

TEST REPORT



Applicant	DEI Sales, Inc., dba Polk Audio
Address	1 Viper Way Vista, California 92801, USA

Manufacturer or Supplier	DEI Sales, Inc., dba Polk Audio
Address	1 Viper Way Vista, California 92801, USA
Product Name	Home Theater Sound Bar System
Brand Name	Polk
System Model	COMMAND SYS US-CAN
Test Model	COMMAND SOUND BAR
Additional Model & Model Difference	N/A
Date of tests	Nov. 11, 2017 ~ Dec. 08, 2017

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 Harry Li Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Mar. 28, 2018

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Test Report No.: RF170927N027-3

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF170927N027-3	Original release.	Mar. 28, 2018

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	No antenna connector is used

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	3.83dB
	1GHz ~ 18GHz	4.93dB
	18GHz ~ 40GHz	4.80dB

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	Home Theater Sound Bar System
SYSTEM MODEL NO.	COMMAND SYS US-CAN
TEST MODEL	COMMAND SOUND BAR
FCC ID	WLQAM9642TX
POWER SUPPLY	DC 19V from Adapter
MODULATION TYPE	OFDM: 256QAM, 64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac : up to 433Mbps
OPERATING FREQUENCY	5150 ~ 5250MHz, 5250 ~ 5350MHz 5470 ~ 5725MHz, 5725 ~ 5850MHz
NUMBER OF CHANNEL	5150 ~ 5250MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz), 1 channel for 802.11ac 80MHz 5250 ~ 5350MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz), 1 channel for 802.11ac 80MHz 5470 ~ 5725MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz), 1 channel for 802.11ac 80MHz 5725 ~ 5850MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz), 1 channel for 802.11ac 80MHz
CONDUCTED OUTPUT POWER	13.60 dBm for 5150 ~ 5250MHz (Maximum AVG Power) 13.60 dBm for 5250 ~ 5350MHz (Maximum AVG Power) 12.43 dBm for 5500 ~ 5725MHz (Maximum AVG Power) 10.94 dBm for 5725 ~ 5850MHz (Maximum AVG Power)
ANTENNA TYPE	ANT1: FPC Antenna, 3.17dBi Gain ANT2: FPC Antenna, 3.21dBi Gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

NOTE:

1. This device has two antennas, but can't transmit simultaneously:

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

2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Please refer to the EUT photo document (Reference No.: 170927N027) for detailed product photo.
5. This device contains two parts, one is soundbar, Model number is "COMMAND SOUND BAR"; another one is subwoofer, Model number is "COMMAND SUBWOOFER".
6. This product has multiple RF functions, such as listed below:

PRODUCT		MODEL	RF FUNCTION
Home Theater Sound Bar System	SOUNDBAR	COMMAND SOUND BAR	1, BT2.1+EDR 2, WIFI 2.4GHz 3, WIFI 5GHz(Band 1~4) 4, 5.8GHz Wireless
	SUBWOOFER	COMMAND SUBWOOFER	5.8GHz Wireless

7. The EUT(COMMAND SUBWOOFER) was supply the following cable:

AC CABLE	
BRAND:	N/A
CABLE	AC Cable: Unshielded, detachable, 1.80m

8. The EUT (COMMAND SOUND BAR) can be powered by adapter as list as attach.

ADAPTER	
BRAND:	Polk
MODEL:	TNUA1903003
INPUT:	AC 100-240V, 50/60Hz, 1.65A
OUTPUT:	DC 19V/3.0A
CABLE:	DC Cable: Unshielded, Non-detachable, 1.78m; AC Cable: Unshielded, detachable, 1.50m

2.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

FOR 5250 ~ 5350MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290MHz	--	--

FOR 5470 ~ 5725MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz
116	5580 MHz	132	5660 MHz
136	5680 MHz	140	5700 MHz

3 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	110	5550 MHz
134	5670 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	-	-

FOR 5725 ~ 5850MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--

2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE<1G	PLC	APCM	
A	√	√	√	√	Powered by adaptor

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

NOTE:

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)
-	802.11a	5180-5240	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	V0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
-	802.11ac 80MHz		58	58	OFDM	BPSK	V0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
-	802.11ac 80MHz		106	106	OFDM	BPSK	V0
-	802.11a	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
-	802.11ac 80MHz		155	155	OFDM	BPSK	V0

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)
-	802.11a	5180-5240 5725-5850	36 to 48 149 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)
-	802.11a	5180-5240 5725-5850	36 to 48 149 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)
-	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	V0
-	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	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
-	802.11ac 80MHz		58	58	OFDM	BPSK	V0
-	802.11a	5470-5725	100 to 140	100, 112, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 112, 140	OFDM	BPSK	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
-	802.11ac 80MHz		106	106	OFDM	BPSK	V0
-	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	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
-	802.11ac 80MHz		155	155	OFDM	BPSK	V0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 55%RH	DC 19V From Adapter	Hardy Leng
RE≥1G	25deg. C, 55%RH	DC 19V From Adapter	Hardy Leng
PLC	25deg. C, 55%RH	DC 19V From Adapter	Xue Wang
APCM	25deg. C, 55%RH	DC 19V From Adapter	Robert Cheng



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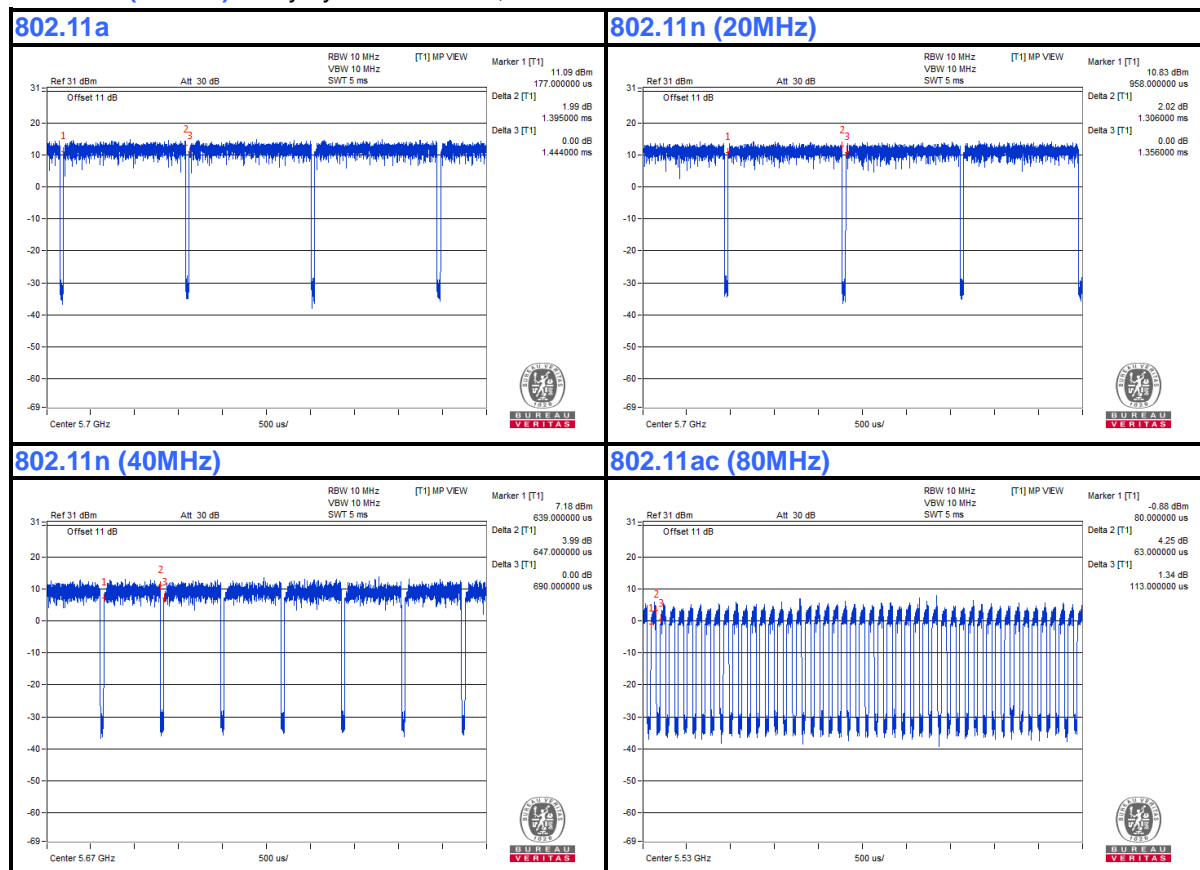
2.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle =96.606%, Factor=0.1499dB

802.11n (20MHz): Duty cycle =96.316%, Factor=0.1632dB

802.11n (40MHz): Duty cycle =93.768%, Factor=0.2794dB

802.11ac (80MHz): Duty cycle =55.752%, Factor=2.537dB



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	Notebook	DELL	E6420	9H12FS1	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.8m; DC Line: 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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 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:

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:

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



3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 12,17	Mar. 11,18
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Nov. 04,17	Nov. 03,18
Bilog Antenna (30MHz~1GHz)	Teseq	CBL 6111D	30643	Jul. 12, 17	Jul. 11, 18
Loop antenna (9kHz ~30MHz)	Daze	ZN30900A	0708	Mar. 12,17	Mar. 11,18
Amplifier (9kHz-1GHz)	SONOMA	310D	186955	Mar. 04,17	Mar. 03, 18
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 18,17	May 17,18
GPS Generator+ Antenna	TOJOIN	GNSS-5000A	E1-010119	Aug. 08, 17	Aug. 07, 18
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Mar. 12,17	Mar. 11,18
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
Horn Antenna (18GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170242	Mar. 15,17	Mar. 14,18
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Mar. 09,17	Mar. 08,18
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 04,17	Nov. 03,18
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	Aug. 08,17	Aug. 07,18
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A	N/A

NOTE:

1. The test was performed in 966 Chamber.
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. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. 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.

NOTE:

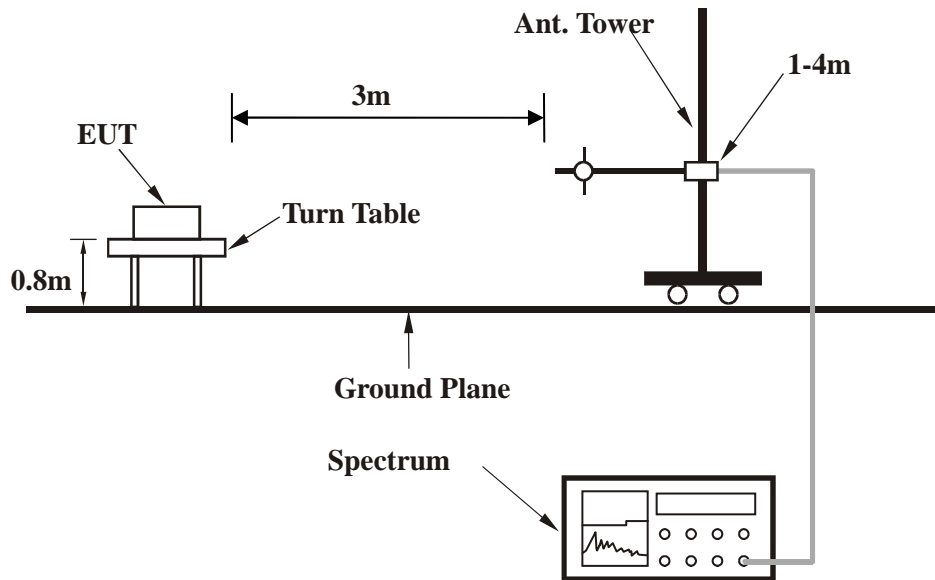
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (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.

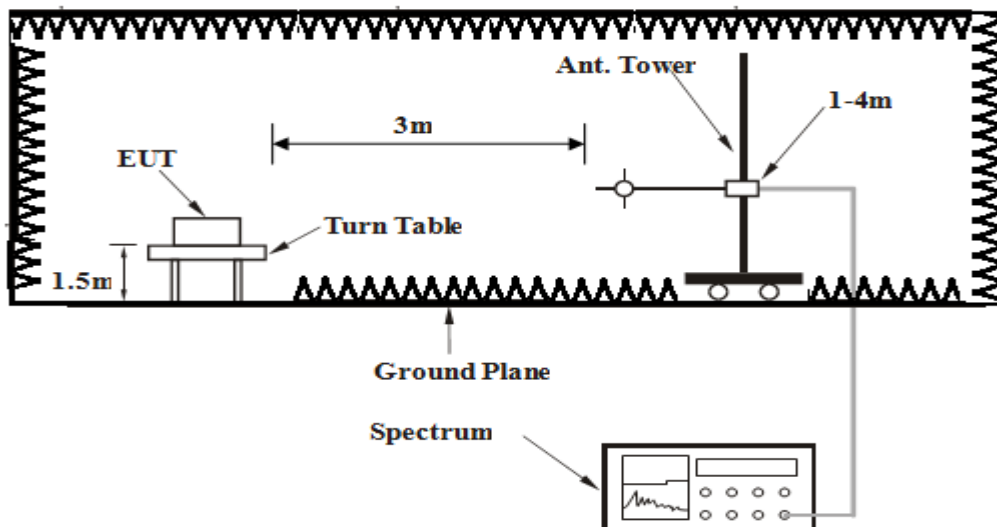
3.1.6 TEST SETUP

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

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



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3.1.8 TEST RESULTS

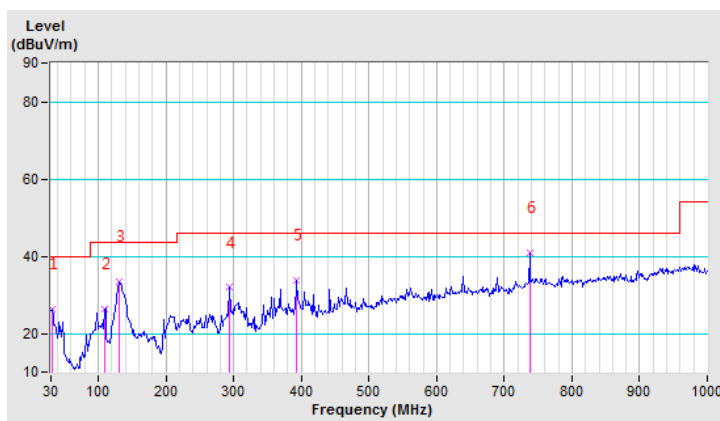
BELOW 1GHz WORST-CASE DATA

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.55	26.41 QP	40.00	-13.59	1.00 H	201	33.54	-7.13
2	109.28	26.31 QP	43.50	-17.19	1.00 H	43	39.26	-12.95
3	131.04	33.40 QP	43.50	-10.10	1.00 H	153	45.70	-12.30
4	294.26	31.94 QP	46.00	-14.06	1.00 H	294	40.40	-8.46
5	393.75	33.86 QP	46.00	-12.14	1.00 H	352	38.17	-4.31
6	737.29	40.80 QP	46.00	-5.20	1.00 H	1	36.12	4.68

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.





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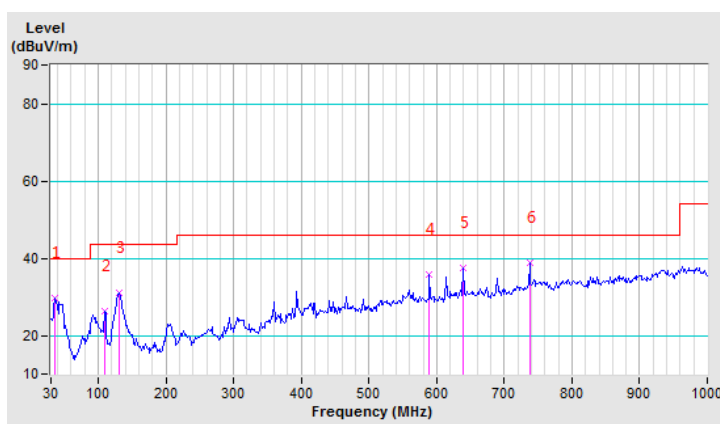
Test Report No.: RF170927N027-3

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 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	36.22	29.59 QP	40.00	-10.41	2.00 V	233	39.18	-9.59
2	109.28	26.43 QP	43.50	-17.07	2.00 V	192	39.38	-12.95
3	131.04	30.96 QP	43.50	-12.54	2.00 V	75	43.26	-12.30
4	589.62	35.81 QP	46.00	-10.19	2.00 V	283	35.03	0.78
5	639.36	37.49 QP	46.00	-8.51	2.00 V	62	35.30	2.19
6	737.29	38.84 QP	46.00	-7.16	2.00 V	100	34.16	4.68

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.



ABOVE 1GHz WORST-CASE DATA

Band 1 (5150-5250MHz):

802.11a

CHANNEL	TX Channel 36	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	57.64 PK	74.00	-16.36	1.00 H	128	51.24	6.40
2	5150.00	41.87 AV	54.00	-12.13	1.00 H	128	35.47	6.40
3	*5180.00	102.81 PK			1.00 H	128	96.38	6.43
4	*5180.00	92.31 AV			1.00 H	128	85.88	6.43
5	#10360.00	50.89 PK	74.00	-23.11	1.22 H	41	34.20	16.69
6	#10360.00	40.36 AV	54.00	-13.64	1.22 H	41	23.67	16.69
7	15540.00	59.25 PK	74.00	-14.75	1.54 H	84	35.32	23.93
8	15540.00	48.15 AV	54.00	-5.85	1.54 H	84	24.22	23.93
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	53.88 PK	74.00	-20.12	3.30 V	75	47.48	6.40
2	5150.00	36.84 AV	54.00	-17.16	3.30 V	75	30.44	6.40
3	*5180.00	97.88 PK			3.30 V	76	91.45	6.43
4	*5180.00	86.92 AV			3.30 V	76	80.49	6.43
5	#10360.00	50.41 PK	74.00	-23.59	1.55 V	64	33.72	16.69
6	#10360.00	41.25 AV	54.00	-12.75	1.55 V	64	24.56	16.69
7	15540.00	59.25 PK	74.00	-14.75	3.02 V	177	35.32	23.93
8	15540.00	48.26 AV	54.00	-5.74	3.02 V	177	24.33	23.93

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 44	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	42.58 PK	74.00	-31.42	1.84 H	74	36.18	6.40
2	5150.00	32.11 AV	54.00	-21.89	1.84 H	74	25.71	6.40
3	*5220.00	102.98 PK			1.84 H	74	96.51	6.47
4	*5220.00	93.96 AV			1.84 H	74	87.49	6.47
5	#10440.00	52.26 PK	74.00	-21.74	1.88 H	21	35.14	17.12
6	#10440.00	41.27 AV	54.00	-12.73	1.88 H	21	24.15	17.12
7	15660.00	57.58 PK	74.00	-16.42	1.00 H	120	33.29	24.29
8	15660.00	48.36 AV	54.00	-5.64	1.00 H	120	24.07	24.29
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	40.74 PK	74.00	-33.26	3.68 V	75	34.34	6.40
2	5150.00	30.36 AV	54.00	-23.64	3.68 V	75	23.96	6.40
3	*5220.00	97.23 PK			3.68 V	75	90.76	6.47
4	*5220.00	86.45 AV			3.68 V	75	79.98	6.47
5	#10440.00	50.25 PK	74.00	-23.75	2.01 V	14	33.13	17.12
6	#10440.00	41.48 AV	54.00	-12.52	2.01 V	14	24.36	17.12
7	15660.00	58.26 PK	74.00	-15.74	1.62 V	144	33.97	24.29
8	15660.00	48.25 AV	54.00	-5.75	1.62 V	144	23.96	24.29

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.



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Test Report No.: RF170927N027-3

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	5149.90	44.06 PK	74.00	-29.94	1.00 H	88	35.59	8.47
2	5149.90	33.95 AV	54.00	-20.05	1.00 H	88	25.48	8.47
3	*5240.00	105.66 PK			1.00 H	88	97.06	8.60
4	*5240.00	95.26 AV			1.00 H	88	86.66	8.60
5	5350.00	45.21 PK	74.00	-28.79	1.00 H	88	36.44	8.77
6	5350.00	33.26 AV	54.00	-20.74	1.00 H	88	24.49	8.77
7	#10480.00	58.12 PK	74.00	-15.88	2.51 H	250	37.78	20.34
8	#10480.00	45.29 AV	54.00	-8.71	2.51 H	250	24.95	20.34
9	15720.00	62.02 PK	74.00	-11.98	2.55 H	23	39.20	22.82
10	15720.00	48.25 AV	54.00	-5.75	2.55 H	23	25.43	22.82
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	5149.90	45.90 PK	74.00	-28.10	1.00 V	350	37.43	8.47
2	5149.90	33.02 AV	54.00	-20.98	1.00 V	350	24.55	8.47
3	*5240.00	106.98 PK			1.00 V	350	98.38	8.60
4	*5240.00	97.55 AV			1.00 V	350	88.95	8.60
5	5350.00	44.97 PK	74.00	-29.03	1.00 V	350	36.20	8.77
6	5350.00	34.25 AV	54.00	-19.75	1.00 V	350	25.48	8.77
7	#10480.00	60.27 PK	74.00	-13.73	2.30 V	251	39.93	20.34
8	#10480.00	48.55 AV	54.00	-5.45	2.30 V	251	28.21	20.34
9	15720.00	60.22 PK	74.00	-13.78	1.55 V	54	37.40	22.82
10	15720.00	47.26 AV	54.00	-6.74	1.55 V	54	24.44	22.82

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 other emission levels were very low 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)
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	54.17 PK	74.00	-19.83	1.00 H	127	47.77	6.40
2	5150.00	40.45 AV	54.00	-13.55	1.00 H	127	34.05	6.40
3	*5180.00	101.53 PK			1.00 H	127	95.10	6.43
4	*5180.00	91.07 AV			1.00 H	127	84.64	6.43
5	#10360.00	50.87 PK	74.00	-23.13	3.02 H	166	34.18	16.69
6	#10360.00	41.26 AV	54.00	-12.74	3.02 H	166	24.57	16.69
7	15540.00	59.26 PK	74.00	-14.74	1.00 H	145	35.33	23.93
8	15540.00	48.36 AV	54.00	-5.64	1.00 H	145	24.43	23.93
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	49.89 PK	74.00	-24.11	1.14 V	76	43.49	6.40
2	5150.00	35.99 AV	54.00	-18.01	1.14 V	76	29.59	6.40
3	*5180.00	96.03 PK			1.14 V	76	89.60	6.43
4	*5180.00	84.94 AV			1.14 V	76	78.51	6.43
5	#10360.00	51.25 PK	74.00	-22.75	2.01 V	55	34.56	16.69
6	#10360.00	40.19 AV	54.00	-13.81	2.01 V	55	23.50	16.69
7	15540.00	58.36 PK	74.00	-15.64	1.00 V	244	34.43	23.93
8	15540.00	48.62 AV	54.00	-5.38	1.00 V	244	24.69	23.93

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.



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Test Report No.: RF170927N027-3

CHANNEL	TX Channel 44	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	42.39 PK	74.00	-31.61	1.00 H	132	35.99	6.40
2	5150.00	31.86 AV	54.00	-22.14	1.00 H	132	25.46	6.40
3	*5220.00	101.74 PK			1.00 H	132	95.27	6.47
4	*5220.00	90.76 AV			1.00 H	132	84.29	6.47
5	#10440.00	51.26 PK	74.00	-22.74	3.02 H	177	34.14	17.12
6	#10440.00	40.33 AV	54.00	-13.67	3.02 H	177	23.21	17.12
7	15660.00	59.55 PK	74.00	-14.45	1.20 H	48	35.26	24.29
8	15660.00	48.69 AV	54.00	-5.31	1.20 H	48	24.40	24.29
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	40.87 PK	74.00	-33.13	3.79 V	98	34.47	6.40
2	5150.00	30.06 AV	54.00	-23.94	3.79 V	98	23.66	6.40
3	*5220.00	97.69 PK			3.79 V	78	91.22	6.47
4	*5220.00	86.45 AV			3.79 V	78	79.98	6.47
5	#10440.00	50.04 PK	74.00	-23.96	2.01 V	188	32.92	17.12
6	#10440.00	41.26 AV	54.00	-12.74	2.01 V	188	24.14	17.12
7	15660.00	59.77 PK	74.00	-14.23	3.02 V	122	35.48	24.29
8	15660.00	48.36 AV	54.00	-5.64	3.02 V	122	24.07	24.29

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.



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Test Report No.: RF170927N027-3

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	5149.90	47.88 PK	74.00	-26.12	2.26 H	91	39.41	8.47
2	5149.90	35.26 AV	54.00	-18.74	2.26 H	91	26.79	8.47
3	*5240.00	110.20 PK			2.26 H	91	101.60	8.60
4	*5240.00	99.37 AV			2.26 H	91	90.77	8.60
5	5350.00	46.25 PK	74.00	-27.75	2.26 H	91	37.48	8.77
6	5350.00	35.36 AV	54.00	-18.64	2.26 H	91	26.59	8.77
7	#10480.00	58.99 PK	74.00	-15.01	1.00 H	120	38.65	20.34
8	#10480.00	48.51 AV	54.00	-5.49	1.00 H	120	28.17	20.34
9	15720.00	63.29 PK	74.00	-10.71	1.55 H	56	40.47	22.82
10	15720.00	50.11 AV	54.00	-3.89	1.55 H	56	27.29	22.82
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	5149.90	43.56 PK	74.00	-30.44	1.00 V	250	35.09	8.47
2	5149.90	32.29 AV	54.00	-21.71	1.00 V	250	23.82	8.47
3	*5240.00	106.59 PK			1.00 V	250	97.99	8.60
4	*5240.00	95.69 AV			1.00 V	250	87.09	8.60
5	5350.00	42.78 PK	74.00	-31.22	1.00 V	250	34.01	8.77
6	5350.00	32.84 AV	54.00	-21.16	1.00 V	250	24.07	8.77
7	#10480.00	60.25 PK	74.00	-13.75	1.66 V	265	39.91	20.34
8	#10480.00	49.02 AV	54.00	-4.98	1.66 V	265	28.68	20.34
9	15720.00	64.25 PK	74.00	-9.75	1.89 V	50	41.43	22.82
10	15720.00	50.01 AV	54.00	-3.99	1.89 V	50	27.19	22.82

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 other emission levels were very low 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)
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	50.26 PK	74.00	-23.74	1.00 H	288	43.86	6.40
2	5150.00	35.23 AV	54.00	-18.77	1.00 H	288	28.83	6.40
3	*5190.00	100.18 PK			1.00 H	21	93.74	6.45
4	*5190.00	90.16 AV			1.00 H	21	83.72	6.45
5	#10380.00	50.26 PK	74.00	-23.74	1.00 H	256	33.46	16.80
6	#10380.00	40.16 AV	54.00	-13.84	1.00 H	256	23.36	16.80
7	15570.00	58.69 PK	74.00	-15.31	1.00 H	360	34.67	24.02
8	15570.00	48.32 AV	54.00	-5.68	1.00 H	360	24.30	24.02
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	5150.00	43.26 PK	74.00	-30.74	2.15 V	133	36.86	6.40
2	5150.00	30.48 AV	54.00	-23.52	2.15 V	133	24.08	6.40
3	*5190.00	91.59 PK			1.00 V	155	85.15	6.45
4	*5190.00	81.11 AV			1.00 V	155	74.66	6.45
5	#10380.00	50.14 PK	74.00	-23.86	1.00 V	214	33.34	16.80
6	#10380.00	40.28 AV	54.00	-13.72	1.00 V	214	23.48	16.80
7	15570.00	59.49 PK	74.00	-14.51	1.62 V	155	35.47	24.02
8	15570.00	48.32 AV	54.00	-5.68	1.62 V	155	24.30	24.02

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.



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Test Report No.: RF170927N027-3

CHANNEL	TX Channel 46	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	50.48 PK	74.00	-23.52	3.02 H	166	44.08	6.40
2	5150.00	35.96 AV	54.00	-18.04	3.02 H	166	29.56	6.40
3	*5230.00	100.13 PK			1.00 H	166	93.65	6.48
4	*5230.00	88.96 AV			1.00 H	166	82.47	6.48
5	5350.00	40.12 PK	74.00	-33.88	1.33 H	50	33.52	6.59
6	5350.00	29.36 AV	54.00	-24.64	1.33 H	50	22.77	6.59
7	#10460.00	50.26 PK	74.00	-23.74	1.00 H	215	33.03	17.23
8	#10460.00	40.19 AV	54.00	-13.81	1.00 H	215	22.96	17.23
9	15690.00	58.19 PK	74.00	-15.81	3.02 H	122	33.81	24.38
10	15690.00	48.33 AV	54.00	-5.67	3.02 H	122	23.95	24.38
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	50.11 PK	74.00	-23.89	1.00 V	215	43.71	6.40
2	5150.00	35.89 AV	54.00	-18.11	1.00 V	215	29.49	6.40
3	*5230.00	93.15 PK			1.00 V	255	86.67	6.48
4	*5230.00	81.49 AV			1.00 V	255	75.00	6.48
5	5350.00	48.36 PK	74.00	-25.64	1.00 V	201	41.77	6.59
6	5350.00	33.15 AV	54.00	-20.85	1.00 V	201	26.55	6.59
7	#10460.00	50.25 PK	74.00	-23.75	1.22 V	30	33.02	17.23
8	#10460.00	41.79 AV	54.00	-12.21	1.22 V	30	24.56	17.23
9	15690.00	58.36 PK	74.00	-15.64	3.01 V	188	33.98	24.38
10	15690.00	47.69 AV	54.00	-6.31	3.01 V	188	23.31	24.38

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 (VTH80MHz)

CHANNEL	TX Channel 42	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	49.36 PK	74.00	-24.64	1.33 H	25	42.96	6.40
2	5150.00	34.01 AV	54.00	-19.99	1.33 H	25	27.61	6.40
3	*5210.00	96.13 PK			1.00 H	25	89.66	6.47
4	*5210.00	86.36 AV			1.00 H	25	79.89	6.47
5	#10420.00	50.27 PK	74.00	-23.73	1.00 H	301	33.26	17.01
6	#10420.00	40.19 AV	54.00	-13.81	1.00 H	301	23.18	17.01
7	15630.00	58.69 PK	74.00	-15.31	1.66 H	49	34.49	24.20
8	15630.00	48.36 AV	54.00	-5.64	1.66 H	49	24.16	24.20
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	42.02 PK	74.00	-31.98	1.55 V	60	35.62	6.40
2	5150.00	28.96 AV	54.00	-25.04	1.55 V	60	22.56	6.40
3	*5210.00	89.36 PK			1.00 V	51	82.89	6.47
4	*5210.00	78.36 AV			1.00 V	51	71.89	6.47
5	#10420.00	50.26 PK	74.00	-23.74	1.33 V	20	33.25	17.01
6	#10420.00	41.10 AV	54.00	-12.90	1.33 V	20	24.09	17.01
7	15630.00	59.36 PK	74.00	-14.64	1.66 V	50	35.16	24.20
8	15630.00	47.36 AV	54.00	-6.64	1.66 V	50	23.16	24.20

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

Band 2 (5250-5350MHz):

802.11a

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	*5260.00	100.02 PK			1.23 H	41	91.39	8.63
2	*5260.00	91.39 AV			1.23 H	41	82.76	8.63
3	5350.00	59.77 PK	74.00	-14.23	1.30 H	41	51.00	8.77
4	5350.00	41.87 AV	54.00	-12.13	1.30 H	41	33.10	8.77
5	10520.00	59.30 PK	74.00	-14.70	1.18 H	39	39.18	20.12
6	10520.00	49.93 AV	54.00	-4.07	1.18 H	39	29.81	20.12
7	15780.00	58.75 PK	74.00	-15.25	1.15 H	44	36.01	22.74
8	15780.00	46.54 AV	54.00	-7.46	1.15 H	44	23.80	22.74
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	*5260.00	104.10 PK			1.30 V	138	95.47	8.63
2	*5260.00	97.86 AV			1.30 V	138	89.23	8.63
3	5350.00	60.44 PK	74.00	-13.56	1.04 V	131	51.67	8.77
4	5350.00	42.45 AV	54.00	-11.55	1.04 V	131	33.68	8.77
5	10520.00	62.80PK	74.00	-11.20	1.12 V	171	42.68	20.12
6	10520.00	50.90 AV	54.00	-3.10	1.12 V	171	30.78	20.12
7	15780.00	59.24 PK	74.00	-14.66	1.54 V	89	36.50	22.74
8	15780.00	46.51 AV	54.00	-7.49	1.54 V	89	23.77	22.74

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 other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 60	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	*5300.00	101.38 PK			1.51 H	163	92.72	8.66
2	*5300.00	92.20 AV			1.51 H	163	83.54	8.66
3	5350.00	65.59 PK	74.00	-8.41	1.70 H	168	56.82	8.77
4	5350.00	48.84 AV	54.00	-5.16	1.70 H	168	40.07	8.77
5	10600.00	59.24 PK	74.00	-14.76	1.94 H	104	38.89	20.35
6	10600.00	50.77 AV	54.00	-3.23	1.94 H	104	30.42	20.35
7	15900.00	59.32 PK	74.00	-14.68	2.31 H	303	36.51	22.81
8	15900.00	46.36 AV	54.00	-7.64	2.31 H	303	23.55	22.81
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	*5300.00	104.70 PK			2.04 V	120	96.04	8.66
2	*5300.00	96.97 AV			2.04 V	120	88.31	8.66
3	5350.00	66.35 PK	74.00	-7.65	2.85 V	124	57.58	8.77
4	5350.00	48.71 AV	54.00	-5.29	2.85 V	124	39.94	8.77
5	10600.00	63.34 PK	74.00	-10.66	1.65 V	273	42.99	20.35
6	10600.00	49.73 AV	54.00	-4.27	1.65 V	273	29.38	20.35
7	15900.00	62.48 PK	74.00	-11.52	1.14 V	355	39.67	22.81
8	15900.00	47.25 AV	54.00	-6.75	1.14 V	355	24.44	22.81

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 other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 64	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	*5320.00	101.59 PK			1.00 H	126	95.02	6.57
2	*5320.00	90.53 AV			1.00 H	126	83.96	6.57
3	5350.00	50.86 PK	74.00	-23.14	1.00 H	126	44.27	6.59
4	5350.00	36.65 AV	54.00	-17.35	1.00 H	126	30.05	6.59
5	10640.00	51.48 PK	74.00	-22.52	1.10 H	214	33.52	17.96
6	10640.00	42.36 AV	54.00	-11.64	1.10 H	214	24.40	17.96
7	15960.00	59.26 PK	74.00	-14.74	1.00 H	178	34.07	25.19
8	15960.00	49.36 AV	54.00	-4.64	1.00 H	178	24.17	25.19
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	93.69 PK			1.00 V	43	87.12	6.57
2	*5320.00	84.46 AV			1.00 V	43	77.89	6.57
3	5350.00	43.79 PK	74.00	-30.21	1.00 V	360	37.20	6.59
4	5350.00	31.25 AV	54.00	-22.75	1.00 V	360	24.66	6.59
5	10640.00	53.26 PK	74.00	-20.74	1.20 V	188	35.30	17.96
6	10640.00	42.18 AV	54.00	-11.82	1.20 V	188	24.22	17.96
7	15960.00	58.26 PK	74.00	-15.74	1.00 V	247	33.07	25.19
8	15960.00	49.22 AV	54.00	-4.78	1.00 V	247	24.03	25.19

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 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	*5260.00	100.20 PK			1.20 H	188	91.57	8.63
2	*5260.00	91.06 AV			1.20 H	188	82.43	8.63
3	5350.00	59.55 PK	74.00	-14.45	1.17 H	188	50.78	8.77
4	5350.00	42.18 AV	54.00	-11.82	1.17H	188	33.41	8.77
5	10520.00	59.46 PK	74.00	-14.54	1.90 H	264	39.34	20.12
6	10520.00	50.67 AV	54.00	-3.33	1.90 H	264	30.55	20.12
7	15780.00	58.82 PK	74.00	-15.18	2.10 H	350	36.08	22.74
8	15780.00	46.96 AV	54.00	-7.04	2.10 H	350	24.24	22.74
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	*5260.00	104.10 PK			1.30 V	138	95.47	8.63
2	*5260.00	97.86 AV			1.30 V	138	89.23	8.63
3	5350.00	60.39 PK	74.00	-13.61	1.04 V	131	51.62	8.77
4	5350.00	42.36 AV	54.00	-11.64	1.04 V	131	33.59	8.77
5	10520.00	62.96 PK	74.00	-11.04	1.12 V	171	42.84	20.12
6	10520.00	50.13 AV	54.00	-3.87	1.12 V	171	30.01	20.12
7	15780.00	58.72 PK	74.00	-15.28	1.54 V	89	35.98	22.74
8	15780.00	46.58 AV	54.00	-7.49	1.54 V	89	23.84	22.74

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 other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 60	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	*5300.00	101.77 PK			1.50 H	355	93.11	8.66
2	*5300.00	92.20 AV			1.50 H	355	84.17	8.66
3	5350.00	65.79 PK	74.00	-8.21	1.50 H	304	57.02	8.77
4	5350.00	49.31 AV	54.00	-4.69	1.50 H	304	40.54	8.77
5	10600.00	58.97 PK	74.00	-15.03	1.90 H	218	38.62	20.35
6	10600.00	50.68 AV	54.00	-3.32	1.90 H	218	30.33	20.35
7	15900.00	59.28 PK	74.00	-14.72	1.00 H	249	36.47	22.81
8	15900.00	46.82 AV	54.00	-7.18	1.00 H	249	24.01	22.81
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	*5300.00	104.99PK			1.00 V	300	96.33	8.66
2	*5300.00	97.08 AV			1.00 V	300	88.42	8.66
3	5350.00	66.17 PK	74.00	-7.83	1.00 V	300	57.4	8.77
4	5350.00	47.51 AV	54.00	-6.49	1.00 V	300	38.74	8.77
5	10600.00	62.89 PK	74.00	-11.11	1.40 V	253	42.54	20.35
6	10600.00	50.86 AV	54.00	-3.14	1.40 V	253	30.51	20.35
7	15900.00	62.85 PK	74.00	-11.15	2.70 V	146	40.04	22.81
8	15900.00	47.74 AV	54.00	-6.26	2.70 V	146	24.93	22.81

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 other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 64	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	*5320.00	101.11 PK			1.00 H	126	94.54	6.57
2	*5320.00	89.78 AV			1.00 H	126	83.21	6.57
3	5350.00	52.07 PK	74.00	-21.93	1.00 H	126	45.48	6.59
4	5350.00	37.09 AV	54.00	-16.91	1.00 H	126	30.50	6.59
5	10640.00	50.99 PK	74.00	-23.01	1.22 H	46	33.03	17.96
6	10640.00	40.36 AV	54.00	-13.64	1.22 H	46	22.40	17.96
7	15960.00	59.37 PK	74.00	-14.63	1.30 H	214	34.18	25.19
8	15960.00	48.88 AV	54.00	-5.12	1.30 H	214	23.69	25.19
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	92.26 PK			1.00 V	43	85.69	6.57
2	*5320.00	82.46 AV			1.00 V	43	75.89	6.57
3	5350.00	43.86 PK	74.00	-30.14	1.00 V	43	37.27	6.59
4	5350.00	31.74 AV	54.00	-22.26	1.00 V	43	25.14	6.59
5	10640.00	49.58 PK	74.00	-24.42	1.33 V	25	31.62	17.96
6	10640.00	40.36 AV	54.00	-13.64	1.33 V	25	22.40	17.96
7	15960.00	59.36 PK	74.00	-14.64	1.20 V	47	34.17	25.19
8	15960.00	48.11 AV	54.00	-5.89	1.20 V	47	22.92	25.19

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 54	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	*5270.00	103.34 PK			1.42 H	172	94.66	8.68
2	*5270.00	91.40 AV			1.42 H	172	82.72	8.68
3	5350.00	58.98 PK	74.00	-15.02	1.42 H	172	50.21	8.77
4	5350.00	46.84 AV	54.00	-7.16	1.42 H	172	38.07	8.77
5	10540.00	58.84 PK	74.00	-15.16	2.10 H	104	38.46	20.38
6	10540.00	47.15 AV	54.00	-6.85	2.10 H	104	26.77	20.38
7	15810.00	56.42 PK	74.00	-17.58	1.00 H	342	33.59	22.83
8	15810.00	46.52 AV	54.00	-7.48	1.00 H	342	23.69	22.83
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	99.60 PK			1.50 V	14	90.92	8.68
2	*5270.00	89.75 AV			1.50 V	14	81.07	8.68
3	5350.00	57.10 PK	74.00	-16.90	1.50 V	23	48.33	8.77
4	5350.00	45.97 AV	54.00	-8.03	1.50 V	23	37.20	8.77
5	10540.00	60.20 PK	74.00	-13.80	1.90 V	243	39.82	20.38
6	10540.00	46.79 AV	54.00	-7.21	1.90 V	243	26.41	20.38
7	15810.00	54.90 PK	74.00	-19.10	1.60 V	5	32.07	22.83
8	15810.00	46.57 AV	54.00	-7.43	1.60 V	5	23.74	22.83

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 other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 62	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	*5310.00	102.15 PK			1.99 H	50	95.59	6.55
2	*5310.00	93.08 AV			1.99 H	50	86.52	6.55
3	5350.00	60.23 PK	74.00	-13.77	1.77 H	45	53.63	6.59
4	5350.00	48.89 AV	54.00	-5.11	1.77 H	45	42.30	6.59
5	10620.00	48.25 PK	74.00	-25.75	1.22 H	20	30.36	17.89
6	10620.00	37.15 AV	54.00	-16.85	1.22 H	20	19.26	17.89
7	15930.00	54.25 PK	74.00	-19.75	1.20 H	205	29.15	25.10
8	15930.00	45.22 AV	54.00	-8.78	1.20 H	205	20.12	25.10
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	*5310.00	97.14 PK			2.00 V	201	90.59	6.55
2	*5310.00	87.58 AV			2.00 V	201	81.02	6.55
3	5350.00	56.15 PK	74.00	-17.85	2.00 V	201	49.55	6.59
4	5350.00	45.49 AV	54.00	-8.51	2.00 V	201	38.89	6.59
5	10620.00	46.22 PK	74.00	-27.78	1.22 V	20	28.33	17.89
6	10620.00	38.15 AV	54.00	-15.85	1.22 V	20	20.26	17.89
7	15930.00	53.16 PK	74.00	-20.84	2.01 V	6	28.06	25.10
8	15930.00	44.02 AV	54.00	-9.98	2.01 V	6	18.92	25.10

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.



802.11ac (VTH80MHz)

CHANNEL	TX Channel 58	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	*5290.00	95.96 PK			1.65 H	50	89.42	6.53
2	*5290.00	86.69 AV			1.65 H	50	80.16	6.53
3	5350.00	50.15 PK	74.00	-23.85	1.62 H	199	43.55	6.59
4	5350.00	35.29 AV	54.00	-18.71	1.62 H	199	28.70	6.59
5	#10580.00	50.16 PK	74.00	-23.84	1.00 H	214	32.41	17.75
6	#10580.00	39.16 AV	54.00	-14.84	1.00 H	214	21.41	17.75
7	15870.00	58.36 PK	74.00	-15.64	3.20 H	100	33.44	24.92
8	15870.00	48.33 AV	54.00	-5.67	3.20 H	100	23.41	24.92
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	89.36 PK			1.55 V	49	82.83	6.53
2	*5290.00	78.15 AV			1.55 V	49	71.62	6.53
3	5350.00	41.26 PK	74.00	-32.74	1.66 V	49	34.66	6.59
4	5350.00	28.01 AV	54.00	-25.99	1.66 V	49	21.42	6.59
5	#10580.00	50.16 PK	74.00	-23.84	1.55 V	64	32.41	17.75
6	#10580.00	41.59 AV	54.00	-12.41	1.55 V	64	23.84	17.75
7	15870.00	57.36 PK	74.00	-16.64	1.60 V	149	32.44	24.92
8	15870.00	47.29 AV	54.00	-6.71	1.60 V	149	22.37	24.92

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)
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	5460.00	46.5 PK	74.0	-27.5	1.55 H	94	39.79	6.70
2	5460.00	33.7 AV	54.0	-20.3	1.55 H	94	27.00	6.70
3	#5470.00	48.8 PK	74.0	-25.3	1.00 H	94	42.04	6.71
4	*5500.00	98.7 PK			1.00 H	94	91.95	6.74
5	*5500.00	89.3 AV			1.00 H	94	82.59	6.74
6	11000.00	51.0 PK	74.0	-23.0	1.20 H	54	31.70	19.32
7	11000.00	40.5 AV	54.0	-13.5	1.20 H	54	21.16	19.32
8	#16500.00	59.4 PK	74.0	-14.6	2.55 H	48	34.85	24.51
9	#16500.00	49.0 AV	54.0	-5.0	2.55 H	48	24.48	24.51
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	5460.00	43.7 PK	74.0	-30.3	1.00 V	47	37.01	6.70
2	5460.00	30.6 AV	54.0	-23.4	1.00 V	47	23.89	6.70
3	#5470.00	45.1 PK	74.0	-28.9	1.00 V	47	38.39	6.71
4	*5500.00	92.5 PK			1.20 V	144	85.74	6.74
5	*5500.00	83.0 AV			1.20 V	144	76.21	6.74
6	11000.00	51.0 PK	74.0	-23.0	1.00 V	201	31.69	19.32
7	11000.00	42.1 AV	54.0	-11.9	1.00 V	201	22.76	19.32
8	#16500.00	59.4 PK	74.0	-14.6	3.02 V	199	34.85	24.51
9	#16500.00	48.4 AV	54.0	-5.6	3.02 V	199	23.85	24.51

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)
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	5460.00	40.3 PK	74.0	-33.8	1.00 H	89	33.55	6.70
2	5460.00	30.0 AV	54.0	-24.0	1.00 H	89	23.29	6.70
3	#5470.00	40.0 PK	74.0	-34.1	1.00 H	214	33.24	6.71
4	*5580.00	98.2 PK			1.00 H	89	91.18	7.03
5	*5580.00	88.3 AV			1.00 H	89	81.28	7.03
6	11160.00	51.5 PK	74.0	-22.5	1.66 H	60	32.46	19.02
7	11160.00	40.6 AV	54.0	-13.4	1.66 H	60	21.57	19.02
8	#16740.00	59.4 PK	74.0	-14.6	1.00 H	214	33.55	25.81
9	#16740.00	49.6 AV	54.0	-4.4	1.00 H	214	23.77	25.81
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	5460.00	37.7 PK	74.0	-36.3	1.00 V	307	31.01	6.70
2	5460.00	29.7 AV	54.0	-24.3	1.00 V	307	22.99	6.70
3	#5470.00	39.0 PK	74.0	-35.0	1.00 V	307	32.30	6.71
4	*5580.00	90.6 PK			1.22 V	307	83.54	7.03
5	*5580.00	80.4 AV			1.22 V	307	73.40	7.03
6	11160.00	50.2 PK	74.0	-23.9	1.30 V	288	31.13	19.02
7	11160.00	41.2 AV	54.0	-12.8	1.30 V	288	22.20	19.02
8	#16740.00	58.7 PK	74.0	-15.3	1.00 V	44	32.88	25.81
9	#16740.00	48.4 AV	54.0	-5.6	1.00 V	44	22.55	25.81

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

CHANNEL	TX Channel 140	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	*5700.00	98.6 PK			1.00 H	91	91.13	7.46
2	*5700.00	88.7 AV			1.00 H	91	81.28	7.46
3	#5725.00	50.7 PK	74.0	-23.3	1.00 H	93	43.11	7.55
4	11400.00	51.6 PK	74.0	-22.4	2.01 H	45	33.02	18.56
5	11400.00	39.6 AV	54.0	-14.4	2.01 H	45	21.00	18.56
6	#17100.00	59.4 PK	74.0	-14.6	3.02 H	144	32.28	27.09
7	#17100.00	49.9 AV	54.0	-4.2	3.02 H	144	22.76	27.09
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	93.9 PK			1.00 V	92	86.43	7.46
2	*5700.00	84.5 AV			1.00 V	92	76.99	7.46
3	#5725.00	45.4 PK	74.0	-28.6	1.00 V	91	37.82	7.55
4	11400.00	49.4 PK	74.0	-24.6	1.00 V	21	30.80	18.56
5	11400.00	40.2 AV	54.0	-13.9	1.00 V	21	21.59	18.56
6	#17100.00	59.4 PK	74.0	-14.6	2.01 V	47	32.27	27.09
7	#17100.00	48.6 AV	54.0	-5.4	2.01 V	47	21.54	27.09

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)
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	5460.00	50.9 PK	74.0	-23.1	1.00 H	127	44.24	6.70
2	5460.00	35.1 AV	54.0	-18.9	1.00 H	127	28.41	6.70
3	#5470.00	51.6 PK	74.0	-22.4	1.00 H	127	44.88	6.71
4	*5500.00	99.6 PK			1.00 H	127	92.83	6.74
5	*5500.00	89.3 AV			1.00 H	127	82.52	6.74
6	11000.00	50.9 PK	74.0	-23.2	3.02 H	100	31.53	19.32
7	11000.00	39.7 AV	54.0	-14.3	3.02 H	100	20.37	19.32
8	#16500.00	58.3 PK	74.0	-15.7	1.52 H	333	33.75	24.51
9	#16500.00	48.7 AV	54.0	-5.3	1.52 H	333	24.15	24.51
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	5460.00	43.6 PK	74.0	-30.4	1.00 V	46	36.86	6.70
2	5460.00	30.3 AV	54.0	-23.8	1.00 V	46	23.55	6.70
3	#5470.00	45.6 PK	74.0	-28.4	1.00 V	46	38.85	6.71
4	*5500.00	92.6 PK			1.00 V	46	85.82	6.74
5	*5500.00	81.9 AV			1.00 V	46	75.14	6.74
6	11000.00	50.6 PK	74.0	-23.5	1.20 V	144	31.23	19.32
7	11000.00	41.8 AV	54.0	-12.2	1.20 V	144	22.48	19.32
8	#16500.00	59.7 PK	74.0	-14.3	1.65 V	144	35.15	24.51
9	#16500.00	48.5 AV	54.0	-5.5	1.65 V	144	23.96	24.51

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)
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	5460.00	50.3 PK	74.0	-23.7	1.00 H	201	43.56	6.70
2	5460.00	35.6 AV	54.0	-18.4	1.00 H	201	28.93	6.70
3	#5470.00	51.3 PK	74.0	-22.7	1.55 H	200	44.55	6.71
4	*5580.00	100.2 PK			1.00 H	201	93.20	7.03
5	*5580.00	89.7 AV			1.00 H	201	82.67	7.03
6	11160.00	50.1 PK	74.0	-23.9	1.00 H	287	31.10	19.02
7	11160.00	40.4 AV	54.0	-13.6	1.00 H	287	21.34	19.02
8	#16740.00	58.7 PK	74.0	-15.3	3.02 H	155	32.88	25.81
9	#16740.00	48.3 AV	54.0	-5.7	3.02 H	155	22.51	25.81
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	5460.00	43.4 PK	74.0	-30.6	1.00 V	302	36.66	6.70
2	5460.00	30.9 AV	54.0	-23.1	1.00 V	302	24.19	6.70
3	#5470.00	45.8 PK	74.0	-28.2	1.00 V	145	39.11	6.71
4	*5580.00	92.9 PK			1.00 V	302	85.85	7.03
5	*5580.00	81.5 AV			1.00 V	302	74.46	7.03
6	11160.00	50.3 PK	74.0	-23.8	1.00 V	214	31.23	19.02
7	11160.00	41.8 AV	54.0	-12.2	1.00 V	214	22.77	19.02
8	#16740.00	59.4 PK	74.0	-14.6	1.00 V	19	33.55	25.81
9	#16740.00	48.1 AV	54.0	-5.9	1.00 V	19	22.28	25.81

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.



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Test Report No.: RF170927N027-3

CHANNEL	TX Channel 140	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	*5700.00	98.4 PK			1.00 H	214	90.90	7.46
2	*5700.00	87.4 AV			1.00 H	214	79.90	7.46
3	#5725.00	51.1 PK	74.0	-22.9	1.00 H	214	43.56	7.55
4	11400.00	50.3 PK	74.0	-23.7	1.00 H	215	31.70	18.56
5	11400.00	40.2 AV	54.0	-13.8	1.00 H	215	21.60	18.56
6	#17100.00	58.8 PK	74.0	-15.2	1.00 H	211	31.75	27.09
7	#17100.00	48.4 AV	54.0	-5.6	1.00 H	211	21.27	27.09
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	92.9 PK			1.00 V	120	85.43	7.46
2	*5700.00	81.6 AV			1.00 V	120	74.16	7.46
3	#5725.00	47.2 PK	74.0	-26.8	1.00 V	120	39.61	7.55
4	11400.00	50.3 PK	74.0	-23.8	1.00 V	260	31.69	18.56
5	11400.00	41.3 AV	54.0	-12.7	1.00 V	260	22.76	18.56
6	#17100.00	60.1 PK	74.0	-13.9	1.00 V	220	33.04	27.09
7	#17100.00	48.8 AV	54.0	-5.2	1.00 V	220	21.67	27.09

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)
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	5460.00	50.1 PK	74.0	-23.9	1.00 H	201	43.43	6.70
2	5460.00	35.5 AV	54.0	-18.5	1.00 H	201	28.78	6.70
3	#5470.00	51.6 PK	74.0	-22.4	1.00 H	201	44.85	6.71
4	*5510.00	99.6 PK			1.00 H	201	92.81	6.78
5	*5510.00	89.7 AV			1.00 H	201	82.93	6.78
6	11020.00	51.5 PK	74.0	-22.5	1.00 H	205	32.18	19.28
7	11020.00	40.9 AV	54.0	-13.2	1.00 H	205	21.57	19.28
8	#16530.00	58.1 PK	74.0	-15.9	1.20 H	177	33.44	24.67
9	#16530.00	48.4 AV	54.0	-5.6	1.20 H	177	23.69	24.67
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	5460.00	43.4 PK	74.0	-30.6	1.22 V	50	36.66	6.70
2	5460.00	31.0 AV	54.0	-23.0	1.22 V	50	24.33	6.70
3	#5470.00	46.8 PK	74.0	-27.2	1.22 V	50	40.11	6.71
4	*5510.00	92.2 PK			1.22 V	50	85.37	6.78
5	*5510.00	81.3 AV			1.22 V	50	74.55	6.78
6	11020.00	50.8 PK	74.0	-23.2	1.30 V	26	31.56	19.28
7	11020.00	41.8 AV	54.0	-12.2	1.30 V	26	22.51	19.28
8	#16530.00	59.5 PK	74.0	-14.5	1.30 V	47	34.79	24.67
9	#16530.00	48.6 AV	54.0	-5.4	1.30 V	47	23.96	24.67

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)
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	5460.00	49.4 PK	74.0	-24.6	1.88 H	70	42.66	6.70
2	5460.00	34.2 AV	54.0	-19.9	1.88 H	70	27.45	6.70
3	#5470.00	50.1 PK	74.0	-23.9	1.88 H	70	43.42	6.71
4	*5550.00	100.3 PK			1.88 H	70	93.40	6.92
5	*5550.00	88.4 AV			1.88 H	70	81.44	6.92
6	11100.00	50.2 PK	74.0	-23.8	2.01 H	146	31.05	19.13
7	11100.00	40.6 AV	54.0	-13.4	2.01 H	146	21.43	19.13
8	#16650.00	58.5 PK	74.0	-15.5	1.88 H	61	33.13	25.33
9	#16650.00	48.1 AV	54.0	-5.9	1.88 H	61	22.79	25.33
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	5460.00	42.2 PK	74.0	-31.8	1.00 V	88	35.46	6.70
2	5460.00	30.0 AV	54.0	-24.0	1.00 V	88	23.26	6.70
3	#5470.00	44.1 PK	74.0	-29.9	1.00 V	88	37.37	6.71
4	*5550.00	92.2 PK			1.00 V	88	85.23	6.92
5	*5550.00	81.5 AV			1.00 V	88	74.56	6.92
6	11100.00	50.0 PK	74.0	-24.0	1.00 V	20	30.88	19.13
7	11100.00	41.4 AV	54.0	-12.6	1.00 V	20	22.23	19.13
8	#16650.00	59.4 PK	74.0	-14.6	1.20 V	73	34.03	25.33
9	#16650.00	48.6 AV	54.0	-5.4	1.20 V	73	23.30	25.33

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

CHANNEL	TX Channel 134	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	*5670.00	98.2 PK			1.30 H	133	90.81	7.35
2	*5670.00	89.0 AV			1.30 H	133	81.64	7.35
3	#5725.00	44.3 PK	74.0	-29.7	1.30 H	133	36.71	7.55
4	11340.00	50.2 PK	74.0	-23.8	1.20 H	15	31.49	18.67
5	11340.00	40.0 AV	54.0	-14.0	1.20 H	15	21.35	18.67
6	#17010.00	57.3 PK	74.0	-16.7	1.30 H	195	30.05	27.21
7	#17010.00	47.4 AV	54.0	-6.6	1.30 H	195	20.15	27.21
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	92.1 PK			1.20 V	10	84.76	7.35
2	*5670.00	80.7 AV			1.20 V	10	73.39	7.35
3	#5725.00	40.1 PK	74.0	-33.9	1.20 V	10	32.54	7.55
4	11340.00	50.3 PK	74.0	-23.7	1.55 V	49	31.59	18.67
5	11340.00	41.8 AV	54.0	-12.2	1.55 V	49	23.15	18.67
6	#17010.00	59.2 PK	74.0	-14.8	1.60 V	14	31.95	27.21
7	#17010.00	48.4 AV	54.0	-5.6	1.60 V	14	21.15	27.21

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

802.11ac (VTH80MHz)

CHANNEL	TX Channel 106	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	5460.00	48.4 PK	74.0	-25.6	1.55 H	60	41.66	6.70
2	5460.00	33.3 AV	54.0	-20.7	1.55 H	60	26.56	6.70
3	#5470.00	52.4 PK	74.0	-21.6	1.55 H	60	45.65	6.71
4	*5530.00	96.1 PK			1.00 H	166	89.20	6.85
5	*5530.00	85.1 AV			1.00 H	166	78.26	6.85
6	11060.00	48.4 PK	74.0	-25.6	1.65 H	48	29.17	19.20
7	11060.00	38.6 AV	54.0	-15.4	1.65 H	48	19.39	19.20
8	#16590.00	57.3 PK	74.0	-16.7	1.00 H	150	32.26	25.00
9	#16590.00	46.4 AV	54.0	-7.6	1.00 H	150	21.39	25.00
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	5460.00	41.3 PK	74.0	-32.7	1.20 V	55	34.56	6.70
2	5460.00	30.0 AV	54.0	-24.0	1.20 V	55	23.31	6.70
3	#5470.00	43.3 PK	74.0	-30.7	1.65 V	92	36.55	6.71
4	*5530.00	87.4 PK			1.30 V	255	80.51	6.85
5	*5530.00	76.4 AV			1.30 V	255	69.55	6.85
6	11060.00	48.4 PK	74.0	-25.6	1.30 V	28	29.16	19.20
7	11060.00	39.4 AV	54.0	-14.6	1.30 V	28	20.16	19.20
8	#16590.00	53.90 PK	74.0	-20.10	1.00 V	65	28.90	25.00
9	#16590.00	48.3 AV	54.0	-5.7	1.00 V	65	23.32	25.00

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 149	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	62.33 PK	68.20	-5.87	1.00 H	20	55.05	7.28
2	#5700.00	68.22 PK	105.20	-36.98	1.00 H	20	60.76	7.46
3	#5720.00	77.14 PK	110.80	-33.66	1.00 H	20	69.60	7.54
4	#5725.00	76.36 PK	122.20	-45.84	1.00 H	20	68.81	7.55
5	*5745.00	98.11 PK			1.00 H	20	90.48	7.63
6	*5745.00	88.32 AV			1.00 H	20	80.69	7.63
7	11490.00	50.12 PK	74.00	-23.88	1.50 H	166	31.73	18.39
8	11490.00	40.15 AV	54.00	-13.85	1.50 H	166	21.76	18.39
9	#17235.00	58.26 PK	74.00	-15.74	1.00 H	14	31.36	26.90
10	#17235.00	48.36 AV	54.00	-5.64	1.00 H	14	21.46	26.90
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	63.16 PK	68.20	-5.04	1.00 V	230	55.88	7.28
2	#5700.00	82.15 PK	105.20	-23.05	1.00 V	230	74.69	7.46
3	#5720.00	90.15 PK	110.80	-20.65	1.00 V	230	82.61	7.54
4	#5725.00	88.19 PK	122.20	-34.01	1.00 V	230	80.64	7.55
5	*5745.00	91.26 PK			1.00 V	230	83.63	7.63
6	*5745.00	80.46 AV			1.00 V	230	72.83	7.63
7	11490.00	50.16 PK	74.00	-23.84	1.45 V	50	31.77	18.39
8	11490.00	41.88 AV	54.00	-12.12	1.45 V	50	23.49	18.39
9	#17235.00	59.36 PK	74.00	-14.64	1.66 V	55	32.46	26.90
10	#17235.00	48.77 AV	54.00	-5.23	1.66 V	55	21.87	26.90

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.



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Test Report No.: RF170927N027-3

CHANNEL	TX Channel 157	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	62.16 PK	68.20	-6.04	1.00 H	50	54.88	7.28
2	#5700.00	68.26 PK	105.20	-36.94	1.00 H	50	60.80	7.46
3	#5720.00	77.25 PK	110.80	-33.55	1.00 H	20	69.71	7.54
4	#5725.00	76.22 PK	122.20	-45.98	1.00 H	50	68.67	7.55
5	*5785.00	99.26 PK			1.66 H	50	91.49	7.77
6	*5785.00	88.32 AV			1.66 H	50	80.55	7.77
7	#5850.00	70.16 PK	122.20	-52.04	1.33 H	50	62.15	8.01
8	#5855.00	69.16 PK	110.80	-41.64	1.00 H	50	61.13	8.03
9	#5875.00	64.19 PK	105.20	-41.01	1.00 H	50	56.09	8.10
10	#5925.00	64.26 PK	68.20	-3.94	1.00 H	50	55.98	8.28
11	11570.00	50.19 PK	74.00	-23.81	1.33 H	25	31.73	18.46
12	11570.00	40.36 AV	54.00	-13.64	1.33 H	25	21.90	18.46
13	#17355.00	57.36 PK	74.00	-16.64	3.20 H	199	30.62	26.74
14	#17355.00	47.33 AV	54.00	-6.67	3.20 H	199	20.59	26.74
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	63.15 PK	68.20	-5.05	1.00 V	144	55.87	7.28
2	#5700.00	82.33 PK	105.20	-22.87	1.00 V	144	74.87	7.46
3	#5720.00	90.15 PK	110.80	-20.65	1.00 V	144	82.61	7.54
4	#5725.00	88.20 PK	122.20	-34.00	1.00 V	144	80.65	7.55
5	*5785.00	90.98 PK			1.00 V	215	83.21	7.77
6	*5785.00	79.36 AV			1.00 V	215	71.59	7.77
7	#5850.00	81.47 PK	122.20	-40.73	1.00 V	144	73.46	8.01
8	#5855.00	78.36 PK	110.80	-32.44	3.02 V	144	70.33	8.03
9	#5875.00	69.16 PK	105.20	-36.04	1.00 V	144	61.06	8.10
10	#5925.00	64.19 PK	68.20	-4.01	1.00 V	144	55.91	8.28
11	11570.00	50.13 PK	74.00	-23.87	2.01 V	360	31.67	18.46
12	11570.00	40.25 AV	54.00	-13.75	2.01 V	360	21.79	18.46
13	#17355.00	58.36 PK	74.00	-15.64	1.00 V	166	31.62	26.74
14	#17355.00	47.66 AV	54.00	-6.34	1.00 V	166	20.92	26.74

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.

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Test Report No.: RF170927N027-3

CHANNEL	TX Channel 165	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	*5825.00	97.36 PK			1.10 H	12	89.44	7.92
2	*5825.00	87.22 AV			1.10 H	12	79.30	7.92
3	#5850.00	70.18 PK	122.20	-52.02	1.10 H	12	62.17	8.01
4	#5855.00	69.26 PK	110.80	-41.54	1.10 H	12	61.23	8.03
5	#5875.00	64.26 PK	105.20	-40.94	1.01 H	12	56.16	8.10
6	#5925.00	64.19 PK	68.20	-4.01	1.10 H	12	55.91	8.28
7	11650.00	50.26 PK	74.00	-23.74	1.00 H	215	31.71	18.55
8	11650.00	40.18 AV	54.00	-13.82	1.00 H	215	21.63	18.55
9	#17475.00	58.36 PK	74.00	-15.64	1.00 H	60	31.79	26.57
10	#17475.00	48.16 AV	54.00	-5.84	1.00 H	60	21.59	26.57
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	90.22 PK			1.30 V	100	82.30	7.92
2	*5825.00	79.37 AV			1.30 V	100	71.45	7.92
3	#5850.00	81.25 PK	122.20	-40.95	1.30 V	25	73.24	8.01
4	#5855.00	77.36 PK	110.80	-33.44	1.30 V	100	69.33	8.03
5	#5875.00	68.96 PK	105.20	-36.24	1.30 V	100	60.86	8.10
6	#5925.00	64.29 PK	68.20	-3.91	1.30 V	100	56.01	8.28
7	11650.00	59.36 PK	74.00	-14.64	1.20 V	29	40.81	18.55
8	11650.00	41.03 AV	54.00	-12.97	1.20 V	29	22.48	18.55
9	#17475.00	58.16 PK	74.00	-15.84	1.50 V	88	31.59	26.57
10	#17475.00	47.32 AV	54.00	-6.68	1.50 V	88	20.75	26.57

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)
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	62.11 PK	68.20	-6.09	1.00 H	144	54.83	7.28
2	#5700.00	68.36 PK	105.20	-36.84	1.00 H	144	60.90	7.46
3	#5720.00	77.15 PK	110.80	-33.65	1.00 H	144	69.61	7.54
4	#5725.00	76.36 PK	122.20	-45.84	1.00 H	144	68.81	7.55
5	*5745.00	98.36 PK			1.60 H	144	90.73	7.63
6	*5745.00	88.46 AV			1.60 H	144	80.83	7.63
7	11490.00	50.18 PK	74.00	-23.82	3.02 H	155	31.79	18.39
8	11490.00	39.46 AV	54.00	-14.54	3.02 H	155	21.07	18.39
9	#17235.00	57.22 PK	74.00	-16.78	3.25 H	155	30.32	26.90
10	#17235.00	47.77 AV	54.00	-6.23	3.25 H	155	20.87	26.90
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	63.15 PK	68.20	-5.05	1.00 V	30	55.87	7.28
2	#5700.00	82.16 PK	105.20	-23.04	1.00 V	30	74.70	7.46
3	#5720.00	90.26 PK	110.80	-20.54	1.00 V	30	82.72	7.54
4	#5725.00	88.26 PK	122.20	-33.94	1.00 V	30	80.71	7.55
5	*5745.00	90.59 PK			1.00 V	30	82.96	7.63
6	*5745.00	79.36 AV			1.00 V	30	71.73	7.63
7	11490.00	49.37 PK	74.00	-24.63	3.02 V	166	30.98	18.39
8	11490.00	40.26 AV	54.00	-13.74	3.02 V	166	21.87	18.39
9	#17235.00	58.26 PK	74.00	-15.74	1.00 V	255	31.36	26.90
10	#17235.00	47.66 AV	54.00	-6.34	1.00 V	255	20.76	26.90

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.



**BUREAU
VERITAS**

Test Report No.: RF170927N027-3

CHANNEL	TX Channel 157	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	61.25 PK	68.20	-6.95	1.00 H	23	53.97	7.28
2	#5700.00	68.15 PK	105.20	-37.05	1.00 H	23	60.69	7.46
3	#5720.00	77.16 PK	110.80	-33.64	1.00 H	23	69.62	7.54
4	#5725.00	76.26 PK	122.20	-45.94	1.00 H	23	68.71	7.55
5	*5785.00	98.15 PK			1.00 H	23	90.38	7.77
6	*5785.00	87.20 AV			1.00 H	23	79.43	7.77
7	#5850.00	70.12 PK	122.20	-52.08	1.00 H	215	62.11	8.01
8	#5855.00	69.23 PK	110.80	-41.57	1.00 H	26	61.20	8.03
9	#5875.00	64.36 PK	105.20	-40.84	1.00 H	23	56.26	8.10
10	#5925.00	64.09 PK	68.20	-4.11	1.00 H	23	55.81	8.28
11	11570.00	49.36 PK	74.00	-24.64	3.02 H	155	30.90	18.46
12	11570.00	38.26 AV	54.00	-15.74	3.02 H	155	19.80	18.46
13	#17355.00	57.26 PK	74.00	-16.74	1.30 H	258	30.52	26.74
14	#17355.00	47.15 AV	54.00	-6.85	1.30 H	258	20.41	26.74
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	63.12 PK	68.20	-5.08	2.30 V	155	55.84	7.28
2	#5700.00	82.16 PK	105.20	-23.04	2.30 V	155	74.70	7.46
3	#5720.00	90.15 PK	110.80	-20.65	2.30 V	155	82.61	7.54
4	#5725.00	88.16 PK	122.20	-34.04	2.30 V	155	80.61	7.55
5	*5785.00	90.25 PK			2.30 V	155	82.48	7.77
6	*5785.00	79.36 AV			2.30 V	155	71.59	7.77
7	#5850.00	81.26 PK	122.20	-40.94	2.30 V	155	73.25	8.01
8	#5855.00	77.56 PK	110.80	-33.24	2.30 V	156	69.53	8.03
9	#5875.00	69.26 PK	105.20	-35.94	2.30 V	155	61.16	8.10
10	#5925.00	64.25 PK	68.20	-3.95	2.30 V	155	55.97	8.28
11	11570.00	49.36 PK	74.00	-24.64	1.00 V	15	30.90	18.46
12	11570.00	39.37 AV	54.00	-14.63	1.00 V	15	20.91	18.46
13	#17355.00	57.26 PK	74.00	-16.74	1.00 V	28	30.52	26.74
14	#17355.00	47.26 AV	54.00	-6.74	1.00 V	28	20.52	26.74

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.

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CHANNEL	TX Channel 165	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	*5825.00	98.11 PK			1.00 H	22	90.19	7.92
2	*5825.00	86.55 AV			1.00 H	22	78.63	7.92
3	#5850.00	80.15 PK	122.20	-42.05	1.00 H	22	72.14	8.01
4	#5855.00	78.16 PK	110.80	-32.64	1.00 H	22	70.13	8.03
5	#5875.00	69.21 PK	105.20	-35.99	1.00 H	22	61.11	8.10
6	#5925.00	64.36 PK	68.20	-3.84	1.00 H	22	56.08	8.28
7	11650.00	50.16 PK	74.00	-23.84	4.00 H	130	31.61	18.55
8	11650.00	40.15 AV	54.00	-13.85	4.00 H	130	21.60	18.55
9	#17475.00	58.26 PK	74.00	-15.74	3.20 H	150	31.69	26.57
10	#17475.00	47.32 AV	54.00	-6.68	3.20 H	150	20.75	26.57
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	90.25 PK			1.00 V	10	82.33	7.92
2	*5825.00	79.36 AV			1.00 V	10	71.44	7.92
3	#5850.00	81.23 PK	122.20	-40.97	3.02 V	166	73.22	8.01
4	#5855.00	78.26 PK	110.80	-32.54	1.00 V	10	70.23	8.03
5	#5875.00	69.26 PK	105.20	-35.94	1.00 V	10	61.16	8.10
6	#5925.00	64.26 PK	68.20	-3.94	1.00 V	10	55.98	8.28
7	11650.00	50.26 PK	74.00	-23.74	1.99 V	90	31.71	18.55
8	11650.00	41.48 AV	54.00	-12.52	1.99 V	90	22.93	18.55
9	#17475.00	58.26 PK	74.00	-15.74	1.00 V	12	31.69	26.57
10	#17475.00	47.36 AV	54.00	-6.64	1.00 V	12	20.79	26.57

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	#5650.00	62.11 PK	68.20	-6.09	1.00 H	20	54.83	7.28
2	#5700.00	68.23 PK	105.20	-36.97	1.00 H	20	60.77	7.46
3	#5720.00	77.58 PK	110.80	-33.22	1.00 H	20	70.04	7.54
4	#5725.00	75.29 PK	122.20	-46.91	1.00 H	20	67.74	7.55
5	*5755.00	97.25 PK			1.40 H	20	89.59	7.66
6	*5755.00	87.22 AV			1.40 H	20	79.56	7.66
7	11510.00	49.26 PK	74.00	-24.74	3.02 H	155	30.87	18.39
8	11510.00	39.16 AV	54.00	-14.84	3.02 H	155	20.77	18.39
9	#17265.00	57.26 PK	74.00	-16.74	3.02 H	155	30.40	26.86
10	#17265.00	47.26 AV	54.00	-6.74	3.02 H	155	20.40	26.86
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	63.26 PK	68.20	-4.94	1.60 V	50	55.98	7.28
2	#5700.00	82.11 PK	105.20	-23.09	1.60 V	50	74.65	7.46
3	#5720.00	90.16 PK	110.80	-20.64	1.60 V	50	82.62	7.54
4	#5725.00	88.26 PK	122.20	-33.94	1.60 V	50	80.71	7.55
5	*5755.00	90.15 PK			1.60 V	50	82.49	7.66
6	*5755.00	79.36 AV			1.60 V	50	71.70	7.66
7	11510.00	50.26 PK	74.00	-23.74	1.00 V	58	31.87	18.39
8	11510.00	41.55 AV	54.00	-12.45	1.00 V	58	23.16	18.39
9	#17265.00	58.26 PK	74.00	-15.74	3.02 V	199	31.40	26.86
10	#17265.00	47.62 AV	54.00	-6.38	3.02 V	199	20.76	26.86

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.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 159	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	*5795.00	97.36 PK			1.60 H	66	89.55	7.81
2	*5795.00	87.36 AV			1.60 H	66	79.55	7.81
3	#5850.00	70.26 PK	122.20	-51.94	1.60 H	66	62.25	8.01
4	#5855.00	69.16 PK	110.80	-41.64	1.60 H	66	61.13	8.03
5	#5875.00	64.26 PK	105.20	-40.94	1.60 H	66	56.16	8.10
6	#5925.00	64.25 PK	68.20	-3.95	1.60 H	66	55.97	8.28
7	11590.00	49.36 PK	74.00	-24.64	3.02 H	155	30.88	18.48
8	11590.00	38.26 AV	54.00	-15.74	3.02 H	155	19.78	18.48
9	#17385.00	57.26 PK	74.00	-16.74	1.00 H	36	30.57	26.69
10	#17385.00	47.26 AV	54.00	-6.74	1.00 H	36	20.57	26.69
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	*5795.00	90.58 PK			1.54 V	48	82.77	7.81
2	*5795.00	80.14 AV			1.54 V	48	72.33	7.81
3	#5850.00	81.26 PK	122.20	-40.94	1.50 V	48	73.25	8.01
4	#5855.00	78.26 PK	110.80	-32.54	1.50 V	48	70.23	8.03
5	#5875.00	69.26 PK	105.20	-35.94	1.50 V	48	61.16	8.10
6	#5925.00	64.26 PK	68.20	-3.94	1.00 V	48	55.98	8.28
7	11590.00	50.16 PK	74.00	-23.84	2.51 V	48	31.68	18.48
8	11590.00	41.25 AV	54.00	-12.75	2.51 V	48	22.77	18.48
9	#17385.00	57.36 PK	74.00	-16.64	3.02 V	166	30.67	26.69
10	#17385.00	48.33 AV	54.00	-5.67	3.02 V	166	21.64	26.69

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.



802.11ac BW80

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	62.33 PK	68.20	-5.87	1.00 H	11	55.05	7.28
2	#5700.00	68.26 PK	105.20	-36.94	1.00 H	11	60.80	7.46
3	#5720.00	77.25 PK	110.80	-33.55	1.00 H	11	69.71	7.54
4	#5725.00	76.26 PK	122.20	-45.94	1.00 H	11	68.71	7.55
5	*5775.00	97.36 PK			1.00 H	11	89.62	7.74
6	*5775.00	88.26 AV			1.00 H	11	80.52	7.74
7	#5850.00	70.25 PK	122.20	-51.95	1.00 H	10	62.24	8.01
8	#5855.00	69.36 PK	110.80	-41.44	1.00 H	11	61.33	8.03
9	#5875.00	64.26 PK	105.20	-40.94	1.00 H	11	56.16	8.10
10	#5925.00	64.19 PK	68.20	-4.01	1.00 H	11	55.91	8.28
11	11550.00	48.36 PK	74.00	-25.64	3.20 H	166	29.93	18.43
12	11550.00	38.27 AV	54.00	-15.73	3.20 H	166	19.84	18.43
13	#17325.00	57.26 PK	74.00	-16.74	3.02 H	199	30.49	26.77
14	#17325.00	47.26 AV	54.00	-6.74	3.02 H	199	20.49	26.77
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
1	#5650.00	62.16 PK	68.20	-6.04	1.00 V	30	54.88	7.28
2	#5700.00	82.11 PK	105.20	-23.09	1.00 V	33	74.65	7.46
3	#5720.00	90.15 PK	110.80	-20.65	1.00 V	33	82.61	7.54
4	#5725.00	88.22 PK	122.20	-33.98	1.11 V	33	80.67	7.55
5	*5775.00	90.12 PK			1.00 V	36	82.38	7.74
6	*5775.00	79.66 AV			1.00 V	36	71.92	7.74
7	#5850.00	80.15 PK	122.20	-42.05	1.00 V	33	72.14	8.01
8	#5855.00	78.17 PK	110.80	-32.63	1.00 V	33	70.14	8.03
9	#5875.00	69.46 PK	105.20	-35.74	1.00 V	33	61.36	8.10
10	#5925.00	64.11 PK	68.20	-4.09	1.00 V	36	55.83	8.28
11	11550.00	48.22 PK	74.00	-25.78	1.60 V	18	29.79	18.43
12	11550.00	40.16 AV	54.00	-13.84	1.60 V	18	21.73	18.43
13	#17325.00	58.16 PK	74.00	-15.84	1.00 V	88	31.39	26.77
14	#17325.00	47.33 AV	54.00	-6.67	1.00 V	88	20.56	26.77

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 (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

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

- The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
- 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	Apr. 05,17	Apr. 04,18
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 06,17	Mar. 05,18
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 05,17	Apr. 04,18
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 04,17	Jan. 03,18
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

NOTE:

- The test was performed in shielded room 553.
- 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

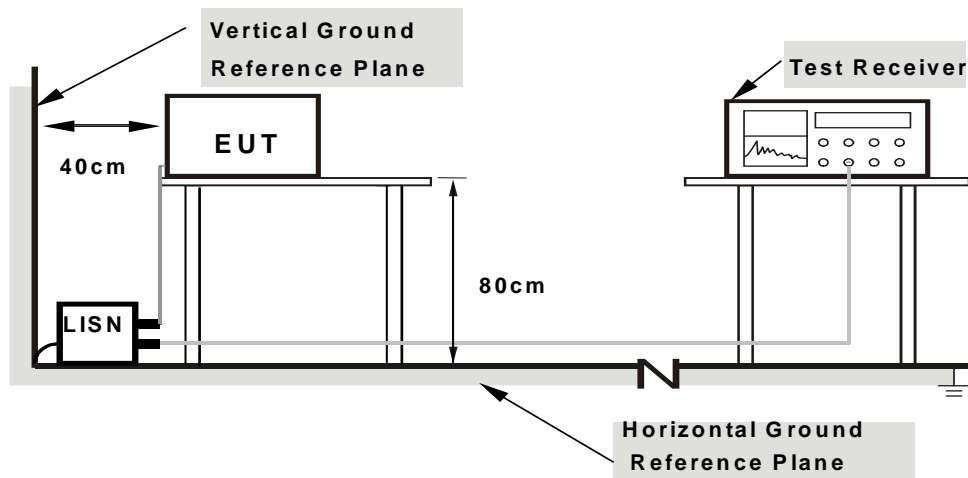
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- 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 cm 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 3.1.6

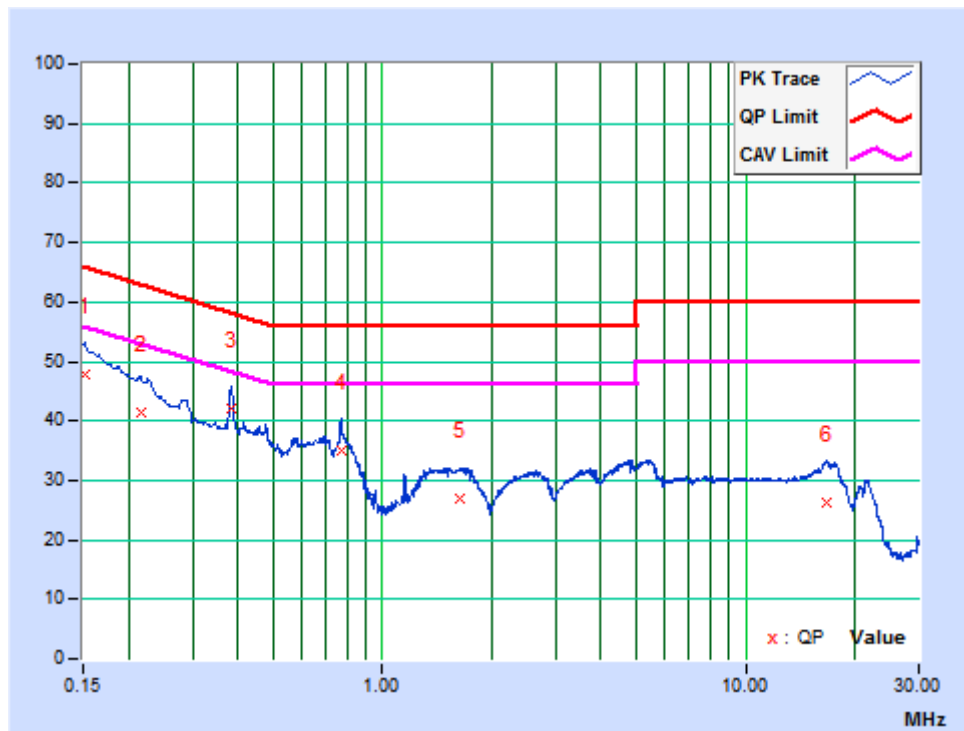
3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15225	10.22	37.45	16.98	47.67	27.20	65.88	55.88	-18.21	-28.68
2	0.21573	10.22	31.10	15.18	41.32	25.40	62.98	52.98	-21.66	-27.58
3	0.38362	10.22	31.75	30.08	41.97	40.30	58.20	48.20	-16.23	-7.90
4	0.77023	10.23	24.75	19.39	34.98	29.62	56.00	46.00	-21.02	-16.38
5	1.62604	10.22	16.75	7.49	26.97	17.71	56.00	46.00	-29.03	-28.29
6	16.72800	10.25	15.94	6.03	26.19	16.28	60.00	50.00	-33.81	-33.72

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



PHASE	Neutral	6dB BANDWIDTH	9kHz
-------	---------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	37.35	17.44	47.36	27.45	66.00	56.00	-18.64	-28.55
2	0.38362	10.02	33.95	31.82	43.97	41.84	58.20	48.20	-14.23	-6.36
3	0.76875	10.02	26.30	22.56	36.32	32.58	56.00	46.00	-19.68	-13.42
4	1.15125	10.02	19.06	15.12	29.08	25.14	56.00	46.00	-26.92	-20.86
5	5.52750	10.02	17.82	6.23	27.84	16.25	60.00	50.00	-32.16	-33.75
6	17.78100	10.14	16.77	6.94	26.91	17.08	60.00	50.00	-33.09	-32.92

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.



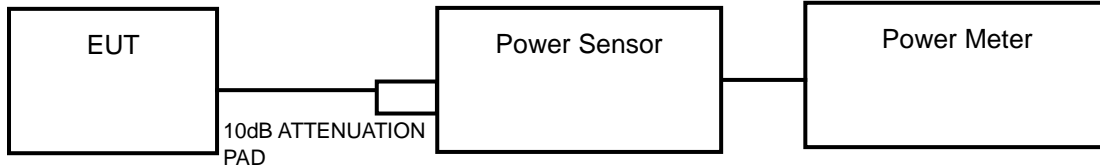
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

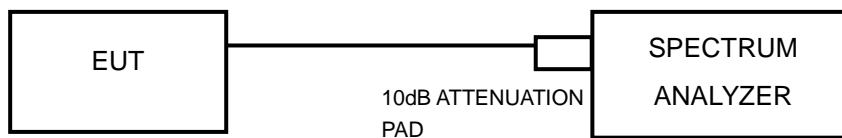
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client 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	May 19,17	May 18,18
Power Sensor	Keysight	U2021XA	MY55060018	May 19,17	May 18,18
Power Meter	Anritsu	ML2495A	1139001	Nov. 04,17	Nov. 03,18
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 13, 17	Oct.12, 18
Humid & Temp Programmable Tester	Haida	HD-2257	110807201	Sep.05,17	Sep. 04,18
Oscilloscope	Agilent	DSO9254A	MY51260160	Nov. 04,17	Nov. 03,18
Signal Analyzer	Rohde & Schwarz	FSV7	102331	Nov. 04,17	Nov. 03,18
Signal Generator	Agilent	N5183A	MY50140980	Nov. 04,17	Nov. 03,18
Agile Signal Generator	Agilent	8645A	Agilent	Aug.08, 17	Aug.07, 18
Spectrum Analyzer	Keysight	N9020A	MY55400499	Apr. 10,17	Apr. 09,18
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Dec.05, 17	Dec. 04, 18
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	Aug.08, 17	Aug.07, 18
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A	N/A
DC Source	Keysight	E3642A	MY56146098	N/A	N/A

NOTE:

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, GREGT/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)	LIMIT (dBm)	PASS /FAIL
36	5180	13.59	24.00	PASS
40	5200	13.36	24.00	PASS
48	5240	13.60	24.00	PASS
52	5260	12.84	24.00	PASS
60	5300	12.94	24.00	PASS
64	5320	13.23	24.00	PASS
100	5500	11.87	24.00	PASS
116	5580	11.05	24.00	PASS
140	5700	9.36	24.00	PASS
149	5745	10.19	30.00	PASS
157	5785	10.50	30.00	PASS
165	5825	10.62	30.00	PASS

For Band 2~Band 3: Limit = $11\text{dBm} + 10\log(26\text{ BW}) = 11 + 10\log(21.83) = 24.39\text{dBm} > 24\text{dBm}$

802.11n (20MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
36	5180	13.19	24.00	PASS
40	5200	13.38	24.00	PASS
48	5240	13.50	24.00	PASS
52	5260	12.94	24.00	PASS
60	5300	12.85	24.00	PASS
64	5320	13.14	24.00	PASS
100	5500	11.91	24.00	PASS
116	5580	10.51	24.00	PASS
140	5700	9.36	24.00	PASS
149	5745	10.05	30.00	PASS
157	5785	10.47	30.00	PASS
165	5825	10.67	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(21.94)=24.41dBm > 24dBm

802.11n (40MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
38	5190	12.84	24.00	PASS
46	5230	13.11	24.00	PASS
54	5270	13.48	24.00	PASS
62	5310	13.60	24.00	PASS
102	5510	12.42	24.00	PASS
110	5550	11.63	24.00	PASS
134	5670	9.95	24.00	PASS
151	5755	10.65	30.00	PASS
159	5795	10.94	30.00	PASS

802.11ac (80MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
42	5210	5.70	24.00	PASS
58	5290	5.67	24.00	PASS
106	5530	4.14	24.00	PASS
155	5775	3.01	30.00	PASS

26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	21.83	PASS
40	5200	21.91	PASS
48	5240	21.94	PASS
52	5260	21.83	PASS
60	5300	21.92	PASS
64	5320	21.85	PASS
100	5500	21.89	PASS
116	5580	21.85	PASS
140	5700	21.84	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	21.98	PASS
40	5200	22.03	PASS
48	5240	22.08	PASS
52	5260	22.10	PASS
60	5300	22.10	PASS
64	5320	22.14	PASS
100	5500	21.96	PASS
116	5580	22.09	PASS
140	5700	22.02	PASS

802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	41.56	PASS
46	5230	41.44	PASS
54	5270	41.58	PASS
62	5310	41.75	PASS
102	5510	41.32	PASS
110	5550	41.47	PASS
134	5670	41.32	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
42	5210	81.76	PASS
58	5290	81.83	PASS
106	5530	82.00	PASS

6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	16.38	PASS
157	5785	16.42	PASS
165	5825	16.42	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	17.65	PASS
157	5785	17.65	PASS
165	5825	17.65	PASS

802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
151	5755	36.43	PASS
159	5795	36.42	PASS

802.11ac (80M)

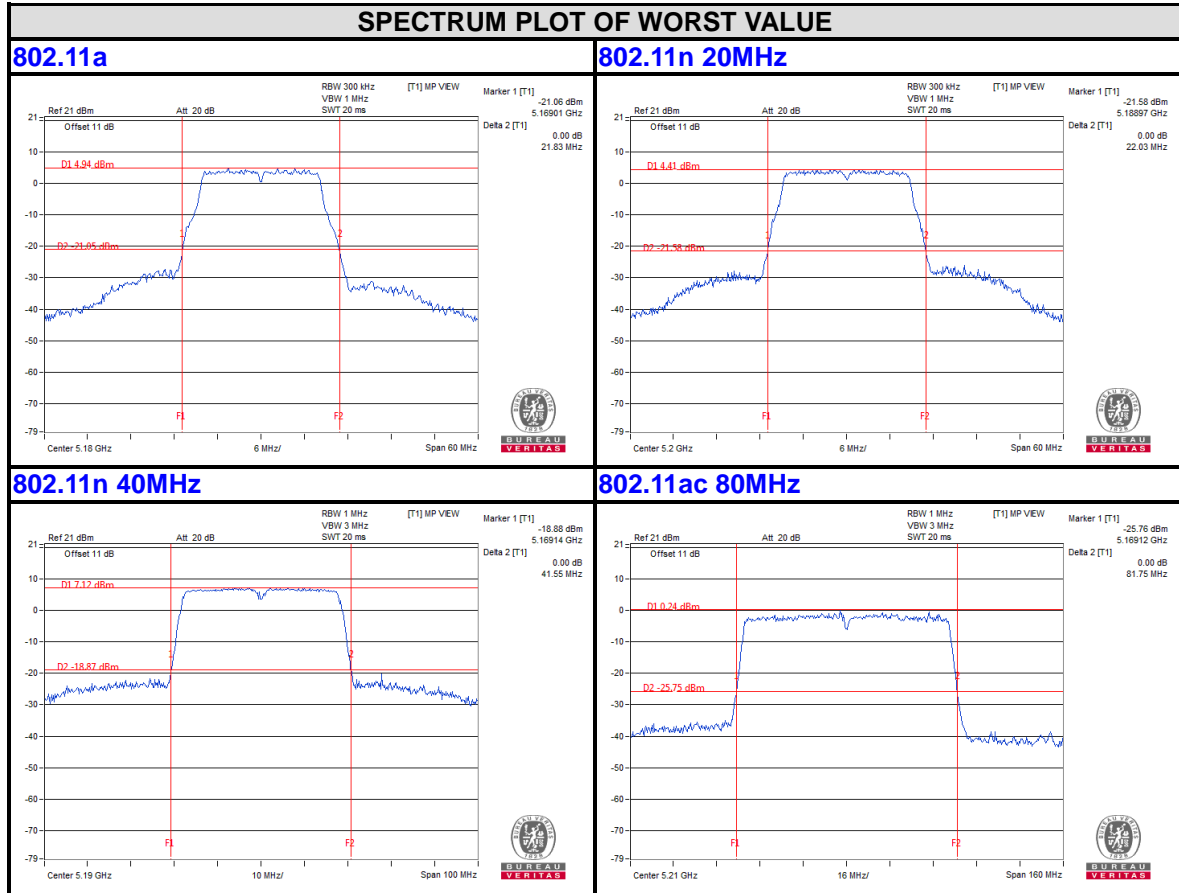
Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
155	5775	76.58	PASS



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

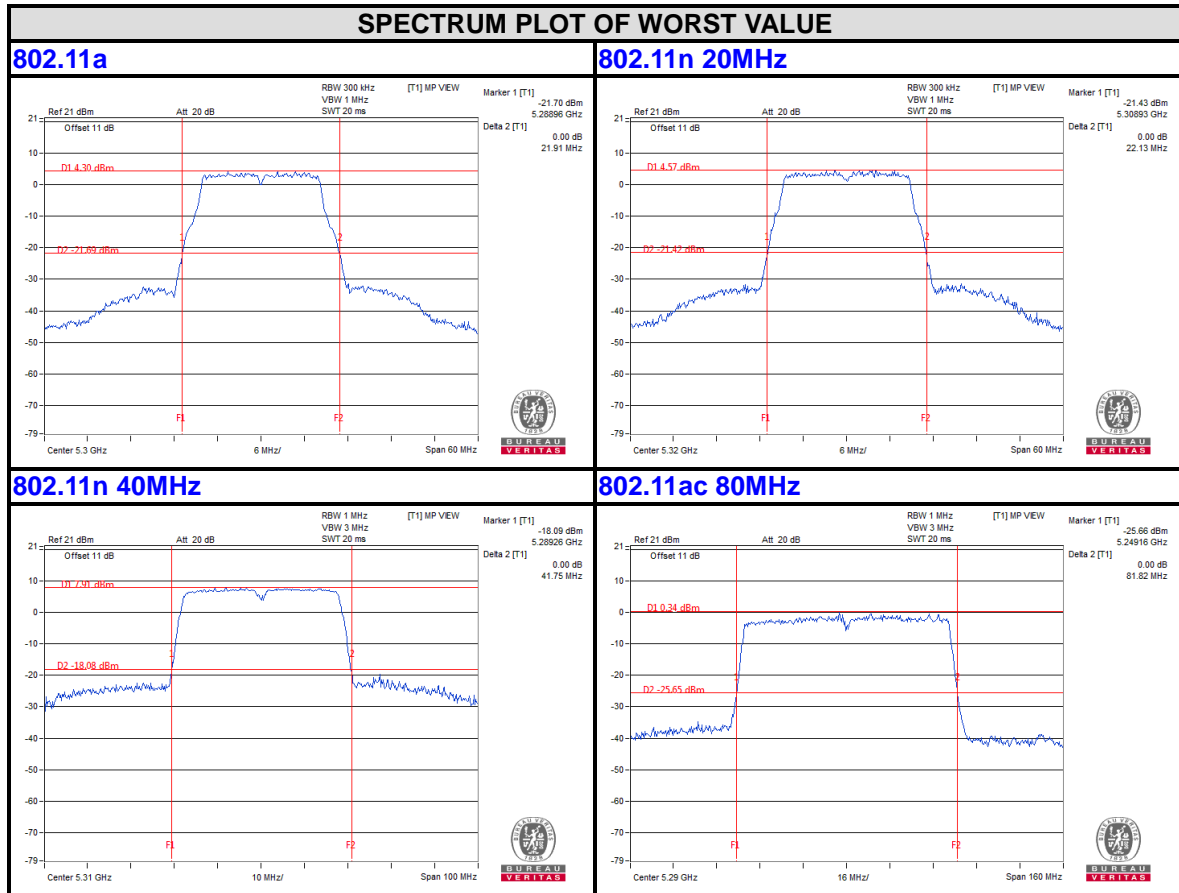




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Test Report No.: RF170927N027-3

For 5250-5350MHz



Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

No. 34, Chenwulu Section, Guantai Rd., Houjie
Town, Dongguan City,
Guangdong 523942, China

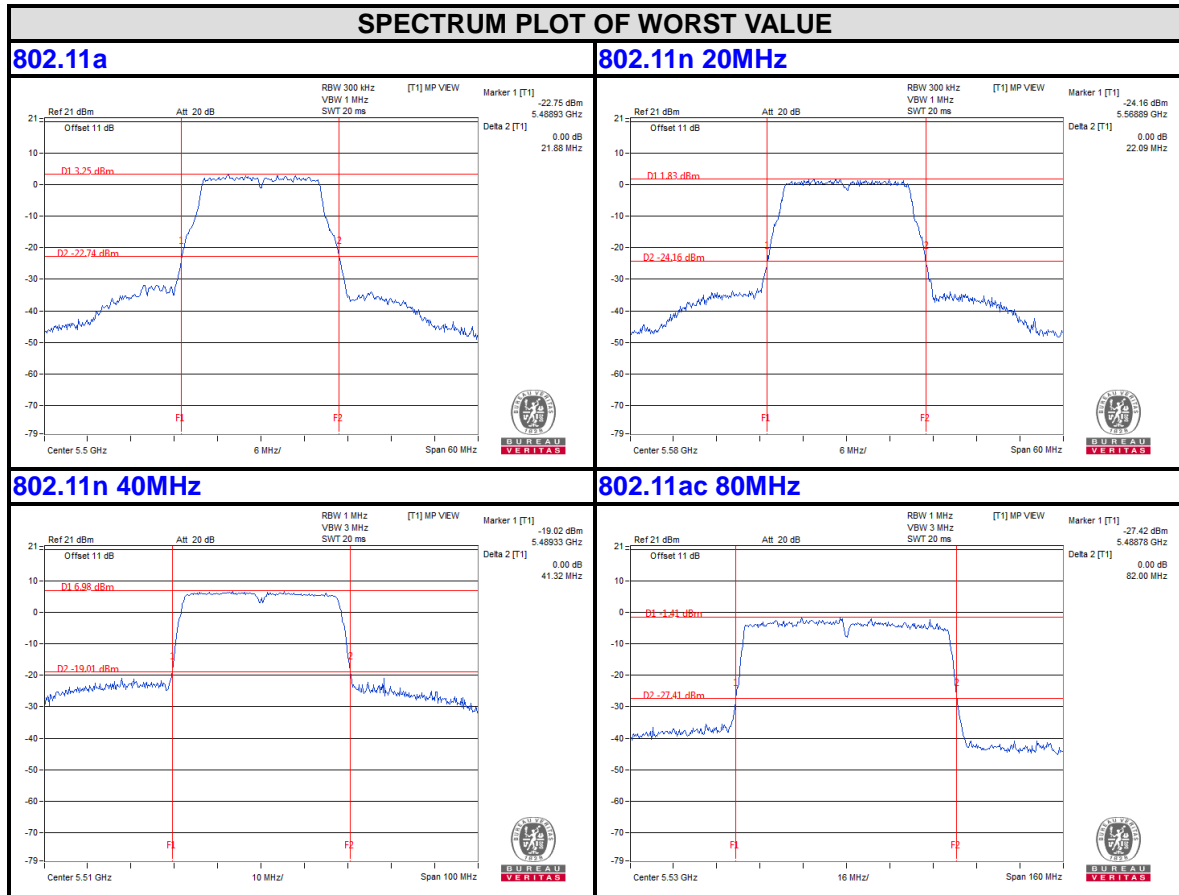
Tel: +86 769 8593 5656
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com



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Test Report No.: RF170927N027-3

For 5470-5725MHz



Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

No. 34, Chenwulu Section, Guantai Rd., Houjie
Town, Dongguan City,
Guangdong 523942, China

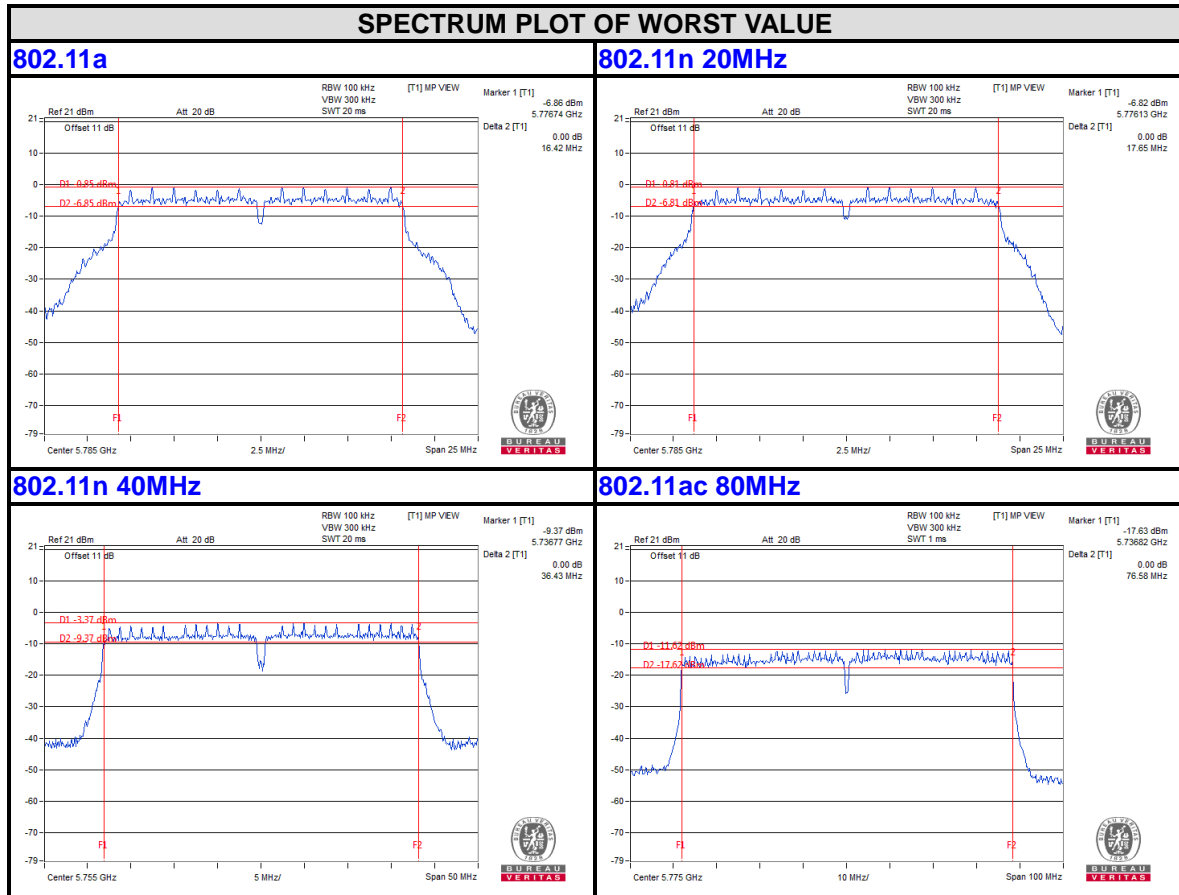
Tel: +86 769 8593 5656
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Email: customerservice.dg@cn.bureauveritas.com



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6dB BANDWIDTH For 5725-5850MHz



99% BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
36	5180	17.04	PASS
40	5200	17.16	PASS
48	5240	17.16	PASS
52	5260	17.16	PASS
60	5300	17.16	PASS
64	5320	17.16	PASS
100	5500	17.04	PASS
116	5580	17.28	PASS
140	5700	17.16	PASS
149	5745	17.13	PASS
157	5785	17.16	PASS
165	5825	17.04	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
36	5180	18.12	PASS
40	5200	18.12	PASS
48	5240	18.24	PASS
52	5260	18.12	PASS
60	5300	18.12	PASS
64	5320	18.12	PASS
100	5500	18.24	PASS
116	5580	18.36	PASS
140	5700	18.12	PASS
149	5745	18.12	PASS
157	5785	18.12	PASS
165	5825	18.12	PASS

802.11n (40MHz)

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
38	5190	36.60	PASS
46	5230	36.80	PASS
54	5270	36.80	PASS
62	5310	36.80	PASS
102	5510	37.00	PASS
110	5550	37.00	PASS
134	5670	36.80	PASS
151	5755	36.80	PASS
159	5795	36.80	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
42	5210	76.08	PASS
58	5290	75.84	PASS
106	5530	75.84	PASS
155	5775	75.84	PASS

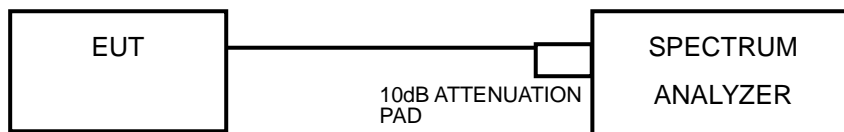
Note: The 99% bandwidth using for prove the sub-band not fall in other band.

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 Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Duty cycle Factor 10 log (1/duty cycle)	Total power density (dBm)	MAX. Limit (dBm)	PASS / FAIL
36	5180	0.34	0.1499	0.49	11.00	PASS
40	5200	0.40	0.1499	0.55	11.00	PASS
48	5240	0.39	0.1499	0.54	11.00	PASS
52	5260	-0.31	0.1499	-0.16	11.00	PASS
60	5300	-0.22	0.1499	-0.07	11.00	PASS
64	5320	0.06	0.1499	0.21	11.00	PASS
100	5500	-1.30	0.1499	-1.15	11.00	PASS
116	5580	-2.56	0.1499	-2.41	11.00	PASS
140	5700	-3.81	0.1499	-3.66	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	Total power density With duty cycle (dBm)	MAX. Limit (dBm/500k)	PASS / FAIL
149	5745	-10.89	-8.67	-8.52	30.00	PASS
157	5785	-10.81	-8.59	-8.44	30.00	PASS
165	5825	-10.13	-7.91	-7.76	30.00	PASS

802.11a: Duty cycle =96.606%, Factor=0.1499dB

802.11n (20MHz): Duty cycle =96.316%, Factor=0.1632dB

802.11n (40MHz): Duty cycle =93.768%, Factor=0.2794dB

802.11ac (80MHz): Duty cycle =55.752%, Factor=2.537dB

802.11n (20MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Duty cycle Factor 10 log (1/duty cycle)	Total power density (dBm)	MAX. Limit (dBm)	PASS / FAIL
36	5180	-0.30	0.16	-0.14	11.00	PASS
40	5200	-0.09	0.16	0.07	11.00	PASS
48	5240	0.00	0.16	0.16	11.00	PASS
52	5260	-0.54	0.16	-0.38	11.00	PASS
60	5300	-0.61	0.16	-0.45	11.00	PASS
64	5320	-0.36	0.16	-0.20	11.00	PASS
100	5500	-1.56	0.16	-1.40	11.00	PASS
116	5580	-3.01	0.16	-2.85	11.00	PASS
140	5700	-4.13	0.16	-3.97	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	Total power density With duty cycle (dBm)	MAX. Limit (dBm/500k)	PASS / FAIL
149	5745	-11.52	-9.30	-9.14	30.00	PASS
157	5785	-11.23	-9.01	-8.85	30.00	PASS
165	5825	-11.08	-8.86	-8.70	30.00	PASS

802.11a: Duty cycle =96.606%, Factor=0.1499dB

802.11n (20MHz): Duty cycle =96.316%, Factor=0.1632dB

802.11n (40MHz): Duty cycle =93.768%, Factor=0.2794dB

802.11ac (80MHz): Duty cycle =55.752%, Factor=2.537dB

802.11n (40MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Duty cycle Factor 10 log (1/duty cycle)	Total power density (dBm)	MAX. Limit (dBm)	PASS / FAIL
38	5190	-3.61	0.28	-3.33	11.00	PASS
46	5230	-3.22	0.28	-2.94	11.00	PASS
54	5270	-2.93	0.28	-2.65	11.00	PASS
62	5310	-2.72	0.28	-2.44	11.00	PASS
102	5510	-3.92	0.28	-3.64	11.00	PASS
110	5550	-4.74	0.28	-4.46	11.00	PASS
134	5670	-6.41	0.28	-6.13	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	Total power density With duty cycle (dBm)	MAX. Limit (dBm/500k)	PASS / FAIL
151	5755	-14.29	-12.07	-11.79	30.00	PASS
159	5795	-14.01	-11.79	-11.51	30.00	PASS

802.11ac (80MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Duty cycle Factor 10 log (1/duty cycle)	Total power density (dBm)	MAX. Limit (dBm)	PASS / FAIL
42	5210	-12.84	2.54	-10.30	11.00	PASS
58	5290	-12.63	2.54	-10.09	11.00	PASS
106	5530	-14.14	2.54	-11.60	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	Total power density With duty cycle (dBm)	MAX. Limit (dBm/500k)	PASS / FAIL
155	5775	-22.44	-20.22	-17.68	30.00	PASS

802.11a: Duty cycle =96.606%, Factor=0.1499dB

802.11n (20MHz): Duty cycle =96.316%, Factor=0.1632dB

802.11n (40MHz): Duty cycle =93.768%, Factor=0.2794dB

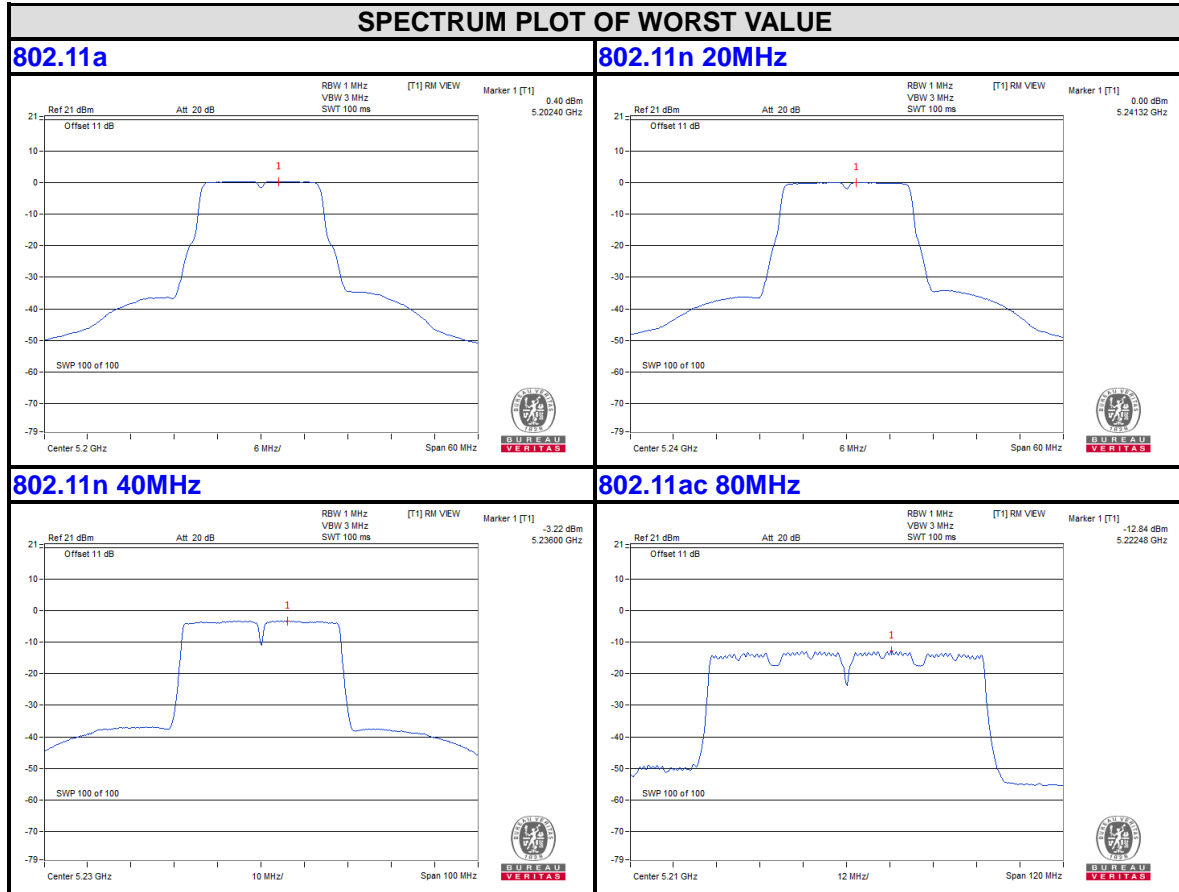
802.11ac (80MHz): Duty cycle =55.752%, Factor=2.537dB



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Test Report No.: RF170927N027-3

PSD Test Plot
BAND 1
5150-5250MHz

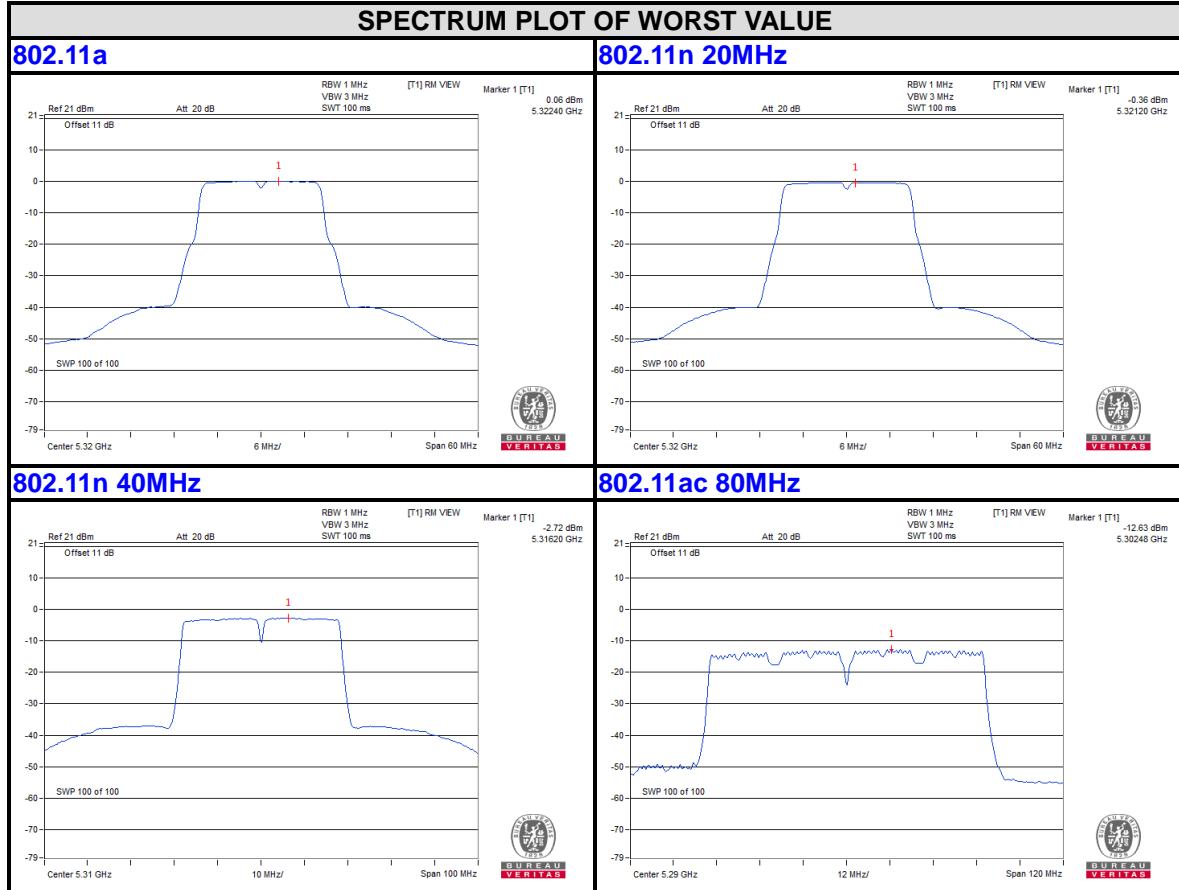




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Test Report No.: RF170927N027-3

BAND 2
5250-5350MHz

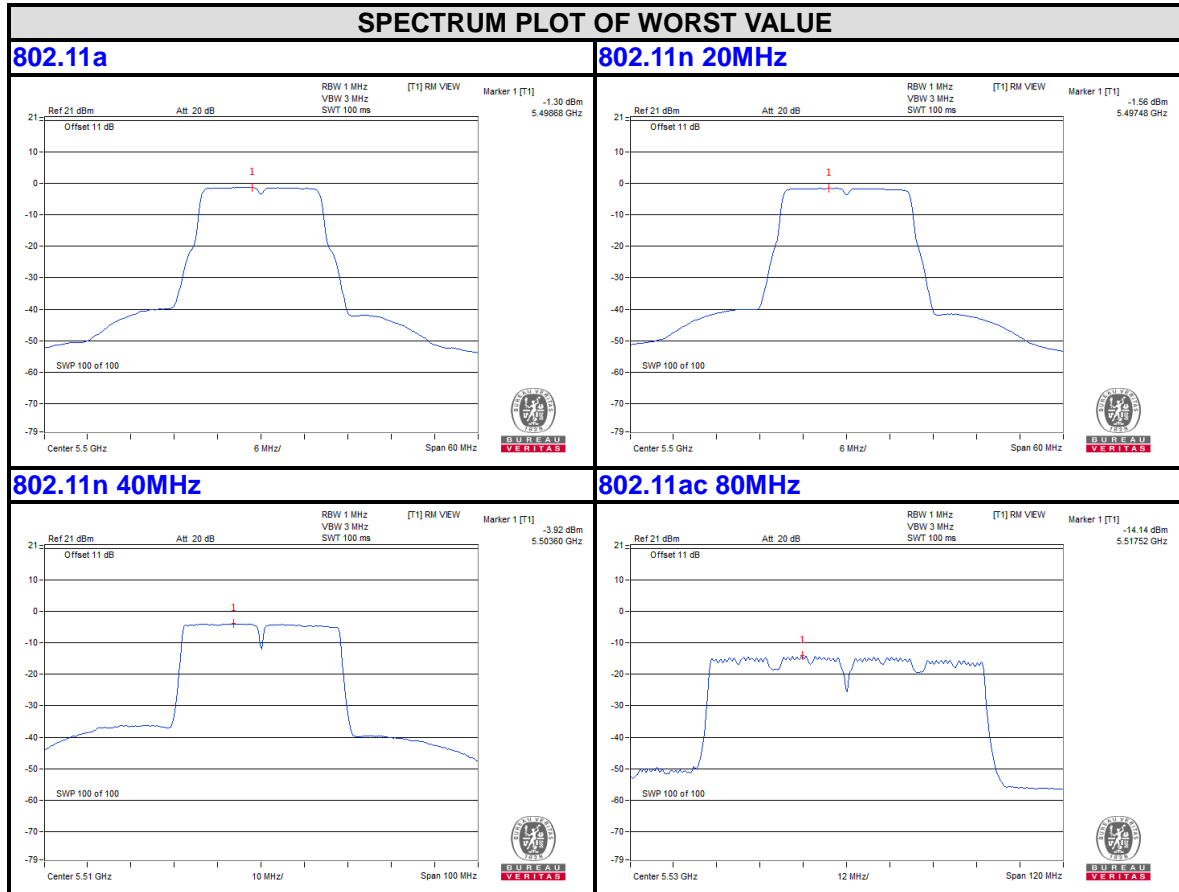




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Test Report No.: RF170927N027-3

BAND 3
5470-5725MHz

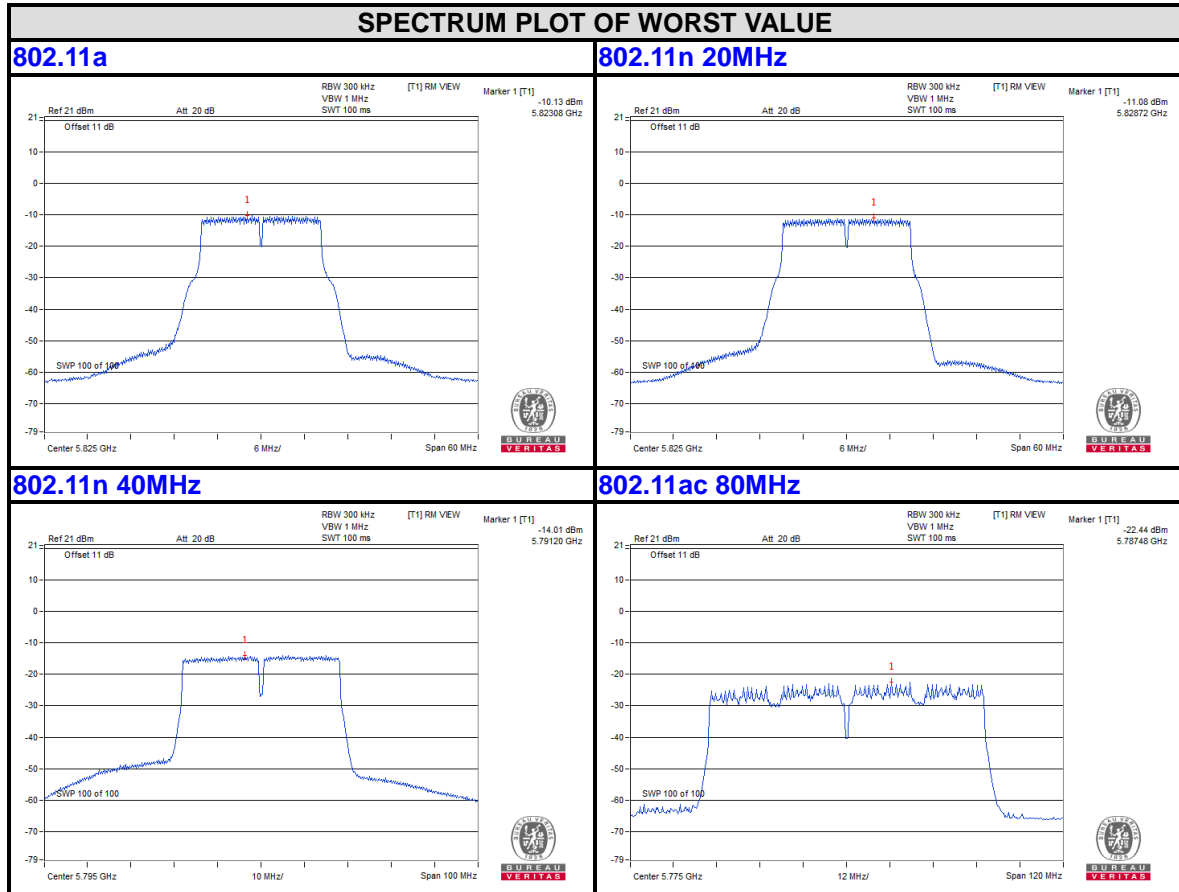




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Test Report No.: RF170927N027-3

BAND4
5725-5850MHz

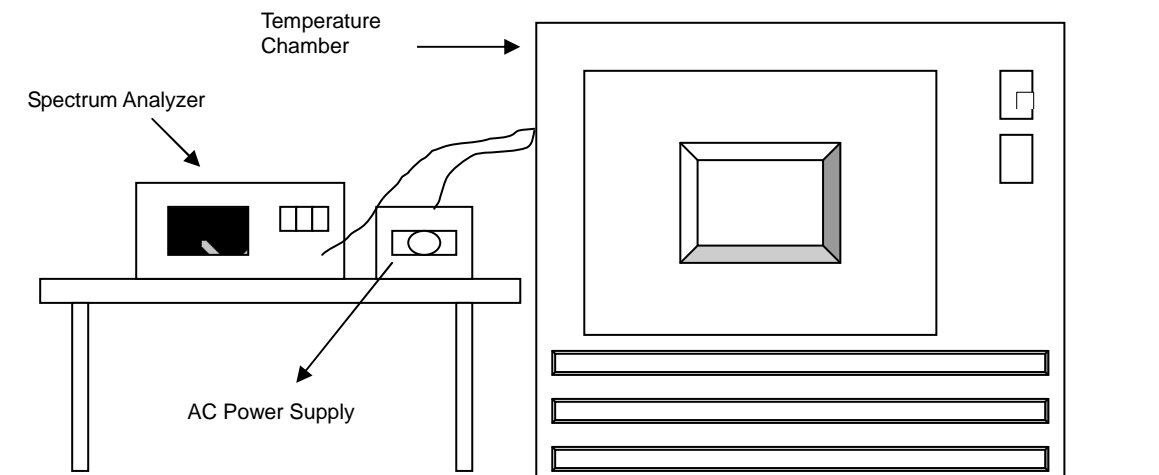


3.5 FREQUENCY STABILITY

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

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	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	5179.9967	-0.00006	5179.9961	-0.00008	5179.9955	-0.00009	5179.9978	-0.00004
40	120	5179.9799	-0.00039	5179.9768	-0.00045	5179.9768	-0.00045	5179.9782	-0.00042
30	120	5179.989	-0.00021	5179.9893	-0.00021	5179.9906	-0.00018	5179.991	-0.00017
20	120	5180.0089	0.00017	5180.0072	0.00014	5180.0064	0.00012	5180.0076	0.00015
10	120	5179.9829	-0.00033	5179.9869	-0.00025	5179.9858	-0.00027	5179.9863	-0.00026
0	120	5179.9789	-0.00041	5179.9805	-0.00038	5179.9789	-0.00041	5179.9786	-0.00041
-10	120	5179.9934	-0.00013	5179.9967	-0.00006	5179.9964	-0.00007	5179.9951	-0.00009
-20	120	5180.0241	0.00047	5180.0211	0.00041	5180.0227	0.00044	5180.022	0.00042
-30	120	5179.9819	-0.00035	5179.9805	-0.00038	5179.9799	-0.00039	5179.9844	-0.00030

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	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	5180.0095	0.00018	5180.0082	0.00016	5180.0071	0.00014	5180.0085	0.00016
	120	5180.0089	0.00017	5180.0072	0.00014	5180.0064	0.00012	5180.0076	0.00015
	102	5180.0087	0.00017	5180.0077	0.00015	5180.0065	0.00013	5180.0082	0.00016

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.

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