE 1 2 3	5 6	Frequency
		NFE	PNO: Wide +++	Trig: Free R Atten: 36 di				DET A WWA		
10 dB/div Log	Ref 25.	00 dBm					Mk	r1 777.000 M -24.266 dB	Hz Bm	Auto Tune
				Ĭ						Center Free
15.0										777.000000 MH
5.00					- مراجع م		Colorado Autor	Man gardes for the second	-	
										Start Fre 773.000000 MH
-5.00										110.000000 1111
-15.0								DL1 -13.00	citim	Stop Fre
-25.0					4 ^{JI}					781.000000 MH
	ray almost almost and	and norm	Anapatronicity for the	March Margaret						
-35.0	and a second									<b>CF Ste</b> 800.000 kH
-45.0									Au	i <u>to</u> Ma
										Freq Offse
-55.0										он
-65.0										
										Scale Typ
	77.000 MH / 100 kHz	lz	#\/B\M	300 kHz			Sween_/	Span 8.000 M .000 ms (1001 p	IHZ Lo	g <u>Li</u>
ARCES DW			#VDVV	300 KHZ			Sweep 4		nsj	

Plot 7-168. Lower Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-169. Lower Emission Mask (Band 13 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 107 of 225
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		zer - Swept SA				1					
LXI RL	RF	50 Ω AC	CORREC		NSE:INT	#Avg Typ	e: RMS	TRAC	4Feb 20, 2018 E 1 2 3 4 5 6	F	requency
		NFE	PNO: Wide ↔ IFGain:Low	Atten: 36				DE			
10 dB/div	Ref 2	5.00 dBm					Mk	r1 787.0 -22.	48 MHz 34 dBm		Auto Tune
					Í						Center Fre
15.0										78	7.000000 MH
5.00	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	ahow-chyman	and the state of the second	and the second se							
										70	Start Free 3.000000 MH
-5.00										70.	5.000000 MIH
-15.0				+	. 1				DL1 -13.00 dBm		Stop Fre
-25.0				lingh	Manyanta					79	1.000000 MH
-20.0					سايداني	CANY VAN AN AN AD	Mrt.Alexan	Jone marken way	water		
-35.0											CF Ste 800.000 kH
-45.0										<u>Auto</u>	Ma
											Freq Offse
-55.0											он
-65.0											
											Scale Typ
Center 78 #Res BW			#\/B\/	/ 300 kHz			Swoon	Span 8	000 10112	Log	Li
	TUU KH	2	#VBV	9 300 KHZ			Sweep 2	4.000 ms (	roo r pts)		

Plot 7-170. Upper Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

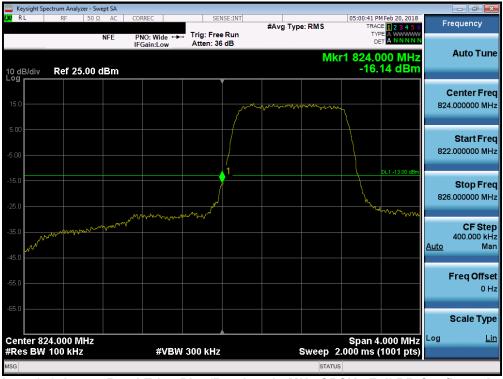


Plot 7-171. Upper Emission Mask (Band 13 - 10.0MHz QPSK - Full RB Configuration)

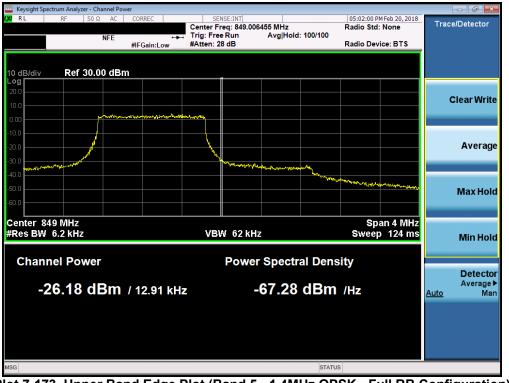
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 109 of 225
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## Band 5



Plot 7-172. Lower Band Edge Plot (Band 5 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-173. Upper Band Edge Plot (Band 5 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 225
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RL	ectrum Analyze RF	50 Ω AC		с	SEI	NSE:INT			05:09:22 P	M Feb 20, 2018		
		NFE		Wide ↔			#Avg Typ	e: RMS	TRAC	DE 1 2 3 4 5 6 PE A WWWW ET A NNNNN	F	requency
			IFGai	n:Low	Atten: 36	dB						A
0 dB/div	Ref 25.	00 dBm	1					Mk	r1 824.0 -21.1	00 MHz 90 dBm		Auto Tur
°g												Center Fre
15.0												4.000000 MI
						Normale	non	Azaran Ma	mmm	por al and		1.000000
5.00												Start Fr
											82	2.000000 M
										DL1 -13.00 dBm		
5.0					-	<b>i</b> 1						Stop Fr
5.0					ļ						82	6.000000 M
	man	martun	mm	mhant	am M							CF St
s.u <b>-</b>												400.000 k
5.0											<u>Auto</u>	м
i5.0												Freq Offs 0
												U
i5.0												
												Scale Ty
	4.000 MI	lz							Span 4	1000 191112	Log	l
Res BW	100 kHz			#VBW	/ 300 kHz			Sweep 2	2.000 ms (	(1001 pts)		
G								STATU	s			

Plot 7-174. Lower Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-175. Upper Band Edge Plot (Band 5 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ectrum Analyze										
LXI RL	RF	50 Ω AC	CORREC		ISE:INT	#Avg Typ	e: RMS	TRAC	HFeb 20, 2018	Fr	equency
		NFE	PNO: Wide ↔ IFGain:Low	Trig: Free Atten: 36							
10 dB/div Log	Ref 25.	00 dBm					Mk	r1 824.0 -21.8	00 MHz 01 dBm		Auto Tune
15.0											Center Free 1.000000 MH
-5.00						er frank av frank.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			822	Start Fre
-15.0					1				DL1 -13.00 dBm	826	Stop Fre 5.000000 MH
35.0 <u>~~~</u> ~~	un and	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ay waaraa waa	V						<u>Auto</u>	CF Ste 400.000 kH Ma
55.0											Freq Offso 0 ⊦
-65.0											Scale Typ
Center 82 #Res BW			#VBW	/ 300 kHz			Sweep 2	Span 4 .000 ms (	.000 MHz 1001 pts)	Log	Li
MSG							STATUS				

Plot 7-176. Lower Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-177. Upper Band Edge Plot (Band 5 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	💽 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 111 of 225
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	pectrum Anal												
XU RL	RF	50 Ω	AC	CORREC	/ide ↔			#Avg Ty	pe: RMS	TRAC	M Feb 20, 2018 CE 1 2 3 4 5 6 PE A WWWWW ET A N N N N N	F	requency
10 dB/div	Ref 2	5.00 d	Bm	IFGain:	Low	Atten: 5			M	(r1 823.9			Auto Tun
15.0													Center Fre 1.000000 M⊦
5.00								and and the state of the state	Develou-+you-yo	ay and a second s	DL1 -13.00 dBm	820	Start Fre
25.0							1					828	Stop Fre
35.0 <b></b>	᠕᠇ᠬᠴᡁᡊᢇᡘᡗ <del>᠆</del>	after the test	كأهرمهاهم	لاروان مرجعهم	Web-pathology	space of the of						<u>Auto</u>	CF Ste 800.000 kl M
5.0													Freq Offs 01
	24.000 I / 100 kH				#\/D\\/	300 kHz				Span 8	.000 10112		Scale Typ
	TUU KH	2			#VBW	JUU KHZ			Sweep	4.000 ms (	(TOUT pts)		

Plot 7-178. Lower Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)



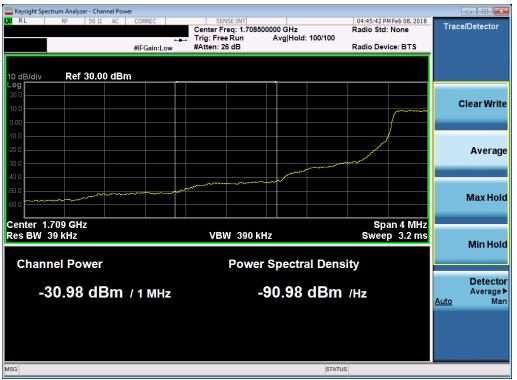
Plot 7-179. Upper Band Edge Plot (Band 5 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 110 of 225
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Plot 7-180. Lower Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-181. Lower Extended Band Edge Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

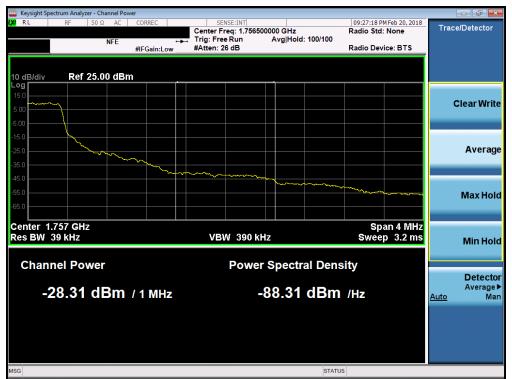
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 112 of 225
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Plot 7-182. Upper Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)



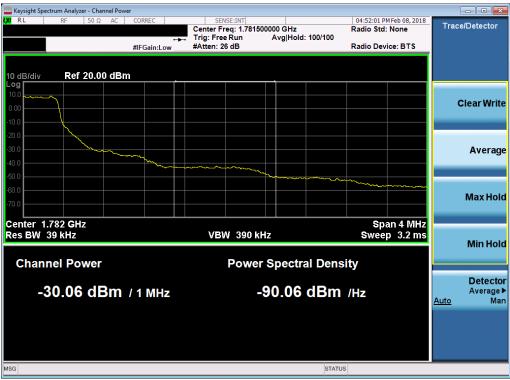
Plot 7-183. Upper Extended Band Edge Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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Plot 7-184. Upper Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)



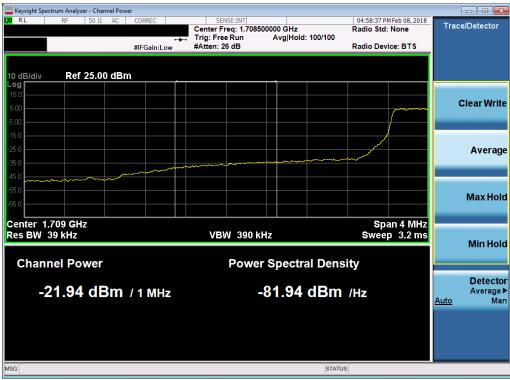
Plot 7-185. Upper Extended Band Edge Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Keysight Spec	RF	er - Swep 50 Ω	AC	CORREC	SEA.	SE:INT			04-58-00 0	M Feb 08, 2018	_	
	NF	0 32	AC	PNO: Wide ↔			#Avg Typ	e: RMS	TRAC	E 1 2 3 4 5 6	F	requency
				IFGain:Low	Atten: 36				DI			
I0 dB/div	Ref 25	i.00 d	Bm					Mk	r1 1.710 ( -22.9	00 GHz 29 dBm		Auto Tun
- ^{og}						Ť						
15.0												Center Fre
15.0											1.71	0000000 GH
5.00												
3.00						prov	mm	hum	www.ww	m		Start Fre
5.00											1.70	8000000 GH
15.0										DL1 -13.00 dBm		
						1						Stop Fre
25.0					ļ ŗ	<u>^</u>					1.71	2000000 GH
35.0	mm	m	-	mmm	-							CF Ste
h	2- 4-0-V										Auto	400.000 kH Ma
45.0											Auto	IVIC
												_
55.0												Freq Offs
												0 F
65.0												
												Scale Typ
Center 1.7		GHz								.000 MHz	Log	L
Res BW	30 kHz			#VB\	N 91 kHz			Sweep	5.533 ms (	1001 pts)	Log	
SG								STAT	rus			

Plot 7-186. Lower Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-187. Lower Extended Band Edge Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	Spectrum Analy										
X/RL	RF	50 Ω AC	CORREC	Trig: Free		#Avg Typ	e: RMS	09:18:06 PM Fe TRACE TYPE	eb 20, 2018 <b>1 2 3 4 5 6</b> A WWWWW A N N N N N	Fre	equency
10 dB/div Log	Ref 25	5.00 dBm	IFGain:Low	Atten: 36	dB		Mkr1	1.755 00 -22.900	0 GHz		Auto Tun
15.0											enter Fre 000000 GH
5.00	~~~~~									1.753	<b>Start Fre</b> 000000 G⊦
-15.0					1				1 -13.00 dBm	1.757	Stop Fre 000000 G⊦
-35.0						~~~~		······	va.	<u>Auto</u>	<b>CF Ste</b> 400.000 k⊢ Ma
55.0										F	req Offso 0 ⊦
-65.0											Scale Typ
	1.755000 W 30 kHz	GHz	#VBV	√ 91 kHz			Sweep 2	Span 4.0 2.000 ms (10	VV IVII 12	Log	Li
ISG							STATU	s			

Plot 7-188. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)



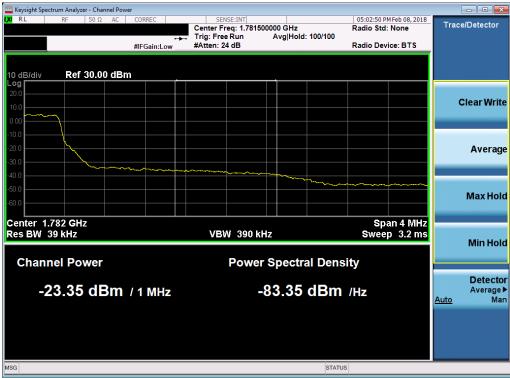
Plot 7-189. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 117 of 225
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RL	ectrum Analy RF	50 Ω		CORREC		SE	NSE:INT			05:02:41 P	M Feb 08, 2018	_	
it to	N	1 20 35	AC		lide ↔→ _ow	Trig: Fre Atten: 3	e Run	#Avg Тур	e:RMS	TRAC	DE 1 2 3 4 5 6 PE A WWWW ET A NNNNN	Fr	equency
) dB/div	Ref 2	5.00 d	Bm						Mkr	1 1.780 ( -24.1	000 GHz 31 dBm		Auto Tur
5.0													Center Fro
.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www	mm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							DL1 -13.00 dBm	1.77	<b>Start Fr</b> 8000000 G
5.0						t \	1					1.78	<b>Stop Fr</b> 2000000 G
5.0								- www.ww	······································			<u>Auto</u>	CF St 400.000 k M
5.0												1	F <b>req Offs</b> 0
	.780000 30 kHz				#\/B\M	91 kHz			Sween	Span 4	I.000 MHz (1001 pts)		Scale Tyj

Plot 7-190. Upper Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



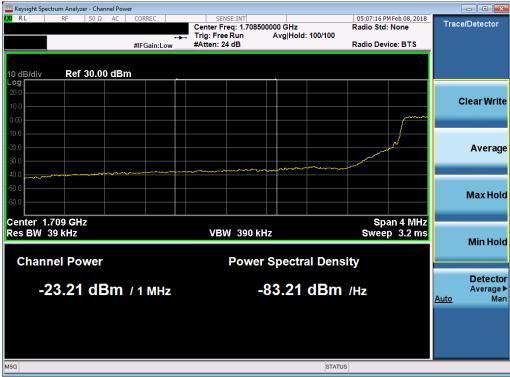
Plot 7-191. Upper Extended Band Edge Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 118 of 225
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	ectrum Analyz											_	
RL	RF	50 Ω	AC		ide ↔	Trig: Fre		#Avg Ty	pe: RMS	TRAC	M Feb 08, 2018 CE 1 2 3 4 5 6 PE A WWWW T A N N N N N	F	requency
0 dB/div	Ref 25	i.00 dl	Bm	IFGain:I	_OW	Atten: 36	6 dB		Mkı	1 1.710 (			Auto Tun
15.0													Center Fre
5.00									·····		DL1 -13.00 dBm	1.70	<b>Start Fre</b> 8000000 GI
5.0						(	1,~1					1.71	<b>Stop Fr</b> 2000000 G
5.0	~~~~	~~~~	~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							<u>Auto</u>	CF St 400.000 k M
5.0													Freq Offs 0
enter 1	.710000 / 51 kHz	GHz			#VBW	160 kHz			Sween	Span 4 1.933 ms (	.000 MHz		Scale Ty
												-	

Plot 7-192. Lower Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



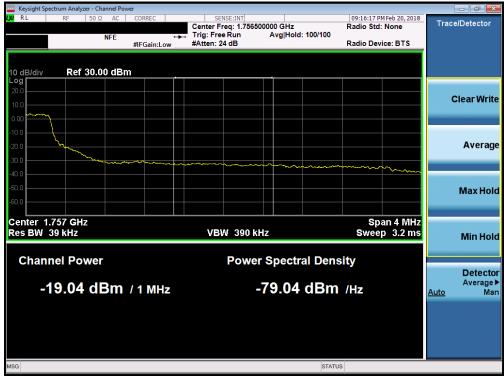
Plot 7-193. Lower Extended Band Edge Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of 225
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	Spectrum Analy							
XI RL	RF	50 Ω AC NFE	CORREC PNO: Wide ↔	Trig: Free	Run	vg Type: RMS	09:15:55 PM Feb 20, 2018 TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N	Frequency
10 dB/div	Ref 25	.00 dBm	IFGain:Low	Atten: 36 d	18	Mkr	1 1.755 008 GHz -20.69 dBm	Auto Tun
15.0								Center Fre 1.755000000 GH
5.00 <u>~</u> ~ 5.00 <u>-</u>	<u>~~~~~~~~</u> ^	~~~~~^^	- - - - - - - - - - - - - - - - - - -				DL1 -13.00 dBm	Start Fre 1.753000000 GH
25.0				- Conne	1			<b>Stop Fre</b> 1.757000000 GF
35.0							m. Marine	CF Ste 400.000 kł <u>Auto</u> Ma
55.0								Freq Offs 0 F
65.0								Scale Typ
	1.755000 W 62 kHz	GHz	#VBV	V 180 kHz		Sweep	Span 4.000 MHz 2.000 ms (1001 pts)	Log <u>L</u>
ISG						STAT		

Plot 7-194. Upper Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)



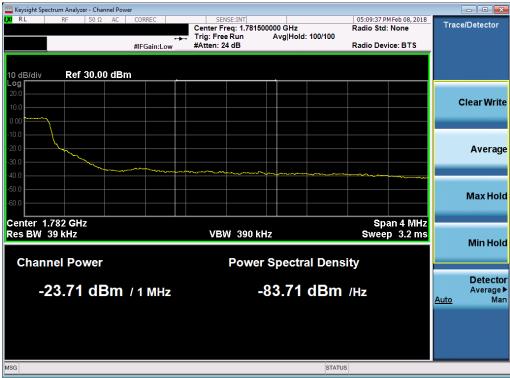
Plot 7-195. Upper Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 225
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RL	RF	50 Ω	AC	CORREC		SEM	SE:INT			05:09:31 P	M Feb 08, 2018	_	
				PNO: W IFGain:	lide ↔ _ow	Trig: Fre Atten: 36		#Avg Typ	e: RMS	TRA	DE 1 2 3 4 5 6 PE A WWWW A N N N N N	Fr	equency
) dB/div	Ref 2	5.00 d	Bm						Mkr	1 1.780 ( -23.1	)00 GHz 75 dBm		Auto Tur
5.0													Center Fr 0000000 G
.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u> </u>		~~~						DL1 -13.00 dBm	1.77	<b>Start Fr</b> 8000000 G
5.0						hy	1					1.78	<b>Stop Fr</b> 2000000 G
5.0										~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<u>Auto</u>	CF St 400.000 k M
5.0													Freq Offs 0
	.780000 / 51 kHz				#VBM	160 kHz			Sween	Span 4 1.933 ms	.000 MHz		Scale Ty

Plot 7-196. Upper Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)



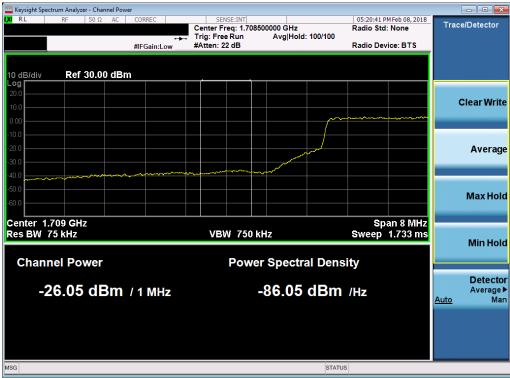
Plot 7-197. Upper Extended Band Edge Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
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Keysight Sp RL	ectrum Analy RF			CORREC		05	NCLANT			05-00-00	DM E-b 00, 2010	_	
KL	RF	50 Ω	AC	CORREC		SE	NSE:INT	#Avg T	ype: RMS	TRA	PM Feb 08, 2018 CE 1 2 3 4 5 6	F	requency
	_			PNO: V IFGain	Vide 🔸	Trig: Fre Atten: 3		_		T` [			
									Mk	r1 1.710	000 GHz		Auto Tun
0 dB/div og r	Ref 2	5.00 dl	Bm							-23.3	505 dBm		
Ŭ							Ĭ						Center Fre
15.0													0000000 GF
5.00								~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
													Start Fre
5.00												1.70	6000000 GI
											DL1 -13.00 dBm		
5.0							1 ~						Stop Fre
25.0							<b>2</b> . <i>N</i>					1.71	4000000 GI
29.0						کم							
35.0					~ ~ ~								CF Ste
$\sim$	$\sim$	~~~~	$\sim\sim\sim$	~~~ -	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and the							800.000 kl
15.0												<u>Auto</u>	M
5.0													Freq Offs
													0
5.0													
													Scale Typ
enter 1	.710000	GHz					A			Span	8.000 MHz		
	100 kH				#VBW	300 kHz	4		Sweep	1.000 ms	(1001 pts)	Log	L
SG									STAT	rus			

Plot 7-198. Lower Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-199. Lower Extended Band Edge Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	Spectrum Anal												
U RL	RF	50 Ω A	E F	DRREC		Trig: Fre		#Avg Typ	e: RMS	TRA	PM Feb 20, 2018 CE 1 2 3 4 5 6 PE A WWWWW DET A NNNNN	Fr	equency
0 dB/div	Ref 2	5.00 dBi		FGain:Lo	W	Atten: 3	6 dB		Mkr	1.755	016 GHz 76 dBm		Auto Tun
15.0													<b>Center Fre</b> 5000000 G⊦
5.00 +**** 5.00	~~where he we have		, المرابع المرابع	C Datestory	, , , , , , , , , , , , , , , , , , ,							1.75	<b>Start Fre</b> 1000000 Gi
25.0						low of the second secon	1				DL1 -13.00 dBm	1.75	<b>Stop Fre</b> 9000000 GI
35.0							بهميمو	Berly marked and the	and and a second se	- Margarage An	- and Radian growthe	<u>Auto</u>	<b>CF Ste</b> 800.000 kl M
i5.0												ľ	F <b>req Offs</b> 0
65.0													Scale Ty
enter 1 Res BV	I.755000 V 100 kH	GHz z		#	VBW	300 kHz	2		Sweep 4	Span 8 4.000 ms	3.000 MHz (1001 pts)	Log	Ŀ
SG									STATU	s			

Plot 7-200. Upper Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-201. Upper Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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RL RF	lyzer - Swept SA 50 Ω AC	CORREC	SEN	SE:INT			05:22:04 P	M Feb 08, 2018	_	
		PNO: Wide ↔ IFGain:Low		Run	#Avg Typ	e: RMS	TRAC	DE 1 2 3 4 5 6 DE A WWWWW T A N N N N N	Fr	equency
dB/div Ref	25.00 dBm					Mkr	1 1.780 ( -23.	08 GHz 61 dBm		Auto Tui
5.0										Center Fr 0000000 G
.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						DL1 -13.00 dBm	1.77	<b>Start Fr</b> 6000000 G
5.0			hy	1					1.78	<b>Stop Fr</b> 4000000 G
5.0				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			~~~~~	<u>Auto</u>	CF St 800.000 k N
5.0										Freq Offs 0
enter 1.78000	0 GHz						Span 8	.000 MHz		Scale Ty

Plot 7-202. Upper Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-203. Upper Extended Band Edge Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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	ectrum Analyz			000055			NOTITI			05-06-55		_	
RL	RF	50 Ω	AC	CORREC	/ide ↔►		NSE:INT	#Avg	Type: RMS	TRA	M Feb 08, 2018 CE 1 2 3 4 5 6 PE A WWWW ET A N N N N N	Fr	equency
				IFGain:		Atten: 3	6 dB						A
) dB/div	Ref 25	5.00 dl	Bm						Mk	r1 1.710 ( -25.3	000 GHz 63 dBm		Auto Tur
							Ĭ						Center Fre
5.0													0000000 GH
5.00								<u> </u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Start Fr
												1 70	4000000 GI
5.0											DL1 -13.00 dBm		
							کر 1					1 71	Stop Fr 6000000 G
25.0						<u>بر</u>						1.7	
i5.0													CF Ste
كمبر	m	~ Voca	سم سر م		where a	~~~~							.200000 M
15.0		- 0- 00										<u>Auto</u>	М
5.0													Freq Offs 0
i5.0													0
optor 1	.710000	CH-7									12.00 MHz		Scale Ty
	/ 10000 / 150 kH				#VBW	470 kHz			Sweep	span 1.000 ms	12.00 MHz (1001 pts)	Log	L
G									STAT				

Plot 7-204. Lower Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



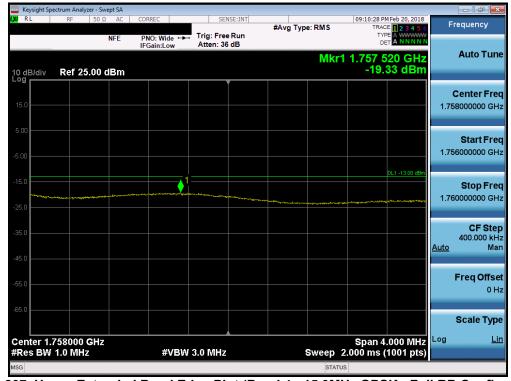
Plot 7-205. Lower Extended Band Edge Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
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		zer - Swept SA									
LXU RL	RF	50 Ω AC	CORREC		ISE:INT	#Avg Typ	e: RMS	TRA	CE 1 2 3 4 5 6	Frequ	iency
		NFE	PNO: Wide ++ IFGain:Low	Trig: Free Atten: 36				C			
10 dB/div Log	Ref 2	5.00 dBm					Mkr1	1.755 -21.3	000 GHz 47 dBm	AL	ito Tuni
15.0											<b>iter Fre</b> 0000 GH
5.00	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	un and a second							<b>Si</b> 1.74900	t <b>art Fre</b> 0000 GH
-15.0				h	1				DL1 -13.00 dBm	<b>S</b> 1 1.76100	t <b>op Fre</b> 0000 G⊦
-35.0								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-		CF Ste 0000 M⊢ Ma
-55.0										Fre	e <b>q Offs</b> o 0 ⊦
-65.0											ale Typ
Center 1 #Res BW			#VBW	470 kHz			Sweep 1	′ Span ۱.000 ms	12.00 MHz (1001 pts)	Log	Li
ISG							STATU	S			

Plot 7-206. Upper Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-207. Upper Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
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	pectrum Analyzer - S										
L <mark>XI</mark> RL	RF 50	Ω AC	CORREC		ISE:INT	#Avg Typ	e: RMS	TRAC	M Feb 08, 2018 E 1 2 3 4 5 6 E A WWWWW	F	requency
			PNO: Wide ↔ IFGain:Low	Atten: 36				DI			A
10 dB/div Log	Ref 25.00	0 dBm					Mkr	1 1.780 0 -23.	12 GHz 98 dBm		Auto Tune
										(	Center Fred
15.0										1.78	0000000 GH:
5.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mm	where we have the second sec	~~~ <u>~</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							
-5.00										1.77	Start Free 4000000 GH
									DL1 -13.00 dBm		
-15.0				m	1						Stop Fre
-25.0					and the second s					1.78	6000000 GH
-35.0					- www	m	and and a start and a start a	1 mm	Many		CF Ste
-45.0										Auto	.200000 MH Ma
-55.0											Freq Offse 0 H
-65.0											
											Scale Type
	I.780000 GH V 150 kHz	Z	#VBW	/ 470 kHz			Sweep	Span 1 1.000 ms (	2.00 MHz 1001 pts)	Log	Lir
MSG							STATU	s			

Plot 7-208. Upper Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)



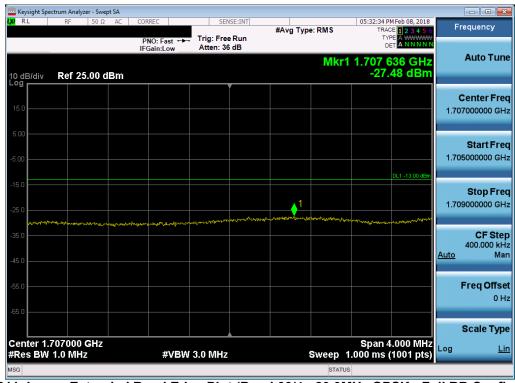
Plot 7-209. Upper Extended Band Edge Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager	
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Keysight Spe												
RL	RF	50 Ω	AC	CORREC		e Run	#Avg Typ	e: RMS	TRA	M Feb 08, 2018 CE 1 2 3 4 5 6 PE A WWWWW ET A N N N N N	Fre	equency
				IFGain:Low	Atten: 36	6 dB						A
0 dB/div	Ref 25	i.00 dE	3m					Mkı	1 1.710 ( -26.6	000 GHz 86 dBm		Auto Tur
											c	enter Fre
15.0												000000 GH
5.00						~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m		Start Fr
5.00											1.702	000000 G
										DL1 -13.00 dBm		
5.0										DET -13.00 GBM		Oton Er
						1~					1 718	Stop Fr 000000 G
25.0					/	/~						
5.0				m								CF St
······	honor	mm	vvv	where a	Wwww							600000 M
15.0											<u>Auto</u>	М
											_	
5.0											F	req Offs 0
5.0												0
												Scale Ty
enter 1.	710000	GH7							Snan	6.00 MHz		
	200 kHz			#VB	W 620 kHz			Sweep	1.000 ms	(1001 pts)	Log	ļ
G								STAT	US			

Plot 7-210. Lower Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-211. Lower Extended Band Edge Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
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	pectrum Anal									_		
XI RL	RF	50 Ω Ν	AC		lide ↔			#Avg Typ	e: RMS	TRA	PM Feb 20, 2018 CE 1 2 3 4 5 6 (PE A WWWWW DET A N N N N N	Frequency
I0 dB/div _og	Ref 2	5.00 dl	Bm	IFGain:I	LOW	Atten: 5	o dB		Mkr1	1.755 (	000 GHz '69 dBm	Auto Tur
15.0												Center Fre 1.755000000 GF
5.00	and they are an	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.www	m	M						<b>Start Fre</b> 1.747000000 GH
25.0						L.	1				DL1 -13.00 dBm	<b>Stop Fre</b> 1.763000000 GF
45.0									- marine and a second s		w. w.	CF Ste 1.600000 MI <u>Auto</u> Mi
i5.0 ———												Freq Offs 0 I
65.0 Center 1	755000									Sport	16.00 MHz	Scale Typ
Res BW				-	#VBW	620 kHz			Sweep	span 1.000 ms	(1001 pts)	
ISG									STATU	S		

Plot 7-212. Upper Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-213. Upper Extended Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 225
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	ectrum Anal											_	
RL	RF	50 Ω	AC		ast 🔸	Trig: Fre		#Avg Ty	pe:RMS	TRA	M Feb 08, 2018 CE 1 2 3 4 5 6 PE A WWWW ET A N N N N N	F	requency
dB/div	Ref 2	5.00 d	Bm	IFGain:	Low	Atten: 3	6 dB		Mkı	1 1.780 (			Auto Tur
5.0													Center Fro
.00	wer wor		~*\/m_v			~~~					DL1 -13.00 dBm	1.77	<b>Start Fr</b> 2000000 G
5.0						Lawre and the second	1					1.78	<b>Stop Fr</b> 8000000 G
5.0							MW W	wwwwww	M. Marson	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	vorman	<u>Auto</u>	CF St 1.600000 M M
5.0													Freq Offs 0
enter 1	.780000 / 200 kH				#\/R\//	620 kHz			Sween	Span	16.00 MHz (1001 pts)	Log	Scale Ty
	.780000 / 200 kH				#VBW	620 kHz		2	2	sweep	Span ′ Sweep 1.000 ms	Span 16.00 MHz Sweep 1.000 ms (1001 pts)	Span 16.00 MHz

Plot 7-214. Upper Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)

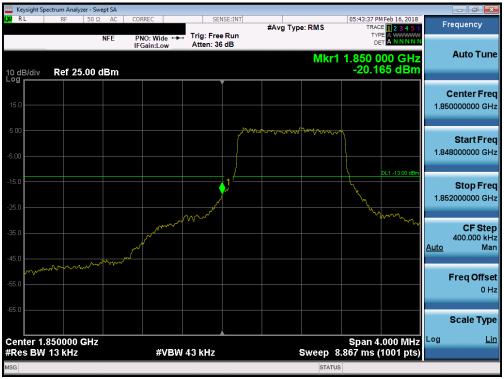


Plot 7-215. Upper Extended Band Edge Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)

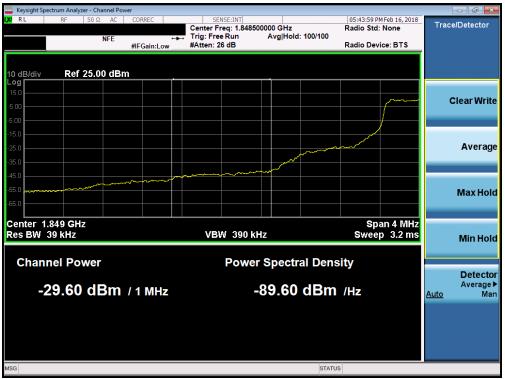
FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 225
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## Band 2



Plot 7-216. Lower Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-217. Lower Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕒 LG	Approved by: Quality Manager	
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Plot 7-218. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-219. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: ZNFQ710TS		MEASUREMENT REPORT (CERTIFICATION)	🕑 LG	Approved by: Quality Manager	
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