Certificate # 2951.01

TEST REPORT

Applicant	Zultys, Inc.
Address	785 Lucerne Drive, Sunnyvale, CA 94085, USA

Manufacturer or Supplier	Zultys, Inc.
Address	785 Lucerne Drive, Sunnyvale, CA 94085, USA
Product Name	Smart Business Phone
Brand Name	ZULTYS
Model	ZIP 49GE
Additional Model & Model Difference	N/A
Date of tests	Jun. 28, 2019 ~ Jul. 05, 2019

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

Tested by Andy Zhu Project Engineer/ EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Aug. 01, 2019

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF190628N080-4	Original release.	Aug. 01, 2019

1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE)			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is i-pex not a standard connector.

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	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.70dB
Radiated emissions	9KHz ~ 30MHz	2.90dB
	30MHz ~ 1GMHz	3.76dB
	1GHz ~ 18GHz	4.84dB
	18GHz ~ 40GHz	4.96dB

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 NAME	Smart Business Phone
MODEL NO.	ZIP 49GE
FCC ID	2APWA-ZIP49GE
POWER SUPPLY	DC 5V from Adapter or DC 48V From POE
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 150Mbps 802.11ac: up to 433.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz): 1 channel for 802.11ac 80MHz 5260 ~ 5320MHz: 4 channels for 802.11a, 802.11n (20MHz) 2 channels for 802.11n, 11ac (40MHz) 1 channel for 802.11ac (80MHz) 5500 ~ 5700MHz: 11 channels for 802.11a, 802.11n (20MHz) 5 channels for 802.11n (40MHz) 2 channel for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz) 1 channel for 802.11ac (80MHz)
CONDUCTED OUTPUT POWER	10.84dBm for 5180 ~ 5240MHz (Maximum AVG Power) 14.18dBm for 5260 ~ 5320MHz (Maximum AVG Power) 11.61dBm for 5500 ~ 5700MHz (Maximum AVG Power) 8.03dBm for 5745 ~ 5825MHz (Maximum AVG Power)
ANTENNA TYPE	5180 ~ 5240MHz: FPC antenna with 3.42dBi gain 5260 ~ 5320MHz: FPC antenna with 3.42dBi gain 5500 ~ 5700MHz: FPC antenna with 3.42dBi gain 5745 ~ 5825MHz: FPC antenna with 3.42dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	RJ45 Line: Shielded detachable 200cm Handset Line: unshielded detachable 330cm

NOTES:

1. The EUT incorporates a SISO function. Physically, the EUT provides 1 completed transmitter and 1 receiver.

MODULATION MODE	FUNCTION
802.11a	1TX/1RX
802.11n (HT20), 802.11ac (VHT20)	1TX/1RX
802.11n (HT40), 802.11ac (VHT40)	1TX/1RX
802.11ac (VHT80)	1TX/1RX

   The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case for final test were chosen 802.11n (HT20/HT40) and record in the report.
2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. Please refer to the EUT photo document (Reference No.: 190628N080) for detailed product photo.
4. EUT can be powered by POE or Adapter, and the worst case was tested under DC 5V From Adapter.
5. The EUT uses following adapters, but only the worst data(Adapter 1) was shown in test report.

Adapter1 :	
Brand	OH
Model	OH-1015A0502000U4-UL
Input Power	AC 100-240V, 50/60Hz 0.5A
Output Power	DC 5V, 2A
DC Line	Unshielded, Non-detachable, 1.80m
Adapter2 :	
Brand	JQH
Model	NSA10EU-05020002
Input Power	AC 100-240V, 50/60Hz 0.5A
Output Power	DC 5V, 2A
DC Line	Unshielded, Non-detachable, 1.80m

2.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--

FOR 5470 ~ 5725MHz

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

5 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

2 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	122	5610MHz

FOR 5725 ~ 5850MHz

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	153	5765MHz
157	5785MHz	161	5805MHz
165	5825MHz	--	--

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--

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 AC 120V 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:

1. 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 (ABOVE 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
	802.11ac 80MHz		106, 122	106, 122	OFDM	BPSK	29.3
	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

RADIATED EMISSION TEST (BELOW 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
	802.11ac 80MHz		106, 122	106, 122	OFDM	BPSK	29.3
	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

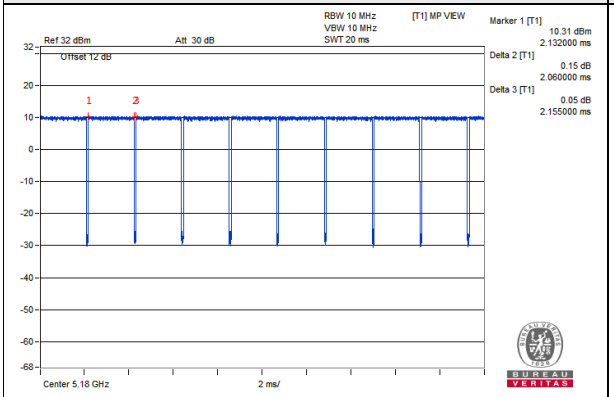
TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	24deg. C, 55%RH	AC 120V 60Hz	Daniel
RE≥1G	24deg. C, 55%RH	AC 120V 60Hz	Daniel
PLC	20deg. C, 56%RH	AC 120V 60Hz	Dragon
APCM	20deg. C, 55%RH	AC 120V 60Hz	Robert Cheng

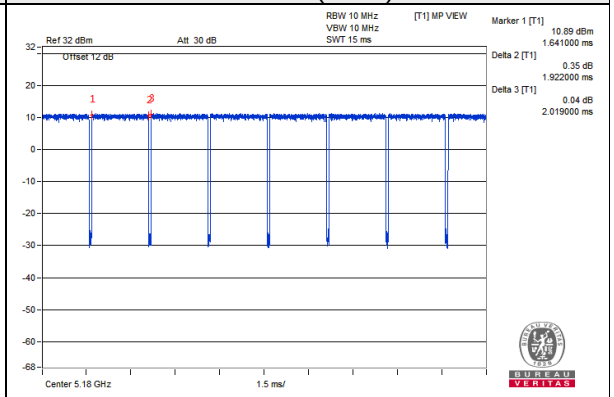
2.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle = 2.06/2.155 =0.956, Duty factor = 10 * log(1/0.956) = 0.195
802.11n (HT20): Duty cycle = 1.922/2.019 =0.952, Duty factor = 10 * log(1/0.952) = 0.213
802.11n (HT40): Duty cycle = 0.946/1.042 =0.908, Duty factor = 10 * log(1/0.908) = 0.149
802.11ac (VHT80): Duty cycle = 0.462/0.545 =0.848, Duty factor = 10 * log(1/0.848) = 0.716

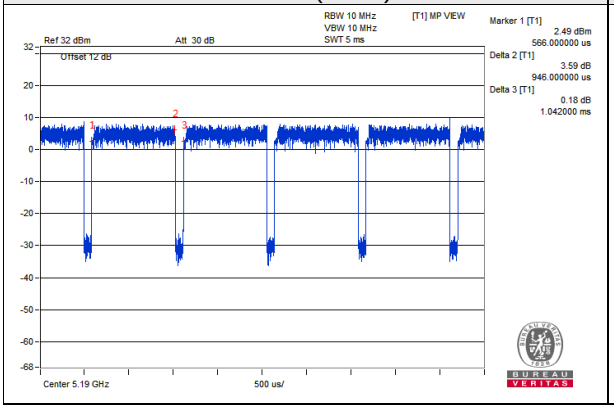
802.11a



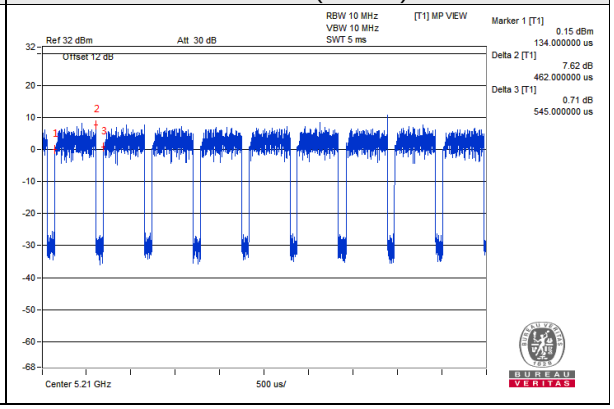
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



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	POE Power	Yealink	YLPOE30	N/A	N/A

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Mains: Unshielded, detachable 1.8m

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specification of the EUT declared by the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01r03
ANSI C63.10-2013

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

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

NOTES:
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 30dB under any condition of modulation.

3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01r03	FIELD STRENGTH AT 3m	
	PK: 74 (dBµV/m)	AV: 54 (dBµV/m)
APPLICABLE TO	**EIRP LIMIT**	**EQUIVALENT FIELD STRENGTH AT 3m**
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBµV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

NOTE: For transmitters operating in the 5.725-5.85 GHz band:

Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

15.407(b)(4)(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.

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).

3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 12,19	Mar. 11,20
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Aug. 02,18	Aug. 01,19
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 04,19	May 03,20
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Apr. 17,19	Apr. 18,20
Bilog Antenna (20MHz -2GHz)	Teseq	CBL 6111D	30643	Aug. 11, 18	Aug. 10, 19
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	Jul. 21, 18	Jul. 20, 19
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170242	May 05,19	May 04,20
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Feb. 10,19	Feb. 09,20
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Apr. 17,19	Apr. 18,20
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 09,18	Nov. 08,19
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

NOTES:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The horn antenna is used only for the measurement of emission frequency above1GHz if tested.
3. The FCC Site Registration No. is 749762.

3.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 1.5 meters(above 1GHz) and 0.8 meters(below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTES:

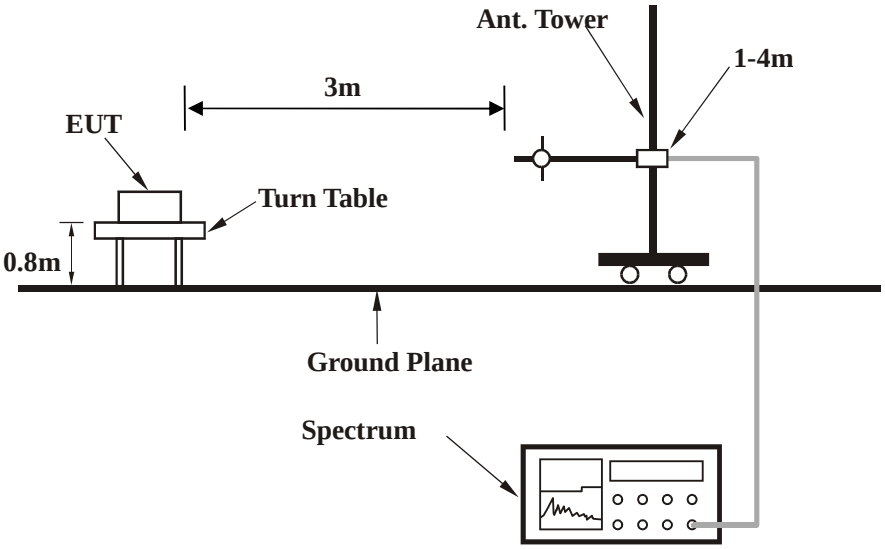
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

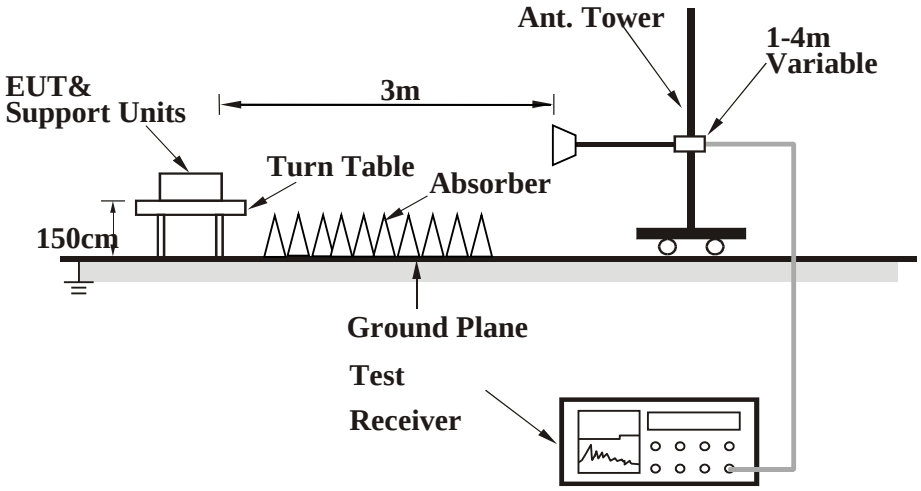
3.1.6 TEST SETUP

Below 1GHz test setup



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

Above 1GHz test setup



Note: 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 FTEST RESULTS

BELOW 1GHz WORST-CASE DATA

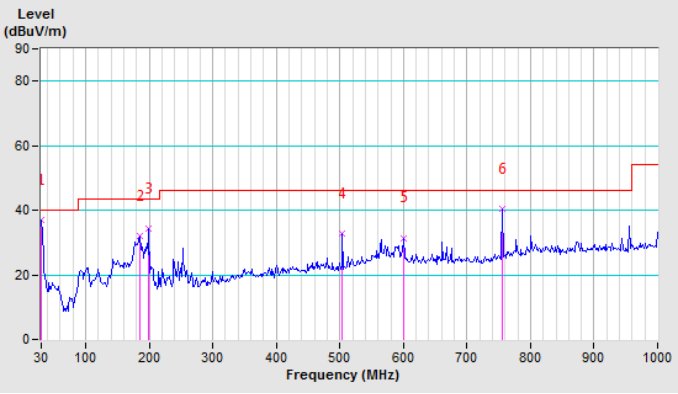
802.11a

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	**30.00**	**36.92 QP**	**40.00**	**-3.08**	**1.00 H**	**152**	**47.05**	**-10.13**
2	185.45	32.10 QP	43.50	-11.40	1.00 H	303	49.89	-17.79
3	199.44	34.34 QP	43.50	-9.16	1.00 H	179	52.39	-18.05
4	504.12	32.91 QP	46.00	-13.09	1.00 H	204	40.40	-7.49
5	600.50	31.43 QP	46.00	-14.57	1.00 H	82	37.17	-5.74
6	755.95	40.46 QP	46.00	-5.54	1.00 H	**77**	43.78	-3.32

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.

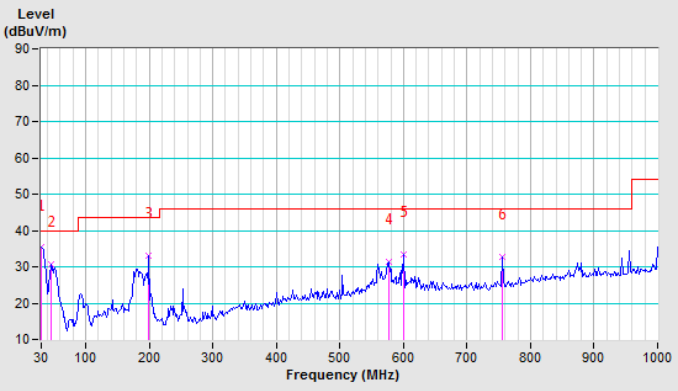


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	35.28 QP	40.00	-4.72	1.00 V	**61**	**48.35**	**-11.88**
2	45.54	30.71 QP	40.00	-9.29	1.00 V	46	55.81	-22.81
3	199.44	33.00 QP	43.50	-10.50	1.00 V	34	38.62	-5.87
4	577.18	31.46 QP	46.00	-14.54	1.00 V	23	41.08	-5.13
5	600.50	33.56 QP	46.00	-12.44	1.00 V	12	37.77	-4.39
6	755.95	32.87 QP	46.00	-13.13	1.00 V	2	37.07	-0.86

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.



Band 1 (5150-5250MHz):

ABOVE 1GHz DATA

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	67.54 PK	74.00	-6.46	1.00 H	96	25.54	42.00
2	**5150.00**	**50.69 AV**	**54.00**	**-3.31**	**1.00 H**	**96**	**8.69**	**42.00**
3	*5180.00	105.20 PK			1.00 H	96	63.08	42.12
4	*5180.00	94.51 AV			1.00 H	96	52.39	42.12
5	#10360.00	53.26 PK	68.20	-14.94	1.00 H	0	5.22	48.04
6	15540.00	61.25 PK	74.00	-12.75	1.00 H	360	7.56	53.69
7	15540.00	47.53 AV	54.00	-6.47	1.00 H	360	-6.16	53.69
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	62.51 PK	74.00	-11.49	1.00 V	126	20.51	42.00
2	5150.00	44.48 AV	54.00	-9.52	1.00 V	126	2.48	42.00
3	*5180.00	101.21 PK			1.00 V	126	59.09	42.12
4	*5180.00	87.93 AV			1.00 V	126	45.81	42.12
5	#10360.00	52.16 PK	68.20	-16.04	1.00 V	360	4.12	48.04
6	15540.00	60.84 PK	74.00	-13.16	1.00 V	0	7.15	53.69
7	15540.00	46.85 AV	54.00	-7.15	1.00 V	360	-6.84	53.69

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.93 PK	74.00	-11.07	1.21 H	91	20.93	42.00
2	5150.00	44.32 AV	54.00	-9.68	1.21 H	91	2.32	42.00
3	*5200.00	107.05 PK			1.21 H	91	64.85	42.20
4	*5200.00	93.60 AV			1.21 H	91	51.40	42.20
5	#10400.00	52.16 PK	68.20	-16.04	1.00 H	0	4.07	48.09
6	15600.00	62.68 PK	74.00	-11.32	1.00 H	360	8.87	53.81
7	15600.00	47.81 AV	54.00	-6.19	1.00 H	360	-6.00	53.81
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.62 PK	74.00	-15.38	1.00 V	168	16.62	42.00
2	5150.00	40.11 AV	54.00	-13.89	1.00 V	168	-1.89	42.00
3	*5200.00	103.85 PK			1.00 V	168	61.65	42.20
4	*5200.00	88.65 AV			1.00 V	168	46.45	42.20
5	#10400.00	51.53 PK	68.20	-16.67	1.00 V	360	3.44	48.09
6	15600.00	61.74 PK	74.00	-12.26	1.00 V	0	7.93	53.81
7	15600.00	46.54 AV	54.00	-7.46	1.00 V	0	-7.27	53.81

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	47.25 PK	74.00	-26.75	1.00 H	228	5.25	42.00
2	5150.00	34.81 AV	54.00	-19.19	1.00 H	228	-7.19	42.00
3	*5240.00	100.14 PK			1.00 H	228	57.78	42.36
4	*5240.00	86.84 AV			1.00 H	228	44.48	42.36
5	5350.00	47.85 PK	74.00	-26.15	1.00 H	228	5.04	42.81
6	5350.00	35.73 AV	54.00	-18.27	1.00 H	228	-7.08	42.81
7	#10480.00	52.14 PK	68.20	-16.06	1.00 H	360	3.95	48.19
8	15720.00	61.44 PK	74.00	-12.56	1.00 H	0	7.39	54.05
9	15720.00	46.77 AV	54.00	-7.23	1.00 H	0	-7.28	54.05
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	47.25 PK	74.00	-26.75	1.00 V	228	5.25	42.00
2	5150.00	34.81 AV	54.00	-19.19	1.00 V	228	-7.19	42.00
3	*5240.00	100.14 PK			1.00 V	228	57.78	42.36
4	*5240.00	86.84 AV			1.00 V	228	44.48	42.36
5	5350.00	47.85 PK	74.00	-26.15	1.00 V	228	5.04	42.81
6	5350.00	35.73 AV	54.00	-18.27	1.00 V	228	-7.08	42.81
7	#10480.00	52.14 PK	68.20	-16.06	1.00 V	360	3.95	48.19
8	15720.00	61.44 PK	74.00	-12.56	1.00 V	0	7.39	54.05
9	15720.00	46.77 AV	54.00	-7.23	1.00 V	0	-7.28	54.05

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	67.57 PK	74.00	-6.43	1.38 H	96	25.57	42.00
2	5150.00	50.11 AV	54.00	-3.89	1.38 H	96	8.11	42.00
3	*5180.00	104.99 PK			1.38 H	96	62.87	42.12
4	*5180.00	91.42 AV			1.38 H	96	49.30	42.12
5	#10360.00	52.46 PK	68.20	-15.74	1.00 H	0	4.42	48.04
6	15540.00	62.58 PK	74.00	-11.42	1.00 H	360	8.89	53.69
7	15540.00	47.83 AV	54.00	-6.17	1.00 H	360	-5.86	53.69
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.25 PK	74.00	-9.75	1.00 V	266	22.25	42.00
2	5150.00	48.37 AV	54.00	-5.63	1.00 V	266	6.37	42.00
3	*5180.00	100.68 PK			1.00 V	266	58.56	42.12
4	*5180.00	86.41 AV			1.00 V	266	44.29	42.12
5	#10360.00	51.38 PK	68.20	-16.82	1.00 V	360	3.34	48.04
6	15540.00	61.34 PK	74.00	-12.66	1.00 V	0	7.65	53.69
7	15540.00	46.28 AV	54.00	-7.72	1.00 V	0	-7.41	53.69

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.50 PK	74.00	-13.50	1.21 H	91	18.50	42.00
2	5150.00	42.24 AV	54.00	-11.76	1.21 H	91	0.24	42.00
3	*5200.00	106.15 PK			1.21 H	91	63.95	42.20
4	*5200.00	92.94 AV			1.21 H	91	50.74	42.20
5	#10400.00	53.05 PK	68.20	-15.15	1.00 H	360	4.96	48.09
6	15600.00	63.25 PK	74.00	-10.75	1.00 H	0	9.44	53.81
7	15600.00	48.24 AV	54.00	-5.76	1.00 H	0	-5.57	53.81
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.53 PK	74.00	-16.47	1.00 V	217	15.53	42.00
2	5150.00	40.13 AV	54.00	-13.87	1.00 V	217	-1.87	42.00
3	*5200.00	102.35 PK			1.00 V	217	60.15	42.20
4	*5200.00	87.24 AV			1.00 V	217	45.04	42.20
5	#10400.00	52.10 PK	68.20	-16.10	1.00 V	0	4.01	48.09
6	15600.00	61.35 PK	74.00	-12.65	1.00 V	360	7.54	53.81
7	15600.00	46.87 AV	54.00	-7.13	1.00 V	360	-6.94	53.81

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	46.58 PK	74.00	-27.42	1.40 H	91	4.58	42.00
2	5150.00	34.69 AV	54.00	-19.31	1.40 H	91	-7.31	42.00
3	*5240.00	104.54 PK			1.40 H	91	62.18	42.36
4	*5240.00	91.39 AV			1.40 H	91	49.03	42.36
5	5350.00	49.64 PK	74.00	-24.36	1.40 H	91	6.83	42.81
6	5350.00	36.84 AV	54.00	-17.16	1.40 H	91	-5.97	42.81
7	#10480.00	52.43 PK	68.20	-15.77	1.00 H	0	4.24	48.19
8	15720.00	62.46 PK	74.00	-11.54	1.00 H	360	8.41	54.05
9	15720.00	48.24 AV	54.00	-5.76	1.00 H	360	-5.81	54.05
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	47.58 PK	74.00	-26.42	1.00 V	304	5.58	42.00
2	5150.00	34.21 AV	54.00	-19.79	1.00 V	304	-7.79	42.00
3	*5240.00	100.38 PK			1.00 V	304	58.02	42.36
4	*5240.00	86.24 AV			1.00 V	304	43.88	42.36
5	5350.00	48.27 PK	74.00	-25.73	1.00 V	304	5.46	42.81
6	5350.00	35.61 AV	54.00	-18.39	1.00 V	304	-7.20	42.81
7	#10480.00	51.47 PK	68.20	-16.73	1.00 V	360	3.28	48.19
8	15720.00	61.37 PK	74.00	-12.63	1.00 V	0	7.32	54.05
9	15720.00	46.53 AV	54.00	-7.47	1.00 V	0	-7.52	54.05

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.72 PK	74.00	-7.28	1.94 H	92	24.72	42.00
2	5150.00	49.36 AV	54.00	-4.64	1.94 H	92	7.36	42.00
3	*5190.00	99.66 PK			1.94 H	92	57.50	42.16
4	*5190.00	84.11 AV			1.94 H	92	41.95	42.16
5	#10380.00	52.48 PK	68.20	-15.72	1.00 H	0	4.42	48.06
6	15570.00	62.48 PK	74.00	-11.52	1.00 H	360	8.73	53.75
7	15570.00	47.55 AV	54.00	-6.45	1.00 H	360	-6.20	53.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.46 PK	74.00	-11.54	1.27 V	267	20.46	42.00
2	5150.00	47.34 AV	54.00	-6.66	1.27 V	267	5.34	42.00
3	*5190.00	95.68 PK			1.27 V	267	53.52	42.16
4	*5190.00	80.46 AV			1.27 V	267	38.30	42.16
5	#10380.00	51.46 PK	68.20	-16.74	1.00 V	360	3.40	48.06
6	15570.00	61.34 PK	74.00	-12.66	1.00 V	0	7.59	53.75
7	15570.00	46.25 AV	54.00	-7.75	1.00 V	0	-7.50	53.75

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.05 PK	74.00	-13.95	1.20 H	91	18.05	42.00
2	5150.00	44.18 AV	54.00	-9.82	1.20 H	91	2.18	42.00
3	*5230.00	103.15 PK			1.20 H	91	60.83	42.32
4	*5230.00	87.33 AV			1.20 H	91	45.01	42.32
5	#10460.00	53.84 PK	68.20	-14.36	1.00 H	0	5.68	48.16
6	15690.00	63.45 PK	74.00	-10.55	1.00 H	360	9.46	53.99
7	15690.00	48.24 AV	54.00	-5.76	1.00 H	360	-5.75	53.99
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.64 PK	74.00	-16.36	1.00 V	274	15.64	42.00
2	5150.00	41.22 AV	54.00	-12.78	1.00 V	274	-0.78	42.00
3	*5230.00	99.65 PK			1.00 V	274	57.33	42.32
4	*5230.00	83.46 AV			1.00 V	274	41.14	42.32
5	#10460.00	51.76 PK	68.20	-16.44	1.00 V	360	3.60	48.16
6	15690.00	61.34 PK	74.00	-12.66	1.00 V	0	7.35	53.99
7	15690.00	47.54 AV	54.00	-6.46	1.00 V	0	-6.45	53.99

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.71 PK	74.00	-8.29	1.21 H	92	23.71	42.00
2	5150.00	49.76 AV	54.00	-4.24	1.21 H	92	7.76	42.00
3	*5210.00	99.23 PK			1.21 H	92	56.99	42.24
4	*5210.00	78.09 AV			1.21 H	92	35.85	42.24
5	#10420.00	53.26 PK	68.20	-14.94	1.00 H	0	5.15	48.11
6	15630.00	63.25 PK	74.00	-10.75	1.00 H	360	9.38	53.87
7	15630.00	47.84 AV	54.00	-6.16	1.00 H	360	-6.03	53.87
8	15630.00	46.11 AV	54.00	-7.89	2.10 H	257	23.36	22.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.35 PK	74.00	-12.65	1.00 V	168	19.35	42.00
2	5150.00	45.28 AV	54.00	-8.72	1.00 V	168	3.28	42.00
3	*5210.00	95.26 PK			1.00 V	168	53.02	42.24
4	*5210.00	75.63 AV			1.00 V	168	33.39	42.24
5	#10420.00	52.16 PK	68.20	-16.04	1.00 V	360	4.05	48.11
6	15630.00	61.45 PK	74.00	-12.55	1.00 V	0	7.58	53.87
7	15630.00	46.58 AV	54.00	-7.42	1.00 V	0	-7.29	53.87
8	15630.00	46.25 AV	54.00	-7.75	3.52 V	260	23.50	22.75

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Band 2 (5250-5350MHz):

ABOVE 1GHz DATA

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	46.22 PK	74.00	-27.78	1.18 H	91	4.22	42.00
2	5150.00	34.65 AV	54.00	-19.35	1.18 H	91	-7.35	42.00
3	*5260.00	104.76 PK			1.18 H	91	62.31	42.45
4	*5260.00	91.91 AV			1.18 H	91	49.46	42.45
5	5350.00	50.05 PK	74.00	-23.95	1.18 H	91	7.24	42.81
6	5350.00	37.50 AV	54.00	-16.50	1.18 H	91	-5.31	42.81
7	#10520.00	53.69 PK	68.20	-14.51	1.00 H	0	5.47	48.22
8	15780.00	62.35 PK	74.00	-11.65	1.00 H	360	8.19	54.16
9	15780.00	47.25 AV	54.00	-6.75	1.00 H	360	-6.91	54.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	45.26 PK	74.00	-28.74	1.00 V	248	3.26	42.00
2	5150.00	33.69 AV	54.00	-20.31	1.00 V	248	-8.31	42.00
3	*5260.00	100.28 PK			1.00 V	248	57.83	42.45
4	*5260.00	87.63 AV			1.00 V	248	45.18	42.45
5	5350.00	49.35 PK	74.00	-24.65	1.00 V	248	6.54	42.81
6	5350.00	37.15 AV	54.00	-16.85	1.00 V	248	-5.66	42.81
7	#10520.00	52.15 PK	68.20	-16.05	1.00 V	360	3.93	48.22
8	15780.00	61.34 PK	74.00	-12.66	1.00 V	0	7.18	54.16
9	15780.00	46.25 AV	54.00	-7.75	1.00 V	0	-7.91	54.16

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.65 PK			1.57 H	90	64.04	42.61
2	*5300.00	93.25 AV			1.57 H	90	50.64	42.61
3	5350.00	65.38 PK	74.00	-8.62	1.57 H	90	22.57	42.81
4	5350.00	49.37 AV	54.00	-4.63	1.57 H	90	6.56	42.81
5	10600.00	52.35 PK	74.00	-21.65	1.00 H	0	4.07	48.28
6	10600.00	41.25 AV	54.00	-12.75	1.00 H	0	-7.03	48.28
7	15900.00	62.53 PK	74.00	-11.47	1.00 H	360	8.13	54.40
8	15900.00	47.81 AV	54.00	-6.19	1.00 H	360	-6.59	54.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	102.48 PK			1.00 V	239	59.87	42.61
2	*5300.00	89.47 AV			1.00 V	239	46.86	42.61
3	5350.00	62.35 PK	74.00	-11.65	1.00 V	239	19.54	42.81
4	5350.00	47.93 AV	54.00	-6.07	1.00 V	239	5.12	42.81
5	10600.00	51.48 PK	74.00	-22.52	1.00 V	360	3.20	48.28
6	10600.00	41.32 AV	54.00	-12.68	1.00 V	360	-6.96	48.28
7	15900.00	61.87 PK	74.00	-12.13	1.00 V	0	7.47	54.40
8	15900.00	46.49 AV	54.00	-7.51	1.00 V	0	-7.91	54.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	106.61 PK			1.89 H	91	63.92	42.69
2	*5320.00	92.33 AV			1.89 H	91	49.64	42.69
3	5350.00	69.02 PK	74.00	-4.98	1.89 H	91	26.21	42.81
4	5350.00	47.97 AV	54.00	-6.03	1.89 H	91	5.16	42.81
5	10640.00	53.26 PK	74.00	-20.74	1.00 H	0	4.95	48.31
6	10640.00	41.85 AV	54.00	-12.15	1.00 H	0	-6.46	48.31
7	15960.00	62.58 PK	74.00	-11.42	1.00 H	360	8.06	54.52
8	15960.00	47.46 AV	54.00	-6.54	1.00 H	360	-7.06	54.52
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	103.28 PK			1.00 V	285	60.59	42.69
2	*5320.00	88.34 AV			1.00 V	285	45.65	42.69
3	5350.00	66.25 PK	74.00	-7.75	1.00 V	285	23.44	42.81
4	5350.00	44.28 AV	54.00	-9.72	1.00 V	285	1.47	42.81
5	10640.00	52.46 PK	74.00	-21.54	1.00 V	360	4.15	48.31
6	10640.00	40.87 AV	54.00	-13.13	1.00 V	360	-7.44	48.31
7	15960.00	61.87 PK	74.00	-12.13	1.00 V	0	7.35	54.52
8	15960.00	46.38 AV	54.00	-7.62	1.00 V	0	-8.14	54.52

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	46.29 PK	74.00	-27.71	1.26 H	92	4.29	42.00
2	5150.00	35.26 AV	54.00	-18.74	1.26 H	92	-6.74	42.00
3	*5260.00	104.81 PK			1.26 H	92	62.36	42.45
4	*5260.00	91.62 AV			1.26 H	92	49.17	42.45
5	5350.00	51.43 PK	74.00	-22.57	1.26 H	92	8.62	42.81
6	5350.00	37.94 AV	54.00	-16.06	1.26 H	92	-4.87	42.81
7	#10520.00	52.18 PK	68.20	-16.02	1.00 H	0	3.96	48.22
8	15780.00	62.14 PK	74.00	-11.86	1.00 H	360	7.98	54.16
9	15780.00	47.35 AV	54.00	-6.65	1.00 H	360	-6.81	54.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	45.28 PK	74.00	-28.72	1.00 V	268	3.28	42.00
2	5150.00	34.68 AV	54.00	-19.32	1.00 V	268	-7.32	42.00
3	*5260.00	100.37 PK			1.00 V	268	57.92	42.45
4	*5260.00	86.57 AV			1.00 V	268	44.12	42.45
5	5350.00	50.34 PK	74.00	-23.66	1.00 V	268	7.53	42.81
6	5350.00	38.46 AV	54.00	-15.54	1.00 V	268	-4.35	42.81
7	#10520.00	51.76 PK	68.20	-16.44	1.00 V	360	3.54	48.22
8	15780.00	61.48 PK	74.00	-12.52	1.00 V	0	7.32	54.16
9	15780.00	46.28 AV	54.00	-7.72	1.00 V	0	-7.88	54.16

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.68 PK			1.55 H	89	64.07	42.61
2	*5300.00	92.88 AV			1.55 H	89	50.27	42.61
3	5350.00	60.88 PK	74.00	-13.12	1.55 H	89	18.07	42.81
4	5350.00	44.82 AV	54.00	-9.18	1.55 H	89	2.01	42.81
5	10600.00	52.16 PK	74.00	-21.84	1.00 H	0	3.88	48.28
6	10600.00	41.36 AV	54.00	-12.64	1.00 H	0	-6.92	48.28
7	15900.00	62.86 PK	74.00	-11.14	1.00 H	360	8.46	54.40
8	15900.00	47.63 AV	54.00	-6.37	1.00 H	360	-6.77	54.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	101.35 PK			1.00 V	259	58.74	42.61
2	*5300.00	87.64 AV			1.00 V	259	45.03	42.61
3	5350.00	58.34 PK	74.00	-15.66	1.00 V	259	15.53	42.81
4	5350.00	42.16 AV	54.00	-11.84	1.00 V	259	-0.65	42.81
5	10600.00	51.67 PK	74.00	-22.33	1.00 V	360	3.39	48.28
6	10600.00	40.68 AV	54.00	-13.32	1.00 V	360	-7.60	48.28
7	15900.00	61.76 PK	74.00	-12.24	1.00 V	0	7.36	54.40
8	15900.00	46.83 AV	54.00	-7.17	1.00 V	0	-7.57	54.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	105.55 PK			2.04 H	96	62.86	42.69
2	*5320.00	91.93 AV			2.04 H	96	49.24	42.69
3	**5350.00**	**70.49 PK**	**74.00**	**-3.51**	**2.04 H**	**96**	**27.68**	**42.81**
4	5350.00	49.69 AV	54.00	-4.31	2.04 H	96	6.88	42.81
5	10640.00	52.84 PK	74.00	-21.16	1.00 H	0	4.53	48.31
6	10640.00	41.34 AV	54.00	-12.66	1.00 H	0	-6.97	48.31
7	15960.00	62.38 PK	74.00	-11.62	1.00 H	360	7.86	54.52
8	15960.00	47.55 AV	54.00	-6.45	1.00 H	360	-6.97	54.52
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	101.29 PK			1.00 V	267	58.60	42.69
2	*5320.00	87.43 AV			1.00 V	267	44.74	42.69
3	5350.00	67.25 PK	74.00	-6.75	1.00 V	267	24.44	42.81
4	5350.00	47.26 AV	54.00	-6.74	1.00 V	267	4.45	42.81
5	10640.00	51.74 PK	74.00	-22.26	1.00 V	360	3.43	48.31
6	10640.00	40.67 AV	54.00	-13.33	1.00 V	360	-7.64	48.31
7	15960.00	61.74 PK	74.00	-12.26	1.00 V	0	7.22	54.52
8	15960.00	47.25 AV	54.00	-6.75	1.00 V	0	-7.27	54.52

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	103.92 PK			1.34 H	92	61.43	42.49
2	*5270.00	87.57 AV			1.34 H	92	45.08	42.49
3	5350.00	60.93 PK	74.00	-13.07	1.34 H	92	18.12	42.81
4	5350.00	46.87 AV	54.00	-7.13	1.34 H	92	4.06	42.81
5	#10540.00	52.68 PK	68.20	-15.52	1.00 H	0	4.44	48.24
6	15810.00	62.64 PK	74.00	-11.36	1.00 H	360	8.42	54.22
7	15810.00	47.84 AV	54.00	-6.16	1.00 H	360	-6.38	54.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	98.36 PK			1.00 V	253	55.87	42.49
2	*5270.00	82.48 AV			1.00 V	253	39.99	42.49
3	5350.00	57.40 PK	74.00	-16.60	1.00 V	253	14.59	42.81
4	5350.00	42.59 AV	54.00	-11.41	1.00 V	253	-0.22	42.81
5	#10540.00	51.79 PK	68.20	-16.41	1.00 V	360	3.55	48.24
6	15810.00	61.72 PK	74.00	-12.28	1.00 V	0	7.50	54.22
7	15810.00	46.28 AV	54.00	-7.72	1.00 V	0	-7.94	54.22
8	15900.00	46.83 AV	54.00	-7.17	1.00 V	0	-7.57	54.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	100.35 PK			1.36 H	93	57.70	42.65
2	*5310.00	84.46 AV			1.36 H	93	41.81	42.65
3	5350.00	64.44 PK	74.00	-9.56	1.36 H	94	21.63	42.81
4	5350.00	48.66 AV	54.00	-5.34	1.36 H	94	5.85	42.81
5	10620.00	52.67 PK	74.00	-21.33	1.00 H	0	4.38	48.29
6	10620.00	41.37 AV	54.00	-12.63	1.00 H	0	-6.92	48.29
7	15930.00	62.46 PK	74.00	-11.54	1.00 H	360	8.00	54.46
8	15930.00	47.54 AV	54.00	-6.46	1.00 H	360	-6.92	54.46
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	96.38 PK			1.00 V	264	53.73	42.65
2	*5310.00	81.47 AV			1.00 V	264	38.82	42.65
3	5350.00	61.24 PK	74.00	-12.76	1.00 V	264	18.43	42.81
4	5350.00	44.28 AV	54.00	-9.72	1.00 V	264	1.47	42.81
5	10620.00	51.48 PK	74.00	-22.52	1.00 V	360	3.19	48.29
6	10620.00	41.28 AV	54.00	-12.72	1.00 V	360	-7.01	48.29
7	15930.00	61.38 PK	74.00	-12.62	1.00 V	0	6.92	54.46
8	15930.00	46.85 AV	54.00	-7.15	1.00 V	0	-7.61	54.46

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": 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								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	99.62 PK			1.00 H	92	93.31	6.31
2	*5290.00	78.01 AV			1.00 H	92	71.70	6.31
3	5350.00	66.33 PK	74.00	-7.67	1.00 H	92	59.80	6.53
4	5350.00	50.07 AV	54.00	-3.93	1.00 H	92	43.54	6.53
5	#10580.00	53.62 PK	68.20	-14.58	1.00 H	0	39.14	14.48
6	15870.00	63.28 PK	74.00	-10.72	1.00 H	360	41.62	21.66
7	15870.00	48.62 AV	54.00	-5.38	1.00 H	360	26.96	21.66
8	15870.00	47.88 AV	54.00	-6.12	3.20 H	55	24.94	22.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	95.62 PK			1.00 V	266	89.31	6.31
2	*5290.00	75.41 AV			1.00 V	266	69.10	6.31
3	5350.00	62.41 PK	74.00	-11.59	1.00 V	266	55.88	6.53
4	5350.00	47.54 AV	54.00	-6.46	1.00 V	266	41.01	6.53
5	#10580.00	52.64 PK	68.20	-15.56	1.00 V	360	38.16	14.48
6	15870.00	62.14 PK	74.00	-11.86	1.00 V	0	40.48	21.66
7	15870.00	47.58 AV	54.00	-6.42	1.00 V	0	25.92	21.66
8	15870.00	46.25 AV	54.00	-7.75	3.17 V	250	23.31	22.94

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Band 3 (5470-5725MHz):

ABOVE 1GHz DATA

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**#5470.00**	**68.00 PK**	**68.20**	**-0.20**	**1.35 H**	**107**	**24.70**	**43.30**
2	*5500.00	104.45 PK			1.35 H	107	61.03	43.42
3	*5500.00	91.13 AV			1.35 H	107	47.71	43.42
4	11000.00	53.25 PK	74.00	-20.75	1.00 H	0	4.70	48.55
5	11000.00	42.48 AV	54.00	-11.52	1.00 H	0	-6.07	48.55
6	#16500.00	62.68 PK	68.20	-5.52	1.00 H	360	7.52	55.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	65.69 PK	68.20	-2.51	1.00 V	263	22.39	43.30
2	*5500.00	100.38 PK			1.00 V	263	56.96	43.42
3	*5500.00	88.47 AV			1.00 V	263	45.05	43.42
4	11000.00	52.18 PK	74.00	-21.82	1.00 V	360	3.63	48.55
5	11000.00	41.86 AV	54.00	-12.14	1.00 V	360	-6.69	48.55
6	#16500.00	61.74 PK	68.20	-6.46	1.00 V	0	6.58	55.16

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	48.98 PK	68.20	-19.22	1.78 H	83	5.68	43.30
2	*5580.00	105.78 PK			1.78 H	83	62.39	43.39
3	*5580.00	92.26 AV			1.78 H	83	48.87	43.39
4	11160.00	53.26 PK	74.00	-20.74	1.00 H	0	4.53	48.73
5	11160.00	42.87 AV	54.00	-11.13	1.00 H	0	-5.86	48.73
6	#16740.00	63.69 PK	68.20	-4.51	1.00 H	360	8.57	55.12
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	48.37 PK	68.20	-19.83	1.00 V	258	5.07	43.30
2	*5580.00	101.34 PK			1.00 V	258	57.95	43.39
3	*5580.00	89.30 AV			1.00 V	258	45.91	43.39
4	11160.00	52.48 PK	74.00	-21.52	1.00 V	360	3.75	48.73
5	11160.00	41.37 AV	54.00	-12.63	1.00 V	360	-7.36	48.73
6	#16740.00	62.48 PK	68.20	-5.72	1.00 V	0	7.36	55.12

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	99.86 PK			1.30 H	182	56.51	43.35
2	*5700.00	86.54 AV			1.30 H	182	43.19	43.35
3	#5725.00	64.34 PK	68.20	-3.86	1.30 H	102	21.00	43.34
4	11400.00	53.25 PK	74.00	-20.75	1.00 H	0	4.24	49.01
5	11400.00	42.36 AV	54.00	-11.64	1.00 H	0	-6.65	49.01
6	#17100.00	62.67 PK	68.20	-5.53	1.00 H	360	7.62	55.05
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	96.57 PK			1.00 V	256	53.22	43.35
2	*5700.00	83.15 AV			1.00 V	256	39.80	43.35
3	#5725.00	62.56 PK	68.20	-5.64	1.00 V	256	19.22	43.34
4	11400.00	52.14 PK	74.00	-21.86	1.00 V	360	3.13	49.01
5	11400.00	41.74 AV	54.00	-12.26	1.00 V	360	-7.27	49.01
6	#17100.00	61.47 PK	68.20	-6.73	1.00 V	0	6.42	55.05

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the 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								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	63.58 PK	68.20	-4.62	1.00 H	106	20.28	43.30
2	*5500.00	101.45 PK			1.00 H	106	58.03	43.42
3	*5500.00	87.53 AV			1.00 H	106	44.11	43.42
4	11000.00	53.64 PK	74.00	-20.36	1.00 H	0	5.09	48.55
5	11000.00	42.86 AV	54.00	-11.14	1.00 H	0	-5.69	48.55
6	#16500.00	63.32 PK	68.20	-4.88	1.00 H	360	8.16	55.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	60.25 PK	68.20	-7.95	1.00 V	263	16.95	43.30
2	*5500.00	97.54 PK			1.00 V	263	54.12	43.42
3	*5500.00	84.21 AV			1.00 V	263	40.79	43.42
4	11000.00	52.98 PK	74.00	-21.02	1.00 V	360	4.43	48.55
5	11000.00	41.87 AV	54.00	-12.13	1.00 V	360	-6.68	48.55
6	#16500.00	62.34 PK	68.20	-5.86	1.00 V	0	7.18	55.16

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	50.27 PK	68.20	-17.93	1.65 H	82	6.97	43.30
2	*5580.00	105.56 PK			1.65 H	82	62.17	43.39
3	*5580.00	92.48 AV			1.65 H	82	49.09	43.39
4	11160.00	53.26 PK	74.00	-20.74	1.00 H	0	4.53	48.73
5	11160.00	42.81 AV	54.00	-11.19	1.00 H	0	-5.92	48.73
6	#16740.00	62.49 PK	68.20	-5.71	1.00 H	360	7.37	55.12
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	51.34 PK	68.20	-16.86	1.00 V	246	8.04	43.30
2	*5580.00	101.48 PK			1.00 V	246	58.09	43.39
3	*5580.00	88.67 AV			1.00 V	246	45.28	43.39
4	11160.00	52.16 PK	74.00	-21.84	1.00 V	360	3.43	48.73
5	11160.00	41.67 AV	54.00	-12.33	1.00 V	360	-7.06	48.73
6	#16740.00	61.80 PK	68.20	-6.40	1.00 V	0	6.68	55.12

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	100.22 PK			1.30 H	101	56.87	43.35
2	*5700.00	87.22 AV			1.30 H	101	43.87	43.35
3	#5725.00	64.73 PK	68.20	-3.47	1.30 H	101	21.39	43.34
4	11400.00	52.68 PK	74.00	-21.32	1.00 H	0	3.67	49.01
5	11400.00	41.67 AV	54.00	-12.33	1.00 H	0	-7.34	49.01
6	#17100.00	62.47 PK	68.20	-5.73	1.00 H	360	7.42	55.05
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	96.57 PK			1.00 V	269	53.22	43.35
2	*5700.00	83.68 AV			1.00 V	269	40.33	43.35
3	#5725.00	61.58 PK	68.20	-6.62	1.00 V	269	18.24	43.34
4	11400.00	51.84 PK	74.00	-22.16	1.00 V	360	2.83	49.01
5	11400.00	41.37 AV	54.00	-12.63	1.00 V	360	-7.64	49.01
6	#17100.00	61.87 PK	68.20	-6.33	1.00 V	0	6.82	55.05

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the 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								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	64.76 PK	68.20	-3.44	1.00 H	107	21.46	43.30
2	*5510.00	96.91 PK			1.00 H	107	53.49	43.42
3	*5510.00	81.26 AV			1.00 H	107	37.84	43.42
4	11020.00	52.68 PK	74.00	-21.32	1.00 H	0	4.11	48.57
5	11020.00	42.18 AV	54.00	-11.82	1.00 H	0	-6.39	48.57
6	#16530.00	62.40 PK	68.20	-5.80	1.00 H	360	7.25	55.15
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	61.73 PK	68.20	-6.47	1.00 V	259	18.43	43.30
2	*5510.00	93.26 PK			1.00 V	259	49.84	43.42
3	*5510.00	78.64 AV			1.00 V	259	35.22	43.42
4	11020.00	51.67 PK	74.00	-22.33	1.00 V	360	3.10	48.57
5	11020.00	41.37 AV	54.00	-12.63	1.00 V	360	-7.20	48.57
6	#16530.00	61.37 PK	68.20	-6.83	1.00 V	0	6.22	55.15

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.94 PK	68.20	-9.26	1.80 H	83	15.64	43.30
2	*5550.00	102.47 PK			1.80 H	83	59.07	43.40
3	*5550.00	87.06 AV			1.80 H	83	43.66	43.40
4	11100.00	53.26 PK	74.00	-20.74	1.00 H	0	4.60	48.66
5	11100.00	42.68 AV	54.00	-11.32	1.00 H	0	-5.98	48.66
6	#16650.00	62.89 PK	68.20	-5.31	1.00 H	360	7.76	55.13
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.32 PK	68.20	-11.88	1.00 V	253	13.02	43.30
2	*5550.00	98.35 PK			1.00 V	253	54.95	43.40
3	*5550.00	84.17 AV			1.00 V	253	40.77	43.40
4	11100.00	52.46 PK	74.00	-21.54	1.00 V	360	3.80	48.66
5	11100.00	41.37 AV	54.00	-12.63	1.00 V	360	-7.29	48.66
6	#16650.00	61.48 PK	68.20	-6.72	1.00 V	0	6.35	55.13

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	102.04 PK			1.32 H	100	58.68	43.36
2	*5670.00	85.96 AV			1.32 H	100	42.60	43.36
3	#5725.00	63.03 PK	68.20	-5.17	1.37 H	100	19.69	43.34
4	11340.00	53.68 PK	74.00	-20.32	1.00 H	0	4.74	48.94
5	11340.00	42.68 AV	54.00	-11.32	1.00 H	0	-6.26	48.94
6	#17010.00	63.58 PK	68.20	-4.62	1.00 H	360	8.51	55.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	98.74 PK			1.00 V	263	55.38	43.36
2	*5670.00	81.37 AV			1.00 V	263	38.01	43.36
3	#5725.00	60.38 PK	68.20	-7.82	1.00 V	263	17.04	43.34
4	11340.00	52.16 PK	74.00	-21.84	1.00 V	360	3.22	48.94
5	11340.00	41.74 AV	54.00	-12.26	1.00 V	360	-7.20	48.94
6	#17010.00	61.96 PK	68.20	-6.24	1.00 V	0	6.89	55.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the 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								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5470.00	65.03 PK	68.20	-3.17	1.00 H	107	21.73	43.30
2	*5530.00	96.00 PK			1.00 H	107	52.59	43.41
3	*5530.00	76.02 AV			1.00 H	107	32.61	43.41
4	11060.00	53.68 PK	74.00	-20.32	1.00 H	0	5.06	48.62
5	11060.00	42.84 AV	54.00	-11.16	1.00 H	0	-5.78	48.62
6	#16590.00	63.18 PK	68.20	-5.02	1.00 H	360	8.04	55.14
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5470.00	61.38 PK	68.20	-6.82	1.00 V	265	18.08	43.30
2	*5530.00	93.68 PK			1.00 V	265	50.27	43.41
3	*5530.00	72.84 AV			1.00 V	265	29.43	43.41
4	11060.00	52.35 PK	74.00	-21.65	1.00 V	360	3.73	48.62
5	11060.00	41.37 AV	54.00	-12.63	1.00 V	360	-7.25	48.62
6	#16590.00	62.85 PK	68.20	-5.35	1.00 V	0	7.71	55.14

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	100.14 PK			1.78 H	80	56.76	43.38
2	*5610.00	80.15 AV			1.78 H	80	36.77	43.38
3	#5725.00	65.70 PK	68.20	-2.50	1.78 H	80	22.36	43.34
4	11220.00	53.68 PK	74.00	-20.32	1.00 H	0	4.88	48.80
5	11220.00	42.68 AV	54.00	-11.32	1.00 H	0	-6.12	48.80
6	#16830.00	63.47 PK	68.20	-4.73	1.00 H	360	8.37	55.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	96.35 PK			1.00 V	253	52.97	43.38
2	*5610.00	76.15 AV			1.00 V	253	32.77	43.38
3	#5725.00	62.48 PK	68.20	-5.72	1.00 V	253	19.14	43.34
4	11220.00	52.61 PK	74.00	-21.39	1.00 V	360	3.81	48.80
5	11220.00	41.95 AV	54.00	-12.05	1.00 V	360	-6.85	48.80
6	#16830.00	62.10 PK	68.20	-6.10	1.00 V	0	7.00	55.10

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5705.65	69.52 PK	106.78	-37.26	1.44 H	85	62.52	7.00
2	#5722.48	78.83 PK	116.45	-37.62	1.44 H	85	71.84	6.99
3	#5725.00	83.91 PK	122.20	-38.29	1.44 H	85	76.92	6.99
4	*5745.00	105.23 PK			1.43 H	85	61.89	43.34
5	*5745.00	92.35 AV			1.43 H	85	49.01	43.34
6	11490.00	53.48 PK	74.00	-20.52	1.00 H	0	4.37	49.11
7	11490.00	43.28 AV	54.00	-10.72	1.00 H	0	-5.83	49.11
8	#17235.00	63.82 PK	68.20	-4.38	1.00 H	360	8.80	55.02
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5716.59	72.42 PK	109.85	-37.43	1.00 V	140	65.42	7.00
2	#5720.79	73.76 PK	112.61	-38.85	1.00 V	140	66.77	6.99
3	#5725.00	79.11 PK	122.20	-43.09	1.00 V	140	72.12	6.99
4	*5745.00	102.54 PK			1.00 V	139	59.20	43.34
5	*5745.00	89.22 AV			1.00 V	139	45.88	43.34
6	11490.00	52.18 PK	74.00	-21.82	1.00 V	360	3.07	49.11
7	11490.00	42.87 AV	54.00	-11.13	1.00 V	360	-6.24	49.11
8	#17235.00	62.16 PK	68.20	-6.04	1.00 V	0	7.14	55.02

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.38	55.61 PK	109.51	-53.90	1.00 H	0	48.61	7.00
2	#5725.00	56.71 PK	122.20	-65.49	1.60 H	89	49.72	6.99
3	*5785.00	103.36 PK			1.60 H	89	60.04	43.32
4	*5785.00	90.09 AV			1.60 H	89	46.77	43.32
5	#5850.84	55.14 PK	120.28	-65.14	1.00 H	0	48.20	6.94
6	11570.00	53.68 PK	74.00	-20.32	1.00 H	360	4.36	49.32
7	11570.00	43.87 AV	54.00	-10.13	1.00 H	360	-5.45	49.32
8	#17355.00	63.67 PK	68.20	-4.53	1.00 H	0	8.67	55.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5705.29	50.84 PK	106.68	-55.84	1.00 V	0	43.84	7.00
2	#5725.00	53.65 PK	122.20	-68.55	1.06 V	141	46.66	6.99
3	*5785.00	101.65 PK			1.06 V	140	58.33	43.32
4	*5785.00	88.44 AV			1.06 V	140	45.12	43.32
5	#5851.68	53.84 PK	118.36	-64.52	1.00 V	0	46.90	6.94
6	11570.00	53.64 PK	74.00	-20.36	1.00 V	0	4.32	49.32
7	11570.00	42.38 AV	54.00	-11.62	1.00 V	0	-6.94	49.32
8	#17355.00	63.28 PK	68.20	-4.92	1.00 V	360	8.28	55.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	101.02 PK			1.63 H	99	57.71	43.31
2	*5825.00	88.19 AV			1.63 H	99	44.88	43.31
3	#5850.00	71.24 PK	122.20	-50.96	1.63 H	99	64.30	6.94
4	#5853.37	67.60 PK	114.53	-46.93	1.63 H	99	60.66	6.94
5	#5858.41	66.01 PK	109.84	-43.83	1.63 H	99	59.07	6.94
6	11650.00	53.68 PK	74.00	-20.32	1.00 H	0	4.13	49.55
7	11650.00	43.58 AV	54.00	-10.42	1.00 H	0	-5.97	49.55
8	#17475.00	63.52 PK	68.20	-4.68	1.00 H	360	8.54	54.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	100.43 PK			1.00 V	165	57.12	43.31
2	*5825.00	87.52 AV			1.00 V	165	44.21	43.31
3	#5850.00	68.37 PK	122.20	-53.83	1.00 V	166	61.43	6.94
4	#5856.73	65.04 PK	110.31	-45.27	1.00 V	166	58.10	6.94
5	#5863.46	60.62 PK	108.43	-47.81	1.00 V	166	53.68	6.94
6	11650.00	52.68 PK	74.00	-21.32	1.00 V	360	3.13	49.55
7	11650.00	42.41 AV	54.00	-11.59	1.00 V	360	-7.14	49.55
8	#17475.00	62.59 PK	68.20	-5.61	1.00 V	0	7.61	54.98

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5719.95	79.27 PK	110.79	-31.52	1.44 H	85	72.27	7.00
2	#5722.48	81.25 PK	116.45	-35.20	1.44 H	85	74.26	6.99
3	#5725.00	84.23 PK	122.20	-37.97	1.44 H	85	77.24	6.99
4	*5745.00	105.33 PK			1.44 H	104	61.99	43.34
5	*5745.00	91.86 AV			1.44 H	104	48.52	43.34
6	11490.00	53.26 PK	74.00	-20.74	1.00 H	360	4.15	49.11
7	11490.00	43.52 AV	54.00	-10.48	1.00 H	360	-5.59	49.11
8	#17235.00	63.95 PK	68.20	-4.25	1.00 H	0	8.93	55.02
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5719.11	74.27 PK	110.55	-36.28	1.00 V	138	67.27	7.00
2	#5721.63	78.91 PK	114.53	-35.62	1.00 V	138	71.92	6.99
3	#5725.00	81.51 PK	122.20	-40.69	1.00 V	138	74.52	6.99
4	*5745.00	103.34 PK			1.00 V	138	60.00	43.34
5	*5745.00	89.14 AV			1.00 V	138	45.80	43.34
6	11490.00	53.62 PK	74.00	-20.38	1.00 V	0	4.51	49.11
7	11490.00	42.95 AV	54.00	-11.05	1.00 V	0	-6.16	49.11
8	#17235.00	62.57 PK	68.20	-5.63	1.00 V	360	7.55	55.02

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5718.75	55.19 PK	110.45	-55.26	1.61 H	88	48.19	7.00
2	#5725.00	52.47 PK	122.20	-69.73	1.61 H	88	45.48	6.99
3	*5785.00	103.25 PK			1.60 H	88	59.93	43.32
4	*5785.00	89.59 AV			1.60 H	88	46.27	43.32
5	#5850.00	59.12 PK	122.20	-63.08	1.61 H	88	52.18	6.94
6	11570.00	53.84 PK	74.00	-20.16	1.00 H	0	4.52	49.32
7	11570.00	43.62 AV	54.00	-10.38	1.00 H	0	-5.70	49.32
8	#17355.00	63.86 PK	68.20	-4.34	1.00 H	360	8.86	55.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5716.59	53.97 PK	109.85	-55.88	1.00 V	138	46.97	7.00
2	#5722.48	55.20 PK	116.45	-61.25	1.00 V	138	48.21	6.99
3	*5785.00	100.91 PK			1.00 V	137	57.59	43.32
4	*5785.00	87.38 AV			1.00 V	137	44.06	43.32
5	#5850.00	52.53 PK	122.20	-69.67	1.00 V	138	45.59	6.94
6	11570.00	52.68 PK	74.00	-21.32	1.00 V	360	3.36	49.32
7	11570.00	42.19 AV	54.00	-11.81	1.00 V	360	-7.13	49.32
8	#17355.00	62.30 PK	68.20	-5.90	1.00 V	0	7.30	55.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	101.45 PK			4.00 H	99	58.14	43.31
2	*5825.00	87.72 AV			4.00 H	99	44.41	43.31
3	#5850.00	70.61 PK	122.20	-51.59	1.63 H	100	63.67	6.94
4	#5851.68	67.52 PK	118.36	-50.84	1.63 H	100	60.58	6.94
5	#5855.05	64.84 PK	110.79	-45.95	1.63 H	100	57.90	6.94
6	11650.00	54.26 PK	74.00	-19.74	1.00 H	0	4.71	49.55
7	11650.00	44.29 AV	54.00	-9.71	1.00 H	0	-5.26	49.55
8	#17475.00	63.20 PK	68.20	-5.00	1.00 H	360	8.22	54.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	100.24 PK			1.00 V	167	56.93	43.31
2	*5825.00	87.11 AV			1.00 V	167	43.80	43.31
3	#5850.00	69.50 PK	122.20	-52.70	1.00 V	168	62.56	6.94
4	#5852.52	67.32 PK	116.44	-49.12	1.00 V	168	60.38	6.94
5	#5854.21	66.35 PK	112.61	-46.26	1.00 V	168	59.41	6.94
6	11650.00	53.84 PK	74.00	-20.16	1.00 V	360	4.29	49.55
7	11650.00	43.08 AV	54.00	-10.92	1.00 V	360	-6.47	49.55
8	#17475.00	63.82 PK	68.20	-4.38	1.00 V	0	8.84	54.98

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5719.11	85.62 PK	110.55	-24.93	2.08 H	89	78.62	7.00
2	#5722.48	86.92 PK	116.45	-29.53	2.08 H	89	79.93	6.99
3	#5725.00	85.49 PK	122.20	-36.71	2.08 H	89	78.50	6.99
4	*5755.00	101.09 PK			2.08 H	99	57.76	43.33
5	*5755.00	85.76 AV			2.08 H	99	42.43	43.33
6	11510.00	53.68 PK	74.00	-20.32	1.00 H	0	4.53	49.15
7	11510.00	43.26 AV	54.00	-10.74	1.00 H	0	-5.89	49.15
8	#17265.00	63.46 PK	68.20	-4.74	1.00 H	360	8.44	55.02
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5716.59	83.85 PK	109.85	-26.00	1.00 V	139	76.85	7.00
2	#5721.63	84.70 PK	114.53	-29.83	1.00 V	139	77.71	6.99
3	#5725.00	83.50 PK	122.20	-38.70	1.00 V	139	76.51	6.99
4	*5755.00	99.43 PK			1.00 V	138	56.10	43.33
5	*5755.00	84.05 AV			1.00 V	138	40.72	43.33
6	11510.00	52.68 PK	74.00	-21.32	1.00 V	360	3.53	49.15
7	11510.00	42.87 AV	54.00	-11.13	1.00 V	360	-6.28	49.15
8	#17265.00	62.63 PK	68.20	-5.57	1.00 V	0	7.61	55.02

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	100.81 PK			1.60 H	88	57.49	43.32
2	*5795.00	84.63 AV			1.60 H	88	41.31	43.32
3	#5850.00	70.93 PK	122.20	-51.27	1.61 H	89	63.99	6.94
4	#5853.37	71.06 PK	114.53	-43.47	1.61 H	89	64.12	6.94
5	#5858.41	69.63 PK	109.84	-40.21	1.61 H	89	62.69	6.94
6	11650.00	54.26 PK	74.00	-19.74	1.00 H	360	4.71	49.55
7	11650.00	43.72 AV	54.00	-10.28	1.00 H	360	-5.83	49.55
8	**#17475.00**	**64.60 PK**	**68.20**	**-3.60**	**1.00 H**	**0**	**9.62**	**54.98**
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	98.89 PK			1.00 V	165	55.57	43.32
2	*5795.00	82.41 AV			1.00 V	165	39.09	43.32
3	#5850.00	68.70 PK	122.20	-53.50	1.00 V	166	61.76	6.94
4	#5853.37	68.55 PK	114.53	-45.98	1.00 V	166	61.61	6.94
5	#5856.73	68.20 PK	110.31	-42.11	1.00 V	166	61.26	6.94
6	11650.00	53.29 PK	74.00	-20.71	1.00 V	0	3.74	49.55
7	11650.00	43.87 AV	54.00	-10.13	1.00 V	0	-5.68	49.55
8	#17475.00	64.20 PK	68.20	-4.00	1.00 V	360	9.22	54.98

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11ac 80MHz

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	61.49 PK	68.20	-6.71	2.09 H	94	54.47	7.02
2	#5675.00	72.32 PK	86.74	-14.42	2.09 H	94	65.31	7.01
3	#5696.03	79.25 PK	102.28	-23.03	2.09 H	94	72.25	7.00
4	*5775.00	104.71 PK			2.08 H	93	61.38	43.33
5	*5775.00	84.49 AV			2.08 H	93	41.16	43.33
6	#5850.00	70.33 PK	122.20	-51.87	2.09 H	94	63.39	6.94
7	11550.00	54.29 PK	74.00	-19.71	1.00 H	0	5.02	49.27
8	11550.00	44.61 AV	54.00	-9.39	1.00 H	0	-4.66	49.27
9	#17325.00	64.50 PK	68.20	-3.70	1.00 H	360	9.49	55.01

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	56.96 PK	68.20	-11.24	1.00 V	143	49.94	7.02
2	#5696.03	74.51 PK	102.28	-27.77	1.00 V	143	67.51	7.00
3	#5725.00	76.58 PK	122.20	-45.62	1.00 V	143	69.59	6.99
4	#5772.00	101.82 PK			1.00 V	143	58.49	43.33
5	#5772.00	82.36 AV			1.00 V	143	39.03	43.33
6	#5850.00	68.18 PK	122.20	-54.02	1.00 V	143	61.24	6.94
7	11550.00	53.20 PK	74.00	-20.80	1.00 V	360	3.93	49.27
8	11550.00	43.82 AV	54.00	-10.18	1.00 V	360	-5.45	49.27
9	#17325.00	63.21 PK	68.20	-4.99	1.00 V	0	8.20	55.01

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 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

NOTES: 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.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Mar. 12,19	Mar. 11,20
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 12,19	Mar. 11,20
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Mar. 13,19	Mar. 12,20
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 17,19	Jan. 16,20
Test software	ADT	ADT_Cond_ V7.3.7	N/A	N/A	N/A

NOTES:

1. The test was performed in shielded room 553.
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.

3.2.3 TEST PROCEDURES

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

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

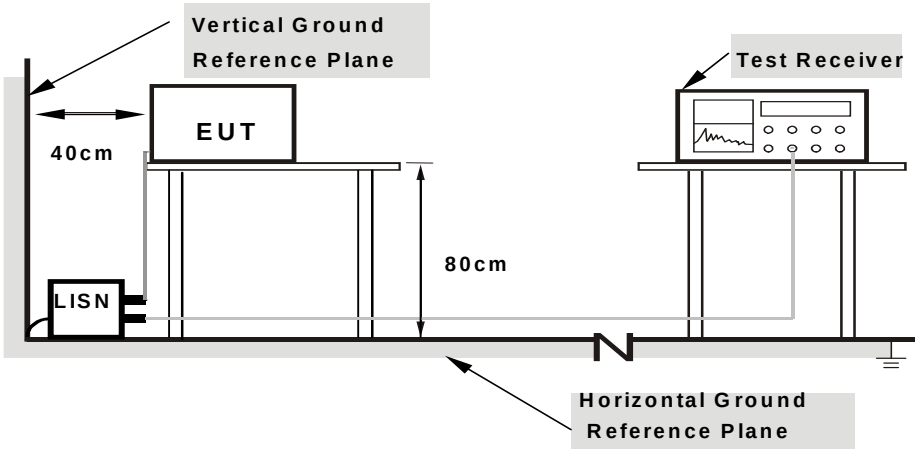
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



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

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

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7

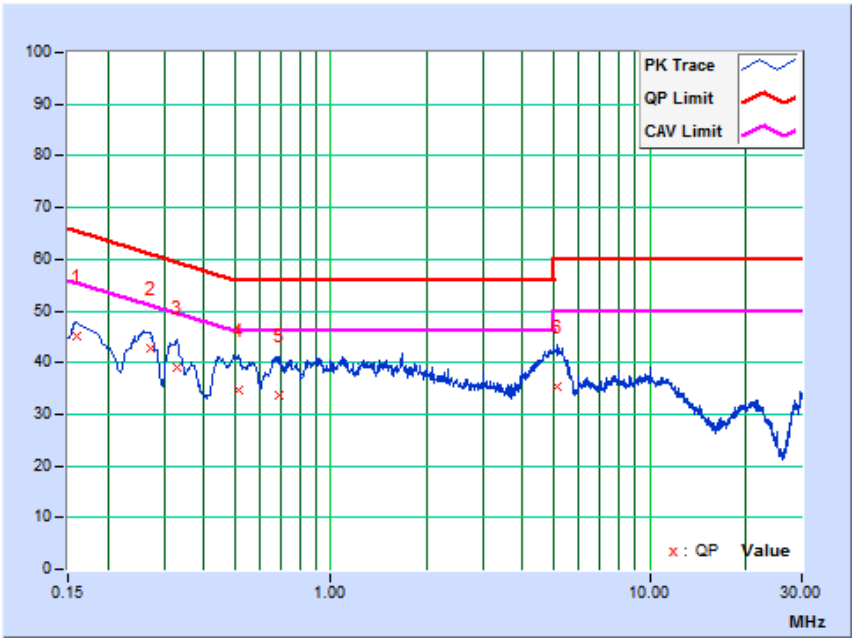
3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11a CH36

PHASE	Line	6dB BANDWIDTH	9kHz

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15924	9.78	35.34	22.44	45.12	32.22	65.50	55.50	-20.38	-23.28
2	0.27150	10.00	32.84	19.17	42.84	29.17	61.07	51.07	-18.23	-21.90
3	**0.33002**	**9.69**	**29.50**	**23.28**	**39.19**	**32.97**	**59.45**	**49.45**	**-20.26**	**-16.48**
4	0.51561	10.39	24.27	16.88	34.66	27.27	56.00	46.00	-21.34	-18.73
5	0.69225	9.89	23.65	17.60	33.54	27.49	56.00	46.00	-22.46	-18.51
6	5.15850	10.16	25.09	18.45	35.25	28.61	60.00	50.00	-24.75	-21.39

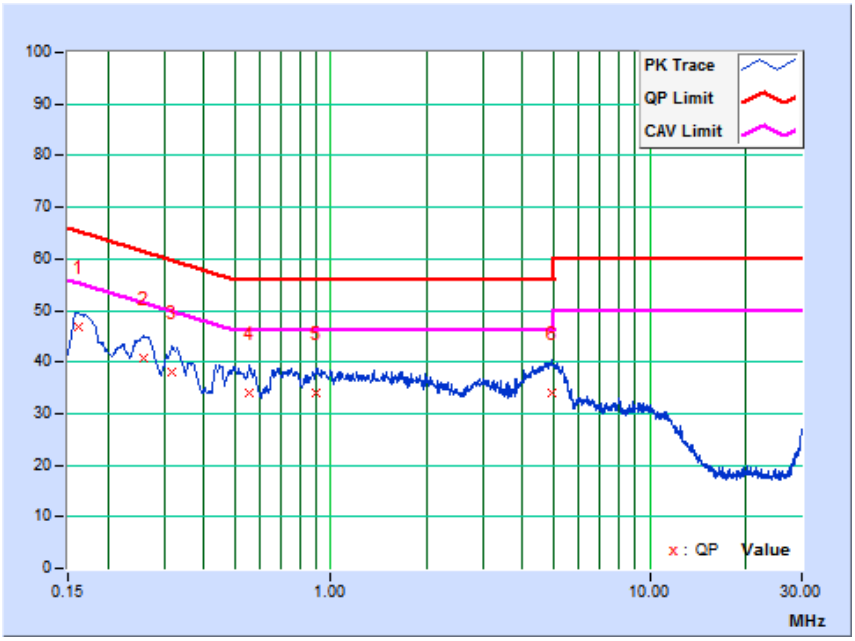
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading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



PHASE	Neutral	6dB BANDWIDTH	9kHz

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16125	10.04	36.87	24.02	46.91	34.06	65.40	55.40	-18.49	-21.34
2	0.25953	9.80	30.81	23.93	40.61	33.73	61.45	51.45	-20.83	-17.71
3	0.31720	10.01	28.01	20.15	38.02	30.16	59.78	49.78	-21.75	-19.61
4	0.55725	9.74	24.27	17.01	34.01	26.75	56.00	46.00	-21.99	-19.25
5	0.90375	10.09	23.81	14.13	33.90	24.22	56.00	46.00	-22.10	-21.78
6	4.95375	9.77	24.17	18.67	33.94	28.44	56.00	46.00	-22.06	-17.56

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



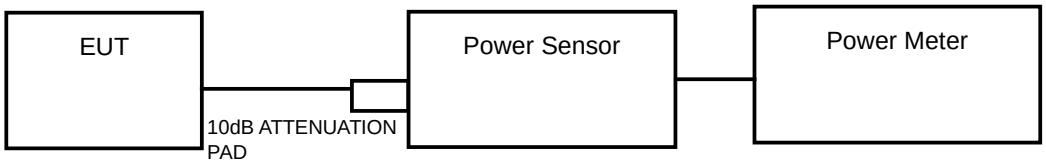
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

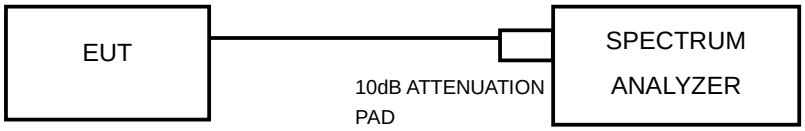
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client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

NOTE: 1. Where B is the 26dB emission bandwidth in MHz.

3.3.2 TEST SETUP



FOR 6/26dB BANDWIDTH



3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Sensor	Keysight	U2021XA	MY55060016	Jun. 13,19	Jun. 12,20
Power Sensor	Keysight	U2021XA	MY55060018	Jun. 13,19	Jun. 12,20
Power Meter	Anritsu	ML2495A	1139001	Mar. 12,19	Mar. 11,20
Power Sensor	Anritsu	MA2411B	1531155	Mar. 12,19	Mar. 11,20
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 17, 18	Oct.16, 19
Humid & Temp Programmable Tester	Haida	HD-2257	110807201	Nov.15,18	Nov. 14,19
Oscilloscope	Agilent	DSO9254A	MY51260160	Nov. 09,18	Nov. 08,19
Signal Analyzer	Rohde & Schwarz	FSV7	102331	Aug. 02,18	Aug. 01,19
Signal Generator	Agilent	N5183A	MY50140980	Dec. 07,18	Dec. 06,19
Agile Signal Generator	Agilent	8645A	Agilent	Oct.27, 18	Oct.26, 19
Spectrum Analyzer	Keysight	N9020A	MY55400499	Mar. 12,19	Mar. 11,20
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Dec. 07, 18	Dec. 06, 19
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A	N/A
DC Source	Keysight	E3642A	MY56146098	N/A	N/A

NOTES:

1. The test was performed in RF Oven 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.

3.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

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

FOR 26dB BANDWIDTH

1) Set RBW = approximately 1% of the emission bandwidth.
2) Set the VBW > RBW.
3) Detector = RMS.
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.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

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

3.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	8.61	7.261	24.00	PASS
40	5200	10.84	12.134	24.00	PASS
48	5240	10.51	11.246	24.00	PASS
52	5260	13.35	21.627	24.00	PASS
60	5300	14.18	26.182	24.00	PASS
64	5320	11.28	13.428	24.00	PASS
100	5500	6.34	4.305	24.00	PASS
120	5600	11.60	14.454	24.00	PASS
140	5700	5.02	3.177	23.92	PASS
149	5745	7.40	5.495	30.00	PASS
157	5785	8.03	6.353	30.00	PASS
165	5825	7.42	5.521	30.00	PASS

Note:

5180 ~ 5240MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced.

5260 ~ 5320MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5500 ~ 5700MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5745 ~ 5825MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

1. **11dBm + 10log (41.46) = 27.18dBm > 24dBm**
2. **11dBm + 10log (45.47) = 27.58dBm > 24dBm**
3. **11dBm + 10log (27.55) = 25.40dBm > 24dBm**
4. **11dBm + 10log (21.22) = 24.27dBm > 24dBm**
5. **11dBm + 10log (44.52) = 27.49dBm > 24dBm**
6. **11dBm + 10log (19.61) = 23.92dBm < 24dBm**

802.11n (20MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	9.66	9.247	24.00	PASS
40	5200	10.59	11.455	24.00	PASS
48	5240	10.78	11.967	24.00	PASS
52	5260	12.85	19.275	24.00	PASS
60	5300	14.17	26.122	24.00	PASS
64	5320	11.92	15.56	24.00	PASS
100	5500	6.83	4.819	24.00	PASS
120	5600	11.61	14.488	24.00	PASS
140	5700	6.03	4.009	24.00	PASS
149	5745	7.18	5.224	30.00	PASS
157	5785	7.90	6.166	30.00	PASS
165	5825	7.22	5.272	30.00	PASS

Note:

5180 ~ 5240MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced.

5260 ~ 5320MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5500 ~ 5700MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5745 ~ 5825MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (43.63) = 27.40dBm > 24dBm

11dBm + 10log (47.63) = 27.78dBm > 24dBm

11dBm + 10log (36.60) = 26.63dBm > 24dBm

11dBm + 10log (21.89) = 24.40dBm > 24dBm

11dBm + 10log (49.88) = 27.98dBm > 24dBm

11dBm + 10log (20.80) = 24.18dBm > 24dBm

802.11n (40MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
38	5190	5.63	3.656	24.00	PASS
46	5230	9.67	9.268	24.00	PASS
54	5270	10.52	11.272	24.00	PASS
62	5310	9.06	8.054	24.00	PASS
102	5510	4.20	2.63	24.00	PASS
118	5590	8.89	7.745	24.00	PASS
134	5670	9.36	8.63	24.00	PASS
151	5755	5.89	3.882	24.00	PASS
159	5795	7.35	5.433	30.00	PASS

Note:

5180 ~ 5240MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced.

5260 ~ 5320MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5500 ~ 5700MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5745 ~ 5825MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (65.73) = 29.18dBm > 24dBm

11dBm + 10log (46.28) = 27.65dBm > 24dBm

11dBm + 10log (45.34) = 27.56dBm > 24dBm

11dBm + 10log (49.49) = 27.95dBm > 24dBm

11dBm + 10log (73.80) = 29.68dBm > 24dBm

802.11ac (80MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
42	5210	5.90	3.89	24.00	PASS
58	5290	8.73	7.464	24.00	PASS
106	5530	5.19	3.304	24.00	PASS
122	5610	8.65	7.328	24.00	PASS
155	5775	5.56	3.597	24.00	PASS

Note:

5180 ~ 5240MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced.

5260 ~ 5320MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5500 ~ 5700MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

5745 ~ 5825MHz Max. Gain = 3.42dBi < 6dBi, so the limit no ned to be reduced

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (82.73) = 30.18dBm > 24dBm

11dBm + 10log (84.95) = 30.29dBm > 24dBm

11dBm + 10log (86.98) = 30.39dBm > 24dBm

26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	40.64	PASS
40	5200	43.12	PASS
48	5240	24.78	PASS
52	5260	41.46	PASS
60	5300	45.47	PASS
64	5320	27.55	PASS
100	5500	21.22	PASS
132	5660	44.52	PASS
140	5700	19.61	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	42.41	PASS
40	5200	45.08	PASS
48	5240	31.22	PASS
52	5260	43.63	PASS
60	5300	47.63	PASS
64	5320	36.60	PASS
100	5500	21.89	PASS
132	5660	49.88	PASS
140	5700	20.80	PASS

802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	51.92	PASS
46	5230	64.69	PASS
54	5270	65.73	PASS
62	5310	46.28	PASS
102	5510	45.34	PASS
118	5590	49.49	PASS
134	5670	73.80	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
42	5210	84.04	PASS
58	5290	82.73	PASS
106	5530	84.95	PASS
122	5610	86.98	PASS

6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	**5745**	15.16	PASS
157	**5785**	15.78	PASS
165	**5825**	15.18	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	**5745**	15.19	PASS
157	**5785**	16.54	PASS
165	**5825**	16.18	PASS

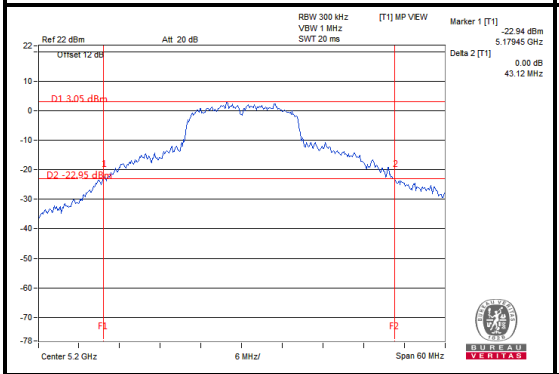
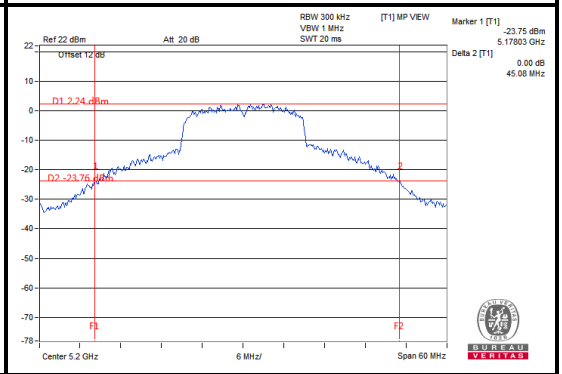
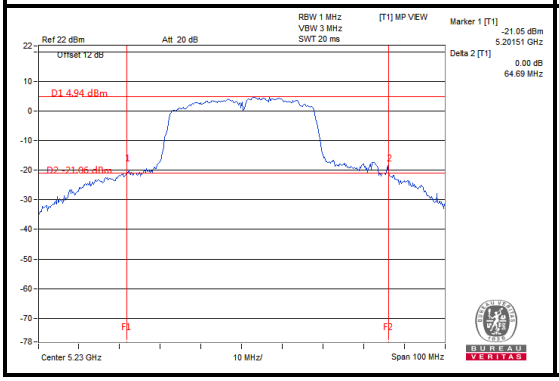
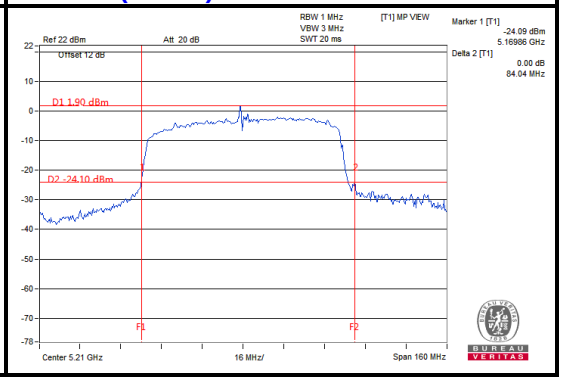
802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
151	**5755**	35.25	PASS
159	**5795**	35.15	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
155	**5775**	72.94	PASS

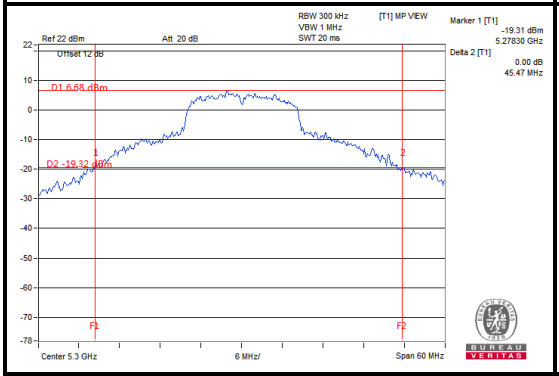
26dB bandwidth Test Plot
For 5150-5250MHz worst plot

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n 20MHz
	
802.11n 40MHz	802.11ac (VHT80)
	

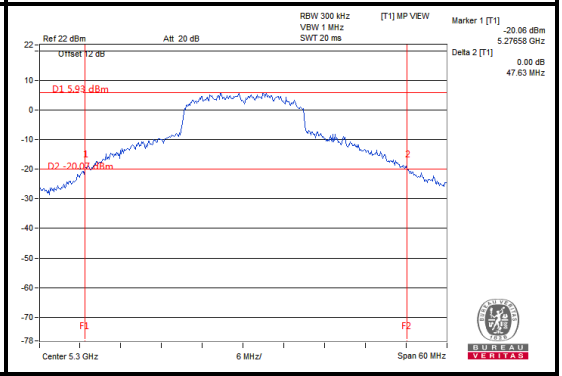
For 5250-5350MHz

SPECTRUM PLOT OF WORST VALUE

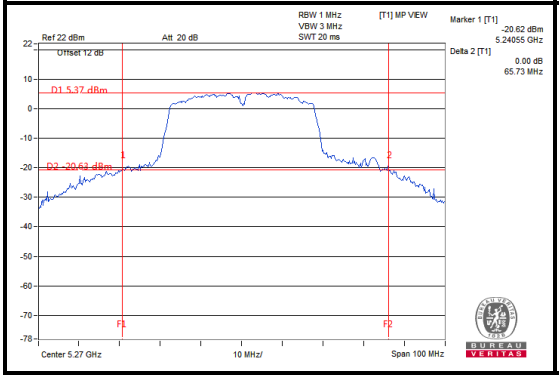
802.11a



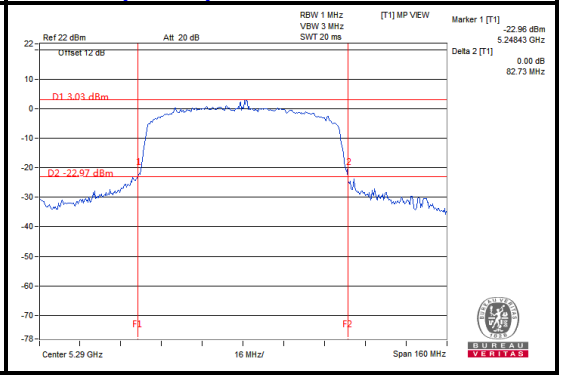
802.11n 20MHz



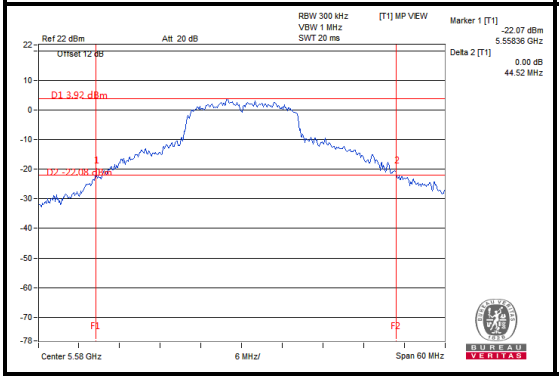
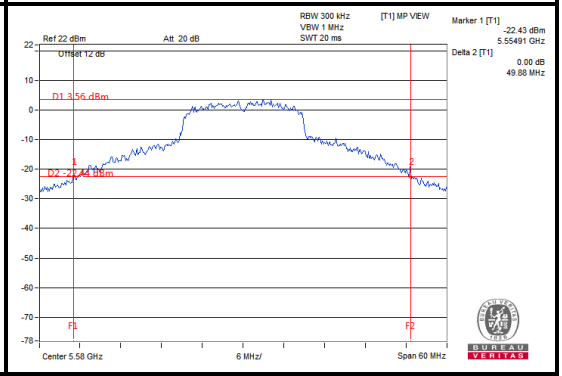
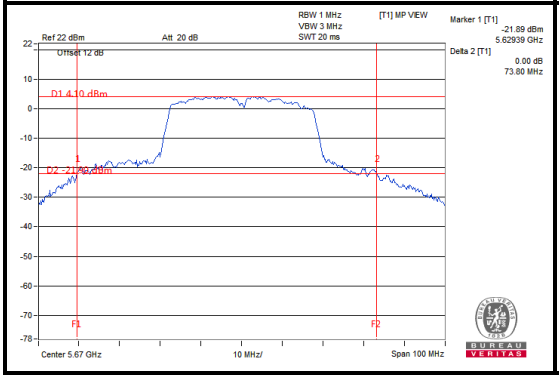
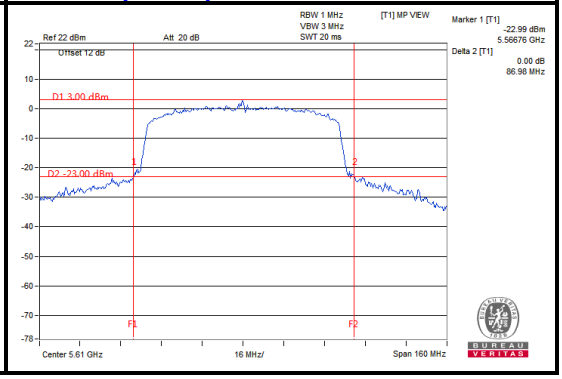
802.11n 40MHz



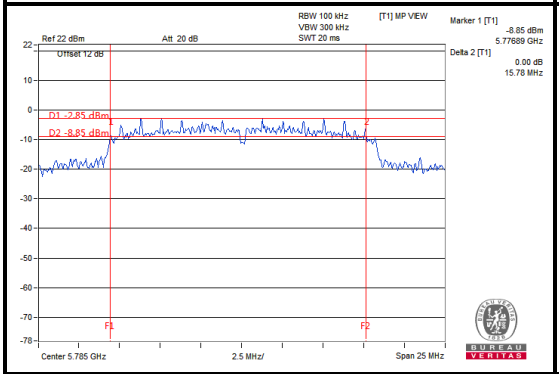
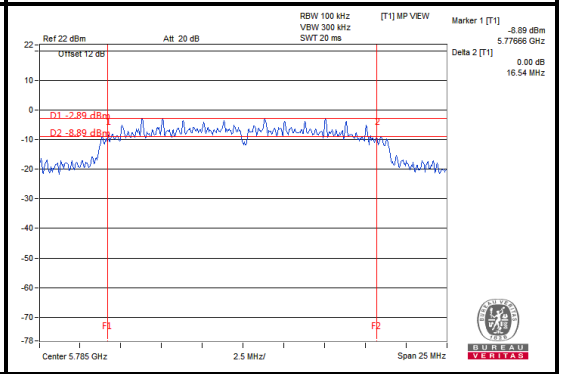
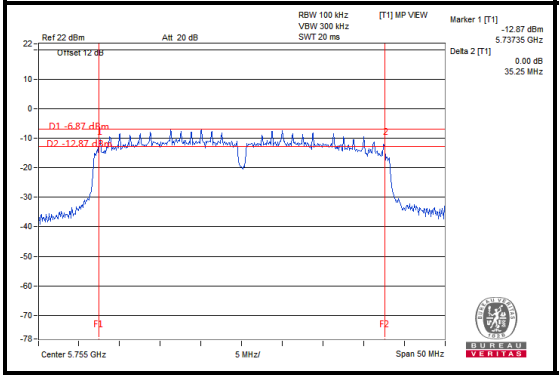
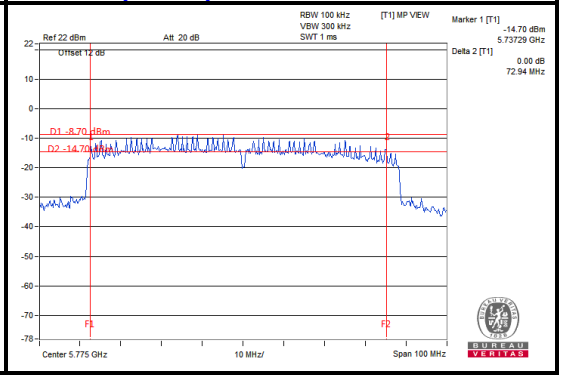
802.11ac (VHT80)



For 5470-5725MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (VHT80)**
	

6dB BANDWIDTH For 5725-5850MHz

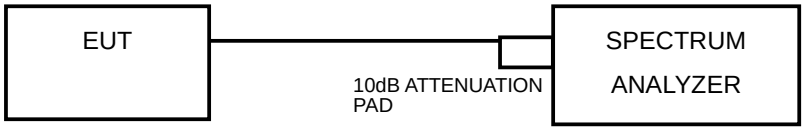
SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (VHT80)**
	

3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.4.4 TEST PROCEDURES

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

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1MHz, 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) Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 300 kHz, Set VBW =1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value and add 10 log (1/duty cycle)

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6

3.4.7 TEST RESULTS

For U-NII-1, U-NII-2A & U-NII-2C，For U-NII-3:

802.11a

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
36	5180	-4.26	0.195	-4.065	11.00	PASS
40	5200	-2.33	0.195	-2.135	11.00	PASS
48	5240	-2.19	0.195	-0.585	11.00	PASS
52	5260	0.25	0.195	0.445	11.00	PASS
60	5300	1.10	0.195	1.295	11.00	PASS
64	5320	-1.69	0.195	-1.495	11.00	PASS
100	5500	-6.94	0.195	-6.745	11.00	PASS
116	5580	-1.66	0.195	-1.465	11.00	PASS
140	5700	-8.31	0.195	-8.115	11.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-13.59	-11.37	0.195	-11.175	30.00	PASS
157	5785	-13.43	-11.21	0.195	-11.015	30.00	PASS
165	5825	-14.06	-11.84	0.195	-11.645	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

802.11n (20MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
36	5180	-3.75	0.213	-3.537	11.00	PASS
40	5200	-2.70	0.213	-2.487	11.00	PASS
48	5240	-2.04	0.213	-0.647	11.00	PASS
52	5260	-0.21	0.213	0.003	11.00	PASS
60	5300	0.62	0.213	0.833	11.00	PASS
64	5320	-1.43	0.213	-1.217	11.00	PASS
100	5500	-6.71	0.213	-6.497	11.00	PASS
116	5580	-1.91	0.213	-1.697	11.00	PASS
140	5700	-7.49	0.213	-7.277	11.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-14.03	-11.81	0.213	-11.597	30.00	PASS
157	5785	-14.00	-11.78	0.213	-11.567	30.00	PASS
165	5825	-14.49	-12.27	0.213	-12.057	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

802.11n (40MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
38	5190	-10.65	0.149	-10.501	11.00	PASS
46	5230	-5.99	0.149	-4.421	11.00	PASS
54	5270	-5.45	0.149	-3.041	11.00	PASS
62	5310	-7.48	0.149	-7.331	11.00	PASS
102	5510	-12.21	0.149	-12.061	11.00	PASS
118	5590	-7.10	0.149	-4.631	11.00	PASS
134	5670	-6.34	0.149	-5.691	11.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
151	5755	-18.59	-16.37	0.149	-16.221	30.00	PASS
159	5795	-17.93	-15.71	0.149	-15.561	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

802.11ac (80MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
42	5210	-12.99	0.716	-12.274	11.00	PASS
58	5290	-10.39	0.716	-9.674	11.00	PASS
106	5530	-14.15	0.716	-13.434	11.00	PASS
122	5610	-10.28	0.716	-8.404	11.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
155	5775	-21.89	-19.67	0.716	-18.954	30.00	PASS

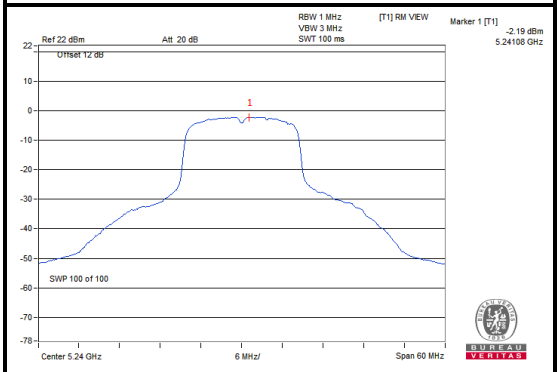
Note: Refer to section 2.3 for duty cycle spectrum plot.

PSD Test Plot

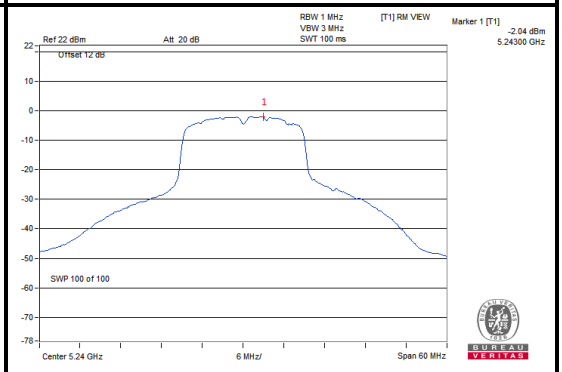
BAND 1
5150-5250MHz

SPECTRUM PLOT OF WORST VALUE

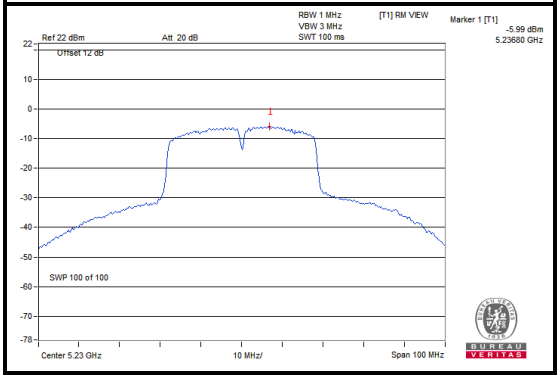
802.11a



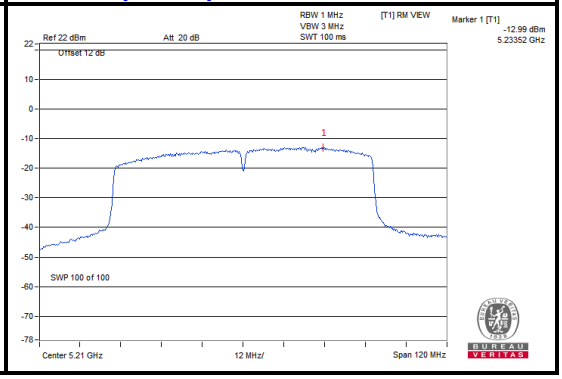
802.11n 20MHz



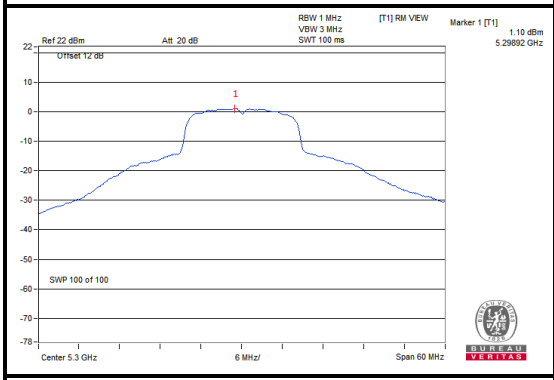
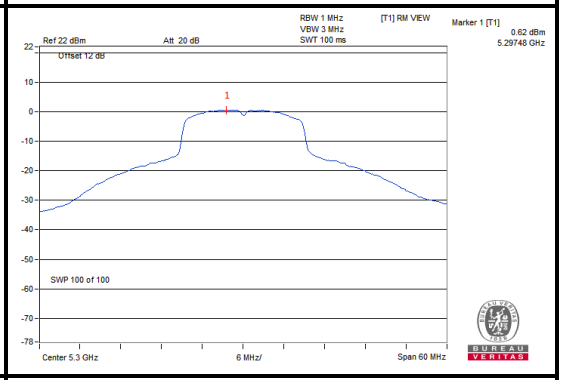
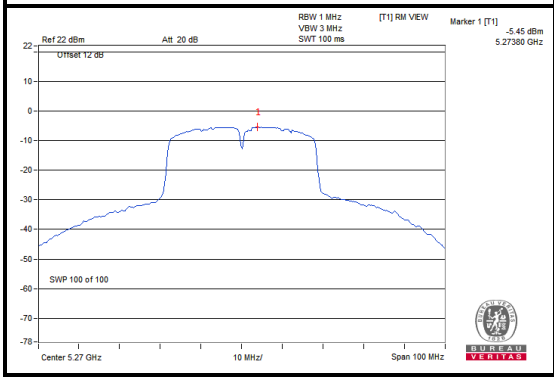
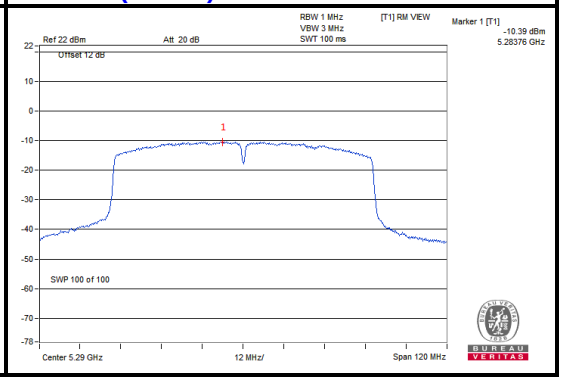
802.11n 40MHz



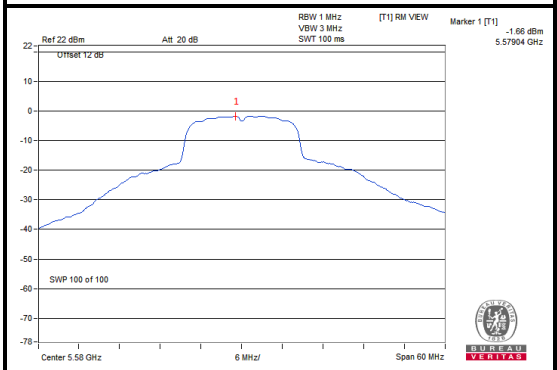
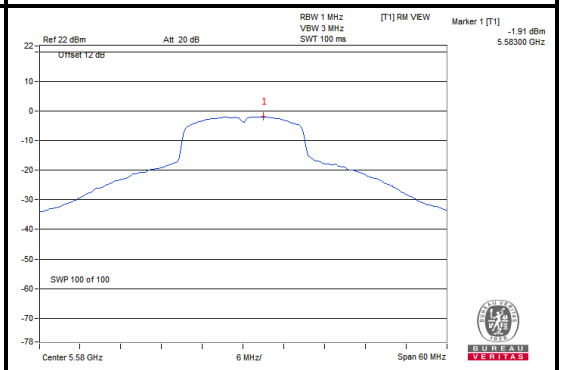
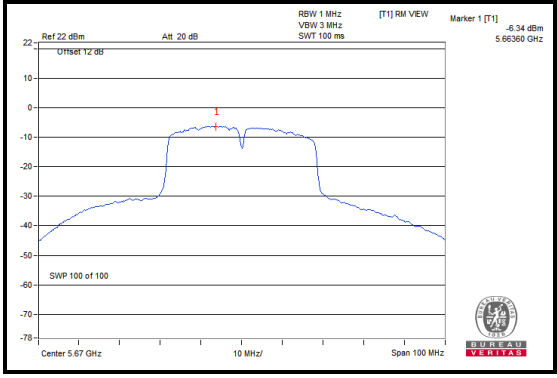
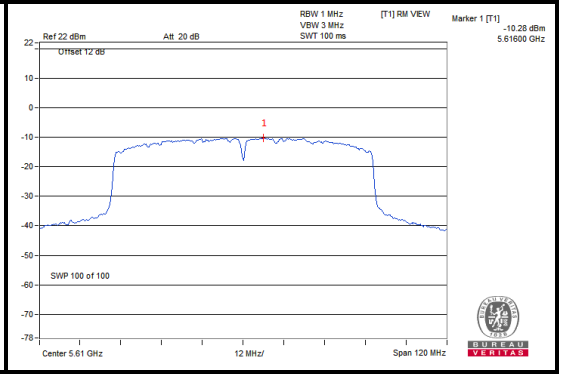
802.11ac (80MHz)



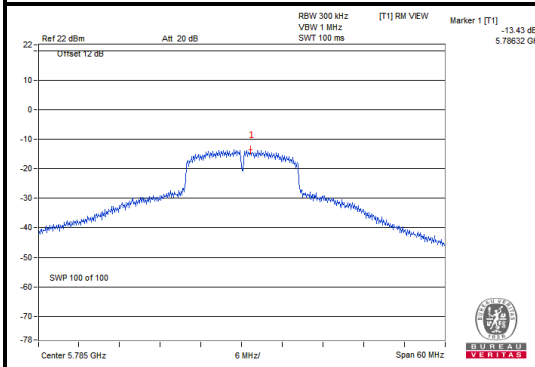
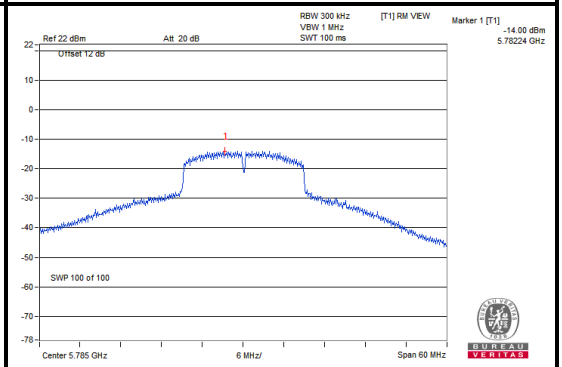
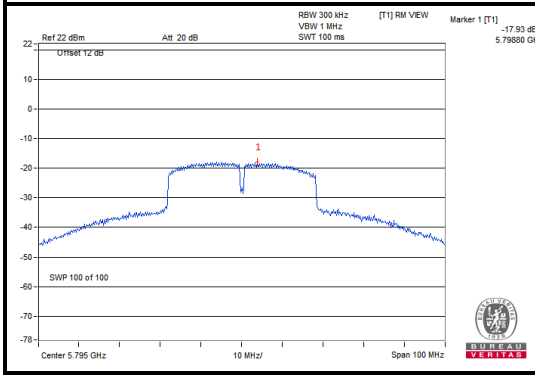
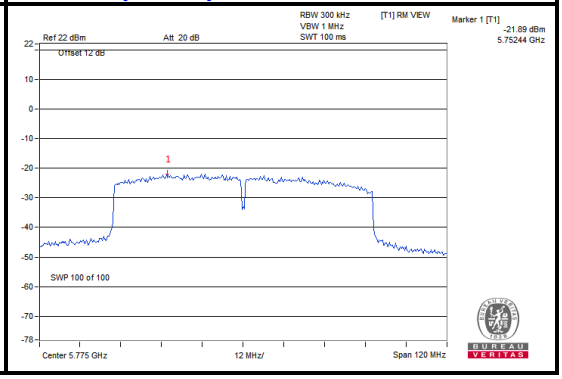
BAND 2
5250-5350MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

BAND 3
5470-5725MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

BAND4
5725-5850MHz

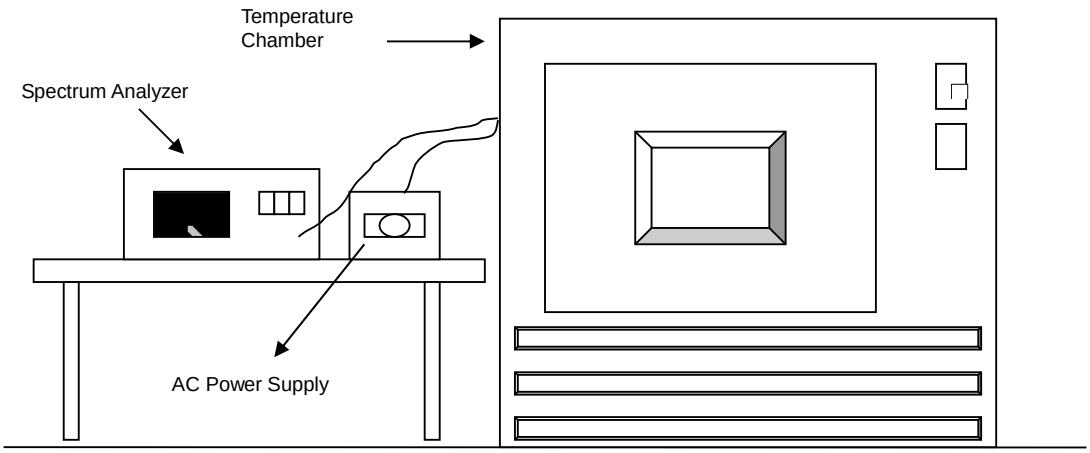
SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

3.5 FREQUENCY STABILITY

3.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

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 PROCEDURE

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

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

3.5.7 TEST RESULTS

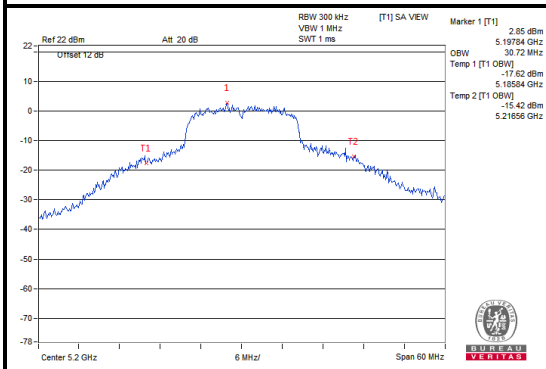
FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5179.977	-0.00044	5179.9766	-0.00045	5179.9736	-0.00051	5179.9754	-0.00047
40	120	5180.0255	0.00049	5180.0273	0.00053	5180.0238	0.00046	5180.0263	0.00051
30	120	5180.0043	0.00008	5180.003	0.00006	5180.0011	0.00002	5180.0019	0.00004
20	120	5180.0089	0.00017	5180.0071	0.00014	5180.0068	0.00013	5180.0093	0.00018
10	120	5180.0033	0.00006	5180.004	0.00008	5180.003	0.00006	5180.0035	0.00007
0	120	5179.9748	-0.00049	5179.977	-0.00044	5179.9761	-0.00046	5179.9791	-0.00040
-10	120	5180.0091	0.00018	5180.0087	0.00017	5180.0073	0.00014	5180.0079	0.00015
-20	120	5179.9863	-0.00026	5179.9835	-0.00032	5179.9862	-0.00027	5179.9846	-0.00030
-30	120	5180.0132	0.00025	5180.0112	0.00022	5180.0097	0.00019	5180.0116	0.00022

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5180.0089	0.00017	5180.0068	0.00013	5180.0068	0.00013	5180.0089	0.00017
	120	5180.0089	0.00017	5180.0071	0.00014	5180.0068	0.00013	5180.0093	0.00018
	102	5180.0088	0.00017	5180.0068	0.00013	5180.0067	0.00013	5180.0102	0.00020

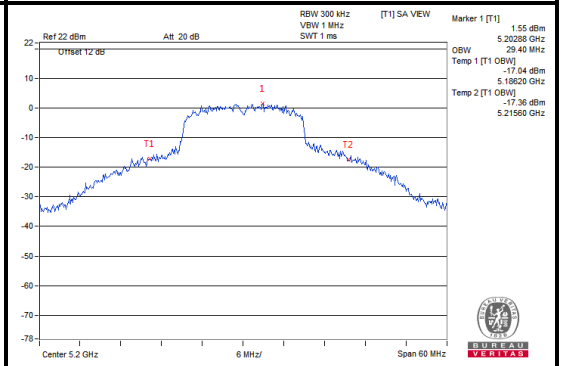
Band 1
5150-5250MHz
99% Occupied Bandwidth Without over DFS Band

SPECTRUM PLOT OF WORST VALUE

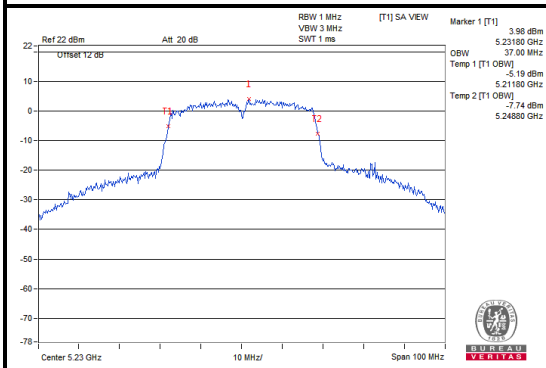
802.11a 5240MHz



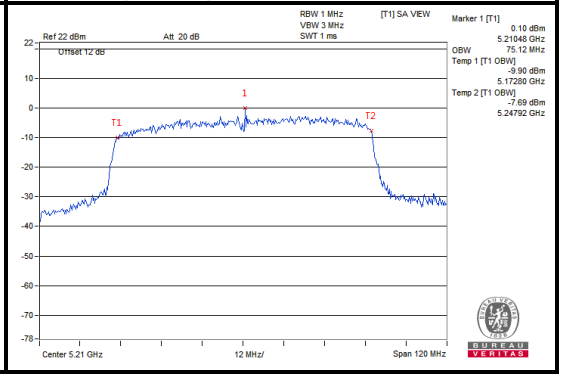
802.11n 20MHz 5240MHz



802.11n 40MHz 5230MHz



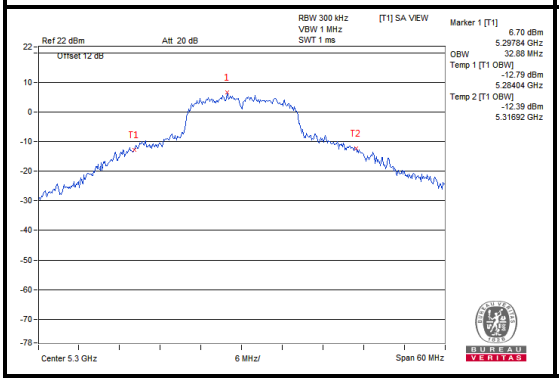
802.11ac (80MHz)



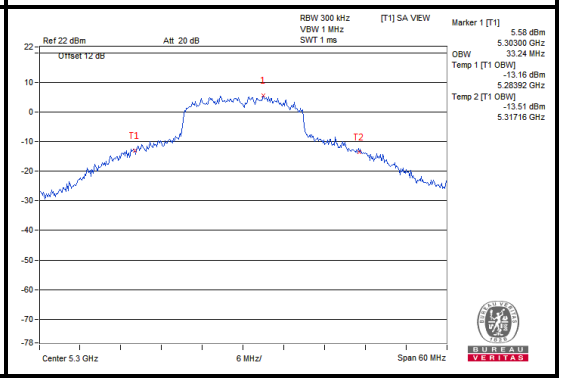
Band 2
5250-5350MHz
99% Occupied Bandwidth Without over Band 1

SPECTRUM PLOT OF WORST VALUE

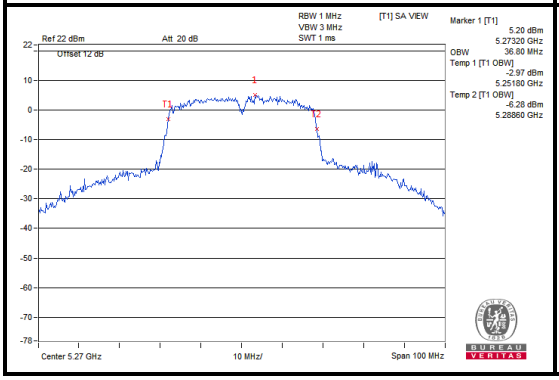
802.11a 5260MHz



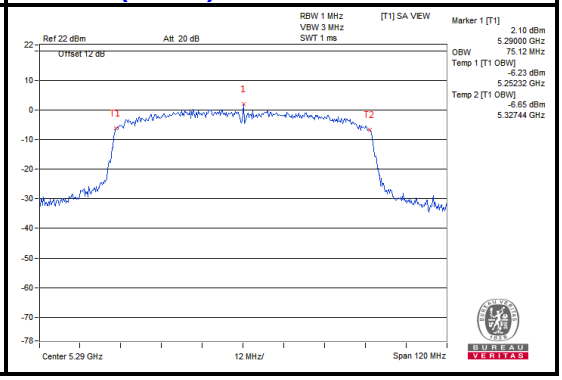
802.11n 20MHz 5260MHz



802.11n 40MHz 5270MHz



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---