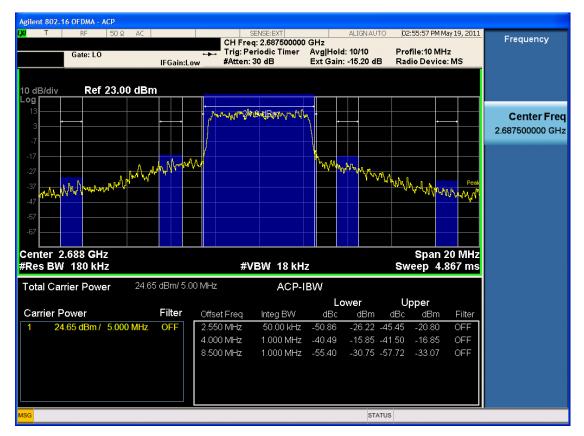


#### gilent 802.16 OFDMA - ACP 02:55:34 PM May 19, 2011 ALIGN AUTO CH Freq: 2.687500000 GHz Frequency Trig: Periodic Timer Avg|Hold: 10/10 #Atten: 30 dB Ext Gain: -15.20 dB Profile:10 MHz Gate: LO #Atten: 30 dB Radio Device: MS IFGain:Low 10 dB/div Ref 23.00 dBm <mark>∿୷⊷ୄ୷୲™ୢଌ<sup>୲</sup>୶୲ଌ୶ୡ</mark>E୶୶୵୷୷୳ୗୢ୶ **Center Freq** 2.687500000 GHz when when when N W/W hall h Yerre holy hours man -Vyn Span 20 MHz Sweep 4.867 ms Center 2.688 GHz #Res BW 180 kHz #VBW 18 kHz 24.64 dBm/ 5.00 MHz ACP-IBW **Total Carrier Power** Upper Lower Carrier Power Filter Offset Freq Integ BW dBc dBm dBc dBm Filter 24.64 dBm / 5.000 MHz 50.00 kHz -26.48 -45.59 2 550 MHz -51.12 -20.94 OFF OFF 4.000 MHz 1.000 MHz -40.53 -16.88 OFF 8.500 MHz 1.000 MHz -55.66 -31.01 -57.78 -33,14 OFF STATUS

#### 16QAM MODE 1/2 (2687.5 MHz) Channel Edge

### ■ 16QAM MODE 3/4 (2687.5 MHz) Channel Edge



	FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue: June 15, 2011	EUT Type: USB Donale	FCC ID:			
HCTR1106FR23	XHGU601					

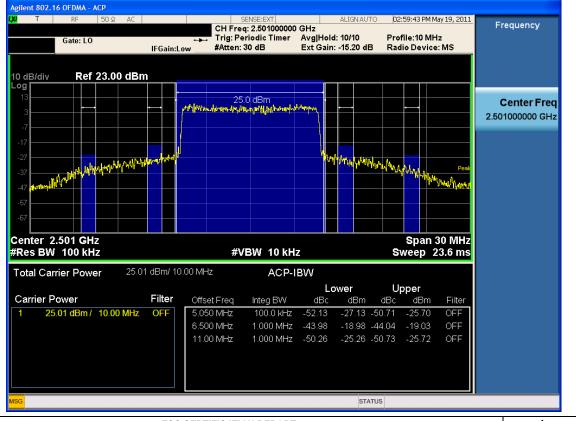


10 MHz



### QPSK MODE 1/2 (2501.0 MHz) Channel Edge

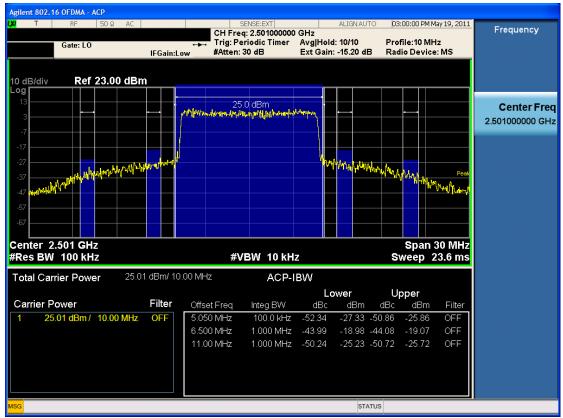
QPSK MODE 3/4 (2501.0 MHz) Channel Edge



	FCC CERTIFICATION REPORT						
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1106FR23	June 15, 2011	USB Dongle	XHGU601				



# 16QAM MODE 1/2 (2501.0 MHz) Channel Edge



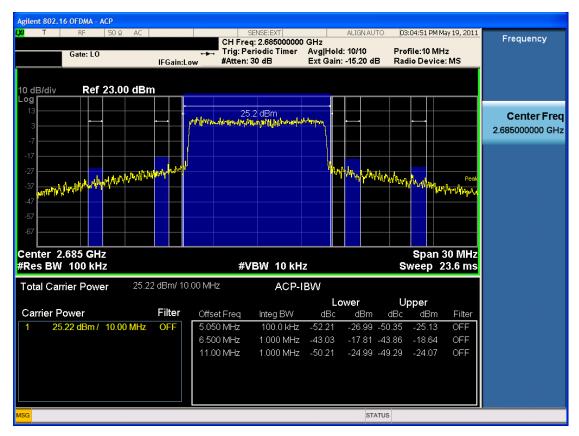
### 16QAM MODE 3/4 (2501.0 MHz) Channel Edge



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				



### QPSK MODE 1/2 (2685.0 MHz) Channel Edge



### QPSK MODE 3/4 (2685.0 MHz) Channel Edge



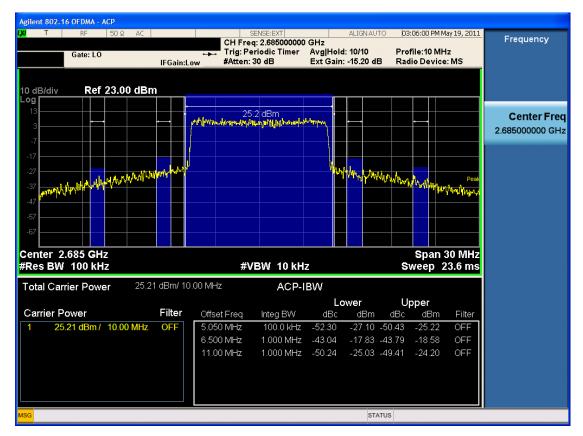
	FCC CERTIFICATION REPORT					
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601			



#### gilent 802.16 OFDMA - ACP 03:05:39 PM May 19, 2011 ALIGN AUTO Frequency CH Freq: 2.685000000 GHz Trig: Periodic Timer Avg|Hold: 10/10 #Atten: 30 dB Ext Gain: -15.20 dB Profile:10 MHz Gate: LO #Atten: 30 dB Radio Device: MS IFGain:Low 10 dB/div Ref 23.00 dBm 25.2 dBm คราปหาหางสาราชาญหาประกาศการ **Center Freq** 2.685000000 GHz Marghanth **NAVA** մի h. ml fr የትትብ Span 30 MHz Sweep 23.6 ms Center 2.685 GHz #Res BW 100 kHz #VBW 10 kHz 25.21 dBm/ 10.00 MHz ACP-IBW **Total Carrier Power** Upper Lower dBm Carrier Power Filter Offset Freq Integ BW dBc dBm dBc Filter 25.21 dBm / 10.00 MHz 100.0 kHz -26.99 -50.16 5 050 MHz -24.95 OFF -52.20 OFF 6.500 MHz 1.000 MHz -43.07 -17.86 -43.84 -18.63 OFF 11.00 MHz 1.000 MHz -50.30 -25.09 -49.40 OFF -24.19 STATUS

### ■ 16QAM MODE 1/2 (2685.0 MHz) Channel Edge

### ■ 16QAM MODE 3/4 (2685.0 MHz) Channel Edge



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				



5 MHz

Agilent Spectrum Analyzer			051						
LXI T RF	50Ω AC			ISE:EXT		LIGNAUTO	TRAC	M May 19, 2011 E 1 2 3 4 5 6 E M WWWWWW	Frequency
		PNO: Fast	#Atten: 18		Ext Gain:	-15.20 dB	DI		A
10 dB/div Ref 23.0	00 dBm					Μ	kr1 995. -46.9	15 MHz 73 dBm	Auto Tune
									Center Freq
13.0									515.000000 MHz
3.00									
-7.00									Start Freq 30.000000 MHz
-17.0								-25.00 dBm	Stop Fred
-27.0								-20.00 (45)	1.000000000 GHz
-37.0									CF Step
-47.0								1	97.000000 MHz <u>Auto</u> Mar
-47.0	mmunda	how where he was	upp-news.alach	hand yuman	Annabaran	N/UNIVIAL AND	storenasty hor for	monorphill	
-57.0									Freq Offset 0 Hz
-67.0									011
Start 30.0 MHz #Res BW 1.0 MHz		#VBW	1.0 MHz			Sween	Stop 1.0	0000 GHz 1001 pts)	
MSG			110 111 12			STATU		1001 pt3)	

### QPSK MODE 1/2 (2498.5 MHz) Conducted Spurious Emissions1

### QPSK MODE 1/2 (2498.5 MHz) Conducted Spurious Emissions2

T	RF	50 Ω	AC		SEI	NSE:EXT		ALIGNAUTO		M May 19, 2011	Frequency
	Gate: LC	)		PNO: Fast +++	Trig: Free #Atten: 18		Avg Type Avg Hold: Ext Gain:	10/10	TRAI TY D	CE 123456 PE MWWWWW ET P NNNNN	
0 dB/div	Ref 2	3.00 d	Bm					M	kr1 25.0 -35.3	947 GHz 94 dBm	Auto Tune
. <b>og</b> 13.0											Center Fred 13.750000000 GH;
3.00 7.00											Start Fred 1.000000000 GH:
27.0										-25.00 dBm	<b>Stop Fred</b> 26.500000000 GHz
37.0	h Managaran di	, under	Mandyrung	hel <sub>n Mar</sub> h je <sup>lda</sup> nstiger	www.ajert.gra.d	Marthan States Mart	Nu Haydadoor	r-n-wh/mh	hanghing	puter wante	CF Step 2.550000000 GH: <u>Auto</u> Mar
57.0											<b>Freq Offse</b> 0 H
67.0											
itart 1.00 Res BW		7		#VBW	1.0 MHz			Sween	Stop 2	6.50 GHz 1001 pts)	
SG		2		<i></i>	1.0 141112			STATUS		Toor pts)	

	FCC CERTIFICATION REPORT						
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1106FR23	June 15, 2011	USB Dongle	XHGU601				



3							STATUS			
art 30.0 Res BW	MHz 1.0 MHz		#VBM	( 1.0 MHz			Sweep	Stop 1.00 1.20 ms (1	)00 GHz 001 pts)	
<sup>r</sup> .0										
										0
1.0										Freq Offs
	haldredone	Mar Maril	John September 19	her help har ment	humalin	Margaholyns	a, my har way h	⊫դ <b>ւղեղ∖∖</b> ե⊷չրգ	montelight	
				<b></b>	1					97.000000 M <u>Auto</u> N
.0										CF St 97.000000 M
									-25.00 dBm	1.000000000 G
.0										Stop Fr
										30.000000 N
00										Start Fr
3.0										515.000000 M
-										Center Fr
dB/div	Ref 23.0	0 dBm						-47.52	0 dBm	
							M	(r1 505.3	0 MHz	Auto Tu
			PNO: Fast ↔ FGain:Low	Trig: Peri #Atten: 18		Avg Hold: Ext Gain:	: 100/100 -15.20 dB	TYPE	M WAAAAAAAAA P N N N N N N	
1	KF J	J X AC					e: Log-Pwr	TRACE	123456	Frequency
Т	RF 5	DΩ AC		CEI	NSE:EXT		ALIGN AUTO	02:12:10 DM	May 19, 2011	

### QPSK MODE 3/4 (2498.5 MHz) Conducted Spurious Emissions1

### QPSK MODE 3/4 (2498.5 MHz) Conducted Spurious Emissions2



	www.hct.co.kr						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				



Т	RF	50 Ω	AC		SEN	VSE:EXT		ALIGNAUTO	03:10:28 PM Ma	ay 19, 2011	_
				PNO: Fast +++	Trig: Peri Atten: 18		Avg Type Avg Hold: Ext Gain:		TYPE M	23456 	Frequency
dB/div	Ref 23	1.00 di	Bm					Mk	r1 402.48 -48.104	dBm	Auto Tur
<b>9</b>											Center Fre 515.000000 Mi
											<b>Start Fr</b> 30.000000 Mi
.0										-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
.0											<b>CF St</b> ( 97.000000 M <u>Auto</u> M
.ս Նիեւոդոր .ս	ditydd yn Arma	<u>Klyw</u> w	Webe Holes	nghampanah	hillownynshu	www.	n terrar den warden	phymological	ง <sub>จบ</sub> าหมู่ภา/ก <sub>ังจนุก</sub> ระป	workaliden har	Freq Offs
.0											0
art 30.0 tes BW	MHz 1.0 MHz	2		#VBW	1.0 MHz			Sweep	Stop 1.000 I.20 ms (10	0 GHz 01 pts)	
3								STATUS			

### ■ 16QAM MODE 1/2 (2498.5 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 1/2 (2498.5 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT					
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601			



T	RF 50 Ω	AC		SEM	NSE:EXT		ALIGN AUTO	03:11:26 PM		Frequency
			PNO: Fast ↔→ IFGain:Low	Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TYPE	123456 MWWWWW PNNNNN	
	ef 23.00 d	IBm					Mk	r1 111.4 -47.88	8 MHz 9 dBm	Auto Tur
										Center Fre 515.000000 Mi
										<b>Start Fr</b> 30.000000 Mi
									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
	1									<b>CF St</b> 97.000000 M <u>Auto</u> M
o	rahawa wanada	ruphylyl	ปฟามาปฏิบา <b>งสุโข<sub>า</sub>งสุทางทาง</b> เต	analyn han felinen	-humer-nag	rralleppertiesel	<b>լու</b> ստես տար	\nhalinethels	v/m~wkkap	Freq Offs
0										0
art 30.0 M es BW 1.0			#VBW	1.0 MHz			Sweep ′	Stop 1.00 1.20 ms (1	000 GHz 001 pts)	
1							STATUS			

### 16QAM MODE 3/4 (2498.5 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 3/4 (2498.5 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				
			<u>.</u>				



Т	RF   50 Ω AC		SENS	E:EXT		ALIGN AUTO	03:14:54 PM May 1		Frequency
		PNO: Fast ↔ IFGain:Low	Trig: Perio #Atten: 18		Avg Type Avg Hold: Ext Gain:		TRACE 12 TYPE MW DET P N	MANAN -	
dB/div R	ef 23.00 dBm					Mk	r1 484.93 I -47.238 c	VIHz IBm	Auto Tur
3.0									Center Fr 515.000000 Mi
00									<b>Start Fr</b> 30.000000 M
r.o							-20	5.00 dBm	<b>Stop Fr</b> 1.000000000 G
			<b>↓</b> 1						CF St 97.000000 M <u>uto</u> M
.0	oghud Walkadoodhara gull	All rapped to be address of the	Heinitan Charles and Charles an	+n/p/vy/Uy/vel	hayboydy994 <sup>1</sup> 49	walaysyddiai	Malinghin and Albarred Albarred	******	<b>Freq Off</b> s ୦
art 30.0 Mi Res BW 1.0		#VBM	/ 1.0 MHz			Sweep 7	Stop 1.0000 I.20 ms (1001	GHz	

### QPSK MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions2



	F	CC CERTIFICATION REPORT	www.hct.co.kr
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601
		Dama 00 at 00	



Т	RF 50	IΩ AC		SEN	ISE:EXT		ALIGN AUTO	03:15:31 PM M		Fraguanay
			PNO: Fast 🔸 FGain:Low	. Trig: Peri #Atten: 18		Avg Hold	e: Log-Pwr : 100/100 -15.20 dB	TYPE N	23456 WWWWWW NNNNN	Frequency
dB/div	Ref 23.00	) dBm					M	r1 764.29 -47.539	dBm	Auto Tui
.0										Center Fr 515.000000 Mi
										<b>Start Fr</b> 30.000000 M
.0									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
.0							<b>1</b>			CF St 97.000000 M Auto M
<b>איייייייייייייייייייייייייייייייייייי</b>	Ngodynt /www.weitingwld	encernphyper	haaraa ya haa haa haa haa haa haa haa haa ha	ulyyuut tu a		plathelicery/m-align		avjelov <sub>n</sub> roomatita <mark>/</mark> art	<b>₩</b> ₩₩₩	Freq Offs 0
art 30.0								Stop 1.000	00 GHz	
les BW	1.0 MHz		#VBW	1.0 MHz			Sweep	1.20 ms (10	01 pts)	

### QPSK MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				



3								STATUS			
art 30.0 Res BW	1.0 MH	z		#VBW	1.0 MHz			Sweep	stop 1.0 1.20 ms (*	000 GHz 1001 pts)	
	. BALL-								Oton 4-0		
7.0											
											0
7.0											Freq Offs
	Har Mahl	hhand	marchele	naliteration	mandupplat	halloute	and and the second second	anton Milde	randirtharhigh	when	
					<b>♦</b> <sup>1</sup>						<u>Auto</u> N
'.o											CF St 97.000000 M
										-25.00 dBm	1.000000000
.0											Stop Fr
00											30.000000 N
00											Start Fi
00											
3.0											515.000000 N
											Center Fr
dB/div	Ref 23	3.00 dl	Bm						-47.47	79 dBm	
								Mk	r1 454.	86 MHz	Auto Tu
				PNO: Fast 🔸 IFGain:Low	Trig: Peri #Atten: 18			-15.20 dB	DE	PNNNN	
		00 11					Avg Typ Avg Hold	e: Log-Pwr	TRACI	123456 MWWWWW	Frequency
Т	RF	50 Ω	AC		SE	NSE;EXT		ALIGN AUTO	03:13:15 PM	1 May 19, 2011	

### ■ 16QAM MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				
		D 00 ( 00					



	RF 50 :	ΩAC		58	NSE:EXT	Ava Type	ALIGNAUTO : Log-Pwr	03:13:31 PM May 19, 201 TRACE 1 2 3 4 5	
			PNO: Fast 🔸 FGain:Low	Trig: Peri #Atten: 18		Avg Hold: Ext Gain:	100/100	DET P N N N N	Ň
dB/div	Ref 23.00	dBm					Mk	r1 788.54 MHz -47.722 dBm	2 Auto Tur
									<b>Center Fr</b> 515.000000 M
									Start Fr 30.000000 M
7.0 <u> </u>								-25.00 dBr	<b>Stop Fr</b> 1.000000000 G
							^1		CF St 97.000000 M <u>Auto</u> M
.0	httylinen ffinskulande	nothermolermolecture	mprovalist	myanyaarihaa	halfholoran frankriger an frankriger frankriger frankriger frankriger frankriger frankriger frankriger frankrig Til som frankriger frankriger frankriger frankriger frankriger frankriger frankriger frankriger frankriger frank	www.luten.v	phydyrlynylliniwyddyn	prentpublications and traplaced by	Freq Offs 0
art 30.0 Res BW	MHz 1.0 MHz		#VBW	1.0 MHz			Sweep 7	Stop 1.0000 GHz I.20 ms (1001 pts	

## 16QAM MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions1

## 16QAM MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions2

T RF 50 9	Ω AC	SENSE:EXT	ALIGNAUTO	07:18:55 PM May 19, 2011	-
Gate: LO	PNO: Fast ↔ IFGain:Low		Avg Type: Log-Pwr Avg Hold: 10/10 Ext Gain: -15.20 dB	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
0 dB/div Ref 23.00			М	kr1 25.582 GHz -35.730 dBm	Auto Tun
13.0					Center Fre 13.750000000 G⊦
7.00					<b>Start Fre</b> 1.000000000 GF
27.0				-25.00 dBm	<b>Stop Fre</b> 26.500000000 Gi
17.0	upher and a stranged	New Mondar March Cardy Die	Although the sealing that all the	Athing will be many free from the second	<b>CF St</b> 2.550000000 GI <u>Auto</u> M
17.0					Freq Offs 0
77.0 tart 1.00 GHz Res BW 1.0 MHz	#VB	V 1.0 MHz	Sween	Stop 26.50 GHz 510 ms (1001 pts)	

	I	FCC CERTIFICATION REPORT	www.hct.co.kr
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601
		Dana 00 of 00	



art 30.0 Res BW	0 MHz 1.0 MHz		#VBW	1.0 MHz			Sweep	Stop 1.0 1.20 ms (′	000 GHz 001 pts)	
7.0										01
7.0	wheeterphysechuloscephad	L <sup>A</sup> UNILAM	hlyppingeriller	hourseling	hanthell-my/hy/ye	herely where the second	had a second second second	allahallan	huilynnhyllyn Awny	Freq Offs
7.0							<b>♦</b> <sup>1</sup>			97.000000 M <u>Auto</u> M
7.0										CF St
7.0									-25.00 dBm	1.000000000 G
										Stop Fr
00										30.000000 M
00										Start Fr
3.0										515.000000 M
3.0										Center Fr
dB/div	Ref 23.00 c	lBm						(r1 726.4 -47.65	6 dBm	
			PNO: Fast 🔸 Gain:Low	#Atten: 18			-15.20 dB	DE	PNNNN	Auto Tu
		AC			NSE:EXT	Avg Type Avg Hold	ALIGNAUTO	TRACE	May 19, 2011 1 2 3 4 5 6 M WWWWW	Frequency

### QPSK MODE 1/2 (2687.5 MHz) Conducted Spurious Emissions1

### ■ QPSK MODE 1/2 (2687.5 MHz) Conducted Spurious Emissions2



	www.hct.co.kr		
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601



	RF 50	ΩAC		SEI	VSE:EXT		ALIGN AUTO		May 19, 2011	Frequency
			PNO: Fast 🔸	Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TYPE	123456 MWWWWWW PNNNNN	
dB/div	Ref 23.00	dBm					Mk	r1 858.3 -47.67	8 MHz 8 dBm	Auto Tur
3.0										Center Fre 515.000000 Mi
00										<b>Start Fr</b> 30.000000 Mi
7.0									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
.o								<b>♦</b> <sup>1</sup>		<b>CF St</b> 97.000000 M <u>Auto</u> M
'.0 <b></b>	lmintinglythayt	hall freeder and	Children and Child	dYLevel, belannen	(***¥*₀* <sub>₩</sub> ₩₩₩	«ԱՄՆ«Իսրել, «յուս» անց	. Level Marcher	aftylafiggigan	Υ <b>β</b> ∎Ι∽ουθγαγγα	<b>Freq Off</b> s 0
art 30.0 Res BW	MHz 1.0 MHz		#VBW	/ 1.0 MHz			Sweep 7	Stop 1.0	000 GHz 001 pts)	

### QPSK MODE 3/4 (2687.5 MHz) Conducted Spurious Emissions1

### ■ QPSK MODE 3/4 (2687.5 MHz) Conducted Spurious Emissions2



	www.hct.co.kr		
Test Report No.	Date of Issue:	EUT Type:	FCC ID:
HCTR1106FR23	June 15, 2011	USB Dongle	XHGU601
		B 05 ( 00	



Т	RF 50 \$	2 AC		SEN	ISE:EXT		ALIGN AUTO		M May 19, 2011	Frequency
			PNO: Fast ↔→ FGain:Low	Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TYP	E 123456 E M <del>WWWWW</del> T P N N N N N	
dB/div	Ref 23.00	dBm					Mł	(r1 878. -46.7)	75 MHz 25 dBm	Auto Tur
3.0										Center Fre 515.000000 Mi
										<b>Start Fr</b> 30.000000 Mi
.0									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
.o								1		<b>CF St</b> 97.000000 M <u>Auto</u> M
	flaans frittigstelvefre	and and yada faa	4padillaptarsadi	ntrennere versen	Yunnyanyada,	Nurra Tarak Maria	ayuntul Albandu	ydfellynn ar annaf	11.4 <b>4</b> 6-14.44	Freq Offs 0
art 30.0 Res BW	MHz 1.0 MHz		#VBW	1.0 MHz			Sweep	Stop 1.0 1.20 ms (	0000 GHz 1001 pts)	
3							STATUS			

## ■ 16QAM MODE 1/2 (2687.5 MHz) Conducted Spurious Emissions1

## 16QAM MODE 1/2 (2687.5 MHz) Conducted Spurious Emissions2

Agilent Spectr	um Analyzer - Swe	pt SA								
LXI T	RF 50 Ω	AC		SEI	NSE:EXT		ALIGNAUTO : Log-Pwr		M May 19, 2011 E <b>1 2 3 4 5 6</b>	Frequency
	Gate: LO	PI IFG	IO: Fast ↔ Gain:Low	Trig: Peri #Atten: 18		Avg Hold: Ext Gain:	10/10	TYF	Е Милинин	
10 dB/div	Ref 23.00 d	Bm					М	kr1 25.0 -34.5	72 GHz 12 dBm	Auto Tune
13.0										Center Freq 13.750000000 GHz
-7.00										<b>Start Freq</b> 1.000000000 GHz
-17.0									-25.00 dBm	<b>Stop Freq</b> 26.500000000 GHz
-37.0	1	Autor the Bart	Mar A with the start	John Mahal	Langer and Made	Moduline	d have a second	hander applies of	Jan <sup>te</sup> us <sup>te</sup> usk	<b>CF Step</b> 2.55000000 GHz <u>Auto</u> Mar
-57.0										Freq Offset 0 Hz
-67.0								Stop 2	6.50 GHz	
#Res BW	1.0 MHz		#VBW	1.0 MHz			Sweep		1001 pts)	
							STATUS	·		

	www.hct.co.kr							
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601					



Т	RF 50 :	Ω AC		SE	NSE:EXT		ALIGN AUTO	03:16:01 PM May 19, 20:	1
			PNO: Fast 🔸	Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TRACE 12345 TYPE MWWWW DET PNNN	6 Frequency
dB/div	Ref 23.00	dBm					M	r1 494.63 MH -47.575 dBr	z Auto Tun N
									Center Fre 515.000000 M⊢
o									Start Fre 30.000000 MH
o								-25.00 dE	Stop Fre 1.000000000 GH
.0				^1					CF Ste 97.000000 MH <u>Auto</u> Ma
	y yungalanyal n	╊ <sup>₩</sup> ᢪ┅ᡢᡪᡘᢞᡮ᠆ᡕ	ydd/nallywrallyddyny	yntertellander.	NH LANUTURA	4Adimentation of the	Lawyan Marine and	ynantholwranagydollarwrddaedd	Freq Offs
.0									
art 30.0 N les BW 1			#VBW	1.0 MHz			Sweep	Stop 1.0000 GH 1.20 ms (1001 pts	Z 5)
							STATUS		

### 16QAM MODE 3/4 (2687.5 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 3/4 (2687.5 MHz) Conducted Spurious Emissions2



	www.hct.co.kr		
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601
		D 07 (00	



10 MHz

	r <mark>um Analyzer</mark> - RF 51	Swept SA		CE	NSE:EXT		ALIGN AUTO	h2:20:50 f	'M May 19, 2011	
	Nr J	U MC	PNO: Fast ++			Avg Type Avg Hold:	: Log-Pwr	TRA	CE 123456 PE MWWWWW	Frequency
			IFGain:Low	#Atten: 18		Ext Gain:	-15.20 dB	-		Auto Tune
10 dB/div Log	Ref 23.0	0 dBm					IVI	-47.8	87 MHz 59 dBm	
										Center Freq
13.0										515.000000 MHz
3.00										Start Freq
-7.00										30.000000 MHz
47.0										
-17.0									-25.00 dBm	Stop Fred 1.000000000 GHz
-27.0										1.00000000 GH2
-37.0										CF Step 97.00000 MHz
-47.0							<b>↓</b> <sup>1</sup>			<u>Auto</u> Man
	untrymh hywar	How My Mary Musi	hildreyfyrsbybroun	nunununun	lostispertur	whenthe	al and a start of the start of	N. M.	windered	Ener Offere
-57.0										Freq Offset 0 Hz
-67.0										
	Ball-							Oton de		
Start 30.0 #Res BW			#VBW	1.0 MHz			Sweep	Stop 1. 1.20 ms (	0000 GHz (1001 pts)	
MSG							STATU	S		

### QPSK MODE 1/2 (2501.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 1/2 (2501.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1106FR23	June 15, 2011	USB Dongle	XHGU601			



T	RF 50 Ω	AC		SEN	NSE:EXT		ALIGNAUTO	03:21:11 PM M		Frequency
			PNO: Fast 🔸	. Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TYPE	23456 ////////////////////////////////////	
dB/div	Ref 23.00 (	dBm					Mk	r1 905.9 <sup>-</sup> -47.964	dBm	Auto Tu
										<b>Center Fr</b> 515.000000 M
0										<b>Start Fr</b> 30.000000 M
o									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
o								1		CF St 97.000000 M Auto M
o O	linen linen tieken	nh.m.d.r.duhyd	pellentradig/solly	phillipsiinan an an	handlogthendorshaph	n when the	darwentler hill frank	ly, control of a spectra of the spec	glaturturtape	Freq Offs 0
art 30.0 M es BW 1			#\/B14	1.0 MHz			Sween	Stop 1.000	00 GHz	
	.0 10112		#VDV				SWEED		or pis)	

### QPSK MODE 3/4 (2501.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 3/4 (2501.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT							
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601					



Т	RF 50 Ω	AC		SEN	VSE:EXT		ALIGN AUTO	03:18:38 PM May :		Fraguana
			PNO: Fast ↔→ FGain:Low	Trig: Peri #Atten: 18		Avg Type Avg Hold Ext Gain:		TRACE 12 TYPE MA DET P N	wwww	Frequency
dB/div	Ref 23.00	dBm					M	r1 730.34 -47.478 c	MHz IBm	Auto Tu
.0										<b>Center Fr</b> 515.000000 M
)0										<b>Start Fr</b> 30.000000 M
.0								-2	5.00 dBm	<b>Stop Fr</b> 1.000000000 G
.0							<b>∮</b> <sup>1</sup>			CF St 97.000000 M uto M
אייאייאייא 0.	Longthe the Land Constrainty of the second	ug Nodewyte Ay	kongelyelenen <sup>M</sup> empilelan	4. North and the loss	manharapad	nyydraigddrafod	yffr <sup>yff</sup> errfyrfiriadau	elo melanda tradición de la construcción de la construcción de la construcción de la construcción de la constru La construcción de la construcción d	wuling	Freq Offs 0
art 30.0 Res BW			#\/B\\	4.0.8811-			0	Stop 1.0000	GHz	
Ies DW			#VBW	1.0 MHz			sweep	1.20 ms (100 <sup>-</sup>	r pis)	

## 16QAM MODE 1/2 (2501.0 MHz) Conducted Spurious Emissions1

## 16QAM MODE 1/2 (2501.0 MHz) Conducted Spurious Emissions2

	rum Analyzer									
T	RF	50Ω AC		SEN	ISE:EXT	Ava Type	ALIGNAUTO : Log-Pwr		4 May 19, 2011	Frequency
	Gate: LO		PNO: Fast ↔→ IFGain:Low	Trig: Peri #Atten: 18		Avg Hold: Ext Gain:	10/10	TYP		
10 dB/div	Ref 23.0	00 dBm					MI	(r1 25.6 -35.6	59 GHz 35 dBm	Auto Tun
13.0										Center Free 13.750000000 GH
3.00										Start Fre
17.0									-25.00 dBm	Stop Fre
27.0 37.0	4				لېېلونېږي.	North and and a start of the	pinghalasha	Mart and	1 Lalvalandinati	CF Ste 2.55000000 GF Auto Ma
47.0 Mindu	here have	l'tor Allthe Angel Capi	languna general and a second	ym Jone of	Lunder					Freq Offs
57.0										01
Start 1.00	GH7							Stop 2	6.50 GHz	
	1.0 MHz		#VBW	1.0 MHz			Sweep	510 ms (	1001 pts)	
ISG							STATUS			

	F	CC CERTIFICATION REPORT	www.hct.co.kr
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		Dama 00 af 00	• • • • •



Т	RF 50	Ω AC		SEI	VSE:EXT		ALIGN AUTO	03:20:21 PM May 19		Frequency
			PNO: Fast ↔ IFGain:Low	. Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TRACE 123 TYPE MWA DET PNN		
dB/div	Ref 23.00	dBm					M	(r1 937.92 M -47.322 d	iHz Bm	Auto Tur
.0										Center Fre
										<b>Start Fr</b> 30.000000 Mi
o								-25.1	00 dBm 1.0	<b>Stop Fr</b> 00000000 G
o								<b>1</b>	s <u>Auto</u>	CF Ste 97.000000 M M
0 0	nnarian lanar	งปั <del>กร</del> ุงในรูปเป	arthey/hearpeatedplb	nonal <sub>le</sub> highnly	provident and	untan anti-Ala	anan an	ใน เ.ศ. เม็น เลง เม่น เม		Freq Offs 0
art 30.0								Stop 1.0000 (	GHz	
es BW	1.0 MHz		#VBW	1.0 MHz			Sweep	1.20 ms (1001	pts)	

### 16QAM MODE 3/4 (2501.0 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 3/4 (2501.0 MHz) Conducted Spurious Emissions2



	I	FCC CERTIFICATION REPORT	www.hct.co.kr
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RF 50 Ω	2 AC		SEI	NSE:EXT		ALIGN AUTO			Frequency
					AvgHold	: 100/100	TYPE M	MANANAN -	
Ref 23.00	dBm					M	(r1 532.46 -47.264	MHz dBm	Auto Tur
									Center Fre 515.000000 MH
									Start Fre 30.000000 Mi
								25.00 dBm	<b>Stop Fr</b> 1.000000000 Gi
				<b>↓</b> <sup>1</sup>					CF Ste 97.000000 Mi Auto M
utynened an and a start and	<b>he<sup>h</sup>liny::</b> {~*h[l=hii]	hh.opentopold	Underge wilderstyll	wylay կավիզը	And an and a second	hinn an lowing in	<sub>Under</sub> anderskyldelsesselfjynd	Manhatatin	<b>Freq Offs</b> 01
MHz 1.0 MHz		#\/B\A	(10 MHz			Sweep	Stop 1.000	0 GHz	
	Ref 23.00	Ref 23.00 dBm	PN0: Fast IFGain:Low Ref 23.00 dBm	PNO: Fast Trig: Peri IFGain:Low #Atten: 18 Ref 23.00 dBm	PNO: Fast Trig: Periodic #Atten: 18 dB   Ref 23.00 dBm    Image: state stat	PNO: Fast Trig: Periodic Avg Type   IFGain:Low Trig: Periodic AvgHold   Ref 23.00 dBm Image: State of the st	PN0: Fast Trig: Periodic Avg Type: Log-Pwr Avg Hold: 100/100 Ext Gain: -15.20 dB   Ref 23.00 dBm Image: State of the s	PN0: Fast Trig: Periodic Avg Type: Log-Pwr Avg Hold: 100/100 Tree Priodic   Mkr1 532.46 Mkr1 532.46   Ref 23.00 dBm -47.264   Image: State of the state of	PNO: Fast

### QPSK MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT							
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601					
		D 00 ( 00	•					



Т	RF 50 Ω	AC		SEN	VSE:EXT		ALIGNAUTO	03:22:26 PM N		Frequency
			NO: Fast 🔸	Trig: Peri #Atten: 18		Avg Type Avg Hold: Ext Gain:		TYPE	123456 MWWWWWW PNNNNN	
dB/div	Ref 23.00 (	dBm					M	r1 973.8 -47.92	1 MHz 3 dBm	Auto Tu
										Center Fr 515.000000 M
)0 )0										Start Fr 30.000000 M
.0									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
.0										<b>CF St</b> 97.000000 M <u>Auto</u> M
.0 <b>  -                                  </b>	haladadhaladadhaladha	Almada a desand	handrander van der	MULAHUMPILAN, M	MANA ANGALYA	Videntlehenenende	onnaling housedary	hlennewlowship	hrowbudwite	Freq Off 0
art 30.0								Stop 1.00	00 GHz	
es BW	1.0 MHz		#VBW	1.0 MHz			sweep	1.20 ms (1	JUT pts)	

### QPSK MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions2



	FC		www.hct.co.kr
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		B 00 ( 00	



Т	RF	50 Ω	AC		SEI	NSE:EXT		ALIGN AUTO	03:21:26 PM	1 May 19, 2011	
				PNO: Fast ↔ IFGain:Low	Trig: Peri #Atten: 18		AvgHold	e: Log-Pwr : 100/100 -15.20 dB	TYP	123456 Mwwwww PNNNNN	Frequency
dB/div	Ref 2	3.00 d	Bm					Mk	r1 537.: -47.90	31 MHz )6 dBm	Auto Tun
.0											Center Fre 515.000000 MH
											<b>Start Fre</b> 30.000000 Mł
o										-25.00 dBm	<b>Stop Fro</b> 1.000000000 GI
.0						<b>↓</b> 1					<b>CF Ste</b> 97.000000 Mi <u>Auto</u> M
	Warlbouland	hann	, tradition of	Www.www.	hannalanhada	hundrelingation	allower and the second second	<sub>ไป</sub> ประเทศ เป็นโรงสาราช	Whywer, How	ollowaghtman	Freq Offs
											0
art 30.0 Res BW		z		#VBM	1.0 MHz			Sweep	Stop 1.0 1.20 ms (′	000 GHz 1001 pts)	
3								STATUS			

### ■ 16QAM MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 1/2 (2593.0 MHz) Conducted Spurious Emissions2



	F	CC CERTIFICATION REPORT	www.hct.co.kr
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601
		Dama 01 of 00	



T	RF 50 Ω	AC			NSE:EXT		ALIGNAUTO	TRAC	M May 19, 2011 E <mark>1 2 3 4 5 6</mark> E M WWWWWW	Frequency
			PNO: Fast 🔸	#Atten: 18		Ext Gain:		DE	PNNNNN	
dB/div	Ref 23.00 d	IBm					Mk	r1 990. -47.4	30 MHz 12 dBm	Auto Tur
<sup>yg</sup>										Center Fre
3.0										515.000000 MI
.00										01
										Start Fr 30.000000 M
00										30.000000 14
7.0										
									-25.00 dBm	Stop Fr
7.0									-25.00 dBm	1.000000000 G
7.0										CF Ste 97.000000 M
										Auto M
7.0	Transant Martin	بالماد الماد	A Charles	hundhorn	- Metwork Hand	what make where	Introphysic	why have all me	my walk and	
	a seal of a seal of a seal	. James I	Under de com							Freq Offs
										0
7.0										
art 30.0	MHz							Stop 1.0	000 GHz	
Res BW			#VBW	1.0 MHz			Sweep 1	1.20 ms (	1001 pts)	
G							STATUS			

### 16QAM MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 3/4 (2593.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT					
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601			



	1.0 MHz		#VBW	í 1.0 MHz			Sweep 1	Stop 1.000 .20 ms (10	01 pts)	
tart 30.0								Stop 1 000		
7.0										
7.0										01
	watankkatha	nerfluonshreed	rallylephthelic	Wyne frent an	Ymy Why h	₽ <sup>↓</sup> ₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	hmulhtryidepte	Maharal Manhal	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Freq Offs
7.0							<b>•</b>	a a di se a litera a		Auto M
7.0							_			CF Ste 97.000000 Mi
7.0									-25.00 dBm	1.000000000 G
7.0										Stop Fr
.00										50.00000 W
										Start Fr 30.000000 M
.00										
3.0										515.000000 M
										Center Fr
dB/div	Ref 23.00	0 dBm					,	-47.771	dBm	
			-Gain:Low	#Attent. It	, ub	Ext Gam.		r1 739.07	7 MHz	Auto Tu
			PNO: Fast 🔸 Gain:Low	. Trig: Peri #Atten: 18		Avg Hold: Ext Gain:	100/100	TYPE		
Т	RF 50	)Ω AC		SEI	NSE:EXT	Aug Tung	ALIGNAUTO : Log-Pwr	03:24:22 PM M	ay 19, 2011	Frequency

### QPSK MODE 1/2 (2685.0 MHz) Conducted Spurious Emissions1

### ■ QPSK MODE 1/2 (2685.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT						
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601				
•							



à							STATUS			
art 30.0 tes BW	MHZ 1.0 MHZ		#VBW	/ 1.0 MHz			Sweep	Stop 1.000 1.20 ms (10	01 pts)	
	Dall-							Oton 1 000		
										0
.0										Freq Offs 0
PRUMIA-AN	upellfulgroupshow	<sub>ՠ</sub> ետերոլիներին	have been been been been been been been be	while white	hand for the past	MC HANNER	wife where the strength	hall when the	-therefore the	
.0										<u>Auto</u> N
.0								. 1		97.000000 M
										CF St
.0										1.0000000000000
									-25.00 dBm	Stop Fr 1.000000000 G
.0										
10										00.000000
20										Start Fi 30.000000 M
00										Otort Fr
										515.000000 M
9										Center Fr
dB/div g	Ref 23.00	dBm						-47.421	dBm	
							Mk	r1 885.54	MHz	Auto Tu
			PNO: Fast 🔸 Gain:Low	Trig: Peri #Atten: 18			l: 100/100 : -15.20 dB	DET	NNNNN	
				Tria: Dori	adia		e: Log-Pwr	TRACE	23456	Frequency
Т	RF 50 Ω	2 AC		SEN	VSE:EXT		ALIGN AUTO	03:24:35 PM M	ay 19, 2011	

### QPSK MODE 3/4 (2685.0 MHz) Conducted Spurious Emissions1

### QPSK MODE 3/4 (2685.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT					
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601			



Т	RF 50 :	Ω AC		SEM	VSE:EXT		ALIGN AUTO		M May 19, 2011	Frequency
			PNO: Fast ++	. Trig: Peri #Atten: 18		Avg Hold	e: Log-Pwr : 100/100 -15.20 dB	TY	CE 123456 PE MWWWWW ET P N N N N N	
dB/div	Ref 23.00	dBm					Mł	(r1 825 -47.8	40 MHz 21 dBm	Auto Tur
g										Center Fre 515.000000 Mi
										<b>Start Fro</b> 30.000000 Mi
.o .o									-25.00 dBm	<b>Stop Fr</b> 1.000000000 G
								<b>↓</b> 1		<b>CF St</b> 97.000000 M <u>Auto</u> M
.0 .0	rilandah y hawar	radina lapitating page 1	Kungangkan pelalikan pal	of the real of the second s	wither all the	ale yoll child yest	ologian and a state of the second	<b>৻</b> ₩৵৾৻ <i>৻</i> ₩৻৻৴৻৽৸	int for production	Freq Offs 0
art 30.0	MHz 1.0 MHz		#VBW	1.0 MHz			Sweep	Stop 1. 1.20 ms	0000 GHz (1001 pts)	
<u>ì</u>							STATUS			

## 16QAM MODE 1/2 (2685.0 MHz) Conducted Spurious Emissions1

## 16QAM MODE 1/2 (2685.0 MHz) Conducted Spurious Emissions2

	um Analyzer - Sv									
T	RF 50 \$	Ω AC		SEN	ISE:EXT		ALIGNAUTO : Log-Pwr		M May 19, 2011	Frequency
	Gate: LO		PNO: Fast 🔸	Trig: Perio #Atten: 18		Avg Hold: Ext Gain:	10/10	TY		
10 dB/div	Ref 23.00	dBm					M	kr1 25.0 -33.3	072 GHz 19 dBm	Auto Tune
13.0										Center Free 13.750000000 GH
-7.00										<b>Start Fre</b> 1.000000000 GH
-17.0									-25.00 dBm	<b>Stop Fre</b> 26.500000000 GH
-37.0	Anta and a state of the	A and the second	ماريد فريام و	and the state of t	h Aller Angered	Whyd work M	r/sny, the work	h May May Plance	porte for another	CF Ste 2.550000000 G⊢ <u>Auto</u> Ma
57.0	- Aldrad belageted and an		Man di cu							Freq Offso 0 ⊦
67.0 Start 1.00 #Res BW			#\/B\M	1.0 MHz			Burgan	Stop 2	6.50 GHz 1001 pts)	
ARES DW	1.0 10112		#VDVV	1.0 10112			Sweep		ioo i pis)	
							STATUS			

	FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID: XHGU601			
HCTR1106FR23	HCTR1106FR23 June 15, 2011 USB Dongle					
		B 00 ( 00				



Т	RF 50	Ω AC		SENSE	E:EXT		ALIGN AUTO	03:24:07 P	M May 19, 2011	En
			PNO: Fast +++ IFGain:Low	Trig: Period #Atten: 18 d		Avg Type Avg Hold: Ext Gain:		TY	E 123456 PE MWWWWW T P N N N N N	Frequency
dB/div	Ref 23.00	) dBm					Mk	r1 857. -47.9	41 MHz 94 dBm	Auto Tun
.0										Center Fre 515.000000 MH
										Start Fre 30.000000 Mi
o									-25.00 dBm	<b>Stop Fre</b> 1.000000000 GF
.0								<b>↓</b> <sup>1</sup>		<b>CF Ste</b> 97.000000 Mi <u>Auto</u> M
.0 <mark>Мил<sub>и</sub>ни/Чу</mark> .0	դի-է,/+Խ <sub>Ն-Մ-Մ</sub> ԻայԽա	<b>∿-<sup>₽</sup>⊷</b> Ψ⊮ч\γ-ეγγ∕∩ύ	niglyledowildleruphed/b	new way water	n. National hat	hlilyslystanessil	h.w.n.hkkulp-nenk	<b>∖</b> ⊌¦⊷{}¶₩∂↑,⊁∾	NHNNNU WWW	Freq Offs
.0										
art 30.0 es BW	MHz 1.0 MHz		#VBW	1.0 MHz			Sweep '	Stop 1.0 1.20 ms (	0000 GHz 1001 pts)	
3							STATUS			

### 16QAM MODE 3/4 (2685.0 MHz) Conducted Spurious Emissions1

### ■ 16QAM MODE 3/4 (2685.0 MHz) Conducted Spurious Emissions2



	FCC CERTIFICATION REPORT					
Test Report No. HCTR1106FR23	Date of Issue: June 15, 2011	EUT Type: USB Dongle	FCC ID: XHGU601			
		Dama 00 of 00				