

FCC PART 15.407

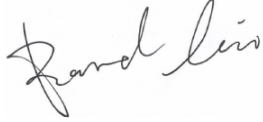
TEST REPORT

For

WISEASY TECHNOLOGY PTE. LTD.

51 GOLDHILL PLAZA #18-05 SINGAPORE (308900)

FCC ID: 2BFPO-T201

Report Type: Original Report	Product Name: Smart Payment Tablet
Report Number:	RKSA240327005-00E
Report Date:	2024-07-12
Reviewed By:	Bard Liu 
Approved By:	Kyle Xu 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S.Government.

TABLE OF CONTENTS

REPORT REVISION HISTORY.....	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	6
TEST METHODOLOGY	6
MEASUREMENT UNCERTAINTY	6
TEST FACILITY	6
SYSTEM TEST CONFIGURATION	7
DESCRIPTION OF TEST CONFIGURATION	7
EUT EXERCISE SOFTWARE	8
EQUIPMENT MODIFICATIONS	14
SUPPORT EQUIPMENT LIST AND DETAILS	14
EXTERNAL I/O CABLE.....	14
BLOCK DIAGRAM OF TEST SETUP	15
UMMARY OF TEST RESULTS	18
TEST EQUIPMENT LIST	19
FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE).....	20
FCC §15.203 – ANTENNA REQUIREMENT	23
APPLICABLE STANDARD	23
ANTENNA CONNECTOR CONSTRUCTION	23
FCC §15.407 (b) (9) §15.207 (a) – AC POWER LINE CONDUCTED EMISSIONS.....	24
APPLICABLE STANDARD	24
TEST SYSTEM SETUP.....	24
EMI TEST RECEIVER SETUP.....	24
TEST PROCEDURE	25
TEST RESULTS SUMMARY	25
§15.205 & §15.209 & §15.407(B) (1), (4), (8), (9), (10) – UNDESIRABLE EMISSION & RESTRICTED BANDS	26
APPLICABLE STANDARD	26
TEST SYSTEM SETUP.....	26
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	29
TEST PROCEDURE	29
FCC §15.407(a) & §15.407(e)–EMISSION BANDWIDTH	30
APPLICABLE STANDARD	30
TEST PROCEDURE	30
FCC §15.407(a) (1) (3) – CONDUCTED TRANSMITTER OUTPUT POWER	31
APPLICABLE STANDARD	31
TEST PROCEDURE	31
FCC §15.407(a) (1) (3) - POWER SPECTRAL DENSITY	32
APPLICABLE STANDARD	32
TEST PROCEDURE	32
Appendix - TEST DATA.....	33
ENVIRONMENTAL CONDITIONS & TEST INFORMATION.....	33
AC POWER LINE CONDUCTED EMISSIONS.....	34
TRANSMITTER UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS.....	38
EMISSION BANDWIDTH.....	77
CONDUCTED TRANSMITTER OUTPUT POWER.....	99

POWER SPECTRAL DENSITY100

EUT PHOTOGRAPHS112

TEST SETUP PHOTOGRAPHS113

REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA240327005-00E	R1V1	2024-07-12	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	WISEASY TECHNOLOGY PTE. LTD.		
Product Name:	Smart Payment Tablet		
Tested Model	T2		
Power Supply:	DC 3.87V powered by battery and DC 5V/9V/12V charging by adapter		
Maximum Average Output Power:	Mode:	B1:	B4:
	802.11a:	14.22 dBm	13.15 dBm
	802.11ac20:	14.15 dBm	12.96 dBm
	802.11ac40:	14.08 dBm	12.94 dBm
	802.11ac80:	11.05 dBm	12.58 dBm
RF Function:	5G Wi-Fi		
Operating Band/Frequency:	Band 1:5150~5250 MHz, Band 4: 5725~5850 MHz		
Channel Number:	Band 1: 7, Band 4: 8		
Channel Separation:	802.11a/ac20: 20MHz; 802.11ac40:40 MHz, 802.11ac80: 80 MHz		
Modulation Type	OFDM		
Antenna Type:	FPC Antenna		
★Maximum Antenna Gain:	Band 1: 2.87 dBi Band 4: 4.09 dBi		

Adapter Information:

Model: 235A-020A-1A1C

Input: AC100-240V 50/60Hz 600mA

Output: USB-C 5.0V-3.0A, 9.0V-2.0A, 12.0V-1.67A

USB-A 5.0V-3.0A, 9.0V-2.0A, 12.0V-1.5A

USB-A+C Total 5.0V-3.0A

Note: The maximum antenna gain was declared by the manufacturer.

All measurement and test data in this report was gathered from production sample serial number: RKSA240327005-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-03-27.)

Objective

This type approval report is prepared for *WISEASY TECHNOLOGY PTE. LTD.* 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.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Kunshan).

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN5055.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

For **5150~5250 MHz** band, test channel list is as below,

802.11a/ac20 mode Channel 36, 40, 48 were tested.

802.11ac40mode Channel 38, 46 were tested.

802.11ac80 mode Channel 42 was tested.

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

For **5725~5850 MHz** band,

802.11a/ac20 mode Channel 149, 157, 165 were tested.

802.11ac40 mode Channel 151, 159 were tested.

802.11ac80 mode Channel 155 was tested.

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

Note: The system support 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80, the 802.11 n ht20/n ht40 were reduced since the identical parameters with 802.11ac vht20 and vht40.

EUT Exercise Software

RF test tool: QRCT

The worst case was performed under:

5150MHz-5250MHz Band:

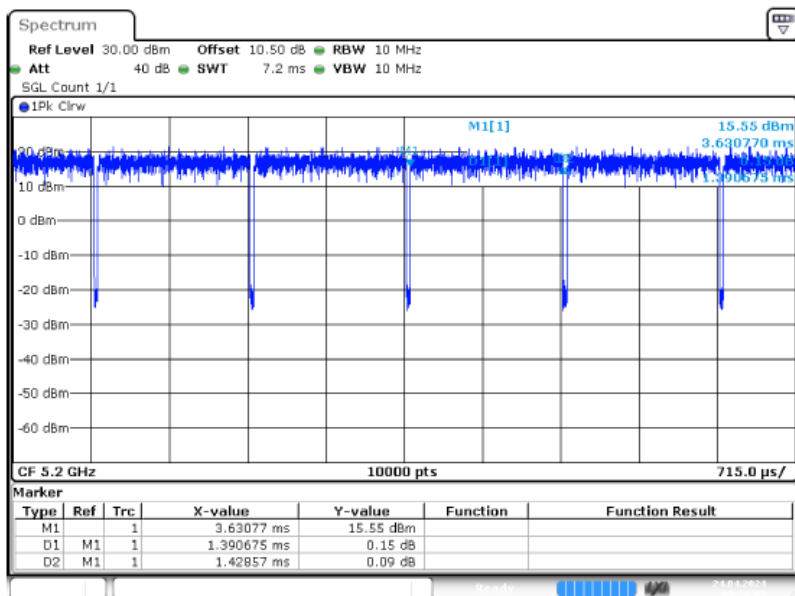
Mode	Data rate	Frequency (MHz)	★Power Level
802.11a	6 Mbps	5180	Default
		5200	Default
		5240	Default
802.11ac20	MCS0	5180	Default
		5200	Default
		5240	Default
802.11ac40	MCS0	5190	Default
		5230	Default
802.11ac80	MCS0	5210	Default

Note: The power level was declared by the applicant.

5725MHz-5850MHz Band:

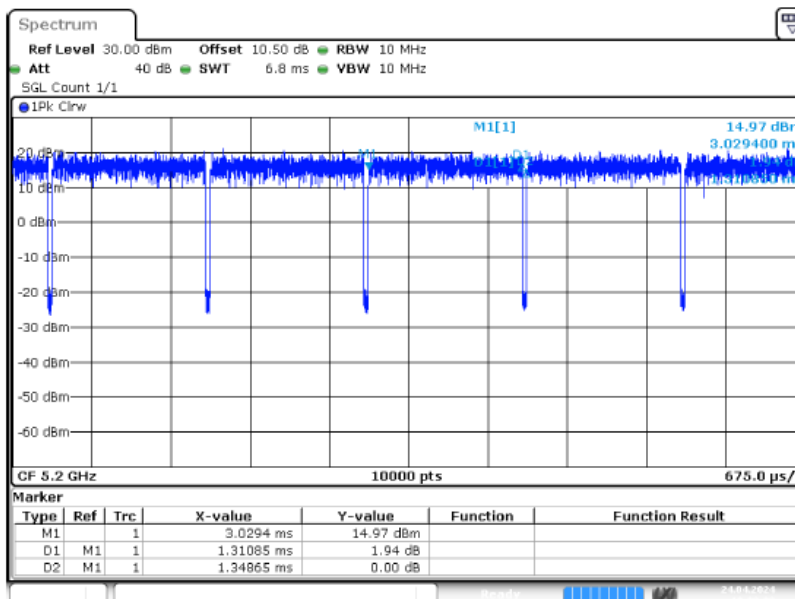
Mode	Data rate	Channel	★Power Level
802.11a	6 Mbps	5745	Default
		5785	Default
		5825	Default
802.11ac20	MCS0	5745	Default
		5785	Default
		5825	Default
802.11ac40	MCS0	5755	Default
		5795	Default
802.11ac80	MCS0	5775	Default

Note: The power level was declared by the applicant.

Duty Cycle**5150MHz-5250MHz Band:****802.11a mode**

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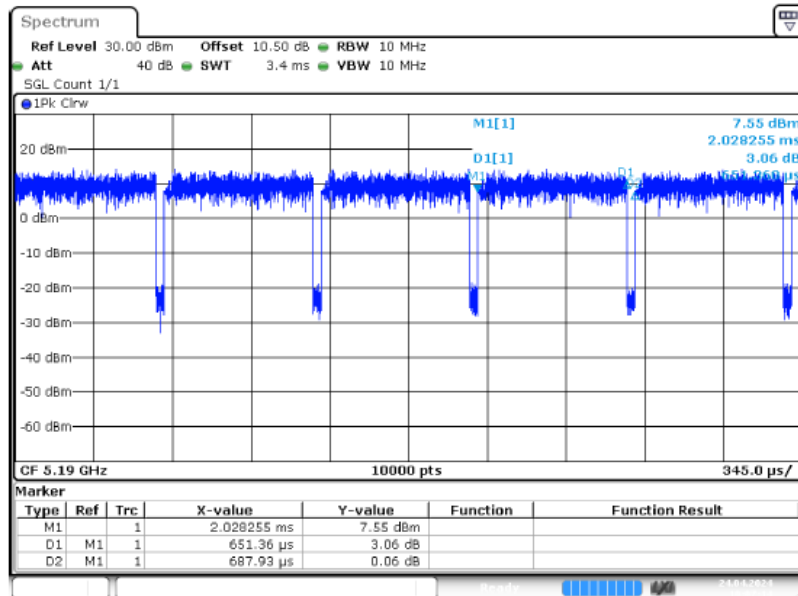
IDate: 24. APR. 2024 09:26:07

802.11ac20 mode

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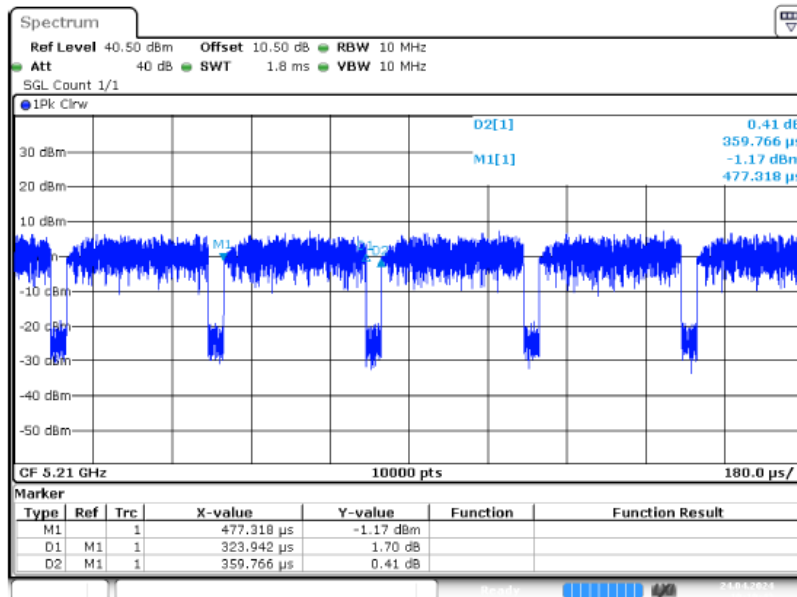
802.11 ac40 mode



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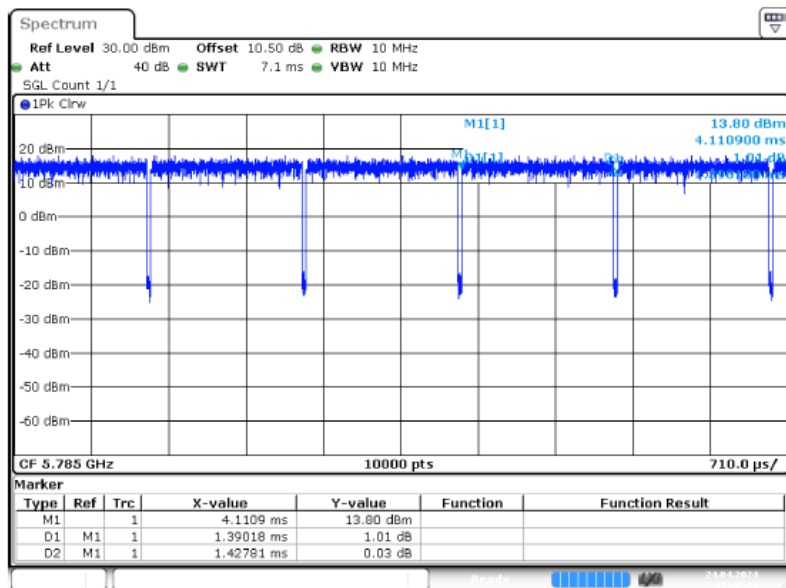
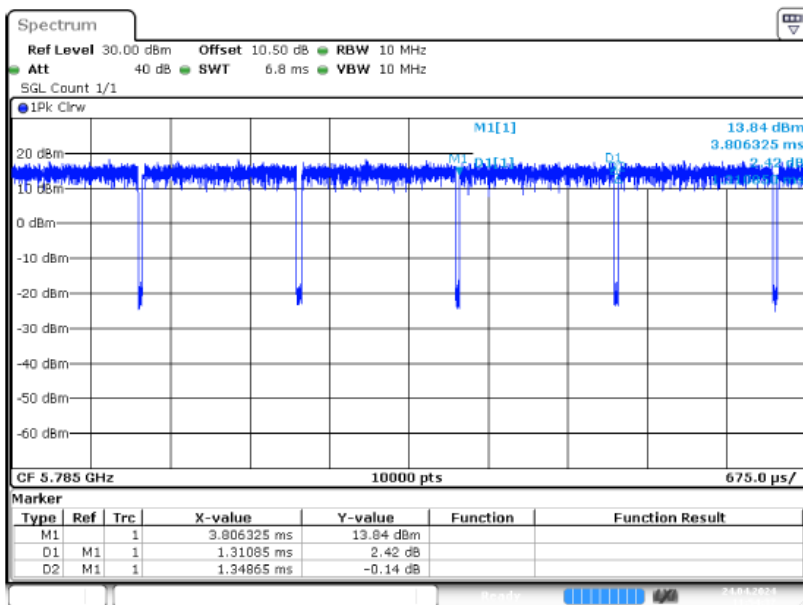
Date: 24.APR.2024 10:07:14

802.11 ac80 mode

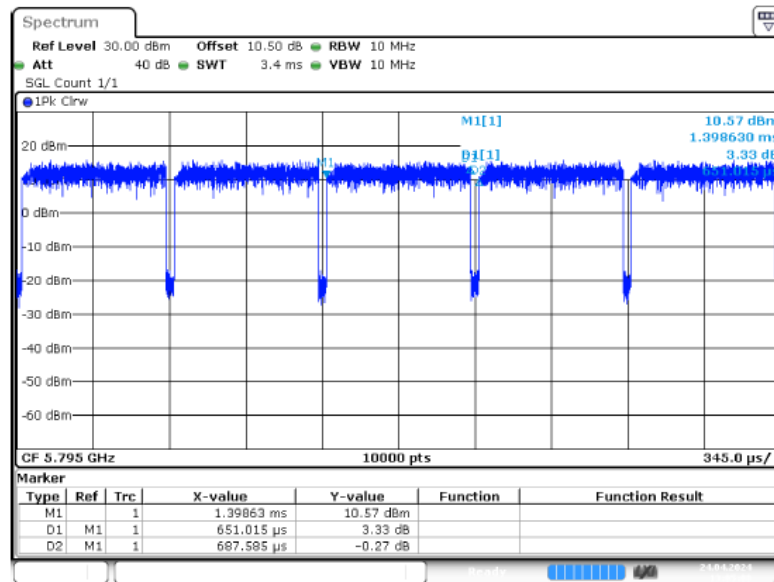


IProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24.APR.2024 10:19:43

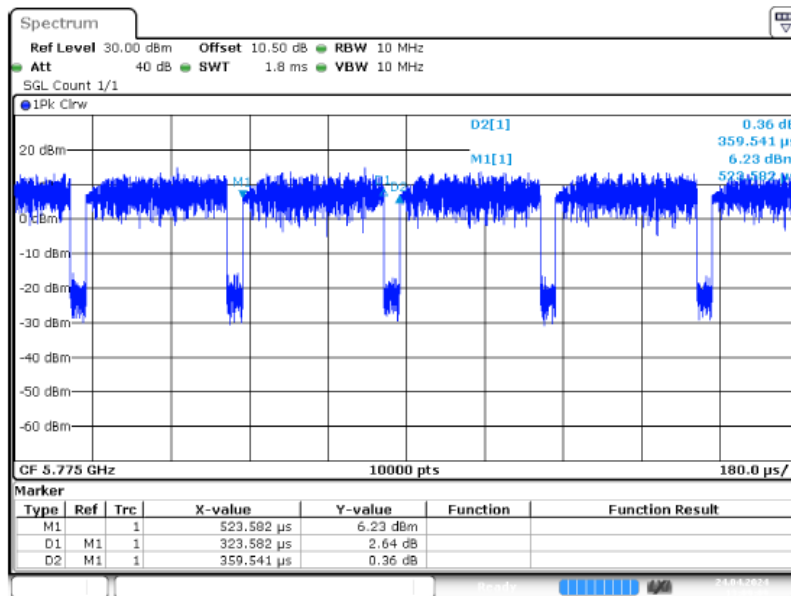
5725MHz-5850MHz Band:**802.11a mode****802.11 ac20 mode**

802.11 ac40 mode



ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24.APR.2024 13:05:09

802.11 ac80 mode



ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24.APR.2024 13:09:09

5150MHz-5250MHz Band:

Test Mode	Channel (MHz)	Transmission Duration (ms)	Transmission Period	Duty Cycle (%)
802.11a	5200	1.391	1.429	97.34
802.11 ac20	5200	1.311	1.348	97.26
802.11 ac40	5190	0.651	0.688	94.62
802.11 ac80	5210	0.324	0.360	90.00

5745MHz-5825MHz Band:

Test Mode	Channel (MHz)	Transmission Duration (ms)	Transmission Period	Duty Cycle (%)
802.11a	5745	1.390	1.428	97.34
802.11 ac20	5745	1.311	1.349	97.18
802.11 ac40	5755	0.651	0.688	94.62
802.11 ac80	5775	0.324	0.360	90.00

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

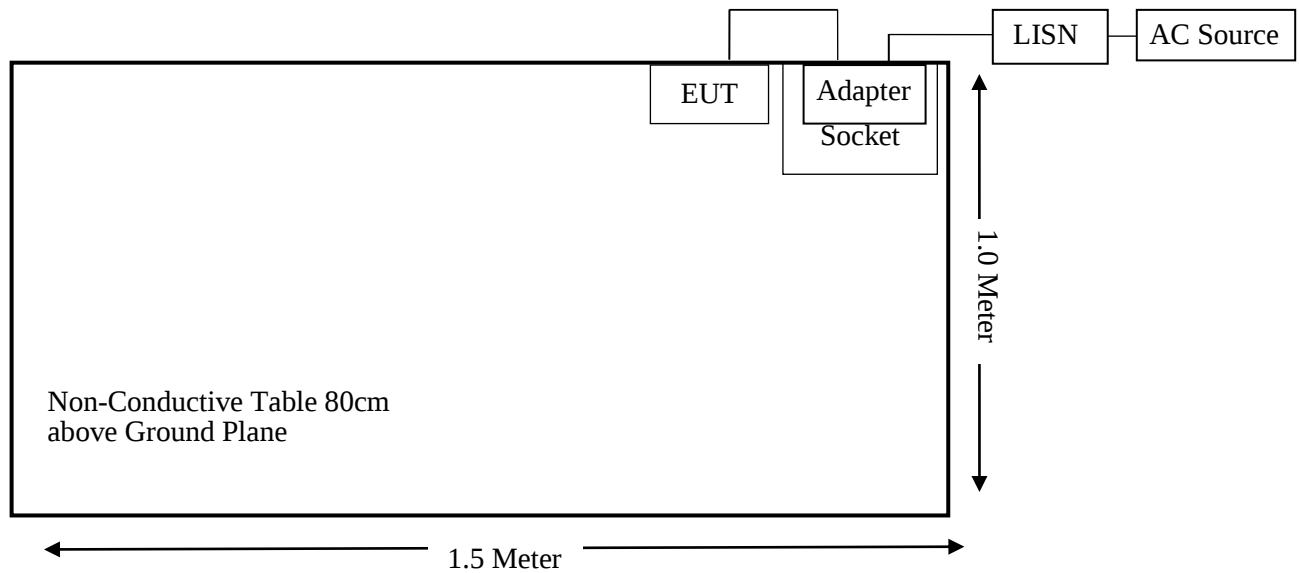
External I/O Cable

Cable Description	Length (m)	From Port	To
USB Cable	1.0	EUT/Base	Adapter
Power Cable	1.0	Adapter	LISN/AC Source

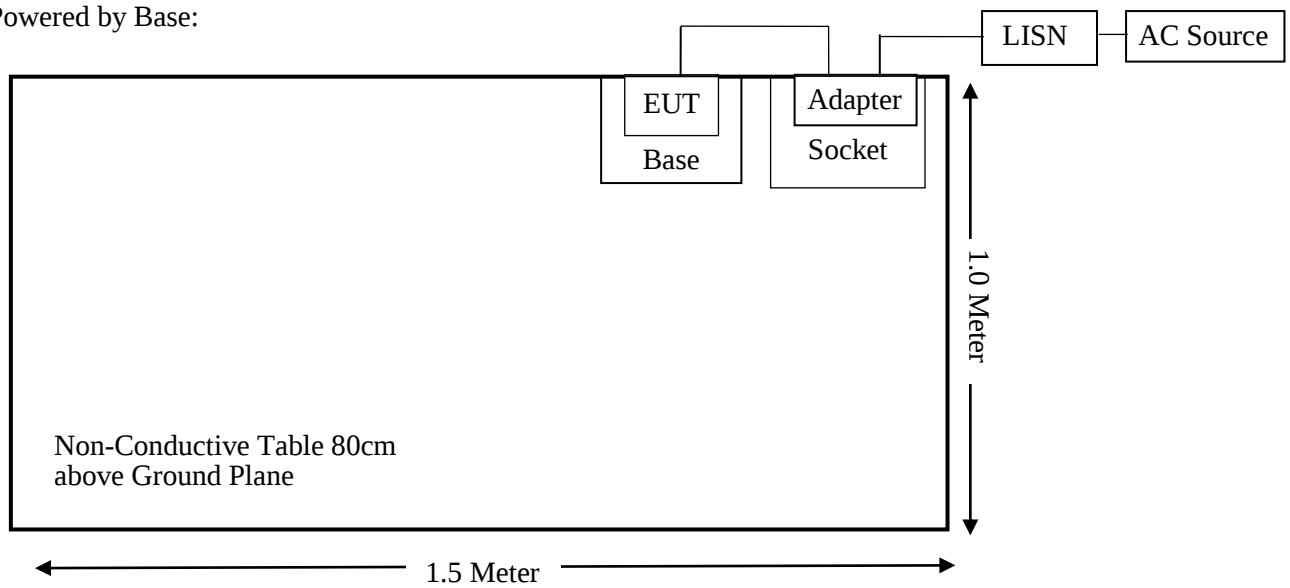
Block Diagram of Test Setup

For Conducted Emissions:

Powered by adapter:

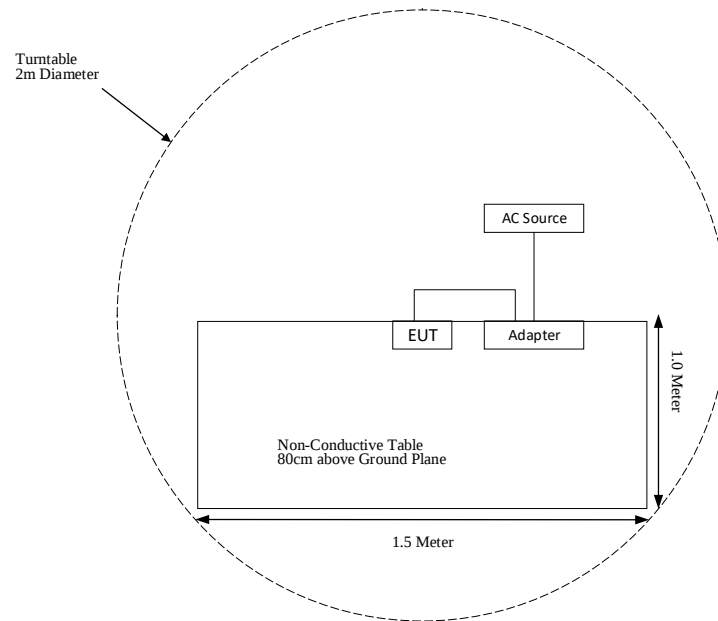


Powered by Base:

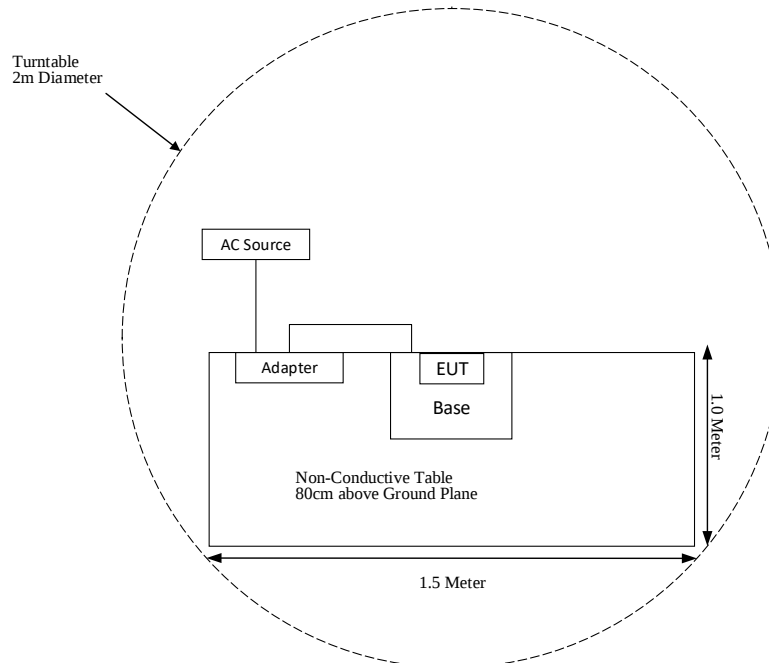


For Radiated Emissions (Below 1GHz):

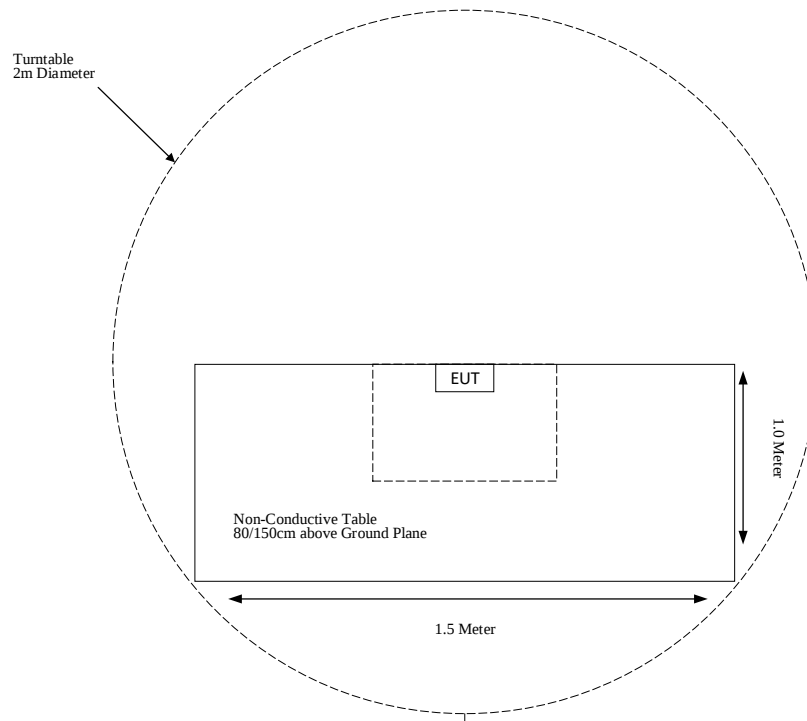
Powered by Adapter:



Powered by Base:



For Radiated Emissions (Above 1GHz):



UMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207 & §15.407(b) (9)	AC Power Line Conducted Emissions	Compliant
§15.205 & §15.209 & §15.407(b) (1), (4), (8), (9), (10)	Undesirable Emission & Restricted Bands	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a) (1) (3)	Conducted Transmitter Output Power	Compliant
§15.407(a) (1) (3)	Power Spectral Density	Compliant
§15.247 (I), §1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-04-23	2025-04-22
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
Sonoma Instrument	Amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
Narda	6 dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2023-12-02	2024-12-01
ETS-LINDGREN	Horn Antenna	3116	2516	2023-12-08	2024-12-07
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
SELECTOR	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2023-08-05	2024-08-04
Narda	Attenuator	10dB	010	2024-04-24	2025-04-23
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-05-23	2025-05-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-05-23	2025-05-22
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-05-23	2025-05-22
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-05-23	2025-05-22
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40-N	103298	2024-04-24	2025-04-23
Anritsu	Power Sensor	MA24418A	12621	2023-09-27	2024-09-26
Narda	Attenuator	10dB	010	2024-04-24	2025-04-23
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	101746	2024-04-23	2025-04-22
Rohde & Schwarz	LISN	ENV216	101115	2024-04-23	2025-04-22
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	0357.8810.54	2023-11-17	2024-11-16
MICRO-COAX	Coaxial Cable	Cable-15	015	2024-05-23	2025-05-22

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

FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculation Data:

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)	MPE Ratio
		(dBi)	(numeric)	(dBm)	(mW)				
BT	2402-2480	1.31	1.35	11.5	14.13	20	0.0038	1.0	0.0038
BLE		1.31	1.35	6.5	4.47	20	0.0012	1.0	0.0012
2.4G Wi-Fi	2412-2462	1.31	1.35	24.5	281.84	20	0.0757	1.0	0.0757
5G Wi-Fi	5150-5250	2.87	2.42	14.5	28.18	20	0.0109	1.0	0.0109
	5725-5850	4.09	2.42	13.5	22.39	20	0.0114	1.0	0.0114
GSM850 (GPRS/EGPRS)	824-849	-1.46	0.71	26.24	420.73	20	0.0598	0.5493	0.1089
PCS1900 (GPRS/EGPRS)	1850-1910	0.38	1.09	22.74	187.93	20	0.0407	1.0	0.0407
WCDMA Band II	1850-1910	0.38	1.09	23	199.53	20	0.0433	1.0	0.0433
WCDMA Band IV	1710-1755	1.33	1.36	23	199.53	20	0.0540	1.0	0.0540
WCDMA Band V	824-849	-1.46	0.71	23	199.53	20	0.0284	0.5493	0.0517
LTE Band 2	1850-1910	0.38	1.09	22.5	177.83	20	0.0386	1.0	0.0386
LTE Band 4	1710-1755	1.33	1.36	23	199.53	20	0.0540	1.0	0.0540
LTE Band 5	824-849	-1.46	0.71	22.5	177.83	20	0.0253	0.5493	0.0461
LTE Band 7	2500-2570	1.51	1.42	24	251.19	20	0.0710	1.0	0.0710
LTE Band 12	699-716	-4.98	0.32	23	199.53	20	0.0126	0.466	0.0270
LTE Band 13	777-787	-3.1	0.49	22.5	177.83	20	0.0173	0.518	0.0334
LTE Band 14	788-798	-3.06	0.49	22.5	177.83	20	0.0175	0.5253	0.0333
LTE Band 17	704-716	-4.98	0.32	23.5	223.87	20	0.0141	0.4693	0.0300
LTE Band 25	1850-1915	0.38	1.09	23.5	223.87	20	0.0485	1.0	0.0485
LTE Band 26	814-849	-1.46	0.71	23	199.53	20	0.0284	0.5427	0.0523
LTE Band 66	1710-1780	1.33	1.36	23	199.53	20	0.0540	1.0	0.0540
LTE Band 71	663-698	-6	0.25	22.5	177.83	20	0.0089	0.442	0.0201
LTE Band 38	2570-2620	0.81	1.21	23	199.53	20	0.0480	1.0	0.0480
LTE Band 41	2535-2655	1.41	1.38	23	199.53	20	0.0548	1.0	0.0548
NFC	13.56	0.00	1.00	-13.92	0.04	20	<0.0001	0.98	<0.0001

NFC field strength is 81.28dBμV/m = -13.92dBm (0.04mW) EIRP. That equal to antenna gain is 0dBi and used the EIRP value as conducted power.

Note:

1. For the above tune up power were declared by the manufacturer.
2. For NFC: EIRP[dBm] = E[dBμV/m]- 95.2 for d = 3 m.

GSM850: Maximum Tune-up output power with 1 slot is 33dBm, 2 slot is 32.00 dBm, 3 slot is 30.50 dBm, 4 slot is 29.00 dBm so the max tune-up time based Ave. power compared to slot Ave. power is 4slot 26.24dBm

PCS1900: Maximum Tune-up output power with 1 slot is 29.50 dBm, 2 slot is 29.0 dBm, 3 slot is 27.0 dBm, 4 slot is 25.5 dBm so the max tune-up time based Ave. power compared to slot Ave. power is 22.74dBm

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.26 dB	-3 dB

Note:

1. For the above tune up power were declared by the manufacturer.
2. 2.4G Wi-Fi , GSM850 and NFC can transmit simultaneously (worst case) ..

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.0757 + 0.1089 + 0.0001 = 0.1847 < 1.0$$

Result: The device meet FCC MPE at 20 cm distance.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407, if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has an FPC antenna, which the antenna gain is 2.87dBi for band 1 and 4.09dBi for band 4, fulfill the requirement of this section. Please refer to the EUT photos.

Antenna Type	Frequency Range	Max. Antenna Gain	Input impedance
FPC Antenna	5150~5250 MHz	2.87dBi	50Ω
	5725~5850 MHz	4.09dBi	

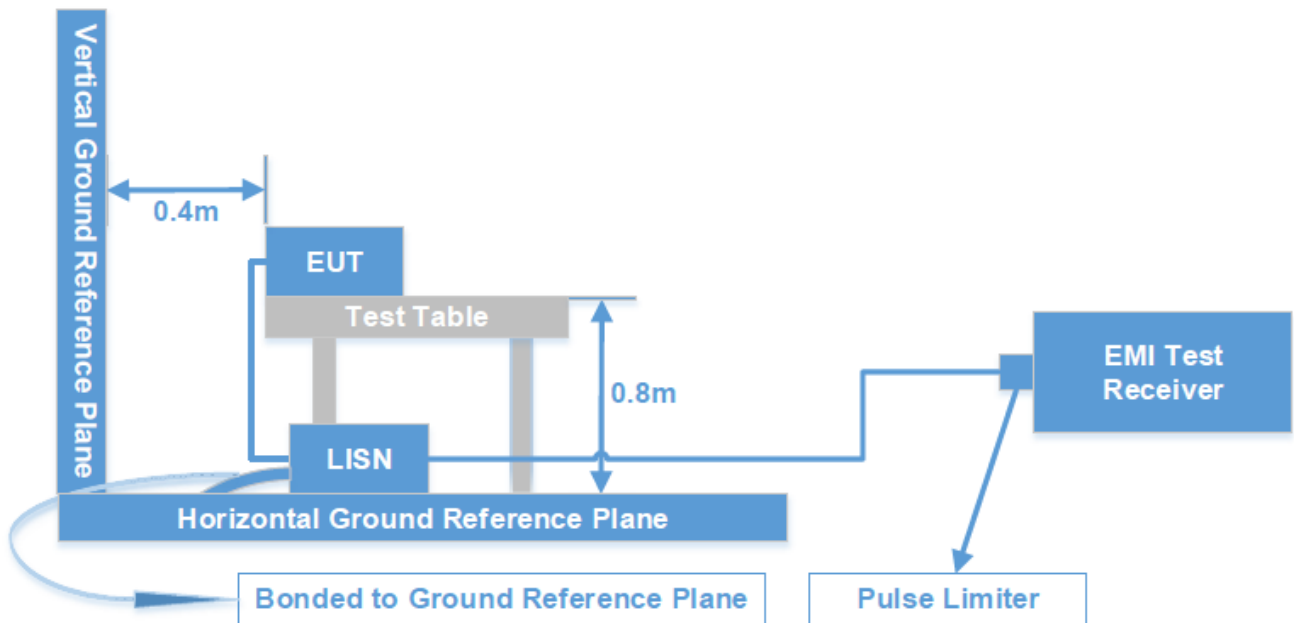
Result: Compliant.

FCC §15.407 (b) (9) §15.207 (a) – AC POWER LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a), §15.407(b) (9)

Test System Setup



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	RBW	VBW
150 kHz - 30 MHz	9 kHz	30 kHz

Test Procedure

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

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

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

Level & Over Limit Calculation

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\begin{aligned}\text{Factor (dB)} &= \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)} \\ \text{Level (dB}\mu\text{V)} &= \text{Read level (dB}\mu\text{V)} + \text{Factor (dB)}\end{aligned}$$

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 above the limit. The equation for Over Limit calculation is as follows:

$$\text{Over Limit (dB)} = \text{Level (dB}\mu\text{V)} - \text{Limit (dB}\mu\text{V)}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data: See Appendix

§15.205 & §15.209 & §15.407(B) (1), (4), (8), (9), (10) – UNDESIRABLE EMISSION & RESTRICTED BANDS

Applicable Standard

FCC §15.407 (b) (1), (4), (8), (9); §15.209; §15.205;

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.

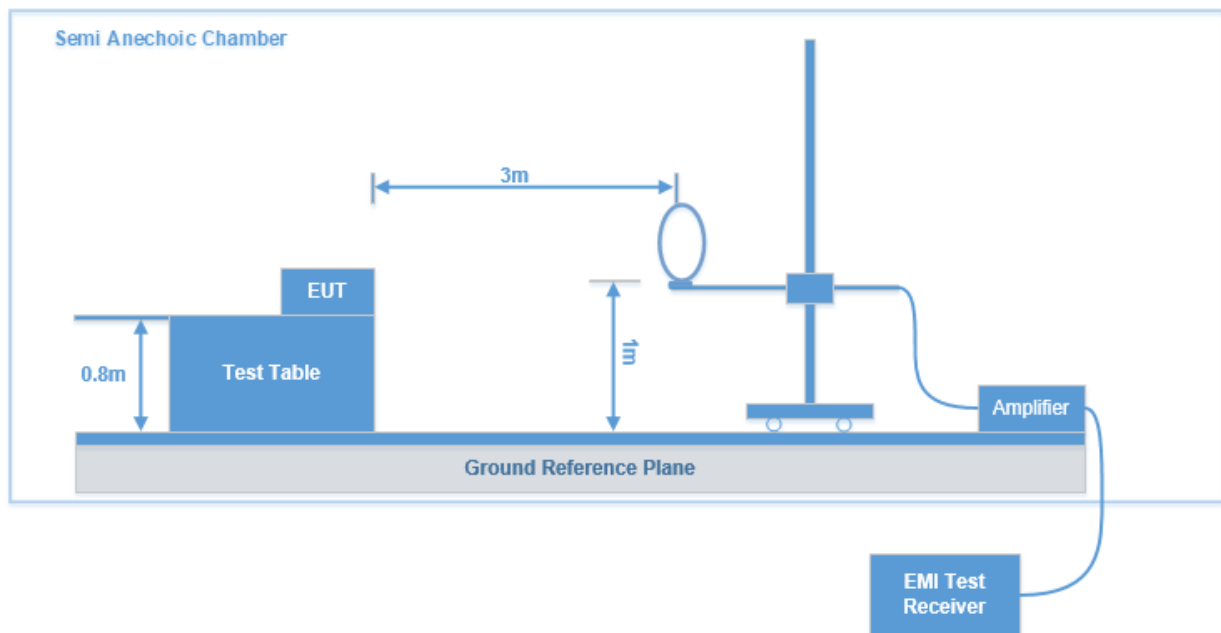
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to 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.

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

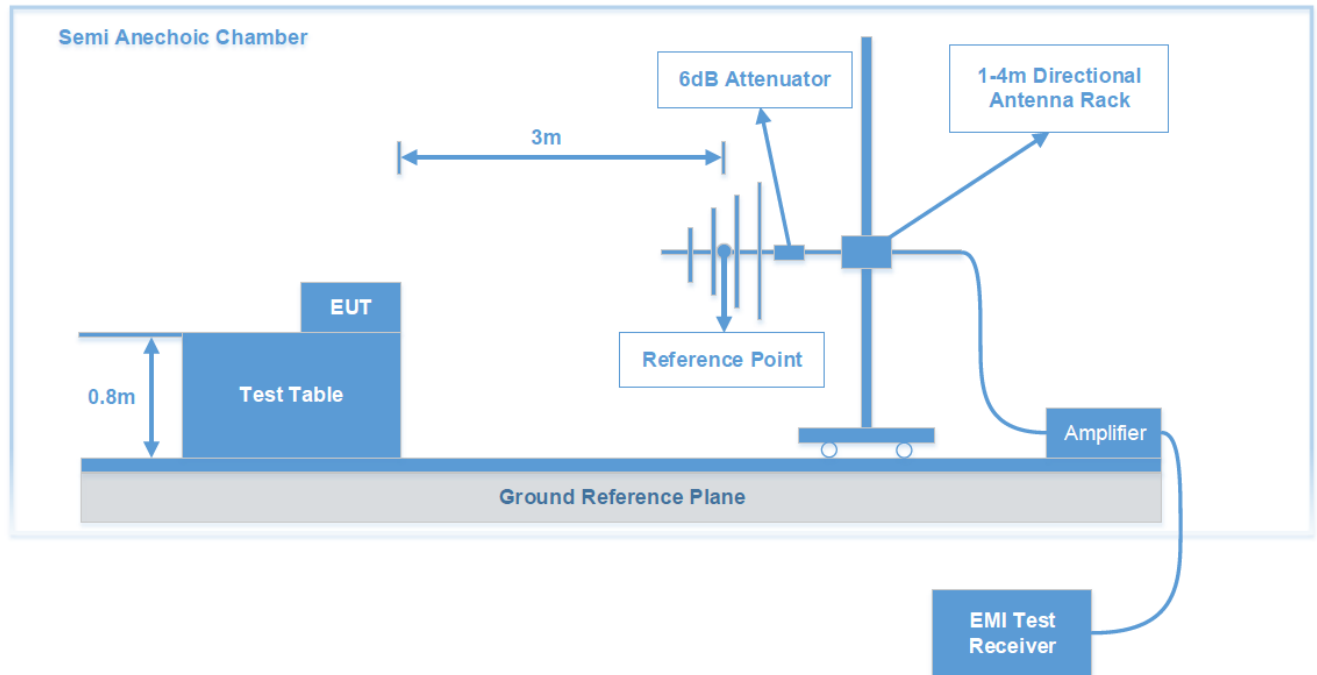
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} + 95.2$, for $d = 3$ meters.

Test System Setup

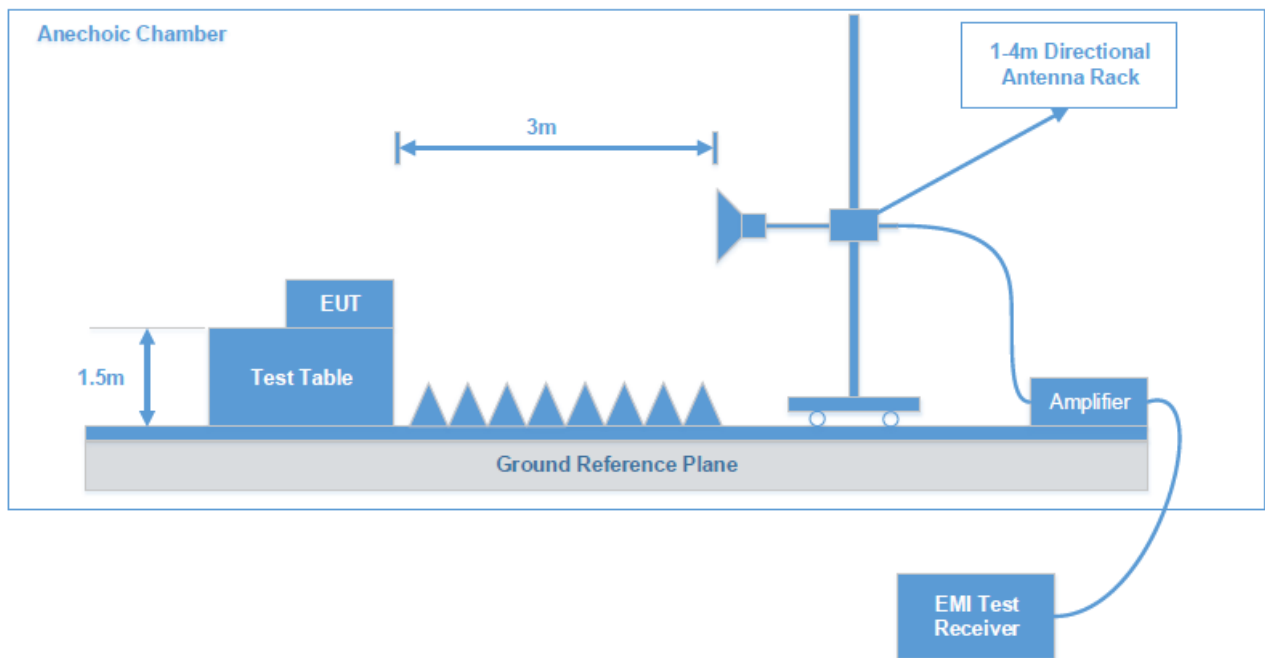
9 kHz-30MHz:

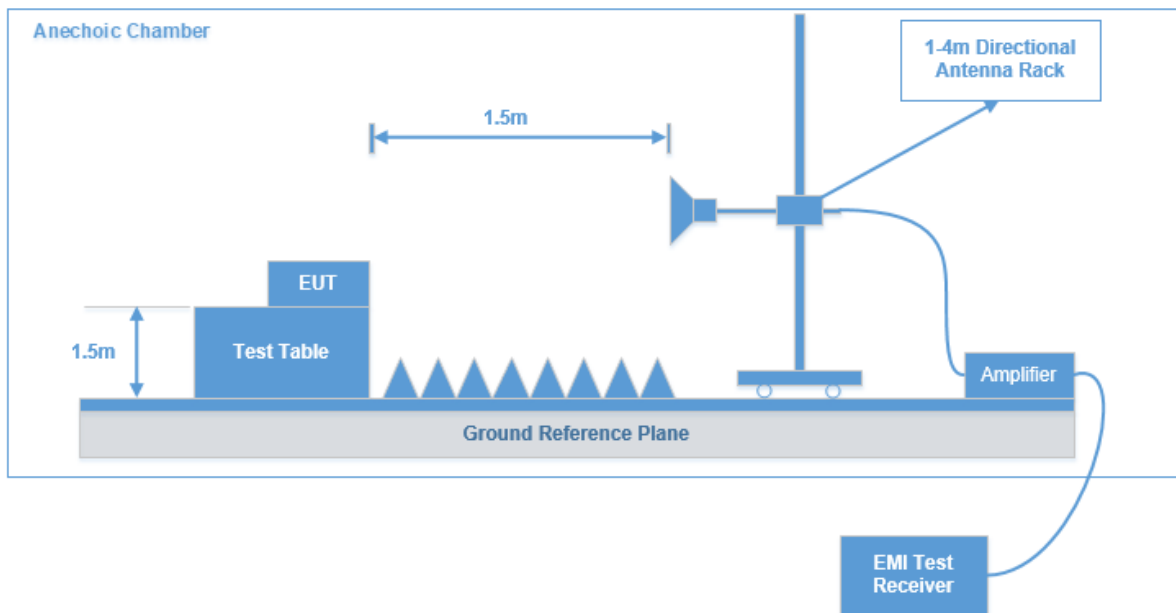


30MHz-1GHz:



1 GHz-18GHz:



18-40GHz:

The radiated emission tests were performed in the 3 meters test site for below 18GHz and 1.5m for 18-40 GHz, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 limits. The limit at 1.5m for 18-40 GHz is 80dB μ V/m (Peak) and 60dB μ V/m (Average)

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was 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.

The spacing between the peripherals was 10 cm.

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 Setup was set with the following configurations:

Frequency Range	RBW	VBW	IF B/W	Detector
9 kHz - 150 kHz	200 Hz	1 kHz	200 Hz	QP/Average
150 kHz - 30 MHz	9 kHz	30 kHz	9 kHz	QP/ Average
30 MHz - 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	/	Average

Test Procedure

During the radiated emission test, the adapter was connected to AC floor outlet. Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

Corrected Amplitude & Margin Calculation

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

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Corrected factor (dB/m)

Corrected factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Test Data: See Appendix

FCC §15.407(a) & §15.407(e)–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 band is 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

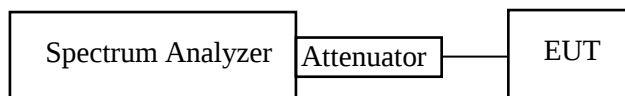
1. Emission Bandwidth (EBW)

- 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.



Test Data: See Appendix

FCC §15.407(a) (1) (3) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

According to §15.407(a)(1)

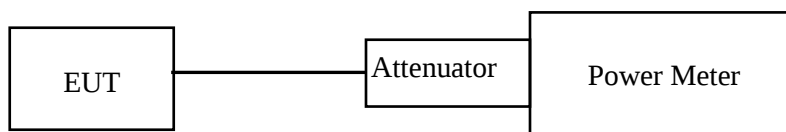
(ii) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

According to §15.407(a) (3)

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 colocated 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

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Data: See Appendix

FCC §15.407(a) (1) (3) - POWER SPECTRAL DENSITY

Applicable Standard

According to §15.407(a) (1)

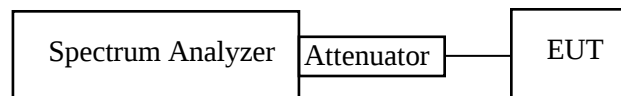
(ii) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

According to §15.407(a) (3)

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

The measurements are base on FCC KDB 789033 D02 General UNII Test Proceidyres New Rules v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices section F: Maximum power spectral density (PPSD) and method SA-1



Test Data: See Appendix

Appendix - TEST DATA

Environmental Conditions & Test Information

Test Item:	DUTY CYCLE	AC POWER-LINE CONDUCTED EMISSIONS LIMITS	UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS	
			9kHz - 1GHz	1 GHz - 40 GHz
Test Date:	2024-04-24	2024-04-24 to 2024-06-18	2024-04-28 to 2024-06-17	2024-04-24
Temperature:	16.0 °C	21.4-25.5 °C	20.0-25.8 °C	16.0 °C
Relative Humidity:	48 %	57-48 %	72-65 %	48 %
ATM Pressure:	102.5kPa	101.3-100.8 kPa	101.0-100.7 kPa	102.5kPa
Test Result:	/	Pass	Pass	Pass
Test Engineer:	Bard Liu	Frank Liu & Joe Zhang	Leah Li	Bard Liu

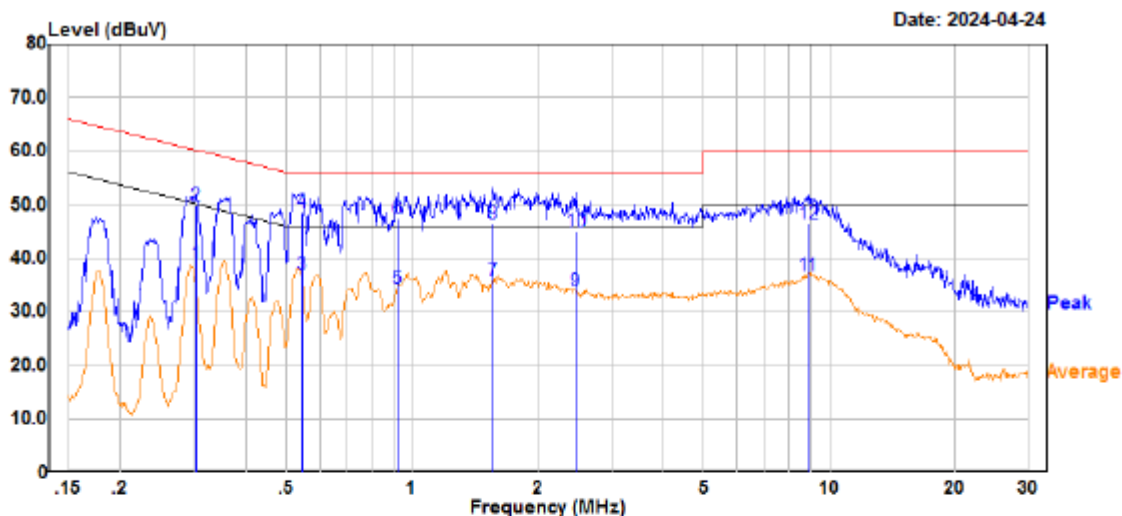
Test Item:	EMISSION BANDWIDTH	CONDUCTED TRANSMITTER OUTPUT POWER	POWER SPECTRAL DENSITY
Test Date:	2024-04-24	2024-04-24	2024-04-24
Temperature:	16.0 °C	16.0 °C	16.0 °C
Relative Humidity:	48 %	48 %	48 %
ATM Pressure:	102.5kPa	102.5kPa	102.5kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Bard Liu	Bard Liu	Bard Liu

AC POWER LINE CONDUCTED EMISSIONS

Powered by adapter:

Transmitting in maximum output power mode and channel of 802.11a mode high channel of 5150~5250MHz

Line

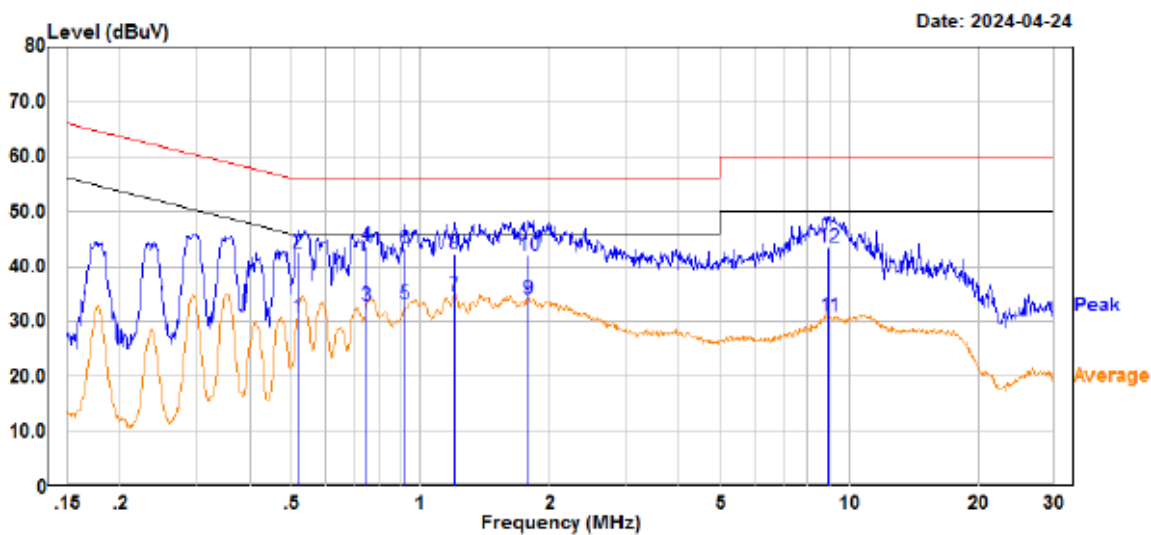


Trace: 1

Site : CE
Condition : FCC Part 15.207
: DET:Peak
Project No. : RKAS240327005
Model : T2
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 21.4℃
Humidity : 57%
Atmospheric pressure: 101.3kPa
Test Engineer : Frank Liu

	Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.303	18.79	20.04	38.83	50.16	-11.33 Average
2	0.303	29.79	20.04	49.83	60.16	-10.33 QP
3	0.543	17.10	19.97	37.07	46.00	-8.93 Average
4	0.543	28.60	19.97	48.57	56.00	-7.43 QP
5	0.921	14.70	19.68	34.38	46.00	-11.62 Average
6	0.921	27.60	19.68	47.28	56.00	-8.72 QP
7	1.561	15.80	19.88	35.68	46.00	-10.32 Average
8	1.561	26.60	19.88	46.48	56.00	-9.52 QP
9	2.457	13.79	20.06	33.85	46.00	-12.15 Average
10	2.457	24.99	20.06	45.05	56.00	-10.95 QP
11	8.847	16.70	19.94	36.64	50.00	-13.36 Average
12	8.847	26.50	19.94	46.44	60.00	-13.56 QP

Neutral

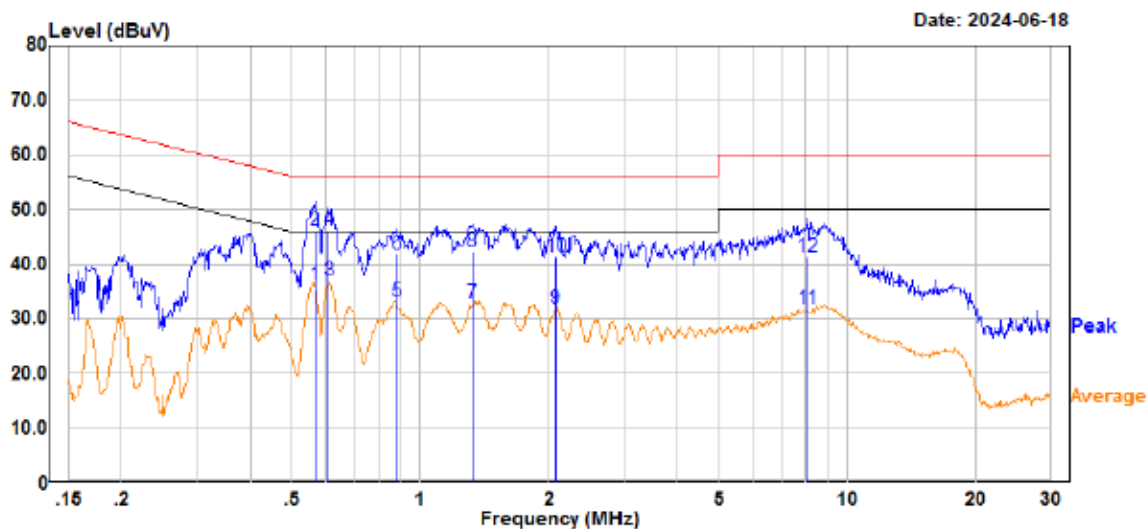


Site : CE
Condition : FCC Part 15.207
: DET:Peak
Project No. : RKAS240327005
Model : T2
Phase : N
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 21.4℃
Humidity : 57%
Atmospheric pressure: 101.3kPa
Test Engineer : Frank Liu

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.516	10.70	19.97	30.67	46.00	-15.33	Average
2	0.516	22.50	19.97	42.47	56.00	-13.53	QP
3	0.747	13.00	19.87	32.87	46.00	-13.13	Average
4	0.747	23.90	19.87	43.77	56.00	-12.23	QP
5	0.921	13.50	19.68	33.18	46.00	-12.82	Average
6	0.921	23.60	19.68	43.28	56.00	-12.72	QP
7	1.199	14.90	19.71	34.61	46.00	-11.39	Average
8	1.199	22.60	19.71	42.31	56.00	-13.69	QP
9	1.786	14.10	19.96	34.06	46.00	-11.94	Average
10	1.786	22.20	19.96	42.16	56.00	-13.84	QP
11	8.935	10.90	19.93	30.83	50.00	-19.17	Average
12	8.935	23.50	19.93	43.43	60.00	-16.57	QP

Powered by Base:

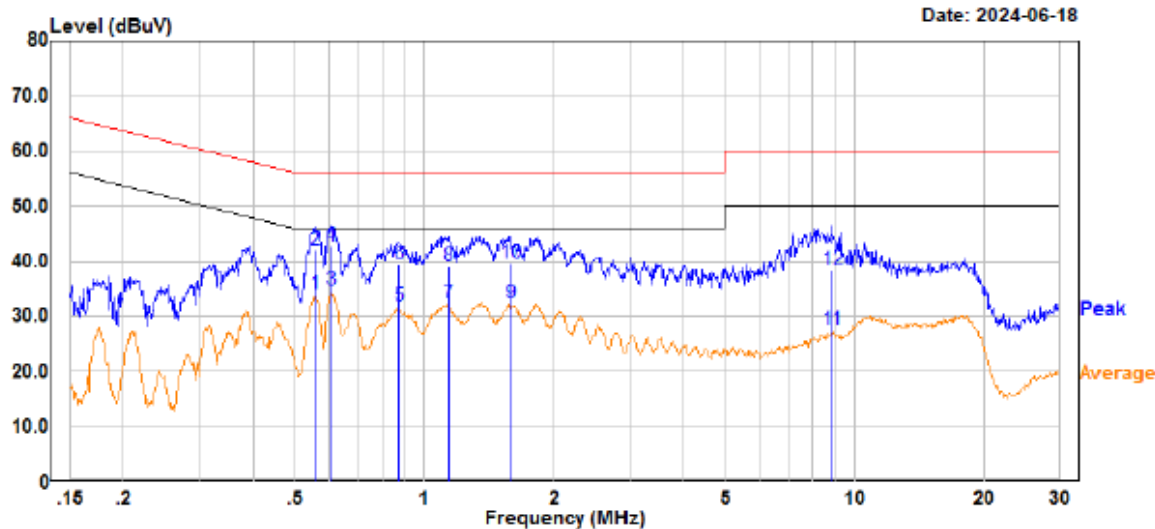
Line



Site : CE
Condition : FCC Part 15.207
: DET:Peak
Project No. : RKAS240327005
Model : T2
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 25.5°C
Humidity : 48%
Atmospheric pressure: 100.8kPa
Test Engineer : Joe Zhang

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.568	16.30	19.96	36.26	46.00	-9.74	Average
2	0.568	26.20	19.96	46.16	56.00	-9.84	QP
3	0.612	17.01	19.94	36.95	46.00	-9.05	Average
4	0.612	26.31	19.94	46.25	56.00	-9.75	QP
5	0.880	13.30	19.72	33.02	46.00	-12.98	Average
6	0.880	22.10	19.72	41.82	56.00	-14.18	QP
7	1.324	13.00	19.77	32.77	46.00	-13.23	Average
8	1.324	22.60	19.77	42.37	56.00	-13.63	QP
9	2.074	11.90	20.03	31.93	46.00	-14.07	Average
10	2.074	21.20	20.03	41.23	56.00	-14.77	QP
11	8.047	12.00	19.99	31.99	50.00	-18.01	Average
12	8.047	21.30	19.99	41.29	60.00	-18.71	QP

Neutral



Trace: 1

Site : CE
 Condition : FCC Part 15.207
 : DET:Peak
 Project No. : RKAS240327005
 Model : T2
 Phase : N
 Voltage : 120V/60Hz
 Mode : 5G WIFI
 Test Equipment : ENV216,ESR
 Temperature : 25.5°C
 Humidity : 48%
 Atmospheric pressure: 100.8kPa
 Test Engineer : Joe Zhang

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.556	14.10	19.96	34.06	46.00	-11.94 Average
2	0.556	22.10	19.96	42.06	56.00	-13.94 QP
3	0.609	14.81	19.94	34.75	46.00	-11.25 Average
4	0.609	22.81	19.94	42.75	56.00	-13.25 QP
5	0.871	12.31	19.72	32.03	46.00	-13.97 Average
6	0.871	19.61	19.72	39.33	56.00	-16.67 QP
7	1.141	12.70	19.68	32.38	46.00	-13.62 Average
8	1.141	19.50	19.68	39.18	56.00	-16.82 QP
9	1.585	12.49	19.89	32.38	46.00	-13.62 Average
10	1.585	19.79	19.89	39.68	56.00	-16.32 QP
11	8.847	7.70	19.94	27.64	50.00	-22.36 Average
12	8.847	18.40	19.94	38.34	60.00	-21.66 QP

TRANSMITTER UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Powered by adapter:

9 kHz-30MHz (Transmitting in maximum output power mode and channel)

The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

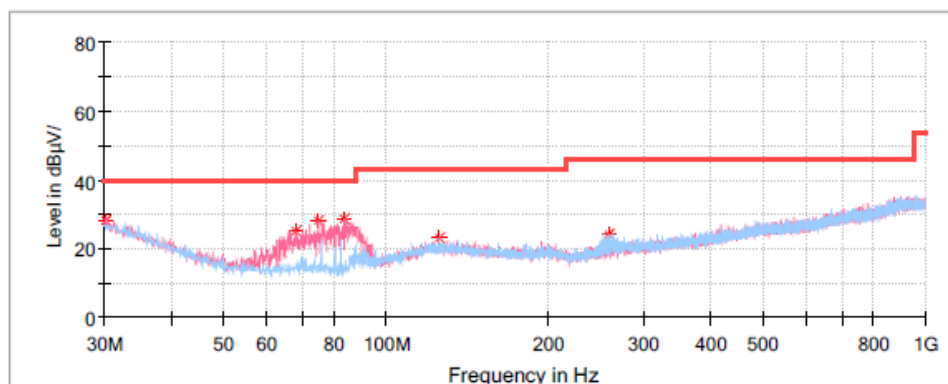
30MHz-1GHz(5150-5250MHz Band):

Transmitting in maximum output power mode 802.11a

Low Channel: 5180 MHz

Common Information

Project No:	RKSA240327005
EUT Model:	T2
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	20°C
Humidity:	72%
Barometric Pressure:	101.0kPa
Test Engineer:	Leah Li
Test Date:	2024/4/28

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB /m)
30.121250	28.06	40.00	11.94	V	-4.5
67.951250	25.36	40.00	14.64	V	-16.9
74.862500	28.37	40.00	11.63	V	-17.2
83.592500	28.57	40.00	11.43	V	-17.4
125.302500	22.96	43.50	20.54	H	-11.3
258.677500	24.22	46.00	21.78	H	-12.4

Middle Channel: 5200 MHz

Common Information

Project No: RKSA240327005

EUT Model: T2

Test Mode: 5G WIFI

Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Equipment: ESCI, JB3, 310N

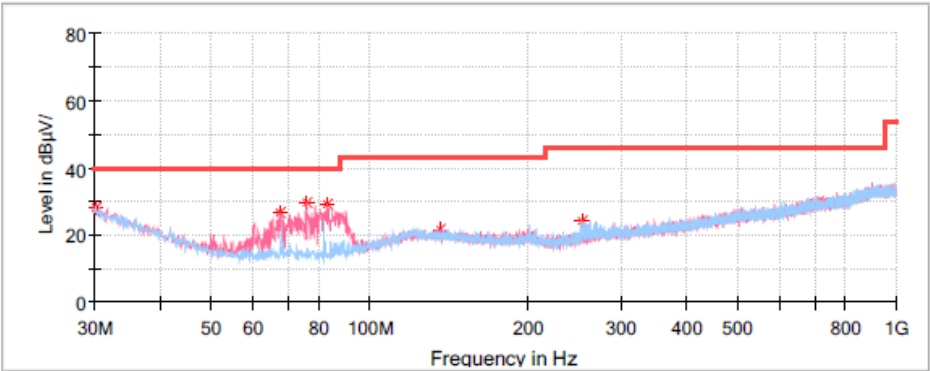
Temperature: 20°C

Humidity: 72%

Barometric Pressure: 101.0kPa

Test Engineer: Leah Li

Test Date: 2024/4/28



Critical Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.121250	28.36	40.00	11.64	H	-4.5
67.345000	26.50	40.00	13.50	V	-17.0
76.196250	29.48	40.00	10.52	V	-17.3
83.407500	29.31	40.00	10.69	V	-17.4
136.578750	21.80	43.50	21.70	V	-11.5
252.493750	23.99	46.00	22.01	H	-12.6

High Channel: 5240 MHz

Common Information

Project No: RKSA240327005

EUT Model: T2

Test Mode: 5G WIFI

Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Equipment: ESCI, JB3, 310N

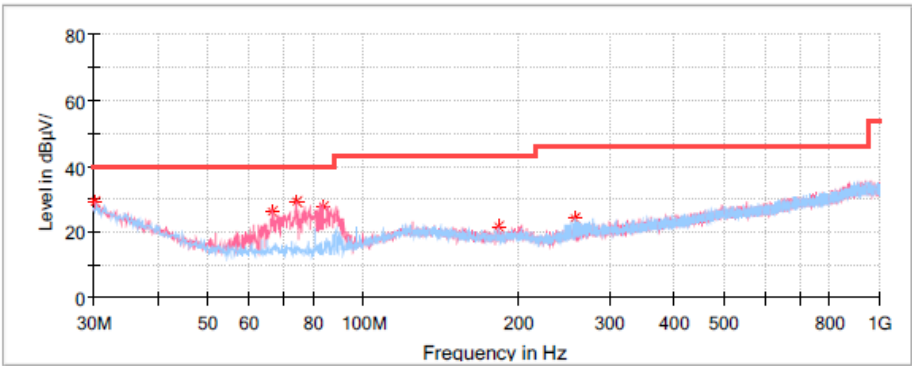
Temperature: 20°C

Humidity: 72%

Barometric Pressure: 101.0kPa

Test Engineer: Leah Li

Test Date: 2024/4/28



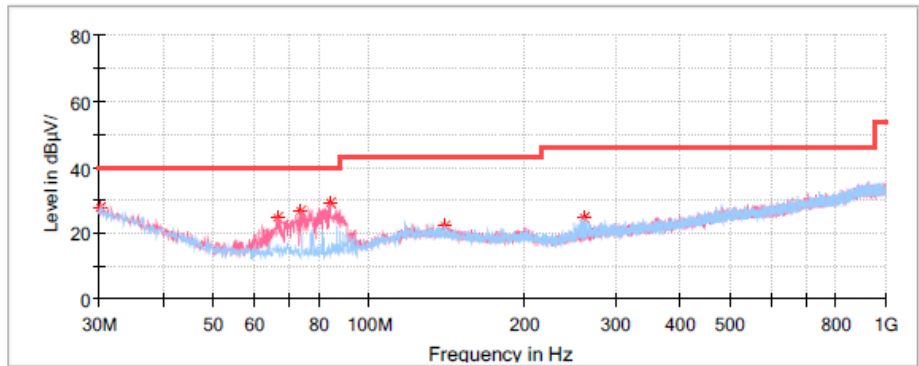
Critical Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.242500	29.02	40.00	10.98	V	-4.6
66.738750	26.00	40.00	14.00	V	-17.0
74.135000	29.38	40.00	10.62	V	-17.1
83.471250	27.86	40.00	12.14	V	-17.4
182.653750	21.79	43.50	21.71	V	-13.2
257.950000	24.26	46.00	21.74	H	-12.4

30MHz-1GHz(5725-5850MHz Band)
Transmitting in maximum output power mode 802.11a
Low Channel: 5745 MHz

Common Information

Project No:	RKSA240327005
EUT Model:	T2
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	20℃
Humidity:	72%
Barometric Pressure:	101.0kPa
Test Engineer:	Leah Li
Test Date:	2024/4/28

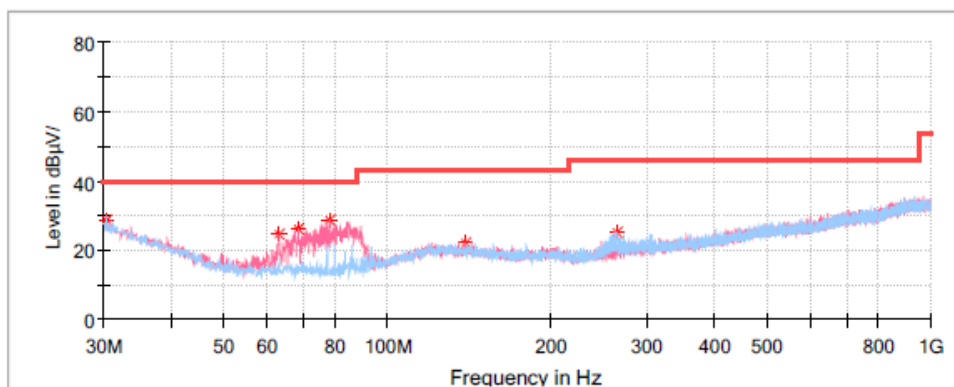


Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.121250	27.86	40.00	12.14	V	-4.5
66.375000	24.46	40.00	15.54	V	-17.0
74.013750	26.82	40.00	13.18	V	-17.1
84.441250	29.00	40.00	11.00	V	-17.4
140.458750	22.34	43.50	21.16	H	-11.6
260.738750	24.43	46.00	21.57	H	-12.3

Middle Channel: 5785 MHz**Common Information**

Project No: RKSA240327005
EUT Model: T2
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 20°C
Humidity: 72%
Barometric Pressure: 101.0kPa
Test Engineer: Leah Li
Test Date: 2024/4/28

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.363750	28.49	40.00	11.51	H	-4.7
63.222500	24.40	40.00	15.60	V	-17.3
68.678750	26.27	40.00	13.73	V	-16.9
78.378750	28.43	40.00	11.57	V	-17.4
139.488750	21.94	43.50	21.56	V	-11.5
264.861250	25.08	46.00	20.92	H	-12.0

High Channel: 5825 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RKSA240327005

T2

5G WIFI

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESCI、JB3、310N

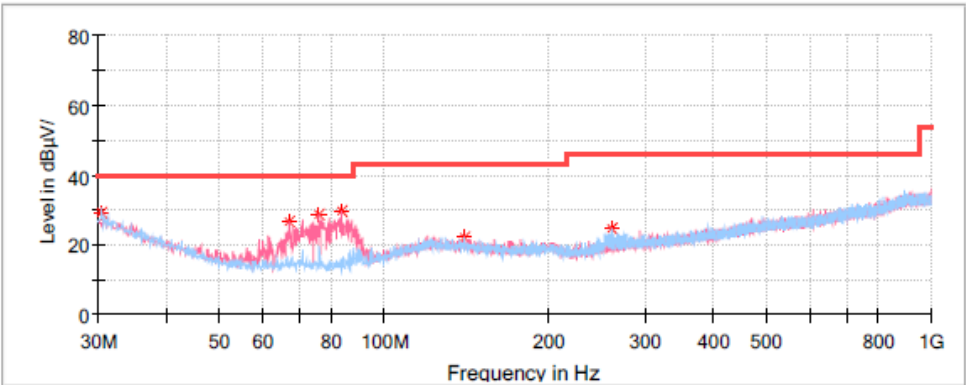
20℃

72%

101.0kPa

Leah Li

2024/4/28



Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.485000	28.99	40.00	11.01	H	-4.8
67.223750	26.52	40.00	13.48	V	-17.0
76.075000	28.86	40.00	11.14	V	-17.3
83.713750	29.64	40.00	10.36	V	-17.4
140.580000	22.35	43.50	21.15	H	-11.6
261.830000	24.89	46.00	21.11	H	-12.2

Powered by Base:

9 kHz-30MHz (Transmitting in maximum output power mode and channel)

The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

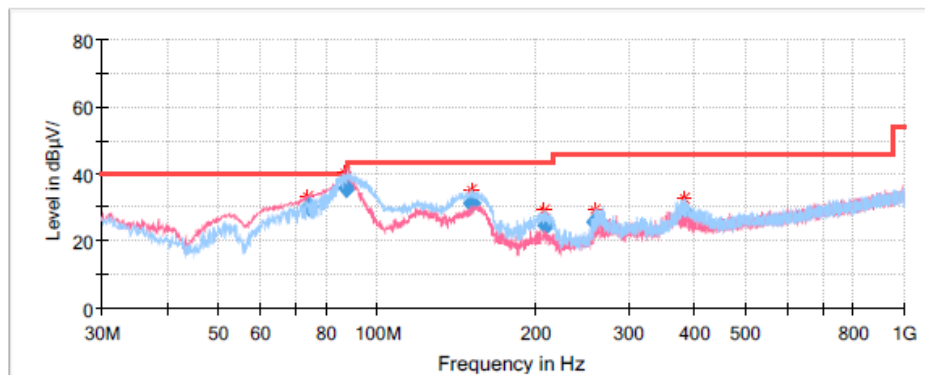
30MHz-1GHz(5150-5250MHz Band):

Transmitting in maximum output power mode 802.11a

Low Channel: 5180 MHz

Common Information

Project No:	RKSA240327005
EUT Model:	T2
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	25.8°C
Humidity:	65%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/6/17



Final Result

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
74.144900	29.94	40.00	10.06	V	-17.2
87.342450	35.70	40.00	4.30	V	-17.0
151.300750	31.40	43.50	12.10	H	-11.8
208.656050	24.87	43.50	18.63	H	-12.8
259.802650	25.91	46.00	20.09	H	-12.0
382.690050	28.69	46.00	17.31	H	-8.4

Middle Channel: 5200 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RKSA240327005

T2

5G WIFI

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESCI, JB3, 310N

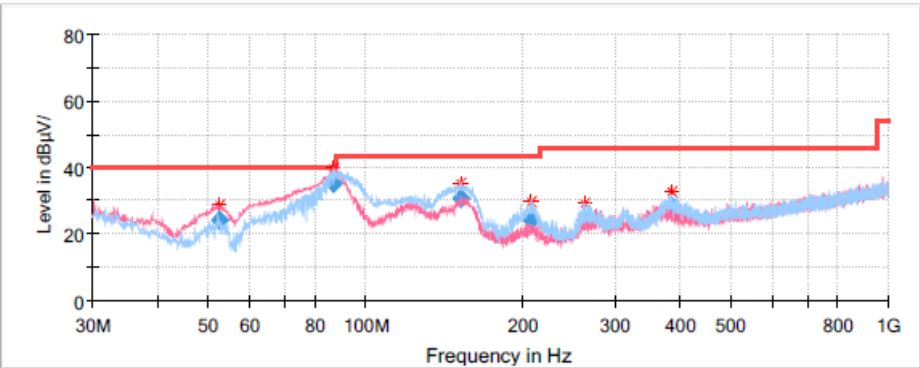
25.8℃

65%

100.7kPa

Leah Li

2024/6/17

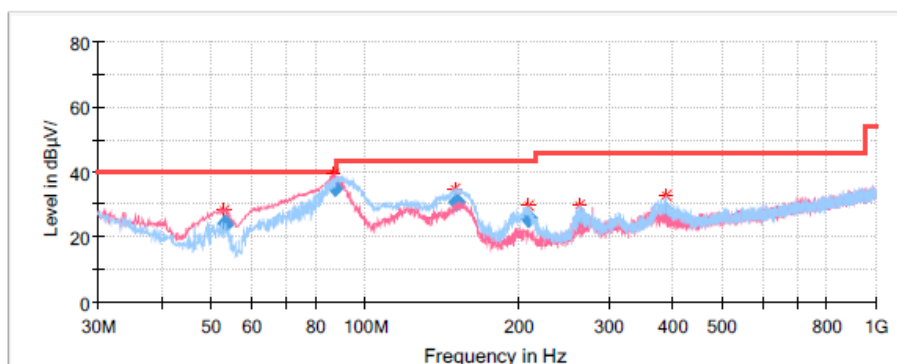


Final Result

Frequency (MHz)	QuasiPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
52.679950	24.24	40.00	15.76	V	-17.0
86.710350	34.99	40.00	5.01	V	-17.1
152.641050	30.70	43.50	12.80	H	-11.9
207.053150	24.14	43.50	19.36	H	-12.7
263.706050	24.01	46.00	21.99	H	-11.7
385.939700	28.02	46.00	17.98	H	-8.3

High Channel: 5240 MHz**Common Information**

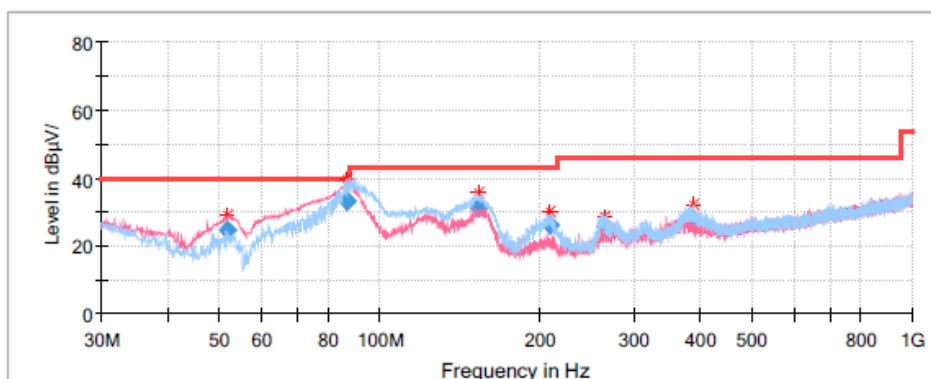
Project No: RKSA240327005
EUT Model: T2
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 25.8°C
Humidity: 65%
Barometric Pressure: 100.7kPa
Test Engineer: Leah Li
Test Date: 2024/6/17

**Final Result**

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
53.277850	24.26	40.00	15.74	V	-17.0
87.348350	35.03	40.00	4.97	V	-17.0
150.953350	30.84	43.50	12.66	H	-11.8
209.053500	25.67	43.50	17.83	H	-12.8
264.550450	25.85	46.00	20.15	H	-11.6
387.489050	27.45	46.00	18.55	H	-8.3

30MHz-1GHz(5725-5850MHz Band):**Transmitting in maximum output power mode 802.11a****Low Channel: 5745 MHz****Common Information**

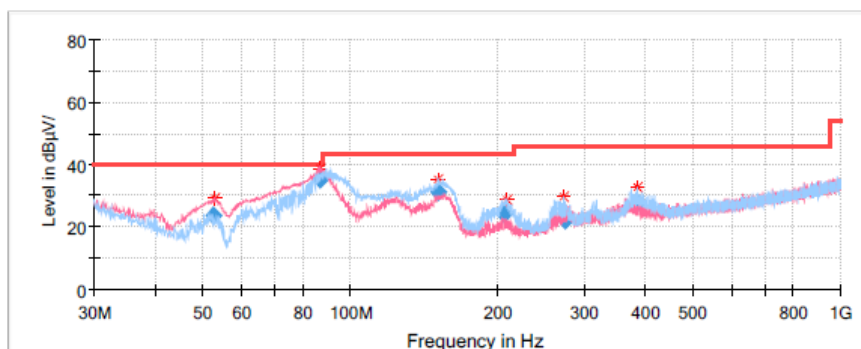
Project No:	RKSA240327005
EUT Model:	T2
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	25.8°C
Humidity:	65%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/6/17

**Final Result**

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
51.872100	24.44	40.00	15.56	V	-16.9
86.745000	33.00	40.00	7.00	H	-17.0
153.278650	31.32	43.50	12.18	H	-11.9
208.506950	26.01	43.50	17.49	H	-12.7
263.852350	25.76	46.00	20.24	H	-11.7
387.350250	27.80	46.00	18.20	H	-8.3

Middle Channel: 5785 MHz**Common Information**

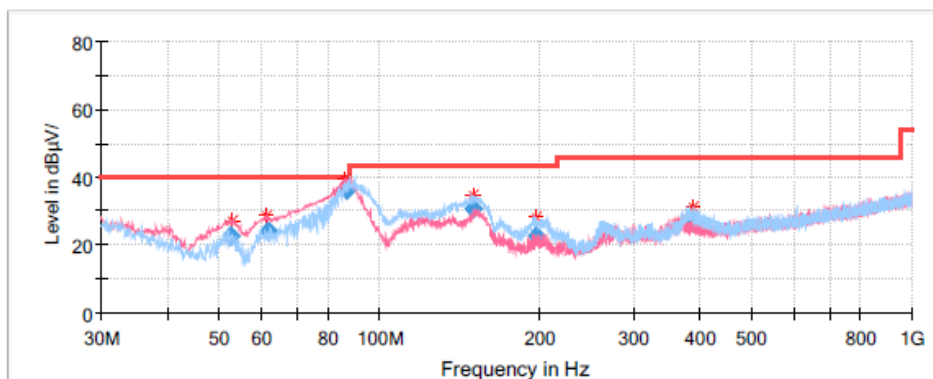
Project No:	RKSA240327005
EUT Model:	T2
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	25.8°C
Humidity:	65%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/6/17

**Final Result**

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
52.512400	23.75	40.00	16.25	V	-17.0
87.100000	35.31	40.00	4.69	V	-17.1
151.443950	31.25	43.50	12.25	H	-11.8
206.753450	24.28	43.50	19.22	H	-12.6
274.263500	22.28	46.00	23.72	H	-11.0
385.183500	27.67	46.00	18.33	H	-8.4

High Channel: 5825 MHz**Common Information**

Project No: RKSA240327005
EUT Model: T2
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 25.8°C
Humidity: 65%
Barometric Pressure: 100.7kPa
Test Engineer: Leah Li
Test Date: 2024/6/17

**Final Result**

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
52.737200	22.52	40.00	17.48	V	-17.0
61.694400	24.38	40.00	15.62	V	-17.5
86.692100	36.47	40.00	3.53	V	-17.1
149.559700	30.58	43.50	12.92	H	-11.8
197.375050	22.86	43.50	20.64	H	-12.3
388.149250	26.68	46.00	19.32	H	-8.3

1GHz-18GHz(5150-5250MHz Band):**802.11a Mode:****Low Channel: 5180MHz****Common Information**

Project No.:

RKAS240327005

Test Mode:

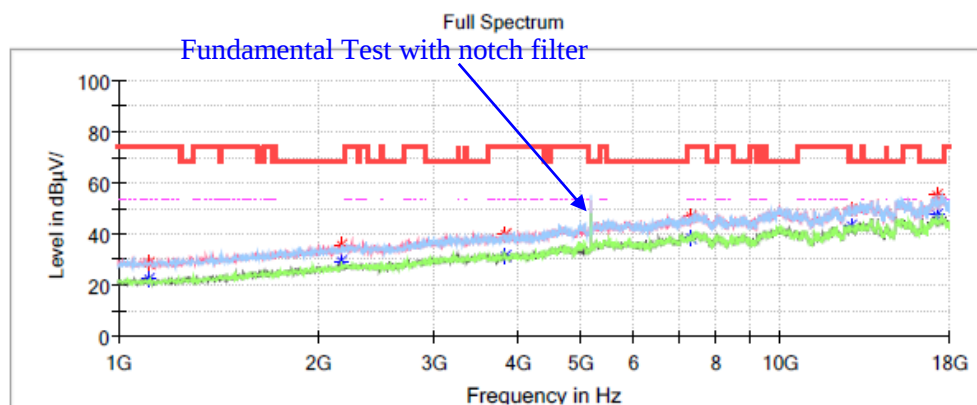
5G WiFi

Standard:

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Engineer:

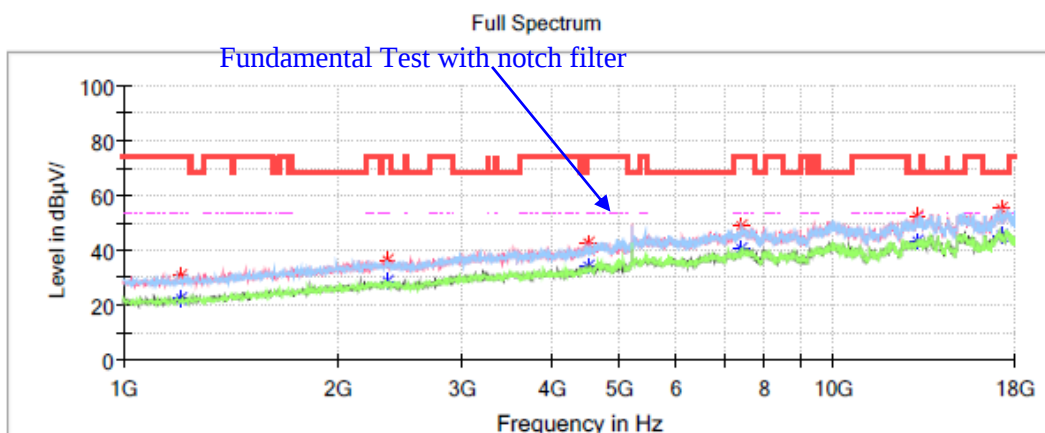
Peter Wang

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1110.500000	---	22.24	54.00	31.76	H	-15.2
1110.500000	29.01	---	74.00	44.99	H	-15.2
2171.300000	35.68	---	68.20	32.52	H	-10.3
3840.700000	---	31.81	54.00	22.19	V	-5.4
3840.700000	39.84	---	74.00	34.16	V	-5.4
7322.300000	---	38.14	54.00	15.86	V	4.0
7322.300000	46.71	---	74.00	27.29	V	4.0
12815.000000	49.68	---	68.20	18.52	V	8.8
17207.800000	54.98	---	68.20	13.22	H	12.9

Middle Channel: 5200MHz**Common Information**

Project No.: RKAS240327005
Test Mode: 5G WiFi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

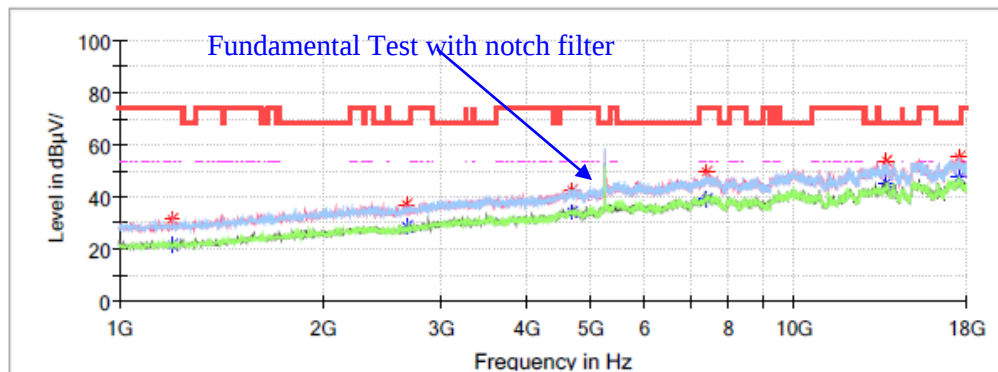
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1205.700000	---	22.32	54.00	31.68	V	-14.9
1205.700000	31.06	---	74.00	42.94	V	-14.9
2353.200000	---	28.51	54.00	25.49	V	-10.0
2353.200000	36.46	---	74.00	37.54	V	-10.0
4503.700000	---	33.99	54.00	20.01	V	-3.8
4503.700000	42.51	---	74.00	31.49	V	-3.8
7417.500000	---	40.23	54.00	13.77	H	4.1
7417.500000	48.77	---	74.00	25.23	H	4.1
13146.500000	52.61	---	68.20	15.59	V	9.6
17219.700000	55.26	---	68.20	12.94	H	12.9

High Channel: 5240MHz**Common Information**

Project No.: RKAS240327005
 Test Mode: 5G WiFi
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1200.600000	---	21.90	54.00	32.10	H	-14.9
1200.600000	31.68	---	74.00	42.32	H	-14.9
2657.500000	36.86	---	68.20	31.34	V	-9.2
4697.500000	---	34.52	54.00	19.48	H	-2.8
4697.500000	42.70	---	74.00	31.30	H	-2.8
7397.100000	---	39.34	54.00	14.66	V	4.1
7397.100000	49.30	---	74.00	24.70	V	4.1
13685.400000	54.00	---	68.20	14.20	V	10.8
17563.100000	55.25	---	68.20	12.95	V	13.4

802.11ac20 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5180 MHz						
1193.800000	---	22.48	54.00	31.52	H	-14.9
1193.800000	29.36	---	74.00	44.64	H	-14.9
2409.300000	36.26	---	68.20	31.94	V	-9.9
5182.000000	42.50	---	68.20	25.70	V	-0.5
10299.000000	50.39	---	68.20	17.81	V	7.5
13680.300000	52.65	---	68.20	15.55	V	10.8
17537.600000	54.30	---	68.20	13.90	V	13.5
Middle Channel: 5200 MHz						
1389.300000	---	22.84	54.00	31.16	H	-14.3
1389.300000	30.62	---	74.00	43.38	H	-14.3
3230.400000	39.45	---	68.20	28.75	V	-7.1
5275.500000	45.62	---	68.20	22.58	V	-0.1
9986.200000	49.54	---	68.20	18.66	V	7.8
13685.400000	53.88	---	68.20	14.32	V	10.8
17546.100000	54.49	---	68.20	13.71	V	13.4
High Channel: 5240 MHz						
1222.700000	---	21.95	54.00	32.05	H	-14.8
1222.700000	28.65	---	74.00	45.35	H	-14.8
2657.500000	35.17	---	68.20	33.03	V	-9.2
4755.300000	---	34.42	54.00	19.58	V	-2.5
4755.300000	44.18	---	74.00	29.82	V	-2.5
7641.900000	---	39.10	54.00	14.90	V	4.1
7641.900000	47.90	---	74.00	26.10	V	4.1
13750.000000	53.58	---	68.20	14.62	V	10.8
17498.500000	55.67	---	68.20	12.53	V	13.6

802.11ac40 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5190 MHz						
1134.300000	---	22.42	54.00	31.58	H	-15.1
1134.300000	29.49	---	74.00	44.51	H	-15.1
3009.400000	37.57	---	68.20	30.63	V	-8.0
5702.200000	42.99	---	68.20	25.21	V	0.6
9947.100000	50.83	---	68.20	17.37	V	7.6
13676.900000	51.82	---	68.20	16.38	V	10.8
17216.300000	54.39	---	68.20	13.81	V	12.9
High Channel: 5230 MHz						
1166.600000	---	21.39	54.00	32.61	H	-15.0
1166.600000	29.19	---	74.00	44.81	H	-15.0
2876.800000	---	27.98	54.00	26.02	V	-8.4
2876.800000	39.11	---	74.00	34.89	V	-8.4
5234.700000	45.17	---	68.20	23.03	V	-0.2
10028.700000	48.92	---	68.20	19.28	V	7.8
13724.500000	53.08	---	68.20	15.12	V	10.8
17554.600000	54.35	---	68.20	13.85	V	13.4

802.11ac80 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
5210 MHz						
1222.700000	---	22.53	54.00	31.47	H	-14.8
1222.700000	28.90	---	74.00	45.10	H	-14.8
2762.900000	---	28.38	54.00	25.62	V	-8.8
2762.900000	37.95	---	74.00	36.05	V	-8.8
4636.300000	---	33.61	54.00	20.39	H	-3.1
4636.300000	44.10	---	74.00	29.90	H	-3.1
7648.700000	---	40.14	54.00	13.86	V	4.1
7648.700000	46.08	---	74.00	27.92	V	4.1
13678.600000	53.94	---	68.20	14.26	V	10.8
17505.300000	51.96	---	68.20	16.24	V	13.6

1GHz-18GHz(5725-5850MHz Band):**802.11a Mode:****Low Channel: 5745MHz****Common Information**

Project No.:

RKSA240327005

Test Mode:

5G Wi-Fi

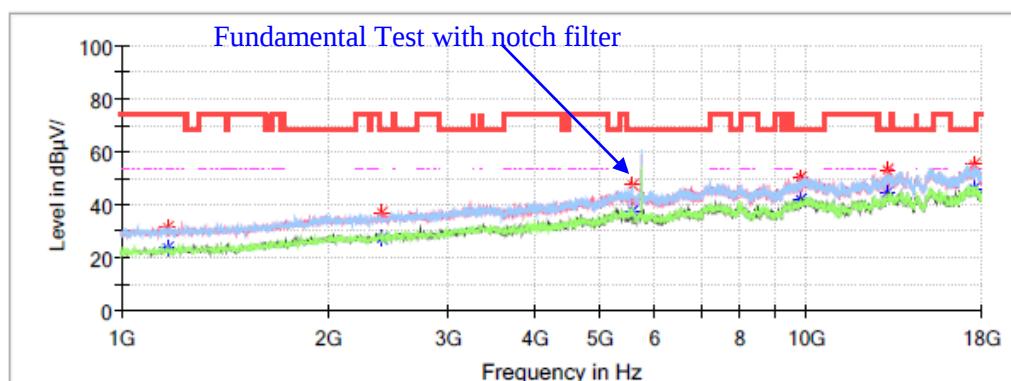
Standard:

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Engineer:

Peter Wang

Full Spectrum

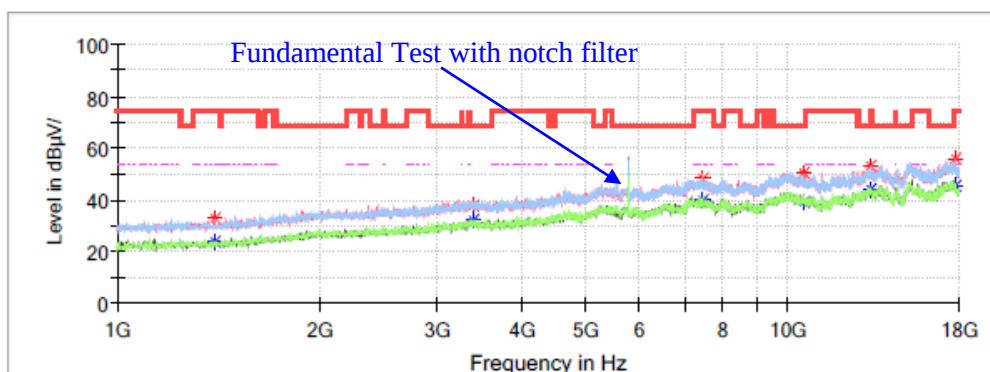
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1168.300000	---	23.50	54.00	30.50	H	-15.0
1168.300000	31.16	---	74.00	42.84	H	-15.0
2400.800000	36.96	---	68.20	31.24	V	-9.9
5576.400000	47.44	---	68.20	20.76	H	0.7
9772.000000	50.29	---	68.20	17.91	V	7.1
13102.300000	53.15	---	68.20	15.05	V	9.4
17546.100000	55.07	---	68.20	13.13	V	13.4

Middle Channel: 5785MHz**Common Information**

Project No.:	RKSA240327005
Test Mode:	5G Wi-Fi
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum

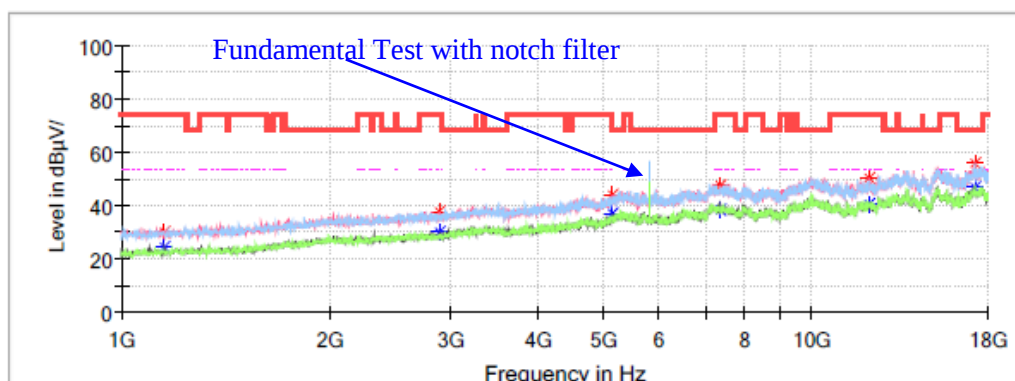
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1396.100000	---	23.51	54.00	30.49	H	-14.3
1396.100000	33.13	---	74.00	40.87	V	-14.3
3402.100000	37.98	---	68.20	30.22	V	-6.5
7439.600000	---	39.63	54.00	14.37	H	4.1
7439.600000	48.33	---	74.00	25.67	H	4.1
10545.500000	50.27	---	68.20	17.93	V	7.2
13255.300000	---	44.30	54.00	9.70	V	10.0
13255.300000	53.12	---	74.00	20.88	V	10.0
17724.600000	---	45.72	54.00	8.28	V	12.7
17724.600000	55.67	---	74.00	18.33	V	12.7

High Channel: 5825MHz**Common Information**

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1156.400000	---	24.48	54.00	29.52	V	-15.0
1156.400000	30.30	---	74.00	43.70	V	-15.0
2883.600000	---	29.80	54.00	24.20	V	-8.4
2883.600000	37.77	---	74.00	36.23	V	-8.4
5142.900000	44.03	---	74.00	29.97	V	-0.6
5142.900000	---	37.09	54.00	16.91	V	-0.6
7375.000000	---	38.77	54.00	15.23	V	4.1
7375.000000	47.71	---	74.00	26.29	V	4.1
12118.000000	---	40.59	54.00	13.41	H	7.2
12118.000000	50.20	---	74.00	23.80	V	7.2
17235.000000	56.12	---	68.20	12.08	H	12.9

802.11ac20 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5745 MHz						
1161.500000	---	22.37	54.00	31.63	H	-15.0
1161.500000	33.23	---	74.00	40.77	H	-15.0
2608.200000	34.33	---	68.20	33.87	V	-9.4
5226.200000	43.31	---	68.20	24.89	V	-0.3
10064.400000	50.54	---	68.20	17.66	V	7.7
Middle Channel: 5785 MHz						
1088.400000	---	22.93	54.00	31.07	H	-15.2
1088.400000	31.48	---	74.00	42.52	H	-15.2
2936.300000	38.63	---	68.20	29.57	V	-8.2
5195.600000	42.15	---	68.20	26.05	V	-0.4
9715.900000	47.33	---	68.20	20.87	V	6.9
13233.200000	52.76	---	68.20	15.44	V	9.9
High Channel: 5825 MHz						
1166.600000	---	23.57	54.00	30.43	H	-15.0
1166.600000	30.72	---	74.00	43.28	H	-15.0
2188.300000	33.45	---	68.20	34.75	V	-10.3
4683.900000	---	34.45	54.00	19.55	H	-2.8
4683.900000	40.79	---	74.00	33.21	H	-2.8
7461.700000	---	39.05	54.00	14.95	V	4.2
7461.700000	47.04	---	74.00	26.96	V	4.2
13768.700000	54.04	---	68.20	14.16	V	10.7
17544.400000	54.57	---	68.20	13.63	V	13.4

802.11ac40 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5755 MHz						
1238.000000	---	23.08	54.00	30.92	H	-14.8
1238.000000	30.44	---	74.00	43.56	H	-14.8
2897.200000	---	28.91	54.00	25.09	V	-8.4
2897.200000	36.65	---	74.00	37.35	V	-8.4
4634.600000	---	36.24	54.00	17.76	H	-3.1
4634.600000	39.60	---	74.00	34.40	H	-3.1
7159.100000	48.46	---	68.20	19.74	V	3.9
10089.900000	51.18	---	68.20	17.02	V	7.7
High Channel: 5795 MHz						
1261.800000	30.54	---	68.20	37.66	V	-14.7
2424.600000	35.36	---	68.20	32.84	V	-9.9
5238.100000	44.63	---	68.20	23.57	V	-0.2
9962.400000	47.71	---	68.20	20.49	V	7.7
13517.100000	49.99	---	68.20	18.21	V	11.0
17515.500000	54.91	---	68.20	13.29	V	13.6

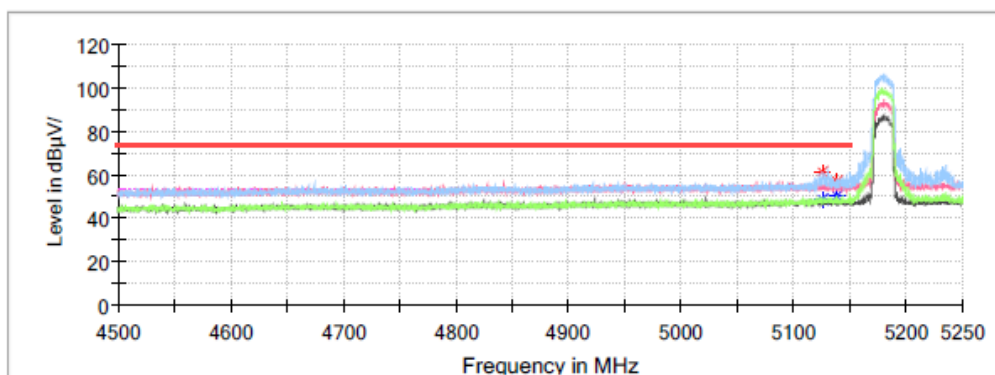
802.11ac80 Mode

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
5775 MHz						
1292.400000	32.85	---	68.20	35.35	V	-14.6
2718.700000	---	29.27	54.00	24.73	H	-9.0
2718.700000	35.50	---	74.00	38.50	H	-9.0
5338.400000	44.20	---	68.20	24.00	V	0.2
8629.600000	48.46	---	68.20	19.74	V	3.8
13112.500000	51.70	---	68.20	16.50	V	9.5
17535.900000	53.81	---	68.20	14.39	V	13.5

Restricted Bands Emissions Test (5150-5250MHz Band):**802.11a Mode:****Common Information**

Project No.: RKAS240327005
Test Mode: 5G WiFi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

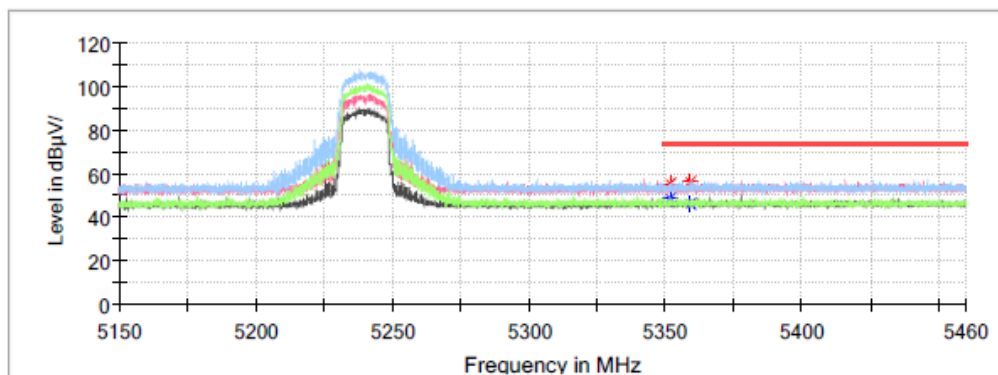
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5125.125000	61.31	---	74.00	12.69	H	9.3
5125.125000	---	48.43	54.00	5.57	H	9.3
5138.400000	57.47	---	74.00	16.53	H	9.4
5138.400000	---	50.68	54.00	3.32	H	9.4

Common Information

Project No.: RKSA240327005
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Klein Zhu

Full Spectrum



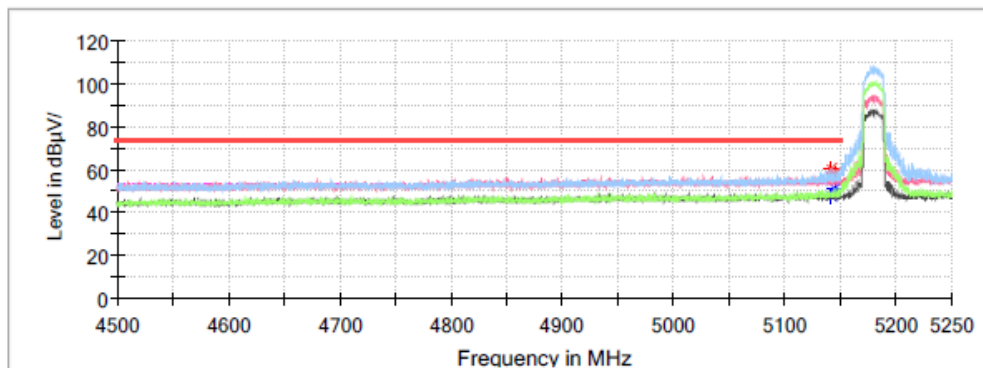
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5351.500000	55.61	---	74.00	18.39	H	8.7
5351.500000	---	48.33	54.00	5.67	H	8.7
5359.064000	---	45.86	54.00	8.14	V	8.8
5359.064000	56.44	---	74.00	17.56	V	8.8

802.11ac20 Mode:**Common Information**

Project No.: RKAS240327005
Test Mode: 5G WiFi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5141.775000	---	47.66	54.00	6.34	H	9.4
5141.775000	60.33	---	74.00	13.67	H	9.4
5145.000000	---	50.80	54.00	3.20	H	9.4
5145.000000	57.88	---	74.00	16.12	H	9.4

Common Information

Project No.:

RKSA240327005

Test Mode:

5G WIFI

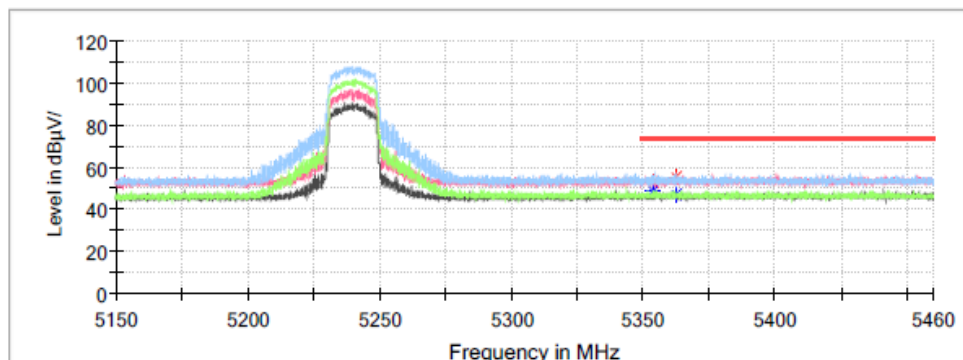
Standard:

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Engineer:

Klein Zhu

Full Spectrum



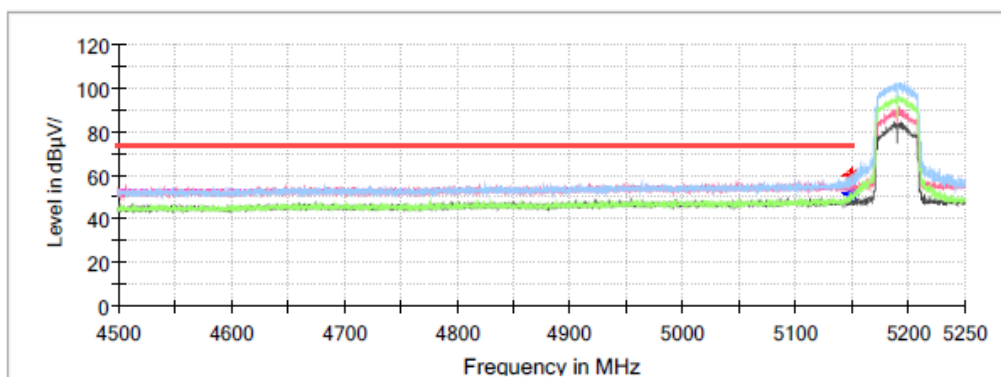
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5354.011000	53.08	---	74.00	20.92	H	8.7
5354.011000	---	48.32	54.00	5.68	H	8.7
5362.195000	---	46.88	54.00	7.12	V	8.8
5362.195000	55.38	---	74.00	18.62	V	8.8

802.11ac40 Mode:**Common Information**

Project No.: RKAS240327005
Test Mode: 5G WiFi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

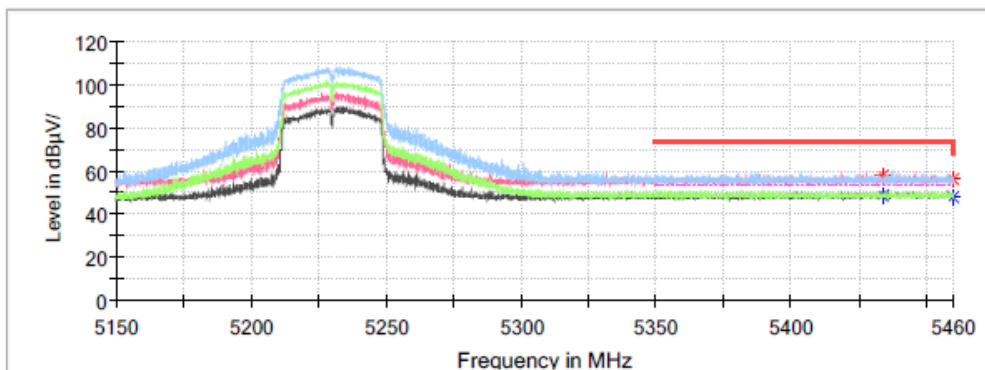
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5148.600000	---	51.94	54.00	2.06	H	9.4
5148.600000	59.31	---	74.00	14.69	H	9.4
5149.425000	---	50.96	54.00	3.04	H	9.4
5149.425000	60.41	---	74.00	13.59	H	9.4

Common Information

Project No.: RKAS240327005
Test Mode: 5G WiFi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum



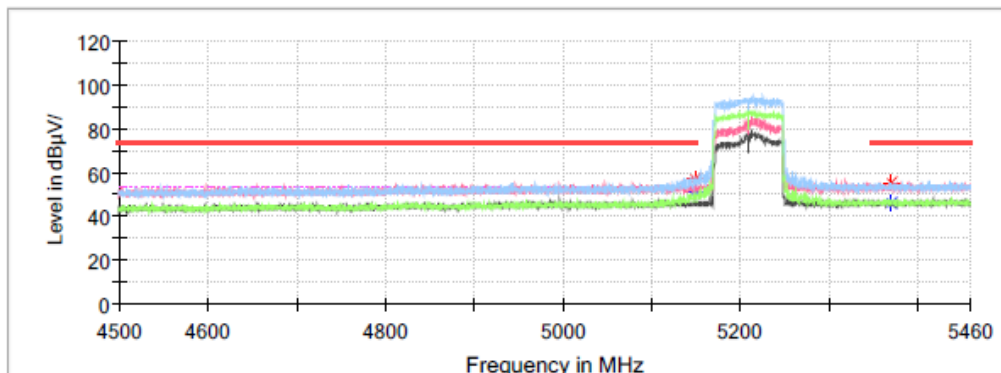
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5433.960000	---	48.84	54.00	5.16	V	10.6
5433.960000	58.26	---	74.00	15.74	V	10.6
5460.000000	---	48.06	54.00	5.94	V	10.7
5460.000000	56.28	---	68.20	11.92	V	10.7

802.11ac80 Mode:**Common Information**

Project No.: RKSA240327005
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Klein Zhu

Full Spectrum

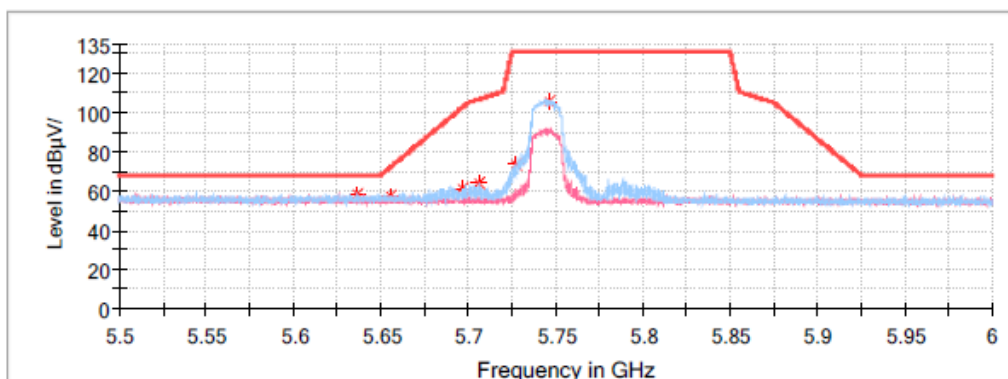
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5149.728000	56.93	---	74.00	17.07	H	8.2
5149.728000	---	51.46	54.00	2.54	H	8.2
5371.392000	---	46.08	54.00	7.92	V	8.8
5371.392000	55.25	---	74.00	18.75	V	8.8

Band edge Emissions Test (5725-5850MHz Band):**802.11a Mode:****Common Information**

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

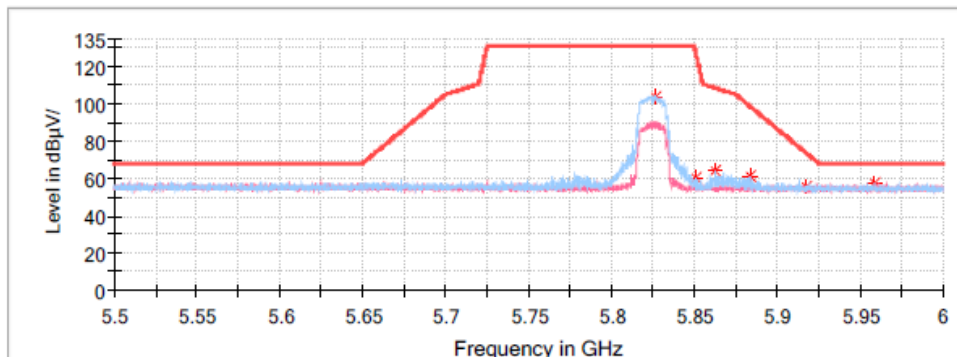
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5636.150000	58.64	---	68.20	9.56	H	10.7
5655.400000	57.46	---	72.20	14.74	H	10.6
5696.250000	61.31	---	102.43	41.11	H	10.6
5706.200000	64.17	---	106.94	42.77	H	10.6
5727.650000	73.75	---	131.20	57.45	H	10.5

Common Information

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum



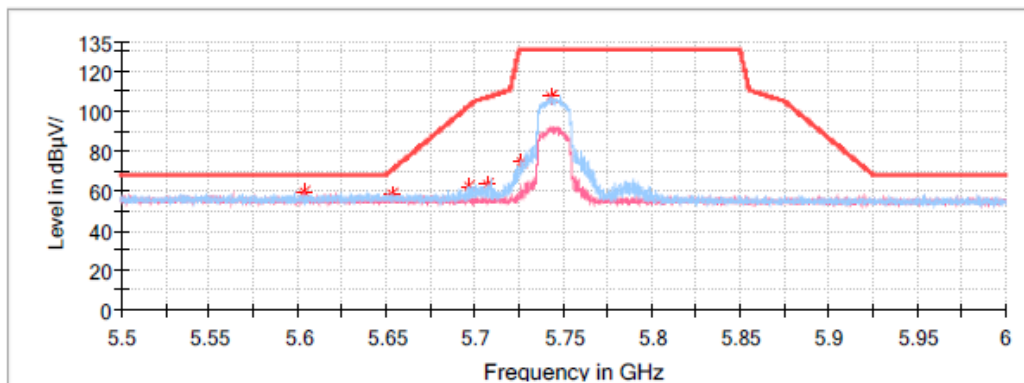
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5826.550000	104.14	---	131.20	27.06	H	10.4
5850.600000	60.85	---	128.75	67.90	H	10.4
5862.550000	64.34	---	108.69	44.35	H	10.4
5883.450000	61.68	---	98.95	37.27	H	10.3
5917.650000	56.05	---	73.64	17.59	V	10.3
5959.150000	57.39	---	68.20	10.81	H	10.2

802.11ac20 Mode:**Common Information**

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

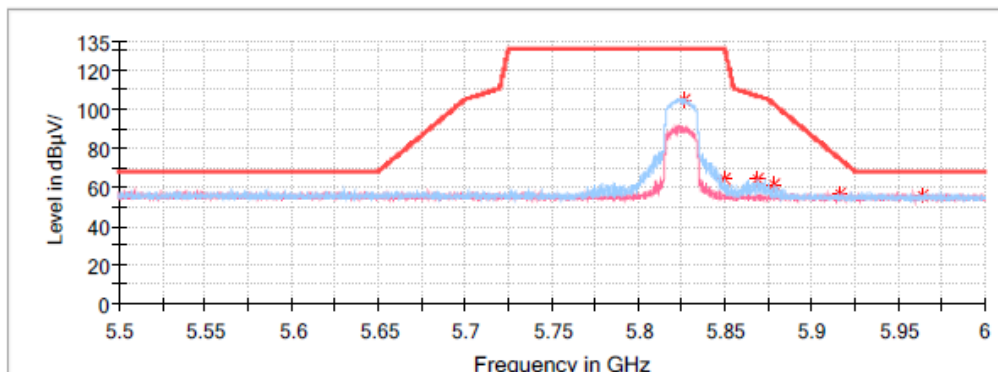
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5604.000000	59.12	---	68.20	9.08	V	10.7
5652.900000	58.42	---	70.35	11.92	H	10.6
5696.500000	62.28	---	102.61	40.33	H	10.6
5707.150000	63.71	---	107.20	43.49	H	10.6
5726.400000	74.99	---	131.20	56.21	H	10.5

Common Information

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum



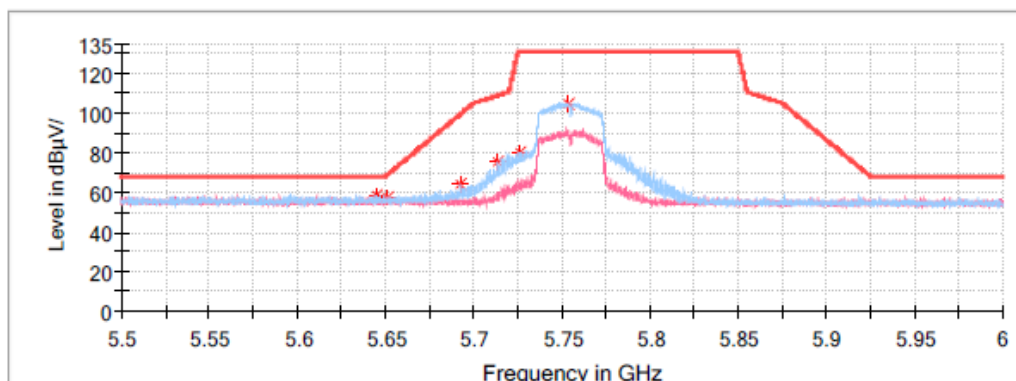
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5826.400000	105.26	---	131.20	25.94	H	10.4
5849.450000	64.24	---	131.20	66.96	H	10.4
5869.100000	64.12	---	106.85	42.74	H	10.4
5878.850000	61.35	---	102.35	41.00	H	10.3
5916.350000	56.85	---	74.60	17.75	V	10.3
5963.550000	55.57	---	68.20	12.63	V	10.2

802.11ac40 Mode:**Common Information**

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

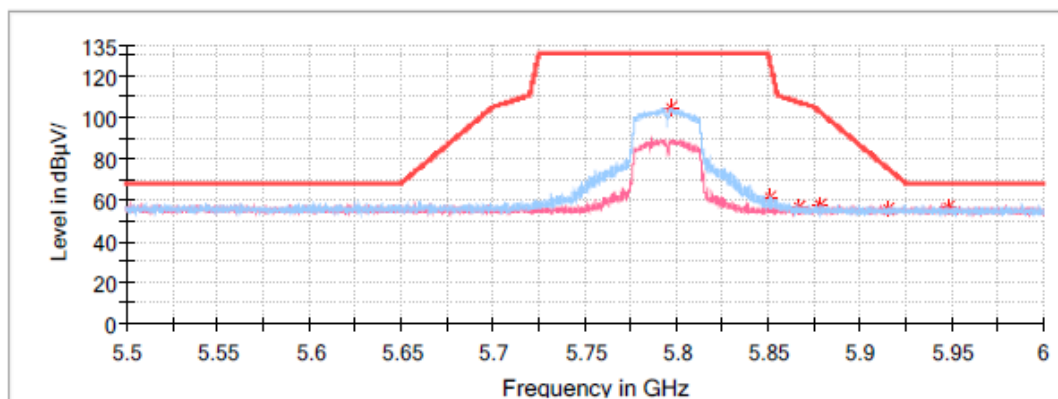
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5644.600000	58.92	---	68.20	9.28	H	10.7
5651.250000	57.85	---	69.12	11.27	V	10.6
5692.700000	64.35	---	99.80	35.45	H	10.6
5713.100000	75.88	---	108.87	32.99	H	10.6
5725.900000	80.51	---	131.20	50.69	H	10.5

Common Information

Project No.: RKSA240327005
Test Mode: 5G Wi-Fi
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum



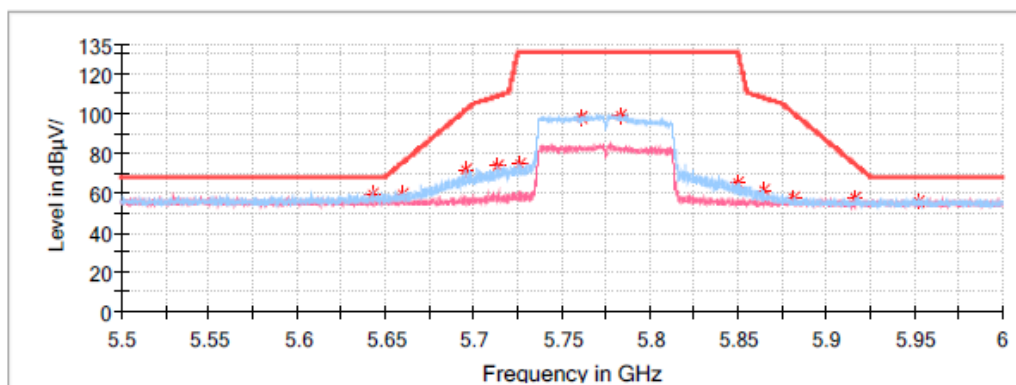
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5850.500000	61.23	---	129.16	67.93	H	10.4
5867.200000	56.27	---	107.38	51.12	V	10.4
5878.450000	57.90	---	102.65	44.74	H	10.3
5915.050000	55.84	---	75.56	19.72	H	10.3
5948.650000	56.24	---	68.20	11.96	H	10.3

802.11ac80 Mode:**Common Information**

Project No.: RKSA240327005
 Test Mode: 5G Wi-Fi
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

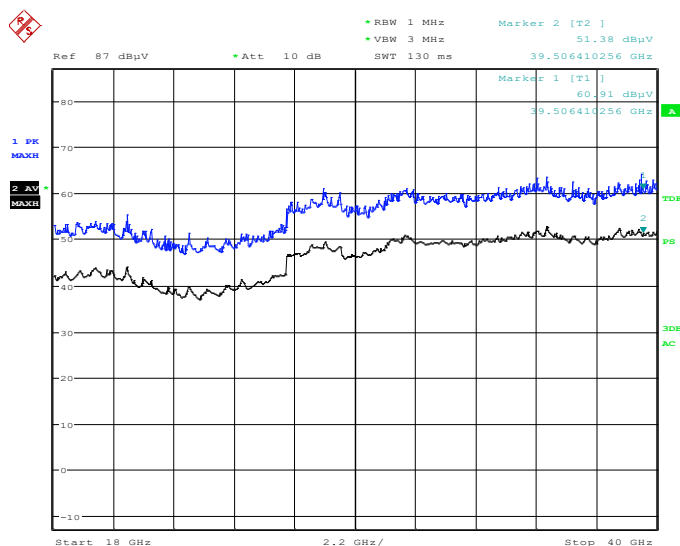
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5642.200000	59.53	---	68.20	8.67	H	10.7
5659.250000	59.58	---	75.04	15.47	H	10.6
5695.200000	71.81	---	101.65	29.84	H	10.6
5713.650000	73.58	---	109.02	35.44	H	10.6
5726.700000	74.21	---	131.20	56.99	H	10.5
5761.550000	98.34	---	131.20	32.86	H	10.5
5782.800000	99.40	---	131.20	31.80	H	10.5
5850.300000	65.24	---	129.98	64.74	H	10.4
5864.300000	61.24	---	108.20	46.96	H	10.4
5881.300000	57.71	---	100.54	42.83	H	10.3
5916.300000	57.20	---	74.64	17.44	H	10.3
5952.150000	55.23	---	68.20	12.97	V	10.3

18 GHz - 40 GHz:

(Note: The test distance is 1.5m, so the limit for peak is 80 dB μ V/m, Average is 60 dB μ V/m)

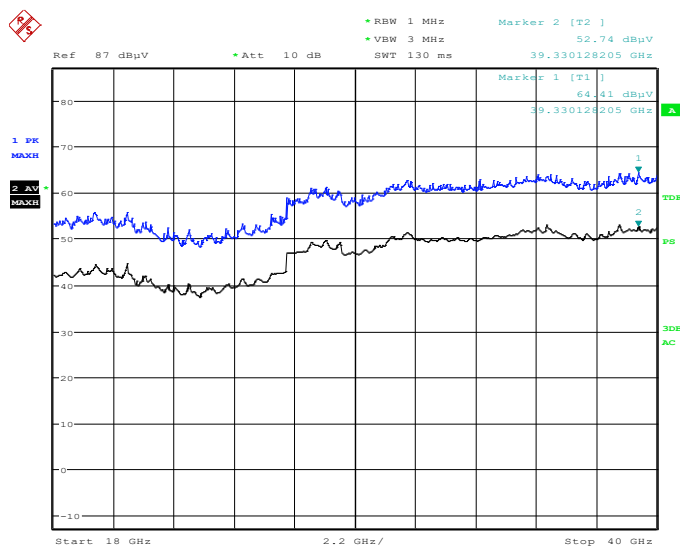
Transmitting in maximum output power mode and channel of 802.11a mode high channel of 5150~5850MHz

Horizontal

Project No.: RKAS240327005

Tester: Peter Wang

Date: 17.APR.2024 22:14:24

Vertical

Project No.: RKAS240327005

Tester: Peter Wang

Date: 17.APR.2024 22:42:14

EMISSION BANDWIDTH**Test Result:** Compliant*5150-5250 MHz:*

Test mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
802.11 a	Low	5180	20.301
	Middle	5200	20.552
	High	5240	20.502
802.11 ac20	Low	5180	20.452
	Middle	5200	20.453
	High	5240	20.503
802.11 ac40	Low	5190	41.000
	High	5230	40.900
802.11 ac80	/	5210	82.600

Test mode	Channel	Frequency (MHz)	99% Bandwidth(MHz)
802.11 a	Low	5180	16.550
	Middle	5200	16.550
	High	5240	16.550
802.11 ac20	Low	5180	17.500
	Middle	5200	17.500
	High	5240	17.500
802.11 ac40	Low	5190	36.100
	High	5230	36.100
802.11 ac80	/	5210	76.000

Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz.

5725-5850MHz:

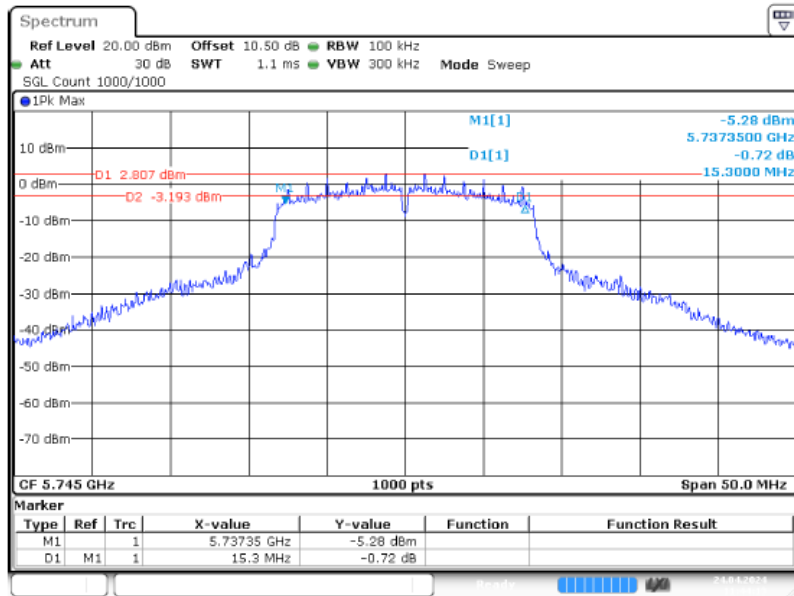
Test mode	Channel	Frequency (MHz)	6dB Bandwidth(MHz)	Limit (MHz)
802.11 a	Low	5745	15.300	0.5
	Middle	5785	15.200	0.5
	High	5825	15.300	0.5
802.11 ac20	Low	5745	15.200	0.5
	Middle	5785	15.200	0.5
	High	5825	15.250	0.5
802.11 ac40	Low	5755	35.300	0.5
	High	5795	35.300	0.5
802.11 ac80	/	5775	75.800	0.5

Test mode	Channel	Frequency (MHz)	99% Bandwidth(MHz)
802.11 a	Low	5745	16.650
	Middle	5785	16.600
	High	5825	16.550
802.11 ac20	Low	5745	17.700
	Middle	5785	17.650
	High	5825	17.650
802.11 ac40	Low	5755	36.600
	High	5795	36.500
802.11 ac80	/	5775	76.600

Note: the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz.

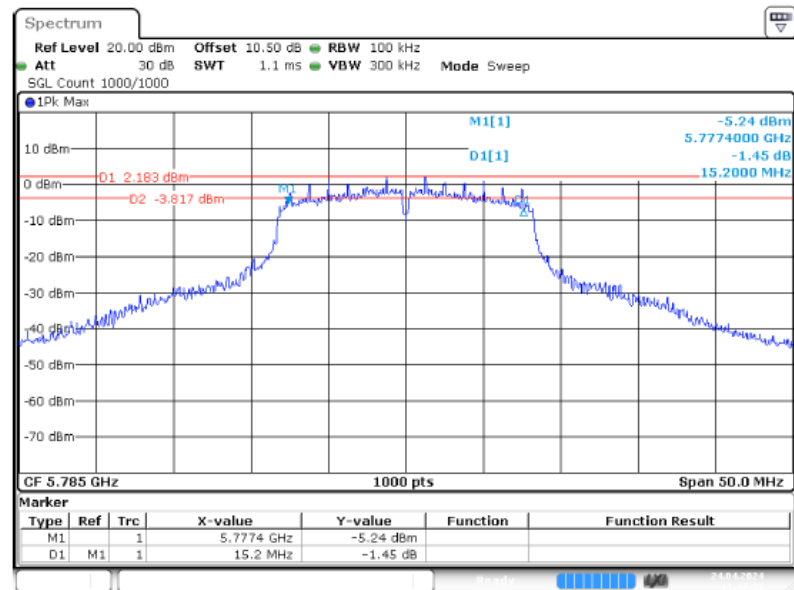
6dB Bandwidth

802.11a mode, 5745MHz



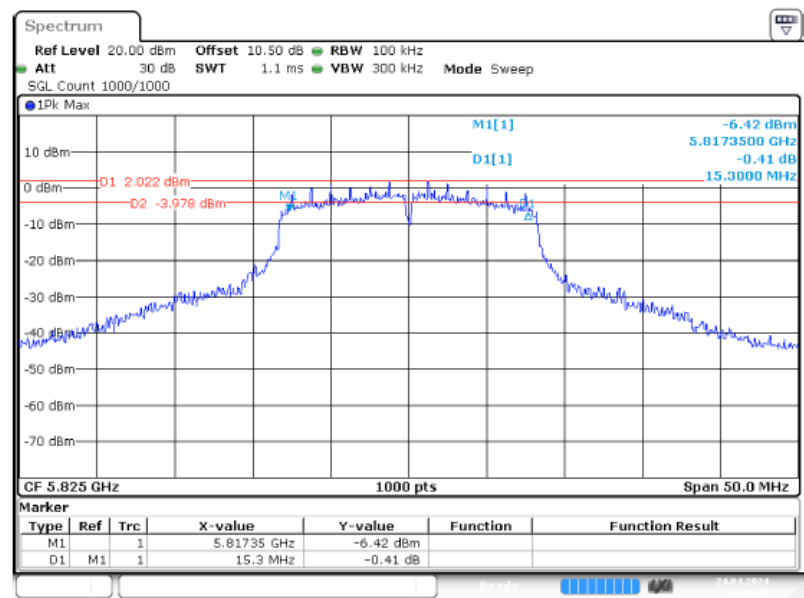
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 11:44:13

802.11a mode, 5785MHz



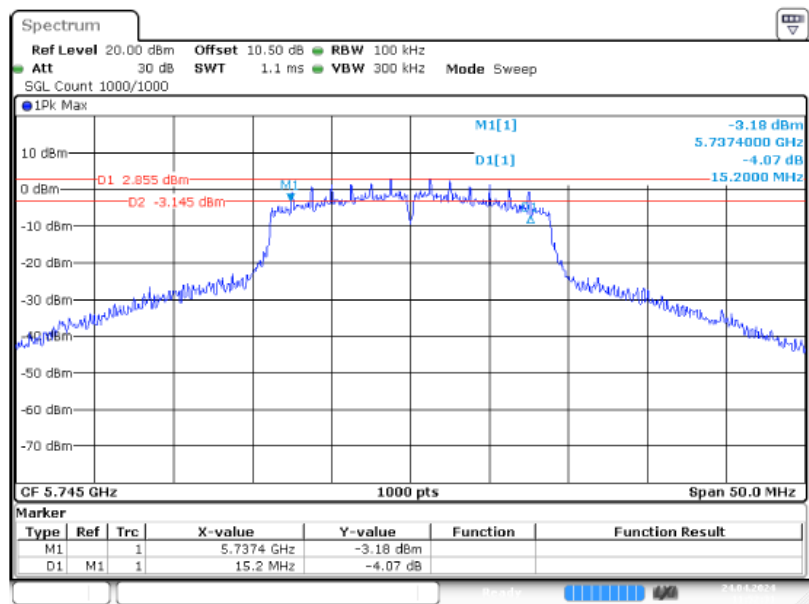
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 11:47:32

802.11a mode, 5825MHz



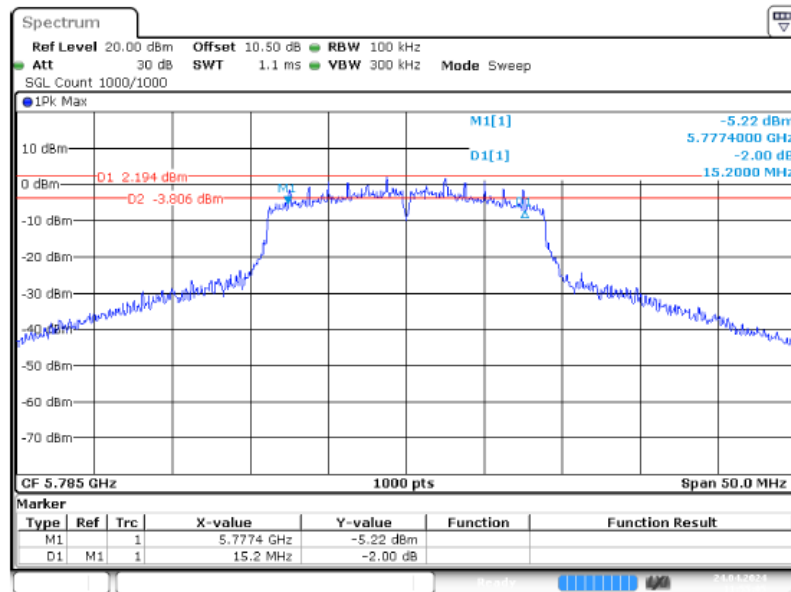
ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 11:49:46

802.11ac20 mode, 5745MHz



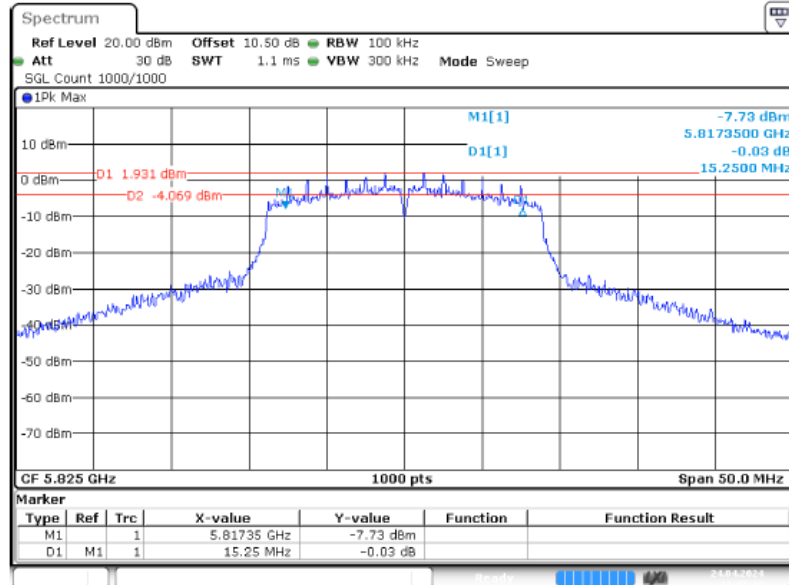
ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 11:52:31

802.11 ac20 mode, 5785MHz



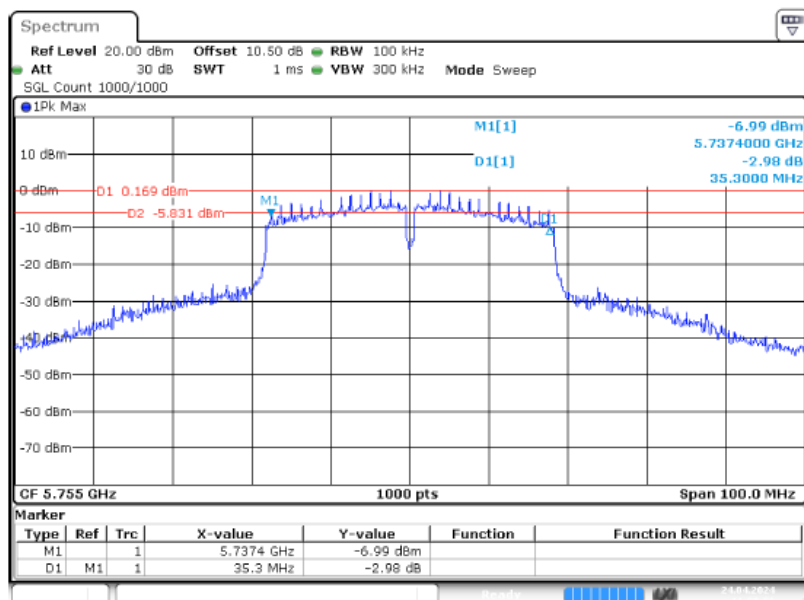
ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24.APR.2024 11:55:06

802.11 ac20 mode, 5825MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24.APR.2024 11:57:32

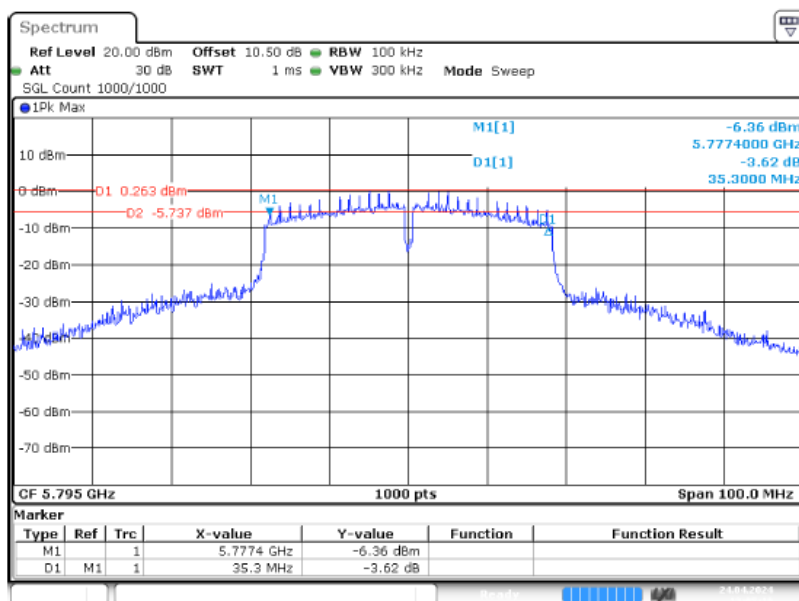
802.11 ac40 mode, 5755MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 11:59:57

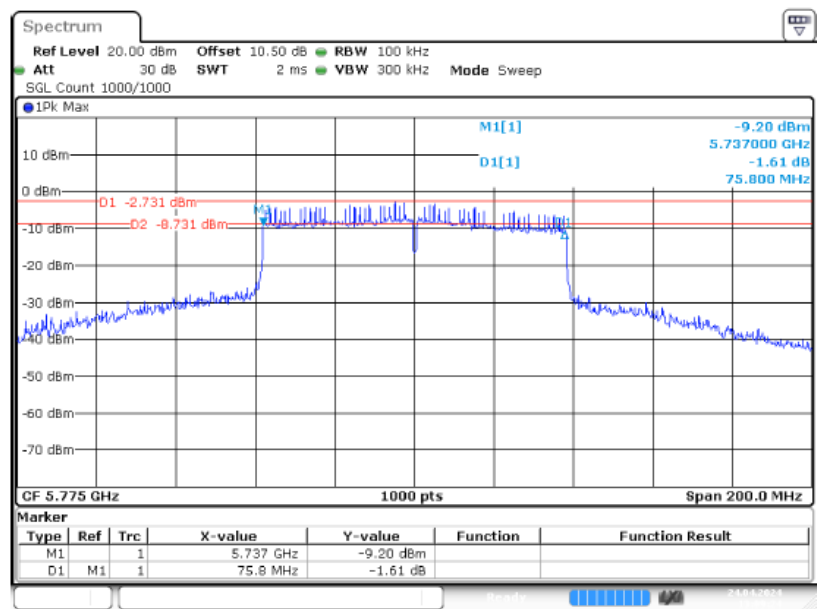
802.11 ac40 mode, 5795MHz



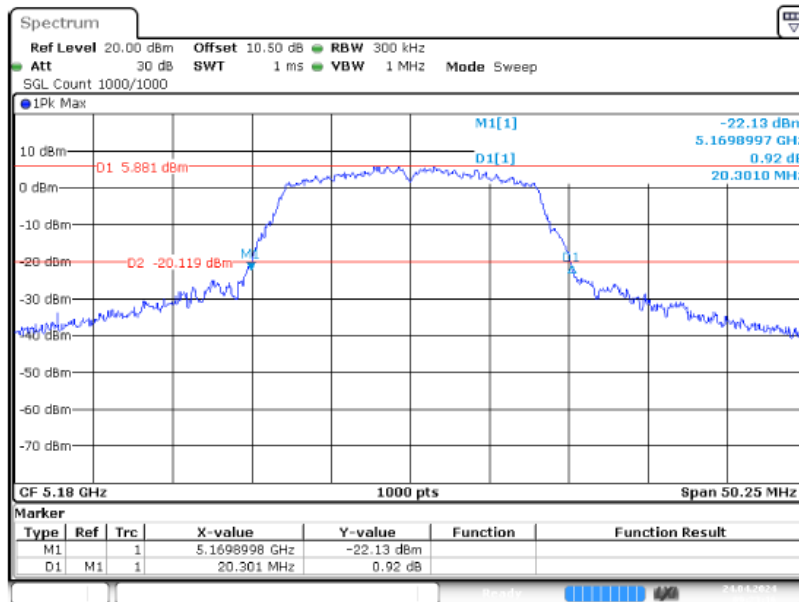
ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 13:05:20

802.11 ac80 mode, 5775MHz

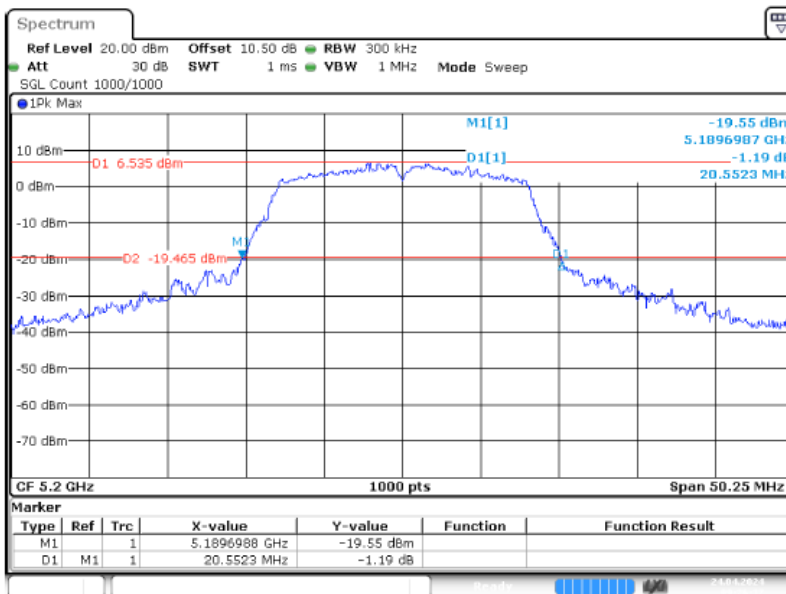


ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 13:09:24

26 Bandwidth**5150-5250 MHz Band:****802.11a mode, 5180MHz**

ProjectNo.: RKSA240327005 Tester: Bard Liu

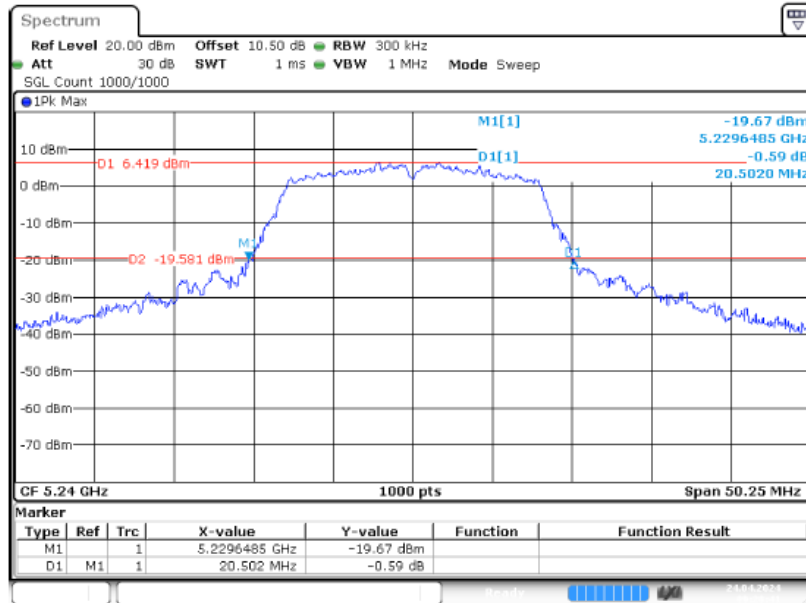
Date: 24 APR 2024 09:23:17

802.11a mode, 5200MHz

ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 09:26:37

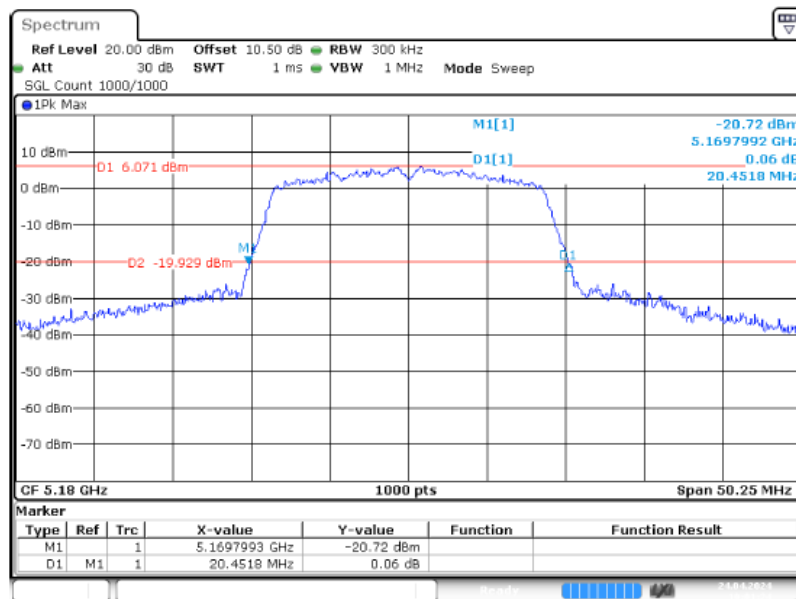
802.11a mode, 5240MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 09:28:42

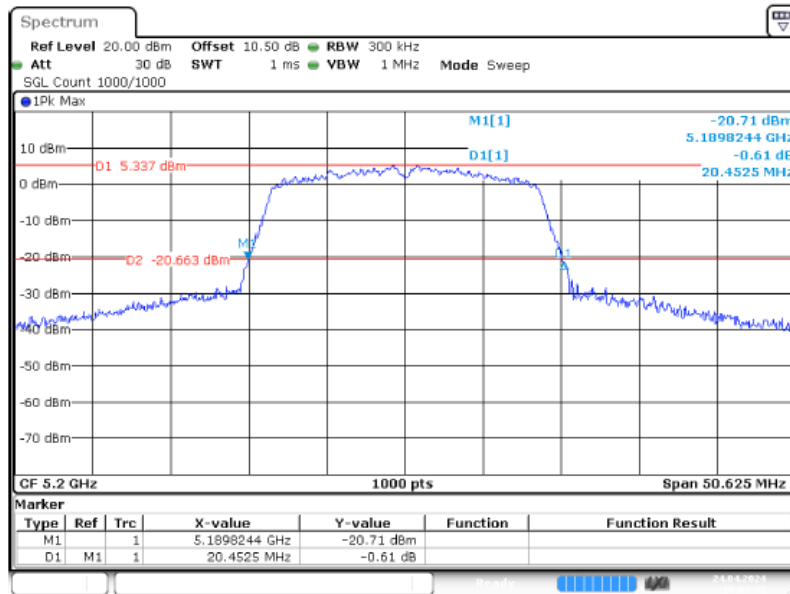
802.11ac20 mode, 5180MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

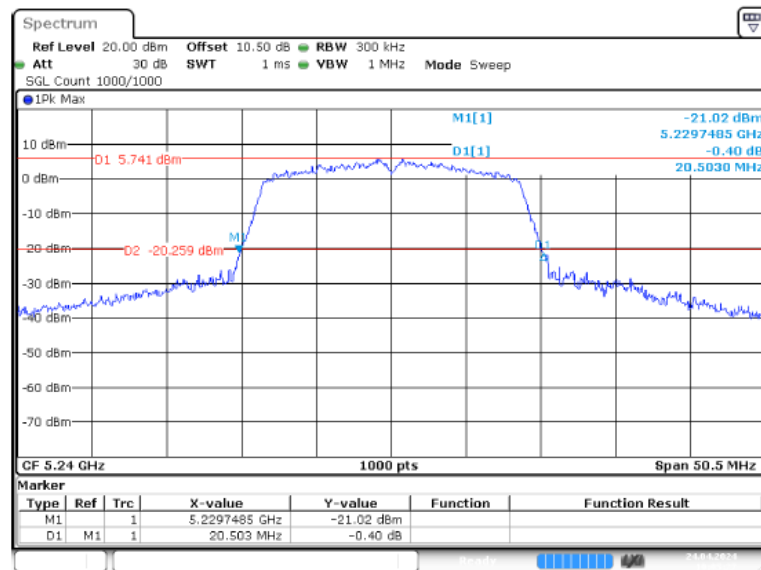
Date: 24 APR 2024 10:01:24

802.11 ac20 mode, 5200MHz



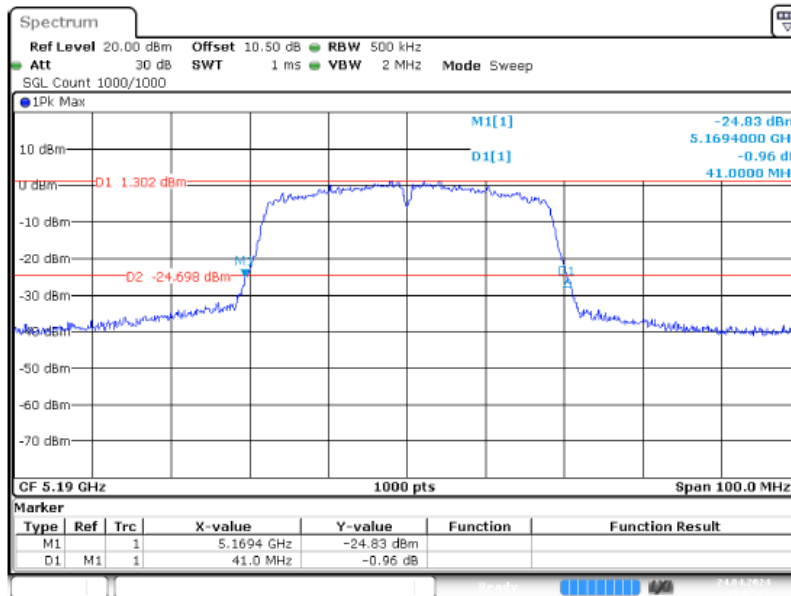
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:03:32

802.11 ac20 mode, 5240MHz

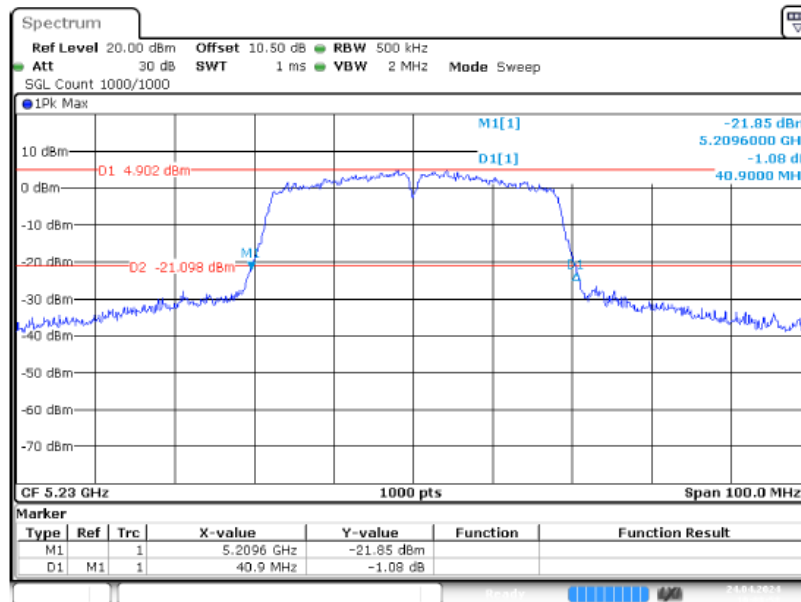


ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:05:27

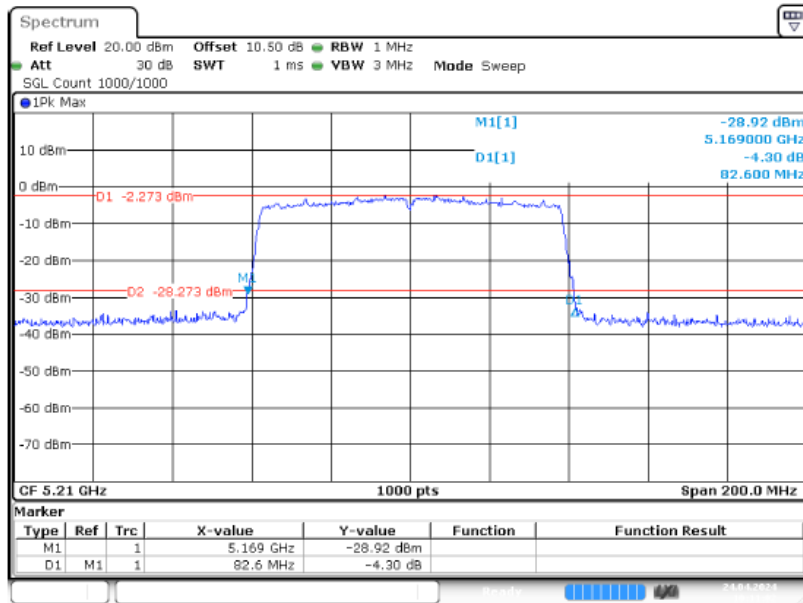
802.11ac40 mode, 5190MHz



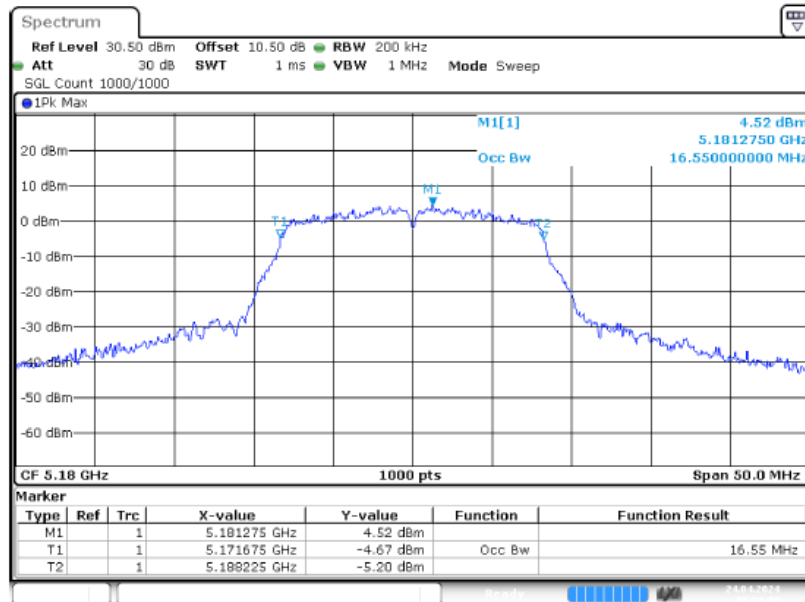
802.11 ac40 mode, 5230MHz



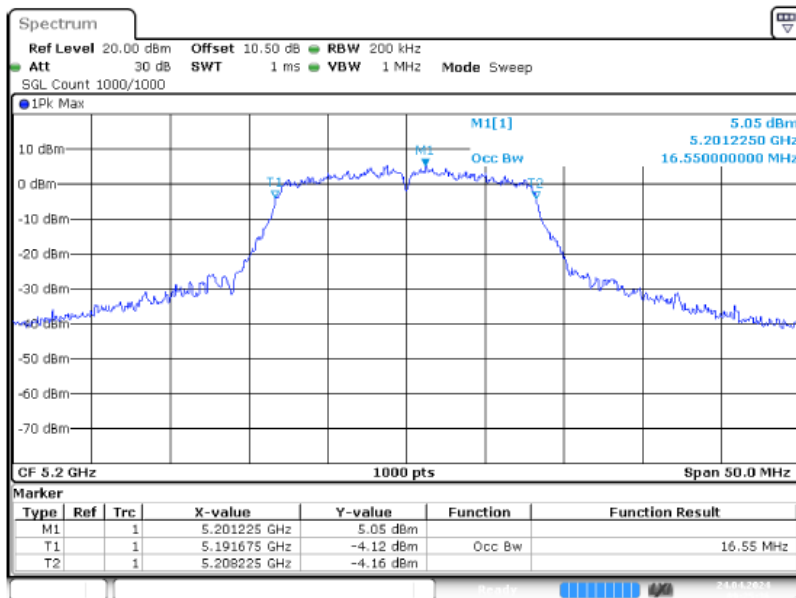
802.11ac80 mode, 5210MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24.APR.2024 10:11:02

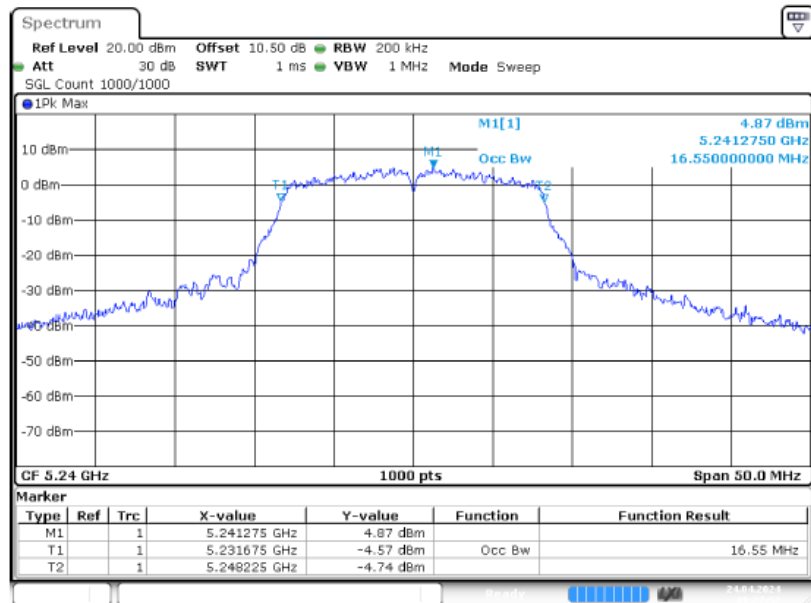
**99% Occupied Bandwidth
5150-5250 MHz Band:****802.11a mode, 5180MHz**

ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 09:22:10

802.11a mode, 5200MHz

ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 09:25:36

802.11a mode, 5240MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 09:27:53

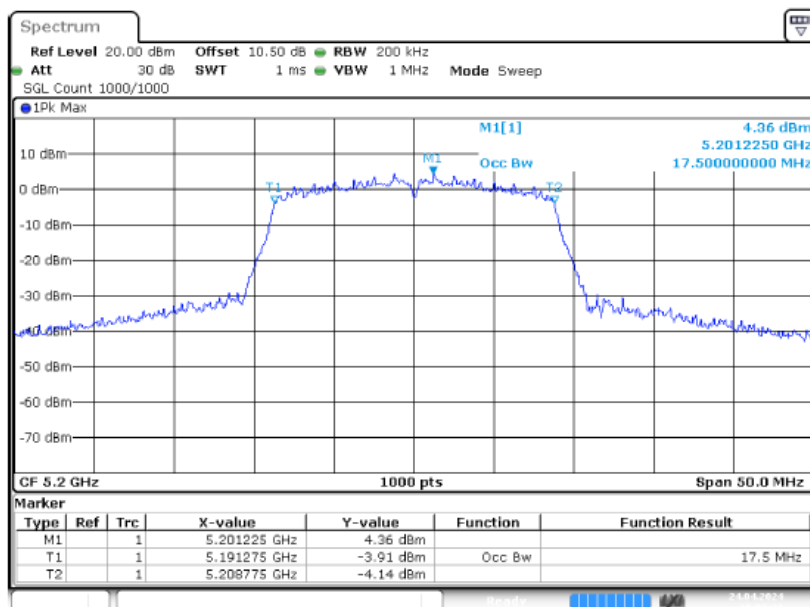
802.11ac20 mode, 5180MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 09:27:53

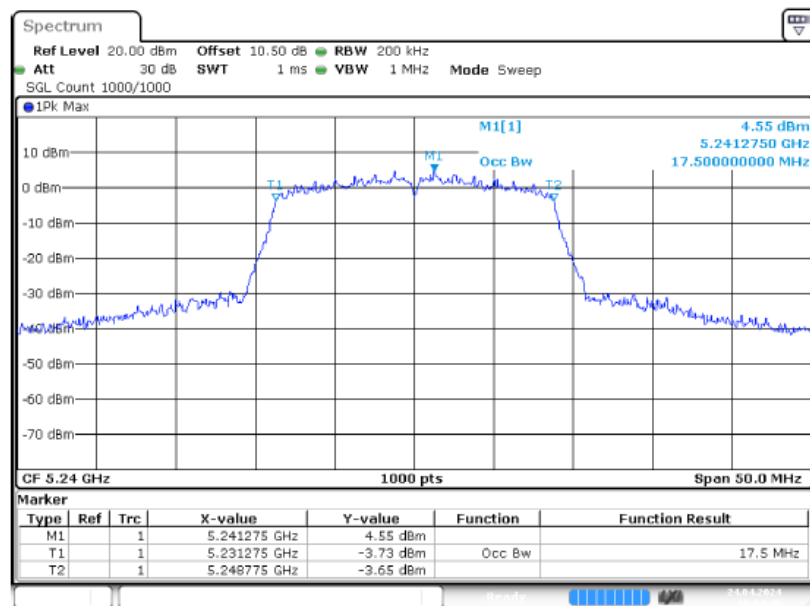
802.11 ac20 mode, 5200MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 10:02:39

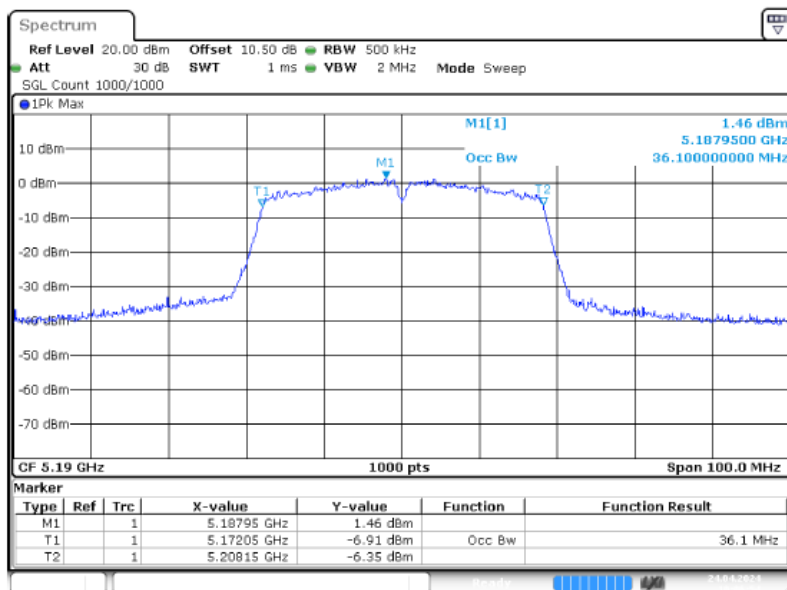
802.11 ac20 mode, 5240MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 10:04:40

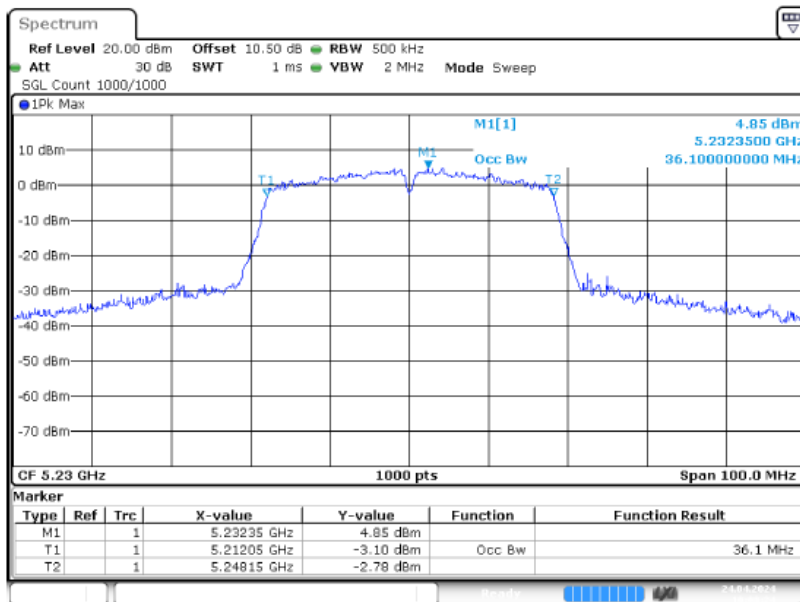
802.11ac40 mode, 5190MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 10:08:55

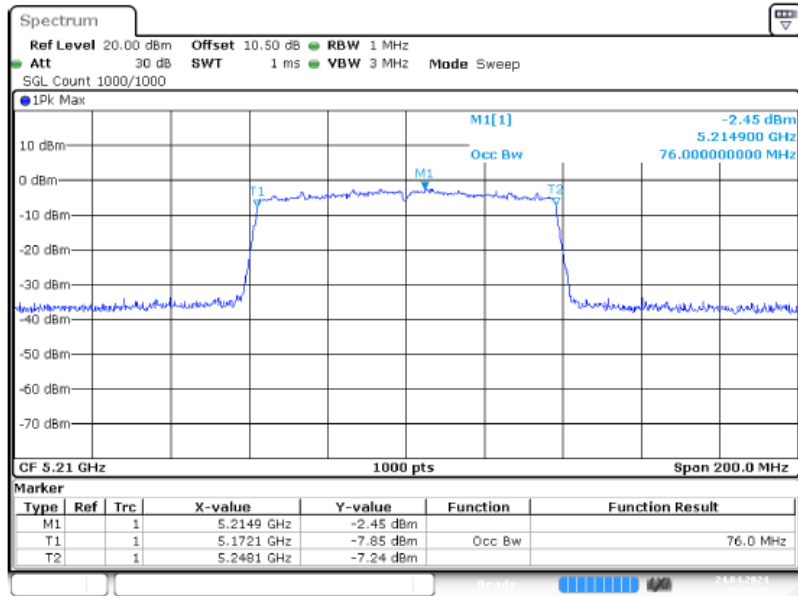
802.11 ac40 mode, 5230MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 10:08:24

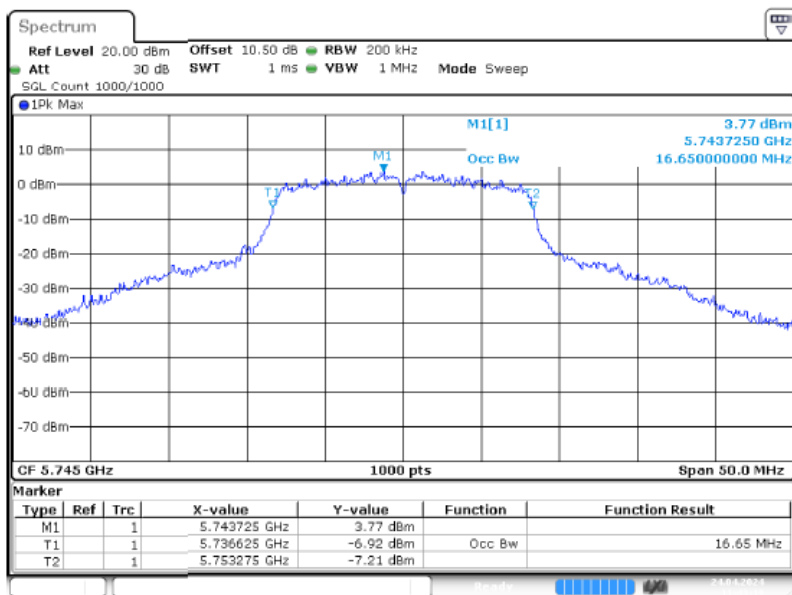
802.11ac80 mode, 5210MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:10:25

5725-5850 MHz Band

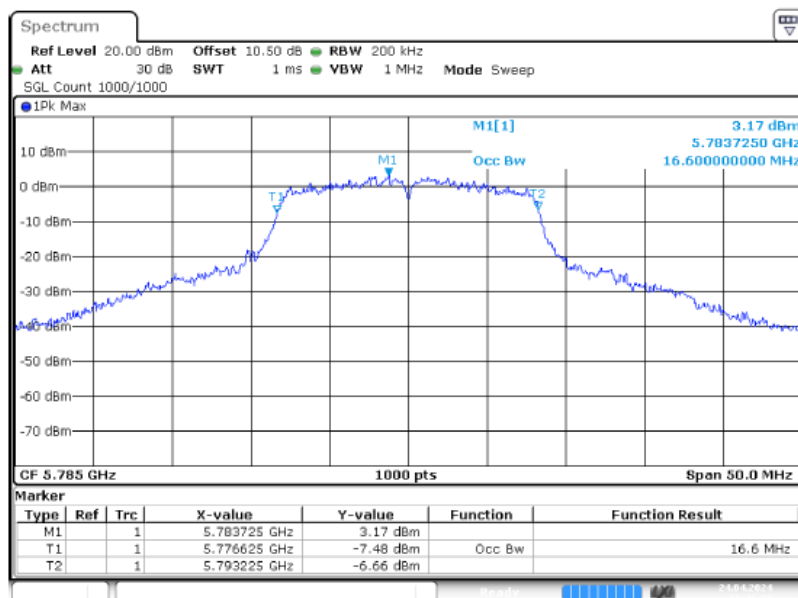
802.11a mode, 5745MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24.APR.2024 11:43:20

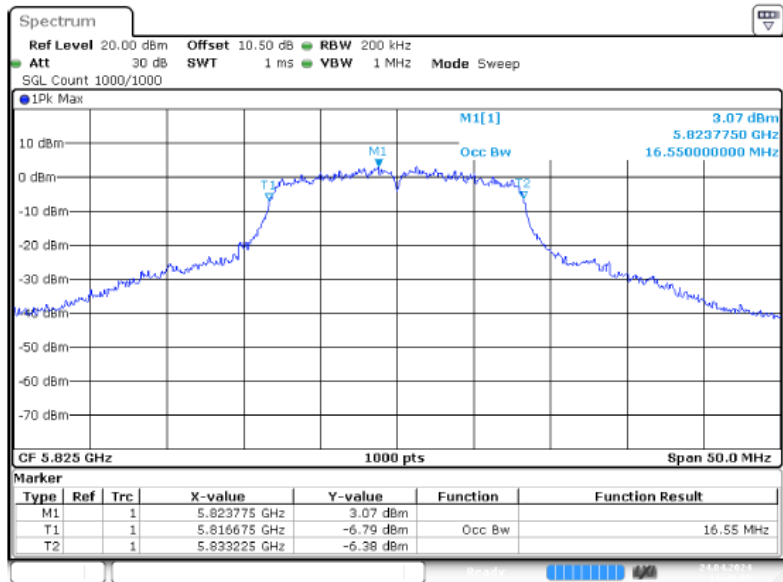
802.11a mode, 5785MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24.APR.2024 11:46:33

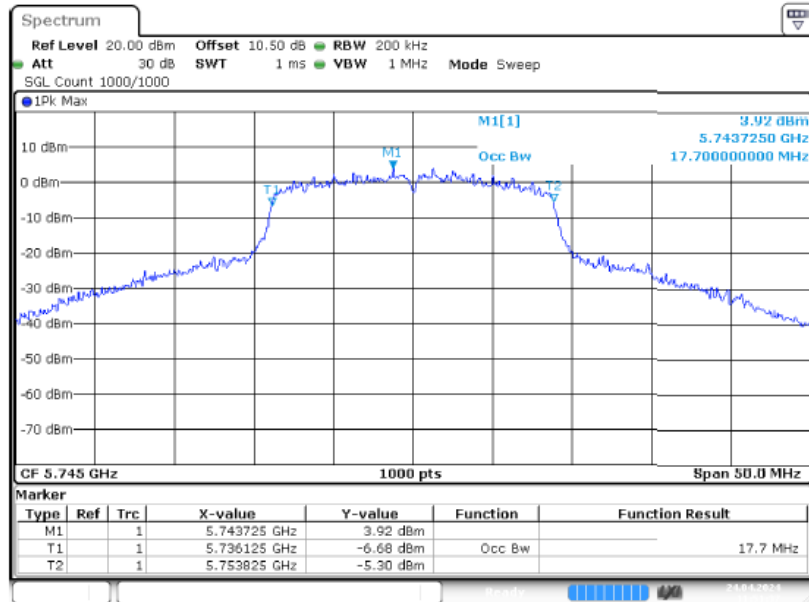
802.11a mode, 5825MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24.APR.2024 11:49:03

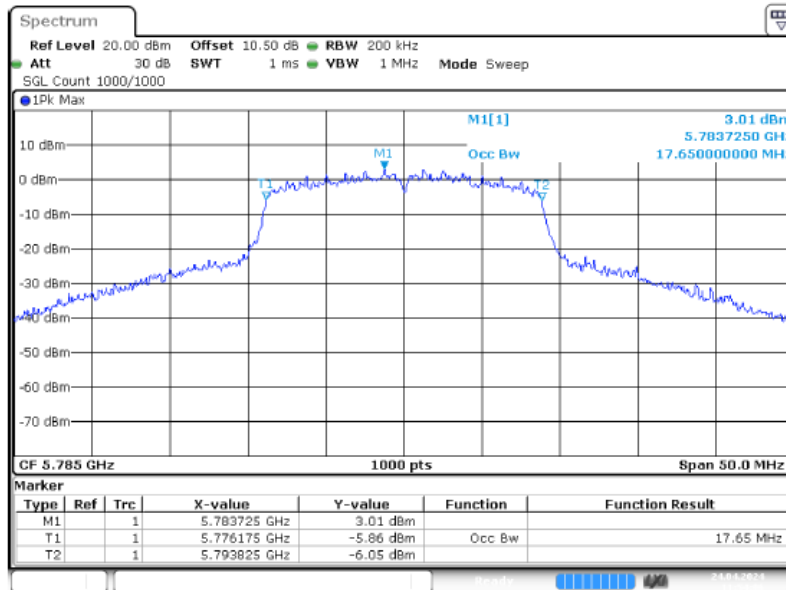
802.11ac20 mode, 5745MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

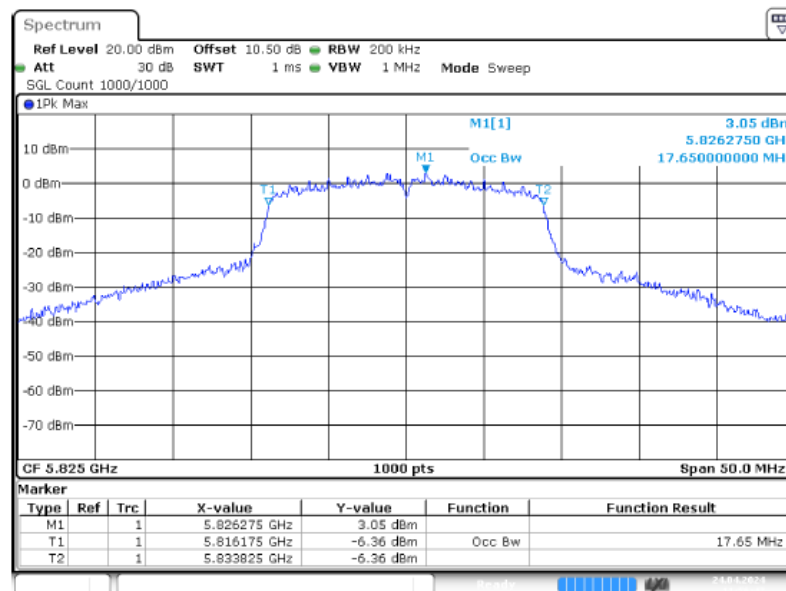
Date: 24.APR.2024 11:51:37

802.11 ac20 mode, 5785MHz



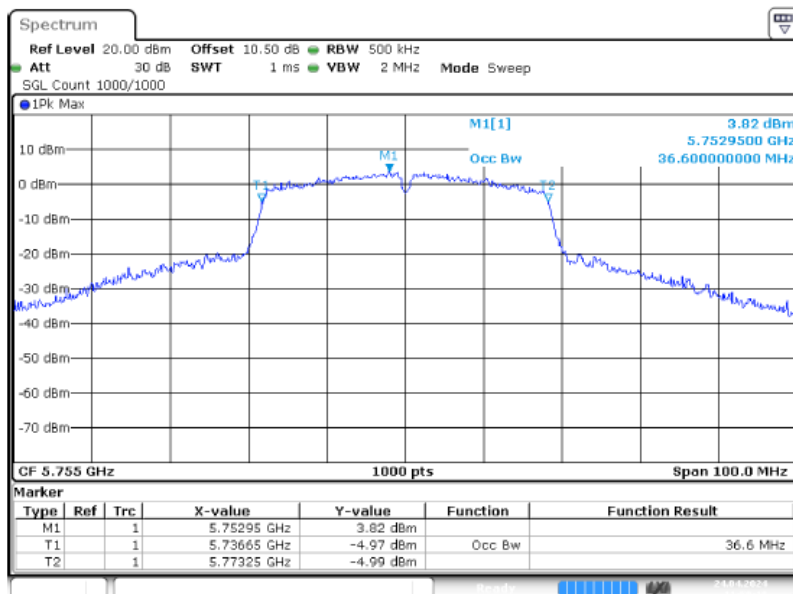
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24.APR.2024 11:54:07

802.11 ac20 mode, 5825MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24.APR.2024 11:56:47

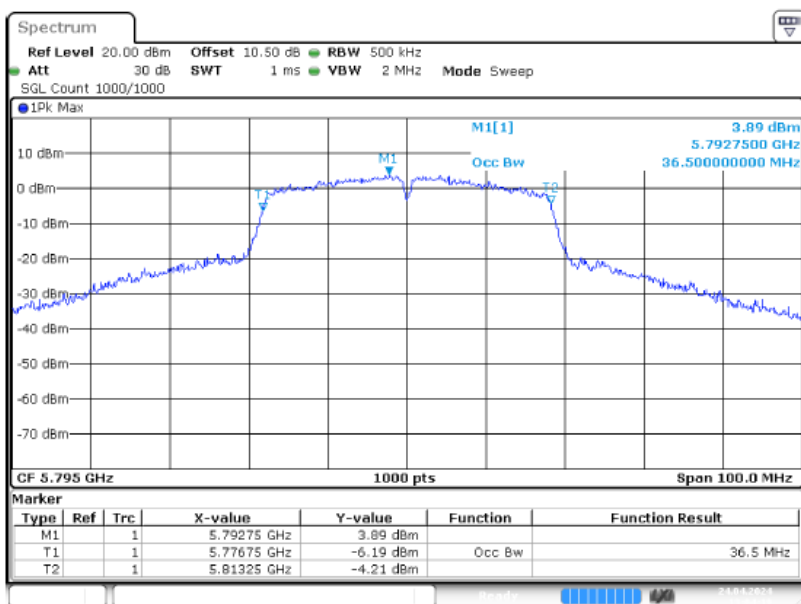
802.11ac40 mode, 5755MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 11:59:18

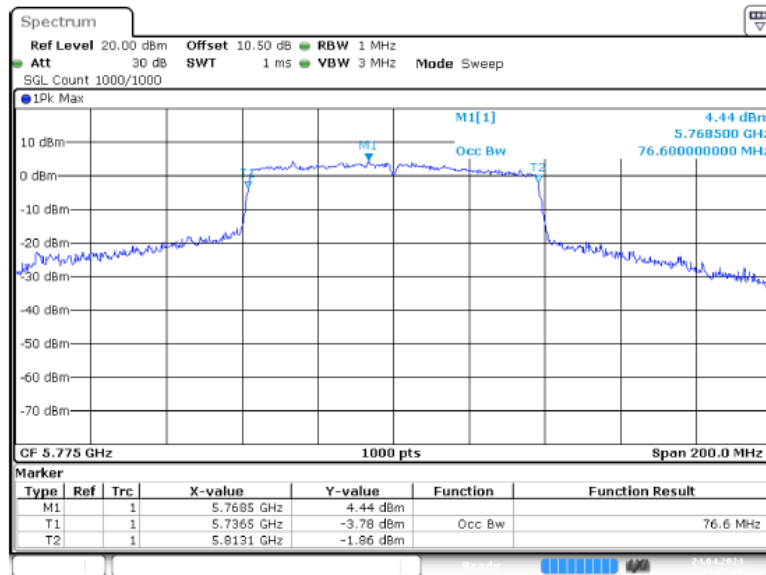
802.11 ac40 mode, 5795MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 13:04:19

802.11 ac80 mode, 5775MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 13:07:27

CONDUCTED TRANSMITTER OUTPUT POWER*Test Mode: Transmitting***Band: 5150-5250 MHz**

Mode	Frequency (MHz)	Conducted Average power(dBm)	Limit (dBm)
802.11a	5180	14.22	24
	5200	13.85	
	5240	14.29	
802.11ac20	5180	14.08	
	5200	14.15	
	5240	14.09	
802.11ac40	5190	9.87	
	5230	14.08	
802.11ac80	5210	11.05	

Band: 5725-5850 MHz

Mode	Frequency (MHz)	Conducted Average power(dBm)	Limit (dBm)
802.11a	5745	13.15	30
	5785	12.88	
	5825	12.63	
802.11ac20	5745	12.96	
	5785	12.69	
	5825	12.45	
802.11ac40	5745	12.94	
	5785	12.69	
802.11ac80	5795	12.58	

Note: The maximum antenna gain is 2.87dBi for band 1 and 4.09dBi for band 4.

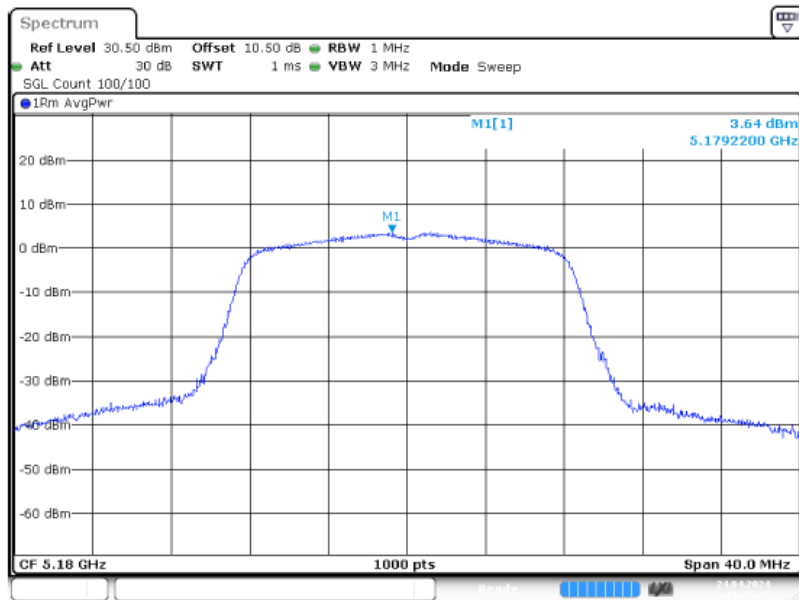
POWER SPECTRAL DENSITY*Test Mode: Transmitting*

Band	Mode	Frequency (MHz)	Duty Cycle Factor (dB)	PSD Result (dBm/MHz)	PSD Limit (dBm/MHz)
5150-5250 MHz	802.11 a	5180	0.01	3.65	11
		5200	0.12	4.30	
		5240	0.12	4.60	
	802.11 ac20	5180	0.12	4.15	
		5200	0.12	0.64	
		5240	0.12	3.46	
	802.11 ac40	5190	0.24	-2.95	
		5230	0.24	0.48	
	802.11 ac80	5210	0.46	-10.46	

Note: Result= Reading+ duty cycle factor

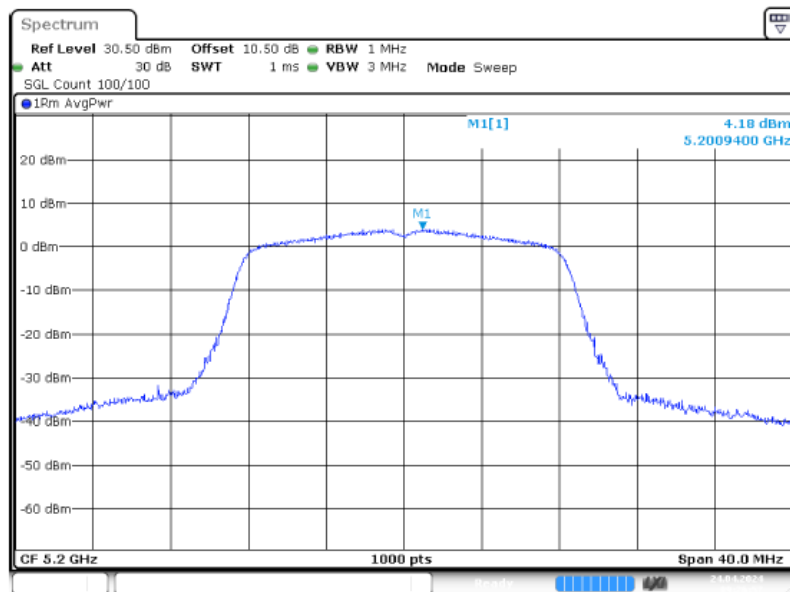
5150MHz-5250 MHz Band:

802.11a mode, Power spectral density-5180MHz



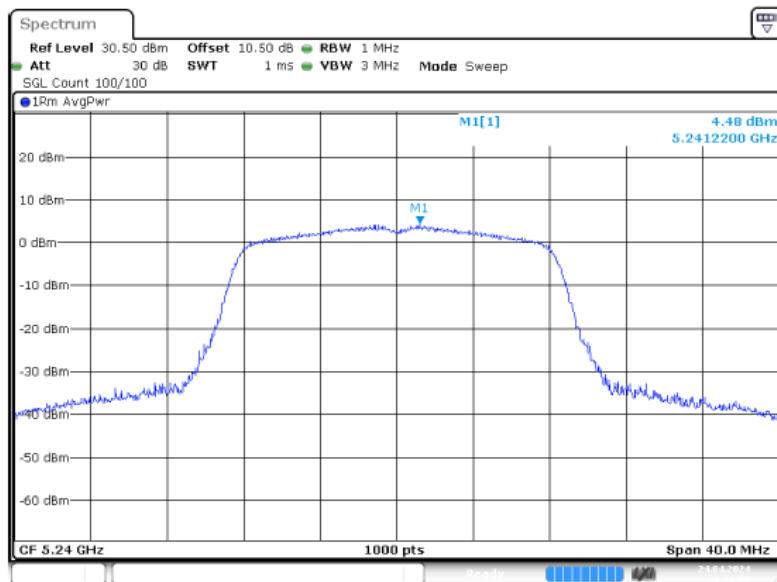
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 09:23:37

802.11a mode, Power spectral density-5200MHz



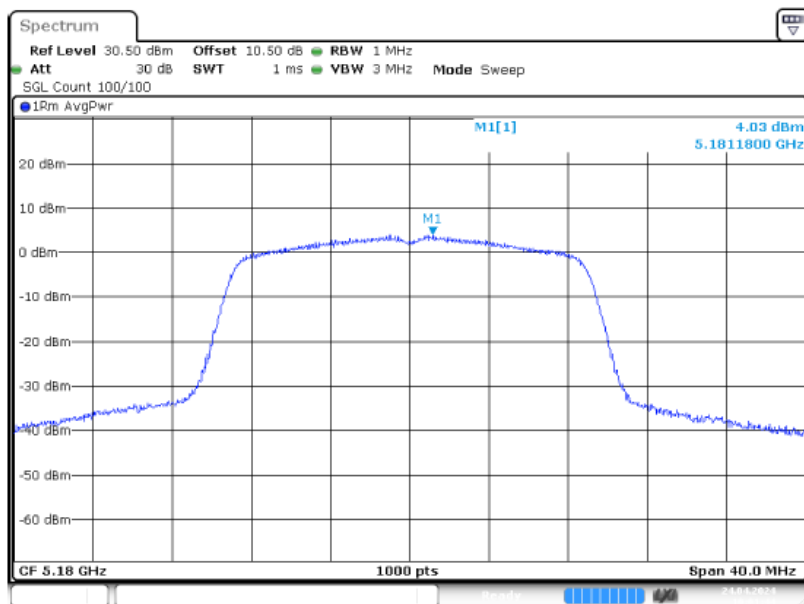
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 09:26:58

802.11a mode, Power spectral density-5240MHz



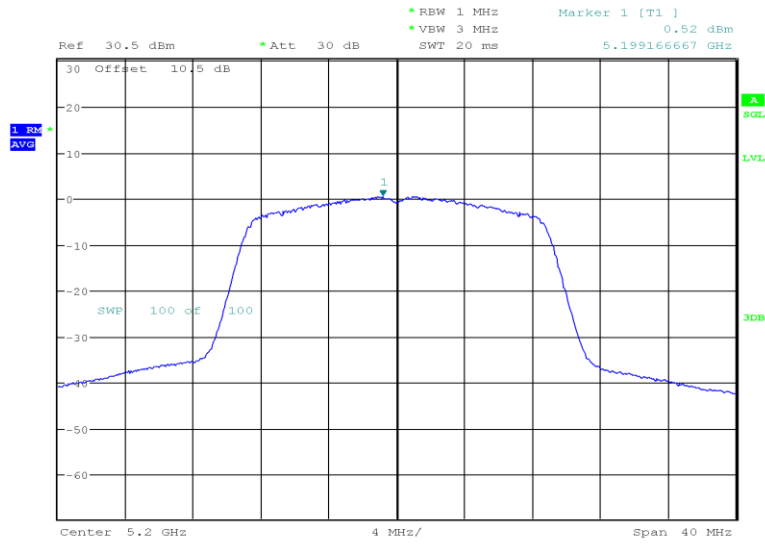
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 09:29:03

802.11ac20 mode, Power spectral density-5180MHz



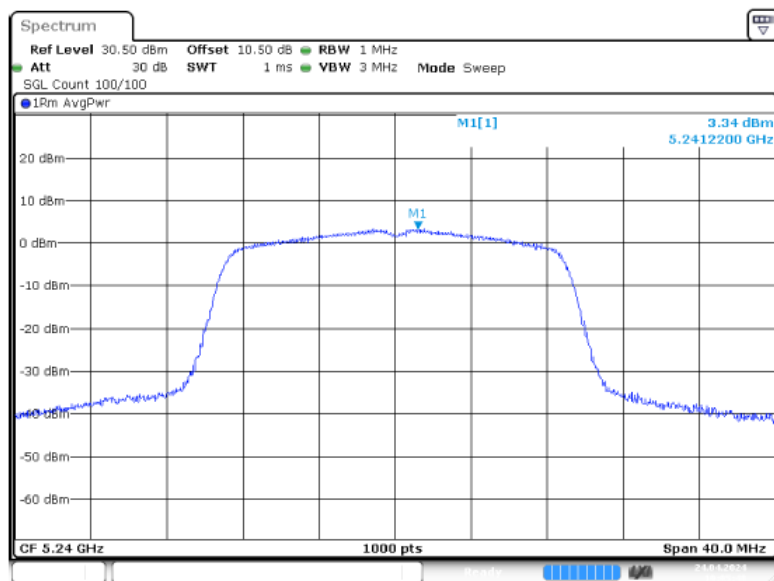
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:01:44

802.11 ac20 mode, Power spectral density-5200MHz



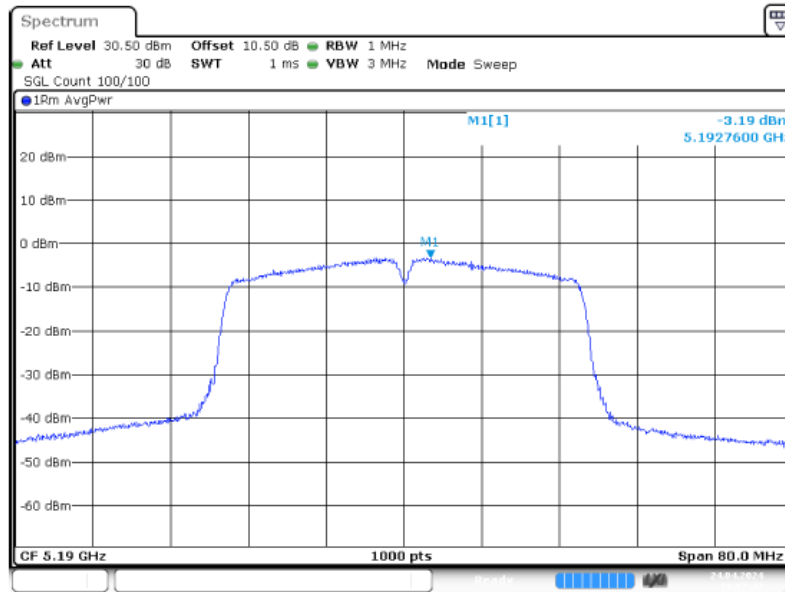
ProjectNo.:RKSA240327005 Tester:Bard Liu
Date: 5.JUL.2024 14:02:41

802.11 ac20 mode, Power spectral density-5240MHz



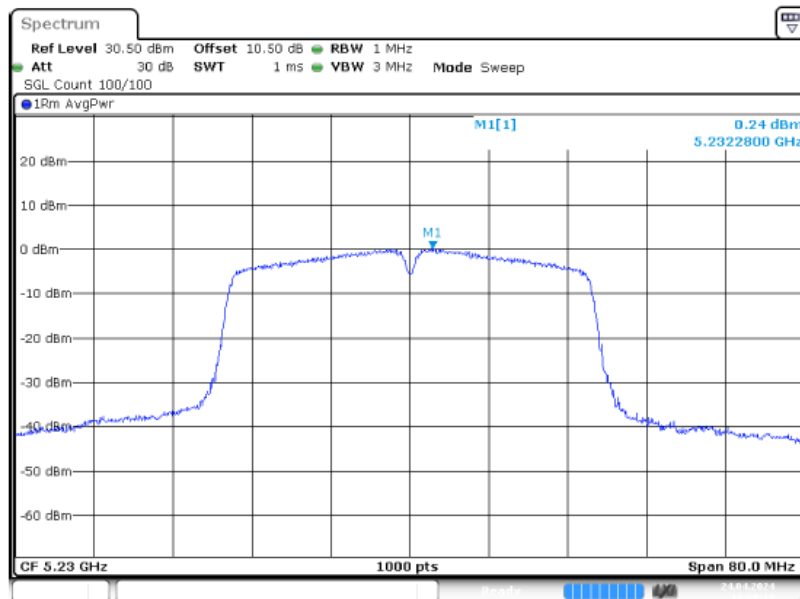
ProjectNo.:RKSA240327005 Tester:Bard Liu
Date: 24.APR.2024 10:05:48

802.11ac40 mode, Power spectral density-5190MHz



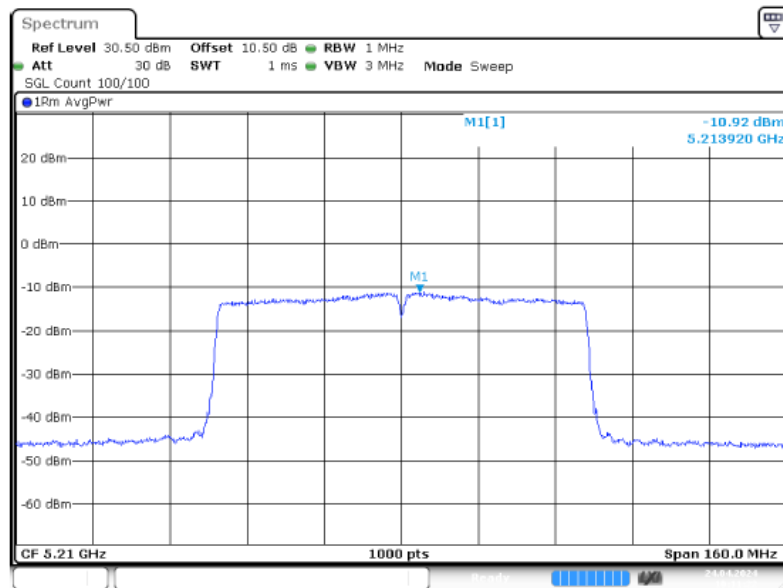
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:07:48

802.11 ac40 mode, Power spectral density-5230MHz



ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:09:20

802.11 ac80 mode, Power spectral density-5210MHz



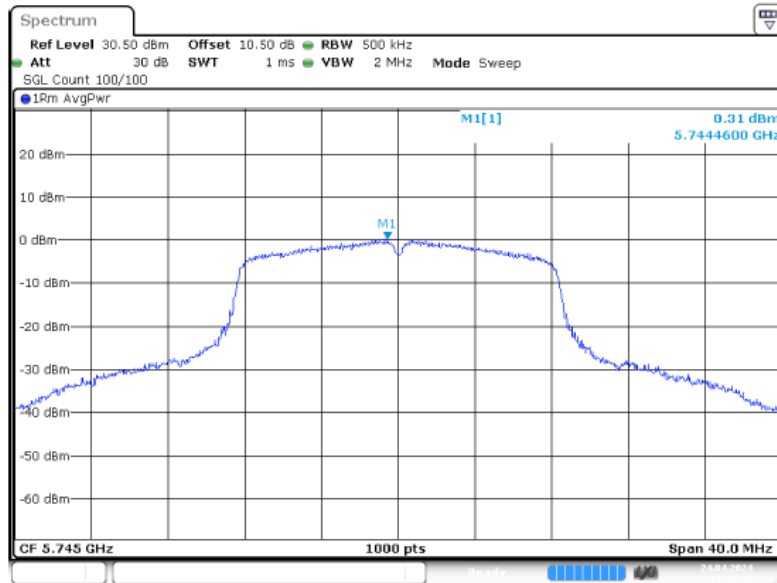
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 10:11:23

Band	Mode	Frequency (MHz)	Duty Cycle Factor (dB)	Result (dBm/500KHz)	Limit (dBm/500KHz)
5725-5850 MHz	802.11 a	5745	0.11	0.42	30
		5785	0.12	-0.33	
		5825	0.12	-0.57	
	802.11 ac20	5745	0.12	0.05	
		5785	0.12	-0.75	
		5825	0.12	-0.00	
	802.11 ac40	5755	0.24	-3.31	
		5795	0.24	-3.31	
	802.11 ac80	5775	0.46	-6.91	

Note: Result= Reading+ duty cycle factor

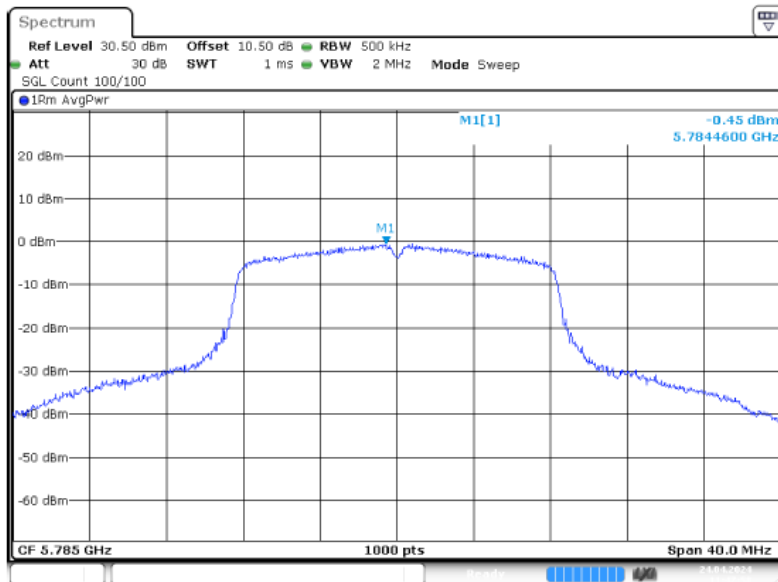
5725MHz-5850 MHz Band:

802.11a mode, Power spectral density-5745MHz

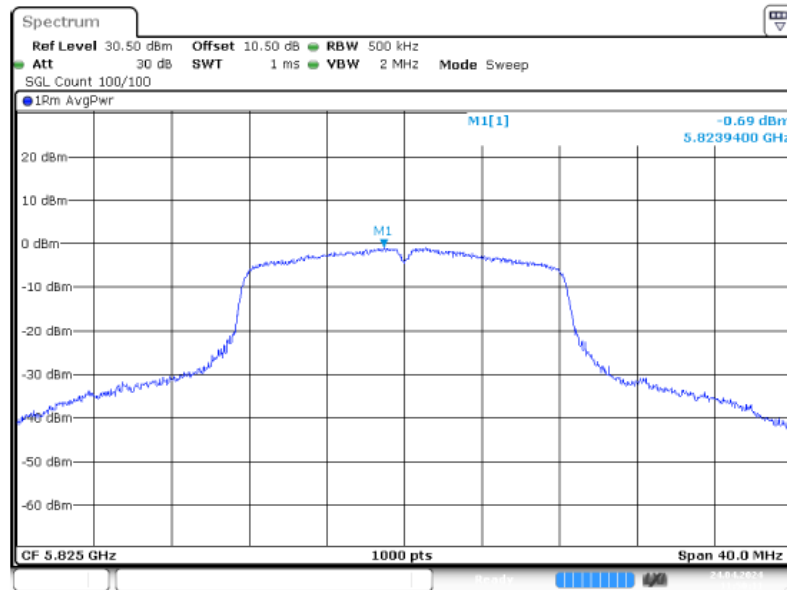


ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 11:44:42

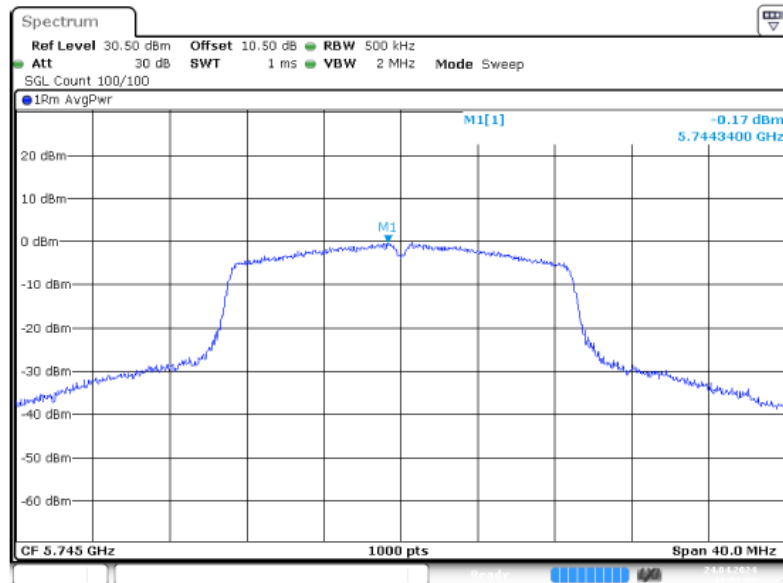
802.11a mode, Power spectral density-5785MHz



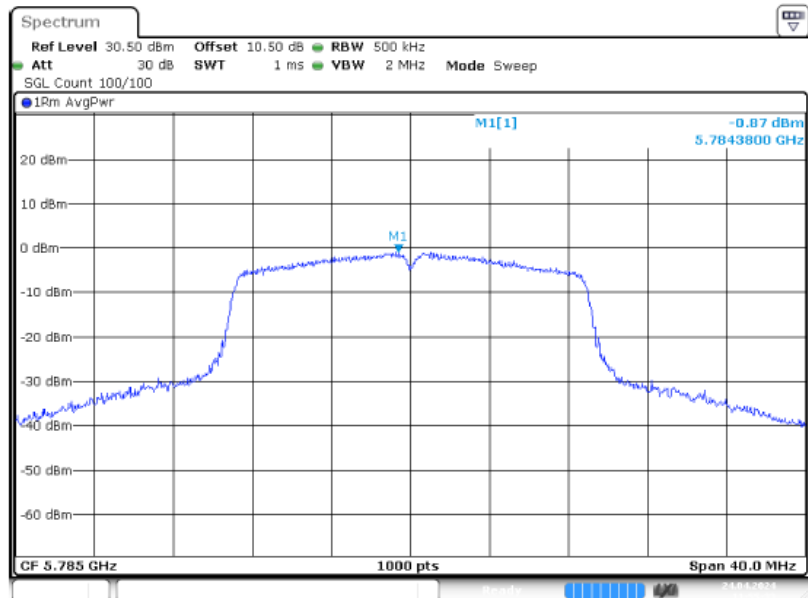
ProjectNo.: RKSA240327005 Tester: Bard Liu
 Date: 24 APR 2024 11:47:58

802.11a mode, Power spectral density-5825MHz

ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 11:50:11

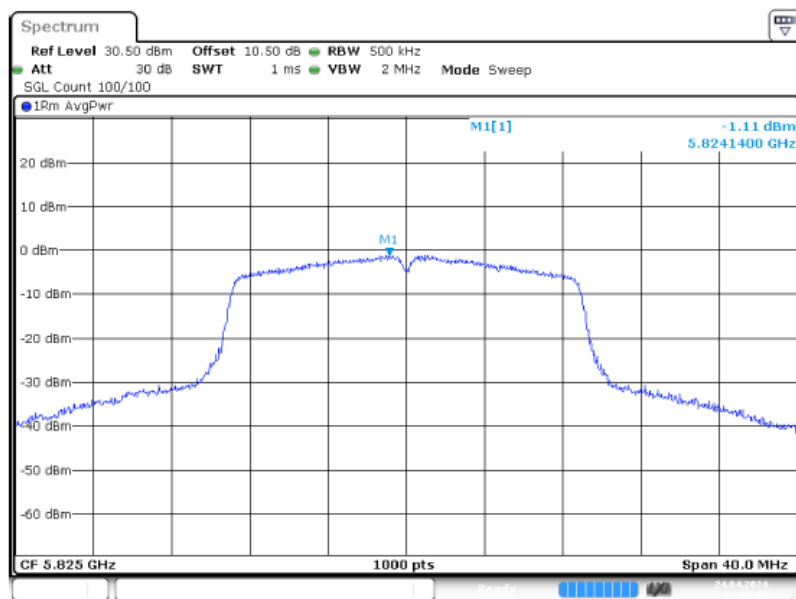
802.11ac20 mode, Power spectral density-5745MHz

ProjectNo.: RKSA240327005 Tester: Bard Liu
Date: 24 APR 2024 11:52:58

802.11 ac20 mode, Power spectral density-5785MHz

ProjectNo.: RKSA240327005 Tester: Bard Liu

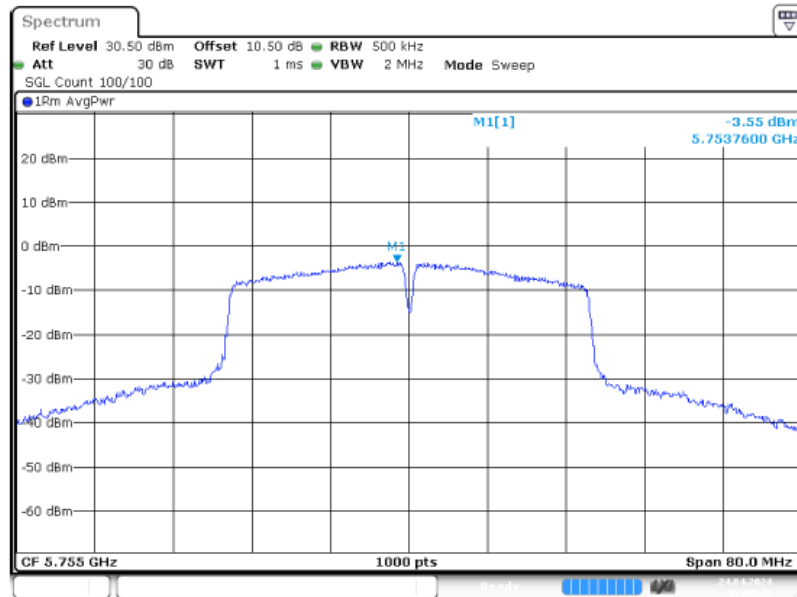
Date: 24 APR 2024 11:55:33

802.11 ac20 mode, Power spectral density-5825MHz

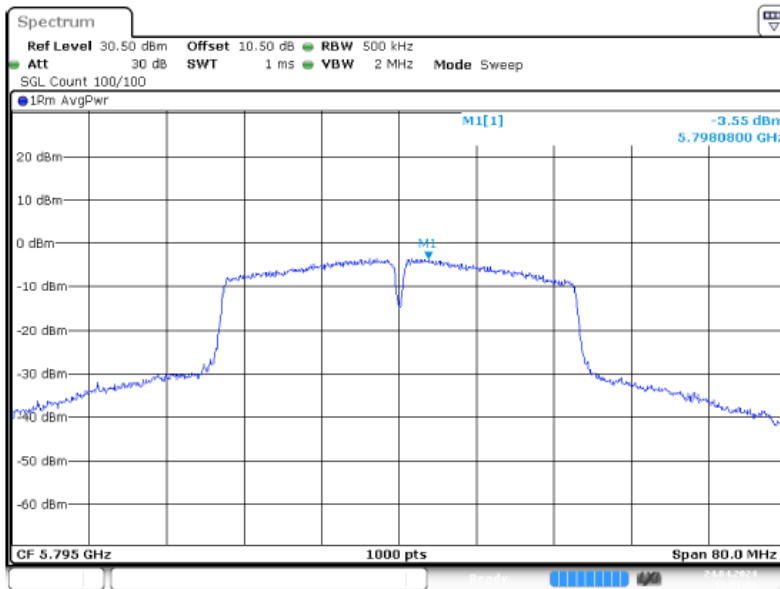
ProjectNo.: RKSA240327005 Tester: Bard Liu

Date: 24 APR 2024 11:57:59

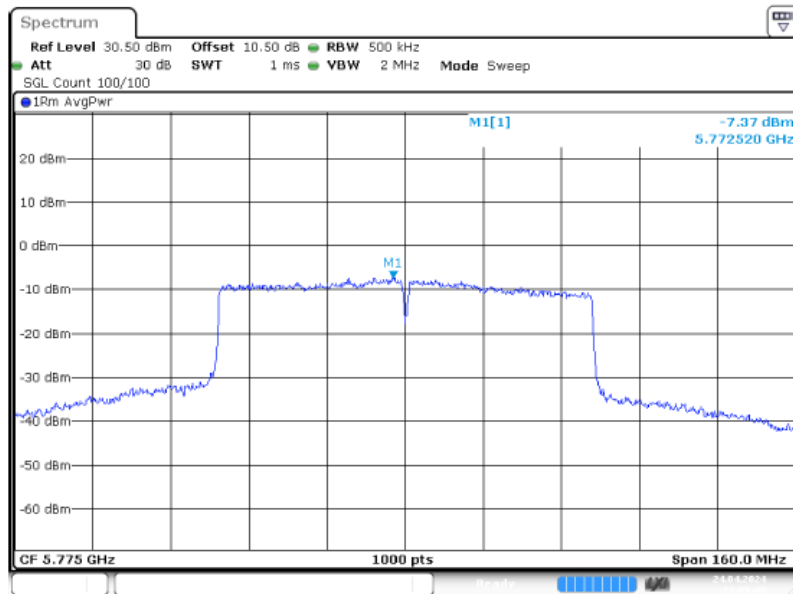
802.11ac40 mode, Power spectral density-5775MHz



802.11 ac40 mode, Power spectral density-5795MHz



802.11 ac80 mode, Power spectral density-5775MHz



ProjectNo.: RKSA240327005 Tester Bard Liu
Date: 24.APR.2024 13:09:49

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT D-TEST SETUP PHOTOGRAPHS.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95.45% confidence interval.

******* END OF REPORT *******