

FCC TEST REPORT (15.247)

REPORT NO.: RF140410C14

MODEL NO.: N450

FCC ID: P4Q-N450W

RECEIVED: Apr. 10, 2014

TESTED: May 06, 2014 ~ May 10, 2014

ISSUED: May 19, 2014

APPLICANT: MITAC International Corp

ADDRESS: Building B, No. 209, Sec. 1, Nan Gang Rd., Nan
Gang Dist., Taipei 11568, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan (R.O.C)

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim
product certification, approval, or endorsement by
TAF or any government agencies.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



TABLE OF CONTENTS

RELEASE CONTROL RECORD	5
1. CERTIFICATION	6
2. SUMMARY OF TEST RESULTS	7
2.1 MEASUREMENT UNCERTAINTY	7
3. GENERAL INFORMATION	8
3.1 GENERAL DESCRIPTION OF EUT	8
3.2 DESCRIPTION OF TEST MODES	10
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	11
3.3 DESCRIPTION OF SUPPORT UNITS	15
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST	15
3.4 DUTY CYCLE TEST SIGNAL	16
3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS	18
4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)	19
4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT	19
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	19
4.1.2 TEST INSTRUMENTS	20
4.1.3 TEST PROCEDURES	21
4.1.4 DEVIATION FROM TEST STANDARD	21
4.1.5 TEST SETUP	22
4.1.6 EUT OPERATING CONDITIONS	23
4.1.7 TEST RESULTS	24
4.2 CONDUCTED EMISSION MEASUREMENT	47
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	47
4.2.2 TEST INSTRUMENTS	47
4.2.3 TEST PROCEDURES	48
4.2.4 DEVIATION FROM TEST STANDARD	48
4.2.5 TEST SETUP	49
4.2.6 EUT OPERATING CONDITIONS	49
4.2.7 TEST RESULTS	50
4.3 6dB BANDWIDTH MEASUREMENT	56
4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT	56
4.3.2 TEST SETUP	56
4.3.3 TEST INSTRUMENTS	56
4.3.4 TEST PROCEDURE	56
4.3.5 DEVIATION FROM TEST STANDARD	56
4.3.6 EUT OPERATING CONDITIONS	56
4.3.7 TEST RESULTS	57
4.4 CONDUCTED OUTPUT POWER	59
4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT	59
4.4.2 TEST SETUP	59
4.4.3 TEST INSTRUMENTS	59
4.4.4 TEST PROCEDURES	59
4.4.5 DEVIATION FROM TEST STANDARD	59
4.4.6 EUT OPERATING CONDITIONS	59
4.4.7 TEST RESULTS	60
4.5 POWER SPECTRAL DENSITY MEASUREMENT	61
4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	61
4.5.2 TEST SETUP	61
4.5.3 TEST INSTRUMENTS	61
4.5.4 TEST PROCEDURE	61
4.5.5 DEVIATION FROM TEST STANDARD	61
4.5.6 EUT OPERATING CONDITION	61



4.5.7	TEST RESULTS.....	62
4.6	CONDUCTED OUT OF BAND EMISSION MEASUREMENT	64
4.6.1	LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT	64
4.6.2	TEST SETUP	64
4.6.3	TEST INSTRUMENTS.....	64
4.6.4	TEST PROCEDURE	64
4.6.5	DEVIATION FROM TEST STANDARD	64
4.6.6	EUT OPERATING CONDITION.....	64
4.6.7	TEST RESULTS.....	65
5.	TEST TYPES AND RESULTS (FOR 5.0GHz BAND)	69
5.1	RADIATED EMISSION AND BANDEDGE MEASUREMENT	69
5.1.1	LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	69
5.1.2	TEST INSTRUMENTS.....	70
5.1.3	TEST PROCEDURES	70
5.1.4	DEVIATION FROM TEST STANDARD	70
5.1.5	TEST SETUP	70
5.1.6	EUT OPERATING CONDITIONS	70
5.1.7	TEST RESULTS.....	71
5.2	CONDUCTED EMISSION MEASUREMENT	90
5.2.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	90
5.2.2	TEST INSTRUMENTS.....	90
5.2.3	TEST PROCEDURES	90
5.2.4	DEVIATION FROM TEST STANDARD	90
5.2.5	TEST SETUP	90
5.2.6	EUT OPERATING CONDITIONS	90
5.2.7	TEST RESULTS.....	91
5.3	6dB BANDWIDTH MEASUREMENT	115
5.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	115
5.3.2	TEST SETUP	115
5.3.3	TEST INSTRUMENTS.....	115
5.3.4	TEST PROCEDURE	115
5.3.5	DEVIATION FROM TEST STANDARD	115
5.3.6	EUT OPERATING CONDITIONS	115
5.3.7	TEST RESULTS.....	116
5.4	MAXIMUM OUTPUT POWER	118
5.4.1	LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT	118
5.4.2	TEST SETUP	118
5.4.3	INSTRUMENTS.....	118
5.4.4	TEST PROCEDURES	118
5.4.5	DEVIATION FROM TEST STANDARD	118
5.4.6	EUT OPERATING CONDITIONS	118
5.4.7	TEST RESULTS.....	119
5.5	POWER SPECTRAL DENSITY MEASUREMENT.....	120
5.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	120
5.5.2	TEST SETUP	120
5.5.3	TEST INSTRUMENTS.....	120
5.5.4	TEST PROCEDURE	120
5.5.5	DEVIATION FROM TEST STANDARD	120
5.5.6	EUT OPERATING CONDITION.....	120
5.5.7	TEST RESULTS.....	121
5.6	CONDUCTED OUT OF BAND EMISSION MEASUREMENT	123
5.6.1	LIMITS OF OUT OF BAND EMISSION MEASUREMENT	123
5.6.2	TEST SETUP	123
5.6.3	TEST INSTRUMENTS.....	123
5.6.4	TEST PROCEDURE	123



A D T

5.6.5	DEVIATION FROM TEST STANDARD	123
5.6.6	EUT OPERATING CONDITION.....	123
5.6.7	TEST RESULTS.....	123
6.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	127
7.	INFORMATION ON THE TESTING LABORATORIES	128
8.	APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	129



A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140410C14	Original release	May 19, 2014



A D T

1. CERTIFICATION

PRODUCT: Tablet

MODEL NO.: N450

BRAND: Mio, Mitac

APPLICANT: MITAC International Corp

TESTED: May 06, 2014 ~ May 10, 2014

TEST SAMPLE: Production Unit

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

ANSI C63.10-2009

The above equipment (model: N450) 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

:

Ivonne Wu

, **DATE**

: May 19, 2014

Ivonne Wu / Supervisor

APPROVED BY

:

Sam chen

, **DATE**

: May 19, 2014

Sam Chen / Senior Project Engineer

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -2.27dB at 0.66563MHz.
15.205 & 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.56dB at 2484.00MHz.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit.
15.247(d)	Antenna Port Emission	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	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:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Tablet
MODEL NO.	N450
POWER SUPPLY	12Vdc (adapter or host equipment) 3.7Vdc (Li-ion battery)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11.0 / 5.5 / 2.0 / 1.0 Mbps 802.11g: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11a: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11n: up to MCS7
OPERATING FREQUENCY	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5745 ~ 5825MHz
NUMBER OF CHANNEL	2.4GHz: 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) 5.0GHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	93.11mW for 2412 ~ 2462MHz 94.84mW for 5745 ~ 5825MHz
ANTENNA TYPE	2.4GHz: PIFA antenna with 2.3dBi gain 5.0GHz: PIFA antenna with 2.64dBi gain
ANTENNA CONNECTOR	NA
DATA CABLE	Refer to Note as below
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

1. The EUT contains following accessory devices.

ITEM	BRAND	MODEL	SPECIFICATION
Adapter 1	SINO-AMERICAN	SA142B-12U	I/P: 110-240Vac, 1.2A O/P: 12Vdc, 3A
Adapter 2	SINPRO	HPU63A-105	I/P: 100-240Vac, 1.62-0.72A O/P: 12Vdc, 5.25A
Battery 1	GETAC	BP-TKS-12/3360 SN	3.7Vdc, 6720mAh
Battery 2	Tian Yu	Bk-N450X-510KNX-01	3.7Vdc, 510mAh
USB Cable	EMINENCE	JU-57405040525	0.9m cable
BCR-1 (1D)	Opticon	MDL2001	--
BCR-2 (2D)	HoneyWell	5680	--
BCR-3 (2D)	Code	CR8012	--
CPU	TI	44705GPCBS	1.5G Hz
eMMC	N/A	N/A	16GB
LCD Panel	N/A	N/A	10.1 inch
Front Camera	Liteon	10P2SF130	--
Rear Camera	Liteon	10P2SA511	--
WLAN,BT Module	Jorjin	WG7833-B0& WX7833-B0	--

2. The above EUT information is 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

FOR 2.4GHz:

11 channels are provided for 802.11b, 802.11g and 802.11n (20MHz):

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		

7 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

FOR 5.0GHz (5745 ~ 5825MHz):

5 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

WLAN 2.4GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	√	√	√	√	Tablet w/o Bar Code Scanner + Adapter 1
B	√	√	-	-	Tablet w/ 1D Opticon Scanner + Adapter 1
C	√	√	-	-	Tablet w/ 2D HoneyWell Scanner + Adapter 1
D	√	√	-	-	Tablet w/ 2D Code Scanner + Adapter 1
E	-	√	√	-	Tablet w/o Bar Code Scanner + Adapter 2
F	-	√	-	-	Tablet w/ 1D Opticon Scanner + Adapter 2
G	-	√	-	-	Tablet w/ 2D HoneyWell Scanner + Adapter 2
H	-	√	-	-	Tablet w/ 2D Code Scanner + Adapter 2

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	MCS0
	802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	MCS0
B, C, D	802.11g	1 to 11	11	OFDM	BPSK	6.0

RADIATED EMISSION TEST (BELOW 1GHz):

☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A~H	802.11g	1 to 11	11	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, E	802.11g	1 to 11	11	OFDM	BPSK	6.0

BANDEDGE 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	MCS0
A	802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	MCS0

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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	MCS0
A	802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	MCS0

Test CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
PLC	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
APCM	25deg. C, 65%RH	120Vac, 60Hz	David Huang

WLAN 5.0GHz (5745 ~ 5825MHz):

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Tablet w/o Bar Code Scanner + Adapter 1
B	√	√	√	-	Tablet w/ 1D Opticon Scanner + Adapter 1
C	√	√	√	-	Tablet w/ 2D HoneyWell Scanner + Adapter 1
D	√	√	√	-	Tablet w/ 2D Code Scanner + Adapter 1
E	-	√	√	-	Tablet w/o Bar Code Scanner + Adapter 2
F	-	√	√	-	Tablet w/ 1D Opticon Scanner + Adapter 2
G	-	√	√	-	Tablet w/ 2D HoneyWell Scanner + Adapter 2
H	-	√	√	-	Tablet w/ 2D Code Scanner + Adapter 2

Where **RE≥1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	149 to 161	149, 157, 165	OFDM	BPSK	6.0
	802.11n (20MHz)	149 to 161	149, 157, 165	OFDM	BPSK	MCS0
	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	MCS0
B, C, D	802.11n (40MHz)	151 to 159	151	OFDM	BPSK	MCS0

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A~H	802.11n (40MHz)	151 to 159	151	OFDM	BPSK	MCS0

POWER LINE CONDUCTED EMISSION TEST:

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A~H	802.11n (40MHz)	151 to 159	151	OFDM	BPSK	MCS0

BANDEDGE 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	149 to 161	149, 157, 165	OFDM	BPSK	6.0
A	802.11n (20MHz)	149 to 161	149, 157, 165	OFDM	BPSK	MCS0
A	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	MCS0

ANTENNA PORT CONDUCTED 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	149 to 161	149, 157, 165	OFDM	BPSK	6.0
A	802.11n (20MHz)	149 to 161	149, 157, 165	OFDM	BPSK	MCS0
A	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	MCS0

Test CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
PLC	25deg. C, 65%RH	120Vac, 60Hz	Peter Weng
APCM	25deg. C, 65%RH	120Vac, 60Hz	David Huang



3.3 DESCRIPTION OF SUPPORT UNITS

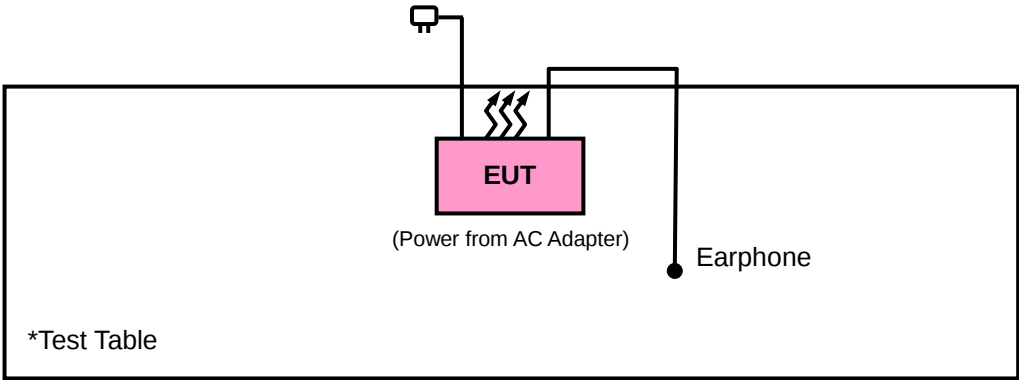
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Earphone	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

NOTE: 1. All power cords of the above support units are non shielded (1.8m).

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



3.4 DUTY CYCLE TEST SIGNAL

WLAN 2.4GHz

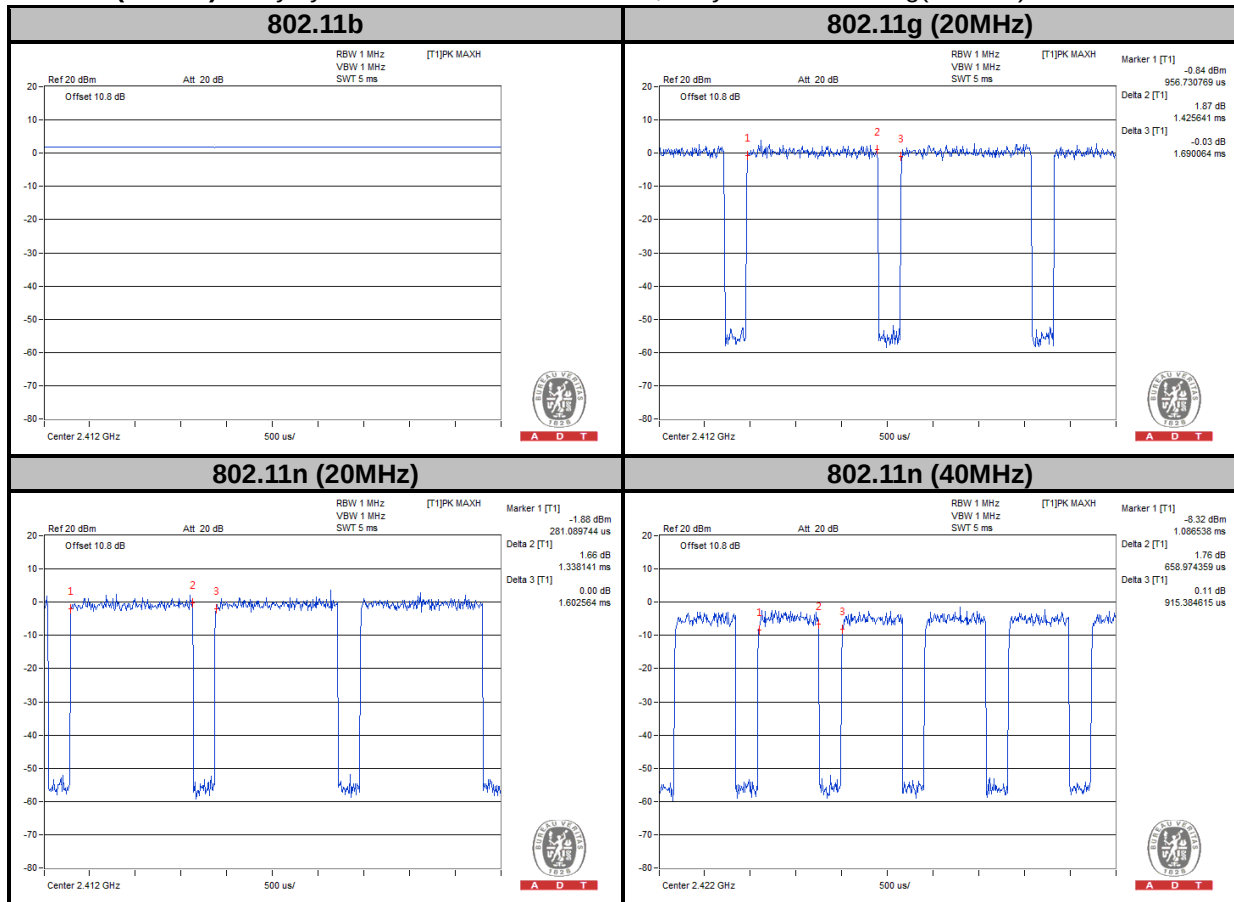
802.11b: Duty cycle of test signal is 100 %

Duty cycle is < 98%

802.11g: Duty cycle = $1.426/1.690 = 0.844$, Duty factor = $10 * \log(1/0.844) = 0.74$

802.11n (20MHz): Duty cycle = $1.338/1.602 = 0.835$, Duty factor = $10 * \log(1/0.835) = 0.78$

802.11n (40MHz): Duty cycle = $658.97/915.38 = 0.720$, Duty factor = $10 * \log(1/0.720) = 1.43$



5725MHz ~ 5850MHz

Duty cycle is < 98%

802.11a: Duty cycle = $1.426/1.691 = 0.843$, Duty factor = $10 * \log(1/0.843) = 0.74$

802.11n (20MHz): Duty cycle = $1.320/1.592 = 0.829$, Duty factor = $10 * \log(1/0.829) = 0.81$

802.11n (40MHz): Duty cycle = $623.08/927.56 = 0.672$, Duty factor = $10 * \log(1/0.672) = 1.73$



3.5 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)

558074 D01 DTS Meas Guidance v03r01

ANSI C63.10-2009

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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. 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.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver AGILENT	N9038A	MY51210203	Jan. 17, 2014	Jan. 16, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2013	Dec. 20, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 27, 2014	Feb. 26, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 19, 2014	Feb. 18, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 18, 2013	Dec. 17, 2014
Loop Antenna	HFH2-Z2	100070	Mar. 06, 2014	Mar. 05, 2016
Preamplifier EMCI	EMC 012645	980115	Dec. 26, 2013	Dec. 25, 2014
Preamplifier EMCI	EMC 184045	980116	Jan. 13, 2014	Jan. 12, 2015
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2013	Dec. 26, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2013	Oct. 17, 2014
RF signal cable Worken	RG-213	NA	Nov. 07, 2013	Nov. 06, 2014
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
Power Meter	ML2495A	1232002	Aug. 23, 2013	Aug. 22, 2014
Power Sensor	MA2411B	1207325	Aug. 23, 2013	Aug. 22, 2014

- 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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in HwaYa Chamber 10.
4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
5. The FCC Site Registration No. is 690701.
6. The IC Site Registration No. is IC 7450F-10.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. 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. Height of receiving 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

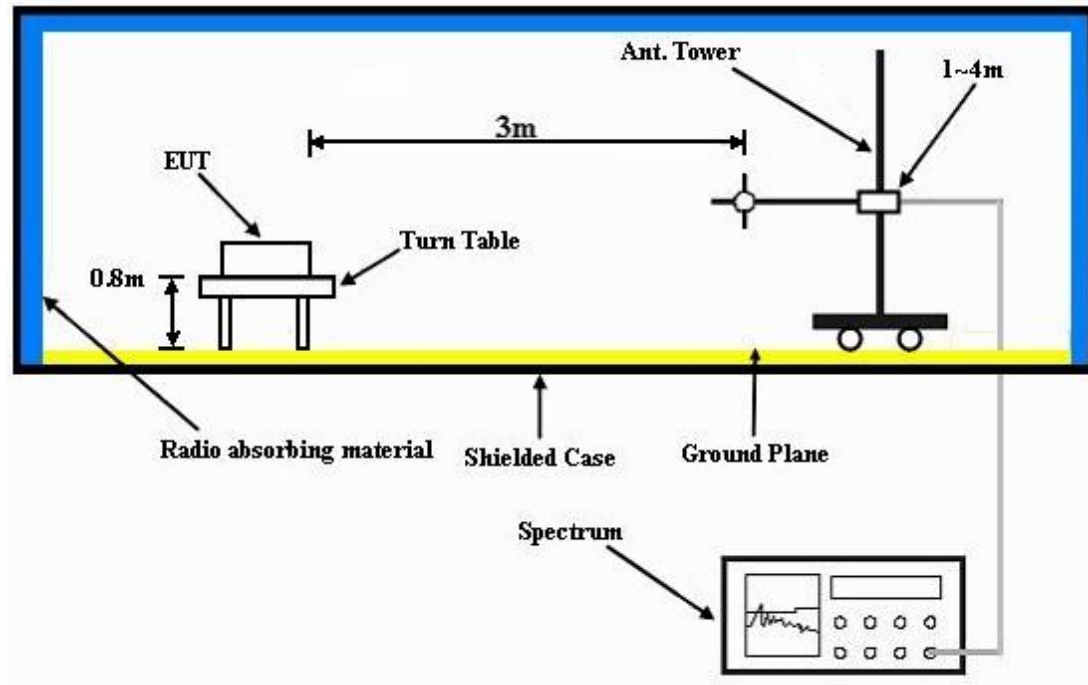
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 1kHz (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

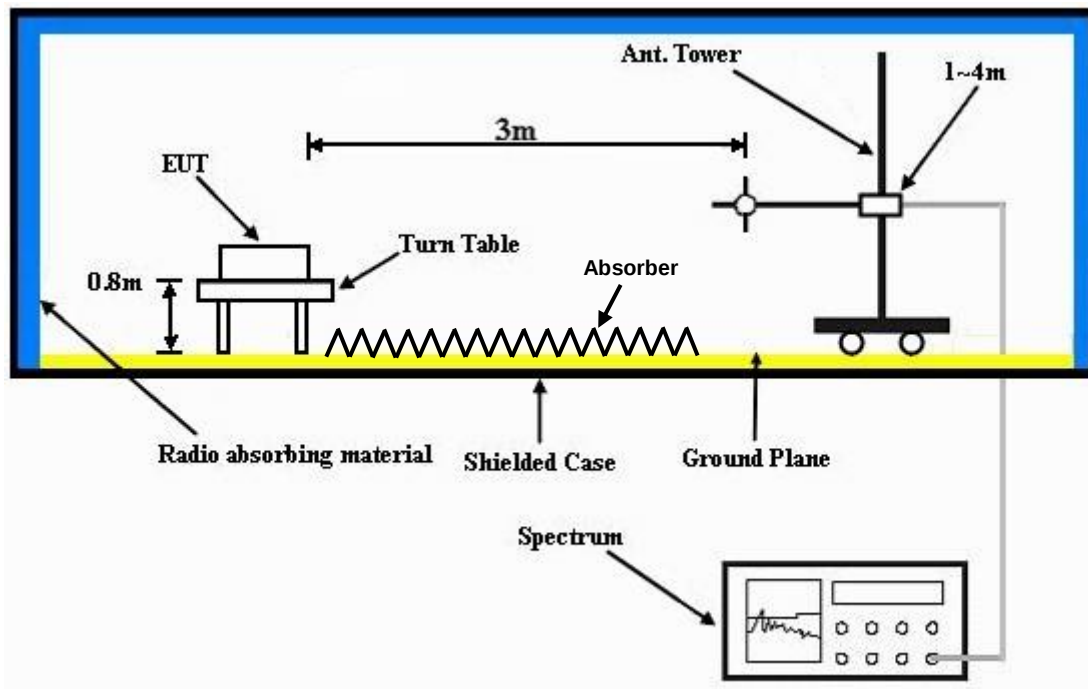
No deviation.

4.1.5 TEST SETUP

Frequency Range 30MHz ~ 1GHz



Frequency Range above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on a testing table.
- b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA

MODE A

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2376	45.25	52.37	54	-8.75	26.86	3.52	37.5	105	321	Average
2376	57.67	64.79	74	-16.33	26.86	3.52	37.5	105	321	Peak
2412	102.34	109.36			26.96	3.54	37.52	105	321	Average
2412	107.66	114.68			26.96	3.54	37.52	105	321	Peak
2494	35.92	42.35	54	-18.08	27.2	3.62	37.25	105	321	Average
2494	57.34	63.77	74	-16.66	27.2	3.62	37.25	105	321	Peak
4824	49.25	65.57	54	-4.75	30.99	5.77	53.08	101	346	Average
4824	52.72	69.04	74	-21.28	30.99	5.77	53.08	101	346	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2386	40.74	47.81	54	-13.26	26.91	3.52	37.5	102	93	Average
2386	56.48	63.55	74	-17.52	26.91	3.52	37.5	102	93	Peak
2412	97.65	104.67			26.96	3.54	37.52	102	93	Average
2412	102.86	109.88			26.96	3.54	37.52	102	93	Peak
2492	34.03	40.46	54	-19.97	27.2	3.62	37.25	102	93	Average
2492	56.39	62.82	74	-17.61	27.2	3.62	37.25	102	93	Peak
4824	52.55	68.87	54	-1.45	30.99	5.77	53.08	114	123	Average
4824	55.47	71.79	74	-18.53	30.99	5.77	53.08	114	123	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2412MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	42.15	48.79	54	-11.85	26.91	3.97	37.52	104	324	Average
2390	57.62	64.26	74	-16.38	26.91	3.97	37.52	104	324	Peak
2437	103.01	109.42			27.06	3.99	37.46	104	324	Average
2437	107.94	114.35			27.06	3.99	37.46	104	324	Peak
2484	42.9	49.03	54	-11.1	27.15	4.04	37.32	104	324	Average
2484	57.97	64.1	74	-16.03	27.15	4.04	37.32	104	324	Peak
4874	46.23	62.42	54	-7.77	31.06	5.8	53.05	100	348	Average
4874	50.42	66.61	74	-23.58	31.06	5.8	53.05	100	348	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2352	38.2	44.96	54	-15.8	26.81	3.92	37.49	102	92	Average
2352	57.39	64.15	74	-16.61	26.81	3.92	37.49	102	92	Peak
2437	99.25	105.66			27.06	3.99	37.46	102	92	Average
2437	103.84	110.25			27.06	3.99	37.46	102	92	Peak
2484	37.55	43.68	54	-16.45	27.15	4.04	37.32	102	92	Average
2484	56.74	62.87	74	-17.26	27.15	4.04	37.32	102	92	Peak
4874	52.52	68.71	54	-1.48	31.06	5.8	53.05	115	127	Average
4874	55.23	71.42	74	-18.77	31.06	5.8	53.05	115	127	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2437MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2360	35.83	43.01	54	-18.17	26.81	3.5	37.49	103	323	Average
2360	56.46	63.64	74	-17.54	26.81	3.5	37.49	103	323	Peak
2462	103.26	109.97			27.1	3.58	37.39	103	323	Average
2462	107.93	114.64			27.1	3.58	37.39	103	323	Peak
2486	46.14	52.71	54	-7.86	27.15	3.6	37.32	103	323	Average
2486	58.53	65.1	74	-15.47	27.15	3.6	37.32	103	323	Peak
4924	47.15	63.23	54	-6.85	31.12	5.83	53.03	113	4	Average
4924	51.33	67.41	74	-22.67	31.12	5.83	53.03	113	4	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2382	33.85	40.97	54	-20.15	26.86	3.52	37.5	100	92	Average
2382	56.25	63.37	74	-17.75	26.86	3.52	37.5	100	92	Peak
2462	98.25	104.96			27.1	3.58	37.39	100	92	Average
2462	102.73	109.44			27.1	3.58	37.39	100	92	Peak
2498	40.27	46.7	54	-13.73	27.2	3.62	37.25	100	92	Average
2498	57.02	63.45	74	-16.98	27.2	3.62	37.25	100	92	Peak
4924	52.73	68.81	54	-1.27	31.12	5.83	53.03	111	128	Average
4924	55.38	71.46	74	-18.62	31.12	5.83	53.03	111	128	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	51.78	58.85	54	-2.22	26.91	3.54	37.52	106	344	Average
2390	73.14	80.21	74	-0.86	26.91	3.54	37.52	106	344	Peak
2412	98.86	105.88			26.96	3.54	37.52	106	344	Average
2412	108.56	115.58			26.96	3.54	37.52	106	344	Peak
2484	36.67	43.24	54	-17.33	27.15	3.6	37.32	106	344	Average
2484	59.6	66.17	74	-14.4	27.15	3.6	37.32	106	344	Peak
4824	35.8	52.12	54	-18.2	30.99	5.77	53.08	102	360	Average
4824	45.82	62.14	74	-28.18	30.99	5.77	53.08	102	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	46.59	53.66	54	-7.41	26.91	3.54	37.52	100	95	Average
2390	70.22	77.29	74	-3.78	26.91	3.54	37.52	100	95	Peak
2412	93.79	100.81			26.96	3.54	37.52	100	95	Average
2412	103.68	110.7			26.96	3.54	37.52	100	95	Peak
2486	34.47	41.04	54	-19.53	27.15	3.6	37.32	100	95	Average
2486	56.32	62.89	74	-17.68	27.15	3.6	37.32	100	95	Peak
4824	38.85	55.17	54	-15.15	30.99	5.77	53.08	114	127	Average
4824	48.51	64.83	74	-25.49	30.99	5.77	53.08	114	127	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2412MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2362	37.21	44.39	54	-16.79	26.81	3.5	37.49	107	344	Average
2362	56.88	64.06	74	-17.12	26.81	3.5	37.49	107	344	Peak
2437	97.17	104.01			27.06	3.56	37.46	107	344	Average
2437	107.07	113.91			27.06	3.56	37.46	107	344	Peak
2496	37.64	44.07	54	-16.36	27.2	3.62	37.25	107	344	Average
2496	57.26	63.69	74	-16.74	27.2	3.62	37.25	107	344	Peak
4874	36.64	52.83	54	-17.36	31.06	5.8	53.05	114	2	Average
4874	46.61	62.8	74	-27.39	31.06	5.8	53.05	114	2	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2386	35.32	42.39	54	-18.68	26.91	3.52	37.5	100	94	Average
2386	57.12	64.19	74	-16.88	26.91	3.52	37.5	100	94	Peak
2437	94.72	101.56			27.06	3.56	37.46	100	94	Average
2437	104.56	111.4			27.06	3.56	37.46	100	94	Peak
2486	35.93	42.5	54	-18.07	27.15	3.6	37.32	100	94	Average
2486	56.35	62.92	74	-17.65	27.15	3.6	37.32	100	94	Peak
4874	40.94	57.13	54	-13.06	31.06	5.8	53.05	100	125	Average
4874	50.05	66.24	74	-23.95	31.06	5.8	53.05	100	125	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2437MHz: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2368	34.47	41.64	54	-19.53	26.81	3.52	37.5	104	347	Average
2368	55.83	63	74	-18.17	26.81	3.52	37.5	104	347	Peak
2462	97.45	104.16			27.1	3.58	37.39	104	347	Average
2462	107.54	114.25			27.1	3.58	37.39	104	347	Peak
2486	50.91	57.48	54	-3.09	27.15	3.6	37.32	104	347	Average
2486	71.76	78.33	74	-2.24	27.15	3.6	37.32	104	347	Peak
4924	36.13	52.21	54	-17.87	31.12	5.83	53.03	100	132	Average
4924	44.96	61.04	74	-29.04	31.12	5.83	53.03	100	132	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2384	33.93	41.05	54	-20.07	26.86	3.52	37.5	100	96	Average
2384	56.81	63.93	74	-17.19	26.86	3.52	37.5	100	96	Peak
2462	92.85	99.56			27.1	3.58	37.39	100	96	Average
2462	103.02	109.73			27.1	3.58	37.39	100	96	Peak
2484	46.58	53.15	54	-7.42	27.15	3.6	37.32	100	96	Average
2484	68.01	74.58	74	-5.99	27.15	3.6	37.32	100	96	Peak
4924	40.52	56.6	54	-13.48	31.12	5.83	53.03	104	26	Average
4924	51.52	67.6	74	-22.48	31.12	5.83	53.03	104	26	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	49.19	56.26	54	-4.81	26.91	3.54	37.52	106	342	Average
2390	72.66	79.73	74	-1.34	26.91	3.54	37.52	106	342	Peak
2412	97.25	104.27			26.96	3.54	37.52	106	342	Average
2412	107.1	114.12			26.96	3.54	37.52	106	342	Peak
2496	36.51	42.94	54	-17.49	27.2	3.62	37.25	106	342	Average
2496	60.26	66.69	74	-13.74	27.2	3.62	37.25	106	342	Peak
4824	35.2	51.52	54	-18.8	30.99	5.77	53.08	103	360	Average
4824	46.15	62.47	74	-27.85	30.99	5.77	53.08	103	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	46.43	53.5	54	-7.57	26.91	3.54	37.52	100	95	Average
2390	66	73.07	74	-8	26.91	3.54	37.52	100	95	Peak
2412	93.4	100.42			26.96	3.54	37.52	100	95	Average
2412	103.52	110.54			26.96	3.54	37.52	100	95	Peak
2484	34.47	41.04	54	-19.53	27.15	3.6	37.32	100	95	Average
2484	55.8	62.37	74	-18.2	27.15	3.6	37.32	100	95	Peak
4824	36.44	52.76	54	-17.56	30.99	5.77	53.08	100	120	Average
4824	48.31	64.63	74	-25.69	30.99	5.77	53.08	100	120	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2412MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	36.18	43.25	54	-17.82	26.91	3.54	37.52	106	346	Average
2390	54.6	61.67	74	-19.4	26.91	3.54	37.52	106	346	Peak
2437	99.9	106.74			27.06	3.56	37.46	106	346	Average
2437	106.96	113.8			27.06	3.56	37.46	106	346	Peak
2484	37.42	43.99	54	-16.58	27.15	3.6	37.32	106	346	Average
2484	55.65	62.22	74	-18.35	27.15	3.6	37.32	106	346	Peak
4874	35.29	51.48	54	-18.71	31.06	5.8	53.05	101	360	Average
4874	46.5	62.69	74	-27.5	31.06	5.8	53.05	101	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2384	35.02	42.14	54	-18.98	26.86	3.52	37.5	100	94	Average
2384	56.62	63.74	74	-17.38	26.86	3.52	37.5	100	94	Peak
2437	93.8	100.64			27.06	3.56	37.46	100	94	Average
2437	103.45	110.29			27.06	3.56	37.46	100	94	Peak
2484	35.66	42.23	54	-18.34	27.15	3.6	37.32	100	94	Average
2484	57.71	64.28	74	-16.29	27.15	3.6	37.32	100	94	Peak
4874	39.42	55.61	54	-14.58	31.06	5.8	53.05	113	127	Average
4874	50.27	66.46	74	-23.73	31.06	5.8	53.05	113	127	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2437MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2362	35.72	42.9	54	-18.28	26.81	3.5	37.49	105	350	Average
2362	59.49	66.67	74	-14.51	26.81	3.5	37.49	105	350	Peak
2462	97.66	104.37			27.1	3.58	37.39	105	350	Average
2462	107.29	114			27.1	3.58	37.39	105	350	Peak
2484	51.03	57.6	54	-2.97	27.15	3.6	37.32	105	350	Average
2484	72.25	78.82	74	-1.75	27.15	3.6	37.32	105	350	Peak
4924	35.35	51.43	54	-18.65	31.12	5.83	53.03	102	4	Average
4924	44.4	60.48	74	-29.6	31.12	5.83	53.03	102	4	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2382	33.62	40.74	54	-20.38	26.86	3.52	37.5	156	92	Average
2382	55.79	62.91	74	-18.21	26.86	3.52	37.5	156	92	Peak
2462	93.66	100.37			27.1	3.58	37.39	156	92	Average
2462	103.42	110.13			27.1	3.58	37.39	156	92	Peak
2484	45.86	52.43	54	-8.14	27.15	3.6	37.32	156	92	Average
2484	67.25	73.82	74	-6.75	27.15	3.6	37.32	156	92	Peak
4924	39.71	55.79	54	-14.29	31.12	5.83	53.03	112	125	Average
4924	48.47	64.55	74	-25.53	31.12	5.83	53.03	112	125	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	51.15	58.22	54	-2.85	26.91	3.54	37.52	107	338	Average
2390	72.38	79.45	74	-1.62	26.91	3.54	37.52	107	338	Peak
2422	92.03	98.92			27.01	3.56	37.46	107	338	Average
2422	101.91	108.8			27.01	3.56	37.46	107	338	Peak
2484	36.74	43.31	54	-17.26	27.15	3.6	37.32	107	338	Average
2484	55.43	62	74	-18.57	27.15	3.6	37.32	107	338	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	47.81	54.88	54	-6.19	26.91	3.54	37.52	100	95	Average
2390	68.41	75.48	74	-5.59	26.91	3.54	37.52	100	95	Peak
2422	89.4	96.29			27.01	3.56	37.46	100	95	Average
2422	98.97	105.86			27.01	3.56	37.46	100	95	Peak
2484	35.63	42.2	54	-18.37	27.15	3.6	37.32	100	95	Average
2484	56.7	63.27	74	-17.3	27.15	3.6	37.32	100	95	Peak
4844	36.5	52.77	54	-17.5	31.01	5.78	53.06	100	119	Average
4844	45.3	61.57	74	-28.7	31.01	5.78	53.06	100	119	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2422MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2388	40.9	47.95	54	-13.1	26.91	3.54	37.5	105	335	Average
2388	58.86	65.91	74	-15.14	26.91	3.54	37.5	105	335	Peak
2437	91.8	98.64			27.06	3.56	37.46	105	335	Average
2437	101.07	107.91			27.06	3.56	37.46	105	335	Peak
2484	42.52	49.09	54	-11.48	27.15	3.6	37.32	105	335	Average
2484	61.02	67.59	74	-12.98	27.15	3.6	37.32	105	335	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	39.61	46.68	54	-14.39	26.91	3.54	37.52	100	95	Average
2390	58.11	65.18	74	-15.89	26.91	3.54	37.52	100	95	Peak
2437	88.93	95.77			27.06	3.56	37.46	100	95	Average
2437	98.61	105.45			27.06	3.56	37.46	100	95	Peak
2496	39.01	45.44	54	-14.99	27.2	3.62	37.25	100	95	Average
2496	56.7	63.13	74	-17.3	27.2	3.62	37.25	100	95	Peak
4874	38.66	54.85	54	-15.34	31.06	5.8	53.05	100	128	Average
4874	46.01	62.2	74	-27.99	31.06	5.8	53.05	100	128	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2437MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390	35.69	42.76	54	-18.31	26.91	3.54	37.52	103	336	Average
2390	55.54	62.61	74	-18.46	26.91	3.54	37.52	103	336	Peak
2452	92.22	98.97			27.06	3.58	37.39	103	336	Average
2452	101.9	108.65			27.06	3.58	37.39	103	336	Peak
2484	50.96	57.53	54	-3.04	27.15	3.6	37.32	103	336	Average
2484	70.56	77.13	74	-3.44	27.15	3.6	37.32	103	336	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2374	35.17	42.29	54	-18.83	26.86	3.52	37.5	100	92	Average
2374	55.94	63.06	74	-18.06	26.86	3.52	37.5	100	92	Peak
2452	89.39	96.14			27.06	3.58	37.39	100	92	Average
2452	99.08	105.83			27.06	3.58	37.39	100	92	Peak
2484	46.77	53.34	54	-7.23	27.15	3.6	37.32	100	92	Average
2484	66.47	73.04	74	-7.53	27.15	3.6	37.32	100	92	Peak
4904	39.9	56.02	54	-14.1	31.1	5.81	53.03	100	127	Average
4904	45.92	62.04	74	-28.08	31.1	5.81	53.03	100	127	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2452MHz: Fundamental frequency.

MODE B

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2368	34.41	41.58	54	-19.59	26.81	3.52	37.5	104	323	Average
2368	57.05	64.22	74	-16.95	26.81	3.52	37.5	104	323	Peak
2462	97.26	103.97			27.1	3.58	37.39	104	323	Average
2462	107.52	114.23			27.1	3.58	37.39	104	323	Peak
2484	51.9	58.47	54	-2.1	27.15	3.6	37.32	104	323	Average
2484	69.11	75.68	74	-4.89	27.15	3.6	37.32	104	323	Peak
4924	38.56	54.64	54	-15.44	31.12	5.83	53.03	100	106	Average
4924	45.02	61.1	74	-28.98	31.12	5.83	53.03	100	106	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2380	33.95	41.07	54	-20.05	26.86	3.52	37.5	104	94	Average
2380	56.47	63.59	74	-17.53	26.86	3.52	37.5	104	94	Peak
2462	93.56	100.27			27.1	3.58	37.39	104	94	Average
2462	104.26	110.97			27.1	3.58	37.39	104	94	Peak
2484	48.07	54.64	54	-5.93	27.15	3.6	37.32	104	94	Average
2484	66.59	73.16	74	-7.41	27.15	3.6	37.32	104	94	Peak
4924	38.12	54.2	54	-15.88	31.12	5.83	53.03	100	177	Average
4924	44.79	60.87	74	-29.21	31.12	5.83	53.03	100	177	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

MODE C

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2376	34.2	41.32	54	-19.8	26.86	3.52	37.5	152	38	Average
2376	56.68	63.8	74	-17.32	26.86	3.52	37.5	152	38	Peak
2462	96.16	102.87			27.1	3.58	37.39	152	38	Average
2462	106.77	113.48			27.1	3.58	37.39	152	38	Peak
2484	49.79	56.36	54	-4.21	27.15	3.6	37.32	152	38	Average
2484	72.08	78.65	74	-1.92	27.15	3.6	37.32	152	38	Peak
4924	40.77	56.85	54	-13.23	31.12	5.83	53.03	100	55	Average
4924	49.86	65.94	74	-24.14	31.12	5.83	53.03	100	55	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2382	35.32	42.44	54	-18.68	26.86	3.52	37.5	100	92	Average
2382	56.43	63.55	74	-17.57	26.86	3.52	37.5	100	92	Peak
2462	95.01	101.72			27.1	3.58	37.39	100	92	Average
2462	105.29	112			27.1	3.58	37.39	100	92	Peak
2486	46.92	53.49	54	-7.08	27.15	3.6	37.32	100	92	Average
2486	67.05	73.62	74	-6.95	27.15	3.6	37.32	100	92	Peak
4924	36.87	52.95	54	-17.13	31.12	5.83	53.03	100	212	Average
4924	44.26	60.34	74	-29.74	31.12	5.83	53.03	100	212	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

MODE D

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1GHz ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2374	35.11	42.23	54	-18.89	26.86	3.52	37.5	105	53	Average
2374	56.34	63.46	74	-17.66	26.86	3.52	37.5	105	53	Peak
2462	96.92	103.63			27.1	3.58	37.39	105	53	Average
2462	106.83	113.54			27.1	3.58	37.39	105	53	Peak
2484	51.08	57.65	54	-2.92	27.15	3.6	37.32	105	53	Average
2484	70.99	77.56	74	-3.01	27.15	3.6	37.32	105	53	Peak
4924	39.65	55.73	54	-14.35	31.12	5.83	53.03	100	239	Average
4924	48.38	64.46	74	-25.62	31.12	5.83	53.03	100	239	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2348	33.9	41.12	54	-20.1	26.77	3.5	37.49	100	93	Average
2348	56.31	63.53	74	-17.69	26.77	3.5	37.49	100	93	Peak
2462	94.14	100.85			27.1	3.58	37.39	100	93	Average
2462	104.19	110.9			27.1	3.58	37.39	100	93	Peak
2486	48.51	55.08	54	-5.49	27.15	3.6	37.32	100	93	Average
2486	66.92	73.49	74	-7.08	27.15	3.6	37.32	100	93	Peak
4924	35.87	51.95	54	-18.13	31.12	5.83	53.03	100	102	Average
4924	44.28	60.36	74	-29.72	31.12	5.83	53.03	100	102	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 2462MHz: Fundamental frequency.

BELOW 1GHz WORST-CASE DATA:

MODE A

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	20.03	36.84	40	-19.97	13.59	0.71	31.11	100	161	Peak
95.07	19.51	41.75	43.5	-23.99	8.68	1.04	31.96	100	130	Peak
184.71	23.97	43.76	43.5	-19.53	10.46	1.52	31.77	100	96	Peak
537.3	26.02	36.66	46	-19.98	18.17	2.91	31.72	100	115	Peak
652.8	28.25	36.76	46	-17.75	20.24	3.25	32	100	298	Peak
729.8	32.16	39.01	46	-13.84	21.23	3.52	31.6	100	170	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.15	24.79	41.59	40	-15.21	13.58	0.7	31.08	100	91	Peak
98.85	23.79	45.71	43.5	-19.71	8.98	1.06	31.96	100	44	Peak
182.28	16.38	36.08	43.5	-27.12	10.6	1.51	31.81	100	50	Peak
384	22.89	37.56	46	-23.11	14.96	2.36	31.99	100	121	Peak
614.3	25.59	34.81	46	-20.41	19.77	3.13	32.12	100	220	Peak
713.7	25.96	33.19	46	-20.04	21.01	3.47	31.71	100	237	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE B

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
41.88	20.43	37.24	40	-19.57	13.56	0.68	31.05	100	147	Peak
91.83	16.69	39.17	43.5	-26.81	8.45	1.03	31.96	100	190	Peak
151.5	21.87	39.45	43.5	-21.63	12.71	1.35	31.64	100	257	Peak
387.5	16.78	31.37	46	-29.22	15.05	2.38	32.02	100	227	Peak
491.8	20.95	32.78	46	-25.05	17.16	2.75	31.74	100	151	Peak
691.3	24.42	32.14	46	-21.58	20.71	3.4	31.83	100	167	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.77	23.3	40.11	40	-16.7	13.59	0.71	31.11	100	165	Peak
96.42	27.97	50.12	43.5	-15.53	8.76	1.05	31.96	100	176	Peak
105.6	26.05	47.22	43.5	-17.45	9.62	1.1	31.89	100	35	Peak
534.5	20.45	31.16	46	-25.55	18.1	2.9	31.71	100	237	Peak
669.6	23.97	32.04	46	-22.03	20.44	3.31	31.82	100	121	Peak
905.5	26.53	31.04	46	-19.47	23.54	3.98	32.03	100	321	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE C

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.77	21.44	38.25	40	-18.56	13.59	0.71	31.11	100	163	Peak
94.53	21.44	43.68	43.5	-22.06	8.68	1.04	31.96	100	148	Peak
180.66	24.56	44.16	43.5	-18.94	10.74	1.5	31.84	100	197	Peak
345.5	32.75	48.34	46	-13.25	14.03	2.21	31.83	100	189	Peak
575.8	38.11	48.13	46	-7.89	19.06	3.02	32.1	100	163	Peak
806.1	38.39	43.82	46	-7.61	22.3	3.71	31.44	100	113	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	25.72	42.52	40	-14.28	13.58	0.7	31.08	100	145	Peak
96.96	25.28	47.36	43.5	-18.22	8.83	1.05	31.96	100	148	Peak
230.34	24.36	43.81	46	-21.64	10.66	1.74	31.85	100	178	Peak
345.5	27.88	43.47	46	-18.12	14.03	2.21	31.83	100	236	Peak
537.3	30.98	41.62	46	-15.02	18.17	2.91	31.72	100	188	Peak
575.8	29.24	39.26	46	-16.76	19.06	3.02	32.1	100	256	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE D

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	21.07	37.87	40	-18.93	13.58	0.7	31.08	100	143	Peak
180.39	25.17	44.77	43.5	-18.33	10.74	1.5	31.84	100	242	Peak
230.34	29.18	48.63	46	-16.82	10.66	1.74	31.85	100	352	Peak
345.5	32.58	48.17	46	-13.42	14.03	2.21	31.83	100	213	Peak
575.8	38.58	48.6	46	-7.42	19.06	3.02	32.1	100	315	Peak
806.1	38.83	44.26	46	-7.17	22.3	3.71	31.44	100	129	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
95.88	25.25	47.4	43.5	-18.25	8.76	1.05	31.96	100	211	Peak
153.66	19.65	37.26	43.5	-23.85	12.72	1.36	31.69	100	321	Peak
230.34	25.91	45.36	46	-20.09	10.66	1.74	31.85	100	175	Peak
345.5	28.76	44.35	46	-17.24	14.03	2.21	31.83	100	267	Peak
537.3	28.98	39.62	46	-17.02	18.17	2.91	31.72	100	234	Peak
575.8	30	40.02	46	-16	19.06	3.02	32.1	100	163	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE E

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.26	40.06	40	-16.74	13.58	0.7	31.08	100	78	Peak
77.79	23.8	45.59	40	-16.2	8.85	0.95	31.59	100	129	Peak
168.24	17.19	35.63	43.5	-26.31	11.86	1.44	31.74	100	256	Peak
332.9	19.23	35.14	46	-26.77	13.73	2.17	31.81	100	193	Peak
493.9	22.24	34	46	-23.76	17.2	2.76	31.72	100	292	Peak
751.5	26.21	32.41	46	-19.79	21.55	3.58	31.33	100	59	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.23	23.42	40.23	40	-16.58	13.59	0.71	31.11	100	82	Peak
143.94	23.41	41.26	43.5	-20.09	12.47	1.31	31.63	100	309	Peak
240.06	20.73	39.66	46	-25.27	11.07	1.79	31.79	100	158	Peak
384	21.61	36.28	46	-24.39	14.96	2.36	31.99	100	311	Peak
671.7	27.34	35.35	46	-18.66	20.48	3.33	31.82	100	94	Peak
809.6	27.97	33.35	46	-18.03	22.35	3.72	31.45	100	351	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE F

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
41.61	20.26	37.07	40	-19.74	13.56	0.68	31.05	100	154	Peak
51.06	15.06	32.73	40	-24.94	12.87	0.77	31.31	100	198	Peak
169.05	14.4	32.84	43.5	-29.1	11.86	1.44	31.74	100	111	Peak
360.2	16.76	32.08	46	-29.24	14.38	2.27	31.97	100	32	Peak
612.2	22.33	31.56	46	-23.67	19.75	3.12	32.1	100	252	Peak
731.2	24.99	31.79	46	-21.01	21.26	3.52	31.58	100	165	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.04	18.77	35.58	40	-21.23	13.59	0.71	31.11	100	119	Peak
72.66	15.19	35.96	40	-24.81	10.05	0.92	31.74	100	175	Peak
86.97	14.09	36.65	40	-25.91	8.25	1.01	31.82	100	279	Peak
348.3	16.75	32.27	46	-29.25	14.1	2.22	31.84	100	103	Peak
675.2	23.12	31.1	46	-22.88	20.51	3.34	31.83	100	65	Peak
834.1	25.89	31.2	46	-20.11	22.66	3.78	31.75	100	187	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE G

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.69	22.33	39.13	40	-17.67	13.58	0.7	31.08	100	179	Peak
143.94	23.54	41.39	43.5	-19.96	12.47	1.31	31.63	100	167	Peak
240.06	21.78	40.71	46	-24.22	11.07	1.79	31.79	100	143	Peak
332.9	28.2	44.11	46	-17.8	13.73	2.17	31.81	100	132	Peak
537.3	24.53	35.17	46	-21.47	18.17	2.91	31.72	100	235	Peak
806.1	30.83	36.26	46	-15.17	22.3	3.71	31.44	100	151	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.23	22.35	39.16	40	-17.65	13.59	0.71	31.11	100	276	Peak
76.71	24.89	46.47	40	-15.11	9.09	0.95	31.62	100	321	Peak
230.34	18.75	38.2	46	-27.25	10.66	1.74	31.85	100	178	Peak
537.3	28.91	39.55	46	-17.09	18.17	2.91	31.72	100	141	Peak
575.8	32.36	42.38	46	-13.64	19.06	3.02	32.1	100	134	Peak
923.7	28.43	32.77	46	-17.57	23.64	4.02	32	100	65	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE H

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.4	40.2	40	-16.6	13.58	0.7	31.08	100	324	Peak
143.94	23.56	41.41	43.5	-19.94	12.47	1.31	31.63	100	316	Peak
240.06	21.31	40.24	46	-24.69	11.07	1.79	31.79	100	331	Peak
345.5	26.31	41.9	46	-19.69	14.03	2.21	31.83	100	156	Peak
384	22.68	37.35	46	-23.32	14.96	2.36	31.99	100	255	Peak
671.7	27.19	35.2	46	-18.81	20.48	3.33	31.82	100	195	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.69	23.11	39.91	40	-16.89	13.58	0.7	31.08	100	215	Peak
77.79	23.43	45.22	40	-16.57	8.85	0.95	31.59	100	277	Peak
166.89	18.73	37.02	43.5	-24.77	12.05	1.43	31.77	100	211	Peak
345.5	26.28	41.87	46	-19.72	14.03	2.21	31.83	100	285	Peak
537.3	27.79	38.43	46	-18.21	18.17	2.91	31.72	100	241	Peak
575.8	32.09	42.11	46	-13.91	19.06	3.02	32.1	100	141	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	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 0.50MHz.
3. 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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 08, 2013	Jul. 07, 2014
Software ADT	BV ADT_Cond_ V7.3.7.3	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 HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

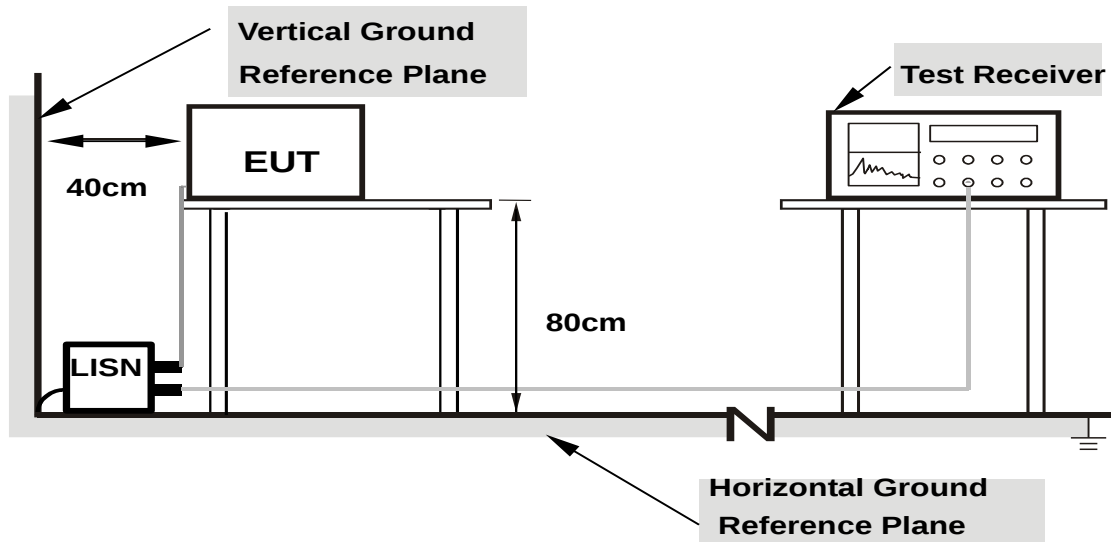
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 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 attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as section 4.1.6.

4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA :

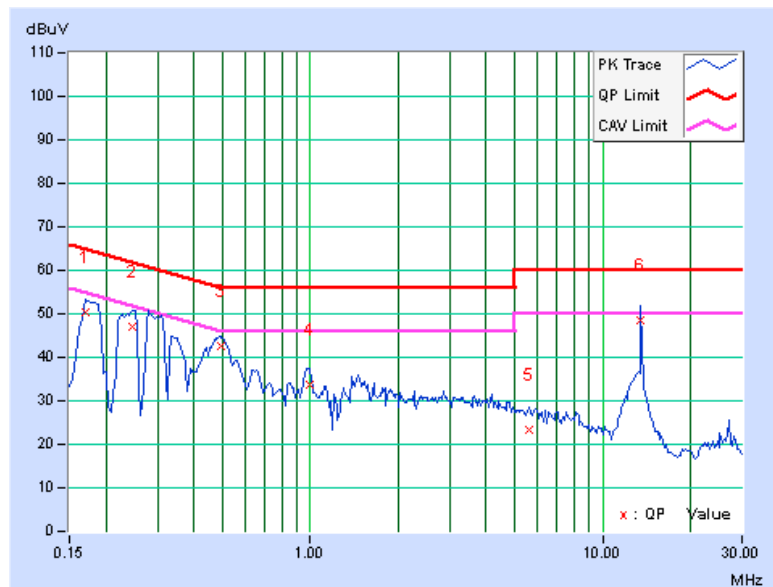
MODE A

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.24	35.48	50.51	35.75	64.98	54.98	-14.47	-19.23
2	0.24766	0.28	46.69	31.08	46.97	31.36	61.84	51.84	-14.86	-20.47
3	0.49375	0.31	42.16	30.35	42.47	30.66	56.10	46.10	-13.64	-15.45
4	0.99375	0.34	33.20	22.33	33.54	22.67	56.00	46.00	-22.46	-23.33
5	5.60938	0.45	23.05	18.68	23.50	19.13	60.00	50.00	-36.50	-30.87
6	13.55859	0.52	48.13	45.45	48.65	45.97	60.00	50.00	-11.35	-4.03

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

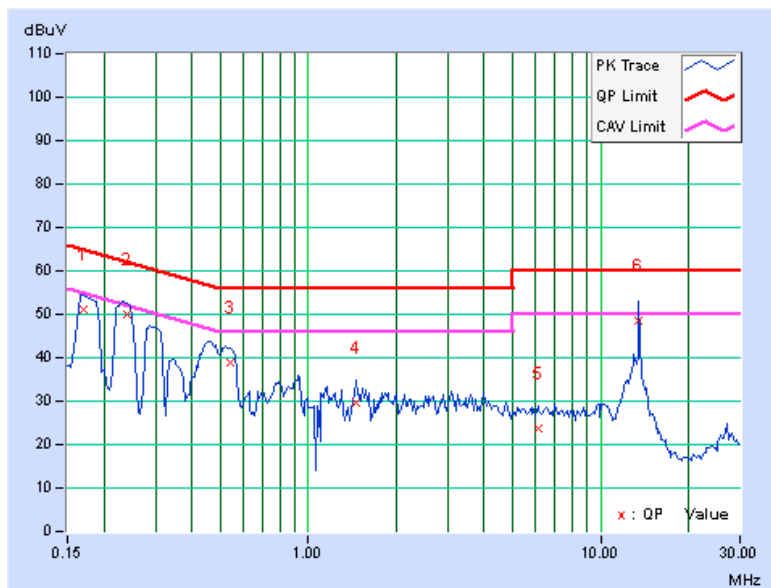


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.78	35.20	51.05	35.47	64.98	54.98	-13.93	-19.51
2	0.23984	0.28	49.54	36.10	49.82	36.38	62.10	52.10	-12.28	-15.72
3	0.54453	0.31	38.67	26.63	38.98	26.94	56.00	46.00	-17.02	-19.06
4	1.46094	0.35	29.42	20.47	29.77	20.82	56.00	46.00	-26.23	-25.18
5	6.10938	0.47	23.35	17.62	23.82	18.09	60.00	50.00	-36.18	-31.91
6	13.55859	0.55	47.97	45.12	48.52	45.67	60.00	50.00	-11.48	-4.33

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



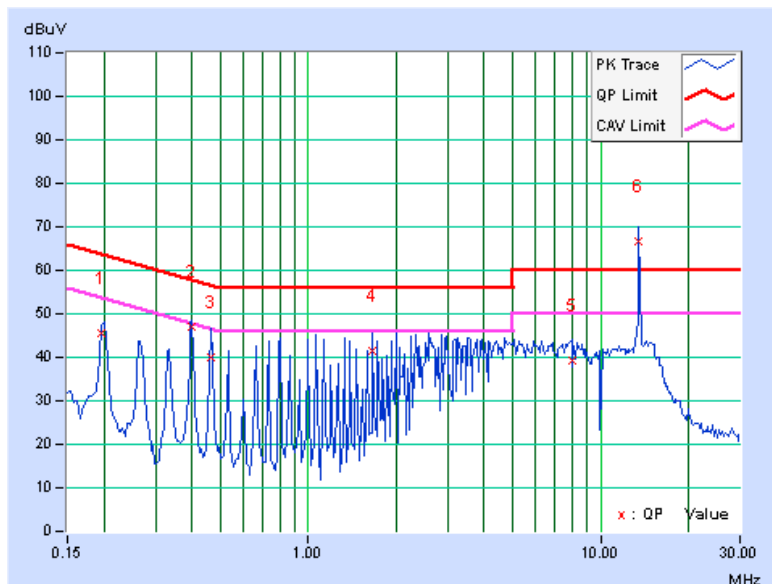
MODE E

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	45.43	42.09	45.71	42.37	63.74	53.74	-18.03	-11.37
2	0.40000	0.30	46.58	43.32	46.88	43.62	57.85	47.85	-10.97	-4.23
3	0.46641	0.30	39.61	36.71	39.91	37.01	56.58	46.58	-16.66	-9.56
4	1.66016	0.35	41.23	38.23	41.58	38.58	56.00	46.00	-14.42	-7.42
5	7.97656	0.48	38.91	34.65	39.39	35.13	60.00	50.00	-20.61	-14.87
6	13.55859	0.52	66.22	63.89	66.74	64.41	60.00	50.00	6.74	14.41

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.

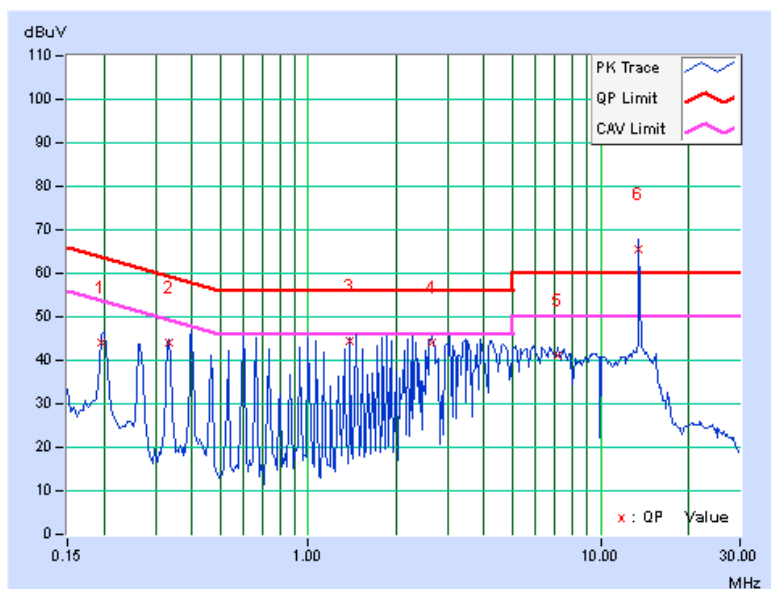


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.65	39.98	43.93	40.26	63.74	53.74	-19.81	-13.48
2	0.33359	0.29	43.82	42.88	44.11	43.17	59.36	49.36	-15.25	-6.19
3	1.39453	0.35	44.21	41.13	44.56	41.48	56.00	46.00	-11.44	-4.52
4	2.65625	0.39	43.62	43.29	44.01	43.68	56.00	46.00	-11.99	-2.32
5	7.11328	0.48	40.81	40.45	41.29	40.93	60.00	50.00	-18.71	-9.07
6	13.55859	0.55	65.14	62.77	65.69	63.32	60.00	50.00	5.69	13.32

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.



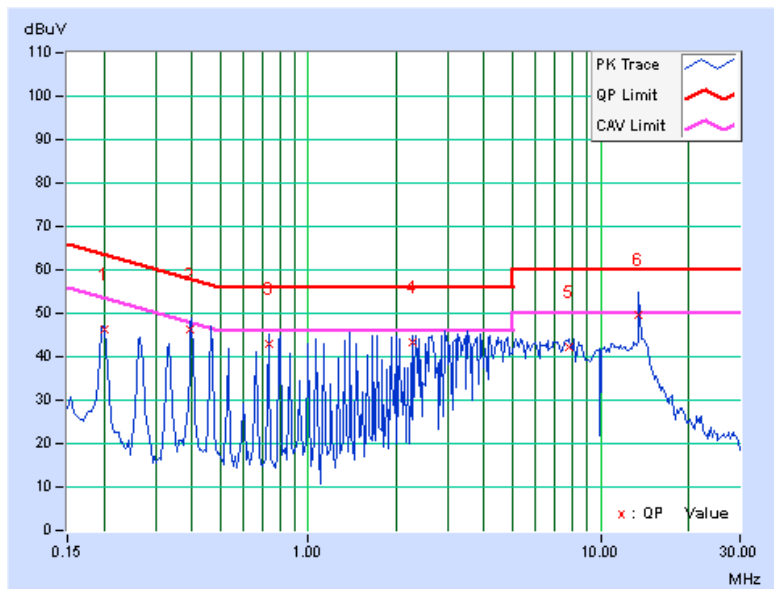
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.13	42.39	46.41	42.67	63.58	53.58	-17.17	-10.91
2	0.39609	0.30	45.84	41.50	46.14	41.80	57.93	47.93	-11.80	-6.14
3	0.73203	0.32	42.53	39.49	42.85	39.81	56.00	46.00	-13.15	-6.19
4	2.26172	0.37	43.01	39.21	43.38	39.58	56.00	46.00	-12.62	-6.42
5	7.84375	0.47	41.62	40.32	42.09	40.79	60.00	50.00	-17.91	-9.21
6	13.55859	0.52	49.00	44.85	49.52	45.37	60.00	50.00	-10.48	-4.63

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

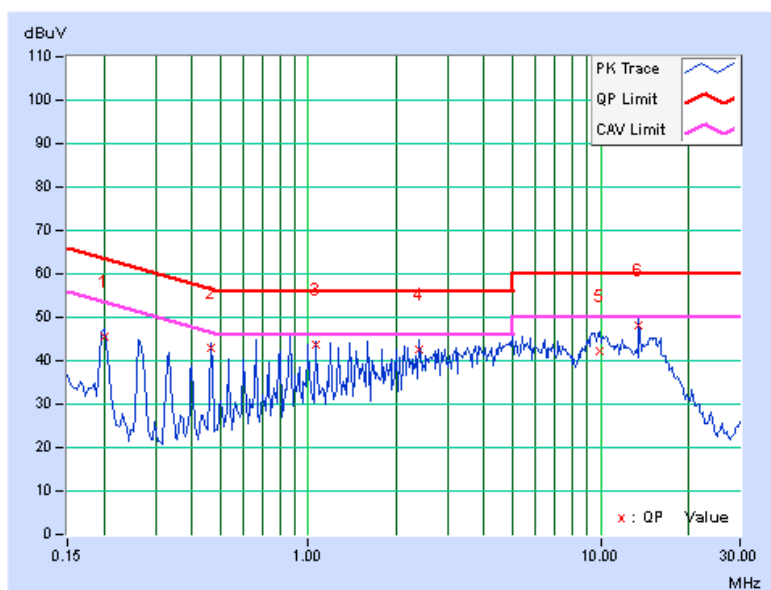


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	45.37	38.83	45.65	39.11	63.58	53.58	-17.93	-14.47
2	0.46641	0.30	42.54	42.46	42.84	42.76	56.58	46.58	-13.73	-3.81
3	1.06250	0.34	43.50	43.06	43.84	43.40	56.00	46.00	-12.16	-2.60
4	2.39453	0.38	42.16	40.67	42.54	41.05	56.00	46.00	-13.46	-4.95
5	9.97266	0.52	41.67	37.59	42.19	38.11	60.00	50.00	-17.81	-11.89
6	13.55859	0.55	47.50	43.25	48.05	43.80	60.00	50.00	-11.95	-6.20

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

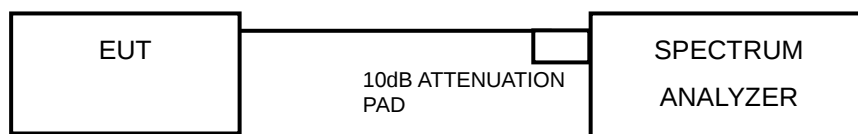


4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST SETUP



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.3.4 TEST PROCEDURE

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

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

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	10.10	0.5	PASS
6	2437	10.10	0.5	PASS
11	2462	10.09	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	15.13	0.5	PASS
6	2437	15.12	0.5	PASS
11	2462	15.09	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	15.12	0.5	PASS
6	2437	15.11	0.5	PASS
11	2462	15.12	0.5	PASS

802.11n (40MHz)

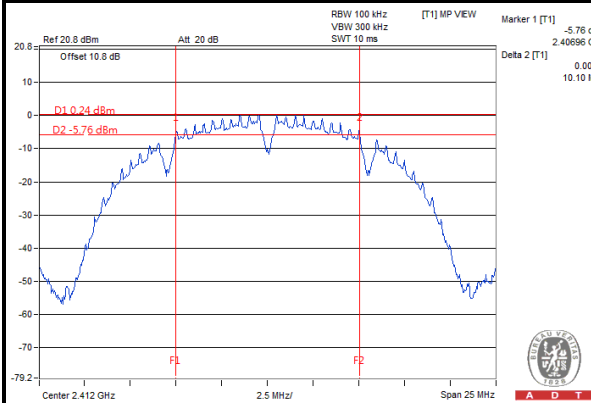
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
3	2422	35.11	0.5	PASS
6	2437	33.88	0.5	PASS
6	2452	35.12	0.5	PASS



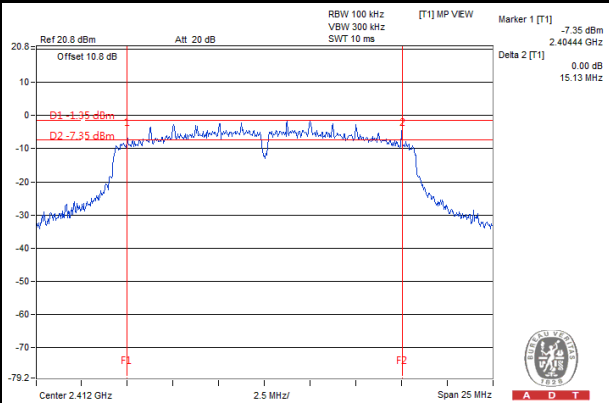
A D T

SPECTRUM PLOT OF WORST VALUE

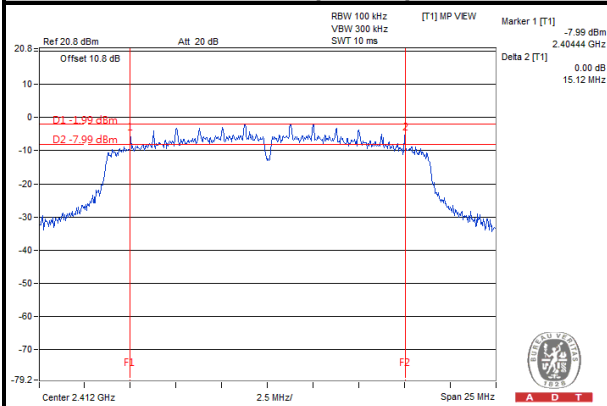
802.11b



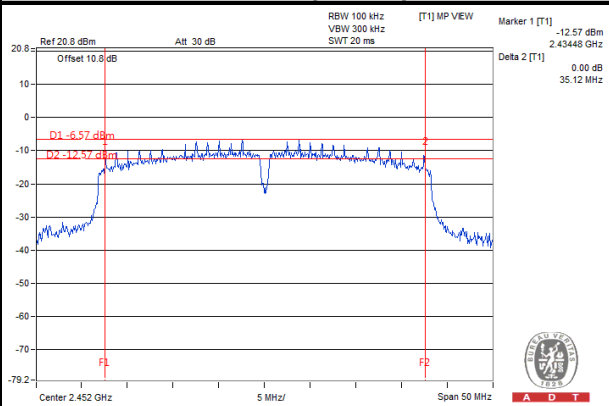
802.11g



802.11n (20MHz)



802.11n (40MHz)

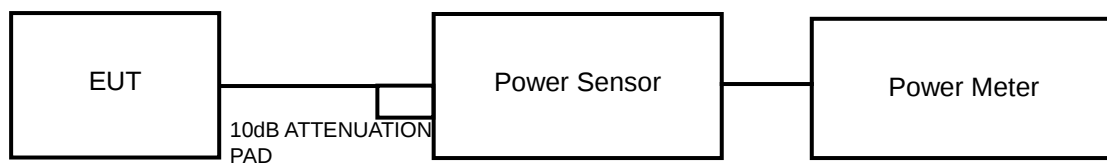


4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the peak power level.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as section 4.3.6.

4.4.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
1	2412	51.64	17.13	30	PASS
6	2437	51.40	17.11	30	PASS
11	2462	54.58	17.37	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
1	2412	88.92	19.49	30	PASS
6	2437	90.78	19.58	30	PASS
11	2462	93.11	19.69	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
1	2412	88.51	19.47	30	PASS
6	2437	90.57	19.57	30	PASS
11	2462	92.47	19.66	30	PASS

802.11n (40MHz)

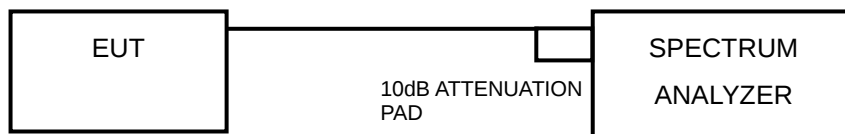
CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
3	2422	78.16	18.93	30	PASS
6	2437	78.52	18.95	30	PASS
9	2452	83.75	19.23	30	PASS

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 SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

- Set the RBW = 3 kHz, VBW = 10 kHz, Detector = peak.
- Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Same as section 4.3.6.

4.5.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
1	2412	-13.27	8	PASS
6	2437	-14.18	8	PASS
11	2462	-13.97	8	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
1	2412	-16.60	8	PASS
6	2437	-15.08	8	PASS
11	2462	-14.55	8	PASS

802.11n (20MHz)

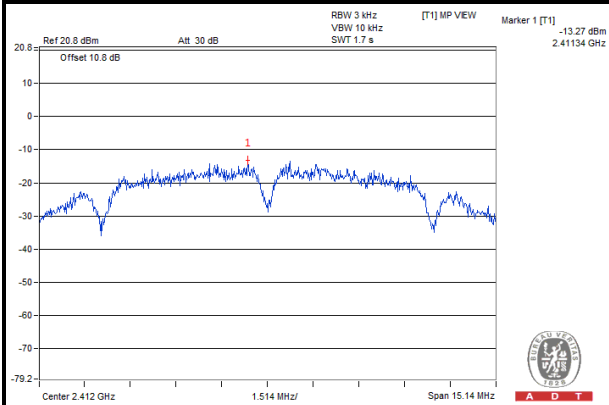
CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
1	2412	-17.07	8	PASS
6	2437	-17.34	8	PASS
11	2462	-16.39	8	PASS

802.11n (40MHz)

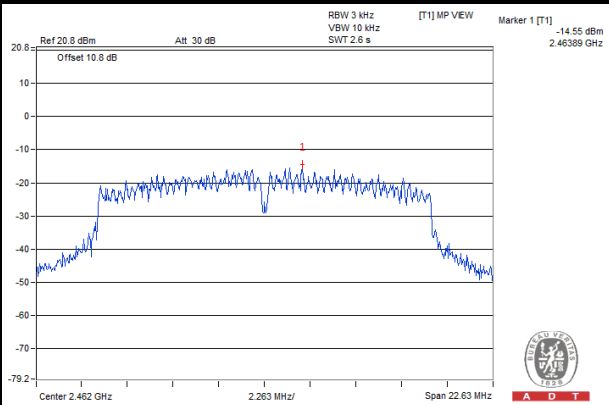
CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
3	2422	-21.81	8	PASS
6	2437	-20.35	8	PASS
9	2452	-21.05	8	PASS

SPECTRUM PLOT OF WORST VALUE

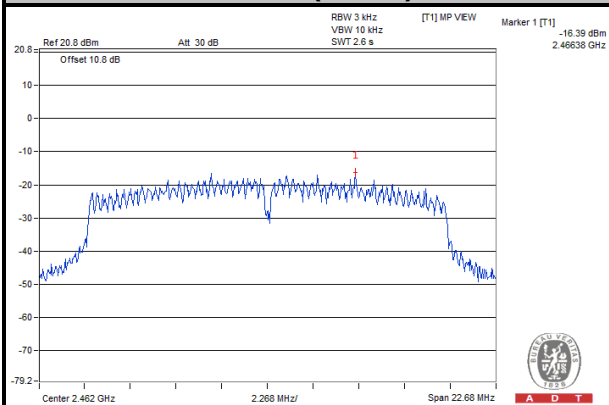
802.11b



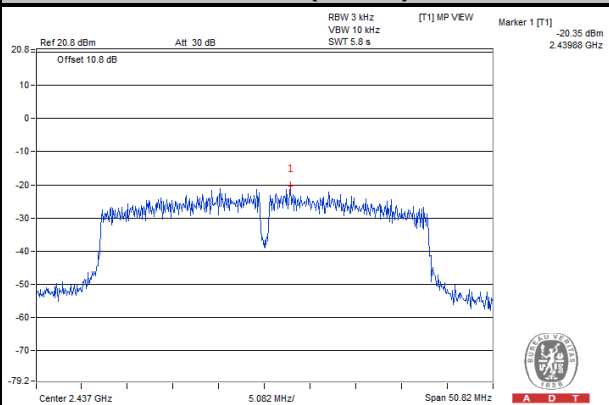
802.11g



802.11n (20MHz)



802.11n (40MHz)

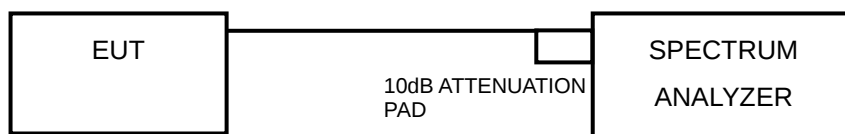


4.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

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

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz .
2. Set the VBW $\geq 300\text{ kHz}$.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz .
2. Set VBW $\geq 300\text{ kHz}$.
3. Ensure that the number of measurement points $\geq \text{span}/\text{RBW}$
4. According to measurement points to set differ measurement span.
5. Detector = peak.
6. Trace Mode = max hold.
7. Sweep = auto couple.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

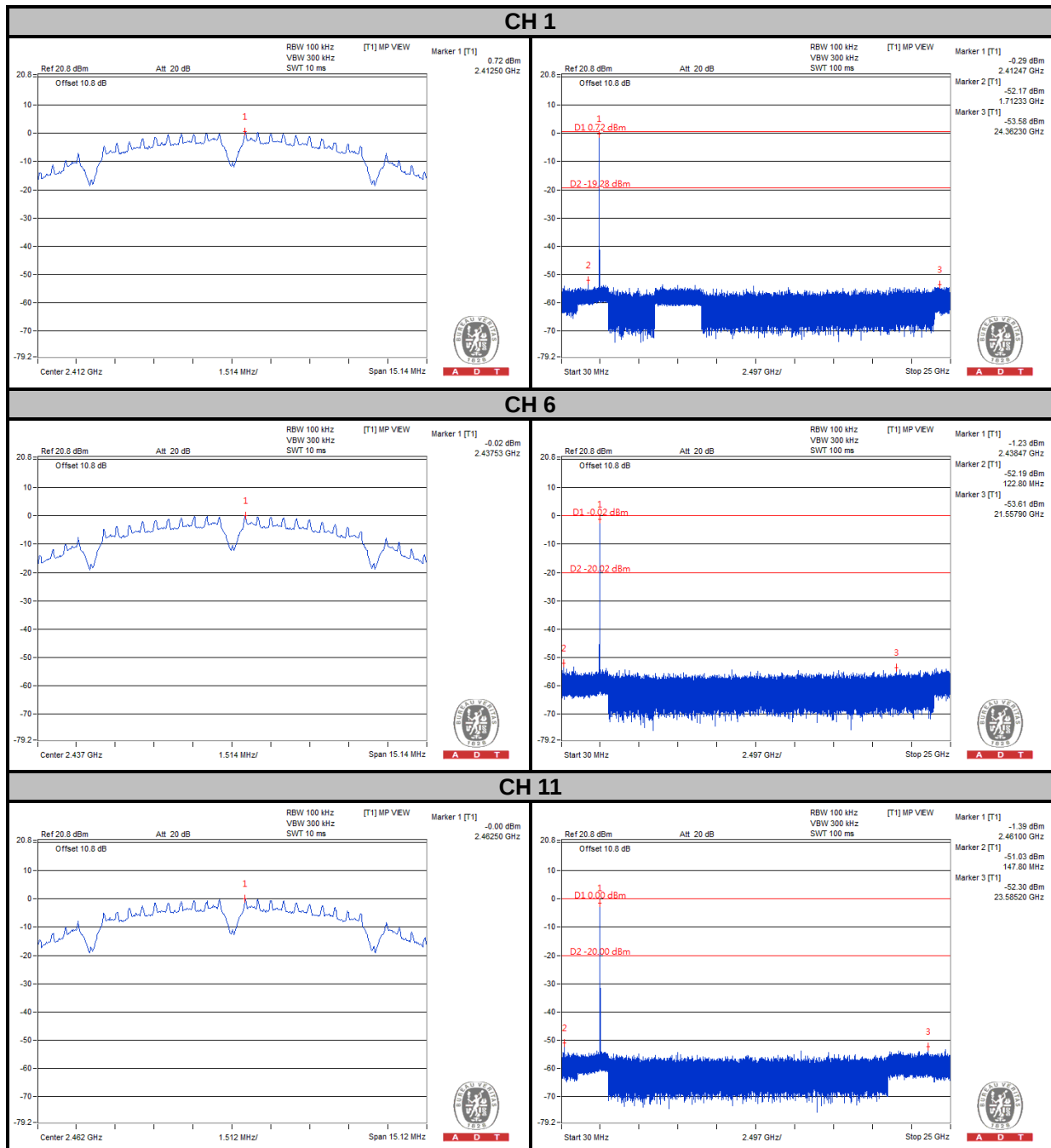
4.6.6 EUT OPERATING CONDITION

Same as section 4.3.6.

4.6.7 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.

802.11b

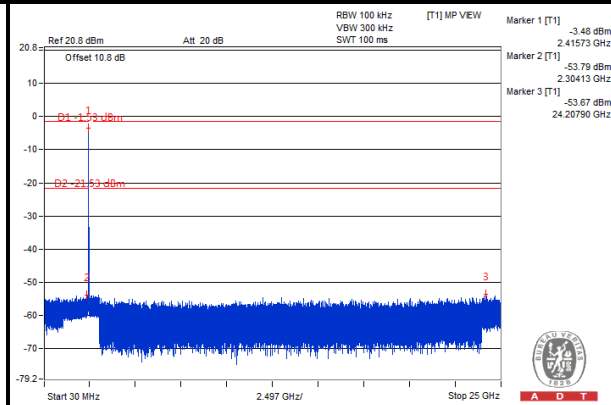
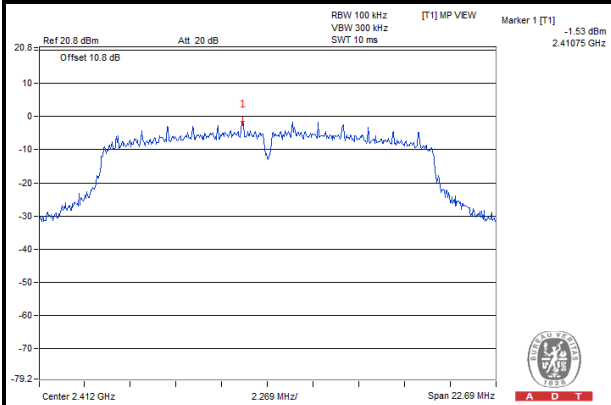




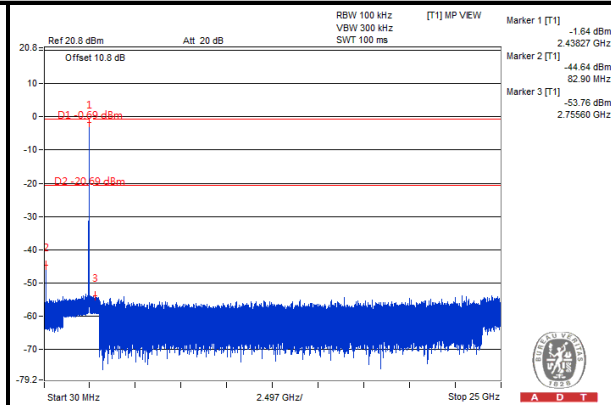
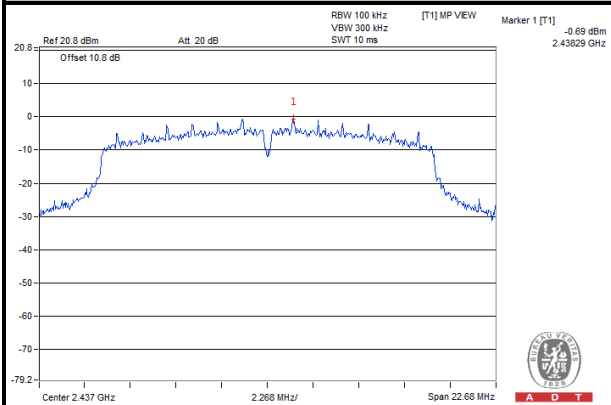
A D T

802.11g

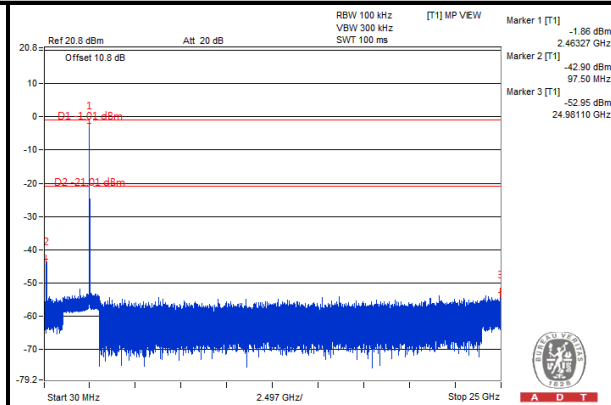
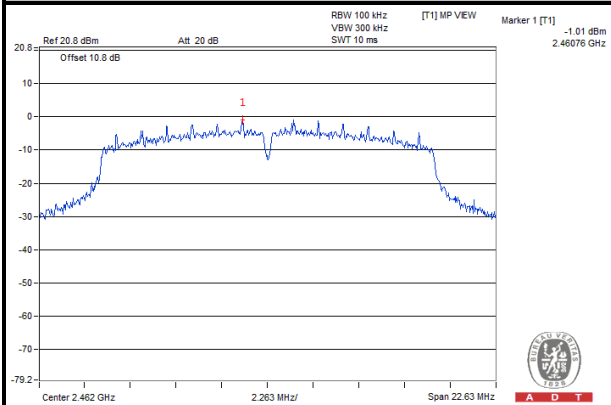
CH 1



CH 6



CH 11

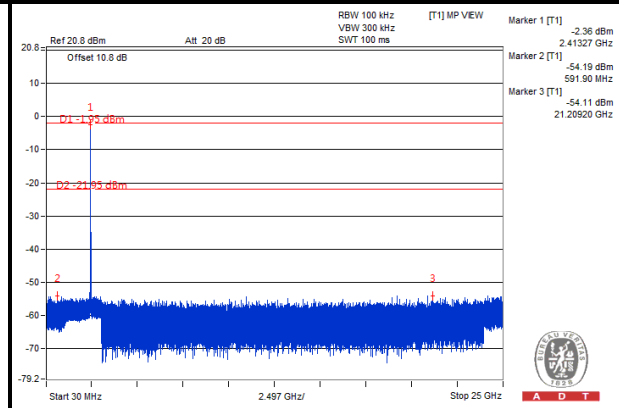
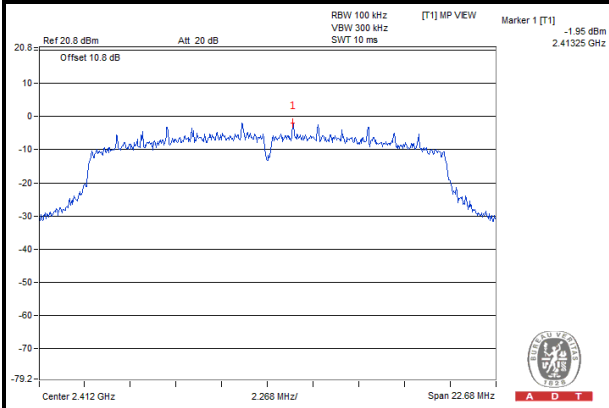




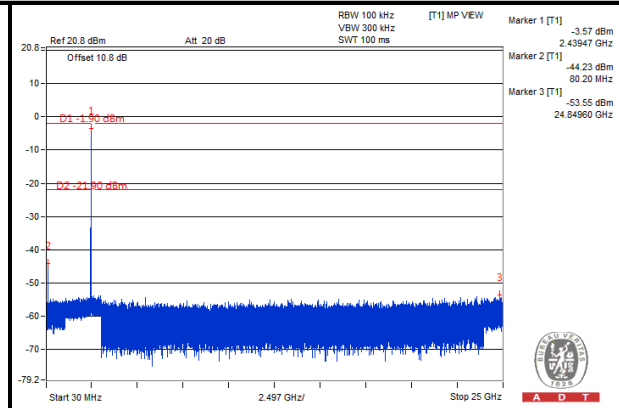
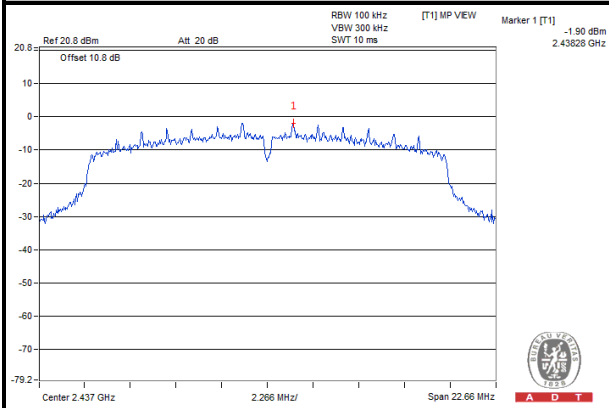
A D T

802.11n (20MHz)

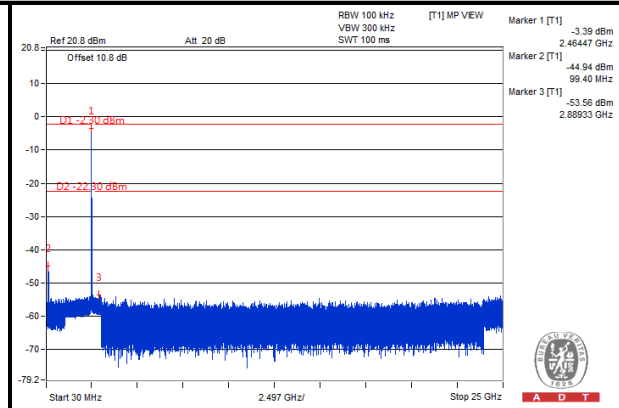
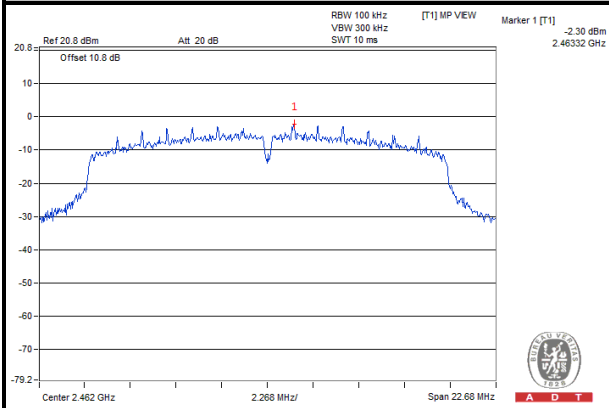
CH 1



CH 6



CH 11

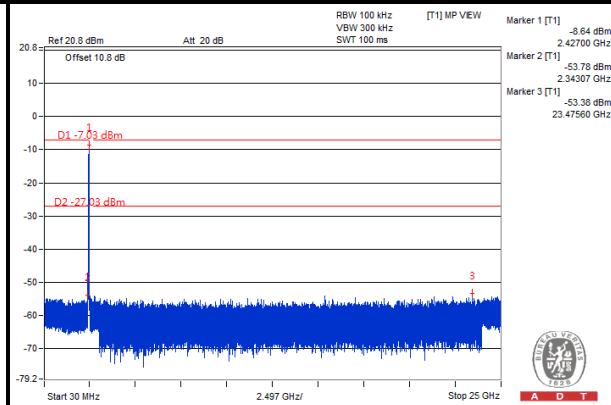
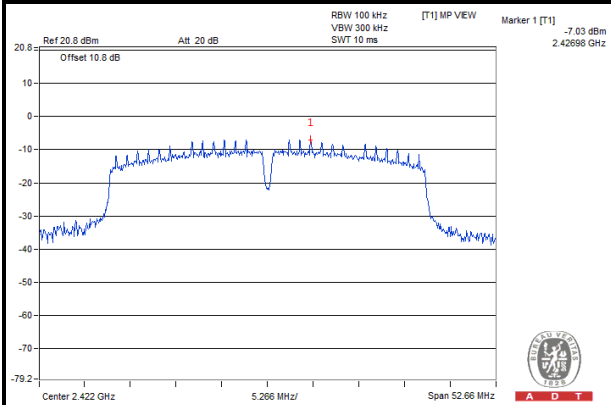




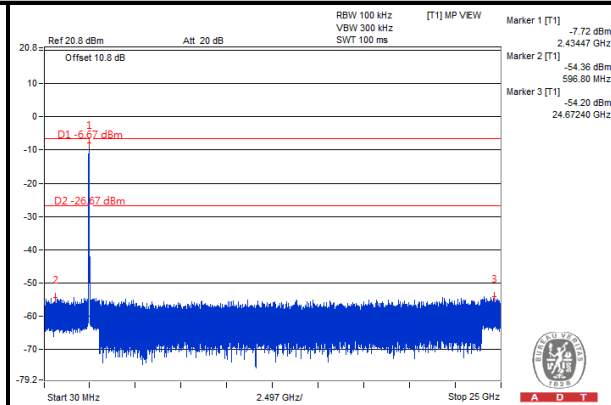
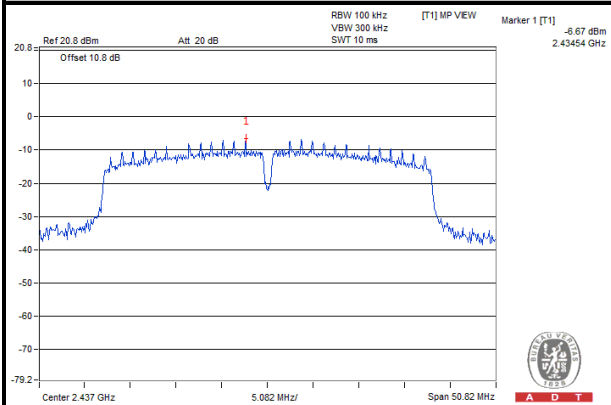
A D T

802.11n (40MHz)

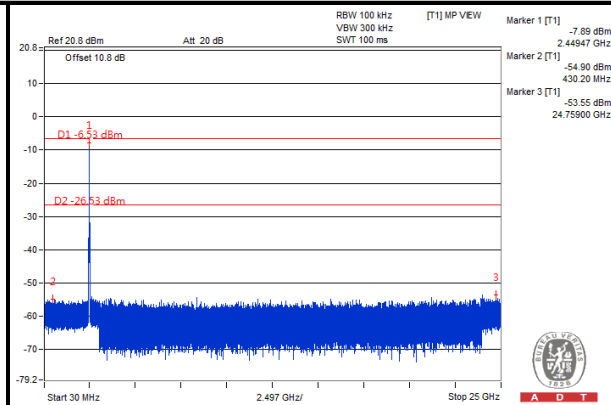
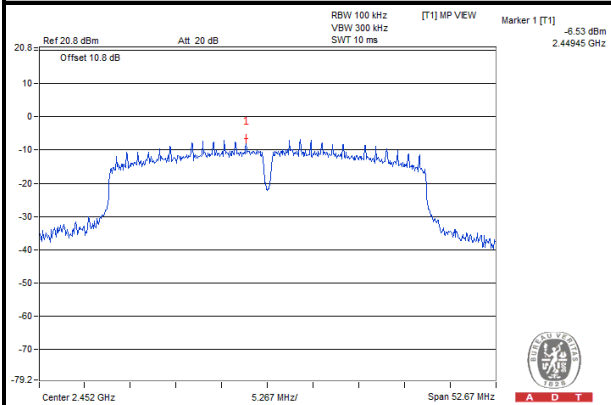
CH 3



CH 6



CH 9



5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND)

5.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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. 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.

5.1.2 TEST INSTRUMENTS

Same as section 4.1.2.

5.1.3 TEST PROCEDURES

Same as section 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as section 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as section 4.1.6.

5.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA :

MODE A

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	54.48	54.36	72.86	-18.38	31.96	5.59	37.43	100	84	Average
5725	70.56	70.44	82.3	-11.74	31.96	5.59	37.43	100	84	Peak
5745	92.86	92.74			31.99	5.6	37.47	100	84	Average
5745	102.3	102.18			31.99	5.6	37.47	100	84	Peak
5850	39.25	38.95	72.86	-33.61	32.15	5.66	37.51	100	84	Average
5850	60.71	60.41	82.3	-21.59	32.15	5.66	37.51	100	84	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	54.91	54.79	72.18	-17.27	31.96	5.59	37.43	100	162	Average
5725	71.19	71.07	81.85	-10.66	31.96	5.59	37.43	100	162	Peak
5745	92.18	92.06			31.99	5.6	37.47	100	162	Average
5745	101.85	101.73			31.99	5.6	37.47	100	162	Peak
5850	38.52	38.22	72.18	-33.66	32.15	5.66	37.51	100	162	Average
5850	60.33	60.03	81.85	-21.52	32.15	5.66	37.51	100	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.39	38.27	74.02	-35.63	31.96	5.59	37.43	119	82	Average
5725	59.56	59.44	83.55	-23.99	31.96	5.59	37.43	119	82	Peak
5785	94.02	93.9			32.04	5.62	37.54	119	82	Average
5785	103.55	103.43			32.04	5.62	37.54	119	82	Peak
5850	38.74	38.44	74.02	-35.28	32.15	5.66	37.51	119	82	Average
5850	58.39	58.09	83.55	-25.16	32.15	5.66	37.51	119	82	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.39	38.27	72.33	-33.94	31.96	5.59	37.43	100	148	Average
5725	58.93	58.81	81.84	-22.91	31.96	5.59	37.43	100	148	Peak
5785	92.33	92.21			32.04	5.62	37.54	100	148	Average
5785	101.84	101.72			32.04	5.62	37.54	100	148	Peak
5850	38.78	38.48	72.33	-33.55	32.15	5.66	37.51	100	148	Average
5850	59.59	59.29	81.84	-22.25	32.15	5.66	37.51	100	148	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.71	38.59	74.43	-35.72	31.96	5.59	37.43	101	86	Average
5725	58.34	58.22	83.87	-25.53	31.96	5.59	37.43	101	86	Peak
5825	94.43	94.2			32.12	5.64	37.53	101	86	Average
5825	103.87	103.64			32.12	5.64	37.53	101	86	Peak
5850	49.67	49.37	74.43	-24.76	32.15	5.66	37.51	101	86	Average
5850	66.71	66.41	83.87	-17.16	32.15	5.66	37.51	101	86	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.72	38.6	73	-34.28	31.96	5.59	37.43	108	161	Average
5725	59.59	59.47	82.29	-22.7	31.96	5.59	37.43	108	161	Peak
5825	93	92.77			32.12	5.64	37.53	108	161	Average
5825	102.29	102.06			32.12	5.64	37.53	108	161	Peak
5850	48.61	48.31	73	-24.39	32.15	5.66	37.51	108	161	Average
5850	63.79	63.49	82.29	-18.5	32.15	5.66	37.51	108	161	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	55.41	55.29	72.84	-17.43	31.96	5.59	37.43	100	80	Average
5725	70.29	70.17	82.16	-11.87	31.96	5.59	37.43	100	80	Peak
5745	92.84	92.72			31.99	5.6	37.47	100	80	Average
5745	102.16	102.04			31.99	5.6	37.47	100	80	Peak
5850	39.12	38.82	72.84	-33.72	32.15	5.66	37.51	100	80	Average
5850	58.71	58.41	82.16	-23.45	32.15	5.66	37.51	100	80	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	56.69	56.57	72.13	-15.44	31.96	5.59	37.43	100	163	Average
5725	71.82	71.7	81.46	-9.64	31.96	5.59	37.43	100	163	Peak
5745	92.13	92.01			31.99	5.6	37.47	100	163	Average
5745	101.46	101.34			31.99	5.6	37.47	100	163	Peak
5850	38.73	38.43	72.13	-33.4	32.15	5.66	37.51	100	163	Average
5850	60.37	60.07	81.46	-21.09	32.15	5.66	37.51	100	163	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.69	38.57	73.69	-35	31.96	5.59	37.43	119	89	Average
5725	59.05	58.93	83.58	-24.53	31.96	5.59	37.43	119	89	Peak
5785	93.69	93.57			32.04	5.62	37.54	119	89	Average
5785	103.58	103.46			32.04	5.62	37.54	119	89	Peak
5850	38.84	38.54	73.69	-34.85	32.15	5.66	37.51	119	89	Average
5850	59.2	58.9	83.58	-24.38	32.15	5.66	37.51	119	89	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.53	38.41	72.41	-33.88	31.96	5.59	37.43	100	160	Average
5725	58.17	58.05	81.96	-23.79	31.96	5.59	37.43	100	160	Peak
5785	92.41	92.29			32.04	5.62	37.54	100	160	Average
5785	101.96	101.84			32.04	5.62	37.54	100	160	Peak
5850	38.59	38.29	72.41	-33.82	32.15	5.66	37.51	100	160	Average
5850	58.9	58.6	81.96	-23.06	32.15	5.66	37.51	100	160	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.66	38.54	74.77	-36.11	31.96	5.59	37.43	101	79	Average
5725	58.75	58.63	84.24	-25.49	31.96	5.59	37.43	101	79	Peak
5825	94.77	94.54			32.12	5.64	37.53	101	79	Average
5825	104.24	104.01			32.12	5.64	37.53	101	79	Peak
5850	51.37	51.07	74.77	-23.4	32.15	5.66	37.51	101	79	Average
5850	68.84	68.54	84.24	-15.4	32.15	5.66	37.51	101	79	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	38.64	38.52	73.49	-34.85	31.96	5.59	37.43	108	159	Average
5725	59.74	59.62	83.04	-23.3	31.96	5.59	37.43	108	159	Peak
5825	93.49	93.26			32.12	5.64	37.53	108	159	Average
5825	103.04	102.81			32.12	5.64	37.53	108	159	Peak
5850	49.98	49.68	73.49	-23.51	32.15	5.66	37.51	108	159	Average
5850	66.34	66.04	83.04	-16.7	32.15	5.66	37.51	108	159	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	56.85	56.73	68.17	-11.32	31.96	5.59	37.43	100	201	Average
5725	74.26	74.14	77.6	-3.34	31.96	5.59	37.43	100	201	Peak
5755	88.17	88.03			32.01	5.6	37.47	100	201	Average
5755	97.6	97.46			32.01	5.6	37.47	100	201	Peak
5850	39.31	39.01	68.17	-28.86	32.15	5.66	37.51	100	201	Average
5850	59.06	58.76	77.6	-18.54	32.15	5.66	37.51	100	201	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	51.35	51.23	62.7	-11.35	31.96	5.59	37.43	114	8	Average
5725	66.98	66.86	72.27	-5.29	31.96	5.59	37.43	114	8	Peak
5755	82.7	82.56			32.01	5.6	37.47	114	8	Average
5755	92.27	92.13			32.01	5.6	37.47	114	8	Peak
5850	38.71	38.41	62.7	-23.99	32.15	5.66	37.51	114	8	Average
5850	59.7	59.4	72.27	-12.57	32.15	5.66	37.51	114	8	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	40.86	40.74	69.9	-29.04	31.96	5.59	37.43	100	82	Average
5725	58.26	58.14	78.8	-20.54	31.96	5.59	37.43	100	82	Peak
5795	89.9	89.74			32.07	5.63	37.54	100	82	Average
5795	98.8	98.64			32.07	5.63	37.54	100	82	Peak
5850	42.98	42.68	69.9	-26.92	32.15	5.66	37.51	100	82	Average
5850	59.24	58.94	78.8	-19.56	32.15	5.66	37.51	100	82	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.37	41.25	67.27	-25.9	31.96	5.59	37.43	100	162	Average
5725	61.52	61.4	76.7	-15.18	31.96	5.59	37.43	100	162	Peak
5795	87.27	87.11			32.07	5.63	37.54	100	162	Average
5795	96.7	96.54			32.07	5.63	37.54	100	162	Peak
5850	40.42	40.12	67.27	-26.85	32.15	5.66	37.51	100	162	Average
5850	58.88	58.58	76.7	-17.82	32.15	5.66	37.51	100	162	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

MODE B

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	58.12	58	68.4	-10.28	31.96	5.59	37.43	102	85	Average
5725	75.8	75.68	77.92	-2.12	31.96	5.59	37.43	102	85	Peak
5755	88.4	88.26			32.01	5.6	37.47	102	85	Average
5755	97.92	97.78			32.01	5.6	37.47	102	85	Peak
5850	39.33	39.03	68.4	-29.07	32.15	5.66	37.51	102	85	Average
5850	58.45	58.15	77.92	-19.47	32.15	5.66	37.51	102	85	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	60.93	60.81	72.33	-11.4	31.96	5.59	37.43	107	43	Average
5725	76.83	76.71	81.56	-4.73	31.96	5.59	37.43	107	43	Peak
5755	92.33	92.19			32.01	5.6	37.47	107	43	Average
5755	101.56	101.42			32.01	5.6	37.47	107	43	Peak
5850	40.28	39.98	72.33	-32.05	32.15	5.66	37.51	107	43	Average
5850	59.21	58.91	81.56	-22.35	32.15	5.66	37.51	107	43	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

MODE C

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	55.78	55.66	67.77	-11.99	31.96	5.59	37.43	102	188	Average
5725	72.47	72.35	77.21	-4.74	31.96	5.59	37.43	102	188	Peak
5755	87.77	87.63			32.01	5.6	37.47	102	188	Average
5755	97.21	97.07			32.01	5.6	37.47	102	188	Peak
5850	39.72	39.42	67.77	-28.05	32.15	5.66	37.51	102	188	Average
5850	59.15	58.85	77.21	-18.06	32.15	5.66	37.51	102	188	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	55.62	55.5	66.3	-10.68	31.96	5.59	37.43	100	265	Average
5725	71.95	71.83	75.79	-3.84	31.96	5.59	37.43	100	265	Peak
5755	86.3	86.16			32.01	5.6	37.47	100	265	Average
5755	95.79	95.65			32.01	5.6	37.47	100	265	Peak
5850	38.99	38.69	66.3	-27.31	32.15	5.66	37.51	100	265	Average
5850	59.16	58.86	75.79	-16.63	32.15	5.66	37.51	100	265	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

MODE D
802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	55.51	55.39	66.61	-11.1	31.96	5.59	37.43	100	251	Average
5725	70.63	70.51	75.91	-5.28	31.96	5.59	37.43	100	251	Peak
5755	86.61	86.47			32.01	5.6	37.47	100	251	Average
5755	95.91	95.77			32.01	5.6	37.47	100	251	Peak
5850	39.04	38.74			32.15	5.66	37.51	100	251	Average
5850	58.37	58.07	75.91	-17.54	32.15	5.66	37.51	100	251	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	59.16	59.04	70.95	-11.79	31.96	5.59	37.43	109	110	Average
5725	75.58	75.46	80.04	-4.46	31.96	5.59	37.43	109	110	Peak
5755	90.95	90.81			32.01	5.6	37.47	109	110	Average
5755	100.04	99.9			32.01	5.6	37.47	109	110	Peak
5850	40.52	40.22	70.95	-30.43	32.15	5.66	37.51	109	110	Average
5850	58.53	58.23	80.04	-21.51	32.15	5.66	37.51	109	110	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- 5725MHz & 5850MHz: Out of restricted band

BELOW 1GHz WORST-CASE DATA :

MODE A

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	18.73	35.54	40	-21.27	13.59	0.71	31.11	100	261	Peak
94.26	18.16	40.48	43.5	-25.34	8.6	1.04	31.96	100	335	Peak
181.2	23.54	43.18	43.5	-19.96	10.67	1.51	31.82	100	59	Peak
511.4	20.54	31.74	46	-25.46	17.57	2.82	31.59	100	179	Peak
673.1	23.79	31.79	46	-22.21	20.49	3.33	31.82	100	212	Peak
773.9	25.2	31.06	46	-20.8	21.86	3.63	31.35	100	166	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
41.07	23.98	40.78	40	-16.02	13.55	0.67	31.02	100	157	Peak
106.41	24.27	45.33	43.5	-19.23	9.71	1.11	31.88	100	277	Peak
190.92	14.07	34.22	43.5	-29.43	9.98	1.55	31.68	100	321	Peak
389.6	17.86	32.42	46	-28.14	15.1	2.38	32.04	100	124	Peak
488.3	20.52	32.49	46	-25.48	17.08	2.74	31.79	100	211	Peak
912.5	27.56	32.02	46	-18.44	23.58	4	32.04	100	241	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE B

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.04	20.7	37.51	40	-19.3	13.59	0.71	31.11	100	222	Peak
51.06	19.66	37.33	40	-20.34	12.87	0.77	31.31	100	199	Peak
58.08	17.08	35.47	40	-22.92	12.15	0.81	31.35	100	176	Peak
461.7	19.47	32.23	46	-26.53	16.56	2.65	31.97	100	14	Peak
780.2	27.96	33.8	46	-18.04	21.94	3.65	31.43	100	221	Peak
806.1	30.29	35.72	46	-15.71	22.3	3.71	31.44	100	277	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.1	26.87	43.68	40	-13.13	13.59	0.71	31.11	100	119	Peak
98.04	18.25	40.24	43.5	-25.25	8.91	1.06	31.96	100	211	Peak
152.58	17.26	34.86	43.5	-26.24	12.71	1.35	31.66	100	266	Peak
366.5	16.81	31.92	46	-29.19	14.54	2.29	31.94	100	151	Peak
477.1	18.88	31.17	46	-27.12	16.87	2.7	31.86	100	241	Peak
840.4	26.07	31.34	46	-19.93	22.74	3.79	31.8	100	128	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE C

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.04	20.97	37.78	40	-19.03	13.59	0.71	31.11	100	71	Peak
182.01	25.15	44.85	43.5	-18.35	10.6	1.51	31.81	100	69	Peak
230.34	28.83	48.28	46	-17.17	10.66	1.74	31.85	100	43	Peak
345.5	31.71	47.3	46	-14.29	14.03	2.21	31.83	100	243	Peak
575.8	37.2	47.22	46	-8.8	19.06	3.02	32.1	100	264	Peak
806.1	40.05	45.48	46	-5.95	22.3	3.71	31.44	100	321	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.42	26.36	43.16	40	-13.64	13.58	0.7	31.08	100	130	Peak
96.42	25.42	47.57	43.5	-18.08	8.76	1.05	31.96	100	253	Peak
230.34	24.95	44.4	46	-21.05	10.66	1.74	31.85	100	117	Peak
461	26.77	39.56	46	-19.23	16.54	2.65	31.98	100	325	Peak
537.3	30.03	40.67	46	-15.97	18.17	2.91	31.72	100	331	Peak
824.3	39.73	45.09	46	-6.27	22.54	3.75	31.65	100	235	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE D

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.77	20.11	36.92	40	-19.89	13.59	0.71	31.11	100	330	Peak
182.01	23.77	43.47	43.5	-19.73	10.6	1.51	31.81	100	203	Peak
253.83	21.81	40.27	46	-24.19	11.59	1.85	31.9	100	62	Peak
537.3	25.75	36.39	46	-20.25	18.17	2.91	31.72	100	253	Peak
691.3	31.82	39.54	46	-14.18	20.71	3.4	31.83	100	210	Peak
729.8	30.44	37.29	46	-15.56	21.23	3.52	31.6	100	241	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
35.4	25.98	43.48	40	-14.02	12.94	0.61	31.05	100	241	Peak
84.81	24.04	46.56	40	-15.96	8.22	1	31.74	100	288	Peak
180.39	17.83	37.43	43.5	-25.67	10.74	1.5	31.84	100	310	Peak
384	23.45	38.12	46	-22.55	14.96	2.36	31.99	100	221	Peak
643.7	23.19	31.89	46	-22.81	20.14	3.22	32.06	100	189	Peak
780.2	25.48	31.32	46	-20.52	21.94	3.65	31.43	100	95	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE E

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	21.55	38.35	40	-18.45	13.58	0.7	31.08	100	276	Peak
76.17	23.42	45	40	-16.58	9.09	0.95	31.62	100	303	Peak
166.08	17.26	35.48	43.5	-26.24	12.15	1.42	31.79	100	349	Peak
456.8	20.26	33.15	46	-25.74	16.46	2.64	31.99	100	157	Peak
514.9	21.74	32.83	46	-24.26	17.66	2.83	31.58	100	188	Peak
732.6	26.66	33.44	46	-19.34	21.27	3.52	31.57	100	264	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	20.94	37.74	40	-19.06	13.58	0.7	31.08	100	96	Peak
143.94	23.73	41.58	43.5	-19.77	12.47	1.31	31.63	100	159	Peak
161.76	17.35	35.26	43.5	-26.15	12.54	1.4	31.85	100	133	Peak
332.9	28.41	44.32	46	-17.59	13.73	2.17	31.81	100	116	Peak
384	21.2	35.87	46	-24.8	14.96	2.36	31.99	100	345	Peak
671.7	27.32	35.33	46	-18.68	20.48	3.33	31.82	100	87	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value

MODE F

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
75.36	16.03	37.41	40	-23.97	9.33	0.94	31.65	100	153	Peak
187.68	18.64	38.61	43.5	-24.86	10.19	1.54	31.7	100	241	Peak
250.32	19.78	38.4	46	-26.22	11.48	1.84	31.94	100	219	Peak
419.7	22.9	36.72	46	-23.1	15.73	2.5	32.05	100	22	Peak
537.3	23.39	34.03	46	-22.61	18.17	2.91	31.72	100	213	Peak
729.8	27.01	33.86	46	-18.99	21.23	3.52	31.6	100	149	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
69.69	17.72	37.87	40	-22.28	10.77	0.9	31.82	100	131	Peak
135.57	17.05	35.44	43.5	-26.45	12.08	1.27	31.74	100	251	Peak
241.14	16.26	35.16	46	-29.74	11.11	1.8	31.81	100	278	Peak
384	21.05	35.72	46	-24.95	14.96	2.36	31.99	100	35	Peak
537.3	24.9	35.54	46	-21.1	18.17	2.91	31.72	100	324	Peak
757.8	27.37	33.56	46	-18.63	21.63	3.59	31.41	100	331	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value

MODE G

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.4	40.2	40	-16.6	13.58	0.7	31.08	100	278	Peak
143.94	23.56	41.41	43.5	-19.94	12.47	1.31	31.63	100	267	Peak
240.06	21.31	40.24	46	-24.69	11.07	1.79	31.79	100	327	Peak
345.5	26.83	42.42	46	-19.17	14.03	2.21	31.83	100	256	Peak
671.7	28.25	36.26	46	-17.75	20.48	3.33	31.82	100	312	Peak
729.8	29.81	36.66	46	-16.19	21.23	3.52	31.6	100	345	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.34	40.14	40	-16.66	13.58	0.7	31.08	100	324	Peak
76.71	23.12	44.7	40	-16.88	9.09	0.95	31.62	100	145	Peak
165	18.88	37.02	43.5	-24.62	12.25	1.42	31.81	100	267	Peak
345.5	26.36	41.95	46	-19.64	14.03	2.21	31.83	100	221	Peak
537.3	27.98	38.62	46	-18.02	18.17	2.91	31.72	100	247	Peak
575.8	31.42	41.44	46	-14.58	19.06	3.02	32.1	100	156	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

MODE H

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Johnson Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	23.6	40.41	40	-16.4	13.59	0.71	31.11	100	23	Peak
143.94	23.24	41.09	43.5	-20.26	12.47	1.31	31.63	100	346	Peak
239.79	20.66	39.62	46	-25.34	11.03	1.79	31.78	100	334	Peak
332.9	27.31	43.22	46	-18.69	13.73	2.17	31.81	100	320	Peak
384	21.86	36.53	46	-24.14	14.96	2.36	31.99	100	76	Peak
720	27.45	34.53	46	-18.55	21.09	3.49	31.66	100	56	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.42	40.22	40	-16.58	13.58	0.7	31.08	100	307	Peak
143.94	23.44	41.29	43.5	-20.06	12.47	1.31	31.63	100	241	Peak
240.06	20.88	39.81	46	-25.12	11.07	1.79	31.79	100	84	Peak
384	21.65	36.32	46	-24.35	14.96	2.36	31.99	100	109	Peak
671.7	27.27	35.28	46	-18.73	20.48	3.33	31.82	100	87	Peak
806.1	28.41	33.84	46	-17.59	22.3	3.71	31.44	100	161	Peak

REMARKS: Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor

Margin value = Emission level – Limit value

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 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 0.50MHz.
 3. 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.

5.2.2 TEST INSTRUMENTS

Same as section 4.2.2.

5.2.3 TEST PROCEDURES

Same as section 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as section 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as section 4.1.6.

5.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA :

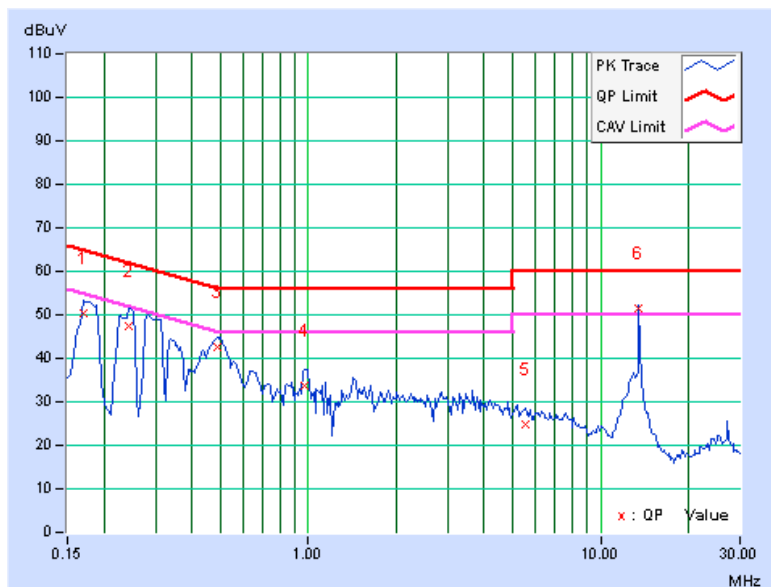
MODE A

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.28	35.50	50.55	35.77	64.98	54.98	-14.43	-19.21
2	0.24375	0.28	47.03	33.17	47.31	33.45	61.97	51.97	-14.65	-18.51
3	0.48594	0.31	42.15	30.88	42.46	31.19	56.24	46.24	-13.78	-15.05
4	0.97031	0.34	33.38	21.35	33.72	21.69	56.00	46.00	-22.28	-24.31
5	5.53516	0.45	24.21	19.95	24.66	20.40	60.00	50.00	-35.34	-29.60
6	13.55859	0.52	50.79	46.45	51.31	46.97	60.00	50.00	-8.69	-3.03

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

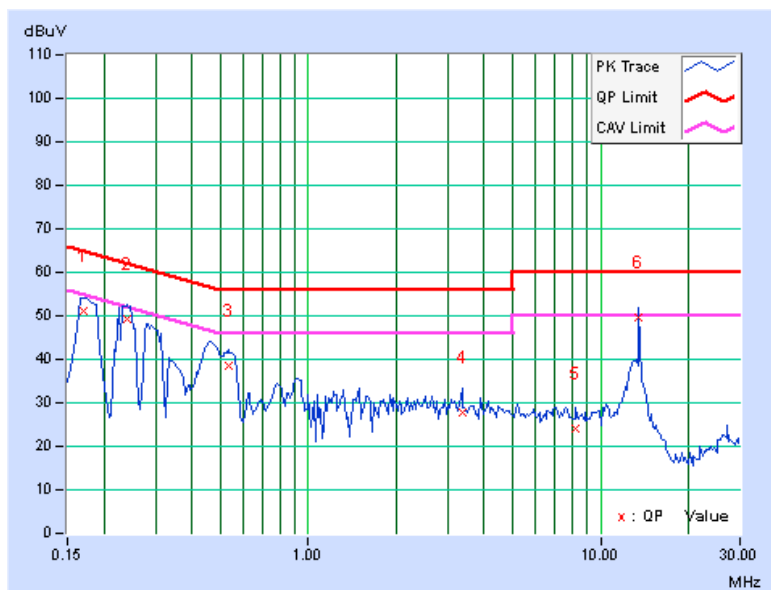


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.98	35.60	51.25	35.87	64.98	54.98	-13.73	-19.11
2	0.23984	0.28	49.00	35.56	49.28	35.84	62.10	52.10	-12.82	-16.26
3	0.53281	0.31	38.13	26.51	38.44	26.82	56.00	46.00	-17.56	-19.18
4	3.36719	0.42	27.18	19.11	27.60	19.53	56.00	46.00	-28.40	-26.47
5	8.19922	0.50	23.73	18.18	24.23	18.68	60.00	50.00	-35.77	-31.32
6	13.55859	0.55	48.94	45.26	49.49	45.81	60.00	50.00	-10.51	-4.19

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



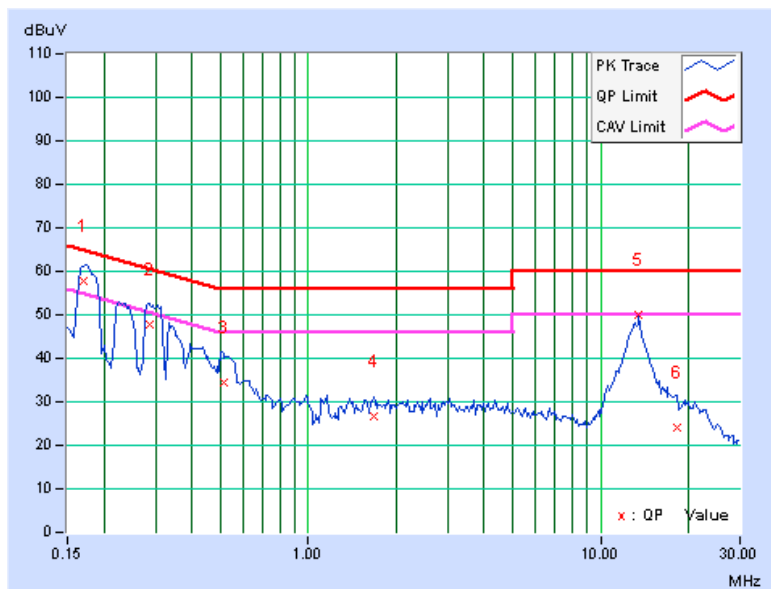
MODE B

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	57.53	41.82	57.80	42.09	64.98	54.98	-7.18	-12.89
2	0.28672	0.29	47.35	34.79	47.64	35.08	60.62	50.62	-12.98	-15.54
3	0.51328	0.31	34.31	22.46	34.62	22.77	56.00	46.00	-21.38	-23.23
4	1.67188	0.35	26.15	17.88	26.50	18.23	56.00	46.00	-29.50	-27.77
5	13.55859	0.52	49.66	45.94	50.18	46.46	60.00	50.00	-9.82	-3.54
6	18.36328	0.57	23.34	17.97	23.91	18.54	60.00	50.00	-36.09	-31.46

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

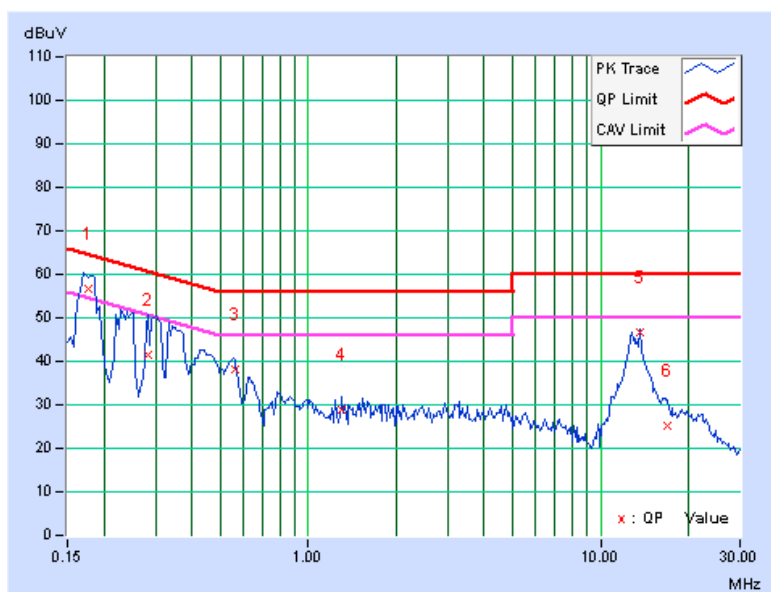


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17734	0.27	56.38	42.49	56.65	42.76	64.61	54.61	-7.96	-11.85
2	0.28281	0.29	41.18	25.65	41.47	25.94	60.73	50.73	-19.26	-24.79
3	0.56406	0.31	37.74	27.29	38.05	27.60	56.00	46.00	-17.95	-18.40
4	1.30078	0.35	28.46	19.38	28.81	19.73	56.00	46.00	-27.19	-26.27
5	13.56250	0.55	45.98	44.03	46.53	44.58	60.00	50.00	-13.47	-5.42
6	17.02734	0.60	24.54	19.18	25.14	19.78	60.00	50.00	-34.86	-30.22

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



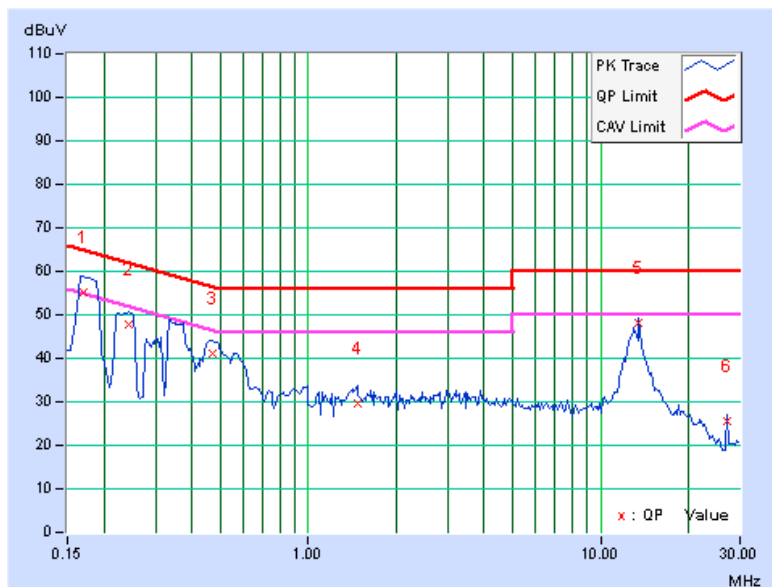
MODE C

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.09	39.25	55.36	39.52	64.98	54.98	-9.62	-15.46
2	0.24375	0.28	47.60	33.83	47.88	34.11	61.97	51.97	-14.08	-17.85
3	0.47031	0.30	40.68	29.72	40.98	30.02	56.51	46.51	-15.52	-16.48
4	1.46875	0.35	29.35	17.49	29.70	17.84	56.00	46.00	-26.30	-28.16
5	13.55859	0.52	47.65	45.48	48.17	46.00	60.00	50.00	-11.83	-4.00
6	27.11719	0.49	25.09	21.48	25.58	21.97	60.00	50.00	-34.42	-28.03

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

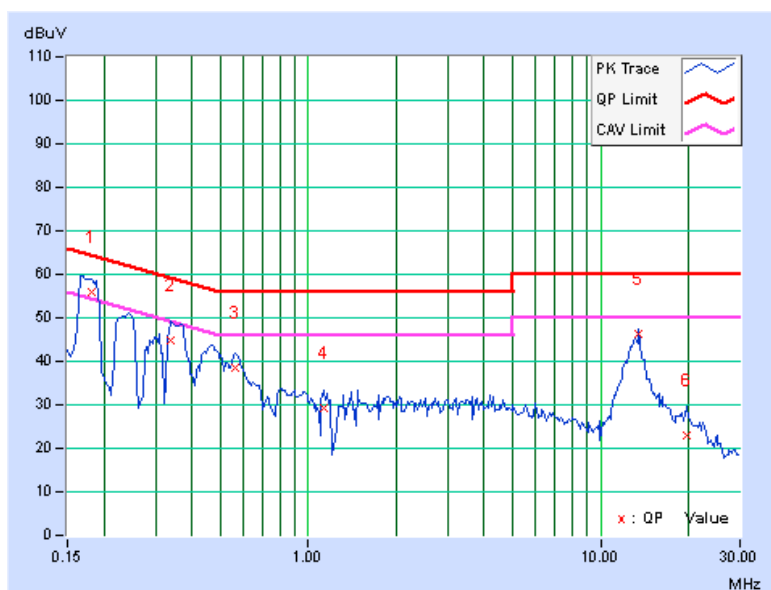


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18125	0.27	55.52	41.00	55.79	41.27	64.43	54.43	-8.63	-13.15
2	0.33750	0.29	44.68	32.30	44.97	32.59	59.26	49.26	-14.29	-16.67
3	0.56406	0.31	38.23	27.48	38.54	27.79	56.00	46.00	-17.46	-18.21
4	1.13281	0.34	29.09	18.71	29.43	19.05	56.00	46.00	-26.57	-26.95
5	13.55859	0.55	45.80	43.85	46.35	44.40	60.00	50.00	-13.65	-5.60
6	19.69141	0.64	22.31	17.63	22.95	18.27	60.00	50.00	-37.05	-31.73

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



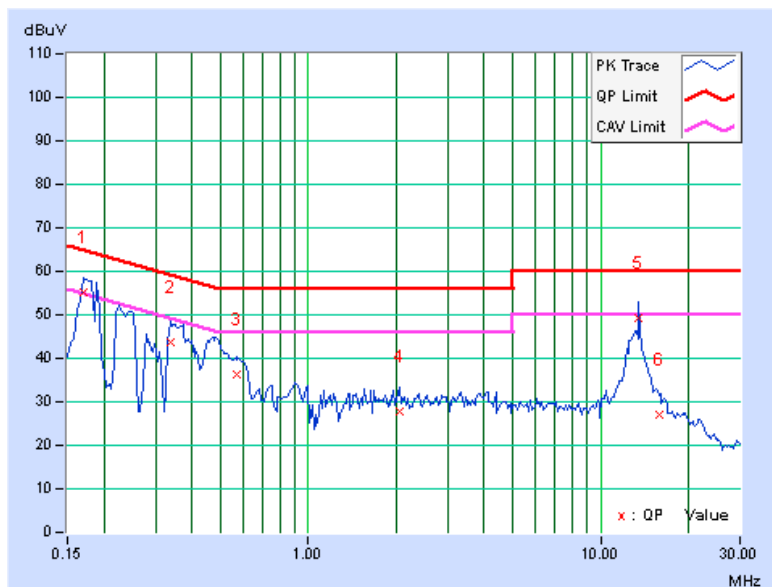
MODE D

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.09	39.25	55.36	39.52	64.98	54.98	-9.62	-15.46
2	0.33750	0.29	43.53	31.19	43.82	31.48	59.26	49.26	-15.44	-17.78
3	0.57188	0.31	36.08	24.53	36.39	24.84	56.00	46.00	-19.61	-21.16
4	2.04688	0.36	27.40	19.11	27.76	19.47	56.00	46.00	-28.24	-26.53
5	13.55859	0.52	48.59	46.05	49.11	46.57	60.00	50.00	-10.89	-3.43
6	15.86719	0.54	26.36	21.05	26.90	21.59	60.00	50.00	-33.10	-28.41

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

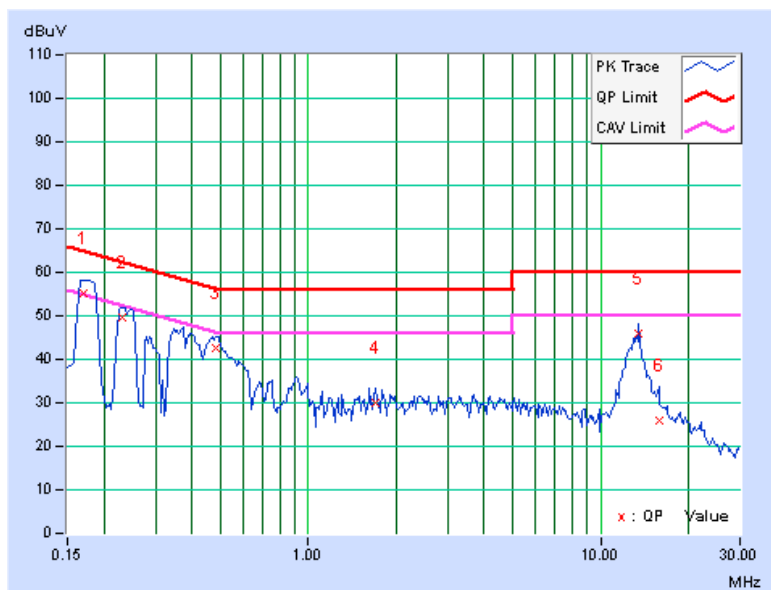


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.01	39.09	55.28	39.36	64.98	54.98	-9.70	-15.62
2	0.23203	0.28	49.35	37.47	49.63	37.75	62.38	52.38	-12.74	-14.62
3	0.48203	0.31	42.11	31.14	42.42	31.45	56.30	46.30	-13.89	-14.86
4	1.69922	0.36	29.50	19.84	29.86	20.20	56.00	46.00	-26.14	-25.80
5	13.55859	0.55	45.36	43.15	45.91	43.70	60.00	50.00	-14.09	-6.30
6	15.85156	0.58	25.48	19.81	26.06	20.39	60.00	50.00	-33.94	-29.61

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



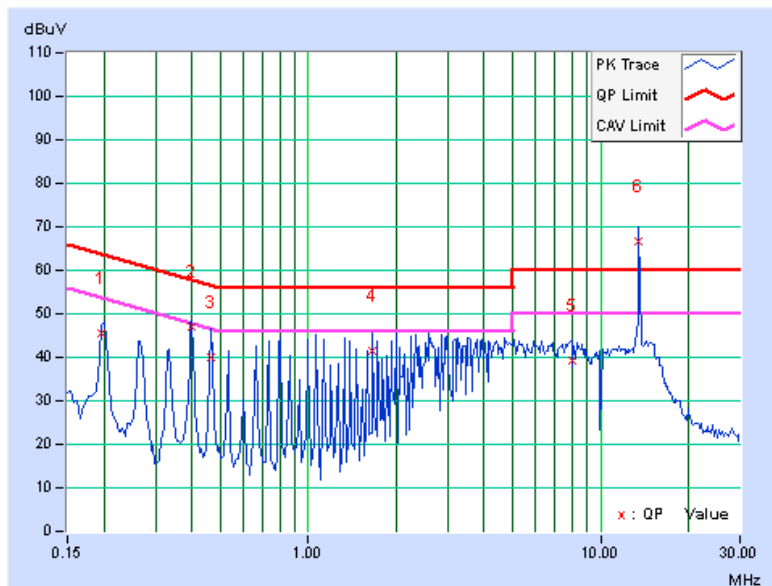
MODE E

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	45.45	39.46	45.73	39.74	63.58	53.58	-17.85	-13.84
2	0.26719	0.29	42.83	41.62	43.12	41.91	61.20	51.20	-18.09	-9.30
3	0.66563	0.32	42.33	40.27	42.65	40.59	56.00	46.00	-13.35	-5.41
4	2.72656	0.39	41.68	40.03	42.07	40.42	56.00	46.00	-13.93	-5.58
5	9.90625	0.50	42.65	38.38	43.15	38.88	60.00	50.00	-16.85	-11.12
6	13.55859	0.52	67.58	64.27	68.10	64.79	60.00	50.00	8.10	14.79

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.

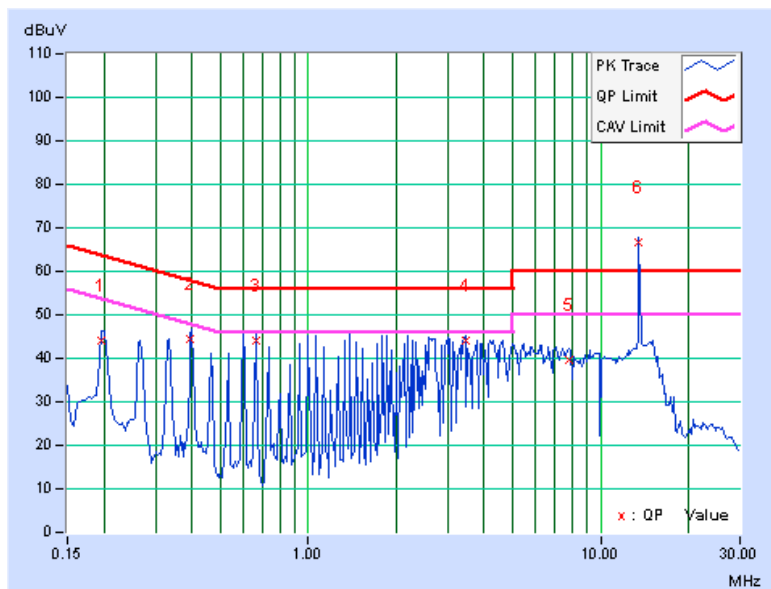


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.67	40.17	43.95	40.45	63.74	53.74	-19.79	-13.29
2	0.39609	0.30	44.22	43.78	44.52	44.08	57.93	47.93	-13.42	-3.86
3	0.66563	0.32	43.72	43.41	44.04	43.73	56.00	46.00	-11.96	-2.27
4	3.45703	0.42	43.78	41.69	44.20	42.11	56.00	46.00	-11.80	-3.89
5	7.83984	0.49	39.13	37.61	39.62	38.10	60.00	50.00	-20.38	-11.90
6	13.55859	0.55	66.18	62.79	66.73	63.34	60.00	50.00	6.73	13.34

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.



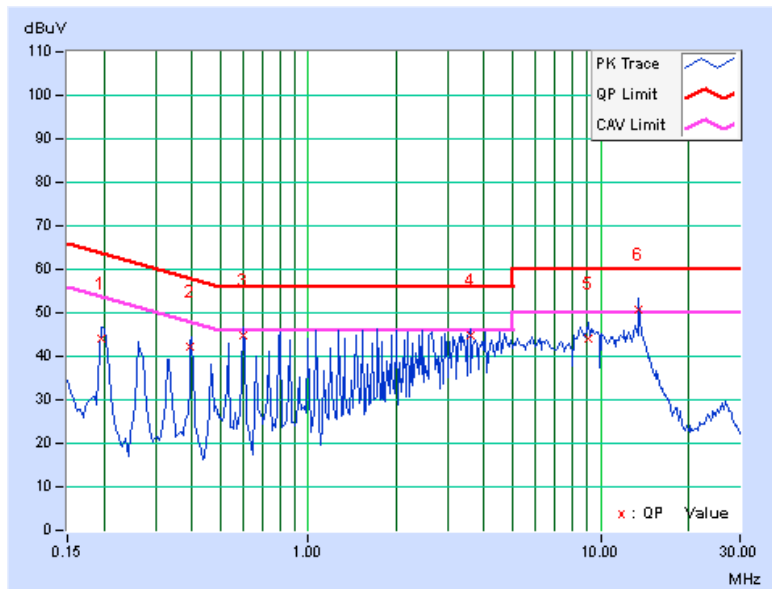
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.96	39.66	44.24	39.94	63.74	53.74	-19.50	-13.80
2	0.39609	0.30	41.93	40.32	42.23	40.62	57.93	47.93	-15.71	-7.32
3	0.59922	0.31	44.46	40.27	44.77	40.58	56.00	46.00	-11.23	-5.42
4	3.58984	0.42	44.42	40.60	44.84	41.02	56.00	46.00	-11.16	-4.98
5	9.10547	0.49	43.57	39.56	44.06	40.05	60.00	50.00	-15.94	-9.95
6	13.55859	0.52	50.30	45.37	50.82	45.89	60.00	50.00	-9.18	-4.11

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

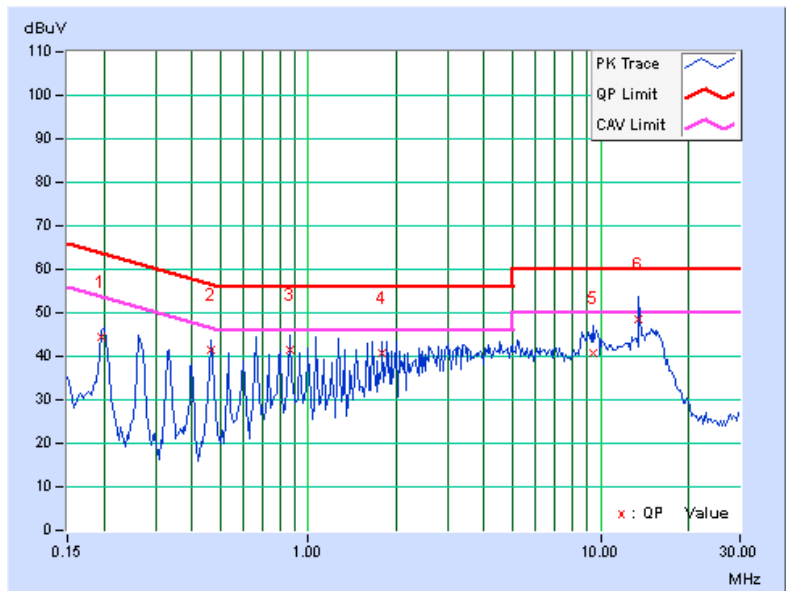


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.10	37.49	44.38	37.77	63.74	53.74	-19.36	-15.97
2	0.46641	0.30	41.33	41.05	41.63	41.35	56.58	46.58	-14.94	-5.22
3	0.86484	0.33	41.09	40.02	41.42	40.35	56.00	46.00	-14.58	-5.65
4	1.79297	0.36	40.41	36.25	40.77	36.61	56.00	46.00	-15.23	-9.39
5	9.44141	0.51	40.26	35.63	40.77	36.14	60.00	50.00	-19.23	-13.86
6	13.55859	0.55	47.93	43.99	48.48	44.54	60.00	50.00	-11.52	-5.46

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



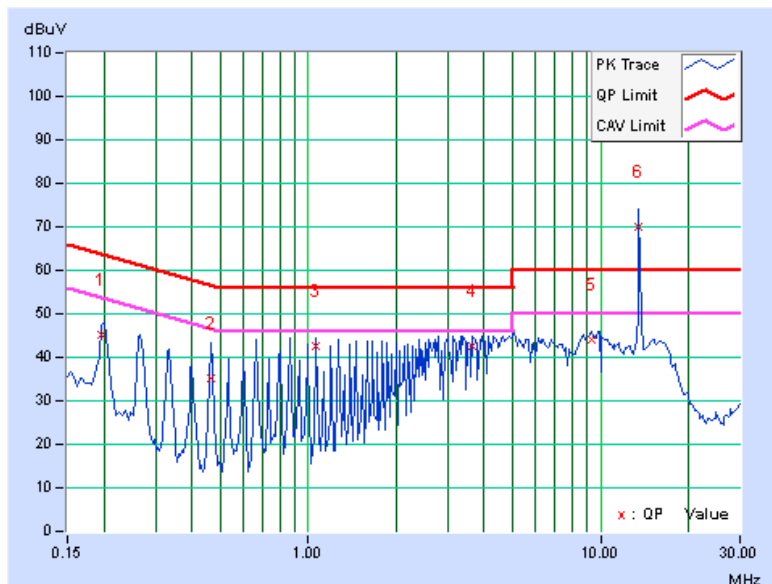
MODE F

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.90	39.27	45.18	39.55	63.74	53.74	-18.56	-14.19
2	0.46641	0.30	35.06	33.89	35.36	34.19	56.58	46.58	-21.21	-12.38
3	1.06250	0.34	42.37	41.24	42.71	41.58	56.00	46.00	-13.29	-4.42
4	3.65625	0.42	42.00	39.05	42.42	39.47	56.00	46.00	-13.58	-6.53
5	9.37109	0.49	43.52	40.18	44.01	40.67	60.00	50.00	-15.99	-9.33
6	13.55859	0.52	69.53	64.22	70.05	64.74	60.00	50.00	10.05	14.74

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.

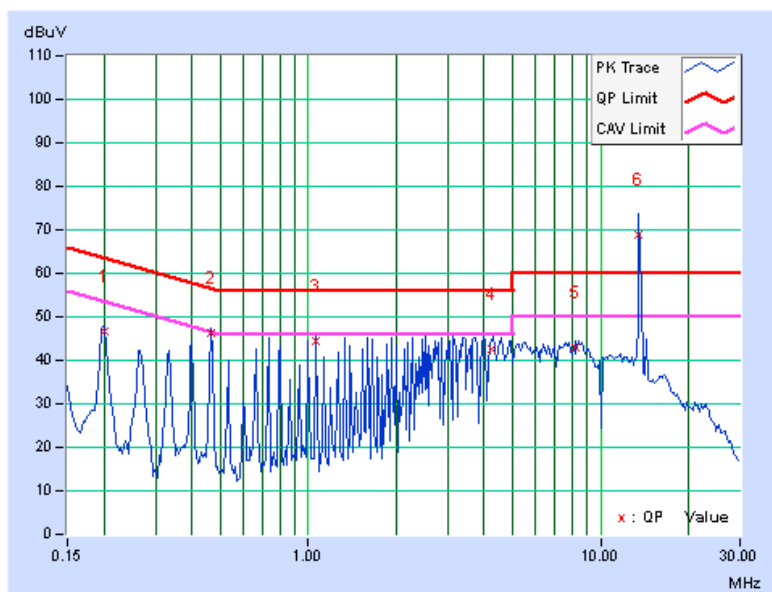


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.34	42.60	46.62	42.88	63.58	53.58	-16.96	-10.70
2	0.46641	0.30	45.85	40.46	46.15	40.76	56.58	46.58	-10.42	-5.81
3	1.06250	0.34	44.22	41.95	44.56	42.29	56.00	46.00	-11.44	-3.71
4	4.25391	0.44	42.00	41.54	42.44	41.98	56.00	46.00	-13.56	-4.02
5	8.17578	0.50	42.53	41.37	43.03	41.87	60.00	50.00	-16.97	-8.13
6	13.55859	0.55	68.19	63.94	68.74	64.49	60.00	50.00	8.74	14.49

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.



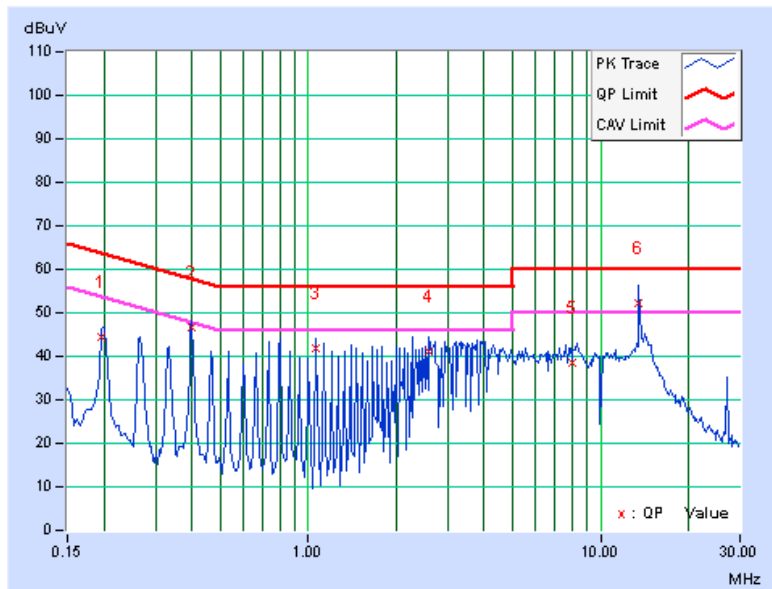
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.14	42.44	46.42	42.72	63.58	53.58	-17.16	-10.86
2	0.46641	0.30	45.98	41.62	46.28	41.92	56.58	46.58	-10.29	-4.65
3	0.73203	0.32	43.77	43.48	44.09	43.80	56.00	46.00	-11.91	-2.20
4	2.79297	0.39	43.97	39.89	44.36	40.28	56.00	46.00	-11.64	-5.72
5	8.57422	0.48	40.14	35.08	40.62	35.56	60.00	50.00	-19.38	-14.44
6	13.55859	0.52	49.23	45.83	49.75	46.35	60.00	50.00	-10.25	-3.65

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

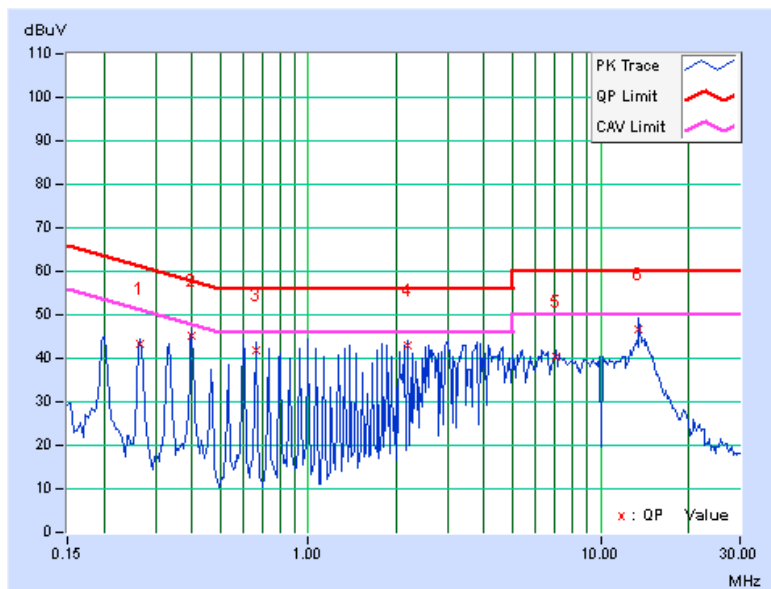


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26719	0.29	42.95	40.39	43.24	40.68	61.20	51.20	-17.97	-10.53
2	0.40000	0.30	44.80	44.25	45.10	44.55	57.85	47.85	-12.75	-3.30
3	0.66563	0.32	41.44	40.50	41.76	40.82	56.00	46.00	-14.24	-5.18
4	2.19531	0.38	42.56	41.28	42.94	41.66	56.00	46.00	-13.06	-4.34
5	7.04688	0.48	40.06	38.62	40.54	39.10	60.00	50.00	-19.46	-10.90
6	13.55859	0.55	46.11	42.72	46.66	43.27	60.00	50.00	-13.34	-6.73

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



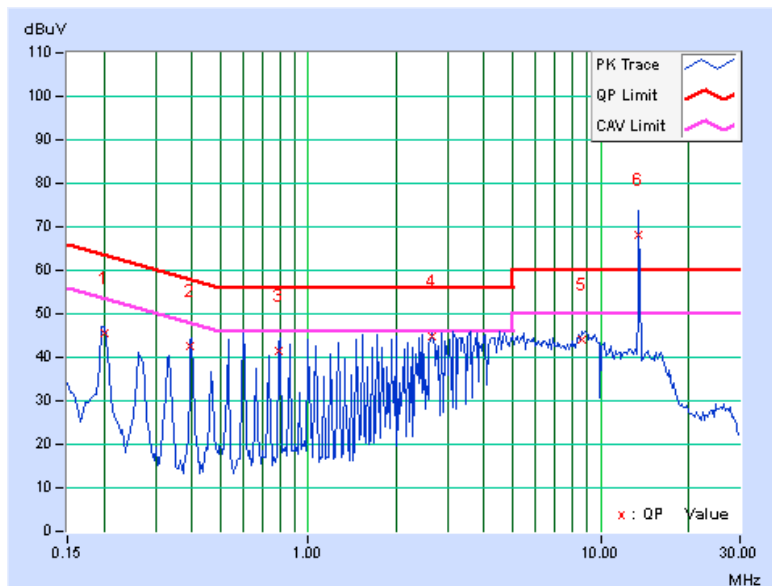
MODE G

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	45.38	41.62	45.66	41.90	63.58	53.58	-17.92	-11.68
2	0.39609	0.30	42.16	41.50	42.46	41.80	57.93	47.93	-15.48	-6.14
3	0.79453	0.33	41.07	40.91	41.40	41.24	56.00	46.00	-14.60	-4.76
4	2.66016	0.38	44.30	40.84	44.68	41.22	56.00	46.00	-11.32	-4.78
5	8.64063	0.48	43.44	40.24	43.92	40.72	60.00	50.00	-16.08	-9.28
6	13.55859	0.52	67.51	64.20	68.03	64.72	60.00	50.00	8.03	14.72

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.

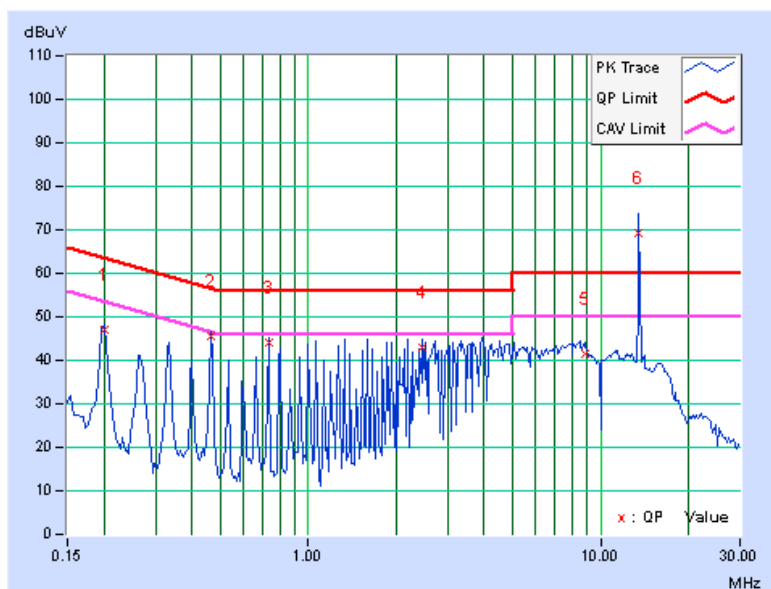


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.59	43.04	46.87	43.32	63.58	53.58	-16.71	-10.26
2	0.46641	0.30	45.17	41.70	45.47	42.00	56.58	46.58	-11.10	-4.57
3	0.73203	0.32	43.91	40.72	44.23	41.04	56.00	46.00	-11.77	-4.96
4	2.46094	0.39	42.61	42.61	43.00	43.00	56.00	46.00	-13.00	-3.00
5	8.83984	0.50	40.91	37.86	41.41	38.36	60.00	50.00	-18.59	-11.64
6	13.55859	0.55	68.54	64.12	69.09	64.67	60.00	50.00	9.09	14.67

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.



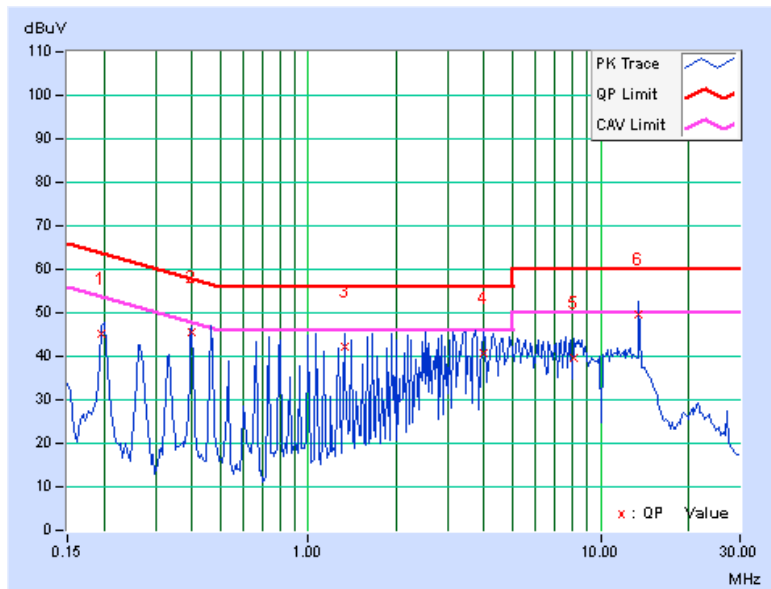
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.97	41.17	45.25	41.45	63.74	53.74	-18.49	-12.29
2	0.40000	0.30	45.22	41.85	45.52	42.15	57.85	47.85	-12.33	-5.70
3	1.32813	0.35	41.94	41.35	42.29	41.70	56.00	46.00	-13.71	-4.30
4	3.98828	0.43	40.43	36.74	40.86	37.17	56.00	46.00	-15.14	-8.83
5	8.10938	0.48	39.32	36.94	39.80	37.42	60.00	50.00	-20.20	-12.58
6	13.55859	0.52	49.02	45.76	49.54	46.28	60.00	50.00	-10.46	-3.72

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

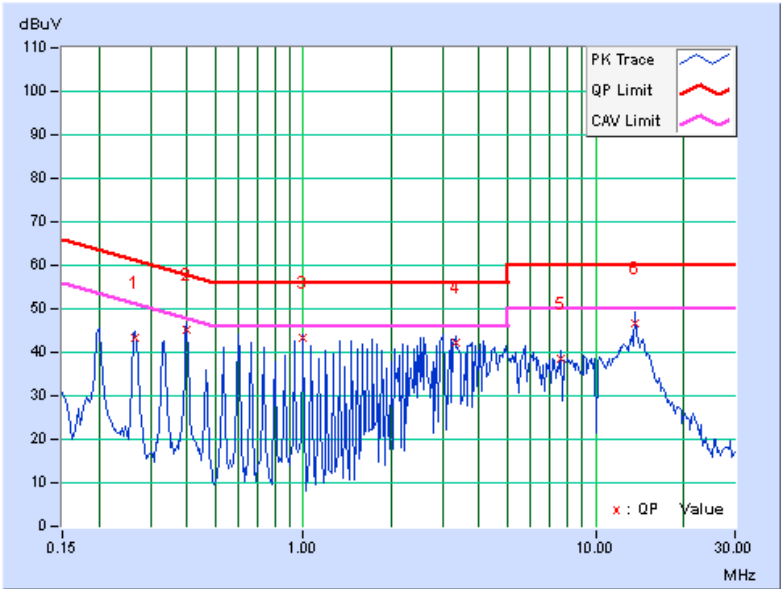


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26719	0.29	43.19	40.59	43.48	40.88	61.20	51.20	-17.73	-10.33
2	0.40000	0.30	44.90	41.33	45.20	41.63	57.85	47.85	-12.65	-6.22
3	0.99766	0.34	43.03	41.65	43.37	41.99	56.00	46.00	-12.63	-4.01
4	3.32422	0.42	41.71	41.38	42.13	41.80	56.00	46.00	-13.87	-4.20
5	7.64844	0.49	38.09	35.95	38.58	36.44	60.00	50.00	-21.42	-13.56
6	13.56250	0.55	46.18	43.03	46.73	43.58	60.00	50.00	-13.27	-6.42

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



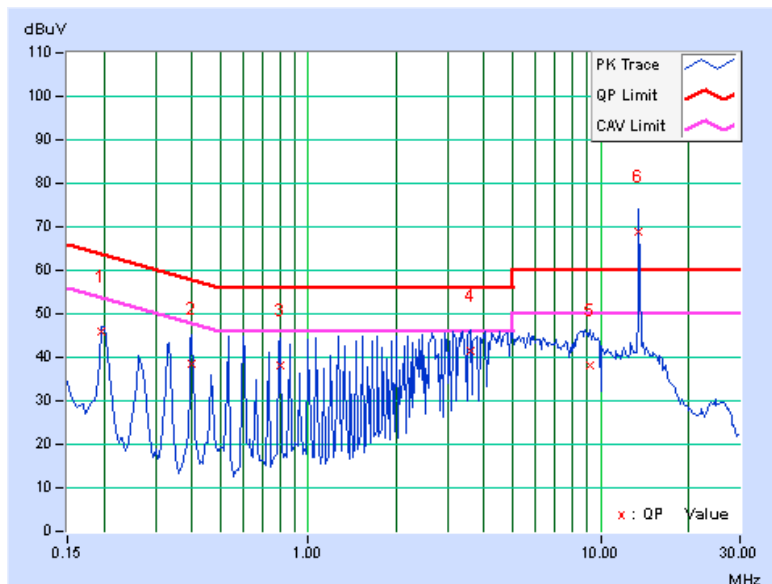
MODE H

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	45.83	42.48	46.11	42.76	63.74	53.74	-17.63	-10.98
2	0.40000	0.30	38.04	33.80	38.34	34.10	57.85	47.85	-19.51	-13.75
3	0.79844	0.33	37.89	36.89	38.22	37.22	56.00	46.00	-17.78	-8.78
4	3.58984	0.42	41.11	37.67	41.53	38.09	56.00	46.00	-14.47	-7.91
5	9.17578	0.49	37.53	33.44	38.02	33.93	60.00	50.00	-21.98	-16.07
6	13.55859	0.52	68.20	65.89	68.72	66.41	60.00	50.00	8.72	16.41

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.

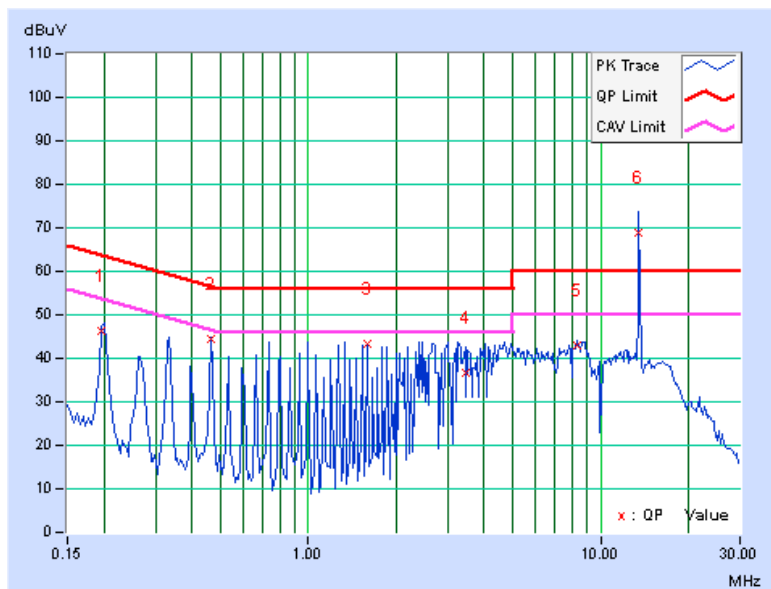


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	46.06	42.38	46.34	42.66	63.74	53.74	-17.40	-11.08
2	0.46641	0.30	44.14	43.56	44.44	43.86	56.58	46.58	-12.13	-2.71
3	1.59375	0.36	42.96	42.53	43.32	42.89	56.00	46.00	-12.68	-3.11
4	3.45313	0.42	36.27	31.56	36.69	31.98	56.00	46.00	-19.31	-14.02
5	8.30859	0.50	42.38	38.26	42.88	38.76	60.00	50.00	-17.12	-11.24
6	13.55859	0.55	68.30	64.97	68.85	65.52	60.00	50.00	8.85	15.52

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value
6. No. 6 is NFC signal inductive with measurement system. Please see the test result for EUT with a suitable dummy load.



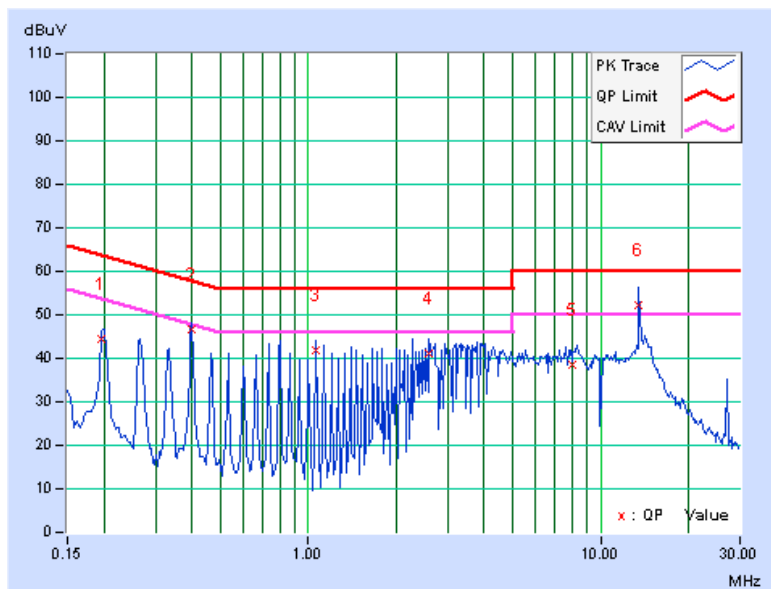
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.10	40.13	44.38	40.41	63.74	53.74	-19.36	-13.33
2	0.40000	0.30	46.45	41.93	46.75	42.23	57.85	47.85	-11.10	-5.62
3	1.06250	0.34	41.68	40.54	42.02	40.88	56.00	46.00	-13.98	-5.12
4	2.59375	0.38	40.88	38.69	41.26	39.07	56.00	46.00	-14.74	-6.93
5	8.04297	0.48	38.05	34.09	38.53	34.57	60.00	50.00	-21.47	-15.43
6	13.55859	0.52	51.80	46.06	52.32	46.58	60.00	50.00	-7.68	-3.42

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

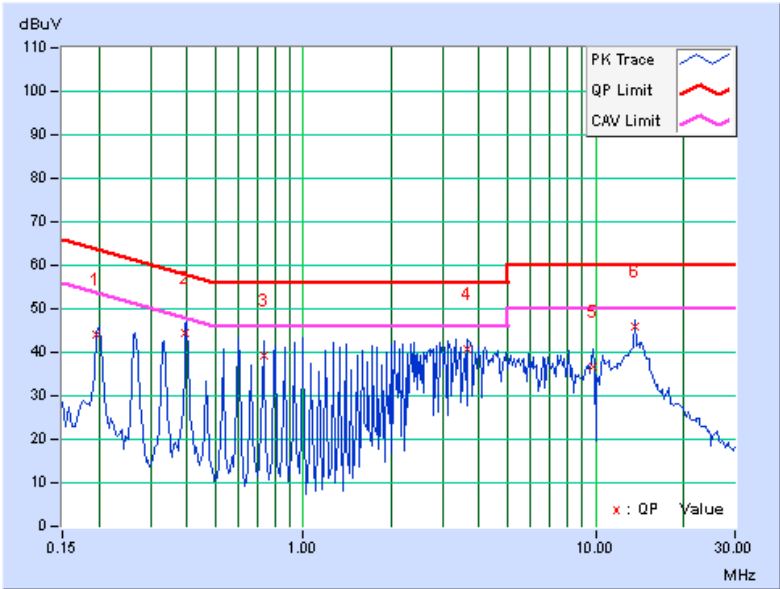


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.65	39.66	43.93	39.94	63.74	53.74	-19.81	-13.80
2	0.39609	0.30	44.20	43.48	44.50	43.78	57.93	47.93	-13.44	-4.16
3	0.73203	0.32	39.09	38.26	39.41	38.58	56.00	46.00	-16.59	-7.42
4	3.65625	0.43	40.36	37.63	40.79	38.06	56.00	46.00	-15.21	-7.94
5	9.77344	0.52	36.16	33.23	36.68	33.75	60.00	50.00	-23.32	-16.25
6	13.56250	0.55	45.37	42.80	45.92	43.35	60.00	50.00	-14.08	-6.65

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

5.3.2 TEST SETUP

Same as section 4.3.2.

5.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.3.4 TEST PROCEDURE

Same as section 4.3.4.

5.3.5 DEVIATION FROM TEST STANDARD

No deviation.

5.3.6 EUT OPERATING CONDITIONS

Same as section 4.3.6.



A D T

5.3.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	15.03	0.5	PASS
157	5785	15.13	0.5	PASS
165	5825	15.16	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	15.09	0.5	PASS
157	5785	15.15	0.5	PASS
165	5825	15.11	0.5	PASS

802.11n (40MHz)

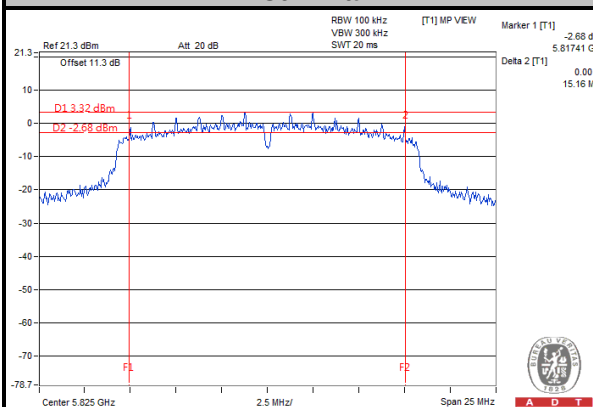
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
151	5755	35.14	0.5	PASS
159	5795	35.17	0.5	PASS



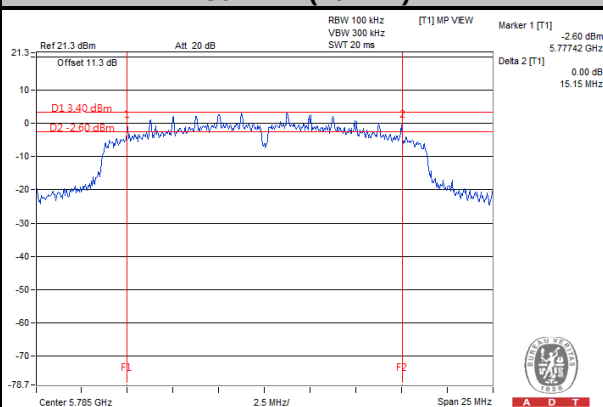
A D T

SPECTRUM PLOT OF WORST VALUE

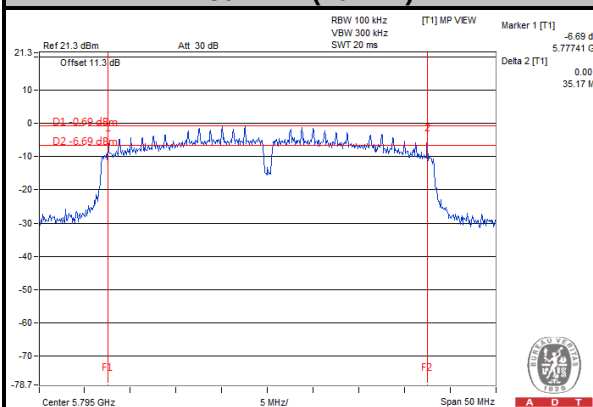
802.11a



802.11n (20MHz)



802.11n (40MHz)



5.4 MAXIMUM OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 5725–5850 MHz bands: 1 Watt (30dBm)

5.4.2 TEST SETUP

Same as section 4.4.2.

5.4.3 INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.4.4 TEST PROCEDURES

Same as section 4.4.4.

5.4.5 DEVIATION FROM TEST STANDARD

No deviation.

5.4.6 EUT OPERATING CONDITIONS

Same as section 4.3.6.

5.4.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
149	5745	93.11	19.69	30	PASS
157	5785	90.36	19.56	30	PASS
165	5825	84.92	19.29	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
149	5745	94.84	19.77	30	PASS
157	5785	91.41	19.61	30	PASS
165	5825	83.95	19.24	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS / FAIL
151	5755	93.76	19.72	30	PASS
159	5795	85.31	19.31	30	PASS



A D T

5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST SETUP

Same as section 4.5.2.

5.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.5.4 TEST PROCEDURE.

Same as section 4.5.4.

5.5.5 DEVIATION FROM TEST STANDARD

No deviation.

5.5.6 EUT OPERATING CONDITION

Same as section 4.3.6.

5.5.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
149	5745	-10.09	8	PASS
157	5785	-11.69	8	PASS
165	5825	-12.03	8	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
149	5745	-11.36	8	PASS
157	5785	-10.61	8	PASS
165	5825	-12.76	8	PASS

802.11n (40MHz)

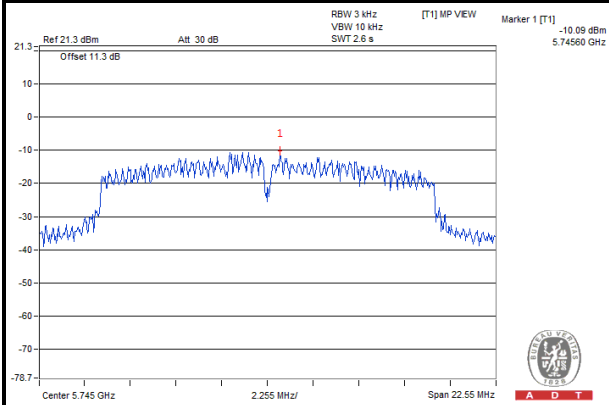
CHANNEL	FREQUENCY (MHz)	PSD (dBm/3kHz)	LIMIT (dBm/3kHz)	PASS / FAIL
151	5755	-16.53	8	PASS
159	5795	-15.16	8	PASS



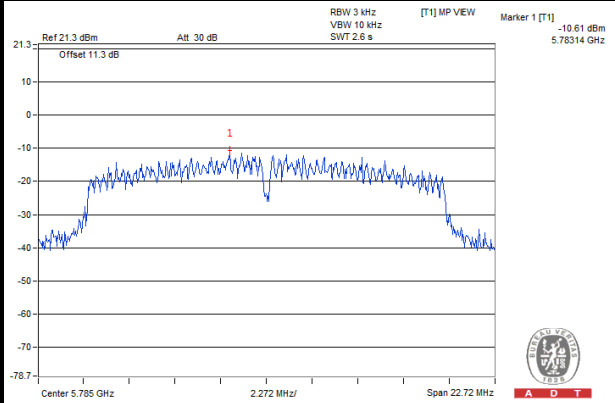
A D T

SPECTRUM PLOT OF WORST VALUE

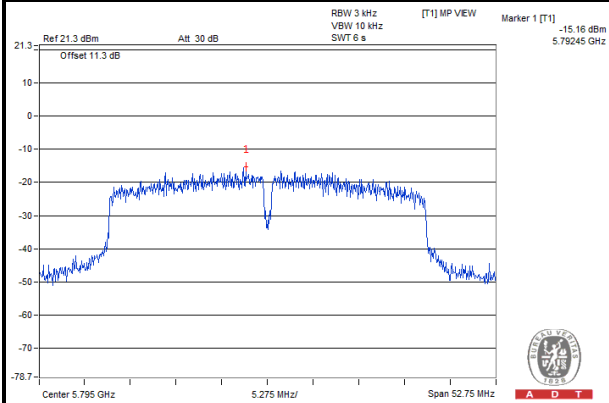
802.11a



802.11n (20MHz)



802.11n (40MHz)



5.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

5.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

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

5.6.2 TEST SETUP

Same as section 4.6.2.

5.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.6.4 TEST PROCEDURE

Same as section 4.6.4

5.6.5 DEVIATION FROM TEST STANDARD

No deviation.

5.6.6 EUT OPERATING CONDITION

Same as section 4.3.6

5.6.7 TEST RESULTS

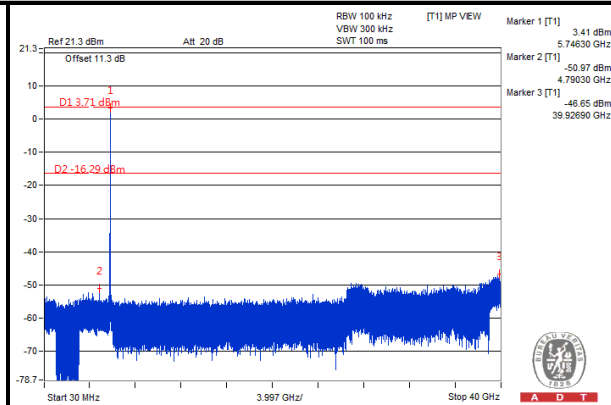
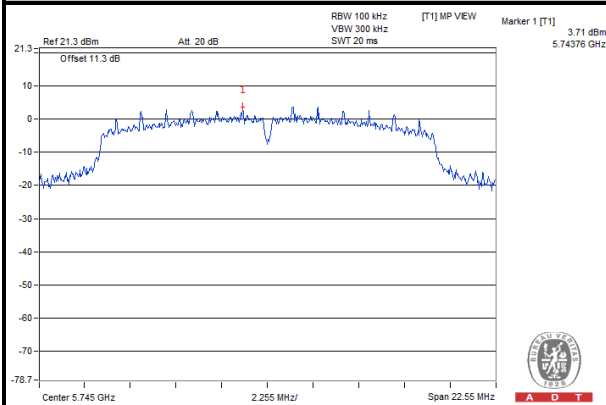
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.



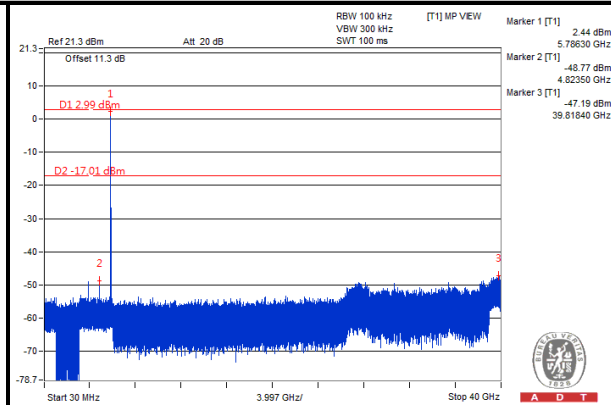
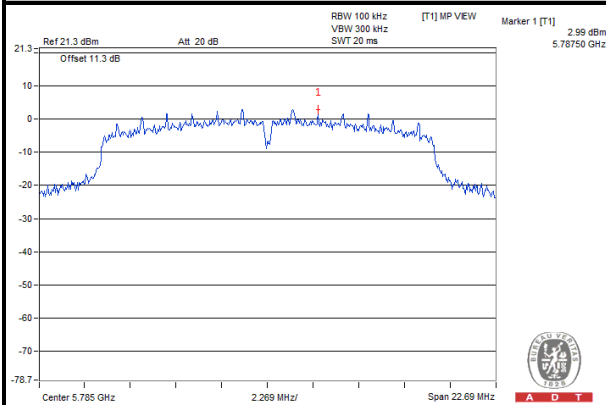
A D T

802.11a

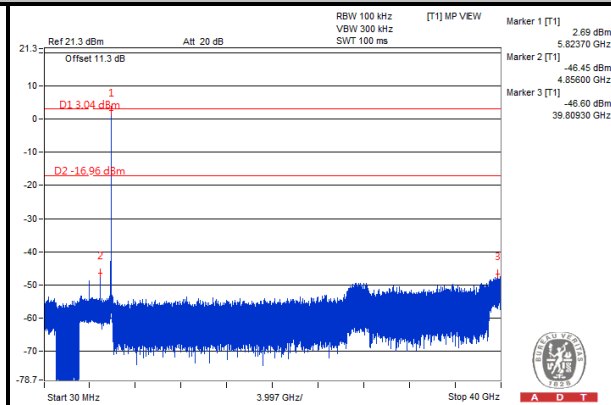
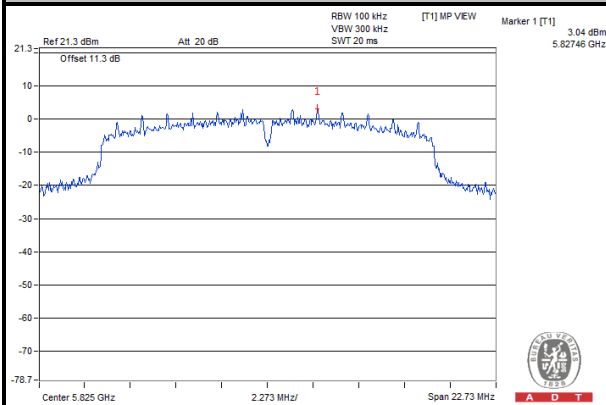
CH 149



CH 157



CH 165

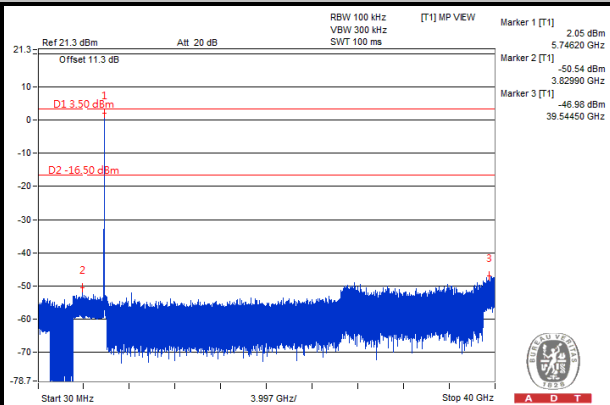
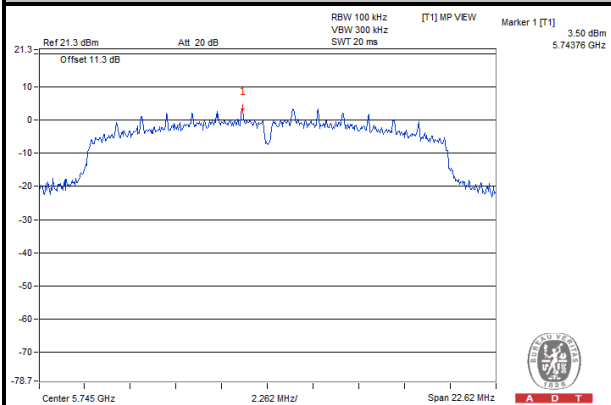




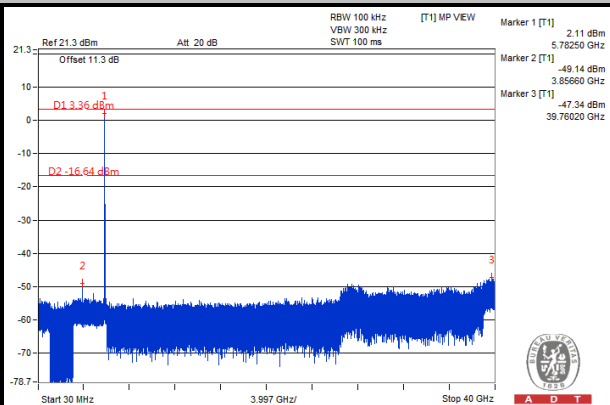
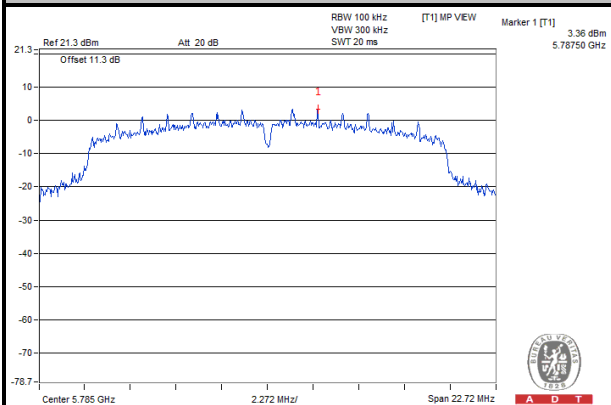
A D T

802.11n (20MHz)

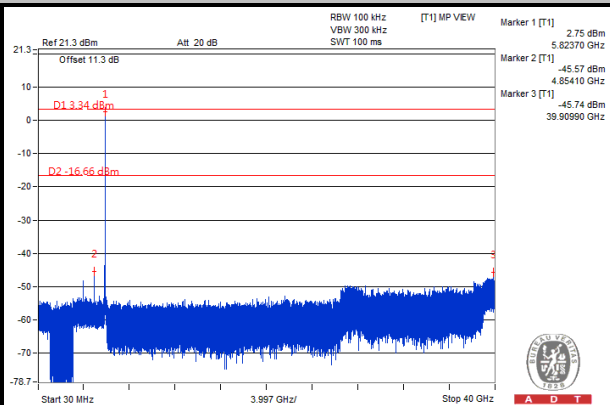
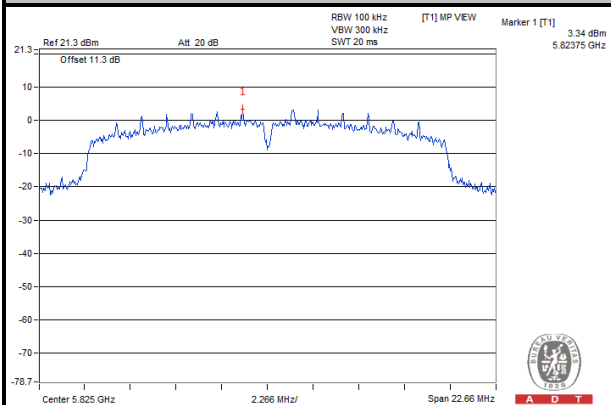
CH 149



CH 157



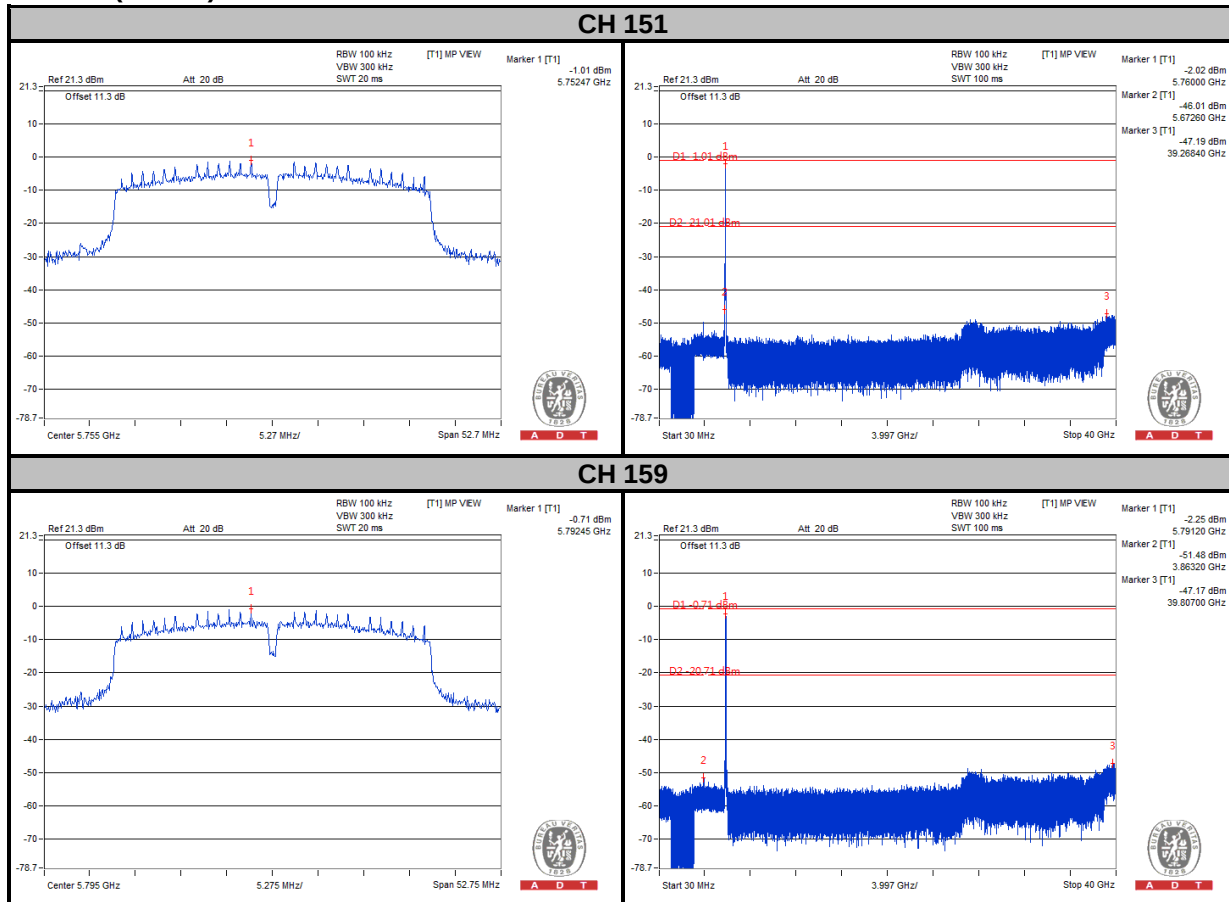
CH 165





A D T

802.11n (40MHz)





A D T

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

7. 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.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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



A D T

8. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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

---END---