

FCC - TEST REPORT

Report Number : **709502403736-00A** Date of Issue: Aug.30,2024Model : T5-E1Product Type : Wi-Fi and Bluetooth ModuleApplicant : Hangzhou Tuya Information Technology Co.,LtdAddress : Room 301,Building 1,Huace Center,Xihu District,
Hangzhou,Zhejiang, ChinaManufacturer : Hangzhou Tuya Information Technology Co.,LtdAddress : Room 301,Building 1,Huace Center,Xihu District,
Hangzhou,Zhejiang, ChinaTest Result : **n Positive** **Δ Negative**Total pages including
Appendices : 138

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2 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
-00A	First Issue	08/30/2024

3 Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
No.16 Lane, 1951 Du Hui Road,
Shanghai 201108,
P.R. China

Telephone: +86 21 6141 0123

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FCC Registration No.: 820234

FCC Designation Number: CN1183

ISED CAB identifier: CN0101

IC Registration No.: 31668

4 Description of the Equipment under Test

Product:	Wi-Fi and Bluetooth Module
Model no.:	T5-E1
FCC ID:	2ANDL-T5-E1
Rating:	2.0-3.6V DC
RF Transmission Frequency:	For 802.11b/g/n(HT20)/ax(HE20): Wi-Fi:2412-2462MHz For 802.11n(HT40)/ax(HE40): 2422~2452 MHz For Bluetooth LE:2402~2480MHz (V5.4)
No. of Operated Channel:	2.4GHz WIFI: 11 for 802.11b/g/n(HT20)/ax(HE20) 7 for 802.11n(HT40)/ax(HE40) 2.4GHz BLE: 40
Modulation:	Direct Sequence Spread Spectrum (DSSS) for 802.11b Orthogonal Frequency Division Multiplexing (OFDM) for 802.11g/n; Orthogonal Frequency Division Multiple Access (OFDMA) for 802.11ax; 2.4GHz BLE: GFSK

Channel list:

802.11b/g/n(HT20)/ax(HE20)				802.11n(HT40)/ax(HE40)			
Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)
1	2412	7	2442	3	2422	8	2447MHz
2	2417	8	2447	4	2427	9	2452MHz
3	2422	9	2452	5	2432		
4	2427	10	2457	6	2437		
5	2432	11	2462	7	2442		
6	2437						

Bluetooth Low Energy							
Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480



Antenna type:	Onboard PCB antenna
Antenna Gain:	3.25dBi
Description of the EUT:	The Equipment Under Test (EUT) is a Wi-Fi and Bluetooth module which support 2.4GHz Wi-Fi and BLE 5.4(support 125Kbps,500Kbps and 1Mbps data rate). We tested it and listed the worst data in this report.
Test sample no.:	SHA-811843-5 (RF radiated); SHA-811843-6 (RF conducted)

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.



5 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2023 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to KDB 558074 D01 15.247 Meas Guidance v05r02 Measurement Guidance and ANSI C63.10-2013.



6 Summary of Test Results

Technical Requirements						
FCC Part 15 Subpart C						
Test Condition		Pages	Test Site	Test Result		
				Pass	Fail	N/A
§15.207	Conducted emission AC power port	14-18	Site 1	☒	☐	☐
§15.247 (b) (3)	Conducted peak output power	19-20	Site 1	☒	☐	☐
§15.247(a)(1)	20dB bandwidth	---	---	☐	☐	☒
§15.247(a)(1)	Carrier frequency separation	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Number of hopping frequencies	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Dwell Time	---	---	☐	☐	☒
§15.247(a)(2)	6dB bandwidth	21-27	Site 1	☒	☐	☐
§15.247(e)	Power spectral density	28-45	Site 1	☒	☐	☐
§15.247(d)	Spurious RF conducted emissions	46-91	Site 1	☒	☐	☐
§15.247(d)	Band edge	92-122	Site 1	☒	☐	☐
§15.247(d) & §15.209	Spurious radiated emissions for transmitter	123-134	Site 1	☒	☐	☐
§15.203	Antenna requirement	See note 1		☒	☐	☐

Remark 1: N/A – Not Applicable.

Note 1: The EUT uses PCB antenna, which gain is 3.25dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.



7 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID:2ANDL-T5-E1, complies with Section 15.207,15.209,15.231,15.247 of the FCC Part 15, Subpart C Rules.

This report is only for the 2.4GHz Wi-Fi test report, for the 2.4GHz BLE test report please refer to 709502403736-00B.

SUMMARY:

All tests according to the regulations cited on page 5 were

n - Performed

o - **Not** Performed

The Equipment under Test

n - **Fulfills** the general approval requirements.

o - **Does not** fulfill the general approval requirements.

Sample Received Date: May 6, 2024

Testing Start Date: May 8, 2024

Testing End Date: August 23, 2024

-TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Reviewed by:

Prepared by:

Tested by:

Hui Tong

Hui TONG
Review Engineer



Jiaxi Xu

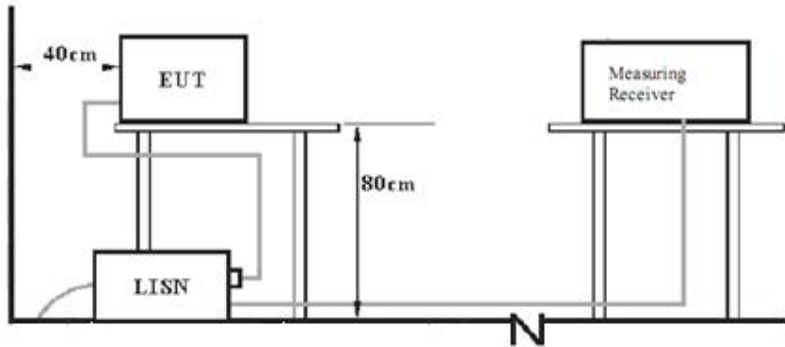
Jiaxi XU
Project Engineer

Cheng Huali

Cheng Huali
Test Engineer

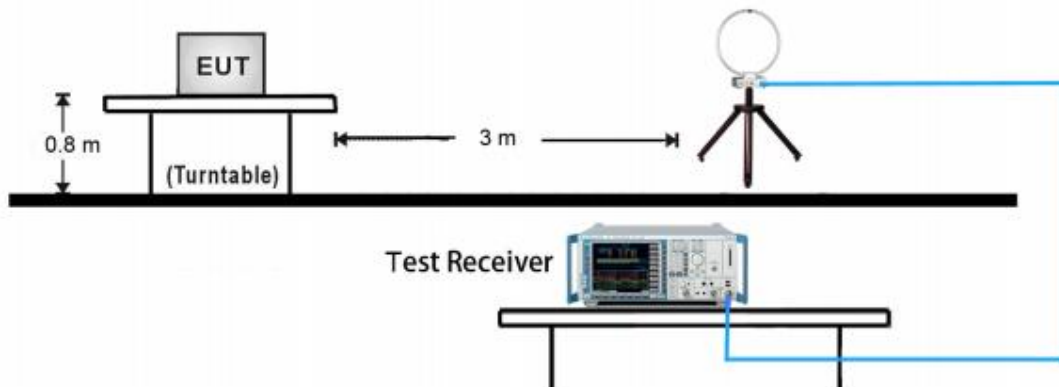
8 Test Setups

7.1 AC Power Line Conducted Emission test setups

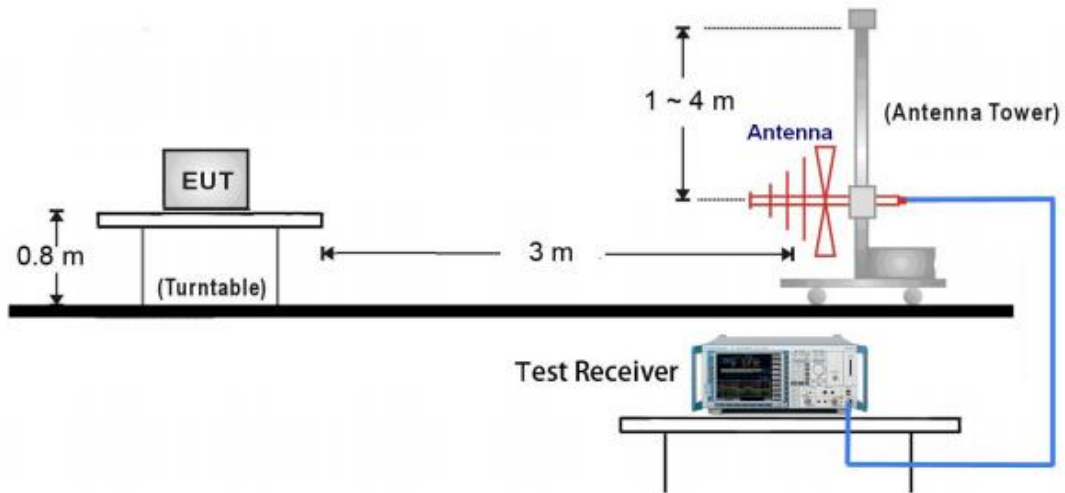


7.2 Radiated test setups

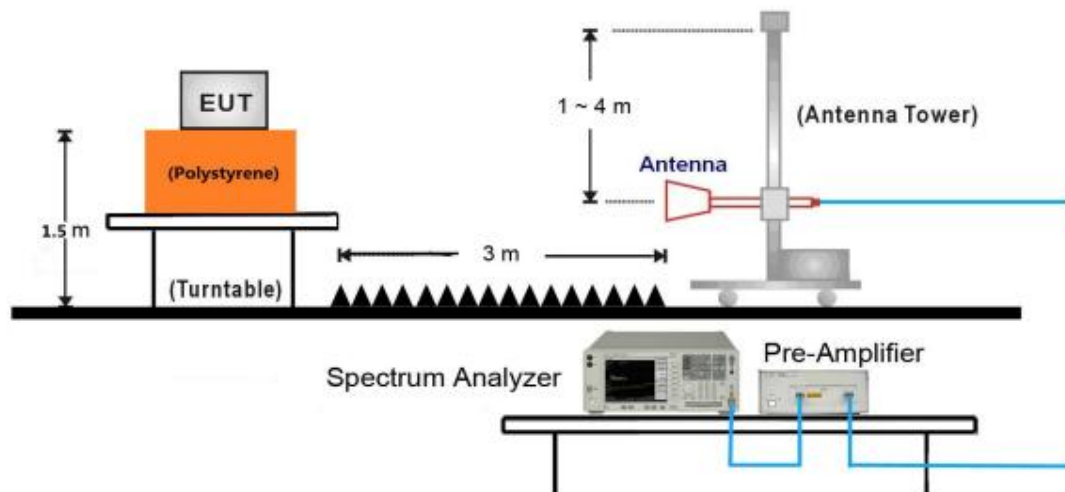
9kHz ~ 30MHz Test Setup:



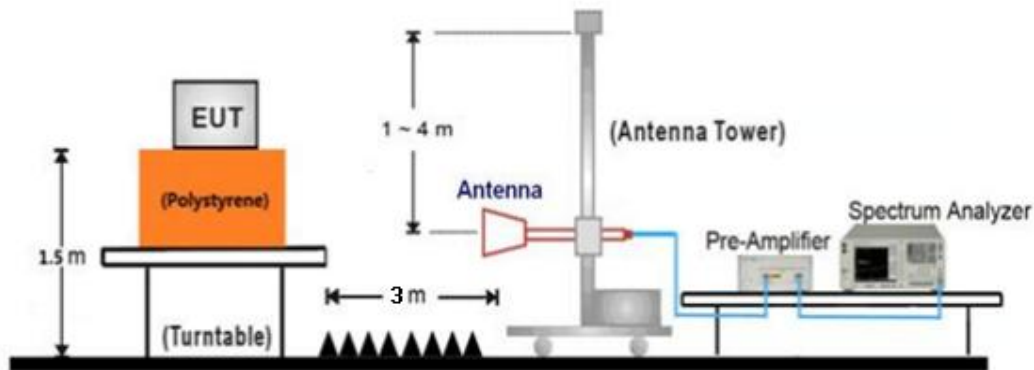
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:

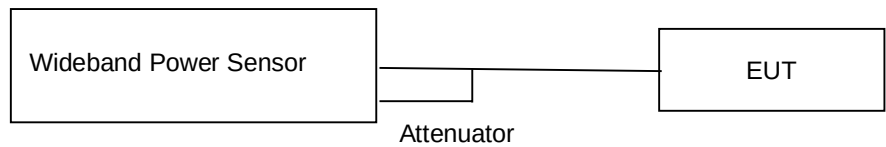


18GHz ~ 25GHz Test Setup:

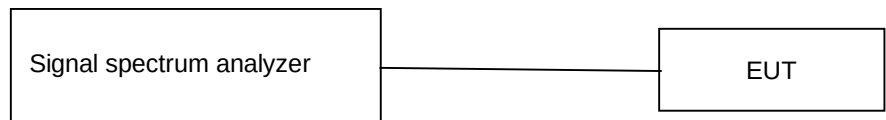


7.3 Conducted RF test setups

For Conducted peak output power



For other test items



9 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Notebook	Lenovo	E470	PF-OU5TS7 17/09

Test software: Wi-Fi test tool v1.8.0

Test Mode Applicability and Tested Channel Detail for nominal bandwidths (Full RU):

Mode	Tested Channel	Data Rate (Mbps)	Modulation	Index Value (Power level setting)
802.11b	1	1	CCK	17
	6	1	CCK	16
	11	1	CCK	14
802.11g	1	6	OFDM	44
	6	6	OFDM	42
	11	6	OFDM	40
802.11n HT20	1	MCS0	OFDM	40
	6	MCS0	OFDM	38
	11	MCS0	OFDM	36
802.11n HT40	3	MCS0	OFDM	35
	6	MCS0	OFDM	34
	9	MCS0	OFDM	32
802.11ax HE20	1	MCS0	OFDMA	40
	6	MCS0	OFDMA	38
	11	MCS0	OFDMA	36
802.11ax HE40	3	MCS0	OFDMA	35
	6	MCS0	OFDMA	34
	9	MCS0	OFDMA	32

Test Mode Applicability and Tested Channel Detail for Partial RU

Test Software Version		Beken Wi-Fi test tool V1.7.8.1		
Mode	RU Tone	RU allocation and test channel	Index Value (Power level setting)	Data Rate
11ax HE20	26 Tone	RU 0, Channel 1	30	MCS0
		RU 4, Channel 6		
		RU 8, Channel 11		
	52 Tone	RU 37, Channel 1	35	
		RU 38, Channel 6		
		RU 40, Channel 11		
	106 Tone	RU 53, Channel 1	40	
		RU 53, Channel 6		
		RU 54, Channel 11		
	242 Tone	RU 61, Channel 1	35	
		RU 61, Channel 6		
		RU 61, Channel 11		
11ax HE40	26 Tone	RU 0, Channel 3	30	MCS0
		RU 8, Channel 6		
		RU 17, Channel 9		
	52 Tone	RU 37, Channel 3	35	
		RU 40, Channel 6		
		RU 44, Channel 9		
	106 Tone	RU 53, Channel 3	40	
		RU 54, Channel 6		
		RU 56, Channel 9		
	242 Tone	RU 61, Channel 3	45	
		RU 61, Channel 6		
		RU 62, Channel 9		
	484 Tone	RU 65, Channel 3	35	
		RU 65, Channel 6		
		RU 65, Channel 9		

Note: The Power spectral density of all RU Tone with all RU allocation are investigated and the above table test condition is the worst case.

As Partial RU PSD < Full RU PSD, so only band edge and spurious emissions were recorded in this report.

Non-hopping mode: The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power.

10 Technical Requirement

10.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Limit

According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency

Conducted Emission

150k-30MHz Conducted Emission Test

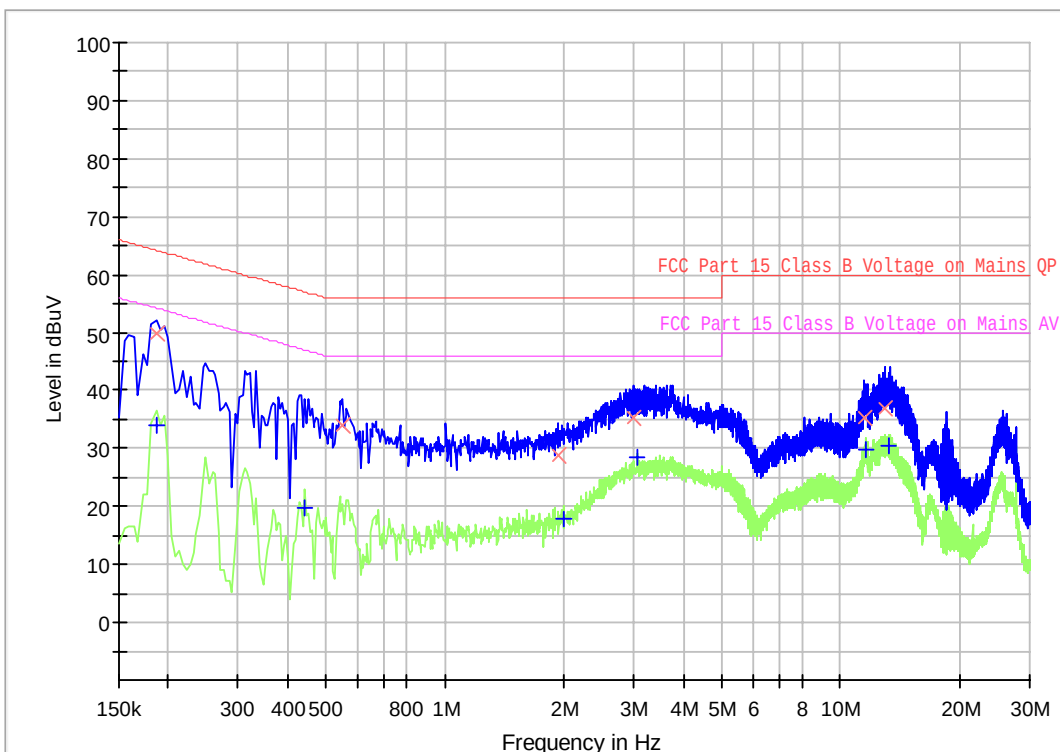
EUT Information

EUT Name:	Wi-Fi and BLE Module
Model	T5-E1
Client:	Hangzhou Tuya Information Technology Co., Ltd
Op Cond	Power on, TX_2412MHz at ax20 mode, AC 120V/60Hz
Operator:	Huali CHENG
Standard	FCC Part 15.207(a)
Comment:	Phase L
Sample No.:	SHA-811843-5

Scan Setup: Voltage with 2-Line-LISN pre [EMI conducted]

Hardware Setup:	Voltage with 2-Line-LISN
Receiver:	[ESR 3]
Level Unit:	dBuV

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamplifier
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0.02 s	0 dB
150 kHz - 30 MHz	4.5 kHz	PK+; AVG	9 kHz	0.01 s	0 dB





Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.186000	---	33.91	54.21	20.30	1000.0	9.000	L1	19.4
0.186000	49.80	---	64.21	14.41	1000.0	9.000	L1	19.4
0.442500	---	19.90	47.01	27.11	1000.0	9.000	L1	19.5
0.550500	33.98	---	56.00	22.02	1000.0	9.000	L1	19.4
1.936500	28.70	---	56.00	27.30	1000.0	9.000	L1	19.5
1.995000	---	17.97	46.00	28.03	1000.0	9.000	L1	19.5
2.994000	35.27	---	56.00	20.73	1000.0	9.000	L1	19.5
3.070500	---	28.49	46.00	17.51	1000.0	9.000	L1	19.5
11.517000	35.42	---	60.00	24.58	1000.0	9.000	L1	19.9
11.643000	---	29.88	50.00	20.12	1000.0	9.000	L1	19.9
12.876000	36.85	---	60.00	23.15	1000.0	9.000	L1	19.9
13.209000	---	30.53	50.00	19.47	1000.0	9.000	L1	20.0

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

150k-30MHz Conducted Emission Test

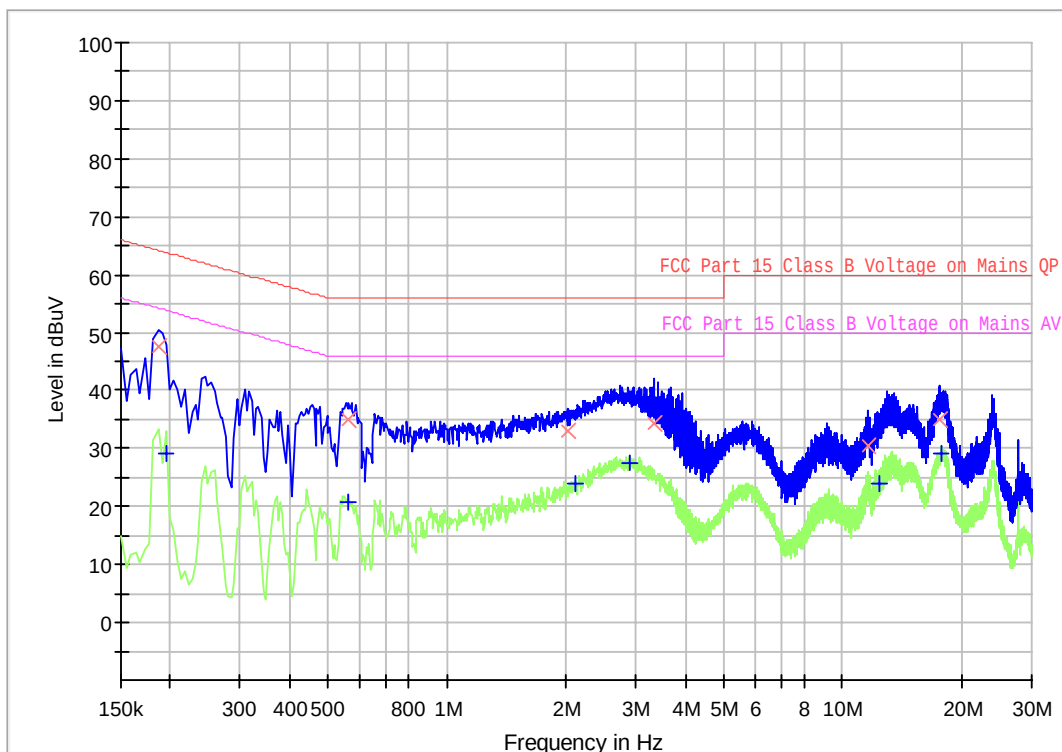
EUT Information

EUT Name:	Wi-Fi and BLE Module
Model	T5-E1
Client:	Hangzhou Tuya Information Technology Co., Ltd
Op Cond	Power on, TX_2412MHz at ax20 mode AC 120V/60Hz
Operator:	Huali CHENG
Standard	FCC Part 15.207(a)
Comment:	Phase N
Sample No.:	SHA-811843-5

Scan Setup: Voltage with 2-Line-LISN pre [EMI conducted]

Hardware Setup:	Voltage with 2-Line-LISN
Receiver:	[ESR 3]
Level Unit:	dBuV

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0.02 s	0 dB
150 kHz - 30 MHz	4.5 kHz	PK+; AVG	9 kHz	0.01 s	0 dB





Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.186000	47.50	---	64.21	16.71	1000.0	9.000	N	19.4
0.195000	---	29.08	53.82	24.74	1000.0	9.000	N	19.4
0.564000	---	20.87	46.00	25.13	1000.0	9.000	N	19.5
0.564000	34.88	---	56.00	21.12	1000.0	9.000	N	19.5
2.017500	33.18	---	56.00	22.82	1000.0	9.000	N	19.5
2.098500	---	23.81	46.00	22.19	1000.0	9.000	N	19.5
2.881500	---	27.58	46.00	18.42	1000.0	9.000	N	19.5
3.340500	34.26	---	56.00	21.74	1000.0	9.000	N	19.5
11.593500	30.60	---	60.00	29.40	1000.0	9.000	N	19.8
12.381000	---	24.00	50.00	26.00	1000.0	9.000	N	19.8
17.628000	34.84	---	60.00	25.16	1000.0	9.000	N	20.0
17.713500	---	29.00	50.00	21.00	1000.0	9.000	N	20.0

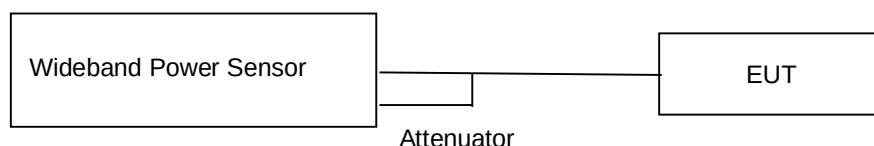
Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

10.2 Conducted peak output power

Test Method

- 1) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
- 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- 4) Measure the peak power of the transmitter. This measurement is a peak over both the ON and OFF periods of the transmitter.



Wideband Power Sensor conducted test setup

Limits

According to §15.247 (b) (3) conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

Test result as below

802.11b

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	18.01	Pass
Middle channel 2437MHz	17.91	Pass
High channel 2462MHz	17.11	Pass

802.11g

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	21.85	Pass
Middle channel 2437MHz	21.77	Pass
High channel 2462MHz	21.54	Pass

802.11n(HT20)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	20.97	Pass
Middle channel 2437MHz	20.93	Pass
High channel 2462MHz	20.5	Pass



802.11n(HT40)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2422MHz	21.4	Pass
Middle channel 2437MHz	21.46	Pass
High channel 2452MHz	21.28	Pass

802.11ax(HE20)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	21.84	Pass
Middle channel 2437MHz	21.79	Pass
High channel 2462MHz	21.57	Pass

802.11ax(HE40)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2422MHz	20.92	Pass
Middle channel 2437MHz	20.86	Pass
High channel 2452MHz	20.52	Pass

10.36dB bandwidth

Test Method

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
RBW=100KHz, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Use the automatic bandwidth measurement capability of an instrument, use the X dB bandwidth mode with X set to 6 dB.
5. Allow the trace to stabilize, record the 6 dB Bandwidth value.

Limit

Limit [kHz]

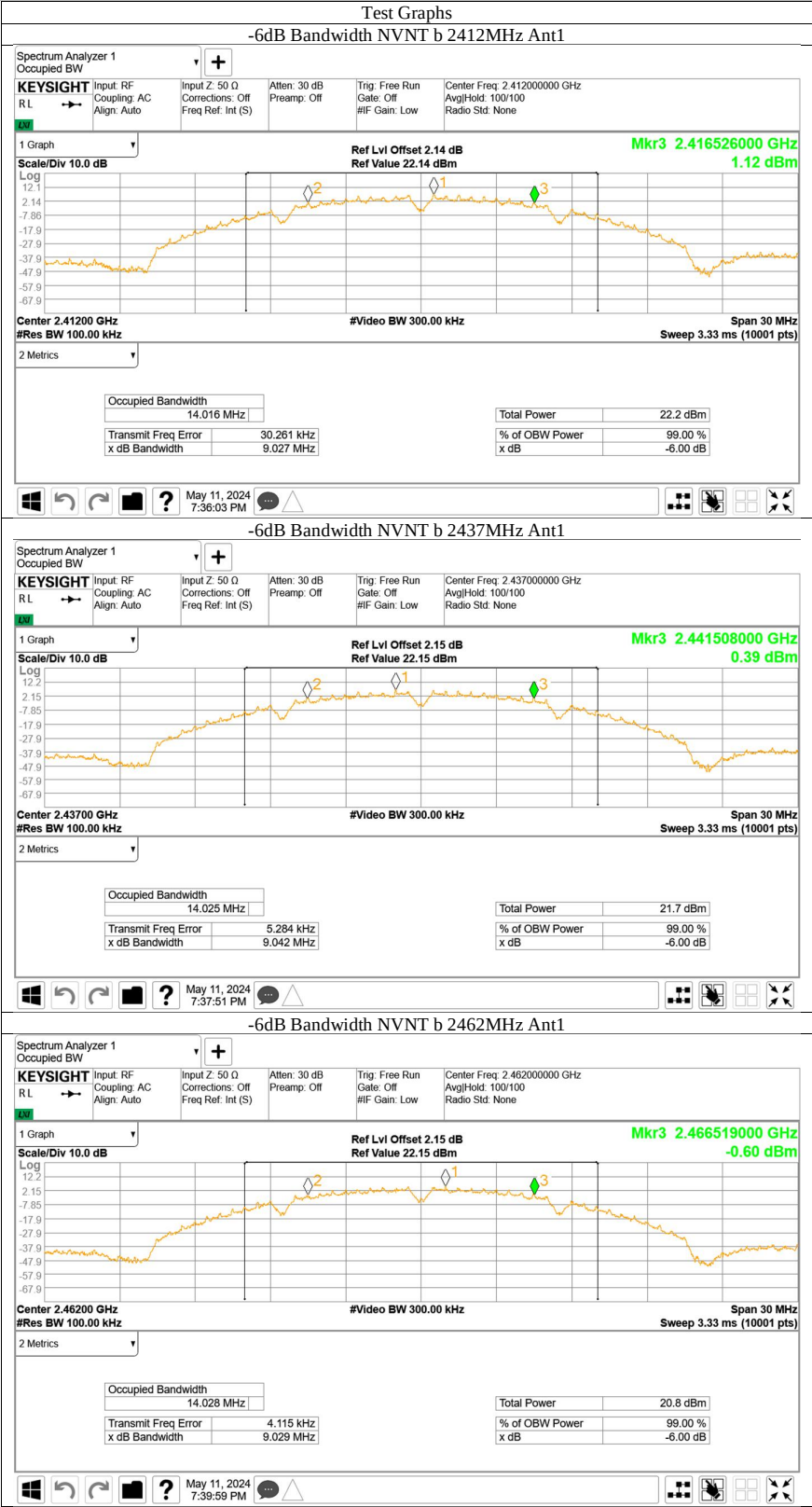
≥500

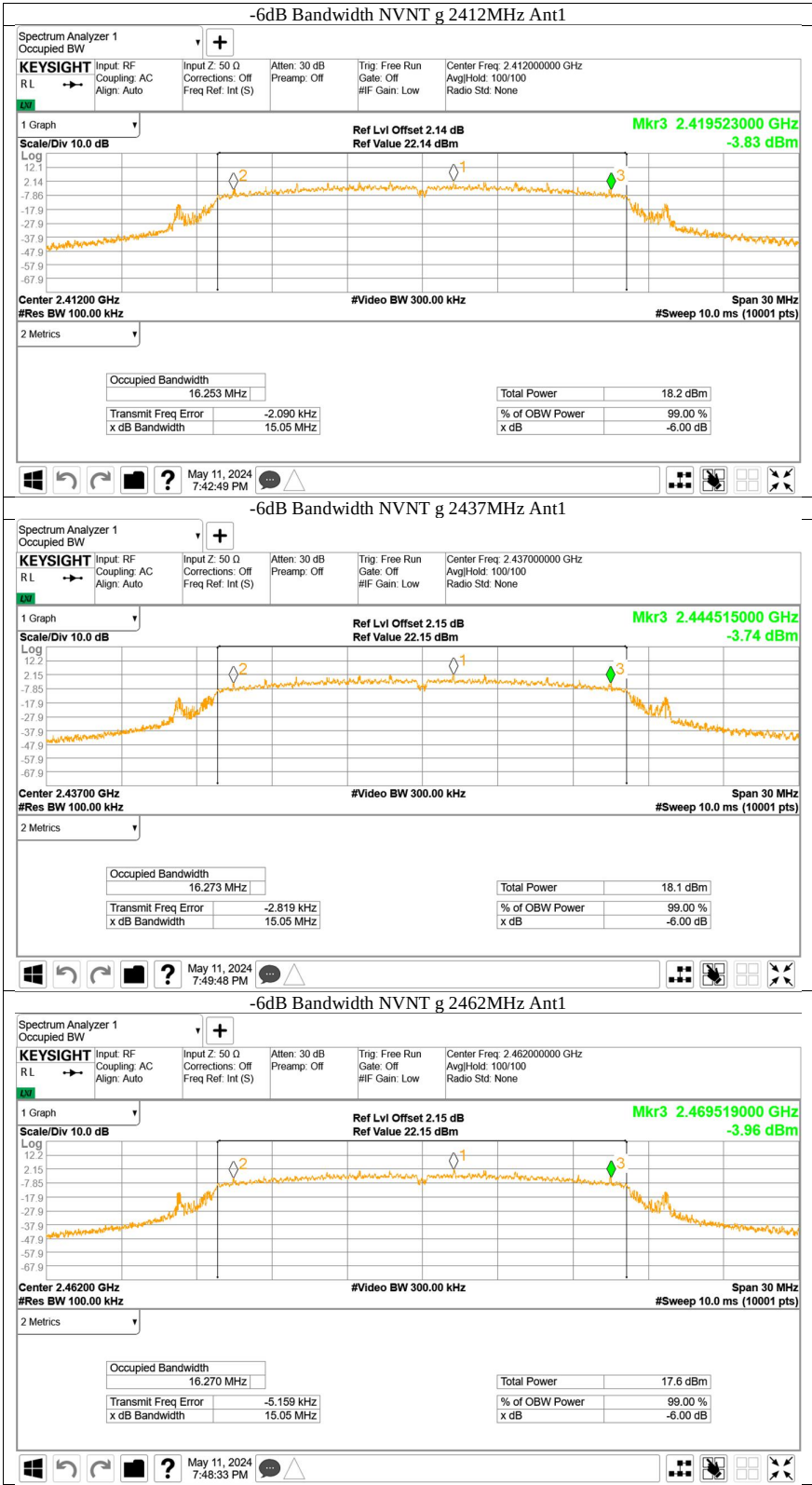
Test result

Test Mode	Frequency MHz	6dB bandwidth (MHz)		Result
		result	limit	verdict
802.11b	2412	9.027	≥0.5	Pass
	2437	9.042	≥0.5	Pass
	2462	9.029	≥0.5	Pass
802.11g	2412	15.05	≥0.5	Pass
	2437	15.048	≥0.5	Pass
	2462	15.046	≥0.5	Pass
802.11n(HT20)	2412	10.036	≥0.5	Pass
	2437	9.992	≥0.5	Pass
	2462	10.064	≥0.5	Pass
802.11n(HT40)	2422	26.309	≥0.5	Pass
	2437	26.295	≥0.5	Pass
	2452	26.27	≥0.5	Pass
802.11ax(HE20)	2412	15.019	≥0.5	Pass
	2437	14.97	≥0.5	Pass
	2462	15.018	≥0.5	Pass
802.11ax(HE40)	2422	26.268	≥0.5	Pass
	2437	26.284	≥0.5	Pass
	2452	26.226	≥0.5	Pass



6 dB Bandwidth





Spectrum Analyzer 1
Occupied BW

KEYSIGHT Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.43700000 GHz
Avg/Hold: 100/100
Radio Std: None

Spectrum Analyzer 1
Occupied BW

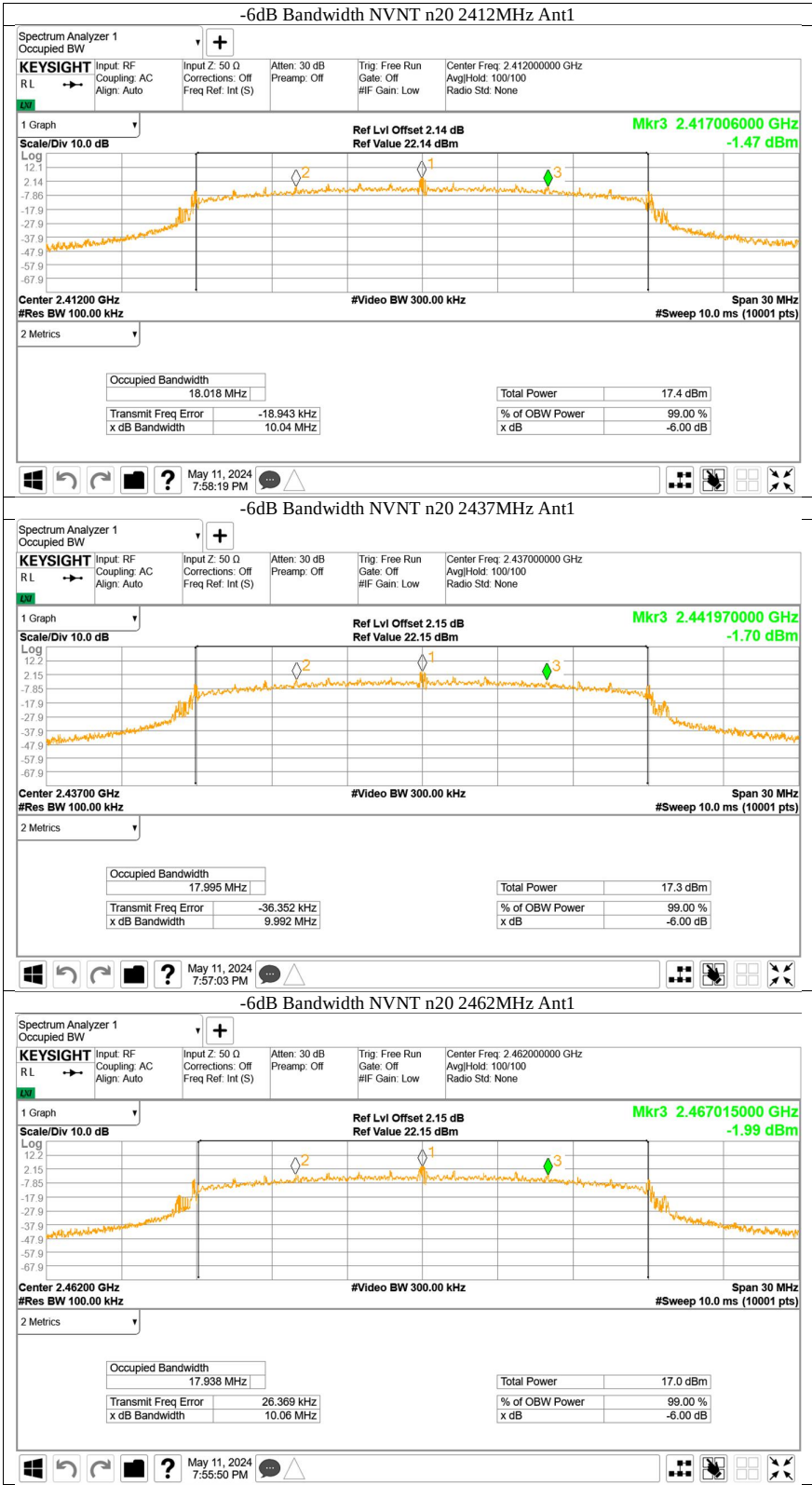
KEYSIGHT Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.46200000 GHz
Avg/Hold: 100/100
Radio Std: None



Spectrum Analyzer 1
Occupied BW

KEYSIGHT Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.43700000 GHz
Avg/Hold: 100/100
Radio Std: None

Spectrum Analyzer 1
Occupied BW

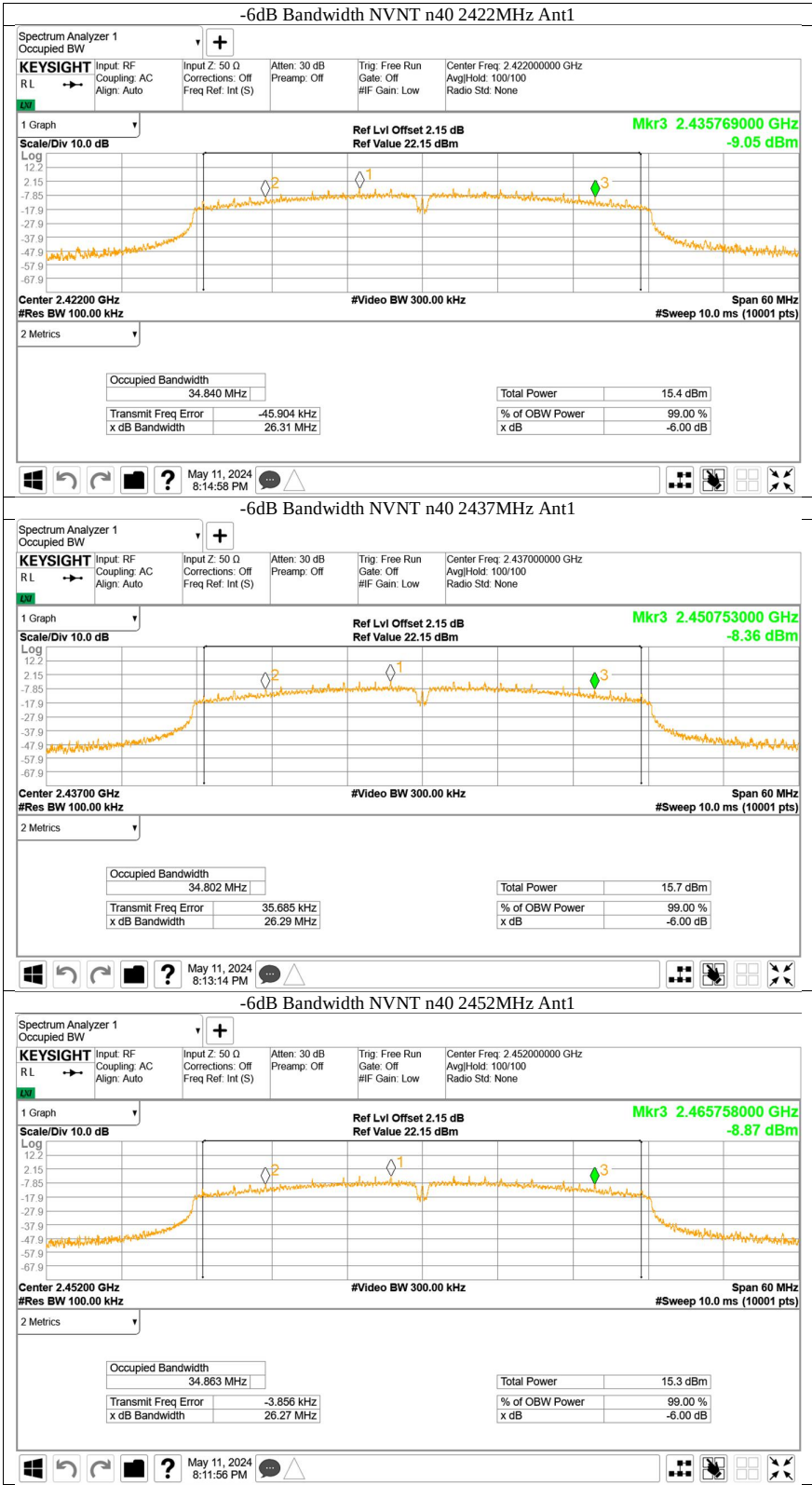
KEYSIGHT Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.46200000 GHz
Avg/Hold: 100/100
Radio Std: None



Spectrum Analyzer 1
Occupied BW

KEYSIGHT Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.43700000 GHz
Avg/Hold: 100/100
Radio Std: None

Spectrum Analyzer 1
Occupied BW

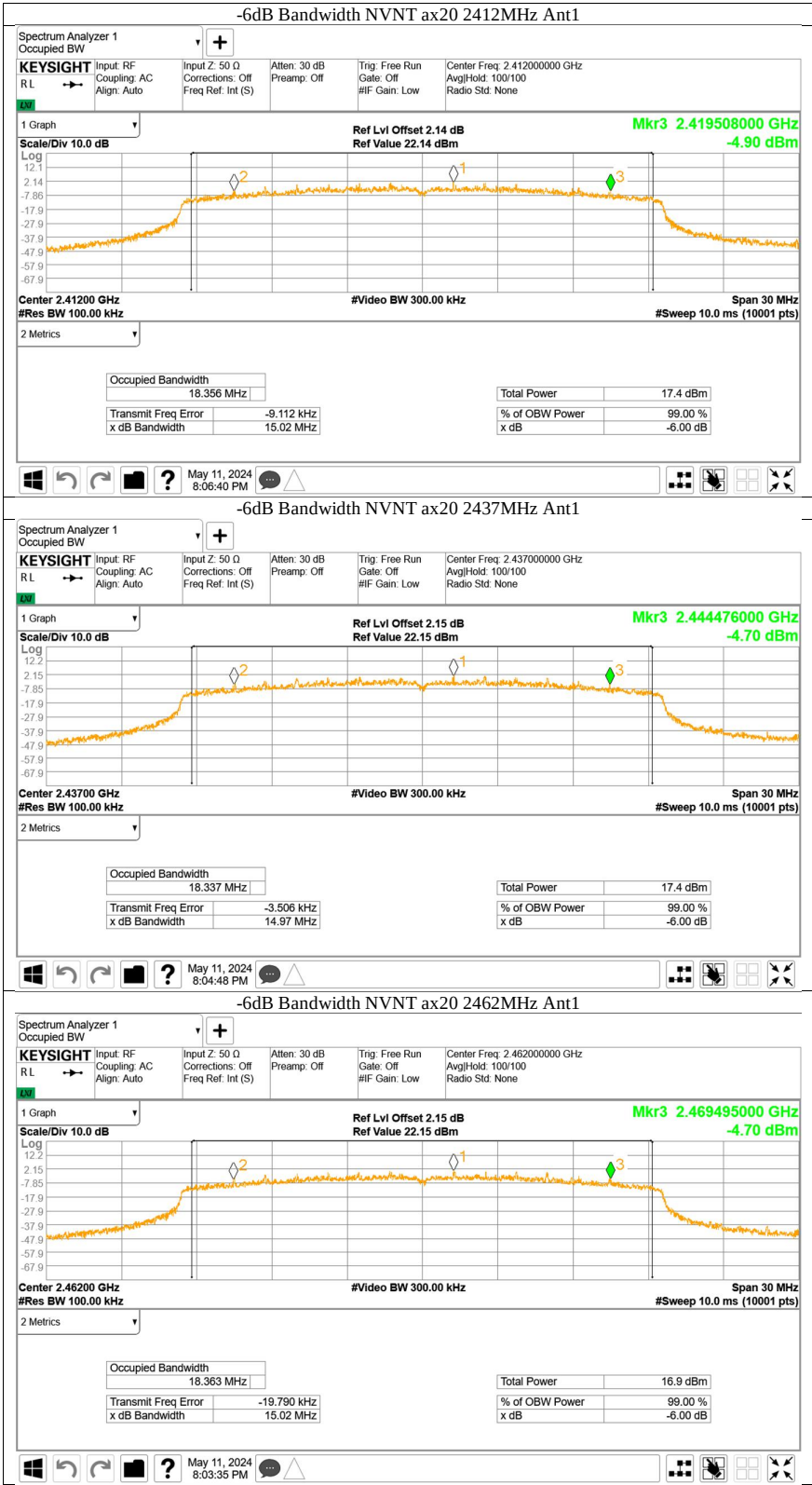
KEYSIGHT Input: RF
Coupling: AC
Align: Auto

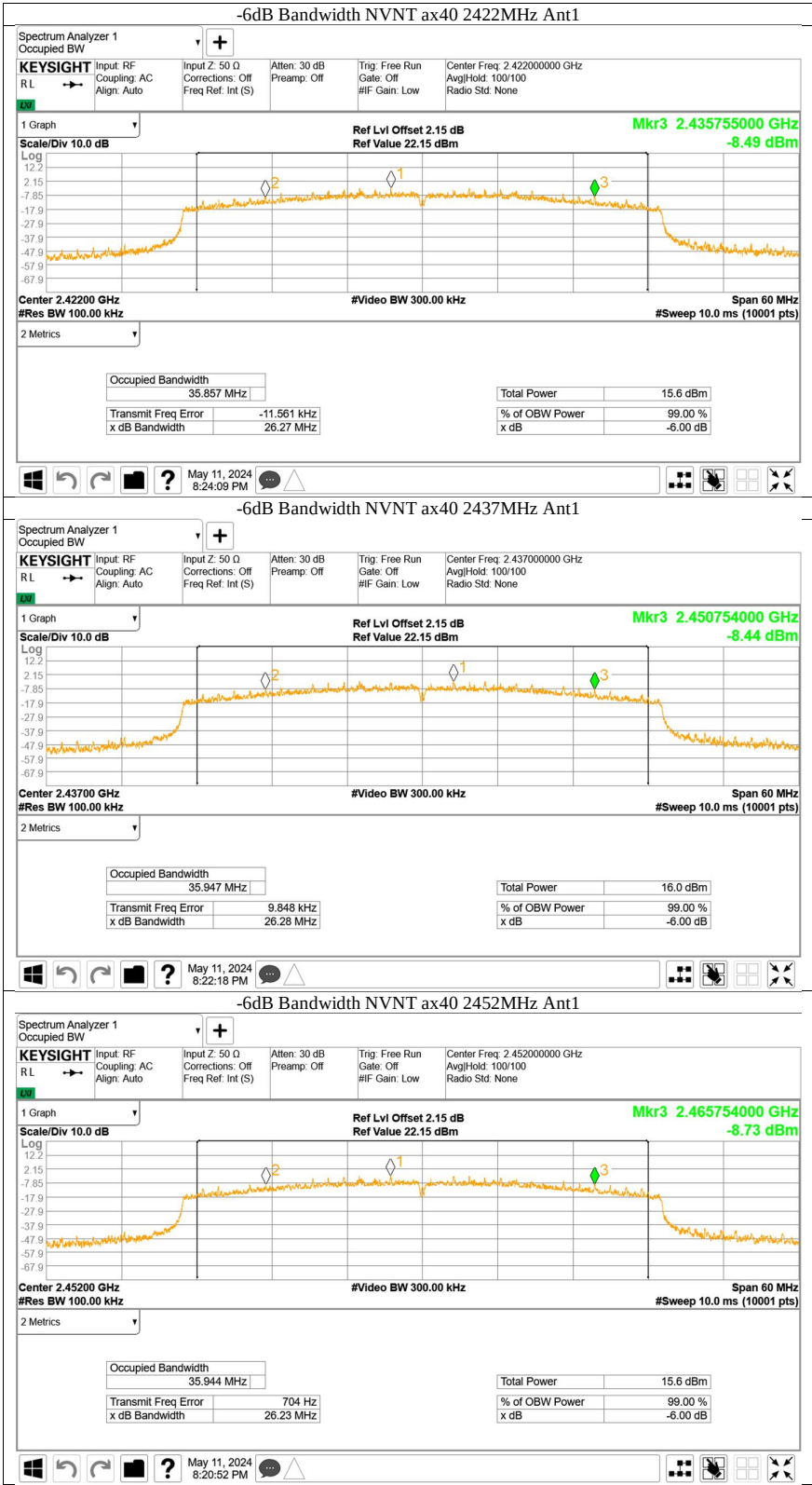
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.45200000 GHz
Avg/Hold: 100/100
Radio Std: None





Spectrum Analyzer 1
Occupied BW

KEYSIGHT
R.L. → Input RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.437000000 GHz
Avg/Hold: 100/100
Radio Std: None

Spectrum Analyzer 1
Occupied BW

KEYSIGHT
R.L. → Input RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 30 dB
Preamp: Off

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.452000000 GHz
Avg/Hold: 100/100
Radio Std: None

10.4 Power spectral density

Test Method

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance:

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
4. Set analyzer center frequency to DTS channel center frequency. RBW=3kHz, VBW $\geq$ 3RBW, Span=1.5 times DTS bandwidth, Detector=Peak, Sweep=auto, Trace= max hold.
5. Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
6. Repeat above procedures until other frequencies measured were completed.

Limit

Limit [dBm/3kHz]

≤ 8

Test result

802.11 b

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-7.26	Pass
Middle channel 2437MHz	-7.93	Pass
High channel 2462MHz	-9.01	Pass

802.11 g

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-11.65	Pass
Middle channel 2437MHz	-11.82	Pass
High channel 2462MHz	-11.11	Pass

802.11 n (HT20)

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-11.07	Pass
Middle channel 2437MHz	-10.78	Pass
High channel 2462MHz	-10.72	Pass



802.11 n (HT40)

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-12.23	Pass
Middle channel 2437MHz	-12.04	Pass
High channel 2452MHz	-11.7	Pass

802.11 ax (HE20)

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-12.08	Pass
Middle channel 2437MHz	-12.3	Pass
High channel 2462MHz	-11.62	Pass

802.11 ax (HE20), RU26

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-16.81	Pass
Middle channel 2437MHz	-13.08	Pass
High channel 2462MHz	-15.63	Pass

802.11 ax (HE20), RU52

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-15.56	Pass
Middle channel 2437MHz	-14.18	Pass
High channel 2462MHz	-15.66	Pass

802.11 ax (HE20), RU106

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-17.93	Pass
Middle channel 2437MHz	-17.13	Pass
High channel 2462MHz	-15.84	Pass

802.11 ax (HE20), RU242

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2412MHz	-13.85	Pass
Middle channel 2437MHz	-13.35	Pass
High channel 2462MHz	-13.09	Pass



802.11 ax (HE40)

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-12.89	Pass
Middle channel 2437MHz	-12.35	Pass
High channel 2452MHz	-12.14	Pass

802.11 ax (HE40), RU 26

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-17.64	Pass
Middle channel 2437MHz	-12.66	Pass
High channel 2452MHz	-17.99	Pass

802.11 ax (HE40),RU 52

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-17.58	Pass
Middle channel 2437MHz	-14.44	Pass
High channel 2452MHz	-17.61	Pass

802.11 ax (HE40),RU 106

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-19.69	Pass
Middle channel 2437MHz	-16.48	Pass
High channel 2452MHz	-17.19	Pass

802.11 ax (HE40),RU 242

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-20.02	Pass
Middle channel 2437MHz	-19.31	Pass
High channel 2452MHz	-17.75	Pass

802.11 ax (HE40),RU 484

Frequency MHz	Power spectral density dBm/3kHz	Result
Low channel 2422MHz	-15.98	Pass
Middle channel 2437MHz	-15.2	Pass
High channel 2452MHz	-15.26	Pass



Power spectral density

