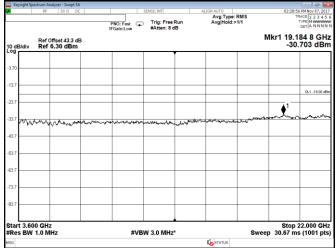
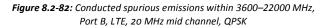


Keysight Spectrum Analyzer - Swept SA			SENSE:INT		AL LG	N AUTO		01/20/20	PM Nov 07, 2017
nput Mech Atten 14 dB	P	NO: Fast	Trig: Free I #Atten: 14	Run		Avg Type: I Avg Hold: 1	RMS /1	TF	ACE 1 2 3 4 5 DIPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm					П				
23					FUTB	1.2120 820b;GHz			
13.3									
3.30									
.70									
16.7									DL1 -19.00 dBr
16.7	provention		ي مەلەمەرەسمە مەلەرلەر ئەرەر	emplosents/wi	4	au المراجع المراجع الم	richtalermen Passag	مەرەبىيە بەرەبىيە بە	wijestafferantister
16.7									
16.7									
6.7									
tart 30 MHz Res BW 1.0 MHz		#VB	W 3.0 MHz				Swee	Stop p 4.467 ms	3.600 GHz (1001 pts
sa					Ľ,	STATUS			

Figure 8.2-83: Conducted spurious emissions within 30–3600 MHz, Port B, LTE, 20 MHz high channel, QPSK





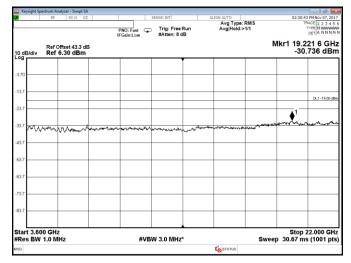
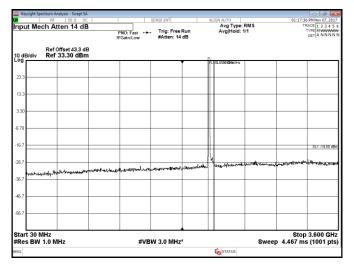
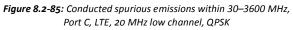


Figure 8.2-84: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 20 MHz high channel, QPSK







Keysight Spect	rum Analyzer - Swept SA RF 50 Ω DC	1		SENSE:INT		ALIGN AUTO		01:19:12	
nput Mecl	h Atten 14 dB		PNO: Fast ++ FGain:Low		Run	Avg Type Avg Hold	: RMS : 1/1	TR	ACE 1 2 3 4 5 YPE NWWWW DET A NNNN
	Ref Offset 43.3 dB Ref 33.30 dBm		,			0 FUI 12 220 8246-245			
23.3									
13.3									
3.30									
6.70							-		
16.7						1			DL1 -19.00 oBe
26.7 36.7	the substance of the su	ورمانيو ، ما ندرانيان	-Jacoberne ar anglan bina	واسرز وطاللا الالوب أرصامها	president and	how of the second s	elessentited and the	n dere in angelike	enter chetanian
46.7									
56.7									
Start 30 MH #Res BW 1			#VB	W 3.0 MHz*			Swee	Stop p 4.467 ms	3.600 GHz (1001 pts
tsg						K STATUS			

Figure 8.2-87: Conducted spurious emissions within 30–3600 MHz, Port C, LTE, 20 MHz mid channel, QPSK

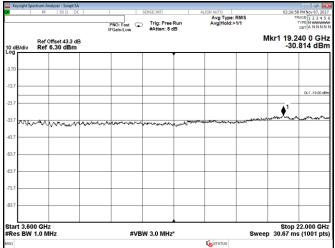


Figure 8.2-86: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 20 MHz low channel, QPSK

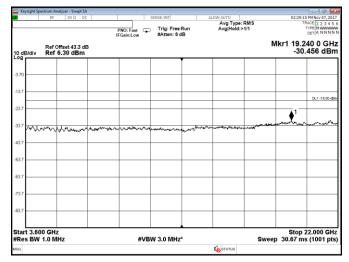
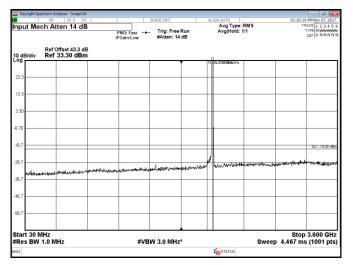
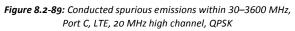


Figure 8.2-88: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 20 MHz mid channel, QPSK



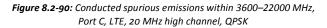




Keysight S	Spectrum Analyzer - Swept SA RF 50 Ω DC			SENSE:INT		ALT	IGN AUTO		01:17:07	
nput M	ech Atten 14 dB		PNO: Fast				Avg Type: Avg Hold: 1	RMS /1	TR. T	ACE 1 2 3 4 5 YPE MWWWW DET A NNNN
0 dB/div	Ref Offset 43.3 dB Ref 33.30 dBm					n	61.2120 @BbGHz			
23.3										
13.3										
3.30										
5.70						1				
16.7						ų				DL1 -19.00 dBm
26.7 36.7	white and the second	hairthathatics and	and the state of the second		an hair and a second		have a start of the second day	i.elaharovaa.e	Charles and a state of the stat	****
16.7										
56.7										
Start 30	MHz V 1.0 MHz		#VB	W 3.0 MHz				Swee	Stop 0 4.467 ms	3.600 GHz (1001 pts
sg							K STATUS			

Figure 8.2-91: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 20 MHz low channel, QPSK

	m Analyzer - Swept SA RF 50 Ω DC			ENSE:INT	ALIGN AUTO		02:30:29 PM Nov	37. 201
		F	PNO: Fast	Trig: Free Run #Atten: 8 dB	Avg Type: Avg Hold:>	RMS 1/1	TRACE 1 2 TYPE MY DET A N	345
	ef Offset 43.3 dB ef 6.30 dBm					м	kr1 20.031 2 -30.889	GH dBr
3.70								
13.7							DL1 -1	9.00 dE
23.7								
33.7 Wykraw	man man	and not	t.p.p.s.aurana	and the second second second	puter and some of the second	anny the stand and	server and an	~~~
13.7								
i3.7								
3.7								
13.7								
start 3.600 G							Stop 22.000	
Res BW 1.0	MHz		#VB	V 3.0 MHz*		Sweep	30.67 ms (100	1 pts



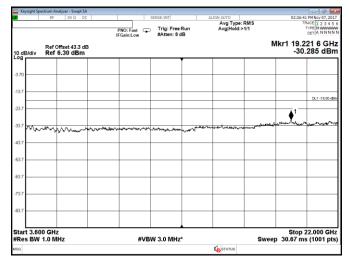
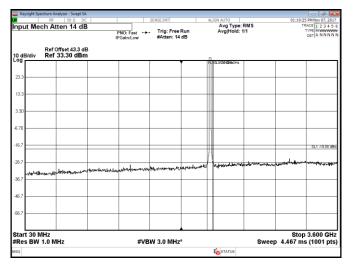
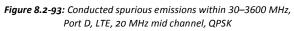


Figure 8.2-92: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 20 MHz low channel, QPSK

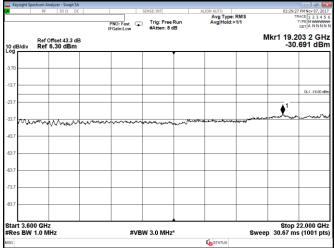


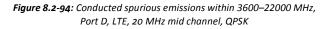




Keysight Spectrum Analyzer - Swept SA			
nput Mech Atten 14 dB	PNO: Fast Trig: Free Ri IFGain:Low #Atten: 14 dl		01:20:06 PM Nov 07, 2017 TRACE 2 3 4 5 (TYPE M WWWWW DET A N N N N
Ref Offset 43.3 dB I0 dB/div Ref 33.30 dBm		0 1910 10.2200 00065442	
23.3			
13.3			
3.30			
6.70			
16.7			DL1 -19.00 dBm
26.7 Joelinghow was a second and a second	ฟลลูมูนไข้แรงก็เราหลี่ระเหลิด เหตุกรังไหร่งกระพุณหรือ	Hangeral Hanas sure and stray	yan a show the house of the house of the north
46.7			
56.7			
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*	Sw	Stop 3.600 GHz eep 4.467 ms (1001 pts)
ASG		STATUS	

Figure 8.2-95: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 20 MHz high channel, QPSK





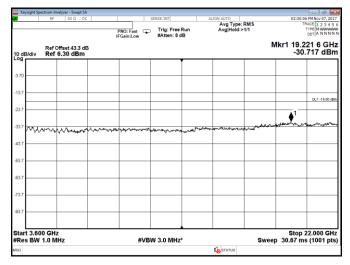


Figure 8.2-96: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 20 MHz high channel, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



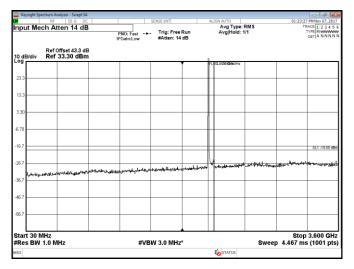


Figure 8.2-97: Conducted spurious emissions within 30–3600 MHz, Port A, LTE, 2 carriers: 5 MHz each at the bottom of the band, QPSK

nput Mech Atten 14 dB	SENSE:INT	AL	IGN AUTO	01:37:03 PM Nov 07, 201
nput Mech Atten 14 dB	1			
	PNO: Fast Trig: Fre IFGain:Low #Atten:		Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm			n	
		1 1	1 EL 2120 880:CHz	
23.3				
13.3				
3.30				
5.70				
16.7				DL1-19.00 at
26.7			formatic fire a terrat of the second	multingerendersterstersterstersterstersterstersterst
26.7 - 2014 March 194 Had	and the second	disployation in the		
6.7				
36.7				
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MH	z*		Stop 3.600 GH Sweep 4.467 ms (1001 pts
ISG			K STATUS	

Figure 8.2-99: Conducted spurious emissions within 30–3600 MHz, Port A, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Keysight :	Spectrum Analyzer - Swept S RF 50 Ω D						02:44:35 PM Nov 07, 201
<u>u</u>	RP 50 Ω E		PNO: Fast	Trig: Free Run #Atten: 8 dB	ALIGN AUTO Avg Type: Avg Hold:>	RM S 1/1	02:44:35 PM Nov 07, 201 TRACE 1 2 3 4 5 TYPE M WWWW DET A N N N N
0 dB/div	Ref Offset 43.3 c Ref 6.30 dBm			•		M	kr1 21.558 4 GH -30.312 dBn
3.70							
13.7							DL1 -19.00 dB
23.7							
33.7 VV	and when the second	ng galan sa	and the second	er-tanorstation	مال معالي	week warden warden week warden week warden week week week week week week week we	Aller (Contractor Speecher
53.7							
53.7							
73.7							
33.7							
	600 GHz V 1.0 MHz	<u> </u>	#VB	W 3.0 MHz*		Sweep	Stop 22.000 GH 30.67 ms (1001 pts
sg					K STATUS		

Figure 8.2-98: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 5 MHz each at the bottom of the band, QPSK

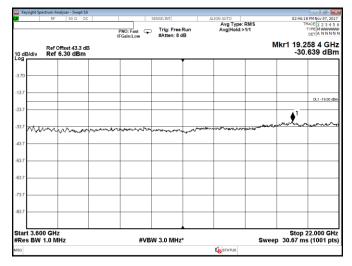
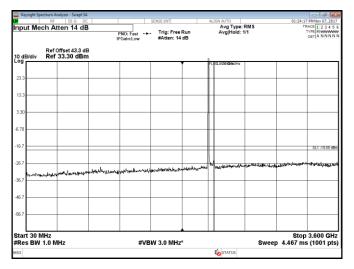
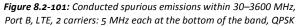


Figure 8.2-100: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



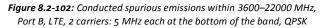




Keysight Spectrum Analyzer - Swept SA			
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:36:54 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast ++- Trig: Free Run IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm	•	171.01.21.2200 KBH6-CH12	
23.3			
13.3			
3.30			
6.70			
16.7			DL1-19.00 dB
26.7	worselaterstation	the water a short water to a short a s	and the state of t
46.7			
56.7			
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*	Swe	Stop 3.600 GHz ep 4.467 ms (1001 pts
sq			

Figure 8.2-103: Conducted spurious emissions within 30–3600 MHz, Port B, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Keysight Spe	ectrum Analyzer - Swept SA								
	RF 50 Ω DC	F	NO: Fast	SENSE:INT Trig: Free I #Atten: 8 d	Run	Avg Type: Avg Hold:>	RMS 1/1	TF	TYPE A N N N N
0 dB/div	Ref Offset 43.3 dB Ref 6.30 dBm				-		N		03 2 GH2 606 dBm
3.70									
13.7									DL1 -19.00 dB
23.7								and the second second	1
^{33.7} ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	marnin	radio and second	᠊ᢕᠬ <i>ᡎᠲᢑ</i> ᠰᢏᡟᢑᠬᡧ		And and a second	aventue annahu	a reading the fraction of the	207 MINT 11 162.411	
i3.7									
i3.7									
3.7									
83.7									
Start 3.60 Res BW			#VB	W 3.0 MHz			Swee	Stop 2 30.67 m	22.000 GHz s (1001 pts
sg						K STATUS			



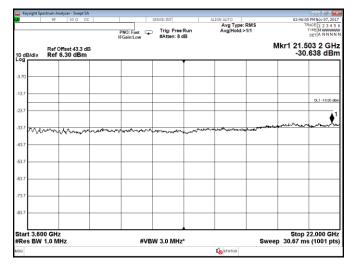
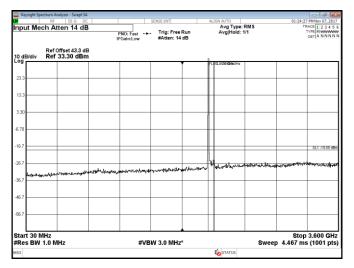
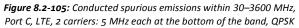


Figure 8.2-104: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3







Keysight Spectrum Analyzer - Swept SA			- 0 e
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:36:44 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free Rur IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE M WWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		17.1 12.2200 KRINGCHIZ	1
		PCI II. 2020 MINUTE	
23.3			
13.3			
3.30			
6.70			
16.7			5L1 -19.00 oB
26.7	ะกไหวแล่สระหก่อนสราไปเกราะห่านเห็นเป็นค่าสาม	wanter and the second states of the second	n weight have been all the service to be
36.7			
46.7			
56.7			
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*	Swe	Stop 3.600 GHz
isg			

Figure 8.2-107: Conducted spurious emissions within 30–3600 MHz, Port C, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

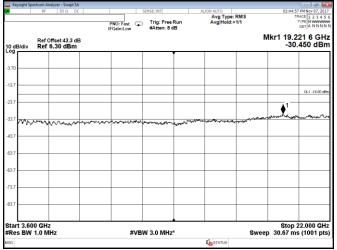


Figure 8.2-106: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 5 MHz each at the bottom of the band, QPSK

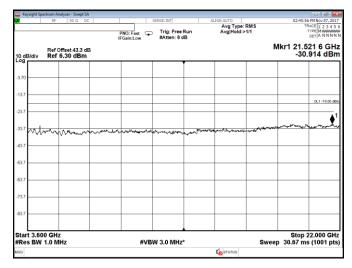
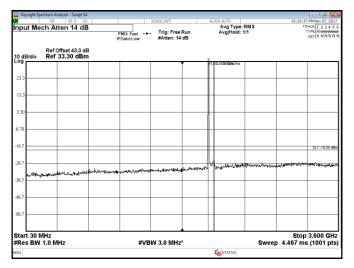
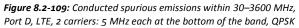


Figure 8.2-108: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3

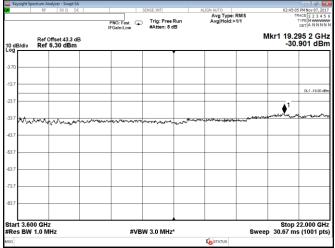


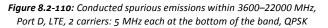




Ref Offset 43.3 dB	PNO: Fast IFGain:Low	Trig: Free F #Atten: 14	Run	ALIGN AUTO Avg Type: Avg Hold: 1	RMS	TR	PM Nov 07, 2017 ACE 1 2 3 4 5
•				Avg Type: Avg Hold:	km 5 //1	14	ACC 1 2 3 4 5
Ref Offset 43.3 dB							DET A NNNN
0 dB/div Ref 33.30 dBm				10.220806.042			
23.3							
13.3							
3.30							
6.70							
16.7							DL1 -19.00 dB
26.7 wheteren har contrained warm	unggartan Juliah der	willow.Physicante	and have been a set	homenant	cinnen.miena	hall a share have a	diverse from
36.7							
46.7							
66.7							
Start 30 MHz							3.600 GH
#Res BW 1.0 MHz	#VB	W 3.0 MHz'		STATUS	Swee	p 4.467 ms	(1001 pts

Figure 8.2-111: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK





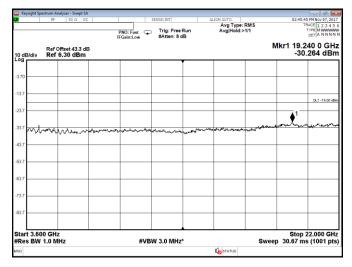
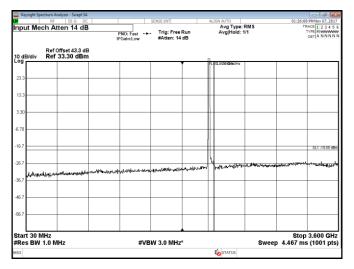
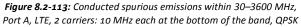


Figure 8.2-112: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 2 carriers: 5 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3







Keysight Spectrum Analyzer - Swept SA			
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:34:35 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast ++- Trig: Free Run IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB I0 dB/div Ref 33.30 dBm		1 1FU1 12.2200 806-CHz	
23.3			
13.3			
3.30			
6.70			
16.7			DL1 -19.00 dBr
26.7	สุดสาวาามูลางการสารารระบารสารารุสามมีสาราสา	Jun Astal reptation of all many all many and and an and	a general and shartness from the second states
36.7			
46.7			
56.7			
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	Stop 3.600 GHz p 4.467 ms (1001 pts
ASG		STATUS	

Figure 8.2-115: Conducted spurious emissions within 30–3600 MHz, Port A, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

Keysight Sp	ectrum Analyzer - Swept S								- 6 E
	RF 50 Ω E	IC	PNO: Fast	Trig: Free F #Atten: 8 di	tun	IGN AUTO Avg Type: Avg Hold:>	RMS 1/1	TE	8 PM Nov 07, 2017 RACE 1 2 3 4 5 TYPE M WWWW DET A N N N N
0 dB/div	Ref Offset 43.3 o Ref 6.30 dBm	B					N	1kr1 21.5 -30.	03 2 GH: 886 dBn
1.70									
3.7									DL1 -19.00 dB
13.7									••••••••••••••••••••••••••••••••••••••
13.7 W	man	Arlan March	-	\$**:5~#~ *	-manana	and the second	Print Banky Plan		
3.7									
3.7									
3.7									
33.7									
	00 GHz 1.0 MHz		#VB	W 3.0 MHz*			Swee		22.000 GH s (1001 pts
SG						K STATUS			

Figure 8.2-114: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 10 MHz each at the bottom of the band, QPSK

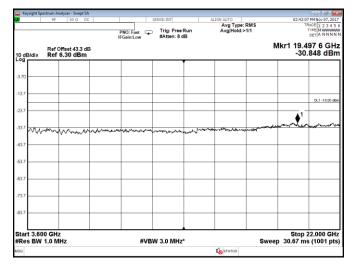
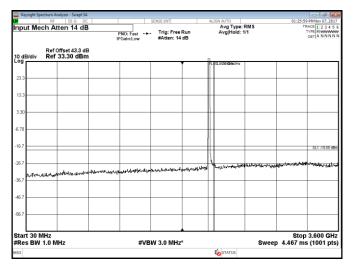
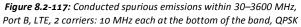


Figure 8.2-116: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3







👱 Keysight Spe	ectrum Analyzer - Swept SA								- 6 E
	RF 50 Ω DC			SENSE:INT	1	ALIGN AUTO Avg Type		01:34:5	ACE 1 2 3 4 5
nput Me	ch Atten 14 dB		PNO: Fast ++	Trig: Free #Atten: 14	Run dB	Avg Hold	: 1/1		DET A NNNN
0 dB/div	Ref Offset 43.3 dB Ref 33.30 dBm					D			
.09					1	FL FL 2120 SEBUCHS			
23.3									
13.3									
3.30									
6.70									
16.7									DC1 -19.00 dBr
26.7							an ay all the second second	a man tel harsten?	distant an of
Martin	ant and a second se	aver-articles.	annall-selenet-sel	eregeryet franskiljed	loonse land	hermonia	August 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	ffriteste as se .	a contraction we have
36.7									
46.7							-		
56.7									
Start 30 M Res BW			#VB	W 3.0 MHz			Swee	Stop p 4.467 m	3.600 GHz 6 (1001 pts
ISG						K STATUS			

Figure 8.2-119: Conducted spurious emissions within 30–3600 MHz, Port B, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

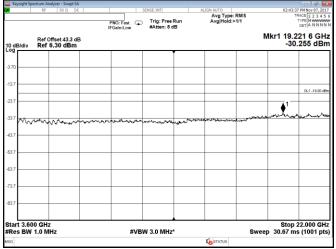


Figure 8.2-118: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 10 MHz each at the bottom of the band, QPSK

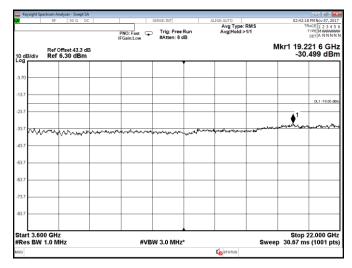
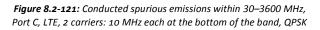


Figure 8.2-120: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



nput Me	RF 50 Ω DC									- 6
nput Me				SENSE:INT		AL	IGN AUTO			PM Nov 07, 2017
	ch Atten 14 dB		NO: Fast Gain:Low	Trig: Free #Atten: 14			Avg Type: Avg Hold: 1	rms /1	1	ACE 1 2 3 4 5 YPE MWWWW DET A NNNN
0 dB/div	Ref Offset 43.3 dB Ref 33.30 dBm				_	<u>n.</u>	12.220 80%CHz			
-					Í	ľ	1217/20 6800.4VZ			
23.3						Ш				
13.3										
13.5						Π				
3 30						H				
3.30						Ш				
						11				
6.70						H				
						11				
16.7						+				DL1 -19.00 dBr
						U				
26.7						N	antrope	and bethings - 1.	the should be all	- desidentes
16.7 Protective	and grass to reason in	n an the angenter and	yn eiler Arnelizan	adalahan ningka ka	Low Law and Will		Been and an			
46.7										
56.7										
tart 30 N									Stop	3.600 GHz
Res BW	1.0 MHz		#VB	W 3.0 MHz	*			Sweep	o 4.467 ms	(1001 pts
sa							STATUS			



RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:35:06 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free I IFGain:Low #Atten: 14		TRACE 1 2 3 4 5 TYPE M WWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		PUID.272040045442	
		PL 712920 82085.942	
23.3			
13.3			
3.30			
.70			
6.7			DL1-19.00 dB4
6.7			a la fa a su a la s
5.7 m.h.style.ingthyle.ingthyle.ingthe.ing	แลงกระบบ ก็สร้างเหตุของไปสูงของการเหตุกลางการสิจกกระ	where white a state of the stat	ogenetic and a second state of the second state of
16.7			
6.7			
tart 30 MHz Res BW 1.0 MHz	#VBW 3.0 MHz	Sv	Stop 3.600 GHz veep 4.467 ms (1001 pts
ia		K STATUS	

Figure 8.2-123: Conducted spurious emissions within 30–3600 MHz, Port C, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

- Keys	sight Spe		alyzer - Swept									- 6 E
<u>a</u>		RF	50 Ω	DC	PI	NO: Fast Gain:Low	Trig: Free #Atten: 8 d	Run IB	ALIGN AUTO Avg Type Avg Hold	: RMS :>1/1	02:43:2 T	RACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
10 dB	l/div		ffset 43.3 5,30 dBn							N		58 4 GH 748 dBn
3.70												
13.7					_							DL1 -19.00 dB
23.7												•1
	~~~~	m	Norma	www	mm	والروالي الريعان المتر	whether the second second	sen ~	an a	e/refleterist	1999-1999 (Marine Start	the second s
43.7												
63.7												
73.7					_							
83.7		_			_							
	3.600 BW 1					#VE	W 3.0 MHz	*		Sweep	Stop 30.67 m	22.000 GH s (1001 pts
ISG									<b>K</b> STATUS			

Figure 8.2-122: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 10 MHz each at the bottom of the band, QPSK

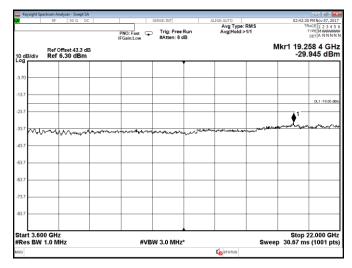
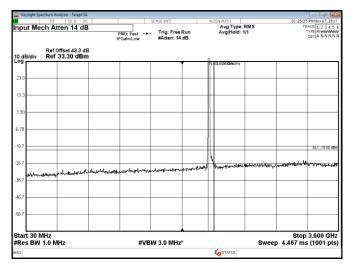
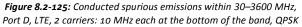


Figure 8.2-124: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3







Keysight Spectrum A							- 6 💌
nput Mech At	50Ω DC		SENSE:INT	ALIGN AUTO	pe: RMS	01:35:19 P	M Nov 07, 2017
nput Mech A	iten 14 dB	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 14 dB	Avg Ho	ld: 1/1	TY	
Ref 0 dB/div Ref	Offset 43.3 dB 33.30 dBm						
.09				FU 12.2120 8895	Hz		
23.3							
13.3							
3.30							
6.70					_		
16.7					_		DC1 -19.00 dBr
26.7			tura la bis a tura della Malla	white white	handerstand	www.	with the owner
36.7	anterial and strain the	างเหม่องได้สามาระบ	Aborte and the t	-	_		
46.7							
56.7					_		
Start 30 MHz #Res BW 1.0 N	IHz	#VE	W 3.0 MHz*		Swee	Stop 3 p 4.467 ms	.600 GHz 1001 pts
nsg							

Figure 8.2-127: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

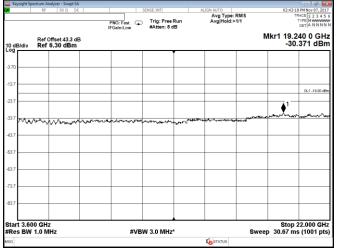


Figure 8.2-126: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 2 carriers: 10 MHz each at the bottom of the band, QPSK

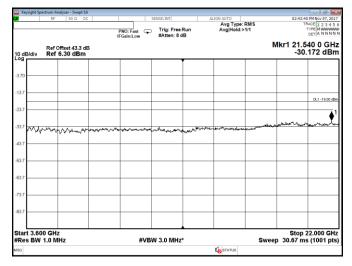
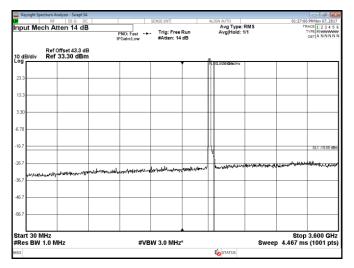
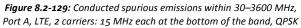


Figure 8.2-128: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 2 carriers: 10 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



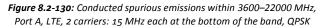




Keysight Spectrum Analyzer - Swept SA			- 6
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:33:00 PM Nov 07, 2017 TRACE 1 2 3 4 5
nput Mech Atten 14 dB	PNO: Fast Trig: Free Run IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		PL 10.2200 886-04/2	
-		P _ 12.2020 6203.402	
23.3			
13.3			
3.30			
6.70			
16.7			DL1 -19.00 aBr
26.7	randerskalastanskalastanskalastanskalastanskalastanskalastanskalastanskalastanskalastanskalastanskalastanskalasta	white web who we who have	the state of the s
36.7			
46.7			
66.7			
Start 30 MHz			Stop 3.600 GHz
#Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	p 4.467 ms (1001 pts
ASG		<b>E</b> STATUS	

Figure 8.2-131: Conducted spurious emissions within 30–3600 MHz, Port A, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Keysi	ight Spe	trum Ana RF	lyzer - Swept 50 Ω	SA DC			SENSE:INT						- 6
		K9	50 Ω	DC	PN	IO: Fast G		Run IB	ALIGN AUTO Avg Avg H	ype: RMS old:>1/1		02:37:	27 PM Nov 07, 201 TRACE 1 2 3 4 5 TYPE M WWWW DET A N N N N
0 dB/	div		ffset 43.3 5.30 dBn					_			м		2216GH .480dBn
3.70		_			_						_		
13.7		-											DL1 -19.00 dB
23.7		-									-	1	
33.7	w.	m	Min	al a solo	~~~	www.	gheren garanters	and the states			<b>n</b> horallin	min	Marcharoth
43.7		+			-								
53.7		-			-								
63.7		-			-								
73.7		+											
83.7		+											
		GHz	łz			#VE	3W 3.0 MHz	*		s	weep	Stop 30.67 m	22.000 GH
ISG									<b>K</b> STATI	15			



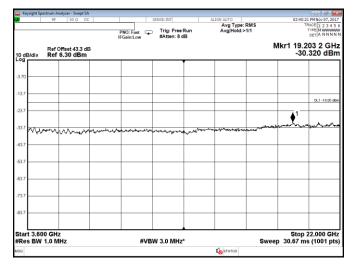
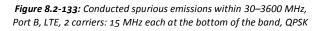


Figure 8.2-132: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



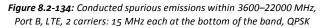
Keysight Spectrum Analyzer - Swep	pt SA			6 ×
RF 50 Ω	DC	SENSE:INT	ALIGN AUTO	01:27:20 PM Nov 07, 2017
Input Mech Atten 14	dB PNO: Fast	Trig: Free Run	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 6 TYPE M WWWW
	IFGain:Low	#Atten: 14 dB		DET A NNNN N
B 600				
Ref Offset 43.3 10 dB/div Ref 33.30 d	3 dB Bm			
Log		Ţ	/II PL 01.2120 02065Hz	
23.3				
13.3				
3 30				
5.50				
6.70				
6.70				
16.7				DL1 -19.00 dBm
			1.	
26.7			a last and a barrent and a second	and a second as the
a sector beauted and and	and an interaction of the second statements and	a flee beyon a leger of a leader agent		
36.7	-			
46.7				
56.7				
Start 30 MHz				Stop 3.600 GHz
#Res BW 1.0 MHz	#VE	W 3.0 MHz*	Swe	ep 4.467 ms (1001 pts)
nsg			<b>K</b> STATUS	
			•	



Keysight Spectrum Analyzer - Swept SA			
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:32:48 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free R IFGain:Low #Atten: 14 d		TRACE 1 2 3 4 5 TYPE M WWWWW DET A N N N N
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		00 (F1.0 f1.2 st200 st206.5Hz	
-		PERCENCE ADDRESS	
23.3			
13.3			
3.30			
6.70			
16.7			DL1 -19.00 dB
26.7		1	والمله ومرارو والمراود والموار والمعادية والمراود
arthresserves Warnerstein Westerness	hanalalan helan helan de Maria and	Children and a second	
46.7			
56.7			
Start 30 MHz			Stop 3.600 GHz
Res BW 1.0 MHz	#VBW 3.0 MHz*	Swe	ep 4.467 ms (1001 pts
ISG		<b>K</b> STATUS	
		-	

Figure 8.2-135: Conducted spurious emissions within 30–3600 MHz, Port B, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

sg					<b>K</b> STATUS			
Start 3.60 Res BW	0 GHz 1.0 MHz		#VB	W 3.0 MHz*		Sweep	Stop 2 30.67 ms	2.000 GH: (1001 pts
83.7								
73.7								
63.7								
53.7								
43.7								
33.7	man	يسترسمانهو	وم, ا ^م يدر وارا محمد رام و	watch watch marked	montener		-	
23.7								DL1 -19.00 dE
13.7								
3.70								
0 dB/div	Ref Offset 43.3 Ref 6.30 dB	dB m				м	kr1 21.54 -30.2	10 0 GH 236 dBr
			PNO: Fast IFGain:Low	Trig: Free Run #Atten: 8 dB	Avg Type: Avg Hold:>	1/1	T	ACE 1 2 3 4 5 YPE MWWWW DET A NNNN
neysigin op	ectrum Analyzer - Swep RF 50 Ω	DC		SENSE:INT	ALIGN AUTO			- @ E



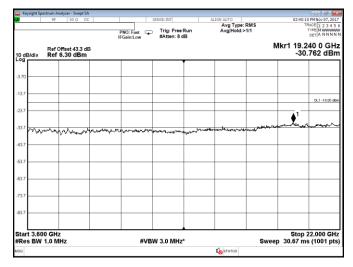
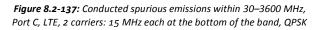


Figure 8.2-136: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



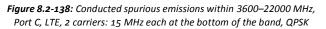
🔤 Keysight Sp	ectrum Analyzer - Swept SA								
	RF 50 Ω DC			SENSE:INT		ALIGN AUTO			9 PM Nov 07, 2017
nput Me	ch Atten 14 dB	P	NO: Fast	Trig: Free #Atten: 14		Avg Type Avg Hold	: RMS : 1/1	T	TYPE MWWWW DET A NNNN
0 dB/div	Ref Offset 43.3 dB Ref 33.30 dBm					7. FL112.21208806:5Hz			
23.3									
13.3									
3.30									
1.70							-		
16.7									DC1 -19.00 dBr
86.7				a kana ka		Munique		hand a starter water	and the second secon
16.7 <b>wite</b>	have been addressed	Uni-Mathanting the	heart freezen	Medica ( )	of other states of the				
16.7									
i6.7									
tart 30 M Res BW	/IHz 1.0 MHz		#VB	W 3.0 MHz			Swee	Stop p 4.467 m	3.600 GHz 6 (1001 pts
sa						<b>I</b> STATUS			



RF 50 Ω DC			
	SENSE:INT	ALIGN AUTO	01:32:40 PM Nov 07, 2017
put Mech Atten 14 dB	PNO: Fast Trig: Free F IFGain:Low #Atten: 14 d		TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		D	
		FL 12.2120 800sGHz	
3.3			
3.3			
.30			
.70			
6.7			DL1 -19.00 dB
6.7		/	rest and the second
6.7 Unenvoid berminghelingent alfertion	and the cash the caper way that a short have a strike the second state of the second strike the	hard a standard three and a standard and a standard and a standard a standard a standard a standard a standard	and and a second s
6.7			
6.7			
tart 30 MHz Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	Stop 3.600 GHz p 4.467 ms (1001 pts
a		<b>K</b> ostatus	

Figure 8.2-139: Conducted spurious emissions within 30–3600 MHz, Port C, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

- Keys	sight Spe		alyzer - Swept									
•		RF	50 Ω	DC	PI	NO: Fast Gain:Low	Trig: Free #Atten: 8 d	Run iB	ALIGN AUTO Avg Type: Avg Hold:>	RMS 1/1	т	2 PM Nov 07, 2017 RACE 1 2 3 4 5 TYPE MWWWW DET A N N N N
0 dB	Vdiv		ffset 43.3 6.30 dBn							М		521 6 GH 527 dBn
3.70					_							
13.7		_										DL1 -19.00 6B
23.7												. chunch
33.7 43.7	rvvv~	-mary	VWYmmer	southing	sur.	birrerallystad	hall the second	ay	en della en	and a second second		
53.7												
53.7		_			_							
73.7												
83.7												
#Res	3.600 BW					#VB	W 3.0 MHz	*		Sweep	Stop 30.67 m	22.000 GH s (1001 pts
ISG												



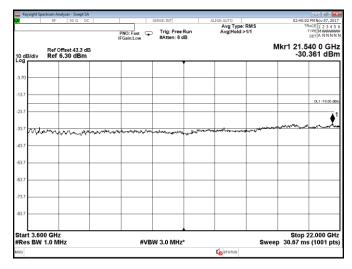
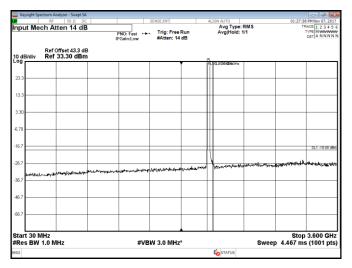
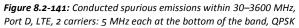


Figure 8.2-140: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



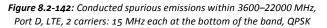




Keysight Spectrum Analyzer - Swept SA			- # <b>*</b>
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:32:27 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free Run IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		01  FLI f2.2520 62663Hz	
23.3			
13.3			
3.30			
5.70			
16.7			DL1 -19.00 dB
26.7	unanan taipinin haita and an an an	anterity winder the strate and the terrary	dertroad woon a service of the second star
16.7			
6.7			
56.7			
itart 30 MHz Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	Stop 3.600 GH: p 4.467 ms (1001 pts
sq		STATUS	

Figure 8.2-143: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Keysig	ght Spec	trum Ani RF	lyzer - Swept 50 Ω	SA DC			SENSE:INT		ALIGN AUTO			2:38:01 PM Nov 07, 201
<u> </u>		RP-	1 20 22	DC	PNO	D: Fast 🗣		Run IB	Avg Type Avg Hold:	:RMS >1/1		TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
0 dB/d			ffset 43.3 3.30 dBn									21.540 0 GH -30.487 dBr
3.70		_			_							
13.7		-										DL1 -19.00 dB
23.7		+						-				•
33.7 TV	ŝ	m	Minin	ynerser ar	worke	shandy yorks	Marina	ي مدينه	and the second secon	and the second	A Market Barry	https://www.and.org
43.7		-										
53.7												
73.7												
83.7 -												
Start 3	2 600											top 22.000 GH
#Res E						#VE	3W 3.0 MHz	*		Sw	eep 30.6	7 ms (1001 pt
SG												



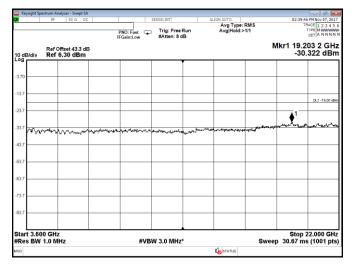
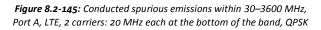


Figure 8.2-144: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 2 carriers: 15 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



Keysight Spect	trum Analyzer - Swept SA							- 6
	RF 50 Ω DC		SENSE:INT	A	LIGN AUTO			PM Nov 07, 201
nput Mec	h Atten 14 dB	PNO: F IFGain:	ast Trig: Free Low #Atten: 14		Avg Type: F Avg Hold: 1	RM S /1		ACE 1 2 3 4 5 YPE MWWWW DET A N N N N
	Ref Offset 43.3 dB Ref 33.30 dBm			• 6	ปนเสราย			
23.3								
13.3								
1.30								
.70								
6.7								DC1 -19.00 dB
16.7	_				L	with which the strates	10-17-0-18-18-18-18-18-18-18-18-18-18-18-18-18-	***COLADEDA
6.7	K.N.J. Barnel of the Solid of the Solid Street St		markensisista merekan kanakula di	ralliadinat	and star a block			
6.7								
6.7								
tart 30 Mi Res BW 1			#VBW 3.0 MH:	Z*		Sweep	Stop 4.467 ms	3.600 GHz (1001 pts
sg					<b>STATUS</b>			



Keysight Spectrum Analy								
RF	50 Ω DC	S	ENSE:INT	A	LIGN AUTO		01:30:23	PM Nov 07, 2017
nput Mech Atte	n 14 dB	PNO: Fast +++	Trig: Free R #Atten: 14 d	un B	Avg Type: Avg Hold:	RM S 1/1	1	ACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offe	set 43.3 dB .30 dBm				a			
			Ĭ	۶	161.2120 880sGHz			
23.3								
13.3								
3.30								
6.70								
16.7								DL1 -19.00 dBr
26.7				/				
the second second	UNIT + YESTER WALKER AND	newsparstern st ternistered	n.a.M. within	hallowalk	27482488/153694V	with a state of the second	Part Proposition of the Party o	արտաներ Դերենեն Դերենեն Դերենեն Դերենեն Դերենեն Դերենեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դերեն Դեր Դերեն Դեր Դեր Դեր Դեր Դես Դեր Դես Դես Դես Դես Դես Դես Դես Դես Դես Դես
36.7								
46.7								
56.7								
Start 30 MHz Res BW 1.0 MHz	!	#VBV	V 3.0 MHz*			Swee	Stop p 4.467 ms	3.600 GHz (1001 pts
19G					<b>K</b> STATUS			

Figure 8.2-147: Conducted spurious emissions within 30–3600 MHz, Port A, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

ISG						<b>K</b> STATUS			
Start 3.60 #Res BW	00 GHz 1.0 MHz		#VB	W 3.0 MHz*			Sweep	Stop 2 30.67 m	22.000 GH s (1001 pts
83.7									
73.7									
63.7									
53.7									
13.7									
33.7 VVV	mar	hanne	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	when when a second	and an and		<del>مان مطاور الأوس</del> يومان	and any and	anger water to
23.7								<u> </u>	DL1 -19.00 dE
13.7									DL1 -19.00 d
3.70									
0 dB/div	Ref Offset 43.3 ( Ref 6.30 dBm			•			M	kr1 19.2 -30.	03 2 GH .647 dBr
			PNO: Fast IFGain:Low	Trig: Free Ru #Atten: 8 dB	n	Avg Type: F Avg Hold:>	/1		TYPE MWWW DET A NNN
	RF 50 Ω 1	DC		SENSE:INT	AL	IGN AUTO		02:36:1	6 PM Nov 07, 201

Figure 8.2-146: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 20 MHz each at the bottom of the band, QPSK

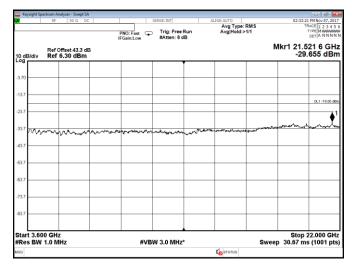
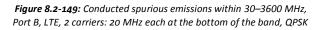


Figure 8.2-148: Conducted spurious emissions within 3600–22000 MHz, Port A, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



	m Analyzer - Swept SA					- 6
	RF 50 Ω DC		SENSE:INT	ALIGN AUTO		01:29:10 PM Nov 07, 201
nput Mech	Atten 14 dB	PNO: Fast IFGain:Low	<ul> <li>Trig: Free Run #Atten: 14 dB</li> </ul>	Avg I) Avg Ho	/pe: RMS ild: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
	ef Offset 43.3 dB ef 33.30 dBm		•	PUID.200406	207	1
23.3						
13.3						
.30						
.70						
6.7						DC1 -19.00 dB
6.7						
milners	n stand and a superior	Management	man see also also also also also also also also	alland an anna an an anna an an an an an an an	uniperturneritersing	and the second
6.7						
6.7						
6.7						
tart 30 MHz Res BW 1.0		#\	/BW 3.0 MHz*		Sweep	Stop 3.600 GH
sg					5	



Keysight Spectrum Analyzer - Swept SA			- 6 E
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:30:37 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free Run IFGain:Low #Atten: 14 dB	Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB IO dB/div Ref 33.30 dBm	•		
23.3			
13.3			
3.30			
6.70			
16.7			DL1-19.00 dB
26.7	สรณระ _เ ปราการสถาสัตว์เขตรงชาวไปการสารสารสร้า	and hoterpresention the second	an shipe water water and the state of the
36.7			
46.7			
56.7			
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	Stop 3.600 GHz p 4.467 ms (1001 pts
rsg		<b>K</b> STATUS	

Figure 8.2-151: Conducted spurious emissions within 30–3600 MHz, Port B, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

Keysigh		Analyzer - Swept S								
<u>.</u>	RF	50 Ω Ε		PNO: Fast	SENSE:INT Trig: Free F #Atten: 8 dl		ALIGN AUTO Avg Type: Avg Hold:>	RM S 1/1	т	4 PM Nov 07, 2017 RACE 1 2 3 4 5 TYPE MWWWW DET A N N N N
10 dB/di		Offset 43.3 c 6.30 dBm						M	lkr1 21.5 -30	5400 GH .947 dBn
3.70										
13.7										DL1 -19.00 dB
33.7								- of marking	an and the second	
43.7	᠕᠇ᢧᡲ᠆ᠰᡎ	Warmon	********		*******	Contration of		entern ^{a en}		
53.7										
63.7										
73.7										
83.7										
	.600 GH W 1.0 I			#VB	W 3.0 MHz*			Sweep	Stop 30.67 m	22.000 GH: s (1001 pts
ISG										

Figure 8.2-150: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 20 MHz each at the bottom of the band, QPSK

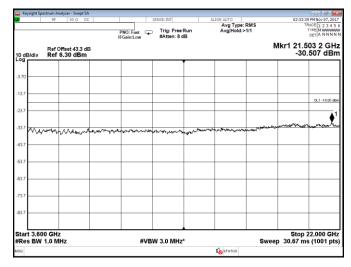
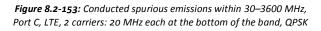


Figure 8.2-152: Conducted spurious emissions within 3600–22000 MHz, Port B, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



Keysight Spectrum Analyzer - Swe				- 6 E
RF 50 Ω	DC	SENSE:INT	ALIGN AUTO	01:29:01 PM Nov 07, 201
nput Mech Atten 14	dB PNO: Fast IFGain:Lot		Avg Type: RMS Avg Hold: 1/1	TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.: 0 dB/div Ref 33.30 d			#0 /FUT0.2200806cHz	
23.3				
13.3				
3.30				
5.70				
16.7				DL1-19.00 aB
26.7				and days and a second and a second
16.7	نەمەرىرلىر. مەمەرىرىيە مەمەرىيە	wydagigwerddiadallyn gwrafaetrow	and he was a second sec	- 110-
6.7				
6.7				
Start 30 MHz Res BW 1.0 MHz		#VBW 3.0 MHz*		Stop 3.600 GHz
		#VDW J.V MHZ"	SW	rep 4.407 ms (1001 pts



Keysight Spectrum Analyzer - Swept SA			
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:30:47 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free F IFGain:Low #Atten: 14		TRACE 1 2 3 4 5 TYPE MWWWW DET A NNNN
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		Δ	
		FC172.2120 8208:CHz	
23.3			
13.3			
3.30			
6.70			
16.7			CL1 -19.00 oB
26.7		and the set of the set of the set	the for the state of the state
100-1 march	entry as for the sector and a constrained and	play for level.	
16.7			
56.7			
tart 30 MHz Res BW 1.0 MHz	#VBW 3.0 MHz	Swe	Stop 3.600 GHz ep 4.467 ms (1001 pts
sg		<b>I</b> STATUS	

Figure 8.2-155: Conducted spurious emissions within 30–3600 MHz, Port C, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

sg						ų	STATUS			
	.600 GH			#VI	BW 3.0 MHz*			Sweep	Stop 2 30.67 m	22.000 GHz s (1001 pts
83.7										
73.7										
63.7										
53.7										
43.7										
33.7	wern		www	~~~~~	mana	we wanter and			when the last	umuch
23.7			_	_						DL1 -19.00 oB
13.7										
3.70			_							
0 dB/di	Ref v Ref	Offset 43.3 6.30 dBr	dB N		· · ·			IVI		848 GH .671 dBn
				PNO: Fast IFGain:Low	Trig: Free Run #Atten: 8 dB	n	Avg Hold:>1	/1		DET A NNNN
		50 Ω	DC		SENSE:INT	ALIG	AVG TVDE: R	MS		9 PM Nov 07, 201 RACE 1 2 3 4 5

Figure 8.2-154: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 20 MHz each at the bottom of the band, QPSK

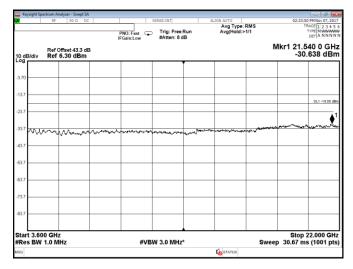
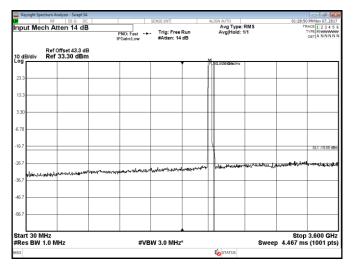
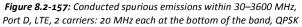


Figure 8.2-156: Conducted spurious emissions within 3600–22000 MHz, Port C, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

Testing data Clause 27.53 and RSS-139, 6.6 Spurious emissions at RF antenna connector FCC Part 27, RSS-139, Issue 3



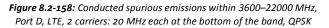




Keysight Spectrum Analyzer - Swept SA			- 6 <b>-</b>
RF 50 Ω DC	SENSE:INT	ALIGN AUTO	01:30:56 PM Nov 07, 2017
nput Mech Atten 14 dB	PNO: Fast Trig: Free R IFGain:Low #Atten: 14 d		TRACE 1 2 3 4 5 TYPE M WWWWW DET A N N N N
Ref Offset 43.3 dB 0 dB/div Ref 33.30 dBm		1911 2220 2284242	
23.3		P (1 12 2120 68/02.412	
13.3			
3.30			
6.70			
16.7			DL1-19.00 dB
26.7	when the state of	nonseller Wardware Marshales	
36.7			
16.7			
56.7			
Start 30 MHz Res BW 1.0 MHz	#VBW 3.0 MHz*	Swee	Stop 3.600 GHz p 4.467 ms (1001 pts
ISG		<b>K</b> ostatus	

Figure 8.2-159: Conducted spurious emissions within 30–3600 MHz, Port D, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK

Keys	iight Spei	ctrum Analy RF	yzer - Swept S				SENSE:INT			1			- 🕼 🛃
<u> </u>		K0*	50 Ω 0	C	PNC	): Fast G		Run	ALIGN AUTO Avg Ty Avg Ho	/pe: RMS ld:>1/1		02:35:	TYPE NWWWW DET A NNNN
10 dB	/div		set 43.3 c .30 dBm								м	kr1 19.3 -30	313 6 GH .769 dBn
3.70		_			+						_		
13.7													DL1 -19.00 dB
23.7										_		1	
33.7	Ś	m	$\sim$	name	marino	/*\$j~\$6_%(j/*~+	harmonia	hand	had a start and the start of th	and a start and a start		mohred	newselve
43.7		-											
53.7		+			+								
63.7													
73.7		-			-								
83.7													
		0 GHz 1.0 MH	z	1		#VE	3W 3.0 MHz	*		s	weep	Stop 30.67 m	22.000 GH: is (1001 pts
ISG									to statu:	5			



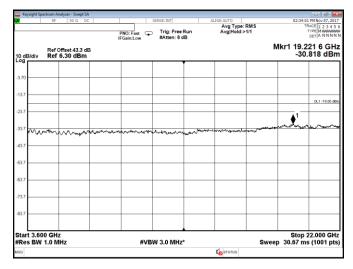


Figure 8.2-160: Conducted spurious emissions within 3600–22000 MHz, Port D, LTE, 2 carriers: 20 MHz each at the top of the band, QPSK



Keysight Spectrum Analyzer - Channel Power RF 50 Ω DC	SENSE:IN	T ALIGN AUTO		03:59:19 PM Nov 06, 201
Ref Offset 43.30 dB	Cent	er Freq: 2.109975000 GHz		Radio Std: None
	#IFGain:Low #Att	FreeRun Avg H an:16 dB	old:>100/100	Radio Device: BTS
Ref Offset 43.3 dB 0 dB/div Ref 40.00 dBm				
og				
0.0				
20.0				
10.0				
.00			and	
0.0				
0.0				
0.0				
0.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
0.0				
enter 2.11 GHz				Span 1 MH
Res BW 10 kHz		VBW 100 kHz		Sweep 11.93 m
Channel Power	Po	wer Spectral Den	sity	
-28.11 dBm / 5		-15.10 dBm		
-28.11 dBm / 5	0 KHZ	-15.10 dBm	/MHZ	
a		<b>K</b> STATL	15	
-				

Figure 8.2-161: Conducted band edge emission at 2110 MHz, Port A, LTE, 5 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analyzer - Chan	nel Power DC		SENSE:INT		LIGN AUTO		03:59:0	1 PM Nov 06, 201
ef Offset 43.30 dB	55 J		Center Fr	eq: 2.10997500		400/400	Radio Std: I	
		#IFGain:Low	#Atten: 16	dB	Avginoid:>	100/100	Radio Devic	e: BTS
Ref Offset 4								
og Ref 40.00	dBm		<u> </u>					
0.0		-						
0.0						1	+	
0.0								
0.0								
0.0					and the second s			
0.0								
0.0								
0.0								
enter 2.11 GHz								Span 1 MH
Res BW 10 kHz			VB	W 100 kHz				p 11.93 m
Channel Barren				<b>0</b>	. D 14			
Channel Power			Powe	r Spectra	Density			
-28.84 dB	m / 50 k	u.,		15.83	dBm //	ALL-2		
-20.04 00	111 / OU K	12		10.00		1112		
a								
-					- Contraction			

Figure 8.2-163: Conducted band edge emission at 2110 MHz, Port B, LTE, 5 MHz channel, QPSK (RBW = 1% of EBW)

Marker 1 2,1090 GHz     Center Free: 2.1090000 GHz     Radio Set: None       If dBidiv     Ref 55.00 dBm	Center Free 2:0650000 GHz GainLow Tip: Free Run AvgiHeid:>100/100 Radio Setic: BTS Mkr1 2:109 GHz -35.755 dBm -35.755	Keysight Spectrum Analyzer - Channel Power							- 6
Bit Galactory     Trig: Free Run Artise: 12 dB     Argified:>100/100     Radio Device: BT       15 dBiddy     Ref 55.00 dBm	GainLow Radio Device: BTS Mkr1 2:109 GHz -35.755 dBr -35.755 dBr -35.757 dBr -	Arker 1 2.1090 GHz		Center Freq: 2.10		GHz			
Mkr1 2.106 	Mkr1 2.109 GHz -35.755 dBm 					Avg Hold:>	100/100	Radio Devid	e: BTS
Channel Power Power Spectral Density	VBW 510 kHz Span 10 MHz VBW 510 kHz Sweep 4.6 ms Power Spectral Density		Gameon						
400 400 400 400 400 400 400 400	VBW 510 kHz Sweep 4.6 ms Power Spectral Density							-35.	755 dBm
20     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30     1       30 <th>VBW 510 kHz Sweep 4.6 ms Power Spectral Density</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	VBW 510 kHz Sweep 4.6 ms Power Spectral Density								
Image: Constraint of the second se	VBW 510 kHz Sweep 4.6 ms Power Spectral Density								
Channel Power Spectral Density	VBW 510 kHz Sweep 4.6 m Power Spectral Density								
channel Power Spectral Density	VBW 510 kHz Sweep 4.6 m Power Spectral Density					/			
50     Image: Constraint of the second of the	VBW 510 kHz Sweep 4.6 m Power Spectral Density								
channel Power Spectral Density	VBW 510 kHz Sweep 4.6 m Power Spectral Density				♦'	h			
S0     S0     S0       enter 2.109 GHz     VBW 510 kHz       Span 1       Res BW 51 kHz     VBW 510 kHz	VBW 510 kHz Sweep 4.6 m Power Spectral Density	and the second se							
OD     Span 1       Res BW 51 kHz     VBW 510 kHz       Spen 1     Sweep	VBW 510 kHz Sweep 4.6 m Power Spectral Density								
Channel Power     Power Spectral Density	VBW 510 kHz Sweep 4.6 m Power Spectral Density								
Res BW     51 kHz     VBW     510 kHz     Sweep       Channel Power     Power Spectral Density	VBW 510 kHz Sweep 4.6 m Power Spectral Density								
Channel Power Mower Spectral Density	Power Spectral Density			VDW 64	0.641-			SI	an 10 MH
		Res BW 51 KHZ		VBW 51	UKHZ			SW	ep 4.0 m
		Channel Power		Power Sp	ectral	Density			
-23.48 dBm / 1 MHz -23.48 dBm /MHz	-23.48 dBm /мнz								
		-23.48 dBm / 1 мнг		-23.	48 d	IBm /M	1Hz		
						4			
	4	G			1				

Figure 8.2-162: Conducted band edge emission at 2109 MHz, Port A, LTE, 5 MHz channel, QPSK (RBW = 1 MHz)

Keysight Spectrum A	50 Ω D0			SENS			ALIGN AUTO			39 AM Nov 07, 20	
larker 1 2.10	90 GHz				enter Fred rig: Free R	2.108500	000 GHz	1:>100/100	Radio Std: None Radio Device: BTS		
			#IFGain:Low		Atten: 12 o		Avginor	1:>100/100			
	tef 55.00 d	Bm								2.109 GH 5.813 dBr	
og 0.0											
5.0											
0.0			_	_		_	- /	_	_		
00				_			+				
0.0				_			+				
5.0						Ţ	-	-	-		
0.0					-						
5.0				_			_	_		-	
0.0							-	-			
enter 2.109 Res BW 51 k					VBM	/ 510 kH	17		S	pan 10 MH eep 4.6 m	
					101	TOTOR	16			cep 4.011	
Channel I	Power				Power	Spectr	al Densi	ty			
-24.0	)5 dBn	n / 1 MI	Hz		-3	24.05	dBm	/MHz			
a							STATUS				

Figure 8.2-164: Conducted band edge emission at 2109 MHz, Port B, LTE, 5 MHz channel, QPSK (RBW = 1 MHz)



Keysight Spectrum Analyzer - Channel Power RF 50 Ω DC	SENSE:INT ALIGN AUTO	03:58:45 PM Nov 06, 201
Ref Offset 42.60 dB	Center Freq: 2.109975000 GHz	Radio Std: None
	Trig: Free Run Avg Hold:>100/ #IFGain:Low #Atten: 16 dB	/100 Radio Device: BTS
Ref Offset 42.6 dB 0 dB/div Ref 40.00 dBm		
og		
30.0		
0.0		
0.0		
1.00		~~
0.0		
0.0		
0.0		
0.0		
0.0		
Center 2.11 GHz Res BW 10 kHz	VBW 100 kHz	Span 1 MH Sweep 11.93 m
Channel Power	Power Spectral Density	
-28.45 dBm / 50	кнz -15.44 dBm /мн	7
20110 4211 / 00		-
sg		

Figure 8.2-165: Conducted band edge emission at 2110 MHz, Port C, LTE, 5 MHz channel, QPSK (RBW = 1% of EBW)

	I Power		SENSE:INT		LIGN AUTO			I8 PM Nov 06, 201
pan 1.0000 MHz			Talas Fast	eq: 2.10997500	0 GHz Avg Hold:>	100/100	Radio Std: I	None
	#1	FGain:Low	#Atten: 1	6 dB	Avginoid.2	100/100	Radio Devic	e: BTS
Ref Offset 43	2 dB							
0 dB/div Ref 35.00 d	IBm							
5.0	_							
5.0						r	+	
00								
00					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- and the		
5.0					~~~			
5.0					1			
5.0								
5.0								
50								
enter 2.11 GHz Res BW 10 kHz			VB	W 100 kHz				Span 1 MH p 11.93 m
Res BW 10 KHZ			VB	W TUU KHZ			Swee	p 11.95 m
Channel Power			Powe	r Spectra	Density	,		
-28.42 dBr	n / 50 kH	7		-15.41	dBm //	1Hz		
20.12 0.01		-						
a					<b>STATUS</b>			

Figure 8.2-167: Conducted band edge emission at 2110 MHz, Port D, LTE, 5 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Specti	rum Analyzer - Channel I											
	RF 50 Ω DC 42.60 dB			SENSE:INT	r Freg: 2.1		LIGN AUTO		09:15:5 Radio Std:	5 AM Nov 07, 2017		
er Onset	42.60 dB			Trig:	Free Run	0000000	Avg Hold:>	100/100				
			#IFGain:Low	#Atte	n: 12 dB		-		Radio Devic	e: BTS		
	Ref Offset 42.6	dB							Mkr1 2.109 GHz			
5 dB/div	Ref 54.30 dl	3m							-36.919 dBn			
<b>og</b> 9.3												
1.3						-	[					
30						-	- /		-			
70					_	+	- (-					
.7					_	<b>↓</b> 1—						
.7				mark		Y	~					
).7					_							
.7												
0.7												
enter 2.1										oan 10 MHz		
Res BW 🗄	D1 KHZ				VBW 51	U KHZ			SW	eep 4.6 m		
				_	-							
Channe	el Power			Po	wer Sp	ectra	I Density					
-						~~						
-24	4.62 dBn	1/1MH	łz		-24.	62 (	dBm //	1Hz				
a							<b>K</b> STATUS					
							~					

Figure 8.2-166: Conducted band edge emission at 2109 MHz, Port D, LTE, 5 MHz channel, QPSK (RBW = 1 MHz)

	m Analyzer - Channel I RF 50 Ω DC			SENSE:INT		ALIGN AUTO	09:16:06 AM Nov 07, 201 Radio Std: None
ef Offset 4	13.30 dB			Trig: Fr		Avg Hold:>100/100	
			#IFGain:Low	#Atten:	12 dB		Radio Device: BTS
5 dB/div	Ref Offset 43.3 Ref 55.00 df						Mkr1 2.109 GH -34.796 dBr
og							
5.0							
1.0							
10						///	
.0							
.0							
.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
0							
.0							
enter 2.10							Span 10 MH
Res BW 5	1 kHz			V	BW 510 kH	Z	Sweep 4.6 m
Channe	Power			Pow	er Spectr	al Density	
-22	.35 dBm	<mark>л/1</mark> М⊮	łz		-22.35	dBm /мнz	
3						<b>STATUS</b>	

Figure 8.2-168: Conducted band edge emission at 2109 MHz, Port D, LTE, 5 MHz channel, QPSK (RBW = 1 MHz)



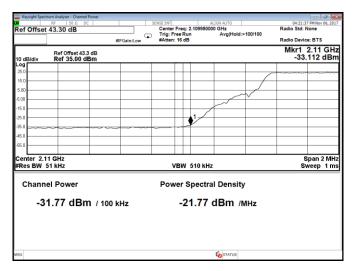


Figure 8.2-169: Conducted band edge emission at 2110 MHz, Port A, LTE, 10 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectru		el Power		SENSE:INT	req: 2.10995	ALIGN AUTO		04:21: Radio Std:	57 PM Nov 06, 201
			#IFGain:Low	Trig: Fre #Atten: 1		Avg Hold:	>100/100	Radio Devi	ce: BTS
0 dB/div	Ref Offset 43 Ref 35.00 d								2.11 GH .103 dBr
og 5.0									
5.0									
00									
.00							~		
5.0			_						
5.0	_				<b>↓</b> 1 <i>→</i>				
5.0					1				
5.0									
5.0									
enter 2.11	GHz								Span 2 MH
Res BW 5	1 kHz			VE	BW 510 k	Hz			weep 1 m
Channe	l Power			Powe	er Spect	tral Densit	/		
24	.95 dBr				24.04	5 dBm /			
-31	.95 081	n / 100	KHZ		-21.9	o abm /	MHZ		
a						<b>K</b> STATUS			

Figure 8.2-171: Conducted band edge emission at 2110 MHz, Port B, LTE, 10 MHz channel, QPSK (RBW = 1% of EBW)

Reysight Spectrum Analyzer - Channel Power           RF         50 Ω         DC           RF         50 Ω         DC	SENSE:IN Cent	T	ALIGN AUTO				
	Trig	: Free Run en: 12 dB	Avg Hold:>100/100		Radio Device: BTS		
Ref Offset 43.3 dB 5 dB/div Ref 55.00 dBm				Mkr1 2.1 -36.9	09 GH 39 dBn		
<b>9</b> g							
5.0					an Proposition and		
1.0							
.0		1_	///				
.0							
0							
1.0							
enter 2.109 GHz Res BW 51 kHz		VBW 510 kH	2	Spa Swee	n 10 MH p 4.6 m		
Channel Power	Po	wer Spectra	al Density				
-24.55 dBm / 1 мн	7	-24.55	dBm /мнz				
	-						
3							

Figure 8.2-170: Conducted band edge emission at 2109 MHz, Port A, LTE, 10 MHz channel, QPSK (RBW = 1 MHz)

	0		SENSE:INT	Freg: 2.10		IGN AUTO		09:17:1 Radio Std:	2 AM Nov 07, 20	
43.30 dB		#IFGain:Low	Trig: Fn	ee Run	000000	Avg Hold:>	100/100	Radio Device: BTS		
									2.109 GH .483 dBr	
_				_	<u> </u>			_		
_						- /				
					1-	$\vdash$				
								-	-	
-				-	-			-		
			v	BW 51	0 kHz			Sw	pan 10 MH eep 4.6 m	
l Power			Pow	er Spe	ectra	I Density				
.04 dBn	n / 1 MF	17		-25	04 (	dBm //	1Hz			
						<b>K</b> STATUS				
	9 GHz 1 kHz	Ref Offiset 43.3 dB Ref 55.00 dBm 9 GHz 1 KHz 1 Power	#FGainLow	BFGain.Low BAtten: Ref Offset 43.3 dB Ref 55.00 dBm 9 GHz 1 kHz V I Power Pow	#FGaint.ow #Atten: 12 dB Ref Offiset 43.3 dB Ref 55.00 dBm 9 GHz 1 KHz VBW 51 1 Power Spe	#GainLow #Atten: 12 dB Ref Offiset 43.3 dB Ref 55.00 dBm 9 GHz 1 KHZ VEW 510 kHz 1 Power Spectra	PFGeinLow Atten: 12 dB Ref Offset 43.3 dB Ref 55.00 dBm 9 GHz 1 Hz 1 Power Power Spectral Density 0.04 dBm / 1 MHz -25.04 dBm / N	Ref Offset 43.3 dB       Ref 55.00 dBm       9 GHz       VBW 510 kHz       1 Power       Power Spectral Density       0.04 dBm / 1 MHz	Ref Offiset 43.3 dB     Red of the set 43.3 dB     Mkr1_2       Ref 55.00 dBm     -37       9 GHz     VBW 510 kHz       1 Hower     Power Spectral Density       0.04 dBm / 1 MHz     -25.04 dBm /MHz	

Figure 8.2-172: Conducted band edge emission at 2109 MHz, Port B, LTE, 10 MHz channel, QPSK (RBW = 1 MHz)



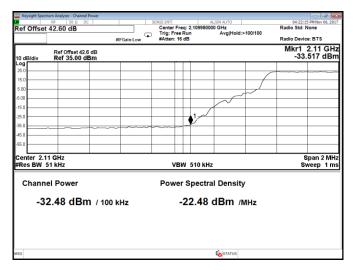


Figure 8.2-173: Conducted band edge emission at 2110 MHz, Port C, LTE, 10 MHz channel, QPSK (RBW = 1% of EBW)

0	ctrum Analyzer - Chan RF 50 Ω t 43.30 dB	DC		SENSE:INT	reg: 2.1099500	ALIGN AUTO		04:22: Radio Std:	30 PM Nov 06, 201
er onse	<u>1 43.30 dB</u>		#IFGain:Low	<ul> <li>Trig: Fre #Atten:</li> </ul>	e Run	Avg Hold:	>100/100	Radio Devi	ce: BTS
0 dB/div	Ref Offset 4 Ref 40.00								2.11 GH .131 dBr
og 10.0									
0.0									
0.0									
				_		ļ.,	$\checkmark$		
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0.0					+	1			
0.0									
0.0	~~~~				~				
0.0									
enter 2. Res BW				v	3W 510 kH	z			Span 2 MH weep 1 m
Chann	nel Power			Pow	er Spectra	al Densit	/		
-31.30 dBm / 100 kHz					-21.30	dBm //	MHz		
g						<b>K</b> STATUS			

Figure 8.2-175: Conducted band edge emission at 2110 MHz, Port D, LTE, 10 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analyzer - Channel Power RF 50 Ω DC Ref Offset 42,60 dB	SENSE:INT	AL	IGN AUTO	09:17:0	AM Nov 07, 201	
	IFGain:Low #Atten: 12	Run	Avg Hold:>100/100	Radio Device: BTS		
Ref Offset 42.6 dB 5 dB/div Ref 54.30 dBm				Mkr1 2.109 GH: -37.989 dBn		
9.3						
30						
70						
.7		1				
7		¥				
.7				_		
1.7						
enter 2.109 GHz Res BW 51 kHz	VB	W 510 kHz			an 10 MH ep 4.6 m	
Channel Power	Powe	r Spectra	I Density			
-25.51 dBm / 1 MH	, .	25 51 0	dBm /мнz			
	-					
3			<b>K</b> STATUS			

Figure 8.2-174: Conducted band edge emission at 2109 MHz, Port D, LTE, 10 MHz channel, QPSK (RBW = 1 MHz)

alyzer - Channel Power 50 Ω DC 30 dB			reg: 2.1085000	00 GHz		49 AM Nov 07, 201	
	#IFGain:Low			Avg Hold:>100/100	Radio Device: BTS		
						2.109 GH 5.576 dBr	
				- A			
		_					
		_		///			
			<b>T</b>				
poster la							
		v	BW 510 kH	z	Sw	pan 10 MH eep 4.6 m	
ower		Pow	er Spectra	al Density			
7 dBm / 1	MHz		-23.07	dBm /мнz			
	30 dB	30 dB #FGalmLow #FGalmLow #FGalmLow #FGalmLow #Foffset 43.3 dB #Ffset 45.00 dBm #Ffset 45.00	Is a oc Is a oc Is a oc Is occurrent Center Trig: Fr Trig: Fr	Sover Power Spectra	So oc     stockaro       30 dB     Center Pres: 2.1080000 dbit/s100100       #FGaint.ow     #FGaint.ow       #Hz     VBW 510 kHz       #FGaint.ow     #FGaint.ow       #FGaint.ow     #FGaint.ow       #Hz     VBW 510 kHz       #FGaint.ow </td <td>Image: Solution of the second seco</td>	Image: Solution of the second seco	

Figure 8.2-176: Conducted band edge emission at 2109 MHz, Port D, LTE, 10 MHz channel, QPSK (RBW = 1 MHz)



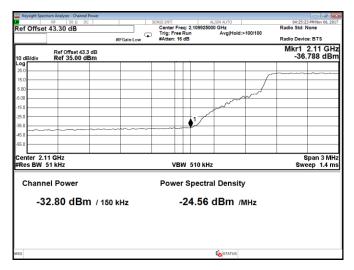


Figure 8.2-177: Conducted band edge emission at 2110 MHz, Port A, LTE, 15 MHz channel, QPSK (RBW = 1% of EBW)

Ref Offset 43					r Freq: : Free Rui	2.10992500	IGN AUTO 0 GHz Avg Hold:	>100/100	04:25:1 Radio Std:	11 PM Nov 06, 201
			#IFGain:Low		n: 16 dB		Avginoid.	2100/100	Radio Devid	ce: BTS
0 dB/div	Ref Offset 43. Ref 35.00 d								Mkr1 -37	2.11 GH .217 dBr
<b>og</b> 5.0										
5.0										
.00										
								~		
5.0							~~~	<b>^</b>		
5.0							~			
5.0						1,7				
5.0					+	~				
5.0										
enter 2.11 ( Res BW 51					vвw	510 kHz				Span 3 MH eep 1.4 m
Channel	Power			Pov	wer S	pectra	I Densit	y		
-33.84 dBm / 150 kHz					-2	5.61	dBm /	MHz		
a										

Figure 8.2-179: Conducted band edge emission at 2110 MHz, Port B, LTE, 15 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analyzer - Channel RF 50 Ω DC	ower	SENSE:INT	ALIGN AUTO	09:18:18 AM Nov 07, 20:				
ef Offset 43.30 dB		Center Freq: 2.108		Radio Std: None				
	#IFGain:Low	#Atten: 12 dB	Avg Hold:>100/100	Radio Device: BTS				
Ref Offset 43.3 5 dB/div Ref 55.00 dB			Mkr1 2.109 GH -38.871 dBr					
og 0.0								
5.0								
1.0			(~					
00								
.0			. — / —					
i.0								
.0								
i.0								
0.0								
enter 2.109 GHz Res BW 51 kHz		VBW 510	) kHz	Span 10 MH Sweep 4.6 m				
Channel Power		Power Spe	ctral Density					
-26.74 dBm	/ 1 MHz	-26.7	74 dBm /мнz					
			4					
3			<b>I</b> STATUS					

Figure 8.2-178: Conducted band edge emission at 2109 MHz, Port A, LTE, 15 MHz channel, QPSK (RBW = 1 MHz)

ef Offset		DC		9	E:INT				400/400	09:18:3 Radio Std:	1 AM Nov 07, 201 None	
			#IFGain:Lo		rig: Free l Atten: 12			Avg Hold:>	100/100	Radio Device: BTS		
5 dB/div	Ref Offset 4 Ref 55.00									Mkr1 2 -40	2.109 GH .261 dBr	
og 0.0												
5.0												
0.0												
00	_		_						1			
0.0							_	/				
5.0						•	1					
0.0					~~~~~							
5.0												
0.0	_	_			-							
enter 2.1 Res BW 5					VBV	N 510	kHz			Sw	pan 10 MH eep 4.6 m	
Channe	el Power				Power	Spec	ctra	Density	,			
-28	3.02 dB	m / 1 M	۸Hz		-	28.0	2 0	Bm /	٨Hz			
ig								<b>STATUS</b>				

Figure 8.2-180: Conducted band edge emission at 2109 MHz, Port B, LTE, 15 MHz channel, QPSK (RBW = 1 MHz)



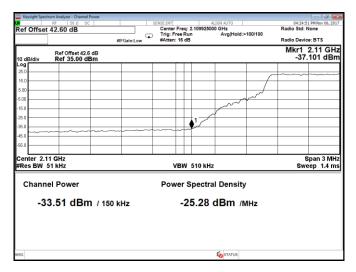


Figure 8.2-181: Conducted band edge emission at 2110 MHz, Port C, LTE, 15 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analy	cer - Channel Power		SENSE:INT		IGN AUTO		04/24/2	4 PM Nov 06, 201	
enter Freq 2.1			Center Fr	eq: 2.10992500	0 GHz		Radio Std: I		
	,	#FGain:Low	Trig: Free #Atten: 16		Avg Hold:>	100/100	Radio Device: BTS		
	Offset 43.3 dB 35.00 dBm							2.11 GH .294 dBr	
og 5.0									
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5.0				¥.					
5.0									
5.0				+					
enter 2.11 GHz Res BW 51 kHz			VB	W 510 kHz				Span 3 MH eep 1.4 m	
Channel Po	wer		Powe	r Spectra	I Density	,			
-32.82	dBm / 150 i	(Hz		-24.58	dBm /M	٨Hz			
g					<b>E</b> STATUS				
·					<b>0</b>				

Figure 8.2-183: Conducted band edge emission at 2110 MHz, Port D, LTE, 15 MHz channel, QPSK (RBW = 1% of EBW)

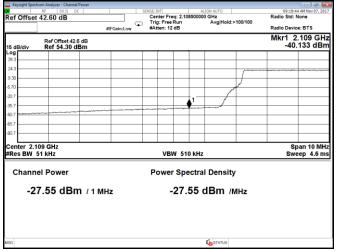


Figure 8.2-182: Conducted band edge emission at 2109 MHz, Port D, LTE, 15 MHz channel, QPSK (RBW = 1 MHz)

Keysight Spectrum Analyzer - Channel Power RF 50 Ω DC ef Offset 43.30 dB		SENSE:INT				09:18: Radio Std:	56 AM Nov 07, 201	
er onset 43.30 dB	#IFGain:Low	Talas France Desa		Avg Hold:>	100/100	Radio Device: BTS		
Ref Offset 43.3 dB 5 dB/div Ref 55.00 dBm						Mkr1 2 -38	2.109 GH .317 dBr	
og 0.0								
5.0								
0.0								
.00			_		/			
0.0				1		_		
5.0			<u> </u>					
0.0						_		
5.0								
0.0								
enter 2.109 GHz Res BW 51 kHz		VBW 3	510 kHz	!			pan 10 MH eep 4.6 m	
Channel Power		Power S	pectra	I Density	,			
-26.04 dBm / 1	MHz	-26	6.04	dBm /M	۱Hz			
10				STATUS				

Figure 8.2-184: Conducted band edge emission at 2109 MHz, Port D, LTE, 15 MHz channel, QPSK (RBW = 1 MHz)



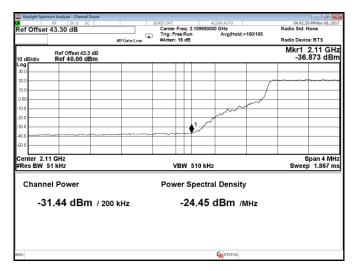


Figure 8.2-185: Conducted band edge emission at 2110 MHz, Port A, LTE, 20 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Ana RF	50 Ω DC		SENSE:INT	Al	LIGN AUTO		04:42:5 Radio Std:	7 PM Nov 06, 201
Ref Offset 43.3	0 dB	#IFGain:Low		Run	Avg Hold:>	100/100	Radio Std:	
	Offset 43.3 dB f 35.00 dBm	#IFGall:LOW	Britten. To				Mkr1	2.11 GH
	35.00 UBIII							
15.0						C		
.00								
00						$\sim$		
5.0					m	-		
5.0				$\exists \neg \neg$	-			
5.0				1 an				
5.0								
55.0								
Center 2.11 GH Res BW 51 kH			VB	W 510 kHz			Swee	Span 4 MH p 1.867 m
Channel Po	ower		Power	r Spectra	I Density	,		
-33.3	3 dBm / 200	) kHz	-	26.34	dBm //	٨Hz		
					-4			
a					<b>K</b> STATUS			

Figure 8.2-187: Conducted band edge emission at 2110 MHz, Port B, LTE, 20 MHz channel, QPSK (RBW = 1% of EBW)

Ref Offset 43	alyzer - Channel Power 50 Ω DC 30 dB				ter Fre					09:20 Radio Sto	0:18 AM Nov 07, 20: I: None
		#IFGa	in:Low 두		: Free F ten: 12			Avg Hold:>	100/100	Radio De	vice: BTS
5 dB/div R	ef Offset 43.3 dB ef 55.00 dBm										2.109 GH 8.456 dBr
og 0.0											
5.0											
0.0										-	
00								1			
5.0							1				
0.0		~~~~	******	~~~~~~	~~~~						
5.0											
0.0											
enter 2.109 Res BW 51 k					VBV	V 51	0 kHz				Span 10 MH weep 4.6 m
Channel F	ower			Po	ower	Spe	ectra	Density	,		
-26.3	3 dBm /			-3	26.	33 d	Bm /I	٨Hz			
a								<b>K</b> STATUS			

Figure 8.2-186: Conducted band edge emission at 2109 MHz, Port A, LTE, 20 MHz channel, QPSK (RBW = 1 MHz)

Keysight Spectr		el Power		SENSE:1	ता ter Freg: 2.1		LIGN AUTO		09:2 Radio Sto	0:07 AM Nov 07, 201
eronset	43.30 UB		#IFGain:Low	Trig	: Free Run ten: 12 dB		Avg Hold:>	100/100	Radio De	
5 dB/div	Ref Offset 43 Ref 55.00 (									2.109 GH 0.076 dBr
og	100.000					<u> </u>			-	
0.0										
5.0										
0.0										
0.0							6	-		
10.0						<b>↓</b> 1				
i0.0							- and the second			
5.0										
10.0										
Res BW 5					VBW 51	0 kHz			S	Span 10 MH weep 4.6 m
Channe	el Power			Po	ower Sp	ectra	I Density	,		
-27	7.86 dBr	<b>n</b> / 1 м	Hz		-27	86 (	dBm //	۱Hz		
							đ			
ia							<b>K</b> STATUS			

Figure 8.2-188: Conducted band edge emission at 2109 MHz, Port B, LTE, 20 MHz channel, QPSK (RBW = 1 MHz)



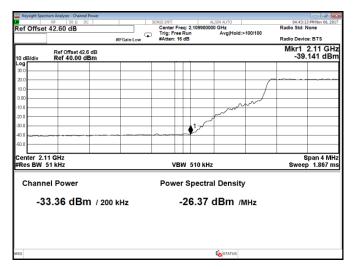


Figure 8.2-189: Conducted band edge emission at 2110 MHz, Port C, LTE, 20 MHz channel, QPSK (RBW = 1% of EBW)

		el Power DC		SENSE:INT			LIGN AUTO			27 PM Nov 06, 201
tef Offset	t 43.30 dB			Trig:	Free Ru	2.10990000 n	0 GHz Avg Hold:>	100/100	Radio Std:	
			#IFGain:Low	#Atte	n: 16 dE				Radio Devi	
0 dB/div	Ref Offset 43 Ref 35.00									2.11 GH .966 dBn
og 8.0					İ					
5.0								C		
5.00										
								~		
5.0							~~~~~			
5.0						1-5	~			
5.0						-~_				
5.0					17					
5.0			_		+					
enter 2.1	11 GHz									Span 4 MH
Res BW					VBW	Swee	p 1.867 m			
Chann	el Power			Po	wor S	nectra	I Density	,		
Cinanin	er rower			FU	ner e	pecua	Density			
				•						
-3	2.18 dB	m / 200	kHz		-2	5.19 (	dBm //	ИНи		

Figure 8.2-191: Conducted band edge emission at 2110 MHz, Port D, LTE, 20 MHz channel, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analyz RF	50 Ω DC		SENSE:INT		ALIGN AUTO			7 AM Nov 07, 20
tef Offset 42.60	dB		Trig: Fre		Avg Hold	>100/100	Radio Std: I	
		#IFGain:Low	#Atten: 1	2 dB			Radio Devic	
	offset 42.6 dB 54.30 dBm						Mkr1 2 -40	.109 GH .143 dB
og 19.3								
24.3								
.30								
.70				+ +		www		
0.7				++++1		1		
6.7								
0.7						-		
6.7								
10.7								
Center 2.109 GH Res BW 51 kHz	2		VE	3W 510 k	Hz			pan 10 MH eep 4.6 m
Channel Po	wer		Powe	er Spect	ral Densit	у		
-27.98	-27.98 dBm / 1 мнz			-27.98	dBm /	MHz		
					-1			
IG					<b>K</b> STATUS			

Figure 8.2-190: Conducted band edge emission at 2109 MHz, Port D, LTE, 20 MHz channel, QPSK (RBW = 1 MHz)

	DC		SENSE:INT			IGN AUTO			- 🗇 📕	
43.30 dB			Talas Fa		500000	) GHz AvaiHold:	100/100	Radio Std:	None	
		#IFGain:Low				Angli Iola.	100/100	Radio Device: BTS		
									2.109 GH .808 dBr	
1101 00100 0										
							/			
					-			-		
				+ +			N. M.	-		
		-			1	1		-		
						~~~~				
		_								
09 GHz								S	pan 10 MH	
51 kHz			v	BW 510	kHz			Sw	eep 4.6 m	
el Power			Pow	er Spec	ctra	I Density	,			
5.33 dBr	n / 1 м	Hz		-25.3	3 0	dBm /M	۱Hz			
						E STATUS				
	Ref Offset 43 Ref 55.00 (Ref Offset 43.3 dB Ref 55.00 dBm	Ref Offset 43.3 dB Ref 55.00 dBm	Ref Offset 43.3 dB Ref 55.00 dBm 09 GHz 11 kHz V el Power Pow	Trig: Free Run #FGaintow Trig: Free Run Atten: 12 dB Ref 0/freet 43 3 dB Ref 55.00 dBm 09 GHz 11 kHz VBW 510 09 GHz 11 kHz VBW 510 el Power Spece	Trig: Free Run Ref Offset 43.3 dB Ref 55.00 dBm 09 GHz 11 kHz VBW 510 kHz el Power Spectral	Ref Officet 433.48 Ref 55.00 dBm 09 GHz 09 GHz 11 KHZ VBW 510 KHZ el Power Power Spectral Density 5.33 dBm / 1 MHz -25.33 dBm / M	Production of the second secon	Trig: Free Run Betroffset 433 dB Ref 55.00 dBm Mkr1 2 -37 09 GHz 0 09 GHz VBW 510 kHz 09 GHz Sw 11 kHz VBW 510 kHz 5.33 dBm / 1 MHz -25.33 dBm /MHz	

Figure 8.2-192: Conducted band edge emission at 2109 MHz, Port D, LTE, 20 MHz channel, QPSK (RBW = 1 MHz)



Keysight Spectrum Analyzer - Chanr RF 50 Ω	el Power DC	1	SENSE:INT		ALIGN AUTO		04:01:	59 PM Nov 06, 201	
pan 1.0000 MHz				Freq: 2.109975			Radio Std: None		
		#IFGain:Low	 Trig: Fr #Atten: 	16 dB	>100/100	Radio Device: BTS			
Ref Offset 43 0 dB/div Ref 35.00 99 5.0	3.3 dB dBm								
.00									
5.0									
5.0									
enter 2.11 GHz Res BW 10 kHz			v	'BW 100 ki	łz			Span 1 MH p 11.93 m	
Channel Power			Pow	er Spect	ral Densit	у			
-30.91 dB	m / 50 k	Hz		-17.90	dBm /	MHz			
G			I STATUS						

Keysight Spectrum Analyzer - C RF 50 s		SENSE:INT		ALIGN AUTO	09:55:46.0	- @ M Nov 07, 2	
arker 1 2.1090 GF	z	Cente	er Freq: 2.1085000 Free Run n: 16 dB		Radio Std: None Radio Device: BTS		
Ref Offse 5 dB/div Ref 55.0					Mkr1 2.1 -36.7	109 GI 16 dB	
og 0.0							
5.0							
0.0							
00				///			
0.0							
5.0			•'				
0.0							
5.0							
0.0							
enter 2.109 GHz Res BW 51 kHz			VBW 510 kH	2	Spa Swee	n 10 M p 4.6 r	
Channel Powe	r	Po	wer Spectra	al Density			
-24.63 d	Bm / 1 MHz		-24.63	dBm /мнz			
a				STATUS			

Figure 8.2-193: Conducted band edge emission at 2110 MHz, Port A, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1% of EBW)

Keysight Spectrum Analy RF	zer - Channel Power 50 Ω DC		SENSE:INT	A	JGN AUTO		04/02/2	😑 🕼 📕
pan 1.0000 MH				reg: 2.10997500			Radio Std:	
pun 1.5000 Mi			Trig: Fre	e Run	Avg Hold	>100/100		
		#IFGain:Low	#Atten: 1	6 dB			Radio Devi	ce: BTS
Baf	Offset 43.3 dB							
	35.00 dBm							
og								
5.0		-					-	
5.0				-				
.00		_					-	
.00						- And		
5.0					- And			
5.0				L				
5.0								
15.0							-	
55.0							+	
enter 2.11 GHz								Span 1 MH
Res BW 10 kHz			VE	3W 100 kHz				p 11.93 m
ICO DI TO RIL				TOO KIN			Unce	p 11.30 m
Channel Po			David		Densit			
Channel Po	wer		Powe	er Spectra	Densit	y		
-30.91	dBm / 50	kHz		-17.90 (dBm /	MHz		
ig .								

Figure 8.2-195: Conducted band edge emission at 2110 MHz, Port B, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1% of EBW) **Figure 8.2-194:** Conducted band edge emission at 2109 MHz, Port A, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1 MHz)

59.0 DC GHZ Fiset 43.3 dB 55.00 dBm	#IFGain:Low	SENSE:INT Center Fi Trig: Fre #Atten: 1	req: 2.10850000 e Run	LIGNAUTO 10 GHz Avg Hold:>100/100	Radio Std: Radio Devi Mkr1 2	
					Mkr1 2	2.109 GH
				Γ		
			+ +			
			<u>+ 1</u> -	- /		
and the second se						+
						-
		VE	W 510 kHz	,	Sw	pan 10 MH eep 4.6 m
s BW 51 kHz		Powe				
dBm /1M	MHz		-25.16	dBm /мнz		
		ver dBm / 1 MHz	ver Powe	ver Power Spectra	· · · · · · · · · · · · · · · · · · ·	VBW 510 kHz Sw ver Power Spectral Density

Figure 8.2-196: Conducted band edge emission at 2109 MHz, Port B, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1 MHz)



ef Offset 42.60 dB			Center Free Trig: Free F	q: 2.10997500	0 GHz Avg Hold:>1	100/100	04:03: Radio Std:	00 PM Nov 06, 201 None
	#IFGain:I						Radio Devi	ce: BTS
Ref Offset 42.6 dB/div Ref 30.00 dB								
0g								
0.0						$- \int_{-}^{-}$		
.00						~		
0.0						~		
D.0								
0.0								
0.0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~				
0.0								
0.0								
enter 2.11 GHz								Span 1 MH
Res BW 10 kHz			VBV	V 100 kHz			Swee	p 11.93 m
Channel Power			Power	Spectra	I Density			
-30.67 dBm) / 50 kHz		-	17.66	dBm /м	Hz		

Figure 8.2-197: Conducted band edge emission at 2110 MHz, Port C, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1% of EBW)

			#IFGain:Low	#Atten:	16 dB			Radio Devic	e: BTS
) dB/div	Ref Offset 43 Ref 40.00								
og									
0.0									
0.0		_				_	$- \Gamma$		
.00		_							
0.0									
0.0						\times			
0.0						, 			
0.0	~~~~~								
0.0									
enter 2.1 Res BW				V	3W 100 ki	47			Span 1 MH p 11.93 m
CS DW					544 100 KI	12		30000	p 11.95 m
Chann	el Power			Powe	er Spect	ral Density	/		
2					47 44	dBm //			
-3	0.42 dB	m / 50	KHZ		-17.41	авт /	MHZ		

Figure 8.2-199: Conducted band edge emission at 2110 MHz, Port D, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1% of EBW)

Keysight Spect	trum Analyzer - Channel Powe	a			_				- 6
tef Offset	RF 50 Ω DC			r Freq: 2.10				09:56:2 Radio Std:	11 AM Nov 07, 2011 None
		#IFGain:Low		Free Run h: 16 dB		Avg Hold:>1	00/100	Radio Devid	e: BTS
15 dB/div	Ref Offset 42.6 dB Ref 54.30 dBm								.109 GH
.og									
24.3									
1.30									
1.70									
0.7									
5.7					• ¹				
0.7									
5.7									
0.7									
enter 2.1 Res BW				VBW 51	0 kHz				pan 10 MH eep 4.6 m
Chann	el Power		Pov	ver Spe	ectra	I Density			
-2	5.90 dBm	/ 1 MHz		-25.	90 (dBm /м	Hz		
ig						K STATUS			

Figure 8.2-198: Conducted band edge emission at 2109 MHz, Port C, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1 MHz)

Keysight Spectrum Analyzer - Cl RF 50 S ef Offset 43.30 dB	2 DC		SENSE:INT	reg: 2.108500	ALIGN AUTO		09:56:3 Radio Std: 1	2 AM Nov 07, 201	
		#IFGain:Low	Trig: Fre #Atten:		Avg Hold:>10	0/100	Radio Device: BTS		
Ref Offse 5 dB/div Ref 55.0								.109 GH 421 dBr	
og 0.0									
5.0									
.0									
0				↓ ¹					
0									
0							_		
.0									
enter 2.109 GHz Res BW 51 kHz		_	v	SW 510 kH	lz		Sp	an 10 MH ep 4.6 m	
Channel Powe			Pow	or Spectr	al Density				
Channel Fowe			FOW	a opecu	al Delisity				
-23.52 d	Вт / 1 м	Hz		-23.52	dBm /мн	İz			
3					4				

Figure 8.2-200: Conducted band edge emission at 2109 MHz, Port D, LTE, 5 MHz channel, 2 bottom carriers, QPSK (RBW = 1 MHz)