

FCC TEST REPORT

REPORT NO.: RF110628E06

MODEL NO.: O-R0003

FCC ID: TOB-OR0003

RECEIVED: June 28, 2011

TESTED: June 29 to July 15, 2011

ISSUED: July 22, 2011

APPLICANT: Logitech Inc.

ADDRESS: 2355 Skymark Avenue, Suite 200 Mississauga, ON

Canada L4W 4Y6

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.)

Ltd., Taoyuan Branch Hsin Chu Laboratory

LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,

Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

TEST LOCATION (1): No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,

Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

TEST LOCATION (2): No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung

Lin Hsiang, Hsin Chu Hsien 307, Taiwan

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF110628E06	Original release	July 22, 2011



1. CERTIFICATION

PRODUCT: Logitech Harmony Link

BRAND NAME: Logitech

MODEL NO.: O-R0003

TEST SAMPLE: ENGINEERING SAMPLE

APPLICANT: Logitech Inc.

> June 29 to July 15, 2011 TESTED:

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

> ANSI C63.4-2003 ANSI C63.10-2009

The above equipment (Model: O-R0003) has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY: Middle Re, DATE: July 22, 2011

(Midoli Peng, Specialist)

APPROVED BY

, DATE: July 22, 2011

(May Chen, Deputy Manager)



2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C							
Standard Section	Test Type and Limit	Result	Remark				
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -19.27dB at 0.396MHz				
Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz		PASS	Meet the requirement of limit.				
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm		Meet the requirement of limit.				
15.247(d)	247(d) Radiated Emissions Limit: Table 15.209		Meet the requirement of limit. Minimum passing margin is -1.3dB at 2390.0MHz				
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.				
15.247(d)	Conducted Out-Band Emission Measurement Limit: 20dB less than the peak value of fundamental frequency		Meet the requirement of limit.				
15.203	Antenna Requirement	PASS	No antenna connector is used.				



2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Conducted emissions	2.45 dB
Radiated emissions (30MHz-1GHz)	4.00dB
Radiated emissions (1GHz -18GHz)	2.49 dB
Radiated emissions (18GHz -40GHz)	2.70 dB



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Logitech Harmony Link
MODEL NO.	O-R0003
FCC ID	TOB-OR0003
POWER SUPPLY	DC 5.15V from power adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps
OPERATING RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER	802.11b: 17.0mW 802.11g: 51.3mW
ANTENNA TYPE	Stamped antenna with 0dBi antenna gain
DATA CABLE	USB Cable x 1(shielded, 0.7m) Mini Blaster IR Cable (Shielded, 2.5m)
I/O PORTS	USB Port x 1 Mini Blaster IR output Port x 2
ASSOCIATED DEVICES	Adapter

NOTE:

1. The EUT must be supplied with a power adapter as following table:

Brand:	Logitech
Model No.:	AD631MC
Input power :	100-240V 50/60Hz 0.13A
Output nower i	5.15V 1A
Output power:	5.15V 1A DC output cable (Unshielded, 1.8m)

- 2. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g and IEEE 802.11b technique devices to the network.
- The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided for 802.11b, 802.11g:

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		



3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT		Al	DESCRIPTION			
CONFIGURE MODE	PLC	RE < 1G	RE 3 1G	APCM	ОВ	DESCRIPTION
-	V	V	V	V	V	-

Where **PLC:** Power Line Conducted Emission

RE < 1G: Radiated Emission below 1GHz

RE ³ 1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

OB: Conducted Out-Band Emission Measurement

POWER LINE CONDUCTED EMISSION TEST:

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE	TESTED	MODULATION	MODULATION	DATA RATE
	CHANNEL	CHANNEL	TECHNOLOGY	TYPE	(Mbps)
802.11g	1 to 11	6	OFDM	BPSK	6

RADIATED EMISSION TEST (BELOW 1 GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE	TESTED	MODULATION	MODULATION	DATA RATE
	CHANNEL	CHANNEL	TECHNOLOGY	TYPE	(Mbps)
802.11g	1 to 11	6	OFDM	BPSK	6



RADIATED EMISSION TEST (ABOVE 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

ANTENNA PORT CONDUCTED MEASUREMENT:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

CONDUCTED OUT-BAND EMISSION MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☐ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DULATION MODULATION HNOLOGY TYPE	
802.11b	1 to 11	1, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 11	OFDM	BPSK	6



*** TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
PLC	28deg. C, 60%RH	120Vac, 60Hz	Kyle Huang
RE ³ 1G	20deg. C, 70%RH	120Vac, 60Hz	Evan Huang
RE<1G	20deg. C, 70%RH	120Vac, 60Hz	Evan Huang
APCM	25deg. C, 60%RH	120Vac, 60Hz	Kent Liu
ОВ	20deg. C, 70%RH	120Vac, 60Hz	Evan Huang



3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247) ANSI C63.4-2003 ANSI C63.10-2009

All test items have been performed and recorded as per the above standards.

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

For C	For Conducted emission test:								
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID				
1	NOTEBOOK COMPUTER	DELL	PP27L	6YLB32S	FCC DoC				
2	PRINTER	EPSON	LQ-300+II	G88Y074083	FCC DoC				
3	MOUSE	DELL	MOC5UO	l1401LVG	FCC DoC				
4	iPod shuffle	Apple	MC749TA/A	CC4DMFJUDFDM	FCC DoC				
For o	ther test items:								
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID				
1	NOTEBOOK COMPUTER	DELL	M2400N	4ANP088103	FCC DoC				

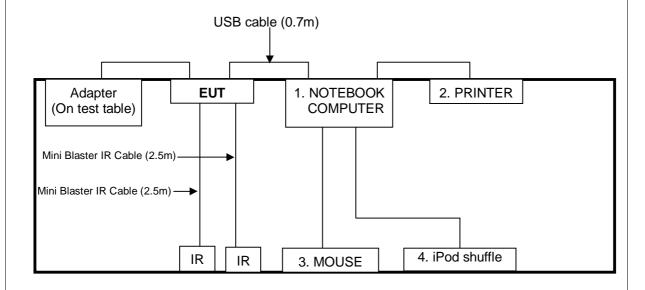
For C	For Conducted emission test:						
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS						
1	USB Cable (shielded, 0.7m)						
2	USB Cable (shielded, 1.8m)						
3	USB Cable (shielded, 1.8m)						
4	USB Cable (shielded, 0.1m)						
For o	ther test items:						
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS						
1	USB Cable (shielded, 0.7m)						

NOTE: All power cords of the above support units are non shielded (1.8m).

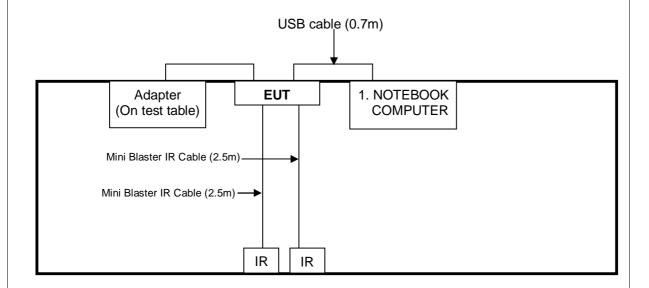


3.5 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted emission test:



For other test items:





4.TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)			
	Quasi-peak	Average		
0.15-0.5	66 to 56	56 to 46		
0.5-5	56	46		
5-30	60	50		

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
- All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

Test date: June 29, 2011

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL	
ROHDE & SCHWARZ Test Receiver	ESCS 30	100287	Mar. 02, 2011	Mar. 01, 2012	
Line-Impedance Stabilization Network (for EUT)	NSLK 8127	8127-523	Sep. 17, 2010	Sep. 16, 2011	
Line-Impedance Stabilization Network (for Peripheral)	ENV-216	100072	June 10, 2011	June 09, 2012	
RF Cable (JYEBAO)	5DFB	CONCAB-003	Aug. 06, 2010	Aug. 05, 2011	
50 ohms Terminator	50	3	Nov. 03, 2010	Nov. 02, 2011	
Software	BV ADT_Cond_V7.3.7	NA	NA	NA	

Note:

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. The test was performed in Shielded Room No. A.
- 3 The VCCI Con A Registration No. is C-817.



4.1.3 TEST PROCEDURES

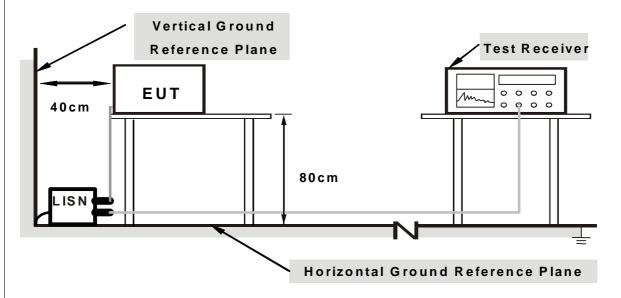
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit 20dB) were not recorded.

414	DEM	ΊΔΤΙΟ	N	FROM:	TEST	STANI	JARD
4.1.4	DLV	1 - 1 + 1 = 1	I V		$I \perp \cup I$	o i \neg i v i	\mathcal{M}

No deviation



4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

- 1. The EUT linked to support unit 1 (Notebook Computer) and which was placed on a testing table.
- 2. The support unit 1 (Notebook Computer) ran a test program "Command" to enable EUT under transmission condition continuously at specific channel frequency.



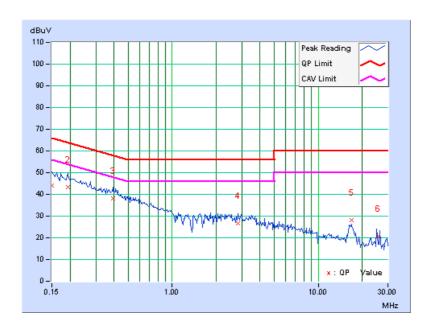
4.1.7 TEST RESULTS

PHASE Line (L)	6dB BANDWIDTH	9 kHz
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	Freq.	Corr.	Reading Value		Emission Level		Lir	nit	Margin	
No		Factor	[dB (uV)]		[dB (uV)] [dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.36	43.83	-	44.19	-	66.00	56.00	-21.80	-
2	0.193	0.36	42.88	-	43.24	-	63.91	53.91	-20.67	-
3	0.392	0.36	37.63	-	37.99	-	58.02	48.02	-20.03	-
4	2.809	0.48	26.22	-	26.70	-	56.00	46.00	-29.30	-
5	16.938	1.02	27.22	-	28.24	-	60.00	50.00	-31.76	-
6	25.622	1.32	19.52	-	20.84	-	60.00	50.00	-39.16	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

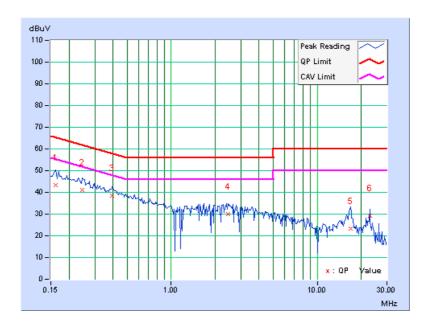




	Freq.	Corr.	Reading Value		Emission Level		Lir	nit	Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.10	43.28	-	43.38	-	65.37	55.37	-22.00	-
2	0.248	0.10	40.88	-	40.98	-	61.83	51.83	-20.85	-
3	0.396	0.11	38.56	-	38.67	-	57.94	47.94	-19.27	-
4	2.461	0.21	29.75	-	29.96	-	56.00	46.00	-26.04	-
5	16.855	1.01	22.34	-	23.35	-	60.00	50.00	-36.65	-
6	22.840	1.37	27.79	-	29.16	-	60.00	50.00	-30.84	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.





4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
- 4. Section 15.205 restricted bands of operation shall compliance with the limits in Section 15.209.



4.2.2 TEST INSTRUMENTS

Test date: July 01 to 04, 2011

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL	
ROHDE & SCHWARZ Spectrum Analyzer	FSP40	100036	Dec. 08, 2010	Dec. 07, 2011	
Agilent PSA Spectrum Analyzer	E4446A	MY48250113	Nov. 30 , 2010	Nov. 29 , 2011	
HP Pre_Amplifier	8449B	300801923	Nov. 01, 2010	Oct. 31, 2011	
ROHDE & SCHWARZ Test Receiver	ESCS30	847124/029	Sep. 03, 2010	Sep. 02, 2011	
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	Apr. 14, 2011	Apr. 13, 2012	
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 17, 2010	Dec. 16, 2011	
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 17, 2011	Jan. 16, 2012	
R&S Loop Antenna	HFH2-Z2	100070	Feb. 03, 2010	Feb. 02, 2012	
RF Switches	EMH-011	1001	NA	NA	
RF CABLE (Chaintek)	Sucoflex 104+ Sucoflex 106	RF104-101+R F106-101	Aug. 24, 2010	Aug. 23, 2011	
RF Cable	8DFB	STCCAB-30M- 1GHz	NA	NA	
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA	
CT Antenna Tower & Turn Table	NA	NA	NA	NA	

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are

- traceable to NML/ROC and NIST/USA.

 2. The horn antenna, preamplifier (model: 8449B) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.

 3. The test was performed in Open Site No. C.

 4. The FCC Site Registration No. is 656396.

 5. The VCCI Site Registration No. is R-1626.

 6. The CANADA Site Registration No. is IC 7450G-3.



4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meters open site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

NOTE:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

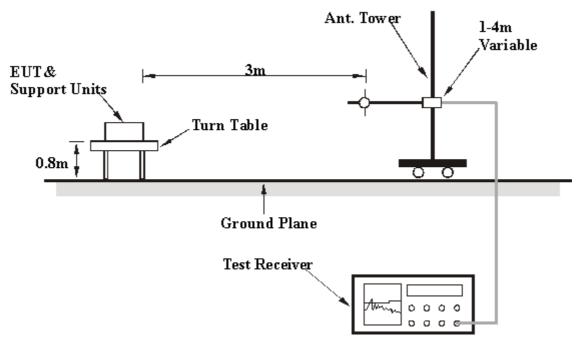
4.2.4 DEVIATION FROM TEST STANDARD

No deviation



Report Format Version 4.0.0

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



4.2.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA: 802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL Channel 6		FREQUENCY RANGE	Below 1000MHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH	TESTED BY	Evan Huang	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	47.29	31.3 QP	40.0	-8.7	2.20 H	0	16.82	14.52			
2	120.00	26.7 QP	43.5	-16.8	1.37 H	285	14.24	12.47			
3	240.00	25.7 QP	46.0	-20.3	1.36 H	15	11.95	13.75			
4	480.00	29.5 QP	46.0	-16.5	1.99 H	312	8.52	21.01			
5	720.00	31.0 QP	46.0	-15.0	2.16 H	20	4.76	26.27			
6	960.00	34.6 QP	54.0	-19.4	1.92 H	232	5.12	29.48			
		ANTENNA	A POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M				
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	43.62	34.6 QP	40.0	-5.4	1.00 V	76	20.56	14.00			
2	120.00	29.0 QP	43.5	-14.5	1.00 V	194	16.53	12.47			
3	186.18	26.4 QP	43.5	-17.1	1.00 V	29	13.51	12.92			
4	240.00	23.4 QP	46.0	-22.6	2.20 V	108	9.64	13.75			
5	479.97	29.8 QP	46.0	-16.2	1.00 V	68	8.81	21.01			
6	720.00	30.8 QP	46.0	-15.3	1.57 V	331	4.48	26.27			
7	960.00	34.8 QP	54.0	-19.2	2.05 V	133	5.30	29.48			

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.



ABOVE 1GHz WORST-CASE DATA

802.11b DSSS MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL Channel 1		FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	2390.00	57.2 PK	74.0	-16.8	2.12 H	81	25.92	31.32			
2	2390.00	44.7 AV	54.0	-9.3	2.12 H	81	13.38	31.32			
3	*2412.00	101.9 PK			1.36 H	70	70.51	31.39			
4	*2412.00	98.5 AV			1.36 H	70	67.11	31.39			
5	4824.00	43.1 PK	74.0	-30.9	1.96 H	360	6.93	36.17			
6	4824.00	30.4 AV	54.0	-23.6	1.96 H	360	-5.77	36.17			
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M				
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	2390.00	57.7 PK	74.0	-16.3	1.08 V	337	26.34	31.32			
2	2390.00	46.0 AV	54.0	-8.0	1.08 V	337	14.66	31.32			
3	*2412.00	105.9 PK			1.11 V	15	74.51	31.39			
4	*2412.00	102.6 AV			1.11 V	15	71.21	31.39			
5	4824.00	43.3 PK	74.0	-30.7	1.33 V	360	7.13	36.17			
6	4824.00	30.5 AV	54.0	-23.5	1.33 V	360	-5.67	36.17			

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL Channel 6		FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.3 PK			1.36 H	76	69.78	31.49
2	*2437.00	98.2 AV			1.36 H	76	66.71	31.49
3	4874.00	43.7 PK	74.0	-30.3	1.45 H	32	7.39	36.31
4	4874.00	30.2 AV	54.0	-23.8	1.45 H	32	-6.11	36.31
5	7311.00	50.1 PK	74.0	-23.9	1.17 H	356	7.87	42.23
6	7311.00	36.9 AV	54.0	-17.1	1.17 H	356	-5.33	42.23
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	106.1 PK			1.01 V	332	74.61	31.49
2	*2437.00	103.0 AV			1.01 V	332	71.51	31.49
3	4874.00	43.7 PK	74.0	-30.3	1.42 V	8	7.39	36.31
4	4874.00	31.1 AV	54.0	-22.9	1.42 V	8	-5.21	36.31
5	7311.00	48.2 PK	74.0	-25.8	1.47 V	95	5.97	42.23
6	7311.00	36.8 AV	54.0	-17.2	1.47 V	95	-5.43	42.23

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



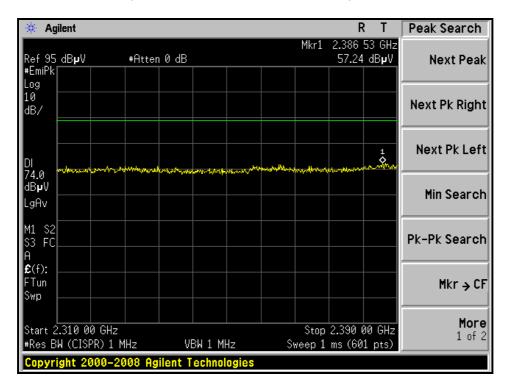
EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL Channel 11		FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

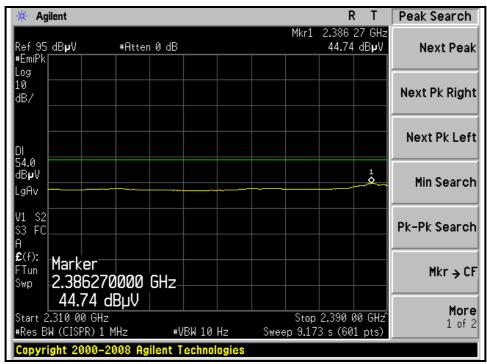
	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
		ANTENNA	POLARITY	& IESI DIS	I ANCE: HO	RIZONTAL	AIJW			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	*2462.00	100.9 PK			2.03 H	55	69.32	31.58		
2	*2462.00	97.2 AV			2.03 H	55	65.62	31.58		
3	2483.50	56.9 PK	74.0	-17.1	2.00 H	294	25.24	31.66		
4	2483.50	44.0 AV	54.0	-10.0	2.00 H	294	12.38	31.66		
5	4924.00	43.4 PK	74.0	-30.6	2.00 H	20	6.98	36.42		
6	4924.00	30.5 AV	54.0	-23.5	2.00 H	20	-5.92	36.42		
7	7386.00	49.2 PK	74.0	-24.8	1.96 H	0	6.68	42.52		
8	7386.00	37.0 AV	54.0	-17.0	1.96 H	0	-5.52	42.52		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	*2462.00	106.5 PK			1.00 V	332	74.92	31.58		
2	*2462.00	103.4 AV			1.00 V	332	71.84	31.58		
3	2483.50	58.3 PK	74.0	-15.7	1.00 V	331	26.64	31.66		
4	2483.50	47.6 AV	54.0	-6.4	1.00 V	331	15.96	31.66		
5	4924.00	43.4 PK	74.0	-30.6	1.49 V	312	6.98	36.42		
6	4924.00	31.1 AV	54.0	-22.9	1.49 V	312	-5.32	36.42		
7	7386.00	49.6 PK	74.0	-24.4	1.00 V	206	7.08	42.52		
8	7386.00	37.0 AV	54.0	-17.0	1.00 V	206	-5.52	42.52		

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



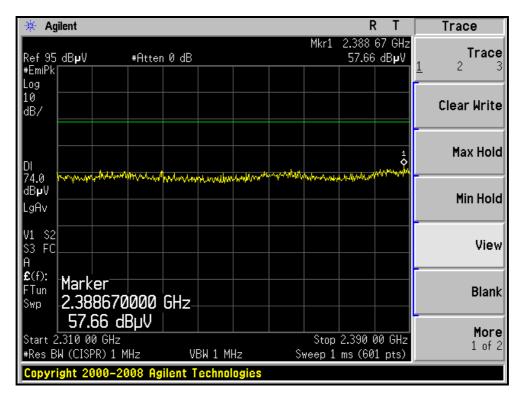
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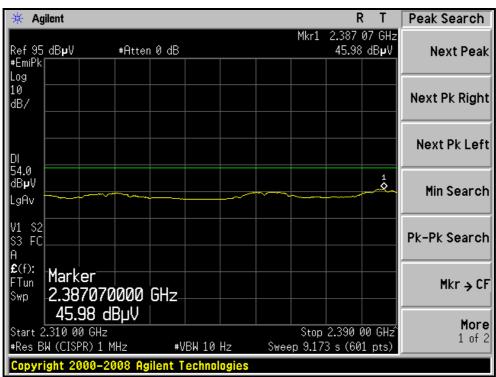






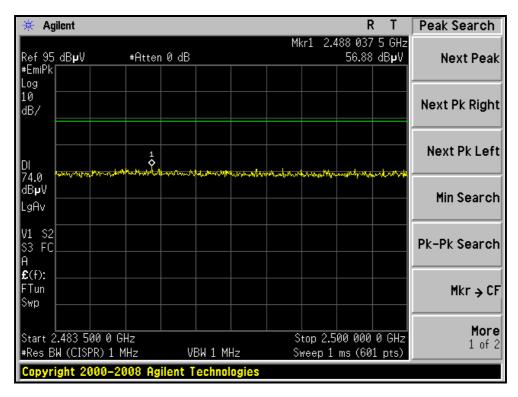
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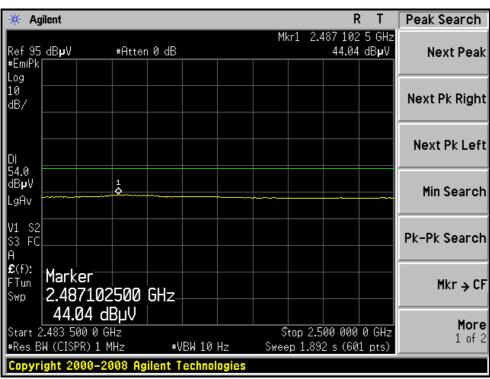






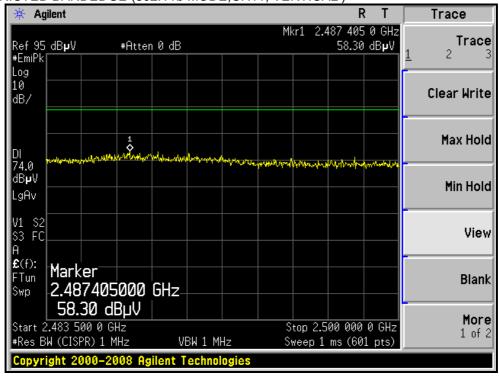
RESTRICTED BANDEDGE (802.11b MODE, CH11, HORIZONTAL)

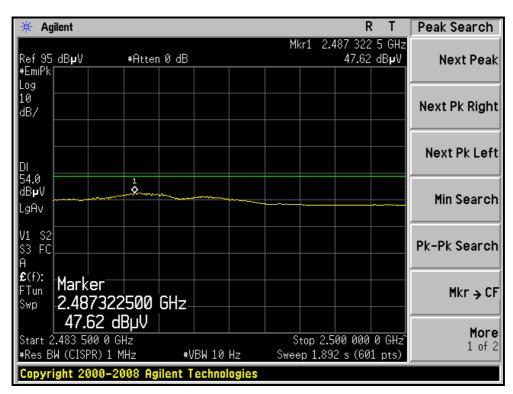






RESTRICTED BANDEDGE (802.11b MODE, CH11, VERTICAL)







802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL Channel 1		FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	2390.00	65.9 PK	74.0	-8.1	2.11 H	71	34.58	31.32			
2	2390.00	49.8 AV	54.0	-4.2	2.11 H	71	18.48	31.32			
3	*2412.00	105.8 PK			1.35 H	71	74.41	31.39			
4	*2412.00	94.9 AV			1.35 H	71	63.51	31.39			
5	4824.00	42.6 PK	74.0	-31.4	1.04 H	20	6.43	36.17			
6	4824.00	30.1 AV	54.0	-23.9	1.04 H	20	-6.07	36.17			
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M				
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	2390.00	70.1 PK	74.0	-3.9	1.06 V	336	38.78	31.32			
2	2390.00	52.7 AV	54.0	-1.3	1.06 V	336	21.38	31.32			
3	*2412.00	110.5 PK			1.09 V	19	79.11	31.39			
4	*2412.00	99.4 AV			1.09 V	19	68.01	31.39			
5	4824.00	42.4 PK	74.0	-31.6	1.43 V	16	6.23	36.17			
6	4824.00	30.2 AV	54.0	-23.9	1.43 V	16	-6.02	36.17			

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*2437.00	105.8 PK			1.97 H	258	74.31	31.49	
2	*2437.00	94.8 AV			1.97 H	258	63.31	31.49	
3	4874.00	43.1 PK	74.0	-30.9	1.00 H	0	6.79	36.31	
4	4874.00	29.8 AV	54.0	-24.2	1.00 H	0	-6.51	36.31	
5	7311.00	49.3 PK	74.0	-24.7	2.13 H	346	7.07	42.23	
6	7311.00	36.7 AV	54.0	-17.3	2.13 H	346	-5.53	42.23	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*2437.00	107.1 PK			1.54 V	284	75.61	31.49	
2	*2437.00	96.5 AV			1.54 V	284	65.01	31.49	
3	4874.00	42.9 PK	74.0	-31.1	1.00 V	220	6.59	36.31	
4	4874.00	29.8 AV	54.0	-24.2	1.00 V	220	-6.51	36.31	
5	7311.00	49.9 PK	74.0	-24.1	1.00 V	0	7.67	42.23	
6	7311.00	36.7 AV	54.0	-17.3	1.00 V	0	-5.53	42.23	

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



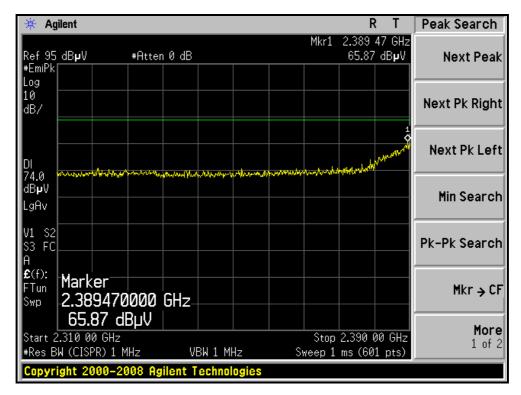
EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH	TESTED BY	Evan Huang	

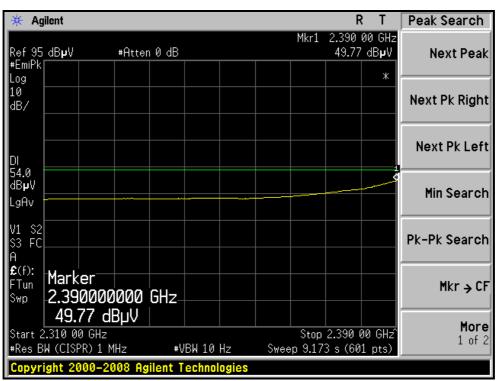
	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*2462.00	105.3 PK			2.15 H	300	73.72	31.58	
2	*2462.00	94.4 AV			2.15 H	300	62.82	31.58	
3	2483.50	66.0 PK	74.0	-8.0	2.03 H	300	34.37	31.66	
4	2483.50	50.1 AV	54.0	-3.9	2.03 H	300	18.44	31.66	
5	4924.00	42.6 PK	74.0	-31.4	1.00 H	17	6.18	36.42	
6	4924.00	30.2 AV	54.0	-23.8	1.00 H	17	-6.22	36.42	
7	7386.00	49.9 PK	74.0	-24.1	2.20 H	353	7.38	42.52	
8	7386.00	36.7 AV	54.0	-17.3	2.20 H	353	-5.82	42.52	
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*2462.00	105.9 PK			1.54 V	284	74.32	31.58	
2	*2462.00	95.6 AV			1.54 V	284	64.02	31.58	
3	2483.50	70.8 PK	74.0	-3.3	1.54 V	284	39.09	31.66	
4	2483.50	52.6 AV	54.0	-1.4	1.54 V	284	20.92	31.66	
5	4924.00	43.2 PK	74.0	-30.8	2.14 V	357	6.78	36.42	
6	4924.00	30.2 AV	54.0	-23.8	2.14 V	357	-6.22	36.42	
7	7386.00	49.9 PK	74.0	-24.1	1.00 V	53	7.38	42.52	
8	7386.00	36.8 AV	54.0	-17.2	1.00 V	53	-5.72	42.52	

- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



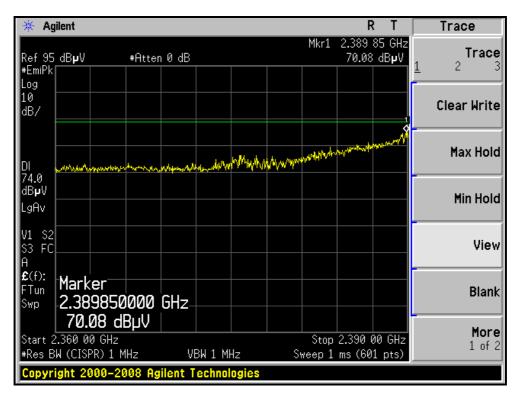
RESTRICTED BANDEDGE (802.11g MODE, CH1, HORIZONTAL)

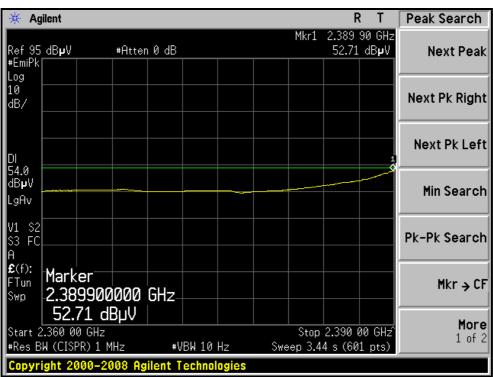






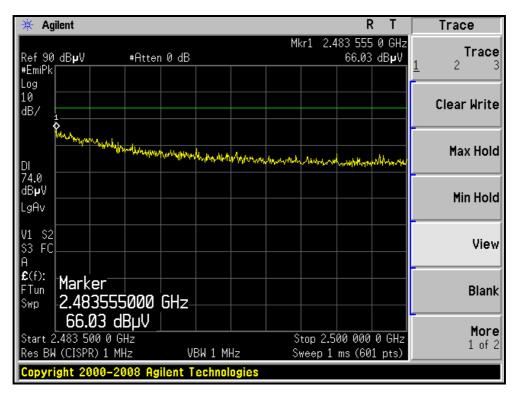
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)

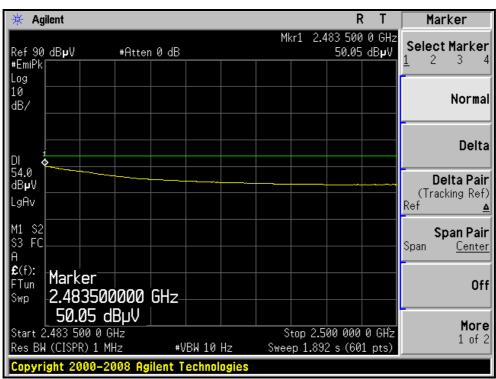






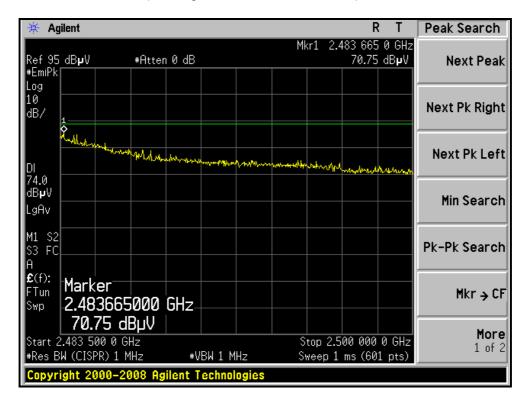
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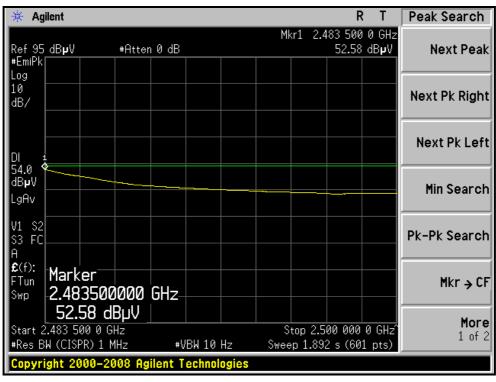






RESTRICTED BANDEDGE (802.11g MODE, CH11, VERTICAL)







4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Test date: July 15, 2011

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP 40	100060	May 11, 2011	May 10, 2012

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

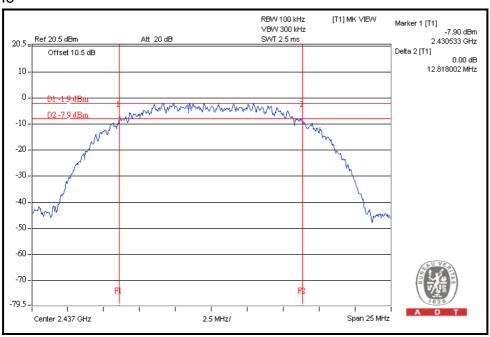
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

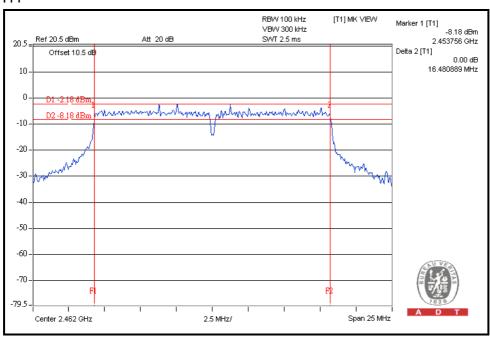
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.67	0.5	PASS
6	2437	12.81	0.5	PASS
11	2462	12.52	0.5	PASS





802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.47	0.5	PASS
6	2437	16.45	0.5	PASS
11	2462	16.48	0.5	PASS





4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

Test date: July 15, 2011

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Anritsu Power Meter	ML2495A	0824006	May 04, 2011	May 03, 2012
Pulse Power Sensor	MA2411B	0738172	May 03, 2011	May 02, 2012

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

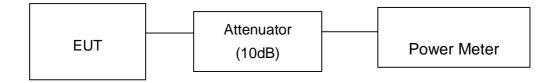
4.4.3 TEST PROCEDURES

- 1. The transmitter output was connected to the power meter through an attenuator; the bandwidth of the fundamental frequency was measured with the power meter.
- 2. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



4.4.7 TEST RESULTS

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	12.9	11.1	30	PASS
6	2437	16.2	12.1	30	PASS
11	2462	17.0	12.3	30	PASS

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	40.7	16.1	30	PASS
6	2437	44.7	16.5	30	PASS
11	2462	51.3	17.1	30	PASS



4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Test date: July 15, 2011

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP 40	100060	May 11, 2011	May 10, 2012

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

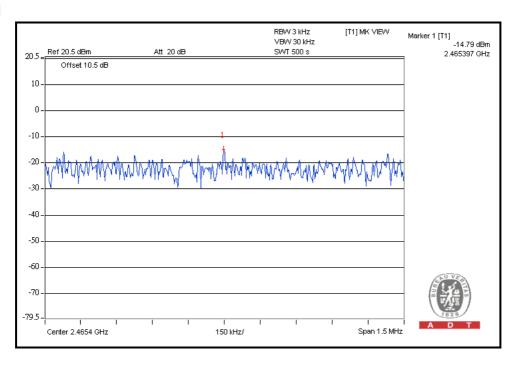
Same as Item 4.3.6



4.5.7 TEST RESULTS

802.11b DSSS MODULATION:

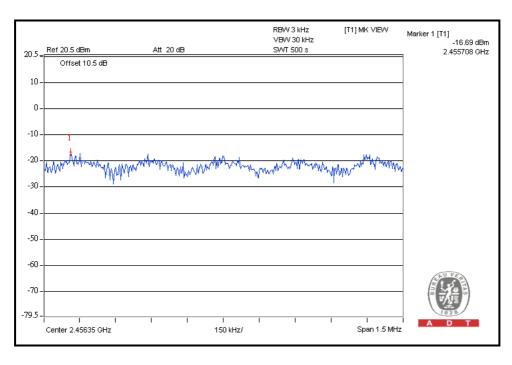
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-16.5	8	PASS
6	2437	-15.4	8	PASS
11	2462	-14.8	8	PASS





802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-19.5	8	PASS
6	2437	-18.7	8	PASS
11	2462	-16.7	8	PASS





4.6 CONDUCTED OUT-BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT-BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

Test date: July 15, 2011

DESCRIPTION &	MODEL NO.	SERIAL	CALIBRATED	CALIBRATED
MANUFACTURER		NO.	DATE	UNTIL
R&S Spectrum Analyzer	FSP 40	100060	May 11, 2011	May 10, 2012

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set RBW of spectrum analyzer to 100kHz and VBW of spectrum analyzer to 300kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (RBW = 100kHz, VBW = 300kHz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

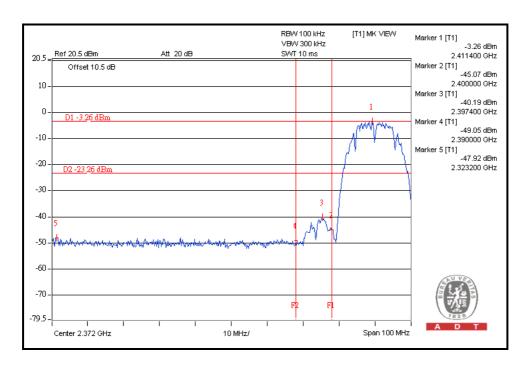
Same as Item 4.3.6

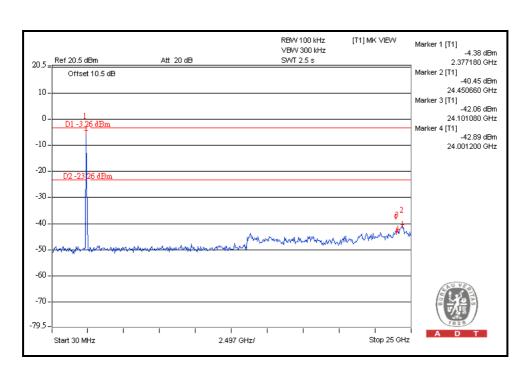
4.6.6 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

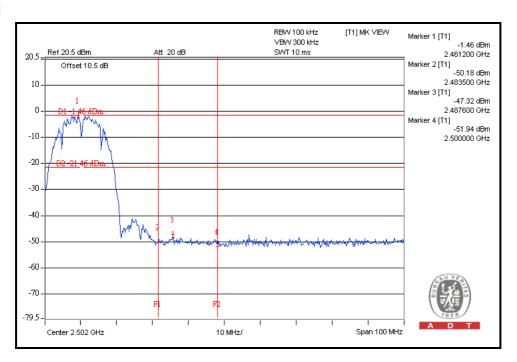


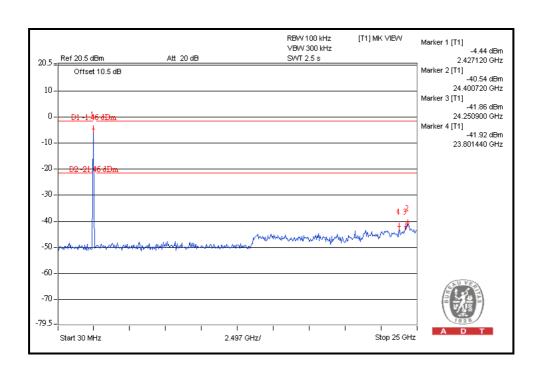
802.11b DSSS MODULATION:





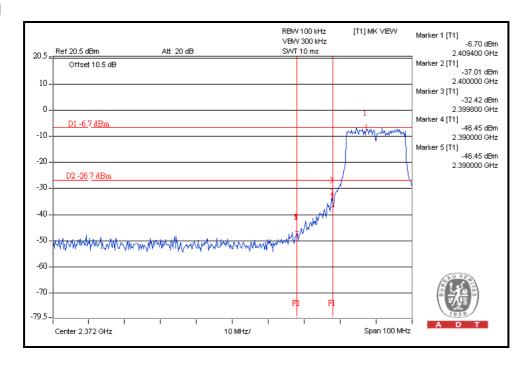


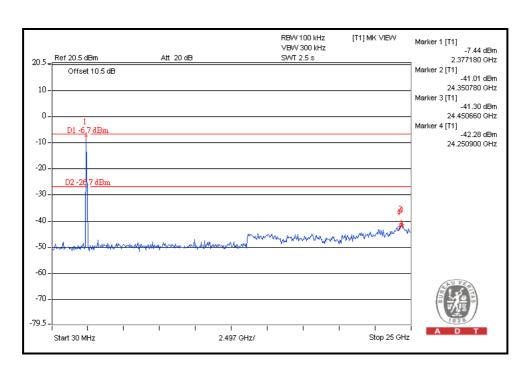




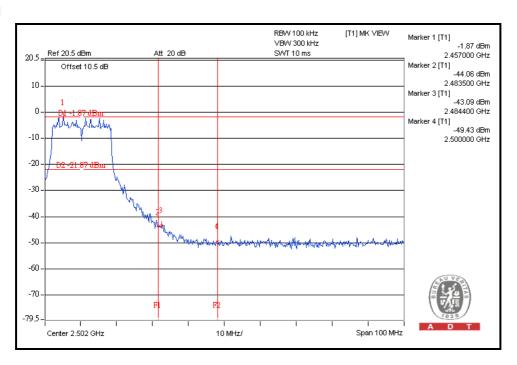


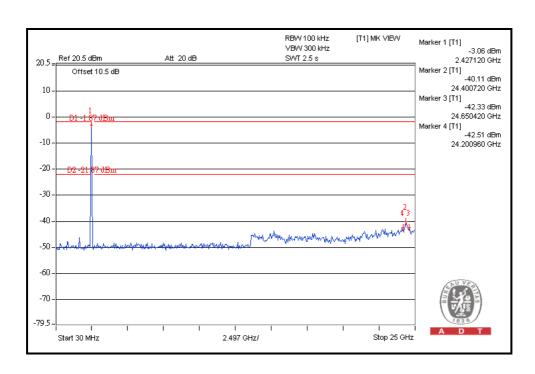
802.11g OFDM MODULATION:













5.INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5.phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab: Hsin Chu EMC/RF Lab:

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26052943 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



6.APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the FLIT by the lab during the test
No any modifications are made to the EUT by the lab during the test.
END