

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Shielded Room
Date : 2011/04/19

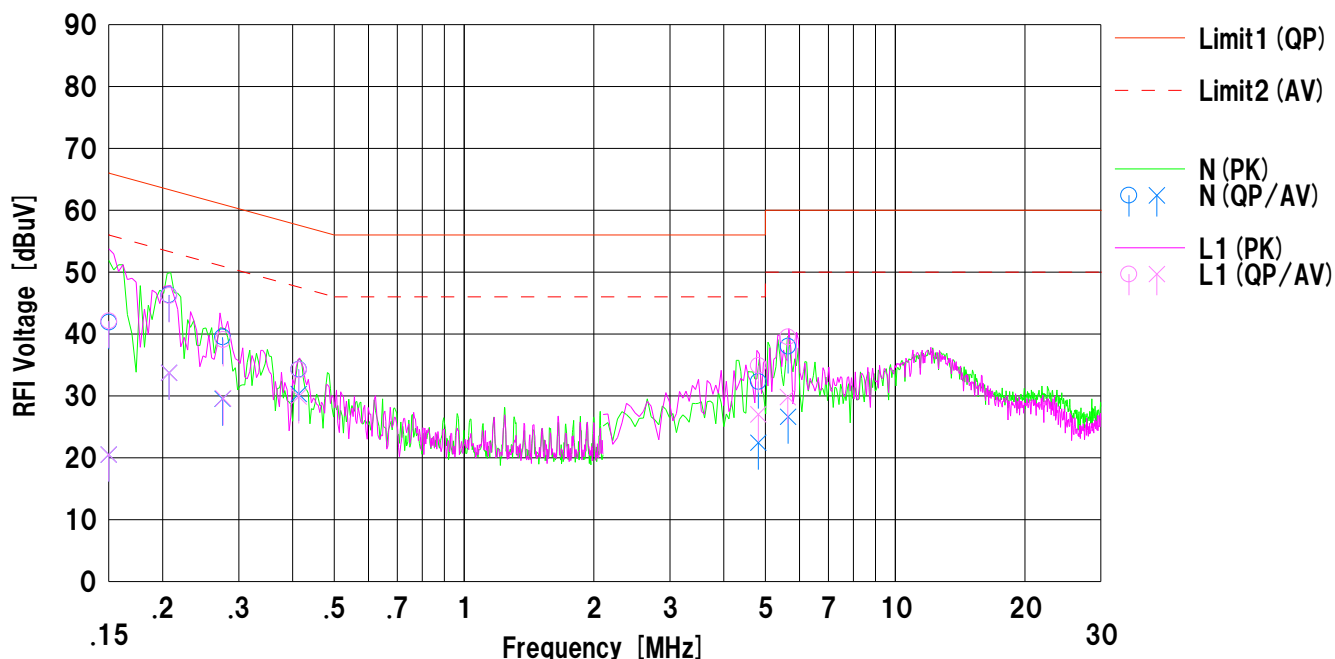
Company : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30326
Serial No. : 11-02

Mode : Tx 802.11b 2437MHz
Report No. : 31IE0111-SH-01-A
Power : AC120V/60Hz (PC)
Temp./Humi. : 26deg.C/32%RH

Remarks : -

Limit1 : FCC 15C (15.207) QP
Limit2 : FCC 15C (15.207) AV

Engineer : Shinichi Takano



No.	Freq. [MHz]	Reading		C.Fac	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]		<QP> [dBuV]	<AV> [dBuV]	<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]		
1	0.15000	29.3	7.9	12.6	41.9	20.5	66.0	56.0	24.1	35.5	N	
2	0.20669	33.8	21.2	12.5	46.3	33.7	63.3	53.3	17.0	19.6	N	
3	0.27535	26.9	16.9	12.6	39.5	29.5	60.9	50.9	21.4	21.4	N	
4	0.41371	21.7	17.7	12.6	34.3	30.3	57.5	47.5	23.2	17.2	N	
5	4.81501	19.5	9.6	12.8	32.3	22.4	56.0	46.0	23.7	23.6	N	
6	5.64036	25.2	13.8	12.8	38.0	26.6	60.0	50.0	22.0	23.4	N	
7	0.15000	29.5	7.9	12.6	42.1	20.5	66.0	56.0	23.9	35.5	L1	
8	0.20693	33.7	21.2	12.5	46.2	33.7	63.3	53.3	17.1	19.6	L1	
9	0.27595	26.5	17.0	12.6	39.1	29.6	60.9	50.9	21.8	21.3	L1	
10	0.41341	21.6	17.3	12.6	34.2	29.9	57.5	47.5	23.3	17.6	L1	
11	4.81435	22.1	14.2	12.8	34.9	27.0	56.0	46.0	21.1	19.0	L1	
12	5.63877	26.7	17.0	12.8	39.5	29.8	60.0	50.0	20.5	20.2	L1	

Radiated Emission

Test place	UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber		
Date	April 11, 2011	April 19, 2011	April 19, 2011
Temperature / Humidity	24deg.C. , 39%RH	23deg.C. , 41%RH	27deg.C. , 33%RH
Engineer	Shinichi Takano	Hikaru Shirasawa	Shinichi Takano
Mode	Tx, 2412 MHz Tx, IEEE802.11b		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	133.663	QP	42.9	13.2	7.4	32.1	31.4	43.5	12.1	236	93	
Hori.	212.237	QP	35.3	16.5	7.9	32.0	27.7	43.5	15.8	163	267	
Hori.	319.992	QP	30.3	14.4	8.5	31.9	21.3	46.0	24.7	108	223	
Hori.	2390.000	PK	47.4	27.5	23.5	40.8	57.6	73.9	16.3	118	64	
Hori.	4824.000	PK	61.3	31.6	5.7	40.6	58.0	73.9	15.9	100	175	
Hori.	7236.000	PK	47.0	36.5	6.8	39.6	50.7	73.9	23.2	100	0	
Hori.	9648.000	PK	47.5	37.9	8.0	37.9	55.5	73.9	18.4	107	273	
Hori.	12060.000	PK	47.9	39.3	9.2	39.4	57.0	73.9	16.9	100	0	
Hori.	19296.000	PK	60.4	40.0	-3.2	48.3	48.9	73.9	25.1	106	142	
Hori.	2390.000	AV	36.9	27.5	23.5	40.8	47.1	53.9	6.8	118	64	VBW:500Hz
Hori.	4824.000	AV	55.2	31.6	5.7	40.6	51.9	53.9	2.0	100	175	VBW:500Hz
Hori.	7236.000	AV	36.4	36.5	6.8	39.6	40.1	53.9	13.8	100	0	VBW:500Hz
Hori.	9648.000	AV	39.1	37.9	8.0	37.9	47.1	53.9	6.8	107	273	VBW:500Hz
Hori.	12060.000	AV	36.4	39.3	9.2	39.4	45.5	53.9	8.4	100	0	VBW:500Hz
Hori.	19296.000	AV	58.5	40.0	-3.2	48.3	47.0	53.9	7.0	106	142	VBW:10Hz
Vert.	51.650	QP	48.4	10.4	6.8	32.1	33.5	40.0	6.5	100	359	
Vert.	108.632	QP	46.5	11.0	7.3	32.1	32.7	43.5	10.8	100	275	
Vert.	132.762	QP	42.6	13.1	7.4	32.1	31.0	43.5	12.5	100	189	
Vert.	212.244	QP	35.0	16.5	7.9	32.0	27.4	43.5	16.1	100	243	
Vert.	2390.000	PK	48.9	27.5	23.5	40.8	59.1	73.9	14.8	100	127	
Vert.	4824.000	PK	55.9	31.6	5.7	40.6	52.6	73.9	21.3	113	249	
Vert.	7236.000	PK	47.5	36.5	6.8	39.6	51.2	73.9	22.7	100	0	
Vert.	9648.000	PK	47.4	37.9	8.0	37.9	55.4	73.9	18.5	101	238	
Vert.	12060.000	PK	47.0	39.3	9.2	39.4	56.1	73.9	17.8	100	0	
Vert.	19296.000	PK	58.3	40.0	-3.2	48.3	46.8	73.9	27.2	100	323	
Vert.	2390.000	AV	37.4	27.5	23.5	40.8	47.6	53.9	6.3	100	127	VBW:500Hz
Vert.	4824.000	AV	49.2	31.6	5.7	40.6	45.9	53.9	8.0	113	249	VBW:500Hz
Vert.	7236.000	AV	37.0	36.5	6.8	39.6	40.7	53.9	13.2	100	0	VBW:500Hz
Vert.	9648.000	AV	39.5	37.9	8.0	37.9	47.5	53.9	6.4	101	238	VBW:500Hz
Vert.	12060.000	AV	36.3	39.3	9.2	39.4	45.4	53.9	8.5	100	0	VBW:500Hz
Vert.	19296.000	AV	55.3	40.0	-3.2	48.3	43.8	53.9	10.2	100	323	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2437 MHz
 Tx, IEEE802.11b

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	4874.000	PK	61.5	31.7	5.7	40.5	58.4	73.9	15.5	100	97	
Hori.	7311.000	PK	46.4	36.7	6.9	39.6	50.4	73.9	23.5	100	0	
Hori.	9748.000	PK	47.0	38.1	8.0	37.9	55.2	73.9	18.7	100	269	
Hori.	12185.000	PK	46.4	39.2	9.2	39.2	55.6	73.9	18.3	100	0	
Hori.	19496.000	PK	62.3	40.1	-3.1	48.1	51.2	73.9	22.8	100	140	
Hori.	4874.000	AV	55.8	31.7	5.7	40.5	52.7	53.9	1.2	100	97	VBW:500Hz
Hori.	7311.000	AV	35.5	36.7	6.9	39.6	39.5	53.9	14.4	100	0	VBW:500Hz
Hori.	9748.000	AV	39.4	38.1	8.0	37.9	47.6	53.9	6.3	100	269	VBW:500Hz
Hori.	12185.000	AV	35.4	39.2	9.2	39.2	44.6	53.9	9.3	100	0	VBW:500Hz
Hori.	19496.000	AV	61.0	40.1	-3.1	48.1	49.9	53.9	4.1	100	140	VBW:10Hz
Vert.	4874.000	PK	60.4	31.7	5.7	40.5	57.3	73.9	16.6	100	134	
Vert.	7311.000	PK	46.2	36.7	6.9	39.6	50.2	73.9	23.7	100	0	
Vert.	9748.000	PK	47.2	38.1	8.0	37.9	55.4	73.9	18.5	100	239	
Vert.	12185.000	PK	46.3	39.2	9.2	39.2	55.5	73.9	18.4	100	0	
Vert.	19496.000	PK	59.1	40.1	-3.1	48.1	48.0	73.9	26.0	100	2	
Vert.	4874.000	AV	54.3	31.7	5.7	40.5	51.2	53.9	2.7	100	134	VBW:500Hz
Vert.	7311.000	AV	36.0	36.7	6.9	39.6	40.0	53.9	13.9	100	0	VBW:500Hz
Vert.	9748.000	AV	38.9	38.1	8.0	37.9	47.1	53.9	6.8	100	239	VBW:500Hz
Vert.	12185.000	AV	35.3	39.2	9.2	39.2	44.5	53.9	9.4	100	0	VBW:500Hz
Vert.	19496.000	AV	56.9	40.1	-3.1	48.1	45.8	53.9	8.2	100	2	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2462 MHz
 Tx, IEEE802.11b

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	47.9	27.6	23.6	40.7	58.4	73.9	15.5	120	114	
Hori.	4924.000	PK	61.7	31.8	5.7	40.4	58.8	73.9	15.1	100	200	
Hori.	7386.000	PK	46.3	36.8	6.8	39.6	50.3	73.9	23.6	100	0	
Hori.	9848.000	PK	48.0	38.3	8.1	37.9	56.5	73.9	17.4	114	268	
Hori.	12310.000	PK	45.4	39.2	9.3	39.1	54.8	73.9	19.1	100	0	
Hori.	19696.000	PK	62.5	40.1	-3.0	48.1	51.5	73.9	22.5	100	139	
Hori.	2483.500	AV	36.5	27.6	23.6	40.7	47.0	53.9	6.9	120	114	VBW:500Hz
Hori.	4924.000	AV	55.7	31.8	5.7	40.4	52.8	53.9	1.1	100	200	VBW:500Hz
Hori.	7386.000	AV	36.3	36.8	6.8	39.6	40.3	53.9	13.6	100	0	VBW:500Hz
Hori.	9848.000	AV	39.3	38.3	8.1	37.9	47.8	53.9	6.1	114	268	VBW:500Hz
Hori.	12310.000	AV	34.4	39.2	9.3	39.1	43.8	53.9	10.1	100	0	VBW:500Hz
Hori.	19696.000	AV	61.2	40.1	-3.0	48.1	50.2	53.9	3.8	100	139	VBW:10Hz
Vert.	2483.500	PK	51.1	27.6	23.6	40.7	61.6	73.9	12.3	100	85	
Vert.	4924.000	PK	60.9	31.8	5.7	40.4	58.0	73.9	15.9	100	139	
Vert.	7386.000	PK	46.6	36.8	6.8	39.6	50.6	73.9	23.3	100	0	
Vert.	9848.000	PK	46.6	38.3	8.1	37.9	55.1	73.9	18.8	100	242	
Vert.	12310.000	PK	46.1	39.2	9.3	39.1	55.5	73.9	18.4	100	0	
Vert.	19696.000	PK	58.8	40.1	-3.0	48.1	47.8	73.9	26.2	100	4	
Vert.	2483.500	AV	38.0	27.6	23.6	40.7	48.5	53.9	5.4	100	85	VBW:500Hz
Vert.	4924.000	AV	55.2	31.8	5.7	40.4	52.3	53.9	1.6	100	139	VBW:500Hz
Vert.	7386.000	AV	36.9	36.8	6.8	39.6	40.9	53.9	13.0	100	0	VBW:500Hz
Vert.	9848.000	AV	38.6	38.3	8.1	37.9	47.1	53.9	6.8	100	242	VBW:500Hz
Vert.	12310.000	AV	34.6	39.2	9.3	39.1	44.0	53.9	9.9	100	0	VBW:500Hz
Vert.	19696.000	AV	56.5	40.1	-3.0	48.1	45.5	53.9	8.5	100	4	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 11, 2011 April 19, 2011
Temperature / Humidity 24deg.C. , 39%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2412 MHz
 Tx, IEEE802.11g

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2390.000	PK	54.9	27.5	23.5	40.8	65.1	73.9	8.8	121	62	
Hori.	4824.000	PK	59.2	31.6	5.7	40.6	55.9	73.9	18.0	100	173	
Hori.	7236.000	PK	47.7	36.5	6.8	39.6	51.4	73.9	22.5	110	59	
Hori.	9648.000	PK	47.1	37.9	8.0	37.9	55.1	73.9	18.8	109	273	
Hori.	12060.000	PK	46.4	39.3	9.2	39.4	55.5	73.9	18.4	100	0	
Hori.	19296.000	PK	61.5	40.0	-3.2	48.3	50.0	73.9	24.0	106	142	
Hori.	2390.000	AV	40.2	27.5	23.5	40.8	50.4	53.9	3.5	121	62	VBW:500Hz
Hori.	4824.000	AV	47.6	31.6	5.7	40.6	44.3	53.9	9.6	100	173	VBW:500Hz
Hori.	7236.000	AV	37.6	36.5	6.8	39.6	41.3	53.9	12.6	110	59	VBW:500Hz
Hori.	9648.000	AV	39.4	37.9	8.0	37.9	47.4	53.9	6.5	109	273	VBW:500Hz
Hori.	12060.000	AV	36.8	39.3	9.2	39.4	45.9	53.9	8.0	100	0	VBW:500Hz
Hori.	19296.000	AV	59.5	40.0	-3.2	48.3	48.0	53.9	6.0	106	142	VBW:10Hz
Vert.	2390.000	PK	51.4	27.5	23.5	40.8	61.6	73.9	12.3	100	128	
Vert.	4824.000	PK	52.1	31.6	5.7	40.6	48.8	73.9	25.1	114	247	
Vert.	7236.000	PK	53.3	36.5	6.8	39.6	57.0	73.9	16.9	160	215	
Vert.	9648.000	PK	46.5	37.9	8.0	37.9	54.5	73.9	19.4	101	237	
Vert.	12060.000	PK	46.3	39.3	9.2	39.4	55.4	73.9	18.5	100	0	
Vert.	19296.000	PK	58.0	40.0	-3.2	48.3	46.5	73.9	27.5	100	323	
Vert.	2390.000	AV	40.3	27.5	23.5	40.8	50.5	53.9	3.4	100	128	VBW:500Hz
Vert.	4824.000	AV	41.4	31.6	5.7	40.6	38.1	53.9	15.8	114	247	VBW:500Hz
Vert.	7236.000	AV	39.6	36.5	6.8	39.6	43.3	53.9	10.6	160	215	VBW:500Hz
Vert.	9648.000	AV	39.2	37.9	8.0	37.9	47.2	53.9	6.7	101	237	VBW:500Hz
Vert.	12060.000	AV	36.9	39.3	9.2	39.4	46.0	53.9	7.9	100	0	VBW:500Hz
Vert.	19296.000	AV	55.7	40.0	-3.2	48.3	44.2	53.9	9.8	100	323	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz~40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2437 MHz
 Tx, IEEE802.11g

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	4874.000	PK	58.9	31.7	5.7	40.5	55.8	73.9	18.1	100	199	
Hori.	7311.000	PK	48.0	36.7	6.9	39.6	52.0	73.9	21.9	100	0	
Hori.	9748.000	PK	47.4	38.1	8.0	37.9	55.6	73.9	18.3	106	268	
Hori.	12185.000	PK	46.5	39.2	9.2	39.2	55.7	73.9	18.2	100	0	
Hori.	19496.000	PK	62.6	40.1	-3.1	48.1	51.5	73.9	22.5	100	140	
Hori.	4874.000	AV	46.5	31.7	5.7	40.5	43.4	53.9	10.5	100	199	VBW:500Hz
Hori.	7311.000	AV	40.8	36.7	6.9	39.6	44.8	53.9	9.1	100	0	VBW:500Hz
Hori.	9748.000	AV	38.8	38.1	8.0	37.9	47.0	53.9	6.9	106	268	VBW:500Hz
Hori.	12185.000	AV	35.3	39.2	9.2	39.2	44.5	53.9	9.4	100	0	VBW:500Hz
Hori.	19496.000	AV	61.1	40.1	-3.1	48.1	50.0	53.9	4.0	100	140	VBW:10Hz
Vert.	4874.000	PK	56.2	31.7	5.7	40.5	53.1	73.9	20.8	100	135	
Vert.	7311.000	PK	46.3	36.7	6.9	39.6	50.3	73.9	23.6	100	0	
Vert.	9748.000	PK	47.2	38.1	8.0	37.9	55.4	73.9	18.5	107	238	
Vert.	12185.000	PK	46.1	39.2	9.2	39.2	55.3	73.9	18.6	100	0	
Vert.	19496.000	PK	59.1	40.1	-3.1	48.1	48.0	73.9	26.0	100	4	
Vert.	4874.000	AV	44.2	31.7	5.7	40.5	41.1	53.9	12.8	100	135	VBW:500Hz
Vert.	7311.000	AV	35.6	36.7	6.9	39.6	39.6	53.9	14.3	100	0	VBW:500Hz
Vert.	9748.000	AV	38.5	38.1	8.0	37.9	46.7	53.9	7.2	107	238	VBW:500Hz
Vert.	12185.000	AV	35.4	39.2	9.2	39.2	44.6	53.9	9.3	100	0	VBW:500Hz
Vert.	19496.000	AV	56.8	40.1	-3.1	48.1	45.7	53.9	8.3	100	4	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz~40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2462 MHz
 Tx, IEEE802.11g

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	50.1	27.6	23.6	40.7	60.6	73.9	13.3	119	124	
Hori.	4924.000	PK	60.0	31.8	5.7	40.4	57.1	73.9	16.8	100	200	
Hori.	7386.000	PK	46.2	36.8	6.8	39.6	50.2	73.9	23.7	100	0	
Hori.	9848.000	PK	46.9	38.3	8.1	37.9	55.4	73.9	18.5	106	267	
Hori.	12310.000	PK	45.9	39.2	9.3	39.1	55.3	73.9	18.6	100	0	
Hori.	19696.000	PK	62.1	40.1	-3.0	48.1	51.1	73.9	22.9	104	140	
Hori.	2483.500	AV	38.3	27.6	23.6	40.7	48.8	53.9	5.1	119	124	VBW:500Hz
Hori.	4924.000	AV	46.7	31.8	5.7	40.4	43.8	53.9	10.1	100	200	VBW:500Hz
Hori.	7386.000	AV	35.3	36.8	6.8	39.6	39.3	53.9	14.6	100	0	VBW:500Hz
Hori.	9848.000	AV	39.1	38.3	8.1	37.9	47.6	53.9	6.3	106	267	VBW:500Hz
Hori.	12310.000	AV	34.3	39.2	9.3	39.1	43.7	53.9	10.2	100	0	VBW:500Hz
Hori.	19696.000	AV	60.4	40.1	-3.0	48.1	49.4	53.9	4.6	104	140	VBW:10Hz
Vert.	2483.500	PK	52.8	27.6	23.6	40.7	63.3	73.9	10.6	100	83	
Vert.	4924.000	PK	57.8	31.8	5.7	40.4	54.9	73.9	19.0	100	134	
Vert.	7386.000	PK	46.5	36.8	6.8	39.6	50.5	73.9	23.4	100	0	
Vert.	9848.000	PK	47.4	38.3	8.1	37.9	55.9	73.9	18.0	106	239	
Vert.	12310.000	PK	45.5	39.2	9.3	39.1	54.9	73.9	19.0	100	0	
Vert.	19696.000	PK	59.3	40.1	-3.0	48.1	48.3	73.9	25.7	100	4	
Vert.	2483.500	AV	40.7	27.6	23.6	40.7	51.2	53.9	2.7	100	83	VBW:500Hz
Vert.	4924.000	AV	45.5	31.8	5.7	40.4	42.6	53.9	11.3	100	134	VBW:500Hz
Vert.	7386.000	AV	36.2	36.8	6.8	39.6	40.2	53.9	13.7	100	0	VBW:500Hz
Vert.	9848.000	AV	38.8	38.3	8.1	37.9	47.3	53.9	6.6	106	239	VBW:500Hz
Vert.	12310.000	AV	34.3	39.2	9.3	39.1	43.7	53.9	10.2	100	0	VBW:500Hz
Vert.	19696.000	AV	57.2	40.1	-3.0	48.1	46.2	53.9	7.8	100	4	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz~40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2412 MHz
 Tx, IEEE802.11n-20

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2390.000	PK	54.3	27.5	23.5	40.8	64.5	73.9	9.4	100	118	
Hori.	4824.000	PK	61.0	31.6	5.7	40.6	57.7	73.9	16.2	100	199	
Hori.	7236.000	PK	47.0	36.5	6.8	39.6	50.7	73.9	23.2	100	0	
Hori.	9648.000	PK	47.3	37.9	8.0	37.9	55.3	73.9	18.6	111	268	
Hori.	12060.000	PK	47.4	39.3	9.2	39.4	56.5	73.9	17.4	100	0	
Hori.	19296.000	PK	59.8	40.0	-3.2	48.3	48.3	73.9	25.7	100	142	
Hori.	2390.000	AV	39.1	27.5	23.5	40.8	49.3	53.9	4.6	100	118	VBW:200Hz
Hori.	4824.000	AV	48.1	31.6	5.7	40.6	44.8	53.9	9.1	100	199	VBW:200Hz
Hori.	7236.000	AV	37.0	36.5	6.8	39.6	40.7	53.9	13.2	100	0	VBW:200Hz
Hori.	9648.000	AV	38.5	37.9	8.0	37.9	46.5	53.9	7.4	111	268	VBW:200Hz
Hori.	12060.000	AV	36.0	39.3	9.2	39.4	45.1	53.9	8.8	100	0	VBW:200Hz
Hori.	19296.000	AV	57.9	40.0	-3.2	48.3	46.4	53.9	7.6	100	142	VBW:10Hz
Vert.	2390.000	PK	57.3	27.5	23.5	40.8	67.5	73.9	6.4	100	87	
Vert.	4824.000	PK	54.1	31.6	5.7	40.6	50.8	73.9	23.1	100	250	
Vert.	7236.000	PK	48.0	36.5	6.8	39.6	51.7	73.9	22.2	100	0	
Vert.	9648.000	PK	46.9	37.9	8.0	37.9	54.9	73.9	19.0	100	238	
Vert.	12060.000	PK	47.2	39.3	9.2	39.4	56.3	73.9	17.6	100	0	
Vert.	19296.000	PK	57.0	40.0	-3.2	48.3	45.5	73.9	28.5	102	8	
Vert.	2390.000	AV	41.3	27.5	23.5	40.8	51.5	53.9	2.4	100	87	VBW:200Hz
Vert.	4824.000	AV	41.7	31.6	5.7	40.6	38.4	53.9	15.5	100	250	VBW:200Hz
Vert.	7236.000	AV	36.1	36.5	6.8	39.6	39.8	53.9	14.1	100	0	VBW:200Hz
Vert.	9648.000	AV	38.8	37.9	8.0	37.9	46.8	53.9	7.1	100	238	VBW:200Hz
Vert.	12060.000	AV	36.1	39.3	9.2	39.4	45.2	53.9	8.7	100	0	VBW:200Hz
Vert.	19296.000	AV	54.3	40.0	-3.2	48.3	42.8	53.9	11.2	102	8	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2437 MHz
 Tx, IEEE802.11n-20

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	4874.000	PK	60.7	31.7	5.7	40.5	57.6	73.9	16.3	100	98	
Hori.	7311.000	PK	46.4	36.7	6.9	39.6	50.4	73.9	23.5	100	0	
Hori.	9748.000	PK	46.7	38.1	8.0	37.9	54.9	73.9	19.0	109	270	
Hori.	12185.000	PK	46.1	39.2	9.2	39.2	55.3	73.9	18.6	100	0	
Hori.	19496.000	PK	63.7	40.1	-3.1	48.1	52.6	73.9	21.4	100	142	
Hori.	4874.000	AV	47.7	31.7	5.7	40.5	44.6	53.9	9.3	100	98	VBW:200Hz
Hori.	7311.000	AV	35.2	36.7	6.9	39.6	39.2	53.9	14.7	100	0	VBW:200Hz
Hori.	9748.000	AV	38.0	38.1	8.0	37.9	46.2	53.9	7.7	109	270	VBW:200Hz
Hori.	12185.000	AV	35.1	39.2	9.2	39.2	44.3	53.9	9.6	100	0	VBW:200Hz
Hori.	19496.000	AV	62.4	40.1	-3.1	48.1	51.3	53.9	2.7	100	142	VBW:10Hz
Vert.	4874.000	PK	57.0	31.7	5.7	40.5	53.9	73.9	20.0	100	134	
Vert.	7311.000	PK	47.1	36.7	6.9	39.6	51.1	73.9	22.8	100	0	
Vert.	9748.000	PK	46.9	38.1	8.0	37.9	55.1	73.9	18.8	100	239	
Vert.	12185.000	PK	47.1	39.2	9.2	39.2	56.3	73.9	17.6	100	0	
Vert.	19496.000	PK	59.8	40.1	-3.1	48.1	48.7	73.9	25.3	101	3	
Vert.	4874.000	AV	44.2	31.7	5.7	40.5	41.1	53.9	12.8	100	134	VBW:200Hz
Vert.	7311.000	AV	35.2	36.7	6.9	39.6	39.2	53.9	14.7	100	0	VBW:200Hz
Vert.	9748.000	AV	38.3	38.1	8.0	37.9	46.5	53.9	7.4	100	239	VBW:200Hz
Vert.	12185.000	AV	34.9	39.2	9.2	39.2	44.1	53.9	9.8	100	0	VBW:200Hz
Vert.	19496.000	AV	57.6	40.1	-3.1	48.1	46.5	53.9	7.5	101	3	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2462 MHz
 Tx, IEEE802.11n-20

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	52.5	27.6	23.6	40.7	63.0	73.9	10.9	121	124	
Hori.	4924.000	PK	61.1	31.8	5.7	40.4	58.2	73.9	15.7	100	199	
Hori.	7386.000	PK	46.7	36.8	6.8	39.6	50.7	73.9	23.2	100	0	
Hori.	9848.000	PK	46.3	38.3	8.1	37.9	54.8	73.9	19.1	107	269	
Hori.	12310.000	PK	45.5	39.2	9.3	39.1	54.9	73.9	19.0	100	0	
Hori.	19696.000	PK	62.7	40.1	-3.0	48.1	51.7	73.9	22.3	100	139	
Hori.	2483.500	AV	39.8	27.6	23.6	40.7	50.3	53.9	3.6	121	124	VBW:200Hz
Hori.	4924.000	AV	48.3	31.8	5.7	40.4	45.4	53.9	8.5	100	199	VBW:200Hz
Hori.	7386.000	AV	35.3	36.8	6.8	39.6	39.3	53.9	14.6	100	0	VBW:200Hz
Hori.	9848.000	AV	37.8	38.3	8.1	37.9	46.3	53.9	7.6	107	269	VBW:200Hz
Hori.	12310.000	AV	34.2	39.2	9.3	39.1	43.6	53.9	10.3	100	0	VBW:200Hz
Hori.	19696.000	AV	61.2	40.1	-3.0	48.1	50.2	53.9	3.8	100	139	VBW:10Hz
Vert.	2483.500	PK	56.8	27.6	23.6	40.7	67.3	73.9	6.6	100	89	
Vert.	4924.000	PK	58.7	31.8	5.7	40.4	55.8	73.9	18.1	100	137	
Vert.	7386.000	PK	46.9	36.8	6.8	39.6	50.9	73.9	23.0	100	0	
Vert.	9848.000	PK	47.0	38.3	8.1	37.9	55.5	73.9	18.4	113	239	
Vert.	12310.000	PK	45.5	39.2	9.3	39.1	54.9	73.9	19.0	100	0	
Vert.	19696.000	PK	60.3	40.1	-3.0	48.1	49.3	73.9	24.7	100	5	
Vert.	2483.500	AV	41.7	27.6	23.6	40.7	52.2	53.9	1.7	100	89	VBW:200Hz
Vert.	4924.000	AV	45.6	31.8	5.7	40.4	42.7	53.9	11.2	100	137	VBW:200Hz
Vert.	7386.000	AV	35.3	36.8	6.8	39.6	39.3	53.9	14.6	100	0	VBW:200Hz
Vert.	9848.000	AV	38.5	38.3	8.1	37.9	47.0	53.9	6.9	113	239	VBW:200Hz
Vert.	12310.000	AV	34.3	39.2	9.3	39.1	43.7	53.9	10.2	100	0	VBW:200Hz
Vert.	19696.000	AV	57.9	40.1	-3.0	48.1	46.9	53.9	7.1	100	5	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2422 MHz
 Tx, IEEE802.11n-40

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2390.000	PK	57.4	27.5	23.5	40.8	67.6	73.9	6.3	100	121	
Hori.	4844.000	PK	57.9	31.6	5.7	40.5	54.7	73.9	19.2	100	197	
Hori.	7266.000	PK	47.3	36.6	6.8	39.6	51.1	73.9	22.8	100	0	
Hori.	9688.000	PK	46.7	38.0	8.0	37.9	54.8	73.9	19.1	107	269	
Hori.	12110.000	PK	46.6	39.3	9.2	39.3	55.8	73.9	18.1	100	0	
Hori.	19376.000	PK	62.5	40.1	-3.1	48.2	51.3	73.9	22.7	100	141	
Hori.	2390.000	AV	40.8	27.5	23.5	40.8	51.0	53.9	2.9	100	121	VBW:200Hz
Hori.	4844.000	AV	45.5	31.6	5.7	40.5	42.3	53.9	11.6	100	197	VBW:200Hz
Hori.	7266.000	AV	35.9	36.6	6.8	39.6	39.7	53.9	14.2	100	0	VBW:200Hz
Hori.	9688.000	AV	38.4	38.0	8.0	37.9	46.5	53.9	7.4	107	269	VBW:200Hz
Hori.	12110.000	AV	35.5	39.3	9.2	39.3	44.7	53.9	9.2	100	0	VBW:200Hz
Hori.	19376.000	AV	61.0	40.1	-3.1	48.2	49.8	53.9	4.2	100	141	VBW:10Hz
Vert.	2390.000	PK	59.3	27.5	23.5	40.8	69.5	73.9	4.4	100	85	
Vert.	4844.000	PK	53.2	31.6	5.7	40.5	50.0	73.9	23.9	100	249	
Vert.	7266.000	PK	48.1	36.6	6.8	39.6	51.9	73.9	22.0	100	0	
Vert.	9688.000	PK	47.9	38.0	8.0	37.9	56.0	73.9	17.9	106	241	
Vert.	12110.000	PK	47.1	39.3	9.2	39.3	56.3	73.9	17.6	100	0	
Vert.	19376.000	PK	58.1	40.1	-3.1	48.2	46.9	73.9	27.1	104	5	
Vert.	2390.000	AV	42.4	27.5	23.5	40.8	52.6	53.9	1.3	100	85	VBW:200Hz
Vert.	4844.000	AV	40.9	31.6	5.7	40.5	37.7	53.9	16.2	100	249	VBW:200Hz
Vert.	7266.000	AV	35.9	36.6	6.8	39.6	39.7	53.9	14.2	100	0	VBW:200Hz
Vert.	9688.000	AV	38.9	38.0	8.0	37.9	47.0	53.9	6.9	106	241	VBW:200Hz
Vert.	12110.000	AV	35.4	39.3	9.2	39.3	44.6	53.9	9.3	100	0	VBW:200Hz
Vert.	19376.000	AV	55.4	40.1	-3.1	48.2	44.2	53.9	9.8	104	5	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 18, 2011 April 19, 2011
Temperature / Humidity 26deg.C. , 35%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2437 MHz
 Tx, IEEE802.11n-40

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	4874.000	PK	57.0	31.7	5.7	40.5	53.9	73.9	20.0	100	96	
Hori.	7311.000	PK	46.7	36.7	6.9	39.6	50.7	73.9	23.2	100	0	
Hori.	9748.000	PK	46.9	38.1	8.0	37.9	55.1	73.9	18.8	108	269	
Hori.	12185.000	PK	46.4	39.2	9.2	39.2	55.6	73.9	18.3	100	0	
Hori.	19496.000	PK	61.7	40.1	-3.1	48.1	50.6	73.9	23.4	100	143	
Hori.	4874.000	AV	44.9	31.7	5.7	40.5	41.8	53.9	12.1	100	96	VBW:200Hz
Hori.	7311.000	AV	35.2	36.7	6.9	39.6	39.2	53.9	14.7	100	0	VBW:200Hz
Hori.	9748.000	AV	38.0	38.1	8.0	37.9	46.2	53.9	7.7	108	269	VBW:200Hz
Hori.	12185.000	AV	35.1	39.2	9.2	39.2	44.3	53.9	9.6	100	0	VBW:200Hz
Hori.	19496.000	AV	59.9	40.1	-3.1	48.1	48.8	53.9	5.2	100	143	VBW:10Hz
Vert.	4874.000	PK	53.0	31.7	5.7	40.5	49.9	73.9	24.0	100	140	
Vert.	7311.000	PK	46.7	36.7	6.9	39.6	50.7	73.9	23.2	100	0	
Vert.	9748.000	PK	46.7	38.1	8.0	37.9	54.9	73.9	19.0	100	240	
Vert.	12185.000	PK	47.6	39.2	9.2	39.2	56.8	73.9	17.1	100	0	
Vert.	19496.000	PK	59.9	40.1	-3.1	48.1	48.8	73.9	25.2	100	3	
Vert.	4874.000	AV	41.6	31.7	5.7	40.5	38.5	53.9	15.4	100	140	VBW:200Hz
Vert.	7311.000	AV	35.3	36.7	6.9	39.6	39.3	53.9	14.6	100	0	VBW:200Hz
Vert.	9748.000	AV	38.6	38.1	8.0	37.9	46.8	53.9	7.1	100	240	VBW:200Hz
Vert.	12185.000	AV	35.1	39.2	9.2	39.2	44.3	53.9	9.6	100	0	VBW:200Hz
Vert.	19496.000	AV	57.4	40.1	-3.1	48.1	46.3	53.9	7.7	100	3	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

Radiated Emission

Test place UL Japan, Inc. Shonan EMC Lab. No.3 Semi Anechoic Chamber
Date April 11, 2011 April 19, 2011
Temperature / Humidity 24deg.C. , 39%RH 23deg.C. , 41%RH
Engineer Shinichi Takano Hikaru Shirasawa
Mode Tx, 2452 MHz
 Tx, IEEE802.11n-40

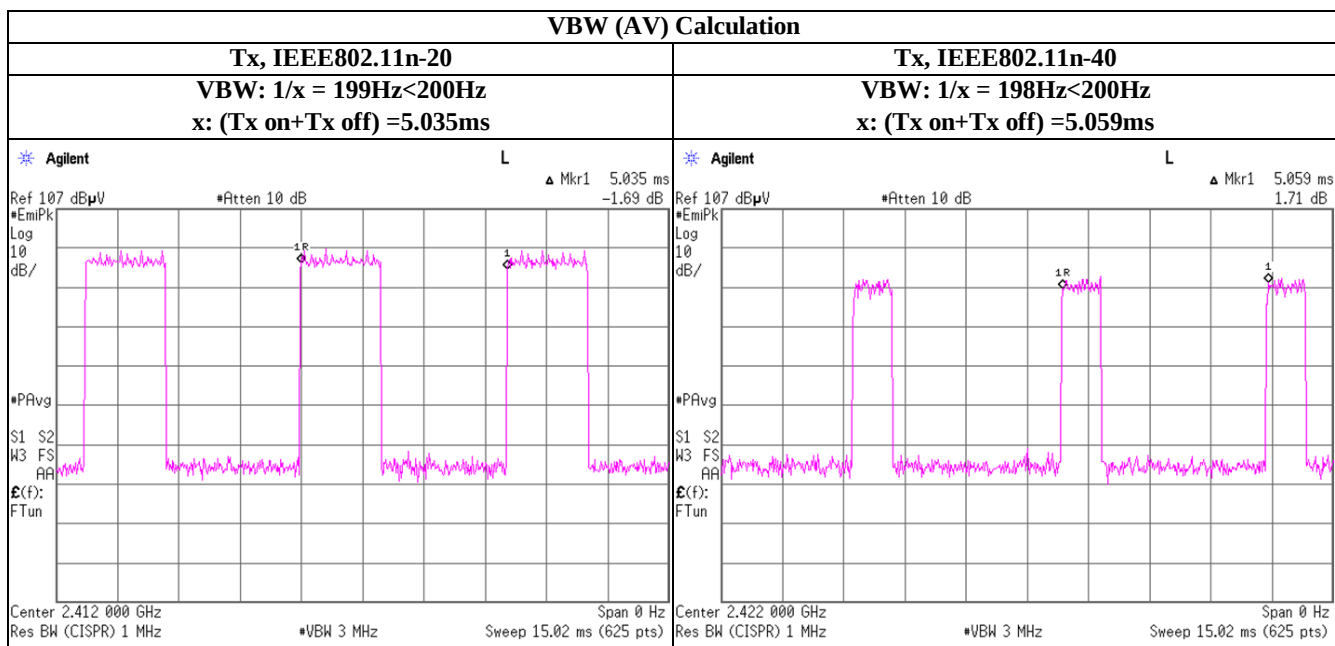
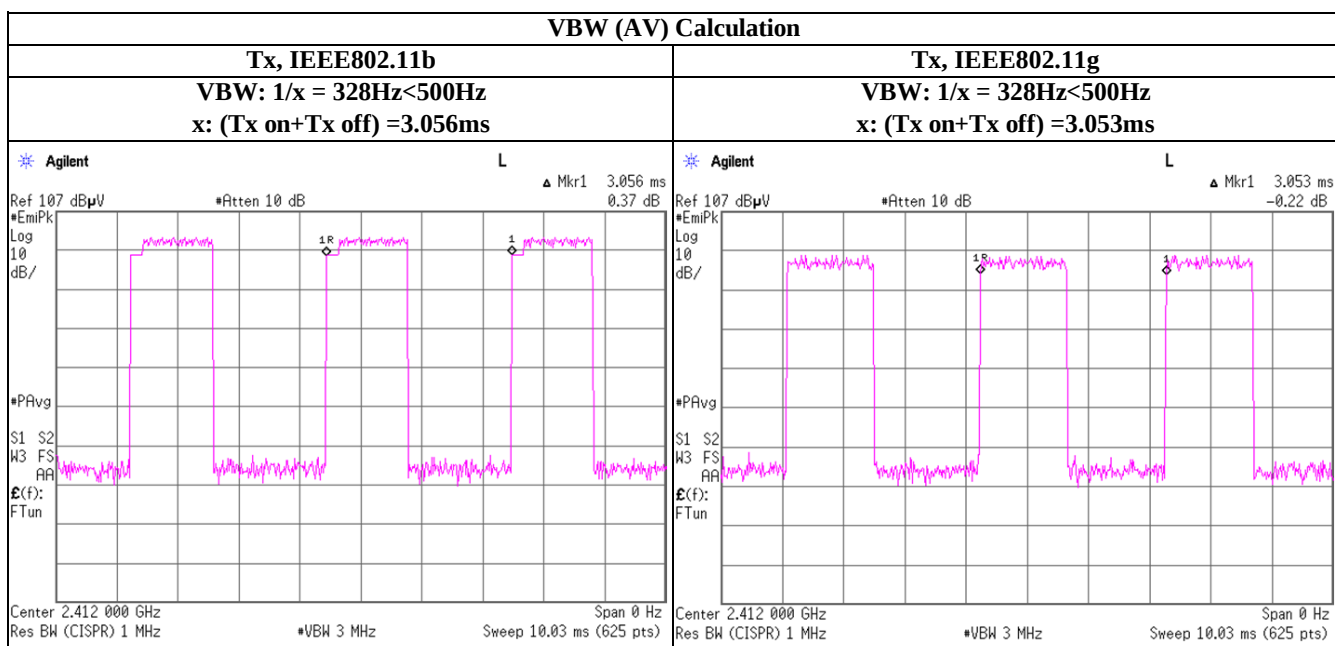
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	57.4	27.6	23.6	40.7	67.9	73.9	6.0	118	70	
Hori.	4904.000	PK	58.2	31.8	5.7	40.4	55.3	73.9	18.6	100	174	
Hori.	7356.000	PK	46.8	36.8	6.8	39.6	50.8	73.9	23.1	100	0	
Hori.	9808.000	PK	46.7	38.2	8.1	37.9	55.1	73.9	18.8	107	268	
Hori.	12260.000	PK	45.6	39.2	9.2	39.1	54.9	73.9	19.0	100	0	
Hori.	19616.000	PK	61.4	40.1	-3.0	48.1	50.4	73.9	23.6	100	143	
Hori.	2483.500	AV	41.3	27.6	23.6	40.7	51.8	53.9	2.1	118	70	VBW:200Hz
Hori.	4904.000	AV	45.5	31.8	5.7	40.4	42.6	53.9	11.3	100	174	VBW:200Hz
Hori.	7356.000	AV	35.5	36.8	6.8	39.6	39.5	53.9	14.4	100	0	VBW:200Hz
Hori.	9808.000	AV	38.8	38.2	8.1	37.9	47.2	53.9	6.7	107	268	VBW:200Hz
Hori.	12260.000	AV	34.2	39.2	9.2	39.1	43.5	53.9	10.4	100	0	VBW:200Hz
Hori.	19616.000	AV	59.7	40.1	-3.0	48.1	48.7	53.9	5.3	100	143	VBW:10Hz
Vert.	2483.500	PK	57.8	27.6	23.6	40.7	68.3	73.9	5.6	100	129	
Vert.	4904.000	PK	53.5	31.8	5.7	40.4	50.6	73.9	23.3	103	152	
Vert.	7356.000	PK	46.3	36.8	6.8	39.6	50.3	73.9	23.6	100	0	
Vert.	9808.000	PK	46.8	38.2	8.1	37.9	55.2	73.9	18.7	107	238	
Vert.	12260.000	PK	45.5	39.2	9.2	39.1	54.8	73.9	19.1	100	0	
Vert.	19616.000	PK	59.6	40.1	-3.0	48.1	48.6	73.9	25.4	100	4	
Vert.	2483.500	AV	41.4	27.6	23.6	40.7	51.9	53.9	2.0	100	129	VBW:200Hz
Vert.	4904.000	AV	42.0	31.8	5.7	40.4	39.1	53.9	14.8	103	152	VBW:200Hz
Vert.	7356.000	AV	35.8	36.8	6.8	39.6	39.8	53.9	14.1	100	0	VBW:200Hz
Vert.	9808.000	AV	38.4	38.2	8.1	37.9	46.8	53.9	7.1	107	238	VBW:200Hz
Vert.	12260.000	AV	34.1	39.2	9.2	39.1	43.4	53.9	10.5	100	0	VBW:200Hz
Vert.	19616.000	AV	57.6	40.1	-3.0	48.1	46.6	53.9	7.4	100	4	VBW:10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

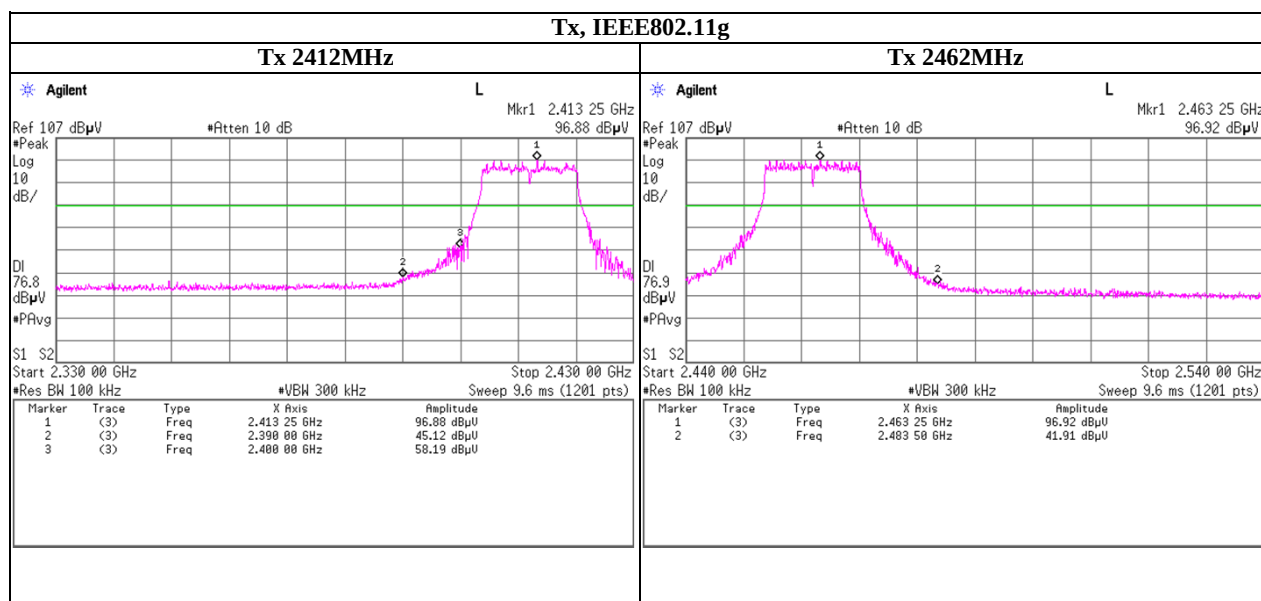
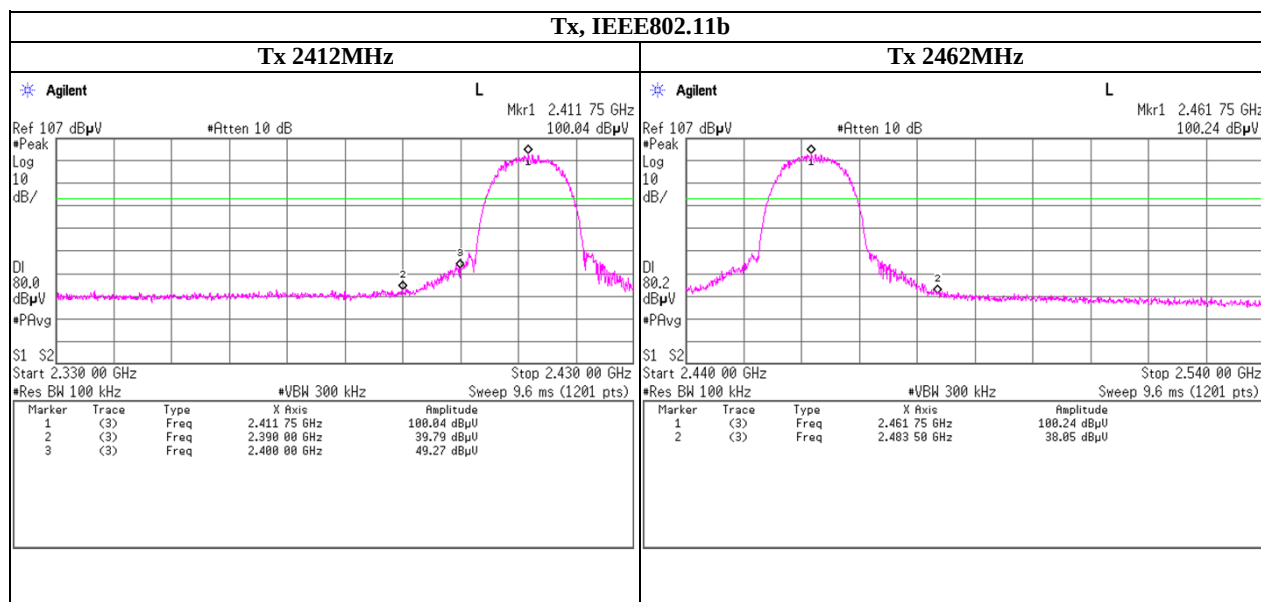
Distance factor: 13GHz-40GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$

Spurious emission (Radiated)



Spurious emission (Conducted)

Band Edge compliance



UL Japan, Inc.

Shonan EMC Lab.

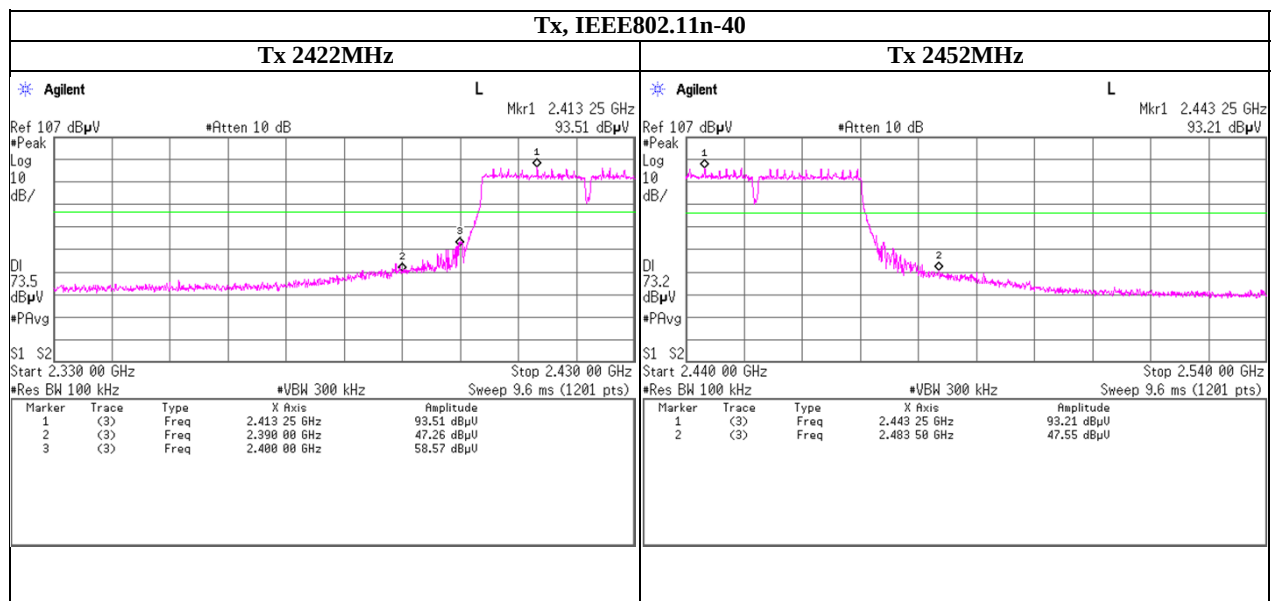
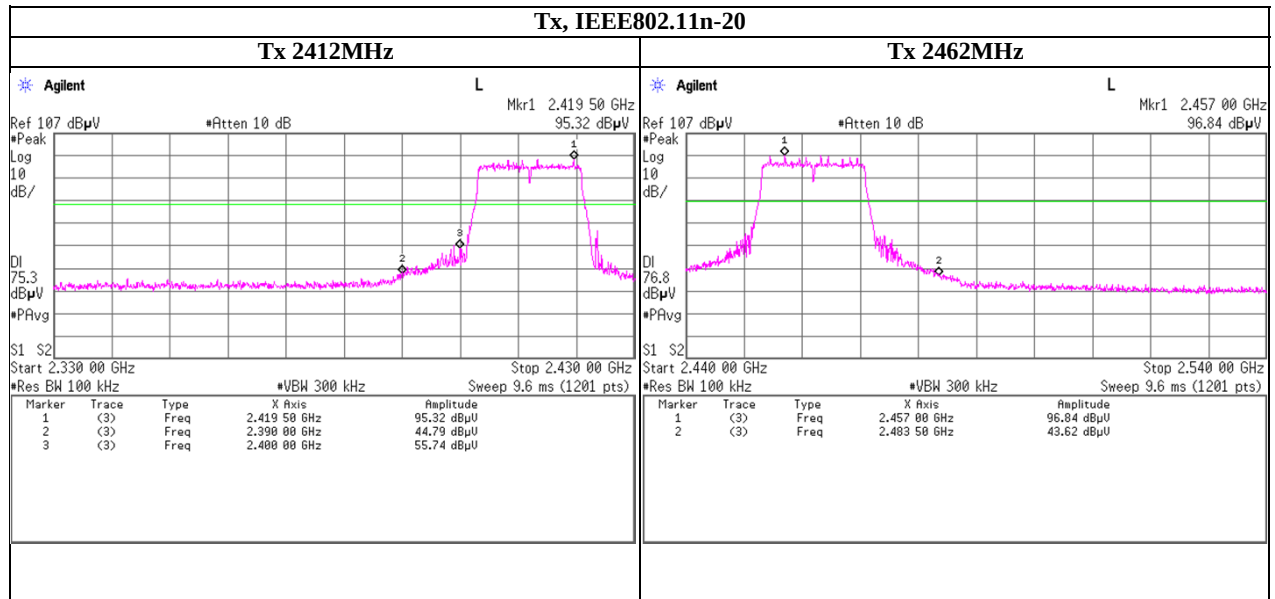
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

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Facsimile : +81 463 50 6401

Spurious emission (Conducted)

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Test Report No : 31IE0111-SH-01-A

APPENDIX 3

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2011/03/23 * 12
SCC-G03	Coaxial Cable	Suhner	SUCOFLEX 104A	46499/4A	RE	2010/04/16 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2010/05/27 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2010/08/17 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2011/02/23 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	RE	2011/03/07 * 12
SJM-10	Measure	PROMART	SEN1935	-	RE,CE	-
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE, RFLMF)	-	RE,CE	-
SAT20-01	Attenuator(above1GHz)	Agilent	8493C-020	74889	RE	2010/12/15 * 12
SFL-02	Highpass Filter	MICRO-TRONICS	HPM50111	051	RE	2010/12/15 * 12
SHA-04	Horn Antenna	ETS LINDGREN	3160-09	LM3640	RE	2011/03/15 * 12
SAF-08	Pre Amplifier	TOYO Corporation	HAP18-26W	00000019	RE	2011/03/16 * 12
SCC-G17	Coaxial Cable	Suhner	SUCOFLEX 104A	46291/4A	RE	2011/03/16 * 12
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2011/02/17 * 12
SAT6-03	Attenuator	JFW	50HF-006N	-	RE	2011/02/17 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2010/10/15 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/NS4906	-/0901-271(RF Selector)	RE	2010/04/02 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2010/10/15 * 12
STR-03	Test Receiver	Rohde & Schwarz	ESI40	100054/040	RE,CE	2010/07/21 * 12
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2010/09/13 * 12
SLP-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100218	RE	2010/10/15 * 12
SCC-C9/C10/SRSE-03	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	CE	2010/04/02 * 12
SLS-05	LISN	Rohde & Schwarz	ENV216	100516	CE	2011/02/23 * 12
SAT3-06	Attenuator	JFW	50HF-003N	-	CE	2011/02/17 * 12
SOS-06	Humidity Indicator	A&D	AD-5681	4062118	CE,AT	2011/03/02 * 12
STM-05	Terminator	TME	CT-01 BP	-	CE	2011/01/07 * 12
SCC-G12	Coaxial Cable	Suhner	SUCOFLEX 102	30790/2	AT	2011/03/23 * 12
SAT10-06	Attenuator	Agilent	8493C-010	74865	AT	2011/03/23 * 12
SCC-G11	Coaxial Cable	Suhner	SUCOFLEX 102	31595/2	AT	2011/03/23 * 12

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

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

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,

AT: Antenna terminal conducted test