# FCC RADIO TEST REPORT

Applicant's Company	SIRIUS SATELLITE RADIO.
Applicant Address	989 Lenox Drive Suite 212 Lawrenceville, New Jersey 08648
Manufacturer's Company	Wistron NeWeb Corporation
Manufacturer Address	No. 10-1, Li-hsin Road I, Science-Baded Industrial Park, Hsinchu 300, Taiwan, R.O.C.

Product Name	Xpress EZ
Brand Name	Sirius
Model Name	XMXP05
Received Date	Dec. 18, 2009
Final Test Date	Dec. 20, 2009

# **1. General Description of Equipment under Test**

Part	Description of Test	Under Limit
3.1	Radiated Emissions	4.36 dB
3.2	Field Strength of Fundamental Emissions	7.05 dB

Note: Due to the frequency shift for PK data equipment, the PK frequency should follow the AV data equipment in section 3.2.

# 2. GENERAL INFORMATION

# 2.1 Table for Carrier Frequencies

Frequency Band	Channel No.	Frequency
	1	88.1 MHz
	2	88.3 MHz
	-	:
	50	97.9 MHz
88 ~ 108MHz	51	98.1 MHz
	52	98.3 MHz
	:	:
	99	107.7 MHz
	100	107.9 MHz

## 2.2 Test Modes

Mode 1: Medium Car (Ford, MONDEO) + XMXP05 Mode 2: Small Car (Mitsubishi, Lancer ) + XMXP05 Mode 3: Large Car (Ford, IXION) + XMXP05

# 2.3 Table for Testing Locations

Test Site No.	Site Category	Location
10CH01-HY	SAC	Hwa Ya

Semi Anechoic Chamber (SAC)

## 2.4 Test Procedure

- 1. Put the vehicle in the center of turn table and put the Radio with Van Mount in the car . The distance between Vehicle edge and Bi-Log antenna is 3 meters (Need to adjust for different Radial Angel). Connect DNP, SDPIV1(car dock), iFMCLA, Car antenna and audio adapter.
- 2. Play SMIQ and to make sure Radio works properly with channel name showing.
- 3. Tune the FM TX to specified frequency (Refer to Table 1). Set the polarization to vertical.
- 4. Turn 8 radial angles and continuously move antenna height from 1m to 4m to record the maximum emission strength, antenna height with frequency range from 30MHz to 1100MHz. Record the azimuth (specified 8 radials) for each data point
- 5. Change polarization to horizontal and process the step 4 again.
- 6. Change Radio to other Radio and process the step 3 to 5 again.
- 7. Change to other 2 vehicles and process the step 3 to 6 again.

## 2.5 Measuring Instruments and Setting

#### <Radiated Emissions>

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

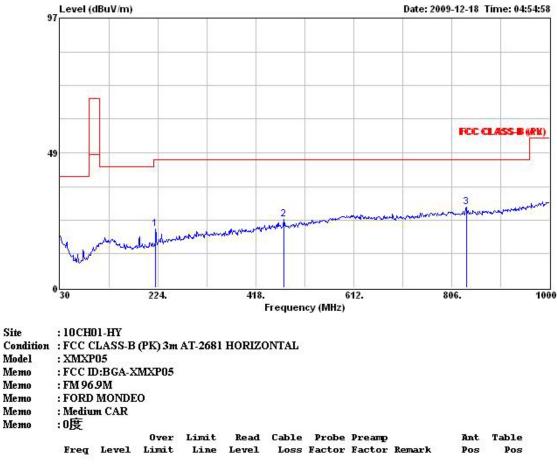
#### <Field Strength of Fundamental Emissions>

Receiver Parameter	Setting
Attenuation	Auto
Center Frequency	Fundamental Frequency
RB	120 KHz
Detector	Peak / QP / Average

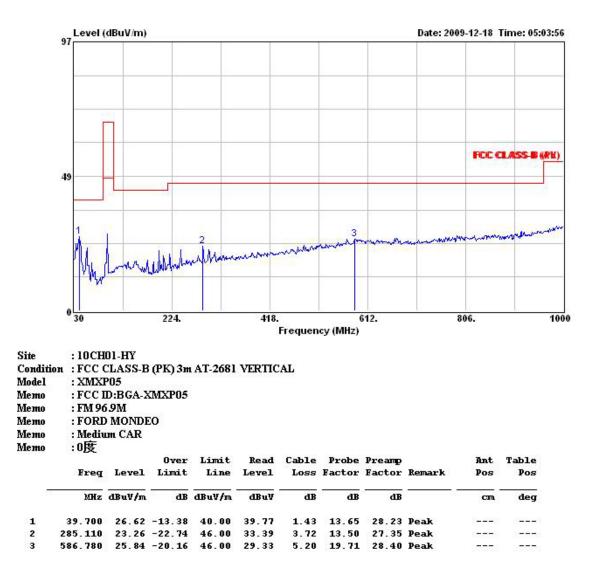
# 3. TEST RESULT

# 3.1 Results for Radiated Emissions

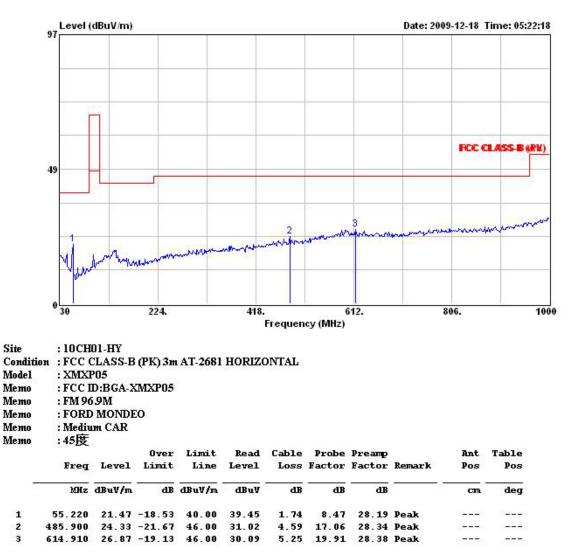
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 0 $^{\circ}$ / Mode 1		

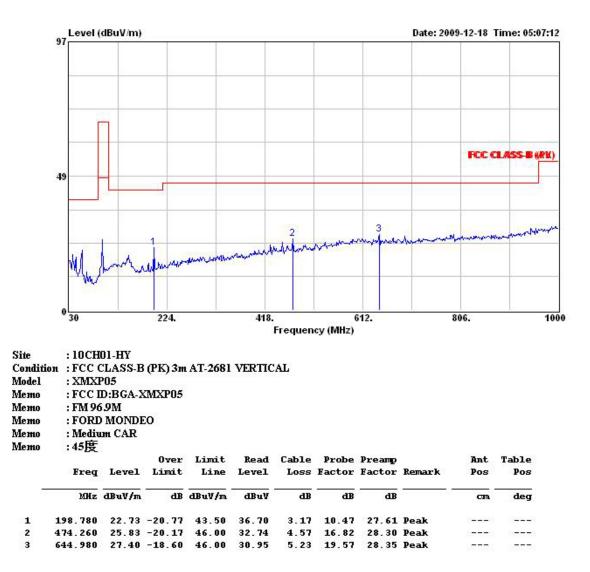


	TTTA	LCICL	2111110	22762	Deret	2000	Lactor	100001		100	100
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	219.150	21.15	-24.85	46.00	34.04	3.27	11.38	27.54	Peak		
2	474.260	24.49	-21.51	46.00	31.40	4.57	16.82	28.30	Peak		
3	835.100	28.97	-17.03	46.00	31.00	5.76	20.07	27.86	Peak	240.000	

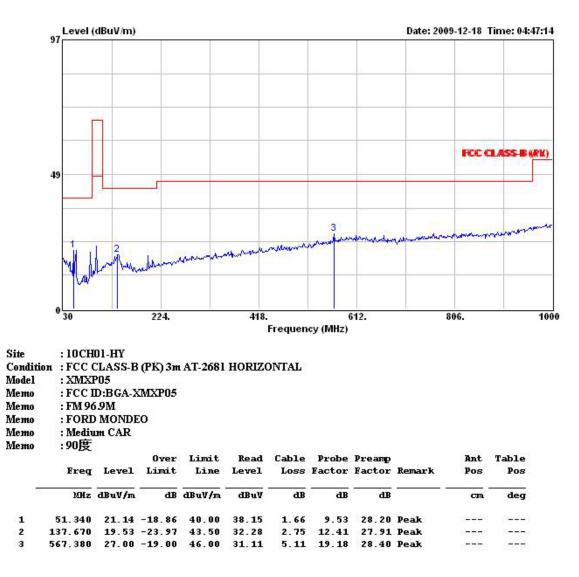


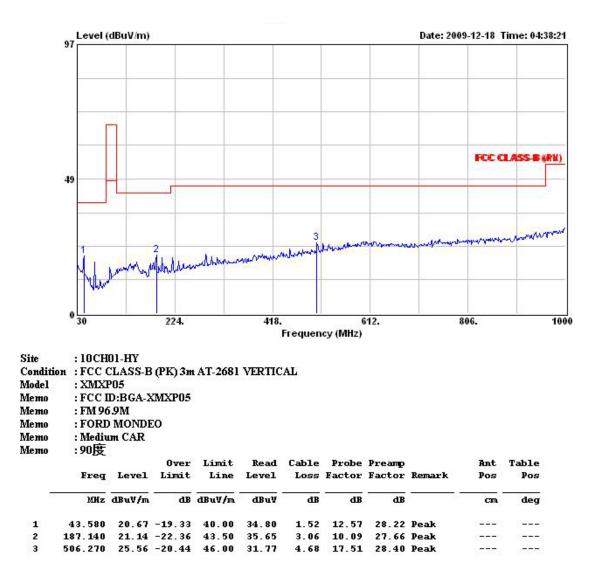
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 45 $^\circ$ / Mode 1		



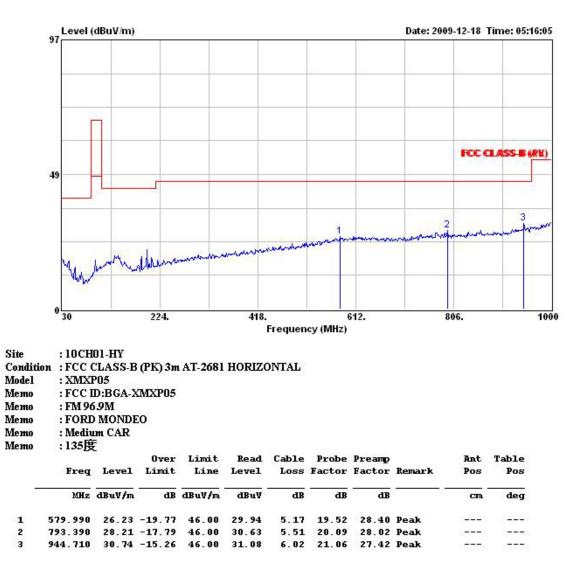


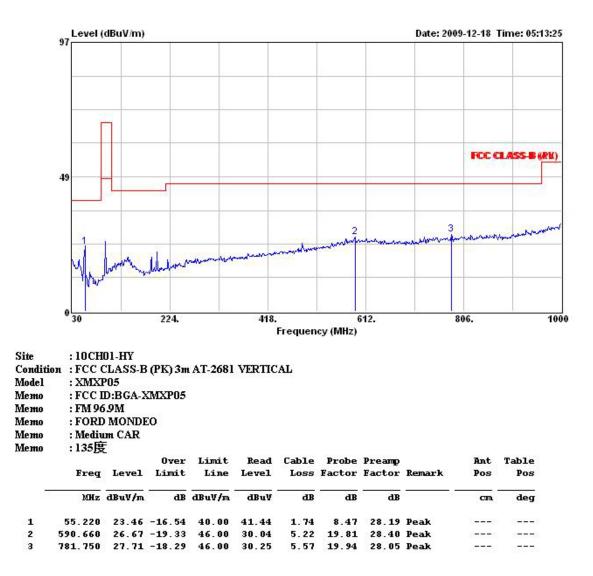
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 90 $^\circ$ / Mode 1		





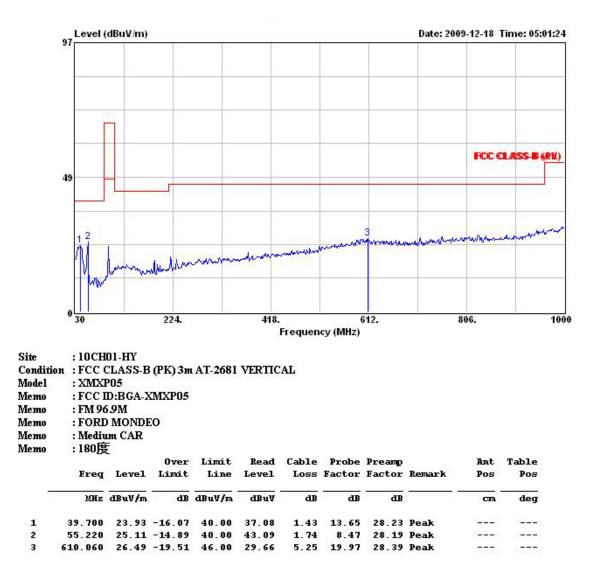
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 135 $^{\circ}$ / Mode 1		



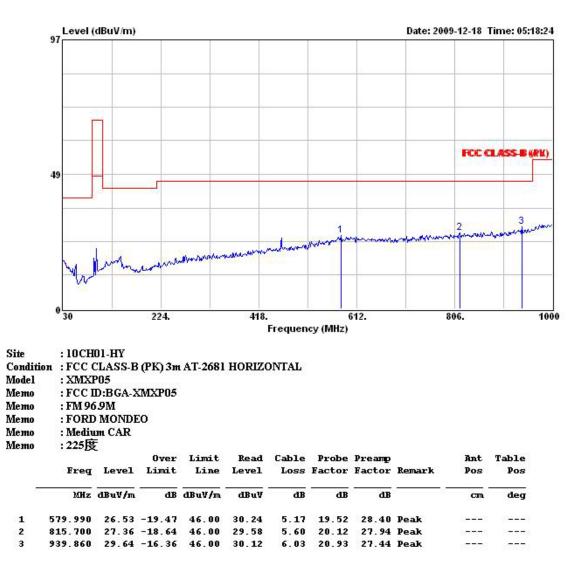


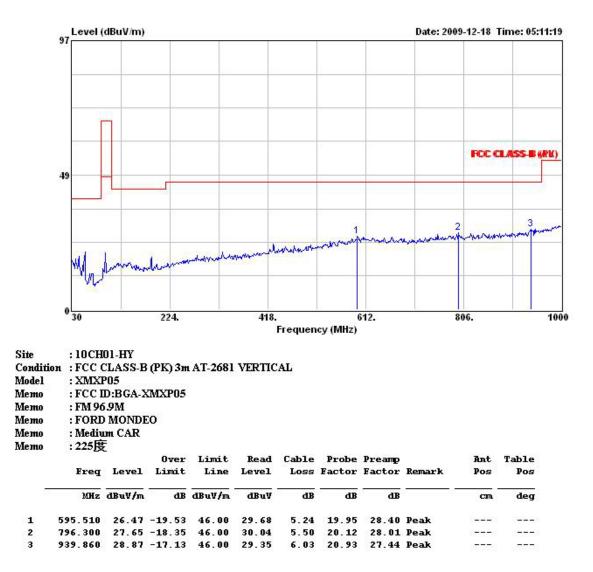
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 180° / Mode 1		



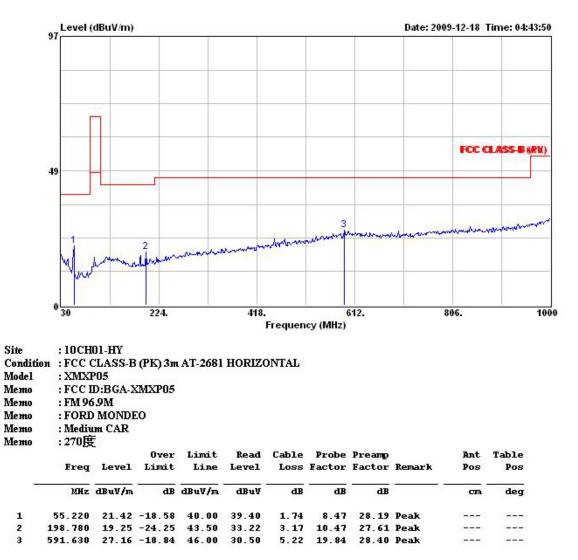


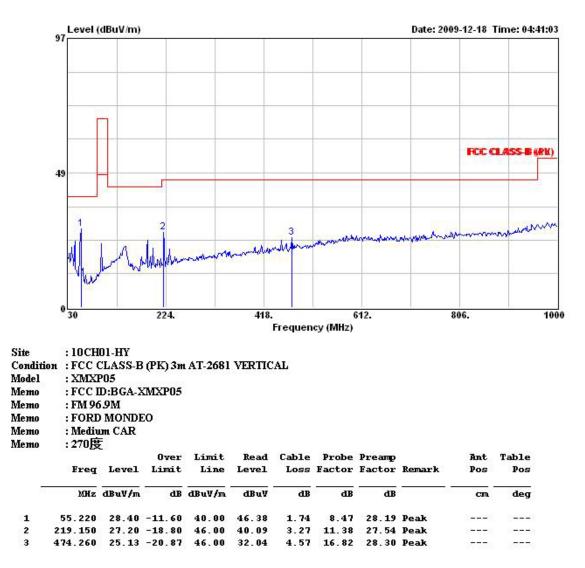
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 225 $^{\circ}$ / Mode 1		





Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 270 $^\circ$ / Mode 1		

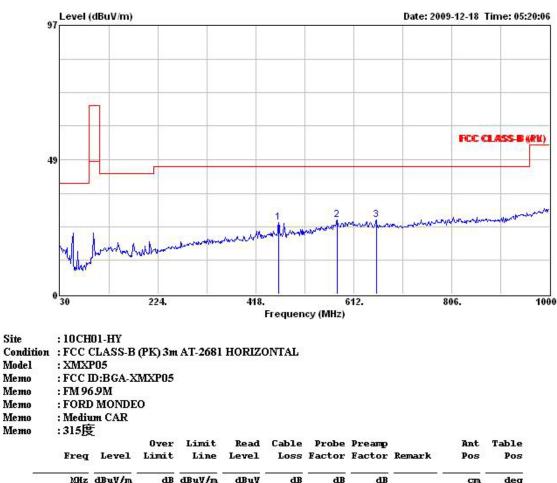




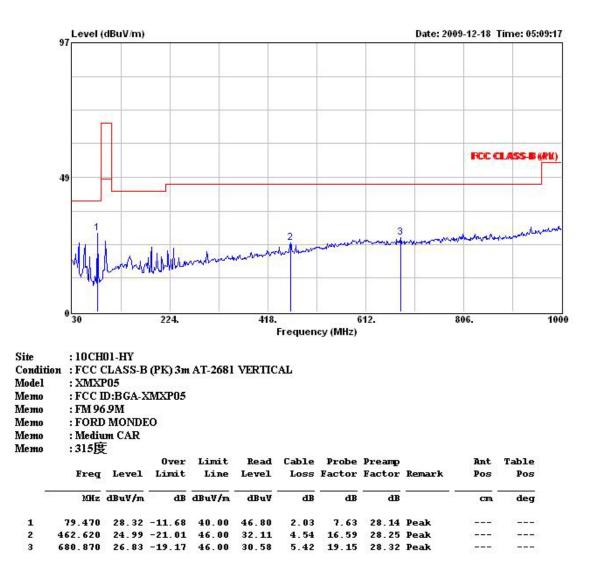
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 315 $^{\circ}$ / Mode 1		

#### Horizontal

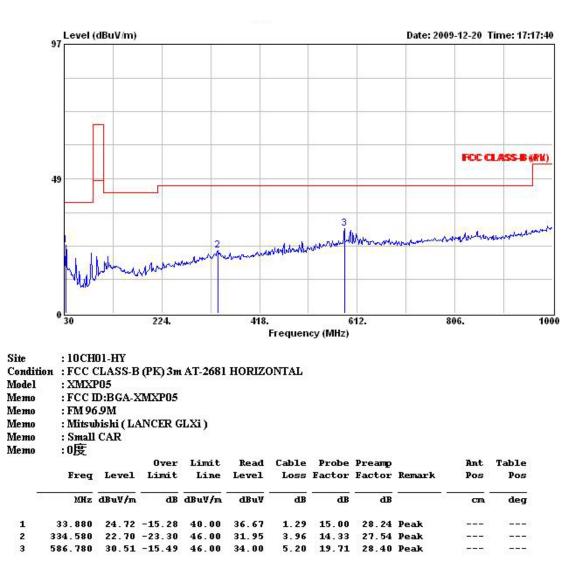
Site

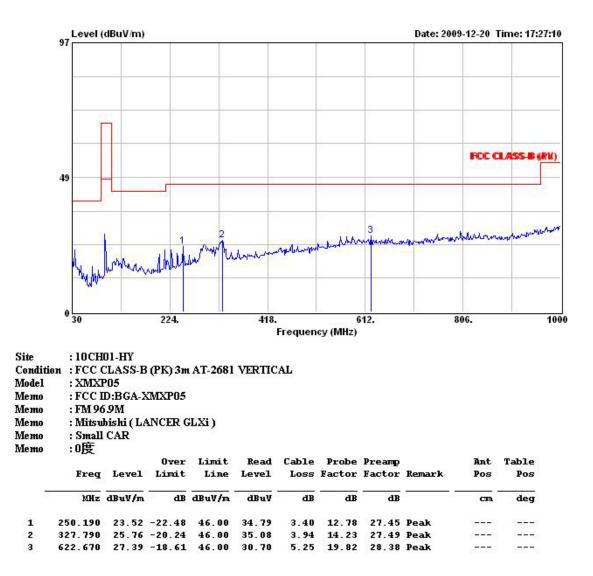


	Freq	Level		Limit Line						Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	462.620	25.86	-20.14	46.00	32.98	4.54	16.59	28.25	Peak		()
2	579.020	26.87	-19.13	46.00	30.61	5.16	19.50	28.40	Peak		
3	656.620	26.71	-19.29	46.00	30.35	5.27	19.43	28.34	Peak	100000	32000

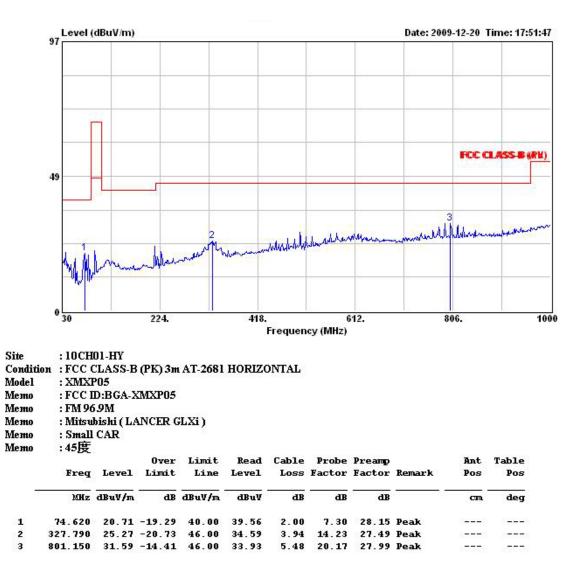


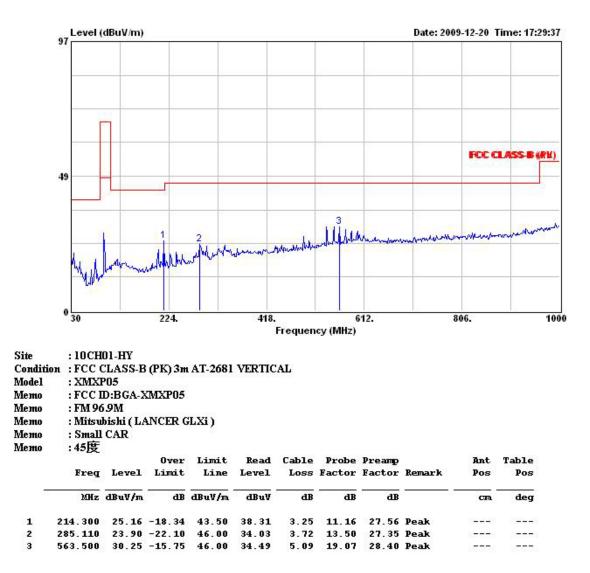
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 0 $^{\circ}$ / Mode 2		



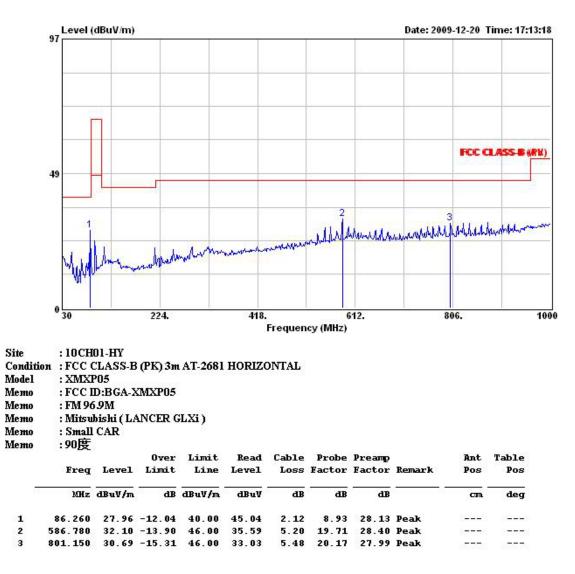


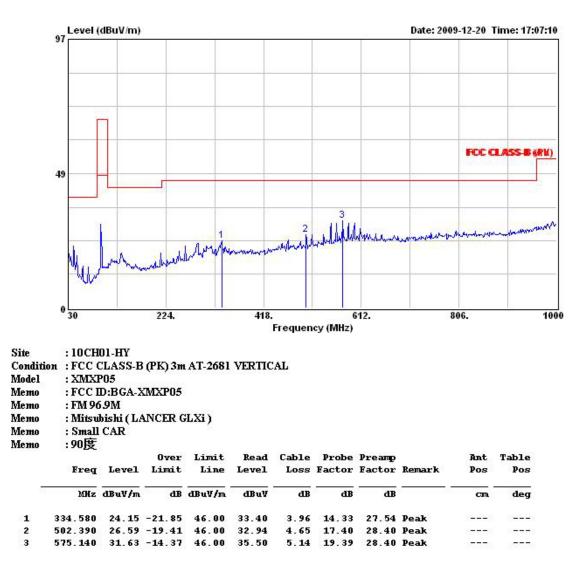
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 45 $^\circ$ / Mode 2		



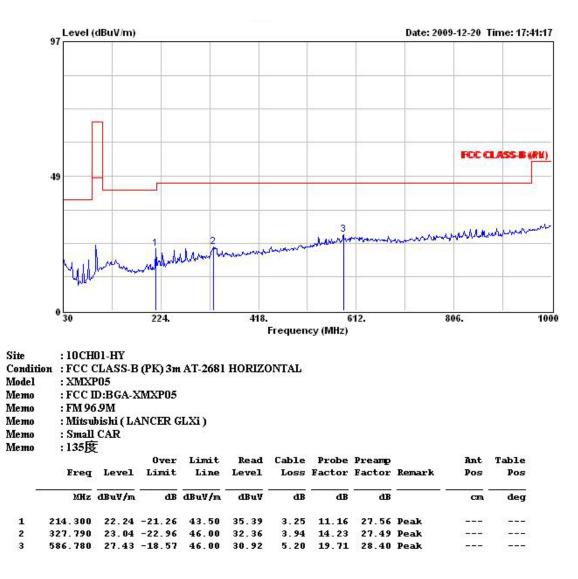


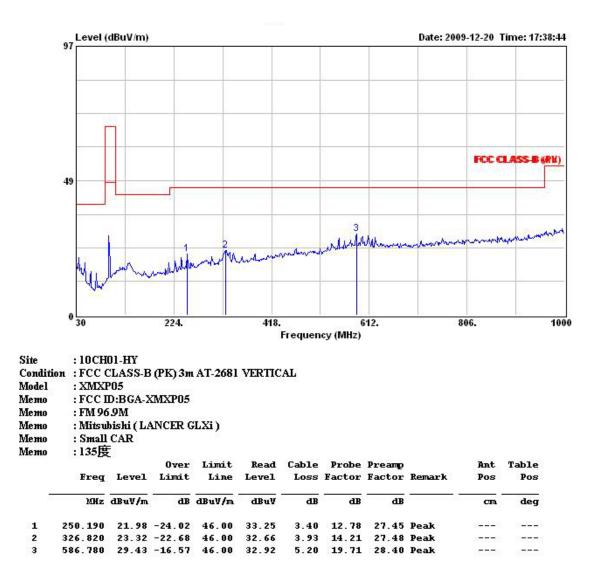
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 90 $^\circ$ / Mode 2		



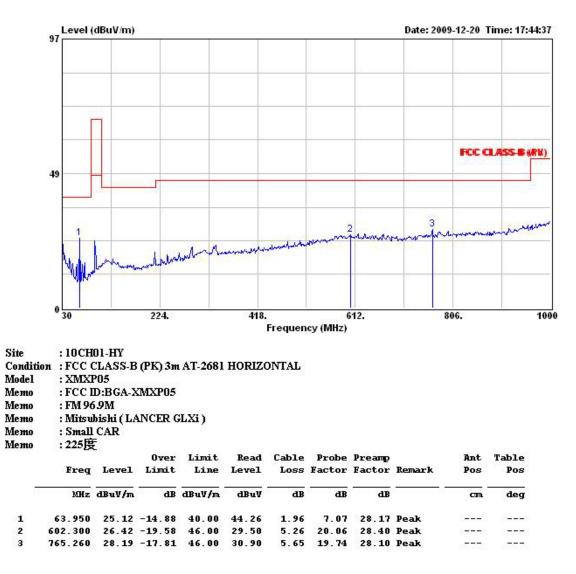


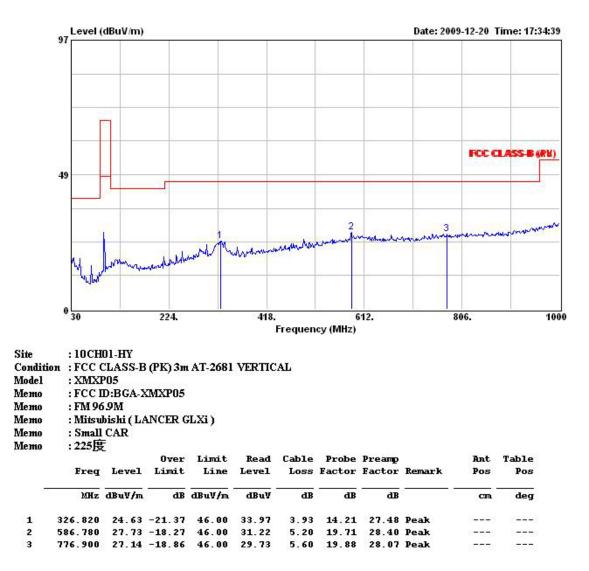
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 135 $^{\circ}$ / Mode 2		



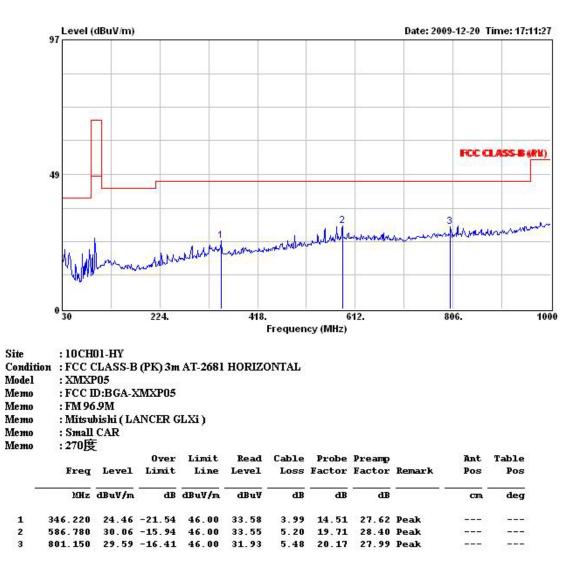


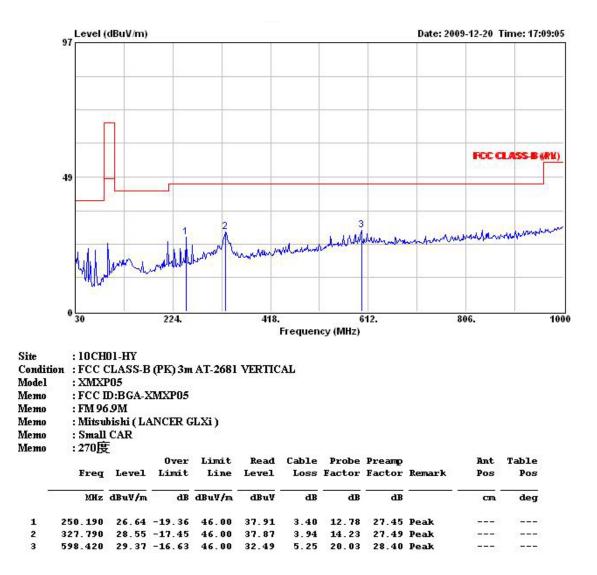
Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 225 $^{\circ}$ / Mode 2		





Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 270 $^\circ$ / Mode 2		





Temperature	<b>20.3</b> ℃	Humidity	57.8%
Configurations	96.9 MHz/ 315 $^{\circ}$ / Mode 2		

