

APPENDIX 2: Data of EMI test

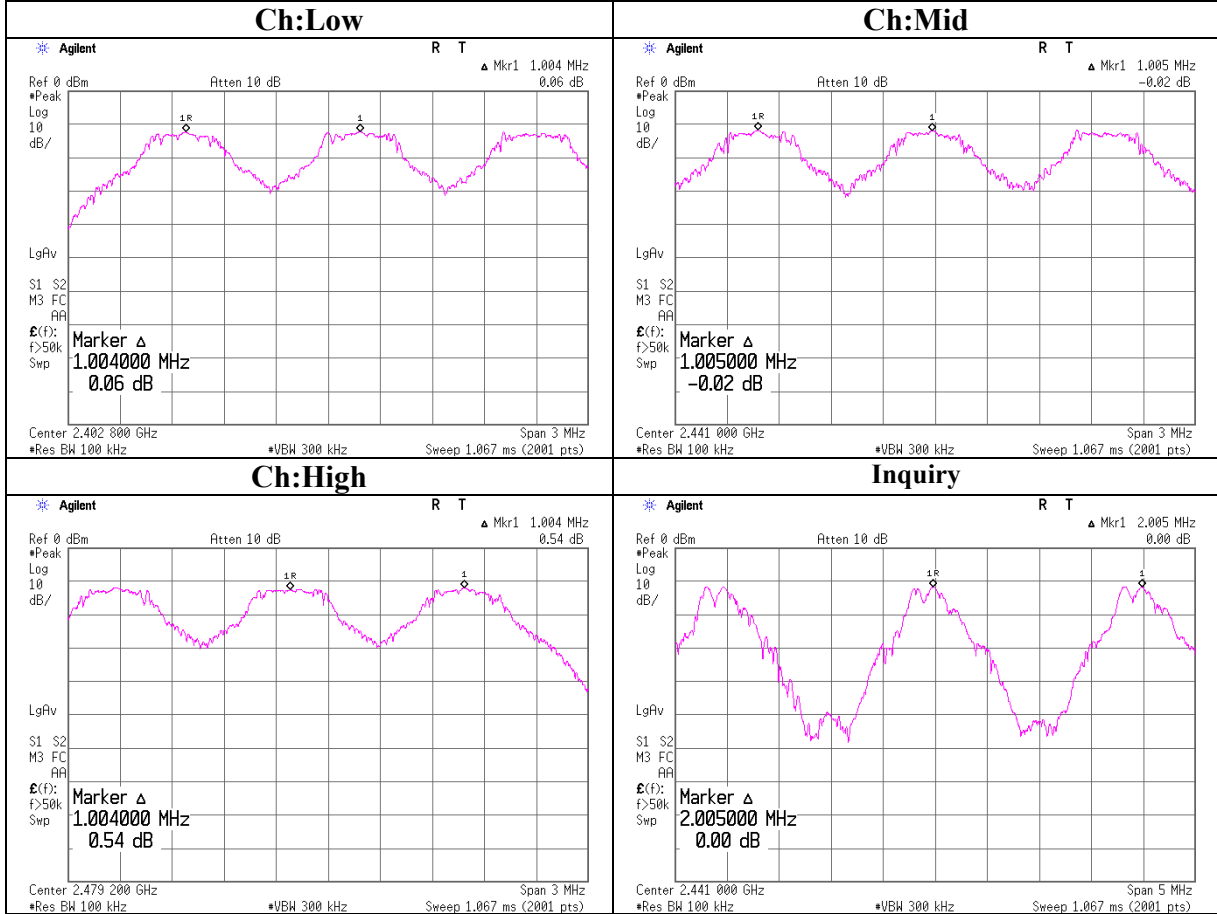
Carrier Frequency Separation

		UL Japan, Inc	
		Head Office EMC Lab. No.6 shielded room	
Company	FUJITSU TEN LIMITED	Regulation	FCC Part15 Subpart C 15.247(a)(1) / RSS-210 A8.1(b)
Equipment	COMB PLAYER A	Test Distance	-
Model	FT0001a	Date	April 10, 2008
S/N	1	Temperature	24 deg.C.
Power	DC 13.2V	Humidity	52 %
Mode	Bluetooth Tx Hopping On, DH5	Engineer	Kenichi Adachi
	/ Inquiry		

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.004	> 0.629 [MHz] (two-thirds of 20dB Bandwidth (0.944 [MHz])) or 25[kHz] (whichever is grater)
Mid	2441.0	1.005	> 0.629 [MHz] (two-thirds of 20dB Bandwidth (0.943 [MHz])) or 25[kHz] (whichever is grater)
High	2480.0	1.004	> 0.627 [MHz] (two-thirds of 20dB Bandwidth (0.941 [MHz])) or 25[kHz] (whichever is grater)
Inquiry	2441.0	2.005	> 0.510 [MHz] (two-thirds of 20dB Bandwidth (0.765 [MHz])) or 25[kHz] (whichever is grater)

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Carrier Frequency Separation

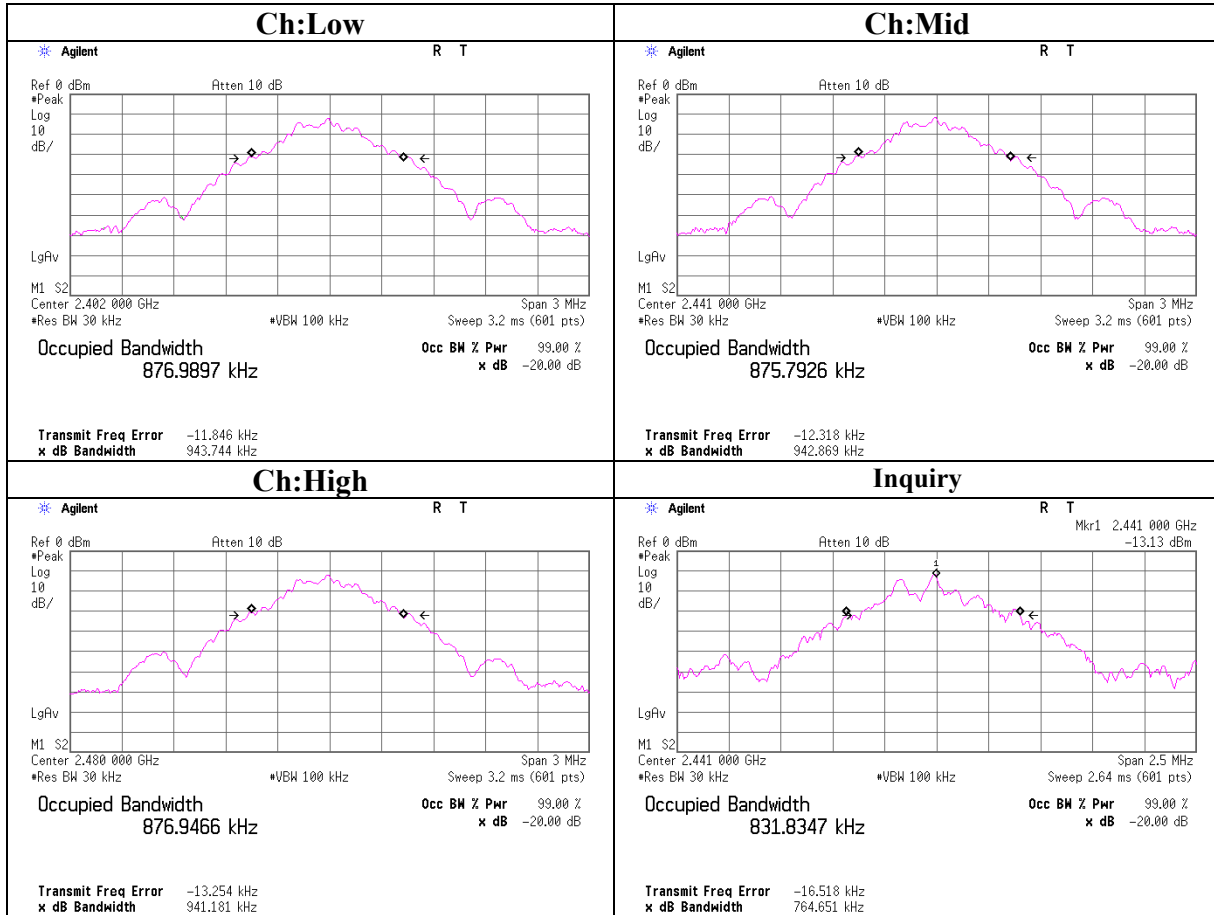


20dB Bandwidth

Company	FUJITSU TEN LIMITED	UL Japan, Inc	
Equipment	COMB PLAYER A	Head Office EMC Lab. No.6 shielded room	
Model	FT0001a	Regulation	FCC Part15 Subpart C 15.247(a)(1) / RSS-210 A8.1(a)
S/N	1	Test Distance	-
Power	DC 13.2V	Date	April 10, 2008
Mode	Bluetooth Tx Hopping Off, DH5	Temperature	24 deg.C.
	/ Inquiry	Humidity	52 %
		Engineer	Kenichi Adachi

Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.944	-
Mid	2441.0	0.943	-
High	2480.0	0.941	-
Inquiry	2441.0	0.765	-

20dB Bandwidth



Number of Hopping Frequency

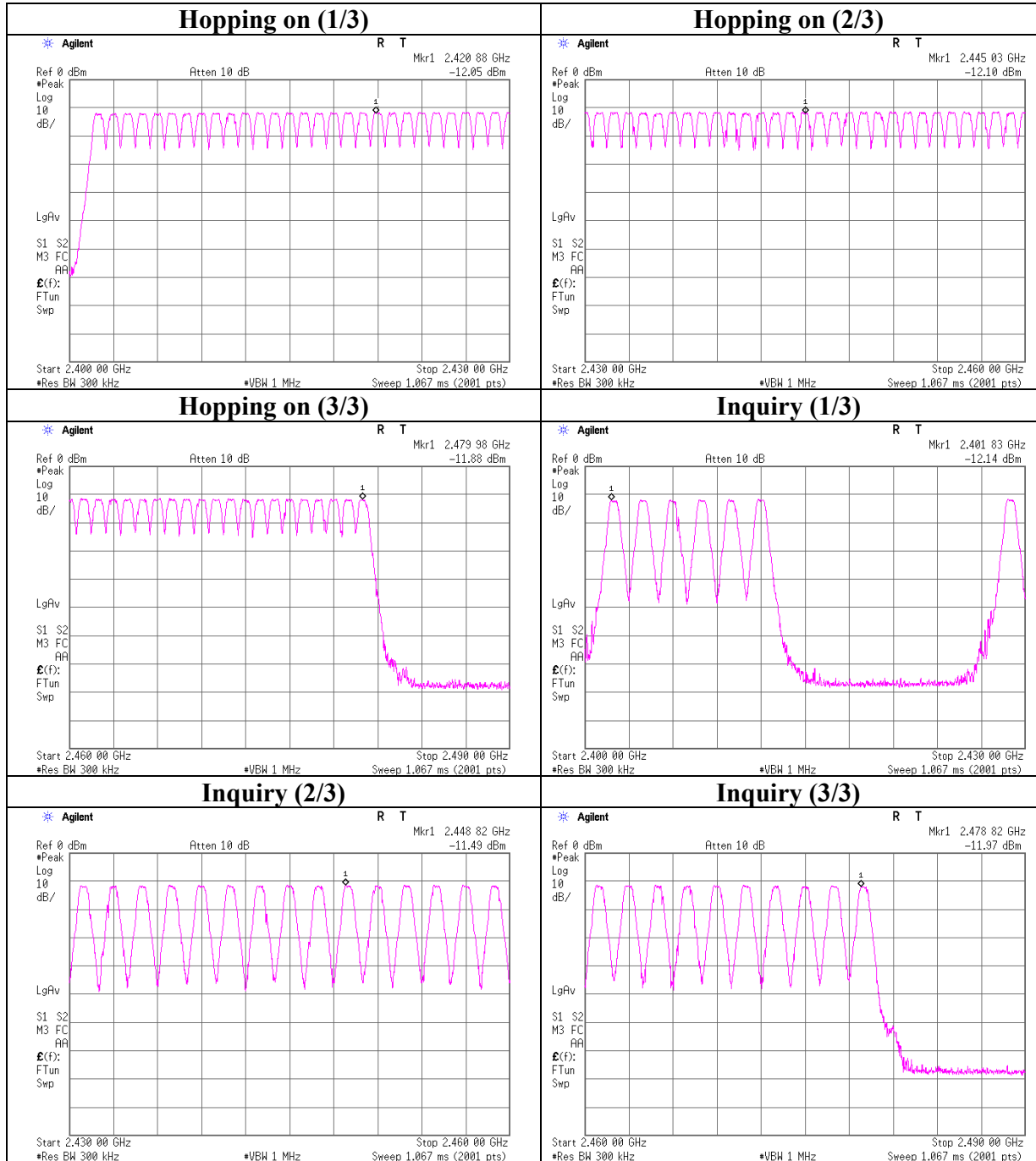
Company FUJITSU TEN LIMITED
Equipment COMB PLAYER A
Model FT0001a
S/N 1
Power DC 13.2V
Mode Bluetooth Tx Hopping On, DH5
/ Inquiry

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded room
Regulation FCC Part15 Subpart C 15.247(a)(1)(iii) / RSS-210 A8.1(d)
Test Distance -
Date April 10, 2008
Temperature 24 deg.C.
Humidity 52 %
Engineer Kenichi Adachi

Mode	Number of channel [times]	Limit [times]
Tx(Hopping on)	79	≥ 15

Mode	Number of channel [times]	Limit [times]
Inquiry	32	≥ 15

Number of Hopping Frequency

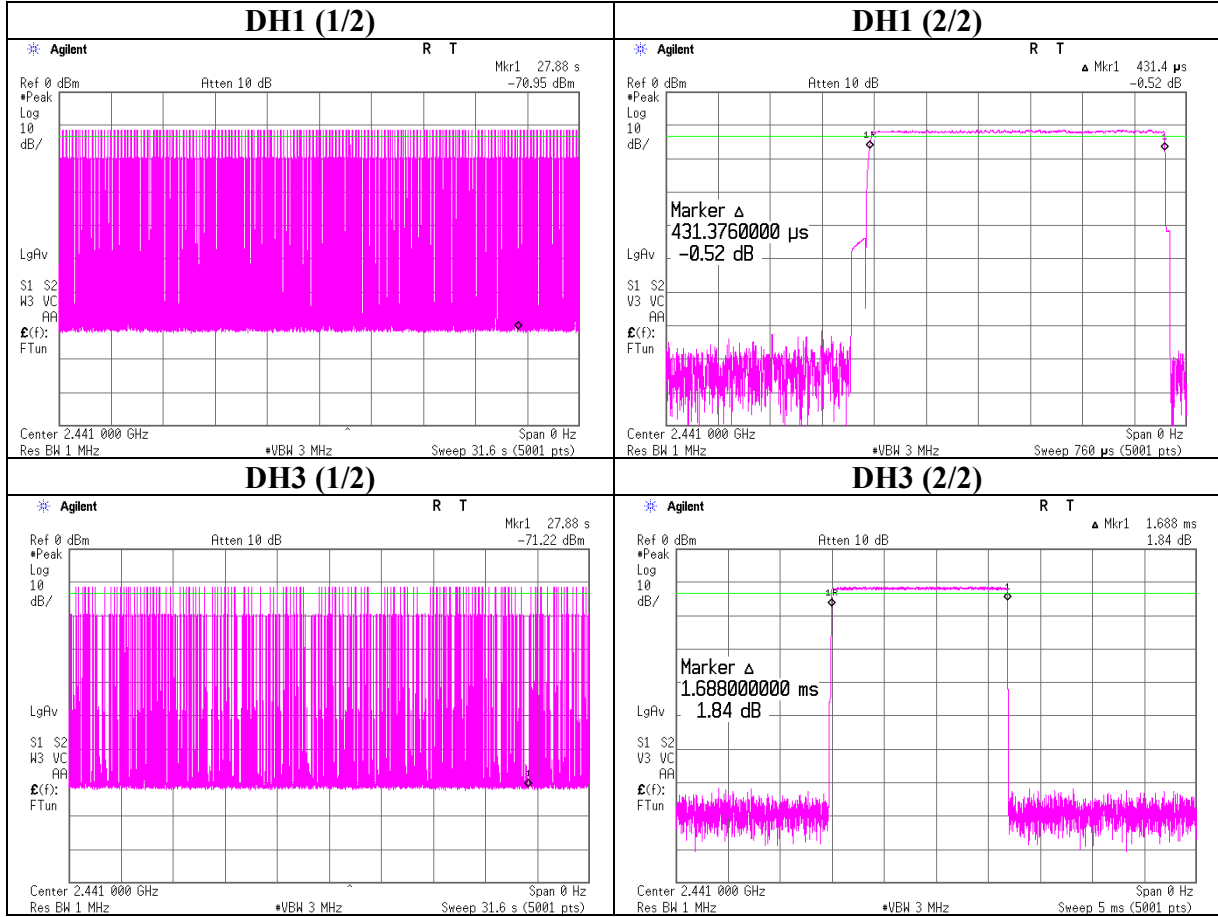


Dwell time

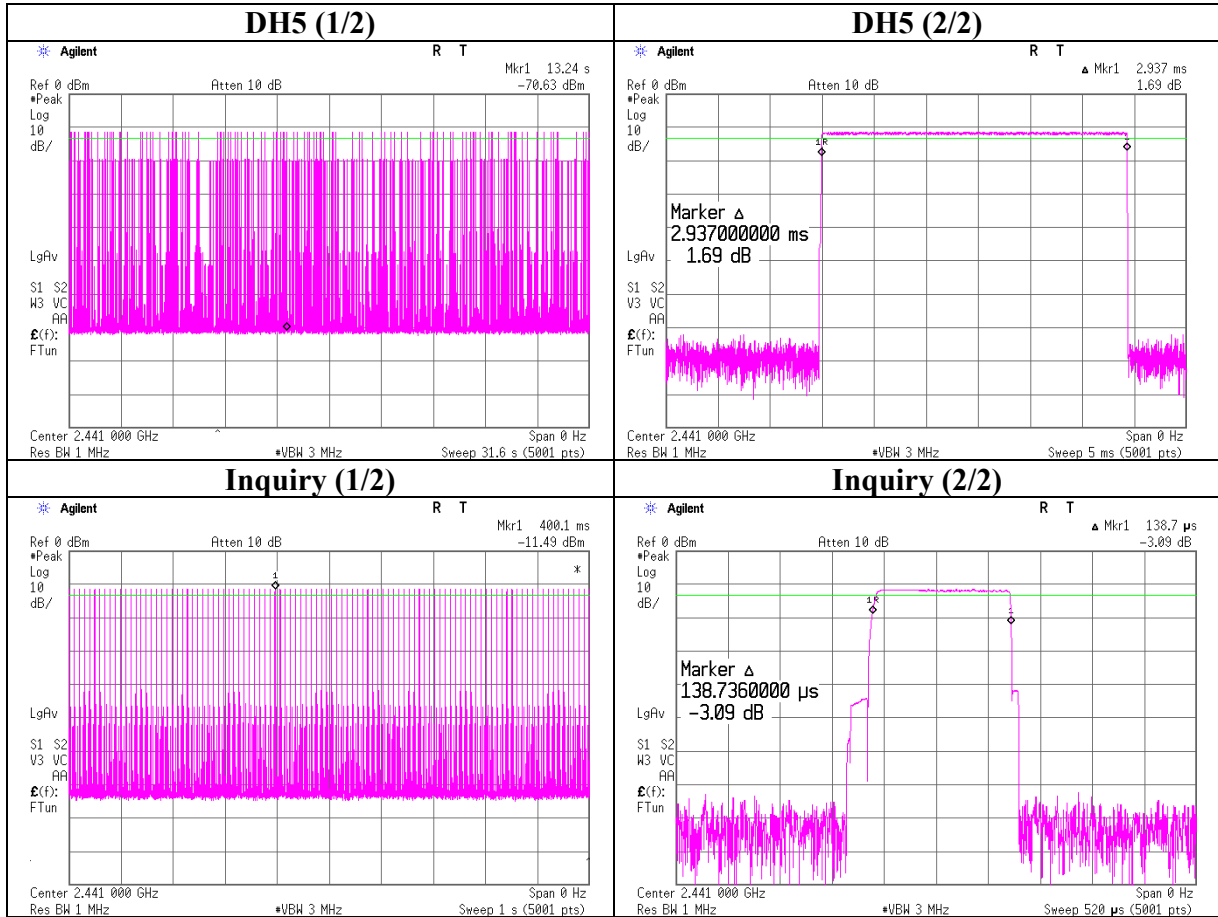
	UL Japan, Inc.	
Company	FUJITSU TEN LIMITED	Head Office EMC Lab. No.6 Shielded room
Equipment	COMB PLAYER A	Regulation FCC Part15 Subpart C 15.247(a)(1)(iii) / RSS-210 A8.1(d)
Model	FT0001a	Test Distance -
S/N	1	Date April 10, 2008
Power	DC 13.2V	Temperature 24 deg.C.
Mode	Bluetooth Tx Hopping On, DH1/DH3/DH5 / Inquiry	Humidity 52 %
		Engineer Kenichi Adachi

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	272 times / 31.6 sec. x 31.6 sec. = 272 times	0.431	117	400
DH3	158 times / 31.6 sec. x 31.6 sec. = 158 times	1.688	267	400
DH5	115 times / 31.6 sec. x 31.6 sec. = 115 times	2.937	338	400
Inquiry	100 times / 1.0 sec. x 12.8 sec. = 1280 times	0.139	178	400

Dwell time



Dwell time



Maximum Peak Output Power

	UL Japan, Inc.
Company	FUJITSU TEN LIMITED
Equipment	COMB PLAYER A
Model	FT0001a
S/N	1
Power	DC 13.2V
Mode	Bluetooth Tx Hopping Off, DH5(Worst) / Inquiry
	Head Office EMC Lab. No.6 Shielded room
	Regulation FCC Part15 Subpart C 15.247(b)(1) / RSS-210 A8.4(2)
	Test Distance -
	Date April 10, 2008
	Temperature 24 deg.C.
	Humidity 52 %
	Engineer Kenichi Adachi

Ch	Freq. [MHz]	P/M (PK) Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-10.52	0.58	10.08	0.14	1.03	20.97	125	20.83
Mid	2441.0	-10.12	0.58	10.08	0.54	1.13	20.97	125	20.43
High	2480.0	-10.37	0.58	10.08	0.29	1.07	20.97	125	20.68
Inquiry	2441.0	-10.58	0.58	10.08	0.08	1.02	20.97	125	20.89

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

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Radiated Spurious Emission (below 1GHz)

Tx, Ch:Low

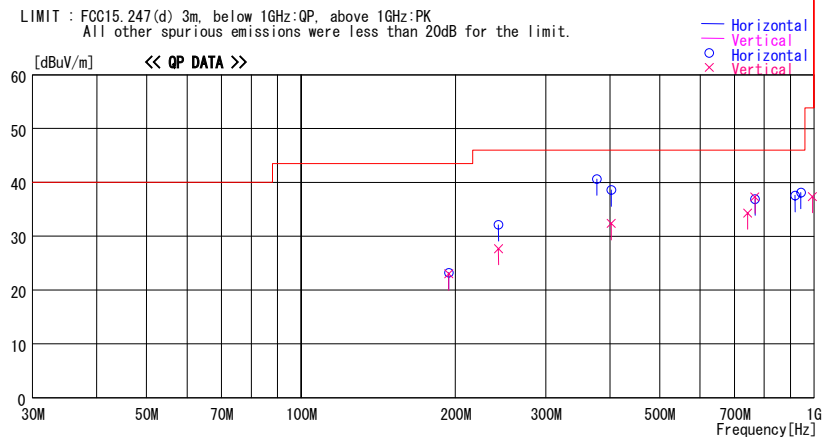
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2008/04/15

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER A
 Model No. : FT0001a
 Serial No. : 2
 Report No. : 28EE0183-HO-02
 Power : DC13.2V
 Temp./Humi. : 20deg.C / 36%
 Operator : Akio Hayashi

Mode / Remarks : Bluetooth Tx 2402MHz, DH5

LIMIT : FCC15.247(d) 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]							
194.125	30.0	QP	16.3	-23.1	23.2	31	210	Hori.	43.5	20.3	
194.125	29.8	QP	16.3	-23.1	23.0	8	100	Vert.	43.5	20.5	
242.650	33.9	QP	16.4	-22.6	27.7	314	100	Vert.	46.0	18.3	
242.652	38.3	QP	16.4	-22.6	32.1	113	186	Hori.	46.0	13.9	
377.424	45.4	QP	16.8	-21.6	40.6	107	100	Hori.	46.0	5.4	
402.580	42.6	QP	17.4	-21.4	38.6	132	100	Hori.	46.0	7.4	
402.585	36.4	QP	17.4	-21.4	32.4	49	100	Vert.	46.0	13.6	
742.257	33.0	QP	20.7	-19.4	34.3	196	263	Vert.	46.0	11.7	
767.416	35.1	QP	21.2	-19.0	37.3	110	104	Vert.	46.0	8.7	
767.424	34.7	QP	21.2	-19.0	36.9	103	100	Hori.	46.0	9.1	
918.379	33.6	QP	21.6	-17.6	37.6	135	100	Hori.	46.0	8.4	
943.541	33.5	QP	22.1	-17.5	38.1	79	100	Hori.	46.0	7.9	
993.868	31.3	QP	23.1	-17.0	37.4	118	100	Vert.	53.9	16.5	

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

Radiated Spurious Emission (below 1GHz)
Tx, Ch:Mid

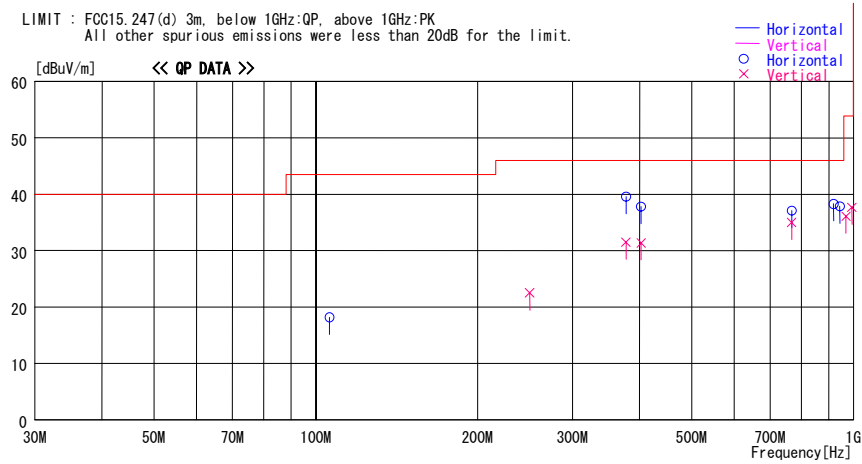
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2008/04/15

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER A
 Model No. : FT0001a
 Serial No. : 2
 Report No. : 28EE0183-HO-02
 Power : DC13.2V
 Temp./Humi. : 20deg. C / 36%
 Operator : Akio Hayashi

Mode / Remarks : Bluetooth Tx 2441MHz, DH5

LIMIT : FCC15.247(d) 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]							
106.008	31.3	QP	10.8	-23.9	18.2	160	164	Hori.	43.5	25.3	
250.007	28.5	QP	16.5	-22.5	22.5	273	100	Vert.	46.0	23.5	
377.424	44.4	QP	16.8	-21.6	39.6	106	100	Hori.	46.0	6.4	
377.424	36.3	QP	16.8	-21.6	31.5	263	124	Vert.	46.0	14.5	
402.583	35.4	QP	17.4	-21.4	31.4	56	100	Vert.	46.0	14.6	
402.588	41.8	QP	17.4	-21.4	37.8	118	100	Hori.	46.0	8.2	
767.417	32.8	QP	21.2	-19.0	35.0	221	100	Vert.	46.0	11.0	
767.420	34.9	QP	21.2	-19.0	37.1	101	113	Hori.	46.0	8.9	
918.389	34.3	QP	21.6	-17.6	38.3	136	100	Hori.	46.0	7.7	
943.550	33.3	QP	22.1	-17.5	37.9	84	100	Hori.	46.0	8.1	
968.713	30.7	QP	22.6	-17.2	36.1	159	116	Vert.	53.9	17.8	
993.869	31.6	QP	23.1	-17.0	37.7	115	100	Vert.	53.9	16.2	

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

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Radiated Spurious Emission (below 1GHz)

Tx, Ch:High

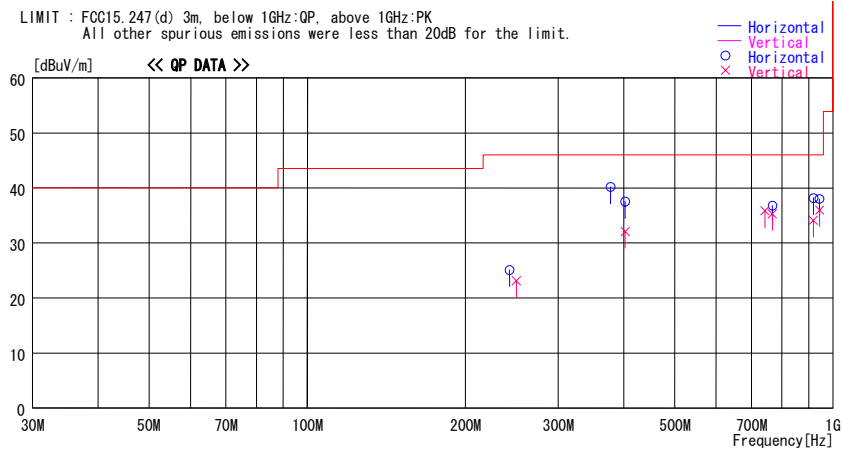
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2008/04/15

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER A
 Model No. : FT0001a
 Serial No. : 2
 Report No. : 28EE0183-HO-02
 Power : DC13.2V
 Temp./Humi. : 20deg.C / 36%
 Operator : Akio Hayashi

Mode / Remarks : Bluetooth Tx 2480MHz, DH5

LIMIT : FCC15.247(d) 3m, below 1GHz:QP, above 1GHz:PK
 All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
242.653	31.3	QP	16.4	-22.6	25.1	126	143	Hori.	46.0	20.9	
250.008	29.1	QP	16.5	-22.5	23.1	273	100	Vert.	46.0	22.9	
377.424	45.0	QP	16.8	-21.6	40.2	104	100	Hori.	46.0	5.8	
402.586	36.1	QP	17.4	-21.4	32.1	47	100	Vert.	46.0	13.9	
402.590	41.5	QP	17.4	-21.4	37.5	114	100	Hori.	46.0	8.5	
742.250	34.5	QP	20.7	-19.4	35.8	214	100	Vert.	46.0	10.2	
767.415	33.1	QP	21.2	-19.0	35.3	203	100	Vert.	46.0	10.7	
767.415	34.6	QP	21.2	-19.0	36.8	104	100	Hori.	46.0	9.2	
918.385	34.2	QP	21.6	-17.6	38.2	135	100	Hori.	46.0	7.8	
918.393	30.1	QP	21.6	-17.6	34.1	32	100	Vert.	46.0	11.9	
943.547	33.4	QP	22.1	-17.5	38.0	82	100	Hori.	46.0	8.0	
943.556	31.4	QP	22.1	-17.5	36.0	183	127	Vert.	46.0	10.0	

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

Radiated Spurious Emission (below 1GHz)
Rx, Ch:Mid

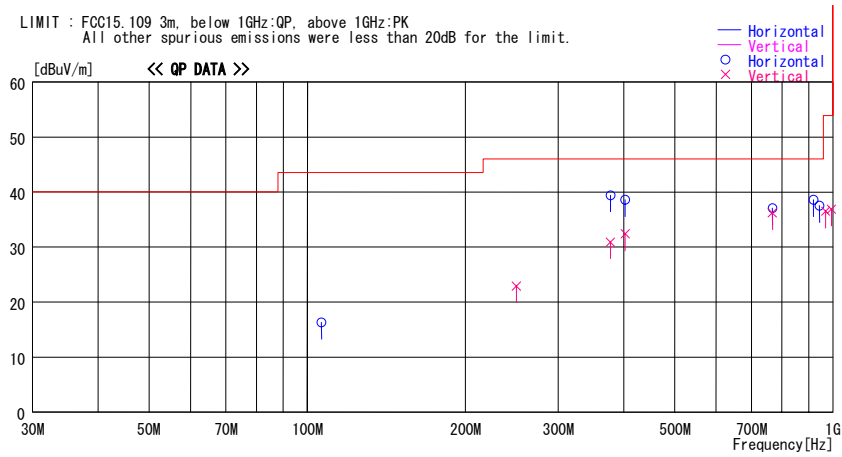
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
 Date : 2008/04/15

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER A
 Model No. : FT0001a
 Serial No. : 2
 Report No. : 28EE0183-H0-02
 Power : DC13.2V
 Temp./Humi. : 20deg.C / 36%
 Operator : Akio Hayashi

Mode / Remarks : Bluetooth Rx

LIMIT : FCC15.109 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]							
106.444	29.3	QP	10.8	-23.8	16.3	52	278	Hori.	43.5	27.2	
250.007	28.9	QP	16.5	-22.5	22.9	36	100	Vert.	46.0	23.1	
377.426	44.2	QP	16.8	-21.6	39.4	104	100	Hori.	46.0	6.6	
377.424	35.7	QP	16.8	-21.6	30.9	236	114	Vert.	46.0	15.1	
402.587	36.4	QP	17.4	-21.4	32.4	48	100	Vert.	46.0	13.6	
402.588	42.6	QP	17.4	-21.4	38.6	126	100	Hori.	46.0	7.4	
767.420	34.9	QP	21.2	-19.0	37.1	97	109	Hori.	46.0	8.9	
767.425	34.0	QP	21.2	-19.0	36.2	45	115	Vert.	46.0	9.8	
918.389	34.6	QP	21.6	-17.6	38.6	137	100	Hori.	46.0	7.4	
943.550	32.9	QP	22.1	-17.5	37.5	83	104	Hori.	46.0	8.5	
968.710	31.1	QP	22.6	-17.2	36.5	188	118	Vert.	53.9	17.4	
993.872	30.8	QP	23.1	-17.0	36.9	112	100	Vert.	53.9	17.0	

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

Radiated Spurious Emission (above 1GHz)
Tx, Ch. Low

Company : FUJITSU TEN LIMITED
Equipment : COMB PLAYER A
Model : FT0001a
S/N : 2
Power : DC13.2V
Mode : Bluetooth Tx 2402MHz, DH5
Position : Normal axis

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Regulation : FCC15.247(d) / RSS-210 A8.5
Test Distance : 3m / 1m
Date : 2008/04/15
Temperature : 20deg.C.
Humidity : 36%
Engineer : Akio Hayashi

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER						HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	53.1	51.6	24.8	35.4	1.9	0.0	-	44.4	42.9	73.9	29.5	31.0
2	2390.00	42.6	43.7	27.3	32.8	2.6	0.0	-	39.7	40.8	73.9	34.2	33.1
3	2400.00	59.6	54.2	27.3	32.8	2.6	0.0	-	56.7	51.3	73.9	17.2	22.6
4	3118.00	45.4	46.4	28.5	32.4	3.0	0.6	-	45.1	46.1	73.9	28.8	27.8
5	4804.00	39.5	39.0	31.5	30.7	4.1	0.8	-	45.2	44.7	73.9	28.7	29.2
6	7206.00	37.2	39.8	35.8	31.4	4.6	0.7	-	46.9	49.5	73.9	27.0	24.4
7	9608.00	36.4	38.5	38.2	32.0	5.4	1.1	-	49.1	51.2	73.9	24.8	22.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
8	12010.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
9	14412.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
10	16814.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
11	19216.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
12	21618.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
13	24020.00	40.3	41.5	38.7	31.2	7.7	0.0	-	46.0	47.2	73.9	27.9	26.7

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER						HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	50.1	48.4	24.8	35.4	1.9	0.0	-	41.4	39.7	53.9	12.5	14.2
2	2390.00	33.4	33.4	27.3	32.8	2.6	0.0	-	30.5	30.5	53.9	23.4	23.4
3	2400.00	36.9	35.0	27.3	32.8	2.6	0.0	-	34.0	32.1	53.9	19.9	21.8
4	3118.00	38.0	40.9	28.5	32.4	3.0	0.6	-	37.7	40.6	53.9	16.2	13.3
5	4804.00	27.8	29.2	31.5	30.7	4.1	0.8	-	33.5	34.9	53.9	20.4	19.0
6	7206.00	27.5	27.4	35.8	31.4	4.6	0.7	-	37.2	37.1	53.9	16.7	16.8
7	9608.00	27.7	27.7	38.2	32.0	5.4	1.1	-	40.4	40.4	53.9	13.5	13.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
8	12010.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
9	14412.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
10	16814.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
11	19216.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
12	21618.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
13	24020.00	31.9	31.9	38.7	31.2	7.7	0.0	-	37.6	37.6	53.9	16.3	16.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*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.

*NS = Non Signal

Radiated Spurious Emission (above 1GHz)
Tx, Ch. Mid

Company : FUJITSU TEN LIMITED
Equipment : COMB PLAYER A
Model : FT0001a
S/N : 2
Power : DC13.2V
Mode : Bluetooth Tx 2441MHz, DH5
Position : Normal axis

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Regulation : FCC15.247(d) / RSS-210 A8.5
Test Distance : 3m / 1m
Date : 2008/04/15
Temperature : 20deg.C.
Humidity : 36%
Engineer : Akio Hayashi

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	51.7	52.0	24.8	35.4	1.9	0.0	-	43.0	43.3	73.9	30.9	30.6
2	3118.33	44.6	47.5	28.5	32.4	3.0	0.0	-	43.7	46.6	73.9	30.2	27.3
3	4882.00	37.5	39.8	31.7	30.6	4.1	0.8	-	43.5	45.8	73.9	30.4	28.1
4	7323.00	37.7	37.1	35.9	31.4	4.6	0.7	-	47.5	46.9	73.9	26.4	27.0
5	9764.00	37.1	37.4	38.2	32.1	5.5	1.2	-	49.9	50.2	73.9	24.0	23.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
6	12205.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
7	14646.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
8	17087.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
9	19528.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
10	21969.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
11	24410.00	38.7	38.9	38.8	30.6	7.7	0.0	-	45.1	45.3	73.9	28.8	28.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	48.2	47.7	24.8	35.4	1.9	0.0	-	39.5	39.0	53.9	14.4	14.9
2	3118.33	38.6	42.9	28.5	32.4	3.0	0.0	-	37.7	42.0	53.9	16.2	11.9
3	4882.00	28.3	30.7	31.7	30.6	4.1	0.8	-	34.3	36.7	53.9	19.6	17.2
4	7323.00	27.0	27.0	35.9	31.4	4.6	0.7	-	36.8	36.8	53.9	17.1	17.1
5	9764.00	27.7	27.7	38.2	32.1	5.5	1.2	-	40.5	40.5	53.9	13.4	13.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
6	12205.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
7	14646.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
8	17087.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
9	19528.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
10	21969.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
11	24410.00	29.8	30.0	38.8	30.6	7.7	0.0	-	36.2	36.4	53.9	17.7	17.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*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.
*NS = Non Signal

Radiated Spurious Emission (above 1GHz)
Tx, Ch. High

Company : FUJITSU TEN LIMITED
Equipment : COMB PLAYER A
Model : FT0001a
S/N : 2
Power : DC13.2V
Mode : Bluetooth Tx 2480MHz, DH5
Position : Normal axis

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Regulation : FCC15.247(d) / RSS-210 A8.5
Test Distance : 3m / 1m
Date : 2008/04/15
Temperature : 20deg.C.
Humidity : 36%
Engineer : Akio Hayashi

PK DETECT

(RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	52.3	52.3	24.8	35.4	1.9	0.0	-	43.6	43.6	73.9	30.3	30.3
2	2483.50	51.9	53.7	27.4	32.8	2.7	0.0	-	49.2	51.0	73.9	24.7	22.9
3	3118.33	46.0	46.8	28.5	32.4	3.0	0.0	-	45.1	45.9	73.9	28.8	28.0
4	4960.00	37.0	37.4	31.8	30.6	4.1	0.8	-	43.1	43.5	73.9	30.8	30.4
5	7440.00	37.8	37.7	36.1	31.4	4.7	0.7	-	47.9	47.8	73.9	26.0	26.1
6	9920.00	40.7	40.1	38.2	32.2	5.5	1.2	-	53.4	52.8	73.9	20.5	21.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
7	12400.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
8	14880.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
9	17360.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
10	19840.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
11	22320.00	NS	NS	-	-	-	-	-	-	-	73.9	-	-
12	24800.00	40.0	39.9	38.9	29.9	7.8	0.0	-	47.3	47.2	73.9	26.6	26.7

AV DETECT

(RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	Dwell Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss													
1	1019.05	49.5	48.5	24.8	35.4	1.9	0.0	-	40.8	39.8	53.9	13.1	14.1
2	2483.50	42.2	42.1	27.4	32.8	2.7	0.0	-	39.5	39.4	53.9	14.4	14.5
3	3118.33	39.7	40.0	28.5	32.4	3.0	0.0	-	38.8	39.1	53.9	15.1	14.8
4	4960.00	27.6	29.6	31.8	30.6	4.1	0.8	-	33.7	35.7	53.9	20.2	18.2
5	7440.00	27.2	27.2	36.1	31.4	4.7	0.7	-	37.3	37.3	53.9	16.6	16.6
6	9920.00	27.8	28.0	38.2	32.2	5.5	1.2	-	40.5	40.7	53.9	13.4	13.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac													
7	12400.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
8	14880.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
9	17360.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
10	19840.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
11	22320.00	NS	NS	-	-	-	-	-	-	-	53.9	-	-
12	24800.00	30.1	30.1	38.9	29.9	7.8	0.0	-	37.4	37.4	53.9	16.5	16.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

*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.

*NS = Non Signal

Radiated Spurious Emission (above 1GHz)
Rx, Ch. Mid

Company : FUJITSU TEN LIMITED
Equipment : COMB PLAYER A
Model : FT0001a
S/N : 2
Power : DC13.2V
Mode : Bluetooth Rx
Position : Normal axis

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Regulation : FCC15.109(a) / RSS-210 A8.5
Test Distance : 3m
Date : 2008/04/15
Temperature : 20deg.C.
Humidity : 36%
Engineer : Akio Hayashi

PK DETECT (Reference data) (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1019.05	51.7	52.9	24.8	35.4	1.9	0.0	43.0	44.2	73.9	30.9	29.7
2	1044.31	51.2	51.1	24.8	35.3	1.9	0.0	42.6	42.5	73.9	31.3	31.4
3	2441.00	37.9	38.0	27.4	32.8	2.7	0.0	35.2	35.3	73.9	38.7	38.6
4	3118.33	45.7	44.6	28.5	32.4	3.0	0.0	44.8	43.7	73.9	29.1	30.2

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1019.05	47.7	49.6	24.8	35.4	1.9	0.0	39.0	40.9	53.9	14.9	13.0
2	1044.31	48.4	47.2	24.8	35.3	1.9	0.0	39.8	38.6	53.9	14.1	15.3
3	2441.00	27.8	27.8	27.4	32.8	2.7	0.0	25.1	25.1	53.9	28.8	28.8
4	3118.33	41.8	38.0	28.5	32.4	3.0	0.0	40.9	37.1	53.9	13.0	16.8

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

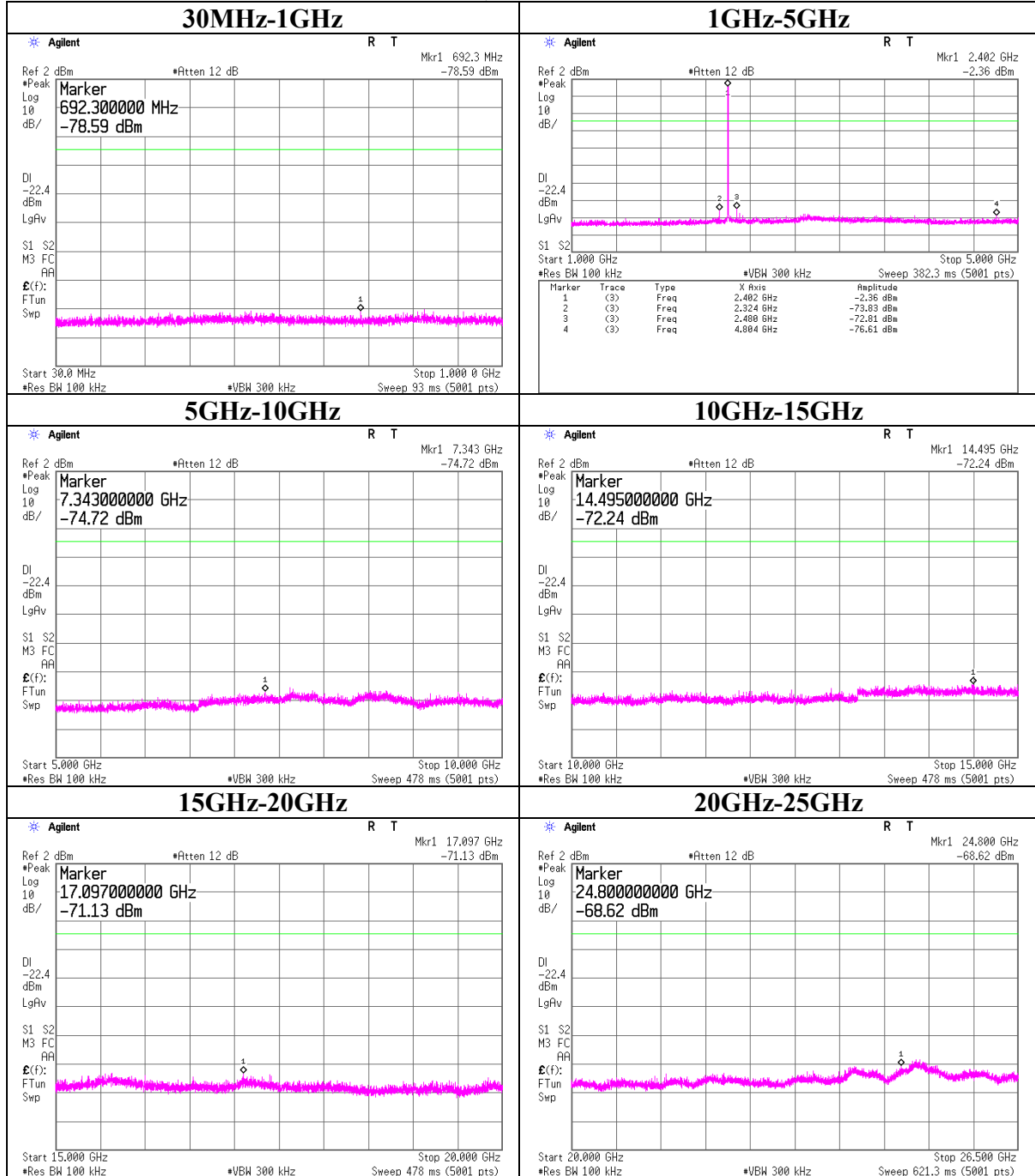
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*The limit is rounded down to one decimal place.

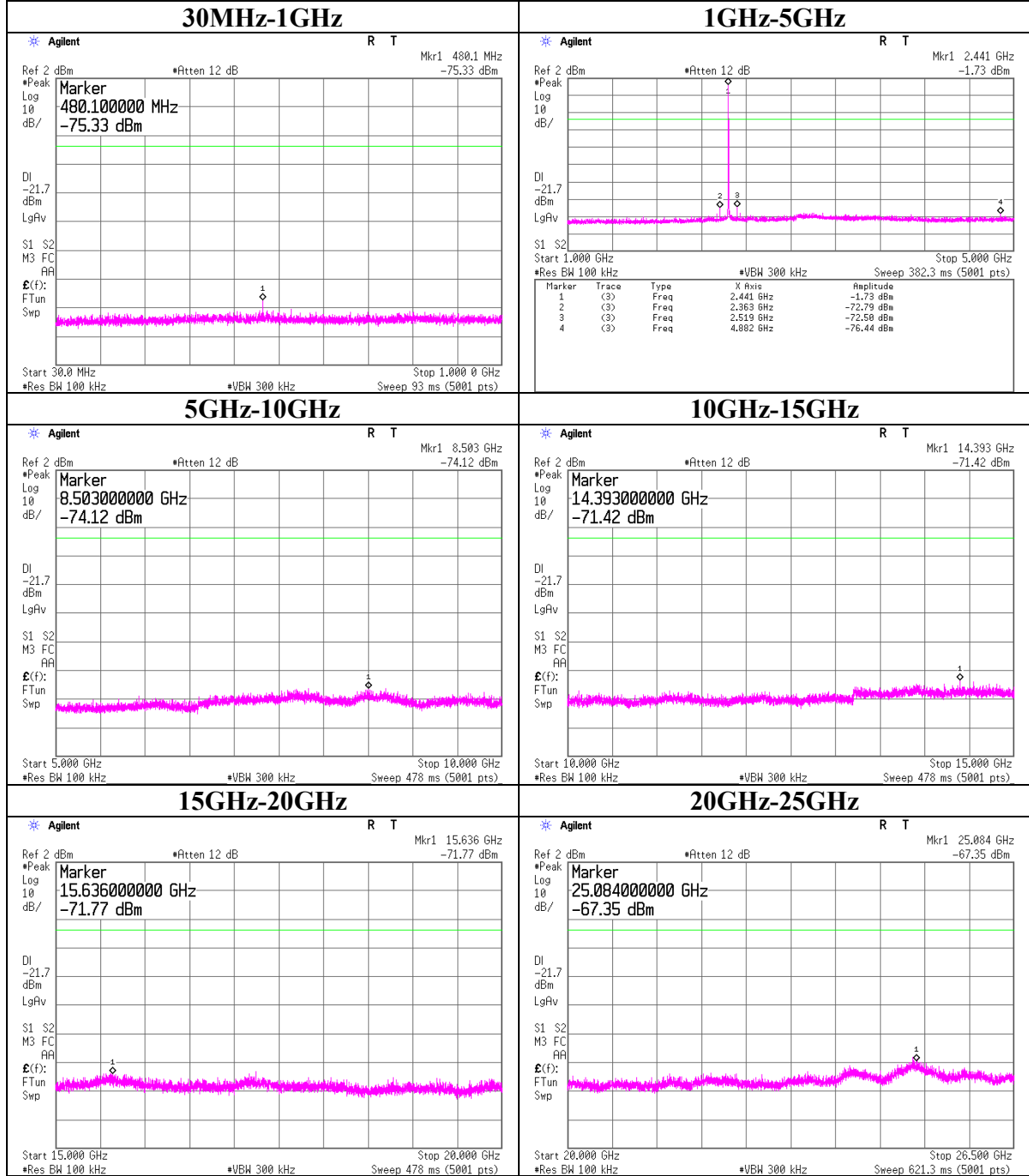
*The test result is rounded off to one or two decimal places, so some differences might be observed.

*NS = Non Signal

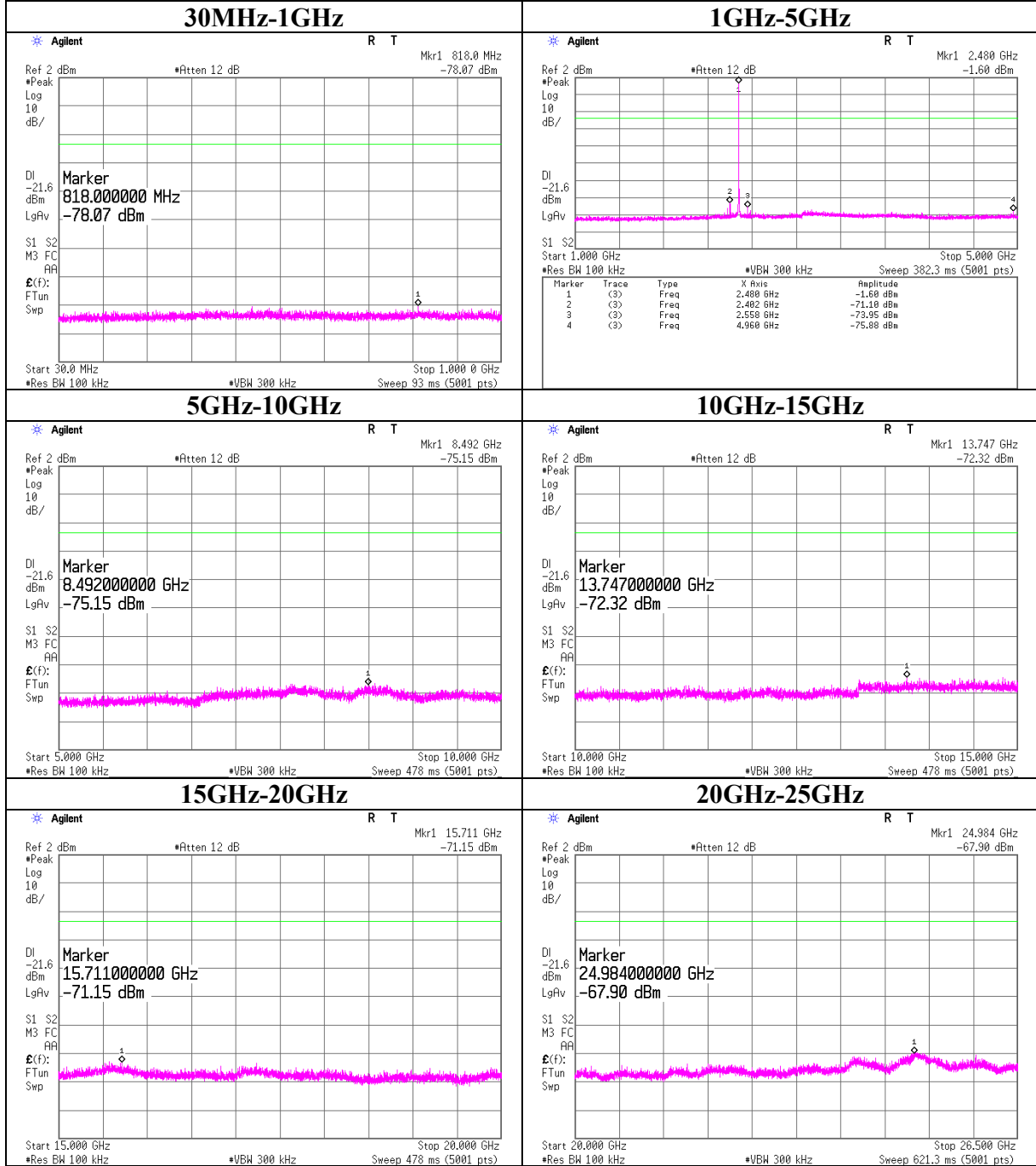
Conducted Spurious Emission
Tx, Ch:Low



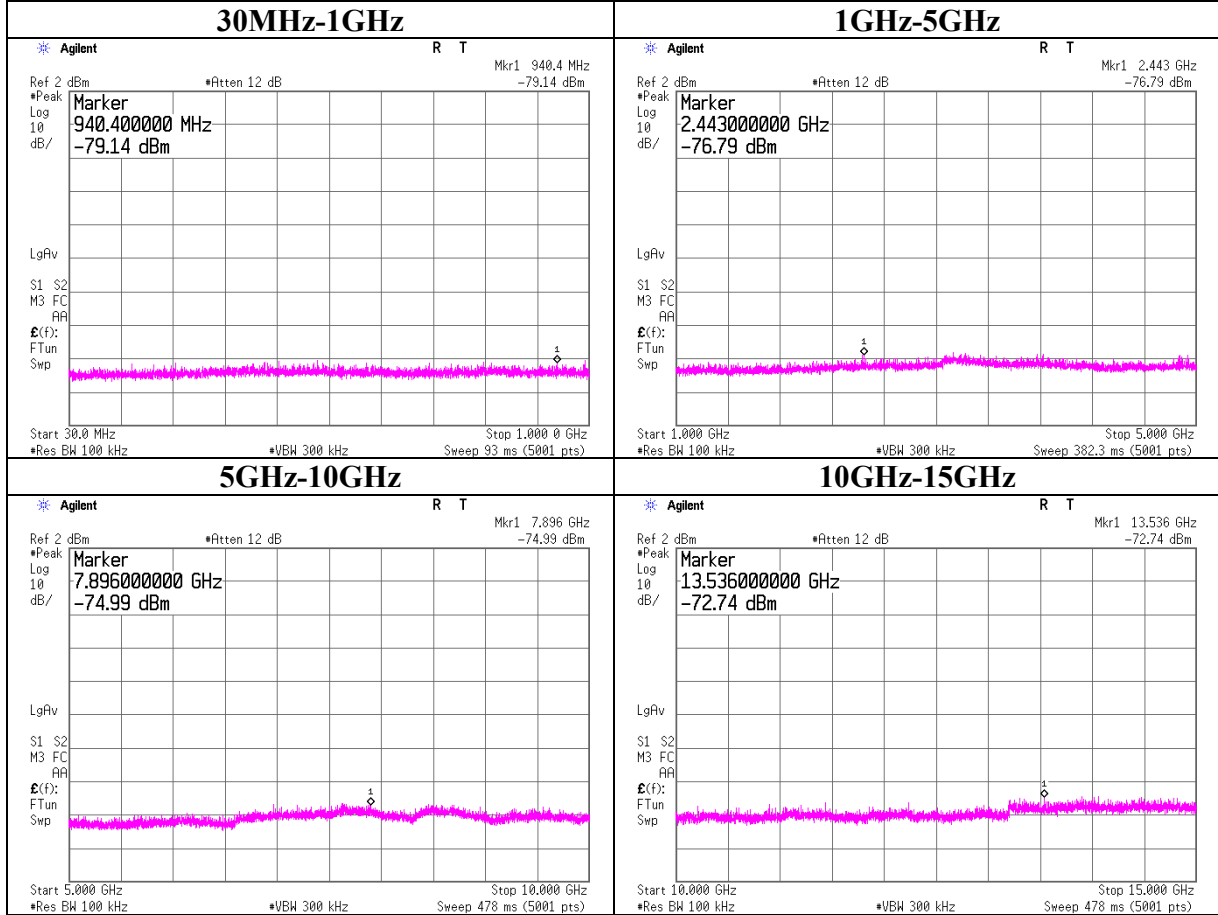
Conducted Spurious Emission
Tx, Ch:Mid



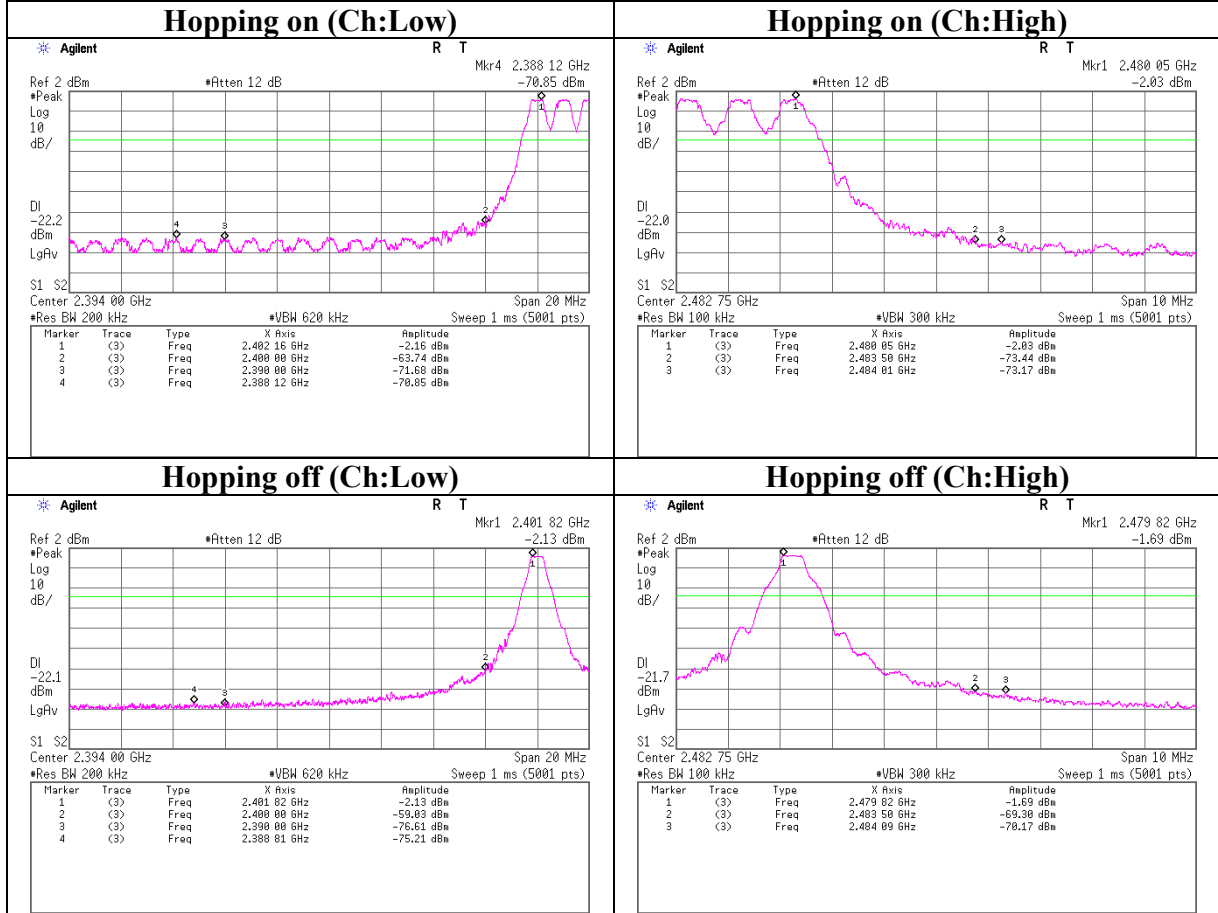
Conducted Spurious Emission
Tx, Ch:High



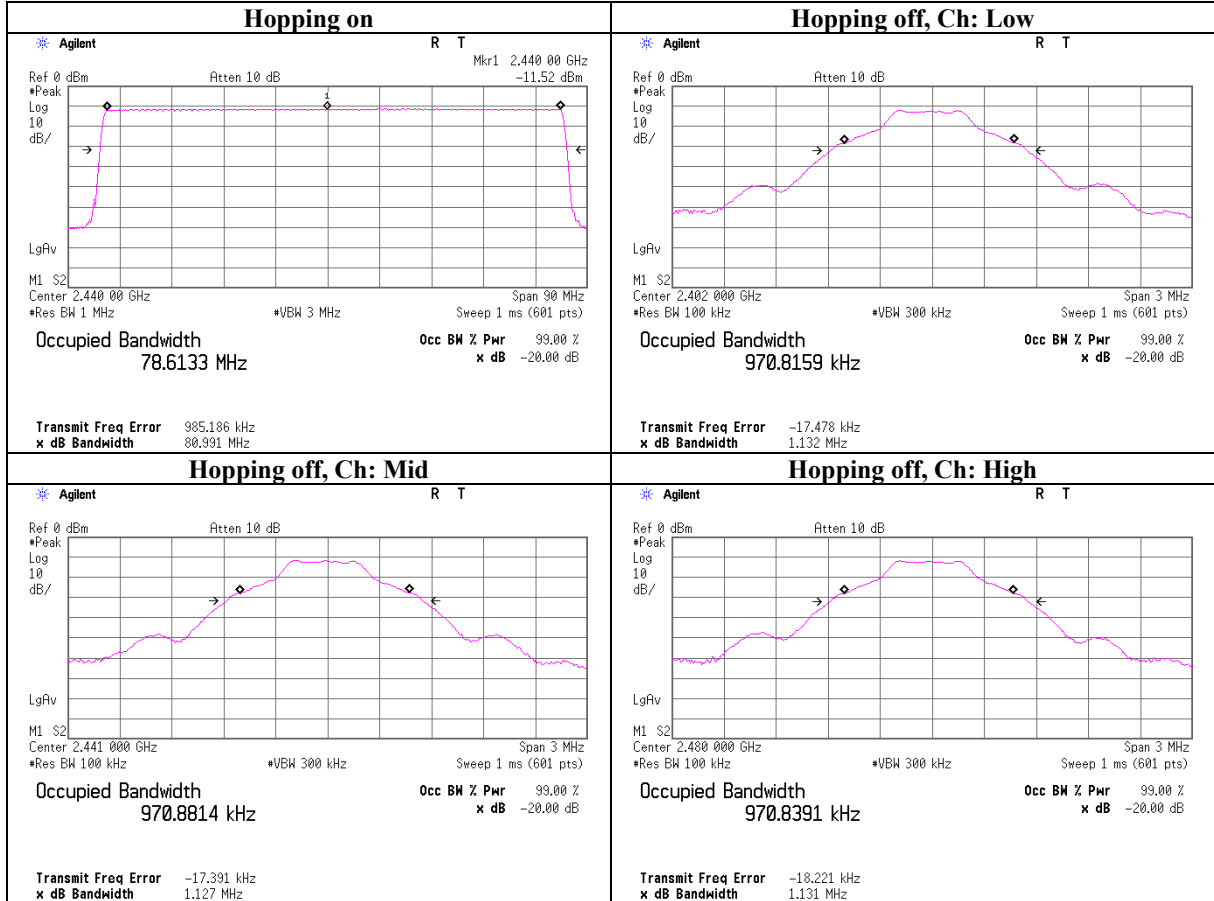
Conducted Spurious Emission
Rx, Ch:Mid



Conducted Spurious Emission
Band Edge compliance



99% Occupied Bandwidth



APPENDIX 3:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MPM-09	Power Meter	Anritsu	ML2495A	AT	2007/09/22 * 12
MPSE-12	Power sensor	Anritsu	MA2411B	AT	2007/09/22 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT	2007/06/20 * 12
MAT-25	Attenuator(10dB)(above1GHz)	Agilent	8493C	AT	2007/06/28 * 12
MCC-67	Microwave Cable 1G-40GHz	Schner	SUCOFLEX102	AT	2008/04/04 * 12
MOS-14	Thermo-Hygrometer	Custom	CTH-180	AT	2008/01/10 * 12
MDPS-12	DC Power Supply	Kikusui	PAK35-10A	AT	Pre Check
MMM-11	Digital HiTESTER	Hioki	3805	AT	2008/04/09 * 12
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2008/03/25 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	RE	2008/01/10 * 12
MJM-06	Measure	PROMART	SEN1955	RE	-
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE	-
MSA-09	Spectrum Analyzer	Advantest	R3273	RE	2007/12/21 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2008/02/20 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2008/01/12 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2008/01/12 * 12
MCC-51	Coaxial cable	UL Japan	-	RE	2007/07/26 * 12
MAT-30	Attenuator(6dB)	TME	UFA-01	RE	2008/03/10 * 12
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	RE	2008/03/06 * 12
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2007/04/14 * 12
MCC-56	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2008/03/12 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2008/03/13 * 12
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	RE	2007/04/06 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE	2007/09/05 * 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

AT: Antenna Terminal Conducted test

UL Japan, Inc.

Head Office EMC Lab.

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