

APPENDIX 2: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MRENT-30	Spectrum Analyzer	Agilent	E7405A	AT	2006/04/19 * 12
MCC-26	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	AT	2005/08/30 * 12
MOS-04	Digital Humidity Indicator	N.T	NT-1800	AT	2004/11/25 * 24
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2005/09/16 * 12
MRENT-23	Spectrum Analyzer	Advantest	R3273	RE	2006/01/10 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2006/01/09 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2006/02/02 * 12
MCC-25	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MCC-27	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2005/08/30 * 12
MHF-05	High Pass Filter	Tokimec	TF323DCA	RE	2006/01/24 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2005/09/07 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE	2004/11/25 * 24
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE	
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/T SJ	-	RE	2006/02/20 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2005/05/24 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MOS-01	Digital Humidity Indicator	N.T	NT-1800		2004/11/25 * 24
MTR-01	Test Receiver	Rohde & Schwarz	ES140	RE	2005/11/10 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2005/11/14 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/04/10 * 12

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

Test Item:

AT: Antenna Terminal Conducted Spurious Emission

Maximum Peak Output Power

Carrier Frequency Separation

20dB Bandwidth

Number of Hopping Frequency

Dwell time

RE: Radiated Spurious Emission

APPENDIX 3: Data of EMI test

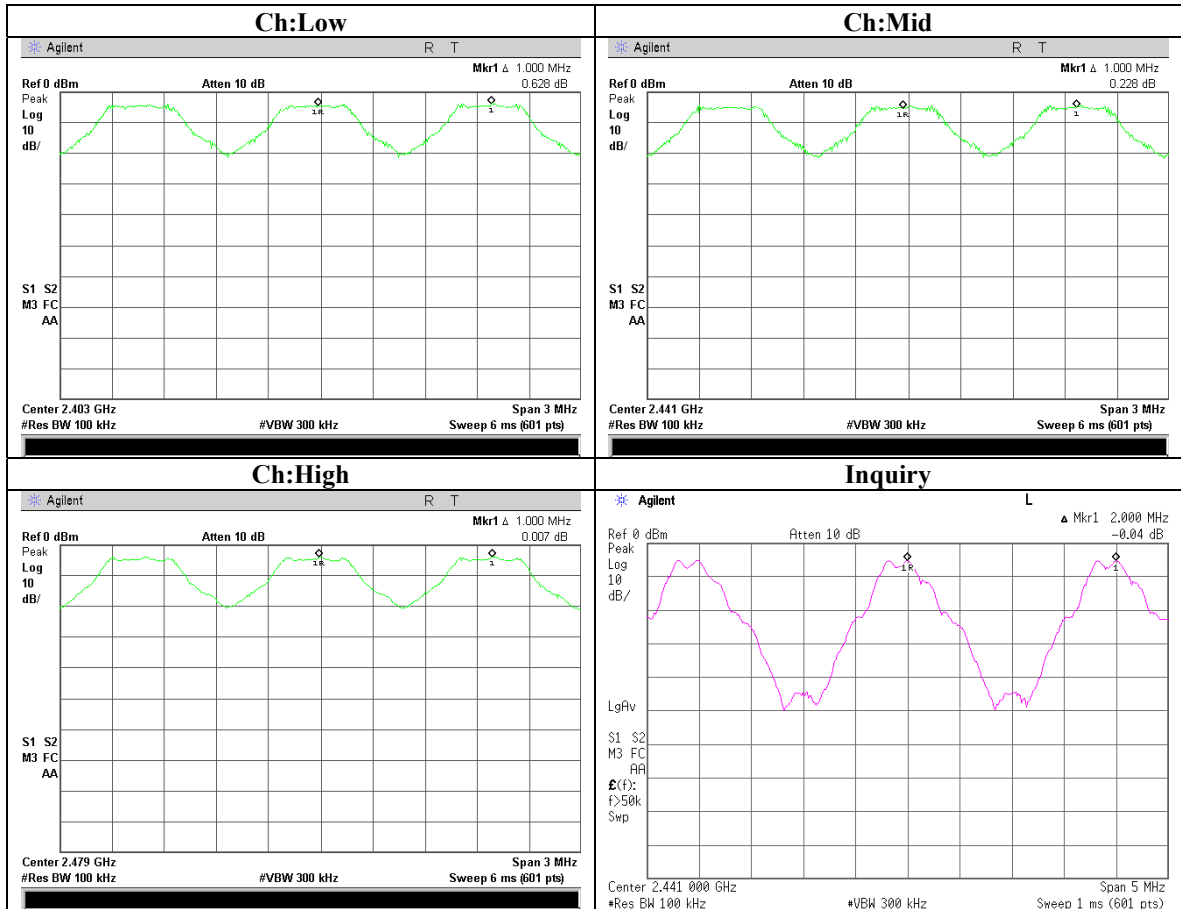
Carrier Frequency Separation

UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

COMPANY	: FUJITSU TEN LIMITED	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: COMB PLAYER	TEST DISTANCE	: -
MODEL	: BT010A	DATE	: 05/12/2006
S/ N	: WE300676	TEMPERATURE	: 23deg.C
POWER	: DC13.2V	HUMIDITY	: 44%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.000	>20dB Bandwidth or 25[kHz](whichever is greater)
Mid	2441.0	1.000	>20dB Bandwidth or 25[kHz](whichever is greater)
High	2480.0	1.000	>20dB Bandwidth or 25[kHz](whichever is greater)
Inquiry	2441.0	2.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)

Carrier Frequency Separation



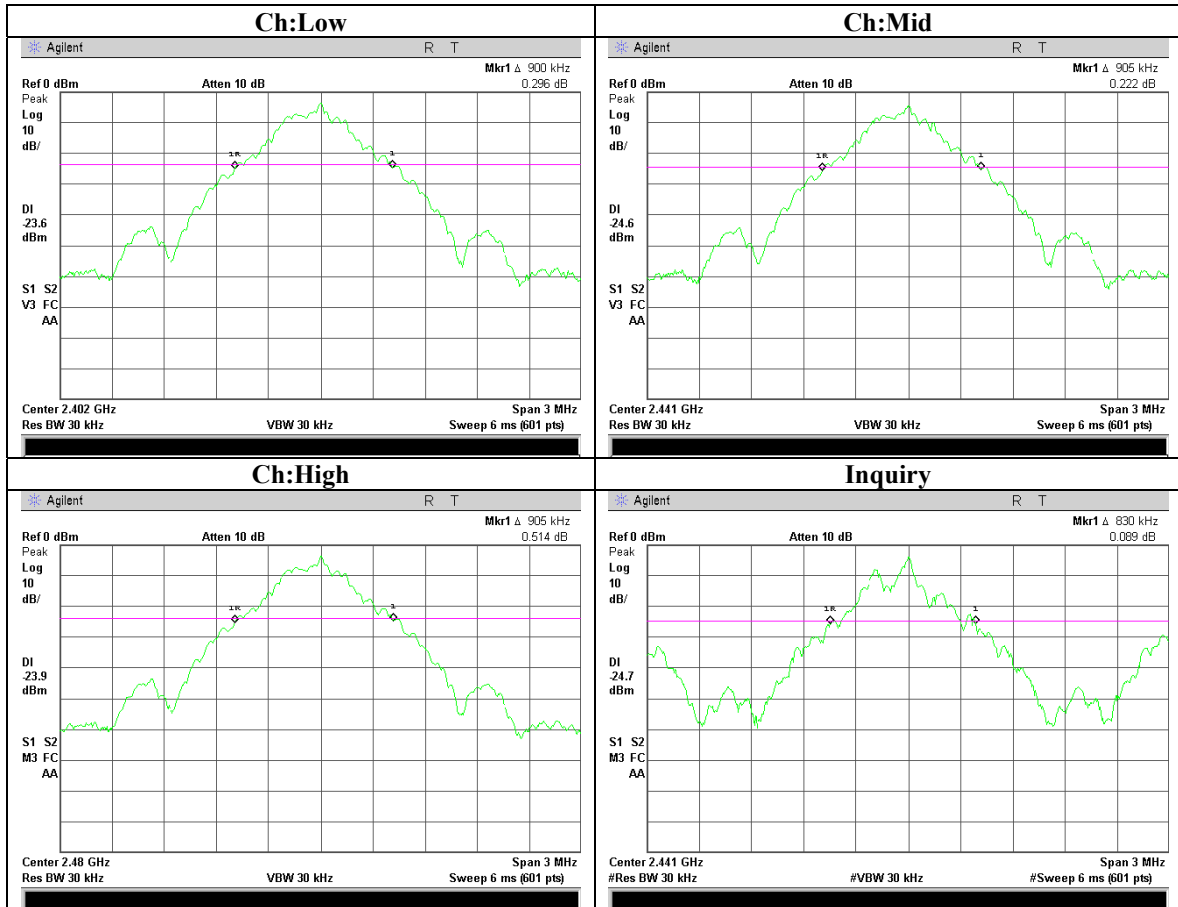
20dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

COMPANY	: FUJITSU TEN LIMITED	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: COMB PLAYER	TEST DISTANCE	: -
MODEL	: BT010A	DATE	: 05/12/2006
S/N	: WE300676	TEMPERATURE	: 23deg.C
POWER	: DC13.2V	HUMIDITY	: 44%
MODE	: Tx (Hopping off) /Inquiry	ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.900	-
Mid	2441.0	0.905	-
High	2480.0	0.905	-
Inquiry	2441.0	0.830	-

20dB Bandwidth



Number of Hopping Frequency

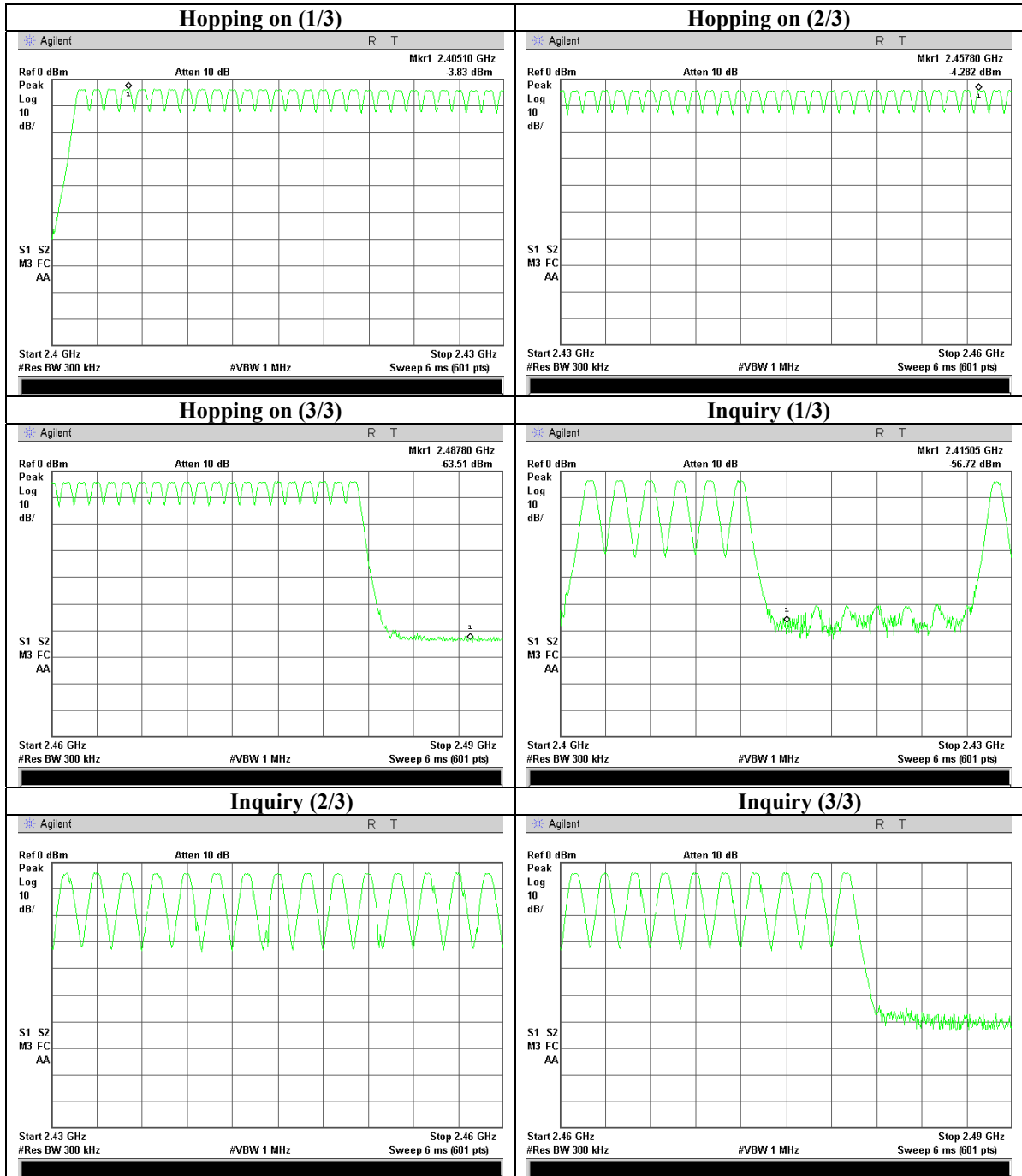
UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

COMPANY	: FUJITSU TEN LIMITED	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: COMB PLAYER	TEST DISTANCE	: -
MODEL	: BT010A	DATE	: 05/12/2006
S/N	: WE300676	TEMPERATURE	: 23deg.C
POWER	: DC13.2V	HUMIDITY	: 44%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Norihisa Hashimoto

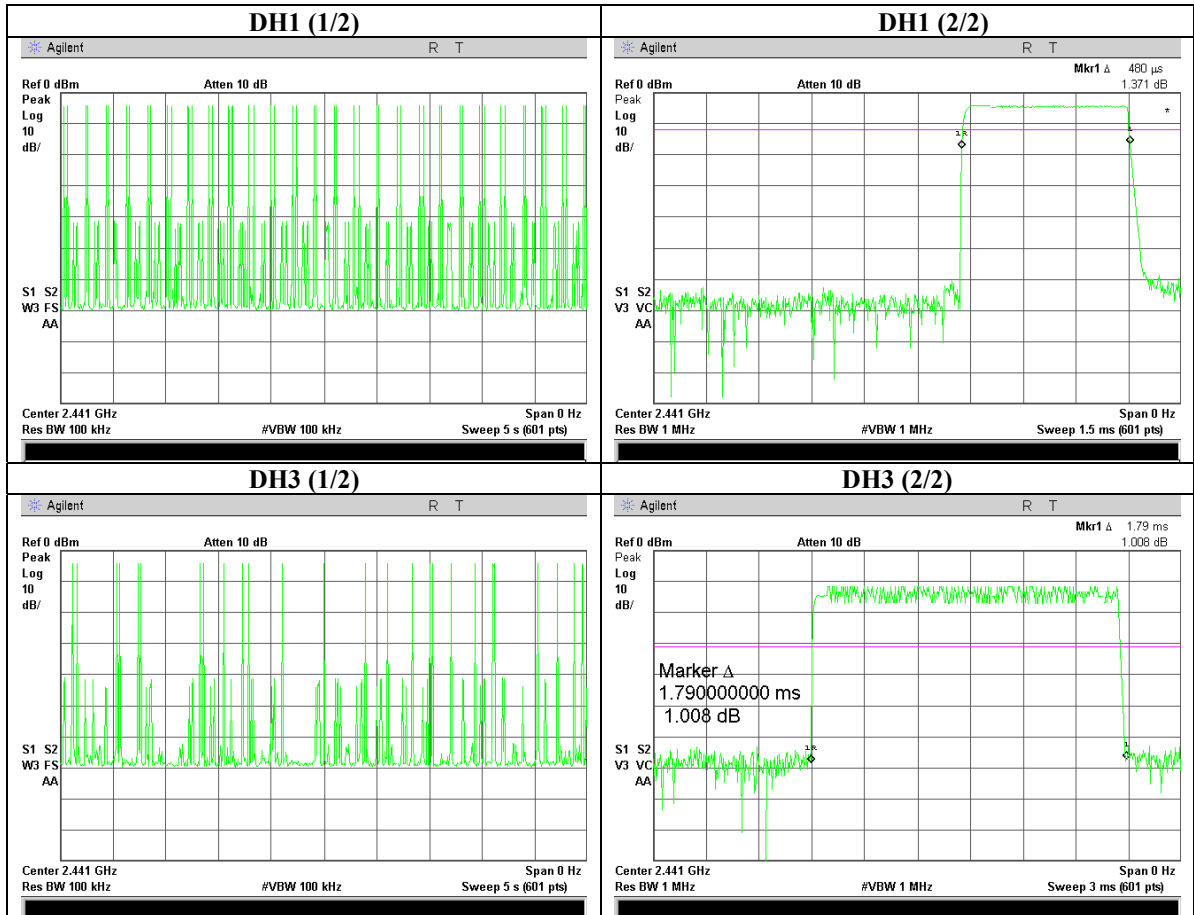
Mode	Number of channel	Limit
	[time]	[time]
Tx(Hoppng on)	79	≥ 15

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

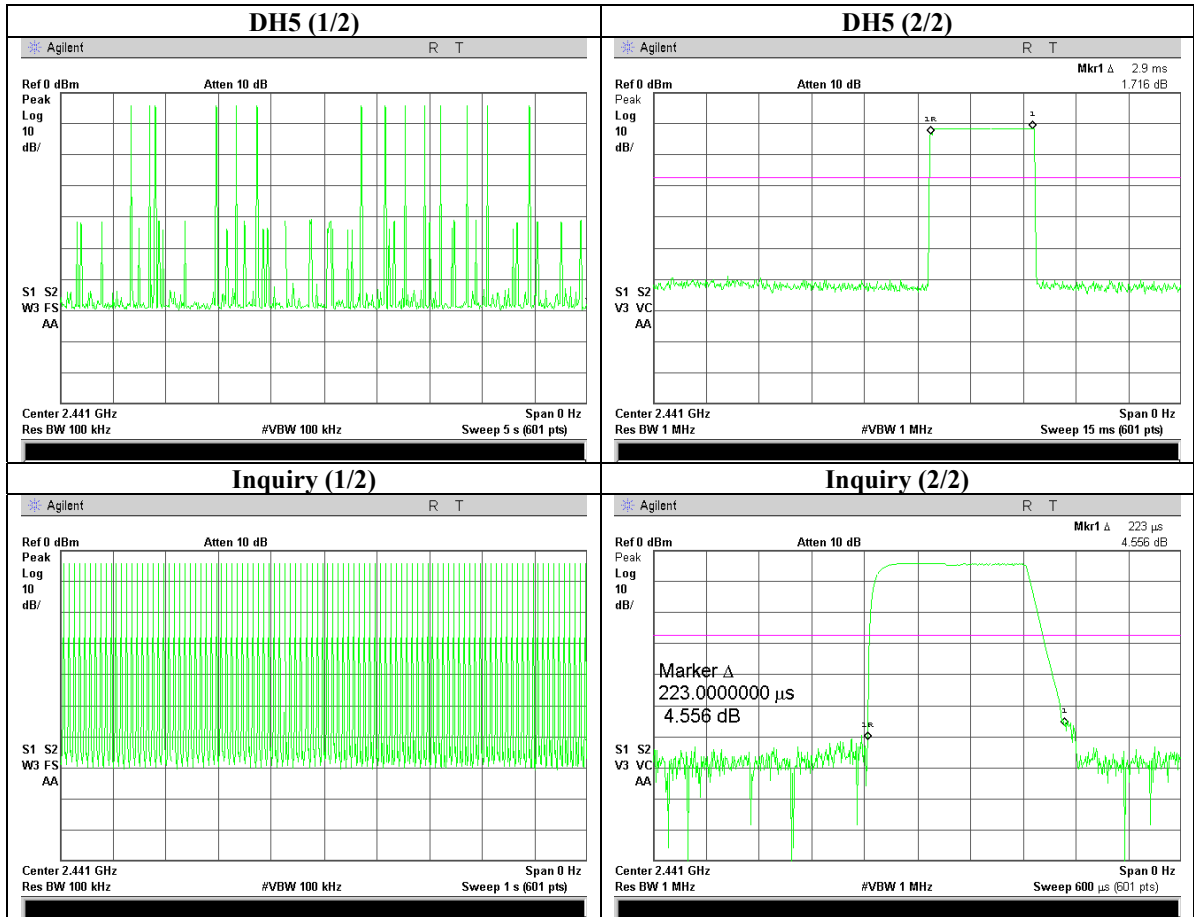
Number of Hopping Frequency



Dwell time



Dwell time



Maximum Peak Output Power

UL Apex Co., Ltd.
 Head Office EMC Lab. No.7 Shielded Room

COMPANY : FUJITSU TEN LIMITED	REGULATION : FCC Part15 Subpart C 15.247(b)(1)
EQUIPMENT : COMB PLAYER	TEST DISTANCE : -
MODEL : BT010A	DATE : 05/12/2006
S/ N : WE300676	TEMPERATURE : 23deg.C
POWER : DC13.2V	HUMIDITY : 44%
MODE : Tx (Hopping off) /Inquiry	ENGINEER : Norihisa Hashimoto

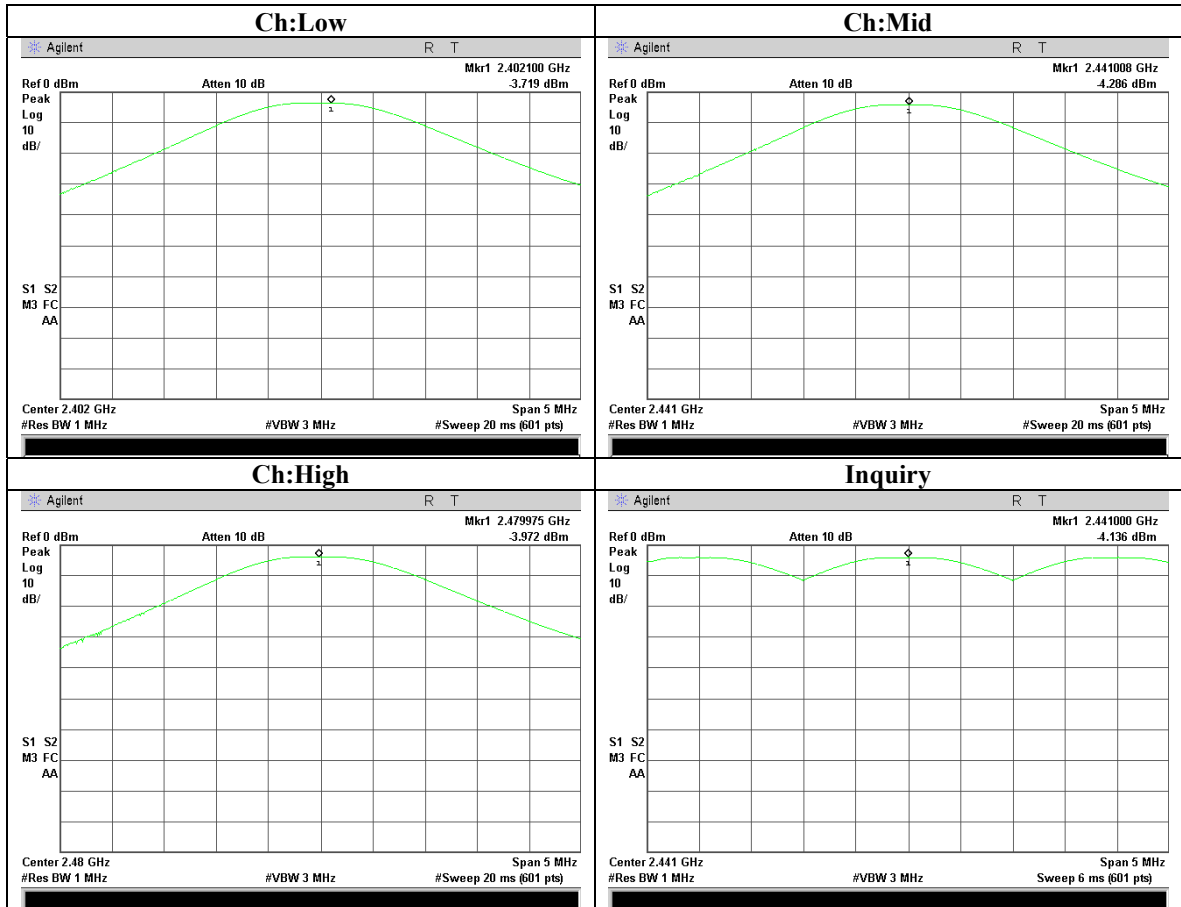
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-3.72	2.02	0.00	-1.70	0.68	20.97	125	22.67
Mid	2441.0	-4.29	1.98	0.00	-2.31	0.59	20.97	125	23.28
High	2480.0	-3.97	1.98	0.00	-1.99	0.63	20.97	125	22.96
Inquiry	2441.0	-4.14	1.98	0.00	-2.16	0.61	20.97	125	23.13

Sample Calculation:

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

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Maximum Peak Output Power



Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

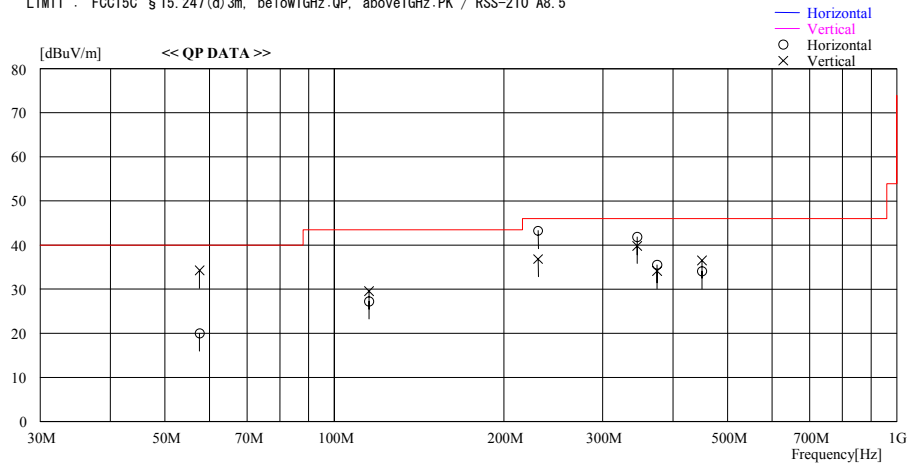
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
 Date : 2006/05/16 13:26:23

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER
 Model No. : BT010A
 Serial No. : WE300674
 Report No. : 26IE0204-HO
 Power : DC13.2V
 Temp./Humi. : 22deg. C. / 55%
 Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Transmitting Mode:2402MHz/DH5/PRBS9, EUT:Typical Position

LIMIT : FCC15C § 15.247(d)3m, below1GHz:QP, above1GHz:PK / RSS-210 A8.5



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
57.600	31.1	QP	9.0	-20.1	20.0	Hori.	40.0	20.0
57.600	45.3	QP	9.0	-20.1	34.2	Vert.	40.0	5.8
115.198	33.8	QP	12.5	-19.0	27.3	Hori.	43.5	16.2
115.198	36.0	QP	12.5	-19.0	29.5	Vert.	43.5	14.0
230.402	36.8	QP	17.2	-17.2	36.8	Vert.	46.0	9.2
230.402	43.3	QP	17.2	-17.2	43.3	Hori.	46.0	2.7
345.610	42.4	QP	15.9	-16.5	41.8	Hori.	46.0	4.2
345.610	40.4	QP	15.9	-16.5	39.8	Vert.	46.0	6.2
374.402	35.0	QP	16.9	-16.5	35.4	Hori.	46.0	10.6
374.402	33.6	QP	16.9	-16.5	34.0	Vert.	46.0	12.0
450.004	35.1	QP	17.8	-16.4	36.5	Vert.	46.0	9.5
450.004	32.7	QP	17.8	-16.4	34.1	Hori.	46.0	11.9

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 Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

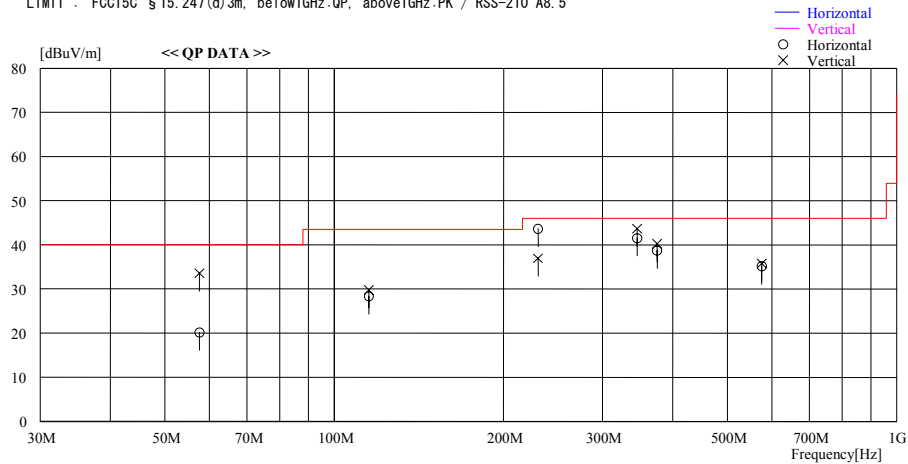
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
 Date : 2006/05/16 14:56:47

Company : FUJITSU TEN LIMITED Report No. : 26IE0204-HO
 Kind of EUT : COMB PLAYER Power : DC13.2V
 Model No. : BT010A Temp./Humi. : 22deg. C. / 55%
 Serial No. : WE300674 Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Transmitting Mode:2441MHz/DH5/PRBS9, EUT:Typical Position

LIMIT : FCC15C § 15.247(d)3m, below1GHz:QP, above1GHz:PK / RSS-210 A8.5



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]				
57.605	31.3	QP	9.0	-20.1	20.2	Hori.	40.0	19.8
57.605	44.6	QP	9.0	-20.1	33.5	Vert.	40.0	6.5
115.204	34.9	QP	12.5	-19.0	28.4	Hori.	43.5	15.1
115.204	36.3	QP	12.5	-19.0	29.8	Vert.	43.5	13.7
230.401	43.7	QP	17.2	-17.2	43.7	Hori.	46.0	2.3
230.401	36.9	QP	17.2	-17.2	36.9	Vert.	46.0	9.1
345.607	42.1	QP	15.9	-16.5	41.5	Hori.	46.0	4.5
345.607	44.2	QP	15.9	-16.5	43.6	Vert.	46.0	2.4
375.004	38.2	QP	16.9	-16.4	38.7	Hori.	46.0	7.3
375.004	39.7	QP	16.9	-16.4	40.2	Vert.	46.0	5.8
576.014	32.4	QP	18.8	-16.1	35.1	Hori.	46.0	10.9
576.014	33.0	QP	18.8	-16.1	35.7	Vert.	46.0	10.3

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 Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

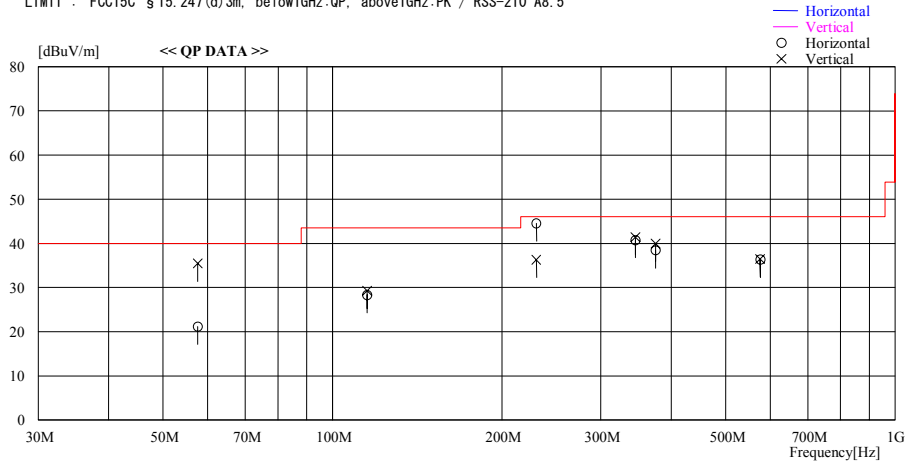
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
 Date : 2006/05/16 15:06:16

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB. PLAYER
 Model No. : BT010A
 Serial No. : WE300674
 Report No. : 26IE0204-HO
 Power : DC13.2V
 Temp./Humi. : 22deg. C. / 55%
 Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Transmitting Mode:2480MHz/DH5/PRBS9, EUT:Typical Position

LIMIT : FCC15C § 15.247(d)3m, below1GHz:QP, above1GHz:PK / RSS-210 A8.5



Frequency	Reading	DET	Antenna		Level	Polar.	Limit	Margin
			Factor	Loss& Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
57.604	32.2	QP	9.0	-20.1	21.1	Hori.	40.0	18.9
57.604	46.5	QP	9.0	-20.1	35.4	Vert.	40.0	4.6
115.213	34.8	QP	12.5	-19.0	28.3	Hori.	43.5	15.2
115.213	35.7	QP	12.5	-19.0	29.2	Vert.	43.5	14.3
230.411	44.5	QP	17.2	-17.2	44.5	Hori.	46.0	1.5
230.411	36.3	QP	17.2	-17.2	36.3	Vert.	46.0	9.7
345.604	41.3	QP	15.9	-16.5	40.7	Hori.	46.0	5.3
345.604	42.0	QP	15.9	-16.5	41.4	Vert.	46.0	4.6
374.999	37.9	QP	16.9	-16.4	38.4	Hori.	46.0	7.6
374.999	39.4	QP	16.9	-16.4	39.9	Vert.	46.0	6.1
576.012	33.6	QP	18.8	-16.1	36.3	Hori.	46.0	9.7
576.012	33.7	QP	18.8	-16.1	36.4	Vert.	46.0	9.6

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)

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

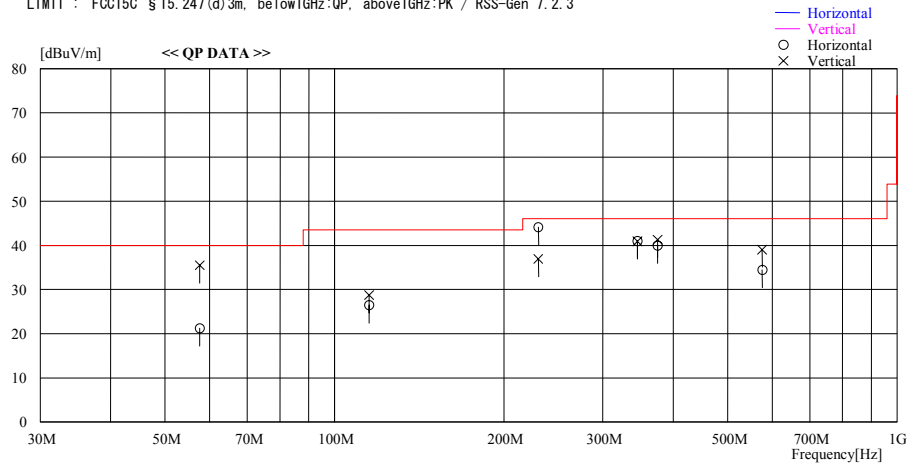
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 1 Semi Anechoic Chamber
 Date : 2006/05/16 15:36:45

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB. PLAYER
 Model No. : BT010A
 Serial No. : WE300674
 Report No. : 26IE0204-HO
 Power : DC13.2V
 Temp./Humi. : 22deg. C. / 55%
 Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Receiving Mode (Continuous Page Scan State), EUT:Typical Position

LIMIT : FCC15C § 15.247(d)3m, below1GHz:QP, above1GHz:PK / RSS-Gen 7.2.3



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
57.605	32.3	QP	9.0	-20.1	21.2	Hori.	40.0	18.8
57.605	46.6	QP	9.0	-20.1	35.5	Vert.	40.0	4.5
115.207	32.9	QP	12.5	-19.0	26.4	Hori.	43.5	17.1
115.207	35.2	QP	12.5	-19.0	28.7	Vert.	43.5	14.8
230.410	44.2	QP	17.2	-17.2	44.2	Hori.	46.0	1.8
230.410	36.9	QP	17.2	-17.2	36.9	Vert.	46.0	9.1
345.605	41.6	QP	15.9	-16.5	41.0	Hori.	46.0	5.0
345.605	41.5	QP	15.9	-16.5	40.9	Vert.	46.0	5.1
375.000	39.4	QP	16.9	-16.4	39.9	Hori.	46.0	6.1
375.000	40.8	QP	16.9	-16.4	41.3	Vert.	46.0	4.7
576.014	31.7	QP	18.8	-16.1	34.4	Hori.	46.0	11.6
576.014	36.3	QP	18.8	-16.1	39.0	Vert.	46.0	7.0

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)

Radiated Spurious Emission

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : FUJITSU TEN LIMITED	REPORT NO : 26IE0204-HO
Equipment : COMB PLAYER	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : BT010A	TEST DISTANCE : 3/1m
Sample No. : WE300674	DATE : 05/13/2006
Power : DC13.2V (Car Battery)	TEMPERATURE : 24deg.C
Mode : Bluetooth, Tx 2402MHz	HUMIDITY : 68%
Remarks : Hor X-axis/Ver X-axis (Typical Position)	ENGINEER : Yutaka Yoshida

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]	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	2390.0	42.6	43.2	30.6	32.4	3.0	0.0	43.8	44.4	74.0	30.2	29.6
2	4804.2	43.9	46.0	35.7	31.9	4.1	1.4	53.2	55.3	74.0	20.8	18.7
3	7206.0	40.1	40.5	37.5	31.5	5.2	1.2	52.5	52.9	74.0	21.5	21.1
4	9608.0	41.2	41.1	36.6	31.7	6.3	1.0	53.4	53.3	74.0	20.6	20.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	not found	not found	---	---	---	---	---	---	74.0	---	---
6	14412.0	not found	not found	---	---	---	---	---	---	74.0	---	---
7	16814.0	not found	not found	---	---	---	---	---	---	74.0	---	---
8	19216.0	not found	not found	---	---	---	---	---	---	74.0	---	---
9	21618.0	not found	not found	---	---	---	---	---	---	74.0	---	---
10	24020.0	40.9	40.2	39.1	30.4	5.7	0.0	45.8	45.1	74.0	28.2	28.9

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	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	30.1	31.7	30.6	32.4	3.0	0.0	31.3	32.9	54.0	22.7	21.1
2	4804.2	34.6	37.8	35.7	31.9	4.1	1.4	43.9	47.1	54.0	10.1	6.9
3	7206.0	27.8	28.0	37.5	31.5	5.2	1.2	40.2	40.4	54.0	13.8	13.6
4	9608.0	28.7	28.8	36.6	31.7	6.3	1.0	40.9	41.0	54.0	13.1	13.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	not found	not found	---	---	---	---	---	---	54.0	---	---
6	14412.0	not found	not found	---	---	---	---	---	---	54.0	---	---
7	16814.0	not found	not found	---	---	---	---	---	---	54.0	---	---
8	19216.0	not found	not found	---	---	---	---	---	---	54.0	---	---
9	21618.0	not found	not found	---	---	---	---	---	---	54.0	---	---
10	24020.0	28.3	28.2	39.1	30.4	5.7	0.0	33.2	33.1	54.0	20.8	20.9

20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2402.0	98.8	95.5	30.6	32.4	3.0	0.0	100.0	96.7	-	-	-
2	2400.0	43.1	44.2	30.6	32.4	3.0	0.0	44.3	45.4	Funda-20dB	35.7	31.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Radiated Spurious Emission

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : FUJITSU TEN LIMITED	REPORT NO : 26IE0204-HO
Equipment : COMB PLAYER	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : BT010A	TEST DISTANCE : 3/1m
Sample No. : WE300674	DATE : 05/13/2006
Power : DC13.2V (Car Battery)	TEMPERATURE : 24deg C
Mode : Bluetooth, Tx 2441MHz	HUMIDITY : 68%
Remarks : Hor X-axis/Ver X-axis (Typical Position)	ENGINEER : Yutaka Yoshida

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]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	45.8	47.8	36.2	31.8	4.1	1.4	55.7	57.7	74.0	18.3	16.3
2	7323.0	39.5	40.3	37.9	31.7	5.2	1.1	52.0	52.8	74.0	22.0	21.2
3	9764.0	40.7	41.3	36.6	31.8	6.4	1.1	53.0	53.6	74.0	21.0	20.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	not found	not found	---	---	---	---	---	---	74.0	---	---
5	14646.0	not found	not found	---	---	---	---	---	---	74.0	---	---
6	17087.0	not found	not found	---	---	---	---	---	---	74.0	---	---
7	19528.0	not found	not found	---	---	---	---	---	---	74.0	---	---
8	21969.0	not found	not found	---	---	---	---	---	---	74.0	---	---
9	24410.0	42.4	41.5	39.1	30.5	5.7	0.0	47.2	46.3	74.0	26.8	27.7

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]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	38.7	40.6	36.2	31.8	4.1	1.4	48.6	50.5	54.0	5.4	3.5
2	7323.0	27.0	27.3	37.9	31.7	5.2	1.1	39.5	39.8	54.0	14.5	14.2
3	9764.0	28.4	28.6	36.6	31.8	6.4	1.1	40.7	40.9	54.0	13.3	13.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	not found	not found	---	---	---	---	---	---	54.0	---	---
5	14646.0	not found	not found	---	---	---	---	---	---	54.0	---	---
6	17087.0	not found	not found	---	---	---	---	---	---	54.0	---	---
7	19528.0	not found	not found	---	---	---	---	---	---	54.0	---	---
8	21969.0	not found	not found	---	---	---	---	---	---	54.0	---	---
9	24410.0	28.5	28.5	39.1	30.5	5.7	0.0	33.3	33.3	54.0	20.7	20.7

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : FUJITSU TEN LIMITED	REPORT NO : 26IE0204-HO	
Equipment : COMB PLAYER	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : BT010A	TEST DISTANCE : 3/1m	
Sample No. : WE300674	DATE : 05/13/2006	
Power : DC13.2V (Car Battery)	TEMPERATURE : 24deg.C	
Mode : Bluetooth, Tx 2480MHz	HUMIDITY : 68%	
Remarks : Hor X-axis/Ver X-axis (Typical Position)	ENGINEER : Yutaka Yoshida	

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]	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	4960.0	47.2	47.5	36.6	31.8	4.2	1.4	57.6	57.9	74.0	16.4	16.1
2	7440.0	39.6	39.5	38.2	31.9	5.2	1.1	52.2	52.1	74.0	21.8	21.9
3	9920.0	41.1	40.8	36.5	32.0	6.5	1.2	53.3	53.0	74.0	20.7	21.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12400.0	not found	not found	---	---	---	---	---	---	74.0	---	---
5	14880.0	not found	not found	---	---	---	---	---	---	74.0	---	---
6	17360.0	not found	not found	---	---	---	---	---	---	74.0	---	---
7	19840.0	not found	not found	---	---	---	---	---	---	74.0	---	---
8	22320.0	not found	not found	---	---	---	---	---	---	74.0	---	---
9	24800.0	42.5	43.4	39.3	30.6	5.9	0.0	47.6	48.5	74.0	26.4	25.5

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	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4960.0	40.0	40.3	36.6	31.8	4.2	1.4	50.4	50.7	54.0	3.6	3.3
2	7440.0	27.8	27.7	38.2	31.9	5.2	1.1	40.4	40.3	54.0	13.6	13.7
3	9920.0	28.6	28.6	36.5	32.0	6.5	1.2	40.8	40.8	54.0	13.2	13.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12400.0	not found	not found	---	---	---	---	---	---	54.0	---	---
5	14880.0	not found	not found	---	---	---	---	---	---	54.0	---	---
6	17360.0	not found	not found	---	---	---	---	---	---	54.0	---	---
7	19840.0	not found	not found	---	---	---	---	---	---	54.0	---	---
8	22320.0	not found	not found	---	---	---	---	---	---	54.0	---	---
9	24800.0	30.7	30.7	39.3	30.6	5.9	0.0	35.8	35.8	54.0	18.2	18.2

Marker-Delta Method (RBW:100kHz)

No.	FREQ [MHz]	Reading calculation*		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [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													
PK DETECT	2	2483.5	36.2	34.7	30.8	40.0	5.5	0.0	32.5	31.0	74.0	41.5	43.0
AV DETECT	2	2483.5	24.7	22.5	30.8	40.0	5.5	0.0	21.0	18.8	54.0	33.0	35.2

*Reading calculation = Carrier(RBW:1MHz) - {Carrier(RBW:100kHz) - Bandedge(RBW:100kHz)}

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

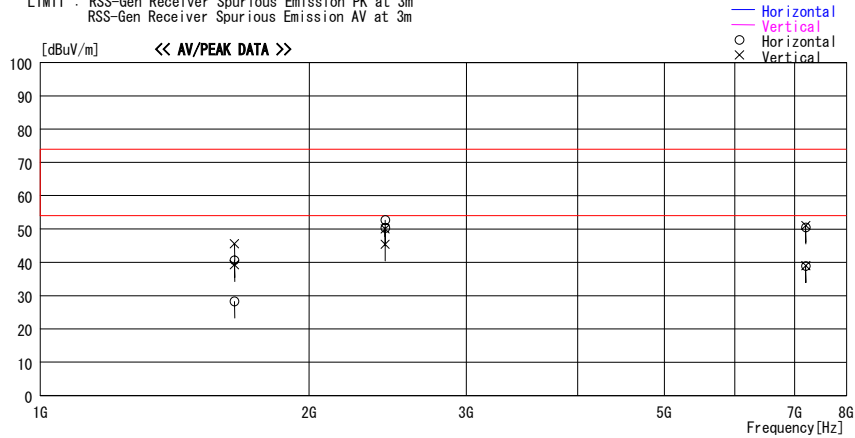
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/05/13 13:38:59

Company : FUJITSU TEN LIMITED
 Kind of EUT : COMB PLAYER
 Model No. : BT010A
 Serial No. : WE300674
 Report No. : 26IE0204-HO
 Power : AC120V/60Hz
 Temp./Humi. : 24deg.C. / 68%
 Operator : Yutaka Yoshida

Mode / Remarks : Bluetooth Receiving Mode (Continuous Page Scan State), EUT:Typical Position

LIMIT : RSS-Gen Receiver Spurious Emission PK at 3m
 RSS-Gen Receiver Spurious Emission AV at 3m

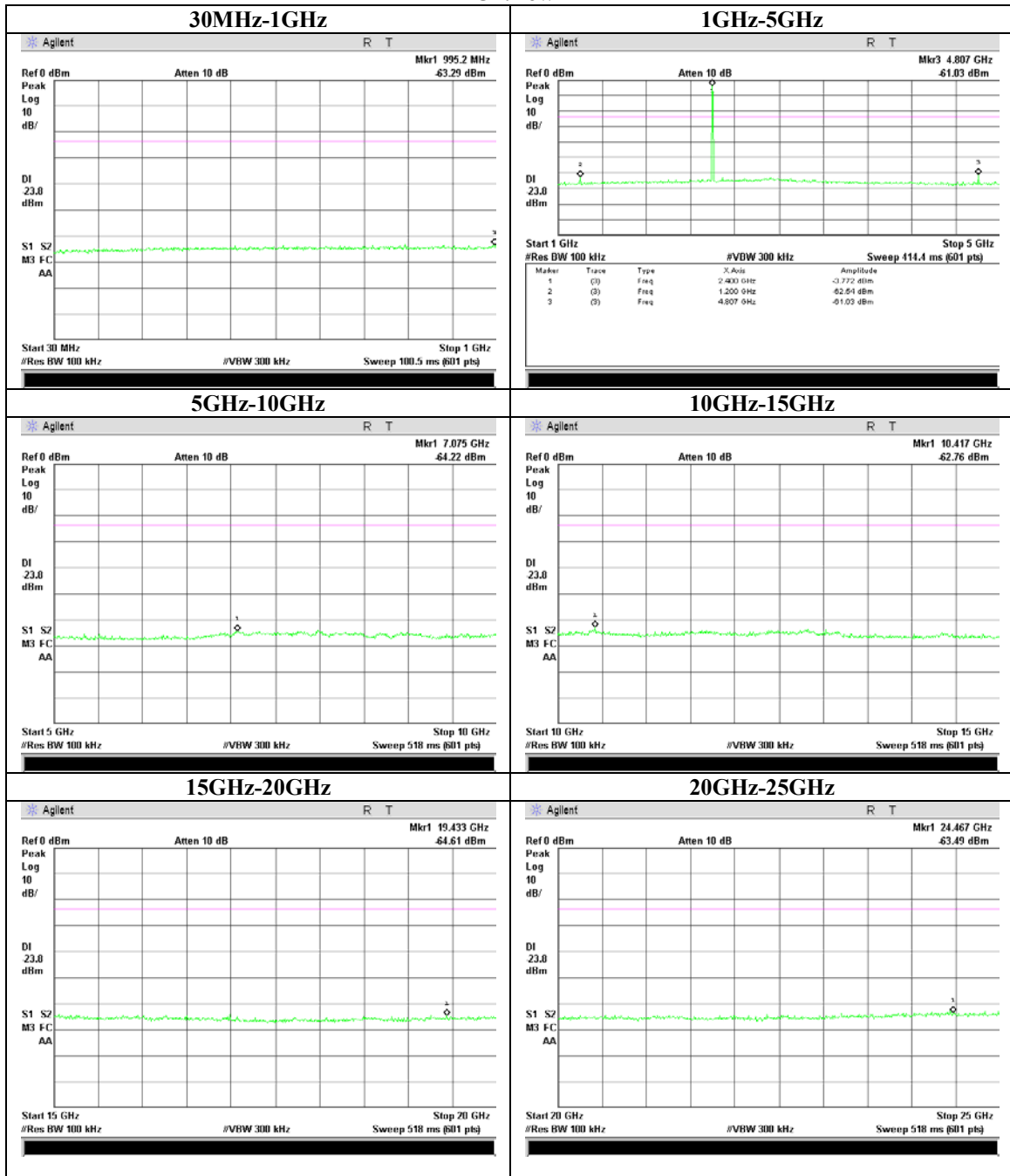


*" PK" data is a Reference data.

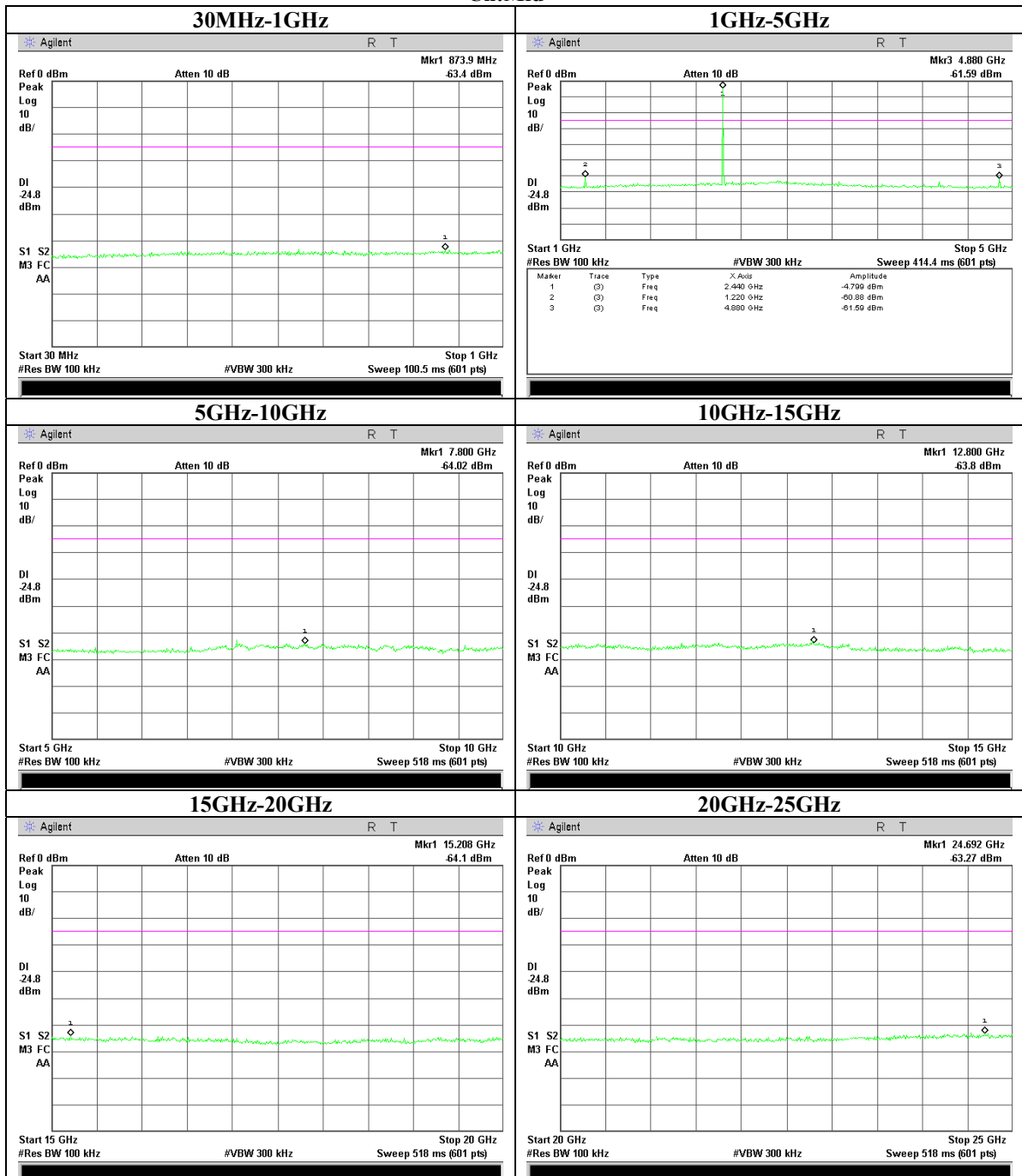
Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
1650.019	49.1	PK	26.5	-30.1	45.5	0	100	Vert.	74.0	28.5	Reference data
1650.019	42.9	AV	26.5	-30.1	39.3	0	100	Vert.	54.0	14.7	
1650.019	44.2	PK	26.5	-30.1	40.6	0	100	Hori.	74.0	33.4	Reference data
1650.019	31.9	AV	26.5	-30.1	28.3	0	100	Hori.	54.0	25.8	
2433.050	49.1	PK	30.5	-29.6	50.0	0	100	Vert.	74.0	24.0	Reference data
2433.050	44.5	PK	30.5	-29.6	45.4	0	100	Vert.	74.0	28.6	Reference data
2433.050	49.5	PK	30.5	-29.6	50.4	0	100	Hori.	74.0	23.7	Reference data
2433.050	51.8	PK	30.5	-29.6	52.7	0	100	Hori.	74.0	21.3	Reference data
7206.120	39.9	PK	37.5	-26.3	51.1	0	100	Vert.	74.0	22.9	Reference data
7206.120	27.8	AV	37.5	-26.3	39.0	0	100	Vert.	54.0	15.0	
7206.120	39.3	PK	37.5	-26.3	50.5	0	100	Hori.	74.0	23.5	Reference data
7206.120	27.7	AV	37.5	-26.3	38.9	0	100	Hori.	54.0	15.1	

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)

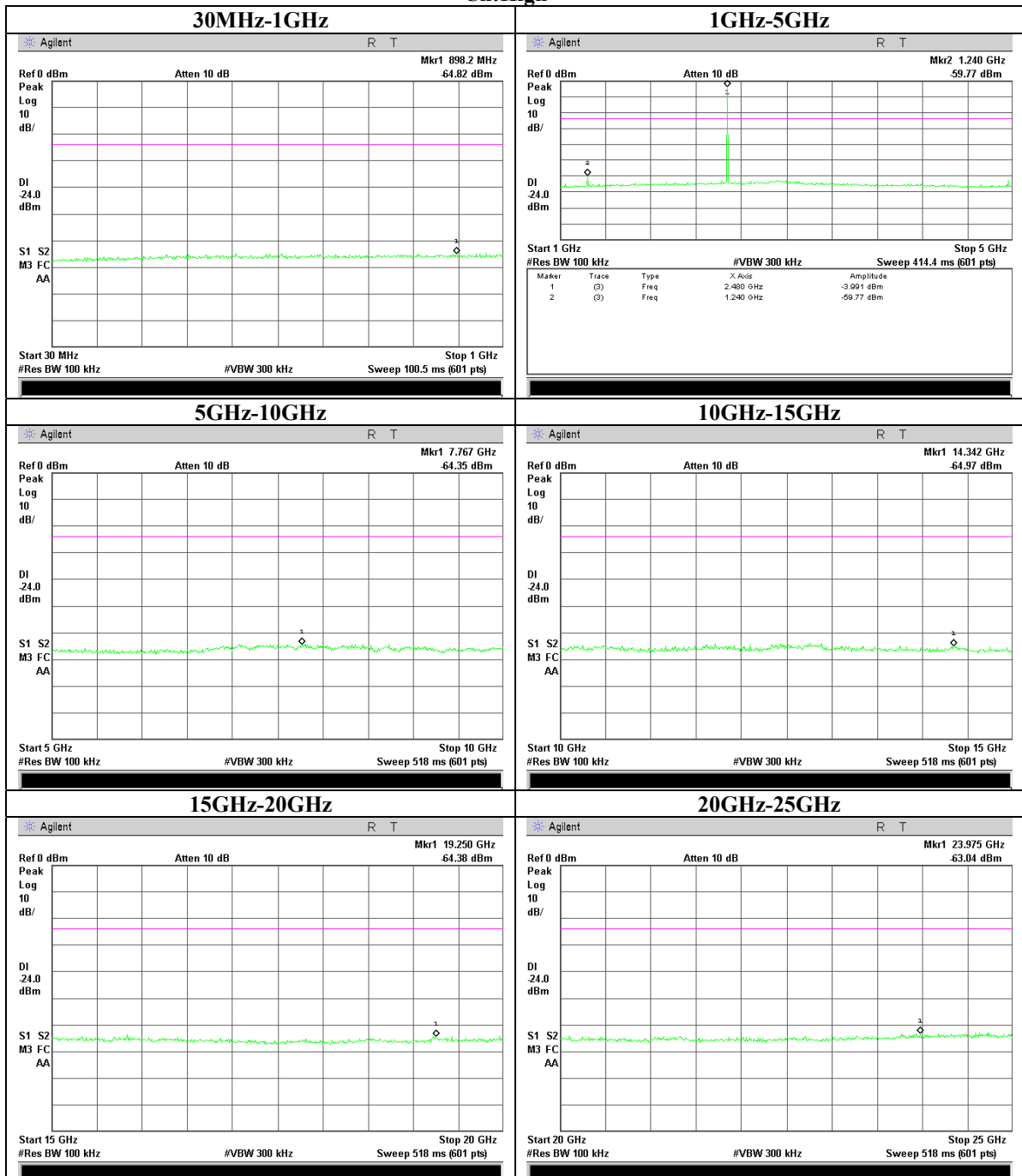
Conducted Spurious Emission
Ch:Low



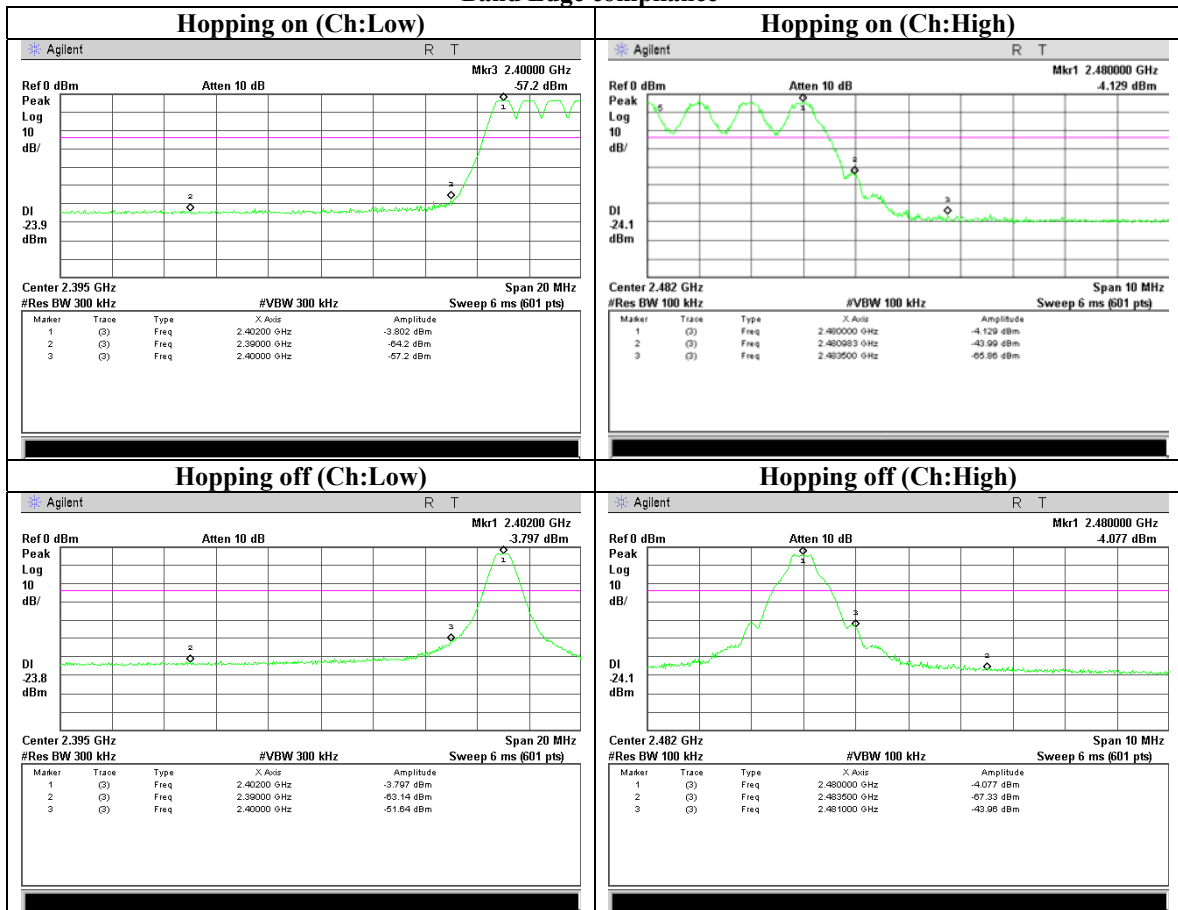
Conducted Spurious Emission
Ch:Mid



Conducted Spurious Emission
Ch:High



Conducted Spurious Emission
Band Edge compliance



99% Occupied Bandwidth

