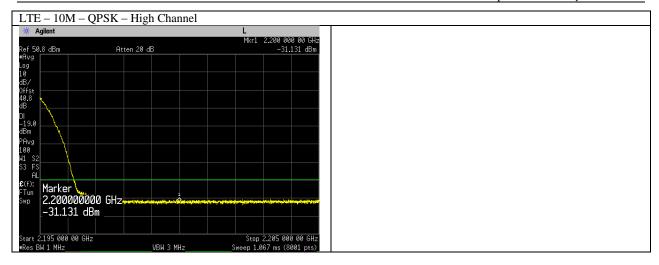
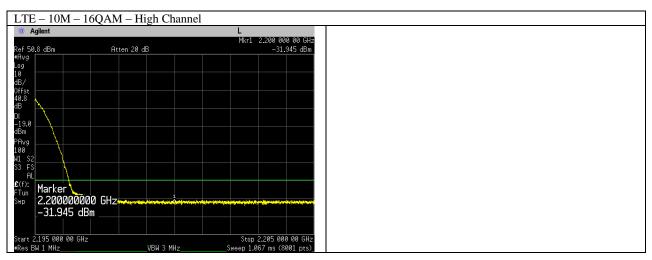
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			-19.0 dBm		
	······				
/g			PAvg 100		N <sup>ala</sup>
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rt 2.106 000 000 GHZ s BW 100 kHz	VBW 300 kHz	Stop 2.109 000 000 GHZ Sweep 1.067 ms (8001 pts)	AL	port	
			£(f):	1	
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			Center 2.110 000 00 GHz		Span 2 I
A.:!!			enter 2.110 000 00 GHz •Res BW 100 kHz		5pan 21 Sweep 1.067 ms (8001 p
Agilent		L Mkr1 2 107 864 250 GHz	Center 2.110 000 00 GH2 #Res BW 100 kHz	VBW 300 kHz	
- - 50.8 dBm Att	ten 20 dB	L Mkr1 2.107 864 250 GHz -25.470 dBm	Center 2.110 000 00 GHz #Res BW 100 kHz	VBW 300 kHz	
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50.8 dBm Att		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 6Hz #Res BW 100 kHz	VBW 300 kHz	
50.8 dBm Att		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ @Res BW 100 kHz	VBW 300 kHz	
50.8 dBm Att		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ WRes BW 100 kHz	VEW 300 kHz	
50.8 dBm Att <sup>19</sup> Marker 2.107864250 GHz -25.470 dBm		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ WRes BW 100 kHz	VBW 300 kHz	
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50.8 dBm Att <sup>79</sup> Marker 2.107864250 GHz -25.470 dBm		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ MRes BW 100 kHz	VGW 300 kHz	
50.8 dBm Att 479 407 417 417 417 417 417 417 417 41		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ #Res BW 100 kHz	<u>VBW 300 kHz</u>	
50.8 dBm Att Marker 2.107864250 GHz -25.470 dBm 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ #Res BW 100 kHz	VBW 300 kHz	
50.8 dBm Att Marker 2.107864250 GHz -25.470 dBm 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ #Res BW 100 kHz	VEW 300 kHz	
r 50.8 dBm Att Marker 2.107864250 GHz -25.470 dBm 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ MRes BW 100 kHz	VEW 300 kHz	
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<ul> <li>Marker</li> <li>2.107864250 GHz</li> <li>-25.470 dBm</li> <li>9.0</li> <li>9.0</li> <li>9.2</li> <li>52</li> <li>FS</li> <li>AL</li> <li>0:</li> </ul>		Mkr1 2.107 864 250 GHz	Lenter 2.110 000 00 GHZ #Res BW 100 kHz	VBW 300 kHz	
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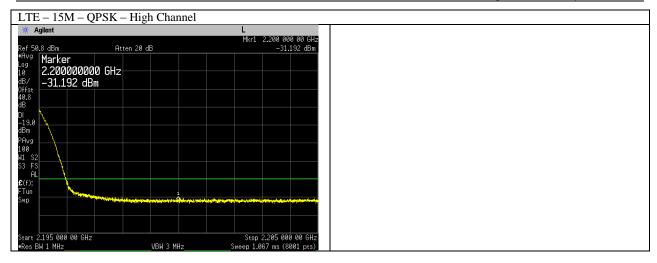


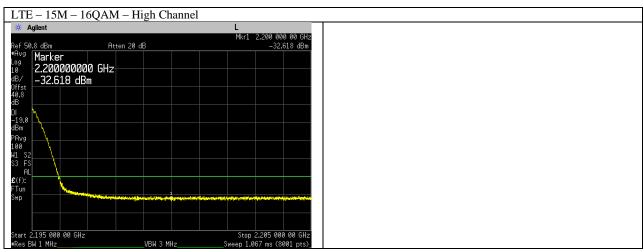
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-30.578 dl				
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			DI -19.0 dBm		
g \$2 t 2.108 000 000 GHz		Stop 2.109 000 000 GHz	PAvg 100 W1 S2 S3 FS		WWWWWWWW
s BW 150 kHz	#VBW 470 kHz	Sweep 1.067 ms (8001 pts)	AL	1_W	
hannel Power		Power Spectral Density	£(f): f>50k	And the second	
27.33 dBm /1.0000 N		-87.33 dBm/Hz	Start 2.109 000 00 GHz #Res BW 150 kHz	•VBW 470 kHz	Stop 2.111 000 00 Sweep 1.067 ms (8001 p
Agilent		L			
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<sup>9</sup> Marker 2.107969250 GHz -25.684 dBm					
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9 \$2 F\$ AL					
AL					
t 2.105 000 000 GHz		Stop 2.108 000 000 GHz			

LTE – 15M – 16QAM * Agilent		L	🔆 Agilent		L
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af40.8 dBm Atti Avg M	en 10 dB	,	Ref 50.8 dBm <sup>#Avg</sup> Marker	Atten 20 dB	-21.134
9 9 3/					
,			<sup>109</sup> 2.110000000 C <sup>dB</sup> / -21 134 dBm	hZ	
fst			dB/ Offst -21.134 dBm		
fst 1.8 3			0ffst 40.8 dB		m
			-19.0 dBm		
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Avg 00			PAvg		AL AL
1 S2 tart 2.108 000 000 GHz		Stop 2.109 000 000 GHz	W1 S2 S3 FS		WIN
Res BW 150 kHz	#VBW 470 kHz	Sweep 1.067 ms (8001 pts)	AL	1 M/M	www.whyww
Channel Power		Power Spectral Density	£(f): f>50k	MN W	
			Swp	mumbhh	
-27.21 dBm /1.0000 M	lz	-87.21 dBm/Hz	mannen	www.weiner	
			Start 2.109 000 00 GHz		Stop 2.111 000 00
			*Res BW 150 kHz	•VBW 470 kHz	
🔆 Agilent		L			
of 50 8 dBm 0++.	en 20 dB	Mkr1 2.107 678 250 GHz –26.075 dBm			
ef 50.8 dBm Atte <sup>Avg</sup> Marker		-20.073 0011			
<sup>B</sup> / -26.075 dBm					
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lvg (	tten 10 dB		Ref 50.8 dBm <sup>#Avg</sup> Marker 10 2.110000000 dB/ -22.001 dBm	GHz	22.001 df
st			dfst 40.8 dB Dl -19.0 dBm dBm		
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Channel Power		Power Spectral Density	£(f): f>50k	and the second sec	
Agilent			Start 2.109 000 00 GHz •Res BW 150 kHz	•VBW 470 kHz	Stop 2.111 000 00 G Sweep 1.067 ms (8001 pt
-		Mkr1 2.107 908 500 GHz			
Marker 2.107908500 GHz 4 -25.705 dBm 9,0 1 1 1 1 1 1 1 1 1 1 1 1 1	tten 20 dB	-25.705 dBm			
S2 FS AL f): p p					
rt 2.105 000 000 GHz	VBW 3 MHz	Stop 2.108 000 000 GHz Sweep 1.067 ms (8001 pts)			



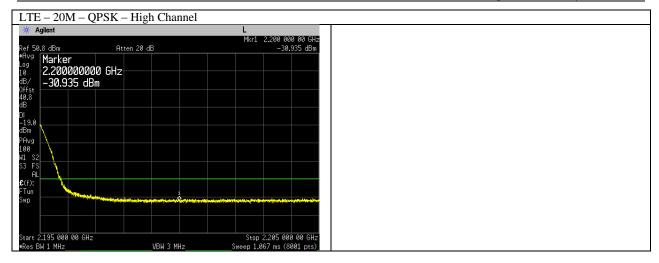


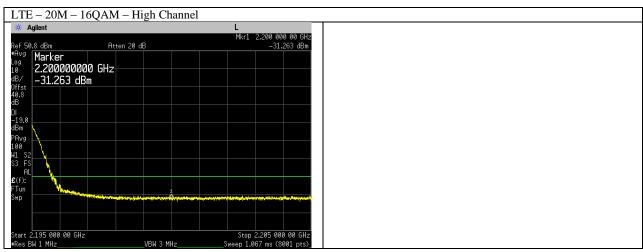
LTE – 15M – 64	- C		L	
			Mkr1	2.200 000 00 GHz
Ref 50.8 dBm	Atten 20 dB			-31.195 dBm
Harker				
2.20000000				
<sup>dB/</sup> -31.195 dBm				
dB/ Offst 40.8 dB				
190				
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41 S2 53 FS				
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Res BW 1 MHz		BW 3 MHz		67 ms (8001 pts)

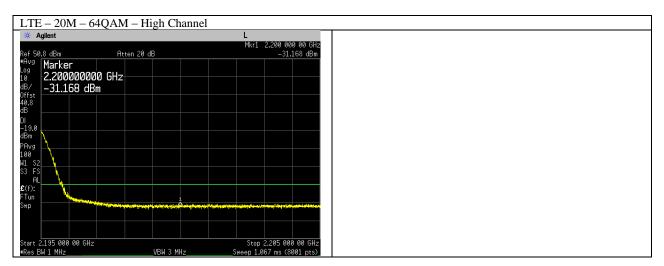
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8			dB/ Offst 40.8 dB		
			DI -19.0		· · · · · · · · · · · · · · · · · · ·
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s2			100 W1 S2		A MARANA MARANA
rt 2.108 000 000 GHz		Stop 2.109 000 000 GHz	W1 S2 S3 FS		Martin 1
s BW 200 kHz	VBW 620 kHz	Sweep 1.067 ms (8001 pts)	AL	Martin Contraction of the Contra	
hannel Power		Power Spectral Density	€(f): f>50k		
				www.markellelangellet	
27.97 dBm /1.0000	MHz	-87.97 dBm/Hz	meren and a second and		
			Start 2.109 000 00 GHz		Stop 2.111 000 00 0
			•Res BW 200 kHz	VBW 620 kHz	
Agilent		L			
		Mkr1 2.107 931 375 GHz			
	ltten 20 dB	-26.136 dBm			
TIALKEI					
2.107931375 GHz					
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2.107931375 GHz -26.136 dBm					
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Agilent	I – Low Channel	L	🔆 Agilent		L
f40.8 dBm At	ten 10 dB		Ref 50.8 dBm	Atten 20 dB	Mkr1 2.110 000 00 −26.995 c
9			Hvg         Marker           0g         2.110000000 GH           db/         -26.995 dBm           dfst         -46.995 dBm		
vg			DI -19.0 dBm PAvg 100		in her have
\$2 rt 2.108 000 000 GHz es BW 200 kHz	VBW 620 kHz	Stop 2.109 000 000 GHz Sweep 1.067 ms (8001 pts)	W1 S2 S3 FS AL	and the form	NWWWWW
hannel Power		Power Spectral Density	£(f): f>50k	1	
Agilent		L Mkr1 2.107 960 625 GHz	Start 2.109 000 00 GHz •Res BW 200 kHz	VBW 620 kHz	Stop 2.111 000 00 0 Sweep 1.067 ms (8001 p
<sup>уд</sup> Магкег 2.107960625 GHz 2.187960625 GHz 2.197960625 GHZ 2.19796065 GHZ 2.1979605 GHZ 2.1979605 GHZ 2.1979605 GHZ 2.1979605 GHZ 2.19796050	ten 20 dB	-25.830 dBm			
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🗱 Agilent		L	🔆 Agilent		L
ef 40.8 dBm	Atten 10 dB		Ref 50.8 dBm	Atten 20 dB	Mkr1 2.110 000 00 G –25.196 dE
1         1			<sup>eAvg</sup> Marker <sup>Log</sup> 2.1.10000000 Gf <sup>10</sup> 2.1.10000000 Gf <sup>dB/</sup> -25.196 dBm <sup>df/st</sup> <sup>dB</sup> dB		
lvg 10 S2 srt 2.108 000 000 GHz		Stop 2.109 000 000 GHz	DI -19.0 dBm PAvg 100 W1 S2 S3 FS		Approval W New York Martin
les BW 200 kHz	VBW 620 kHz	Sweep 1.067 ms (8001 pts)	AL £(f):	<u></u>	
Channel Power -28.11 dBm /1.0000		Power Spectral Density	f>50k Swp	and the second second	
* Agilent		L Mkr1 2.107 978 625 GHz	Start 2.109 000 00 GHz •Res BW 200 kHz	VBW 620 kHz	Stop 2.111 000 00 G Sweep 1.067 ms (8001 pt
Hyg         Marker           2.107978625 GH         -26.064 dBm           4/5         -26.064 dBm           3	Atten 20 dB	-26.064 dBm			
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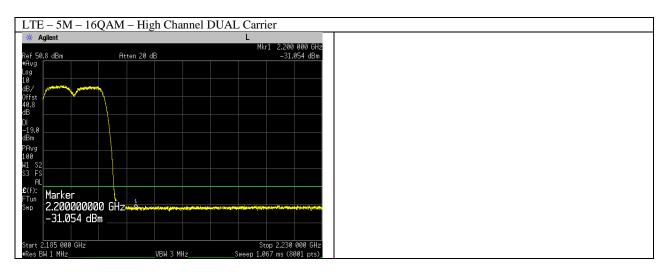


TE – 5M – QPSK -	- Low Channel DUA	AL Carrier			
K Agilent		L	🔆 Agilent		L
f 40.8 dBm F	Atten 10 dB		Ref 50.8 dBm	Atten 20 dB	Mkr1 2.110 000 –21.60
vg			* <sup>Avg</sup> Marker <sup>Log</sup> 2.110000000 GH <sup>dB/</sup> -21 601 dBm		
			0ffst 40,8 B Dl -19,0 dBm PAvg		
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Channel Power		Power Spectral Density	FTun Swp		
K Agilent		L Mkr1 2.107 811 0 GHz	Start 2.109 000 0 GHz *Res BW 51 kHz	•VBW 160 kHz	Stop 2.120 000 Sweep 12.8 ms (800
f 50.8 dBm f <sup>Y9</sup> Marker <sup>2</sup> 2.107811000 GH; / / fst .8	Atten 20 dB	-25.103 dBm			
9,0 m vg					
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	and a second design of the second	An a state of the			
art 2.080 000 0 GHz		Stop 2.108 000 0 GHz			

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f40.8 dBm Atte	n 10 dB		Ref 50.8 dBm	Atten 20 dB	Mkr1 2.110 000 –22.678
g 👘 👘 👘			#Avg Marker		-22.070
			Log 2.110000000 GH	7	
/			dB/ -22 679 dBm		
/ fst .8			Offst 40.8 dB		
3				where many manual	and the second
			DI -19.0		
			dBm		
lvg			PAvg		
1 \$2			W1 S2 S3 FS		
tart 2.108 000 000 GHz Res BW 51 kHz	₩VBW 160 kHz	Stop 2.109 000 000 GHz Sweep 1.6 ms (8001 pts)	S3 FS AL		
	*VDW 100 KHZ		£(f):		
Channel Power		Power Spectral Density	FTun 🖊		
-24.76 dBm /1.0000 MH	z	-84.76 dBm/Hz	Smp Jun V		
			Start 2.109 000 0 GHz		Stop 2.120 000 0
				●VBW 160 kHz	
* Agilent		L	start 2.109 000 0 GHz #Res BW 51 kHz	•VBW 160 kHz	Stup 2.120 000 e Sweep 12.8 ms (8001
	- 20 JD	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
ef 50.8 dBm Atte	n 20 dB			•VBW 160 kHz	
ef 50.8 dBm Atte	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
ef 50.8 dBm Atte	n 20 dB	Mkr1 2.107 909 0 GHz		.vBW 160 kHz	
ef 50.8 dBm Atte	n 20 dB	Mkr1 2.107 909 0 GHz		.vBW 160 kHz	
ef 50.8 dBm Atte <sup>1 yg</sup> Marker <sup>2 J.107909000 GHz -25.536 dBm <sup>1 fst</sup> .8</sup>	n 20 dB	Mkr1 2.107 909 0 GHz		.•VBW 160 kHz	
ef 50.8 dBm Atte <sup>149</sup> <b>Marker</b> 2.107909000 GHz -25.536 dBm <sup>151</sup> .8	n 20 dB	Mkr1 2.107 909 0 GHz		.vBW 160 kHz	
ef 50.8 dBm Atte Avg Marker 2.107909000 GHz -25.536 dBm 19.0 19.0	n 20 dB	Mkr1 2.107 909 0 GHz		.•VBW 160 kHz	
Hyg         Marker           2.107909000 GHz         -           4         -         -           7         -         -           8/         -         -           9.8         -         -           9.8         -         -           9.9         -         -           9.9         -         -	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
ef 50.8 dBm Atte Avg Marker 2.107909000 GHz 4.1075009000 GHz -25.536 dBm 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
ef 50.8 dBm Atte Avg Marker 2.107909000 GHz 4.1075009000 GHz -25.536 dBm 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
ef 50.8 dBm Atte Avg Marker 2.107909000 GHz -2.5.536 dBm 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
org         Game         Attende           hyg         Marker         Attende           2.107909000         GHz         GHz           3/         -25.536         dBm           19.0	n 20 dB	Mkr1 2.107 909 0 GHz		•VBW 160 kHz	
Art         Atte           Avg         Marker           39         2.107909000 GHz           400         -25.536 dBm           401         -25.536 dBm           190         -25.536 dB	n 20 dB	Mkr1 2.107 909 0 GHz		.vBW 160 kHz	
org         Game         Attende           hyg         Marker         Attende           2.107909000         GHz         GHz           3/         -25.536         dBm           19.0	n 20 dB	Mkr1 2.107 909 0 GHz		_•VBW 160 kHz	
org         Game         Attende           hyg         Marker         Attende           2.107909000         GHz         GHz           3/         -25.536         dBm           19.0	n 20 dB	Mkr1 2.107 909 0 GHz		.vBW 160 kHz	

Agilent		L	🔆 Agilent		L
40.8 dBm	Atten 10 dB		Ref 50.8 dBm	Atten 20 dB	Mkr1 2.110 000 0 –22.362 c
g (			* <sup>Avg</sup> Marker Log 10 2.110000000 (		
it			dB/ Offst 40.8 dB DI -19.0 dBm		all the lattice starting and the same
g \$2 t 2.108 000 000 GHz		Stop 2.109 000 000 GHz	dBm PAvg 100 W1 S2 S3 FS		
s BW 51 kHz	#VBW 160 kHz	Sweep 1.6 ms (8001 pts)	AL 🖌		
nannel Power		Power Spectral Density	£(f): ∲ FTun ♪		
24.77 dBm /1.0000	MHz	-84.77 dBm/Hz	Swp		
			Start 2.109 000 0 GHz #Res BW 51 kHz	•VBW 160 kHz	Stop 2.120 000 0 Sweep 12.8 ms (8001 p
Agilent			Start 2.109 000 0 GHz	•VBW 160 kHz	
50.8 dBm	Atten 20 dB	L Mkr1 2.107 751 5 GHz -25.781 dBm	Start 2.109 000 0 GHz	■VBW 160 kHz	
50.8 dBm		Mkr1 2.107 751 5 GHz	Start 2.109 000 0 GHz	●VBW 160 kHz	
50.3 dBm <sup>9</sup> Marker 2.107751500 GH -25.781 dBm .0		Mkr1 2.107 751 5 GHz	Start 2.109 000 0 GHz	●VBW 160 kHz	
50.3 dBm <sup>9</sup> Marker 2.107751500 GH -25.781 dBm .0 9		Mkr1 2.107 751 5 GHz	Start 2.109 000 0 GHz	•VBW 160 kHz	
50.3 dBm <sup>9</sup> Marker 2.107751500 GH -25.781 dBm .0		Mkr1 2.107 751 5 GHz	Start 2.109 000 0 GHz		

LTE – 5M – QPSK – Hig	h Channel DUAL	Carrier
🔆 Agilent		L
Ref 50 <u>.8 dBm Atten 2</u> 0	dB	Mkr1 2.200 000 GHz -31.013 dBm
+Avg .og		
LØ JB/ Dffst		
Dffst 10.8 JB		
-19.0 BBm		
PAvg 100 41 \$2		
63 FS AL		
E(f): Tun Swp 2.200000000 GHz	ang ng manakan pang mga ng	
31.013 dBm		
Gtart 2.185 000 GHz PRes BW 1 MHz	VBW 3 MHz	Stop 2.230 000 GHz _Sweep 1.067 ms (8001 pts)_



LTE - 5M - 6		0		
🔆 Agilent			L MU	r1 2.200 000 GHz
Ref 50.8 dBm	Atten 20	dB	HIR.	-31.104 dBm
#Avg				
Log 10				
dB/ John Market				
Offst				
0ffst 40.8 dB				
ה 1 ו				
-19.0 dBm				
PAvg 100				
41 S2 53 FS				
S3 FS AL				
£(f): Marker		et ja kunnetin ferena se kara fetera statu d		
		Alarka nativjera na polana stravatna stravat		****
-31.104 d	Bm			
Start 2.185 000 GHz				top 2.230 000 GHz
•Res BW 1 MHz		VBW 3 MHz	Sween 1.6	067 ms (8001 pts)

## AWS - 4 Band Out of Band Emissions Requirement (2200-2290MHz)

Measurements made at the external notch filter (Filtronics p/n: US-PSD015-F1V1) output port using FRIJ Ant 4. Limit is -100.6 dBW/4kHz EIRP and is further reduced by 10\*log(4) per FCC KDB 662911D01 v02r01 due to 4x4 MIMO operation. The Limit at the output of the external notch filter port is determined as follows:

-100.6dBW/4kHz (EIRP Limit) + 30dB (dBW to dBm) + 24dB (BW conversion 10log[1M/4k]) - 6dB (4 Port MIMO) – 17dBi (Nokia Design Assumed BTS Antenna Gain) = -69.6dBm/1MHz

Tests performed at Port 4 on Top channel for all modulations and channel bandwidth modes.

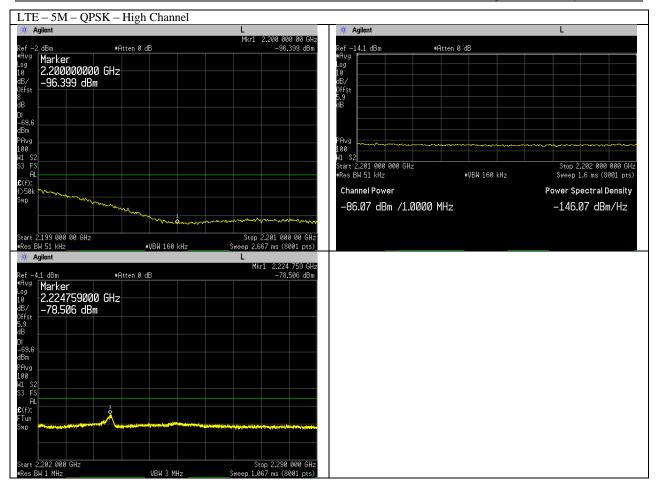
**Results summary:** 

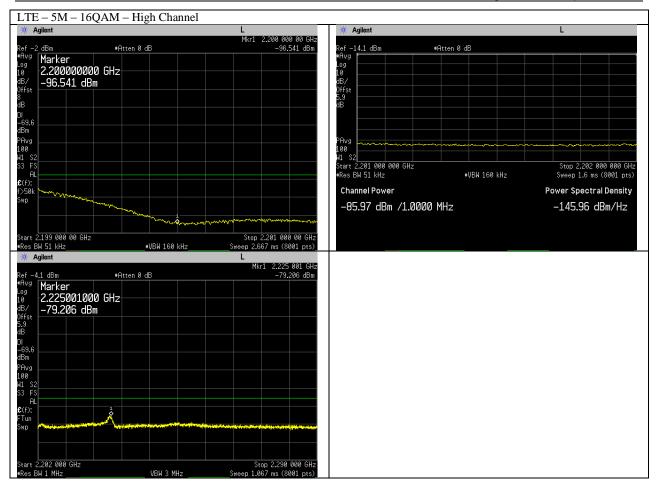
	LTE - QPSK	LTE - 16QAM	LTE - 64QAM
	2200-2290MHz	2200-2290MHz	2200-2290MHz
5M	-78.506dBm	-79.206dBm	-79.983dBm
10M	-78.41dBm	-78.61dBm	-78.61dBm
15M	-77.25dBm	77.63dBm	-77.18dBm
20M	-79.367dBm	-79.928dBm	-79.460dBm
5M Dual	-78.763dBm	-79.2dBm	-79.33dBm

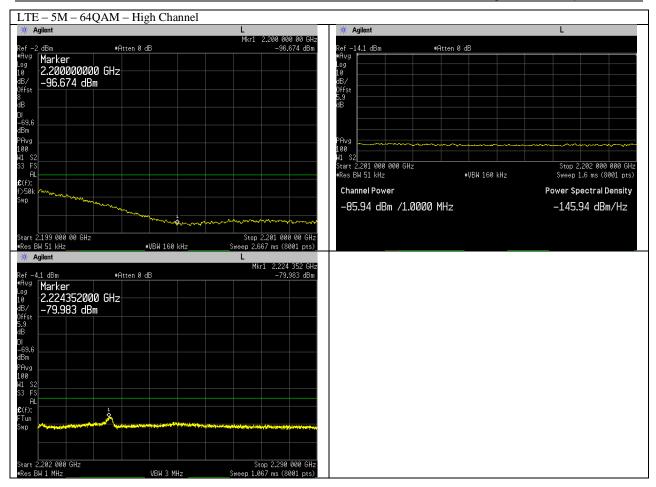
Measurements were performed in RMS average mode with 1MHz RBW and 3MHz VBW over 100 traces. In 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 1% of the emission bandwidth has been used. In 1 to 2 MHz frequency range outside upper bandedge (i.e.: 2201-2202 MHz) the RBW was again reduced to 1% of the emission bandwidth and power was integrated (over 1 MHz).

Total path losses of 8.0 dB for the 2200 to 2201 MHz frequency range and 5.9 dB for the 2201 to 2290 MHz frequency range were factored in via reference offset of the spectrum analyzer and the settings are shown on the corresponding plots. A customer supplier filter (Creowave filter p/n CW-DPF-2110-2996-E1-M2) was characterized for insertion loss and used to measure emissions in the 2200 to 2290 MHz range to reduce measurement instrumentation noise floor.

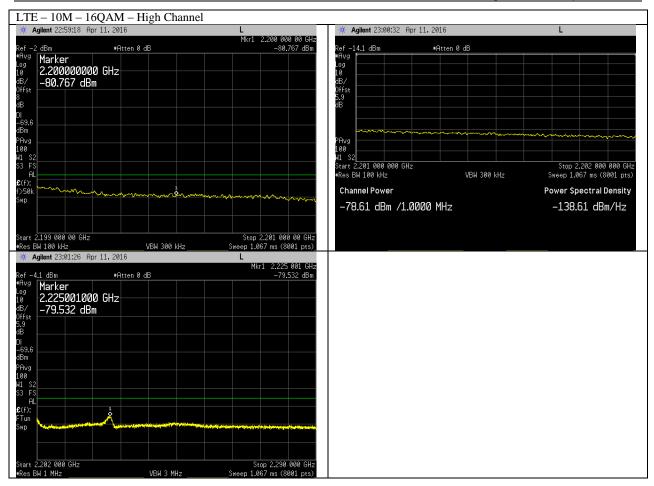
All corresponding plots are included on the following pages.

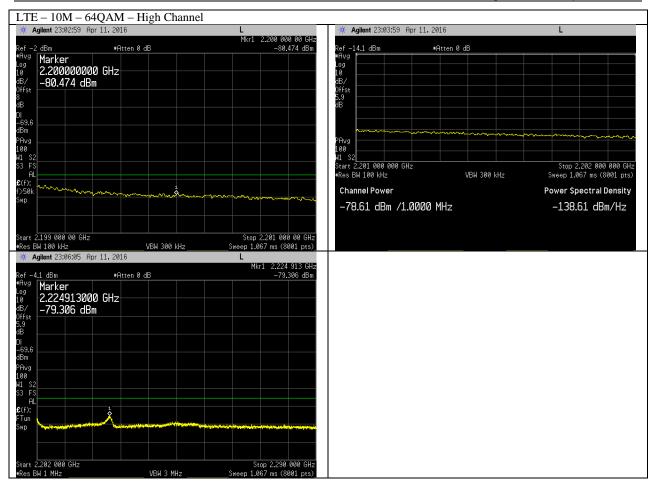


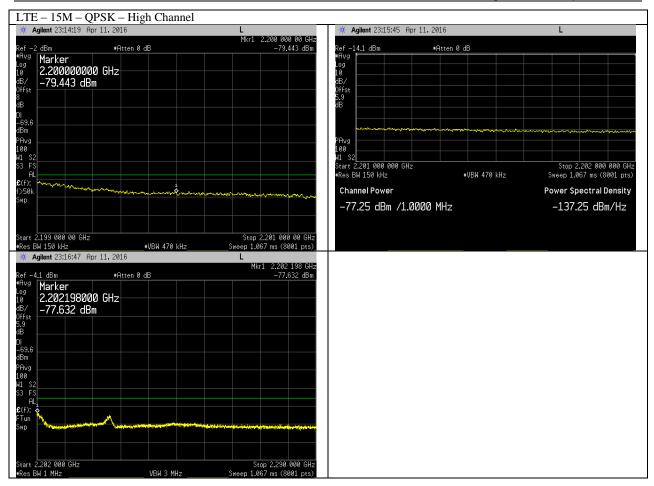




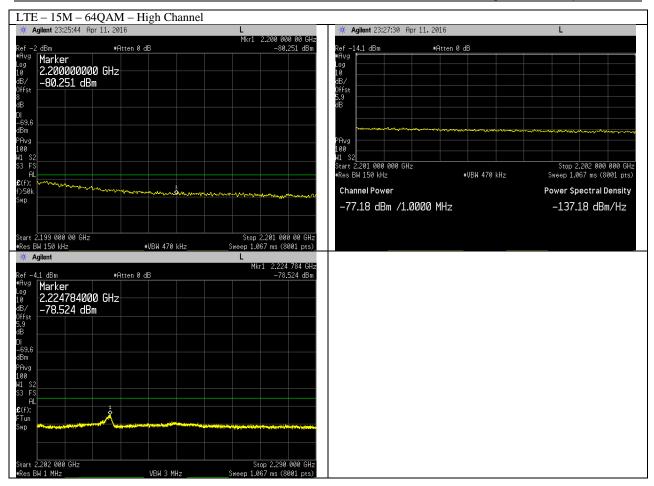
∴ TE — TOIVI —	QPSK – High Channel		🔆 Agilent 22:53:56 Apr	11 2016	
K Agilent 22.31:01	ημι 11, 2010	∟ Mkr1 2.200 000 00 GHz	<b>* Agilent</b> 22:53:56 Apr	11, 2010	L
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B/ <b>-81.378 d</b>	dBm		dB/		
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AA			#Res BW 100 kHz	VBW 300 kHz	Sweep 1.067 ms (8001 pts)
(f): >50k ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Channel Power		Power Spectral Density
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			70.41 UDM 71.80	500 miz	130.41 0000/12
tart 2.199 000 00 G Res BW 100 kHz	Hz VBW 300 kHz	Stop 2.201 000 00 GHz Sweep 1.067 ms (8001 pts)			
* Agilent 22:56:43					
-		Mkr1 2.224 374 GHz			
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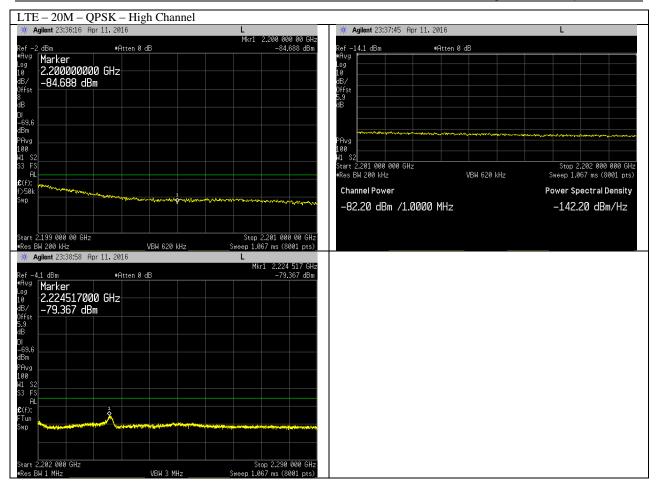


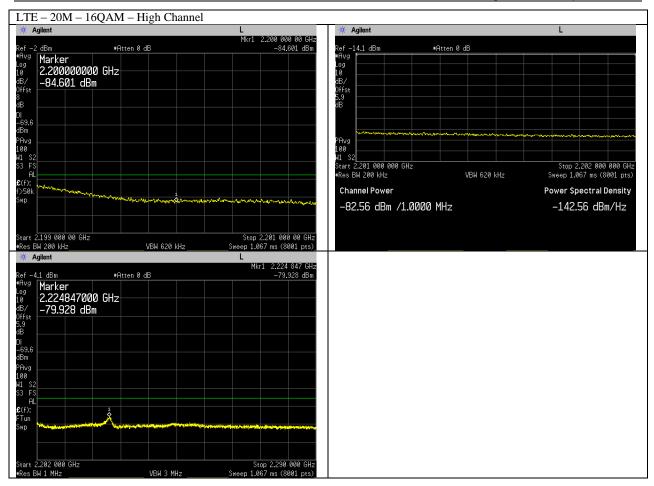


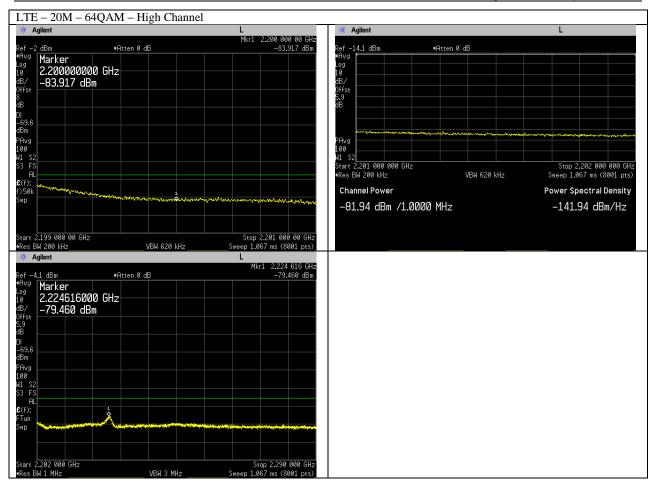


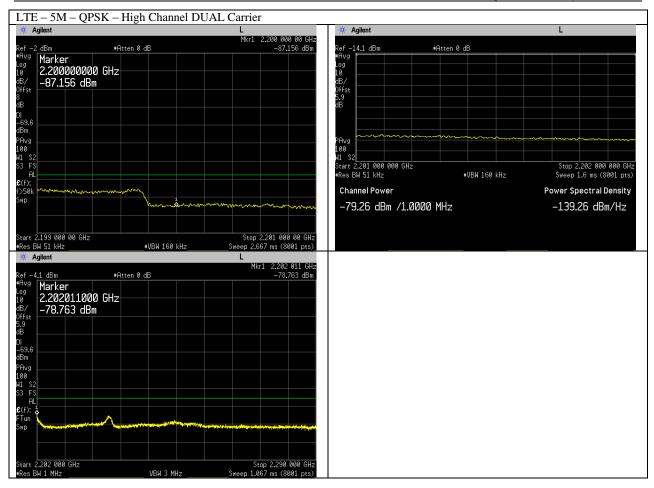
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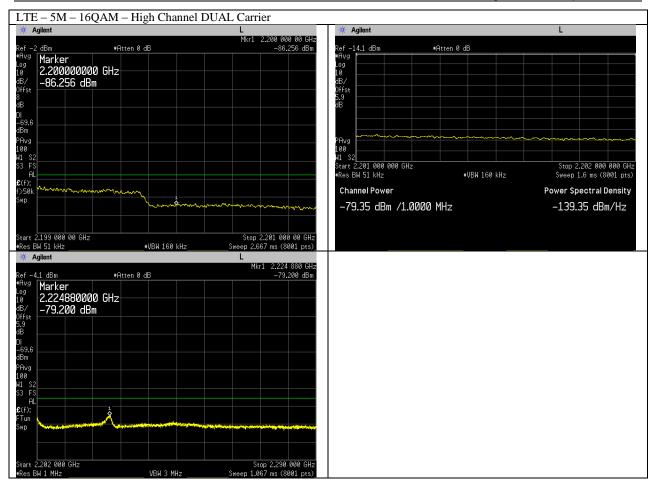


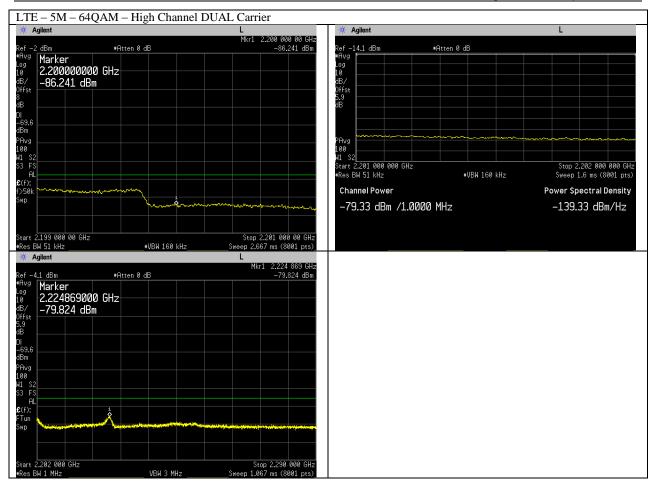












## Transmitter Antenna Port Conducted Spurious Emissions

Tests performed at Port 4 on center channel for all modulations and bandwidth modes. Due to 4x4 MIMO operation, limit is -19.03dBm (-13dBm - 10\*log(4)) per FCC KDB 662911D01 v02r01. Measurements made at the external notch filter (Filtronics p/n: US-PSD015-F1V1) output port using FRIJ Ant 4.

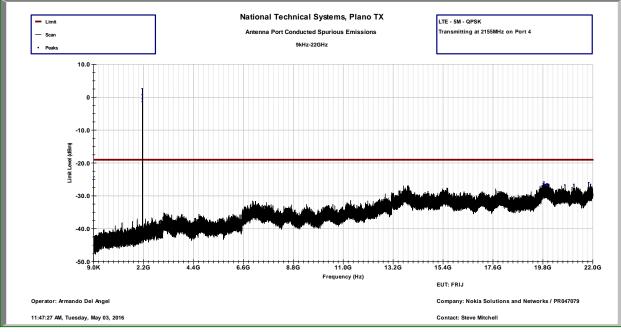
Frequency Range	RBW	VBW	Number of data points	Divided into	Detector	Sweep Time	Max hold over
9kHz-150kHz	1kHz	3kHz	8000	1 segment	Peak	Auto	50 sweeps
150kHz-1.5MHz	100kHz	300kHz	8000	1 segments	Peak	Auto	50 sweeps
1.5MHz-22GHz	1MHz	3MHz	8000	10 segments	Peak	Auto	50 sweeps

TILE6 measurement software was used during testing with the following settings:

In order to reduce the measurement instrumentation noise floor in addition to a 40dB attenuator a notch filter was also used and the PSA's internal attenuation was reduced to 0dB. An additional measurement was taken without the filter in order to measure the filter's stop-band. In that case, only 40db of external attenuation was used.

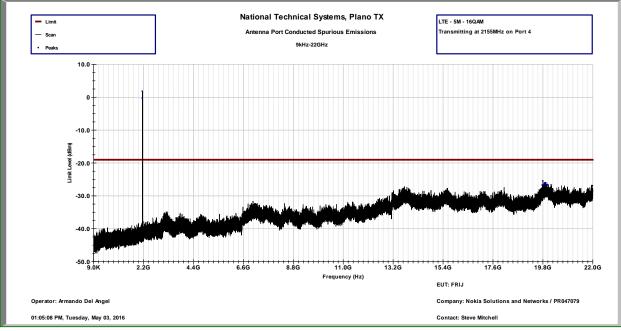
Corresponding plots are included on the following pages.





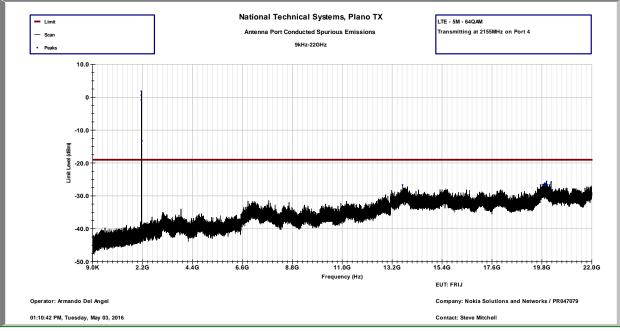
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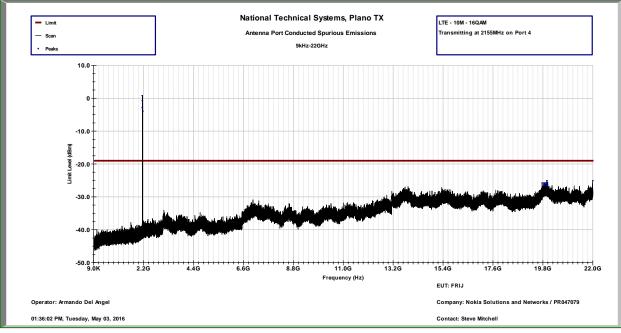
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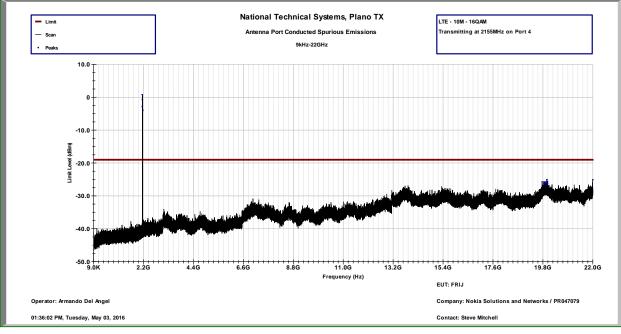
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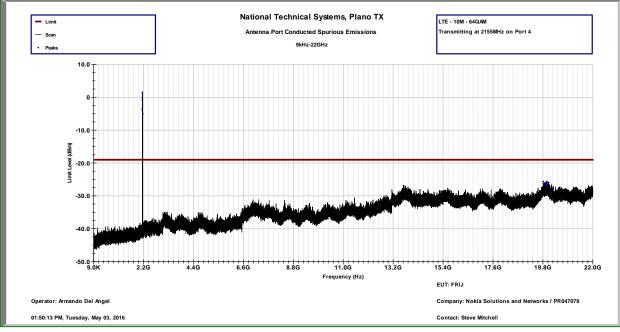
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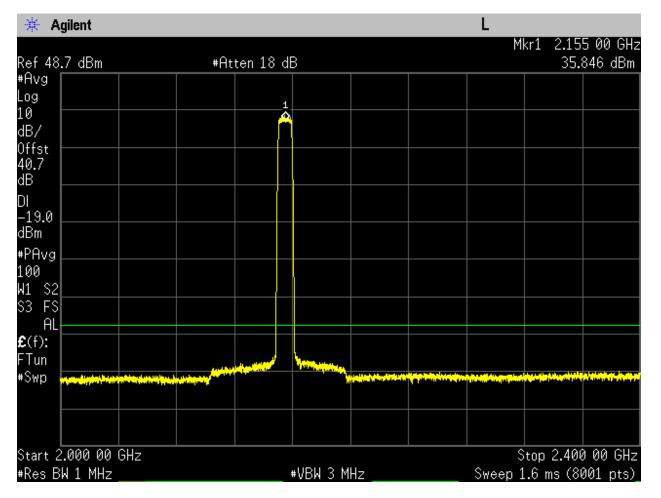




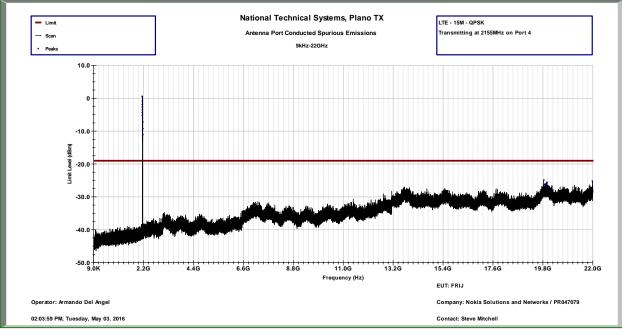
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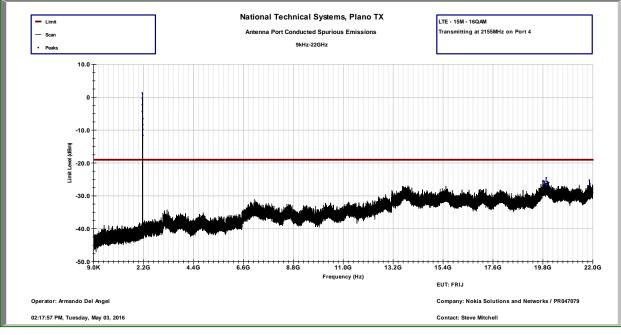






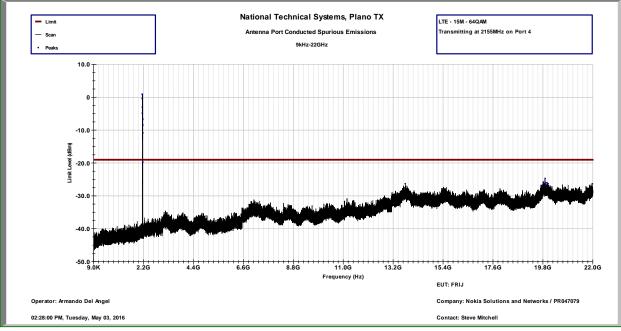
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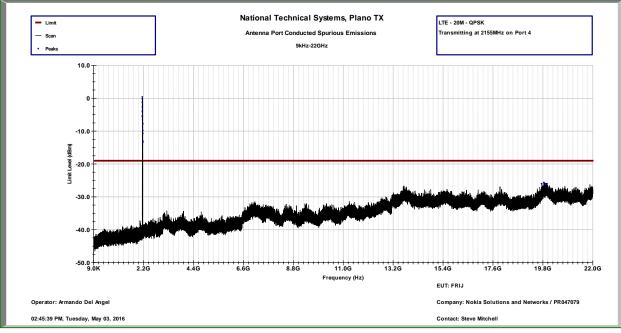
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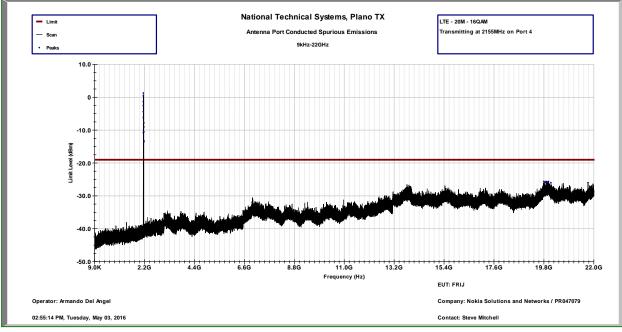
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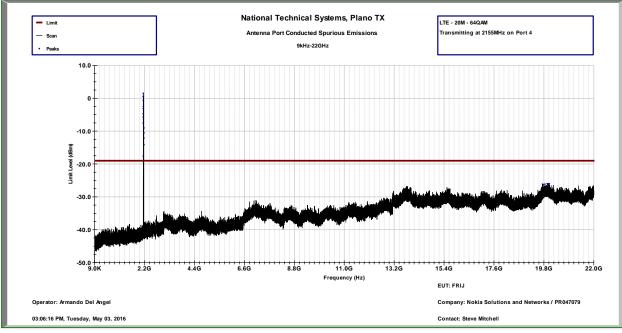
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#### Transmitter Radiated Spurious Emissions (AWS-4 Band Out of Band Emission Requirement)

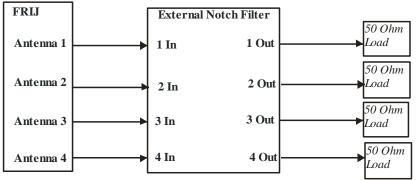
During testing all antenna ports of the base station were terminated with 500hm termination blocks and unit was transmitting on all of its ports at full power as described below. The radiated emission limit for FCC part 27.1134(e)(i) and RSS 170 requirement was calculated for the FRIJ operating in four port MIMO as follows:

-100.6dBW/4kHz (EIRP Limit) + 30dB (dBW to dBm) + 24dB (BW conversion 10 log[1M/4k]) - 0dBi (Antenna Gain) = -46.6dBm/1MHz or at a max field strength of 50.8dBuV/m at 3 meters Note that a BTS antenna gain of 0dBi is used since the radiated emissions are being measured are off the RRH hardware (all antenna ports are terminated into 50 ohm loads).

FRIJ Antenna Port	EARFCN	LTE Channel Bandwidth	Modulation Type	Transmit Frequency
1	67261 (Notch Filter Top Channel)	5 MHz	QPSK	2192.5 MHz
2	67261 (Notch Filter Top Channel)	5 MHz	QPSK	2192.5 MHz
3	67261 (Notch Filter Top Channel)	5 MHz	QPSK	2192.5 MHz
4	67261 (Notch Filter Top Channel)	5 MHz	QPSK	2192.5 MHz

FRIJ Transmit Frequencies used in Radiated Emission Testing for 2200 to 2290MH
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FRIJ Radiated Emission RF Setup Block Diagram for 2200 to 2290MHz
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#### 2200-2290MHz @ 3m Distance

#### Peak Readings

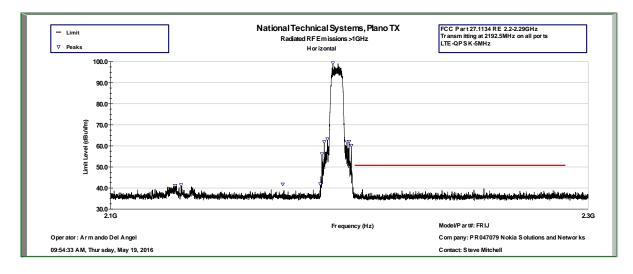
Frequency (GHz)	Polarity (H/V)	Raw Pk Reading at 3m (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Pak Field Strength at 3m (dBuV/m)	Limit at 3m (dBuV/m)	Margin (dB)
2.255	H	51.205	-41.934	27.506	2.936	39.711	50.8	-11.089
2.203	Н	50.864	-42.09	27.658	2.882	39.314	50.8	-11.486
2.250	Н	50.589	-41.947	27.502	2.932	39.074	50.8	-11.726
2.285	Н	50.24	-41.845	27.533	2.967	38.894	50.8	-11.906
2.237	H	50.375	-41.988	27.546	2.917	38.849	50.8	-11.951
2.220	H	50.239	-42.039	27.602	2.9	38.701	50.8	-12.099
2.257	H	50.139	-41.927	27.509	2.939	38.658	50.8	-12.142
2.281	H	49.907	-41.857	27.53	2.963	38.541	50.8	-12.259
2.270	H	49.908	-41.888	27.52	2.952	38.491	50.8	-12.309
2.226	H	49.987	-42.022	27.583	2.906	38.453	50.8	-12.347
2.230	H	49.937	-42.009	27.569	2.91	38.406	50.8	-12.394
2.285	H	49.671	-41.843	27.534	2.968	38.328	50.8	-12.472
2.236	V	49.035	-41.99	27.547	2.917	37.508	50.8	-13.292
2.282	V	48.681	-41.854	27.53	2.964	37.319	50.8	-13.481
2.287	V	48.553	-41.837	27.536	2.97	37.221	50.8	-13.579
2.272	V	48.609	-41.883	27.522	2.954	37.2	50.8	-13.6
2.251	V	48.686	-41.945	27.503	2.932	37.174	50.8	-13.626
2.223	V	48.589	-42.03	27.592	2.903	37.053	50.8	-13.747
2.274	V	48.324	-41.877	27.523	2.956	36.924	50.8	-13.876
2.243	V	48.38	-41.969	27.525	2.924	36.858	50.8	-13.942
2.280	V	48.204	-41.858	27.529	2.962	36.836	50.8	-13.964
2.276	V	48.208	-41.871	27.525	2.958	36.818	50.8	-13.982
2.279	V	48.183	-41.861	27.528	2.961	36.81	50.8	-13.99
2.246	V	48.327	-41.96	27.515	2.927	36.807	50.8	-13.993

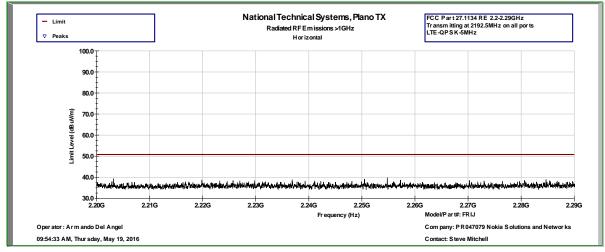
#### Maximized Average Readings

Frequency (GHz)	Polarity (H/V)	Raw Reading at 3m (dBuV)	Amplifier Gain (dB)	- гастог	Cable Loss (dB)	Correcte d Field Strength at 3m (dBuV/m)	Limit at 3m (dBuV/m)	Margin (dB)
2.29	Н	37.887	-41.829	27.538	2.973	26.568	50.8	-24.232
2.20	H	37.937	-42.097	27.666	2.88	26.385	50.8	-24.415
2.25	H	37.751	-41.949	27.502	2.931	26.234	50.8	-24.566
2.29	V	36.52	-41.826	27.539	2.974	25.207	50.8	-25.593
2.20	V	36.6	-42.098	27.667	2.88	25.048	50.8	-25.752
2.25	V	36.111	-41.947	27.502	2.932	24.597	50.8	-26.203

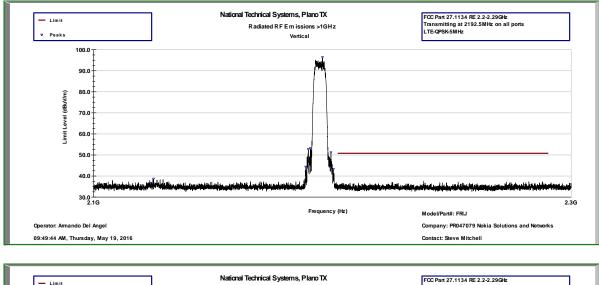
Since all maximized readings were more than 20dB below the limit, substitution measurements were not performed. TILE software was used for all preliminary scans and plots included on the following pages.

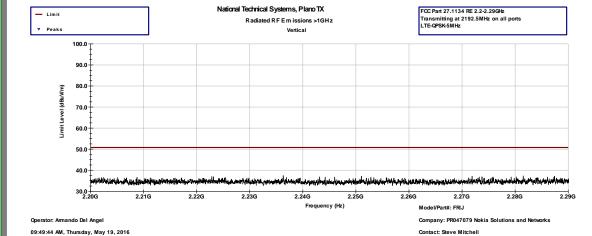
#### 2200MHz – 2290MHz Peak Prescan at 3m – H





### 2200MHz – 2290MHz Peak Prescan at 3m - V





# Frequency Stability See results in annex A

## End of Report

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