Radiated Emission Data

1 Geteway 450SX4

a) Lower Frequncy (Channel 01)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (15dBm)
Fundamental Frequency : 2412 MHz (Tx), 2038MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2038.000	64.3	56.1	64.8	56.6	-4.5	60.3	52.1	74.0	54.0	-1.9	43	1.0
4076.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6114.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8152.000	---	---	---	---	6.5	---	---	74.0	54.0	---	---	---
10190.00	---	---	---	---	7.6	---	---	74.0	54.0	---	---	---
4824.000	---	---	---	---	2.6	---	---	74.0	54.0	---	---	---
7236.000	---	---	---	---	5.8	---	---	74.0	54.0	---	---	---
9648.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12060.000	---	---	---	---	9.2	---	---	74.0	54.0	---	---	---
14472.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
16884.000	---	---	---	---	12.1	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	8.8	---	---	74.0	54.0	---	---	---
21708.000	---	---	---	---	9.8	---	---	74.0	54.0	---	---	---
24120.000	---	---	---	---	10.4	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

b) Middle Frequncy (Channel 06)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (15.1dBm)
Fundamental Frequency : 2412 MHz (Tx), 2063MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2063.000	63.8	54.7	62.7	54.5	-4.4	59.4	50.3	74.0	54.0	-3.7	45	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.6	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.7	---	---	74.0	54.0	---	---	---
4874.000	---	---	---	---	2.7	---	---	74.0	54.0	---	---	---
7311.000	---	---	---	---	5.9	---	---	74.0	54.0	---	---	---
9748.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12185.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14622.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
17059.000	---	---	---	---	13.1	---	---	74.0	54.0	---	---	---
19496.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
21933.000	---	---	---	---	9.9	---	---	74.0	54.0	---	---	---
24370.000	---	---	---	---	10.7	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

c) Highest Frequncy (Channel 11)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (14.3dBm)
Fundamental Frequency : 2412 MHz (Tx), 2088MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Ave	Limit @3m (dBuV/m) Peak	Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2088.000	64.2	56.2	64.3	56.4	-4.3	60.0	52.1	74.0	54.0	-1.9	51	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.7	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.8	---	---	74.0	54.0	---	---	---
4924.000	---	---	---	---	2.8	---	---	74.0	54.0	---	---	---
7386.000	---	---	---	---	6.0	---	---	74.0	54.0	---	---	---
9848.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12310.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14772.000	---	---	---	---	11.5	---	---	74.0	54.0	---	---	---
17234.000	---	---	---	---	14.3	---	---	74.0	54.0	---	---	---
19696.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
22158.000	---	---	---	---	10.0	---	---	74.0	54.0	---	---	---
24620.000	---	---	---	---	10.9	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

d) Other Emission

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (13.6dBm)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

No radiated emission frequencies from the transceiver card below 1 GHz were detected with a pre-amplifier of 25 dB.
Radiated emission frequencies above 1 GHz to 5 GHz were too low to be measured with a pre-amplifier of 35 dB.

2 Gateway 600YGR

a) Lower Frequncy (Channel 01)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (15dBm)
Fundamental Frequency : 2412 MHz (Tx), 2038MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2038.000	63.0	54.5	64.5	56.1	-4.5	60.0	51.6	74.0	54.0	-2.4	65	1.0
4076.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6114.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8152.000	---	---	---	---	6.5	---	---	74.0	54.0	---	---	---
10190.00	---	---	---	---	7.6	---	---	74.0	54.0	---	---	---
4824.000	---	---	---	---	2.6	---	---	74.0	54.0	---	---	---
7236.000	---	---	---	---	5.8	---	---	74.0	54.0	---	---	---
9648.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12060.000	---	---	---	---	9.2	---	---	74.0	54.0	---	---	---
14472.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
16884.000	---	---	---	---	12.1	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	8.8	---	---	74.0	54.0	---	---	---
21708.000	---	---	---	---	9.8	---	---	74.0	54.0	---	---	---
24120.000	---	---	---	---	10.4	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

b) Middle Frequncy (Channel 06)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (14.5dBm)
Fundamental Frequency : 2412 MHz (Tx), 2063MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2063.000	62.5	53.5	63.1	53.9	-4.4	58.7	49.5	74.0	54.0	-4.5	58	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.6	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.7	---	---	74.0	54.0	---	---	---
4874.000	---	---	---	---	2.7	---	---	74.0	54.0	---	---	---
7311.000	---	---	---	---	5.9	---	---	74.0	54.0	---	---	---
9748.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12185.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14622.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
17059.000	---	---	---	---	13.1	---	---	74.0	54.0	---	---	---
19496.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
21933.000	---	---	---	---	9.9	---	---	74.0	54.0	---	---	---
24370.000	---	---	---	---	10.7	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

c) Highest Frequncy (Channel 11)

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting (13.8dBm)
Fundamental Frequency : 2412 MHz (Tx), 2088MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2088.000	63.0	54.7	62.9	54.3	-4.3	58.7	50.4	74.0	54.0	-3.6	76	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.7	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.8	---	---	74.0	54.0	---	---	---
4924.000	---	---	---	---	2.8	---	---	74.0	54.0	---	---	---
7386.000	---	---	---	---	6.0	---	---	74.0	54.0	---	---	---
9848.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12310.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14772.000	---	---	---	---	11.5	---	---	74.0	54.0	---	---	---
17234.000	---	---	---	---	14.3	---	---	74.0	54.0	---	---	---
19696.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
22158.000	---	---	---	---	10.0	---	---	74.0	54.0	---	---	---
24620.000	---	---	---	---	10.9	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

d) Other Emission

Antenna Type : OA1 (Slot)
Operation Mode : Full Power Transmitting @ CH1(15dBm)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

No radiated emission frequencies from the transceiver card below 1 GHz were detected with a pre-amplifier of 25 dB.
Radiated emission frequencies above 1 GHz to 5 GHz were too low to be measured with a pre-amplifier of 35 dB.

3 Gateway 9550

a) Lower Frequncy (Channel 01)

Antenna Type : UA2 (Dipole)
Operation Mode : Full Power Transmitting (15.0dBm)
Fundamental Frequency : 2412 MHz (Tx), 2038MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2038.000	63.0	54.5	64.5	56.1	-4.5	60.0	51.6	74.0	54.0	-2.4	65	1.0
4076.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6114.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8152.000	---	---	---	---	6.5	---	---	74.0	54.0	---	---	---
10190.00	---	---	---	---	7.6	---	---	74.0	54.0	---	---	---
4824.000	---	---	---	---	2.6	---	---	74.0	54.0	---	---	---
7236.000	---	---	---	---	5.8	---	---	74.0	54.0	---	---	---
9648.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12060.000	---	---	---	---	9.2	---	---	74.0	54.0	---	---	---
14472.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
16884.000	---	---	---	---	12.1	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	8.8	---	---	74.0	54.0	---	---	---
21708.000	---	---	---	---	9.8	---	---	74.0	54.0	---	---	---
24120.000	---	---	---	---	10.4	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

b) Middle Frequncy (Channel 06)

Antenna Type : UA2 (Dipole)
Operation Mode : Full Power Transmitting (14.3dBm)
Fundamental Frequency : 2412 MHz (Tx), 2063MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2063.000	62.5	53.5	63.1	53.9	-4.4	58.7	49.5	74.0	54.0	-4.5	58	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.6	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.7	---	---	74.0	54.0	---	---	---
4874.000	---	---	---	---	2.7	---	---	74.0	54.0	---	---	---
7311.000	---	---	---	---	5.9	---	---	74.0	54.0	---	---	---
9748.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12185.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14622.000	---	---	---	---	11.6	---	---	74.0	54.0	---	---	---
17059.000	---	---	---	---	13.1	---	---	74.0	54.0	---	---	---
19496.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
21933.000	---	---	---	---	9.9	---	---	74.0	54.0	---	---	---
24370.000	---	---	---	---	10.7	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

c) Highest Frequncy (Channel 11)

Antenna Type : UA2 (Diploe)
Operation Mode : Full Power Transmitting (13.4dBm)
Fundamental Frequency : 2412 MHz (Tx), 2088MHx (Rx L.O.)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

Frequency (MHz)	Reading (dBuV) @3m H Peak	H Ave	V Peak	V Ave	Factor (dB) Corr.	Result @3m (dBuV/m) Peak	Result @3m (dBuV/m) Ave	Limit @3m (dBuV/m) Peak	Limit @3m (dBuV/m) Ave.	Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
2088.000	63.0	54.7	62.9	54.3	-4.3	58.7	50.4	74.0	54.0	-3.6	76	1.0
4176.000	---	---	---	---	2.0	---	---	74.0	54.0	---	---	---
6264.000	---	---	---	---	4.5	---	---	74.0	54.0	---	---	---
8352.000	---	---	---	---	6.7	---	---	74.0	54.0	---	---	---
10440.00	---	---	---	---	7.8	---	---	74.0	54.0	---	---	---
4924.000	---	---	---	---	2.8	---	---	74.0	54.0	---	---	---
7386.000	---	---	---	---	6.0	---	---	74.0	54.0	---	---	---
9848.000	---	---	---	---	7.3	---	---	74.0	54.0	---	---	---
12310.000	---	---	---	---	9.3	---	---	74.0	54.0	---	---	---
14772.000	---	---	---	---	11.5	---	---	74.0	54.0	---	---	---
17234.000	---	---	---	---	14.3	---	---	74.0	54.0	---	---	---
19696.000	---	---	---	---	8.5	---	---	74.0	54.0	---	---	---
22158.000	---	---	---	---	10.0	---	---	74.0	54.0	---	---	---
24620.000	---	---	---	---	10.9	---	---	74.0	54.0	---	---	---

Note :

1. Remark " " means that the emission frequency is from Rx local oscillator.
2. Remark "---" means that the emission level is too low to be measured (a pre-amplifier of about 35 dB is used).
3. Margins are derived from Peak or Average whichever is lower. If there is only peak value in Result field, the Margin is also referred to average limits.

d) Other Emission

Antenna Type : UA2 (Dipole)
Operation Mode : Full Power Transmitting @ CH1(15.2dBm)
Test Date : Jan 26, 2002 Temperature : 17 Humidity : 70%

No radiated emission frequencies from the transceiver card below 1 GHz were detected with a pre-amplifier of 25 dB.
Radiated emission frequencies above 1 GHz to 5 GHz were too low to be measured with a pre-amplifier of 35 dB.