

APPENDIX 2: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

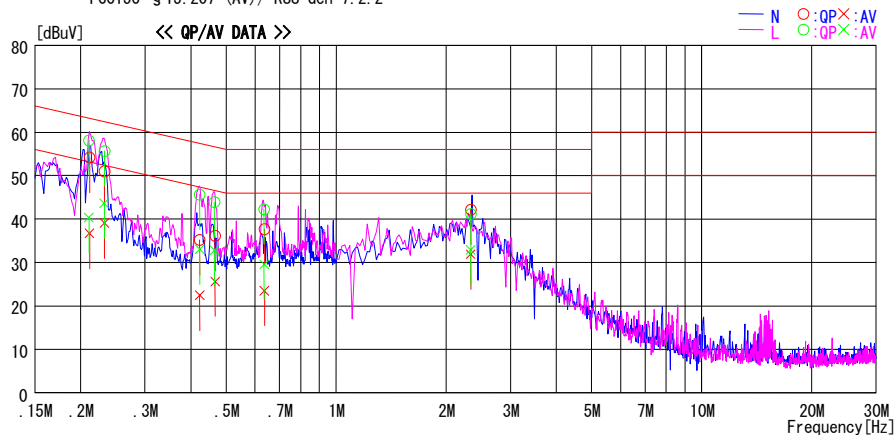
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/11/14 02:31:31

Company : Honda Motor Co., Ltd.
Kind of EUT : TPMS Sensor Tool
Model No. : AKS0620061
Serial No. : 0001

Report No. : 27DE0059-HO
Power : DC 12.0V (AC Adapter:AC120V/60Hz)
Temp./Humi. : 22deg.C / 36%
Operator : Takumi Shimada

Mode / Remarks : TRW mode

LIMIT : FCC15C § 15.207 (QP) / RSS-Gen 7.2.2
FCC15C § 15.207 (AV) / RSS-Gen 7.2.2



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.21157	53.9	36.5	0.2	54.1	36.7	63.1	53.1	9.0	16.4	N
0.23226	50.8	38.9	0.2	51.0	39.1	62.4	52.4	11.4	13.3	N
0.42340	35.0	22.2	0.2	35.2	22.4	57.4	47.4	22.2	25.0	N
0.46658	35.9	25.4	0.2	36.1	25.6	56.6	46.6	20.5	21.0	N
0.63619	37.4	23.2	0.3	37.7	23.5	56.0	46.0	18.4	22.5	N
2.33212	41.7	31.4	0.5	42.2	31.9	56.0	46.0	13.8	14.1	N
0.21043	57.9	40.1	0.2	58.1	40.3	63.2	53.2	5.1	12.9	L
0.23209	55.5	43.4	0.2	55.7	43.6	62.4	52.4	6.7	8.8	L
0.42312	45.4	32.8	0.2	45.6	33.0	57.4	47.4	11.8	14.4	L
0.46449	43.7	32.6	0.2	43.9	32.8	56.6	46.6	12.8	13.8	L
0.63508	42.0	29.3	0.3	42.3	29.6	56.0	46.0	13.7	16.4	L
2.33281	40.7	32.4	0.5	41.2	32.9	56.0	46.0	14.8	13.1	L

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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MF060b(14.06.06)

Radiated Emission below 30MHz (Fundamental)

DATA OF MAGNETIC RADIATED EMISSION TEST

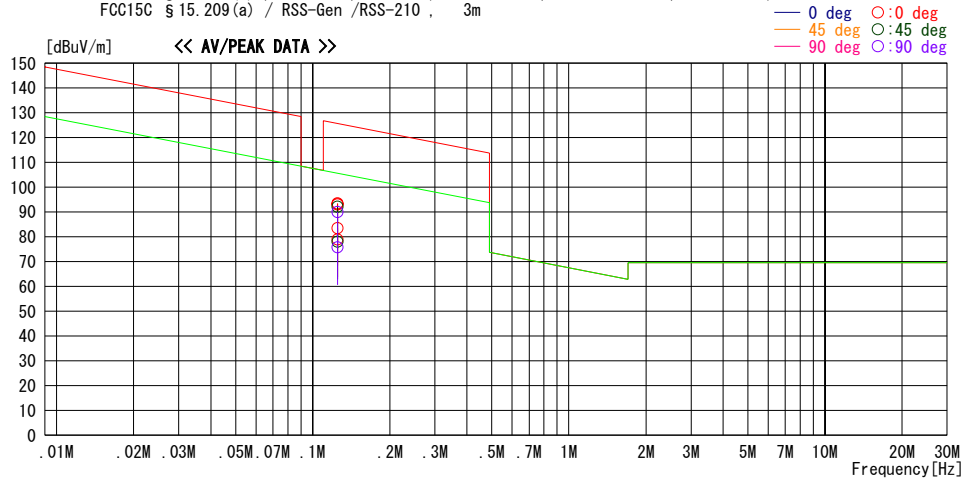
UL Apex Co., LTD. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/11/13 21:00:36

Company : Honda Motor Co., Ltd.
Kind of EUT : TPMS Sensor Tool
Model No. : AKS0620061
Serial No. : 0001

Report No. : 27DE0059-HO
Power : DC 12.0V (AC Adapter: AC120V/60Hz)
Temp./ Humi. : 22deg. C / 36%
Operator : Takumi Shimada

Mode / Remarks : TRW mode Max-axis: X-axis

LIMIT : FCC15C § 15.209(a) / RSS-Gen / RSS-210 , 9k-90k: PK / 110k-490k: PK / other: QP , 3m
FCC15C § 15.209(a) / RSS-Gen / RSS-210 , 3m



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]	
0.12505	100.1	PEAK	19.5	0.1	26.1	93.6	125.7	32.1	0deg	270	X-axis
0.12505	90.0	PEAK	19.5	0.1	26.1	83.5	125.7	42.2	0deg	45	Y-axis
0.12505	99.5	PEAK	19.5	0.1	26.1	93.0	125.7	32.7	0deg	270	Z-axis
0.12505	85.4	AV	19.5	0.1	26.1	78.9	105.7	26.8	0deg	270	X-axis
0.12505	98.6	PEAK	19.5	0.1	26.1	92.1	125.7	33.6	45deg	45	X-axis
0.12505	84.6	AV	19.5	0.1	26.1	78.1	105.7	27.6	45deg	45	X-axis
0.12505	96.5	PEAK	19.5	0.1	26.1	90.0	125.7	35.7	90deg	359	X-axis
0.12505	82.3	AV	19.5	0.1	26.1	75.8	105.7	29.9	90deg	359	X-axis

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

Radiated Emission below 30MHz (Spurious Emission)

DATA OF MAGNETIC RADIATED EMISSION TEST

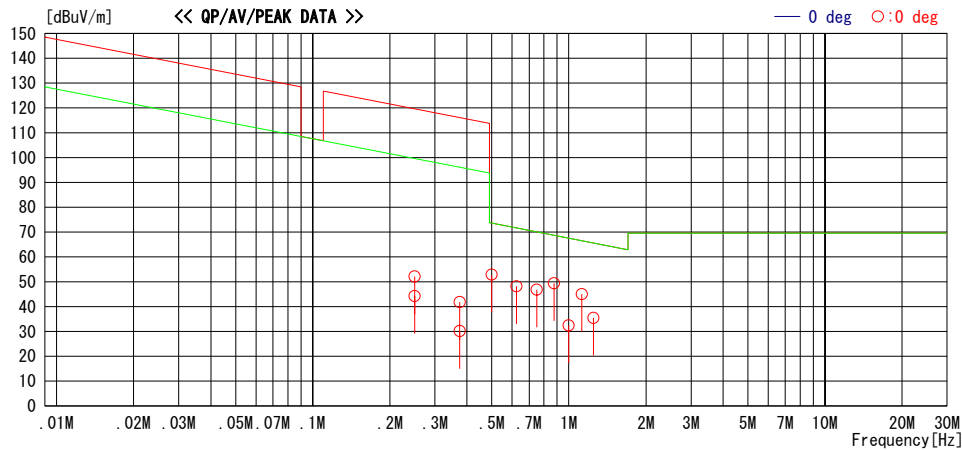
UL Apex Co., LTD. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/11/13 22:26:19

Company : Honda Motor Co., Ltd.
Kind of EUT : TPMS Sensor Tool
Model No. : AKS0620061
Serial No. : 0001

Report No. : 27DE0059-HO
Power : DC 12.0V (AC Adapter: AC120V/60Hz)
Temp./ Humi. : 22deg. C / 36%
Operator : Takumi Shimada

Mode / Remarks : TRW mode Max-axis: X-axis

LIMIT : FCC15C § 15.209(a) / RSS-Gen / RSS-210 , 9k-90k: PK / 110k-490k: PK / other: QP , 3m
FCC15C § 15.209(a) / RSS-Gen / RSS-210 , 3m



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]	
0.25002	59.3	PEAK	19.5	0.1	26.8	52.1	119.6	67.5	0deg	270	
0.25002	51.5	AV	19.5	0.1	26.8	44.3	99.6	55.3	0deg	270	
0.37521	49.3	PEAK	19.5	0.1	27.1	41.8	116.1	74.3	0deg	270	
0.37521	37.6	AV	19.5	0.1	27.1	30.1	96.1	66.0	0deg	270	
0.50000	60.4	QP	19.5	0.2	27.3	52.8	73.6	20.8	0deg	270	
0.62500	55.9	QP	19.5	0.2	27.5	48.1	71.7	23.6	0deg	270	
0.75000	54.7	QP	19.5	0.2	27.6	46.8	70.1	23.3	0deg	270	
0.87500	57.5	QP	19.5	0.2	27.7	49.5	68.8	19.3	0deg	270	
1.00000	40.6	QP	19.5	0.2	27.8	32.4	67.6	35.1	0deg	270	
1.12500	53.2	QP	19.5	0.2	27.8	45.1	66.6	21.5	0deg	270	
1.25000	43.4	QP	19.6	0.3	27.8	35.5	65.7	30.2	0deg	270	

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

Radiated Emission above 30MHz (Spurious Emission)

DATA OF RADIATED EMISSION TEST

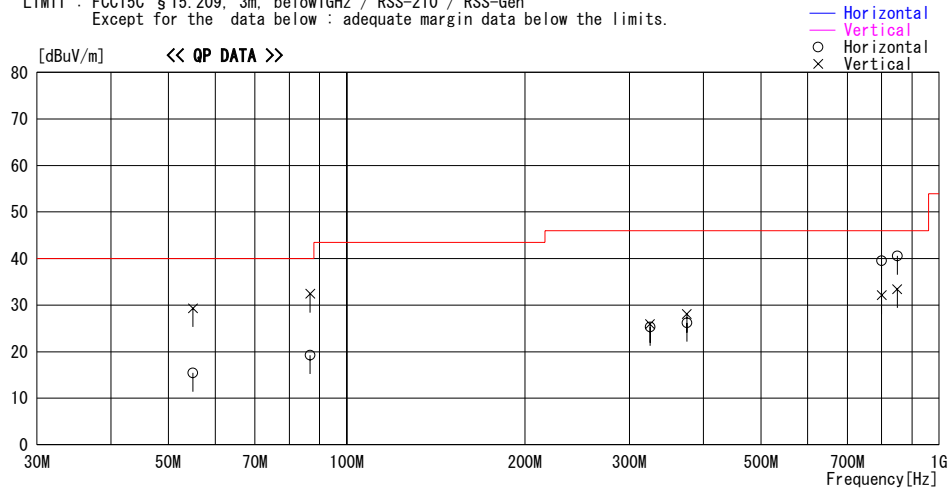
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/11/14 00:56:16

Applicant : Honda Motor Co.,Ltd.
Kind of EUT : TPMS Sensor Tool
Model No. : AKS0620061
Serial No. : 0001

Report No. : 27DE0059-HP0
Power : DC 12.0V (AC Adapter:AC120V/60Hz)
Temp°C/Humi% : 22°C / 36%
Operator : Takumi Shimada

Mode / Remarks : TRW Mode

LIMIT : FCC15C §15.209, 3m, below1GHz / RSS-210 / RSS-Gen
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin	Comment
			Factor	Gain							
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
55.007	40.0	QP	9.3	-20.0	29.3	22	100	Vert.	40.0	10.7	
55.008	26.2	QP	9.3	-20.0	15.5	334	300	Hori.	40.0	24.5	
86.760	31.4	QP	7.3	-19.4	19.3	264	300	Hori.	40.0	20.7	
86.761	44.5	QP	7.3	-19.4	32.4	288	100	Vert.	40.0	7.6	
325.037	26.4	QP	15.5	-16.6	25.3	82	100	Hori.	46.0	20.7	
325.038	27.0	QP	15.5	-16.6	25.9	0	140	Vert.	46.0	20.1	
375.043	27.4	QP	17.2	-16.5	28.1	293	150	Vert.	46.0	17.9	
375.043	25.5	QP	17.2	-16.5	26.2	88	100	Hori.	46.0	19.8	
800.092	32.4	QP	22.0	-14.9	39.5	98	100	Hori.	46.0	6.5	
800.092	25.0	QP	22.0	-14.9	32.1	30	100	Vert.	46.0	13.9	
850.098	33.4	QP	21.9	-14.7	40.6	110	100	Hori.	46.0	5.4	
850.098	26.2	QP	21.9	-14.7	33.4	198	100	Vert.	46.0	12.6	

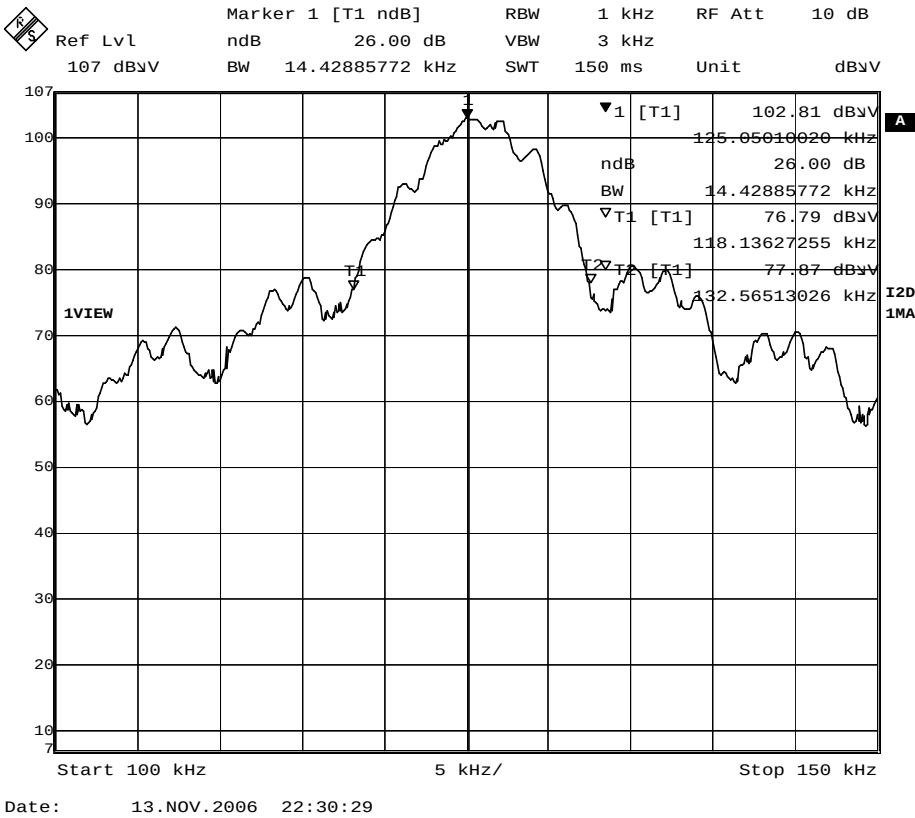
CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

-26dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.1 Semi Anechoic Chamber

COMPANY	: Honda Motor Co., Ltd.	REPORT NO	: 27DE0059-HO
EQUIPMENT	: TPMS Sensor Tool	REGULATION	: Reference data
MODEL	: AKS0620061	TEST DISTANCE	: 3m
S/ N	: 0001	DATE	: 11/13/2006
POWER	: DC 12.0V (AC Adapter:AC120V/60Hz)	TEMPERATURE	: 22 deg.C.
MODE	: TRW	HUMIDITY	: 36%
	: Ant-Max	Engineer	: Takumi Shimada

FREQ	-26dB Bandwidth
[kHz]	[kHz]
125.1	14.429



99% Occupied Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.1 Semi Anechoic Chamber

COMPANY

EQUIPMENT

MODEL

S/ N

POWER

MODE

: Honda Motor Co., Ltd.

: TPMS Sensor Tool

: AKS0620061

: 0001

: DC 12V (AC Adapter:AC120V/60Hz)

: TRW

REPORT NO

REGULATION

TEST DISTANCE

DATE

TEMPERATURE

HUMIDITY

: 27DE0059-HO

: RSS-Gen 4.4.1

: 3m

: 11/13/2006

: 22 deg.C

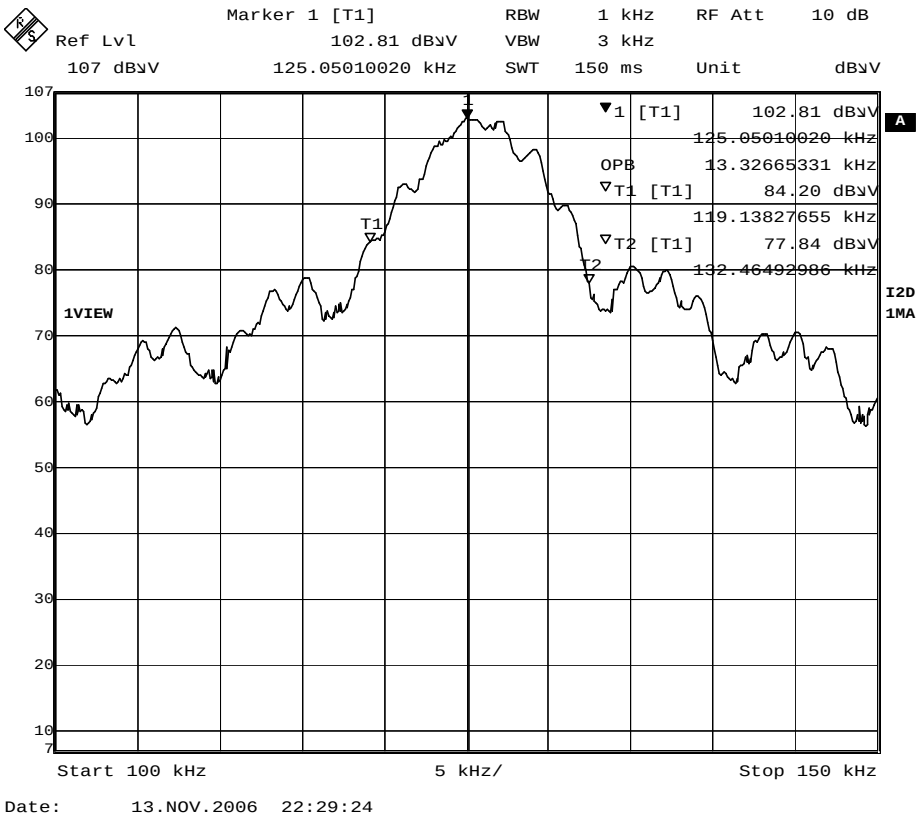
: 36 %

Ant-Max

Engineer

: Takumi Shimada

FREQ	99% Occupid Bandwidth
[kHz]	[kHz]
125.1	13.327



APPENDIX 3: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE / CE	2005/11/14 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE / CE	2006/10/14 * 12
MLPA-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	RE	2005/12/06 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/Agilent/TSJ	-	RE / CE	2005/12/18 * 12
MCC-31	Coaxial cable	ULApex	-	RE	2006/05/29 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2006/05/27 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/TSJ	-	RE	2006/02/20 * 12
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2006/06/01 * 12
MJM-01	Measure	KDS	ES19-55	RE / CE	-
MOS-01	Digital Humidity Indicator	N.T	NT-1800	RE / CE	2004/11/25 * 24
MBM-06	Barometer	SATO	Aneroid	RE / CE	2006/06/19 * 60
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE / CE	-

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.

Test Item:

CE: Conducted Emission

RE: Radiated Emission

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MF060b(14.06.06)