EMI TEST REPORT

Test Report No. : 25HE0109-HO-9a

Applicant	:	**DENSO WAVE INCORPORATED**
Type of Equipment	:	**Handy Terminal**
Model No.	:	**BHT-300QWB**
Test standard	:	**FCC Part 15 Subpart C** **Section 15.207, Section 15.247 : 2005**
FCC ID	:	**PZWBHT300WB**
Test Result	:	**Complied**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test: March 31 to July 25, 2005

Tested by:

Makoto Kosaka
EMC Service

Yutaka Yoshida
EMC Service

Norihisa Hashimoto
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Approved by :

Naoki Sakamoto
Group Leader of
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SECTION 1: Client information

Company Name	:	DENSO WAVE INCORPORATED
Address	:	1-1, Showa-cho, Kariya-shi, Aichi-ken 448-8661 Japan
Telephone Number	:	+81-566-61-3816
Facsimile Number	:	+81-566-25-4741
Contact Person	:	Hiroshi Hayami

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment	:	Handy Terminal
Model No.	:	BHT-300QWB (Variant model : BHT-300BWB)
Serial No.	:	549690004450027 : BHT300QWB 549690004450025 : BHT300BWB
Country of Manufacture	:	Japan
Receipt Date of Sample	:	March 22, 2005
Condition of EUT	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

The EUT, BHT-300QWB is the QR Code Handy Terminal and has a IEEE802.11b WLAN module (M/N: KCS) and a Bluetooth module (M/N: DWBT005) inside.
The EUT has a variant model:BHT-300BWB, which is a Barcode Handy Terminal and also have the same IEEE802.11b WLAN module (M/N: KCS) and Bluetooth module (M/N: DWBT004) inside.

The differences between BHT-300QWB and BHT-300BWB are as follows:
1. Code type (QR Code or Barcode)
2. Antenna position and length of antenna cables for WLAN/Bluetooth module.
The radio parts are same in two models.

For details of antenna position, please see Section 2.2.3 of UL Apex SAR Test report No. 25HE0109-HO-11 and -12.
We performed all the tests with BHT-300QWB, and only radiated spurious emission test was conducted with BHT-300BWB for confirmation.

We performed all the tests with BHT-300QWB, and Maximum Peak Output power and radiated spurious emission tests were conducted with BHT-300BWB for confirmation.
The clock frequency of EUT is 16MHz.

RF specification	Bluetooth(DWBT004/DWBT005)	Wireless LAN(KCS)
Equipment Type	Transceiver	Transceiver
Frequency operation	2402-2480MHz	2412-2462MHz
Type of modulation	FHSS	DSSS(IEEE802.11b), CCK(5.5/11Mbps), BPSK(1Mbps), QPSK(2Mbps)
Channel spacing	1MHz	5MHz
Mode of operation	Duplex	Simplex
Antenna Type	Inverted-F type multi-layer Antenna	Inverted-F Type Multi-layer Antenna
Antenna Gain	2.02dBi	2.02dBi
Antenna connector Type	Coaxial Connector with Switch SWD Type	Hirose CL331-0471-0-10X1
Method of Frequency Generation	Crystal	Synthesizer

FCC 15.31 (e)
This EUT provides stable voltage(DC3.3V) from Host, and it is constantly converted into and provided with DC1.8V for the Operational voltage within RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement
EUT has a particular antenna connector. Therefore, the equipment complies with the antenna requirement of Section 15.203.

SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification	:	FCC Part15 Subpart C : 2005
Title	:	FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators Section 15.207 Conducted limits : 2005 Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz : 2005

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin*0)	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	21.0dB 0.5785MHz, QP,L	Complied
2	Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A	*See data.	Complied
3	20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
5	Dwell time	ANSI C63.4:2003 13.Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
6	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(b)(1)	Conducted	N/A		Complied
7	Band Edge Compliance	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted	N/A		Complied
8	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	3.2dB 4924.0MHz Horizontal, AV (11b Tx2462MHz)	Complied

Note: UL Apex's EMI Work Procedures No.QPM05.

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

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.
The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ±1.3dB.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ±4.5dB(3m)/ ±4.7dB(10m).
The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ±5.2dB(3m)/ ±3.8dB(10m).
The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ±6.6dB.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ±3.0dB.

*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	Conducted	N/A	N/A	N/A
2	Co-location & Co-operation (Confirmation testing for Radiated Spurious Emission at simultaneous transmission)	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Radiated Bluetooth and IEEE802.11b mode	N/A	2.8dB 2483.5MHz Vertical, AV (11b Tx2437MHz +BT Hopping)	Complied
3	Spurious Emission [BHT-300BWB]	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	9.8dB 24020.0MHz Horizontal, AV	Complied

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116 Facsimile : +81 596 24 8124

	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

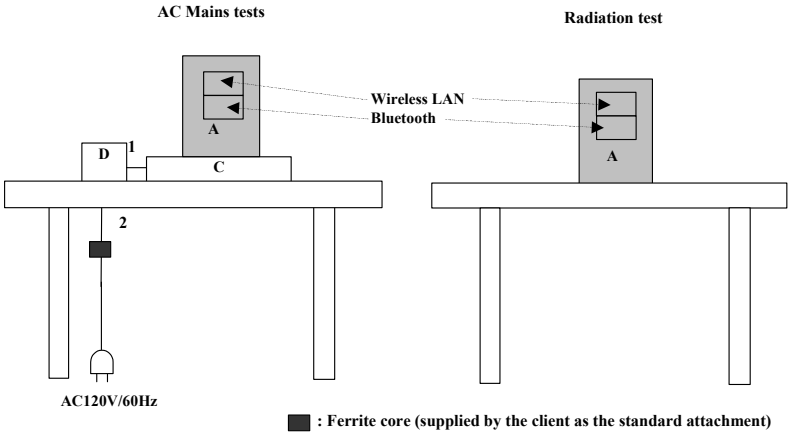
SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : [FHSS:Bluetooth]
1. Transmitting mode (Packet size DH5)
Low Channel :2402MHz
Mid Channel :2441MHz
High channel :2480MHz
2. Inquiry mode
3. Hopping mode
[Simultaneous transmission]
1.Bluetooth Hopping + Wireless LAN mode

[DSSS:Wireless LAN]
1. Transmitting mode (IEEE802.11b 11Mbps)
Low Channel :2412MHz
Mid Channel :2437MHz
High channel :2462MHz

4.2 Configuration and peripherals



Remarks : The radiation test with accessory equipment was performed in FCC Part 15 Subpart B.

* Cabling was taken into consideration and test data was taken under worst case conditions.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID
A	QR code Handy Terminal	BHT-300QWB	549690004450027	DENSO WAVE	PZWBHT300WB
	Barcode Handy Terminal	BHT-300BWB	549690004450025	DENSO WAVE	PZWBHT300WB
C	Communication Unit	CU-321	5496320078300015	DENSO WAVE	-
D	AC Adaptor	454865-0340	S3423823	DENSO WAVE	

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	DC Power Cable	1.8	N	Polyvinyl chloride
2	AC Power Cable	1.8	N	Polyvinyl chloride

SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT with other peripherals (as a whole system)
I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane.

2) For the tests on EUT itself (as a stand alone equipment)
Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN /(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistivity terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.
The EUT was connected to a LISN (AMN).
An overview sweep with peak detection has been performed.

Detector	**: CISPR quasi-peak and average detector (IF BW 9 kHz)**
Measurement range	**: 0.15-30MHz**
Test data	**: APPENDIX 3**
Test result	**: Pass**

SECTION 6: Spurious Emission

[Conducted]

Test Procedure
The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.
Test data : APPENDIX 3
Test result : Pass

[Radiated]

Test Procedure
EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane.
The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).
The height of the measuring varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.
The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer (in linear mode).
The test was made with the detector (RBW/VBW) in the following table.
When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

The result also satisfied with the general limits specified in section 15.209(a).

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector IF Bandwidth	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz AV: RBW:1MHz/VBW:10Hz

Test data : APPENDIX 3
Test result : Pass

20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of 15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector IF Bandwidth	QP: BW 120kHz(T/R) 20dBc : RBW: 100kHz VBW: 300kHz (S/A)	PK: RBW:1MHz/VBW: 1MHz AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

SECTION 7: Bandwidth

Test Procedure

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 8: Maximum Peak Output Power

Test Procedure
Bluetooth
The test was made with the spectrum analyzer that has a function of channel-power measurements.
The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Wireless LAN
The test was made measured with a peak power meter that has a function of detected for broadband connected to the antenna port

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Carrier Frequency Separation[FHSS]

Test Procedure

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 10: Number of Hopping Frequency[FHSS]

Test Procedure

The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 11: Dwell time[FHSS]

Test Procedure

The Dwell time was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 12: Peak Power Density[DSSS]

[Conducted]
Test Procedure
The Peak Power Density was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

APPENDIX 1: Photographs of test setup

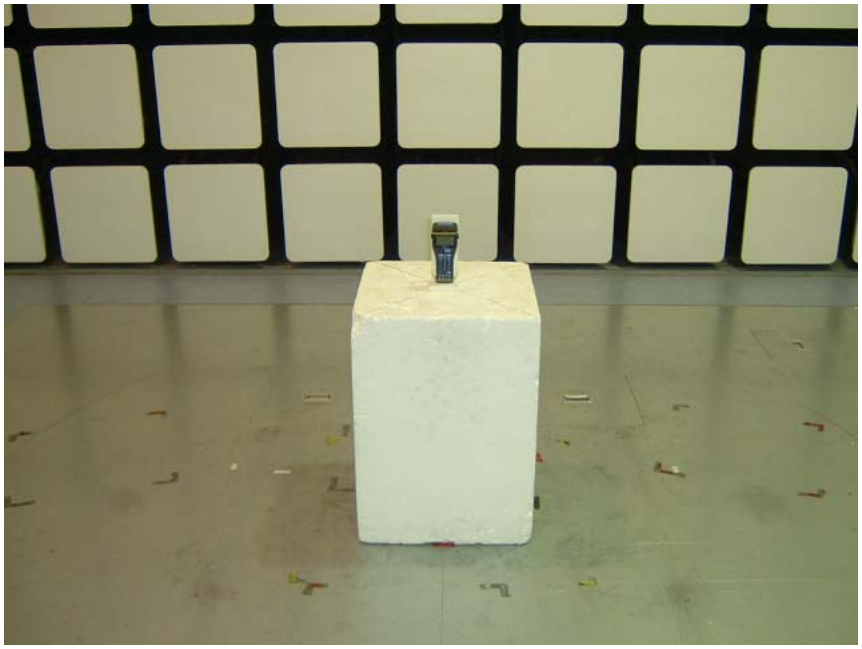
Conducted Emission

Front

Side

Spurious Emission (Radiated)

Front



Rear

Worst Case Position (Y-axis:Horizontal / Z-axis:Vertical)

X-axis

Y-axis

Z-axis

APPENDIX 2:Test instruments

EMI Test Instrument

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAT-19	Attenuator(6dB) (above1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-106	CFS, 20BW, NHF, DT, MPOP, CSE, BE	2005/01/11 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	CFS, 20BW, NHF, DT, MPOP, CSE, BE	2005/06/03 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE/CE	2005/04/11 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2005/01/10 * 12
MRENT-14	Spectrum Analyzer	Advantest	R3273	RE	2005/02/21 * 12
MPA-05	Pre Amplifier	TSJ	TSJ 1-26.5GHz PreAmp	RE	2005/07/08 * 12
MCC-21	Microwave Cable 1G-50GHz	Storm	421-011 (90-011-080)	RE	2005/04/29 * 12
MCC-04	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MCC-22	Microwave Cable 1G-50GHz	Storm	421-011 (90-011-080)	RE	2005/04/29 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2004/09/18 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/10/14 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2004/10/14 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2005/05/24 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent /TSJ	-	RE	2004/12/19 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE/CE	2004/11/12 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE/CE	2004/11/13 * 12

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

Test Item:

CE : AC Main Conducted Emission **CFS: Carrier Frequency Separation**
20BW: 20dB Bandwidth **NHF: Number of Hopping Frequency**
DT: Dwell time **MPOP: Maximum Peak Output Power**
BE: Band Edge Compliance **CSE: Antenna Terminal Conducted Spurious Emission**
RE: Radiated Spurious Emission **99%: 99% Occupied Bandwidth (RSS-210 Canada)**

APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

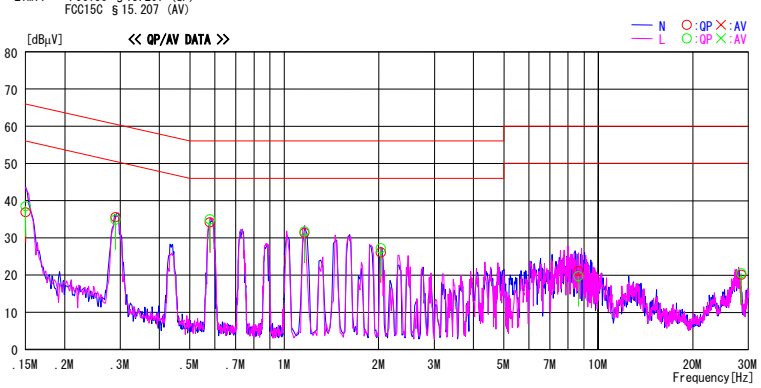
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 20:40:55

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : Handy Terminal
Model No. : BHT-3000WB
Serial No. : 5496900004450027

Report No. : 25HE0109-HO
Power : AC120V / 60Hz(CU-321 AC LINE)
Temp℃/Humi% : 22deg.C / 46%
Operator : Makoto Kosaka

Mode / Remarks : Tx BT DH5 2402MHz

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)



NO	FREQ	READING QP	READING AV	C.F	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	0.1500	36.7	-----	0.2	36.9	-----	66.0	-----	29.1	-----	N
2	0.2896	35.3	-----	0.3	35.6	-----	60.5	-----	24.9	-----	N
3	0.5785	33.7	-----	0.5	34.2	-----	56.0	-----	21.8	-----	N
4	1.1583	31.0	-----	0.4	31.4	-----	56.0	-----	24.6	-----	N
5	2.0245	25.6	-----	0.5	26.1	-----	56.0	-----	29.9	-----	N
6	8.6290	20.0	-----	1.1	21.1	-----	60.0	-----	38.9	-----	N
7	28.4419	18.1	-----	2.0	20.1	-----	60.0	-----	39.9	-----	N
8	0.1500	38.3	-----	0.2	38.5	-----	66.0	-----	27.5	-----	L
9	0.2896	34.6	-----	0.3	34.9	-----	60.5	-----	25.6	-----	L
10	0.5785	34.5	-----	0.5	35.0	-----	56.0	-----	21.0	-----	L
11	1.1583	31.3	-----	0.4	31.7	-----	56.0	-----	24.3	-----	L
12	2.0246	26.7	-----	0.5	27.2	-----	56.0	-----	28.8	-----	L
13	8.6290	18.6	-----	1.1	19.7	-----	60.0	-----	40.3	-----	L
14	28.4419	18.5	-----	2.0	20.5	-----	60.0	-----	39.5	-----	L

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

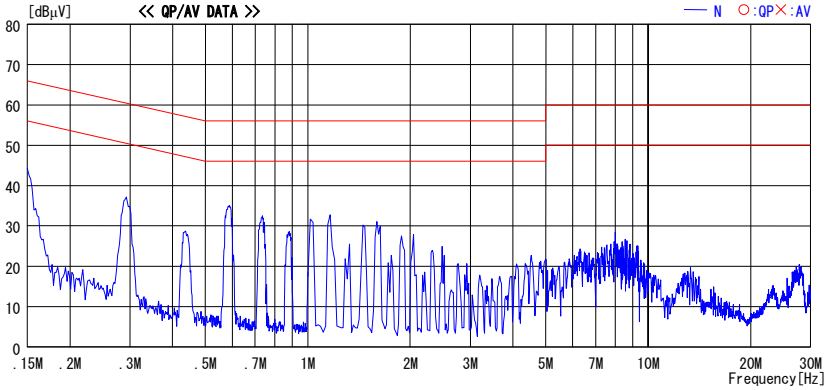
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 20:49:36

Applicant	: DENSO WAVE INCORPORATED	Report No.	: 25HE0109-HO
Kind of EUT	: Handy Terminal	Power	: AC120V / 60Hz (CU-321 AC LINE)
Model No.	: BHT-3000WB	Temp℃/Humi%	: 22deg.C / 46%
Serial No.	: 549690004450027	Operator	: Makoto Kosaka

Mode / Remarks : Tx BT DH5 2441MHz

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)



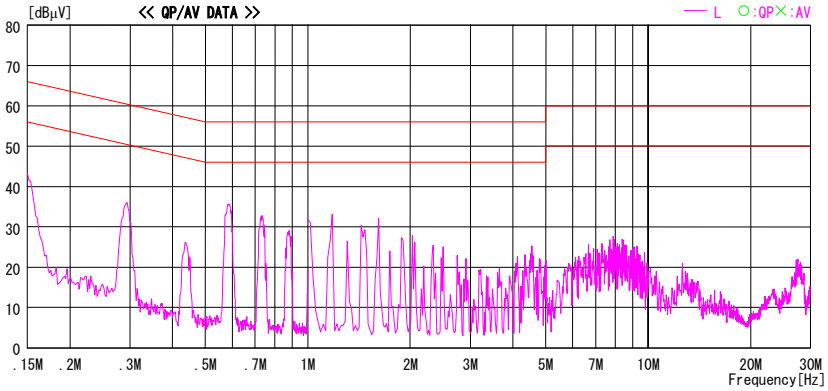


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

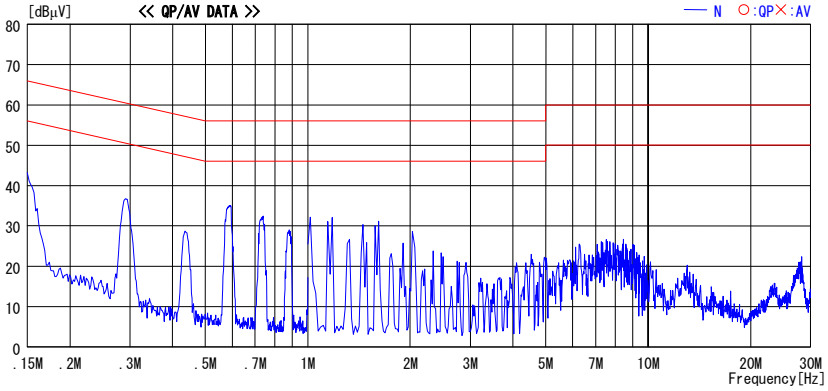
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 20:57:07

Applicant	: DENSO WAVE INCORPORATED	Report No.	: 25HE0109-HO
Kind of EUT	: Handy Terminal	Power	: AC120V / 60Hz (CU-321 AC LINE)
Model No.	: BHT-300QWB	Temp℃/Humi%	: 22deg.C / 46%
Serial No.	: 549690004450027	Operator	: Makoto Kosaka

Mode / Remarks : Tx BT DH5 2480MHz

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)



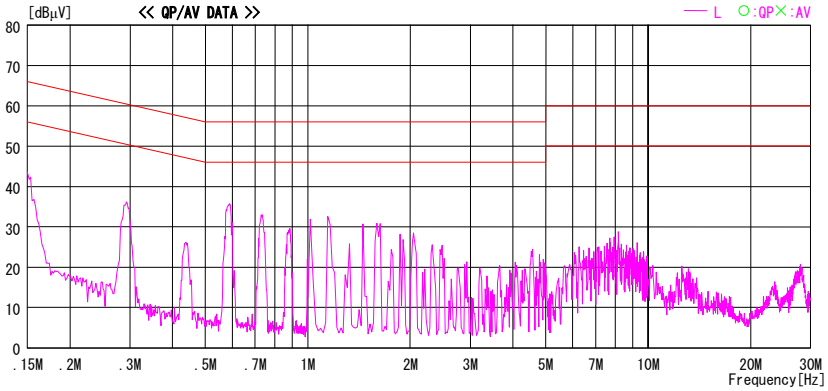


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

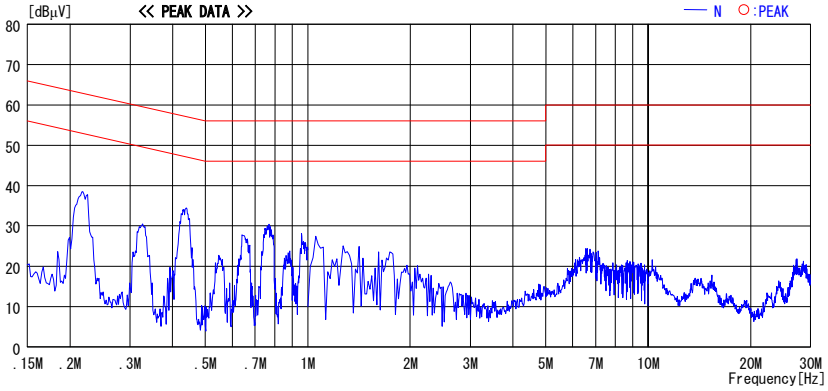
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 22:24:59

Applicant	: DENSO WAVE INCORPORATED	Report No.	: 25HE0109-HO
Kind of EUT	: Handy Terminal	Power	: AC120V /60Hz(CU-321 AC LINE)
Model No.	: BHT-3000WB	Temp℃/Humi%	: 22deg.C / 46%
Serial No.	: 549690004450027	Operator	: Makoto Kosaka

Mode / Remarks : Tx BT Hopping and 11b 11Mbps 2437MHz

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)



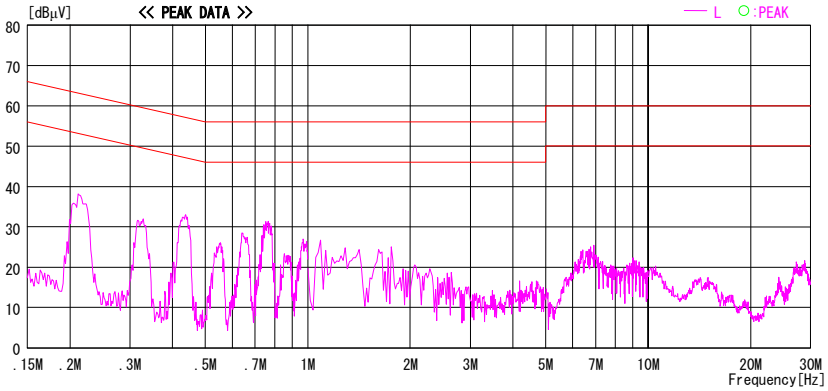


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

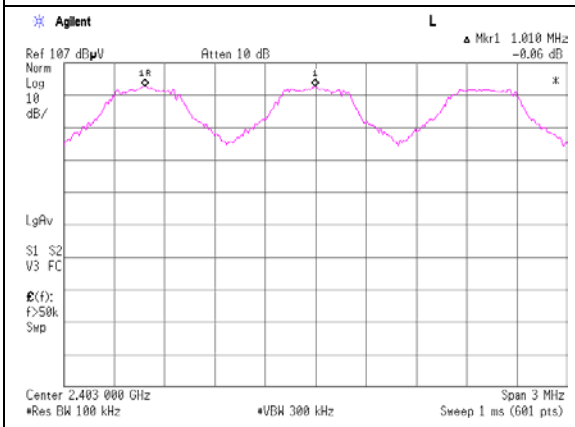
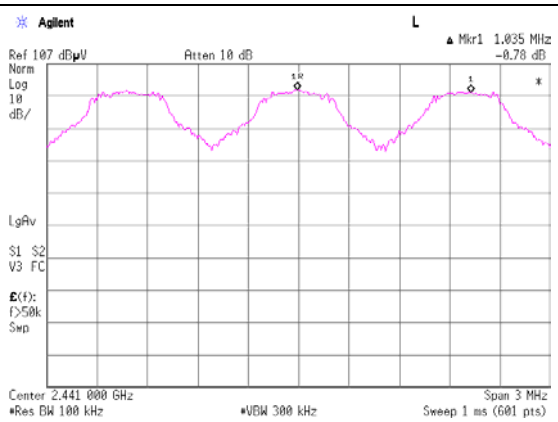
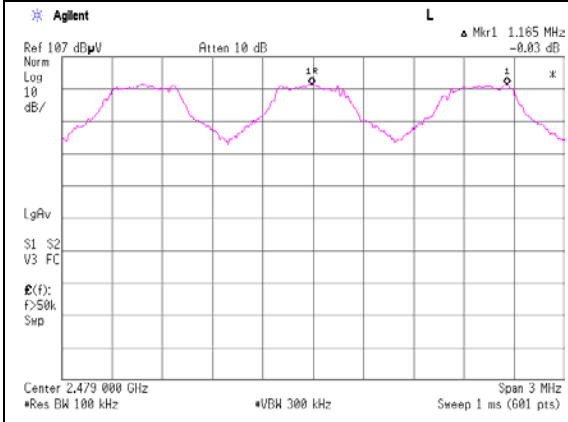
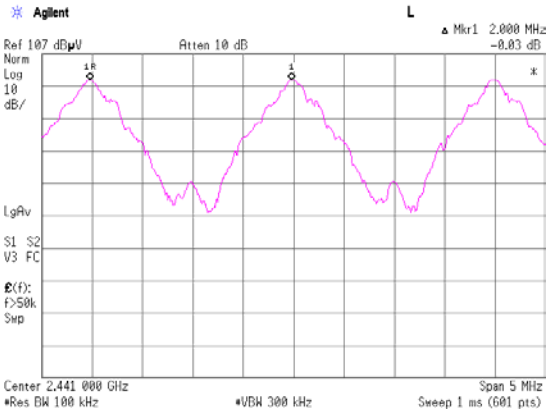
Carrier Frequency Separation(Bluetooth)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shield Room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 03/31/2005
S/ N	: 549690004450027	TEMPERATURE	: 26deg.C
POWER	: DC3.3V	HUMIDITY	: 24%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Yutaka Yoshida

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.010	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.035	>20dB Bandwidth and 25[kHz]
High	2480.0	1.165	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	2.000	>20dB Bandwidth and 25[kHz]

Carrier Frequency Separation

Ch:Low	Ch:Mid
	
Ch:High	**Inquiry**
	

20dB Bandwidth(Bluetooth)

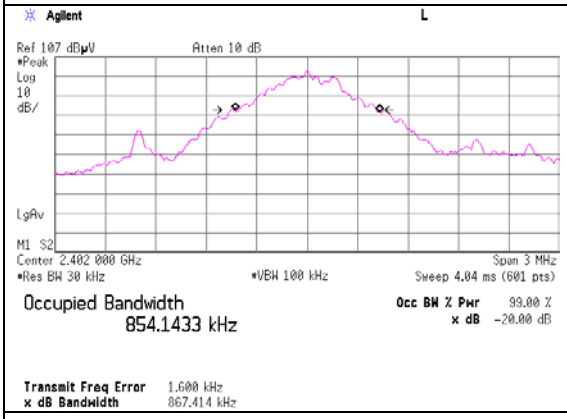
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shield Room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 03/31/2005
S/ N	: 549690004450027	TEMPERATURE	: 26deg.C
POWER	: DC3.3V	HUMIDITY	: 24%
MODE	: Tx (Hopping off) /Inquiry	ENGINEER	: Yutaka Yoshida

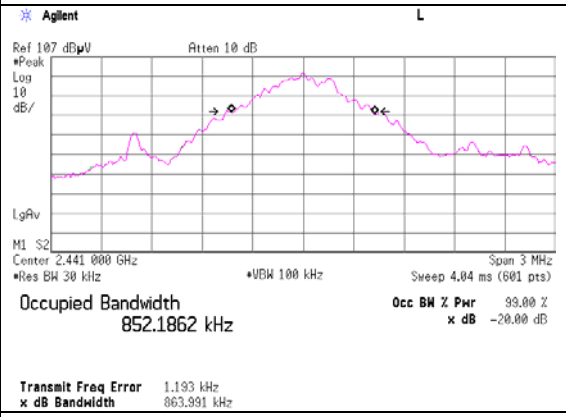
Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.867	-
Mid	2441.0	0.864	-
High	2480.0	0.815	-
Inquiry	2441.0	0.817	-

20dB Bandwidth

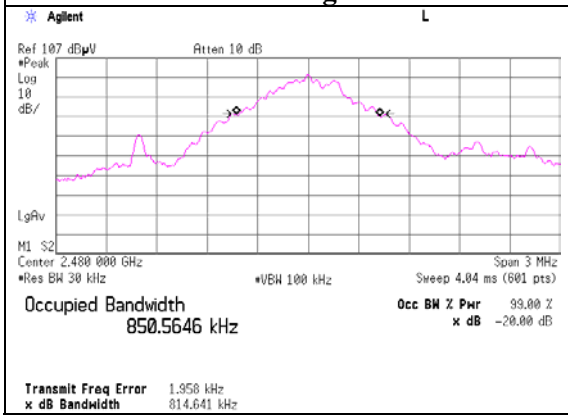
Ch:Low



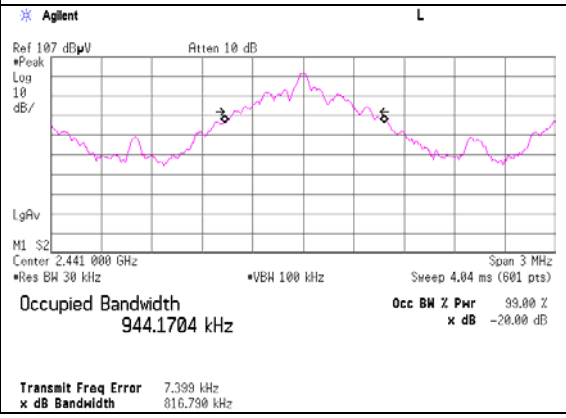
Ch:Mid



Ch:High



Inquiry



Number of Hopping Frequency(Bluetooth)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shield Room

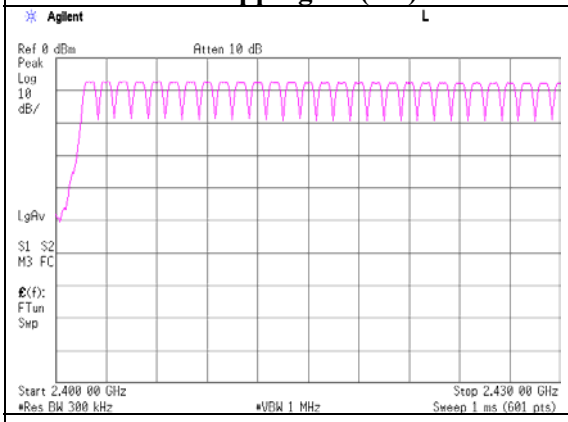
COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 03/31/2005
S/ N	: 549690004450027	TEMPERATURE	: 26deg.C
POWER	: DC3.3V	HUMIDITY	: 24%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Yutaka Yoshida

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

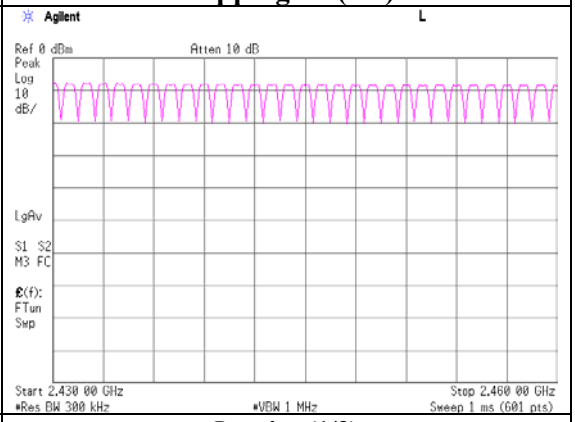
Mode	Number of channel [time]	Limit [time]
Inquiry	32	≧15

Number of Hopping Frequency

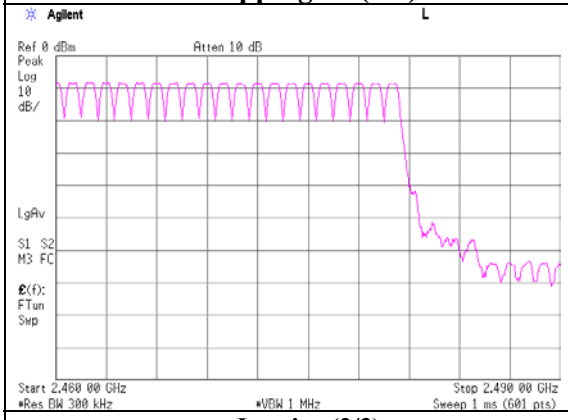
Hopping on (1/3)



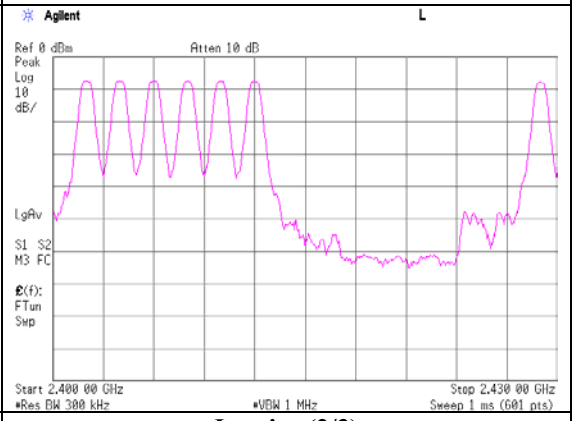
Hopping on (2/3)



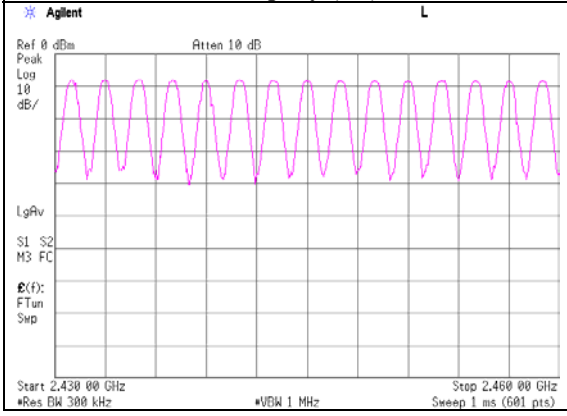
Hopping on (3/3)



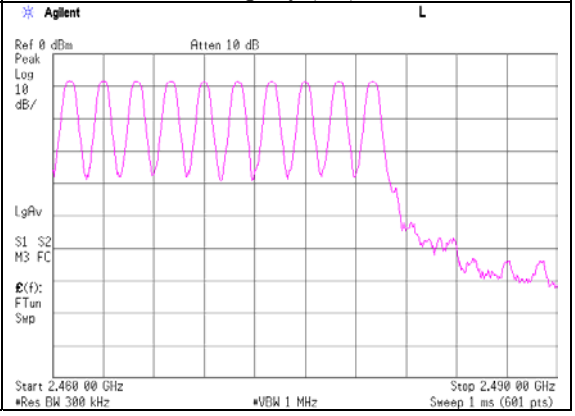
Inquiry (1/3)



Inquiry (2/3)



Inquiry (2/3)



Dwell time(Bluetooth)

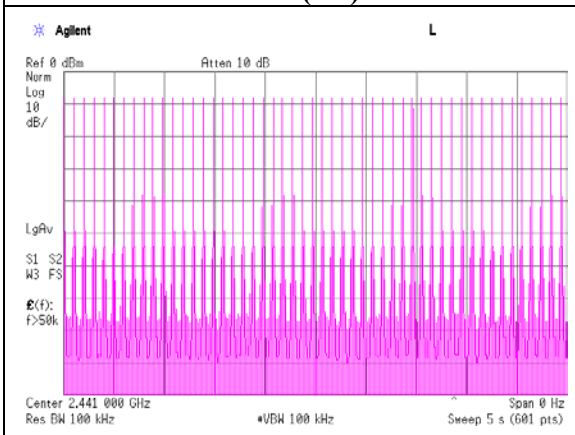
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shield Room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 03/31/2005
S/ N	: 549690004450027	TEMPERATURE	: 26deg.C
POWER	: DC3.3V	HUMIDITY	: 24%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Yutaka Yoshida

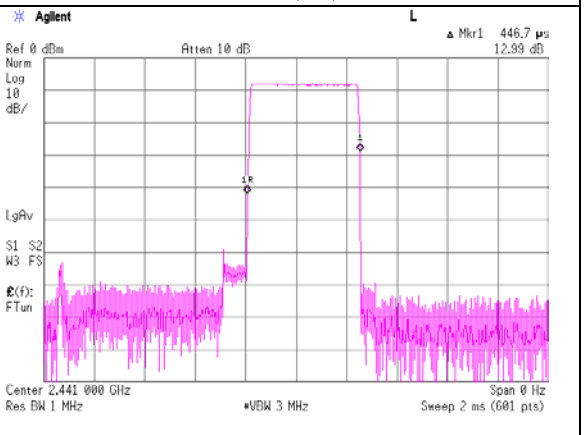
Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	51 times /5sec. x 31.6 = 323 times	0.447	144	400
DH3	26 times / 5sec. x 31.6 = 165 times	1.700	281	400
DH5	17 times / 5 sec. x 31.6 = 108 times	3.000	324	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.243	311	400

Dwell time

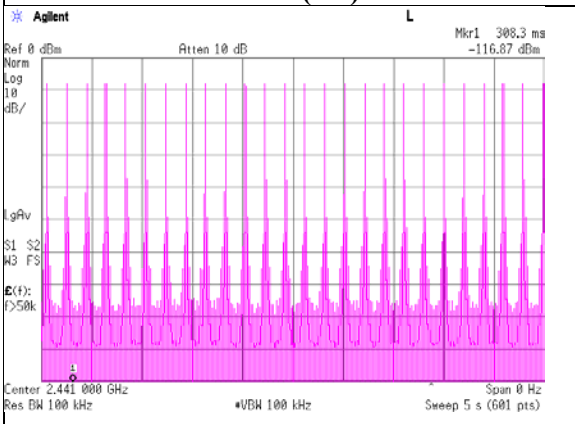
DH1 (1/2)



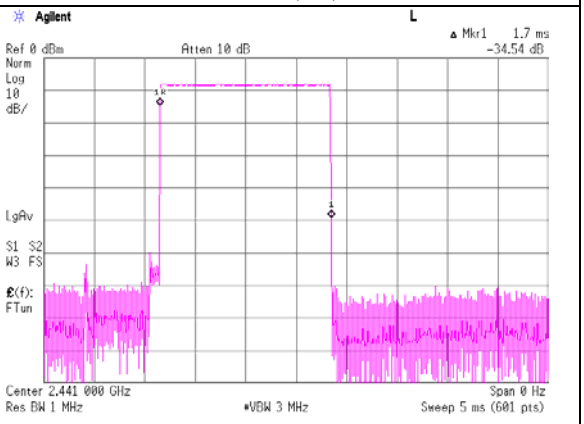
DH1 (2/2)



DH3 (1/2)

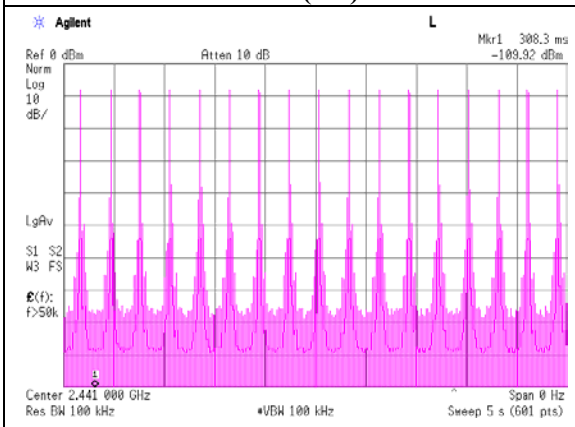


DH3 (2/2)

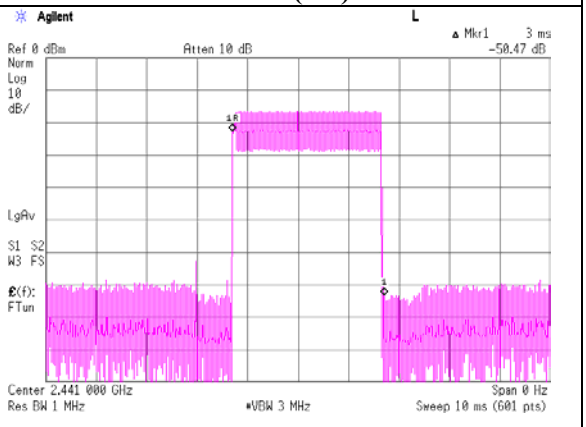


Dwell time

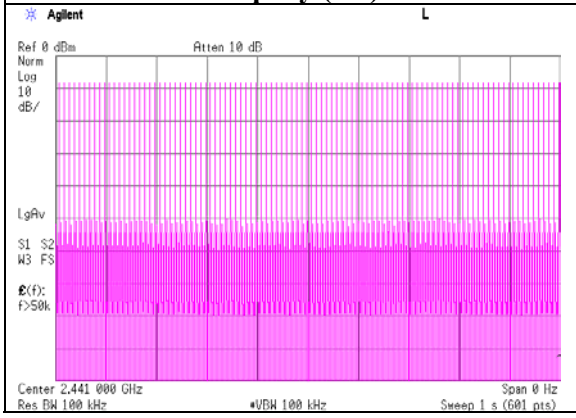
DH5 (1/2)



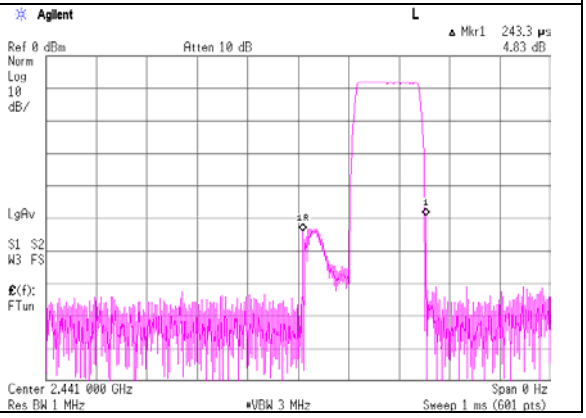
DH5 (2/2)



Inquiry (1/2)



Inquiry (2/2)



Maximum Peak Output Power(Bluetooth)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 shielded room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 03/31/2005
S/ N	: 549690004450027	TEMPERATURE	: 26deg.C
POWER	: DC3.3V	HUMIDITY	: 24%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Yutaka Yoshida

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.0	-7.32	0.45	6.00	-0.87	30.00	30.87
Mid	2441.0	-8.04	0.46	5.90	-1.68	30.00	31.68
High	2480.0	-8.47	0.46	5.90	-2.11	30.00	32.11
Inquiry	2441.0	-8.06	0.46	5.90	-1.70	30.00	31.70

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.

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 shielded room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300BWB	DATE	: 07/25/2005
S/ N	: 549690004450025	TEMPERATURE	: 25deg.C
POWER	: DC3.3V	HUMIDITY	: 59%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Yutaka Yoshida

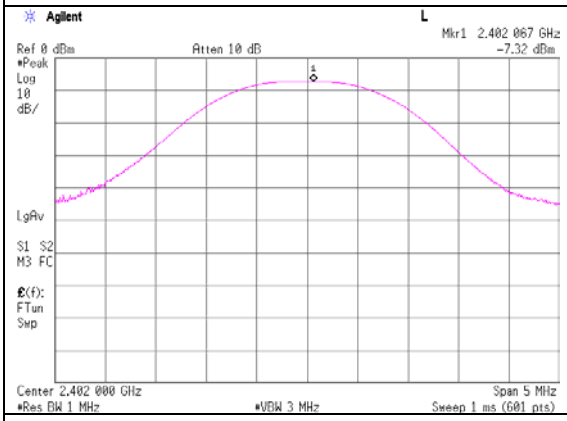
[Bluetooth]

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dBm]
Low	2402.0	-7.39	0.45	6.00	-0.94	30.00	30.94
Mid	2441.0	-8.00	0.46	5.90	-1.64	30.00	31.64
High	2480.0	-8.28	0.46	5.90	-1.92	30.00	31.92

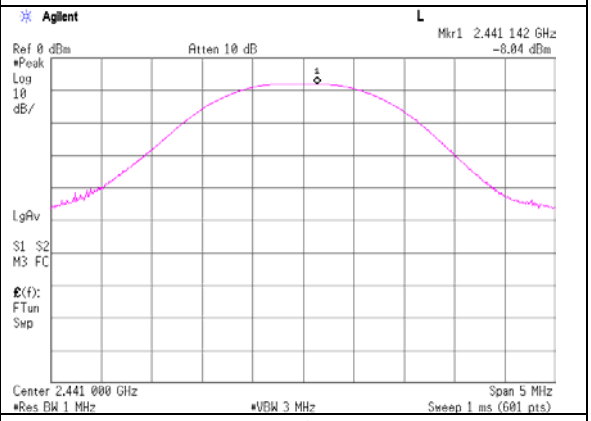
Sample Calculation:
Result = Reading + Cable Loss (supplied by customer)+ Attenuator
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Maximum Peak Output Power

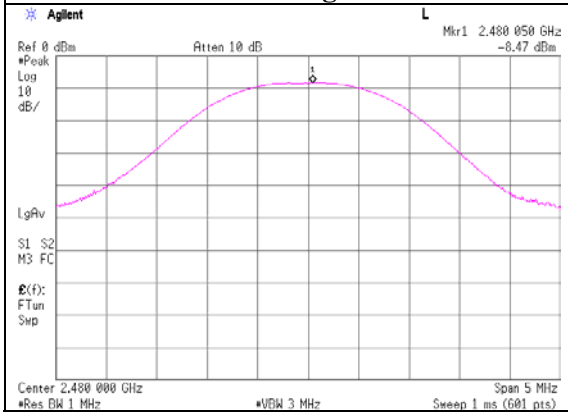
Ch:Low



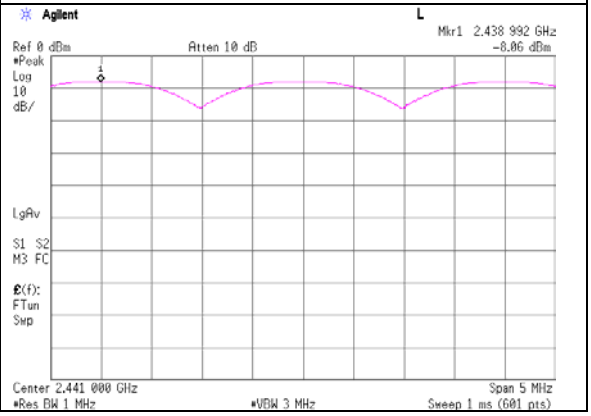
Ch:Mid



Ch:High



Inquiry



6dB Bandwidth(W-LAN)

DATA OF 6dB BANDWIDTH (CONDUCTED)

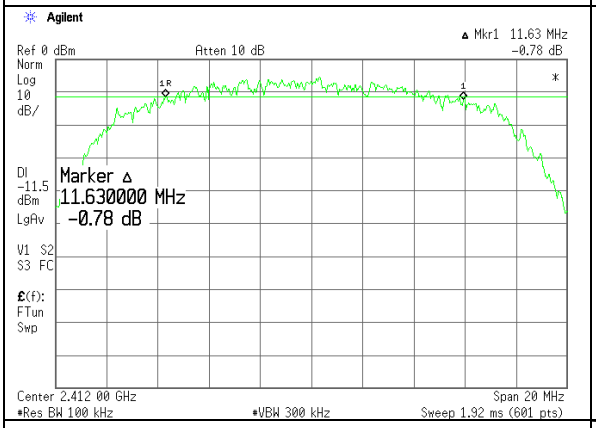
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(a)(2)
Model	: BHT-300QWB	TEST DISTANCE	: -
Sample No.	: 549690004450027	DATE	: 06/19/2005
Power	: DC3.3V	TEMPERATURE	: 21℃
Mode	: Tx 11b 11Mbps 2412/2437/2462MHz	HUMIDITY	: 53%
		ENGINEER	: Norihisa Hashimoto

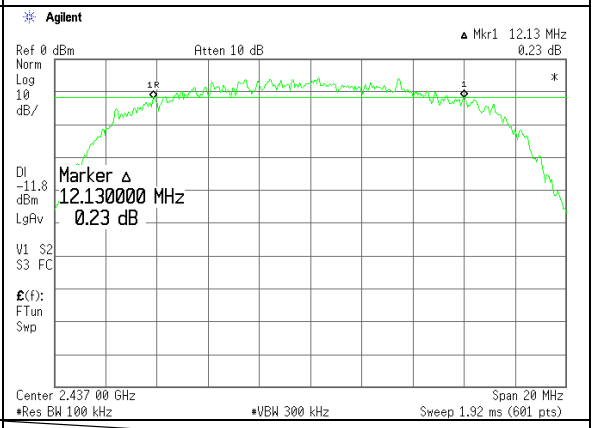
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	11.630	500.0
Mid	2437.0	12.130	500.0
High	2462.0	12.030	500.0

6dB Bandwidth(W-LAN)

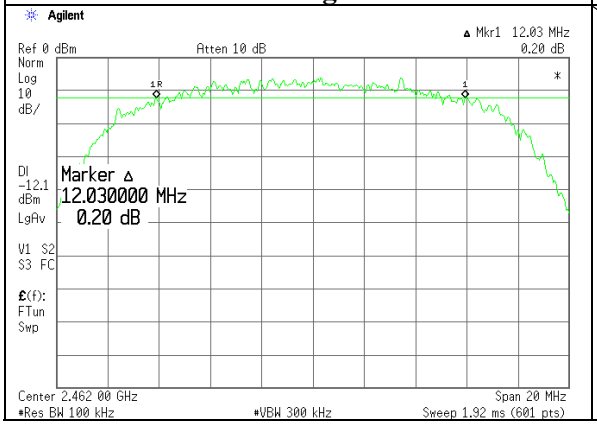
Ch:Low



Ch:Mid



Ch:High



Maximum Peak OutPut Power (W-LAN)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
Model	: BHT-300QWB	TEST DISTANCE	: -
Sample No.	: 549690004450027	DATE	: 06/19/2005
Power	: DC3.3V	TEMPERATURE	: 21℃
Mode	: Tx 11b 11Mbps 2412/2437/2462MHz	HUMIDITY	: 53%
		ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	5.60	0.88	10.00	16.48	30.00	13.52
Mid	2437.0	5.10	1.06	10.00	16.16	30.00	13.84
High	2462.0	4.50	1.23	10.00	15.73	30.00	14.27

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 shielded room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300BWB	DATE	: 07/25/2005
S/ N	: 549690004450025	TEMPERATURE	: 25deg.C
POWER	: DC3.3V	HUMIDITY	: 59%
MODE	: Tx 11b 11Mbps 2412/2437/2462MHz	ENGINEER	: Yutaka Yoshida

[IEEE802.11b : 11Mbps]							
Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	5.40	0.88	10.00	16.28	30.00	13.72
Mid	2437.0	5.20	1.06	10.00	16.26	30.00	13.74
High	2462.0	4.30	1.23	10.00	15.53	30.00	14.47

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

Radiated Spurious Emission

W-LAN ch Low

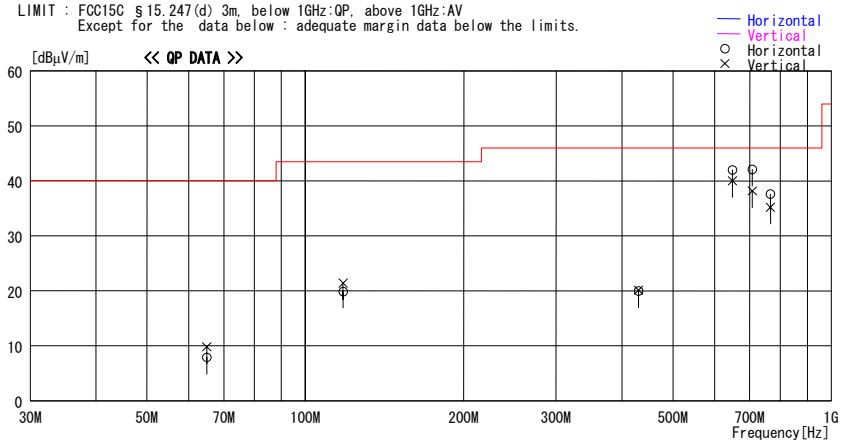
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 09:10:29

Applicant	: DENSO WAVE INCORPORATED	Report No.	: 25HE0109-HO
Kind of EUT	: HANDY Terminal	Power	: DC3.3V
Model No.	: BHT-300QWB	Temp℃/Humi%	: 24deg.C / 29%
Serial No.	: 549690004450027	Operator	: Norihisa Hashimoto

Mode / Remarks : Tx 11b 11Mbps 2412MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	21.8	7.6	6.3	27.8	7.9	40.0	32.1	110	359
2	117.973	27.8	12.8	6.8	27.5	19.9	43.5	23.6	134	46
3	430.000	20.7	18.7	8.4	27.8	20.0	46.0	26.0	100	40
4	648.821	40.8	20.1	9.4	28.3	42.0	46.0	4.0	135	270
5	707.804	40.0	20.6	9.6	28.1	42.1	46.0	3.9	118	260
6	766.788	34.5	21.5	9.7	28.1	37.6	46.0	8.4	109	260
----- Vertical ------										
7	65.000	23.7	7.6	6.3	27.8	9.8	40.0	30.2	100	344
8	117.973	29.3	12.8	6.8	27.5	21.4	43.5	22.1	100	180
9	430.000	20.8	18.7	8.4	27.8	20.1	46.0	25.9	100	175
10	648.821	38.8	20.1	9.4	28.3	40.0	46.0	6.0	174	180
11	707.804	36.1	20.6	9.6	28.1	38.2	46.0	7.8	143	0
12	766.788	32.1	21.5	9.7	28.1	35.2	46.0	10.8	150	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

W-LAN ch Mid

DATA OF RADIATED EMISSION TEST

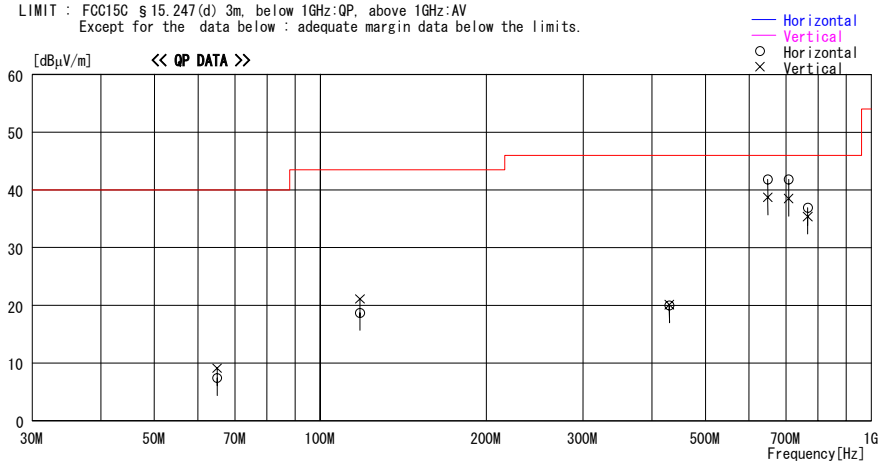
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 10:46:19

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa Hashimoto

Mode / Remarks : Tx 11b 11Mbps 2437MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	21.3	7.6	6.3	27.8	7.4	40.0	32.6	300	294
2	117.969	26.6	12.8	6.8	27.5	18.7	43.5	24.8	161	180
3	430.000	20.7	18.7	8.4	27.8	20.0	46.0	26.0	100	359
4	648.834	40.6	20.1	9.4	28.3	41.8	46.0	4.2	124	270
5	707.810	39.7	20.6	9.6	28.1	41.8	46.0	4.2	117	270
6	766.800	33.8	21.5	9.7	28.1	36.9	46.0	9.1	110	260
----- Vertical ------										
7	65.000	23.0	7.6	6.3	27.8	9.1	40.0	30.9	100	0
8	117.969	29.0	12.8	6.8	27.5	21.1	43.5	22.4	114	197
9	430.000	20.8	18.7	8.4	27.8	20.1	46.0	25.9	100	90
10	648.834	37.5	20.1	9.4	28.3	38.7	46.0	7.3	169	180
11	707.810	36.4	20.6	9.6	28.1	38.5	46.0	7.5	163	0
12	766.800	32.3	21.5	9.7	28.1	35.4	46.0	10.6	131	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

W-LAN ch High

DATA OF RADIATED EMISSION TEST

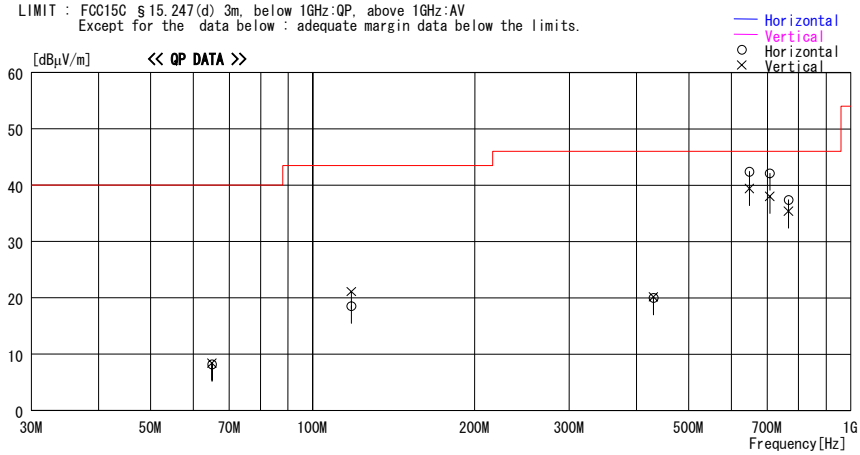
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 11:28:09

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa hashimoto

Mode / Remarks : Tx 11b 11Mbps 2462MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	22.1	7.6	6.3	27.8	8.2	40.0	31.8	300	186
2	117.984	26.4	12.8	6.8	27.5	18.5	43.5	25.0	162	180
3	430.000	20.7	18.7	8.4	27.8	20.0	46.0	26.0	122	256
4	648.835	41.2	20.1	9.4	28.3	42.4	46.0	3.6	122	256
5	707.822	40.0	20.6	9.6	28.1	42.1	46.0	3.9	115	250
6	766.786	34.3	21.5	9.7	28.1	37.4	46.0	8.6	113	250
----- Vertical ------										
7	65.000	22.3	7.6	6.3	27.8	8.4	40.0	31.6	100	359
8	117.984	29.0	12.8	6.8	27.5	21.1	43.5	22.4	110	4
9	430.000	20.9	18.7	8.4	27.8	20.2	46.0	25.8	100	180
10	648.835	38.2	20.1	9.4	28.3	39.4	46.0	6.6	100	180
11	707.822	35.9	20.6	9.6	28.1	38.0	46.0	8.0	141	0
12	766.786	32.3	21.5	9.7	28.1	35.4	46.0	10.6	145	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Bluetooth ch Low

DATA OF RADIATED EMISSION TEST

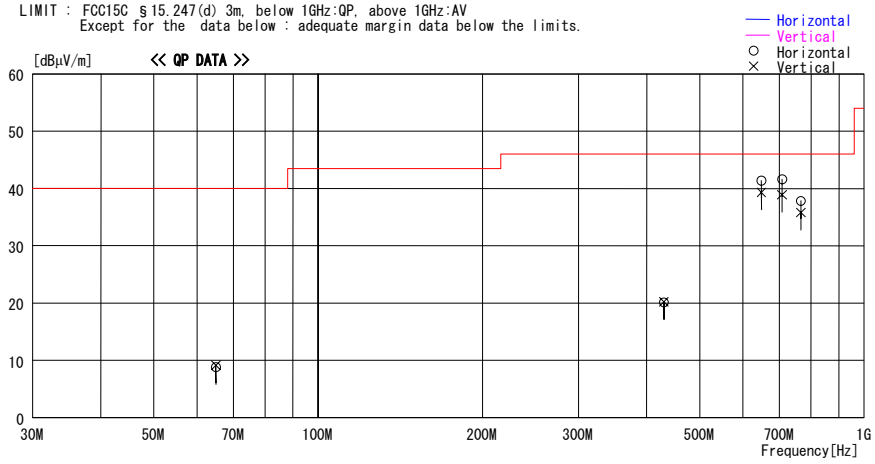
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 12:53:50

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa Hashimoto

Mode / Remarks : Tx BT DH5 2402MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	22.7	7.6	6.3	27.8	8.8	40.0	31.2	109	226
2	430.000	20.8	18.7	8.4	27.8	20.1	46.0	25.9	109	226
3	648.828	40.2	20.1	9.4	28.3	41.4	46.0	4.6	126	261
4	707.817	39.5	20.6	9.6	28.1	41.6	46.0	4.4	115	248
5	766.803	34.7	21.5	9.7	28.1	37.8	46.0	8.2	107	238
----- Vertical ------										
6	65.000	23.0	7.6	6.3	27.8	9.1	40.0	30.9	100	359
7	430.000	20.9	18.7	8.4	27.8	20.2	46.0	25.8	128	267
8	648.828	38.1	20.1	9.4	28.3	39.3	46.0	6.7	100	180
9	707.817	36.8	20.6	9.6	28.1	38.9	46.0	7.1	151	40
10	766.803	32.7	21.5	9.7	28.1	35.8	46.0	10.2	135	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Bluetooth ch Mid

DATA OF RADIATED EMISSION TEST

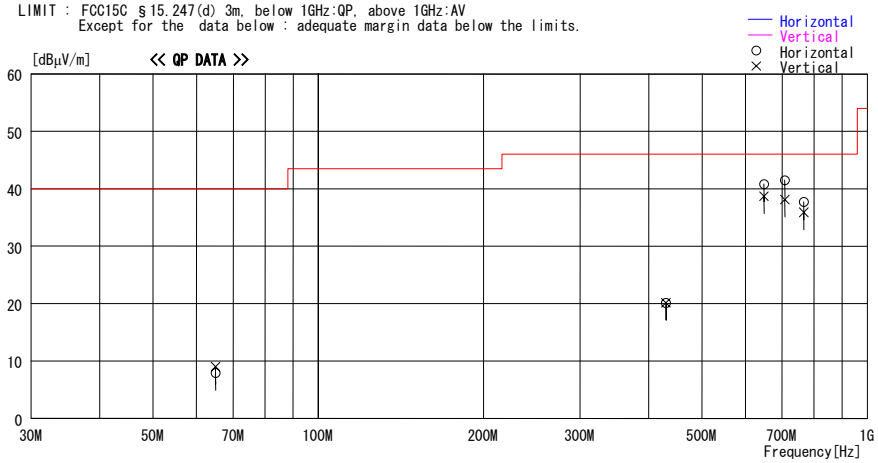
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 13:45:43

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa Hashimoto

Mode / Remarks : Tx BT DH5 2441MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	21.8	7.6	6.3	27.8	7.9	40.0	32.1	300	0
2	430.000	20.8	18.7	8.4	27.8	20.1	46.0	25.9	100	0
3	648.827	39.6	20.1	9.4	28.3	40.8	46.0	5.2	132	241
4	707.816	39.4	20.6	9.6	28.1	41.5	46.0	4.5	119	242
5	766.805	34.6	21.5	9.7	28.1	37.7	46.0	8.3	109	243
----- Vertical ------										
6	65.000	22.9	7.6	6.3	27.8	9.0	40.0	31.0	100	359
7	430.000	20.8	18.7	8.4	27.8	20.1	46.0	25.9	100	49
8	648.827	37.5	20.1	9.4	28.3	38.7	46.0	7.3	153	69
9	707.816	36.0	20.6	9.6	28.1	38.1	46.0	7.9	148	0
10	766.805	32.8	21.5	9.7	28.1	35.9	46.0	10.1	143	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Bluetooth ch High

DATA OF RADIATED EMISSION TEST

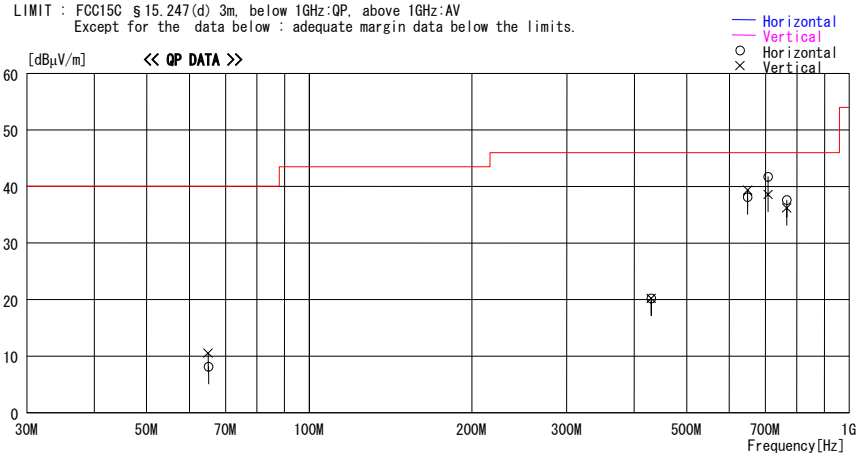
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 14:20:34

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa Hashimoto

Mode / Remarks : Tx BT DH5 2480MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.100	22.1	7.5	6.3	27.8	8.1	40.0	31.9	100	254
2	430.000	20.9	18.7	8.4	27.8	20.2	46.0	25.8	100	321
3	648.831	36.9	20.1	9.4	28.3	38.1	46.0	7.9	250	267
4	707.813	39.6	20.6	9.6	28.1	41.7	46.0	4.3	118	251
5	766.801	34.5	21.5	9.7	28.1	37.6	46.0	8.4	112	242
----- Vertical ------										
6	65.000	24.4	7.6	6.3	27.8	10.5	40.0	29.5	139	0
7	430.000	20.9	18.7	8.4	27.8	20.2	46.0	25.8	100	0
8	648.831	38.2	20.1	9.4	28.3	39.4	46.0	6.6	168	171
9	707.813	36.5	20.6	9.6	28.1	38.6	46.0	7.4	154	0
10	766.801	33.1	21.5	9.7	28.1	36.2	46.0	9.8	140	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Co-location(Bluetooth Hopping + W-LAN ch Mid)

DATA OF RADIATED EMISSION TEST

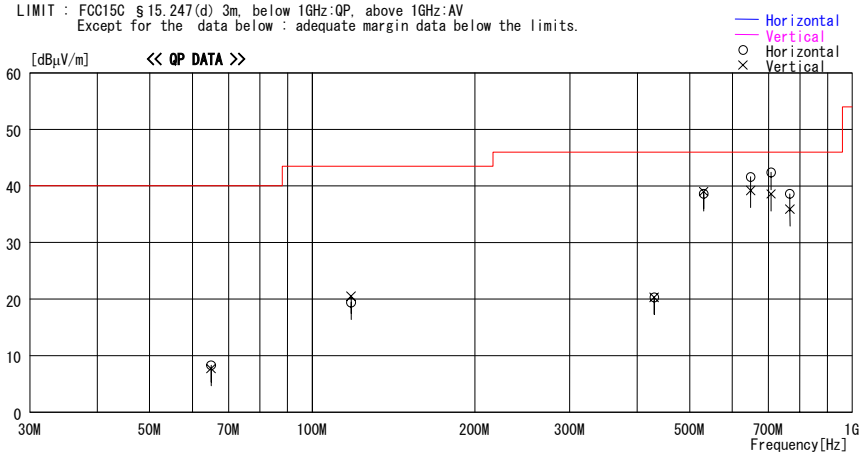
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 15:53:35

Applicant : DENSO WAVE INCORPORATED
Kind of EUT : HANDY Terminal
Model No. : BHT-300QWB
Serial No. : 549690004450027

Report No. : 25HE0109-HO
Power : DC3.3V
Temp℃/Humi% : 24deg.C / 29%
Operator : Norihisa Hashimoto

Mode / Remarks : Tx BT Hopping 11b 11Mbps 2437MHz / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	65.000	22.2	7.6	6.3	27.8	8.3	40.0	31.7	300	359
2	117.981	27.3	12.8	6.8	27.5	19.4	43.5	24.1	166	0
3	430.000	21.0	18.7	8.4	27.8	20.3	46.0	25.7	100	359
4	530.867	38.9	19.1	8.8	28.2	38.6	46.0	7.4	183	276
5	648.832	40.4	20.1	9.4	28.3	41.6	46.0	4.4	146	244
6	707.812	40.3	20.6	9.6	28.1	42.4	46.0	3.6	131	258
7	766.808	35.5	21.5	9.7	28.1	38.6	46.0	7.4	122	242
----- Vertical ------										
8	65.000	21.6	7.6	6.3	27.8	7.7	40.0	32.3	100	0
9	117.981	28.4	12.8	6.8	27.5	20.5	43.5	23.0	105	0
10	430.000	21.0	18.7	8.4	27.8	20.3	46.0	25.7	100	281
11	530.867	39.3	19.1	8.8	28.2	39.0	46.0	7.0	100	150
12	648.832	38.0	20.1	9.4	28.3	39.2	46.0	6.8	100	130
13	707.812	36.5	20.6	9.6	28.1	38.6	46.0	7.4	143	101
14	766.880	32.8	21.5	9.7	28.1	35.9	46.0	10.1	143	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Reference Data of BHT-300BWB

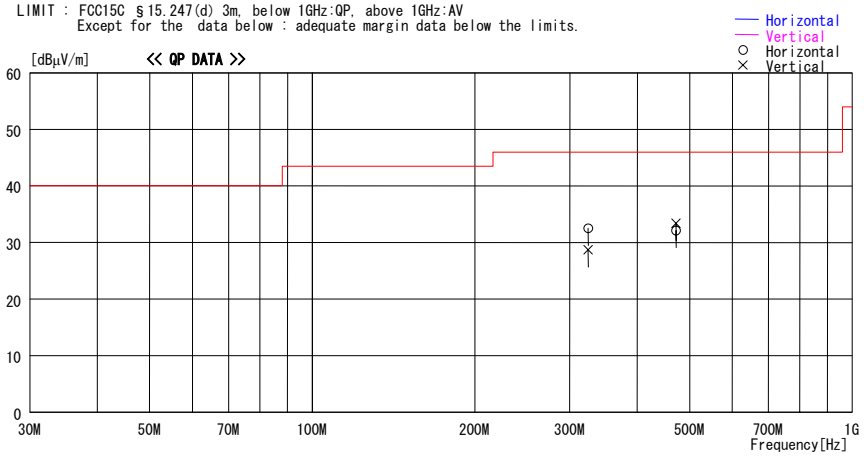
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/06/17 17:01:10

Applicant	: DENSO WAVE INCORPORATED	Report No.	: 25HE0109-HO
Kind of EUT	: HANDY Terminal	Power	: DC3.3V
Model No.	: BHT-300BWB	Temp℃/Humi%	: 24deg.C / 29%
Serial No.	: 549690004450025	Operator	: Norihisa Hashimoto

Mode / Remarks : Tx BT DH5 2480MHz BarCode_Type SCCANAR / Max-axis(Hor-X Ver-Y)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	324.431	35.7	15.7	8.0	26.9	32.5	46.0	13.5	114	254
2	471.874	32.8	18.8	8.5	28.0	32.1	46.0	13.9	228	75
----- Vertical ------										
3	324.431	31.9	15.7	8.0	26.9	28.7	46.0	17.3	153	298
4	471.874	34.1	18.8	8.5	28.0	33.4	46.0	12.6	120	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Radiated Spurious Emission

Bluetooth ch Low

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/04/2005
Power	: DC3.3V	TEMPERATURE	: 23deg.C
Mode	: Tx 2402MHz DH5	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	49.4	49.1	30.5	39.9	5.7	0.0	45.7	45.4	74.0	28.3	28.6
2	4804.0	48.2	49.9	35.1	41.2	8.3	1.0	51.4	53.1	74.0	22.6	20.9
3	7206.0	48.6	48.4	37.5	40.5	10.0	0.4	56.0	55.8	74.0	18.0	18.2
4	9608.0	48.9	48.9	36.9	39.5	12.1	0.2	58.6	58.6	74.0	15.4	15.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	44.3	44.1	41.6	39.6	14.3	0.0	51.1	50.9	74.0	22.9	23.1
6	14412.0	41.1	43.1	41.7	41.0	15.2	0.0	47.5	49.5	74.0	26.5	24.5
7	16814.0	44.0	43.6	45.1	41.7	16.5	0.0	54.4	54.0	74.0	19.6	20.0
8	19216.0	41.8	42.0	40.0	40.3	12.6	0.0	44.6	44.8	74.0	29.4	29.2
9	21618.0	42.2	41.8	39.8	35.4	12.8	0.0	49.9	49.5	74.0	24.1	24.5
10	24020.0	41.2	41.0	40.4	33.0	14.8	0.0	53.9	53.7	74.0	20.1	20.3

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	37.0	37.1	30.5	39.9	5.7	0.0	33.3	33.4	54.0	20.7	20.6
2	4804.0	38.5	38.5	35.1	41.2	8.3	1.0	41.7	41.7	54.0	12.3	12.3
3	7206.0	37.4	37.5	37.5	40.5	10.0	0.4	44.8	44.9	54.0	9.2	9.1
4	9608.0	37.7	37.8	36.9	39.5	12.1	0.2	47.4	47.5	54.0	6.6	6.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	33.3	33.3	41.6	39.6	14.3	0.0	40.1	40.1	54.0	13.9	13.9
6	14412.0	31.9	31.9	41.7	41.0	15.2	0.0	38.3	38.3	54.0	15.7	15.7
7	16814.0	32.7	32.8	45.1	41.7	16.5	0.0	43.1	43.2	54.0	10.9	10.8
8	19216.0	30.8	30.8	40.0	40.3	12.6	0.0	33.6	33.6	54.0	20.4	20.4
9	21618.0	31.9	31.9	39.8	35.4	12.8	0.0	39.6	39.6	54.0	14.4	14.4
10	24020.0	32.0	32.1	40.4	33.0	14.8	0.0	44.7	44.8	54.0	9.3	9.2

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	20dBc	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2402.0	106.5	104.8	30.5	39.9	5.7	0.0	102.8	101.1	-	-	-
2	2400.0	61.9	61.6	30.5	39.9	5.7	0.0	58.2	57.9	Funda-20dB	24.6	23.2

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

Bluetooth ch Mid

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/04/2005
Power	: DC3.3V	TEMPERATURE	: 23deg.C
Mode	: Tx 2441MHz DH5	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	49.2	49.6	35.6	41.2	8.4	1.0	53.0	53.4	74.0	21.0	20.6
2	7323.0	47.0	46.7	37.9	40.4	10.3	0.4	55.2	54.9	74.0	18.8	19.1
3	9764.0	48.8	48.0	36.8	39.6	12.4	0.2	58.6	57.8	74.0	15.4	16.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	44.5	44.3	41.6	39.8	14.4	0.0	51.2	51.0	74.0	22.8	23.0
5	14646.0	43.5	43.4	42.2	40.9	15.3	0.0	50.6	50.5	74.0	23.4	23.5
6	17087.0	44.1	44.3	45.2	41.8	16.7	0.0	54.7	54.9	74.0	19.3	19.1
7	19528.0	42.0	41.3	40.3	39.8	12.8	0.0	45.8	45.1	74.0	28.2	28.9
8	21969.0	42.3	42.9	39.8	35.9	12.8	0.0	49.5	50.1	74.0	24.5	23.9
9	24410.0	40.5	41.0	40.4	33.8	14.7	0.0	52.3	52.8	74.0	21.7	21.2

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	37.7	37.8	35.6	41.2	8.4	1.0	41.5	41.6	54.0	12.5	12.4
2	7323.0	36.8	37.0	37.9	40.4	10.3	0.4	45.0	45.2	54.0	9.0	8.8
3	9764.0	37.7	37.9	36.8	39.6	12.4	0.2	47.5	47.7	54.0	6.5	6.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	33.2	33.2	41.6	39.8	14.4	0.0	39.9	39.9	54.0	14.1	14.1
5	14646.0	32.2	32.2	42.2	40.9	15.3	0.0	39.3	39.3	54.0	14.7	14.7
6	17087.0	33.7	33.8	45.2	41.8	16.7	0.0	44.3	44.4	54.0	9.7	9.6
7	19528.0	31.5	31.4	40.3	39.8	12.8	0.0	35.3	35.2	54.0	18.7	18.8
8	21969.0	32.0	32.0	39.8	35.9	12.8	0.0	39.2	39.2	54.0	14.8	14.8
9	24410.0	30.5	30.6	40.4	33.8	14.7	0.0	42.3	42.4	54.0	11.7	11.6

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

Bluetooth ch High

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/04/2005
Power	: DC3.3V	TEMPERATURE	: 23deg.C
Mode	: Tx 2480MHz DH5	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	66.6	67.2	30.5	40.0	5.8	0.0	62.9	63.5	74.0	11.1	10.5
2	4960.0	50.3	50.5	36.1	41.3	8.5	1.0	54.6	54.8	74.0	19.4	19.2
3	7440.0	48.1	47.9	38.1	40.3	10.4	0.5	56.8	56.6	74.0	17.2	17.4
4	9920.0	49.3	48.5	36.7	39.6	12.3	0.6	59.3	58.5	74.0	14.7	15.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	43.1	42.9	41.7	40.0	14.5	0.0	49.8	49.6	74.0	24.2	24.4
6	14880.0	42.1	41.2	42.7	40.9	15.5	0.0	49.9	49.0	74.0	24.1	25.0
7	17360.0	42.8	42.6	44.7	41.6	16.9	0.0	53.3	53.1	74.0	20.7	20.9
8	19840.0	40.8	41.2	40.4	39.4	12.5	0.0	44.8	45.2	74.0	29.2	28.8
9	22320.0	42.8	43.1	39.8	35.3	12.6	0.0	50.4	50.7	74.0	23.6	23.3
10	24800.0	41.3	41.5	40.7	34.6	14.7	0.0	52.6	52.8	74.0	21.4	21.2

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1*	2483.5	58.5	58.9	30.5	40.0	5.8	0.0	24.3	24.7	54.0	29.7	29.3
2	4960.0	38.9	38.8	36.1	41.3	8.5	1.0	43.2	43.1	54.0	10.8	10.9
3	7440.0	37.7	37.9	38.1	40.3	10.4	0.5	46.4	46.6	54.0	7.6	7.4
4	9920.0	38.4	38.1	36.7	39.6	12.3	0.6	48.4	48.1	54.0	5.6	5.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	33.0	33.1	41.7	40.0	14.5	0.0	39.7	39.8	54.0	14.3	14.2
6	14880.0	32.4	32.3	42.7	40.9	15.5	0.0	40.2	40.1	54.0	13.8	13.9
7	17360.0	31.2	31.1	44.7	41.6	16.9	0.0	41.7	41.6	54.0	12.3	12.4
8	19840.0	31.1	31.0	40.4	39.4	12.5	0.0	35.1	35.0	54.0	18.9	19.0
9	22320.0	31.7	31.7	39.8	35.3	12.6	0.0	39.3	39.3	54.0	14.7	14.7
10	24800.0	30.7	30.7	40.7	34.6	14.7	0.0	42.0	42.0	54.0	12.0	12.0

<AV DETECT 2483.5MHz>
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss + Duty Cycle correction factor
Duty Cycle correction factor = -30.5dB
*Refer to the p.44 for calculation method of Duty cycle correction factor.

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

W-LAN ch Low

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/06/2005
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: Tx 11b 11Mbps 2412MHz	HUMIDITY	: 37%
Remarks	: Hor X , Ver Y-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	48.9	48.7	30.5	39.9	5.7	0.0	45.2	45.0	74.0	28.8	29.0
2	2400.0	48.8	49.2	30.5	39.9	5.7	0.0	45.1	45.5	74.0	28.9	28.5
3	4824.0	52.1	50.6	35.2	41.2	7.3	1.0	54.4	52.9	74.0	19.7	21.2
4	7236.0	46.3	46.2	37.7	40.4	9.7	0.6	53.9	53.8	74.0	20.1	20.2
5	9648.0	45.1	45.4	37.0	39.5	12.1	0.2	54.9	55.2	74.0	19.1	18.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12060.0	44.2	44.8	41.6	39.6	14.1	0.2	51.0	51.6	74.0	23.0	22.4
7	14472.0	44.2	44.8	41.8	41.0	15.0	0.2	50.7	51.3	74.0	23.3	22.7
8	16884.0	45.3	46.1	45.2	41.8	15.6	1.1	55.9	56.7	74.0	18.1	17.3
9	19296.0	44.6	43.7	40.2	40.2	10.7	2.1	47.9	47.0	74.0	26.1	27.0
10	21708.0	43.9	43.7	39.8	35.5	11.0	2.0	51.7	51.5	74.0	22.3	22.5
11	24120.0	43.7	44.0	40.4	33.1	14.7	0.3	56.5	56.8	74.0	17.5	17.2

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	36.6	36.2	30.5	39.9	5.7	0.0	32.9	32.5	54.0	21.1	21.5
2	2400.0	36.6	37.1	30.5	39.9	5.7	0.0	32.9	33.4	54.0	21.1	20.6
3	4824.0	43.7	42.9	35.2	41.2	7.3	1.0	46.0	45.2	54.0	8.1	8.9
4	7236.0	33.7	33.6	37.7	40.4	9.7	0.6	41.3	41.2	54.0	12.7	12.8
5	9648.0	38.3	35.9	37.0	39.5	12.1	0.2	48.1	45.7	54.0	5.9	8.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12060.0	32.2	32.3	41.6	39.6	14.1	0.2	39.0	39.1	54.0	15.0	14.9
7	14472.0	32.7	33.0	41.8	41.0	15.0	0.2	39.2	39.5	54.0	14.8	14.5
8	16884.0	33.6	33.7	45.2	41.8	15.6	1.1	44.2	44.3	54.0	9.8	9.7
9	19296.0	31.4	31.3	40.2	40.2	10.7	2.1	34.7	34.6	54.0	19.3	19.4
10	21708.0	31.1	31.1	39.8	35.5	11.0	2.0	38.9	38.9	54.0	15.1	15.1
11	24120.0	31.4	31.4	40.4	33.1	14.7	0.3	44.2	44.2	54.0	9.8	9.8

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

W-LAN ch Mid

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/06/2005
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: Tx 11b 11Mbps 2437MHz	HUMIDITY	: 37%
Remarks	: Hor X , Ver Y-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	52.2	51.6	35.5	41.2	7.4	1.0	54.9	54.3	74.0	19.1	19.7
2	7310.0	46.2	46.3	37.9	40.4	9.7	0.5	53.9	54.0	74.0	20.1	20.0
3	9748.0	45.8	46.1	36.9	39.5	12.2	0.2	55.6	55.9	74.0	18.4	18.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	43.6	43.7	41.6	39.8	14.1	0.3	50.3	50.4	74.0	23.7	23.6
5	14622.0	44.6	45.2	42.1	40.9	15.1	0.2	51.6	52.2	74.0	22.4	21.8
6	17059.0	47.2	45.6	45.3	41.9	15.5	1.1	57.7	56.1	74.0	16.3	17.9
7	19496.0	41.0	44.1	40.3	39.9	10.7	2.3	44.9	48.0	74.0	29.1	26.0
8	21933.0	43.5	44.7	39.8	35.8	11.8	1.1	50.9	52.1	74.0	23.1	21.9
9	24370.0	42.5	43.4	40.4	33.7	14.4	0.6	54.7	55.6	74.0	19.4	18.5

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	46.9	43.8	35.5	41.2	7.4	1.0	49.6	46.5	54.0	4.4	7.5
2	7310.0	33.5	33.5	37.9	40.4	9.7	0.5	41.2	41.2	54.0	12.8	12.8
3	9748.0	36.5	35.7	36.9	39.5	12.2	0.2	46.3	45.5	54.0	7.7	8.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	31.5	31.6	41.6	39.8	14.1	0.3	38.2	38.3	54.0	15.8	15.7
5	14622.0	32.8	32.8	42.1	40.9	15.1	0.2	39.8	39.8	54.0	14.2	14.2
6	17059.0	34.0	33.9	45.3	41.9	15.5	1.1	44.5	44.4	54.0	9.5	9.6
7	19496.0	31.1	31.1	40.3	39.9	10.7	2.3	35.0	35.0	54.0	19.0	19.0
8	21933.0	31.6	31.6	39.8	35.8	11.8	1.1	39.0	39.0	54.0	15.0	15.0
9	24370.0	30.4	30.5	40.4	33.7	14.4	0.6	42.6	42.7	54.0	11.5	11.4

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

W-LAN ch High

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 04/06/2005
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: Tx 11b 11Mbps 2462MHz	HUMIDITY	: 37%
Remarks	: Hor X , Ver Y-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	49.4	48.8	30.5	40.0	5.8	0.0	45.7	45.1	74.0	28.3	28.9
2	4924.0	52.6	52.5	35.8	41.3	7.4	1.0	55.5	55.4	74.0	18.5	18.6
3	7386.0	45.9	46.1	38.0	40.3	9.8	0.6	54.0	54.2	74.0	20.0	19.8
4	9848.0	45.6	44.7	36.8	39.6	12.3	0.3	55.4	54.5	74.0	18.6	19.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	44.1	44.2	41.7	39.9	14.0	0.4	50.8	50.9	74.0	23.2	23.1
6	14772.0	44.4	45.4	42.4	40.9	15.1	0.4	51.9	52.9	74.0	22.1	21.1
7	17234.0	45.4	46.7	44.9	41.7	15.7	1.0	55.8	57.1	74.0	18.2	16.9
8	19696.0	43.5	44.1	40.3	39.6	11.4	1.8	47.9	48.5	74.0	26.1	25.5
9	22158.0	43.7	44.3	39.8	35.6	12.1	0.9	51.4	52.0	74.0	22.6	22.0
10	24620.0	42.6	43.6	40.5	34.2	14.1	0.9	54.4	55.4	74.0	19.6	18.6

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	36.3	36.3	30.5	40.0	5.8	0.0	32.6	32.6	54.0	21.4	21.4
2	4924.0	47.9	47.0	35.8	41.3	7.4	1.0	50.8	49.9	54.0	3.2	4.1
3	7386.0	33.2	33.2	38.0	40.3	9.8	0.6	41.3	41.3	54.0	12.7	12.7
4	9848.0	36.3	34.1	36.8	39.6	12.3	0.3	46.1	43.9	54.0	7.9	10.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	32.5	32.5	41.7	39.9	14.0	0.4	39.2	39.2	54.0	14.8	14.8
6	14772.0	32.7	32.8	42.4	40.9	15.1	0.4	40.2	40.3	54.0	13.8	13.7
7	17234.0	33.9	34.0	44.9	41.7	15.7	1.0	44.3	44.4	54.0	9.7	9.6
8	19696.0	31.3	31.3	40.3	39.6	11.4	1.8	35.7	35.7	54.0	18.3	18.3
9	22158.0	31.9	31.9	39.8	35.6	12.1	0.9	39.6	39.6	54.0	14.4	14.4
10	24620.0	30.3	30.3	40.5	34.2	14.1	0.9	42.1	42.1	54.0	11.9	11.9

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.

Co-location(Bluetooth Hopping + W-LAN ch Mid)

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300QWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450027	DATE	: 06/17/2005
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: W-LAN 2437MHz + BT Hopping	HUMIDITY	: 29%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	67.2	73.5	30.5	40.0	3.7	0.0	61.4	67.7	74.0	12.6	6.3
2*	2400.0	80.9	89.4	30.5	40.1	3.7	0.0	75.0	83.5	74.0	-	-
3	2483.5	74.4	74.9	30.5	40.2	3.7	0.0	68.4	68.9	74.0	5.6	5.1
4	4874.0	55.1	53.4	35.5	41.5	5.3	1.0	55.4	53.7	74.0	18.6	20.3
5	7311.0	46.1	46.5	37.9	40.2	6.6	0.5	50.9	51.3	74.0	23.1	22.7
6	9748.0	46.6	44.4	36.9	39.5	8.1	0.2	52.3	50.1	74.0	21.7	23.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12185.0	43.7	43.9	41.6	39.8	14.4	0.0	50.4	50.6	74.0	23.6	23.4
8	14622.0	44.9	45.6	42.1	40.9	15.3	0.0	51.9	52.6	74.0	22.1	21.4
9	17059.0	44.2	46.2	45.3	41.9	16.6	0.0	54.7	56.7	74.0	19.3	17.3
10	19496.0	42.8	43.6	40.3	39.9	13.0	0.0	46.7	47.5	74.0	27.3	26.5
11	21933.0	44.5	43.6	39.8	35.8	12.9	0.0	51.9	51.0	74.0	22.1	23.0
12	24370.0	43.1	43.0	40.4	33.7	15.0	0.0	55.3	55.2	74.0	18.7	18.8

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	54.2	52.4	30.5	40.0	3.7	0.0	48.4	46.6	54.0	5.6	7.4
2*	2400.0	69.7	78.0	30.5	40.1	3.7	0.0	63.8	72.1	54.0	-	-
3	2483.5	56.8	57.2	30.5	40.2	3.7	0.0	50.8	51.2	54.0	3.2	2.8
4	4874.0	48.9	47.5	35.5	41.5	5.3	1.0	49.2	47.8	54.0	4.8	6.2
5	7311.0	34.1	34.1	37.9	40.2	6.6	0.5	38.9	38.9	54.0	15.1	15.1
6	9748.0	37.4	32.4	36.9	39.5	8.1	0.2	43.1	38.1	54.0	10.9	15.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12185.0	31.3	31.4	41.6	39.8	14.4	0.0	38.0	38.1	54.0	16.0	15.9
8	14622.0	32.6	32.6	42.1	40.9	15.3	0.0	39.6	39.6	54.0	14.4	14.4
9	17059.0	33.9	33.8	45.3	41.9	16.6	0.0	44.4	44.3	54.0	9.6	9.7
10	19496.0	31.1	31.0	40.3	39.9	13.0	0.0	35.0	34.9	54.0	19.0	19.1
11	21933.0	31.6	31.6	39.8	35.8	12.9	0.0	39.0	39.0	54.0	15.0	15.0
12	24370.0	30.5	30.5	40.4	33.7	15.0	0.0	42.7	42.7	54.0	11.3	11.3

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	20dBc	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2412.0	104.3	107.2	30.5	40.1	3.7	0.0	98.4	101.3	-	-	-
2	2400.0	69.4	79.4	30.5	40.1	3.7	0.0	63.5	73.5	Funda-20dB	14.9	7.8

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.

Reference Data of BHT-300BWB

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: BHT-300BWB	TEST DISTANCE	: 3/1m
Sample No.	: 549690004450025	DATE	: 06/17/2005
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: Tx 2402MHz DH5	HUMIDITY	: 29%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Norihisa Hashimoto

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	50.0	51.8	30.5	40.0	3.7	0.0	44.2	46.0	74.0	29.8	28.0
2*	2400.0	79.1	79.5	30.5	40.1	3.7	0.0	73.2	73.6	74.0	-	-
3	4804.0	48.5	47.9	35.1	41.5	5.3	1.0	48.4	47.8	74.0	25.6	26.2
4	7206.0	46.1	46.9	37.7	40.2	6.6	0.4	50.6	51.4	74.0	23.4	22.6
5	9608.0	44.4	44.7	37.0	39.5	7.9	0.1	49.9	50.2	74.0	24.1	23.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	44.1	43.7	41.6	39.6	14.3	0.0	50.9	50.5	74.0	23.1	23.5
7	14412.0	42.4	43.2	41.7	41.0	15.2	0.0	48.8	49.6	74.0	25.2	24.4
8	16814.0	43.2	43.3	45.1	41.7	16.5	0.0	53.6	53.7	74.0	20.4	20.3
9	19216.0	42.3	43.3	40.0	40.3	12.6	0.0	45.1	46.1	74.0	28.9	27.9
10	21618.0	42.1	42.4	39.8	35.4	12.8	0.0	49.8	50.1	74.0	24.2	23.9
11	24020.0	41.5	42.1	40.4	33.0	14.8	0.0	54.2	54.8	74.0	19.8	19.2

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	37.5	37.8	30.5	40.0	3.7	0.0	31.7	32.0	54.0	22.3	22.0
2*	2400.0	68.5	68.7	30.5	40.1	3.7	0.0	62.6	62.8	54.0	-	-
3	4804.0	36.1	36.1	35.1	41.5	5.3	1.0	36.0	36.0	54.0	18.0	18.0
4	7206.0	34.1	34.2	37.7	40.2	6.6	0.4	38.6	38.7	54.0	15.4	15.3
5	9608.0	32.3	32.2	37.0	39.5	7.9	0.1	37.8	37.7	54.0	16.2	16.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	31.4	31.4	41.6	39.6	14.3	0.0	38.2	38.2	54.0	15.8	15.8
7	14412.0	31.5	31.6	41.7	41.0	15.2	0.0	37.9	38.0	54.0	16.1	16.0
8	16814.0	32.4	32.8	45.1	41.7	16.5	0.0	42.8	43.2	54.0	11.2	10.8
9	19216.0	31.8	31.5	40.0	40.3	12.6	0.0	34.6	34.3	54.0	19.4	19.7
10	21618.0	31.2	31.9	39.8	35.4	12.8	0.0	38.9	39.6	54.0	15.1	14.4
11	24020.0	31.5	31.2	40.4	33.0	14.8	0.0	44.2	43.9	54.0	9.8	10.1

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

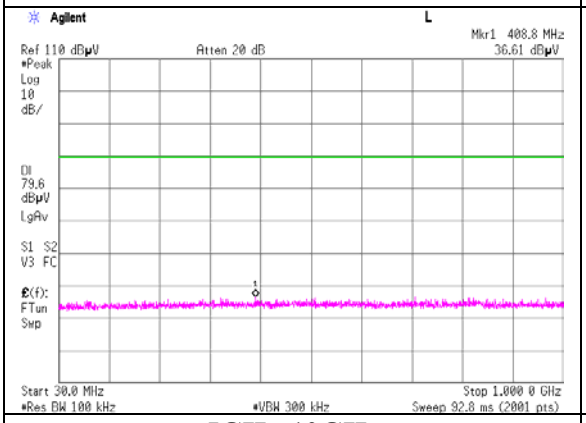
No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	20dBc	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2402.0	103.0	103.5	30.5	40.1	3.7	0.0	97.1	97.6	-	-	-
2	2400.0	53.6	55.2	30.5	40.1	3.7	0.0	47.7	49.3	Funda-20dB	29.4	28.3

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 Fiter was not used for factor 0.0dB of the above table.

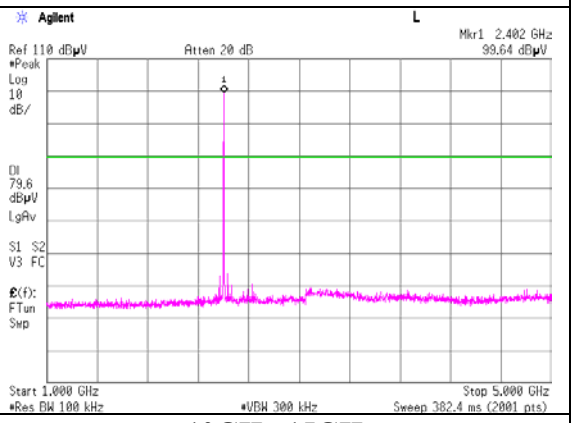
Conducted Spurious Emission

Ch:Low

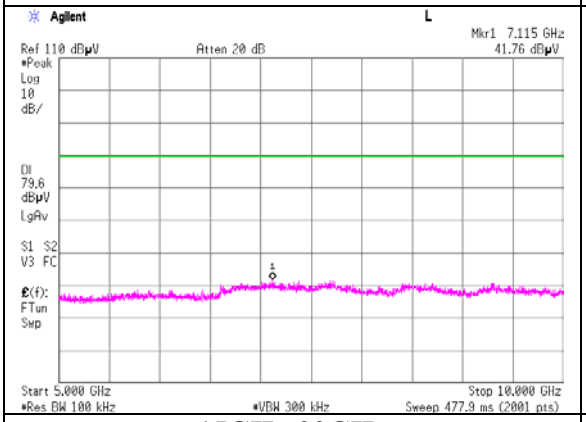
30MHz-1GHz



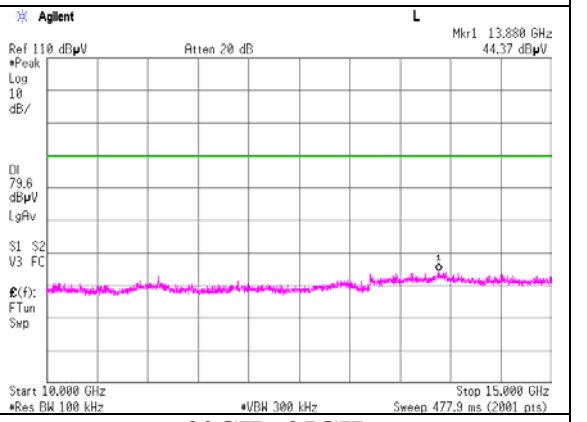
1GHz-5GHz



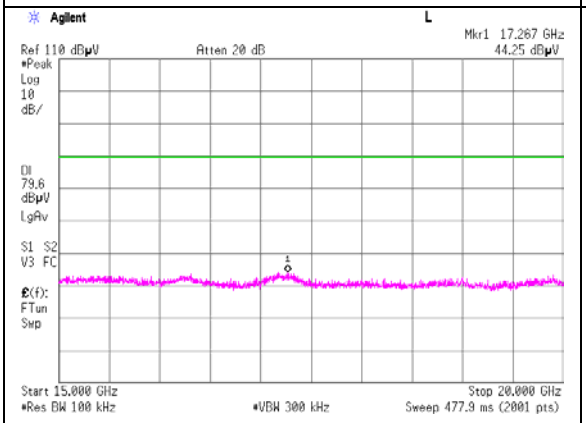
5GHz-10GHz



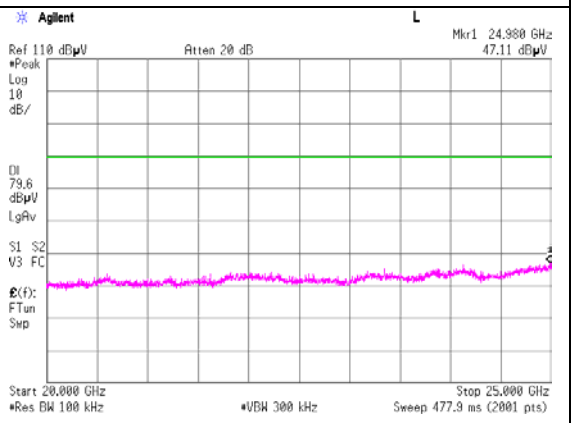
10GHz-15GHz



15GHz-20GHz

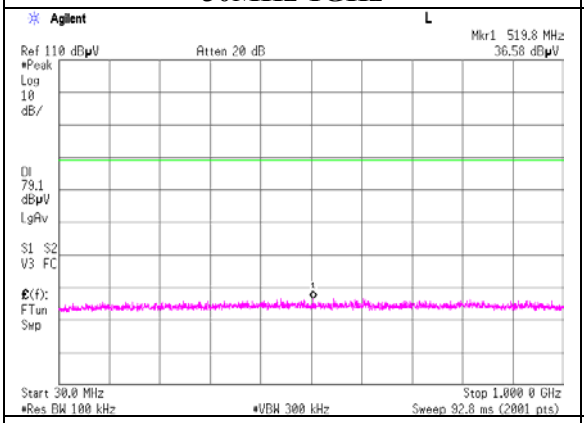


20GHz-25GHz

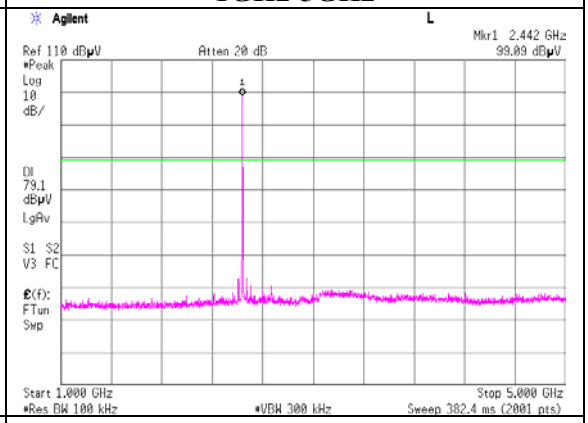


Conducted Spurious Emission
Ch:Mid

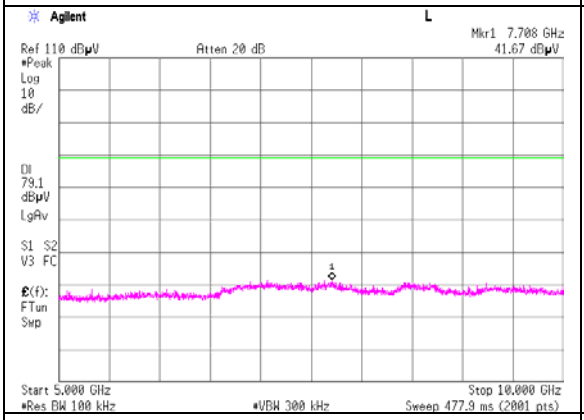
30MHz-1GHz



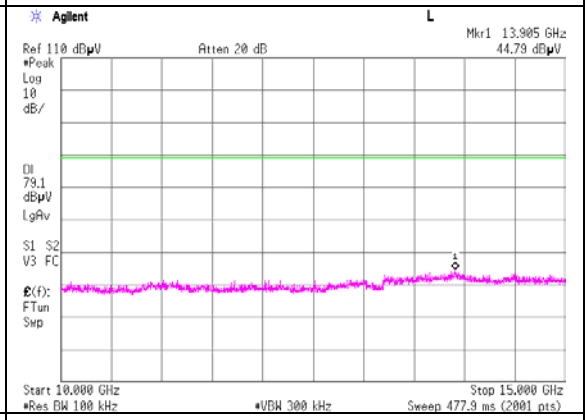
1GHz-5GHz



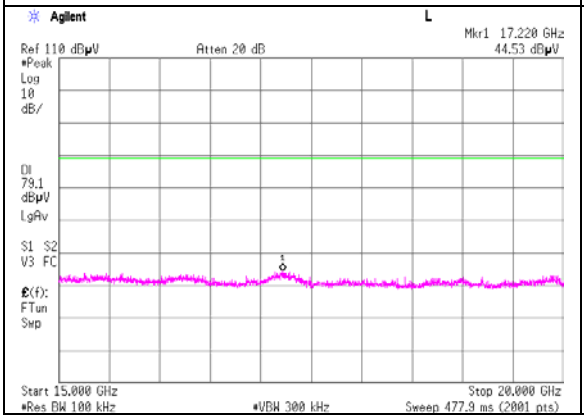
5GHz-10GHz



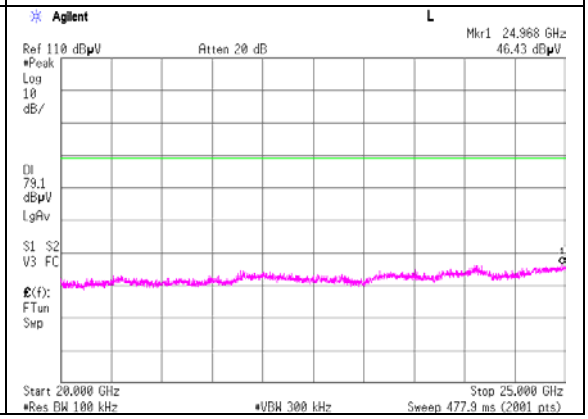
10GHz-15GHz



15GHz-20GHz



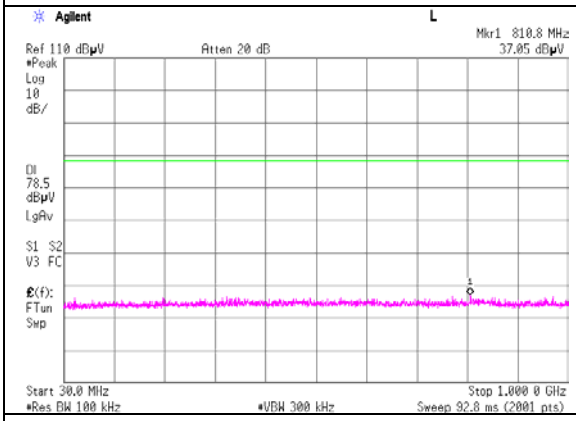
20GHz-25GHz



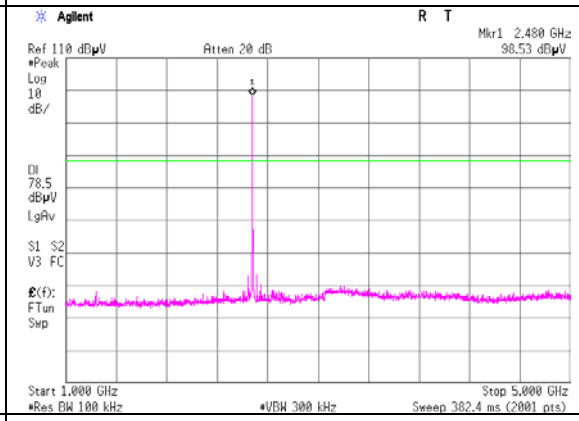
Conducted Spurious Emission

Ch:High

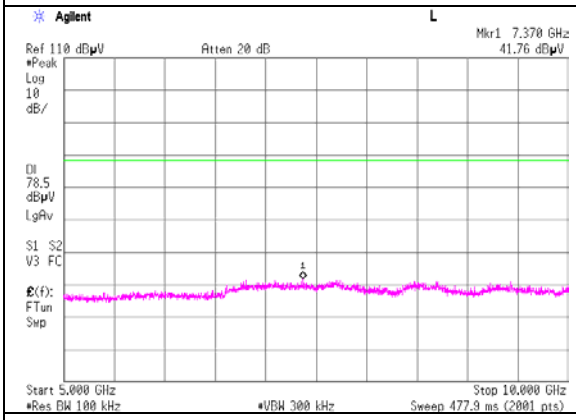
30MHz-1GHz



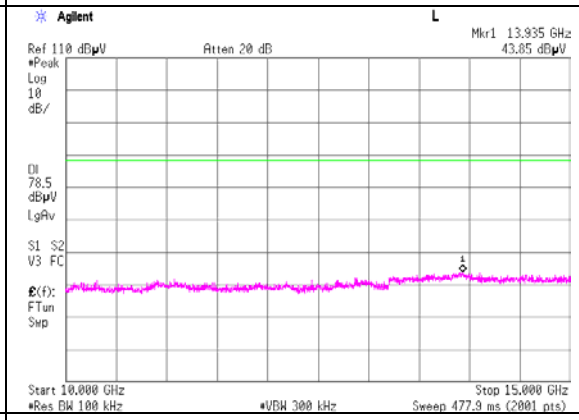
1GHz-5GHz



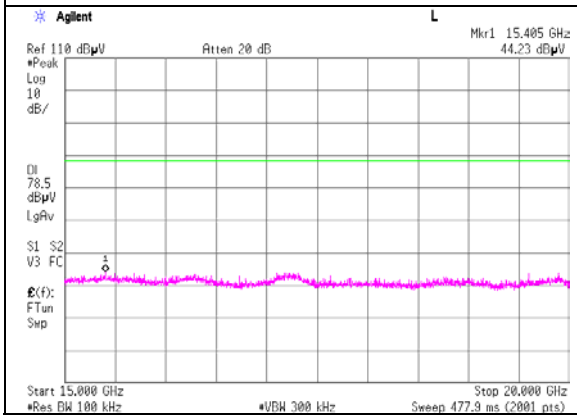
5GHz-10GHz



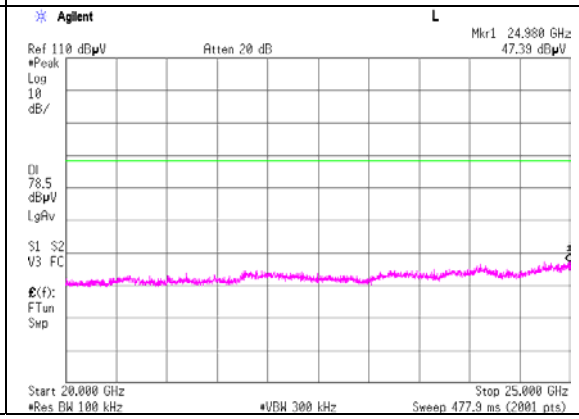
10GHz-15GHz



15GHz-20GHz

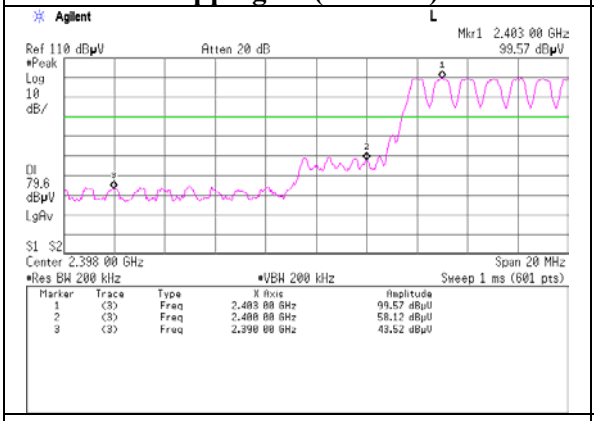


20GHz-25GHz

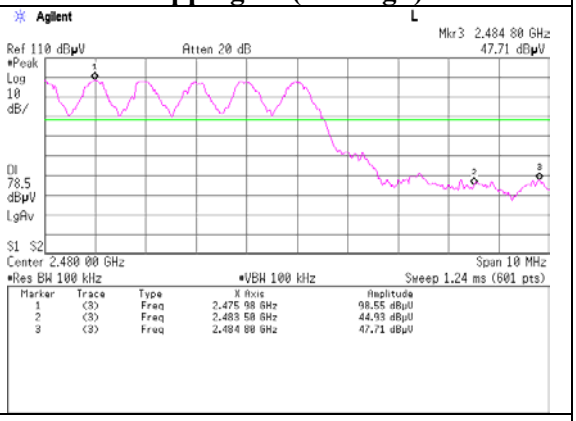


Band Edge compliance (Bluetooth)

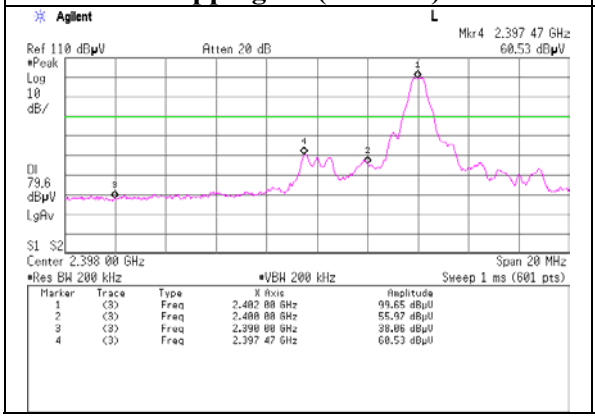
Hopping on (Ch:Low)



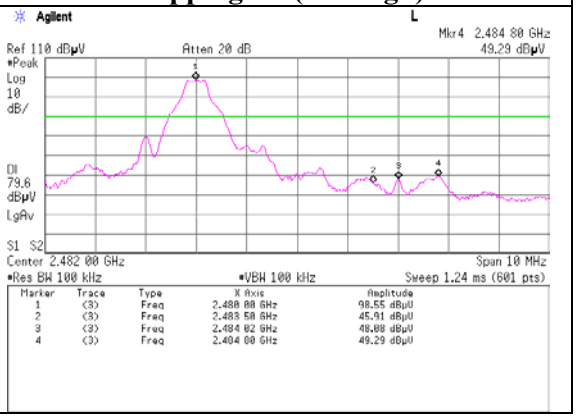
Hopping on (Ch:High)



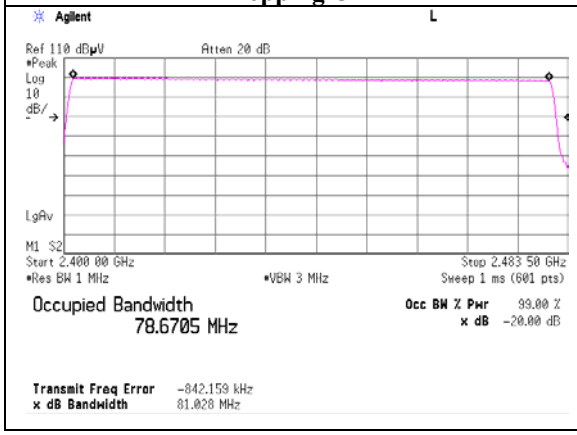
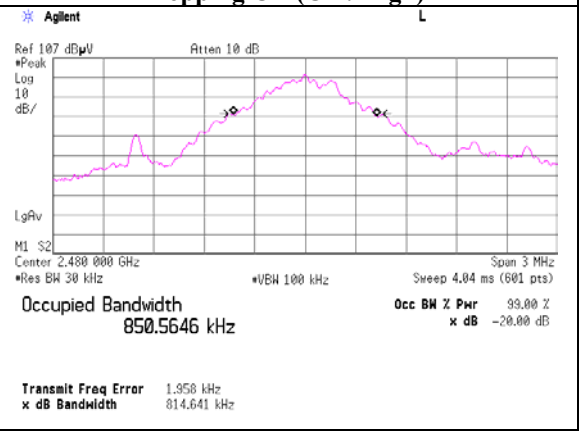
Hopping off (Ch:Low)



Hopping off (Ch:High)



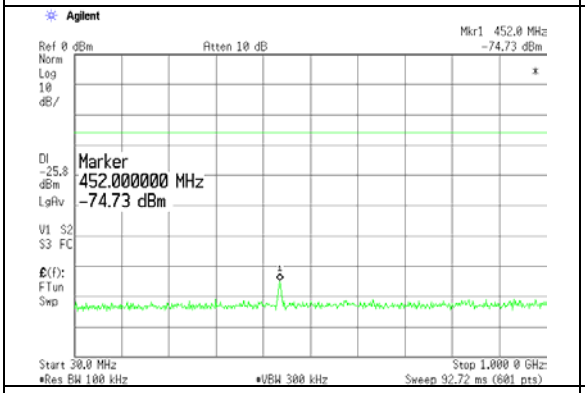
99% Occupied Bandwidth(Bluetooth)

Hopping On	Hopping Off (Ch : High)
	

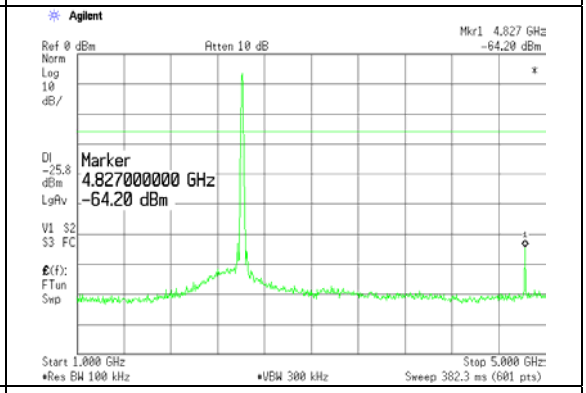
Conducted Spurious Emission(W-LAN)

Ch : Low

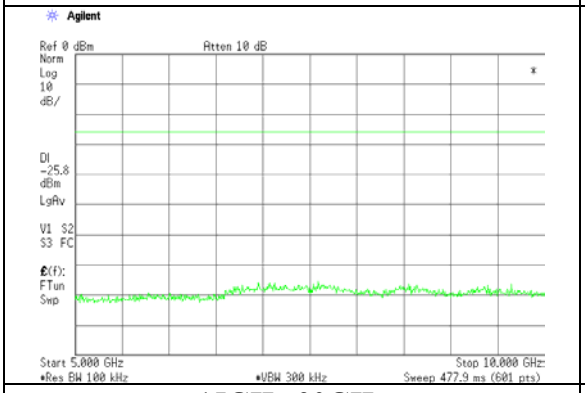
30MHz-1GHz



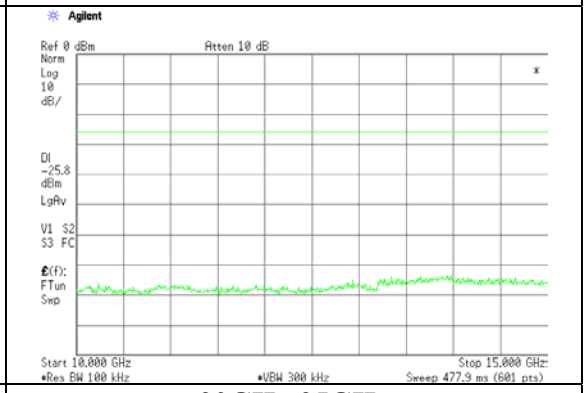
1GHz-5GHz



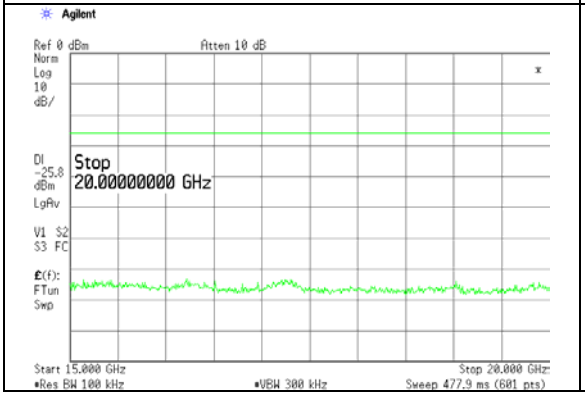
5GHz-10GHz



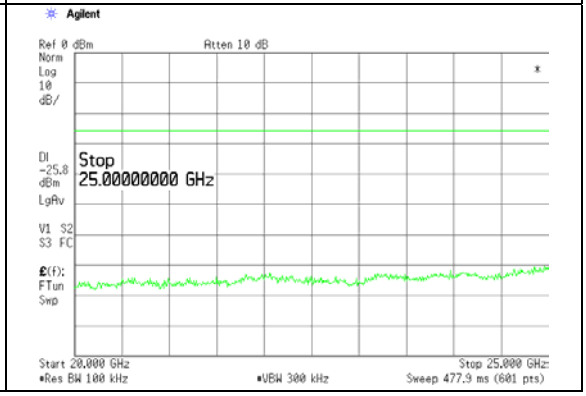
10GHz-15GHz



15GHz-20GHz



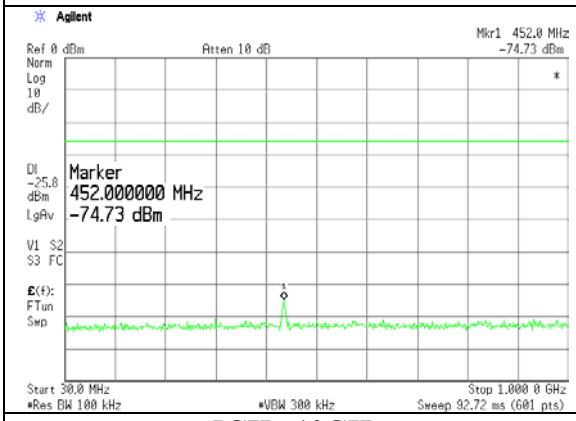
20GHz-25GHz



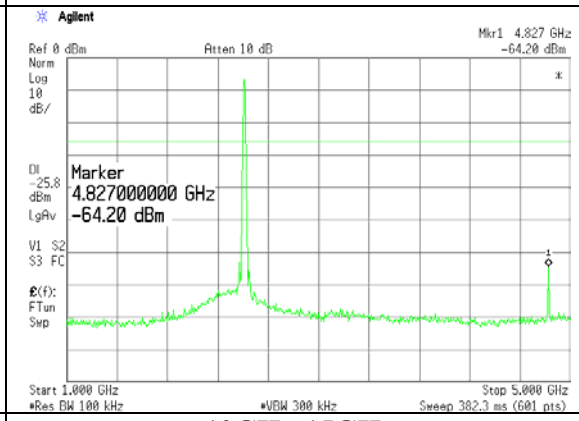
Conducted Spurious Emission(W-LAN)

Ch : Mid

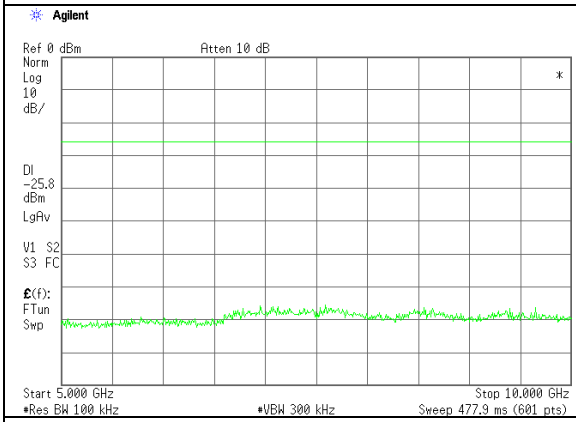
30MHz-1GHz



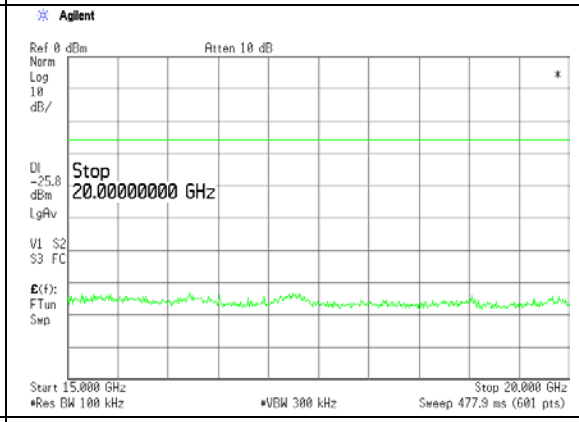
1GHz-5GHz



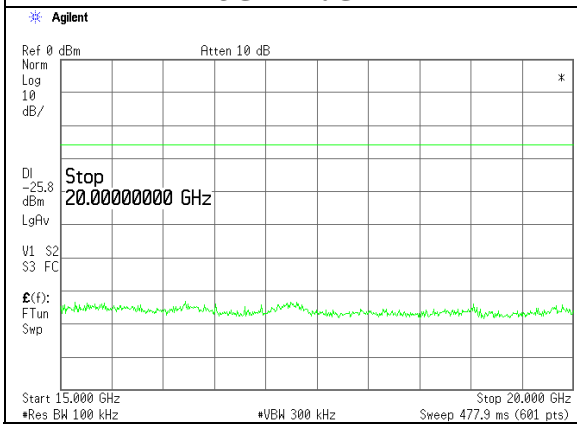
5GHz-10GHz



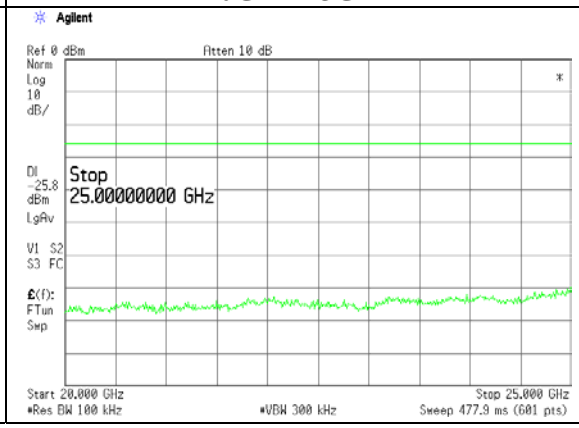
10GHz-15GHz



15GHz-20GHz



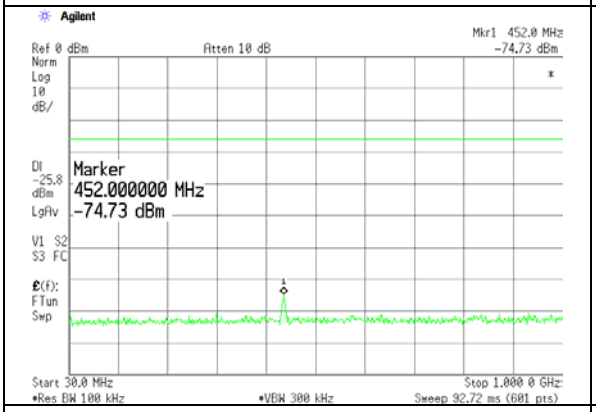
20GHz-25GHz



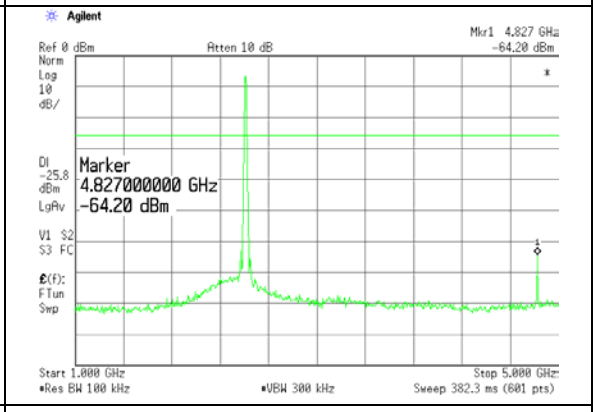
Conducted Spurious Emission(W-LAN)

Ch : High

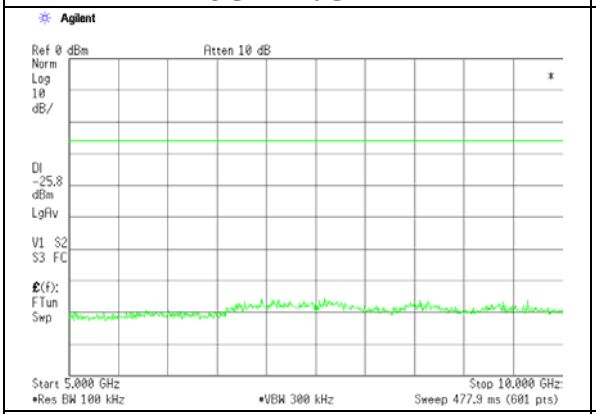
30MHz-1GHz



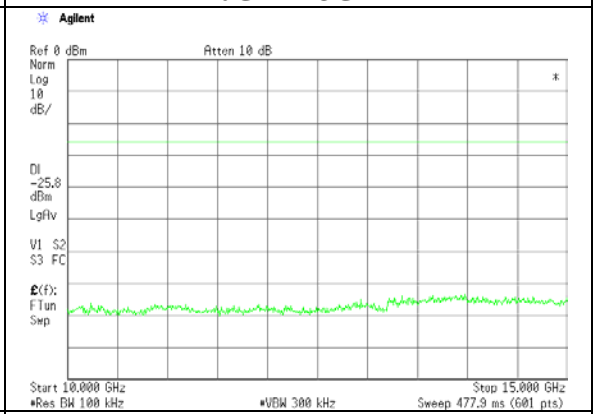
1GHz-5GHz



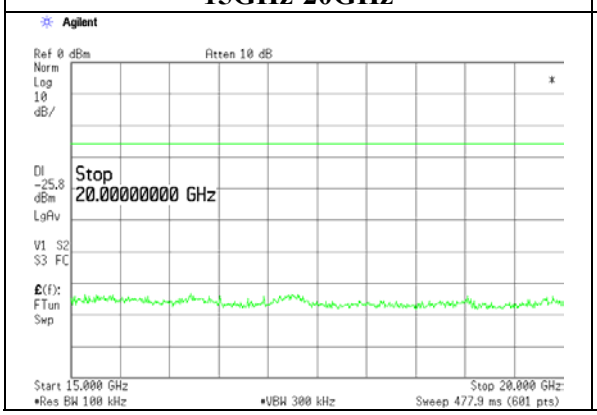
5GHz-10GHz



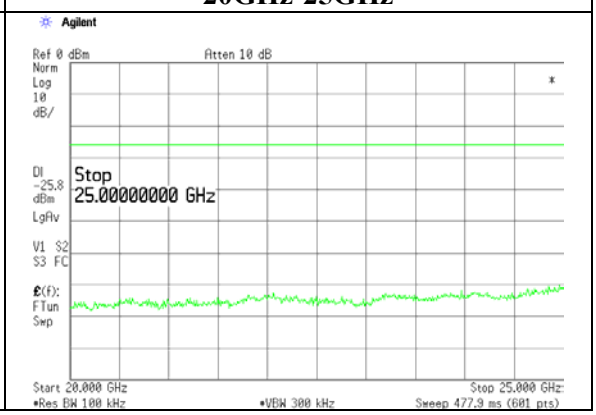
10GHz-15GHz



15GHz-20GHz

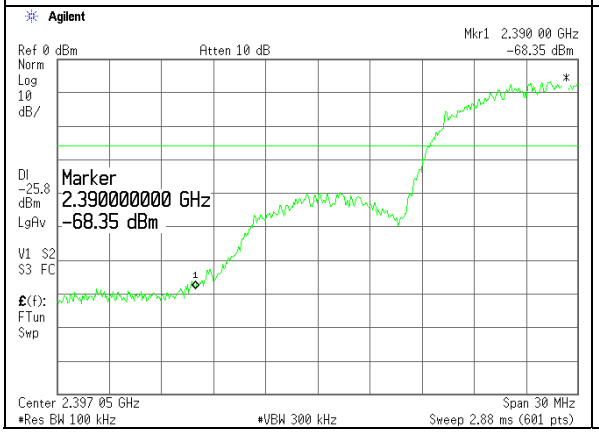


20GHz-25GHz

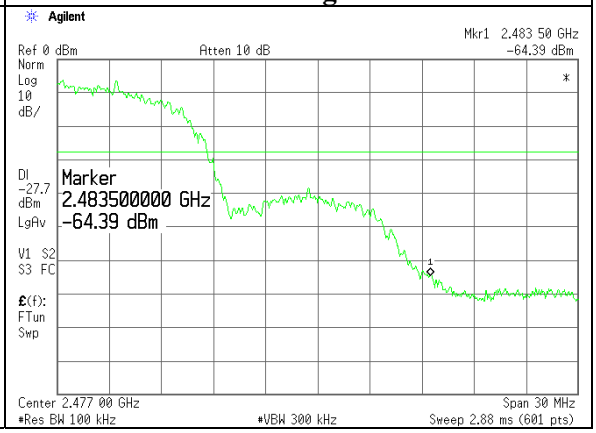


Band Edge compliance (W-LAN)

Ch:Low



Ch:High



Power Density (W-LAN)

UL Apex Co., Ltd.
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Roo

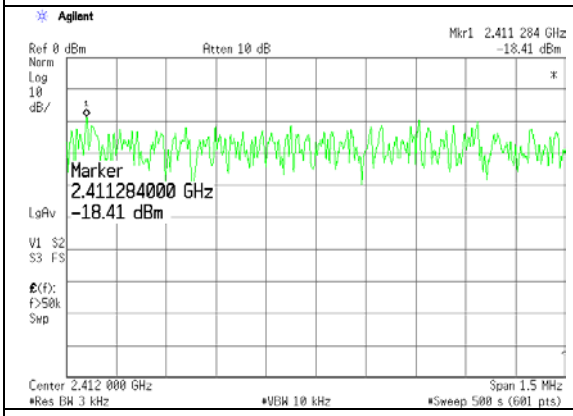
Company	: DENSO WAVE INCORPORATED	REPORT NO	: 25HE0109-HO
Equipment	: Handy Terminal	REGULATION	: Fcc Part15 Subpart C 15.247(d
Model	: BHT-300QWB	TEST DISTANCE	: -
Sample No.	: 549690004450027	DATE	: 06/19/2005
Power	: AC120V/60Hz	TEMPERATURE	: 21℃
Mode	: Tx 11b 11Mbps 2412/2437/2462MHz	HUMIDITY	: 53%
		ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2411.2	-18.41	0.88	10.00	-7.53	8.00	15.53
Mid	2436.2	-18.91	1.06	10.00	-7.85	8.00	15.85
High	2461.2	-19.57	1.23	10.00	-8.34	8.00	16.34

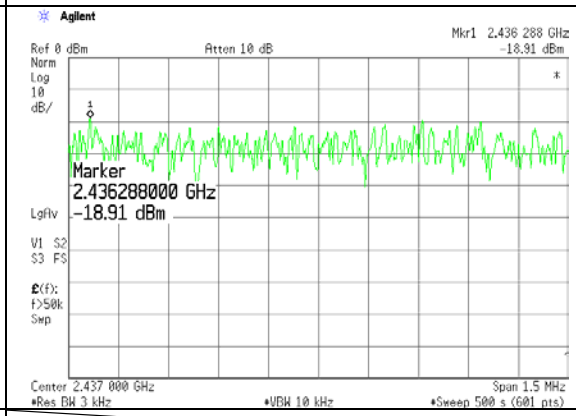
Sample Calculation:
Result = Reading + Cable Loss (spplied by customer) + Attenuator

Power Density(W-LAN)

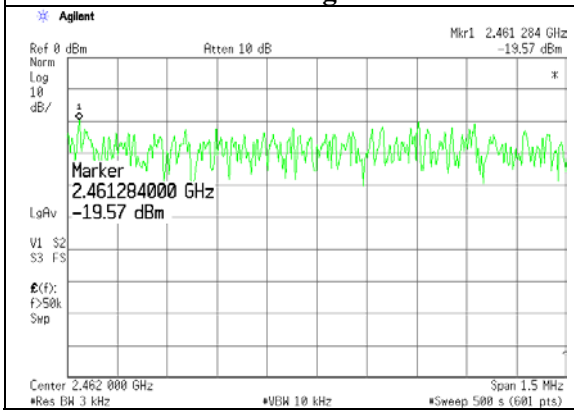
Ch:Low



Ch:Mid

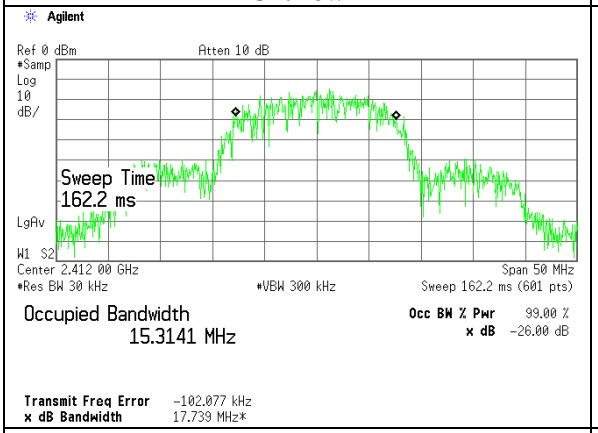


Ch:High

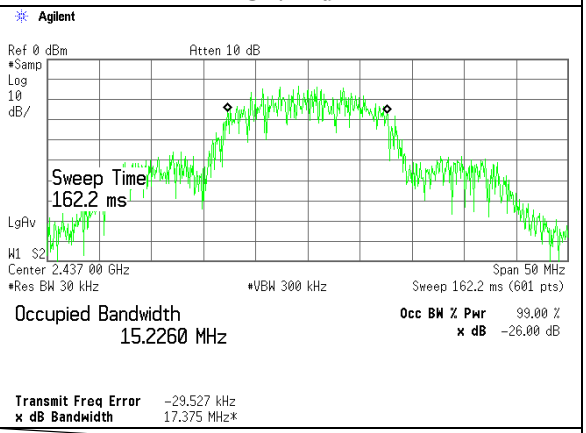


99%Occupied Bandwidth(W-LAN)

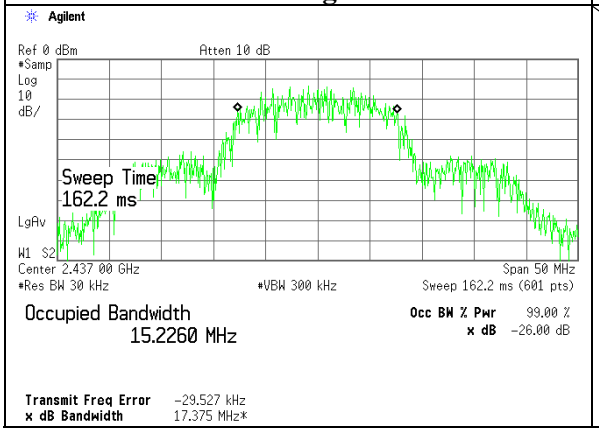
Ch:Low



Ch:Mid



Ch:High



Duty cycle correction factor

§ 15.35 Duty cycle correction factor

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

COMPANY	: DENSO WAVE INCORPORATED	REGULATION	: Fcc Part15 Subpart C 15.35
EQUIPMENT	: Handy Terminal	TEST DISTANCE	: -
MODEL	: BHT-300QWB	DATE	: 04/04/2005
S/ N	: 549690004450027	TEMPERATURE	: 23deg.C
POWER	: DC 3.3 V	HUMIDITY	: 34%
MODE	: Tx (Hopping on) DH5	ENGINEER	: Norihisa Hashimoto

(DH5) times	Number of Hoppings	Length of transmission time [msec]	Dwell time [msec]	Result [dB]	Duty Factor [dB]
1 to 5	1, 1, 1, 1, 1	100.000	3.000	-30.5	-30.5
Averege	1				

Result : 20log (Dwell Time/100ms)