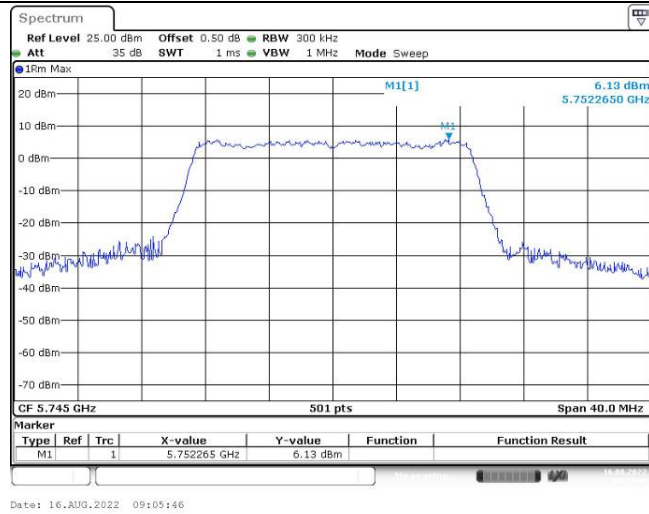
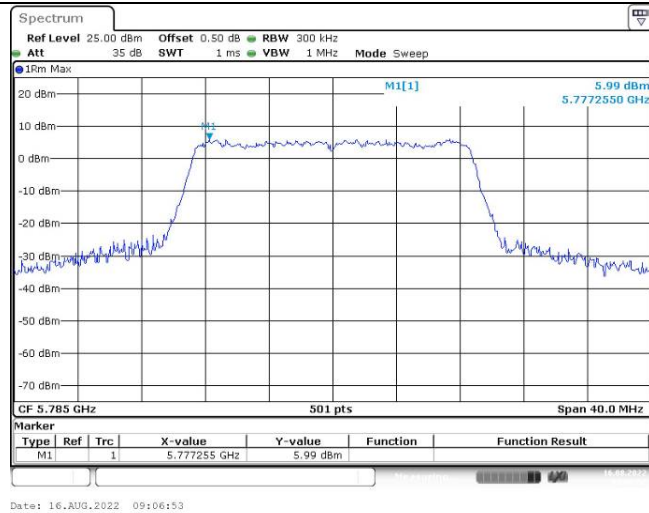
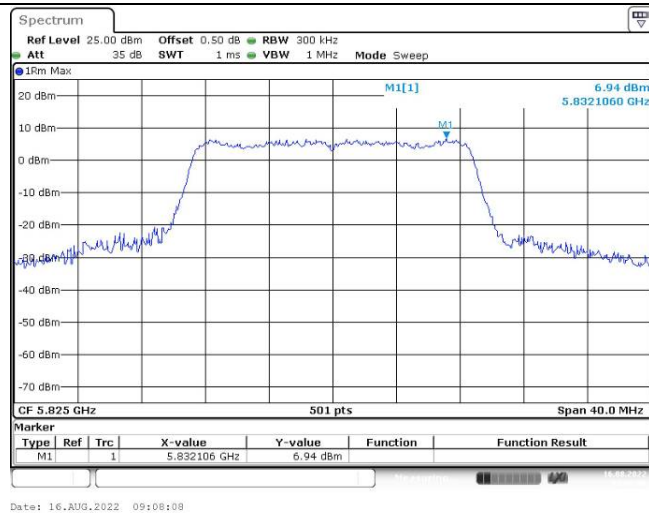
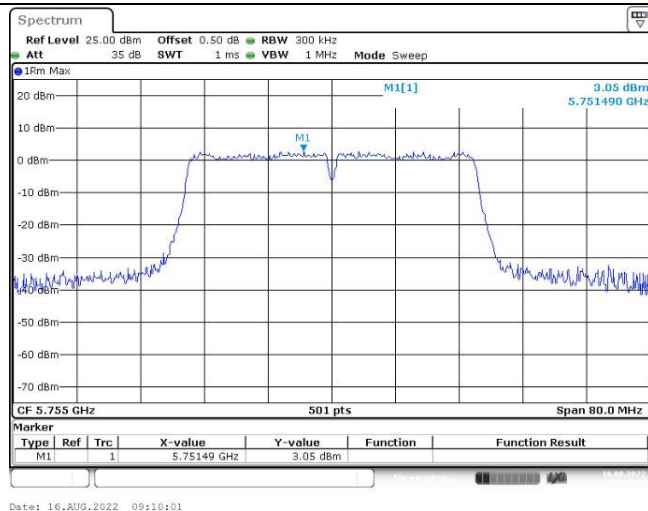
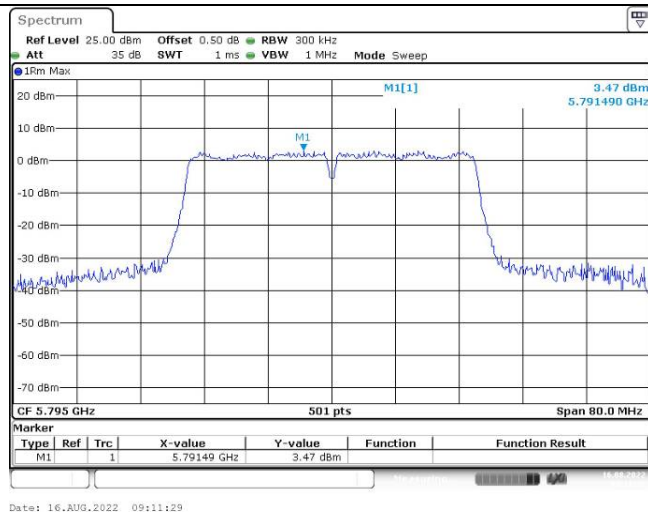
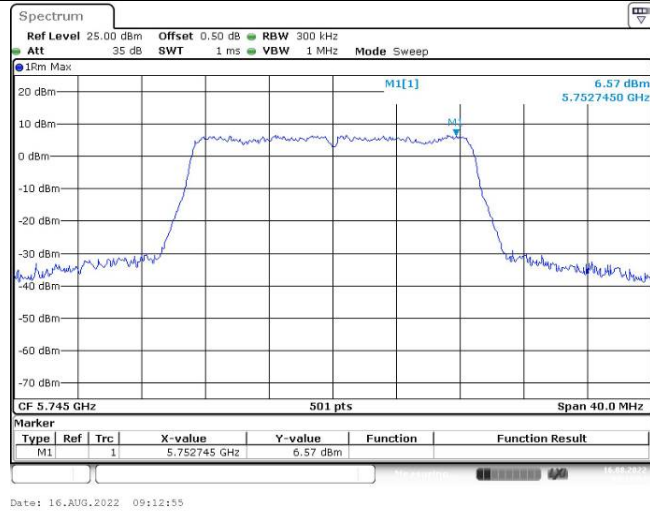
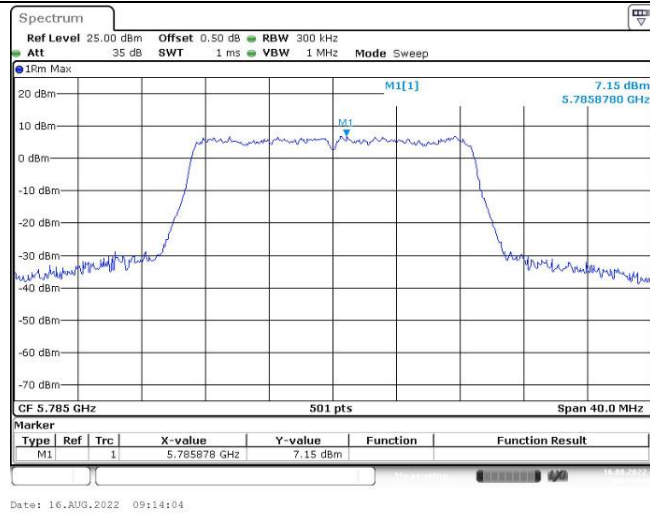
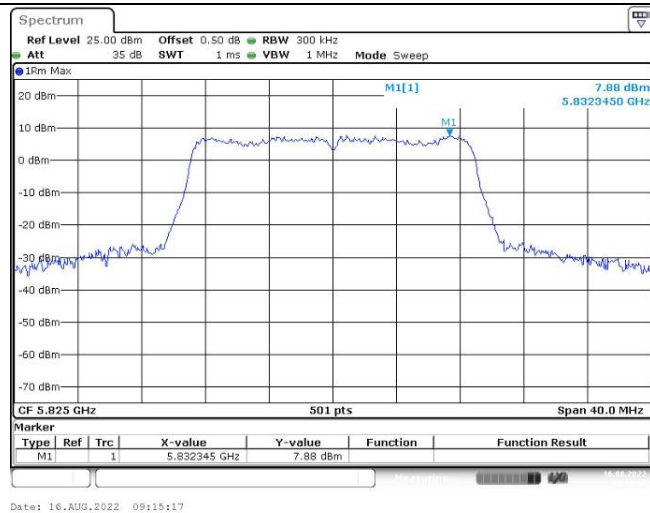


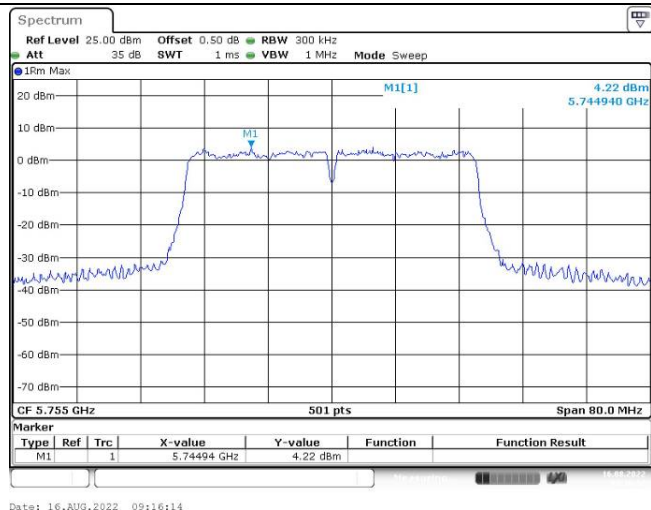
Maximum power spectral density

802.11n ht20
Lowest Channel802.11n ht20
Middle Channel802.11n ht20
Highest Channel

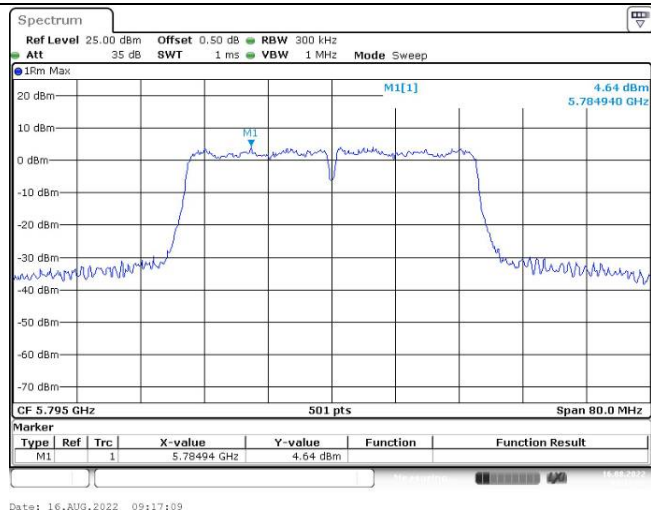
Maximum power spectral density802.11n ht40
Lowest Channel802.11n ht40
Highest Channel

Maximum power spectral density

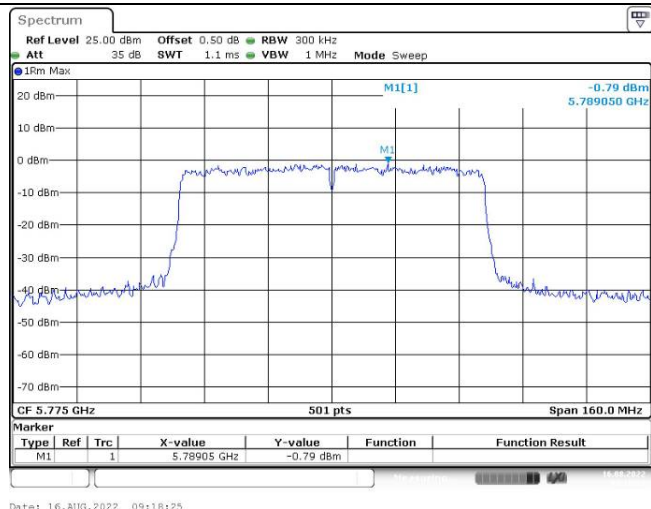
802.11ac vht20
Lowest Channel802.11ac vht20
Middle Channel802.11ac vht20
Highest Channel

Maximum power spectral density802.11ac vht40
Lowest Channel

Date: 16.AUG.2022 09:16:14

802.11ac vht40
Highest Channel

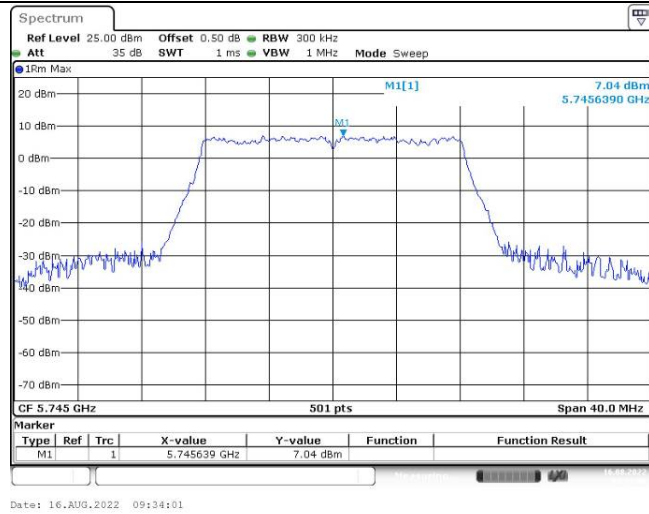
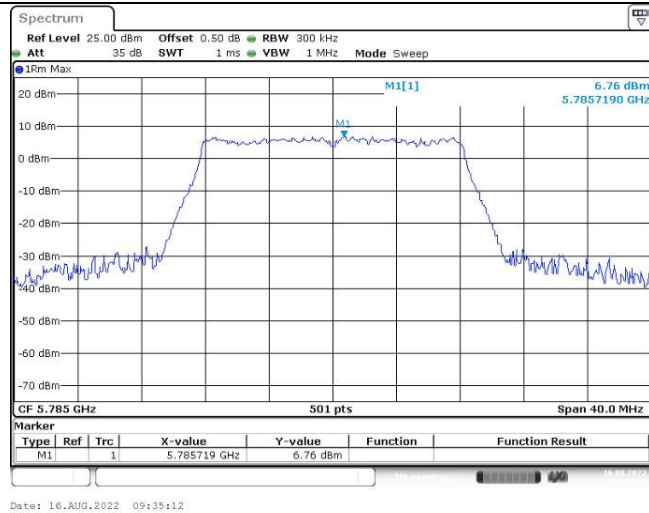
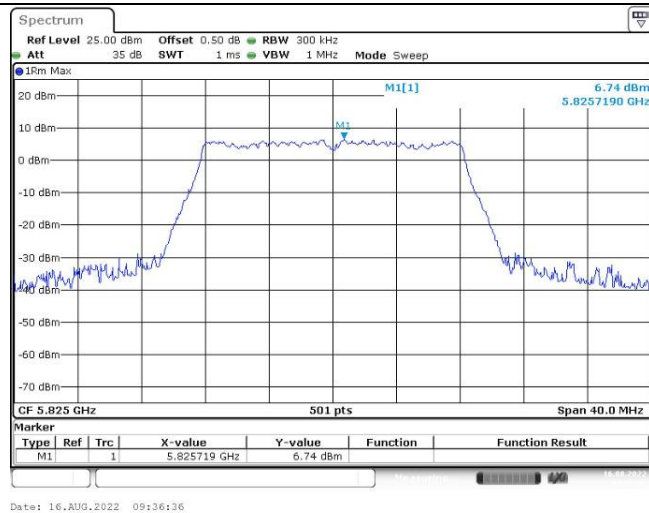
Date: 16.AUG.2022 09:17:09

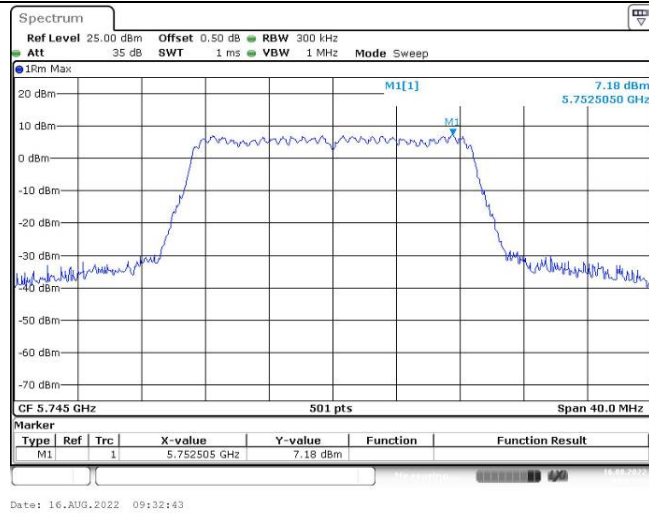
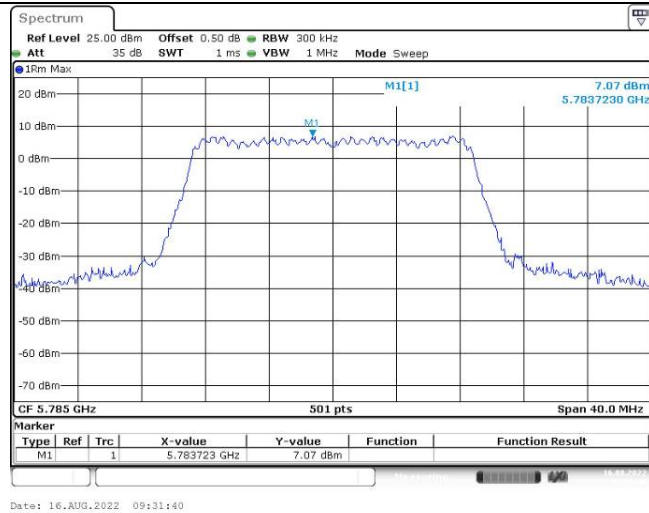
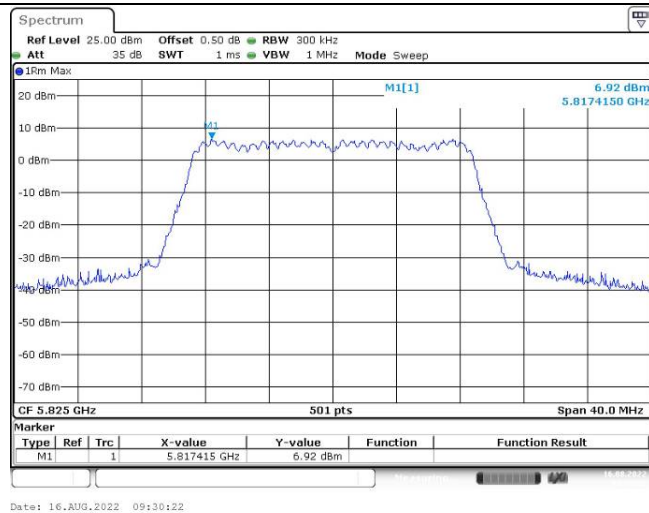
802.11ac vht80
Middle Channel

Date: 16.AUG.2022 09:18:25

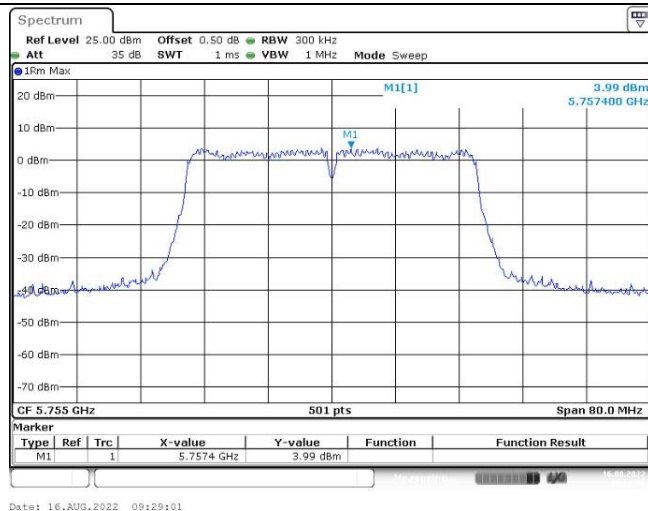
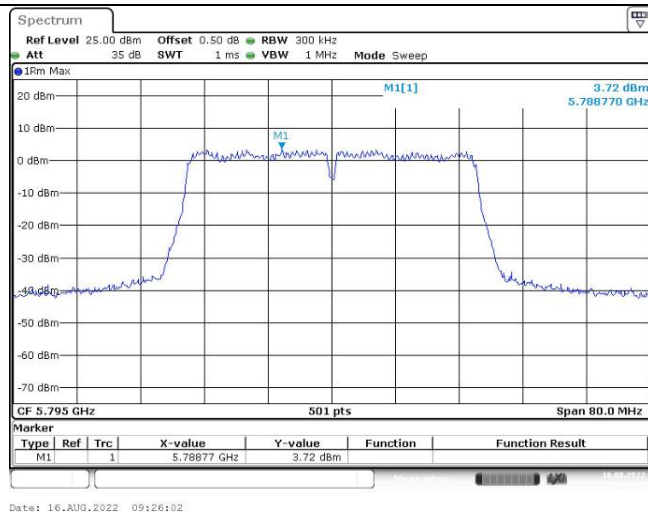
Chain1:

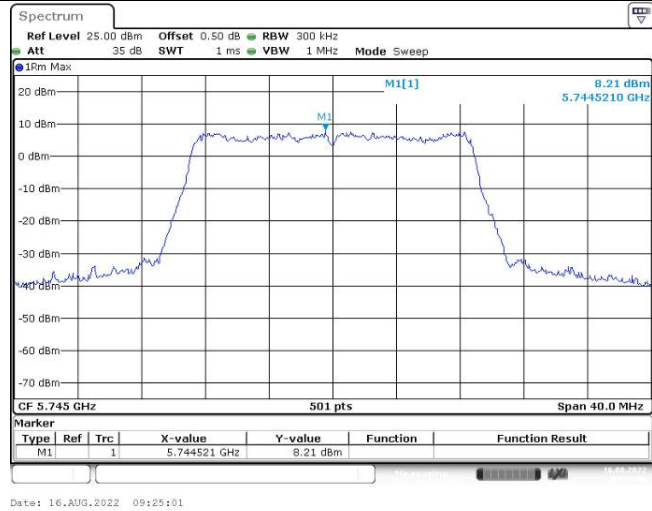
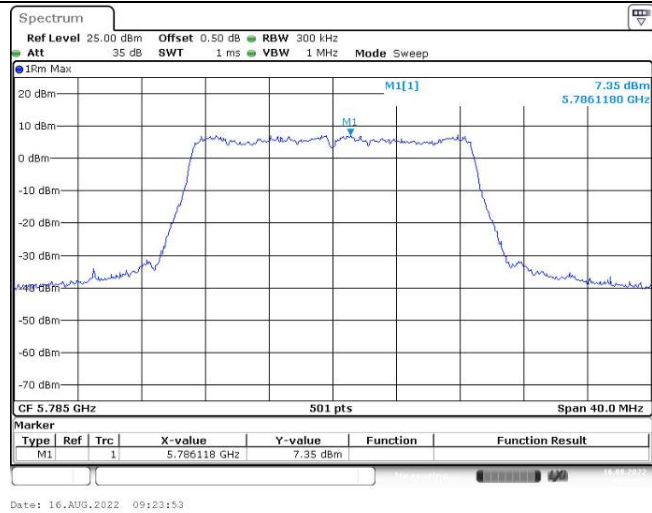
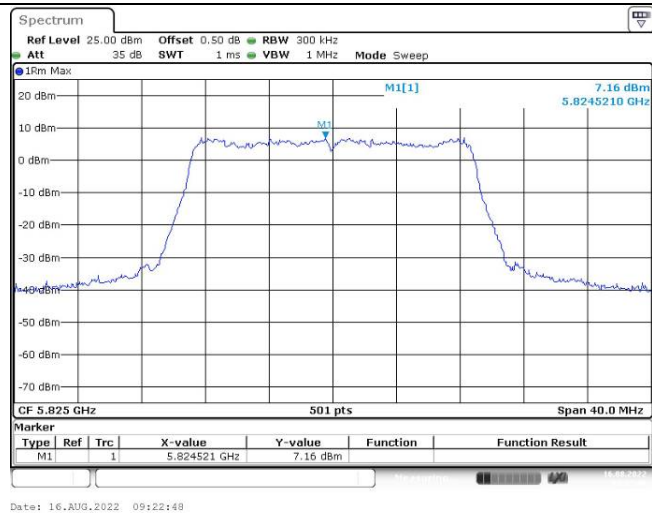
Maximum power spectral density

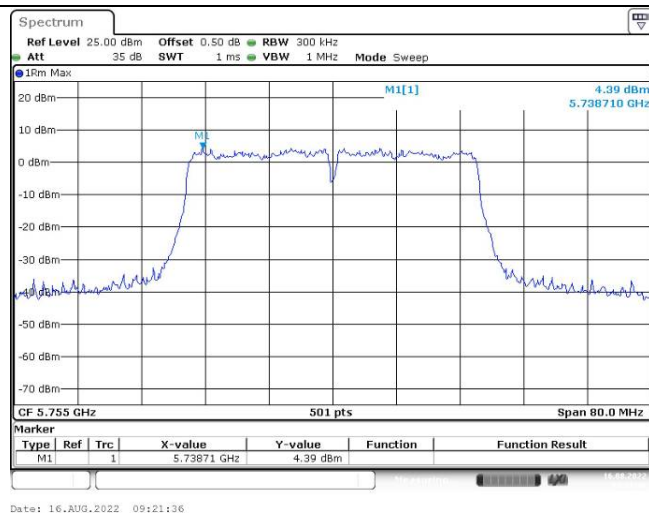
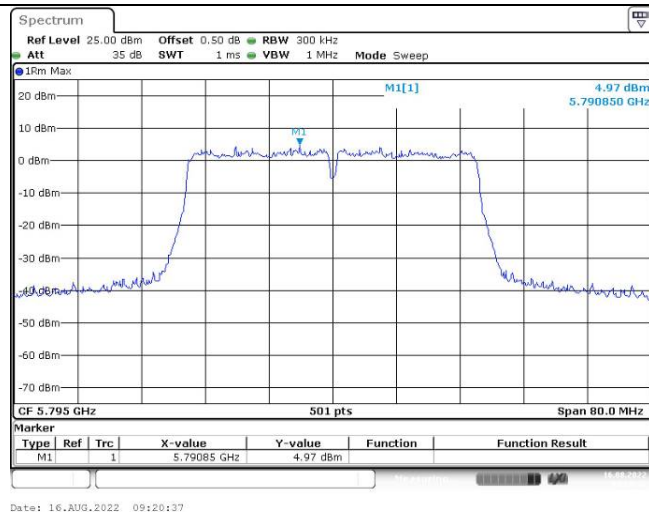
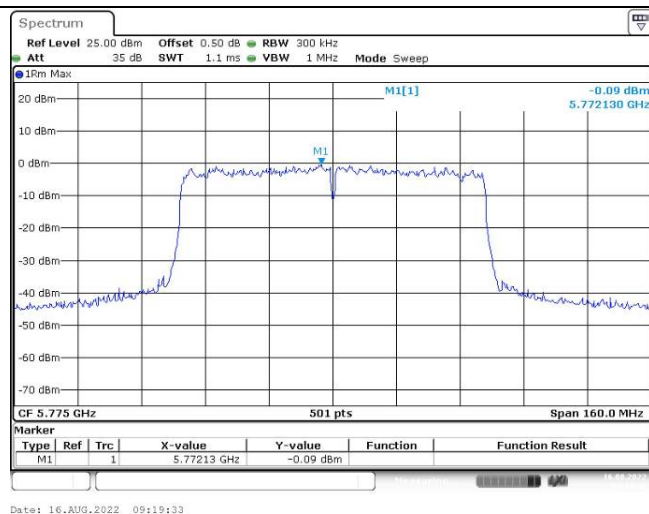
802.11a
Lowest Channel802.11a
Middle Channel802.11a
Highest Channel

Maximum power spectral density802.11n ht20
Lowest Channel802.11n ht20
Middle Channel802.11n ht20
Highest Channel

Maximum power spectral density

802.11n ht40
Lowest Channel802.11n ht40
Highest Channel

Maximum power spectral density802.11ac vht20
Lowest Channel802.11ac vht20
Middle Channel802.11ac vht20
Highest Channel

Maximum power spectral density802.11ac vht40
Lowest Channel802.11ac vht40
Highest Channel802.11ac vht80
Middle Channel

4.6 Duty Cycle:

Serial Number:	CR22080002-RF-S1	Test Date:	2022-08-15
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	26.2	Relative Humidity: (%)	69	ATM Pressure: (kPa)	99.9
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2021-10-10	2022-10-09
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554404	Each time	N/A

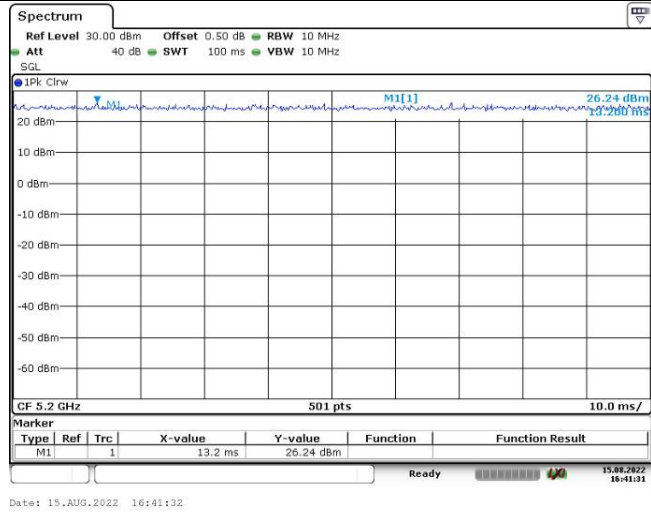
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

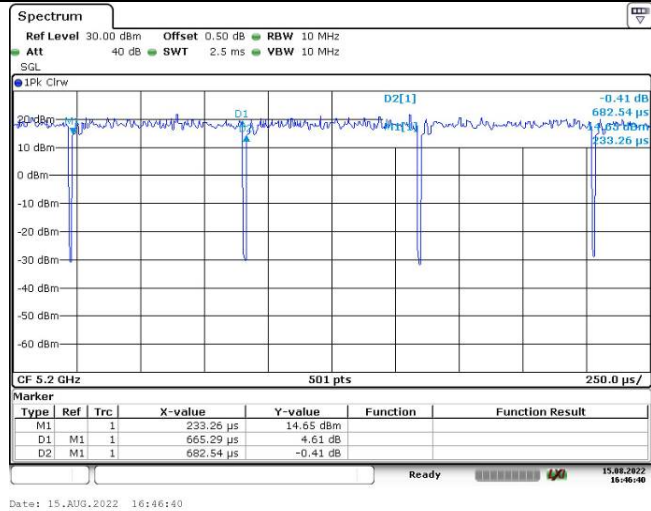
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)
802.11a	100	100	100.00
802.11n ht20	0.665	0.683	97.36
802.11n ht40	0.345	0.359	96.10
802.11ac vht20	0.154	0.161	95.65
802.11ac vht40	0.096	0.104	92.31
802.11ac vht80	0.06	0.067	89.55

Duty Cycle

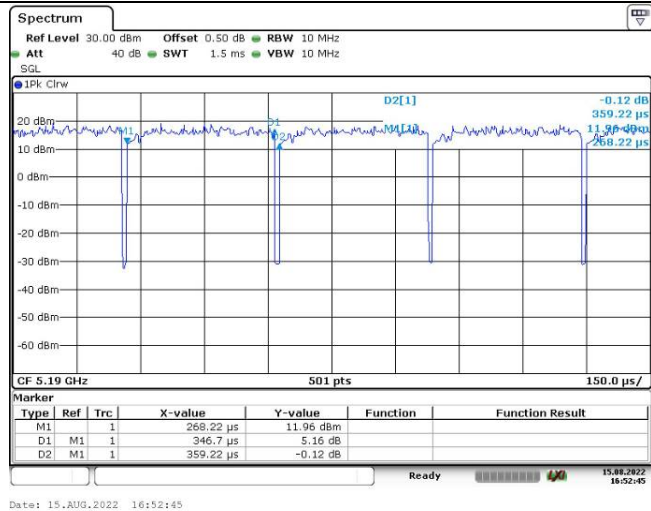
802.11a



802.11n ht20

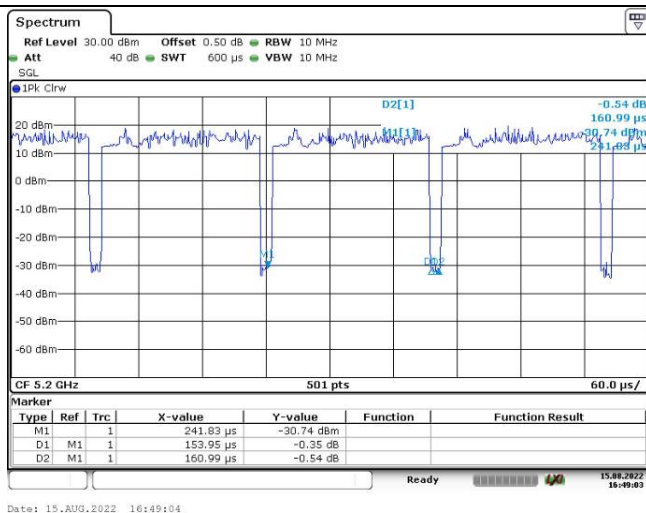


802.11n ht40

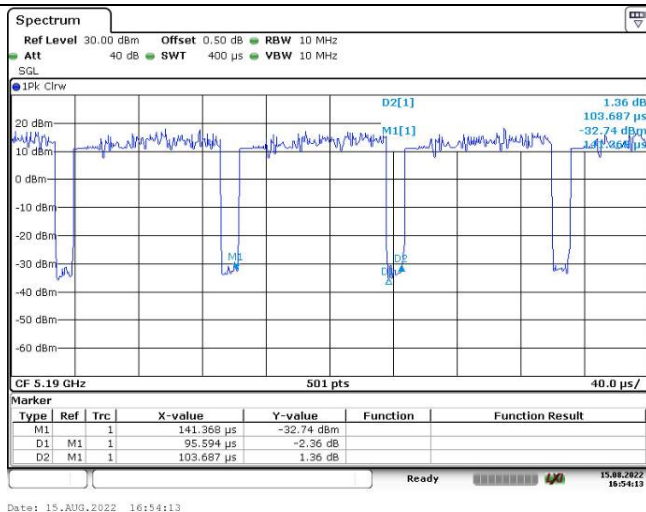


Duty Cycle

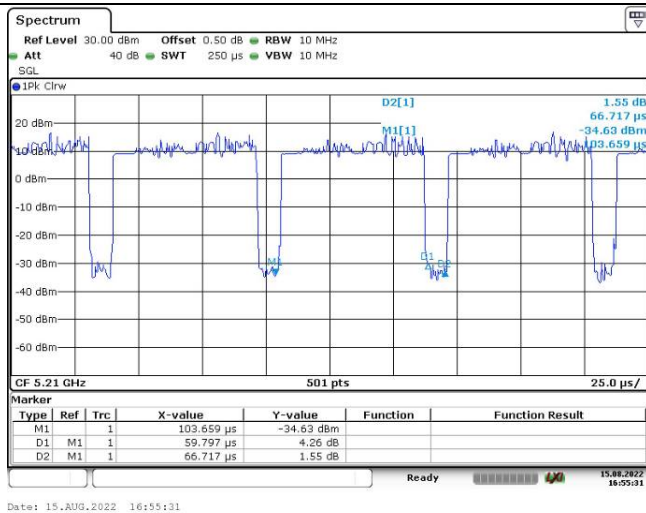
802.11ac vht20



802.11ac vht40



802.11ac vht80



5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

According to KDB 447498 D04 Interim General RF Exposure Guidance v01:

2.2.2 Simultaneous Transmission with both SAR-based and MPE-Based Test Exemptions

This case is described in detail in § 1.1307(b)(3)(ii)(B) and covers the situations where both SAR-based and MPE-based exemption may be considered for test exemption in fixed, mobile, or portable device exposure conditions. For these cases, a device with multiple RF sources transmitting simultaneously will be considered an RF exempt device if the condition of Formula (1) is satisfied.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

5.2 Measurement Result

Operation Modes	Frequency (MHz)	Distance (mm)	P _{th}		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain + Beamforming Gain (dBi)	ERP (dBm)	ERP (mW)	Exemption
			(mW)	(dBm)					
WLAN 2.4G	2412-2462	200	3060	34.86	26	8.0	31.85	1531.09	Compliant
WLAN 5.2G	5150-5250	200	3060	34.86	21	8.0	26.85	484.17	Compliant
WLAN 5.8G	5725-5850	200	3060	34.86	22	8.0	27.85	609.54	Compliant

WLAN 2.4G and 5G can transmit simultaneously:

$$\sum_{i=1}^a \left(\frac{P_i}{P_{th_i}} \right) + \sum_{j=1}^b \left(\frac{ERP_j}{ERP_{th_j}} \right) + \sum_{k=1}^c \left(\frac{Evaluated_k}{Exposure Limit_k} \right)$$

$$= \text{EPR}_{2.4G} / P_{th-2.4G} + \text{EPR}_{5G} / P_{th-5G}$$

$$= 1531.09 / 3060 + 609.54 / 3060$$

$$= 0.70$$

Result: The device compliant the Exemption at 20cm distances.

===== END OF REPORT =====