

FCC TEST REPORT (15.407)

REPORT NO.: RF140410C13-4
MODEL NO.: N450
FCC ID: P4Q-N450
RECEIVED: Apr. 10, 2014
TESTED: May 06, 2014 ~ May 10, 2014
ISSUED: May 19, 2014

APPLICANT: MITAC International Corp

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

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

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140410C13-4	Original release	May 19, 2014

1. CERTIFICATION

PRODUCT: Tablet
MODEL NO.: N450
BRAND: Mio, Mitac
APPLICANT: MITAC International Corp
TESTED: May 06, 2014 ~ May 10, 2014
TEST SAMPLE: Production Unit
STANDARDS: FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10-2009

The above equipment (model: N450) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Ivonne Wu , **DATE** : May 19, 2014
Ivonne Wu / Supervisor

APPROVED BY : Sam Chen , **DATE** : May 19, 2014
Sam Chen / Senior Project Engineer

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART 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 -2.27dB at 0.66563MHz.
15.407(b/1/2/3)(b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.49dB at 5350.00MHz.
15.407(a/1/2)	Peak 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)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
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	Tablet
MODEL NO.	N450
POWER SUPPLY	12Vdc (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
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)
OUTPUT POWER	29.31mW for 5180 ~ 5240MHz 40.74mW for 5260 ~ 5320MHz 34.59mW for 5500 ~ 5700MHz
ANTENNA TYPE	PIFA antenna with 2.74dBi gain (5180 ~ 5240MHz) PIFA antenna with 1.58dBi gain (5260 ~ 5320MHz) PIFA antenna with 2.64dBi gain (5500 ~ 5700MHz)
ANTENNA CONNECTOR	NA
DATA CABLE	Refer to Note as below
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

1. The EUT contains following accessory devices.

ITEM	BRAND	MODEL	SPECIFICATION
Adapter 1	SINO-AMERICAN	SA142B-12U	I/P: 110-240Vac, 1.2A O/P: 12Vdc, 3A
Adapter 2	SINPRO	HPU63A-105	I/P: 100-240Vac, 1.62-0.72A O/P: 12Vdc, 5.25A
Battery 1	GETAC	BP-TKS-12/3360 SN	3.7Vdc, 6720mAh
Battery 2	Tian Yu	Bk-N450X-510KNX-01	3.7Vdc, 510mAh
USB Cable	EMINENCE	JU-57405040525	0.9m cable
BCR-1 (1D)	Opticon	MDL2001	--
BCR-2 (2D)	HoneyWell	5680	--
BCR-3 (2D)	Code	CR8012	--
CPU	TI	44705GPCBS	1.5G Hz
eMMC	N/A	N/A	16GB
LCD Panel	N/A	N/A	10.1 inch
Front Camera	Liteon	10P2SF130	--
Rear Camera	Liteon	10P2SA511	--
WWAN Module	Ublox	LISA-U200	--
WLAN,BT Module	Jorjin	WG7833-B0& WX7833-B0	--

2. The above EUT information is declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

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		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

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

RE $<$ 1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane** for 5180-5240MHz & 5260-5320MHz and **X-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
	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
B, C, D	802.11n (40MHz)	5180-5240	38 to 46	38	OFDM	BPSK	MCS0
	802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	MCS0
	802.11n (20MHz)	5500-5700	100 to 140	140	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 ~ H	802.11n (40MHz)	5180-5240	38 to 46	38	OFDM	BPSK	MCS0
	802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	MCS0
	802.11n (20MHz)	5500-5700	100 to 140	140	OFDM	BPSK	MCS0

POWER LINE CONDUCTED EMISSION TEST:

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A ~ H	802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	MCS0

BANDEDGE MEASUREMENT:

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

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

Test CONDITION:

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

3.3 DESCRIPTION OF SUPPORT UNITS

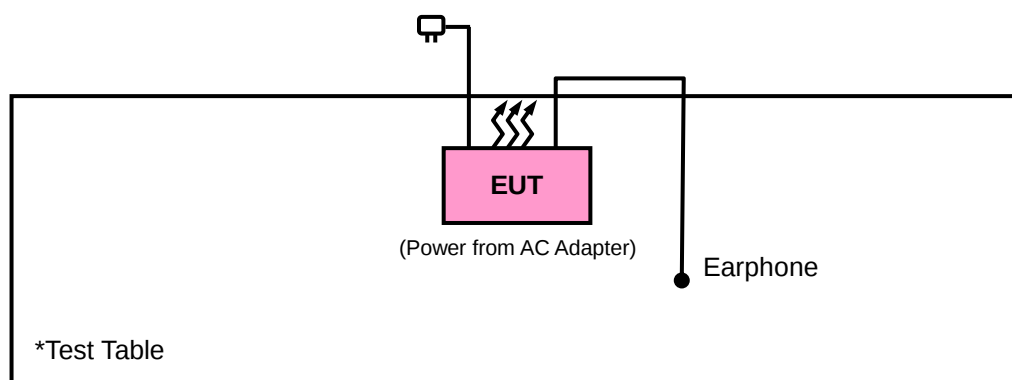
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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

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

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

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



3.4 DUTY CYCLE TEST SIGNAL

MODULATION TYPE: BPSK

If duty cycle is < 98%, duty factor shall be considered.

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

802.11n (20MHz): Duty cycle = $1.330/1.586 = 0.838$, Duty factor = $10 * \log(1/0.838) = 0.77$

802.11n (40MHz): Duty cycle = $625.00/921.47 = 0.678$, Duty factor = $10 * \log(1/0.678) = 1.69$



MODULATION TYPE: QPSK

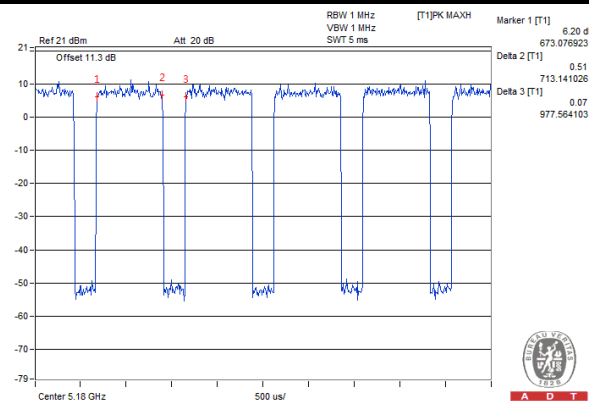
If duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $713.14/977.56 = 0.729$, Duty factor = $10 * \log(1/0.729) = 1.37$

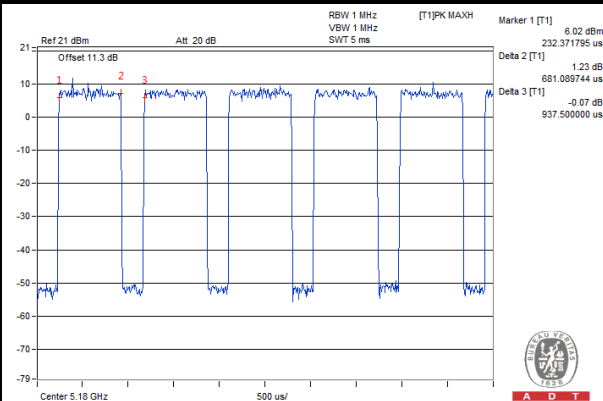
802.11n (20MHz): Duty cycle = $681.09/937.50 = 0.726$, Duty factor = $10 * \log(1/0.726) = 1.39$

802.11n (40MHz): Duty cycle = $312.50/600.96 = 0.520$, Duty factor = $10 * \log(1/0.520) = 2.84$

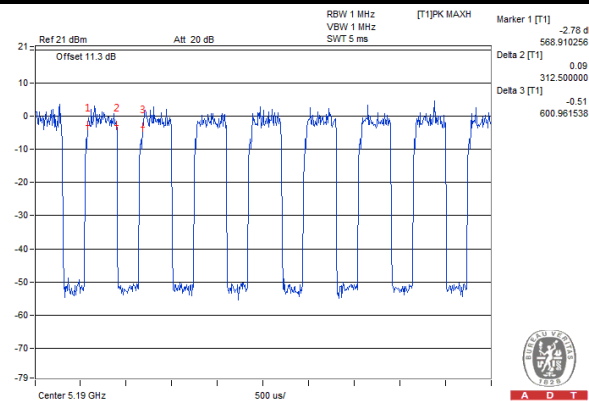
802.11a



802.11n (20MHz)



802.11n (40MHz)



MODULATION TYPE: 16QAM

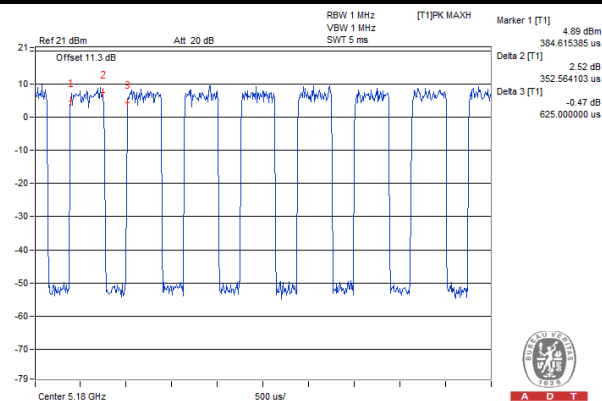
If duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $352.56/625.00 = 0.564$, Duty factor = $10 * \log(1/0.564) = 2.49$

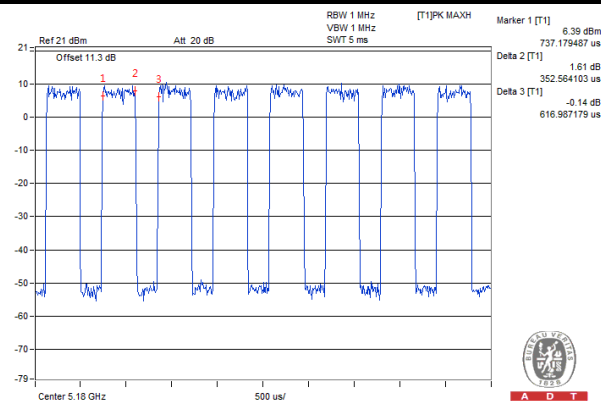
802.11n (20MHz): Duty cycle = $352.56/616.99 = 0.571$, Duty factor = $10 * \log(1/0.571) = 2.43$

802.11n (40MHz): Duty cycle = $158.65/447.11 = 0.355$, Duty factor = $10 * \log(1/0.355) = 4.50$

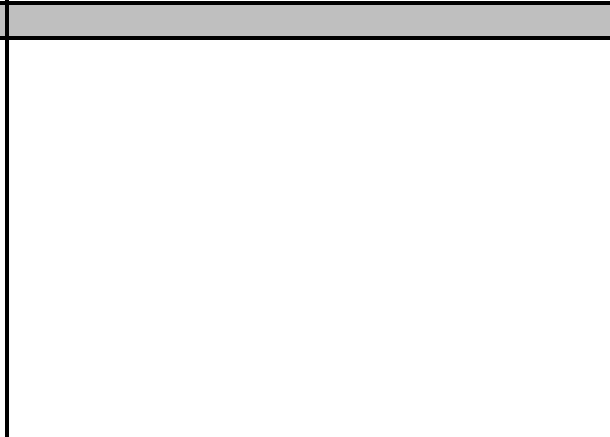
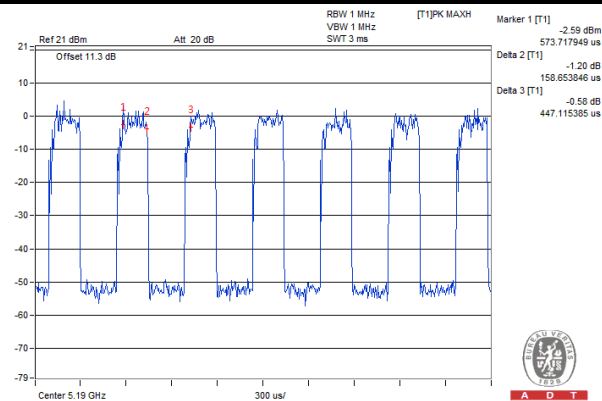
802.11a



802.11n (20MHz)



802.11n (40MHz)



MODULATION TYPE: 64QAM

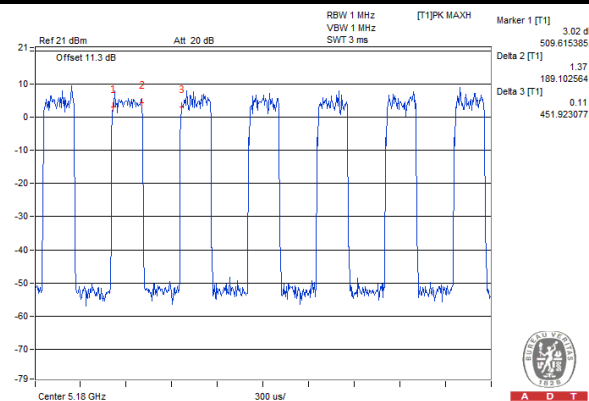
If duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $189.10/451.92 = 0.418$, Duty factor = $10 * \log(1/0.418) = 3.78$

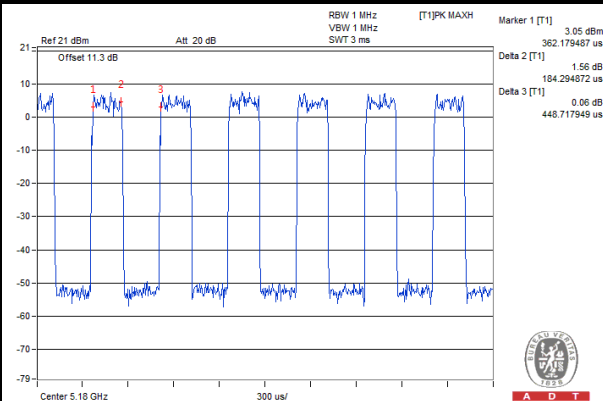
802.11n (20MHz): Duty cycle = $184.29/448.72 = 0.411$, Duty factor = $10 * \log(1/0.411) = 3.86$

802.11n (40MHz): Duty cycle = $75.32/366.99 = 0.205$, Duty factor = $10 * \log(1/0.205) = 6.88$

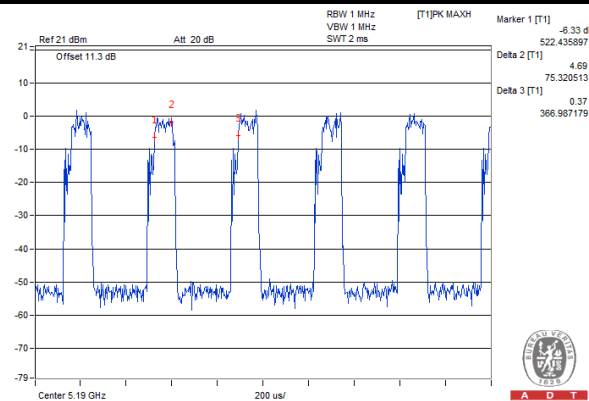
802.11a



802.11n (20MHz)



802.11n (40MHz)



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)

KDB 789033 D01 General UNII Test Procedures v01r03

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS

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	
	FIELD STRENGTH AT 3m (dBμV/m)	
	PK	AV
	74	54
√	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)
	PK	PK
	-27	68.3

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

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

4.1.3 TEST INSTRUMENTS

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

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in HwaYa Chamber 10.
4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
5. The FCC Site Registration No. is 690701.
6. The IC Site Registration No. is IC 7450F-10.

4.1.4 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:

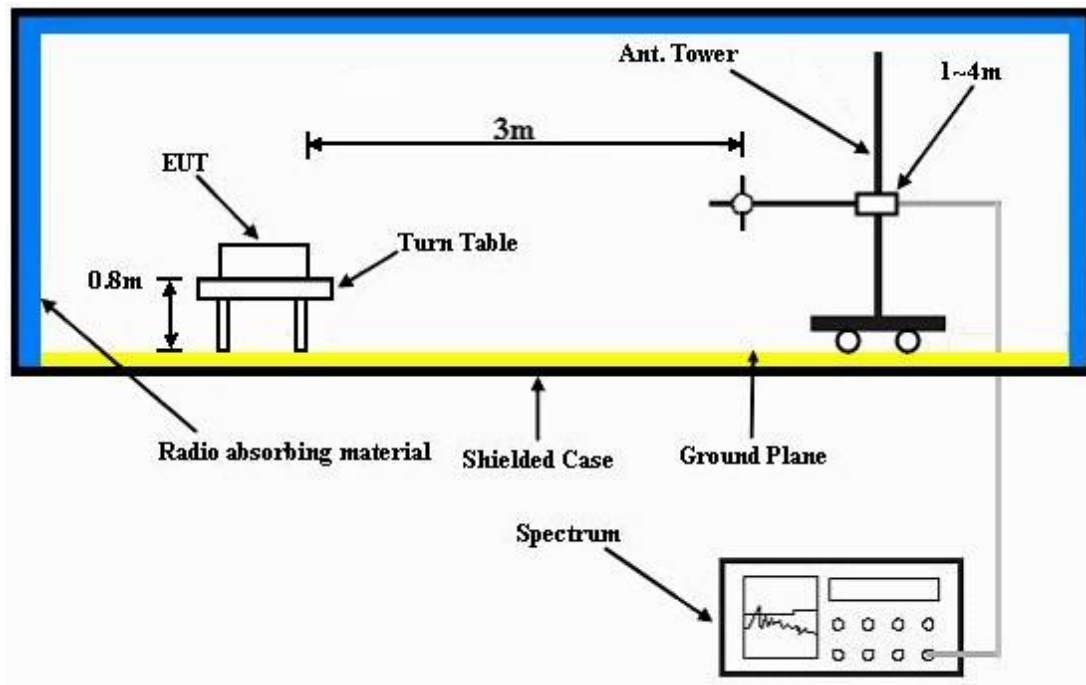
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency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

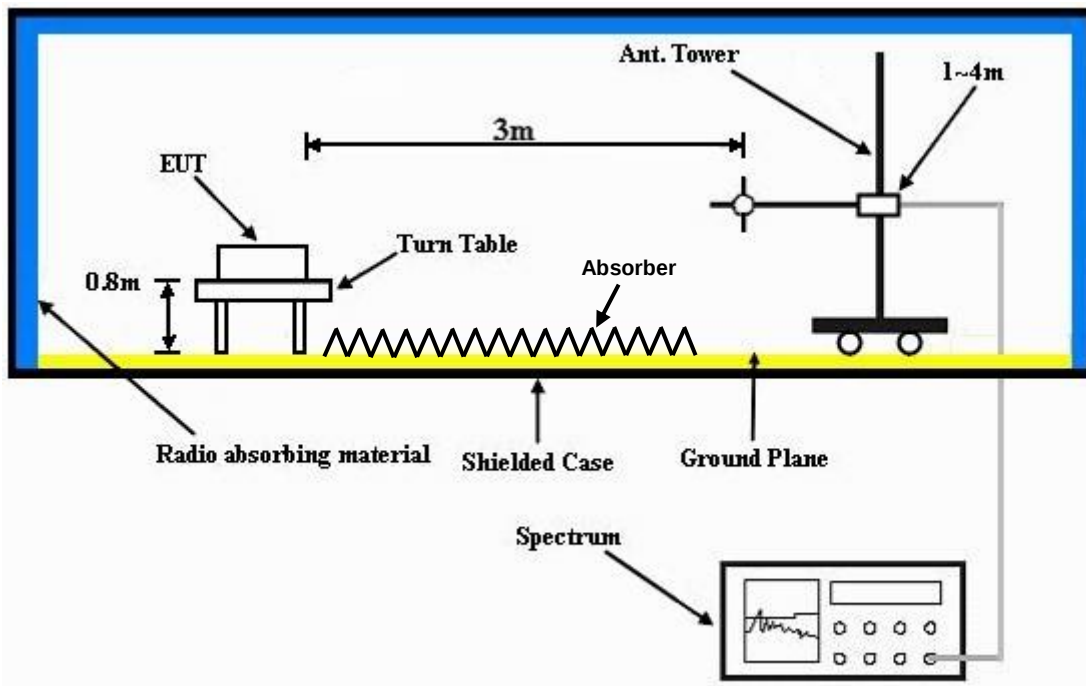
No deviation.

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	44.82	45.53	54	-9.18	31.32	5.29	37.32	104	183	Average
5150	61.44	62.15	74	-12.56	31.32	5.29	37.32	104	183	Peak
5180	94.37	95.05			31.35	5.31	37.34	104	183	Average
5180	102.78	103.46			31.35	5.31	37.34	104	183	Peak
5418	37.62	37.85	54	-16.38	31.53	5.42	37.18	104	183	Average
5418	58.66	58.89	74	-15.34	31.53	5.42	37.18	104	183	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	47.94	48.65	54	-6.06	31.32	5.29	37.32	100	18	Average
5150	65.8	66.51	74	-8.2	31.32	5.29	37.32	100	18	Peak
5180	97.44	98.12			31.35	5.31	37.34	100	18	Average
5180	106.35	107.03			31.35	5.31	37.34	100	18	Peak
5440	37.49	37.63	54	-16.51	31.55	5.44	37.13	100	18	Average
5440	59.95	60.09	74	-14.05	31.55	5.44	37.13	100	18	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5044	37.63	38.39	54	-16.37	31.24	5.25	37.25	102	197	Average
5044	58.82	59.58	74	-15.18	31.24	5.25	37.25	102	197	Peak
5220	93.98	94.64			31.37	5.33	37.36	102	197	Average
5220	102.99	103.65			31.37	5.33	37.36	102	197	Peak
5364	37.66	37.95	54	-16.34	31.49	5.4	37.18	102	197	Average
5364	60.53	60.82	74	-13.47	31.49	5.4	37.18	102	197	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	39.86	40.59	54	-14.14	31.29	5.28	37.3	100	19	Average
5120	59.01	59.74	74	-14.99	31.29	5.28	37.3	100	19	Peak
5220	97.83	98.49			31.37	5.33	37.36	100	19	Average
5220	106.77	107.43			31.37	5.33	37.36	100	19	Peak
5372	37.55	37.84	54	-16.45	31.49	5.4	37.18	100	19	Average
5372	58.87	59.16	74	-15.13	31.49	5.4	37.18	100	19	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5034	37.91	38.68	54	-16.09	31.23	5.24	37.24	120	186	Average
5034	58.22	58.99	74	-15.78	31.23	5.24	37.24	120	186	Peak
5240	94.25	94.84			31.39	5.34	37.32	120	186	Average
5240	103.68	104.27			31.39	5.34	37.32	120	186	Peak
5360	37.58	37.89	54	-16.42	31.48	5.39	37.18	120	186	Average
5360	60.16	60.47	74	-13.84	31.48	5.39	37.18	120	186	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
5006	39.44	40.24	54	-14.56	31.21	5.22	37.23	109	19	Average
5006	58.87	59.67	74	-15.13	31.21	5.22	37.23	109	19	Peak
5240	97.61	98.2			31.39	5.34	37.32	109	19	Average
5240	107.07	107.66			31.39	5.34	37.32	109	19	Peak
5400	37.6	37.85	54	-16.4	31.52	5.41	37.18	109	19	Average
5400	59.61	59.86	74	-14.39	31.52	5.41	37.18	109	19	Peak

REMARKS:

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



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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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	37.74	38.45	54	-16.26	31.32	5.29	37.32	122	187	Average
5148	58.15	58.86	74	-15.85	31.32	5.29	37.32	122	187	Peak
5260	93.7	94.22			31.41	5.34	37.27	122	187	Average
5260	102.52	103.04			31.41	5.34	37.27	122	187	Peak
5362	37.99	38.29	54	-16.01	31.49	5.39	37.18	122	187	Average
5362	59.01	59.31	74	-14.99	31.49	5.39	37.18	122	187	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	38.51	39.24	54	-15.49	31.29	5.28	37.3	118	25	Average
5120	59.16	59.89	74	-14.84	31.29	5.28	37.3	118	25	Peak
5260	98.49	99.01			31.41	5.34	37.27	118	25	Average
5260	107.24	107.76			31.41	5.34	37.27	118	25	Peak
5380	38.8	39.07	54	-15.2	31.51	5.4	37.18	118	25	Average
5380	59.19	59.46	74	-14.81	31.51	5.4	37.18	118	25	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5042	36.99	37.75	54	-17.01	31.24	5.25	37.25	130	186	Average
5042	58.8	59.56	74	-15.2	31.24	5.25	37.25	130	186	Peak
5300	93.95	94.33			31.44	5.37	37.19	130	186	Average
5300	103.11	103.49			31.44	5.37	37.19	130	186	Peak
5460	37.98	38.06	54	-16.02	31.56	5.44	37.08	130	186	Average
5460	59.43	59.51	74	-14.57	31.56	5.44	37.08	130	186	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	37.02	37.74	54	-16.98	31.28	5.27	37.27	118	25	Average
5090	58.42	59.14	74	-15.58	31.28	5.27	37.27	118	25	Peak
5300	98.04	98.42			31.44	5.37	37.19	118	25	Average
5300	107.42	107.8			31.44	5.37	37.19	118	25	Peak
5350	38.94	39.25	54	-15.06	31.48	5.39	37.18	118	25	Average
5350	60.07	60.38	74	-13.93	31.48	5.39	37.18	118	25	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5086	36.81	37.55	54	-17.19	31.27	5.26	37.27	130	186	Average
5086	58.39	59.13	74	-15.61	31.27	5.26	37.27	130	186	Peak
5320	93.65	94.01			31.45	5.38	37.19	130	186	Average
5320	103.09	103.45			31.45	5.38	37.19	130	186	Peak
5350	40.95	41.26	54	-13.05	31.48	5.39	37.18	130	186	Average
5350	59.75	60.06	74	-14.25	31.48	5.39	37.18	130	186	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	36.77	37.48	54	-17.23	31.31	5.28	37.3	107	32	Average
5126	59.16	59.87	74	-14.84	31.31	5.28	37.3	107	32	Peak
5320	97.88	98.24			31.45	5.38	37.19	107	32	Average
5320	106.56	106.92			31.45	5.38	37.19	107	32	Peak
5350	45.54	45.85	54	-8.46	31.48	5.39	37.18	107	32	Average
5350	63.22	63.53	74	-10.78	31.48	5.39	37.18	107	32	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5374	39.47	39.76	54	-14.53	31.49	5.4	37.18	132	350	Average
5374	59.17	59.46	74	-14.83	31.49	5.4	37.18	132	350	Peak
5470	59.73	59.79	68.3	-8.57	31.57	5.45	37.08	132	350	Peak
5500	87.04	87.01			31.6	5.46	37.03	132	350	Average
5500	96.36	96.33			31.6	5.46	37.03	132	350	Peak
5725	57.26	57.14	68.3	-11.04	31.96	5.59	37.43	132	350	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
5458	45.83	45.91	54	-8.17	31.56	5.44	37.08	112	125	Average
5458	61.73	61.81	74	-12.27	31.56	5.44	37.08	112	125	Peak
5470	64.65	64.71	68.3	-3.65	31.57	5.45	37.08	112	125	Peak
5500	93.87	93.84			31.6	5.46	37.03	112	125	Average
5500	102.83	102.8			31.6	5.46	37.03	112	125	Peak
5725	58.39	58.27	68.3	-9.91	31.96	5.59	37.43	112	125	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



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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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5404	37.66	37.91	54	-16.34	31.52	5.41	37.18	131	353	Average
5404	59.39	59.64	74	-14.61	31.52	5.41	37.18	131	353	Peak
5470	58.18	58.24	68.3	-10.12	31.57	5.45	37.08	131	353	Peak
5580	88.38	88.33			31.71	5.5	37.16	131	353	Average
5580	97.61	97.56			31.71	5.5	37.16	131	353	Peak
5725	58.32	58.2	68.3	-9.98	31.96	5.59	37.43	131	353	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
5446	37.58	37.71	54	-16.42	31.56	5.44	37.13	141	124	Average
5446	59.19	59.32	74	-14.81	31.56	5.44	37.13	141	124	Peak
5470	57.27	57.33	68.3	-11.03	31.57	5.45	37.08	141	124	Peak
5580	94.53	94.48			31.71	5.5	37.16	141	124	Average
5580	103.61	103.56			31.71	5.5	37.16	141	124	Peak
5725	58.16	58.04	68.3	-10.14	31.96	5.59	37.43	141	124	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5456	37.56	37.64	54	-16.44	31.56	5.44	37.08	128	352	Average
5456	59.22	59.3	74	-14.78	31.56	5.44	37.08	128	352	Peak
5470	59.21	59.27	68.3	-9.09	31.57	5.45	37.08	128	352	Peak
5700	87.63	87.56			31.9	5.57	37.4	128	352	Average
5700	97.17	97.1			31.9	5.57	37.4	128	352	Peak
5725	63.96	63.84	68.3	-4.34	31.96	5.59	37.43	128	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
5376	37.62	37.91	54	-16.38	31.49	5.4	37.18	147	112	Average
5376	59.34	59.63	74	-14.66	31.49	5.4	37.18	147	112	Peak
5470	57.86	57.92	68.3	-10.44	31.57	5.45	37.08	147	112	Peak
5700	93.47	93.4			31.9	5.57	37.4	147	112	Average
5700	102.95	102.88			31.9	5.57	37.4	147	112	Peak
5725	65.11	64.99	68.3	-3.19	31.96	5.59	37.43	147	112	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

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	45.59	46.3	54	-8.41	31.32	5.29	37.32	120	188	Average
5150	63.92	64.63	74	-10.08	31.32	5.29	37.32	120	188	Peak
5180	93.86	94.54			31.35	5.31	37.34	120	188	Average
5180	103.06	103.74			31.35	5.31	37.34	120	188	Peak
5354	37.6	37.91	54	-16.4	31.48	5.39	37.18	120	188	Average
5354	58.77	59.08	74	-15.23	31.48	5.39	37.18	120	188	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.1	49.81	54	-4.9	31.32	5.29	37.32	100	20	Average
5150	65.78	66.49	74	-8.22	31.32	5.29	37.32	100	20	Peak
5180	97.89	98.57			31.35	5.31	37.34	100	20	Average
5180	106.77	107.45			31.35	5.31	37.34	100	20	Peak
5352	37.57	37.88	54	-16.43	31.48	5.39	37.18	100	20	Average
5352	59.21	59.52	74	-14.79	31.48	5.39	37.18	100	20	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5114	37.92	38.63	54	-16.08	31.29	5.28	37.28	109	191	Average
5114	58.18	58.89	74	-15.82	31.29	5.28	37.28	109	191	Peak
5220	94.06	94.72			31.37	5.33	37.36	109	191	Average
5220	102.71	103.37			31.37	5.33	37.36	109	191	Peak
5410	37.66	37.91	54	-16.34	31.52	5.41	37.18	109	191	Average
5410	59.25	59.5	74	-14.75	31.52	5.41	37.18	109	191	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
5138	39.87	40.57	54	-14.13	31.31	5.29	37.3	110	19	Average
5138	59.21	59.91	74	-14.79	31.31	5.29	37.3	110	19	Peak
5220	97.88	98.54			31.37	5.33	37.36	110	19	Average
5220	107.05	107.71			31.37	5.33	37.36	110	19	Peak
5396	37.57	37.82	54	-16.43	31.52	5.41	37.18	110	19	Average
5396	58.83	59.08	74	-15.17	31.52	5.41	37.18	110	19	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5104	38.04	38.77	54	-15.96	31.28	5.27	37.28	120	187	Average
5104	59.18	59.91	74	-14.82	31.28	5.27	37.28	120	187	Peak
5240	94.39	94.98			31.39	5.34	37.32	120	187	Average
5240	103.44	104.03			31.39	5.34	37.32	120	187	Peak
5444	37.66	37.8	54	-16.34	31.55	5.44	37.13	120	187	Average
5444	59.38	59.52	74	-14.62	31.55	5.44	37.13	120	187	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
5084	39.31	40.05	54	-14.69	31.27	5.26	37.27	108	18	Average
5084	58.48	59.22	74	-15.52	31.27	5.26	37.27	108	18	Peak
5240	97.76	98.35			31.39	5.34	37.32	108	18	Average
5240	106.94	107.53			31.39	5.34	37.32	108	18	Peak
5446	37.63	37.76	54	-16.37	31.56	5.44	37.13	108	18	Average
5446	59.13	59.26	74	-14.87	31.56	5.44	37.13	108	18	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5094	37.68	38.41	54	-16.32	31.28	5.27	37.28	123	187	Average
5094	58.77	59.5	74	-15.23	31.28	5.27	37.28	123	187	Peak
5260	93.64	94.16			31.41	5.34	37.27	123	187	Average
5260	102.48	103			31.41	5.34	37.27	123	187	Peak
5384	38.15	38.42	54	-15.85	31.51	5.4	37.18	123	187	Average
5384	59.4	59.67	74	-14.6	31.51	5.4	37.18	123	187	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
5144	39.15	39.86	54	-14.85	31.32	5.29	37.32	119	25	Average
5144	58.83	59.54	74	-15.17	31.32	5.29	37.32	119	25	Peak
5260	98.61	99.13			31.41	5.34	37.27	119	25	Average
5260	107.83	108.35			31.41	5.34	37.27	119	25	Peak
5450	38.43	38.51	54	-15.57	31.56	5.44	37.08	119	25	Average
5450	59.63	59.71	74	-14.37	31.56	5.44	37.08	119	25	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5072	37.16	37.9	54	-16.84	31.27	5.26	37.27	128	186	Average
5072	58.33	59.07	74	-15.67	31.27	5.26	37.27	128	186	Peak
5300	93.94	94.32			31.44	5.37	37.19	128	186	Average
5300	102.96	103.34			31.44	5.37	37.19	128	186	Peak
5376	38.14	38.43	54	-15.86	31.49	5.4	37.18	128	186	Average
5376	59.22	59.51	74	-14.78	31.49	5.4	37.18	128	186	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
5062	36.91	37.66	54	-17.09	31.25	5.25	37.25	128	37	Average
5062	59.13	59.88	74	-14.87	31.25	5.25	37.25	128	37	Peak
5300	98.09	98.47			31.44	5.37	37.19	128	37	Average
5300	107.28	107.66			31.44	5.37	37.19	128	37	Peak
5382	39.63	39.9	54	-14.37	31.51	5.4	37.18	128	37	Average
5382	59.12	59.39	74	-14.88	31.51	5.4	37.18	128	37	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5036	36.75	37.52	54	-17.25	31.23	5.24	37.24	118	188	Average
5036	58.31	59.08	74	-15.69	31.23	5.24	37.24	118	188	Peak
5320	93.7	94.06			31.45	5.38	37.19	118	188	Average
5320	103	103.36			31.45	5.38	37.19	118	188	Peak
5350	42.37	42.68	54	-11.63	31.48	5.39	37.18	118	188	Average
5350	59.63	59.94	74	-14.37	31.48	5.39	37.18	118	188	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5032	36.74	37.51	54	-17.26	31.23	5.24	37.24	128	29	Average
5032	58.68	59.45	74	-15.32	31.23	5.24	37.24	128	29	Peak
5320	98.19	98.55			31.45	5.38	37.19	128	29	Average
5320	107.25	107.61			31.45	5.38	37.19	128	29	Peak
5350	46.07	46.38	54	-7.93	31.48	5.39	37.18	128	29	Average
5350	67.85	68.16	74	-6.15	31.48	5.39	37.18	128	29	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.8	40.88	54	-13.2	31.56	5.44	37.08	107	359	Average
5460	58.86	58.94	74	-15.14	31.56	5.44	37.08	107	359	Peak
5470	62.47	62.53	68.3	-5.83	31.57	5.45	37.08	107	359	Peak
5500	85.87	85.84			31.6	5.46	37.03	107	359	Average
5500	95.29	95.26			31.6	5.46	37.03	107	359	Peak
5725	59.91	59.79	68.3	-8.39	31.96	5.59	37.43	107	359	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	46.49	46.57	54	-7.51	31.56	5.44	37.08	143	123	Average
5460	60.85	60.93	74	-13.15	31.56	5.44	37.08	143	123	Peak
5470	64.76	64.82	68.3	-3.54	31.57	5.45	37.08	143	123	Peak
5500	93.71	93.68			31.6	5.46	37.03	143	123	Average
5500	103.17	103.14			31.6	5.46	37.03	143	123	Peak
5725	57.79	57.67	68.3	-10.51	31.96	5.59	37.43	143	123	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5362	37.36	37.66	54	-16.64	31.49	5.39	37.18	116	353	Average
5362	59.07	59.37	74	-14.93	31.49	5.39	37.18	116	353	Peak
5470	58	58.06	68.3	-10.3	31.57	5.45	37.08	116	353	Peak
5580	88.19	88.14			31.71	5.5	37.16	116	353	Average
5580	97.63	97.58			31.71	5.5	37.16	116	353	Peak
5725	56.74	56.62	68.3	-11.56	31.96	5.59	37.43	116	353	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
5352	37.39	37.7	54	-16.61	31.48	5.39	37.18	140	124	Average
5352	59.42	59.73	74	-14.58	31.48	5.39	37.18	140	124	Peak
5470	57.29	57.35	68.3	-11.01	31.57	5.45	37.08	140	124	Peak
5580	93.85	93.8			31.71	5.5	37.16	140	124	Average
5580	103.27	103.22			31.71	5.5	37.16	140	124	Peak
5725	59.81	59.69	68.3	-8.49	31.96	5.59	37.43	140	124	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	37.79	37.87	54	-16.21	31.56	5.44	37.08	101	353	Average
5460	57.47	57.55	74	-16.53	31.56	5.44	37.08	101	353	Peak
5470	58.58	58.64	68.3	-9.72	31.57	5.45	37.08	101	353	Peak
5700	85.65	85.58			31.9	5.57	37.4	101	353	Average
5700	95.12	95.05			31.9	5.57	37.4	101	353	Peak
5725	61.95	61.83	68.3	-6.35	31.96	5.59	37.43	101	353	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	37.73	37.81	54	-16.27	31.56	5.44	37.08	144	110	Average
5460	57.69	57.77	74	-16.31	31.56	5.44	37.08	144	110	Peak
5470	57.17	57.23	68.3	-11.13	31.57	5.45	37.08	144	110	Peak
5700	93.29	93.22			31.9	5.57	37.4	144	110	Average
5700	102.3	102.23			31.9	5.57	37.4	144	110	Peak
5725	65.77	65.65	68.3	-2.53	31.96	5.59	37.43	144	110	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

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.99	50.7	54	-4.01	31.32	5.29	37.32	104	183	Average
5150	64.96	65.67	74	-9.04	31.32	5.29	37.32	104	183	Peak
5190	89.05	89.72			31.35	5.32	37.34	104	183	Average
5190	99.24	99.91			31.35	5.32	37.34	104	183	Peak
5418	38.1	38.33	54	-15.9	31.53	5.42	37.18	104	183	Average
5418	59.61	59.84	74	-14.39	31.53	5.42	37.18	104	183	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	51.99	52.7	54	-2.01	31.32	5.29	37.32	110	23	Average
5150	70.09	70.8	74	-3.91	31.32	5.29	37.32	110	23	Peak
5190	92.24	92.91			31.35	5.32	37.34	110	23	Average
5190	102.22	102.89			31.35	5.32	37.34	110	23	Peak
5420	38.03	38.26	54	-15.97	31.53	5.42	37.18	110	23	Average
5420	60.16	60.39	74	-13.84	31.53	5.42	37.18	110	23	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5080	39.94	40.68	54	-14.06	31.27	5.26	37.27	122	189	Average
5080	58.64	59.38	74	-15.36	31.27	5.26	37.27	122	189	Peak
5230	90.41	91.01			31.39	5.33	37.32	122	189	Average
5230	99.55	100.15			31.39	5.33	37.32	122	189	Peak
5374	37.92	38.21	54	-16.08	31.49	5.4	37.18	122	189	Average
5374	59.12	59.41	74	-14.88	31.49	5.4	37.18	122	189	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	42.17	42.88	54	-11.83	31.32	5.29	37.32	109	16	Average
5148	63.45	64.16	74	-10.55	31.32	5.29	37.32	109	16	Peak
5230	93.43	94.03			31.39	5.33	37.32	109	16	Average
5230	103.08	103.68			31.39	5.33	37.32	109	16	Peak
5372	37.89	38.18	54	-16.11	31.49	5.4	37.18	109	16	Average
5372	58.99	59.28	74	-15.01	31.49	5.4	37.18	109	16	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5038	37.32	38.07	54	-16.68	31.24	5.25	37.24	131	187	Average
5038	59.15	59.9	74	-14.85	31.24	5.25	37.24	131	187	Peak
5270	89.86	90.37			31.41	5.35	37.27	131	187	Average
5270	99.28	99.79			31.41	5.35	37.27	131	187	Peak
5416	38.48	38.71	54	-15.52	31.53	5.42	37.18	131	187	Average
5416	60.15	60.38	74	-13.85	31.53	5.42	37.18	131	187	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
5130	37.17	37.88	54	-16.83	31.31	5.28	37.3	108	31	Average
5130	58.91	59.62	74	-15.09	31.31	5.28	37.3	108	31	Peak
5270	94.01	94.52			31.41	5.35	37.27	108	31	Average
5270	103.08	103.59			31.41	5.35	37.27	108	31	Peak
5360	40.06	40.37	54	-13.94	31.48	5.39	37.18	108	31	Average
5360	59.74	60.05	74	-14.26	31.48	5.39	37.18	108	31	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5012	37.71	38.51	54	-16.29	31.21	5.22	37.23	101	184	Average
5012	59.64	60.44	74	-14.36	31.21	5.22	37.23	101	184	Peak
5310	89.22	89.59			31.45	5.37	37.19	101	184	Average
5310	98.34	98.71			31.45	5.37	37.19	101	184	Peak
5350	48.08	48.39	54	-5.92	31.48	5.39	37.18	101	184	Average
5350	70.05	70.36	74	-3.95	31.48	5.39	37.18	101	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
5066	37.74	38.48	54	-16.26	31.25	5.26	37.25	109	28	Average
5066	59.02	59.76	74	-14.98	31.25	5.26	37.25	109	28	Peak
5310	93.83	94.2			31.45	5.37	37.19	109	28	Average
5310	102.7	103.07			31.45	5.37	37.19	109	28	Peak
5350	52.51	52.82	54	-1.49	31.48	5.39	37.18	109	28	Average
5350	67.35	67.66	74	-6.65	31.48	5.39	37.18	109	28	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.56	40.64	54	-13.44	31.56	5.44	37.08	129	360	Average
5460	59.59	59.67	74	-14.41	31.56	5.44	37.08	129	360	Peak
5470	59.74	59.8	68.3	-8.56	31.57	5.45	37.08	129	360	Peak
5510	80.55	80.55			31.6	5.46	37.06	129	360	Average
5510	89.84	89.84			31.6	5.46	37.06	129	360	Peak
5725	59.85	59.73	68.3	-8.45	31.96	5.59	37.43	129	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	47.56	47.64	54	-6.44	31.56	5.44	37.08	142	122	Average
5460	65.05	65.13	74	-8.95	31.56	5.44	37.08	142	122	Peak
5470	65.23	65.29	68.3	-3.07	31.57	5.45	37.08	142	122	Peak
5510	88.44	88.44			31.6	5.46	37.06	142	122	Average
5510	97.9	97.9			31.6	5.46	37.06	142	122	Peak
5725	57.93	57.81	68.3	-10.37	31.96	5.59	37.43	142	122	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5354	37.99	38.3	54	-16.01	31.48	5.39	37.18	130	350	Average
5354	59.82	60.13	74	-14.18	31.48	5.39	37.18	130	350	Peak
5470	57.73	57.79	68.3	-10.57	31.57	5.45	37.08	130	350	Peak
5550	83.55	83.47			31.68	5.49	37.09	130	350	Average
5550	92.76	92.68			31.68	5.49	37.09	130	350	Peak
5725	59.32	59.2	68.3	-8.98	31.96	5.59	37.43	130	350	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
5352	40.65	40.96	54	-13.35	31.48	5.39	37.18	154	123	Average
5352	59.95	60.26	74	-14.05	31.48	5.39	37.18	154	123	Peak
5470	59.31	59.37	68.3	-8.99	31.57	5.45	37.08	154	123	Peak
5550	89.4	89.32			31.68	5.49	37.09	154	123	Average
5550	98.68	98.6			31.68	5.49	37.09	154	123	Peak
5725	57.93	57.81	68.3	-10.37	31.96	5.59	37.43	154	123	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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5370	37.76	38.05	54	-16.24	31.49	5.4	37.18	114	354	Average
5370	58.99	59.28	74	-15.01	31.49	5.4	37.18	114	354	Peak
5470	57.77	57.83	68.3	-10.53	31.57	5.45	37.08	114	354	Peak
5670	82.57	82.47			31.88	5.56	37.34	114	354	Average
5670	91.99	91.89			31.88	5.56	37.34	114	354	Peak
5725	59.19	59.07	68.3	-9.11	31.96	5.59	37.43	114	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
5356	38.04	38.35	54	-15.96	31.48	5.39	37.18	146	111	Average
5356	59.18	59.49	74	-14.82	31.48	5.39	37.18	146	111	Peak
5470	57.2	57.26	68.3	-11.1	31.57	5.45	37.08	146	111	Peak
5670	88.93	88.83			31.88	5.56	37.34	146	111	Average
5670	97.67	97.57			31.88	5.56	37.34	146	111	Peak
5725	60.94	60.82	68.3	-7.36	31.96	5.59	37.43	146	111	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

MODE B

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	47.22	47.93	54	-6.78	31.32	5.29	37.32	106	168	Average
5150	62.24	62.95	74	-11.76	31.32	5.29	37.32	106	168	Peak
5190	88.55	89.22			31.35	5.32	37.34	106	168	Average
5190	97.53	98.2			31.35	5.32	37.34	106	168	Peak
5362	38.03	38.33	54	-15.97	31.49	5.39	37.18	106	168	Average
5362	59.52	59.82	74	-14.48	31.49	5.39	37.18	106	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
5150	50.82	51.53	54	-3.18	31.32	5.29	37.32	100	278	Average
5150	70.6	71.31	74	-3.4	31.32	5.29	37.32	100	278	Peak
5190	91.77	92.44			31.35	5.32	37.34	100	278	Average
5190	100.82	101.49			31.35	5.32	37.34	100	278	Peak
5412	38.05	38.29	54	-15.95	31.53	5.41	37.18	100	278	Average
5412	59.93	60.17	74	-14.07	31.53	5.41	37.18	100	278	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 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5098	37.7	38.43	54	-16.3	31.28	5.27	37.28	114	166	Average
5098	59.65	60.38	74	-14.35	31.28	5.27	37.28	114	166	Peak
5310	93.28	93.65			31.45	5.37	37.19	114	166	Average
5310	102.46	102.83			31.45	5.37	37.19	114	166	Peak
5350	49.91	50.22	54	-4.09	31.48	5.39	37.18	114	166	Average
5350	69.99	70.3	74	-4.01	31.48	5.39	37.18	114	166	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5042	37.58	38.34	54	-16.42	31.24	5.25	37.25	110	271	Average
5042	59.36	60.12	74	-14.64	31.24	5.25	37.25	110	271	Peak
5310	90.5	90.87			31.45	5.37	37.19	110	271	Average
5310	99.67	100.04			31.45	5.37	37.19	110	271	Peak
5350	49.02	49.33	54	-4.98	31.48	5.39	37.18	110	271	Average
5350	63.35	63.66	74	-10.65	31.48	5.39	37.18	110	271	Peak

REMARKS:

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

802.11n (20MHz)

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5454	37.58	37.66	54	-16.42	31.56	5.44	37.08	121	84	Average
5454	59.82	59.9	74	-14.18	31.56	5.44	37.08	121	84	Peak
5470	57.68	57.74	68.3	-10.62	31.57	5.45	37.08	121	84	Peak
5700	92.29	92.22			31.9	5.57	37.4	121	84	Average
5700	102.04	101.97			31.9	5.57	37.4	121	84	Peak
5725	63.14	63.02	68.3	-5.16	31.96	5.59	37.43	121	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
5386	37.62	37.89	54	-16.38	31.51	5.4	37.18	100	33	Average
5386	59.41	59.68	74	-14.59	31.51	5.4	37.18	100	33	Peak
5470	57.42	57.48	68.3	-10.88	31.57	5.45	37.08	100	33	Peak
5700	97.51	97.44			31.9	5.57	37.4	100	33	Average
5700	107.21	107.14			31.9	5.57	37.4	100	33	Peak
5725	65.45	65.33	68.3	-2.85	31.96	5.59	37.43	100	33	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

MODE C

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5146	45.75	46.46	54	-8.25	31.32	5.29	37.32	100	50	Average
5146	61.15	61.86	74	-12.85	31.32	5.29	37.32	100	50	Peak
5190	82.69	83.36			31.35	5.32	37.34	100	50	Average
5190	91.9	92.57			31.35	5.32	37.34	100	50	Peak
5382	38.22	38.49	54	-15.78	31.51	5.4	37.18	100	50	Average
5382	59.84	60.11	74	-14.16	31.51	5.4	37.18	100	50	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	50.49	51.2	54	-3.51	31.32	5.29	37.32	140	177	Average
5150	66.2	66.91	74	-7.8	31.32	5.29	37.32	140	177	Peak
5190	89.99	90.66			31.35	5.32	37.34	140	177	Average
5190	99.16	99.83			31.35	5.32	37.34	140	177	Peak
5450	38.09	38.17	54	-15.91	31.56	5.44	37.08	140	177	Average
5450	59.85	59.93	74	-14.15	31.56	5.44	37.08	140	177	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 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5124	37.88	38.59	54	-16.12	31.31	5.28	37.3	109	68	Average
5124	58.61	59.32	74	-15.39	31.31	5.28	37.3	109	68	Peak
5310	87.42	87.79			31.45	5.37	37.19	109	68	Average
5310	96.45	96.82			31.45	5.37	37.19	109	68	Peak
5350	47.27	47.58	54	-6.73	31.48	5.39	37.18	109	68	Average
5350	62.45	62.76	74	-11.55	31.48	5.39	37.18	109	68	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
5114	37.87	38.58	54	-16.13	31.29	5.28	37.28	127	166	Average
5114	59.43	60.14	74	-14.57	31.29	5.28	37.28	127	166	Peak
5310	89.34	89.71			31.45	5.37	37.19	127	166	Average
5310	98.12	98.49			31.45	5.37	37.19	127	166	Peak
5350	47.06	47.37	54	-6.94	31.48	5.39	37.18	127	166	Average
5350	64.15	64.46	74	-9.85	31.48	5.39	37.18	127	166	Peak

REMARKS:

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

802.11n (20MHz)

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5440	37.73	37.87	54	-16.27	31.55	5.44	37.13	100	330	Average
5440	59.29	59.43	74	-14.71	31.55	5.44	37.13	100	330	Peak
5470	58.72	58.78	68.3	-9.58	31.57	5.45	37.08	100	330	Peak
5700	90.34	90.27			31.9	5.57	37.4	100	330	Average
5700	99.13	99.06			31.9	5.57	37.4	100	330	Peak
5725	64.83	64.71	68.3	-3.47	31.96	5.59	37.43	100	330	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	37.58	37.89	54	-16.42	31.48	5.39	37.18	100	35	Average
5360	59.29	59.6	74	-14.71	31.48	5.39	37.18	100	35	Peak
5470	57.75	57.81	68.3	-10.55	31.57	5.45	37.08	100	35	Peak
5700	93.67	93.6			31.9	5.57	37.4	100	35	Average
5700	102.95	102.88			31.9	5.57	37.4	100	35	Peak
5725	65.73	65.61	68.3	-2.57	31.96	5.59	37.43	100	35	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

MODE D

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	47.56	48.27	54	-6.44	31.32	5.29	37.32	100	153	Average
5148	67.37	68.08	74	-6.63	31.32	5.29	37.32	100	153	Peak
5190	77.81	78.48			31.35	5.32	37.34	100	153	Average
5190	96.97	97.64			31.35	5.32	37.34	100	153	Peak
5406	38.16	38.41	54	-15.84	31.52	5.41	37.18	100	153	Average
5406	60.04	60.29	74	-13.96	31.52	5.41	37.18	100	153	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	50.78	51.49	54	-3.22	31.32	5.29	37.32	100	203	Average
5150	69.74	70.45	74	-4.26	31.32	5.29	37.32	100	203	Peak
5190	91.25	91.92			31.35	5.32	37.34	100	203	Average
5190	100.46	101.13			31.35	5.32	37.34	100	203	Peak
5430	38.34	38.5	54	-15.66	31.55	5.42	37.13	100	203	Average
5430	59.76	59.92	74	-14.24	31.55	5.42	37.13	100	203	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 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5128	37.79	38.5	54	-16.21	31.31	5.28	37.3	112	75	Average
5128	59.92	60.63	74	-14.08	31.31	5.28	37.3	112	75	Peak
5310	86.7	87.07			31.45	5.37	37.19	112	75	Average
5310	95.98	96.35			31.45	5.37	37.19	112	75	Peak
5350	43.83	44.14	54	-10.17	31.48	5.39	37.18	112	75	Average
5350	65.58	65.89	74	-8.42	31.48	5.39	37.18	112	75	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
5032	37.79	38.56	54	-16.21	31.23	5.24	37.24	127	176	Average
5032	59.94	60.71	74	-14.06	31.23	5.24	37.24	127	176	Peak
5310	92	92.37			31.45	5.37	37.19	127	176	Average
5310	102.41	102.78			31.45	5.37	37.19	127	176	Peak
5350	49.72	50.03	54	-4.28	31.48	5.39	37.18	127	176	Average
5350	66.81	67.12	74	-7.19	31.48	5.39	37.18	127	176	Peak

REMARKS:

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

802.11n (20MHz)

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	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5456	37.91	37.99	54	-16.09	31.56	5.44	37.08	100	271	Average
5456	59.06	59.14	74	-14.94	31.56	5.44	37.08	100	271	Peak
5470	57.86	57.92	68.3	-10.44	31.57	5.45	37.08	100	271	Peak
5700	87.78	87.71			31.9	5.57	37.4	100	271	Average
5700	97.24	97.17			31.9	5.57	37.4	100	271	Peak
5725	58.47	58.35	68.3	-9.83	31.96	5.59	37.43	100	271	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
5442	37.85	37.99	54	-16.15	31.55	5.44	37.13	146	188	Average
5442	60.55	60.69	74	-13.45	31.55	5.44	37.13	146	188	Peak
5470	57.79	57.85	68.3	-10.51	31.57	5.45	37.08	146	188	Peak
5700	95.51	95.44			31.9	5.57	37.4	146	188	Average
5700	104.8	104.73			31.9	5.57	37.4	146	188	Peak
5725	65.32	65.2	68.3	-2.98	31.96	5.59	37.43	146	188	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

BELOW 1GHz WORST-CASE DATA:

MODE A

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.23	23	39.81	40	-17	13.59	0.71	31.11	100	133	Peak
100.74	17.31	39.04	43.5	-26.19	9.15	1.07	31.95	154	128	Peak
148.53	18.15	35.8	43.5	-25.35	12.64	1.33	31.62	168	151	Peak
332.9	28.37	44.28	46	-17.63	13.73	2.17	31.81	175	189	Peak
438.6	22.66	35.99	46	-23.34	16.1	2.57	32	178	185	Peak
659.8	24.43	32.77	46	-21.57	20.33	3.28	31.95	100	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
42.96	25.65	42.45	40	-14.35	13.58	0.7	31.08	166	185	Peak
97.5	19.71	41.7	43.5	-23.79	8.91	1.06	31.96	100	185	Peak
222.51	13.89	33.63	46	-32.11	10.3	1.7	31.74	100	157	Peak
332.9	19.38	35.29	46	-26.62	13.73	2.17	31.81	144	249	Peak
511.4	20.66	31.86	46	-25.34	17.57	2.82	31.59	164	200	Peak
601.7	23.66	33.18	46	-22.34	19.62	3.09	32.23	177	185	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.92	25.42	43.61	40	-14.58	12.35	0.8	31.34	169	207	Peak
100.74	15.46	37.19	43.5	-28.04	9.15	1.07	31.95	152	88	Peak
143.4	17.68	35.53	43.5	-25.82	12.47	1.31	31.63	173	288	Peak
332.9	28.68	44.59	46	-17.32	13.73	2.17	31.81	185	117	Peak
528.2	20.62	31.45	46	-25.38	17.97	2.88	31.68	100	116	Peak
780.2	28.19	34.03	46	-17.81	21.94	3.65	31.43	123	115	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	25.98	42.79	40	-14.02	13.59	0.71	31.11	165	333	Peak
97.77	19.77	41.76	43.5	-23.73	8.91	1.06	31.96	100	188	Peak
150.42	18.72	36.28	43.5	-24.78	12.71	1.34	31.61	102	222	Peak
332.9	20.68	36.59	46	-25.32	13.73	2.17	31.81	105	244	Peak
540.1	22.07	32.64	46	-23.93	18.24	2.92	31.73	174	242	Peak
645.8	23.82	32.48	46	-22.18	20.16	3.23	32.05	100	122	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.87	40.67	40	-16.13	13.58	0.7	31.08	187	264	Peak
100.74	17.46	39.19	43.5	-26.04	9.15	1.07	31.95	112	164	Peak
142.32	18.19	36.07	43.5	-25.31	12.44	1.31	31.63	111	154	Peak
332.9	25.93	41.84	46	-20.07	13.73	2.17	31.81	119	208	Peak
423.2	19.88	33.62	46	-26.12	15.79	2.51	32.04	144	233	Peak
780.2	28.55	34.39	46	-17.45	21.94	3.65	31.43	159	247	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	24.92	41.72	40	-15.08	13.58	0.7	31.08	100	195	Peak
97.77	19.01	41	43.5	-24.49	8.91	1.06	31.96	100	288	Peak
143.94	18.22	36.07	43.5	-25.28	12.47	1.31	31.63	166	207	Peak
332.9	20.59	36.5	46	-25.41	13.73	2.17	31.81	195	214	Peak
440	20.07	33.35	46	-25.93	16.14	2.58	32	173	294	Peak
743.8	26.37	32.78	46	-19.63	21.44	3.56	31.41	100	185	Peak

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

MODE B
802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
50.25	17.22	34.79	40	-22.78	12.97	0.77	31.31	100	174	Peak
143.94	24.08	41.93	43.5	-19.42	12.47	1.31	31.63	100	109	Peak
229.26	15.31	34.85	46	-30.69	10.58	1.73	31.85	100	331	Peak
384	20.06	34.73	46	-25.94	14.96	2.36	31.99	100	49	Peak
577.9	22.66	32.64	46	-23.34	19.1	3.03	32.11	100	91	Peak
747.3	26.7	33.01	46	-19.3	21.48	3.56	31.35	100	36	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
35.4	24.69	42.19	40	-15.31	12.94	0.61	31.05	100	246	Peak
90.48	23.05	45.69	43.5	-20.45	8.3	1.02	31.96	100	294	Peak
125.85	19.52	38.77	43.5	-23.98	11.42	1.22	31.89	100	156	Peak
456.1	20.02	32.92	46	-25.98	16.45	2.64	31.99	100	202	Peak
665.4	24.35	32.52	46	-21.65	20.4	3.3	31.87	100	333	Peak
853.7	26.93	32.07	46	-19.07	22.91	3.83	31.88	100	224	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
41.88	20.43	37.24	40	-19.57	13.56	0.68	31.05	156	110	Peak
107.22	14.27	35.21	43.5	-29.23	9.81	1.11	31.86	117	154	Peak
143.94	24.08	41.93	43.5	-19.42	12.47	1.31	31.63	100	124	Peak
465.9	21.96	34.59	46	-24.04	16.64	2.67	31.94	100	140	Peak
658.4	24.79	33.17	46	-21.21	20.31	3.27	31.96	144	168	Peak
747.3	26.7	33.01	46	-19.3	21.48	3.56	31.35	100	136	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
35.4	24.69	42.19	40	-15.31	12.94	0.61	31.05	100	158	Peak
92.64	29.85	52.25	43.5	-13.65	8.53	1.03	31.96	100	105	Peak
166.35	16.46	34.75	43.5	-27.04	12.05	1.43	31.77	100	114	Peak
490.4	20.72	32.59	46	-25.28	17.14	2.75	31.76	100	132	Peak
635.3	24.34	33.22	46	-21.66	20.03	3.2	32.11	154	124	Peak
722.1	25.38	32.39	46	-20.62	21.13	3.5	31.64	165	285	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.45	40.25	40	-16.55	13.58	0.7	31.08	100	360	Peak
94.26	18.38	40.7	43.5	-25.12	8.6	1.04	31.96	100	168	Peak
159.87	22.23	39.99	43.5	-21.27	12.73	1.39	31.88	114	151	Peak
618.5	23.8	32.99	46	-22.2	19.83	3.14	32.16	100	187	Peak
671.7	26.69	34.7	46	-19.31	20.48	3.33	31.82	100	158	Peak
695.5	25.25	32.89	46	-20.75	20.76	3.41	31.81	100	166	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	25.78	42.58	40	-14.22	13.58	0.7	31.08	100	165	Peak
96.15	29.1	51.25	43.5	-14.4	8.76	1.05	31.96	144	102	Peak
106.41	27.32	48.38	43.5	-16.18	9.71	1.11	31.88	102	167	Peak
635.3	24.34	33.22	46	-21.66	20.03	3.2	32.11	100	165	Peak
685.7	24.92	32.74	46	-21.08	20.64	3.38	31.84	100	169	Peak
744.5	26.09	32.47	46	-19.91	21.45	3.56	31.39	158	147	Peak

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

MODE C

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
120.45	15.96	35.65	43.5	-27.54	11.02	1.19	31.9	100	115	Peak
218.73	14.68	34.51	46	-31.32	10.18	1.69	31.7	100	250	Peak
257.34	19.1	37.45	46	-26.9	11.68	1.85	31.88	100	334	Peak
332.9	23.97	39.88	46	-22.03	13.73	2.17	31.81	100	133	Peak
659.8	25.6	33.94	46	-20.4	20.33	3.28	31.95	100	208	Peak
947.5	26.73	30.72	46	-19.27	23.78	4.07	31.84	100	199	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
93.18	26.77	49.17	43.5	-16.73	8.53	1.03	31.96	100	244	Peak
178.5	14.2	33.61	43.5	-29.3	10.92	1.49	31.82	100	187	Peak
277.59	16.86	34.51	46	-29.14	12.28	1.95	31.88	100	159	Peak
419.7	21.39	35.21	46	-24.61	15.73	2.5	32.05	100	130	Peak
681.5	25.29	33.17	46	-20.71	20.6	3.36	31.84	100	140	Peak
960.1	30.46	34.45	54	-23.54	23.85	4.09	31.93	100	177	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
120.45	15.96	35.65	43.5	-27.54	11.02	1.19	31.9	100	188	Peak
232.23	15.92	35.3	46	-30.08	10.71	1.75	31.84	100	103	Peak
278.94	16.79	34.33	46	-29.21	12.34	1.96	31.84	100	299	Peak
384	24.12	38.79	46	-21.88	14.96	2.36	31.99	100	241	Peak
575.8	26.55	36.57	46	-19.45	19.06	3.02	32.1	100	303	Peak
806.1	28.21	33.64	46	-17.79	22.3	3.71	31.44	100	305	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	28.48	45.28	40	-11.52	13.58	0.7	31.08	100	182	Peak
97.77	26.39	48.38	43.5	-17.11	8.91	1.06	31.96	100	185	Peak
233.04	15.84	35.18	46	-30.16	10.75	1.75	31.84	100	225	Peak
384	22.55	37.22	46	-23.45	14.96	2.36	31.99	100	214	Peak
537.3	30.05	40.69	46	-15.95	18.17	2.91	31.72	100	142	Peak
836.2	33.43	38.73	46	-12.57	22.69	3.78	31.77	100	304	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
84.27	23.47	45.97	40	-16.53	8.2	0.99	31.69	130	105	Peak
153.39	29.68	47.29	43.5	-13.82	12.72	1.36	31.69	103	25	Peak
219.27	17.99	37.82	46	-28.01	10.18	1.69	31.7	117	245	Peak
405	19.88	34.03	46	-26.12	15.45	2.45	32.05	111	59	Peak
593.3	23.74	33.39	46	-22.26	19.46	3.07	32.18	118	134	Peak
748	26.01	32.29	46	-19.99	21.49	3.57	31.34	128	235	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
91.02	34.97	57.52	43.5	-8.53	8.38	1.03	31.96	112	13	Peak
153.93	28.98	46.62	43.5	-14.52	12.72	1.36	31.72	119	89	Peak
187.68	18.02	37.99	43.5	-25.48	10.19	1.54	31.7	138	16	Peak
386.8	18.32	32.93	46	-27.68	15.03	2.37	32.01	106	225	Peak
605.9	23.63	32.99	46	-22.37	19.68	3.11	32.15	108	95	Peak
746.6	25.87	32.18	46	-20.13	21.48	3.56	31.35	101	246	Peak

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

MODE D

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.11	16.95	35.03	40	-23.05	12.45	0.8	31.33	100	115	Peak
94.53	21.44	43.68	43.5	-22.06	8.68	1.04	31.96	100	143	Peak
147.45	21.7	39.38	43.5	-21.8	12.61	1.33	31.62	100	298	Peak
345.5	32.75	48.34	46	-13.25	14.03	2.21	31.83	100	220	Peak
603.8	23.81	33.23	46	-22.19	19.66	3.1	32.18	100	165	Peak
776.7	26.48	32.33	46	-19.52	21.9	3.64	31.39	100	11	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
36.21	25.13	42.63	40	-14.87	12.94	0.61	31.05	100	85	Peak
98.04	24.51	46.5	43.5	-18.99	8.91	1.06	31.96	100	104	Peak
181.47	16.5	36.14	43.5	-27	10.67	1.51	31.82	100	222	Peak
440	20.55	33.83	46	-25.45	16.14	2.58	32	100	192	Peak
646.5	23.9	32.54	46	-22.1	20.17	3.23	32.04	100	108	Peak
806.1	28.47	33.9	46	-17.53	22.3	3.71	31.44	100	223	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
76.71	15.5	37.08	40	-24.5	9.09	0.95	31.62	100	218	Peak
184.71	23.97	43.76	43.5	-19.53	10.46	1.52	31.77	100	206	Peak
255.45	22.94	41.37	46	-23.06	11.62	1.85	31.9	100	115	Peak
384	20.91	35.58	46	-25.09	14.96	2.36	31.99	100	88	Peak
555.5	22.42	32.89	46	-23.58	18.59	2.96	32.02	100	94	Peak
748	27.01	33.29	46	-18.99	21.49	3.57	31.34	100	54	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.58	21.85	38.66	40	-18.15	13.6	0.73	31.14	100	145	Peak
126.39	20.28	39.53	43.5	-23.22	11.42	1.22	31.89	100	126	Peak
245.19	18.6	37.37	46	-27.4	11.28	1.82	31.87	100	342	Peak
307	19.68	36.39	46	-26.32	13.13	2.08	31.92	100	261	Peak
415.5	19.29	33.19	46	-26.71	15.64	2.48	32.02	100	253	Peak
549.9	22.39	32.93	46	-23.61	18.46	2.95	31.95	100	194	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.11	16.95	35.03	40	-23.05	12.45	0.8	31.33	100	341	Peak
142.32	20.14	38.02	43.5	-23.36	12.44	1.31	31.63	100	224	Peak
278.94	23.55	41.09	46	-22.45	12.34	1.96	31.84	100	81	Peak
638.1	23.74	32.57	46	-22.26	20.07	3.2	32.1	100	41	Peak
799.8	29.34	34.85	46	-16.66	22.23	3.69	31.43	100	209	Peak
960.8	27.9	31.87	54	-26.1	23.85	4.1	31.92	100	333	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
34.59	24.85	42.53	40	-15.15	12.79	0.59	31.06	100	93	Peak
105.33	23.91	45.08	43.5	-19.59	9.62	1.1	31.89	100	223	Peak
236.01	18.48	37.65	46	-27.52	10.87	1.77	31.81	100	71	Peak
378.4	18.4	33.18	46	-27.6	14.82	2.34	31.94	100	52	Peak
614.3	25.59	34.81	46	-20.41	19.77	3.13	32.12	100	202	Peak
835.5	27.06	32.36	46	-18.94	22.68	3.78	31.76	100	263	Peak

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

MODE E

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.23	20.68	37.49	40	-19.32	13.59	0.71	31.11	135	355	Peak
192	22.92	43.14	43.5	-20.58	9.91	1.56	31.69	119	2	Peak
230.34	22.9	42.35	46	-23.1	10.66	1.74	31.85	129	341	Peak
345.5	29.93	45.52	46	-16.07	14.03	2.21	31.83	111	332	Peak
575.8	27.42	37.44	46	-18.58	19.06	3.02	32.1	123	256	Peak
806.1	33.74	39.17	46	-12.26	22.3	3.71	31.44	139	267	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	19.82	36.62	40	-20.18	13.58	0.7	31.08	135	302	Peak
140.7	18.62	36.59	43.5	-24.88	12.37	1.3	31.64	124	211	Peak
230.34	16.99	36.44	46	-29.01	10.66	1.74	31.85	118	178	Peak
345.5	29.35	44.94	46	-16.65	14.03	2.21	31.83	112	66	Peak
575.8	28.64	38.66	46	-17.36	19.06	3.02	32.1	128	20	Peak
806.1	28.52	33.95	46	-17.48	22.3	3.71	31.44	108	227	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	20.12	36.92	40	-19.88	13.58	0.7	31.08	115	223	Peak
192	24.66	44.88	43.5	-18.84	9.91	1.56	31.69	113	235	Peak
230.34	22.57	42.02	46	-23.43	10.66	1.74	31.85	114	146	Peak
345.5	29.1	44.69	46	-16.9	14.03	2.21	31.83	103	159	Peak
575.8	27.83	37.85	46	-18.17	19.06	3.02	32.1	129	316	Peak
806.1	32.29	37.72	46	-13.71	22.3	3.71	31.44	136	220	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	20.27	37.07	40	-19.73	13.58	0.7	31.08	117	191	Peak
142.05	17.81	35.69	43.5	-25.69	12.44	1.31	31.63	140	285	Peak
230.34	16.58	36.03	46	-29.42	10.66	1.74	31.85	121	253	Peak
345.5	29.96	45.55	46	-16.04	14.03	2.21	31.83	110	2	Peak
575.8	29.45	39.47	46	-16.55	19.06	3.02	32.1	106	123	Peak
806.1	28.69	34.12	46	-17.31	22.3	3.71	31.44	136	126	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.42	19.07	35.87	40	-20.93	13.58	0.7	31.08	105	257	Peak
192	22.62	42.84	43.5	-20.88	9.91	1.56	31.69	116	328	Peak
230.34	22.31	41.76	46	-23.69	10.66	1.74	31.85	107	254	Peak
345.5	29.26	44.85	46	-16.74	14.03	2.21	31.83	126	262	Peak
575.8	27.52	37.54	46	-18.48	19.06	3.02	32.1	100	118	Peak
806.1	33.38	38.81	46	-12.62	22.3	3.71	31.44	100	273	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	20.57	37.37	40	-19.43	13.58	0.7	31.08	100	223	Peak
143.67	17.34	35.19	43.5	-26.16	12.47	1.31	31.63	115	36	Peak
230.34	17.27	36.72	46	-28.73	10.66	1.74	31.85	121	47	Peak
345.5	29.46	45.05	46	-16.54	14.03	2.21	31.83	100	234	Peak
575.8	28.85	38.87	46	-17.15	19.06	3.02	32.1	100	197	Peak
806.1	28.23	33.66	46	-17.77	22.3	3.71	31.44	100	200	Peak

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

MODE F

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	21.58	38.39	40	-18.42	13.59	0.71	31.11	100	115	Peak
168.24	15.26	33.7	43.5	-28.24	11.86	1.44	31.74	100	260	Peak
247.08	15.38	34.1	46	-30.62	11.36	1.82	31.9	100	254	Peak
465.9	20.86	33.49	46	-25.14	16.64	2.67	31.94	100	168	Peak
650.7	24.27	32.82	46	-21.73	20.22	3.24	32.01	100	154	Peak
795.6	26.5	32.08	46	-19.5	22.16	3.68	31.42	100	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
71.04	19.38	39.73	40	-20.62	10.53	0.91	31.79	100	105	Peak
144.21	18.23	36.03	43.5	-25.27	12.51	1.32	31.63	100	288	Peak
249.51	14.67	33.33	46	-31.33	11.44	1.83	31.93	100	191	Peak
384	19.61	34.28	46	-26.39	14.96	2.36	31.99	100	189	Peak
750.8	26.01	32.21	46	-19.99	21.53	3.58	31.31	100	225	Peak
944	27.38	31.46	46	-18.62	23.75	4.06	31.89	100	202	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.77	20.74	37.55	40	-19.26	13.59	0.71	31.11	185	214	Peak
143.94	21.86	39.71	43.5	-21.64	12.47	1.31	31.63	100	133	Peak
194.43	14.85	35.3	43.5	-28.65	9.7	1.57	31.72	166	213	Peak
589.8	23.45	33.16	46	-22.55	19.37	3.06	32.14	100	266	Peak
657.7	25.22	33.61	46	-20.78	20.3	3.27	31.96	100	168	Peak
769	26.35	32.25	46	-19.65	21.79	3.62	31.31	100	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
43.77	20.13	36.94	40	-19.87	13.59	0.71	31.11	100	313	Peak
85.08	17.8	40.32	40	-22.2	8.22	1	31.74	100	279	Peak
169.32	16.48	35.01	43.5	-27.02	11.76	1.44	31.73	100	263	Peak
484.1	21.27	33.36	46	-24.73	17	2.73	31.82	100	155	Peak
573.7	22.4	32.47	46	-23.6	19.01	3.02	32.1	146	320	Peak
671.7	25.56	33.57	46	-20.44	20.48	3.33	31.82	100	159	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	23.88	40.68	40	-16.12	13.58	0.7	31.08	165	147	Peak
155.01	15.48	33.13	43.5	-28.02	12.72	1.37	31.74	117	154	Peak
190.11	15.73	35.8	43.5	-27.77	10.05	1.55	31.67	100	125	Peak
384	20.35	35.02	46	-25.65	14.96	2.36	31.99	100	154	Peak
634.6	24.1	33.01	46	-21.9	20.02	3.19	32.12	185	44	Peak
674.5	25.37	33.36	46	-20.63	20.5	3.33	31.82	100	145	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.5	20.93	37.74	40	-19.07	13.59	0.71	31.11	164	115	Peak
85.89	16.65	39.2	40	-23.35	8.23	1	31.78	100	150	Peak
143.94	23.66	41.51	43.5	-19.84	12.47	1.31	31.63	100	222	Peak
580.7	22.79	32.71	46	-23.21	19.17	3.03	32.12	100	196	Peak
622	24.29	33.43	46	-21.71	19.87	3.15	32.16	100	167	Peak
671.7	25.56	33.57	46	-20.44	20.48	3.33	31.82	156	221	Peak

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

MODE G

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.38	16.24	34.32	40	-23.76	12.45	0.8	31.33	100	194	Peak
187.14	21.39	41.32	43.5	-22.11	10.26	1.53	31.72	100	237	Peak
253.02	18.97	37.46	46	-27.03	11.57	1.85	31.91	100	81	Peak
345.5	27.86	43.45	46	-18.14	14.03	2.21	31.83	100	172	Peak
633.9	27.95	36.86	46	-18.05	20.02	3.19	32.12	100	173	Peak
848.8	34.14	39.33	46	-11.86	22.85	3.82	31.86	100	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
87.51	17.89	40.45	40	-22.11	8.25	1.01	31.82	100	202	Peak
167.7	16.76	35.13	43.5	-26.74	11.96	1.43	31.76	100	250	Peak
266.52	15.85	33.96	46	-30.15	11.97	1.9	31.98	100	193	Peak
498.8	24.65	36.24	46	-21.35	17.29	2.77	31.65	100	65	Peak
719.3	25.58	32.66	46	-20.42	21.09	3.49	31.66	100	61	Peak
844.6	30.2	35.42	46	-15.8	22.8	3.81	31.83	100	55	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.23	23.17	39.98	40	-16.83	13.59	0.71	31.11	100	135	Peak
145.83	17.49	35.25	43.5	-26.01	12.54	1.32	31.62	114	58	Peak
245.73	16.03	34.8	46	-29.97	11.28	1.82	31.87	103	247	Peak
440	23.06	36.34	46	-22.94	16.14	2.58	32	100	118	Peak
581.4	22.63	32.55	46	-23.37	19.17	3.03	32.12	106	298	Peak
783	26.7	32.49	46	-19.3	21.98	3.65	31.42	100	331	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
75.63	23.68	45.06	40	-16.32	9.33	0.94	31.65	124	205	Peak
164.19	16.84	34.91	43.5	-26.66	12.34	1.41	31.82	110	179	Peak
256.26	14.89	33.28	46	-31.11	11.65	1.85	31.89	100	52	Peak
440	20.54	33.82	46	-25.46	16.14	2.58	32	100	229	Peak
626.9	23.9	32.95	46	-22.1	19.93	3.17	32.15	100	316	Peak
743.1	26.3	32.76	46	-19.7	21.42	3.55	31.43	100	167	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.58	23.36	40.16	40	-16.64	13.58	0.7	31.08	110	175	Peak
191.8	18.3	38.52	43.5	-25.2	9.91	1.56	31.69	100	77	Peak
233.77	24.83	44.28	46	-21.17	10.66	1.74	31.85	105	212	Peak
343.2	28.55	44.14	46	-17.45	14.03	2.21	31.83	100	168	Peak
613.16	29.03	38.25	46	-16.97	19.77	3.13	32.12	100	143	Peak
837.28	32.96	38.26	46	-13.04	22.69	3.78	31.77	100	230	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	28.46	45.26	40	-11.54	13.58	0.7	31.08	100	279	Peak
95.74	28.95	51.19	43.5	-14.55	8.68	1.04	31.96	100	159	Peak
230.24	20.92	40.37	46	-25.08	10.66	1.74	31.85	100	178	Peak
344	28.16	43.75	46	-17.84	14.03	2.21	31.83	100	159	Peak
461.36	34.48	47.27	46	-11.52	16.54	2.65	31.98	100	129	Peak
805.48	31	36.43	46	-15	22.3	3.71	31.44	100	128	Peak

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

Margin value = Emission level – Limit value

MODE H

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.42	20.75	37.55	40	-19.25	13.58	0.7	31.08	100	205	Peak
142.32	20.14	38.02	43.5	-23.36	12.44	1.31	31.63	100	165	Peak
185.52	23.1	42.95	43.5	-20.4	10.39	1.52	31.76	100	289	Peak
465.9	22.04	34.67	46	-23.96	16.64	2.67	31.94	100	227	Peak
664.7	25.46	33.66	46	-20.54	20.39	3.3	31.89	100	204	Peak
844.6	29.68	34.9	46	-16.32	22.8	3.81	31.83	100	187	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
87.51	21.93	44.49	40	-18.07	8.25	1.01	31.82	100	82	Peak
126.39	20.28	39.53	43.5	-23.22	11.42	1.22	31.89	100	194	Peak
239.52	18.4	37.36	46	-27.6	11.03	1.79	31.78	100	260	Peak
384	22.89	37.56	46	-23.11	14.96	2.36	31.99	100	142	Peak
601.7	23.14	32.66	46	-22.86	19.62	3.09	32.23	100	265	Peak
817.3	27.38	32.76	46	-18.62	22.45	3.74	31.57	100	119	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 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
84	18.05	40.55	40	-21.95	8.2	0.99	31.69	100	69	Peak
125.31	17.87	37.2	43.5	-25.63	11.35	1.21	31.89	100	130	Peak
177.15	19.61	38.92	43.5	-23.89	11.01	1.49	31.81	100	284	Peak
312.6	21.17	37.77	46	-24.83	13.24	2.1	31.94	100	192	Peak
614.3	25.99	35.21	46	-20.01	19.77	3.13	32.12	100	175	Peak
793.5	27.38	32.98	46	-18.62	22.13	3.68	31.41	100	281	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
35.4	25.71	43.21	40	-14.29	12.94	0.61	31.05	100	137	Peak
94.26	22.3	44.62	43.5	-21.2	8.6	1.04	31.96	100	240	Peak
186.33	14.89	34.77	43.5	-28.61	10.33	1.53	31.74	100	55	Peak
422.5	19.91	33.65	46	-26.09	15.79	2.51	32.04	100	79	Peak
640.2	24.67	33.46	46	-21.33	20.09	3.21	32.09	100	84	Peak
835.5	27.06	32.36	46	-18.94	22.68	3.78	31.76	100	42	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 140	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Peter Weng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.11	16.95	35.03	40	-23.05	12.45	0.8	31.33	100	251	Peak
138.81	19.37	37.47	43.5	-24.13	12.27	1.29	31.66	100	286	Peak
229.53	20.46	39.96	46	-25.54	10.62	1.74	31.86	100	180	Peak
465.9	22.04	34.67	46	-23.96	16.64	2.67	31.94	100	66	Peak
682.9	25.15	33.01	46	-20.85	20.61	3.37	31.84	100	132	Peak
869.8	28.03	33.04	46	-17.97	23.12	3.88	32.01	100	213	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
43.77	24.44	41.25	40	-15.56	13.59	0.71	31.11	100	237	Peak
132.06	18.25	37.02	43.5	-25.25	11.81	1.25	31.83	100	105	Peak
245.19	18.6	37.37	46	-27.4	11.28	1.82	31.87	100	360	Peak
372.8	18.31	33.24	46	-27.69	14.68	2.32	31.93	100	84	Peak
603.1	23.54	32.99	46	-22.46	19.65	3.1	32.2	100	53	Peak
784.4	26.45	32.2	46	-19.55	22.01	3.66	31.42	100	169	Peak

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE:

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

4.2.2 TEST INSTRUMENTS

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

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

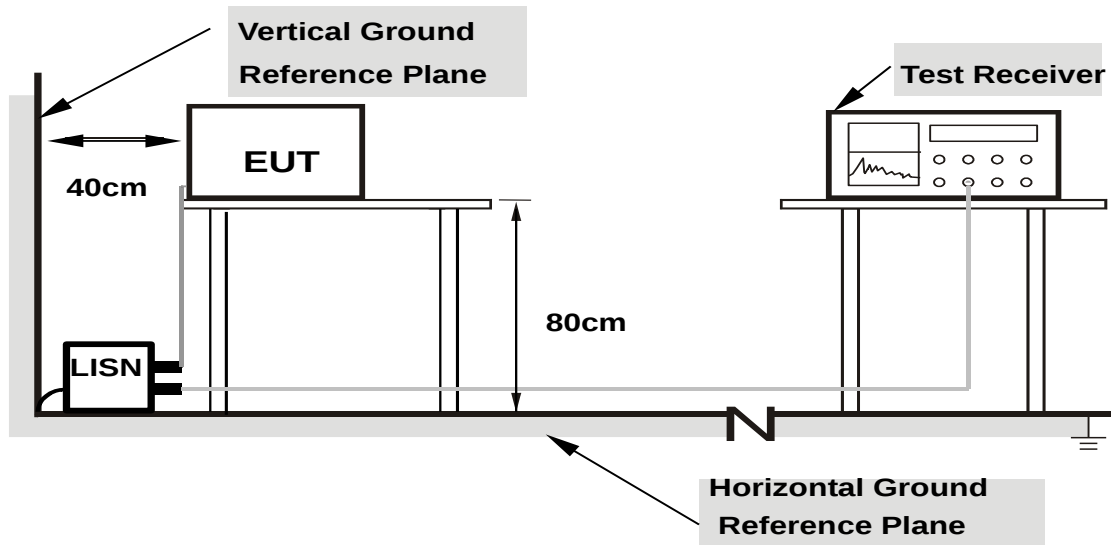
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



- Note:** 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as section 4.1.6.

4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA :

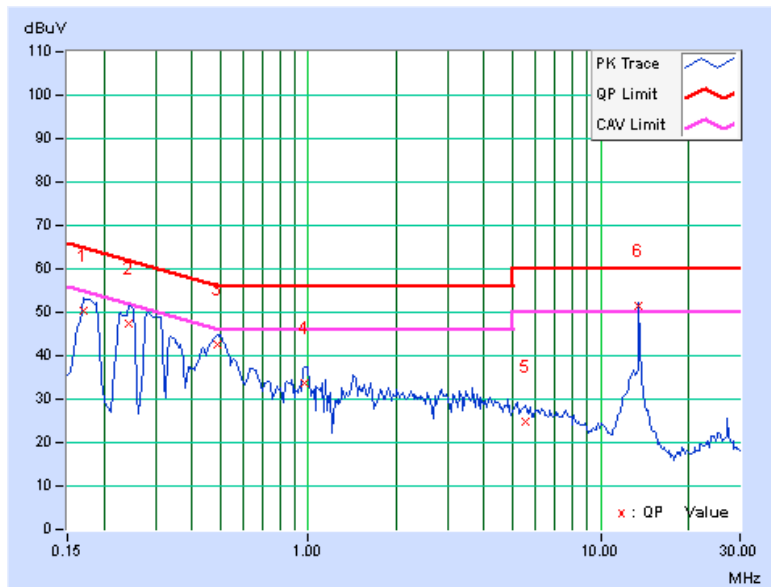
MODE A

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.28	35.50	50.55	35.77	64.98	54.98	-14.43	-19.21
2	0.24375	0.28	47.03	33.17	47.31	33.45	61.97	51.97	-14.65	-18.51
3	0.48594	0.31	42.15	30.88	42.46	31.19	56.24	46.24	-13.78	-15.05
4	0.97031	0.34	33.38	21.35	33.72	21.69	56.00	46.00	-22.28	-24.31
5	5.53516	0.45	24.21	19.95	24.66	20.40	60.00	50.00	-35.34	-29.60
6	13.55859	0.52	50.79	46.45	51.31	46.97	60.00	50.00	-8.69	-3.03

REMARKS:

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

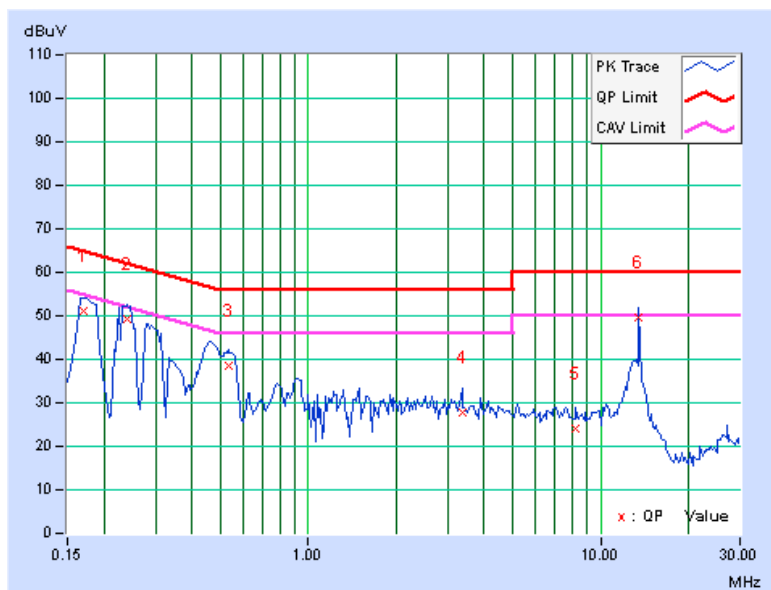


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	50.98	35.60	51.25	35.87	64.98	54.98	-13.73	-19.11
2	0.23984	0.28	49.00	35.56	49.28	35.84	62.10	52.10	-12.82	-16.26
3	0.53281	0.31	38.13	26.51	38.44	26.82	56.00	46.00	-17.56	-19.18
4	3.36719	0.42	27.18	19.11	27.60	19.53	56.00	46.00	-28.40	-26.47
5	8.19922	0.50	23.73	18.18	24.23	18.68	60.00	50.00	-35.77	-31.32
6	13.55859	0.55	48.94	45.26	49.49	45.81	60.00	50.00	-10.51	-4.19

REMARKS:

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



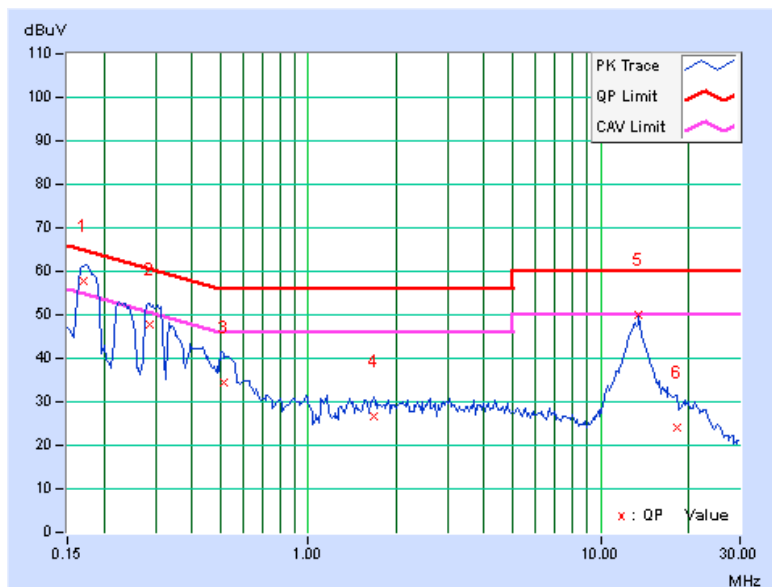
MODE B

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	57.53	41.82	57.80	42.09	64.98	54.98	-7.18	-12.89
2	0.28672	0.29	47.35	34.79	47.64	35.08	60.62	50.62	-12.98	-15.54
3	0.51328	0.31	34.31	22.46	34.62	22.77	56.00	46.00	-21.38	-23.23
4	1.67188	0.35	26.15	17.88	26.50	18.23	56.00	46.00	-29.50	-27.77
5	13.55859	0.52	49.66	45.94	50.18	46.46	60.00	50.00	-9.82	-3.54
6	18.36328	0.57	23.34	17.97	23.91	18.54	60.00	50.00	-36.09	-31.46

REMARKS:

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

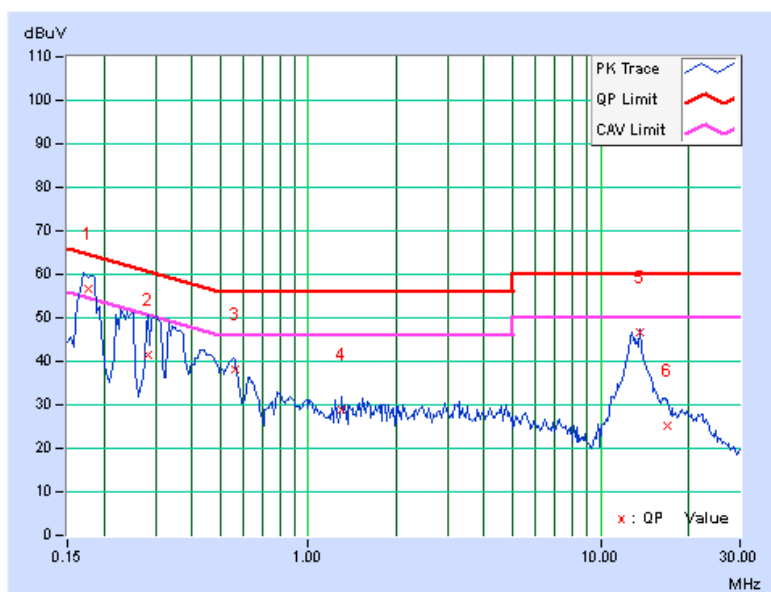


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17734	0.27	56.38	42.49	56.65	42.76	64.61	54.61	-7.96	-11.85
2	0.28281	0.29	41.18	25.65	41.47	25.94	60.73	50.73	-19.26	-24.79
3	0.56406	0.31	37.74	27.29	38.05	27.60	56.00	46.00	-17.95	-18.40
4	1.30078	0.35	28.46	19.38	28.81	19.73	56.00	46.00	-27.19	-26.27
5	13.56250	0.55	45.98	44.03	46.53	44.58	60.00	50.00	-13.47	-5.42
6	17.02734	0.60	24.54	19.18	25.14	19.78	60.00	50.00	-34.86	-30.22

REMARKS:

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



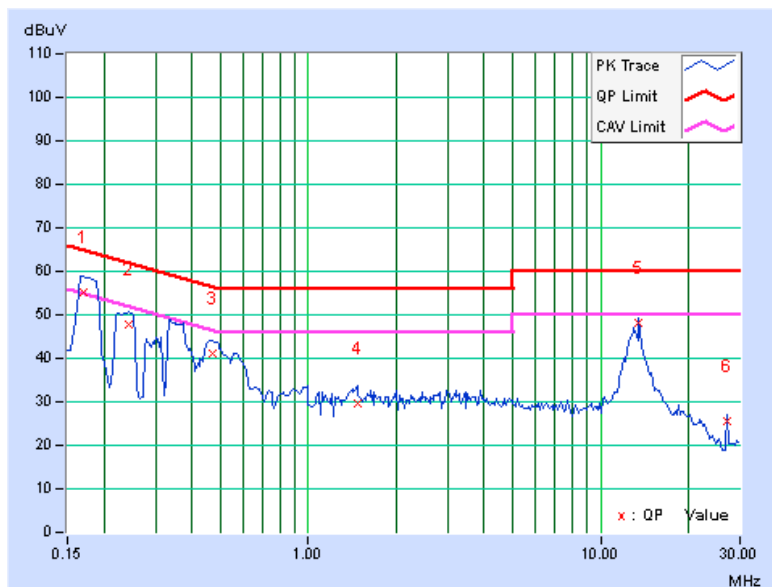
MODE C

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.09	39.25	55.36	39.52	64.98	54.98	-9.62	-15.46
2	0.24375	0.28	47.60	33.83	47.88	34.11	61.97	51.97	-14.08	-17.85
3	0.47031	0.30	40.68	29.72	40.98	30.02	56.51	46.51	-15.52	-16.48
4	1.46875	0.35	29.35	17.49	29.70	17.84	56.00	46.00	-26.30	-28.16
5	13.55859	0.52	47.65	45.48	48.17	46.00	60.00	50.00	-11.83	-4.00
6	27.11719	0.49	25.09	21.48	25.58	21.97	60.00	50.00	-34.42	-28.03

REMARKS:

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

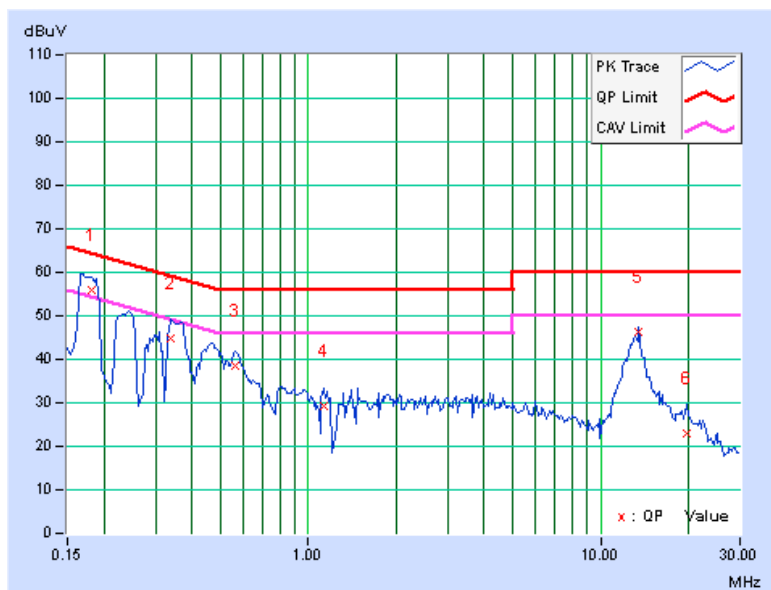


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18125	0.27	55.52	41.00	55.79	41.27	64.43	54.43	-8.63	-13.15
2	0.33750	0.29	44.68	32.30	44.97	32.59	59.26	49.26	-14.29	-16.67
3	0.56406	0.31	38.23	27.48	38.54	27.79	56.00	46.00	-17.46	-18.21
4	1.13281	0.34	29.09	18.71	29.43	19.05	56.00	46.00	-26.57	-26.95
5	13.55859	0.55	45.80	43.85	46.35	44.40	60.00	50.00	-13.65	-5.60
6	19.69141	0.64	22.31	17.63	22.95	18.27	60.00	50.00	-37.05	-31.73

REMARKS:

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



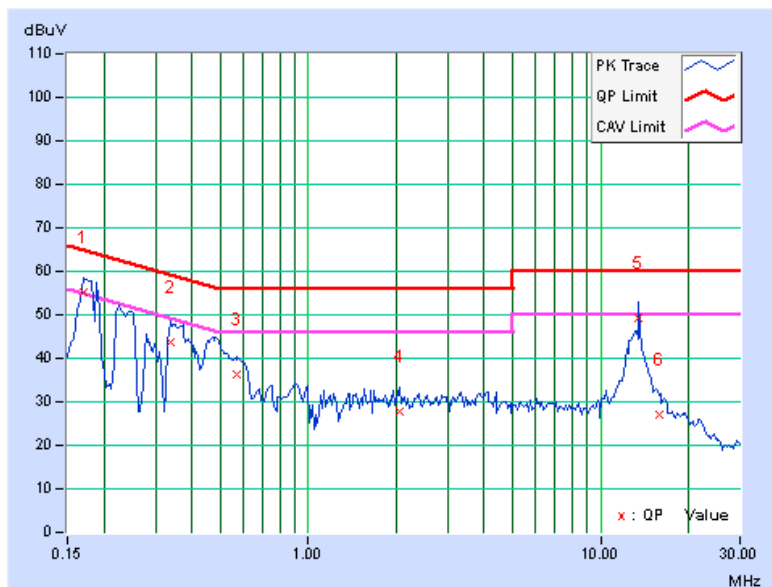
MODE D

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.09	39.25	55.36	39.52	64.98	54.98	-9.62	-15.46
2	0.33750	0.29	43.53	31.19	43.82	31.48	59.26	49.26	-15.44	-17.78
3	0.57188	0.31	36.08	24.53	36.39	24.84	56.00	46.00	-19.61	-21.16
4	2.04688	0.36	27.40	19.11	27.76	19.47	56.00	46.00	-28.24	-26.53
5	13.55859	0.52	48.59	46.05	49.11	46.57	60.00	50.00	-10.89	-3.43
6	15.86719	0.54	26.36	21.05	26.90	21.59	60.00	50.00	-33.10	-28.41

REMARKS:

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

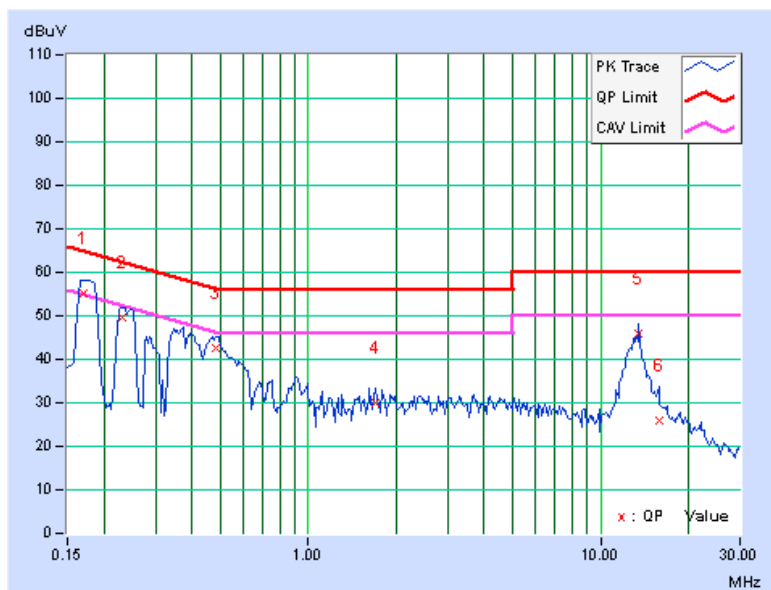


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.27	55.01	39.09	55.28	39.36	64.98	54.98	-9.70	-15.62
2	0.23203	0.28	49.35	37.47	49.63	37.75	62.38	52.38	-12.74	-14.62
3	0.48203	0.31	42.11	31.14	42.42	31.45	56.30	46.30	-13.89	-14.86
4	1.69922	0.36	29.50	19.84	29.86	20.20	56.00	46.00	-26.14	-25.80
5	13.55859	0.55	45.36	43.15	45.91	43.70	60.00	50.00	-14.09	-6.30
6	15.85156	0.58	25.48	19.81	26.06	20.39	60.00	50.00	-33.94	-29.61

REMARKS:

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



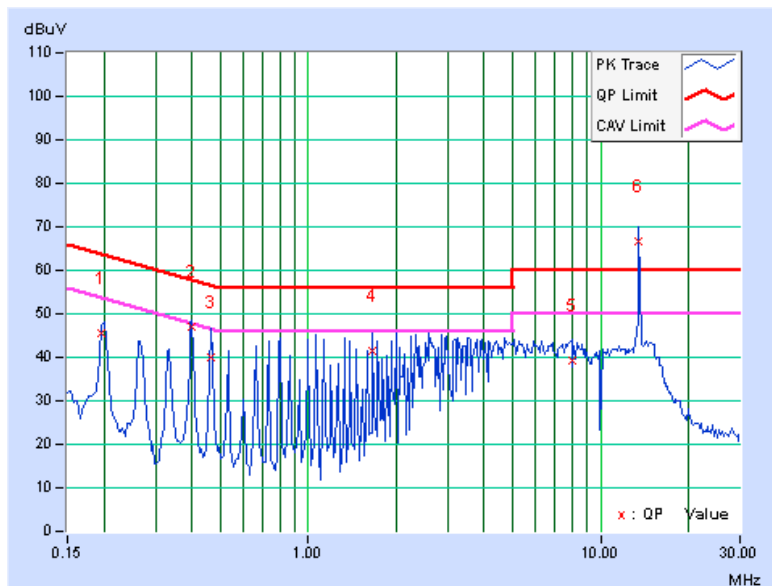
MODE E

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	45.45	39.46	45.73	39.74	63.58	53.58	-17.85	-13.84
2	0.26719	0.29	42.83	41.62	43.12	41.91	61.20	51.20	-18.09	-9.30
3	0.66563	0.32	42.33	40.27	42.65	40.59	56.00	46.00	-13.35	-5.41
4	2.72656	0.39	41.68	40.03	42.07	40.42	56.00	46.00	-13.93	-5.58
5	9.90625	0.50	42.65	38.38	43.15	38.88	60.00	50.00	-16.85	-11.12
6	13.55859	0.52	67.58	64.27	68.10	64.79	60.00	50.00	8.10	14.79

REMARKS:

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

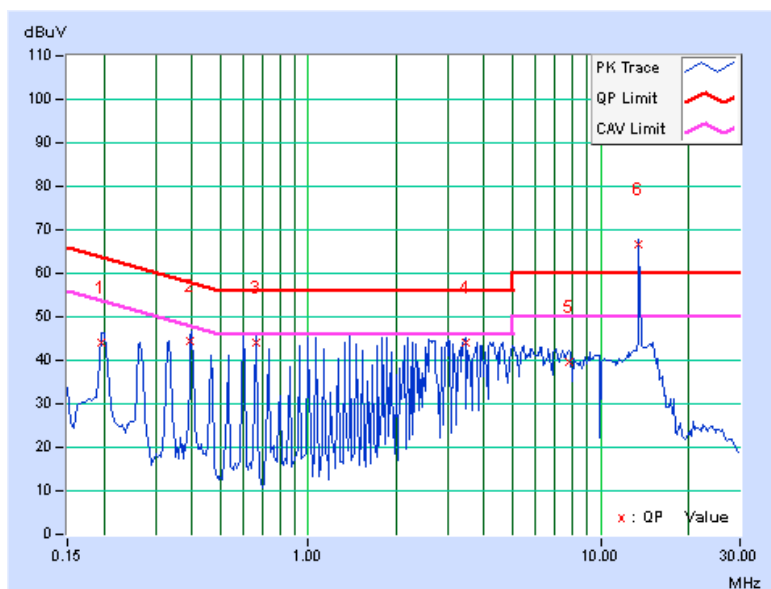


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.67	40.17	43.95	40.45	63.74	53.74	-19.79	-13.29
2	0.39609	0.30	44.22	43.78	44.52	44.08	57.93	47.93	-13.42	-3.86
3	0.66563	0.32	43.72	43.41	44.04	43.73	56.00	46.00	-11.96	-2.27
4	3.45703	0.42	43.78	41.69	44.20	42.11	56.00	46.00	-11.80	-3.89
5	7.83984	0.49	39.13	37.61	39.62	38.10	60.00	50.00	-20.38	-11.90
6	13.55859	0.55	66.18	62.79	66.73	63.34	60.00	50.00	6.73	13.34

REMARKS:

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



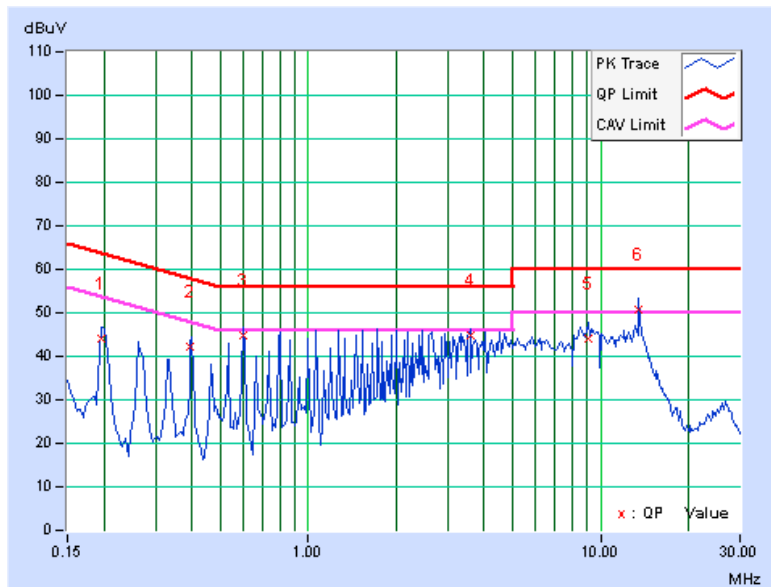
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.96	39.66	44.24	39.94	63.74	53.74	-19.50	-13.80
2	0.39609	0.30	41.93	40.32	42.23	40.62	57.93	47.93	-15.71	-7.32
3	0.59922	0.31	44.46	40.27	44.77	40.58	56.00	46.00	-11.23	-5.42
4	3.58984	0.42	44.42	40.60	44.84	41.02	56.00	46.00	-11.16	-4.98
5	9.10547	0.49	43.57	39.56	44.06	40.05	60.00	50.00	-15.94	-9.95
6	13.55859	0.52	50.30	45.37	50.82	45.89	60.00	50.00	-9.18	-4.11

REMARKS:

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

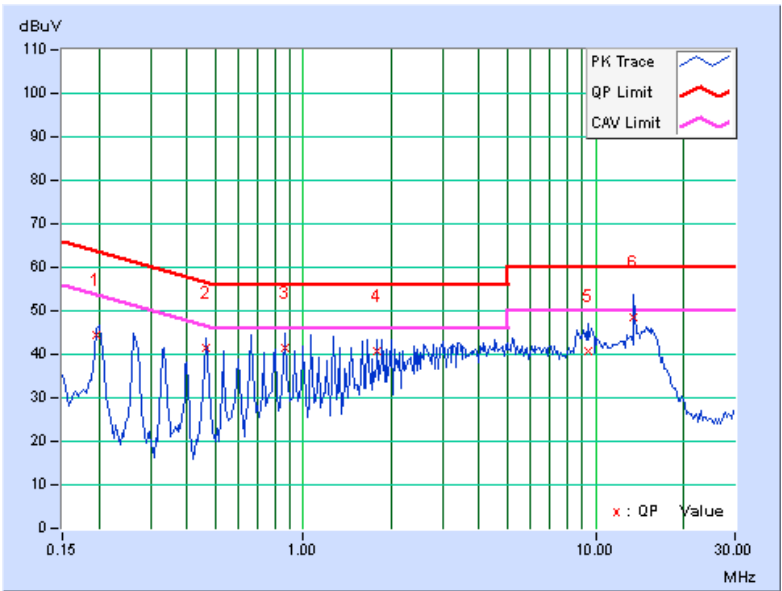


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.10	37.49	44.38	37.77	63.74	53.74	-19.36	-15.97
2	0.46641	0.30	41.33	41.05	41.63	41.35	56.58	46.58	-14.94	-5.22
3	0.86484	0.33	41.09	40.02	41.42	40.35	56.00	46.00	-14.58	-5.65
4	1.79297	0.36	40.41	36.25	40.77	36.61	56.00	46.00	-15.23	-9.39
5	9.44141	0.51	40.26	35.63	40.77	36.14	60.00	50.00	-19.23	-13.86
6	13.55859	0.55	47.93	43.99	48.48	44.54	60.00	50.00	-11.52	-5.46

REMARKS:

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



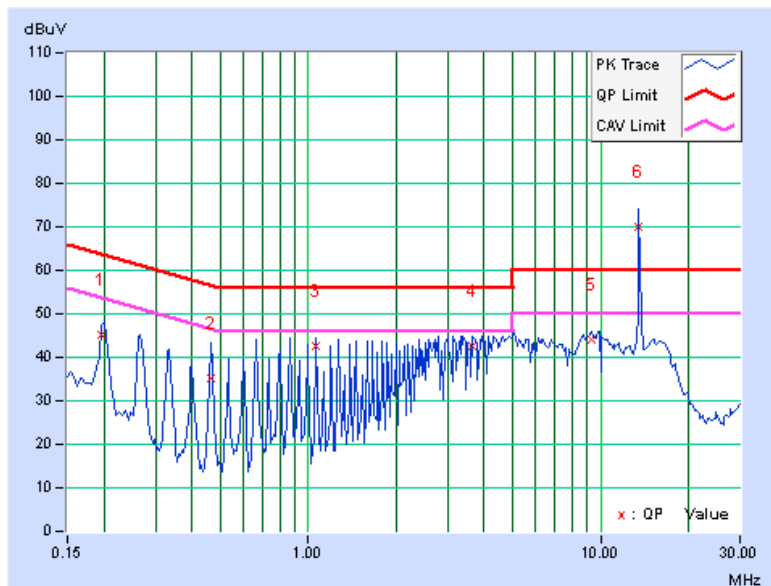
MODE F

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.90	39.27	45.18	39.55	63.74	53.74	-18.56	-14.19
2	0.46641	0.30	35.06	33.89	35.36	34.19	56.58	46.58	-21.21	-12.38
3	1.06250	0.34	42.37	41.24	42.71	41.58	56.00	46.00	-13.29	-4.42
4	3.65625	0.42	42.00	39.05	42.42	39.47	56.00	46.00	-13.58	-6.53
5	9.37109	0.49	43.52	40.18	44.01	40.67	60.00	50.00	-15.99	-9.33
6	13.55859	0.52	69.53	64.22	70.05	64.74	60.00	50.00	10.05	14.74

REMARKS:

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

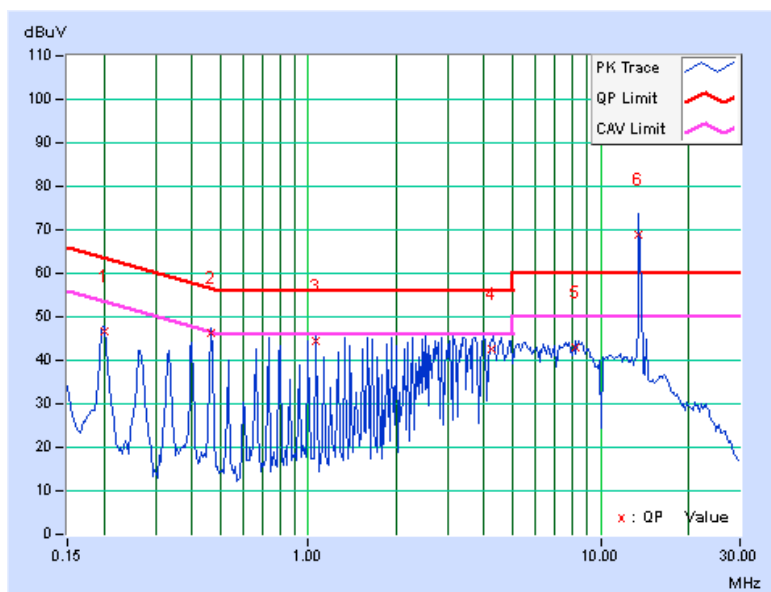


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.34	42.60	46.62	42.88	63.58	53.58	-16.96	-10.70
2	0.46641	0.30	45.85	40.46	46.15	40.76	56.58	46.58	-10.42	-5.81
3	1.06250	0.34	44.22	41.95	44.56	42.29	56.00	46.00	-11.44	-3.71
4	4.25391	0.44	42.00	41.54	42.44	41.98	56.00	46.00	-13.56	-4.02
5	8.17578	0.50	42.53	41.37	43.03	41.87	60.00	50.00	-16.97	-8.13
6	13.55859	0.55	68.19	63.94	68.74	64.49	60.00	50.00	8.74	14.49

REMARKS:

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



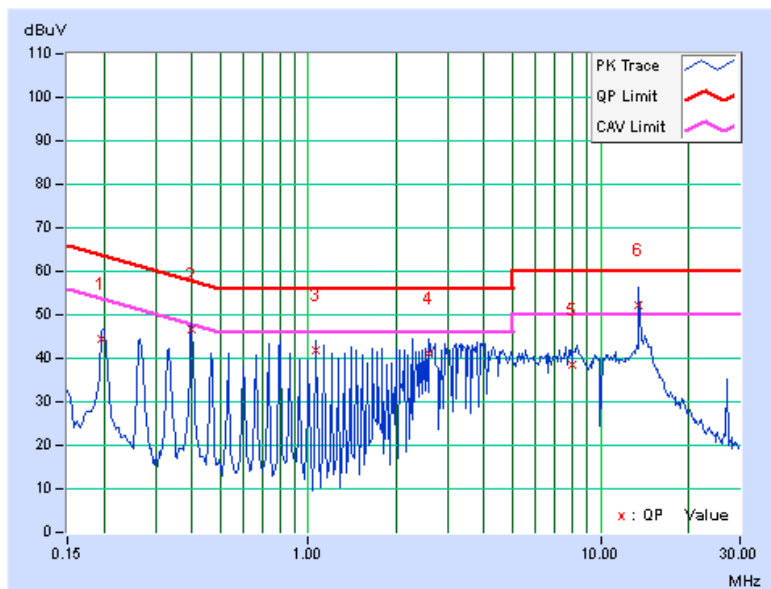
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.14	42.44	46.42	42.72	63.58	53.58	-17.16	-10.86
2	0.46641	0.30	45.98	41.62	46.28	41.92	56.58	46.58	-10.29	-4.65
3	0.73203	0.32	43.77	43.48	44.09	43.80	56.00	46.00	-11.91	-2.20
4	2.79297	0.39	43.97	39.89	44.36	40.28	56.00	46.00	-11.64	-5.72
5	8.57422	0.48	40.14	35.08	40.62	35.56	60.00	50.00	-19.38	-14.44
6	13.55859	0.52	49.23	45.83	49.75	46.35	60.00	50.00	-10.25	-3.65

REMARKS:

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

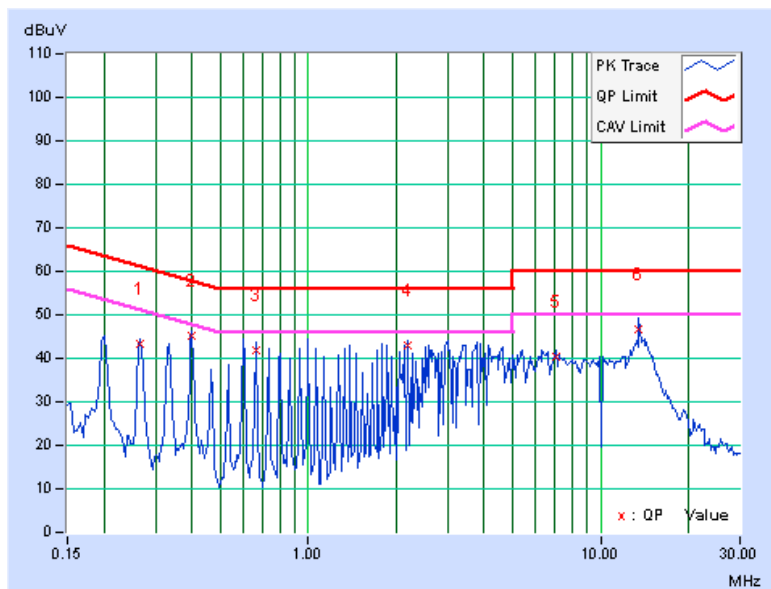


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26719	0.29	42.95	40.39	43.24	40.68	61.20	51.20	-17.97	-10.53
2	0.40000	0.30	44.80	44.25	45.10	44.55	57.85	47.85	-12.75	-3.30
3	0.66563	0.32	41.44	40.50	41.76	40.82	56.00	46.00	-14.24	-5.18
4	2.19531	0.38	42.56	41.28	42.94	41.66	56.00	46.00	-13.06	-4.34
5	7.04688	0.48	40.06	38.62	40.54	39.10	60.00	50.00	-19.46	-10.90
6	13.55859	0.55	46.11	42.72	46.66	43.27	60.00	50.00	-13.34	-6.73

REMARKS:

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



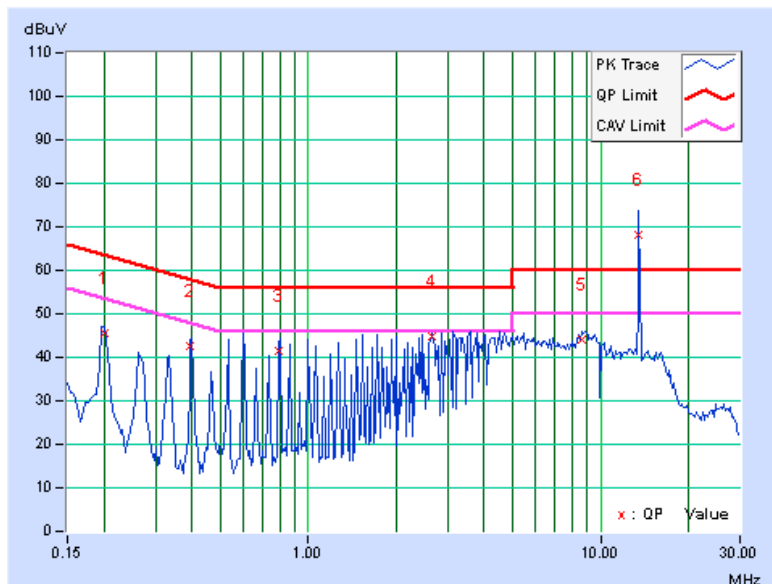
MODE G

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	45.38	41.62	45.66	41.90	63.58	53.58	-17.92	-11.68
2	0.39609	0.30	42.16	41.50	42.46	41.80	57.93	47.93	-15.48	-6.14
3	0.79453	0.33	41.07	40.91	41.40	41.24	56.00	46.00	-14.60	-4.76
4	2.66016	0.38	44.30	40.84	44.68	41.22	56.00	46.00	-11.32	-4.78
5	8.64063	0.48	43.44	40.24	43.92	40.72	60.00	50.00	-16.08	-9.28
6	13.55859	0.52	67.51	64.20	68.03	64.72	60.00	50.00	8.03	14.72

REMARKS:

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

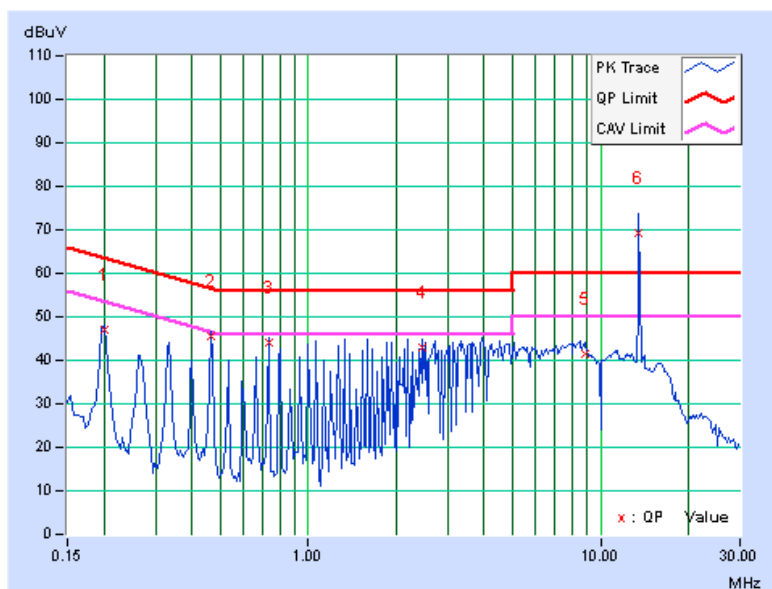


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.28	46.59	43.04	46.87	43.32	63.58	53.58	-16.71	-10.26
2	0.46641	0.30	45.17	41.70	45.47	42.00	56.58	46.58	-11.10	-4.57
3	0.73203	0.32	43.91	40.72	44.23	41.04	56.00	46.00	-11.77	-4.96
4	2.46094	0.39	42.61	42.61	43.00	43.00	56.00	46.00	-13.00	-3.00
5	8.83984	0.50	40.91	37.86	41.41	38.36	60.00	50.00	-18.59	-11.64
6	13.55859	0.55	68.54	64.12	69.09	64.67	60.00	50.00	9.09	14.67

REMARKS:

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



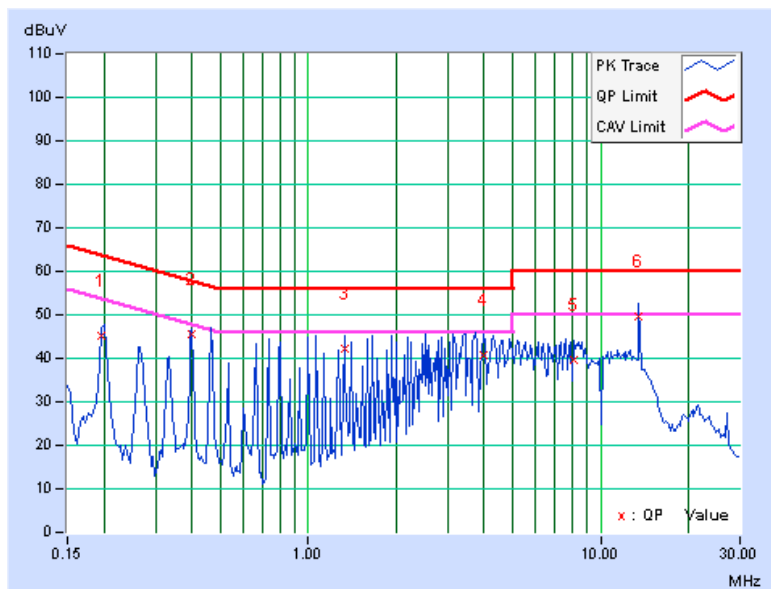
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.97	41.17	45.25	41.45	63.74	53.74	-18.49	-12.29
2	0.40000	0.30	45.22	41.85	45.52	42.15	57.85	47.85	-12.33	-5.70
3	1.32813	0.35	41.94	41.35	42.29	41.70	56.00	46.00	-13.71	-4.30
4	3.98828	0.43	40.43	36.74	40.86	37.17	56.00	46.00	-15.14	-8.83
5	8.10938	0.48	39.32	36.94	39.80	37.42	60.00	50.00	-20.20	-12.58
6	13.55859	0.52	49.02	45.76	49.54	46.28	60.00	50.00	-10.46	-3.72

REMARKS:

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

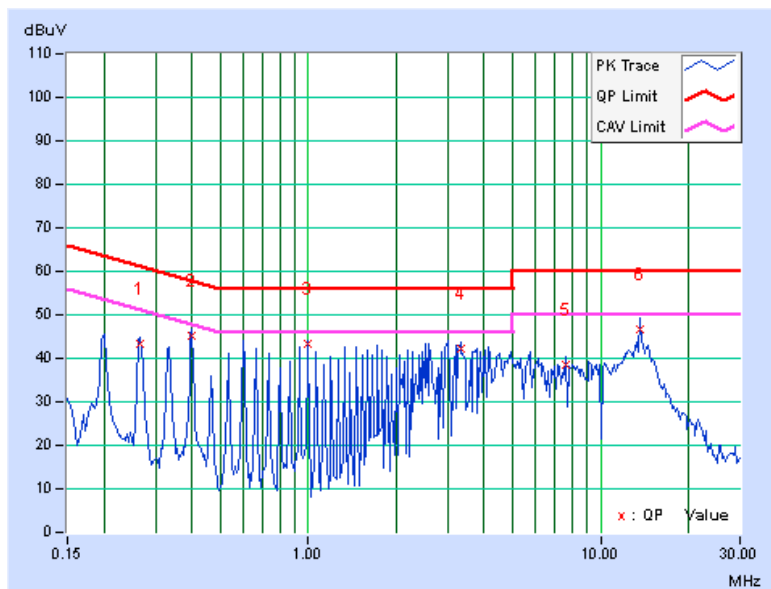


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26719	0.29	43.19	40.59	43.48	40.88	61.20	51.20	-17.73	-10.33
2	0.40000	0.30	44.90	41.33	45.20	41.63	57.85	47.85	-12.65	-6.22
3	0.99766	0.34	43.03	41.65	43.37	41.99	56.00	46.00	-12.63	-4.01
4	3.32422	0.42	41.71	41.38	42.13	41.80	56.00	46.00	-13.87	-4.20
5	7.64844	0.49	38.09	35.95	38.58	36.44	60.00	50.00	-21.42	-13.56
6	13.56250	0.55	46.18	43.03	46.73	43.58	60.00	50.00	-13.27	-6.42

REMARKS:

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



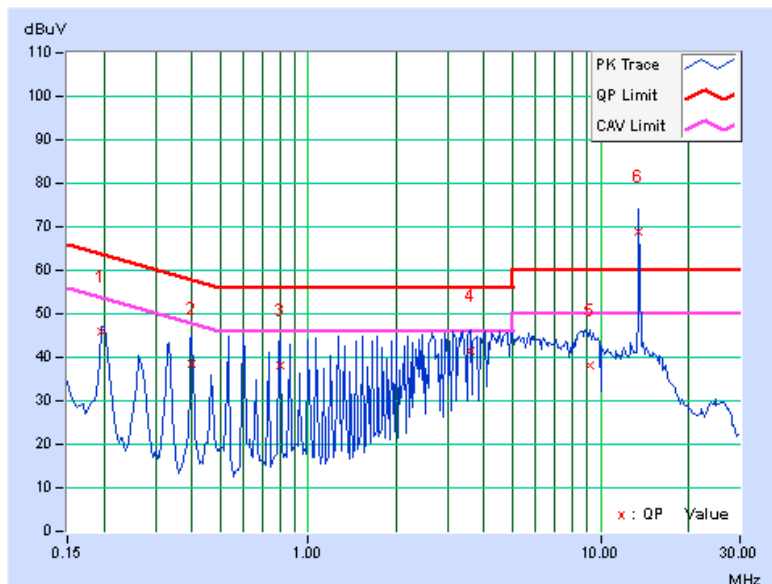
MODE H

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	45.83	42.48	46.11	42.76	63.74	53.74	-17.63	-10.98
2	0.40000	0.30	38.04	33.80	38.34	34.10	57.85	47.85	-19.51	-13.75
3	0.79844	0.33	37.89	36.89	38.22	37.22	56.00	46.00	-17.78	-8.78
4	3.58984	0.42	41.11	37.67	41.53	38.09	56.00	46.00	-14.47	-7.91
5	9.17578	0.49	37.53	33.44	38.02	33.93	60.00	50.00	-21.98	-16.07
6	13.55859	0.52	68.20	65.89	68.72	66.41	60.00	50.00	8.72	16.41

REMARKS:

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

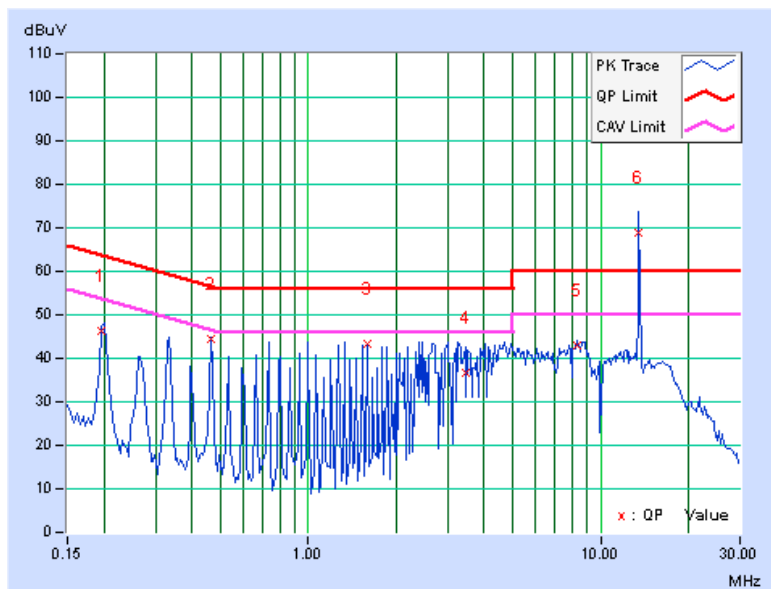


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	46.06	42.38	46.34	42.66	63.74	53.74	-17.40	-11.08
2	0.46641	0.30	44.14	43.56	44.44	43.86	56.58	46.58	-12.13	-2.71
3	1.59375	0.36	42.96	42.53	43.32	42.89	56.00	46.00	-12.68	-3.11
4	3.45313	0.42	36.27	31.56	36.69	31.98	56.00	46.00	-19.31	-14.02
5	8.30859	0.50	42.38	38.26	42.88	38.76	60.00	50.00	-17.12	-11.24
6	13.55859	0.55	68.30	64.97	68.85	65.52	60.00	50.00	8.85	15.52

REMARKS:

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



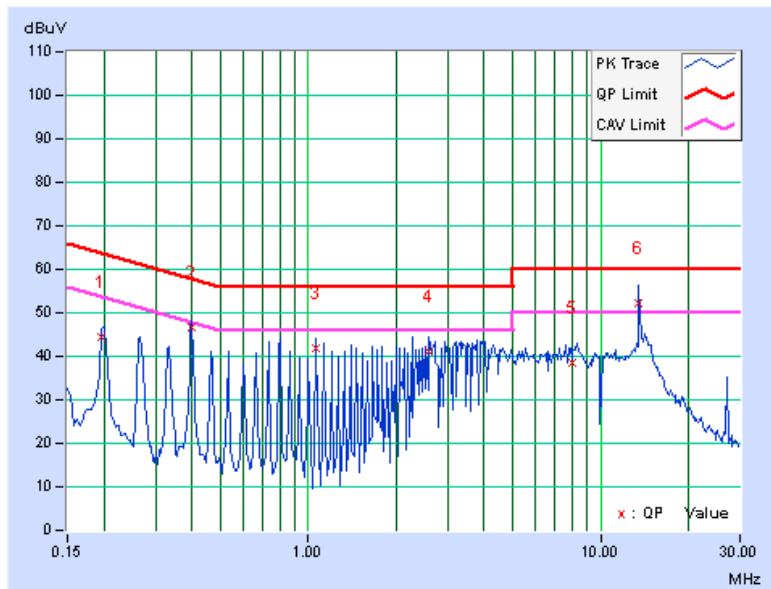
Test with suitable dummy load

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	44.10	40.13	44.38	40.41	63.74	53.74	-19.36	-13.33
2	0.40000	0.30	46.45	41.93	46.75	42.23	57.85	47.85	-11.10	-5.62
3	1.06250	0.34	41.68	40.54	42.02	40.88	56.00	46.00	-13.98	-5.12
4	2.59375	0.38	40.88	38.69	41.26	39.07	56.00	46.00	-14.74	-6.93
5	8.04297	0.48	38.05	34.09	38.53	34.57	60.00	50.00	-21.47	-15.43
6	13.55859	0.52	51.80	46.06	52.32	46.58	60.00	50.00	-7.68	-3.42

REMARKS:

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

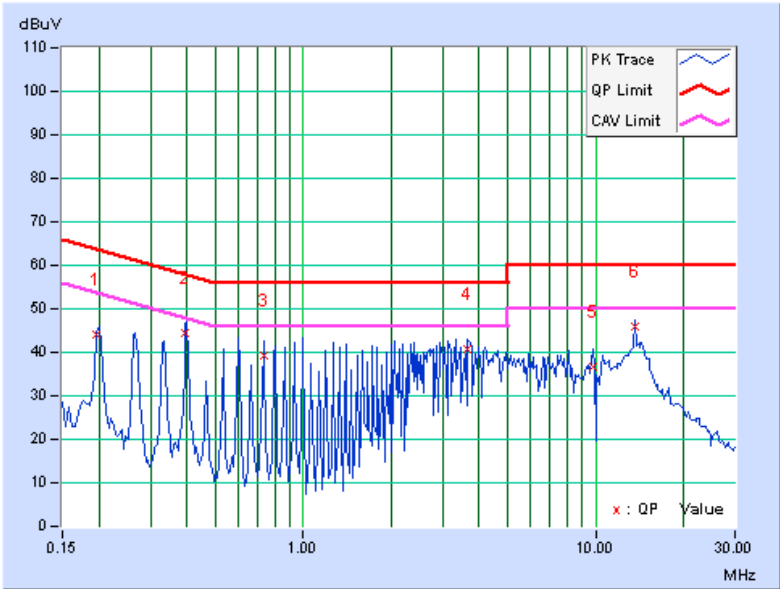


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.28	43.65	39.66	43.93	39.94	63.74	53.74	-19.81	-13.80
2	0.39609	0.30	44.20	43.48	44.50	43.78	57.93	47.93	-13.44	-4.16
3	0.73203	0.32	39.09	38.26	39.41	38.58	56.00	46.00	-16.59	-7.42
4	3.65625	0.43	40.36	37.63	40.79	38.06	56.00	46.00	-15.21	-7.94
5	9.77344	0.52	36.16	33.23	36.68	33.75	60.00	50.00	-23.32	-16.25
6	13.56250	0.55	45.37	42.80	45.92	43.35	60.00	50.00	-14.08	-6.65

REMARKS:

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



4.3 PEAK TRANSMIT POWER MEASUREMENT

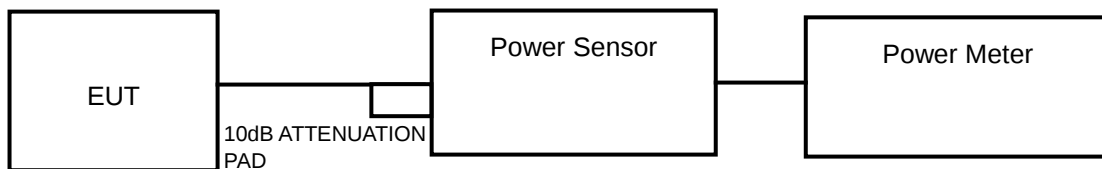
4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB

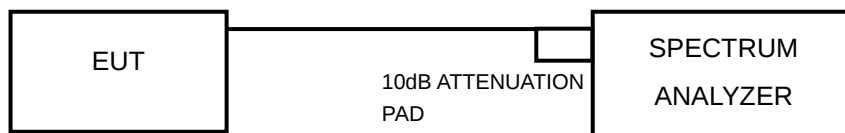
NOTE: Where B is the 26dB emission bandwidth in MHz.

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	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	27.10	14.33	17	PASS
44	5220	28.51	14.55	17	PASS
48	5240	26.67	14.26	17	PASS
52	5260	35.81	15.54	24	PASS
60	5300	36.64	15.64	24	PASS
64	5320	36.81	15.66	24	PASS
100	5500	33.27	15.22	24	PASS
116	5580	34.20	15.34	24	PASS
140	5700	31.84	15.03	24	PASS

NOTE:

For 5180~5240MHz:

1. $4\text{dBm} + 10\log(28.36) = 18.53\text{dBm} > 17\text{dBm}$.
2. $4\text{dBm} + 10\log(28.08) = 18.48\text{dBm} > 17\text{dBm}$.
3. $4\text{dBm} + 10\log(29.71) = 18.73\text{dBm} > 17\text{dBm}$.

For 5260~5700MHz:

1. $11\text{dBm} + 10\log(39.01) = 26.91\text{dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(39.05) = 26.92\text{dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(38.69) = 26.88\text{dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(42.39) = 27.27\text{dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(39.15) = 26.93\text{dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(40.82) = 27.11\text{dBm} > 24\text{dBm}$.

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	29.58	14.71	17	PASS
44	5220	28.71	14.58	17	PASS
48	5240	29.31	14.67	17	PASS
52	5260	40.55	16.08	24	PASS
60	5300	40.46	16.07	24	PASS
64	5320	40.74	16.10	24	PASS
100	5500	34.59	15.39	24	PASS
116	5580	32.43	15.11	24	PASS
140	5700	31.77	15.02	24	PASS

NOTE:

For 5180~5240MHz:

1. $4\text{dBm} + 10\log(37.55) = 19.75\text{dBm} > 17\text{dBm}$.
2. $4\text{dBm} + 10\log(37.79) = 19.77\text{dBm} > 17\text{dBm}$.
3. $4\text{dBm} + 10\log(38.03) = 19.80\text{dBm} > 17\text{dBm}$.

For 5260~5700MHz:

1. $11\text{dBm} + 10\log(41.36) = 27.17\text{dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(40.49) = 27.07\text{dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(39.84) = 27.00\text{dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(40.59) = 27.08\text{dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(40.90) = 27.12\text{dBm} > 24\text{dBm}$.
6. $11\text{dBm} + 10\log(41.16) = 27.14\text{dBm} > 24\text{dBm}$.

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	14.86	11.72	17	PASS
46	5230	25.88	14.13	17	PASS
54	5270	27.86	14.45	24	PASS
62	5310	26.30	14.20	24	PASS
102	5510	22.28	13.48	24	PASS
110	5550	20.32	13.08	24	PASS
134	5670	18.92	12.77	24	PASS

NOTE:

For 5180~5240MHz:

1. $4\text{dBm} + 10\log(78.40) = 22.94\text{dBm} > 17\text{dBm}$.
2. $4\text{dBm} + 10\log(75.93) = 22.80\text{dBm} > 17\text{dBm}$.

For 5260~5700MHz:

1. $11\text{dBm} + 10\log(78.82) = 29.97\text{dBm} > 24\text{dBm}$.
2. $11\text{dBm} + 10\log(82.62) = 30.17\text{dBm} > 24\text{dBm}$.
3. $11\text{dBm} + 10\log(78.57) = 29.95\text{dBm} > 24\text{dBm}$.
4. $11\text{dBm} + 10\log(80.53) = 30.06\text{dBm} > 24\text{dBm}$.
5. $11\text{dBm} + 10\log(85.20) = 30.30\text{dBm} > 24\text{dBm}$.

26dB BANDWIDTH

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	28.36	PASS
44	5220	28.08	PASS
48	5240	29.71	PASS
52	5260	39.01	PASS
60	5300	39.05	PASS
64	5320	38.69	PASS
100	5500	42.39	PASS
116	5580	39.15	PASS
140	5700	40.82	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	37.55	PASS
44	5220	37.79	PASS
48	5240	38.03	PASS
52	5260	41.36	PASS
60	5300	40.49	PASS
64	5320	39.84	PASS
100	5500	40.59	PASS
116	5580	40.90	PASS
140	5700	41.16	PASS

802.11n (40MHz)

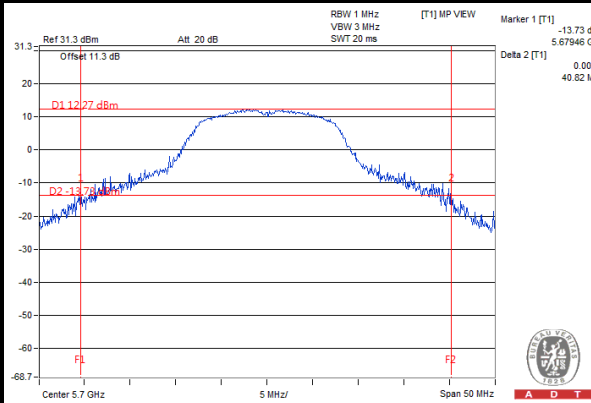
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
38	5190	78.40	PASS
46	5230	75.93	PASS
54	5270	78.82	PASS
62	5310	82.62	PASS
102	5510	78.57	PASS
110	5550	80.53	PASS
134	5670	85.20	PASS



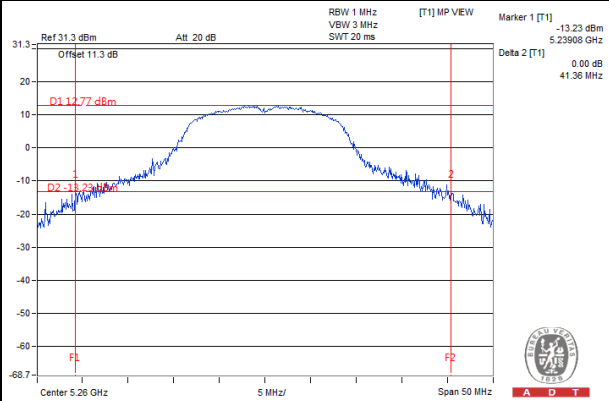
A D T

SPECTRUM PLOT OF WORST VALUE

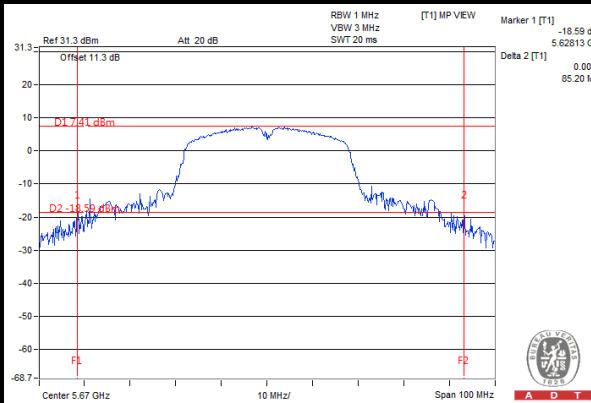
802.11a



802.11n (20MHz)



802.11n (40MHz)

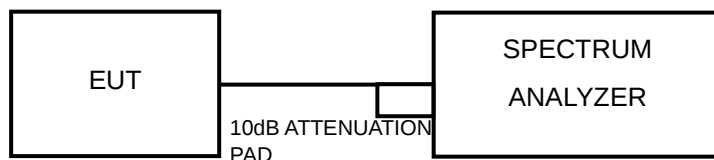


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

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

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

Using method SA-2 alternative

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- 3) Sweep time = 4second.
- 4) Perform a single sweep.
- 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

802.11a

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	2.81	0.74	3.55	4	PASS
44	5220	2.77	0.74	3.51	4	PASS
48	5240	2.88	0.74	3.62	4	PASS
52	5260	3.42	0.74	4.16	11	PASS
60	5300	3.73	0.74	4.47	11	PASS
64	5320	3.88	0.74	4.62	11	PASS
100	5500	4.19	0.74	4.93	11	PASS
116	5580	3.67	0.74	4.41	11	PASS
140	5700	2.95	0.74	3.69	11	PASS

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

802.11n (20MHz)

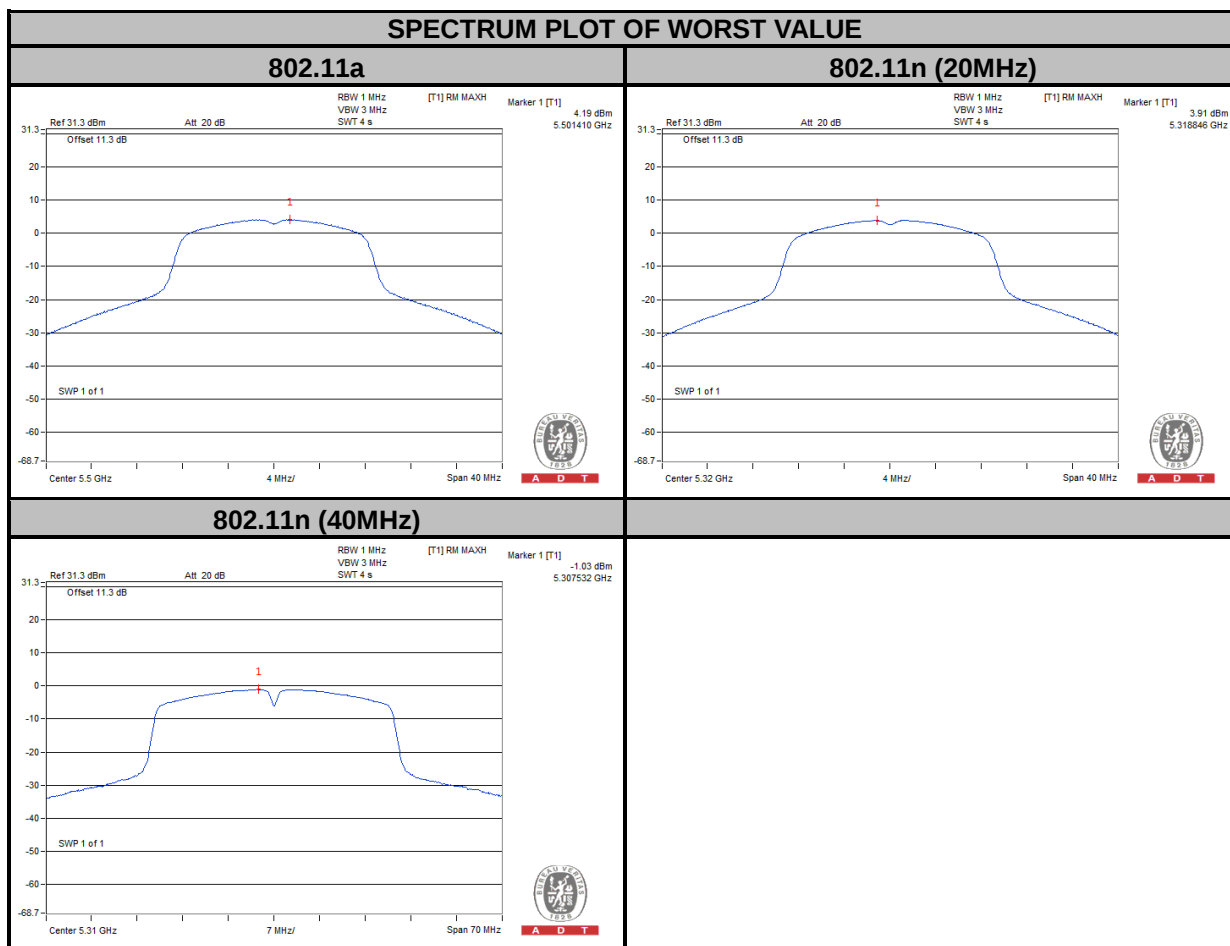
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	2.69	0.77	3.46	4	PASS
44	5220	2.89	0.77	3.66	4	PASS
48	5240	3.00	0.77	3.77	4	PASS
52	5260	3.43	0.77	4.20	11	PASS
60	5300	3.71	0.77	4.48	11	PASS
64	5320	3.91	0.77	4.68	11	PASS
100	5500	3.80	0.77	4.57	11	PASS
116	5580	3.22	0.77	3.99	11	PASS
140	5700	2.50	0.77	3.27	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	-2.18	1.69	-0.49	4	PASS
46	5230	-2.05	1.69	-0.36	4	PASS
54	5270	-1.32	1.69	0.37	11	PASS
62	5310	-1.03	1.69	0.66	11	PASS
102	5510	-2.12	1.69	-0.43	11	PASS
110	5550	-2.34	1.69	-0.65	11	PASS
134	5670	-2.81	1.69	-1.12	11	PASS

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

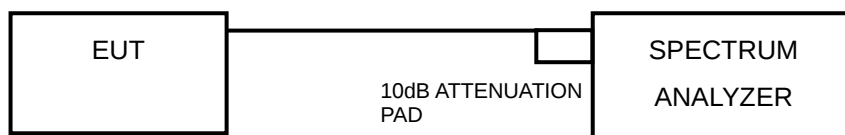


4.5 PEAK POWER EXCURSION MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

Shall not exceed 13 dB.

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

- Set the RBW = 1 kHz, VBW $\geq$ 3 MHz, Detector = peak.
 - Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
 - Use the peak search function to find the peak of the spectrum.
 - Measure the PPSD.
 - Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.
- Find the worst channel and modulation mode as above test procedure, and follow KDB 789033 D01 General UNII Test Procedures v01r03 and repeat step 1 to 5 for final testing of each modulation mode on a single channel (all modulation types) in a single operating band to compliance with the peak excursion requirement.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

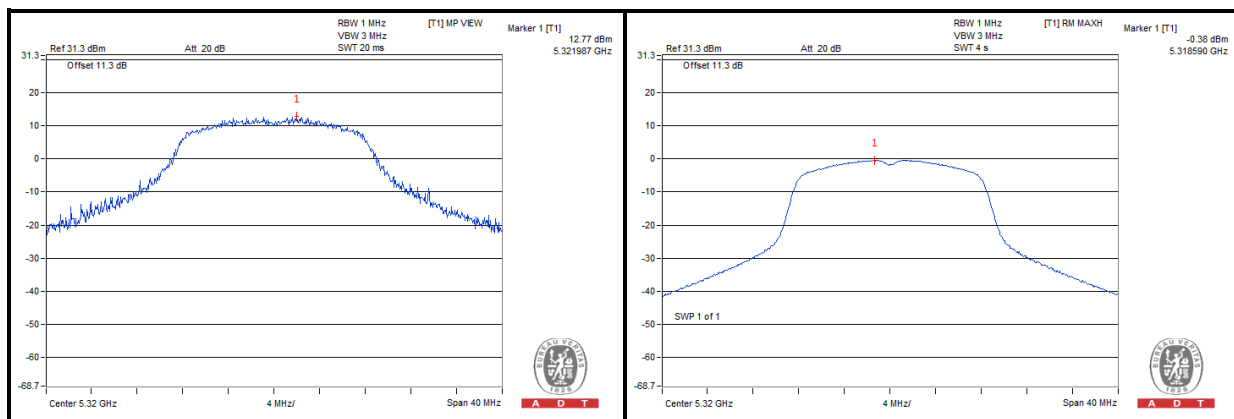
4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6.

4.5.7 TEST RESULTS

MODULATION MODE	MODULATION TYPE	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
802.11a	BPSK	5320	13.68	3.88	4.62	9.06	13	PASS
	QPSK		13.82	3.62	4.99	8.83	13	PASS
	16QAM		13.86	2.28	4.77	9.09	13	PASS
	64QAM		12.77	-0.38	3.40	9.37	13	PASS
802.11n (20MHz)	BPSK	5320	13.47	3.91	4.68	8.79	13	PASS
	QPSK		14.44	3.73	5.12	9.32	13	PASS
	16QAM		13.94	2.89	5.32	8.62	13	PASS
	64QAM		12.30	-0.65	3.21	9.09	13	PASS
802.11n (40MHz)	BPSK	5310	9.24	-1.03	0.66	8.58	13	PASS
	QPSK		9.70	-1.54	1.30	8.40	13	PASS
	16QAM		10.94	-2.48	2.02	8.92	13	PASS
	64QAM		10.59	-3.82	3.06	7.53	13	PASS

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

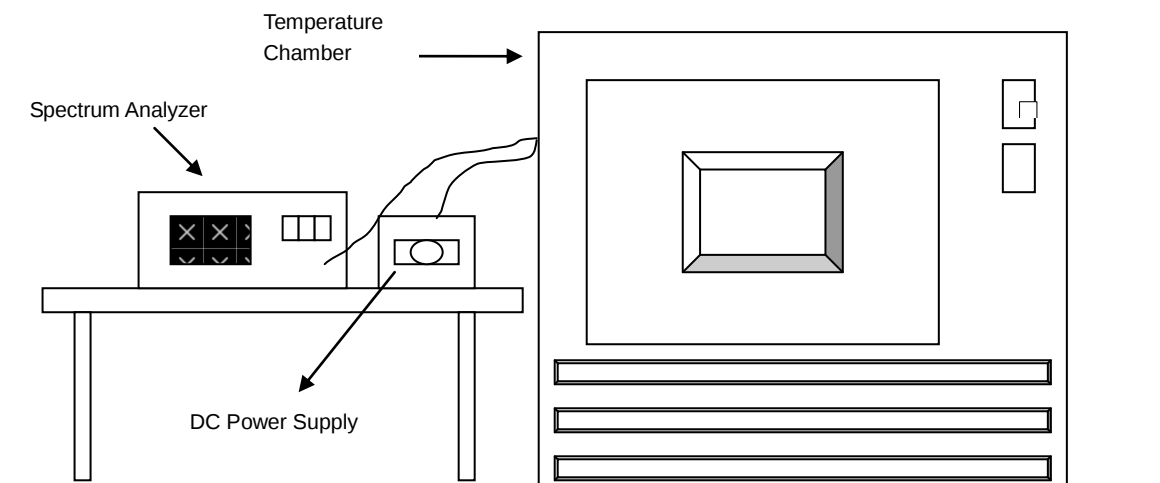


4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

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

- 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.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

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

4.6.7 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)
50	3.8	5320.012354	2.322	5320.012139	2.282	5320.012075	2.270	5320.012458	2.342
40	3.8	5320.012177	2.289	5320.012000	2.256	5320.012143	2.283	5320.012132	2.280
30	3.8	5320.013969	2.626	5320.013451	2.528	5320.013449	2.528	5320.013735	2.582
20	3.8	5320.014976	2.815	5320.015266	2.870	5320.014903	2.801	5320.014956	2.811
10	3.8	5320.015795	2.969	5320.015775	2.965	5320.016098	3.026	5320.015881	2.985
0	3.8	5320.014552	2.735	5320.014527	2.731	5320.014535	2.732	5320.014205	2.670
-10	3.8	5320.012780	2.402	5320.012399	2.331	5320.012364	2.324	5320.012839	2.413
-20	3.8	5320.012443	2.339	5320.012379	2.327	5320.012462	2.342	5320.012138	2.282
-30	3.8	5320.010601	1.993	5320.010920	2.053	5320.010433	1.961	5320.010967	2.061

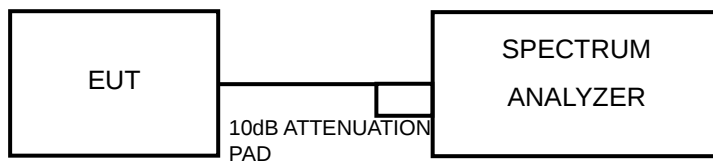
FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	3.4	5320.014626	2.749	5320.014328	2.693	5320.014233	2.675	5320.014566	2.738
	3.8	5320.014976	2.815	5320.015266	2.870	5320.014903	2.801	5320.014956	2.811
	4.20	5320.016339	3.071	5320.015860	2.981	5320.015837	2.977	5320.016215	3.048

4.7 20dBc BANDWIDTH MEASUREMENT

4.7.1 LIMITS OF 20dBc BANDWIDTH MEASUREMENT

20dBc point shall not overlap in 5150~5700MHz.

4.7.2 TEST SETUP



4.7.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

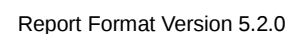
4.7.4 TEST PROCEDURES

789033 D01 General UNII Test Procedures v01r03

Emission bandwidth

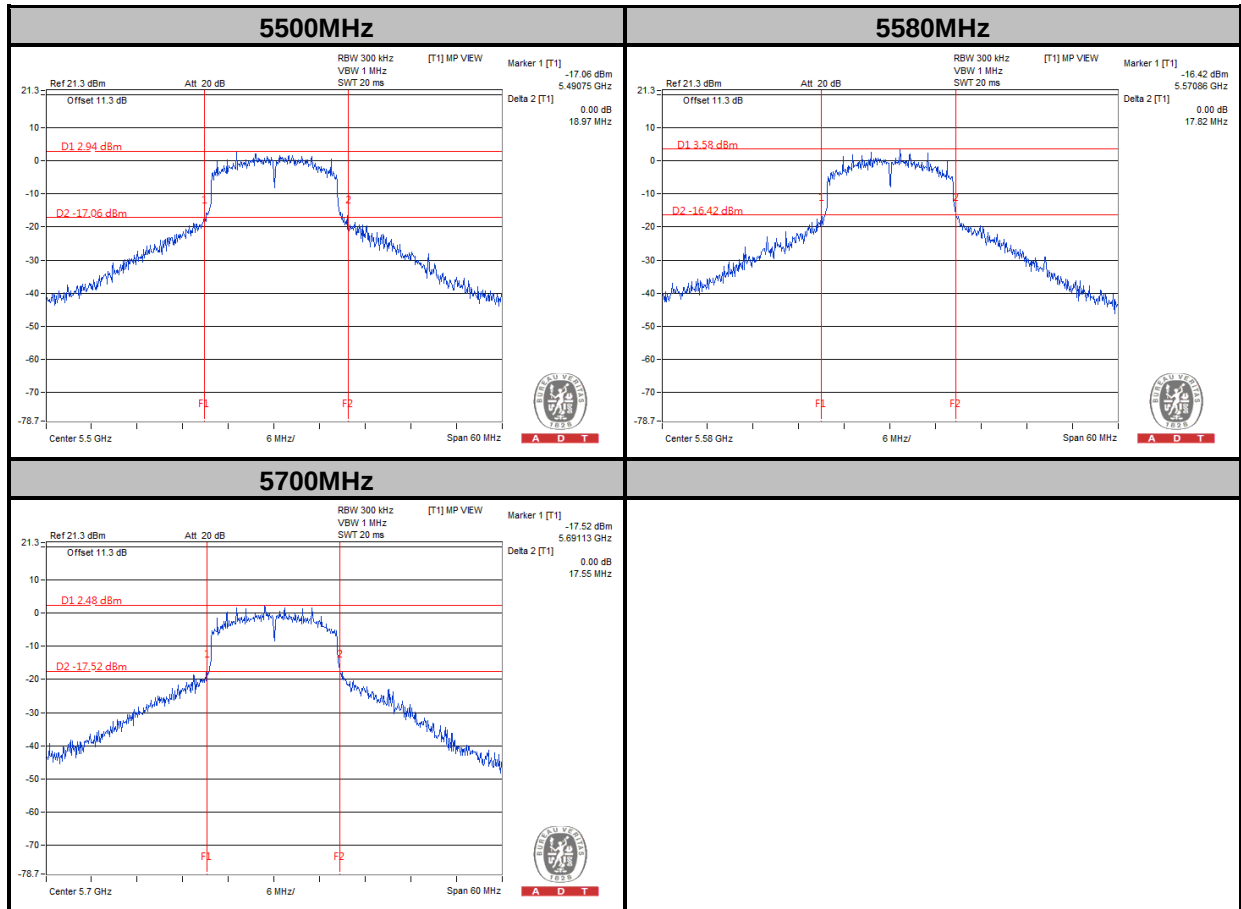
- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak
- 4) Trace mode = max hold.
- 5) Measurement the maximum width of the emission that is 20dB down from the peak of the emission. Compare this with RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

802.11a





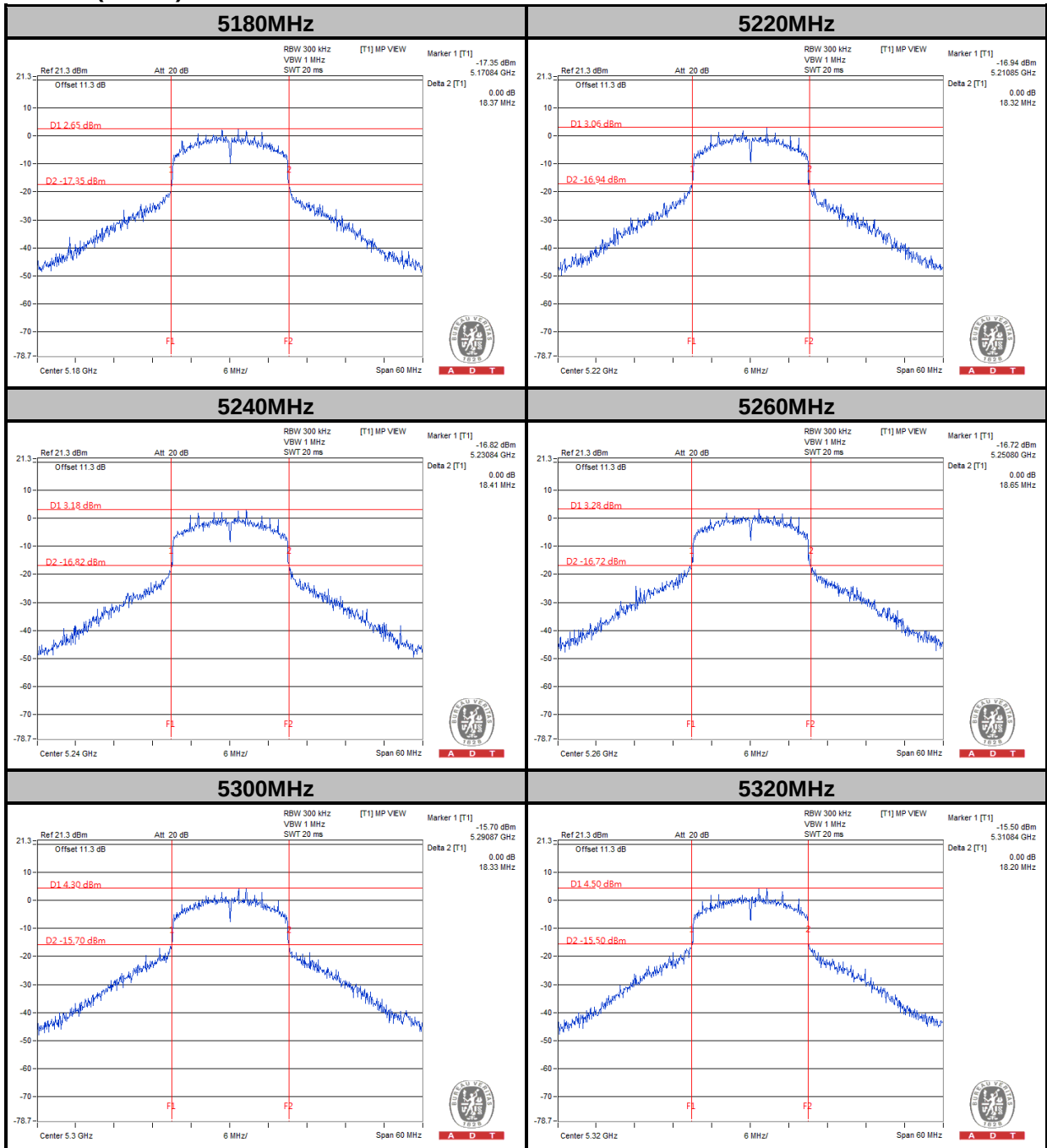
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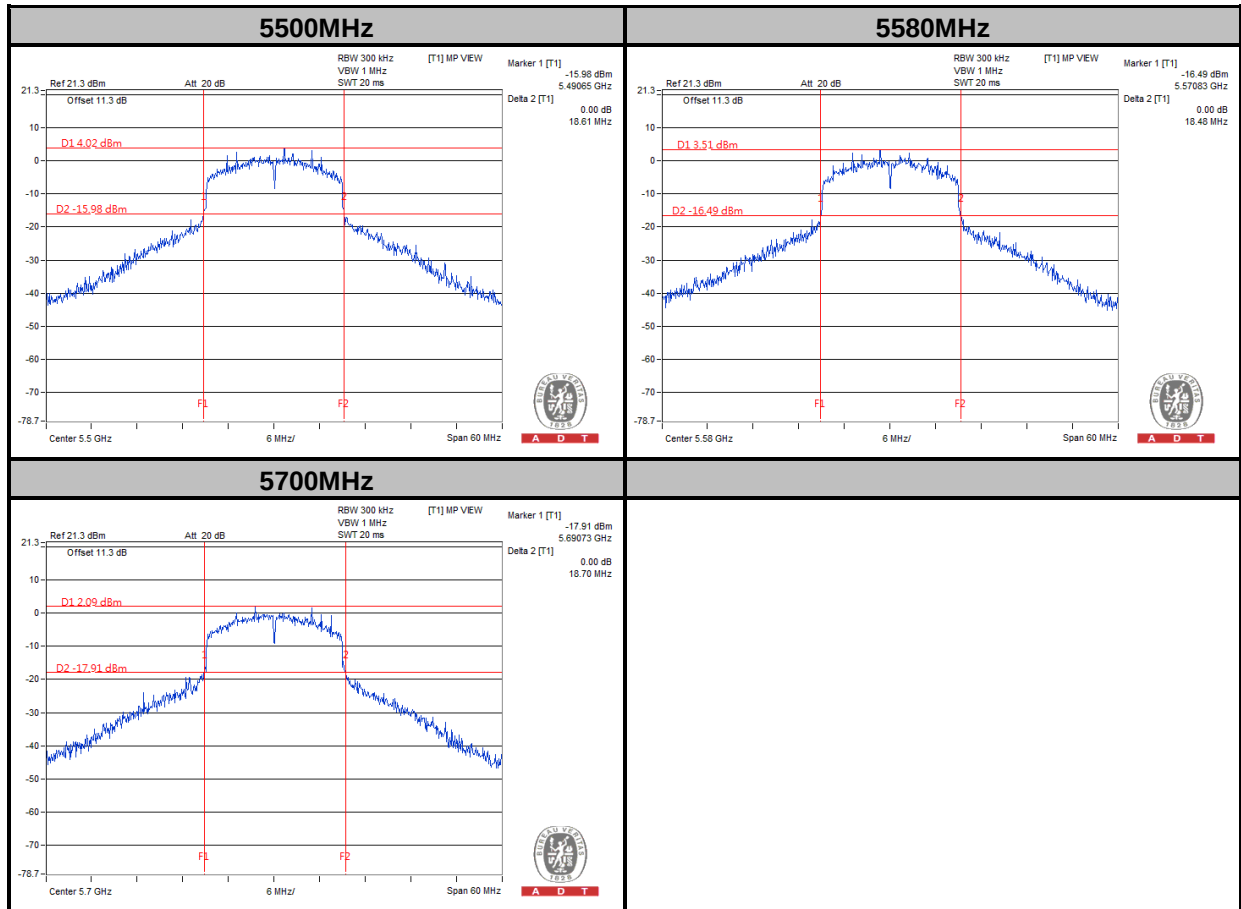
A D T

802.11n (20MHz)





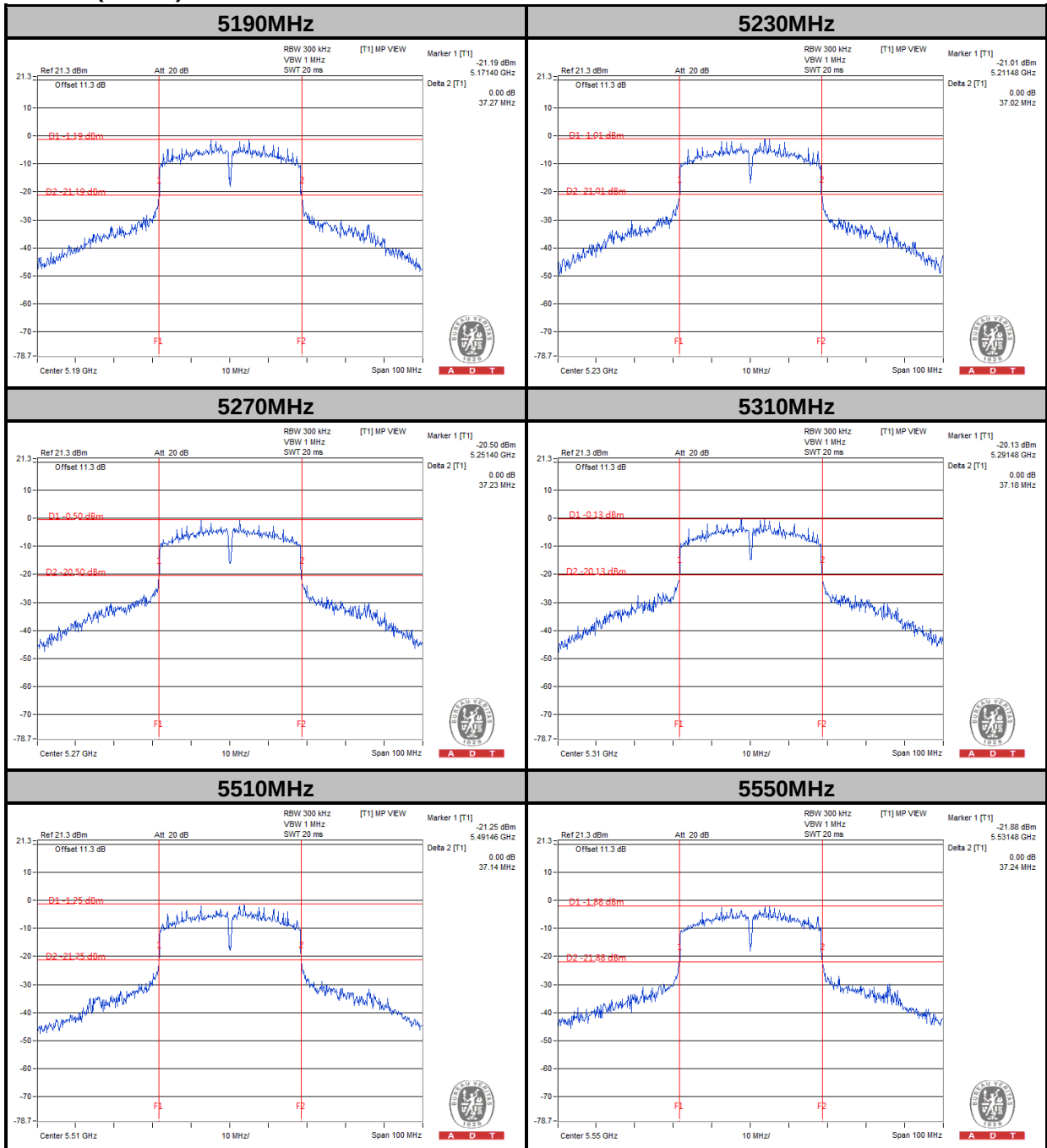
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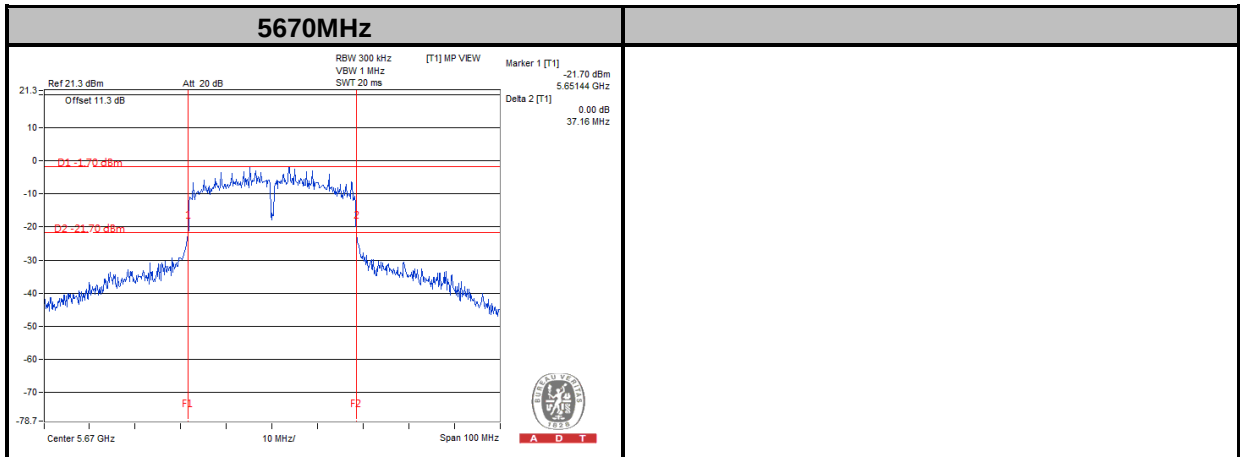
A D T

802.11n (40MHz)





A D T



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:

Linko EMC/RF Lab:

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Tel: 886-3-3183232

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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



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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---