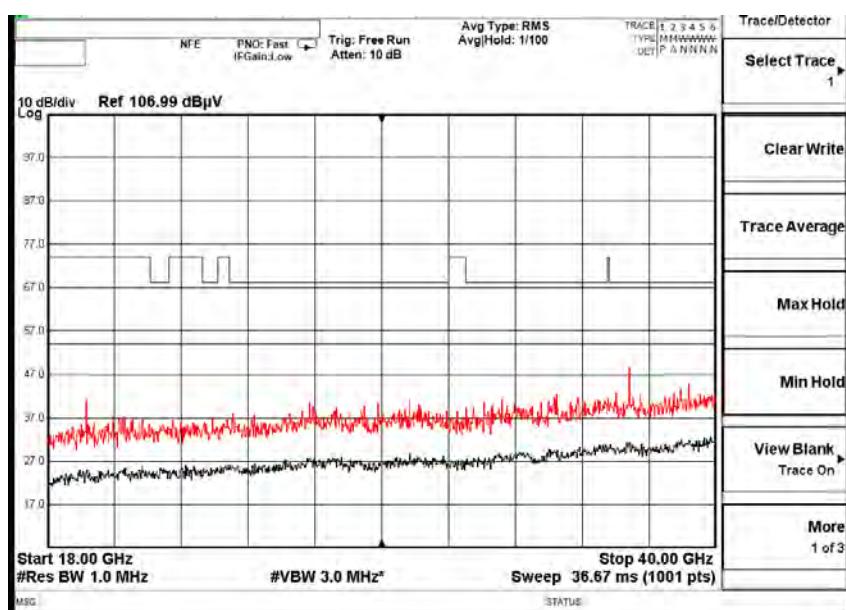
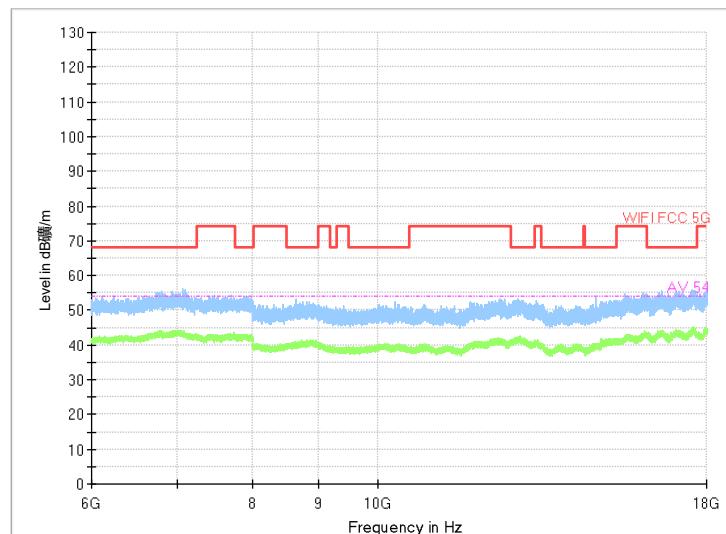




BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

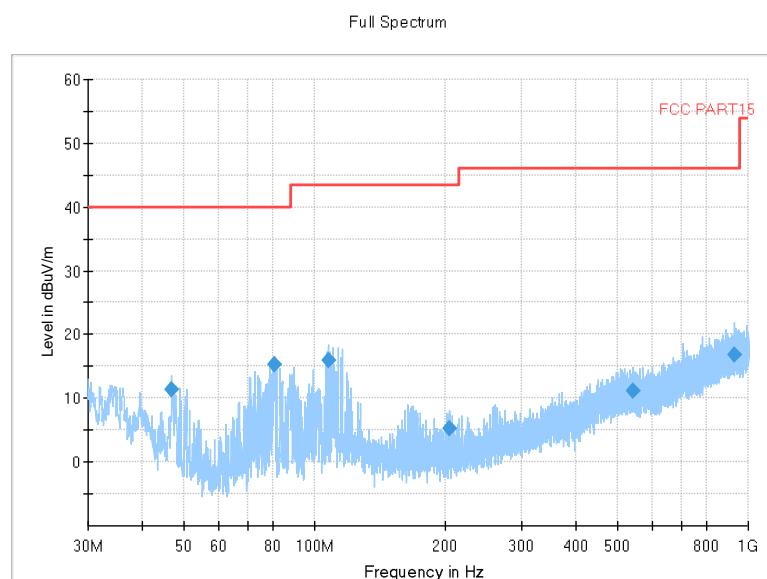
Full Spectrum



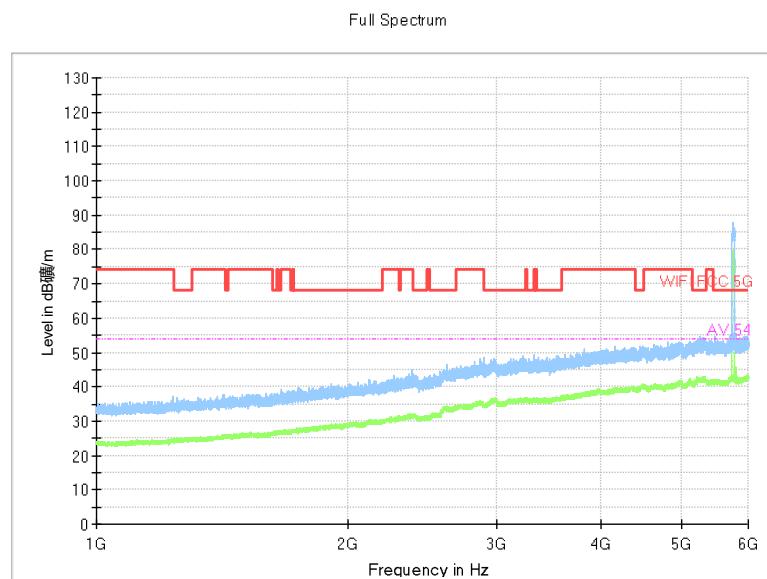


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10



Frequency Range: 30MHz -1GHz QP mode  
Test Mode: 802.11ac(VHT40)



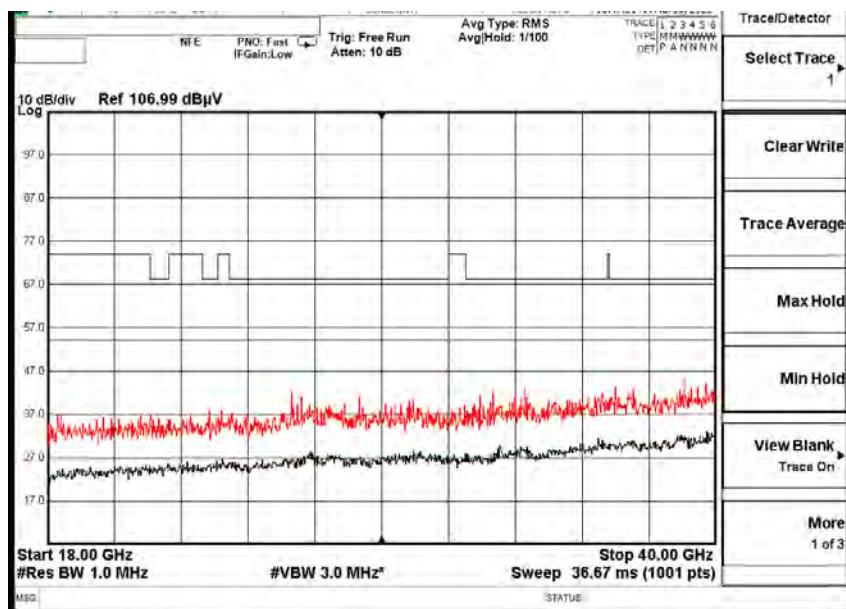
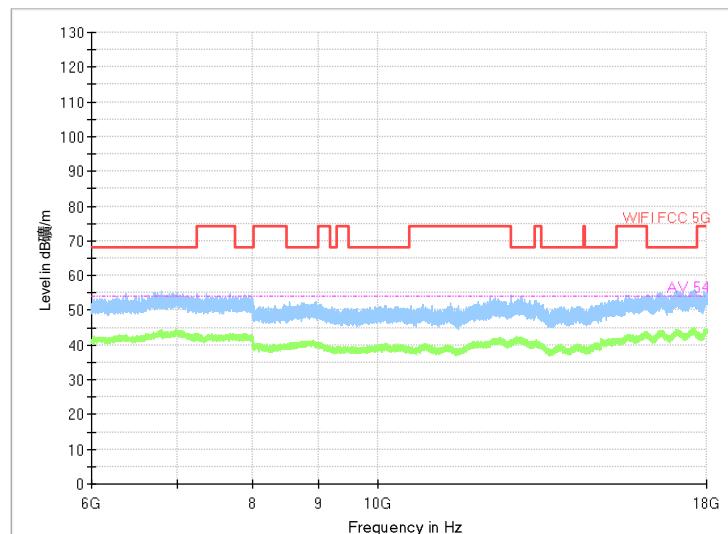
Frequency Range: 1GHz -6GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ac(VHT40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

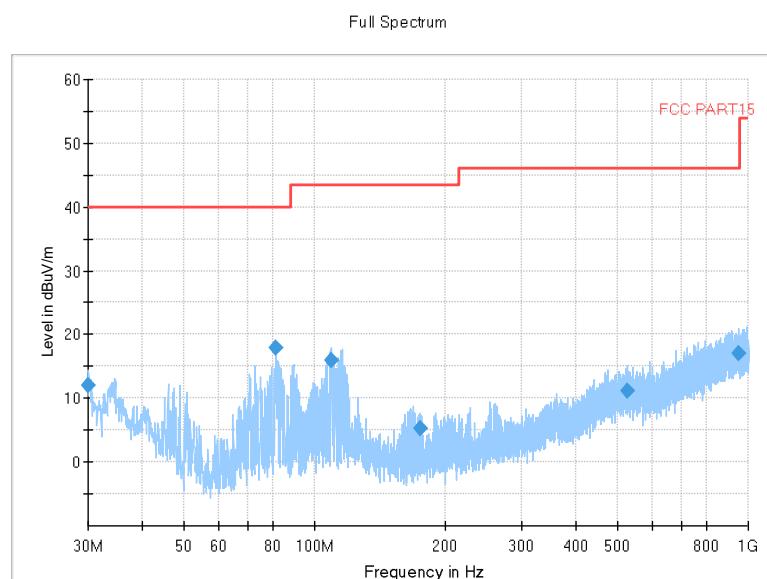
Full Spectrum



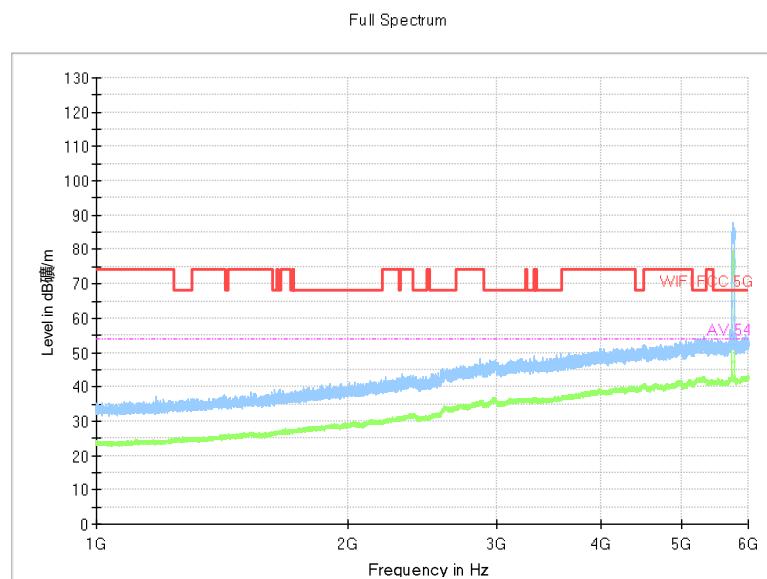


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10



Frequency Range: 30MHz -1GHz QP mode  
Test Mode: 802.11ax(HE40)



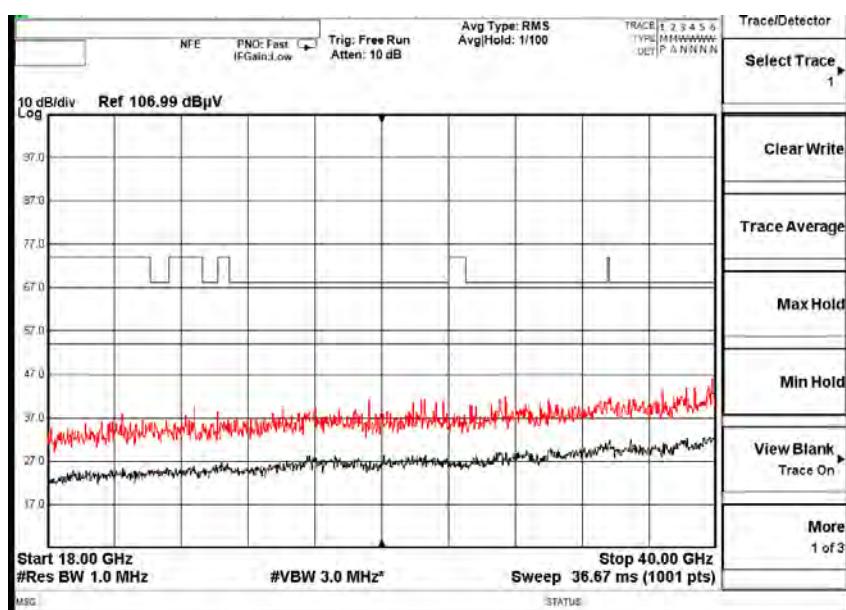
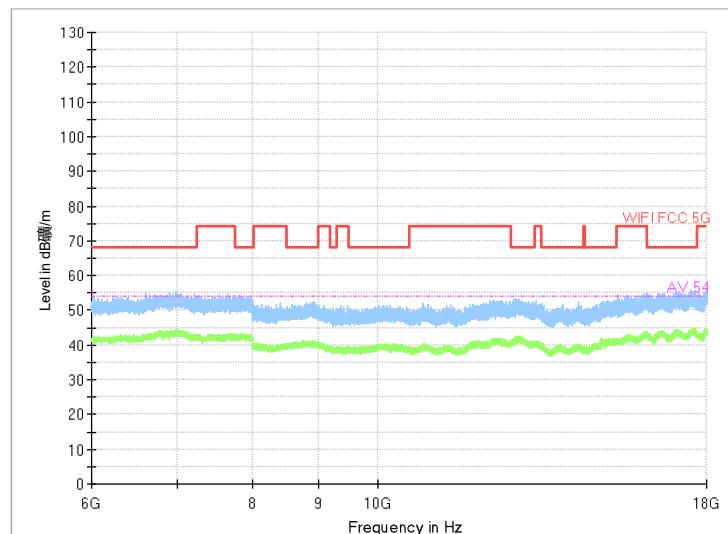
Frequency Range: 1GHz -6GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum





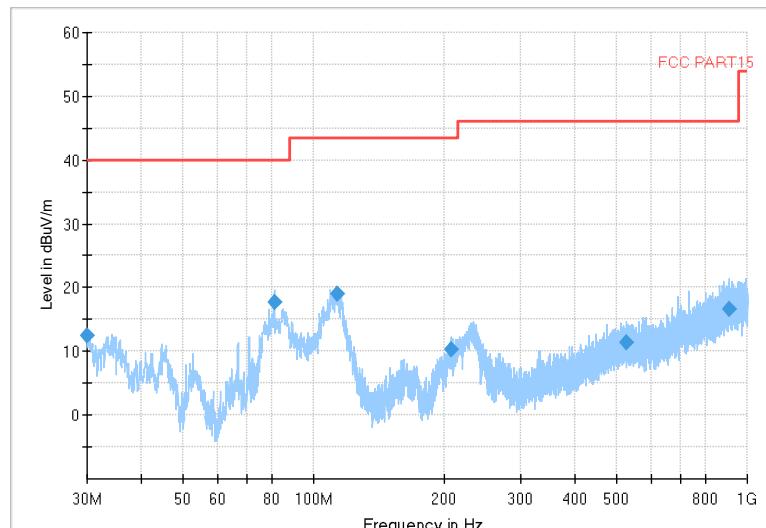
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5795

Channel No.:159

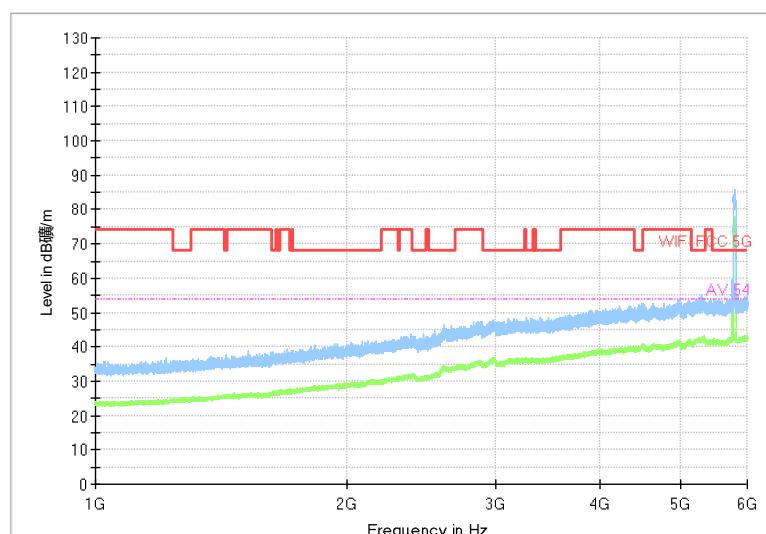
Full Spectrum



Frequency Range: 30MHz -1GHz QP mode

Modulation type: 802.11n(HT40)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

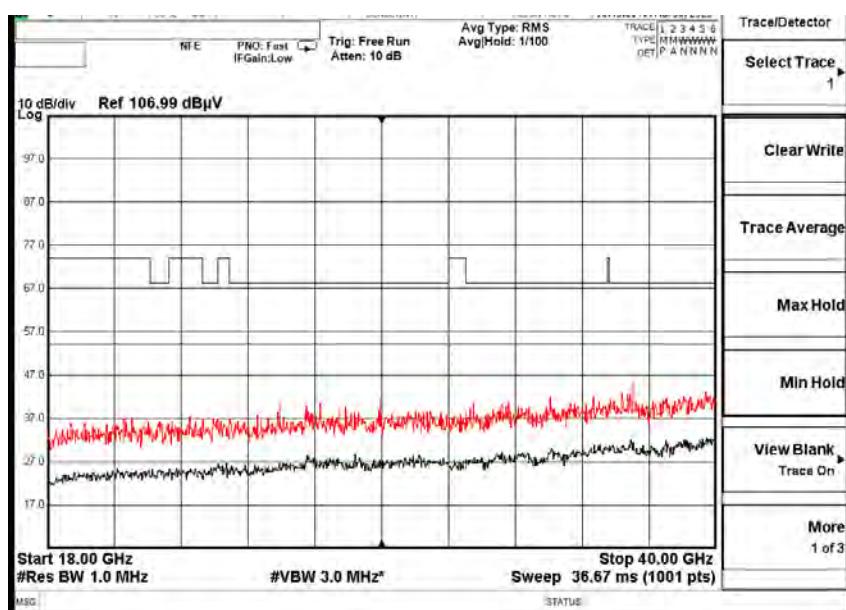
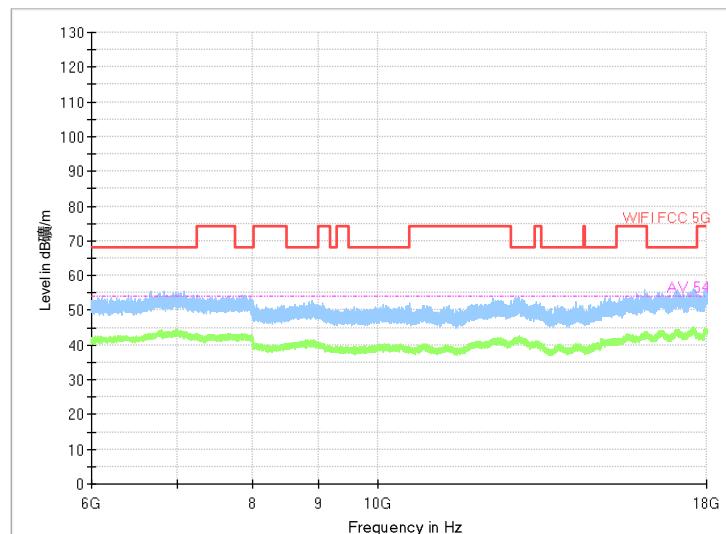
Modulation type: 802.11n(HT40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

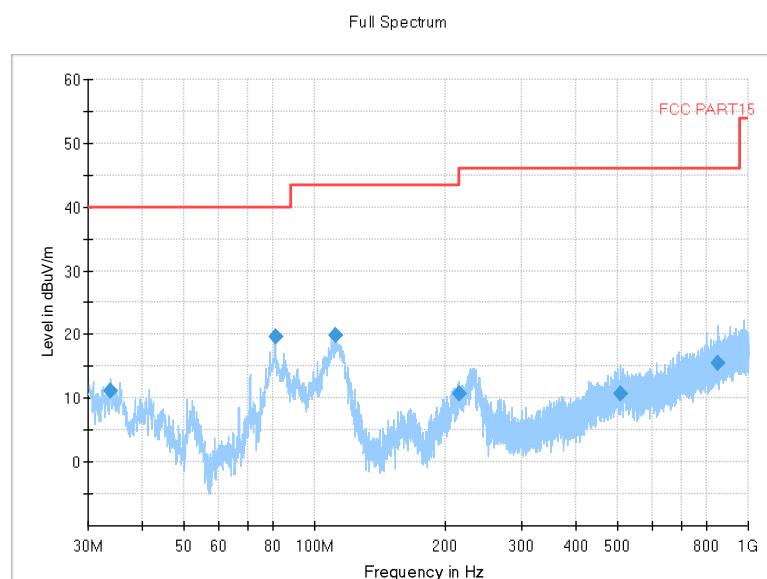
Full Spectrum



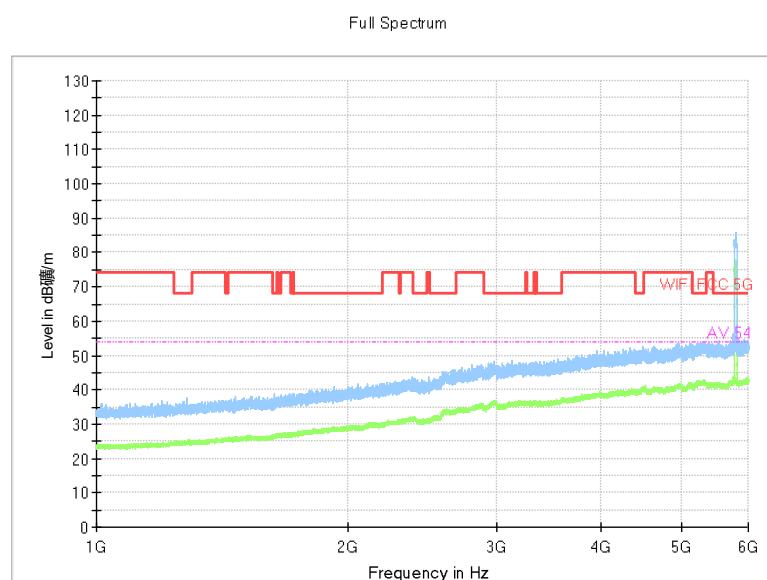


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10



Frequency Range: 30MHz -1GHz QP mode  
Test Mode: 802.11ac(VHT40)



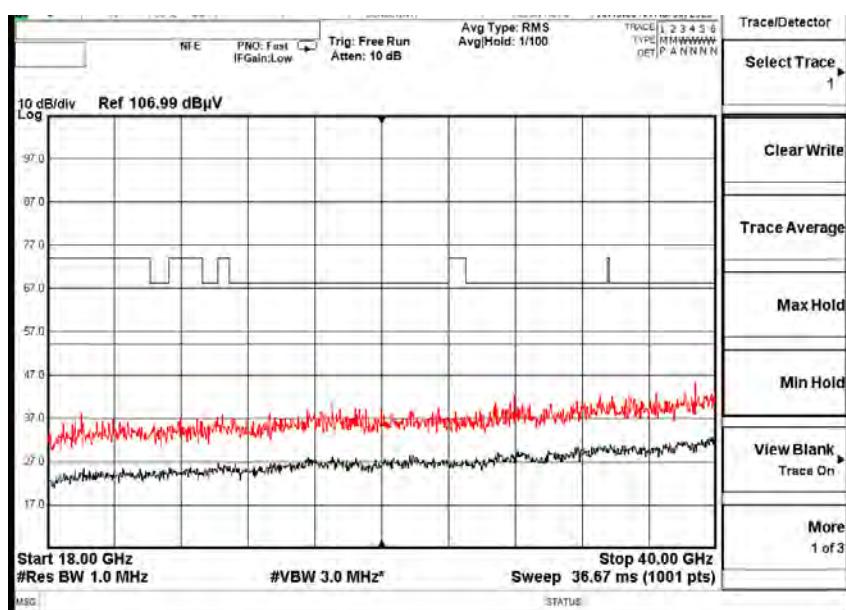
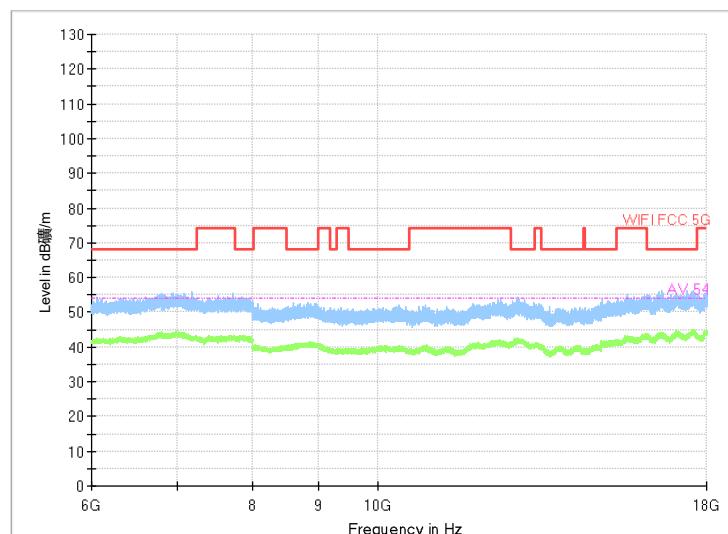
Frequency Range: 1GHz -6GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ac(VHT40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

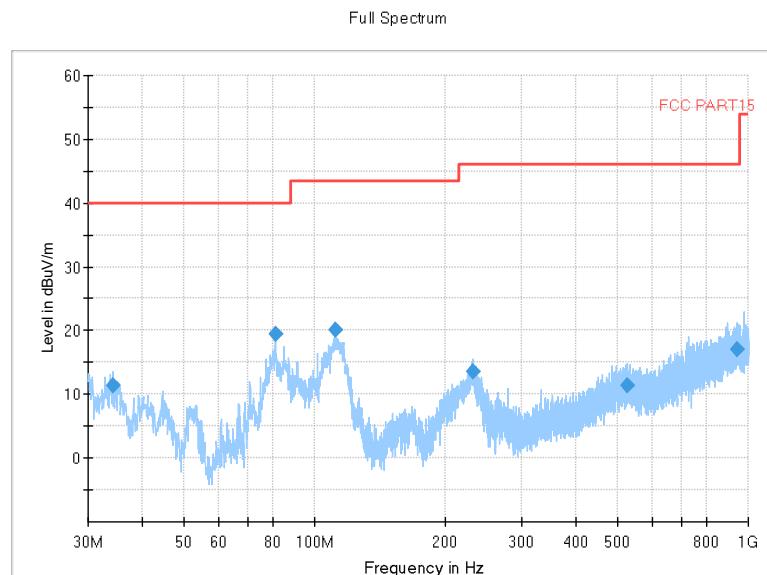
Full Spectrum



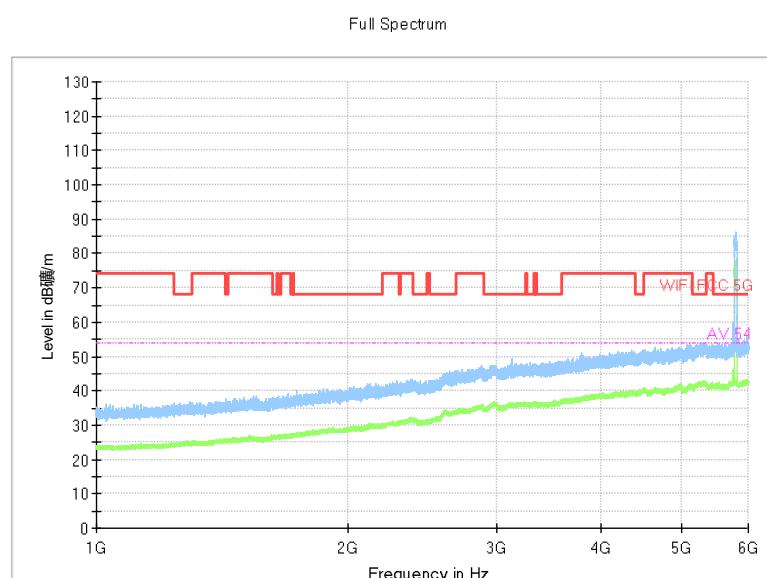


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10



Frequency Range: 30MHz -1GHz QP mode  
Test Mode: 802.11ax(HE40)



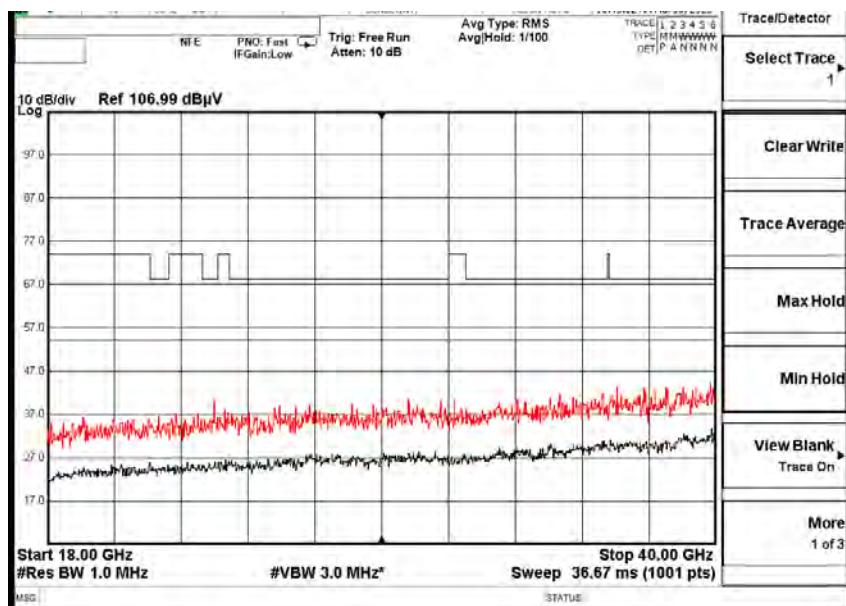
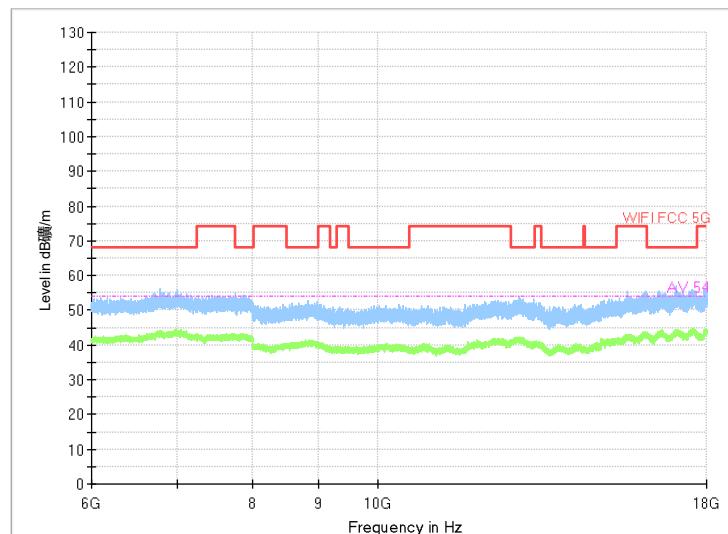
Frequency Range: 1GHz -6GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



Frequency Range: 18GHz -40GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE40)



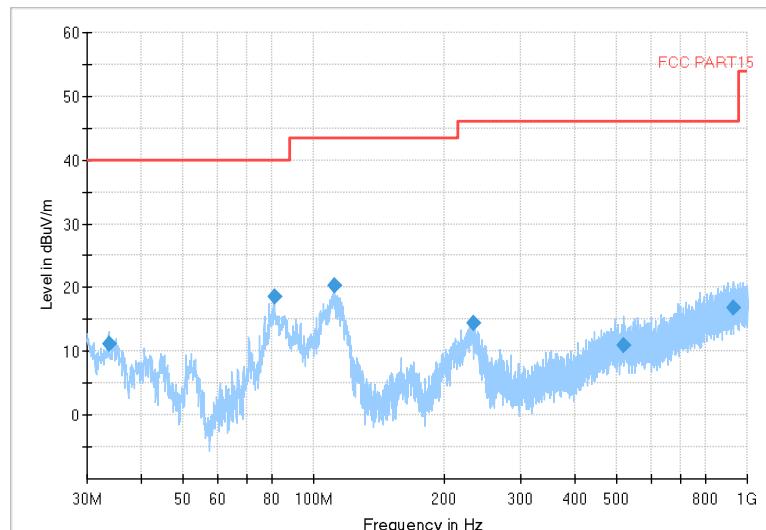
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5775

Channel No.:155

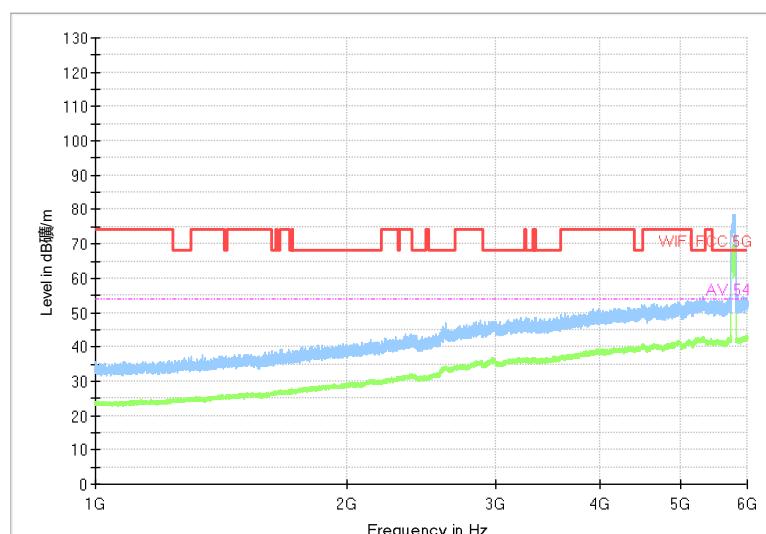
Full Spectrum



Frequency Range: 30MHz -1GHz QP mode

Test Mode: 802.11ac(VHT80)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

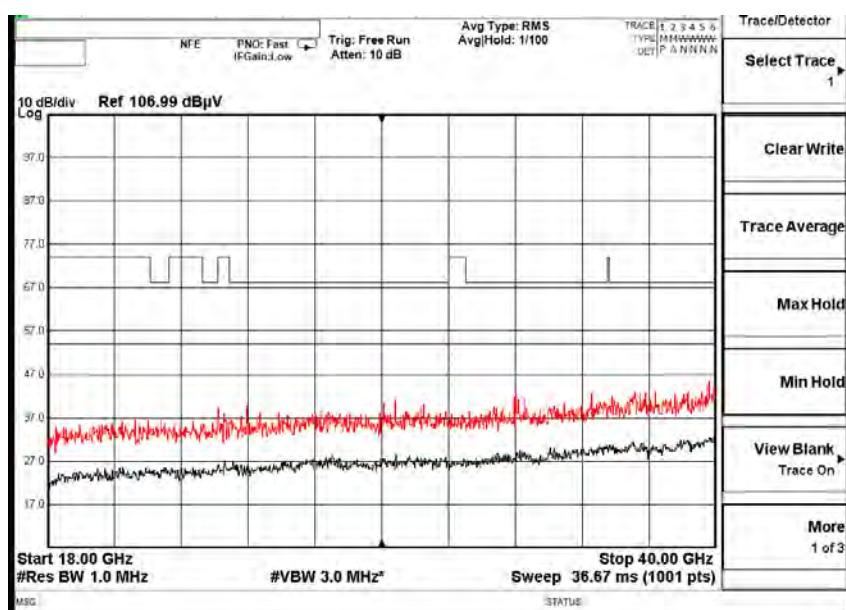
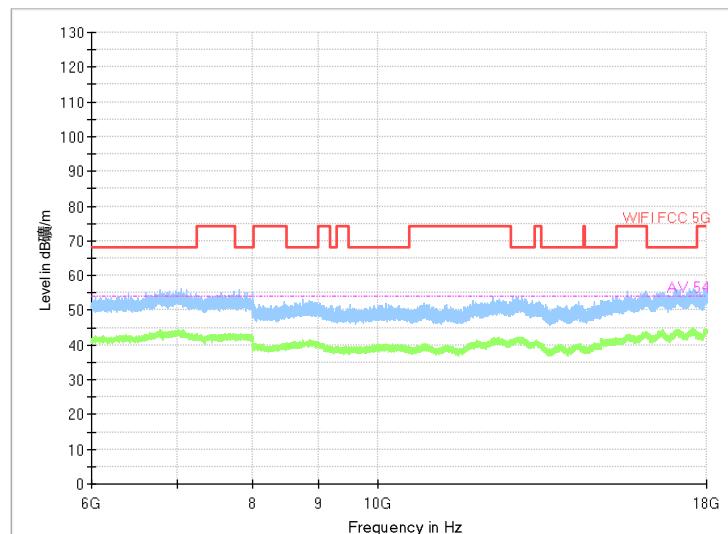
Test Mode: 802.11ac(VHT80)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

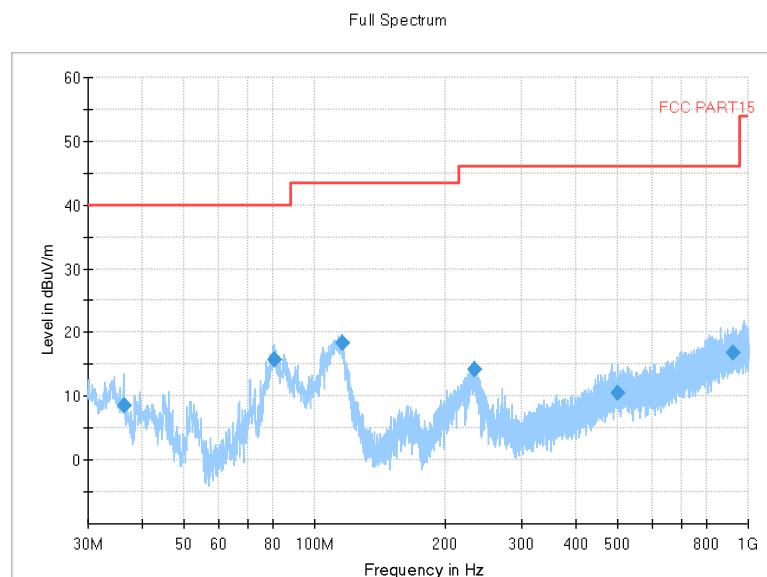
Full Spectrum



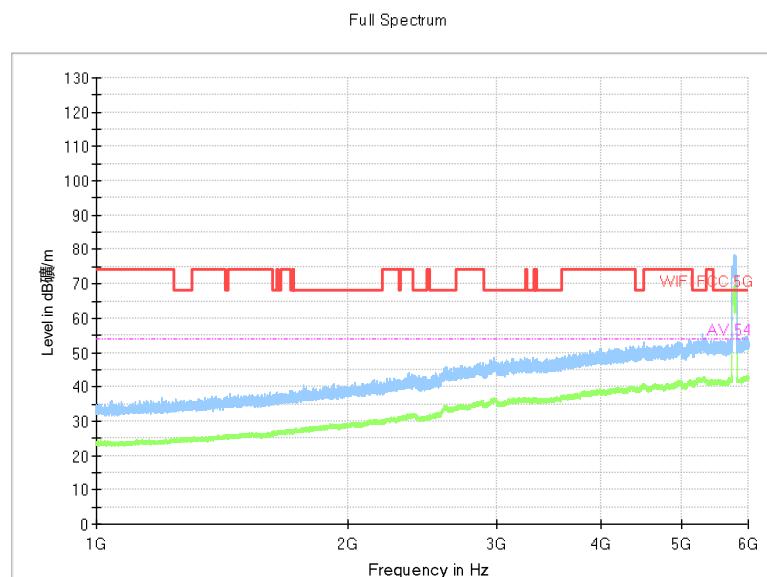


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10



Frequency Range: 30MHz -1GHz QP mode  
Test Mode: 802.11ax(HE80)



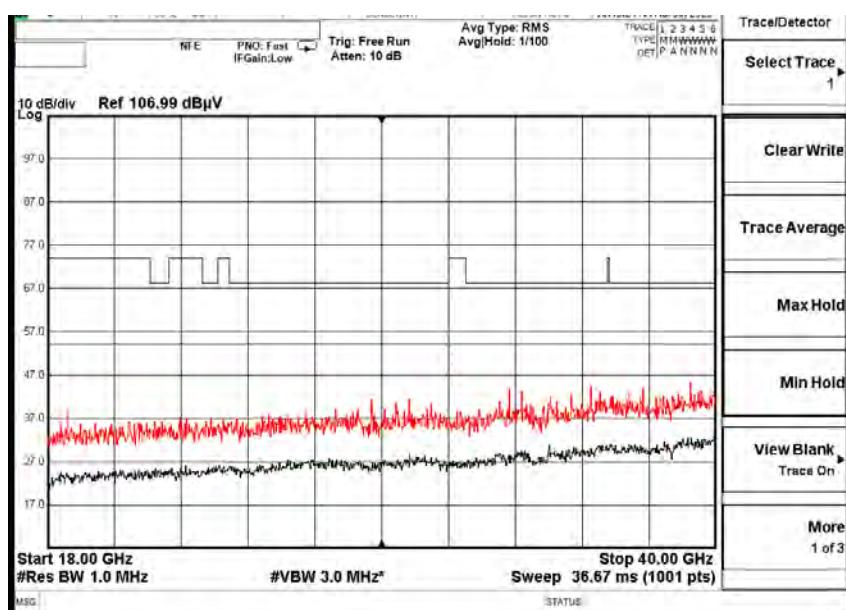
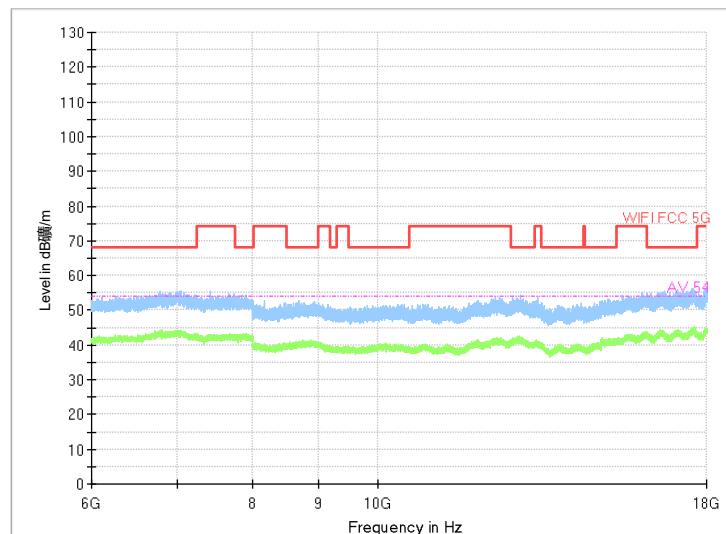
Frequency Range: 1GHz -6GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE80)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



Frequency Range: 18GHz -40GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE80)



BUREAU  
VERITAS

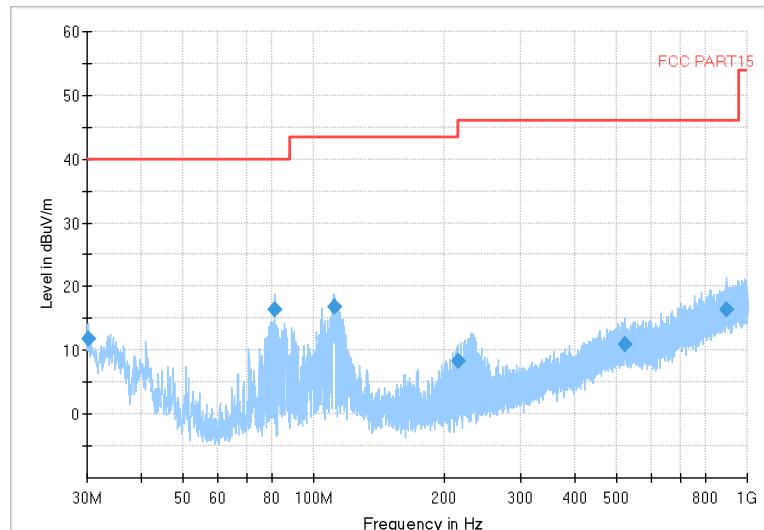
Test Report No.: PSU-NQN2502170113RF10

### Partial RU (Tone26)

Carrier frequency (MHz): 5180

Channel No.:36

Full Spectrum

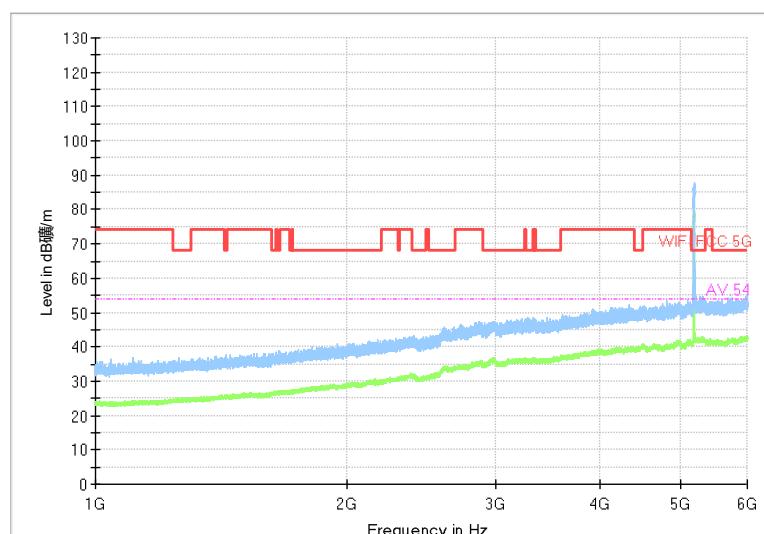


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

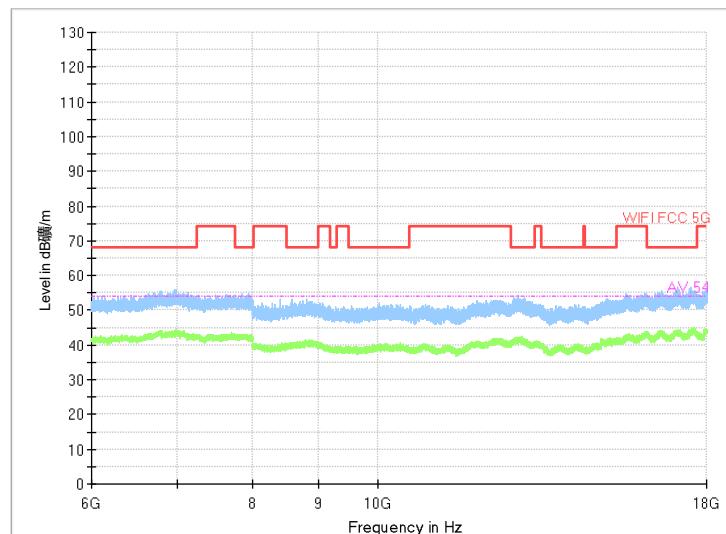
Test Mode: 802.11ax(HE20)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

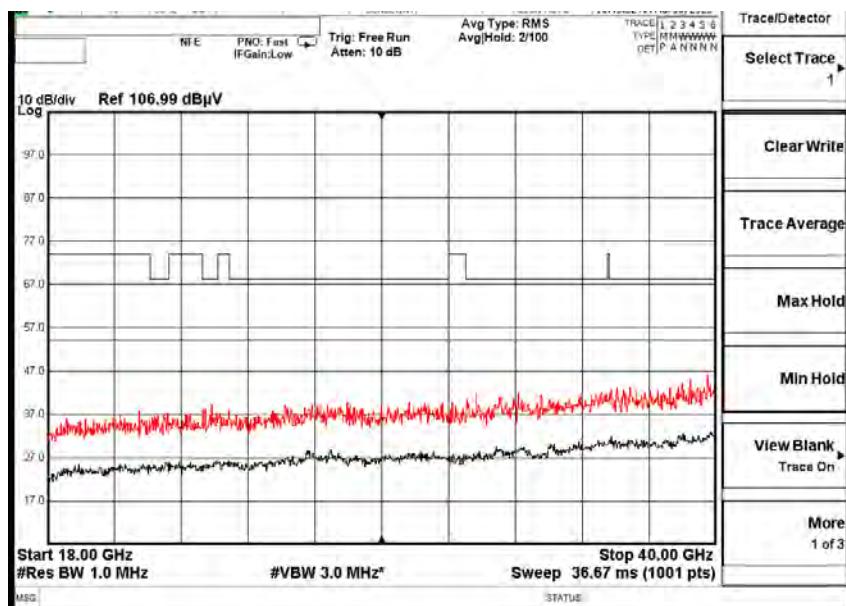
Full Spectrum



Frequency Range: 6GHz -18GHz

Detector: Av mode and PK mode

Test Mode: 802.11ax(HE20)



Frequency Range: 18GHz -40GHz

Detector: Av mode and PK mode

Test Mode: 802.11ax(HE20)



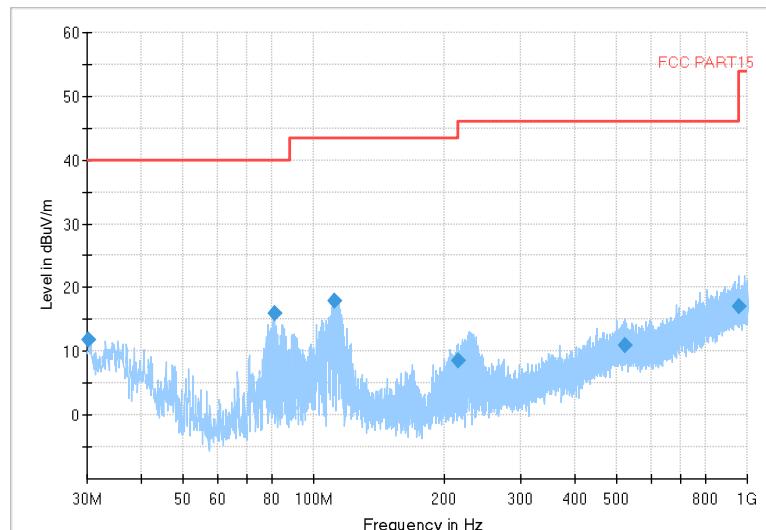
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5220

Channel No.44

Full Spectrum

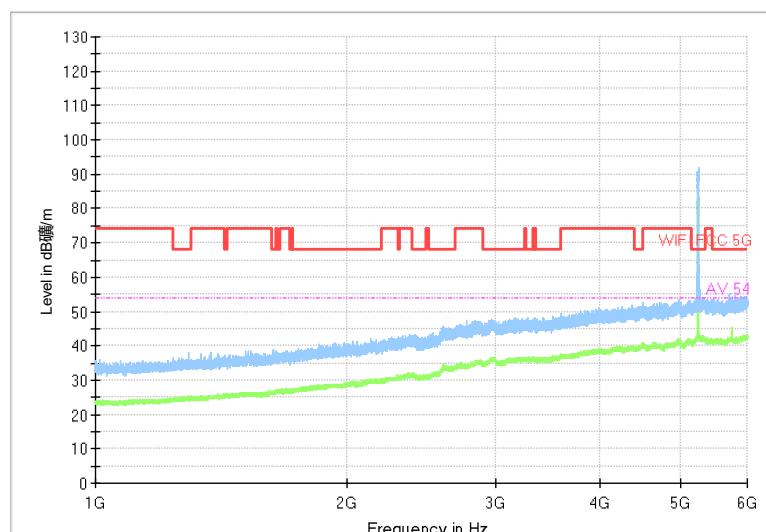


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

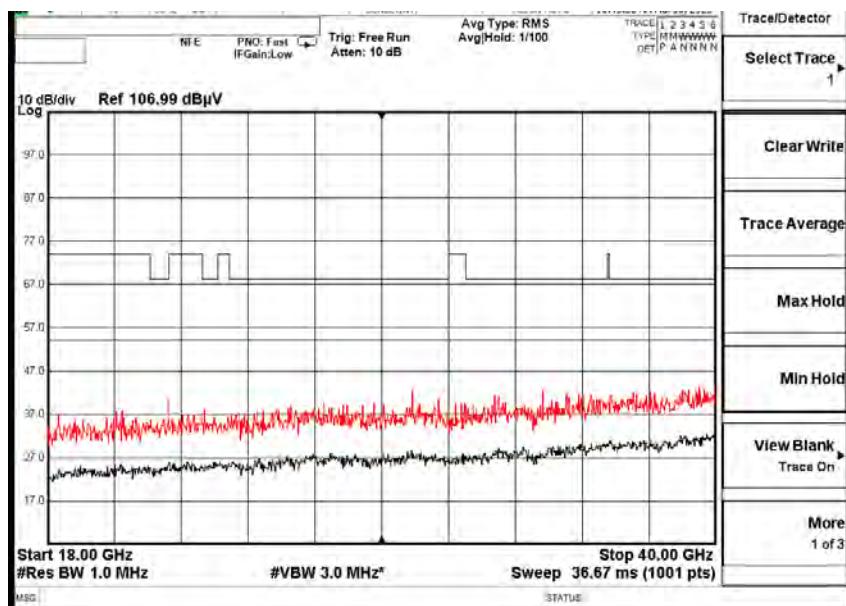
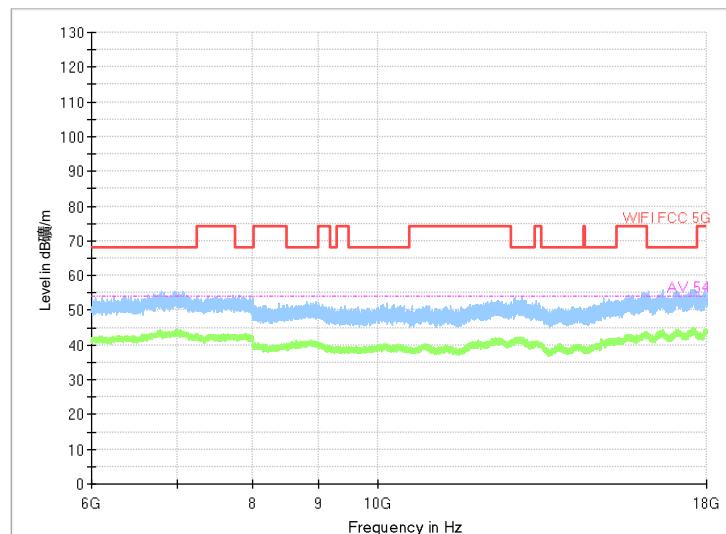
Test Mode: 802.11ax(HE20)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



Frequency Range: 18GHz -40GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE20)



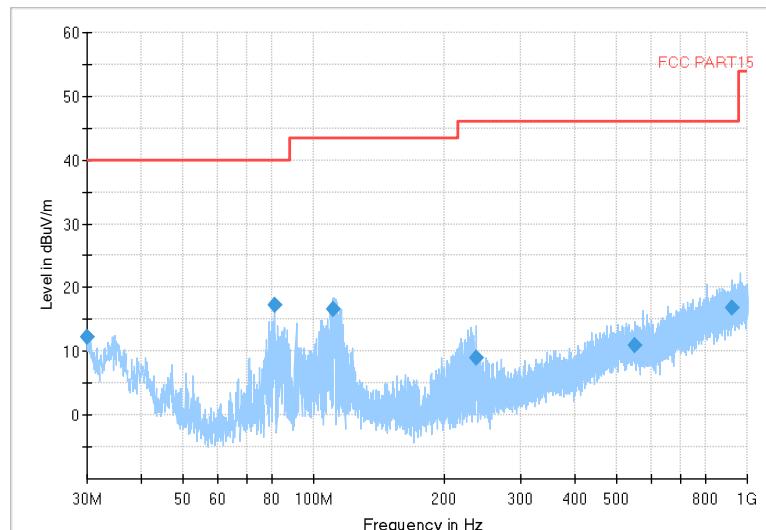
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5240

Channel No.:48

Full Spectrum

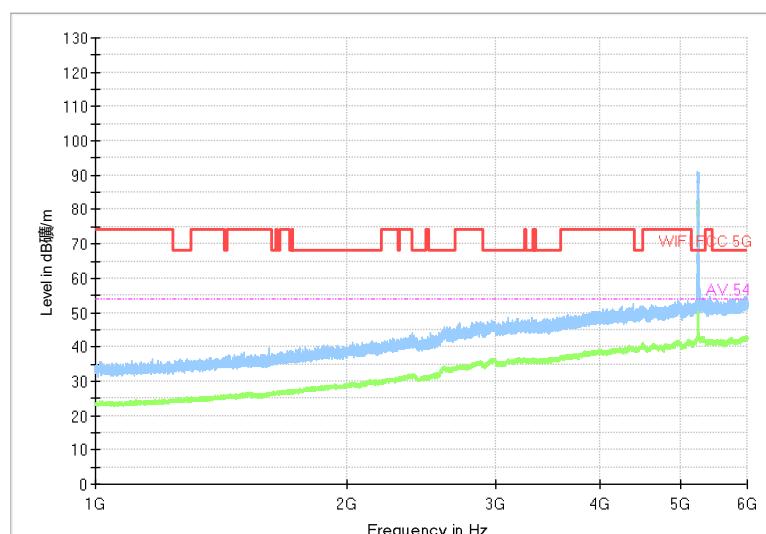


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

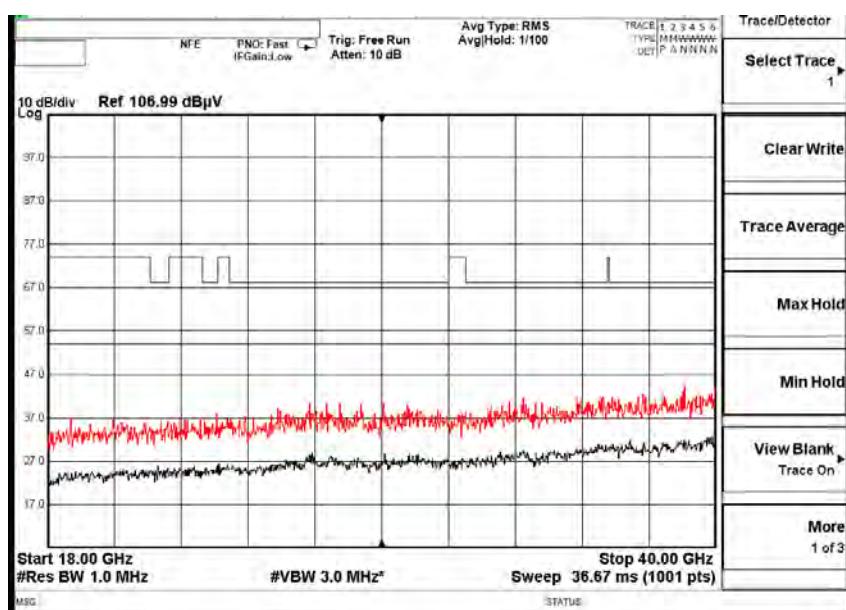
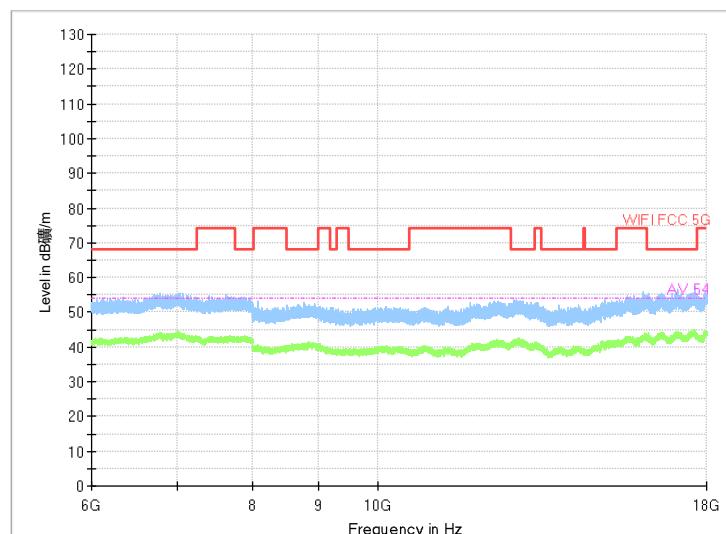
Test Mode: 802.11ax(HE20)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



Frequency Range: 18GHz -40GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE20)



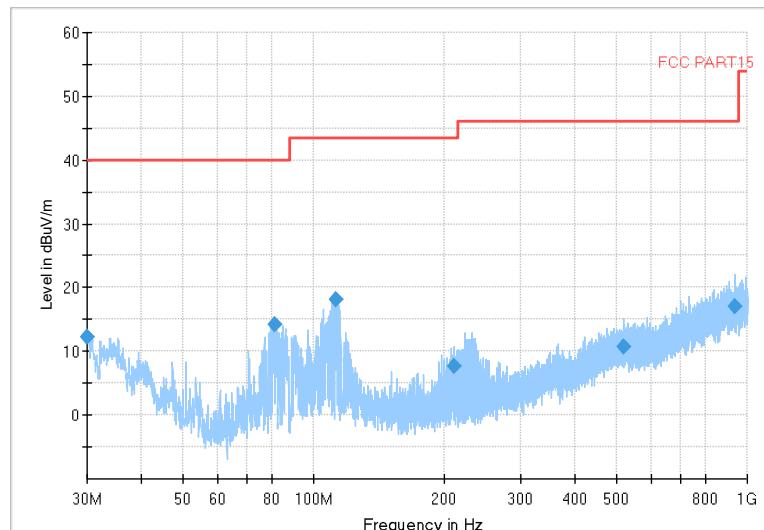
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5190

Channel No.:38

Full Spectrum

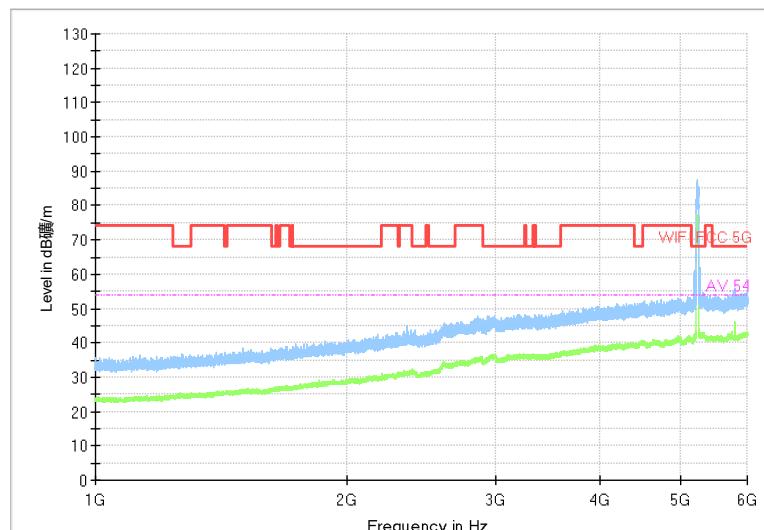


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

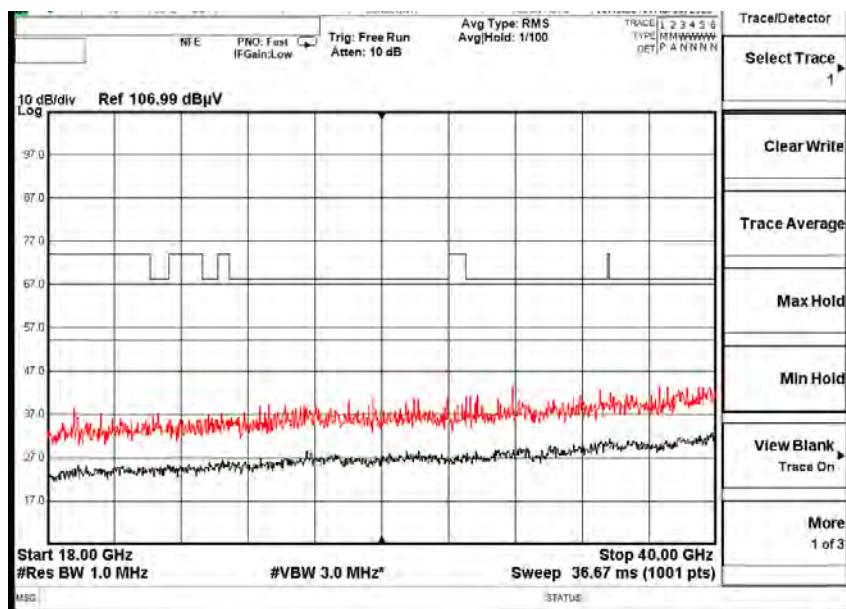
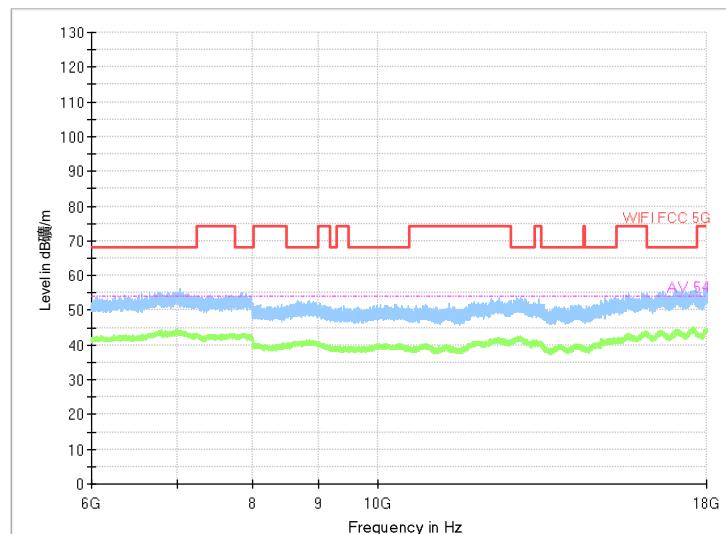
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum

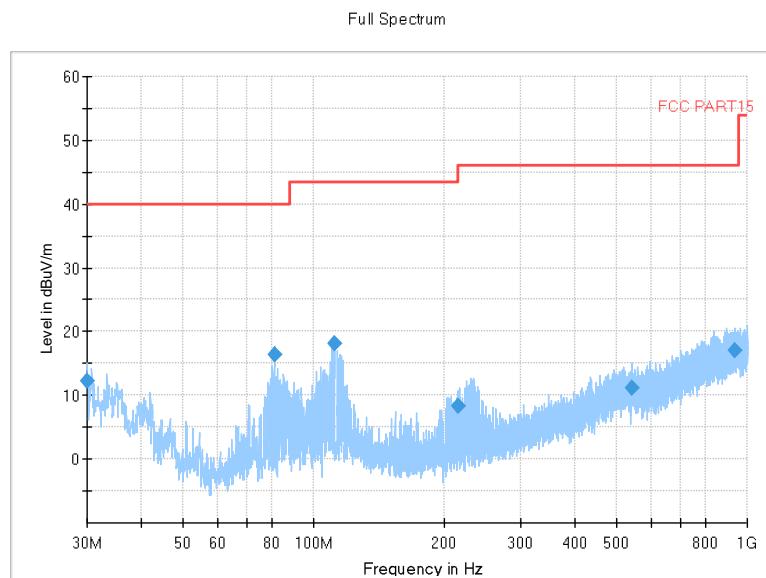




BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

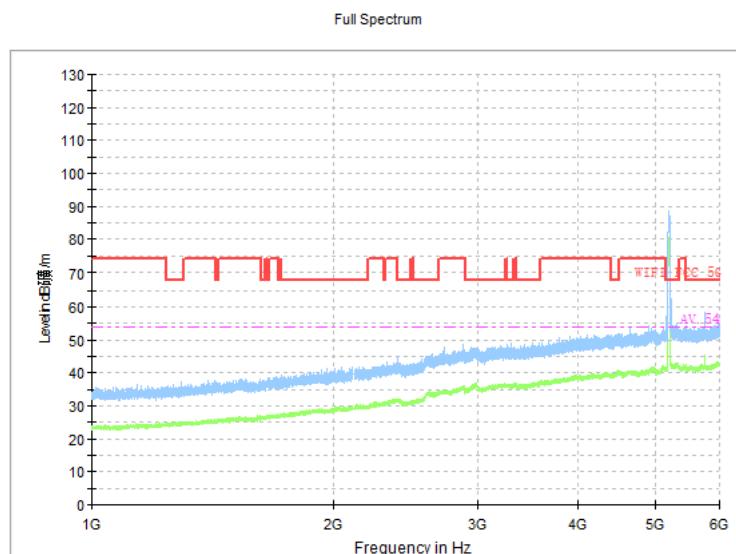
Carrier frequency (MHz): 5230  
Channel No.:46



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

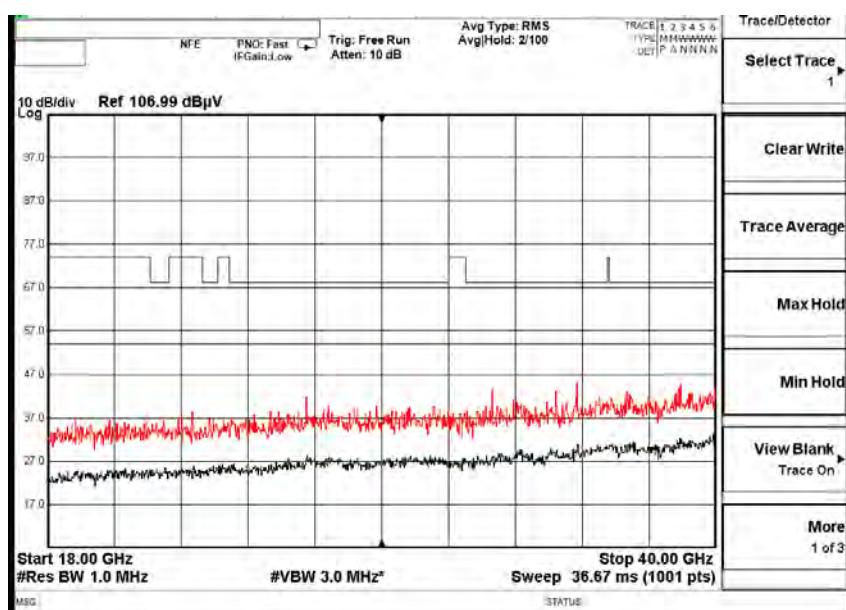
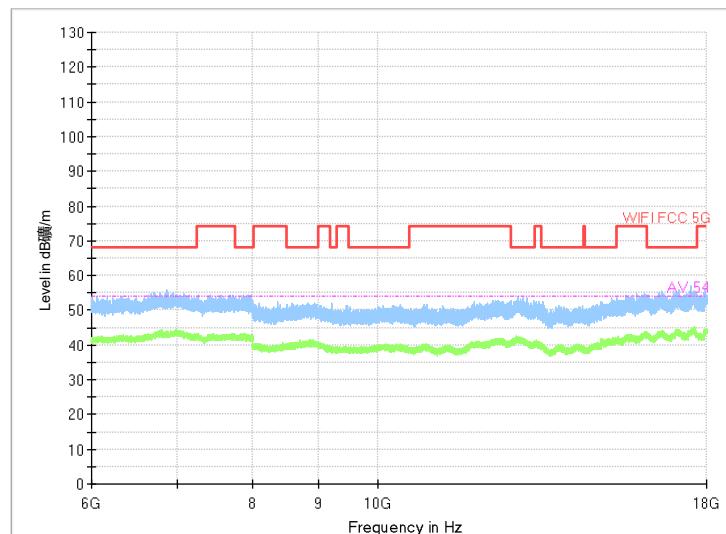
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum





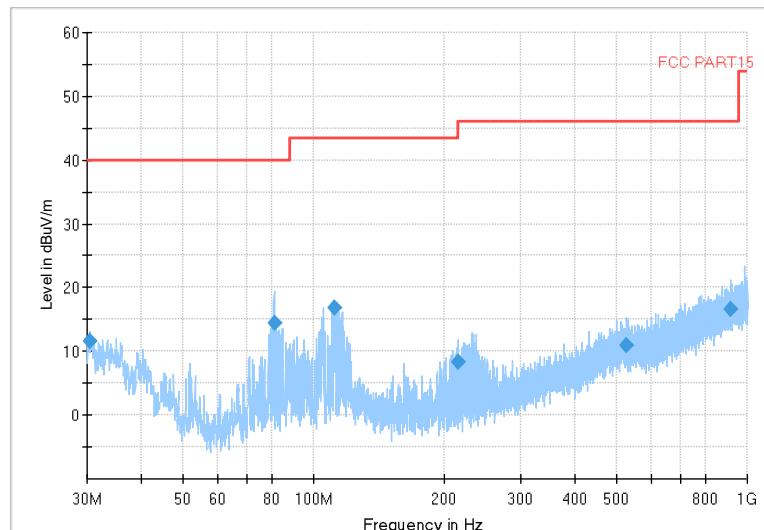
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5210

Channel No.:42

Full Spectrum

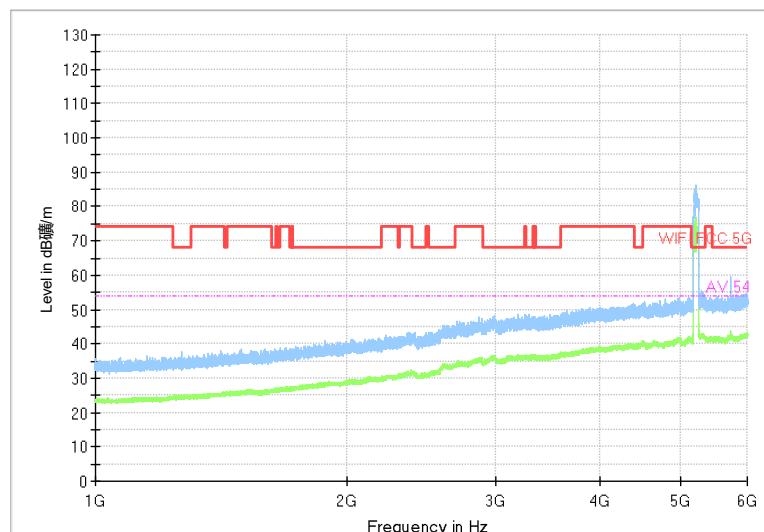


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE80)

Full Spectrum



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

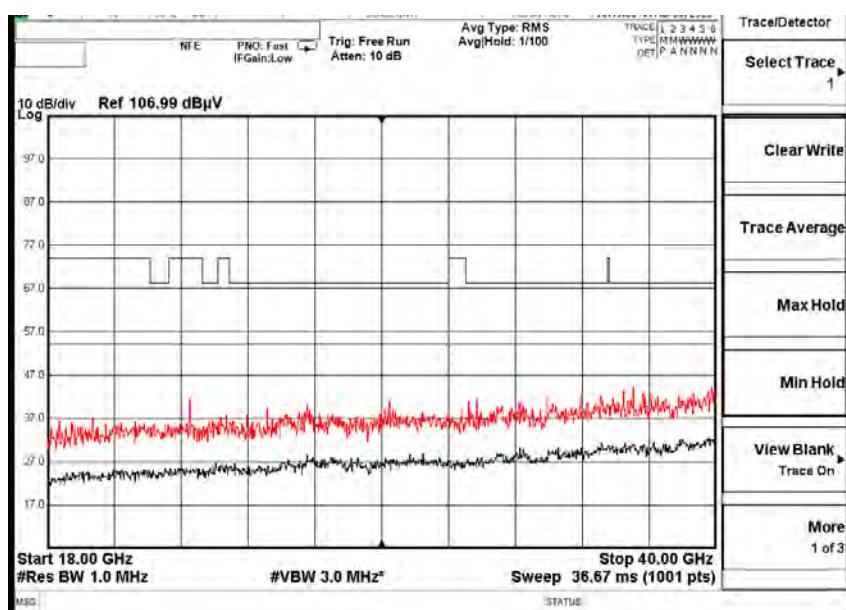
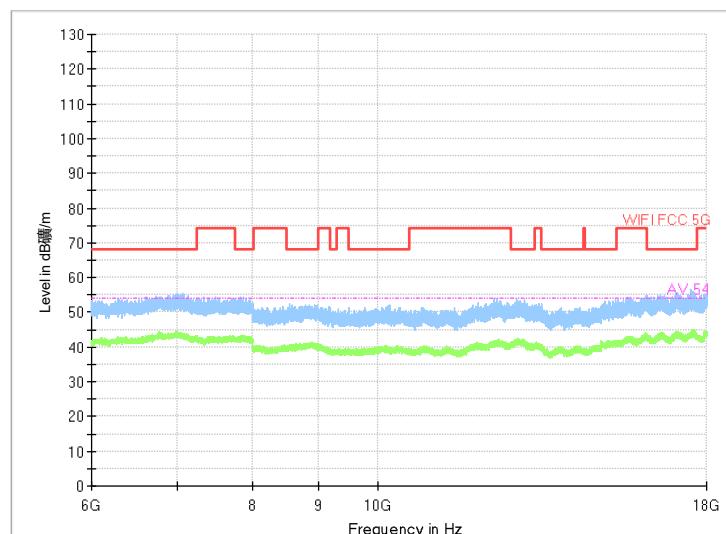
Test Mode: 802.11ax(HE80)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



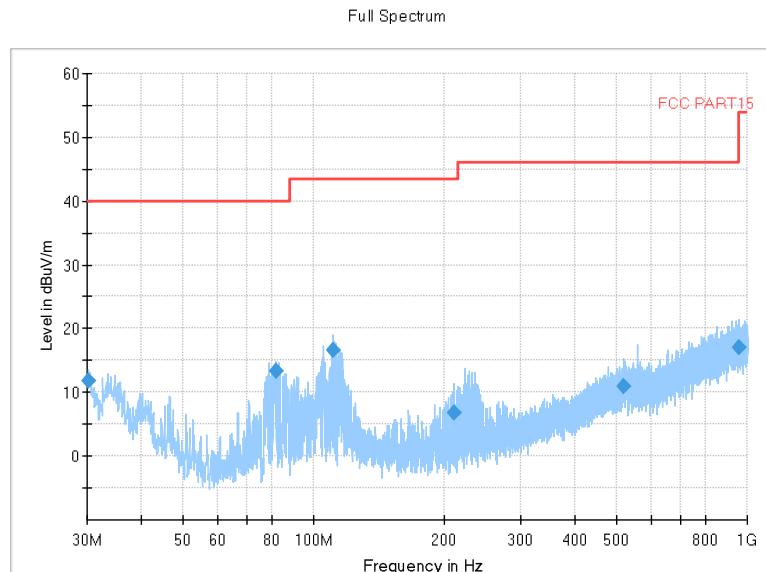


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5745

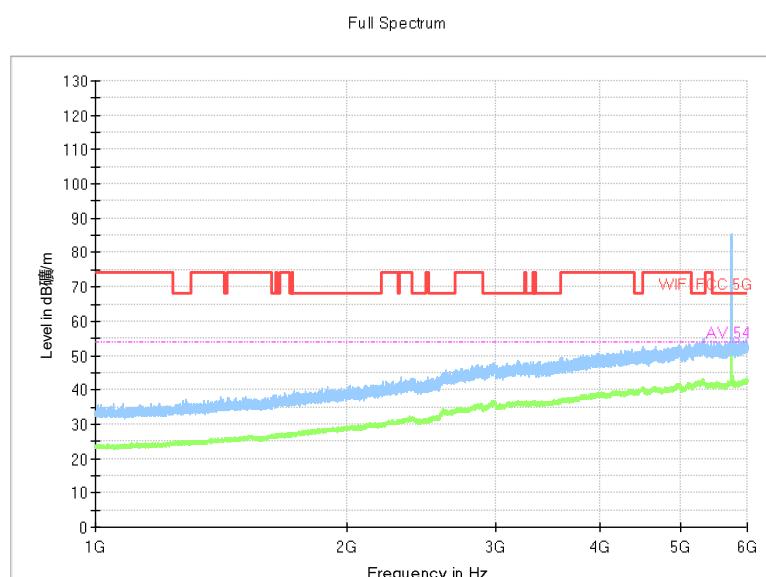
Channel No.:149



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

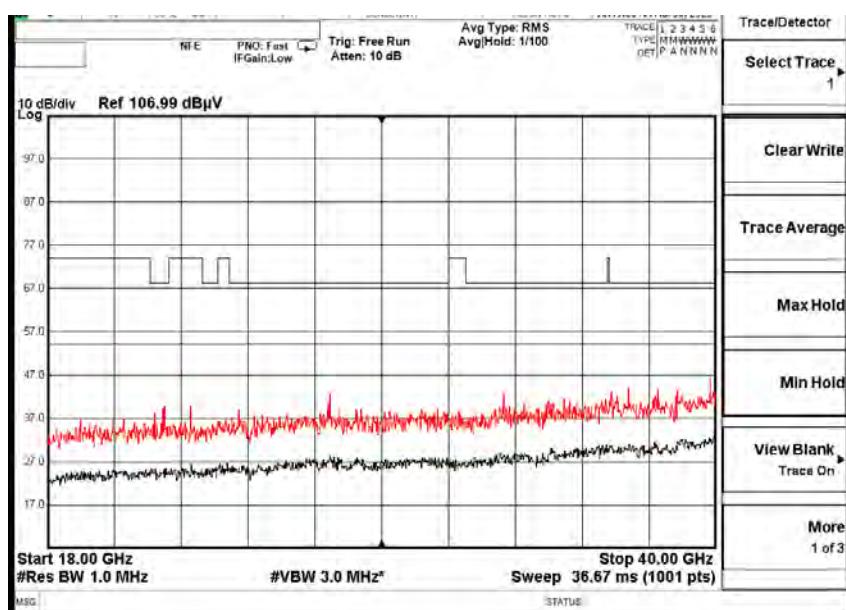
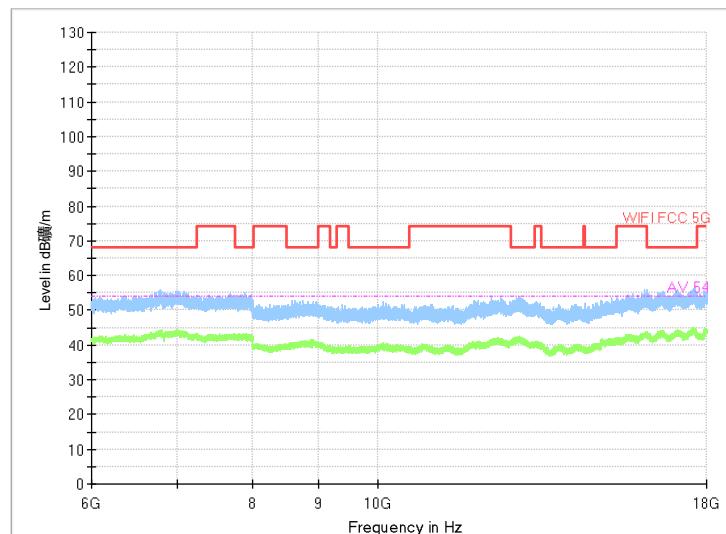
Test Mode: 802.11ax(HE20)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



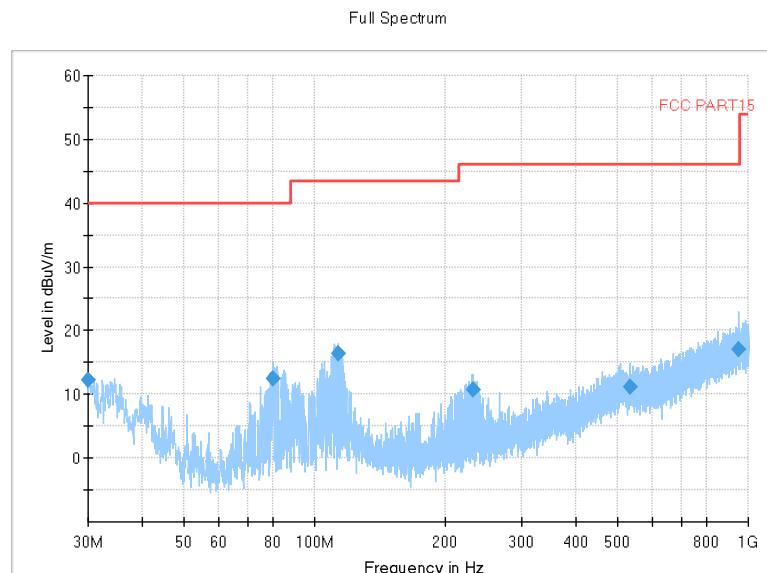


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5785

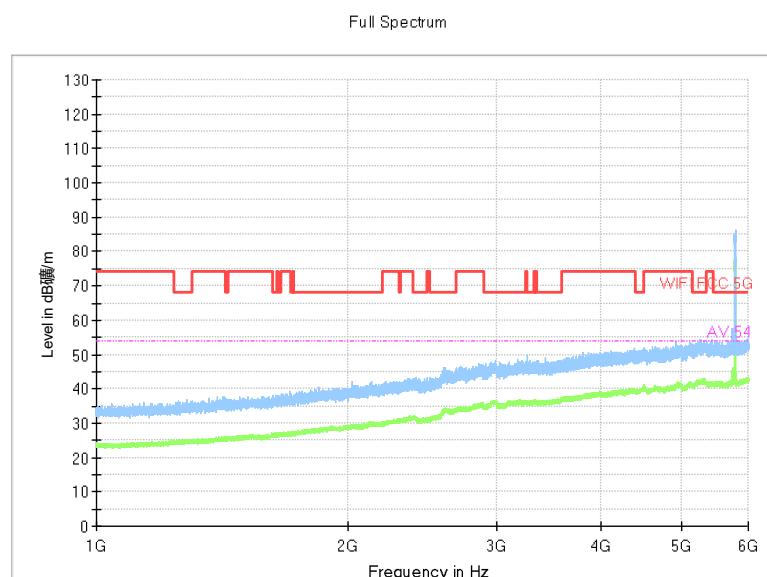
Channel No.:157



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

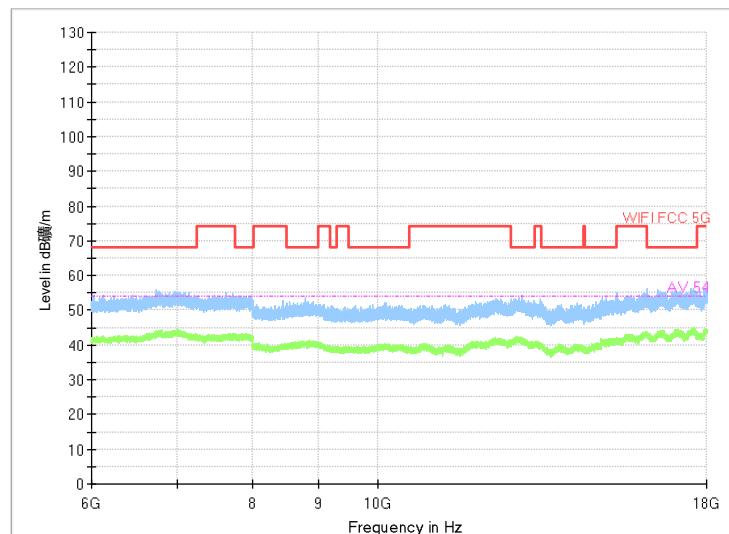
Test Mode: 802.11ax(HE20)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

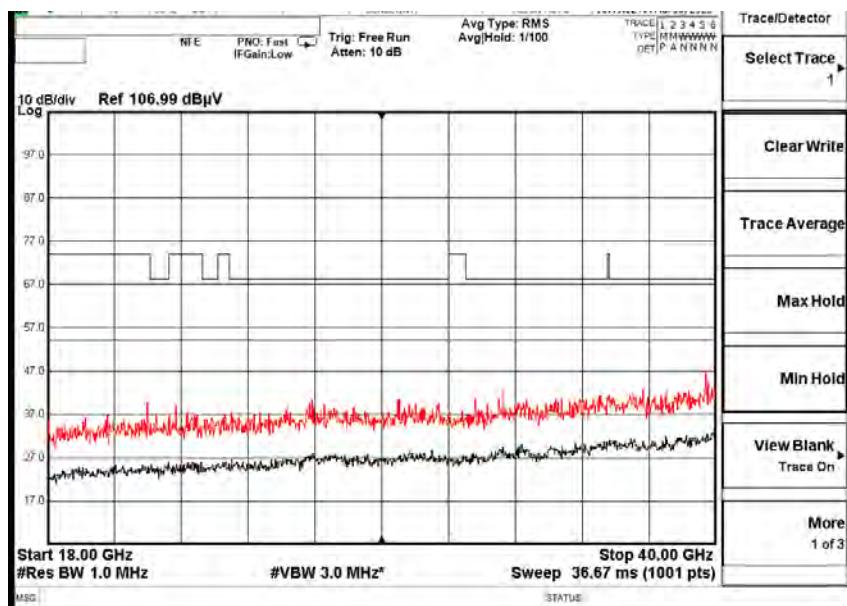
Full Spectrum



Frequency Range: 6GHz -18GHz

Detector: Av mode and PK mode

Test Mode: 802.11ax(HE20)



Frequency Range: 18GHz -40GHz

Detector: Av mode and PK mode

Test Mode: 802.11ax(HE20)



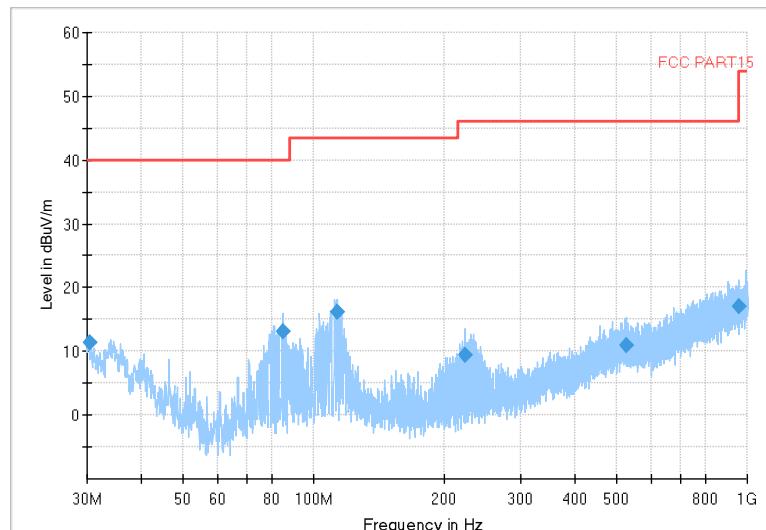
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

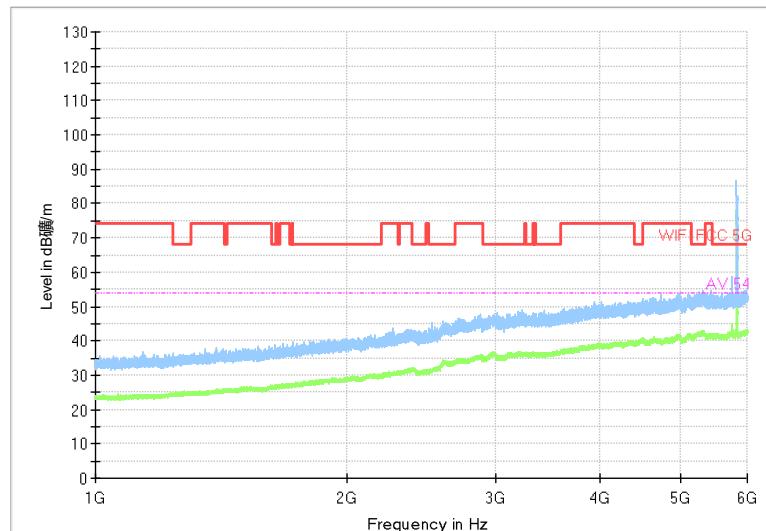
Carrier frequency (MHz): 5825

Channel No.:165

Full Spectrum



Full Spectrum

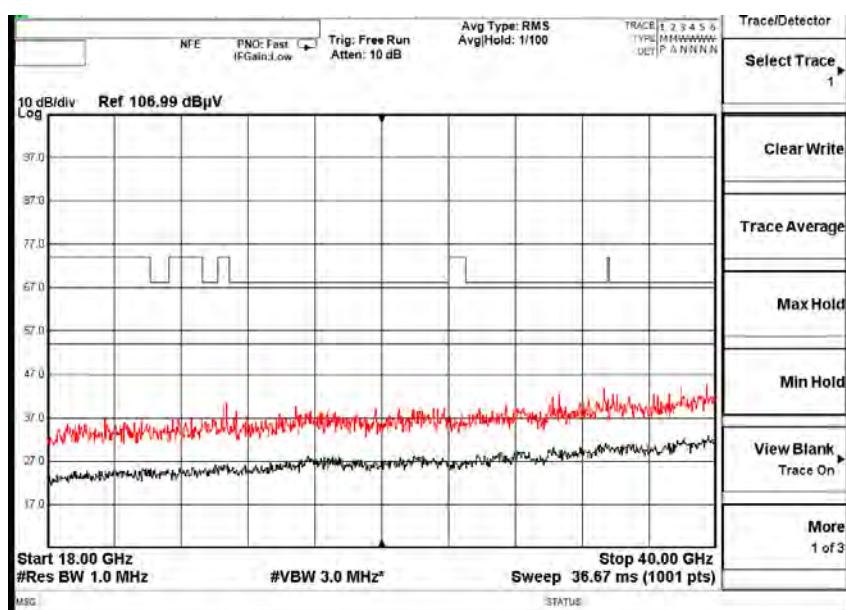
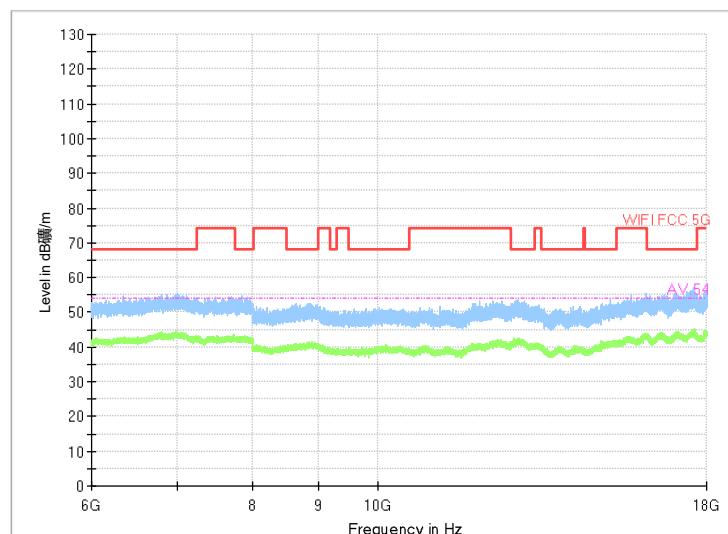




BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



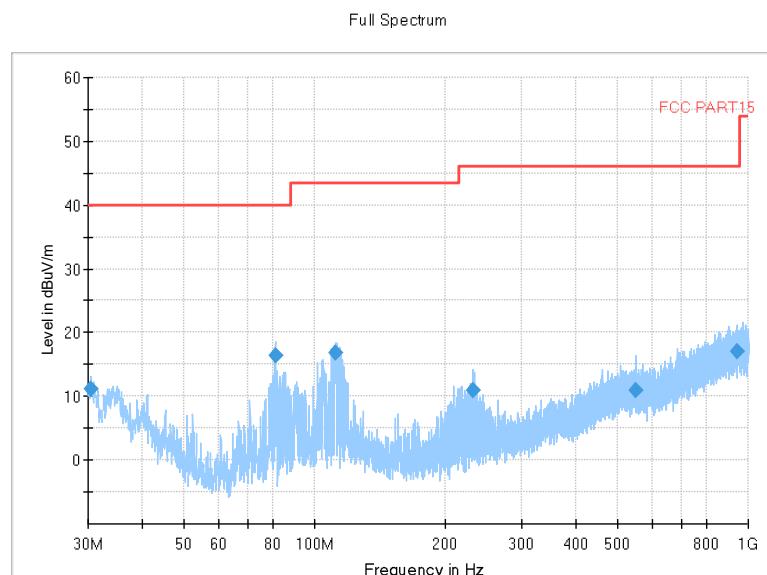


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5755

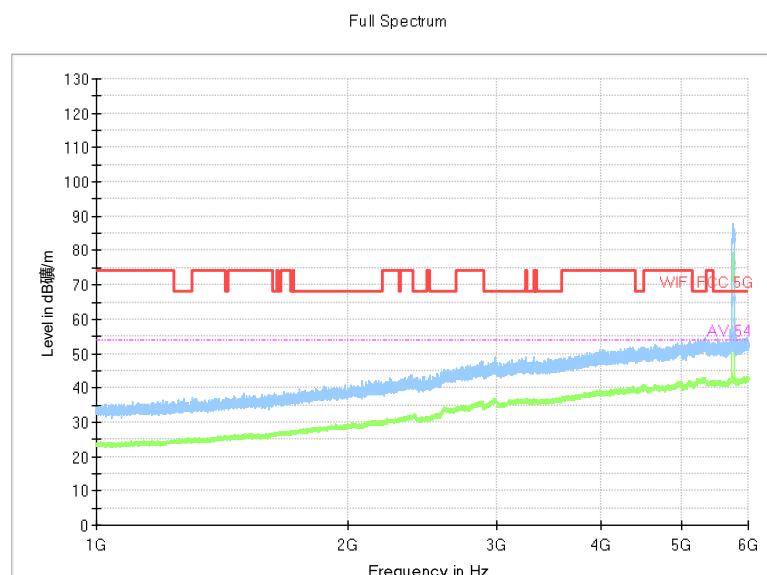
Channel No.: 151



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

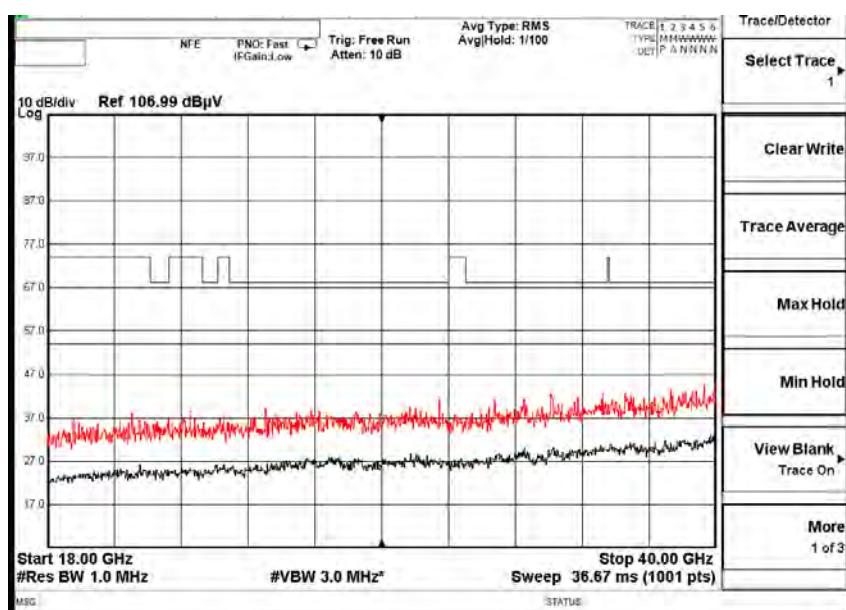
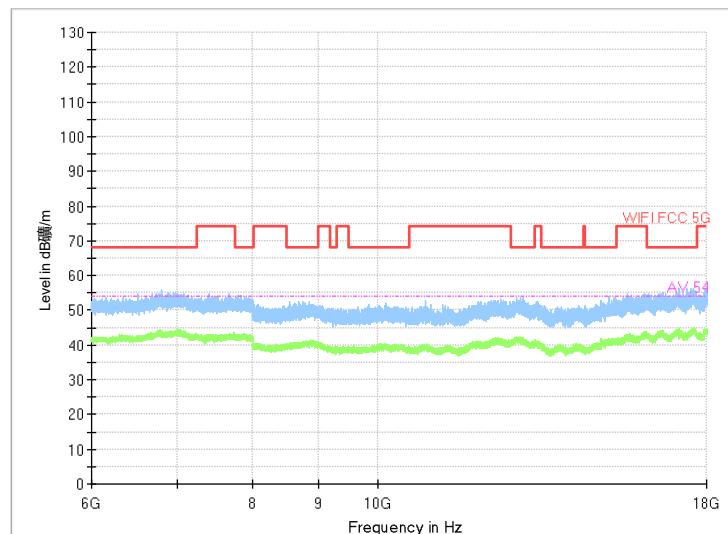
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



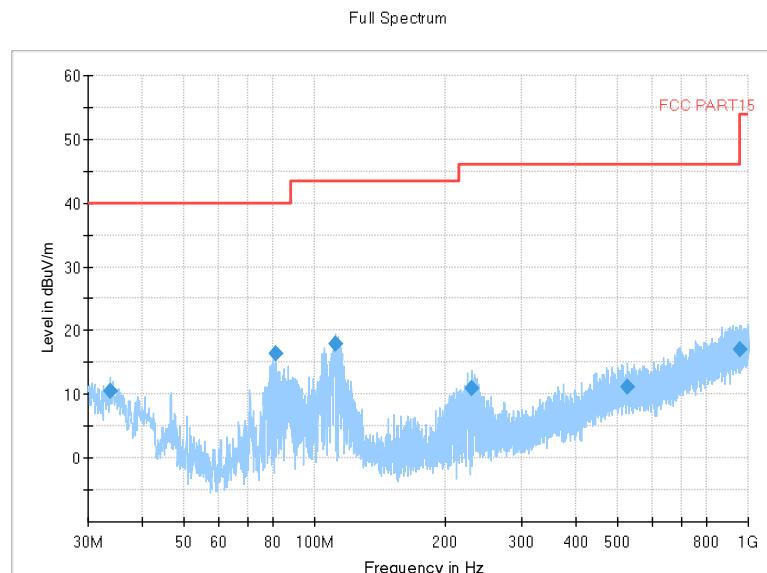


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5795

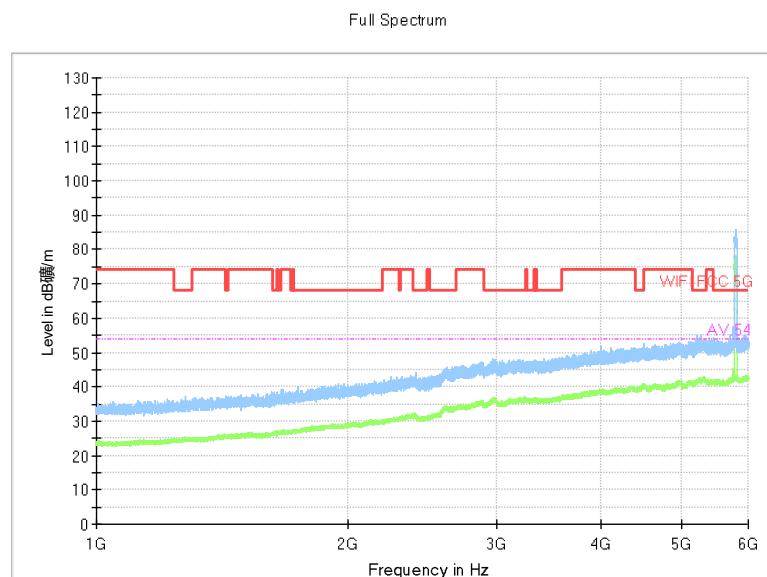
Channel No.: 159



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

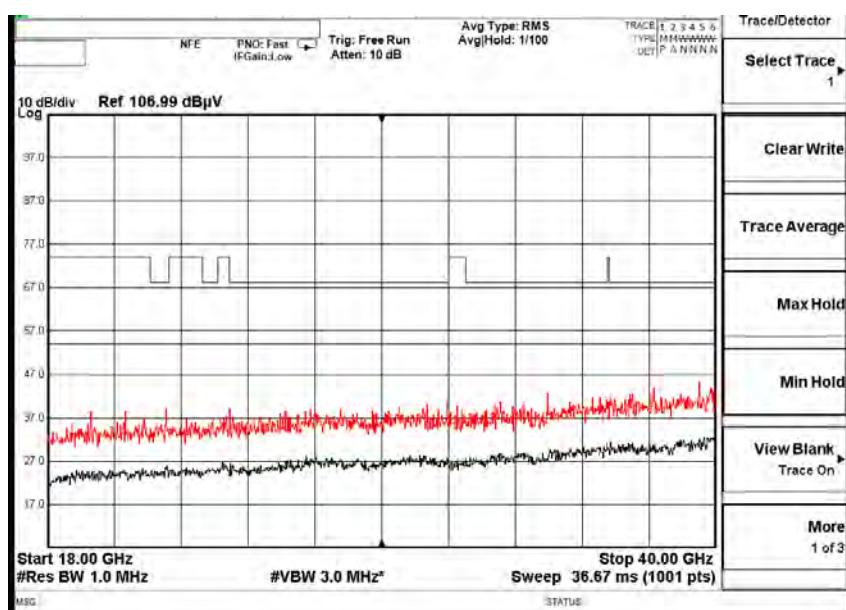
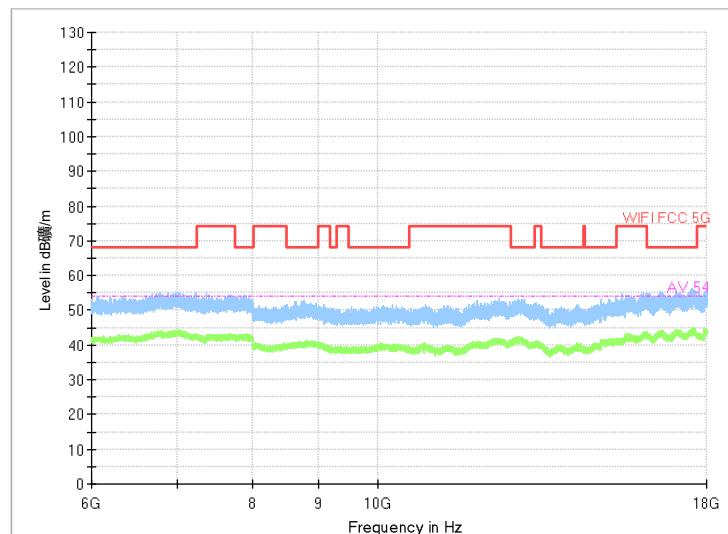
Test Mode: 802.11ax(HE40)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum



Frequency Range: 18GHz -40GHz  
Detector: Av mode and PK mode  
Test Mode: 802.11ax(HE40)

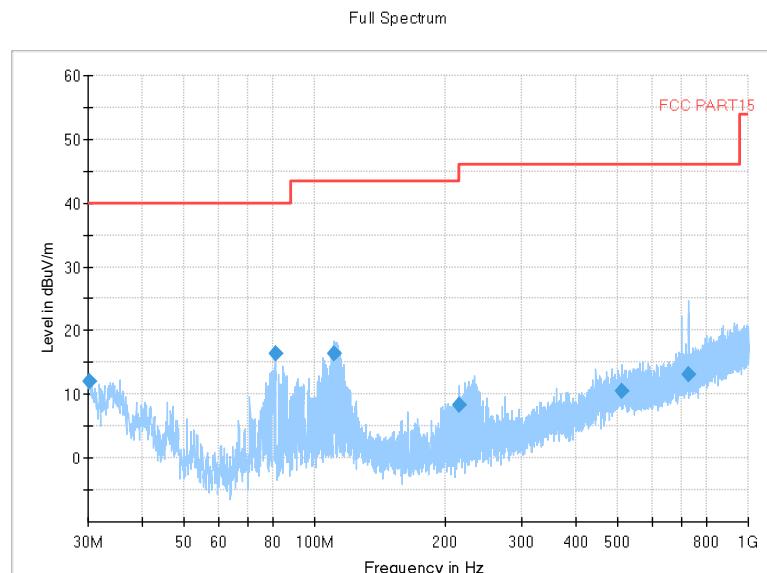


BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Carrier frequency (MHz): 5775

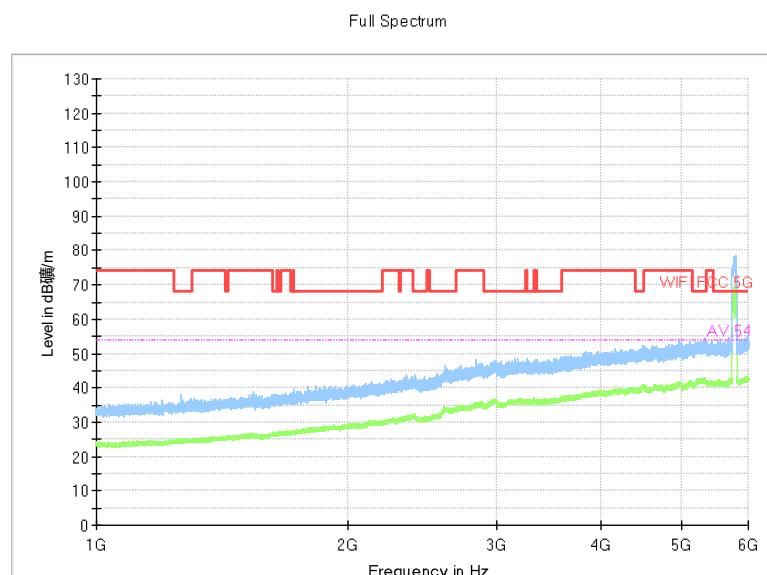
Channel No.:155



Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE80)



Frequency Range: 1GHz -6GHz

Detector: Av mode and PK mode

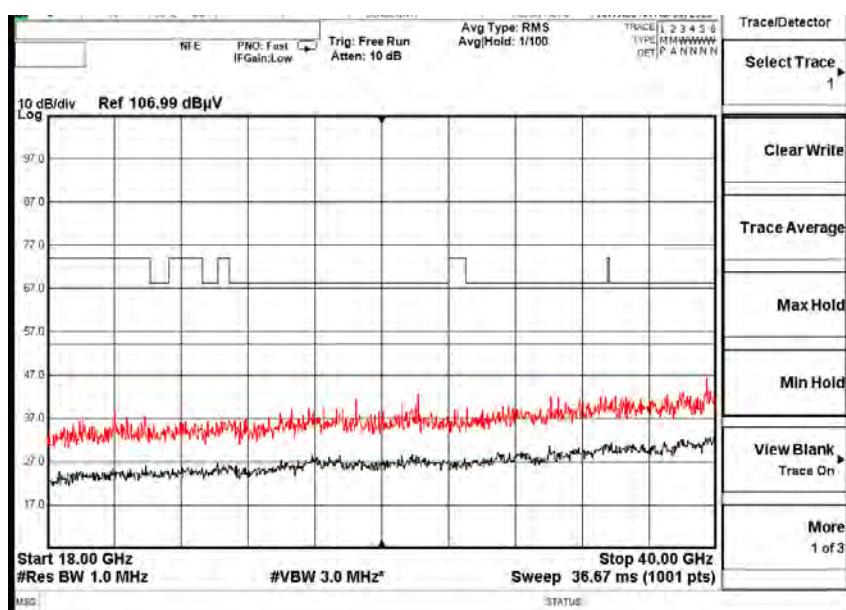
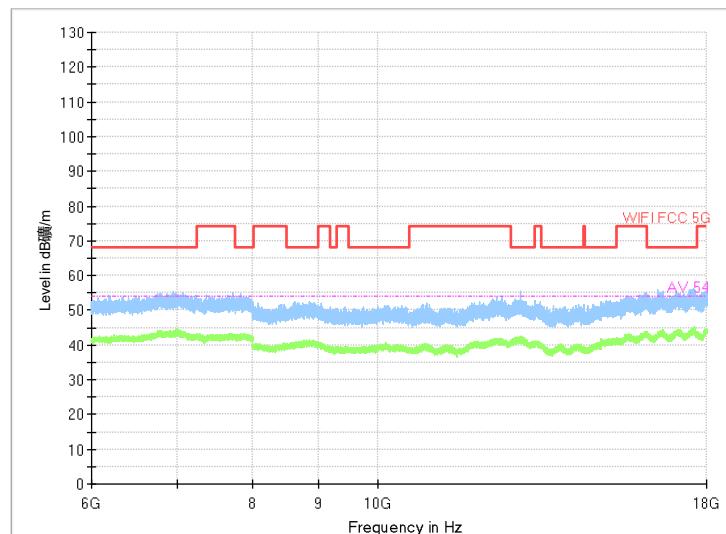
Test Mode: 802.11ax(HE80)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

Full Spectrum





BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

### 3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### 3.3.1 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>B</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.



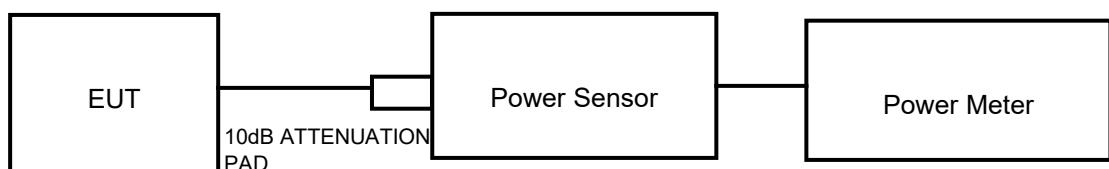
BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

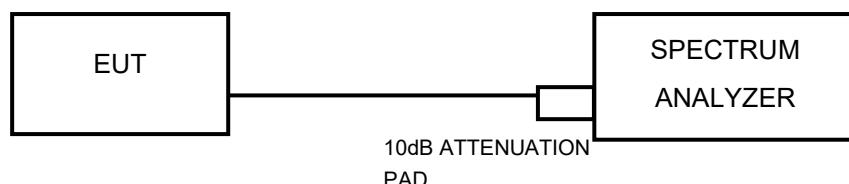
### 3.3.2 TEST SETUP

#### FOR POWER OUTPUT MEASUREMENT

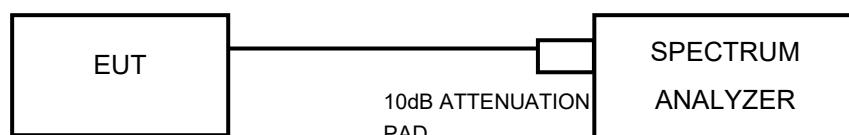
##### 802.11a, 802.11n/ac/ax (20MHz), 802.11 n/ac/ax (40MHz) TEST CONFIGURATION



##### 802.11ac/ax (80MHz) TEST CONFIGURATION



#### FOR 26dB BANDWIDTH





BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

### 3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Sep.06,23	Sep.05,25
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00 -1	SEP-03-20-0 69	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00 -1	SEP-03-20-0 70	Apr.27,24	Apr.26,25
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	5856607810 0050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

#### NOTE:

1. The calibration interval of the above test instruments is 12/24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.



### 3.3.4 TEST PROCEDURE

#### FOR POWER MEASUREMENT

##### For 802.11a, 802.11 n/ac/ax (20MHz), 802.11 n/ac/ax (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/ax (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  $\geq 2 \times$  span / RBW. (This ensures that bin-to-bin spacing is  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add  $10 \log (1/x)$ , where  $x$  is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \log (1/0.25) = 6$  dB if the duty cycle is 25%.



#### FOR 99 PERCENT OCCUPIED BANDWIDTH

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

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 \cdot$  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)  $\geq 3$  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.



**Test Report No.: PSU-NQN2502170113RF10**

### 3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.3.6 EUT OPERATING CONDITIONS

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

### 3.3.7 TEST RESULTS

Please Refer to Appendix A/B Of this test report.



BUREAU  
VERITAS

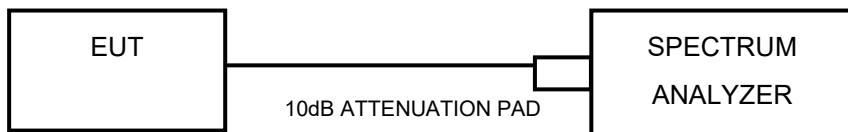
Test Report No.: PSU-NQN2502170113RF10

### 3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

#### 3.4.1 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-3	✓		30dBm/ 500kHz	

#### 3.4.2 TEST SETUP



#### 3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.



### 3.4.4 TEST PROCEDURES

Using method SA-2(Band1/2/3)

- 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

Using method SA-2 (Band4)

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 KHz, Set VBW  $\geq$  1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add  $10 \log(500\text{kHz}/\text{RBW})$  to the test result.  $10 \log(500\text{kHz}/300\text{KHz}) = 2.22\text{dBm}$
- 7) 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).
- 8) Record the max value

### 3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4.6 EUT OPERATING CONDITIONS

Same as 3.1.7.

### 3.4.7 TEST RESULTS

Please Refer to Appendix A/B Of this test report.



### **3.5 AUTOMATICALLY DISCONTINUE TRANSMISSION**

#### **3.5.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION**

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

#### **3.5.2 TEST INSTRUMENTS**

Refer to section 3.3.3 to get information of above instrument.

#### **3.5.3 TEST RESULT**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission



### 3.6 ANTENNA REQUIREMENTS

#### 3.6.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 3.6.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

#### 3.6.3 ANTENNA GAIN

According to FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB;

For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for  $N_{ANT} \leq 4$ ;

The EUT supports Cyclic Delay Diversity (CDD) mode,

For power measurements, the directional GANT is set equal to the antenna having the highest gain as following formulas.

Directional Gain = Max.Gain + Array Gain.

For PSD measurements, the directional GANT is calculation is following F(2)f)ii of KDB 662911 D01 v02r01.

The directional gain is calculated as following table.

5GHz Band1/ 4	Ant 1 (dBi)	Ant 2 (dBi)	DG For Power (dBi)	DG For PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	4.9	4.9	4.9	4.9	0.00	0.00

NOTE : DG = directional gain, Power Limit Reduction = DG For Power Gain - 6dbi < 0

PSD Limit Reduction = DG For PSD - 6dbi < 0. Therefore, it is not necessary to reduce maximum peak output power and PSD limit.



**BUREAU  
VERITAS** Test Report No.: PSU-NQN2502170113RF10

## 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

## 5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

## 6 APPENDIX A: RLAN UNII-1 DUTY CYCLE

Test Mode	Antenna	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	Chain0	5180	99.97%	0	Fig.1
802.11a	Chain1	5180	99.96%	0	Fig.2
802.11a	Chain2	5180	99.97%	0	Fig.3
802.11n HT20	Chain0	5180	99.98%	0	Fig.4
802.11n HT20	Chain1	5180	99.96%	0	Fig.5
802.11n HT20	Chain2	5180	99.98%	0	Fig.6
802.11ac VHT20	Chain0	5180	99.91%	0	Fig.7
802.11ac VHT20	Chain1	5180	99.91%	0	Fig.8
802.11ac VHT20	Chain2	5180	99.91%	0	Fig.9
802.11ax HE20	Chain0	5180	99.89%	0	Fig.10
802.11ax HE20	Chain1	5180	99.89%	0	Fig.11
802.11ax HE20	Chain2	5180	99.90%	0	Fig.12
802.11n HT40	Chain0	5190	99.91%	0	Fig.13
802.11n HT40	Chain1	5190	99.92%	0	Fig.14
802.11n HT40	Chain2	5190	99.92%	0	Fig.15
802.11ac VHT40	Chain0	5190	99.86%	0	Fig.16
802.11ac VHT40	Chain1	5190	99.81%	0	Fig.17
802.11ac VHT40	Chain2	5190	99.83%	0	Fig.18
802.11ax HE40	Chain0	5190	99.91%	0	Fig.19
802.11ax HE40	Chain1	5190	99.92%	0	Fig.20
802.11ax HE40	Chain2	5190	99.91%	0	Fig.21
802.11ac VHT80	Chain0	5210	99.80%	0	Fig.22
802.11ac VHT80	Chain1	5210	99.72%	0	Fig.23



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

802.11ac VHT80	Chain2	5210	99.74%	0	Fig.24
802.11ax HE80	Chain0	5210	99.89%	0	Fig.25
802.11ax HE80	Chain1	5210	99.93%	0	Fig.26
802.11ax HE80	Chain2	5210	99.89%	0	Fig.27

Note: Correction Factor=10\*log (1/Duty Cycle)

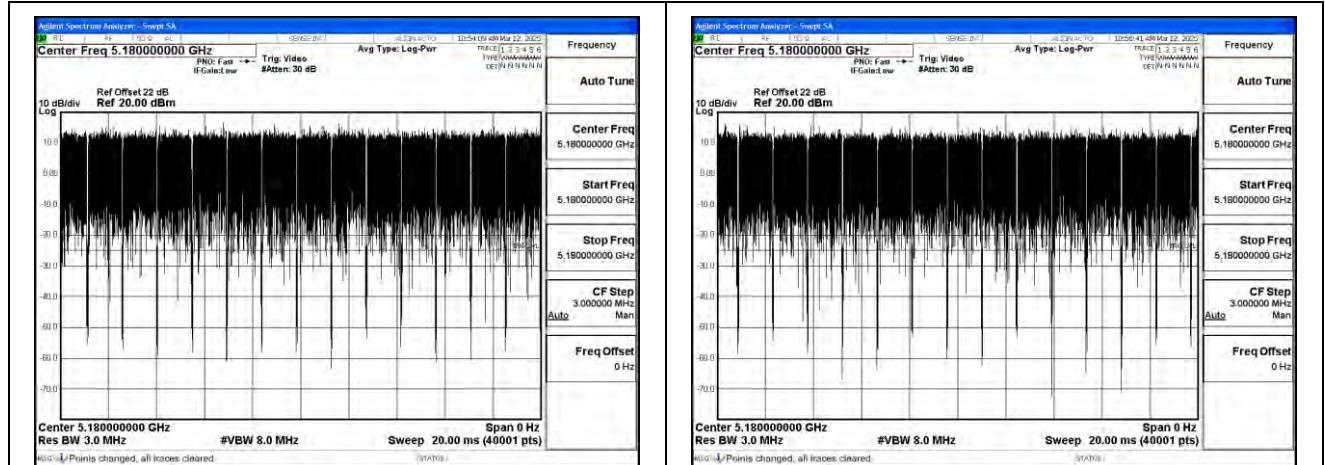


Fig.1

Fig.2

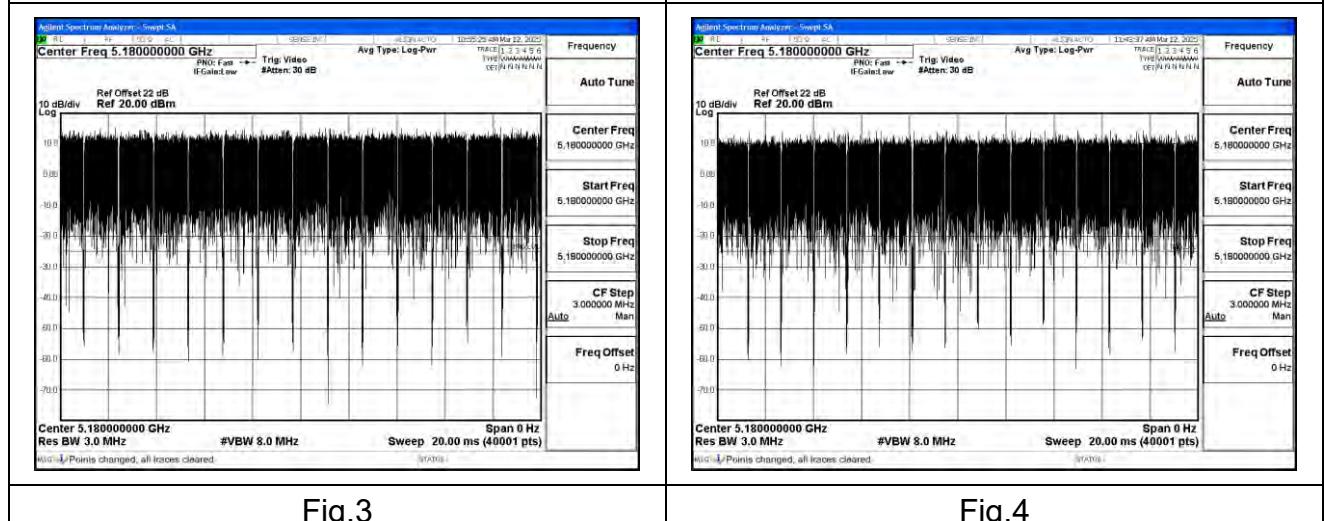


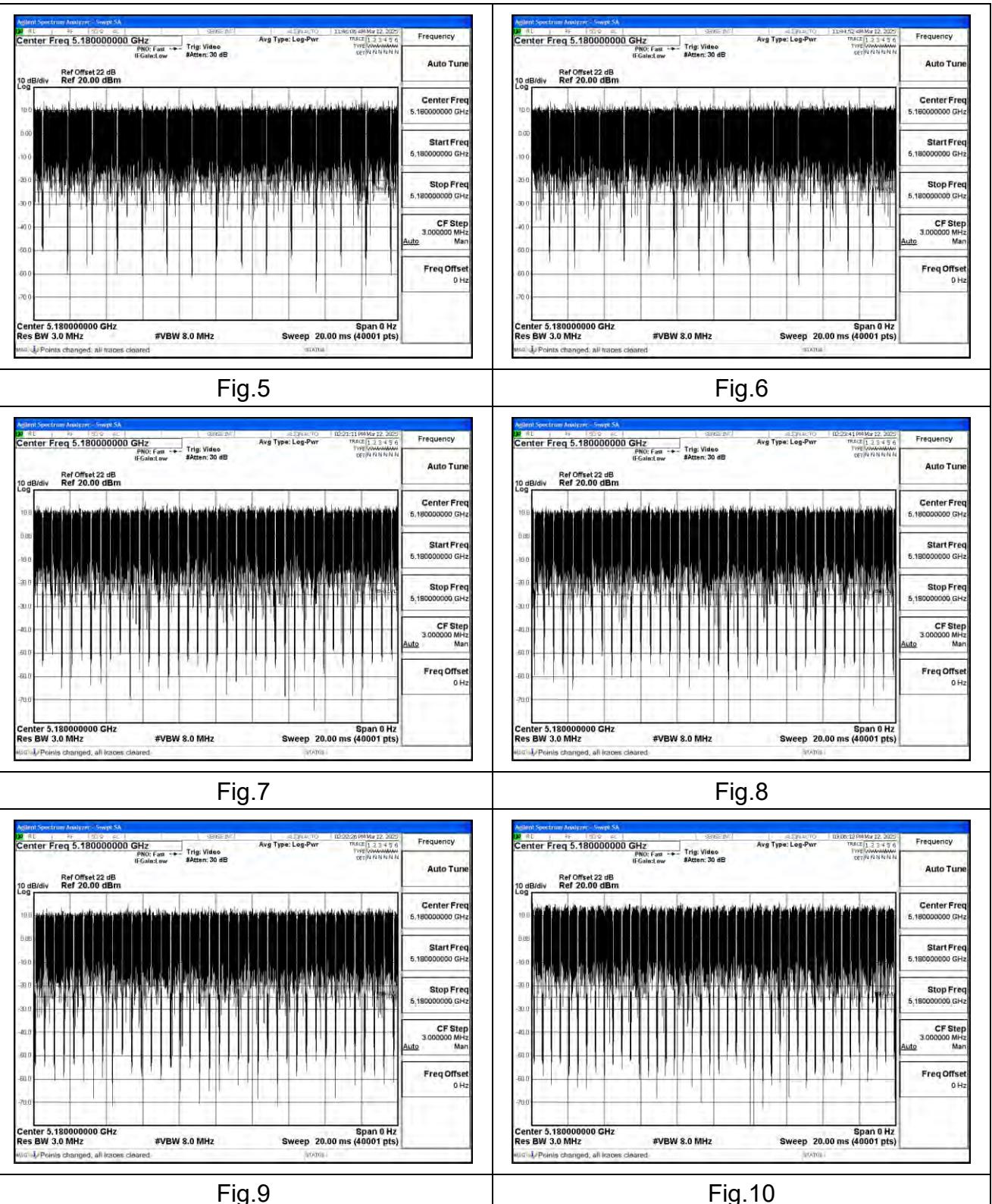
Fig.3

Fig.4



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10





BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

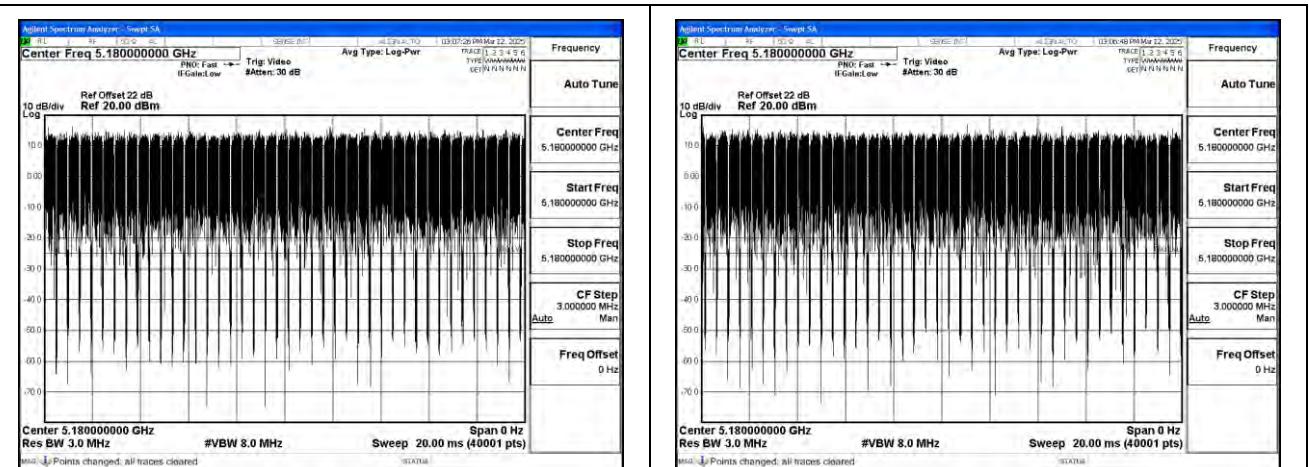


Fig.11



Fig.12

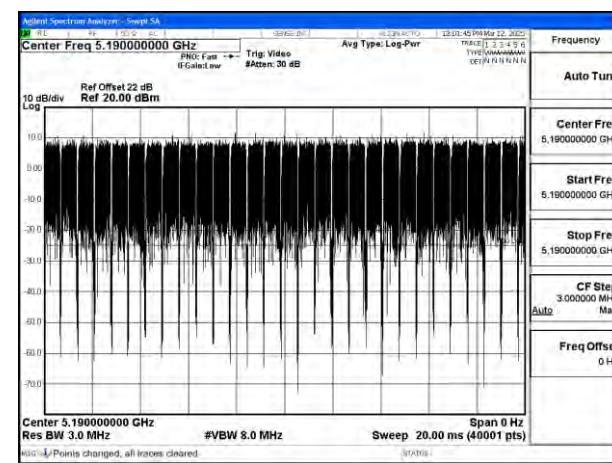


Fig.13

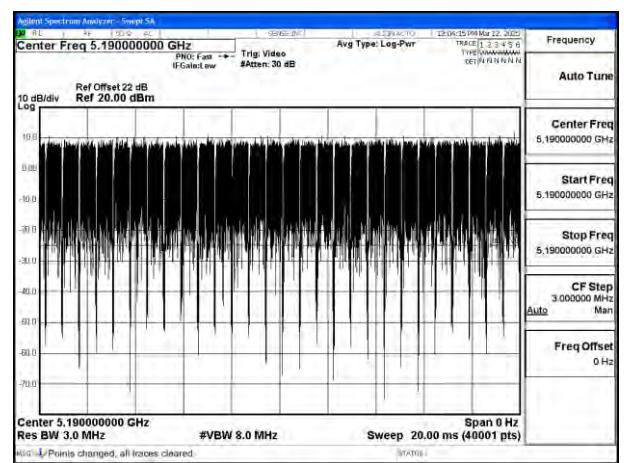


Fig.14

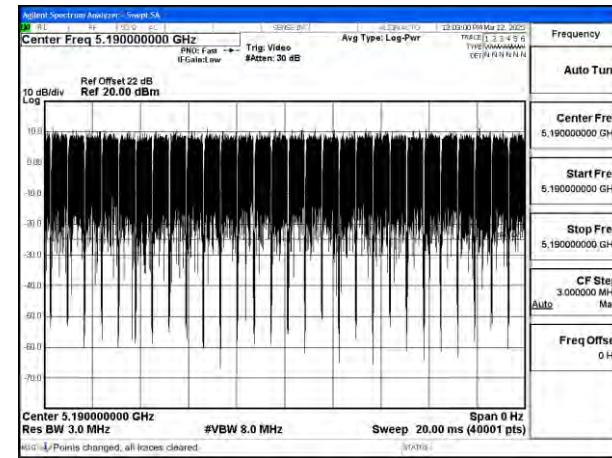


Fig.15

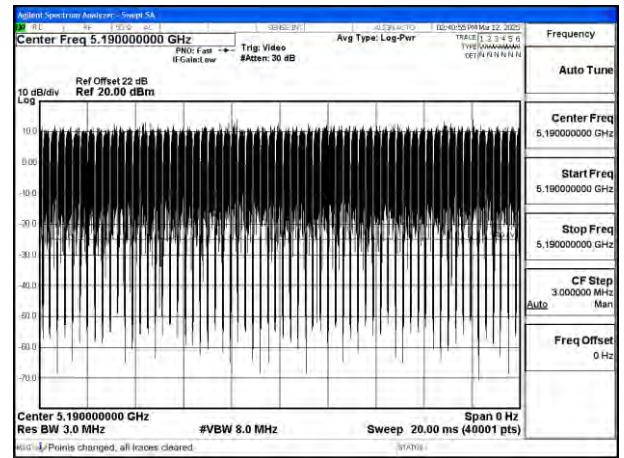


Fig.16



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

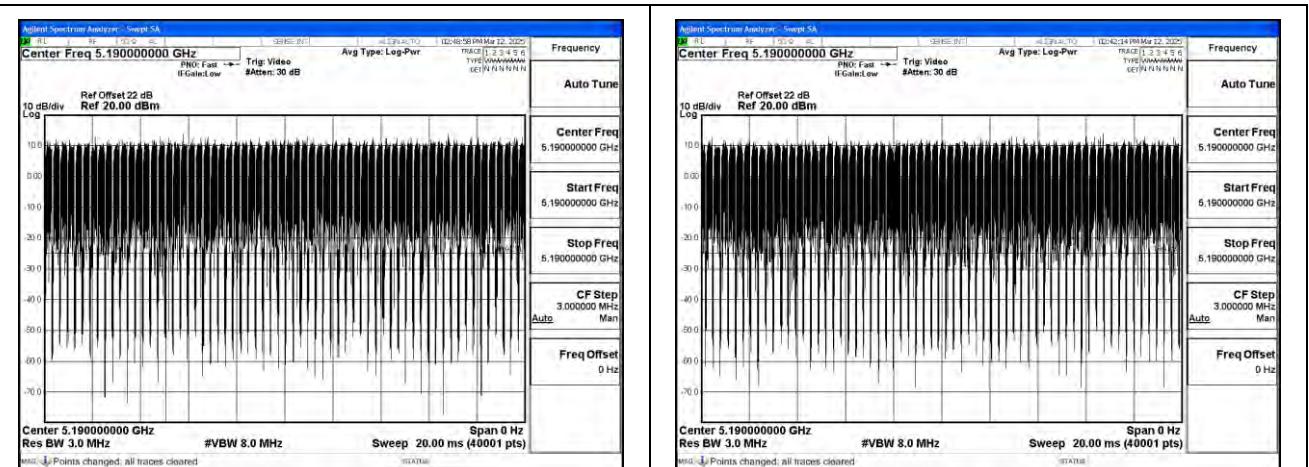


Fig.17

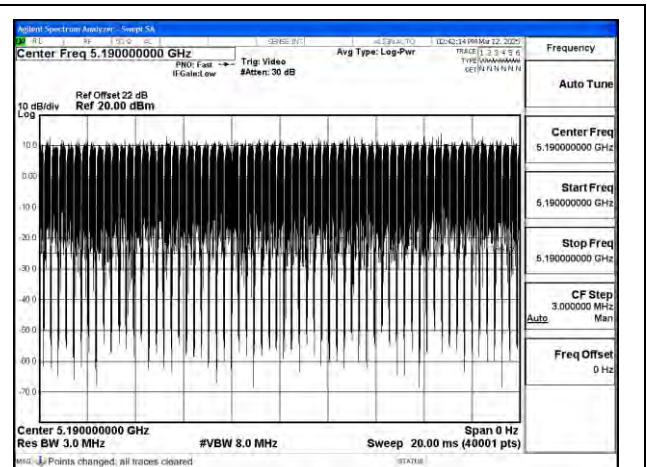


Fig.18

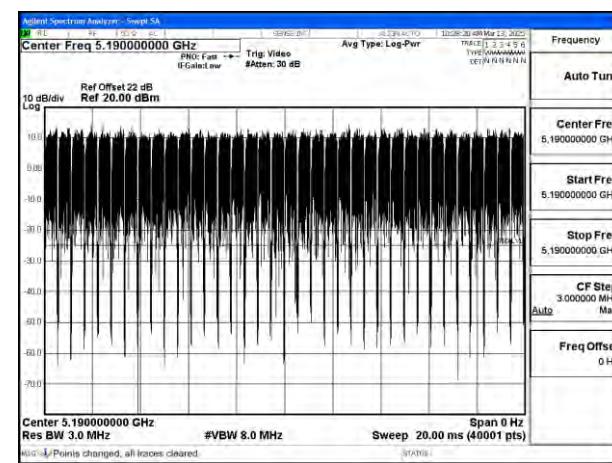


Fig.19

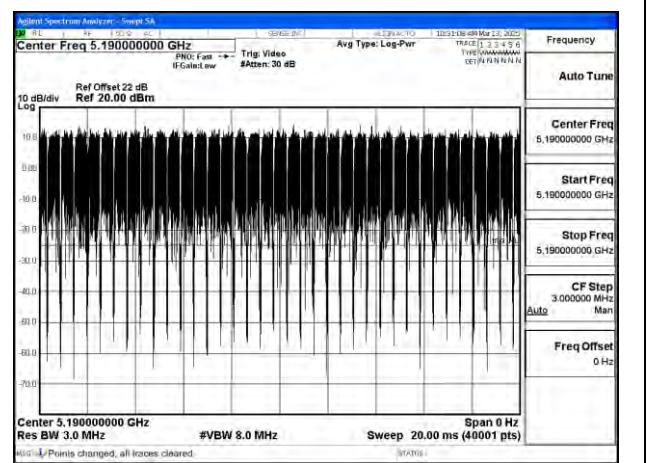


Fig.20

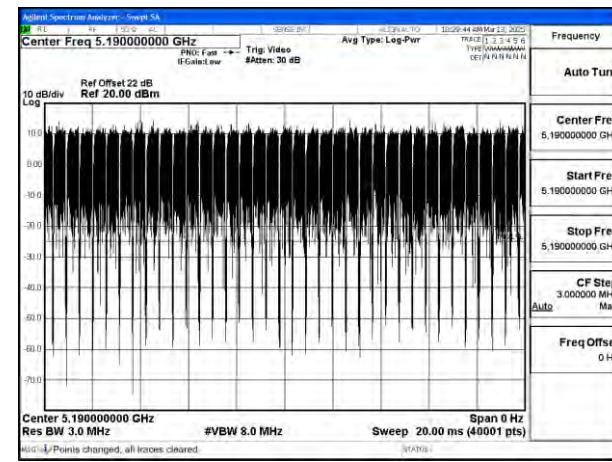


Fig.21

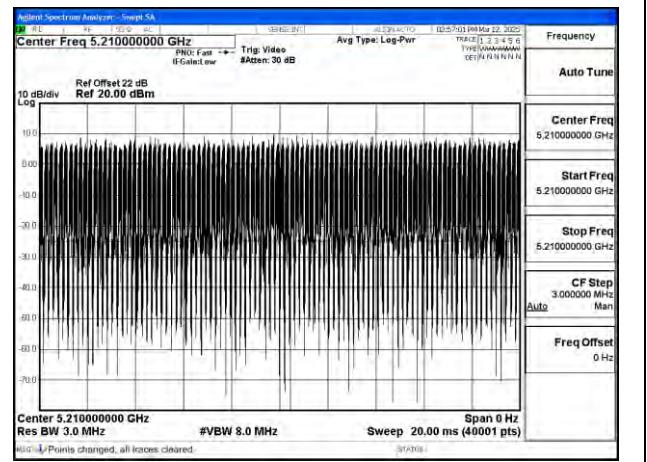


Fig.22



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

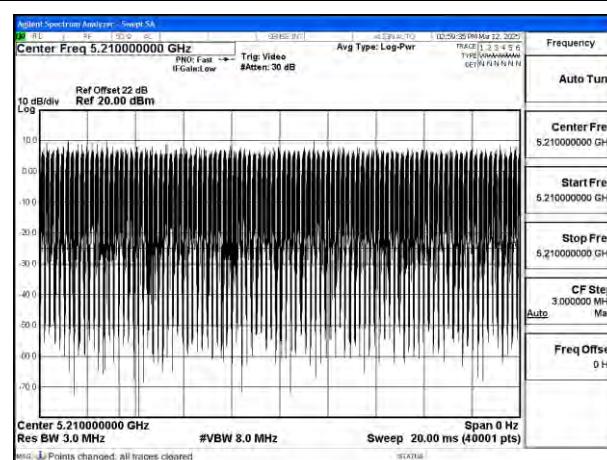


Fig.23

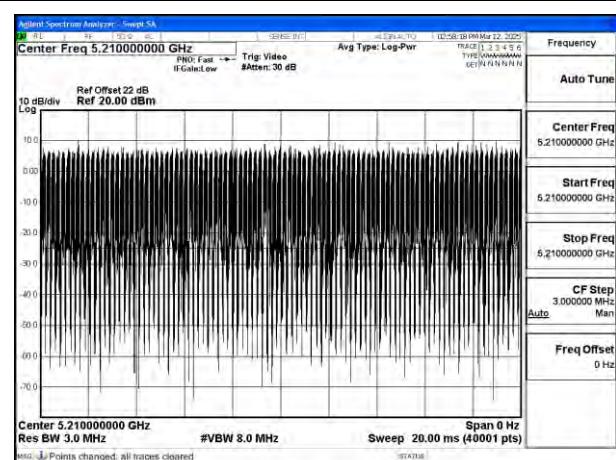


Fig.24

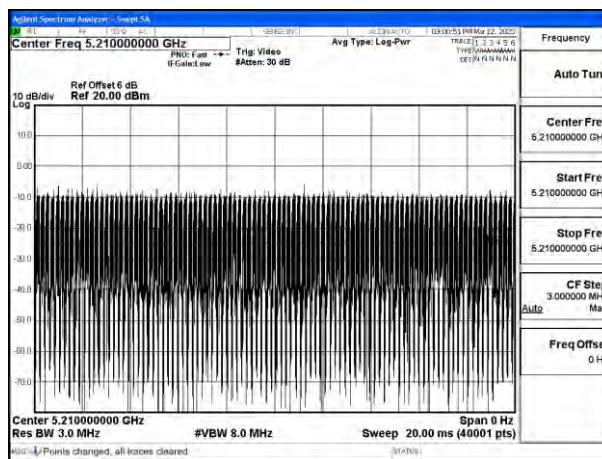


Fig.25

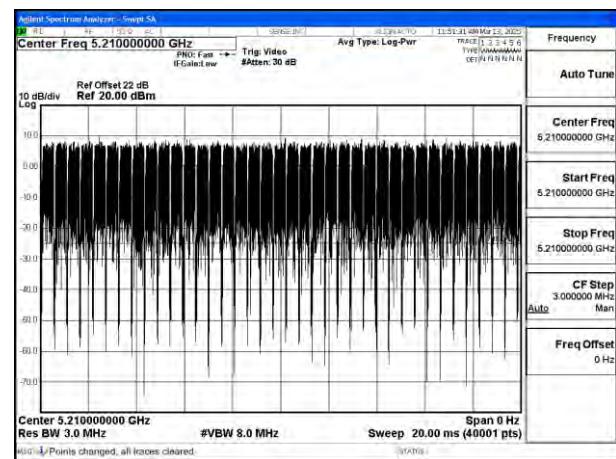


Fig.26

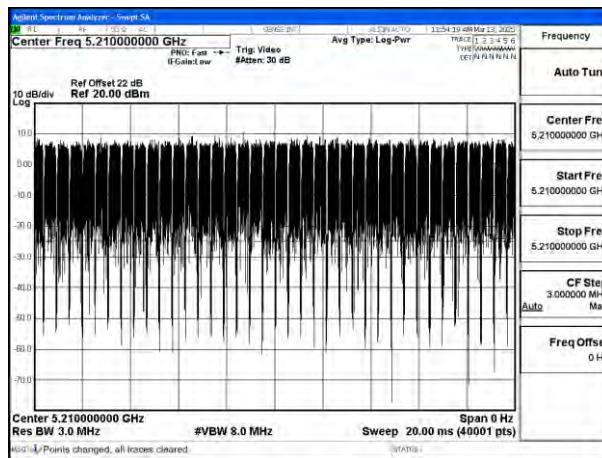


Fig.27

Note: Correction Factor=10\*log (1/Duty Cycle)



## DUTY CYCLE FOR BE

Test Mode	Antenna	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11be EHT20	Chain0	5180	99.09%	0	Fig.1
802.11be EHT20	Chain1	5180	99.17%	0	Fig.2
802.11be EHT20	Chain2	5180	99.90%	0	Fig.3
802.11be EHT40	Chain0	5190	99.21%	0	Fig.4
802.11be EHT40	Chain1	5190	99.20%	0	Fig.5
802.11be EHT40	Chain2	5190	99.90%	0	Fig.6
802.11be EHT80	Chain0	5210	99.08%	0	Fig.7
802.11be EHT80	Chain1	5210	99.20%	0	Fig.8
802.11be EHT80	Chain2	5210	99.89%	0	Fig.9

Note: Correction Factor=10\*log (1/Duty Cycle)

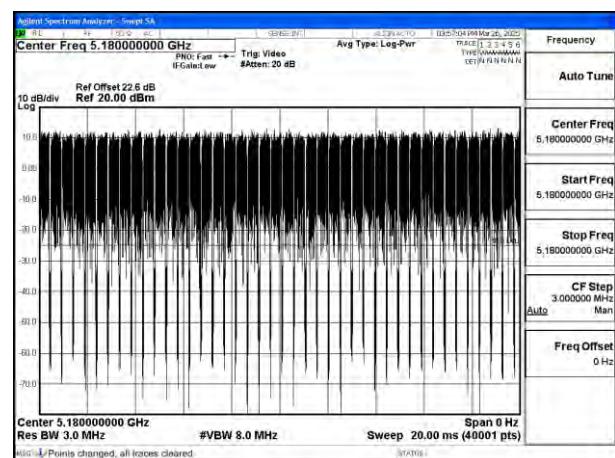
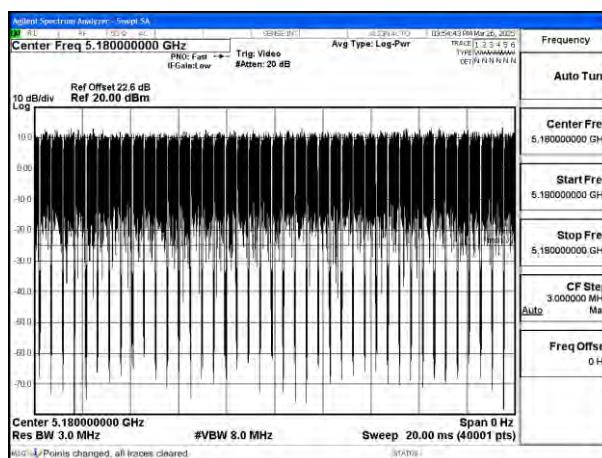


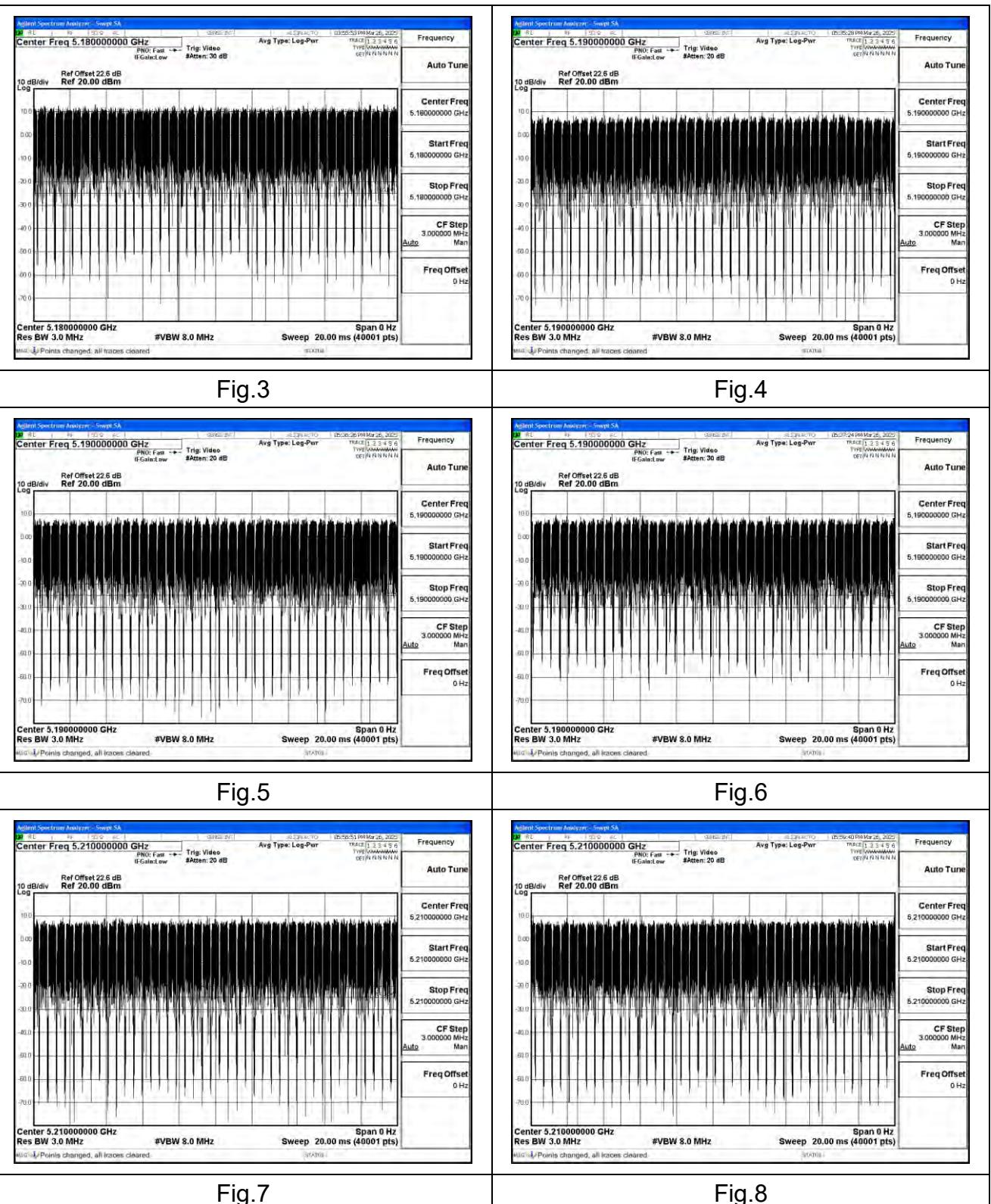
Fig.1

Fig.2



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10





BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

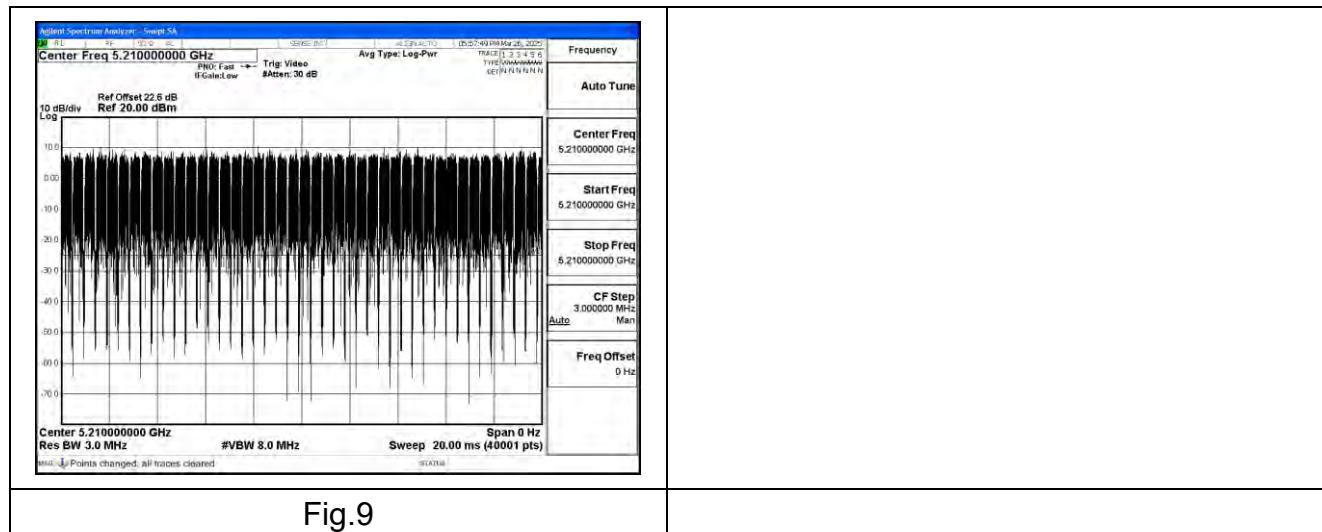


Fig.9

Note: Correction Factor=10\*log (1/Duty Cycle)



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

## OUTPUT POWER

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	11.47	16.37
802.11a	NA	5180	Chain1	11.88	16.78
802.11a	NA	5220	Chain0	11.87	16.77
802.11a	NA	5220	Chain1	11.93	16.83
802.11a	NA	5240	Chain0	11.88	16.78
802.11a	NA	5240	Chain1	11.88	16.78
802.11n HT20	NA	5180	Chain0	10.32	15.22
802.11n HT20	NA	5180	Chain1	10.05	14.95
802.11n HT20	NA	5180	MIMO	15.50	20.40
802.11n HT20	NA	5220	Chain0	10.41	15.31
802.11n HT20	NA	5220	Chain1	10.39	15.29
802.11n HT20	NA	5220	MIMO	15.72	20.62
802.11n HT20	NA	5240	Chain0	10.33	15.23
802.11n HT20	NA	5240	Chain1	10.33	15.23
802.11n HT20	NA	5240	MIMO	15.72	20.62
802.11ac VHT20	NA	5180	Chain0	10.41	15.31
802.11ac VHT20	NA	5180	Chain1	10.31	15.21
802.11ac VHT20	NA	5180	MIMO	15.08	19.98
802.11ac VHT20	NA	5220	Chain0	10.29	15.19
802.11ac VHT20	NA	5220	Chain1	10.12	15.02
802.11ac VHT20	NA	5220	MIMO	15.06	19.96
802.11ac VHT20	NA	5240	Chain0	10.09	14.99
802.11ac VHT20	NA	5240	Chain1	10.03	14.93
802.11ac VHT20	NA	5240	MIMO	14.93	19.83
802.11n HT40	NA	5190	Chain0	10.54	15.44
802.11n HT40	NA	5190	Chain1	10.43	15.33
802.11n HT40	NA	5190	MIMO	15.21	20.11
802.11n HT40	NA	5230	Chain0	10.77	15.67
802.11n HT40	NA	5230	Chain1	10.66	15.56
802.11n HT40	NA	5230	MIMO	15.30	20.20



BUREAU  
VERITAS

Test Report No.: PSU-NQN2502170113RF10

802.11ac VHT40	NA	5190	Chain0	12.23	17.13
802.11ac VHT40	NA	5190	Chain1	12.25	17.15
802.11ac VHT40	NA	5190	MIMO	16.40	21.30
802.11ac VHT40	NA	5230	Chain0	11.91	16.81
802.11ac VHT40	NA	5230	Chain1	11.91	16.81
802.11ac VHT40	NA	5230	MIMO	16.26	21.16
802.11ac VHT80	NA	5210	Chain0	11.61	16.51
802.11ac VHT80	NA	5210	Chain1	10.84	15.74
802.11ac VHT80	NA	5210	MIMO	15.84	20.74