

APPENDIX 2: Data of EMI test

Conducted Emission

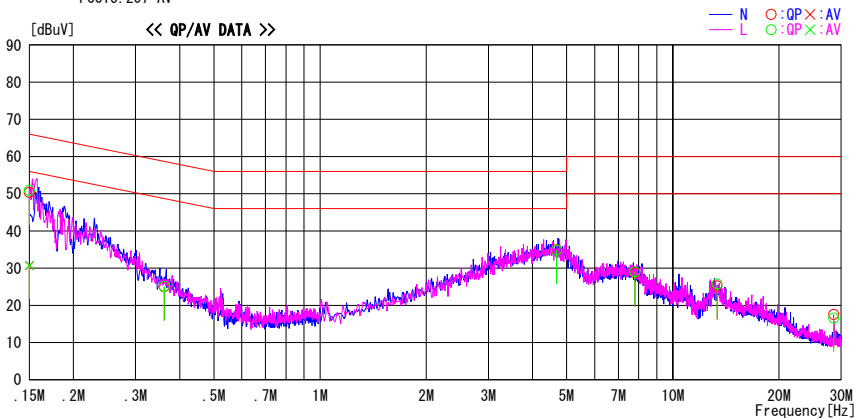
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2007/02/08

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BW-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg.C / 29%
Operator : Makoto Kosaka

Mode / Remarks : Tx 11b 11Mbps Low(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.15000	50.2	30.5	0.2	50.4	30.7	66.0	56.0	15.6	25.3	N
0.36200	24.8	---	0.2	25.0	---	58.7	---	33.7	---	N
4.68000	34.2	---	0.7	34.9	---	56.0	---	21.1	---	N
7.80000	27.7	---	1.0	28.7	---	60.0	---	31.3	---	N
13.33000	23.8	---	1.5	25.3	---	60.0	---	34.7	---	N
28.59000	15.7	---	1.9	17.6	---	60.0	---	42.4	---	N
0.15000	50.7	30.6	0.2	50.9	30.8	66.0	56.0	15.1	25.2	L
0.36200	24.9	---	0.2	25.1	---	58.7	---	33.6	---	L
4.68000	34.1	---	0.7	34.8	---	56.0	---	21.2	---	L
7.80000	28.0	---	1.0	29.0	---	60.0	---	31.0	---	L
13.33000	24.2	---	1.5	25.7	---	60.0	---	34.3	---	L
28.59000	14.7	---	1.9	16.6	---	60.0	---	43.4	---	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.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/08

Company : DENSO WAVE INCORPORATED
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Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg. C / 29%
Operator : Makoto Kosaka

Mode / Remarks : Tx 11b 11Mbps Mid(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

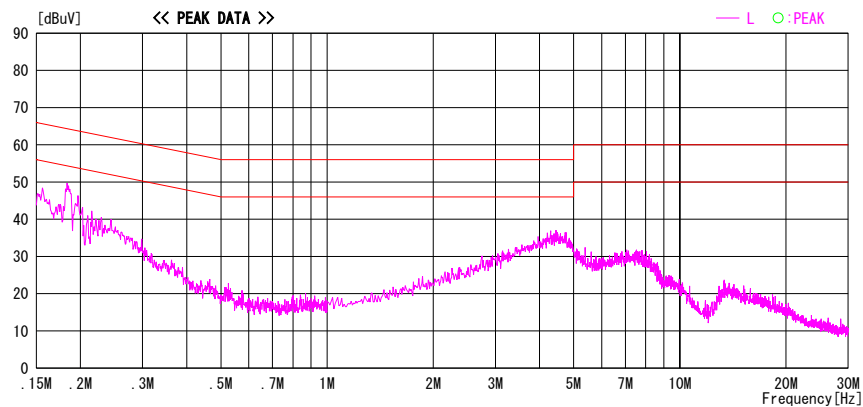
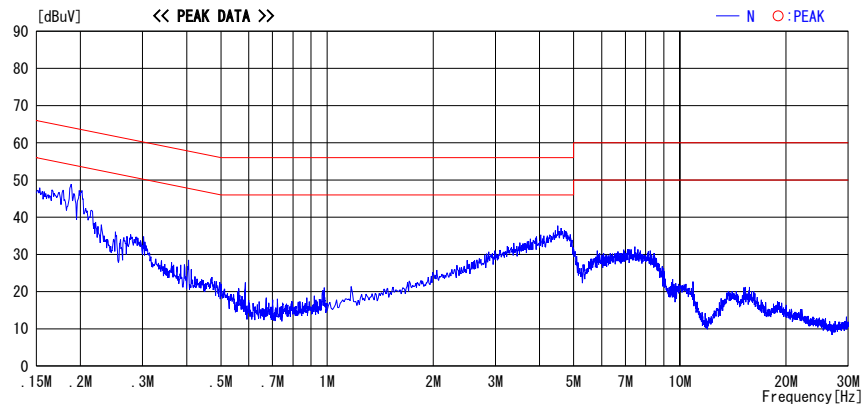


CHART:WITH FACTOR, Peak hold data, Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/08

Company	: DENSO WAVE INCORPORATED	Report No.	: 27DE0137-HO
Kind of EUT	: Barcode Handy Terminal	Power	: AC120V / 60Hz
Model No.	: BHT-470BWB-CE	Temp./Humi.	: 23deg. C / 29%
Serial No.	: 5496310346600007	Operator	: Makoto Kosaka

Mode / Remarks : Tx 11b 11Mbps High (with CU-421 (USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

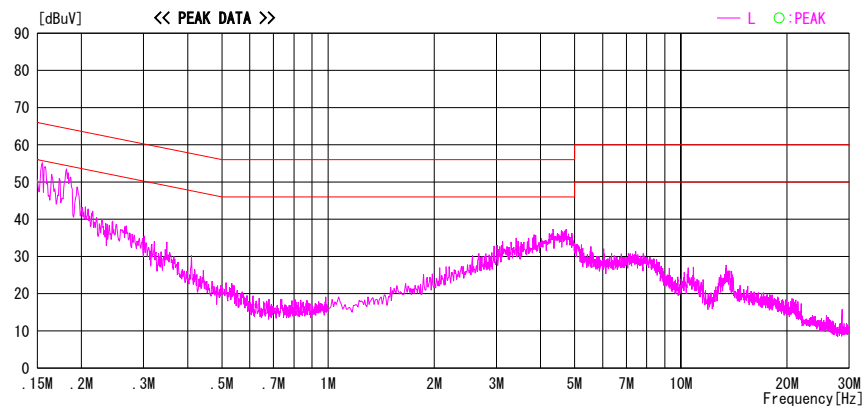
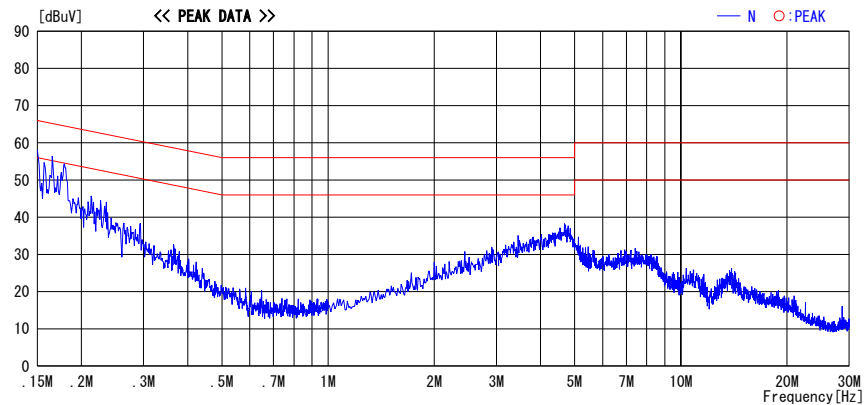


CHART:WITH FACTOR, Peak hold data, Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2007/02/08

Company

Kind of EUT

Model No.

Serial No.

: DENSO WAVE INCORPORATED

: Barcode Handy Terminal

: BHT-470BWB-CE

: 5496310346600007

Report No.

Power

Temp./Humi.

Operator

: 27DE0137-H0

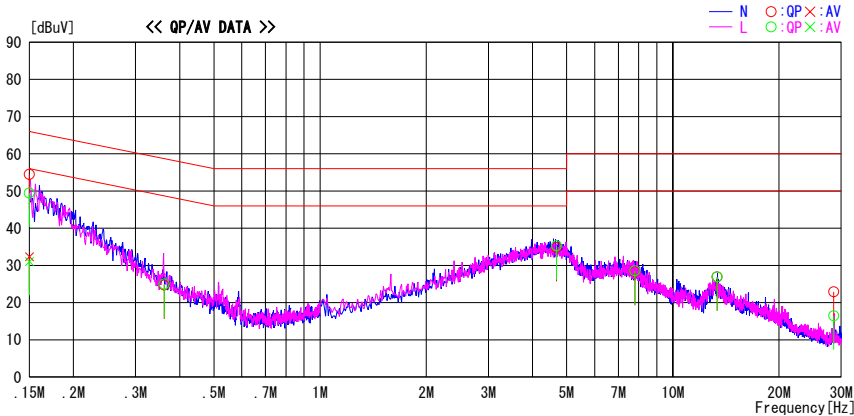
: AC120V / 60Hz

: 23deg. C / 29%

: Makoto Kosaka

Mode / Remarks : Tx 11g 54Mbps Low(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP	AV		QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	54.3	32.1	0.2	54.5	32.3	66.0	56.0	11.5	23.7	N
0.15000	49.3	30.9	0.2	49.5	31.1	66.0	56.0	16.5	24.9	L
0.36200	24.5	---	0.2	24.7	---	58.7	---	34.0	---	N
0.36200	24.8	---	0.2	25.0	---	58.7	---	33.7	---	L
4.68000	34.1	---	0.7	34.8	---	56.0	---	21.2	---	N
4.68000	34.6	---	0.7	35.3	---	56.0	---	20.7	---	L
7.80000	27.6	---	1.0	28.6	---	60.0	---	31.4	---	L
7.80000	27.4	---	1.0	28.4	---	60.0	---	31.6	---	N
13.33000	25.4	---	1.5	26.9	---	60.0	---	33.1	---	L
13.33000	25.4	---	1.5	26.9	---	60.0	---	33.1	---	N
28.59000	14.6	---	1.9	16.5	---	60.0	---	43.5	---	L
28.59000	21.0	---	1.9	22.9	---	60.0	---	37.1	---	N

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.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/08

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg. C / 29%
Operator : Makoto Kosaka

Mode / Remarks : Tx 11g 54Mbps Mid(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

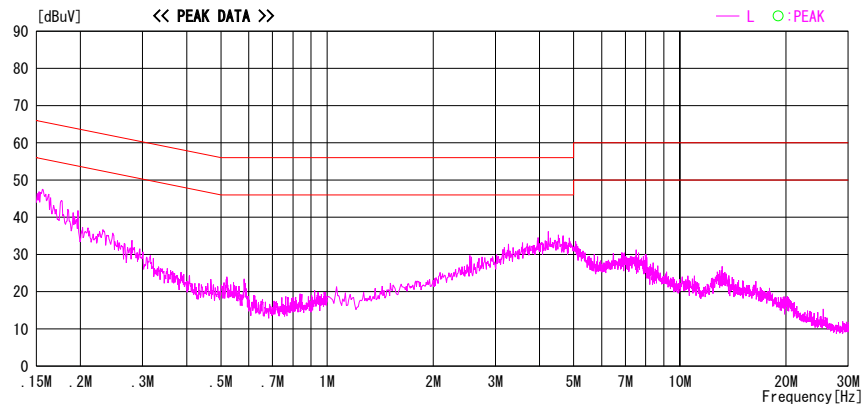
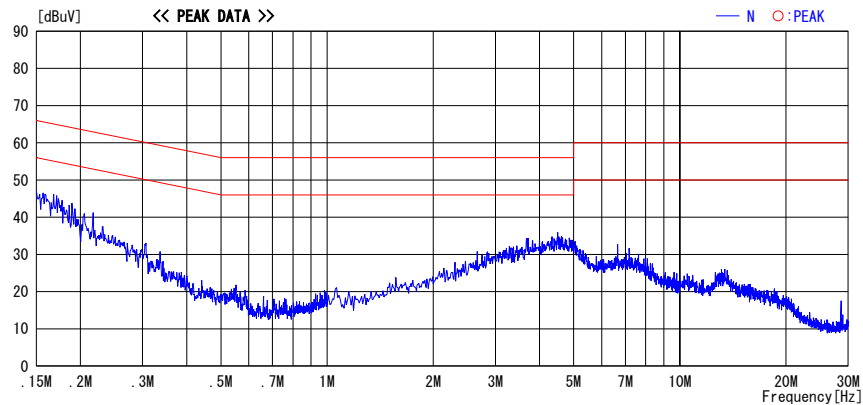


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/08

Company	: DENSO WAVE INCORPORATED	Report No.	: 27DE0137-HO
Kind of EUT	: Barcode Handy Terminal	Power	: AC120V / 60Hz
Model No.	: BHT-470BWB-CE	Temp./Humi.	: 23deg. C / 29%
Serial No.	: 5496310346600007	Operator	: Makoto Kosaka

Mode / Remarks : Tx 11g 54Mbps High (with CU-421 (USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

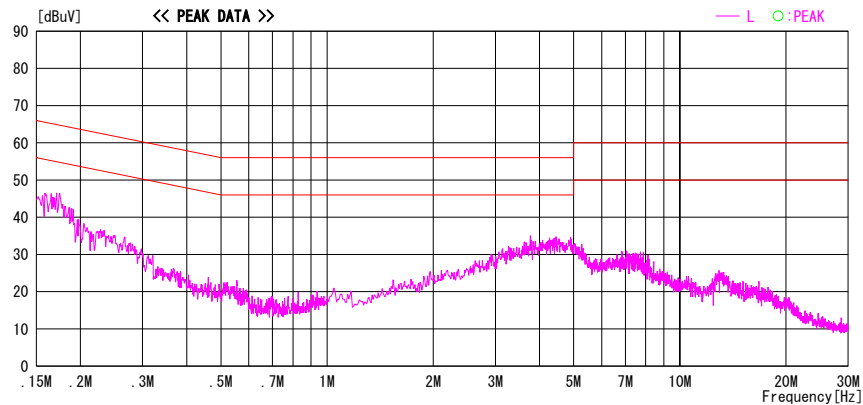
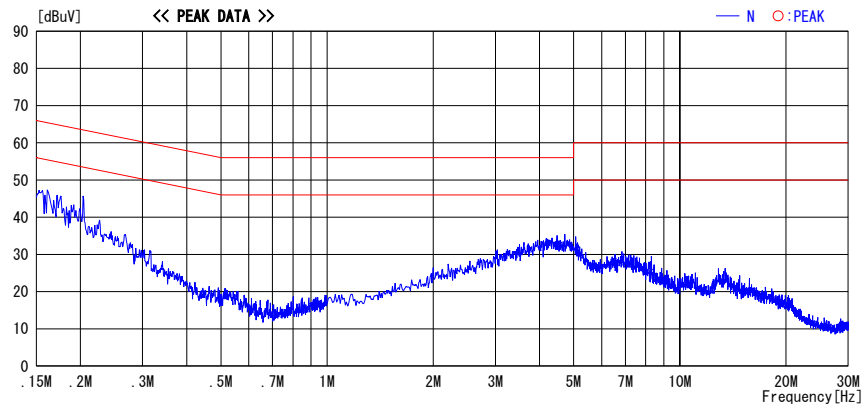


CHART: WITH FACTOR. Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/09

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007

Report No. : 27DE0137-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg. C / 29%
Operator : Makoto Kosaka

Mode / Remarks : Rx 11bg Mid(with CU-421 (USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

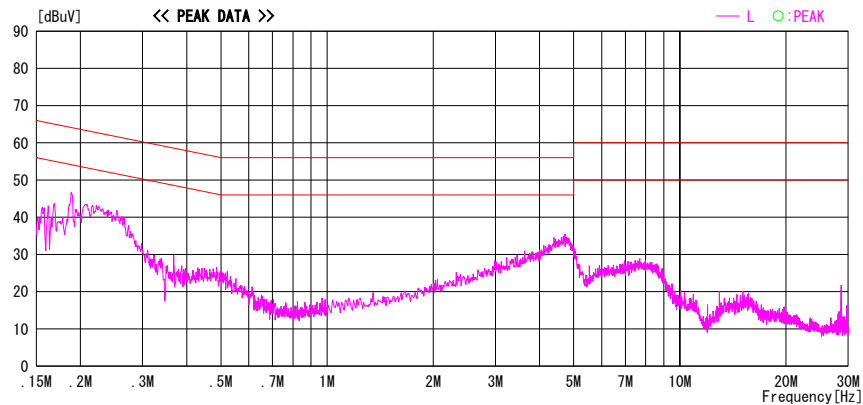
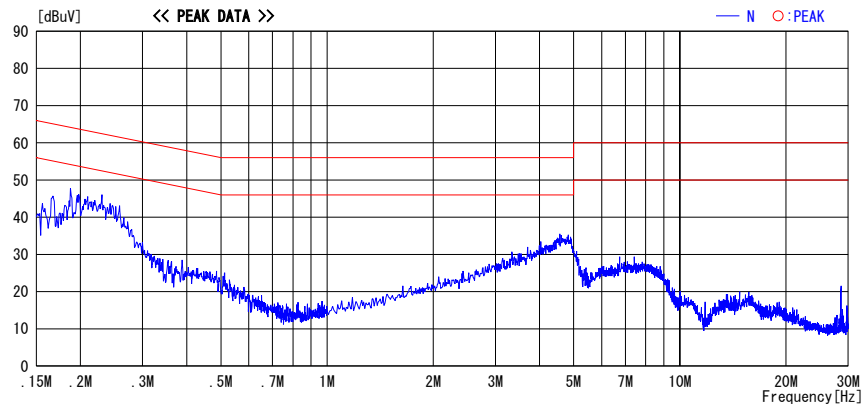


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

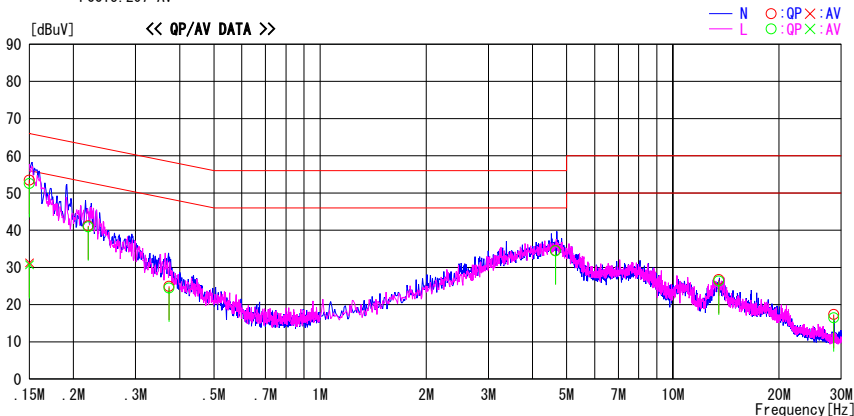
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/08

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg. C / 29%
Operator : Makoto Kosaka

Mode / Remarks : Tx BT Hop & 11b 11Mbps Mid(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP	AV		QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	53.3	31.0	0.2	53.5	31.2	66.0	56.0	12.5	24.8	N
0.22000	41.0	---	0.2	41.2	---	62.8	---	21.6	---	N
0.37300	24.7	---	0.2	24.9	---	58.4	---	33.5	---	N
4.65000	33.9	---	0.7	34.6	---	56.0	---	21.4	---	N
13.50000	25.2	---	1.5	26.7	---	60.0	---	33.3	---	N
28.59000	15.5	---	1.9	17.4	---	60.0	---	42.6	---	N
0.15000	52.4	30.5	0.2	52.6	30.7	66.0	56.0	13.4	25.3	L
0.22000	40.7	---	0.2	40.9	---	62.8	---	21.9	---	L
0.37300	24.3	---	0.2	24.5	---	58.4	---	33.9	---	L
4.65000	33.8	---	0.7	34.5	---	56.0	---	21.5	---	L
13.50000	24.9	---	1.5	26.4	---	60.0	---	33.6	---	L
28.59000	14.6	---	1.9	16.5	---	60.0	---	43.5	---	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.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2007/02/09

Company

Kind of EUT

Model No.

Serial No.

: DENSO WAVE INCORPORATED

: Barcode Handy Terminal

: BHT-470BWB-CE

: 5496310346600007

Report No.

Power

Temp./Humi.

Operator

: 27DE0137-H0

: AC120V / 60Hz

: 23deg. C / 29%

: Makoto Kosaka

Mode / Remarks : Tx BT Hop & 11g 54Mbps Mid(with CU-421(USB))

LIMIT : FCC15.207 QP
FCC15.207 AV

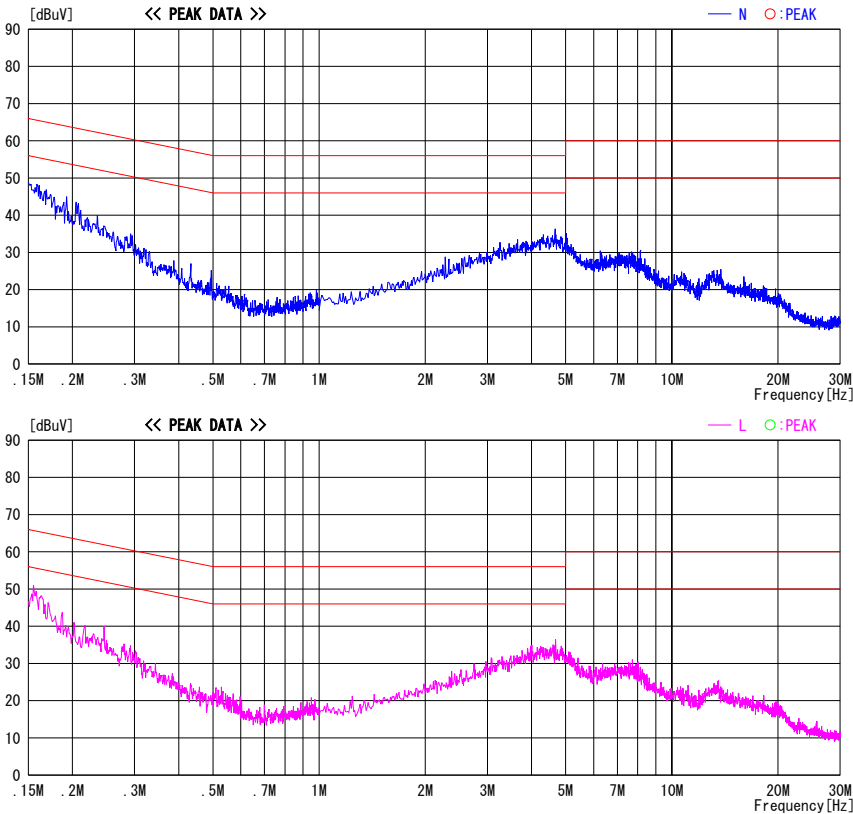


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

6dB Bandwidth

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

Company : DENSO WAVE INCORPORATED
Equipment : Barcode Handy Terminal
Model : BHT-470BWB-CE
Sample No. : 5496310346600007
Power : DC3.7V
Mode : Tx(Ch L, M, H)

REPORT NO : 27DE0137-HO
REGULATION : FCC15.247(a)(2)/RSS-210A8.2(1)
TEST DISTANCE : -
DATE : 2006/12/07
TEMPERATURE : 25deg.C.
HUMIDITY : 30%
ENGINEER : Makoto Kosaka

[IEEE802.11b: 11Mbps]

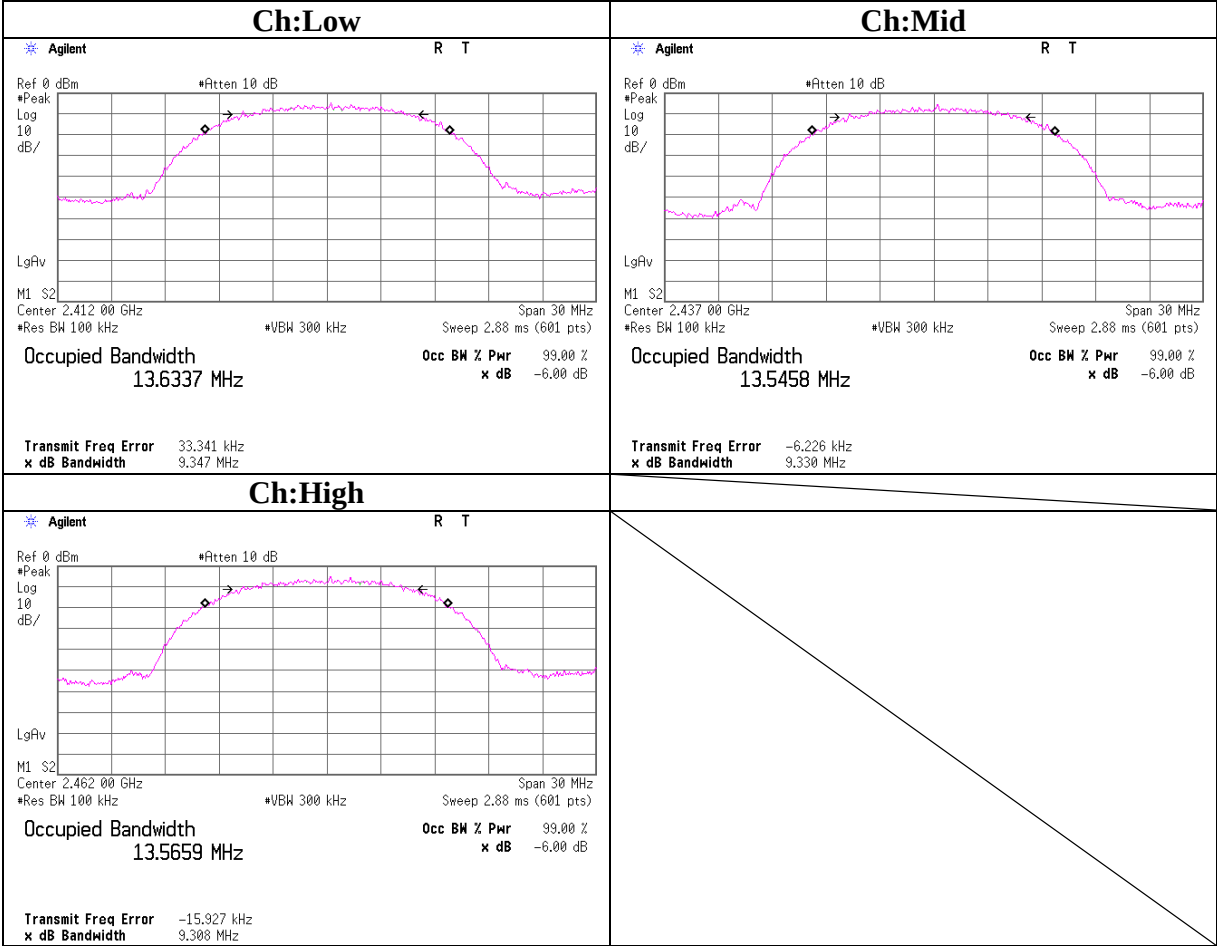
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	9.347	>500
Mid	2437.0	9.330	>500
High	2462.0	9.308	>500

[IEEE802.11g: 24Mbps]

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.490	>500
Mid	2437.0	16.500	>500
High	2462.0	16.524	>500

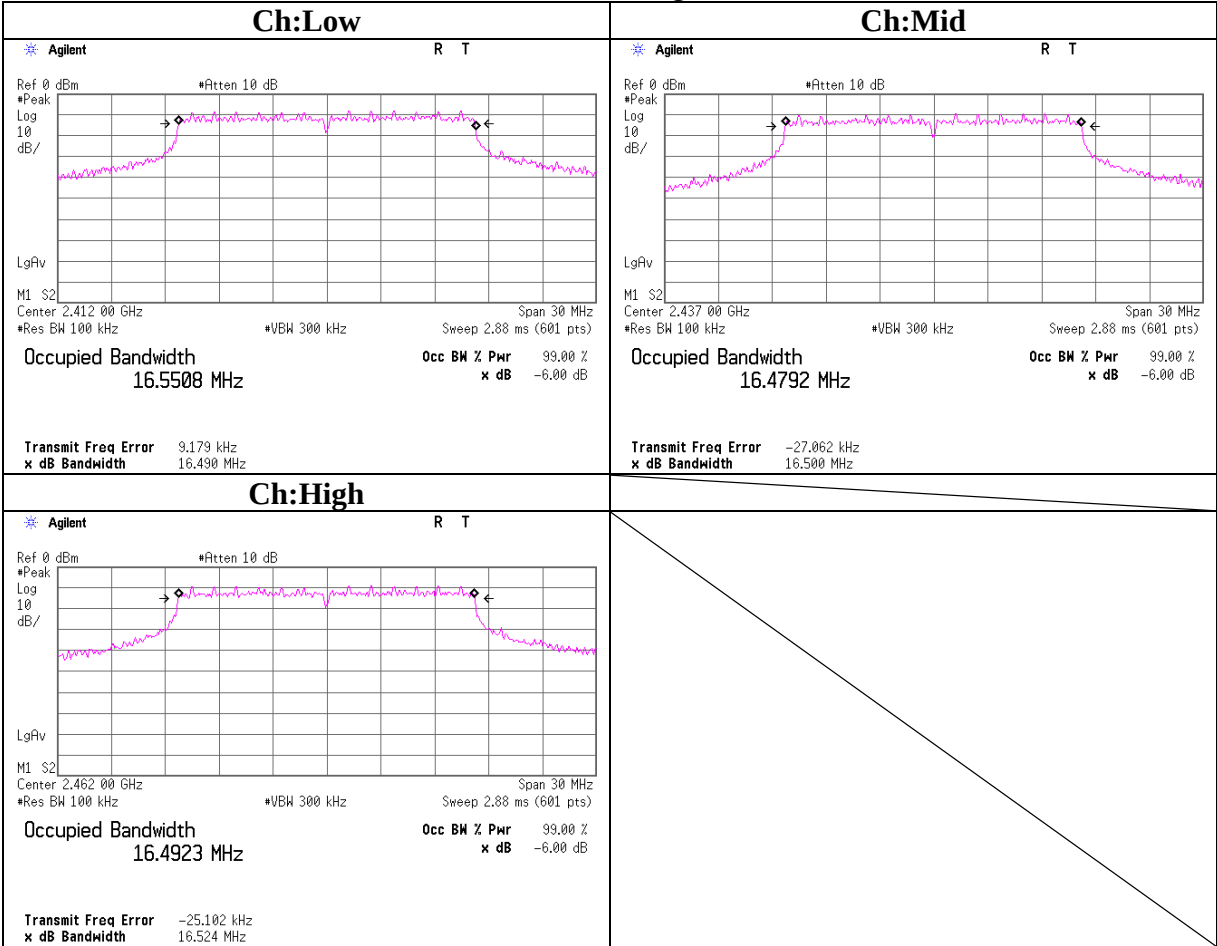
6dB Bandwidth

IEEE802.11b



6dB Bandwidth

IEEE802.11g



Maximum Peak Output Power

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(b)(3)/RSS-210 A8.4(4)
Model	: BHT-470BWB-CE	TEST DISTANCE	: -
Sample No.	: 5496310346600007	DATE	: 2006/12/07
Power	: DC3.7V	TEMPERATURE	: 25deg.C.
Mode	: Tx(Ch L, M, H)	HUMIDITY	: 30%
		ENGINEER	: Makoto Kosaka

[IEEE802.11b:11Mbps]

Ch	Freq.	P/M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]		[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	5.79	1.85	10.12	17.76	59.70	30.00	1000	12.24
Mid	2437.0	4.84	1.86	10.12	16.82	48.08	30.00	1000	13.18
High	2462.0	5.29	1.88	10.12	17.29	53.58	30.00	1000	12.71

[IEEE802.11g:24Mbps]

Ch	Freq.	P/M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]		[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	8.37	1.85	10.12	20.34	108.14	30.00	1000	9.66
Mid	2437.0	7.91	1.86	10.12	19.89	97.50	30.00	1000	10.11
High	2462.0	8.23	1.88	10.12	20.23	105.44	30.00	1000	9.77

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

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

[IEEE802.11b] Rate Check (PK)

Rate	Freq.	P/M Reading	Cable Loss	Atten.	Result		Limit		Margin
					[dBm]	[mW]	[dBm]	[mW]	
1.0	2437.0	4.42	1.86	10.12	16.40	43.65	30.00	1000	13.60
2.0	2437.0	4.11	1.86	10.12	16.09	40.64	30.00	1000	13.91
5.5	2437.0	4.42	1.86	10.12	16.40	43.65	30.00	1000	13.60
11.0	2437.0	4.84	1.86	10.12	16.82	48.08	30.00	1000	13.18

[IEEE802.11g] Rate Check (PK)

Rate	Freq.	P/M Reading	Cable Loss	Atten.	Result		Limit		Margin
					[dBm]	[mW]	[dBm]	[mW]	
6.0	2437.0	7.23	1.86	10.12	19.21	83.37	30.00	1000	10.79
9.0	2437.0	7.46	1.86	10.12	19.44	87.90	30.00	1000	10.56
12.0	2437.0	7.57	1.86	10.12	19.55	90.16	30.00	1000	10.45
18.0	2437.0	7.89	1.86	10.12	19.87	97.05	30.00	1000	10.13
24.0	2437.0	7.91	1.86	10.12	19.89	97.50	30.00	1000	10.11
36.0	2437.0	7.88	1.86	10.12	19.86	96.83	30.00	1000	10.14
48.0	2437.0	7.42	1.86	10.12	19.40	87.10	30.00	1000	10.60
54.0	2437.0	7.55	1.86	10.12	19.53	89.74	30.00	1000	10.47

Average power (Reference data for SAR testing)

Mode	Freq.	P/M AVG Reading	Cable Loss	Atten.	Result	
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]
11b (1Mbps)	2437		2.39	1.86	10.12	14.37
11g (6Mbps)	2437		0.39	1.86	10.12	12.37
						17.26

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Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

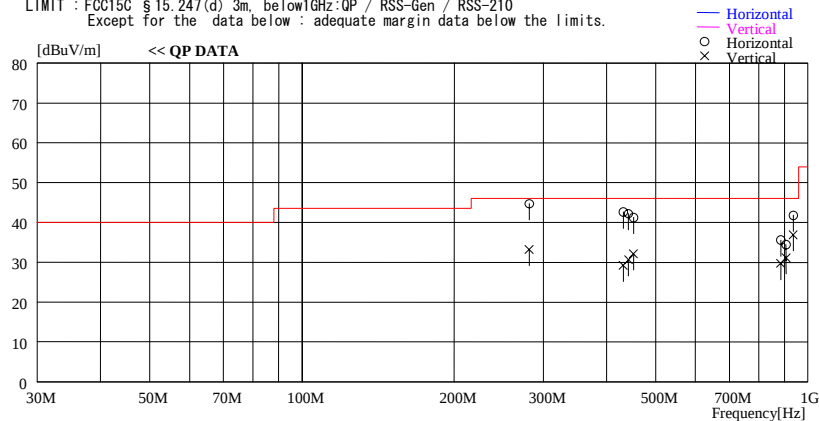
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 10:52:13

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : DC 3.7V
Temp./Humi. : 20deg.C. / 40%
Operator : Makoto Kosaka

Mode / Remarks: WLAN 11b Lch 11Mbps Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
281.373	47.5	QP	19.6	-22.4	44.7	Hori.	46.0	1.3
281.373	36.0	QP	19.6	-22.4	33.2	Vert.	46.0	12.8
431.590	45.9	QP	18.2	-21.5	42.6	Hori.	46.0	3.4
431.590	32.5	QP	18.2	-21.5	29.2	Vert.	46.0	16.8
441.987	45.4	QP	18.3	-21.5	42.2	Hori.	46.0	3.8
441.987	33.8	QP	18.3	-21.5	30.6	Vert.	46.0	15.4
452.387	44.4	QP	18.3	-21.5	41.2	Hori.	46.0	4.8
452.387	35.3	QP	18.3	-21.5	32.1	Vert.	46.0	13.9
883.973	32.4	QP	21.6	-18.4	35.6	Hori.	46.0	10.4
883.973	26.5	QP	21.6	-18.4	29.7	Vert.	46.0	16.3
905.921	27.7	QP	21.6	-18.2	31.1	Vert.	46.0	14.9
905.921	31.0	QP	21.6	-18.2	34.4	Hori.	46.0	11.6
935.970	32.5	QP	22.3	-17.9	36.9	Vert.	46.0	9.1
935.970	37.4	QP	22.3	-17.9	41.8	Hori.	46.0	4.2

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

UL Apex Co., Ltd.
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4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

MF060b(14.06.06)

Test report No. : 27DE0137-HO-A-1
Page : 31 of 66
Issued date : March 14, 2007
Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

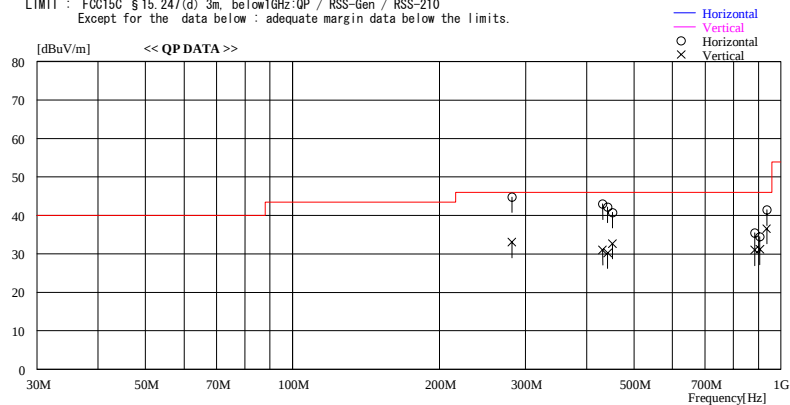
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 12:50:34

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-4708WB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-H0
Power : DC 3.7V
Temp./Humi. : 20deg. C. / 40%
Operator : Makoto Kosaka

Mode / Remarks : WLAN 11b Mch 11Mbps Max axis (Hor:X, Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna		Level	Polar.	Limit	Margin
			Factor	Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
281.369	47.6	QP	19.6	-22.4	44.8	Hori.	46.0	1.2
281.369	35.8	QP	19.6	-22.4	33.0	Vert.	46.0	13.0
431.586	46.3	QP	18.2	-21.5	43.0	Hori.	46.0	3.0
431.586	34.4	QP	18.2	-21.5	31.1	Vert.	46.0	14.9
441.987	45.4	QP	18.3	-21.5	42.2	Hori.	46.0	3.8
441.987	33.4	QP	18.3	-21.5	30.2	Vert.	46.0	15.8
452.385	43.9	QP	18.3	-21.5	40.7	Hori.	46.0	5.3
452.385	35.9	QP	18.3	-21.5	32.7	Vert.	46.0	13.3
883.973	32.2	QP	21.6	-18.4	35.4	Hori.	46.0	10.6
883.973	27.8	QP	21.6	-18.4	31.0	Vert.	46.0	15.0
905.922	31.0	QP	21.6	-18.2	34.4	Hori.	46.0	11.6
905.922	27.8	QP	21.6	-18.2	31.2	Vert.	46.0	14.8
935.970	32.2	QP	22.3	-17.9	36.6	Vert.	46.0	9.4
935.970	37.1	QP	22.3	-17.9	41.5	Hori.	46.0	4.5

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

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MF060b(14.06.06)

Test report No. : 27DE0137-HO-A-1
Page : 32 of 66
Issued date : March 14, 2007
Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

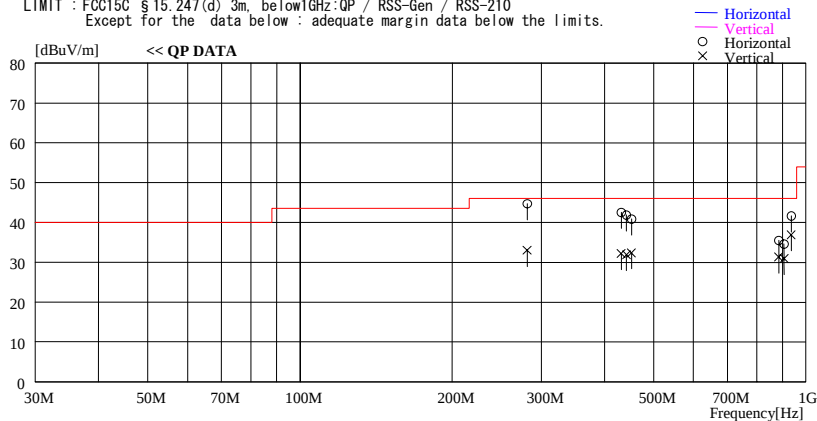
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 14:00:59

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : DC 3.7V
Temp./Humi. : 20deg.C. / 40%
Operator : Makoto Kosaka

Mode / Remarks: WLAN 11b Hch 11Mbps Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
281.371	47.5	QP	19.6	-22.4	44.7	Hori.	46.0	1.3
281.371	35.8	QP	19.6	-22.4	33.0	Vert.	46.0	13.0
431.581	45.8	QP	18.2	-21.5	42.5	Hori.	46.0	3.5
431.581	35.5	QP	18.2	-21.5	32.2	Vert.	46.0	13.8
441.983	45.1	QP	18.3	-21.5	41.9	Hori.	46.0	4.1
441.983	35.1	QP	18.3	-21.5	31.9	Vert.	46.0	14.1
452.382	44.0	QP	18.3	-21.5	40.8	Hori.	46.0	5.2
452.382	35.6	QP	18.3	-21.5	32.4	Vert.	46.0	13.6
883.978	32.3	QP	21.6	-18.4	35.5	Hori.	46.0	10.5
883.978	28.1	QP	21.6	-18.4	31.3	Vert.	46.0	14.7
905.921	31.2	QP	21.6	-18.2	34.6	Hori.	46.0	11.4
905.921	27.5	QP	21.6	-18.2	30.9	Vert.	46.0	15.1
935.970	37.2	QP	22.3	-17.9	41.6	Hori.	46.0	4.4
935.970	32.5	QP	22.3	-17.9	36.9	Vert.	46.0	9.1

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

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MF060b(14.06.06)

Radiated Spurious Emission (below 1GHz)

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

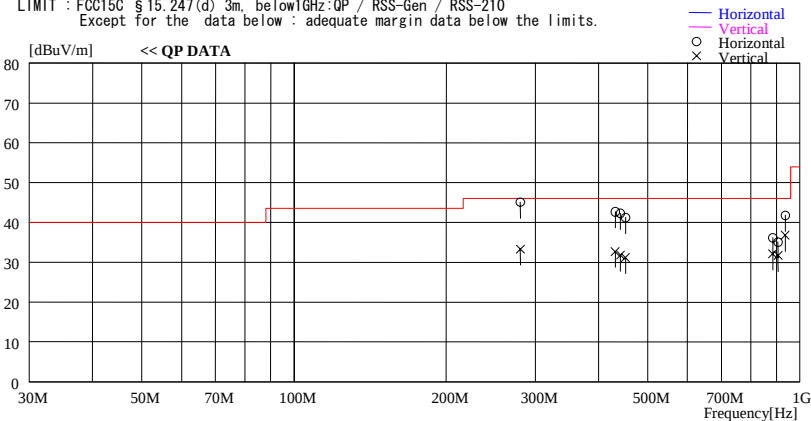
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 15:06:59

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-H0
Power : DC 3.7V
Temp./Humi. : 20deg.C. / 40%
Operator : Makoto Kosaka

Mode / Remarks: WLAN 11g Lch 54Mbps Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		Factor	Gain	[dBuV/m]		[dBuV/m]	[dB]
280.223	47.9	QP	19.6	-22.4	45.1	Hori.	46.0	0.9
280.223	36.1	QP	19.6	-22.4	33.3	Vert.	46.0	12.7
431.584	46.0	QP	18.2	-21.5	42.7	Hori.	46.0	3.3
431.584	36.0	QP	18.2	-21.5	32.7	Vert.	46.0	13.3
441.986	45.5	QP	18.3	-21.5	42.3	Hori.	46.0	3.7
441.986	35.0	QP	18.3	-21.5	31.8	Vert.	46.0	14.2
452.382	44.4	QP	18.3	-21.5	41.2	Hori.	46.0	4.8
452.382	34.4	QP	18.3	-21.5	31.2	Vert.	46.0	14.8
883.972	32.9	QP	21.6	-18.4	36.1	Hori.	46.0	9.9
883.972	28.9	QP	21.6	-18.4	32.1	Vert.	46.0	13.9
905.924	31.7	QP	21.6	-18.2	35.1	Hori.	46.0	10.9
905.924	28.3	QP	21.6	-18.2	31.7	Vert.	46.0	14.3
935.971	37.4	QP	22.3	-17.9	41.8	Hori.	46.0	4.2
935.971	32.4	QP	22.3	-17.9	36.8	Vert.	46.0	9.2

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

Test report No. : 27DE0137-HO-A-1
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Issued date : March 14, 2007
Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

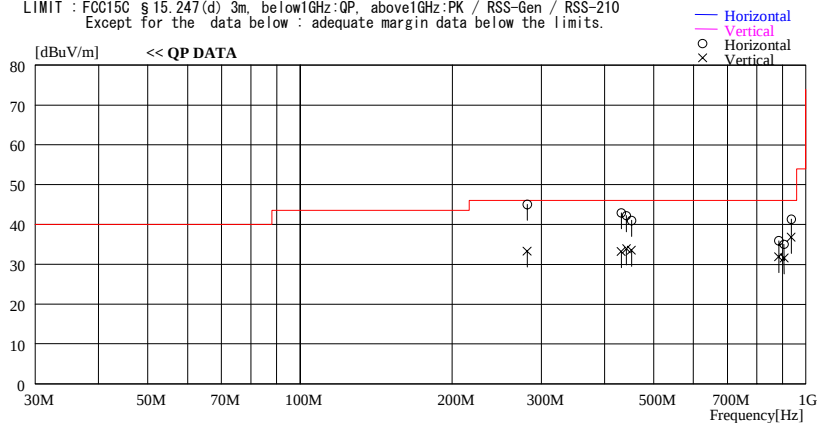
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 16:15:57

Company : DENSO WAVE INCORPORATED Report No. : 27DE0137-HO
Kind of EUT : Barcode Handy Terminal Power : DC 3.7V
Model No. : BHT-470BWB-CE Temp./Humi. : 20deg.C. / 40%
Serial No. : 5496310346600007 Operator : Makoto Kosaka

Mode / Remarks: WLAN 11g Mch 54Mbps Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
281.374	47.8	QP	19.6	-22.4	45.0	Hori.	46.0	1.0
281.374	36.1	QP	19.6	-22.4	33.3	Vert.	46.0	12.7
431.586	46.2	QP	18.2	-21.5	42.9	Hori.	46.0	3.1
431.586	36.5	QP	18.2	-21.5	33.2	Vert.	46.0	12.8
441.987	45.4	QP	18.3	-21.5	42.2	Hori.	46.0	3.8
441.987	37.1	QP	18.3	-21.5	33.9	Vert.	46.0	12.1
452.384	44.2	QP	18.3	-21.5	41.0	Hori.	46.0	5.0
452.384	36.7	QP	18.3	-21.5	33.5	Vert.	46.0	12.5
883.970	32.7	QP	21.6	-18.4	35.9	Hori.	46.0	10.1
883.970	28.7	QP	21.6	-18.4	31.9	Vert.	46.0	14.1
905.924	28.2	QP	21.6	-18.2	31.6	Vert.	46.0	14.4
905.924	31.6	QP	21.6	-18.2	35.0	Hori.	46.0	11.0
935.968	36.9	QP	22.3	-17.9	41.3	Hori.	46.0	4.7
935.968	32.4	QP	22.3	-17.9	36.8	Vert.	46.0	9.2

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

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MF060b(14.06.06)

Test report No. : 27DE0137-HO-A-1
Page : 35 of 66
Issued date : March 14, 2007
Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

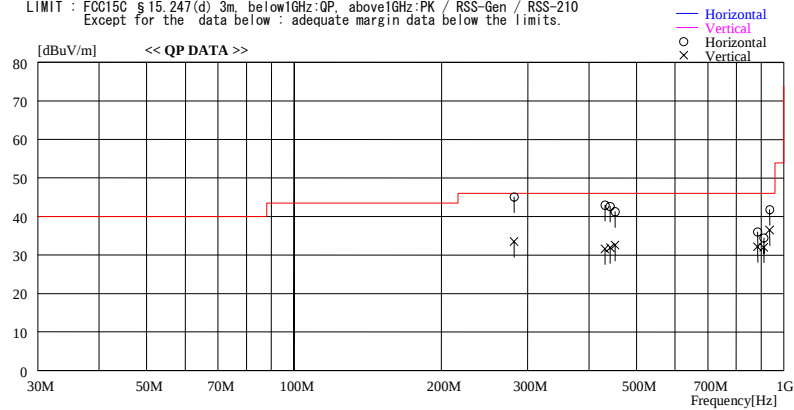
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 17:26:53

Company : DENSO WAVE INCORPORATED Report No. : 27DE0137-HO
Kind of EUT : Barcode Handy Terminal Power : DC 3.7V
Model No. : BHT-4708WB-GE Temp./Humi. : 20deg. C. / 40%
Serial No. : 5496310346600007 Operator : Makoto Kosaka

Mode / Remarks : WLAN 11g Hch 54Mbps Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna		Level	Polar.	Limit	Margin
			Factor	Loss&Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
281.372	47.8	QP	19.6	-22.4	45.0	Hori.	46.0	1.0
281.372	36.3	QP	19.6	-22.4	33.5	Vert.	46.0	12.5
431.591	46.2	QP	18.2	-21.5	42.9	Hori.	46.0	3.1
431.591	34.9	QP	18.2	-21.5	31.6	Vert.	46.0	14.4
441.985	45.8	QP	18.3	-21.5	42.6	Hori.	46.0	3.4
441.985	35.1	QP	18.3	-21.5	31.9	Vert.	46.0	14.1
452.382	44.4	QP	18.3	-21.5	41.2	Hori.	46.0	4.8
452.382	35.7	QP	18.3	-21.5	32.5	Vert.	46.0	13.5
883.969	32.8	QP	21.6	-18.4	36.0	Hori.	46.0	10.0
883.969	28.9	QP	21.6	-18.4	32.1	Vert.	46.0	13.9
909.968	30.9	QP	21.7	-18.2	34.4	Hori.	46.0	11.6
909.968	28.5	QP	21.7	-18.2	32.0	Vert.	46.0	14.0
935.972	37.4	QP	22.3	-17.9	41.8	Hori.	46.0	4.2
935.972	32.1	QP	22.3	-17.9	36.5	Vert.	46.0	9.5

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

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MF060b(14.06.06)

Test report No. : 27DE0137-HO-A-1
Page : 36 of 66
Issued date : March 14, 2007
Revised date : March 22, 2007
FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (below 1GHz)

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

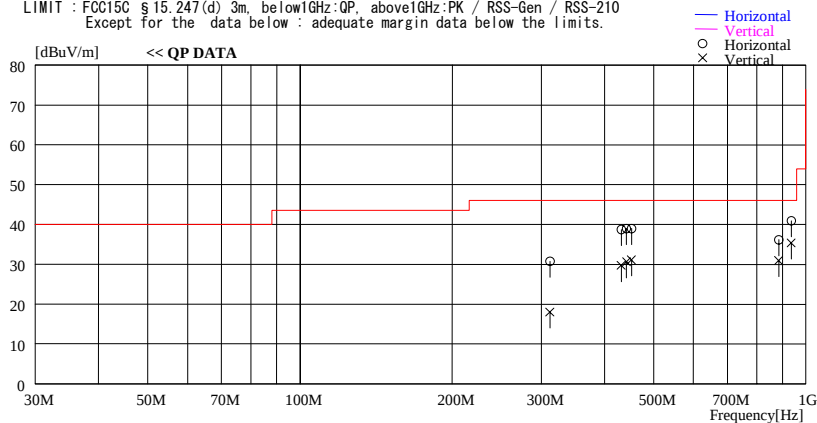
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2006/12/05 18:45:57

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-H0
Power : DC 3.7V
Temp./Humi. : 20deg.C. / 40%
Operator : Makoto Kosaka

Mode / Remarks: WLAN 11bg Mch Rx Max axis(Hor:X,Ver:Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		Factor	Gain	[dBuV/m]		[dBuV/m]	[dB]
311.983	38.0	QP	14.9	-22.2	30.7	Hori.	46.0	15.3
311.983	25.3	QP	14.9	-22.2	18.0	Vert.	46.0	28.0
431.585	42.0	QP	18.2	-21.5	38.7	Hori.	46.0	7.3
431.585	33.0	QP	18.2	-21.5	29.7	Vert.	46.0	16.3
441.983	42.2	QP	18.3	-21.5	39.0	Hori.	46.0	7.0
441.983	33.8	QP	18.3	-21.5	30.6	Vert.	46.0	15.4
452.383	42.2	QP	18.3	-21.5	39.0	Hori.	46.0	7.0
452.383	34.3	QP	18.3	-21.5	31.1	Vert.	46.0	14.9
883.975	32.9	QP	21.6	-18.4	36.1	Hori.	46.0	9.9
883.975	27.7	QP	21.6	-18.4	30.9	Vert.	46.0	15.1
935.974	36.5	QP	22.3	-17.9	40.9	Hori.	46.0	5.1
935.974	31.0	QP	22.3	-17.9	35.4	Vert.	46.0	10.6

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

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MF060b(14.06.06)

Radiated Spurious Emission (below 1GHz)

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

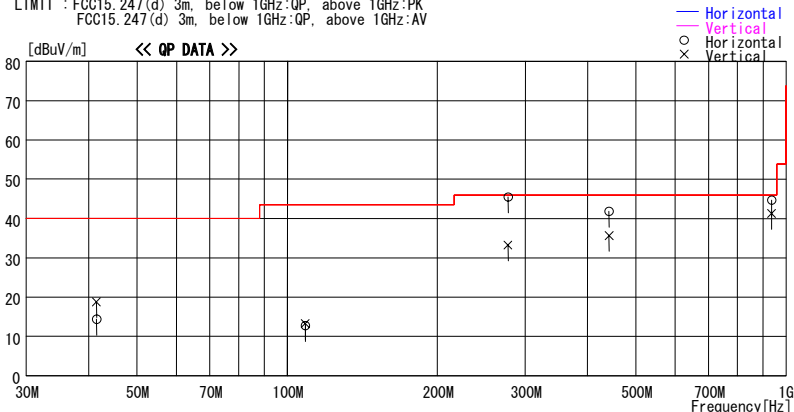
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Date : 2007/02/10

Company : DENSO WAVE INCORPORATED
Kind of EUT : Barcode Handy Terminal
Model No. : BHT-470BWB-CE
Serial No. : 5496310346600007
Report No. : 27DE0137-HO
Power : DC 3.7V
Temp./Humi. : 24deg.C. / 39%
Operator : Makoto Kosaka

Mode / Remarks: WLAN 11g Mch 54Mbps & BT DH5 Hopping Max axis(Hor:X, Ver:Z)

LIMIT : FCC15.247(d) 3m, below 1GHz:QP, above 1GHz:PK
FCC15.247(d) 3m, below 1GHz:QP, above 1GHz:AV



Frequency	Reading	DET	Antenna Factor	Loss & Gain	Level	Angle	Height	Polar.	Limit	Margin	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
41.470	25.6	QP	13.4	-24.6	14.4	0	314	Hori	40.0	25.6	
41.470	30.0	QP	13.4	-24.6	18.8	0	100	Vert	40.0	21.2	
108.700	24.7	QP	11.7	-23.6	12.8	270	157	Hori	43.5	30.7	
108.700	25.2	QP	11.7	-23.6	13.3	287	100	Vert	43.5	30.2	
277.340	48.9	QP	18.7	-22.1	45.5	262	123	Hori	46.0	0.5	
277.340	36.7	QP	18.7	-22.1	33.3	174	133	Vert	46.0	12.7	
441.986	44.5	QP	18.4	-21.0	41.9	281	228	Hori	46.0	4.1	
441.986	38.3	QP	18.4	-21.0	35.7	190	202	Vert	46.0	10.3	
935.972	37.6	QP	24.8	-17.7	44.7	125	100	Hori	46.0	1.3	
935.972	34.2	QP	24.8	-17.7	41.3	178	156	Vert	46.0	4.7	

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 (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : DENSO WAVE INCORPORATED Equipment : Barcode Handy Terminal Model : BHT-470BWB-CE Sample No. : 5496310346600007 Power : DC3.7 V Mode : WLAN 11b 11Mbps 2412MHz Remarks : Hor X , Ver Z-axis	REPORT NO : 27DE0137-HO REGULATION : FCC15.247(d)/RSS-210A8.5 TEST DISTANCE : 3/1m DATE : 12/04/2006 TEMPERATURE : 20deg.C HUMIDITY : 40% ENGINEER : Makoto Kosaka
--	--

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4824.0	56.9	51.7	33.4	31.6	3.5	0.1	62.3	57.1	74.0	11.7	16.9
2	7236.0	43.9	43.7	37.3	32.1	4.3	0.4	53.8	53.6	74.0	20.2	20.4
3	9648.0	43.6	44.4	39.5	33.1	5.0	0.7	55.7	56.5	74.0	18.3	17.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12060.0	43.3	44.2	40.6	33.0	5.8	0.8	48.0	48.9	74.0	26.0	25.1
5	14472.0	44.6	44.0	41.4	32.3	6.3	0.6	51.1	50.5	74.0	22.9	23.5
6	16884.0	44.1	44.4	40.6	32.0	6.8	1.2	51.2	51.5	74.0	22.8	22.5
7	19296.0	44.9	44.9	39.0	31.8	7.3	0.0	49.9	49.9	74.0	24.1	24.1
8	21708.0	45.8	46.5	39.4	32.2	7.8	0.0	51.3	52.0	74.0	22.7	22.0
9	24120.0	48.0	47.3	39.1	31.4	8.1	0.0	54.3	53.6	74.0	19.7	20.4

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit AV	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4824.0	37.1	34.0	33.4	31.6	3.5	0.1	42.5	39.4	54.0	11.5	14.6
2	7236.0	30.1	30.1	37.3	32.1	4.3	0.4	40.0	40.0	54.0	14.0	14.0
3	9648.0	30.5	30.4	39.5	33.1	5.0	0.7	42.6	42.5	54.0	11.4	11.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12060.0	29.9	30.0	40.6	33.0	5.8	0.8	34.6	34.7	54.0	19.4	19.3
5	14472.0	30.9	31.1	41.4	32.3	6.3	0.6	37.4	37.6	54.0	16.6	16.4
6	16884.0	31.0	31.2	40.6	32.0	6.8	1.2	38.1	38.3	54.0	15.9	15.7
7	19296.0	31.2	31.4	39.0	31.8	7.3	0.0	36.2	36.4	54.0	17.8	17.6
8	21708.0	33.1	33.2	39.4	32.2	7.8	0.0	38.6	38.7	54.0	15.4	15.3
9	24120.0	34.5	34.4	39.1	31.4	8.1	0.0	40.8	40.7	54.0	13.2	13.3

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 third 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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 12/04/2006
Power	: DC3.7 V	TEMPERATURE	: 20deg.C
Mode	: WLAN 11b 11Mbps 2437MHz	HUMIDITY	: 40%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	54.1	51.6	33.5	31.6	3.5	0.0	59.5	57.0	74.0	14.5	17.0
2	7311.0	43.6	44.3	37.4	32.2	4.3	0.4	53.5	54.2	74.0	20.5	19.8
3	9748.0	43.8	44.2	39.6	33.1	5.0	0.7	56.0	56.4	74.0	18.0	17.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	42.5	42.6	40.6	32.9	5.8	0.8	47.3	47.4	74.0	26.7	26.6
5	14622.0	43.8	44.2	41.0	32.4	6.3	0.6	49.8	50.2	74.0	24.2	23.8
6	17059.0	45.2	45.5	41.2	32.0	6.8	1.1	52.8	53.1	74.0	21.2	20.9
7	19496.0	45.8	45.3	39.1	31.9	7.3	0.0	50.8	50.3	74.0	23.2	23.7
8	21933.0	46.8	47.0	39.5	32.1	7.8	0.0	52.5	52.7	74.0	21.5	21.3
9	24370.0	46.4	46.9	39.1	31.1	8.2	0.0	53.1	53.6	74.0	20.9	20.4

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	35.3	34.0	33.5	31.6	3.5	0.0	40.7	39.4	54.0	13.3	14.6
2	7311.0	30.0	30.1	37.4	32.2	4.3	0.4	39.9	40.0	54.0	14.1	14.0
3	9748.0	30.2	30.2	39.6	33.1	5.0	0.7	42.4	42.4	54.0	11.6	11.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	29.4	29.5	40.6	32.9	5.8	0.8	34.2	34.3	54.0	19.8	19.7
5	14622.0	30.6	30.8	41.0	32.4	6.3	0.6	36.6	36.8	54.0	17.4	17.2
6	17059.0	31.8	31.9	41.2	32.0	6.8	1.1	39.4	39.5	54.0	14.6	14.5
7	19496.0	31.4	31.5	39.1	31.9	7.3	0.0	36.4	36.5	54.0	17.6	17.5
8	21933.0	33.5	33.7	39.5	32.1	7.8	0.0	39.2	39.4	54.0	14.8	14.6
9	24370.0	33.8	33.8	39.1	31.1	8.2	0.0	40.5	40.5	54.0	13.5	13.5

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 third 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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 12/04/2006
Power	: DC3.7 V	TEMPERATURE	: 20deg.C
Mode	: WLAN 11b 11Mbps 2462MHz	HUMIDITY	: 40%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4924.0	51.3	49.5	33.6	31.6	3.5	0.0	56.8	55.0	74.0	17.2	19.0
2	7386.0	44.2	44.1	37.5	32.2	4.3	0.5	54.3	54.2	74.0	19.7	19.8
3	9848.0	44.2	44.0	39.7	33.2	5.0	0.7	56.4	56.2	74.0	17.6	17.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12310.0	42.4	42.8	40.6	32.8	5.9	0.8	47.4	47.8	74.0	26.6	26.2
5	14772.0	43.6	44.4	40.7	32.4	6.3	0.6	49.3	50.1	74.0	24.7	23.9
6	17234.0	44.9	45.4	42.1	31.9	6.9	1.0	53.5	54.0	74.0	20.5	20.0
7	19696.0	45.0	44.7	39.1	31.9	7.3	0.0	50.0	49.7	74.0	24.0	24.3
8	22158.0	46.7	46.5	39.6	32.1	7.8	0.0	52.5	52.3	74.0	21.5	21.7
9	24620.0	47.7	48.4	39.2	30.8	8.2	0.0	54.8	55.5	74.0	19.2	18.5

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4924.0	33.9	32.6	33.6	31.6	3.5	0.0	39.4	38.1	54.0	14.6	15.9
2	7386.0	30.3	30.3	37.5	32.2	4.3	0.5	40.4	40.4	54.0	13.6	13.6
3	9848.0	30.4	30.3	39.7	33.2	5.0	0.7	42.6	42.5	54.0	11.4	11.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12310.0	29.4	29.8	40.6	32.8	5.9	0.8	34.4	34.8	54.0	19.6	19.2
5	14772.0	31.0	31.3	40.7	32.4	6.3	0.6	36.7	37.0	54.0	17.3	17.0
6	17234.0	32.3	32.3	42.1	31.9	6.9	1.0	40.9	40.9	54.0	13.1	13.1
7	19696.0	31.6	31.5	39.1	31.9	7.3	0.0	36.6	36.5	54.0	17.4	17.5
8	22158.0	33.4	33.4	39.6	32.1	7.8	0.0	39.2	39.2	54.0	14.8	14.8
9	24620.0	34.3	34.5	39.2	30.8	8.2	0.0	41.4	41.6	54.0	12.6	12.4

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

*In the frequency over the third 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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 12/01/2006,12/04/2006
Power	: DC3.7 V	TEMPERATURE	: 22deg.C,20deg.C
Mode	: WLAN 11g 54Mbps 2412MHz	HUMIDITY	: 41%,40%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1064.2	51.2	49.5	25.8	35.2	1.5	0.0	43.3	41.6	74.0	30.7	32.4
2	4823.2	51.2	47.6	33.4	31.6	3.5	0.1	56.6	53.0	74.0	17.4	21.0
3	7236.0	44.1	43.6	37.3	32.1	4.3	0.4	54.0	53.5	74.0	20.0	20.5
4	9648.0	45.0	44.0	39.5	33.1	5.0	0.7	57.1	56.1	74.0	16.9	17.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12060.0	43.4	42.7	40.6	33.0	5.8	0.8	48.1	47.4	74.0	25.9	26.6
6	14472.0	44.1	44.5	41.4	32.3	6.3	0.6	50.6	51.0	74.0	23.4	23.0
7	16884.0	44.8	44.9	40.6	32.0	6.8	1.2	51.9	52.0	74.0	22.1	22.0
8	19296.0	44.8	45.6	39.0	31.8	7.3	0.0	49.8	50.6	74.0	24.2	23.4
9	21708.0	46.9	47.3	39.4	32.2	7.8	0.0	52.4	52.8	74.0	21.6	21.2
10	24120.0	49.5	48.7	39.1	31.4	8.1	0.0	55.8	55.0	74.0	18.2	19.0

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
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1064.2	42.3	37.5	25.8	35.2	1.5	0.0	34.4	29.6	54.0	19.6	24.4
2	4823.2	30.0	29.3	33.4	31.6	3.5	0.1	35.4	34.7	54.0	18.6	19.3
3	7236.0	29.7	29.7	37.3	32.1	4.3	0.4	39.6	39.6	54.0	14.4	14.4
4	9648.0	30.0	30.0	39.5	33.1	5.0	0.7	42.1	42.1	54.0	11.9	11.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12060.0	30.0	30.0	40.6	33.0	5.8	0.8	34.7	34.7	54.0	19.3	19.3
6	14472.0	31.0	31.1	41.4	32.3	6.3	0.6	37.5	37.6	54.0	16.5	16.4
7	16884.0	31.1	31.3	40.6	32.0	6.8	1.2	38.2	38.4	54.0	15.8	15.6
8	19296.0	31.2	31.4	39.0	31.8	7.3	0.0	36.2	36.4	54.0	17.8	17.6
9	21708.0	33.1	33.2	39.4	32.2	7.8	0.0	38.6	38.7	54.0	15.4	15.3
10	24120.0	34.7	34.5	39.1	31.4	8.1	0.0	41.0	40.8	54.0	13.0	13.2

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 third 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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 11/27/2006,12/04/2006
Power	: DC3.7V	TEMPERATURE	: 20deg.C
Mode	: WLAN 11g 54Mbps 2437MHz	HUMIDITY	: 60%,40%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]		[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	54.1	51.5	33.5	31.6	3.5	1.4	60.9	58.3	74.0	13.1	15.7
2	7311.0	49.8	50.5	37.4	32.2	4.3	1.1	60.4	61.1	74.0	13.6	12.9
3	9748.0	50.0	49.9	39.6	33.1	5.0	1.1	62.6	62.5	74.0	11.4	11.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	43.2	42.5	40.6	32.9	5.8	0.8	48.0	47.3	74.0	26.0	26.7
5	14622.0	44.2	43.5	41.0	32.4	6.3	0.6	50.2	49.5	74.0	23.8	24.5
6	17059.0	45.6	45.4	41.2	32.0	6.8	1.1	53.2	53.0	74.0	20.8	21.0
7	19496.0	44.2	44.3	39.1	31.9	7.3	0.0	49.2	49.3	74.0	24.8	24.7
8	21933.0	47.1	46.6	39.5	32.1	7.8	0.0	52.8	52.3	74.0	21.2	21.7
9	24370.0	46.9	46.8	39.1	31.1	8.2	0.0	53.6	53.5	74.0	20.4	20.5

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	36.0	36.2	33.5	31.6	3.5	1.4	42.8	43.0	54.0	11.2	11.0
2	7311.0	37.3	37.7	37.4	32.2	4.3	1.1	47.9	48.3	54.0	6.1	5.7
3	9748.0	36.7	36.7	39.6	33.1	5.0	1.1	49.3	49.3	54.0	4.7	4.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12185.0	29.6	29.4	40.6	32.9	5.8	0.8	34.4	34.2	54.0	19.6	19.8
5	14622.0	30.9	30.6	41.0	32.4	6.3	0.6	36.9	36.6	54.0	17.1	17.4
6	17059.0	31.8	31.8	41.2	32.0	6.8	1.1	39.4	39.4	54.0	14.6	14.6
7	19496.0	31.3	31.4	39.1	31.9	7.3	0.0	36.3	36.4	54.0	17.7	17.6
8	21933.0	33.6	33.6	39.5	32.1	7.8	0.0	39.3	39.3	54.0	14.7	14.7
9	24370.0	33.9	33.9	39.1	31.1	8.2	0.0	40.6	40.6	54.0	13.4	13.4

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

*In the frequency over the third 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.

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FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 12/01/2006,12/04/2006
Power	: DC3.7V	TEMPERATURE	: 22deg.C,20deg.C
Mode	: WLAN 11g 54Mbps 2462MHz	HUMIDITY	: 41%,40%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1768.0	47.7	49.8	27.5	33.4	2.0	0.0	43.8	45.9	74.0	30.2	28.1
2	4922.0	46.0	44.5	33.6	31.6	3.5	0.0	51.5	50.0	74.0	22.5	24.0
3	7386.0	43.8	44.7	37.5	32.2	4.3	0.5	53.9	54.8	74.0	20.1	19.2
4	9848.0	44.4	43.9	39.7	33.2	5.0	0.7	56.6	56.1	74.0	17.4	17.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	42.1	42.9	40.6	32.8	5.9	0.8	47.1	47.9	74.0	26.9	26.1
6	14772.0	44.1	44.2	40.7	32.4	6.3	0.6	49.8	49.9	74.0	24.2	24.1
7	17234.0	45.6	45.4	42.1	31.9	6.9	1.0	54.2	54.0	74.0	19.8	20.0
8	19696.0	45.2	45.6	39.1	31.9	7.3	0.0	50.2	50.6	74.0	23.8	23.4
9	22158.0	46.9	47.4	39.6	32.1	7.8	0.0	52.7	53.2	74.0	21.3	20.8
10	24620.0	48.5	48.2	39.2	30.8	8.2	0.0	55.6	55.3	74.0	18.4	18.7

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	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1768.0	40.6	41.0	27.5	33.4	2.0	0.0	36.7	37.1	54.0	17.3	16.9
2	4922.0	29.1	29.0	33.6	31.6	3.5	0.0	34.6	34.5	54.0	19.4	19.5
3	7386.0	29.9	29.9	37.5	32.2	4.3	0.5	40.0	40.0	54.0	14.0	14.0
4	9848.0	30.0	30.0	39.7	33.2	5.0	0.7	42.2	42.2	54.0	11.8	11.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12310.0	29.6	29.8	40.6	32.8	5.9	0.8	34.6	34.8	54.0	19.4	19.2
6	14772.0	31.2	31.4	40.7	32.4	6.3	0.6	36.9	37.1	54.0	17.1	16.9
7	17234.0	32.4	32.4	42.1	31.9	6.9	1.0	41.0	41.0	54.0	13.0	13.0
8	19696.0	31.4	31.5	39.1	31.9	7.3	0.0	36.4	36.5	54.0	17.6	17.5
9	22158.0	33.3	33.4	39.6	32.1	7.8	0.0	39.1	39.2	54.0	14.9	14.8
10	24620.0	34.6	34.5	39.2	30.8	8.2	0.0	41.7	41.6	54.0	12.3	12.4

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

*In the frequency over the third 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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : DENSO WAVE INCORPORATED	REPORT NO : 27DE0137-HO
Equipment : Barcode Handy Terminal	REGULATION : FCC15.247(d)/RSS-210A8.5
Model : BHT-470BWB-CE	TEST DISTANCE : 3/1m
Sample No. : 5496310346600007	DATE : 12/01/2006
Power : DC3.7V	TEMPERATURE : 22deg.C
Mode : WLAN 11bg Rx 2437MHz	HUMIDITY : 41%
Remarks : Hor X , Ver Z-axis	ENGINEER : Makoto Kosaka

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

R-REJECT (RDW: 1MHz, VDW: 1MHz)												
No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		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	2437.0	42.9	42.6	29.1	32.7	2.2	0.0	41.5	41.2	74.0	32.5	32.8
2	4874.0	41.7	41.8	33.5	31.6	3.5	0.0	47.1	47.2	74.0	26.9	26.8
3	7311.0	44.0	43.7	37.4	32.2	4.3	0.0	53.5	53.2	74.0	20.5	20.8
4	9748.0	43.0	43.1	39.6	33.1	5.0	0.0	54.5	54.6	74.0	19.5	19.4

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2437.0	29.6	29.5	29.1	32.7	2.2	0.0	28.2	28.1	54.0	25.8	25.9
2	4874.0	28.6	28.5	33.5	31.6	3.5	0.0	34.0	33.9	54.0	20.0	20.1
3	7311.0	29.7	29.7	37.4	32.2	4.3	0.0	39.2	39.2	54.0	14.8	14.8
4	9748.0	29.8	29.8	39.6	33.1	5.0	0.0	41.3	41.3	54.0	12.7	12.7

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

*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.

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Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.4 & 3Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 1/25 & 2/5/2007
Power	: DC3.7 V	TEMPERATURE	: 23, 25deg.C
Mode	: WLAN 11b 11Mbps 2437MHz & BT hopping	HUMIDITY	: 33, 32%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.4	59.8	59.1	25.0	33.9	1.7	0.0	52.6	51.9	74.0	21.4	22.1
2	4874.0	52.4	48.8	31.0	31.5	3.2	1.0	56.1	52.5	74.0	17.9	21.5
3	7311.0	NS	NS	37.3	32.1	4.3	0.4	-	-	74.0	-	-
4	9748.0	NS	NS	39.5	33.1	5.0	0.7	-	-	74.0	-	-
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	NS	NS	40.6	33.0	5.8	0.8	-	-	74.0	-	-
6	14622.0	NS	NS	41.4	32.3	6.3	0.6	-	-	74.0	-	-
7	17059.0	NS	NS	40.6	32.0	6.8	1.2	-	-	74.0	-	-
8	19496.0	NS	NS	39.0	31.8	7.3	0.0	-	-	74.0	-	-
9	21933.0	NS	NS	39.4	32.2	7.8	0.0	-	-	74.0	-	-
10	24370.0	45.4	46.3	38.7	31.4	8.2	0.0	51.4	52.3	74.0	22.6	21.7

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	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.4	42.2	42.2	25.0	33.9	1.7	0.0	35.0	35.0	54.0	19.0	19.0
2	4874.0	34.6	32.0	31.0	31.5	3.2	1.0	38.3	35.7	54.0	15.7	18.3
3	7311.0	NS	NS	37.3	32.1	4.3	0.4	-	-	54.0	-	-
4	9748.0	NS	NS	39.5	33.1	5.0	0.7	-	-	54.0	-	-
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	NS	NS	40.6	33.0	5.8	0.8	-	-	54.0	-	-
6	14622.0	NS	NS	41.4	32.3	6.3	0.6	-	-	54.0	-	-
7	17059.0	NS	NS	40.6	32.0	6.8	1.2	-	-	54.0	-	-
8	19496.0	NS	NS	39.0	31.8	7.3	0.0	-	-	54.0	-	-
9	21933.0	NS	NS	39.4	32.2	7.8	0.0	-	-	54.0	-	-
10	24370.0	33.8	33.8	38.7	31.4	8.2	0.0	39.8	39.8	54.0	14.2	14.2

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

*The tenth harmonic is the noise floor level.

*NS: Non signal

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FCC ID : PZWBHT400SLBWB

Radiated Spurious Emission (above 1GHz)

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

UL Apex Co., Ltd.
Head Office EMC Lab. No.4 & 3Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3/1m
Sample No.	: 5496310346600007	DATE	: 1/25 & 2/5/2007
Power	: DC3.7 V	TEMPERATURE	: 23, 25deg.C
Mode	: WLAN 11g 54Mbps 2437MHz & BT hopping	HUMIDITY	: 33, 32%
Remarks	: Hor X , Ver Z-axis	ENGINEER	: Makoto Kosaka

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.4	57.2	54.8	25.0	33.9	1.7	0.0	50.0	47.6	74.0	24.0	26.4
2	4874.0	45.5	45.2	31.0	31.5	3.2	1.0	49.2	48.9	74.0	24.8	25.1
3	7311.0	NS	NS	37.3	32.1	4.3	0.4	-	-	74.0	-	-
4	9748.0	NS	NS	39.5	33.1	5.0	0.7	-	-	74.0	-	-
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	NS	NS	40.6	33.0	5.8	0.8	-	-	74.0	-	-
6	14622.0	NS	NS	41.4	32.3	6.3	0.6	-	-	74.0	-	-
7	17059.0	NS	NS	40.6	32.0	6.8	1.2	-	-	74.0	-	-
8	19496.0	NS	NS	39.0	31.8	7.3	0.0	-	-	74.0	-	-
9	21933.0	NS	NS	39.4	32.2	7.8	0.0	-	-	74.0	-	-
10	24370.0	45.7	45.6	38.7	31.4	8.2	0.0	51.7	51.6	74.0	22.3	22.4

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.4	32.7	32.7	25.0	33.9	1.7	0.0	25.5	25.5	54.0	28.5	28.5
2	4874.0	30.3	30.3	31.0	31.5	3.2	1.0	34.0	34.0	54.0	20.0	20.0
3	7311.0	NS	NS	37.3	32.1	4.3	0.4	-	-	54.0	-	-
4	9748.0	NS	NS	39.5	33.1	5.0	0.7	-	-	54.0	-	-
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	NS	NS	40.6	33.0	5.8	0.8	-	-	54.0	-	-
6	14622.0	NS	NS	41.4	32.3	6.3	0.6	-	-	54.0	-	-
7	17059.0	NS	NS	40.6	32.0	6.8	1.2	-	-	54.0	-	-
8	19496.0	NS	NS	39.0	31.8	7.3	0.0	-	-	54.0	-	-
9	21933.0	NS	NS	39.4	32.2	7.8	0.0	-	-	54.0	-	-
10	24370.0	33.6	33.6	38.7	31.4	8.2	0.0	39.6	39.6	54.0	14.4	14.4

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

*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.

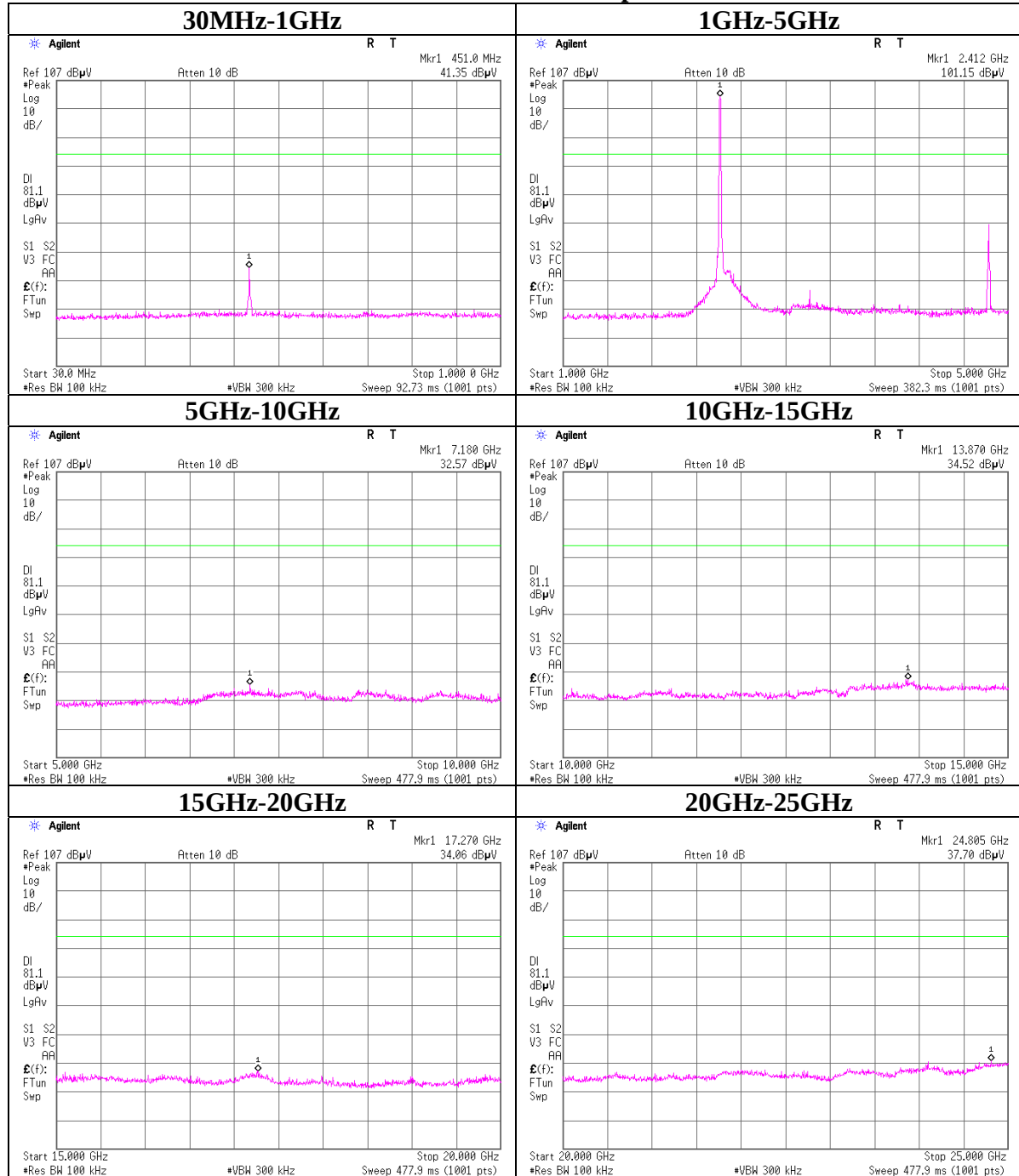
*The tenth harmonic is the noise floor level.

*NS: Non signal

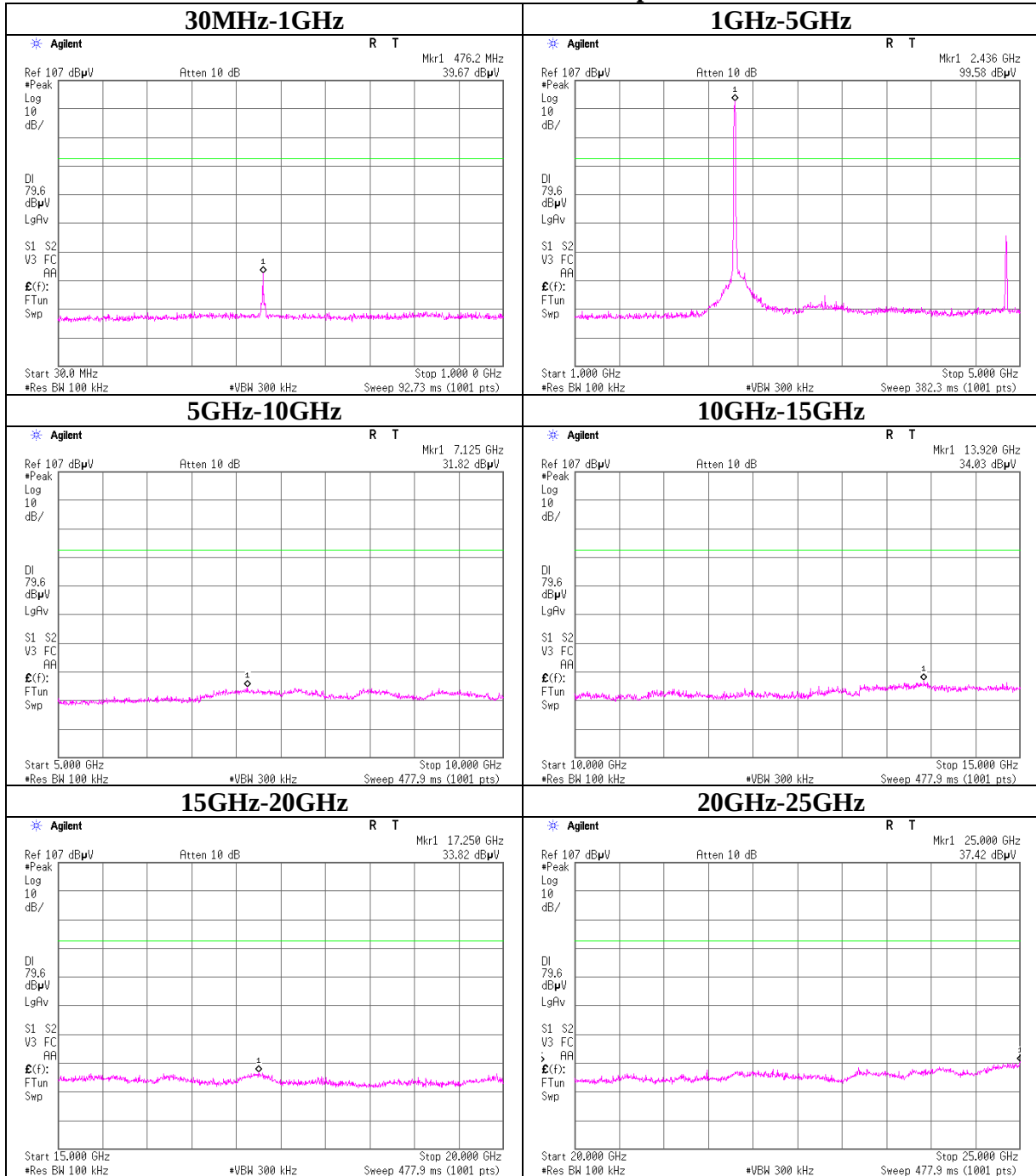
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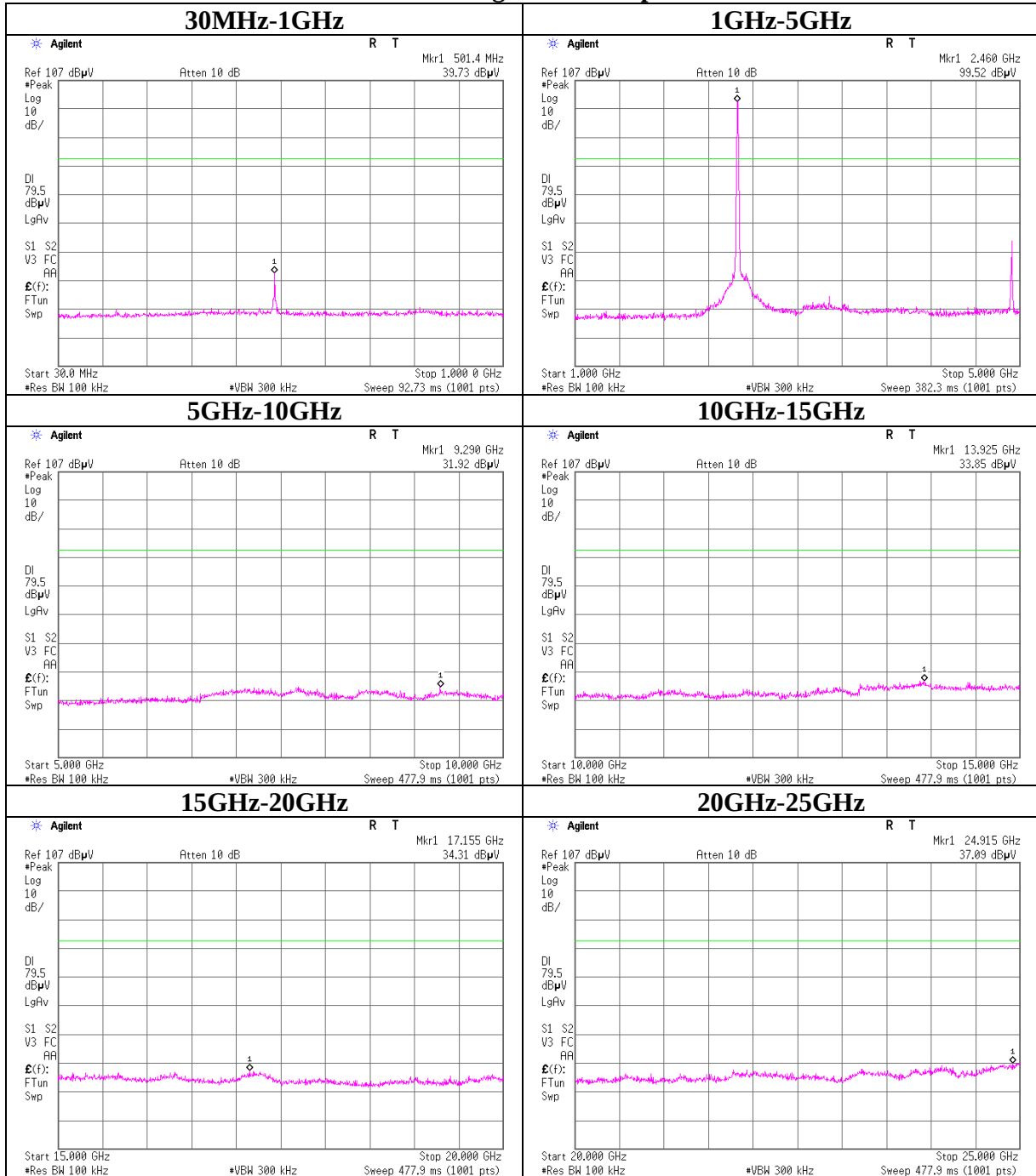
Conducted Spurious Emission
Ch: Low 11b 11Mbps



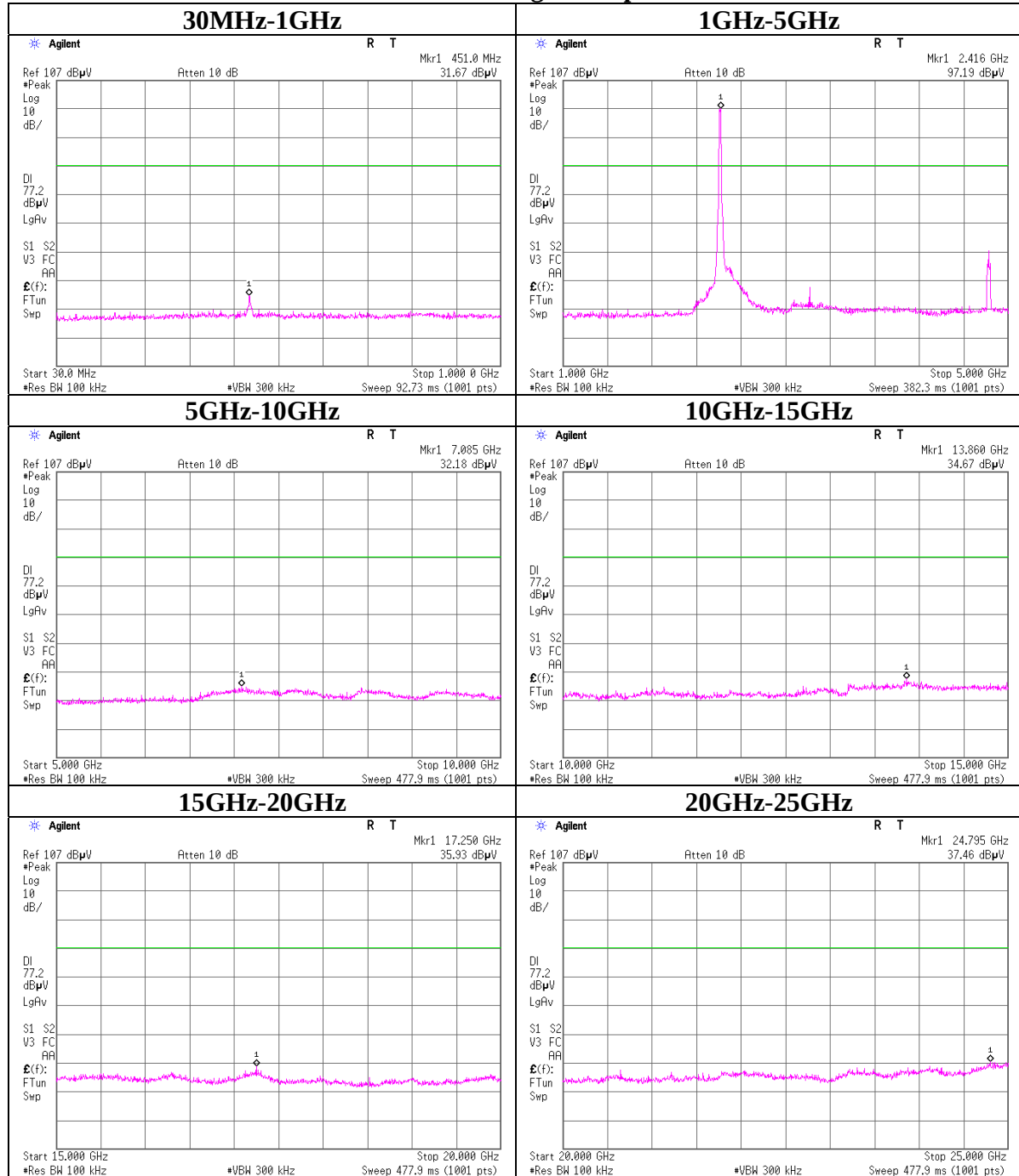
Conducted Spurious Emission
Ch: Mid 11b 11Mbps



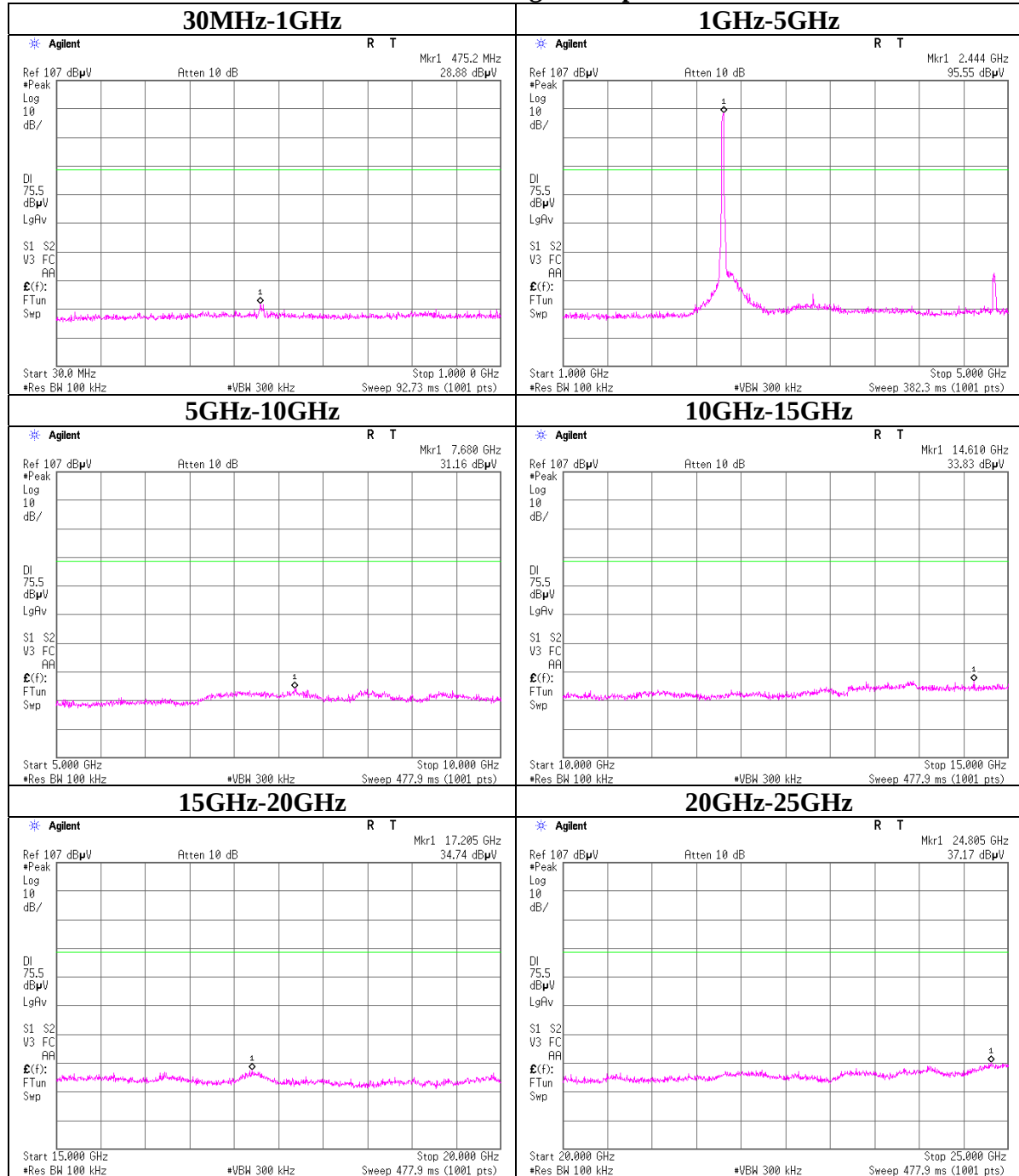
Conducted Spurious Emission
Ch: High 11b 11Mbps



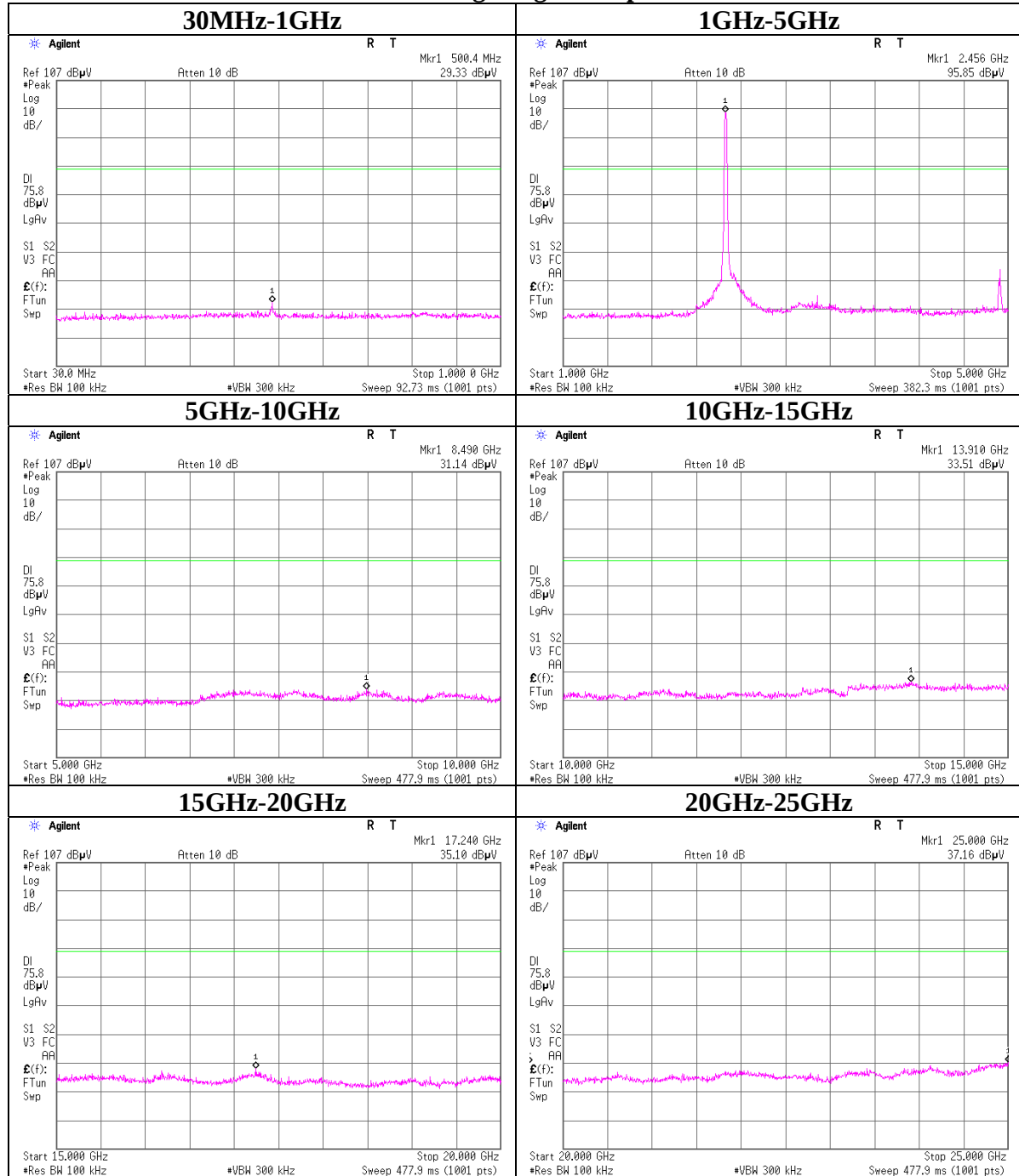
Conducted Spurious Emission
Ch: Low 11g 54Mbps



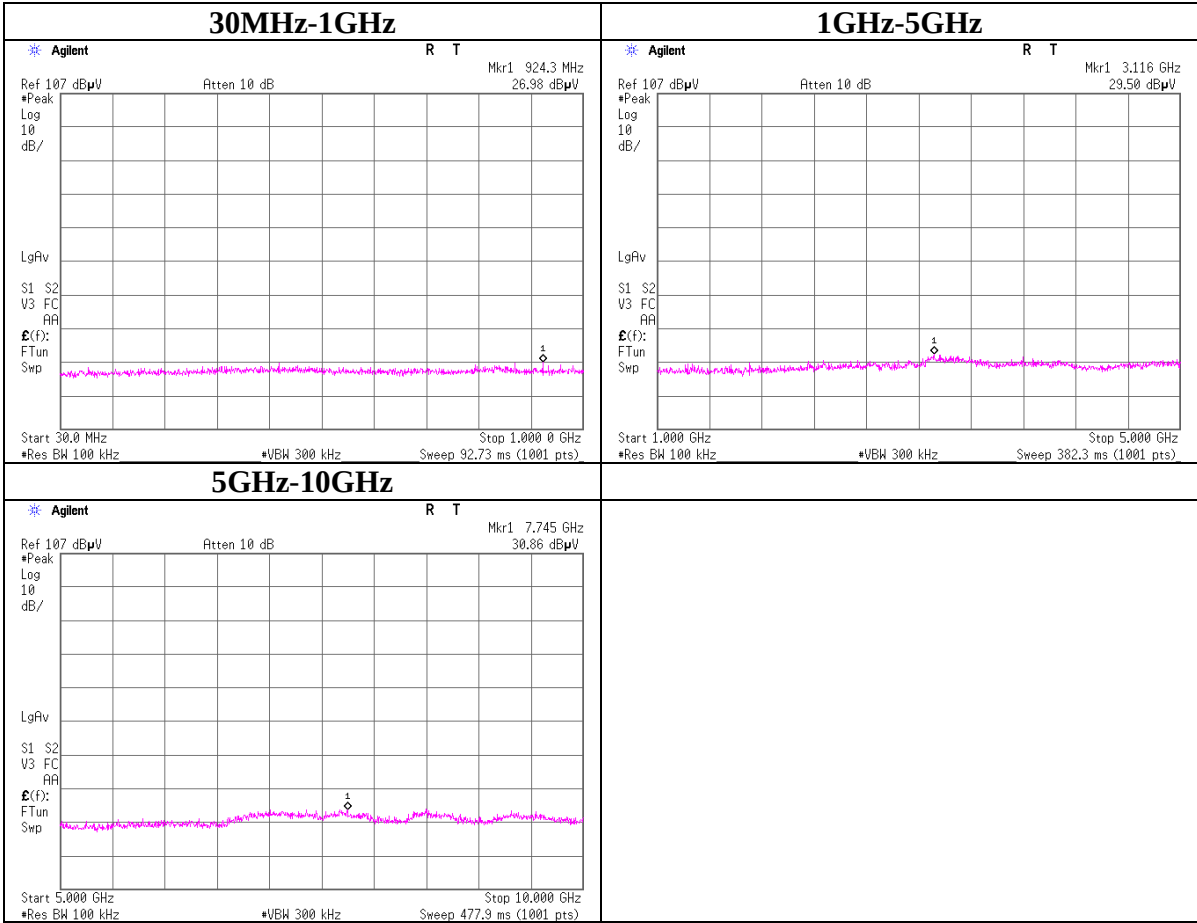
Conducted Spurious Emission
Ch: Mid 11g 54Mbps



Conducted Spurious Emission
Ch: High 11g 54Mbps

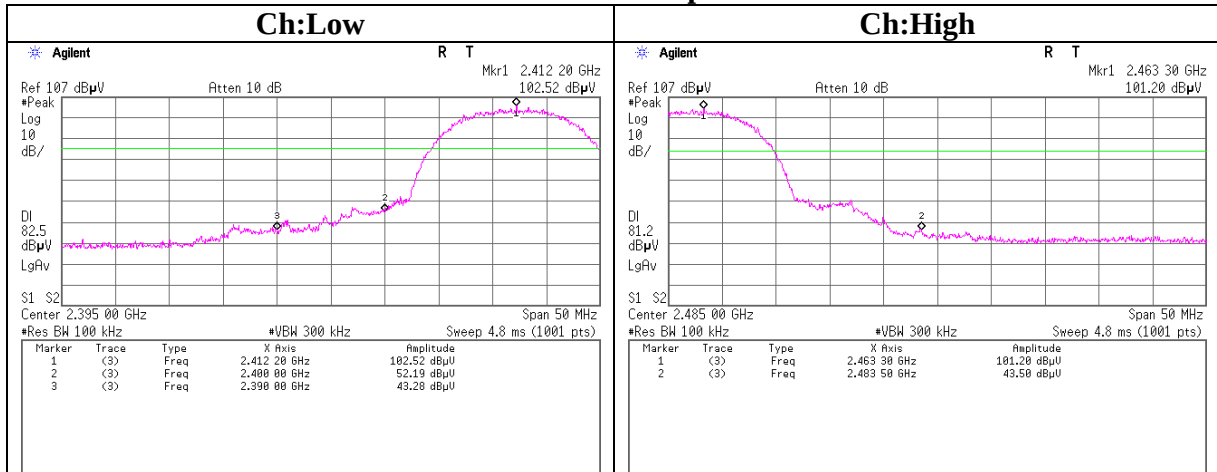


Conducted Spurious Emission
Rx, Ch:Mid

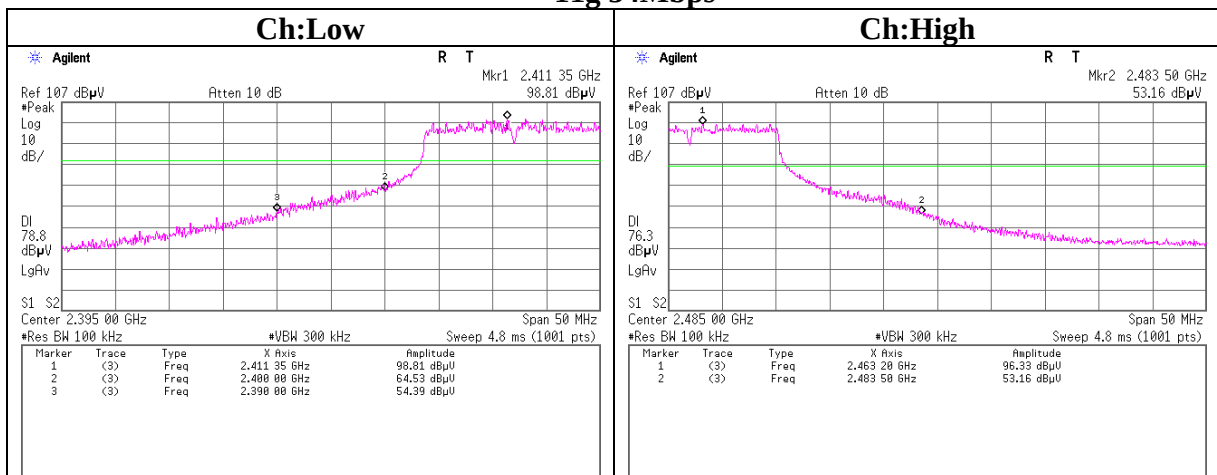


Conducted emission Band Edge compliance

11b 11Mbps



11g 54Mbps



Radiated emission Band Edge compliance

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company

Equipment

Model

Sample No.

Power

Mode

: DENSO WAVE INCORPORATED

: Barcode Handy Terminal

: BHT-470BWB-CE

: 5496310346600007

: DC3.7 V

: WLAN 11b 11Mbps 2412/2462MHz

REPORT NO

REGULATION

TEST DISTANCE

DATE

TEMPERATURE

HUMIDITY

ENGINEER

: 27DE0137-HO

: FCC15.247(d)/RSS-210A8.5

: 3m

: 12/04/2006

: 20deg.C

: 40%

: Makoto Kosaka

Remarks

: Hor X , Ver Z-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)												
Mode	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
11Mbps	2390.0	62.1	60.2	29.1	32.8	2.2	0.0	60.6	58.7	74.0	13.4	15.3
11Mbps	2400.0	75.1	72.3	29.1	32.8	2.2	0.0	73.6	70.8	74.0	0.4	3.2
11Mbps	2483.5	61.8	60.6	29.2	32.7	2.3	0.0	60.6	59.4	74.0	13.4	14.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)												
No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
11Mbps	2390.0	41.0	41.3	29.1	32.8	2.2	0.0	39.5	39.8	54.0	14.5	14.2
11Mbps	2400.0	53.7	52.2	29.1	32.8	2.2	0.0	52.2	50.7	54.0	1.8	3.3
11Mbps	2483.5	40.8	41.0	29.2	32.7	2.3	0.0	39.6	39.8	54.0	14.4	14.2

20dBc(Fundamental 2412MHz)													(RBW: 100kHz, VBW: 300kHz)					
No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Filter/ Atten. [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN							
		HOR	VER					HOR	VER		HOR	VER						
		[dBuV]											[dBuV/m]		[dB]			
Test distance 3meters													RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter/Atten. Loss					
-	2412.0	97.1	94.8	29.1	32.8	2.2	10.3	105.9	103.6	-	-	-						
11Mbps	2400.0	68.3	65.3	29.1	32.8	2.2	0.0	66.8	63.8	Funda-20dB	19.1	19.8						

*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.

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Radiated emission Band Edge compliance

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : DENSO WAVE INCORPORATED
Equipment : Barcode Handy Terminal
Model : BHT-470BWB-CE
Sample No. : 5496310346600007
Power : DC3.7V
Mode : WLAN 11g 54Mbps 2412/2462MHz

REPORT NO : 27DE0137-HO
REGULATION : FCC15.247(d)/RSS-210A8.5
TEST DISTANCE : 3/1m
DATE : 11/27/2006
TEMPERATURE : 20deg.C
HUMIDITY : 60%
ENGINEER : Makoto Kosaka

Remarks : Hor X , Ver Z-axis

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

Mode	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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
54Mbps	2390.0	66.2	70.2	29.1	32.8	2.2	0.0	64.7	68.7	74.0	9.3	5.3
54Mbps	2483.5	71.4	68.1	29.2	32.7	2.3	0.0	70.2	66.9	74.0	3.8	7.1

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
54Mbps	2390.0	32.4	32.2	29.1	32.8	2.2	0.0	30.9	30.7	54.0	23.1	23.3
54Mbps	2483.5	33.6	31.5	29.2	32.7	2.3	0.0	32.4	30.3	54.0	21.6	23.7

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Filter/ Atten. [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter/Atten. Loss												
-	2412.0	99.4	99.5	29.1	32.8	2.2	0.0	97.9	98.0	-	-	-
54Mbps	2400.0	70.9	69.0	29.1	32.8	2.2	0.0	69.4	67.5	Funda-20dB	8.5	10.5

*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.

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Radiated emission Band Edge compliance

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : DENSO WAVE INCORPORATED
Equipment : Barcode Handy Terminal
Model : BHT-470BWB-CE
Sample No. : 5496310346600007
Power : DC3.7 V
Mode : WLAN 11b 11Mbps 2412/2462MHz
Remarks : Bluetooth Hopping ON
 : Hor X , Ver Z-axis

REPORT NO : 27DE0137-HO
REGULATION : FCC15.247(d)/RSS-210A8.5
TEST DISTANCE : 3m
DATE : 1/25/2007
TEMPERATURE : 23deg.C
HUMIDITY : 33%
ENGINEER : Makoto Kosaka

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

Mode	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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
11Mbps+BT	2390.0	61.8	60.3	26.6	32.7	2.1	0.0	57.8	56.3	74.0	16.2	17.7
11Mbps+BT	2400.0	75.8	72.4	26.6	32.7	2.1	0.0	71.8	68.4	-	-	-
11Mbps+BT	2483.5	57.7	59.1	26.8	32.6	2.2	0.0	54.1	55.5	74.0	19.9	18.5

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
11Mbps+BT	2390.0	41.3	41.4	26.6	32.7	2.1	0.0	37.3	37.4	54.0	16.7	16.6
11Mbps+BT	2400.0	54.6	51.8	26.6	32.7	2.1	0.0	50.6	47.8	-	-	-
11Mbps+BT	2483.5	39.8	39.5	26.8	32.6	2.2	0.0	36.2	35.9	54.0	17.8	18.1

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Filter/ Atten. [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter/Atten. Loss												
-	2412.0	107.0	104.7	26.7	32.7	2.1	0.0	103.1	100.8	-	-	-
11Mbps+BT	2400.0	67.1	61.0	26.6	32.7	2.1	0.0	63.1	57.0	Funda-20dB	20.0	23.8

*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.

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FCC ID : PZWBHT400SLBWB

Radiated emission Band Edge compliance

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: BHT-470BWB-CE	TEST DISTANCE	: 3m
Sample No.	: 5496310346600007	DATE	: 1/25/2007
Power	: DC3.7 V	TEMPERATURE	: 23deg.C
Mode	: WLAN 11g 54Mbps 2412/2462MHz	HUMIDITY	: 33%
Remarks	: Bluetooth Hopping ON	ENGINEER	Makoto Kosaka
	: Hor X , Ver Z-axis		

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

Mode	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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
54Mbps+BT	2390.0	75.5	75.2	26.6	32.7	2.1	0.0	71.5	71.2	74.0	2.5	2.8
54Mbps+BT	2400.0	87.7	88.1	26.6	32.7	2.1	0.0	83.7	84.1	-	-	-
54Mbps+BT	2483.5	59.1	57.7	26.8	32.6	2.2	0.0	55.5	54.1	74.0	18.5	19.9

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
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
54Mbps+BT	2390.0	33.6	35.1	26.6	32.7	2.1	0.0	29.6	31.1	54.0	24.4	22.9
54Mbps+BT	2400.0	41.4	40.6	26.6	32.7	2.1	0.0	37.4	36.6	-	-	-
54Mbps+BT	2483.5	39.8	39.5	26.8	32.6	2.2	0.0	36.2	35.9	54.0	17.8	18.1

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Filter/ Atten. [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER			
		[dBuV]									[dBuV/m]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter/Atten. Loss												
-	2412.0	92.6	92.1	26.7	32.7	2.1	0.0	88.7	88.2	-	-	-
54Mbps+BT	2400.0	72.0	72.0	26.6	32.7	2.1	0.0	68.0	68.0	Funda-20dB	0.7	0.2

*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.

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Power Density

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

Company	: DENSO WAVE INCORPORATED	REPORT NO	: 27DE0137-HO
Equipment	: Barcode Handy Terminal	REGULATION	: FCC15.247(e)/RSS-210A8.2(2)
Model	: BHT-470BWB-CE	TEST DISTANCE	: -
Sample No.	: 5496310346600007	DATE	: 2006/12/07
Power	: DC3.7V	TEMPERATURE	: 25deg.C.
Mode	: Tx(Ch L, M, H)	HUMIDITY	: 30%
		ENGINEER	: Makoto Kosaka

[IEEE802.11b:11Mbps]

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-11.95	1.9	10.1	0.0	8.0	8.0
Mid	2437.0	-13.24	1.9	10.1	-1.2	8.0	9.2
High	2462.0	-12.48	1.9	10.1	-0.5	8.0	8.5

Sample Calculation:

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

[IEEE802.11g:24Mbps]

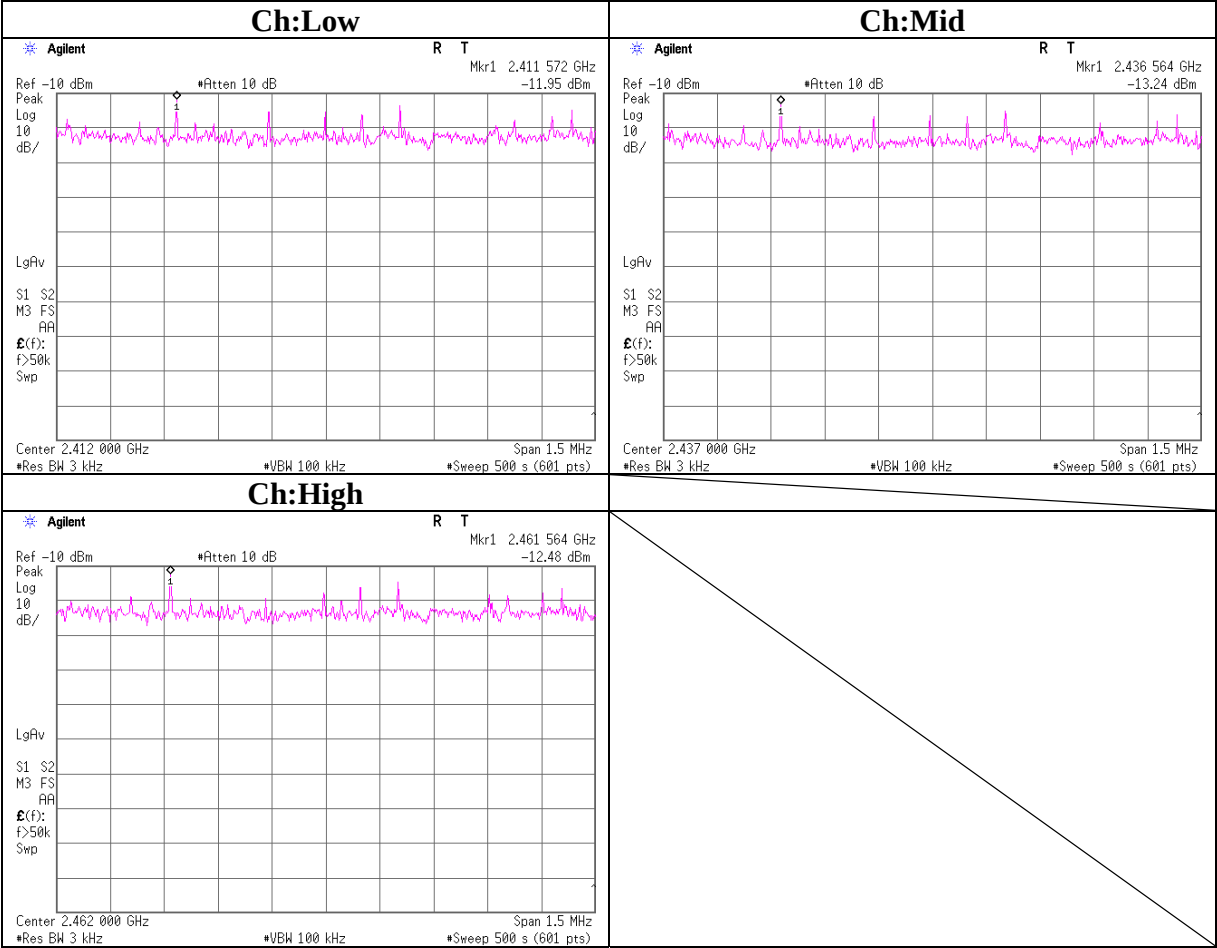
Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-23.51	1.9	10.1	-11.5	8.0	19.5
Mid	2437.0	-24.58	1.9	10.1	-12.6	8.0	20.6
High	2462.0	-24.59	1.9	10.1	-12.6	8.0	20.6

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

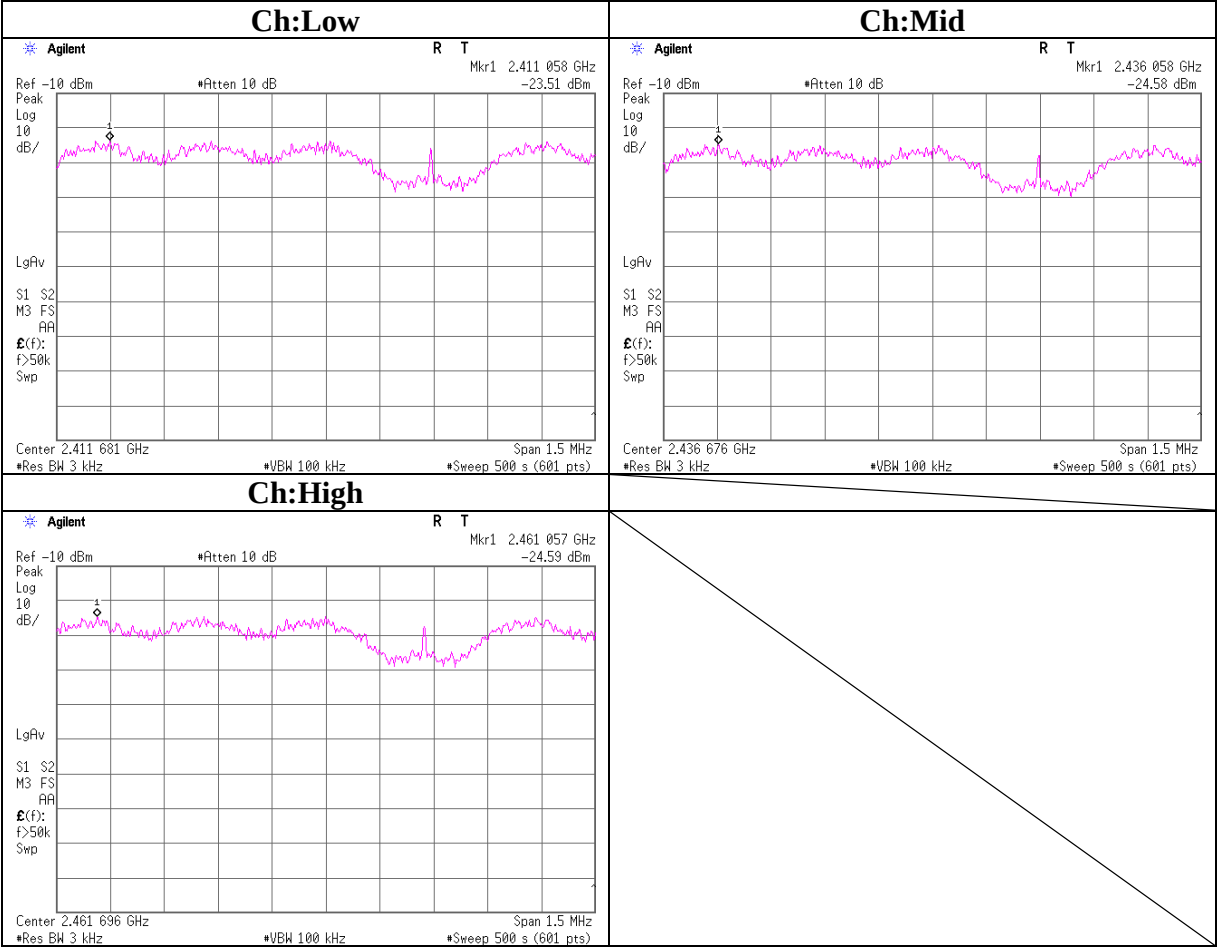
Power Density

IEEE802.11b



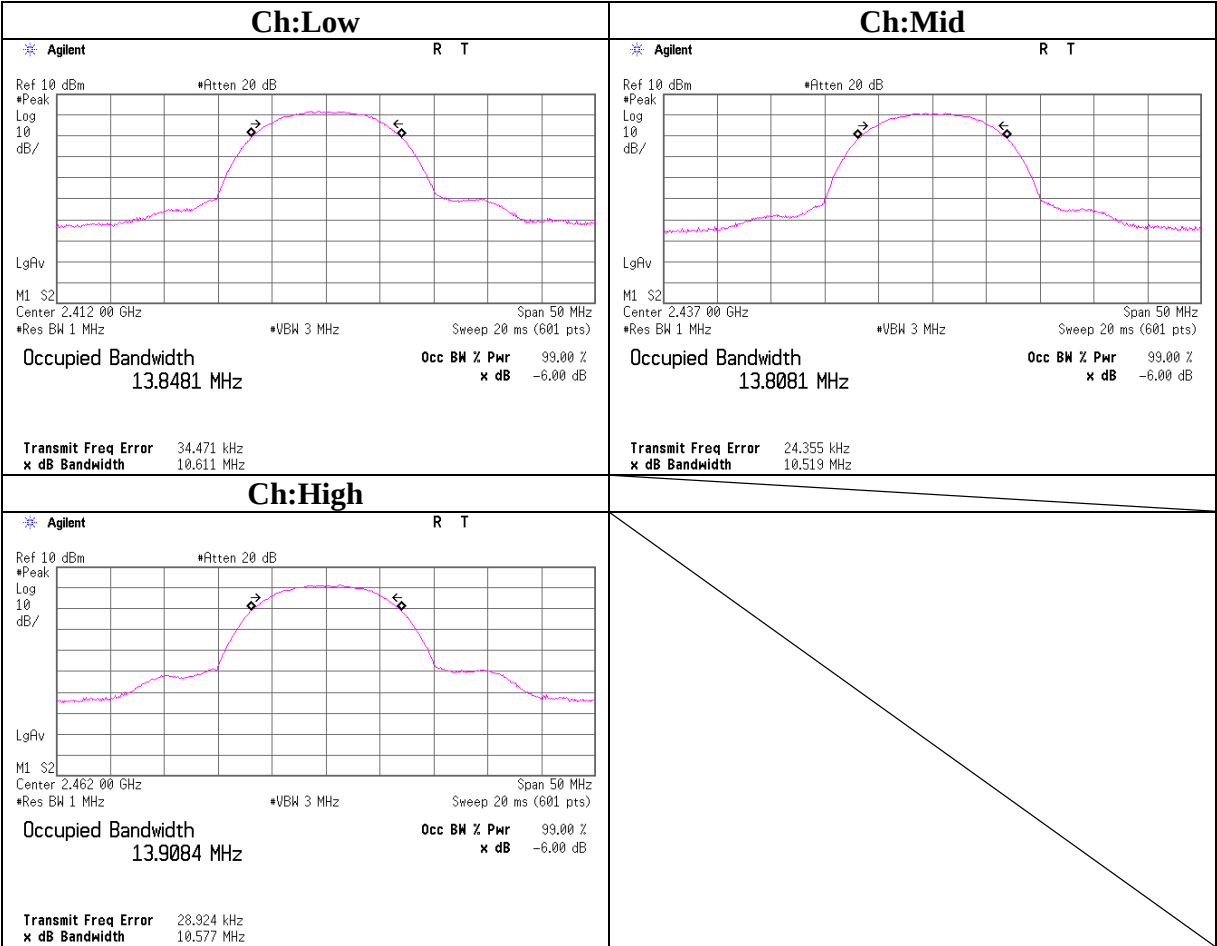
Power Density

IEEE802.11g



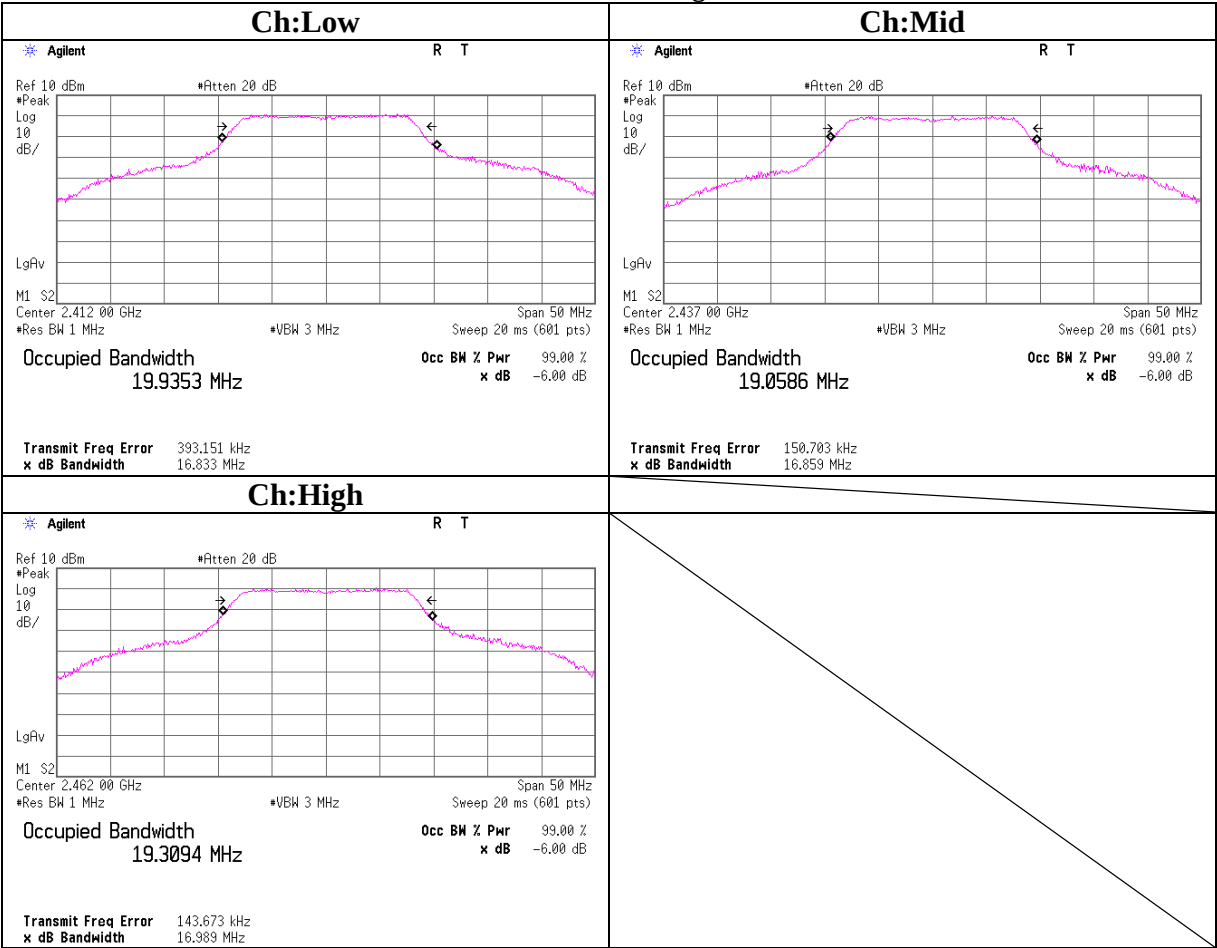
99%Occupied Bandwidth

IEEE802.11b



99%Occupied Bandwidth

IEEE802.11g



APPENDIX 3:Test instruments

EMI test equipment (1/2)

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-04	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	CE	2006/03/06 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2006/06/01 * 12
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE(AE)	2006/06/01 * 12
MTA-02	Terminator	TME	CT-01	CE	2007/02/01 * 12
MCC-50	Coaxial cable	UL Apex	-	CE	2006/03/09 * 12
MSA-09	Spectrum Analyzer	Advantest	R3273	CE	2006/12/08 * 12
TR-07	Test Receiver	Rohde & Schwarz	ESCS30	CE	2006/09/12 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	CE	2006/01/19 * 24
MJM-07	Measure	PROMART	SEN1955	CE	-
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	CE/RE	-
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/03/03 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MJM-06	Measure	PROMART	SEN1955	RE	-
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2006/04/06 * 12
MCC-56	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2006/04/15 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2006/03/27 * 12
MHF-06	High Pass Filter 3.5-24GHz	Tokimec	TF323DCA	RE	2006/05/20 * 12
MAT-20	Attenuator(10dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	RE	2006/01/10 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE/AT	2006/09/13 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/01/29 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/01/29 * 12
MPA-13	Pre Amplifier	SONOA INSTRUMENT	310	RE	2006/03/25 * 12
MAT-30	Attenuator(6dB)	TME	UFA-01	RE	2006/03/11 * 12

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EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MHF-05	High Pass Filter 3.5-24GHz	Tokimec	TF323DCA	RE	2007/01/16 * 12
MCC-51	Coaxial cable	UL Apex	-	RE	2006/03/09 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2006/08/17 * 12
MCC-57	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2006/04/15 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	RE	2007/03/12 * 12
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	RE	2006/04/15 * 12
MHF-12	High Pass Filter 3.5-18GHz	TOKIMEC	TF323DCA	RE	2006/12/18 * 12
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/01/19 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	RE	2007/01/19 * 12
MAT-31	Attenuator(6dB)	TME	UFA-01	RE	2007/03/05 * 12
MPA-14	Pre Amplifier	SONOA INSTRUMENT	310	RE	2007/03/12 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	RE	2006/05/20 * 12
MOS-04	Digital Humidity Indicator	N.T	NT-1800	AT	2006/11/27 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT	2006/06/02 * 12
MPM-09	Power Meter	Anritsu	ML2495A	AT	2006/09/20 * 12
MPSE-12	Power sensor	Anritsu	MA2411B	AT	2006/09/20 * 12
MAT-22	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	AT	2006/03/18 * 12
MCC-15	Microwave Cable 1G-26.5GHz 1m	Suhner	SUCOFLEX 104	AT	2006/02/02 * 12

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

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

Test Item:

CE: Conducted emission

RE: Spurious emission

AT: Antenna Terminal Conducted test

* Some calibrations were performed after the tested dates, however those EMI test equipment have been controlled by means of unbroken chains of calibrations.

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