

**APPENDIX 2: Data of EMI test**

**Radiated Emission**

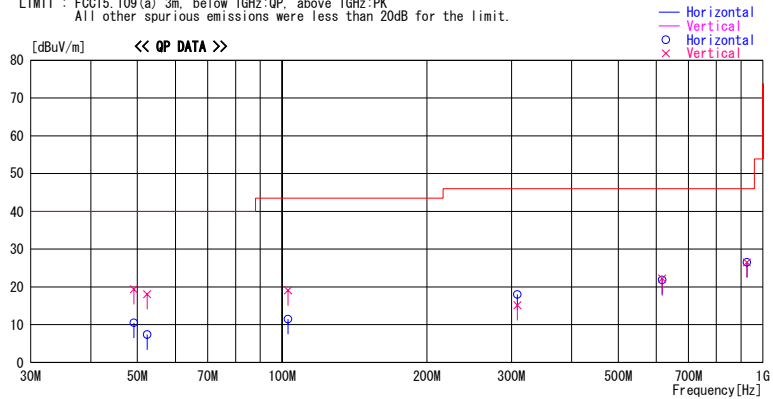
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber  
Date : 2007/12/23

Company : Tokai Rika Co., Ltd. Report No. : 28EE0022-HO-01  
 Kind of EUT : Receiver Power : DC 12.0V  
 Model No. : F02RG Temp./Humi. : 24deg. C. / 42%  
 Serial No. : 4 Operator : Makoto Kosaka

Mode / Remarks : Rx 312.15MHz worst axis Hor:X-axis Ver:X-axis

LIMIT : FCC15.109(a) 3m. below 1GHz:QP, above 1GHz:PK  
 All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss & Gain [dB]							
49.148	24.4	QP	10.8	-24.7	10.5	0	339	Hor.	40.0	29.5	
49.148	33.3	QP	10.8	-24.7	19.4	359	280	Vert.	40.0	20.6	
52.395	21.8	QP	10.1	-24.5	7.4	0	228	Hor.	40.0	32.6	
52.395	32.5	QP	10.1	-24.5	18.1	0	280	Vert.	40.0	21.9	
102.857	24.7	QP	10.8	-24.0	11.5	273	316	Hor.	43.5	32.0	
102.857	32.3	QP	10.8	-24.0	19.1	235	100	Vert.	43.5	24.4	
308.572	25.7	QP	14.3	-22.0	18.0	0	100	Hor.	46.0	28.0	
308.572	22.9	QP	14.3	-22.0	15.2	0	100	Vert.	46.0	30.8	
617.143	23.2	QP	19.3	-20.3	22.2	185	100	Vert.	46.0	23.8	
617.143	22.8	QP	19.3	-20.3	21.8	146	183	Hor.	46.0	24.2	
925.650	22.0	QP	22.1	-17.6	26.5	146	183	Hor.	46.0	19.5	
925.650	22.0	QP	22.1	-17.6	26.5	185	100	Vert.	46.0	19.5	

CHART WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN  
 CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place.

\*The test result is rounded off to one or two decimal places, so some differences might be observed.

## Radiated Emission

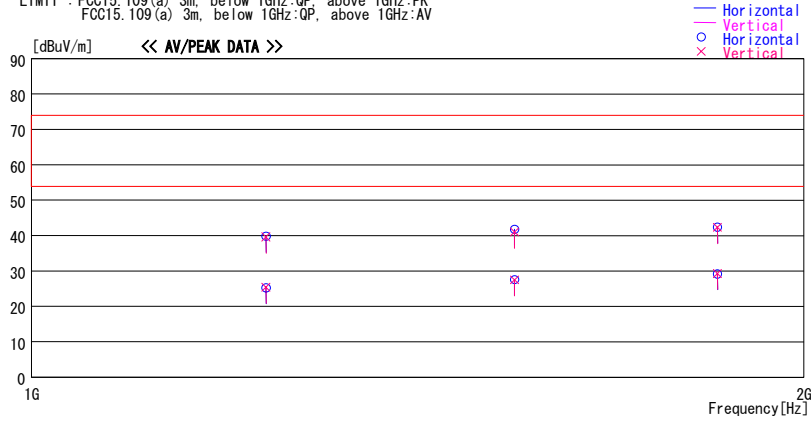
### DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No. 3 Semi Anechoic Chamber  
Date : 2007/12/23

Company : Tokai Rika Co., Ltd.                      Report No. : 28EE0022-HO-01  
 Kind of EUT : Receiver                                      Power : DC 12.0V (Car Battery)  
 Model No. : F02RG    Temp./Humi. : 24deg.C / 42%  
 Serial No. : 4    Operator : Makoto Kosaka

Mode / Remarks: Rx 312.15MHz worst axis Hor:X-axis Ver:X-axis

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
 FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
1234.200	46.0	PK	25.3	-31.5	39.8	178	125	Hori.	73.9	34.1	
1234.200	45.8	PK	25.3	-31.5	39.6	8	132	Vert.	73.9	34.3	
1234.200	31.5	AV	25.3	-31.5	25.3	178	125	Hori.	53.9	28.7	
1234.200	31.6	AV	25.3	-31.5	25.4	8	132	Vert.	53.9	28.5	
1542.750	46.3	PK	25.9	-30.4	41.8	178	125	Hori.	73.9	32.1	
1542.750	45.5	PK	25.9	-30.4	41.0	8	132	Vert.	73.9	32.9	
1542.750	32.1	AV	25.9	-30.4	27.6	178	125	Hori.	53.9	26.3	
1542.750	32.0	AV	25.9	-30.4	27.5	8	132	Vert.	53.9	26.4	
1851.300	45.3	PK	26.5	-29.4	42.4	178	125	Hori.	73.9	31.5	
1851.300	45.2	PK	26.5	-29.4	42.3	8	132	Vert.	73.9	31.6	
1851.300	32.1	AV	26.5	-29.4	29.2	178	125	Hori.	53.9	24.7	
1851.300	32.2	AV	26.5	-29.4	29.3	8	132	Vert.	53.9	24.6	

CHART WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz:-HORN  
 CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place.  
 \*The test result is rounded off to one or two decimal places, so some differences might be observed.

### APPENDIX 3: Test instruments

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2007/03/05 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/01/19 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2007/01/19 * 12
MAT-30	Attenuator(6dB)	TME	UFA-01	RE	2007/03/05 * 12
MCC-51	Coaxial cable	UL Japan	-	RE	2007/07/26 * 12
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	RE	2007/03/16 * 12
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2007/04/14 * 12
MCC-56	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2007/03/29 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2007/03/02 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2007/02/03 * 12
MSA-09	Spectrum Analyzer	Advantest	R3273	RE	2007/12/21 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MLDM-03	Digital laser distance meter	BOSCH	DLE 50	RE	2007/06/21 * 36
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE	-

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipments have been controlled by means of an unbroken chains of calibrations.

Test Item:

RE: Radiated emission

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