

VARIANT FCC TEST REPORT

(Part 15, Subpart E)

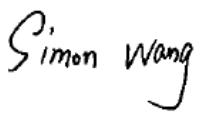
Applicant:	Shenzhen Zolon Technology Co., Ltd.
Address:	401, Building 3, Shenzhen Software Park, Maling Community, Yuehai Sub-district, Nanshan District, Shenzhen, China

Manufacturer or Supplier:	Shenzhen Zolon Technology Co., Ltd.
Address:	401, Building 3, Shenzhen Software Park, Maling Community, Yuehai Sub-district, Nanshan District, Shenzhen, China
Product:	Pay Tablet
Brand Name:	ZOLON
Model Name:	M8
FCC ID:	2AV5BM8
Date of tests:	Sep. 19, 2021 ~ Oct. 12, 2021

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

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

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

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: May. 29, 2024	 Date: May. 29, 2024

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21090022RF03	Original release	Oct. 13, 2021
W7L-P24050005RF03	Based on the original report changing the applicant information and manufacturer information, brand name, FCC ID.	May. 29, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

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

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	$\pm 2.70\text{dB}$
Radiated emissions (30MHz~1GMHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GMHz ~6GMHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GMHz ~18GMHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GMHz ~40GMHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Power Spectral Density	$\pm 0.85\text{ dB}$

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



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Pay Tablet
BRAND NAME	ZOLON
MODEL NAME	M8
NOMINAL VOLTAGE	5Vdc /9Vdc /12Vdc (adapter) 3.85Vdc (Rechargeable Li-ion, battery)
MODULATION	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n, 802.11ac(20MHz) 6 for 802.11n, 802.11ac (40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n, 802.11ac (20MHz) 3 for 802.11n, 802.11ac (40MHz) 2 for 802.11ac (80MHz)
AVERAGE POWER	26.24mW for 5180 ~ 5240MHz 25.12mW for 5260 ~ 5320MHz 26.85mW for 5500 ~ 5720MHz 26.36mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	0.7 dBi for 5180 ~ 5240MHz 0.7 dBi for 5260 ~ 5320MHz 0.7 dBi for 5500 ~ 5720MHz 0.7 dBi for 5745 ~ 5825MHz
HW VERSION	M8-XXX-XXX-XXXX
SW VERSION	V0.0.0.1
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: unshielded without ferrite, 1 meter



NOTE:

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

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

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

List of Accessory:

ACCESSORIES	BRAND	MODEL	SPECIFICATION
Battery	IES	ICS021NA	Capacity: 3.85vdc 6300mAh
AC Adapter	/	GLH-PD18W-U	I/P:100-240Vac, 0.5A O/P: 5Vdc, 3A/9Vdc, 2A/12Vdc, 1.5A
USB Cable	/	HJ-20010506CC444	Shielded, 1meter

2.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5260 ~ 5320MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		



FOR 5500 ~ 5720MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	138	5690 MHz
122	5610 MHz		

FOR 5745 ~ 5825MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
144	5720MHz	157	5785 MHz
149	5745 MHz	165	5825 MHz
153	5765 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
142	5710 MHz	159	5795 MHz
151	5755 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
138	5690MHz	155	5775 MHz

2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

Where

RE $\geq$ 1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE:

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

NOTE: “-” means no effect.

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11n (20MHz)	5180-5240	36 to 48	48	OFDM	MCS0

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11n (40MHz)	5180-5240	36 to 48	48	OFDM	MCS0



BANDEDGE MEASUREMENT:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	36 to 48	6.0
A	802.11n (20MHz)		36 to 48	36, 48	36 to 48	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	38 to 46	MCS0
A	802.11ac (20MHz)		36 to 48	36, 48	36 to 48	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	38 to 46	MCS0
A	802.11ac (80MHz)		42	42	42	MCS0
A	802.11a	5260-5320	52 to 64	52, 64	52 to 64	6.0
A	802.11n (20MHz)		52 to 64	52, 64	52 to 64	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	54 to 62	MCS0
A	802.11ac (20MHz)		52 to 64	52, 64	52 to 64	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	54 to 62	MCS0
A	802.11ac (80MHz)		58	58	58	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	100 to 144	6.0
A	802.11n (20MHz)		100 to 144	100, 116, 140, 144	100 to 144	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	102 to 142	MCS0
A	802.11ac (20MHz)		100 to 144	100, 116, 140, 144	100 to 144	MCS0
A	802.11ac (40MHz)		102 to 142	102, 110, 134, 142	102 to 142	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	106 to 138	MCS0
EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0



A	802.11ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

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

A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 3.85V	Star Le
RE≥1G	23deg. C, 70%RH	DC 3.85V	Star Le
PLC	25deg. C, 52%RH	DC 3.85V	Jimmy Liu
APCM	25deg. C, 60%RH	DC 3.85V	Kevin Zhang

2.3 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle = 1.41/1.44 = 0.979, Duty factor = $10 * \log(1 / 0.979) = 0.09$.

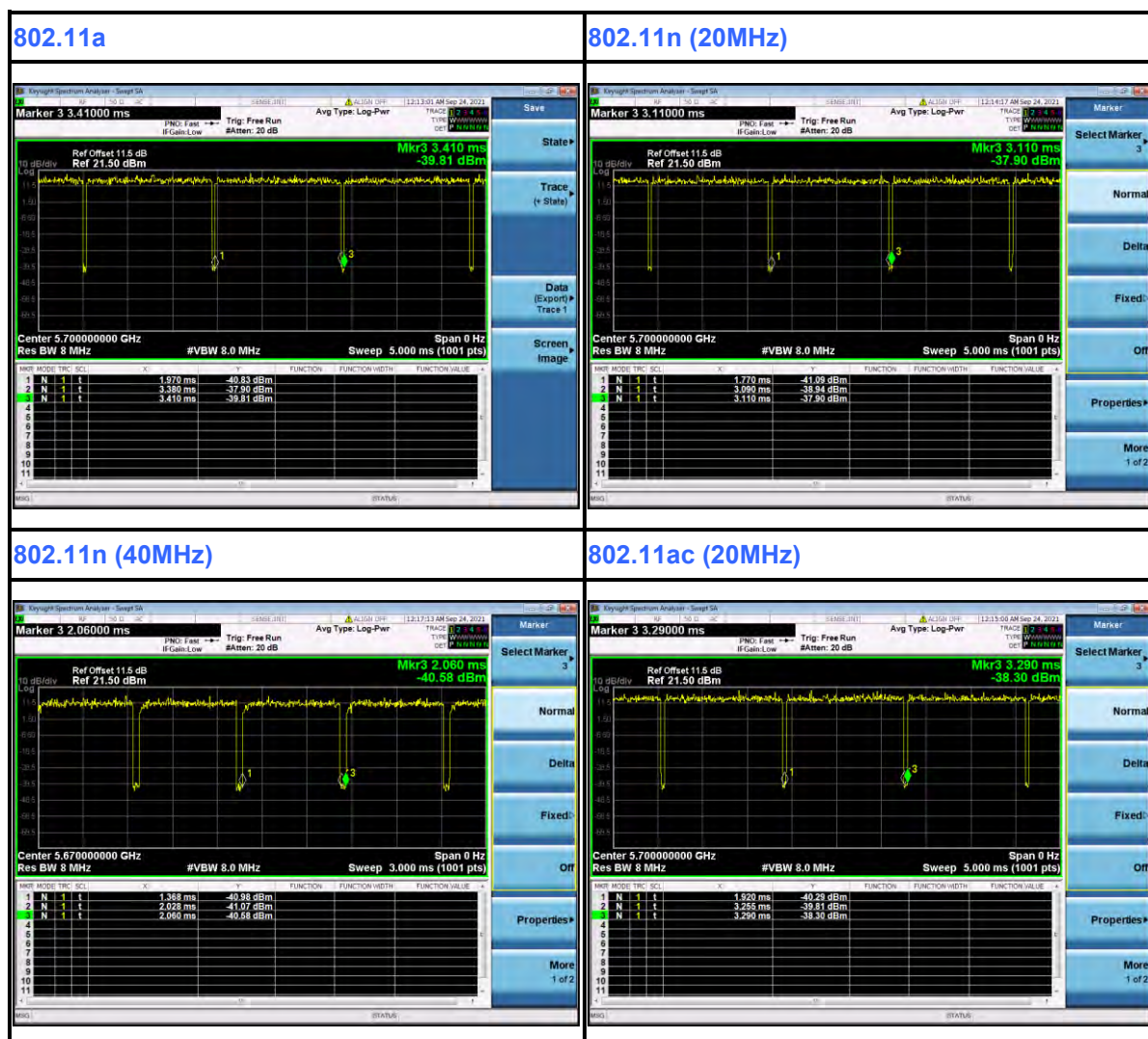
802.11n (20MHz): Duty cycle = 1.32/1.34=0.985, duty factor shall not be considered.

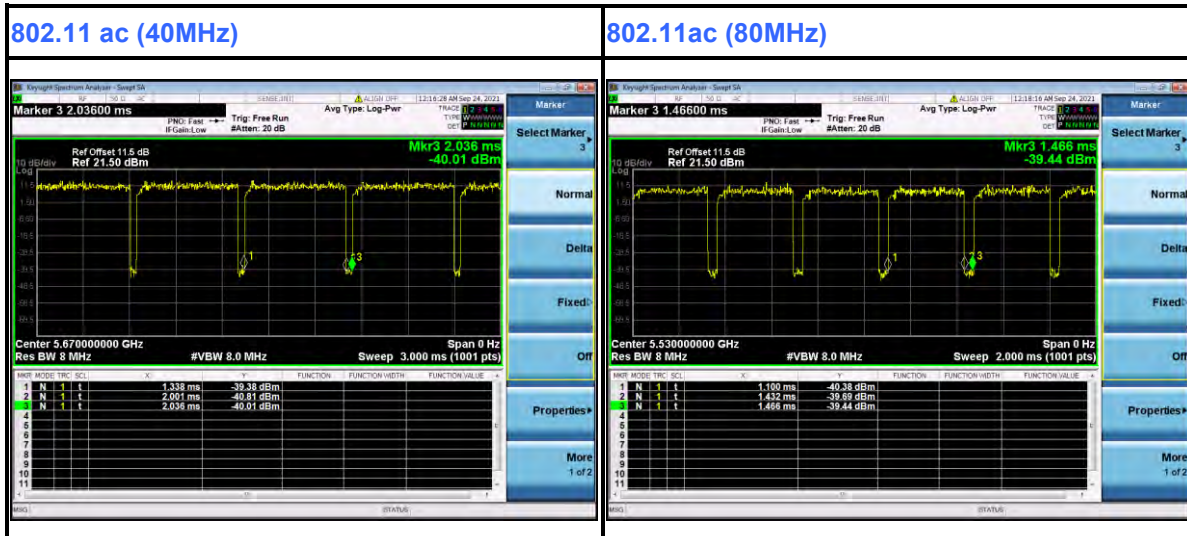
802.11n (40MHz): Duty cycle =0.66/0.692 = 0.954, Duty factor = $10 * \log(1 / 0.954) = 0.20$

802.11ac (20MHz): Duty cycle = 1.335/1.37=0.974, Duty factor = $10 * \log(1 / 0.974) = 0.11$.

802.11ac (40MHz): Duty cycle =0.663/0.698=0.95, Duty factor = $10 * \log(1 / 0.95) = 0.22$.

802.11ac (80MHz): Duty cycle =0.332/0.366=0.907, Duty factor = $10 * \log(1 / 0.907) = 0.42$







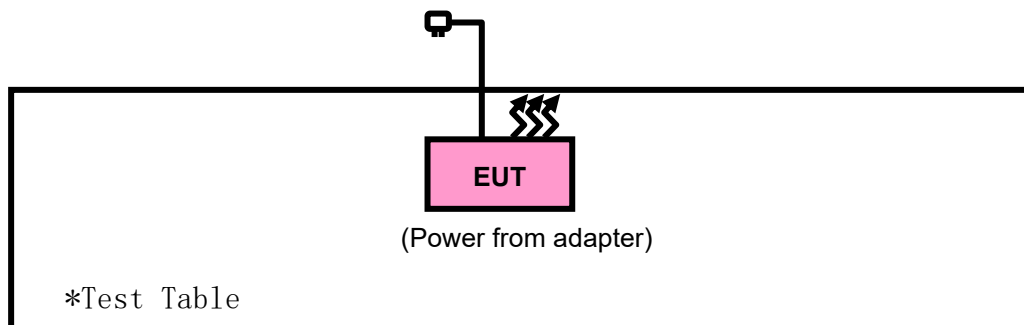
2.4 DESCRIPTION OF SUPPORT UNITS

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

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

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

2.4.1 CONFIGURATION OF SYSTEM UNDER TEST



2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

ANSI C63.10-2013

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

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

3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTE:

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

3.1.2 LIMITS OF UNWANTED EMISSION

RESTRICTED BANDS	APPLICABLE TO	LIMIT	
	789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m (dBµV/m)	
		PK : 74	AV : 54
OUT OF THE RESTRICTED BANDS	APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
	15.407(b)(1)	PK : -27	PK : 68.2
	15.407(b)(2)		
	15.407(b)(3)		
	15.407(b)(4)	See note 2 (FCC 16-24)	

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

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

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

3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 05,21	Mar. 04,22
Horn Antenna	ETS-LINDGREN	3117	00168728	Apr. 02,21	Apr. 01,22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 26, 21	Aug. 25, 22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 22,21	Apr. 21,22
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 03,21	Jun. 02,22
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 22,21	Apr. 21,22

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Chamber.

3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

3.1.4 TEST PROCEDURES

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

NOTE:

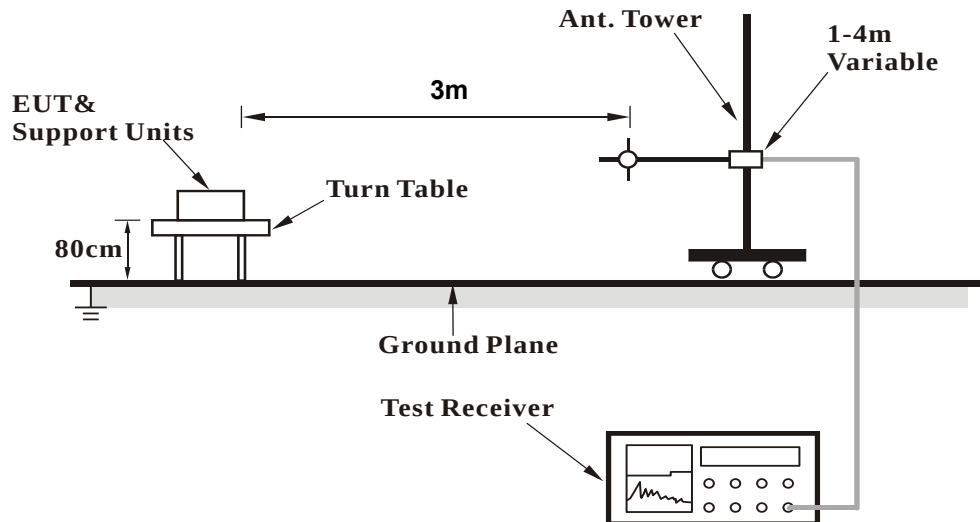
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

3.1.5 DEVIATION FROM TEST STANDARD

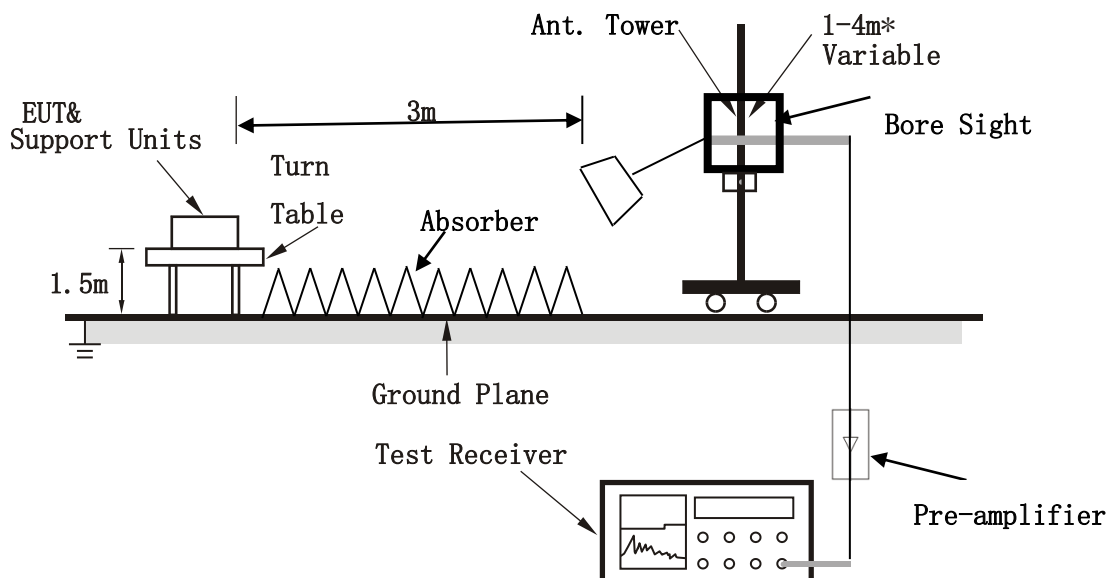
No deviation.

3.1.6 TEST SETUP

< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

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

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



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3.1.7 EUT OPERATING CONDITION

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

3.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

Band 1

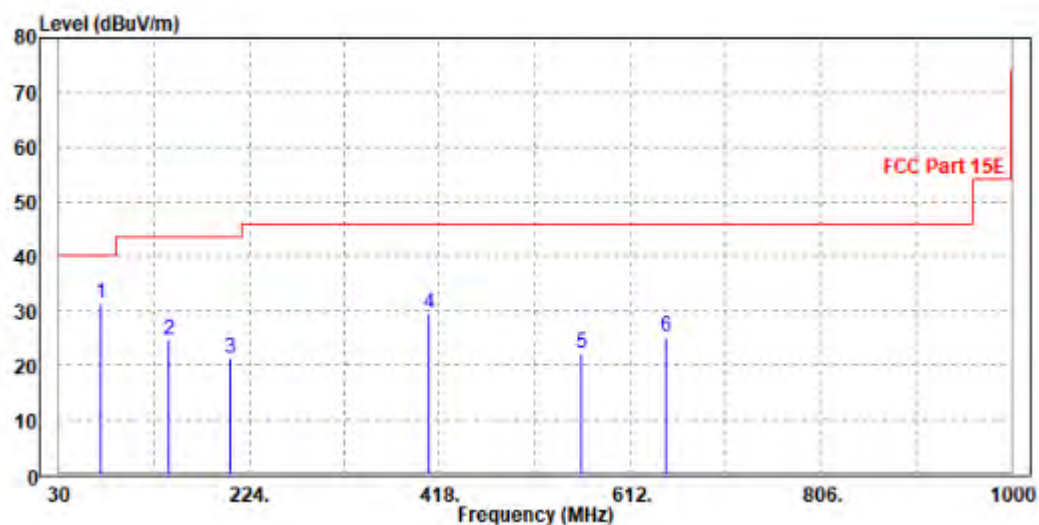
802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
72.68	31.48	59.96	40	-8.52	7.75	1.1	37.33	300	360	Peak
142.52	24.57	51.39	43.5	-18.93	8.55	1.52	36.89	300	360	Peak
204.6	21.31	44.85	43.5	-22.19	11.2	1.82	36.56	300	360	Peak
406.36	29.6	46.85	46	-16.4	17.01	2.58	36.84	300	360	Peak
562.53	22.07	36.24	46	-23.93	19.95	3.11	37.23	300	360	Peak
648.86	25.21	37.6	46	-20.79	21.68	3.38	37.45	300	360	Peak

REMARKS:

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

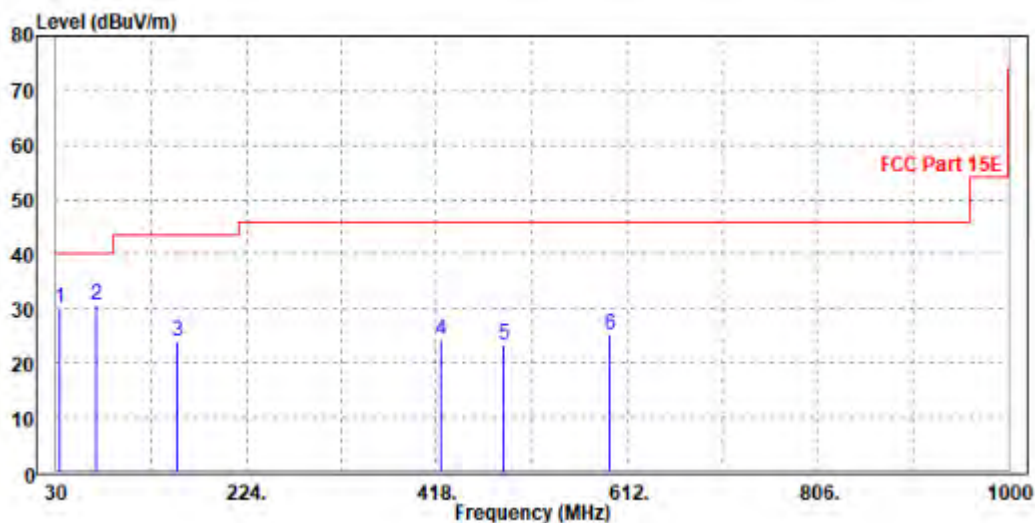


CHANNEL	Channel 48	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
34.85	30.21	48.98	40	-9.79	18.07	0.75	37.59	200	360	Peak
71.71	30.73	59	40	-9.27	7.97	1.09	37.33	200	360	Peak
154.16	24	48.58	43.5	-19.5	10.62	1.58	36.78	200	360	Peak
422.85	24.27	40.87	46	-21.73	17.63	2.64	36.87	200	360	Peak
486.87	23.35	38.6	46	-22.65	18.85	2.88	36.98	200	360	Peak
594.54	25.33	38.68	46	-20.67	20.8	3.2	37.35	200	360	Peak

REMARKS:

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





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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	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.21	57.52	74	-18.79	34.52	9.52	46.35	180	60	Peak
5150	49.49	51.8	54	-4.51	34.52	9.52	46.35	180	60	Average
5180	95.21	97.44	-	-	34.54	9.58	46.35	180	60	Peak
5180	87.91	90.14	-	-	34.54	9.58	46.35	180	60	Average
5350	55.27	56.95	74	-18.73	34.68	9.94	46.3	180	60	Peak
5350	48.54	50.22	54	-5.46	34.68	9.94	46.3	180	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.73	56.96	74	-19.27	34.6	9.52	46.35	100	193	Peak
5150	49.31	51.54	54	-4.69	34.6	9.52	46.35	100	193	Average
5180	94.21	96.38	-	-	34.6	9.58	46.35	100	193	Peak
5180	86.75	88.92	-	-	34.6	9.58	46.35	100	193	Average
5350	55.5	57.26	74	-18.5	34.6	9.94	46.3	100	193	Peak
5350	48.8	50.56	54	-5.2	34.6	9.94	46.3	100	193	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.44	57.75	74	-18.56	34.52	9.52	46.35	180	60	Peak
5150	49.71	52.02	54	-4.29	34.52	9.52	46.35	180	60	Average
5200	95.08	97.24	-	-	34.56	9.62	46.34	180	60	Peak
5200	88.04	90.2	-	-	34.56	9.62	46.34	180	60	Average
5350	53.85	55.53	74	-20.15	34.68	9.94	46.3	180	60	Peak
5350	49.02	50.7	54	-4.98	34.68	9.94	46.3	180	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.59	56.82	74	-19.41	34.6	9.52	46.35	100	193	Peak
5150	49.94	52.17	54	-4.06	34.6	9.52	46.35	100	193	Average
5200	93.71	95.83	-	-	34.6	9.62	46.34	100	193	Peak
5200	86.74	88.86	-	-	34.6	9.62	46.34	100	193	Average
5350	56.14	57.9	74	-17.86	34.6	9.94	46.3	100	193	Peak
5350	49.13	50.89	54	-4.87	34.6	9.94	46.3	100	193	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.34	57.65	74	-18.66	34.52	9.52	46.35	180	60	Peak
5150	49.72	52.03	54	-4.28	34.52	9.52	46.35	180	60	Average
5240	95.93	97.96	-	-	34.59	9.71	46.33	180	60	Peak
5240	89.04	91.07	-	-	34.59	9.71	46.33	180	60	Average
5350	55.88	57.56	74	-18.12	34.68	9.94	46.3	180	60	Peak
5350	49.06	50.74	54	-4.94	34.68	9.94	46.3	180	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.93	59.16	74	-17.07	34.6	9.52	46.35	100	193	Peak
5150	49.91	52.14	54	-4.09	34.6	9.52	46.35	100	193	Average
5240	94.18	96.2	-	-	34.6	9.71	46.33	100	193	Peak
5240	87.51	89.53	-	-	34.6	9.71	46.33	100	193	Average
5350	54.26	56.02	74	-19.74	34.6	9.94	46.3	100	193	Peak
5350	48.28	50.04	54	-5.72	34.6	9.94	46.3	100	193	Average

REMARKS:

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



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802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	54.78	57.09	74	-19.22	34.52	9.52	46.35	200	65	Peak
5150	50.17	52.48	54	-3.83	34.52	9.52	46.35	200	65	Average
5180	95.58	97.81	-	-	34.54	9.58	46.35	200	65	Peak
5180	87.99	90.22	-	-	34.54	9.58	46.35	200	65	Average
5350	53.9	55.58	74	-20.1	34.68	9.94	46.3	200	65	Peak
5350	48.69	50.37	54	-5.31	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.52	58.75	74	-17.48	34.6	9.52	46.35	100	200	Peak
5150	49.66	51.89	54	-4.34	34.6	9.52	46.35	100	200	Average
5180	92.96	95.13	-	-	34.6	9.58	46.35	100	200	Peak
5180	85.79	87.96	-	-	34.6	9.58	46.35	100	200	Average
5350	55.25	57.01	74	-18.75	34.6	9.94	46.3	100	200	Peak
5350	49.21	50.97	54	-4.79	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.7	58.01	74	-18.3	34.52	9.52	46.35	200	60	Peak
5150	49.97	52.28	54	-4.03	34.52	9.52	46.35	200	60	Average
5200	95.21	97.37	-	-	34.56	9.62	46.34	200	60	Peak
5200	87.92	90.08	-	-	34.56	9.62	46.34	200	60	Average
5350	55.78	57.46	74	-18.22	34.68	9.94	46.3	200	60	Peak
5350	48.65	50.33	54	-5.35	34.68	9.94	46.3	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.76	58.99	74	-17.24	34.6	9.52	46.35	100	200	Peak
5150	50.23	52.46	54	-3.77	34.6	9.52	46.35	100	200	Average
5200	95.23	97.35	-	-	34.6	9.62	46.34	100	200	Peak
5200	87.43	89.55	-	-	34.6	9.62	46.34	100	200	Average
5350	54.32	56.08	74	-19.68	34.6	9.94	46.3	100	200	Peak
5350	48.39	50.15	54	-5.61	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.38	56.69	74	-19.62	34.52	9.52	46.35	200	60	Peak
5150	49.6	51.91	54	-4.4	34.52	9.52	46.35	200	60	Average
5240	95.81	97.84	-	-	34.59	9.71	46.33	200	60	Peak
5240	88	90.03	-	-	34.59	9.71	46.33	200	60	Average
5350	54.73	56.41	74	-19.27	34.68	9.94	46.3	200	60	Peak
5350	48.69	50.37	54	-5.31	34.68	9.94	46.3	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.97	57.2	74	-19.03	34.6	9.52	46.35	100	200	Peak
5150	50.47	52.7	54	-3.53	34.6	9.52	46.35	100	200	Average
5240	93.62	95.64	-	-	34.6	9.71	46.33	100	200	Peak
5240	86.98	89	-	-	34.6	9.71	46.33	100	200	Average
5350	54.52	56.28	74	-19.48	34.6	9.94	46.3	100	200	Peak
5350	48.75	50.51	54	-5.25	34.6	9.94	46.3	100	200	Average

REMARKS:

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



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802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.09	57.4	74	-18.91	34.52	9.52	46.35	200	65	Peak
5150	50.12	52.43	54	-3.88	34.52	9.52	46.35	200	65	Average
5190	90.69	92.88	-	-	34.55	9.6	46.34	200	65	Peak
5190	84.25	86.44	-	-	34.55	9.6	46.34	200	65	Average
5350	55.68	57.36	74	-18.32	34.68	9.94	46.3	200	65	Peak
5350	48.51	50.19	54	-5.49	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.8	57.03	74	-19.2	34.6	9.52	46.35	100	200	Peak
5150	50.24	52.47	54	-3.76	34.6	9.52	46.35	100	200	Average
5190	90.14	92.28	-	-	34.6	9.6	46.34	100	200	Peak
5190	83.07	85.21	-	-	34.6	9.6	46.34	100	200	Average
5350	56.94	58.7	74	-17.06	34.6	9.94	46.3	100	200	Peak
5350	48.47	50.23	54	-5.53	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.86	57.17	74	-19.14	34.52	9.52	46.35	200	65	Peak
5150	50.36	52.67	54	-3.64	34.52	9.52	46.35	200	65	Average
5230	91.31	93.37	-	-	34.58	9.69	46.33	200	65	Peak
5230	84.93	86.99	-	-	34.58	9.69	46.33	200	65	Average
5350	56.72	58.4	74	-17.28	34.68	9.94	46.3	200	65	Peak
5350	48.71	50.39	54	-5.29	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.87	58.1	74	-18.13	34.6	9.52	46.35	100	200	Peak
5150	50.42	52.65	54	-3.58	34.6	9.52	46.35	100	200	Average
5230	89.31	91.35	-	-	34.6	9.69	46.33	100	200	Peak
5230	82.87	84.91	-	-	34.6	9.69	46.33	100	200	Average
5350	54.75	56.51	74	-19.25	34.6	9.94	46.3	100	200	Peak
5350	49.77	51.53	54	-4.23	34.6	9.94	46.3	100	200	Average

REMARKS:

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



802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.5	58.81	74	-17.5	34.52	9.52	46.35	200	65	Peak
5150	49.63	51.94	54	-4.37	34.52	9.52	46.35	200	65	Average
5180	94.96	97.19	-	-	34.54	9.58	46.35	200	65	Peak
5180	87.35	89.58	-	-	34.54	9.58	46.35	200	65	Average
5350	54.43	56.11	74	-19.57	34.68	9.94	46.3	200	65	Peak
5350	49.54	51.22	54	-4.46	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.69	56.92	74	-19.31	34.6	9.52	46.35	100	200	Peak
5150	49.59	51.82	54	-4.41	34.6	9.52	46.35	100	200	Average
5180	93.11	95.28	-	-	34.6	9.58	46.35	100	200	Peak
5180	84.98	87.15	-	-	34.6	9.58	46.35	100	200	Average
5350	55.45	57.21	74	-18.55	34.6	9.94	46.3	100	200	Peak
5350	48.35	50.11	54	-5.65	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.34	56.65	74	-19.66	34.52	9.52	46.35	200	65	Peak
5150	49.94	52.25	54	-4.06	34.52	9.52	46.35	200	65	Average
5200	95.4	97.56	-	-	34.56	9.62	46.34	200	65	Peak
5200	88.08	90.24	-	-	34.56	9.62	46.34	200	65	Average
5350	56.22	57.9	74	-17.78	34.68	9.94	46.3	200	65	Peak
5350	48.56	50.24	54	-5.44	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.65	58.88	74	-17.35	34.6	9.52	46.35	100	200	Peak
5150	49.73	51.96	54	-4.27	34.6	9.52	46.35	100	200	Average
5200	93.69	95.81	-	-	34.6	9.62	46.34	100	200	Peak
5200	86.1	88.22	-	-	34.6	9.62	46.34	100	200	Average
5350	56.86	58.62	74	-17.14	34.6	9.94	46.3	100	200	Peak
5350	48.95	50.71	54	-5.05	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.44	58.75	74	-17.56	34.52	9.52	46.35	200	65	Peak
5150	49.45	51.76	54	-4.55	34.52	9.52	46.35	200	65	Average
5240	95.62	97.65	-	-	34.59	9.71	46.33	200	65	Peak
5240	88.23	90.26	-	-	34.59	9.71	46.33	200	65	Average
5350	55.57	57.25	74	-18.43	34.68	9.94	46.3	200	65	Peak
5350	48.34	50.02	54	-5.66	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.67	56.9	74	-19.33	34.6	9.52	46.35	100	200	Peak
5150	49.66	51.89	54	-4.34	34.6	9.52	46.35	100	200	Average
5240	92.92	94.94	-	-	34.6	9.71	46.33	100	200	Peak
5240	86.53	88.55	-	-	34.6	9.71	46.33	100	200	Average
5350	54.68	56.44	74	-19.32	34.6	9.94	46.3	100	200	Peak
5350	48.98	50.74	54	-5.02	34.6	9.94	46.3	100	200	Average

REMARKS:

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



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Test Report No.: W7L-P24050005RF03

802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.95	57.26	74	-19.05	34.52	9.52	46.35	200	65	Peak
5150	49.8	52.11	54	-4.2	34.52	9.52	46.35	200	65	Average
5190	91.18	93.37	-	-	34.55	9.6	46.34	200	65	Peak
5190	83.72	85.91	-	-	34.55	9.6	46.34	200	65	Average
5350	54.93	56.61	74	-19.07	34.68	9.94	46.3	200	65	Peak
5350	48.47	50.15	54	-5.53	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.18	57.41	74	-18.82	34.6	9.52	46.35	100	200	Peak
5150	49.8	52.03	54	-4.2	34.6	9.52	46.35	100	200	Average
5190	90.1	92.24	-	-	34.6	9.6	46.34	100	200	Peak
5190	82.2	84.34	-	-	34.6	9.6	46.34	100	200	Average
5350	54.58	56.34	74	-19.42	34.6	9.94	46.3	100	200	Peak
5350	49.17	50.93	54	-4.83	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.35	58.66	74	-17.65	34.52	9.52	46.35	200	65	Peak
5150	50.44	52.75	54	-3.56	34.52	9.52	46.35	200	65	Average
5230	89.71	91.77	-	-	34.58	9.69	46.33	200	65	Peak
5230	82.13	84.19	-	-	34.58	9.69	46.33	200	65	Average
5350	56.07	57.75	74	-17.93	34.68	9.94	46.3	200	65	Peak
5350	48.96	50.64	54	-5.04	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.6	56.83	74	-19.4	34.6	9.52	46.35	100	200	Peak
5150	50.22	52.45	54	-3.78	34.6	9.52	46.35	100	200	Average
5230	89.08	91.12	-	-	34.6	9.69	46.33	100	200	Peak
5230	81.88	83.92	-	-	34.6	9.69	46.33	100	200	Average
5350	54.88	56.64	74	-19.12	34.6	9.94	46.3	100	200	Peak
5350	48.55	50.31	54	-5.45	34.6	9.94	46.3	100	200	Average

REMARKS:

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



802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.31	57.62	74	-18.69	34.52	9.52	46.35	200	65	Peak
5150	50.25	52.56	54	-3.75	34.52	9.52	46.35	200	65	Average
5210	86.72	88.85	-	-	34.57	9.64	46.34	200	65	Peak
5210	79.19	81.32	-	-	34.57	9.64	46.34	200	65	Average
5350	53.83	55.51	74	-20.17	34.68	9.94	46.3	200	65	Peak
5350	49.02	50.7	54	-4.98	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.05	59.28	74	-16.95	34.6	9.52	46.35	100	200	Peak
5150	50.18	52.41	54	-3.82	34.6	9.52	46.35	100	200	Average
5210	84.87	86.97	-	-	34.6	9.64	46.34	100	200	Peak
5210	77.61	79.71	-	-	34.6	9.64	46.34	100	200	Average
5350	54.56	56.32	74	-19.44	34.6	9.94	46.3	100	200	Peak
5350	49.2	50.96	54	-4.8	34.6	9.94	46.3	100	200	Average

REMARKS:

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



Band 2

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.84	57.15	74	-19.16	34.52	9.52	46.35	180	60	Peak
5150	49.02	51.33	54	-4.98	34.52	9.52	46.35	180	60	Average
5260	93.88	95.84	-	-	34.61	9.75	46.32	180	60	Peak
5260	85.96	87.92	-	-	34.61	9.75	46.32	180	60	Average
5350	54.19	55.87	74	-19.81	34.68	9.94	46.3	180	60	Peak
5350	48.54	50.22	54	-5.46	34.68	9.94	46.3	180	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.5	57.73	74	-18.5	34.6	9.52	46.35	100	190	Peak
5150	48.69	50.92	54	-5.31	34.6	9.52	46.35	100	190	Average
5260	92.08	94.05	-	-	34.6	9.75	46.32	100	190	Peak
5260	84.11	86.08	-	-	34.6	9.75	46.32	100	190	Average
5350	54.27	56.03	74	-19.73	34.6	9.94	46.3	100	190	Peak
5350	47.78	49.54	54	-6.22	34.6	9.94	46.3	100	190	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.77	55.08	74	-21.23	34.52	9.52	46.35	180	60	Peak
5150	48.57	50.88	54	-5.43	34.52	9.52	46.35	180	60	Average
5300	93.97	95.81	-	-	34.64	9.83	46.31	180	60	Peak
5300	87.78	89.62	-	-	34.64	9.83	46.31	180	60	Average
5350	53.71	55.39	74	-20.29	34.68	9.94	46.3	180	60	Peak
5350	47.57	49.25	54	-6.43	34.68	9.94	46.3	180	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.6	56.83	74	-19.4	34.6	9.52	46.35	100	192	Peak
5150	48.03	50.26	54	-5.97	34.6	9.52	46.35	100	192	Average
5300	91.52	93.4	-	-	34.6	9.83	46.31	100	192	Peak
5300	83.32	85.2	-	-	34.6	9.83	46.31	100	192	Average
5350	54.23	55.99	74	-19.77	34.6	9.94	46.3	100	192	Peak
5350	48.14	49.9	54	-5.86	34.6	9.94	46.3	100	192	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.04	55.35	74	-20.96	34.52	9.52	46.35	123	205	Peak
5150	47.98	50.29	54	-6.02	34.52	9.52	46.35	123	205	Average
5320	93.21	94.97	-	-	34.66	9.88	46.3	123	205	Peak
5320	84.58	86.34	-	-	34.66	9.88	46.3	123	205	Average
5350	55.25	56.93	74	-18.75	34.68	9.94	46.3	123	205	Peak
5350	48.49	50.17	54	-5.51	34.68	9.94	46.3	123	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.97	58.2	74	-18.03	34.6	9.52	46.35	100	192	Peak
5150	48.65	50.88	54	-5.35	34.6	9.52	46.35	100	192	Average
5320	90.71	92.53	-	-	34.6	9.88	46.3	100	192	Peak
5320	82.27	84.09	-	-	34.6	9.88	46.3	100	192	Average
5350	56.08	57.84	74	-17.92	34.6	9.94	46.3	100	192	Peak
5350	48.47	50.23	54	-5.53	34.6	9.94	46.3	100	192	Average

REMARKS:

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



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Test Report No.: W7L-P24050005RF03

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.71	58.02	74	-18.29	34.52	9.52	46.35	190	60	Peak
5150	48.63	50.94	54	-5.37	34.52	9.52	46.35	190	60	Average
5260	96.05	98.01	-	-	34.61	9.75	46.32	190	60	Peak
5260	88.5	90.46	-	-	34.61	9.75	46.32	190	60	Average
5350	55.78	57.46	74	-18.22	34.68	9.94	46.3	190	60	Peak
5350	48.72	50.4	54	-5.28	34.68	9.94	46.3	190	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.48	57.71	74	-18.52	34.6	9.52	46.35	100	190	Peak
5150	48.76	50.99	54	-5.24	34.6	9.52	46.35	100	190	Average
5260	92.27	94.24	-	-	34.6	9.75	46.32	100	190	Peak
5260	84.2	86.17	-	-	34.6	9.75	46.32	100	190	Average
5350	53.1	54.86	74	-20.9	34.6	9.94	46.3	100	190	Peak
5350	48.63	50.39	54	-5.37	34.6	9.94	46.3	100	190	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.35	55.66	74	-20.65	34.52	9.52	46.35	190	60	Peak
5150	48.26	50.57	54	-5.74	34.52	9.52	46.35	190	60	Average
5300	94.6	96.44	-	-	34.64	9.83	46.31	190	60	Peak
5300	87.91	89.75	-	-	34.64	9.83	46.31	190	60	Average
5350	55.88	57.56	74	-18.12	34.68	9.94	46.3	190	60	Peak
5350	48.48	50.16	54	-5.52	34.68	9.94	46.3	190	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.23	59.46	74	-16.77	34.6	9.52	46.35	100	190	Peak
5150	47.75	49.98	54	-6.25	34.6	9.52	46.35	100	190	Average
5300	92.2	94.08	-	-	34.6	9.83	46.31	100	190	Peak
5300	84.38	86.26	-	-	34.6	9.83	46.31	100	190	Average
5350	53.98	55.74	74	-20.02	34.6	9.94	46.3	100	190	Peak
5350	47.3	49.06	54	-6.7	34.6	9.94	46.3	100	190	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.03	57.34	74	-18.97	34.52	9.52	46.35	190	60	Peak
5150	48.48	50.79	54	-5.52	34.52	9.52	46.35	190	60	Average
5320	95.33	97.09	-	-	34.66	9.88	46.3	190	60	Peak
5320	88.56	90.32	-	-	34.66	9.88	46.3	190	60	Average
5350	53.8	55.48	74	-20.2	34.68	9.94	46.3	190	60	Peak
5350	47.63	49.31	54	-6.37	34.68	9.94	46.3	190	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.58	57.81	74	-18.42	34.6	9.52	46.35	100	140	Peak
5150	48.51	50.74	54	-5.49	34.6	9.52	46.35	100	140	Average
5320	93.42	95.24	-	-	34.6	9.88	46.3	100	140	Peak
5320	86.57	88.39	-	-	34.6	9.88	46.3	100	140	Average
5350	56.22	57.98	74	-17.78	34.6	9.94	46.3	100	140	Peak
5350	47.83	49.59	54	-6.17	34.6	9.94	46.3	100	140	Average

REMARKS:

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



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Test Report No.: W7L-P24050005RF03

802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.46	56.77	74	-19.54	34.52	9.52	46.35	200	65	Peak
5150	48.14	50.45	54	-5.86	34.52	9.52	46.35	200	65	Average
5270	90.43	92.36	-	-	34.62	9.77	46.32	200	65	Peak
5270	83.23	85.16	-	-	34.62	9.77	46.32	200	65	Average
5350	53.76	55.44	74	-20.24	34.68	9.94	46.3	200	65	Peak
5350	46.89	48.57	54	-7.11	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.12	56.35	74	-19.88	34.6	9.52	46.35	100	190	Peak
5150	48.4	50.63	54	-5.6	34.6	9.52	46.35	100	190	Average
5270	87.32	89.27	-	-	34.6	9.77	46.32	100	190	Peak
5270	81.24	83.19	-	-	34.6	9.77	46.32	100	190	Average
5350	54.06	55.82	74	-19.94	34.6	9.94	46.3	100	190	Peak
5350	47.82	49.58	54	-6.18	34.6	9.94	46.3	100	190	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.72	58.03	74	-18.28	34.52	9.52	46.35	200	62	Peak
5150	49.28	51.59	54	-4.72	34.52	9.52	46.35	200	62	Average
5310	92.03	93.84	-	-	34.65	9.85	46.31	200	62	Peak
5310	86.56	88.37	-	-	34.65	9.85	46.31	200	62	Average
5350	54.69	56.37	74	-19.31	34.68	9.94	46.3	200	62	Peak
5350	49.68	51.36	54	-4.32	34.68	9.94	46.3	200	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.03	57.26	74	-18.97	34.6	9.52	46.35	143	75	Peak
5150	49.97	52.2	54	-4.03	34.6	9.52	46.35	143	75	Average
5310	89.36	91.22			34.6	9.85	46.31	143	75	Peak
5310	84.48	86.34			34.6	9.85	46.31	143	75	Average
5350	53.82	55.58	74	-20.18	34.6	9.94	46.3	143	75	Peak
5350	48.62	50.38	54	-5.38	34.6	9.94	46.3	143	75	Average

REMARKS:

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



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Test Report No.: W7L-P24050005RF03

802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.24	57.55	74	-18.76	34.52	9.52	46.35	200	62	Peak
5150	49.52	51.83	54	-4.48	34.52	9.52	46.35	200	62	Average
5260	95.72	97.68	-	-	34.61	9.75	46.32	200	62	Peak
5260	88.36	90.32	-	-	34.61	9.75	46.32	200	62	Average
5350	54.38	56.06	74	-19.62	34.68	9.94	46.3	200	62	Peak
5350	48.37	50.05	54	-5.63	34.68	9.94	46.3	200	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.61	57.84	74	-18.39	34.6	9.52	46.35	100	200	Peak
5150	48.94	51.17	54	-5.06	34.6	9.52	46.35	100	200	Average
5260	93.76	95.73	-	-	34.6	9.75	46.32	100	200	Peak
5260	87.48	89.45	-	-	34.6	9.75	46.32	100	200	Average
5350	54.28	56.04	74	-19.72	34.6	9.94	46.3	100	200	Peak
5350	48.68	50.44	54	-5.32	34.6	9.94	46.3	100	200	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.93	57.24	74	-19.07	34.52	9.52	46.35	170	62	Peak
5150	49.77	52.08	54	-4.23	34.52	9.52	46.35	170	62	Average
5300	95.89	97.73	-	-	34.64	9.83	46.31	170	62	Peak
5300	89.17	91.01	-	-	34.64	9.83	46.31	170	62	Average
5350	55.24	56.92	74	-18.76	34.68	9.94	46.3	170	62	Peak
5350	49.01	50.69	54	-4.99	34.68	9.94	46.3	170	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.71	58.94	74	-17.29	34.6	9.52	46.35	108	135	Peak
5150	49.05	51.28	54	-4.95	34.6	9.52	46.35	108	135	Average
5300	92.94	94.82	-	-	34.6	9.83	46.31	108	135	Peak
5300	86.86	88.74	-	-	34.6	9.83	46.31	108	135	Average
5350	53.67	55.43	74	-20.33	34.6	9.94	46.3	108	135	Peak
5350	48.71	50.47	54	-5.29	34.6	9.94	46.3	108	135	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.99	57.3	74	-19.01	34.52	9.52	46.35	170	62	Peak
5150	49.01	51.32	54	-4.99	34.52	9.52	46.35	170	62	Average
5320	95.98	97.74	-	-	34.66	9.88	46.3	170	62	Peak
5320	88.52	90.28	-	-	34.66	9.88	46.3	170	62	Average
5350	55.19	56.87	74	-18.81	34.68	9.94	46.3	170	62	Peak
5350	48.83	50.51	54	-5.17	34.68	9.94	46.3	170	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.85	57.08	74	-19.15	34.6	9.52	46.35	100	135	Peak
5150	49.56	51.79	54	-4.44	34.6	9.52	46.35	100	135	Average
5320	93.53	95.35	-	-	34.6	9.88	46.3	100	135	Peak
5320	87.36	89.18	-	-	34.6	9.88	46.3	100	135	Average
5350	55.41	57.17	74	-18.59	34.6	9.94	46.3	100	135	Peak
5350	49.1	50.86	54	-4.9	34.6	9.94	46.3	100	135	Average

REMARKS:

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



802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.62	57.93	74	-18.38	34.52	9.52	46.35	200	62	Peak
5150	49.35	51.66	54	-4.65	34.52	9.52	46.35	200	62	Average
5270	91.28	93.21	-	-	34.62	9.77	46.32	200	62	Peak
5270	86.28	88.21	-	-	34.62	9.77	46.32	200	62	Average
5350	55.2	56.88	74	-18.8	34.68	9.94	46.3	200	62	Peak
5350	48.61	50.29	54	-5.39	34.68	9.94	46.3	200	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.4	56.63	74	-19.6	34.6	9.52	46.35	115	140	Peak
5150	49.43	51.66	54	-4.57	34.6	9.52	46.35	115	140	Average
5270	89.18	91.13	-	-	34.6	9.77	46.32	115	140	Peak
5270	83.73	85.68	-	-	34.6	9.77	46.32	115	140	Average
5350	54.4	56.16	74	-19.6	34.6	9.94	46.3	115	140	Peak
5350	49.13	50.89	54	-4.87	34.6	9.94	46.3	115	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.99	58.3	74	-18.01	34.52	9.52	46.35	200	62	Peak
5150	50.5	52.81	54	-3.5	34.52	9.52	46.35	200	62	Average
5310	91.67	93.48	-	-	34.65	9.85	46.31	200	62	Peak
5310	86.23	88.04	-	-	34.65	9.85	46.31	200	62	Average
5350	54.77	56.45	74	-19.23	34.68	9.94	46.3	200	62	Peak
5350	49.63	51.31	54	-4.37	34.68	9.94	46.3	200	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.98	57.21	74	-19.02	34.6	9.52	46.35	100	140	Peak
5150	49.96	52.19	54	-4.04	34.6	9.52	46.35	100	140	Average
5310	88.32	90.18	-	-	34.6	9.85	46.31	100	140	Peak
5310	83.06	84.92	-	-	34.6	9.85	46.31	100	140	Average
5350	54.76	56.52	74	-19.24	34.6	9.94	46.3	100	140	Peak
5350	48.85	50.61	54	-5.15	34.6	9.94	46.3	100	140	Average

REMARKS:

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



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Test Report No.: W7L-P24050005RF03

802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.31	56.62	74	-19.69	34.52	9.52	46.35	200	62	Peak
5150	49.89	52.2	54	-4.11	34.52	9.52	46.35	200	62	Average
5290	86.09	87.96	-	-	34.63	9.81	46.31	200	62	Peak
5290	80.87	82.74	-	-	34.63	9.81	46.31	200	62	Average
5350	53.75	55.43	74	-20.25	34.68	9.94	46.3	200	62	Peak
5350	49.66	51.34	54	-4.34	34.68	9.94	46.3	200	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.73	56.96	74	-19.27	34.6	9.52	46.35	100	140	Peak
5150	50.11	52.34	54	-3.89	34.6	9.52	46.35	100	140	Average
5290	85.14	87.04	-	-	34.6	9.81	46.31	100	140	Peak
5290	79.69	81.59	-	-	34.6	9.81	46.31	100	140	Average
5350	54.2	55.96	74	-19.8	34.6	9.94	46.3	100	140	Peak
5350	49.08	50.84	54	-4.92	34.6	9.94	46.3	100	140	Average

REMARKS:

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



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Band 3

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.48	55.8	74	-19.52	34.77	10.17	46.26	200	60	Peak
5460	48.74	50.06	54	-5.26	34.77	10.17	46.26	200	60	Average
5470	56.68	57.97	68.3	-11.62	34.78	10.19	46.26	200	60	Peak
5500	95.68	96.87	-	-	34.8	10.26	46.25	200	60	Peak
5500	88.49	89.68	-	-	34.8	10.26	46.25	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.55	56.04	74	-19.45	34.6	10.17	46.26	115	140	Peak
5460	48.99	50.48	54	-5.01	34.6	10.17	46.26	115	140	Average
5470	54.95	56.42	68.3	-13.35	34.6	10.19	46.26	115	140	Peak
5500	94.03	95.42	-	-	34.6	10.26	46.25	115	140	Peak
5500	87.91	89.3	-	-	34.6	10.26	46.25	115	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.02	56.34	74	-18.98	34.77	10.17	46.26	200	60	Peak
5460	49.08	50.4	54	-4.92	34.77	10.17	46.26	200	60	Average
5470	54.32	55.61	68.3	-13.98	34.78	10.19	46.26	200	60	Peak
5580	96.84	97.58	–	–	34.9	10.59	46.23	200	60	Peak
5580	90.54	91.28	–	–	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.31	55.8	74	-19.69	34.6	10.17	46.26	115	140	Peak
5460	48.53	50.02	54	-5.47	34.6	10.17	46.26	115	140	Average
5470	54.99	56.46	68.3	-13.31	34.6	10.19	46.26	115	140	Peak
5580	96.99	97.93	–	–	34.7	10.59	46.23	115	140	Peak
5580	90.59	91.53	–	–	34.7	10.59	46.23	115	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	95.47	95.53	–	–	35.04	11.09	46.19	100	50	Peak
5700	89.21	89.27	–	–	35.04	11.09	46.19	100	50	Average
5725	60.58	60.5	68.3	-7.72	35.07	11.2	46.19	100	50	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.18	98.44	–	–	34.84	11.09	46.19	120	245	Peak
5700	92.29	92.55	–	–	34.84	11.09	46.19	120	245	Average
5725	58.67	58.79	68.3	-9.63	34.87	11.2	46.19	120	245	Peak

REMARKS:

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.83	58.12	74	-17.17	34.78	10.19	46.26	105	48	Peak
5720	96.92	96.87	–	–	35.06	11.18	46.19	105	48	Peak
5720	90.83	90.78	–	–	35.06	11.18	46.19	105	48	Average
5850	58.01	57.22	68.3	-10.29	35.22	11.72	46.15	105	48	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.38	57.85	74	-17.62	34.6	10.19	46.26	120	245	Peak
5720	98.49	98.64	–	–	34.86	11.18	46.19	120	245	Peak
5720	92.06	92.21	–	–	34.86	11.18	46.19	120	245	Average
5850	57.43	56.84	68.3	-10.87	35.02	11.72	46.15	120	245	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.9	55.22	74	-20.1	34.77	10.17	46.26	120	60	Peak
5460	48.99	50.31	54	-5.01	34.77	10.17	46.26	120	60	Average
5470	55.71	57	68.3	-12.59	34.78	10.19	46.26	120	60	Peak
5500	95.4	96.59	-	-	34.8	10.26	46.25	120	60	Peak
5500	88.92	90.11	-	-	34.8	10.26	46.25	120	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.58	57.07	74	-18.42	34.6	10.17	46.26	103	140	Peak
5460	48.98	50.47	54	-5.02	34.6	10.17	46.26	103	140	Average
5470	54.59	56.06	68.3	-13.71	34.6	10.19	46.26	103	140	Peak
5500	94.74	96.13	-	-	34.6	10.26	46.25	103	140	Peak
5500	88.76	90.15	-	-	34.6	10.26	46.25	103	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.74	56.06	74	-19.26	34.77	10.17	46.26	200	60	Peak
5460	48.54	49.86	54	-5.46	34.77	10.17	46.26	200	60	Average
5470	55.64	56.93	68.3	-12.66	34.78	10.19	46.26	200	60	Peak
5580	96.39	97.13	–	–	34.9	10.59	46.23	200	60	Peak
5580	89.86	90.6	–	–	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.66	55.15	74	-20.34	34.6	10.17	46.26	103	140	Peak
5460	48.78	50.27	54	-5.22	34.6	10.17	46.26	103	140	Average
5470	54.87	56.34	68.3	-13.43	34.6	10.19	46.26	103	140	Peak
5580	95.78	96.72	–	–	34.7	10.59	46.23	103	140	Peak
5580	88.09	89.03	–	–	34.7	10.59	46.23	103	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	96.6	96.66	–	–	35.04	11.09	46.19	100	45	Peak
5700	89.86	89.92	–	–	35.04	11.09	46.19	100	45	Average
5725	58.43	58.35	68.3	-9.87	35.07	11.2	46.19	100	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.6	98.86	–	–	34.84	11.09	46.19	155	240	Peak
5700	92.29	92.55	–	–	34.84	11.09	46.19	155	240	Average
5725	59.51	59.63	68.3	-8.79	34.87	11.2	46.19	155	240	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.

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.19	55.48	74	-19.81	34.78	10.19	46.26	100	35	Peak
5720	95.14	95.09	-	-	35.06	11.18	46.19	100	35	Peak
5720	87.92	87.87	-	-	35.06	11.18	46.19	100	35	Average
5850	60.13	59.34	68.3	-8.17	35.22	11.72	46.15	100	35	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.34	57.81	74	-17.66	34.6	10.19	46.26	155	240	Peak
5720	98.98	99.13	-	-	34.86	11.18	46.19	155	240	Peak
5720	93.07	93.22	-	-	34.86	11.18	46.19	155	240	Average
5850	58.21	57.62	68.3	-10.09	35.02	11.72	46.15	155	240	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	53.66	54.98	74	-20.34	34.77	10.17	46.26	100	60	Peak
5460	49.03	50.35	54	-4.97	34.77	10.17	46.26	100	60	Average
5470	58.03	59.32	68.3	-10.27	34.78	10.19	46.26	100	60	Peak
5510	90.06	91.2	-	-	34.81	10.3	46.25	100	60	Peak
5510	85.52	86.66	-	-	34.81	10.3	46.25	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.6	55.09	74	-20.4	34.6	10.17	46.26	102	140	Peak
5460	48.8	50.29	54	-5.2	34.6	10.17	46.26	102	140	Average
5470	55.06	56.53	68.3	-13.24	34.6	10.19	46.26	102	140	Peak
5510	90.03	91.37	-	-	34.61	10.3	46.25	102	140	Peak
5510	85.2	86.54	-	-	34.61	10.3	46.25	102	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.7	55.02	74	-20.3	34.77	10.17	46.26	100	60	Peak
5460	49.46	50.78	54	-4.54	34.77	10.17	46.26	100	60	Average
5470	54.23	55.52	68.3	-14.07	34.78	10.19	46.26	100	60	Peak
5550	91.41	92.32	–	–	34.86	10.47	46.24	100	60	Peak
5550	86.73	87.64	–	–	34.86	10.47	46.24	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.97	56.46	74	-19.03	34.6	10.17	46.26	102	140	Peak
5460	48.99	50.48	54	-5.01	34.6	10.17	46.26	102	140	Average
5470	53.77	55.24	68.3	-14.53	34.6	10.19	46.26	102	140	Peak
5550	90.35	91.46	–	–	34.66	10.47	46.24	102	140	Peak
5550	85.67	86.78	–	–	34.66	10.47	46.24	102	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	90.97	91.2	–	–	35	10.97	46.2	100	60	Peak
5670	86.82	87.05	–	–	35	10.97	46.2	100	60	Average
5725	56.49	56.41	68.3	-11.81	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & test distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	89.97	90.4	–	–	34.8	10.97	46.2	100	140	Peak
5670	85.81	86.24	–	–	34.8	10.97	46.2	100	140	Average
5725	58.14	58.26	68.3	-10.16	34.87	11.2	46.19	100	140	Peak

REMARKS:

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

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	55.19	56.48	74	-18.81	34.78	10.19	46.26	100	50	Peak
5710	89.88	89.88	–	–	35.05	11.14	46.19	100	50	Peak
5710	85.34	85.34	–	–	35.05	11.14	46.19	100	50	Average
5850	59.49	58.7	68.3	-8.81	35.22	11.72	46.15	100	50	Peak
ANTENNA POLARITY & test distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.23	55.7	74	-19.77	34.6	10.19	46.26	155	240	Peak
5710	93.62	93.82	–	–	34.85	11.14	46.19	155	240	Peak
5710	90.04	90.24	–	–	34.85	11.14	46.19	155	240	Average
5850	56.51	55.92	68.3	-11.79	35.02	11.72	46.15	155	240	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	56.63	57.95	74	-17.37	34.77	10.17	46.26	152	60	Peak
5460	48.81	50.13	54	-5.19	34.77	10.17	46.26	152	60	Average
5470	56	57.29	68.3	-12.3	34.78	10.19	46.26	152	60	Peak
5500	95.15	96.34	–	–	34.8	10.26	46.25	152	60	Peak
5500	89.61	90.8	–	–	34.8	10.26	46.25	152	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.79	57.28	74	-18.21	34.6	10.17	46.26	103	140	Peak
5460	48.96	50.45	54	-5.04	34.6	10.17	46.26	103	140	Average
5470	55.02	56.49	68.3	-13.28	34.6	10.19	46.26	103	140	Peak
5500	95.66	97.05	–	–	34.6	10.26	46.25	103	140	Peak
5500	88.78	90.17	–	–	34.6	10.26	46.25	103	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.39	56.71	74	-18.61	34.77	10.17	46.26	200	60	Peak
5460	48.64	49.96	54	-5.36	34.77	10.17	46.26	200	60	Average
5470	55.12	56.41	68.3	-13.18	34.78	10.19	46.26	200	60	Peak
5580	95.59	96.33	–	–	34.9	10.59	46.23	200	60	Peak
5580	90.03	90.77	–	–	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.56	56.05	74	-19.44	34.6	10.17	46.26	100	140	Peak
5460	48.73	50.22	54	-5.27	34.6	10.17	46.26	100	140	Average
5470	54.45	55.92	68.3	-13.85	34.6	10.19	46.26	100	140	Peak
5580	95.9	96.84	–	–	34.7	10.59	46.23	100	140	Peak
5580	89.16	90.1	–	–	34.7	10.59	46.23	100	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	96.63	96.69	–	–	35.04	11.09	46.19	100	45	Peak
5700	89.97	90.03	–	–	35.04	11.09	46.19	100	45	Average
5725	59.11	59.03	68.3	-9.19	35.07	11.2	46.19	100	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.42	98.68	–	–	34.84	11.09	46.19	200	240	Peak
5700	91.9	92.16	–	–	34.84	11.09	46.19	200	240	Average
5725	58.38	58.5	68.3	-9.92	34.87	11.2	46.19	200	240	Peak

REMARKS:

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	55.16	56.45	74	-18.84	34.78	10.19	46.26	218	45	Peak
5720	95.34	95.29	-	-	35.06	11.18	46.19	218	45	Peak
5720	89.25	89.2	-	-	35.06	11.18	46.19	218	45	Average
5850	57.69	56.9	68.3	-10.61	35.22	11.72	46.15	218	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.04	57.51	74	-17.96	34.6	10.19	46.26	200	240	Peak
5720	98.41	98.56	-	-	34.86	11.18	46.19	200	240	Peak
5720	92.63	92.78	-	-	34.86	11.18	46.19	200	240	Average
5850	60.12	59.53	68.3	-8.18	35.02	11.72	46.15	200	240	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.23	56.55	74	-18.77	34.77	10.17	46.26	120	60	Peak
5460	49.7	51.02	54	-4.3	34.77	10.17	46.26	120	60	Average
5470	55.13	56.42	68.3	-13.17	34.78	10.19	46.26	120	60	Peak
5510	90.84	91.98	-	-	34.81	10.3	46.25	120	60	Peak
5510	85.97	87.11	-	-	34.81	10.3	46.25	120	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	56.08	57.57	74	-17.92	34.6	10.17	46.26	110	140	Peak
5460	49.12	50.61	54	-4.88	34.6	10.17	46.26	110	140	Average
5470	55.59	57.06	68.3	-12.71	34.6	10.19	46.26	110	140	Peak
5510	89.56	90.9	-	-	34.61	10.3	46.25	110	140	Peak
5510	84.62	85.96	-	-	34.61	10.3	46.25	110	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.61	55.93	74	-19.39	34.77	10.17	46.26	100	60	Peak
5460	48.99	50.31	54	-5.01	34.77	10.17	46.26	100	60	Average
5470	53.84	55.13	68.3	-14.46	34.78	10.19	46.26	100	60	Peak
5550	91.72	92.63	–	–	34.86	10.47	46.24	100	60	Peak
5550	87.03	87.94	–	–	34.86	10.47	46.24	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.61	57.1	74	-18.39	34.6	10.17	46.26	110	140	Peak
5460	48.92	50.41	54	-5.08	34.6	10.17	46.26	110	140	Average
5470	55.43	56.9	68.3	-12.87	34.6	10.19	46.26	110	140	Peak
5550	89.76	90.87	–	–	34.66	10.47	46.24	110	140	Peak
5550	84.52	85.63	–	–	34.66	10.47	46.24	110	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	91.18	91.41	–	–	35	10.97	46.2	100	60	Peak
5670	86.53	86.76	–	–	35	10.97	46.2	100	60	Average
5725	58.23	58.15	68.3	-10.07	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	94.37	94.8	–	–	34.8	10.97	46.2	200	140	Peak
5670	90.08	90.51	–	–	34.8	10.97	46.2	200	140	Average
5725	55.63	55.75	68.3	-12.67	34.87	11.2	46.19	200	140	Peak

REMARKS:

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

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	53.49	54.78	74	-20.51	34.78	10.19	46.26	100	55	Peak
5710	91.59	91.59	–	–	35.05	11.14	46.19	100	55	Peak
5710	87.27	87.27	–	–	35.05	11.14	46.19	100	55	Average
5850	58.02	57.23	68.3	-10.28	35.22	11.72	46.15	100	55	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.06	55.53	74	-19.94	34.6	10.19	46.26	142	240	Peak
5710	94.62	94.82	–	–	34.85	11.14	46.19	142	240	Peak
5710	90.37	90.57	–	–	34.85	11.14	46.19	142	240	Average
5850	57.04	56.45	68.3	-11.26	35.02	11.72	46.15	142	240	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.94	55.26	74	-20.06	34.77	10.17	46.26	100	55	Peak
5460	49.28	50.6	54	-4.72	34.77	10.17	46.26	100	55	Average
5470	54.61	55.9	68.3	-13.69	34.78	10.19	46.26	100	55	Peak
5530	86.77	87.79	-	-	34.84	10.38	46.24	100	55	Peak
5530	82.14	83.16	-	-	34.84	10.38	46.24	100	55	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.48	55.97	74	-19.52	34.6	10.17	46.26	110	140	Peak
5460	48.63	50.12	54	-5.37	34.6	10.17	46.26	110	140	Average
5470	54.29	55.76	68.3	-14.01	34.6	10.19	46.26	110	140	Peak
5530	84.78	86	-	-	34.64	10.38	46.24	110	140	Peak
5530	80.26	81.48	-	-	34.64	10.38	46.24	110	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5610	87.35	87.92	–	–	34.93	10.72	46.22	100	60	Peak
5610	83.76	84.33	–	–	34.93	10.72	46.22	100	60	Average
5725	55.95	55.87	68.3	-12.35	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5610	84.62	85.39	–	–	34.73	10.72	46.22	110	140	Peak
5610	80.72	81.49	–	–	34.73	10.72	46.22	110	140	Average
5725	53.5	53.62	68.3	-14.8	34.87	11.2	46.19	110	140	Peak

REMARKS:

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

CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	55.2	56.49	74	-18.8	34.78	10.19	46.26	100	60	Peak
5690	86.69	86.81	-	-	35.03	11.05	46.2	100	60	Peak
5690	82.28	82.4	-	-	35.03	11.05	46.2	100	60	Average
5850	57.19	56.4	68.3	-11.11	35.22	11.72	46.15	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.55	56.02	74	-19.45	34.6	10.19	46.26	100	140	Peak
5690	85.43	85.75	-	-	34.83	11.05	46.2	100	140	Peak
5690	80.88	81.2	-	-	34.83	11.05	46.2	100	140	Average
5850	59.38	58.79	68.3	-8.92	35.02	11.72	46.15	100	140	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5690MHz: Fundamental frequency.
3. #: Out of restricted band.



**BUREAU
VERITAS**

Test Report No.: W7L-P24050005RF03

Band 4:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	97.09	96.9	–	–	35.09	11.28	46.18	105	45	Peak
5745	90.51	90.32	–	–	35.09	11.28	46.18	105	45	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	99.84	99.85	–	–	34.89	11.28	46.18	170	55	Peak
5745	93.75	93.76	–	–	34.89	11.28	46.18	170	55	Average

REMARKS:

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

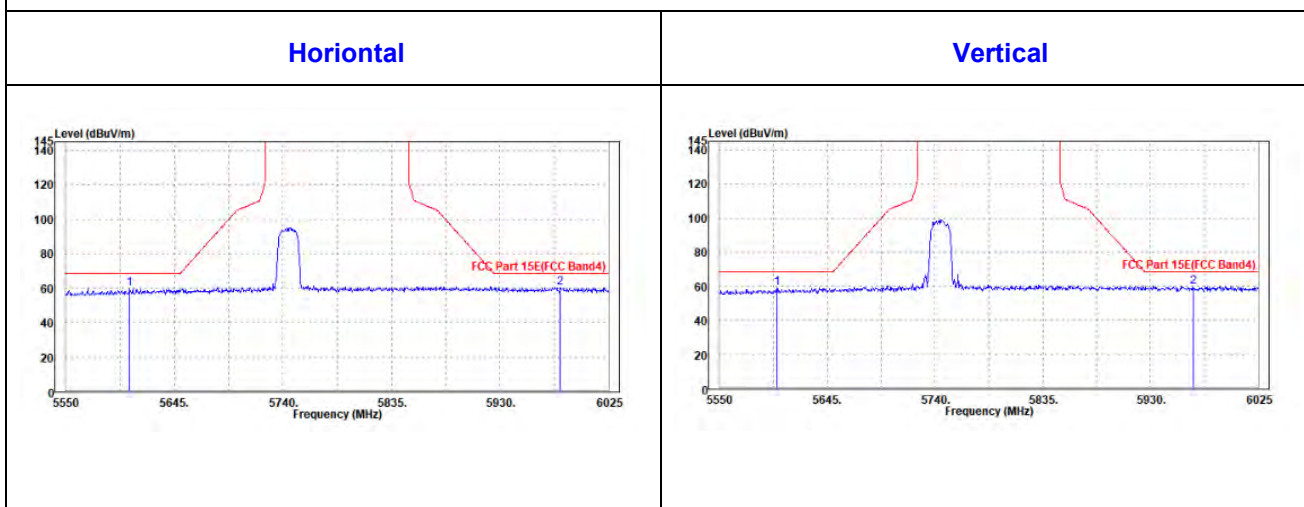


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802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.05	59.47	60.06	68.2	-8.73	34.93	10.7	46.22	300	0	Peak
5982.725	60.3	58.75	68.2	-7.9	35.38	12.28	46.11	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	58.8	59.62	68.2	-9.4	34.72	10.68	46.22	300	0	Peak
5967.525	59.65	58.4	68.2	-8.55	35.16	12.21	46.12	300	0	Peak

CH 149





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	96.9	96.48	–	–	35.14	11.45	46.17	100	203	Peak
5785	90.42	90	–	–	35.14	11.45	46.17	100	203	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	99.11	98.89	–	–	34.94	11.45	46.17	200	55	Peak
5785	93.11	92.89	–	–	34.94	11.45	46.17	200	55	Average

REMARKS:

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

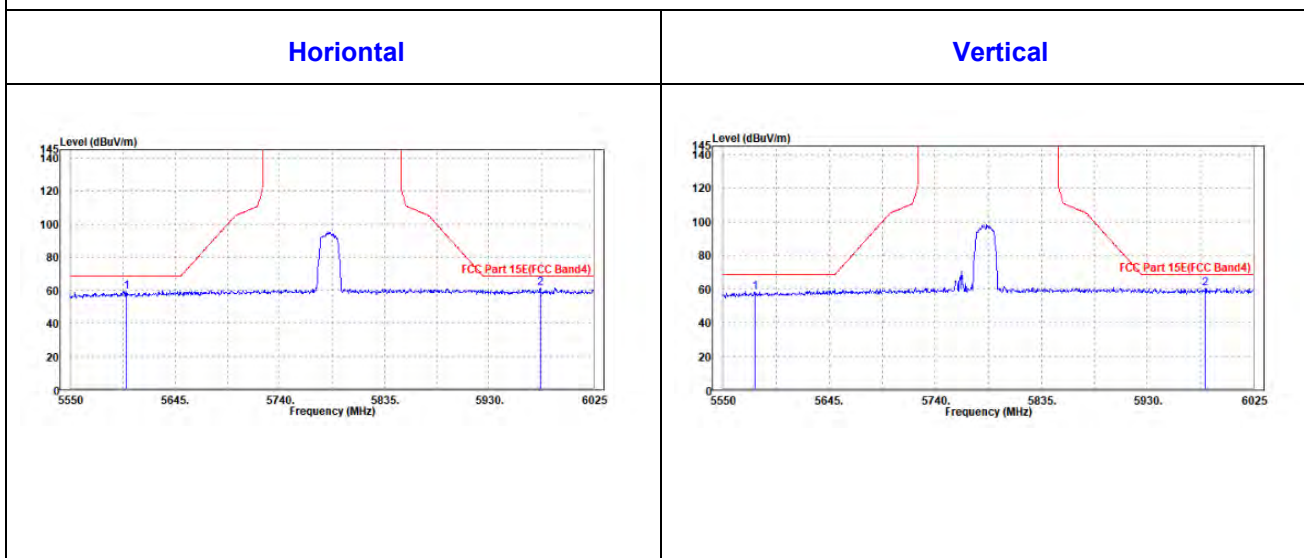


OOBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	59.01	59.63	68.2	-9.19	34.92	10.68	46.22	300	0	Peak
5976.55	61.32	59.82	68.2	-6.88	35.37	12.25	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5578.5	58.14	59.1	68.2	-10.06	34.69	10.58	46.23	200	0	Peak
5981.775	60.35	59.02	68.2	-7.85	35.18	12.27	46.12	200	0	Peak

CH 157





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	96.42	95.77	–	–	35.19	11.62	46.16	100	205	Peak
5825	90.09	89.44	–	–	35.19	11.62	46.16	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.96	98.51	–	–	34.99	11.62	46.16	200	55	Peak
5825	92.66	92.21	–	–	34.99	11.62	46.16	200	55	Average

REMARKS:

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

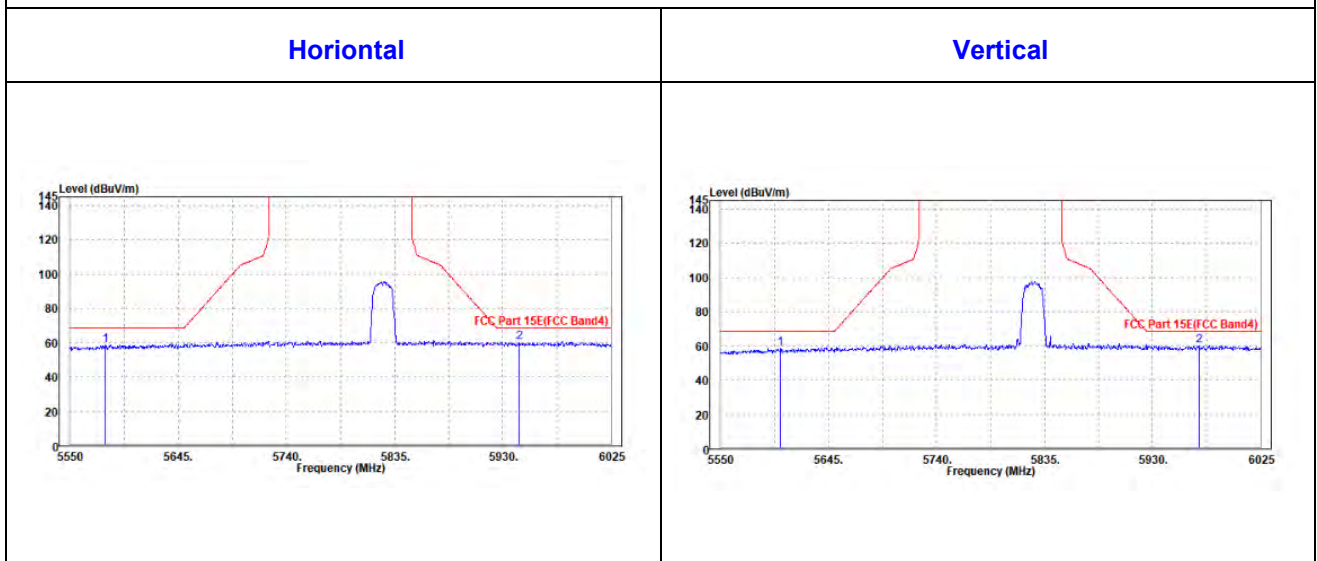


Oobe Data

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5581.35	58.56	59.29	68.2	-9.64	34.9	10.6	46.23	200	360	Peak
5944.725	60.3	58.98	68.2	-7.9	35.33	12.12	46.13	200	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5602.725	58.44	59.25	68.2	-9.76	34.72	10.69	46.22	300	360	Peak
5970.85	60.1	58.82	68.2	-8.1	35.17	12.23	46.12	300	360	Peak

CH 165





802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	96.34	96.15	–	–	35.09	11.28	46.18	118	45	Peak
5745	89.57	89.38	–	–	35.09	11.28	46.18	118	45	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	98.63	98.64	–	–	34.89	11.28	46.18	200	55	Peak
5745	92.85	92.86	–	–	34.89	11.28	46.18	200	55	Average

REMARKS:

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



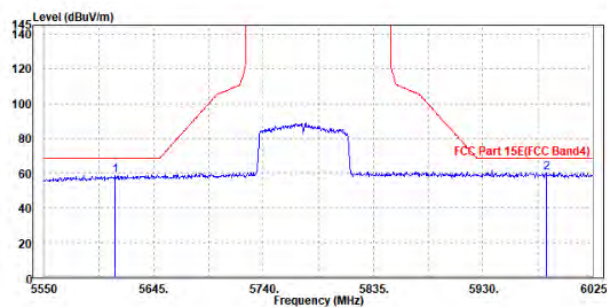
Oobe Data

802.11n (20MHz)

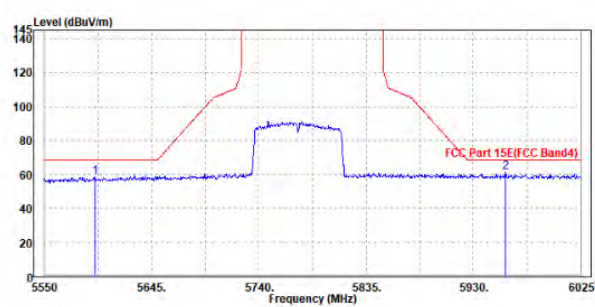
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.525	58.45	59.04	68.2	-9.75	34.93	10.7	46.22	300	360	Peak
5965.625	60.62	59.17	68.2	-7.58	35.36	12.21	46.12	300	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.05	58.63	59.42	68.2	-9.57	34.73	10.7	46.22	200	360	Peak
5979.875	60.3	58.97	68.2	-7.9	35.18	12.27	46.12	200	360	Peak

CH 149

Horizontal



Vertical





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	96.57	96.35	–	–	34.94	11.45	46.17	200	205	Peak
5785	90.2	89.98	–	–	34.94	11.45	46.17	200	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	98.95	98.73	–	–	34.94	11.45	46.17	200	55	Peak
5785	92.42	92.2	–	–	34.94	11.45	46.17	200	55	Average

REMARKS:

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

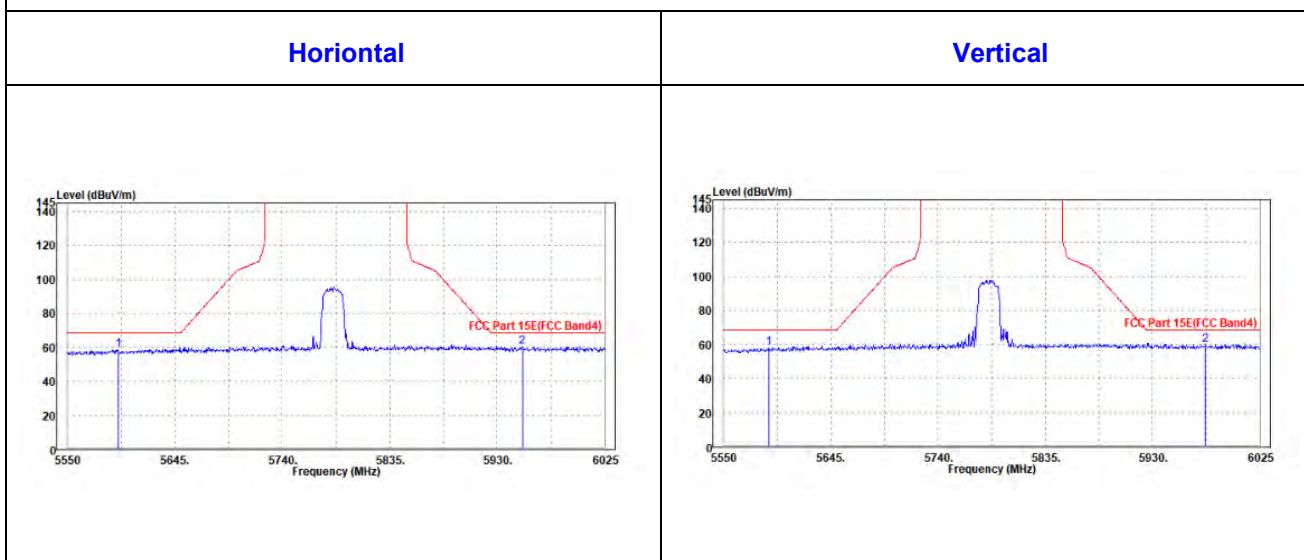


Oobe Data

802.11n (20MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5594.65	58.49	59.15	68.2	-9.71	34.91	10.65	46.22	200	0	Peak
5952.325	60.34	58.97	68.2	-7.86	35.34	12.15	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5590.375	58.11	58.99	68.2	-10.09	34.71	10.63	46.22	300	0	Peak
5977.025	59.67	58.37	68.2	-8.53	35.17	12.25	46.12	300	0	Peak

CH 157





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	96.32	95.67	–	–	35.19	11.62	46.16	100	205	Peak
5825	89.85	89.2	–	–	35.19	11.62	46.16	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.55	98.1	–	–	34.99	11.62	46.16	200	55	Peak
5825	92.12	91.67	–	–	34.99	11.62	46.16	200	55	Average

REMARKS:

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



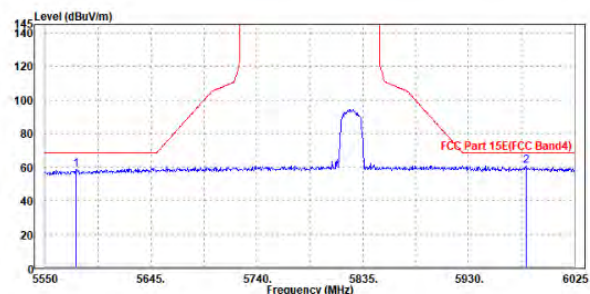
Oobe Data

802.11n (20MHz)

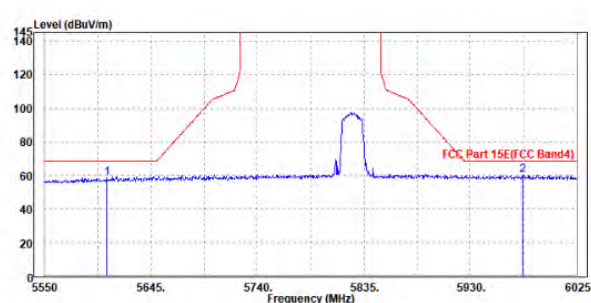
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5577.55	58.63	59.39	68.2	-9.57	34.89	10.58	46.23	300	0	Peak
5981.3	60.86	59.33	68.2	-7.34	35.38	12.27	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5605.575	58.48	59.27	68.2	-9.72	34.73	10.7	46.22	200	0	Peak
5977.025	60.25	58.95	68.2	-7.95	35.17	12.25	46.12	200	0	Peak

CH 165

Horizontal



Vertical





802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ 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	90.06	89.81	–	–	35.11	11.32	46.18	100	205	Peak
5755	85.72	85.47	–	–	35.11	11.32	46.18	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	94.5	94.45	–	–	34.91	11.32	46.18	200	240	Peak
5755	89.65	89.6	–	–	34.91	11.32	46.18	200	240	Average

REMARKS:

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



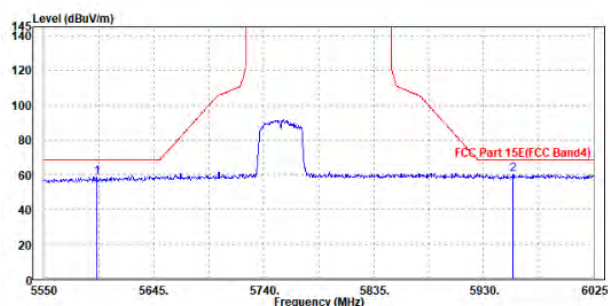
Oobe Data

802.11n (40MHz)

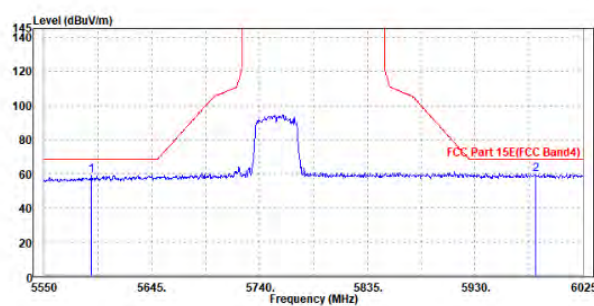
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5595.6	58.41	59.06	68.2	-9.79	34.91	10.66	46.22	200	0	Peak
5955.175	60.09	58.7	68.2	-8.11	35.35	12.16	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5591.8	58.8	59.67	68.2	-9.4	34.71	10.64	46.22	300	0	Peak
5983.675	59.6	58.25	68.2	-8.6	35.18	12.28	46.11	300	0	Peak

CH 151

Horizontal



Vertical





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	92.49	92.02	–	–	35.15	11.49	46.17	200	295	Peak
5795	86.94	86.47	–	–	35.15	11.49	46.17	200	295	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	93.66	93.39	–	–	34.95	11.49	46.17	200	240	Peak
5795	88.78	88.51	–	–	34.95	11.49	46.17	200	240	Average

REMARKS:

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

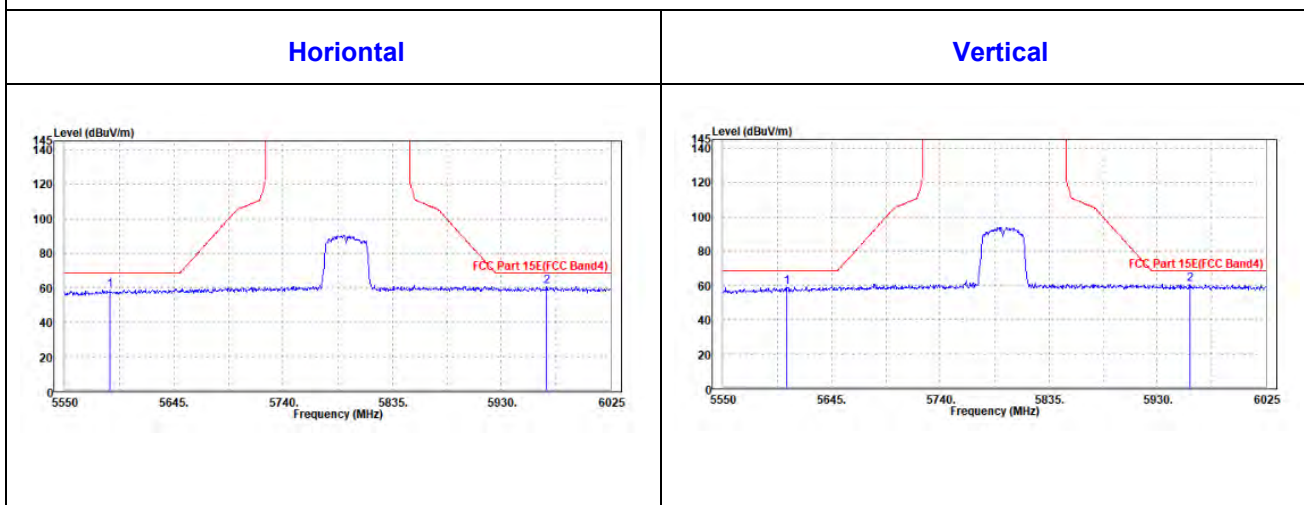


OOBE DATA

802.11n (40MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5589.425	58.48	59.16	68.2	-9.72	34.91	10.63	46.22	300	0	Peak
5969.425	60.8	59.34	68.2	-7.4	35.36	12.22	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5605.575	59.04	59.83	68.2	-9.16	34.73	10.7	46.22	200	0	Peak
5958.5	60.45	59.24	68.2	-7.75	35.15	12.18	46.12	200	0	Peak

CH 159





802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	96.04	95.85	–	–	35.09	11.28	46.18	100	205	Peak
5745	90.17	89.98	–	–	35.09	11.28	46.18	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.04	100.05	–	–	34.89	11.28	46.18	200	240	Peak
5745	93.4	93.41	–	–	34.89	11.28	46.18	200	240	Average

REMARKS:

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

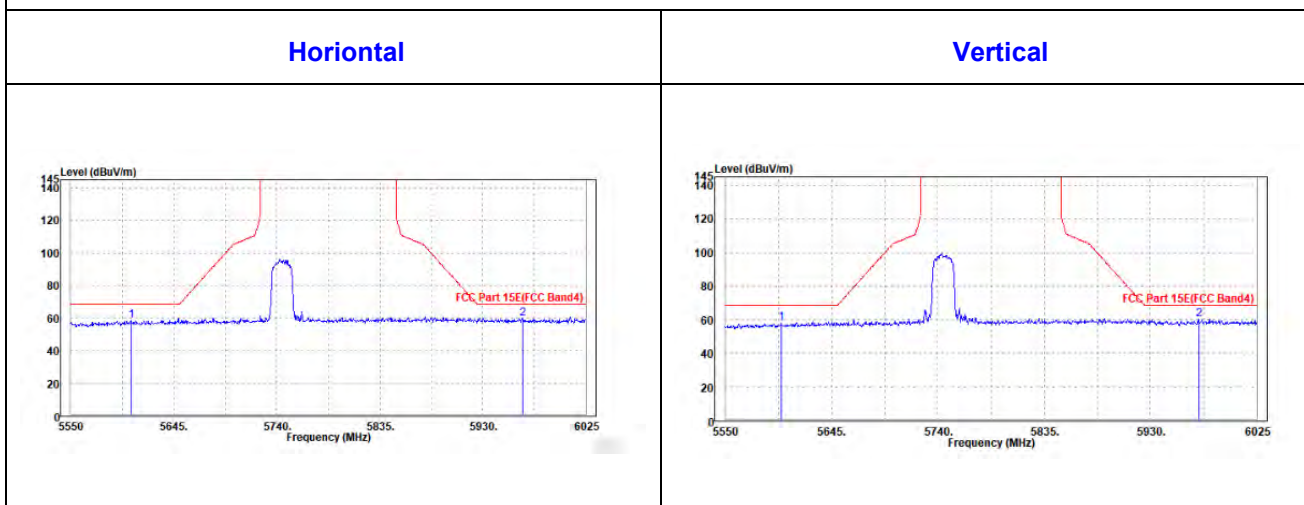


Oobe Data

802.11ac (20MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5605.575	58.49	59.08	68.2	-9.71	34.93	10.7	46.22	200	0	Peak
5966.575	59.54	58.09	68.2	-8.66	35.36	12.21	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.35	58.12	58.94	68.2	-10.08	34.72	10.68	46.22	300	0	Peak
5973.225	60.26	58.97	68.2	-7.94	35.17	12.24	46.12	300	0	Peak

CH 149





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	97.26	96.84	–	–	35.14	11.45	46.17	200	295	Peak
5785	91.24	90.82	–	–	35.14	11.45	46.17	200	295	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	99.95	99.73	–	–	34.94	11.45	46.17	182	240	Peak
5785	93.63	93.41	–	–	34.94	11.45	46.17	182	240	Average

REMARKS:

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

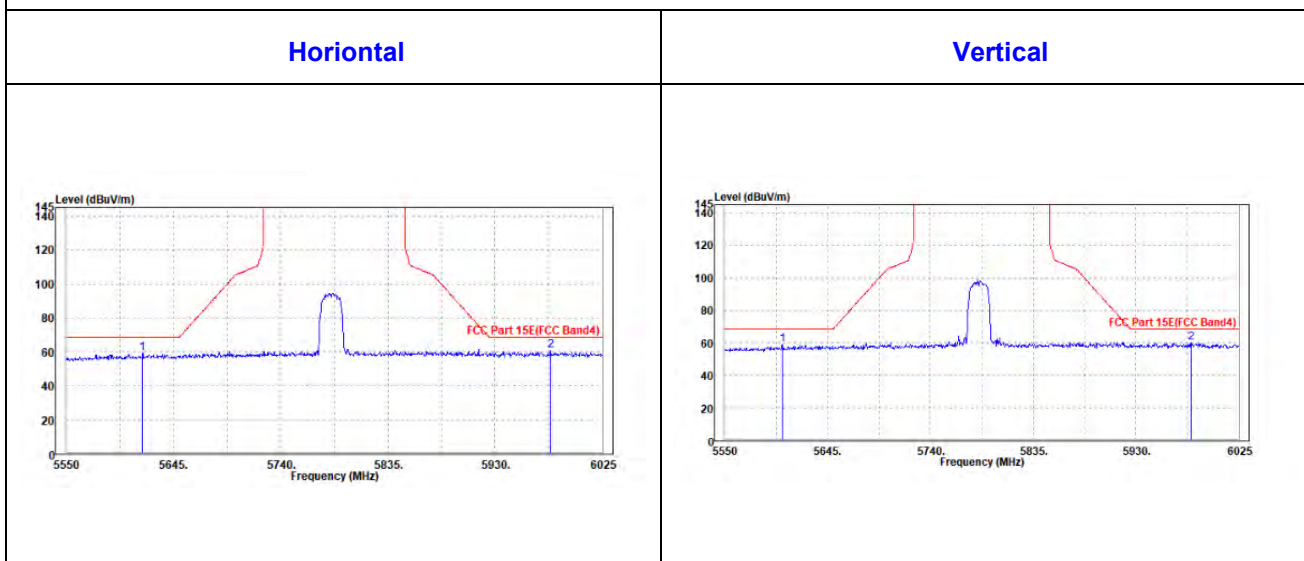


Oobe Data

802.11ac (20MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5617.45	59.04	59.57	68.2	-9.16	34.94	10.75	46.22	300	0	Peak
5978.925	60.41	58.9	68.2	-7.79	35.37	12.26	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5603.2	58.81	59.62	68.2	-9.39	34.72	10.69	46.22	200	0	Peak
5980.825	59.87	58.54	68.2	-8.33	35.18	12.27	46.12	200	0	Peak

CH 157





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	96.47	95.82	–	–	35.19	11.62	46.16	210	205	Peak
5825	89.94	89.29	–	–	35.19	11.62	46.16	210	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.94	98.49	–	–	34.99	11.62	46.16	182	240	Peak
5825	92.7	92.25	–	–	34.99	11.62	46.16	182	240	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P24050005RF03

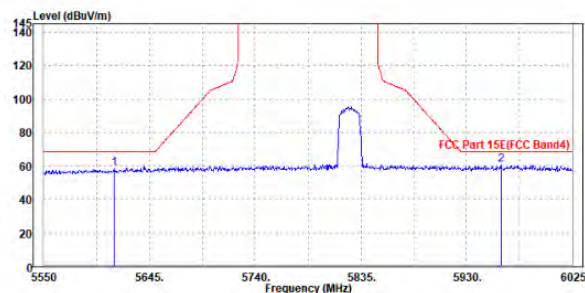
OOBE DATA

802.11ac (20MHZ)

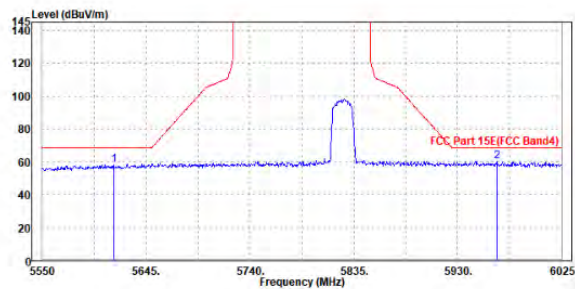
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5613.175	58.18	58.73	68.2	-10.02	34.94	10.73	46.22	200	0	Peak
5960.875	60.38	58.96	68.2	-7.82	35.35	12.19	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5615.55	58.05	58.79	68.2	-10.15	34.74	10.74	46.22	300	0	Peak
5966.1	60.19	58.94	68.2	-8.01	35.16	12.21	46.12	300	0	Peak

CH 165

Horizontal



Vertical





802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	92.68	92.43	–	–	35.11	11.32	46.18	100	45	Peak
5755	87.48	87.23	–	–	35.11	11.32	46.18	100	45	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	94.91	94.86	–	–	34.91	11.32	46.18	107	230	Peak
5755	90.15	90.1	–	–	34.91	11.32	46.18	107	230	Average

REMARKS:

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

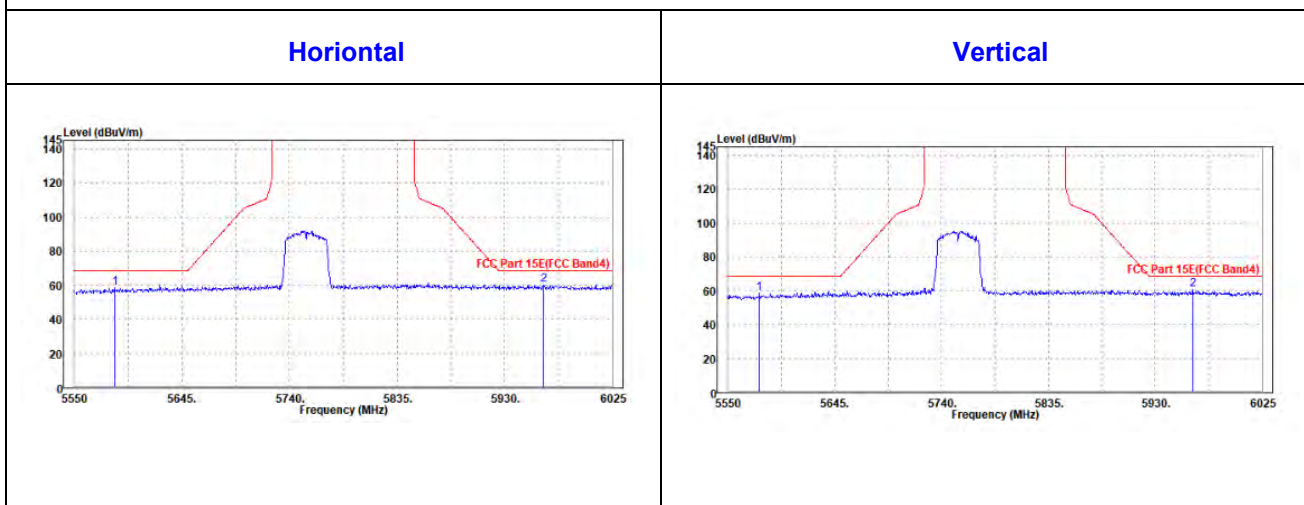


OOBE DATA

802.11ac (40MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5585.625	58.27	58.99	68.2	-9.93	34.9	10.61	46.23	300	0	Peak
5964.675	59.92	58.48	68.2	-8.28	35.36	12.2	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5578.025	58.58	59.54	68.2	-9.62	34.69	10.58	46.23	200	0	Peak
5963.25	60.57	59.33	68.2	-7.63	35.16	12.2	46.12	200	0	Peak

CH 151





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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	90.09	89.62	–	–	35.15	11.49	46.17	100	205	Peak
5795	85.32	84.85	–	–	35.15	11.49	46.17	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	93.69	93.42	–	–	34.95	11.49	46.17	107	230	Peak
5795	88.67	88.4	–	–	34.95	11.49	46.17	107	230	Average

REMARKS:

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

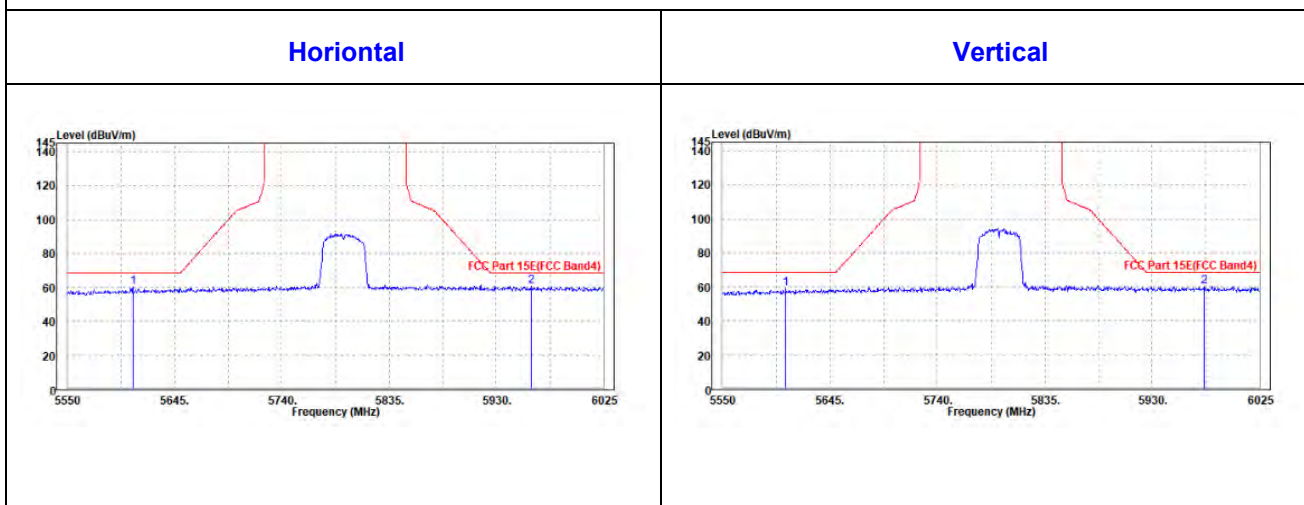


Oobe Data

802.11ac (40MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5607.95	60.3	60.88	68.2	-7.9	34.93	10.71	46.22	200	360	Peak
5960.875	60.52	59.1	68.2	-7.68	35.35	12.19	46.12	200	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.05	58.74	59.53	68.2	-9.46	34.73	10.7	46.22	300	360	Peak
5976.075	60.22	58.92	68.2	-7.98	35.17	12.25	46.12	300	360	Peak

CH 159





802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	85.59	85.22	–	–	35.13	11.41	46.17	100	205	Peak
5775	82	81.63	–	–	35.13	11.41	46.17	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	90.3	90.13	–	–	34.93	11.41	46.17	160	240	Peak
5775	86.44	86.27	–	–	34.93	11.41	46.17	160	240	Average

REMARKS:

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



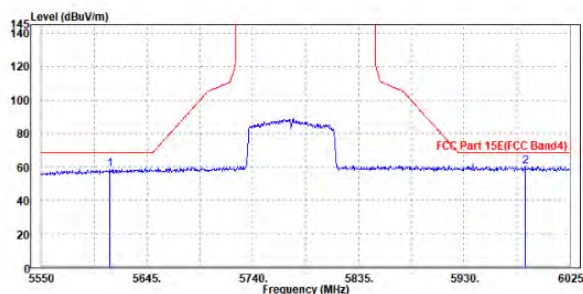
Oobe Data

802.11ac (80MHz)

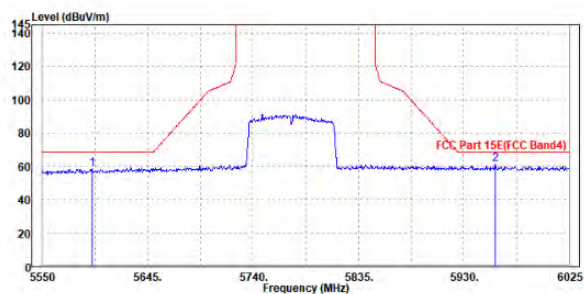
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5611.275	58.42	58.99	68.2	-9.78	34.93	10.72	46.22	300	360	Peak
5984.625	60.31	58.75	68.2	-7.89	35.38	12.29	46.11	300	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5595.125	58.26	59.12	68.2	-9.94	34.71	10.65	46.22	200	360	Peak
5958.5	61.12	59.91	68.2	-7.08	35.15	12.18	46.12	200	360	Peak

CH 155

Horizontal



Vertical



3.2 OUT OF BAND EMISSION MEASUREMENT

3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

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

NOTE:

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

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

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

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

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

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

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,21	Jun. 02,22

NOTE:

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

3.2.3 TEST PROCEDURES

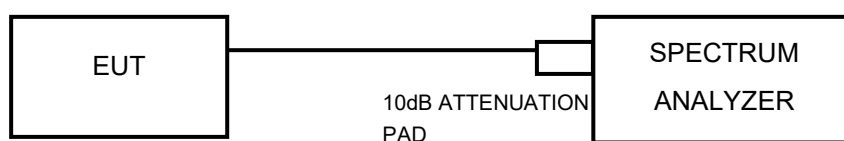
- a. Check the calibration of the measurement instrument using either an internal calibrator or a known signal from an external generator.
- b. The resolution bandwidth is set to 1MHzThe Video bandwidth is set to ≥ 1 MHz, report the peak value out of operating band.
- c. Repeat above procedures until all frequencies measured were complete.

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

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



3.2.6 EUT OPERATING CONDITION

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

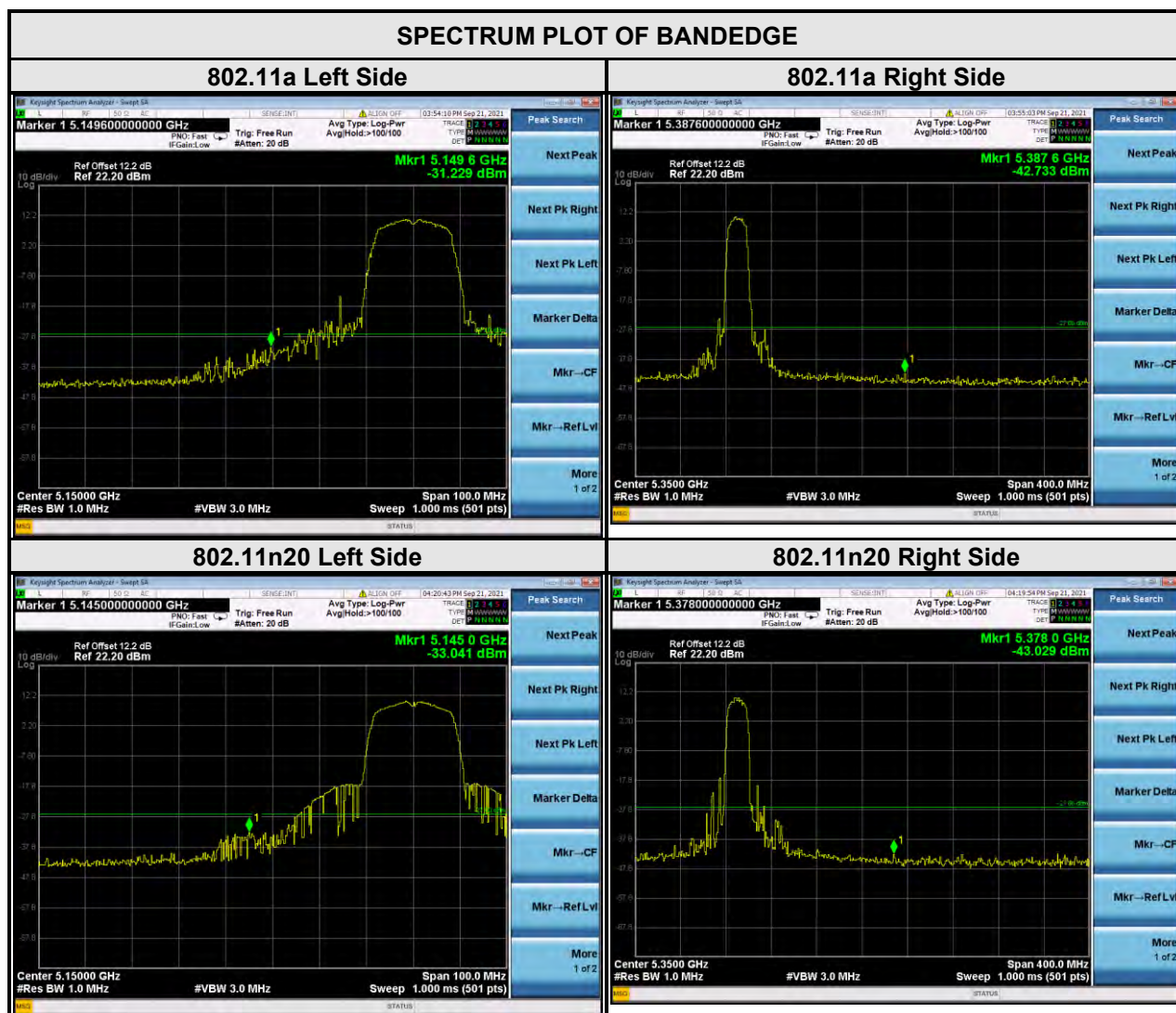


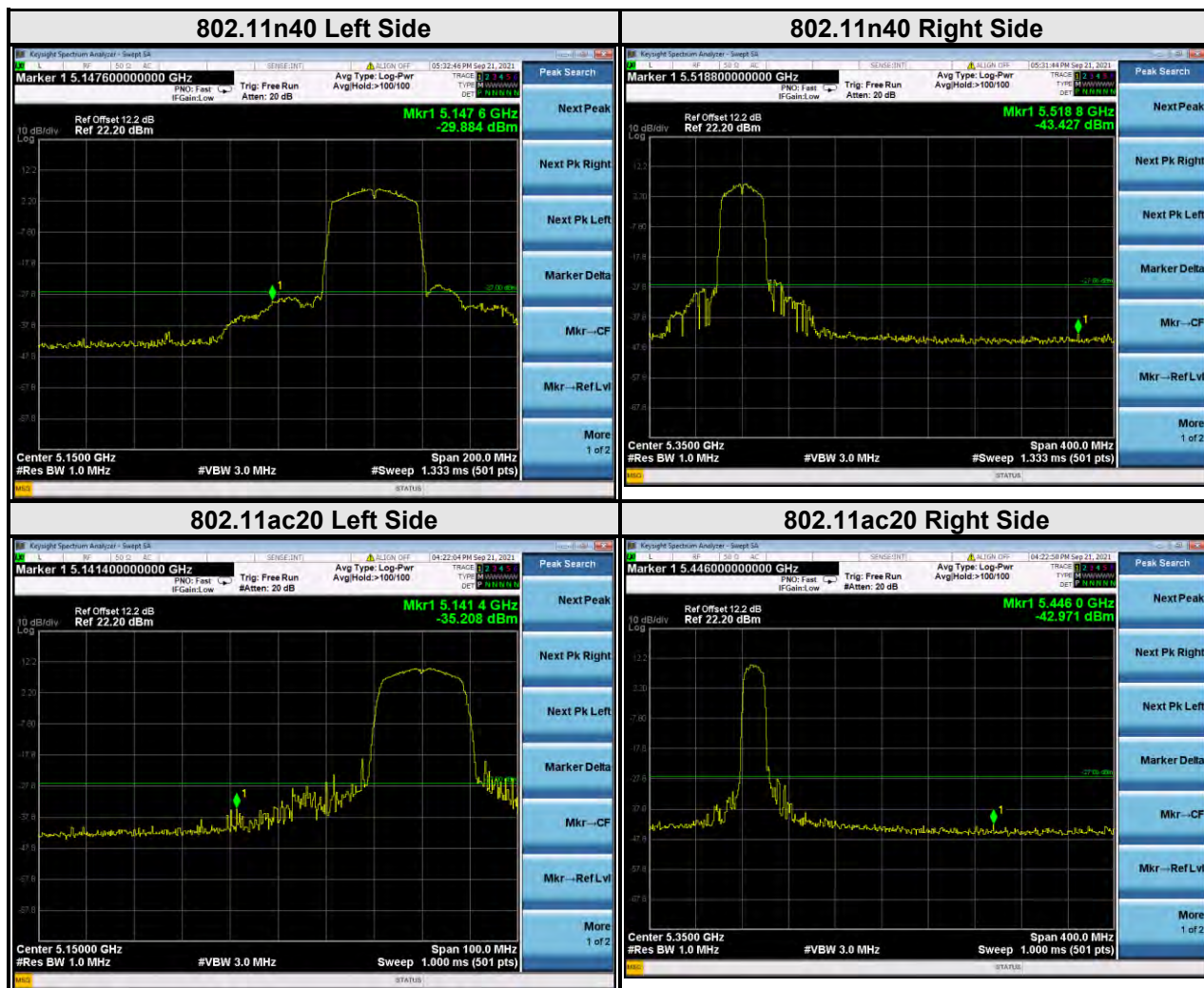
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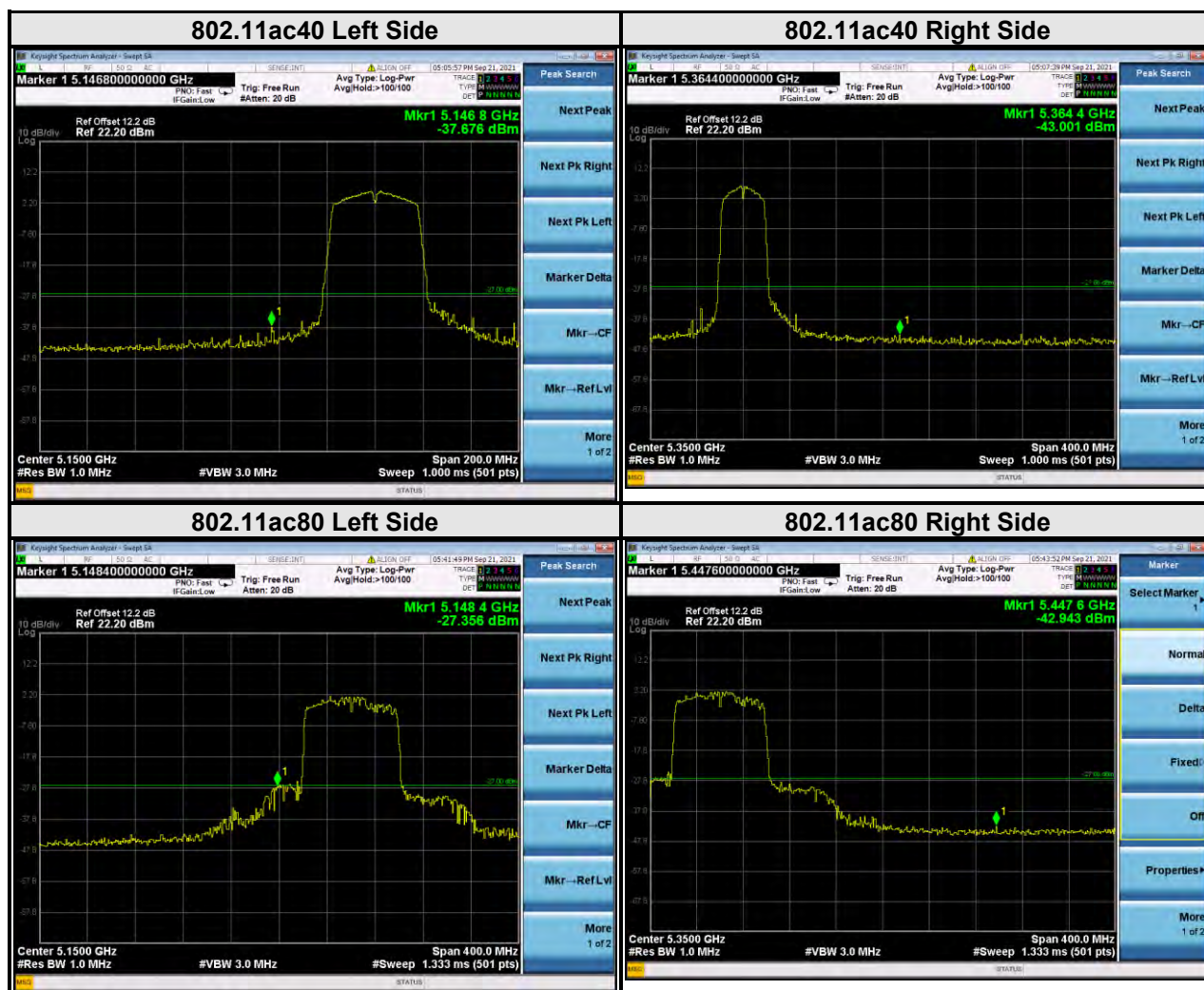
Test Report No.: W7L-P24050005RF03

3.2.7 TEST RESULTS

For U-NII-1:





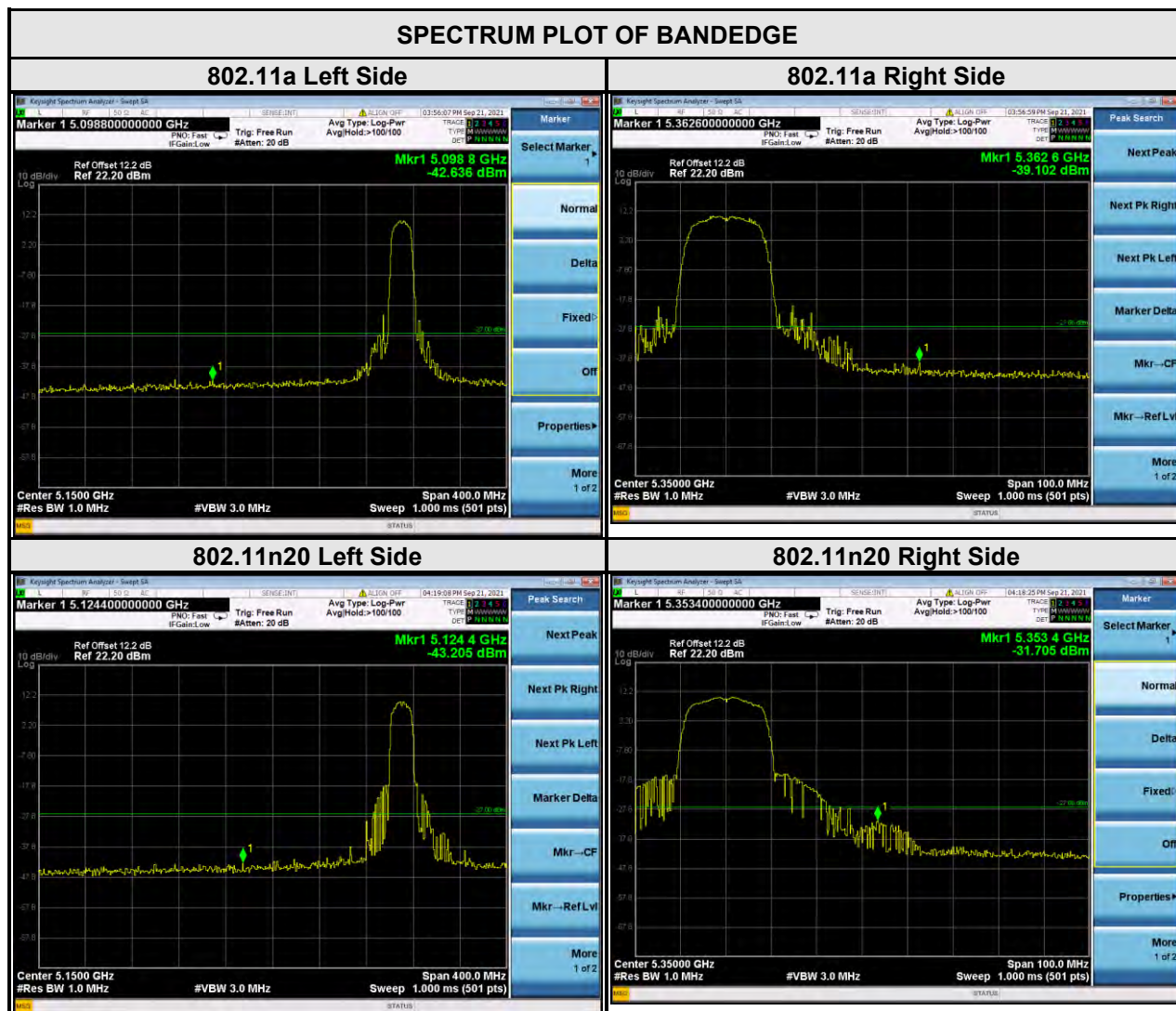


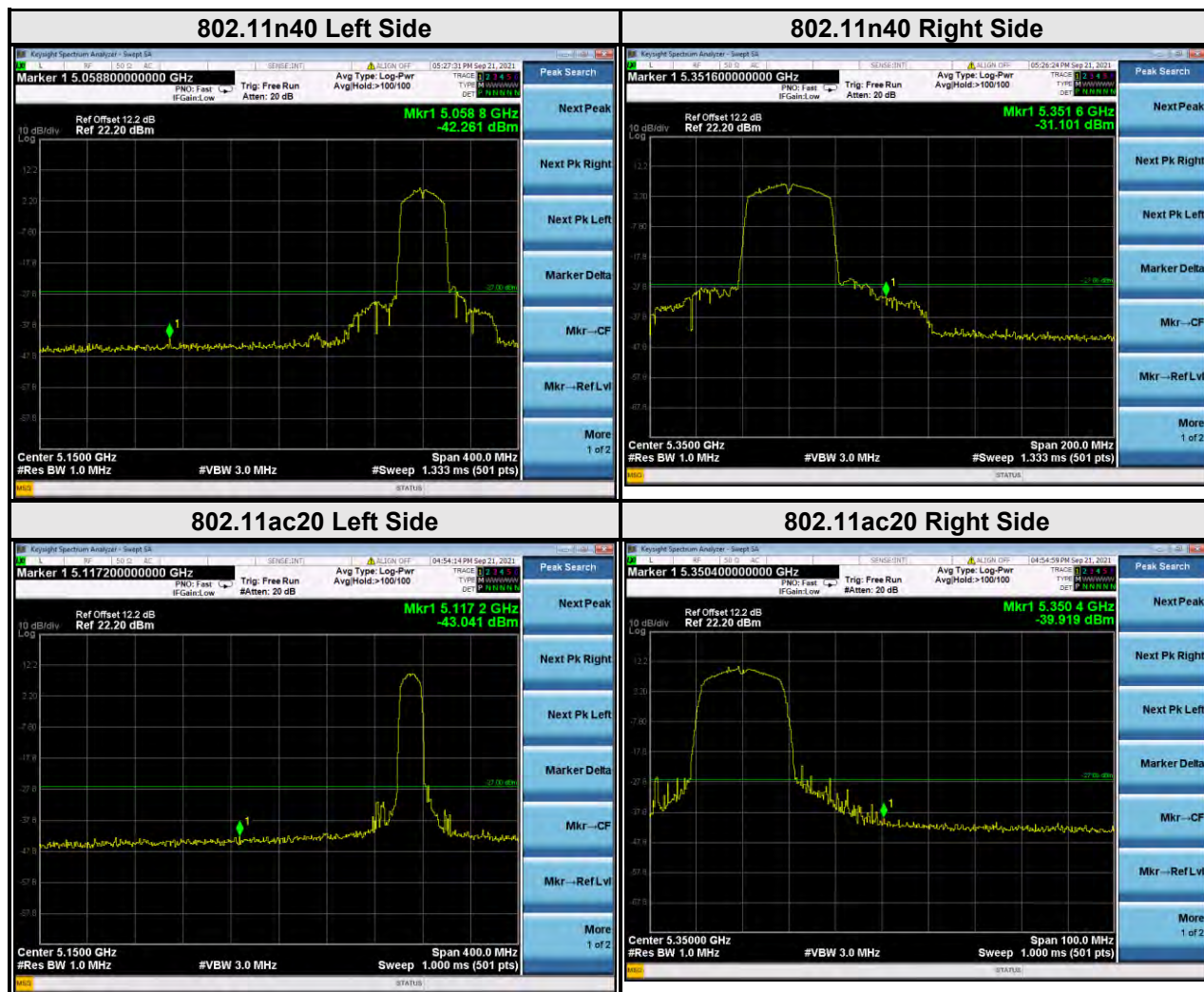


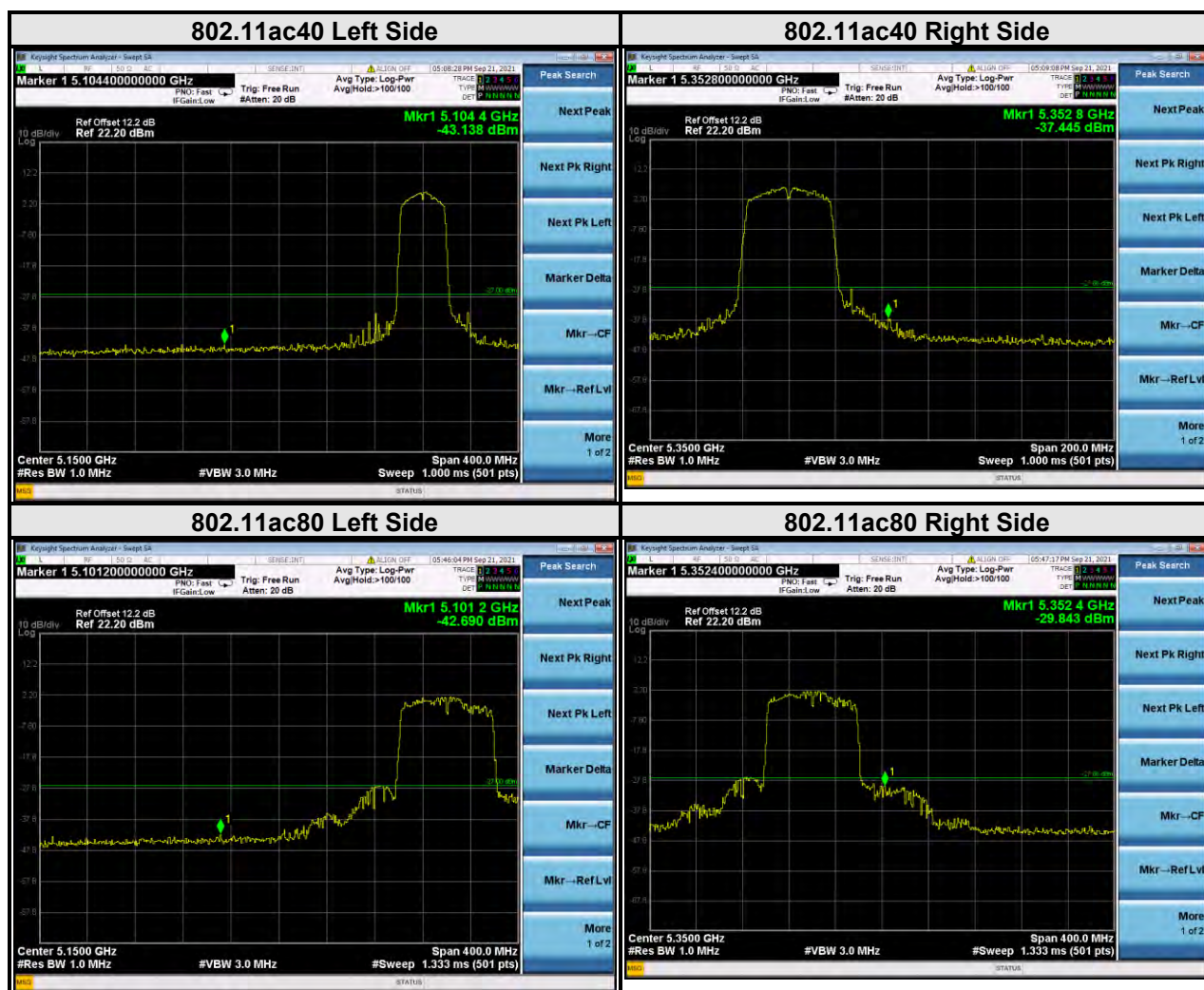
BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03

For U-NII-2A:









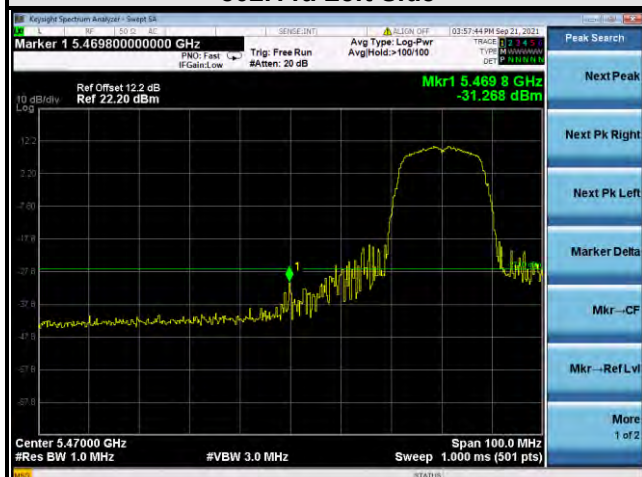
BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03

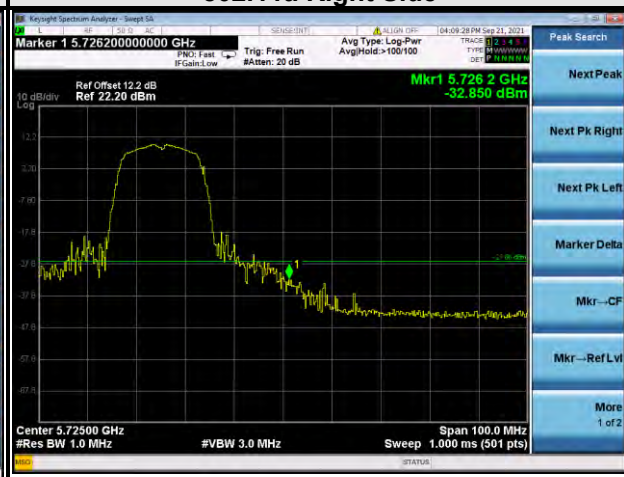
For U-NII-2C:

SPECTRUM PLOT OF BANDEDGE

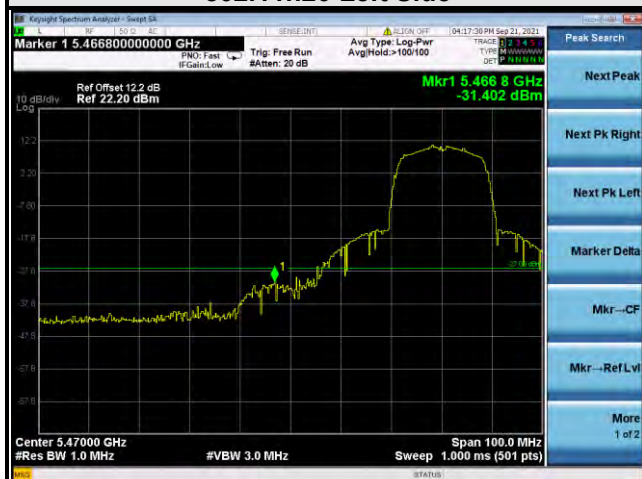
802.11a Left Side



802.11a Right Side

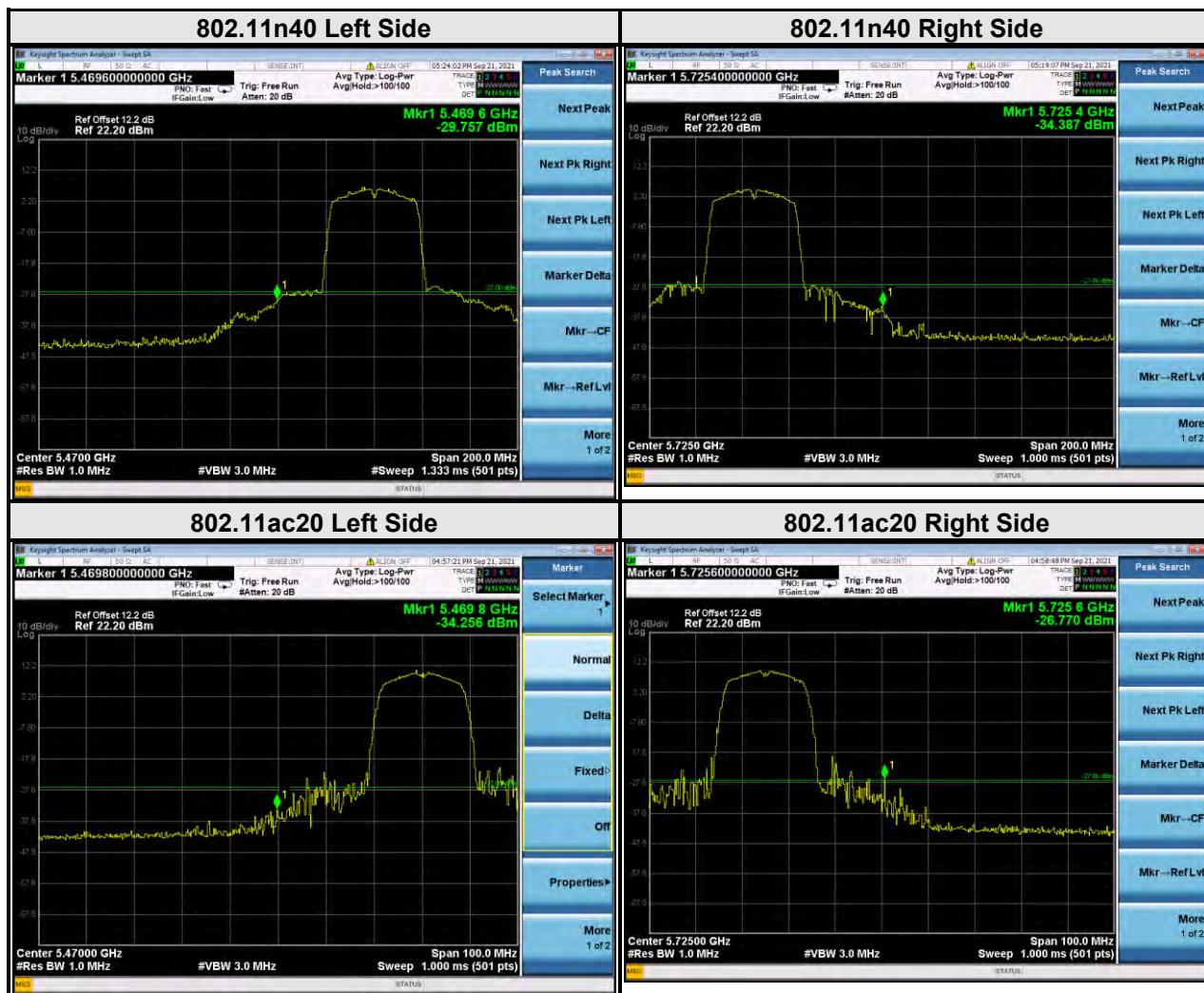


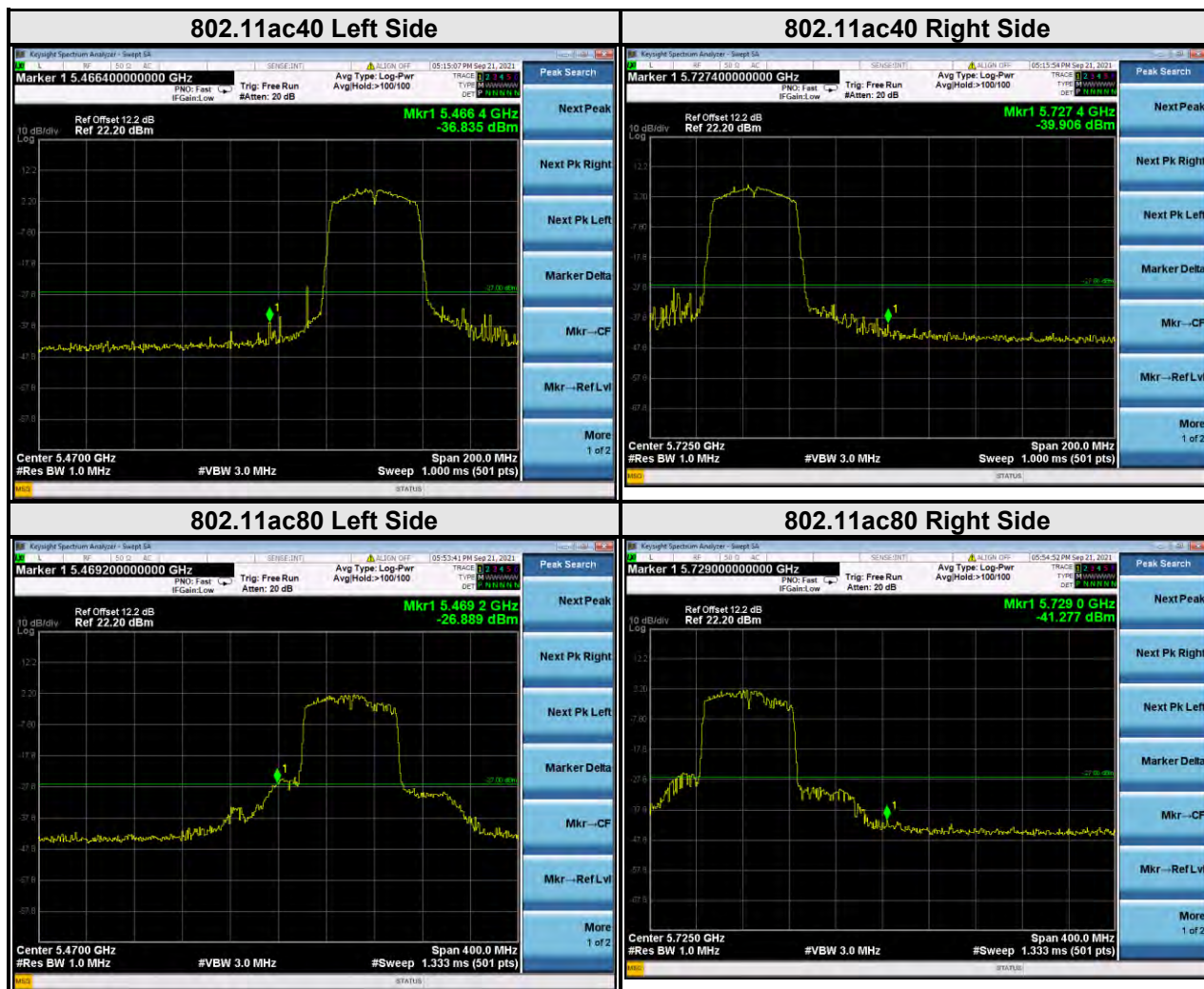
802.11n20 Left Side



802.11n20 Right Side





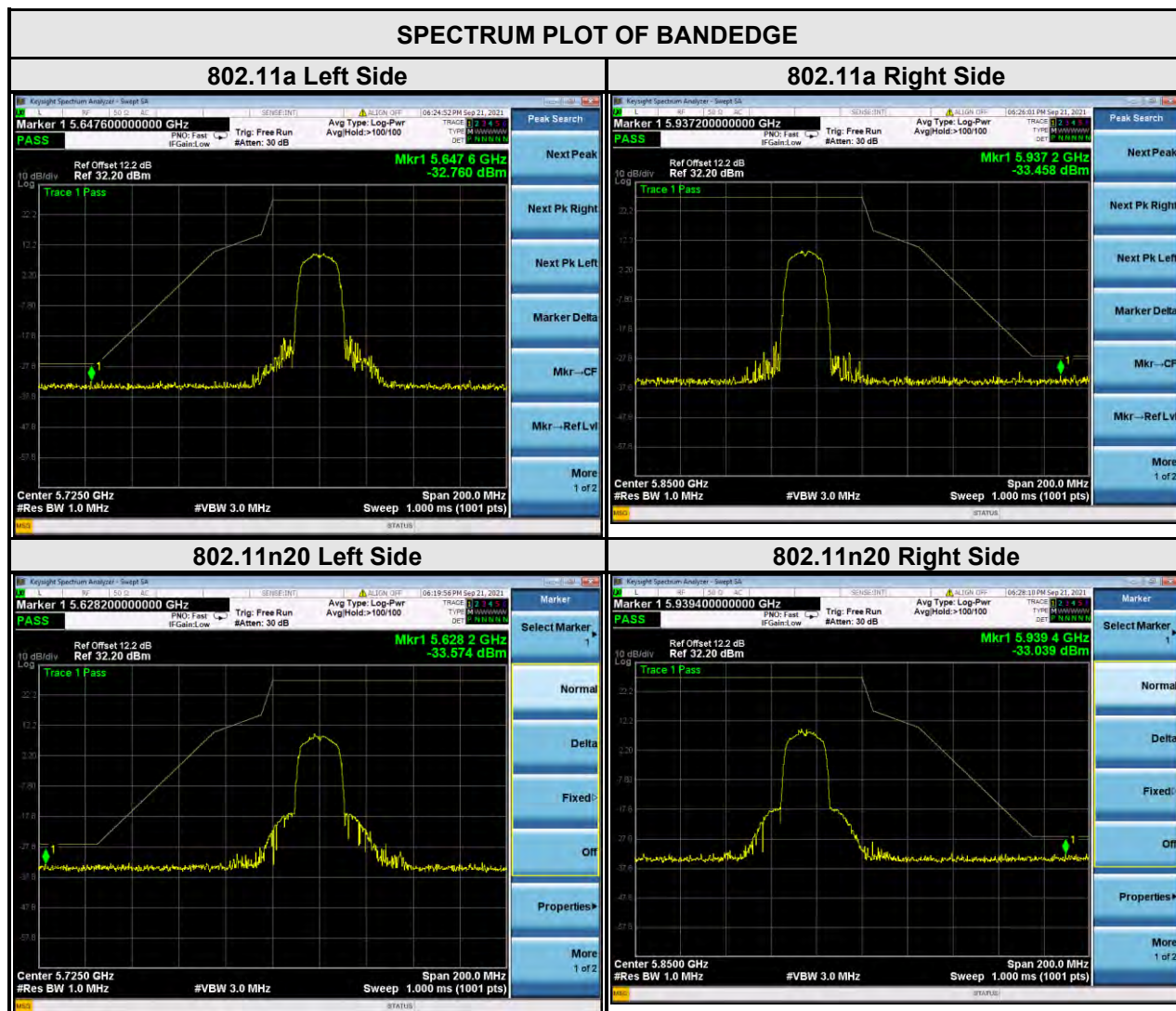




BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03

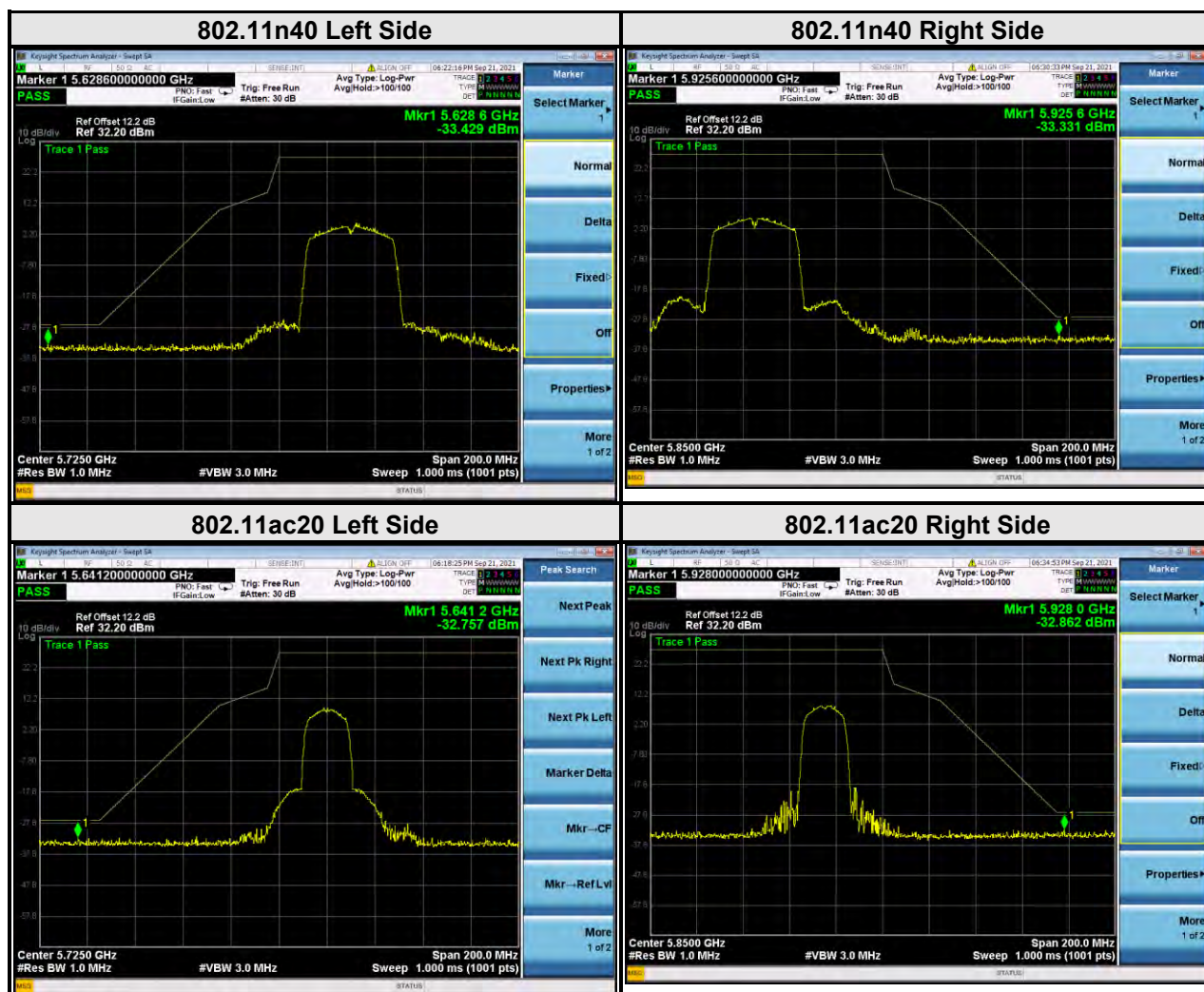
For U-NII-3:

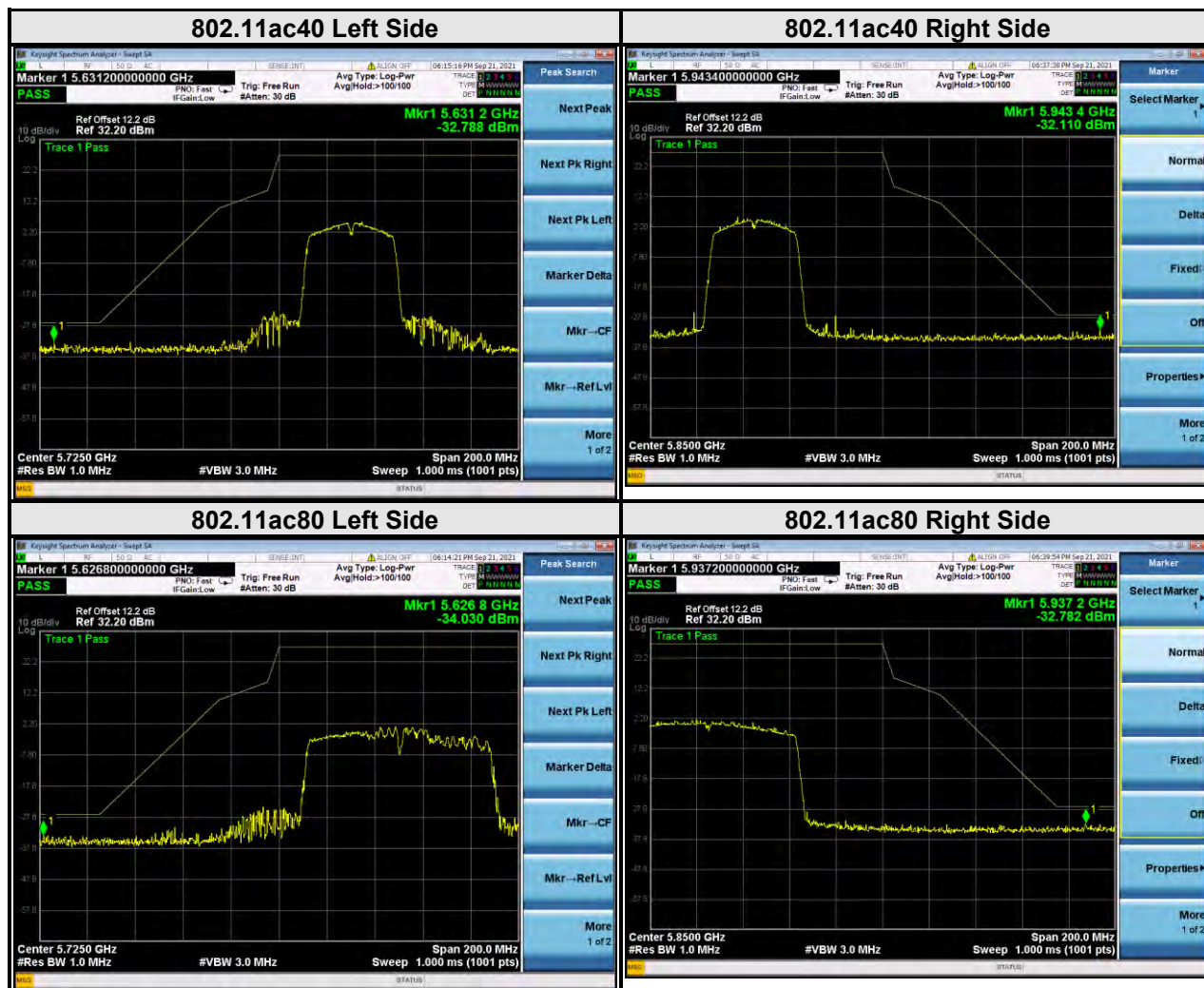




BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03





3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Mar. 03,21	Mar. 02,22
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Feb. 22,21	Feb. 21,22

NOTE:

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

3.3.3 TEST PROCEDURES

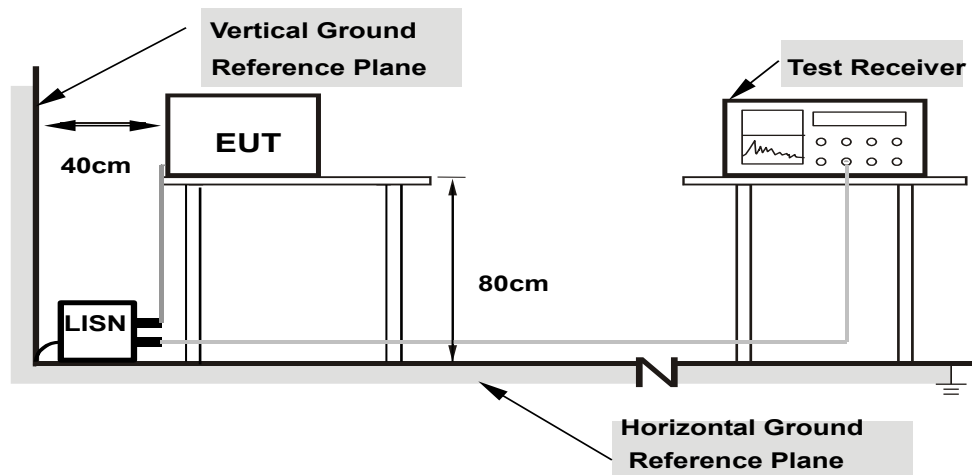
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



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

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

3.3.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

3.3.7 TEST RESULTS

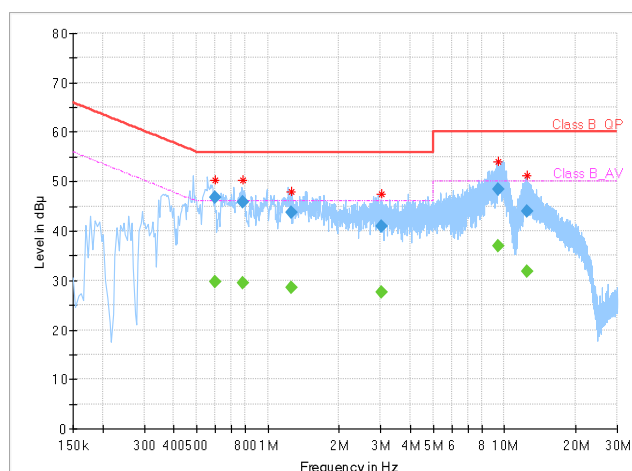
CONDUCTED WORST-CASE DATA:

Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25deg. C, 55%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.596000	---	29.79	46.00	16.21	L1	ON	9.7
0.596000	46.72	---	56.00	9.28	L1	ON	9.7
0.784000	---	29.36	46.00	16.64	L1	ON	9.7
0.784000	45.86	---	56.00	10.14	L1	ON	9.7
1.260000	---	28.46	46.00	17.54	L1	ON	9.7
1.260000	43.79	---	56.00	12.21	L1	ON	9.7
3.028000	---	27.64	46.00	18.36	L1	ON	9.7
3.028000	40.94	---	56.00	15.06	L1	ON	9.7
9.372000	---	37.04	50.00	12.96	L1	ON	9.7
9.372000	48.49	---	60.00	11.51	L1	ON	9.7
12.424000	---	31.83	50.00	18.17	L1	ON	9.8
12.424000	44.01	---	60.00	15.99	L1	ON	9.8

- 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 = Limit value -Emission level
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

Full Spectrum

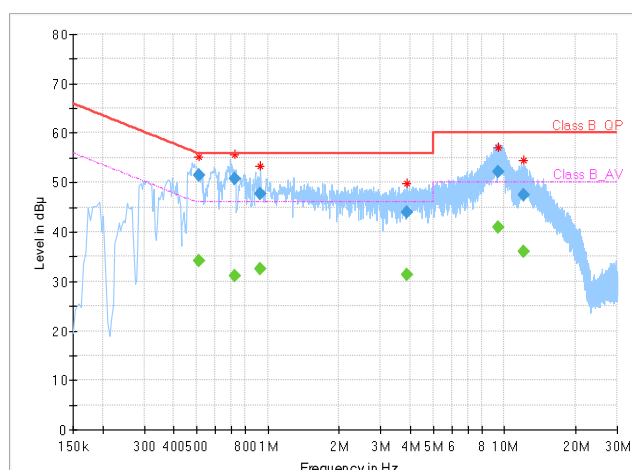


Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25deg. C, 55%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.512000	---	34.05	46.00	11.95	N	ON	9.7
0.512000	51.49	---	56.00	4.51	N	ON	9.7
0.728000	---	31.08	46.00	14.92	N	ON	9.7
0.728000	50.74	---	56.00	5.26	N	ON	9.7
0.928000	---	32.55	46.00	13.45	N	ON	9.7
0.928000	47.78	---	56.00	8.22	N	ON	9.7
3.884000	---	31.33	46.00	14.67	N	ON	9.8
3.884000	43.95	---	56.00	12.05	N	ON	9.8
9.424000	---	40.84	50.00	9.16	N	ON	9.8
9.424000	52.17	---	60.00	7.83	N	ON	9.8
12.024000	---	36.06	50.00	13.94	N	ON	9.8
12.024000	47.44	---	60.00	12.56	N	ON	9.8

- 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 = Limit value -Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

Full Spectrum



3.4 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.4.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

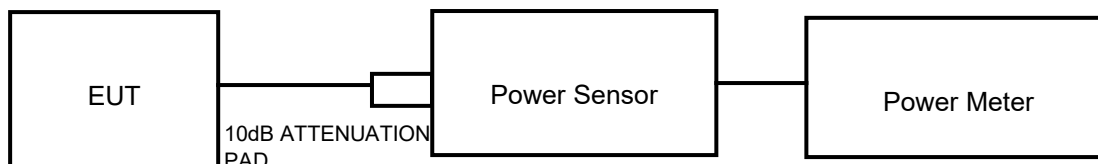
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	B	Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW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

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

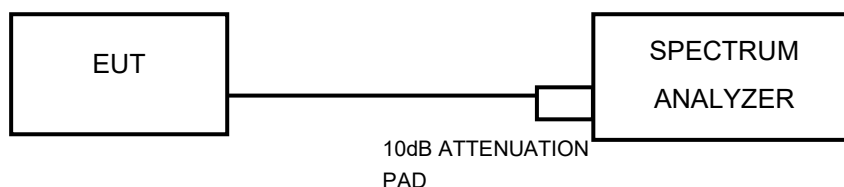
3.4.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

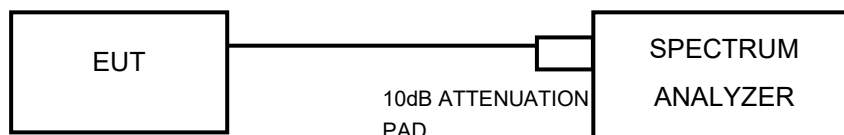
802.11a, 802.11n (20MHz), 802.11n (40MHz) TEST CONFIGURATION



11ac TEST CONFIGURATION



FOR 26dB BANDWIDTH



3.4.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 22,21	Feb. 21,22
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 25,21	Feb. 24,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,21	Jun. 02,22
Power Sensor	ANRITSU	MA2411B	1339352	May. 07,21	May. 08,22

NOTE:

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

3.4.4 TEST PROCEDURE

FOR POWER MEASUREMENT

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

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

For 802.11ac (80MHz)

1. Measure the duty cycle, x , of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW $\geq$ 3 MHz.
5. Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, 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 $10 \log (1/0.25) = 6 \text{ dB}$ 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 $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

FOR 26dB BANDWIDTH

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

FOR 6dB BANDWIDTH

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

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

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



Test Report No.: W7L-P24050005RF03

3.4.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	14.10	0.09	14.19	26.24	24	PASS
40	5200	14.00	0.09	14.09	25.64	24	PASS
48	5240	13.99	0.09	14.08	25.59	24	PASS
52	5260	13.91	0.09	14.00	25.12	24	PASS
60	5300	13.89	0.09	13.98	25.00	24	PASS
64	5320	13.87	0.09	13.96	24.89	24	PASS
100	5500	13.84	0.09	13.93	24.72	24	PASS
116	5580	14.20	0.09	14.29	26.85	24	PASS
140	5700	14.02	0.09	14.11	25.76	24	PASS
144	5720	14.05	0.09	14.14	25.94	24	PASS
144	5720	14.05	0.09	14.14	25.94	30	PASS
149	5745	14.08	0.09	14.17	26.12	30	PASS
157	5785	14.10	0.09	14.19	26.24	30	PASS
165	5825	14.12	0.09	14.21	26.36	30	PASS

**802.11n (20MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	13.98	0	13.98	25.00	24	PASS
40	5200	14.00	0	14.00	25.12	24	PASS
48	5240	13.86	0	13.86	24.32	24	PASS
52	5260	13.82	0	13.82	24.10	24	PASS
60	5300	13.80	0	13.80	23.99	24	PASS
64	5320	13.85	0	13.85	24.27	24	PASS
100	5500	13.78	0	13.78	23.88	24	PASS
116	5580	14.18	0	14.18	26.18	24	PASS
140	5700	14.01	0	14.01	25.18	24	PASS
144	5720	13.97	0	13.97	24.95	24	PASS
144	5720	13.97	0	13.97	24.95	30	PASS
149	5745	14.05	0	14.05	25.41	30	PASS
157	5785	14.07	0	14.07	25.53	30	PASS
165	5825	14.06	0	14.06	25.47	30	PASS



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	13.22	0.20	13.42	21.98	24	PASS
46	5230	13.25	0.20	13.45	22.13	24	PASS
54	5270	13.12	0.20	13.32	21.48	24	PASS
62	5310	13.02	0.20	13.22	20.99	24	PASS
102	5510	13.06	0.20	13.26	21.18	24	PASS
110	5550	13.10	0.20	13.30	21.38	24	PASS
134	5670	12.80	0.20	13.00	19.95	24	PASS
142	5710	12.82	0.20	13.02	20.04	24	PASS
142	5710	12.82	0.20	13.02	20.04	30	PASS
151	5755	12.90	0.20	13.10	20.42	30	PASS
159	5795	12.88	0.20	13.08	20.32	30	PASS

802.11ac (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	13.96	0.11	14.07	25.53	24	PASS
40	5200	13.85	0.11	13.96	24.89	24	PASS
48	5240	13.91	0.11	14.02	25.23	24	PASS
52	5260	13.86	0.11	13.97	24.95	24	PASS
60	5300	13.77	0.11	13.88	24.43	24	PASS
64	5320	13.75	0.11	13.86	24.32	24	PASS
100	5500	13.74	0.11	13.85	24.27	24	PASS
116	5580	13.78	0.11	13.89	24.49	24	PASS
140	5700	13.95	0.11	14.06	25.47	24	PASS
144	5720	13.98	0.11	14.09	25.64	24	PASS
144	5720	13.98	0.11	14.09	25.64	30	PASS
149	5745	14.05	0.11	14.16	26.06	30	PASS
157	5785	14.02	0.11	14.13	25.88	30	PASS
165	5825	14.08	0.11	14.19	26.24	30	PASS

802.11ac (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	13.24	0.22	13.46	22.18	24	PASS
46	5230	13.22	0.22	13.44	22.08	24	PASS
54	5270	13.16	0.22	13.38	21.78	24	PASS
62	5310	13.07	0.22	13.29	21.33	24	PASS
102	5510	13.03	0.22	13.25	21.13	24	PASS
110	5550	13.12	0.22	13.34	21.58	24	PASS
134	5670	13.18	0.22	13.40	21.88	24	PASS
142	5710	13.25	0.22	13.47	22.23	24	PASS
142	5710	13.25	0.22	13.47	22.23	30	PASS
151	5755	13.26	0.22	13.48	22.28	30	PASS
159	5795	12.92	0.22	13.14	20.61	30	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	Duty Factor	FINAL AVERAGE POWER (dBm)	FINAL AVERAGE POWER (mW)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	12.02	0.42	12.44	17.54	24	PASS
58	5290	11.95	0.42	12.37	17.26	24	PASS
106	5530	11.82	0.42	12.24	16.75	24	PASS
122	5610	11.80	0.42	12.22	16.67	24	PASS
138	5690	12.00	0.42	12.42	17.46	24	PASS
138	5690	12.00	0.42	12.42	17.46	30	PASS
155	5775	11.98	0.42	12.40	17.38	30	PASS

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

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	16.56	20.09	PASS
40	5200	16.50	20.19	PASS
48	5240	16.62	19.92	PASS
52	5260	16.56	19.89	PASS
60	5300	16.50	20.04	PASS
64	5320	16.50	20.22	PASS
100	5500	16.56	20.13	PASS
116	5580	16.56	20.16	PASS
140	5700	16.62	20.19	PASS
144	5720	16.62	20.26	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
144	5720	16.62	15.32	PASS
149	5745	16.56	15.12	PASS
157	5785	16.56	15.12	PASS
165	5825	16.56	15.13	PASS

**802.11n (20MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.76	20.40	PASS
40	5200	17.70	20.42	PASS
48	5240	17.70	20.47	PASS
52	5260	17.76	20.40	PASS
60	5300	17.76	20.32	PASS
64	5320	17.70	20.37	PASS
100	5500	17.70	20.50	PASS
116	5580	17.64	20.34	PASS
140	5700	17.70	20.47	PASS
142	5720	17.70	20.41	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
144	5720	17.70	15.13	PASS
149	5745	17.70	15.12	PASS
157	5785	17.70	15.13	PASS
165	5825	17.64	15.33	PASS

**802.11n (40MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.20	41.62	PASS
46	5230	36.30	41.40	PASS
54	5270	36.20	41.71	PASS
62	5310	36.20	41.32	PASS
102	5510	36.20	41.56	PASS
110	5550	36.20	41.75	PASS
134	5670	36.20	41.33	PASS
142	5710	36.20	41.33	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
142	5710	36.20	35.17	PASS
151	5755	36.10	35.13	PASS
159	5795	36.10	35.13	PASS

**802.11ac (20MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.64	20.41	PASS
40	5200	17.70	20.43	PASS
48	5240	17.64	20.42	PASS
52	5260	17.70	20.46	PASS
60	5300	17.64	20.57	PASS
64	5320	17.70	20.32	PASS
100	5500	17.58	20.52	PASS
116	5580	17.70	20.40	PASS
140	5700	17.64	20.40	PASS
144	5720	17.64	20.55	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
144	5720	17.64	15.16	PASS
149	5745	17.64	15.12	PASS
157	5785	17.70	15.12	PASS
165	5825	17.64	15.10	PASS



802.11ac (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.20	41.34	PASS
46	5230	36.10	41.10	PASS
54	5270	36.20	41.20	PASS
62	5310	36.10	41.60	PASS
102	5510	36.20	41.43	PASS
110	5550	36.10	41.43	PASS
134	5670	36.00	41.25	PASS
142	5710	36.10	41.33	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
142	5710	36.10	35.09	PASS
151	5755	36.00	35.14	PASS
159	5795	36.10	35.10	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
42	5210	75.24	81.40	PASS
58	5290	75.12	81.07	PASS
106	5530	75.12	81.19	PASS
122	5610	75.24	81.21	PASS
138	5690	75.24	81.04	PASS
CHANNEL	CHANNEL FREQUENCY	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH	PASS/FAIL
138	5690	75.24	75.41	PASS
155	5775	75.12	75.18	PASS

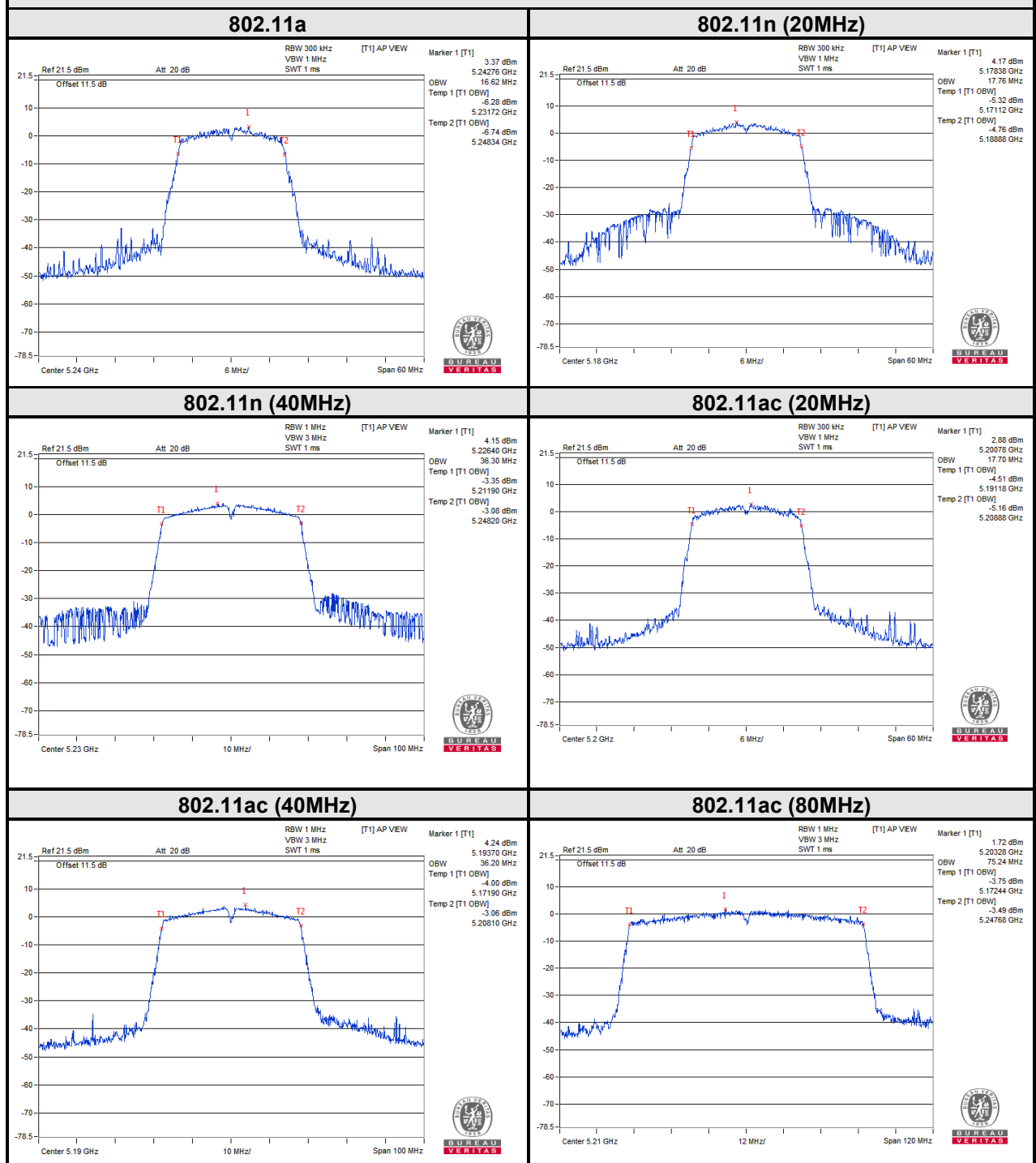


BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03

For U-NII-1:

SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH



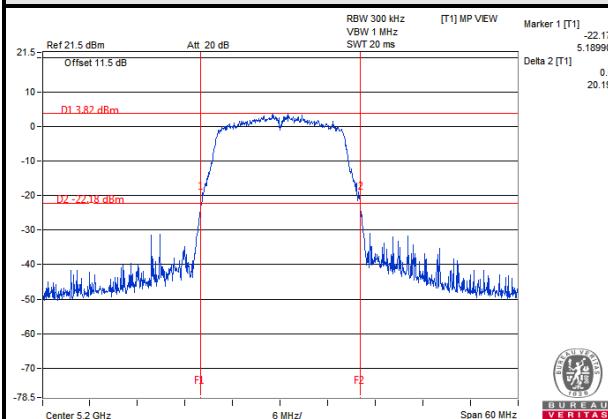


BUREAU
VERITAS

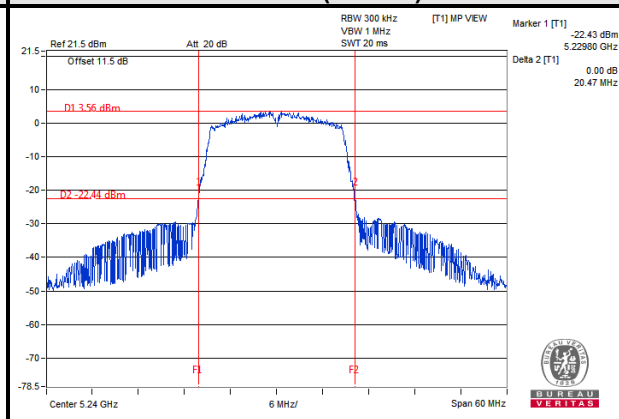
Test Report No.: W7L-P24050005RF03

SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

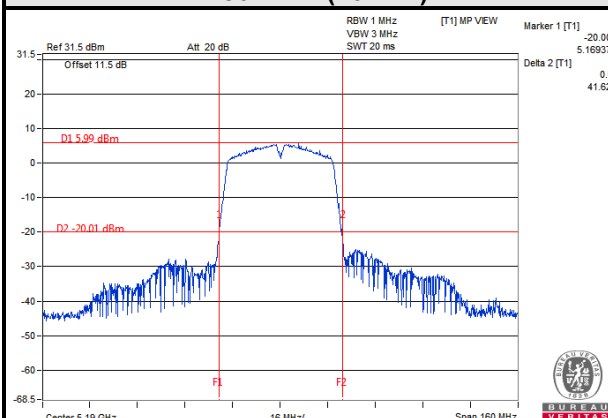
802.11a



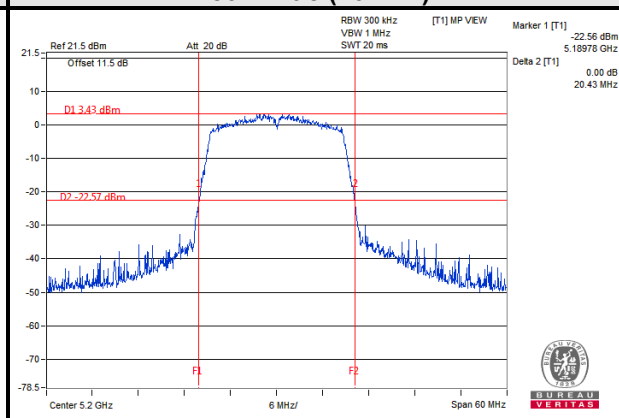
802.11n (20MHz)



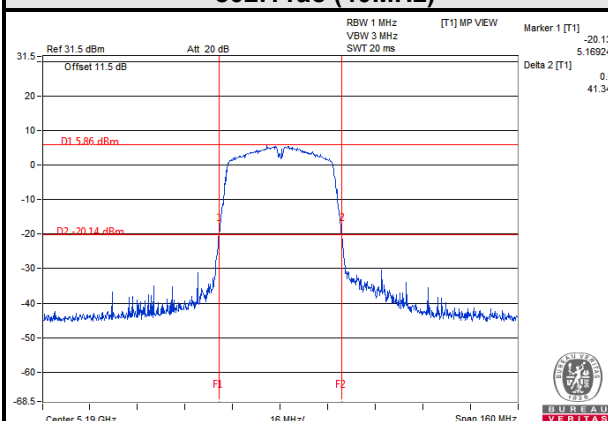
802.11n (40MHz)



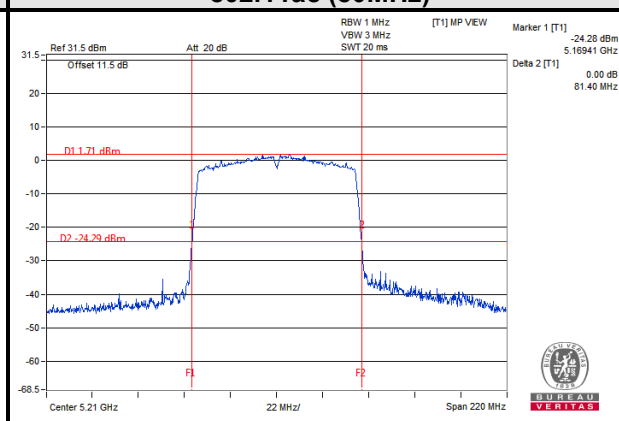
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)





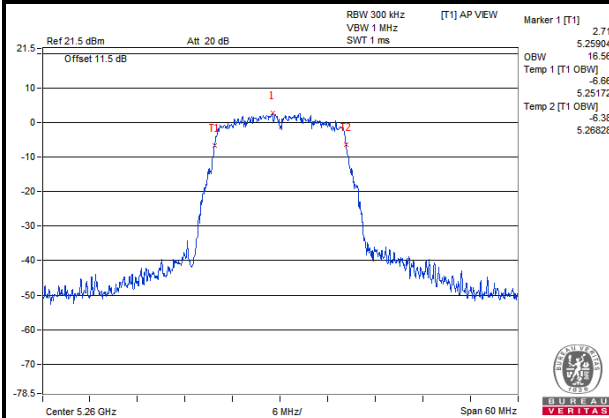
BUREAU
VERITAS

Test Report No.: W7L-P24050005RF03

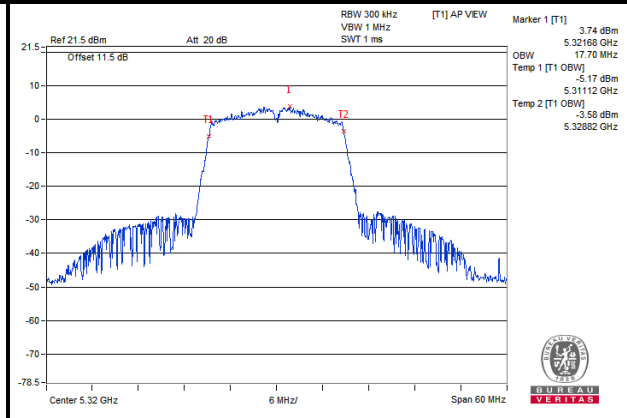
For U-NII-2A:

SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH

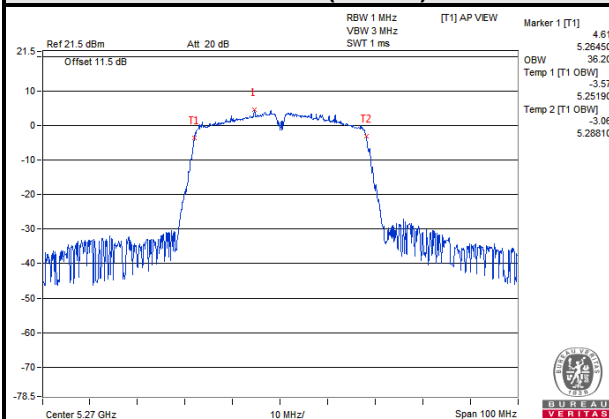
802.11a



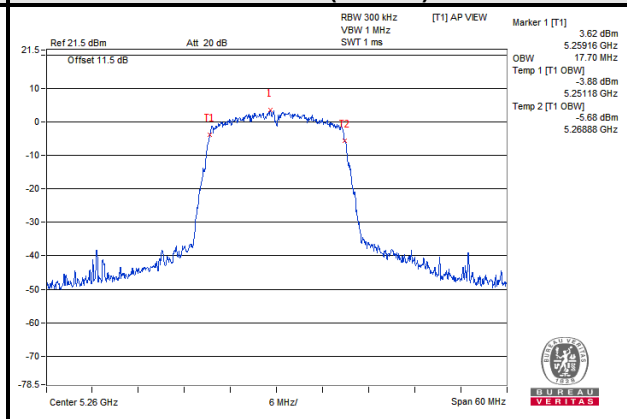
802.11n (20MHz)



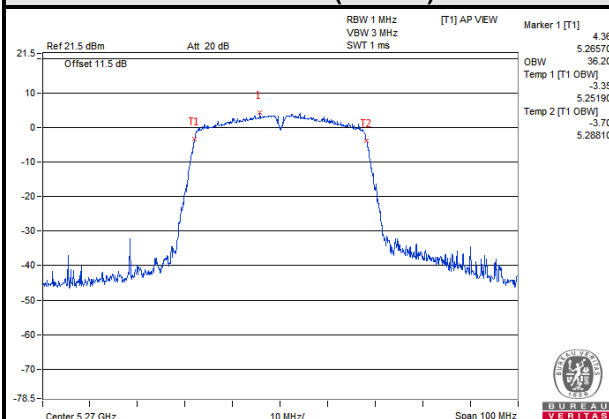
802.11n (40MHz)



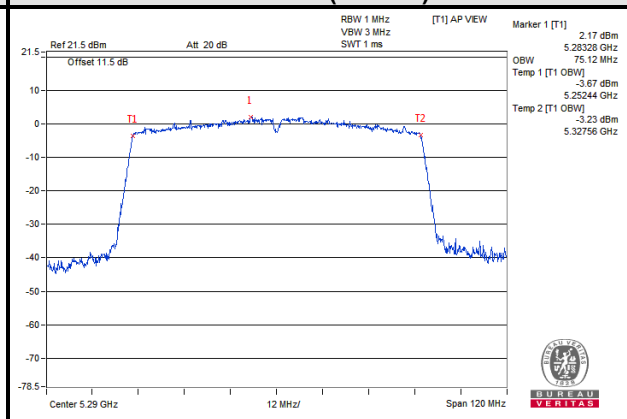
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)



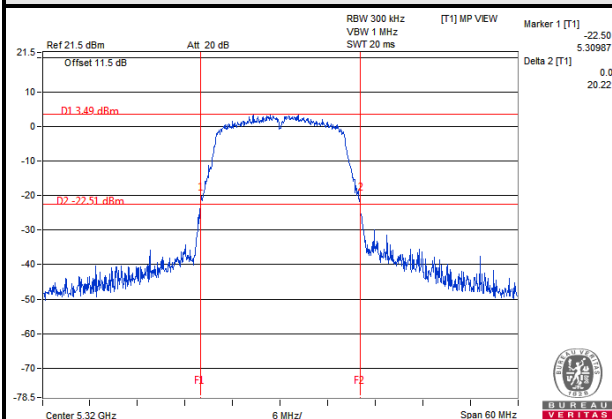


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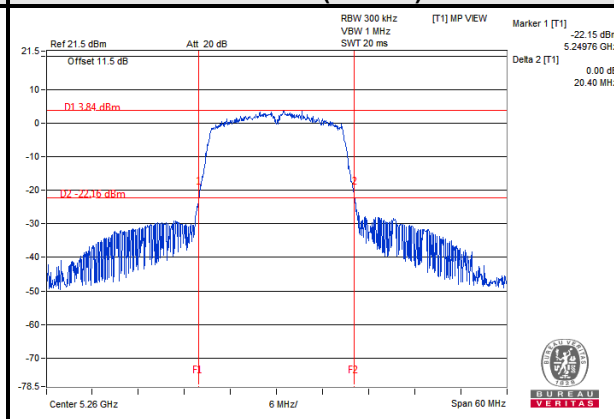
Test Report No.: W7L-P24050005RF03

SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

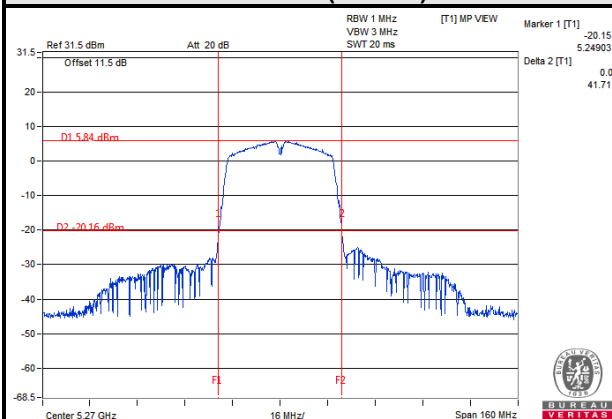
802.11a



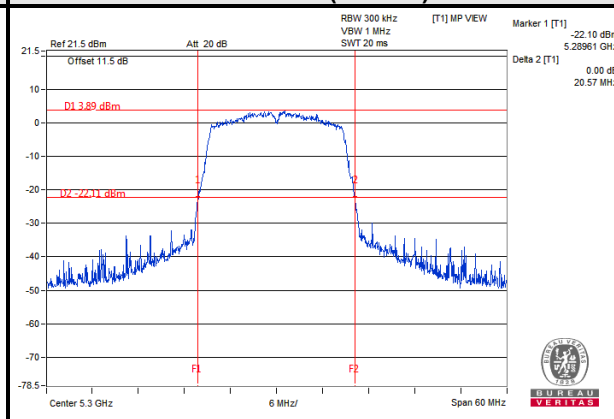
802.11n (20MHz)



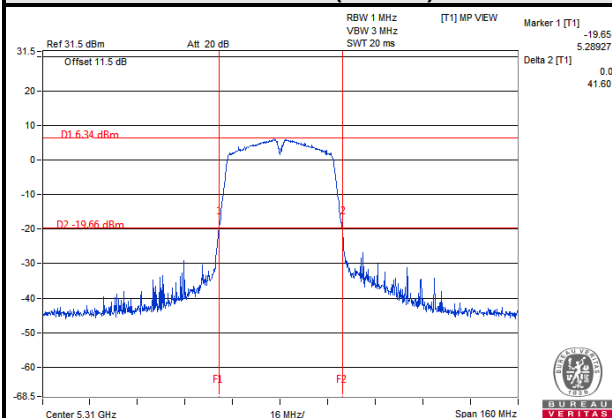
802.11n (40MHz)



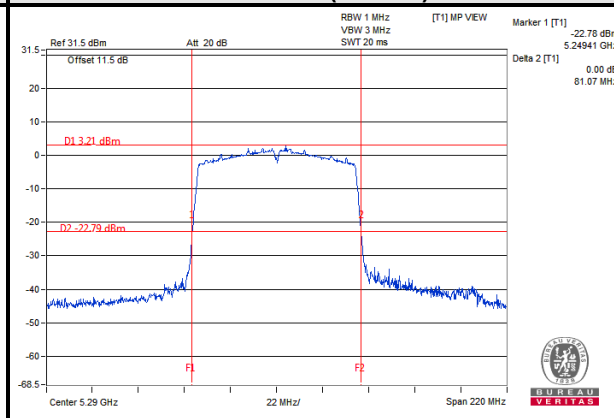
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)



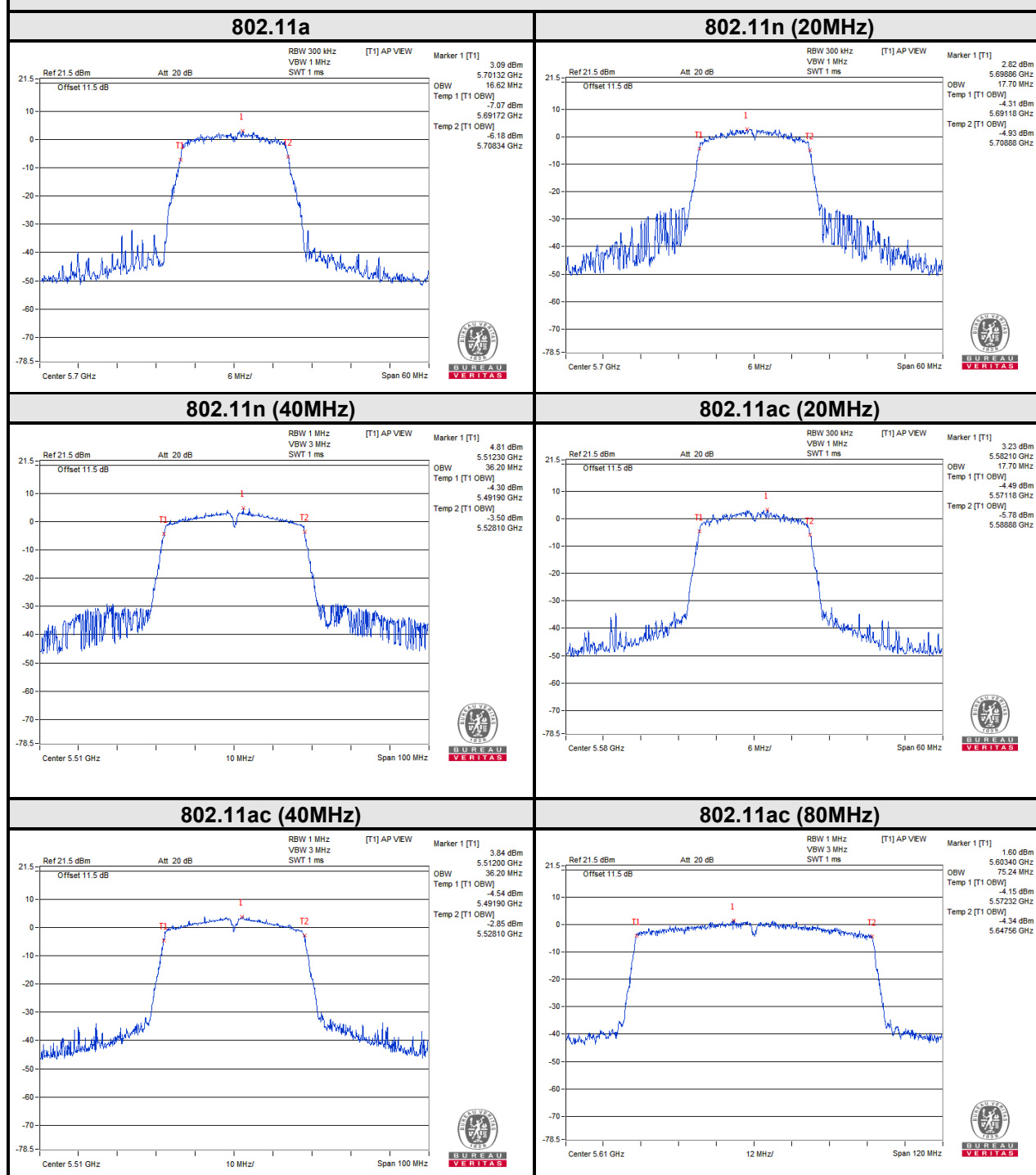


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Test Report No.: W7L-P24050005RF03

For U-NII-2C:

SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH



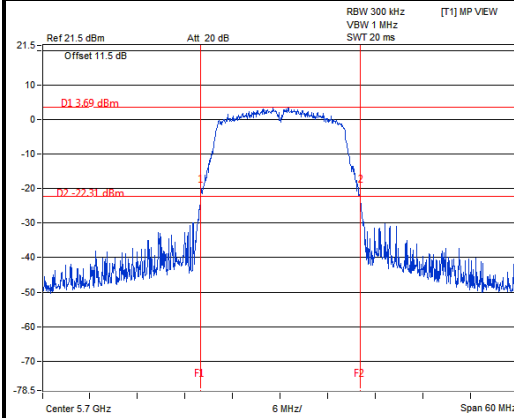


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VERITAS

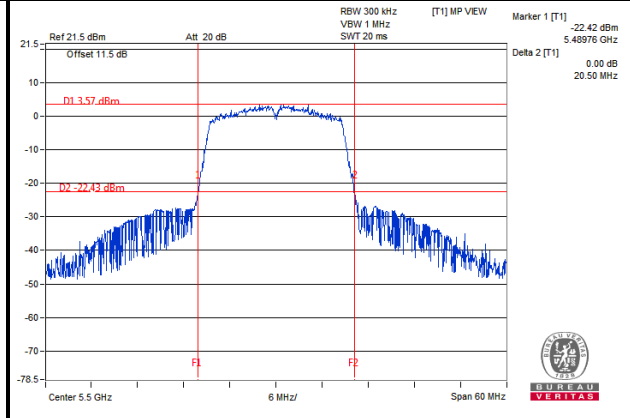
Test Report No.: W7L-P24050005RF03

SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

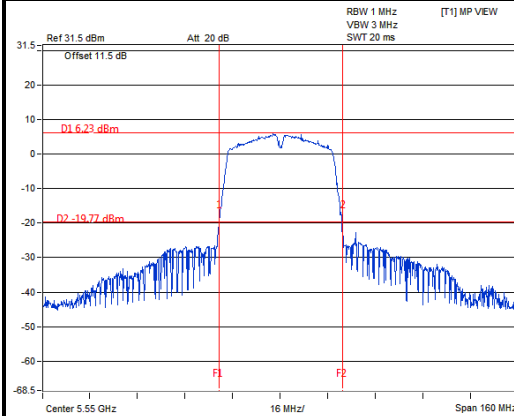
802.11a



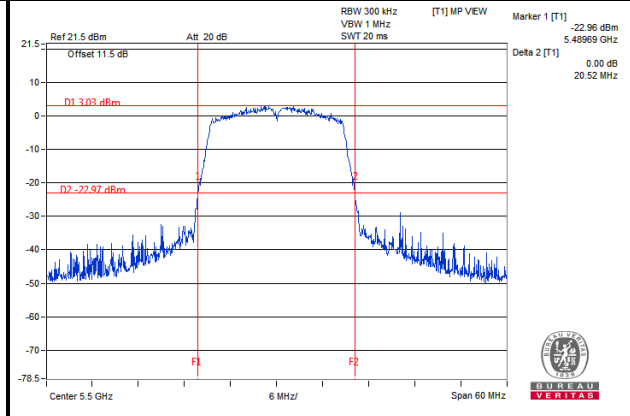
802.11n (20MHz)



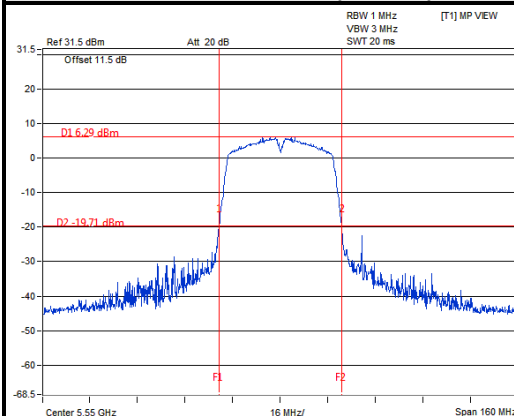
802.11n (40MHz)



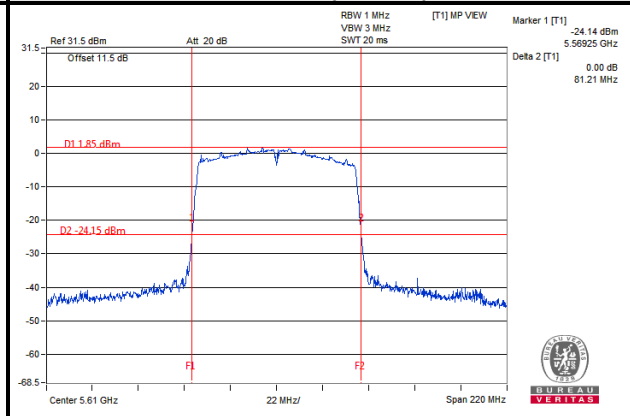
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)



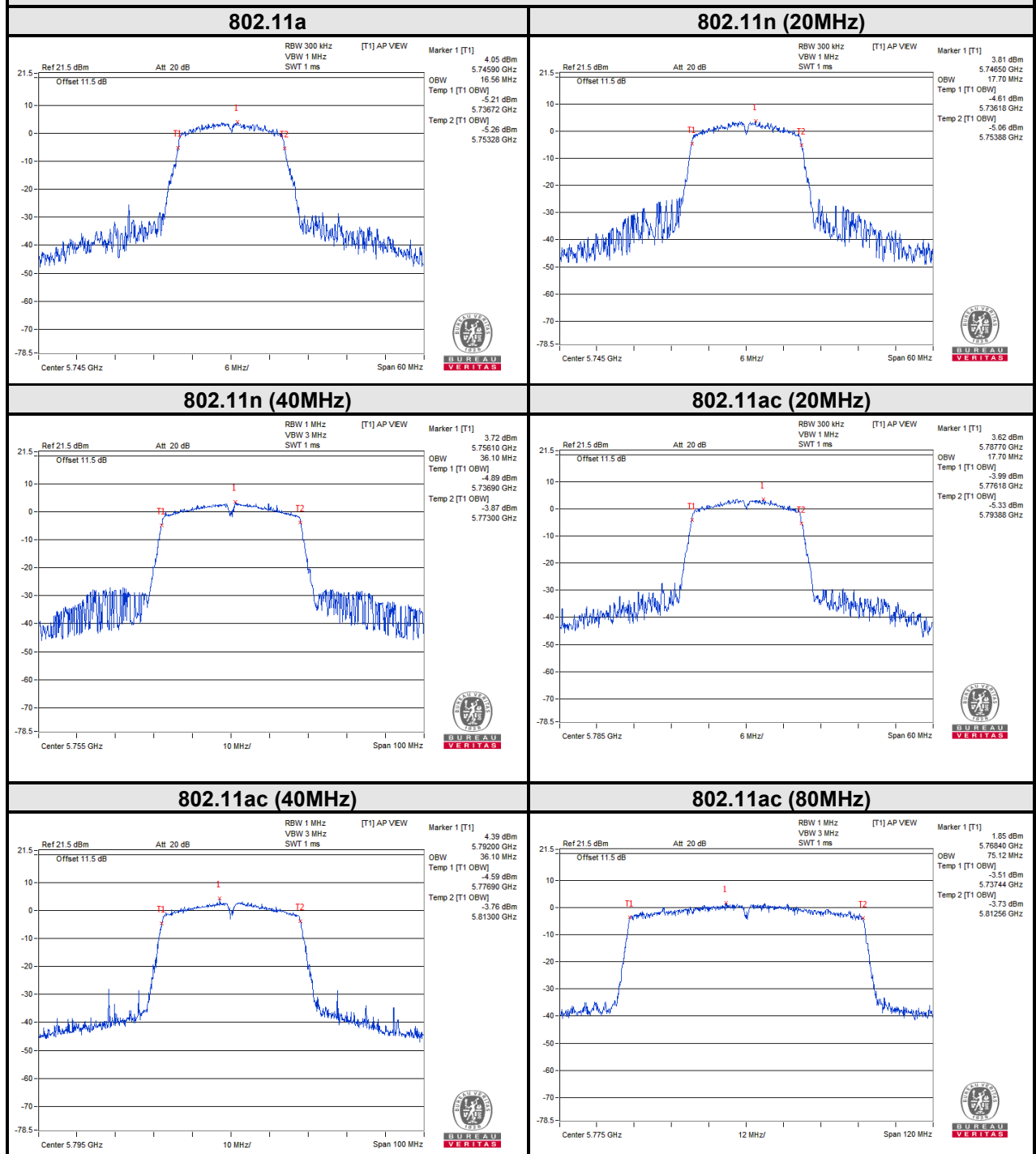


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VERITAS

Test Report No.: W7L-P24050005RF03

For U-NII-3:

SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH



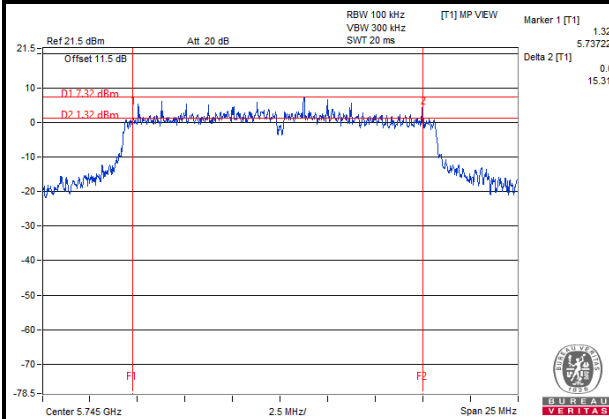


BUREAU
VERITAS

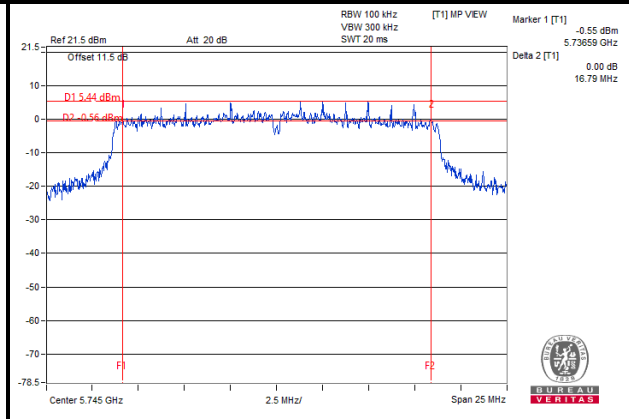
Test Report No.: W7L-P24050005RF03

SPECTRUM PLOT OF WORST VALUE of 6dB Bandwidth

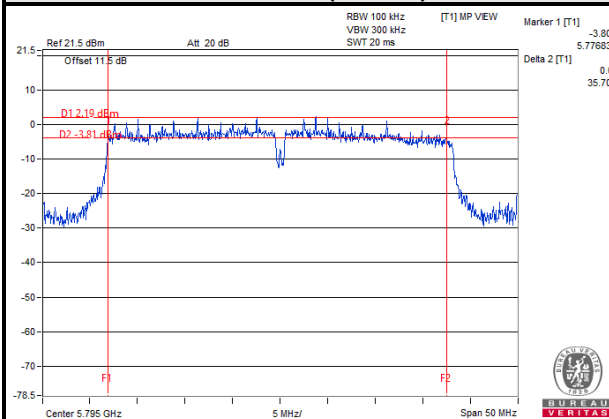
802.11a



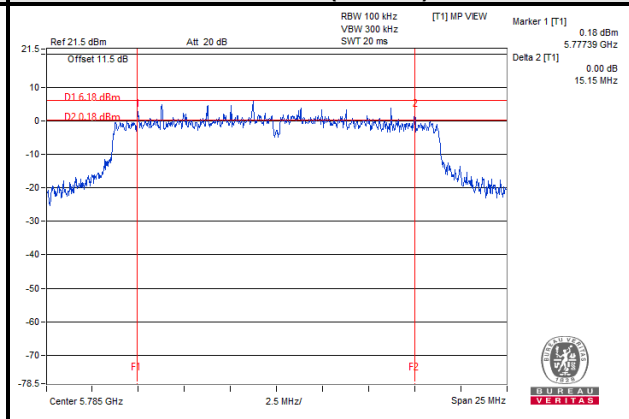
802.11n (20MHz)



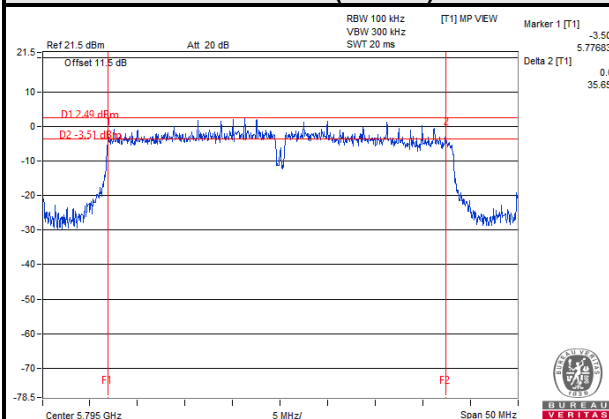
802.11n (40MHz)



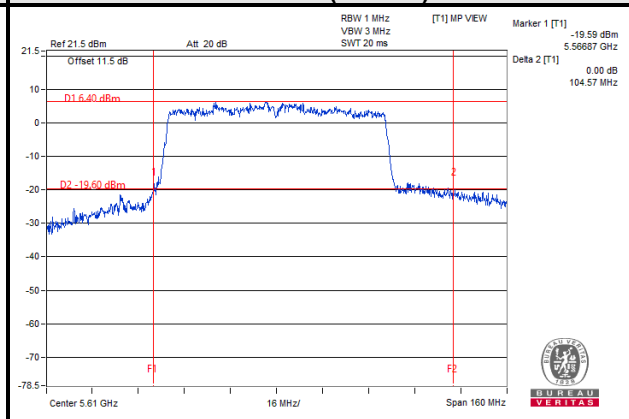
802.11ac (20MHz)



802.11ac (40MHz)



802.11ac (80MHz)

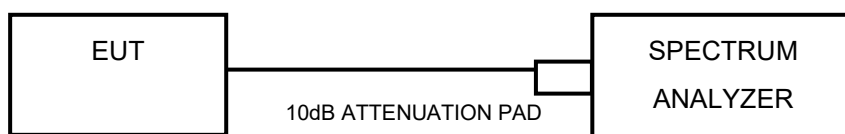


3.5 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

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

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.5.4 TEST PROCEDURES

Using method SA-2

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

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

3.5.7 TEST RESULTS

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

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	0.53	0.09	0.62	11	PASS
40	5200	-0.14	0.09	-0.05	11	PASS
48	5240	0.00	0.09	0.09	11	PASS
52	5260	0.11	0.09	0.20	11	PASS
60	5300	0.16	0.09	0.25	11	PASS
64	5320	0.04	0.09	0.13	11	PASS
100	5500	0.22	0.09	0.31	11	PASS
116	5580	0.40	0.09	0.49	11	PASS
140	5700	-0.27	0.09	-0.18	11	PASS
144	5720	-0.53	0.09	-0.44	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	-0.04	0	-0.04	11	PASS
40	5200	0.85	0	0.85	11	PASS
48	5240	0.04	0	0.04	11	PASS
52	5260	0.16	0	0.16	11	PASS
60	5300	0.01	0	0.01	11	PASS
64	5320	-0.16	0	-0.16	11	PASS
100	5500	-0.12	0	-0.12	11	PASS
116	5580	0.32	0	0.32	11	PASS
140	5700	-0.55	0	-0.55	11	PASS
144	5720	-0.94	0	-0.94	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	-4.01	0.20	-3.81	11	PASS
46	5230	-3.55	0.20	-3.35	11	PASS
54	5270	-3.24	0.20	-3.04	11	PASS
62	5310	-3.37	0.20	-3.17	11	PASS
102	5510	-3.63	0.20	-3.43	11	PASS
110	5550	-3.75	0.20	-3.55	11	PASS
134	5670	-4.58	0.20	-4.38	11	PASS
142	5710	-5.00	0.20	-4.80	11	PASS

802.11 ac (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	-0.72	0.11	-0.61	11	PASS
40	5200	-0.60	0.11	-0.49	11	PASS
48	5240	-0.22	0.11	-0.11	11	PASS
52	5260	-0.21	0.11	-0.10	11	PASS
60	5300	-0.23	0.11	-0.12	11	PASS
64	5320	-0.28	0.11	-0.17	11	PASS
100	5500	-0.43	0.11	-0.32	11	PASS
116	5580	-0.30	0.11	-0.19	11	PASS
140	5700	-1.51	0.11	-1.40	11	PASS
144	5720	-0.88	0.11	-0.77	11	PASS

**802.11ac (40MHz)**

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
38	5190	-4.09	0.22	-3.87	11	PASS
46	5230	-3.60	0.22	-3.38	11	PASS
54	5270	-3.42	0.22	-3.20	11	PASS
62	5310	-3.49	0.22	-3.27	11	PASS
102	5510	-3.98	0.22	-3.76	11	PASS
110	5550	-3.77	0.22	-3.55	11	PASS
134	5670	-4.25	0.22	-4.03	11	PASS
142	5710	-4.50	0.22	-4.28	11	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
42	5210	-8.23	0.42	-7.81	11	PASS
58	5290	-7.66	0.42	-7.24	11	PASS
106	5530	-8.00	0.42	-7.58	11	PASS
122	5610	-8.51	0.42	-8.09	11	PASS
138	5690	-8.89	0.42	-8.47	11	PASS

For U-NII-3:

Note: dBm/500kHz= dBm/300kHz+10*log(0.5/0.3)= dBm/300kHz+2.22

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
144	5720	-5.51	-3.29	0.09	-3.20	30	PASS
149	5745	-4.30	-2.08	0.09	-1.99	30	PASS
157	5785	-5.09	-2.87	0.09	-2.78	30	PASS
165	5825	-5.11	-2.89	0.09	-2.80	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
144	5720	-5.92	-3.70	0	-3.70	30	PASS
149	5745	-5.25	-3.03	0	-3.03	30	PASS
157	5785	-5.19	-2.97	0	-2.97	30	PASS
165	5825	-5.40	-3.18	0	-3.18	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
142	5710	-10.18	-7.96	0.20	-7.76	30	PASS
151	5755	-9.41	-7.19	0.20	-6.99	30	PASS
159	5795	-9.64	-7.42	0.20	-7.22	30	PASS



802.11ac (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
144	5720	-6.39	-4.17	0.11	-4.06	30	PASS
149	5745	-6.55	-4.33	0.11	-4.22	30	PASS
157	5785	-5.30	-3.08	0.11	-2.97	30	PASS
165	5825	-5.64	-3.42	0.11	-3.31	30	PASS

802.11ac (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
142	5710	-10.28	-8.06	0.22	-7.84	30	PASS
151	5755	-9.30	-7.08	0.22	-6.86	30	PASS
159	5795	-9.52	-7.30	0.22	-7.08	30	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/300kHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
138	5690	-13.61	-11.39	0.42	-10.97	30	PASS
155	5775	-12.65	-10.43	0.42	-10.01	30	PASS

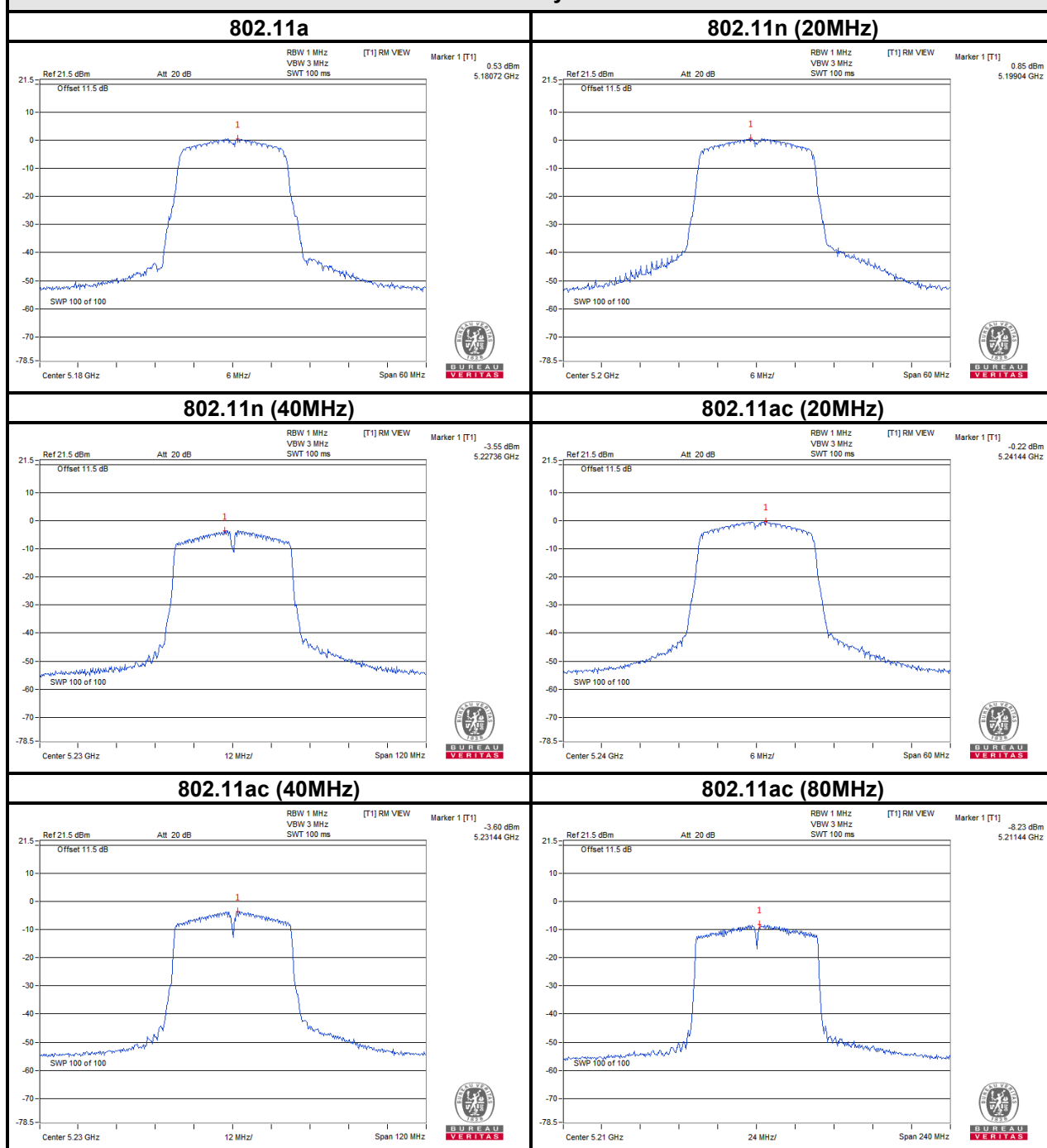


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Test Report No.: W7L-P24050005RF03

For 5180~5240MHz

PSD w/o Duty Factor

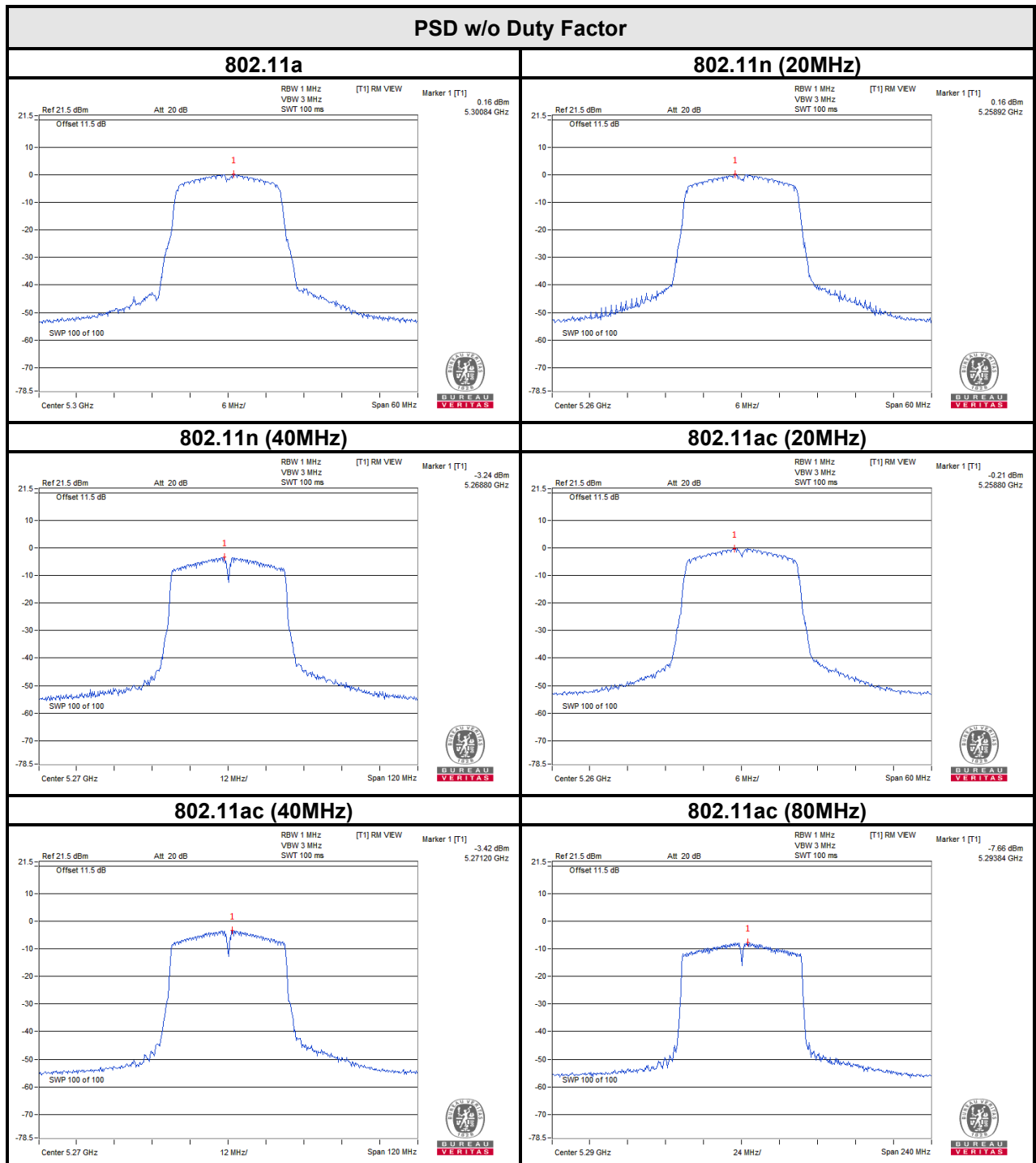




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VERITAS

Test Report No.: W7L-P24050005RF03

For 5260~5320MHz

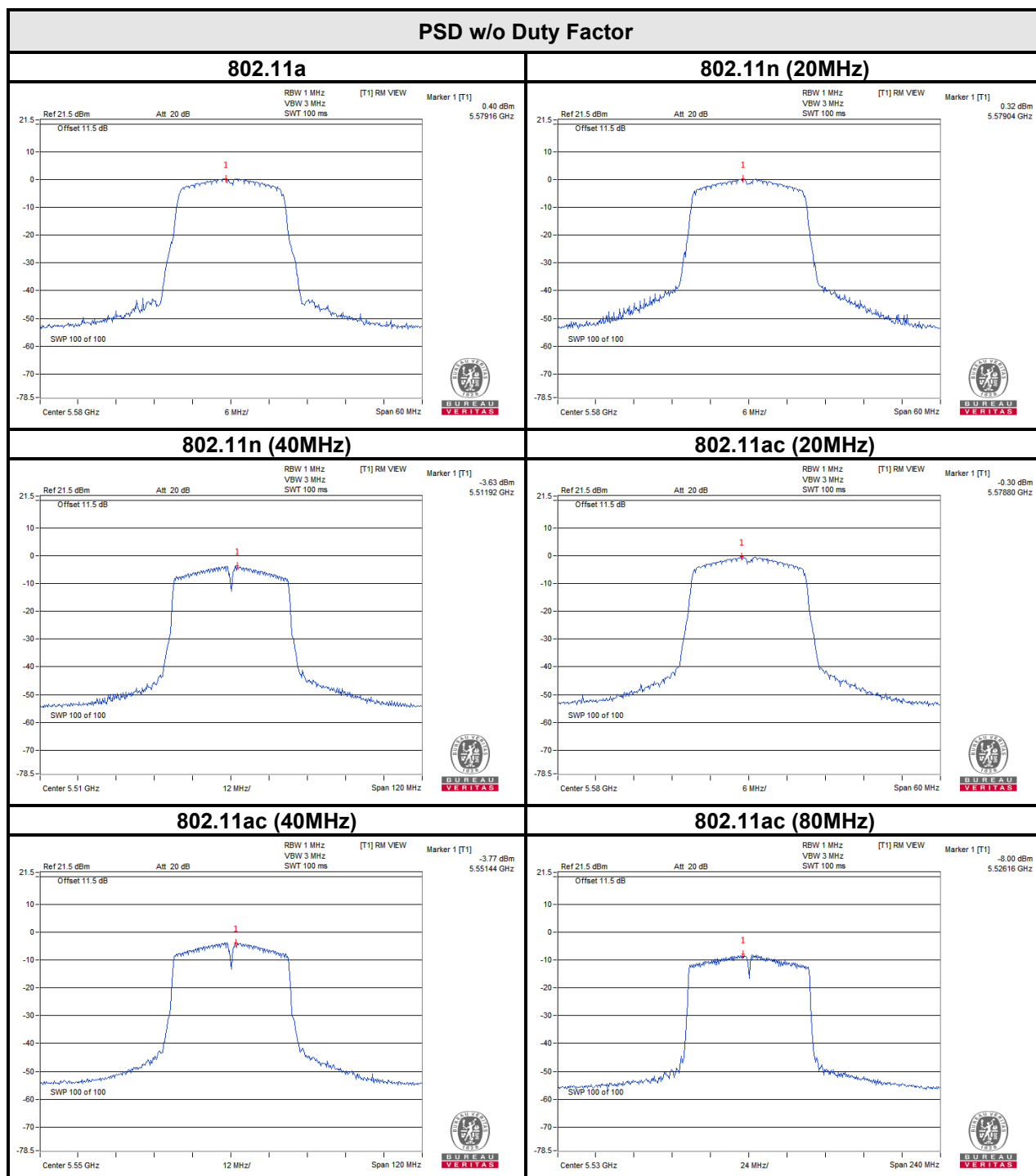




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VERITAS

Test Report No.: W7L-P24050005RF03

For 5500~5700MHz

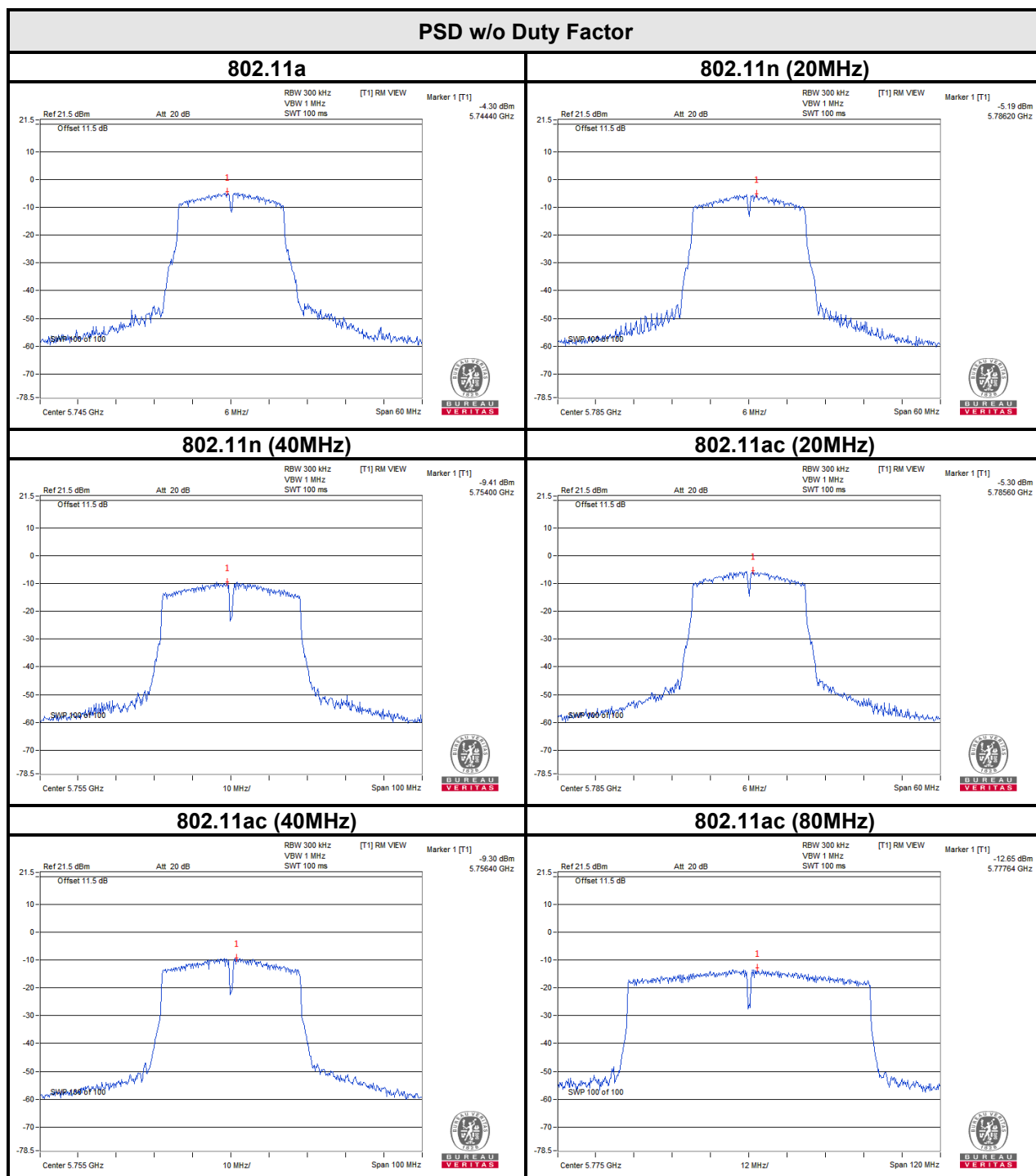




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VERITAS

Test Report No.: W7L-P24050005RF03

For 5745~5825MHz





Test Report No.: W7L-P24050005RF03

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

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

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

---END---