

# FCC TEST REPORT

## (Part 15, Subpart E)


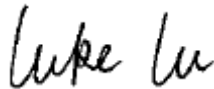
Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd.
Address:	Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone

Manufacturer or Supplier:	Lenovo PC HK Limited
Address:	23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, P.R.China
Product:	Portable Tablet Computer
Brand Name:	Lenovo
Model Name:	Lenovo TB-7306F
FCC ID:	O57TB7306F
Date of tests:	Jan. 05, 2021 ~ Jan. 25, 2021

The tests have been carried out according to the requirements of the following standard:

**FCC Part 15, Subpart E, Section 15.407**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Jan. 26, 2021	Date: Jan. 26, 2021

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## TABLE OF CONTENTS

<b>RELEASE CONTROL RECORD .....</b>	<b>4</b>
1 SUMMARY OF TEST RESULTS .....	5
1.1 MEASUREMENT UNCERTAINTY .....	5
2 GENERAL INFORMATION.....	6
2.1 GENERAL DESCRIPTION OF EUT .....	6
2.2 DESCRIPTION OF TEST MODES .....	8
2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	10
2.3 DUTY CYCLE OF TEST SIGNAL .....	15
2.4 DESCRIPTION OF SUPPORT UNITS .....	17
2.4.1 CONFIGURATION OF SYSTEM UNDER TEST .....	18
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS .....	18
<b>3 TEST TYPES AND RESULTS.....</b>	<b>19</b>
3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT.....	19
3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT.....	19
3.1.2 LIMITS OF UNWANTED EMISSION.....	19
3.1.3 TEST INSTRUMENTS.....	20
3.1.4 TEST PROCEDURES .....	21
3.1.5 DEVIATION FROM TEST STANDARD .....	21
3.1.6 TEST SETUP .....	22
3.1.7 EUT OPERATING CONDITION .....	23
<b>3.1.8 TEST RESULTS .....</b>	<b>24</b>
3.2 OUT OF BAND EMISSION MEASUREMENT .....	99
3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT .....	99
3.2.2 TEST INSTRUMENTS.....	100
3.2.3 TEST PROCEDURES .....	100
3.2.4 DEVIATION FROM TEST STANDARD .....	100
3.2.5 TEST SETUP .....	100
3.2.6 EUT OPERATING CONDITION .....	100
3.2.7 TEST RESULTS .....	101
3.3 CONDUCTED EMISSION MEASUREMENT .....	113
3.3.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	113
3.3.2 TEST INSTRUMENTS.....	113
3.3.3 TEST PROCEDURES .....	113



3.3.4	DEVIATION FROM TEST STANDARD .....	114
3.3.5	TEST SETUP .....	114
3.3.6	EUT OPERATING CONDITIONS .....	114
3.3.7	TEST RESULTS .....	115
3.4	MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT .....	117
3.4.1	LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT .....	117
3.4.2	TEST SETUP .....	118
3.4.3	TEST INSTRUMENTS .....	118
3.4.4	TEST PROCEDURE .....	119
3.4.5	DEVIATION FROM TEST STANDARD .....	121
3.4.6	EUT OPERATING CONDITIONS .....	121
3.4.7	TEST RESULTS .....	122
3.5	MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT .....	139
3.5.1	LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT .....	139
3.5.2	TEST SETUP .....	139
3.5.3	TEST INSTRUMENTS .....	139
3.5.4	TEST PROCEDURES .....	140
3.5.5	DEVIATION FROM TEST STANDARD .....	140
3.5.6	EUT OPERATING CONDITIONS .....	140
3.5.7	TEST RESULTS .....	141
<b>4</b>	<b>PHOTOGRAPHS OF THE TEST CONFIGURATION .....</b>	<b>150</b>
<b>5</b>	<b>APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB .....</b>	<b>151</b>



Test Report No.: RFA20210104W002-3

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RFA20210104W002-3	Original release	Jan. 26, 2021



# 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E		
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT
15.407(b)(6)	AC Power Conducted Emission	Compliance
15.407(b) (1/2/3/4/5)	Radiated Emission & Band Edge Measurement	Compliance
15.407(a/1/2/3)	Maximum conducted output Power	Compliance
15.407(a/1/2/3)	Peak Power Spectral Density	Compliance
15.403(i)	26 dB Bandwidth	Compliance
15.407(e)	6 dB Bandwidth	Compliance
15.203	Antenna Requirement	Compliance

## 1.1 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	UNCERTAINTY
AC Power Conducted emissions	±2.70dB
Radiated emissions (30MHz~1GMHz)	±4.98dB
Radiated emissions (1GMHz ~6GMHz)	±4.70dB
Radiated emissions (6GMHz ~18GMHz)	±4.60dB
Radiated emissions (18GMHz ~40GMHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Power Spectral Density	±0.85 dB

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



## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Portable Tablet Computer
<b>BRAND NAME</b>	Lenovo
<b>MODEL NAME</b>	Lenovo TB-7306F
<b>NOMINAL VOLTAGE</b>	5.0Vdc (adapter or host equipment) 3.86Vdc (Li-ion, battery)
<b>MODULATION</b>	OFDM
<b>TRANSFER RATE</b>	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
<b>OPERATING FREQUENCY</b>	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
<b>NUMBER OF CHANNEL</b>	5180 ~ 5240MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 11 for 802.11a, 802.11n, 802.11ac(20MHz) 5 for 802.11n, 802.11ac (40MHz) 2 for 802.11ac (80MHz) 5745 ~ 5825MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz)
<b>AVERAGE POWER</b>	34.36mW for 5180 ~ 5240MHz 34.75mW for 5260 ~ 5320MHz 33.65mW for 5500 ~ 5700MHz 34.83mW for 5745 ~ 5825MHz
<b>ANTENNA TYPE</b>	PIFA Antenna
<b>ANTENNA GAIN</b>	-3.6 dBi for 5180 ~ 5240MHz -3.6 dBi for 5260 ~ 5320MHz -3.7Bi for 5500 ~ 5720MHz -3.7dBi for 5745 ~ 5825MHz
<b>HW VERSION</b>	Lenovo Tablet TB-7306F
<b>SW VERSION</b>	TB-7306F_RF01_201229
<b>I/O PORTS</b>	Refer to user's manual
<b>CABLE SUPPLIED</b>	USB cable: shielded, detachable, 1meter



**NOTE:**

1. For a more detailed features description, please refer to the manufacturer’s specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

<b>MODULATION MODE</b>	<b>TX FUNCTION</b>
<b>802.11a</b>	1TX/1RX
<b>802.11n/802.11ac (20MHz)</b>	1TX/1RX
<b>802.11n/802.11ac (40MHz)</b>	1TX/1RX
<b>802.11ac (80MHz)</b>	1TX/1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

**List of Accessory:**

<b>ACCESSORIES</b>	<b>BRAND</b>	<b>MODEL</b>	<b>SPECIFICATION</b>
Battery 1	Sunwoda	L20D1P32	Capacity: 3.86vdc 3750mAh
Battery 2	NAT	L20D1P32	Capacity: 3.86vdc 3750mAh
AC Adapter 1	Acbel	SC-41	I/P:100-240Vac, 0.3A O/P: 5Vdc, 2A
AC Adapter 2	Salom	SC-41	I/P:100-240Vac, 0.3A O/P: 5Vdc, 2A
USB Cable 1	liqi	L62B-052000100	Shielded, 1.0meter
USB Cable 2	saibao	S62B-052000100	Shielded, 1.0meter



## 2.2 DESCRIPTION OF TEST MODES

### FOR 5180 ~ 5240MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

### FOR 5260 ~ 5320MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		





### FOR 5500 ~ 5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

2 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	122	5610 MHz

### FOR 5745 ~ 5825MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775 MHz		



### 2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	Powered by Adapter with wifi(5G) link
B	-	-	-	√	Powered by Battery with wifi(5G) link
C	-	-	-	-	Powered by USB with wifi(5G) link

Where **RE≥1G**: Radiated Emission above 1GHz      **RE<1G**: Radiated Emission below 1GHz  
**PLC**: Power Line Conducted Emission      **APCM**: Antenna Port Conducted Measurement

**NOTE:**  
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.  
**NOTE:** "-" means no effect.

#### 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	DATA RATE (Mbps)
A	802.11ac (80MHz)	5180-5240	42	42	OFDM	MCS0



**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	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
A	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11ac (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11n (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	MCS0



**POWER LINE CONDUCTED EMISSION TEST:**

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (80MHz)	5180-5240	42	42	OFDM	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	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0



EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
A	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11n (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11ac (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	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	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0



A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
A	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11n (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (20MHz)		149 to 165	149, 157, 165	OFDM	MCS0
A	802.11ac (40MHz)		151 to 159	1151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	MCS0

**TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Carl xie
RE≥1G	23deg. C, 70%RH	DC 5V By Adapter	Carl xie
PLC	25deg. C, 52%RH	DC 5V By Adapter	Jimmy Liu
APCM	25deg. C, 60%RH	DC 3.86V By Battery	Lily Zhao



### 2.3 DUTY CYCLE OF TEST SIGNAL

Duty cycle of test signal is < 98%, duty factor shall be considered.

**802.11a:** Duty cycle = 1.390/1.435 = 0.969, Duty factor = 10 \* log(1/ 0.969) =0.138.

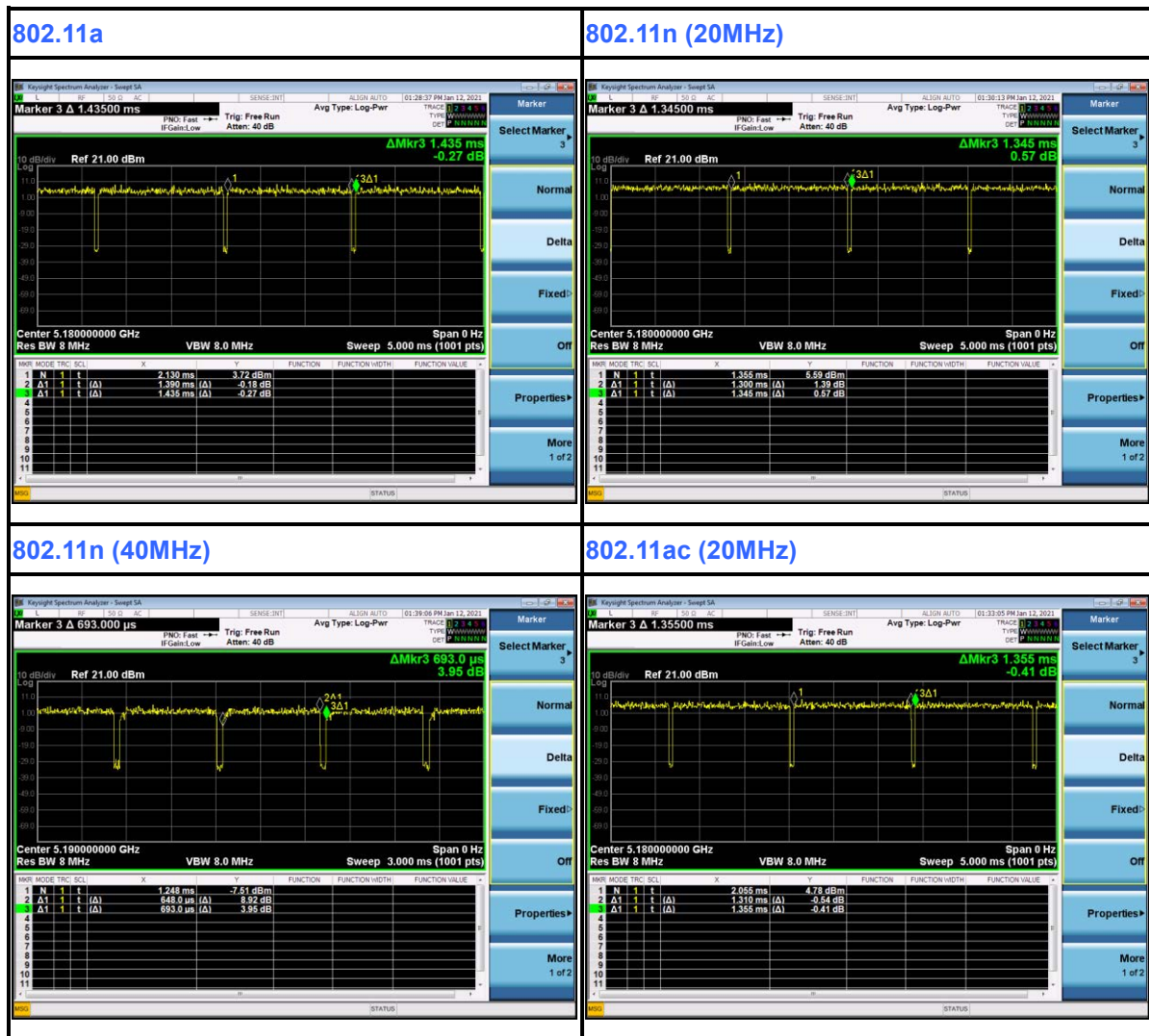
**802.11n (20MHz):** Duty cycle = 1.300/1.345 = 0.967, Duty factor = 10 \* log(1/ 0.967) =0.148.

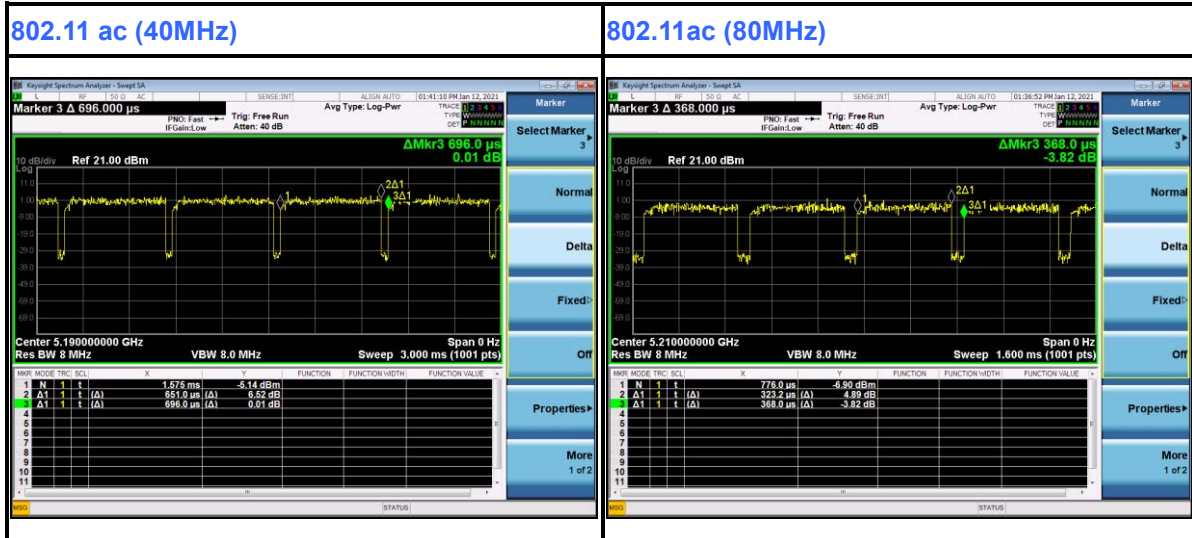
**802.11n (40MHz):** Duty cycle =648/693 = 0.935, Duty factor = 10 \* log(1/ 0.935) = 0.292.

**802.11ac (20MHz):** Duty cycle = 1.310/1.355 = 0.967, Duty factor = 10 \* log(1/ 0.967) =0.147.

**802.11ac (40MHz):** Duty cycle =651/696 = 0.935, Duty factor = 10 \* log(1/ 0.935) = 0.290.

**802.11ac (80MHZ):** Duty cycle =323.2/368.0 = 0.878, Duty factor = 10 \* log( 1/0.878) = 0.564.









## 2.4 DESCRIPTION OF SUPPORT UNITS

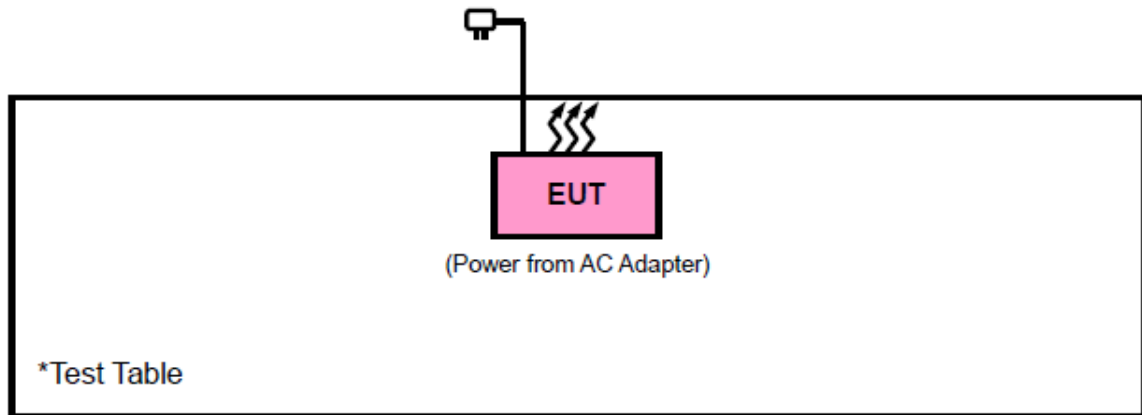
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	Thnikpad L440	R90FTFKN	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.5m
2	AC Line: Unshielded, Detachable 1.5m
3	AC Line: Unshielded, Detachable 1.5m



## 2.4.1 CONFIGURATION OF SYSTEM UNDER TEST



## 2.5 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 D02 General U-NII Test Procedures New Rules v02r01**

ANSI C63.10-2013

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 (Certification). The test report has been issued separately.



### 3 TEST TYPES AND RESULTS

#### 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

##### 3.1.1 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.

##### 3.1.2 LIMITS OF UNWANTED EMISSION

RESTRICTED BANDS	APPLICABLE TO	LIMIT	
	789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m (dBµV/m)	
		PK : 74	AV : 54
OUT OF THE RESTRICTED BANDS	APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
	15.407(b)(1)	PK : -27	PK : 68.3
	15.407(b)(2)		
	15.407(b)(3)		
15.407(b)(4)	See note 2 (FCC 16-24)		



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

E = (1000000\*sqrt(30P))/3 μV/m, where P is the eirp (Watts).

2. 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.

3.1.3 TEST INSTRUMENTS

Table with 6 columns: Equipment, Manufacturer, Model No., Serial No., Last Cal., Next Cal. Rows include 3m Semi-anechoic Chamber, Bilog Antenna, Horn Antenna, Test Software, 10dB Attenuator, MXE EMI Receiver, and Signal Pre-Amplifier.

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA. 2. The test was performed in 3m Chamber. 3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.



### 3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. 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 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq$  98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

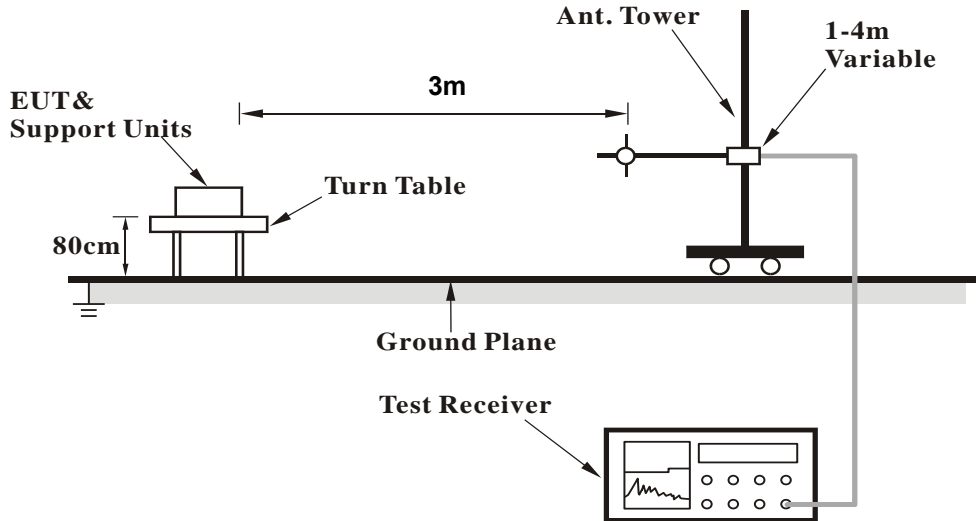
### 3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

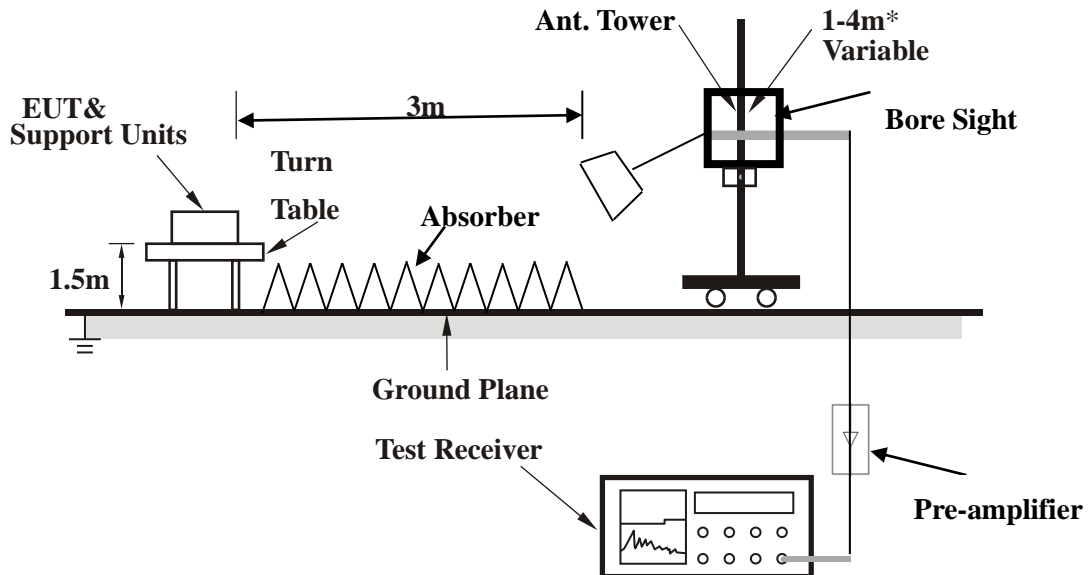


### 3.1.6 TEST SETUP

< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



**Note:** Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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



### 3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.



**3.1.8 TEST RESULTS**

**BELOW 1GHz WORST-CASE DATA:**

**30 MHz – 1GHz data:**

**Band 1**

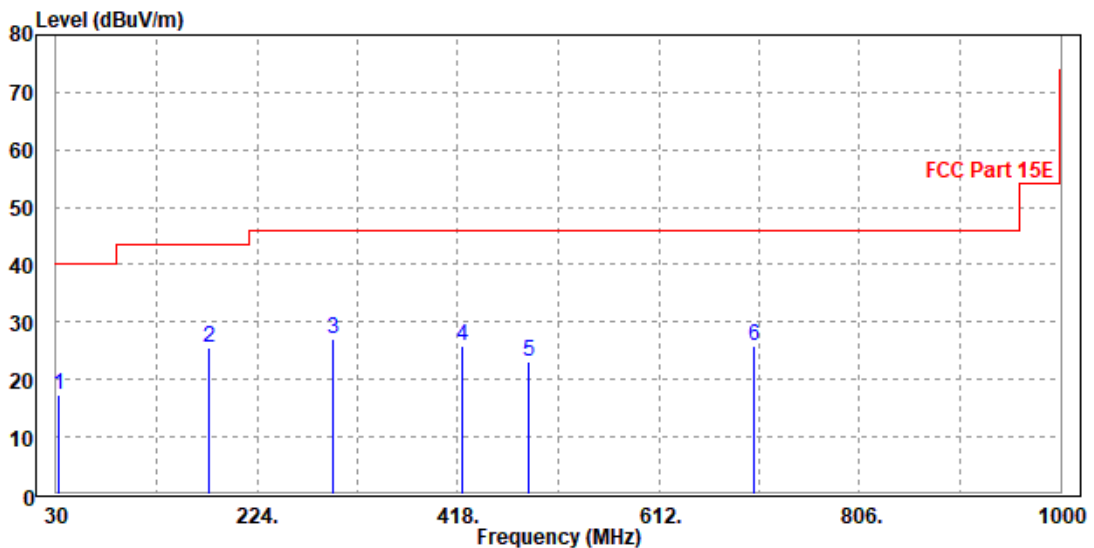
**802.11ac (80MHz)**

<b>CHANNEL</b>	TX Channel 42	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>										
<b>FREQ. (MHz)</b>	<b>EMISSION LEVEL (dBuV/m)</b>	<b>READ LEVEL (dBuV)</b>	<b>LIMIT (dBuV/m)</b>	<b>MARGIN (dB)</b>	<b>ANTENNA FACTOR (dB /m)</b>	<b>CABLE LOSS (dB)</b>	<b>PREAMP FACTOR (dB)</b>	<b>ANTENNA HEIGHT (cm)</b>	<b>TABLE ANGLE (Degree)</b>	<b>REMARK</b>
31.94	28.08	44.77	40	-11.92	19.93	0.8	37.42	100	0	Peak
89.17	14.11	41.87	43.5	-29.39	8.23	1.27	37.26	100	0	Peak
187.14	25.7	50.64	43.5	-17.8	9.94	1.73	36.61	100	0	Peak
278.32	27.9	48.91	46	-18.1	13.56	2.14	36.71	100	0	Peak
422.85	26.19	43.01	46	-19.81	17.35	2.7	36.87	100	0	Peak
693.48	24.32	35.72	46	-21.68	22.61	3.51	37.52	100	0	Peak

**REMARKS:**

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





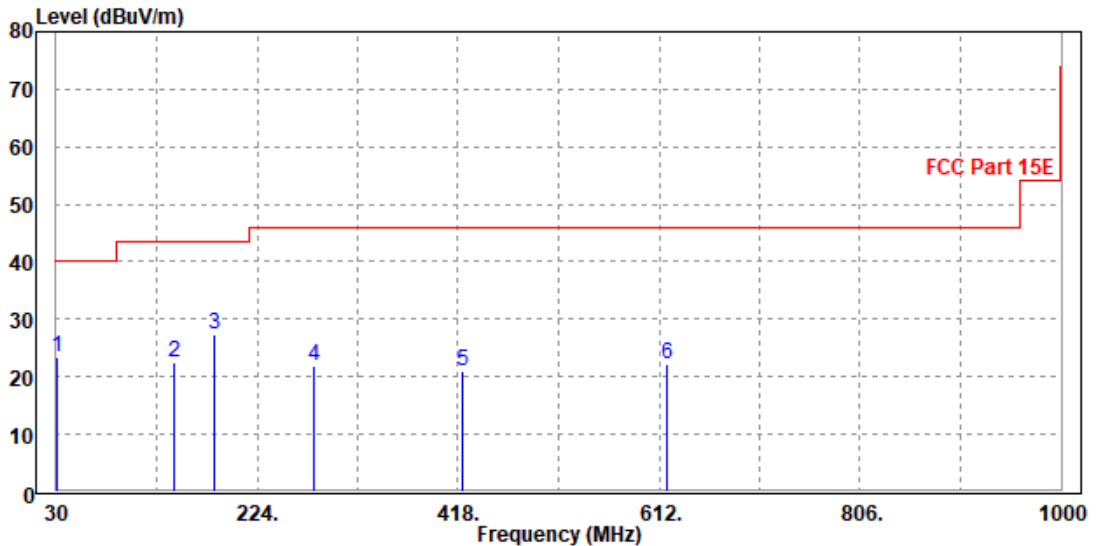


<b>CHANNEL</b>	Channel 42	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
31.94	26.01	42.7	40	-13.99	19.93	0.8	37.42	200	0	Peak
124.09	20.12	48.27	43.5	-23.38	7.44	1.46	37.05	200	0	Peak
187.14	22.32	47.26	43.5	-21.18	9.94	1.73	36.61	200	0	Peak
241.46	22.13	43.86	46	-23.87	12.9	2	36.63	200	0	Peak
280.26	24.45	45.46	46	-21.55	13.56	2.14	36.71	200	0	Peak
422.85	25.73	42.55	46	-20.27	17.35	2.7	36.87	200	0	Peak

**REMARKS:**

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





ABOVE 1GHZ WORST-CASE DATA:

Note: For higher frequency, the emission is too low to be detected.

Band 1

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	51.23	56.46	74	-22.77	33.7	7.42	46.35	100	40	Peak
5150	45.47	50.7	54	-8.53	33.7	7.42	46.35	100	40	Average
5180	92.76	97.98			33.7	7.43	46.35	100	40	Peak
5180	85.33	90.55			33.7	7.43	46.35	100	40	Average
5350	49.99	55.12	74	-24.01	33.7	7.47	46.3	100	40	Peak
5350	44.33	49.46	54	-9.67	33.7	7.47	46.3	100	40	Average

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	55.42	58.06	74	-18.58	36.29	7.42	46.35	100	0	Peak
5150	49.02	51.66	54	-4.98	36.29	7.42	46.35	100	0	Average
5180	102.24	104.85			36.31	7.43	46.35	100	0	Peak
5180	94.95	97.56			36.31	7.43	46.35	100	0	Average
5350	53.71	56.13	74	-20.29	36.41	7.47	46.3	100	0	Peak
5350	47.15	49.57	54	-6.85	36.41	7.47	46.3	100	0	Average

REMARKS:

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



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	52.5	57.73	74	-21.5	33.7	7.42	46.35	100	360	Peak
5150	45.89	51.12	54	-8.11	33.7	7.42	46.35	100	360	Average
5200	93.12	98.33			33.7	7.43	46.34	100	360	Peak
5200	87.65	92.86			33.7	7.43	46.34	100	360	Average
5350	51.78	56.91	74	-22.22	33.7	7.47	46.3	100	360	Peak
5350	44.36	49.49	54	-9.64	33.7	7.47	46.3	100	360	Average

**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	57.58	60.22	74	-16.42	36.29	7.42	46.35	100	25	Peak
5150	48.42	51.06	54	-5.58	36.29	7.42	46.35	100	25	Average
5200	101.47	104.06			36.32	7.43	46.34	100	25	Peak
5200	94.83	97.42			36.32	7.43	46.34	100	25	Average
5350	53.88	56.3	74	-20.12	36.41	7.47	46.3	100	25	Peak
5350	46.7	49.12	54	-7.3	36.41	7.47	46.3	100	25	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	53.41	58.64	74	-20.59	33.7	7.42	46.35	100	0	Peak
5150	45.34	50.57	54	-8.66	33.7	7.42	46.35	100	0	Average
5240	102.15	107.34			33.7	7.44	46.33	100	0	Peak
5240	95.33	100.52			33.7	7.44	46.33	100	0	Average
5350	51.75	56.88	74	-22.25	33.7	7.47	46.3	100	0	Peak
5350	43.96	49.09	54	-10.04	33.7	7.47	46.3	100	0	Average

**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	57.14	59.78	74	-16.86	36.29	7.42	46.35	100	20	Peak
5150	45.39	48.03	54	-8.61	36.29	7.42	46.35	100	20	Average
5240	101	103.55			36.34	7.44	46.33	100	20	Peak
5240	94.56	97.11			36.34	7.44	46.33	100	20	Average
5350	54.61	57.03	74	-19.39	36.41	7.47	46.3	100	20	Peak
5350	46.43	48.85	54	-7.57	36.41	7.47	46.3	100	20	Average

**REMARKS:**

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



802.11n (20MHz)

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	53.09	58.32	74	-20.91	33.7	7.42	46.35	100	325	Peak
5150	46.68	51.91	54	-7.32	33.7	7.42	46.35	100	325	Average
5180	89.78	95			33.7	7.43	46.35	100	325	Peak
5180	84.99	90.21			33.7	7.43	46.35	100	325	Average
5350	51.88	57.01	74	-22.12	33.7	7.47	46.3	100	325	Peak
5350	44.8	49.93	54	-9.2	33.7	7.47	46.3	100	325	Average
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	56.28	58.92	74	-17.72	36.29	7.42	46.35	100	0	Peak
5150	49.36	52	54	-4.64	36.29	7.42	46.35	100	0	Average
5180	102.11	104.72			36.31	7.43	46.35	100	0	Peak
5180	94.88	97.49			36.31	7.43	46.35	100	0	Average
5350	54.62	57.04	74	-19.38	36.41	7.47	46.3	100	0	Peak
5350	48.13	50.55	54	-5.87	36.41	7.47	46.3	100	0	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.52	56.75	74	-22.48	33.7	7.42	46.35	100	0	Peak
5150	46.12	51.35	54	-7.88	33.7	7.42	46.35	100	0	Average
5200	95.02	100.23			33.7	7.43	46.34	100	0	Peak
5200	87.16	92.37			33.7	7.43	46.34	100	0	Average
5350	52.22	57.35	74	-21.78	33.7	7.47	46.3	100	0	Peak
5350	44.93	50.06	54	-9.07	33.7	7.47	46.3	100	0	Average

**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	54.81	57.45	74	-19.19	36.29	7.42	46.35	100	20	Peak
5150	48.65	51.29	54	-5.35	36.29	7.42	46.35	100	20	Average
5200	104.83	107.42			36.32	7.43	46.34	100	20	Peak
5200	97.06	99.65			36.32	7.43	46.34	100	20	Average
5350	55.14	57.56	74	-18.86	36.41	7.47	46.3	100	20	Peak
5350	47.82	50.24	54	-6.18	36.41	7.47	46.3	100	20	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	52.21	57.44	74	-21.79	33.7	7.42	46.35	100	0	Peak
5150	46.25	51.48	54	-7.75	33.7	7.42	46.35	100	0	Average
5240	93.28	98.47			33.7	7.44	46.33	100	0	Peak
5240	86.09	91.28			33.7	7.44	46.33	100	0	Average
5350	51.2	56.33	74	-22.8	33.7	7.47	46.3	100	0	Peak
5350	44.71	49.84	54	-9.29	33.7	7.47	46.3	100	0	Average

**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	56.11	58.75	74	-17.89	36.29	7.42	46.35	100	20	Peak
5150	48.73	51.37	54	-5.27	36.29	7.42	46.35	100	20	Average
5240	103.92	106.47			36.34	7.44	46.33	100	20	Peak
5240	95.93	98.48			36.34	7.44	46.33	100	20	Average
5350	55.29	57.71	74	-18.71	36.41	7.47	46.3	100	20	Peak
5350	47.12	49.54	54	-6.88	36.41	7.47	46.3	100	20	Average

**REMARKS:**

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



802.11n (40MHz)

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.62	56.85	74	-22.38	33.7	7.42	46.35	200	0	Peak
5150	46.56	51.79	54	-7.44	33.7	7.42	46.35	200	0	Average
5190	91.51	96.72			33.7	7.43	46.34	200	0	Peak
5190	83.51	88.72			33.7	7.43	46.34	200	0	Average
5350	51.06	56.19	74	-22.94	33.7	7.47	46.3	200	0	Peak
5350	44.24	49.37	54	-9.76	33.7	7.47	46.3	200	0	Average

**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	54.62	57.26	74	-19.38	36.29	7.42	46.35	100	20	Peak
5150	49.41	52.05	54	-4.59	36.29	7.42	46.35	100	20	Average
5190	100.34	102.94			36.31	7.43	46.34	100	20	Peak
5190	93.97	96.57			36.31	7.43	46.34	100	20	Average
5350	54.33	56.75	74	-19.67	36.41	7.47	46.3	100	20	Peak
5350	46.25	48.67	54	-7.75	36.41	7.47	46.3	100	20	Average

**REMARKS:**

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





<b>CHANNEL</b>	TX Channel 46	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	52.93	58.16	74	-21.07	33.7	7.42	46.35	100	260	Peak
5150	45.51	50.74	54	-8.49	33.7	7.42	46.35	100	260	Average
5230	92.44	97.63			33.7	7.44	46.33	100	260	Peak
5230	86.45	91.64			33.7	7.44	46.33	100	260	Average
5350	52.03	57.16	74	-21.97	33.7	7.47	46.3	100	260	Peak
5350	44.03	49.16	54	-9.97	33.7	7.47	46.3	100	260	Average

**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	54.47	57.11	74	-19.53	36.29	7.42	46.35	155	25	Peak
5150	48.76	51.4	54	-5.24	36.29	7.42	46.35	155	25	Average
5230	98.77	101.32			36.34	7.44	46.33	155	25	Peak
5230	92.57	95.12			36.34	7.44	46.33	155	25	Average
5350	56.39	58.81	74	-17.61	36.41	7.47	46.3	155	25	Peak
5350	47.23	49.65	54	-6.77	36.41	7.47	46.3	155	25	Average

**REMARKS:**

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



802.11ac (20MHz)

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	55.49	60.72	74	-18.51	33.7	7.42	46.35	200	360	Peak
5150	46.08	51.31	54	-7.92	33.7	7.42	46.35	200	360	Average
5180	94.31	99.53			33.7	7.43	46.35	200	360	Peak
5180	86.94	92.16			33.7	7.43	46.35	200	360	Average
5350	53.3	58.43	74	-20.7	33.7	7.47	46.3	200	360	Peak
5350	44.08	49.21	54	-9.92	33.7	7.47	46.3	200	360	Average

**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	57.85	60.49	74	-16.15	36.29	7.42	46.35	200	280	Peak
5150	48.76	51.4	54	-5.24	36.29	7.42	46.35	200	280	Average
5180	101.74	104.35			36.31	7.43	46.35	200	280	Peak
5180	92.5	95.11			36.31	7.43	46.35	200	280	Average
5350	55.44	57.86	74	-18.56	36.41	7.47	46.3	200	280	Peak
5350	46.69	49.11	54	-7.31	36.41	7.47	46.3	200	280	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	54.18	59.41	74	-19.82	33.7	7.42	46.35	100	360	Peak
5150	45.61	50.84	54	-8.39	33.7	7.42	46.35	100	360	Average
5200	94.35	99.56			33.7	7.43	46.34	100	360	Peak
5200	88.04	93.25			33.7	7.43	46.34	100	360	Average
5350	53.08	58.21	74	-20.92	33.7	7.47	46.3	100	360	Peak
5350	44.09	49.22	54	-9.91	33.7	7.47	46.3	100	360	Average

**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	56.26	58.9	74	-17.74	36.29	7.42	46.35	200	280	Peak
5150	48.42	51.06	54	-5.58	36.29	7.42	46.35	200	280	Average
5200	100.18	102.77			36.32	7.43	46.34	200	280	Peak
5200	91.56	94.15			36.32	7.43	46.34	200	280	Average
5350	54.58	57	74	-19.42	36.41	7.47	46.3	200	280	Peak
5350	47.1	49.52	54	-6.9	36.41	7.47	46.3	200	280	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	53.04	58.27	74	-20.96	33.7	7.42	46.35	100	360	Peak
5150	45.19	50.42	54	-8.81	33.7	7.42	46.35	100	360	Average
5240	95.18	100.37			33.7	7.44	46.33	100	360	Peak
5240	87.67	92.86			33.7	7.44	46.33	100	360	Average
5350	52.03	57.16	74	-21.97	33.7	7.47	46.3	100	360	Peak
5350	44.12	49.25	54	-9.88	33.7	7.47	46.3	100	360	Average

**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	55.87	58.51	74	-18.13	36.29	7.42	46.35	100	360	Peak
5150	48.59	51.23	54	-5.41	36.29	7.42	46.35	100	360	Average
5240	102.56	105.11			36.34	7.44	46.33	100	360	Peak
5240	96.03	98.58			36.34	7.44	46.33	100	360	Average
5350	54.76	57.18	74	-19.24	36.41	7.47	46.3	100	360	Peak
5350	46.25	48.67	54	-7.75	36.41	7.47	46.3	100	360	Average

**REMARKS:**

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



802.11ac (40MHz)

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	52.23	57.46	74	-21.77	33.7	7.42	46.35	200	360	Peak
5150	46.26	51.49	54	-7.74	33.7	7.42	46.35	200	360	Average
5190	89.08	94.29			33.7	7.43	46.34	200	360	Peak
5190	82.73	87.94			33.7	7.43	46.34	200	360	Average
5350	51.36	56.49	74	-22.64	33.7	7.47	46.3	200	360	Peak
5350	43.66	48.79	54	-10.34	33.7	7.47	46.3	200	360	Average

**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	54.85	57.49	74	-19.15	36.29	7.42	46.35	100	0	Peak
5150	48.92	51.56	54	-5.08	36.29	7.42	46.35	100	0	Average
5190	98.47	101.07			36.31	7.43	46.34	100	0	Peak
5190	88.9	91.5			36.31	7.43	46.34	100	0	Average
5350	54.52	56.94	74	-19.48	36.41	7.47	46.3	100	0	Peak
5350	47.36	49.78	54	-6.64	36.41	7.47	46.3	100	0	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 46	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	53.47	58.7	74	-20.53	33.7	7.42	46.35	100	360	Peak
5150	46.07	51.3	54	-7.93	33.7	7.42	46.35	100	360	Average
5230	88.11	93.3			33.7	7.44	46.33	100	360	Peak
5230	82.32	87.51			33.7	7.44	46.33	100	360	Average
5350	51.91	57.04	74	-22.09	33.7	7.47	46.3	100	360	Peak
5350	44.17	49.3	54	-9.83	33.7	7.47	46.3	100	360	Average

**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	56.97	59.61	74	-17.03	36.29	7.42	46.35	100	0	Peak
5150	48.45	51.09	54	-5.55	36.29	7.42	46.35	100	0	Average
5230	94.98	97.53			36.34	7.44	46.33	100	0	Peak
5230	88.19	90.74			36.34	7.44	46.33	100	0	Average
5350	55.03	57.45	74	-18.97	36.41	7.47	46.3	100	0	Peak
5350	46.93	49.35	54	-7.07	36.41	7.47	46.3	100	0	Average

**REMARKS:**

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



802.11ac (80MHz)

<b>CHANNEL</b>	TX Channel 42	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.88	57.11	74	-22.12	33.7	7.42	46.35	200	360	Peak
5150	46.39	51.62	54	-7.61	33.7	7.42	46.35	200	360	Average
5210	86.15	91.35			33.7	7.44	46.34	200	360	Peak
5210	78.78	83.98			33.7	7.44	46.34	200	360	Average
5350	51.36	56.49	74	-22.64	33.7	7.47	46.3	200	360	Peak
5350	45	50.13	54	-9	33.7	7.47	46.3	200	360	Average

**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	56.14	58.78	74	-17.86	36.29	7.42	46.35	100	15	Peak
5150	49.77	52.41	54	-4.23	36.29	7.42	46.35	100	15	Average
5210	96.29	98.86			36.33	7.44	46.34	100	15	Peak
5210	88.32	90.89			36.33	7.44	46.34	100	15	Average
5350	55.02	57.44	74	-18.98	36.41	7.47	46.3	100	15	Peak
5350	47.1	49.52	54	-6.9	36.41	7.47	46.3	100	15	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5210MHz: Fundamental frequency.



Band 2  
802.11a

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.55	56.78	74	-22.45	33.7	7.42	46.35	100	345	Peak
5150	41.46	46.69	54	-12.54	33.7	7.42	46.35	100	345	Average
5260	95.19	100.36			33.7	7.45	46.32	100	345	Peak
5260	86.08	91.25			33.7	7.45	46.32	100	345	Average
5350	51.71	56.84	74	-22.29	33.7	7.47	46.3	100	345	Peak
5350	41.46	46.59	54	-12.54	33.7	7.47	46.3	100	345	Average

**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	55.23	57.87	74	-18.77	36.29	7.42	46.35	188	95	Peak
5150	44.61	47.25	54	-9.39	36.29	7.42	46.35	188	95	Average
5260	99.84	102.35			36.36	7.45	46.32	188	95	Peak
5260	91.13	93.64			36.36	7.45	46.32	188	95	Average
5350	55.16	57.58	74	-18.84	36.41	7.47	46.3	188	95	Peak
5350	45.21	47.63	54	-8.79	36.41	7.47	46.3	188	95	Average

**REMARKS:**

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





<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.01	56.24	74	-22.99	33.7	7.42	46.35	100	341	Peak
5150	41.13	46.36	54	-12.87	33.7	7.42	46.35	100	341	Average
5300	95.06	100.21			33.7	7.46	46.31	100	341	Peak
5300	87.39	92.54			33.7	7.46	46.31	100	341	Average
5350	51.65	56.78	74	-22.35	33.7	7.47	46.3	100	341	Peak
5350	41.44	46.57	54	-12.56	33.7	7.47	46.3	100	341	Average

**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	53.85	56.49	74	-20.15	36.29	7.42	46.35	188	98	Peak
5150	44.21	46.85	54	-9.79	36.29	7.42	46.35	188	98	Average
5300	100.55	103.02			36.38	7.46	46.31	188	98	Peak
5300	92.15	94.62			36.38	7.46	46.31	188	98	Average
5350	54.33	56.75	74	-19.67	36.41	7.47	46.3	188	98	Peak
5350	44.26	46.68	54	-9.74	36.41	7.47	46.3	188	98	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.98	57.21	74	-22.02	33.7	7.42	46.35	100	342	Peak
5150	41.63	46.86	54	-12.37	33.7	7.42	46.35	100	342	Average
5320	95.22	100.36			33.7	7.46	46.3	100	342	Peak
5320	86.28	91.42			33.7	7.46	46.3	100	342	Average
5350	53.28	58.41	74	-20.72	33.7	7.47	46.3	100	342	Peak
5350	42.76	47.89	54	-11.24	33.7	7.47	46.3	100	342	Average

**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	54	56.64	74	-20	36.29	7.42	46.35	185	96	Peak
5150	44.07	46.71	54	-9.93	36.29	7.42	46.35	185	96	Average
5320	100.75	103.2			36.39	7.46	46.3	185	96	Peak
5320	91.78	94.23			36.39	7.46	46.3	185	96	Average
5350	57.14	59.56	74	-16.86	36.41	7.47	46.3	185	96	Peak
5350	45.79	48.21	54	-8.21	36.41	7.47	46.3	185	96	Average

**REMARKS:**

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



802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	51.05	56.28	74	-22.95	33.7	7.42	46.35	100	348	Peak
5150	41.28	46.51	54	-12.72	33.7	7.42	46.35	100	348	Average
5260	95.04	100.21			33.7	7.45	46.32	100	348	Peak
5260	86.06	91.23			33.7	7.45	46.32	100	348	Average
5350	51.32	56.45	74	-22.68	33.7	7.47	46.3	100	348	Peak
5350	41.02	46.15	54	-12.98	33.7	7.47	46.3	100	348	Average

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	54.14	56.78	74	-19.86	36.29	7.42	46.35	187	98	Peak
5150	43.95	46.59	54	-10.05	36.29	7.42	46.35	187	98	Average
5260	98.63	101.14			36.36	7.45	46.32	187	98	Peak
5260	90.13	92.64			36.36	7.45	46.32	187	98	Average
5350	54.33	56.75	74	-19.67	36.41	7.47	46.3	187	98	Peak
5350	44.21	46.63	54	-9.79	36.41	7.47	46.3	187	98	Average

REMARKS:

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



<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.15	56.38	74	-22.85	33.7	7.42	46.35	100	352	Peak
5150	41.3	46.53	54	-12.7	33.7	7.42	46.35	100	352	Average
5300	94.53	99.68			33.7	7.46	46.31	100	352	Peak
5300	85.06	90.21			33.7	7.46	46.31	100	352	Average
5350	51.62	56.75	74	-22.38	33.7	7.47	46.3	100	352	Peak
5350	41.68	46.81	54	-12.32	33.7	7.47	46.3	100	352	Average

**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	53.83	56.47	74	-20.17	36.29	7.42	46.35	185	96	Peak
5150	43.95	46.59	54	-10.05	36.29	7.42	46.35	185	96	Average
5300	97.99	100.46			36.38	7.46	46.31	185	96	Peak
5300	89.05	91.52			36.38	7.46	46.31	185	96	Average
5350	54.47	56.89	74	-19.53	36.41	7.47	46.3	185	96	Peak
5350	43.93	46.35	54	-10.07	36.41	7.47	46.3	185	96	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.22	56.45	74	-22.78	33.7	7.42	46.35	100	348	Peak
5150	40.89	46.12	54	-13.11	33.7	7.42	46.35	100	348	Average
5320	94.18	99.32			33.7	7.46	46.3	100	348	Peak
5320	85.17	90.31			33.7	7.46	46.3	100	348	Average
5350	53.08	58.21	74	-20.92	33.7	7.47	46.3	100	348	Peak
5350	43.19	48.32	54	-10.81	33.7	7.47	46.3	100	348	Average

**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	54.14	56.78	74	-19.86	36.29	7.42	46.35	185	96	Peak
5150	43.88	46.52	54	-10.12	36.29	7.42	46.35	185	96	Average
5320	98.7	101.15			36.39	7.46	46.3	185	96	Peak
5320	90.21	92.66			36.39	7.46	46.3	185	96	Average
5350	57.83	60.25	74	-16.17	36.41	7.47	46.3	185	96	Peak
5350	46.34	48.76	54	-7.66	36.41	7.47	46.3	185	96	Average

**REMARKS:**

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



802.11n (40MHz)

<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.54	56.77	74	-22.46	33.7	7.42	46.35	100	116	Peak
5150	41.63	46.86	54	-12.37	33.7	7.42	46.35	100	116	Average
5270	91.41	96.58			33.7	7.45	46.32	100	116	Peak
5270	82.37	87.54			33.7	7.45	46.32	100	116	Average
5350	51.22	56.35	74	-22.78	33.7	7.47	46.3	100	116	Peak
5350	41.16	46.29	54	-12.84	33.7	7.47	46.3	100	116	Average

**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	54.07	56.71	74	-19.93	36.29	7.42	46.35	100	25	Peak
5150	44.04	46.68	54	-9.96	36.29	7.42	46.35	100	25	Average
5270	95.85	98.36			36.36	7.45	46.32	100	25	Peak
5270	87.14	89.65			36.36	7.45	46.32	100	25	Average
5350	54.42	56.84	74	-19.58	36.41	7.47	46.3	100	25	Peak
5350	43.89	46.31	54	-10.11	36.41	7.47	46.3	100	25	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.56	56.79	74	-22.44	33.7	7.42	46.35	100	12	Peak
5150	41.63	46.86	54	-12.37	33.7	7.42	46.35	100	12	Average
5310	91.17	96.32			33.7	7.46	46.31	100	12	Peak
5310	82.19	87.34			33.7	7.46	46.31	100	12	Average
5350	54.48	59.61	74	-19.52	33.7	7.47	46.3	100	12	Peak
5350	43.4	48.53	54	-10.6	33.7	7.47	46.3	100	12	Average

**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	54.14	56.78	74	-19.86	36.29	7.42	46.35	100	26	Peak
5150	43.71	46.35	54	-10.29	36.29	7.42	46.35	100	26	Average
5310	93.97	99.12			33.7	7.46	46.31	100	26	Peak
5310	85.09	90.24			33.7	7.46	46.31	100	26	Average
5350	60.63	63.05	74	-13.37	36.41	7.47	46.3	100	26	Peak
5350	47.26	49.68	54	-6.74	36.41	7.47	46.3	100	26	Average

**REMARKS:**

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



**802.11ac (20MHz)**

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.22	56.45	74	-22.78	33.7	7.42	46.35	100	348	Peak
5150	41.09	46.32	54	-12.91	33.7	7.42	46.35	100	348	Average
5260	96.19	101.36			33.7	7.45	46.32	100	348	Peak
5260	87.37	92.54			33.7	7.45	46.32	100	348	Average
5350	51.74	56.87	74	-22.26	33.7	7.47	46.3	100	348	Peak
5350	41.72	46.85	54	-12.28	33.7	7.47	46.3	100	348	Average

**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	53.61	56.25	74	-20.39	36.29	7.42	46.35	100	25	Peak
5150	43.95	46.59	54	-10.05	36.29	7.42	46.35	100	25	Average
5260	100.37	102.88			36.36	7.45	46.32	100	25	Peak
5260	91.04	93.55			36.36	7.45	46.32	100	25	Average
5350	53.82	56.24	74	-20.18	36.41	7.47	46.3	100	25	Peak
5350	43.73	46.15	54	-10.27	36.41	7.47	46.3	100	25	Average

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.





<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.19	56.42	74	-22.81	33.7	7.42	46.35	100	325	Peak
5150	41.13	46.36	54	-12.87	33.7	7.42	46.35	100	325	Average
5300	96.54	101.69			33.7	7.46	46.31	100	325	Peak
5300	87.26	92.41			33.7	7.46	46.31	100	325	Average
5350	51.65	56.78	74	-22.35	33.7	7.47	46.3	100	325	Peak
5350	41.69	46.82	54	-12.31	33.7	7.47	46.3	100	325	Average

**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	54.14	56.78	74	-19.86	36.29	7.42	46.35	100	26	Peak
5150	43.95	46.59	54	-10.05	36.29	7.42	46.35	100	26	Average
5300	100.79	103.26			36.38	7.46	46.31	100	26	Peak
5300	91.68	94.15			36.38	7.46	46.31	100	26	Average
5350	53.81	56.23	74	-20.19	36.41	7.47	46.3	100	26	Peak
5350	43.83	46.25	54	-10.17	36.41	7.47	46.3	100	26	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.18	56.41	74	-22.82	33.7	7.42	46.35	100	115	Peak
5150	41.58	46.81	54	-12.42	33.7	7.42	46.35	100	115	Average
5320	92.44	97.58			33.7	7.46	46.3	100	115	Peak
5320	83.61	88.75			33.7	7.46	46.3	100	115	Average
5350	53.54	58.67	74	-20.46	33.7	7.47	46.3	100	115	Peak
5350	42.55	47.68	54	-11.45	33.7	7.47	46.3	100	115	Average

**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	53.82	56.46	74	-20.18	36.29	7.42	46.35	100	25	Peak
5150	43.74	46.38	54	-10.26	36.29	7.42	46.35	100	25	Average
5320	100.9	103.35			36.39	7.46	46.3	100	25	Peak
5320	91.76	94.21			36.39	7.46	46.3	100	25	Average
5350	57.99	60.41	74	-16.01	36.41	7.47	46.3	100	25	Peak
5350	46.22	48.64	54	-7.78	36.41	7.47	46.3	100	25	Average

**REMARKS:**

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



802.11ac (40MHz)

<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	51.62	56.85	74	-22.38	33.7	7.42	46.35	100	325	Peak
5150	41.56	46.79	54	-12.44	33.7	7.42	46.35	100	325	Average
5270	87.18	92.35			33.7	7.45	46.32	100	325	Peak
5270	79.35	84.52			33.7	7.45	46.32	100	325	Average
5350	51.85	56.98	74	-22.15	33.7	7.47	46.3	100	325	Peak
5350	41.45	46.58	54	-12.55	33.7	7.47	46.3	100	325	Average

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	53.74	56.38	74	-20.26	36.29	7.42	46.35	100	20	Peak
5150	43.63	46.27	54	-10.37	36.29	7.42	46.35	100	20	Average
5270	96.64	99.15			36.36	7.45	46.32	100	20	Peak
5270	87.8	90.31			36.36	7.45	46.32	100	20	Average
5350	54.42	56.84	74	-19.58	36.41	7.47	46.3	100	20	Peak
5350	44.1	46.52	54	-9.9	36.41	7.47	46.3	100	20	Average

REMARKS:

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



<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.64	56.87	74	-22.36	33.7	7.42	46.35	100	345	Peak
5150	41.46	46.69	54	-12.54	33.7	7.42	46.35	100	345	Average
5310	88.1	93.25			33.7	7.46	46.31	100	345	Peak
5310	79.08	84.23			33.7	7.46	46.31	100	345	Average
5350	54.19	59.32	74	-19.81	33.7	7.47	46.3	100	345	Peak
5350	43.68	48.81	54	-10.32	33.7	7.47	46.3	100	345	Average

**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	54.21	56.85	74	-19.79	36.29	7.42	46.35	100	21	Peak
5150	44.15	46.79	54	-9.85	36.29	7.42	46.35	100	21	Average
5310	96.9	99.36			36.39	7.46	46.31	100	21	Peak
5310	88.18	90.64			36.39	7.46	46.31	100	21	Average
5350	58.15	60.57	74	-15.85	36.41	7.47	46.3	100	21	Peak
5350	47.24	49.66	54	-6.76	36.41	7.47	46.3	100	21	Average

**REMARKS:**

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



802.11ac (80MHz)

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	51.61	56.84	74	-22.39	33.7	7.42	46.35	100	358	Peak
5150	41.16	46.39	54	-12.84	33.7	7.42	46.35	100	358	Average
5290	86.16	91.32			33.7	7.45	46.31	100	358	Peak
5290	77.29	82.45			33.7	7.45	46.31	100	358	Average
5350	53.29	58.42	74	-20.71	33.7	7.47	46.3	100	358	Peak
5350	42.83	47.96	54	-11.17	33.7	7.47	46.3	100	358	Average

**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	55.2	57.84	74	-18.8	36.29	7.42	46.35	100	21	Peak
5150	44.13	46.77	54	-9.87	36.29	7.42	46.35	100	21	Average
5290	94.4	96.89			36.37	7.45	46.31	100	21	Peak
5290	85.76	88.25			36.37	7.45	46.31	100	21	Average
5350	56.54	58.96	74	-17.46	36.41	7.47	46.3	100	21	Peak
5350	45.27	47.69	54	-8.73	36.41	7.47	46.3	100	21	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5290MHz: Fundamental frequency.



Band 3

802.11a

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	53.6	58.67	74	-20.4	33.7	7.49	46.26	130	310	Peak
5460	44.67	49.74	54	-9.33	33.7	7.49	46.26	130	310	Average
#5470	53.87	58.94	68.3	-14.43	33.7	7.49	46.26	130	310	Peak
5500	91.49	96.54			33.7	7.5	46.25	130	310	Peak
5500	84.17	89.22			33.7	7.5	46.25	130	310	Average

**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	55.55	57.84	74	-18.45	36.48	7.49	46.26	100	320	Peak
5460	48.08	50.37	54	-5.92	36.48	7.49	46.26	100	320	Average
#5470	56.3	58.59	68.3	-12	36.48	7.49	46.26	100	320	Peak
5500	99.74	101.99			36.5	7.5	46.25	100	320	Peak
5500	92.28	94.53			36.5	7.5	46.25	100	320	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	53.6	58.67	74	-20.4	33.7	7.49	46.26	100	15	Peak
5460	44.5	49.57	54	-9.5	33.7	7.49	46.26	100	15	Average
#5470	52.61	57.68	68.3	-15.69	33.7	7.49	46.26	100	15	Peak
5580	91.71	96.56			33.8	7.58	46.23	100	15	Peak
5580	85.36	90.21			33.8	7.58	46.23	100	15	Average

**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	55.16	57.45	74	-18.84	36.48	7.49	46.26	100	360	Peak
5460	47.25	49.54	54	-6.75	36.48	7.49	46.26	100	360	Average
#5470	56.36	58.65	68.3	-11.94	36.48	7.49	46.26	100	360	Peak
5580	94.76	96.86			36.55	7.58	46.23	100	360	Peak
5580	87.57	89.67			36.55	7.58	46.23	100	360	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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
5700	91.95	96.5			33.94	7.7	46.19	100	60	Peak
5700	85.23	89.78			33.94	7.7	46.19	100	60	Average
#5725	52.79	57.28	68.3	-15.51	33.97	7.73	46.19	100	60	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
5700	98.21	100.08			36.62	7.7	46.19	100	300	Peak
5700	91.61	93.48			36.62	7.7	46.19	100	300	Average
#5725	56.59	58.42	68.3	-11.71	36.63	7.73	46.19	100	300	Peak

**REMARKS:**

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





802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	52.42	57.49	74	-21.58	33.7	7.49	46.26	100	345	Peak
5460	44.69	49.76	54	-9.31	33.7	7.49	46.26	100	345	Average
#5470	54.68	59.75	68.3	-13.62	33.7	7.49	46.26	100	345	Peak
5500	88.54	93.59			33.7	7.5	46.25	100	345	Peak
5500	82.49	87.54			33.7	7.5	46.25	100	345	Average

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	54.71	57	74	-19.29	36.48	7.49	46.26	100	300	Peak
5460	48.55	50.84	54	-5.45	36.48	7.49	46.26	100	300	Average
5470	57.85	60.14	68.3	-10.45	36.48	7.49	46.26	100	300	Peak
5500	95.13	97.38			36.5	7.5	46.25	100	300	Peak
5500	88.95	91.2			36.5	7.5	46.25	100	300	Average

REMARKS:

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



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**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	50.84	55.91	74	-23.16	33.7	7.49	46.26	100	345	Peak
5460	44.05	49.12	54	-9.95	33.7	7.49	46.26	100	345	Average
#5470	53.39	58.46	68.3	-14.91	33.7	7.49	46.26	100	345	Peak
5580	90.42	95.27			33.8	7.58	46.23	100	345	Peak
5580	83.67	88.52			33.8	7.58	46.23	100	345	Average

**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	54.58	56.87	74	-19.42	36.48	7.49	46.26	100	0	Peak
5460	47.5	49.79	54	-6.5	36.48	7.49	46.26	100	0	Average
#5470	56.4	58.69	68.3	-11.9	36.48	7.49	46.26	100	0	Peak
5580	96.97	99.07			36.55	7.58	46.23	100	0	Peak
5580	90.37	92.47			36.55	7.58	46.23	100	0	Average

**REMARKS:**

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



<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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
5700	92.03	96.58			33.94	7.7	46.19	100	60	Peak
5700	84.93	89.48			33.94	7.7	46.19	100	60	Average
#5725	54.71	59.2	68.3	-13.59	33.97	7.73	46.19	100	60	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
5700	98.5	100.37			36.62	7.7	46.19	100	320	Peak
5700	90.82	92.69			36.62	7.7	46.19	100	320	Average
#5725	56.92	58.75	68.3	-11.38	36.63	7.73	46.19	100	320	Peak

**REMARKS:**

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