

FCC TEST REPORT (15.407)

REPORT NO.: RF141117C22-2
MODEL NO.: TC75AH
FCC ID: H9PTC75AH
RECEIVED: Nov. 17, 2014
TESTED: Dec. 06, 2014 ~ Jan. 25, 2015
ISSUED: Feb. 16, 2015

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1. CERTIFICATION	5
2. SUMMARY OF TEST RESULTS	6
2.1 MEASUREMENT UNCERTAINTY	6
3. GENERAL INFORMATION	7
3.1 GENERAL DESCRIPTION OF EUT	7
3.2 DESCRIPTION OF TEST MODES	9
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	11
3.3 DESCRIPTION OF SUPPORT UNITS	14
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST	14
3.4 DUTY CYCLE TEST SIGNAL	15
3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS	19
4. TEST TYPES AND RESULTS	20
4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT	20
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	20
4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS	20
4.1.3 TEST INSTRUMENTS	21
4.1.4 TEST PROCEDURES	23
4.1.5 DEVIATION FROM TEST STANDARD	23
4.1.6 TEST SETUP	24
4.1.7 EUT OPERATING CONDITIONS	25
4.1.8 TEST RESULTS	26
4.2 CONDUCTED EMISSION MEASUREMENT	100
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	100
4.2.2 TEST INSTRUMENTS	100
4.2.3 TEST PROCEDURES	101
4.2.4 DEVIATION FROM TEST STANDARD	101
4.2.5 TEST SETUP	102
4.2.6 EUT OPERATING CONDITIONS	102
4.2.7 TEST RESULTS	103
4.3 TRANSMIT POWER MEASUREMENT	105
4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT	105
4.3.2 TEST SETUP	105
4.3.3 TEST INSTRUMENTS	105
4.3.4 TEST PROCEDURE	106
4.3.5 DEVIATION FROM TEST STANDARD	106
4.3.6 EUT OPERATING CONDITIONS	106
4.3.7 TEST RESULTS	107
4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT	112
4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT	112
4.4.2 TEST SETUP	112
4.4.3 TEST INSTRUMENTS	112
4.4.4 TEST PROCEDURES	112
4.4.5 DEVIATION FROM TEST STANDARD	113
4.4.6 EUT OPERATING CONDITIONS	113
4.4.7 TEST RESULTS	114
4.5 FREQUENCY STABILITY	117
4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	117
4.5.2 TEST SETUP	117
4.5.3 TEST INSTRUMENTS	117
4.5.4 TEST PROCEDURE	118
4.5.5 DEVIATION FROM TEST STANDARD	118



A D T

4.5.6	EUT OPERATING CONDITION.....	118
4.5.7	TEST RESULTS.....	119
4.6	6dB BANDWIDTH MEASUREMENT	120
4.6.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	120
4.6.2	TEST SETUP	120
4.6.3	TEST INSTRUMENTS	120
4.6.4	TEST PROCEDURE	120
4.6.5	DEVIATION FROM TEST STANDARD	120
4.6.6	EUT OPERATING CONDITIONS	120
4.6.7	TEST RESULTS.....	121
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	123
6.	INFORMATION ON THE TESTING LABORATORIES	124
7.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	125



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF141117C22-2	Original release	Feb. 16, 2015



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1. CERTIFICATION

PRODUCT: Touch Computer

MODEL NO.: TC75AH

BRAND: Symbol

APPLICANT: Symbol Technologies, Inc.

TESTED: Dec. 06, 2014 ~ Jan. 25, 2015

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10-2009

The above equipment (model: TC75AH) 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 : Gina Liu , **DATE** : Feb. 16, 2015

Gina Liu / Specialist

APPROVED BY : Sam Chen , **DATE** : Feb. 16, 2015

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 E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -8.02dB at 0.19013MHz.
15.407(b)(1/2/3) (b)(6)	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.02dB at 5350MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	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	Touch Computer
MODEL NO.	TC75AH
POWER SUPPLY	5.4Vdc (adapter or host equipment) 3.7Vdc (Li-ion battery)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	107.40mW for 5180 ~ 5240MHz 108.14mW for 5260 ~ 5320MHz 104.23mW for 5500 ~ 5700MHz 98.40mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA antenna with 3.58dBi gain (5180 ~ 5240MHz) PIFA antenna with 2.87dBi gain (5260 ~ 5320MHz) PIFA antenna with 3.73dBi gain (5500 ~ 5700MHz) PIFA antenna with 4.36dBi gain (5745 ~ 5825MHz)
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
HW VERSION	DV3
SW VERSION	Android version : 4.4.3 Build number : 91-23257-K-07-04-00-D3

NOTE:

1. The EUT contains following accessory devices.

ITEM	BRAND	MODEL	SPECIFICATION
Adapter	Motorola	86-14000-249R	I/P: 100-240Vac, 50/60Hz, 0.6A O/P: 5.4Vdc, 3A
Battery	Symbol	82-171249-02	3.7Vdc, 4500mAh
Charging only Cable Cup	Symbol	CHG-TC7X-CBL1-01	0.2m non-shielded cable w/o core
Earphone 1	Symbol / Zebra	HDST-25MM-PTVP-01	1.3m non-shielded cable w/o core
Earphone 2	Symbol / Zebra	RCH51	1.05m shielded cable w/o core
TC7X SNAP ON AUDIO ADAPTER	Symbol / Zebra	ADP-TC7X-AUDIO1-01	--
Snap On USB Cable	Symbol / Zebra	CBL-TC7X-USB1-01	1.8m non-shielded cable with core

2. The EUT provides 1 completed transmitter and 1 receiver.

MODULATION MODE	TX FUNCTION
802.11a	1TX
802.11n (20MHz)	1TX
802.11n (40MHz)	1TX

3. 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

WLAN 5180 ~ 5240MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

FOR 5260 ~ 5320MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

WLAN 5500 ~ 5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500MHz	116	5580MHz
104	5520MHz	132	5660MHz
108	5540MHz	136	5680MHz
112	5560MHz	140	5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510MHz	134	5670MHz
110	5550MHz		

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

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	EUT + Earphone 1
B	√	√	-	-	EUT + Earphone 2
C	√	√	-	-	EUT + U-cup cable + USB cable

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 **X-plane** for 5180-5240MHz, **Z-plane** for 5260-5320MHz and 5745 ~ 5825MHz, **Y-plane** for 5500 ~ 5700MHz.

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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
	802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A, C	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
B			52 to 64	64	OFDM	BPSK	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
A	802.11a	5745-5825	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

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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
	802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A, C	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
B			52 to 64	64	OFDM	BPSK	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
A	802.11a	5745-5825	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

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11n (20MHz)	5260-5320	52 to 64	64	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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
	802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
A	802.11a	5745-5825	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

Test CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Anson Lin, Toby Tian
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Anson Lin
PLC	25deg. C, 65%RH	120Vac, 60Hz	Toby Tian
APCM	25deg. C, 65%RH	120Vac, 60Hz	Howard Kao

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.

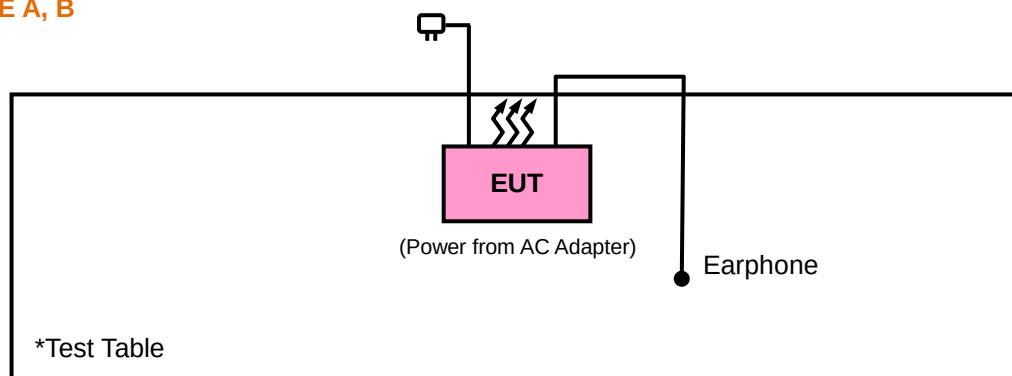
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	Inspiron 14R	8LRKKW1	NA

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

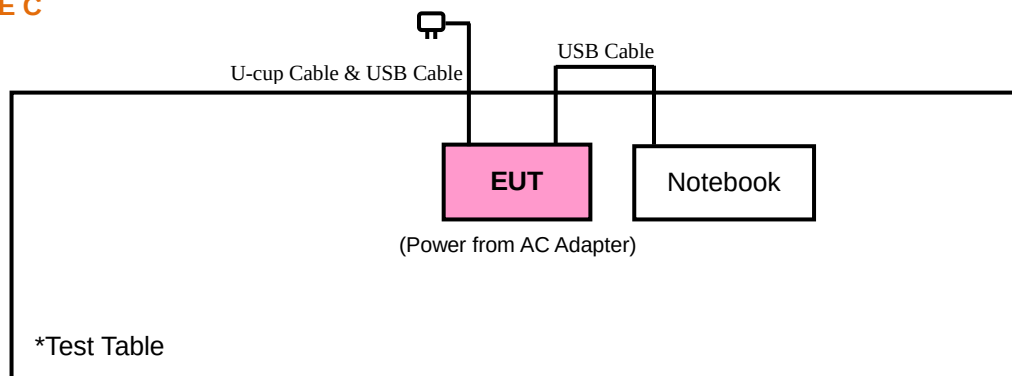
NOTE: 1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 as a communication partner to transfer data.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

MODE A, B



MODE C





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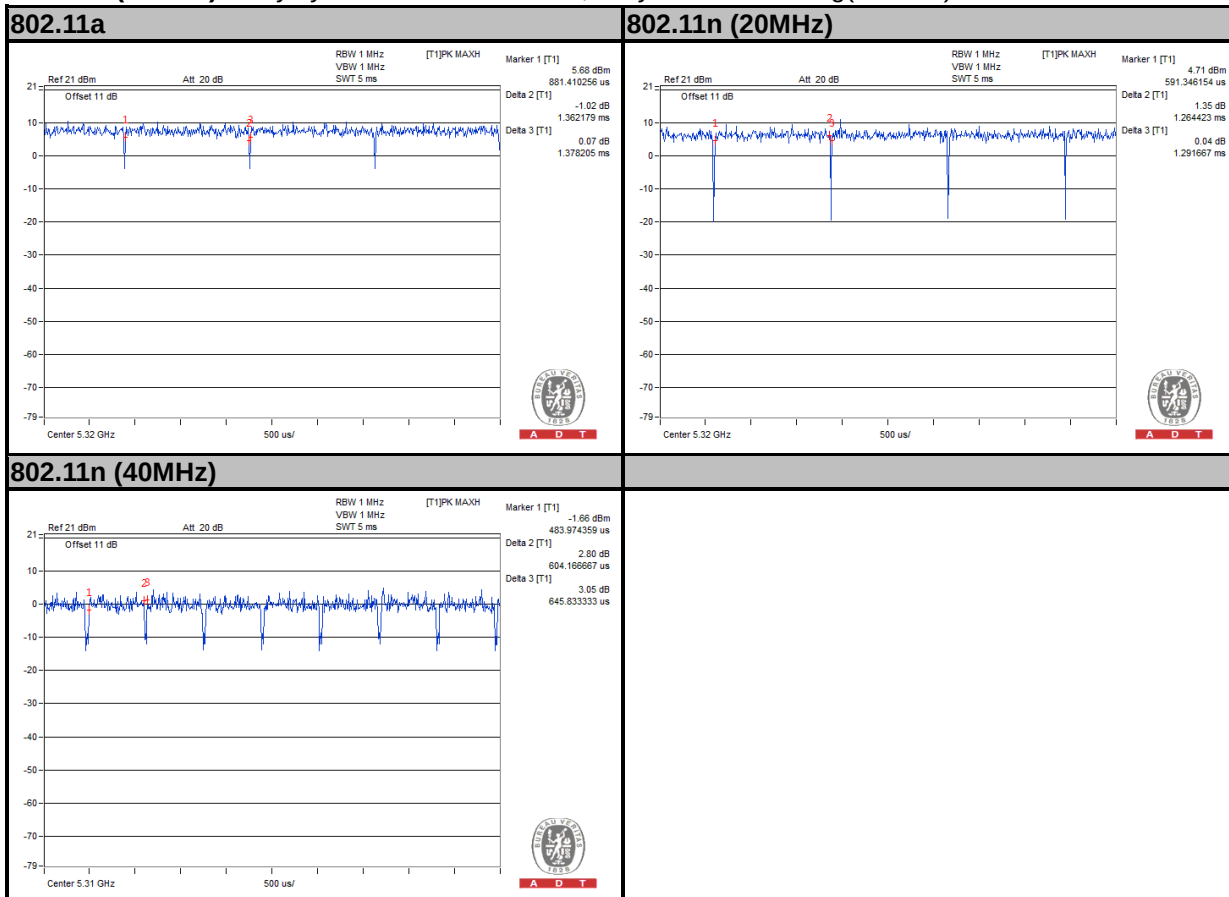
3.4 DUTY CYCLE TEST SIGNAL

MODULATION TYPE: BPSK

802.11a: Duty cycle of test signal is > 98 %, duty factor is not required.

802.11n (20MHz): Duty cycle = $1.264/1.291 = 0.979$, Duty factor = $10 * \log(1/0.979) = 0.09$

802.11n (40MHz): Duty cycle = $604/645 = 0.936$, Duty factor = $10 * \log(1/0.936) = 0.29$



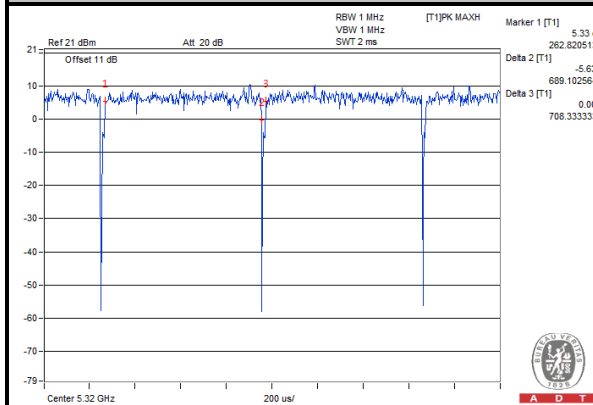
MODULATION TYPE: QPSK

802.11a: Duty cycle = $689.102/708.333 = 0.973$, Duty factor = $10 * \log(1/0.973) = 0.12$

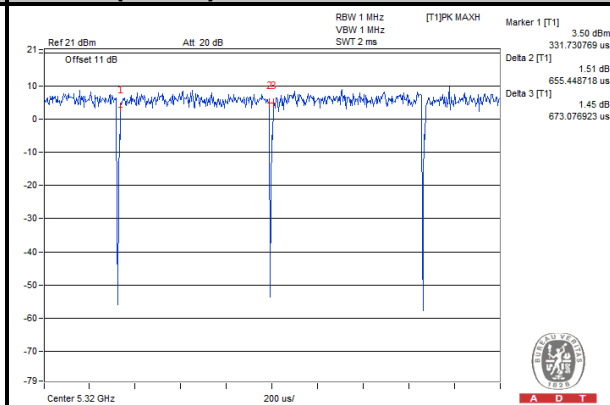
802.11n (20MHz): Duty cycle = $655.448/673.076 = 0.974$, Duty factor = $10 * \log(1/0.974) = 0.12$

802.11n (40MHz): Duty cycle = $306.089/342.948 = 0.893$, Duty factor = $10 * \log(1/0.893) = 0.49$

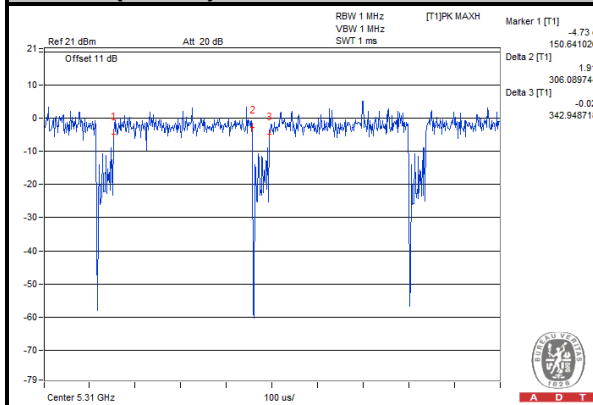
802.11a



802.11n (20MHz)



802.11n (40MHz)



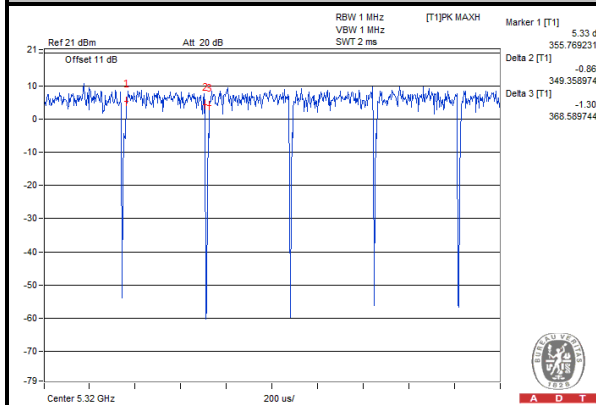
MODULATION TYPE: 16QAM

802.11a: Duty cycle = $349.358/368.589 = 0.948$, Duty factor = $10 * \log(1/0.948) = 0.23$

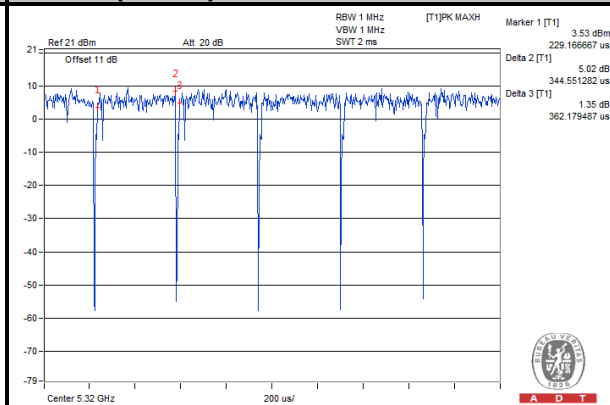
802.11n (20MHz): Duty cycle = $344.551/362.179 = 0.951$, Duty factor = $10 * \log(1/0.951) = 0.22$

802.11n (40MHz): Duty cycle = $157.051/195.512 = 0.803$, Duty factor = $10 * \log(1/0.803) = 0.95$

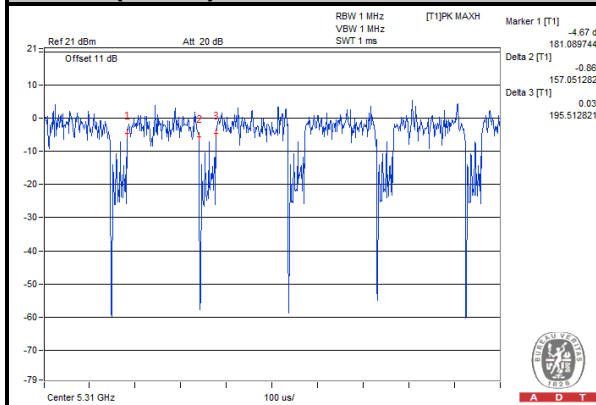
802.11a



802.11n (20MHz)



802.11n (40MHz)



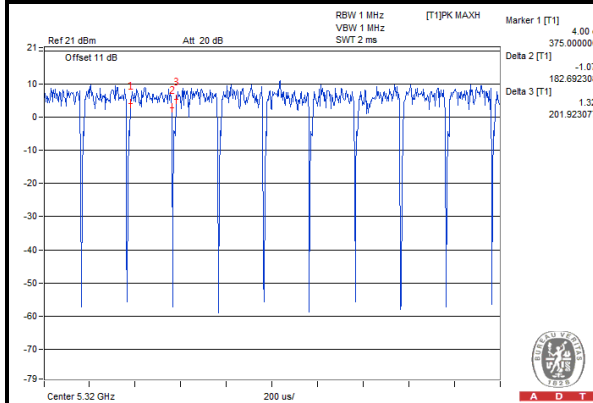
MODULATION TYPE: 64QAM

802.11a: Duty cycle = $182.692/201.923 = 0.905$, Duty factor = $10 * \log(1/0.905) = 0.43$

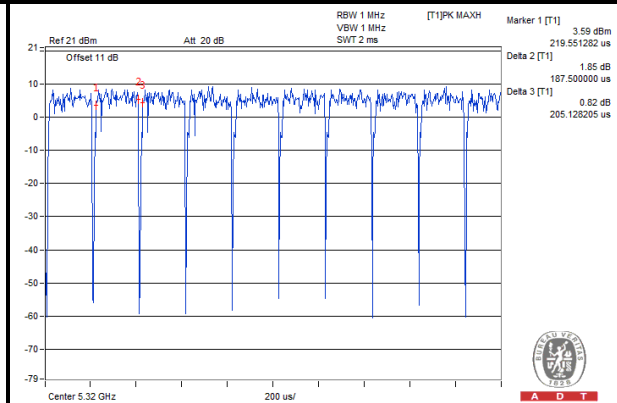
802.11n (20MHz): Duty cycle = $187.500/205.128 = 0.914$, Duty factor = $10 * \log(1/0.914) = 0.39$

802.11n (40MHz): Duty cycle = $80.128/118.589 = 0.676$, Duty factor = $10 * \log(1/0.676) = 1.70$

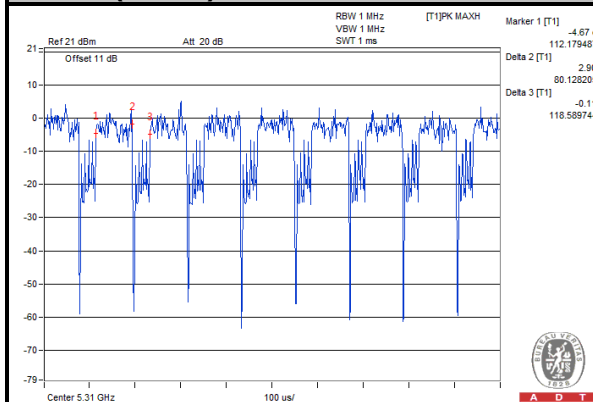
802.11a



802.11n (20MHz)



802.11n (40MHz)





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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 E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS

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:

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 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) ^{*1} PK: -17 (dBm/MHz) ^{*2}	PK: 68.2 (dBμV/m) ^{*1} PK: 78.2 (dBμV/m) ^{*2}

NOTE: ^{*1} beyond 10MHz of the band edge ^{*2} within 10 MHz of band edge

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Spectrum Analyzer Agilent Technologies	N9038A	MY52260177	May. 19, 2014	May. 18, 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	Aug. 27, 2014	Aug. 26, 2015
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, 2014	Oct. 17, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2014	Oct. 17, 2015
RF signal cable Worken	RG-213	NA	Nov. 07, 2014	Nov. 06, 2015
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	Sep. 17, 2014	Sep. 16, 2015
Power Sensor	MA2411B	1207325	Sep. 17, 2014	Sep. 16, 2015

- 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.

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Spectrum Analyzer Agilent Technologies	N9038A	MY52260177	May. 19, 2014	May. 18, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 10, 2014	Dec. 09, 2015
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	Aug. 27, 2014	Aug. 26, 2015
Loop Antenna	HFH2-Z2	100070	Mar. 06, 2014	Mar. 05, 2016
Preamplifier EMCI	EMC 012645	980115	Dec. 12, 2014	Dec. 11, 2015
Preamplifier EMCI	EMC 184045	980116	Jan. 09, 2015	Jan. 08, 2016
Preamplifier EMCI	EMC 330H	980112	Dec. 25, 2014	Dec. 24, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2014	Oct. 17, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2014	Oct. 17, 2015
RF signal cable Worken	RG-213	NA	Nov. 07, 2014	Nov. 06, 2015
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	Sep. 17, 2014	Sep. 16, 2015
Power Sensor	MA2411B	1207325	Sep. 17, 2014	Sep. 16, 2015

- 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.

4.1.4 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. The antenna is a broadband antenna, and its height 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 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

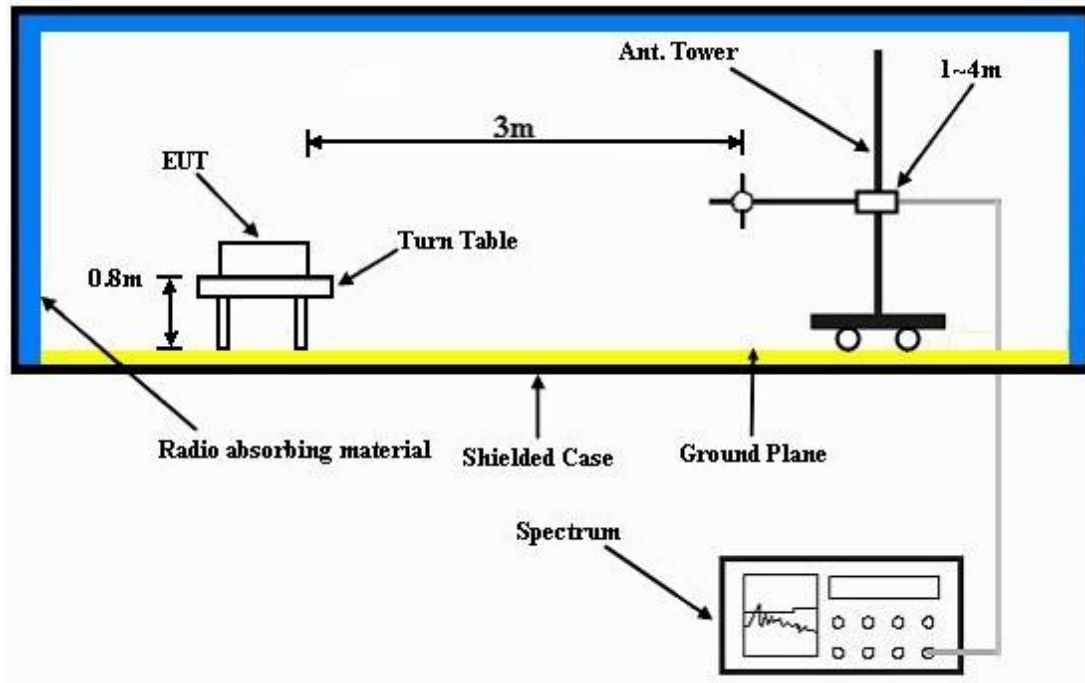
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency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

4.1.5 DEVIATION FROM TEST STANDARD

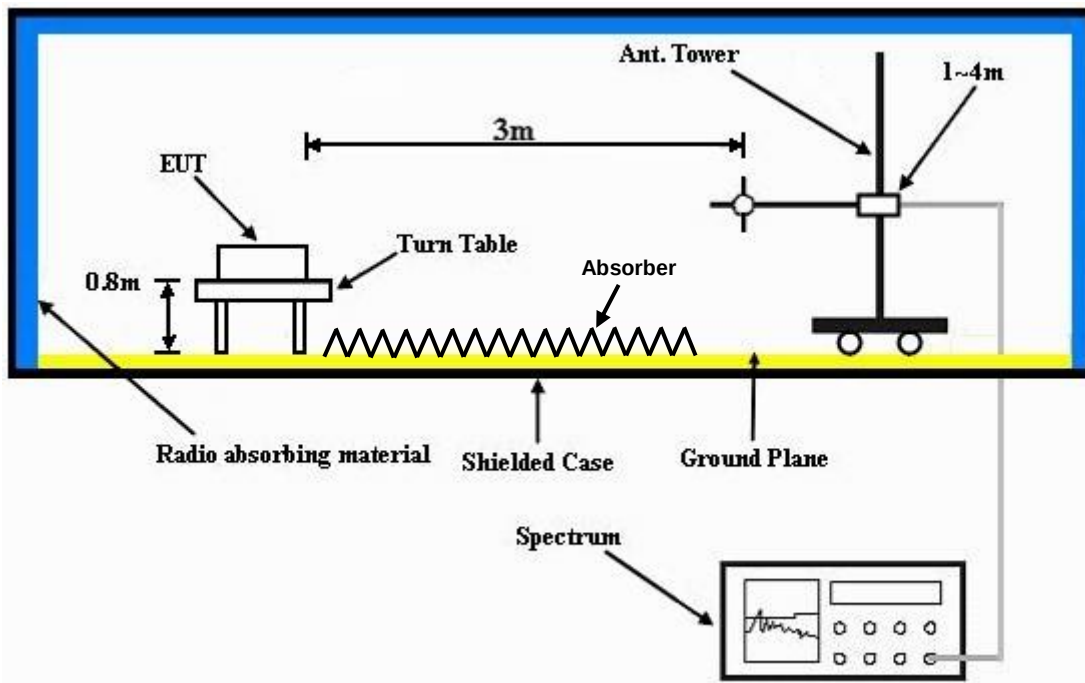
No deviation.

4.1.6 TEST SETUP

Frequency Range 30MHz ~ 1GHz



Frequency Range above 1GHz



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

4.1.7 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.

4.1.8 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA

MODE A

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5148	49.84	50.55	54	-4.16	31.32	5.29	37.32	102	89	Average
5148	68.41	69.12	74	-5.59	31.32	5.29	37.32	102	89	Peak
5180	100.11	100.79			31.35	5.31	37.34	102	89	Average
5180	109.17	109.85			31.35	5.31	37.34	102	89	Peak
5366	37.58	37.87	54	-16.42	31.49	5.4	37.18	102	89	Average
5366	59.28	59.57	74	-14.72	31.49	5.4	37.18	102	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
5150	52.55	53.26	54	-1.45	31.32	5.29	37.32	110	175	Average
5150	68.04	68.75	74	-5.96	31.32	5.29	37.32	110	175	Peak
5180	101.71	102.39			31.35	5.31	37.34	110	175	Average
5180	110.79	111.47			31.35	5.31	37.34	110	175	Peak
5422	37.84	38.07	54	-16.16	31.53	5.42	37.18	110	175	Average
5422	59.91	60.14	74	-14.09	31.53	5.42	37.18	110	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5124	37.74	38.45	54	-16.26	31.31	5.28	37.3	100	62	Average
5124	59.83	60.54	74	-14.17	31.31	5.28	37.3	100	62	Peak
5220	99.72	100.38			31.37	5.33	37.36	100	62	Average
5220	108.99	109.65			31.37	5.33	37.36	100	62	Peak
5348	37.58	37.89	54	-16.42	31.48	5.39	37.18	100	62	Average
5348	60.61	60.92	74	-13.39	31.48	5.39	37.18	100	62	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
5146	38.3	39.01	54	-15.7	31.32	5.29	37.32	109	178	Average
5146	60.02	60.73	74	-13.98	31.32	5.29	37.32	109	178	Peak
5220	102.59	103.25			31.37	5.33	37.36	109	178	Average
5220	111.48	112.14			31.37	5.33	37.36	109	178	Peak
5428	37.68	37.86	54	-16.32	31.53	5.42	37.13	109	178	Average
5428	59.63	59.81	74	-14.37	31.53	5.42	37.13	109	178	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5094	37.6	38.33	54	-16.4	31.28	5.27	37.28	100	61	Average
5094	59.62	60.35	74	-14.38	31.28	5.27	37.28	100	61	Peak
5240	98.92	99.51			31.39	5.34	37.32	100	61	Average
5240	108.33	108.92			31.39	5.34	37.32	100	61	Peak
5398	37.76	38.01	54	-16.24	31.52	5.41	37.18	100	61	Average
5398	60.14	60.39	74	-13.86	31.52	5.41	37.18	100	61	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
5058	37.86	38.61	54	-16.14	31.25	5.25	37.25	110	171	Average
5058	60.13	60.88	74	-13.87	31.25	5.25	37.25	110	171	Peak
5240	101.77	102.36			31.39	5.34	37.32	110	171	Average
5240	111.14	111.73			31.39	5.34	37.32	110	171	Peak
5410	37.65	37.9	54	-16.35	31.52	5.41	37.18	110	171	Average
5410	59.91	60.16	74	-14.09	31.52	5.41	37.18	110	171	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5058	39.4	40.15	54	-14.6	31.25	5.25	37.25	109	107	Average
5058	59.48	60.23	74	-14.52	31.25	5.25	37.25	109	107	Peak
5260	102.08	102.6			31.41	5.34	37.27	109	107	Average
5260	111.26	111.78			31.41	5.34	37.27	109	107	Peak
5374	40.01	40.3	54	-13.99	31.49	5.4	37.18	109	107	Average
5374	58.81	59.1	74	-15.19	31.49	5.4	37.18	109	107	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
5120	38.02	38.75	54	-15.98	31.29	5.28	37.3	100	164	Average
5120	59.75	60.48	74	-14.25	31.29	5.28	37.3	100	164	Peak
5260	100.04	100.56			31.41	5.34	37.27	100	164	Average
5260	109.35	109.87			31.41	5.34	37.27	100	164	Peak
5428	37.75	37.93	54	-16.25	31.53	5.42	37.13	100	164	Average
5428	59.39	59.57	74	-14.61	31.53	5.42	37.13	100	164	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.

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

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
5148	37.83	38.54	54	-16.17	31.32	5.29	37.32	109	107	Average
5148	59.31	60.02	74	-14.69	31.32	5.29	37.32	109	107	Peak
5300	101.73	102.11			31.44	5.37	37.19	109	107	Average
5300	110.81	111.19			31.44	5.37	37.19	109	107	Peak
5352	47.24	47.55	54	-6.76	31.48	5.39	37.18	109	107	Average
5352	60.85	61.16	74	-13.15	31.48	5.39	37.18	109	107	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
5086	37.73	38.47	54	-16.27	31.27	5.26	37.27	131	170	Average
5086	59.05	59.79	74	-14.95	31.27	5.26	37.27	131	170	Peak
5300	100.11	100.49			31.44	5.37	37.19	131	170	Average
5300	109.59	109.97			31.44	5.37	37.19	131	170	Peak
5350	45.67	45.98	54	-8.33	31.48	5.39	37.18	131	170	Average
5350	61.9	62.21	74	-12.1	31.48	5.39	37.18	131	170	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5300MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5066	37.85	38.59	54	-16.15	31.25	5.26	37.25	108	99	Average
5066	60.1	60.84	74	-13.9	31.25	5.26	37.25	108	99	Peak
5320	102.08	102.44			31.45	5.38	37.19	108	99	Average
5320	110.6	110.96			31.45	5.38	37.19	108	99	Peak
5350	52.27	52.58	54	-1.73	31.48	5.39	37.18	108	99	Average
5350	72.25	72.56	74	-1.75	31.48	5.39	37.18	108	99	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
5004	37.99	38.79	54	-16.01	31.21	5.22	37.23	132	166	Average
5004	58.76	59.56	74	-15.24	31.21	5.22	37.23	132	166	Peak
5320	99.6	99.96			31.45	5.38	37.19	132	166	Average
5320	108.39	108.75			31.45	5.38	37.19	132	166	Peak
5350	48.95	49.26	54	-5.05	31.48	5.39	37.18	132	166	Average
5350	68.54	68.85	74	-5.46	31.48	5.39	37.18	132	166	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5428	47.16	47.34	54	-6.84	31.53	5.42	37.13	132	131	Average
5428	59.54	59.72	74	-14.46	31.53	5.42	37.13	132	131	Peak
5470	66.88	66.94	68.2	-1.32	31.57	5.45	37.08	132	131	Peak
5500	100.45	100.42			31.6	5.46	37.03	132	131	Average
5500	110.18	110.15			31.6	5.46	37.03	132	131	Peak
5725	59.02	58.9	68.2	-9.18	31.96	5.59	37.43	132	131	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
5448	46.84	46.97	54	-7.16	31.56	5.44	37.13	109	233	Average
5448	60.14	60.27	74	-13.86	31.56	5.44	37.13	109	233	Peak
5470	66.77	66.83	68.2	-1.43	31.57	5.45	37.08	109	233	Peak
5500	98.67	98.64			31.6	5.46	37.03	109	233	Average
5500	108.09	108.06			31.6	5.46	37.03	109	233	Peak
5725	58.78	58.66	68.2	-9.42	31.96	5.59	37.43	109	233	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5416	38.66	38.89	54	-15.34	31.53	5.42	37.18	112	160	Average
5416	59.51	59.74	74	-14.49	31.53	5.42	37.18	112	160	Peak
5470	58.05	58.11	68.2	-10.15	31.57	5.45	37.08	112	160	Peak
5580	101.74	101.69			31.71	5.5	37.16	112	160	Average
5580	111.3	111.25			31.71	5.5	37.16	112	160	Peak
5725	59.95	59.83	68.2	-8.25	31.96	5.59	37.43	112	160	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
5382	38.14	38.41	54	-15.86	31.51	5.4	37.18	110	198	Average
5382	60.27	60.54	74	-13.73	31.51	5.4	37.18	110	198	Peak
5470	57.9	57.96	68.2	-10.3	31.57	5.45	37.08	110	198	Peak
5580	100.28	100.23			31.71	5.5	37.16	110	198	Average
5580	109.39	109.34			31.71	5.5	37.16	110	198	Peak
5725	58.18	58.06	68.2	-10.02	31.96	5.59	37.43	110	198	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5406	38.16	38.41	54	-15.84	31.52	5.41	37.18	153	138	Average
5406	59.47	59.72	74	-14.53	31.52	5.41	37.18	153	138	Peak
5470	57.29	57.35	68.2	-10.91	31.57	5.45	37.08	153	138	Peak
5700	98.74	98.67			31.9	5.57	37.4	153	138	Average
5700	108.47	108.4			31.9	5.57	37.4	153	138	Peak
5725	66.84	66.72	68.2	-1.36	31.96	5.59	37.43	153	138	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
5382	37.78	38.05	54	-16.22	31.51	5.4	37.18	103	234	Average
5382	60.35	60.62	74	-13.65	31.51	5.4	37.18	103	234	Peak
5470	58.33	58.39	68.2	-9.87	31.57	5.45	37.08	103	234	Peak
5700	97.1	97.03			31.9	5.57	37.4	103	234	Average
5700	106.6	106.53			31.9	5.57	37.4	103	234	Peak
5725	65.87	65.75	68.2	-2.33	31.96	5.59	37.43	103	234	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

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	Gavin Wu

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
5714	61.29	61.2	68.2	-6.91	31.93	5.59	37.43	100	109	Peak
5725	73.08	72.96	78.2	-5.12	31.96	5.59	37.43	100	109	Peak
5745	96.42	96.3			31.99	5.6	37.47	100	109	Average
5745	107.85	107.73			31.99	5.6	37.47	100	109	Peak
5850	59.73	59.43	78.2	-18.47	32.15	5.66	37.51	100	109	Peak
5861	58.96	58.62	68.2	-9.24	32.18	5.66	37.5	100	109	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
5714	67.03	66.94	68.2	-1.17	31.93	5.59	37.43	100	182	Peak
5725	76.28	76.16	78.2	-1.92	31.96	5.59	37.43	100	182	Peak
5745	99.48	99.36			31.99	5.6	37.47	100	182	Average
5745	109.87	109.75			31.99	5.6	37.47	100	182	Peak
5850	60.61	60.31	78.2	-17.59	32.15	5.66	37.51	100	182	Peak
5861	60.16	59.82	68.2	-8.04	32.18	5.66	37.5	100	182	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: 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	Gavin Wu

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
5714	58.9	58.81	68.2	-9.3	31.93	5.59	37.43	100	124	Peak
5725	57.65	57.53	78.2	-20.55	31.96	5.59	37.43	100	124	Peak
5785	96.91	96.79			32.04	5.62	37.54	100	124	Average
5785	107.82	107.7			32.04	5.62	37.54	100	124	Peak
5850	58.77	58.47	78.2	-19.43	32.15	5.66	37.51	100	124	Peak
5861	57.99	57.65	68.2	-10.21	32.18	5.66	37.5	100	124	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
5714	59.7	59.61	68.2	-8.5	31.93	5.59	37.43	128	188	Peak
5725	59.79	59.67	78.2	-18.41	31.96	5.59	37.43	128	188	Peak
5785	99.92	99.8			32.04	5.62	37.54	128	188	Average
5785	109.06	108.94			32.04	5.62	37.54	128	188	Peak
5850	60.56	60.26	78.2	-17.64	32.15	5.66	37.51	128	188	Peak
5861	59.15	58.81	68.2	-9.05	32.18	5.66	37.5	128	188	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: 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	Gavin Wu

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
5714	58.02	57.93	68.2	-10.18	31.93	5.59	37.43	102	137	Peak
5725	58.41	58.29	78.2	-19.79	31.96	5.59	37.43	102	137	Peak
5825	97.94	97.71			32.12	5.64	37.53	102	137	Average
5825	107.56	107.33			32.12	5.64	37.53	102	137	Peak
5850	65.92	65.62	78.2	-12.28	32.15	5.66	37.51	102	137	Peak
5861	61.11	60.77	68.2	-7.09	32.18	5.66	37.5	102	137	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
5714	59.06	58.97	68.2	-9.14	31.93	5.59	37.43	107	176	Peak
5725	60.38	60.26	78.2	-17.82	31.96	5.59	37.43	107	176	Peak
5825	99.95	99.72			32.12	5.64	37.53	107	176	Average
5825	109.3	109.07			32.12	5.64	37.53	107	176	Peak
5850	68.6	68.3	78.2	-9.6	32.15	5.66	37.51	107	176	Peak
5861	60.98	60.64	68.2	-7.22	32.18	5.66	37.5	107	176	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: Out of restricted band

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5148	50.37	51.08	54	-3.63	31.32	5.29	37.32	101	63	Average
5148	67.47	68.18	74	-6.53	31.32	5.29	37.32	101	63	Peak
5180	98.47	99.15			31.35	5.31	37.34	101	63	Average
5180	108.08	108.76			31.35	5.31	37.34	101	63	Peak
5442	37.69	37.83	54	-16.31	31.55	5.44	37.13	101	63	Average
5442	59.45	59.59	74	-14.55	31.55	5.44	37.13	101	63	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
5150	51.25	51.96	54	-2.75	31.32	5.29	37.32	110	172	Average
5150	66.55	67.26	74	-7.45	31.32	5.29	37.32	110	172	Peak
5180	100.31	100.99			31.35	5.31	37.34	110	172	Average
5180	109.82	110.5			31.35	5.31	37.34	110	172	Peak
5412	37.51	37.75	54	-16.49	31.53	5.41	37.18	110	172	Average
5412	59.16	59.4	74	-14.84	31.53	5.41	37.18	110	172	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5180MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5122	37.96	38.69	54	-16.04	31.29	5.28	37.3	100	65	Average
5122	59.11	59.84	74	-14.89	31.29	5.28	37.3	100	65	Peak
5220	99.18	99.84			31.37	5.33	37.36	100	65	Average
5220	108.43	109.09			31.37	5.33	37.36	100	65	Peak
5460	37.69	37.77	54	-16.31	31.56	5.44	37.08	100	65	Average
5460	59.89	59.97	74	-14.11	31.56	5.44	37.08	100	65	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
5094	37.99	38.72	54	-16.01	31.28	5.27	37.28	110	175	Average
5094	59.89	60.62	74	-14.11	31.28	5.27	37.28	110	175	Peak
5220	99.93	100.59			31.37	5.33	37.36	110	175	Average
5220	109.19	109.85			31.37	5.33	37.36	110	175	Peak
5382	37.63	37.9	54	-16.37	31.51	5.4	37.18	110	175	Average
5382	59.15	59.42	74	-14.85	31.51	5.4	37.18	110	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5220MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5100	37.41	38.14	54	-16.59	31.28	5.27	37.28	100	84	Average
5100	60.22	60.95	74	-13.78	31.28	5.27	37.28	100	84	Peak
5240	98.48	99.07			31.39	5.34	37.32	100	84	Average
5240	108.02	108.61			31.39	5.34	37.32	100	84	Peak
5414	37.59	37.82	54	-16.41	31.53	5.42	37.18	100	84	Average
5414	59.5	59.73	74	-14.5	31.53	5.42	37.18	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
5044	37.69	38.45	54	-16.31	31.24	5.25	37.25	109	175	Average
5044	59.47	60.23	74	-14.53	31.24	5.25	37.25	109	175	Peak
5240	100.28	100.87			31.39	5.34	37.32	109	175	Average
5240	109.7	110.29			31.39	5.34	37.32	109	175	Peak
5448	37.78	37.91	54	-16.22	31.56	5.44	37.13	109	175	Average
5448	59.25	59.38	74	-14.75	31.56	5.44	37.13	109	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5240MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5056	37.88	38.63	54	-16.12	31.25	5.25	37.25	100	99	Average
5056	60.67	61.42	74	-13.33	31.25	5.25	37.25	100	99	Peak
5260	101.19	101.71			31.41	5.34	37.27	100	99	Average
5260	110.15	110.67			31.41	5.34	37.27	100	99	Peak
5382	38.1	38.37	54	-15.9	31.51	5.4	37.18	100	99	Average
5382	59.96	60.23	74	-14.04	31.51	5.4	37.18	100	99	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
5148	37.89	38.6	54	-16.11	31.32	5.29	37.32	110	171	Average
5148	59.07	59.78	74	-14.93	31.32	5.29	37.32	110	171	Peak
5260	100.26	100.78			31.41	5.34	37.27	110	171	Average
5260	108.85	109.37			31.41	5.34	37.27	110	171	Peak
5360	38.03	38.34	54	-15.97	31.48	5.39	37.18	110	171	Average
5360	59.68	59.99	74	-14.32	31.48	5.39	37.18	110	171	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.

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

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
5020	37.65	38.44	54	-16.35	31.21	5.24	37.24	107	113	Average
5020	59.82	60.61	74	-14.18	31.21	5.24	37.24	107	113	Peak
5300	101.29	101.67			31.44	5.37	37.19	107	113	Average
5300	110.31	110.69			31.44	5.37	37.19	107	113	Peak
5354	48.2	48.51	54	-5.8	31.48	5.39	37.18	107	113	Average
5354	62.84	63.15	74	-11.16	31.48	5.39	37.18	107	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
5126	37.77	38.48	54	-16.23	31.31	5.28	37.3	108	171	Average
5126	59.18	59.89	74	-14.82	31.31	5.28	37.3	108	171	Peak
5300	100.18	100.56			31.44	5.37	37.19	108	171	Average
5300	108.92	109.3			31.44	5.37	37.19	108	171	Peak
5350	46.38	46.69	54	-7.62	31.48	5.39	37.18	108	171	Average
5350	60.65	60.96	74	-13.35	31.48	5.39	37.18	108	171	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5300MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5022	37.84	38.61	54	-16.16	31.23	5.24	37.24	108	104	Average
5022	59.53	60.3	74	-14.47	31.23	5.24	37.24	108	104	Peak
5320	101.54	101.9			31.45	5.38	37.19	108	104	Average
5320	110.32	110.68			31.45	5.38	37.19	108	104	Peak
5350	52.86	53.17	54	-1.14	31.48	5.39	37.18	108	104	Average
5350	70.4	70.71	74	-3.6	31.48	5.39	37.18	108	104	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
5150	37.93	38.64	54	-16.07	31.32	5.29	37.32	119	169	Average
5150	59.2	59.91	74	-14.8	31.32	5.29	37.32	119	169	Peak
5320	99.92	100.28			31.45	5.38	37.19	119	169	Average
5320	108.75	109.11			31.45	5.38	37.19	119	169	Peak
5350	51.34	51.65	54	-2.66	31.48	5.39	37.18	119	169	Average
5350	68.82	69.13	74	-5.18	31.48	5.39	37.18	119	169	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5448	47.99	48.12	54	-6.01	31.56	5.44	37.13	132	129	Average
5448	62.28	62.41	74	-11.72	31.56	5.44	37.13	132	129	Peak
5470	66.95	67.01	68.2	-1.25	31.57	5.45	37.08	132	129	Peak
5500	100.32	100.29			31.6	5.46	37.03	132	129	Average
5500	110.1	110.07			31.6	5.46	37.03	132	129	Peak
5725	59.7	59.58	68.2	-8.5	31.96	5.59	37.43	132	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
5360	47.8	48.11	54	-6.2	31.48	5.39	37.18	109	234	Average
5360	60.44	60.75	74	-13.56	31.48	5.39	37.18	109	234	Peak
5470	65.93	65.99	68.2	-2.27	31.57	5.45	37.08	109	234	Peak
5500	98.31	98.28			31.6	5.46	37.03	109	234	Average
5500	108.19	108.16			31.6	5.46	37.03	109	234	Peak
5725	60.08	59.96	68.2	-8.12	31.96	5.59	37.43	109	234	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5442	38.25	38.39	54	-15.75	31.55	5.44	37.13	111	163	Average
5442	59.44	59.58	74	-14.56	31.55	5.44	37.13	111	163	Peak
5470	56.9	56.96	68.2	-11.3	31.57	5.45	37.08	111	163	Peak
5580	100.7	100.65			31.71	5.5	37.16	111	163	Average
5580	110.43	110.38			31.71	5.5	37.16	111	163	Peak
5725	58.51	58.39	68.2	-9.69	31.96	5.59	37.43	111	163	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
5418	38.04	38.27	54	-15.96	31.53	5.42	37.18	106	234	Average
5418	59.17	59.4	74	-14.83	31.53	5.42	37.18	106	234	Peak
5470	58.55	58.61	68.2	-9.65	31.57	5.45	37.08	106	234	Peak
5580	99.11	99.06			31.71	5.5	37.16	106	234	Average
5580	108.57	108.52			31.71	5.5	37.16	106	234	Peak
5725	57.9	57.78	68.2	-10.3	31.96	5.59	37.43	106	234	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5394	38.1	38.36	54	-15.9	31.51	5.41	37.18	153	140	Average
5394	60.02	60.28	74	-13.98	31.51	5.41	37.18	153	140	Peak
5470	57.7	57.76	68.2	-10.5	31.57	5.45	37.08	153	140	Peak
5700	98.96	98.89			31.9	5.57	37.4	153	140	Average
5700	108.5	108.43			31.9	5.57	37.4	153	140	Peak
5725	67.02	66.9	68.2	-1.18	31.96	5.59	37.43	153	140	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
5370	37.89	38.18	54	-16.11	31.49	5.4	37.18	103	234	Average
5370	60.59	60.88	74	-13.41	31.49	5.4	37.18	103	234	Peak
5470	58.04	58.1	68.2	-10.16	31.57	5.45	37.08	103	234	Peak
5700	97.01	96.94			31.9	5.57	37.4	103	234	Average
5700	106.56	106.49			31.9	5.57	37.4	103	234	Peak
5725	65.86	65.74	68.2	-2.34	31.96	5.59	37.43	103	234	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

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	Gavin Wu

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
5714	61.73	61.64	68.2	-6.47	31.93	5.59	37.43	100	120	Peak
5725	75.93	75.81	78.2	-2.27	31.96	5.59	37.43	100	120	Peak
5745	97.15	97.03			31.99	5.6	37.47	100	120	Average
5745	106.74	106.62			31.99	5.6	37.47	100	120	Peak
5850	58.31	58.01	78.2	-19.89	32.15	5.66	37.51	100	120	Peak
5861	58.28	57.94	68.2	-9.92	32.18	5.66	37.5	100	120	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
5714	65.21	65.12	68.2	-2.99	31.93	5.59	37.43	109	182	Peak
5725	76.61	76.49	78.2	-1.59	31.96	5.59	37.43	109	182	Peak
5745	98.55	98.43			31.99	5.6	37.47	109	182	Average
5745	108.35	108.23			31.99	5.6	37.47	109	182	Peak
5850	59.31	59.01	78.2	-18.89	32.15	5.66	37.51	109	182	Peak
5861	60.61	60.27	68.2	-7.59	32.18	5.66	37.5	109	182	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5745MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: 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	Gavin Wu

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
5714	58.79	58.7	68.2	-9.41	31.93	5.59	37.43	100	117	Peak
5725	59.83	59.71	78.2	-18.37	31.96	5.59	37.43	100	117	Peak
5785	97.82	97.7			32.04	5.62	37.54	100	117	Average
5785	106.92	106.8			32.04	5.62	37.54	100	117	Peak
5850	61.25	60.95	78.2	-16.95	32.15	5.66	37.51	100	117	Peak
5861	58.92	58.58	68.2	-9.28	32.18	5.66	37.5	100	117	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
5714	59.39	59.3	68.2	-8.81	31.93	5.59	37.43	108	183	Peak
5725	59	58.88	78.2	-19.2	31.96	5.59	37.43	108	183	Peak
5785	98.86	98.74			32.04	5.62	37.54	108	183	Average
5785	108.11	107.99			32.04	5.62	37.54	108	183	Peak
5850	59.2	58.9	78.2	-19	32.15	5.66	37.51	108	183	Peak
5861	60.08	59.74	68.2	-8.12	32.18	5.66	37.5	108	183	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5785MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: 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	Gavin Wu

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
5714	57.19	57.1	68.2	-11.01	31.93	5.59	37.43	101	137	Peak
5725	57.29	57.17	78.2	-20.91	31.96	5.59	37.43	101	137	Peak
5825	97.71	97.48			32.12	5.64	37.53	101	137	Average
5825	106.4	106.17			32.12	5.64	37.53	101	137	Peak
5850	66.1	65.8	78.2	-12.1	32.15	5.66	37.51	101	137	Peak
5861	61.76	61.42	68.2	-6.44	32.18	5.66	37.5	101	137	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
5714	59.17	59.08	68.2	-9.03	31.93	5.59	37.43	108	180	Peak
5725	58.7	58.58	78.2	-19.5	31.96	5.59	37.43	108	180	Peak
5825	98.78	98.55			32.12	5.64	37.53	108	180	Average
5825	108.12	107.89			32.12	5.64	37.53	108	180	Peak
5850	66.07	65.77	78.2	-12.13	32.15	5.66	37.51	108	180	Peak
5861	60.68	60.34	68.2	-7.52	32.18	5.66	37.5	108	180	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5825MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: Out of restricted band

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5146	50.58	51.29	54	-3.42	31.32	5.29	37.32	102	90	Average
5146	67.45	68.16	74	-6.55	31.32	5.29	37.32	102	90	Peak
5190	95.02	95.69			31.35	5.32	37.34	102	90	Average
5190	104.31	104.98			31.35	5.32	37.34	102	90	Peak
5424	38.13	38.36	54	-15.87	31.53	5.42	37.18	102	90	Average
5424	59.49	59.72	74	-14.51	31.53	5.42	37.18	102	90	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
5150	51.67	52.38	54	-2.33	31.32	5.29	37.32	110	176	Average
5150	70.54	71.25	74	-3.46	31.32	5.29	37.32	110	176	Peak
5190	96.23	96.9			31.35	5.32	37.34	110	176	Average
5190	105.52	106.19			31.35	5.32	37.34	110	176	Peak
5410	37.93	38.18	54	-16.07	31.52	5.41	37.18	110	176	Average
5410	60.39	60.64	74	-13.61	31.52	5.41	37.18	110	176	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5190MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
5110	39.23	39.95	54	-14.77	31.29	5.27	37.28	100	82	Average
5110	60.59	61.31	74	-13.41	31.29	5.27	37.28	100	82	Peak
5230	94.91	95.51			31.39	5.33	37.32	100	82	Average
5230	104.45	105.05			31.39	5.33	37.32	100	82	Peak
5390	38.98	39.24	54	-15.02	31.51	5.41	37.18	100	82	Average
5390	60.09	60.35	74	-13.91	31.51	5.41	37.18	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
5076	40.83	41.57	54	-13.17	31.27	5.26	37.27	110	171	Average
5076	59.38	60.12	74	-14.62	31.27	5.26	37.27	110	171	Peak
5230	96.56	97.16			31.39	5.33	37.32	110	171	Average
5230	105.64	106.24			31.39	5.33	37.32	110	171	Peak
5360	39.1	39.41	54	-14.9	31.48	5.39	37.18	110	171	Average
5360	59.31	59.62	74	-14.69	31.48	5.39	37.18	110	171	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5230MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5112	39.65	40.37	54	-14.35	31.29	5.27	37.28	109	114	Average
5112	59.34	60.06	74	-14.66	31.29	5.27	37.28	109	114	Peak
5270	98.1	98.61			31.41	5.35	37.27	109	114	Average
5270	107.19	107.7			31.41	5.35	37.27	109	114	Peak
5378	41.84	42.11	54	-12.16	31.51	5.4	37.18	109	114	Average
5378	59.58	59.85	74	-14.42	31.51	5.4	37.18	109	114	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
5020	39.32	40.11	54	-14.68	31.21	5.24	37.24	110	172	Average
5020	60.44	61.23	74	-13.56	31.21	5.24	37.24	110	172	Peak
5270	97.01	97.52			31.41	5.35	37.27	110	172	Average
5270	106.11	106.62			31.41	5.35	37.27	110	172	Peak
5390	40.99	41.25	54	-13.01	31.51	5.41	37.18	110	172	Average
5390	58.98	59.24	74	-15.02	31.51	5.41	37.18	110	172	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5270MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5096	38.07	38.8	54	-15.93	31.28	5.27	37.28	109	100	Average
5096	59.45	60.18	74	-14.55	31.28	5.27	37.28	109	100	Peak
5310	96.69	97.06			31.45	5.37	37.19	109	100	Average
5310	105.76	106.13			31.45	5.37	37.19	109	100	Peak
5350	52.2	52.51	54	-1.8	31.48	5.39	37.18	109	100	Average
5350	70.91	71.22	74	-3.09	31.48	5.39	37.18	109	100	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
5142	38.06	38.75	54	-15.94	31.32	5.29	37.3	118	169	Average
5142	59.34	60.03	74	-14.66	31.32	5.29	37.3	118	169	Peak
5310	95.51	95.88			31.45	5.37	37.19	118	169	Average
5310	104.7	105.07			31.45	5.37	37.19	118	169	Peak
5350	51.92	52.23	54	-2.08	31.48	5.39	37.18	118	169	Average
5350	70.61	70.92	74	-3.39	31.48	5.39	37.18	118	169	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5310MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5456	47.8	47.88	54	-6.2	31.56	5.44	37.08	112	156	Average
5456	61.49	61.57	74	-12.51	31.56	5.44	37.08	112	156	Peak
5470	66.35	66.41	68.2	-1.85	31.57	5.45	37.08	112	156	Peak
5510	96.58	96.58			31.6	5.46	37.06	112	156	Average
5510	105.57	105.57			31.6	5.46	37.06	112	156	Peak
5725	58.54	58.42	68.2	-9.66	31.96	5.59	37.43	112	156	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
5460	45.9	45.98	54	-8.1	31.56	5.44	37.08	133	233	Average
5460	61.05	61.13	74	-12.95	31.56	5.44	37.08	133	233	Peak
5470	64.45	64.51	68.2	-3.75	31.57	5.45	37.08	133	233	Peak
5510	94.26	94.26			31.6	5.46	37.06	133	233	Average
5510	102.97	102.97			31.6	5.46	37.06	133	233	Peak
5725	59.58	59.46	68.2	-8.62	31.96	5.59	37.43	133	233	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5510MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5350	43.12	43.43	54	-10.88	31.48	5.39	37.18	102	162	Average
5350	59.95	60.26	74	-14.05	31.48	5.39	37.18	102	162	Peak
5470	59.68	59.74	68.2	-8.52	31.57	5.45	37.08	102	162	Peak
5550	97.57	97.49			31.68	5.49	37.09	102	162	Average
5550	106.79	106.71			31.68	5.49	37.09	102	162	Peak
5725	59.12	59	68.2	-9.08	31.96	5.59	37.43	102	162	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
5452	40.7	40.78	54	-13.3	31.56	5.44	37.08	100	201	Average
5452	60.17	60.25	74	-13.83	31.56	5.44	37.08	100	201	Peak
5470	59.26	59.32	68.2	-8.94	31.57	5.45	37.08	100	201	Peak
5550	94.13	94.05			31.68	5.49	37.09	100	201	Average
5550	104.23	104.15			31.68	5.49	37.09	100	201	Peak
5725	60.36	60.24	68.2	-7.84	31.96	5.59	37.43	100	201	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5550MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5394	38.62	38.88	54	-15.38	31.51	5.41	37.18	100	170	Average
5394	61.06	61.32	74	-12.94	31.51	5.41	37.18	100	170	Peak
5470	59.15	59.21	68.2	-9.05	31.57	5.45	37.08	100	170	Peak
5670	96.29	96.19			31.88	5.56	37.34	100	170	Average
5670	105.73	105.63			31.88	5.56	37.34	100	170	Peak
5725	61.6	61.48	68.2	-6.6	31.96	5.59	37.43	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
5428	38.48	38.66	54	-15.52	31.53	5.42	37.13	120	125	Average
5428	60.15	60.33	74	-13.85	31.53	5.42	37.13	120	125	Peak
5470	58.79	58.85	68.2	-9.41	31.57	5.45	37.08	120	125	Peak
5670	94.32	94.22			31.88	5.56	37.34	120	125	Average
5670	103.6	103.5			31.88	5.56	37.34	120	125	Peak
5725	61.53	61.41	68.2	-6.67	31.96	5.59	37.43	120	125	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5670MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

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	Gavin Wu

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
5714	65.01	64.92	68.2	-3.19	31.93	5.59	37.43	100	111	Peak
5725	70.22	70.1	78.2	-7.98	31.96	5.59	37.43	100	111	Peak
5755	93.98	93.84			32.01	5.6	37.47	100	111	Average
5755	103.29	103.15			32.01	5.6	37.47	100	111	Peak
5850	60.05	59.75	78.2	-18.15	32.15	5.66	37.51	100	111	Peak
5861	59.21	58.87	68.2	-8.99	32.18	5.66	37.5	100	111	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
5714	66.73	66.64	68.2	-1.47	31.93	5.59	37.43	100	175	Peak
5725	72.7	72.58	78.2	-5.5	31.96	5.59	37.43	100	175	Peak
5755	96.05	95.91			32.01	5.6	37.47	100	175	Average
5755	105.17	105.03			32.01	5.6	37.47	100	175	Peak
5850	58.98	58.68	78.2	-19.22	32.15	5.66	37.51	100	175	Peak
5861	58.92	58.58	68.2	-9.28	32.18	5.66	37.5	100	175	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5755MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: Out of restricted band



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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	Gavin Wu

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
5714	57.88	57.79	68.2	-10.32	31.93	5.59	37.43	104	143	Peak
5725	59.41	59.29	78.2	-18.79	31.96	5.59	37.43	104	143	Peak
5795	94.12	93.96			32.07	5.63	37.54	104	143	Average
5795	103.46	103.3			32.07	5.63	37.54	104	143	Peak
5850	60.53	60.23	78.2	-17.67	32.15	5.66	37.51	104	143	Peak
5861	60.21	59.87	68.2	-7.99	32.18	5.66	37.5	104	143	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
5714	58.98	58.89	68.2	-9.22	31.93	5.59	37.43	109	182	Peak
5725	61.17	61.05	78.2	-17.03	31.96	5.59	37.43	109	182	Peak
5795	96.42	96.26			32.07	5.63	37.54	109	182	Average
5795	105.41	105.25			32.07	5.63	37.54	109	182	Peak
5850	61.97	61.67	78.2	-16.23	32.15	5.66	37.51	109	182	Peak
5861	58.34	58	68.2	-9.86	32.18	5.66	37.5	109	182	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5795MHz: Fundamental frequency.
- 5714MHz, 5725MHz, 5850MHz & 5861MHz: Out of restricted band

MODE B

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5030	38.57	39.34	54	-15.43	31.23	5.24	37.24	100	108	Average
5030	59.46	60.23	74	-14.54	31.23	5.24	37.24	100	108	Peak
5320	101.62	101.98			31.45	5.38	37.19	100	108	Average
5320	110.6	110.96			31.45	5.38	37.19	100	108	Peak
5356	52.95	53.26	54	-1.05	31.48	5.39	37.18	100	108	Average
5356	69	69.31	74	-5	31.48	5.39	37.18	100	108	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
5050	37.72	38.48	54	-16.28	31.24	5.25	37.25	107	169	Average
5050	58.99	59.75	74	-15.01	31.24	5.25	37.25	107	169	Peak
5320	100.36	100.72			31.45	5.38	37.19	107	169	Average
5320	109.56	109.92			31.45	5.38	37.19	107	169	Peak
5352	52.56	52.87	54	-1.44	31.48	5.39	37.18	107	169	Average
5352	70.43	70.74	74	-3.57	31.48	5.39	37.18	107	169	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320MHz: Fundamental frequency.



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MODE C**802.11n (20MHz)**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5034	37.62	38.39	54	-16.38	31.23	5.24	37.24	125	88	Average
5034	59.4	60.17	74	-14.6	31.23	5.24	37.24	125	88	Peak
5260	101.48	102			31.41	5.34	37.27	125	88	Average
5260	110.68	111.2			31.41	5.34	37.27	125	88	Peak
5382	38.34	38.61	54	-15.66	31.51	5.4	37.18	125	88	Average
5382	60.26	60.53	74	-13.74	31.51	5.4	37.18	125	88	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
5066	37.67	38.41	54	-16.33	31.25	5.26	37.25	103	110	Average
5066	58.98	59.72	74	-15.02	31.25	5.26	37.25	103	110	Peak
5260	100.04	100.56			31.41	5.34	37.27	103	110	Average
5260	109.01	109.53			31.41	5.34	37.27	103	110	Peak
5350	37.92	38.23	54	-16.08	31.48	5.39	37.18	103	110	Average
5350	59.44	59.75	74	-14.56	31.48	5.39	37.18	103	110	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5260MHz: Fundamental frequency.

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

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
5002	38.11	38.92	54	-15.89	31.2	5.22	37.23	124	88	Average
5002	60	60.81	74	-14	31.2	5.22	37.23	124	88	Peak
5300	101.72	102.1			31.44	5.37	37.19	124	88	Average
5300	110.76	111.14			31.44	5.37	37.19	124	88	Peak
5354	46.91	47.22	54	-7.09	31.48	5.39	37.18	124	88	Average
5354	60.26	60.57	74	-13.74	31.48	5.39	37.18	124	88	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
5090	37.69	38.41	54	-16.31	31.28	5.27	37.27	101	111	Average
5090	59.04	59.76	74	-14.96	31.28	5.27	37.27	101	111	Peak
5300	100.42	100.8			31.44	5.37	37.19	101	111	Average
5300	109.3	109.68			31.44	5.37	37.19	101	111	Peak
5354	46.31	46.62	54	-7.69	31.48	5.39	37.18	101	111	Average
5354	60.05	60.36	74	-13.95	31.48	5.39	37.18	101	111	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5300MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
5074	38.24	38.98	54	-15.76	31.27	5.26	37.27	124	87	Average
5074	59.4	60.14	74	-14.6	31.27	5.26	37.27	124	87	Peak
5320	101.68	102.04			31.45	5.38	37.19	124	87	Average
5320	110.52	110.88			31.45	5.38	37.19	124	87	Peak
5350	52.98	53.29	54	-1.02	31.48	5.39	37.18	124	87	Average
5350	68.98	69.29	74	-5.02	31.48	5.39	37.18	124	87	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
5060	37.66	38.41	54	-16.34	31.25	5.25	37.25	101	109	Average
5060	59.4	60.15	74	-14.6	31.25	5.25	37.25	101	109	Peak
5320	100.08	100.44			31.45	5.38	37.19	101	109	Average
5320	109.29	109.65			31.45	5.38	37.19	101	109	Peak
5350	51.88	52.19	54	-2.12	31.48	5.39	37.18	101	109	Average
5350	68.68	68.99	74	-5.32	31.48	5.39	37.18	101	109	Peak

REMARKS:

- Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
Margin value = Emission level – Limit value
- 5320MHz: Fundamental frequency.

BELOW 1GHz WORST-CASE DATA:

MODE A

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.01	32.23	53.2	40	-7.77	9.81	0.93	31.71	118	5	Peak
153.39	26.73	44.34	43.5	-16.77	12.72	1.36	31.69	128	301	Peak
175.8	27.7	46.83	43.5	-15.8	11.19	1.47	31.79	119	217	Peak
318.9	21.68	38.06	46	-24.32	13.4	2.12	31.9	109	10	Peak
422.5	24.28	38.02	46	-21.72	15.79	2.51	32.04	128	346	Peak
554.1	22.31	32.79	46	-23.69	18.55	2.96	31.99	124	352	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
30.81	33.37	51.78	40	-6.63	12.14	0.57	31.12	127	34	Peak
72.39	32.37	53.14	40	-7.63	10.05	0.92	31.74	133	1	Peak
109.38	27.87	48.6	43.5	-15.63	9.99	1.12	31.84	136	221	Peak
319.6	18.83	35.17	46	-27.17	13.43	2.12	31.89	137	44	Peak
428.8	22.05	35.62	46	-23.95	15.91	2.53	32.01	135	163	Peak
578.6	23.77	33.74	46	-22.23	19.12	3.03	32.12	136	29	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
42.42	22.7	39.5	40	-17.3	13.58	0.7	31.08	112	226	Peak
75.36	28.26	49.64	40	-11.74	9.33	0.94	31.65	132	336	Peak
149.34	25.88	43.47	43.5	-17.62	12.68	1.34	31.61	103	226	Peak
320.3	21.17	37.51	46	-24.83	13.43	2.12	31.89	136	206	Peak
412.7	21.45	35.38	46	-24.55	15.6	2.48	32.01	126	23	Peak
570.9	23.67	33.79	46	-22.33	18.95	3.01	32.08	140	27	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
35.13	30.97	48.65	40	-9.03	12.79	0.59	31.06	105	338	Peak
74.82	33.69	54.87	40	-6.31	9.57	0.93	31.68	140	351	Peak
109.11	29.24	49.97	43.5	-14.26	9.99	1.12	31.84	130	167	Peak
380.5	18.89	33.62	46	-27.11	14.87	2.35	31.95	125	117	Peak
523.3	22.35	33.25	46	-23.65	17.86	2.86	31.62	102	280	Peak
624.8	24.52	33.62	46	-21.48	19.9	3.16	32.16	139	234	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	22.66	39.46	40	-17.34	13.58	0.7	31.08	106	23	Peak
75.63	27.92	49.3	40	-12.08	9.33	0.94	31.65	119	339	Peak
153.93	25.85	43.49	43.5	-17.65	12.72	1.36	31.72	135	137	Peak
316.1	21.25	37.72	46	-24.75	13.33	2.11	31.91	125	137	Peak
422.5	24.17	37.91	46	-21.83	15.79	2.51	32.04	105	271	Peak
549.2	23.52	34.07	46	-22.48	18.44	2.94	31.93	118	228	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
34.86	30.96	48.64	40	-9.04	12.79	0.59	31.06	122	40	Peak
74.82	32.99	54.17	40	-7.01	9.57	0.93	31.68	132	66	Peak
108.84	29.19	50.02	43.5	-14.31	9.9	1.12	31.85	119	49	Peak
309.8	18.02	34.71	46	-27.98	13.17	2.08	31.94	116	101	Peak
487.6	20.53	32.5	46	-25.47	17.08	2.74	31.79	102	265	Peak
638.1	24.95	33.78	46	-21.05	20.07	3.2	32.1	104	162	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	23.95	40.75	40	-16.05	13.58	0.7	31.08	134	146	Peak
74.55	29.66	50.84	40	-10.34	9.57	0.93	31.68	117	327	Peak
128.28	23.52	42.62	43.5	-19.98	11.55	1.23	31.88	126	28	Peak
347.6	20.51	36.04	46	-25.49	14.08	2.22	31.83	123	40	Peak
419	22.2	36.03	46	-23.8	15.71	2.5	32.04	104	265	Peak
685.7	25.57	33.39	46	-20.43	20.64	3.38	31.84	113	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
30.54	32.05	50.46	40	-7.95	12.14	0.57	31.12	108	119	Peak
74.28	33.13	54.31	40	-6.87	9.57	0.93	31.68	126	234	Peak
109.11	28.33	49.06	43.5	-15.17	9.99	1.12	31.84	104	173	Peak
314.7	20.53	37.03	46	-25.47	13.31	2.11	31.92	126	58	Peak
422.5	20.85	34.59	46	-25.15	15.79	2.51	32.04	118	123	Peak
588.4	25.38	35.12	46	-20.62	19.34	3.06	32.14	131	18	Peak

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

Margin value = Emission level – Limit value

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

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	23.68	40.48	40	-16.32	13.58	0.7	31.08	126	136	Peak
74.82	28.33	49.51	40	-11.67	9.57	0.93	31.68	131	336	Peak
127.47	23.36	42.55	43.5	-20.14	11.48	1.22	31.89	128	141	Peak
353.9	21.11	36.52	46	-24.89	14.24	2.24	31.89	131	148	Peak
419	21.48	35.31	46	-24.52	15.71	2.5	32.04	117	308	Peak
657.7	25.27	33.66	46	-20.73	20.3	3.27	31.96	130	179	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
30.54	31.92	50.33	40	-8.08	12.14	0.57	31.12	130	312	Peak
74.28	31.98	53.16	40	-8.02	9.57	0.93	31.68	102	142	Peak
110.19	27.99	48.62	43.5	-15.51	10.09	1.13	31.85	130	154	Peak
315.4	20.8	37.3	46	-25.2	13.31	2.11	31.92	121	206	Peak
461	21.27	34.06	46	-24.73	16.54	2.65	31.98	136	195	Peak
633.2	25.45	34.37	46	-20.55	20.01	3.19	32.12	105	168	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	23.83	40.63	40	-16.17	13.58	0.7	31.08	112	84	Peak
74.01	28.89	49.86	40	-11.11	9.81	0.93	31.71	128	237	Peak
127.74	22.85	41.95	43.5	-20.65	11.55	1.23	31.88	120	143	Peak
345.5	20.81	36.4	46	-25.19	14.03	2.21	31.83	109	125	Peak
412.7	22.15	36.08	46	-23.85	15.6	2.48	32.01	108	239	Peak
663.3	24.79	33.03	46	-21.21	20.37	3.29	31.9	118	126	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
30.54	32	50.41	40	-8	12.14	0.57	31.12	132	349	Peak
42.42	29.38	46.18	40	-10.62	13.58	0.7	31.08	122	77	Peak
74.28	31.91	53.09	40	-8.09	9.57	0.93	31.68	124	360	Peak
314	20.61	37.15	46	-25.39	13.29	2.1	31.93	101	28	Peak
454	20.39	33.33	46	-25.61	16.41	2.63	31.98	137	187	Peak
584.9	25.23	35.06	46	-20.77	19.26	3.04	32.13	106	121	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	27.85	49.03	40	-12.15	9.57	0.93	31.68	117	134	Peak
129.36	22.8	41.84	43.5	-20.7	11.61	1.23	31.88	132	248	Peak
155.01	26.7	44.35	43.5	-16.8	12.72	1.37	31.74	125	1	Peak
354.6	21.2	36.59	46	-24.8	14.26	2.25	31.9	136	178	Peak
478.5	21.58	33.84	46	-24.42	16.89	2.71	31.86	124	281	Peak
630.4	25.21	34.2	46	-20.79	19.97	3.18	32.14	111	184	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
34.86	31.48	49.16	40	-8.52	12.79	0.59	31.06	101	221	Peak
73.47	31.67	52.64	40	-8.33	9.81	0.93	31.71	105	326	Peak
134.76	30.55	49.03	43.5	-12.95	12.01	1.27	31.76	130	102	Peak
318.9	20.04	36.42	46	-25.96	13.4	2.12	31.9	121	280	Peak
502.3	21.97	33.42	46	-24.03	17.37	2.79	31.61	117	90	Peak
650.7	24.68	33.23	46	-21.32	20.22	3.24	32.01	132	168	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.82	27.16	48.34	40	-12.84	9.57	0.93	31.68	108	251	Peak
129.36	23.61	42.65	43.5	-19.89	11.61	1.23	31.88	133	93	Peak
155.01	26.7	44.35	43.5	-16.8	12.72	1.37	31.74	129	342	Peak
345.5	22.2	37.79	46	-23.8	14.03	2.21	31.83	117	173	Peak
463.1	20.9	33.62	46	-25.1	16.58	2.66	31.96	135	342	Peak
612.9	24.21	33.43	46	-21.79	19.76	3.13	32.11	140	155	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
30.54	31.03	49.44	40	-8.97	12.14	0.57	31.12	137	226	Peak
74.01	31.88	52.85	40	-8.12	9.81	0.93	31.71	139	2	Peak
109.38	28.53	49.26	43.5	-14.97	9.99	1.12	31.84	108	190	Peak
344.8	19.8	35.39	46	-26.2	14.03	2.21	31.83	105	245	Peak
465.9	21.43	34.06	46	-24.57	16.64	2.67	31.94	136	320	Peak
562.5	23.67	34.01	46	-22.33	18.75	2.98	32.07	137	203	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.82	27.48	48.66	40	-12.52	9.57	0.93	31.68	127	317	Peak
129.36	24.66	43.7	43.5	-18.84	11.61	1.23	31.88	127	29	Peak
150.69	26.89	44.45	43.5	-16.61	12.71	1.34	31.61	114	35	Peak
360.9	21.24	36.54	46	-24.76	14.4	2.27	31.97	140	301	Peak
519.8	22.41	33.36	46	-23.59	17.77	2.85	31.57	125	145	Peak
659.8	25.13	33.47	46	-20.87	20.33	3.28	31.95	107	108	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
30.27	31.04	49.63	40	-8.96	11.98	0.57	31.14	116	124	Peak
73.47	31.36	52.33	40	-8.64	9.81	0.93	31.71	115	43	Peak
135.03	30.53	49.01	43.5	-12.97	12.01	1.27	31.76	111	272	Peak
326.6	19.73	35.82	46	-26.27	13.59	2.15	31.83	125	43	Peak
493.9	21.21	32.97	46	-24.79	17.2	2.76	31.72	114	317	Peak
678.7	26.19	34.12	46	-19.81	20.56	3.35	31.84	118	295	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
75.09	28.14	49.32	40	-11.86	9.57	0.93	31.68	130	194	Peak
129.09	24.23	43.27	43.5	-19.27	11.61	1.23	31.88	111	211	Peak
148.8	26.8	44.45	43.5	-16.7	12.64	1.33	31.62	134	81	Peak
350.4	19.93	35.39	46	-26.07	14.15	2.23	31.84	132	73	Peak
461	20.68	33.47	46	-25.32	16.54	2.65	31.98	101	211	Peak
591.9	23.95	33.64	46	-22.05	19.41	3.06	32.16	112	103	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
41.88	27.73	44.54	40	-12.27	13.56	0.68	31.05	138	198	Peak
74.82	30.83	52.01	40	-9.17	9.57	0.93	31.68	103	337	Peak
108.84	28.8	49.63	43.5	-14.7	9.9	1.12	31.85	100	219	Peak
323.1	19.93	36.17	46	-26.07	13.5	2.13	31.87	140	166	Peak
475	20.6	32.94	46	-25.4	16.83	2.7	31.87	104	210	Peak
584.9	23.88	33.71	46	-22.12	19.26	3.04	32.13	129	41	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	27.66	49.04	40	-12.34	9.33	0.94	31.65	126	295	Peak
127.2	22.78	41.97	43.5	-20.72	11.48	1.22	31.89	117	41	Peak
155.01	25.62	43.27	43.5	-17.88	12.72	1.37	31.74	110	155	Peak
354.6	20.28	35.67	46	-25.72	14.26	2.25	31.9	126	244	Peak
491.8	21.42	33.25	46	-24.58	17.16	2.75	31.74	132	317	Peak
638.8	24.09	32.9	46	-21.91	20.08	3.21	32.1	118	218	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
75.09	30.95	52.13	40	-9.05	9.57	0.93	31.68	126	220	Peak
108.84	28.5	49.33	43.5	-15	9.9	1.12	31.85	110	151	Peak
134.49	30.93	49.41	43.5	-12.57	12.01	1.27	31.76	136	265	Peak
379.8	18.74	33.47	46	-27.26	14.87	2.35	31.95	130	360	Peak
477.1	20.72	33.01	46	-25.28	16.87	2.7	31.86	114	117	Peak
639.5	24.49	33.3	46	-21.51	20.08	3.21	32.1	105	211	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	26.98	48.16	40	-13.02	9.57	0.93	31.68	134	199	Peak
127.47	22.89	42.08	43.5	-20.61	11.48	1.22	31.89	138	156	Peak
168.24	24.33	42.77	43.5	-19.17	11.86	1.44	31.74	132	159	Peak
363	20.98	36.21	46	-25.02	14.45	2.28	31.96	112	316	Peak
495.3	21.35	33.05	46	-24.65	17.23	2.76	31.69	140	32	Peak
680.1	25.49	33.4	46	-20.51	20.57	3.36	31.84	122	19	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
75.9	30.82	52.2	40	-9.18	9.33	0.94	31.65	131	79	Peak
108.84	28.92	49.75	43.5	-14.58	9.9	1.12	31.85	104	292	Peak
134.22	30.96	49.54	43.5	-12.54	11.94	1.26	31.78	118	119	Peak
346.9	19.61	35.14	46	-26.39	14.08	2.22	31.83	131	41	Peak
485.5	21.56	33.59	46	-24.44	17.04	2.73	31.8	138	340	Peak
663.3	25.05	33.29	46	-20.95	20.37	3.29	31.9	118	280	Peak

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

Margin value = Emission level – Limit value

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	22.05	38.85	40	-17.95	13.58	0.7	31.08	132	20	Peak
74.82	28.52	49.7	40	-11.48	9.57	0.93	31.68	115	19	Peak
149.07	25.64	43.23	43.5	-17.86	12.68	1.34	31.61	129	75	Peak
315.4	20.73	37.23	46	-25.27	13.31	2.11	31.92	102	162	Peak
422.5	24.42	38.16	46	-21.58	15.79	2.51	32.04	115	285	Peak
625.5	24.84	33.9	46	-21.16	19.92	3.17	32.15	112	232	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
30.54	31.77	50.18	40	-8.23	12.14	0.57	31.12	137	197	Peak
74.55	33.48	54.66	40	-6.52	9.57	0.93	31.68	110	182	Peak
109.11	29.34	50.07	43.5	-14.16	9.99	1.12	31.84	124	310	Peak
341.3	17.5	33.18	46	-28.5	13.94	2.2	31.82	101	53	Peak
452.6	21.52	34.48	46	-24.48	16.39	2.63	31.98	125	197	Peak
628.3	24.83	33.86	46	-21.17	19.95	3.17	32.15	123	126	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	30.41	51.59	40	-9.59	9.57	0.93	31.68	137	298	Peak
129.36	23.64	42.68	43.5	-19.86	11.61	1.23	31.88	102	259	Peak
155.28	27.09	44.74	43.5	-16.41	12.72	1.37	31.74	116	84	Peak
345.5	23.23	38.82	46	-22.77	14.03	2.21	31.83	128	47	Peak
514.9	21.86	32.95	46	-24.14	17.66	2.83	31.58	121	145	Peak
675.2	24.84	32.82	46	-21.16	20.51	3.34	31.83	127	283	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
31.62	29.55	47.78	40	-10.45	12.3	0.58	31.11	134	168	Peak
75.36	32.46	53.84	40	-7.54	9.33	0.94	31.65	116	297	Peak
108.03	28.48	49.42	43.5	-15.02	9.81	1.11	31.86	124	311	Peak
313.3	21.06	37.63	46	-24.94	13.26	2.1	31.93	111	350	Peak
511.4	21.74	32.94	46	-24.26	17.57	2.82	31.59	131	66	Peak
677.3	25.32	33.27	46	-20.68	20.54	3.34	31.83	101	301	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	23.15	39.95	40	-16.85	13.58	0.7	31.08	124	279	Peak
75.36	30.23	51.61	40	-9.77	9.33	0.94	31.65	125	271	Peak
129.09	23.66	42.7	43.5	-19.84	11.61	1.23	31.88	111	300	Peak
370.7	22.38	37.36	46	-23.62	14.63	2.31	31.92	123	96	Peak
485.5	21.16	33.19	46	-24.84	17.04	2.73	31.8	101	282	Peak
677.3	26	33.95	46	-20	20.54	3.34	31.83	130	302	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
31.62	31.03	49.26	40	-8.97	12.3	0.58	31.11	101	133	Peak
75.09	33.74	54.92	40	-6.26	9.57	0.93	31.68	129	109	Peak
134.22	30.3	48.88	43.5	-13.2	11.94	1.26	31.78	128	134	Peak
311.9	20.72	37.32	46	-25.28	13.24	2.1	31.94	120	317	Peak
512.1	21.59	32.76	46	-24.41	17.6	2.82	31.59	123	240	Peak
662.6	25.02	33.28	46	-20.98	20.36	3.29	31.91	120	39	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	24.64	41.44	40	-15.36	13.58	0.7	31.08	126	204	Peak
74.28	28.64	49.82	40	-11.36	9.57	0.93	31.68	139	288	Peak
150.96	27.2	44.78	43.5	-16.3	12.71	1.35	31.64	137	247	Peak
351.1	21.1	36.55	46	-24.9	14.17	2.23	31.85	129	237	Peak
504.4	22.34	33.74	46	-23.66	17.42	2.79	31.61	112	243	Peak
666.1	25.31	33.46	46	-20.69	20.41	3.3	31.86	128	34	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
30.54	31.65	50.06	40	-8.35	12.14	0.57	31.12	100	111	Peak
73.47	32	52.97	40	-8	9.81	0.93	31.71	125	200	Peak
135.03	30.41	48.89	43.5	-13.09	12.01	1.27	31.76	105	4	Peak
335	19.89	35.75	46	-26.11	13.78	2.17	31.81	127	56	Peak
496	21.83	33.53	46	-24.17	17.23	2.76	31.69	139	293	Peak
652.8	26.26	34.77	46	-19.74	20.24	3.25	32	135	25	Peak

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

Margin value = Emission level – Limit value

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

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	23.47	40.27	40	-16.53	13.58	0.7	31.08	127	95	Peak
74.01	27.47	48.44	40	-12.53	9.81	0.93	31.71	101	166	Peak
150.96	26.85	44.43	43.5	-16.65	12.71	1.35	31.64	138	59	Peak
348.3	20.81	36.33	46	-25.19	14.1	2.22	31.84	112	273	Peak
422.5	21.51	35.25	46	-24.49	15.79	2.51	32.04	115	184	Peak
678	24.78	32.71	46	-21.22	20.55	3.35	31.83	124	96	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	29.55	46.35	40	-10.45	13.58	0.7	31.08	103	113	Peak
74.01	32.9	53.87	40	-7.1	9.81	0.93	31.71	127	130	Peak
134.76	30.82	49.3	43.5	-12.68	12.01	1.27	31.76	103	193	Peak
347.6	20.31	35.84	46	-25.69	14.08	2.22	31.83	123	267	Peak
461	20.85	33.64	46	-25.15	16.54	2.65	31.98	131	230	Peak
694.8	25.87	33.53	46	-20.13	20.75	3.41	31.82	134	36	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
42.15	24.08	40.88	40	-15.92	13.58	0.7	31.08	100	270	Peak
74.01	27.88	48.85	40	-12.12	9.81	0.93	31.71	129	154	Peak
150.15	26.58	44.14	43.5	-16.92	12.71	1.34	31.61	114	188	Peak
347.6	21.51	37.04	46	-24.49	14.08	2.22	31.83	140	264	Peak
422.5	21.83	35.57	46	-24.17	15.79	2.51	32.04	101	161	Peak
694.8	25.76	33.42	46	-20.24	20.75	3.41	31.82	100	102	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	29.87	46.67	40	-10.13	13.58	0.7	31.08	128	148	Peak
73.47	32.04	53.01	40	-7.96	9.81	0.93	31.71	138	203	Peak
134.49	30.88	49.36	43.5	-12.62	12.01	1.27	31.76	134	318	Peak
312.6	20.62	37.22	46	-25.38	13.24	2.1	31.94	105	336	Peak
455.4	21.2	34.1	46	-24.8	16.45	2.64	31.99	102	121	Peak
595.4	23.41	33.04	46	-22.59	19.5	3.07	32.2	102	231	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
75.63	28.11	49.49	40	-11.89	9.33	0.94	31.65	113	348	Peak
128.28	24.67	43.77	43.5	-18.83	11.55	1.23	31.88	116	130	Peak
150.42	27.11	44.67	43.5	-16.39	12.71	1.34	31.61	115	222	Peak
346.2	20.79	36.36	46	-25.21	14.05	2.21	31.83	120	288	Peak
447	20.42	33.53	46	-25.58	16.27	2.61	31.99	114	66	Peak
694.8	25.37	33.03	46	-20.63	20.75	3.41	31.82	107	324	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
34.86	29.1	46.78	40	-10.9	12.79	0.59	31.06	131	82	Peak
75.09	30.27	51.45	40	-9.73	9.57	0.93	31.68	107	157	Peak
135.03	31.08	49.56	43.5	-12.42	12.01	1.27	31.76	112	127	Peak
312.6	21.25	37.85	46	-24.75	13.24	2.1	31.94	117	105	Peak
413.4	22.11	36.04	46	-23.89	15.6	2.48	32.01	114	131	Peak
678	25.45	33.38	46	-20.55	20.55	3.35	31.83	114	313	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
75.9	27.79	49.17	40	-12.21	9.33	0.94	31.65	106	227	Peak
127.74	24.35	43.45	43.5	-19.15	11.55	1.23	31.88	125	115	Peak
152.58	26.77	44.37	43.5	-16.73	12.71	1.35	31.66	115	45	Peak
349	21.17	36.67	46	-24.83	14.12	2.22	31.84	127	170	Peak
488.3	21.57	33.54	46	-24.43	17.08	2.74	31.79	117	119	Peak
686.4	25.13	32.93	46	-20.87	20.66	3.38	31.84	111	325	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
41.88	28.21	45.02	40	-11.79	13.56	0.68	31.05	134	253	Peak
72.66	30.42	51.19	40	-9.58	10.05	0.92	31.74	114	299	Peak
134.76	29.92	48.4	43.5	-13.58	12.01	1.27	31.76	120	177	Peak
319.6	20.67	37.01	46	-25.33	13.43	2.12	31.89	132	269	Peak
487.6	21.75	33.72	46	-24.25	17.08	2.74	31.79	101	39	Peak
640.2	24.12	32.91	46	-21.88	20.09	3.21	32.09	120	250	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
75.9	27.68	49.06	40	-12.32	9.33	0.94	31.65	125	128	Peak
128.28	24.58	43.68	43.5	-18.92	11.55	1.23	31.88	130	90	Peak
149.61	27.1	44.69	43.5	-16.4	12.68	1.34	31.61	108	220	Peak
355.3	21.84	37.23	46	-24.16	14.26	2.25	31.9	115	280	Peak
481.3	21.25	33.42	46	-24.75	16.95	2.72	31.84	110	53	Peak
680.8	25.63	33.52	46	-20.37	20.59	3.36	31.84	104	253	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
30.27	30.06	48.65	40	-9.94	11.98	0.57	31.14	111	56	Peak
75.36	30.72	52.1	40	-9.28	9.33	0.94	31.65	102	351	Peak
134.49	30.44	48.92	43.5	-13.06	12.01	1.27	31.76	127	334	Peak
318.2	20.14	36.54	46	-25.86	13.38	2.12	31.9	113	345	Peak
507.9	22.46	33.74	46	-23.54	17.51	2.81	31.6	116	330	Peak
664.7	24.52	32.72	46	-21.48	20.39	3.3	31.89	125	32	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.82	27.68	48.86	40	-12.32	9.57	0.93	31.68	119	78	Peak
155.55	26.12	43.77	43.5	-17.38	12.72	1.37	31.74	131	66	Peak
175.53	26.42	45.55	43.5	-17.08	11.19	1.47	31.79	104	158	Peak
367.2	21.16	36.23	46	-24.84	14.56	2.3	31.93	101	22	Peak
480.6	21.17	33.34	46	-24.83	16.95	2.72	31.84	127	343	Peak
603.1	23.79	33.24	46	-22.21	19.65	3.1	32.2	101	276	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
74.55	30.75	51.93	40	-9.25	9.57	0.93	31.68	104	213	Peak
109.38	28.8	49.53	43.5	-14.7	9.99	1.12	31.84	124	273	Peak
133.95	31.14	49.72	43.5	-12.36	11.94	1.26	31.78	106	50	Peak
311.2	19.87	36.5	46	-26.13	13.22	2.09	31.94	121	302	Peak
432.3	21.38	34.86	46	-24.62	15.98	2.55	32.01	102	342	Peak
616.4	23.8	32.99	46	-22.2	19.81	3.14	32.14	125	228	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.82	27.13	48.31	40	-12.87	9.57	0.93	31.68	100	212	Peak
128.82	23.9	42.94	43.5	-19.6	11.61	1.23	31.88	111	359	Peak
149.61	25.43	43.02	43.5	-18.07	12.68	1.34	31.61	123	139	Peak
354.6	20.34	35.73	46	-25.66	14.26	2.25	31.9	109	318	Peak
488.3	21.62	33.59	46	-24.38	17.08	2.74	31.79	109	276	Peak
590.5	23.34	33.04	46	-22.66	19.39	3.06	32.15	105	47	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
74.28	30.94	52.12	40	-9.06	9.57	0.93	31.68	122	269	Peak
108.57	29.04	49.87	43.5	-14.46	9.9	1.12	31.85	111	236	Peak
134.49	30.68	49.16	43.5	-12.82	12.01	1.27	31.76	109	179	Peak
332.9	19.87	35.78	46	-26.13	13.73	2.17	31.81	130	200	Peak
466.6	21.37	33.97	46	-24.63	16.66	2.67	31.93	140	23	Peak
540.1	23.26	33.83	46	-22.74	18.24	2.92	31.73	127	29	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	27.19	48.37	40	-12.81	9.57	0.93	31.68	116	224	Peak
128.28	23.57	42.67	43.5	-19.93	11.55	1.23	31.88	128	103	Peak
155.01	25.82	43.47	43.5	-17.68	12.72	1.37	31.74	138	52	Peak
353.9	22.47	37.88	46	-23.53	14.24	2.24	31.89	111	264	Peak
514.9	21.68	32.77	46	-24.32	17.66	2.83	31.58	134	119	Peak
611.5	25.33	34.56	46	-20.67	19.74	3.12	32.09	129	172	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
74.55	30.34	51.52	40	-9.66	9.57	0.93	31.68	124	226	Peak
108.84	29.72	50.55	43.5	-13.78	9.9	1.12	31.85	130	329	Peak
134.49	31.28	49.76	43.5	-12.22	12.01	1.27	31.76	101	323	Peak
318.2	20.34	36.74	46	-25.66	13.38	2.12	31.9	121	90	Peak
438.6	21.17	34.5	46	-24.83	16.1	2.57	32	123	108	Peak
621.3	24.21	33.35	46	-21.79	19.87	3.15	32.16	127	194	Peak

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

Margin value = Emission level – Limit value

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
43.23	22.93	39.74	40	-17.07	13.59	0.71	31.11	136	56	Peak
74.82	30.6	51.78	40	-9.4	9.57	0.93	31.68	128	11	Peak
128.28	23.74	42.84	43.5	-19.76	11.55	1.23	31.88	112	190	Peak
349.7	22.55	38.01	46	-23.45	14.15	2.23	31.84	112	125	Peak
510	22.21	33.44	46	-23.79	17.55	2.81	31.59	115	138	Peak
643.7	24.98	33.68	46	-21.02	20.14	3.22	32.06	115	343	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
31.08	31.88	50.29	40	-8.12	12.14	0.57	31.12	103	115	Peak
75.09	33.18	54.36	40	-6.82	9.57	0.93	31.68	115	50	Peak
109.11	28.49	49.22	43.5	-15.01	9.99	1.12	31.84	129	23	Peak
321.7	20.95	37.22	46	-25.05	13.47	2.13	31.87	134	326	Peak
419	22.13	35.96	46	-23.87	15.71	2.5	32.04	118	210	Peak
559.7	22.8	33.21	46	-23.2	18.68	2.97	32.06	113	343	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	23.96	40.76	40	-16.04	13.58	0.7	31.08	112	251	Peak
74.82	29.93	51.11	40	-10.07	9.57	0.93	31.68	114	205	Peak
128.55	24.1	43.14	43.5	-19.4	11.61	1.23	31.88	114	354	Peak
345.5	22.79	38.38	46	-23.21	14.03	2.21	31.83	132	38	Peak
419	22.23	36.06	46	-23.77	15.71	2.5	32.04	107	21	Peak
588.4	24.12	33.86	46	-21.88	19.34	3.06	32.14	120	51	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
30.81	32.16	50.57	40	-7.84	12.14	0.57	31.12	116	265	Peak
74.55	33.03	54.21	40	-6.97	9.57	0.93	31.68	122	135	Peak
109.11	28.1	48.83	43.5	-15.4	9.99	1.12	31.84	137	223	Peak
315.4	21.03	37.53	46	-24.97	13.31	2.11	31.92	109	299	Peak
486.2	20.98	33.01	46	-25.02	17.04	2.73	31.8	126	306	Peak
654.2	24.17	32.63	46	-21.83	20.27	3.26	31.99	121	101	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
75.63	27.71	49.09	40	-12.29	9.33	0.94	31.65	136	269	Peak
129.9	23.15	42.11	43.5	-20.35	11.68	1.24	31.88	123	193	Peak
154.74	26.76	44.41	43.5	-16.74	12.72	1.37	31.74	125	297	Peak
352.5	21.72	37.17	46	-24.28	14.19	2.23	31.87	113	138	Peak
461	21.31	34.1	46	-24.69	16.54	2.65	31.98	100	310	Peak
681.5	25.19	33.07	46	-20.81	20.6	3.36	31.84	105	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
42.42	30.64	47.44	40	-9.36	13.58	0.7	31.08	113	260	Peak
73.47	31.59	52.56	40	-8.41	9.81	0.93	31.71	121	245	Peak
135.03	30.66	49.14	43.5	-12.84	12.01	1.27	31.76	108	204	Peak
330.1	19.91	35.9	46	-26.09	13.66	2.16	31.81	131	204	Peak
494.6	22.58	34.31	46	-23.42	17.21	2.76	31.7	122	26	Peak
676.6	25.11	33.06	46	-20.89	20.54	3.34	31.83	135	333	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	23.3	40.1	40	-16.7	13.58	0.7	31.08	121	356	Peak
74.82	27.91	49.09	40	-12.09	9.57	0.93	31.68	103	248	Peak
150.96	26.89	44.47	43.5	-16.61	12.71	1.35	31.64	130	283	Peak
358.1	21.19	36.54	46	-24.81	14.33	2.26	31.94	133	298	Peak
474.3	21.27	33.63	46	-24.73	16.81	2.7	31.87	109	258	Peak
671.7	25.14	33.15	46	-20.86	20.48	3.33	31.82	131	168	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
30.27	30.94	49.53	40	-9.06	11.98	0.57	31.14	123	284	Peak
73.47	31.6	52.57	40	-8.4	9.81	0.93	31.71	121	355	Peak
134.76	30.87	49.35	43.5	-12.63	12.01	1.27	31.76	121	1	Peak
348.3	19.57	35.09	46	-26.43	14.1	2.22	31.84	109	354	Peak
542.9	23.44	34.02	46	-22.56	18.3	2.92	31.8	134	249	Peak
683.6	25.08	32.93	46	-20.92	20.62	3.37	31.84	120	127	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	27.44	48.82	40	-12.56	9.33	0.94	31.65	105	237	Peak
129.36	23.72	42.76	43.5	-19.78	11.61	1.23	31.88	100	326	Peak
175.26	26.79	45.92	43.5	-16.71	11.19	1.47	31.79	130	194	Peak
356.7	20.35	35.72	46	-25.65	14.31	2.25	31.93	108	119	Peak
419	21.67	35.5	46	-24.33	15.71	2.5	32.04	126	135	Peak
623.4	24.57	33.68	46	-21.43	19.89	3.16	32.16	118	125	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	28.18	44.98	40	-11.82	13.58	0.7	31.08	109	66	Peak
75.36	30.7	52.08	40	-9.3	9.33	0.94	31.65	132	72	Peak
134.49	30.5	48.98	43.5	-13	12.01	1.27	31.76	117	66	Peak
332.2	20	35.91	46	-26	13.73	2.17	31.81	131	26	Peak
470.1	21.03	33.51	46	-24.97	16.73	2.68	31.89	107	328	Peak
610.1	24.4	33.63	46	-21.6	19.73	3.12	32.08	120	333	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	28	49.38	40	-12	9.33	0.94	31.65	134	197	Peak
127.74	23.47	42.57	43.5	-20.03	11.55	1.23	31.88	124	269	Peak
169.05	25.76	44.2	43.5	-17.74	11.86	1.44	31.74	117	169	Peak
417.6	22.4	36.25	46	-23.6	15.7	2.49	32.04	123	142	Peak
564.6	23.83	34.12	46	-22.17	18.79	2.99	32.07	101	205	Peak
668.2	26.18	34.28	46	-19.82	20.43	3.31	31.84	106	184	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
35.13	29.12	46.8	40	-10.88	12.79	0.59	31.06	118	228	Peak
75.36	30.55	51.93	40	-9.45	9.33	0.94	31.65	129	248	Peak
109.11	28.79	49.52	43.5	-14.71	9.99	1.12	31.84	115	50	Peak
407.1	20.45	34.55	46	-25.55	15.48	2.45	32.03	111	224	Peak
546.4	22.26	32.82	46	-23.74	18.37	2.93	31.86	115	229	Peak
673.1	24.81	32.81	46	-21.19	20.49	3.33	31.82	110	5	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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	28.05	49.43	40	-11.95	9.33	0.94	31.65	126	16	Peak
127.74	23.91	43.01	43.5	-19.59	11.55	1.23	31.88	127	282	Peak
176.61	25.99	45.21	43.5	-17.51	11.1	1.48	31.8	107	329	Peak
351.1	20.99	36.44	46	-25.01	14.17	2.23	31.85	100	51	Peak
504.4	21.45	32.85	46	-24.55	17.42	2.79	31.61	121	193	Peak
613.6	24.86	34.08	46	-21.14	19.77	3.13	32.12	133	105	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
41.88	28.07	44.88	40	-11.93	13.56	0.68	31.05	132	163	Peak
75.63	30.63	52.01	40	-9.37	9.33	0.94	31.65	135	286	Peak
134.76	30.49	48.97	43.5	-13.01	12.01	1.27	31.76	107	111	Peak
372.8	19.89	34.82	46	-26.11	14.68	2.32	31.93	102	210	Peak
502.3	22.34	33.79	46	-23.66	17.37	2.79	31.61	106	240	Peak
657	24.88	33.29	46	-21.12	20.29	3.27	31.97	128	135	Peak

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

Margin value = Emission level – Limit value

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	Anson Lin

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
75.09	27.81	48.99	40	-12.19	9.57	0.93	31.68	132	204	Peak
129.09	22.96	42	43.5	-20.54	11.61	1.23	31.88	121	66	Peak
154.2	25.76	43.4	43.5	-17.74	12.72	1.36	31.72	103	46	Peak
356	20.92	36.3	46	-25.08	14.29	2.25	31.92	119	121	Peak
487.6	21.53	33.5	46	-24.47	17.08	2.74	31.79	136	344	Peak
654.9	25.19	33.65	46	-20.81	20.27	3.26	31.99	113	78	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
74.55	30.35	51.53	40	-9.65	9.57	0.93	31.68	136	219	Peak
109.11	29.86	50.59	43.5	-13.64	9.99	1.12	31.84	130	194	Peak
134.76	30.78	49.26	43.5	-12.72	12.01	1.27	31.76	105	55	Peak
320.3	20.18	36.52	46	-25.82	13.43	2.12	31.89	107	350	Peak
482	21.55	33.7	46	-24.45	16.96	2.72	31.83	112	99	Peak
611.5	23.84	33.07	46	-22.16	19.74	3.12	32.09	127	227	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	27.56	48.74	40	-12.44	9.57	0.93	31.68	105	9	Peak
128.82	23.54	42.58	43.5	-19.96	11.61	1.23	31.88	113	176	Peak
155.82	25.95	43.63	43.5	-17.55	12.72	1.37	31.77	133	324	Peak
358.8	20.54	35.88	46	-25.46	14.36	2.26	31.96	105	23	Peak
491.1	22.06	33.93	46	-23.94	17.14	2.75	31.76	131	174	Peak
694.1	25.04	32.7	46	-20.96	20.75	3.41	31.82	100	254	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	26.97	43.77	40	-13.03	13.55	0.67	31.02	118	252	Peak
74.28	30.9	52.08	40	-9.1	9.57	0.93	31.68	115	286	Peak
109.11	29.9	50.63	43.5	-13.6	9.99	1.12	31.84	108	141	Peak
374.2	18.93	33.81	46	-27.07	14.73	2.32	31.93	104	152	Peak
488.3	21.82	33.79	46	-24.18	17.08	2.74	31.79	140	113	Peak
628.3	23.77	32.8	46	-22.23	19.95	3.17	32.15	135	281	Peak

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

Margin value = Emission level – Limit value



A D T

MODE B**802.11n (20MHz)**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
73.74	29.2	50.17	40	-10.8	9.81	0.93	31.71	136	219	Peak
129.09	24.14	43.18	43.5	-19.36	11.61	1.23	31.88	114	243	Peak
155.01	26.9	44.55	43.5	-16.6	12.72	1.37	31.74	139	34	Peak
367.2	21.95	37.02	46	-24.05	14.56	2.3	31.93	136	254	Peak
504.4	21.23	32.63	46	-24.77	17.42	2.79	31.61	106	169	Peak
672.4	25.4	33.41	46	-20.6	20.48	3.33	31.82	135	252	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
31.89	29.73	47.96	40	-10.27	12.3	0.58	31.11	110	313	Peak
75.09	32.88	54.06	40	-7.12	9.57	0.93	31.68	134	119	Peak
134.22	30.72	49.3	43.5	-12.78	11.94	1.26	31.78	126	251	Peak
340.6	19.78	35.5	46	-26.22	13.91	2.19	31.82	111	283	Peak
461.7	20.83	33.59	46	-25.17	16.56	2.65	31.97	106	328	Peak
591.9	23.86	33.55	46	-22.14	19.41	3.06	32.16	138	101	Peak

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

Margin value = Emission level – Limit value

MODE C

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Anson Lin

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
74.55	29.38	50.56	40	-10.62	9.57	0.93	31.68	135	199	Peak
128.28	24.11	43.21	43.5	-19.39	11.55	1.23	31.88	103	351	Peak
155.82	26.6	44.28	43.5	-16.9	12.72	1.37	31.77	122	184	Peak
358.8	21.78	37.12	46	-24.22	14.36	2.26	31.96	103	215	Peak
497.4	22.32	33.94	46	-23.68	17.27	2.77	31.66	126	24	Peak
650.7	25.81	34.36	46	-20.19	20.22	3.24	32.01	113	354	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
30.54	31.66	50.07	40	-8.34	12.14	0.57	31.12	105	276	Peak
74.28	33.04	54.22	40	-6.96	9.57	0.93	31.68	121	345	Peak
135.03	30.56	49.04	43.5	-12.94	12.01	1.27	31.76	140	161	Peak
342.7	19.87	35.53	46	-26.13	13.96	2.2	31.82	118	260	Peak
510.7	22.25	33.45	46	-23.75	17.57	2.82	31.59	114	239	Peak
730.5	26.51	33.34	46	-19.49	21.24	3.52	31.59	134	56	Peak

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

Margin value = Emission level – Limit value

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

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
74.01	28.18	49.15	40	-11.82	9.81	0.93	31.71	131	177	Peak
148.53	25.4	43.05	43.5	-18.1	12.64	1.33	31.62	139	344	Peak
175.26	26.53	45.66	43.5	-16.97	11.19	1.47	31.79	108	208	Peak
356.7	21.35	36.72	46	-24.65	14.31	2.25	31.93	101	257	Peak
531	22.61	33.4	46	-23.39	18.02	2.88	31.69	112	73	Peak
631.8	24.88	33.84	46	-21.12	19.99	3.18	32.13	123	76	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
30.54	31.55	49.96	40	-8.45	12.14	0.57	31.12	108	291	Peak
73.74	31.97	52.94	40	-8.03	9.81	0.93	31.71	117	294	Peak
135.03	30.75	49.23	43.5	-12.75	12.01	1.27	31.76	118	291	Peak
309.8	19.9	36.59	46	-26.1	13.17	2.08	31.94	122	59	Peak
498.8	22.99	34.58	46	-23.01	17.29	2.77	31.65	100	314	Peak
692	25.6	33.32	46	-20.4	20.71	3.4	31.83	104	204	Peak

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

Margin value = Emission level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Quasi-peak (QP)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Toby Tian

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
70.5	23.01	43.36	40	-16.99	10.53	0.91	31.79	112	194	Peak
113.16	26.09	46.43	43.5	-17.41	10.37	1.15	31.86	117	239	Peak
152.58	26.96	44.56	43.5	-16.54	12.71	1.35	31.66	122	108	Peak
380.5	25.17	39.9	46	-20.83	14.87	2.35	31.95	128	250	Peak
501.6	27.04	38.53	46	-18.96	17.35	2.78	31.62	132	105	Peak
599.6	29.53	39.09	46	-16.47	19.59	3.09	32.24	129	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	33.01	49.81	40	-6.99	13.58	0.7	31.08	119	52	Peak
62.67	33.03	52.09	40	-6.97	11.59	0.85	31.5	118	159	Peak
125.58	32.24	51.49	43.5	-11.26	11.42	1.22	31.89	136	77	Peak
332.2	20.35	36.26	46	-25.65	13.73	2.17	31.81	136	75	Peak
444.2	27.33	40.52	46	-18.67	16.21	2.59	31.99	108	211	Peak
554.8	27.92	38.4	46	-18.08	18.57	2.96	32.01	102	336	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. 10, 2014	Jul. 09, 2015
Software ADT	BV ADT_Conc_ 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

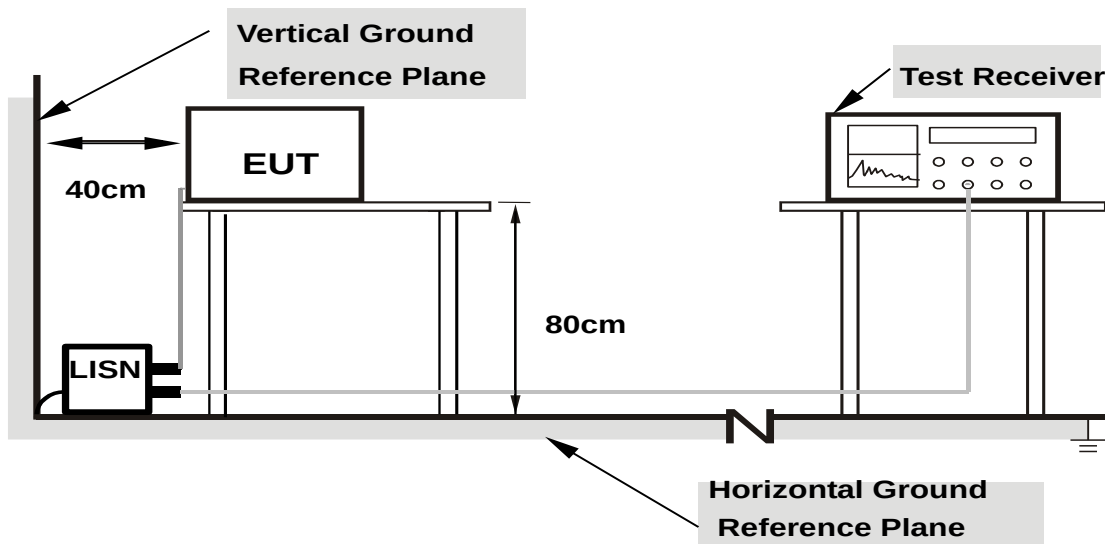
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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

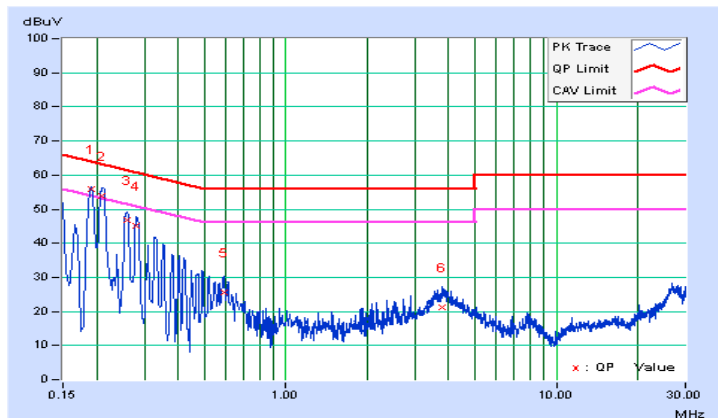
CONDUCTED WORST-CASE DATA :

PHASE	Line 1	6dB BANDWIDTH	9kHz
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Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19013	0.07	55.94	36.76	56.01	36.83	64.03	54.03	-8.02	-17.20
2	0.20960	0.07	53.74	37.35	53.81	37.42	63.22	53.22	-9.41	-15.80
3	0.25810	0.07	46.85	28.87	46.92	28.94	61.49	51.49	-14.57	-22.55
4	0.27859	0.07	45.11	27.08	45.18	27.15	60.86	50.86	-15.67	-23.70
5	0.59000	0.09	25.45	9.71	25.54	9.80	56.00	46.00	-30.46	-36.20
6	3.76198	0.22	20.93	15.20	21.15	15.42	56.00	46.00	-34.85	-30.58

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

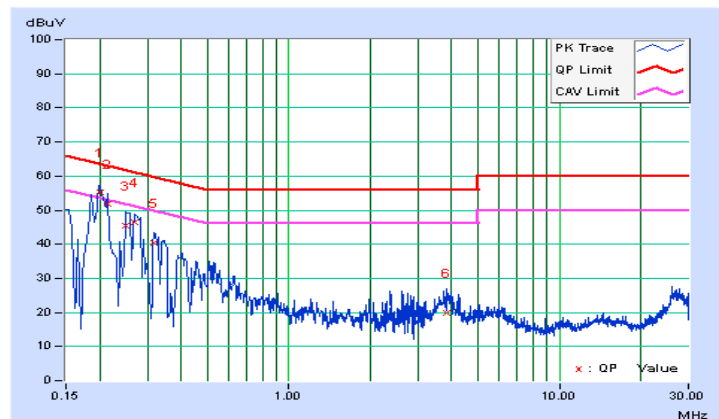


PHASE	Line 2	6dB BANDWIDTH	9kHz
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Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20200	0.05	55.28	40.27	55.33	40.32	63.53	53.53	-8.20	-13.21
2	0.21400	0.05	51.81	31.59	51.86	31.64	63.05	53.05	-11.19	-21.41
3	0.25006	0.06	45.54	22.87	45.60	22.93	61.76	51.76	-16.16	-28.83
4	0.26992	0.06	46.48	29.77	46.54	29.83	61.12	51.12	-14.58	-21.29
5	0.31800	0.06	40.42	19.60	40.48	19.66	59.76	49.76	-19.28	-30.10
6	3.82600	0.20	19.68	12.32	19.88	12.52	56.00	46.00	-36.12	-33.48

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 TRANSMIT POWER MEASUREMENT

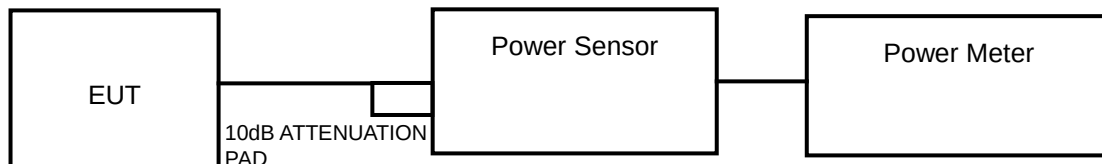
4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

OPERATION BAND	EUT CATEGORY		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√	---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√	---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√	---	1 Watt (30 dBm)

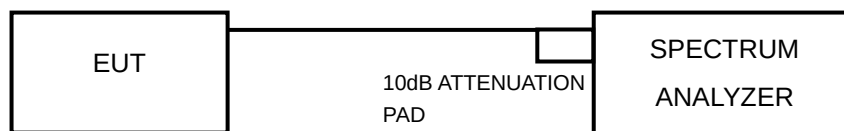
NOTE: Where B is the 26dB emission bandwidth in MHz.

4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

<802.11a, 802.11n (20MHz), 802.11n (40MHz)>

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

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 specific channel frequencies individually.

4.3.7 TEST RESULTS

POWER OUTPUT

802.11a

CHANNEL	FREQUENCY (MHz)	DATA RATE							
		6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
36	5180	19.94	19.92	19.9	19.91	19.93	19.91	19.69	18.07
44	5220	20.29	19.88	19.92	19.85	19.86	20.08	19.65	18.05
48	5240	20.31	19.82	19.96	19.92	19.89	20.11	19.64	18.34
52	5260	20.34	19.92	19.91	19.85	19.9	20.05	19.55	18.19
60	5300	20.18	19.75	19.72	19.72	19.77	19.88	19.54	18.15
64	5320	20.02	19.82	19.62	19.69	19.71	19.91	19.51	18.11
100	5500	18.92	18.89	18.9	18.87	18.89	18.9	18.9	17.5
116	5580	20.18	19.98	19.89	19.97	19.96	20.06	19.25	17.51
140	5700	17.41	17.38	17.36	17.39	17.4	17.4	17.4	17.61
149	5745	19.76	19.59	19.51	19.55	19.54	19.68	19.01	17.29
157	5785	19.93	19.55	19.56	19.63	19.66	19.71	19.05	17.33
165	5825	19.78	19.52	19.55	19.51	19.5	19.7	18.99	17.38

CHANNEL	CHANNEL FREQUENCY (MHz)	MAX. CONDUCTED POWER (mW)	MAX. CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	98.63	19.94	24	PASS
44	5220	106.91	20.29	24	PASS
48	5240	107.40	20.31	24	PASS
52	5260	108.14	20.34	24	PASS
60	5300	104.23	20.18	24	PASS
64	5320	100.46	20.02	24	PASS
100	5500	77.98	18.92	24	PASS
116	5580	104.23	20.18	24	PASS
140	5700	55.08	17.41	24	PASS
149	5745	94.62	19.76	30	PASS
157	5785	98.40	19.93	30	PASS
165	5825	95.06	19.78	30	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(41.35) = 27.17\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(28.79) = 25.59\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(26.99) = 25.31\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(38.75) = 26.88\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(42.25) = 27.26\text{ dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(42.18) = 27.25\text{ dBm} > 24\text{dBm}$.

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	DATA RATE							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
36	5180	19.59	19.52	19.55	19.51	19.58	18.72	17.77	17.22
44	5220	19.55	19.51	19.52	19.5	19.47	18.81	17.88	17.39
48	5240	19.56	19.55	19.54	19.53	19.52	18.74	17.91	17.45
52	5260	19.62	19.54	19.49	19.55	19.48	18.8	17.92	17.46
60	5300	19.4	19.39	19.37	19.38	19.32	18.66	17.62	17.23
64	5320	19.38	19.33	19.34	19.36	19.37	18.6	17.75	17.24
100	5500	19.19	19.16	19.14	19.12	19.17	18.75	17.5	17.08
116	5580	19.67	19.65	19.66	19.63	19.58	18.9	17.48	17.03
140	5700	17.66	17.57	17.52	17.6	17.58	17.64	17.62	17.25
149	5745	19.35	19	18.98	18.99	19.04	18.71	17.05	16.55
157	5785	19.28	18.87	18.93	18.97	18.95	18.65	17.07	16.56
165	5825	19.32	18.98	19	19.01	18.97	18.65	16.98	16.49

CHANNEL	CHANNEL FREQUENCY (MHz)	MAX. CONDUCTED POWER (mW)	MAX. CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	90.99	19.59	24	PASS
44	5220	90.16	19.55	24	PASS
48	5240	90.36	19.56	24	PASS
52	5260	91.62	19.62	24	PASS
60	5300	87.10	19.40	24	PASS
64	5320	86.70	19.38	24	PASS
100	5500	82.99	19.19	24	PASS
116	5580	92.68	19.67	24	PASS
140	5700	58.34	17.66	24	PASS
149	5745	86.10	19.35	30	PASS
157	5785	84.72	19.28	30	PASS
165	5825	85.51	19.32	30	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(40.67) = 27.09\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(27.89) = 25.45\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(27.91) = 25.46\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(26.34) = 25.21\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(43.48) = 27.38\text{ dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(40.77) = 27.10\text{ dBm} > 24\text{dBm}$.

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	DATA RATE							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
38	5190	17.62	17.59	17.6	15.82	15.18	17.6	17.1	16.59
46	5230	18.61	18.58	18.57	15.79	15.21	18.15	17.14	16.67
54	5270	18.51	18.48	18.49	18.42	18.45	18.14	17.22	16.8
62	5310	17.48	17.46	17.45	17.36	17.46	17.42	17.1	16.6
102	5510	18.52	18.49	18.5	17.66	17.64	17.78	16.86	16.87
110	5550	18.96	18.42	18.41	18.58	18.57	18.31	16.88	16.88
134	5670	19	18.48	18.44	18.61	18.51	18.11	16.92	16.92
151	5755	17.95	17.93	17.92	17.93	17.91	17.87	16.38	15.92
159	5795	18.45	17.88	17.93	18.09	18.07	17.73	16.44	16.02

CHANNEL	CHANNEL FREQUENCY (MHz)	MAX. CONDUCTED POWER (mW)	MAX. CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	57.81	17.62	24	PASS
46	5230	72.61	18.61	24	PASS
54	5270	70.96	18.51	24	PASS
62	5310	55.98	17.48	24	PASS
102	5510	71.12	18.52	24	PASS
110	5550	78.70	18.96	24	PASS
134	5670	79.43	19.00	24	PASS
151	5755	62.37	17.95	30	PASS
159	5795	69.98	18.45	30	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(63.71) = 29.04\text{ dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(59.57) = 28.75\text{ dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(59.04) = 28.71\text{ dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(55.25) = 28.42\text{ dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(72.02) = 29.58\text{ dBm} > 24\text{dBm}$.

26dB BANDWIDTH

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	41.35	PASS
60	5300	28.79	PASS
64	5320	26.99	PASS
100	5500	38.75	PASS
116	5580	42.25	PASS
140	5700	42.18	PASS

802.11n (20MHz)

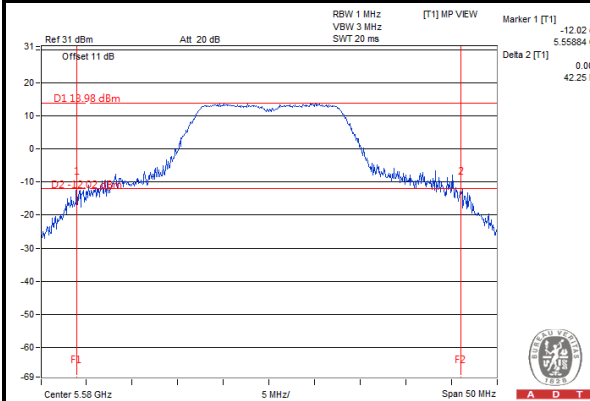
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	40.67	PASS
60	5300	27.89	PASS
64	5320	27.91	PASS
100	5500	26.34	PASS
116	5580	43.48	PASS
140	5700	40.77	PASS

802.11n (40MHz)

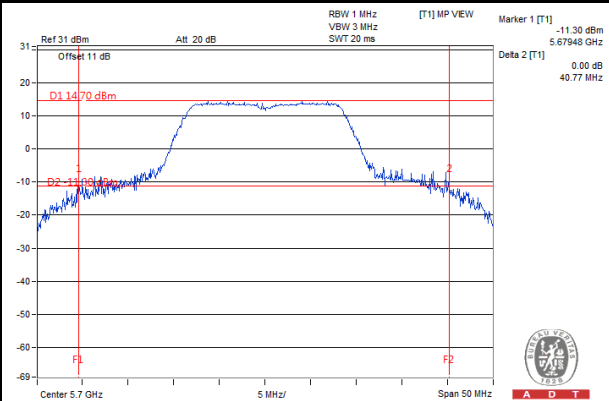
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	63.71	PASS
62	5310	59.57	PASS
102	5510	59.04	PASS
110	5550	55.25	PASS
134	5670	72.02	PASS

SPECTRUM PLOT OF WORST VALUE

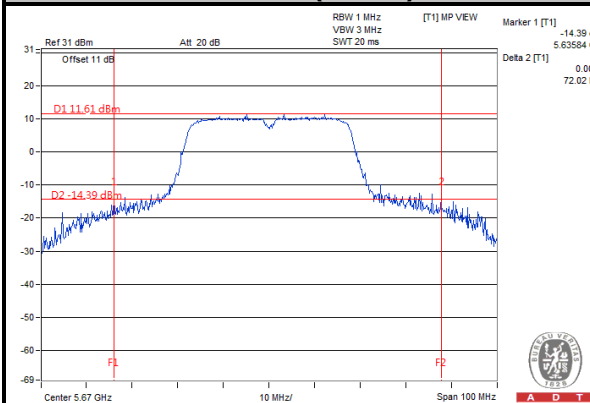
802.11a



802.11n (20MHz)



802.11n (40MHz)

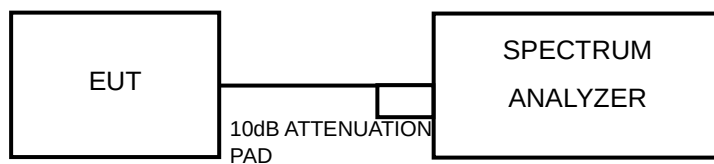


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√	---	11dBm/ MHz
U-NII-2C	√	---	11dBm/ MHz
U-NII-3	√	---	30dBm/ 500KHz

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value

Using method SA-1 alternative

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = 4 second.
- 5) Perform a single sweep.
- 6) Record the max value

For U-NII-3 band:

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 500 kHz, Set VBW $\geq$ 3 RBW, Detector = RMS
- 3) Sweep time = auto, trigger set to "free run".
- 4) Trace average at least 100 traces in power averaging mode.
- 5) Record the max value and add 10 log (1/duty cycle)

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

4.4.7 TEST RESULTS

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	3.54	11	PASS
44	5220	3.73	11	PASS
48	5240	3.76	11	PASS
52	5260	8.13	11	PASS
60	5300	8.23	11	PASS
64	5320	8.46	11	PASS
100	5500	6.79	11	PASS
116	5580	7.24	11	PASS
140	5700	5.42	11	PASS

802.11n (20MHz)

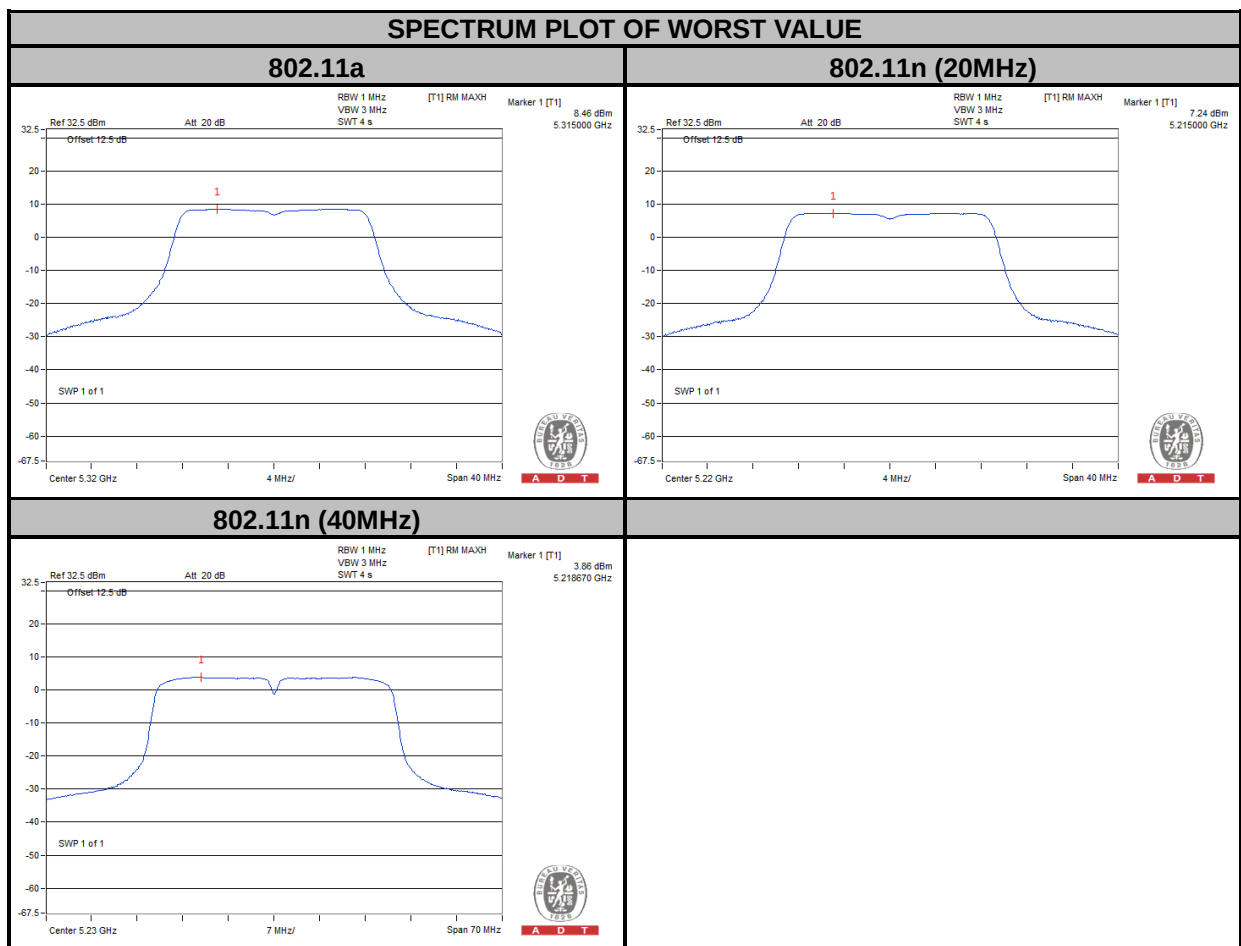
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	6.95	0.09	7.04	11	PASS
44	5220	7.24	0.09	7.33	11	PASS
48	5240	7.24	0.09	7.33	11	PASS
52	5260	7.13	0.09	7.22	11	PASS
60	5300	7.24	0.09	7.33	11	PASS
64	5320	7.23	0.09	7.32	11	PASS
100	5500	6.53	0.09	6.62	11	PASS
116	5580	6.16	0.09	6.25	11	PASS
140	5700	5.16	0.09	5.25	11	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	2.81	0.29	3.10	11	PASS
46	5230	3.86	0.29	4.15	11	PASS
54	5270	3.18	0.29	3.47	11	PASS
62	5310	2.03	0.29	2.32	11	PASS
102	5510	3.24	0.29	3.53	11	PASS
110	5550	3.42	0.29	3.71	11	PASS
134	5670	3.42	0.29	3.71	11	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.



For U-NII-3 Band

802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS/FAIL
149	5745	1.69	30	PASS
157	5785	1.42	30	PASS
165	5825	1.94	30	PASS

Note : Duty cycle of test signal is > 98 %, duty factor is not required

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	LIMIT (dBm/500kHz)	PASS/FAIL
149	5745	0.92	0.09	1.01	30	PASS
157	5785	0.64	0.09	0.73	30	PASS
165	5825	1.04	0.09	1.13	30	PASS

802.11n (40MHz)

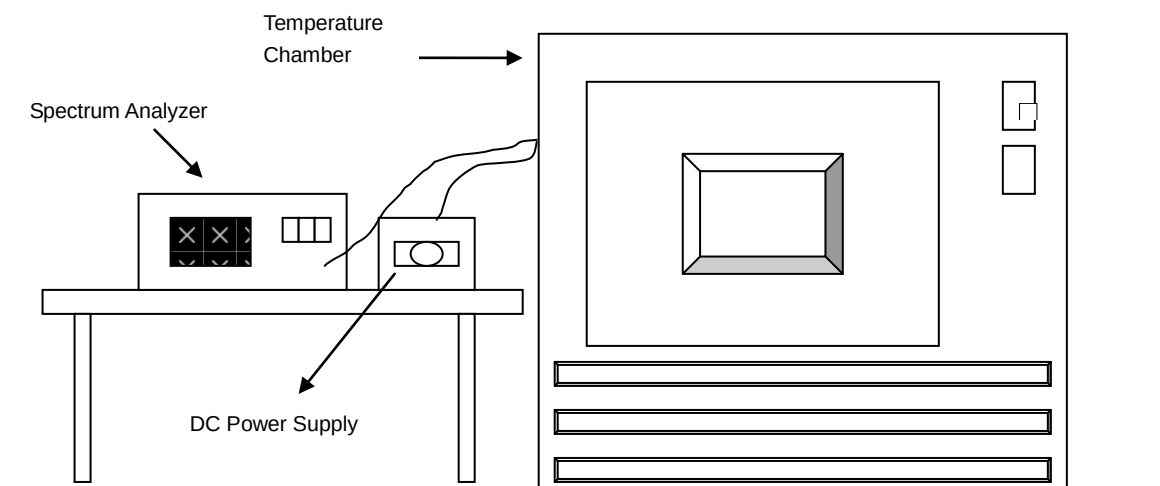
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	LIMIT (dBm/500kHz)	PASS/FAIL
151	5755	-2.48	0.29	-2.19	30	PASS
159	5795	-2.34	0.29	-2.05	30	PASS

4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- b. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
- c. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.

4.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
60	3.7	5320.035867	6.742	5320.036115	6.789	5320.036398	6.842	5320.036154	6.796
50	3.7	5320.036887	6.934	5320.036768	6.911	5320.036873	6.931	5320.036981	6.951
40	3.7	5320.037198	6.992	5320.037275	7.007	5320.037003	6.955	5320.036598	6.879
30	3.7	5320.038018	7.146	5320.037992	7.141	5320.038272	7.194	5320.037908	7.126
20	3.7	5320.038955	7.322	5320.039172	7.363	5320.039458	7.417	5320.038741	7.282
10	3.7	5320.040270	7.570	5320.040447	7.603	5320.040849	7.678	5320.040437	7.601
0	3.7	5320.039102	7.350	5320.038897	7.311	5320.039179	7.364	5320.039093	7.348
-10	3.7	5320.037649	7.077	5320.037849	7.114	5320.037418	7.033	5320.037329	7.017
-20	3.7	5320.036733	6.905	5320.037342	7.019	5320.037158	6.985	5320.037075	6.969
-30	3.7	5320.036222	6.809	5320.036109	6.787	5320.035623	6.696	5320.035991	6.765

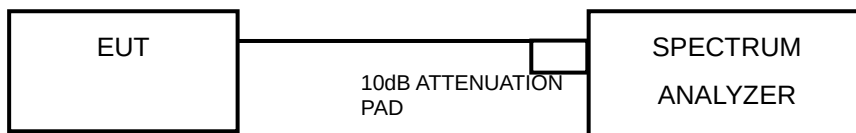
FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	3.4	5320.038512	7.239	5320.038604	7.256	5320.038501	7.237	5320.038917	7.315
	3.7	5320.038955	7.322	5320.039172	7.363	5320.039458	7.417	5320.038741	7.282
	4.2	5320.040665	7.644	5320.040308	7.577	5320.040775	7.664	5320.040364	7.587

4.6 6dB BANDWIDTH MEASUREMENT

4.6.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.6.4 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.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITIONS

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

4.6.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.39	0.5	PASS
157	5785	16.40	0.5	PASS
165	5825	16.40	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	17.62	0.5	PASS
157	5785	17.62	0.5	PASS
165	5825	17.63	0.5	PASS

802.11n (40MHz)

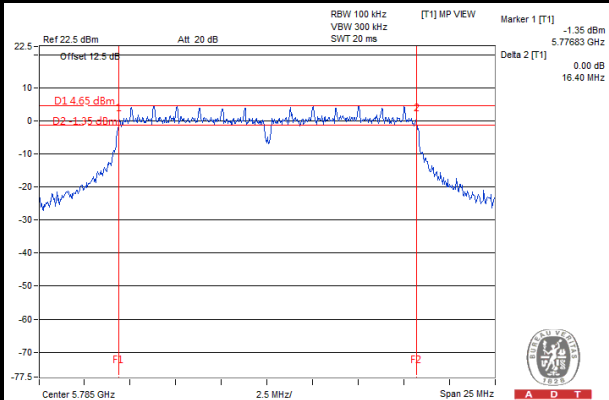
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
151	5755	35.39	0.5	PASS
159	5795	35.29	0.5	PASS



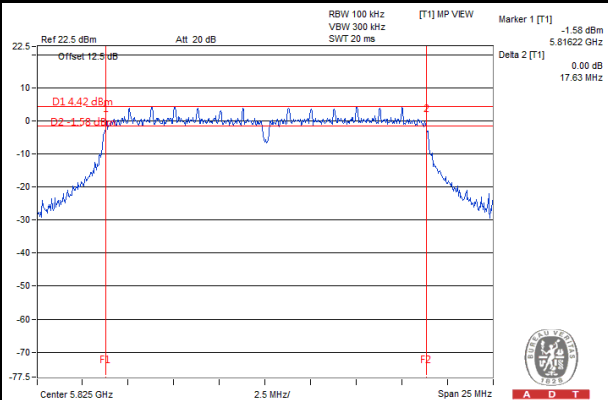
A D T

SPECTRUM PLOT OF WORST VALUE

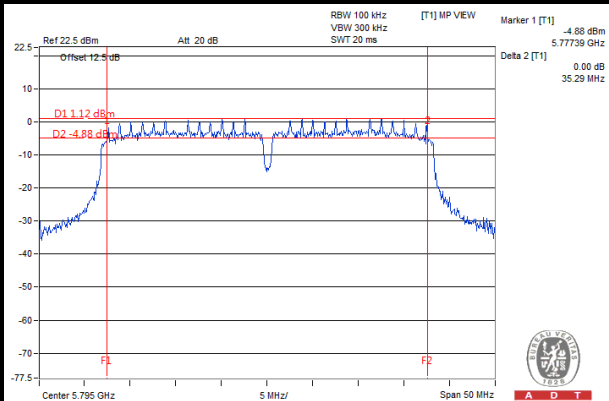
802.11a



802.11n (20MHz)



802.11n (40MHz)





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5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. 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:

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Web Site: www.bureauveritas-adt.com

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



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7. 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---