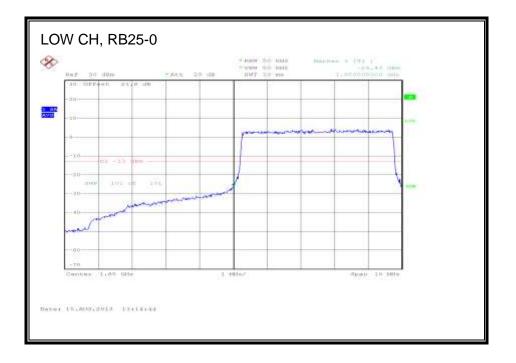


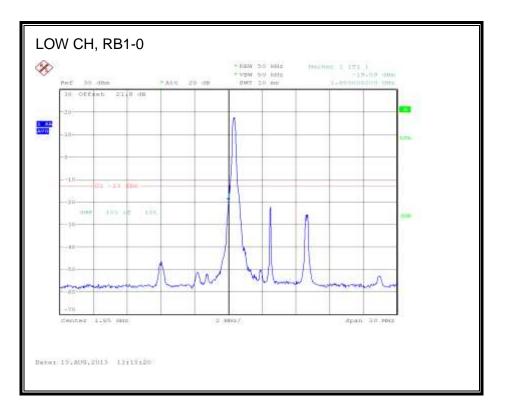
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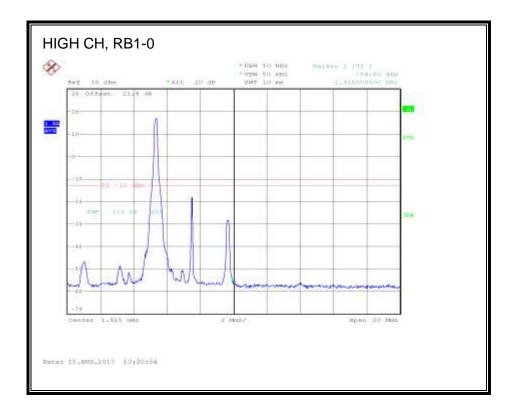




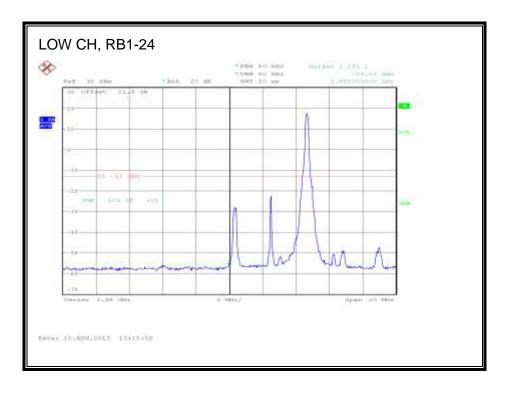
Page 448 of 745

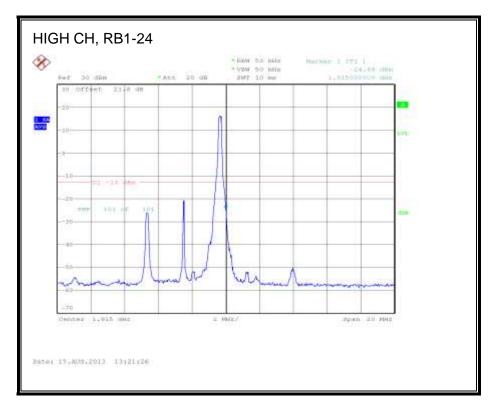
## LTE 16QAM Band 25 (5.0 MHz BAND WIDTH)



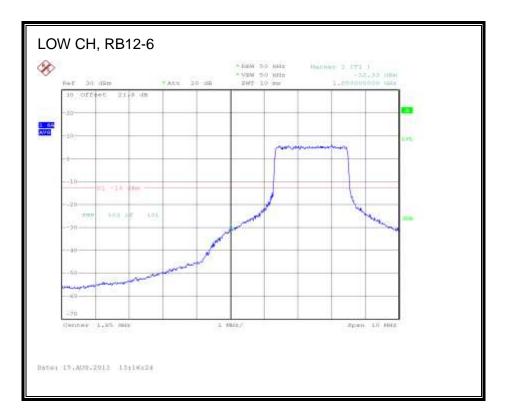


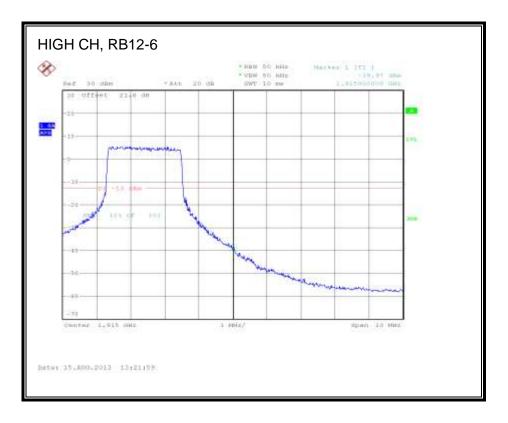
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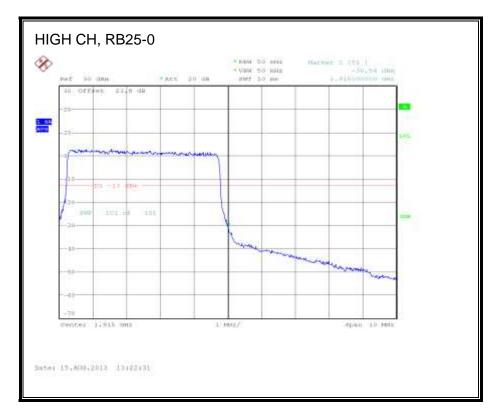
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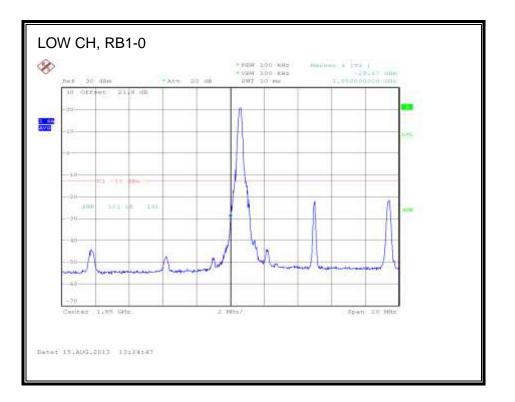
Page 451 of 745

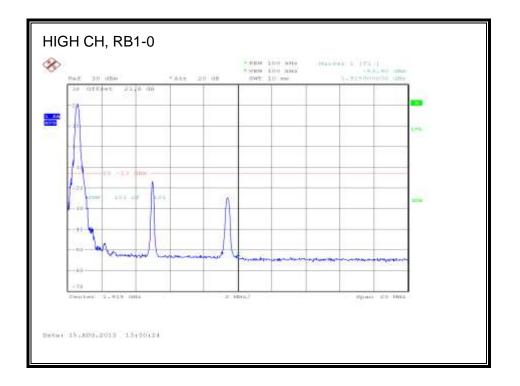




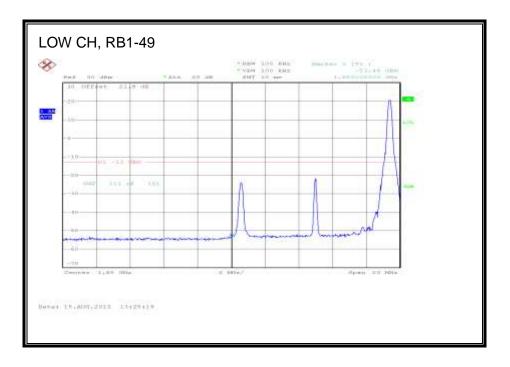
Page 452 of 745

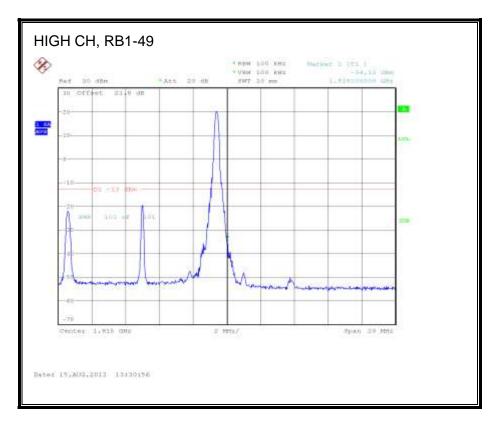
# LTE QPSK Band 25 (10.0 MHz BAND WIDTH)





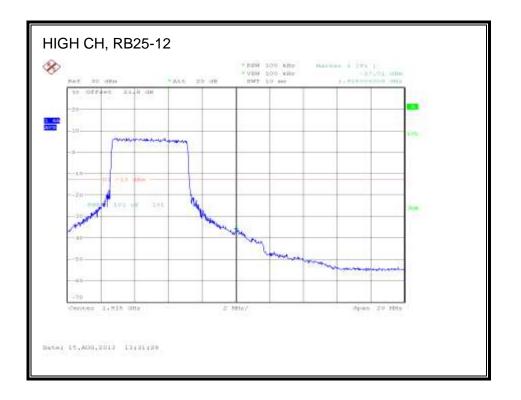
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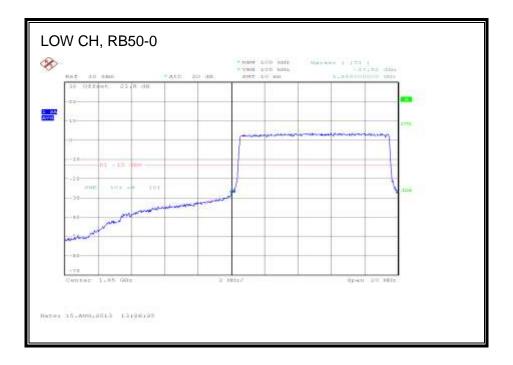


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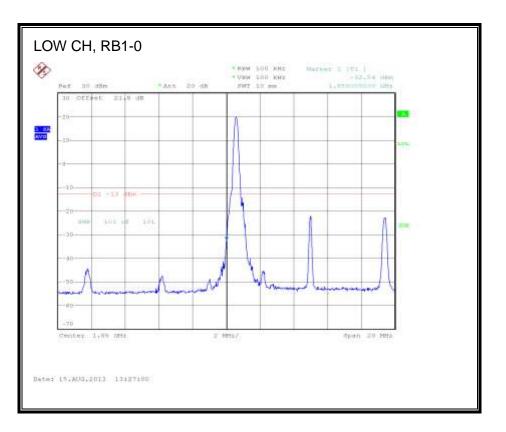
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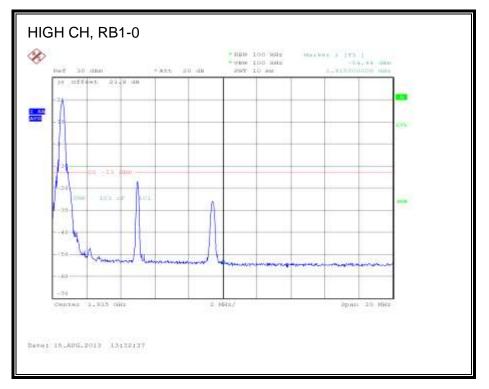




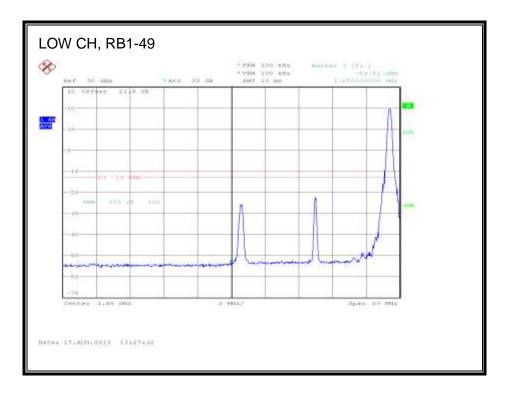
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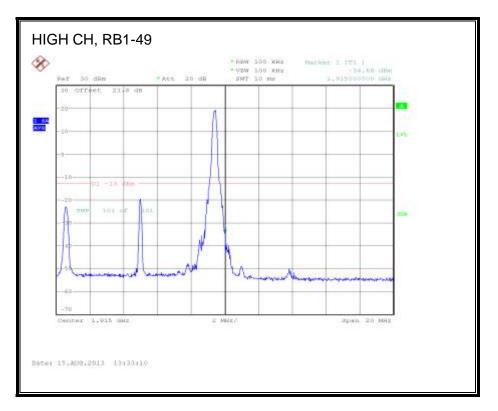
# LTE 16QAM Band 25 (10.0 MHz BAND WIDTH)



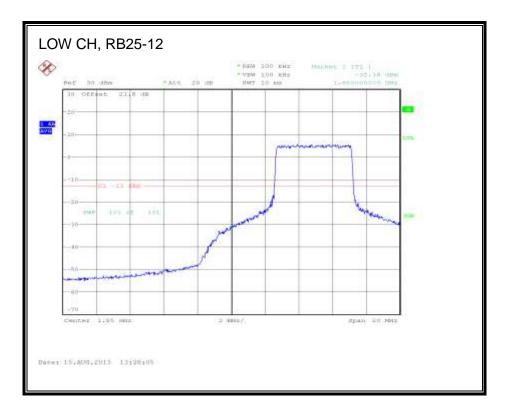


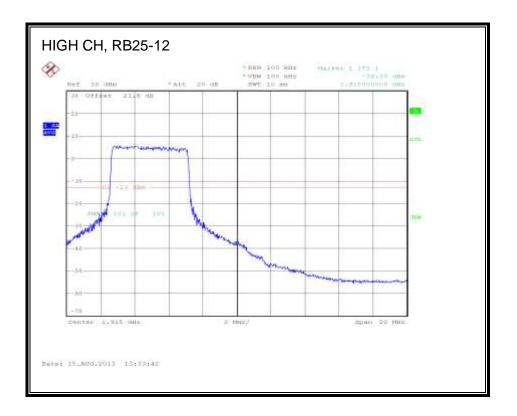
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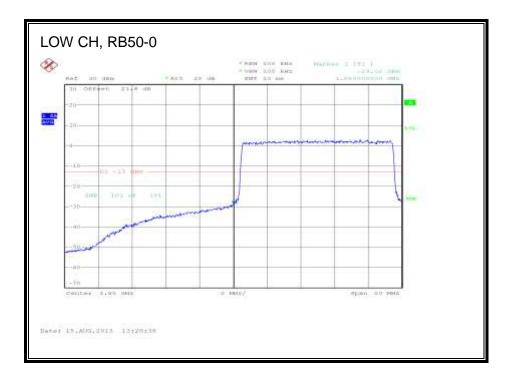


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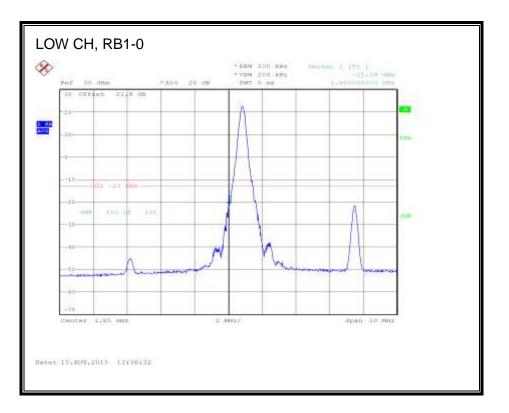
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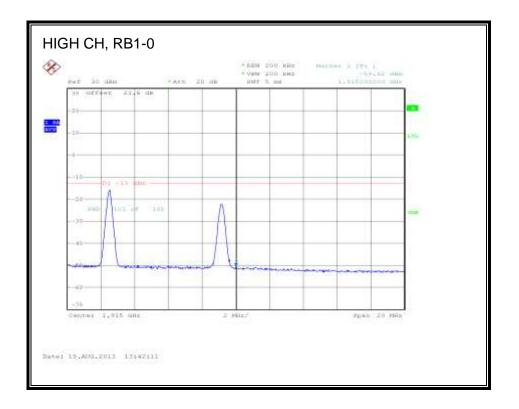




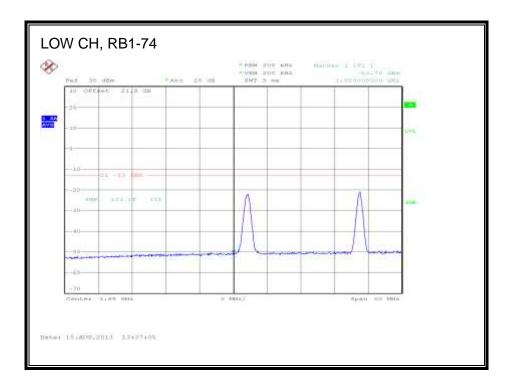
Page 460 of 745

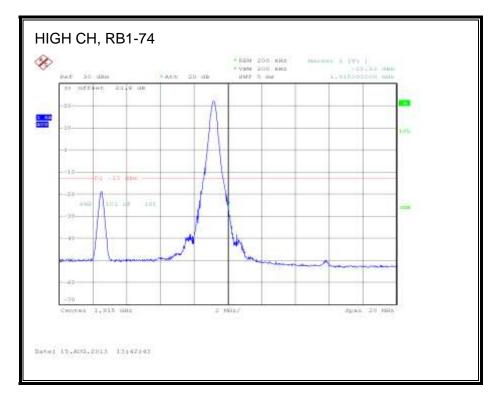
# LTE QPSK Band 25 (15.0 MHz BAND WIDTH)





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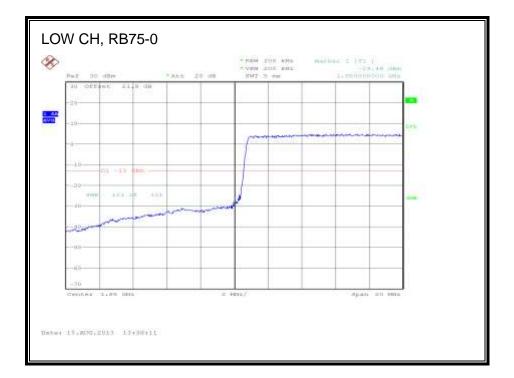


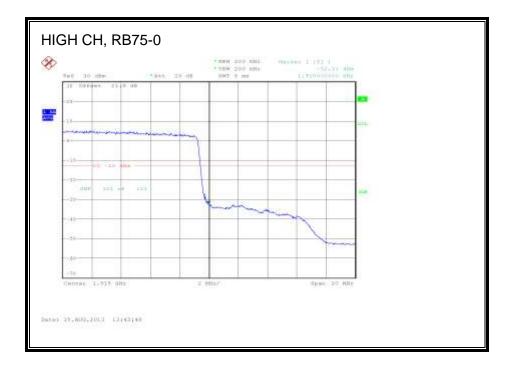
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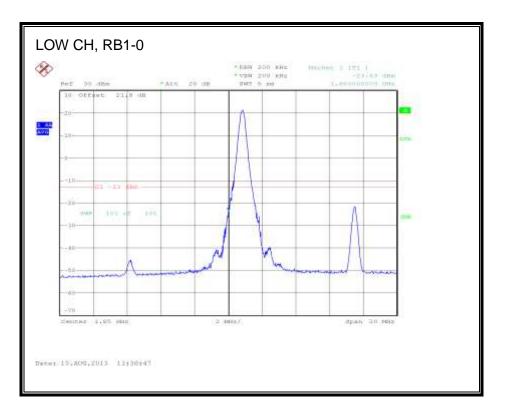
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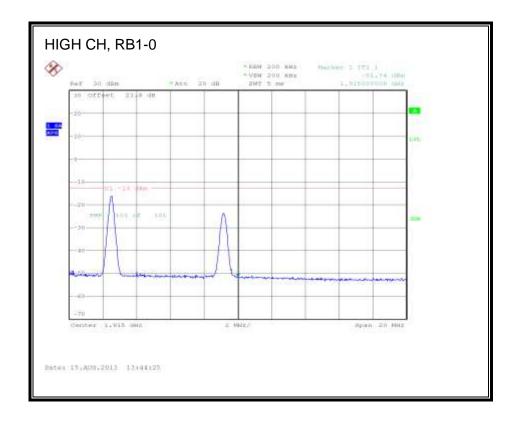




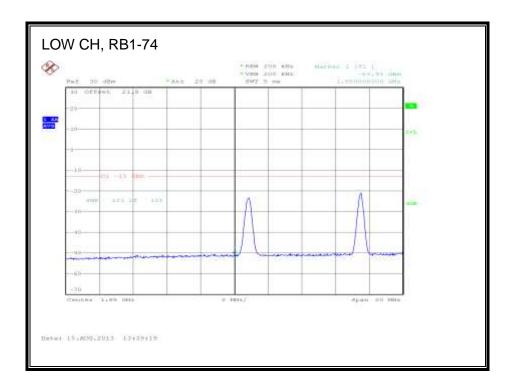
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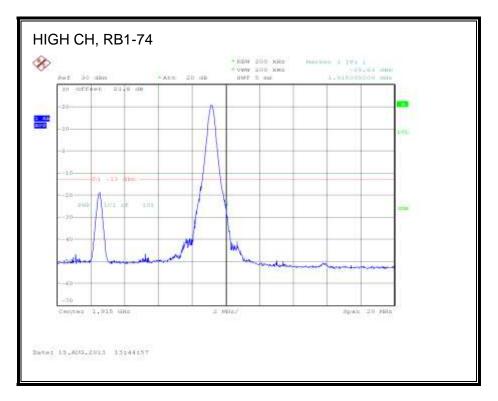
# LTE 16QAM Band 25 (15.0 MHz BAND WIDTH)





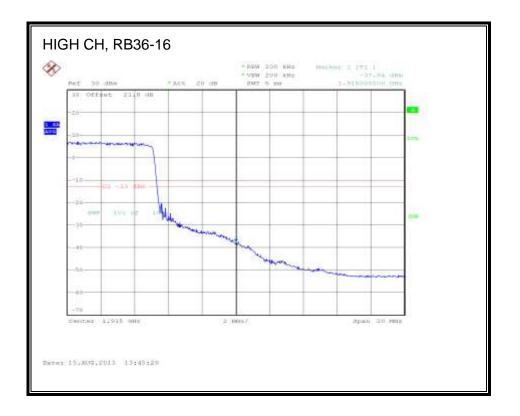
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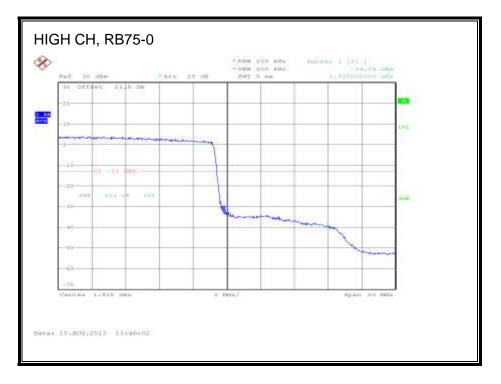
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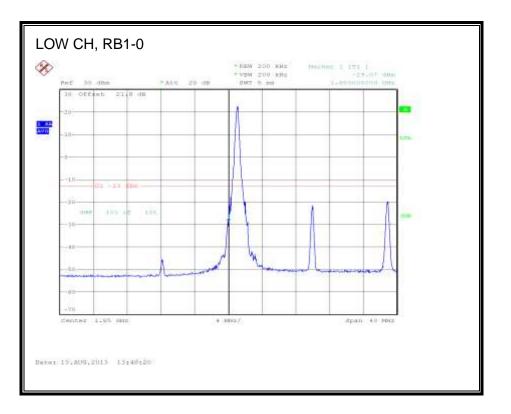
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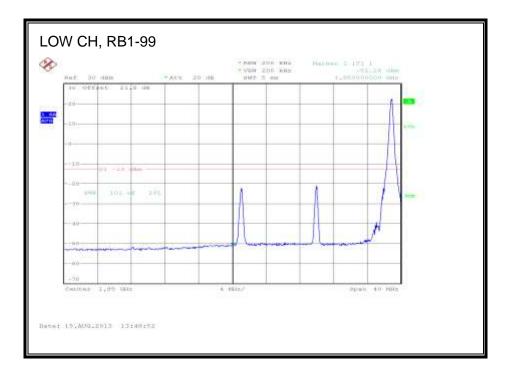
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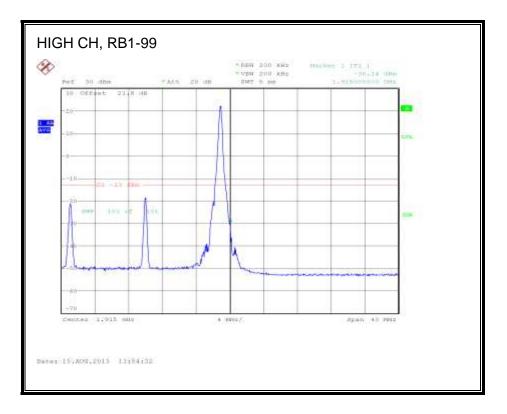
# LTE QPSK Band 25 (20.0 MHz BAND WIDTH)



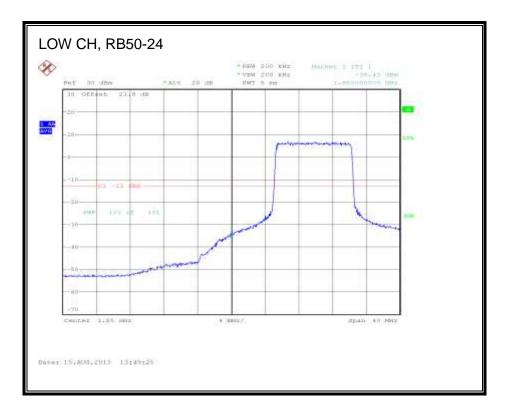


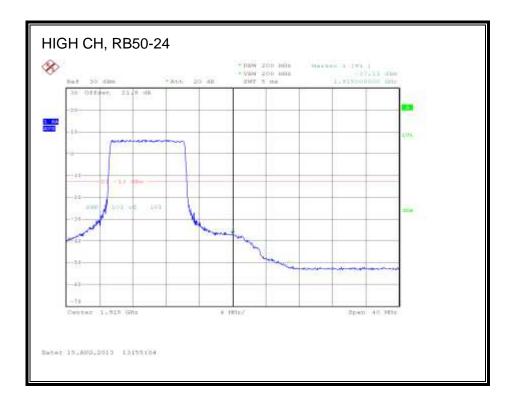


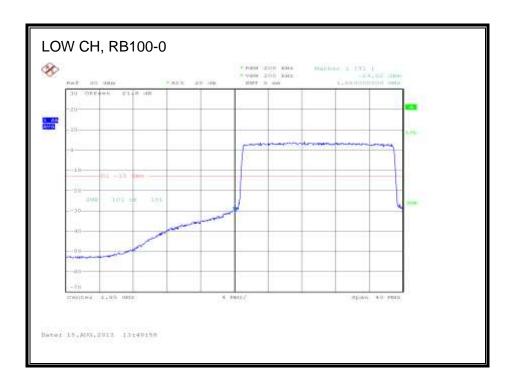




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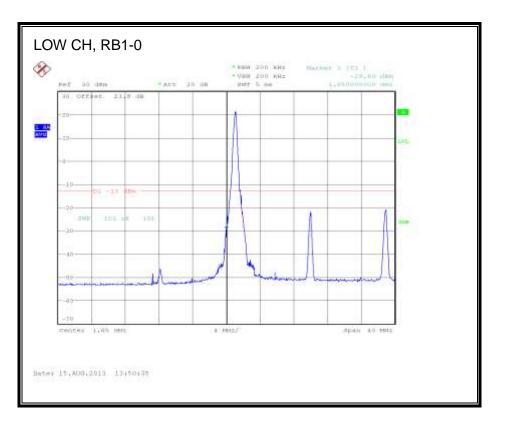


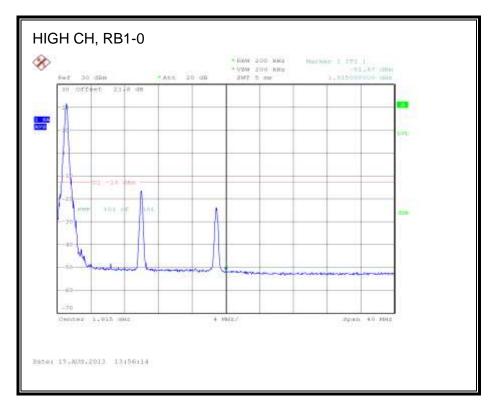




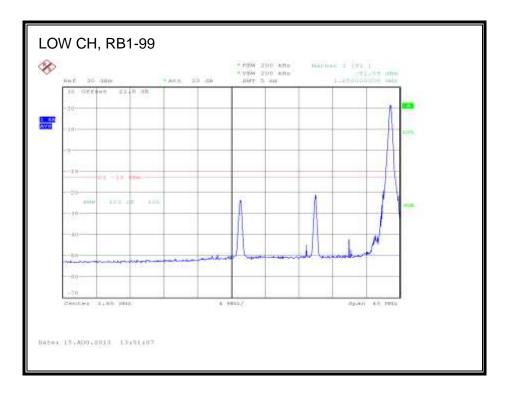
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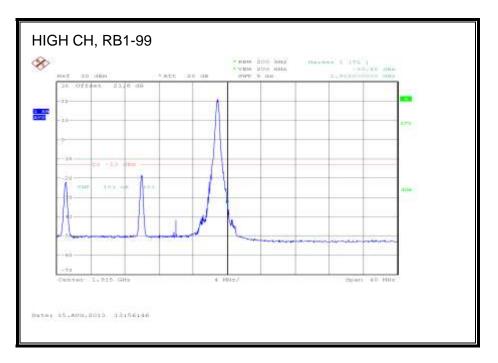
# LTE 16QAM Band 25 (20.0 MHz BAND WIDTH)





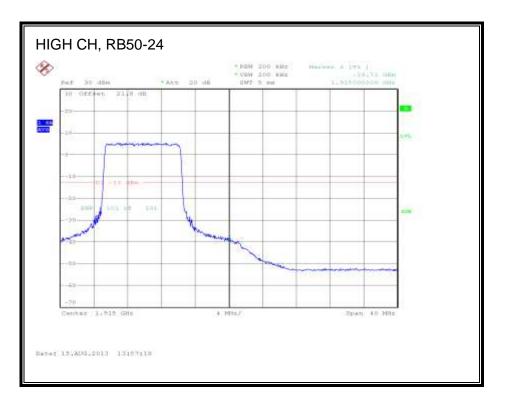
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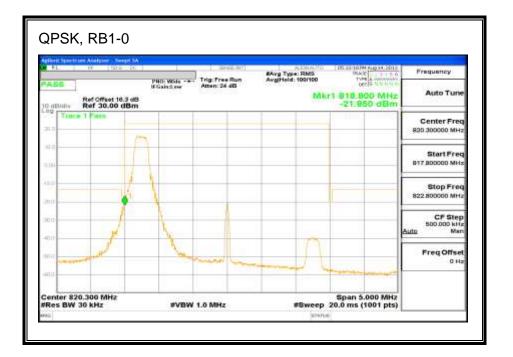


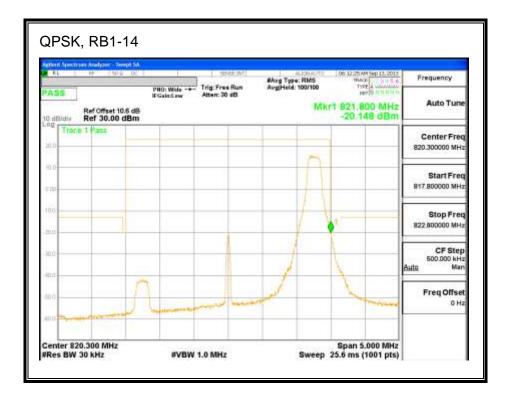


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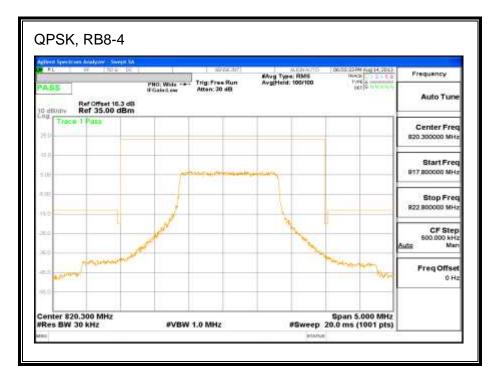
# 8.2.7. LTE BAND 26 (PART 90 EMISSION MASK)

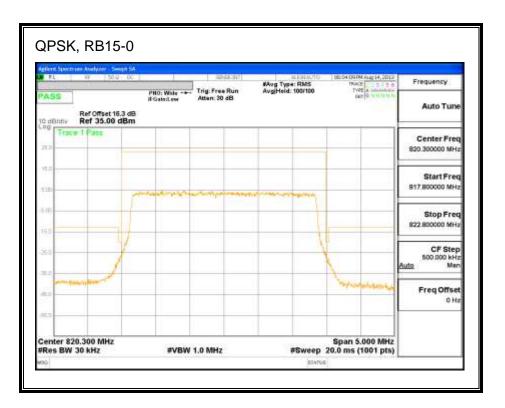
#### 820.3MHz at 3.0MHz BW



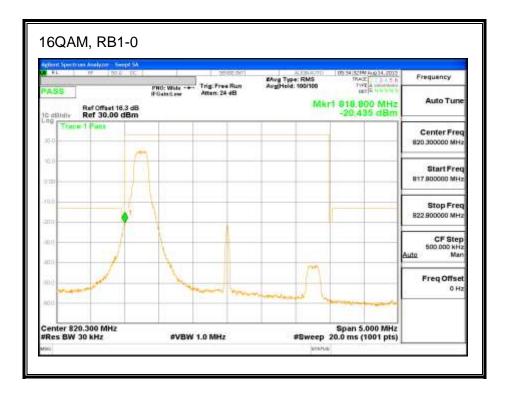


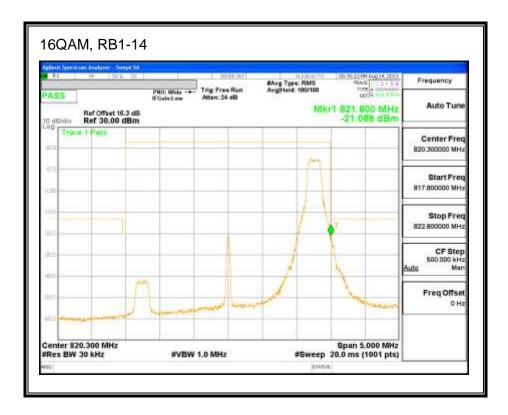
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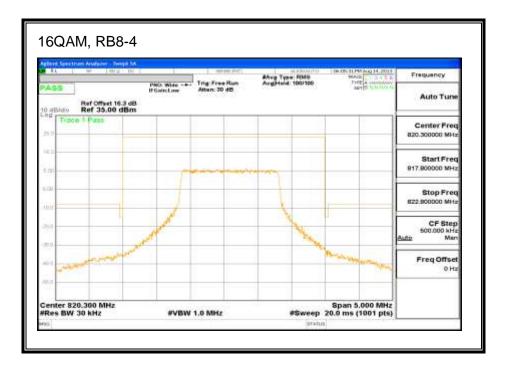


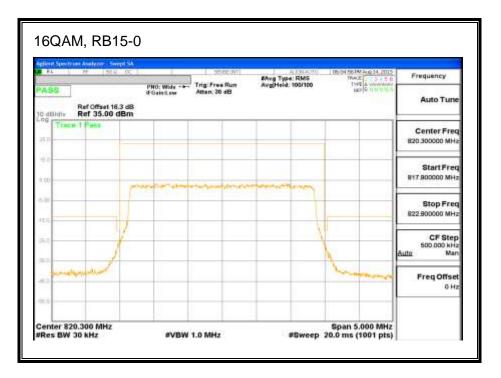
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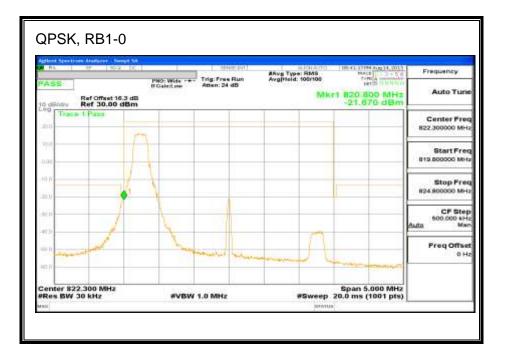
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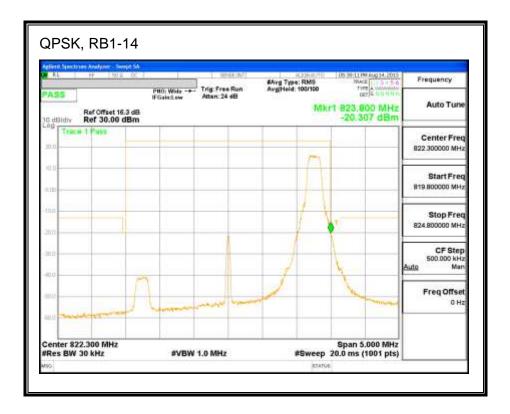




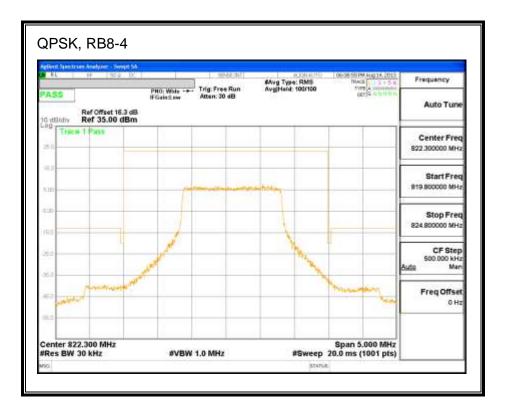
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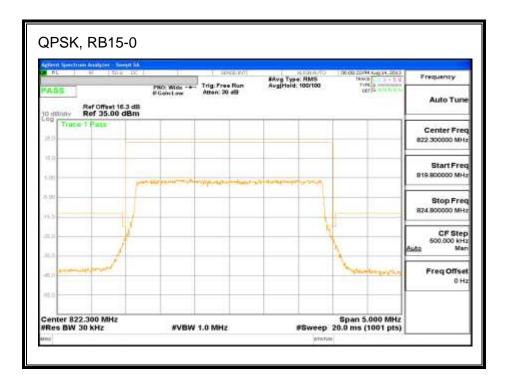
# 822.3MHz at 3.0MHz BW



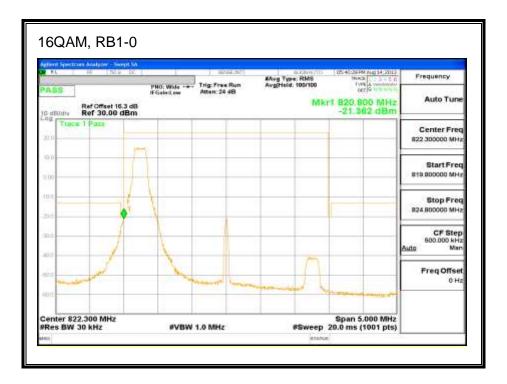


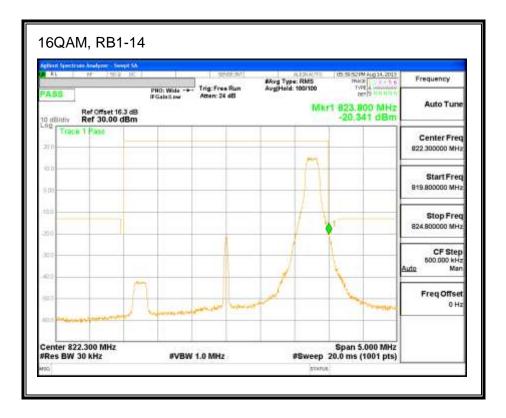
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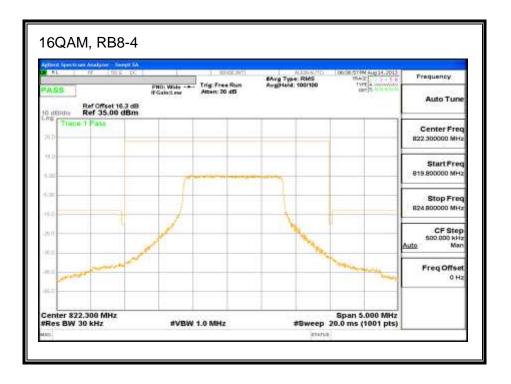


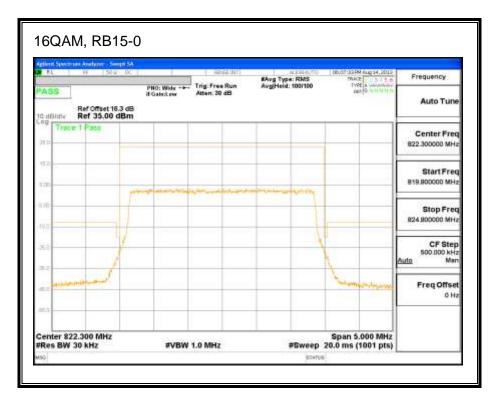
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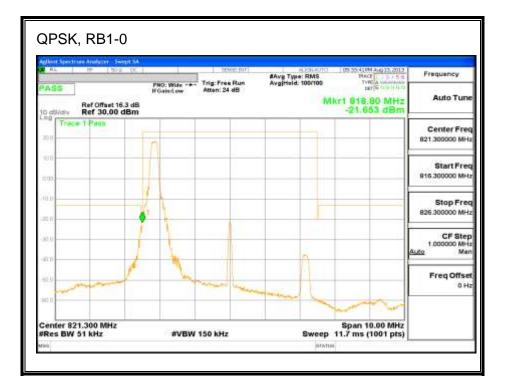
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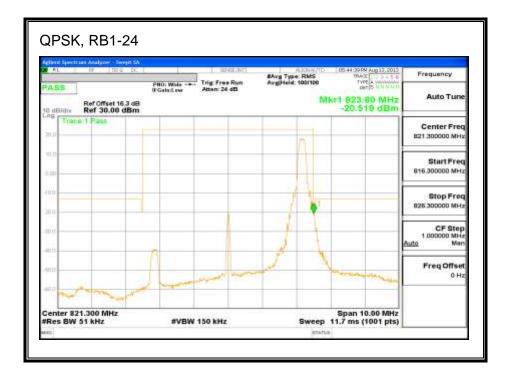




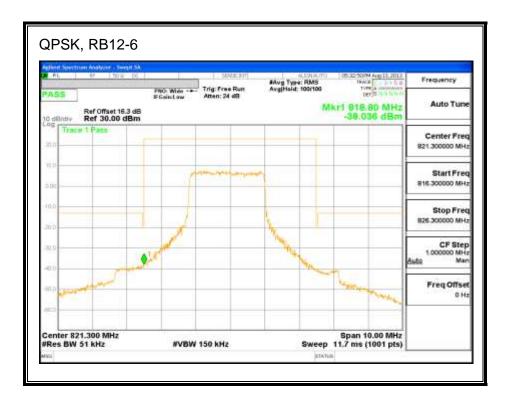
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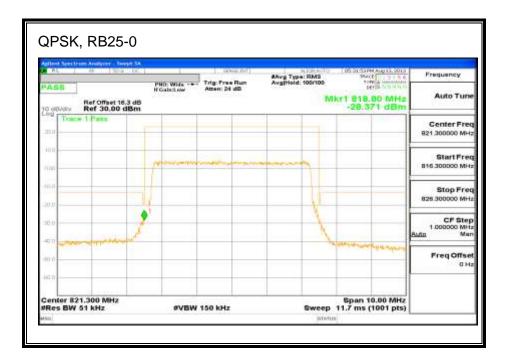
#### 821.3MHz at 5.0MHz BW



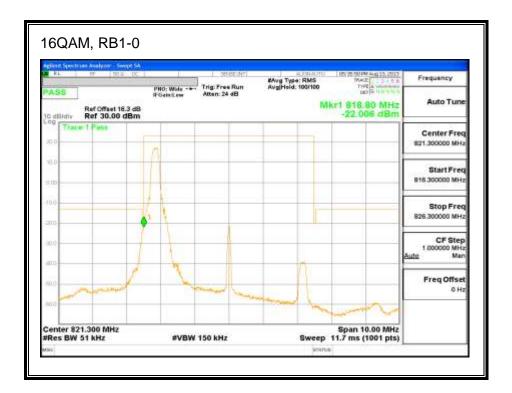


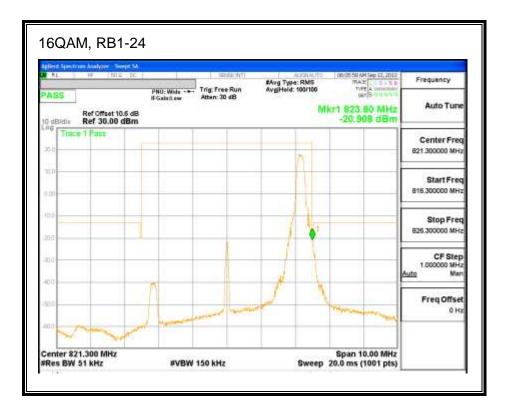
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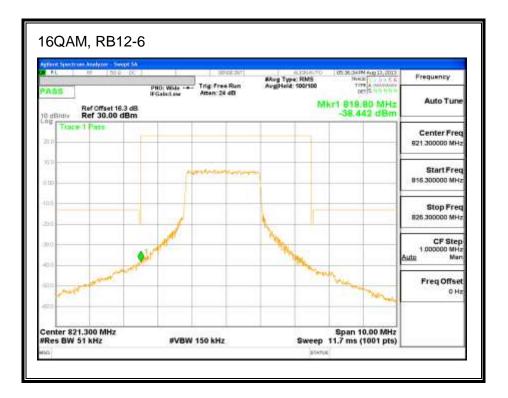


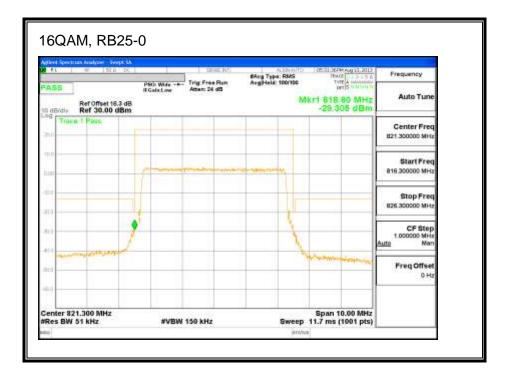
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# 8.3. OUT OF BAND EMISSIONS

#### RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238 and §27.53 IC: RSS-132, 4.5; RSS-133, 6.5 and RSS-139, 6.5

#### <u>LIMITS</u>

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

#### TEST PROCEDURE

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

#### MODES TESTED

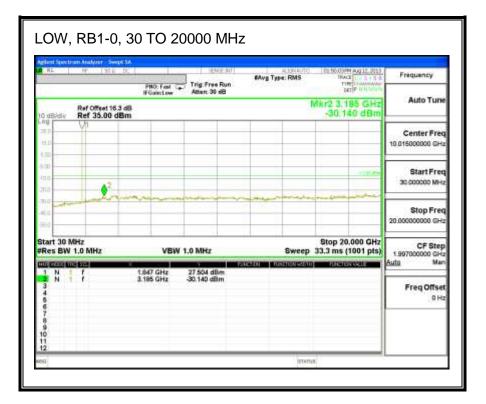
- Band 2
- Band 4
- Band 5
- Band 13
- Band 17
- Band 25
- Band 26

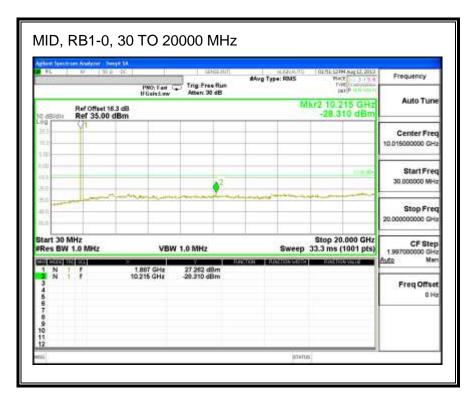
**RESULTS** 

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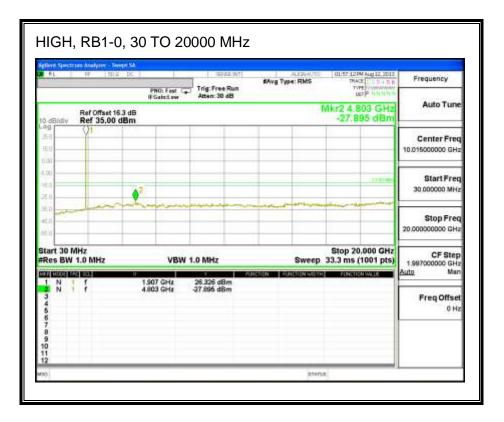
# 8.3.1. LTE BAND 2

## LTE QPSK, 1.4 MHz BAND WIDTH





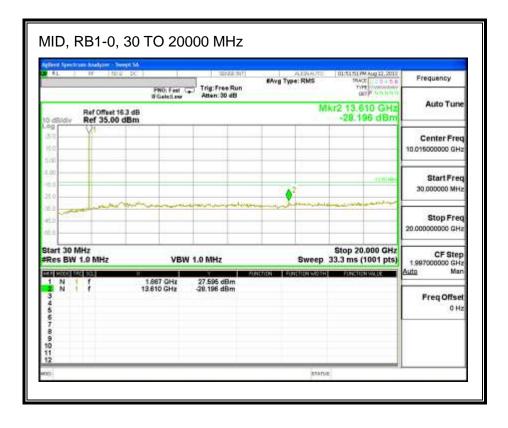
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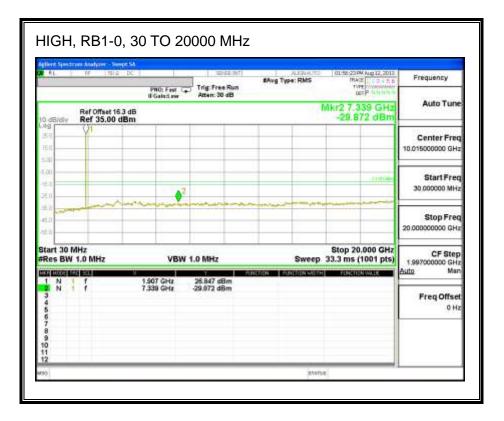
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#### LTE 16QAM

FL.	HE 1512 1	PHO: Fast G	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	01:49:25 PM Aug 12, 2013 IPAGE 12:0 9 5 5 TYPE 00:0000000000000000000000000000000000	Frequency
0 dBidly	Ref Offset 16.3 Ref 35.00 dB		Atten: 30 att	71	Mkr2 7.559 GHz -29.361 dBm	Auto Tune
99 350 150 500	4					Center Freq 10.015000000 GHz
4.0 4.0 M.0					11000-	Start Freq 30.000000 MHz
0.0 0.0	- marine and the			have a friend a frien	a maata ar da dan sa maraka Property	Stop Freq 20.00000000 GHz
tart 30 M Res BW	MHz 1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 2 N 3 4 5 5 7 8 9 0 11	1	1.847 GHz 7.569 GHz	27.351 dBm -29.361 dBm	NETON ANTON WOT	PINCTEN VALUE	Auto Man Freq Offsel 0 Hz

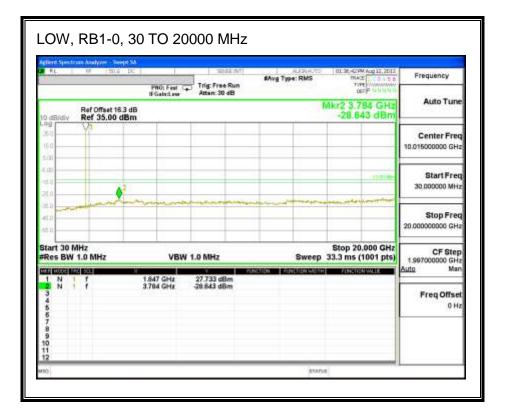


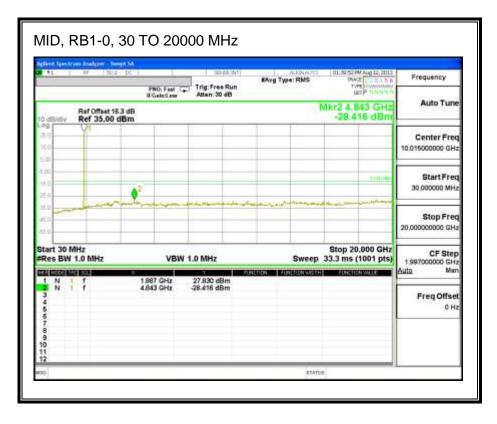
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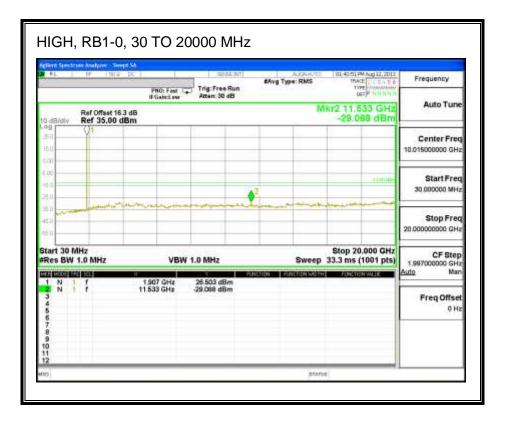
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## LTE QPSK, 3.0 MHz BAND WIDTH





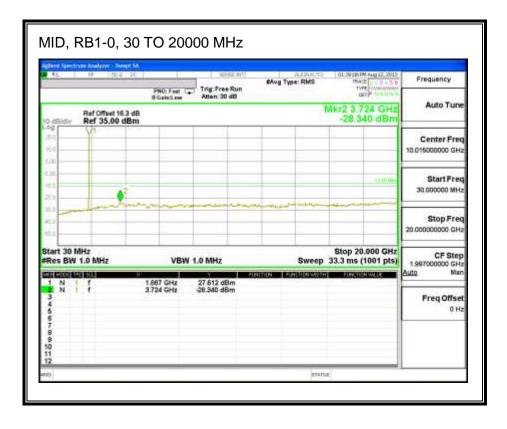
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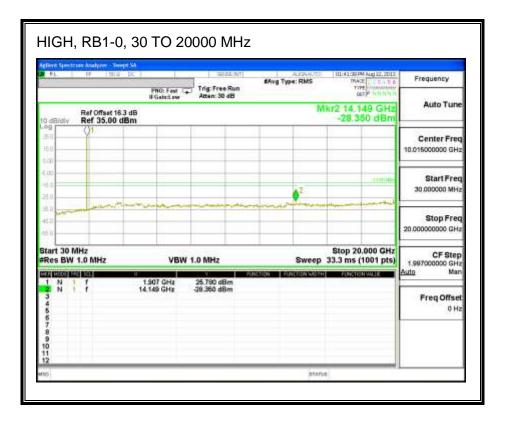
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#### LTE 16QAM

AL I IF 1515	PHO: Fast 7	Trig: Free Run Atten: 30 dB	SAvg Type: RMS	01:27:44 PM Aug 12, 2013 TRACE 10:27:45 B TVPE 10:07:45 B TVPE 10:07:45 B	Frequency	
If Galaxy Atten: 30 dB Mkr2 7.059 GHz   Ref Offset 16.3 dB Mkr2 7.059 GHz -29 983 dBm   10 dBidly Ref 35.00 dBm -29 983 dBm						
•9 V1 50 V1	-5270				Center Freq 10.015000000 GHz	
1.00 d. 0. M. 0				-12000	Start Freq 30.000000 MHz	
en en					Stop Freq 20.00000000 GHz	
tart 30 MHz Res BW 1.0 MHz	VBV	V 1.0 MHz		Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz Auto Man	
01 1002 100 100 1 N 1 F 2 N 1 F 3 4 5 5 5 7 8 9 9 00 1 1 2	1.847 GHz 7.059 GHz	27 296 dBm -29,963 dBm	AND THE AND THE AND THE	PLINCTEN WALLE	Freq Offset	

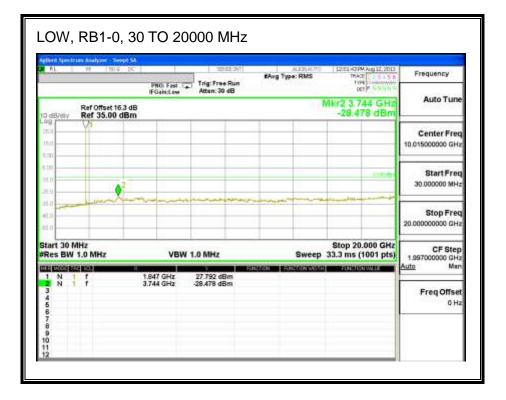


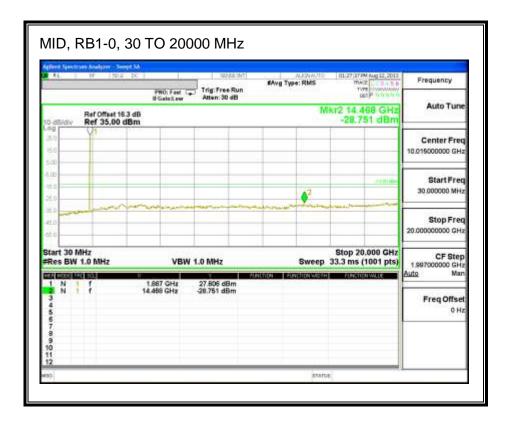
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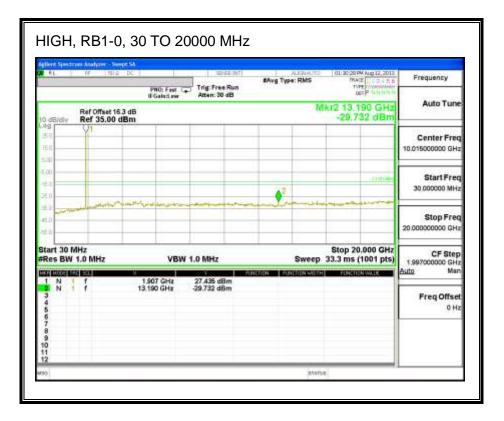
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## LTE QPSK, 5.0 MHz BAND WIDTH





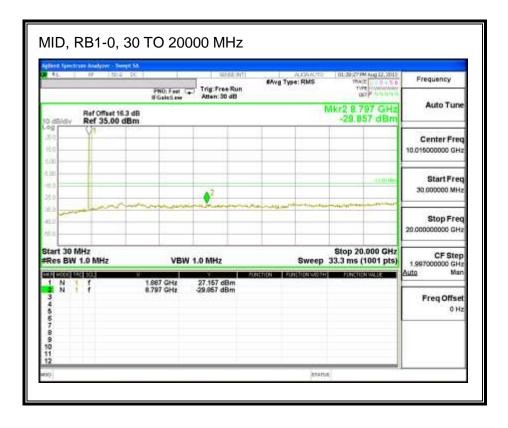
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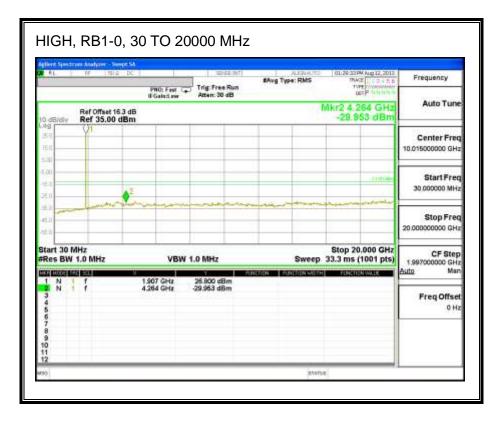
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#### LTE 16QAM

Bent Spectrum Analyzer - Newy R.L. IF 19212	PRO: Fast 7	Trig: Free Run	#Avg Type: RMS	12:00:49PM Aug 12, 2013 TMACE 12:00:5 B TMRCE 10:00:5 B TMRCE 10:00:000	Frequency	
H Gatet ov Atten: 30 dB 00000 0000 0000 0000 00000 00000000						
99 V1					Center Freq 10.015000000 GHz	
00 4.0 4.0				1100	Start Free 30 000000 MHz	
60			and appropriate of the second	a pring any generative of property and the second	Stop Freq 20.00000000 GHz	
tart 30 MHz Res BW 1.0 MHz	VBV	V 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH	
24 UDC0 1424 F241 25 N 1 f 3 4 5 6 7 7 8 9 9 0 1 1 2	2.647 GHz 2.626 GHz	27.094 dBm -31.107 dBm	action Association with	E PENCTION WALK	Auto Man Freq Offset 0 Hz	

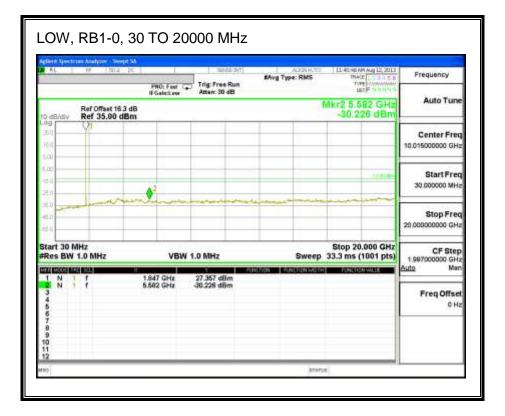


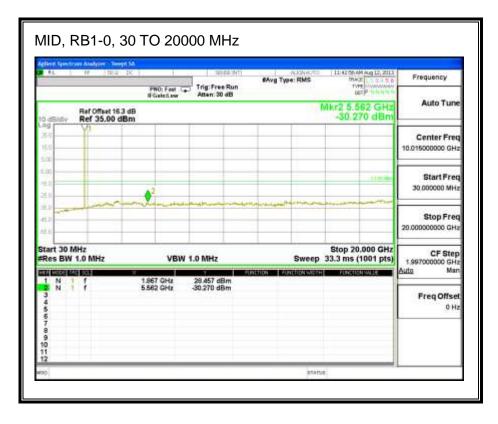
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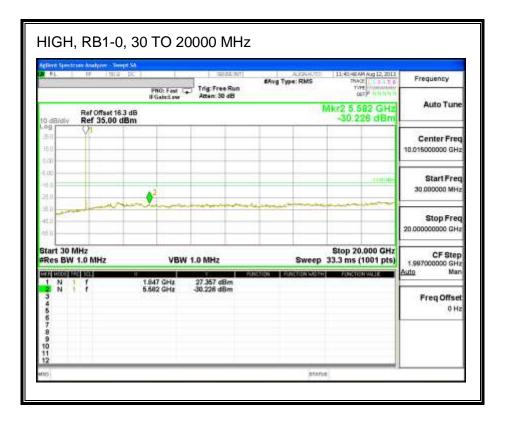
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### LTE QPSK, 10.0 MHz BAND WIDTH





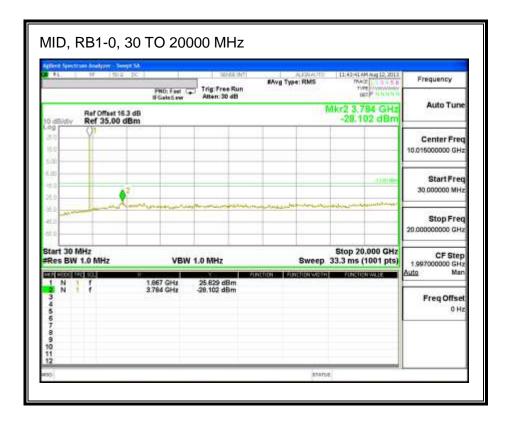
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#### LTE 16QAM

Ren Spectrum Anal RL IF	PNO: Fr		#Avg Type: RMS	11:40:02 AM Aug 12, 2013 19:402 12:30 4:5 8 17:92 17:00 4:5 8 17:92 17:00 4:5 8	Frequency
dBldly Ref	IFGelnt. Iffset 16.3 dB 35.00 dBm	eer Atten: 30 dB	73	Mkr2 5.102 GHz -29.224 dBm	Auto Tune
50 V1					Center Free 10.015000000 GH:
00 1.0 1.0	<u></u>			11000	Start Free 30.000000 MH
10		44.44. Waltonia		and the second sec	Stop Free 20.00000000 GH
art 30 MHz Res BW 1.0 M	Hz V	/BW 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH
1 N 1 f 2 N 1 f 3 N 1 f 3 S 4 5 5 6 7 8 9 0 1 2	1.847 GH 5.102 GH	z 26.654 dBm	antition Associates with the	PENCIUM VALUE	Auto Mar Freq Offse 0 Hi

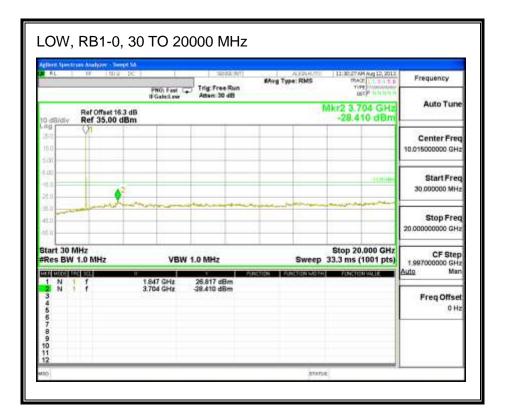


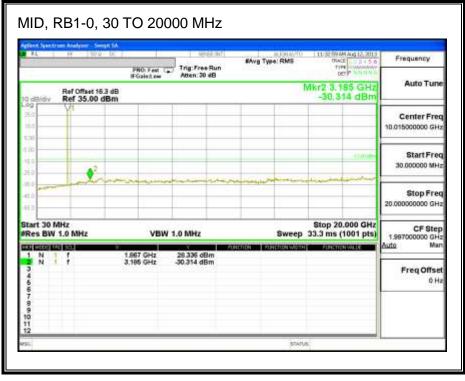
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AL.	ran Analyzer - Seegr HF 19212		Trig: Free Run	#Avg Type: RMS	11:44:48 AM Aug 12, 2013 TRACE 11:8 3 4 5 5 TVPE	Frequency
0 dB/dly	Ref Offset 16.3 Ref 35.00 dE	#Gaintew	Atten: 30 dB	72	Mkr2 3.824 GHz -28.415 dBm	Auto Tune
4g 350 150	V1					Center Freq 10.015000000 GHz
4.0 4.0	¢2				11010	Start Free 30 000000 MH
0.0	harr			and the and the state of the		Stop Freq 20.00000000 GH2
tart 30 l Res BW	1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHI Auto Mar
1 N 3 4 5 5 7 8 9 10 11	11	1,907 GHz 3,824 GHz	27.553 dBm -28.415 dBm			Freq Offsel 0 Hz

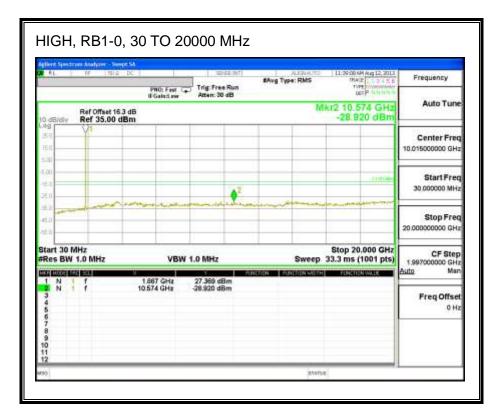
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#### LTE QPSK, 15.0 MHz BAND WIDTH





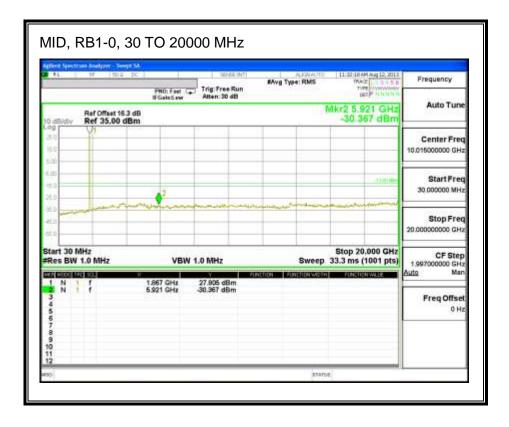
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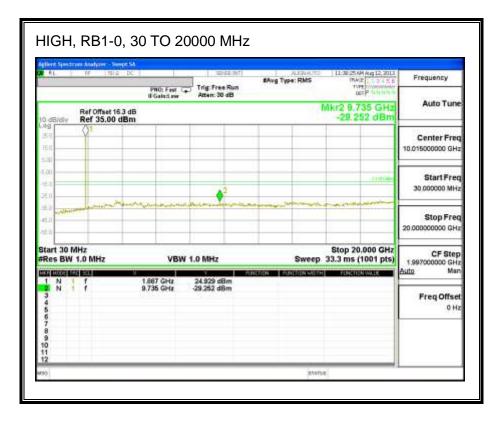
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### LTE 16QAM

AL.	H 1812	pc	THEAST	#Avg Type: RMS	11:31:26 AM Aug 12, 2013 TRACE 23:45.5	Frequency
		PNO: Fest C IF Galact.cvr	Trig: Free Run Atten: 30 dB	1002622016268	Dec P 1111111	Auto Tune
Ref Offset 16.3 dB Mkr2 9.835 GHz Io dBidly Ref 35.00 dBm - 29.493 dBm						
0g 250 100	(M					Center Freq 10.015000000 GHz
4.D			2		-1100	Start Freq 30.000000 MHz
11 D 12 D	-	in the second second	, and a second	A CALL AND A CALL		Stop Freq 20.00000000 GHz
tart 30 P Res BW	ILO MHZ	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step
1 N 2 N 3 4	29 823 900 1 1	1.847 GHz 9.836 GHz	26.607 dBm -29.493 dBm	noder einenermen		Auto Man Freq Offset 0 Hz
5 6 7 8 9						

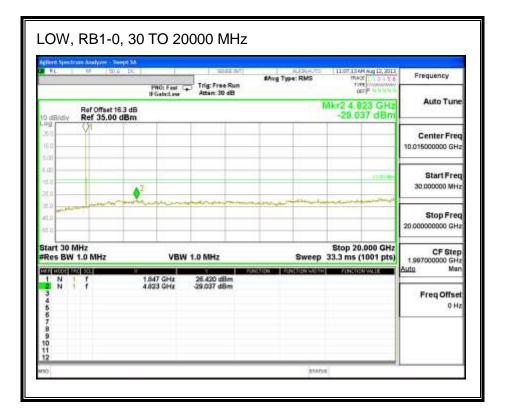


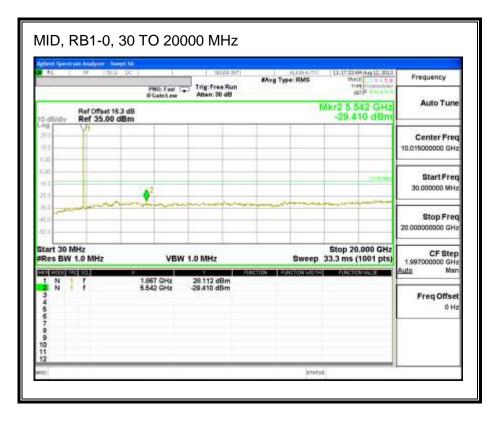
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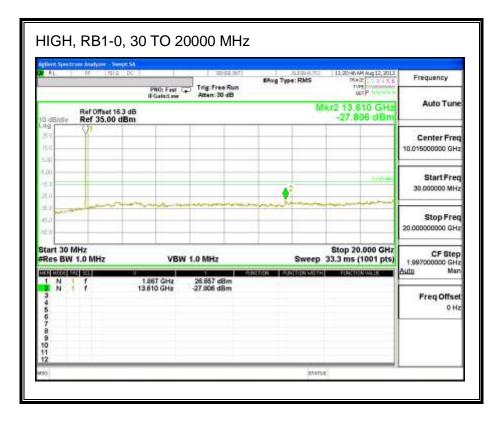
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### LTE QPSK, 20.0 MHz BAND WIDTH





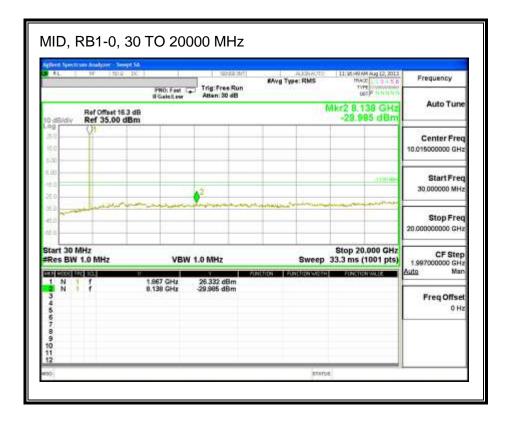
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#### LTE 16QAM

FL.	nes Analyzer - Se 17 - 1915	PNO: Fast		#Aug Type: RMS	11:35:02:4M Aug 12, 2013 TRACE 11:33:4:55 TOPE Internet	Frequency
vibieb 0	Ref Offset 16 Ref 35.00		Atten: 30 db	72	Mkr2 4.723 GHz -28.539 dBm	Auto Tune
eg 350 150	Vi -					Center Freq 10.015000000 GHz
4.0 4.0		2			11000-	Start Freq 30.000000 MHz
0.0	-	"her have a set		and the second state of the second		Stop Freq 20.000000000 GHz
tart 30 / Res BW	MHz 1.0 MHz	VB	W 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 2 N 3 4 5 5 7 8 9 0		1.847 GHz 4.723 GHz	27.462 dBm -38.539 dBm	ACTOR ANTONIA	PENCIEN VALUE	Auto Man Freq Offset 0 Hz



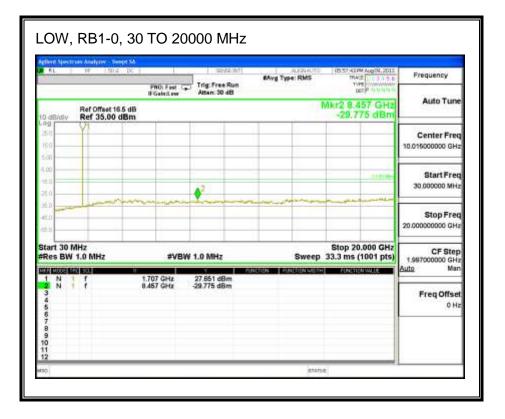
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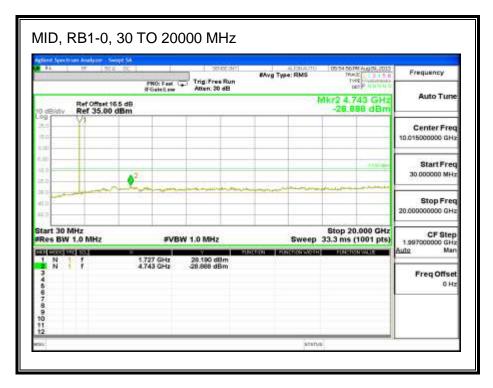
Bent Spectrum Analyzer - Deep NL 1 IF 2012		Trig: Free Run	#Avg Type: RMS	11:23:22 AM Aug 12, 2013 17:402 11:33 A.5 5 17:42 11:43 A.5 5	TraceDet
Ref Offset 16.3 Bell 35.00 dE	IF Galact ow	Atten: 30 dB	71	Mkr2 8.977 GHz -28.887 dBm	Select Trace
0 dB/dlv Ref 35,00 dE					Clear Write
00 10 10				11.000	frace Averag
10					Max Hold
tart 30 MHz Res BW 1.0 MHz	VBW	f 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	Min Hold
1 N 1 f 3 N 1 f 4 5 6	1.867 GHz 0.977 GHz	26.132 dBm -29.007 dBm			View/Blank, View
6 7 8 9 0 1 2					Mon 1 of

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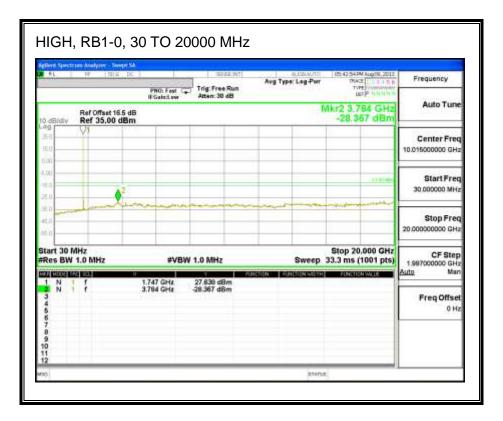
# 8.3.2. LTE BAND 4

#### LTE QPSK (1.4 MHz BAND WIDTH)





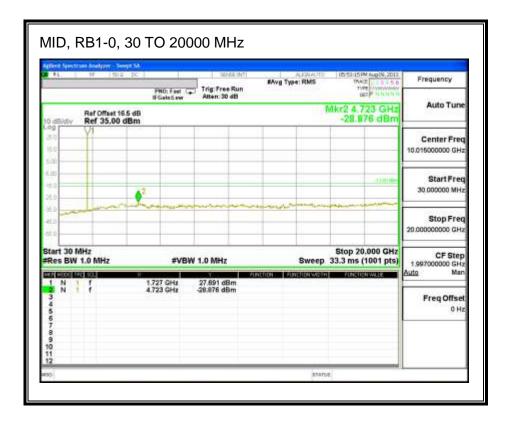
#### Page 514 of 745



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#### LTE 16QAM

AL.	H 1813	PRO: Fast IF Galaciaw	Trig: Free Run Atten: 30 dB	SAvg Type: RMS	15:52-65PM Aug/04, 2013 TRACE 12:23:55 5 TVPE VICENTIAN	Frequency
0 dBidly	Auto Tune					
99 350 150 500	M	20.00				Center Freq 10.015000000 GHz
1.00 1.0 1.0		2			-12000-	Start Freq 30.000000 MHz
4.0 e1.0	al sinds		and the second description of the objection of the object	Ange-gan ange-anan Pantanan ang kang		Stop Freq 29.000000000 GHz
tart 30 M Res BW	MHz 1.0 MHz	#VE	3W 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 2 N 3 4 5 6 7 8 9 0 01 12		1.707 GHz 4.603 GHz	27.796 dBm -28.969 dBm	unition - Aurition with	PENCTON WALK	Auto Man Freq Offset 0 Hz

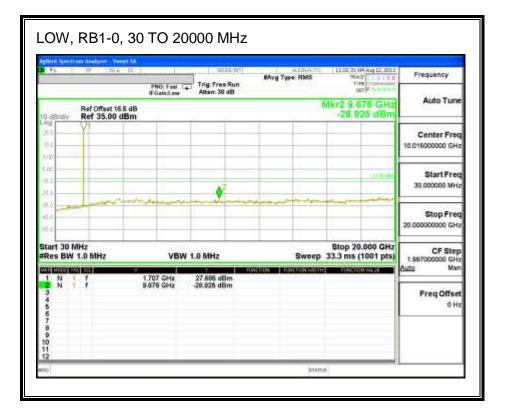


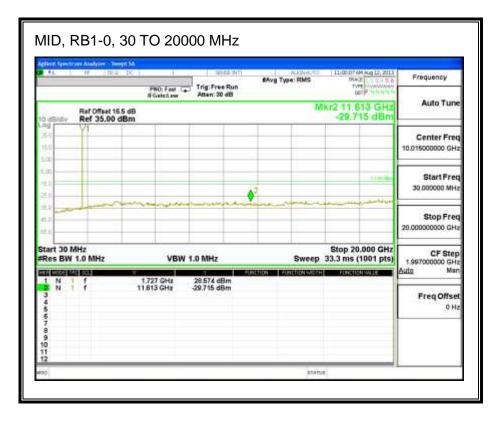
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AL.	nen Analyzer - Tempf HF (1915) (		Trig: Free Run	SAvg Type: RMS	15:45:20 PM Aug 04, 2013 19:402 1, 2 3 4 5 8 19:492 10:00000000	Frequency
vibidb 0	Ref Offset 16.5 d Ref 35.00 dB	IF Galactions IB	Atten: 30 dB	11	Mkr2 2.187 GHz -32.036 dBm	Auto Tune
49 350 150	Vi Vi					Center Freq 10.015000000 GHz
1.00 11.0 11.0	2				-11000	Start Free 30.000000 MH
40 e10	-lat-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Stop Freq 29.00000000 GHz
tart 30 / Res BW	1.0 MHz	¢∨B¥	V 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz Auto Man
1 N 3 4 5 6 7 8 9 10	1	1.747 GHz 2.187 GHz	27.984 dBm -32,038 dBm			Freq Offset 0 Hz

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## LTE QPSK, 3.0 MHz BAND WIDTH



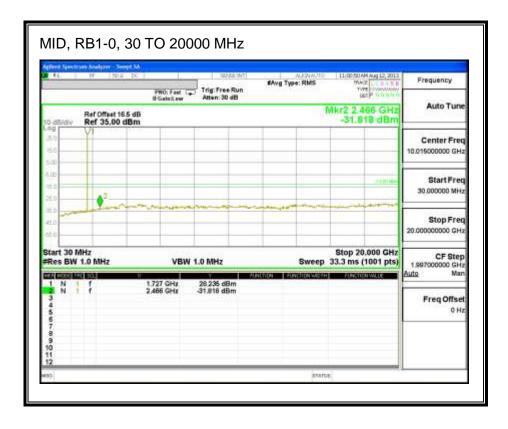


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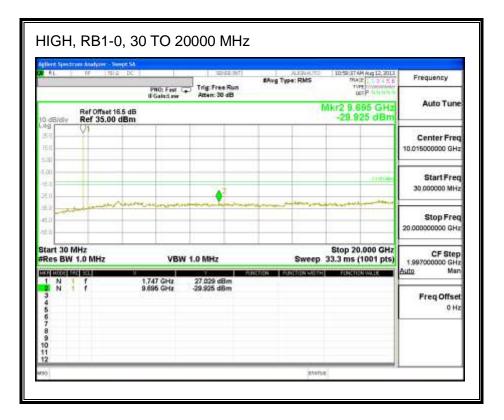
AL.	nen Analysee - Seept 17 - 1913		Trig: Free Run	#Avg Type: RMS	10-59-28 AM Aug 12, 2013 194-02 1, 2, 3 4, 5, 5 194-02 1, 2, 3 4, 5, 5	Frequency
0 dBidly	Ref Offset 16.5 Ref 35.00 dB	#Gaintow dB	Atten: 30 dB	71	Mkr2 3.824 GHz -28.920 dBm	Auto Tune
99 350 150	()1 ()1					Center Fred 10.015000000 GH:
00 10 10	¢ <sup>2</sup>	1			-1100	Start Free 30.000000 MH
0.0				11.44 - 10.74 - 10.74 - 10.74		Stop Free 20.00000000 GH
tart 30 / Res BW	1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH Auto Mar
1 N 3 4 5 6 7 8 9 0 1	11	1,747 GHz 3,624 GHz	26.818 dBm -28.920 dBm			Freq Offse 0 Hi

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AL H	PHO: Fe	Trig: Free Sun Atten: 30 dB	SAvg Type: RMS	11:51:55 AM Aug 12, 2013 TRACE 1: 2:3 A 5 5 T/76 1:10 A 5 5 T/76 1:10 A 5 5 T/76 1:10 A 5 5	Frequency
delidiy Ref	Diffset 16.5 dB 35.00 dBm	er Aben: 30 ab	71	Mkr2 4.603 GHz -30.049 dBm	Auto Tune
99 V1					Center Freq 10.015000000 GHz
1.00 4.0 M.0	2			-11/10/0-	Start Freq 30.000000 MHz
		india factoria and	Manager and the second s		Stop Freq 20.00000000 GHz
tart 30 MHz Res BW 1.0 M	IHz V	BW 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 1 f N 1 f 3 4 5 6 7 8 9 0 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	1.707 GHz 4.603 GHz	28.256 dBm	unchipn   Aunchipn wic≯r	FIRETICH WALE	Auto Man Freq Offset 0 Hz

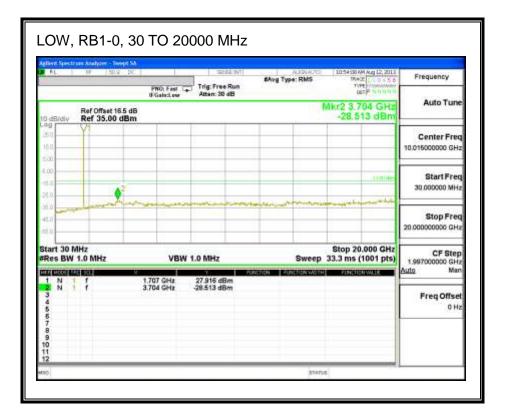


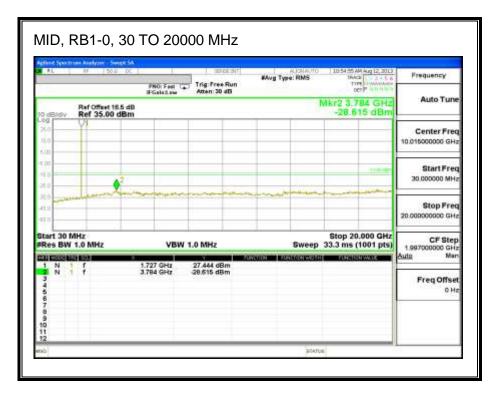
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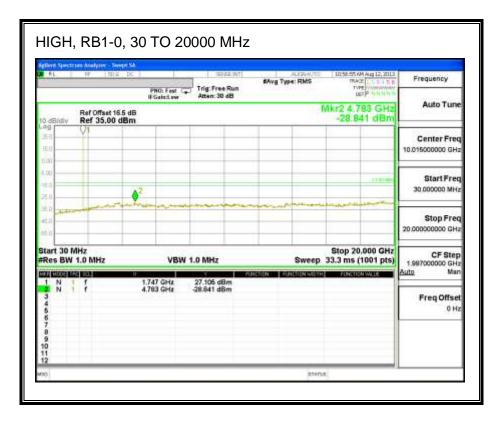
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# LTE QPSK, 5.0 MHz BAND WIDTH



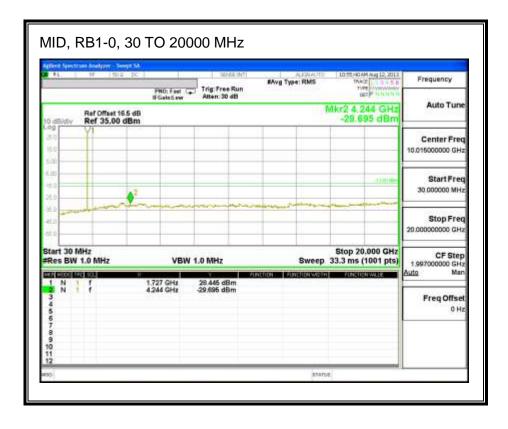


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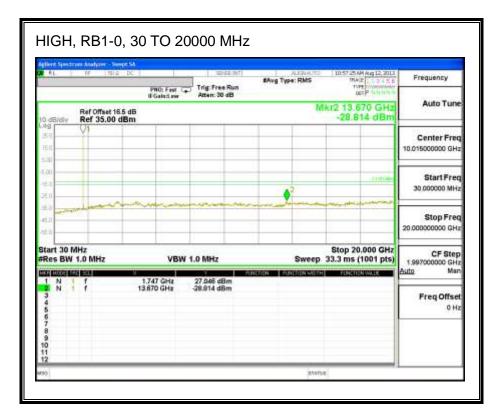


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	HT 1916 D		Trig: Free Run	#Avg Type: RMS	10:53:30 AM Aug 12, 2013 19:402 13:3 4 5 6 19:40 10:00 10:00 10:00	Frequency
	Ref Offset 16.5 di	IF Galact.ow	Atten: 30 dB	1.1	Mkr2 3.724 GHz	Auto Tune
vib/Bb	Ref 35.00 dBn	n			-28.797 dBm	
50 50 50						Center Fred 10.015000000 GH:
00 1.0 1.0	▲ <sup>2</sup>					Start Free 30.000000 MH
	- and a second second	~~~~~		and the second		Stop Free 20.00000000 GH
tart 30 f Res BW	MHz 1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH
	COLUMN TWO IS NOT	1.707 GHz	27.225 dBm	NUTION ADDRESSON WEETH	FUNCTION WALK	Auto Mar
1 N 2 N 3 4	1	3.724 GHz	-28.797 dBm			Freq Offse 0 H
6 7 8 9 0						

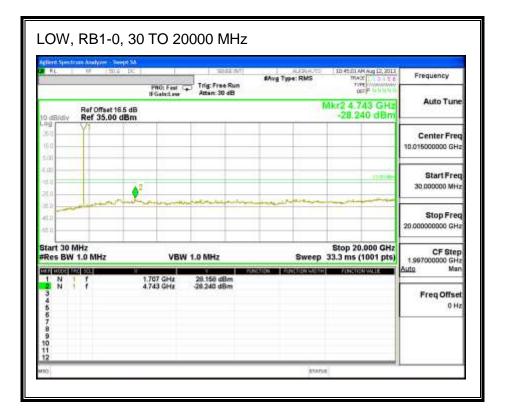


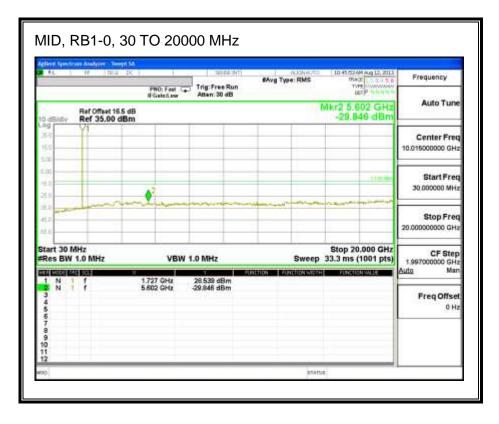
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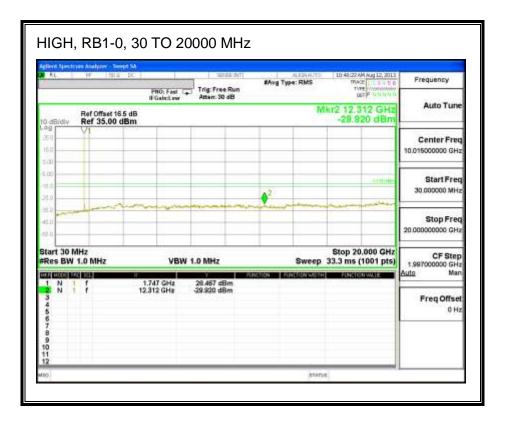
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# LTE QPSK, 10.0 MHz BAND WIDTH



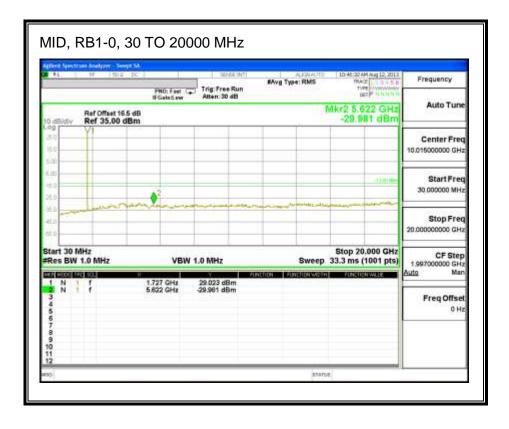


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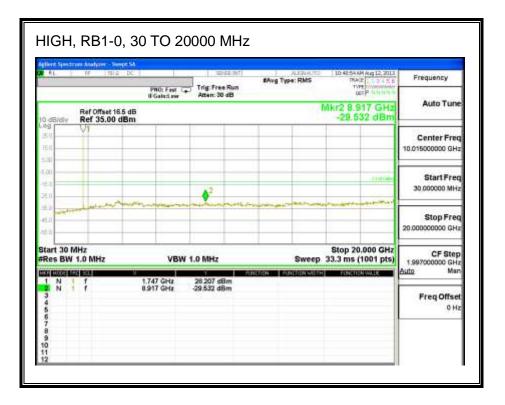


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	un Andyzer - Seept A HF - 1513 - Do	PNO: Fast .G	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	10:44 (24 AM Aug 12, 2013) 19402 11 3 4 5 5 19802 12 3 4 5 5 1982 12 3 4 5 5	Frequency
0 dBidly	Ref Offset 16.5 d Ref 35.00 dBn		Atten: 30 dB	73	Mkr2 9.416 GHz -29.519 dBm	Auto Tune
09 350 150	VI					Center Freq 10.015000000 GHz
1.00 11.00 11.00					11000-	Start Freq 30.000000 MHz
40 40 40	-		alterna versionale service			Stop Freq 20.00000000 GHz
tart 30 M Res BW		VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 1 2 N 3 4 5 5 7 8 9 10		1.707 GHz 9.416 GHz	27.813 dBm -29.519 dBm	NCTION AND THE PARTY AND THE	FUNCTION WALK	Auto Man Freq Offset 0 Hz

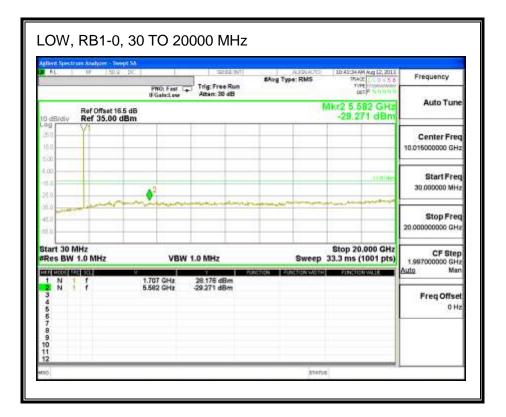


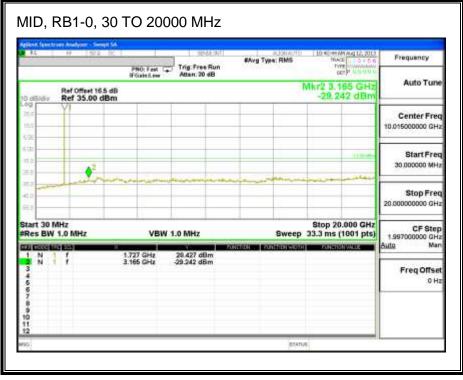
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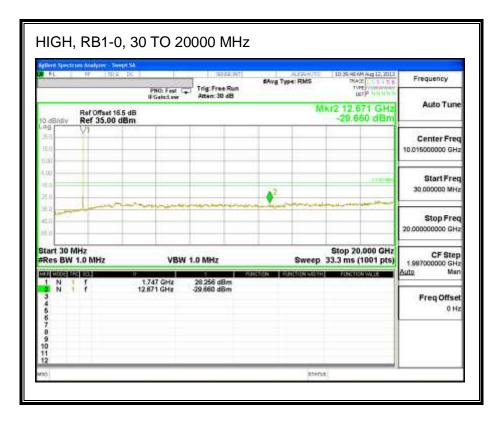
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### LTE QPSK, 15.0 MHz BAND WIDTH



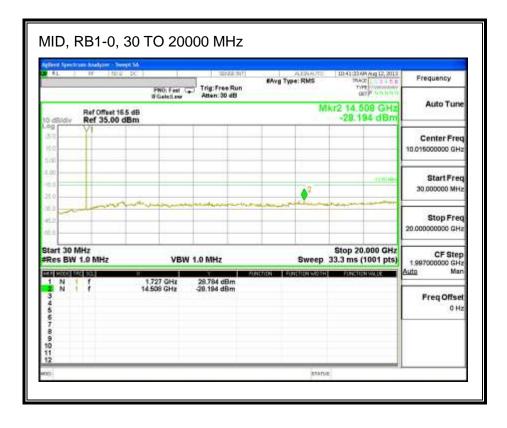


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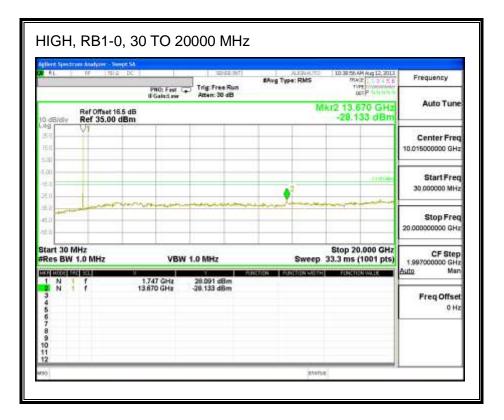


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AL.	HE 1512	PHO: Fast Ca	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	10:42:22:444 Aug 12, 2013 17:402 17:33:4:55 17:72 17:33:4:55 02:7 17:10:10:10	Frequency
o dBidly	Ref Offset 16.5 Ref 35.00 dB		Atten: 30 ap	72	Mkr2 8.977 GHz -29.165 dBm	Auto Tune
•g 350 150	M					Center Freq 10.015000000 GHz
4.0 4.0			2		11000	Start Freq 30.000000 MHz
4.0 4.0	Jun		and the second	a tarde ta ano	and the second	Stop Freq 20.00000000 GHz
tart 30 / Res BW	MHz 1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz
1 N 2 N 3 4 5 5 5 5 7 8 9 0 1 1 2		1.707 GHz 8.977 GHz	27.759 dBm -29.165 dBm	HERON ANTON WE'R	ELENCTION WALLE	Auto Man Freq Offset 0 Hz

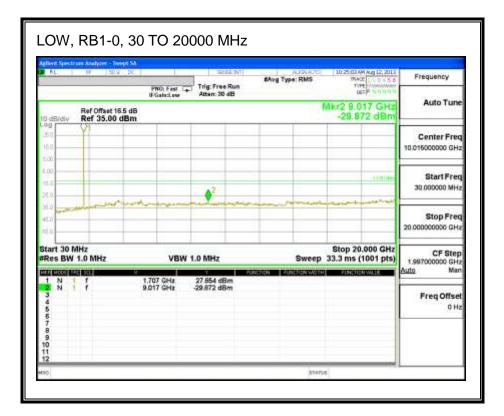


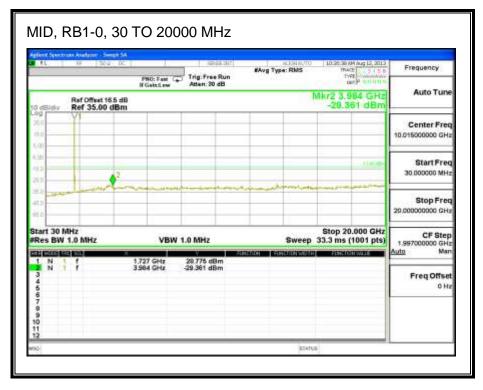
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#### LTE QPSK, 20.0 MHz BAND WIDTH



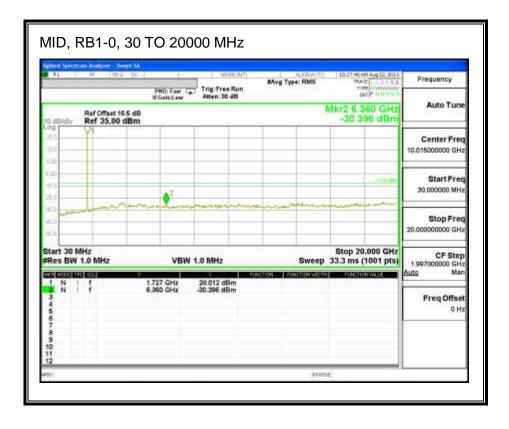


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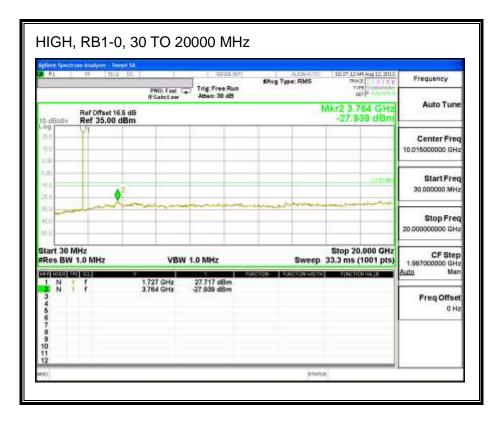
AL.	an Andrew Teept M IF 1913 DC		Statut	#Avg Type: RMS	10.26/26/44 Aug 12, 2013 1942 1, 2045 6 1972 0, 2045 6 1975 0, 1976 1, 2045 6	Frequency
0 dBidly	Ref Offset 16.5 dE Ref 35.00 dBm		Atten: 30 dB	11	Mkr2 2.406 GHz -30.156 dBm	Auto Tune
*9 5-0 5-0	VI					Center Free 10.015000000 GH
00	2				-12 00 00	Start Free 30.000000 MH
10	- Land-					Stop Free 20.00000000 GH
	AHz 1.0 MHz	VBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH Auto Mar
1 N 3 3 4 5 6 7 8 9 0 1 2	1	1,727 GHz 2,406 GHz	28.516 dBm -30.156 dBm			Freq Offse 0 H

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RL.	HE 1912 1	PHO: Fast G	Trig: Free Run Atten: 30 dB	#Aug Type: RMS	10:34:20 AM Aug 12, 2013 10:402 17:3:4:5:5 TVPE Provident	Frequency
o dBidly	Ref Offset 16.5 ( Ref 35.00 dB		Atten: 30 db	W	kr2 10.674 GHz -29.114 dBm	Auto Tune
•g 350 150	Y					Center Freq 10.015000000 GHz
d.0			2		11000-	Start Freq 30.000000 MHz
0.0						Stop Freq 20.00000000 GHz
Contraction of	1.0 MHz	VBW	1.0 MHz		Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz Auto Man
1 N 3 4 5 6 7 8 9 0 1 2	47 903 1 1 1	1,707 GHz 10,874 GHz	27,890 dBm -29,114 dBm	ANTERN ANTERNAL	PENCILEN VALUE	Auto Man Freq Offset 0 Hz



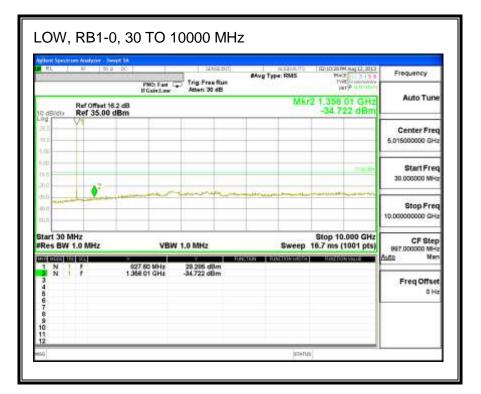
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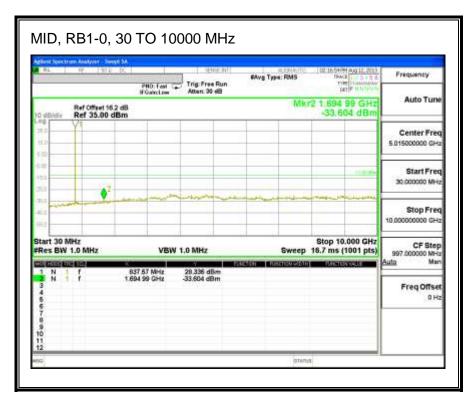


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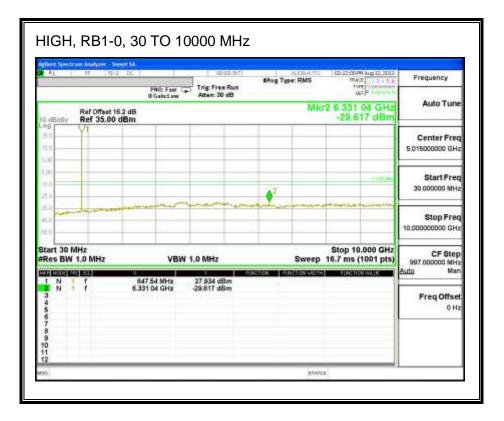
# 8.3.3. LTE BAND 5

# LTE QPSK (1.4 MHz BAND WIDTH)



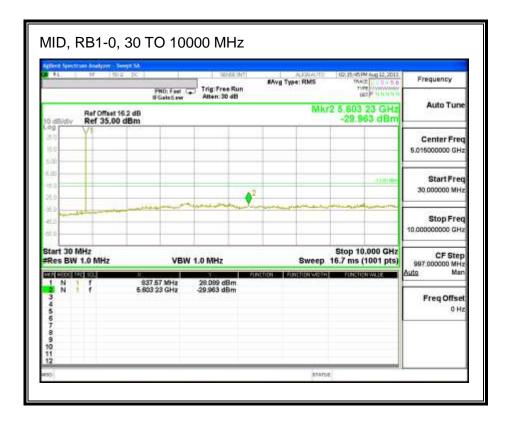


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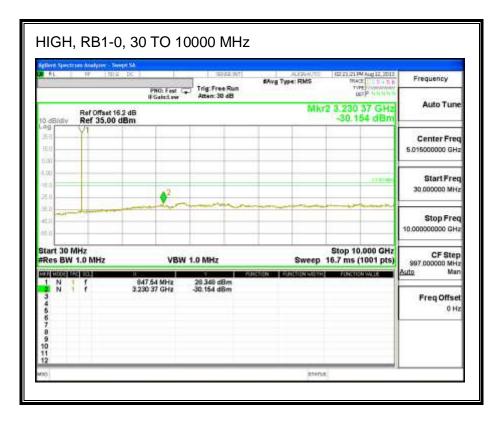


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AL.	W /10.5	PHO: Fast 1	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	102 14 50 PM Aug 12, 2013 TRACE 1, 20 A 5 B TYPE	Frequency
Il Galidiov Attain: 30 dB Mkr2 3.738 84 GHz 10 dBidiov Ref 35.00 dBm -28.301 dBm						
99 350 150 500	VE					Center Freq 5.015000000 GHz
4.0 4.0 21.0			2		100	Start Freq 30.000000 MHz
e1.0				And a state of the second s		Stop Freq 10.00000000 GHz
and the second second	1.0 MHz		V 1.0 MHz		Stop 10.000 GHz 16.7 ms (1001 pts)	CF Step 997.000000 MHz
1 N 2 N 3 4 5 6 7 8 9 0 01 12	44 SUL	627.60 MHz 3.736 84 GHz	28.546 dBm -29.301 dBm	unction Principle with	FINCTION WALK	Auto Man Freq Offset 0 Hz

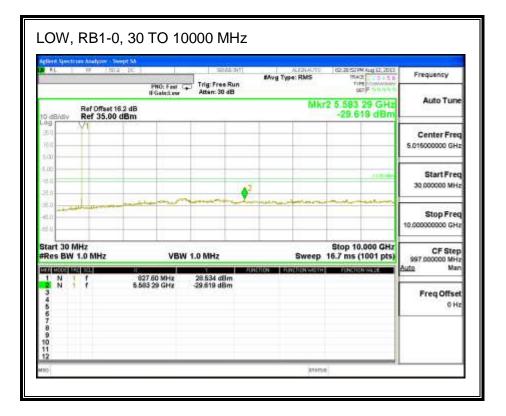


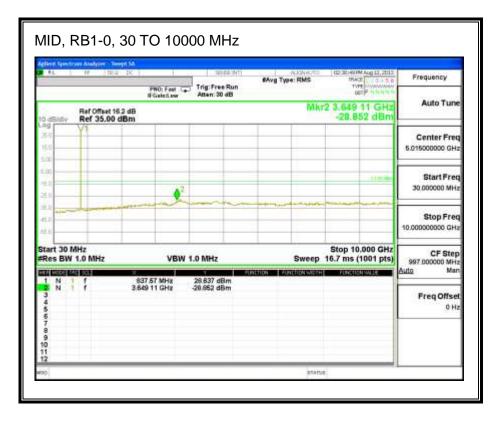
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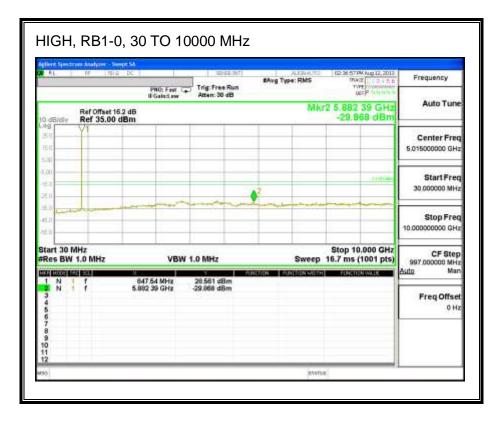
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# LTE QPSK, 3.0 MHz BAND WIDTH



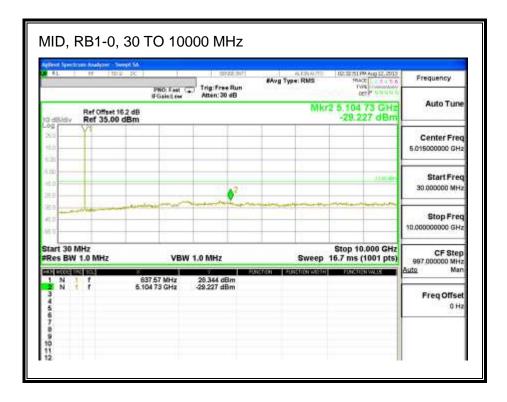


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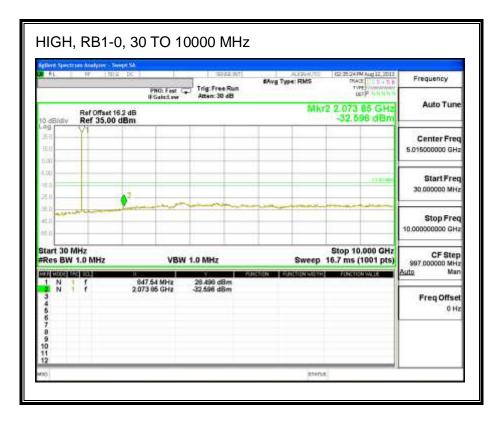


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AL.	W /102	PNO: Fast	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	02:27:21 PM Aug 12:2013 19402 2:2015 b 1092 2:0015 b 1092 2:0015 b	Frequency
0 dBidly	Ref Offset 16.2 Ref 35.00 dB	IF Galact.ow dB im	Aben: 30 ab	Mk	2 8.514 47 GHz -28.791 dBm	Auto Tune
99 350 150 500	VI	294				Center Freq 5.015000000 GHz
1.00 1.0 1.0						Start Freq 30.000000 MHz
40 e10	-					Stop Freq 10.000000000 GHz
	1.0 MHz		/ 1.0 MHz		Stop 10.000 GHz 16.7 ms (1001 pts)	CF Step 997.000000 MHz Auto Man
1 N 3 4 5 5 7 8 9 0 11 2	1	827.60 MHz 8.514 47 GHz	28.997 dBm -20.791 dBm	ANTELON WERE	HANCIEN WALK	Freq Offset 0 Hz

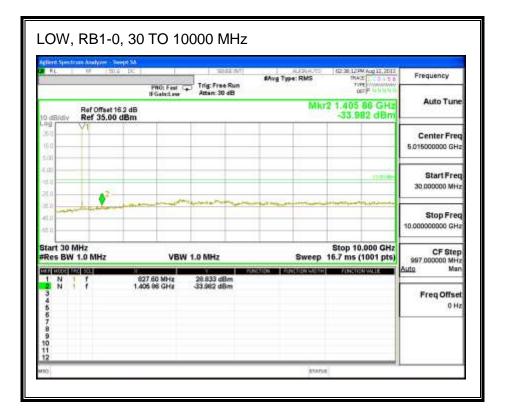


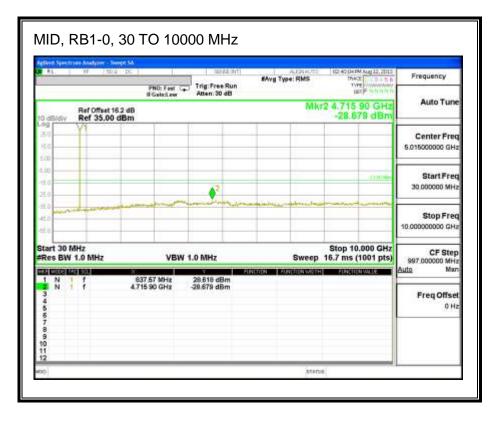
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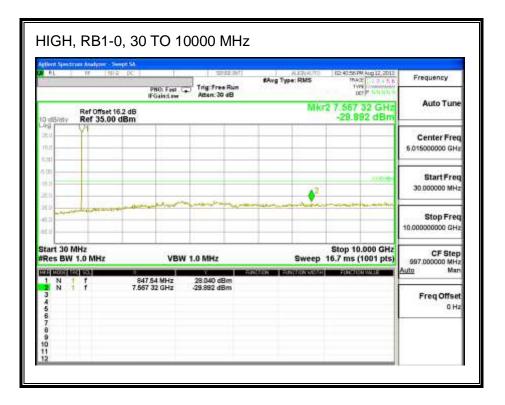
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# LTE QPSK, 5.0 MHz BAND WIDTH



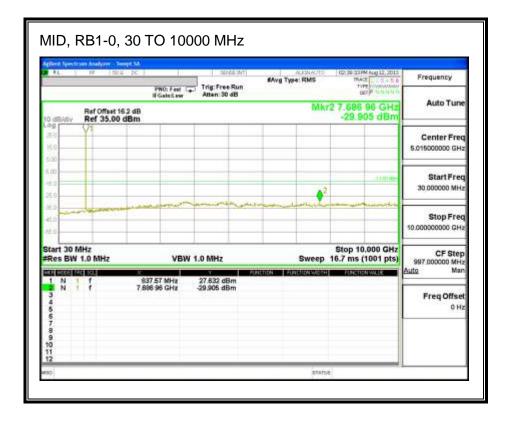


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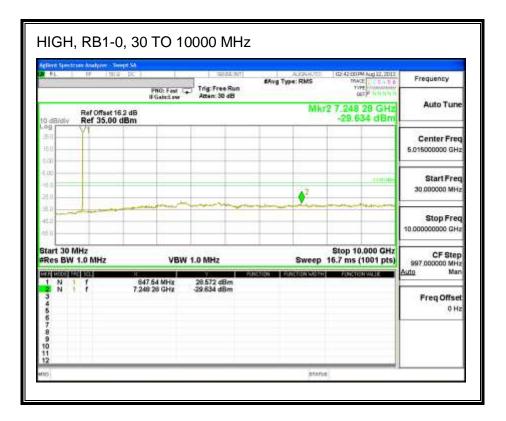


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AL.	W 1915	PHO: Fast 3	Trig: Free Run	#Avg Type: RMS	102-38-47 PM Aug 12, 2013 PM-02 12 0 4 5 5 T/PE 10 10 4 5 5 0 0 0 1 10 10 10 10	Frequency
Ref Offset 16.2 dB Mkr2 7.338 01 GHz to dB/dy Ref 35.00 dBm - 30.242 dBm						
•g 350 150	Vi	22330				Center Freq 5.015000000 GHz
4.0 4.0				2	11000	Start Freq 30.000000 MHz
4.0 4.0	-	- man and a contra	4		يىنى بىرى <sub>يە</sub> يەر يەرىيە يەرىيە بىرىيە بىرىيە بىرىيە بىرىيە يەرىيە بىرىيە يەرىيە بىرىيە بىرىيە بىرىيە بىرىيە بىرى	Stop Freq 10.00000000 GHz
Contractor of	1.0 MHz	VBV	/ 1.0 MHz		Stop 10.000 GHz 16.7 ms (1001 pts)	CF Step 997.000000 MHz
1 N 3 4 5 6 7 8 9 0 1 2	1	627.60 MHz 7.336 01 GHz	28.356 dBm -30.242 dBm	ANTION ANTION WORK	PERCTICINALLE	Auto Man Freq Offsel 0 Hz

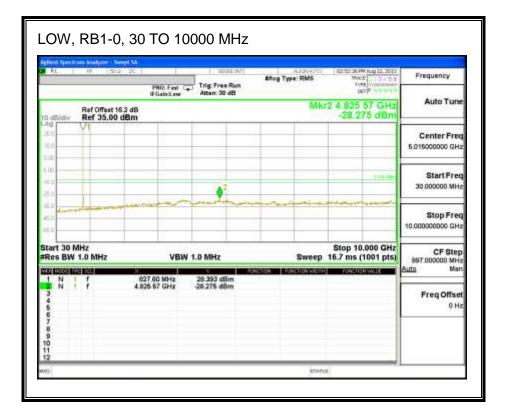


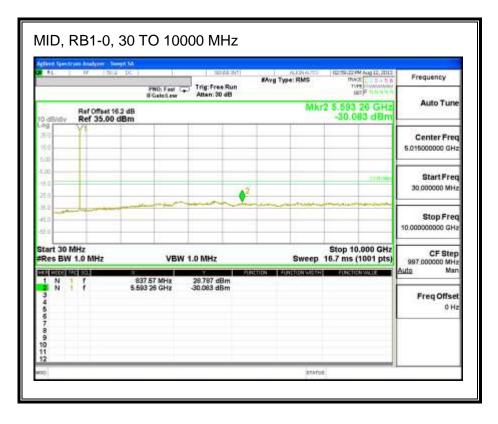
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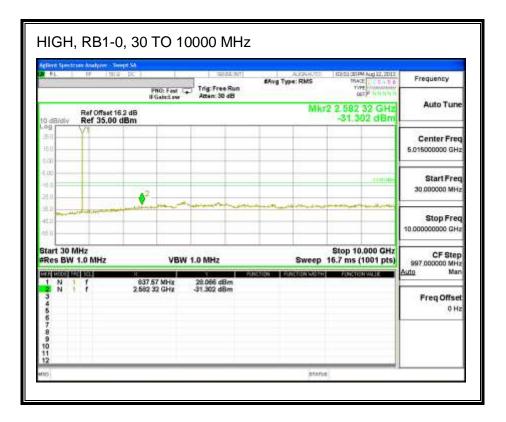
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# LTE QPSK, 10.0 MHz BAND WIDTH



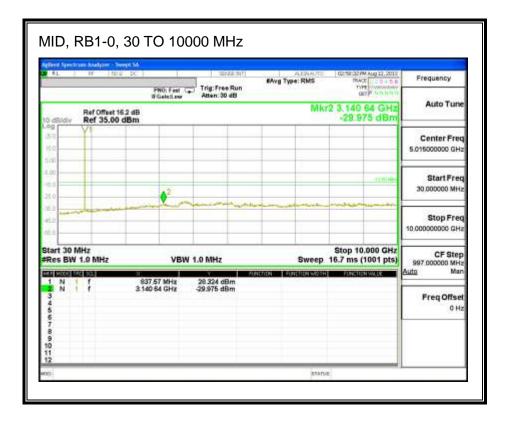


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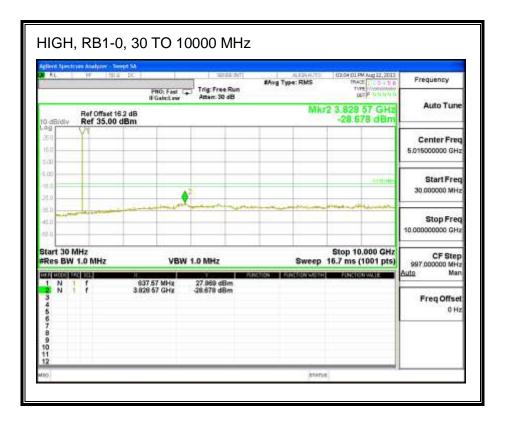


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AL.	H 15	18 pc	PHO: Fast C	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	02:57:21 PM Aug 12, 2013 TRACE 0 0 0 4 5 0 TOTE 0 0 0 4 5 0	Frequency
o dBidly	Ref Offset Ref 35.00	16.2 dB	FGaindlow	Atten: 30 db	M	472 2.193 49 GHz -31.609 dBm	Auto Tune
•g 350 150	VI						Center Freq 5.015000000 GHz
4.0 4.0		<b>₽</b> 2				-1100	Start Freq 30.000000 MHz
0.0	4		~				Stop Freq 10.00000000 GHz
tart 30 M Res BW	AHz 1.0 MHz		VBW	1.0 MHz	Sweep	Stop 10.000 GHz 16.7 ms (1001 pts)	CF Step 997.000000 MHz
1 N 1 2 N 3 4 5 5 5 5 5 7 8 9 0 1 1 2	22 <b>1</b> 500 <b>1</b>		60 MHz 49 GHz	28.816 dBm -31.509 dBm	ANTION FUNCTION WE	H FUNCTION WALK	Auto Man Freq Offset 0 Hz



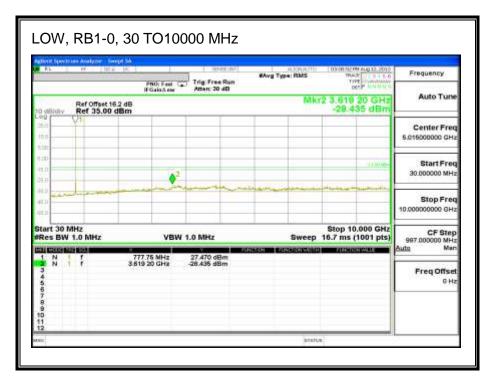
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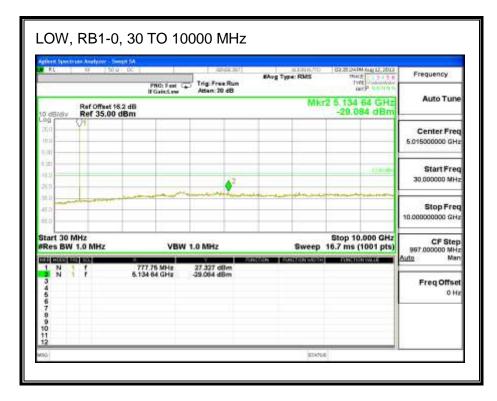
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# 8.3.4. LTE BAND 13

#### LTE QPSK, 779.5 (5.0 MHz BAND WIDTH)

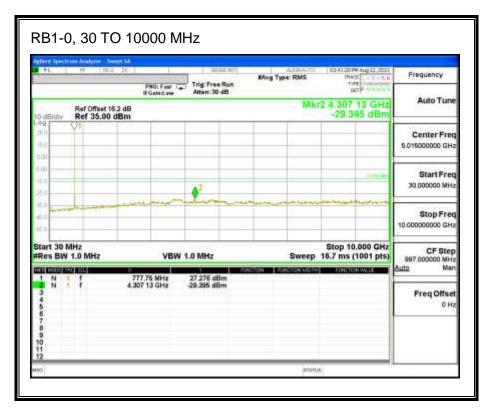


#### LTE 16QAM

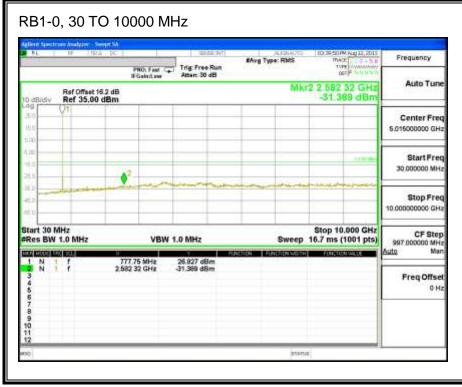


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#### LTE QPSK, 782MHz (5.0 MHz BAND WIDTH)

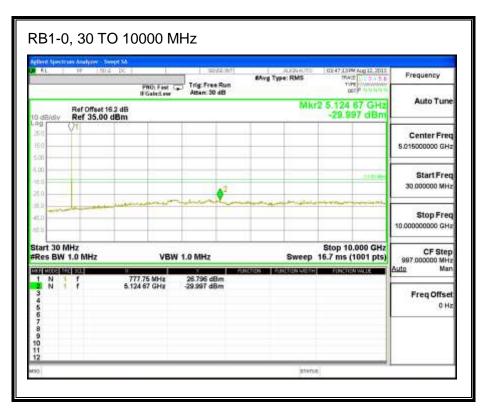


#### LTE 16QAM

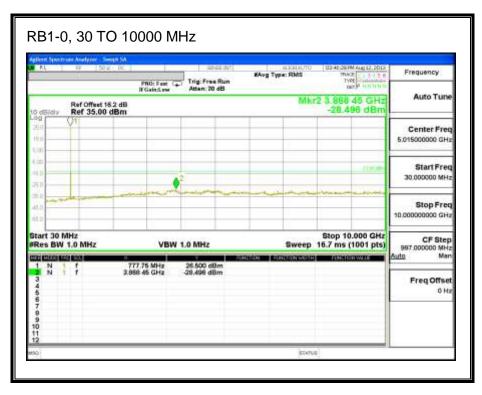


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## LTE QPSK Band 13, 784.5MHz (5MHz Bandwidth)

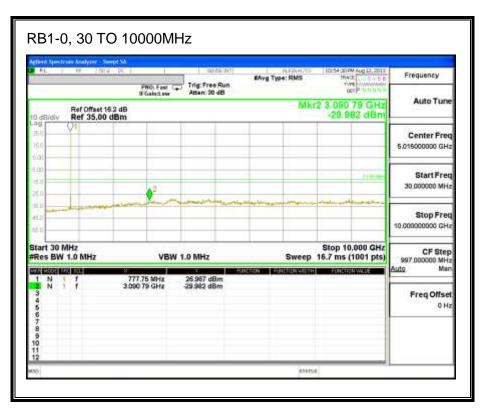


#### LTE 16QAM Band 13, 784.5MHz (5MHz Bandwidth)

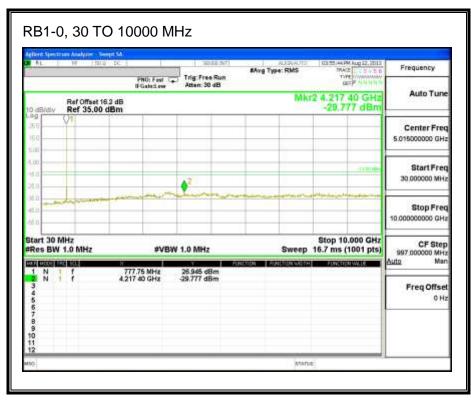


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## LTE QPSK Band 13, 782MHz (10MHz Bandwidth)



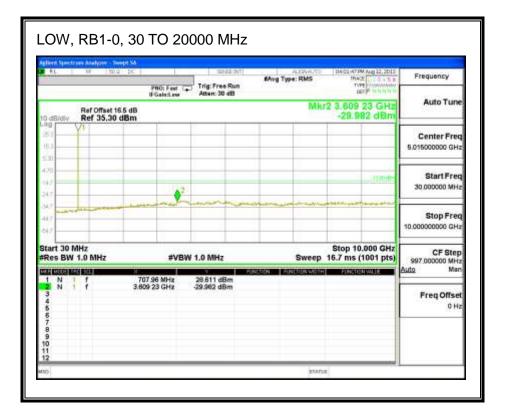
## LTE 16QAM Band 13, 782MHz (10MHz Bandwidth)

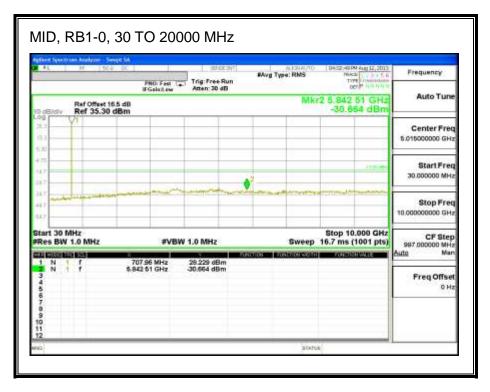


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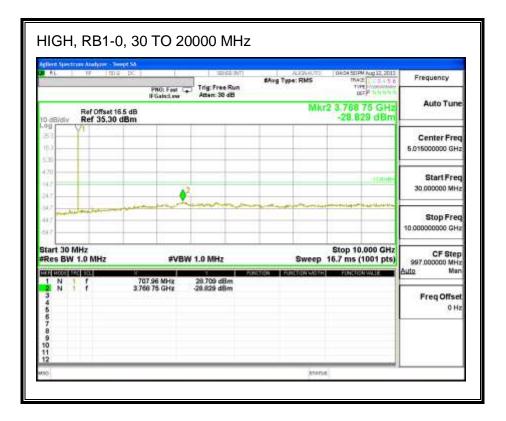
# 8.3.5. LTE BAND 17

#### LTE QPSK (5.0 MHz BAND WIDTH)

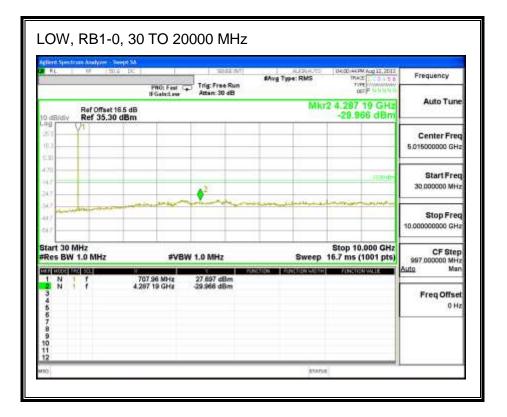


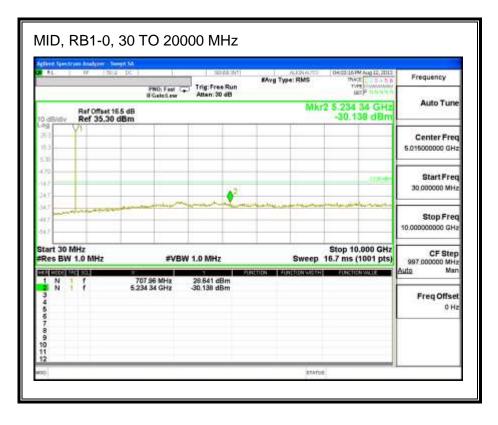


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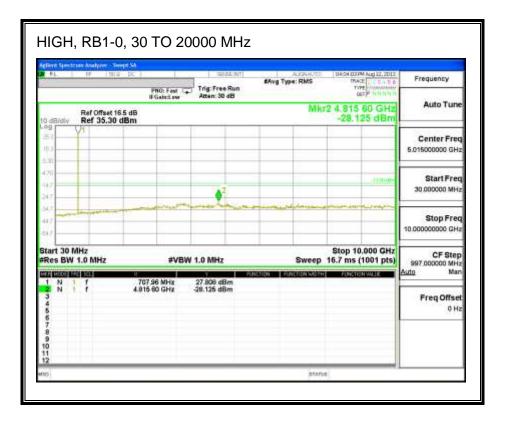


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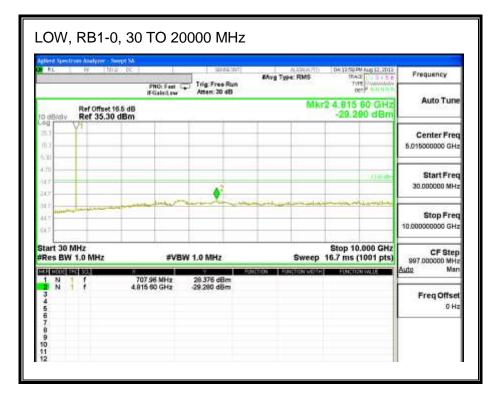
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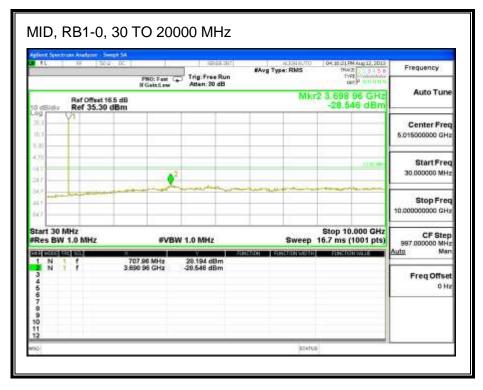


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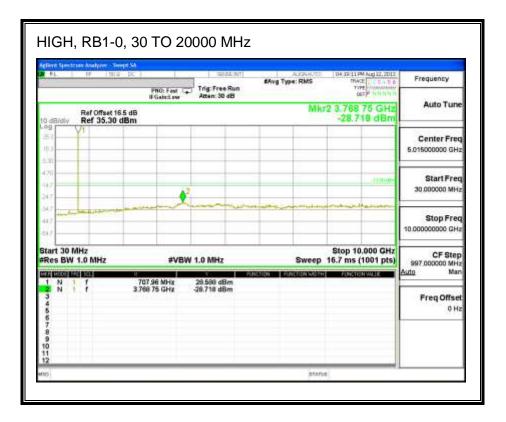
### Band 17 (10.0 MHz BAND WIDTH)

### LTE QPSK

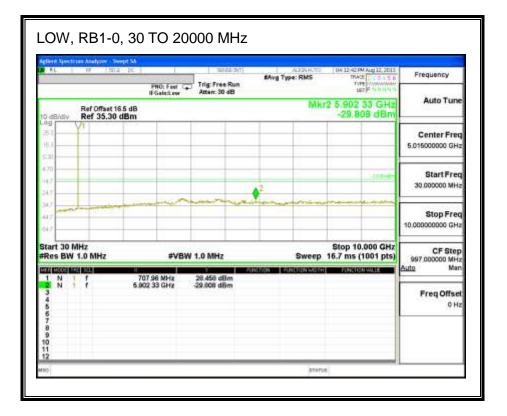


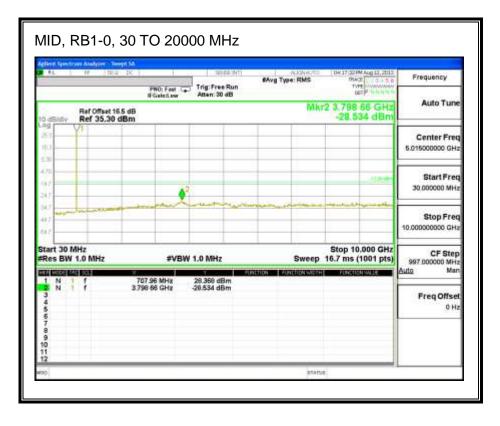


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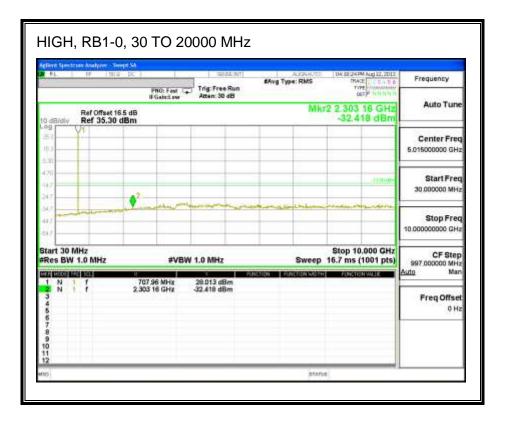


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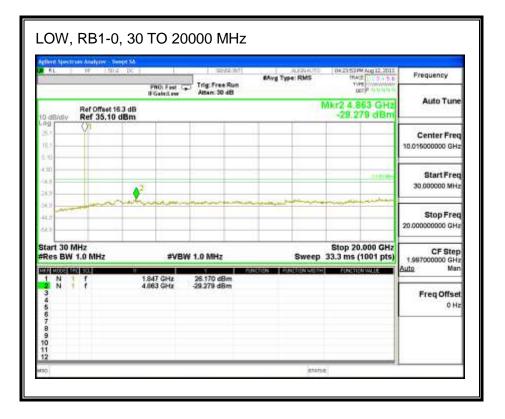
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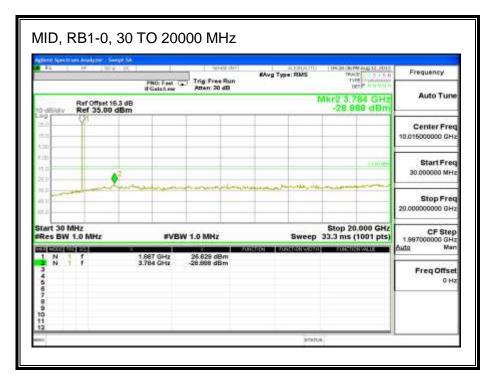


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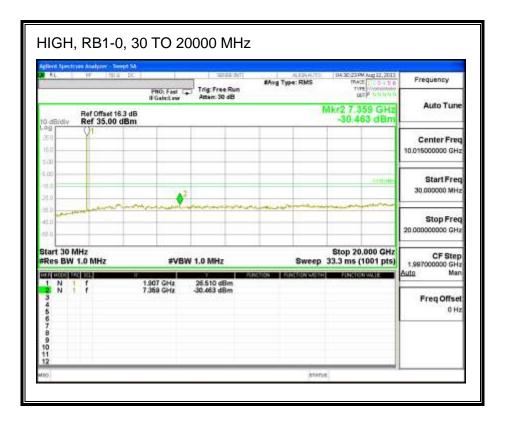
# 8.3.6. LTE BAND 25

#### LTE QPSK (1.4 MHz BAND WIDTH)



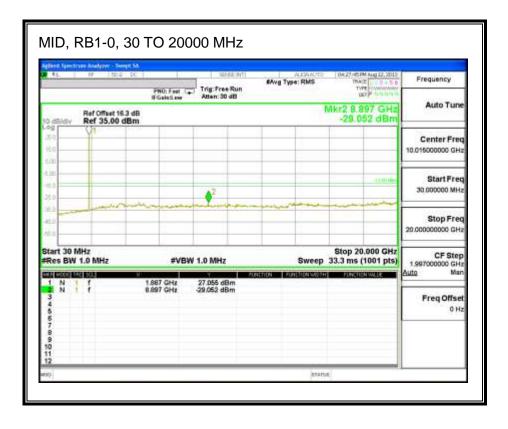


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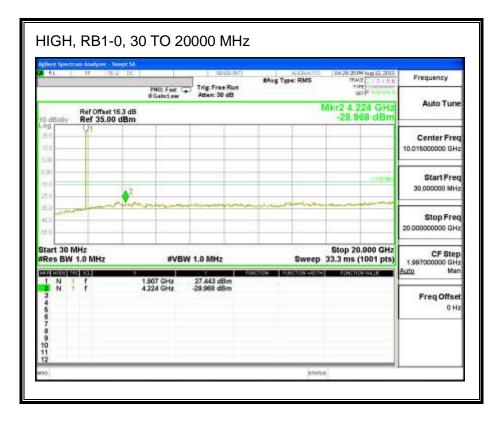


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	um Analyzer - 3 17 - 2 22	s pc   Fill	t Fest 🕞	Trig: Free Run Atten: 30 dB	#Avg Type: RMS		Frequency
dBidly	Ref Offset 1 Ref 35.00	16.3 dB	FGalativer Atten: 30 dB Mkr2 5.062 GF -29,486 dB				
99 50 50 00	CH -						Center Free 10.015000000 GH:
00		2				11.010	Start Free 30.000000 MH
10		deren .	يند نغر ي	******			Stop Free 20.00000000 GH
	rrt 30 MHz Stop 20.000 GH es BW 1.0 MHz #VBW 1.0 MHz Sweep. 33.3 ms (1001 pt				1.997000000 GHz		
1 N 1 2 N 1 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	f f	1.847 5.062	GH2 GH2	27.058 dBm -29.498 dBm	UNCTUR AURCTURY	FINCTION WALK	Freq Offse 0 H

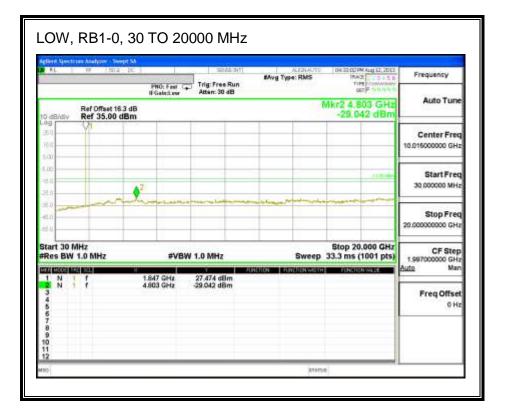


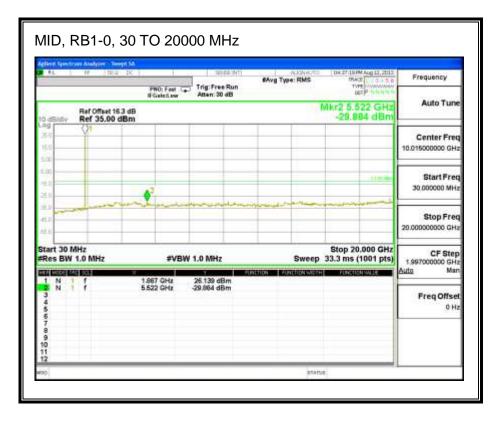
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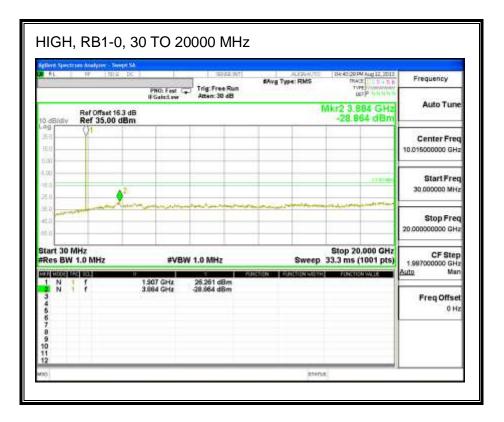
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## LTE QPSK (3.0 MHz BAND WIDTH)



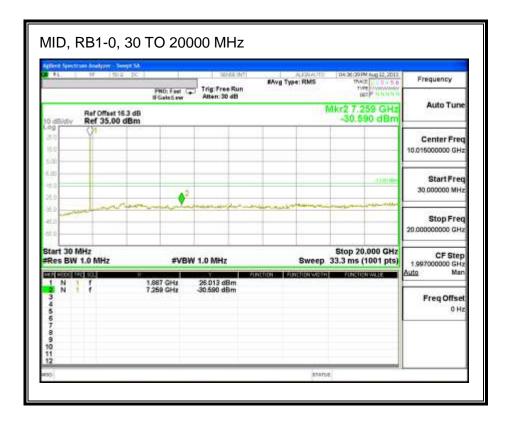


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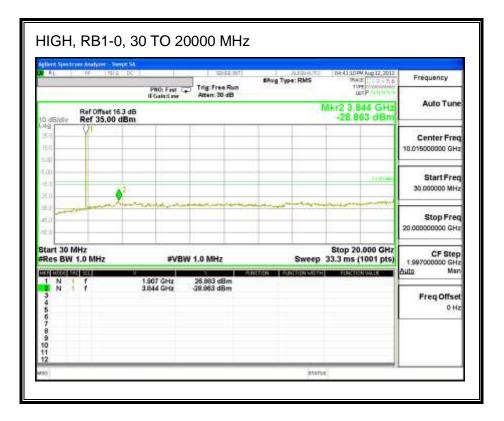


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Ben Spectrum Analyzer AL IF	PNO: Fast Cal	Trig: Free Run	#Avg Type: RMS	104 10 53 PM Aug 12, 2013 19 402 0 0 4 5 6 10 4 2 10 4 5 6	Frequency
	ef Offset 163 dB Mkr2 7.239 GH2 ef 35.00 dBm - 30.446 dBm				Auto Tune
99 V3 50 50					Center Freq 10.015000000 GHz
10 10 10	2			11000	Start Free 30.000000 MHz
eo eo			1000-00-00-00-00-00-00-00-00-00-00-00-00	and the factor of the second second	Stop Free 20.00000000 GHz
tart 30 MHz Res BW 1.0 MHz	≠vBW	1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH
20 1002 424 104 1 N 1 f 3 N 1 f 5 6 7 8 9 9 0 1 2	1,647 GHz 7,238 GHz	26.632 dBm -30.446 dBm	NETION AUTOMOUTH	FUNCTION VALUE	Auto Mar Freq Offset 0 Hz

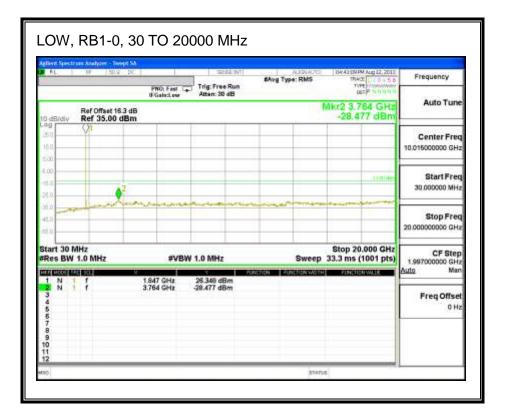


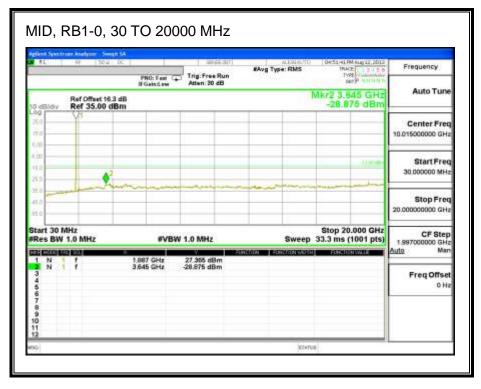
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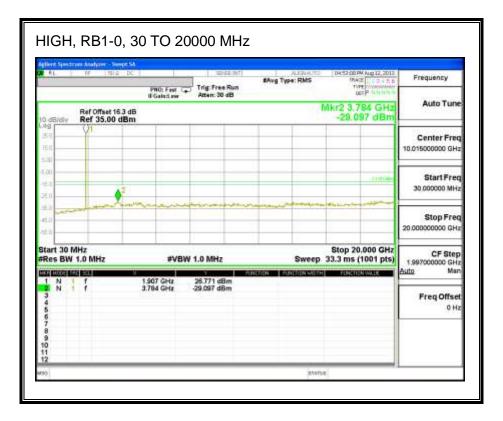
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### LTE QPSK (5.0 MHz BAND WIDTH)

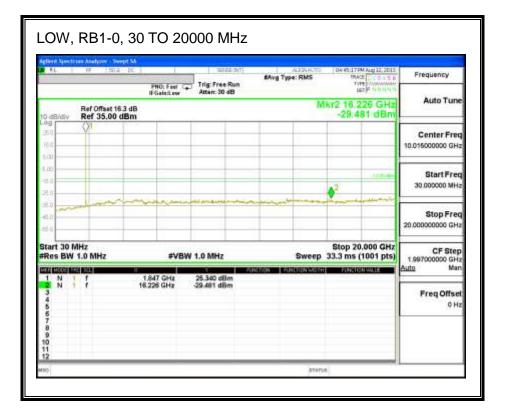


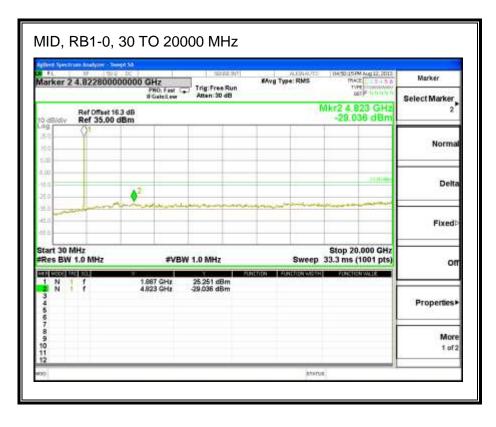


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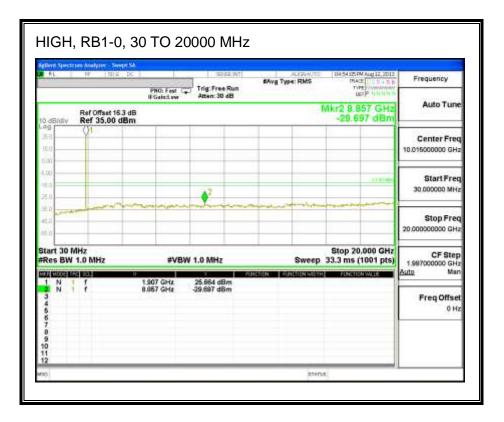


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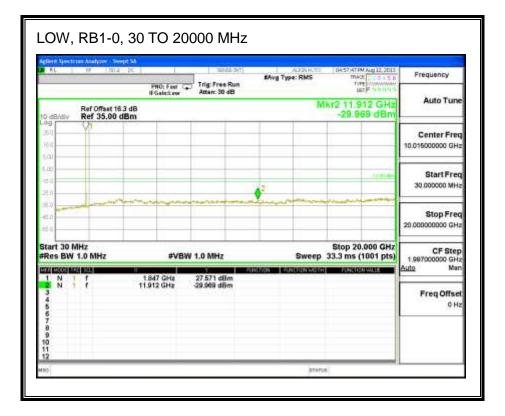


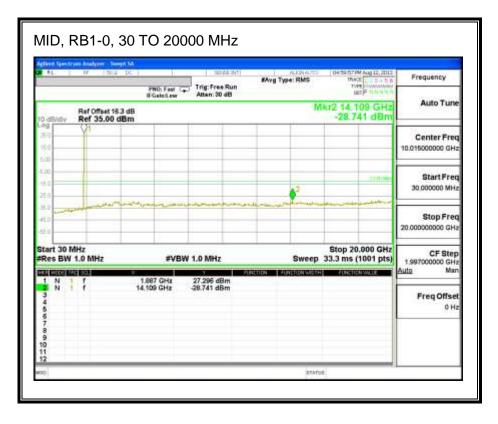
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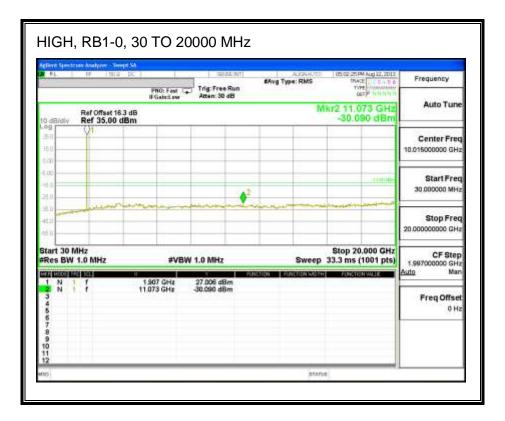
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## LTE QPSK (10.0 MHz BAND WIDTH)



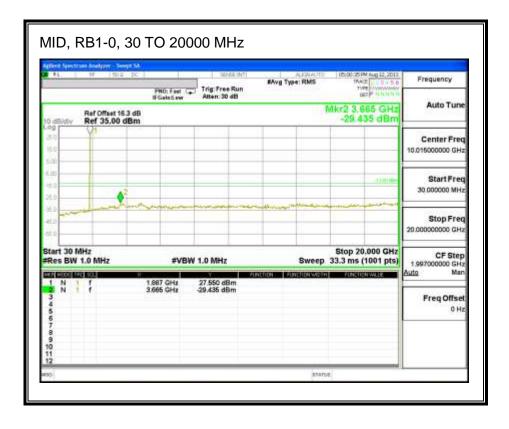


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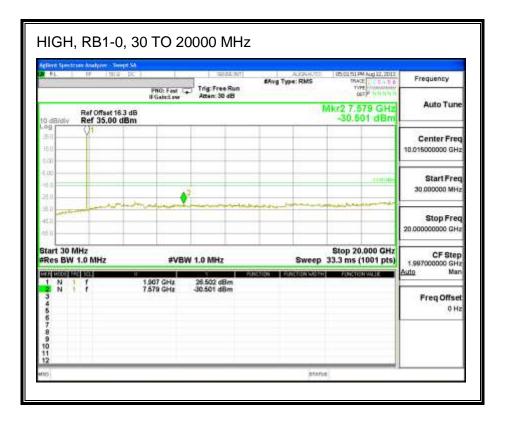


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AL   H 1512	PRO: Fast C	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	04:50:20 PM Aug 12, 2013 PACE 12:20 A 5 5 TVPE 10:00 A 5 5 007 F 10:10:00 F	Frequency	
delidiv Ref 35.00 (	Ref Offset 16.3 dB Mkr2 3.844 GHz					
•9 ()1 50 ()1 50 ()1					Center Freq 10.015000000 GHz	
(0) 4.0 4.0	2			1000	Start Freq 30.000000 MHz	
60	- man -	1			Stop Freq 20.000000000 GHz	
tart 30 MHz Stop 20.000 Res BW 1.0 MHz #VBW 1.0 MHz Sweep 33.3 ms (1001					1.997000000 GH	
24 DECOM ACA SUB 25 N 1 f 26 N 1 f 3 4 5 6 7 8 9 9 0 1 2	1.847 GHz 3.844 GHz	25.204 dBm -28.096 dBm	antition Associates with the	PENCIUM VALUE	Auto Man Freq Offset 0 Hz	

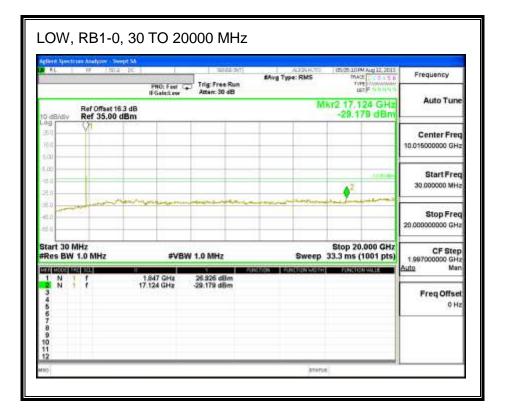


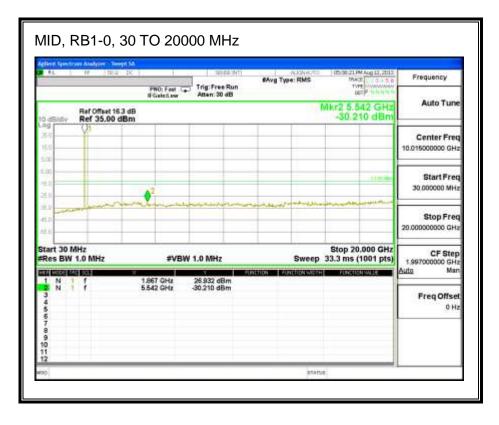
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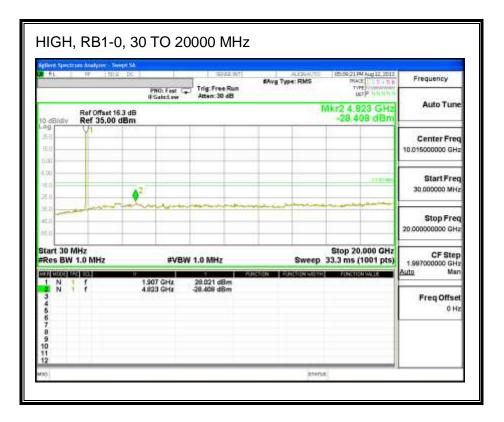
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## LTE QPSK (15.0 MHz BAND WIDTH)



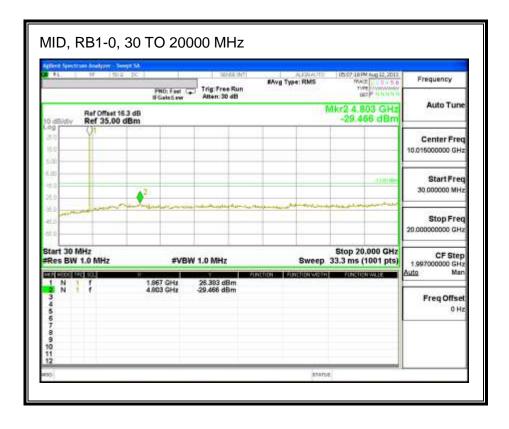


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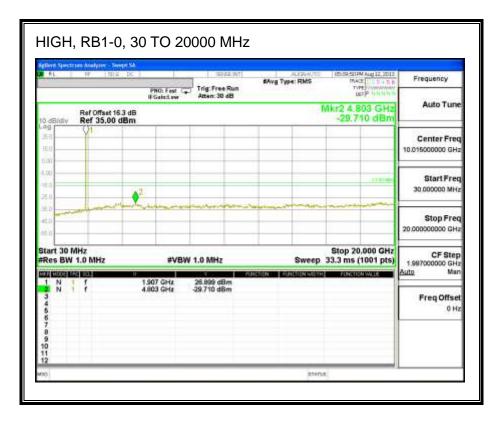


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AL   #  192	PNO: Fast	Trig: Free Sun	#Avg Type: RMS	ISOSSSPM Aug 12, 2013 THACE TO COAS B THE DOWNWARK	Frequency	
Bidly Ref 35.00	Ref Offset 16.3 dB Mkr2 19.141 GHz					
•g V1 50 50					Center Freq 10.01500000 GHz	
40 40				2	Start Freq 30.000000 MHz	
do do		nje la umonanjenomanje			Stop Freq 20.00000000 GHz	
tart 30 MHz Res BW 1.0 MHz						
71 00.00 120 120 1 N 1 F 2 N 1 F 3 4 5 5 5 7 8 9 0 1 2	1 547 GHz 19.141 GHz	26.552 dBm -28.193 dBm	Autor Autor Autor Autor	PINCTON WALK	Auto Man Freq Offset 0 Hz	



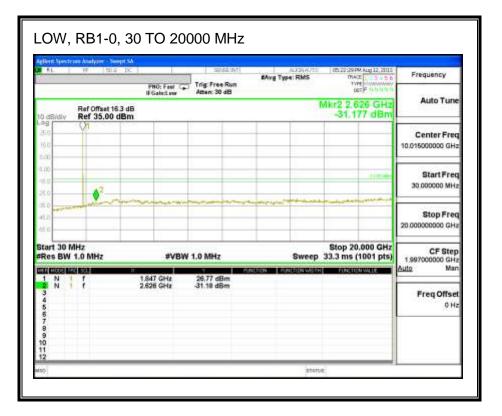
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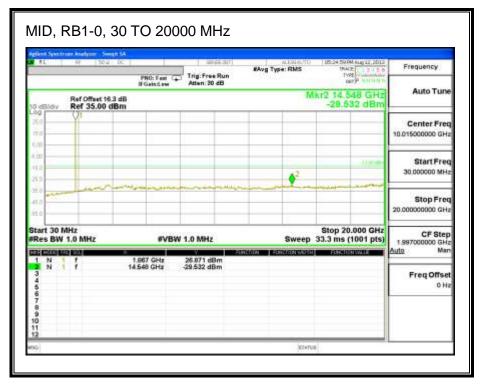


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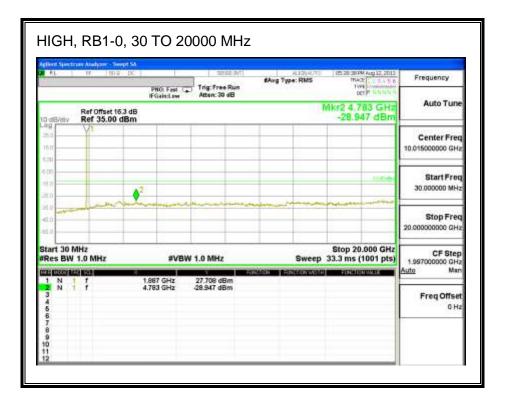
### Band 25 (20.0 MHz BAND WIDTH)

### LTE QPSK



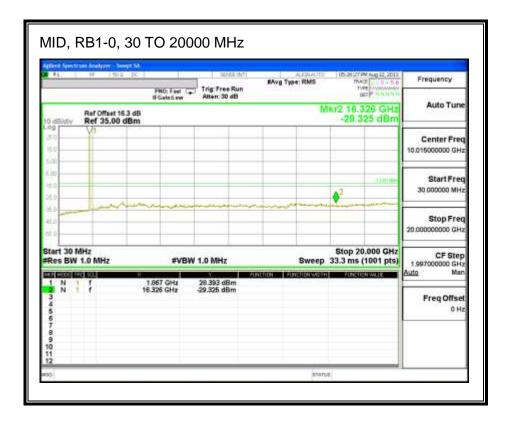


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Bent Spectrum Analyzer - S RL IF 750	2 pc	32242.347	#Avg Type: RMS	15:20:26 PM Aug 12, 2013 19:422 2:15 p	Frequency		
	FNO: Fest C IFGalad.cor	Trig: Free Run Atten: 30 dB	0.000	Dec P 11 11 11 11 1	Auto Tune		
Ref Offset 1 dBidly Ref 35.00	6.3 dB dBm	91. UK	Mkr2 3.804 GHz -29.798 dBm				
					Center Freq 10.015000000 GHz		
10 10 10	2			100	Start Freq 30.000000 MHz		
10 00000000000000000000000000000000000	North Marine	and the second street and second street		- Marth - Constant	Stop Freq 20.00000000 GHz		
tart 30 MHz Res BW 1.0 MHz	#VB	W 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GHz		
	1.847 GHz	26.295 dBm	MARKE BURKENSING		<u>Auto</u> Man		
2 N 1 F 3 4 5 6	3.804 GHz	-29.799 dBm			Freq Offse 0 H		
7 8 9							



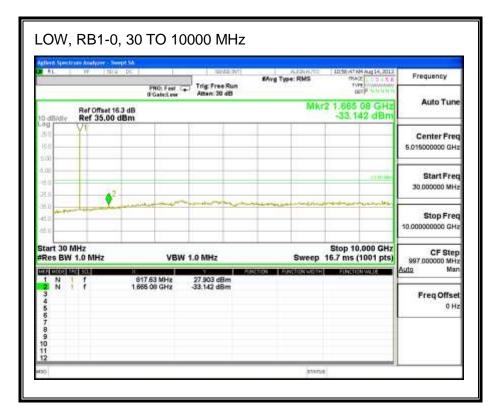
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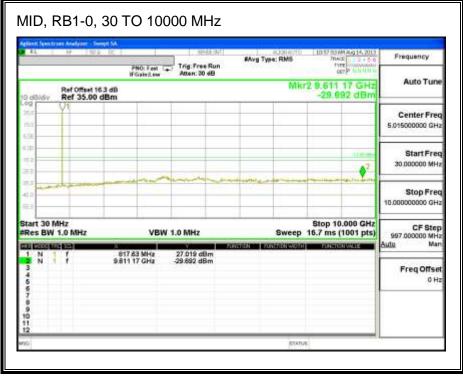
AL IF	PRO: Fast	Trig: Free Run	BAvg Type: RMS	18:27:37PM Aug 12,2013 794/32 1.0 9 5 8 1992 1994/34	Frequency	
Ref Offset 16.3 dB Mkr2 4.823 GHz 0 dBidly Ref 35.00 dBm -28.822 dBm						
50 V1					Center Free 10.015000000 GH	
00 1.0 1.0	(a)			-1700	Start Free 30,000000 MH	
1.0 1.0	n market		and a start of the		Stop Free 20.00000000 GH	
tart 30 MHz Res BW 1.0 MHz	#VB	W 1.0 MHz	Sweep	Stop 20.000 GHz 33.3 ms (1001 pts)	CF Step 1.997000000 GH Auto Mar	
1 N 1 f 20 N 1 f 4 5 6 7 8 9 0 1	1.667 GHz 4.823 GHz	27.059 dBm -36.622 dBm			Freq Offse 0 H	

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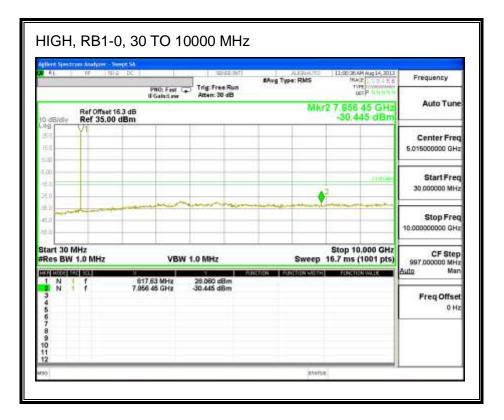
# 8.3.7. LTE BAND 26

#### LTE BAND 26 QPSK (3.0 MHz BAND WIDTH)



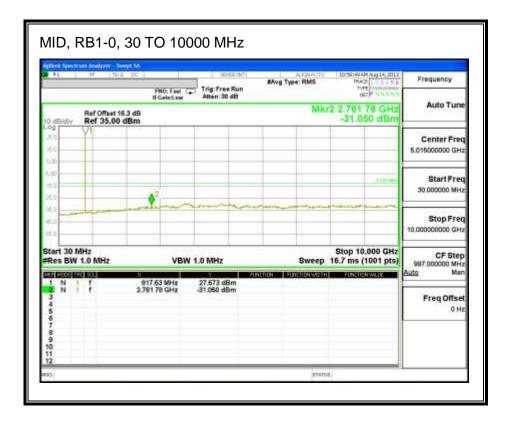


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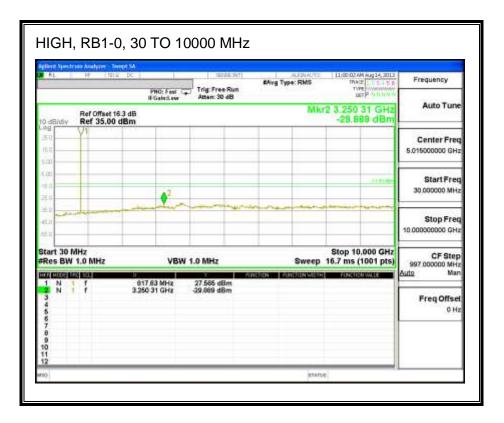


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AL.	W 1912 D	PNO: Fast G	Trig: Free Run Atten: 30 dB	sAvg Type: RMS	10:58:11 AM Aug 14, 2013 17402 1, 2 3 4 5 8 1775 1, 2 3 4 5 8 1775 1, 10 1 5 1	Frequency
0 dB/dly	Ref Offset 16.3 d Ref 35.00 dBr	в		Mic	Auto Tune	
.09 .350 .150 .00	91					Center Freq 5.01500000 GHz
4.00 4.0. 24.0			2		-1100	Start Freq 30.000000 MHz
0.02 0.02	~			1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -		Stop Freq 10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz VBW 1.0 MHz				Sweep	Stop 10.000 GHz Sweep 16.7 ms (1001 pts)	
1 N 1 2 N 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	817.63 MHz 3.796 86 GHz	26.994 dBm -27.608 dBm	AUTON AUTONNES	FUNCTION WALLS	<u>Auto</u> Man Freq Offset 0 Hz

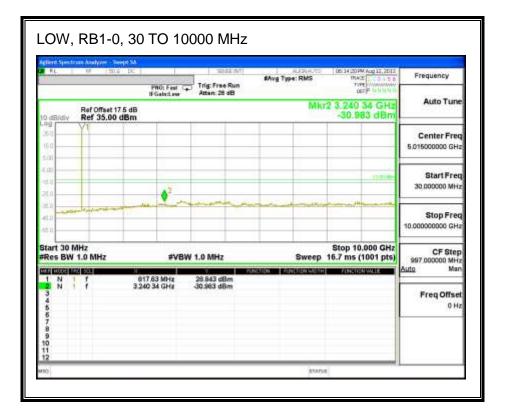


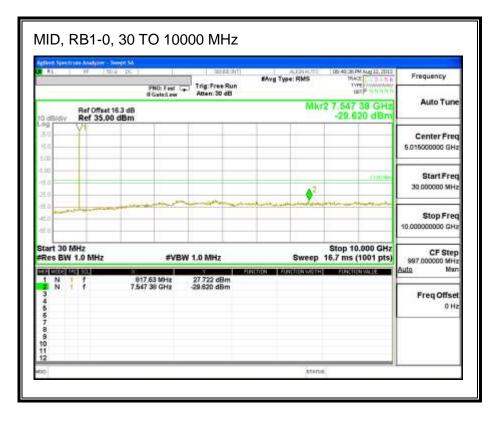
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## LTE BAND 26 QPSK (5.0 MHz BAND WIDTH)





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