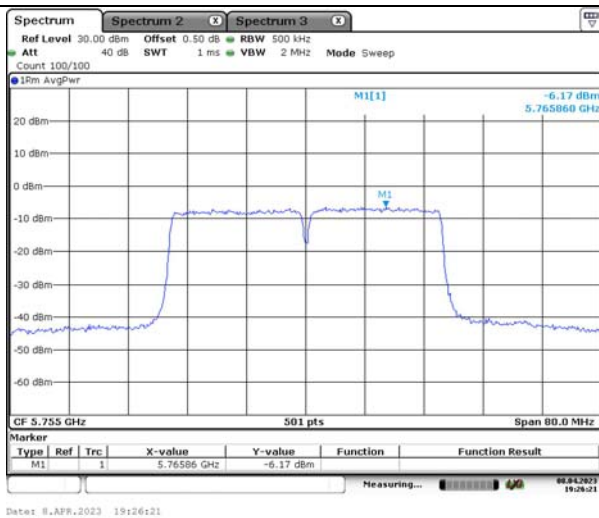
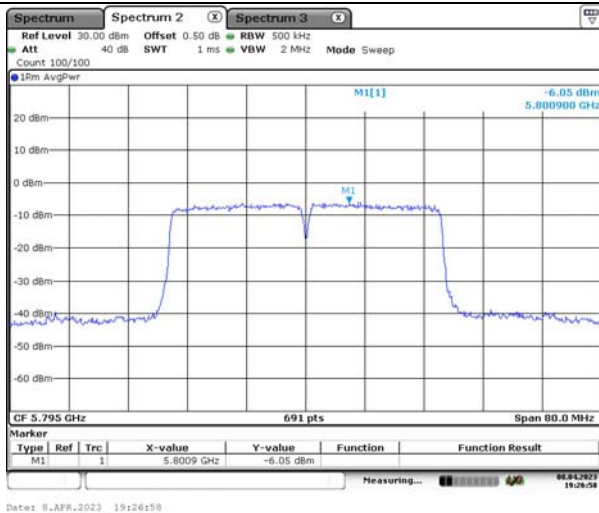


Maximum power spectral density

802.11n ht40
Lowest Channel

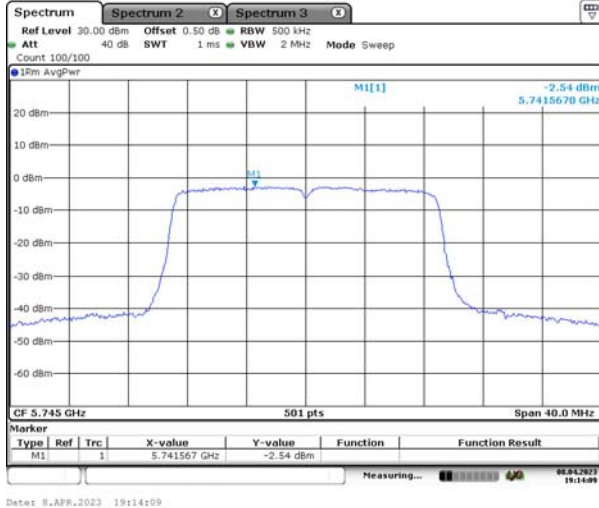


802.11n ht40
Highest Channel

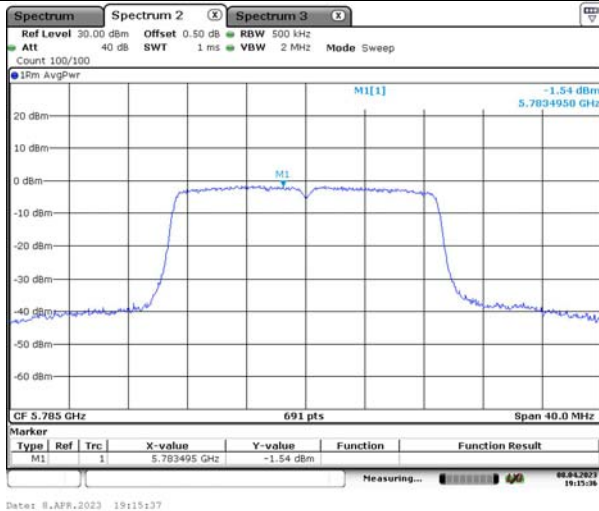


Maximum power spectral density

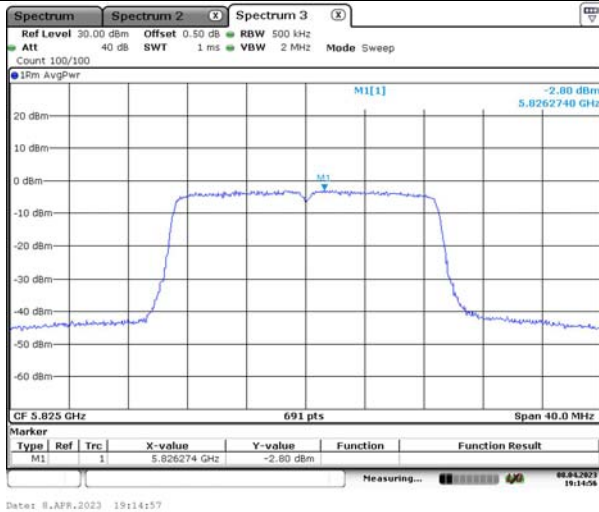
802.11ac vht20
Lowest Channel



802.11ac vht20
Middle Channel

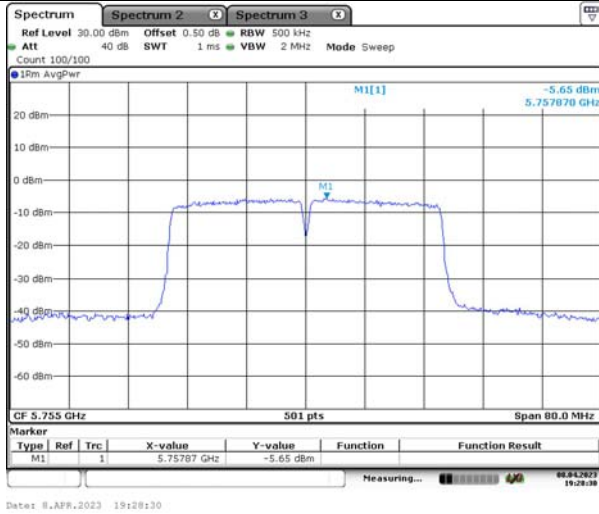


802.11ac vht20
Highest Channel

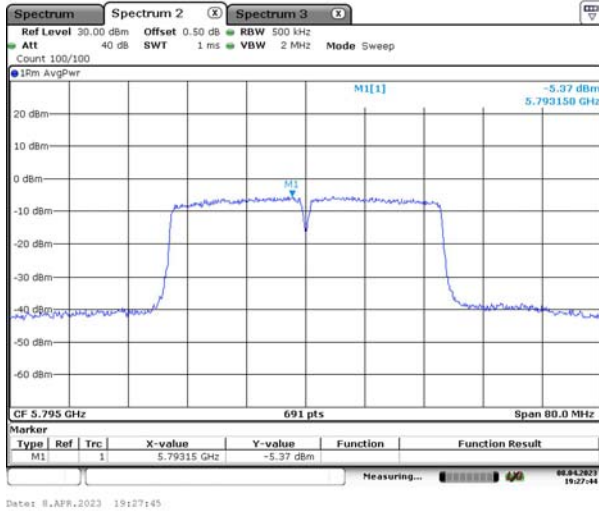


Maximum power spectral density

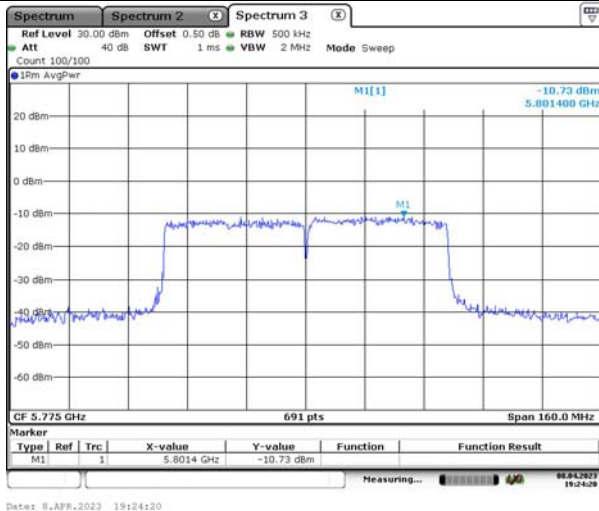
802.11ac vht40
Lowest Channel



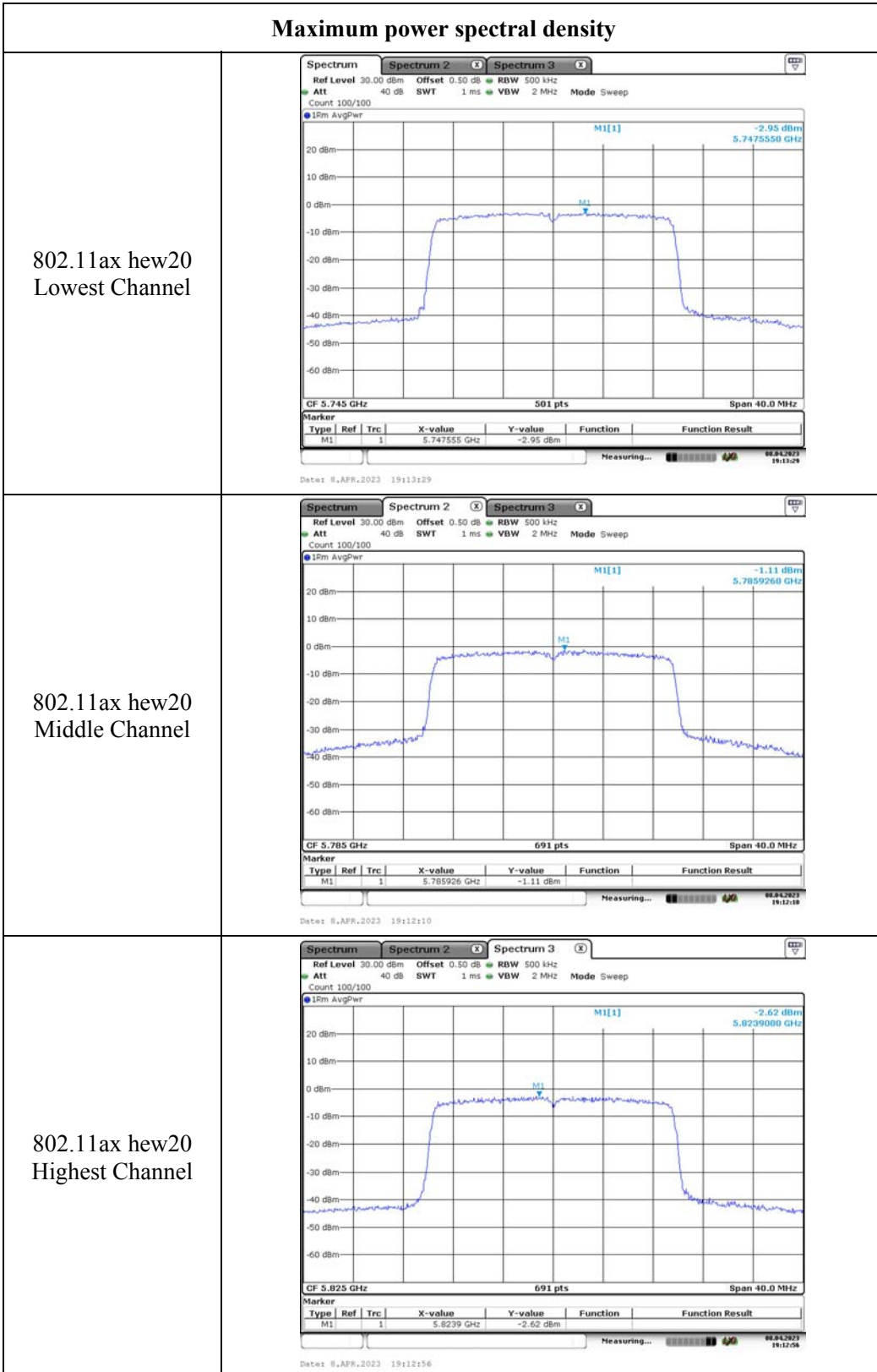
802.11ac vht40
Highest Channel



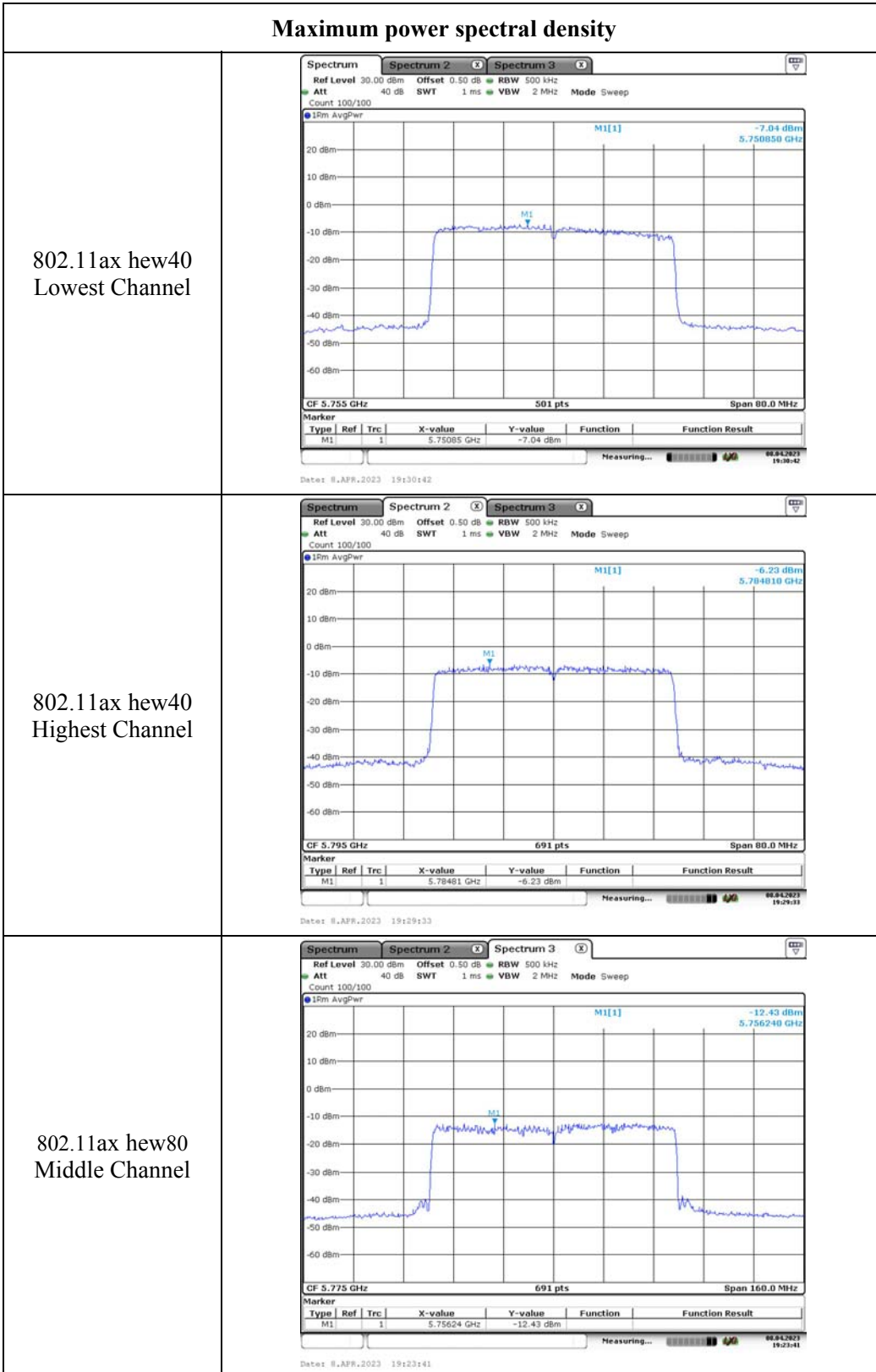
802.11ac vht80
Middle Channel



Maximum power spectral density



Maximum power spectral density



4.6 Duty Cycle:

Serial Number:	231Y	Test Date:	2023/04/08~2023/04/10
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jim Wei	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	23.4~23.6	Relative Humidity: (%)	53~56	ATM Pressure: (kPa)	101.1~101.4
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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	2022/07/25	2023/07/24
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	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 (%)	1/T (Hz)	Duty Cycle Factor (dB)
802.11a	1.5061	3.9213	38.41	664	4.16
802.11n ht20	1.2174	3.6822	33.06	821	4.81
802.11n ht40	0.6087	3.0652	19.86	1643	7.02
802.11ac vht20	1.2722	3.6552	34.81	786	4.58
802.11ac vht40	0.6087	3.0725	19.81	1643	7.03
802.11ac vht80	0.3354	2.7861	12.04	2982	9.19
802.11ax hew20	1.1065	3.5217	31.42	904	5.03
802.11ax hew40	0.5507	3.0145	18.27	1816	7.38
802.11ax hew80	0.3464	2.7846	12.44	2887	9.05

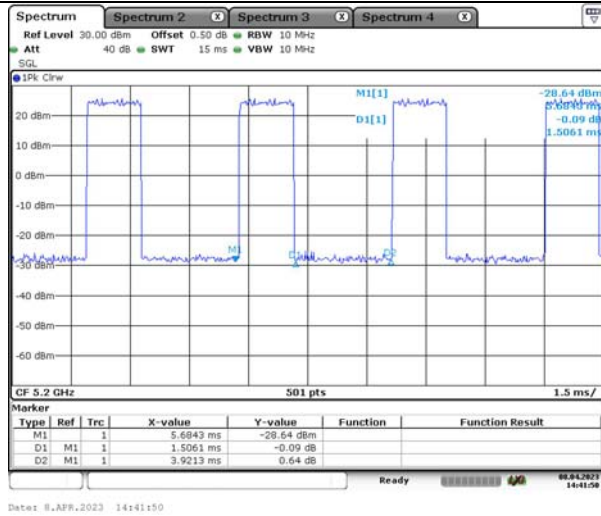
Note:

Test only was performed at chain 0.

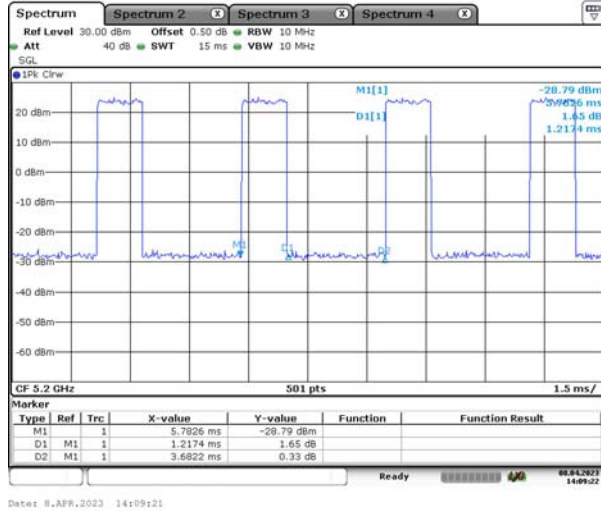
Duty cycle <98%, duty cycle variations are less than ±2%.

Duty Cycle

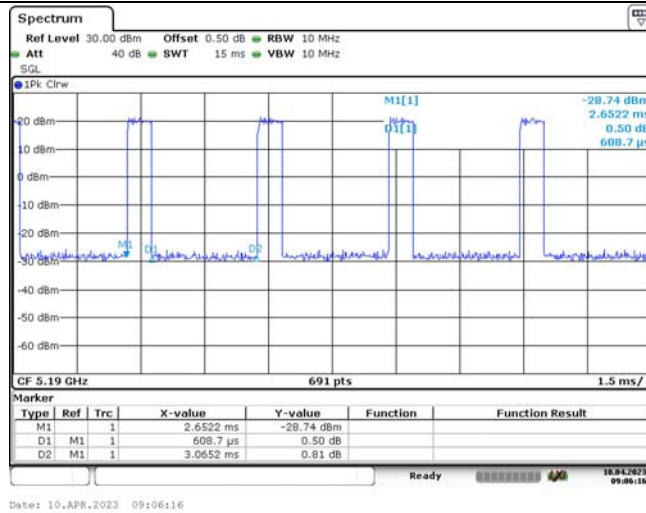
802.11a



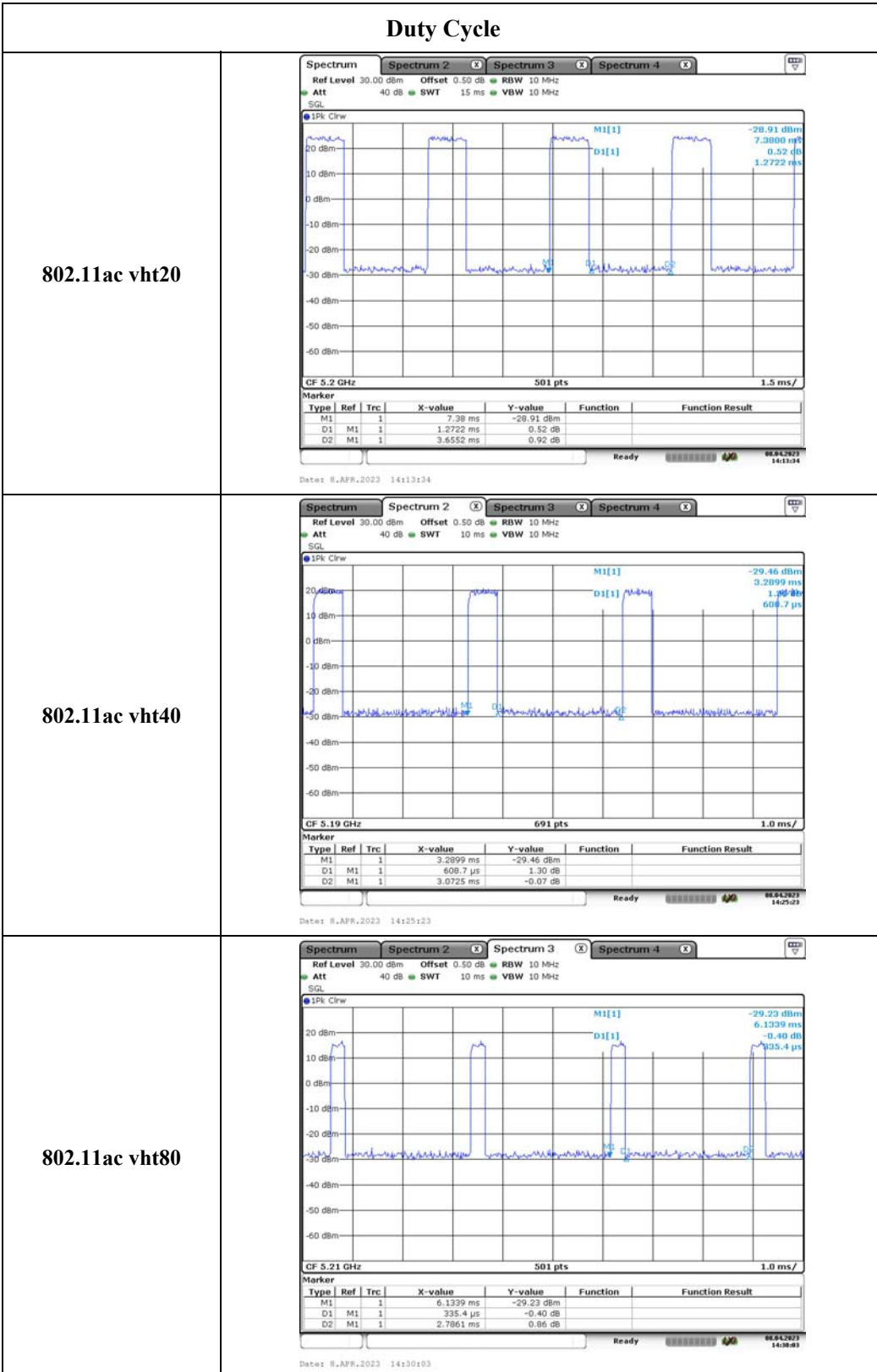
802.11n ht20



802.11n ht40

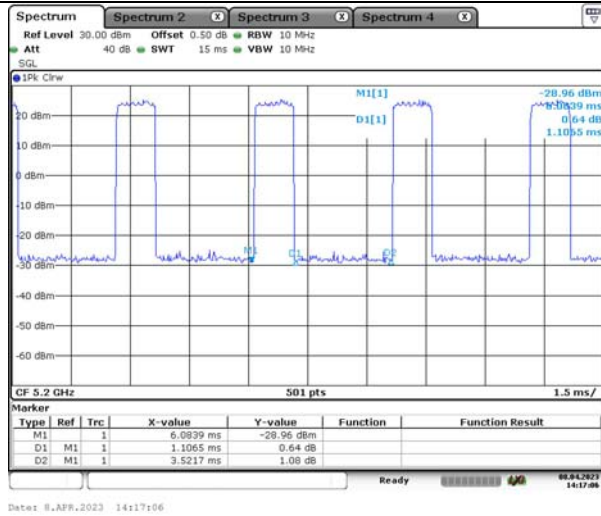


Duty Cycle



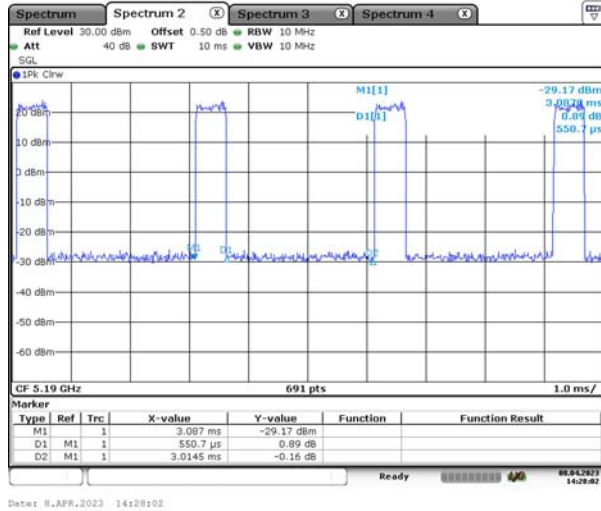
Duty Cycle

802.11ax hew20



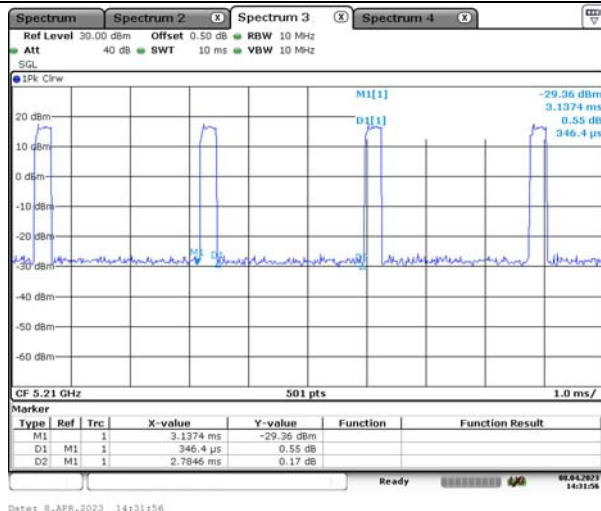
Date: 8.APR.2023 14:17:06

802.11 ax hew40



Date: 8.APR.2023 14:28:02

802.11ax hew80



Date: 8.APR.2023 14:31:56

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);

5.2 Measurement Result

Operation Modes	Frequency (MHz)	Distance (mm)	P _{th}		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (P) (dBm)	ERP (P) (mW)	Exemption
			(mW)	(dBm)					
WLAN 2.4G	2412-2462	200	3060	34.86	23	7.84	28.69	739.61	Compliant
WLAN 5G	5150-5250	200	3060	34.86	25	8.93	31.78	1506.61	Compliant
	5725-5850	200	3060	34.86	24	8.34	30.19	1044.72	Compliant

Note:

Antenna gain includes beamforming gain for WLAN 2.4G and 5150-5250MHz/5725-5850MHz. The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

WLAN 2.4G and 5G can transmit simultaneously.

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

$$= P_{-2.4G}/P_{th-2.4G} + P_{-5G}/P_{th-5G}$$

$$= 739.61/3060 + 1506.61/3060$$

$$= 0.73 < 1$$

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

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