



FCC TEST REPORT

(Part 15, Subpart E)

Applicant:	PAX Technology Limited
Address:	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

Manufacturer or Supplier:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address: 4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.	
Product:	Smart Kiosk
Brand Name:	PAX
Model Name:	SK600
FCC ID:	V5PSK600
Date of tests:	Apr. 30, 2019 ~ Jul. 09, 2019

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

CONCLUSION: The submitted sample was found to <u>COMPLY</u> with the test requirement

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Engineer / Mobile Department	Manager / Mobile Department		
Nlad	11.1.		

Date: Jul. 11, 2019 Date: Jul. 11, 2019

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BV 7Layers Communications Technology (Shenzhen) Co. Ltd

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF190429W001-3	Original release	Jul. 11, 2019

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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)				
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK	
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -18.18dB at 0.150000MHz.	
15.407(b) (1/2/3/4/6)	Radiated Emission & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is 2.68dB at 5725MHz.	
15.407(a/1/2/3)	Maximum conducted output 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(e)	6 dB Bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)	
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	UNCERTAINTY
AC Power Conducted emissions	\pm 2.70dB
All Radiated emissions	±4.48dB
Conducted emissions	±2 dB
Occupied Channel Bandwidth	±21.7KHz
Conducted Output power	±1.03 dB
Power Spectral Density	±0.95 dB

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



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

2.1 GENERAL DESCRIPTI			
EUT	Smart Kiosk		
BRAND NAME	PAX		
MODEL NAME	NAME SK600		
POWER SUPPLY	AC 120V		
MODULATION TYPE	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 MCS7 802.11ac: up to 390.0Mbps		
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz		
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5745 ~ 5825MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz)		
AVERAGE POWER	27.164mW for 5180 ~ 5240MHz 26.062mW for 5260 ~ 5320MHz 26.730mW for 5500 ~ 5700MHz 28.054mW for 5745 ~ 5825MHz		
ANTENNA TYPE	5180 ~ 5240MHz: PIFA Antenna with 6.04dBi gain 5260 ~ 5320MHz: PIFA Antenna with 5.79dBi gain 5500 ~ 5700MHz: PIFA Antenna with 5.25dBi gain 5745 ~ 5825MHz: PIFA Antenna with 4.75dBi gain		
HW VERSION N/A			
SW VERSION N/A			
I/O PORTS	Refer to user's manual		

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CABLE SUPPLIED	Refer to note as below

NOTE:

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

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

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



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	44	5220 MHz
40	5200 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	5210 MHz		

FOR 5250 ~ 5350MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
52	5260 MHz	60	5300 MHz	
56	5280 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	5290 MHz		



FOR 5470 ~ 5725MHz

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

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

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz		

FOR 5725 ~ 5825MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775 MHz		

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2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE		APPLICA	ABLE TO	DESCRIPTION	
MODE	RE≥1G	RE<1G	PLC	APCM	DESCRIPTION
Α	V	\checkmark	$\sqrt{}$	-	Powered by Adapter with wifi(5G) link
В	-	-	-	V	Powered by Battery with wifi(5G) link
С	-	-	-	-	Powered by USB with wifi(5G) link

Where

RE≥1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE:

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-plane.

NOTE: "-"means no effect.

RADIATED EMISSION TEST (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)
Α	802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	3100-3240	38 to 46	38, 46	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
Α	802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	3200-3320	54 to 62	54, 62	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
Α	802.11a		100 to 140	100, 116, 140	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5500-5700	102 to 134	102, 110, 134	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
Α	802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	3123-3023	151 to 159	151, 159	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

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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)
Α	802.11a	5500-5700	100 to 140	140	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)
Α	802.11a	5500-5700	100 to 140	140	OFDM	BPSK	6.0

BANDEDGE MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
Α	802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5160-5240	38 to 46	38, 46	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
Α	802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6.0
Α	802.11n (20MHz)	F260 F220	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5260-5320	54 to 62	54, 62	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
Α	802.11a		100 to 140	100, 116, 140	OFDM	BPSK	6.0
Α	802.11n (20MHz)	FF00 F700	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5500-5700	102 to 134	102, 110, 134	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
Α	802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6.0
А	802.11n (20MHz)	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
А	802.11n (40MHz)	3723-3625	151 to 159	151, 159	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

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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)
Α	802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5160-5240	38 to 46	38, 46	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
Α	802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6.0
Α	802.11n (20MHz)	E260 E220	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5260-5320	54 to 62	54, 62	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
Α	802.11a		100 to 140	100, 116, 140	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5500-5700	102 to 134	102, 110, 134	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
Α	802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6.0
Α	802.11n (20MHz)	E70E E00E	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
Α	802.11n (40MHz)	5725-5825	151 to 159	151, 159	OFDM	BPSK	MCS0
Α	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 62%RH	AC 120V	Star Le
RE≥1G	23deg. C, 62%RH	AC 120V	Star Le
PLC	24deg. C, 61%RH	AC 120V	John Wen
APCM	23.5deg. C, 60%RH	AC 120V	Rain Wang



2.3 DUTY CYCLE OF TEST SIGNAL

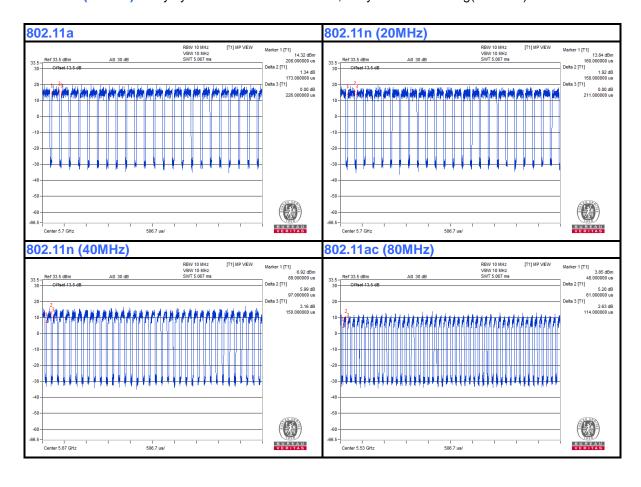
Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 0.173/0.226=0.765, Duty factor = 10 * log(1/0.765) = 1.16

802.11n (20MHz): Duty cycle = 0.158/0.211 = 0.715, Duty factor = 10 * log(1/0.715) = 1.46

802.11n (40MHz): Duty cycle = 0.097/0.150 = 0.647, Duty factor = $10 * \log(1/0.647) = 1.89$

802.11ac (80MHz): Duty cycle = 0.061/0.114 = 0.535, Duty factor = 10 * log(1/0.535) = 2.71



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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.

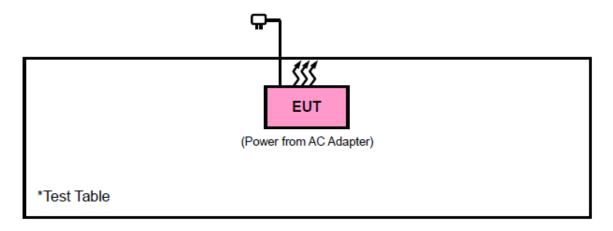
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A
2	PC	HP	A6608CN	3CR83825X3	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS					
1	DC Line: Unshielded, Detachable 1.0m					
2	AC Line: Unshielded, Detachable 1.5m					

NOTE:

1. All power cords of the above support units are non shielded (1.8m).

2.4.1 CONFIGURATION OF SYSTEM UNDER TEST





2.5 **GENERAL DESCRIPTION OF APPLIED STANDARDS**

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

FCC Part 15, Subpart E (15.407) KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 ANSI C63.10-2013

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

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

3.1.2 LIMITS OF UNWANTED EMISSION

	APPLICABLE TO		LIMIT		
RESTRICTED BANDS	789033 D02 General	FIELD STRENGTH AT 3m (dBµV/m)			
2720	UNII Test Procedures New Rules v01r02	PK : 74	AV : 54		
	APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)		
OUT OF THE	15.407(b)(1)				
OUT OF THE RESTRICTED BANDS	15.407(b)(2)	PK : -27	PK : 68.3		
BANDS	15.407(b)(3)				
	15.407(b)(4)	See note	2 (FCC 16-24)		

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

$$E = \frac{1000000 - \sqrt{30 \ P}}{3}$$
 µV/m, where P is the eirp (Watts).

2. All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn- CT0001143-1216	Feb. 26,19	Feb. 25,20
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 26,19	Feb. 25,20
Horn Antenna	ETS-LINDGREN	3117	00168728	Feb. 26,19	Feb. 25,20
Horn Antenna (18GHz-40GHz)		QWH-SL-18-40- K-SG/QMS-003 61	15433	Nov. 21, 18	Nov. 20, 19
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_ V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 24,19	Jun. 23,20
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 26,19	Feb. 25,20
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 24,19	Jun. 23,20
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 24,19	Jun. 23,20
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Jun. 24,19	Jun. 23,20

NOTE:

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



3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

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

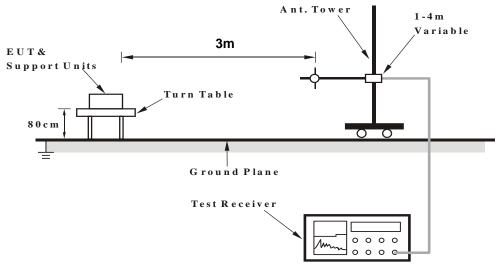
3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

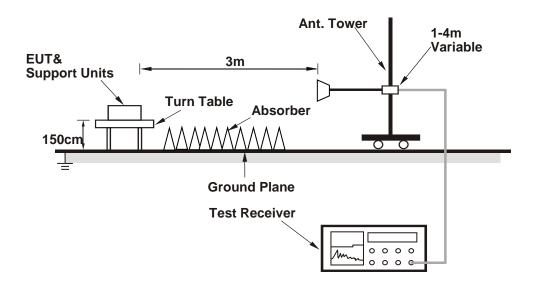


3.1.6 TEST SETUP

< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



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

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Email: customerservice.dg@cn.bureauveritas.com



3.1.7 **EUT OPERATING CONDITION**

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

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3.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

30 MHz - 1GHz data:

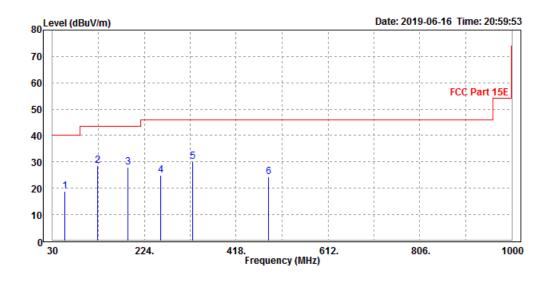
802.11a

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Overi Beak (OB)
FREQUENCY RANGE		DETECTOR FUNCTION	Quasi-Peak (QP)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
56.21	18.75	48.51	40	-21.25	6.44	1.14	37.34	100	360	QP	
125.32	28.62	56.35	43.5	-14.88	7.46	1.72	36.91	100	360	QP	
189.75	27.95	52.46	43.5	-15.55	10	2.11	36.62	100	360	QP	
258.63	25.01	46.53	46	-20.99	12.5	2.5	36.52	100	360	QP	
325.64	30.21	49.86	46	-15.79	14.08	2.83	36.56	100	360	QP	
485.67	24.37	39.65	46	-21.63	18.23	3.42	36.93	100	360	QP	

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.



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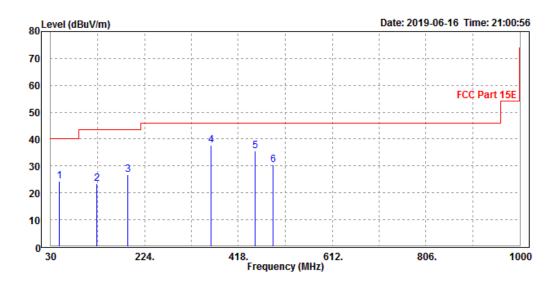


CHANNEL	Channel 140	DETECTOR FUNCTION	Ougoi Poek (OP)
FREQUENCY RANGE		DETECTOR FUNCTION	Quasi-Peak (QP)

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
48.52	24.33	53.62	40	-15.67	7.05	1.06	37.4	100	0	QP	
125.42	23.51	51.24	43.5	-19.99	7.46	1.72	36.91	100	0	QP	
189.65	26.77	51.28	43.5	-16.73	10	2.11	36.62	100	0	QP	
362.31	37.84	55.87	46	-8.16	15.62	2.99	36.64	100	0	QP	
452.31	35.57	51.28	46	-10.43	17.83	3.31	36.85	100	0	QP	
489.65	30.28	45.51	46	-15.72	18.28	3.43	36.94	100	0	QP	

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.



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ABOVE 1GHz WORST-CASE DATA:

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

Band 1 802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.72	51.24	74	-21.28	35.95	7.42	41.89	100	328	Peak
5150	42.71	41.23	54	-11.29	35.95	7.42	41.89	100	328	Average
5180	89.78	88.26			35.98	7.43	41.89	100	328	Peak
5180	80.16	78.64			35.98	7.43	41.89	100	328	Average
5350	52.85	51.12	74	-21.15	36.15	7.47	41.89	100	328	Peak
5350	44.04	42.31	54	-9.96	36.15	7.47	41.89	100	328	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICAI	L AT 3 M		
FREQ.	EMISSION	READ	LIMIT	MARGIN	ANTENNA	CABLE	PREAMP	ANTENNA	TABLE	
(MHz)	LEVEL (dBuV/m)	LEVEL (dBuV)	(dBuV/m)	(dB)	FACTOR (dB/m)	LOSS (dB)	FACTOR (dB)	HEIGHT (cm)	ANGLE (Degree)	REMARK
(MHz) 5150				_				_	_	REMARK Peak
. ,	(dBuV/m)	(dBuV)	(dBuV/m)	(dB)	(dB /m)	(dB)	(dB)	(cm)	(Degree)	
5150	(dBuV/m) 56.03	(dBuV) 54.21	(dBuV/m) 74	(dB) -17.97	(dB /m) 36.29	(dB) 7.42	(dB) 41.89	(cm) 100	(Degree)	Peak
5150 5150	(dBuV/m) 56.03 45.08	(dBuV) 54.21 43.26	(dBuV/m) 74	(dB) -17.97	(dB /m) 36.29 36.29	(dB) 7.42 7.42	(dB) 41.89 41.89	(cm) 100 100	(Degree) 5	Peak Average
5150 5150 5180	(dBuV/m) 56.03 45.08 92.15	(dBuV) 54.21 43.26 90.3	(dBuV/m) 74	(dB) -17.97	(dB /m) 36.29 36.29 36.31	(dB) 7.42 7.42 7.43	(dB) 41.89 41.89 41.89	(cm) 100 100 100	(Degree) 5 5 5	Peak Average Peak

REMARKS:

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



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

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.95	52.47	74	-20.05	35.95	7.42	41.89	100	115	Peak
5150	46.36	44.88	54	-7.64	35.95	7.42	41.89	100	115	Average
5200	107.69	106.15			36	7.43	41.89	100	115	Peak
5200	96.98	95.44			36	7.43	41.89	100	115	Average
5350	52.43	50.7	74	-21.57	36.15	7.47	41.89	100	115	Peak
5350	41.87	40.14	54	-12.13	36.15	7.47	41.89	100	115	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: V	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.37	52.55	74	-19.63	36.29	7.42	41.89	147	346	Peak
5150	44.89	43.07	54	-9.11	36.29	7.42	41.89	147	346	Average
5200	101.82	99.96			36.32	7.43	41.89	147	346	Peak
5200	91.92	90.06			36.32	7.43	41.89	147	346	Average
5350	53.15	51.16	74	-20.85	36.41	7.47	41.89	147	346	Peak
5350	42.04	40.05	54	-11.96	36.41	7.47	41.89	147	346	Average

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



CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.58	50.1	74	-22.42	35.95	7.42	41.89	173	55	Peak
5150	43.73	42.25	54	-10.27	35.95	7.42	41.89	173	55	Average
5240	109.7	108.11			36.04	7.44	41.89	173	55	Peak
5240	99.8	98.21			36.04	7.44	41.89	173	55	Average
5350	51.74	50.01	74	-22.26	36.15	7.47	41.89	173	55	Peak
5350	41.91	40.18	54	-12.09	36.15	7.47	41.89	173	55	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: V	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.68	50.86	74	-21.32	36.29	7.42	41.89	114	205	Peak
5150	43.74	41.92	54	-10.26	36.29	7.42	41.89	114	205	Average
5240	105.04	103.15			36.34	7.44	41.89	114	205	Peak
5240	92.95	91.06			36.34	7.44	41.89	114	205	Average
5350	50.97	48.98	74	-23.03	36.41	7.47	41.89	114	205	Peak
5350	42.06	40.07	54	-11.94	36.41	7.47	41.89	114	205	Average

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



802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.11	54.63	74	-17.89	35.95	7.42	41.89	100	325	Peak
5150	46.76	45.28	54	-7.24	35.95	7.42	41.89	100	325	Average
5180	91.13	89.61			35.98	7.43	41.89	100	325	Peak
5180	81.77	80.25			35.98	7.43	41.89	100	325	Average
5350	54.09	52.36	74	-19.91	36.15	7.47	41.89	100	325	Peak
5350	43.86	42.13	54	-10.14	36.15	7.47	41.89	100	325	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR	CABLE LOSS	PREAMP FACTOR	ANTENNA HEIGHT	TABLE ANGLE	REMARK
		(ubuv)	` ,	()	(dB /m)	(dB)	(dB)	(cm)	(Degree)	TC_III/TCTC
5150	56.05	54.23	74	-17.95	(dB /m) 36.29	(dB) 7.42	(dB) 41.89	(cm) 100	(Degree) 25	Peak
5150 5150			` '	` '			_ , _ ,	' '		
	56.05	54.23	74	-17.95	36.29	7.42	41.89	100	25	Peak
5150	56.05 46.47	54.23 44.65	74	-17.95	36.29 36.29	7.42 7.42	41.89 41.89	100 100	25 25	Peak Average
5150 5180	56.05 46.47 92.1	54.23 44.65 90.25	74	-17.95	36.29 36.29 36.31	7.42 7.42 7.43	41.89 41.89 41.89	100 100 100	25 25 25	Peak Average Peak

REMARKS:

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



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

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.38	50.9	74	-21.62	35.95	7.42	41.89	125	350	Peak
5150	44.32	42.84	54	-9.68	35.95	7.42	41.89	125	350	Average
5200	101.87	100.33			36	7.43	41.89	125	350	Peak
5200	91.75	90.21			36	7.43	41.89	125	350	Average
5350	50.09	48.36	74	-23.91	36.15	7.47	41.89	125	350	Peak
5350	41.67	39.94	54	-12.33	36.15	7.47	41.89	125	350	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: V	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.63	51.81	74	-20.37	36.29	7.42	41.89	100	215	Peak
5150	44.82	43	54	-9.18	36.29	7.42	41.89	100	215	Average
5200	101.06	99.2			36.32	7.43	41.89	100	215	Peak
5200	91.06	89.2			36.32	7.43	41.89	100	215	Average
5350	52.04	50.05	74	-21.96	36.41	7.47	41.89	100	215	Peak
5350	42.08	40.09	54	-11.92	36.41	7.47	41.89	100	215	Average

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



CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.55	52.07	74	-20.45	35.95	7.42	41.89	165	55	Peak
5150	43.66	42.18	54	-10.34	35.95	7.42	41.89	165	55	Average
5240	108.22	106.63			36.04	7.44	41.89	165	55	Peak
5240	97.55	95.96			36.04	7.44	41.89	165	55	Average
5350	51.39	49.66	74	-22.61	36.15	7.47	41.89	165	55	Peak
5350	41.93	40.2	54	-12.07	36.15	7.47	41.89	165	55	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: Y	VERTICA	L AT 3 M	=	-
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.63	51.81	74	-20.37	36.29	7.42	41.89	100	205	Peak
5150	43.7	41.88	54	-10.3	36.29	7.42	41.89	100	205	Average
5240	102.75	100.86			36.34	7.44	41.89	100	205	Peak
5240	92.53	90.64			36.34	7.44	41.89	100	205	Average
5350	53.25	51.26	74	-20.75	36.41	7.47	41.89	100	205	Peak
5350	42.04	40.05	54	-11.96	36.41	7.47	41.89	100	205	Average

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



802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.84	50.36	74	-22.16	35.95	7.42	41.89	100	325	Peak
5150	44.06	42.58	54	-9.94	35.95	7.42	41.89	100	325	Average
5190	87.16	85.63			35.99	7.43	41.89	100	325	Peak
5190	77.21	75.68			35.99	7.43	41.89	100	325	Average
5350	52.96	51.23	74	-21.04	36.15	7.47	41.89	100	325	Peak
5350	42.98	41.25	54	-11.02	36.15	7.47	41.89	100	325	Average
	-	ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.51	52.69	74	-19.49	36.29	7.42	41.89	100	15	Peak
5150	45.08	43.26	54	-8.92	36.29	7.42	41.89	100	15	Average
5190	89.36	87.51			36.31	7.43	41.89	100	15	Peak
5190	79.27	77.42			36.31	7.43	41.89	100	15	Average
5350	53.23	51.24	74	-20.77	36.41	7.47	41.89	100	15	Peak
5350	43.2	41.21	54	-10.8	36.41	7.47	41.89	100	15	Average

REMARKS:

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



CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.59	55.11	74	-17.41	35.95	7.42	41.89	100	50	Peak
5150	46.29	44.81	54	-7.71	35.95	7.42	41.89	100	50	Average
5230	103.42	101.84			36.03	7.44	41.89	100	50	Peak
5230	93.46	91.88			36.03	7.44	41.89	100	50	Average
5350	50.79	49.06	74	-23.21	36.15	7.47	41.89	100	50	Peak
5350	42.78	41.05	54	-11.22	36.15	7.47	41.89	100	50	Average
	-	ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.91	52.09	74	-20.09	36.29	7.42	41.89	100	231	Peak
5150	45.49	43.67	54	-8.51	36.29	7.42	41.89	100	231	Average
5230	96.88	94.99			36.34	7.44	41.89	100	231	Peak
5230	86.33	84.44			36.34	7.44	41.89	100	231	Average
5350	51.54	49.55	74	-22.46	36.41	7.47	41.89	100	231	Peak
5350	42.95	40.96	54	-11.05	36.41	7.47	41.89	100	231	Average

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



802.11ac (80MHz)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	63.79	62.31	74	-10.21	35.95	7.42	41.89	163	52	Peak
5150	50.73	49.25	54	-3.27	35.95	7.42	41.89	163	52	Average
5210	105.76	104.2			36.01	7.44	41.89	163	52	Peak
5210	96.51	94.95			36.01	7.44	41.89	163	52	Average
5350	51.96	50.23	74	-22.04	36.15	7.47	41.89	163	52	Peak
5350	42.34	40.61	54	-11.66	36.15	7.47	41.89	163	52	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	61.14	59.32	74	-12.86	36.29	7.42	41.89	125	63	Peak
5150	48.33	46.51	54	-5.67	36.29	7.42	41.89	125	63	Average
5210	102.19	100.31			36.33	7.44	41.89	125	63	Peak
5210	94.32	92.44			36.33	7.44	41.89	125	63	Average
5350	52.25	50.26	74	-21.75	36.41	7.47	41.89	125	63	Peak
5350	42.11	40.12	54	-11.89	36.41	7.47	41.89	125	63	Average

REMARKS:

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



Band 2 802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.19	51.71	74	-20.81	35.95	7.42	41.89	198	86	Peak
5150	43.59	42.11	54	-10.41	35.95	7.42	41.89	198	86	Average
5260	108.1	106.48			36.06	7.45	41.89	198	86	Peak
5260	98.31	96.69			36.06	7.45	41.89	198	86	Average
5350	51.57	49.84	74	-22.43	36.15	7.47	41.89	198	86	Peak
5350	41.84	40.11	54	-12.16	36.15	7.47	41.89	198	86	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: V	VERTICA	L AT 3 M		-
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.33	49.51	74	-22.67	36.29	7.42	41.89	100	202	Peak
5150	43.73	41.91	54	-10.27	36.29	7.42	41.89	100	202	Average
5260	104.74	102.82			36.36	7.45	41.89	100	202	Peak
5260	93.64	91.72			36.36	7.45	41.89	100	202	Average
5350	51.4	49.41	74	-22.6	36.41	7.47	41.89	100	202	Peak
5350	42.11	40.12	54	-11.89	36.41	7.47	41.89	100	202	Average

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



CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5150	51.56	50.08	74	-22.44	35.95	7.42	41.89	100	56	Peak	
5150	43.55	42.07	54	-10.45	35.95	7.42	41.89	100	56	Average	
5300	106.89	105.22			36.1	7.46	41.89	100	56	Peak	
5300	96.48	94.81			36.1	7.46	41.89	100	56	Average	
5350	53.44	51.71	74	-20.56	36.15	7.47	41.89	100	56	Peak	
5350	3.29	1.56	54	-50.71	36.15	7.47	41.89	100	56	Average	
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: Y	VERTICA	L AT 3 M	=	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5150	52.03	50.21	74	-21.97	36.29	7.42	41.89	100	205	Peak	
5150	43.66	41.84	54	-10.34	36.29	7.42	41.89	100	205	Average	
5300	104.04	102.09			36.38	7.46	41.89	100	205	Peak	
5300	94.44	92.49			36.38	7.46	41.89	100	205	Average	
5350	52.21	50.22	74	-21.79	36.41	7.47	41.89	100	205	Peak	
5350	43.09	41.1	54	-10.91	36.41	7.47	41.89	100	205	Average	

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



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.73	50.25	74	-22.27	35.95	7.42	41.89	198	82	Peak
5150	43.47	41.99	54	-10.53	35.95	7.42	41.89	198	82	Average
5320	106.54	104.85			36.12	7.46	41.89	198	82	Peak
5320	96.09	94.4			36.12	7.46	41.89	198	82	Average
5350	63.36	61.63	74	-10.64	36.15	7.47	41.89	198	82	Peak
5350	50.86	49.13	54	-3.14	36.15	7.47	41.89	198	82	Average
	-	ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.34	51.52	74	-20.66	36.29	7.42	41.89	100	205	Peak
5150	43.67	41.85	54	-10.33	36.29	7.42	41.89	100	205	Average
5320	102.99	101.03			36.39	7.46	41.89	100	205	Peak
5320	92.77	90.81			36.39	7.46	41.89	100	205	Average
5350	60.97	58.98	74	-13.03	36.41	7.47	41.89	100	205	Peak
5350	49.69	47.7	54	-4.31	36.41	7.47	41.89	100	205	Average

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



802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.18	52.7	74	-19.82	35.95	7.42	41.89	100	52	Peak
5150	44.58	43.1	54	-9.42	35.95	7.42	41.89	100	52	Average
5260	108.83	107.21			36.06	7.45	41.89	100	52	Peak
5260	97.53	95.91			36.06	7.45	41.89	100	52	Average
5350	51.89	50.16	74	-22.11	36.15	7.47	41.89	100	52	Peak
5350	42.8	41.07	54	-11.2	36.15	7.47	41.89	100	52	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.84	52.02	74	-20.16	36.29	7.42	41.89	182	68	Peak
5150	44.77	42.95	54	-9.23	36.29	7.42	41.89	182	68	Average
5260	103.45	101.53			36.36	7.45	41.89	182	68	Peak
5260	92.79	90.87			36.36	7.45	41.89	182	68	Average
5350	51.48	49.49	74	-22.52	36.41	7.47	41.89	182	68	Peak
5350	42.99	41	54	-11.01	36.41	7.47	41.89	182	68	Average

REMARKS:

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



CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK									
5150	52.61	51.13	74	-21.39	35.95	7.42	41.89	132	54	Peak									
5150	44.48	43	54	-9.52	35.95	7.42	41.89	132	54	Average									
5300	105.68	104.01			36.1	7.46	41.89	132	54	Peak									
5300	94.67	93			36.1	7.46	41.89	132	54	Average									
5350	56.01	54.28	74	-17.99	36.15	7.47	41.89	132	54	Peak									
5350	43.76	42.03	54	-10.24	36.15	7.47	41.89	132	54	Average									
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	=									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK									
5150	55.22	53.4	74	-18.78	36.29	7.42	41.89	100	206	Peak									
5150	44.65	42.83	54	-9.35	36.29	7.42	41.89	100	206	Average									
5300	102.04	100.09			36.38	7.46	41.89	100	206	Peak									
5300	90.68	88.73			36.38	7.46	41.89	100	206	Average									
5350	55.26	53.27	74	-18.74	36.41	7.47	41.89	100	206	Peak									
5350	43.56	41.57	54	-10.44	36.41	7.47	41.89	100	206	Average									

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



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	A	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.68	51.2	74	-21.32	35.95	7.42	41.89	140	51	Peak
5150	44.48	43	54	-9.52	35.95	7.42	41.89	140	51	Average
5320	105.55	103.86			36.12	7.46	41.89	140	51	Peak
5320	95.19	93.5			36.12	7.46	41.89	140	51	Average
5350	60.35	58.62	74	-13.65	36.15	7.47	41.89	140	51	Peak
5350	49.52	47.79	54	-4.48	36.15	7.47	41.89	140	51	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	=
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.56	51.74	74	-20.44	36.29	7.42	41.89	100	60	Peak
5150	44.77	42.95	54	-9.23	36.29	7.42	41.89	100	60	Average
5320	100.83	98.87			36.39	7.46	41.89	100	60	Peak
5320	90.52	88.56			36.39	7.46	41.89	100	60	Average
5350	60.08	58.09	74	-13.92	36.41	7.47	41.89	100	60	Peak
5350	47.22	45.23	54	-6.78	36.41	7.47	41.89	100	60	Average

REMARKS:

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



802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.71	52.23	74	-20.29	35.95	7.42	41.89	100	51	Peak
5150	44.95	43.47	54	-9.05	35.95	7.42	41.89	100	51	Average
5270	103.12	101.49			36.07	7.45	41.89	100	51	Peak
5270	92.94	91.31			36.07	7.45	41.89	100	51	Average
5350	53.85	52.12	74	-20.15	36.15	7.47	41.89	100	51	Peak
5350	43.91	42.18	54	-10.09	36.15	7.47	41.89	100	51	Average
	-	ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: Y	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.92	53.1	74	-19.08	36.29	7.42	41.89	100	67	Peak
5150	44.75	42.93	54	-9.25	36.29	7.42	41.89	100	67	Average
5270	98.62	96.7			36.36	7.45	41.89	100	67	Peak
5270	87.68	85.76			36.36	7.45	41.89	100	67	Average
5350	53.55	51.56	74	-20.45	36.41	7.47	41.89	100	67	Peak
5350	43.32	41.33	54	-10.68	36.41	7.47	41.89	100	67	Average

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



CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.83	50.35	74	-22.17	35.95	7.42	41.89	100	256	Peak
5150	42.74	41.26	54	-11.26	35.95	7.42	41.89	100	256	Average
5310	86.96	85.28			36.11	7.46	41.89	100	256	Peak
5310	77.16	75.48			36.11	7.46	41.89	100	256	Average
5350	54.37	52.64	74	-19.63	36.15	7.47	41.89	100	256	Peak
5350	44.29	42.56	54	-9.71	36.15	7.47	41.89	100	256	Average
	-	ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.2	50.38	74	-21.8	36.29	7.42	41.89	100	36	Peak
5150	42.05	40.23	54	-11.95	36.29	7.42	41.89	100	36	Average
5310	88.21	86.25			36.39	7.46	41.89	100	36	Peak
5310	78.17	76.21			36.39	7.46	41.89	100	36	Average
5350	55.63	53.64	74	-18.37	36.41	7.47	41.89	100	36	Peak
5350	44.56	42.57	54	-9.44	36.41	7.47	41.89	100	36	Average

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



802.11ac (80MHz)

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.82	52.34	74	-20.18	35.95	7.42	41.89	142	69	Peak
5150	43.16	41.68	54	-10.84	35.95	7.42	41.89	142	69	Average
5290	105.18	103.53			36.09	7.45	41.89	142	69	Peak
5290	96.23	94.58			36.09	7.45	41.89	142	69	Average
5350	63.62	61.89	74	-10.38	36.15	7.47	41.89	142	69	Peak
5350	50.69	48.96	54	-3.31	36.15	7.47	41.89	142	69	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: Y	VERTICA	L AT 3 M	=	
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.09	51.27	74	-20.91	36.29	7.42	41.89	112	55	Peak
5150	43.03	41.21	54	-10.97	36.29	7.42	41.89	112	55	Average
5290	103.18	101.25			36.37	7.45	41.89	112	55	Peak
5290	95.59	93.66			36.37	7.45	41.89	112	55	Average
5350	63.44	61.45	74	-10.56	36.41	7.47	41.89	112	55	Peak
5350	49.67	47.68	54	-4.33	36.41	7.47	41.89	112	55	Average

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



Band 3

802.11a

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	A	NTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5460	54.24	52.37	74	-19.76	36.26	7.49	41.88	147	45	Peak				
5460	43.62	41.75	54	-10.38	36.26	7.49	41.88	147	45	Average				
#5470	46.39	44.51	68.3	-21.91	36.27	7.49	41.88	147	45	Peak				
5500	103.59	101.67			36.3	7.5	41.88	147	45	Peak				
5500	92.92	91			36.3	7.5	41.88	147	45	Average				
		ANTEN	INA POLA	ARITY & 1	TEST DIST	ANCE: \	VERTICA	L AT 3 M						
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5460	54.63	52.54	74	-19.37	36.48	7.49	41.88	100	214	Peak				
5460	42.89	40.8	54	-11.11	36.48	7.49	41.88	100	214	Average				
#5470	55.92	53.83	68.3	-12.38	36.48	7.49	41.88	100	214	Peak				
5500	99.73	97.61			36.5	7.5	41.88	100	214	Peak				
	90.19	88.07			36.5	7.5	41.88	100	214	Average				

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



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Δ	NTENN	IA POLAF	RITY & TE	ST DISTA	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK							
5460	52.99	51.12	74	-21.01	36.26	7.49	41.88	100	79	Peak							
5460	43.27	41.4	54	-10.73	36.26	7.49	41.88	100	79	Average							
#5470	55	53.12	68.3	-13.3	36.27	7.49	41.88	100	79	Peak							
5580	102.05	100.07			36.33	7.58	41.93	100	79	Peak							
5580	92.03	90.05			36.33	7.58	41.93	100	79	Average							
		ANTEN	INA POLA	ARITY & 1	TEST DIST	ANCE: \	VERTICA	L AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK							
5460	51.99	49.9	74	-22.01	36.48	7.49	41.88	100	4	Peak							
5460	41.52	39.43	54	-12.48	36.48	7.49	41.88	100	4	Average							
#5470	53.12	51.03	68.3	-15.18	36.48	7.49	41.88	100	4	Peak							
5580	103.1	100.9			36.55	7.58	41.93	100	4	Peak							
5580	93.12	90.92			36.55	7.58	41.93	100	4	Average							

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



CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5700	104.88	102.81			36.38	7.7	42.01	140	47	Peak	
5700	92.53	90.46			36.38	7.7	42.01	140	47	Average	
#5725	64.16	62.06	68.3	-4.14	36.39	7.73	42.02	140	47	Peak	
		ANTEN	NA POLA	ARITY & T	EST DIST	ANCE: \	VERTICA	L AT 3 M			
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5700	102.9	100.59	·	·	36.62	7.7	42.01	100	210	Peak	
5700	92.36	90.05		·	36.62	7.7	42.01	100	210	Average	
#5725	64.98	62.64	68.3	-3.32	36.63	7.73	42.02	100	210	Peak	

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



802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: HO	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.98	53.11	74	-19.02	36.26	7.49	41.88	100	74	Peak
5460	43.62	41.75	54	-10.38	36.26	7.49	41.88	100	74	Average
#5470	61.35	59.47	68.3	-6.95	36.27	7.49	41.88	100	74	Peak
5500	102.91	100.99			36.3	7.5	41.88	100	74	Peak
5500	92.06	90.14			36.3	7.5	41.88	100	74	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
					(4.2 /)	(45)	(42)	(5111)	(Dog. cc)	
5460	52.99	50.9	74	-21.01	36.48	7.49	41.88	100	209	Peak
5460 5460	52.99 43.21	50.9 41.12	74 54	-21.01 -10.79	`		, ,	` '		Peak Average
					36.48	7.49	41.88	100	209	
5460	43.21	41.12	54	-10.79	36.48 36.48	7.49 7.49	41.88 41.88	100 100	209 209	Average

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



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	NTENN	IA POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK											
5460	50.81	48.94	74	-23.19	36.26	7.49	41.88	143	48	Peak											
5460	42.45	40.58	54	-11.55	36.26	7.49	41.88	143	48	Average											
#5470	54.48	52.6	68.3	-13.82	36.27	7.49	41.88	143	48	Peak											
5580	103.49	101.51			36.33	7.58	41.93	143	48	Peak											
5580	91.97	89.99			36.33	7.58	41.93	143	48	Average											
		ANTEN	INA POL	ARITY & 1	TEST DIST	ANCE: \	VERTICA	L AT 3 M													
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK											
5460	52.66	50.57	74	-21.34	36.48	7.49	41.88	100	67	Peak											
5460	42.67	40.58	54	-11.33	36.48	7.49	41.88	100	67	Average											
#5470	52.61	50.52	68.3	-15.69	36.48	7.49	41.88	100	67	Peak											
110-110																					
5580	100.47	98.27			36.55	7.58	41.93	100	67	Peak											

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



CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5700	103.6	101.53			36.38	7.7	42.01	100	38	Peak	
5700	92.86	90.79			36.38	7.7	42.01	100	38	Average	
#5725	65.84	63.74	68.3	-2.46	36.39	7.73	42.02	100	38	Peak	
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M			
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5700	101.79	99.48			36.62	7.7	42.01	175	208	Peak	
5700	90.96	88.65			36.62	7.7	42.01	175	208	Average	
#5725	64.91	62.57	68.3	-3.39	36.63	7.73	42.02	175	208	Peak	

REMARKS:

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

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802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Δ	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK		
5460	58.5	56.63	74	-15.5	36.26	7.49	41.88	100	72	Peak		
5460	44.38	42.51	54	-9.62	36.26	7.49	41.88	100	72	Average		
#5470	60.45	58.57	68.3	-7.85	36.27	7.49	41.88	100	72	Peak		
5510	97.03	95.11			36.3	7.51	41.89	100	72	Peak		
5510	86.64	84.72			36.3	7.51	41.89	100	72	Average		
		ANTEN	INA POLA	ARITY & 1	TEST DIST	ANCE: \	VERTICA	L AT 3 M				
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK		
5460	54.13	52.04	74	-19.87	36.48	7.49	41.88	100	0	Peak		
5460	43.92	41.83	54	-10.08	36.48	7.49	41.88	100	0	Average		
#5470	56.37	54.28	68.3	-11.93	36.48	7.49	41.88	100	0	Peak		
5510	95.45	93.32			36.51	7.51	41.89	100	0	Peak		

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



CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE			Average (AV)

	Δ	NTENN	IA POLAF	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5460	53.31	51.44	74	-20.69	36.26	7.49	41.88	100	72	Peak				
5460	42.86	40.99	54	-11.14	36.26	7.49	41.88	100	72	Average				
#5470	54.84	52.96	68.3	-13.46	36.27	7.49	41.88	100	72	Peak				
5550	95.89	93.93			36.32	7.55	41.91	100	72	Peak				
5550	85.91	83.95			36.32	7.55	41.91	100	72	Average				
		ANTEN	INA POL	ARITY & 1	TEST DIST	ANCE: \	VERTICA	L AT 3 M						
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5460	51.72	49.63	74	-22.28	36.48	7.49	41.88	100	0	Peak				
5460	42.92	40.83	54	-11.08	36.48	7.49	41.88	100	0	Average				
#5470	52.61	50.52	68.3	-15.69	36.48	7.49	41.88	100	0	Peak				
			1				44.04	400		_				
5550	95.59	93.42			36.53	7.55	41.91	100	0	Peak				

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5550MHz: Fundamental frequency.
- 3. #: Out of restricted band.



CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	97.4	95.35			36.37	7.67	41.99	140	47	Peak
5670	87.8	85.75			36.37	7.67	41.99	140	47	Average
#5725	58.93	56.83	68.3	-9.37	36.39	7.73	42.02	140	47	Peak
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	94.39	92.11			36.6	7.67	41.99	100	207	Peak
5670	84.73	82.45			36.6	7.67	41.99	100	207	Average
#5725	56.57	54.23	68.3	-11.73	36.63	7.73	42.02	100	207	Peak

REMARKS:

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

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802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE		DETECTOR FUNCTION	Average (AV)

	Ą	NTENN	IA POLAF	RITY & TE	ST DISTA	NCE: HO	ORIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	59.77	57.68	74	-14.23	36.48	7.49	41.88	116	52	Peak
5460	47.72	45.63	54	-6.28	36.48	7.49	41.88	116	52	Average
#5470	63.33	61.24	68.3	-4.97	36.48	7.49	41.88	116	52	Peak
5530	104.5	102.35			36.52	7.53	41.9	116	52	Peak
5530	95.79	93.64			36.52	7.53	41.9	116	52	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	58.93	56.84	74	-15.07	36.48	7.49	41.88	145	65	Peak
5460	46.57	44.48	54	-7.43	36.48	7.49	41.88	145	65	Average
	60.7E	E0.00	60.2	-7.55	36.48	7.49	41.88	145	65	Peak
#5470	60.75	58.66	68.3	-7.55	50.40	7.73	11.00	. 10	0	i car
#5470 5530	102.3	100.15		-7.55	36.52	7.53	41.9	145	65	Peak

REMARKS:

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



Band 4

802.11a

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

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	102.94	100.83			36.4	7.75	42.04	100	325	Peak
5745	94.47	92.36			36.4	7.75	42.04	100	325	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.98	98.62			36.65	7.75	42.04	100	321	Peak
5745	92.71	90.35			36.65	7.75	42.04	100	321	Average

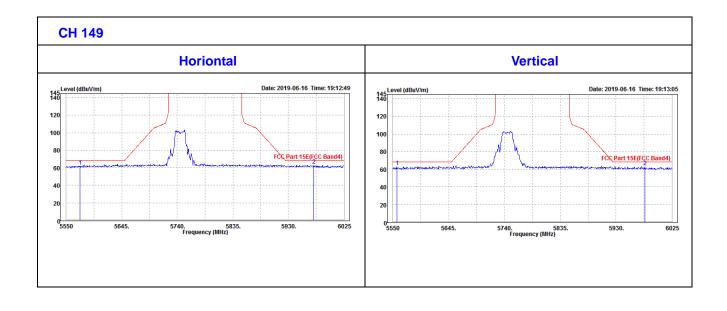
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5745MHz: Fundamental frequency.



OOBE DATA

802.11a

	A	NTENN	IA POLAF	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5573.75	61.99	60.01	68.3	-6.31	36.33	7.58	41.93	200	360	Peak				
5973.7	62.65	60.36	68.3	-5.65	36.49	7.98	42.18	200	360	Peak				
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M						
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5556.65	63.1	60.93	68.3	-5.2	36.53	7.56	41.92	100	360	Peak				
5550.05	03.1	00.55	00.0	5.2	00.00	7.00			000	i our				



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

	Δ	NTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK			
5785	103.37	101.23			36.41	7.79	42.06	100	322	Peak			
5785	95.79	93.65			36.41	7.79	42.06	100	322	Average			
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICAI	L AT 3 M					
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK			
-	LEVEL	LEVEL	(dBuV/m)	_	FACTOR	LOSS	FACTOR	HEIGHT	ANGLE	REMARK Peak			

REMARKS:

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

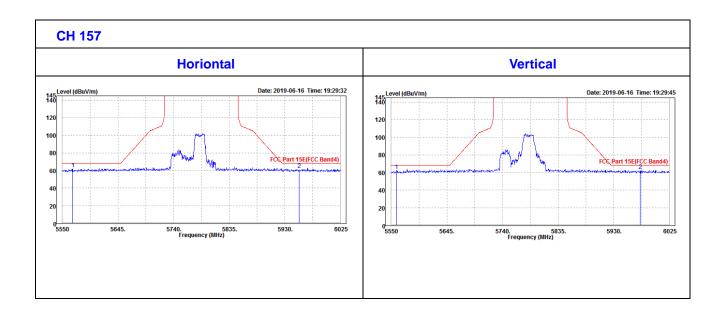
BV 7Layers Communications Technology



OOBE DATA

802.11a

	A	NTENN	IA POLAF	RITY & TE	ST DISTA	NCE: HO	DRIZONT	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK								
5567.58	61.58	59.6	68.3	-6.72	36.33	7.57	41.92	100	360	Peak								
5954.23	61.29	59.02	68.3	-7.01	36.48	7.96	42.17	100	360	Peak								
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK								
5559.03	62.32	60.14	68.3	-5.98	36.54	7.56	41.92	100	0	Peak								



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

	Δ	NTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK			
5825	104.51	102.34			36.43	7.83	42.09	100	305	Peak			
5825	96.38	94.21			36.43	7.83	42.09	100	305	Average			
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICAI	L AT 3 M					
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK			
-	LEVEL	LEVEL		_	FACTOR	LOSS	FACTOR	HEIGHT	ANGLE	REMARK Peak			

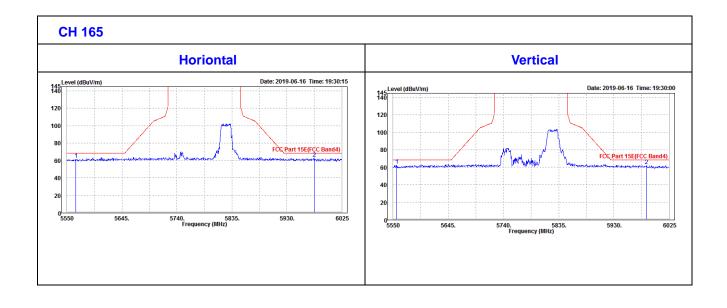
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5825MHz: Fundamental frequency.



OOBE DATA

802.11a

	A	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5565.68	61.07	59.09	68.3	-7.23	36.33	7.57	41.92	100	0	Peak
5977.50	62.35	60.06	68.3	-5.95	36.49	7.99	42.19	100	0	Peak
		ANTEN	NA POL	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5556.18	62.05	59.88	68.3	-6.25	36.53	7.56	41.92	100	360	Peak
5986.05	61.82	59.22	68.3	-6.48	36.79	8	42.19	100	360	Peak



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802.11n (20MHz)

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

	Α	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: HO	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	103.43	101.32			36.4	7.75	42.04	100	256	Peak
5745	95.74	93.63			36.4	7.75	42.04	100	256	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	94.86	100.25	·		36.65	0	42.04	100	236	Peak
5745	86.85	92.24	·	·	36.65	0	42.04	100	236	Average

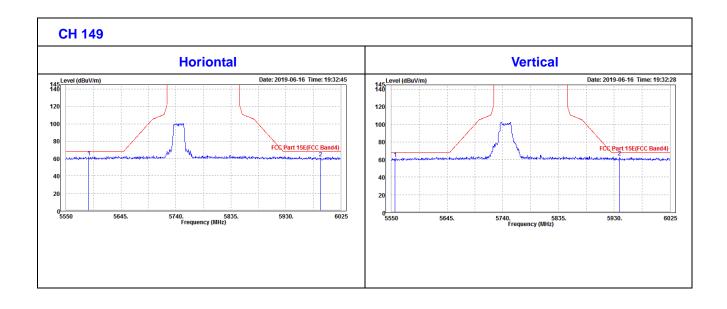
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5745MHz: Fundamental frequency.



OOBE DATA

802.11n (20MHZ)

	A	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5588.95	61.71	59.72	68.3	-6.59	36.34	7.59	41.94	100	0	Peak
5989.85	60.5	58.19	68.3	-7.8	36.5	8	42.19	100	0	Peak
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5556.18	61.32	59.15	68.3	-6.98	36.53	7.56	41.92	100	360	Peak
5939.03	62.64	60.09	68.3	-5.66	36.76	7.95	42.16	100	360	Peak



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

	Δ	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: HO	ORIZONT.	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	104.45	102.31			36.41	7.79	42.06	100	185	Peak
5785	95.59	93.45			36.41	7.79	42.06	100	185	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICAI	L AT 3 M		
	EMISSION]								
FREQ. (MHz)	LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
-	LEVEL	LEVEL	(dBuV/m)	_	FACTOR	LOSS	FACTOR	HEIGHT	ANGLE	REMARK Peak

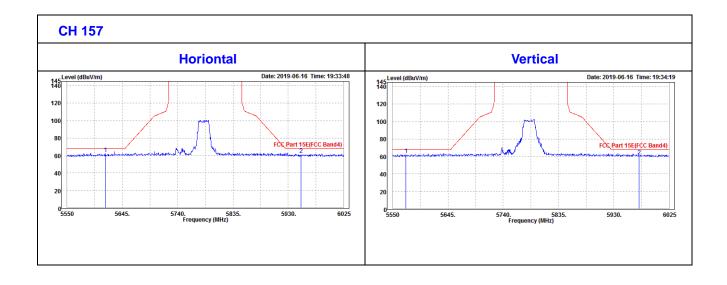
- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5785MHz: Fundamental frequency.



OOBE DATA

802.11n (20MHZ)

	A	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5616.03	62.24	60.22	68.3	-6.06	36.35	7.62	41.95	100	0	Peak
5951.85	61.28	59.01	68.3	-7.02	36.48	7.96	42.17	100	0	Peak
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5572.80	62.54	60.36	68.3	-5.76	36.54	7.57	41.93	100	360	Peak
5973.23	60.79	58.21	68.3	-7.51	36.78	7.98	42.18	100	360	Peak



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

	Δ	NTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
5825	102.03	99.86			36.43	7.83	42.09	100	325	Peak				
5825	93.71	91.54			36.43	7.83	42.09	100	325	Average				
		ANTEN	NA POLA	ARITY & T	TEST DIST	ANCE: \	/ERTICAI	L AT 3 M						
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK				
-	LEVEL	LEVEL	(dBuV/m)		FACTOR	LOSS	FACTOR	HEIGHT	ANGLE	REMARK Peak				

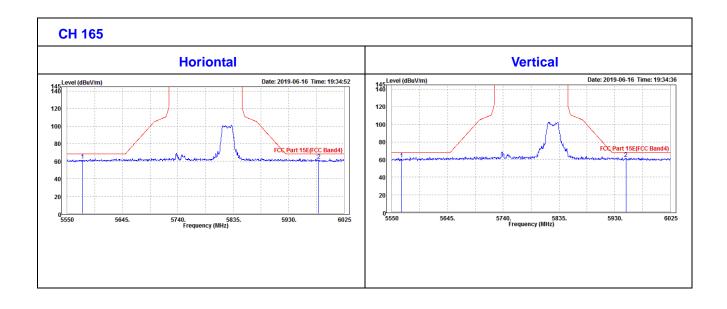
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5825MHz: Fundamental frequency.



OOBE DATA

802.11n (20MHZ)

	A	NTENN	A POLAF	RITY & TE	ST DISTA	NCE: H	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5575.65	61.08	59.1	68.3	-7.22	36.33	7.58	41.93	100	360	Peak
5981.3	61.28	58.99	68.3	-7.02	36.49	7.99	42.19	100	360	Peak
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5566.15	60.88	58.69	68.3	-7.42	36.54	7.57	41.92	100	0	Peak
5949	61.37	58.81	68.3	-6.93	36.77	7.96	42.17	100	0	Peak



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802.11n (40MHz)

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

	Α	NTENN	IA POLAF	RITY & TE	ST DISTA	NCE: HO	DRIZONT	AL AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	100.4	102.42	74	26.4	36.4	7.76	46.18	100	215	Peak
5755	91.66	93.68	54	37.66	36.4	7.76	46.18	100	215	Average
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	I LEVEL LIEVELL LEGACION LIOSS LEAGION HEIGHLI ANGLE INFMARK									
5755	99.87	101.64	74	25.87	36.65	7.76	46.18	100	328	Peak
5755	91.68	93.45	54	37.68	36.65	7.76	46.18	100	328	Average

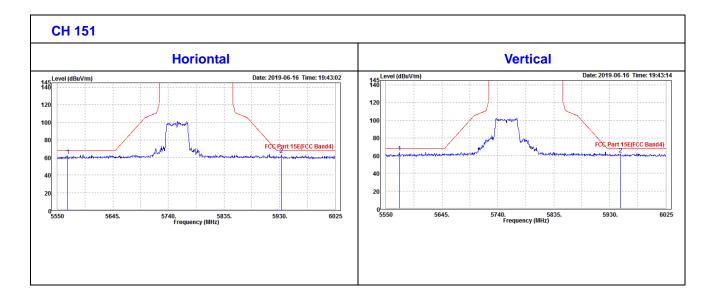
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5755MHz: Fundamental frequency.



OOBE DATA

802.11n (40MHZ)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5567.58	62.43	60.45	68.3	-5.87	36.33	7.57	41.92	100	0	Peak
5933.33	63.36	61.11	68.3	-4.94	36.47	7.94	42.16	100	0	Peak
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5572.80	63.9	61.72	68.3	-4.4	36.54	7.57	41.93	100	360	Peak
5947.58	61.82	59.26	68.3	-6.48	36.77	7.96	42.17	100	360	Peak



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	102.5	100.35			36.42	7.8	42.07	100	312	Peak
5795	93.71	91.56			36.42	7.8	42.07	100	312	Average
		ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
	LEVEL	LEVEL	(dBuV/m)	_	FACTOR	CABLE LOSS	PREAMP FACTOR	ANTENNA HEIGHT	ANGLE	REMARK Peak

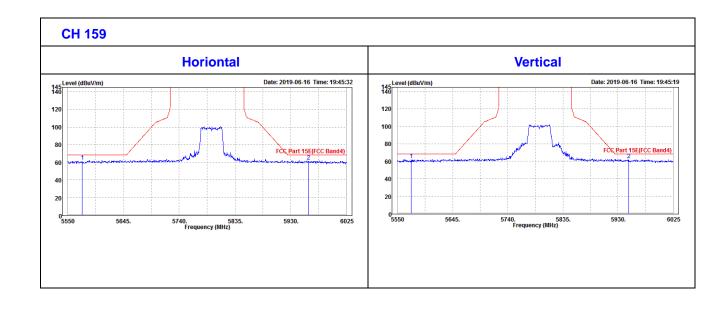
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5795MHz: Fundamental frequency.



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802.11n (40MHZ)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5574.7	61.33	59.35	68.3	-6.97	36.33	7.58	41.93	100	360	Peak
5960.4	61.42	59.14	68.3	-6.88	36.48	7.97	42.17	100	360	Peak
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5573.75	61.49	59.3	68.3	-6.81	36.54	7.58	41.93	100	0	Peak
5948.53	61.68	59.12	68.3	-6.62	36.77	7.96	42.17	100	0	Peak



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802.11ac (80MHz)

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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	104.48	102.35			36.41	7.78	42.06	100	324	Peak
5775	95.78	93.65			36.41	7.78	42.06	100	324	Average
		ANTEN	NA POLA	ARITY & 1	EST DIST	ANCE: \	VERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	103.08	100.69			36.67	7.78	42.06	100	315	Peak
5775	95	92.61			36.67	7.78	42.06	100	315	Average

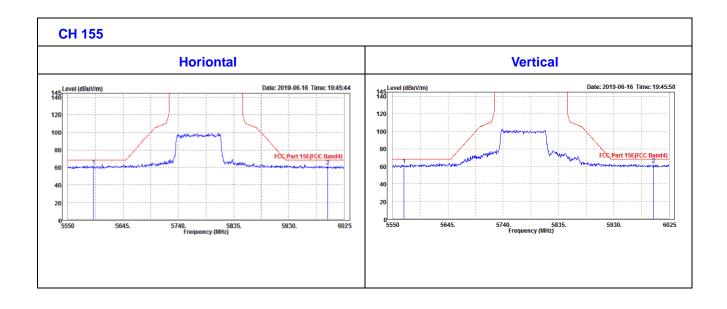
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor Margin value = Emission level – Limit value.
- 2. 5775MHz: Fundamental frequency.



OOBE DATA

802.11ac (80MHZ)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5594.18	61.75	59.75	68.3	-6.55	36.34	7.6	41.94	100	0	Peak
5996.5	61.31	59	68.3	-6.99	36.5	8.01	42.2	100	0	Peak
		ANTEN	INA POLA	ARITY & 1	EST DIST	ANCE: \	/ERTICA	L AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5569.48	61.99	59.8	68.3	-6.31	36.54	7.57	41.92	100	360	Peak
5997.93	62.12	59.51	68.3	-6.18	36.8	8.01	42.2	100	360	Peak



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3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

- 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
- 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Feb. 26,19	Feb. 25,20
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Feb. 26,19	Feb. 25,20

NOTE:

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

3.2.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

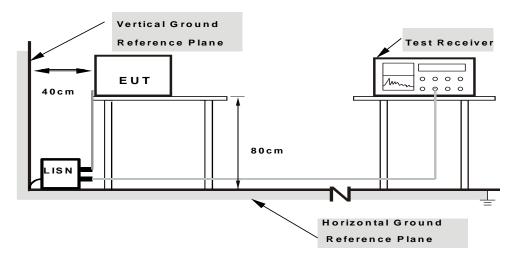
NOTE: All modes of operation were investigated and the worst-case emissions are reported.



3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



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

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

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

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3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA:

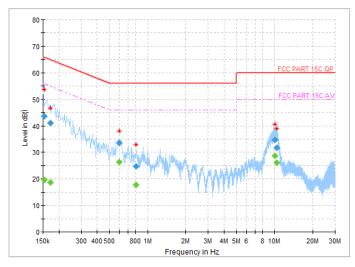
Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25deg. C, 52RH
Tested By	John Wen	TEST DATE	2019/05/28
Test Voltage	AC 120V		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000		29.62	56.00	-26.38	L	ON	9.6
0.150000	47.82		66.00	-18.18	L	ON	9.6
0.176000		26.17	54.67	-28.50	L	ON	9.7
0.176000	43.82		64.67	-20.86	L	ON	9.7
0.600000		23.92	46.00	-22.08	L	ON	9.7
0.600000	30.73		56.00	-25.27	L	ON	9.7
0.808000		15.88	46.00	-30.12	L	ON	9.7
0.808000	23.31		56.00	-32.69	L	ON	9.7
10.304000		26.56	50.00	-23.44	L	ON	9.9
10.304000	32.54		60.00	-27.46	L	ON	9.9
10.604000		27.07	50.00	-22.93	L	ON	9.9
10.604000	32.66		60.00	-27.34	L	ON	9.9

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

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





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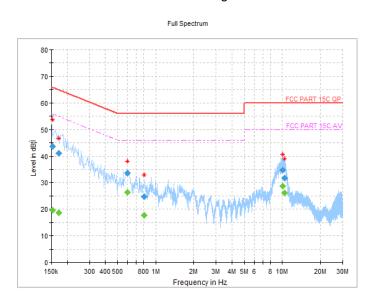


Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25deg. C, 52RH
Tested By	John Wen	TEST DATE	2019/05/28
Test Voltage	AC 120V		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000		19.59	55.78	-36.19	N	ON	9.9
0.154000	43.55		65.78	-22.23	N	ON	9.9
0.172000		18.57	54.86	-36.29	N	ON	10.2
0.172000	41.06		64.86	-23.80	N	ON	10.2
0.600000		26.37	46.00	-19.63	N	ON	10.1
0.600000	33.50		56.00	-22.50	N	ON	10.1
0.808000		17.69	46.00	-28.31	N	ON	10.0
0.808000	24.62		56.00	-31.38	N	ON	10.0
10.128000		28.62	50.00	-21.38	N	ON	9.9
10.128000	34.68		60.00	-25.32	N	ON	9.9
10.456000		26.01	50.00	-23.99	N	ON	9.9
10.456000	31.81		60.00	-28.19	N	ON	9.9

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

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



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3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

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

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

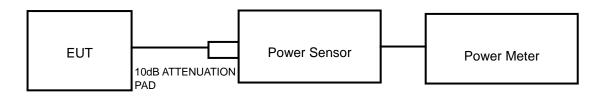
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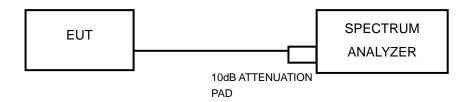
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

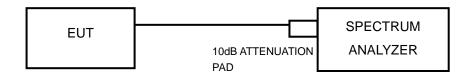
802.11a, 802.11n (20MHz), 802.11n (40MHz) TEST CONFIGURATION



11ac TEST CONFIGURATION



FOR 26dB BANDWIDTH



3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 26,19	Feb. 25,20
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 26,19	Feb. 25,20
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Feb. 26,19	Feb. 25,20
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 26,19	Feb. 25,20

NOTE:

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



3.3.4 **TEST PROCEDURE**

FOR POWER MEASUREMENT

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

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

For 802.11ac (80MHz)

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



FOR 99 PERCENT OCCUPIED BANDWIDTH

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

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

FOR 26dB BANDWIDTH

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

FOR 6dB BANDWIDTH

- 1. Set RBW = 100 kHz.
- 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.

EUT OPERATING CONDITIONS 3.3.6

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

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3.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	14.07	25.527	24	PASS
40	5200	13.84	24.210	24	PASS
48	5240	14.34	27.164	24	PASS
52	5260	14.02	25.235	24	PASS
60	5300	13.90	24.547	24	PASS
64	5320	14.16	26.062	24	PASS
100	5500	14.24	26.546	24	PASS
116	5580	14.27	26.730	24	PASS
140	5700	14.10	25.704	24	PASS
149	5745	13.83	24.155	30	PASS
157	5785	14.41	27.606	30	PASS
165	5825	14.48	28.054	30	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	12.36	17.219	24	PASS
40	5200	12.50	17.783	24	PASS
48	5240	12.48	17.701	24	PASS
52	5260	12.52	17.865	24	PASS
60	5300	12.43	17.498	24	PASS
64	5320	12.33	17.100	24	PASS
100	5500	12.43	17.498	24	PASS
116	5580	12.53	17.906	24	PASS
140	5700	12.53	17.906	24	PASS
149	5745	12.11	16.255	30	PASS
157	5785	12.15	16.406	30	PASS
165	5825	12.23	16.711	30	PASS

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802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	12.13	16.331	24	PASS
46	5230	12.12	16.293	24	PASS
54	5270	12.61	18.239	24	PASS
62	5310	12.62	18.281	24	PASS
102	5510	12.03	15.959	24	PASS
110	5550	11.98	15.776	24	PASS
134	5670	12.00	15.849	24	PASS
151	5755	12.31	17.022	30	PASS
159	5798	12.22	16.672	30	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	10.10	10.233	24	PASS
58	5290	10.07	10.162	24	PASS
106	5530	9.77	9.484	24	PASS
155	5775	10.46	11.117	30	PASS



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

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	16.62	21.90	PASS
40	5200	16.62	22.05	PASS
48	5240	16.68	21.92	PASS
52	5260	16.74	22.80	PASS
60	5300	16.62	22.17	PASS
64	5320	16.68	22.19	PASS
100	5500	16.56	20.80	PASS
116	5580	16.56	20.90	PASS
140	5700	16.62	21.17	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
149	5745	16.86	16.34	PASS
157	5785	16.80	16.04	PASS
165	5825	17.46	16.03	PASS

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802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.94	21.65	PASS
40	5200	17.94	21.54	PASS
48	5240	17.88	21.47	PASS
52	5260	17.88	22.09	PASS
60	5300	17.94	21.62	PASS
64	5320	17.94	21.31	PASS
100	5500	17.88	21.30	PASS
116	5580	17.88	21.41	PASS
140	5700	17.88	21.34	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
149	5745	17.94	17.68	PASS
157	5785	17.94	17.70	PASS
165	5825	18.00	17.67	PASS

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802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.78	56.74	PASS
46	5230	36.60	54.20	PASS
54	5270	36.78	61.93	PASS
62	5310	36.48	48.75	PASS
102	5510	36.36	40.40	PASS
110	5550	36.54	40.52	PASS
134	5670	36.54	47.03	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
151	5755	36.72	36.35	PASS
159	5795	36.54	36.31	PASS

802.11ac (80MHz)

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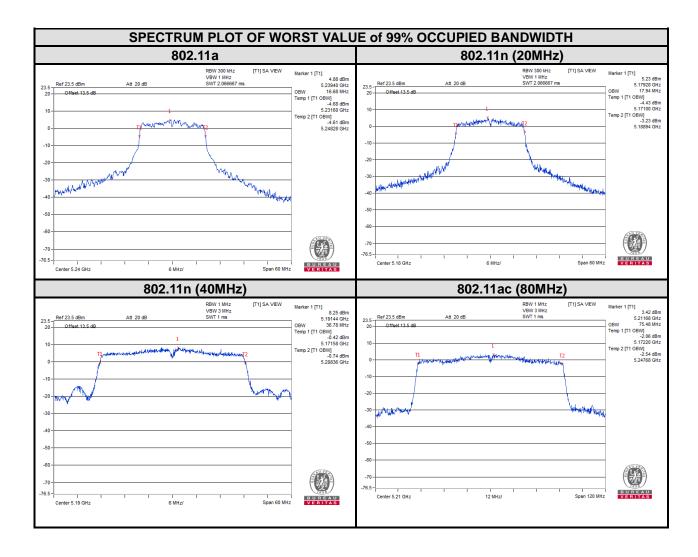
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CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
42	5210	75.48	80.54	PASS
58	5290	75.60	81.36	PASS
106	5530	75.36	80.79	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
155	5775	75.48	75.26	PASS

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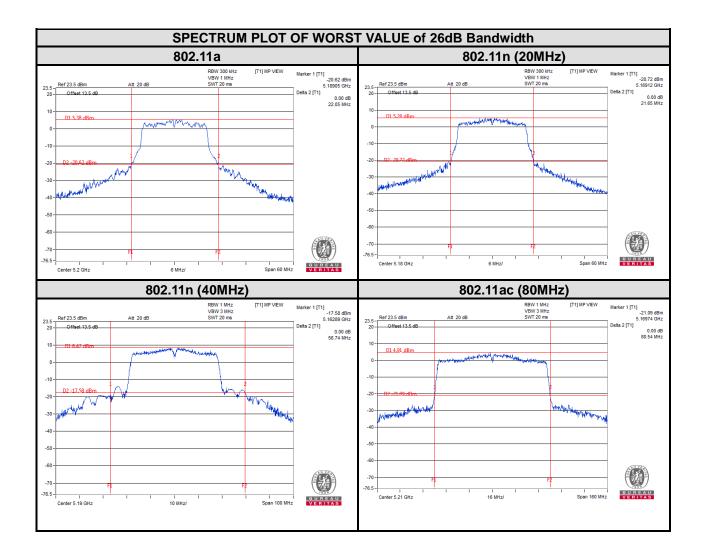


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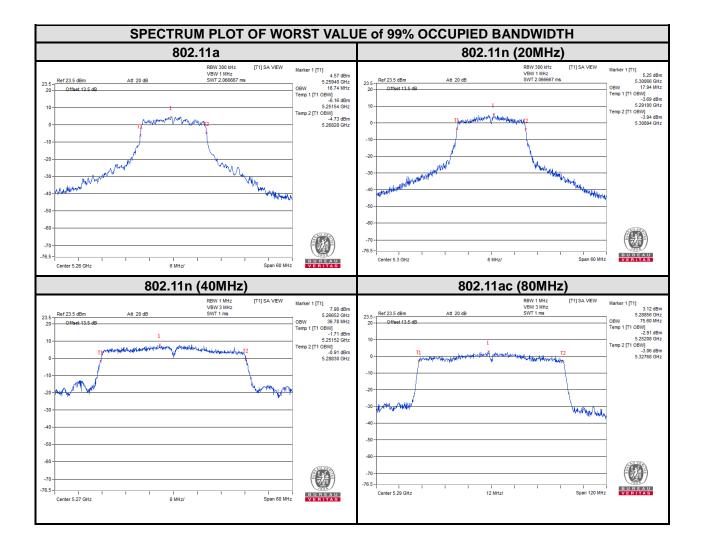


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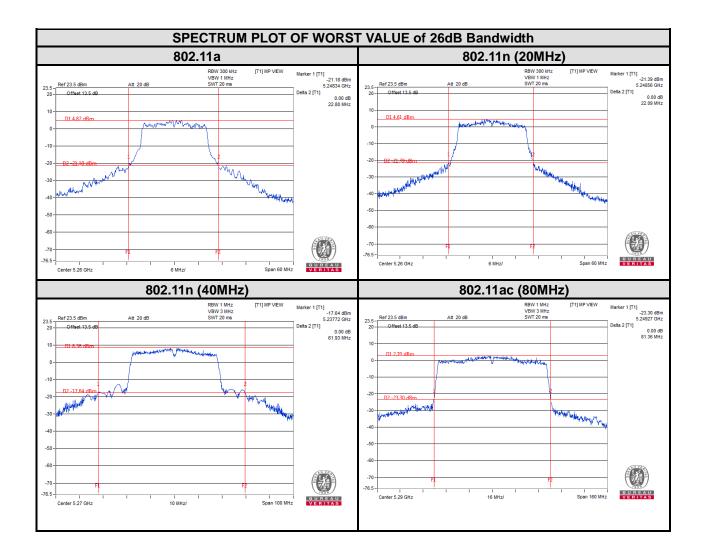
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For U-NII-2A:



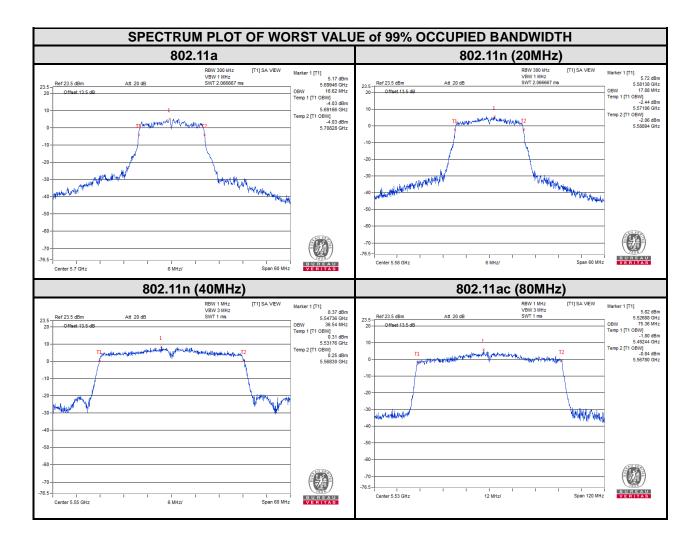




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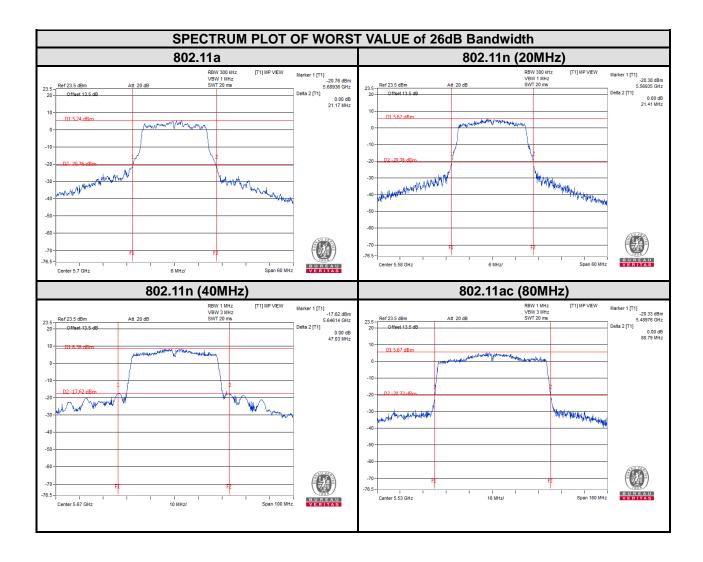


For U-NII-2C:



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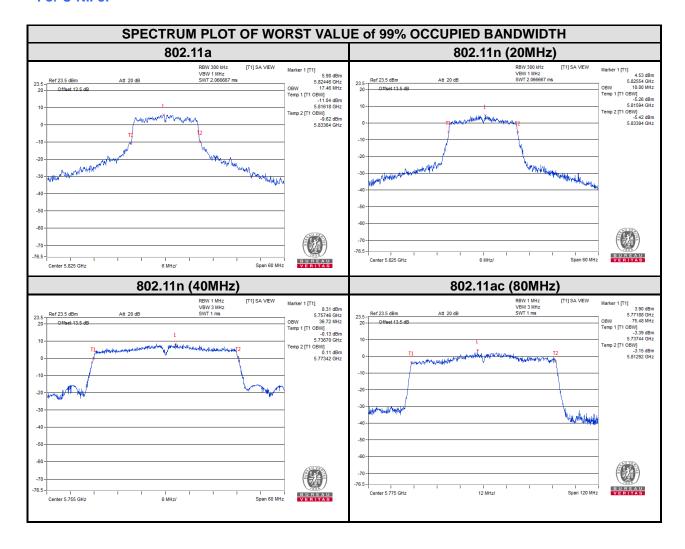




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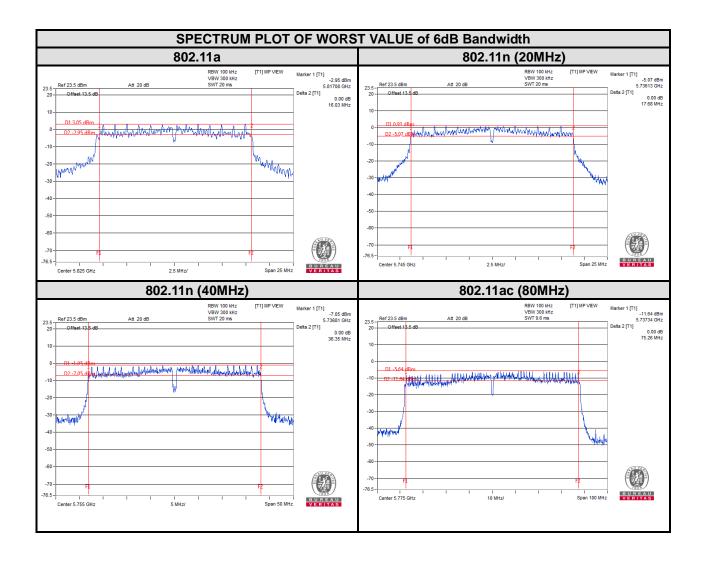


For U-NII-3:



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3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
		Outdoor Access Point	
LI NIII 1		Fixed point-to-point Access Point	17dBm/ MHz
U-NII-1		Indoor Access Point	
	$\sqrt{}$	Client devices	11dBm/ MHz
U-NII-2A		$\sqrt{}$	11dBm/ MHz
U-NII-2C		$\sqrt{}$	11dBm/ MHz
U-NII-3	V		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

Using method SA-2

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

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.1.6.



3.4.7 TEST RESULTS

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

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	7.79	1.16	8.95	11	PASS
40	5200	7.97	1.16	9.13	11	PASS
48	5240	8.62	1.16	9.78	11	PASS
52	5260	7.71	1.16	8.87	11	PASS
60	5300	8.21	1.16	9.37	11	PASS
64	5320	9.23	1.16	10.39	11	PASS
100	5500	7.38	1.16	8.54	11	PASS
116	5580	8.45	1.16	9.61	11	PASS
140	5700	7.92	1.16	9.08	11	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	8.51	1.46	9.97	11	PASS
40	5200	8.40	1.46	9.86	11	PASS
48	5240	7.13	1.46	8.59	11	PASS
52	5260	6.25	1.46	7.71	11	PASS
60	5300	8.11	1.46	9.57	11	PASS
64	5320	8.16	1.46	9.62	11	PASS
100	5500	7.74	1.46	9.2	11	PASS
116	5580	7.87	1.46	9.33	11	PASS
140	5700	8.63	1.46	10.09	11	PASS



802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
38	5190	5.24	1.89	7.13	11	PASS
46	5230	5.22	1.89	7.11	11	PASS
54	5270	6.45	1.89	8.34	11	PASS
62	5310	5.67	1.89	7.56	11	PASS
102	5510	5.30	1.89	7.19	11	PASS
110	5550	5.43	1.89	7.32	11	PASS
134	5670	5.29	1.89	7.18	11	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)		PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
42	5210	2.62	2.71	5.33	11	PASS
58	5290	1.02	2.71	3.73	11	PASS
106	5530	3.82	2.71	6.53	11	PASS



For U-NII-3:

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	2.69	-0.32	1.16	0.84	30	PASS
157	5785	3.13	0.12	1.16	1.28	30	PASS
165	5825	3.20	0.19	1.16	1.35	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	0.68	-2.33	1.46	-0.87	30	PASS
157	5785	0.97	-2.04	1.46	-0.58	30	PASS
165	5825	0.34	-2.67	1.46	-1.21	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
151	5755	-2.31	-5.32	1.89	-3.43	30	PASS
159	5795	-1.89	-4.9	1.89	-3.01	30	PASS

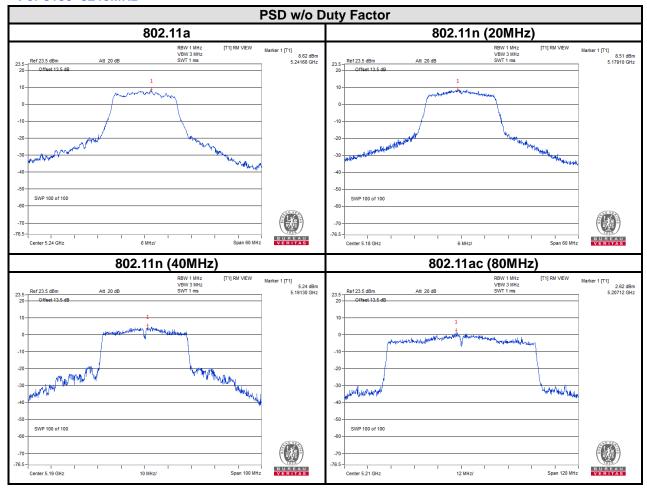
802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	I Duty Factor I Duty Factor		Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
155	5775	-7.61	-10.62	2.71	-7.91	30	PASS

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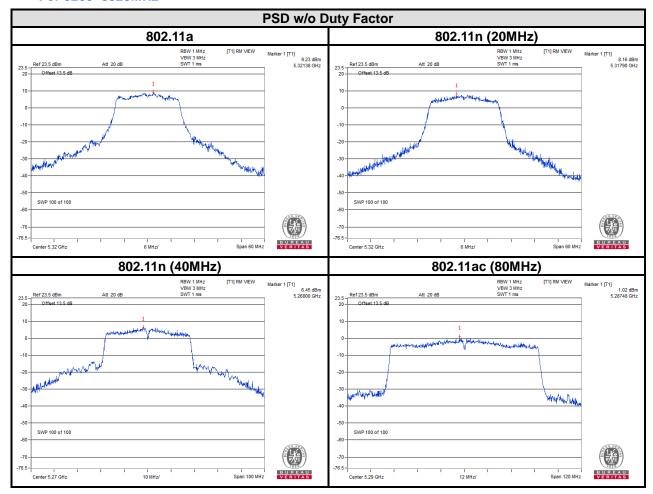


For 5180~5240MHz





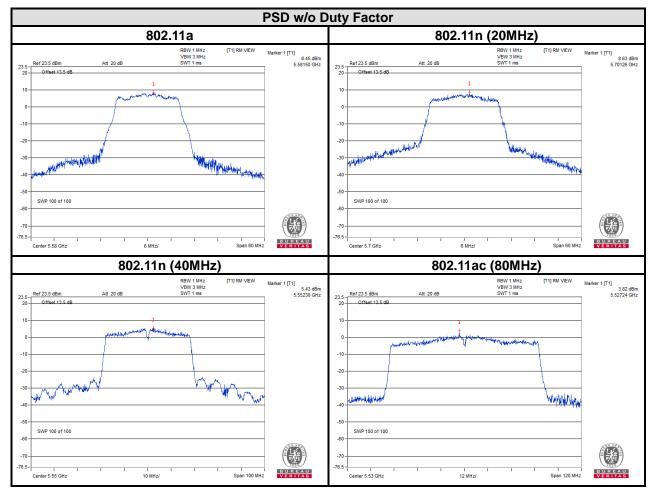
For 5260~5320MHz



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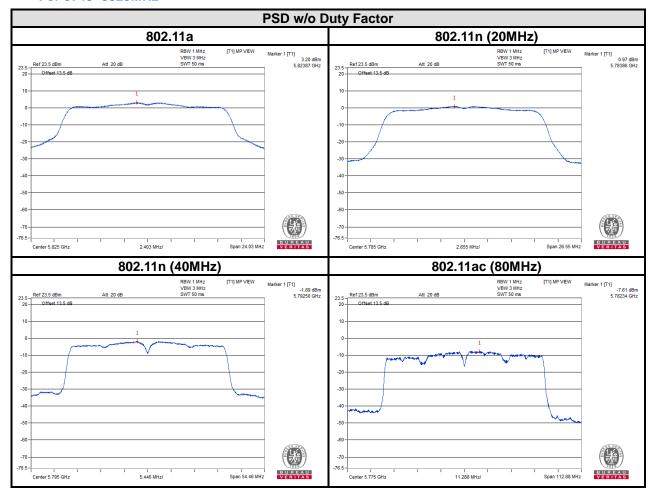
For 5500~5700MHz



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For 5745~5825MHz



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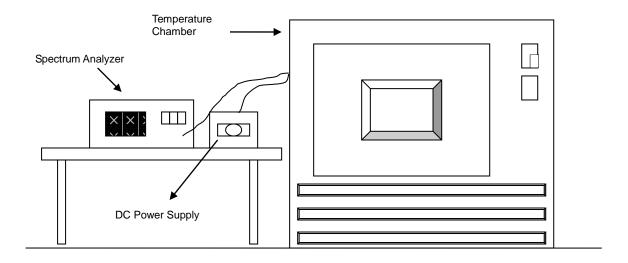


3.5 FREQUENCY STABILITY

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.

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3.5.4 **TEST PROCEDURE**

- a. The EUT was placed inside the environmental test chamber and powered by nominal DC 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.
- 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

			FREQ	UEMCY STA	ABILITY VER	SUS TEMP.						
OPERATING FREQUENCY: 5180MHz												
	0 MINUTE 2 MINUTES 5 MINUTES 10 MINUTE											
TEMP. (℃)	Power Supply (Vdc)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)			
50	120	5180.0117	2.259	5180.013	2.510	5180.0135	2.606	5180.0169	3.263	PASS		
40	120	5180.0022	0.425	5180.0047	0.907	5180	0.000	5180.0074	1.429	PASS		
30	120	5180.003	0.579	5179.9979	-0.405	5180.005	0.965	5180.004	0.772	PASS		
20	120	5180.0098	1.892	5180.0109	2.104	5180.0025	0.483	5180.0133	2.568	PASS		
10	120	5179.9872	-2.471	5179.9907	-1.795	5179.9825	-3.378	5179.9924	-1.467	PASS		
0	120	5179.9993	-0.135	5179.9982	-0.347	5180.0016	0.309	5179.9971	-0.560	PASS		
-10	120	5180.0112	2.162	5180.0052	1.004	5180.0044	0.849	5180.0078	1.506	PASS		
-20	120	5180.0211	4.073	5180.0116	2.239	5180.018	3.475	5180.0143	2.761	PASS		
-30	120	5180.0071	1.371	5180.0144	2.780	5180.0032	0.618	5180.0081	1.564	PASS		

	FREQUEMCY STABILITY VERSUS VOLTAGE											
OPERATING FREQUENCY: 5180MHz												
	UMINOTE ZMINOTE SMINOTE TOMINOTE									RESULT		
TEMP. (℃)	Power Supply (Vdc)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)			
	138	5180.0095	1.834	5180.0115	2.220	5180.0026	0.502	5180.0124	2.394	PASS		
20	120	5180.0098	1.892	5180.0109	2.104	5180.0025	0.483	5180.0133	2.568	PASS		
	102	5180.0087	1.680	5180.0104	2.008	5180.0026	0.502	5180.0123	2.375	PASS		



			FREQ	UEMCY STA	ABILITY VER	SUS TEMP.						
OPERATING FREQUENCY: 5825MHz												
	0 MINUTE 2 MINUTES 5 MINUTES 10 MINUTE											
TEMP. (℃)	Power Supply (Vdc)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)			
50	120	5825.0101	1.734	5825.0044	0.755	5825.01	1.717	5825.0041	0.704	PASS		
40	120	5825.0003	0.052	5825.0043	0.738	5824.9954	-0.790	5824.9958	-0.721	PASS		
30	120	5825.0141	2.421	5825.0135	2.318	5825.0119	2.043	5825.0064	1.099	PASS		
20	120	5824.9754	-4.223	5824.9835	-2.833	5824.9797	-3.485	5824.9771	-3.931	PASS		
10	120	5825.0132	2.266	5825.0119	2.043	5825.0147	2.524	5825.0112	1.923	PASS		
0	120	5824.9749	-4.309	5824.9816	-3.159	5824.9842	-2.712	5824.9793	-3.554	PASS		
-10	120	5824.9834	-2.850	5824.9819	-3.107	5824.9889	-1.906	5824.9936	-1.099	PASS		
-20	120	5824.9974	-0.446	5825.004	0.687	5824.9992	-0.137	5825.0075	1.288	PASS		
-30	120	5825.01	1.717	5825.0082	1.408	5825.0008	0.137	5825.0093	1.597	PASS		

	FREQUEMCY STABILITY VERSUS VOLTAGE											
OPERATING FREQUENCY: 5825MHz												
	0 MINOTE 2 MINOTE 10 MINOTE								RESULT			
TEMP. (°C)	Power Supply (Vdc)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)			
	138	5824.9772	-3.914	5824.9844	-2.678	5824.9795	-3.519	5824.9779	-3.794	PASS		
20	120	5824.9754	-4.223	5824.9835	-2.833	5824.9797	-3.485	5824.9771	-3.931	PASS		
	102	5824.9761	-4.103	5824.9838	-2.781	5824.9795	-3.519	5824.9765	-4.034	PASS		



PHOTOGRAPHS OF THE TEST CONFIGURATION

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

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

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

---END---

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