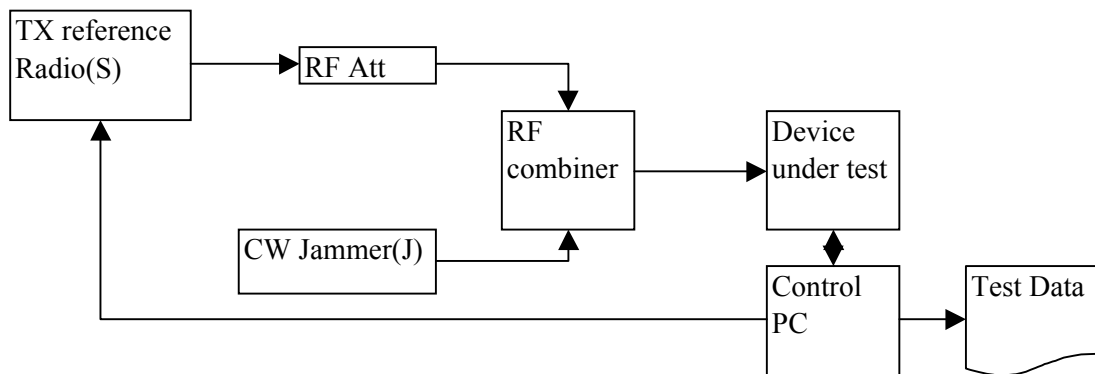


# Testing Configuration : CW Jamming Margin (15.247)(e)

## Basic Test Block Diagram



## Test Procedure

The processing gain is measured using the CW jamming margin method. A signal generator producing a CW Jammer Signal (J) is stepped in 50kHz increments across the 10MHz pass band of the system. At each point the CW Jammer Signal Generator level required to produce a Bit Error Rate equivalent to  $BER = 10E-5$  is recorded as the Jammer level (J). The output power of the TX reference Radio is fixed at -50 dBm (which is about 30.0 dB above RX sensitivity threshold) and referred to as  $M_j$  and is used to calculate the Processing Gain ( $G_p$ ) using the following formula:

$$G_p = (S/N)_o + M_j + L_{sys}$$

With:

$L_{sys} = 2.0$  dB and

$(S/N)_o$  as derived from data sheet of HFA3863 chipset.

Device Under Test	TMW1003S1
Baseband Processor	HFA3863
RF channel	ch 1 (2412MHz)
Bit Rate	11Mbps
Mj (after discarding 20% worst ones)	-7.9 dB
Gp = Mj + (S/N)o + Lsys	11.1 dB

Offset Frequency $\Delta f$ (kHz)	Processing Gain (dB)			
	ch1			
	Gp(dB)	(S/N)o	Mj=J/S	Lsys
-8500	28.1	17.0	9.1	2.0
-8450	27.9	17.0	8.9	2.0
-8400	27.8	17.0	8.8	2.0
-8350	27.8	17.0	8.8	2.0
-8300	27.6	17.0	8.6	2.0
-8250	27.1	17.0	8.1	2.0
-8200	26.8	17.0	7.8	2.0
-8150	26.9	17.0	7.9	2.0
-8100	26.7	17.0	7.7	2.0
-8050	26.4	17.0	7.4	2.0
-8000	26.1	17.0	7.1	2.0
-7950	25.9	17.0	6.9	2.0
-7900	25.7	17.0	6.7	2.0
-7850	24.8	17.0	5.8	2.0
-7800	24.3	17.0	5.3	2.0
-7750	24.0	17.0	5.0	2.0
-7700	24.1	17.0	5.1	2.0
-7650	23.9	17.0	4.9	2.0
-7600	23.5	17.0	4.5	2.0
-7550	22.5	17.0	3.5	2.0
-7500	22.4	17.0	3.4	2.0
-7450	21.9	17.0	2.9	2.0
-7400	21.9	17.0	2.9	2.0
-7350	22.0	17.0	3.0	2.0
-7300	20.5	17.0	1.5	2.0
-7250	20.0	17.0	1.0	2.0
-7200	20.0	17.0	1.0	2.0
-7150	19.5	17.0	0.5	2.0
-7100	19.4	17.0	0.4	2.0
-7050	19.5	17.0	0.5	2.0
-7000	19.3	17.0	0.3	2.0
-6950	19.1	17.0	0.1	2.0
-6900	18.9	17.0	-0.1	2.0
-6850	18.6	17.0	-0.4	2.0
-6800	18.2	17.0	-0.8	2.0
-6750	17.7	17.0	-1.3	2.0
-6700	17.7	17.0	-1.3	2.0
-6650	18.0	17.0	-1.0	2.0
-6600	17.8	17.0	-1.2	2.0
-6550	17.6	17.0	-1.4	2.0
-6500	16.7	17.0	-2.3	2.0
-6450	16.8	17.0	-2.2	2.0
-6400	17.4	17.0	-1.6	2.0
-6350	17.5	17.0	-1.5	2.0

-6300	17.0	17.0	-2.0	2.0
-6250	16.9	17.0	-2.1	2.0
-6200	17.0	17.0	-2.0	2.0
-6150	17.1	17.0	-1.9	2.0
-6100	17.0	17.0	-2.0	2.0
-6050	16.8	17.0	-2.2	2.0
-6000	16.7	17.0	-2.3	2.0
-5950	16.7	17.0	-2.3	2.0
-5900	16.7	17.0	-2.3	2.0
-5850	16.6	17.0	-2.4	2.0
-5800	16.7	17.0	-2.3	2.0
-5750	16.7	17.0	-2.3	2.0
-5700	16.1	17.0	-2.9	2.0
-5650	16.0	17.0	-3.0	2.0
-5600	16.0	17.0	-3.0	2.0
-5550	15.9	17.0	-3.1	2.0
-5500	15.1	17.0	-3.9	2.0
-5450	14.8	17.0	-4.2	2.0
-5400	14.9	17.0	-4.1	2.0
-5350	14.9	17.0	-4.1	2.0
-5300	14.8	17.0	-4.2	2.0
-5250	14.2	17.0	-4.8	2.0
-5200	14.1	17.0	-4.9	2.0
-5150	14.0	17.0	-5.0	2.0
-5100	14.0	17.0	-5.0	2.0
-5050	14.0	17.0	-5.0	2.0
-5000	14.0	17.0	-5.0	2.0
-4950	13.9	17.0	-5.1	2.0
-4900	14.0	17.0	-5.0	2.0
-4850	14.0	17.0	-5.0	2.0
-4800	13.6	17.0	-5.4	2.0
-4750	13.5	17.0	-5.5	2.0
-4700	13.6	17.0	-5.4	2.0
-4650	13.7	17.0	-5.3	2.0
-4600	13.6	17.0	-5.4	2.0
-4550	13.5	17.0	-5.5	2.0
-4500	13.6	17.0	-5.4	2.0
-4450	13.4	17.0	-5.6	2.0
-4400	13.4	17.0	-5.6	2.0
-4350	13.5	17.0	-5.5	2.0
-4300	13.3	17.0	-5.7	2.0
-4250	13.2	17.0	-5.8	2.0
-4200	13.2	17.0	-5.8	2.0
-4150	13.1	17.0	-5.9	2.0
-4100	13.1	17.0	-5.9	2.0
-4050	13.0	17.0	-6.0	2.0
-4000	13.0	17.0	-6.0	2.0
-3950	12.8	17.0	-6.2	2.0
-3900	13.0	17.0	-6.0	2.0
-3850	13.0	17.0	-6.0	2.0
-3800	12.6	17.0	-6.4	2.0
-3750	11.7	17.0	-7.3	2.0
-3700	11.7	17.0	-7.3	2.0
-3650	11.7	17.0	-7.3	2.0
-3600	11.7	17.0	-7.3	2.0

-3550	11.2	17.0	-7.8	2.0
-3500				
-3450				
-3400				
-3350				
-3300				
-3250				
-3200				
-3150				
-3100				
-3050				
-3000				
-2950				
-2900				
-2850				
-2800				
-2750				
-2700	11.2	17.0	-7.8	2.0
-2650				
-2600	11.2	17.0	-7.8	2.0
-2550				
-2500				
-2450	11.3	17.0	-7.7	2.0
-2400	11.4	17.0	-7.6	2.0
-2350	11.2	17.0	-7.8	2.0
-2300				
-2250				
-2200				
-2150				
-2100				
-2050				
-2000				
-1950				
-1900				
-1850				
-1800				
-1750				
-1700				
-1650				
-1600				
-1550				
-1500				
-1450				
-1400				
-1350				
-1300				
-1250				
-1200				
-1150	11.4	17.0	-7.6	2.0
-1100	11.2	17.0	-7.8	2.0
-1050	11.5	17.0	-7.5	2.0
-1000	11.6	17.0	-7.4	2.0
-950	11.7	17.0	-7.3	2.0
-900	11.4	17.0	-7.6	2.0
-850	11.5	17.0	-7.5	2.0

-800	11.4	17.0	-7.6	2.0
-750	11.5	17.0	-7.5	2.0
-700	11.5	17.0	-7.5	2.0
-650	11.5	17.0	-7.5	2.0
-600	11.6	17.0	-7.4	2.0
-550	11.6	17.0	-7.4	2.0
-500	13.0	17.0	-6.0	2.0
-450	12.8	17.0	-6.2	2.0
-400	12.9	17.0	-6.1	2.0
-350	12.1	17.0	-6.9	2.0
-300	11.2	17.0	-7.8	2.0
-250	11.7	17.0	-7.3	2.0
-200	11.8	17.0	-7.2	2.0
-150	11.7	17.0	-7.3	2.0
-100	11.8	17.0	-7.2	2.0
-50	11.4	17.0	-7.6	2.0
0	11.4	17.0	-7.6	2.0
50	11.4	17.0	-7.6	2.0
100	11.6	17.0	-7.4	2.0
150	11.3	17.0	-7.7	2.0
200	11.6	17.0	-7.4	2.0
250	11.6	17.0	-7.4	2.0
300	11.2	17.0	-7.8	2.0
350	11.3	17.0	-7.7	2.0
400	11.4	17.0	-7.6	2.0
450	11.2	17.0	-7.8	2.0
500	12.2	17.0	-6.8	2.0
550	12.3	17.0	-6.7	2.0
600	12.2	17.0	-6.8	2.0
650	12.3	17.0	-6.7	2.0
700	11.3	17.0	-7.7	2.0
750	11.4	17.0	-7.6	2.0
800	12.5	17.0	-6.5	2.0
850	12.3	17.0	-6.7	2.0
900	12.3	17.0	-6.7	2.0
950	12.4	17.0	-6.6	2.0
1000	12.5	17.0	-6.5	2.0
1050	12.8	17.0	-6.2	2.0
1100	12.9	17.0	-6.1	2.0
1150	12.4	17.0	-6.6	2.0
1200	12.3	17.0	-6.7	2.0
1250	12.6	17.0	-6.4	2.0
1300	12.6	17.0	-6.4	2.0
1350	12.6	17.0	-6.4	2.0
1400	12.9	17.0	-6.1	2.0
1450	11.4	17.0	-7.6	2.0
1500	11.3	17.0	-7.7	2.0
1550	11.4	17.0	-7.6	2.0
1600	11.4	17.0	-7.6	2.0
1650	11.6	17.0	-7.4	2.0
1700	11.9	17.0	-7.1	2.0
1750	11.4	17.0	-7.6	2.0
1800				
1850				
1900	11.1	17.0	-7.9	2.0

1950				
2000				
2050				
2100				
2150				
2200				
2250				
2300	11.2	17.0	-7.8	2.0
2350	11.3	17.0	-7.7	2.0
2400	11.3	17.0	-7.7	2.0
2450	11.4	17.0	-7.6	2.0
2500	11.5	17.0	-7.5	2.0
2550	11.4	17.0	-7.6	2.0
2600	11.4	17.0	-7.6	2.0
2650	11.8	17.0	-7.2	2.0
2700	11.8	17.0	-7.2	2.0
2750	11.7	17.0	-7.3	2.0
2800	12.0	17.0	-7.0	2.0
2850	11.9	17.0	-7.1	2.0
2900	11.9	17.0	-7.1	2.0
2950	12.3	17.0	-6.7	2.0
3000	12.5	17.0	-6.5	2.0
3050	12.3	17.0	-6.7	2.0
3100	12.2	17.0	-6.8	2.0
3150	12.2	17.0	-6.8	2.0
3200	12.3	17.0	-6.7	2.0
3250	12.2	17.0	-6.8	2.0
3300	12.1	17.0	-6.9	2.0
3350	12.4	17.0	-6.6	2.0
3400	11.5	17.0	-7.5	2.0
3450	11.5	17.0	-7.5	2.0
3500	11.3	17.0	-7.7	2.0
3550	11.3	17.0	-7.7	2.0
3600	11.3	17.0	-7.7	2.0
3650				
3700				
3750				
3800				
3850				
3900				
3950				
4000				
4050				
4100				
4150				
4200				
4250				
4300				
4350				
4400				
4450				
4500				
4550	11.9	17.0	-7.1	2.0
4600	12.0	17.0	-7.0	2.0
4650	12.0	17.0	-7.0	2.0

4700	11.9	17.0	-7.1	2.0
4750	12.0	17.0	-7.0	2.0
4800	12.0	17.0	-7.0	2.0
4850	12.3	17.0	-6.7	2.0
4900	12.4	17.0	-6.6	2.0
4950	12.4	17.0	-6.6	2.0
5000	12.5	17.0	-6.5	2.0
5050	12.7	17.0	-6.3	2.0
5100	12.9	17.0	-6.1	2.0
5150	13.0	17.0	-6.0	2.0
5200	13.7	17.0	-5.3	2.0
5250	13.5	17.0	-5.5	2.0
5300	13.3	17.0	-5.7	2.0
5350	13.3	17.0	-5.7	2.0
5400	13.5	17.0	-5.5	2.0
5450	13.4	17.0	-5.6	2.0
5500	13.4	17.0	-5.6	2.0
5550	13.2	17.0	-5.8	2.0
5600	13.7	17.0	-5.3	2.0
5650	13.8	17.0	-5.2	2.0
5700	13.6	17.0	-5.4	2.0
5750	13.7	17.0	-5.3	2.0
5800	13.7	17.0	-5.3	2.0
5850	13.7	17.0	-5.3	2.0
5900	13.7	17.0	-5.3	2.0
5950	14.3	17.0	-4.7	2.0
6000	14.2	17.0	-4.8	2.0
6050	14.1	17.0	-4.9	2.0
6100	14.1	17.0	-4.9	2.0
6150	14.0	17.0	-5.0	2.0
6200	14.1	17.0	-4.9	2.0
6250	14.0	17.0	-5.0	2.0
6300	14.6	17.0	-4.4	2.0
6350	15.3	17.0	-3.7	2.0
6400	15.2	17.0	-3.8	2.0
6450	15.1	17.0	-3.9	2.0
6500	15.0	17.0	-4.0	2.0
6550	15.0	17.0	-4.0	2.0
6600	15.5	17.0	-3.5	2.0
6650	16.2	17.0	-2.8	2.0
6700	16.1	17.0	-2.9	2.0
6750	16.2	17.0	-2.8	2.0
6800	16.4	17.0	-2.6	2.0
6850	16.9	17.0	-2.1	2.0
6900	17.0	17.0	-2.0	2.0
6950	17.4	17.0	-1.6	2.0
7000	17.5	17.0	-1.5	2.0
7050	17.6	17.0	-1.4	2.0
7100	18.7	17.0	-0.3	2.0
7150	18.5	17.0	-0.5	2.0
7200	18.5	17.0	-0.5	2.0
7250	18.4	17.0	-0.6	2.0
7300	18.4	17.0	-0.6	2.0
7350	19.2	17.0	0.2	2.0
7400	19.9	17.0	0.9	2.0

7450	19.7	17.0	0.7	2.0
7500	19.9	17.0	0.9	2.0
7550	20.0	17.0	1.0	2.0
7600	20.1	17.0	1.1	2.0
7650	20.4	17.0	1.4	2.0
7700	20.8	17.0	1.8	2.0
7750	21.1	17.0	2.1	2.0
7800	21.5	17.0	2.5	2.0
7850	22.4	17.0	3.4	2.0
7900	22.7	17.0	3.7	2.0
7950	22.7	17.0	3.7	2.0
8000	23.6	17.0	4.6	2.0
8050	24.2	17.0	5.2	2.0
8100	24.2	17.0	5.2	2.0
8150	24.3	17.0	5.3	2.0
8200	24.8	17.0	5.8	2.0
8250	25.3	17.0	6.3	2.0
8300	26.4	17.0	7.4	2.0
8350	27.0	17.0	8.0	2.0
8400	27.1	17.0	8.1	2.0
8450	27.5	17.0	8.5	2.0
8500	28.2	17.0	9.2	2.0
Min.	11.1		-7.9	



Device Under Test	TMW1003S1
Baseband Processor	HFA3863
RF channel	ch 6 (2437MHz)
Bit Rate	11Mbps
Mj (after discarding 20% worst ones)	-7.9 dB
Gp = Mj + (S/N)o + Lsys	11.1 dB

Offset Frequency $\Delta f$ (kHz)	Processing Gain (dB)			
	ch6			
	Gp(dB)	(S/N)o	Mj=J/S	Lsys
-8500	26.9	17.0	7.9	2.0
-8450	26.9	17.0	7.9	2.0
-8400	26.7	17.0	7.7	2.0
-8350	26.8	17.0	7.8	2.0
-8300	26.7	17.0	7.7	2.0
-8250	26.1	17.0	7.1	2.0
-8200	26.0	17.0	7.0	2.0
-8150	26.0	17.0	7.0	2.0
-8100	26.0	17.0	7.0	2.0
-8050	25.6	17.0	6.6	2.0
-8000	25.0	17.0	6.0	2.0
-7950	24.4	17.0	5.4	2.0
-7900	24.5	17.0	5.5	2.0
-7850	23.8	17.0	4.8	2.0
-7800	23.4	17.0	4.4	2.0
-7750	23.2	17.0	4.2	2.0
-7700	23.1	17.0	4.1	2.0
-7650	23.1	17.0	4.1	2.0
-7600	22.3	17.0	3.3	2.0
-7550	22.1	17.0	3.1	2.0
-7500	21.8	17.0	2.8	2.0
-7450	21.5	17.0	2.5	2.0
-7400	21.1	17.0	2.1	2.0
-7350	20.4	17.0	1.4	2.0
-7300	19.5	17.0	0.5	2.0
-7250	19.3	17.0	0.3	2.0
-7200	19.2	17.0	0.2	2.0
-7150	19.3	17.0	0.3	2.0
-7100	19.4	17.0	0.4	2.0
-7050	19.2	17.0	0.2	2.0
-7000	18.9	17.0	-0.1	2.0
-6950	18.4	17.0	-0.6	2.0
-6900	18.1	17.0	-0.9	2.0
-6850	17.5	17.0	-1.5	2.0
-6800	17.5	17.0	-1.5	2.0
-6750	17.4	17.0	-1.6	2.0
-6700	17.3	17.0	-1.7	2.0
-6650	17.0	17.0	-2.0	2.0
-6600	16.8	17.0	-2.2	2.0
-6550	16.6	17.0	-2.4	2.0
-6500	16.3	17.0	-2.7	2.0
-6450	16.4	17.0	-2.6	2.0
-6400	16.6	17.0	-2.4	2.0
-6350	16.9	17.0	-2.1	2.0

-6300	16.3	17.0	-2.7	2.0
-6250	16.1	17.0	-2.9	2.0
-6200	16.2	17.0	-2.8	2.0
-6150	16.3	17.0	-2.7	2.0
-6100	16.5	17.0	-2.5	2.0
-6050	16.3	17.0	-2.7	2.0
-6000	16.1	17.0	-2.9	2.0
-5950	16.2	17.0	-2.8	2.0
-5900	16.0	17.0	-3.0	2.0
-5850	16.1	17.0	-2.9	2.0
-5800	15.7	17.0	-3.3	2.0
-5750	15.6	17.0	-3.4	2.0
-5700	15.7	17.0	-3.3	2.0
-5650	15.5	17.0	-3.5	2.0
-5600	15.4	17.0	-3.6	2.0
-5550	15.2	17.0	-3.8	2.0
-5500	14.7	17.0	-4.3	2.0
-5450	14.6	17.0	-4.4	2.0
-5400	14.6	17.0	-4.4	2.0
-5350	14.5	17.0	-4.5	2.0
-5300	14.2	17.0	-4.8	2.0
-5250	14.2	17.0	-4.8	2.0
-5200	13.8	17.0	-5.2	2.0
-5150	14.0	17.0	-5.0	2.0
-5100	14.0	17.0	-5.0	2.0
-5050	14.2	17.0	-4.8	2.0
-5000	13.5	17.0	-5.5	2.0
-4950	13.4	17.0	-5.6	2.0
-4900	13.5	17.0	-5.5	2.0
-4850	13.6	17.0	-5.4	2.0
-4800	13.5	17.0	-5.5	2.0
-4750	13.4	17.0	-5.6	2.0
-4700	13.5	17.0	-5.5	2.0
-4650	13.7	17.0	-5.3	2.0
-4600	13.6	17.0	-5.4	2.0
-4550	13.4	17.0	-5.6	2.0
-4500	13.3	17.0	-5.7	2.0
-4450	13.1	17.0	-5.9	2.0
-4400	13.2	17.0	-5.8	2.0
-4350	13.1	17.0	-5.9	2.0
-4300	13.1	17.0	-5.9	2.0
-4250	12.9	17.0	-6.1	2.0
-4200	13.2	17.0	-5.8	2.0
-4150	13.4	17.0	-5.6	2.0
-4100	12.4	17.0	-6.6	2.0
-4050	12.3	17.0	-6.7	2.0
-4000	12.5	17.0	-6.5	2.0
-3950	12.5	17.0	-6.5	2.0
-3900	12.8	17.0	-6.2	2.0
-3850	12.7	17.0	-6.3	2.0
-3800	12.7	17.0	-6.3	2.0
-3750	12.1	17.0	-6.9	2.0
-3700	12.0	17.0	-7.0	2.0
-3650	12.3	17.0	-6.7	2.0
-3600	12.1	17.0	-6.9	2.0

-3550	11.4	17.0	-7.6	2.0
-3500	11.2	17.0	-7.8	2.0
-3450				
-3400				
-3350				
-3300				
-3250				
-3200				
-3150				
-3100				
-3050				
-3000				
-2950	11.3	17.0	-7.7	2.0
-2900	11.3	17.0	-7.7	2.0
-2850	11.1	17.0	-7.9	2.0
-2800	11.1	17.0	-7.9	2.0
-2750	11.2	17.0	-7.8	2.0
-2700	11.2	17.0	-7.8	2.0
-2650	11.3	17.0	-7.7	2.0
-2600				
-2550	11.2	17.0	-7.8	2.0
-2500	11.4	17.0	-7.6	2.0
-2450	11.5	17.0	-7.5	2.0
-2400	11.2	17.0	-7.8	2.0
-2350	11.2	17.0	-7.8	2.0
-2300	11.3	17.0	-7.7	2.0
-2250				
-2200				
-2150				
-2100				
-2050				
-2000				
-1950				
-1900				
-1850				
-1800				
-1750				
-1700				
-1650				
-1600				
-1550				
-1500				
-1450				
-1400				
-1350				
-1300				
-1250				
-1200				
-1150				
-1100	11.4	17.0	-7.6	2.0
-1050	11.8	17.0	-7.2	2.0
-1000	11.8	17.0	-7.2	2.0
-950	11.8	17.0	-7.2	2.0
-900	11.8	17.0	-7.2	2.0
-850	12.4	17.0	-6.6	2.0

-800	12.2	17.0	-6.8	2.0
-750	11.9	17.0	-7.1	2.0
-700	12.1	17.0	-6.9	2.0
-650	12.0	17.0	-7.0	2.0
-600	11.9	17.0	-7.1	2.0
-550	12.2	17.0	-6.8	2.0
-500	12.4	17.0	-6.6	2.0
-450	12.8	17.0	-6.2	2.0
-400	12.9	17.0	-6.1	2.0
-350	12.4	17.0	-6.6	2.0
-300				
-250	12.0	17.0	-7.0	2.0
-200	12.1	17.0	-6.9	2.0
-150	12.1	17.0	-6.9	2.0
-100	12.2	17.0	-6.8	2.0
-50	11.9	17.0	-7.1	2.0
0	11.7	17.0	-7.3	2.0
50	11.5	17.0	-7.5	2.0
100	12.0	17.0	-7.0	2.0
150	11.9	17.0	-7.1	2.0
200	11.9	17.0	-7.1	2.0
250	11.8	17.0	-7.2	2.0
300	11.6	17.0	-7.4	2.0
350	11.7	17.0	-7.3	2.0
400	11.4	17.0	-7.6	2.0
450	11.5	17.0	-7.5	2.0
500	12.0	17.0	-7.0	2.0
550	12.1	17.0	-6.9	2.0
600	12.2	17.0	-6.8	2.0
650	12.1	17.0	-6.9	2.0
700				
750				
800	11.9	17.0	-7.1	2.0
850	11.9	17.0	-7.1	2.0
900	12.3	17.0	-6.7	2.0
950	12.1	17.0	-6.9	2.0
1000	12.3	17.0	-6.7	2.0
1050	12.6	17.0	-6.4	2.0
1100	12.6	17.0	-6.4	2.0
1150	12.1	17.0	-6.9	2.0
1200	12.2	17.0	-6.8	2.0
1250	12.4	17.0	-6.6	2.0
1300	12.3	17.0	-6.7	2.0
1350	12.3	17.0	-6.7	2.0
1400	12.6	17.0	-6.4	2.0
1450	11.5	17.0	-7.5	2.0
1500	11.4	17.0	-7.6	2.0
1550	11.6	17.0	-7.4	2.0
1600	11.5	17.0	-7.5	2.0
1650	12.3	17.0	-6.7	2.0
1700	12.1	17.0	-6.9	2.0
1750				
1800				
1850				
1900				

1950				
2000				
2050				
2100				
2150				
2200				
2250				
2300	11.7	17.0	-7.3	2.0
2350	11.5	17.0	-7.5	2.0
2400	11.3	17.0	-7.7	2.0
2450				
2500				
2550				
2600				
2650	12.1	17.0	-6.9	2.0
2700	11.9	17.0	-7.1	2.0
2750	12.1	17.0	-6.9	2.0
2800	12.1	17.0	-6.9	2.0
2850	11.9	17.0	-7.1	2.0
2900	11.9	17.0	-7.1	2.0
2950	11.9	17.0	-7.1	2.0
3000	12.2	17.0	-6.8	2.0
3050	12.3	17.0	-6.7	2.0
3100	12.6	17.0	-6.4	2.0
3150	12.9	17.0	-6.1	2.0
3200	12.4	17.0	-6.6	2.0
3250	12.0	17.0	-7.0	2.0
3300	11.9	17.0	-7.1	2.0
3350	12.5	17.0	-6.5	2.0
3400	12.1	17.0	-6.9	2.0
3450	12.1	17.0	-6.9	2.0
3500				
3550				
3600	11.2	17.0	-7.8	2.0
3650	11.2	17.0	-7.8	2.0
3700				
3750				
3800				
3850				
3900				
3950				
4000				
4050				
4100				
4150				
4200				
4250				
4300	11.3	17.0	-7.7	2.0
4350	11.4	17.0	-7.6	2.0
4400	11.2	17.0	-7.8	2.0
4450				
4500				
4550	11.3	17.0	-7.7	2.0
4600	12.7	17.0	-6.3	2.0
4650	12.9	17.0	-6.1	2.0

4700	12.5	17.0	-6.5	2.0
4750	12.5	17.0	-6.5	2.0
4800	12.6	17.0	-6.4	2.0
4850	12.9	17.0	-6.1	2.0
4900	12.8	17.0	-6.2	2.0
4950	12.9	17.0	-6.1	2.0
5000	12.9	17.0	-6.1	2.0
5050	13.2	17.0	-5.8	2.0
5100	13.3	17.0	-5.7	2.0
5150	13.5	17.0	-5.5	2.0
5200	13.9	17.0	-5.1	2.0
5250	13.6	17.0	-5.4	2.0
5300	13.6	17.0	-5.4	2.0
5350	13.8	17.0	-5.2	2.0
5400	13.9	17.0	-5.1	2.0
5450	13.8	17.0	-5.2	2.0
5500	13.3	17.0	-5.7	2.0
5550	13.6	17.0	-5.4	2.0
5600	14.0	17.0	-5.0	2.0
5650	14.1	17.0	-4.9	2.0
5700	14.0	17.0	-5.0	2.0
5750	13.9	17.0	-5.1	2.0
5800	13.8	17.0	-5.2	2.0
5850	13.8	17.0	-5.2	2.0
5900	14.2	17.0	-4.8	2.0
5950	14.3	17.0	-4.7	2.0
6000	14.4	17.0	-4.6	2.0
6050	14.7	17.0	-4.3	2.0
6100	14.9	17.0	-4.1	2.0
6150	14.9	17.0	-4.1	2.0
6200	14.7	17.0	-4.3	2.0
6250	14.9	17.0	-4.1	2.0
6300	14.8	17.0	-4.2	2.0
6350	16.0	17.0	-3.0	2.0
6400	16.2	17.0	-2.8	2.0
6450	15.4	17.0	-3.6	2.0
6500	15.2	17.0	-3.8	2.0
6550	15.6	17.0	-3.4	2.0
6600	16.2	17.0	-2.8	2.0
6650	16.9	17.0	-2.1	2.0
6700	17.0	17.0	-2.0	2.0
6750	17.1	17.0	-1.9	2.0
6800	17.1	17.0	-1.9	2.0
6850	17.7	17.0	-1.3	2.0
6900	17.6	17.0	-1.4	2.0
6950	17.7	17.0	-1.3	2.0
7000	18.1	17.0	-0.9	2.0
7050	18.4	17.0	-0.6	2.0
7100	18.8	17.0	-0.2	2.0
7150	18.8	17.0	-0.2	2.0
7200	19.2	17.0	0.2	2.0
7250	18.9	17.0	-0.1	2.0
7300	19.2	17.0	0.2	2.0
7350	20.4	17.0	1.4	2.0
7400	20.3	17.0	1.3	2.0

7450	20.6	17.0	1.6	2.0
7500	20.6	17.0	1.6	2.0
7550	20.6	17.0	1.6	2.0
7600	20.8	17.0	1.8	2.0
7650	21.1	17.0	2.1	2.0
7700	21.3	17.0	2.3	2.0
7750	21.3	17.0	2.3	2.0
7800	21.7	17.0	2.7	2.0
7850	22.9	17.0	3.9	2.0
7900	23.4	17.0	4.4	2.0
7950	23.7	17.0	4.7	2.0
8000	23.6	17.0	4.6	2.0
8050	24.1	17.0	5.1	2.0
8100	24.8	17.0	5.8	2.0
8150	25.6	17.0	6.6	2.0
8200	25.7	17.0	6.7	2.0
8250	25.8	17.0	6.8	2.0
8300	26.8	17.0	7.8	2.0
8350	26.9	17.0	7.9	2.0
8400	27.0	17.0	8.0	2.0
8450	28.1	17.0	9.1	2.0
8500	28.7	17.0	9.7	2.0
Min.	11.1		-7.9	

Device Under Test	TMW1003S1
Baseband Processor	HFA3863
RF channel	ch 11 (2462MHz)
Bit Rate	11Mbps
Mj (after discarding 20% worst ones)	-8.1 dB
Gp = Mj + (S/N)o + Lsys	10.9 dB

Offset Frequency $\Delta f$ (kHz)	Processing Gain (dB)			
	ch11			
	Gp(dB)	(S/N)o	Mj=J/S	Lsys
-8500	26.6	17.0	7.6	2.0
-8450	26.5	17.0	7.5	2.0
-8400	26.5	17.0	7.5	2.0
-8350	26.4	17.0	7.4	2.0
-8300	26.0	17.0	7.0	2.0
-8250	25.7	17.0	6.7	2.0
-8200	25.6	17.0	6.6	2.0
-8150	25.5	17.0	6.5	2.0
-8100	25.4	17.0	6.4	2.0
-8050	25.2	17.0	6.2	2.0
-8000	24.6	17.0	5.6	2.0
-7950	24.2	17.0	5.2	2.0
-7900	24.2	17.0	5.2	2.0
-7850	23.5	17.0	4.5	2.0
-7800	23.2	17.0	4.2	2.0
-7750	22.5	17.0	3.5	2.0
-7700	22.5	17.0	3.5	2.0
-7650	22.2	17.0	3.2	2.0
-7600	21.7	17.0	2.7	2.0
-7550	21.3	17.0	2.3	2.0
-7500	20.5	17.0	1.5	2.0
-7450	20.4	17.0	1.4	2.0
-7400	20.5	17.0	1.5	2.0
-7350	20.2	17.0	1.2	2.0
-7300	19.3	17.0	0.3	2.0
-7250	18.3	17.0	-0.7	2.0
-7200	18.4	17.0	-0.6	2.0
-7150	18.4	17.0	-0.6	2.0
-7100	18.4	17.0	-0.6	2.0
-7050	18.3	17.0	-0.7	2.0
-7000	18.2	17.0	-0.8	2.0
-6950	17.4	17.0	-1.6	2.0
-6900	17.5	17.0	-1.5	2.0
-6850	16.9	17.0	-2.1	2.0
-6800	16.7	17.0	-2.3	2.0
-6750	16.6	17.0	-2.4	2.0
-6700	16.6	17.0	-2.4	2.0
-6650	16.8	17.0	-2.2	2.0
-6600	16.7	17.0	-2.3	2.0
-6550	16.5	17.0	-2.5	2.0
-6500	16.2	17.0	-2.8	2.0
-6450	15.9	17.0	-3.1	2.0
-6400	16.2	17.0	-2.8	2.0
-6350	16.4	17.0	-2.6	2.0



-6300	15.6	17.0	-3.4	2.0
-6250	15.7	17.0	-3.3	2.0
-6200	15.7	17.0	-3.3	2.0
-6150	16.1	17.0	-2.9	2.0
-6100	16.0	17.0	-3.0	2.0
-6050	15.7	17.0	-3.3	2.0
-6000	15.6	17.0	-3.4	2.0
-5950	15.6	17.0	-3.4	2.0
-5900	15.6	17.0	-3.4	2.0
-5850	15.5	17.0	-3.5	2.0
-5800	15.5	17.0	-3.5	2.0
-5750	15.4	17.0	-3.6	2.0
-5700	15.1	17.0	-3.9	2.0
-5650	14.8	17.0	-4.2	2.0
-5600	14.9	17.0	-4.1	2.0
-5550	14.4	17.0	-4.6	2.0
-5500	13.9	17.0	-5.1	2.0
-5450	13.8	17.0	-5.2	2.0
-5400	13.9	17.0	-5.1	2.0
-5350	13.7	17.0	-5.3	2.0
-5300	13.6	17.0	-5.4	2.0
-5250	13.7	17.0	-5.3	2.0
-5200	13.1	17.0	-5.9	2.0
-5150	13.0	17.0	-6.0	2.0
-5100	13.2	17.0	-5.8	2.0
-5050	13.3	17.0	-5.7	2.0
-5000	13.1	17.0	-5.9	2.0
-4950	13.1	17.0	-5.9	2.0
-4900	13.1	17.0	-5.9	2.0
-4850	13.1	17.0	-5.9	2.0
-4800	13.2	17.0	-5.8	2.0
-4750	13.0	17.0	-6.0	2.0
-4700	13.1	17.0	-5.9	2.0
-4650	13.1	17.0	-5.9	2.0
-4600	12.9	17.0	-6.1	2.0
-4550	12.8	17.0	-6.2	2.0
-4500	12.5	17.0	-6.5	2.0
-4450	12.5	17.0	-6.5	2.0
-4400	12.4	17.0	-6.6	2.0
-4350	12.5	17.0	-6.5	2.0
-4300	12.2	17.0	-6.8	2.0
-4250	12.3	17.0	-6.7	2.0
-4200	12.5	17.0	-6.5	2.0
-4150	12.5	17.0	-6.5	2.0
-4100	12.0	17.0	-7.0	2.0
-4050	12.0	17.0	-7.0	2.0
-4000	11.9	17.0	-7.1	2.0
-3950	11.8	17.0	-7.2	2.0
-3900	12.0	17.0	-7.0	2.0
-3850	12.1	17.0	-6.9	2.0
-3800	11.9	17.0	-7.1	2.0
-3750	11.5	17.0	-7.5	2.0
-3700	11.7	17.0	-7.3	2.0
-3650	11.7	17.0	-7.3	2.0
-3600	11.3	17.0	-7.7	2.0

-3550				
-3500				
-3450				
-3400				
-3350				
-3300				
-3250				
-3200				
-3150				
-3100				
-3050				
-3000				
-2950				
-2900				
-2850				
-2800				
-2750				
-2700				
-2650				
-2600				
-2550				
-2500				
-2450				
-2400				
-2350				
-2300				
-2250				
-2200				
-2150				
-2100				
-2050				
-2000				
-1950				
-1900				
-1850				
-1800				
-1750				
-1700				
-1650				
-1600				
-1550				
-1500				
-1450				
-1400				
-1350				
-1300				
-1250				
-1200				
-1150				
-1100				
-1050	11.0	17.0	-8.0	2.0
-1000	11.2	17.0	-7.8	2.0
-950	11.5	17.0	-7.5	2.0
-900	11.4	17.0	-7.6	2.0
-850	11.7	17.0	-7.3	2.0

-800	11.4	17.0	-7.6	2.0
-750	11.6	17.0	-7.4	2.0
-700	11.6	17.0	-7.4	2.0
-650	11.5	17.0	-7.5	2.0
-600	11.5	17.0	-7.5	2.0
-550	11.9	17.0	-7.1	2.0
-500	12.3	17.0	-6.7	2.0
-450	12.8	17.0	-6.2	2.0
-400	12.8	17.0	-6.2	2.0
-350	12.3	17.0	-6.7	2.0
-300				
-250	11.5	17.0	-7.5	2.0
-200	11.7	17.0	-7.3	2.0
-150	11.7	17.0	-7.3	2.0
-100	11.5	17.0	-7.5	2.0
-50	11.5	17.0	-7.5	2.0
0	11.3	17.0	-7.7	2.0
50	11.1	17.0	-7.9	2.0
100	11.3	17.0	-7.7	2.0
150	11.3	17.0	-7.7	2.0
200	11.1	17.0	-7.9	2.0
250	11.3	17.0	-7.7	2.0
300	11.2	17.0	-7.8	2.0
350	11.5	17.0	-7.5	2.0
400	11.3	17.0	-7.7	2.0
450	11.4	17.0	-7.6	2.0
500	11.9	17.0	-7.1	2.0
550	11.9	17.0	-7.1	2.0
600	11.7	17.0	-7.3	2.0
650	12.1	17.0	-6.9	2.0
700	11.4	17.0	-7.6	2.0
750	11.4	17.0	-7.6	2.0
800	11.3	17.0	-7.7	2.0
850	12.2	17.0	-6.8	2.0
900	12.2	17.0	-6.8	2.0
950	12.0	17.0	-7.0	2.0
1000	12.1	17.0	-6.9	2.0
1050	12.2	17.0	-6.8	2.0
1100	12.1	17.0	-6.9	2.0
1150	13.1	17.0	-5.9	2.0
1200	12.5	17.0	-6.5	2.0
1250	12.6	17.0	-6.4	2.0
1300	12.5	17.0	-6.5	2.0
1350	12.4	17.0	-6.6	2.0
1400	12.4	17.0	-6.6	2.0
1450	11.9	17.0	-7.1	2.0
1500	11.7	17.0	-7.3	2.0
1550	11.7	17.0	-7.3	2.0
1600	11.4	17.0	-7.6	2.0
1650	11.9	17.0	-7.1	2.0
1700	11.1	17.0	-7.9	2.0
1750	11.0	17.0	-8.0	2.0
1800				
1850				
1900				

1950				
2000				
2050				
2100				
2150				
2200				
2250				
2300	11.4	17.0	-7.6	2.0
2350	11.2	17.0	-7.8	2.0
2400	11.2	17.0	-7.8	2.0
2450	11.2	17.0	-7.8	2.0
2500	11.0	17.0	-8.0	2.0
2550	11.1	17.0	-7.9	2.0
2600	11.1	17.0	-7.9	2.0
2650	11.6	17.0	-7.4	2.0
2700	11.6	17.0	-7.4	2.0
2750	11.8	17.0	-7.2	2.0
2800	12.0	17.0	-7.0	2.0
2850	12.1	17.0	-6.9	2.0
2900	12.0	17.0	-7.0	2.0
2950	11.9	17.0	-7.1	2.0
3000	12.2	17.0	-6.8	2.0
3050	12.2	17.0	-6.8	2.0
3100	12.6	17.0	-6.4	2.0
3150	12.7	17.0	-6.3	2.0
3200	12.6	17.0	-6.4	2.0
3250	12.5	17.0	-6.5	2.0
3300	12.2	17.0	-6.8	2.0
3350	12.3	17.0	-6.7	2.0
3400	11.9	17.0	-7.1	2.0
3450	11.8	17.0	-7.2	2.0
3500				
3550	11.8	17.0	-7.2	2.0
3600	11.6	17.0	-7.4	2.0
3650	11.1	17.0	-7.9	2.0
3700	10.9	17.0	-8.1	2.0
3750	10.9	17.0	-8.1	2.0
3800	11.0	17.0	-8.0	2.0
3850	11.0	17.0	-8.0	2.0
3900				
3950	11.1	17.0	-7.9	2.0
4000	11.1	17.0	-7.9	2.0
4050				
4100				
4150				
4200				
4250				
4300	11.0	17.0	-8.0	2.0
4350	11.2	17.0	-7.8	2.0
4400	11.1	17.0	-7.9	2.0
4450	11.4	17.0	-7.6	2.0
4500	11.4	17.0	-7.6	2.0
4550	11.6	17.0	-7.4	2.0
4600	11.9	17.0	-7.1	2.0
4650	13.2	17.0	-5.8	2.0

4700	12.4	17.0	-6.6	2.0
4750	12.2	17.0	-6.8	2.0
4800	12.2	17.0	-6.8	2.0
4850	12.8	17.0	-6.2	2.0
4900	13.0	17.0	-6.0	2.0
4950	12.4	17.0	-6.6	2.0
5000	12.8	17.0	-6.2	2.0
5050	13.1	17.0	-5.9	2.0
5100	13.3	17.0	-5.7	2.0
5150	13.3	17.0	-5.7	2.0
5200	13.6	17.0	-5.4	2.0
5250	13.6	17.0	-5.4	2.0
5300	13.7	17.0	-5.3	2.0
5350	13.8	17.0	-5.2	2.0
5400	13.9	17.0	-5.1	2.0
5450	13.8	17.0	-5.2	2.0
5500	13.9	17.0	-5.1	2.0
5550	14.0	17.0	-5.0	2.0
5600	13.9	17.0	-5.1	2.0
5650	13.9	17.0	-5.1	2.0
5700	13.8	17.0	-5.2	2.0
5750	14.1	17.0	-4.9	2.0
5800	14.0	17.0	-5.0	2.0
5850	14.0	17.0	-5.0	2.0
5900	14.4	17.0	-4.6	2.0
5950	14.7	17.0	-4.3	2.0
6000	14.8	17.0	-4.2	2.0
6050	14.7	17.0	-4.3	2.0
6100	15.0	17.0	-4.0	2.0
6150	15.0	17.0	-4.0	2.0
6200	15.0	17.0	-4.0	2.0
6250	15.1	17.0	-3.9	2.0
6300	15.4	17.0	-3.6	2.0
6350	15.9	17.0	-3.1	2.0
6400	15.8	17.0	-3.2	2.0
6450	15.7	17.0	-3.3	2.0
6500	15.6	17.0	-3.4	2.0
6550	16.3	17.0	-2.7	2.0
6600	16.3	17.0	-2.7	2.0
6650	16.9	17.0	-2.1	2.0
6700	16.8	17.0	-2.2	2.0
6750	16.9	17.0	-2.1	2.0
6800	18.3	17.0	-0.7	2.0
6850	18.2	17.0	-0.8	2.0
6900	18.0	17.0	-1.0	2.0
6950	18.2	17.0	-0.8	2.0
7000	18.1	17.0	-0.9	2.0
7050	18.3	17.0	-0.7	2.0
7100	18.5	17.0	-0.5	2.0
7150	19.3	17.0	0.3	2.0
7200	19.2	17.0	0.2	2.0
7250	19.3	17.0	0.3	2.0
7300	19.5	17.0	0.5	2.0
7350	19.5	17.0	0.5	2.0
7400	19.8	17.0	0.8	2.0

7450	20.1	17.0	1.1	2.0
7500	20.6	17.0	1.6	2.0
7550	20.5	17.0	1.5	2.0
7600	21.2	17.0	2.2	2.0
7650	22.2	17.0	3.2	2.0
7700	22.0	17.0	3.0	2.0
7750	22.1	17.0	3.1	2.0
7800	23.0	17.0	4.0	2.0
7850	23.2	17.0	4.2	2.0
7900	23.4	17.0	4.4	2.0
7950	23.5	17.0	4.5	2.0
8000	24.6	17.0	5.6	2.0
8050	25.3	17.0	6.3	2.0
8100	25.3	17.0	6.3	2.0
8150	25.8	17.0	6.8	2.0
8200	25.7	17.0	6.7	2.0
8250	26.1	17.0	7.1	2.0
8300	26.9	17.0	7.9	2.0
8350	27.8	17.0	8.8	2.0
8400	28.2	17.0	9.2	2.0
8450	28.5	17.0	9.5	2.0
8500	28.7	17.0	9.7	2.0
Min.	10.9		-8.1	