# **Tune Up Procedure**

#### Tune-up procedure

GSM/WCDMA/LTE TEST

Measurement Procedure:

GSM/ WCDMA/LTE

- $1. Connect\ EUT\ with\ CMU200 (E5515C)/CMW500,\ through\ RF\ cable.\ Make\ a\ call\ from\ CMU200 (E5515C)/CMW500;$
- 2. Measure the Output Power Average value;
- 3.Remarks: All Output Power are tested in Average Value specification.

For WIFI/BT

- 1: Connect to Power meter (NRVD) through RF cable and let the EUT Continuously transmit
- 2: Measure the Output Power Average value

#### **Manufacturing tolerance**

#### GSM Speech <SIM1>

GSM 850 (GMSK) (Burst Average Power)							
Channel	Channel 128	Channel 128 Channel 190					
Target (dBm)	32.0	32.0	32.0				
Tolerance ±(dB)	Tolerance ±(dB) 1.0		1.0				
	GSM 1900 (GMSK) (Burst Average Power)						
Channel	Channel 512	Channel 661	Channel 810				
Target (dBm)	29.0	29.0	29.0				
Tolerance ±(dB)	1.0	1.0	1.0				

GSM 850 GPRS (GMSK) (Burst Average Power)							
Cha	annel	128	190	251			
1 Txslot	Target (dBm)	32.0	32.0	32.0			
1 1 X SIOU	Tolerance ±(dB)	1.0	1.0	1.0			
2 Txslot	Target (dBm)	30.0	30.0	30.0			
2 1 X SIOT	Tolerance ±(dB)	1.0	1.0	1.0			
2 Typlot	Target (dBm)	29.0	29.0	29.0			
3 Txslot	Tolerance ±(dB)	1.0	1.0	1.0			
4 Txslot	Target (dBm)	27.0	27.0	27.0			
4 1 XSIOI	Tolerance ±(dB)	1.0	1.0	1.0			
	GSM 850 EDGE	(8PSK) (Burst Av	erage Power)				
Cha	annel	128	190	251			
1 Txslot	Target (dBm)	25.0	25.0	25.0			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Tolerance ±(dB)	1.0	1.0	1.0			
2 Txslot	Target (dBm)	24.0	24.0	24.0			
2 1 X SIOU	Tolerance ±(dB)	1.0	1.0	1.0			
3 Txslot	Target (dBm)	22.0	22.0	22.0			
3 1 X SIOL	Tolerance ±(dB)	1.0	1.0	1.0			
4 Txslot	Target (dBm)	21.0	21.0	21.0			

	Tolerance ±(dB)	1.0	1.0	1.0				
	GSM 1900 GPRS (GMSK) (Burst Average Power)							
Cha	annel	512	661	810				
1 Txslot	Target (dBm)	29.0	29.0	29.0				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Tolerance ±(dB)	1.0	1.0	1.0				
2 Txslot	Target (dBm)	27.0	27.0	27.0				
2 1 X SIOU	Tolerance ±(dB)	1.0	1.0	1.0				
2 Tyolot	Target (dBm)	26.0	26.0	26.0				
3 Txslot	Tolerance ±(dB)	1.0	1.0	1.0				
4 Txslot	Target (dBm)	24.0	24.0	24.0				
4 1 X SIOI	Tolerance ±(dB)	1.0	1.0	1.0				
	GSM 1900 EDGI	E (8PSK) (Burst A	verage Power)					
Cha	annel	512	661	810				
1 Txslot	Target (dBm)	25.0	25.0	25.0				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Tolerance ±(dB)	1.0	1.0	1.0				
2 Txslot	Target (dBm)	23.0	23.0	23.0				
2 1 X SIOU	Tolerance ±(dB)	1.0	1.0	1.0				
3 Txslot	Target (dBm)	22.0	22.0	22.0				
3 1 X SIUL	Tolerance ±(dB)	1.0	1.0	1.0				
4 Txslot	Target (dBm)	20.0	20.0	20.0				
4 1 1 1 1 1 1 1 1	Tolerance ±(dB)	1.0	1.0	1.0				

## **UMTS**

UMTS Band V						
Channel	Channel 4132	Channel 4183	Channel 4233			
Target (dBm)	23.0	23.0	23.0			
Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band V HSDPA(sub-test 1)						
Channel	Channel 4132	Channel 4183	Channel 4233			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band V HSDPA(sub-test 2)						
Channel	Channel 4132	Channel 4183	Channel 4233			
Target (dBm)	22.0	22.0	22.0			

Tolerance ±(dB)	1.0	1.0	1.0					
UMTS Band V HSDPA(sub-test 3)								
Channel	Channel Channel 4132 Channel 4183 Channel							
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
UMTS Band V HSDPA(sub-test 4)								
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
	UMTS Band V	HSUPA(sub-test 1)						
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
	UMTS Band V HSUPA(sub-test 2)							
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
	UMTS Band V	HSUPA(sub-test 3)						
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
	UMTS Band V	HSUPA(sub-test 4)						
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
_	UMTS Band V	HSUPA(sub-test 5)						
Channel	Channel 4132	Channel 4183	Channel 4233					
Target (dBm)	22.0	22.0	22.0					
Tolerance ±(dB)	1.0	1.0	1.0					
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UMTS Band II						
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	23.0	23.0	23.0			
Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band II HSDPA(sub-test 1)						
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band II HSDPA(sub-test 2)						
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	m) 22.0 22.0		22.0			

Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band II HSDPA(sub-test 3)						
Channel	Channel Channel 9262 Channel 9400 Channel					
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
	UMTS Band II I	HSDPA(sub-test 4)				
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
	UMTS Band II I	HSUPA(sub-test 1)				
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
UMTS Band II HSUPA(sub-test 2)						
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
	UMTS Band II I	HSUPA(sub-test 3)				
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
	UMTS Band II I	HSUPA(sub-test 4)				
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			
	UMTS Band II I	HSUPA(sub-test 5)				
Channel	Channel 9262	Channel 9400	Channel 9538			
Target (dBm)	22.0	22.0	22.0			
Tolerance ±(dB)	1.0	1.0	1.0			

## LTE Band 2

BW:1.4MHz [ <rb=1>]</rb=1>								
Observati	Channel 18607		Channel 18900		Channel 19193			
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0		
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0		
	BW:1.4MHz [ <rb=3>, <rb=6>]</rb=6></rb=3>							
Channel	Channe	l 18607	Channe	l 18900	Channe	l 19193		
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		

Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
, ,		BW:3MF	lz [ <rb=1>]</rb=1>			
	Channe			l 18900	Channe	l 19185
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	В	BW:3MHz [ <f< td=""><td>RB=8&gt;, <rb=< td=""><td>=15&gt;]</td><td></td><td></td></rb=<></td></f<>	RB=8>, <rb=< td=""><td>=15&gt;]</td><td></td><td></td></rb=<>	=15>]		
Channel	Channe	l 18615	Channe	l 18900	Channe	l 19185
Chamilei	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:5MF	lz [ <rb=1>]</rb=1>			
Channel	Channe	l 18625	Channe	l 18900	Channe	l 19175
Chamilei	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	В	W:5MHz [ <r< td=""><td>B=12&gt;, <rb< td=""><td>=25&gt;]</td><td></td><td></td></rb<></td></r<>	B=12>, <rb< td=""><td>=25&gt;]</td><td></td><td></td></rb<>	=25>]		
Channel	Channe	l 18625	Channe	l 18900	Channe	l 19175
Chamilei	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:10M	Hz [ <rb=1>]</rb=1>			
Channel	Channe	l 18650	Channel 18900		Channe	l 19150
Oriannei	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	B\	V:10MHz [ <f< td=""><td>RB=25&gt;, <re< td=""><td>B=50&gt;]</td><td></td><td></td></re<></td></f<>	RB=25>, <re< td=""><td>B=50&gt;]</td><td></td><td></td></re<>	B=50>]		
Channel	Channe	l 18650	Channe	l 18900	Channe	l 19150
Orianner	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:15M	Hz [ <rb=1>]</rb=1>			
Channel	Channe	l 18675	Channe	l 18900	Channe	l 19125
Oriannei	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	22.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	BV	V:15MHz [ <f< td=""><td>RB=37&gt;, <re< td=""><td>B=75&gt;]</td><td></td><td></td></re<></td></f<>	RB=37>, <re< td=""><td>B=75&gt;]</td><td></td><td></td></re<>	B=75>]		
Channel	Channe	l 18675	Channe	l 18900	Channe	l 19125
Onamo	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:20M	Hz [ <rb=1>]</rb=1>			

Channel	Channel 18700		Channel 18900		Channel 19100	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	23.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	ви	V:20MHz [ <r< td=""><td>B=50&gt;, <rb< td=""><td>=100&gt;]</td><td></td><td></td></rb<></td></r<>	B=50>, <rb< td=""><td>=100&gt;]</td><td></td><td></td></rb<>	=100>]		
Channel	Channel 18700		Channel 18900		Channel 19100	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	23.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

## LTE Band 4

		BW:1.4M	Hz [ <rb=1></rb=1>				
Channel	Channe	l 19957	Channe	l 20175	Channe	l 20393	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
	В	W:1.4MHz [<	<rb=3>, <re< td=""><td>B=6&gt;]</td><td></td><td></td></re<></rb=3>	B=6>]			
Channel	Channe	l 19957	Channe	l 20175	Channe	l 20393	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
		BW:3MF	lz [ <rb=1>]</rb=1>				
Channel	Channe	el 19965	Channe	l 20175	Channe	l 20385	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
	Е	BW:3MHz [ <f< td=""><td>RB=8&gt;, <rb=< td=""><td>=15&gt;]</td><td></td><td></td></rb=<></td></f<>	RB=8>, <rb=< td=""><td>=15&gt;]</td><td></td><td></td></rb=<>	=15>]			
Channel	Channel 19965		Channel 20175		Channel 20385		
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	24.0	22.0	21.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
		BW:5MF	lz [ <rb=1>]</rb=1>				
Channel	Channe	el 19975	Channe	Channel 20175 Channel 20375		l 20375	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
	В	W:5MHz [ <r< td=""><td>B=12&gt;, <rb< td=""><td>=25&gt;]</td><td></td><td></td></rb<></td></r<>	B=12>, <rb< td=""><td>=25&gt;]</td><td></td><td></td></rb<>	=25>]			
Channel	Channe	el 19975	Channe	l 20175	Channel 20375		
Chamer	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Target (dBm)	22.0	21.0	22.0	21.0	22.0	22.0	
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0	
BW:10MHz [ <rb=1>]</rb=1>							

	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	B\	N:10MHz [ <f< td=""><td>RB=25&gt;, <re< td=""><td>B=50&gt;]</td><td></td><td></td></re<></td></f<>	RB=25>, <re< td=""><td>B=50&gt;]</td><td></td><td></td></re<>	B=50>]		
Channel	Channe	el 20000	Channe	el 20175	Channe	l 20350
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:15M	Hz [ <rb=1>]</rb=1>	]		
Channel	Channe	el 20025	Channe	el 20175	Channe	l 20325
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	BI	N:15MHz [ <f< td=""><td>RB=37&gt;, <re< td=""><td>3=75&gt;]</td><td></td><td></td></re<></td></f<>	RB=37>, <re< td=""><td>3=75&gt;]</td><td></td><td></td></re<>	3=75>]		
Channel	Channel 20025		Channel 20175		Channel 20325	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
		BW:20M	Hz [ <rb=1>]</rb=1>	]		
Channel	Channe	el 20050	Channel 20175		Channel 20300	
Chame	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	BV	V:20MHz [ <r< td=""><td>B=50&gt;, <rb< td=""><td>=100&gt;]</td><td></td><td></td></rb<></td></r<>	B=50>, <rb< td=""><td>=100&gt;]</td><td></td><td></td></rb<>	=100>]		
Channel	Channe	el 20050	Channe	el 20175	Channel 20300	
Chame	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	22.0	22.0	22.0	22.0	22.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

## LTE Band 7

BW:5MHz [ <rb=1>]</rb=1>						
Channel	Channel 20775		Channel 21100		Channel 21425	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:5MHz [ <rb=12>, <rb=25>]</rb=25></rb=12>						
Channel	Channel 20775		Channel 21100		Channel 21425	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:10MHz [ <rb=1>]</rb=1>						
Channel	Channel 20800		Channel 21100		Channel 21400	

	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
	B\	N:10MHz [ <f< td=""><td>RB=25&gt;, <re< td=""><td>3=50&gt;]</td><td></td><td></td></re<></td></f<>	RB=25>, <re< td=""><td>3=50&gt;]</td><td></td><td></td></re<>	3=50>]		
Channel	Channel 20800		Channel 21100		Channel 21400	
Chame	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	20.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:15MHz [ <rb=1>]</rb=1>						
Channel	Channe	el 20825	Channel 21100		Channel 21375	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:15MHz [ <rb=37>, <rb=75>]</rb=75></rb=37>						
Channel	Channel 20825		Channel 21100		Channel 21375	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	20.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:20MHz [ <rb=1>]</rb=1>						
Channel	Channel 20850		Channel 21100		Channel 21350	
Channel	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	22.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0
BW:20MHz [ <rb=50>, <rb=100>]</rb=100></rb=50>						
Channel	Channe	el 20850	Channe	el 21100	Channe	l 21350
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Target (dBm)	22.0	21.0	22.0	21.0	21.0	20.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

# WiFi 2.4G

IEEE 802.11b (Average)				
Channel	Channel 1	Channel 6	Channel 11	
Target (dBm)	17.0	17.0	17.0	
Tolerance ±(dB)	1.0	1.0	1.0	
IEEE 802.11g (Average)				

Channel	Channel 1	Channel 6	Channel 11		
Target (dBm)	16.0	15.0	15.0		
Tolerance ±(dB)	1.0	1.0	1.0		
IEEE 802.11n HT20 (Average)					
Channel	Channel 1	Channel 6	Channel 11		
Target (dBm)	16.0	16.0	15.0		
Tolerance ±(dB)	1.0	1.0	1.0		
IEEE 802.11n HT40 (Average)					
Channel	Channel 3	Channel 6	Channel 9		
Target (dBm)	15.0	15.0	15.0		
Tolerance ±(dB)	1.0	1.0	1.0		

## Bluetooth V4.0

BLE-GFSK (Average)						
Channel	Channel 0	Channel 19	Channel 39			
Target (dBm)	0.0	0.0	-1.0			
Tolerance ±(dB)	1.0	1.0	1.0			
GFSK (Average)						
Channel	Channel 0	Channel 39	Channel 78			
Target (dBm)	4.0	4.0	3.0			
Tolerance ±(dB)	1.0	1.0	1.0			
8DPSK (Average)						
Channel	Channel 0	Channel 39	Channel 78			
Target (dBm)	3.0	3.0	2.0			
Tolerance ±(dB)	1.0	1.0	1.0			
π/4DQPSK (Average)						
Channel	Channel 0	Channel 39	Channel 78			
Target (dBm)	3.0	3.0	3.0			
Tolerance ±(dB)	1.0	1.0	1.0			

#### **Tune Up Procedure**

- 1. RX Gain Calibration
- a. Put DUT in test mode
- b. Put DUT in BCH mode
- c. Put DUT in selected channel band
- d. Total gain chain calibration at center ARFCN
- e. Frequency Ripple calibration
- f. Complete RX\_AGC Gain table
- 2. TX Power Calibration
- a. Put DUT in test mode
- b. Put DUT in BCH mode
- c. Put DUT in selected channel band
- d. Total gain chain calibration at center ARFCN
- e .Frequency Ripple calibration
- f .Complete TX\_APC Gain table
- 3. AFC calibration
- a. Put DUT in test mode
- b. Put DUT in selected channel mode
- c. Calibration AFC at center ARFCN
- d. Complete AFC result table