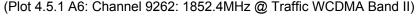
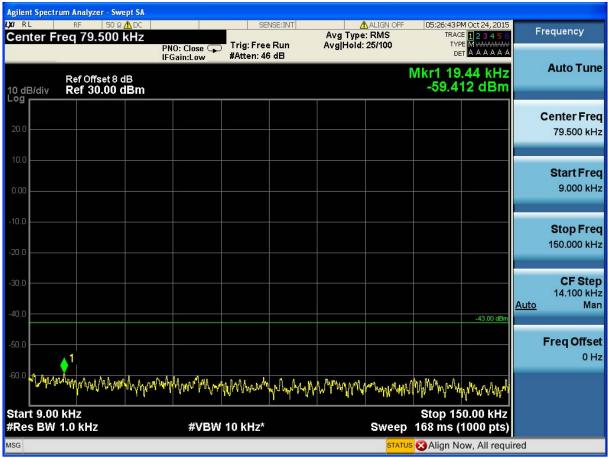
# Page 31 of 59

Agilent Spectrum Analyzer - Swept SA											
LXI RL		RF 50 ຊ eq 16.800		247	SE	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Ger		54 10.000	Р	NO: Fast 😱	Trig: Free #Atten: 30		Avg Hold:	50/100	TYE		
			IF	Gain:Low	#Atten: 30			Mke		38GHz	Auto Tune
10 dE	2/diu	Ref Offset 8.: Ref 28.20						IVINI	-37.7	44 dBm	
Log	57419	Kei 20.20									
											Center Freq
18.2											16.800000000 GHz
8.20					_						
0.20											Start Freq
-1.80			9	e.						6	13.60000000 GHz
-11.8										-13.00 dBm	Stop Freq
											20.000000000 GHz
-21.8			<u></u>								
-31.8											CF Step
-31.0								•	1		640.000000 MHz
-41.8		Jau d	والمتراكية والمراجع			i and in the state		, in the second second	an aibhlatua la ai	A MAR & September	<u>Auto</u> Man
			A set of the	and the second strength of the second second		in the second second				Contraction of the last	
-51.8			8	~						~	Freq Offset
											0 Hz
-61.8											
		0 GHz				0				.000 GHz	
#Res	s BW 1	.0 MHz		#VBW	3.0 MHz	*		Sweep	16.2 ms (	6400 pts)	
MSG								STATUS	🕄 Align N	ow, All requi	red





(Plot 4.5.1 B1: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

	m Analyzer - Swept SA									
LX/IRL	RF 50 Ω 🚹 DC		SEN	ISE:INT		ALIGN OFF		M Oct 24, 2015	Frequency	
Center Fro	eq 15.075000 M	Hz	Trig: Free	Run	Avg Type Avg Hold:		TY	CE 123456	requeries	
		PNO: Wide 🖵 IFGain:Low	#Atten: 40							
						Λ	/kr1 8 6	66 MHz	Auto Tu	ne
	Ref Offset 8 dB Ref 30.00 dBm						-62.1	17 dBm		
10 dB/div Log	Rel 30.00 uBill									
									Center Fr	ner
20.0		3	e					2	15.075000 M	
									15.075000 M	Π2
10.0										
10.0									Start Fr	00
									150.000 k	
0.00									150.000 K	HZ
-10.0									Stop Fr	00
									30.000000 M	1.1
-20.0			ç					<u>s</u>	30.000000 141	
-30.0									CF Ste	ep
								-33.00 dBm	2.985000 M	
-40.0									<u>Auto</u> M	lan
-40.0									T.	
den da									Freq Offs	tot
-50.0								22		Hz
		×1							U	HZ
-60.0		- <b>?</b>								
Managhille	whiteman	where and a support of the second	www.weighter.	La Bally de Minut	weekhelendergene	all and the second	munitimal subjection	Mangangalanth		
Start 150 k	Hz				1		Stop 3	0.00 MHz		
#Res BW 1		#VBW	30 kHz*			Sweep	368 ms (	1000 pts)		
MSG								ow, All requi	red	
								and and earlier		

(Plot 4.5.1 B2: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

	um Analyzer - Swept SA								
Center Fi	RF 50 Ω AC req 515.000000		SEN	SE:INT	Avg Type Avg Hold:		TRAC	M Oct 24, 2015 CE <b>1 2 3 4 5 6</b> PE M WWWWWW	Frequency
10 dB/div	Ref Offset 8.2 dB Ref 28.20 dBm	PNO: Fast 🌩 IFGain:Low	#Atten: 30				Di <b>//kr1 80</b> 1	1.0 MHz 29 dBm	Auto Tune
18.2									Center Freq 515.000000 MHz
8.20 -1.80									Start Freq 30.000000 MHz
-11.8								-13.00 dBm	<b>Stop Freq</b> 1.000000000 GHz
-31.8							1		CF Step 97.000000 MHz <u>Auto</u> Man
	ndhalansion-shikayashigiya)	ayahayayhiyahaydifayofihisiaya	unthing and the state of the st	unitipantativiseiseit	ptry year weld by the	and the second	haderback and my of	ha-Adulah kululan ku	<b>Freq Offset</b> 0 Hz
-61.8 Start 30.0	MHz						Stop 1 (	0000 GHz	
#Res BW		#VBW	3.0 MHz*				1.20 ms (	1000 pts)	red
								,	

(Plot 4.5.1 B3: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

#### Page 33 of 59

		m Analyzer	- Swept S	5A								
LXI RL		RF	50 Ω A			SE	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Cem		eq 4.00	00000	PN	0: Fast 😱	Trig: Free		Avg Hold:		TYF		
_	_			IFG	ain:Low	#Atten: 40	0 dB					Auto Tune
		Ref Offs							Mk	r2 3.62	59 GHz	Autorune
10 dE	3/div	Ref 30.	00 dBr	n						-31.94	49 dBm	
3		0	1									Center Freq
20.0		Y										4.000000000 GHz
												4.000000000000
10.0												
												Start Freq
0.00												1.00000000 GHz
-10.0											-13.00 dBm	Stop Freq
												7.000000000 GHz
-20.0												
						<u>^</u> 2						OF Other
-30.0								6				CF Step 600.000000 MHz
10.0		1.1. Jan 1.1.1						n dan se				<u>Auto</u> Man
-40.0		a second second	The state of the s									
-50.0												Freq Offset
-30.0												0 Hz
-60.0												
00.0												
l												
	1.000				40 (5) 44	0.0.0411-	è		0	Stop 7	.000 GHz	
	5 BW	.0 MHz			#VBW	3.0 MHz					6200 pts)	
MSG										Align N	ow, All requi	red

(Plot 4.5.1 B4: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

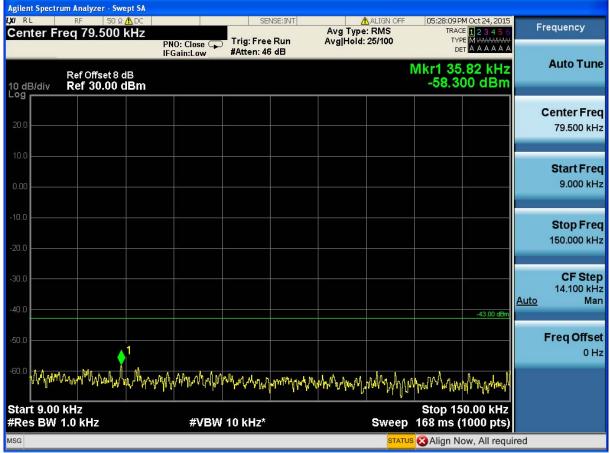


(Plot 4.5.1 B5: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

### Page 34 of 59

	ectrum Analyzer - Sw									
LXIRL	RF 50 S			SEI	VSE:INT	Avg Type			M Oct 24, 2015	Frequency
Center	Freq 10.000	PN	IO: Fast 😱	Trig: Free		Avg Hold:		TYF		
		IFG	ain:Low	#Atten: 30	0 dB		_			Auto Tune
	Ref Offset 8.						Mkr	1 18.10	7 7 GHz 16 dBm	Auto Tunc
10 dB/div Log	v Ref 28.20	dBm						-38.2	тө авт	
Ĩ										Center Freq
18.2			c						G	16.800000000 GHz
8.20		-								
										Start Freq
-1.80		3							<u>e</u>	13.60000000 GHz
200703										
-11.8									-13.00 dBm	Stop Freq
24.0									4	20.00000000 GHz
-21.8										
-31.8										CF Step
							<b>↓</b> 1			640.000000 MHz
-41.8		المالل وسعادي ا	a de la factoria de la composición de la compo		al Haladada	lite a triba la fil			and the state of the	<u>Auto</u> Man
		A DESCRIPTION OF THE OWNER.	and the second se	and experience of the second	and the second					
-51.8								-		Freq Offset
										0 Hz
-61.8										
Start 13	3.600 GHz							Stop 20	.000 GHz	
	W 1.0 MHz		#VBW	3.0 MHz	*		Sweep	16.2 ms (	6400 pts)	
MSG							STATUS	Align N	ow, All requi	red
	(5)			1010			-			

(Plot 4.5.1 B6: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)



(Plot 4.5.1 C1: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)

Agilent Spectrum Analyzer - Swept SA						
LX/RL RF 50Ω 🗘 DC		NSE:INT	ALIGN OFF		1 Oct 24, 2015	Frequency
Center Freq 15.075000 M	PNO: Wide 😱 Trig: Free		Hold: 12/100	TYP	M WANNANAN	
	IFGain:Low #Atten: 40	) dB		DE		
Ref Offset 8 dB			M	kr1 11.5	64 MHz	Auto Tune
10 dB/div Ref 30.00 dBm				-61.90	00 dBm	
Log						
						Center Freq
20.0						15.075000 MHz
10.0						Start From
						Start Freq 150.000 kHz
0.00						150.000 KHZ
and a second						
-10.0						Stop Freq
						30.000000 MHz
-20.0						
						CE Stop
-30.0					-33.00 dBm	CF Step 2.985000 MHz
						<u>Auto</u> Man
-40.0						F
						Freq Offset
-50.0						0 Hz
	<b>▲1</b>					0112
-60.0	the land transferred and the	hina ta sa an	مر المراجع المرجع المرجع	anaki sasa		
Marin Marin Marin Marin Marin Marin Marin Marin Marin Marina Marina Marina Marina Marina Marina Marina Marina M	ullenderun - der valerender der ander der der ander	With the have with the second s	un an	and the second		
Start 150 kHz				Stop 30	0.00 MHz	
#Res BW 10 kHz	#VBW 30 kHz*		Sweep	368 ms ('		
MSG			STATU	🛚 🔀 Align No	w, All requi	red

(Plot 4.5.1 C2: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)

Agilent Spectrum Analyzer - Swept SA					
Center Freq 515.000000	MHz	Avg Type	RMS	38 PM Oct 24, 2015	Frequency
Ref Offset 8.2 dB	PN0: Fast Trig: Free IFGain:Low #Atten: 30		Mkr1 S	15.5 MHz 881 dBm	Auto Tune
18.2					Center Freq 515.000000 MHz
-1.80					Start Freq 30.000000 MHz
-11.8				-13.00 dBm	<b>Stop Freq</b> 1.000000000 GHz
-31.8				1	CF Step 97.000000 MHz <u>Auto</u> Man
-51.8 <mark>ประเทศสารที่เป็นสารครามประ</mark>	franskipteringer folget val pleased on the second on the	Walley all the group of the second	มา มายางการเขาเป็นสารประเทศ (1994) มายางการเป็นสารประเทศ (1994)	**************************************	<b>Freq Offset</b> 0 Hz
Start 30.0 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz*		Stop Sweep 1.20 m	1.0000 GHz s (1000 pts)	
MSG			STATUS 🐼 Alig	n Now, All requi	red

(Plot 4.5.1 C3: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)

### Page 36 of 59

	pectrum Analy										
LXI RL Cente	r Freq 4.0			-17	SE	NSE;INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Conto	i i i oq ii		Р	NO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:				
				Sam.Low	Writtern. 4			M	(r2 3 72)	5 6 GHz	Auto Tune
10 dB/d		fset 8.2 1 <b>0.00</b> (							-31.9	02 dBm	
		<b>∆</b> <sup>1</sup>									
20.0	5	Y		4					5		Center Freq
49.0											4.000000000 GHz
10.0				71							
											Start Freq
0.00		8 8		8	6						1.000000000 GHz
-10.0										-13.00 dBm	Stop Freq
-20.0				14	- 6						7.00000000 GHz
1000											
-30.0											CF Step
			والمعينة الاطلاع وأوريا	a shall be a	Land Property lies	the strain and		idana <mark>fillean ba</mark>	last ada data a	a the state of the state	600.000000 MHz <u>Auto</u> Man
-40.0 <b>bit</b>			and the second			and the second states of		a dista distri di si			<u>Haro</u> man
											Freq Offset
-50.0					2						0 Hz
-60.0											
									04a m 7		
	.000 GHz 3W 1.0 MF	z		#VBW	3.0 MHz	*		Sweep	10.3 ms (	.000 GHz 6200 pts)	
MSG									_	ow, All requi	red
		<i>(</i> <b>_</b> )									

(Plot 4.5.1 C4: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)



(Plot 4.5.1 C5: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)



(Plot 4.5.1 C6: Channel 9538: 1907.6MHz @ Traffic WCDMA Band II)

# 4.5.2 For UMTS/TM1/WCDMA Band V Test Results

### A. Test Verdict

Test Mode/ Channel	Frequency (MHz)	Frequency Range	Refer to Plot	Limit (dBm)	Verdict
		9KHz-150KHz	Plot 4.5.2 A1	-13.00	PASS
UMTS/TM1/WCDMA	826.40	150KHz-30MHz	Plot 4.5.2 A2	-13.00	PASS
Band V/4132	020.40	30MHz-1GHz	Plot 4.5.2 A3	-13.00	PASS
		1GHz-9GHz	Plot 4.5.2 A4	-13.00	PASS
		9KHz-150KHz	Plot 4.5.2 B1	-13.00	PASS
UMTS/TM1/WCDMA	836.60	150KHz-30MHz	Plot 4.5.2 B2	-13.00	PASS
Band V/4183	030.00	30MHz-1GHz	Plot 4.5.2 B3	-13.00	PASS
		1GHz-9GHz	Plot 4.5.2 B4	-13.00	PASS
		9KHz-150KHz	Plot 4.5.2 C1	-13.00	PASS
UMTS/TM1/WCDMA	946 60	150KHz-30MHz	Plot 4.5.2 C2	-13.00	PASS
Band V/4233	846.60	30MHz-1GHz	Plot 4.5.2 C3	-13.00	PASS
		1GHz-9GHz	Plot 4.5.2 C4	-13.00	PASS

Note:

1. In general, the worse case attenuation requirement shown above was applied.

2."---" means that the emission level is too low to be measured or at least 20 dB down than the limit.

B. Test Plots

### Page 38 of 59

		um Analyzer -	Swept SA									
LXI RI			OΩ 🔔 DC		SE	NSE:INT	Avg Type			M Oct 24, 2015	F	requency
Cen	ter Fr	eq 79.50	U KHZ	PNO: Close 🖵 IFGain:Low	Trig: Free #Atten: 40		Avg Hold:		TYI	E 1 2 3 4 5 6 E M <del>MMMM</del> T A A A A A A A		
10 dE Log i	3/div	Ref Offset <b>Ref 30.0</b>								.31 kHz 68 dBm		Auto Tune
20.0					-							Center Freq 79.500 kHz
10.0 0.00												Start Freq 9.000 kHz
-10.0 -20.0												<b>Stop Freq</b> 150.000 kHz
-30.0 -40.0										-33.00 dBm	<u>Auto</u>	<b>CF Step</b> 14.100 kHz Man
-50.0						↓ <sup>1</sup>						Freq Offset 0 Hz
-60.0	have the state		M Mar Ma	Wanty My hal	Manadan	maringhy	Well My work	whilehow				
	t 9.00 s BW	kHz 1.0 kHz		#VBW	10 kHz*			Sweep		0.00 kHz 1000 pts)		
MSG								STATUS	🛛 🔁 Align N	ow, All requi	red	

(Plot 4.5.2 A1: Channel 4132: 826.40 MHz @ WCDMA Band V)

Agilent Spectrum Analyzer - Swept SA						
LXIRL RF 50Ω 🗘 DC		NSE:INT	ALIGN OFF		M Oct 24, 2015	Frequency
Center Freq 15.075000 M	PNO: Wide 😱 Trig: Free		pe: RMS ld: 12/100	TYF	E 123456 E MWW/WWW	
	IFGain:Low #Atten: 4			DI		in a constant
Ref Offset 8 dB			Ν	/kr1 9.7	12 MHz	Auto Tune
10 dB/div Ref 30.00 dBm				-61.6	56 dBm	
Log						
						Center Freq
20.0						15.075000 MHz
25.5 A.S.						
10.0						Otort Eron
						Start Freq
0.00						150.000 kHz
-10.0					-	Stop Freq
						30.000000 MHz
-20.0					-23.00 dBm	
-30.0					~	CF Step 2.985000 MHz
						Auto Man
-40.0						
						Ener Offerst
-50.0					÷.	Freq Offset
	<b>▲</b> 1					0 Hz
-60.0						
Meter his with the second state of the second	how was and the set of	Millington March March	when when when the second	where the second second	White Mary Mary Market	
Start 150 kHz				Stop 3	0.00 MHz	
#Res BW 10 kHz	#VBW 30 kHz*		Sweep		1000 pts)	
MSG			STATUS	🛛 🔀 Align N	ow, All requi	red

(Plot 4.5.2 A2: Channel 4132: 826.40 MHz @ WCDMA Band V)

### Page 39 of 59

	t Spectru												
LXI RL		RF	100000	AC 0000 N	/LI-7		SE	ENSE:INT	Avg Typ			PM Oct 24, 2015 CE <b>1 2 3 4 5 6</b>	Frequency
Gen		eq 51	5.000	JUUU N		Fast 🖵 :Low	Trig: Fre #Atten: 3			l:>100/100	T		
10 dE Log	3/div		fset 8.2 2 <b>8.20</b> (							I		6.6 MHz 35 dBm	Auto Tune
18.2													Center Freq 515.000000 MHz
8.20 -1.80													Start Freq 30.000000 MHz
-11.8 -21.8													<b>Stop Freq</b> 1.000000000 GHz
-31.8 -41.8							-				2		CF Step 97.000000 MHz <u>Auto</u> Man
-51.8	pestori katin	filminpart	vww.uHupl	mand	hhimme	-	ol. landoqui	mhul <sub>l</sub> ag <sub>hanal</sub> yh	andara-han-han-han-	holywardroidann	And Western	hthale and the second	Freq Offset 0 Hz
-61.8													
	t 30.0 s BW ′		Iz			#VBW	3.0 MHz	*			1.20 ms	0000 GHz (1000 pts)	
MSG										STATU	I <mark>s</mark> 🕄 Align N	low, All requi	red

(Plot 4.5.2 A3: Channel 4132: 826.40 MHz @ WCDMA Band V)



(Plot 4.5.2 A4: Channel 4132: 826.40 MHz @ WCDMA Band V)

### Page 40 of 59

		um Analyzer										
LXI R		req 79.50	50 Ω 🚹 DC		SE	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	F	requency
Cer		eq 79.50	00 KHZ	PNO: Close 🕞 IFGain:Low	) Trig: Free #Atten: 40		Avg Hold:	24/100	TY D			Auto Tuno
10 di Log	B/div	Ref Offse Ref 30.0							Mkr1 33 -57.0	96 dBm		Auto Tune
											3	Center Freq
20.0											_	79.500 kHz
10.0												Start Freq
0.00			2		8		3			<u>.</u>		9.000 kHz
-10.0												Stop Freq
-20.0	<u> </u>		2	14		_				<u>.</u>		150.000 kHz
-30.0										-33.00 dBm		CF Step 14.100 kHz
-40.0											<u>Auto</u>	Man
-50.0												Freq Offset
			<b>•</b> <sup>1</sup>									0 Hz
-60.0	M <sup>U</sup> WWW	why have and work	14mm Murry	myMymu	Minnumur	My white when	MANANA	humperpert	MMM MM	www.wheelye		
	t 9.00 s BW	kHz 1.0 kHz		#VBW	10 kHz*			Sweep		50.00 kHz (1000 pts)		
MSG								STATUS		ow, All requi	red	

(Plot 4.5.2 B1: Channel 4183: 836.60 MHz @ WCDMA Band V)

Agilent Spectrum Analyzer - Swept SA						
Ω/ RL RF 50 Ω <u>A</u> DC Center Freq 15.075000 M	NHz		ALIGN OFF	TRAC	M Oct 24, 2015 E <b>1 2 3 4 5 6</b> E M <del>WWWWW</del>	Frequency
Ref Offset 8 dB	PNO: Wide 🖵 Trig: Free IFGain:Low #Atten: 40		Hold: 12/100	DE Mkr1 (	389 kHz	Auto Tune
10 dB/div Ref 30.00 dBm				-62.2	89 dBm	
20.0				5		Center Freq 15.075000 MHz
0.00						Start Freq 150.000 kHz
-10.0					-23.00 dBm	Stop Freq 30.000000 MHz
-30.0						<b>CF Step</b> 2.985000 MHz <u>Auto</u> Man
-50.0						Freq Offset 0 Hz
-60.0	non New West New York and Andrew Strategy and the	englybridgerspecification	willingertypeintheftypeinter	<b>lon</b> yohan Mang	Mahranahuhulahal	
Start 150 kHz #Res BW 10 kHz	#VBW 30 kHz*		Sweep	Stop 3 368 ms (	0.00 MHz 1000 pts)	
MSG			STATU	s 🐼 Align N	ow, All requi	red

(Plot 4.5.2 B2: Channel 4183: 836.60 MHz @ WCDMA Band V)

### Page 41 of 59

		m Analyzer - Sv									
LXI RI		RF 50: eq 515.00	Ω ΑC	1-7	SEI	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Gen		eq 515.00		PNO: Fast 🖵 FGain:Low	Trig: Free #Atten: 30		Avg Hold:	>100/100	TY D		Auto Tune
10 dE	B/div	Ref Offset 8 Ref 28.20						N	/lkr2 91 -46.4	3.6 MHz 40 dBm	Auto Tune
Log 18.2			5)								Center Freq 515.000000 MHz
8.20 -1.80											Start Freq 30.000000 MHz
-11.8 -21.8										-13.00 dBm	<b>Stop Freq</b> 1.000000000 GHz
-31.8 -41.8										2	CF Step 97.000000 MHz <u>Auto</u> Man
-51.8	y why have	upolhterritulmungui	LajUrstyne <mark>l</mark> je <mark>d</mark> je	<b>ledigle</b> (ry 1944). Indeki	amhradadha	WW. North	nfrandirandradded	<sub>Mand</sub> alahalahahin	nd home	hippodires/Lohd-sorper	Freq Offset 0 Hz
	t 30.0	MHz .0 MHz		#\/P\1	2.0 844-	*		Swaan	Stop 1.	0000 GHz	
#RC	5 DW			#VDW	3.0 MHz					(1000 pts) ow. All requi	red
MSG STATUS SAlign Now, All required											

(Plot 4.5.2 B3: Channel 4183: 836.60 MHz @ WCDMA Band V)



(Plot 4.5.2 B4: Channel 4183: 836.60 MHz @ WCDMA Band V)

### Page 42 of 59

		ım Analyzer -										
LXI R		RF 5 eq 79.50	i0 Ω 🚹 DC		SE	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	F	requency
Cer		eq 79.50	70 KHZ	PNO: Close 🏹 IFGain:Low	Trig: Free #Atten: 40		Avg Hold:		TY			
10 di Log	B/div	Ref Offsei Ref 30.0							Mkr1 20 -59.7	.01 kHz 48 dBm		Auto Tune
20.0												<b>Center Freq</b> 79.500 kHz
10.0 0.00												Start Freq 9.000 kHz
-10.0 -20.0												<b>Stop Freq</b> 150.000 kHz
-30.0										-33.00 dBm	<u>Auto</u>	<b>CF Step</b> 14.100 kHz Man
-50.0		▲ <sup>1</sup>										Freq Offset 0 Hz
-60.0	Many	Mymphys	MAYAN	MANNA ALT	abu waad	WMAAA	wan	Murhay	MMMMM	www.www.ll.		
	t 9.00 s BW	kHz 1.0 kHz		#VBW	10 kHz*			Sweep		50.00 kHz 1000 pts)		
MSG								STATUS	🛛 🐼 Align N	ow, All requi	red	

(Plot 4.5.2 C1: Channel 4233: 846.60 MHz @ WCDMA Band V)

Agilent Spectrum Analyzer - Swept SA					
00 RL RF 50 Ω ▲ DC Center Freq 15.075000 M	Hz		ALIGN OFF	05:36:42 PM Oct 24, 20 TRACE 1 2 3 4 TYPE M WANNA	Frequency
	PNO: Wide Trig: Fre IFGain:Low #Atten:		g Hold: 12/100	DET A A A A	
Ref Offset 8 dB 10 dB/div Ref 30.00 dBm				Mkr1 150 kH -61.244 dB	12
					Center Freq
20.0					15.075000 MHz
10.0					Start Freq
0.00				<u>.</u>	150.000 kHz
-10.0					Stop Frog
-20.0					Stop Freq 30.000000 MHz
				-23.00 c	
-30.0					CF Step 2.985000 MHz Auto Man
-40.0					Mari
-50.0					Freq Offset
-60.0					
Martalahi yakun Manakanaka	hand and an all an all and a line	and the second second	Werner WWW. April 10	lmandultapping	<u> </u>
Start 150 kHz #Res BW 10 kHz	#VBW 30 kHz		Sweep	Stop 30.00 Mi 368 ms (1000 pt	
MSG			STATUS	🗙 Align Now, All re	quired

(Plot 4.5.2 C2: Channel 4233: 846.60 MHz @ WCDMA Band V)

### Page 43 of 59

		m Analyz											
LXI RL		<sub>RF</sub> eq 51	50 Ω			SE	NSE:INT	Avg Type	ALIGN OFF	05:3		Oct 24, 2015	Frequency
Cen		eq 51	5.000	000 1	PNO: Fast G IFGain:Low	Trig: Free #Atten: 30		Avg Hold:			TYPE	A A A A A A	
10 dE Log	3/div	Ref Off Ref 2							ſ	Mkr2 -4	823. 5.74	3 MHz 6 dBm	Auto Tune
18.2													Center Freq 515.000000 MHz
8.20					J								Start Freq 30.000000 MHz
-11.8 -21.8											-	-13.00 dBm	<b>Stop Freq</b> 1.000000000 GHz
-31.8 -41.8										2			CF Step 97.000000 MHz <u>Auto</u> Man
-51.8	hery works	<sub>ᢦ</sub> ᡁᡟᢧᡵᡨᡰᠼᢧ <sub>ᡩ</sub>	uten.ute	nt-militatin fo	http://www.andiatestation	nymenterforderleiter	menthiling	in shifty/mailasm	Anjouth Albert	And h	when	in an	<b>Freq Offset</b> 0 Hz
	t 30.0											000 GHz	
	s BW 1	.0 MH	Z		#VB\	V 3.0 MHz	*					000 pts)	
MSG									STATU	s 🛃 Alię	gn Nov	w, All requi	rea

(Plot 4.5.2 C3: Channel 4233: 846.60 MHz @ WCDMA Band V)



(Plot 4.5.2 C4: Channel 4233: 846.60 MHz @ WCDMA Band V)

# 4.5.3 For UMTS/TM1/WCDMA Band IV Test Results

A. Test Verdict

Test Mode/ Channel	Frequency (MHz)	Frequency Range	Refer to Plot	Limit (dBm)	Verdict
		9KHz-150KHz	Plot 4.5.3 A1	-13.00	PASS
		150KHz-30MHz	Plot 4.5.3 A2	-13.00	PASS
UMTS/TM1/WCDMA	1712.4	30MHz-1GHz	Plot 4.5.3 A3	-13.00	PASS
Band IV /1312	1712.4	1GHz-7GHz	Plot 4.5.3 A4	-13.00	PASS
		7GHz-13.6GHz	Plot 4.5.3 A5	-13.00	PASS
		13.6GHz-20GHz	Plot 4.5.3 A6	-13.00	PASS
		9KHz-150KHz	Plot 4.5.3 B1	-13.00	PASS
	1732.6	150KHz-30MHz	Plot 4.5.3 B2	-13.00	PASS
UMTS/TM1/WCDMA		30MHz-1GHz	Plot 4.5.3 B3	-13.00	PASS
Band IV /1413		1GHz-7GHz	Plot 4.5.3 B4	-13.00	PASS
		7GHz-13.6GHz	Plot 4.5.3 B5	-13.00	PASS
		13.6GHz-20GHz	Plot 4.5.3 B6	-13.00	PASS PASS PASS PASS PASS PASS PASS PASS
		9KHz-150KHz	Plot 4.5.3 C1	-13.00	PASS
		150KHz-30MHz	Plot 4.5.3 C2	-13.00	PASS
UMTS/TM1/WCDMA	1752.6	30MHz-1GHz	Plot 4.5.3 C3	-13.00	PASS
Band IV /1513	1/52.0	1GHz-7GHz	Plot 4.5.3 C4	-13.00	PASS
		7GHz-13.6GHz	Plot 4.5.3 C5	-13.00	PASS
		13.6GHz-20GHz	Plot 4.5.3 C6	-13.00	PASS

Note:

- 1. In general, the worse case attenuation requirement shown above was applied.
- 2. \*\*\* means that the emission level is too low to be measured or at least 20 dB down than the limit.
- B. Test Plots

Start 9.00 kHz #Res BW 1.0 kHz Isg	#VBW 10 kHz*			Stop 150.00 kHz 168 ms (1000 pts Align Now, All req	
	land the world a for the the the the	an appendie of the second s	handworkpathaby		N
60.0 will use an all the	A				01
50.0					Freq Offs
40.0				-43.00 dBr	14.100 kH <u>Auto</u> Ma
30.0					CF Ste
20.0				, e	150.000 ki
10.0					Stop Fre
0.00					9.000 ki
10.0					Start Fre
20.0					Center Fre 79.500 ki
0 dB/div Ref 30.00 dBm				-57.711 dBm	
Ref Offset 8 dB	IFGain:Low #Atten: 46	dB	ſ	DET A A A A A A A A A A A A A A A A A A A	Auto Tur
Center Freq 79.500 kHz	PNO: Close 🕞 Trig: Free	Av Run Avç	g Type: RMS  Hold: 25/100	TRACE 12345 TYPE MWWWWW	Frequency
α RL RF 50Ω 🔥 DC	SEL	ISE:INT	ALIGN OFF	05:41:44 PM Oct 24, 201	5

(Plot 4.5.3 A1: Channel 1312: 1712.4MHz @ Traffic WCDMA Band IV)

### Page 45 of 59

-		um Analyzer									
LXI R		RF	50 Ω 🔔 DC	AU 1-	SE	NSE;INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Gen	iter Fi	eq 15.0	75000	PNO: Wide 🕞 IFGain:Low	Trig: Free #Atten: 40		Avg Hold:		TY		
10 dl Log	B/div	Ref Offs Ref 30.	et8 dB 00 dBm					N	/kr1 5.3 -61.5	49 MHz 32 dBm	Auto Tune
20.0											Center Freq 15.075000 MHz
10.0 0.00											<b>Start Freq</b> 150.000 kHz
-10.0 -20.0											Stop Freq 30.000000 MHz
-30.0 -40.0										-33.00 dBm	<b>CF Step</b> 2.985000 MHz <u>Auto</u> Man
-50.0			▲ <sup>1</sup>								<b>Freq Offset</b> 0 Hz
-60.0	handishi	maniputation	whenter	utrakkryydallerysalaunetha	4/1. hnunder 14-hd	Moneur des No	nterilia y la granderi	Winningen	dalar and the		
	t 150 s BW	kHz 10 kHz		#VBW	30 kHz*			Sweep	Stop 3 368 ms (	0.00 MHz (1000 pts)	
MSG								STATUS	Alian N	ow. All requi	red

(Plot 4.5.3 A2: Channel 1312: 1712.4MHz @ Traffic WCDMA Band IV)

Agilent Spectrum Analyzer - Swept SA LXI RL RF 50Ω AC		TA LOUIST AN UNIT	ALIGN OFF 05:42:1	0.014 0.015	
μ/         RL         RF         50 Ω         AC           Center Freq 515.000000		Avg Typ	e: RMS	3PM Oct 24, 2015 RACE 1 2 3 4 5 5 TYPE M WARAAAAA	Frequency
Ref Offset 8.2 dB 10 dB/div Ref 28.20 dBm	IFGain:Low #Atten: 3		Mkr1 8	65.0 MHz 425 dBm	Auto Tune
18.2					Center Freq 515.000000 MHz
-1.80					Start Freq 30.000000 MHz
-11.8				-13.00 dBm	<b>Stop Freq</b> 1.000000000 GHz
-31.8			<b>,</b>		CF Step 97.000000 MHz <u>Auto</u> Man
	ledungely also an and also all or periods of the de	elyddynawyddyddwyryddyddalaetha	hterestation and the second of the second	andreyserykenderede	<b>Freq Offset</b> 0 Hz
Start 30.0 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz	×	Stop 1 Sweep 1.20 ms	1.0000 GHz	
MSG			STATUS 🐼 Align		red

(Plot 4.5.3 A3: Channel 1312: 1712.4MHz @ Traffic WCDMA Band IV)

### Page 46 of 59

X//         RL         RF         50 Ω         AC         SERVSE:INT         ALIGN OFF         05:42:23 PM Oct 24, 2015         Free           Center Freq 4.000000000 GHz         Avg Type: RMS         TRACE 12:3:4:5:5         Free	equency
PNO: Fast Trig: Free Run Avg Hold: 86/100 TYPE MWWWWW IFGain:Low #Atten: 30 dB DET A A A A A	
Ref Offset 8.2 dB	Auto Tune
	<b>Center Freq</b>
8.20	Start Freq
-11.8	Stop Freq
	<b>CF Step</b> .000000 MHz Man
	Freq Offset 0 Hz
-61.8 Start 1.000 GHz Stop 7.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 10.3 ms (6200 pts)	
MSG STATUS XALIGN Now, All required	

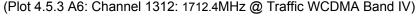
(Plot 4.5.3 A4: Channel 1312: 1712.4MHz @ Traffic WCDMA Band IV)

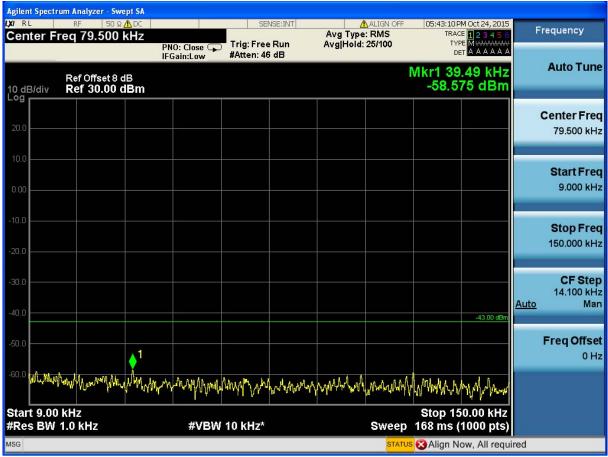


(Plot 4.5.3 A5: Channel 1312: 1712.4MHz @ Traffic WCDMA Band IV)

### Page 47 of 59

	ım Analyzer - Swept	SA					
DVIRL	RF 50 Ω eq 16.80000		SENSE:INT	Avg Type: RM		PM Oct 24, 2015	Frequency
Center Fr	eq 10.80000	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold: 51/1	100 T		
10 dB/div Log	Ref Offset 8.2 d Ref 28.20 dB				Mkr1 18.08 -38.4	2 7 GHz 10 dBm	Auto Tune
18.2							Center Freq 16.80000000 GHz
8.20							<b>Start Freq</b> 13.600000000 GHz
-11.8						-13.00 dBm	<b>Stop Freq</b> 20.000000000 GHz
-31.8						list della constant della se	CF Step 640.000000 MHz <u>Auto</u> Man
-51.8							<b>Freq Offset</b> 0 Hz
-61.8							
Start 13.60 #Res BW 1		#VBW	3.0 MHz*	Sv	Stop 20 veep 16.2 ms	0.000 GHz (6400 pts)	
MSG					STATUS 🐼 Align I	Now, All requi	red





(Plot 4.5.3 B1: Channel 1413:1732.6MHz @ Traffic WCDMA Band IV)

### Page 48 of 59

		ım Analyze											
LXI R		RF	50 Ω 🧥 D			SE	NSE:INT		ALIGN OFF		M Oct 24, 2015	Fr	requency
Cen	iter Fr	eq 15.0	075000	PN	IO: Wide 🕞 Gain:Low	Trig: Free #Atten: 40		Avg Type Avg Hold:		TY	CE 1 2 3 4 5 6 PE MWWWWW ET A A A A A A A		
10 di Log	B/div	Ref Offs Ref 30	et8dB .00dBr	n					N	/lkr1 8.6 -61.2	96 MHz 32 dBm		Auto Tune
20.0					8					5		1.0000	Center Freq
10.0													
0.00					8	6				5			Start Freq 150.000 kHz
-10.0										5		30	Stop Freq 0.000000 MHz
-20.0											00.00.15		CF Step
-40.0											-33.00 dBm	2 <u>Auto</u>	2.985000 MHz Man
-50.0						2						1	Freq Offset 0 Hz
-60.0	Nalawality	hiterbywyseria	un work	-indravaly	v^Apphapabilitie	hyphownlawsbyten	phone	nstatury hay hymla	www.humusn	hungenerveler	Morright		
	t 150   s BW	kHz 10 kHz			#VBV	v 30 kHz*			Sweep		0.00 MHz (1000 pts)		
MSG									STATU:	s 🐼 Align N	ow, All requi	red	

(Plot 4.5.3 B2: Channel 1413:1732.6MHz @ Traffic WCDMA Band IV)



(Plot 4.5.3 B3: Channel 1413:1732.6MHz @ Traffic WCDMA Band IV)

### Page 49 of 59

	Spectrum /	Analyzer - Sw									
LXIRL Cente		RF 50 Ω	AC 00000 GI	-17	SE	NSE:INT	Avg Type	ALIGN OFF		Oct 24, 2015	Frequency
Cente		4.0000	Р	NO: Fast G Gain:Low	) Trig: Free #Atten: 30		Avg Hold:	86/100	TY D		Auto Tune
10 dB/ Log —		ef Offset 8.2 ef 28.20							-41.6	4 6 GHz 34 dBm	
18.2 —		<b>0</b> <sup>1</sup>		<u>a</u>					0	<u>.</u>	Center Freq 4.000000000 GHz
8.20 — -1.80 —				3					2		Start Freq 1.000000000 GHz
-11.8										43.00 dBm	<b>Stop Freq</b> 7.000000000 GHz
-31.8					¢ <sup>2</sup>						CF Step 600.000000 MHz <u>Auto</u> Man
-51.8				l py let y field y	alan <sup>di k</sup> iran	Maluy, and any f	addition to although	ayya liyla yayad	ind <sub>ta be</sub> ili bil (nit al din Tagan ying a tanan ata		<b>Freq Offset</b> 0 Hz
-61.8	1.000 G	`U-							Stop 7	.000 GHz	
	BW 1.0			#VBW	3.0 MHz	*		Sweep		.000 GH2 (6200 pts)	
MSG								STATU	s 🐼 Align N	low, All requi	red

(Plot 4.5.3 B4: Channel 9400: 1880.0MHz @ Traffic WCDMA Band II)

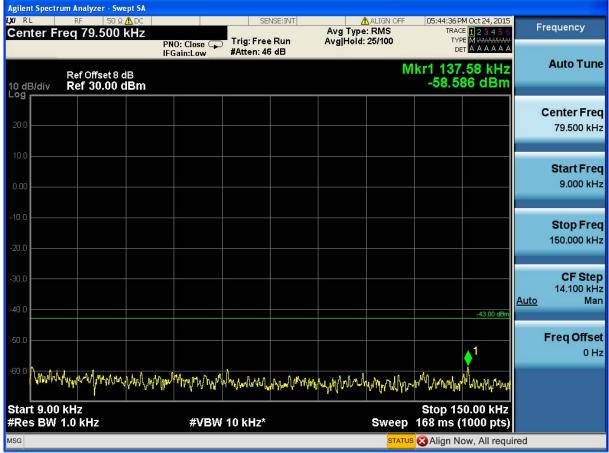


(Plot 4.5.3 B5: Channel 1413:1732.6MHz @ Traffic WCDMA Band IV)

### Page 50 of 59

		m Analyzer - Sv	vept SA								
LXI RL		RF 50 G eq 16.800	2 AC	·LI	SE	VSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Cen		eq 10.000	Р	NO: Fast 😱	Trig: Free		Avg Hold:		TYF	E MWWWWW T A A A A A A	
_	_		IFO	Gain:Low	#Atten: 30	0 dB					Auto Tune
		Ref Offset 8.						Mki	1 17.32	7 6 GHz	Auto Tune
10 dE Log	3/div	Ref 28.20	dBm						-37.7	24 dBm	
Ŭ											Center Freq
18.2			2	3						<u>.</u>	16.800000000 GHz
8.20			÷						5		
											Start Freq
-1.80			9	9					2		13.60000000 GHz
-11.8									5	-13.00 dBm	Stop Freq
											20.00000000 GHz
-21.8			2								
-31.8											CF Step
-31.0						•					640.000000 MHz
-41.8			المتعلقين والمقادين والم			and the second states	-	الربا الجاجر ال		a list in a sale later	<u>Auto</u> Man
41.0	a lindi bid		a been a politic a constraint				and a state of the second state of the		Contraction in a loss of the		
-51.8											Freq Offset
											0 Hz
-61.8		_									
Stor	+ 12 60	00 GHz							Stop 20		
		.0 MHz		#VBW	3.0 MHz	*		Sweep	16.2 ms (	.000 GHz 6400 pts)	
MSG									-	ow, All requi	red

(Plot 4.5.3 B6: Channel 1413:1732.6MHz @ Traffic WCDMA Band IV)



(Plot 4.5.3 C1: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)

### Page 51 of 59

		alyzer - Swept S <i>l</i>	1						
LXI R		50 Ω 🧥 DC		SENSE;INT	Avg Type			M Oct 24, 2015	Frequency
Cen	ter Freq	15.075000	IVIHZ PNO: Wide 🖵 IFGain:Low	Trig: Free Run #Atten: 40 dB	Avg Hold:		TYP	E 1 2 3 4 5 6 E M <del>MMMMM</del> T A A A A A A A	
10 di Log		Offset 8 dB 7 <b>30.00 dBm</b>	1			MI	kr1 23.4 -62.1	86 MHz 89 dBm	Auto Tune
20.0								<u></u>	Center Freq 15.075000 MHz
10.0 0.00									<b>Start Freq</b> 150.000 kHz
-10.0 -20.0									Stop Freq 30.000000 MHz
-30.0								-33.00 dBm	<b>CF Step</b> 2.985000 MHz <u>Auto</u> Man
-50.0							1		<b>Freq Offset</b> 0 Hz
-60.0		wington and the second s	ปนาใจจงให้บุริเทศเพราะเกิด	VIVIA NIPANJapanana Ma	Herein Haber logalen	ndynaniti			
	t 150 kHz s BW 10 k	Hz	#VBW	30 kHz*		Sweep	368 ms (	0.00 MHz 1000 pts)	
MSG						STATUS	🛛 🕄 Align N	ow, All requi	red

(Plot 4.5.3 C2: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)

Agilent Sp	pectrum Analyzer - Swept SA								
LXIRL	RF 50 Ω AC		SENS	SE:INT	Avg Type			M Oct 24, 2015	Frequency
Cente	r Freq 515.000000 I	PNO: Fast	Trig: Free I	Run	Avg Type Avg Hold:		TY	ET A A A A A A	
		IFGain:Low	#Atten: 30	dB			D		
	Ref Offset 8.2 dB					ľ	Mkr1 88	3.5 MHz	Auto Tune
10 dB/d							-47.2	95 dBm	
18.2 —									Center Freq
10.2									515.000000 MHz
8.20									
0.20									Start Freq
-1.80		6					9	4	30.000000 MHz
1.00									
-11.8								-13.00 dBm	
									Stop Freq
-21.8							2	4	1.000000000 GHz
-31.8									CF Step
									97.000000 MHz
-41.8									<u>Auto</u> Man
						n		Line in	
-51.8	mentermenter	and have the second	uthingfylastalya		and the state of t	and the second second	erunt-paratela	a ana ana ang ang ang ang ang ang ang an	Freq Offset
									0 Hz
-61.8								-	
Start 2	0.0 MHz						Stop 1	0000 GHz	
	3W 1.0 MHz	#VBW	3.0 MHz*			Sweep		1000 GH2	
MSG								ow, All requi	red
							- ingit it	e, r r oqui	

(Plot 4.5.3 C3: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)

### Page 52 of 59

		Analyzer - Sw									
LXI RL			2 AC 00000 GI	47	SE	NSE:INT	Avg Type	ALIGN OFF		M Oct 24, 2015	Frequency
Gen		4.0000	F	NO: Fast 😱 Gain:Low	Trig: Free #Atten: 30		Avg Hold:		TY		
10 dE Log		ef Offset 8. ef <b>28.20</b>						M		1 4 GHz 59 dBm	Auto Tune
18.2		<b>∲</b> 1									Center Freq 4.000000000 GHz
8.20 -1.80											Start Freq 1.000000000 GHz
-11.8 -21.8			5							13.00 dBm	<b>Stop Freq</b> 7.000000000 GHz
-31.8 -41.8					¢ <sup>2</sup>						CF Step 600.000000 MHz <u>Auto</u> Man
-51.8	h di shi ta shi	in the second					weither diether		ni in foldette a	inter det som det i	<b>Freq Offset</b> 0 Hz
-61.8 Star	t 1.000 Q	247							Stop 7	.000 GHz	
	s BW 1.0			#VBW	3.0 MHz	*		Sweep		6200 pts)	
MSG								STATU	s 🐼 Align N	ow, All requi	red

(Plot 4.5.3 C4: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)



(Plot 4.5.3 C5: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)

		m Analyzer - Sv									
LXI RL		RF 50 eq 16.800		NU	SE	NSE:INT	Avg Type	ALIGN OFF		PM Oct 24, 2015 CE <b>1 2 3 4 5 6</b>	Frequency
Cen		eq 10.000	Р	NO: Fast 😱 Gain:Low	Trig: Free #Atten: 30		Avg Hold:		TY		
10 dE Log r	3/div	Ref Offset 8 Ref 28.20	.2 dB d <b>Bm</b>					Mkr	1 17.56 -37.6	6 6 GHz 85 dBm	Auto Tune
18.2				3							Center Freq 16.80000000 GHz
8.20 - -1.80 -				- 							<b>Start Freq</b> 13.60000000 GHz
-11.8 -21.8										-13.00 dBm	<b>Stop Freq</b> 20.000000000 GHz
-31.8 -41.8	11.14		العمل المراجع المراجع المراجع المراجع		a the state of the state of the		1 Na platety state		teres and the state of the second		<b>CF Step</b> 640.000000 MHz <u>Auto</u> Man
-51.8					(allyster are and a first						<b>Freq Offset</b> 0 Hz
		00 GHz I.0 MHz		#VB)A	3.0 MHz	*		Sweep	Stop 20	).000 GHz (6400 pts)	
MSG					0.011112					low, All requi	red
	_							01110	- Alight N	on, Airiequi	u .

(Plot 4.5.3 C6: Channel 1513: 1752.6MHz @ Traffic WCDMA Band IV)

# 4.6 Frequency Stability Test

# TEST APPLICABLE

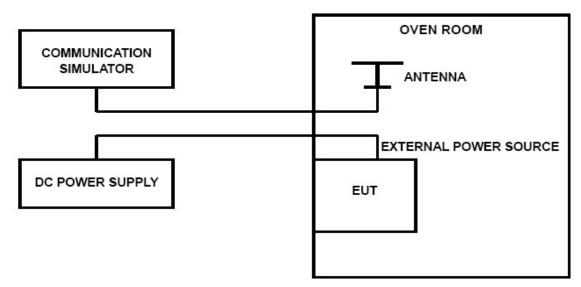
- 1. According to FCC Part 2 Section 2.1055 (a)(1), the frequency stability shall be measured with variation of ambient temperature from -30°C to +50°C centigrade.
- 2. According to FCC Part 2 Section 2.1055 (E) (2), for battery powered equipment, the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point, which is specified by the manufacture.
- 3. Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried voltage equipment and the end voltage point was 3.40V.

# TEST PROCEDURE

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

- 1. Measure the carrier frequency at room temperature;
- 2. Subject the EUT to overnight soak at -30℃;
- 3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on middle channel of WCDMA Band II/IV/V, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming;
- 4. Repeat the above measurements at 10<sup>°</sup>C increments from -30<sup>°</sup>C to +50<sup>°</sup>C. Allow at least 0.5 hours at each temperature, unpowered, before making measurements;
- Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 0.5 hours unpowered, to allow any self-heating to stabilize, before continuing;
- 6. Subject the EUT to overnight soak at +50℃;
- 7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming;
- 8. Repeat the above measurements at 10℃ increments from +50℃ to -30℃. Allow at least 0.5 hours at each temperature, unpowered, before making measurements;
- 9. At all temperature levels hold the temperature to +/-  $0.5^{\circ}$ C during the measurement procedure;

# TEST CONFIGURATION



## TEST LIMITS

### For Hand carried battery powered equipment

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the

### Page 55 of 59

manufacturer. This transceiver is specified to operate with an input voltage of between 3.40VDC and 4.20VDC, with a nominal voltage of 3.70DC. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress. These voltages represent a tolerance of -10 % and +12.5 %. For the purposes of measuring frequency stability these voltage limits are to be used.

### For equipment powered by primary supply voltage

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. For this EUT section 2.1055(d)(1) applies. This requires varying primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

### TEST RESULTS

		UMTS/TM1/W	CDMA Band II		
DC Power	Temperature (℃)	Frequency error(Hz)	Frequency error(ppm)	Limit (ppm)	Verdict
3.40	20	0.08	0.00	2.50	PASS
3.80	20	-0.79	0.00	2.50	PASS
4.20	20	0.72	0.00	2.50	PASS
3.80	-30	0.44	0.00	2.50	PASS
3.80	-20	-1.83	0.00	2.50	PASS
3.80	-10	1.10	0.00	2.50	PASS
3.80	0	1.65	0.00	2.50	PASS
3.80	10	-2.84	0.00	2.50	PASS
3.80	20	-1.83	0.00	2.50	PASS
3.80	30	-2.33	0.00	2.50	PASS
3.80	40	0.87	0.00	2.50	PASS
3.80	50	1.75	0.00	2.50	PASS

		UMTS/TM1/W	CDMA Band IV		
DC Power	Temperature (℃)	Frequency error(Hz)	Frequency error(ppm)	Limit (ppm)	Verdict
3.40	20	-2.73	0.00	2.50	PASS
3.80	20	-1.88	0.00	2.50	PASS
4.20	20	-3.54	0.00	2.50	PASS
3.80	-30	-2.66	0.00	2.50	PASS
3.80	-20	4.36	0.00	2.50	PASS
3.80	-10	-1.05	0.00	2.50	PASS
3.80	0	2.88	0.00	2.50	PASS
3.80	10	2.37	0.00	2.50	PASS
3.80	20	-1.30	0.00	2.50	PASS
3.80	30	0.92	0.00	2.50	PASS
3.80	40	0.05	0.00	2.50	PASS
3.80	50	-2.73	0.00	2.50	PASS

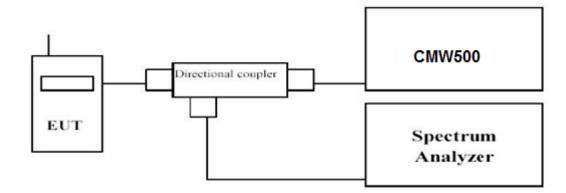
		UMTS/TM1/W	CDMA Band V		
DC Power	Temperature (℃)	Frequency error(Hz)	Frequency error(ppm)	Limit (ppm)	Verdict
3.40	20	-3.63	0.00	2.50	PASS
3.80	20	-0.20	0.00	2.50	PASS
4.20	20	0.69	0.00	2.50	PASS
3.80	-30	-6.23	-0.01	2.50	PASS
3.80	-20	-2.17	0.00	2.50	PASS
3.80	-10	-0.27	0.00	2.50	PASS
3.80	0	-3.11	0.00	2.50	PASS
3.80	10	2.30	0.00	2.50	PASS
3.80	20	-0.50	0.00	2.50	PASS
3.80	30	1.94	0.00	2.50	PASS
3.80	40	-3.75	0.00	2.50	PASS
3.80	50	-7.42	-0.01	2.50	PASS

# 4.7 Peak-to-Average Ratio (PAR)

# LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

# **TEST CONFIGURATION**



## TEST PROCEDURE

- 1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 4. Set the measurement interval as follows:
  1). for continuous transmissions, set to 1 ms,
  2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
- 5. Record the maximum PAPR level associated with a probability of 0.1%.

# TEST RESULTS

	UMTS/TM1/ WCDMA Band II								
Channel	Frequency	Measured							
Number	(MHz)	(dB)							
9262	1852.4	2.82							
9400	1880.0	3.26							
9538	1907.6	3.13							

	UMTS/TM1/ WCDMA Band IV								
Channel	Frequency	Measured							
Number	(MHz)	(dB)							
1312	1712.4	3.29							
1413	1732.6	3.23							
1513	1752.6	3.25							

#### Page 57 of 59



#### Page 58 of 59



# 5 Test Setup Photos of the EUT

Please refer to separated files for Test Setup Photos of the EUT.

# 6 External Photos of the EUT

Please refer to separated files for External Photos of the EUT.

# 7 Internal Photos of the EUT

Please refer to separated files for Internal Photos of the EUT.

.....End of Report.....