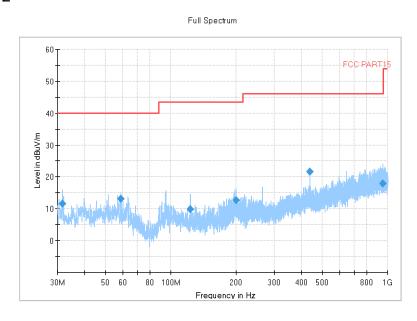


Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

Carrier frequency (MHz): 5510

Channel No.:102



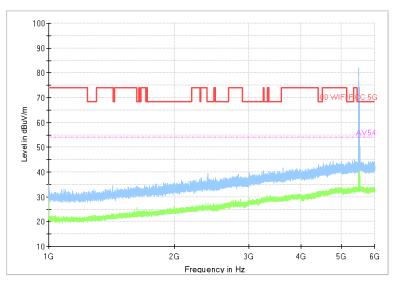
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)

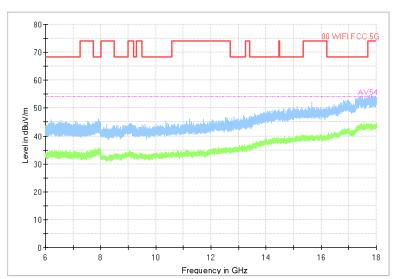






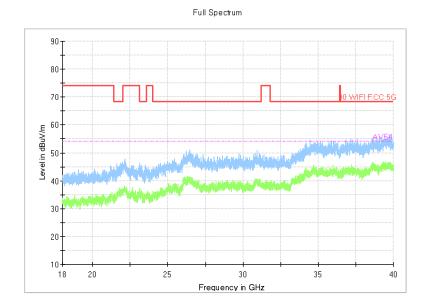
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

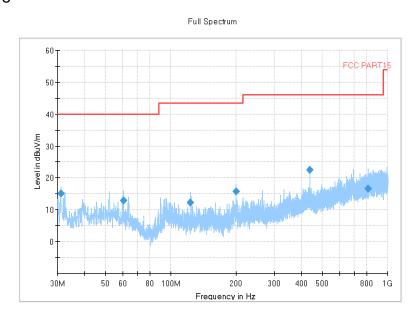




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Carrier frequency (MHz): 5590

Channel No.:118



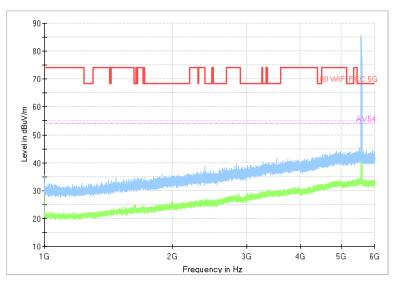
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)

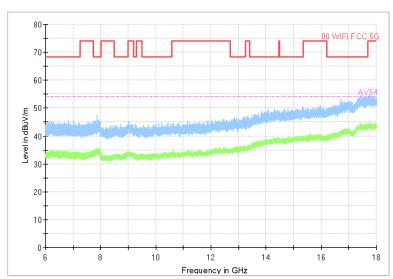






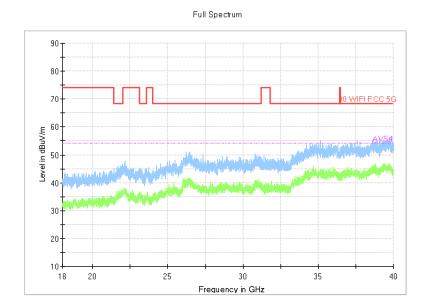
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

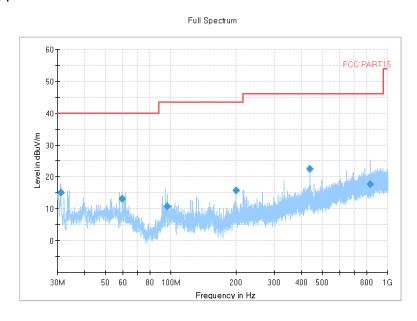




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Carrier frequency (MHz): 5670

Channel No.:134



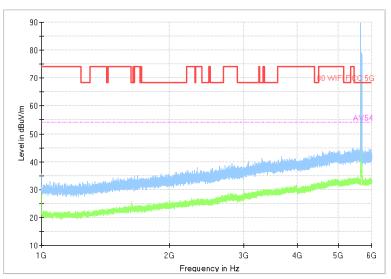
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)

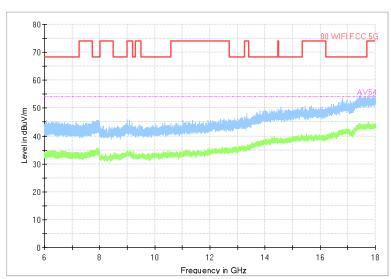






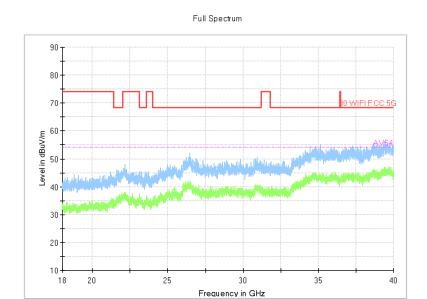
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

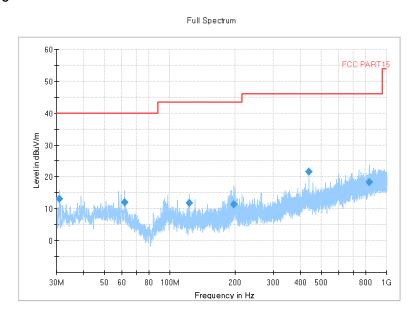




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Carrier frequency (MHz): 5530

Channel No.:106

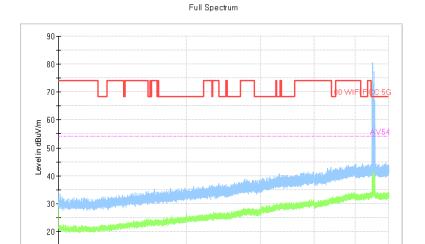


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE80)





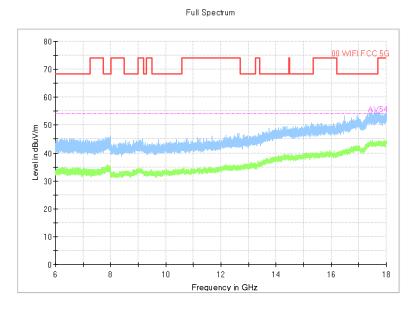
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

Frequency in Hz

3G

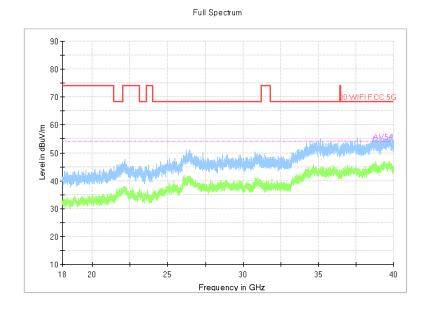
4G

2G



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

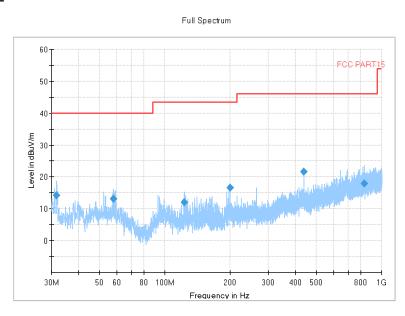




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

Carrier frequency (MHz): 5610

Channel No.:122

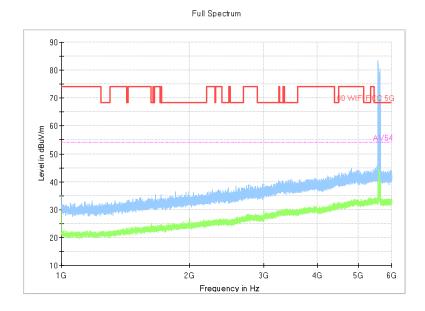


Frequency Range: 30MHz -1GHz

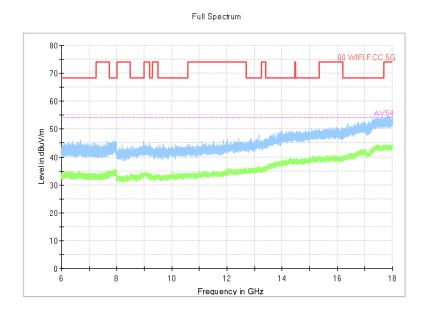
Detector: QP mode

Test Mode: 802.11ax(HE80)



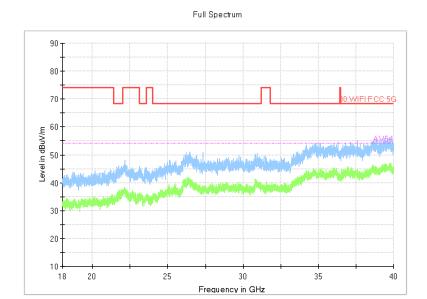


Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

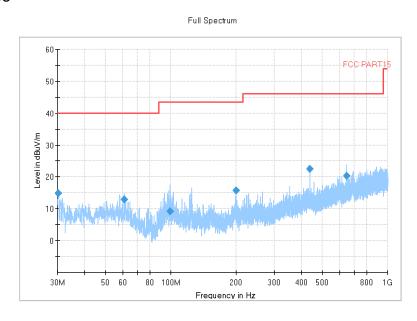




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

Carrier frequency (MHz): 5690

Channel No.:138



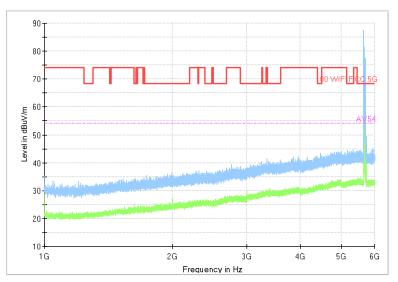
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE80)

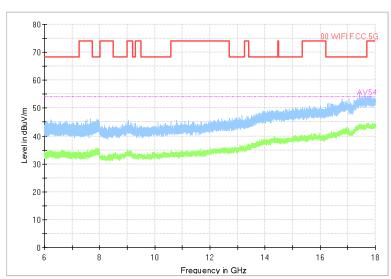






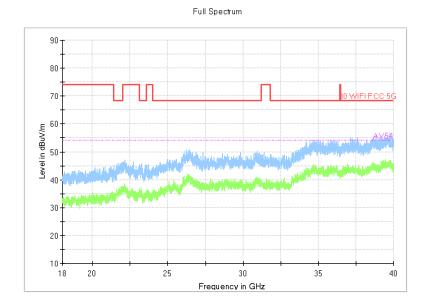
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

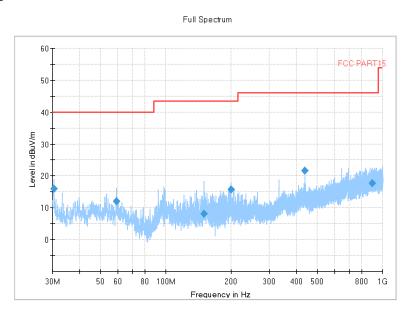




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)

Carrier frequency (MHz): 5745

Channel No.:149

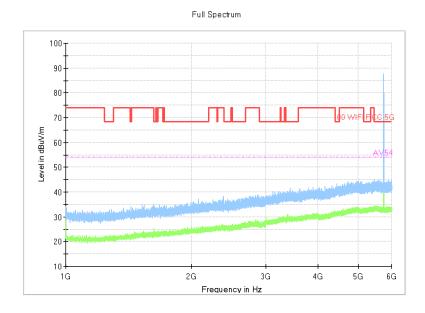


Frequency Range: 30MHz -1GHz

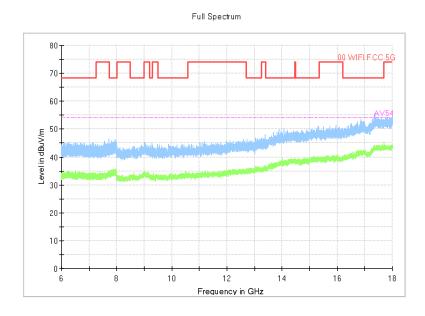
Detector: QP mode

Test Mode: 802.11ax(HE20)



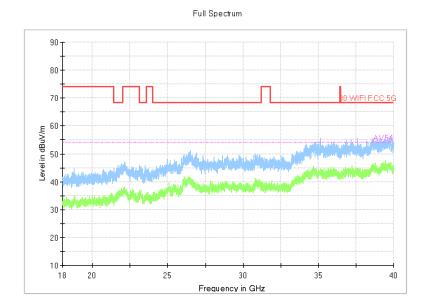


Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

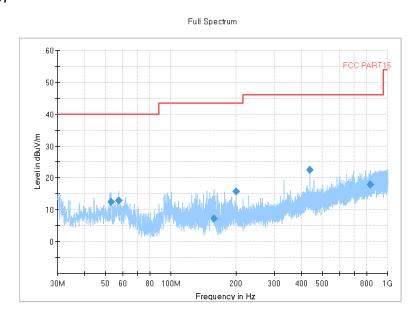




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

Carrier frequency (MHz): 5785

Channel No.:157



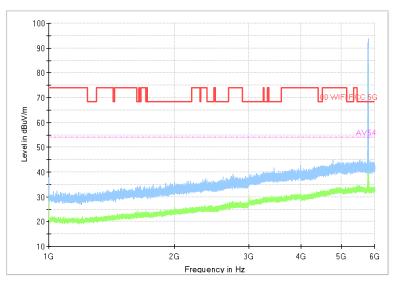
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE20)

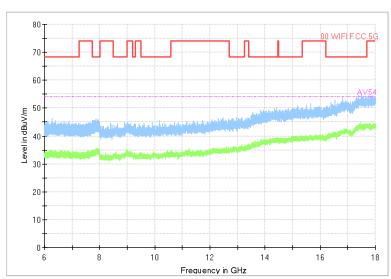






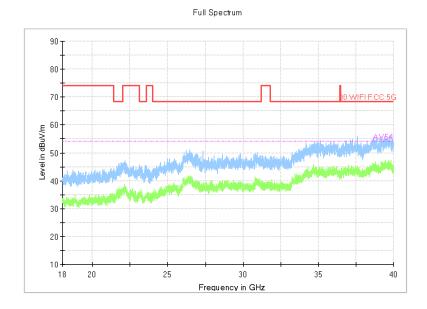
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

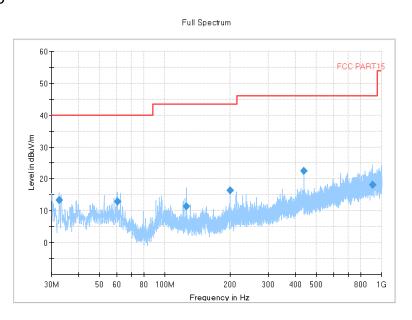




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

Carrier frequency (MHz): 5825

Channel No.:165

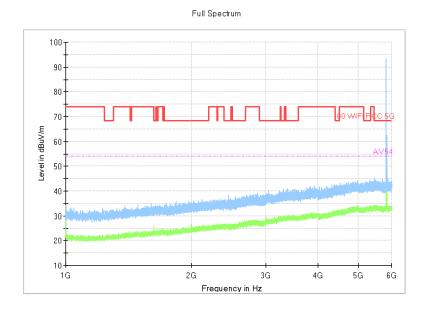


Frequency Range: 30MHz -1GHz

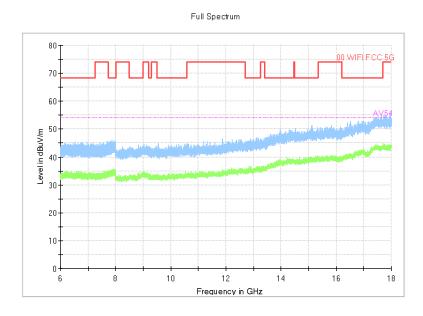
Detector: QP mode

Test Mode: 802.11ax(HE20)



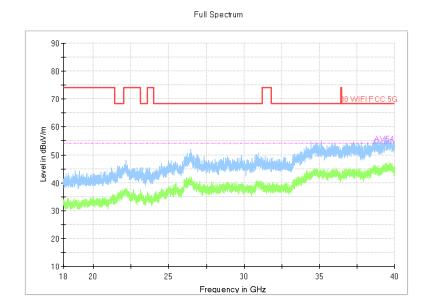


Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

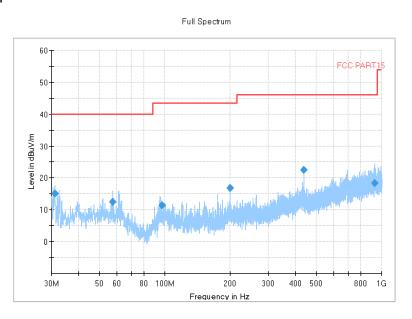




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE20)

Carrier frequency (MHz): 5755

Channel No.:151

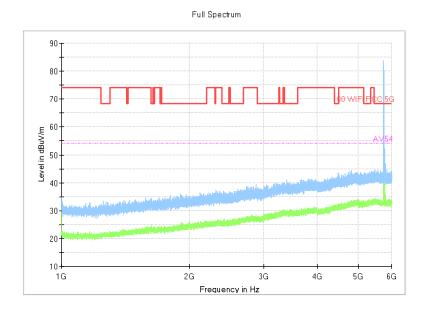


Frequency Range: 30MHz -1GHz

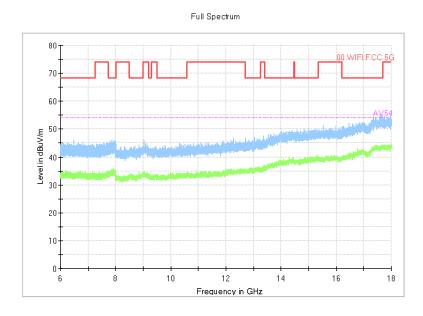
Detector: QP mode

Test Mode: 802.11ax(HE40)



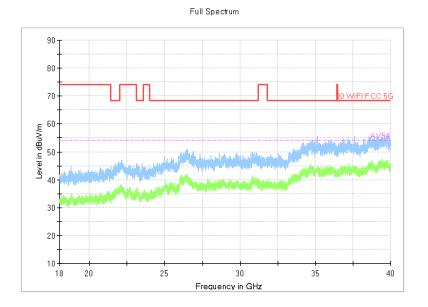


Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

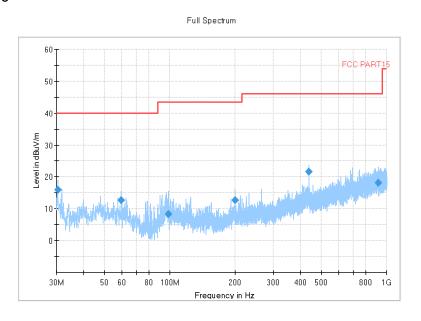




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Carrier frequency (MHz): 5795

Channel No.:159



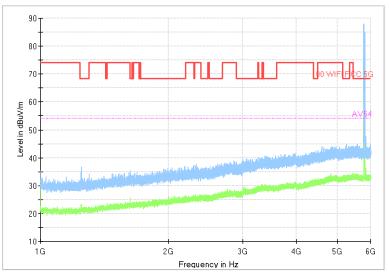
Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE40)

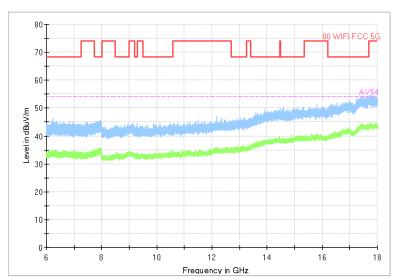






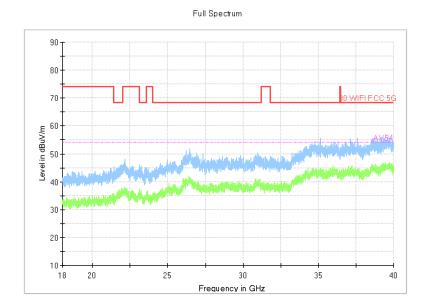
Frequency Range: 1GHz -6GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Full Spectrum



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

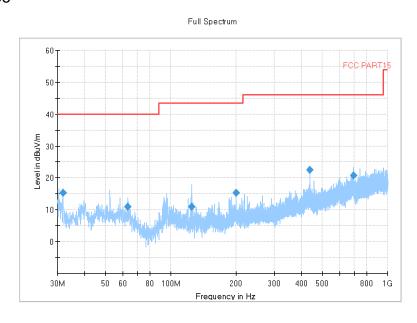




Frequency Range: 18GHz -40GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE40)

Carrier frequency (MHz): 5775

Channel No.:155

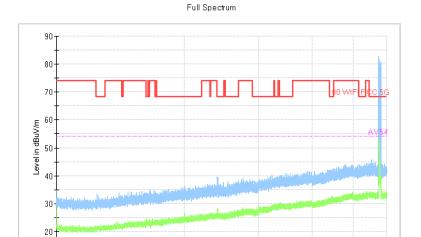


Frequency Range: 30MHz -1GHz

Detector: QP mode

Test Mode: 802.11ax(HE80)





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

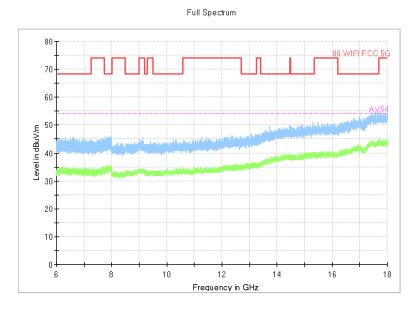
Frequency in Hz

3G

4G

5G

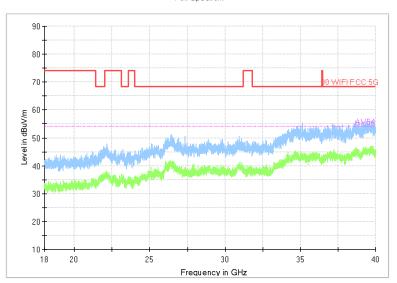
2G



Frequency Range: 6GHz -18GHz Detector: Av mode and PK mode Test Mode: 802.11ax(HE80)







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



3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

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

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	102749	Mar.28,24	Mar.27,26
ELEKTRA test software	Rohde&Schwarz	ELEKTRA	NA	N/A	N/A
LISN network	Rohde&Schwarz	ENV216	102640	Mar.28,24	Mar.27,26
CABLE	Rohde&Schwarz	W61.01	N/A	Apr.27,24	Apr.26,25
CABLE	Rohde&Schwarz	W601	N/A	Apr.27,24	Apr.26,25

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.

3.2.3 TEST PROCEDURES

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

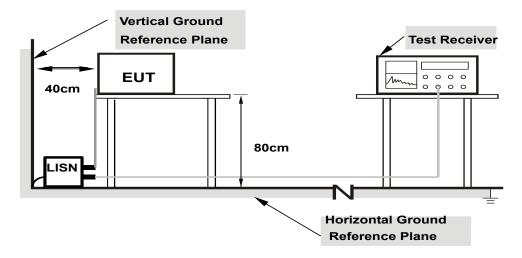
NOTE: All modes of operation were investigated and the worst-case emissions are reported.



3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7.

3.2.7 TEST RESULTS

N/A



3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

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

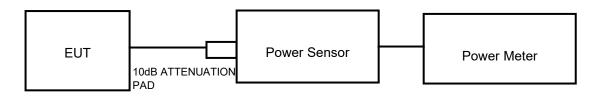
NOTE: Where B is the 26dB emission bandwidth in MHz.



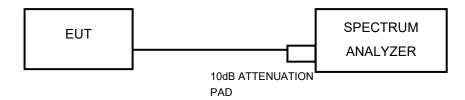
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

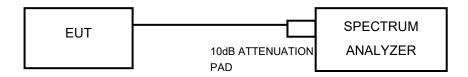
802.11a, 802.11n/ac/ax (20MHz), 802.11 n/ac/ax (40MHz) TEST CONFIGURATION



802.11ac/ax (80MHz) TEST CONFIGURATION



FOR 26dB BANDWIDTH



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	SEP-03-20-0	Apr.27,24	Apr.26,25

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Tel: +86 (0557) 368 1008



		-1	70		
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 ≥ 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 dB if the duty cycle is 25%.



FOR 99 PERCENT OCCUPIED BANDWIDTH

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

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

FOR 26dB BANDWIDTH

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

FOR 6dB BANDWIDTH

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



3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

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

3.3.7 TEST RESULTS

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



3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
		Outdoor Access Point	
U-NII-1		Fixed point-to-point Access Point 17dBm/	
U-INII- I		Indoor Access Point	
	$\sqrt{}$	Client devices	11dBm/ MHz
U-NII-2A	V		11dBm/ MHz
U-NII-2C	$\sqrt{}$		11dBm/ MHz
U-NII-3	V		30dBm/ 500kHz

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.



3.4.4 TEST PROCEDURES

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

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
- 7) Record the max value 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 ≥ 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(500kHz/RBW) to the test result. 10 log(500kHz/300KHZ) = 2.22dBm
- 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

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.

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.



6 APPENDIX A: RLAN EMISSION BANDWIDTH TEST RESULT

U-NII-1

Test Mode	Antenna	26dB Bandwidth (MHz)				
rest Mode	Antenna	5180MHz	5220MHz	5240MHz		
802.11a	Chain0	24.37	24.23	19.70		
802.11a	Chain1	24.57	27.61	19.98		
802.11n HT20	Chain0	24.93	24.32	20.12		
802.11n HT20	Chain1	27.03	25.81	20.03		
802.11ac VHT20	Chain0	26.43	23.90	19.99		
802.11ac VHT20	Chain1	25.93	25.53	19.81		
802.11ax HE20	Chain0	21.20	20.74	20.20		
802.11ax HE20	Chain1	23.89	21.35	20.23		

Test Mode	Antenna	26dB Bandwidth (MHz)			
rest Mode	Antenna	5190MHz		5230MHz	
802.11n HT40	Chain0	39.29		39.33	
802.11n HT40	Chain1	39.77		40.28	
802.11ac VHT40	Chain0	39.82		40.33	
802.11ac VHT40	Chain1	40.44		39.21	
802.11ax HE40	Chain0	40.10		40.20	
802.11ax HE40	Chain1	39.96		40.14	

Test Mode	Antenna	26dB Bandwidth (MHz)			
rest Mode	Antenna	5210MHz			
802.11ac VHT80	Chain0	80.45			
802.11ac VHT80	Chain1	80.28			
802.11ax HE80	Chain0	81.89			
802.11ax HE80	Chain1	81.99			



T	oot Modo	Mode Tones/	Antenna	26dB Bandwidth (MHz)		
16	est Mode		Antenna	5180MHz	5220MHz	5240MHz
8	302.11ax	26T+0	ChainO	20.20	20.56	40.20
	HE20	26T+0	Chain0	20.39	20.56	19.29
8	302.11ax	26T+0	Chain1	20.00	21.21	19.29
	HE20	201+0	Chain1	20.89	21.21	19.29

Test Mode	Tones/		26dB Bandwidth (MHz)		
rest wode	RU Index	Antenna	5190MHz		5230MHz
802.11ax HE40	26T+0	Chain0	24.17		23.50
802.11ax HE40	26T+0	Chain1	24.12		21.06

Test Mode	Tones/ RU Index	Antenna	2	6dB Bandwidth (MHz)	
rest wode		Antenna	5210MHz		
802.11ax	26T±0	Chain0	21.79		
HE80	26T+0	Chamo	21.79		
802.11ax	267.0	Chain1	24.46		
HE80	26T+0	Chain1	24.16		



U-NII-2A

Test Mode	Antenna	26dB Bandwidth (MHz)				
rest Mode	Antenna	5260MHz	5280MHz	5320MHz		
802.11a	Chain0	26.93	25.15	24.01		
802.11a	Chain1	26.45	27.45	26.67		
802.11n HT20	Chain0	25.31	26.38	25.28		
802.11n HT20	Chain1	23.82	25.96	25.20		
802.11ac VHT20	Chain0	25.97	25.63	26.27		
802.11ac VHT20	Chain1	27.87	24.95	25.87		
802.11ax HE20	Chain0	21.18	20.37	21.18		
802.11ax HE20	Chain1	20.63	21.77	22.98		

Test Mode Antenna		26dB Bandwidth (MHz)			
rest Mode	Antenna	5270MHz		5310MHz	
802.11n HT40	Chain0	39.51		39.85	
802.11n HT40	Chain1	39.92		39.63	
802.11ac VHT40	Chain0	39.83		40.23	
802.11ac VHT40	Chain1	39.85		40.92	
802.11ax HE40	Chain0	40.22		39.67	
802.11ax HE40	Chain1	40.01		40.08	

Test Mode	Antonno	26dB Bandwidth (MHz)			
rest Mode	Antenna	5290MHz	5290MHz		
802.11ac VHT80	Chain0	80.76			
802.11ac VHT80	Chain1	80.55			
802.11ax HE80	Chain0	81.69			
802.11ax HE80	Chain1	81.70			



То	ot Mada	Tones/	Antenna	26dB Bandwidth (MHz)		
16	est Mode RU Index	Antonna	5260MHz	5280MHz	5320MHz	
80	02.11ax	267.0	Chain	20.67	24.42	20.94
	HE20	26T+0	Chain0	20.67	21.13	20.81
80	02.11ax	267.0	Chain1	20.96	20.05	24.20
	HE20	26T+0	Chain i	20.86	20.85	21.39

Test Mode	Tones/	Antenna	26dB Bandwidth (MHz)		
rest Mode	RU Index	Antenna	5270MHz		5310MHz
802.11ax HE40	26T+0	Chain0	19.91		19.79
802.11ax HE40	26T+0	Chain1	19.77		19.80

Test Mode	Tones/ RU Index	Tones/ Antenna		26dB Bandwidth (MHz)		
rest wode		Antenna	5290MHz			
802.11ax	267.0	ChainO	20.05			
HE80	26T+0	Chain0	20.05			
802.11ax	267.0	Ch ain 1	20.65			
HE80	26T+0	Chain1	20.65			



U-NII-2C

Test Mode	Antenna	26dB Bandwidth (MHz)				
rest Mode	Antenna	5500MHz	5580MHz	5700MHz		
802.11a	Chain0	26.61	26.91	27.06		
802.11a	Chain1	26.44	25.80	24.75		
802.11n HT20	Chain0	25.78	25.98	26.40		
802.11n HT20	Chain1	26.20	26.21	24.27		
802.11ac VHT20	Chain0	28.12	25.54	27.26		
802.11ac VHT20	Chain1	25.40	25.97	27.40		
802.11ax HE20	Chain0	23.50	22.30	20.38		
802.11ax HE20	Chain1	20.62	20.47	22.71		

Test Mode	Antenna	26dB Bandwidth (MHz)				
rest wode	Antenna	5510MHz	5590MHz	5670MHz		
802.11n HT40	Chain0	39.43	39.92	39.95		
802.11n HT40	Chain1	40.23	40.14	40.30		
802.11ac VHT40	Chain0	40.48	39.93	39.67		
802.11ac VHT40	Chain1	40.55	39.67	40.16		
802.11ax HE40	Chain0	40.16	40.05	39.79		
802.11ax HE40	Chain1	40.09	40.00	40.22		

Test Mode	Antenna	26dB Bandwidth (MHz)			
rest Mode	Antenna	5530MHz		5610MHz	
802.11ac VHT80	Chain0	80.44		80.30	
802.11ac VHT80	Chain1	80.39		80.44	
802.11ax HE80	Chain0	81.81		82.00	
802.11ax HE80	Chain1	81.13		82.07	



Test Mode	Mode Tones/	Antenna	26dB Bandwidth (MHz)		
rest wode		Antenna	5500MHz	5580MHz	5700MHz
802.11ax	26T+0	Chain0	21.13	20.47	21.29
HE20					
802.11ax	26T+0	Chain1	20.81	21.70	21.08
HE20	20110	Chairi	20.01	21.70	21.00

Test Mode	Tones/ Antenna		26dB Bandwidth (MHz)			
rest Mode	RU Index	Antenna	5510MHz	5590MHz	5670MHz	
802.11ax HE40	26T+0	Chain0	23.92	19.86	20.70	
802.11ax HE40	26T+0	Chain1	21.50	19.77	21.00	

Test Mode	Tones/		26dB Bandwidth (MHz)		
rest wode	RU Index	Antenna	5530MHz		5610MHz
802.11ax	26T+0	Chain0	21.39		20.95
HE80	201+0	Chamo	21.39		20.95
802.11ax	26T±0	Chain1	24.59		20.49
HE80	26T+0	Chain1	24.58		20.48



U-NII-3

Test Mode	Antenna	26dB Bandwidth (MHz)				
rest Mode	Antenna	5745MHz	5785MHz	5825MHz		
802.11a	Chain0	26.25	25.47	25.94		
802.11a	Chain1	24.84	25.11	26.91		
802.11n HT20	Chain0	26.50	25.56	27.62		
802.11n HT20	Chain1	25.73	27.70	24.55		
802.11ac VHT20	Chain0	25.97	28.78	28.69		
802.11ac VHT20	Chain1	24.86	23.70	26.71		
802.11ax HE20	Chain0	20.83	20.57	21.99		
802.11ax HE20	Chain1	21.68	21.14	20.40		

Test Mode	Antenna	26dB Bandwidth (MHz)			
rest wode	Antenna	5755MHz		5795MHz	
802.11n HT40	Chain0	40.05		39.30	
802.11n HT40	Chain1	40.62		39.92	
802.11ac VHT40	Chain0	40.36		39.69	
802.11ac VHT40	Chain1	39.61		39.65	
802.11ax HE40	Chain0	40.24		39.88	
802.11ax HE40	Chain1	39.96		40.05	

Toot Mode	Antonno	26dB Bandwidth (MHz)				
Test Mode	Antenna	5775MHz				
802.11ac VHT80	Chain0	80.69				
802.11ac VHT80	Chain1	80.30				
802.11ax HE80	Chain0	82.25				
802.11ax HE80	Chain1	82.19				



Test Mod	lo	Tones/	Antenna	26dB Bandwidth (MHz)		
Test Mod	ie	RU Index	Antenna	5745MHz	5785MHz	5825MHz
802.11a	х	26T+0	Chain	21.41	20.72	24.04
HE20		26T+0	Chain0	21.41	20.72	21.01
802.11a	х	26T+0	Chain1	20.95	20.75	24.20
HE20		26T+0	Chaini	20.95	20.75	21.39

Test Mode	Tones/	Antenna	2)	
rest wode	RU Index	Antenna	5755MHz		5795MHz
802.11ax HE40	26T+0	Chain0	19.98		19.83
802.11ax HE40	26T+0	Chain1	19.86		19.87

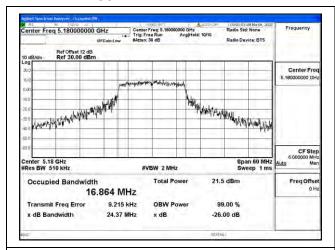
Test Mode	Tones/ RU Index	Tones/ Antenna		26dB Bandwidth (MHz)		
rest wode		Antenna	5775MHz			
802.11ax	267.0	Chain0	24.04			
HE80	26T+0	Chainu	21.94			
802.11ax	267.0	Chain 1	22.02			
HE80	26T+0	Chain1	22.02			

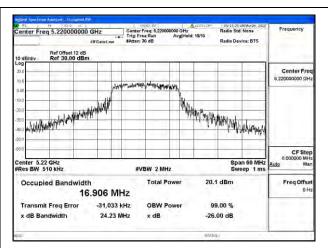


TEST GRAPHS

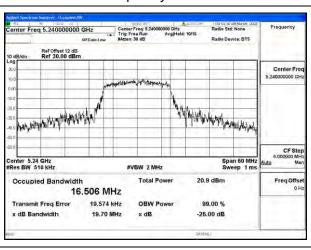
U-NII-1

Test Mode: 802.11a

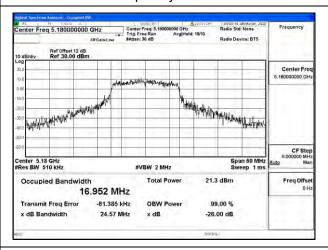




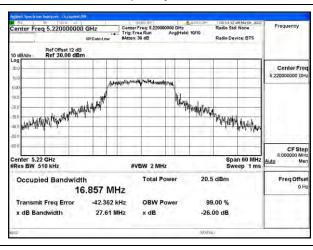
Mode:802.11a Frequency:5180MHz Ant:Chain0



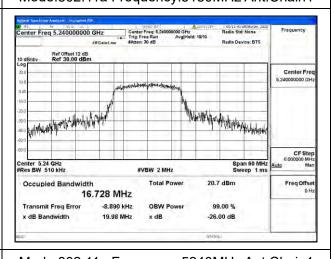
Mode:802.11a Frequency:5220MHz Ant:Chain0



Mode:802.11a Frequency:5240MHz Ant:Chain0



Mode:802.11a Frequency:5180MHz Ant:Chain1



Mode:802.11a Frequency:5220MHz Ant:Chain1

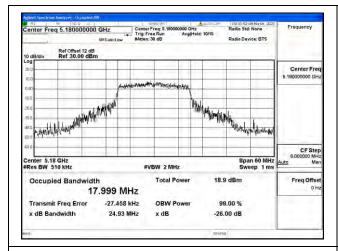
Mode:802.11a Frequency:5240MHz Ant:Chain1

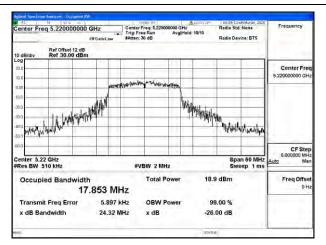
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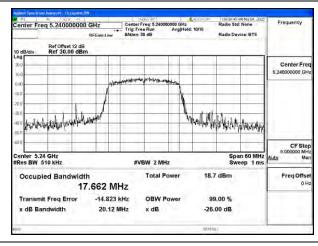
Test Mode: 802.11n HT20

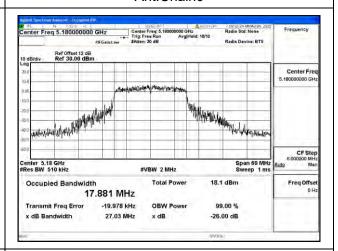




Mode:802.11n HT20 Frequency:5180MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5220MHz
Ant:Chain0

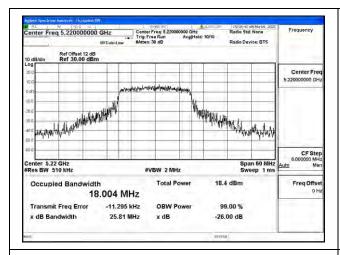


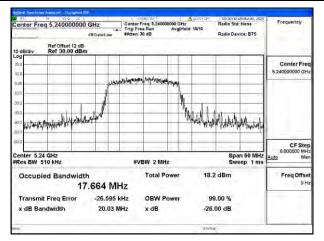


Mode:802.11n HT20 Frequency:5240MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5180MHz
Ant:Chain1



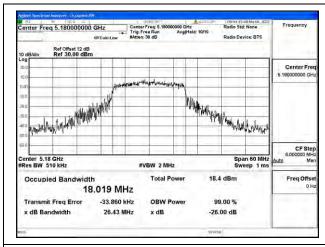


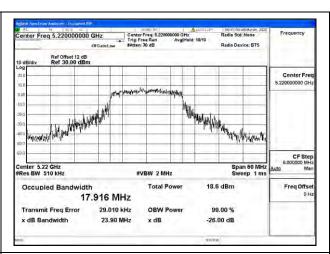


Mode:802.11n HT20 Frequency:5220MHz
Ant:Chain1

Mode:802.11n HT20 Frequency:5240MHz
Ant:Chain1

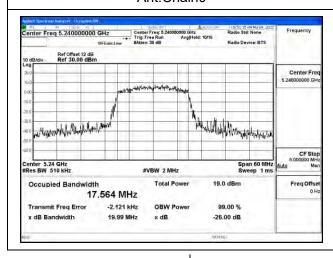
Test Mode: 802.11ac VHT20

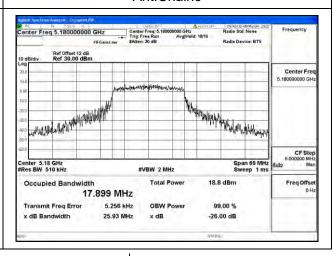




Mode:802.11ac VHT20 Frequency:5180MHz
Ant:Chain0

Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain0



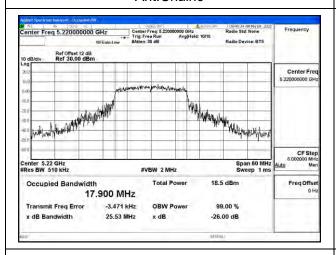


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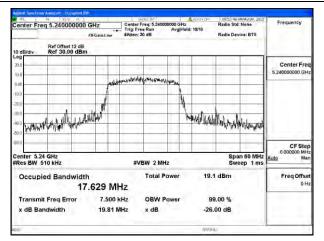


Mode:802.11ac VHT20 Frequency:5240MHz Ant:Chain0



Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain1

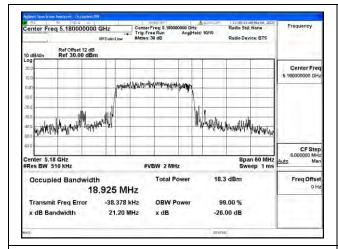
Mode:802.11ac VHT20 Frequency:5180MHz Ant:Chain1

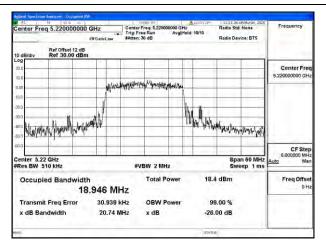


Mode:802.11ac VHT20 Frequency:5240MHz
Ant:Chain1



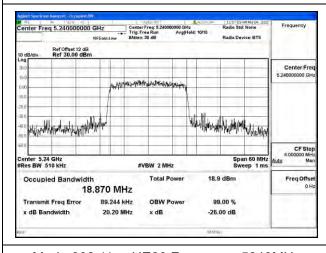
Test Mode: 802.11ax HE20

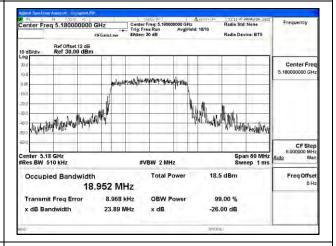




Mode:802.11ax HE20 Frequency:5180MHz
Ant:Chain0

Mode:802.11ax HE20 Frequency:5220MHz
Ant:Chain0

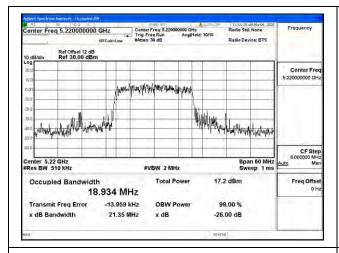


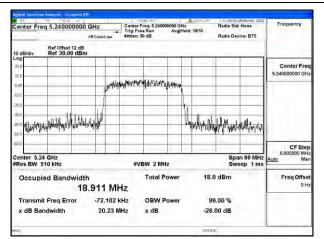


Mode:802.11ax HE20 Frequency:5240MHz
Ant:Chain0

Mode:802.11ax HE20 Frequency:5180MHz
Ant:Chain1



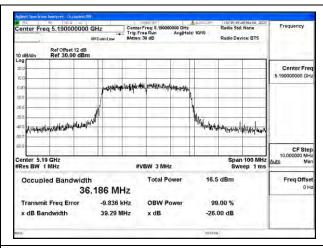


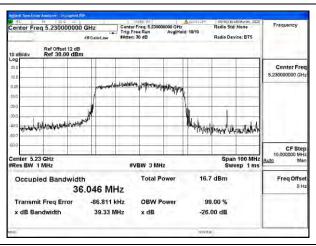


Mode:802.11ax HE20 Frequency:5220MHz
Ant:Chain1

Mode:802.11ax HE20 Frequency:5240MHz
Ant:Chain1

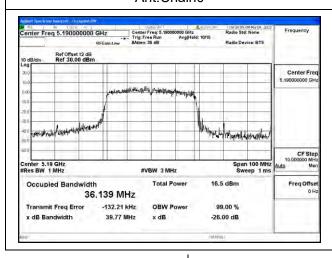
Test Mode: 802.11n HT40

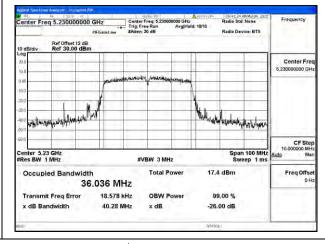




Mode:802.11n HT40 Frequency:5190MHz
Ant:Chain0

Mode:802.11n HT40 Frequency:5230MHz
Ant:Chain0





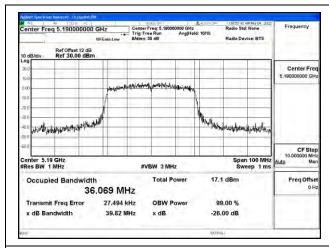
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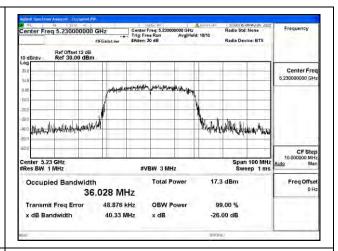


Mode:802.11n HT40 Frequency:5190MHz	Mode:802.11n HT40 Frequency:5230MHz
Ant:Chain1	Ant:Chain1

Test Mode: 802.11ac VHT40

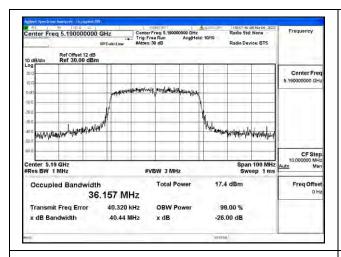


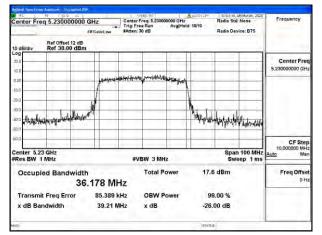




Mode:802.11ac VHT40 Frequency:5230MHz
Ant:Chain0



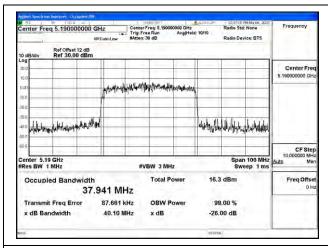


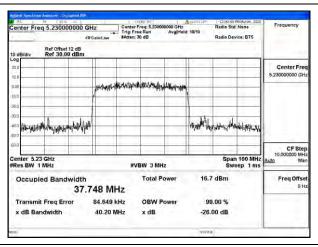


Mode:802.11ac VHT40 Frequency:5190MHz
Ant:Chain1

Mode:802.11ac VHT40 Frequency:5230MHz
Ant:Chain1

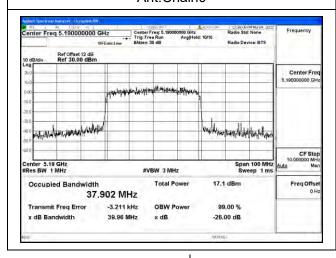
Test Mode: 802.11ax HE40

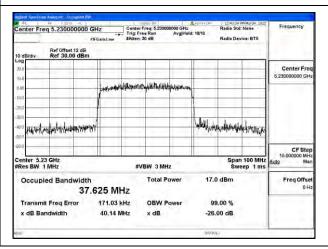




Mode:802.11ax HE40 Frequency:5190MHz
Ant:Chain0

Mode:802.11ax HE40 Frequency:5230MHz
Ant:Chain0





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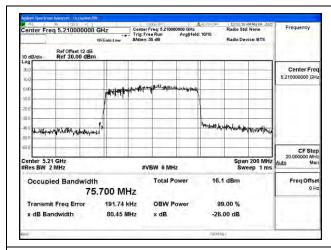
Mode:802.11ax HE40 Frequency:5190MHz

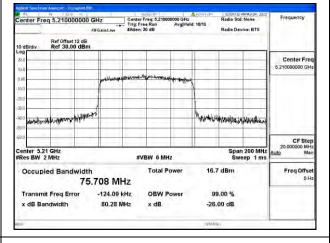
Ant:Chain1

Mode:802.11ax HE40 Frequency:5230MHz

Ant:Chain1

Test Mode: 802.11ac VHT80



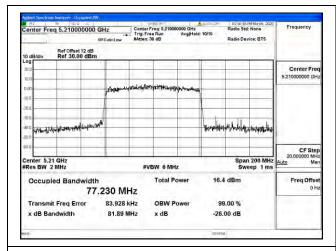


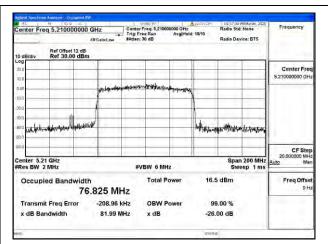
Mode:802.11ac VHT80 Frequency:5210MHz
Ant:Chain0

Mode:802.11ac VHT80 Frequency:5210MHz
Ant:Chain1



Test Mode: 802.11ax HE80



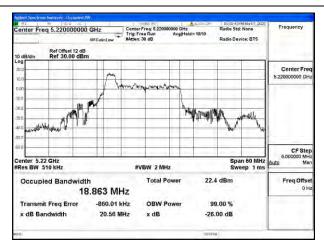


Mode:802.11ax HE80 Frequency:5210MHz
Ant:Chain0

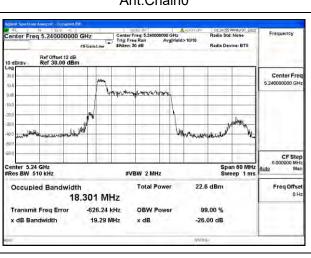
Mode:802.11ax HE80 Frequency:5210MHz
Ant:Chain1

Test Mode: 802.11ax HE20 26T

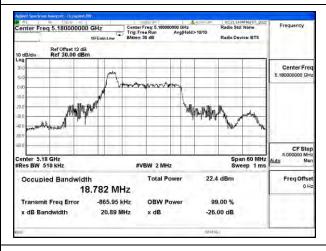




Mode:802.11ax HE20 26T Frequency:5180MHz
Ant:Chain0



Mode:802.11ax HE20 26T Frequency:5220MHz
Ant:Chain0



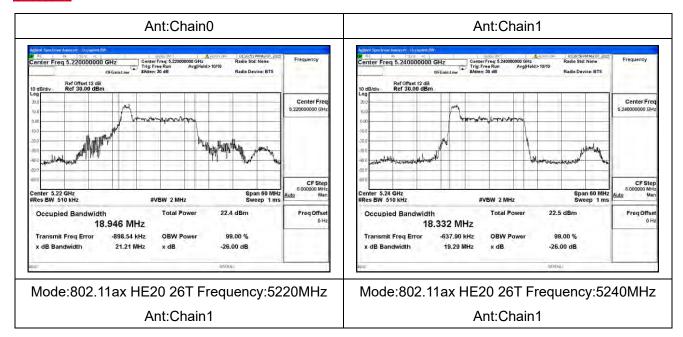
Mode:802.11ax HE20 26T Frequency:5240MHz

Mode:802.11ax HE20 26T Frequency:5180MHz

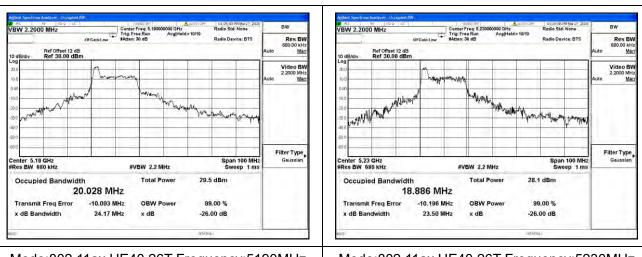
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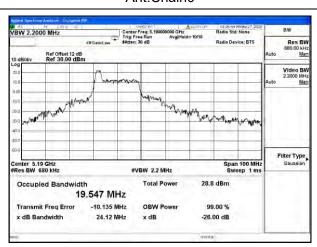




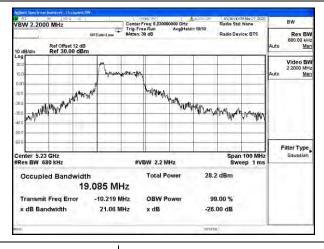
Test Mode: 802.11ax HE40 26T



Mode:802.11ax HE40 26T Frequency:5190MHz
Ant:Chain0



Mode:802.11ax HE40 26T Frequency:5230MHz
Ant:Chain0



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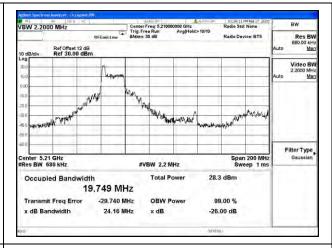
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Mode:802.11ax HE40 26T Frequency:5190MHz	Mode:802.11ax HE40 26T Frequency:5230MHz
Ant:Chain1	Ant:Chain1

Test Mode: 802.11ax HE80 26T





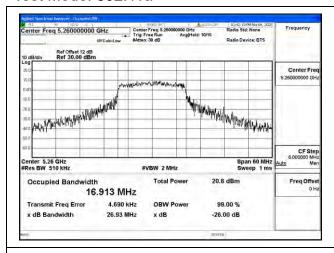
Mode:802.11ax HE80 26T Frequency:5210MHz
Ant:Chain0

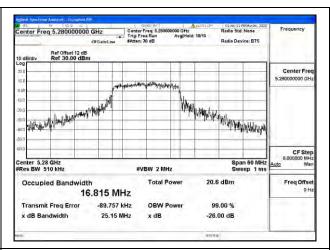
Mode:802.11ax HE80 26T Frequency:5210MHz
Ant:Chain1



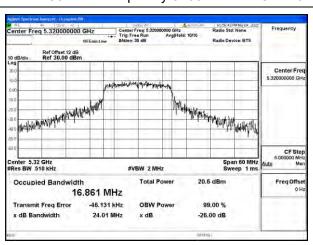
U-NII-2A

Test Mode: 802.11a

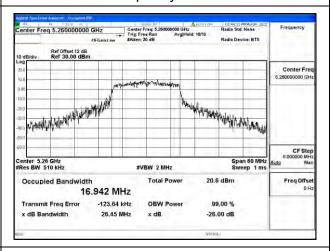




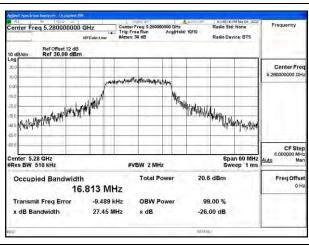
Mode:802.11a Frequency:5260MHz Ant:Chain0



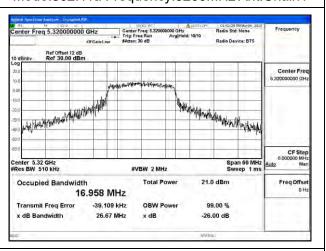
Mode:802.11a Frequency:5280MHz Ant:Chain0



Mode:802.11a Frequency:5320MHz Ant:Chain0



Mode:802.11a Frequency:5260MHz Ant:Chain1

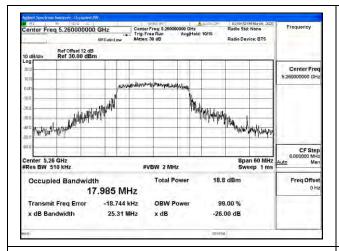


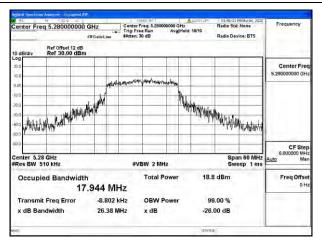
Mode:802.11a Frequency:5280MHz Ant:Chain1

Mode:802.11a Frequency:5320MHz Ant:Chain1



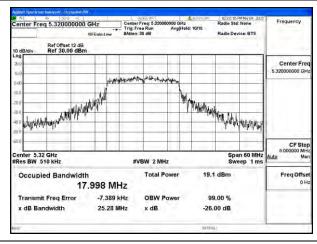
Test Mode: 802.11n HT20

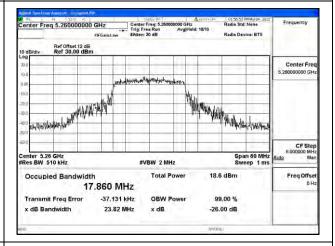




Mode:802.11n HT20 Frequency:5260MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5280MHz
Ant:Chain0

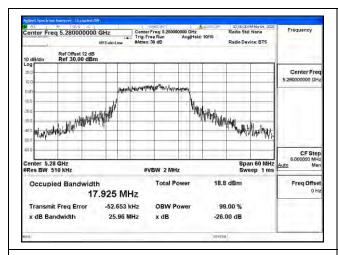


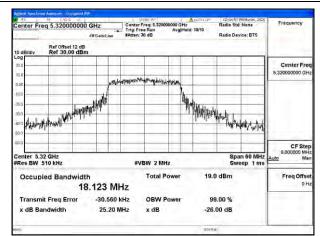


Mode:802.11n HT20 Frequency:5320MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5260MHz
Ant:Chain1



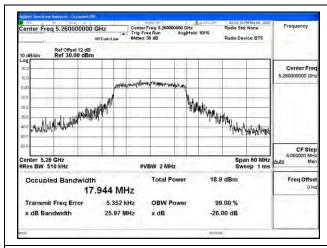


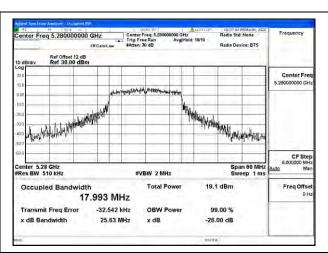


Mode:802.11n HT20 Frequency:5280MHz
Ant:Chain1

Mode:802.11n HT20 Frequency:5320MHz
Ant:Chain1

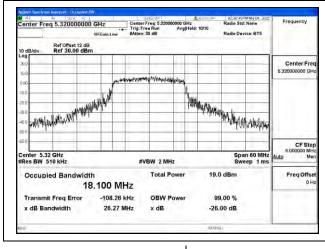
Test Mode: 802.11ac VHT20

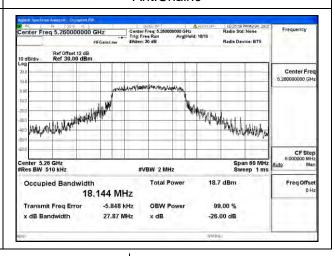




Mode:802.11ac VHT20 Frequency:5260MHz
Ant:Chain0

Mode:802.11ac VHT20 Frequency:5280MHz
Ant:Chain0



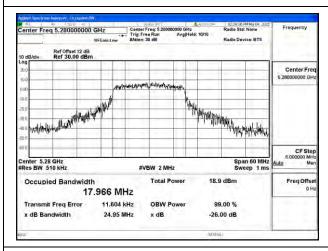


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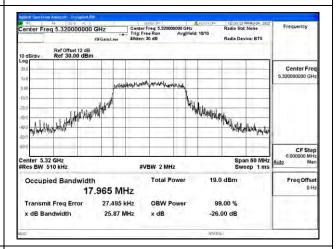


Mode:802.11ac VHT20 Frequency:5320MHz Ant:Chain0



Mode:802.11ac VHT20 Frequency:5280MHz
Ant:Chain1

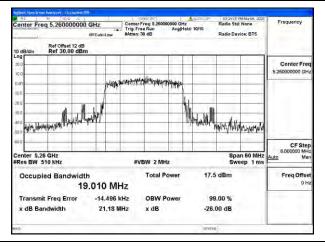
Mode:802.11ac VHT20 Frequency:5260MHz Ant:Chain1

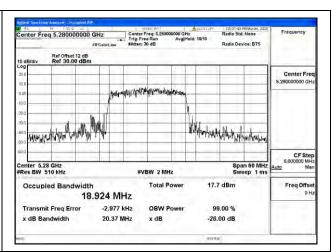


Mode:802.11ac VHT20 Frequency:5320MHz
Ant:Chain1



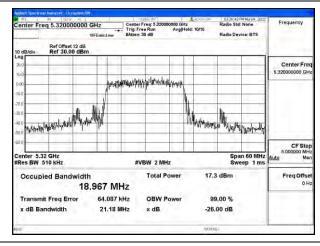
Test Mode: 802.11ax HE20

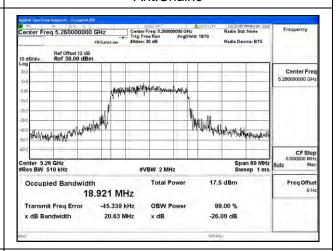




Mode:802.11ax HE20 Frequency:5260MHz
Ant:Chain0

Mode:802.11ax HE20 Frequency:5280MHz
Ant:Chain0

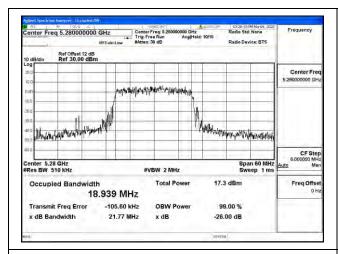


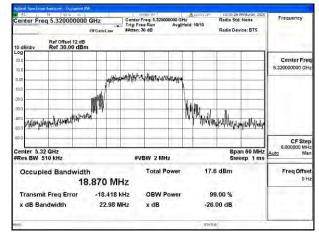


Mode:802.11ax HE20 Frequency:5320MHz
Ant:Chain0

Mode:802.11ax HE20 Frequency:5260MHz
Ant:Chain1



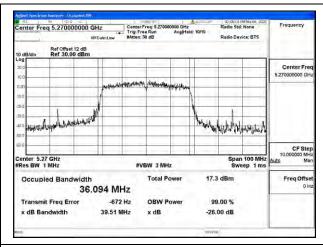


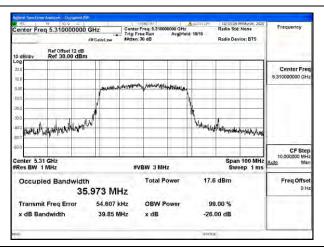


Mode:802.11ax HE20 Frequency:5280MHz
Ant:Chain1

Mode:802.11ax HE20 Frequency:5320MHz
Ant:Chain1

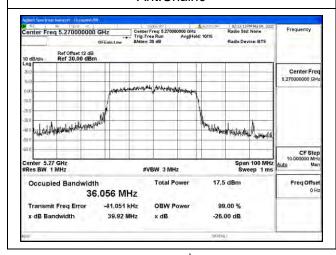
Test Mode: 802.11n HT40

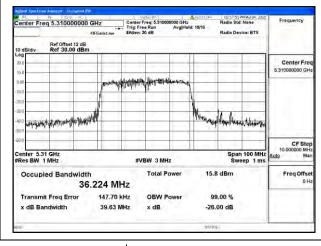




Mode:802.11n HT40 Frequency:5270MHz
Ant:Chain0

Mode:802.11n HT40 Frequency:5310MHz
Ant:Chain0





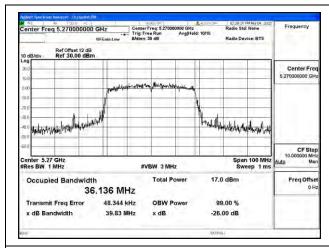
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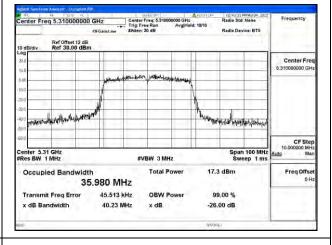
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Mode:802.11n HT40 Frequency:5270MHz	Mode:802.11n HT40 Frequency:5310MHz
Ant:Chain1	Ant:Chain1

Test Mode: 802.11ac VHT40

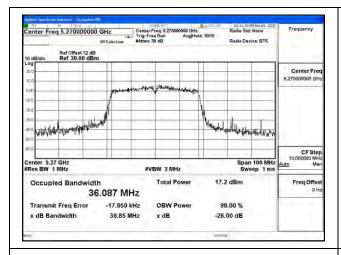


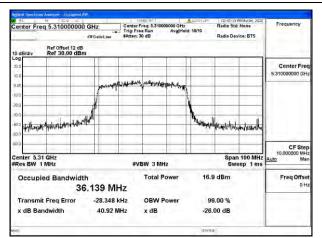


Mode:802.11ac VHT40 Frequency:5270MHz
Ant:Chain0

Mode:802.11ac VHT40 Frequency:5310MHz
Ant:Chain0



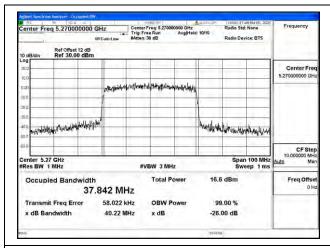


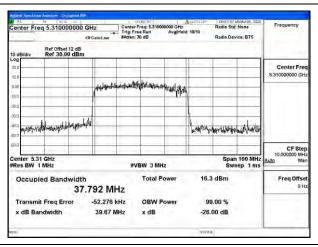


Mode:802.11ac VHT40 Frequency:5270MHz
Ant:Chain1

Mode:802.11ac VHT40 Frequency:5310MHz
Ant:Chain1

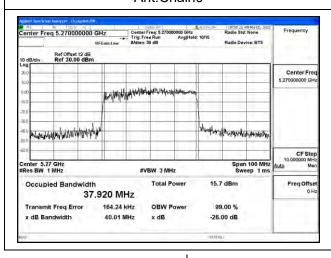
Test Mode: 802.11ax HE40

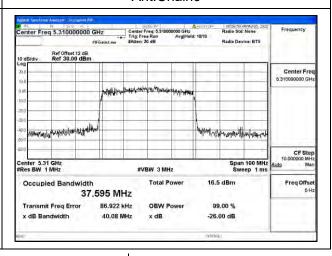




Mode:802.11ax HE40 Frequency:5270MHz
Ant:Chain0

Mode:802.11ax HE40 Frequency:5310MHz
Ant:Chain0





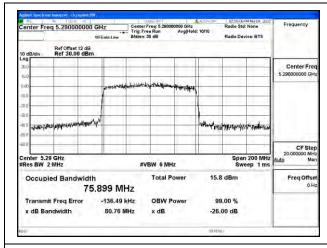
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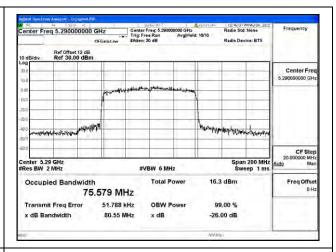


Mode:802.11ax HE40 Frequency:5270MHz	Mode:802.11ax HE40 Frequency:5310MHz
Ant:Chain1	Ant:Chain1

Test Mode: 802.11ac VHT80



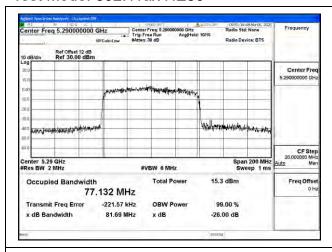


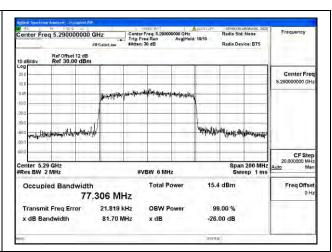


Mode:802.11ac VHT80 Frequency:5290MHz
Ant:Chain1



Test Mode: 802.11ax HE80





Mode:802.11ax HE80 Frequency:5290MHz
Ant:Chain0

Mode:802.11ax HE80 Frequency:5290MHz
Ant:Chain1

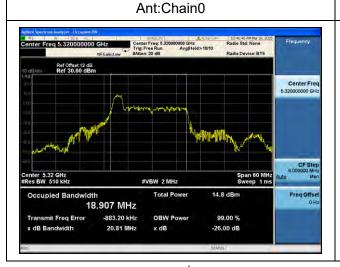
Test Mode: 802.11ax HE20 26T





Mode:802.11ax HE20 26T Frequency:5260MHz

Mode:802.11ax HE20 26T Frequency:5280MHz
Ant:Chain0



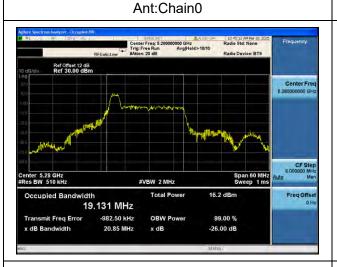


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Mode:802.11ax HE20 26T Frequency:5320MHz



Mode:802.11ax HE20 26T Frequency:5280MHz
Ant:Chain1

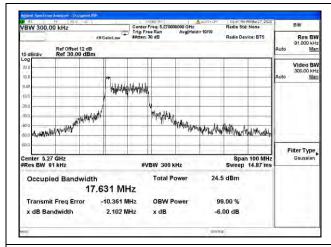
Mode:802.11ax HE20 26T Frequency:5260MHz Ant:Chain1

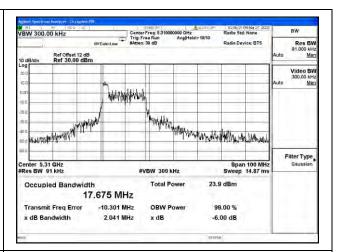


Mode:802.11ax HE20 26T Frequency:5320MHz
Ant:Chain1



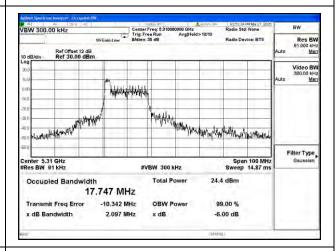
Test Mode: 802.11ax HE40 26T





Mode:802.11ax HE40 26T Frequency:5270MHz
Ant:Chain0

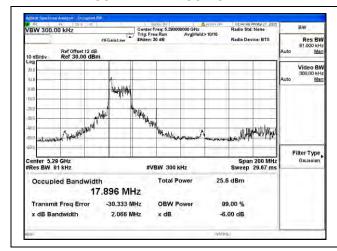
Mode:802.11ax HE40 26T Frequency:5310MHz
Ant:Chain0

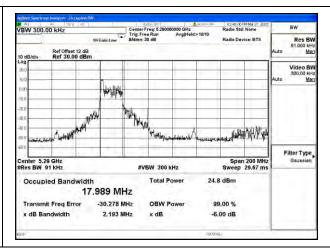


Mode:802.11ax HE40 26T Frequency:5270MHz
Ant:Chain1

Mode:802.11ax HE40 26T Frequency:5310MHz
Ant:Chain1

Test Mode: 802.11ax HE80 26T





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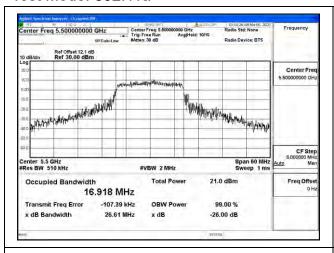


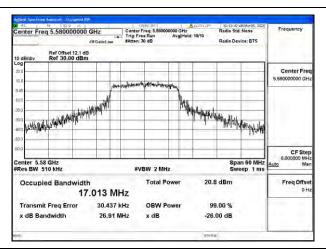
Mode:802.11ax HE80 26T Frequency:5290MHz	Mode:802.11ax HE80 26T Frequency:5290MHz
Ant:Chain0	Ant:Chain1



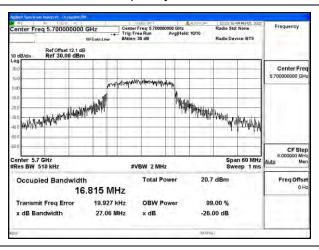
U-NII-2C

Test Mode: 802.11a

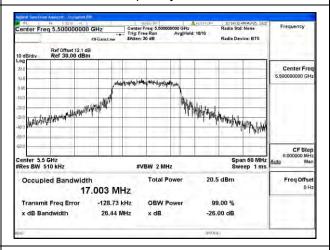




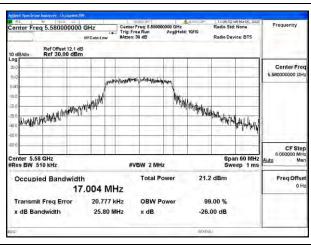
Mode:802.11a Frequency:5500MHz Ant:Chain0



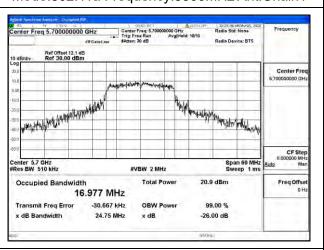
Mode:802.11a Frequency:5580MHz Ant:Chain0



Mode:802.11a Frequency:5700MHz Ant:Chain0



Mode:802.11a Frequency:5500MHz Ant:Chain1

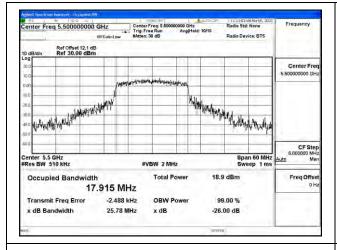


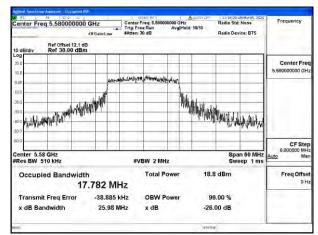
Mode:802.11a Frequency:5580MHz Ant:Chain1

Mode:802.11a Frequency:5700MHz Ant:Chain1



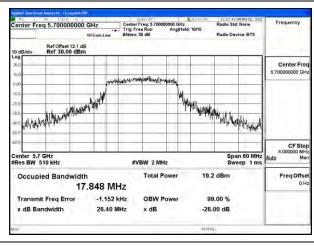
Test Mode: 802.11n HT20

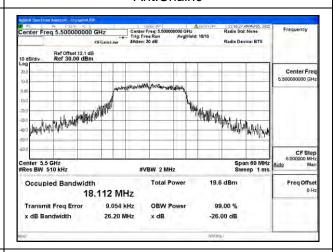




Mode:802.11n HT20 Frequency:5500MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5580MHz
Ant:Chain0

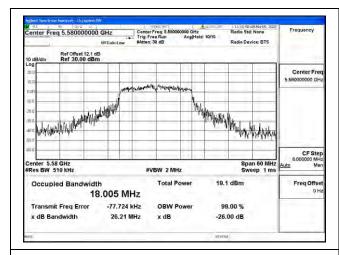


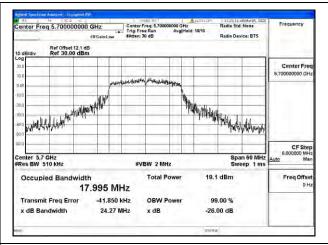


Mode:802.11n HT20 Frequency:5700MHz
Ant:Chain0

Mode:802.11n HT20 Frequency:5500MHz
Ant:Chain1



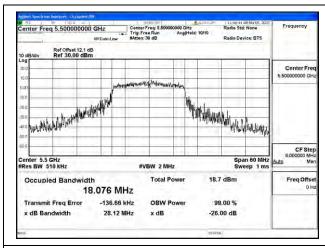


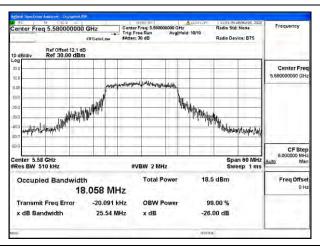


Mode:802.11n HT20 Frequency:5580MHz
Ant:Chain1

Mode:802.11n HT20 Frequency:5700MHz
Ant:Chain1

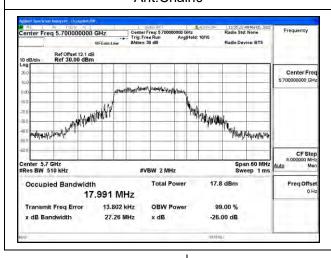
Test Mode: 802.11ac VHT20

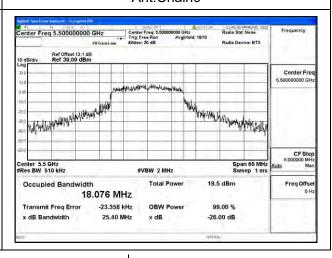




Mode:802.11ac VHT20 Frequency:5500MHz
Ant:Chain0

Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain0



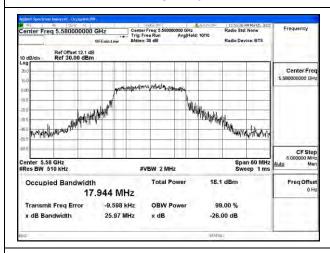


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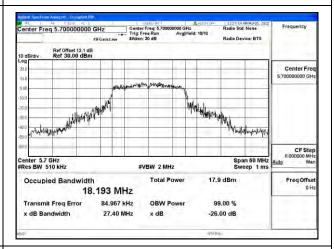


Mode:802.11ac VHT20 Frequency:5700MHz Ant:Chain0



Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain1

Mode:802.11ac VHT20 Frequency:5500MHz Ant:Chain1



Mode:802.11ac VHT20 Frequency:5700MHz
Ant:Chain1