

# FCC C2PC Test Report

**FCC ID** : SQG-MSD45N  
**Equipment** : 45 Series Pluggable module  
**Model No.** : MSD45N  
**Brand Name** : Laird Connectivity  
**Applicant** : Laird Connectivity LLC  
**Address** : W66N220 Commerce Court, Cedarburg, WI  
53012 United States Of America  
**Standard** : 47 CFR FCC Part 15.407  
**Received Date** : Mar. 07, 2022  
**Tested Date** : Mar. 18 ~ Mar. 30, 2022

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:

  
\_\_\_\_\_  
Along Chen / Assistant Manager

  
\_\_\_\_\_  
Gary Chang / Manager

---

## Table of Contents

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>5</b>
1.1	Information.....	5
1.2	Local Support Equipment List .....	9
1.3	Test Setup Chart .....	9
1.4	The Equipment List .....	10
1.5	Test Standards .....	11
1.6	Reference Guidance .....	11
1.7	Deviation from Test Standard and Measurement Procedure.....	11
1.8	Measurement Uncertainty .....	11
<b>2</b>	<b>TEST CONFIGURATION.....</b>	<b>12</b>
2.1	Testing Facility .....	12
2.2	The Worst Test Modes and Channel Details .....	12
<b>3</b>	<b>TRANSMITTER TEST RESULTS .....</b>	<b>14</b>
3.1	Conducted Output Power .....	14
3.2	Unwanted Emissions.....	16
3.3	AC Power Line Conducted Emissions .....	19
<b>4</b>	<b>TEST LABORATORY INFORMATION .....</b>	<b>20</b>
<b>APPENDIX A. CONDUCTED OUTPUT POWER</b>		
<b>APPENDIX B. UNWANTED EMISSIONS</b>		
<b>APPENDIX C. AC POWER LINE CONDUCTED EMISSIONS</b>		

---

## Release Record

Report No.	Version	Description	Issued Date
FR371704-12AN	Rev. 01	Initial issue	Apr. 20, 2022

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 19.224MHz 41.14 (Margin -8.86dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 66.91 (Margin -1.29dB) - PK	Pass
15.407(a)	Conducted Output Power	Max Power [dBm]: 5150~5250MHz: 16.45 5250~5350MHz: 16.42 5470~5725MHz: 17.77 5725~5850MHz: 18.13	Pass

### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

# 1 General Description

## 1.1 Information

This report is prepared for FCC class II permissive change.

This report is issued as a supplementary report to original ICC report no. FR371704-09AC. The modification is concerned with following:

- ✧ New applicant name & address.
- ✧ Adding 2<sup>nd</sup> source of Power Amplifier, Diplexer
- ✧ RF Shielding Can changed.

Therefore, related test items had been performed and presented in the following sections.

### 1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	Data Rate
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	1	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	1	MCS 0-7

Note 1: RF output power specifies that Maximum Conducted Output Power.  
 Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.  
 Note 3: 802.11n supports HT20 only.

### 1.1.2 Antenna Details

Ant. No.	Brand / Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	MAG.LAYERS/EDA-15 13-25GR2-B2-CY	Dipole	SMA Jack Reverse	2	2	2	2	2
2	MAG.LAYERS/PCA-46 06-2G4C1-A13-CY	PCB Dipole	UFL	2.21	---	---	---	---
3	Laird/NanoBlade-IP04	PCB Dipole	UFL	2	3.9	3.9	4	4
4	Laird/MAF95310 Mini NanoBlade Flex	PCB Dipole	UFL	2.79	3.38	3.38	3.38	3.38
5	Laird/NanoBlue-IP04	PCB Dipole	UFL	2	---	---	---	---
6	Ethertronics/WLAN_10 00146	PIFA	UFL	2.5	3.5	3.5	3.5	3.5
7	SAA / MG7018-41-000-R	Dipole	UFL	1.87	0.85	0.6	0.94	0.92
8	SAA / MG7324-41-000-R	Dipole	UFL	1.32	1.04	1.6	2.75	2.24
9	EMF2449A1-33UFL	PCB Dipole	UFL	0.8	3.3	3.3	3.3	3.3

Note: The antennas with highest gain of each type were selected for final testing in this test report

### 1.1.3 Power Supply Type of Equipment under Test (EUT)

<b>Power Supply Type</b>	3.3Vdc from power supply
--------------------------	--------------------------

### 1.1.4 Accessories

N/A

### 1.1.5 Channel List

802.11 a / HT20	
Channel	Frequency(MHz)
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
149	5745
153	5765
157	5785
161	5805
165	5825

### 1.1.6 Test Tool and Duty Cycle

Test Tool	Terminal, Version: 2.32.1		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	99.26	0.03
	HT20	99.62	0.02

### 1.1.7 Power Index of Test Tool

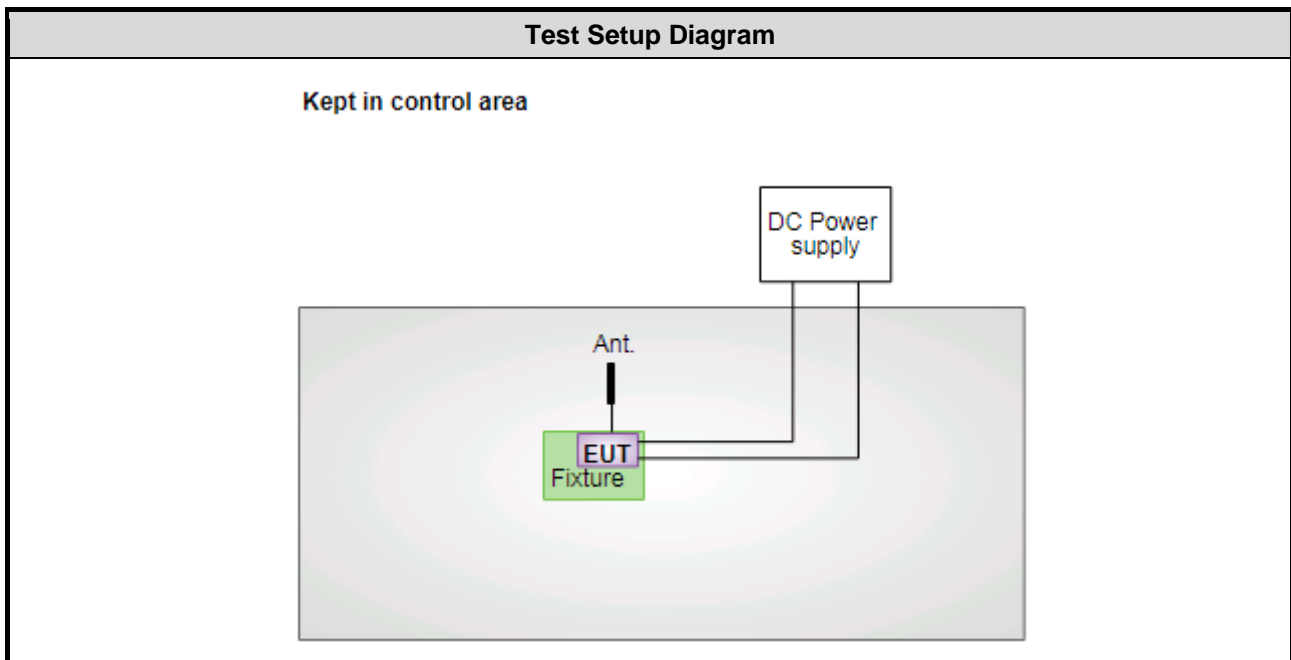
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	14.5
11a	5200	14.5
11a	5240	15.5
11a	5260	16
11a	5300	16
11a	5320	15.5
11a	5500	14.5
11a	5580	17
11a	5700	14.5
11a	5745	15.5
11a	5785	18
11a	5825	18.5
HT20	5180	14
HT20	5200	14
HT20	5240	15.5
HT20	5260	15.5
HT20	5300	15.5
HT20	5320	15
HT20	5500	14.5
HT20	5580	17
HT20	5700	14.5
HT20	5745	15.5
HT20	5785	18
HT20	5825	17



## 1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	DC Power Supply	GWINSTEK	GPC-3060D	---	---
2	Notebook	Lenovo	X61	---	Provided by applicant.
3	Fixture	---	---	---	Provided by applicant.

## 1.3 Test Setup Chart



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

## 1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 30, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Feb. 16, 2022	Feb. 15, 2023
LISN	R&S	ENV216	101295	Jan. 12, 2022	Jan. 11, 2023
LISN (Support Unit)	SCHWARZBECK	NSLK 8127	8127667	Jan .07, 2022	Jan .06, 2023
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 19, 2021	Oct. 18, 2022
50 ohm terminal (Support Unit)	NA	50	04	May 25, 2021	May 24, 2022
Measurement Software	AUDIX	e3	6.120210k	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Mar. 18 ~ Mar. 21, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Spectrum Analyzer	R&S	FSV40	101499	Mar. 08, 2022	Mar. 07, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 08, 2021	Nov. 07, 2022
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	May 06, 2021	May 05, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 20, 2021	Dec. 19, 2022
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Jan. 11, 2022	Jan. 10, 2023
Preamplifier	EMC	EMC02325	980187	Jul. 26, 2021	Jul. 25, 2022
Preamplifier	Agilent	83017A	MY39501309	Sep. 06, 2021	Sep. 05, 2022
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 05, 2021	Oct. 04, 2022
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 24, 2021	Sep. 23, 2022
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 24, 2021	Sep. 23, 2022
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 24, 2021	Sep. 23, 2022
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 24, 2021	Sep. 23, 2022
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 24, 2021	Sep. 23, 2022

Note: Calibration Interval of instruments listed above is one year.

<b>Test Item</b>	RF Conducted				
<b>Test Site</b>	(TH01-WS)				
<b>Tested Date</b>	Mar. 23, 2022				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101498	Nov. 29, 2021	Nov. 28, 2022
Power Meter	Anritsu	ML2495A	1241002	Nov. 07, 2021	Nov. 06, 2022
Power Sensor	Anritsu	MA2411B	1207366	Nov. 07, 2021	Nov. 06, 2022
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Nov. 08, 2021	Nov. 07, 2022
Measurement Software	Sporton	SENSE-15247_DTS	V5.10	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

## 1.5 Test Standards

47 CFR FCC Part 15.407  
ANSI C63.10-2013

## 1.6 Reference Guidance

FCC KDB 412172 D01 Determining ERP and EIRP v01r01  
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

## 1.7 Deviation from Test Standard and Measurement Procedure

None

## 1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	±1x10 <sup>-9</sup>
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.96 dB
Radiated emission > 1GHz	±4.51 dB
Time	±0.1%
Temperature	±0.4 °C

## 2 Test Configuration

### 2.1 Testing Facility

<b>Test Laboratory</b>	International Certification Corporation
<b>Test Site</b>	CO01-WS, TH01-WS
<b>Address of Test Site</b>	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
<b>Test Site</b>	03CH03-WS
<b>Address of Test Site</b>	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISED#: 10807C
- CAB identifier: TW2732

### 2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
AC Power Line Conducted Emissions	11a	5580	6 Mbps	1
Radiated Emissions ≤1GHz	11a	5580 5240	6 Mbps	1, 2, 3 4
Conducted Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	1
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
Radiated Emissions >1GHz	HT20	11a	5180	1
		5320 / 5700	MCS 0	1
		5180 / 5320 / 5700		2
		5700		3
5180 / 5320	4			

**NOTE:**

1. Test configurations are listed as below:
  - 1) Configuration 1 : PCB Dipole antenna (Antenna No.3), Y-plane
  - 2) Configuration 2 : PIFA antenna (Antenna No.6), Y-plane
  - 3) Configuration 3 : Dipole antenna (Antenna No.8), Y-plane / 5.47 ~ 5.725 GHz
  - 4) Configuration 4 : Dipole antenna (Antenna No.1), Y-plane./ 5.15 ~ 5.35 GHz

Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
AC Power Line Conducted Emissions	11a	5825	6 Mbps	1
Radiated Emissions $\leq$ 1GHz	11a	5825	6 Mbps	1, 2, 3
Conducted Output Power	11a	5745 / 5785 / 5825	6 Mbps	1
	HT20	5745 / 5785 / 5825	MCS 0	
Radiated Emissions >1GHz	11a	5825	6 Mbps	2
	HT20	5785	MCS 0	1, 3

**NOTE:**

1. 3 types antenna are used for this device, highest gain antenna of each type is selected to perform radiated emission test as below test configuration
  - 1) Configuration 1 : PCB Dipole antenna (Antenna No.3), Y-plane
  - 2) Configuration 2 : PIFA antenna (Antenna No.6), Y-plane
  - 3) Configuration 3 : Dipole antenna (Antenna No.8), Y-plane

### 3 Transmitter Test Results

#### 3.1 Conducted Output Power

##### 3.1.1 Limit of Conducted Output Power

Frequency band 5150-5250 MHz	
Operating Mode	Limit
<input type="checkbox"/> Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
<input type="checkbox"/> Indoor access point	Conducted Power: 1 W
<input type="checkbox"/> Fixed point-to-point access points	Conducted Power: 1 W
<input checked="" type="checkbox"/> Client devices	Conducted Power: 250 mW

Frequency Band (MHz)	Limit
<input checked="" type="checkbox"/> 5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
<input checked="" type="checkbox"/> 5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
<input checked="" type="checkbox"/> 5725 ~ 5850	Conducted Power: 1 W

Note: "B" is the 26dB emission bandwidth in MHz.

##### 3.1.2 Test Procedures

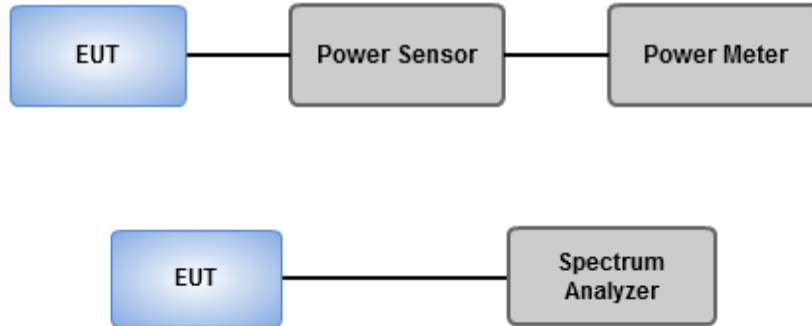
###### Method PM-G (Measurement using a gated RF average power meter)

Measurements is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

###### Spectrum analyzer (For channel that extends across the 5.725 GHz boundary)

1. Set RBW = 1MHz, VBW = 3MHz, Sweep time = Auto, Detector = RMS.
2. Trace average at least 100 traces in power averaging mode.
3. Compute power by integrating the spectrum across the 26 dB EBW.
4. Add  $10 \log(1/X)$ , X:duty cycle) if duty cycle is <98%).

### 3.1.3 Test Setup



### 3.1.4 Test Result of Maximum Conducted Output Power

<b>Ambient Condition</b>	22 °C / 66 %	<b>Tested By</b>	Brad Wu
--------------------------	--------------	------------------	---------

Refer to Appendix A

## 3.2 Unwanted Emissions

### 3.2.1 Limit of Unwanted Emissions

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

**Note 1:**  
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

**Note 2:**  
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

**Note 1:** Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).



### 3.2.2 Test Procedures

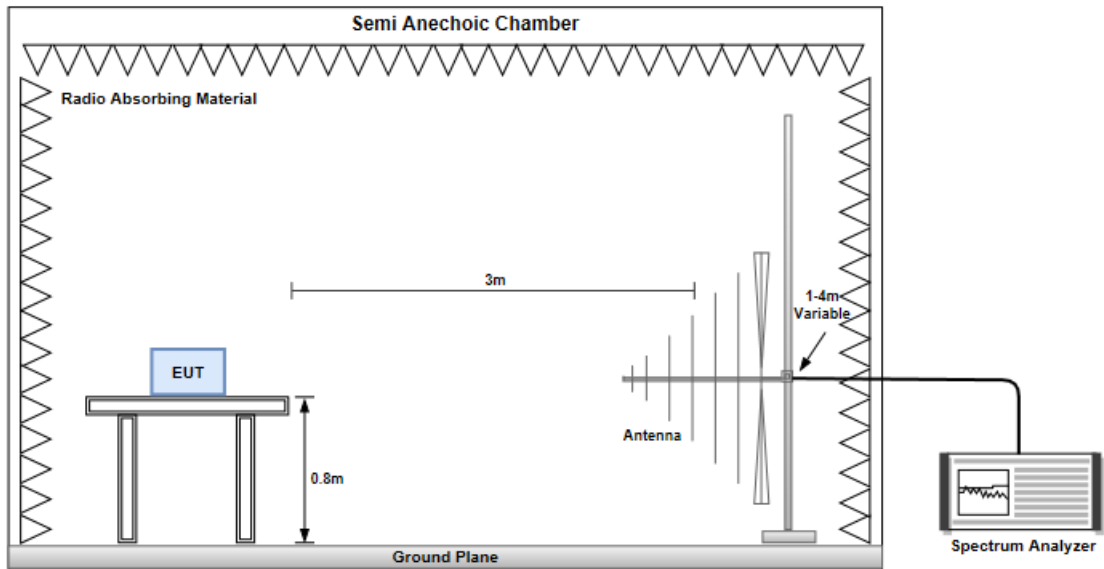
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

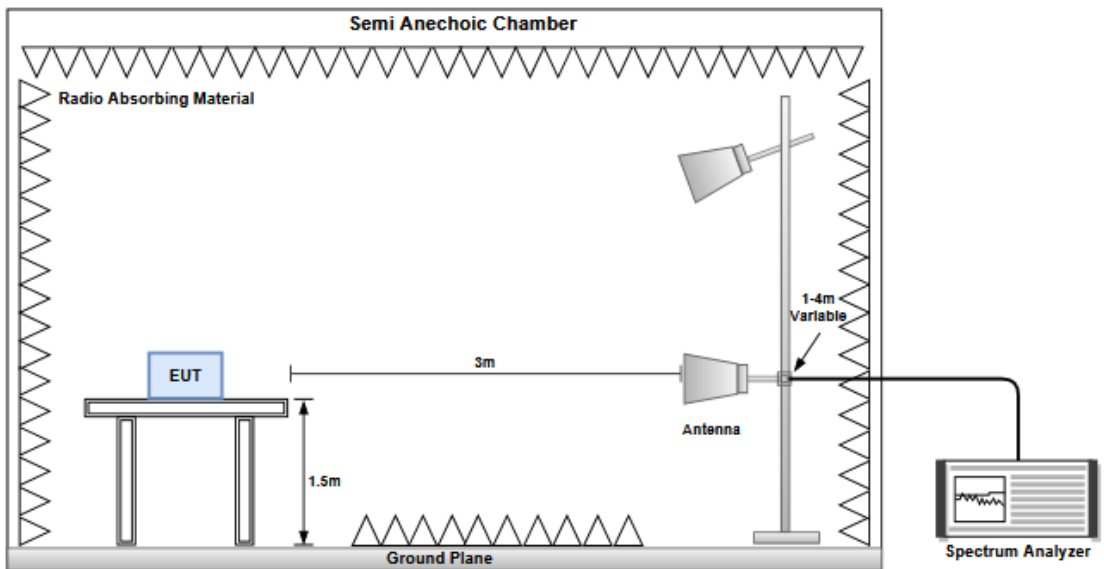
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

### 3.2.3 Test Setup

#### Radiated Emissions below 1 GHz



#### Radiated Emissions above 1 GHz



### 3.2.4 Test Results

Refer to Appendix B.

### 3.3 AC Power Line Conducted Emissions

#### 3.3.1 Limit of AC Power Line Conducted Emissions

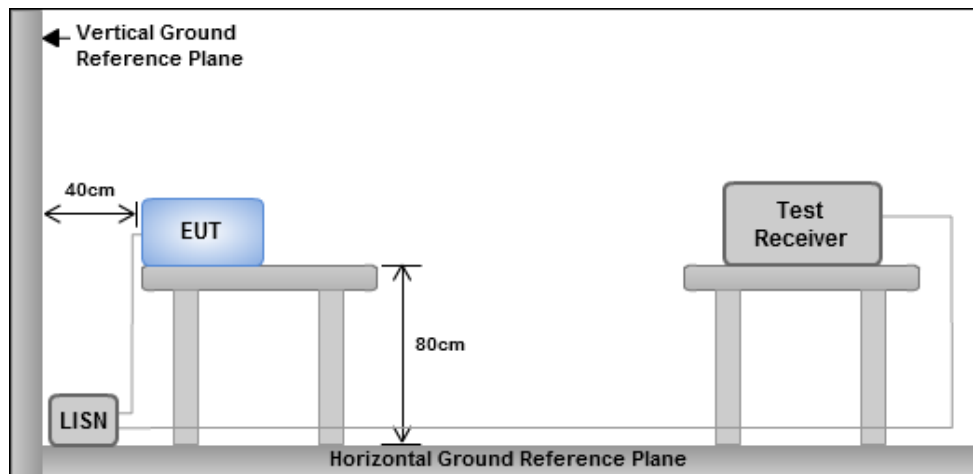
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: \* Decreases with the logarithm of the frequency.

#### 3.3.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50  $\Omega$  LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

#### 3.3.3 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 cm from other units and other metal planes

#### 3.3.4 Test Results

Refer to Appendix C.

## 4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

### **Linkou**

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou  
District, New Taipei City, Taiwan  
(R.O.C.)

### **Kwei Shan**

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)  
No.2-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)

### **Kwei Shan Site II**

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0345

Email: ICC\_Service@icertifi.com.tw

==END==



## CONDUCTED OUTPUT POWER

Appendix A

### Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.45	0.04416	20.35	0.10839
802.11n HT20_Nss1,(MCS0)_1TX	16.32	0.04285	20.22	0.10520
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.42	0.04385	20.32	0.10765
802.11n HT20_Nss1,(MCS0)_1TX	16.31	0.04276	20.21	0.10495
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	17.77	0.05984	21.77	0.15031
802.11n HT20_Nss1,(MCS0)_1TX	17.73	0.05929	21.73	0.14894
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	18.13	0.06501	22.13	0.16331
802.11n HT20_Nss1,(MCS0)_1TX	18.03	0.06353	22.03	0.15959



## CONDUCTED OUTPUT POWER

Appendix A

### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.90	15.53	15.53	24.00	19.43	30.00
5200MHz	Pass	3.90	15.13	15.13	24.00	19.03	30.00
5240MHz	Pass	3.90	16.45	16.45	24.00	20.35	30.00
5260MHz	Pass	3.90	16.42	16.42	24.00	20.32	30.00
5300MHz	Pass	3.90	16.16	16.16	24.00	20.06	30.00
5320MHz	Pass	3.90	15.72	15.72	24.00	19.62	30.00
5500MHz	Pass	4.00	15.33	15.33	24.00	19.33	30.00
5580MHz	Pass	4.00	17.77	17.77	24.00	21.77	30.00
5700MHz	Pass	4.00	15.05	15.05	24.00	19.05	30.00
5745MHz	Pass	4.00	15.73	15.73	30.00	19.73	36.00
5785MHz	Pass	4.00	18.05	18.05	30.00	22.05	36.00
5825MHz	Pass	4.00	18.13	18.13	30.00	22.13	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.90	15.32	15.32	24.00	19.22	30.00
5200MHz	Pass	3.90	15.15	15.15	24.00	19.05	30.00
5240MHz	Pass	3.90	16.32	16.32	24.00	20.22	30.00
5260MHz	Pass	3.90	16.31	16.31	24.00	20.21	30.00
5300MHz	Pass	3.90	16.08	16.08	24.00	19.98	30.00
5320MHz	Pass	3.90	15.58	15.58	24.00	19.48	30.00
5500MHz	Pass	4.00	15.18	15.18	24.00	19.18	30.00
5580MHz	Pass	4.00	17.73	17.73	24.00	21.73	30.00
5700MHz	Pass	4.00	15.02	15.02	24.00	19.02	30.00
5745MHz	Pass	4.00	15.6	15.60	30.00	19.60	36.00
5785MHz	Pass	4.00	18.03	18.03	30.00	22.03	36.00
5825MHz	Pass	4.00	17.53	17.53	30.00	21.53	36.00

**DG** = Directional Gain; **Port X** = Port X output power



**Configuration 1: PCB Dipole antenna (Antenna No.3), Y-plane**

**Transmitter Radiated Unwanted Emissions (Below 1GHz)**

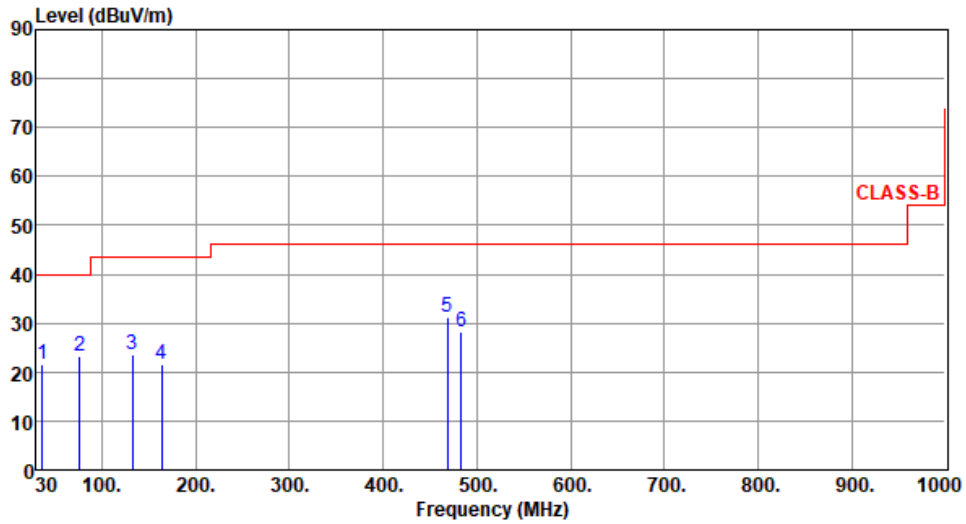
<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5580						
<b>Polarization</b>	Horizontal								
Test By :Brad Wu      Temperature(°C):23      Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	35.82	20.16	40.00	-19.84	30.13	-9.97	Peak	---	---
2	142.52	20.57	43.50	-22.93	29.48	-8.91	Peak	---	---
3	287.05	21.09	46.00	-24.91	29.51	-8.42	Peak	---	---
4	350.10	23.01	46.00	-22.99	30.01	-7.00	Peak	---	---
5	468.44	28.69	46.00	-17.31	31.99	-3.30	Peak	---	---
6	482.99	27.12	46.00	-18.88	30.20	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	21.51	40.00	-18.49	31.19	-9.68	Peak	---	---
2	76.56	23.27	40.00	-16.73	35.67	-12.40	Peak	---	---
3	132.82	23.51	43.50	-19.99	33.19	-9.68	Peak	---	---
4	163.86	21.73	43.50	-21.77	30.31	-8.58	Peak	---	---
5	468.44	31.34	46.00	-14.66	34.64	-3.30	Peak	---	---
6	482.99	28.13	46.00	-17.87	31.21	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

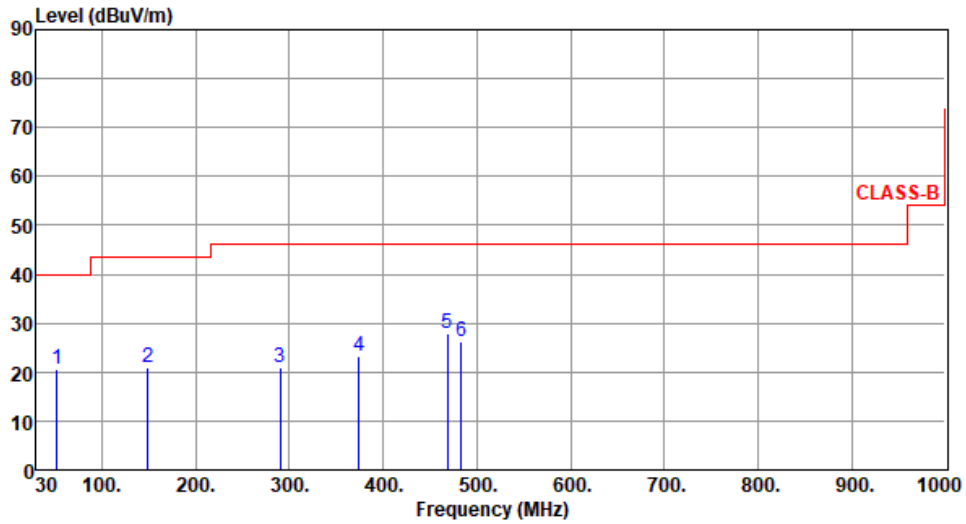
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.





Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	52.31	20.47	40.00	-19.53	29.63	-9.16	Peak	---	---
2	149.31	20.82	43.50	-22.68	29.55	-8.73	Peak	---	---
3	289.96	20.90	46.00	-25.10	29.26	-8.36	Peak	---	---
4	374.35	23.21	46.00	-22.79	29.42	-6.21	Peak	---	---
5	468.44	27.98	46.00	-18.02	31.28	-3.30	Peak	---	---
6	482.99	26.35	46.00	-19.65	29.43	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

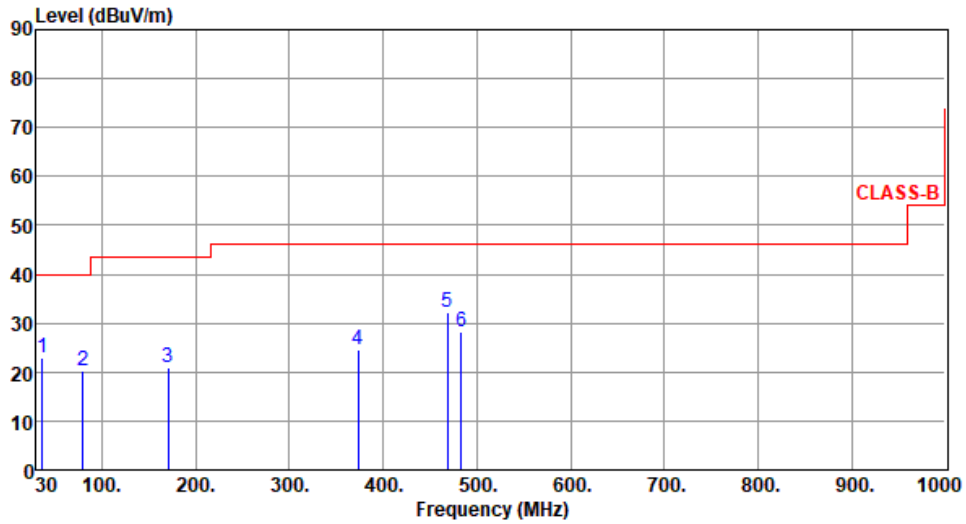
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	22.94	40.00	-17.06	32.62	-9.68	Peak	---	---
2	79.47	20.24	40.00	-19.76	33.45	-13.21	Peak	---	---
3	170.65	20.76	43.50	-22.74	29.71	-8.95	Peak	---	---
4	373.38	24.44	46.00	-21.56	30.67	-6.23	Peak	---	---
5	468.44	32.13	46.00	-13.87	35.43	-3.30	Peak	---	---
6	482.99	28.14	46.00	-17.86	31.22	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

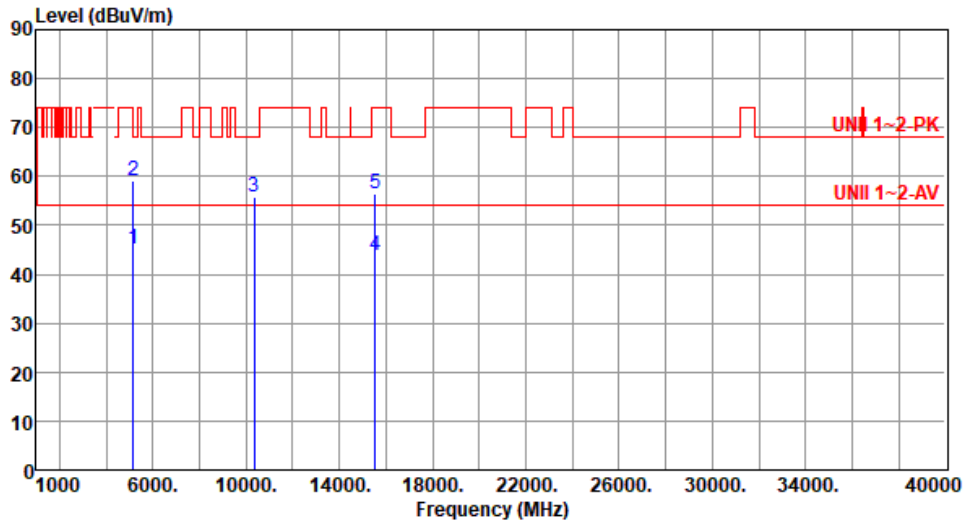
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.30	54.00	-8.70	38.99	6.31	Average	105	311
2	5150.00	58.98	74.00	-15.02	52.67	6.31	Peak	105	311
3	10360.00	55.77	68.20	-12.43	41.32	14.45	Peak	100	22
4	15540.00	43.76	54.00	-10.24	27.36	16.40	Average	100	54
5	15540.00	56.45	74.00	-17.55	40.05	16.40	Peak	100	54

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

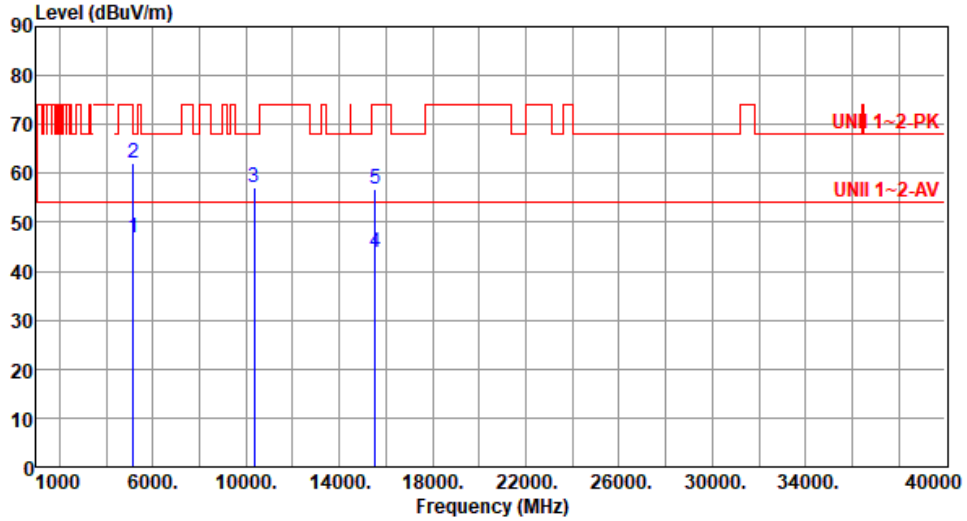
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.95	54.00	-7.05	40.64	6.31	Average	108	99
2	5150.00	62.26	74.00	-11.74	55.95	6.31	Peak	108	99
3	10360.00	57.13	68.20	-11.07	42.68	14.45	Peak	100	41
4	15540.00	43.70	54.00	-10.30	27.30	16.40	Average	100	58
5	15540.00	56.85	74.00	-17.15	40.45	16.40	Peak	100	58

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

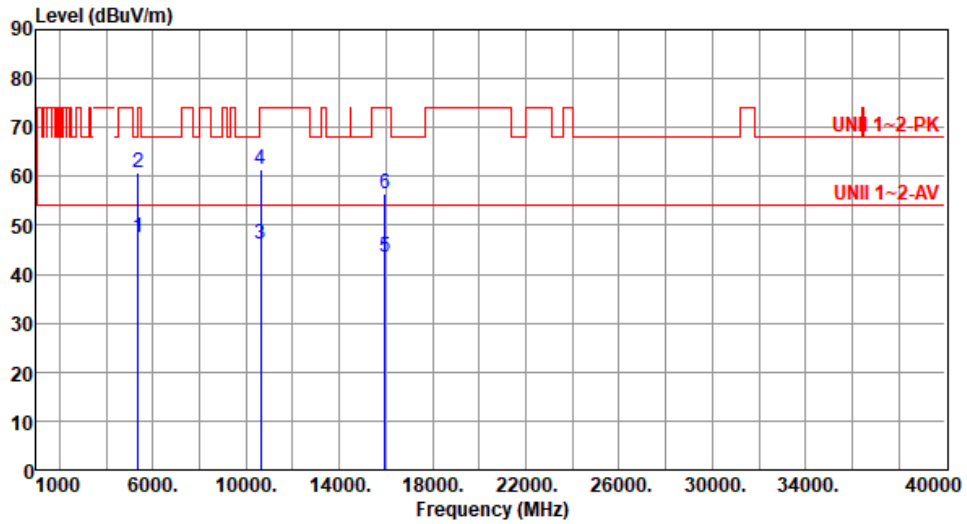
Modulation	HT20	Test Freq. (MHz)	5320						
Polarization	Horizontal								
Test By :Brad Wu      Temperature(°C):22      Humidity(%):66									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.74	54.00	-9.26	39.02	5.72	Average	105	310
2	5350.00	57.95	74.00	-16.05	52.23	5.72	Peak	105	310
3	10640.00	44.03	54.00	-9.97	29.17	14.86	Average	100	25
4	10640.00	56.00	74.00	-18.00	41.14	14.86	Peak	100	25
5	15960.00	43.87	54.00	-10.13	28.22	15.65	Average	100	44
6	15960.00	56.14	74.00	-17.86	40.49	15.65	Peak	100	44

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	47.34	54.00	-6.66	41.62	5.72	Average	100	93
2	5350.00	60.85	74.00	-13.15	55.13	5.72	Peak	100	93
3	10640.00	46.13	54.00	-7.87	31.27	14.86	Average	329	230
4	10640.00	61.59	74.00	-12.41	46.73	14.86	Peak	329	230
5	15960.00	43.52	54.00	-10.48	27.87	15.65	Average	100	55
6	15960.00	56.59	74.00	-17.41	40.94	15.65	Peak	100	55

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

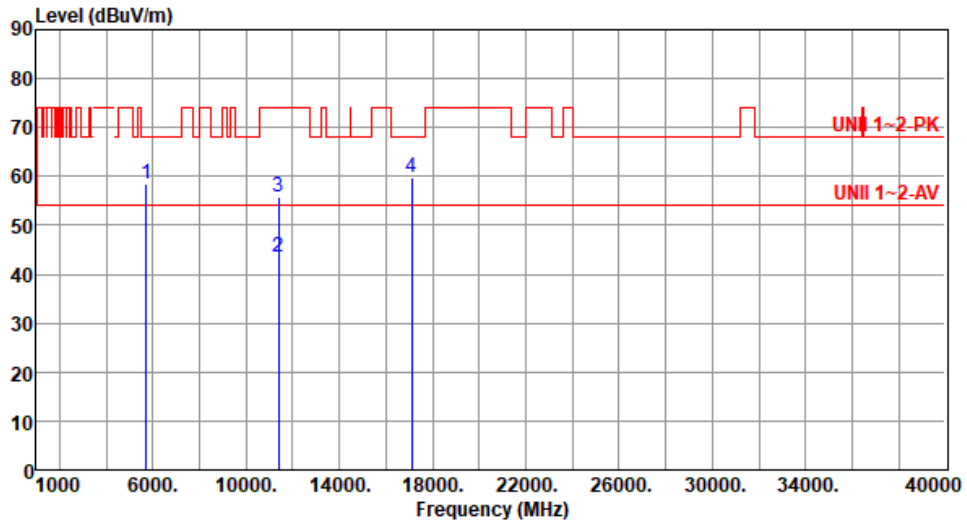
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	58.58	68.20	-9.62	51.99	6.59	Peak	101	116
2	11400.00	43.38	54.00	-10.62	28.23	15.15	Average	100	20
3	11400.00	55.89	74.00	-18.11	40.74	15.15	Peak	100	20
4	17100.00	59.93	68.20	-8.27	41.78	18.15	Peak	100	16

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

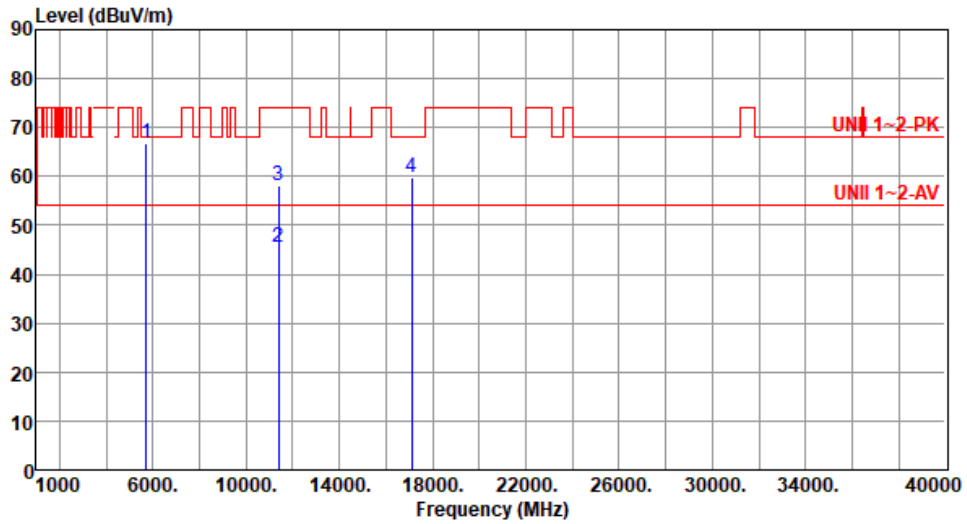
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	66.91	68.20	-1.29	60.32	6.59	Peak	217	253
2	11400.00	45.38	54.00	-8.62	30.23	15.15	Average	200	15
3	11400.00	58.01	74.00	-15.99	42.86	15.15	Peak	200	15
4	17100.00	59.82	68.20	-8.38	41.67	18.15	Peak	100	29

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

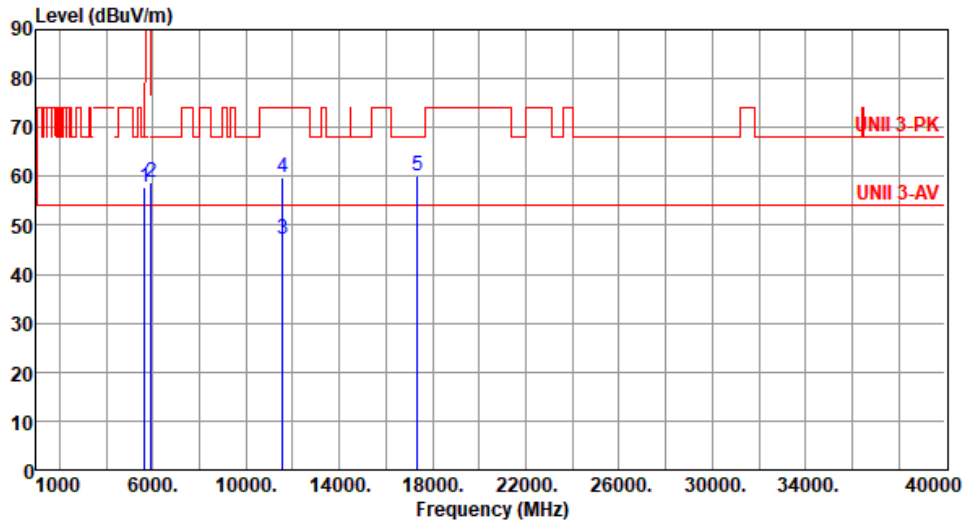
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.78	68.20	-10.42	51.46	6.32	Peak	113	308
2	5925.00	58.79	68.20	-9.41	51.76	7.03	Peak	113	308
3	11570.00	47.21	54.00	-6.79	31.83	15.38	Average	196	124
4	11570.00	59.70	74.00	-14.30	44.32	15.38	Peak	196	124
5	17355.00	60.18	68.20	-8.02	41.20	18.98	Peak	100	33

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

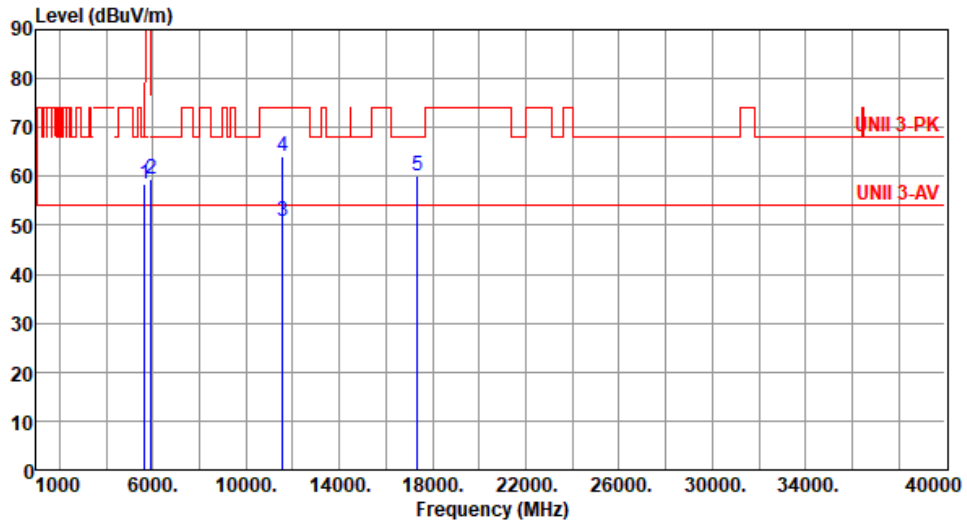
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.38	68.20	-9.82	52.06	6.32	Peak	126	267
2	5925.00	59.42	68.20	-8.78	52.39	7.03	Peak	126	267
3	11570.00	50.76	54.00	-3.24	35.38	15.38	Average	339	3
4	11570.00	64.02	74.00	-9.98	48.64	15.38	Peak	339	3
5	17355.00	60.14	68.20	-8.06	41.16	18.98	Peak	100	25

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



**Configuration 2: PIFA antenna (Antenna No.6), Y-plane**

**Transmitter Radiated Unwanted Emissions (Below 1GHz)**

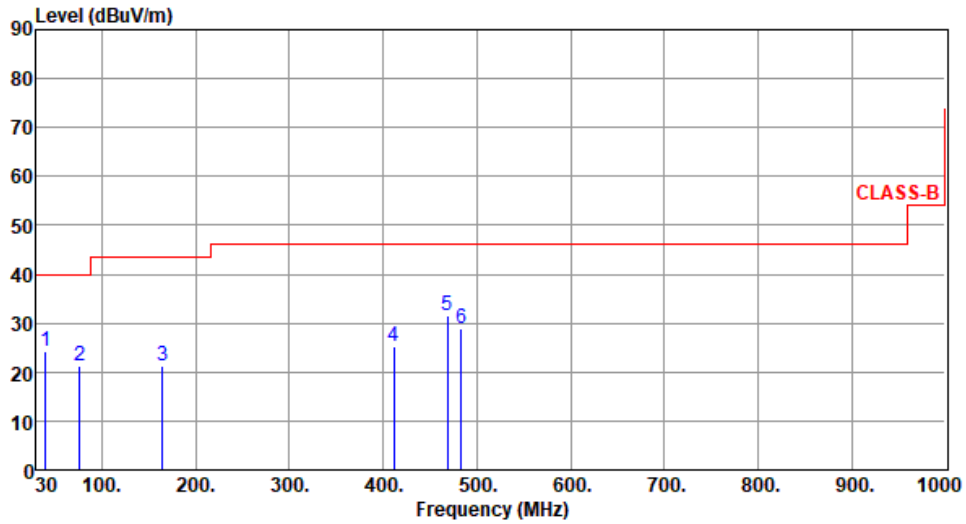
<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5580						
<b>Polarization</b>	Horizontal								
Test By :Brad Wu      Temperature(°C):23      Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.34	22.49	40.00	-17.51	31.56	-9.07	Peak	---	---
2	73.65	21.53	40.00	-18.47	33.23	-11.70	Peak	---	---
3	161.92	22.03	43.50	-21.47	30.52	-8.49	Peak	---	---
4	415.09	24.99	46.00	-21.01	29.98	-4.99	Peak	---	---
5	468.44	29.54	46.00	-16.46	32.84	-3.30	Peak	---	---
6	482.99	27.89	46.00	-18.11	30.97	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	39.70	24.33	40.00	-15.67	33.52	-9.19	Peak	---	---
2	76.56	21.18	40.00	-18.82	33.58	-12.40	Peak	---	---
3	164.83	21.12	43.50	-22.38	29.78	-8.66	Peak	---	---
4	411.21	25.14	46.00	-20.86	30.30	-5.16	Peak	---	---
5	468.44	31.53	46.00	-14.47	34.83	-3.30	Peak	---	---
6	482.99	28.97	46.00	-17.03	32.05	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

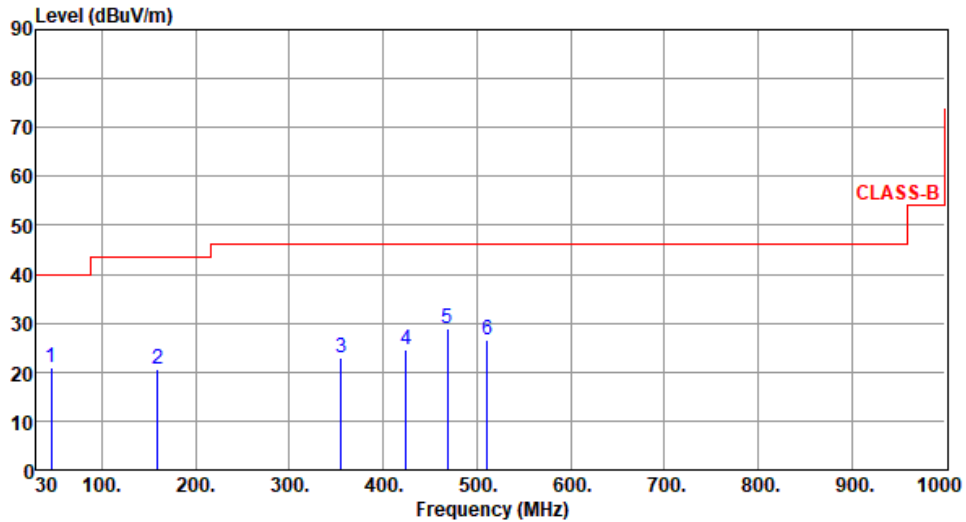
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.52	20.92	40.00	-19.08	29.79	-8.87	Peak	---	---
2	159.01	20.55	43.50	-22.95	28.94	-8.39	Peak	---	---
3	354.95	22.78	46.00	-23.22	29.56	-6.78	Peak	---	---
4	424.79	24.59	46.00	-21.41	29.22	-4.63	Peak	---	---
5	468.44	28.89	46.00	-17.11	32.19	-3.30	Peak	---	---
6	511.12	26.59	46.00	-19.41	28.98	-2.39	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

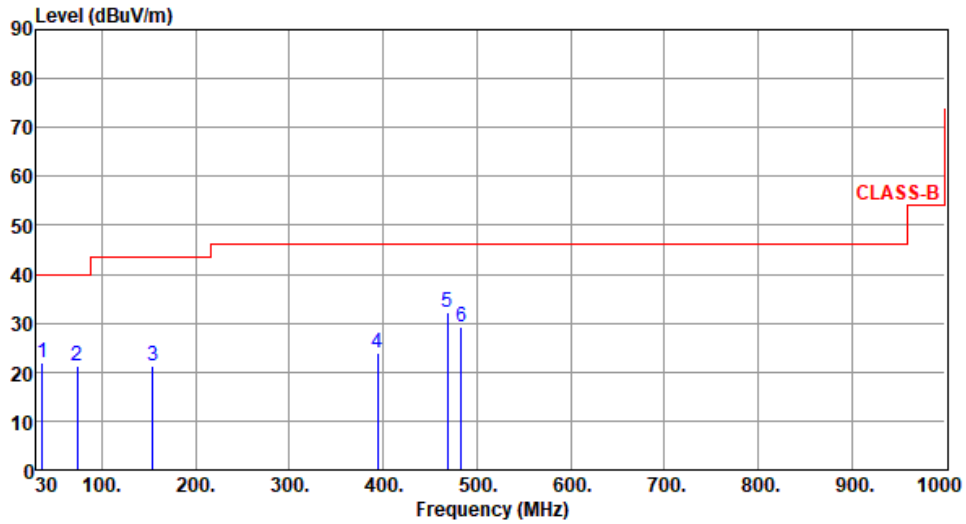
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	21.84	40.00	-18.16	31.52	-9.68	Peak	---	---
2	73.65	21.22	40.00	-18.78	32.92	-11.70	Peak	---	---
3	154.16	21.12	43.50	-22.38	29.71	-8.59	Peak	---	---
4	393.75	23.94	46.00	-22.06	29.58	-5.64	Peak	---	---
5	468.44	32.26	46.00	-13.74	35.56	-3.30	Peak	---	---
6	482.99	29.07	46.00	-16.93	32.15	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

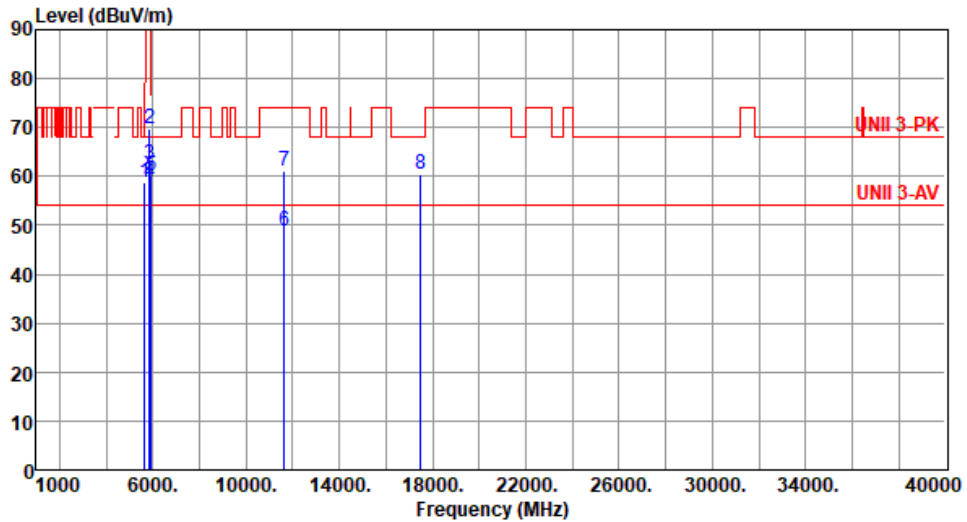
Modulation	11a	Test Freq. (MHz)	5825						
Polarization	Horizontal								
Test By : Roger Lu      Temperature(°C):22      Humidity(%):66									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.48	68.20	-10.72	51.16	6.32	Peak	105	316
2	5850.00	65.90	122.20	-56.30	59.13	6.77	Peak	105	316
3	5855.00	60.90	110.80	-49.90	54.10	6.80	Peak	105	316
4	5875.00	58.67	105.20	-46.53	51.79	6.88	Peak	105	316
5	5925.00	59.58	68.20	-8.62	52.55	7.03	Peak	105	316
6	11650.00	45.76	54.00	-8.24	30.59	15.17	Average	115	10
7	11650.00	59.24	74.00	-14.76	44.07	15.17	Peak	115	10
8	17475.00	59.80	68.20	-8.40	39.99	19.81	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.69	68.20	-9.51	52.37	6.32	Peak	100	121
2	5850.00	69.83	122.20	-52.37	63.06	6.77	Peak	100	121
3	5855.00	62.60	110.80	-48.20	55.80	6.80	Peak	100	121
4	5875.00	58.80	105.20	-46.40	51.92	6.88	Peak	100	121
5	5925.00	60.18	68.20	-8.02	53.15	7.03	Peak	100	121
6	11650.00	48.80	54.00	-5.20	33.63	15.17	Average	174	20
7	11650.00	61.11	74.00	-12.89	45.94	15.17	Peak	174	20
8	17475.00	60.29	68.20	-7.91	40.48	19.81	Peak	100	50

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).





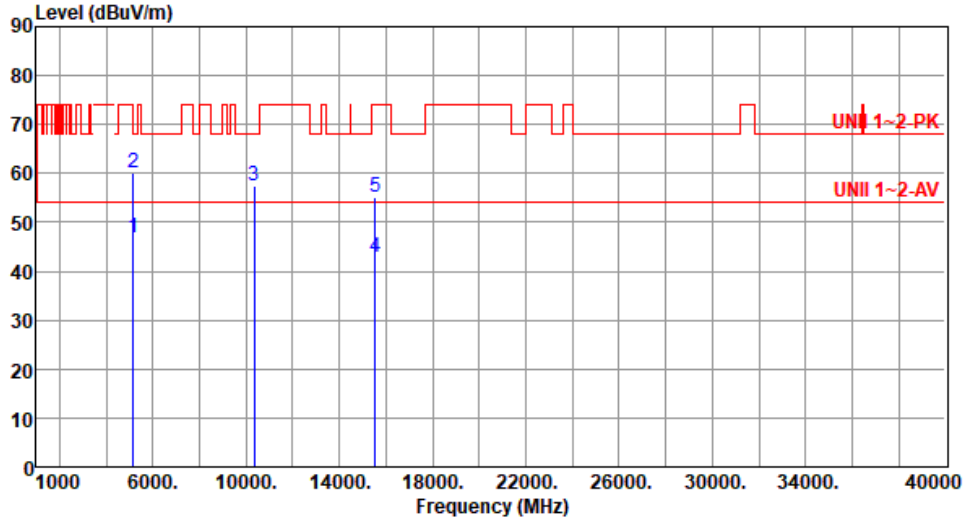
Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	5180						
Polarization	Horizontal								
Test By : Roger Lu      Temperature(°C):22      Humidity(%):66									
<p>The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (1000 to 40000). A red line represents the emission level, showing a series of peaks. Two horizontal red lines indicate limits: UNII 1-2-PK at approximately 70 dBuV/m and UNII 1-2-AV at approximately 55 dBuV/m. Five blue vertical lines mark specific frequency points: 1 (at 5150 MHz), 2 (at 5150 MHz), 3 (at 10360 MHz), 4 (at 15540 MHz), and 5 (at 15540 MHz).</p>									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.37	54.00	-8.63	39.06	6.31	Average	101	315
2	5150.00	58.91	74.00	-15.09	52.60	6.31	Peak	101	315
3	10360.00	56.34	68.20	-11.86	41.89	14.45	Peak	100	335
4	15540.00	42.89	54.00	-11.11	26.49	16.40	Average	100	60
5	15540.00	55.30	74.00	-18.70	38.90	16.40	Peak	100	60
<p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)          *Factor includes antenna factor , cable loss and amplifier gain          Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p>									



Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.84	54.00	-7.16	40.53	6.31	Average	100	95
2	5150.00	60.22	74.00	-13.78	53.91	6.31	Peak	100	95
3	10360.00	57.61	68.20	-10.59	43.16	14.45	Peak	184	43
4	15540.00	42.76	54.00	-11.24	26.36	16.40	Average	100	40
5	15540.00	55.22	74.00	-18.78	38.82	16.40	Peak	100	40

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

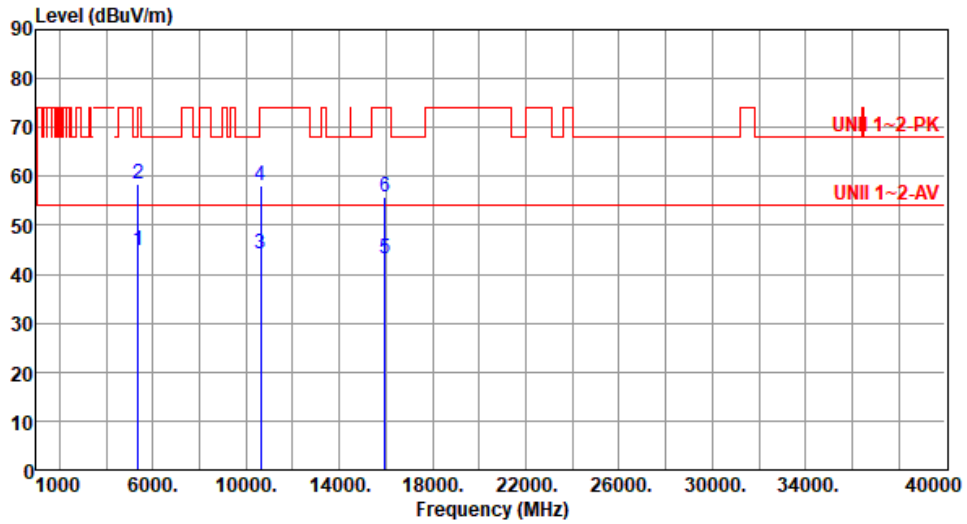
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.98	54.00	-9.02	39.26	5.72	Average	105	312
2	5350.00	58.29	74.00	-15.71	52.57	5.72	Peak	105	312
3	10640.00	44.11	54.00	-9.89	29.25	14.86	Average	172	337
4	10640.00	58.01	74.00	-15.99	43.15	14.86	Peak	172	337
5	15960.00	43.13	54.00	-10.87	27.48	15.65	Average	100	60
6	15960.00	55.65	74.00	-18.35	40.00	15.65	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

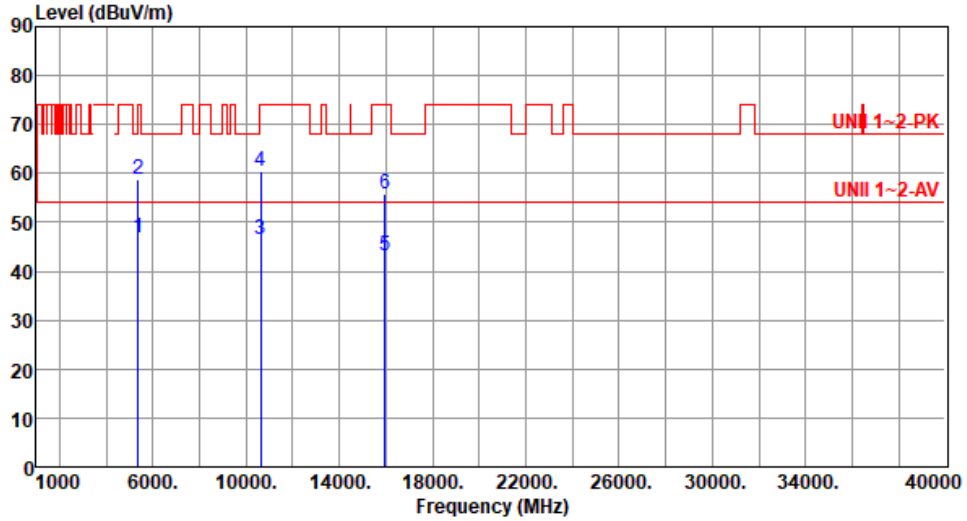
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.87	54.00	-7.13	41.15	5.72	Average	100	112
2	5350.00	58.92	74.00	-15.08	53.20	5.72	Peak	100	112
3	10640.00	46.60	54.00	-7.40	31.74	14.86	Average	209	41
4	10640.00	60.52	74.00	-13.48	45.66	14.86	Peak	209	41
5	15960.00	43.19	54.00	-10.81	27.54	15.65	Average	100	50
6	15960.00	55.70	74.00	-18.30	40.05	15.65	Peak	100	50

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

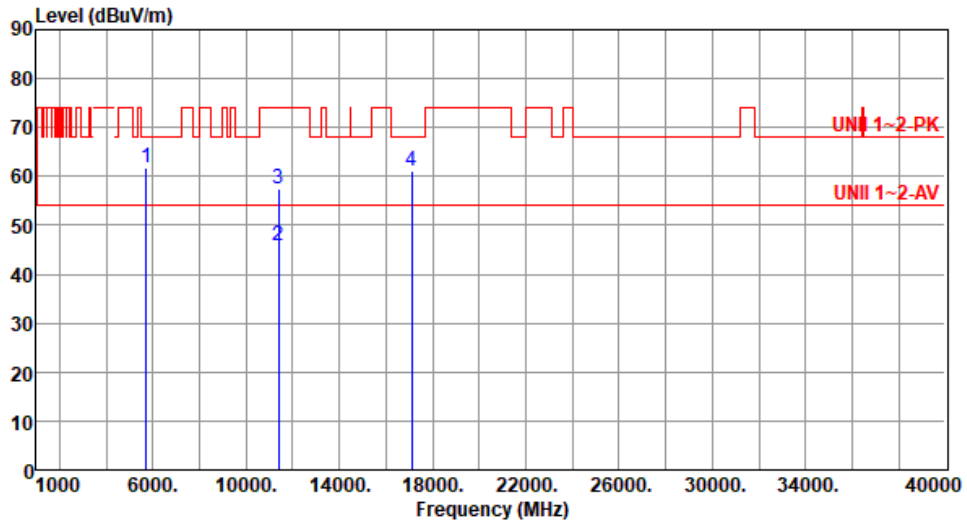
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	61.86	68.20	-6.34	55.27	6.59	Peak	108	315
2	11400.00	45.95	54.00	-8.05	30.80	15.15	Average	100	26
3	11400.00	57.40	74.00	-16.60	42.25	15.15	Peak	100	26
4	17100.00	61.23	68.20	-6.97	43.08	18.15	Peak	100	45

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

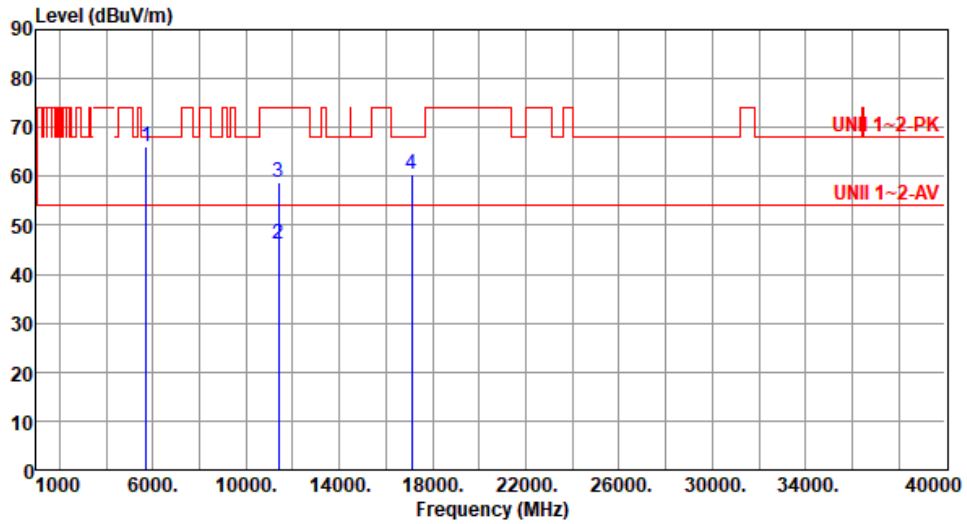
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	66.04	68.20	-2.16	59.45	6.59	Peak	100	69
2	11400.00	46.04	54.00	-7.96	30.89	15.15	Average	100	16
3	11400.00	58.66	74.00	-15.34	43.51	15.15	Peak	100	16
4	17100.00	60.56	68.20	-7.64	42.41	18.15	Peak	100	87

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



**Configuration 3: Dipole antenna (Antenna No.8), Y-plane / 5.47 ~ 5.725 GHz**

**Transmitter Radiated Unwanted Emissions (Below 1GHz)**

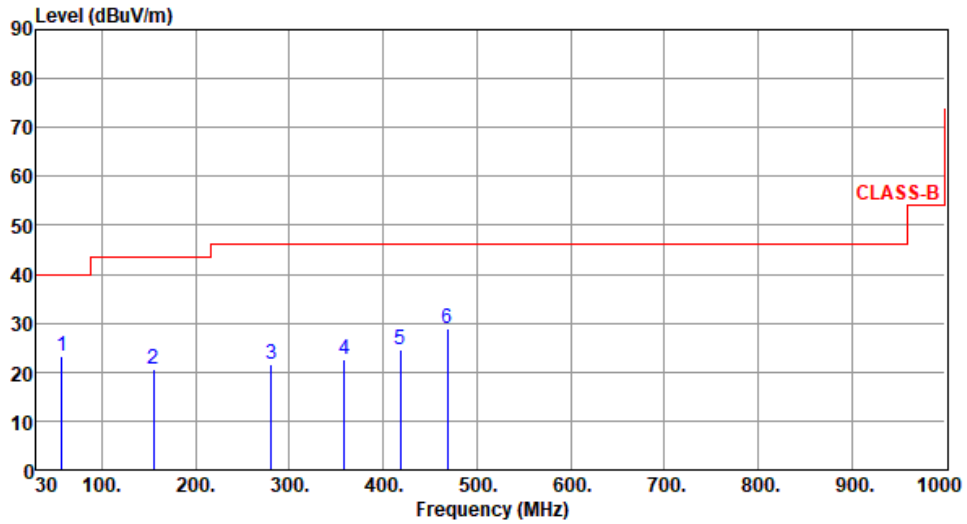
<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5580						
<b>Polarization</b>	Horizontal								
Test By :Brad Wu      Temperature(°C):23      Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.34	20.68	40.00	-19.32	29.75	-9.07	Peak	---	---
2	157.07	20.61	43.50	-22.89	29.02	-8.41	Peak	---	---
3	305.48	21.73	46.00	-24.27	29.81	-8.08	Peak	---	---
4	370.47	23.16	46.00	-22.84	29.46	-6.30	Peak	---	---
5	451.95	25.14	46.00	-20.86	28.83	-3.69	Peak	---	---
6	468.44	28.45	46.00	-17.55	31.75	-3.30	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	57.16	23.35	40.00	-16.65	32.72	-9.37	Peak	---	---
2	155.13	20.57	43.50	-22.93	29.08	-8.51	Peak	---	---
3	280.26	21.66	46.00	-24.34	30.24	-8.58	Peak	---	---
4	358.83	22.70	46.00	-23.30	29.38	-6.68	Peak	---	---
5	418.00	24.46	46.00	-21.54	29.36	-4.90	Peak	---	---
6	468.44	28.93	46.00	-17.07	32.23	-3.30	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

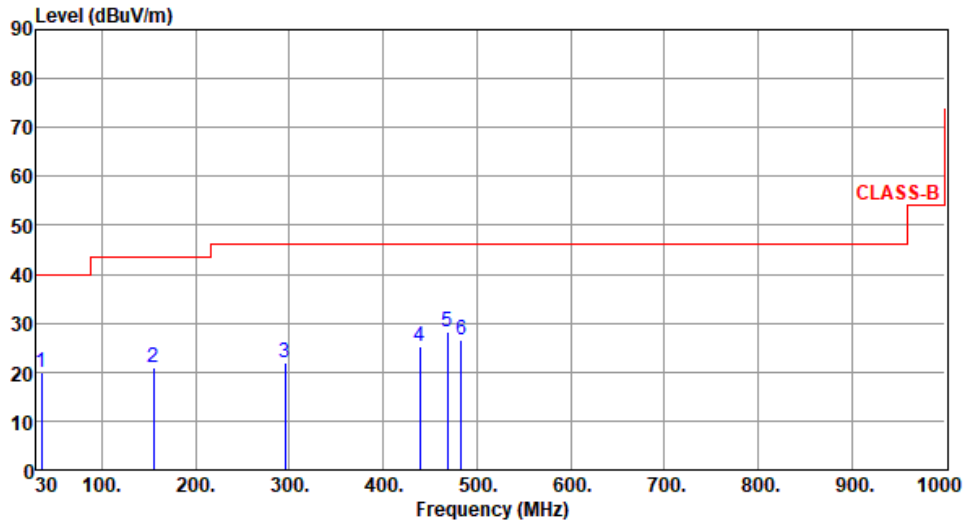
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.





Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	35.82	19.96	40.00	-20.04	29.93	-9.97	Peak	---	---
2	155.13	20.93	43.50	-22.57	29.44	-8.51	Peak	---	---
3	295.78	22.01	46.00	-23.99	30.25	-8.24	Peak	---	---
4	439.34	25.33	46.00	-20.67	29.37	-4.04	Peak	---	---
5	468.44	28.24	46.00	-17.76	31.54	-3.30	Peak	---	---
6	482.99	26.52	46.00	-19.48	29.60	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

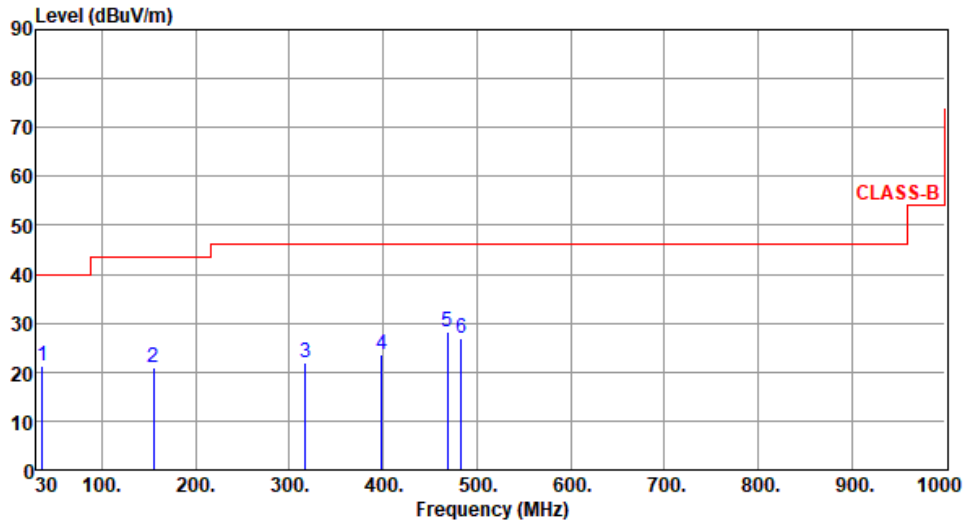
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	21.30	40.00	-18.70	30.98	-9.68	Peak	---	---
2	155.13	21.03	43.50	-22.47	29.54	-8.51	Peak	---	---
3	317.12	22.05	46.00	-23.95	29.66	-7.61	Peak	---	---
4	398.60	23.71	46.00	-22.29	29.24	-5.53	Peak	---	---
5	468.44	28.34	46.00	-17.66	31.64	-3.30	Peak	---	---
6	482.99	26.96	46.00	-19.04	30.04	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

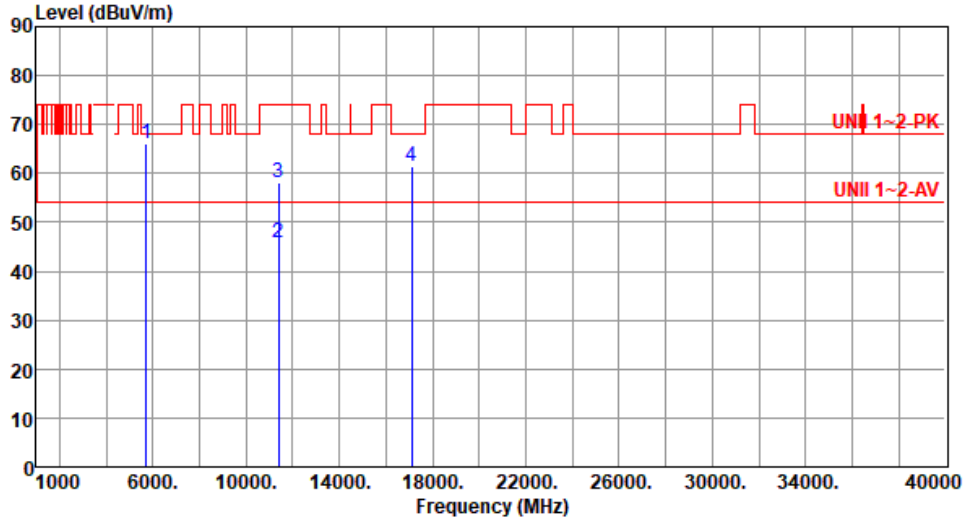
Modulation	HT20	Test Freq. (MHz)	5700						
Polarization	Horizontal								
Test By :Brad Wu      Temperature(°C):22      Humidity(%):66									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	60.02	68.20	-8.18	53.43	6.59	Peak	100	326
2	11400.00	43.61	54.00	-10.39	28.46	15.15	Average	100	35
3	11400.00	56.97	74.00	-17.03	41.82	15.15	Peak	100	35
4	17100.00	60.75	68.20	-7.45	42.60	18.15	Peak	100	48

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	66.19	68.20	-2.01	59.60	6.59	Peak	179	290
2	11400.00	45.99	54.00	-8.01	30.84	15.15	Average	100	3
3	11400.00	58.03	74.00	-15.97	42.88	15.15	Peak	100	3
4	17100.00	61.29	68.20	-6.91	43.14	18.15	Peak	100	44

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

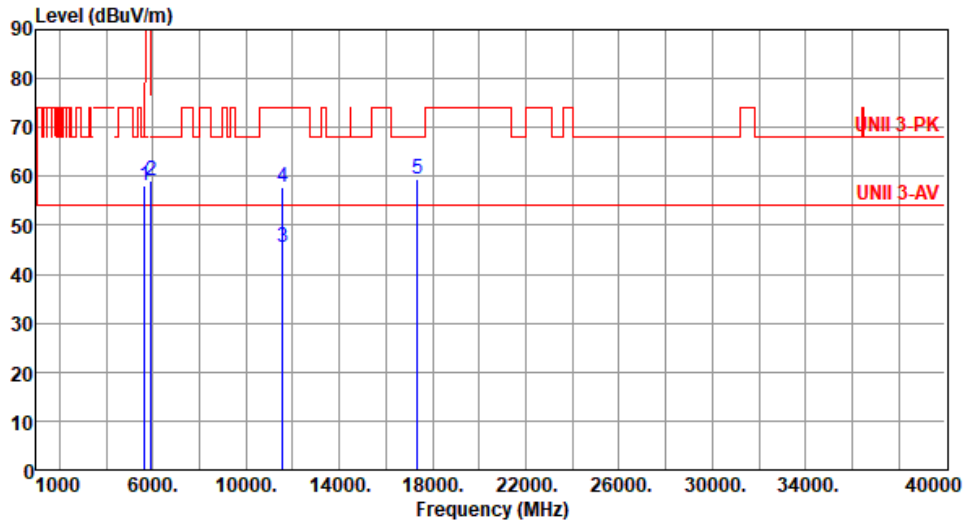
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.25	68.20	-9.95	51.93	6.32	Peak	100	330
2	5925.00	59.19	68.20	-9.01	52.16	7.03	Peak	100	330
3	11570.00	45.50	54.00	-8.50	30.12	15.38	Average	110	55
4	11570.00	57.90	74.00	-16.10	42.52	15.38	Peak	110	55
5	17355.00	59.38	68.20	-8.82	40.40	18.98	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

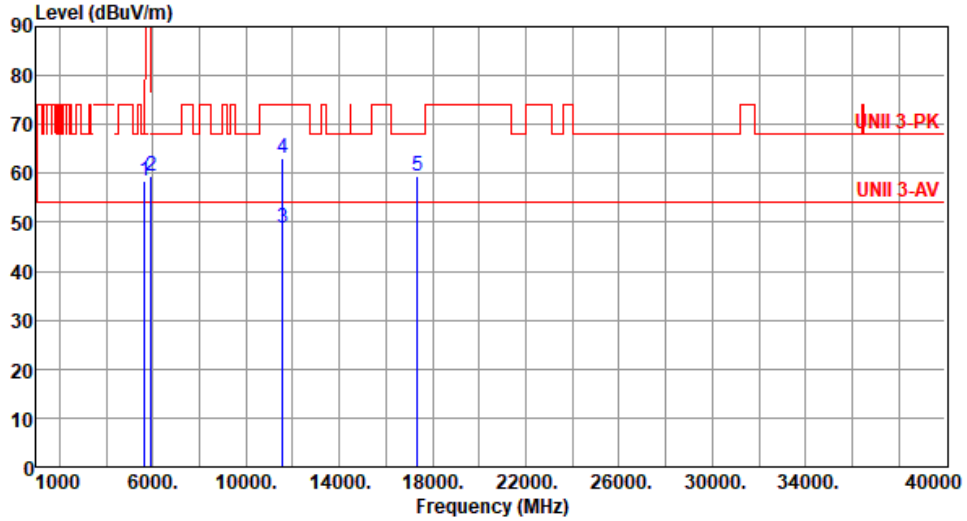
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.39	68.20	-9.81	52.07	6.32	Peak	227	250
2	5925.00	59.29	68.20	-8.91	52.26	7.03	Peak	227	250
3	11570.00	48.88	54.00	-5.12	33.50	15.38	Average	213	9
4	11570.00	63.14	74.00	-10.86	47.76	15.38	Peak	213	9
5	17355.00	59.57	68.20	-8.63	40.59	18.98	Peak	100	90

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

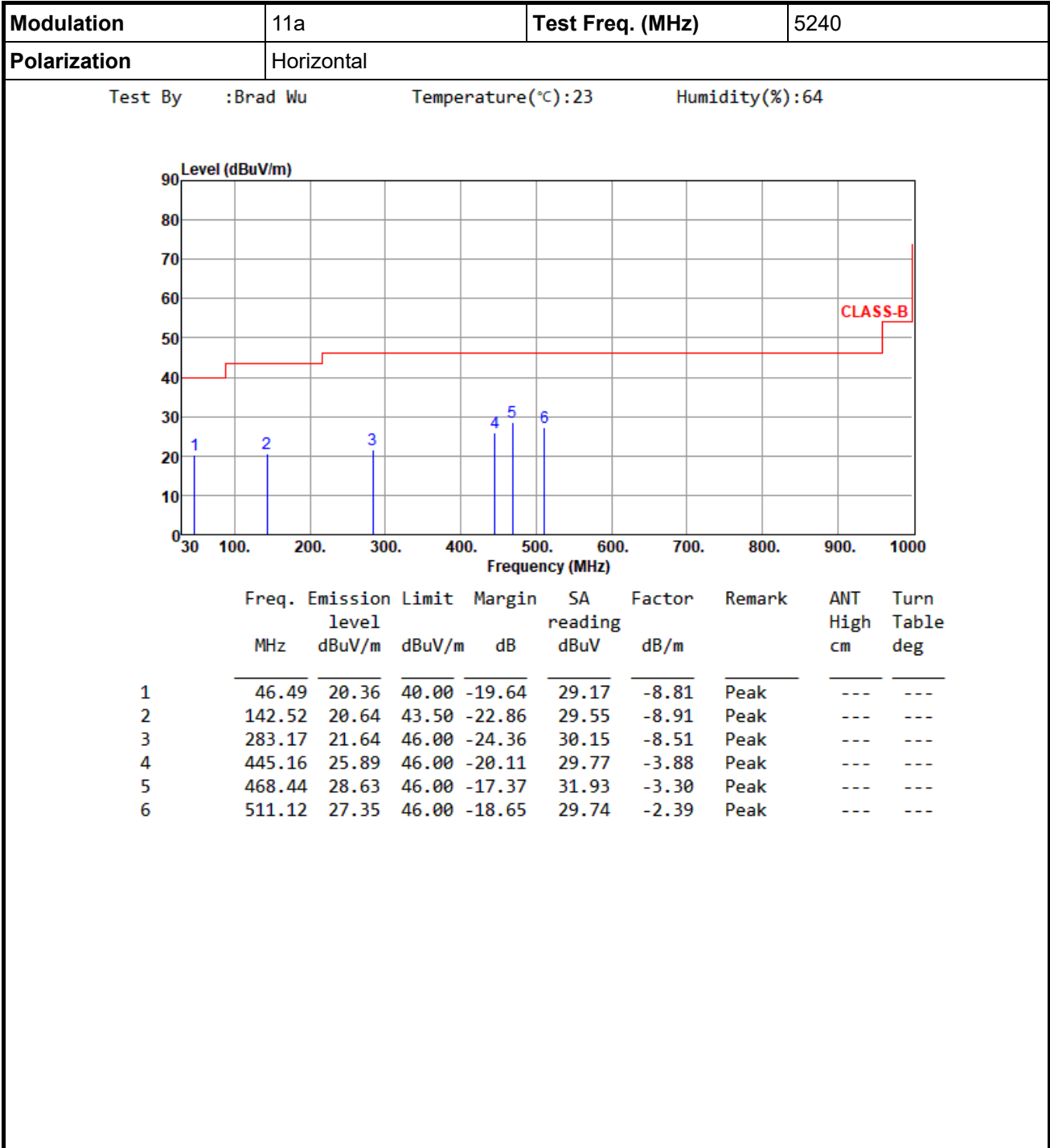
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



**Configuration 4: Dipole antenna (Antenna No.1), Y-plane./ 5.15 ~ 5.35 GHz**

**Transmitter Radiated Unwanted Emissions (Below 1GHz)**

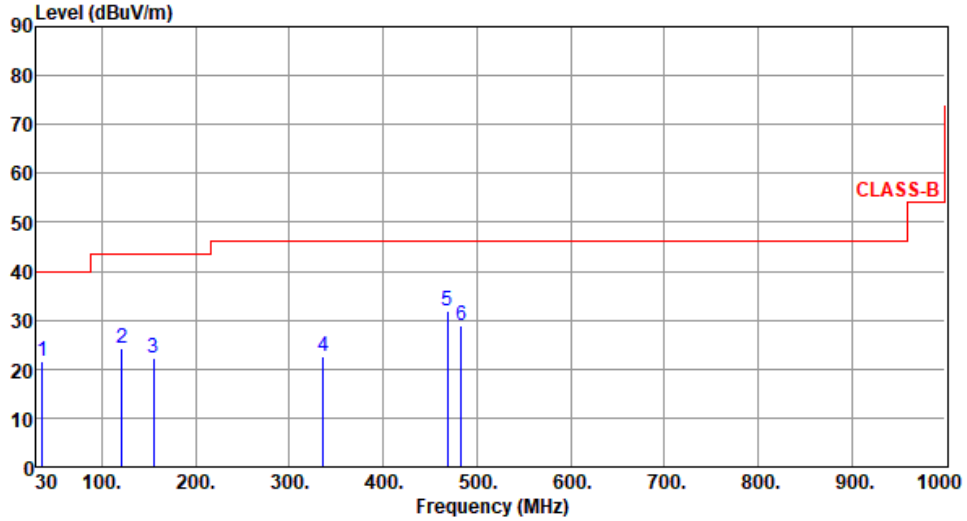


Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	21.69	40.00	-18.31	31.37	-9.68	Peak	---	---
2	121.18	24.17	43.50	-19.33	34.87	-10.70	Peak	---	---
3	155.13	22.27	43.50	-21.23	30.78	-8.51	Peak	---	---
4	336.52	22.68	46.00	-23.32	29.74	-7.06	Peak	---	---
5	468.44	31.87	46.00	-14.13	35.17	-3.30	Peak	---	---
6	482.99	29.02	46.00	-16.98	32.10	-3.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

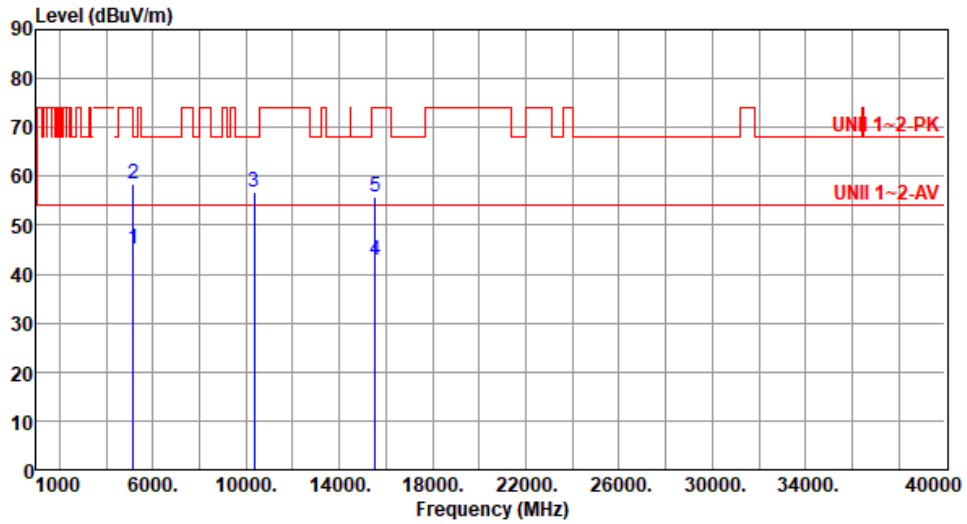




Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



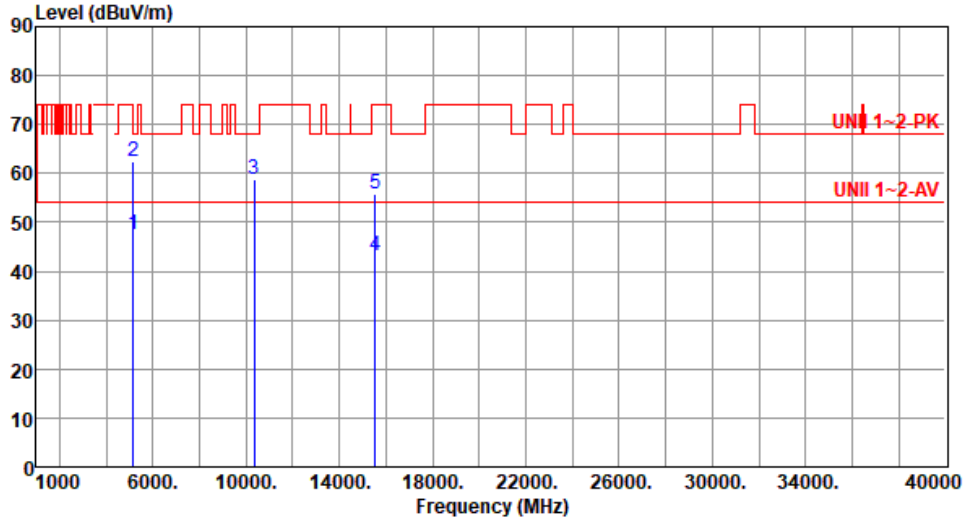
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.30	54.00	-8.70	38.99	6.31	Average	132	339
2	5150.00	58.47	74.00	-15.53	52.16	6.31	Peak	132	339
3	10360.00	56.67	68.20	-11.53	42.22	14.45	Peak	210	115
4	15540.00	42.84	54.00	-11.16	26.44	16.40	Average	100	30
5	15540.00	55.77	74.00	-18.23	39.37	16.40	Peak	100	30

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.42	54.00	-6.58	41.11	6.31	Average	166	245
2	5150.00	62.39	74.00	-11.61	56.08	6.31	Peak	166	245
3	10360.00	58.89	68.20	-9.31	44.44	14.45	Peak	327	59
4	15540.00	43.10	54.00	-10.90	26.70	16.40	Average	100	20
5	15540.00	55.90	74.00	-18.10	39.50	16.40	Peak	100	20

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

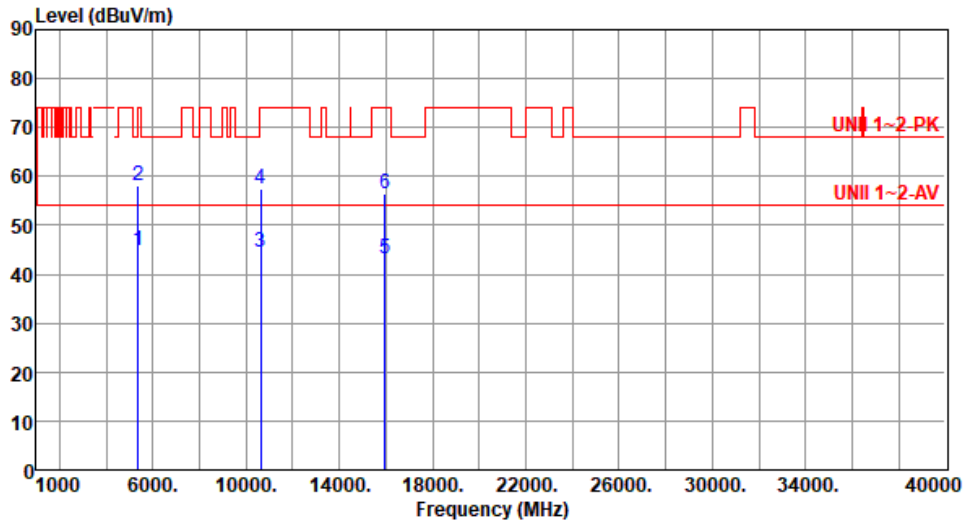
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.77	54.00	-9.23	39.05	5.72	Average	135	342
2	5350.00	58.21	74.00	-15.79	52.49	5.72	Peak	135	342
3	10640.00	44.66	54.00	-9.34	29.80	14.86	Average	216	120
4	10640.00	57.34	74.00	-16.66	42.48	14.86	Peak	216	120
5	15960.00	43.26	54.00	-10.74	27.61	15.65	Average	100	60
6	15960.00	56.32	74.00	-17.68	40.67	15.65	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

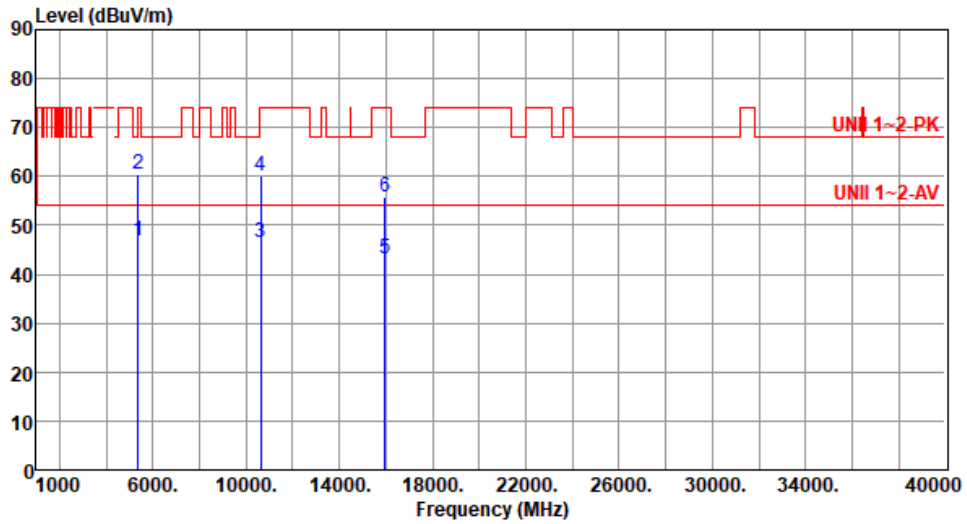
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):22      Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.82	54.00	-7.18	41.10	5.72	Average	179	251
2	5350.00	60.57	74.00	-13.43	54.85	5.72	Peak	179	251
3	10640.00	46.50	54.00	-7.50	31.64	14.86	Average	323	64
4	10640.00	60.03	74.00	-13.97	45.17	14.86	Peak	323	64
5	15960.00	43.26	54.00	-10.74	27.61	15.65	Average	100	40
6	15960.00	55.72	74.00	-18.28	40.07	15.65	Peak	100	40

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

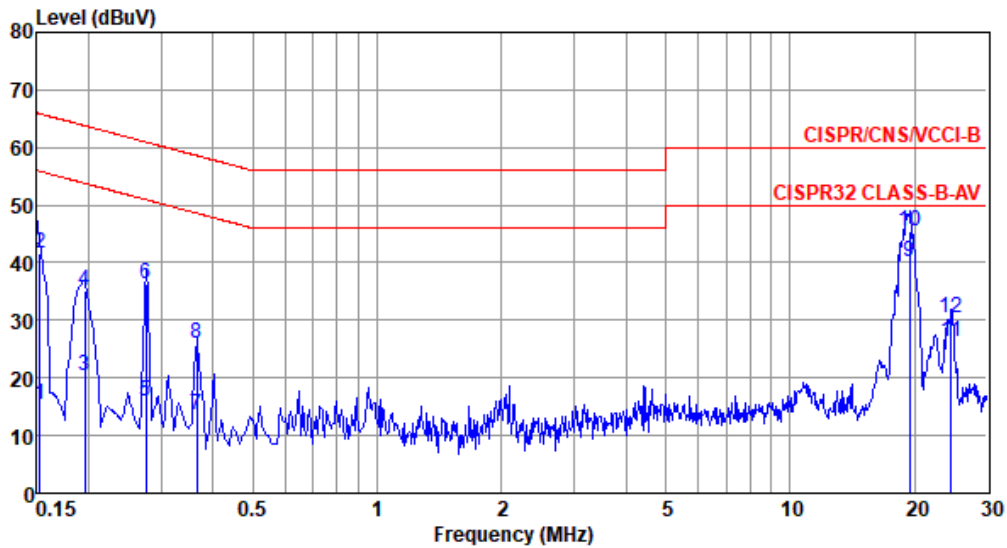
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Test Result of AC Power Line Conducted Emissions

Modulation Mod	11a	Test Freq. (MHz)	5580
Power Phase	Line		

Test by : Joe Liao      Temperature: 16°C      Humidity: 60%



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.152	15.29	55.87	-40.58	5.61	9.60	0.08	0.00	Average
2	0.152	41.77	65.87	-24.10	32.09	9.60	0.08	0.00	QP
3	0.195	20.47	53.80	-33.33	10.78	9.61	0.08	0.00	Average
4	0.195	35.23	63.80	-28.57	25.54	9.61	0.08	0.00	QP
5	0.276	15.97	50.94	-34.97	6.28	9.61	0.08	0.00	Average
6	0.276	36.21	60.94	-24.73	26.52	9.61	0.08	0.00	QP
7	0.365	13.46	48.61	-35.15	3.78	9.60	0.08	0.00	Average
8	0.365	25.92	58.61	-32.69	16.24	9.60	0.08	0.00	QP
9*	19.428	40.24	50.00	-9.76	30.00	9.59	0.65	0.00	Average
10	19.428	45.47	60.00	-14.53	35.23	9.59	0.65	0.00	QP
11	24.529	26.14	50.00	-23.86	15.93	9.52	0.69	0.00	Average
12	24.529	30.42	60.00	-29.58	20.21	9.52	0.69	0.00	QP

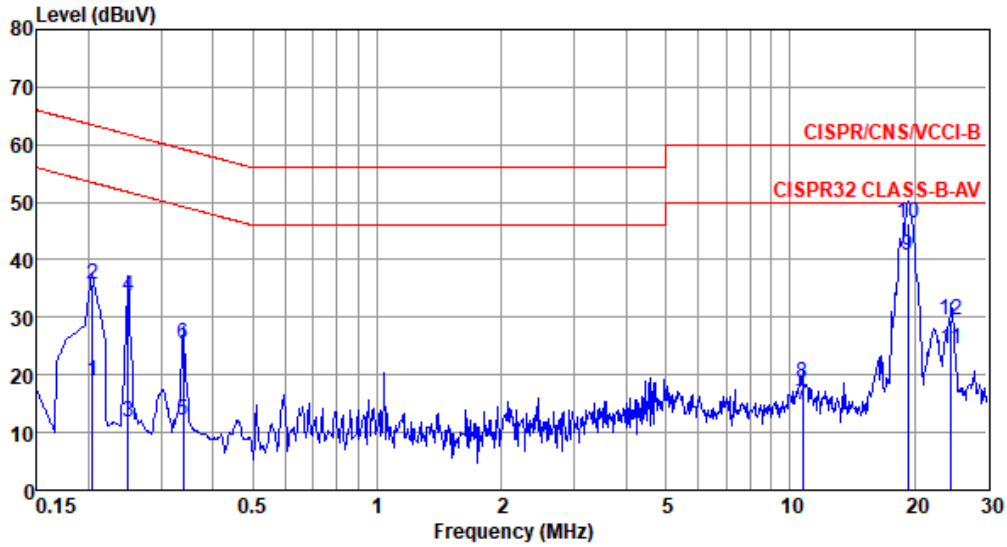
Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

Note 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).



Modulation Mod	11a	Test Freq. (MHz)	5580
Power Phase	Neutral		

Test by : Joe Liao      Temperature: 16°C      Humidity: 60%



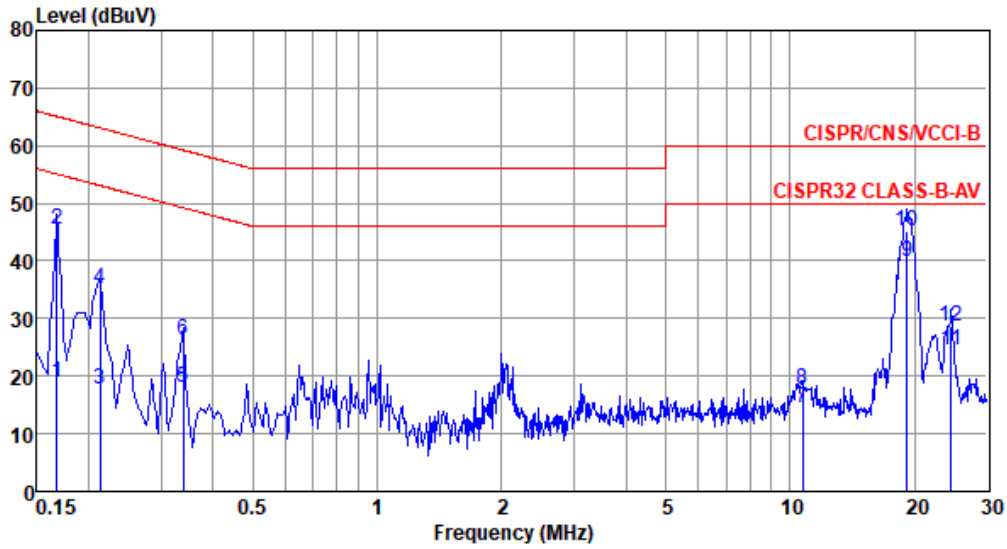
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.204	18.99	53.45	-34.46	9.32	9.59	0.08	0.00	Average
2	0.204	35.75	63.45	-27.70	26.08	9.59	0.08	0.00	QP
3	0.249	11.82	51.78	-39.96	2.15	9.59	0.08	0.00	Average
4	0.249	33.55	61.78	-28.23	23.88	9.59	0.08	0.00	QP
5	0.339	12.23	49.22	-36.99	2.57	9.58	0.08	0.00	Average
6	0.339	25.25	59.22	-33.97	15.59	9.58	0.08	0.00	QP
7	10.733	14.69	50.00	-35.31	4.57	9.65	0.47	0.00	Average
8	10.733	18.57	60.00	-41.43	8.45	9.65	0.47	0.00	QP
9*	19.326	40.83	50.00	-9.17	30.50	9.68	0.65	0.00	Average
10	19.326	46.48	60.00	-13.52	36.15	9.68	0.65	0.00	QP
11	24.529	24.60	50.00	-25.40	14.25	9.66	0.69	0.00	Average
12	24.529	29.54	60.00	-30.46	19.19	9.66	0.69	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).



Modulation Mod	11a	Test Freq. (MHz)	5825
Power Phase	Line		

Test by : Joe Liao      Temperature: 16°C      Humidity: 60%



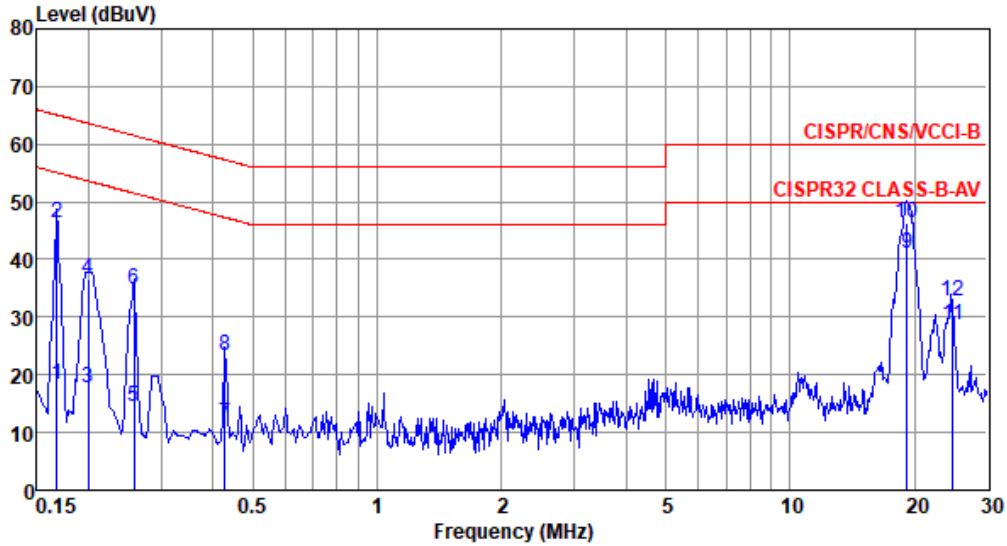
	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.168	18.95	55.08	-36.13	9.27	9.60	0.08	0.00	Average
2	0.168	45.34	65.08	-19.74	35.66	9.60	0.08	0.00	QP
3	0.213	17.57	53.10	-35.53	7.88	9.61	0.08	0.00	Average
4	0.213	35.16	63.10	-27.94	25.47	9.61	0.08	0.00	QP
5	0.339	18.10	49.22	-31.12	8.42	9.60	0.08	0.00	Average
6	0.339	26.38	59.22	-32.84	16.70	9.60	0.08	0.00	QP
7	10.733	14.45	50.00	-35.55	4.34	9.64	0.47	0.00	Average
8	10.733	17.71	60.00	-42.29	7.60	9.64	0.47	0.00	QP
9*	19.224	39.99	50.00	-10.01	29.75	9.59	0.65	0.00	Average
10	19.224	45.21	60.00	-14.79	34.97	9.59	0.65	0.00	QP
11	24.529	24.64	50.00	-25.36	14.43	9.52	0.69	0.00	Average
12	24.529	28.67	60.00	-31.33	18.46	9.52	0.69	0.00	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 Note 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).



Modulation Mod	11a	Test Freq. (MHz)	5825
Power Phase	Neutral		

Test by : Joe Liao      Temperature: 16°C      Humidity: 60%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.168	18.26	55.08	-36.82	8.59	9.59	0.08	0.00	Average
2	0.168	46.20	65.08	-18.88	36.53	9.59	0.08	0.00	QP
3	0.200	17.61	53.62	-36.01	7.94	9.59	0.08	0.00	Average
4	0.200	36.75	63.62	-26.87	27.08	9.59	0.08	0.00	QP
5	0.258	14.44	51.51	-37.07	4.77	9.59	0.08	0.00	Average
6	0.258	34.87	61.51	-26.64	25.20	9.59	0.08	0.00	QP
7	0.428	11.44	47.29	-35.85	1.77	9.58	0.09	0.00	Average
8	0.428	23.35	57.29	-33.94	13.68	9.58	0.09	0.00	QP
<b>9*</b>	<b>19.224</b>	<b>41.14</b>	<b>50.00</b>	<b>-8.86</b>	<b>30.81</b>	<b>9.68</b>	<b>0.65</b>	<b>0.00</b>	<b>Average</b>
10	19.224	46.34	60.00	-13.66	36.01	9.68	0.65	0.00	QP
11	24.790	28.59	50.00	-21.41	18.24	9.66	0.69	0.00	Average
12	24.790	32.74	60.00	-27.26	22.39	9.66	0.69	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 Note 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).