

ANNEX 1 PROCESSING GAIN OF DIRECT SEQUENCE SPREAD SPECTRUM MEASUREMENT

1. LIMITS OF PROCESSING GAIN OF A DIRECT SEQUENCE SPREAD SPECTRUM MEASUREMENT

The limit of processing gain is 10dB

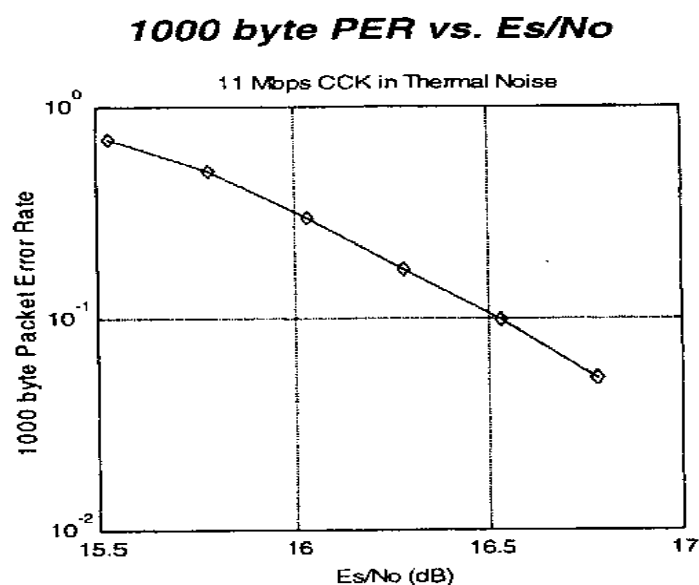
1.1 TEST INSTRUMENTS & SUPPORT UNIT

Description & Manufacturer	Model No.	Serial No.
Anritsu Spectrum Analyzer, 9kHz to 30GHz	MS2667C	M10281
Anritsu Signal Generator, 10kHz to 20GHz	68247B	984703
Hewlett Packard Power Meter,	HP438A	2743A04416
Hewlett Packard Power Sensor, -30 to 20dBm	8485A	2942A08387
Hewlett Packard Step Attenuator, 10dB steps	HP8496B	3247A18505
Mini-Circuits Power Splitter	ZN2PD-9G	NA
DELL Laptop Computer	Inspiron 5000e	NA
Campaq Laptop Computer	PPX	99125

1.2 METHOD OF MEASUREMENT

The processing gain may be measured using the CW jamming margin method. Section 4.7.4 shows the test configuration. The test consists of stepping a signal generator in 50 kHz increments across the passband of the system. At each point, the generator level required to produce the recommended Bit Error Rate (BER) is recorded. This level is jammer level. The output power of the transmitting unit is measured at the same point. The jammer to Signal (J/S) ratio is then calculated. Discard the worst 20% of the J/S data points. The lowest remaining J/S ratio is used when calculating the Process Gain.

The reference PER is specified as 8%. The corresponding Es/No (signal to noise ratio per symbol) is 16.4 dB. The curve is attached as below.



This value and the measured J/S ratio are used in the following equation to calculate the Process Gain (G_p) of the system.

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

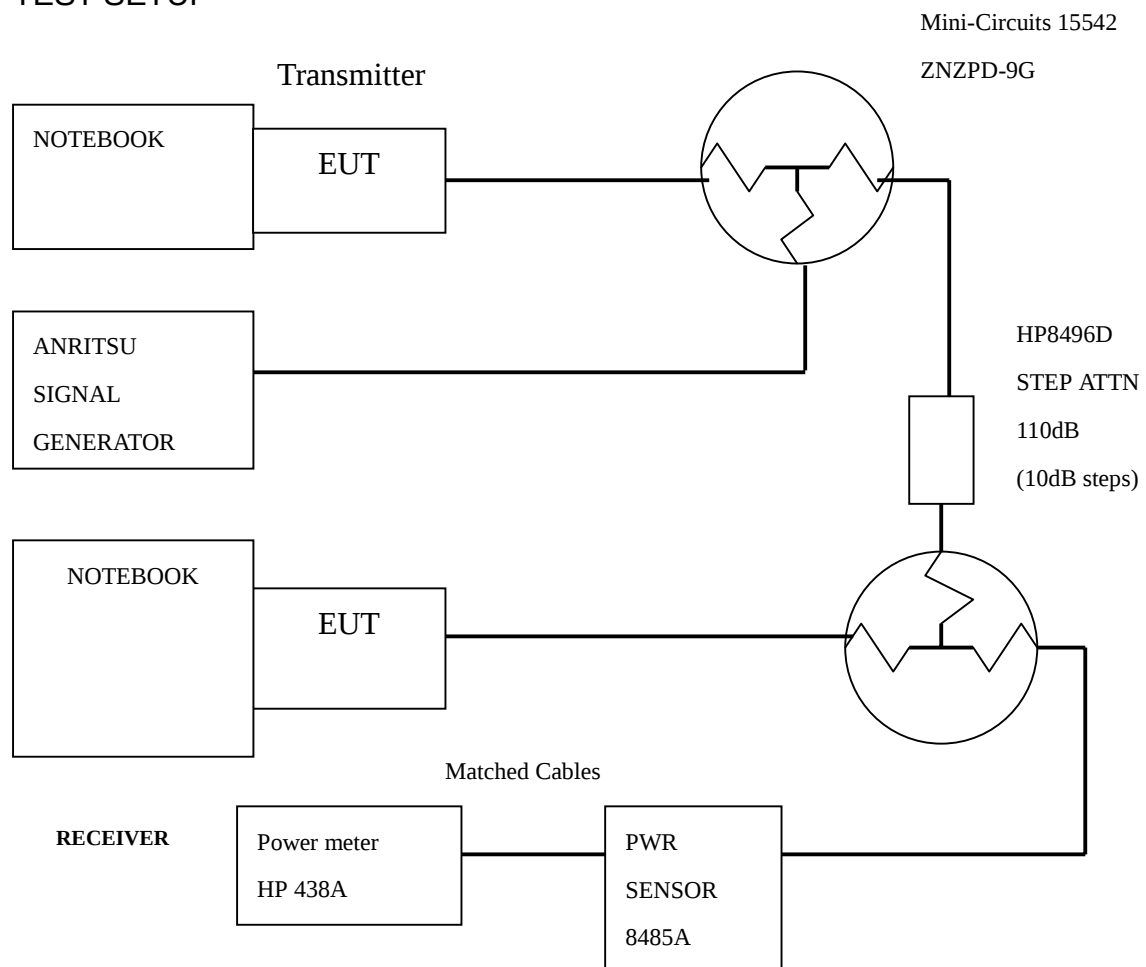
Where:

$(S/N)_o$: Signal to noise ratio for the chosen BER.

Mj : Maximum jammer to Signal Ratio recorded at the detected BER.

Lsys : System losses . For the purpose of this processing gain calculation, we assume Lsys at its minimum value of 2 dB.

TEST SETUP



1.3 TEST PROCEDURES

Obtain the simplex link shown. Perform all independent instrumentation calibrations prior to this procedure. Set operating power levels using fixed and variable attenuators in system to meet the following objectives:

Signal Power at receiver approximately -55dBm (above thermal sensitivity such that thermal noise does not cause bit errors).

Signal Power at power meter between -20 and -30dBm for optimal linearity.

Use spectrum analyzer to monitor test.

Ensure that CW Jammer generator RF output is disabled and measure the power at the power meter port using the power meter. This is the relative signal power, S_r .

Disable Transmitter, and set CW Jammer generator RF output frequency equal to the carrier frequency and enable generator output. Set reference CW Jammer power level at power meter port 8.4dB below S_r (minimum J/S, or 10dB processing gain reference level). Note the power level setting on the generator, this is the reference CW Jammer power setting, J_r .

Disable CW Jammer, re-establish link. PER test should be operating essentially error -free.

Enable CW Jammer at the reference power level and verify that the PER test indicates a PER of less than 8%.

Alternatively, adjust the CW Jammer level to that which causes 8% PER and verify that the S/J is less than 8.4dB .

Repeat step 7 for uniform steps in frequency increments of 50 kHz across the receiver passband with the CW Jammer. In this case the receiver passband is $\pm 8.5\text{ MHz}$.

The numerical data associated with the following radio channel is tabulated and presented for Channel 1,6, and 11.

Note: Since the jamming signal will be blocked by the IF filter if the jamming frequency is far from the center of the carrier frequency. So, only those frequencies around carrier frequency are shown here.

1.4 EUT OPERATING CONDITION

The software provided by client to set the EUT to transmit at lowest, middle and highest channel.

1.5 TEST RESULTS

EUT	Wireless USB Adapter	Model	GL2411EU GL2411IU
Environmental Conditions	20°C, 60%RH	Tested By	Steven Lu

Although the theoretical processing gain is lower than 10 dB, but the CCK coding provides an extra coding gain of 2.2dB.

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.40800	13.0	16.4	-4.4	1
2.40805	13.6	16.4	-3.8	1
2.40810	13.1	16.4	-4.3	1
2.40815	13.2	16.4	-4.2	1
2.40820	13.0	16.4	-4.4	1
2.40825	12.9	16.4	-4.5	1
2.40830	12.8	16.4	-4.6	1
2.40835	12.3	16.4	-5.1	1
2.40840	13.0	16.4	-4.4	1
2.40845	13.1	16.4	-4.3	1
2.40850	12.4	16.4	-5.0	1
2.40855	12.0	16.4	-5.4	1
2.40860	12.3	16.4	-5.1	1
2.40865	12.2	16.4	-5.2	1
2.40870	12.5	16.4	-4.9	1
2.40875	11.8	16.4	-5.6	1
2.40880	12.1	16.4	-5.3	1
2.40885	12.3	16.4	-5.1	1
2.40890	12.1	16.4	-5.3	1
2.40895	12.5	16.4	-4.9	1
2.40900	12.2	16.4	-5.2	1
2.40950	12.0	16.4	-5.4	1

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.40955	11.4	16.4	-6.0	1
2.40960	11.3	16.4	-6.1	1
2.40965	11.0	16.4	-6.4	1
2.40970	11.6	16.4	-5.8	1
2.40975	10.9	16.4	-6.5	1
2.40980	11.4	16.4	-6.0	1
2.40985	11.0	16.4	-6.4	1
2.40990	11.6	16.4	-5.8	1
2.40995	10.3	16.4	-7.1	1
2.41000	10.6	16.4	-6.8	1
2.41005	11.2	16.4	-6.2	1
2.41010	10.5	16.4	-6.9	1
2.41015	11.4	16.4	-6.0	1
2.41020	10.8	16.4	-6.6	1
2.41025	10.6	16.4	-6.8	1
2.41030	10.2	16.4	-7.2	1
2.41035	11.6	16.4	-5.8	1
2.41040	11.2	16.4	-6.2	1
2.41045	12.7	16.4	-4.7	1
2.41050	11.4	16.4	-6.0	1
2.41055	13.1	16.4	-4.3	1
2.41060	12.5	16.4	-4.9	1
2.41065	12.4	16.4	-5.0	1
2.41070	11.6	16.4	-5.8	1
2.41075	11.4	16.4	-6.0	1
2.41080	11.3	16.4	-6.1	1
2.41085	12.0	16.4	-5.4	1
2.41090	11.8	16.4	-5.6	1
2.41095	12.0	16.4	-5.4	1
2.41100	12.1	16.4	-5.3	1
2.41105	11.4	16.4	-6.0	1
2.41110	11.6	16.4	-5.8	1
2.41115	11.5	16.4	-5.9	1
2.41120	11.3	16.4	-6.1	1

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.41125	11.0	16.4	-6.4	1
2.41130	11.4	16.4	-6.0	1
2.41135	11.8	16.4	-5.6	1
2.41140	10.8	16.4	-6.6	1
2.41145	11.5	16.4	-5.9	1
2.41150	11.3	16.4	-6.1	1
2.41155	11.1	16.4	-6.3	1
2.41160	12.0	16.4	-5.4	1
2.41165	11.6	16.4	-5.8	1
2.41170	11.8	16.4	-5.6	1
2.41175	11.2	16.4	-6.2	1
2.41180	11.5	16.4	-5.9	1
2.41185	11.3	16.4	-6.1	1
2.41190	11.5	16.4	-5.9	1
2.41195	11.6	16.4	-5.8	1
2.41200	11.4	16.4	-6.0	1
2.41205	11.0	16.4	-6.4	1
2.41210	11.3	16.4	-6.1	1
2.41215	11.9	16.4	-5.5	1
2.41220	11.8	16.4	-5.6	1
2.41225	11.4	16.4	-6.0	1
2.41230	11.2	16.4	-6.2	1
2.41235	11.0	16.4	-6.4	1
2.41240	11.3	16.4	-6.1	1
2.41245	10.8	16.4	-6.6	1
2.41250	11.6	16.4	-5.8	1
2.41255	12.3	16.4	-5.1	1
2.41260	12.1	16.4	-5.3	1
2.41265	12.4	16.4	-5.0	1
2.41270	12.0	16.4	-5.4	1
2.41275	11.8	16.4	-5.6	1
2.41280	11.4	16.4	-6.0	1
2.41285	11.6	16.4	-5.8	1
2.41290	11.4	16.4	-6.0	1
2.41295	12.5	16.4	-4.9	1
2.41300	12.5	16.4	-4.9	1

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.41305	12.3	16.4	-5.1	1
2.41310	12.0	16.4	-5.4	1
2.41315	11.5	16.4	-5.9	1
2.41320	11.4	16.4	-6.0	1
2.41325	11.6	16.4	-5.8	1
2.41330	11.1	16.4	-6.3	1
2.41335	11.5	16.4	-5.9	1
2.41340	11.6	16.4	-5.8	1
2.41345	12.3	16.4	-5.1	1
2.41350	12.1	16.4	-5.3	1
2.41355	12.2	16.4	-5.2	1
2.41360	12.4	16.4	-5.0	1
2.41365	11.8	16.4	-5.6	1
2.41370	11.7	16.4	-5.7	1
2.41375	11.5	16.4	-5.9	1
2.41380	11.6	16.4	-5.8	1
2.41385	11.0	16.4	-6.4	1
2.41390	11.5	16.4	-5.9	1
2.41395	11.4	16.4	-6.0	1
2.41400	10.7	16.4	-6.7	1
2.41405	11.3	16.4	-6.1	1
2.41410	11.0	16.4	-6.4	1
2.41415	11.0	16.4	-6.4	1
2.41420	11.8	16.4	-5.6	1
2.41425	11.4	16.4	-6.0	1
2.41430	11.4	16.4	-6.0	1
2.41435	11.3	16.4	-6.1	1
2.41440	11.9	16.4	-5.5	1
2.41445	11.8	16.4	-5.6	1
2.41450	11.6	16.4	-5.8	1
2.41455	11.4	16.4	-6.0	1
2.41460	11.7	16.4	-5.7	1
2.41465	11.4	16.4	-6.0	1
2.41470	11.3	16.4	-6.1	1
2.41475	11.4	16.4	-6.0	1
2.41480	12.3	16.4	-5.1	1

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.41485	12.0	16.4	-5.4	1
2.41490	11.5	16.4	-5.9	1
2.41495	12.0	16.4	-5.4	1
2.41500	12.3	16.4	-5.1	1
2.41505	12.4	16.4	-5.0	1
2.41510	12.0	16.4	-5.4	1
2.41515	11.8	16.4	-5.6	1
2.41520	11.9	16.4	-5.5	1
2.41525	12.1	16.4	-5.3	1
2.41530	12.3	16.4	-5.1	1
2.41535	11.6	16.4	-5.8	1
2.41540	11.8	16.4	-5.6	1
2.41545	11.4	16.4	-6.0	1
2.41550	11.6	16.4	-5.8	1
2.41555	12.9	16.4	-4.5	1
2.41560	13.0	16.4	-4.4	1
2.41565	12.8	16.4	-4.6	1
2.41570	12.0	16.4	-5.4	1
2.41575	12.4	16.4	-5.0	1
2.41580	12.4	16.4	-5.0	1
2.41585	12.8	16.4	-4.6	1
2.41590	12.4	16.4	-5.0	1
2.41595	12.3	16.4	-5.1	1
2.41600	12.6	16.4	-4.8	1
2.41605	12.2	16.4	-5.2	1
2.41610	12.2	16.4	-5.2	1
2.41615	12.3	16.4	-5.1	1
2.41620	13.0	16.4	-4.4	1
2.41625	13.0	16.4	-4.4	1
2.41630	13.2	16.4	-4.2	1
2.41635	13.1	16.4	-4.3	1
2.41640	13.5	16.4	-3.9	1
2.41645	13.3	16.4	-4.1	1
2.41650	13.4	16.4	-4.0	1
2.41655	13.4	16.4	-4.0	1
2.41660	14.0	16.4	-3.4	1

11Mbps CHANNEL 1 Processing Gain				
Frequency	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.41665	13.6	16.4	-3.8	1
2.41670	13.0	16.4	-4.4	1
2.41675	13.1	16.4	-4.3	1
2.41680	13.7	16.4	-3.7	1
2.41685	13.6	16.4	-3.8	1
2.41690	14.0	16.4	-3.4	1
2.41695	13.8	16.4	-3.6	1
2.41700	13.8	16.4	-3.6	1
2.41705	14.0	16.4	-3.4	1
2.41710	14.4	16.4	-3.0	1
2.41715	14.6	16.4	-2.8	1
2.41720	14.0	16.4	-3.4	1
2.41725	15.0	16.4	-2.4	1
2.41730	15.6	16.4	-1.8	1
2.41735	14.9	16.4	-2.5	1
2.41740	15.4	16.4	-2.0	1
2.41745	15.6	16.4	-1.8	1
2.41750	15.4	16.4	-2.0	1
2.41755	15.5	16.4	-1.9	1
2.41760	16.0	16.4	-1.4	1
2.41765	15.6	16.4	-1.8	1
2.41770	16.0	16.4	-1.4	1
2.41775	16.0	16.4	-1.4	1
2.41780	16.4	16.4	-1.0	1
2.41785	16.5	16.4	-0.9	1
2.41790	16.8	16.4	-0.6	1
2.41795	16.7	16.4	-0.7	1
2.41800	16.7	16.4	-0.7	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.43200	13.8	16.4	-3.6	1
2.43205	15.0	16.4	-2.4	1
2.43210	14.9	16.4	-2.5	1
2.43215	13.9	16.4	-3.5	1
2.43220	13.7	16.4	-3.7	1
2.43225	13.0	16.4	-4.4	1
2.43230	13.4	16.4	-4.0	1
2.43235	13.5	16.4	-3.9	1
2.43240	14.6	16.4	-2.8	1
2.43245	14.2	16.4	-3.2	1
2.43250	14.4	16.4	-3.0	1
2.43255	13.6	16.4	-3.8	1
2.43260	13.4	16.4	-4.0	1
2.43265	13.5	16.4	-3.9	1
2.43270	13.8	16.4	-3.6	1
2.43275	13.6	16.4	-3.8	1
2.43280	13.4	16.4	-4.0	1
2.43285	12.8	16.4	-4.6	1
2.43290	12.7	16.4	-4.7	1
2.43295	13.5	16.4	-3.9	1
2.43300	13.4	16.4	-4.0	1
2.43305	13.5	16.4	-3.9	1
2.43310	12.9	16.4	-4.5	1
2.43315	12.5	16.4	-4.9	1
2.43320	12.8	16.4	-4.6	1
2.43325	12.3	16.4	-5.1	1
2.43330	12.6	16.4	-4.8	1
2.43335	12.7	16.4	-4.7	1
2.43340	12.9	16.4	-4.5	1
2.43345	13.0	16.4	-4.4	1
2.43350	12.5	16.4	-4.9	1
2.43355	12.0	16.4	-5.4	1
2.43360	12.4	16.4	-5.0	1
2.43365	12.1	16.4	-5.3	1
2.43370	12.0	16.4	-5.4	1
2.43375	11.5	16.4	-5.9	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.43380	11.8	16.4	-5.6	1
2.43385	11.7	16.4	-5.7	1
2.43390	11.4	16.4	-6.0	1
2.43395	11.9	16.4	-5.5	1
2.43400	11.8	16.4	-5.6	1
2.43405	11.6	16.4	-5.8	1
2.43410	11.8	16.4	-5.6	1
2.43415	11.4	16.4	-6.0	1
2.43420	11.2	16.4	-6.2	1
2.43425	11.0	16.4	-6.4	1
2.43430	10.5	16.4	-6.9	1
2.43435	11.0	16.4	-6.4	1
2.43440	11.3	16.4	-6.1	1
2.43445	11.8	16.4	-5.6	1
2.43450	10.8	16.4	-6.6	1
2.43455	10.9	16.4	-6.5	1
2.43460	10.4	16.4	-7.0	1
2.43465	10.6	16.4	-6.8	1
2.43470	10.8	16.4	-6.6	1
2.43475	11.5	16.4	-5.9	1
2.43480	11.6	16.4	-5.8	1
2.43485	11.6	16.4	-5.8	1
2.43490	11.5	16.4	-5.9	1
2.43495	10.4	16.4	-7.0	1
2.43500	10.4	16.4	-7.0	1
2.43505	11.0	16.4	-6.4	1
2.43510	11.6	16.4	-5.8	1
2.43515	11.4	16.4	-6.0	1
2.43520	11.8	16.4	-5.6	1
2.43525	11.7	16.4	-5.7	1
2.43530	12.0	16.4	-5.4	1
2.43535	12.1	16.4	-5.3	1
2.43540	11.4	16.4	-6.0	1
2.43545	11.6	16.4	-5.8	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.43550	11.5	16.4	-5.9	1
2.43555	11.4	16.4	-6.0	1
2.43560	11.7	16.4	-5.7	1
2.43565	11.4	16.4	-6.0	1
2.43570	11.6	16.4	-5.8	1
2.43575	11.4	16.4	-6.0	1
2.43580	11.2	16.4	-6.2	1
2.43585	11.6	16.4	-5.8	1
2.43590	11.6	16.4	-5.8	1
2.43595	12.0	16.4	-5.4	1
2.43600	12.1	16.4	-5.3	1
2.43605	11.4	16.4	-6.0	1
2.43610	11.1	16.4	-6.3	1
2.43615	11.2	16.4	-6.2	1
2.43620	11.4	16.4	-6.0	1
2.43625	12.0	16.4	-5.4	1
2.43630	11.5	16.4	-5.9	1
2.43635	11.8	16.4	-5.6	1
2.43640	11.4	16.4	-6.0	1
2.43645	10.5	16.4	-6.9	1
2.43650	11.0	16.4	-6.4	1
2.43655	10.8	16.4	-6.6	1
2.43660	11.3	16.4	-6.1	1
2.43665	11.4	16.4	-6.0	1
2.43670	12.0	16.4	-5.4	1
2.43675	11.4	16.4	-6.0	1
2.43680	11.3	16.4	-6.1	1
2.43685	11.4	16.4	-6.0	1
2.43690	10.6	16.4	-6.8	1
2.43695	10.5	16.4	-6.9	1
2.43700	11.2	16.4	-6.2	1
2.43705	11.7	16.4	-5.7	1
2.43710	11.4	16.4	-6.0	1
2.43715	11.6	16.4	-5.8	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.43720	11.5	16.4	-5.9	1
2.43725	11.4	16.4	-6.0	1
2.43730	11.3	16.4	-6.1	1
2.43735	11.5	16.4	-5.9	1
2.43740	11.6	16.4	-5.8	1
2.43745	11.8	16.4	-5.6	1
2.43750	11.4	16.4	-6.0	1
2.43755	11.5	16.4	-5.9	1
2.43760	11.9	16.4	-5.5	1
2.43765	12.0	16.4	-5.4	1
2.43770	11.4	16.4	-6.0	1
2.43775	11.3	16.4	-6.1	1
2.43780	11.5	16.4	-5.9	1
2.43785	12.2	16.4	-5.2	1
2.43790	11.9	16.4	-5.5	1
2.43795	12.2	16.4	-5.2	1
2.43800	12.0	16.4	-5.4	1
2.43805	11.8	16.4	-5.6	1
2.43810	11.9	16.4	-5.5	1
2.43815	11.4	16.4	-6.0	1
2.43820	11.6	16.4	-5.8	1
2.43825	12.0	16.4	-5.4	1
2.43830	11.5	16.4	-5.9	1
2.43835	11.2	16.4	-6.2	1
2.43840	11.2	16.4	-6.2	1
2.43845	11.4	16.4	-6.0	1
2.43850	10.9	16.4	-6.5	1
2.43855	11.3	16.4	-6.1	1
2.43860	11.5	16.4	-5.9	1
2.43865	11.5	16.4	-5.9	1
2.43870	11.4	16.4	-6.0	1
2.43875	11.4	16.4	-6.0	1
2.43880	11.0	16.4	-6.4	1
2.43885	11.8	16.4	-5.6	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.43890	11.9	16.4	-5.5	1
2.43895	11.0	16.4	-6.4	1
2.43900	11.4	16.4	-6.0	1
2.43905	11.4	16.4	-6.0	1
2.43910	11.2	16.4	-6.2	1
2.43915	11.5	16.4	-5.9	1
2.43920	11.6	16.4	-5.8	1
2.43925	11.8	16.4	-5.6	1
2.43930	11.8	16.4	-5.6	1
2.43935	11.4	16.4	-6.0	1
2.43940	11.3	16.4	-6.1	1
2.43945	11.7	16.4	-5.7	1
2.43950	11.5	16.4	-5.9	1
2.43955	11.3	16.4	-6.1	1
2.43960	11.8	16.4	-5.6	1
2.43965	11.9	16.4	-5.5	1
2.43970	11.2	16.4	-6.2	1
2.43975	11.5	16.4	-5.9	1
2.43980	11.6	16.4	-5.8	1
2.43985	11.0	16.4	-6.4	1
2.43990	11.3	16.4	-6.1	1
2.43995	12.2	16.4	-5.2	1
2.44000	12.3	16.4	-5.1	1
2.44005	12.5	16.4	-4.9	1
2.44010	12.3	16.4	-5.1	1
2.44015	12.5	16.4	-4.9	1
2.44020	12.6	16.4	-4.8	1
2.44025	12.3	16.4	-5.1	1
2.44030	12.4	16.4	-5.0	1
2.44035	12.1	16.4	-5.3	1
2.44040	12.3	16.4	-5.1	1
2.44045	12.0	16.4	-5.4	1
2.44050	12.2	16.4	-5.2	1
2.44055	12.5	16.4	-4.9	1

11Mbps CHANNEL 6 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.44060	12.8	16.4	-4.6	1
2.44065	12.6	16.4	-4.8	1
2.44070	12.5	16.4	-4.9	1
2.44075	12.7	16.4	-4.7	1
2.44080	12.5	16.4	-4.9	1
2.44085	13.0	16.4	-4.4	1
2.44090	13.2	16.4	-4.2	1
2.44095	13.4	16.4	-4.0	1
2.44100	13.0	16.4	-4.4	1
2.44105	12.1	16.4	-5.3	1
2.44110	12.7	16.4	-4.7	1
2.44115	12.3	16.4	-5.1	1
2.44120	12.6	16.4	-4.8	1
2.44125	12.4	16.4	-5.0	1
2.44130	13.0	16.4	-4.4	1
2.44135	13.2	16.4	-4.2	1
2.44140	14.2	16.4	-3.2	1
2.44145	13.6	16.4	-3.8	1
2.44150	13.7	16.4	-3.7	1
2.44155	13.8	16.4	-3.6	1
2.44160	13.6	16.4	-3.8	1
2.44165	13.5	16.4	-3.9	1
2.44170	13.4	16.4	-4.0	1
2.44175	13.6	16.4	-3.8	1
2.44180	14.4	16.4	-3.0	1
2.44185	14.2	16.4	-3.2	1
2.44190	13.9	16.4	-3.5	1
2.44195	14.4	16.4	-3.0	1
2.44200	15.0	16.4	-2.4	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.45700	15.0	16.4	-2.4	1
2.45705	15.2	16.4	-2.2	1
2.45710	14.2	16.4	-3.2	1
2.45715	14.3	16.4	-3.1	1
2.45720	14.2	16.4	-3.2	1
2.45725	13.5	16.4	-3.9	1
2.45730	14.0	16.4	-3.4	1
2.45735	14.5	16.4	-2.9	1
2.45740	14.6	16.4	-2.8	1
2.45745	13.9	16.4	-3.5	1
2.45750	13.2	16.4	-4.2	1
2.45755	13.4	16.4	-4.0	1
2.45760	13.6	16.4	-3.8	1
2.45765	13.8	16.4	-3.6	1
2.45770	12.9	16.4	-4.5	1
2.45775	12.8	16.4	-4.6	1
2.45780	13.6	16.4	-3.8	1
2.45785	13.7	16.4	-3.7	1
2.45790	13.8	16.4	-3.6	1
2.45795	13.6	16.4	-3.8	1
2.45800	13.0	16.4	-4.4	1
2.45805	13.6	16.4	-3.8	1
2.45810	13.8	16.4	-3.6	1
2.45815	13.0	16.4	-4.4	1
2.45820	12.9	16.4	-4.5	1
2.45825	12.4	16.4	-5.0	1
2.45830	12.5	16.4	-4.9	1
2.45835	12.7	16.4	-4.7	1
2.45840	12.6	16.4	-4.8	1
2.45845	12.8	16.4	-4.6	1
2.45850	12.0	16.4	-5.4	1
2.45855	12.4	16.4	-5.0	1
2.45860	12.6	16.4	-4.8	1
2.45865	12.6	16.4	-4.8	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.45870	12.5	16.4	-4.9	1
2.45875	12.7	16.4	-4.7	1
2.45880	12.8	16.4	-4.6	1
2.45885	12.8	16.4	-4.6	1
2.45890	12.5	16.4	-4.9	1
2.45895	12.4	16.4	-5.0	1
2.45900	12.0	16.4	-5.4	1
2.45905	11.8	16.4	-5.6	1
2.45910	11.4	16.4	-6.0	1
2.45915	11.6	16.4	-5.8	1
2.45920	12.2	16.4	-5.2	1
2.45925	12.3	16.4	-5.1	1
2.45930	12.1	16.4	-5.3	1
2.45935	11.4	16.4	-6.0	1
2.45940	11.9	16.4	-5.5	1
2.45945	11.9	16.4	-5.5	1
2.45950	11.5	16.4	-5.9	1
2.45955	12.3	16.4	-5.1	1
2.45960	12.2	16.4	-5.2	1
2.45965	11.8	16.4	-5.6	1
2.45970	11.6	16.4	-5.8	1
2.45975	11.8	16.4	-5.6	1
2.45980	12.0	16.4	-5.4	1
2.45985	11.9	16.4	-5.5	1
2.45990	12.3	16.4	-5.1	1
2.45995	11.7	16.4	-5.7	1
2.46000	11.8	16.4	-5.6	1
2.46005	11.4	16.4	-6.0	1
2.46010	11.6	16.4	-5.8	1
2.46015	11.8	16.4	-5.6	1
2.46020	11.5	16.4	-5.9	1
2.46025	11.6	16.4	-5.8	1
2.46030	11.8	16.4	-5.6	1
2.46035	12.0	16.4	-5.4	1
2.46040	11.6	16.4	-5.8	1
2.46045	11.6	16.4	-5.8	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.46050	11.4	16.4	-6.0	1
2.46055	10.8	16.4	-6.6	1
2.46060	11.4	16.4	-6.0	1
2.46065	11.0	16.4	-6.4	1
2.46070	12.4	16.4	-5.0	1
2.46075	12.6	16.4	-4.8	1
2.46080	11.4	16.4	-6.0	1
2.46085	12.3	16.4	-5.1	1
2.46090	11.6	16.4	-5.8	1
2.46095	12.8	16.4	-4.6	1
2.46100	11.7	16.4	-5.7	1
2.46105	12.0	16.4	-5.4	1
2.46110	12.4	16.4	-5.0	1
2.46115	12.3	16.4	-5.1	1
2.46120	12.0	16.4	-5.4	1
2.46125	12.2	16.4	-5.2	1
2.46130	12.6	16.4	-4.8	1
2.46135	12.0	16.4	-5.4	1
2.46140	12.0	16.4	-5.4	1
2.46145	12.1	16.4	-5.3	1
2.46150	12.3	16.4	-5.1	1
2.46155	12.4	16.4	-5.0	1
2.46160	12.6	16.4	-4.8	1
2.46165	13.0	16.4	-4.4	1
2.46170	13.1	16.4	-4.3	1
2.46175	13.5	16.4	-3.9	1
2.46180	12.6	16.4	-4.8	1
2.46185	12.4	16.4	-5.0	1
2.46190	12.3	16.4	-5.1	1
2.46195	11.9	16.4	-5.5	1
2.46200	11.0	16.4	-6.4	1
2.46205	11.6	16.4	-5.8	1
2.46210	11.4	16.4	-6.0	1
2.46215	12.0	16.4	-5.4	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.46220	12.3	16.4	-5.1	1
2.46225	12.5	16.4	-4.9	1
2.46230	13.2	16.4	-4.2	1
2.46235	12.1	16.4	-5.3	1
2.46240	12.2	16.4	-5.2	1
2.46245	12.3	16.4	-5.1	1
2.46250	12.4	16.4	-5.0	1
2.46255	12.6	16.4	-4.8	1
2.46260	12.4	16.4	-5.0	1
2.46265	12.6	16.4	-4.8	1
2.46270	11.8	16.4	-5.6	1
2.46275	11.9	16.4	-5.5	1
2.46280	13.0	16.4	-4.4	1
2.46285	12.2	16.4	-5.2	1
2.46290	11.6	16.4	-5.8	1
2.46295	12.4	16.4	-5.0	1
2.46300	12.8	16.4	-4.6	1
2.46305	12.4	16.4	-5.0	1
2.46310	12.6	16.4	-4.8	1
2.46315	12.0	16.4	-5.4	1
2.46320	11.4	16.4	-6.0	1
2.46325	11.6	16.4	-5.8	1
2.46330	11.4	16.4	-6.0	1
2.46335	12.0	16.4	-5.4	1
2.46340	12.1	16.4	-5.3	1
2.46345	12.2	16.4	-5.2	1
2.46350	12.1	16.4	-5.3	1
2.46355	12.5	16.4	-4.9	1
2.46360	12.1	16.4	-5.3	1
2.46365	12.3	16.4	-5.1	1
2.46370	12.2	16.4	-5.2	1
2.46375	12.4	16.4	-5.0	1
2.46380	12.3	16.4	-5.1	1
2.46385	12.0	16.4	-5.4	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.46390	12.4	16.4	-5.0	1
2.46395	12.0	16.4	-5.4	1
2.46400	12.0	16.4	-5.4	1
2.46405	11.6	16.4	-5.8	1
2.46410	11.5	16.4	-5.9	1
2.46415	11.6	16.4	-5.8	1
2.46420	11.4	16.4	-6.0	1
2.46425	12.0	16.4	-5.4	1
2.46430	12.6	16.4	-4.8	1
2.46435	12.7	16.4	-4.7	1
2.46440	12.4	16.4	-5.0	1
2.46445	12.6	16.4	-4.8	1
2.46450	12.0	16.4	-5.4	1
2.46455	12.1	16.4	-5.3	1
2.46460	12.8	16.4	-4.6	1
2.46465	11.9	16.4	-5.5	1
2.46470	12.0	16.4	-5.4	1
2.46475	12.1	16.4	-5.3	1
2.46480	12.3	16.4	-5.1	1
2.46485	12.4	16.4	-5.0	1
2.46490	13.0	16.4	-4.4	1
2.46495	12.8	16.4	-4.6	1
2.46500	12.9	16.4	-4.5	1
2.46505	12.4	16.4	-5.0	1
2.46510	13.0	16.4	-4.4	1
2.46515	12.8	16.4	-4.6	1
2.46520	12.4	16.4	-5.0	1
2.46525	12.5	16.4	-4.9	1
2.46530	12.7	16.4	-4.7	1
2.46535	12.6	16.4	-4.8	1
2.46540	12.4	16.4	-5.0	1
2.46545	12.3	16.4	-5.1	1
2.46550	11.8	16.4	-5.6	1

11Mbps CHANNEL 11 Processing Gain				
Freq.	Gp	(S/N)	Mj = J/S	Lsys
(GHz)	(dB)	(dB)	(dB)	(dB)
2.46555	12.3	16.4	-5.1	1
2.46560	12.0	16.4	-5.4	1
2.46565	13.4	16.4	-4.0	1
2.46570	13.4	16.4	-4.0	1
2.46575	13.1	16.4	-4.3	1
2.46580	14.0	16.4	-3.4	1
2.46585	13.7	16.4	-3.7	1
2.46590	13.3	16.4	-4.1	1
2.46595	13.9	16.4	-3.5	1
2.46600	14.2	16.4	-3.2	1
2.46605	13.1	16.4	-4.3	1
2.46610	13.4	16.4	-4.0	1
2.46615	14.0	16.4	-3.4	1
2.46620	13.8	16.4	-3.6	1
2.46625	14.2	16.4	-3.2	1
2.46630	14.5	16.4	-2.9	1
2.46635	14.0	16.4	-3.4	1
2.46640	13.8	16.4	-3.6	1
2.46645	14.2	16.4	-3.2	1
2.46650	14.9	16.4	-2.5	1
2.46655	14.1	16.4	-3.3	1
2.46660	14.2	16.4	-3.2	1
2.46665	13.8	16.4	-3.6	1
2.46670	14.0	16.4	-3.4	1
2.46675	14.5	16.4	-2.9	1
2.46680	14.3	16.4	-3.1	1
2.46685	15.0	16.4	-2.4	1
2.46690	14.8	16.4	-2.6	1
2.46695	14.9	16.4	-2.5	1
2.46700	15.0	16.4	-2.4	1