

#### Band Edge GSM\_850MHz\_LowCH128-824.2





#### GPRS\_850MHz\_LowCH128-824.2



#### GPRS\_850MHz\_HighCH251-848.8 enter Freq 849.000000 MHz PNO: Wide Atten: 30 dB Avg Type: Log-Pw Auto Tur Ref Offset 14.2 dB Ref 30.00 dBm Center Fre Start Fre Stop Fre 348.50 Stop 849.5000 MHz reep 173.0 ms (1001 pts) CF Step 3.0 kHz VBW 3.0 kHz Freq Offs 0 H Scale Typ ы (h)

GSM\_1900MHz\_LowCH512-1850.2



# GSM\_1900MHz\_HighCH810-1909.8



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#### GPRS\_1900MHz\_LowCH512-1850.2



GPRS\_1900MHz\_HighCH810-1909.8



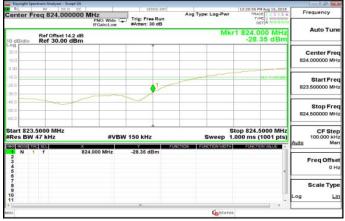














#### HSDPA\_B5\_HighCH4233-846.6

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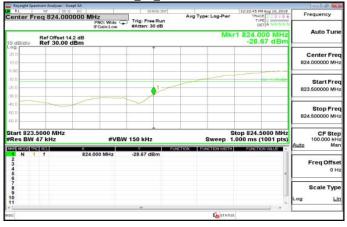
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#### HSUPA\_B5\_LowCH4132-826.4







#### Band5\_1\_4MHz\_QPSK\_1\_0\_LowCH20407-824.7





#### Band5\_1\_4MHz\_QPSK\_6\_0\_LowCH20407-824.7



#### Band5\_1\_4MHz\_QPSK\_6\_0\_HighCH20643-848.3



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台灣檢驗科技股份有限公司



#### Band5\_3MHz\_QPSK\_1\_0\_LowCH20415-825.5



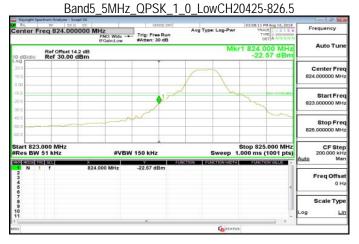




#### Band5\_3MHz\_QPSK\_15\_0\_LowCH20415-825.5







#### Band5\_5MHz\_QPSK\_1\_24\_HighCH20625-846.5



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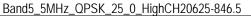
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#### Band5\_5MHz\_QPSK\_25\_0\_LowCH20425-826.5

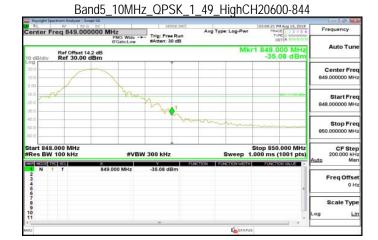






#### Band5\_10MHz\_QPSK\_1\_0\_LowCH20450-829





#### Band5\_10MHz\_QPSK\_50\_0\_LowCH20450-829



#### Band5\_10MHz\_QPSK\_50\_0\_HighCH20600-844

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Start Free 848.000000 MH	Cut-1500 dBr			1	mon			
Stop Fre 850.000000 MH			~~~~~	Market -				0
CF Stej 200.000 kH	Stop 850.000 MHz 000 ms (1001 pts)	Sweep 1.	177	300 kHz	#VBW :		000 MHz 100 kHz	rt 848.0
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Band12\_1\_4MHz\_QPSK\_1\_0\_LowCH23017-699.7

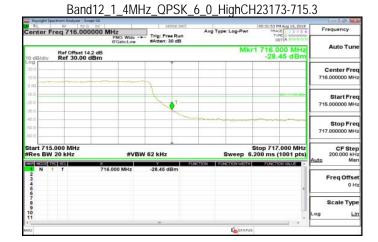












Band12\_3MHz\_QPSK\_1\_0\_LowCH23025-700.5







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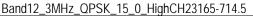
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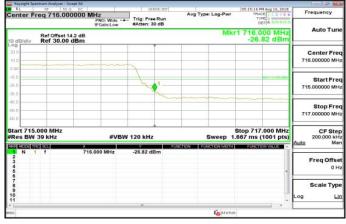
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#### Band12\_3MHz\_QPSK\_15\_0\_LowCH23025-700.5







#### Band12\_5MHz\_QPSK\_1\_0\_LowCH23035-701.5





#### Band12\_5MHz\_QPSK\_25\_0\_LowCH23035-701.5



#### Band12\_5MHz\_QPSK\_25\_0\_HighCH23155-713.5



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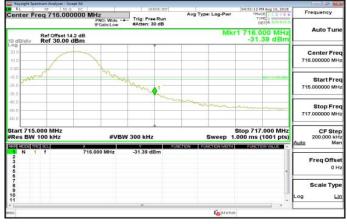
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#### Band12\_10MHz\_QPSK\_1\_0\_LowCH23060-704

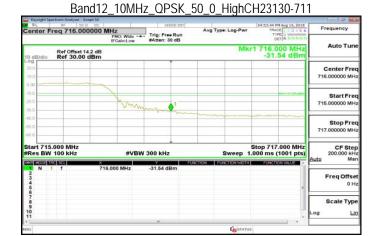


Band12\_10MHz\_QPSK\_1\_49\_HighCH23130-711



#### Band12\_10MHz\_QPSK\_50\_0\_LowCH23060-704





#### Band17\_5MHz\_QPSK\_1\_0\_LowCH23755-706.5



#### Band17\_5MHz\_QPSK\_1\_24\_HighCH23825-713.5



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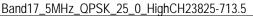
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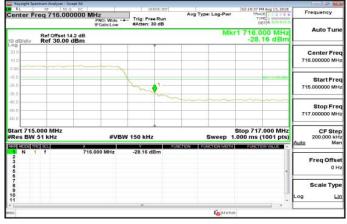
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#### Band17\_5MHz\_QPSK\_25\_0\_LowCH23755-706.5

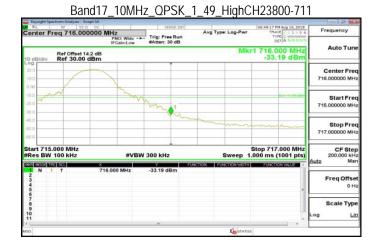






#### Band17\_10MHz\_QPSK\_1\_0\_LowCH23780-709





#### Band17\_10MHz\_QPSK\_50\_0\_LowCH23780-709



#### Band17\_10MHz\_QPSK\_50\_0\_HighCH23800-711



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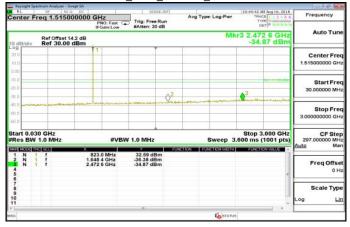
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#### **Out of Band Emission**

30MHz~3GHz\_GSM\_850MHz\_LowCH128-824.2



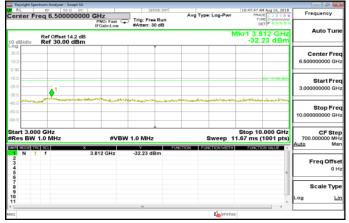




#### 30MHz~3GHz GSM 850MHz MidCH190-836.6

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6 7 8 9					Scale Typ
10					Log L
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#### 3GHz~10GHz\_GSM\_850MHz\_MidCH190-836.6



#### 30MHz~3GHz\_GSM\_850MHz\_HighCH251-848.8



#### 3GHz~10GHz\_GSM\_850MHz\_HighCH251-848.8



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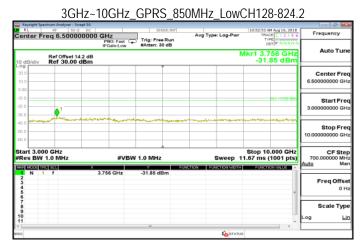
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#### 30MHz~3GHz\_GPRS\_850MHz\_LowCH128-824.2

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Log L												10
						HE						



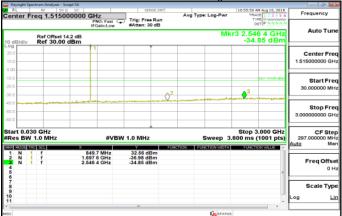
#### 30MHz~3GHz\_GPRS\_850MHz\_MidCH190-836.6

	ectrum Analyzer -					
Center F		000000 GHz	Trig: Free Run	Avg Type: Log-Pwr	10:54:01 AM Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE M WWWWWW	Frequency
	Ref Offset Ref 30.0	PNO: Fast C IFGain:Low	#Atten: 30 dB	M	kr3 2.509 8 GHz -34.43 dBm	Auto Tuno
20.0 10.0	Ref 30.00	1				Center Freq 1.515000000 GHz
-10.0 -20.0 -30.0			2 <sup>2</sup>		DE1-12:00 cDn	Start Freq 30.000000 MHz
-40.0	u gan ya madalar	ميد عبار دي و فاليا الميسد . مريخ و من	and the second			Stop Freq 3.000000000 GHz
Start 0.03 #Res BW	1.0 MHz	#VB	W 1.0 MHz	Sweep 3	Stop 3.000 GHz 3.600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man
1 N 2 N 3 N 4 5	ļ	837.8 MHz 1.673 2 GHz 2.609 8 GHz	32.75 dBm -34.88 dBm -34.43 dBm			Freq Offset 0 Hz
6 7 8 9 10 11						Scale Type
MBG				<b>Ko</b> statu	5	

#### 3GHz~10GHz\_GPRS\_850MHz\_MidCH190-836.6



#### 30MHz~3GHz\_GPRS\_850MHz\_HighCH251-848.8



#### 3GHz~10GHz\_GPRS\_850MHz\_HighCH251-848.8

enter Freq 6.50000000 GHz Prig: Free Run BicelinLow Ref Offset 14.2 dB 0 dBldw Ref 30.000 dBm 0 dBldw 1 dBldw		ectrum Analyzer - Sw							
Ref Offset 14.2 dB     Mkr1 3,728 GHz     Auto Tune       0 dB/div     Ref 30.00 dBm     -32,74 dBm     Center Frequence     6,50000000 GHz       0 dB/div     Ref 30.00 dBm     -32,74 dBm     Center Freq     6,50000000 GHz       0 dB/div     Ref 30.00 dBm     -32,74 dBm     Stop Freq     3,0000000 GHz       0 dB/div     Ref 30.00 dBm     -32,74 dBm     Stop Freq     3,00000000 GHz       0 dB/div     Ref 30.00 dBm     Stop Freq     10,0000000 GHz     Stop Freq       0 dB/div     Ref 30.00 GHz     RVBW 1.0 MHz     Sweep 11.67 ms (1001 pts)     TOCR00000 MHz       2 N 1 f     3.728 GHz     -32.74 dBm     F0000000 Freq     Mark     Mark       2 N 1 f     3.728 GHz     -32.74 dBm     F0000000 Freq     Mark     Mark	Center F		00000 GHz			Avg Type: Log-Pw	TRACE 1	23456	Frequency
Conter Freq	10 dB/div		IFGain:				Mkr1 3.728	GHz	Auto Tune
Stop 10.000 GHz     Stop 10.000 GHz       Res BW 1.0 MHz     #VBW 1.0 MHz       Stop 11.67 ms (1001 pts)       1     3.728 GHz       3.728 GHz     3.274 dBm	20.0 10.0								
Stop Freq     Stop Freq <t< td=""><td>-10.0 -20.0 -30.0</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	-10.0 -20.0 -30.0	1							
Res BW 1.0 MHz     #VBW 1.0 MHz     Sweep 11.67 ms (1001 pts)     700.00000 MHz       20 Pool Had 2001     x     50 Houristic Provided Had 2001     Four-Pool Work     Top of Pool Had 2001	-40.0 -60.0 -60.0	ad of the second se		and a second	**************************************	generation and a second			
2 3 4 5 6 7	#Res BW	1.0 MHz	×	Y Y		-	11.67 ms (10	01 pts)	700.000000 MHz
Ž Davla Tara	2 3 4 5	1 1	3.728 GH	lz -32.74 dE	Im				
9	7 8 9 10								Scale Type
n	<					-	1	•	

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台	灣	檢	驗	科	技	股	份	有	限	公	司	
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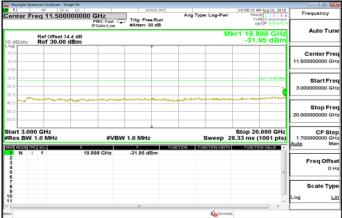
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#### 30MHz~3GHz\_GSM\_1900MHz\_LowCH512-1850.2

						rum Analyzer - Swept SA	
Frequency	10:58:10 AM Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P NNNNN	pe: Log-Pwr	Avg	Trig: Free Run #Atten: 30 dB	00 GHz PNO: Fest	eq 1.5150000	enter Fr
Auto Tun	r1 1.850 6 GHz 29.17 dBm	Mk		#Atten: 30 db		Ref Offset 14.4 d Ref 30.00 dBr	dB/div
Center Fre 1.515000000 GH			1				
Start Fre 30.000000 Mi	011-1200 dDr.						0.0
Stop Fre 3.000000000 G					and an an and the second s		0.0
CF Ste 297.000000 M Auto M	Stop 3.000 GHz .600 ms (1001 pts)	Sweep 3	FUNCTION	W 1.0 MHz	#VE	.0 MHz	art 0.030 Res BW
Freq Offs 0				29.17 dBm	1.850 6 GHz	f	N 1
Scale Typ							5 7 8 9
	•						1





#### 30MHz~3GHz\_GSM\_1900MHz\_MidCH661-1880

		yzer - Swept SA					o 4 🕰
Center F	req 1.5	50 R DC 15000000 GHz PNO: Fast	Trig: Free Run		Type: Log-Pwr	10:59:46 AM Aug 16, 2018 TRACE 1 2 3 6 5 6 TYPE	Frequency
10 dB/div		IFGain:Low fset 14.4 dB 0.00 dBm	#Atten: 30 dB		M	r1 1.880 3 GHz 29.11 dBm	Auto Tune
20.0 10.0				1			Center Fred 1.515000000 GHz
0.00 -10.0 -20.0						CET-1200 dan	Start Free 30.000000 MHz
-40.0		and the second	an a	محيد <mark>ا مع</mark> روست	and a star the star and star and star	al and the second s	Stop Free 3.000000000 GH
Start 0.03 #Res BW	1.0 MH	iz #Ve	3W 1.0 MHz	FUNCTION	Sweep 3	Stop 3.000 GHz .600 ms (1001 pts)	CF Step 297.000000 MH Auto Mar
1 N 1 2 3 4 5	1 1	1,880 3 GHz	29.11 dBm			*	Freq Offse 0 H
6 7 8 9 10 11							Scale Type
* Cen			H			•	

#### 3GHz~10GHz\_GSM\_1900MHz\_MidCH661-1880



#### 30MHz~3GHz\_GSM\_1900MHz\_HighCH810-1909.8

	ectrum Analyzer - S					
Center F	req 1.5150	000000 GHz	Trig: Free Run	Avg Type: Log-Pwr	11:02:30 AM Aug 16, 2018 TRACE 1 2 3 4 5 6	Frequency
10 dB/div	Ref Offset 1 Ref 30.00		#Atten: 30 dB	M	kr1 1.910 0 GHz 28.99 dBm	Auto Tune
20.0 10.0	Kei Su.uu			1		Center Freq 1.51500000 GHz
-10.0					DL1 -10.00 cDn	Start Free 30.000000 MH2
40.0 60.0 60.0	an a	and a second		مىرىلەيەر بايەرىيەن مەرىپىيەر يەرىپى بىرىي مەرىلەيەر بايەرىيەن مەرىپىيەر بىرىيەر بىرىيەر بىرىيەر بىرىيەر بىرىيەر	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Stop Free 3.000000000 GH:
Start 0.03 Res BW	1.0 MHz	×	SW 1.0 MHz	Sweep 3	Stop 3.000 GHz 3.600 ms (1001 pts) Function wave	CF Step 297.000000 MH Auto Mar
1 N 1 2 3 4 5 6	1	1.910 0 GHz	28.99 dBm			Freq Offse 0 H
6 7 8 9 10						Scale Type
4				<b>K</b> STATU	5	

#### 3GHz~10GHz\_GSM\_1900MHz\_HighCH810-1909.8

	rectrum Analyzer - S										- 2
Center F	req 11.500	000000 GH	Hz Di Fast Ca	1	Run	Avg Type	: Log-Pwr	TRAC	H Aug 16, 2018 E 1 2 3 4 5 6 E H WWWWWW	Fre	quency
	Ref Offset 1	IFG	ain:Low	#Atten: 30	dB		м	kr1 19.0	99 GHz	'	Auto Tune
20.0 10.0	Ref 30.00	dBm			·						enter Freq 000000 GHz
-10.0						a contraction of the second			0.1-12:00 dBn		Start Freq
-40.0	Active Section 1										Stop Freq 000000 GHz
Start 3.0 #Res BW			#VBW	1.0 MHz			Sweep 2	Stop 20 8.33 ms (	.000 GHz 1001 pts)	1.700 Auto	CF Step 000000 GHz Man
MRE MODE 1 N 2		× 19.099	GHz	-31.04 dB		NCTION FUR	ICTION WOTH	FUNCTION	IN VALUE	2010	Width
3 4 5 6										F	0 Hz
7 8 9											cale Type
11										Log	Lin
MBG							to STATU	в			

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#### 30MHz~3GHz\_GPRS\_1900MHz\_LowCH512-1850.2

C 🖉 🔤								m Analyzer - 5	pht Spects	
Frequency	11:06:27 AM Aug 16, 2018 TRACE 1 2 3 4 5 6	: Log-Pwr	Avg T	NSE: INT		GHz	0 DC	1.5150	r Fre	RL
	DET P NNNN	-	-	Run	Trig: Free #Atten: 3	PNO: Fast C		4 110100		ona
Auto Tun				0 ab	#Atten: 3	IFGain:Low				
	1 1.850 6 GHz 29.37 dBm	MK					14.4 dB	tef Offset		
	29.37 0.51			-			dBm	tef 30.00	div	
Center Fre										0.0
1.515000000 GH										
										1.00
										0.0
Start Fre	Dt.1 -10.00 cDm									
30.000000 MH										0.0
	man to be a through and									0.0
Stop Fre					and the same	an a	and and the start of		دريم معر	10.0 🛏
3.000000000 GH										0.0
3.000000000				-						0.0
	AL								0.030	. L
CF Ste 297.000000 MH	Stop 3.000 GHz 500 ms (1001 pts)	Sween 3			/ 1.0 MHz	#VB		GHZ 0 MHZ		
Auto Ma					1.0 14112	***				
	FUNCTION VALUE	ICTION WIDTH	EUNCTION		29.37 dE	50 6 GHz	× 1.85	1 1		
Freg Offs										2
01										4
	*									5
0										7
Scale Typ										8
Log L										0
	, .				**					1
										a
										-



#### **1**60 ST

#### 30MHz~3GHz\_GPRS\_1900MHz\_MidCH661-1880

Keysight Spectrum Analyzer - Swept SA					
Center Freq 1.51500000		Trig: Free Run	Avg Type: Log-Pwr	11:12:46 AM Aug 16, 2018 TRACE 1 2 3 4 5 6	Frequency
Ref Offset 14.4 dB 10 dB/div Ref 30.00 dBm	PNO: Fast G	#Atten: 30 dB	м	kr1 1.880 3 GHz 29.28 dBm	Auto Tune
20.0 10.0			1		Center Fred 1.515000000 GHz
-10.0			مسيدوسا مرسوم م	DL1 +10:00 cDm	Start Free 30.000000 MH
-40.0	14.00 <sup>1111</sup> 1011111111111111111111111111111				Stop Free 3.000000000 GH
Start 0.030 GHz #Res BW 1.0 MHz			Sweep	Stop 3.000 GHz 3.600 ms (1001 pts)	CF Step 297.000000 MH Auto Mar
2 3 4 5	.880 3 GHz	29.28 dBm			Freq Offse 0 H
6 7 8 9 10 11					Scale Type
MBG		17	10 STAT	,	

	ctrum Analyzer - Swe					
Center Fi	req 11.5000		Trig: Free Run	Avg Type: Log-Pwr	11:14:29 AM Aug 16, 2018 TRACE 1 2 3 4 5 6 Type M www.awa	Frequency
	Ref Offset 14	PNO: Fast G IFGain:Low	#Atten: 30 dB	м	kr1 19.201 GHz	Auto Tune
10 dB/div	Ref 30.00 d				-31.18 dBm	
20.0						Center Fred 11.500000000 GHz
-10.0					DL1-1000 eBin	Start Free 3.000000000 GHz
-40.0 -50.0 -60.0	le roca de la calenda con		en den ferheren en e	4 <sub>80</sub> , 5,9 <sup>4</sup> - 2,99 -		Stop Freq 20.00000000 GHz
Start 3.00 #Res BW		#VB	V 1.0 MHz	Sweep 2	Stop 20.000 GHz 8.33 ms (1001 pts)	CF Step 1.700000000 GHz Auto Mar
MRR MODE TR	ic scu	× 19.201 GHz	-31,18 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Mar
2 3 4 5	T	19.201 GHZ	-31.18 dBm			Freq Offset 0 Hz
6 7 8 9						Scale Type
10 11						Log <u>Lin</u>
*				ri- erene	•	L

#### 3GHz~10GHz\_GPRS\_1900MHz\_MidCH661-1880

#### 30MHz~3GHz\_GPRS\_1900MHz\_HighCH810-1909.8

		ter - Swept SA									s 🛛
Center F	req 1.5	50 D DC 15000000 GH	lz	Trig: Free R		Avg Typ	e: Log-Pwr	TRA	M Aug 16, 2018	Frequen	cy
10 dB/div		set 14.4 dB	NO: Fast G Gain:Low	#Atten: 30 d	B		м	r1 1.91	0 0 GHz 18 dBm	Auto	Tune
20.0 10.0						1				Cente 1.51500000	
-10.0									0L1 -13:00 cDm	Star 30.00000	t Fred
-40.0 -50.0 -60.0		al and a construction	*****	******		per a la contra				Stop 3.00000000	o Free
Start 0.03 #Res BW	1.0 MH:	×		W 1.0 MHz		TION	Sweep	3.600 ms (	.000 GHz 1001 pts)	297.00000 Auto	Step 0 MH Mar
1 N 1 2 3 4 5	1	1.910	0 GHz	29.18 dBm						Freq	Offse 0 H
6 7 8 9 10									_	Scale	Type Lir
*				17			<b>K</b> STATU	8	,		

#### 3GHz~10GHz\_GPRS\_1900MHz\_HighCH810-1909.8

	ectrum Analyzer - S									_	-   2 🗠
Center F	req 11.500	000000 G	Hz ND: Fast C		Run	Avg Type	e: Log-Pwr	TRAC	H Aug 16, 2018 E 1 2 3 4 5 6 E M WWWWWW	Fre	quency
10 dB/div	Ref Offset 1 Ref 30.00	14.4 dB	Sain:Low	#Atten: 30	dB		N	lkr1 19.4	73 GHz 31 dBm	_ ·	Auto Tune
20.0 10.0											enter Freq 000000 GHz
-10.0 -20.0 -30.0				-					01-12:00 dBm		Start Freq
-40.0 -50.0 -60.0											Stop Freq
Start 3.00 #Res BW	1.0 MHz		#VBV	V 1.0 MHz				28.33 ms (		1.700 Auto	CF Step 000000 GHz Man
1 N 2 3 4 5		× 19.47	3 GHz	-32.31 dB		CTION FUR	NOTION WIDTH	FUNCTI	IN WALUE	F	req Offset 0 Hz
6 7 8 9 10									_	Log	cale Type Lin
·	1 1							1	· ·		
MBG							to state	JS			

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#### 30MHz~3GHz\_WCDMA\_B5\_LowCH4132-826.4

0.0	12:14:58 PM Aug 16, 2018			SENS		ept SA DC	Analyzer - See	ectrum	sight S	Key
Frequency	TRACE 1 2 3 6 5 6 TYPE NWWWWW DET P NNNNN	g Type: Log-Pwr	0.0 3	Trig: Free F	Z VO: Fast (a)	00000 GH			er I	
0.0000000	DET P HIN N N			#Atten: 30	Sain:Low	IFG				
Auto Tu	r3 2.479 2 GHz -34.91 dBm	Mk					Offset 14		l/div	
						Y1			1	00
Center Fr 1.515000000 G										10.0
1.515000000 G										1.00
	1000									0.0
Start Fr										0.0
30.000000 M	3		$\Diamond^2$			1				0.0
	and all all all all all all all all all al		Same	man	-	- contract and	2.20		100	DD
Stop Freq										0.0
3.000000000 G										0.0
CF St 297.000000 M	Stop 3.000 GHz 600 ms (1001 pts)	Sweep 3.		1.0 MHz	#VBW	10 - 31	Hz MHz	30 G		
Auto M	FUNCTION WALLE	FUNCTIONWOTH	FUNCTION	Y	-	×		10 50		
and the second second				24.07 dBr -35.81 dBr	9 MHz 8 GHz	1.652 8			NNN	12
Freq Offs				-34.91 dBn	2 GHz	2.479		1 1	N	3
	-									5
Scale Ty										789
Log										ō
-				H						1
		Costatus								



#### 30MHz~3GHz WCDMA B5 MidCH4183-836.6

0 0 🖬 🖬				dad				Analyzer - So			
Frequency	M Aug 16, 2018	TRAC	ype: Log-Pwr	'n	Trig: Free	Z O: Fast 😱	00000 GH		req		Cen
Auto Tun	B GHz	r3 2.50	Mk	8	#Atten: 30	ain:Low	IFG	f Offset 14	Re	-	-
Auto Tun Center Fre 1.515000000 GH Start Fre 30.000000 MH Gtz Z7 CF Ste Z700000 MH Mate Freq Offse OH	27 dBm	-35.			f 30.00		B/div	10 d			
							V1				20.0
	011-12-00 eBar			_							0.00 -10.0
30.000000 MH		<b>3</b>		Q2	man		- An				-30.0
											60.0
297.000000 MH		.600 ms (	Sweep 3	-	1.0 MHz	#VBW		MHz	1.0	t 0.0 s BV	#Re
Check Inte	- summer	EUNOT	FUNCTION WOTH	FUNCT	24.03 dB	MHz	834.9			N	100
					-37.01 dB -35.27 dB	GHz	1.673 2 2.509 8		1	NN	2345
Scale Type											456789011
Log Li											10 11
					H.					_	*
		5	Co STATUS								450

#### 3GHz~10GHz\_WCDMA\_B5\_MidCH4183-836.6



#### 30MHz~3GHz\_WCDMA\_B5\_HighCH4233-846.6



#### 3GHz~10GHz WCDMA B5 HighCH4233-846.6

	ectrum Analyzer - Sv						
Center F	req 6.5000		Trig: Free Run	Avg Type	: Log-Pwr	12:18:55 PM Aug 16, 2018 TRACE 1 2 3 4 5 6 TVPE M 44444	
10 dB/div	Ref Offset 14 Ref 30.00	IFGain:Low	#Atten: 30 dB		r	/kr1 3.798 GHz -33.06 dBm	Auto Tuno
20.0 10.0							Center Freq 6.500000000 GHz
-10.0 -20.0 -30.0						DL1-4300 dDn	Start Freq 3.000000000 GHz
-40.0		and the total and the second s	non and a straight and a straight and a straight and a straight a straight a straight a straight a straight a s	and the second	a an fair de la sean de	a garan an An Ala an Agana gara garang baran da an	Stop Freq 10.000000000 GHz
Start 3.00 #Res BW	1.0 MHz	#VI	BW 1.0 MHz	FUNCTION   FUN		Stop 10.000 GHz 1.67 ms (1001 pts)	CF Step 700.000000 MHz Auto Man
1 N 2 3 4 5		3.798 GHz	-33.06 dBm				Freq Offset 0 Hz
6 7 8 9							Scale Type
11							
MSG					to STATU	5	

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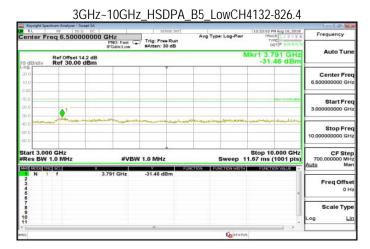
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Freq Offse Scale Tvp ш

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#### 30MHz~3GHz\_HSDPA\_B5\_LowCH4132-826.4

0 4 2			2714		1		Analyzer - See	pectru	night S	
Frequency	12:21:20 PH Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE H WWWWWW DET P 100 M M M	Type: Log-Pwr	m	Trig: Free	O: Fast	00000 GH		Fred	ter	en
Auto Tune	3 2.479 2 GHz -35.81 dBm	Mk	3	#Atten: 30	ain:Low	2 dB	f Offset 14 ef 30.00 d		3/div	
Center Fre 1.515000000 GH				ľ		V1				000 200
Start Fre 30.000000 MH	3		A2			1				0.00 10.0 20.0
Stop Fre 3.000000000 GF			a Shinyarran		te de ad leva ann	مسا المعمومية		4	uun:	40.0 50.0
CF Ste 297.000000 Mi Auto Ma	Stop 3.000 GHz 500 ms (1001 pts)	Sweep 3.		1.0 MHz	#VBW		Hz MHz		t 0.0 s BV	
Freq Offse	FUNCTION VALUE	FUNCTION WOTH	FUNCTI	24.03 dB -36.98 dB -35.81 dB	9 MHz 9 GHz 2 GHz	828.9 1.662 8 2.479 2	2			1 2 3
0 H Scale Typ										4567
Log L										8 9 10 11
		Costatus		н						50



#### 30MHz~3GHz\_HSDPA\_B5\_MidCH4183-836.6

🔤 Keysight Spectrum Analyzer - Swept S					0 4 📫			
Center Freq 1.5150000		Trig: Free Run	Avg Type: Log-Pwr	12:27:00 PM Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE N WWWWWW DET P PM N N N	Frequency			
Ref Offset 14.2 (	IFGain:Low	#Atten: 30 dB	#Atten: 30 dB Mkr3 2.509 8 GH: -34.04 dBn					
20.00 Ref 30.00 dB	m 			-54.04 (15)	Center Freq 1.515000000 GHz			
-10.0		^2		at -10 m mm	Start Freq 30.000000 MHz			
-40.0		and an Ver	an a		Stop Freq 3.00000000 GHz			
Start 0.030 GHz #Res BW 1.0 MHz	#VBW	1.0 MHz	Sweep 3	Stop 3.000 GHz .600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man			
1 N 1 f 2 N 1 f 3 N 1 f	834.9 MHz 1.673 2 GHz 2.509 8 GHz	24.08 dBm -37.50 dBm -34.04 dBm		*	Freq Offset 0 Hz			
4 5 6 7 8 9 9 10 11					Scale Type			
MSO			Costatu:					

#### 3GHz~10GHz\_HSDPA\_B5\_MidCH4183-836.6 DOOD GHZ PNO: Fest (+) Trig: Free Run #Atten: 30 dB enter Freq 6.50000 Frequer Avg Type: Log-Pw Auto Tu 3.700 GH Ref Offset 14.2 dB Ref 30.00 dBm Center Fre Start Fre Stop Fre 3.000 GHz Stop 10.000 G 11.67 ms (1001 p CF Ste VRW 10 MH

#### 30MHz~3GHz\_HSDPA\_B5\_HighCH4233-846.6 nter Freq 1.515000000 GHz Frequ Trig: Free Run Auto Tu 3 2.539 8 0 Ref Offset 14.2 dB Ref 30.00 dBm Center Fre Start Fre 000000.08 Stop Fre Stop 3.000 GH 3.600 ms (1001 pts CF Step art 0.030 GHz es BW 1.0 MH VBW 1.0 MH 846.8 MHz 1.693 2 GHz 2.539 8 GHz 222 11 24.48 dBm -36.40 dBm -35.34 dBm Freq Offs Scale Typ

#### 3GHz~10GHz\_HSDPA\_B5\_HighCH4233-846.6

0 4 🗳	and the second states of the second states					knulyzer - Swept SA	
5,000     Frequency       6,000     Auto Turn       GHz     Auto Turn       0     6,50000000 GH       3,00000000 GH     Start Fre       10,00000000 GH     Stop Fre       10,00000000 GH     Ma       0     Stop Fre       10,00000000 GH     Ma       0     Stop Fre       10,00000000 GH     Ma	12:30:54 PN Aug 16, 2018 TRACE 1 2 3 4 5 6 TIPE H WARNAW DET P HOLINAR	Type: Log-Pwr	un	Trig: Free P	PNO: Fast Ca	50 g pc	enter Fre
	1kr1 3.770 GHz -32.37 dBm	N	18	#Atten: 30	IFGain;Low	Offset 14.2 dB 30.00 dBm	dB/div
Center Free 6.500000000 GH							20 0.0
Start Fre 3.000000000 GH	CLT -1 > III offer					1	0.0
	an a	angelang gan Mandaran sa	ەرەنىمور كارايىلى			Magnada Barrana Ar	0.0
700.000000 MH	Stop 10.000 GHz 1.67 ms (1001 pts)			1.0 MHz	#VBW	MHz	tart 3.000 Res BW 1
Freq Offse 0 H	FORCTON VALUE	FORCTION WOTH		-32.37 dBr	3.770 GHz		32 70000 1100 1 N 1 2 3 4 5
Scale Typ							4 5 6 7 8 9 0
		ESTATUS		н			

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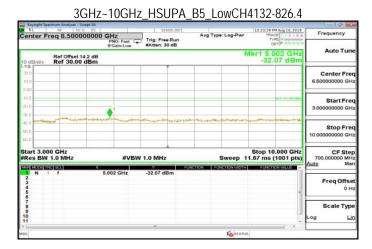
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#### 30MHz~3GHz\_HSUPA\_B5\_LowCH4132-826.4

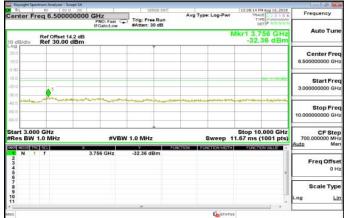
Keysight Spectrum Analyzer - See		100000000000000000000000000000000000000	10			
Center Freq 1.51500	DOODO GHZ	Trig: Free Run	Avg Type: Log-Pwr	12:23:00 PH Aug 16, 2018 TRACE 1 2 3 4 5 4 TYPE H WWWWWW	Frequency	
Ref Offset 14		#Atten: 30 dB	Mi	r3 2.479 2 GHz -34.30 dBm	Auto Tun	
00 200 100	V1				Center Fre 1.515000000 GH	
0.00 10.0 20.0				3	Start Fre 30.000000 Mit	
	assened beirgeneration	and man and les	الدوائلين هار الجره في حجر بالحق مردوع برويسي	and the second	Stop Fre 3.000000000 GP	
tart 0.030 GHz Res BW 1.0 MHz	#VBV	V 1.0 MHz	Sweep 3	Stop 3.000 GHz .600 ms (1001 pts)	CF Ste 297.000000 Mi Auto M	
1 N 1 f 2 N 1 f 3 N 1 f 4 5	828.9 MHz 1.652 8 GHz 2.479 2 GHz	23.99 dBm -36.36 dBm -34.30 dBm	INCTION FUNCTION WOTH	FONCTION WALLE	Freq Offs 01	
6 7 8 9 0					Scale Typ	
20		H)	Co STATU	· · ·		



#### 30MHz~3GHz HSUPA B5 MidCH4183-836.6

								am Analyzer -	Spectr		
Frequency	PH Aug 16, 2018 ACE 1 2 3 4 5 6 YPE N WWWWWW	TR.	vg Type: Log-Pwr	20.0	SENS	Hz	000000 G		Fre		Cen
Auto Tune	DET P NNNNN				#Atten: 30	PNO: Fast 😱 IFGain:Low					
Auto Tune	9 8 GHz .88 dBm	r3 2.50 -34	Mk					Ref Offset Ref 30.0		B/div	10 di
Center Fred					Í	1	Y				20.0 10.0
Start Free	CL1 +1 > On uDir										0.00 -10.0
30.000000 MH		<b>∮</b> <sup>3</sup>		$O^2$		1					-20.0 -30.0
Stop Free 3.000000000 GH						يى مى مەرىپىلە تەرىپى يە تورار يەر يۇللەيد		a de se de de la composition d	9-9-1-		-40.0 -50.0 -60.0
CF Step 297.000000 MH Auto Mar	3.000 GHz (1001 pts)		Sweep 3.		1.0 MHz	#VBW		GHz 0 MHz			
Auto Mar	TON MADE	FUNC	FUNCTION WOTH	FUNC	24.06 dBr	4.9 MHz	× 97		HER.	N	100
Freq Offse 0 Ha					-36.22 dBr -34.88 dBr	3 2 GHz 9 8 GHz	1.67	1	1	ZZ	2 3 4 5
Scale Type											6 7 8 9 10
Log <u>Lin</u>					10						11
			Co STATUS								MISO

#### 3GHz~10GHz\_HSUPA\_B5\_MidCH4183-836.6



#### 30MHz~3GHz\_HSUPA\_B5\_HighCH4233-846.6



#### 3GHz~10GHz HSUPA B5 HighCH4233-846.6

	Laness Sections		-	Sec. 1		14		ctrum Analyzer - 5				
Frequency	12:32:08 PN Aug 16, 2018 TRACE 1 2 3 4 5 6 Type N WWWWW		Avg Type: Log-Pwr		Trig: Free Run		00000 G	eq 6.5000	Center Fi			
Auto Tuni	PNOC Fase     Trg: Free Run     Ing: Free Run       Def Different 142 dB     Mkr1 3,763 GHz       10 dB/ddv     Ref 30.00 dBm     -52.30 dBm											
Center Free 6.500000000 GH		-02					dBm	Ref 30.00	20.0 10.0			
Start Free 3.000000000 GH	OLT -1 - Sh allin							1	0.00 -10.0 -20.0			
Stop Free 10.000000000 GH	an la stifter par la la sup		dari nagi seti seri ng Katiya		the state of the s	a la angesta a su	<del>ه</del> رولادر به سا	a marine and	-40.0 -40.0 -60.0			
CF Step 700.000000 MH								Start 3.00 #Res BW				
Auto Mar	ON WALLE	FUNCT	FUNCTIONWOTH	FUNC	-32.30 dB	3 GHz	× 37					
Freq Offse 0 H					-92.00 00	o on a	0.1		234567			
Scale Type									8 9 10			
									11			
-		5	Costatus						MISO			

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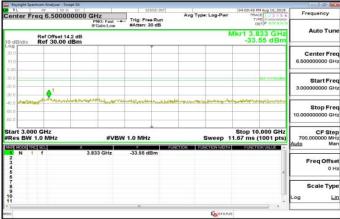
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#### 30MHz~3GHz\_Band5\_1\_4MHz\_QPSK\_1\_0\_LowCH20407-824.7

0 0 2	anna anna anna				and the second			pt SA	nalyzer - Sire		Spect		
Frequency	04:00:29 PH Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE H WWWWWW		Avg Type: Log-Pwr		Trig: Free Run		Z	.51500	eq '	Fre		Cen	
Auto Tune	Ir Gelini.cow #Atten: 30 dB 0471 ATTA 1 GHz Ref Offset 142 dB 0474 1 GHz 10 dMdy Ref 30.00 dBm -36.677 dBm												
Center Fred 1.515000000 GHz								*1					200 10.0
Start Free 30.000000 MH	CL1-12-DI (D)-	3			2								-10.0
Stop Free 3.000000000 GH:		u-encioner		- beferedand	and the second	باندر الفسقور <del>ي</del>	e-alise(R <sub>ese</sub> te		ar a star and		an fa	Care	40.0 60.0
CF Step 297.000000 MH Auto Ma		.600 ms (	Sweep 3	CTION	100	1.0 MHz	#VBW	×	AHz	0 GH	W 1	s B	#Re
Freq Offse 0 H					m	27.06 dE -36.59 dE -36.67 dE		826. 1.649 2.474		***	111	222	12345
Scale Type													6 7 8 9 10
		i.	<b>STATUS</b>			H)				-	-	-	150

3GHz~10GHz\_Band5\_1\_4MHz\_QPSK\_1\_0\_LowCH20407-824.7



#### 30MHz~3GHz Band5 1 4MHz QPSK 1 0 MidCH20525-836.5

		Analyzer - 5								and a second second	0 0 2
Center F			000000	GHz PNO: Fast		Trig: Free Run		Avg Type: Log-Pwr		H Aug 16, 2018 CE 1 2 3 4 5 6 PE H WWWWW	Frequency
				IFGain:Low	#Atten: 34					ET P NNNNN	Auto Tune
10 dB/div		f Offset 1 of 30.00						M		9 5 GHz 47 dBm	
20.0				¥1							Center Free
10.0			_		-		-				1.515000000 GH
0.00										1	Start Free 30.000000 MH
-10.0										DL1-12-01 (Dir	
-30.0						02					
	Auri	cost-oph	hadaran	a man white the	united the sector	and there	and a state of the		and all the second		Stop Fre 3.000000000 GH
60.0											
Start 0.0 #Res BW	t 0.030 GHz Stop 3.000 GHz s BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts)									CF Step 297.000000 MH	
#Res BW				#VE	SW 1.0 MHz			Sweep 3		(1001 pts)	297.000000 MH: Auto Mar
1 N	1 1	6 <b>.</b>		834.9 MHz 573 0 GHz	27.25 dE	3m	CITON TO		FUNC		
3 N	1		2.1	509 5 GHz	-35.47 dE	Im					Freq Offse
4 5 7 8 9 10											Scale Type
10											Log Lit
*					н.,			4	1		
450								Co STATUS			

#### 3GHz~10GHz\_Band5\_1\_4MHz\_QPSK\_1\_0\_MidCH20525-836.5



#### 30MHz~3GHz\_Band5\_1\_4MHz\_QPSK\_1\_0\_HighCH20643-848.3



#### 3GHz~10GHz Band5 1 4MHz QPSK 1 0 HighCH20643-848.3

0 0 🖬 🏜		and the second		14.14.14		140		ctrum Analyzer -			
	04:04:24 PN Aug 16, 2018 TRACE 1 2 3 4 5 6 TYPE N WWWWW		Avg Type: Log-Pwr		Trig: Free Run		00000 G	req 6.500	Center Fi		
Auto Tune	PND: East										
Center Free 6.500000000 GH					ľ				20.0		
Start Free 3.000000000 GH:	CLT-1201 (Dir							1	0.00 -10.0 -20.0		
Stop Fred 10.000000000 GH:	No a Manual And		navin-makus (at MCREA		- etan yen Willin	day down	anna ann an Anna Anna Anna Anna Anna Anna Anna	Mar Provingent of	40.0 <b>34.000</b> 60.0		
CF Step 700.000000 MH	Stop 10.000 GHz Sweep 11.67 ms (1001 pts)				t 3.000 GHz s BW 1.0 MHz #VBW 1.0 MHz						
Auto Mar	-	EUNCT	FUNCTION WOTH	EUNC	-33.52 dB	4 GHz	× 3.7	1			
Freq Offse 0 H									2 3 4 5 6 7		
Scale Type									8 9 10		
					н				11		
		5	Co STATUS						MSO		

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