

TEST REPORT

Applicant Name: INFINIX MOBILITY LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Report Number: 2401Y58158E-RF-00D
FCC ID: 2AIZN-YY5-X6858

Test Standard (s)
FCC PART 15.407

Sample Description

Product Type: Mobile Phone
Model No.: X6858
Multiple Model(s) No.: N/A
Trade Mark: Infinix
Date Received: 2024-10-23
Issue Date: 2024-12-20

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

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Jim Cheng
RF Engineer

Approved By:

Nancy Wang

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RF Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401Y58158E-RF-00D	Original Report	2024-12-20

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz
Mode	802.11a/ac20/n20/ac40/n40/ac80
Maximum Conducted Average Output Power	5150-5250MHz: 15.60dBm; 5250-5350MHz: 14.81dBm 5470-5725MHz: 11.84dBm; 5725-5850MHz: 10.35dBm
Modulation Technique	OFDM
Antenna Specification[#]	-0.93 dBi (provided by the applicant)
Voltage Range	DC 5-11V charging from adapter or DC 3.91V from battery
Sample serial number	2TGQ-1 for Conducted and Radiated Emissions Test 2TGQ-2 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Model:U450XSB Input:AC100-240V, 50/60Hz, 1.8A Output:DC5.0V, 3.0A, 15.0W or DC5.0-10.0V, 4.5A or DC11.0V, 4.1A, 45.0W MAX

Note: The EUT has two configurations, the two configuration was electrical identical except for color, memory, motherboard material, electronic material, NFC/WPT Antenna and battery. Please refer to the declaration letter[#] for more detail, which was provided by manufacturer. The configuration 1[#] was selected to test. The configuration 2[#] was evaluated in DSS report and compliance with the limit.

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		109.2kHz(k=2, 95% level of confidence)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz - 30MHz	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.73dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.34dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.40dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.64dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer. The device support 802.11a/n ht20/n ht40/ac-VHT 20/ac-VHT40/ac-VHT 80, the 802.11 n ht20/n ht40 were reduced since the identical parameters with 802.11ac-VHT20 and vht40.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a/ac20 mode: channel 36, 40, 48 were tested;

For 802.11ac40 mode: channel 38, 46 were tested;

For 802.11ac80 mode, channel 42 was tested.

For 5250-5350MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a/ac20 mode: channel 52, 56, 64 were tested;

For 802.11ac40 mode: channel 54, 62 were tested;

For 802.11ac80 mode, channel 58 was tested.

For 5470-5725MHz Band, 21 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
102	5510	126	5630
104	5520	128	5640
106	5530	132	5660
108	5540	134	5670
110	5550	136	5680
112	5560	138	5690
116	5580	140	5700
118	5590	142	5710
120	5600	144	5720
122	5610	/	/

For 802.11a/ac20 mode: channel 100, 116, 140, 144 were tested;

For 802.11ac40 mode: channel 102, 110, 134, 142 were tested;

For 802.11ac80 mode, channel 106, 122, 138 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/ac20 mode: channel 149, 157, 165 were tested;

For 802.11ac40 mode: channel 151, 159 were tested;

For 802.11ac80 mode, channel 155 was tested.

EUT Exercise Software

Exercise Software [#]	N/A		
5150-5250 MHz Band			
Mode	Test Channels	Data rate	Power Level [#]
802.11a	Low	6Mbps	15
	Middle	6Mbps	15
	High	6Mbps	15
802.11ac-VHT20	Low	MCS0	15
	Middle	MCS0	15
	High	MCS0	15
802.11ac-VHT40	Low	MCS0	15
	High	MCS0	15
802.11ac-VHT80	Middle	MCS0	15
5250-5350 MHz Band			
Mode	Test Channels	Data rate	Power Level [#]
802.11a	Low	6Mbps	15
	Middle	6Mbps	15
	High	6Mbps	15
802.11ac-VHT20	Low	MCS0	15
	Middle	MCS0	15
	High	MCS0	15
802.11ac-VHT40	Low	MCS0	15
	High	MCS0	15
802.11ac-VHT80	Middle	MCS0	13

5470-5725 MHz Band			
Mode	Test Channels	Data rate	Power Level [#]
802.11a	Low	6Mbps	12
	Middle	6Mbps	12
	High	6Mbps	12
	Cross	6Mbps	12
802.11ac-VHT20	Low	MCS0	12
	Middle	MCS0	12
	High	MCS0	12
	Cross	MCS0	12
802.11ac-VHT40	Low	MCS0	12
	High	MCS0	12
	Cross	MCS0	12
802.11ac-VHT80	Middle	MCS0	12
	Cross	MCS0	12
5725-5850 MHz Band			
Mode	Test Channels	Data rate	Power Level [#]
802.11a	Low	6Mbps	11
	Middle	6Mbps	11
	High	6Mbps	11
802.11ac-VHT20	Low	MCS0	11
	Middle	MCS0	11
	High	MCS0	11
802.11ac-VHT40	Low	MCS0	11
	High	MCS0	11
802.11ac-VHT80	Middle	MCS0	11

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

Support Equipment List and Details-DFS

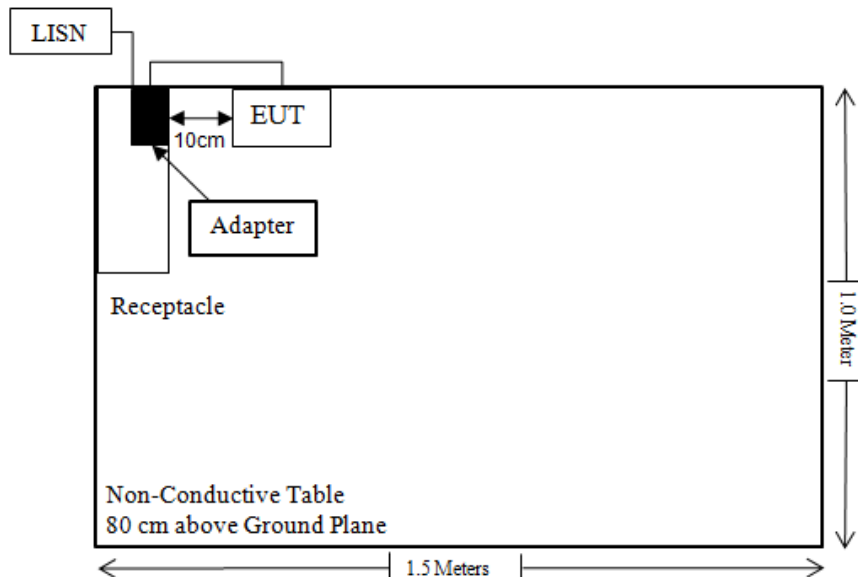
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

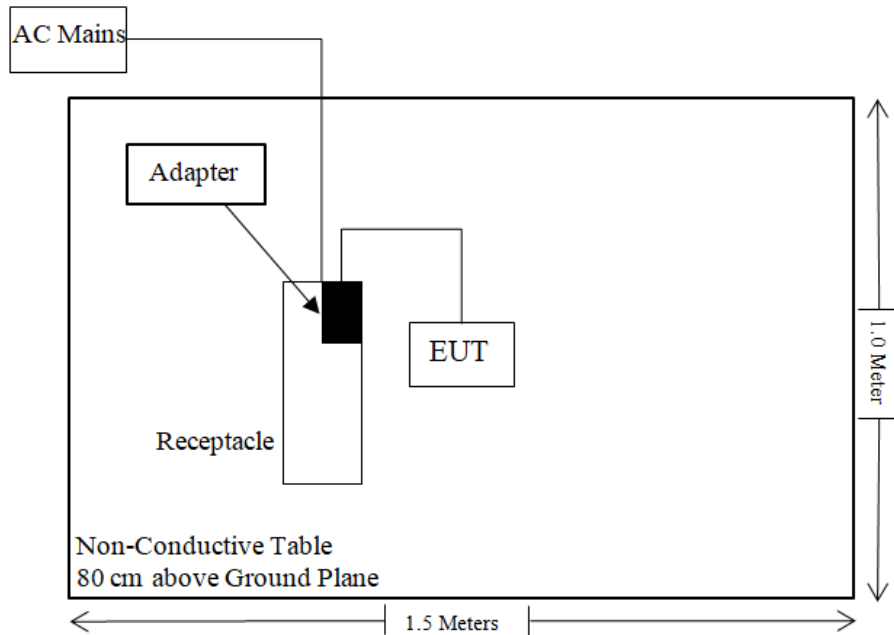
Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	1	EUT	Adapter
Shielded Un-detachable AC Cable	1.5	Receptacle	LISN/AC Mains

Block Diagram of Test Setup

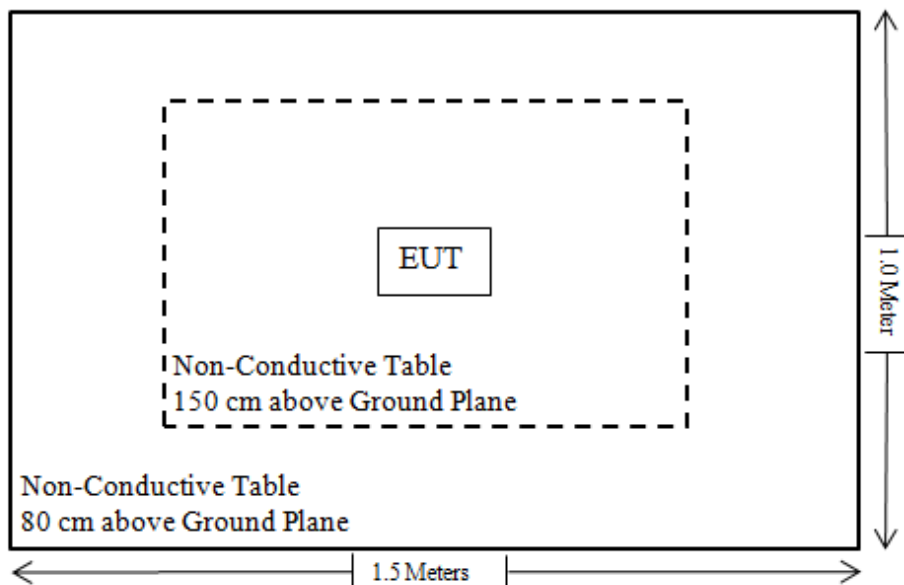
For Conducted Emissions:



For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207(a)	AC Line Conducted Emissions	Compliant
FCC §15.207(a)	Undesirable Emission& Restricted Bands	Compliant
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407(a) (e)	99% Occupied Bandwidth	Compliant
FCC§15.407 (a)	Maximum Conducted Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
C63.10 §11.6	Duty Cycle	Compliant
FCC§1.1307,§2.1093	RF Exposure	Compliant
FCC§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant*

Compliant*: Please refer to the DFS report 2401Y58158E-RF-00F.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/01/16	2025/01/15
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2024/05/21	2025/05/20
Rohde & Schwarz	LISN	ENV216	101613	2024/01/16	2025/01/15
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2024/05/21	2025/05/20
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310N	186238	2024/05/21	2025/05/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber Cable 1	F-03-EM236	2024/06/18	2025/06/17
Unknown	Cable	XH500C	J-10M-A	2024/06/18	2025/06/17
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/05/21	2025/05/20
Unknown	Cable	PNG214	1354	2024/05/21	2025/05/20
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
COM-POWER	Pre-amplifier	PA-122	181919	2024/06/18	2025/06/17
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	0735	2024/06/18	2025/06/17
Unknown	RF Cable	UFA147	219661	2024/06/18	2025/06/17
Unknown	RF Cable	XH750A-N	J-10M	2024/06/18	2025/06/17
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	2024/06/18	2025/06/17
A.H.System	Pre-amplifier	PAM-1840VH	190	2024/06/18	2025/06/17
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/06/18	2025/06/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV40-N	102259	2024/01/16	2025/01/15
Unknown	10dB Attenuator	Unknown	F-03-EM190	2024/06/27	2025/06/26
ANRITSU	Microwave peak power sensor	MA24418A	12622	2024/05/21	2025/05/20

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

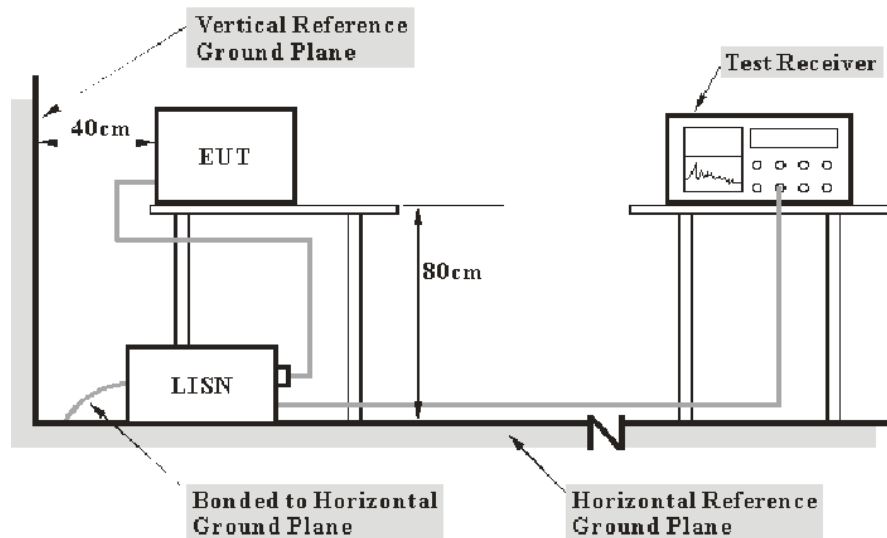
REQUIREMENTS AND TEST PROCEDURES

Conducted Emissions

Applicable Standard

FCC §15.207, §15.407(b) (6)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Average detection mode.

Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

Undesirable Emission

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

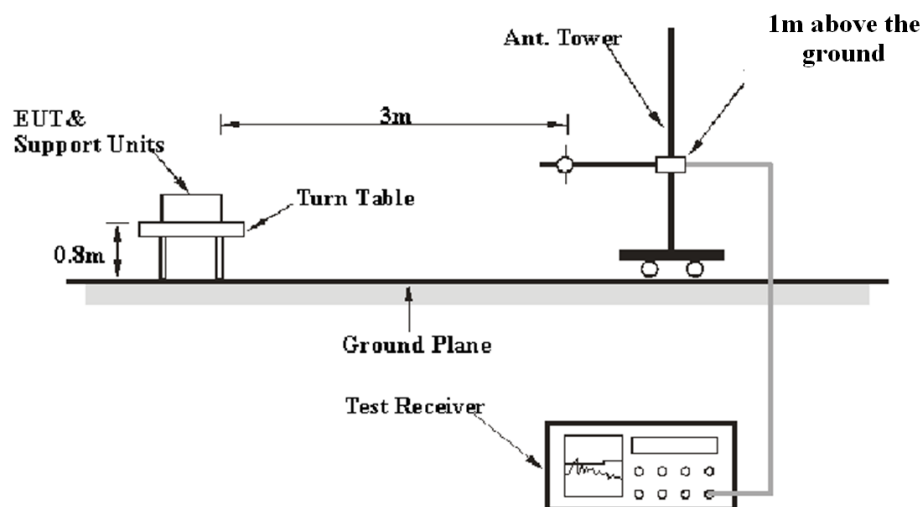
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

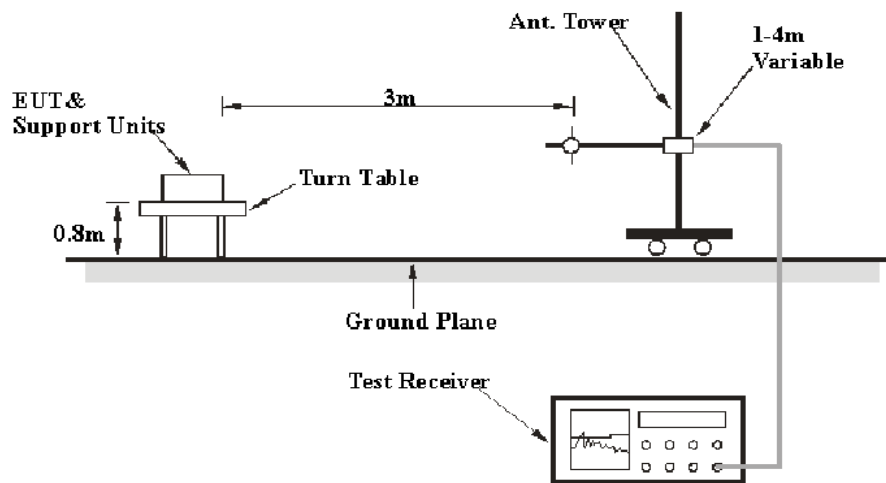
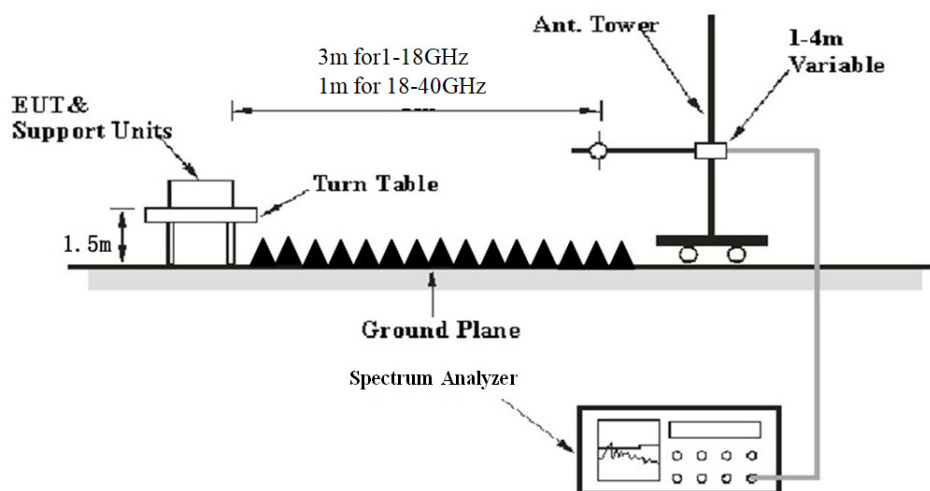
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

9 kHz-30MHz:



30MHz-1GHz:**Above 1 GHz:**

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9 kHz-1GHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	PK

1-40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
AV	>98%	1MHz	10 Hz
	<98%	1MHz	≥1/Ton

Note: Ton is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Test Procedure

Radiated Spurious Emission

During the radiated emission test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\text{SpecLimit}} = E_{\text{Meas}} + 20 \log \left(\frac{d_{\text{Meas}}}{d_{\text{SpecLimit}}} \right)$$

where

$E_{\text{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dB μ V/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dB μ V/m
d_{Meas}	is the measurement distance, in m
$d_{\text{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is $20 \cdot \log(1/3) = -9.5$ dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit}; \text{Margin} = \text{Limit} - \text{Corrected Amplitude} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

26 dB & 6dB Emission Bandwidth

Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

According to KDB789033 D02 section II.C and section II.D

1. Emission Bandwidth (EBW)

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

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

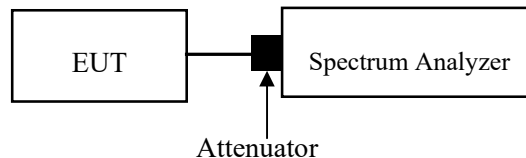
3. 99% Occupied Bandwidth:

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW/RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Conducted Transmitter Output Power

Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

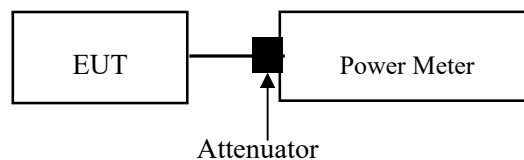
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method PM-G should be applied

- a. Place the EUT on a bench and set it in transmitting mode.
- b. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.



Power Spectral Density

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Duty cycle $\geq 98\%$

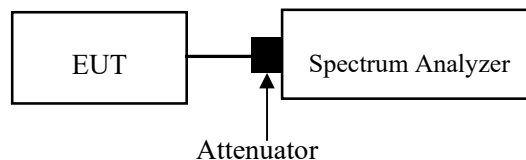
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

Duty cycle $< 98\%$, duty cycle variations are less than $\pm 2\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

Duty cycle $< 98\%$, duty cycle variations exceed $\pm 2\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.



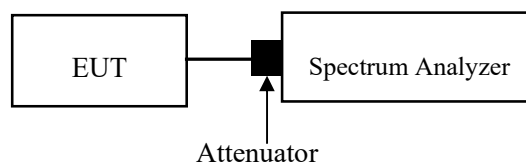
Duty Cycle

Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.
- 3) Set $VBW \geq RBW$. Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu s$.)



ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Antenna Connector Construction

The EUT has one internal antenna arrangement, which was permanently attached, the antenna gain[#] is -0.93dBi, fulfill the requirement of this section. Please refer to the EUT photos.

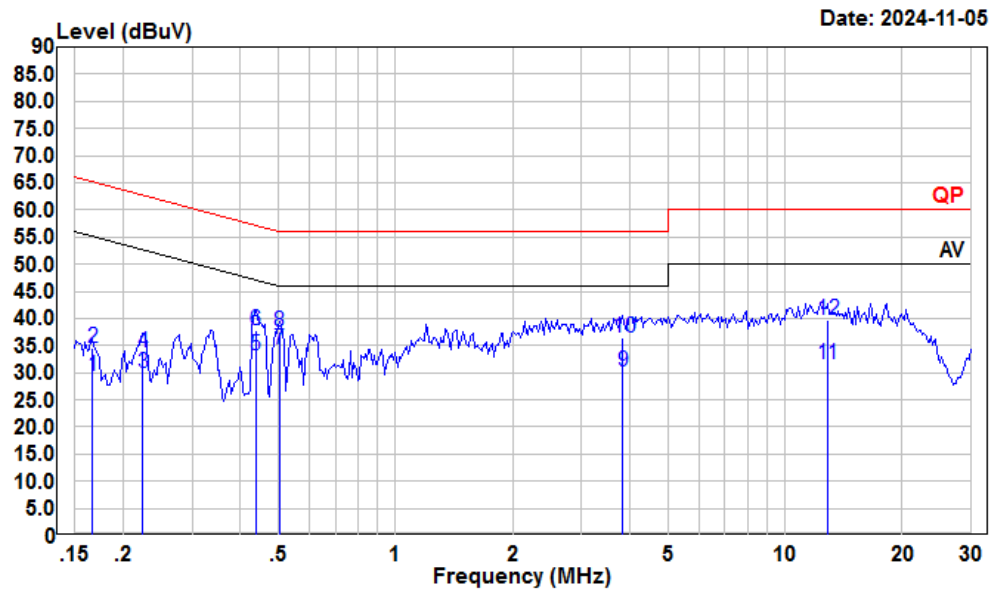
Result: Compliant

TEST DATA AND RESULTS

Conducted Emissions

Temperature (°C)	26	Relative Humidity (%)	56
ATM Pressure (kPa)	101	Test engineer	Macy Shi
Test date	2024/11/05		
EUT operation mode	Transmitting (Maximum output power mode, 802.11ac-VHT20 Mode, 5240MHz)		

120V 60 Hz, Line



Condition: Line

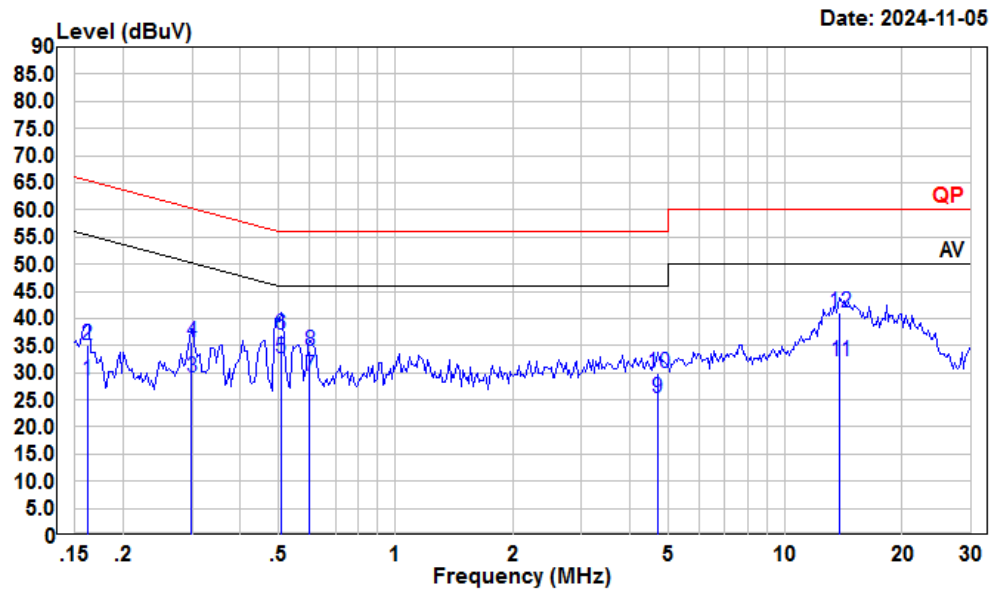
Project : 2401Y58158E-RF

tester : Macy.shi

Note : Transmitting

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.167	8.52	29.48	10.86	10.10	55.12	-25.64	Average
2	0.167	13.71	34.67	10.86	10.10	65.12	-30.45	QP
3	0.224	8.95	29.80	10.76	10.09	52.66	-22.86	Average
4	0.224	12.85	33.70	10.76	10.09	62.66	-28.96	QP
5	0.437	12.58	33.23	10.54	10.11	47.11	-13.88	Average
6	0.437	17.03	37.68	10.54	10.11	57.11	-19.43	QP
7	0.502	13.57	34.21	10.50	10.14	46.00	-11.79	Average
8	0.502	16.77	37.41	10.50	10.14	56.00	-18.59	QP
9	3.840	9.53	30.06	10.32	10.21	46.00	-15.94	Average
10	3.840	15.91	36.44	10.32	10.21	56.00	-19.56	QP
11	12.852	10.68	31.50	10.60	10.22	50.00	-18.50	Average
12	12.852	18.81	39.63	10.60	10.22	60.00	-20.37	QP

120V 60 Hz, Neutral



Condition: Neutral

Project : 2401Y58158E-RF

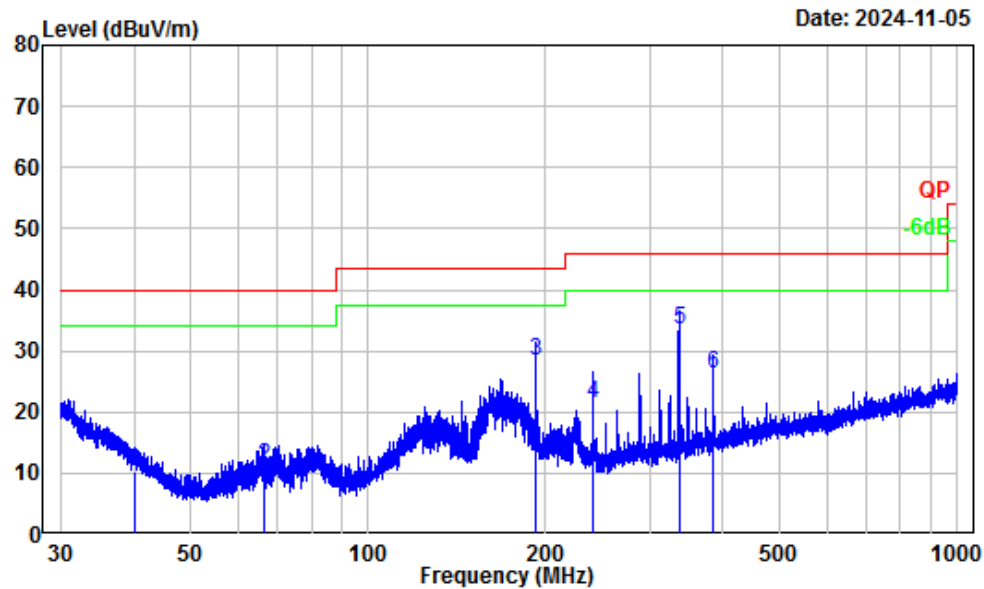
tester : Macy.shi

Note : Transmitting

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.162	7.88	28.54	10.55	10.11	55.38	-26.84	Average
2	0.162	14.37	35.03	10.55	10.11	65.38	-30.35	QP
3	0.299	8.60	29.24	10.53	10.11	50.28	-21.04	Average
4	0.299	14.96	35.60	10.53	10.11	60.28	-24.68	QP
5	0.507	11.75	32.59	10.70	10.14	46.00	-13.41	Average
6	0.507	16.24	37.08	10.70	10.14	56.00	-18.92	QP
7	0.601	8.63	29.45	10.70	10.12	46.00	-16.55	Average
8	0.601	13.20	34.02	10.70	10.12	56.00	-21.98	QP
9	4.696	4.53	25.21	10.49	10.19	46.00	-20.79	Average
10	4.696	9.20	29.88	10.49	10.19	56.00	-26.12	QP
11	13.841	11.01	32.03	10.80	10.22	50.00	-17.97	Average
12	13.841	20.17	41.19	10.80	10.22	60.00	-18.81	QP

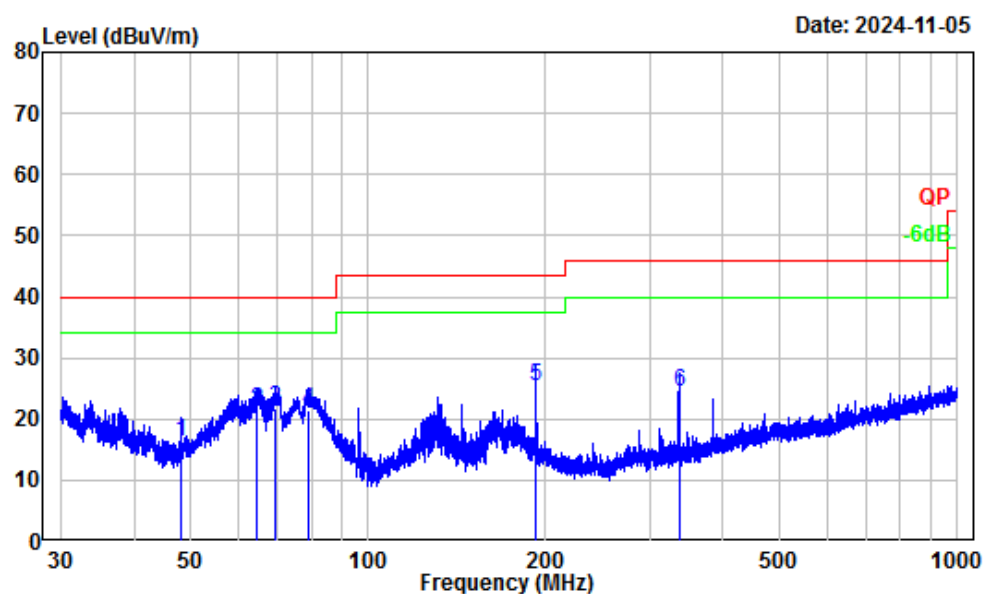
Undesirable Emission

Temperature (°C)	24-25	Relative Humidity (%)	50-55
ATM Pressure (kPa):	101	Test engineer:	Anson Su & Zenos Qiao
Test date:	2024/10/29-2024/11/20		
EUT operation mode:	Below 1GHz: Transmitting (Maximum output power mode, 802.11ac20, 5240MHz) Above 1GHz: Transmitting		
Note:	After pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation were recorded. For the radiated spurious emission below 30MHz, the emissions are 20dB below the limit or the noise floor which are not recorded.		

Below 1GHz:

Site : Chamber A
Condition : 3m Horizontal
Project Number: 2401Y58158E-RF
Test Mode : 5G WIFI Transmitting
Tester : Anson Su

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	40.05	-13.23	23.50	10.27	40.00	-29.73 QP
2	66.73	-18.60	29.64	11.04	40.00	-28.96 QP
3	192.42	-12.98	41.29	28.31	43.50	-15.19 QP
4	240.51	-14.54	35.90	21.36	46.00	-24.64 QP
5	336.77	-12.40	45.91	33.51	46.00	-12.49 QP
6	384.94	-11.38	37.50	26.12	46.00	-19.88 QP



Site : Chamber A
Condition : 3m Vertical
Project Number: 2401Y58158E-RF
Test Mode : 5G WIFI Transmitting
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	48.14	-18.23	34.38	16.15	40.00	-23.85	QP
2	64.63	-18.72	40.15	21.43	40.00	-18.57	QP
3	69.66	-18.57	40.16	21.59	40.00	-18.41	QP
4	79.10	-18.57	40.00	21.43	40.00	-18.57	QP
5	192.50	-12.98	38.39	25.41	43.50	-18.09	QP
6	336.77	-12.40	36.76	24.36	46.00	-21.64	QP

Above 1GHz:**5150-5250 MHz**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11a							
Low Channel							
5149.24	58.37	PK	H	2.71	61.08	74	-12.92
5149.24	43.15	AV	H	2.71	45.86	54	-8.14
5149.89	59.86	PK	V	2.71	62.57	74	-11.43
5149.89	43.72	AV	V	2.71	46.43	54	-7.57
10360.00	45.88	PK	H	13.07	58.95	68.2	-9.25
10360.00	46.23	PK	V	13.07	59.30	68.2	-8.90
Middle Channel							
10400.00	46.14	PK	H	13.12	59.26	68.2	-8.94
10400.00	46.52	PK	V	13.12	59.64	68.2	-8.56
High Channel							
5364.35	55.41	PK	H	2.90	58.31	74	-15.69
5364.35	41.94	AV	H	2.90	44.84	54	-9.16
5355.01	55.68	PK	V	2.90	58.58	74	-15.42
5355.01	42.09	AV	V	2.90	44.99	54	-9.01
10480.00	46.45	PK	H	13.07	59.52	68.2	-8.68
10480.00	46.89	PK	V	13.07	59.96	68.2	-8.24
802.11ac20							
Low Channel							
5149.40	58.16	PK	H	2.71	60.87	74	-13.13
5149.40	42.88	AV	H	2.71	45.59	54	-8.41
5149.67	59.69	PK	V	2.71	62.40	74	-11.60
5149.67	43.37	AV	V	2.71	46.08	54	-7.92
10360.00	45.60	PK	H	13.07	58.67	68.2	-9.53
10360.00	45.98	PK	V	13.07	59.05	68.2	-9.15
Middle Channel							
10400.00	45.89	PK	H	13.12	59.01	68.2	-9.19
10400.00	46.22	PK	V	13.12	59.34	68.2	-8.86
High Channel							
5362.18	55.23	PK	H	2.90	58.13	74	-15.87
5362.18	41.84	AV	H	2.90	44.74	54	-9.26
5358.50	55.47	PK	V	2.90	58.37	74	-15.63
5358.50	41.96	AV	V	2.90	44.86	54	-9.14
10480.00	46.17	PK	H	13.07	59.24	68.2	-8.96
10480.00	46.54	PK	V	13.07	59.61	68.2	-8.59

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac40							
Low Channel							
5147.07	60.27	PK	H	2.71	62.98	74	-11.02
5147.07	44.12	AV	H	2.71	46.83	54	-7.17
5147.94	62.08	PK	V	2.71	64.79	74	-9.21
5147.94	44.75	AV	V	2.71	47.46	54	-6.54
10380.00	45.34	PK	H	13.09	58.43	68.2	-9.77
10380.00	45.65	PK	V	13.09	58.74	68.2	-9.46
High Channel							
5352.63	55.38	PK	H	2.90	58.28	74	-15.72
5352.63	42.23	AV	H	2.90	45.13	54	-8.87
5353.74	55.77	PK	V	2.90	58.67	74	-15.33
5353.74	42.46	AV	V	2.90	45.36	54	-8.64
10460.00	45.71	PK	H	13.09	58.80	68.2	-9.40
10460.00	46.06	PK	V	13.09	59.15	68.2	-9.05
802.11ac80							
Middle Channel							
5149.02	62.09	PK	H	2.71	64.80	74	-9.20
5149.02	45.64	AV	H	2.71	48.35	54	-5.65
5148.37	64.15	PK	V	2.71	66.86	74	-7.14
5148.37	46.23	AV	V	2.71	48.94	54	-5.06
5350.90	57.16	PK	H	2.90	60.06	74	-13.94
5350.90	44.21	AV	H	2.90	47.11	54	-6.89
5351.68	58.03	PK	V	2.90	60.93	74	-13.07
5351.68	44.44	AV	V	2.90	47.34	54	-6.66
10420.00	45.18	PK	H	13.12	58.30	68.2	-9.90
10420.00	45.45	PK	V	13.12	58.57	68.2	-9.63

5250-5350MHz

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11a							
Low Channel							
5125.83	55.63	PK	H	2.77	58.40	74	-15.60
5125.83	42.05	AV	H	2.77	44.82	54	-9.18
5130.59	55.86	PK	V	2.77	58.63	74	-15.37
5130.59	42.17	AV	V	2.77	44.94	54	-9.06
10520.00	45.87	PK	H	13.05	58.92	68.2	-9.28
10520.00	46.12	PK	V	13.05	59.17	68.2	-9.03
Middle Channel							
10560.00	46.26	PK	H	13.02	59.28	68.2	-8.92
10560.00	46.54	PK	V	13.02	59.56	68.2	-8.64
High Channel							
5350.40	58.22	PK	H	2.90	61.12	74	-12.88
5350.40	42.58	AV	H	2.90	45.48	54	-8.52
5350.88	59.75	PK	V	2.90	62.65	74	-11.35
5350.88	43.06	AV	V	2.90	45.96	54	-8.04
10640.00	46.68	PK	H	13.19	59.87	74	-14.13
10640.00	32.90	AV	H	13.19	46.09	54	-7.91
10640.00	46.95	PK	V	13.19	60.14	74	-13.86
10640.00	33.09	AV	V	13.19	46.28	54	-7.72

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac20							
Low Channel							
5140.75	55.72	PK	H	2.77	58.49	74	-15.51
5140.75	42.14	AV	H	2.77	44.91	54	-9.09
5143.38	55.98	PK	V	2.77	58.75	74	-15.25
5143.38	42.29	AV	V	2.77	45.06	54	-8.94
10520.00	45.72	PK	H	13.05	58.77	68.2	-9.43
10520.00	45.96	PK	V	13.05	59.01	68.2	-9.19
Middle Channel							
10560.00	46.08	PK	H	13.02	59.10	68.2	-9.10
10560.00	46.37	PK	V	13.02	59.39	68.2	-8.81
High Channel							
5350.08	59.08	PK	H	2.90	61.98	74	-12.02
5350.08	42.94	AV	H	2.90	45.84	54	-8.16
5350.56	60.69	PK	V	2.90	63.59	74	-10.41
5350.56	43.45	AV	V	2.90	46.35	54	-7.65
10640.00	46.45	PK	H	13.19	59.64	74	-14.36
10640.00	32.83	AV	H	13.19	46.02	54	-7.98
10640.00	46.72	PK	V	13.19	59.91	74	-14.09
10640.00	33.01	AV	V	13.19	46.20	54	-7.80

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac40							
Low Channel							
5101.05	55.36	PK	H	2.77	58.13	74	-15.87
5101.05	42.49	AV	H	2.77	45.26	54	-8.74
5135.13	55.81	PK	V	2.77	58.58	74	-15.42
5135.13	42.67	AV	V	2.77	45.44	54	-8.56
10540.00	45.77	PK	H	13.03	58.80	68.2	-9.40
10540.00	46.02	PK	V	13.03	59.05	68.2	-9.15
High Channel							
5350.24	64.19	PK	H	2.90	67.09	74	-6.91
5350.24	46.93	AV	H	2.90	49.83	54	-4.17
5350.45	66.31	PK	V	2.90	69.21	74	-4.79
5350.45	47.58	AV	V	2.90	50.48	54	-3.52
10620.00	46.35	PK	H	13.09	59.44	74	-14.56
10620.00	33.40	AV	H	13.09	46.49	54	-7.51
10620.00	46.74	PK	V	13.09	59.83	74	-14.17
10620.00	33.57	AV	V	13.09	46.66	54	-7.34
802.11ac80							
Middle Channel							
10580.00	45.75	PK	H	13.00	58.75	68.2	-9.45
10580.00	46.00	PK	V	13.00	59.00	68.2	-9.20

5470-5725MHz

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11a							
Low Channel							
5460.00	54.48	PK	H	3.05	57.53	74	-16.47
5460.00	41.57	AV	H	3.05	44.62	54	-9.38
5460.00	54.72	PK	V	3.05	57.77	74	-16.23
5460.00	41.86	AV	V	3.05	44.91	54	-9.09
5469.64	57.33	PK	H	3.06	60.39	68.2	-7.81
5469.05	58.65	PK	V	3.06	61.71	68.2	-6.49
11000.00	45.25	PK	H	13.98	59.23	74	-14.77
11000.00	31.34	AV	H	13.98	45.32	54	-8.68
11000.00	45.47	PK	V	13.98	59.45	74	-14.55
11000.00	31.51	AV	V	13.98	45.49	54	-8.51
Middle Channel							
11160.00	45.76	PK	H	13.62	59.38	74	-14.62
11160.00	32.03	AV	H	13.62	45.65	54	-8.35
11160.00	45.99	PK	V	13.62	59.61	74	-14.39
11160.00	32.21	AV	V	13.62	45.83	54	-8.17
High Channel							
5725.98	59.73	PK	H	3.48	63.21	68.2	-4.99
5725.57	61.18	PK	V	3.48	64.66	68.2	-3.54
11400.00	46.09	PK	H	14.08	60.17	74	-13.83
11400.00	32.67	AV	H	14.08	46.75	54	-7.25
11400.00	46.38	PK	V	14.08	60.46	74	-13.54
11400.00	32.86	AV	V	14.08	46.94	54	-7.06
Cross Channel							
11440.00	45.90	PK	H	14.08	59.98	74	-14.02
11440.00	32.25	AV	H	14.08	46.33	54	-7.67
11440.00	46.19	PK	V	14.08	60.27	74	-13.73
11440.00	32.44	AV	V	14.08	46.52	54	-7.48

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac20							
Low Channel							
5460.00	54.59	PK	H	3.05	57.64	74	-16.36
5460.00	41.64	AV	H	3.05	44.69	54	-9.31
5460.00	54.97	PK	V	3.05	58.02	74	-15.98
5460.00	41.88	AV	V	3.05	44.93	54	-9.07
5468.05	58.02	PK	H	3.06	61.08	68.2	-7.12
5467.20	59.45	PK	V	3.06	62.51	68.2	-5.69
11000.00	44.84	PK	H	13.98	58.82	74	-15.18
11000.00	31.42	AV	H	13.98	45.40	54	-8.60
11000.00	45.09	PK	V	13.98	59.07	74	-14.93
11000.00	31.58	AV	V	13.98	45.56	54	-8.44
Middle Channel							
11160.00	45.37	PK	H	13.62	58.99	74	-15.01
11160.00	31.98	AV	H	13.62	45.60	54	-8.40
11160.00	45.62	PK	V	13.62	59.24	74	-14.76
11160.00	32.15	AV	V	13.62	45.77	54	-8.23
High Channel							
5725.66	60.17	PK	H	3.48	63.65	68.2	-4.55
5725.19	61.64	PK	V	3.48	65.12	68.2	-3.08
11400.00	45.98	PK	H	14.08	60.06	74	-13.94
11400.00	32.59	AV	H	14.08	46.67	54	-7.33
11400.00	46.27	PK	V	14.08	60.35	74	-13.65
11400.00	32.75	AV	V	14.08	46.83	54	-7.17
Cross Channel							
11440.00	45.64	PK	H	14.08	59.72	74	-14.28
11440.00	32.17	AV	H	14.08	46.25	54	-7.75
11440.00	45.98	PK	V	14.08	60.06	74	-13.94
11440.00	32.39	AV	V	14.08	46.47	54	-7.53

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac40							
Low Channel							
5460.00	55.19	PK	H	3.05	58.24	74	-15.76
5460.00	42.02	AV	H	3.05	45.07	54	-8.93
5460.00	55.64	PK	V	3.05	58.69	74	-15.31
5460.00	42.35	AV	V	3.05	45.40	54	-8.60
5469.02	60.17	PK	H	3.06	63.23	68.2	-4.97
5469.47	61.86	PK	V	3.06	64.92	68.2	-3.28
11020.00	44.93	PK	H	13.89	58.82	74	-15.18
11020.00	31.74	AV	H	13.89	45.63	54	-8.37
11020.00	45.17	PK	V	13.89	59.06	74	-14.94
11020.00	31.89	AV	V	13.89	45.78	54	-8.22
Middle Channel							
11100.00	45.35	PK	H	13.53	58.88	74	-15.12
11100.00	32.26	AV	H	13.53	45.79	54	-8.21
11100.00	45.58	PK	V	13.53	59.11	74	-14.89
11100.00	32.43	AV	V	13.53	45.96	54	-8.04
High Channel							
5725.36	57.08	PK	H	3.48	60.56	68.2	-7.64
5725.70	58.11	PK	V	3.48	61.59	68.2	-6.61
11340.00	45.76	PK	H	13.99	59.75	74	-14.25
11340.00	32.69	AV	H	13.99	46.68	54	-7.32
11340.00	46.01	PK	V	13.99	60.00	74	-14.00
11340.00	32.85	AV	V	13.99	46.84	54	-7.16
Cross Channel							
11420.00	45.49	PK	H	14.08	59.57	74	-14.43
11420.00	32.35	AV	H	14.08	46.43	54	-7.57
11420.00	45.73	PK	V	14.08	59.81	74	-14.19
11420.00	32.56	AV	V	14.08	46.64	54	-7.36

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac80							
Low Channel							
5460.00	57.78	PK	H	3.05	60.83	74	-13.17
5460.00	43.21	AV	H	3.05	46.26	54	-7.74
5460.00	58.33	PK	V	3.05	61.38	74	-12.62
5460.00	43.57	AV	V	3.05	46.62	54	-7.38
5468.15	60.45	PK	H	3.06	63.51	68.2	-4.69
5467.78	62.12	PK	V	3.06	65.18	68.2	-3.02
11060.00	45.07	PK	H	13.71	58.78	74	-15.22
11060.00	33.48	AV	H	13.71	47.19	54	-6.81
11060.00	45.32	PK	V	13.71	59.03	74	-14.97
11060.00	33.65	AV	V	13.71	47.36	54	-6.64
High Channel							
5738.50	55.36	PK	H	3.51	58.87	68.2	-9.33
5737.61	55.97	PK	V	3.51	59.48	68.2	-8.72
11220.00	45.75	PK	H	13.73	59.48	74	-14.52
11220.00	33.87	AV	H	13.73	47.60	54	-6.40
11220.00	45.98	PK	V	13.73	59.71	74	-14.29
11220.00	34.03	AV	V	13.73	47.76	54	-6.24
Cross Channel							
11380.00	45.38	PK	H	13.99	59.37	74	-14.63
11380.00	33.52	AV	H	13.99	47.51	54	-6.49
11380.00	45.63	PK	V	13.99	59.62	74	-14.38
11380.00	33.74	AV	V	13.99	47.73	54	-6.27

5725-5850MHz

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11a							
Low Channel							
5650.00	55.16	PK	H	3.59	58.75	68.2	-9.45
5700.00	55.71	PK	H	4.09	59.80	105.2	-45.40
5720.00	55.95	PK	H	4.09	60.04	110.8	-50.76
5725.00	59.22	PK	H	4.09	63.31	122.2	-58.89
5650.00	55.47	PK	V	3.59	59.06	68.2	-9.14
5700.00	55.82	PK	V	4.09	59.91	105.2	-45.29
5720.00	56.54	PK	V	4.09	60.63	110.8	-50.17
5725.00	60.73	PK	V	4.09	64.82	122.2	-57.38
11490.00	44.79	PK	H	14.31	59.10	74	-14.90
11490.00	30.92	AV	H	14.31	45.23	54	-8.77
11490.00	45.03	PK	V	14.31	59.34	74	-14.66
11490.00	31.06	AV	V	14.31	45.37	54	-8.63
Middle Channel							
11570.00	45.42	PK	H	14.05	59.47	74	-14.53
11570.00	31.63	AV	H	14.05	45.68	54	-8.32
11570.00	46.65	PK	V	14.05	60.70	74	-13.30
11570.00	31.78	AV	V	14.05	45.83	54	-8.17
High Channel							
5850.00	57.73	PK	H	4.09	61.82	122.2	-60.38
5855.00	55.94	PK	H	4.09	60.03	110.8	-50.77
5875.00	55.39	PK	H	4.19	59.58	105.2	-45.62
5925.00	55.51	PK	H	4.69	60.20	68.2	-8.00
5850.00	58.84	PK	V	4.09	62.93	122.2	-59.27
5855.00	56.22	PK	V	4.09	60.31	110.8	-50.49
5875.00	55.75	PK	V	4.19	59.94	105.2	-45.26
5925.00	55.89	PK	V	4.69	60.58	68.2	-7.62
11650.00	46.00	PK	H	13.83	59.83	74	-14.17
11650.00	32.46	AV	H	13.83	46.29	54	-7.71
11650.00	46.24	PK	V	13.83	60.07	74	-13.93
11650.00	32.61	AV	V	13.83	46.44	54	-7.56

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac20							
Low Channel							
5650.00	55.47	PK	H	3.59	59.06	68.2	-9.14
5700.00	56.04	PK	H	4.09	60.13	105.2	-45.07
5720.00	57.52	PK	H	4.09	61.61	110.8	-49.19
5725.00	61.95	PK	H	4.09	66.04	122.2	-56.16
5650.00	55.72	PK	V	3.59	59.31	68.2	-8.89
5700.00	56.28	PK	V	4.09	60.37	105.2	-44.83
5720.00	58.93	PK	V	4.09	63.02	110.8	-47.78
5725.00	63.56	PK	V	4.09	67.65	122.2	-54.55
11490.00	44.45	PK	H	14.31	58.76	74	-15.24
11490.00	30.73	AV	H	14.31	45.04	54	-8.96
11490.00	44.69	PK	V	14.31	59.00	74	-15.00
11490.00	30.94	AV	V	14.31	45.25	54	-8.75
Middle Channel							
11570.00	45.13	PK	H	14.05	59.18	74	-14.82
11570.00	31.48	AV	H	14.05	45.53	54	-8.47
11570.00	45.37	PK	V	14.05	59.42	74	-14.58
11570.00	31.66	AV	V	14.05	45.71	54	-8.29
High Channel							
5850.00	57.73	PK	H	4.09	61.82	122.2	-60.38
5855.00	56.34	PK	H	4.09	60.43	110.8	-50.37
5875.00	55.87	PK	H	4.19	60.06	105.2	-45.14
5925.00	55.29	PK	H	4.69	59.98	68.2	-8.22
5850.00	58.45	PK	V	4.09	62.54	122.2	-59.66
5855.00	56.70	PK	V	4.09	60.79	110.8	-50.01
5875.00	56.26	PK	V	4.19	60.45	105.2	-44.75
5925.00	55.52	PK	V	4.69	60.21	68.2	-7.99
11650.00	45.75	PK	H	13.83	59.58	74	-14.42
11650.00	32.26	AV	H	13.83	46.09	54	-7.91
11650.00	45.98	PK	V	13.83	59.81	74	-14.19
11650.00	32.44	AV	V	13.83	46.27	54	-7.73

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac40							
Low Channel							
5650.00	55.38	PK	H	3.59	58.97	68.2	-9.23
5700.00	57.01	PK	H	4.09	61.10	105.2	-44.10
5720.00	59.84	PK	H	4.09	63.93	110.8	-46.87
5725.00	62.20	PK	H	4.09	66.29	122.2	-55.91
5650.00	55.64	PK	V	3.59	59.23	68.2	-8.97
5700.00	57.89	PK	V	4.09	61.98	105.2	-43.22
5720.00	61.26	PK	V	4.09	65.35	110.8	-45.45
5725.00	63.75	PK	V	4.09	67.84	122.2	-54.36
11510.00	44.60	PK	H	14.29	58.89	74	-15.11
11510.00	31.83	AV	H	14.29	46.12	54	-7.88
11510.00	44.92	PK	V	14.29	59.21	74	-14.79
11510.00	32.04	AV	V	14.29	46.33	54	-7.67
High Channel							
5850.00	56.90	PK	H	4.09	60.99	122.2	-61.21
5855.00	56.05	PK	H	4.09	60.14	110.8	-50.66
5875.00	55.87	PK	H	4.19	60.06	105.2	-45.14
5925.00	55.64	PK	H	4.69	60.33	68.2	-7.87
5850.00	57.26	PK	V	4.09	61.35	122.2	-60.85
5855.00	56.53	PK	V	4.09	60.62	110.8	-50.18
5875.00	56.12	PK	V	4.19	60.31	105.2	-44.89
5925.00	55.91	PK	V	4.69	60.60	68.2	-7.60
11590.00	46.05	PK	H	13.97	60.02	74	-13.98
11590.00	32.98	AV	H	13.97	46.95	54	-7.05
11590.00	46.34	PK	V	13.97	60.31	74	-13.69
11590.00	33.19	AV	V	13.97	47.16	54	-6.84

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave					
802.11ac80							
Middle Channel							
5650.00	55.67	PK	H	3.59	59.26	68.2	-8.94
5700.00	57.92	PK	H	4.09	62.01	105.2	-43.19
5720.00	59.36	PK	H	4.09	63.45	110.8	-47.35
5725.00	61.08	PK	H	4.09	65.17	122.2	-57.03
5650.00	55.99	PK	V	3.59	59.58	68.2	-8.62
5700.00	58.40	PK	V	4.09	62.49	105.2	-42.71
5720.00	60.76	PK	V	4.09	64.85	110.8	-45.95
5725.00	62.53	PK	V	4.09	66.62	122.2	-55.58
5850.00	58.02	PK	H	4.09	62.11	122.2	-60.09
5855.00	56.70	PK	H	4.09	60.79	110.8	-50.01
5875.00	55.86	PK	H	4.19	60.05	105.2	-45.15
5925.00	55.58	PK	H	4.69	60.27	68.2	-7.93
5850.00	58.57	PK	V	4.09	62.66	122.2	-59.54
5855.00	57.18	PK	V	4.09	61.27	110.8	-49.53
5875.00	56.39	PK	V	4.19	60.58	105.2	-44.62
5925.00	55.85	PK	V	4.69	60.54	68.2	-7.66
11550.00	45.87	PK	H	14.13	60.00	74	-14.00
11550.00	33.68	AV	H	14.13	47.81	54	-6.19
11550.00	46.15	PK	V	14.13	60.28	74	-13.72
11550.00	33.92	AV	V	14.13	48.05	54	-5.95

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

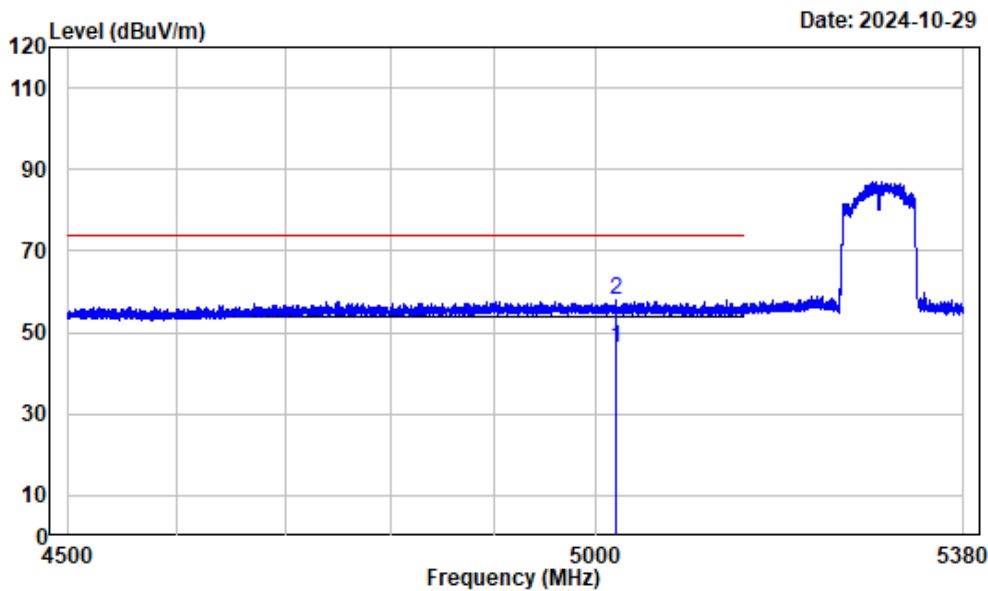
Corrected Amplitude = Factor + Reading

Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

Test plots:

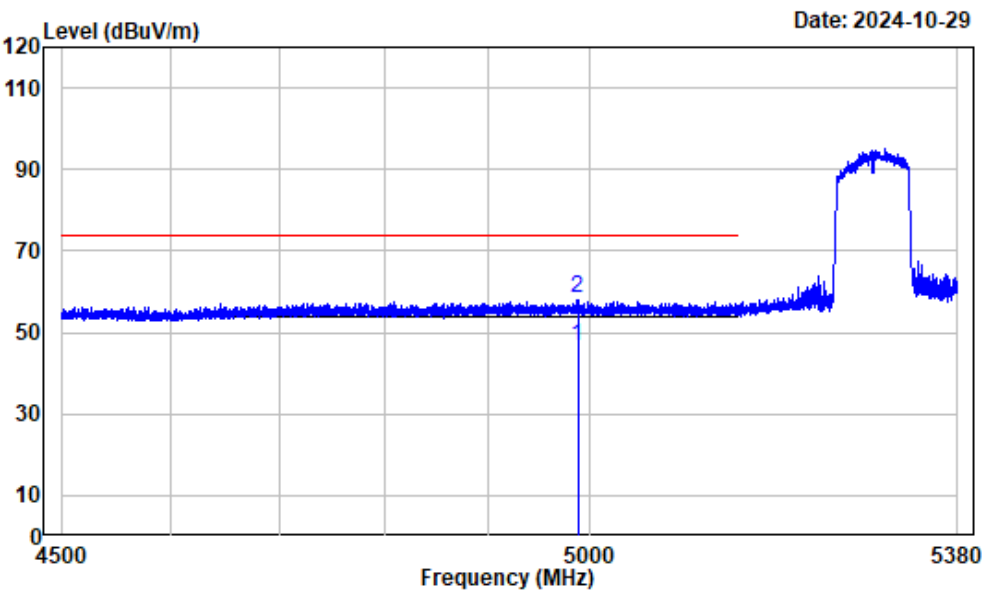
Worst Case-5GWi-Fi-Band2-AC80-5290_4500-5150MHz-H



Condition : Horizontal
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band2-AC80-5290

		Read		Limit		Over	Remark
Freq		Factor	Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5019.485	2.96	43.37	46.33	54.00	-7.67	Average
2	5019.485	2.96	55.09	58.05	74.00	-15.95	Peak

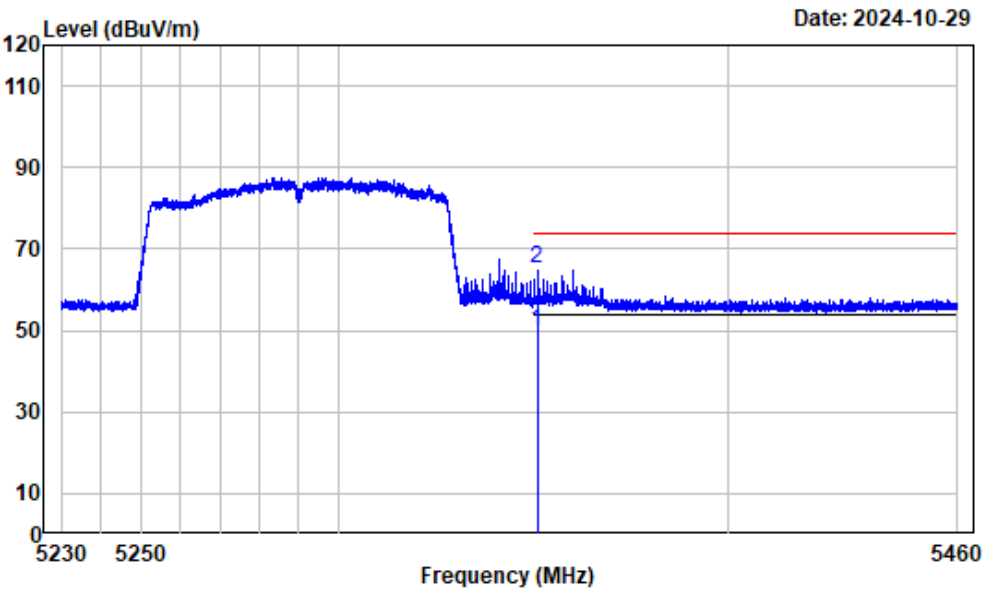
Worst Case-5GWi-Fi-Band2-AC80-5290_4500-5150MHz-V



Condition : Vertical
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band2-AC80-5290

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4987.801	2.88	43.68	46.56	54.00	-7.44	Average
2	4987.801	2.88	55.41	58.29	74.00	-15.71	Peak

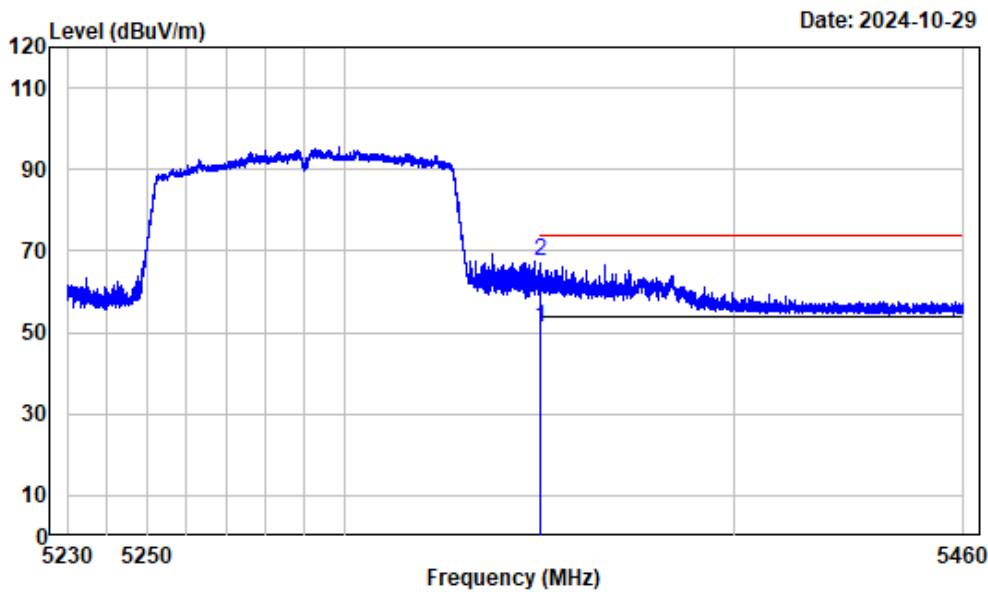
Worst Case-5GWi-Fi-Band2-AC80-5290_5350-5460MHz-H



Condition : Horizontal
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band2-AC80-5290

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.880	2.90	47.08	49.98	54.00	-4.02	Average
2	5350.880	2.90	62.25	65.15	74.00	-8.85	Peak

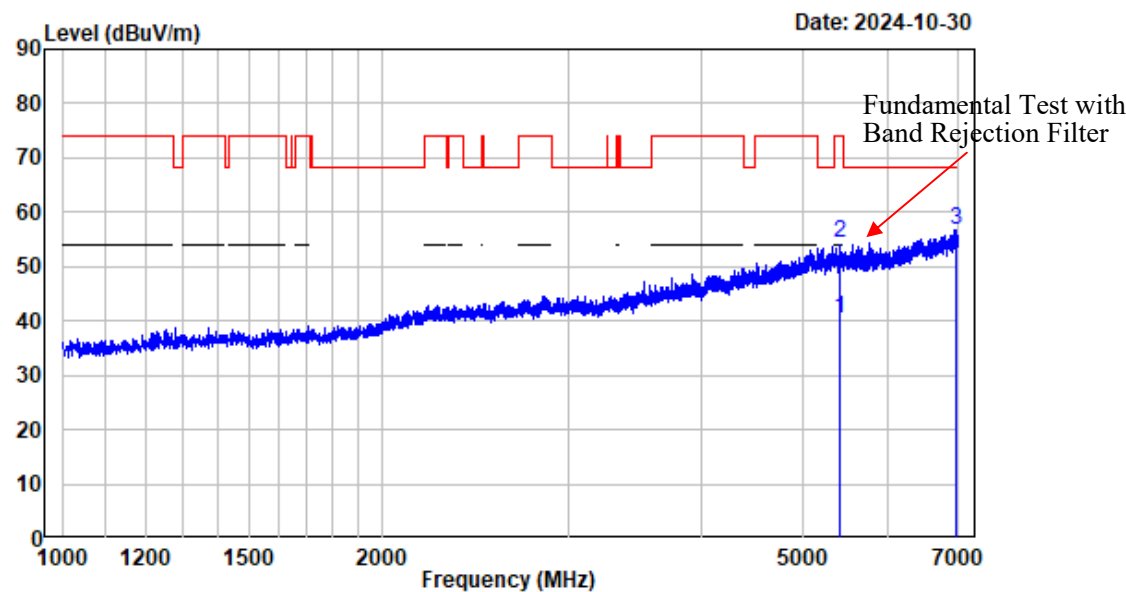
Worst Case-5GWi-Fi-Band2-AC80-5290_5350-5460MHz-V



Condition : Vertical
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band2-AC80-5290

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.240	2.90	48.10	51.00	54.00	-3.00	Average
2	5350.240	2.90	64.54	67.44	74.00	-6.56	Peak

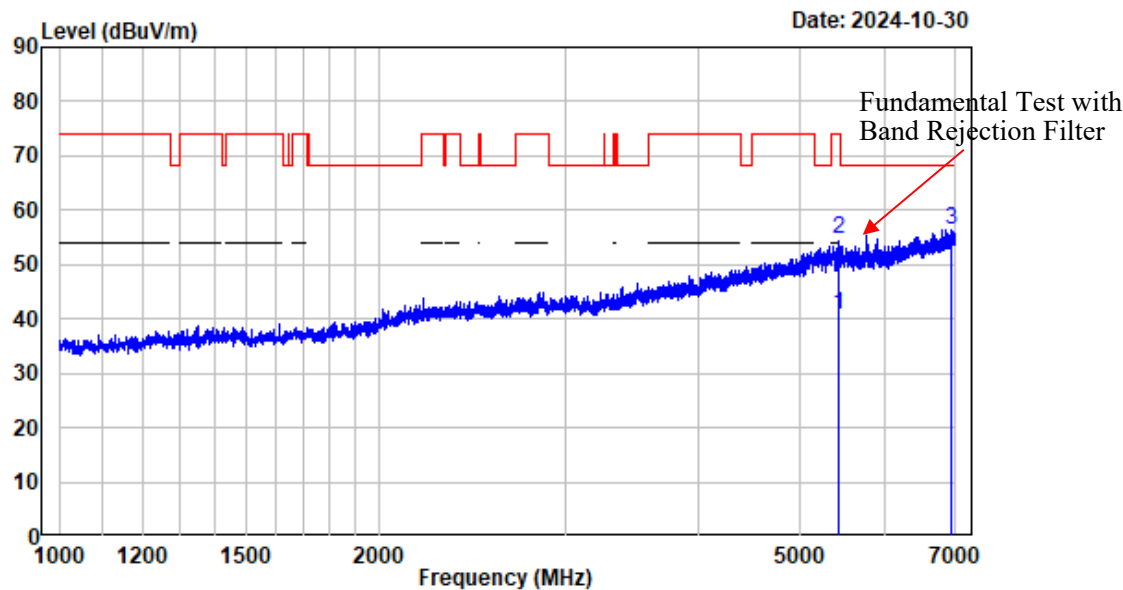
Worst Case-5GWi-Fi (Band4 AC80 Mode) 1-7G-H



Condition : Horizontal
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5412.051	3.00	37.45	40.45	54.00	-13.55	Average
2	5412.051	3.00	51.38	54.38	74.00	-19.62	Peak
3	6965.496	8.67	48.03	56.70	68.20	-11.50	Peak

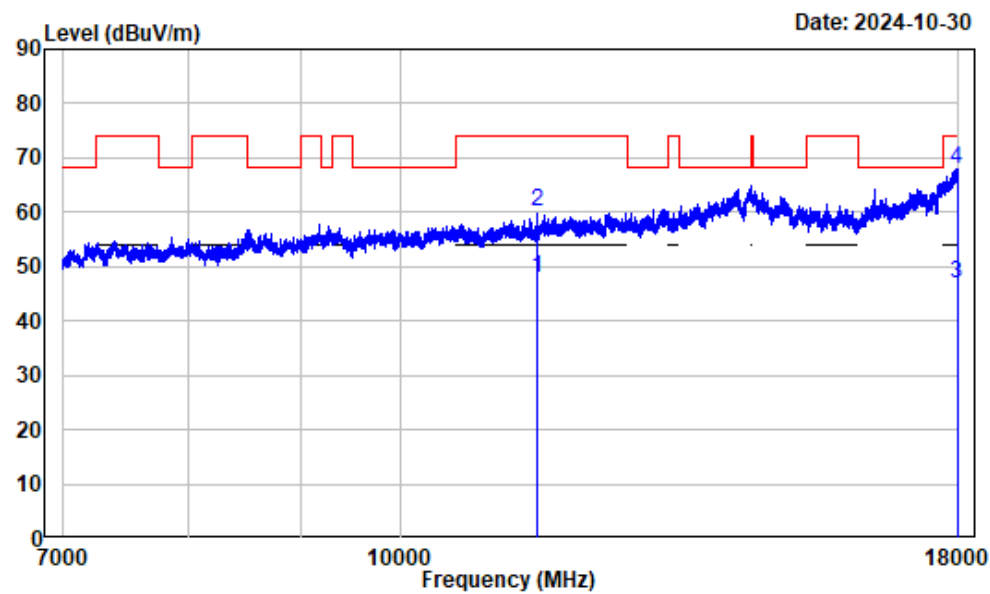
Worst Case-5GWi-Fi (Band4 AC80 Mode) 1-7G-V



Condition : Vertical
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5429.304	3.03	37.79	40.82	54.00	-13.18	Average
2	5429.304	3.03	51.64	54.67	74.00	-19.33	Peak
3	6926.491	8.41	47.99	56.40	68.20	-11.80	Peak

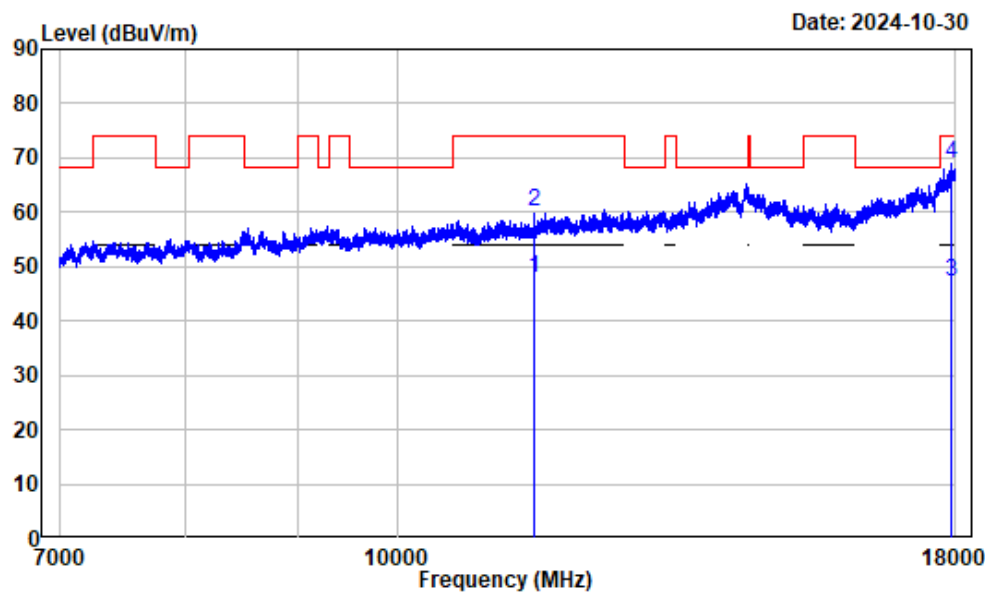
Worst Case-5GWi-Fi (Band4 AC80 Mode) 7-18G-H



Condition : Horizontal
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11550.000	14.13	33.68	47.81	54.00	-6.19	Average
2	11550.000	14.13	45.87	60.00	74.00	-14.00	Peak
3	17972.500	24.43	22.59	47.02	54.00	-6.98	Average
4	17972.500	24.43	43.55	67.98	74.00	-6.02	Peak

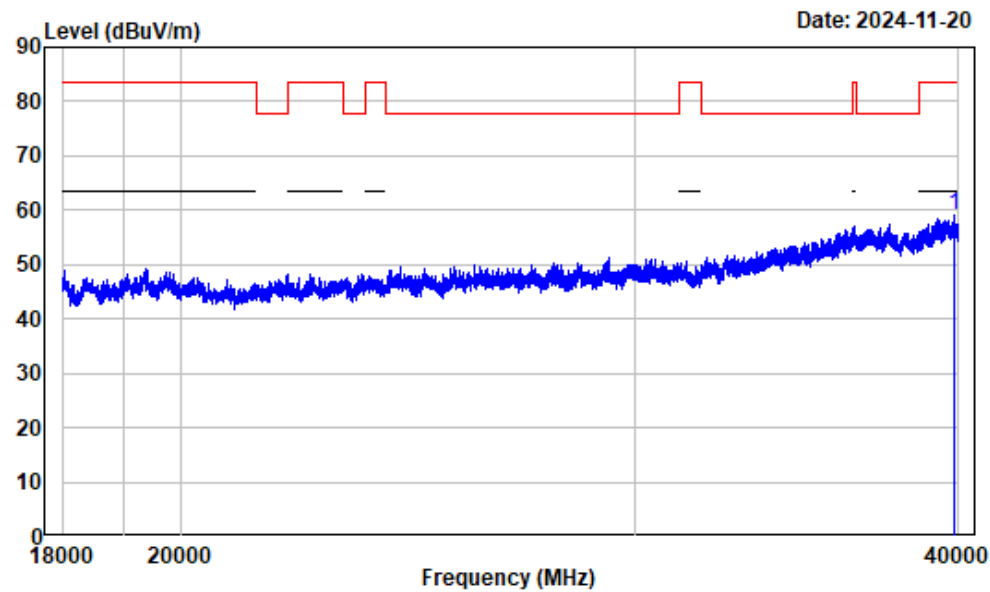
Worst Case-5GWi-Fi (Band4 AC80 Mode) 7-18G-V



Condition : Vertical
Project No.: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWiFi-Band4-AC80-5775

Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11550.000	14.13	33.92	48.05	54.00	-5.95	Average
2	11550.000	14.13	46.15	60.28	74.00	-13.72	Peak
3	17929.870	24.12	23.02	47.14	54.00	-6.86	Average
4	17929.870	24.12	44.89	69.01	74.00	-4.99	Peak

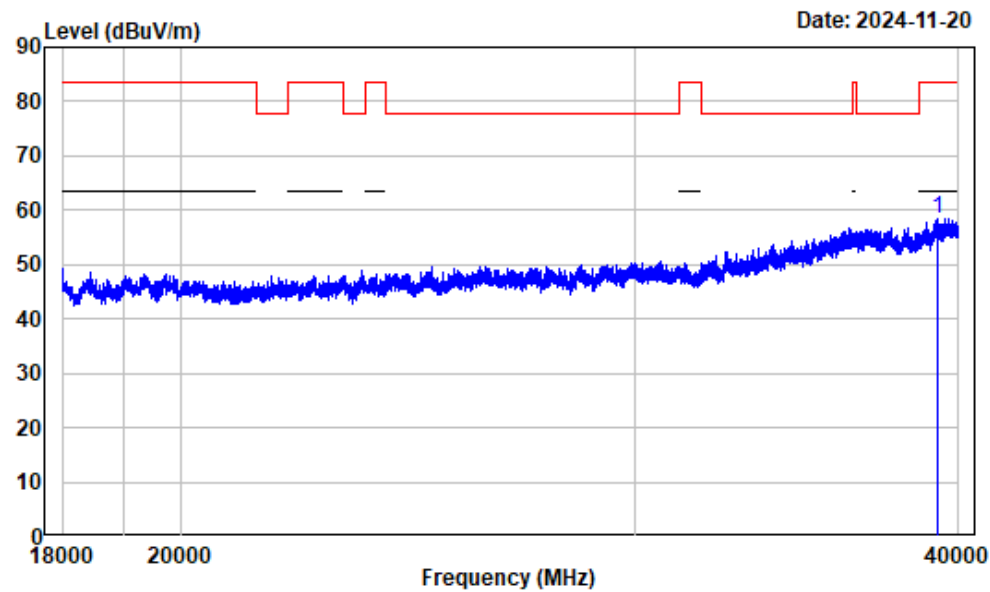
Worst Case-5GWi-Fi (Band4 AC80 Mode) 18-40G-H



Condition : Horizontal
Project No: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWIFI-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 39881.730	22.54	36.65	59.19	83.50	-24.31	Peak

Worst Case-5GWi-Fi (Band4 AC80 Mode) 18-40G-V



Condition : Vertical
Project No: 2401Y58158E-RF
Tester : Zenos Qiao
Note : 5GWIFI-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 39290.410	22.72	35.66	58.38	83.50	-25.12	Peak

RF Conducted data

Emission Bandwidth

Test Information:

Sample No.:	2TGQ-2	Test Date:	2024/11/13
Test Site:	RF	Test Mode:	Transmitting
Tester:	Kungfumaster Liang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	26.5-27	Relative Humidity: (%)	54-55	ATM Pressure: (kPa)	101
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Test Data:**26dB Emission Bandwidth****5150-5250MHz**

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5180	23.405
	5200	19.920
	5240	20.643
802.11ac20	5180	21.254
	5200	21.054
	5240	25.022
802.11ac40	5190	40.741
	5230	43.143
802.11ac80	5210	97.202

5250-5350MHz

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5260	22.695
	5280	20.190
	5320	22.116
802.11ac20	5260	26.499
	5280	23.982
	5320	20.492
802.11ac40	5270	40.941
	5310	40.841
802.11ac80	5290	81.481

5470-5725MHz

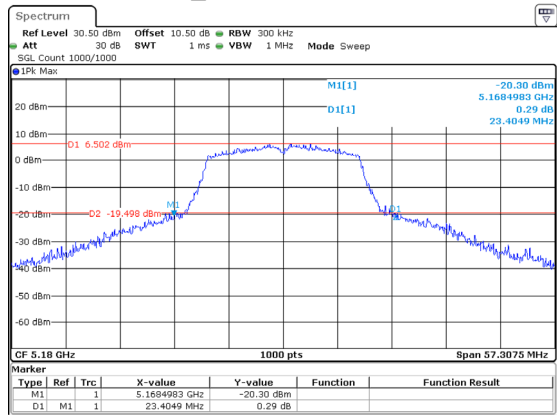
Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5500	20.391
	5580	20.391
	5700	19.920
	5720	19.870
802.11ac20	5500	20.544
	5580	20.493
	5700	20.594
	5720	20.645
802.11ac40	5510	41.041
	5550	41.041
	5670	41.041
	5710	40.841
802.11ac80	5530	81.481
	5610	81.281
	5690	81.281

6dB Emission Bandwidth**5725-5850MHz**

Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11a	5745	15.215	0.5	Pass
	5785	15.165	0.5	Pass
	5825	15.215	0.5	Pass
802.11ac20	5745	15.265	0.5	Pass
	5785	15.215	0.5	Pass
	5825	15.215	0.5	Pass
802.11ac40	5755	35.235	0.5	Pass
	5795	35.235	0.5	Pass
802.11ac80	5775	75.475	0.5	Pass

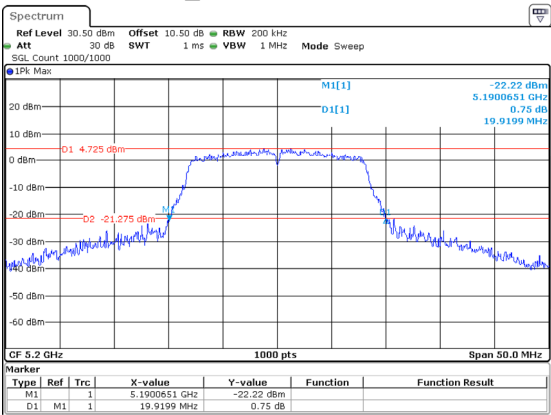
5150-5250MHz

802.11a_5180MHz 23.405MHz



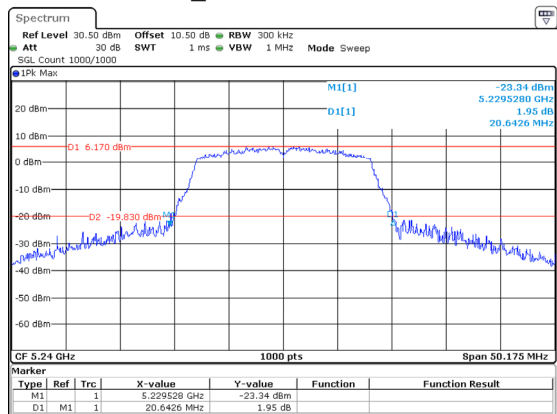
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 20:21:56

802.11a_5200MHz 19.920MHz



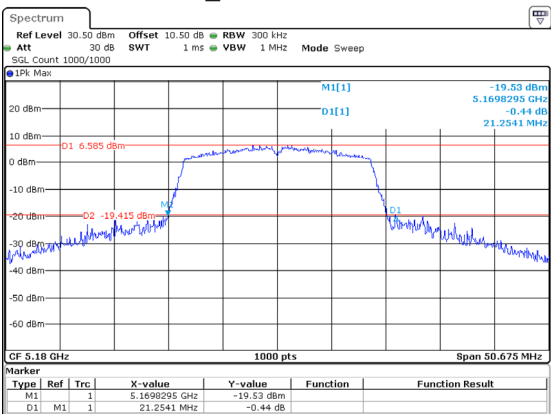
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 20:23:05

802.11a_5240MHz 20.643MHz



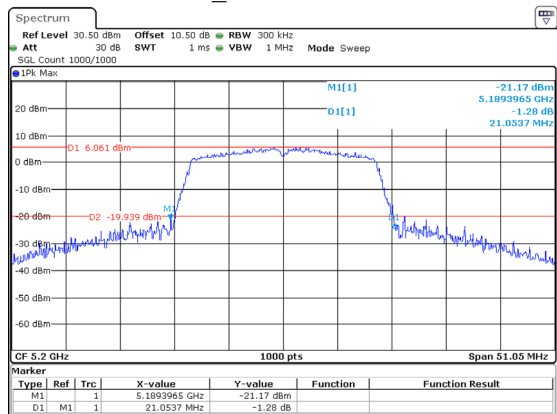
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Date: 13.NOV.2024 20:24:12

802.11ac20_5180MHz 21.254MHz



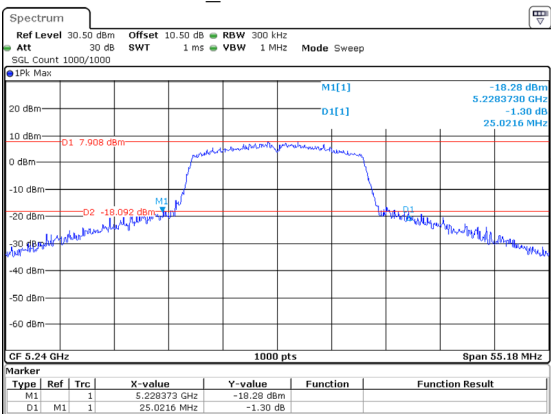
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Date: 13.NOV.2024 20:25:47

802.11ac20_5200MHz 21.054MHz



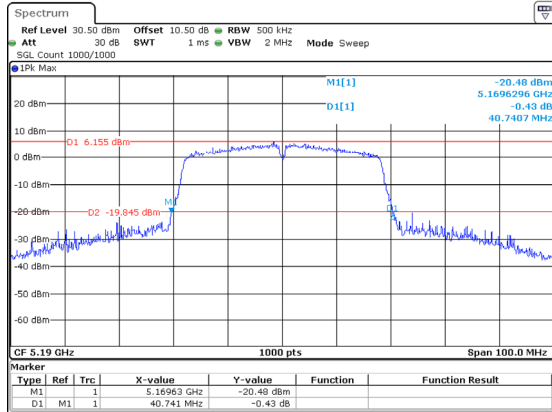
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Date: 13.NOV.2024 20:27:16

802.11ac20_5240MHz 25.022MHz



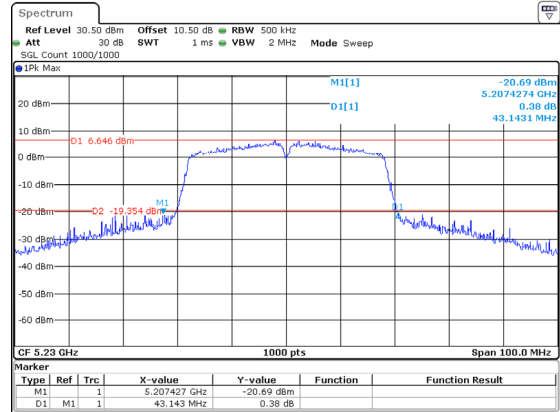
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Date: 13.NOV.2024 20:28:38

802.11ac40_5190MHz 40.741MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 20:29:58

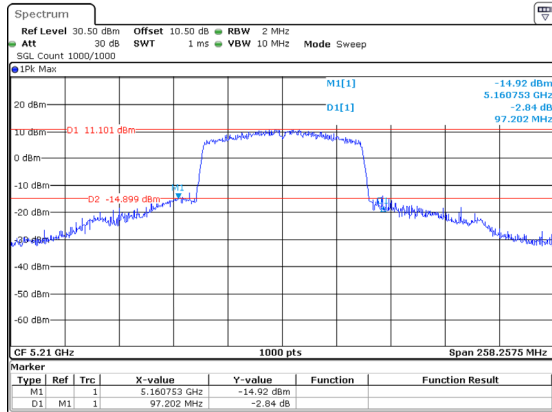
802.11ac40_5230MHz 43.143MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 20:30:47

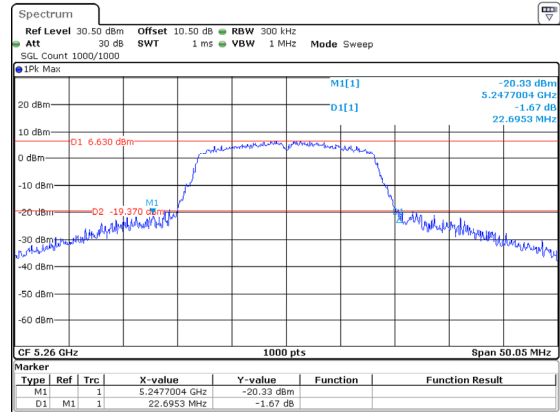
5250-5350MHz

802.11ac80_5210MHz 97.202MHz



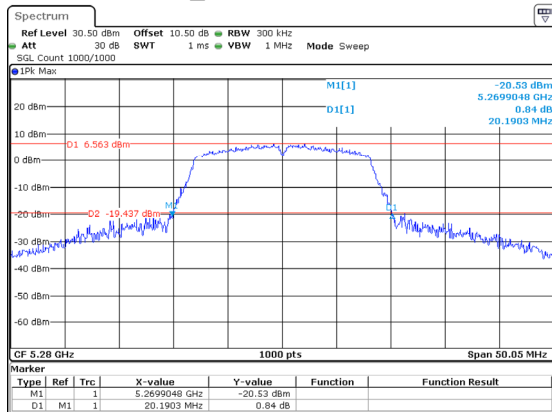
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Date: 13.NOV.2024 20:32:04

802.11a_5260MHz 22.695MHz



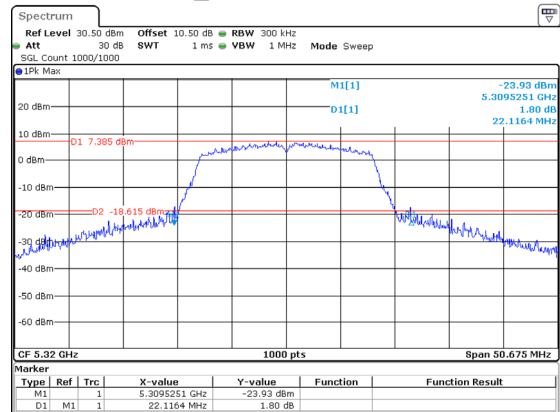
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Date: 13.NOV.2024 21:03:14

802.11a_5280MHz 20.190MHz



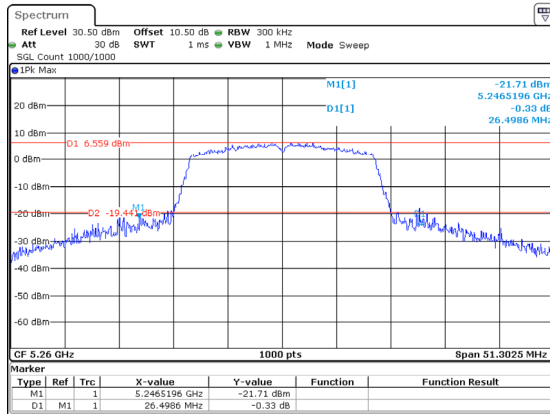
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Date: 13.NOV.2024 21:05:05

802.11a_5320MHz 22.116MHz



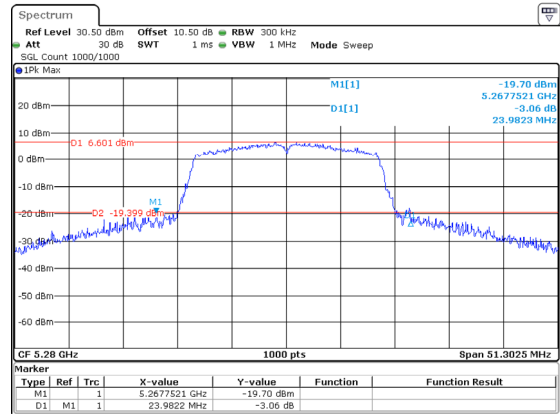
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Date: 13.NOV.2024 21:06:27

802.11ac20_5260MHz 26.499MHz



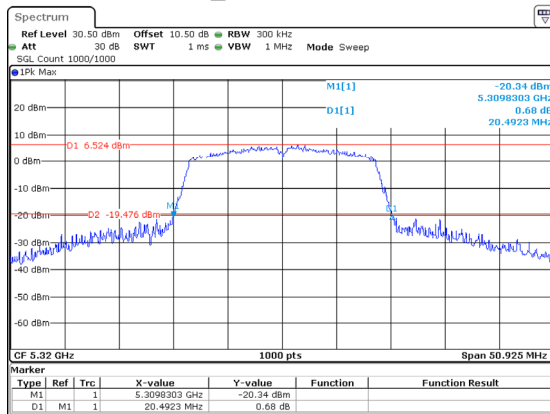
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:07:49

802.11ac20_5280MHz 23.982MHz



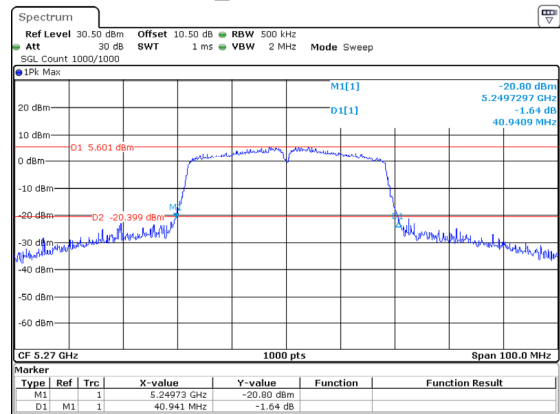
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:09:10

802.11ac20_5320MHz 20.492MHz



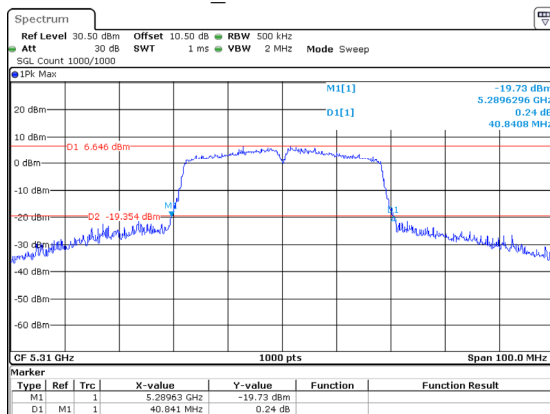
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Date: 13.NOV.2024 21:10:24

802.11ac40_5270MHz 40.941MHz



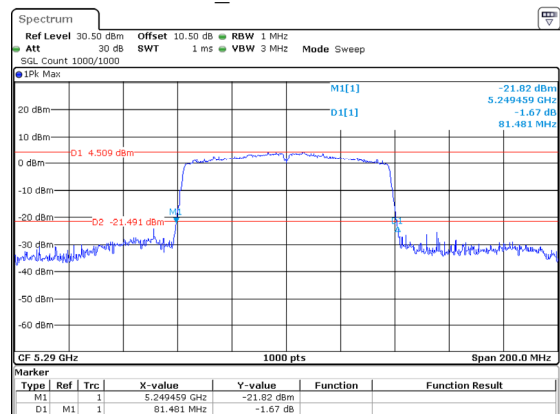
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:11:52

802.11ac40_5310MHz 40.841MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:12:41

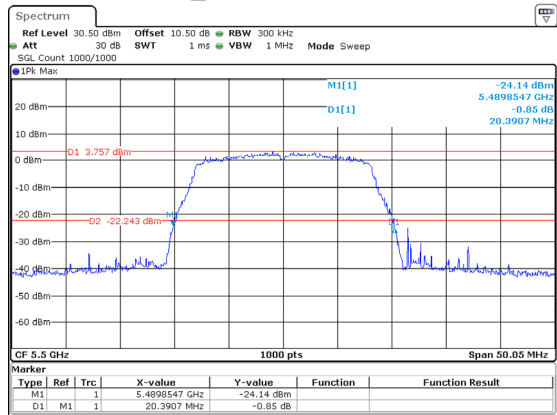
802.11ac80_5290MHz 81.481MHz



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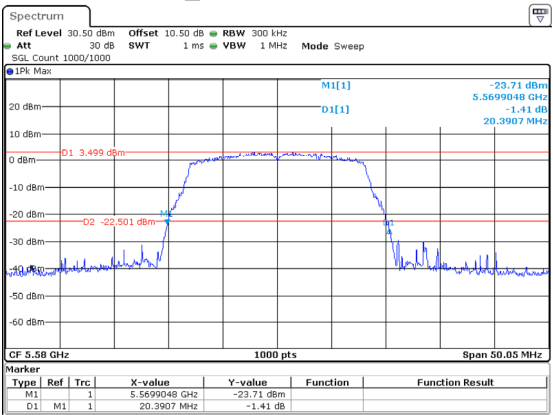
5470-5725MHz

802.11a_5500MHz 20.391MHz



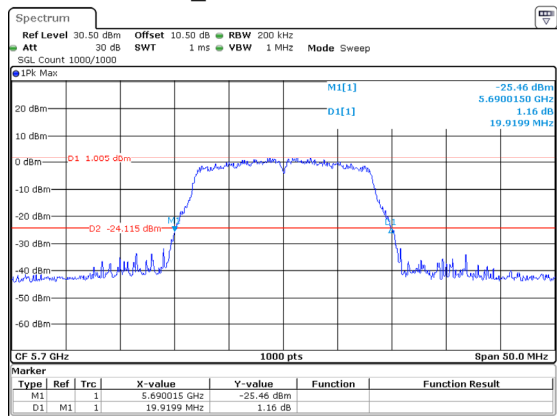
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Date: 13.NOV.2024 21:31:39

802.11a_5580MHz 20.391MHz



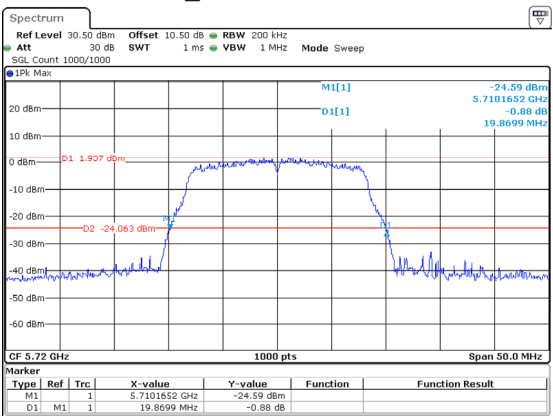
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Date: 13.NOV.2024 21:33:00

802.11a_5700MHz 19.920MHz



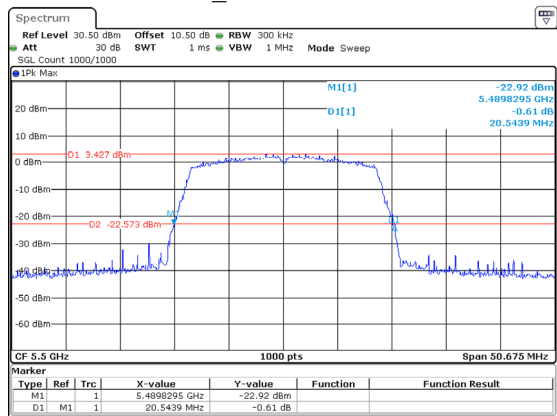
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Date: 13.NOV.2024 21:34:16

802.11a_5720MHz 19.870MHz



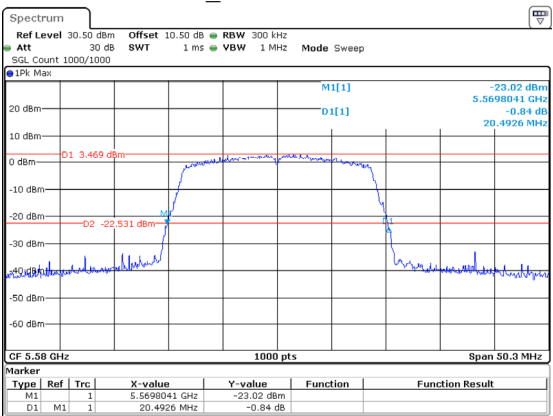
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Date: 13.NOV.2024 21:35:22

802.11ac20_5500MHz 20.544MHz



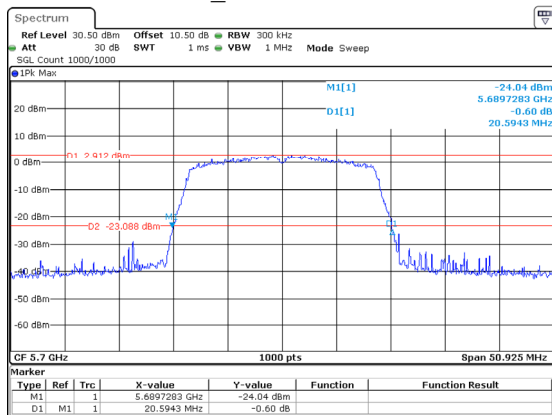
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Date: 13.NOV.2024 21:37:01

802.11ac20_5580MHz 20.493MHz

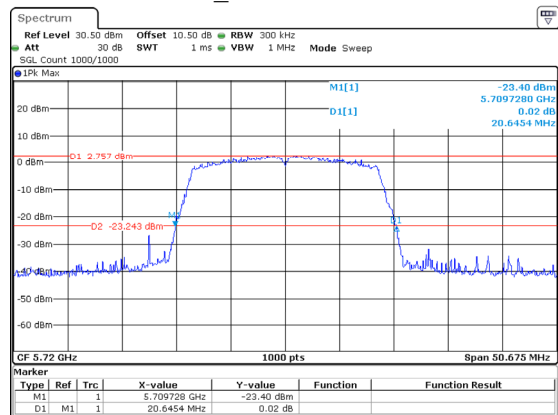


ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:38:20

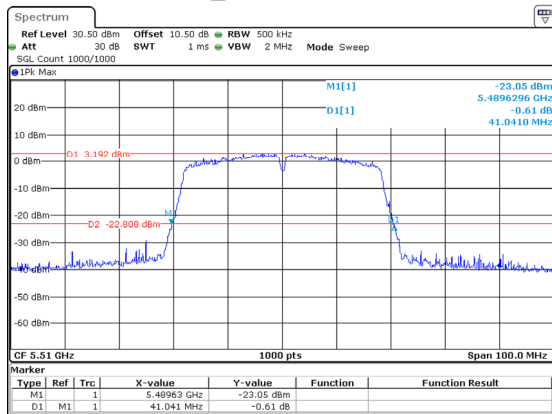
802.11ac20_5700MHz 20.594MHz



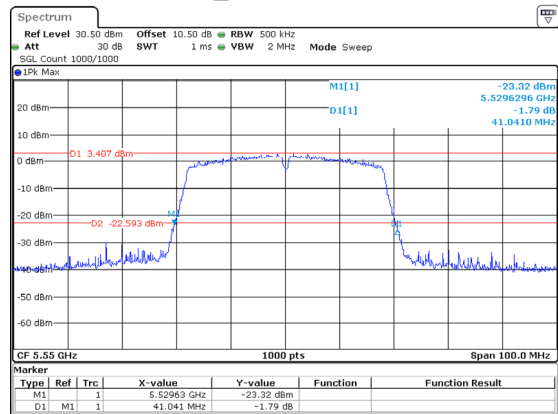
802.11ac20_5720MHz 20.645MHz



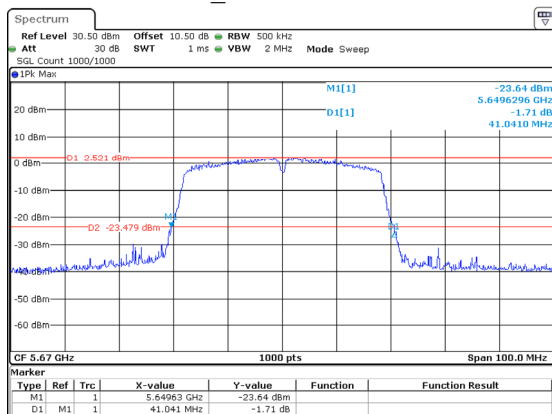
802.11ac40_5510MHz 41.041MHz



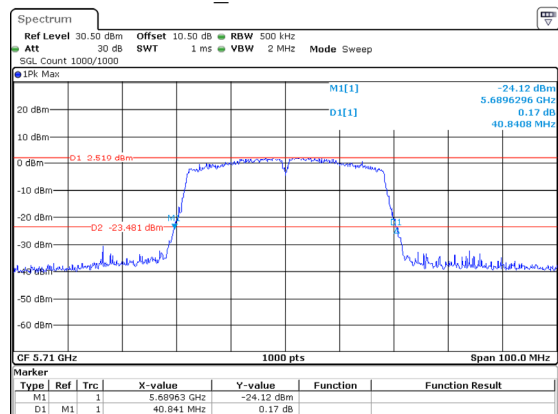
802.11ac40_5550MHz 41.041MHz



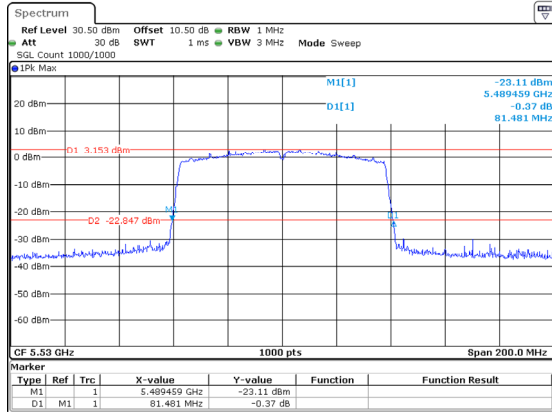
802.11ac40_5670MHz 41.041MHz



802.11ac40_5710MHz 40.841MHz

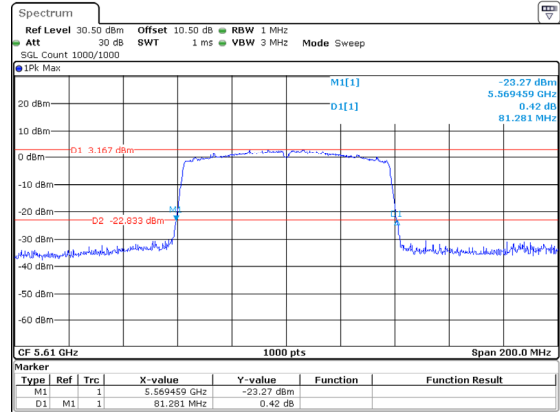


802.11ac80_5530MHz 81.481MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:46:51

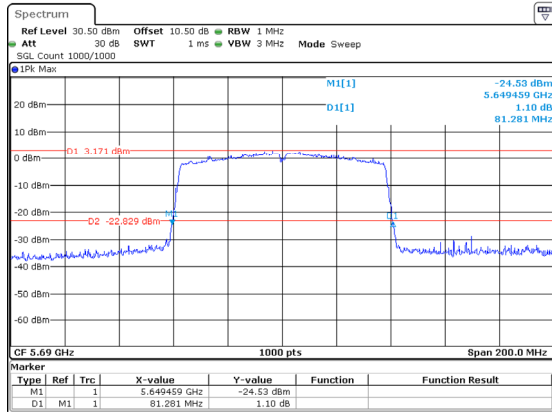
802.11ac80_5610MHz 81.281MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 21:47:37

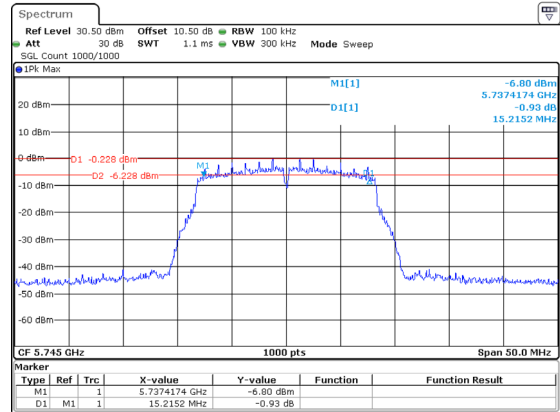
5725-5850MHz

802.11ac80_5690MHz 81.281MHz



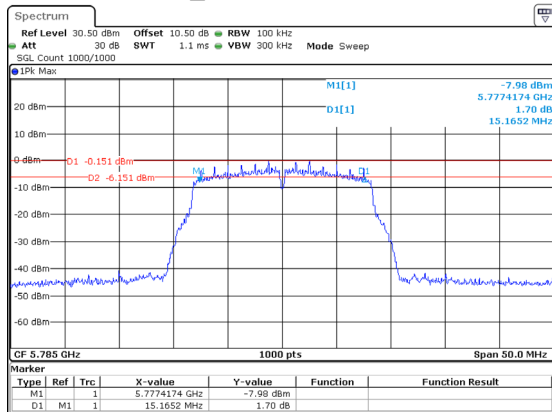
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Date: 13.NOV.2024 21:48:21

802.11a_5745MHz 15.215MHz



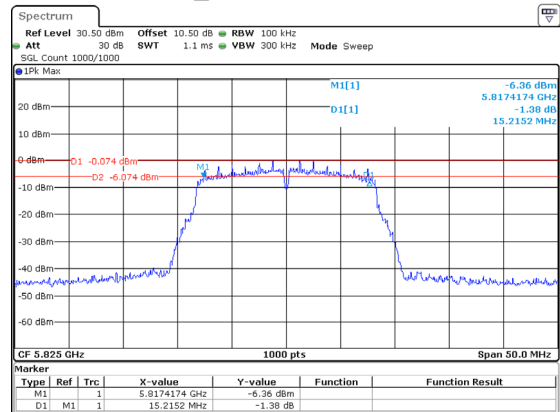
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Date: 13.NOV.2024 21:18:05

802.11a_5785MHz 15.165MHz



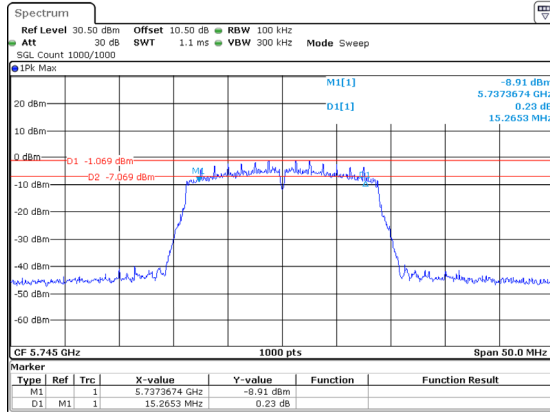
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Date: 13.NOV.2024 22:19:56

802.11a_5825MHz 15.215MHz



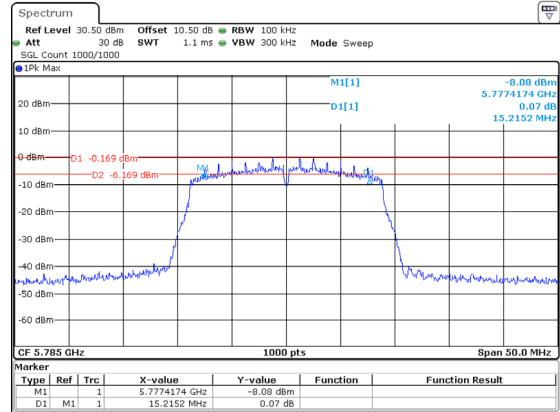
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Date: 13.NOV.2024 22:21:03

802.11ac20_5745MHz 15.265MHz



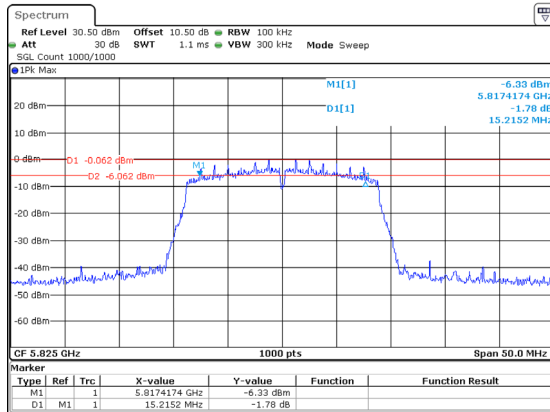
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:22:25

802.11ac20_5785MHz 15.215MHz



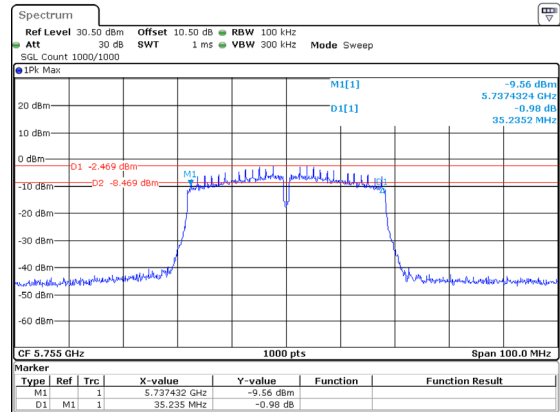
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:28:52

802.11ac20_5825MHz 15.215MHz



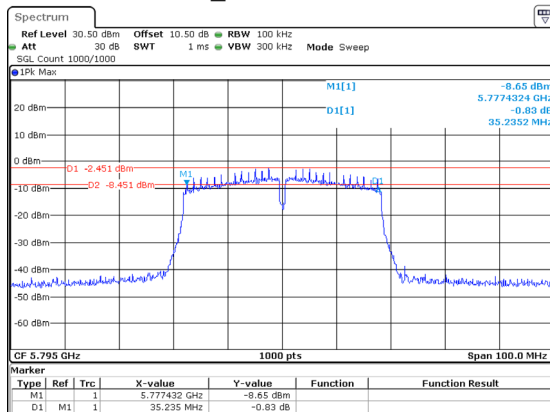
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:29:50

802.11ac40_5755MHz 35.235MHz



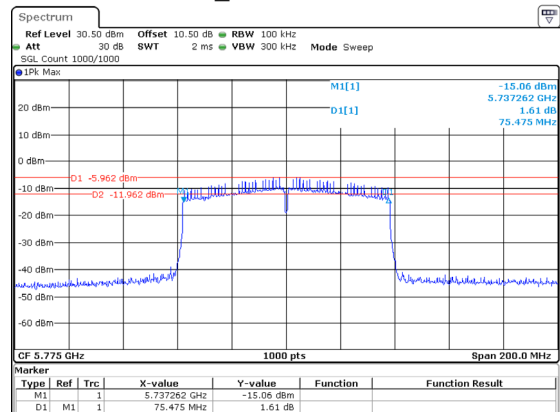
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:30:32

802.11ac40_5795MHz 35.235MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:31:18

802.11ac80_5775MHz 75.475MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 13.NOV.2024 22:32:36

99% Occupied Bandwidth

Test Information:

Sample No.:	2TGQ-2	Test Date:	2024/11/22
Test Site:	RF	Test Mode:	Transmitting
Tester:	Kungfumaster Liang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	26.5-27	Relative Humidity: (%)	54-55	ATM Pressure: (kPa)	101
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Test Data:**5150-5250MHz**

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5180	16.600
	5200	16.600
	5240	16.500
802.11ac20	5180	17.750
	5200	17.700
	5240	17.650
802.11ac40	5190	36.200
	5230	36.200
802.11ac80	5210	75.600

Note:

The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

5250-5350MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5260	16.500
	5280	16.550
	5320	16.550
802.11ac20	5260	17.600
	5280	17.600
	5320	17.600
802.11ac40	5270	36.200
	5310	36.200
802.11ac80	5290	75.200

5470-5725MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5500	16.450
	5580	16.450
	5700	16.450
	5720	16.500
802.11ac20	5500	17.600
	5580	17.550
	5700	17.600
	5720	17.600
802.11ac40	5510	36.200
	5550	36.100
	5670	36.100
	5710	36.100
802.11ac80	5530	75.200
	5610	75.200
	5690	75.200

5725-5850MHz

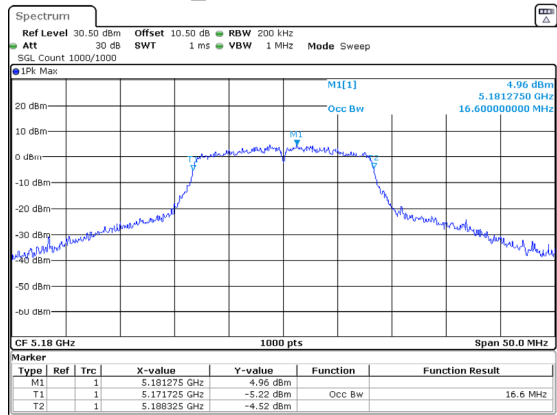
Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5745	16.450
	5785	16.500
	5825	16.450
802.11ac20	5745	17.550
	5785	17.550
	5825	17.550
802.11ac40	5755	36.200
	5795	36.100
802.11ac80	5775	75.200

Note:

The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

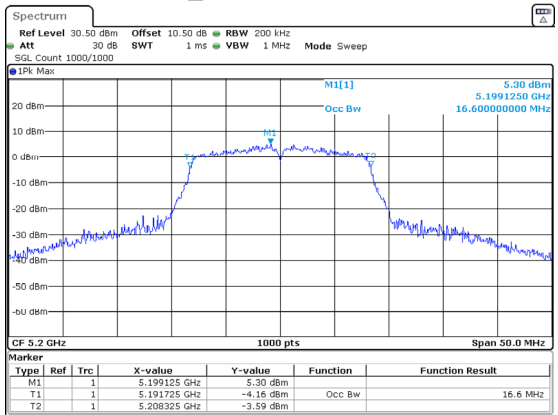
5150-5250MHz

802.11a_5180MHz 16.600MHz



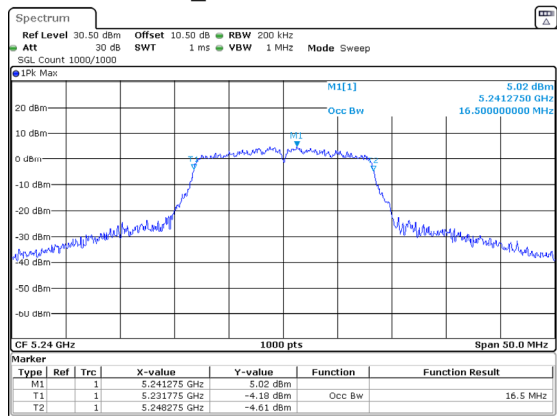
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:22:22

802.11a_5200MHz 16.600MHz



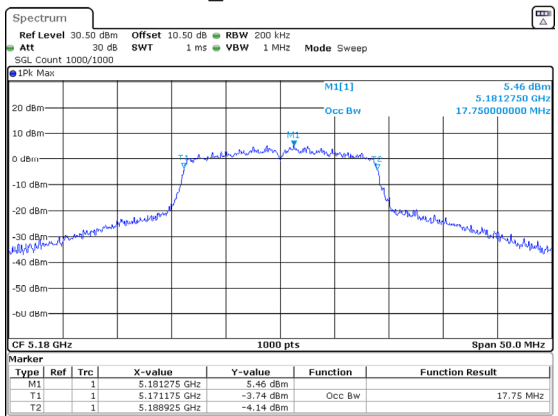
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802.11a_5240MHz 16.500MHz



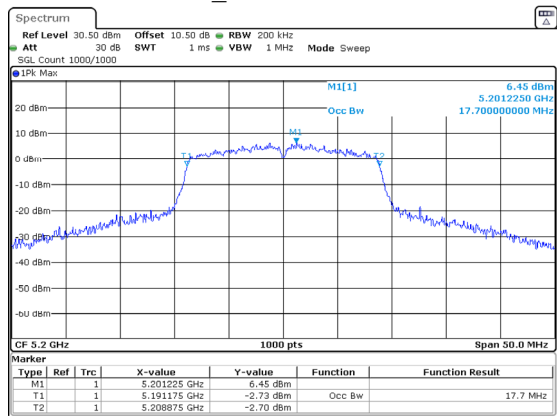
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802.11ac20_5180MHz 17.750MHz



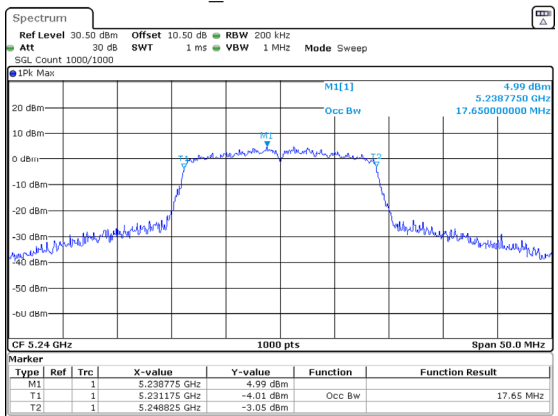
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802.11ac20_5200MHz 17.700MHz



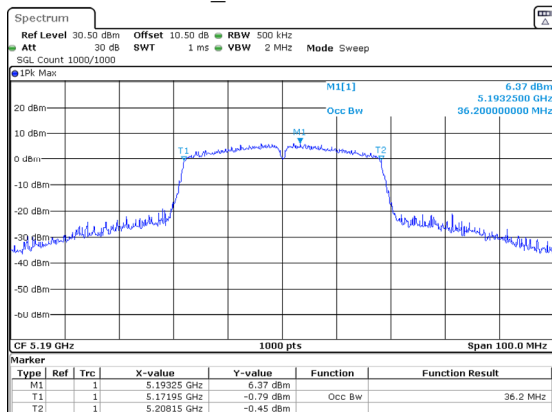
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Date: 22.NOV.2024 20:26:36

802.11ac20_5240MHz 17.650MHz



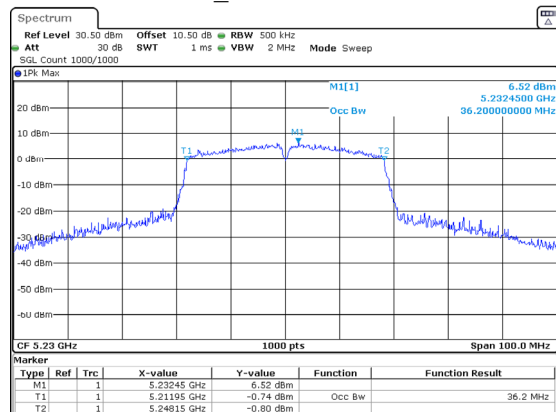
ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:27:42

802.11ac40_5190MHz 36.200MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:28:45

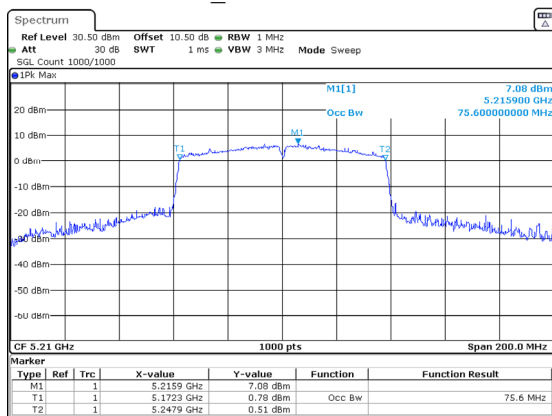
802.11ac40_5230MHz 36.200MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:29:54

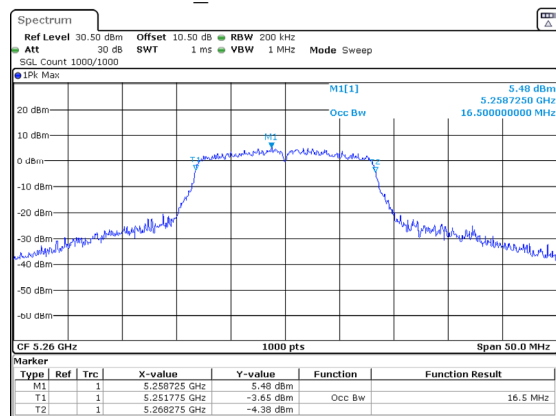
5250-5350MHz

802.11ac80_5210MHz 75.600MHz



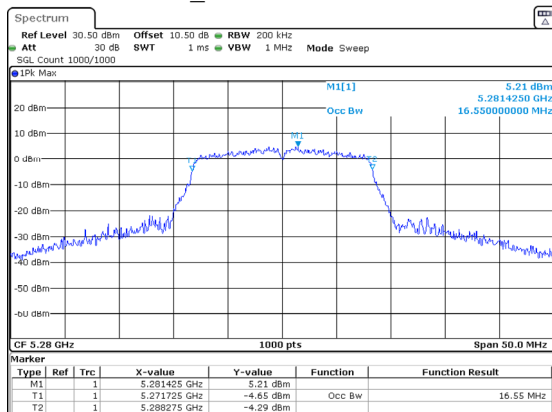
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802.11a_5260MHz 16.500MHz



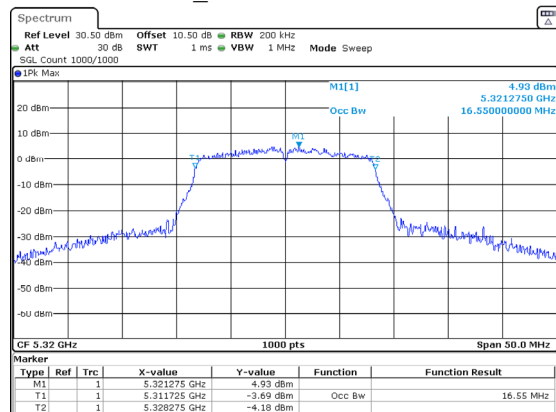
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Date: 22.NOV.2024 20:32:22

802.11a_5280MHz 16.550MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:33:27

802.11a_5320MHz 16.550MHz



ProjectNo.:2401Y58158E-RF Tester:Kungfumaster Liang
Date: 22.NOV.2024 20:34:27