

**APPENDIX 2: Data of EMI test**

**Radiated Emission below 30MHz (Fundamental and Spurious Emission)**

**DATA OF RADIATED EMISSION TEST**

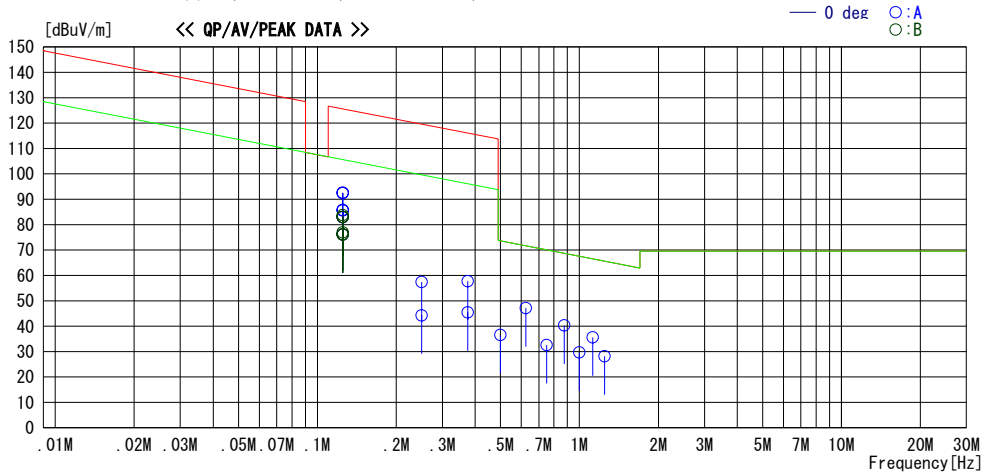
UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01

Temp./ Humi. : 22deg. C. / 31%  
Engineer : Takumi Shimada

Mode / Remarks : LF Transmitting 125kHz, Max Antenna / Worst axis : X-axis

LIMIT : FCC15.209(a) 3m, 9-90kHz:PK, 110-490kHz:PK, other:QP  
FCC15.209(a) 3m, 9-90kHz:AV, 110-490kHz:AV, other:QP



Freq.	Reading	DET	Ant. Fac	Loss	Gain	Result	Limit	Margin	Antenna	Table	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[deg.]	[deg.]	
0.12500	98.8	PEAK	19.9	6.0	32.1	92.6	125.6	33.0	0	A	359 X-axis
0.12500	92.0	AV	19.9	6.0	32.1	85.8	105.7	19.9	0	A	359 X-axis
0.12500	89.1	PEAK	19.9	6.0	32.1	82.9	125.6	42.7	0	A	252 Y-axis
0.12500	82.3	AV	19.9	6.0	32.1	76.1	105.7	29.6	0	A	252 Y-axis
0.12500	98.7	PEAK	19.9	6.0	32.1	92.5	125.6	33.1	0	A	270 Z-axis
0.12500	91.9	AV	19.9	6.0	32.1	85.7	105.7	20.0	0	A	270 Z-axis
0.12500	89.2	PEAK	19.9	6.0	32.1	83.0	125.6	42.6	0	B	192 X-axis Hor
0.12500	82.4	AV	19.9	6.0	32.1	76.2	105.7	29.5	0	B	192 X-axis Hor
0.12500	90.0	PEAK	19.9	6.0	32.1	83.8	125.6	41.8	0	B	236 Y-axis Hor
0.12500	83.2	AV	19.9	6.0	32.1	77.0	105.7	28.7	0	B	236 Y-axis Hor
0.12500	89.2	PEAK	19.9	6.0	32.1	83.0	125.6	42.6	0	B	270 Z-axis Hor
0.12500	82.3	AV	19.9	6.0	32.1	76.1	105.7	29.6	0	B	270 Z-axis Hor
0.25000	63.7	PEAK	19.7	6.1	32.1	57.4	119.6	62.2	0	A	190 X-axis
0.25000	50.5	AV	19.7	6.1	32.1	44.2	99.6	55.4	0	A	190 X-axis
0.37500	64.1	PEAK	19.7	6.1	32.1	57.8	116.1	58.3	0	A	180 X-axis
0.37500	51.7	AV	19.7	6.1	32.1	45.4	96.1	50.7	0	A	180 X-axis
0.50000	42.9	QP	19.6	6.1	32.1	36.5	73.6	37.1	0	A	359 X-axis
0.62500	53.4	QP	19.6	6.2	32.1	47.1	71.7	24.6	0	A	359 X-axis
0.75000	38.9	QP	19.6	6.2	32.1	32.6	70.1	37.5	0	A	359 X-axis
0.87500	46.6	QP	19.6	6.2	32.1	40.3	68.7	28.4	0	A	359 X-axis
1.00000	36.0	QP	19.6	6.2	32.1	29.7	67.6	37.9	0	A	359 X-axis
1.12500	42.0	QP	19.6	6.2	32.1	35.7	66.5	30.8	0	A	359 X-axis
1.25000	34.5	QP	19.6	6.2	32.1	28.2	65.6	37.4	0	A	359 X-axis

CHART: WITH FACTOR, ANT TYPE: LOOP. Except for the data below: adequate margin data below the limits.  
CALCULATION: RESULT[dBuV] = READING[dBuV] + ANT FACTOR[dB] + LOSS[dB] (CABLE + ATTEN. - AMP.)

**Radiated Emission above 30MHz (Fundamental and Spurious Emission)**

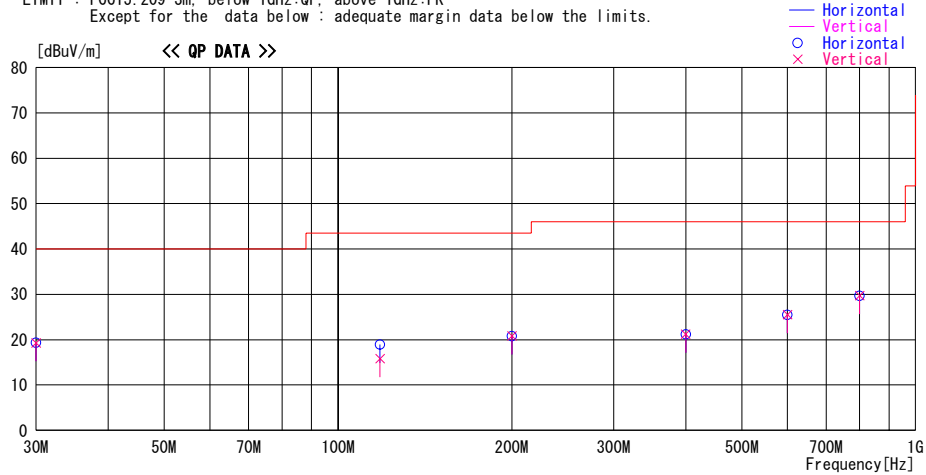
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01  
Temp./Humi. : 20deg. C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks : LF Transmitting 125kHz, Max Antenna / Antenna:X, ECU:X

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin	Comment
			Factor [dB/m]	Gain [dB]							
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Hori.	40.0	20.7	Noise Floor
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Vert.	40.0	20.7	Noise Floor
118.244	39.0	QP	12.6	-32.7	18.9	8	265	Hori.	43.5	24.6	
118.246	35.9	QP	12.6	-32.7	15.8	354	100	Vert.	43.5	27.7	
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Hori.	43.5	22.7	Noise Floor
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Vert.	43.5	22.7	Noise Floor
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Hori.	46.0	24.8	Noise Floor
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Vert.	46.0	24.8	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Hori.	46.0	20.5	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Vert.	46.0	20.5	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Hori.	46.0	16.3	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Vert.	46.0	16.3	Noise Floor

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)

**Radiated Emission below 30MHz (Fundamental and Spurious Emission)**

**DATA OF RADIATED EMISSION TEST**

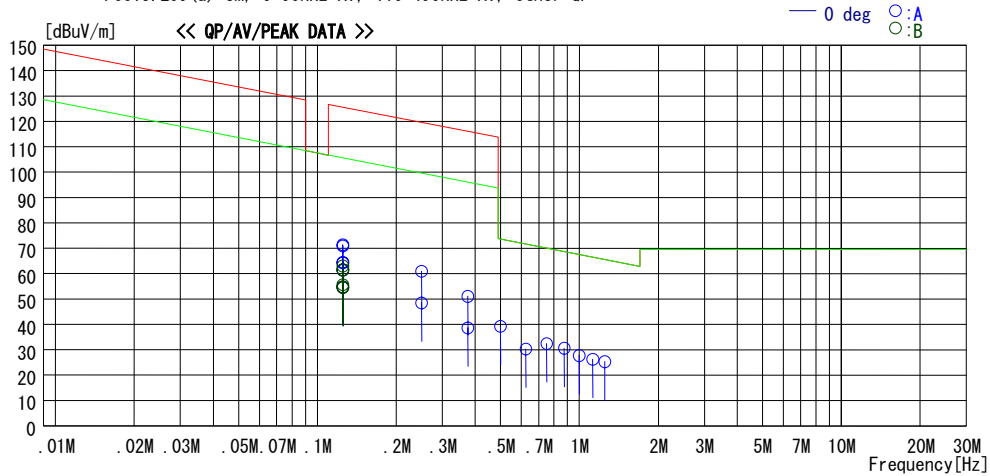
UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01

Temp./ Humi. : 22deg. C. / 31%  
Engineer : Takumi Shimada

Mode / Remarks: LF Transmitting 125kHz, Min Antenna / Worst axis : X-axis

LIMIT : FCC15. 209(a) 3m, 9-90kHz:PK, 110-490kHz:PK, other:QP  
FCC15. 209(a) 3m, 9-90kHz:AV, 110-490kHz:AV, other:QP



Freq. [MHz]	Reading [dBuV]	DET	Ant. Fac	Loss	Gain	Result	Limit	Margin	Antenna	Table	Comment
			[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[deg]	[deg]	
0.12500	77.6	PEAK	19.9	6.0	32.1	71.4	125.6	54.2	0	A	180 X-axis
0.12500	70.7	AV	19.9	6.0	32.1	64.5	105.7	41.2	0	A	180 X-axis
0.12500	67.6	PEAK	19.9	6.0	32.1	61.4	125.6	64.2	0	A	270 Y-axis
0.12500	60.8	AV	19.9	6.0	32.1	54.6	105.7	51.1	0	A	270 Y-axis
0.12500	77.2	PEAK	19.9	6.0	32.1	71.0	125.6	54.6	0	A	270 Z-axis
0.12500	70.5	AV	19.9	6.0	32.1	64.3	105.7	41.4	0	A	270 Z-axis
0.12500	67.8	PEAK	19.9	6.0	32.1	61.6	125.6	64.0	0	B	180 X-axis Hor
0.12500	60.8	AV	19.9	6.0	32.1	54.6	105.7	51.1	0	B	180 X-axis Hor
0.12500	69.3	PEAK	19.9	6.0	32.1	63.1	125.6	62.5	0	B	245 Y-axis Hor
0.12500	61.9	AV	19.9	6.0	32.1	55.7	105.7	50.0	0	B	245 Y-axis Hor
0.12500	67.8	PEAK	19.9	6.0	32.1	61.6	125.6	64.0	0	B	270 Z-axis Hor
0.12500	61.1	AV	19.9	6.0	32.1	54.9	105.7	50.8	0	B	270 Z-axis Hor
0.25000	67.2	PEAK	19.7	6.1	32.1	60.9	119.6	58.7	0	A	180 X-axis
0.25000	54.8	AV	19.7	6.1	32.1	48.5	99.6	51.1	0	A	180 X-axis
0.37500	57.4	PEAK	19.7	6.1	32.1	51.1	116.1	65.0	0	A	180 X-axis
0.37500	44.9	AV	19.7	6.1	32.1	38.6	96.1	57.5	0	A	180 X-axis
0.50000	45.6	QP	19.6	6.1	32.1	39.2	73.6	34.4	0	A	180 X-axis
0.62500	36.6	QP	19.6	6.2	32.1	30.3	71.7	41.4	0	A	180 X-axis
0.75000	38.7	QP	19.6	6.2	32.1	32.4	70.1	37.7	0	A	180 X-axis
0.87500	36.9	QP	19.6	6.2	32.1	30.6	68.7	38.1	0	A	180 X-axis
1.00000	34.1	QP	19.6	6.2	32.1	27.8	67.6	39.8	0	A	180 X-axis
1.12500	32.5	QP	19.6	6.2	32.1	26.2	66.5	40.3	0	A	180 X-axis
1.25000	31.6	QP	19.6	6.2	32.1	25.3	65.6	40.3	0	A	180 X-axis

CHART: WITH FACTOR ANT TYPE: LOOP. Except for the data below : adequate margin data below the limits.  
CALCULATION : RESULT [dBuV] = READING [dBuV] + ANT FACTOR [dB] + LOSS [dB] ( CABLE + ATTEN. - AMP. )

**Radiated Emission above 30MHz (Fundamental and Spurious Emission)**

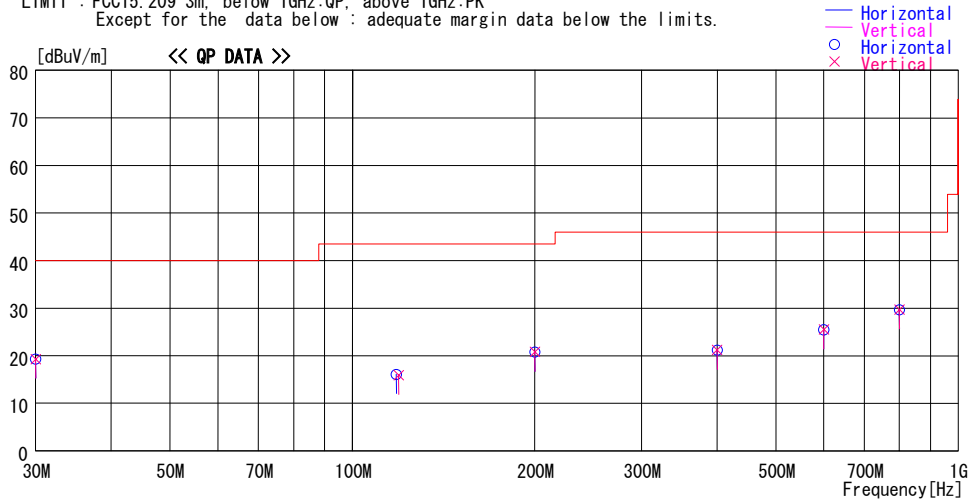
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01  
Temp./Humi. : 20deg. C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks: LF Transmitting 125kHz, Min Antenna / Antenna:X, ECU:X

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK  
Except for the data below : adequate margin data below the limits.



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]							
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Hori.	40.0	20.7	Noise Floor
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Vert.	40.0	20.7	Noise Floor
118.270	36.2	QP	12.6	-32.7	16.1	347	300	Hori.	43.5	27.4	
119.279	35.9	QP	12.7	-32.7	15.9	351	100	Vert.	43.5	27.6	
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Hori.	43.5	22.7	Noise Floor
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Vert.	43.5	22.7	Noise Floor
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Hori.	46.0	24.8	Noise Floor
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Vert.	46.0	24.8	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Hori.	46.0	20.5	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Vert.	46.0	20.5	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Hori.	46.0	16.3	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Vert.	46.0	16.3	Noise Floor

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)

**Radiated Emission below 30MHz (Fundamental and Spurious Emission)**

**DATA OF RADIATED EMISSION TEST**

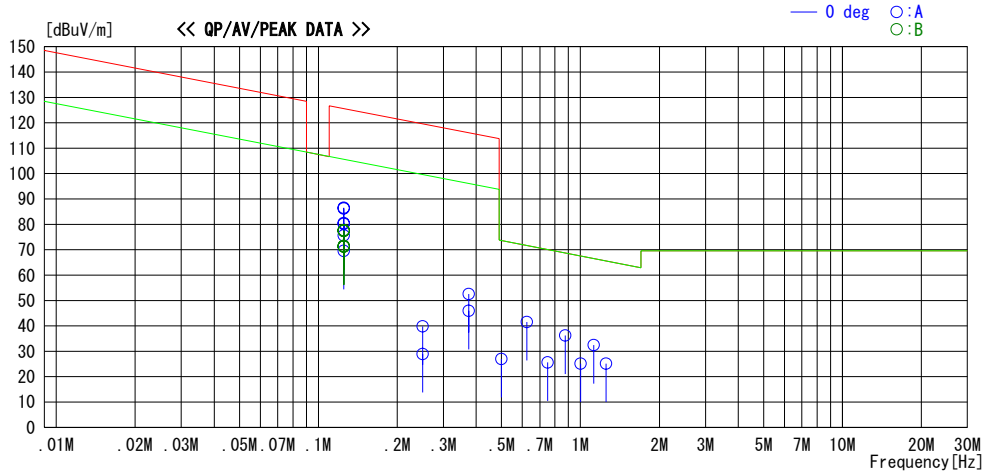
UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01

Temp. / Humi. : 20deg. C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks : Immobilizer Transmitting 125kHz, / Worst axis : X-axis

LIMIT : FCC15.209(a) 3m, 9-90kHz:PK, 110-490kHz:PK, other:QP  
FCC15.209(a) 3m, 9-90kHz:AV, 110-490kHz:AV, other:QP



Freq.	Reading	DET	Ant. Fac	Loss	Gain	Result	Limit	Margin	Antenna	Table	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[deg]	[deg]	
0.12508	92.7	PEAK	19.9	6.0	32.1	86.5	125.6	39.1	0	A	0 X-axis
0.12508	86.6	AV	19.9	6.0	32.1	80.4	105.7	25.3	0	A	0 X-axis
0.12508	81.9	PEAK	19.9	6.0	32.1	75.7	125.6	49.9	0	A	189 Y-axis
0.12508	75.7	AV	19.9	6.0	32.1	69.5	105.7	36.2	0	A	189 Y-axis
0.12508	92.5	PEAK	19.9	6.0	32.1	86.3	125.6	39.3	0	A	88 Z-axis
0.12508	86.3	AV	19.9	6.0	32.1	80.1	105.7	25.6	0	A	88 Z-axis
0.12508	83.6	PEAK	19.9	6.0	32.1	77.4	125.6	48.2	0	B	180 X-axis Hor
0.12508	77.4	AV	19.9	6.0	32.1	71.2	105.7	34.5	0	B	180 X-axis Hor
0.12508	83.9	PEAK	19.9	6.0	32.1	77.7	125.6	47.9	0	B	77 Y-axis Hor
0.12508	77.7	AV	19.9	6.0	32.1	71.5	105.7	34.2	0	B	77 Y-axis Hor
0.12508	83.7	PEAK	19.9	6.0	32.1	77.5	125.6	48.1	0	B	70 Z-axis Hor
0.12508	77.5	AV	19.9	6.0	32.1	71.3	105.7	34.4	0	B	70 Z-axis Hor
0.25017	46.2	PEAK	19.7	6.1	32.1	39.9	119.6	79.7	0	A	359 X-axis
0.25017	35.2	AV	19.7	6.1	32.1	28.9	99.6	70.7	0	A	359 X-axis
0.37524	58.9	PEAK	19.7	6.1	32.1	52.6	116.1	63.5	0	A	359 X-axis
0.37524	52.2	AV	19.7	6.1	32.1	45.9	96.1	50.2	0	A	359 X-axis
0.50033	33.4	QP	19.6	6.1	32.1	27.0	73.6	46.6	0	A	359 X-axis
0.62542	47.9	QP	19.6	6.2	32.1	41.6	71.7	30.1	0	A	359 X-axis
0.75051	32.0	QP	19.6	6.2	32.1	25.7	70.1	44.4	0	A	359 X-axis
0.87560	42.5	QP	19.6	6.2	32.1	36.2	68.7	32.5	0	A	359 X-axis
1.00069	31.5	QP	19.6	6.2	32.1	25.2	67.6	42.4	0	A	359 X-axis
1.12578	38.8	QP	19.6	6.2	32.1	32.5	66.5	34.0	0	A	359 X-axis
1.25087	31.4	QP	19.6	6.2	32.1	25.1	65.6	40.5	0	A	359 X-axis

CHART: WITH FACTOR, ANT TYPE: LOOP. Except for the data below : adequate margin data below the limits.  
CALCULATION : RESULT[dBuV] = READING[dBuV] + ANT FACTOR[dB] + LOSS[dB] ( CABLE + ATTEN. - AMP. )

**Radiated Emission above 30MHz (Fundamental and Spurious Emission)**

**DATA OF RADIATED EMISSION TEST**

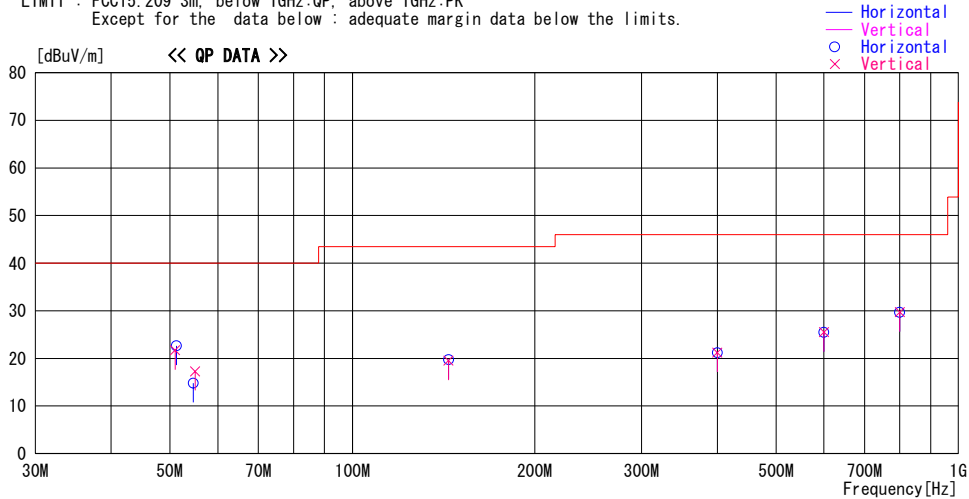
UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-H0-01

Temp./Humi. : 20deg.C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks : Immobilizer Transmitting 125kHz, / Antenna:X, ECU:X

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
51.274	46.1	QP	10.5	-34.0	22.6	175	376	Hori.	40.0	17.4	
51.021	45.1	QP	10.6	-34.0	21.7	290	100	Vert.	40.0	18.3	
54.686	39.4	QP	9.4	-34.0	14.8	170	350	Hori.	40.0	25.2	
55.039	42.0	QP	9.3	-34.0	17.3	288	100	Vert.	40.0	22.7	
144.078	37.5	QP	14.5	-32.3	19.7	347	254	Hori.	43.5	23.8	
144.079	37.3	QP	14.5	-32.3	19.5	82	100	Vert.	43.5	24.0	
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Hori.	46.0	24.8	Noise Floor
400.000	35.2	QP	15.9	-29.9	21.2	0	100	Vert.	46.0	24.8	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Hori.	46.0	20.5	Noise Floor
600.000	35.3	QP	18.9	-28.7	25.5	0	100	Vert.	46.0	20.5	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Hori.	46.0	16.3	Noise Floor
800.000	35.1	QP	22.0	-27.4	29.7	0	100	Vert.	46.0	16.3	Noise Floor

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)

## Radiated Emission

### DATA OF RADIATED EMISSION TEST

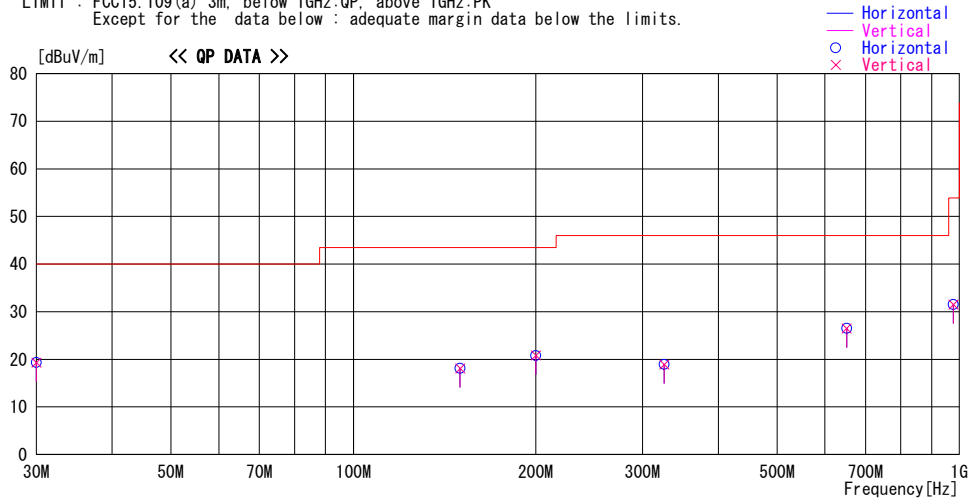
UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

Report No. : 29KE0168-HO-01

Temp./Humi. : 20deg. C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks : RF Receiving 315MHz, ECU:X

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Hori.	40.0	20.7	Noise Floor
30.000	36.6	QP	17.1	-34.4	19.3	0	100	Vert.	40.0	20.7	Noise Floor
150.000	35.7	QP	14.7	-32.3	18.1	0	100	Hori.	43.5	25.4	Noise Floor
150.000	35.7	QP	14.7	-32.3	18.1	0	100	Vert.	43.5	25.4	Noise Floor
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Hori.	43.5	22.7	Noise Floor
200.000	35.7	QP	16.7	-31.6	20.8	0	100	Vert.	43.5	22.7	Noise Floor
325.700	35.3	QP	14.0	-30.4	18.9	0	100	Hori.	46.0	27.1	Noise Floor
325.700	35.3	QP	14.0	-30.4	18.9	0	100	Vert.	46.0	27.1	Noise Floor
651.400	35.2	QP	19.7	-28.4	26.5	0	100	Hori.	46.0	19.5	Noise Floor
651.400	35.2	QP	19.7	-28.4	26.5	0	100	Vert.	46.0	19.5	Noise Floor
977.100	34.6	QP	23.2	-26.3	31.5	0	100	Hori.	53.9	22.4	Noise Floor
977.100	34.6	QP	23.2	-26.3	31.5	0	100	Vert.	53.9	22.4	Noise Floor

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)

**Radiated Emission**

**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2010/01/21

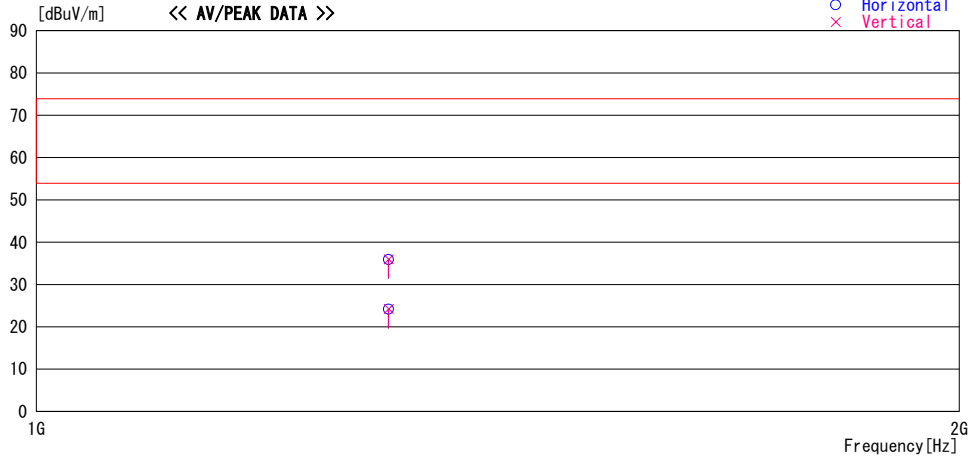
Report No. : 29KE0168-HO-01

Temp./Humi. : 20deg. C. / 46%  
Engineer : Kazufumi Nakai

Mode / Remarks : RF Receiving 315MHz, ECU:X

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

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
1302.800	44.9	PK	25.9	-34.9	35.9	0	100	Hori.	73.9	38.0	Noise Floor
1302.800	45.0	PK	25.9	-34.9	36.0	0	100	Vert.	73.9	37.9	Noise Floor
1302.800	33.2	AV	25.9	-34.9	24.2	0	100	Hori.	53.9	29.7	Noise Floor
1302.800	33.2	AV	25.9	-34.9	24.2	0	100	Vert.	53.9	29.7	Noise Floor

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)

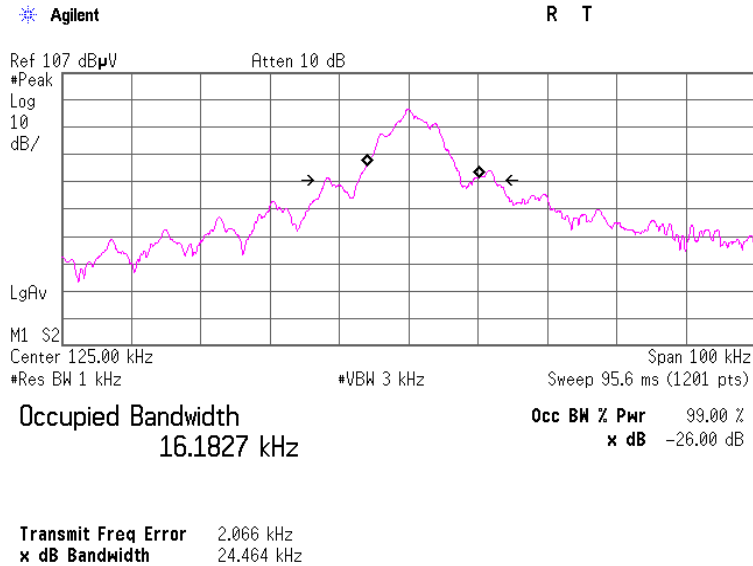


**-26dB Bandwidth and 99% Occupied Bandwidth**

UL Japan, Inc.  
 Head Office EMC Lab. No.6 Shielded room

COMPANY	: OMRON Corporation	REPORT NO	: 29KE0168-HO-01
EQUIPMENT	: Keyless operation system	REGULATION	: Reference Data (for FCC)/RSS-Gen 4.6.1
MODEL	: G8D-841M-ECU-D/Max Antenna	TEST DISTANCE	: -
S/ N	: 1/1-244	DATE	: 03/29/2010
POWER	: DC 12V	TEMPERATURE	: 23 deg.C
MODE	: LF Transmitting mode 125kHz	HUMIDITY	: 38 %
		Engineer	: Takumi Shimada

FREQ	-26dB Bandwidth	99% Occupied Bandwidth
[kHz]	[kHz]	[kHz]
125.0	24.5	16.183



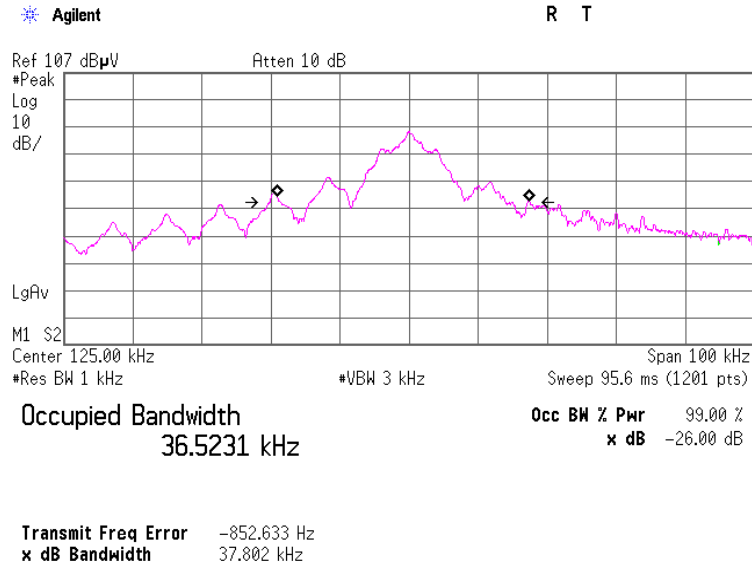
**-26dB Bandwidth and 99% Occupied Bandwidth**

UL Japan, Inc.  
 Head Office EMC Lab. No.1 Semi Anechoic Chamber

COMPANY : OMRON Corporation  
 EQUIPMENT : Keyless operation system  
 MODEL : G8D-841M-ECU-D/Min Antenna  
 S/ N : 1/1-248  
 POWER : DC 12V  
 MODE : LF Transmitting mode 125kHz

REPORT NO : 29KE0168-HO-01  
 REGULATION : Reference Data (for FCC)/RSS-Gen 4.6.1  
 TEST DISTANCE : -  
 DATE : 01/21/2010  
 TEMPERATURE : 22 deg.C  
 HUMIDITY : 31 %  
 Engineer : Takumi Shimada

FREQ	-26dB Bandwidth	99% Occupied Bandwidth
[kHz]	[kHz]	[kHz]
125.0	37.8	36.523



**-26dB Bandwidth and 99% Occupied Bandwidth**

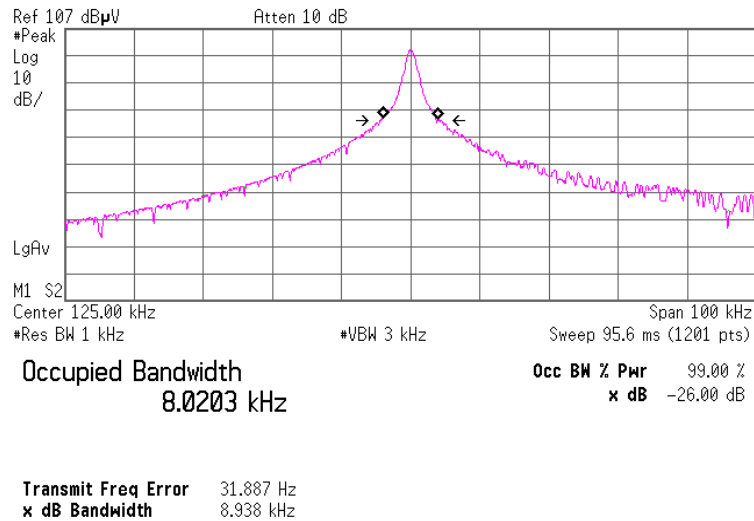
UL Japan, Inc.  
 Head Office EMC Lab. No.1 Semi Anechoic Chamber

COMPANY	: OMRON Corporation	REPORT NO	: 29KE0168-HO-01
EQUIPMENT	: Keyless operation system	REGULATION	: Reference Data (for FCC)/RSS-Gen 4.6.1
MODEL	: G8D-841M-ECU-D/G8Z-F116M	TEST DISTANCE	: -
S/ N	: 1/75	DATE	: 01/21/2010
POWER	: DC 12V	TEMPERATURE	: 22 deg.C
MODE	: Immobilizer Transmitting mode 125kHz	HUMIDITY	: 31 %
		Engineer	: Takumi Shimada

FREQ	-26dB Bandwidth	99% Occupied Bandwidth
[kHz]	[kHz]	[kHz]
125.0	8.9	8.020

Agilent

R T



### **APPENDIX 3: Test instruments**

#### **EMI test equipment**

<b>Control No.</b>	<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Serial No</b>	<b>Test Item</b>	<b>Calibration Date * Interval(month)</b>
MAEC-01	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 10m	DA-06881	RE	2009/06/26 * 12
MOS-01	Digital Humidity Indicator	N.T	NT-1800	MOS01	RE	2009/02/06 * 12
MJM-01	Measure	KDS	ES19-55	-	RE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE	-
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	100084	RE	2009/12/17 * 12
MLPA-01	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100017	RE	2009/10/19 * 12
MCC-30	Coaxial cable	UL Japan	-	-	RE	2009/06/22 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/TSJ	5D-2W(20m)/3D-2W(7.5m)/RG400u(1.5m)/RFM-E421(Switcher)	-/01068(Switcher)	RE	2010/01/05 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2009/03/18 * 12
MAT-09	Attenuator(6dB)	Weinschel Corp	2	BK7973	RE	2009/11/12 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	RE	2009/08/25 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032007	RE	2009/10/03 * 12
MLA-09	Logperiodic Antenna	Schwarzbeck	USLP9143B	9143B006	RE	2009/10/03 * 12
MAT-08	Attenuator(6dB)	Weinschel Corp	2	BK7971	RE	2009/11/13 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent /TSJ	-	-	RE	2009/10/09 * 12
MPA-20	Pre Amplifier	Elena	EPA-4020YA	030801	RE	2009/03/17 * 12
MHA-05	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	253	RE	2009/06/15 * 12
MCC-18	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	233010(1m) / 292410(5m)	RE	2009/09/16 * 12
MPA-01	Pre Amplifier	Agilent	8449B	3008A01671	RE	2009/02/12 * 12

**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 equipment have been controlled by means of an unbroken chains of calibrations.**

**Test Item:**

**RE: Radiated Emission**

**UL Japan, Inc.**

**Head Office EMC Lab.**

**4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN**

**Telephone : +81 596 24 8116**

**Facsimile : +81 596 24 8124**