

Japan Radio Test Report

Project No. : 2511C374
Equipment : AXE5400 Tri-Band Wi-Fi 6E Mini Wireless USB Adapter
Brand Name : tp-link
Model Name : Archer TXE70U
Applicant : TP-Link Systems Inc.
Address : 10 Mauchly, Irvine, CA 92618
Manufacturer : TP-Link Systems Inc.
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Factory : Lianzhou International Co., Ltd. Guangming Branch
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Date of Receipt : Nov. 18, 2025
Date of Test : Nov. 19, 2025 ~ Dec. 22, 2025
Issued Date : Jun. 09, 2026
Test Sample : Engineering Sample No.: DG920251118127 for Carrier Sense Capability, DG920251118125 for others.
MIC Category : Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment Article 2 Paragraph 1 of item 80
Technical Standard(s) : Ordinance Regulating Radio Equipment General Provisions, Transmitting Equipment, Receiving Equipment, Article 49-20
Test Procedure : Test Method Specified Radio Equipment Article 2 Paragraph 1 of item 80

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacturer's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

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BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-JPAP-3-2511C374	R00	Original Report.	Jun. 09, 2026	Valid

1. SUMMARY OF TEST RESULTS

Part	Description of Test	Article of ORRE	Result
3.1	Frequency Tolerance	Clause 2	Pass
3.2	Occupied Bandwidth	Clause 3	Pass
3.3	Unwanted Emission Intensity	Clause 4 & Clause 5	Pass
3.4	Antenna Power Tolerance	Clause 6	Pass
3.5	Adjacent Channel Emitted Power	Clause 7	Pass
3.6	Limitation of Collateral Emission of Receiver	Clause 8	Pass
3.7	Radio Interference Prevention Capability	Clause 9	Pass
3.8	Transmission Burst Length	Clause 10	Pass
3.9	Carrier Sense Capability	Clause 11	Pass
	Number of carrier	--	49-20
	Construction Protection	--	49-20
	Warning indication for 'indoor use only'	--	MIC No.48

1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

DGDLR08-2 / DGDLR09-1: No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

1.2 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Frequency Tolerance	1.4 ppm	Confidence levels of 95.45%
99% Bandwidth	0.75 %	Confidence levels of 95.45%
Antenna Power	1.3 dB	Confidence levels of 95.45%
TX-RX Emission	2.1 dB	Confidence levels of 95.45%

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
Frequency Tolerance	24°C	52%	DC 5V	Jay Wei
Occupied Bandwidth	24°C	52%	DC 5V	Jay Wei
Unwanted Emission Intensity	24°C	52%	DC 5V	Jay Wei
Antenna Power Tolerance	24°C	52%	DC 5V	Jay Wei
Adjacent Channel Emitted Power	24°C	52%	DC 5V	Jay Wei
Limitation of Collateral Emission of Receiver	24°C	52%	DC 5V	Jay Wei
Transmission Burst Length	24°C	52%	DC 5V	Jay Wei
Carrier Sense Capability	21°C	49%	DC 5V	Ilya Zhang

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AXE5400 Tri-Band Wi-Fi 6E Mini Wireless USB Adapter
Brand Name	tp-link
Test Model	Archer TXE70U
Model Name	Archer TXE70U
Model Difference(s)	N/A
Hardware Version	1.0
Software Version	1.0
Power Source	Supplied from USB port.
Power Rating	DC 5V
Operation Frequency Band(s)	5925 MHz ~ 6425 MHz
Modulation Technology	IEEE 802.11ax: OFDMA
Bit Rate of Transmitter	IEEE 802.11ax: up to 2402 Mbps
Occupied Bandwidth	158.72 MHz
Antenna Power (Rated Power)	IEEE 802.11ax(HE20): 3.85 mW/MHz IEEE 802.11ax(HE40): 1.36 mW/MHz IEEE 802.11ax(HE80): 0.93 mW/MHz IEEE 802.11ax(HE160): 0.47 mW/MHz
Antenna Power (Max. Conducted Power)	IEEE 802.11ax(HE20): 3.9355 mW/MHz IEEE 802.11ax(HE40): 1.9634 mW/MHz IEEE 802.11ax(HE80): 0.9550 mW/MHz IEEE 802.11ax(HE160): 0.4842 mW/MHz
Equipment Mode	LPI (Max. EIRP 200 mW)

Note:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

2. Channel List:

UNII-5					
IEEE 802.11ax(HE20)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	33	6115	65	6275
5	5975	37	6135	69	6295
9	5995	41	6155	73	6315
13	6015	45	6175	77	6335
17	6035	49	6195	81	6355
21	6055	53	6215	85	6375
25	6075	57	6235	89	6395
29	6095	61	6255	93	6415

UNII-5					
IEEE 802.11ax(HE40)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	5965	35	6125	67	6285
11	6005	43	6165	75	6325
19	6045	51	6205	83	6365
27	6085	59	6245	91	6405

UNII-5					
IEEE 802.11ax(HE80)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
7	5985	39	6145	71	6305
23	6065	55	6225	87	6385

UNII-5					
IEEE 802.11ax(HE160)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
15	6025	47	6185	79	6345

3. Table for Filed Antenna Table:

Ant.	Manufacturer	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	6000001182	PIFA & Monopole	N/A	3.57
2	TP-Link Systems Inc.	6000001182	PIFA & Monopole	N/A	3.96

Note:

- 1) The EUT supports CDD. Physically, the EUT provides two completed transmitters and receivers (2T2R).
- 2) Both of Ant. 1 and Ant. 2 had been pre-tested and found the Ant. 2 power is the highest and worst, so only the data of Ant. 2 with offset 3dB had been recorded.
- 3) The antenna gain is provided by the manufacturer.

4. Table for Antenna Configuration:

Operating Mode TX Mode	2TX
IEEE 802.11ax(HE20)	V (Ant. 1+Ant. 2)
IEEE 802.11ax(HE40)	V (Ant. 1+Ant. 2)
IEEE 802.11ax(HE80)	V (Ant. 1+Ant. 2)
IEEE 802.11ax(HE160)	V (Ant. 1+Ant. 2)

2.2 DESCRIPTION OF TEST MODES

The EUT Module was tested while in a continuous transmitter / receiver mode.

The EUT was tuned to a low, middle and high channel for all tests.

The EUT continuously transmitted a modulated packet with payload, while transmitting the EUT was setup to operate at the intended maximum power output available to the end user.

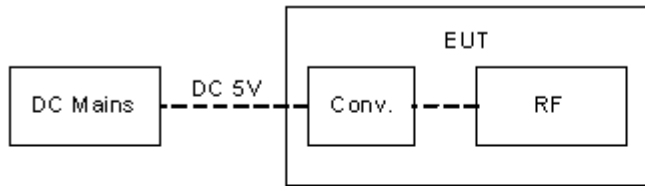
For all test cases pre-scan were completed in all modes to determine worst case levels.

Test Mode	Description
Mode 1	TX AX(HE20) Mode Channel 01/45/93
Mode 2	TX AX(HE40) Mode Channel 03/43/91
Mode 3	TX AX(HE80) Mode Channel 07/39/87
Mode 4	TX AX(HE160) Mode Channel 15/47/79

Note:

- 1) IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.

Power Supply Voltage Fluctuation Test



Voltage Fluctuation Test	Normal Voltage	High Voltage + 10% of Normal Voltage	Low Voltage - 10% of Normal Voltage
Input: AC Power	5V	5.5V	4.5V
Output: DC Power	3.275V	3.265V	3.275V
Voltage Variation (%)	-	-0.3053	0

Measurement point



Note:

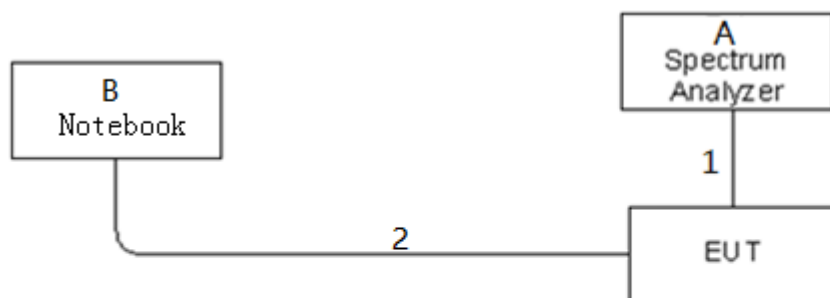
Voltage Variation (%)

= (Output High or Low Voltage - Output Normal Voltage)/Output Normal Voltage * 100

During the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/- 1%.

Exempt extremely high and low supply voltage condition tests, EUT only operated in normal voltage to test all regulation.

2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
A	Spectrum Analyzer	R&S	FSP38	100852
B	Notebook	HUAWEI	WFH9	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	RF Cable	YES	NO	0.1m
2	Control Cable	NO	NO	1.1m

2.5 TABLE FOR PARAMETERS OF TEST SOFTWARE SETTING

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level.

Test Software Version	AX Series MP Toolkit		
Frequency (MHz)	5955	6175	6415
IEEE 802.11ax(HE20)	16.75	16.75	1
Frequency (MHz)	5965	6165	6405
IEEE 802.11ax(HE40)	16.75	16.75	11
Frequency (MHz)	5985	6145	6385
IEEE 802.11ax(HE80)	16.5	16	16
Frequency (MHz)	6025	6185	6345
IEEE 802.11ax(HE160)	16.5	16.5	16.25

3. TEST RESULTS

3.1 FREQUENCY TOLERANCE MEASUREMENT

3.1.1 LIMIT

Item	Limits (See Article 5, Table1 of the Ordinance Regulating Radio Equipment)
Frequency Tolerance	-20≤ppm≤20

3.1.2 SETTING

The following table is the setting of spectrum analyzer.

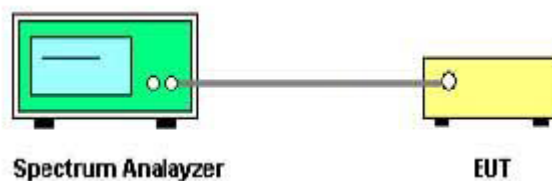
Spectrum Parameter	Setting
Span	500kHz
RBW / VBW	30kHz / 30kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.1.3 TEST PROCEDURES

Test method according to Clause 2 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

- Frequency accuracy of SA shall be less than 10% of limits tolerance (2ppm).
- Set spectrum analyzer with condition in section 3.1.2 and tune reference level to observe receiving signal position.
- Center Frequency: The center frequency of testing for EUT.
- EUT have transmitted absence of modulation signal and fixed channelize. f is using the mark cursor to mark the peak frequency value, fc is declaring of channel frequency.
Then the frequency error formula is $(f_c - f) / f_c \times 10^6$ ppm and the limit is less than ±20ppm.

3.1.4 TEST SETUP LAYOUT



3.1.5 TEST DEVIATION

There is no deviation with the original standard.

3.1.6 EUT OPERATION DURING TEST

The EUT was placed on the test table and programmed in un-modulation function.

3.1.7 TEST RESULTS

Please refer to the Appendix A.

3.2 OCCUPIED BANDWIDTH MEASUREMENT

3.2.1 LIMIT

Item	Limits (See Article 6, Table2 and Article 49-20, Item1-h,i of the Ordinance Regulating Radio Equipment)
Occupied Bandwidth	20MHz systems≤20MHz 40MHz systems≤40MHz 80MHz systems≤80MHz 160MHz systems≤160MHz

3.2.2 SETTING

The following table is the setting of spectrum analyzer.

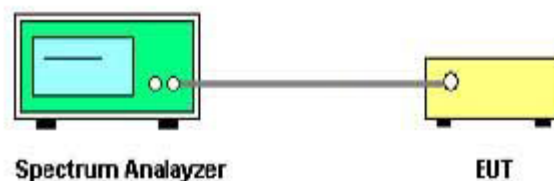
Spectrum Parameter	Setting
Span	20MHz systems: 50MHz 40MHz systems: 80MHz 80MHz systems: 160MHz 160MHz systems: 320MHz
RBW / VBW	300kHz / 300kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.2.3 TEST PROCEDURES

Test method according to Clause 3 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. Set spectrum analyzer with condition in section 3.2.2 and tune reference level to observe receiving signal position.
2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than table 3.2.1.

3.2.4 TEST SETUP LAYOUT



3.2.5 TEST DEVIATION

There is no deviation with the original standard.

3.2.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

3.2.7 TEST RESULTS

Please refer to the Appendix B.

3.3 UNWANTED EMISSION INTENSITY MEASUREMENT

3.3.1 LIMIT

Item	Limits (See Article 2 Paragraph 1 of Item 80)	Equipment Mode
TX Spurious Emission (EIRP) For 20MHz systems	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)	LPI
	6425MHz ~ 6435.9MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)	
	6435.9MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)	
TX Spurious Emission (EIRP) For 40MHz systems	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)	
	6425MHz ~ 6440.1MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)	
	6440.1MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)	
TX Spurious Emission (EIRP) For 80MHz systems	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)	
	6425MHz ~ 6440.4MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)	
	6440.4MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)	
TX Spurious Emission (EIRP) For 160MHz systems	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)	
	6425MHz ~ 6425.5MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)	
	6425.5MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)	

Frequency Range	30MHz ~ 1GHz	1GHz ~ 2.5GHz	2.5GHz ~ 6GHz	6GHz ~ 12.5GHz	12.5GHz ~ 26GHz
Cable Loss (dB)	16	16	16	16	16

Note: The cable loss already includes antenna gain.

3.3.2 SETTING

The following table is the setting of spectrum analyzer.

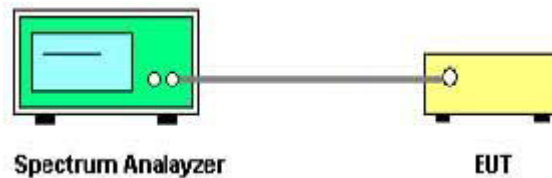
Spectrum Parameter	Setting
RBW / VBW	1MHz / 1MHz
Detector	Positive Peak
Trace	Max Hold
Sweep Time	Auto

3.3.3 TEST PROCEDURES

Test method according to Clause 4 & Clause 5 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Set spectrum analyzer with condition in section 3.3.2 and tune reference level to observe receiving signal position.
3. Setting of SA with frequency in section 3.3.1 , then to mark peak reading value + cable loss + Max Ant. Gain shall be less than Limit.
4. Sweep with every specified sweep bandwidth and find maximum power value of each band. Then transform the found values of "Pa" to "Poa" using following formula and if corresponding EIRP "Poa" (dBm/MHz) satisfies regulated limitation, skip the next procedure 3 and record the "Poa" as measurement results. Poa is calculated by following formula $Poa = Pa + Gt - Lf$ Pa: found values in the measurment of out of band leakage power (dBm/MHz) Gt: Antenna gain at the frequency of the found values (dBi) Lf: Cable loss at the frequency of the found values (dB).
5. If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like time domain power measurement as Result_Value.

3.3.4 TEST SETUP LAYOUT



3.3.5 TEST DEVIATION

There is no deviation with the original standard.

3.3.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

3.3.7 TEST RESULTS

Please refer to the Appendix C.

3.4 ANTENNA POWER TOLERANCE MEASUREMENT

3.4.1 LIMIT

Item	Limits (See Article 49-20. 4 of the Ordinance Regulating Radio Equipment)
Antenna Power Density	20MHz systems ≤ 10 mW/MHz
	40MHz systems ≤ 5 mW/MHz
	80MHz systems ≤ 2.5 mW/MHz
	160MHz systems ≤ 1.25 mW/MHz
EIRP Density (LPI Mode)	20MHz systems ≤ 10 mW/MHz
	40MHz systems ≤ 5 mW/MHz
	80MHz systems ≤ 2.5 mW/MHz
	160MHz systems ≤ 1.25 mW/MHz
Antenna Power Tolerance	+20% ~ -80% (Base on manufacturer declare antenna power density)

3.4.2 SETTING

The following table is the setting of spectrum analyzer.

Step 1:

Spectrum Parameter	Setting
Span	20MHz systems: 20MHz 40MHz systems: 40MHz 80MHz systems: 80MHz 160MHz systems: 160MHz
RBW / VBW	1MHz / 1MHz
Detector	RMS
Trace	Max Hold
Sweep Time	Auto

Step 3:

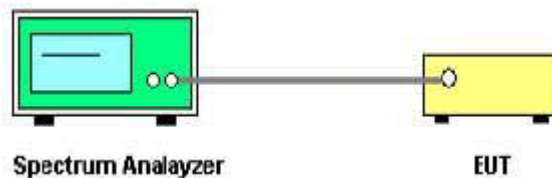
Spectrum Parameter	Setting
Span	0Hz
RBW / VBW	1MHz / 1MHz
Detector	RMS
Trace	Max Hold
Sweep Time	60s

3.4.3 TEST PROCEDURES

Test method according to Clause 6 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. Set spectrum analyzer with condition in section 3.4.2 Step 1 and tune reference level to observe receiving signal position.
2. When the trace is complete, find the peak value of the power envelope and record the frequency.
3. Set spectrum analyzer with condition in section 3.4.2 Step 3 and tune reference level to observe receiving signal position. The detector mode "Average" is often referred to as "RMS Average" or "Sample" but do not use Video Average.
4. When the trace is complete, capture the trace, for example using the "View" option on the spectrum analyser.
Find the peak value of the trace and place the analyser marker on this peak. This level is recorded as the highest mean power (spectral power density) in a 1 MHz band.
5. The maximum e.i.r.p. spectral density is calculated from the above measured power density (D), the observed duty cycle x (see clause 5.7.2.2, step 1), and the applicable antenna assembly gain "G" in dBi, according to the formula below. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the highest gain shall be used.
 - $PD = D + G + 10 \log (1/x)$.

3.4.4 TEST SETUP LAYOUT



3.4.5 TEST DEVIATION

There is no deviation with the original standard.

3.4.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

3.4.7 TEST RESULTS

Please refer to the Appendix D.

3.5 ADJACENT CHANNEL EMITTED POWER MEASUREMENT

3.5.1 LIMIT

Item	Limits (See 49-20 Item1-e of the Ordinance Regulating Radio Equipment)
Adjacent Channel Emitted Power	≥ 25 dB $f \pm 20$ MHz (20MHz systems) $f \pm 40$ MHz (40MHz systems) $f \pm 80$ MHz (80MHz systems) $f \pm 160$ MHz (160MHz systems)
	≥ 40 dB $f \pm 40$ MHz (20MHz systems) $f \pm 80$ MHz (40MHz systems) $f \pm 160$ MHz (80MHz systems) $f \pm 320$ MHz (160MHz systems)

3.5.2 SETTING

The following table is the setting of spectrum analyzer.

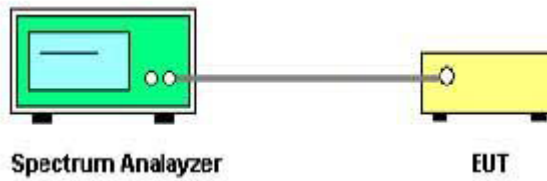
Spectrum Parameter	Setting
Span	20MHz systems: 200MHz 40MHz systems: 400MHz 80MHz systems: 500MHz 160MHz systems: 1000MHz
RBW / VBW	300kHz / 300kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.5.3 TEST PROCEDURES

Test method according to Clause 7 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Set spectrum analyzer with condition in section 3.5.2 and tune reference level to observe receiving signal position.
3. SA set the Channel Power Function and Channel Bandwidth: 20MHz and Center Frequency: The center frequency of testing for EUT (Such as 5180MHz). Then SA automatically calculate the channel power of EUT and A is representative of this channel power.
4. SA set the Channel Power Function and Channel Bandwidth: 20MHz and Center Frequency: The center frequency of testing for EUT (Such as 5180MHz) ± 20 MHz. Then SA automatically calculate the first adjacent channel power of EUT and B is representative of this first adjacent channel power.
5. SA set the Channel Power Function and Channel Bandwidth: 20MHz and Center Frequency: The center frequency of testing for EUT (Such as 5180MHz) ± 40 MHz. Then SA automatically calculate the second adjacent channel power of EUT and C is representative of this first adjacent channel power.
6. Conclusion that A - B is more than 25dB and A - C is more than 40dB.

3.5.4 TEST SETUP LAYOUT



3.5.5 TEST DEVIATION

There is no deviation with the original standard.

3.5.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

3.5.7 TEST RESULTS

Please refer to the Appendix E.

3.6 LIMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

3.6.1 LIMIT

Item	Limits (See Article 24, Paragraph 2 of the Ordinance Regulating Radio Equipment)
	≤4nW (f<1GHz)
RX Spurious Emission	≤20nW (1GHz≤f)

Frequency Range	30MHz ~ 1GHz	1GHz ~ 2.5GHz	2.5GHz ~ 6GHz	6GHz ~ 12.5GHz	12.5GHz ~ 26GHz
Cable Loss (dB)	1.5	1.5	1.5	1.5	1.5

3.6.2 SETTING

The following table is the setting of spectrum analyzer.

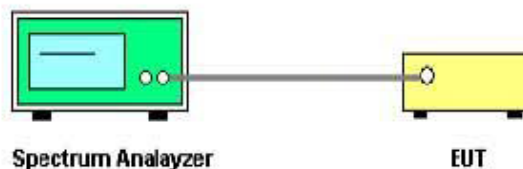
Spectrum Parameter	Setting
RBW / VBW	100 kHz / 100 kHz (30 MHz ~ 1000 MHz) 1MHz / 1MHz (Above 1000MHz)
Detector	Positive Peak
Trace	Max Hold
Sweep Time	Auto

3.6.3 TEST PROCEDURES

Test method according to Clause 8 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. EUT have the continuous reception mode and fixed only one channelize.
2. Set spectrum analyzer with condition in section 3.6.2 and tune reference level to observe receiving signal position.
3. SA set RBW: 100kHz and VBW: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW.
4. SA set RBW: 1MHz and VBW: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 26000MHz. Search to mark peak reading value + cable loss shall be less than 20nW.
5. If power level of lower emissions are more than 1/10 of limit (0.4nW for f < 1GHz, 2nW for f ≥ 1GHz), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

3.6.4 TEST SETUP LAYOUT



3.6.5 TEST DEVIATION

There is no deviation with the original standard.

3.6.6 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously receiving mode.

3.6.7 TEST RESULTS

Please refer to the Appendix F.

3.7 RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

3.7.1 LIMIT

Item	Limits (See Article 9-4, Item9-C of the Ordinance Regulating Radio Equipment)
Identification code	The wireless equipment of the radio station mainly used in the same station automatically sends or receives the identification code.

3.7.2 MEASURING ID CODE SOFTWARE

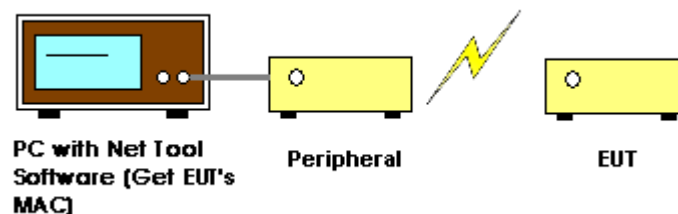
PC with Net Tool	Setting
MAC IP List	MAC Scan

3.7.3 TEST PROCEDURES

Test method according to Clause 9 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. In the case that the EUT has the function of automatically transmitting the identification code:
 - a. Transmit the predetermined identification codes form EUT.
 - b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code:
 - a. Transmit the predetermined identification codes form the counterpart.
 - b. Check if communication is normal.
 - c. Transmit the signals other than predetermined ID codes form the counterpart.
 - d. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

3.7.4 TEST SETUP LAYOUT



3.7.5 TEST DEVIATION

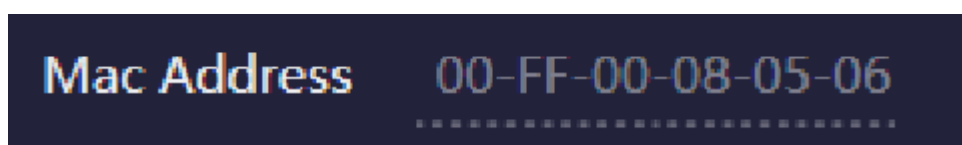
There is no deviation with the original standard.

3.7.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

3.7.7 TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILIT

Test Power:	Normal Voltage
Test Mode:	IEEE 802.11ax(HE20)
Test Result:	Pass (identification code: [00-FF-00-08-05-06])



3.8 TRANSMISSION BURST LENGTH MEASUREMENT

3.8.1 LIMIT

Item	Limits
	(See 49-20 Item1-e of the Ordinance Regulating Radio Equipment)
Transmission Burst Length	≤ 8 ms

3.8.2 SETTING

The following table is the setting of spectrum analyzer.

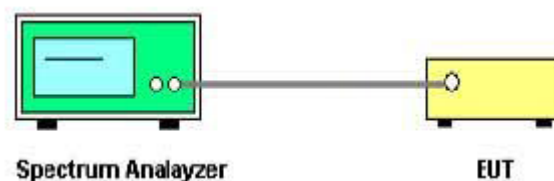
Spectrum Parameter	Setting
Span	0Hz
RBW / VBW	10MHz / 10MHz
Sweep	Single
Detector	Peak
Trigger mode	Video

3.8.3 TEST PROCEDURES

Test method according to Clause 10 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set spectrum analyzer with condition in section 3.8.2 and tune reference level to observe receiving signal position.
3. Use a video trigger with the trigger level set to enable triggering only on full pulses.
4. Sweep Time is more than once pulse time.
5. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
6. Measure the maximum time duration of one single pulse.

3.8.4 TEST SETUP LAYOUT



3.8.5 TEST DEVIATION

There is no deviation with the original standard.

3.8.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

3.8.7 TEST RESULTS

Please refer to the Appendix G.

3.9 CARRIER SENSE CAPABILITY MEASUREMENT

3.9.1 LIMIT

Item	Limits (See Article 49-20, Item1-k of the Ordinance Regulating Radio Equipment)
Carrier Sense Capability	Field intensity in the direction of the maximum gain of a receiving antenna:100mV/m. *Start transmission after performing a carrier sense. However, when transmission and reception are controlled from other radio equipment, and when the radio equipment which performed transmission resumes transmission within 8 millisecond after a career sense, it can omit performing a career sense.

3.9.2 SETTING

The following table is the setting of spectrum analyzer.

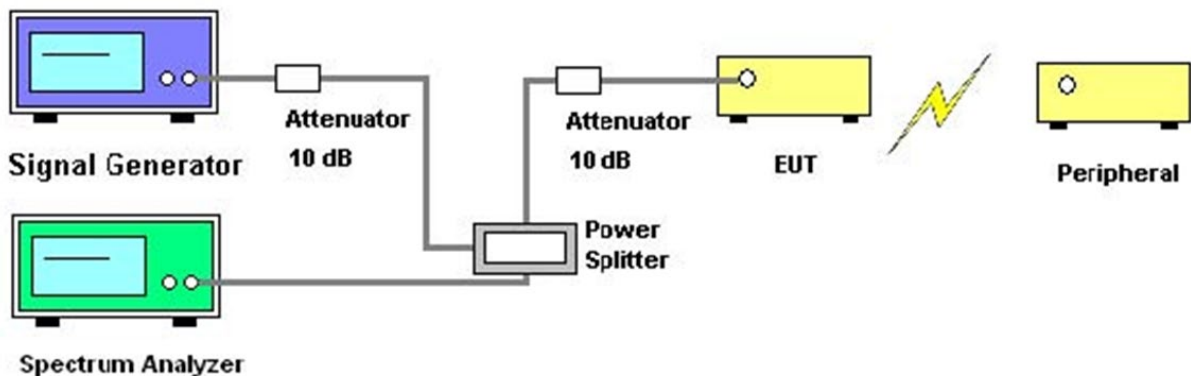
Spectrum Parameter	Setting
Span	0Hz
RBW / VBW	1MHz / 1MHz
Sweep	Continuous
Detector	Peak
Trigger mode	Video

3.9.3 TEST PROCEDURES

Test method according to Clause 11 of Specified Radio Equipment Article 2 Paragraph 1 of item 80.

- SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is $(On\ 22.79 + Gr - 20 \cdot \log(f)) [dBm]$ (Gr: dBi; f:MHz). Then turn off the RF signal of SSG.
- EUT have transmitted the maximum modulation signal and fixed channelize.
- Set spectrum analyzer with condition in section 3.9.2 and tune reference level to observe receiving signal position.
- SSG RF Signal On.
- EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.

3.9.4 TEST SETUP LAYOUT



3.9.5 TEST DEVIATION

There is no deviation with the original standard.

3.9.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

3.9.7 TEST RESULTS

Please refer to the Appendix H.

3.10 CONSTRUCTION PROTECTION CONFIRMATION METHOD

3.10.1 LIMIT

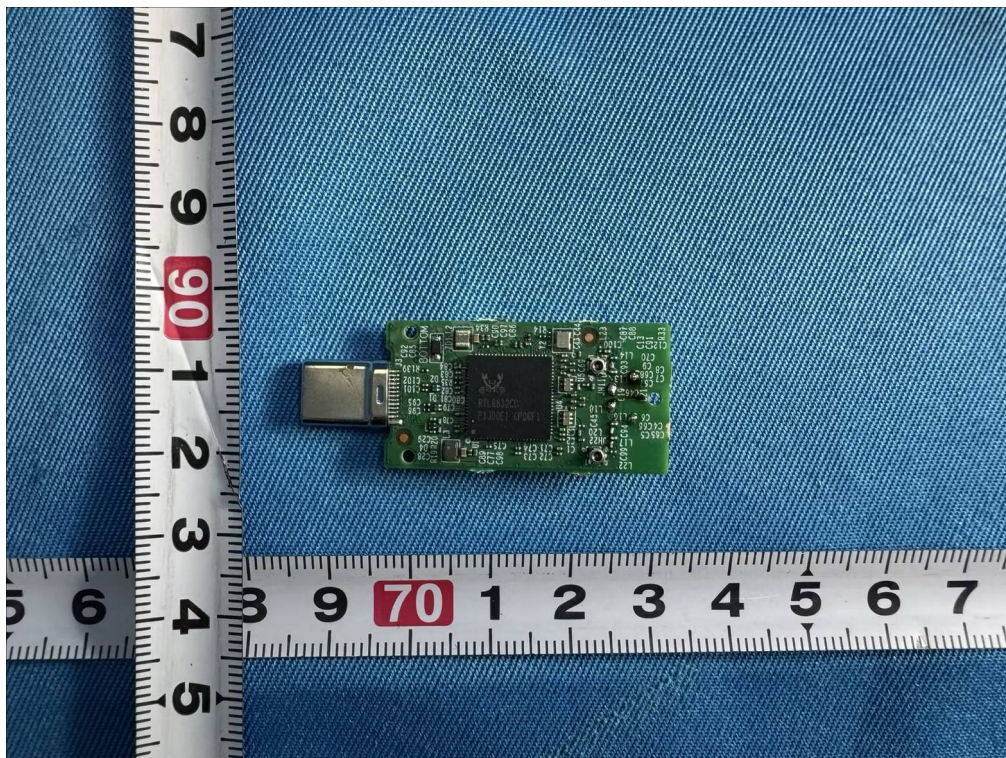
(See Article 49-20, Item1-a of the Ordinance Regulating Radio Equipment).

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

3.10.2 CONFIRMATION METHOD

The RF and modulation portions are protected against illegal modification as following method:

Tick the appropriate box	
☐	1. Sealed with special screws.
☐	2. Plastic chassis is being welded using ultrasonic waves.
☐	3. Chassis is glued using a special adhesive.
☐	4. Metal covers are spot-fused.
☐	5. Cover is specially interlocked.
☐	6. RF and Modulation components are covered with shielding case and this shielding case is soldered.
☐	7. Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method.
☐	8. Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive.
☐	9. Shield case is welded at RF and modulation parts, and ID-ROM is glued with a non-transparent laminating agent.
☒	10. RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable part on PCB or adjustable parts are not exposed.



4. LIST OF MEASURING EQUIPMENTS

Kind of Equipment	Manufacturer	Model No.	Serial No.	Validity Date	Calibration Agency	Class Information
EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Nov. 21, 2026	CEPREI Calibration and Testing Center	(c)
MXG Vector Signal Generator	Keysight	N5182B	MY57300568	Nov. 21, 2026	CEPREI Calibration and Testing Center	(c)
Frequency Extender	Keysight	N5182BX07	MY61500105	Jul. 04, 2026	CEPREI Calibration and Testing Center	(c)
Cable	RegalWay	N/A	RWP50-402-S MSM-1M	N/A	N/A	-
Cable	RegalWay	N/A	RWP50-402-S MSM-1M	N/A	N/A	-
Cable	RegalWay	N/A	RWP50-402-S MSM-1M	N/A	N/A	-
Power Splitter	N/A	N/A	SZ201504933	Nov. 21, 2026	CEPREI Calibration and Testing Center	(c)
Power Splitter	Mini-Circuits	ZN4PD-642W-S+	SN806321618-1	May 17, 2026	CEPREI Calibration and Testing Center	(c)
Power Splitter	Mini-Circuits	ZN4PD-642W-S+	SN806321618-2	May 17, 2026	CEPREI Calibration and Testing Center	(c)
Attenuator	RegalWay	RWPA-6000-110-MA	N/A	May 27, 2026	CEPREI Calibration and Testing Center	(c)
Gaming Router	Tplink	Archer GE800	N/A	N/A	N/A	-
MXA Signal Analyzer	KEYSIGHT	N9020B	MY63380204	Jul. 25, 2026	CEPREI Calibration and Testing Center	(c)
Measurement Software	BTL	BTL Conducted Test	N/A	N/A	N/A	-
DC power supply	UNI-T	UDP6721	AWP7224050031	Nov. 21, 2026	CEPREI Calibration and Testing Center	(c)
Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A	N/A	-
Multimeter	FLUKE	15B+(TR13)	45123773WS	May 17, 2026	CEPREI Calibration and Testing Center	(c)
Spectrum Analyzer	R&S	FSP38	100852	May 27, 2026	CEPREI Calibration and Testing Center	(c)
DC Block	N/A	N/A	N/A	N/A	N/A	-

Remark:

- a. Calibration conducted by the National Institute of Information and Communications Technology (NITC) in Japan (hereinafter referred to as "NITC") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
- b. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No.51 of 1992).
- c. Calibration conducted in countries except Japan, which shall be equivalent to the calibration Conducted by the NITC or a designation agency under Article 102-18 paragraph (1).
- d. Calibration, etc. conducted by using measuring instruments and other equipment listed in the above column of appended table No.3, which shall have been given any type of calibration, etc. listed above from (a) to (c). From JRL Article 24-2, paragraph 4, item 2.

Note:

1. "N/A" denotes the equipment is verified or confirmed internally by test lab.
2. The calibration interval of the above test instruments is 12 months.
3. The Calibration Agency(CHINA CEPREI LABORATORY) address for the Building 9, No. 78, West Zhucun Avenue, Zhucun Street, Zengcheng District, Guangzhou City.

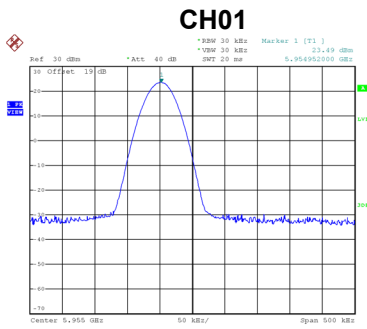
5. EUT TEST PHOTO



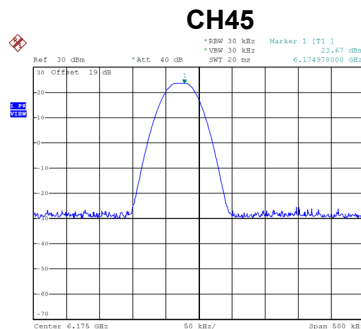
APPENDIX A - FREQUENCY TOLERANCE

Test Mode: IEEE 802.11ax(HE20)

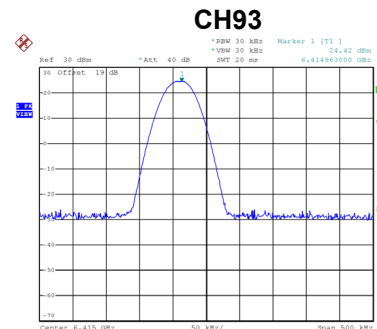
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5955	6175	6415	Low/Mid/High of test frequency range
Measured Frequency (MHz)	5954.9520	6174.9780	6414.9630	-
Frequency Tolerance (ppm)	8.06	3.56	5.77	Limit: $-20 \leq \text{ppm} \leq 20$



Date: 28.NOV.2025 15:25:51



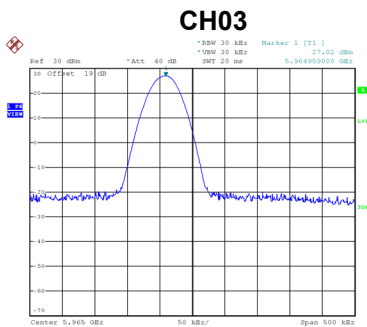
Date: 28.NOV.2025 15:30:24



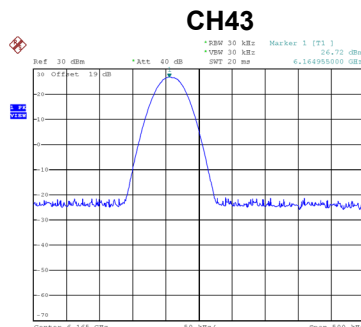
Date: 28.NOV.2025 15:41:06

Test Mode: IEEE 802.11ax(HE40)

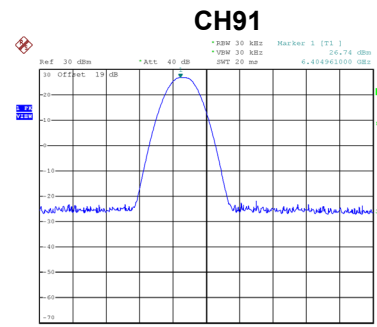
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5965	6165	6405	Low/Mid/High of test frequency range
Measured Frequency (MHz)	5964.9590	6164.9550	6404.9610	-
Frequency Tolerance (ppm)	6.87	7.30	6.09	Limit: $-20 \leq \text{ppm} \leq 20$



Date: 28.NOV.2025 15:44:07



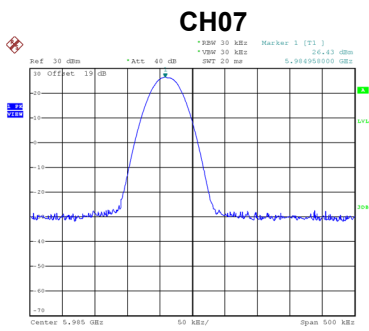
Date: 28.NOV.2025 15:44:35



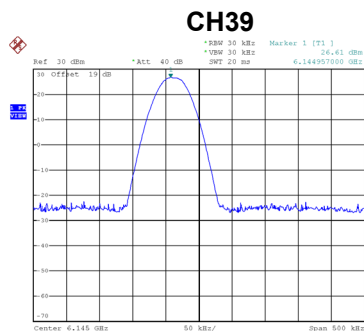
Date: 28.NOV.2025 15:45:28

Test Mode: IEEE 802.11ax(HE80)

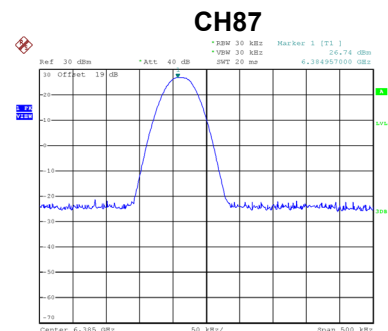
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5985	6145	6385	Low/Mid/High of test frequency range
Measured Frequency (MHz)	5984.9580	6144.9570	6384.9570	-
Frequency Tolerance (ppm)	7.02	7.00	6.73	Limit: -20≤ppm≤20



Date: 28.NOV.2025 15:45:50



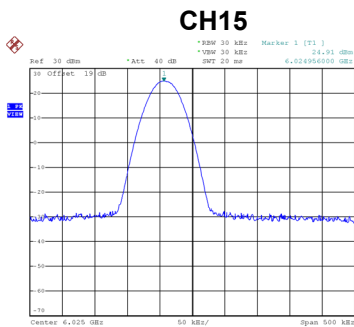
Date: 28.NOV.2025 15:46:12



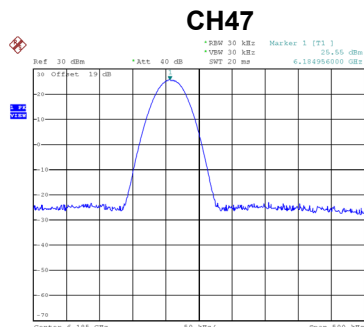
Date: 28.NOV.2025 15:47:44

Test Mode: IEEE 802.11ax(HE160)

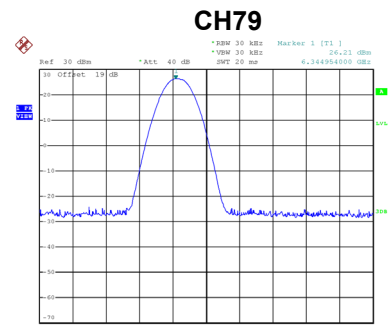
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	6025	6185	6345	Low/Mid/High of test frequency range
Measured Frequency (MHz)	6024.9560	6184.9560	6344.9540	-
Frequency Tolerance (ppm)	7.30	7.11	7.25	Limit: -20≤ppm≤20



Date: 28.NOV.2025 15:48:07



Date: 28.NOV.2025 15:48:42

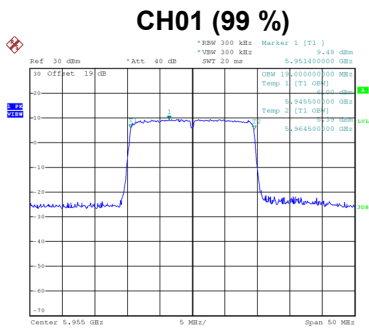


Date: 28.NOV.2025 15:49:04

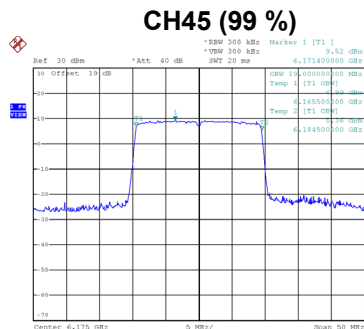
APPENDIX B - OCCUPIED BANDWIDTH

Test Mode: IEEE 802.11ax(HE20)

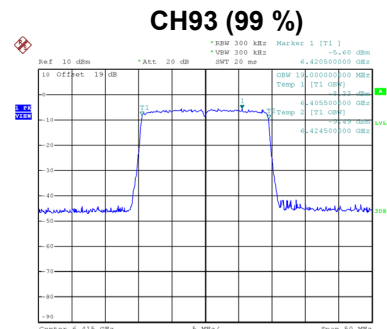
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5955	6175	6415	Low/Mid/High of test frequency range
Occupied Bandwidth (MHz)	19.00	19.00	19.00	Limit ≤ 20 MHz



Date: 28.NOV.2025 14:35:19



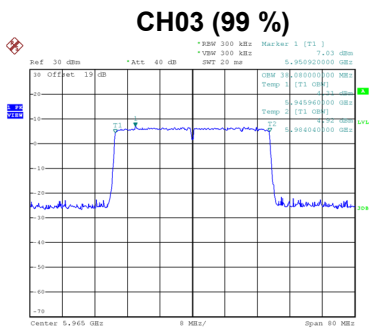
Date: 28.NOV.2025 14:36:23



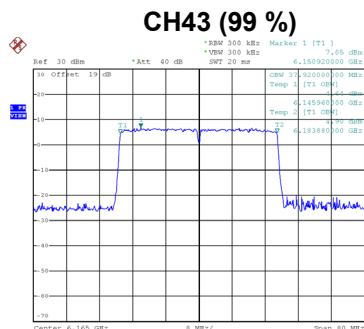
Date: 28.NOV.2025 16:43:36

Test Mode: IEEE 802.11ax(HE40)

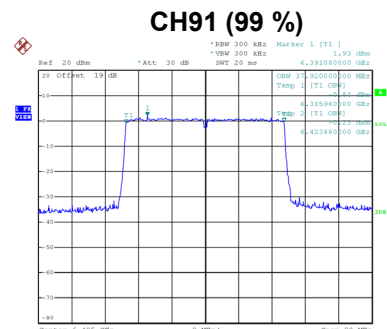
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5965	6165	6405	Low/Mid/High of test frequency range
Occupied Bandwidth (MHz)	38.08	37.92	37.92	Limit ≤ 40 MHz



Date: 28.NOV.2025 14:45:16



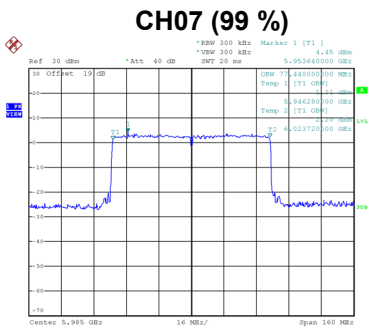
Date: 28.NOV.2025 14:46:30



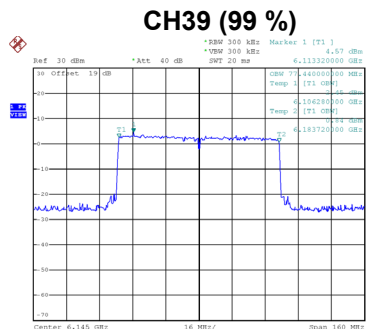
Date: 28.NOV.2025 16:48:11

Test Mode:	IEEE 802.11ax(HE80)
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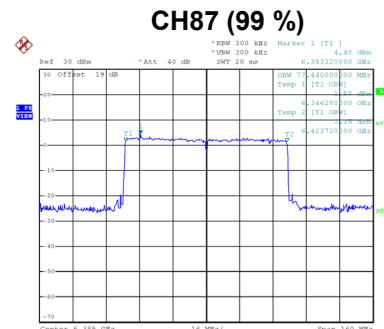
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5985	6145	6385	Low/Mid/High of test frequency range
Occupied Bandwidth (MHz)	77.44	77.44	77.44	Limit ≤ 80 MHz



Date: 28.NOV.2025 15:10:50



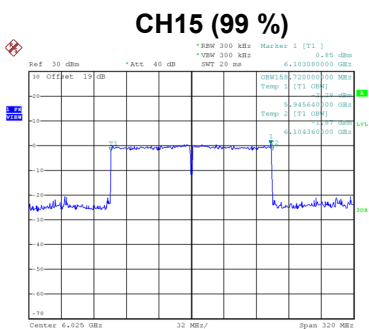
Date: 28.NOV.2025 15:13:34



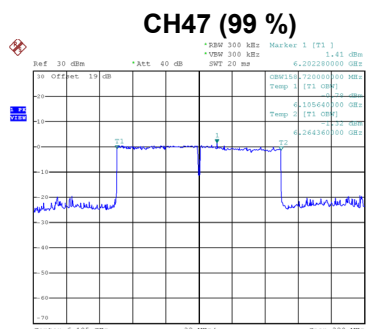
Date: 28.NOV.2025 15:14:38

Test Mode:	IEEE 802.11ax(HE160)
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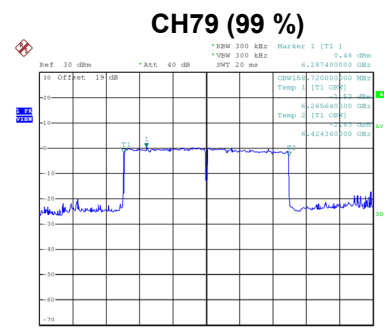
Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	6025	6185	6345	Low/Mid/High of test frequency range
Occupied Bandwidth (MHz)	158.72	158.72	158.72	Limit ≤ 160 MHz



Date: 28.NOV.2025 15:17:58



Date: 28.NOV.2025 15:21:11



Date: 28.NOV.2025 15:22:10

APPENDIX C - UNWANTED EMISSION INTENSITY

Test Mode:	IEEE 802.11ax(HE20)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5955	6175	6415	Low/Mid/High of test frequency range
Unwanted Emission Intensity (Max value in the band)	MHz	5925.00	4474.83	3189.72	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)
	dBm/MHz	-34.29	-34.81	-34.63	
	$\mu\text{W/MHz}$	0.3724	0.3304	0.3443	
	MHz	6426.98	6431.56	6425.03	6425MHz ~ 6435.9MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)
	dBm/MHz	-34.84	-35.61	-14.87	
	$\mu\text{W/MHz}$	0.3281	0.2748	32.5837	
	MHz	24884.85	25413.08	25882.62	6435.9MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)
	dBm/MHz	31.76	-31.35	-21.35	
	$\mu\text{W/MHz}$	0.6668	0.7328	7.3282	

Note:

Emission value = SA measurement value + Directional gain + cable loss

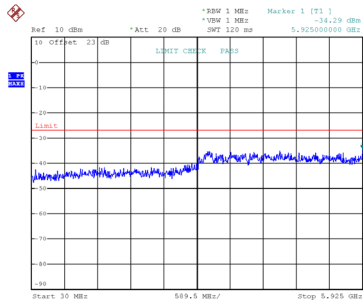
Directional gain = $10 \log (\text{Ant } X)$

X = the total number of antennas

Explanation of Marker and ZeroSP test:

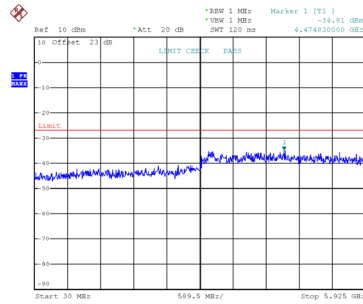
- 1) The frequency of Marker during testing is the frequency that exceeds the limit the most.
- 2) The testing of ZeroSP is the worst, covering the entire frequency band.

CH01



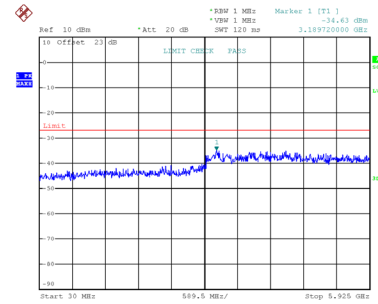
Date: 28.NOV.2025 14:35:25

CH45 30 MHz ≤ f ≤ 5925 MHz



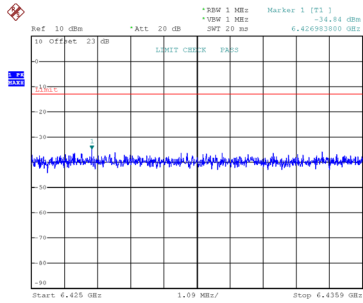
Date: 28.NOV.2025 14:36:29

CH93

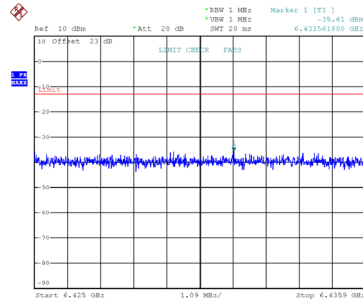


Date: 28.NOV.2025 16:43:42

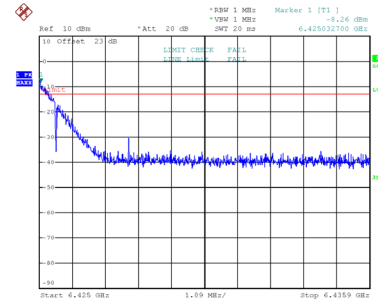
6425 MHz ≤ f ≤ 6435.9 MHz



Date: 28.NOV.2025 14:35:30

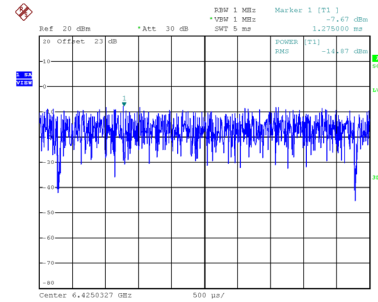


Date: 28.NOV.2025 14:36:34



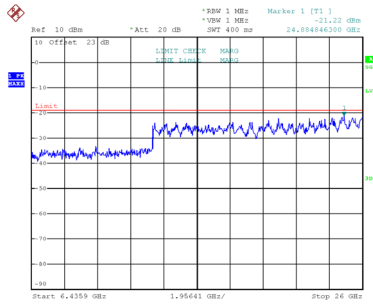
Date: 28.NOV.2025 16:43:47

ZeroSP



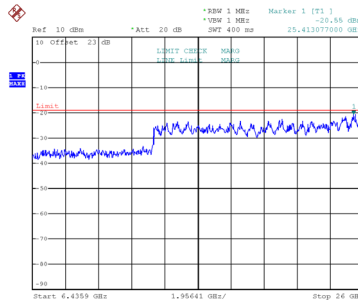
Date: 28.NOV.2025 16:43:54

CH01



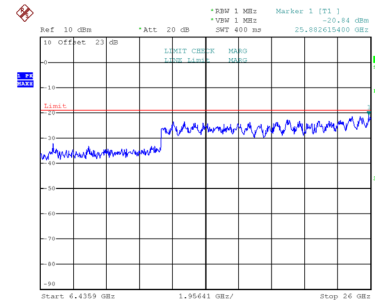
Date: 28.NOV.2025 14:35:36

CH45 6435.9 MHz < f ≤ 26000 MHz



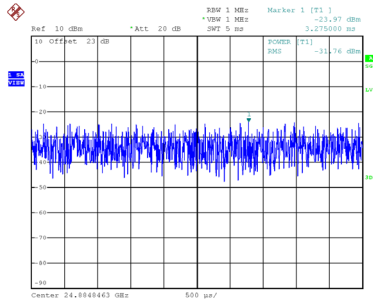
Date: 28.NOV.2025 14:36:40

CH93



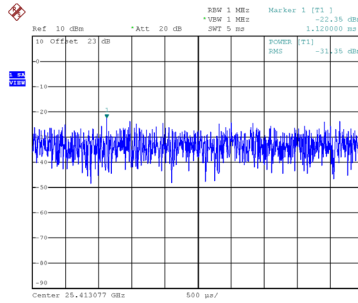
Date: 28.NOV.2025 16:50:00

ZeroSP



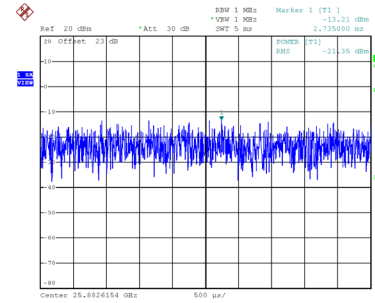
Date: 28.NOV.2025 14:35:42

ZeroSP



Date: 28.NOV.2025 14:36:46

ZeroSP



Date: 28.NOV.2025 16:50:06

Test Mode:	IEEE 802.11ax(HE40)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5965	6165	6405	Low/Mid/High of test frequency range
Unwanted Emission Intensity (Max value in the band)	MHz	5925.00	3814.59	3130.77	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)
	dBm/MHz	-35.80	-35.14	-34.42	
	$\mu\text{W/MHz}$	0.2630	0.3062	0.3614	
	MHz	6432.14	6425.79	6425.02	6425MHz ~ 6440.1MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)
	dBm/MHz	-35.37	-34.55	-14.27	
	$\mu\text{W/MHz}$	0.2904	0.3508	37.4111	
	MHz	24806.85	25452.32	26000.00	6440.1MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)
	dBm/MHz	-31.39	-31.73	-30.22	
	$\mu\text{W/MHz}$	0.7261	0.6714	0.9506	

Note:

Emission value = SA measurement value + Directional gain + cable loss

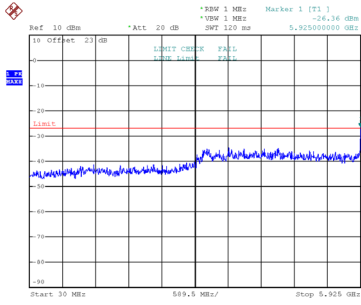
Directional gain = $10 \log (\text{Ant X})$

X = the total number of antennas

Explanation of Marker and ZeroSP test:

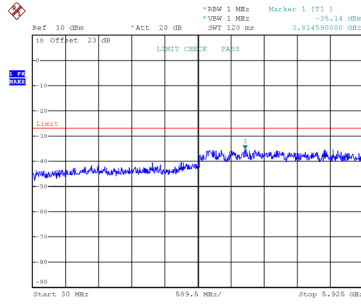
- 1) The frequency of Marker during testing is the frequency that exceeds the limit the most.
- 2) The testing of ZeroSP is the worst, covering the entire frequency band.

CH03



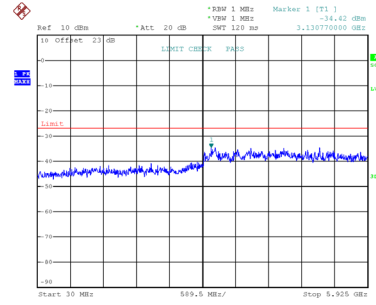
Date: 28.NOV.2025 14:45:22

CH43 30 MHz ≤ f ≤ 5925 MHz



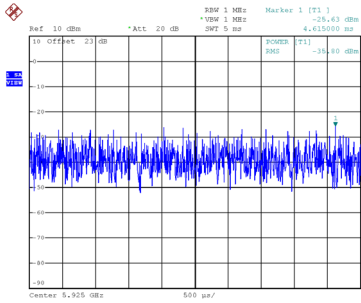
Date: 28.NOV.2025 14:46:36

CH91



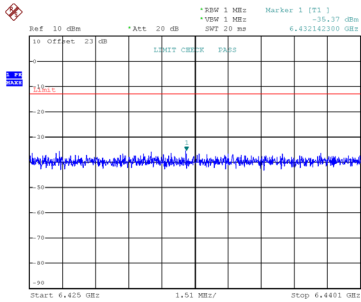
Date: 28.NOV.2025 16:46:52

ZeroSP

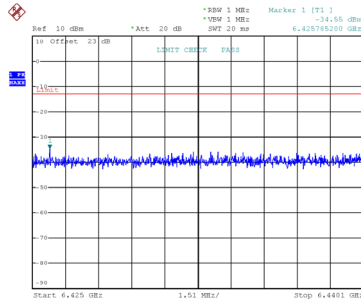


Date: 28.NOV.2025 14:45:28

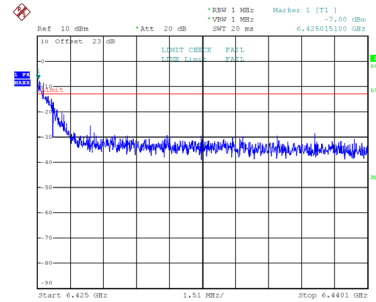
6425 MHz ≤ f ≤ 6440.1 MHz



Date: 28.NOV.2025 14:45:33

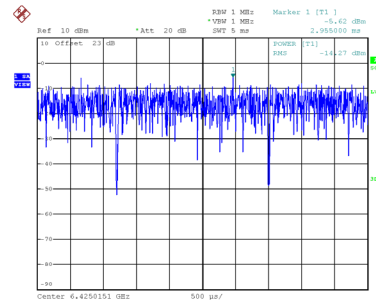


Date: 28.NOV.2025 14:46:41



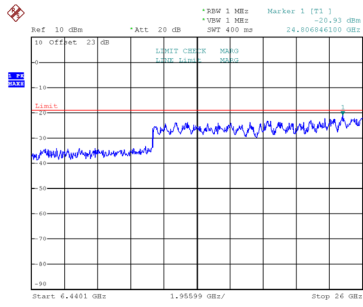
Date: 28.NOV.2025 16:51:07

ZeroSP



Date: 28.NOV.2025 16:51:13

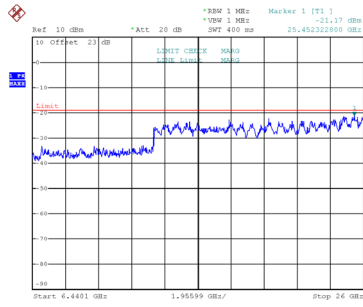
CH03



Date: 28.NOV.2025 14:45:39

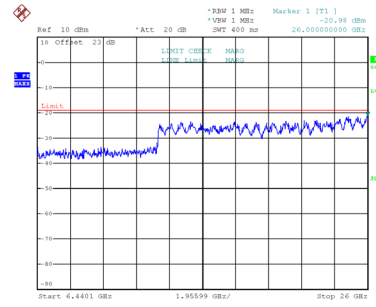
CH43

6440.1 MHz < f ≤ 26000 MHz



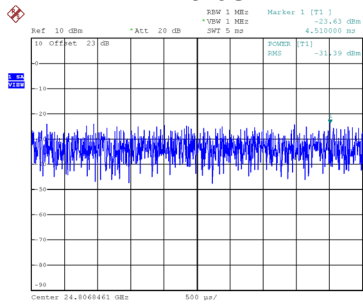
Date: 28.NOV.2025 14:46:47

CH91



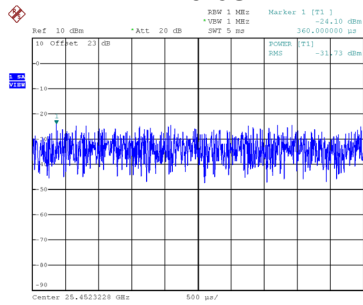
Date: 28.NOV.2025 16:47:09

ZeroSP



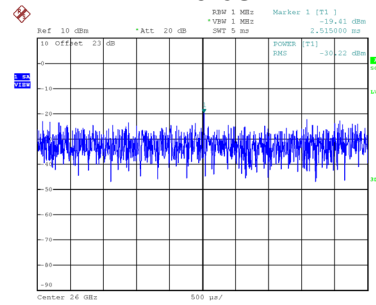
Date: 28.NOV.2025 14:45:45

ZeroSP



Date: 28.NOV.2025 14:46:53

ZeroSP



Date: 28.NOV.2025 16:47:15

Test Mode:	IEEE 802.11ax(HE80)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5985	6145	6385	Low/Mid/High of test frequency range
Unwanted Emission Intensity (Max value in the band)	MHz	5925.00	3183.83	5135.07	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)
	dBm/MHz	-40.25	-33.21	-34.08	
	$\mu\text{W/MHz}$	0.0944	0.4775	0.3908	
	MHz	6434.66	6426.94	6425.06	6425MHz ~ 6440.4MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)
	dBm/MHz	-35.46	-34.82	-15.19	
	$\mu\text{W/MHz}$	0.2844	0.3296	30.2691	
	MHz	26000.00	25843.52	6459.96	6440.4MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)
	dBm/MHz	-30.40	-31.77	-31.66	
	$\mu\text{W/MHz}$	0.9120	0.6653	0.6823	

Note:

Emission value = SA measurement value + Directional gain + cable loss

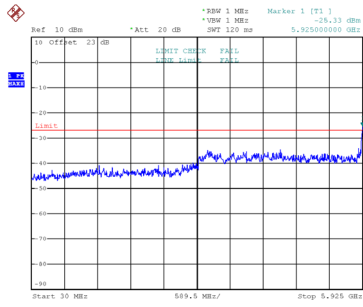
Directional gain = $10 \log (\text{Ant } X)$

X = the total number of antennas

Explanation of Marker and ZeroSP test:

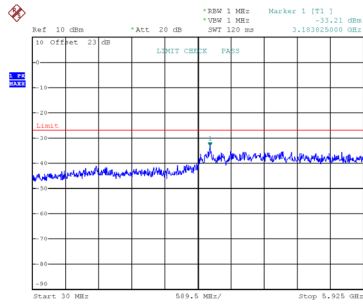
- 1) The frequency of Marker during testing is the frequency that exceeds the limit the most.
- 2) The testing of ZeroSP is the worst, covering the entire frequency band.

CH07



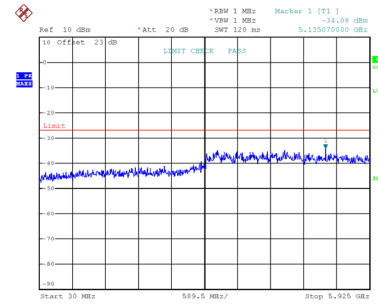
Date: 28.NOV.2025 15:10:56

CH39 30 MHz ≤ f ≤ 5925 MHz



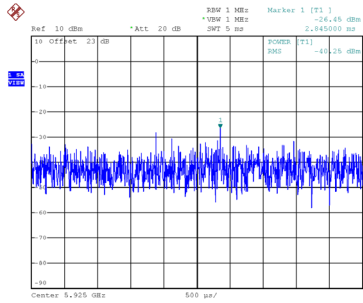
Date: 28.NOV.2025 15:13:40

CH87



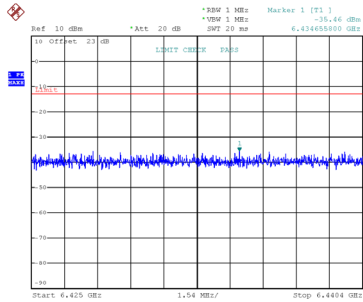
Date: 28.NOV.2025 15:14:44

ZeroSP

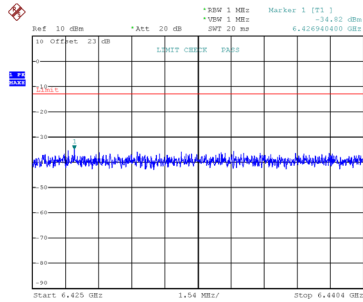


Date: 28.NOV.2025 15:11:02

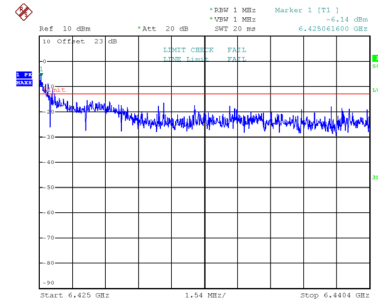
6425 MHz ≤ f ≤ 6440.4 MHz



Date: 28.NOV.2025 15:11:07

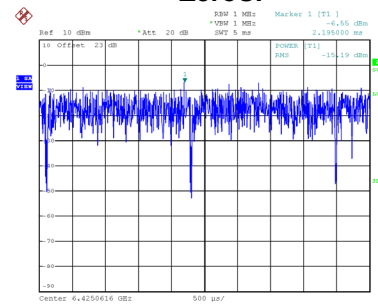


Date: 28.NOV.2025 15:13:45



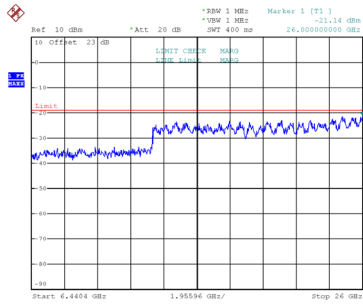
Date: 28.NOV.2025 15:16:56

ZeroSP



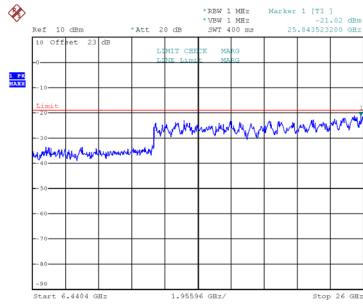
Date: 28.NOV.2025 15:17:02

CH07



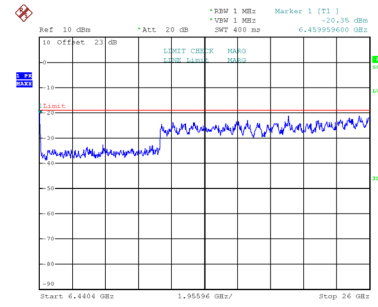
Date: 28.NOV.2025 15:11:13

CH39 6440.4 MHz < f ≤ 26000 MHz



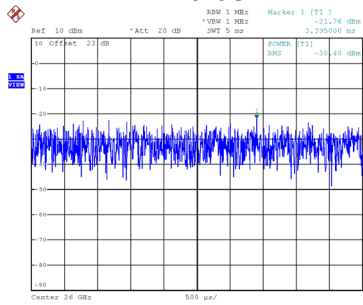
Date: 28.NOV.2025 15:13:51

CH87



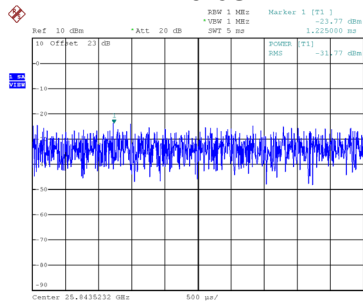
Date: 28.NOV.2025 15:15:02

ZeroSP



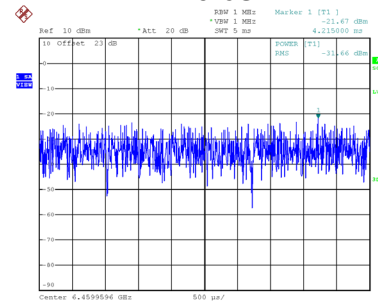
Date: 28.NOV.2025 15:11:19

ZeroSP



Date: 28.NOV.2025 15:13:57

ZeroSP



Date: 28.NOV.2025 15:15:08

Test Mode:	IEEE 802.11ax(HE160)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	6025	6185	6345	Low/Mid/High of test frequency range
Unwanted Emission Intensity (Max value in the band)	MHz	5907.31	5913.21	4233.14	30MHz ~ 5925MHz Limit $\leq 2 \mu\text{W/MHz}$ (-26.99 dBm/MHz)
	dBm/MHz	-29.39	-33.43	-34.49	
	$\mu\text{W/MHz}$	1.1508	0.4539	0.3556	
	MHz	6425.46	6425.04	6425.02	6425MHz ~ 6425.5MHz Limit $\leq 50 \mu\text{W/MHz}$ (-13.01 dBm/MHz)
	dBm/MHz	-34.76	-24.79	-16.51	
	$\mu\text{W/MHz}$	0.3342	3.3189	22.3357	
	MHz	25314.89	25354.04	6425.50	6425.5MHz ~ 26000MHz Limit $\leq 12.5 \mu\text{W/MHz}$ (-19.03 dBm/MHz)
	dBm/MHz	-31.45	-31.04	-23.67	
	$\mu\text{W/MHz}$	0.7161	0.7870	4.2954	

Note:

Emission value = SA measurement value + Directional gain + cable loss

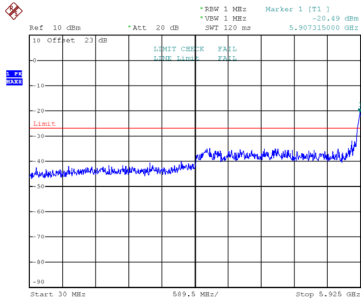
Directional gain = $10 \log (\text{Ant } X)$

X = the total number of antennas

Explanation of Marker and ZeroSP test:

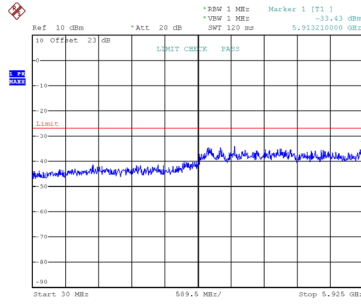
- 1) The frequency of Marker during testing is the frequency that exceeds the limit the most.
- 2) The testing of ZeroSP is the worst, covering the entire frequency band.

CH15



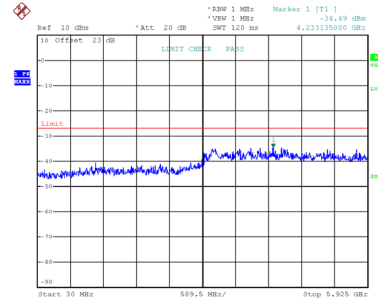
Date: 28.NOV.2025 15:18:04

CH47 30 MHz ≤ f ≤ 5925 MHz



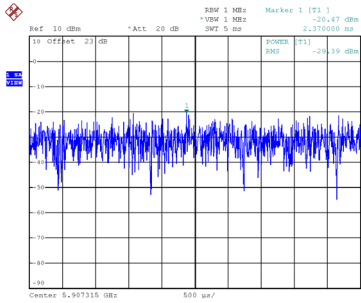
Date: 28.NOV.2025 15:21:17

CH79



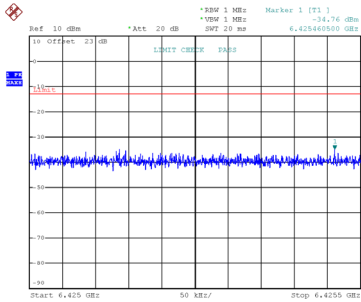
Date: 28.NOV.2025 15:22:16

ZeroSP

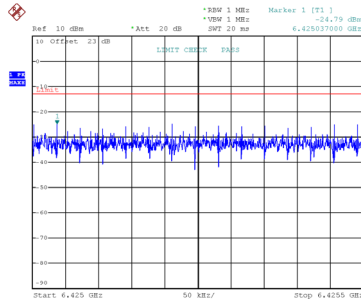


Date: 28.NOV.2025 15:18:10

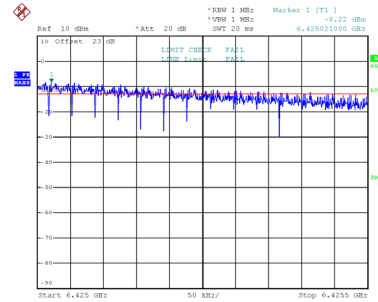
6425 MHz ≤ f ≤ 6425.5 MHz



Date: 28.NOV.2025 15:18:15

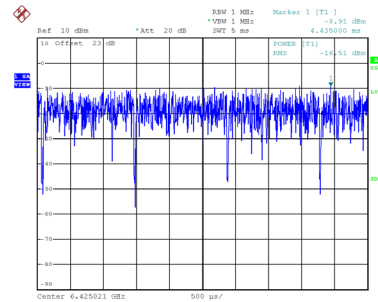


Date: 28.NOV.2025 15:21:23



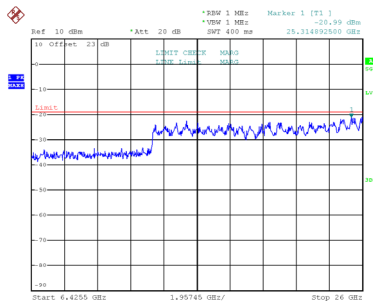
Date: 28.NOV.2025 15:22:21

ZeroSP



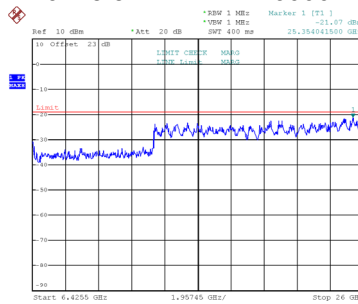
Date: 28.NOV.2025 15:22:27

CH15



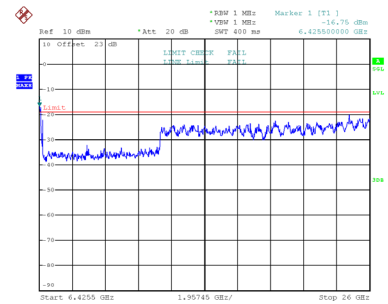
Date: 28.NOV.2025 15:18:22

CH47 6425.5 MHz < f ≤ 26000 MHz



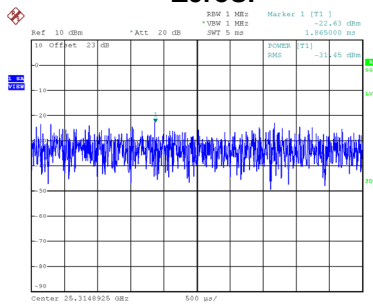
Date: 28.NOV.2025 15:21:29

CH79



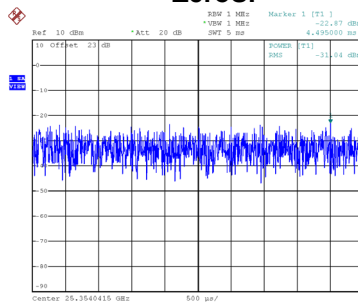
Date: 28.NOV.2025 15:22:33

ZeroSP



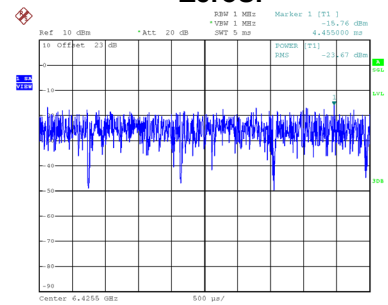
Date: 28.NOV.2025 15:18:28

ZeroSP



Date: 28.NOV.2025 15:21:35

ZeroSP



Date: 28.NOV.2025 15:22:39

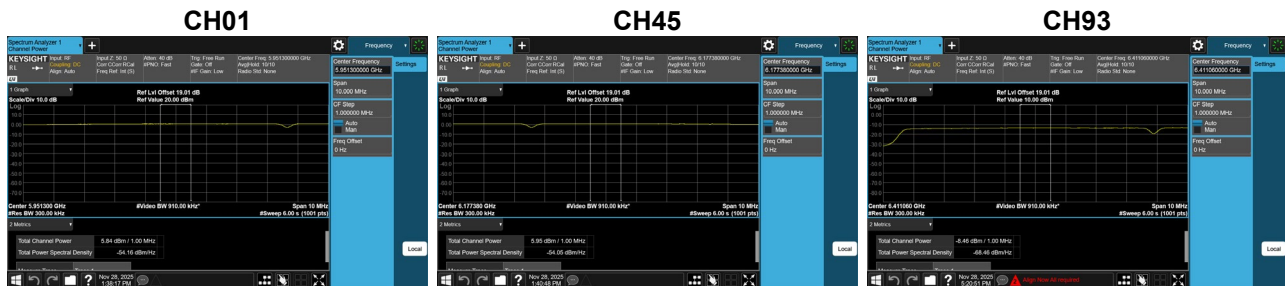
APPENDIX D - ANTENNA POWER TOLERANCE

Test Mode: IEEE 802.11ax(HE20)

Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5955	6175	6415	Low/Mid/High of test frequency range
Antenna Power (Conductive) (mW/MHz)	3.8371	3.9355	0.1426	Limit ≤ 10 mW/MHz
Antenna Power (Rated) (mW/MHz)	3.85			-
Antenna Power Tolerance (%)	-0.3358	2.2208	1.8291	Limit + 20% ~ - 80%
Antenna Power (EIRP) (mW/MHz)	9.5499	9.7949	0.3548	Limit ≤ 10 mW/MHz

Note:

1. Antenna power tolerance = $\{(\text{conducted power density-rated power density})/\text{rated power density}\}$
2. Radiated RF output power density (EIRP) = conducted RF output power density + Max. Antenna gain
3. Antenna Power value = SA measurement value + Directional gain + cable loss
Directional gain = $10 \log (\text{Ant X})$
X = the total number of antennas

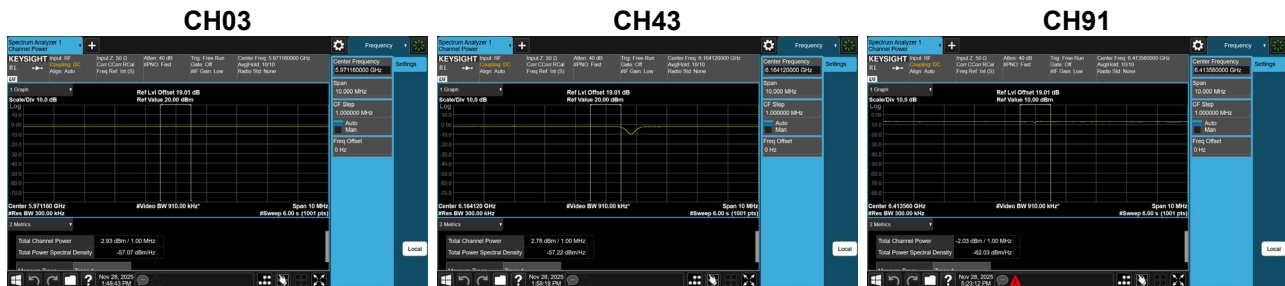


Test Mode: IEEE 802.11ax(HE40)

Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5965	6165	6405	Low/Mid/High of test frequency range
Antenna Power (Conductive) (mW/MHz)	1.9634	1.8967	0.6266	Limit ≤ 5 mW/MHz
Antenna Power (Rated) (mW/MHz)	1.36			-
Antenna Power Tolerance (%)	44.3649	39.4637	-53.9255	Limit + 20% ~ - 80%
Antenna Power (EIRP) (mW/MHz)	4.8865	4.7206	1.5596	Limit ≤ 5 mW/MHz

Note:

1. Antenna power tolerance = $\{(\text{conducted power density-rated power density})/\text{rated power density}\}$
 2. Radiated RF output power density (EIRP) = conducted RF output power density + Max. Antenna gain
 3. Antenna Power value = SA measurement value + Directional gain + cable loss
- Directional gain = $10 \log (\text{Ant X})$
X = the total number of antennas

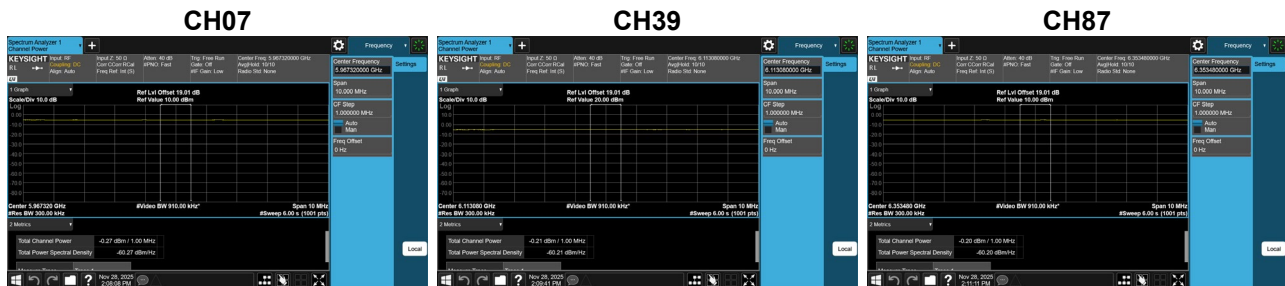


Test Mode: IEEE 802.11ax(HE80)

Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	5985	6145	6385	Low/Mid/High of test frequency range
Antenna Power (Conductive) (mW/MHz)	0.9397	0.9528	0.9550	Limit ≤ 2.5 mW/MHz
Antenna Power (Rated) (mW/MHz)	0.93			-
Antenna Power Tolerance (%)	1.0455	2.4512	2.6874	Limit + 20% ~ - 80%
Antenna Power (EIRP) (mW/MHz)	2.3388	2.3714	2.3768	Limit ≤ 2.5 mW/MHz

Note:

1. Antenna power tolerance = $\{(\text{conducted power density-rated power density})/\text{rated power density}\}$
2. Radiated RF output power density (EIRP) = conducted RF output power density + Max. Antenna gain
3. Antenna Power value = SA measurement value + Directional gain + cable loss
Directional gain = $10 \log (\text{Ant X})$
X = the total number of antennas

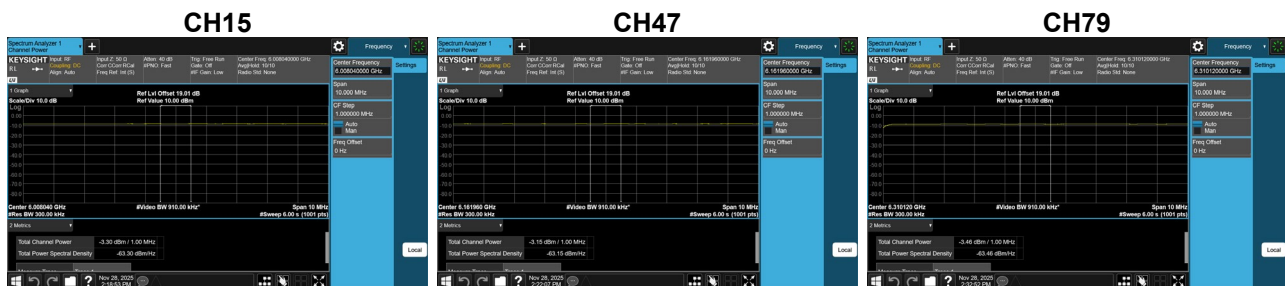


Test Mode: IEEE 802.11ax(HE160)

Test Voltage	Normal Voltage			Remarks
Test Frequency (MHz)	6025	6185	6345	Low/Mid/High of test frequency range
Antenna Power (Conductive) (mW/MHz)	0.4677	0.4842	0.4508	Limit ≤ 1.25 mW/MHz
Antenna Power (Rated) (mW/MHz)	0.47			-
Antenna Power Tolerance (%)	-0.4819	3.0154	-4.0816	Limit + 20% ~ - 80%
Antenna Power (EIRP) (mW/MHz)	1.1641	1.2050	1.1220	Limit ≤ 1.25 mW/MHz

Note:

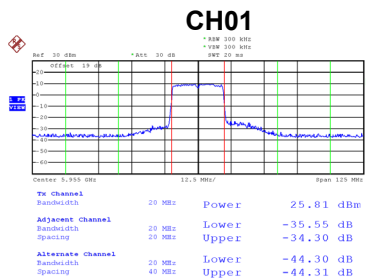
- Antenna power tolerance = $\{(\text{conducted power density-rated power density})/\text{rated power density}\}$
- Radiated RF output power density (EIRP) = conducted RF output power density + Max. Antenna gain
- Antenna Power value = SA measurement value + Directional gain + cable loss
Directional gain = $10 \log (\text{Ant X})$
X = the total number of antennas



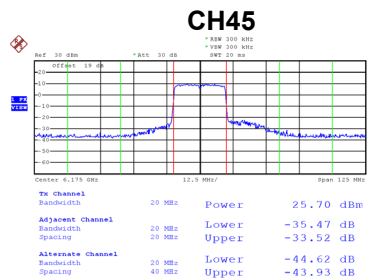
APPENDIX E - ADJACENT CHANNEL EMITTED POWER

Test Mode: IEEE 802.11ax(HE20)

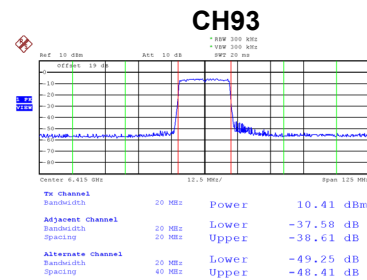
Test Voltage		Normal Voltage				Remarks
Test Frequency	MHz	5955	6175	6415	-	Low/Mid/High of test frequency range
Adjacent Channel Emitted Power	-20	-35.55	-35.47	-37.58	dB	Limit ≥ 25 dB
	+20	-34.30	-33.52	-38.61	dB	Limit ≥ 25 dB
	-40	-44.30	-44.62	-49.25	dB	Limit ≥ 40 dB
	+40	-44.31	-43.93	-48.41	dB	Limit ≥ 40 dB



Date: 28.NOV.2025 14:35:54



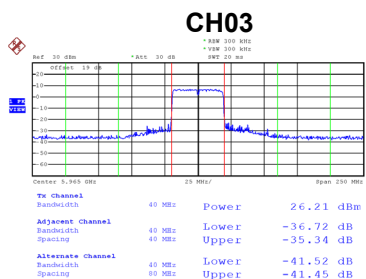
Date: 28.NOV.2025 14:36:58



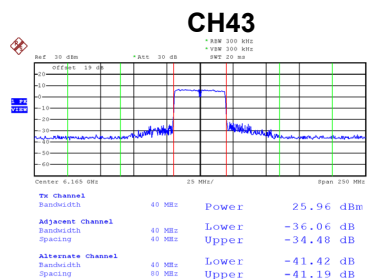
Date: 28.NOV.2025 16:45:43

Test Mode: IEEE 802.11ax(HE40)

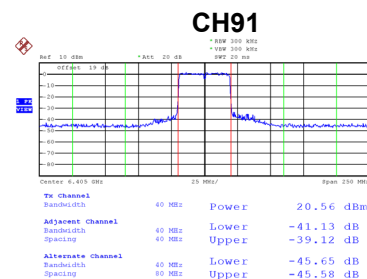
Test Voltage		Normal Voltage				Remarks
Test Frequency	MHz	5965	6165	6405	-	Low/Mid/High of test frequency range
Adjacent Channel Emitted Power	-40	-36.72	-36.06	-41.13	dB	Limit ≥ 25 dB
	+40	-35.34	-34.48	-39.12	dB	Limit ≥ 25 dB
	-80	-41.52	-41.42	-45.65	dB	Limit ≥ 40 dB
	+80	-41.45	-41.19	-45.58	dB	Limit ≥ 40 dB



Date: 28.NOV.2025 14:45:56



Date: 28.NOV.2025 14:47:05

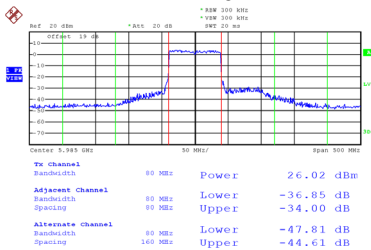


Date: 28.NOV.2025 16:48:33

Test Mode: IEEE 802.11ax(HE80)

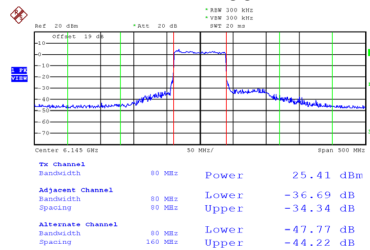
Test Voltage		Normal Voltage				Remarks
Test Frequency	MHz	5985	6145	6385	-	Low/Mid/High of test frequency range
Adjacent Channel Emitted Power	-80	-36.85	-36.69	-35.78	dB	Limit ≥ 25 dB
	+80	-34.00	-34.34	-32.71	dB	Limit ≥ 25 dB
	-160	-47.81	-47.77	-47.47	dB	Limit ≥ 40 dB
	+160	-44.61	-44.22	-42.67	dB	Limit ≥ 40 dB

CH07



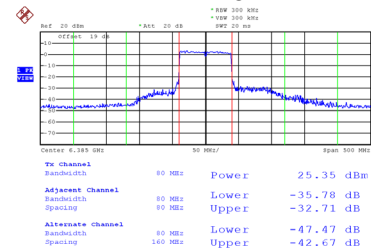
Date: 28.NOV.2025 15:12:51

CH39



Date: 28.NOV.2025 15:14:09

CH87

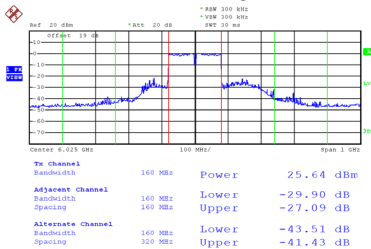


Date: 28.NOV.2025 15:15:19

Test Mode: IEEE 802.11ax(HE160)

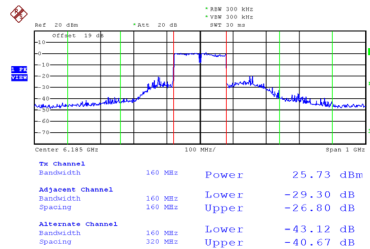
Test Voltage		Normal Voltage				Remarks
Test Frequency	MHz	6025	6185	6345	-	Low/Mid/High of test frequency range
Adjacent Channel Emitted Power	-160	-29.90	-29.30	-28.90	dB	Limit ≥ 25 dB
	+160	-27.09	-26.80	-27.31	dB	Limit ≥ 25 dB
	-320	-43.51	-43.12	-44.14	dB	Limit ≥ 40 dB
	+320	-41.43	-40.67	-40.69	dB	Limit ≥ 40 dB

CH15



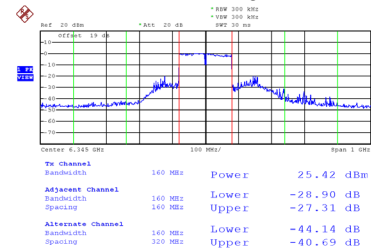
Date: 28.NOV.2025 15:20:19

CH47



Date: 28.NOV.2025 15:21:46

CH79



Date: 28.NOV.2025 15:22:50

APPENDIX F - LIMITATION OF COLLATERAL EMISSION OF RECEIVER

Test Mode: IEEE 802.11ax(HE20)

Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5955	6175	6415	Low/Mid/High of test frequency range
Limitation of Collateral Emission of Receiver	MHz	677.96	161.92	686.69	Limit ≤ 4 nW (-54 dBm)
	nW	0.0118	0.0124	0.0126	
	MHz	24325.00	25975.00	25375.00	Limit ≤ 20 nW (-47 dBm)
	nW	1.1169	0.9977	1.1803	

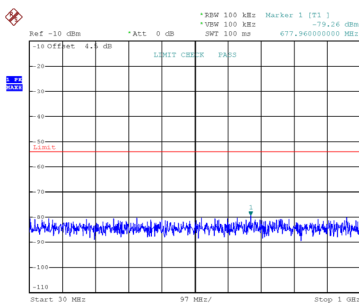
Note:

Emission value = SA measurement value + Directional gain + cable loss

Directional gain = $10 \log (\text{Ant X})$

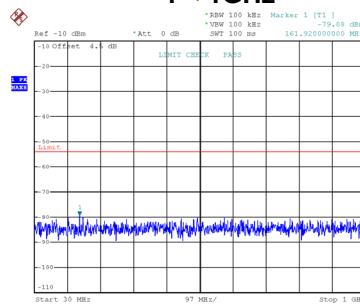
X = the total number of antennas

CH01



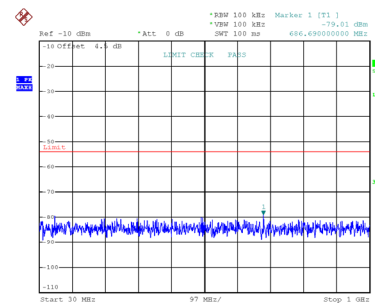
Date: 28.NOV.2025 15:50:39

CH45
f < 1GHz



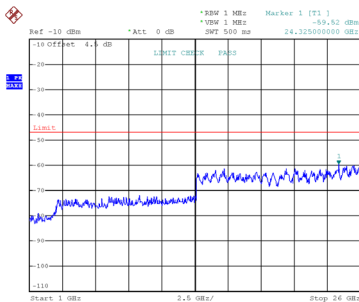
Date: 28.NOV.2025 15:52:07

CH93

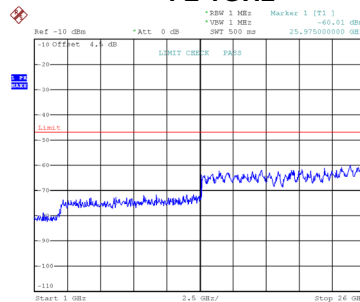


Date: 28.NOV.2025 15:52:20

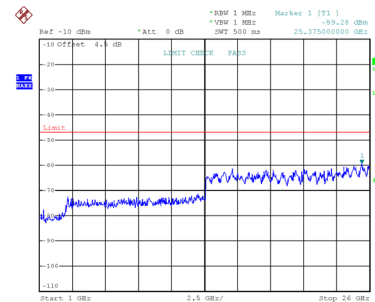
f ≥ 1GHz



Date: 28.NOV.2025 15:51:59



Date: 28.NOV.2025 15:52:13



Date: 28.NOV.2025 15:52:27

Test Mode: IEEE 802.11ax(HE40)

Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5965	6165	6405	Low/Mid/High of test frequency range
Limitation of Collateral Emission of Receiver	MHz	566.41	116.33	981.57	Limit ≤ 4 nW (-54 dBm)
	nW	0.0116	0.0093	0.0116	
	MHz	25900.00	26000.00	26000.00	Limit ≤ 20 nW (-47 dBm)
	nW	1.2302	1.0789	1.1614	

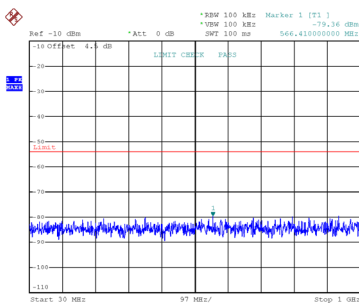
Note:

Emission value = SA measurement value + Directional gain + cable loss

Directional gain = $10 \log (\text{Ant X})$

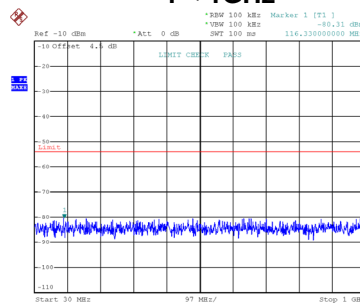
X = the total number of antennas

CH03



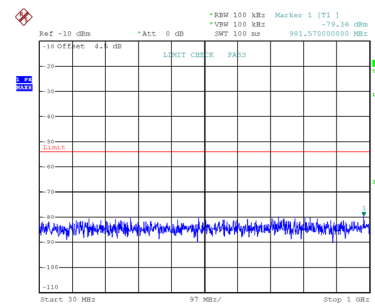
Date: 28.NOV.2025 15:52:34

CH43
f < 1GHz



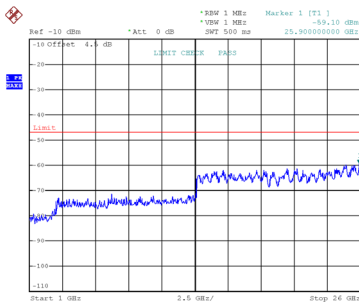
Date: 28.NOV.2025 15:52:47

CH91

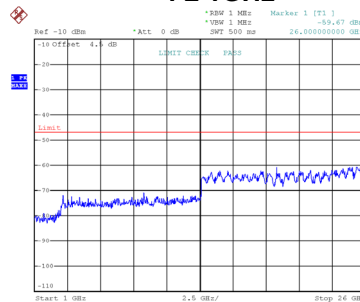


Date: 28.NOV.2025 15:53:00

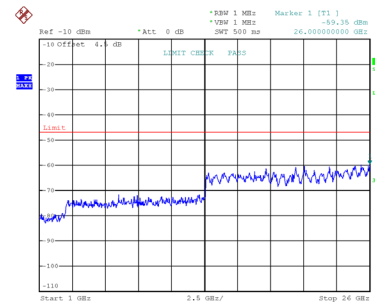
f ≥ 1GHz



Date: 28.NOV.2025 15:52:40



Date: 28.NOV.2025 15:52:54



Date: 28.NOV.2025 15:53:07

Test Mode: IEEE 802.11ax(HE80)

Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5985	6145	6385	Low/Mid/High of test frequency range
Limitation of Collateral Emission of Receiver	MHz	685.72	426.73	65.89	Limit ≤ 4 nW (-54 dBm)
	nW	0.0112	0.0110	0.0104	
	MHz	25975.00	25400.00	25950.00	Limit ≤ 20 nW (-47 dBm)
	nW	1.4421	1.2050	1.089	

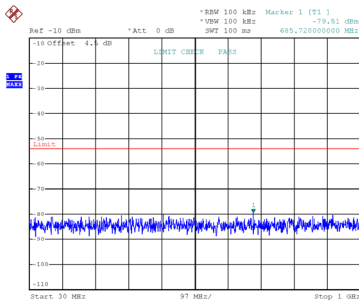
Note:

Emission value = SA measurement value + Directional gain + cable loss

Directional gain = $10 \log (\text{Ant X})$

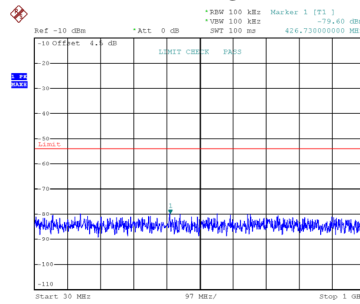
X = the total number of antennas

CH07



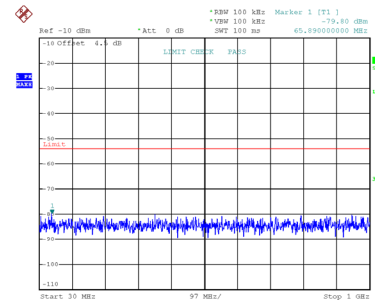
Date: 28.NOV.2025 15:53:13

CH39
f < 1GHz



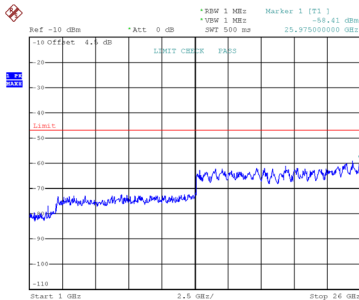
Date: 28.NOV.2025 15:53:26

CH87

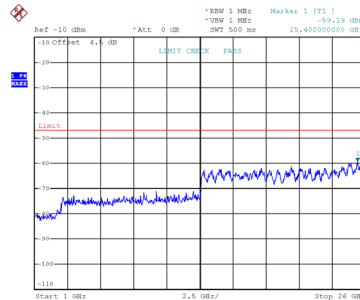


Date: 28.NOV.2025 15:53:40

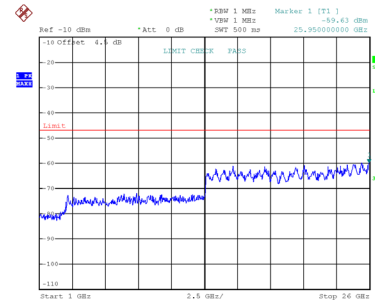
f ≥ 1GHz



Date: 28.NOV.2025 15:53:20



Date: 28.NOV.2025 15:53:33



Date: 28.NOV.2025 15:53:46

Test Mode: IEEE 802.11ax(HE160)

Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	6025	6185	6345	Low/Mid/High of test frequency range
Limitation of Collateral Emission of Receiver	MHz	822.49	713.85	863.23	Limit ≤ 4 nW (-54 dBm)
	nW	0.0103	0.0124	0.0098	
	MHz	18125.00	24825.00	25475.00	Limit ≤ 20 nW (-47 dBm)
	nW	1.0351	1.0764	1.0839	

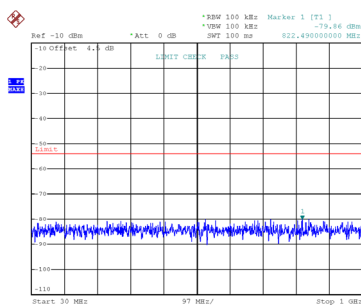
Note:

Emission value = SA measurement value + Directional gain + cable loss

Directional gain = $10 \log (\text{Ant X})$

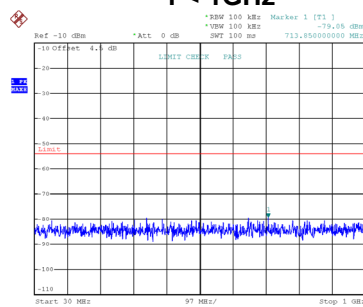
X = the total number of antennas

CH15



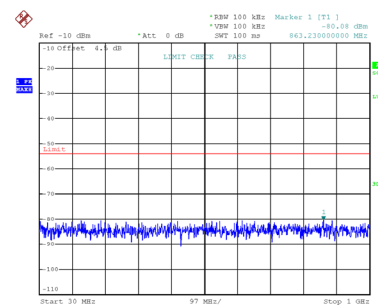
Date: 28.NOV.2025 15:53:52

CH47
f < 1GHz



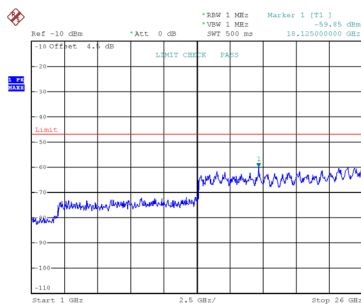
Date: 28.NOV.2025 15:54:07

CH79

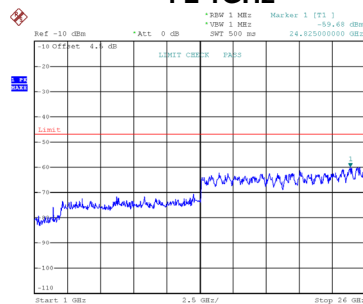


Date: 28.NOV.2025 15:54:21

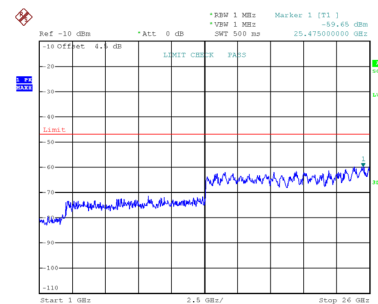
f ≥ 1GHz



Date: 28.NOV.2025 15:53:59



Date: 28.NOV.2025 15:54:13



Date: 28.NOV.2025 15:54:28

APPENDIX G - TRANSMISSION BURST LENGTH

Test Mode:	IEEE 802.11ax(HE20)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5955	6175	6415	Low/Mid/High of test frequency range
Transmission Burst Length	msec	3.778	3.778	3.778	Limit ≤ 8msec

Test Mode:	IEEE 802.11ax(HE40)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5965	6165	6405	Low/Mid/High of test frequency range
Transmission Burst Length	msec	1.915	1.915	1.915	Limit ≤ 8msec

Test Mode:	IEEE 802.11ax(HE80)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5985	6145	6385	Low/Mid/High of test frequency range
Transmission Burst Length	msec	1.831	1.831	1.831	Limit ≤ 8msec

Test Mode:	IEEE 802.11ax(HE160)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	6025	6185	6345	Low/Mid/High of test frequency range
Transmission Burst Length	msec	1.163	1.163	1.163	Limit ≤ 8msec

APPENDIX H - CARRIER SENSE CAPABILITY

Test Mode:	IEEE 802.11ax(HE20)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5955	6175	6415	Low/Mid/High of test level
Carrier Sense (100mV/m)	OK / NG	OK	OK	OK	Pin = 22.79+Gr-20*log(freq_MHz) [dBm]

Test Mode:	IEEE 802.11ax(HE40)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5965	6165	6405	Low/Mid/High of test level
Carrier Sense (100mV/m)	OK / NG	OK	OK	OK	Pin = 22.79+Gr-20*log(freq_MHz) [dBm]

Test Mode:	IEEE 802.11ax(HE80)
------------	---------------------

Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	5985	6145	6385	Low/Mid/High of test level
Carrier Sense (100mV/m)	OK / NG	OK	OK	OK	Pin = 22.79+Gr-20*log(freq_MHz) [dBm]

Test Mode:	IEEE 802.11ax(HE160)
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Test Voltage		Normal Voltage			Remarks
Test Frequency	MHz	6025	6185	6345	Low/Mid/High of test level
Carrier Sense (100mV/m)	OK / NG	OK	OK	OK	Pin = 22.79+Gr-20*log(freq_MHz) [dBm]

End of Test Report