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-7306X
FCC ID:	O57TB7306X
Date of tests:	Jan. 05, 2021 ~ Jan. 16, 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	Approved by Luke Lu
Engineer / Mobile Department	Manager / Mobile Department
Simon	Luke Lu
Date: Jan. 18, 2021	Date: Jan. 18, 2021

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RFA20210104W001-3	Original release	Jan. 18, 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

PRODUCT	Portable Tablet Computer
BRAND NAME	Lenovo
MODEL NAME	Lenovo TB-7306X
NOMINAL VOLTAGE	5.0Vdc (adapter or host equipment) 3.86Vdc (Li-ion, battery)
MODULATION	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	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)
AVERAGE POWER	34.43mW for 5180 ~ 5240MHz 34.20mW for 5260 ~ 5320MHz 34.36mW for 5500 ~ 5700MHz 34.83mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	-3.6 dBi for 5180 ~ 5240MHz -3.6 dBi for 5260 ~ 5320MHz -3.7Bi for 5500 ~ 5720MHz -3.7dBi for 5745 ~ 5825MHz
HW VERSION	Lenovo Tablet TB-7306X
SW VERSION	TB-7306X_RF01_201218
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	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.

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

ACCESSORIES	BRAND	MODEL	SPECIFICATION
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	802.11n (40MHz)	5180-5240	36 to 48	48	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	802.11n (40MHz)	5180-5240	36 to 48	48	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

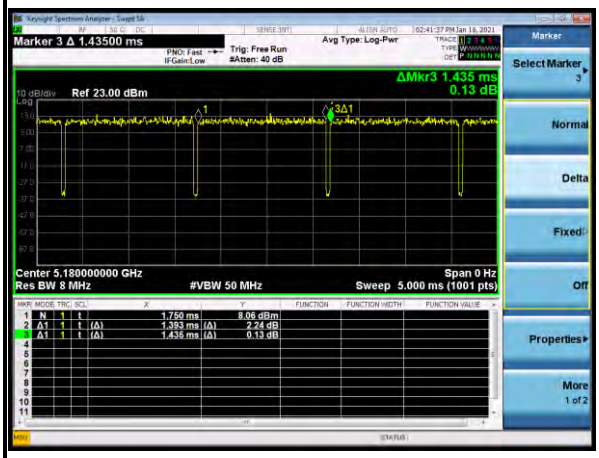
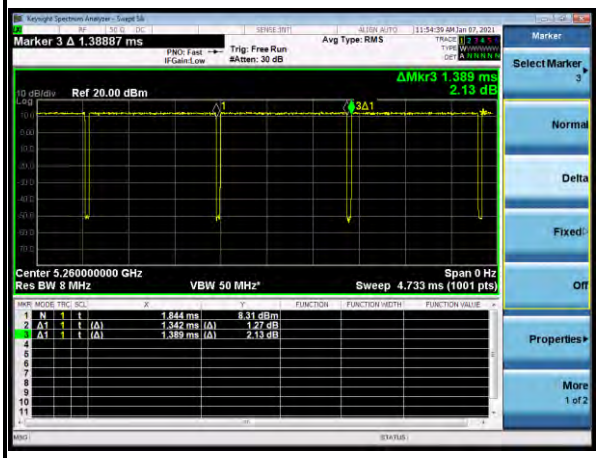
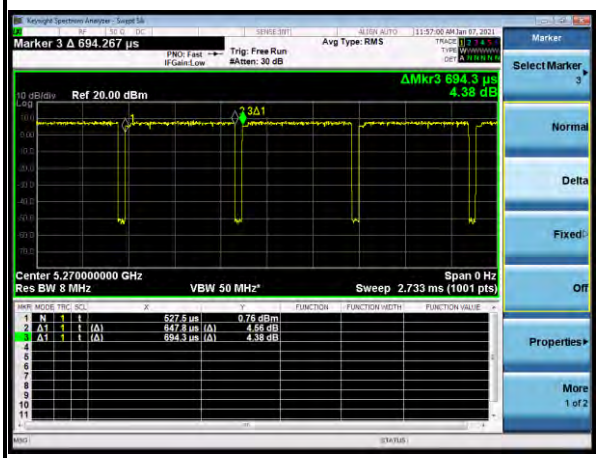
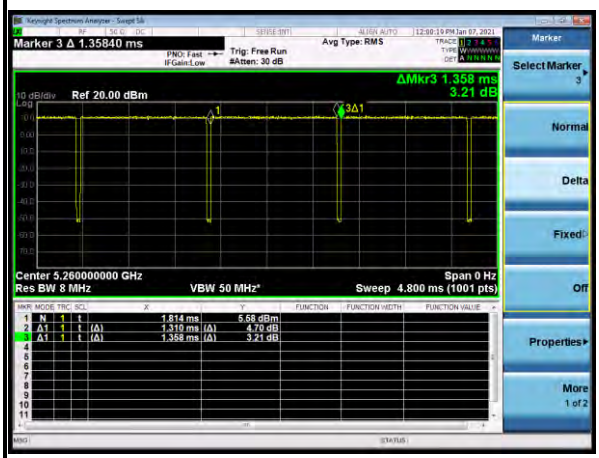
TEST CONDITION:

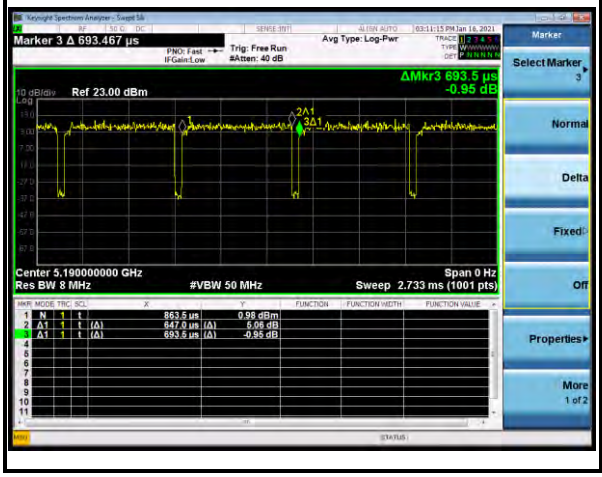
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
RE≥1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
PLC	25deg. C, 52%RH	DC 5V By Adapter	Jimmy Liu
APCM	25deg. C, 60%RH	DC 3.86V By Battery	Lily Zhao

2.3 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle = 1.393/1.435 = 0.971, Duty factor = 10 * log(1/ 0.971) =0.129.
802.11n (20MHz): Duty cycle = 1.342/1.389 = 0.966, Duty factor = 10 * log(1/ 0.966) =0.149.
802.11n (40MHz): Duty cycle =647.8/694.3 = 0.933, Duty factor = 10 * log(1/ 0.933) = 0.301.
802.11ac (20MHz): Duty cycle = 1.310/1.358 = 0.965, Duty factor = 10 * log(1/ 0.965) =0.156.
802.11ac (40MHz): Duty cycle =647.0/693.5 = 0.933, Duty factor = 10 * log(1/ 0.933) = 0.301.
802.11ac (80MHz): Duty cycle =323.5/368.0 = 0.879, Duty factor = 10 * log(1/0.879) = 0.560.

802.11a	802.11n (20MHz)
	
802.11n (40MHz)	**802.11ac (20MHz)**
	

802.11 ac (40MHz)	802.11ac (80MHz)
	

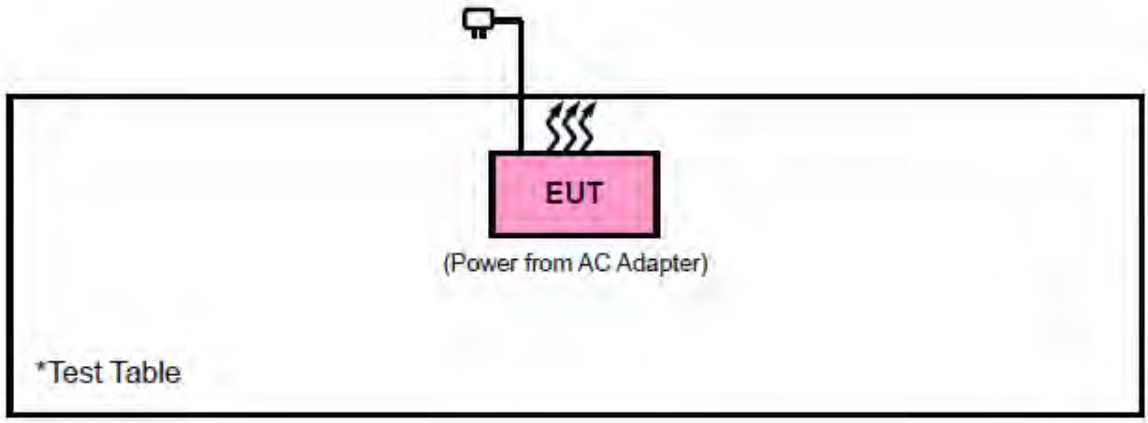
2.4 DESCRIPTION OF SUPPORT UNITS

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

<table>
<tr><td rowspan="2">RESTRICTED BANDS</td><td>APPLICABLE TO</td><td colspan="2">LIMIT</td></tr>
<tr><td rowspan="2">789033 D02 General UNII Test Procedures New Rules v02r01</td><td colspan="2">FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>PK : 74</td><td>AV : 54</td></tr>
<tr><td rowspan="5">OUT OF THE RESTRICTED BANDS</td><td>APPLICABLE TO</td><td>EIRP LIMIT (dBm/MHz)</td><td>EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>15.407(b)(1)</td><td rowspan="3">PK : -27</td><td rowspan="3">PK : 68.3</td></tr>
<tr><td>15.407(b)(2)</td></tr>
<tr><td>15.407(b)(3)</td></tr>
<tr><td>15.407(b)(4)</td><td colspan="2">See note 2 (FCC 16-24)</td></tr>
</table>

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

$$E = \frac{1000000\sqrt{30P}}{3}$$ 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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Bilog Antenna	ETS-LINDGREN	3143B	00165965	Mar. 27,20	Mar. 26,21
Horn Antenna	ETS-LINDGREN	3117	00168728	Nov. 24, 20	Nov. 23, 21
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Nov. 24, 20	Nov. 23, 21
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,20	Jun. 02,21
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 27,20	Apr. 26,21
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,20	Jun. 01,21
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 02,20	Jun. 01,21
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 30,20	Apr. 29,21

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:

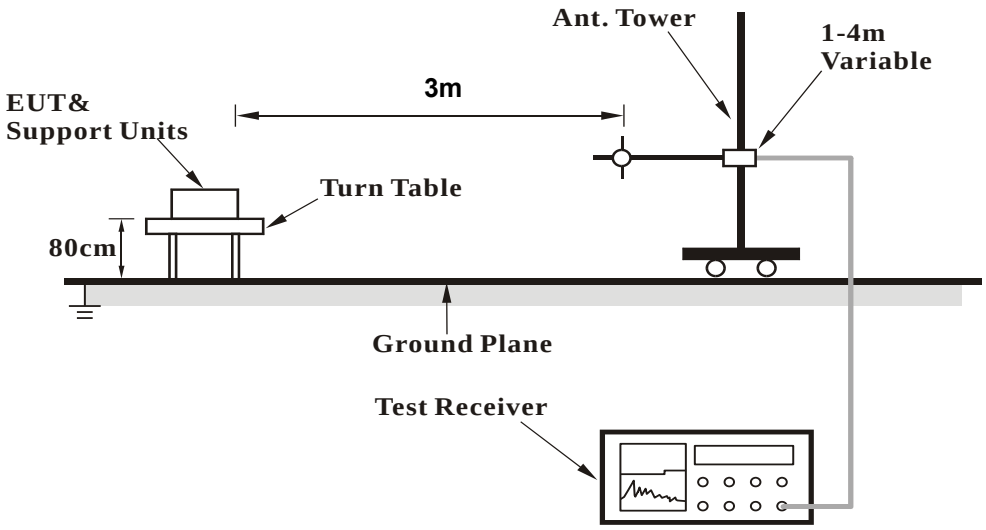
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency 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/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 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

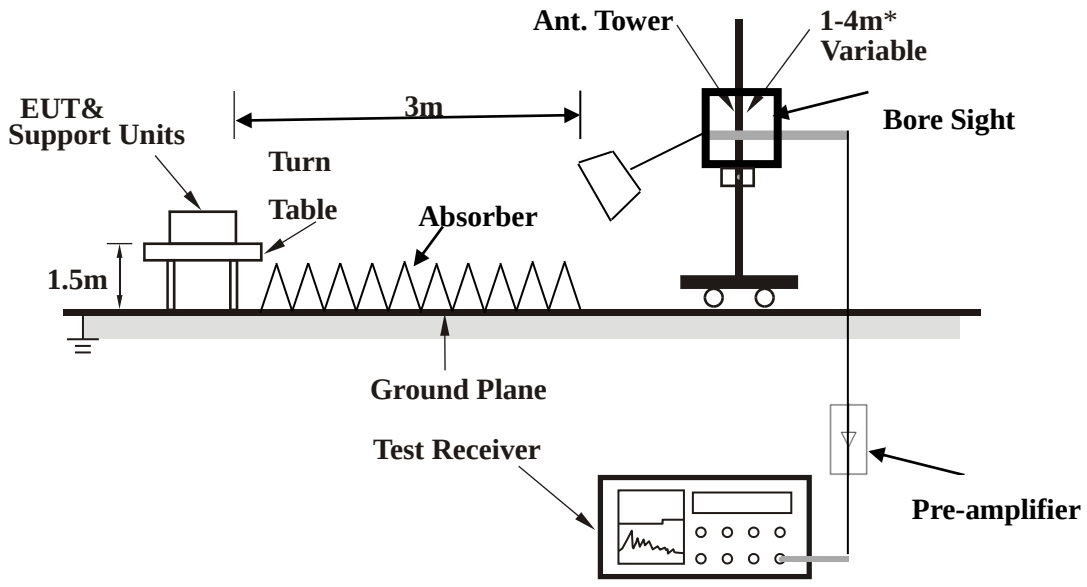
No deviation.

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

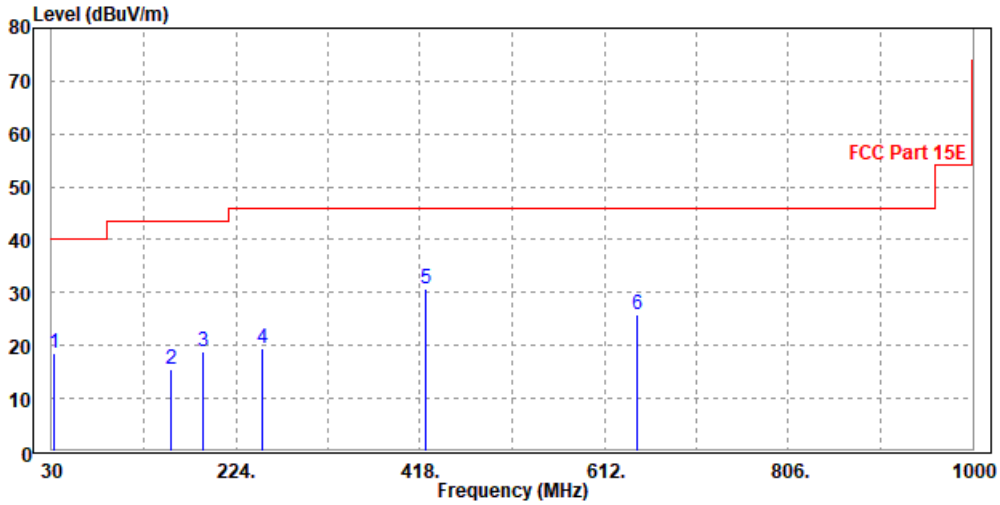
802.11n (20MHz)

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
31.91	18.59	35.26	40	-21.41	19.94	0.8	37.41	100	0	Peak
155.13	15.52	40.47	43.5	-27.98	10.21	1.61	36.77	100	0	Peak
189.24	18.73	43.64	43.5	-24.77	9.95	1.74	36.6	100	0	Peak
251.16	19.56	40.67	46	-26.44	13.5	2.04	36.65	100	0	Peak
423.61	30.84	47.63	46	-15.16	17.37	2.71	36.87	100	0	Peak
646.92	25.82	38.68	46	-20.18	21.26	3.33	37.45	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.

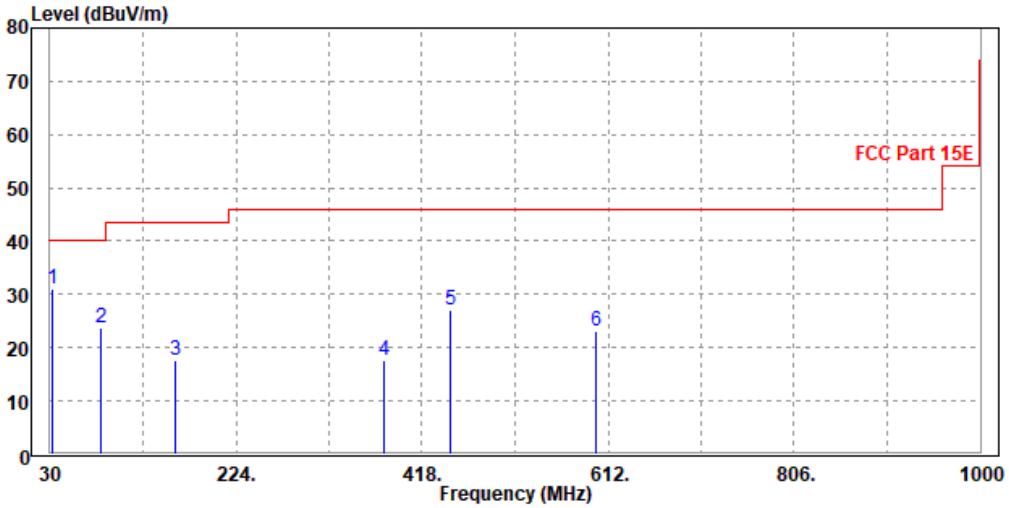


CHANNEL	Channel 48	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
32.91	31.02	48.23	40	-8.98	19.44	0.82	37.47	100	0	Peak
82.38	23.85	52.26	40	-16.15	7.69	1.22	37.32	100	0	Peak
161.26	17.75	42.16	43.5	-25.75	10.65	1.66	36.72	100	0	Peak
378.23	17.67	35.85	46	-28.33	16.1	2.53	36.81	100	0	Peak
447.1	26.97	43.16	46	-19.03	17.93	2.79	36.91	100	0	Peak
599.54	23.18	37.49	46	-22.82	19.9	3.16	37.37	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.



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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	54.39	59.62	74	-19.61	33.7	7.42	46.35	110	340	Peak
5150	45.31	50.54	54	-8.69	33.7	7.42	46.35	110	340	Average
5180	94.39	99.61			33.7	7.43	46.35	110	340	Peak
5180	86.45	91.67			33.7	7.43	46.35	110	340	Average
5350	53.71	58.84	74	-20.29	33.7	7.47	46.3	110	340	Peak
5350	43.94	49.07	54	-10.06	33.7	7.47	46.3	110	340	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	55.7	58.34	74	-18.3	36.29	7.42	46.35	150	0	Peak
5150	48.52	51.16	54	-5.48	36.29	7.42	46.35	150	0	Average
5180	100.04	102.65			36.31	7.43	46.35	150	0	Peak
5180	93.43	96.04			36.31	7.43	46.35	150	0	Average
5350	55.92	58.34	74	-18.08	36.41	7.47	46.3	150	0	Peak
5350	46.2	48.62	54	-7.8	36.41	7.47	46.3	150	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

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

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	54.38	59.61	74	-19.62	33.7	7.42	46.35	125	260	Peak
5150	45.13	50.36	54	-8.87	33.7	7.42	46.35	125	260	Average
5200	95.06	100.27			33.7	7.43	46.34	125	260	Peak
5200	86.91	92.12			33.7	7.43	46.34	125	260	Average
5350	53.6	58.73	74	-20.4	33.7	7.47	46.3	125	260	Peak
5350	43.82	48.95	54	-10.18	33.7	7.47	46.3	125	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	55.69	58.33	74	-18.31	36.29	7.42	46.35	160	300	Peak
5150	48.55	51.19	54	-5.45	36.29	7.42	46.35	160	300	Average
5200	101.17	103.76			36.32	7.43	46.34	160	300	Peak
5200	92.8	95.39			36.32	7.43	46.34	160	300	Average
5350	54.61	57.03	74	-19.39	36.41	7.47	46.3	160	300	Peak
5350	47.1	49.52	54	-6.9	36.41	7.47	46.3	160	300	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

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

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	110	20	Peak
5150	45.15	50.38	54	-8.85	33.7	7.42	46.35	110	20	Average
5240	95.07	100.26			33.7	7.44	46.33	110	20	Peak
5240	88.22	93.41			33.7	7.44	46.33	110	20	Average
5350	54.35	59.48	74	-19.65	33.7	7.47	46.3	110	20	Peak
5350	44.4	49.53	54	-9.6	33.7	7.47	46.3	110	20	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	56.46	59.1	74	-17.54	36.29	7.42	46.35	155	25	Peak
5150	47.98	50.62	54	-6.02	36.29	7.42	46.35	155	25	Average
5240	100.85	103.4			36.34	7.44	46.33	155	25	Peak
5240	94	96.55			36.34	7.44	46.33	155	25	Average
5350	55.63	58.05	74	-18.37	36.41	7.47	46.3	155	25	Peak
5350	46.9	49.32	54	-7.1	36.41	7.47	46.3	155	25	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (20MHz)

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

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	54.59	59.82	74	-19.41	33.7	7.42	46.35	100	135	Peak
5150	45.44	50.67	54	-8.56	33.7	7.42	46.35	100	135	Average
5180	90.65	95.87			33.7	7.43	46.35	100	135	Peak
5180	83.73	88.95			33.7	7.43	46.35	100	135	Average
5350	52.28	57.41	74	-21.72	33.7	7.47	46.3	100	135	Peak
5350	44.35	49.48	54	-9.65	33.7	7.47	46.3	100	135	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	54.48	57.12	74	-19.52	36.29	7.42	46.35	100	220	Peak
5150	48.37	51.01	54	-5.63	36.29	7.42	46.35	100	220	Average
5180	95.57	98.18			36.31	7.43	46.35	100	220	Peak
5180	88.54	91.15			36.31	7.43	46.35	100	220	Average
5350	54.01	56.43	74	-19.99	36.41	7.47	46.3	100	220	Peak
5350	47.29	49.71	54	-6.71	36.41	7.47	46.3	100	220	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

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

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	54.66	59.89	74	-19.34	33.7	7.42	46.35	100	205	Peak
5150	45.98	51.21	54	-8.02	33.7	7.42	46.35	100	205	Average
5200	90.58	95.79			33.7	7.43	46.34	100	205	Peak
5200	83.28	88.49			33.7	7.43	46.34	100	205	Average
5350	51.16	56.29	74	-22.84	33.7	7.47	46.3	100	205	Peak
5350	44.4	49.53	54	-9.6	33.7	7.47	46.3	100	205	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	56.81	59.45	74	-17.19	36.29	7.42	46.35	100	360	Peak
5150	48.66	51.3	54	-5.34	36.29	7.42	46.35	100	360	Average
5200	100.26	102.85			36.32	7.43	46.34	100	360	Peak
5200	92.99	95.58			36.32	7.43	46.34	100	360	Average
5350	53.9	56.32	74	-20.1	36.41	7.47	46.3	100	360	Peak
5350	47.32	49.74	54	-6.68	36.41	7.47	46.3	100	360	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

CHANNEL	TX Channel 48	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	56.08	58.72	74	-17.92	36.29	7.42	46.35	115	10	Peak
5150	48.81	51.45	54	-5.19	36.29	7.42	46.35	115	10	Average
5240	96.08	98.63			36.34	7.44	46.33	115	10	Peak
5240	89.1	91.65			36.34	7.44	46.33	115	10	Average
5350	54.53	56.95	74	-19.47	36.41	7.47	46.3	115	10	Peak
5350	46.94	49.36	54	-7.06	36.41	7.47	46.3	115	10	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	56.94	59.58	74	-17.06	36.29	7.42	46.35	100	360	Peak
5150	48.27	50.91	54	-5.73	36.29	7.42	46.35	100	360	Average
5240	100.12	102.67			36.34	7.44	46.33	100	360	Peak
5240	92.06	94.61			36.34	7.44	46.33	100	360	Average
5350	55.22	57.64	74	-18.78	36.41	7.47	46.3	100	360	Peak
5350	46.82	49.24	54	-7.18	36.41	7.47	46.3	100	360	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (40MHz)

CHANNEL	TX Channel 38	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	53.55	58.78	74	-20.45	33.7	7.42	46.35	100	15	Peak
5150	45.42	50.65	54	-8.58	33.7	7.42	46.35	100	15	Average
5190	87.47	92.68			33.7	7.43	46.34	100	15	Peak
5190	81.22	86.43			33.7	7.43	46.34	100	15	Average
5350	49.67	54.8	74	-24.33	33.7	7.47	46.3	100	15	Peak
5350	43.75	48.88	54	-10.25	33.7	7.47	46.3	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
5150	61.25	63.89	74	-12.75	36.29	7.42	46.35	105	300	Peak
5150	48.75	51.39	54	-5.25	36.29	7.42	46.35	105	300	Average
5190	94.7	97.3			36.31	7.43	46.34	105	300	Peak
5190	87.65	90.25			36.31	7.43	46.34	105	300	Average
5350	53.96	56.38	74	-20.04	36.41	7.47	46.3	105	300	Peak
5350	46.67	49.09	54	-7.33	36.41	7.47	46.3	105	300	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

CHANNEL	TX Channel 46	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	52.31	57.54	74	-21.69	33.7	7.42	46.35	135	340	Peak
5150	45.18	50.41	54	-8.82	33.7	7.42	46.35	135	340	Average
5230	91.54	96.73			33.7	7.44	46.33	135	340	Peak
5230	84.14	89.33			33.7	7.44	46.33	135	340	Average
5350	50.27	55.4	74	-23.73	33.7	7.47	46.3	135	340	Peak
5350	43.59	48.72	54	-10.41	33.7	7.47	46.3	135	340	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	53.34	55.98	74	-20.66	36.29	7.42	46.35	105	30	Peak
5150	47.69	50.33	54	-6.31	36.29	7.42	46.35	105	30	Average
5230	95.11	97.66			36.34	7.44	46.33	105	30	Peak
5230	88.12	90.67			36.34	7.44	46.33	105	30	Average
5350	53.31	55.73	74	-20.69	36.41	7.47	46.3	105	30	Peak
5350	46.52	48.94	54	-7.48	36.41	7.47	46.3	105	30	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.

802.11ac (20MHz)

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

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	53.02	58.25	74	-20.98	33.7	7.42	46.35	115	200	Peak
5150	45.59	50.82	54	-8.41	33.7	7.42	46.35	115	200	Average
5180	89.33	94.55			33.7	7.43	46.35	115	200	Peak
5180	82.22	87.44			33.7	7.43	46.35	115	200	Average
5350	51.28	56.41	74	-22.72	33.7	7.47	46.3	115	200	Peak
5350	44.18	49.31	54	-9.82	33.7	7.47	46.3	115	200	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	60.3	62.94	74	-13.7	36.29	7.42	46.35	100	0	Peak
5150	48.8	51.44	54	-5.2	36.29	7.42	46.35	100	0	Average
5180	99.19	101.8			36.31	7.43	46.35	100	0	Peak
5180	91.93	94.54			36.31	7.43	46.35	100	0	Average
5350	55.79	58.21	74	-18.21	36.41	7.47	46.3	100	0	Peak
5350	46.76	49.18	54	-7.24	36.41	7.47	46.3	100	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

CHANNEL	TX Channel 40	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	56.01	61.24	74	-17.99	33.7	7.42	46.35	100	205	Peak
5150	45.61	50.84	54	-8.39	33.7	7.42	46.35	100	205	Average
5200	90.5	95.71			33.7	7.43	46.34	100	205	Peak
5200	81.96	87.17			33.7	7.43	46.34	100	205	Average
5350	54.33	59.46	74	-19.67	33.7	7.47	46.3	100	205	Peak
5350	44.22	49.35	54	-9.78	33.7	7.47	46.3	100	205	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	57.1	59.74	74	-16.9	36.29	7.42	46.35	100	0	Peak
5150	48.41	51.05	54	-5.59	36.29	7.42	46.35	100	0	Average
5200	100.11	102.7			36.32	7.43	46.34	100	0	Peak
5200	92.07	94.66			36.32	7.43	46.34	100	0	Average
5350	55.91	58.33	74	-18.09	36.41	7.47	46.3	100	0	Peak
5350	47.38	49.8	54	-6.62	36.41	7.47	46.3	100	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

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

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	50.9	56.13	74	-23.1	33.7	7.42	46.35	100	0	Peak
5150	45.56	50.79	54	-8.44	33.7	7.42	46.35	100	0	Average
5240	95.9	101.09			33.7	7.44	46.33	100	0	Peak
5240	89.12	94.31			33.7	7.44	46.33	100	0	Average
5350	51	56.13	74	-23	33.7	7.47	46.3	100	0	Peak
5350	43.32	48.45	54	-10.68	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	57.56	60.2	74	-16.44	36.29	7.42	46.35	100	270	Peak
5150	48.44	51.08	54	-5.56	36.29	7.42	46.35	100	270	Average
5240	95.77	98.32			36.34	7.44	46.33	100	270	Peak
5240	87.68	90.23			36.34	7.44	46.33	100	270	Average
5350	56.56	58.98	74	-17.44	36.41	7.47	46.3	100	270	Peak
5350	47.12	49.54	54	-6.88	36.41	7.47	46.3	100	270	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11ac (40MHz)

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

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	54.13	59.36	74	-19.87	33.7	7.42	46.35	135	10	Peak
5150	45.05	50.28	54	-8.95	33.7	7.42	46.35	135	10	Average
5190	86.48	91.69			33.7	7.43	46.34	135	10	Peak
5190	78.59	83.8			33.7	7.43	46.34	135	10	Average
5350	50.79	55.92	74	-23.21	33.7	7.47	46.3	135	10	Peak
5350	44.15	49.28	54	-9.85	33.7	7.47	46.3	135	10	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	56.17	58.81	74	-17.83	36.29	7.42	46.35	100	360	Peak
5150	48.76	51.4	54	-5.24	36.29	7.42	46.35	100	360	Average
5190	94.1	96.7			36.31	7.43	46.34	100	360	Peak
5190	86.76	89.36			36.31	7.43	46.34	100	360	Average
5350	55.25	57.67	74	-18.75	36.41	7.47	46.3	100	360	Peak
5350	46.68	49.1	54	-7.32	36.41	7.47	46.3	100	360	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

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

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	53.3	58.53	74	-20.7	33.7	7.42	46.35	100	15	Peak
5150	44.91	50.14	54	-9.09	33.7	7.42	46.35	100	15	Average
5230	92.26	97.45			33.7	7.44	46.33	100	15	Peak
5230	85.09	90.28			33.7	7.44	46.33	100	15	Average
5350	52.19	57.32	74	-21.81	33.7	7.47	46.3	100	15	Peak
5350	43.84	48.97	54	-10.16	33.7	7.47	46.3	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
5150	55.71	58.35	74	-18.29	36.29	7.42	46.35	175	10	Peak
5150	47.4	50.04	54	-6.6	36.29	7.42	46.35	175	10	Average
5230	94.46	97.01			36.34	7.44	46.33	175	10	Peak
5230	86.57	89.12			36.34	7.44	46.33	175	10	Average
5350	54.51	56.93	74	-19.49	36.41	7.47	46.3	175	10	Peak
5350	46.17	48.59	54	-7.83	36.41	7.47	46.3	175	10	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.

802.11ac (80MHz)

CHANNEL	TX Channel 42	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	52.42	57.65	74	-21.58	33.7	7.42	46.35	155	20	Peak
5150	45.5	50.73	54	-8.5	33.7	7.42	46.35	155	20	Average
5210	85.07	90.27			33.7	7.44	46.34	155	20	Peak
5210	76.85	82.05			33.7	7.44	46.34	155	20	Average
5350	51.25	56.38	74	-22.75	33.7	7.47	46.3	155	20	Peak
5350	43.62	48.75	54	-10.38	33.7	7.47	46.3	155	20	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	54.69	57.33	74	-19.31	36.29	7.42	46.35	100	0	Peak
5150	48.04	50.68	54	-5.96	36.29	7.42	46.35	100	0	Average
5210	88.99	91.56			36.33	7.44	46.34	100	0	Peak
5210	82.93	85.5			36.33	7.44	46.34	100	0	Average
5350	54.42	56.84	74	-19.58	36.41	7.47	46.3	100	0	Peak
5350	46.42	48.84	54	-7.58	36.41	7.47	46.3	100	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5210MHz: Fundamental frequency.

Band 2

802.11a

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	51.66	56.89	74	-22.34	33.7	7.42	46.35	100	15	Peak
5150	41.89	47.12	54	-12.11	33.7	7.42	46.35	100	15	Average
5260	96.61	101.78			33.7	7.45	46.32	100	15	Peak
5260	88.53	93.7			33.7	7.45	46.32	100	15	Average
5350	51.39	56.52	74	-22.61	33.7	7.47	46.3	100	15	Peak
5350	42.62	47.75	54	-11.38	33.7	7.47	46.3	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
5150	53.99	56.63	74	-20.01	36.29	7.42	46.35	100	286	Peak
5150	44.51	47.15	54	-9.49	36.29	7.42	46.35	100	286	Average
5260	98.17	100.68			36.36	7.45	46.32	100	286	Peak
5260	90.02	92.53			36.36	7.45	46.32	100	286	Average
5350	54.06	56.48	74	-19.94	36.41	7.47	46.3	100	286	Peak
5350	45.37	47.79	54	-8.63	36.41	7.47	46.3	100	286	Average

REMARKS:

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

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

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	51.12	56.35	74	-22.88	33.7	7.42	46.35	100	16	Peak
5150	42.13	47.36	54	-11.87	33.7	7.42	46.35	100	16	Average
5300	97.39	102.54			33.7	7.46	46.31	100	16	Peak
5300	89.36	94.51			33.7	7.46	46.31	100	16	Average
5350	51.74	56.87	74	-22.26	33.7	7.47	46.3	100	16	Peak
5350	42.56	47.69	54	-11.44	33.7	7.47	46.3	100	16	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	54.22	56.86	74	-19.78	36.29	7.42	46.35	100	278	Peak
5150	45.25	47.89	54	-8.75	36.29	7.42	46.35	100	278	Average
5300	98.42	100.89			36.38	7.46	46.31	100	278	Peak
5300	91.09	93.56			36.38	7.46	46.31	100	278	Average
5350	54.7	57.12	74	-19.3	36.41	7.47	46.3	100	278	Peak
5350	45.35	47.77	54	-8.65	36.41	7.47	46.3	100	278	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

CHANNEL	TX Channel 64	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	51.35	56.58	74	-22.65	33.7	7.42	46.35	100	18	Peak
5150	42.28	47.51	54	-11.72	33.7	7.42	46.35	100	18	Average
5320	96.61	101.75			33.7	7.46	46.3	100	18	Peak
5320	88.51	93.65			33.7	7.46	46.3	100	18	Average
5350	55.39	60.52	74	-18.61	33.7	7.47	46.3	100	18	Peak
5350	44.48	49.61	54	-9.52	33.7	7.47	46.3	100	18	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	135	335	Peak
5150	44.99	47.63	54	-9.01	36.29	7.42	46.35	135	335	Average
5320	100.24	102.69			36.39	7.46	46.3	135	335	Peak
5320	92.11	94.56			36.39	7.46	46.3	135	335	Average
5350	58.16	60.58	74	-15.84	36.41	7.47	46.3	135	335	Peak
5350	46.44	48.86	54	-7.56	36.41	7.47	46.3	135	335	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (20MHz)

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

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	51.09	56.32	74	-22.91	33.7	7.42	46.35	100	15	Peak
5150	41.75	46.98	54	-12.25	33.7	7.42	46.35	100	15	Average
5260	95.19	100.36			33.7	7.45	46.32	100	15	Peak
5260	87.28	92.45			33.7	7.45	46.32	100	15	Average
5350	51.35	56.48	74	-22.65	33.7	7.47	46.3	100	15	Peak
5350	41.76	46.89	54	-12.24	33.7	7.47	46.3	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
5150	53.72	56.36	74	-20.28	36.29	7.42	46.35	136	345	Peak
5150	44.35	46.99	54	-9.65	36.29	7.42	46.35	136	345	Average
5260	97.37	99.88			36.36	7.45	46.32	136	345	Peak
5260	88.73	91.24			36.36	7.45	46.32	136	345	Average
5350	53.82	56.24	74	-20.18	36.41	7.47	46.3	136	345	Peak
5350	44.16	46.58	54	-9.84	36.41	7.47	46.3	136	345	Average

REMARKS:

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

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

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	51.25	56.48	74	-22.75	33.7	7.42	46.35	100	12	Peak
5150	42.03	47.26	54	-11.97	33.7	7.42	46.35	100	12	Average
5300	95.13	100.28			33.7	7.46	46.31	100	12	Peak
5300	87.16	92.31			33.7	7.46	46.31	100	12	Average
5350	51.28	56.41	74	-22.72	33.7	7.47	46.3	100	12	Peak
5350	41.55	46.68	54	-12.45	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	54.05	56.69	74	-19.95	36.29	7.42	46.35	132	325	Peak
5150	44.48	47.12	54	-9.52	36.29	7.42	46.35	132	325	Average
5300	97.16	99.63			36.38	7.46	46.31	132	325	Peak
5300	89.68	92.15			36.38	7.46	46.31	132	325	Average
5350	53.81	56.23	74	-20.19	36.41	7.47	46.3	132	325	Peak
5350	44.09	46.51	54	-9.91	36.41	7.47	46.3	132	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

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

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	51.08	56.31	74	-22.92	33.7	7.42	46.35	100	15	Peak
5150	42.02	47.25	54	-11.98	33.7	7.42	46.35	100	15	Average
5320	94.55	99.69			33.7	7.46	46.3	100	15	Peak
5320	86.4	91.54			33.7	7.46	46.3	100	15	Average
5350	54.22	59.35	74	-19.78	33.7	7.47	46.3	100	15	Peak
5350	43.56	48.69	54	-10.44	33.7	7.47	46.3	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
5150	54.14	56.78	74	-19.86	36.29	7.42	46.35	136	325	Peak
5150	44.72	47.36	54	-9.28	36.29	7.42	46.35	136	325	Average
5320	98.2	100.65			36.39	7.46	46.3	136	325	Peak
5320	90.06	92.51			36.39	7.46	46.3	136	325	Average
5350	57.15	59.57	74	-16.85	36.41	7.47	46.3	136	325	Peak
5350	46.37	48.79	54	-7.63	36.41	7.47	46.3	136	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (40MHz)

CHANNEL	TX Channel 54	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	51.54	56.77	74	-22.46	33.7	7.42	46.35	100	21	Peak
5150	41.62	46.85	54	-12.38	33.7	7.42	46.35	100	21	Average
5270	86.98	92.15			33.7	7.45	46.32	100	21	Peak
5270	78.39	83.56			33.7	7.45	46.32	100	21	Average
5350	51.18	56.31	74	-22.82	33.7	7.47	46.3	100	21	Peak
5350	41.1	46.23	54	-12.9	33.7	7.47	46.3	100	21	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	54.15	56.79	74	-19.85	36.29	7.42	46.35	100	345	Peak
5150	43.61	46.25	54	-10.39	36.29	7.42	46.35	100	345	Average
5270	94.61	97.12			36.36	7.45	46.32	100	345	Peak
5270	87.12	89.63			36.36	7.45	46.32	100	345	Average
5350	54	56.42	74	-20	36.41	7.47	46.3	100	345	Peak
5350	44.14	46.56	54	-9.86	36.41	7.47	46.3	100	345	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5270MHz: Fundamental frequency.

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

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	12	Peak
5150	41.05	46.28	54	-12.95	33.7	7.42	46.35	100	12	Average
5310	89.36	94.51			33.7	7.46	46.31	100	12	Peak
5310	80.52	85.67			33.7	7.46	46.31	100	12	Average
5350	54.74	59.87	74	-19.26	33.7	7.47	46.3	100	12	Peak
5350	42.52	47.65	54	-11.48	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	53.95	56.59	74	-20.05	36.29	7.42	46.35	100	352	Peak
5150	43.72	46.36	54	-10.28	36.29	7.42	46.35	100	352	Average
5310	93.75	96.21			36.39	7.46	46.31	100	352	Peak
5310	85.69	88.15			36.39	7.46	46.31	100	352	Average
5350	59.16	61.58	74	-14.84	36.41	7.47	46.3	100	352	Peak
5350	46.33	48.75	54	-7.67	36.41	7.47	46.3	100	352	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.

802.11ac (20MHz)

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

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	51.66	56.89	74	-22.34	33.7	7.42	46.35	100	25	Peak
5150	41.64	46.87	54	-12.36	33.7	7.42	46.35	100	25	Average
5260	91.19	96.36			33.7	7.45	46.32	100	25	Peak
5260	83.47	88.64			33.7	7.45	46.32	100	25	Average
5350	51.35	56.48	74	-22.65	33.7	7.47	46.3	100	25	Peak
5350	41.38	46.51	54	-12.62	33.7	7.47	46.3	100	25	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	53.94	56.58	74	-20.06	36.29	7.42	46.35	100	285	Peak
5150	43.95	46.59	54	-10.05	36.29	7.42	46.35	100	285	Average
5260	97.73	100.24			36.36	7.45	46.32	100	285	Peak
5260	89.79	92.3			36.36	7.45	46.32	100	285	Average
5350	54.33	56.75	74	-19.67	36.41	7.47	46.3	100	285	Peak
5350	44.27	46.69	54	-9.73	36.41	7.47	46.3	100	285	Average

REMARKS:

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

CHANNEL	TX Channel 60	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	51.22	56.45	74	-22.78	33.7	7.42	46.35	100	18	Peak
5150	41.05	46.28	54	-12.95	33.7	7.42	46.35	100	18	Average
5300	92.39	97.54			33.7	7.46	46.31	100	18	Peak
5300	84.48	89.63			33.7	7.46	46.31	100	18	Average
5350	51.64	56.77	74	-22.36	33.7	7.47	46.3	100	18	Peak
5350	41.25	46.38	54	-12.75	33.7	7.47	46.3	100	18	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	53.9	56.54	74	-20.1	36.29	7.42	46.35	100	275	Peak
5150	44.25	46.89	54	-9.75	36.29	7.42	46.35	100	275	Average
5300	98.74	101.21			36.38	7.46	46.31	100	275	Peak
5300	91.18	93.65			36.38	7.46	46.31	100	275	Average
5350	54.36	56.78	74	-19.64	36.41	7.47	46.3	100	275	Peak
5350	44.17	46.59	54	-9.83	36.41	7.47	46.3	100	275	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

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

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	16	Peak
5150	41.35	46.58	54	-12.65	33.7	7.42	46.35	100	16	Average
5320	92.75	97.89			33.7	7.46	46.3	100	16	Peak
5320	85.11	90.25			33.7	7.46	46.3	100	16	Average
5350	53.83	58.96	74	-20.17	33.7	7.47	46.3	100	16	Peak
5350	43.54	48.67	54	-10.46	33.7	7.47	46.3	100	16	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	53.71	56.35	74	-20.29	36.29	7.42	46.35	100	289	Peak
5150	43.87	46.51	54	-10.13	36.29	7.42	46.35	100	289	Average
5320	98.78	101.23			36.39	7.46	46.3	100	289	Peak
5320	90.06	92.51			36.39	7.46	46.3	100	289	Average
5350	58.33	60.75	74	-15.67	36.41	7.47	46.3	100	289	Peak
5350	46.14	48.56	54	-7.86	36.41	7.47	46.3	100	289	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11ac (40MHz)

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

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	51.25	56.48	74	-22.75	33.7	7.42	46.35	100	95	Peak
5150	41.13	46.36	54	-12.87	33.7	7.42	46.35	100	95	Average
5270	86.52	91.69			33.7	7.45	46.32	100	95	Peak
5270	78.47	83.64			33.7	7.45	46.32	100	95	Average
5350	51.62	56.75	74	-22.38	33.7	7.47	46.3	100	95	Peak
5350	41.45	46.58	54	-12.55	33.7	7.47	46.3	100	95	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	53.9	56.54	74	-20.1	36.29	7.42	46.35	100	16	Peak
5150	44.15	46.79	54	-9.85	36.29	7.42	46.35	100	16	Average
5270	90.14	92.65			36.36	7.45	46.32	100	16	Peak
5270	81.7	84.21			36.36	7.45	46.32	100	16	Average
5350	54.29	56.71	74	-19.71	36.41	7.47	46.3	100	16	Peak
5350	44.26	46.68	54	-9.74	36.41	7.47	46.3	100	16	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5270MHz: Fundamental frequency.

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

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	51.26	56.49	74	-22.74	33.7	7.42	46.35	100	25	Peak
5150	41.12	46.35	54	-12.88	33.7	7.42	46.35	100	25	Average
5310	86.39	91.54			33.7	7.46	46.31	100	25	Peak
5310	78.41	83.56			33.7	7.46	46.31	100	25	Average
5350	53.56	58.69	74	-20.44	33.7	7.47	46.3	100	25	Peak
5350	43.58	48.71	54	-10.42	33.7	7.47	46.3	100	25	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	54.08	56.72	74	-19.92	36.29	7.42	46.35	100	98	Peak
5150	43.67	46.31	54	-10.33	36.29	7.42	46.35	100	98	Average
5310	90.99	93.45			36.39	7.46	46.31	100	98	Peak
5310	82.66	85.12			36.39	7.46	46.31	100	98	Average
5350	57.27	59.69	74	-16.73	36.41	7.47	46.3	100	98	Peak
5350	46.25	48.67	54	-7.75	36.41	7.47	46.3	100	98	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.

802.11ac (80MHz)

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

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	21	Peak
5150	41.28	46.51	54	-12.72	33.7	7.42	46.35	100	21	Average
5290	85.4	90.56			33.7	7.45	46.31	100	21	Peak
5290	75.53	80.69			33.7	7.45	46.31	100	21	Average
5350	52.76	57.89	74	-21.24	33.7	7.47	46.3	100	21	Peak
5350	42.29	47.42	54	-11.71	33.7	7.47	46.3	100	21	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	53.84	56.48	74	-20.16	36.29	7.42	46.35	100	92	Peak
5150	43.61	46.25	54	-10.39	36.29	7.42	46.35	100	92	Average
5290	89.7	92.19			36.37	7.45	46.31	100	92	Peak
5290	80.32	82.81			36.37	7.45	46.31	100	92	Average
5350	56.22	58.64	74	-17.78	36.41	7.47	46.3	100	92	Peak
5350	45.43	47.85	54	-8.57	36.41	7.47	46.3	100	92	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5290MHz: Fundamental frequency.

Band 3

802.11a

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

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	51.69	56.76	74	-22.31	33.7	7.49	46.26	105	50	Peak
5460	43.39	48.46	54	-10.61	33.7	7.49	46.26	105	50	Average
#5470	50.17	55.24	68.3	-18.13	33.7	7.49	46.26	105	50	Peak
5500	92.97	98.02			33.7	7.5	46.25	105	50	Peak
5500	84.33	89.38			33.7	7.5	46.25	105	50	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	53.2	55.49	74	-20.8	36.48	7.49	46.26	100	300	Peak
5460	46.73	49.02	54	-7.27	36.48	7.49	46.26	100	300	Average
#5470	54.93	57.22	68.3	-13.37	36.48	7.49	46.26	100	300	Peak
5500	98.99	101.24			36.5	7.5	46.25	100	300	Peak
5500	90.16	92.41			36.5	7.5	46.25	100	300	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	50.15	55.22	74	-23.85	33.7	7.49	46.26	130	20	Peak
5460	44.18	49.25	54	-9.82	33.7	7.49	46.26	130	20	Average
#5470	51.41	56.48	68.3	-16.89	33.7	7.49	46.26	130	20	Peak
5580	91.82	96.67			33.8	7.58	46.23	130	20	Peak
5580	85.17	90.02			33.8	7.58	46.23	130	20	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	54.82	57.11	74	-19.18	36.48	7.49	46.26	100	30	Peak
5460	47	49.29	54	-7	36.48	7.49	46.26	100	30	Average
#5470	53.24	55.53	68.3	-15.06	36.48	7.49	46.26	100	30	Peak
5580	95.83	97.93			36.55	7.58	46.23	100	30	Peak
5580	87.01	89.11			36.55	7.58	46.23	100	30	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	95.94	100.49			33.94	7.7	46.19	120	65	Peak
5700	88.71	93.26			33.94	7.7	46.19	120	65	Average
#5725	55.13	59.62	68.3	-13.17	33.97	7.73	46.19	120	65	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.97	100.84			36.62	7.7	46.19	145	0	Peak
5700	92.27	94.14			36.62	7.7	46.19	145	0	Average
#5725	56.75	58.58	68.3	-11.55	36.63	7.73	46.19	145	0	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (20MHz)

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

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	52.95	58.02	74	-21.05	33.7	7.49	46.26	125	70	Peak
5460	44.56	49.63	54	-9.44	33.7	7.49	46.26	125	70	Average
#5470	56.18	61.25	68.3	-12.12	33.7	7.49	46.26	125	70	Peak
5500	93.7	98.75			33.7	7.5	46.25	125	70	Peak
5500	87.29	92.34			33.7	7.5	46.25	125	70	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	57.04	59.33	74	-16.96	36.48	7.49	46.26	120	330	Peak
5460	46.85	49.14	54	-7.15	36.48	7.49	46.26	120	330	Average
#5470	61.05	63.34	68.3	-7.25	36.48	7.49	46.26	120	330	Peak
5500	98.35	100.6			36.5	7.5	46.25	120	330	Peak
5500	91.63	93.88			36.5	7.5	46.25	120	330	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	53.49	58.56	74	-20.51	33.7	7.49	46.26	100	30	Peak
5460	43.37	48.44	54	-10.63	33.7	7.49	46.26	100	30	Average
#5470	51.62	56.69	68.3	-16.68	33.7	7.49	46.26	100	30	Peak
5580	88.6	93.45			33.8	7.58	46.23	100	30	Peak
5580	81.29	86.14			33.8	7.58	46.23	100	30	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	56.32	58.61	74	-17.68	36.48	7.49	46.26	110	30	Peak
5460	47.01	49.3	54	-6.99	36.48	7.49	46.26	110	30	Average
#5470	56.84	59.13	68.3	-11.46	36.48	7.49	46.26	110	30	Peak
5580	98.27	100.37			36.55	7.58	46.23	110	30	Peak
5580	91.11	93.21			36.55	7.58	46.23	110	30	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	94.56	99.11			33.94	7.7	46.19	100	75	Peak
5700	87.74	92.29			33.94	7.7	46.19	100	75	Average
#5725	53.77	58.26	68.3	-14.53	33.97	7.73	46.19	100	75	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	100.35	102.22			36.62	7.7	46.19	110	0	Peak
5700	92.4	94.27			36.62	7.7	46.19	110	0	Average
#5725	56.8	58.63	68.3	-11.5	36.63	7.73	46.19	110	0	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	51.71	56.78	74	-22.29	33.7	7.49	46.26	100	50	Peak
5460	43.64	48.71	54	-10.36	33.7	7.49	46.26	100	50	Average
#5470	56.07	61.14	68.3	-12.23	33.7	7.49	46.26	100	50	Peak
5510	85.8	90.83			33.71	7.51	46.25	100	50	Peak
5510	80.07	85.1			33.71	7.51	46.25	100	50	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	55.85	58.14	74	-18.15	36.48	7.49	46.26	137	320	Peak
5460	46.86	49.15	54	-7.14	36.48	7.49	46.26	137	320	Average
#5470	60.64	62.93	68.3	-7.66	36.48	7.49	46.26	137	320	Peak
5510	93.65	95.88			36.51	7.51	46.25	137	320	Peak
5510	87.24	89.47			36.51	7.51	46.25	137	320	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5510MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	54.09	56.38	74	-19.91	36.48	7.49	46.26	125	340	Peak
5460	46.64	48.93	54	-7.36	36.48	7.49	46.26	125	340	Average
#5470	55.56	57.85	68.3	-12.74	36.48	7.49	46.26	125	340	Peak
5550	94.6	96.76			36.53	7.55	46.24	125	340	Peak
5550	88.24	90.4			36.53	7.55	46.24	125	340	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	50.18	55.25	74	-23.82	33.7	7.49	46.26	120	65	Peak
5460	44.05	49.12	54	-9.95	33.7	7.49	46.26	120	65	Average
#5470	54.31	59.38	68.3	-13.99	33.7	7.49	46.26	120	65	Peak
5550	89.26	94.19			33.76	7.55	46.24	120	65	Peak
5550	84.52	89.45			33.76	7.55	46.24	120	65	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5670	90.27	94.9			33.9	7.67	46.2	140	70	Peak
5670	84.44	89.07			33.9	7.67	46.2	140	70	Average
#5725	51.94	56.43	74	-22.06	33.97	7.73	46.19	140	70	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
5670	94.4	96.33			36.6	7.67	46.2	100	300	Peak
5670	86.08	88.01			36.6	7.67	46.2	100	300	Average
#5725	55.82	57.65	74	-18.18	36.63	7.73	46.19	100	300	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (20MHz)

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

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	51.77	56.84	74	-22.23	33.7	7.49	46.26	100	45	Peak
5460	44.04	49.11	54	-9.96	33.7	7.49	46.26	100	45	Average
#5470	52.29	57.36	68.3	-16.01	33.7	7.49	46.26	100	45	Peak
5500	90.28	95.33			33.7	7.5	46.25	100	45	Peak
5500	84.73	89.78			33.7	7.5	46.25	100	45	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	54.95	57.24	74	-19.05	36.48	7.49	46.26	120	0	Peak
5460	45.99	48.28	54	-8.01	36.48	7.49	46.26	120	0	Average
#5470	54.96	57.25	68.3	-13.34	36.48	7.49	46.26	120	0	Peak
5500	94.11	96.36			36.5	7.5	46.25	120	0	Peak
5500	47.11	49.36			36.5	7.5	46.25	120	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	51.56	56.63	74	-22.44	33.7	7.49	46.26	100	345	Peak
5460	43.17	48.24	54	-10.83	33.7	7.49	46.26	100	345	Average
#5470	52.34	57.41	68.3	-15.96	33.7	7.49	46.26	100	345	Peak
5580	91.96	96.81			33.8	7.58	46.23	100	345	Peak
5580	85.66	90.51			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	55.35	57.64	74	-18.65	36.48	7.49	46.26	105	0	Peak
5460	47.42	49.71	54	-6.58	36.48	7.49	46.26	105	0	Average
#5470	55.64	57.93	68.3	-12.66	36.48	7.49	46.26	105	0	Peak
5580	96.07	98.17			36.55	7.58	46.23	105	0	Peak
5580	89.17	91.27			36.55	7.58	46.23	105	0	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

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

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	93.8	98.35			33.94	7.7	46.19	100	70	Peak
5700	87.52	92.07			33.94	7.7	46.19	100	70	Average
#5725	53.07	57.56	68.3	-15.23	33.97	7.73	46.19	100	70	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	99.04	100.91			36.62	7.7	46.19	145	300	Peak
5700	91.19	93.06			36.62	7.7	46.19	145	300	Average
#5725	55.01	57.3	68.3	-13.29	36.48	7.49	46.26	145	300	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	52.28	54.57	74	-21.72	36.48	7.49	46.26	100	55	Peak
5460	45.35	47.64	54	-8.65	36.48	7.49	46.26	100	55	Average
#5470	54.44	56.67	68.3	-13.86	36.51	7.51	46.25	100	55	Peak
5510	87.61	89.84			36.51	7.51	46.25	100	55	Peak
5510	82.29	84.52			36.51	7.51	46.25	100	55	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	53.9	56.19	74	-20.1	36.48	7.49	46.26	100	265	Peak
5460	46.56	48.85	54	-7.44	36.48	7.49	46.26	100	265	Average
#5470	66.02	68.31	68.3	-2.28	36.48	7.49	46.26	100	265	Peak
5510	89.44	91.67			36.51	7.51	46.25	100	265	Peak
5510	83.03	85.26			36.51	7.51	46.25	100	265	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5510MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	50.11	55.18	74	-23.89	33.7	7.49	46.26	100	25	Peak
5460	43.15	48.22	54	-10.85	33.7	7.49	46.26	100	25	Average
#5470	49.39	54.46	68.3	-18.91	33.7	7.49	46.26	100	25	Peak
5550	82.68	87.61			33.76	7.55	46.24	100	25	Peak
5550	78.67	83.6			33.76	7.55	46.24	100	25	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	53.61	55.9	74	-20.39	36.48	7.49	46.26	100	90	Peak
5460	46.36	48.65	54	-7.64	36.48	7.49	46.26	100	90	Average
#5470	53.93	56.22	68.3	-14.37	36.48	7.49	46.26	100	90	Peak
5550	87.2	89.36			36.53	7.55	46.24	100	90	Peak
5550	82.2	84.36			36.53	7.55	46.24	100	90	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5670	85.84	90.47			33.9	7.67	46.2	100	55	Peak
5670	80.79	85.42			33.9	7.67	46.2	100	55	Average
#5725	51.99	56.48	68.3	-16.31	33.97	7.73	46.19	100	55	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	95.36	97.29			36.6	7.67	46.2	105	360	Peak
5670	89.39	91.32			36.6	7.67	46.2	105	360	Average
#5725	57.13	58.96	68.3	-11.17	36.63	7.73	46.19	105	360	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	50.62	55.69	74	-23.38	33.7	7.49	46.26	100	60	Peak
5460	43.47	48.54	54	-10.53	33.7	7.49	46.26	100	60	Average
#5470	52.55	57.62	68.3	-15.75	33.7	7.49	46.26	100	60	Peak
5530	82.43	87.4			33.74	7.53	46.24	100	60	Peak
5530	76.62	81.59			33.74	7.53	46.24	100	60	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	54.59	56.88	74	-19.41	36.48	7.49	46.26	100	330	Peak
5460	46.97	49.26	54	-7.03	36.48	7.49	46.26	100	330	Average
#5470	56.46	58.75	68.3	-11.84	36.48	7.49	46.26	100	330	Peak
5530	90.28	92.47			36.52	7.53	46.24	100	330	Peak
5530	83.3	85.49			36.52	7.53	46.24	100	330	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5530MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5610	83.68	88.46			33.83	7.61	46.22	100	60	Peak
5610	78.77	83.55			33.83	7.61	46.22	100	60	Average
#5725	51.76	56.25	68.3	-16.54	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
5610	84.6	86.64			36.57	7.61	46.22	100	360	Peak
5610	80.41	82.45			36.57	7.61	46.22	100	360	Average
#5725	54.37	56.2	68.3	-13.93	36.63	7.73	46.19	100	360	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5610MHz: Fundamental frequency.
3. #: Out of restricted band.

Band 4:

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5745	89.12	93.56			33.99	7.75	46.18	100	23	Peak
5745	80.07	84.51			33.99	7.75	46.18	100	23	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
5745	94.87	96.65			36.65	7.75	46.18	100	99	Peak
5745	85.37	87.15			36.65	7.75	46.18	100	99	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

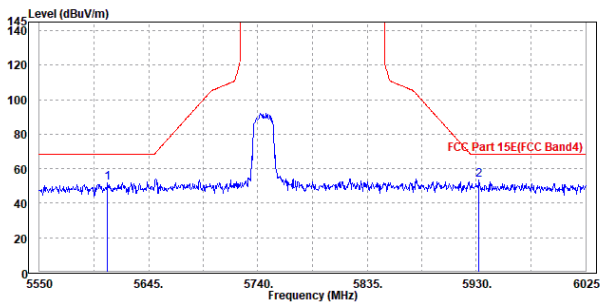
OOBE DATA

802.11a

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
5609.375	51.96	56.74	68.3	-16.34	33.83	7.61	46.22	100	85	Peak
5932.375	53.29	57.26	68.3	-15.01	34.22	7.94	46.13	100	85	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5616.975	54.51	56.54	68.3	-13.79	36.57	7.62	46.22	100	85	Peak
5932.375	56.07	57.5	68.3	-12.23	36.76	7.94	46.13	100	85	Peak

CH 149

Horiontal



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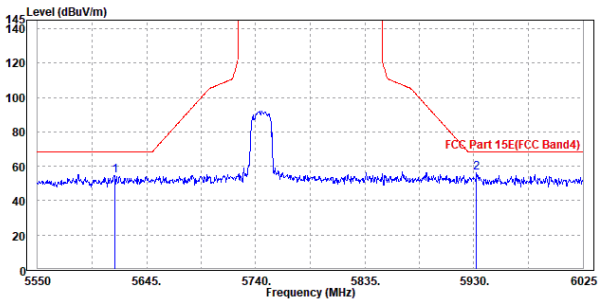


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5785	91.98	96.32			34.04	7.79	46.17	100	23	Peak
5785	83.11	87.45			34.04	7.79	46.17	100	23	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
5785	93.7	95.41			36.67	7.79	46.17	100	97	Peak
5785	84.54	86.25			36.67	7.79	46.17	100	97	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

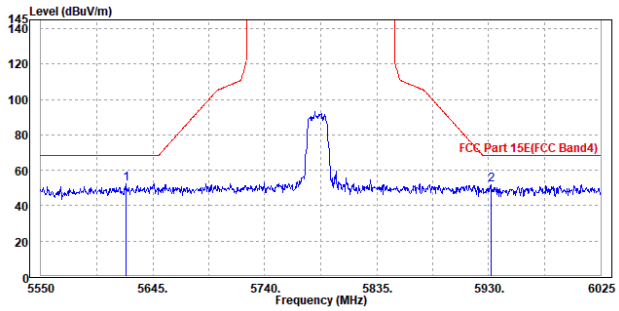
OOBE DATA

802.11a

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
5622.2	52.5	57.25	68.3	-15.8	33.85	7.62	46.22	100	85	Peak
5931.9	51.66	55.63	68.3	-16.64	34.22	7.94	46.13	100	85	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5630.275	54.46	56.46	68.3	-13.84	36.58	7.63	46.21	100	85	Peak
5945.675	53.09	54.5	68.3	-15.21	36.77	7.95	46.13	100	85	Peak

CH 157

Horiontal



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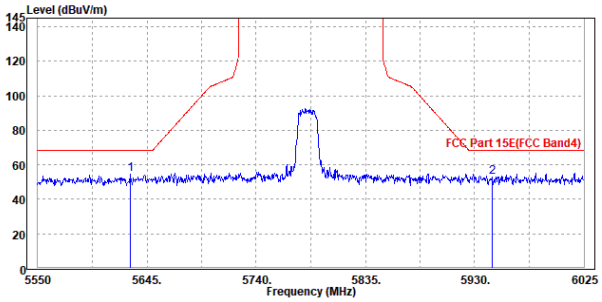


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5825	91.42	95.66			34.09	7.83	46.16	100	16	Peak
5825	82.21	86.45			34.09	7.83	46.16	100	16	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
5825	94.73	96.37			36.69	7.83	46.16	100	99	Peak
5825	85.49	87.13			36.69	7.83	46.16	100	99	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

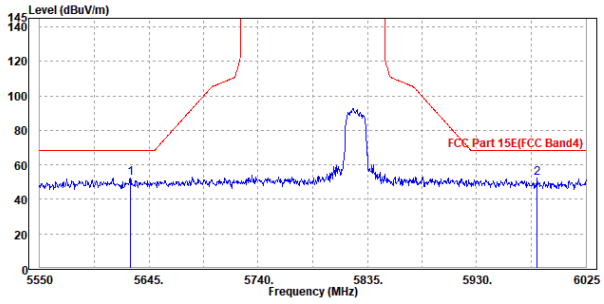
OOBE DATA

802.11a

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
5628.85	52.12	56.85	68.3	-16.18	33.85	7.63	46.21	100	85	Peak
5982.725	52.36	56.2	68.3	-15.94	34.28	7.99	46.11	100	85	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5593.225	56.6	58.66	68.3	-11.7	36.56	7.6	46.22	100	85	Peak
5931.9	56.6	58.03	68.3	-11.7	36.76	7.94	46.13	100	85	Peak

CH 165

Horiontal



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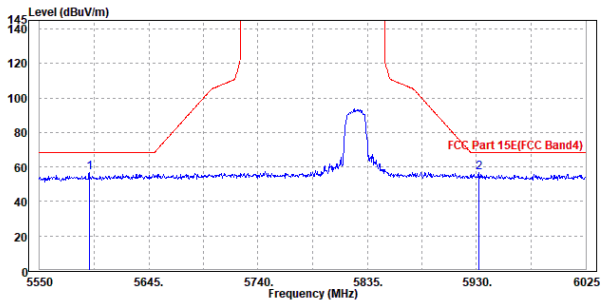


802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5745	89.37	93.81			33.99	7.75	46.18	100	23	Peak
5745	80.15	84.59			33.99	7.75	46.18	100	23	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
5745	93.58	95.36			36.65	7.75	46.18	100	325	Peak
5745	85	86.78			36.65	7.75	46.18	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

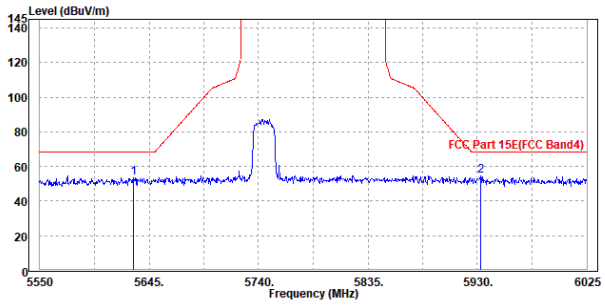
OOBE DATA

802.11n (20MHZ)

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
5631.225	53.54	58.26	68.3	-14.76	33.86	7.63	46.21	100	0	Peak
5932.85	54.51	58.48	68.3	-13.79	34.22	7.94	46.13	100	0	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
5584.2	56.64	58.73	68.3	-11.66	36.55	7.59	46.23	100	0	Peak
5977.5	57.7	59.04	68.3	-10.6	36.79	7.99	46.12	100	0	Peak

CH 149

Horiontal



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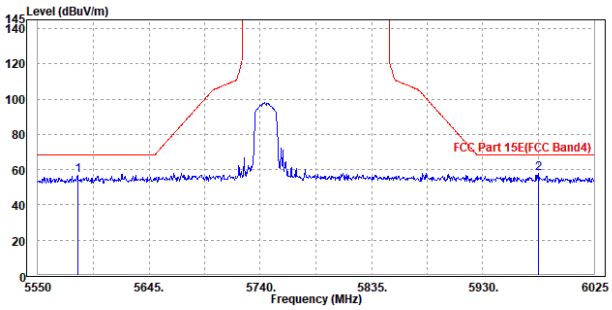


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5785	91.22	95.56			34.04	7.79	46.17	100	315	Peak
5785	82.61	86.95			34.04	7.79	46.17	100	315	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
5785	96.8	98.51			36.67	7.79	46.17	100	258	Peak
5785	88.04	89.75			36.67	7.79	46.17	100	258	Average

REMARKS:

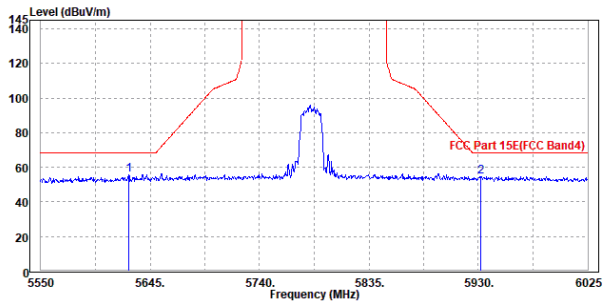
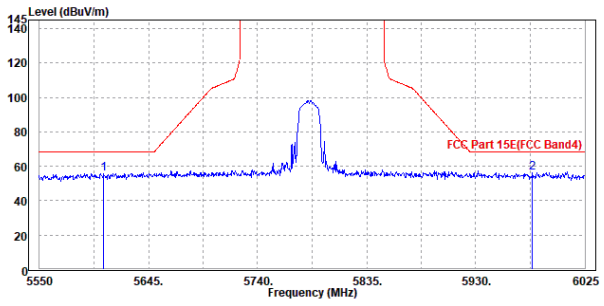
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

OOBE DATA

802.11n (20MHZ)

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
5626.475	55.45	60.18	68.3	-12.85	33.85	7.63	46.21	0	0	Peak
5932.375	54.84	58.81	68.3	-13.46	34.22	7.94	46.13	0	0	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
5606.05	55.93	57.98	68.3	-12.37	36.56	7.61	46.22	100	0	Peak
5979.4	56.44	57.78	68.3	-11.86	36.79	7.99	46.12	100	0	Peak

CH 157

Horiontal	Vertical
	

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5825	90.91	95.15			34.09	7.83	46.16	100	12	Peak
5825	82.21	86.45			34.09	7.83	46.16	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
5825	95.73	97.37			36.69	7.83	46.16	100	289	Peak
5825	86.88	88.52			36.69	7.83	46.16	100	289	Average

REMARKS:

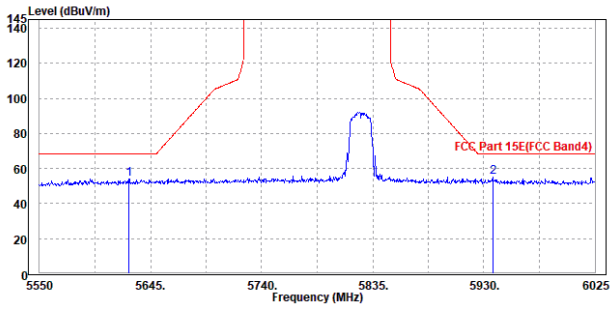
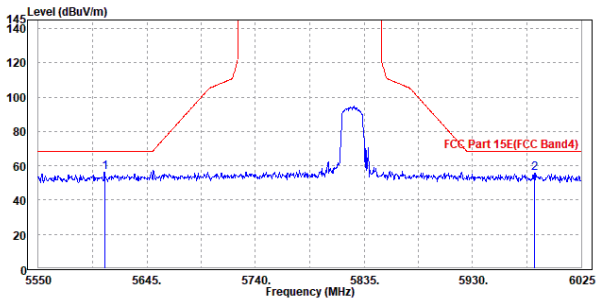
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

OOBE DATA

802.11n (20MHZ)

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
5626.475	54.02	58.75	68.3	-14.28	33.85	7.63	46.21	100	0	Peak
5937.6	55.04	58.99	68.3	-13.26	34.23	7.95	46.13	100	0	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
5607.95	56.29	58.34	68.3	-12.01	36.56	7.61	46.22	100	0	Peak
5984.15	55.63	56.96	68.3	-12.67	36.79	7.99	46.11	100	0	Peak

CH 165

Horiontal	Vertical
	

802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5755	89.28	93.69			34.01	7.76	46.18	100	25	Peak
5755	79.8	84.21			34.01	7.76	46.18	100	25	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
5755	94.98	96.75			36.65	7.76	46.18	100	315	Peak
5755	85.68	87.45			36.65	7.76	46.18	100	315	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

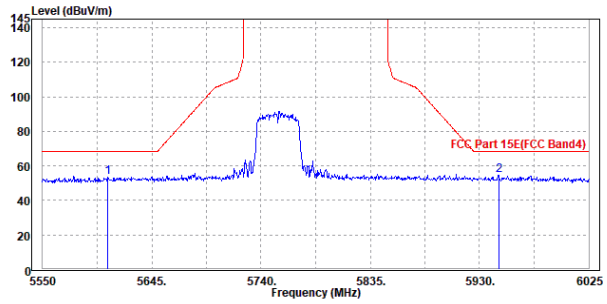
OOBE DATA

802.11n (40MHZ)

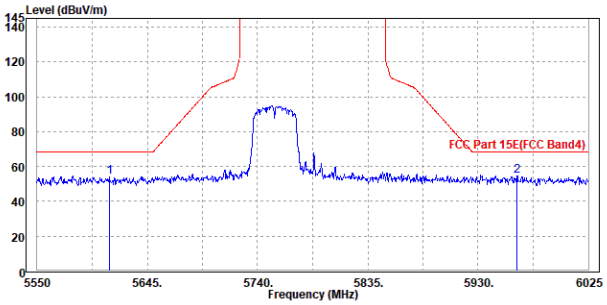
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.525	53.55	58.33	68.3	-14.75	33.83	7.61	46.22	0	0	Peak
5946.625	54.63	58.55	68.3	-13.67	34.24	7.96	46.12	0	0	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
5612.225	54.06	56.1	68.3	-14.24	36.57	7.61	46.22	100	0	Peak
5963.725	54.63	56	68.3	-13.67	36.78	7.97	46.12	100	0	Peak

CH 151

Horiontal



Vertical



CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5795	90.25	94.57			34.05	7.8	46.17	100	15	Peak
5795	80.93	85.25			34.05	7.8	46.17	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
5795	94.66	96.35			36.68	7.8	46.17	100	289	Peak
5795	86.26	87.95			36.68	7.8	46.17	100	289	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

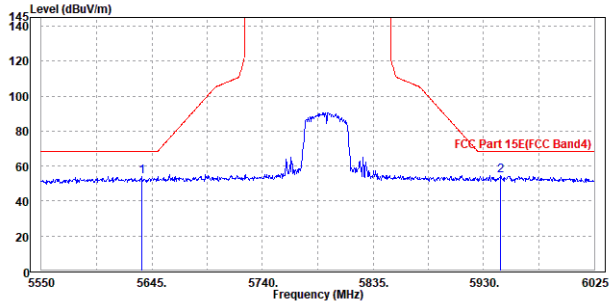
OOBE DATA

802.11n (40MHZ)

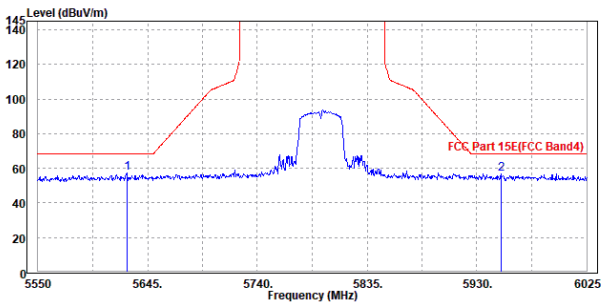
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5635.975	53.97	58.68	68.3	-14.33	33.86	7.64	46.21	0	0	Peak
5944.725	54.42	58.37	68.3	-13.88	34.23	7.95	46.13	0	0	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
5626.95	57.45	59.45	68.3	-10.85	36.58	7.63	46.21	100	0	Peak
5950.9	56.92	58.31	68.3	-11.38	36.77	7.96	46.12	100	0	Peak

CH 159

Horiontal



Vertical



802.11ac (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5745	90.12	94.56			33.99	7.75	46.18	100	15	Peak
5745	81.8	86.24			33.99	7.75	46.18	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
5745	96.86	98.64			36.65	7.75	46.18	100	278	Peak
5745	87.76	89.54			36.65	7.75	46.18	100	278	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

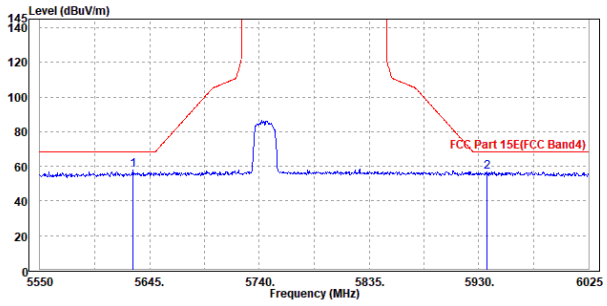
OOBE DATA

802.11ac (20MHZ)

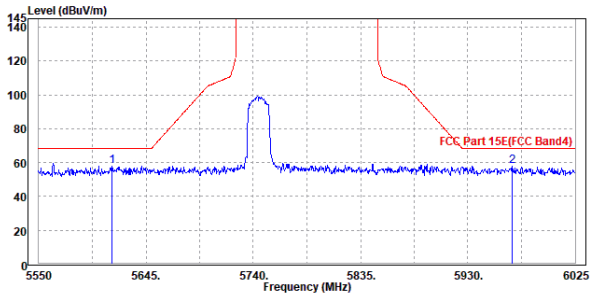
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5630.275	58.11	62.83	68.3	-10.19	33.86	7.63	46.21	100	0	Peak
5936.65	56.7	60.66	68.3	-11.6	34.22	7.95	46.13	100	0	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
5615.075	57.77	59.8	68.3	-10.53	36.57	7.62	46.22	100	0	Peak
5969.425	57.72	59.08	68.3	-10.58	36.78	7.98	46.12	100	0	Peak

CH 149

Horiontal



Vertical



CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5785	91.3	95.64			34.04	7.79	46.17	100	16	Peak
5785	82.44	86.78			34.04	7.79	46.17	100	16	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
5785	96.8	98.51			36.67	7.79	46.17	100	275	Peak
5785	87.54	89.25			36.67	7.79	46.17	100	275	Average

REMARKS:

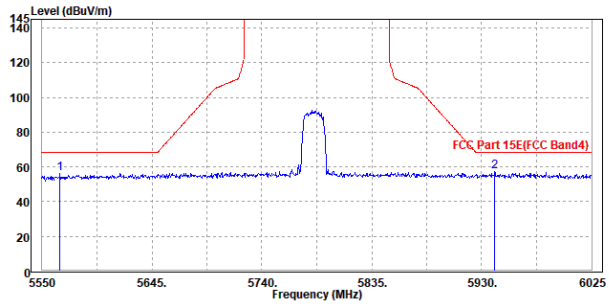
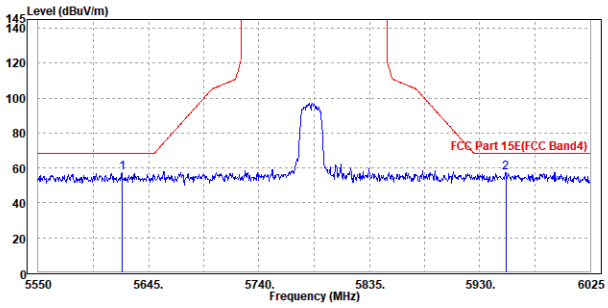
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

OOBE DATA

802.11ac (20MHZ)

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
5565.675	56.23	61.11	68.3	-12.07	33.78	7.57	46.23	100	360	Peak
5941.4	57.56	61.51	68.3	-10.74	34.23	7.95	46.13	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5622.2	57.49	59.52	68.3	-10.81	36.57	7.62	46.22	100	0	Peak
5952.325	57.28	58.67	68.3	-11.02	36.77	7.96	46.12	100	0	Peak

CH 157

Horiontal	Vertical
	

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5825	91.08	95.32			34.09	7.83	46.16	100	12	Peak
5825	83.12	87.36			34.09	7.83	46.16	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
5825	96.25	97.89			36.69	7.83	46.16	100	265	Peak
5825	87.52	89.16			36.69	7.83	46.16	100	265	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

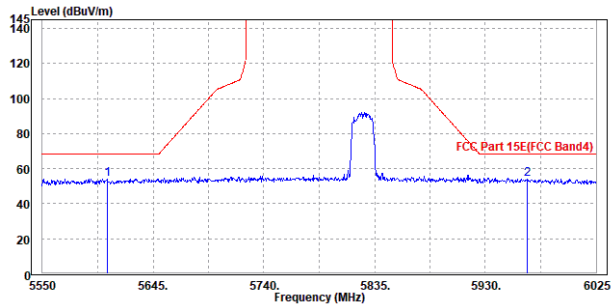
OOBE DATA

802.11ac (20MHZ)

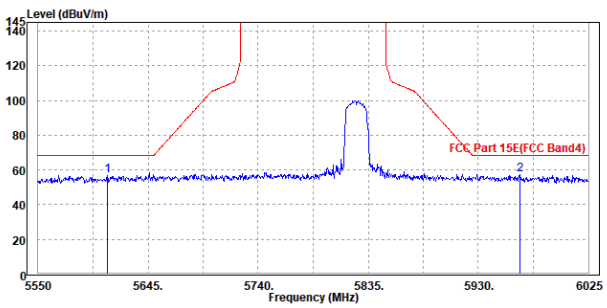
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5605.575	54.2	58.98	68.3	-14.1	33.83	7.61	46.22	100	0	Peak
5966.1	53.99	57.87	68.3	-14.31	34.26	7.98	46.12	100	0	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
5609.85	56.64	58.68	68.3	-11.66	36.57	7.61	46.22	100	0	Peak
5965.625	57.23	58.6	68.3	-11.07	36.78	7.97	46.12	100	0	Peak

CH 165

Horiontal



Vertical



802.11ac (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5755	87.15	91.56			34.01	7.76	46.18	100	15	Peak
5755	78.8	83.21			34.01	7.76	46.18	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
5755	95.65	97.42			36.65	7.76	46.18	100	269	Peak
5755	87.86	89.63			36.65	7.76	46.18	100	269	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

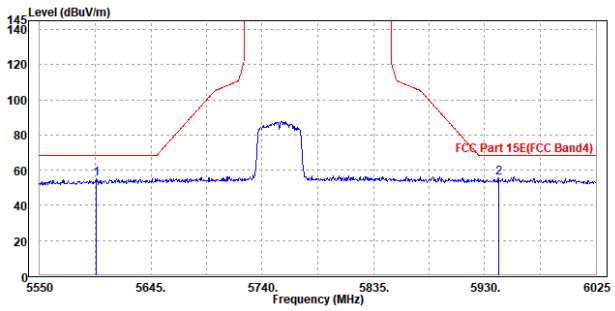
OOBE DATA

802.11ac (40MHZ)

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
5597.975	55.03	59.83	68.3	-13.27	33.82	7.6	46.22	0	0	Peak
5941.875	55.94	59.89	68.3	-12.36	34.23	7.95	46.13	0	0	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
5597.5	56.23	58.29	68.3	-12.07	36.56	7.6	46.22	100	0	Peak
5968.475	57.74	59.1	68.3	-10.56	36.78	7.98	46.12	100	0	Peak

CH 151

Horiontal



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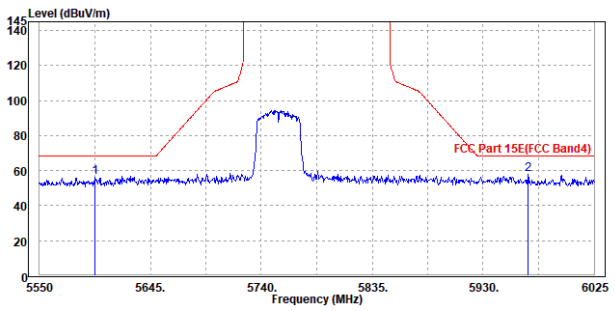


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5795	88.27	92.59			34.05	7.8	46.17	100	12	Peak
5795	79.92	84.24			34.05	7.8	46.17	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
5795	96.16	97.85			36.68	7.8	46.17	100	269	Peak
5795	86.98	88.67			36.68	7.8	46.17	100	269	Average

REMARKS:

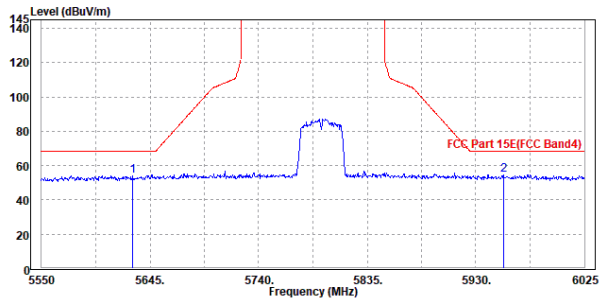
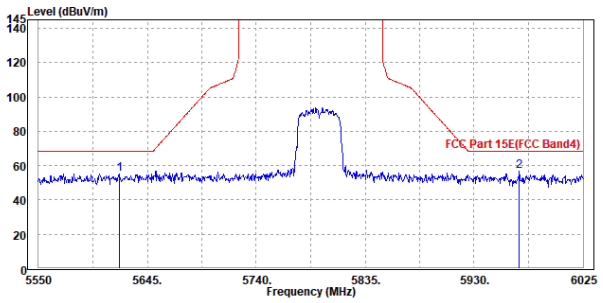
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

OOBE DATA

802.11ac (40MHZ)

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
5629.8	53.78	58.5	68.3	-14.52	33.86	7.63	46.21	0	0	Peak
5954.225	54.46	58.37	68.3	-13.84	34.25	7.96	46.12	0	0	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
5620.3	55.29	57.32	68.3	-13.01	36.57	7.62	46.22	100	0	Peak
5969.425	56.85	58.21	68.3	-11.45	36.78	7.98	46.12	100	0	Peak

CH 159

Horiontal	Vertical
	

802.11ac (80MHz)

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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
5775	85.29	89.65			34.03	7.78	46.17	100	23	Peak
5775	76.89	81.25			34.03	7.78	46.17	100	23	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
5775	94.59	96.31			36.67	7.78	46.17	100	258	Peak
5775	86.91	88.63			36.67	7.78	46.17	100	258	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.

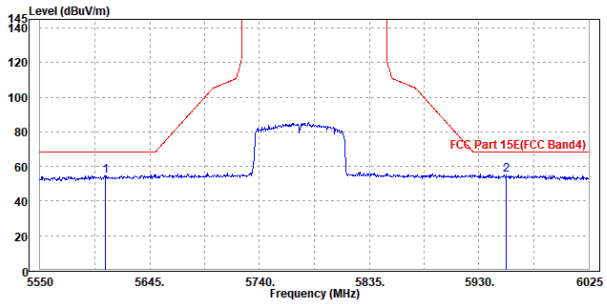
OOBE DATA

802.11ac (80MHZ)

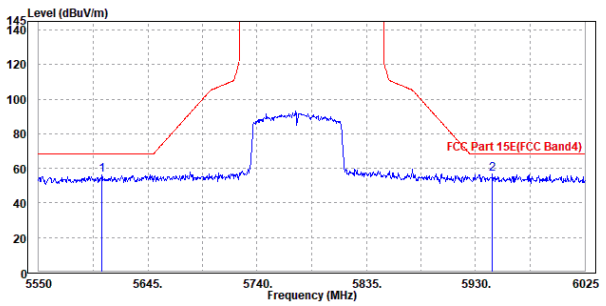
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.525	54.85	59.63	68.3	-13.45	33.83	7.61	46.22	100	0	Peak
5953.275	55.3	59.22	68.3	-13	34.24	7.96	46.12	100	0	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
5605.1	56.35	58.4	68.3	-11.95	36.56	7.61	46.22	100	0	Peak
5944.725	56.7	58.11	68.3	-11.6	36.77	7.95	46.13	100	0	Peak

CH 155

Horiontal



Vertical



3.2 OUT OF BAND EMISSION MEASUREMENT

3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

	APPLICABLE TO	EIRP LIMIT (dBm/MHz)
OUT OF THE RESTRICTED BANDS	15.407(b)(1)	-27
	15.407(b)(2)	
	15.407(b)(3)	
	15.407(b)(4)	See note

NOTE:

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,20	Jun. 02,21
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,20	Jun. 02,21

NOTE:

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

3.2.3 TEST PROCEDURES

a. Cheak the calibration of the measurement instrument using either an internal calibrator or a known signal from an external generator.

b. The resolution bandwidth is set to 1MHzThe Video bandwidth is set to ≥1MHz, report the peak value out of oprating band.

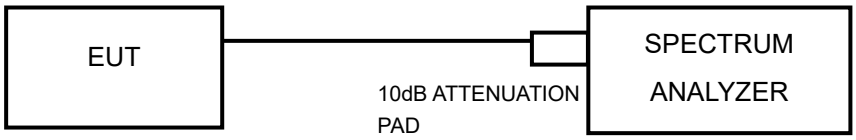
c. Repeat above procedures until all frequencies measured wre complete.

NOTE: All modes of operation were investigated and the worst-case emissions are reported,antenna gain was added into the test result.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



3.2.6 EUT OPERATING CONDITION

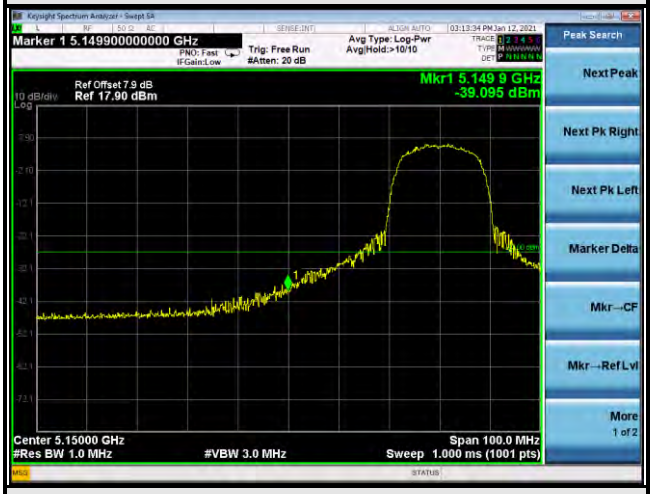
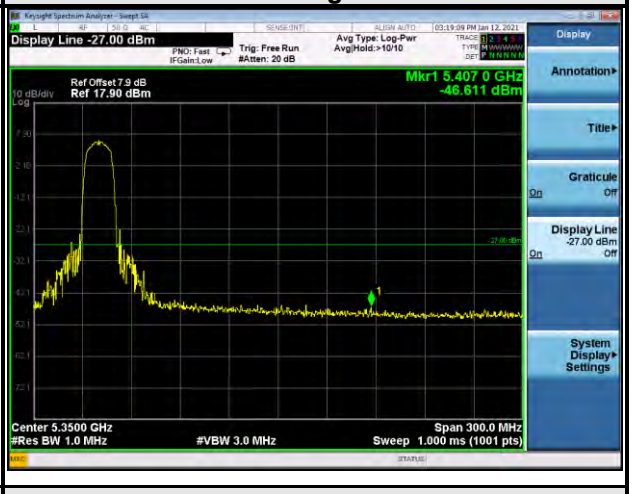
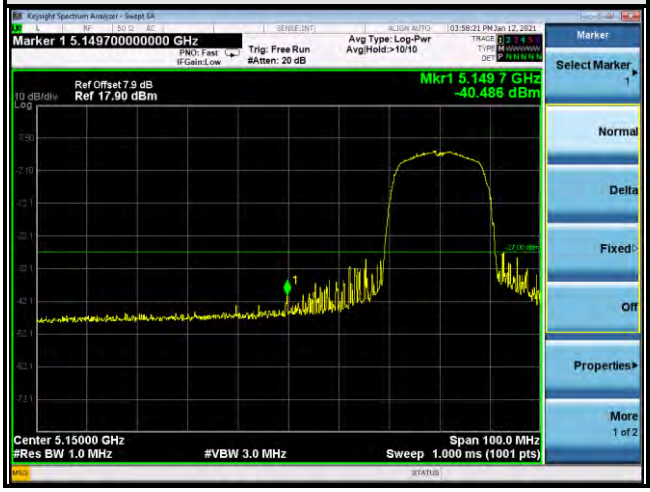
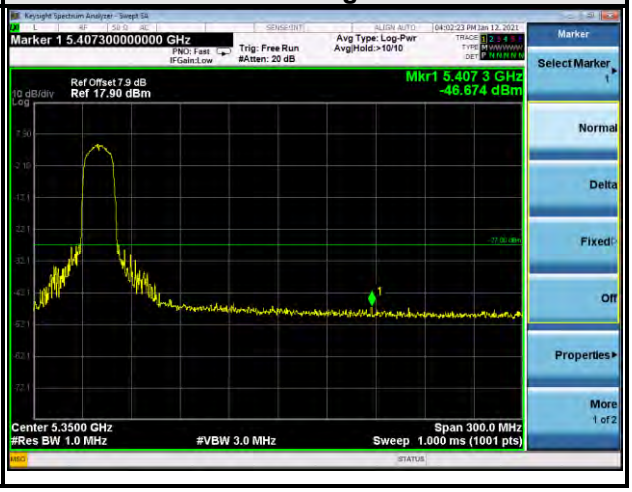
a. Set the EUT under full load condition and placed them on a testing table.

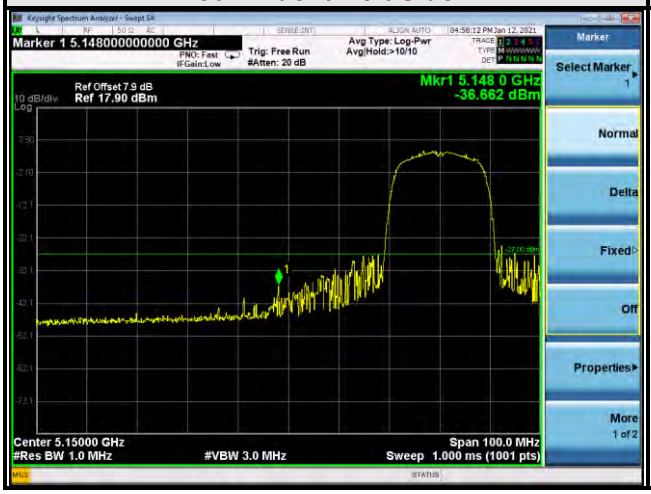
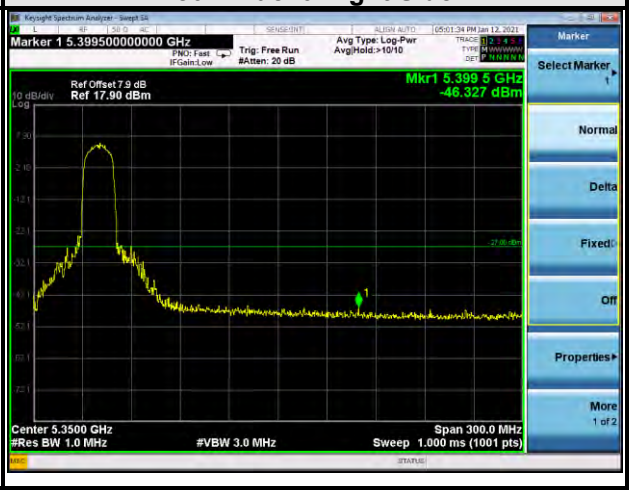
b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

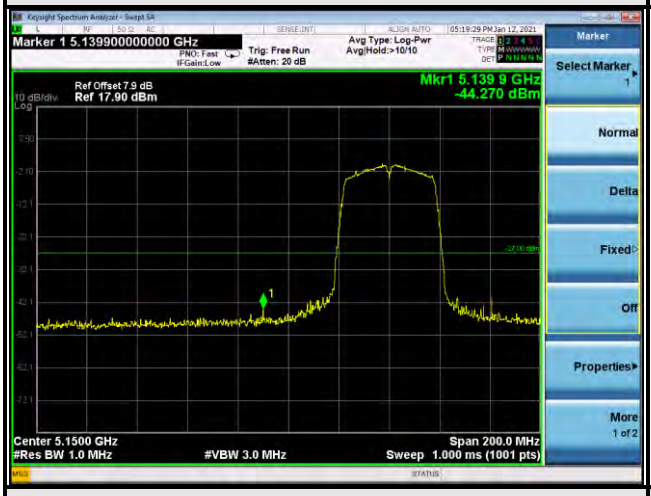
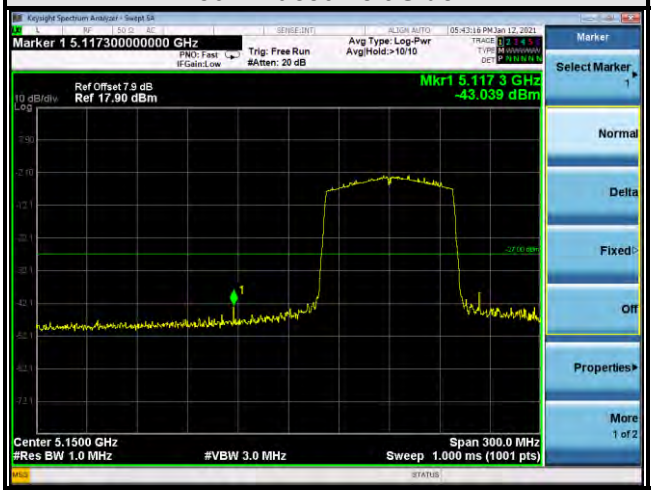
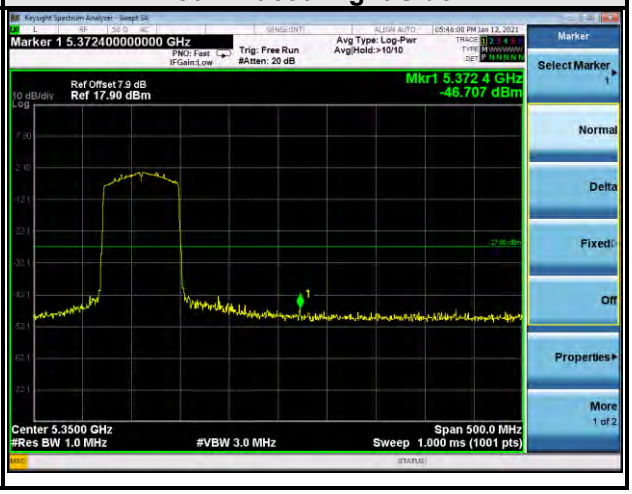
c. The necessary accessories enable the EUT in full functions.

3.2.7 TEST RESULTS

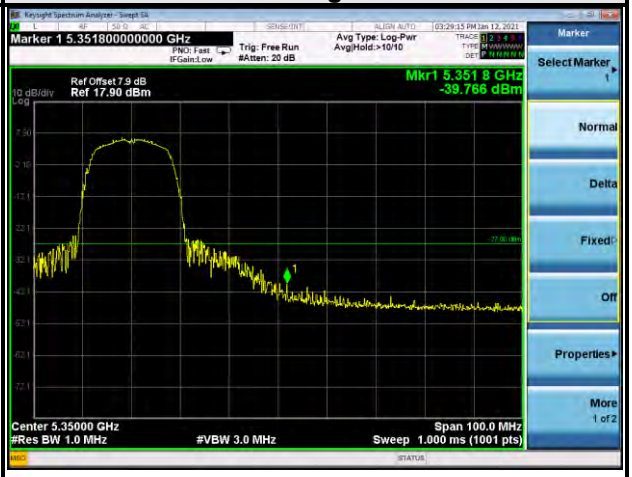
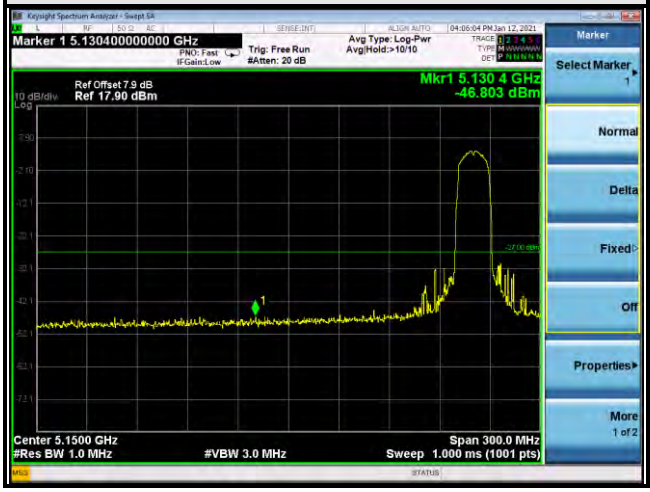
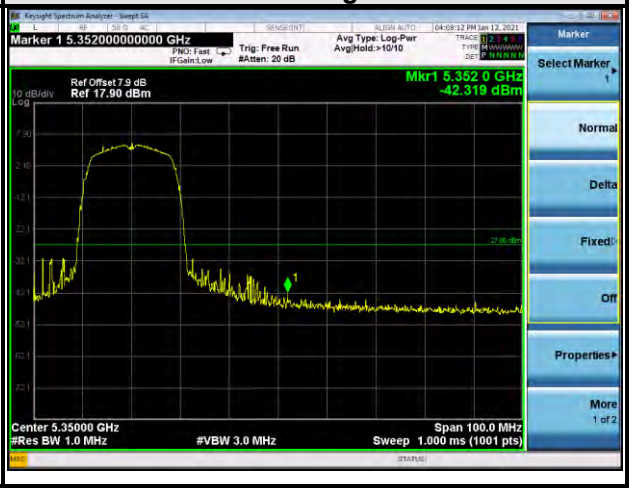
For U-NII-1:

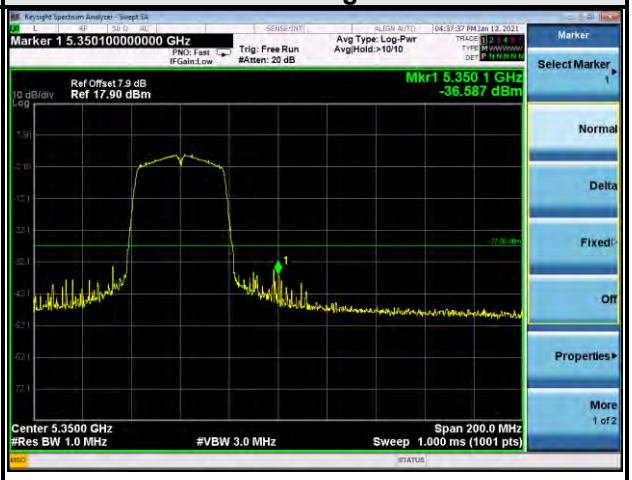
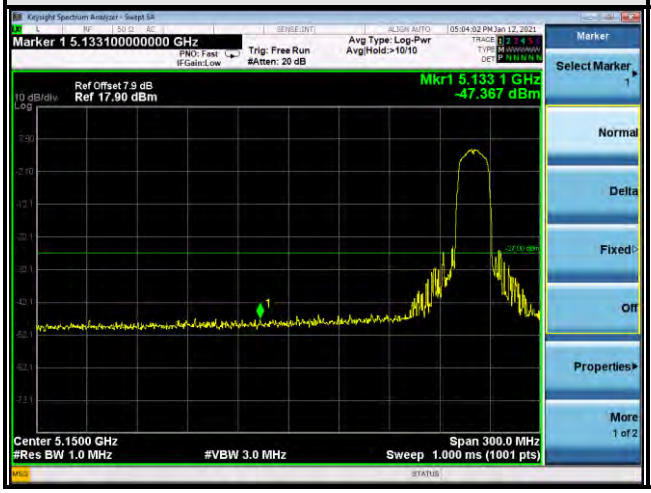
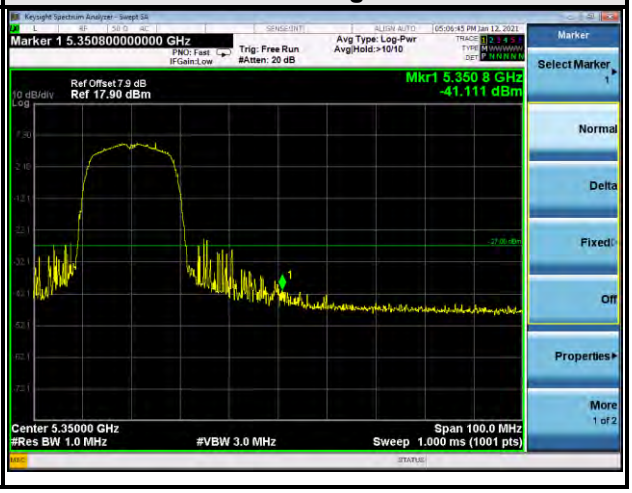
SPECTRUM PLOT OF BANDEDGE	
802.11a Left Side	802.11a Right Side
	
802.11n20 Left Side	802.11n20 Right Side
	

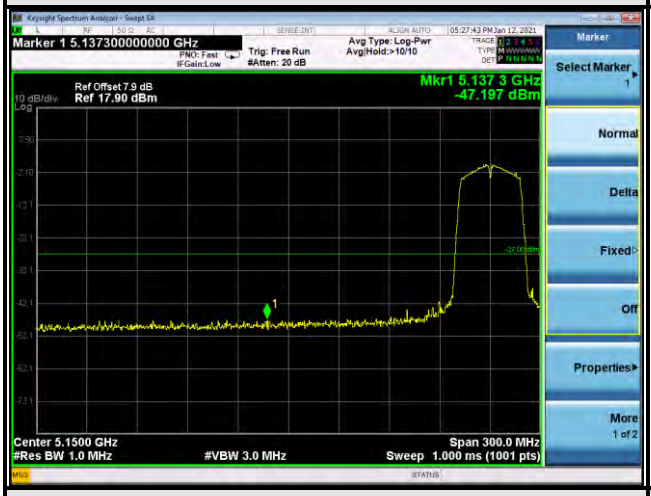
802.11n40 Left Side	802.11n40 Right Side
	
802.11ac20 Left Side	**802.11ac20 Right Side**
	

802.11ac40 Left Side	802.11ac40 Right Side
	
802.11ac80 Left Side	**802.11ac80 Right Side**
	

For U-NII-2A:

SPECTRUM PLOT OF BANDEDGE	
802.11a Left Side	802.11a Right Side
	
802.11n20 Left Side	802.11n20 Right Side
	

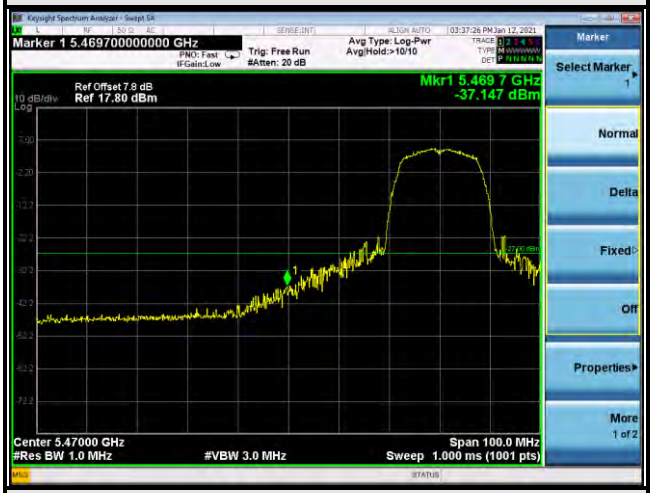
802.11n40 Left Side	802.11n40 Right Side
	
802.11ac20 Left Side	**802.11ac20 Right Side**
	

802.11ac40 Left Side	802.11ac40 Right Side
	
802.11ac80 Left Side	**802.11ac80 Right Side**
	

For U-NII-2C:

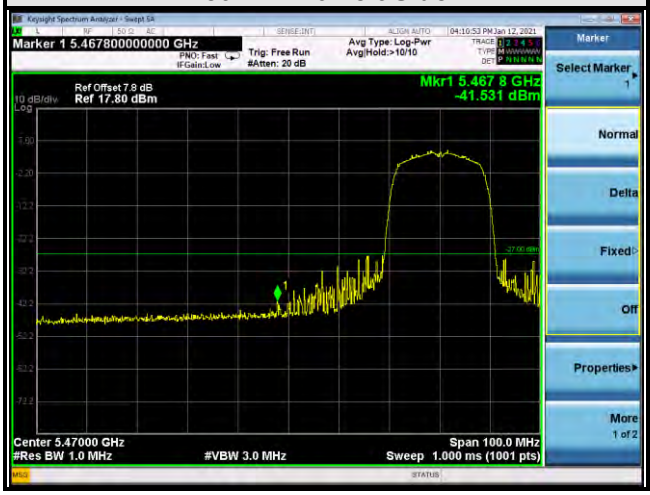
SPECTRUM PLOT OF BANDEDGE

802.11a Left Side

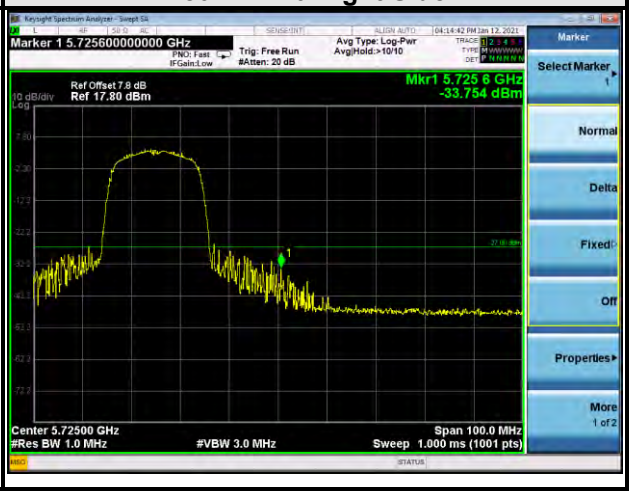


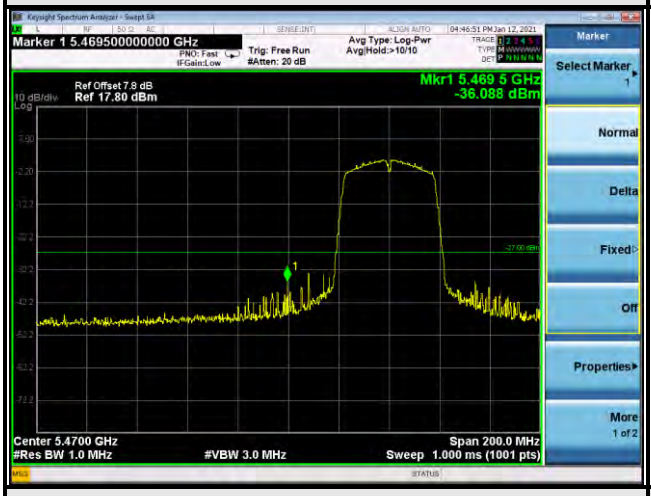
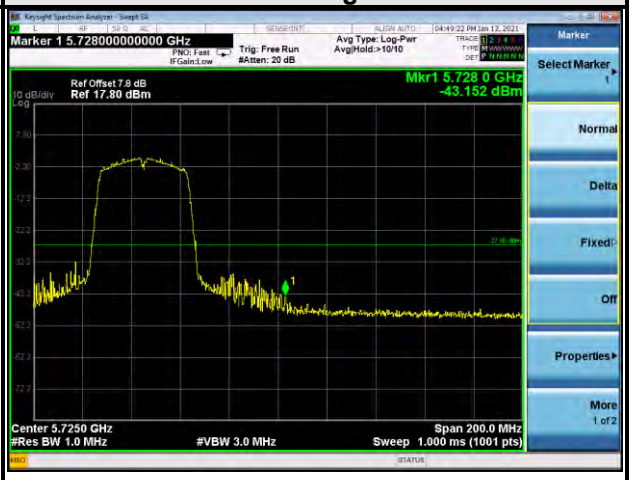
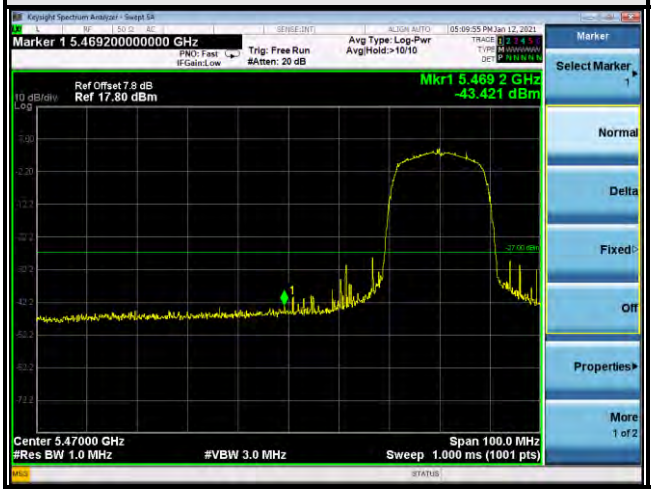
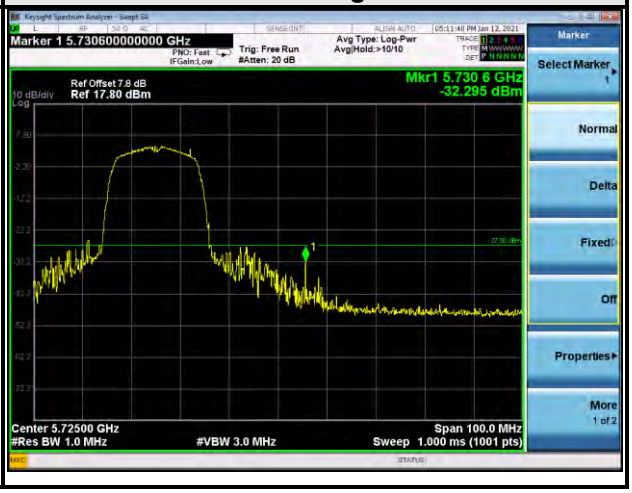
802.11a Right Side

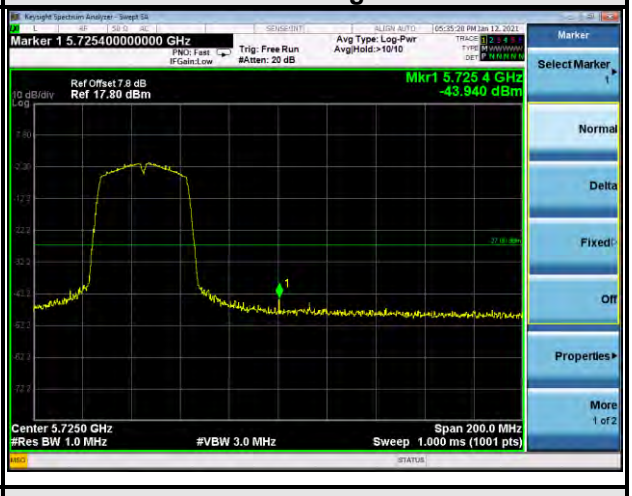
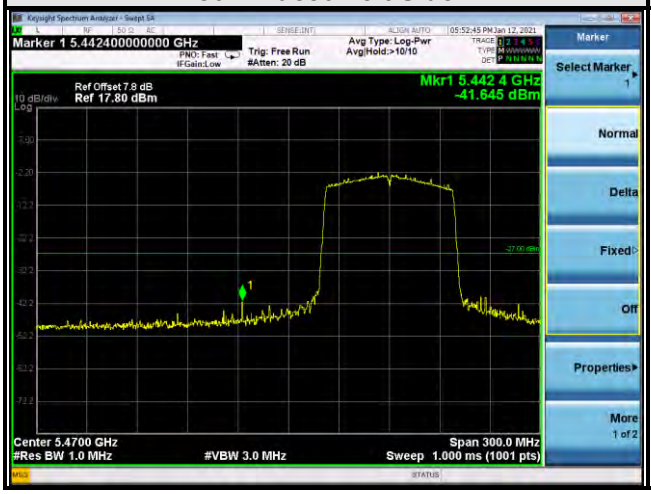
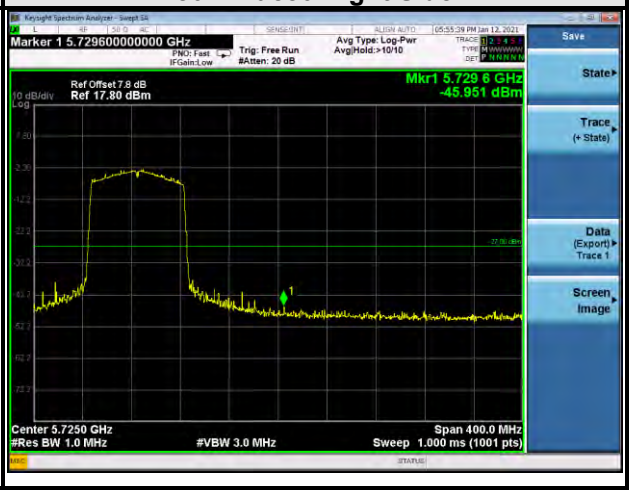
802.11n20 Left Side



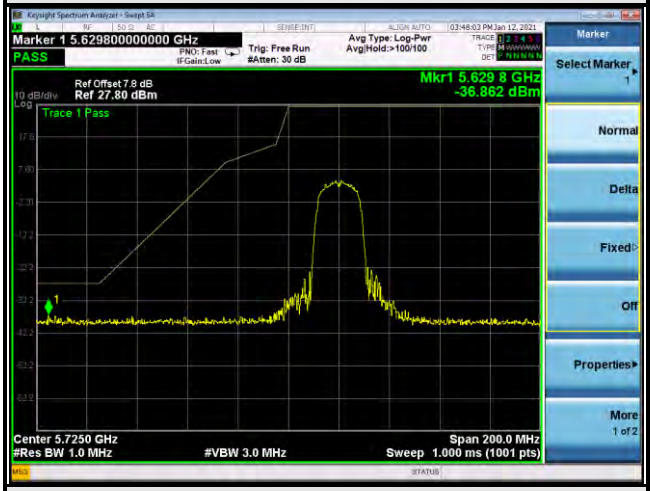
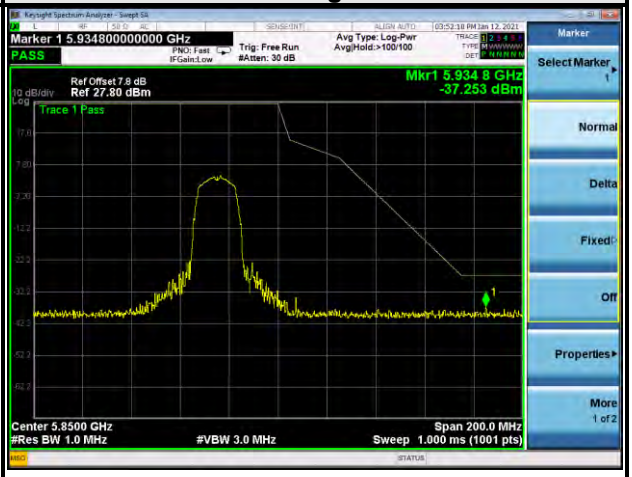
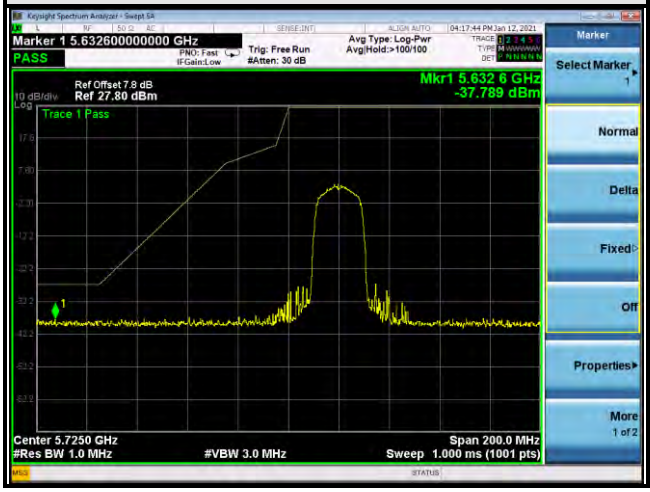
802.11n20 Right Side

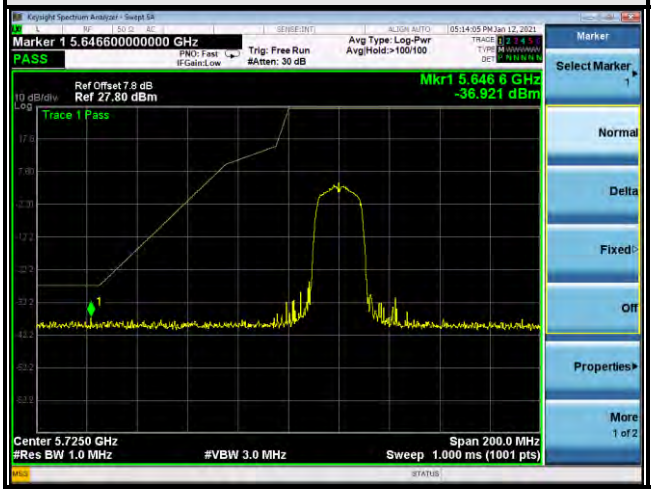


802.11n40 Left Side	802.11n40 Right Side
	
802.11ac20 Left Side	**802.11ac20 Right Side**
	

802.11ac40 Left Side	802.11ac40 Right Side
	
802.11ac80 Left Side	**802.11ac80 Right Side**
	

For U-NII-3:

SPECTRUM PLOT OF BANDEDGE	
802.11a Left Side	802.11a Right Side
	
802.11n20 Left Side	802.11n20 Right Side
	

802.11n40 Left Side	802.11n40 Right Side
	
802.11ac20 Left Side	**802.11ac20 Right Side**
	

802.11ac40 Left Side	802.11ac40 Right Side
	
802.11ac80 Left Side	**802.11ac80 Right Side**
	

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Feb. 26,20	Feb. 25,21
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Feb. 26,20	Feb. 25,21

NOTE:

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3.3.3 TEST PROCEDURES

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

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

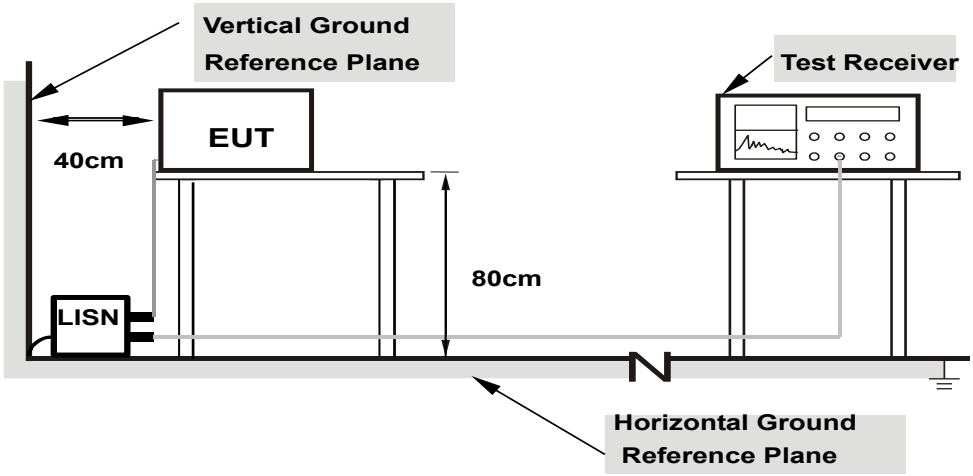
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



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

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

3.3.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

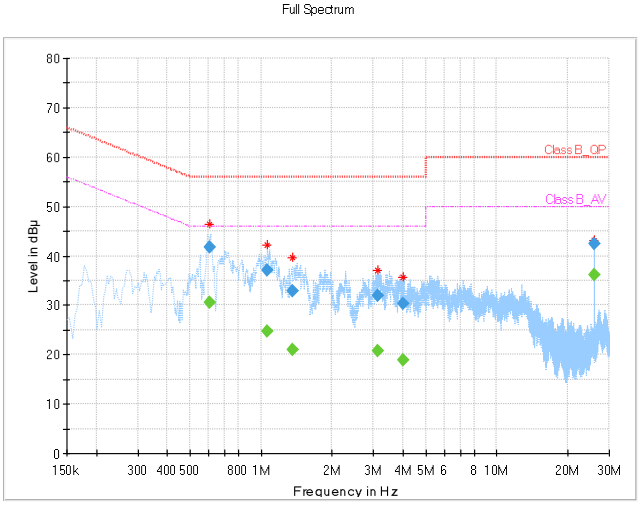
3.3.7 TEST RESULTS

CONDUCTED WORST-CASE DATA :

Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	24deg. C, 55%RH
Tested By	Chase Zhou		

Frequency (MHz)	QuasiPeak (dB¦ÌV)	CAverage (dB¦ÌV)	Limit (dB¦ÌV)	Margin (dB)	Line	Filter	Corr. (dB)
0.604000	---	30.58	46.00	-15.42	L	ON	9.7
0.604000	41.70	---	56.00	-14.30	L	ON	9.7
1.060000	---	24.65	46.00	-21.35	L	ON	9.7
1.060000	37.09	---	56.00	-18.91	L	ON	9.7
1.356000	---	20.97	46.00	-25.03	L	ON	9.7
1.356000	32.79	---	56.00	-23.21	L	ON	9.7
3.128000	---	20.75	46.00	-25.25	L	ON	9.8
3.128000	32.05	---	56.00	-23.95	L	ON	9.8
4.008000	---	18.97	46.00	-27.03	L	ON	9.8
4.008000	30.26	---	56.00	-25.74	L	ON	9.8
26.000000	---	36.05	50.00	-13.95	L	ON	10.2
26.000000	42.50	---	60.00	-17.50	L	ON	10.2

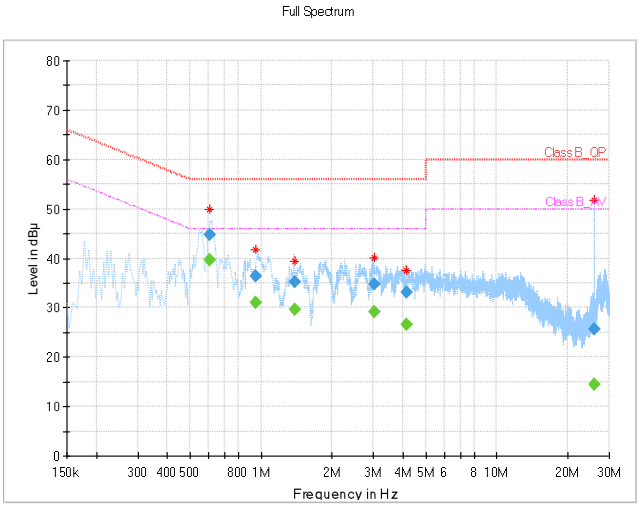
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	24deg. C, 55%RH
Tested By	Chase Zhou		

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.604000	**---**	**39.69**	**46.00**	**-6.31**	**N**	**ON**	**9.8**
0.604000	44.79	---	56.00	-11.21	N	ON	9.8
0.952000	---	31.13	46.00	-14.87	N	ON	9.8
0.952000	36.33	---	56.00	-19.67	N	ON	9.8
1.384000	---	29.58	46.00	-16.42	N	ON	9.8
1.384000	35.20	---	56.00	-20.80	N	ON	9.8
3.008000	---	29.21	46.00	-16.79	N	ON	9.9
3.008000	34.87	---	56.00	-21.13	N	ON	9.9
4.164000	---	26.55	46.00	-19.45	N	ON	9.9
4.164000	33.06	---	56.00	-22.94	N	ON	9.9
26.032000	---	14.42	50.00	-35.58	N	ON	10.3
26.032000	25.64	---	60.00	-34.36	N	ON	10.3

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



3.4 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.4.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

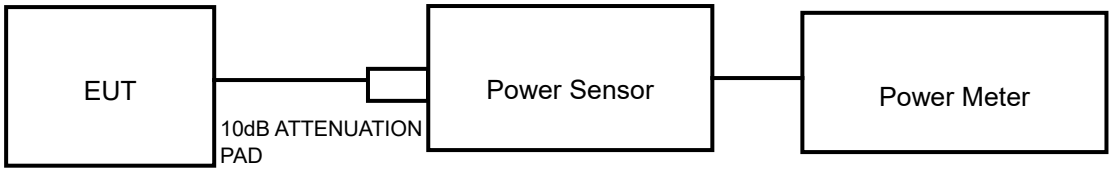
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

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

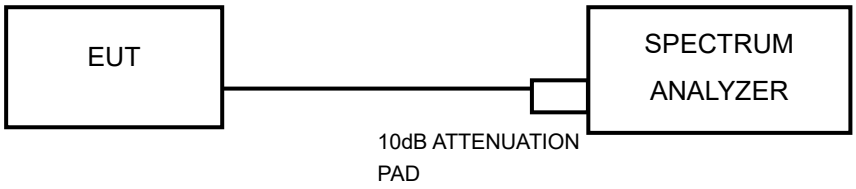
3.4.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

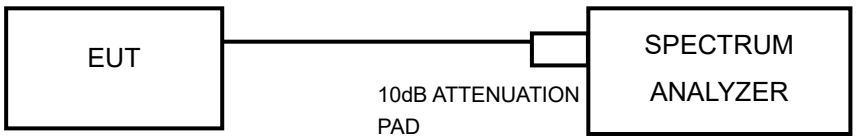
802.11a, 802.11n (20MHz), 802.11n (40MHz) TEST CONFIGURATION



11ac TEST CONFIGURATION



FOR 26dB BANDWIDTH



3.4.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 26,20	Feb. 25,21
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 26,20	Feb. 25,21
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 02,20	Jun. 03,21
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 26,20	Feb. 25,21

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

3.4.4 TEST PROCEDURE

FOR POWER MEASUREMENT

For 802.11a, 802.11n (20MHz), 802.11n (40MHz)

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

For 802.11ac (80MHz)

1. Measure the duty cycle, x, of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW ≥ 3 MHz.
5. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add 10 log (1/x), where x is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25%.

FOR 99 PERCENT OCCUPIED BANDWIDTH

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

FOR 26dB BANDWIDTH

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

FOR 6dB BANDWIDTH

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

3.4.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	15.18	0.13	15.31	33.96	24	PASS
40	5200	15.24	0.13	15.37	34.43	24	PASS
48	5240	15.10	0.13	15.23	33.34	24	PASS
52	5260	15.16	0.13	15.29	33.81	24	PASS
60	5300	15.19	0.13	15.32	34.04	24	PASS
64	5320	15.21	0.13	15.34	34.20	24	PASS
100	5500	15.05	0.13	15.18	32.96	24	PASS
116	5580	15.07	0.13	15.20	33.11	24	PASS
140	5700	15.23	0.13	15.36	34.36	24	PASS
149	5745	15.20	0.13	15.33	34.12	30	PASS
157	5785	15.06	0.13	15.19	33.04	30	PASS
165	5825	15.29	0.13	15.42	34.83	30	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	13.96	0.15	14.11	25.76	24	PASS
40	5200	13.92	0.15	14.07	25.53	24	PASS
48	5240	13.80	0.15	13.95	24.83	24	PASS
52	5260	14.01	0.15	14.16	26.06	24	PASS
60	5300	14.15	0.15	14.30	26.92	24	PASS
64	5320	14.11	0.15	14.26	26.67	24	PASS
100	5500	14.17	0.15	14.32	27.04	24	PASS
116	5580	14.22	0.15	14.37	27.35	24	PASS
140	5700	14.02	0.15	14.17	26.12	24	PASS
149	5745	13.91	0.15	14.06	25.47	30	PASS
157	5785	14.12	0.15	14.27	26.73	30	PASS
165	5825	14.16	0.15	14.31	26.98	30	PASS

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	13.86	0.30	14.16	26.06	24	PASS
46	5230	13.89	0.30	14.19	26.24	24	PASS
54	5270	13.95	0.30	14.25	26.61	24	PASS
62	5310	14.06	0.30	14.36	27.29	24	PASS
102	5510	14.18	0.30	14.48	28.05	24	PASS
110	5550	14.06	0.30	14.36	27.29	24	PASS
134	5670	13.93	0.30	14.23	26.49	24	PASS
151	5755	14.23	0.30	14.53	28.38	30	PASS
159	5798	14.15	0.30	14.45	27.86	30	PASS

802.11ac (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	14.48	0.16	14.64	29.11	24	PASS
40	5200	14.49	0.16	14.65	29.17	24	PASS
48	5240	14.60	0.16	14.76	29.92	24	PASS
52	5260	14.56	0.16	14.72	29.65	24	PASS
60	5300	14.54	0.16	14.70	29.51	24	PASS
64	5320	14.58	0.16	14.74	29.79	24	PASS
100	5500	14.46	0.16	14.62	28.97	24	PASS
116	5580	14.36	0.16	14.52	28.31	24	PASS
140	5700	14.56	0.16	14.72	29.65	24	PASS
149	5745	14.51	0.16	14.67	29.31	30	PASS
157	5785	14.35	0.16	14.51	28.25	30	PASS
165	5825	14.63	0.16	14.79	30.13	30	PASS

802.11ac (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	12.69	0.30	12.99	19.91	24	PASS
46	5230	12.63	0.30	12.93	19.63	24	PASS
54	5270	12.62	0.30	12.92	19.59	24	PASS
62	5310	12.73	0.30	13.03	20.09	24	PASS
102	5510	12.62	0.30	12.92	19.59	24	PASS
110	5550	12.55	0.30	12.85	19.28	24	PASS
134	5670	12.60	0.30	12.90	19.50	24	PASS
151	5755	12.51	0.30	12.81	19.10	30	PASS
159	5798	12.46	0.30	12.76	18.88	30	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	12.43	0.56	12.99	19.91	24	PASS
58	5290	12.54	0.56	13.10	20.42	24	PASS
106	5530	12.61	0.56	13.17	20.75	24	PASS
122	5610	12.68	0.56	13.24	21.09	24	PASS
155	5775	12.64	0.56	13.20	20.89	30	PASS

99% OCCUPIED BANDWIDTH & 26dB BANDWIDTH/6dB BANDWIDTH DATA FROM:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	16.74	20.21	PASS
40	5200	16.62	20.22	PASS
48	5240	16.68	20.23	PASS
52	5260	16.56	20.21	PASS
60	5300	16.56	20.06	PASS
64	5320	16.62	20.17	PASS
100	5500	16.56	20.16	PASS
116	5580	16.62	20.21	PASS
140	5700	16.62	20.07	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
149	5745	16.56	15.14	PASS
157	5785	16.62	15.08	PASS
165	5825	16.56	15.10	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.64	20.32	PASS
40	5200	17.70	20.58	PASS
48	5240	17.64	20.37	PASS
52	5260	17.70	20.31	PASS
60	5300	17.64	20.54	PASS
64	5320	17.64	20.45	PASS
100	5500	17.70	20.40	PASS
116	5580	17.64	20.36	PASS
140	5700	17.64	20.55	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
149	5745	17.82	15.11	PASS
157	5785	17.64	14.36	PASS
165	5825	17.64	15.13	PASS

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.30	41.83	PASS
46	5230	36.10	41.58	PASS
54	5270	36.20	41.13	PASS
62	5310	36.20	41.36	PASS
102	5510	36.10	41.45	PASS
110	5550	36.20	41.26	PASS
134	5670	36.20	41.72	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
151	5755	36.30	35.11	151
159	5795	36.30	35.05	159

802.11ac (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.70	20.45	PASS
40	5200	17.70	20.54	PASS
48	5240	17.64	20.41	PASS
52	5260	17.64	20.45	PASS
60	5300	17.64	20.45	PASS
64	5320	17.64	20.42	PASS
100	5500	17.70	20.37	PASS
116	5580	17.70	20.39	PASS
140	5700	17.64	20.50	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
149	5745	17.70	15.14	PASS
157	5785	17.64	15.12	PASS
165	5825	17.70	15.13	PASS

802.11ac (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.10	41.58	PASS
46	5230	36.10	41.50	PASS
54	5270	36.10	41.58	PASS
62	5310	36.20	41.09	PASS
102	5510	36.20	41.77	PASS
110	5550	36.30	41.27	PASS
134	5670	36.30	41.47	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
151	5755	36.00	35.16	PASS
159	5795	36.20	35.14	PASS

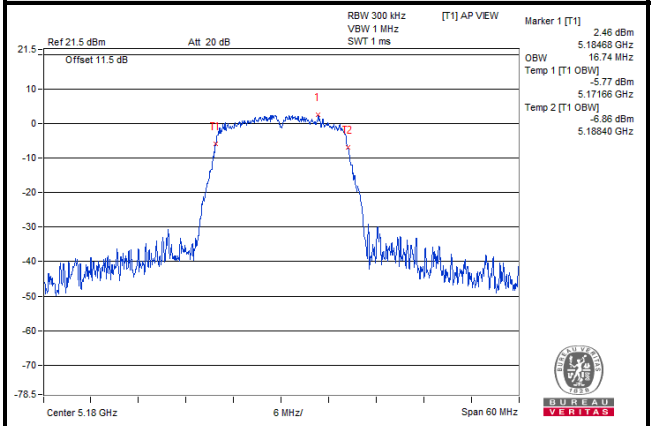
802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
42	5210	75.12	81.25	PASS
58	5290	75.00	80.92	PASS
106	5530	75.24	81.28	PASS
122	5610	75.24	81.49	PASS
CHANNEL	**CHANNEL FREQUENCY**	**99% OCCUPIED BANDWIDTH**	**6dB BANDWIDTH**	**PASS/FAIL**
155	5775	75.12	75.18	PASS

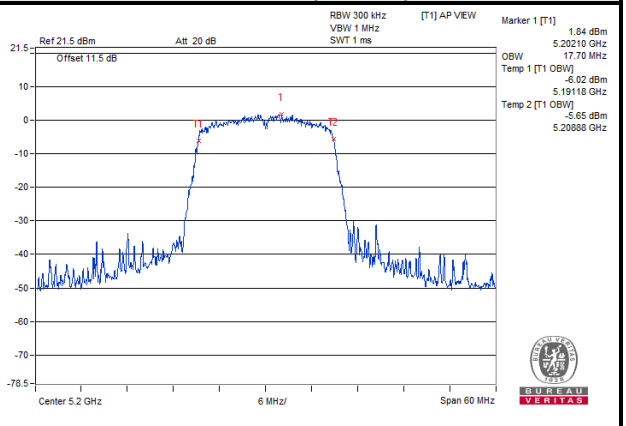
For U-NII-1:

SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH

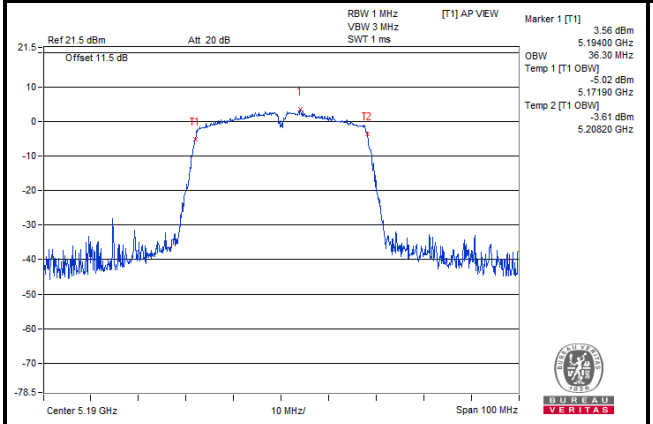
802.11a



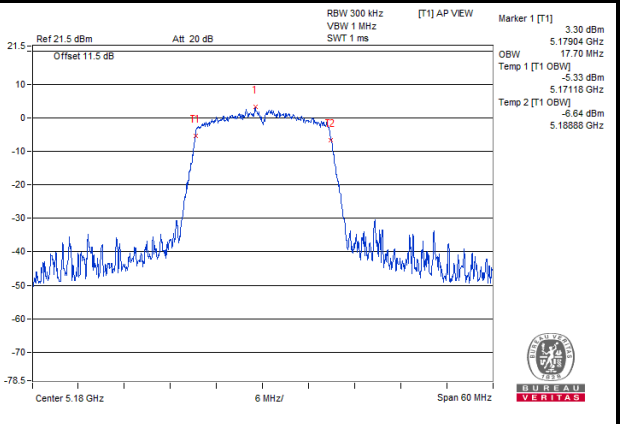
802.11n (20MHz)



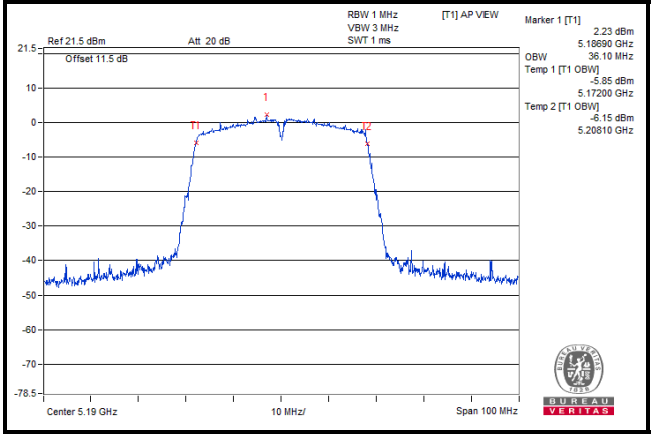
802.11n (40MHz)



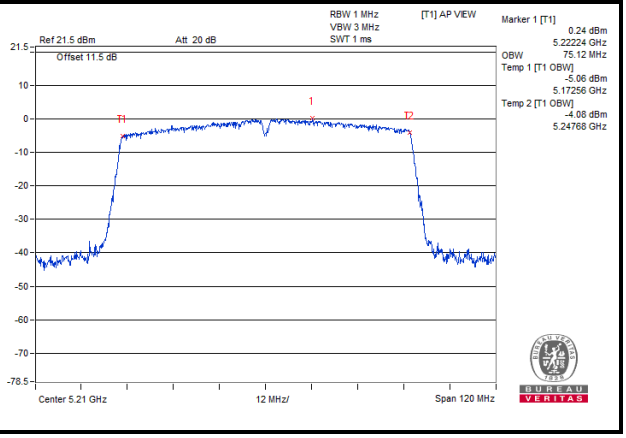
802.11ac (20MHz)



802.11ac (40MHz)

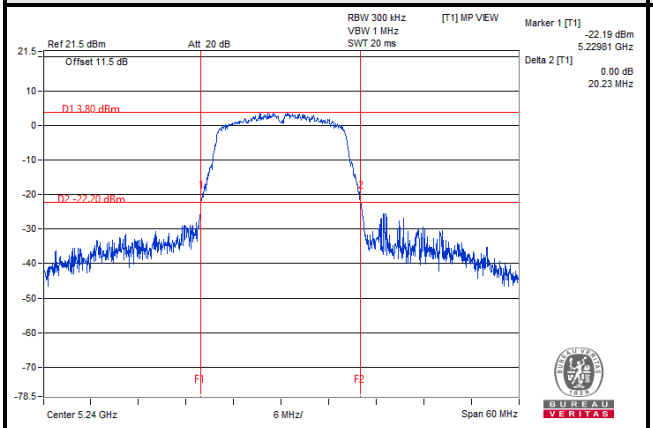


802.11ac (80MHz)

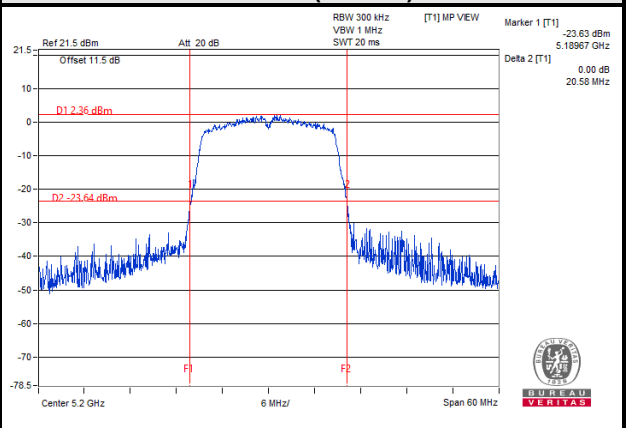


SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

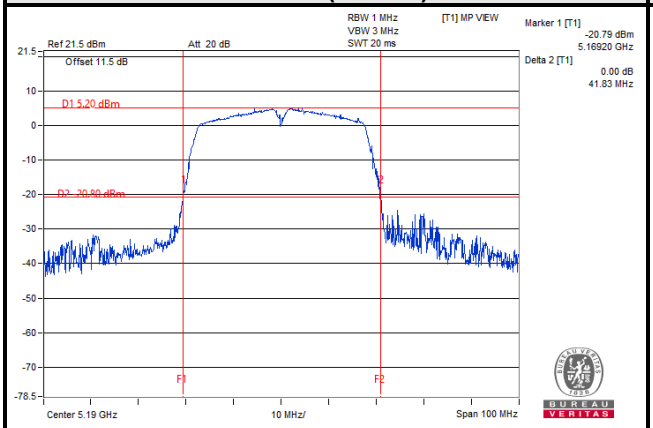
802.11a



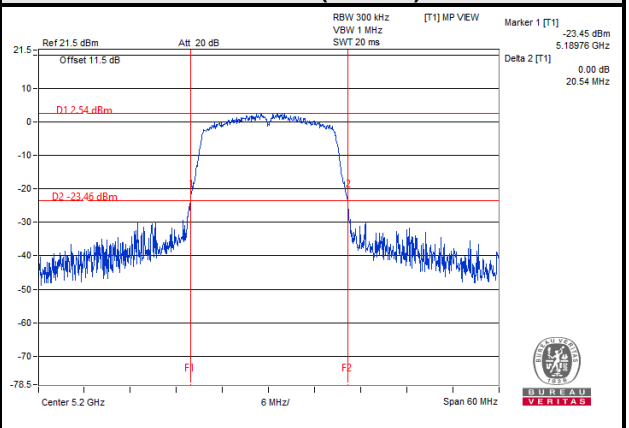
802.11n (20MHz)



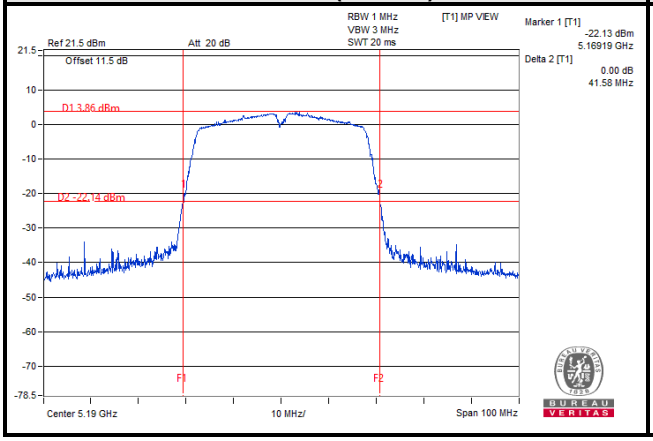
802.11n (40MHz)



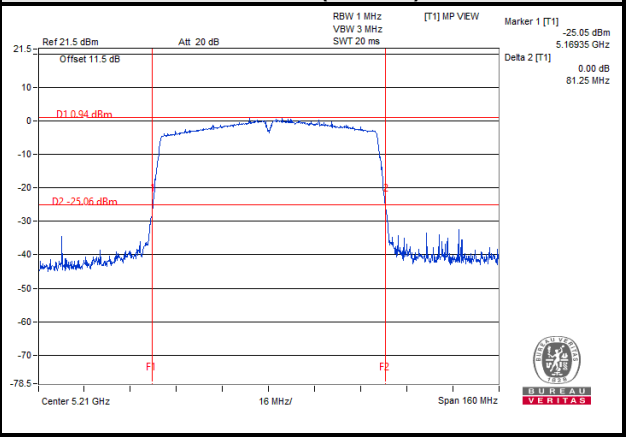
802.11ac (20MHz)



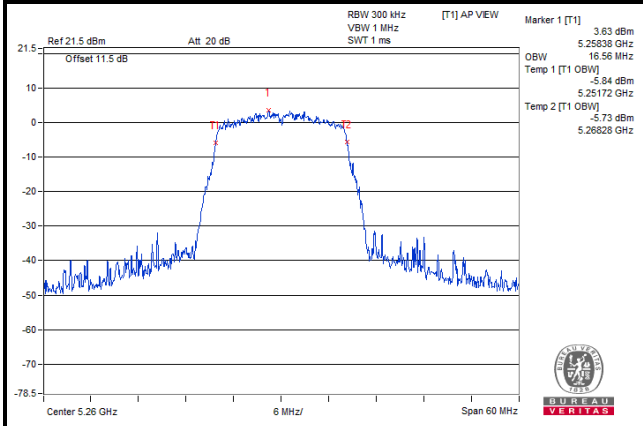
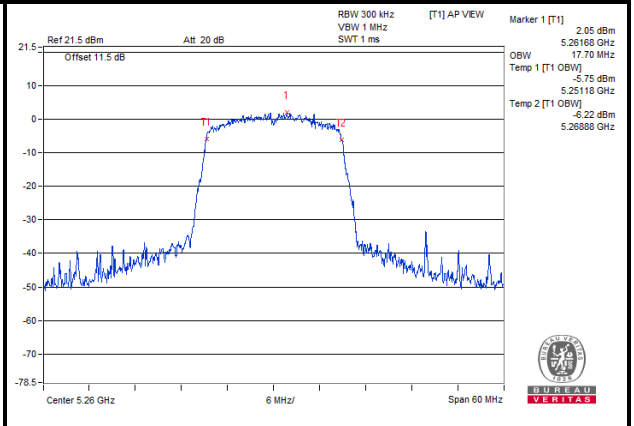
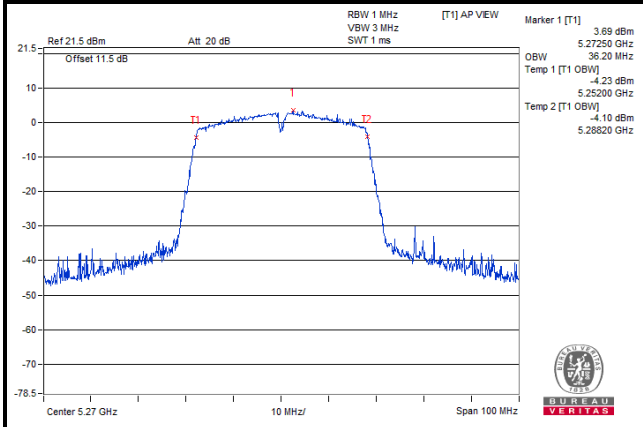
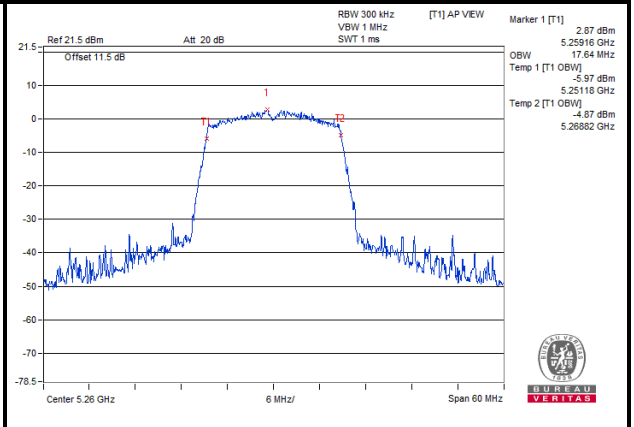
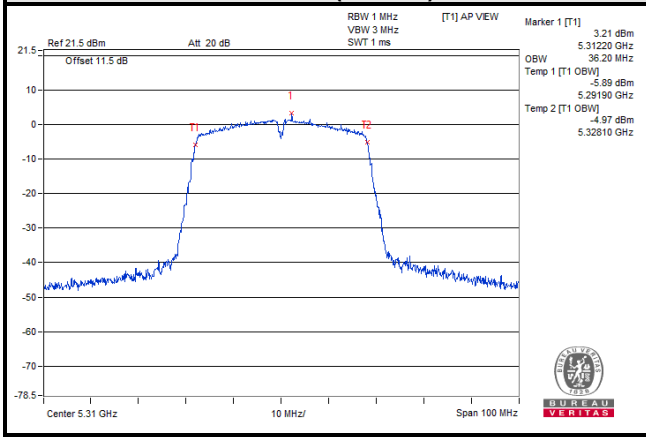
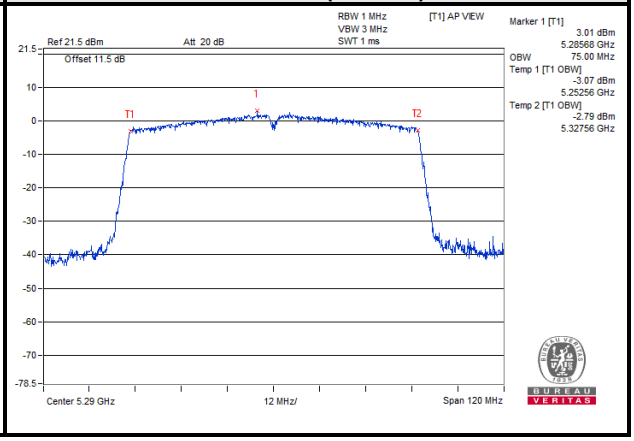
802.11ac (40MHz)



802.11ac (80MHz)

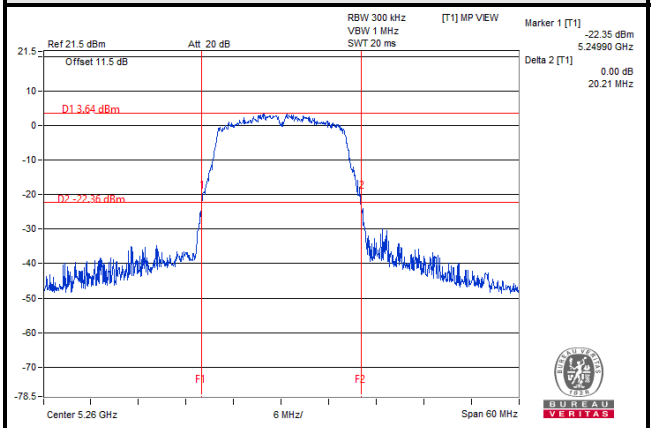


For U-NII-2A:

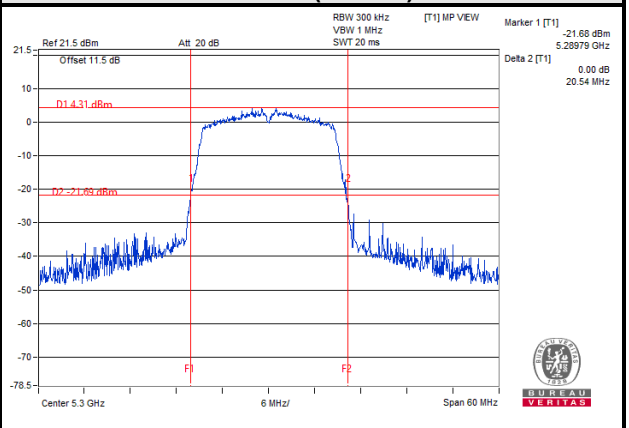
SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH	
802.11a	**802.11n (20MHz)**
	
802.11n (40MHz)	**802.11ac (20MHz)**
	
802.11ac (40MHz)	**802.11ac (80MHz)**
	

SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

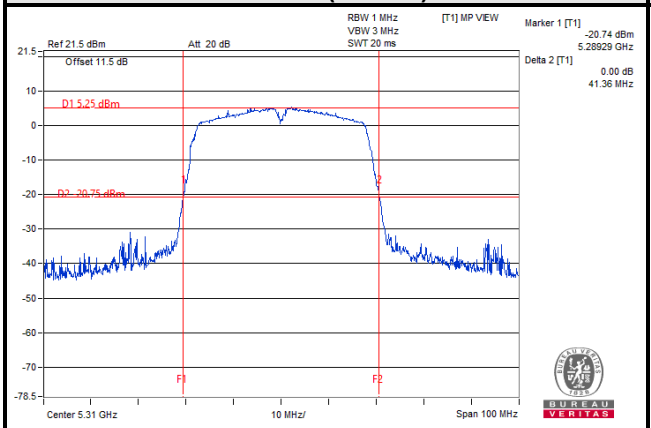
802.11a



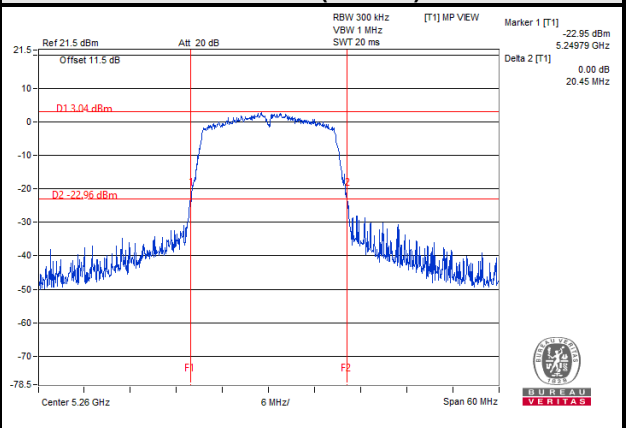
802.11n (20MHz)



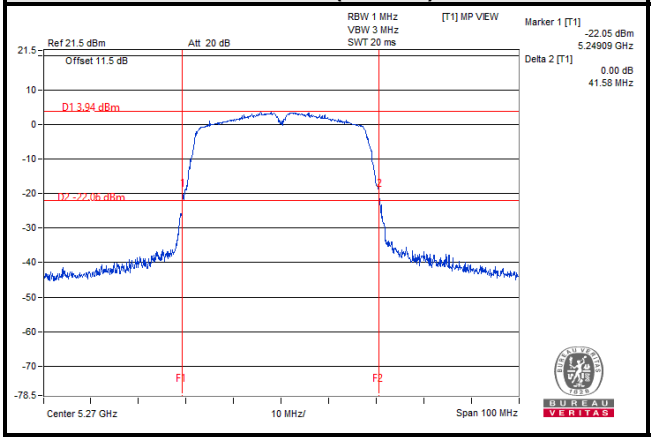
802.11n (40MHz)



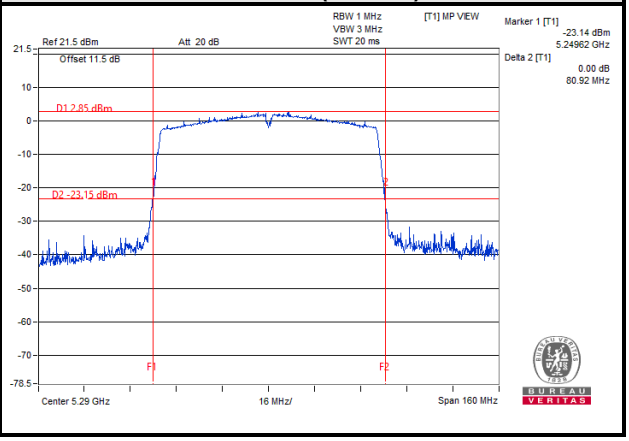
802.11ac (20MHz)



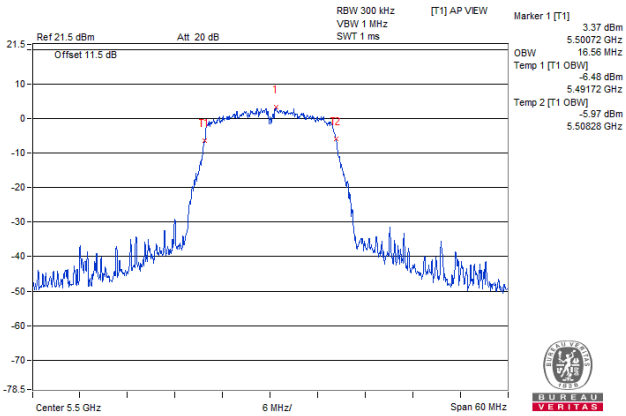
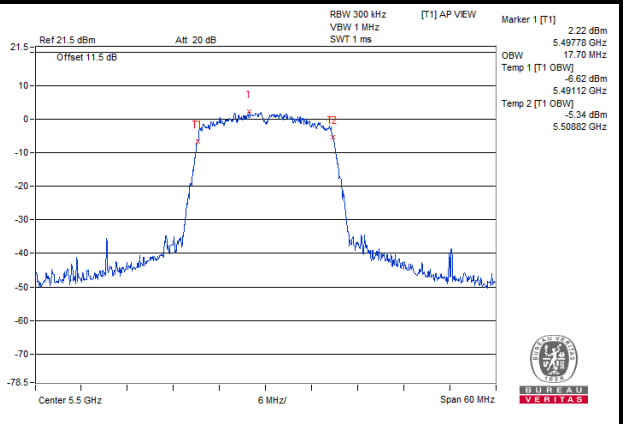
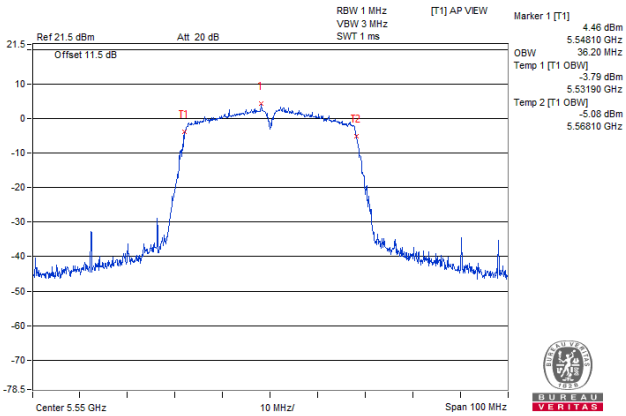
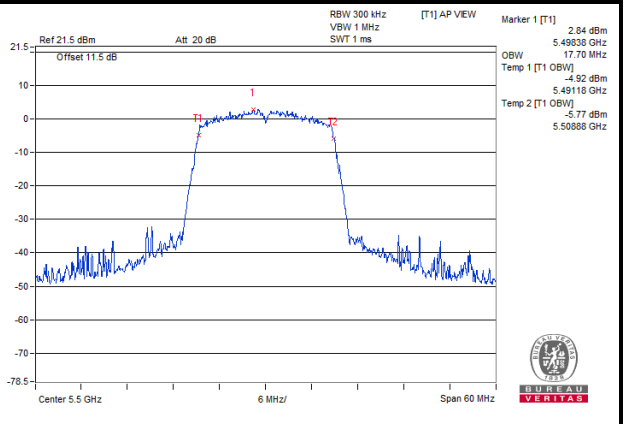
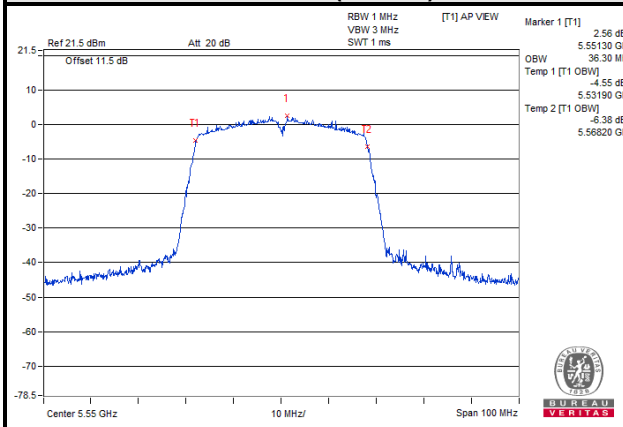
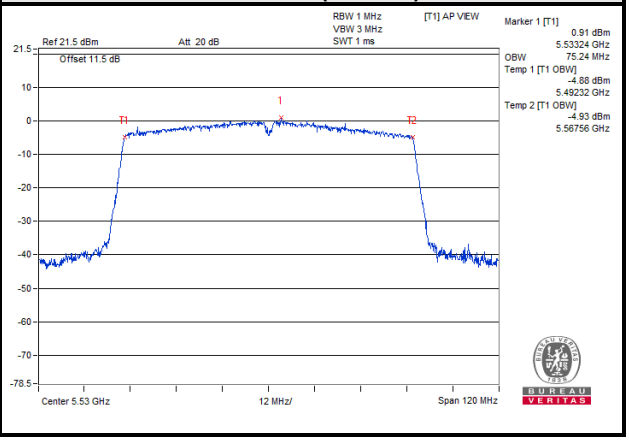
802.11ac (40MHz)



802.11ac (80MHz)

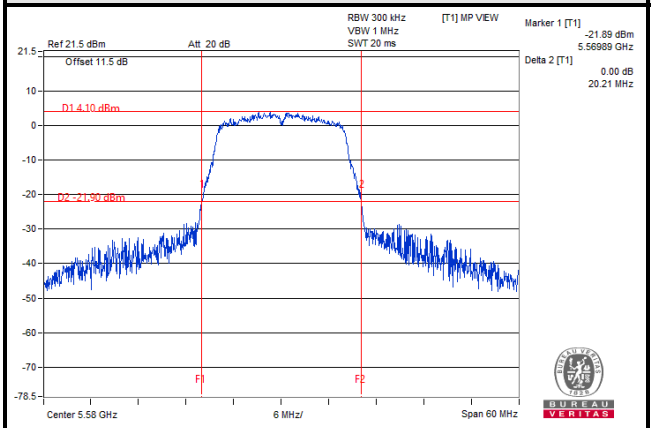


For U-NII-2C:

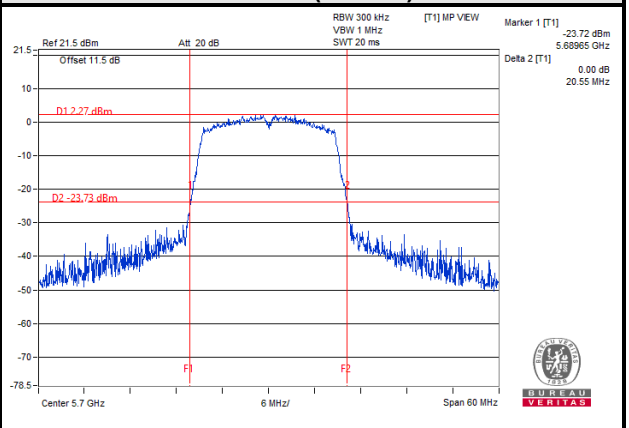
SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

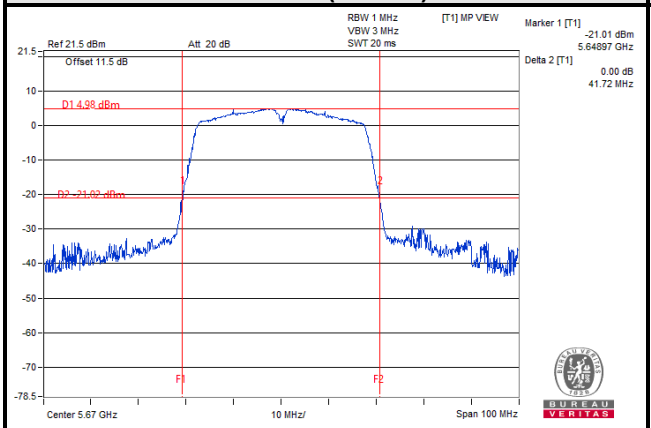
802.11a



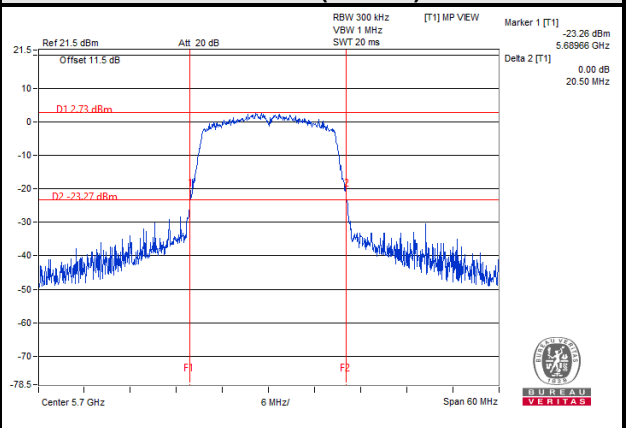
802.11n (20MHz)



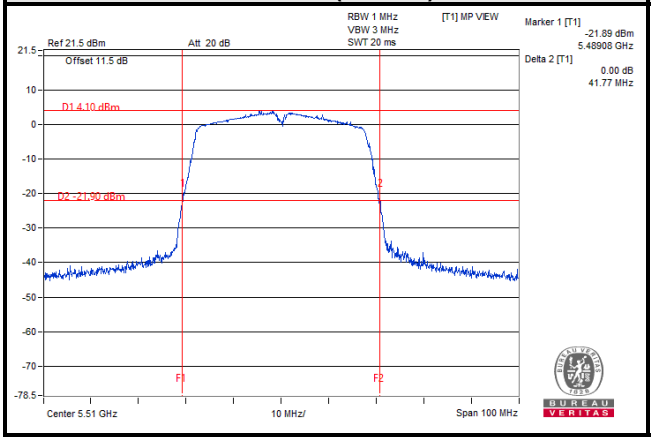
802.11n (40MHz)



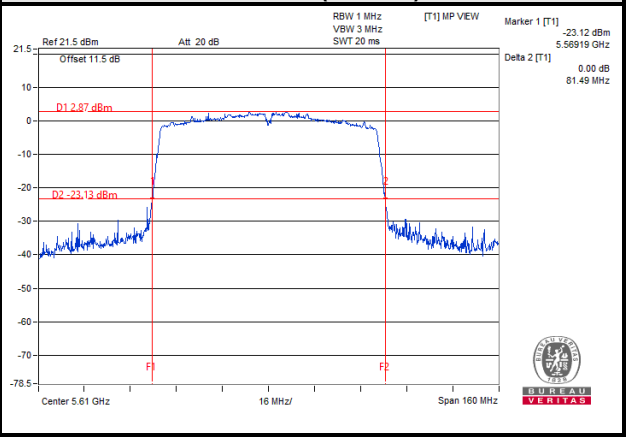
802.11ac (20MHz)



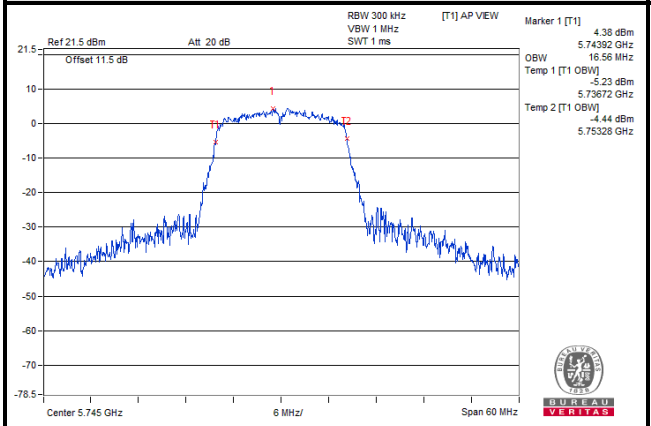
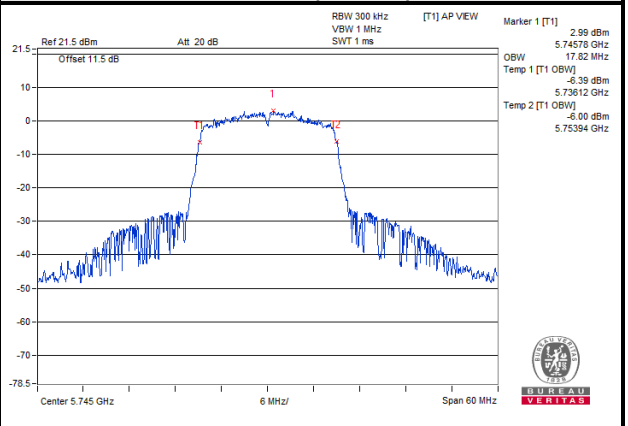
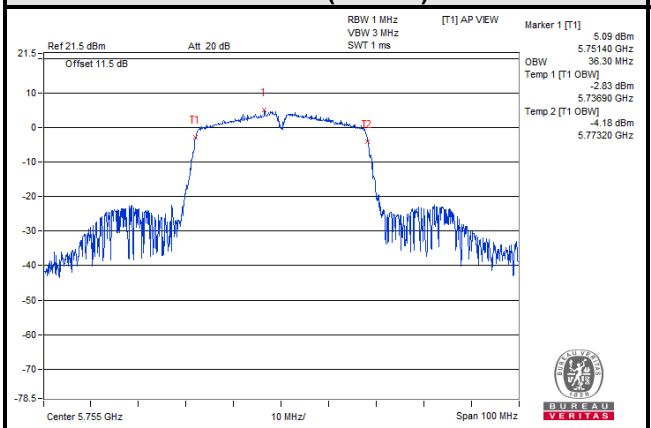
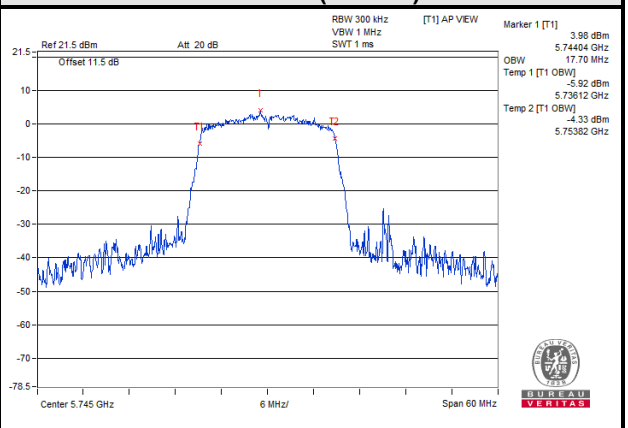
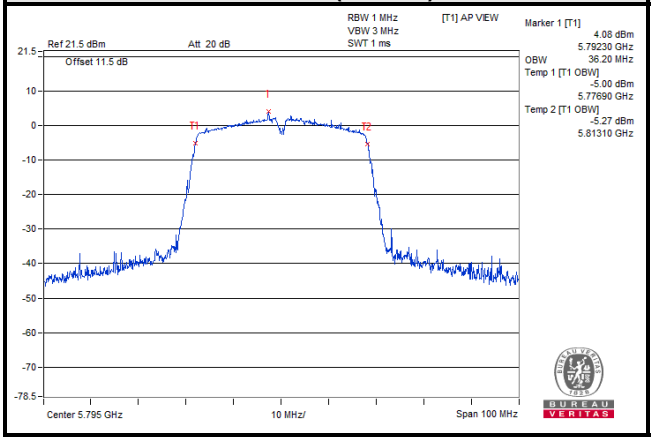
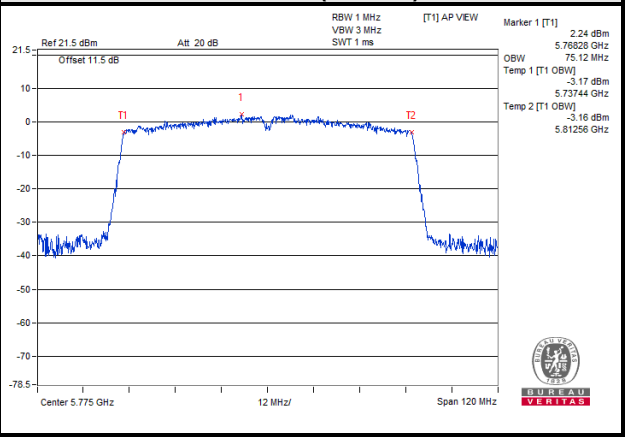
802.11ac (40MHz)



802.11ac (80MHz)

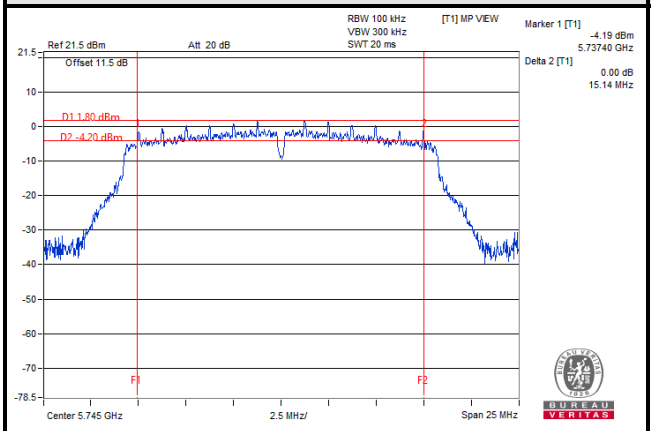


For U-NII-3:

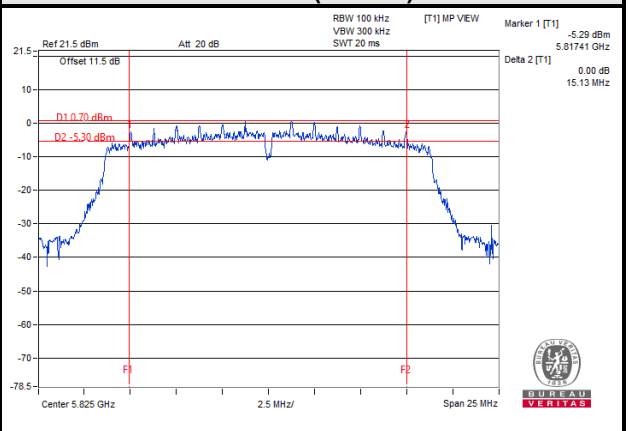
SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

SPECTRUM PLOT OF WORST VALUE of 6dB Bandwidth

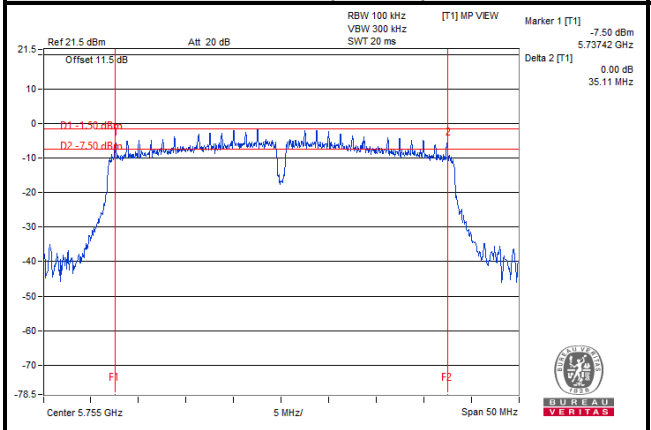
802.11a



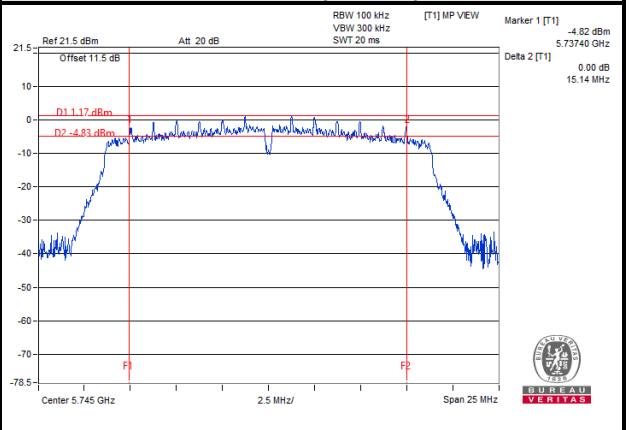
802.11n (20MHz)



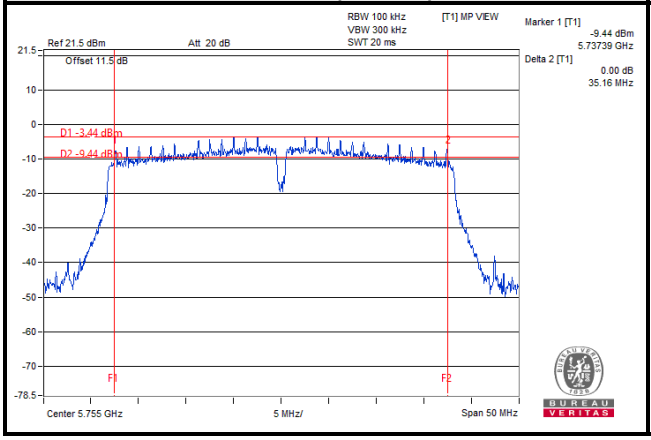
802.11n (40MHz)



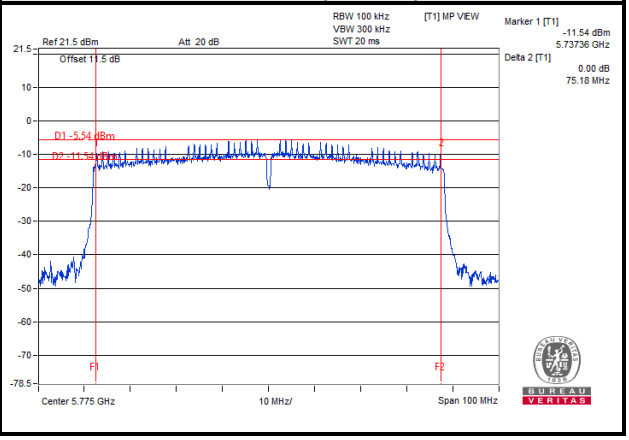
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)

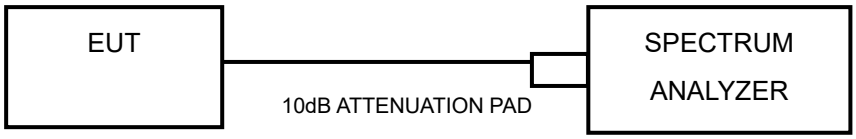


3.5 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Client devices	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.5.4 TEST PROCEDURES

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
7) Record the max value

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

3.5.7 TEST RESULTS

For U-NII-1 & U-NII-2A& U-NII-2C:
802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	-0.14	0.13	-0.01	11	PASS
40	5200	0.22	0.13	0.35	11	PASS
48	5240	0.55	0.13	0.68	11	PASS
52	5260	0.76	0.13	0.89	11	PASS
60	5300	1.09	0.13	1.22	11	PASS
64	5320	1.06	0.13	1.19	11	PASS
100	5500	0.44	0.13	0.57	11	PASS
116	5580	0.40	0.13	0.53	11	PASS
140	5700	0.22	0.13	0.35	11	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	-1.26	0.15	-1.11	11	PASS
40	5200	-1.30	0.15	-1.15	11	PASS
48	5240	-0.95	0.15	-0.80	11	PASS
52	5260	-0.46	0.15	-0.31	11	PASS
60	5300	-0.27	0.15	-0.12	11	PASS
64	5320	-0.67	0.15	-0.52	11	PASS
100	5500	-0.13	0.15	0.02	11	PASS
116	5580	-0.28	0.15	-0.13	11	PASS
140	5700	-1.08	0.15	-0.93	11	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
38	5190	-3.74	0.30	-3.44	11	PASS
46	5230	-3.14	0.30	-2.84	11	PASS
54	5270	-3.87	0.30	-3.57	11	PASS
62	5310	-3.13	0.30	-2.83	11	PASS
102	5510	-3.40	0.30	-3.10	11	PASS
110	5550	-3.26	0.30	-2.96	11	PASS
134	5670	-4.34	0.30	-4.04	11	PASS

802.11 ac (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	-0.54	0.16	-0.38	11	PASS
40	5200	-1.38	0.16	-1.22	11	PASS
48	5240	-0.99	0.16	-0.83	11	PASS
52	5260	-0.55	0.16	-0.39	11	PASS
60	5300	-0.21	0.16	-0.05	11	PASS
64	5320	-0.02	0.16	0.14	11	PASS
100	5500	-0.86	0.16	-0.70	11	PASS
116	5580	-0.21	0.16	-0.05	11	PASS
140	5700	-0.86	0.16	-0.70	11	PASS

802.11ac (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
38	5190	-4.87	0.30	-4.57	11	PASS
46	5230	-5.00	0.30	-4.70	11	PASS
54	5270	-4.44	0.30	-4.14	11	PASS
62	5310	-4.41	0.30	-4.11	11	PASS
102	5510	-4.70	0.30	-4.40	11	PASS
110	5550	-4.44	0.30	-4.14	11	PASS
134	5670	-5.38	0.30	-5.08	11	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
42	5210	-8.50	0.56	-7.94	11	PASS
58	5290	-7.24	0.56	-6.68	11	PASS
106	5530	-7.67	0.56	-7.11	11	PASS
122	5610	-7.92	0.56	-7.36	11	PASS

For U-NII-3:

Note: dBm/500kHz= dBm/MHz+10*log(0.5/1)= dBm/MHz-3.01

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	-5.97	-3.75	0.13	-3.62	30	PASS
157	5785	-6.04	-3.82	0.13	-3.69	30	PASS
165	5825	-5.98	-3.76	0.13	-3.63	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	-7.17	-4.95	0.15	-4.80	30	PASS
157	5785	-6.95	-4.73	0.15	-4.58	30	PASS
165	5825	-7.27	-5.05	0.15	-4.90	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
151	5755	-9.99	-7.77	0.30	-7.47	30	PASS
159	5795	-10.27	-8.05	0.30	-7.75	30	PASS

802.11ac (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	-6.82	-4.60	0.16	-4.44	30	PASS
157	5785	-6.90	-4.68	0.16	-4.52	30	PASS
165	5825	-6.91	-4.69	0.16	-4.53	30	PASS

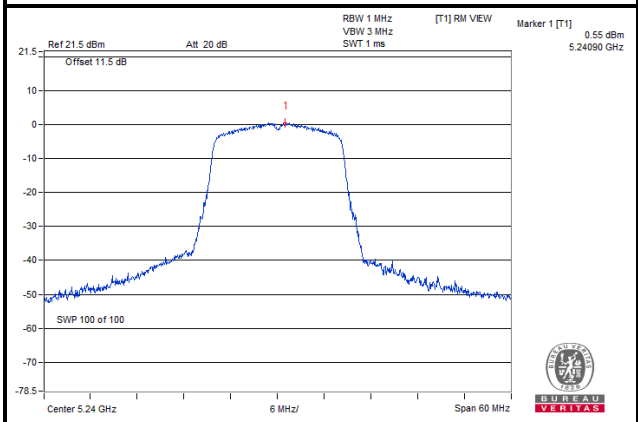
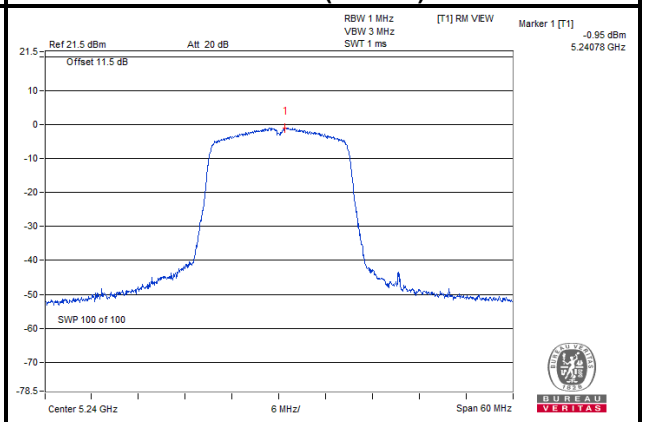
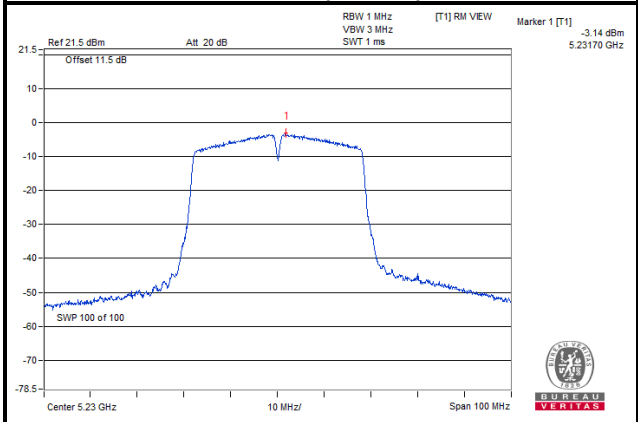
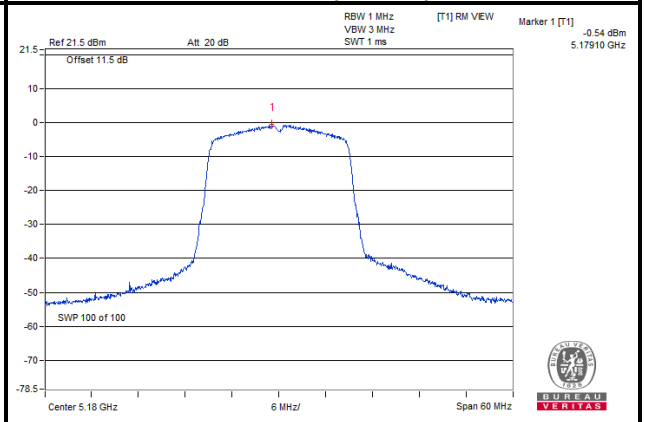
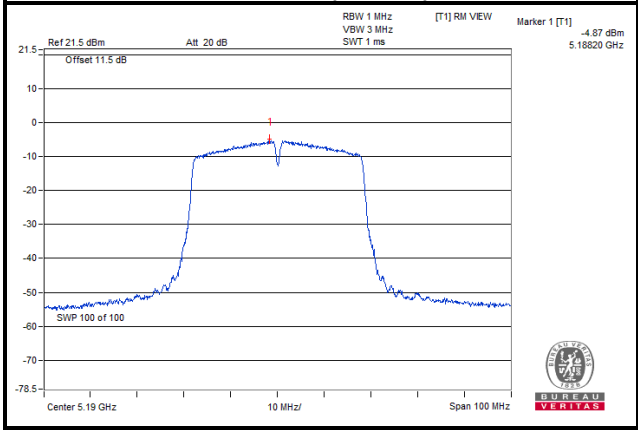
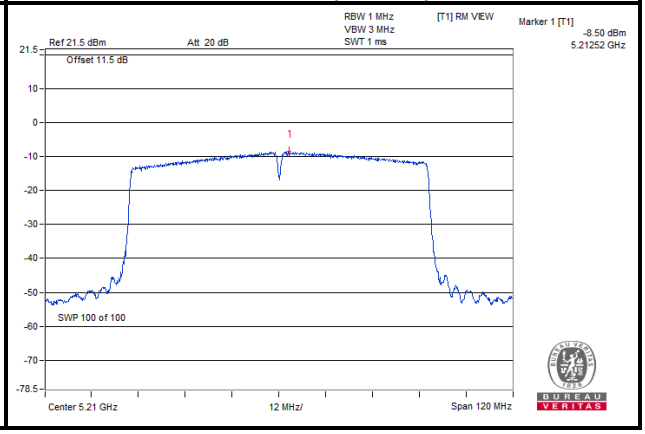
802.11ac (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
151	5755	-11.62	-9.40	0.30	-9.10	30	PASS
159	5795	-11.89	-9.67	0.30	-9.37	30	PASS

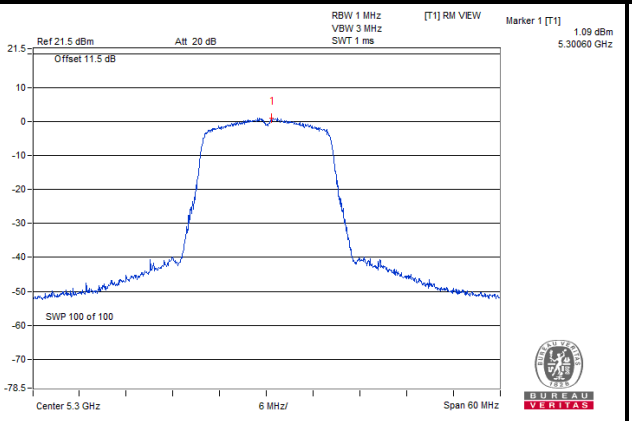
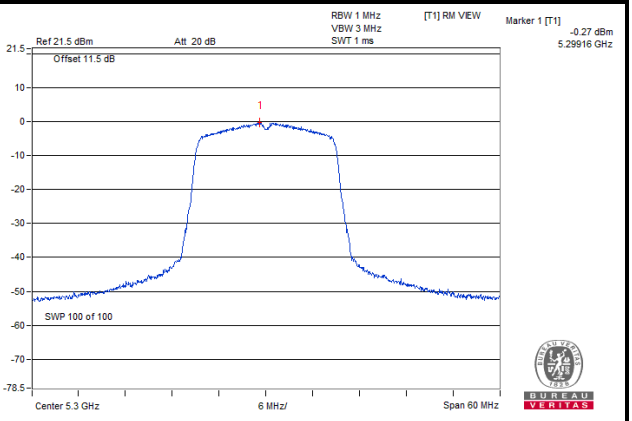
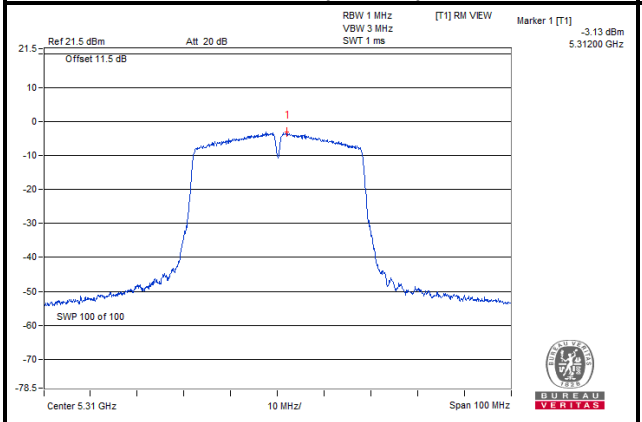
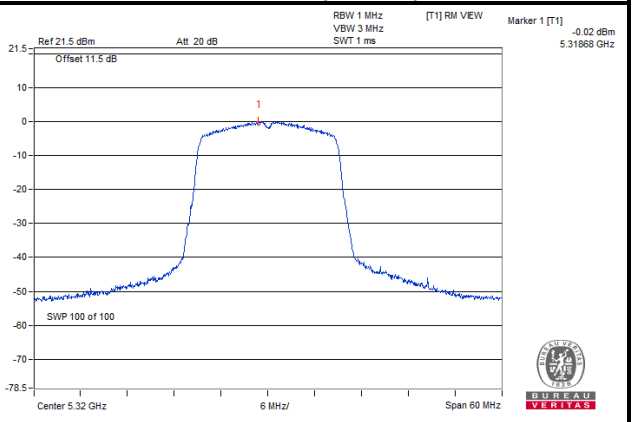
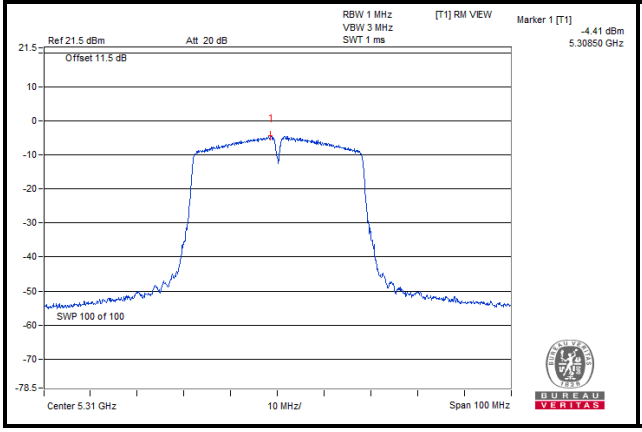
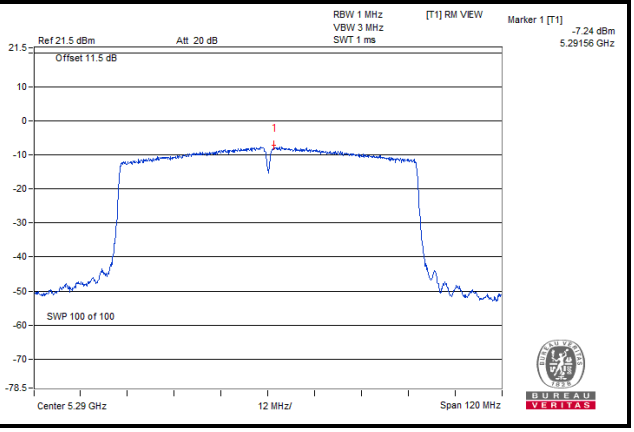
802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
155	5775	-14.41	-12.19	0.56	-11.63	30	PASS

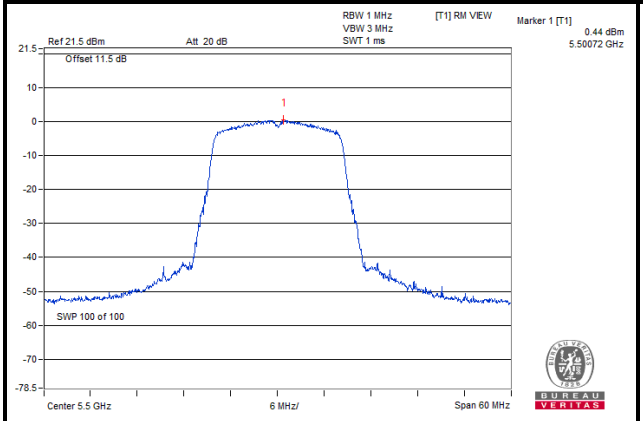
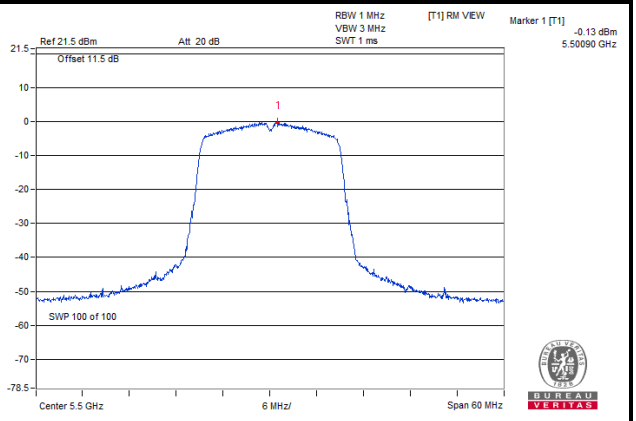
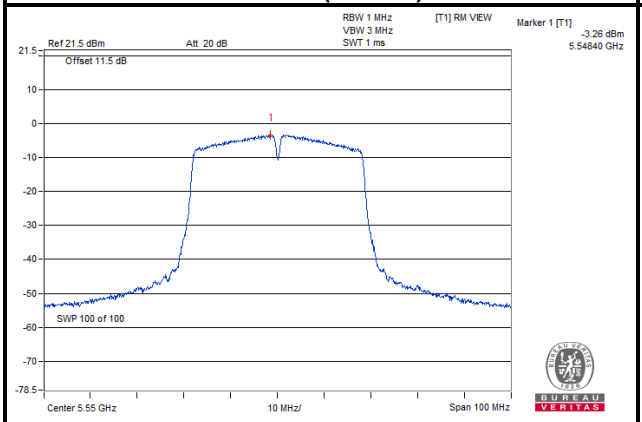
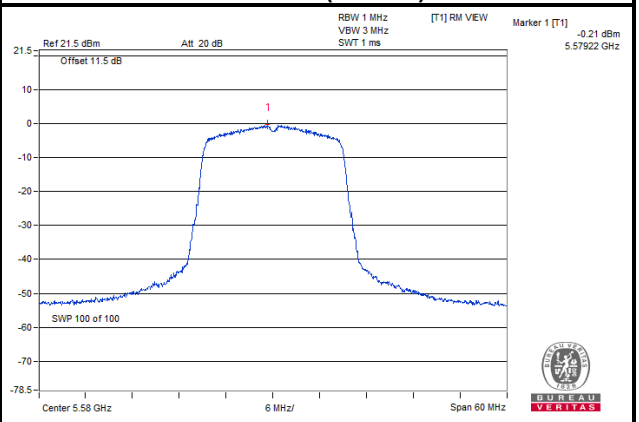
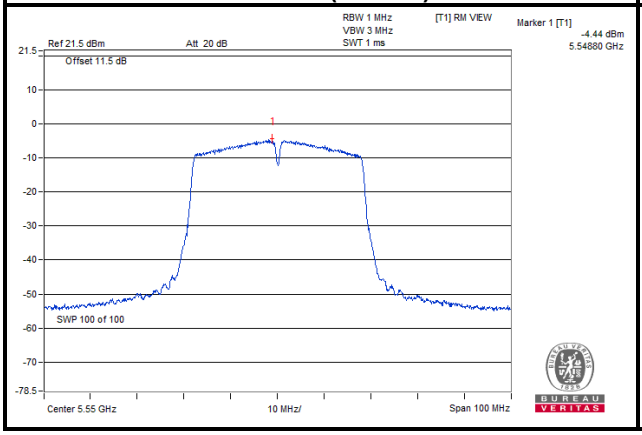
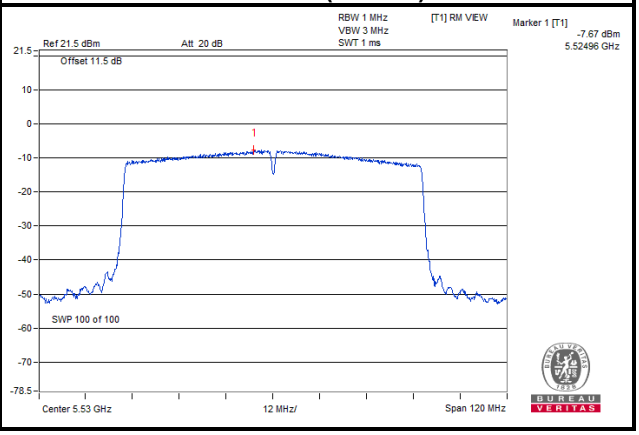
For 5180~5240MHz

PSD w/o Duty Factor	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

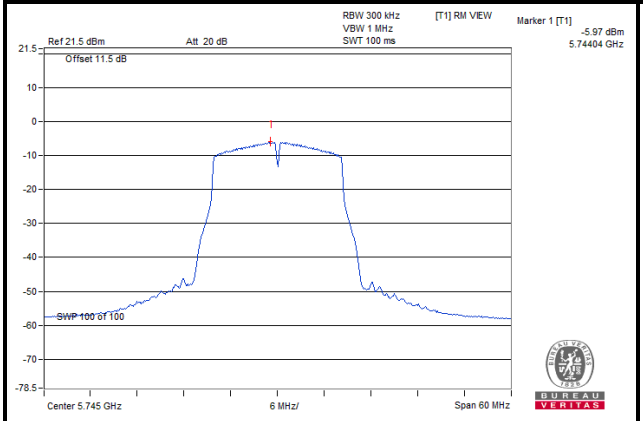
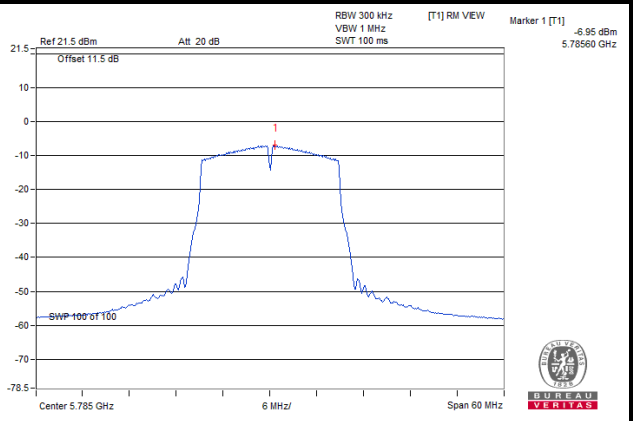
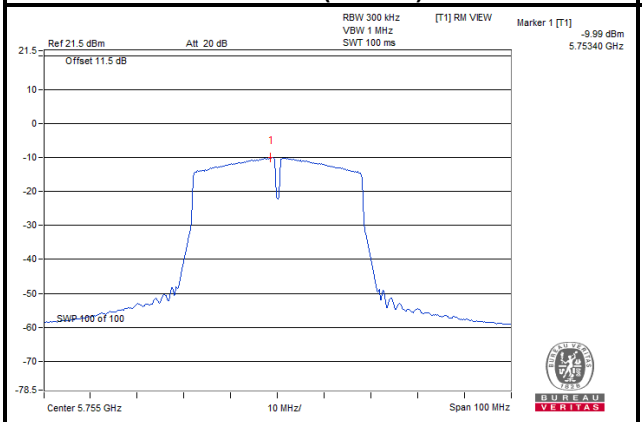
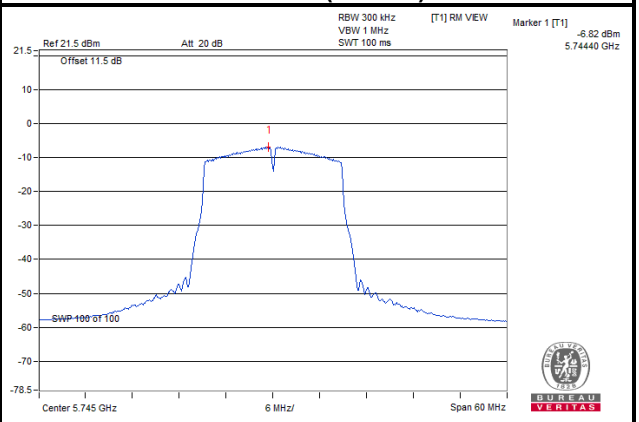
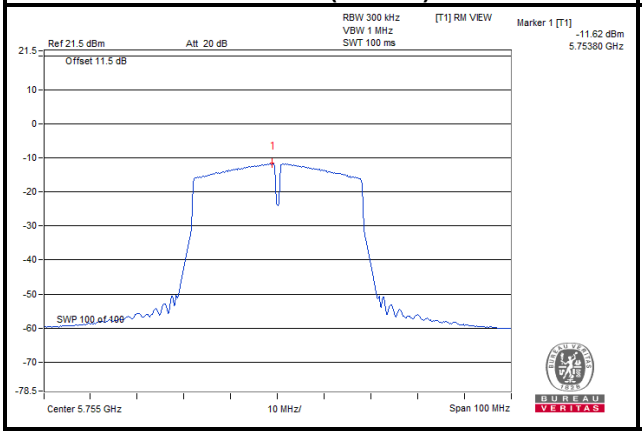
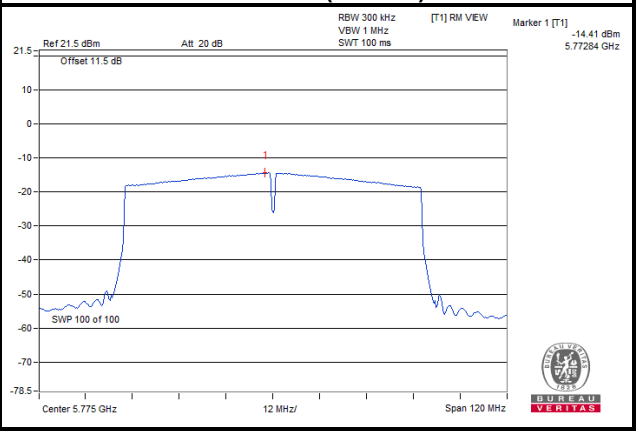
For 5260~5320MHz

PSD w/o Duty Factor	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

For 5500~5700MHz

PSD w/o Duty Factor	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

For 5745~5825MHz

PSD w/o Duty Factor	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (20MHz)
	
802.11ac (40MHz)	802.11ac (80MHz)
	

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

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

No modifications were made to the EUT by the lab during the test.

---END---