

FCC PART 15.407

TEST REPORT

For

Compex Systems Pte Ltd

178 Paya Lebar Road #05-05 Singapore 409030

FCC ID: TK4WLW518H25

Report Type: Original Report	Product Name: WiFi 6 (802.11ax) 2x2 MU-MIMO Dual Band Module
Report Number:	RKSA240703001-00C
Report Date:	2025-03-11
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Approved By:	Kyle Xu 
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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.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA240703001-00C	R1V1	2025-03-11	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Compex Systems Pte Ltd	
Product Name:	WiFi 6 (802.11ax) 2x2 MU-MIMO Dual Band Module	
Tested Model:	WLW518H25-V	
Power Supply:	DC 3.3V	
Operating Frequency:	B1: 5150-5250 MHz, B2: 5250-5350 MHz, B3: 5470-5725 MHz, B4: 5725-5850 MHz	
Maximum Output Power:	5G Wi-Fi	
	Band 1: For master 802.11a: 16.94 dBm 802.11ac20: 19.92 dBm 802.11ac40: 19.72 dBm 802.11ac80: 8.72 dBm 802.11ax20: 19.79 dBm 802.11ax40: 19.81 dBm 802.11ax80: 8.84 dBm For client 802.11a: 16.8 dBm 802.11ac20: 14.65 dBm 802.11ac40: 17.48 dBm 802.11ac80: 7.9 dBm 802.11ax20: 14.72 dBm 802.11ax40: 18.57 dBm 802.11ax80: 8.28 dBm Band 2: 802.11a: 16.78dBm 802.11ac160: 8.58 dBm 802.11ac20: 16.46 dBm 802.11ac40: 18.70 dBm 802.11ac80: 10.38 dBm 802.11ax160: 8.72 dBm 802.11ax20: 16.03 dBm 802.11ax40: 18.42 dBm 802.11ax80: 10.30 dBm	Band 3: 802.11a: 16.94 dBm 802.11ac160: 7.78 dBm 802.11ac20: 16.42 dBm 802.11ac40: 18.37 dBm 802.11ac80: 20.00 dBm 802.11ax160: 7.85 dBm 802.11ax20: 15.77 dBm 802.11ax40: 18.79 dBm 802.11ax80: 20.32 dBm Band 4: 802.11a: 16.32 dBm 802.11ac20: 19.87 dBm 802.11ac40: 19.76 dBm 802.11ac80: 19.65 dBm 802.11ax20: 19.87 dBm 802.11ax40: 19.79 dBm 802.11ax80: 19.78 dBm
Channel Number:	B1: 7, B2: 8, B3: 22, B4: 8	
Channel Separation	802.11a/ac/n/ax20: 20 MHz, 802.11ac/n/ax40: 40 MHz, 802.11ac/ax80: 80 MHz, 802.11ac/ax160: 160 MHz	
Modulation Type:	OFDM, OFDMA	
Antenna Type:	Omni Antenna	
★Maximum Antenna Gain:	7.0 dBi	

Note: The maximum antenna gain was provided by the applicant.

All measurement and test data in this report was gathered from production sample serial number: RKSA240703001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-07-03)

Objective

This type approval report is prepared for *Compex Systems 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.

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℃
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.

Note: The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80/ax20/ax40/ax80/ac160/ax160, the 802.11n-ht20/n-ht40 were reduced since the identical parameters with 802.11 ac20/ ac40.

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

802.11a/ac20/ax20 mode Channel 36, 40, 48 were tested.

802.11ac40/ax40 mode Channel 38, 46 were tested.

802.11ac80/ax80 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 **5250~5350 MHz** band, test channel list is as below,

802.11a/ac20/ax20 mode Channel 52, 56, 64 were tested.

802.11ac40/ax40 mode Channel 54, 62 were tested.

802.11ac80/ax80 mode Channel 58 was tested.

802.11ac160/ax160 mode Channel 50 was tested.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
50	5250	60	5300
52	5260	62	5310
54	5270	64	5320
56	5280	/	/
58	5290	/	/

For **5470~5725 MHz** band, test channel list is as below,

802.11a/ac20/ax20 mode Channel 100, 116, 140, 144 were tested.

802.11ac40/ax40 mode Channel 102, 110, 134, 142 were tested.

802.11ac80/ax80 mode Channel 106, 122, 138 were tested.

802.11ac160/ax160 mode Channel 114 were tested.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	134	5670
102	5510	118	5590	136	5680
104	5520	120	5600	138	5690
106	5530	122	5610	140	5700
108	5540	124	5620	142	5710
110	5550	126	5630	144	5720
112	5560	128	5640	/	/
114	5570	132	5660	/	/

For **5725~5850 MHz** band,

802.11a/ac20/ax20 mode Channel 149, 157, 165 were tested.

802.11ac40/ax40 mode Channel 151, 159 were tested.

802.11ac80/ax80 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:

1. 802.11a supports SISO mode, 802.11n/ac/ax supports SISO, MIMO mode and beamforming mode.

2. For radiated emission, according to pretest, the worst case for 802.11n/ac/ax are MIMO mode.
So MIMO mode test data were recorded in the report.

3. The applicant provided two different antennas with the same antenna type, and the antenna with high antenna gain was selected for radiated emissions.

EUT Exercise Software

RF test tool: Putty

The worst case was performed under:

5150-5250MHz:

For Master

Mode	Data Rate	Channel	★Power Level	
			Chain 0	Chain 1
802.11a	6 Mbps	5180	28	28
		5200	36	36
		5240	36	36
802.11-ac20	MCS0	5180	28	28
		5200	36	36
		5240	36	36
802.11-ac40	MCS0	5190	17	17
		5230	36	36
802.11-ac80	MCS0	5210	12	12
802.11-ax20	MCS0	5180	28	28
		5200	36	36
		5240	36	36
802.11-ax40	MCS0	5190	17	17
		5230	36	36
802.11-ax80	MCS0	5210	12	12

For Client

Mode	Data Rate	Channel	★Power Level	
			Chain 0	Chain 1
802.11a	6 Mbps	5180	28	28
		5200	36	36
		5240	36	36
802.11-ac20	MCS0	5180	25	25
		5200	25	25
		5240	25	25
802.11-ac40	MCS0	5190	17	17
		5230	30	30
802.11-ac80	MCS0	5210	10	10
802.11-ax20	MCS0	5180	25	25
		5200	25	25
		5240	25	25
802.11-ax40	MCS0	5190	17	17
		5230	36	36
802.11-ax80	MCS0	5210	12	12

5250-5350MHz:

Mode	Data Rate	Channel	★Power Level	
			Chain 0	Chain 1
802.11a	6 Mbps	5260	36	36
		5280	36	36
		5320	32	32
802.11-ac20	MCS0	5260	28	28
		5280	28	28
		5320	28	28
802.11-ac40	MCS0	5270	30	30
		5310	30	30
802.11-ac80	MCS0	5290	15	15
802.11-ac160	MCS0	5250	12	12
802.11-ax20	MCS0	5260	28	28
		5280	28	28
		5320	28	28
802.11-ax40	MCS0	5270	30	30
		5310	20	20
802.11-ax80	MCS0	5290	35	35
802.11-ax160	MCS0	5250	12	12

5470-5725MHz:

Mode	Data Rate	Channel	★Power Level	
			Chain 0	Chain 1
802.11a	6 Mbps	5500	33	33
		5580	36	36
		5700	33	33
		5720	33	33
802.11ac20	MCS0	5500	26	26
		5580	26	26
		5700	26	26
		5720	26	26
802.11ac40	MCS0	5510	23	23
		5550	26	26
		5670	26	26
		5710	26	26
802.11ac80	MCS0	5530	15	15
		5610	33	33
		5690	36	36
802.11ac160	MCS0	5570	12	12
802.11ax20	MCS0	5500	28	28
		5580	28	28
		5700	28	28
		5720	28	28
802.11ax40	MCS0	5510	24	24
		5550	30	30
		5670	30	30
		5710	30	30
802.11ax80	MCS0	5530	13	13
		5610	36	36
		5690	36	36
802.11ax160	MCS0	5570	10	10

5725-5850MHz:

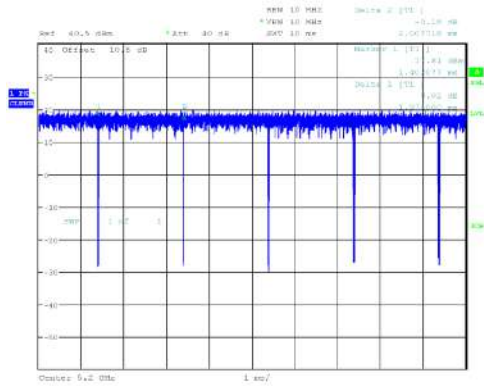
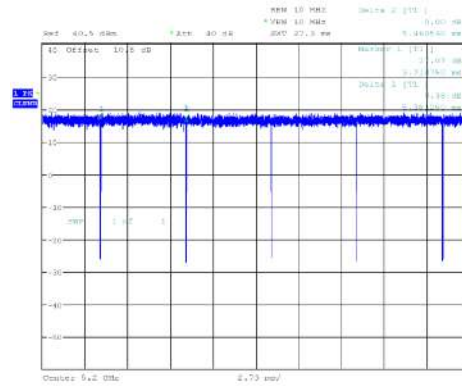
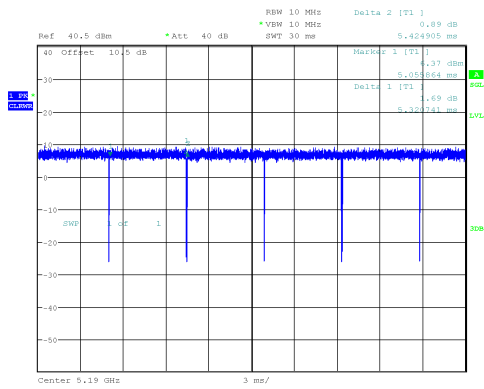
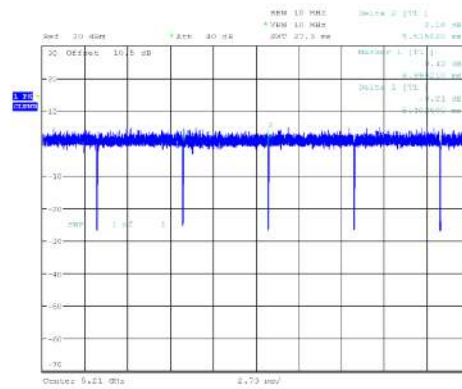
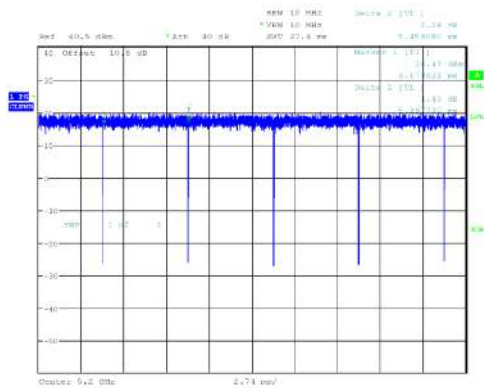
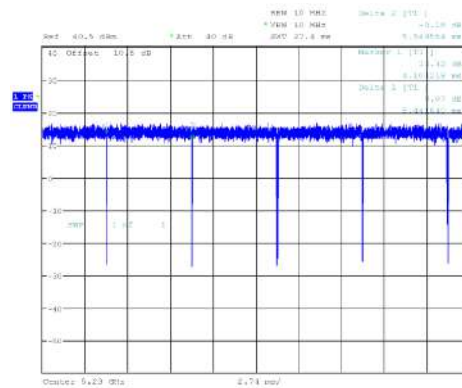
Mode	Data Rate	Channel	★Power Level	
			Chain 0	Chain 1
802.11a	6 Mbps	5745	36	36
		5785	36	36
		5825	36	36
802.11ac20	MCS0	5745	36	36
		5785	36	36
		5825	36	36
802.11ac40	MCS0	5755	36	36
		5795	36	36
802.11ac80	MCS0	5775	36	36
802.11ax20	MCS0	5745	36	36
		5785	36	36
		5825	36	36
802.11ax40	MCS0	5755	36	36
		5795	36	36
802.11ax80	MCS0	5775	31	31

Note:

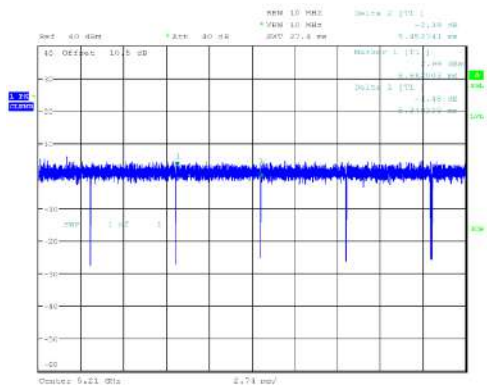
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Duty Cycle

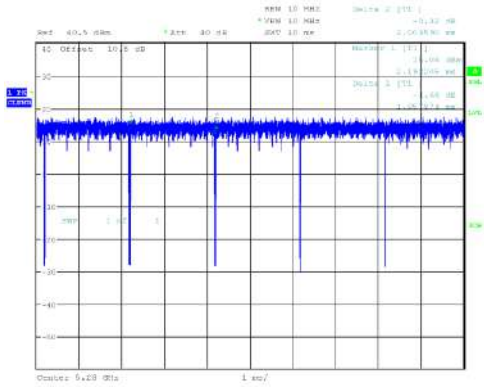
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5150MHz-5250MHz Band:**802.11a mode**ProjectNo.:RKSA240703001 Tester:Neil Zhou
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Date: 21.AUG.2024 14:47:05**802.11ac40 mode**ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 21.AUG.2024 15:08:08**802.11ac80 mode**ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 21.AUG.2024 15:49:34**802.11ax20 mode**ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 21.AUG.2024 16:12:56**802.11ax40 mode**ProjectNo.:RKSA240703001 Tester:Neil Zhou
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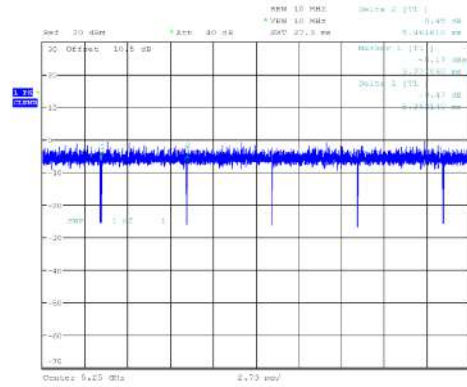
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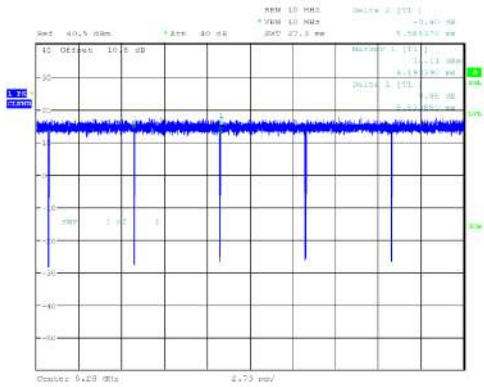
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5250MHz-5350MHz Band:**802.11a mode**

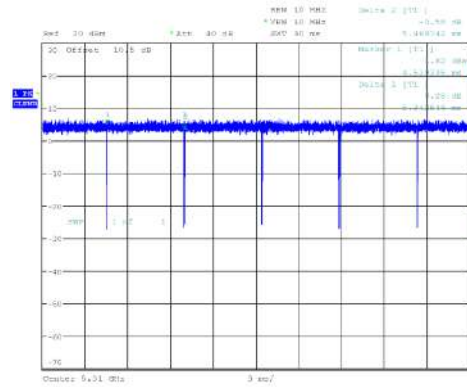
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802.11ac160 mode

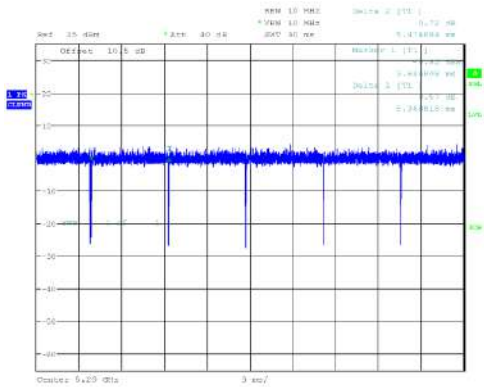
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802.11ac20 mode

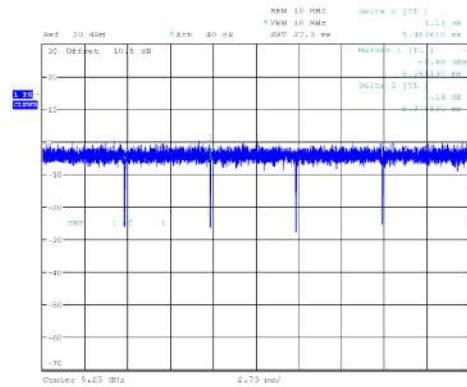
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802.11ac40 mode

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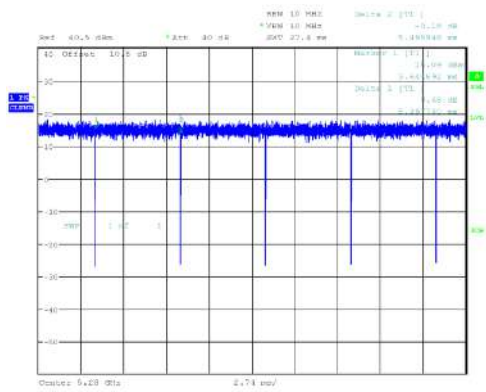
802.11ac80 mode

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802.11ax160 mode

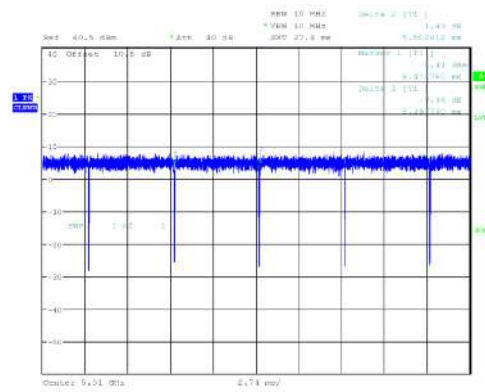
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802.11ax20 mode



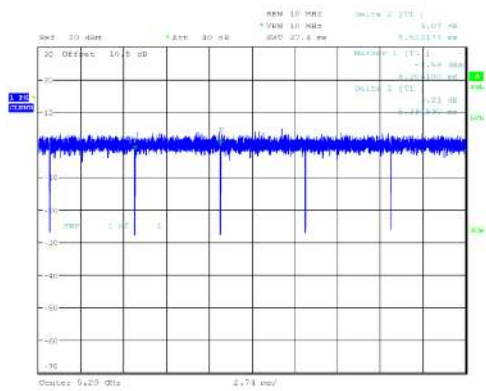
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802.11ax40 mode



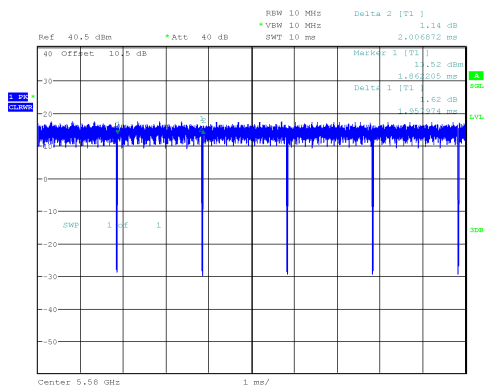
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802.11ax80 mode



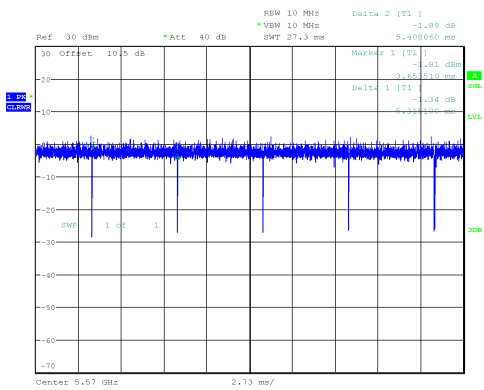
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5470MHz-5725MHz Band:
802.11a mode



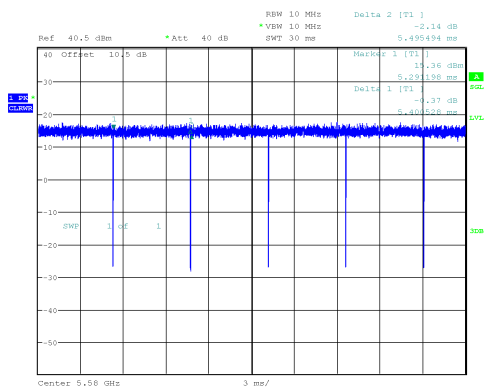
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802.11ac160 mode



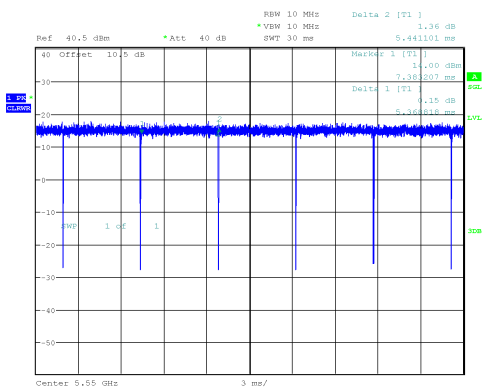
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802.11ac20 mode



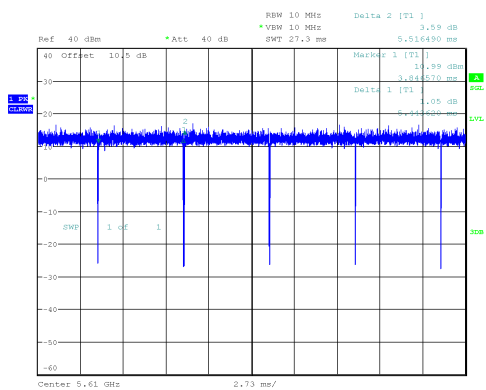
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802.11ac40 mode



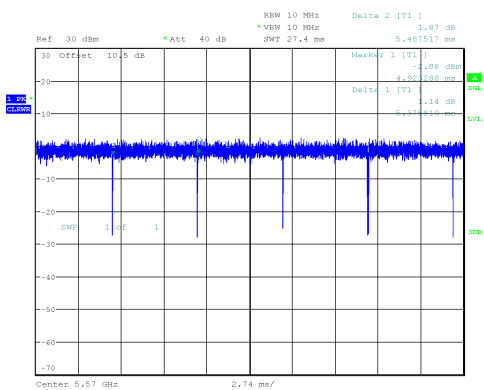
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802.11ac80 mode



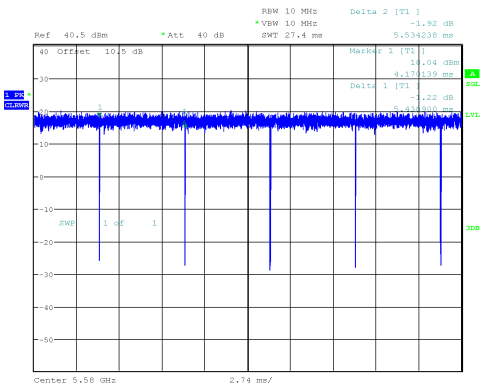
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802.11ax160 mode



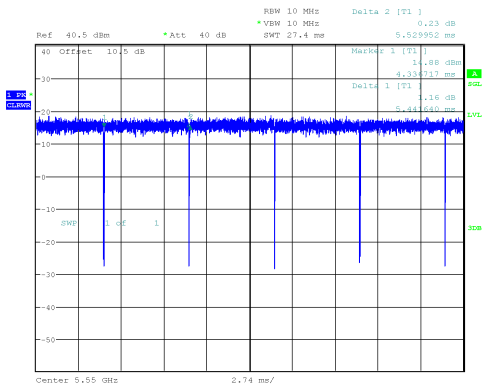
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802.11ax20 mode



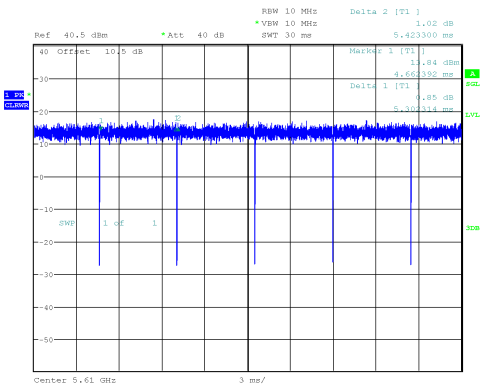
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802.11ax40 mode



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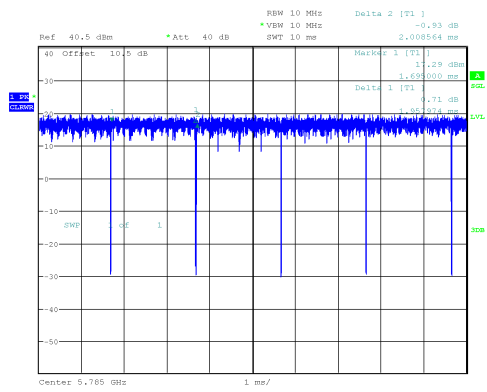
802.11ax80 mode



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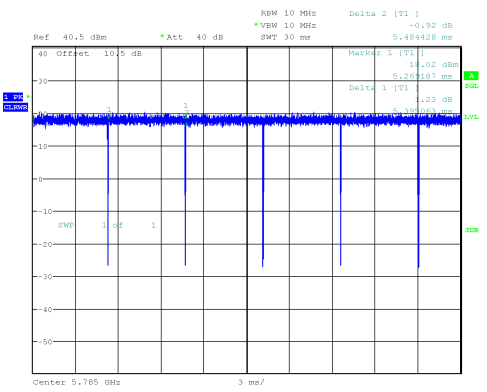
5725MHz-5850MHz Band:

802.11a mode



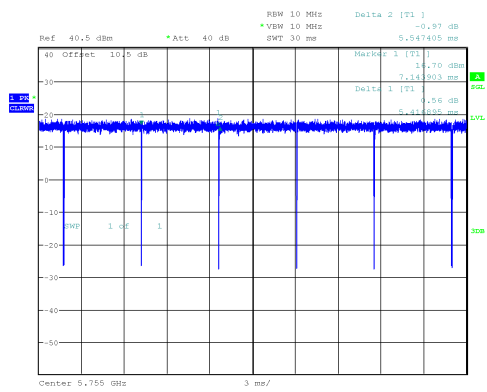
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802.11ac20 mode



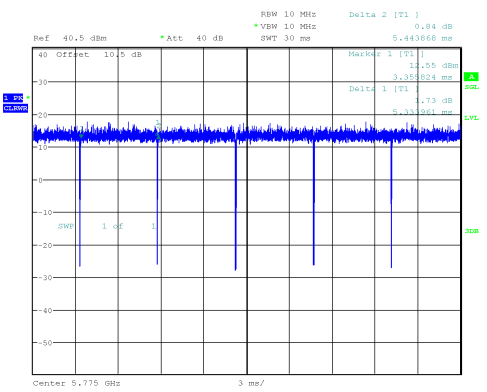
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Date: 22.AUG.2024 15:17:17

802.11ac40 mode



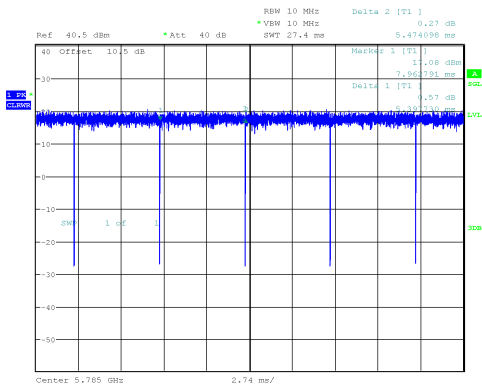
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 15:26:20

802.11ac80 mode



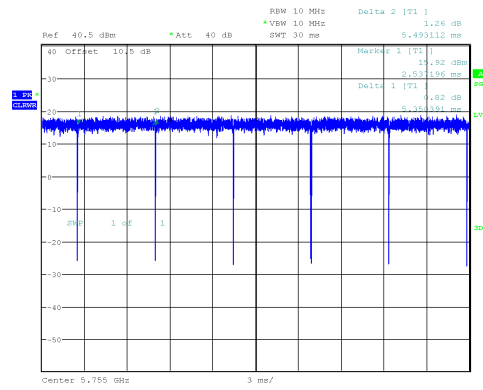
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 15:39:43

802.11ax20 mode



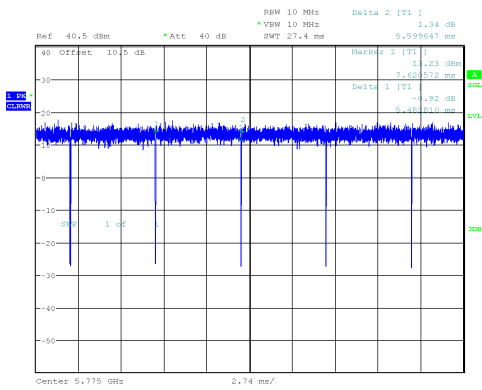
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 15:55:15

802.11ax40 mode



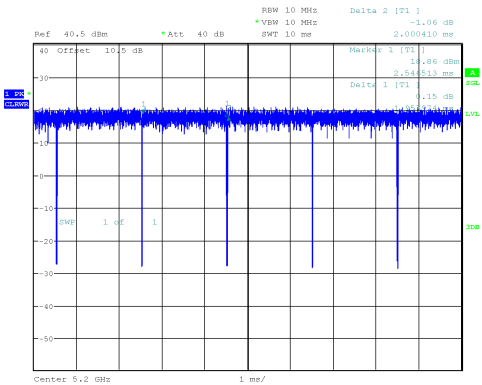
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 16:07:19

802.11ax80 mode



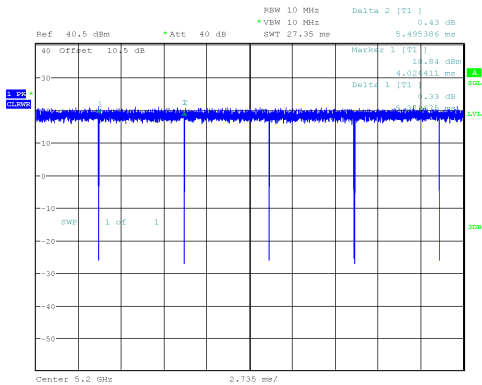
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 16:18:37

Chain 1
5150MHz-5250MHz Band:
802.11a mode



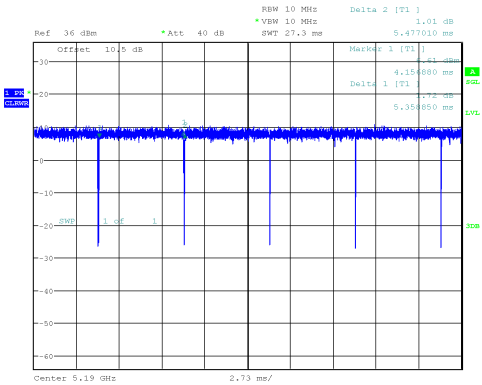
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 19:26:03

802.11ac20 mode



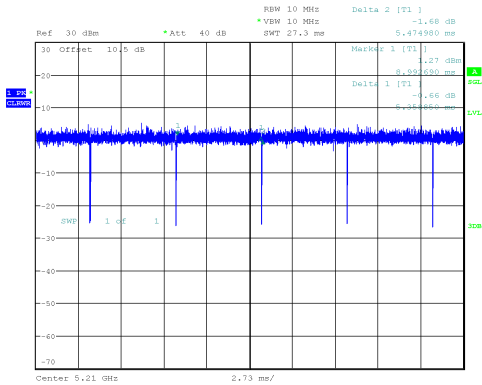
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 19:42:01

802.11ac40 mode



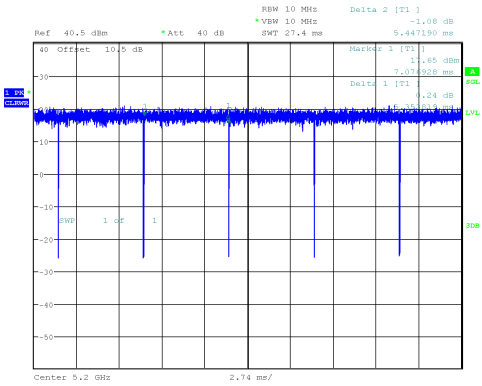
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 22.AUG.2024 19:54:36

802.11ac80 mode



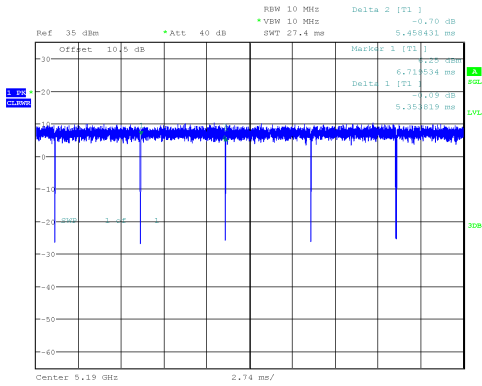
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 09:49:21

802.11ax20 mode



ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 10:02:26

802.11ax40 mode



ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 10:13:51

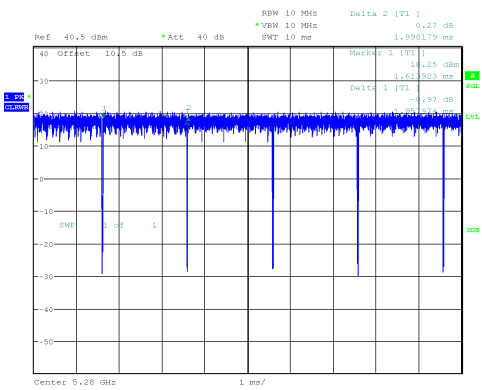
REF 35 dBm *Att 40 dB RESW 10 Mhz Delta 2 [T1] -0.70 dB
 *VIEW 10 30Hz SWT 27.4 ms 5.450431 ms

Offset 10.0 dB Markers 1 [T1] -0.70 dB
 Delta 1 [T1] 6.718534 ms
 -0.69 dB
 5.358119 ms

5.19 GHz 27.4 ms/

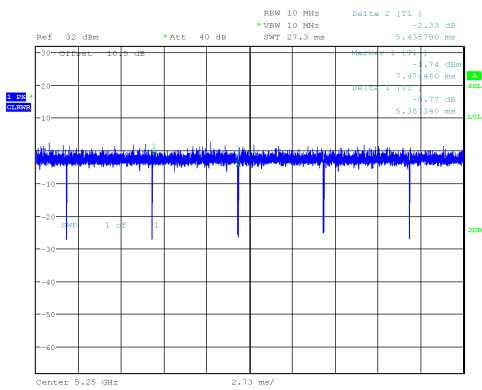
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 10:13:51

5250MHz-5350MHz Band:
802.11a mode



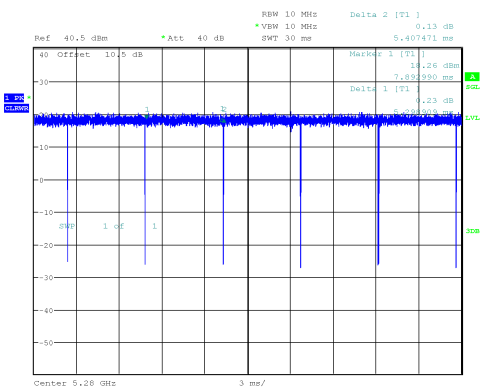
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 11:11:13

802.11ac160 mode



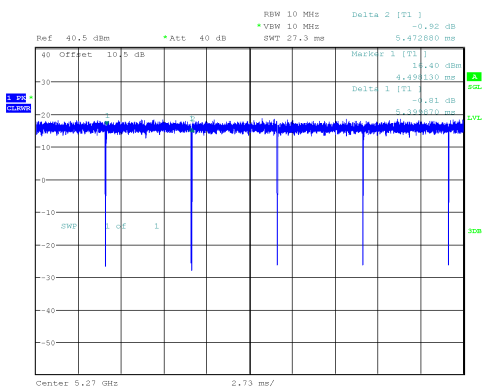
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 14:30:03

802.11ac20 mode



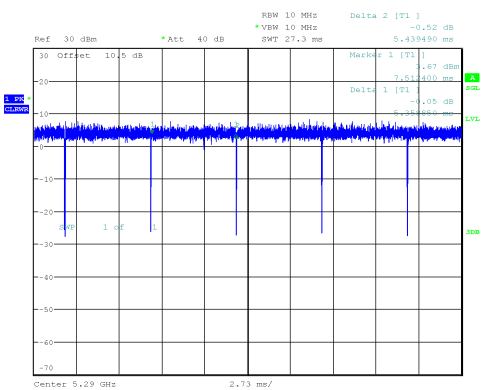
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 11:48:51

802.11ac40 mode



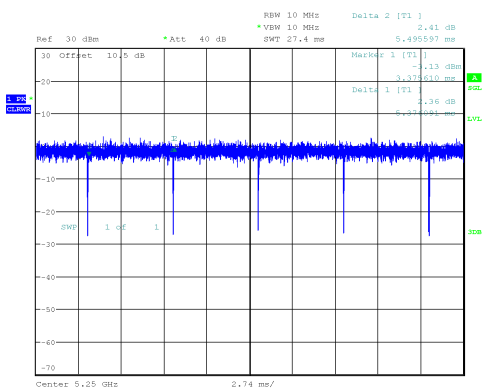
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 12:00:32

802.11ac80 mode



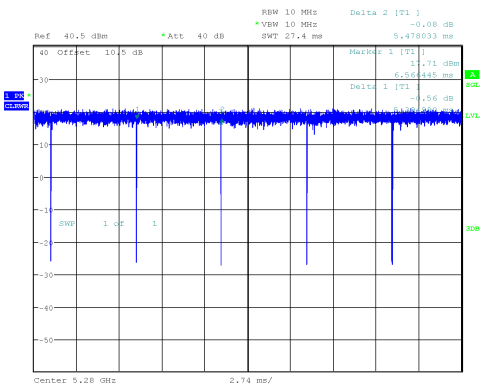
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 13:16:17

802.11ax160 mode



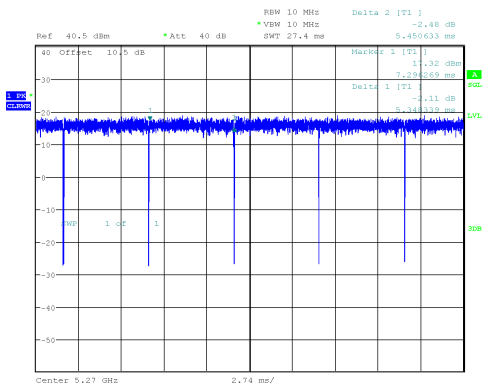
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 15:29:16

802.11ax20 mode



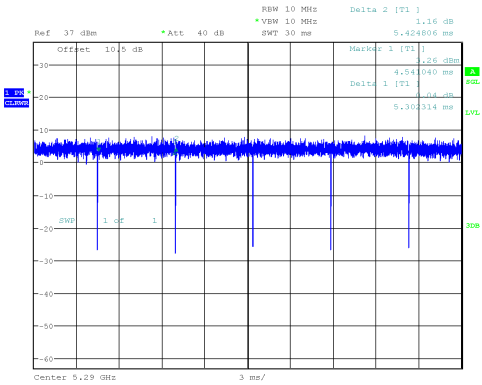
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 13:27:30

802.11ax40 mode

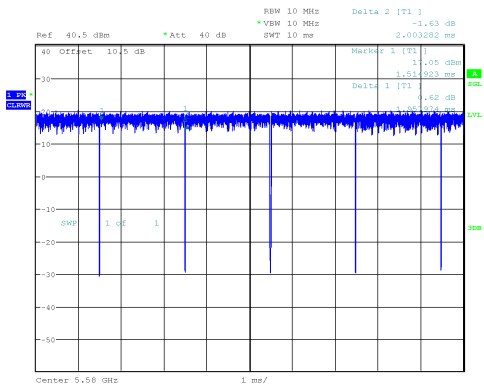


ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 13:39:05

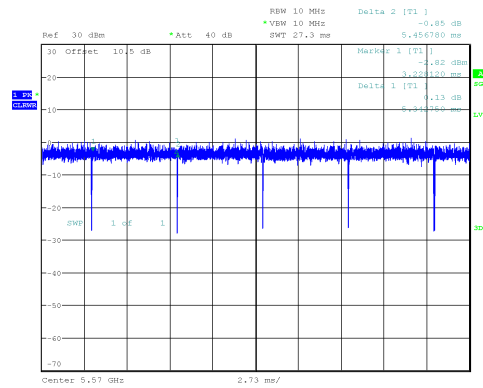
802.11ax80 mode



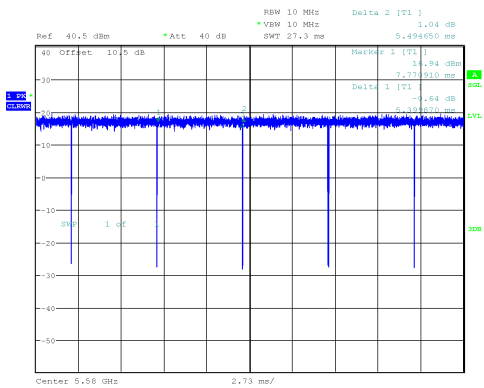
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 13:52:28

5470MHz-5725MHz Band:**802.11a mode**

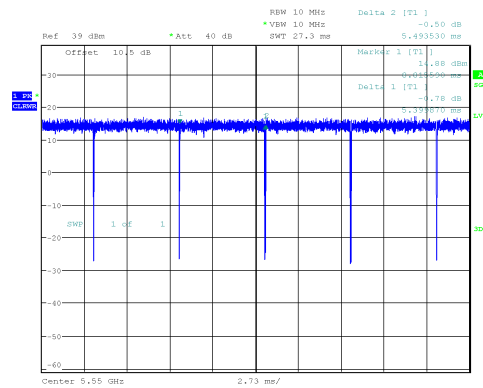
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 23.AUG.2024 15:44:24

802.11ac160 mode

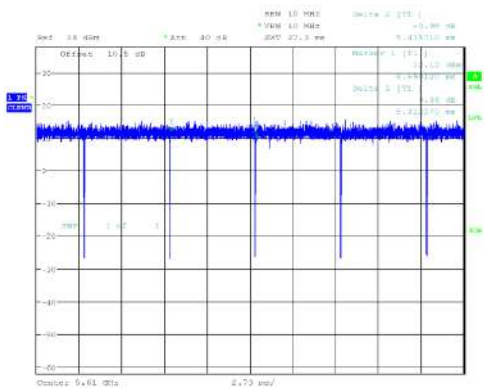
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 26.AUG.2024 16:36:03

802.11ac20 mode

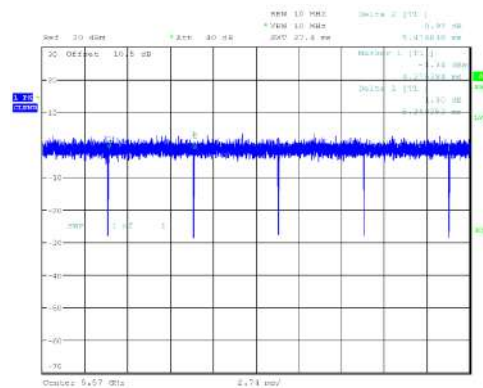
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 26.AUG.2024 11:46:41

802.11ac40 mode

ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 26.AUG.2024 13:22:37

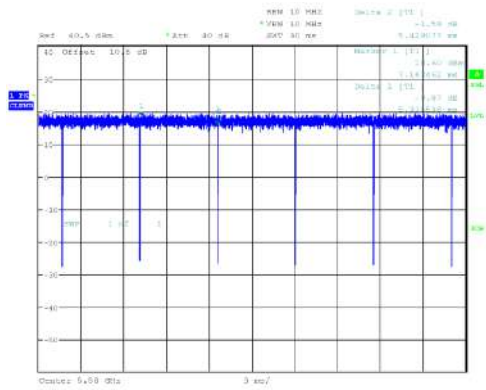
802.11ac80 mode

ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 26.AUG.2024 14:14:34

802.11ax160 mode

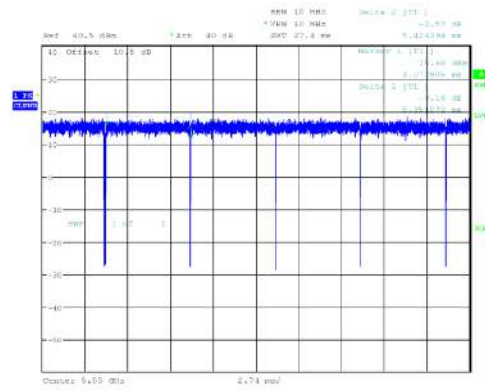
ProjectNo.:RKSA240703001 Tester:Neil Zhou
Date: 26.AUG.2024 15:50:05

802.11ax20 mode



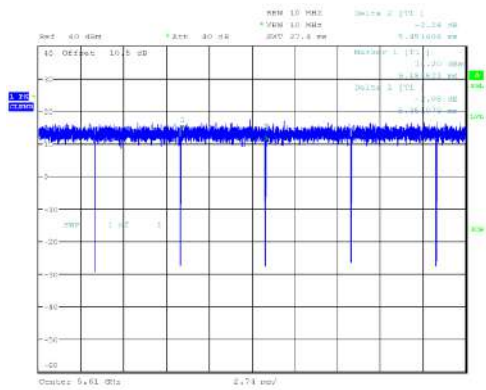
ProjectNo.:PESA240703001 Testcell:11111111
Date: 26.MAY.2024 14:36:52

802.11ax40 mode



ProjectNo.:PESA240703001 Testcell:11111111
Date: 26.MAY.2024 15:06:32

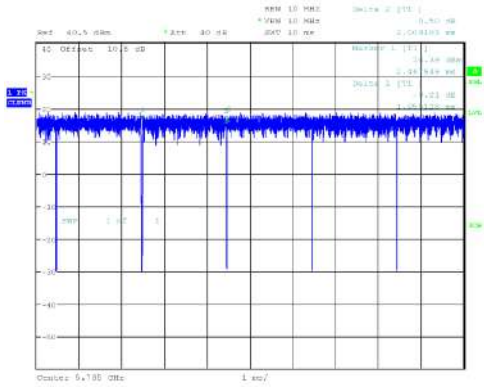
802.11ax80 mode



ProjectNo.:PESA240703001 Testcell:11111111
Date: 26.MAY.2024 15:35:24

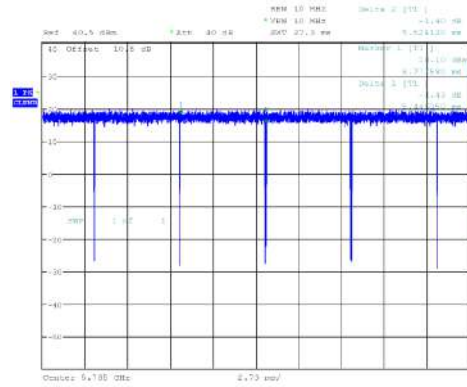
5725MHz-5850MHz Band:

802.11a mode



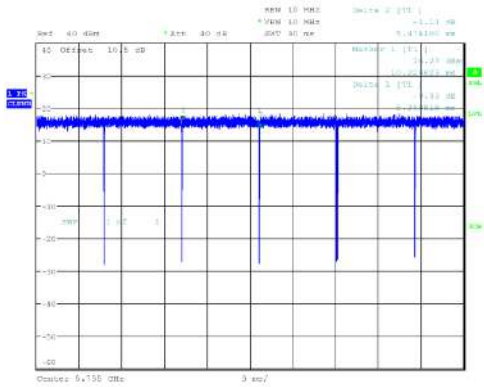
ProjectNo.:PES240703001 Testcell:11111111
Date: 26.May.2024 16:10:36

802.11ac20 mode



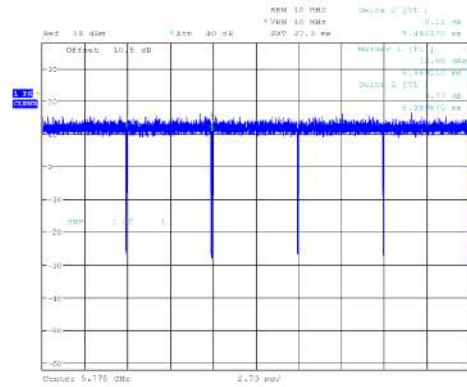
ProjectNo.:PES240703001 Testcell:11111111
Date: 26.May.2024 16:10:44

802.11ac40 mode



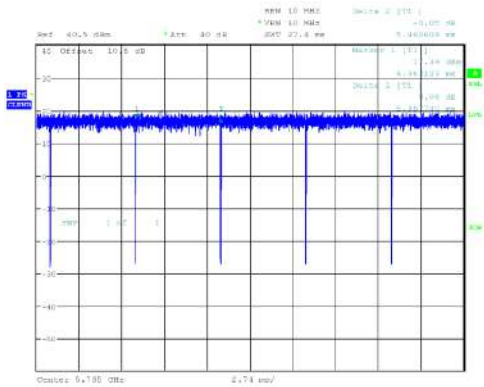
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Date: 26.May.2024 17:00:24

802.11ac80 mode



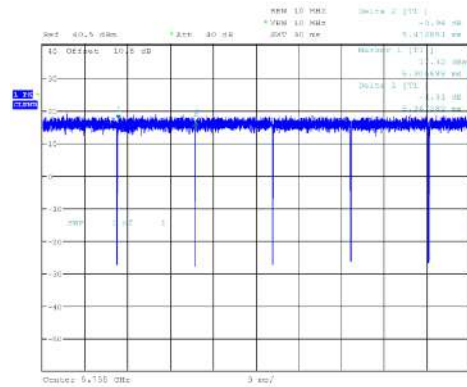
ProjectNo.:PES240703001 Testcell:11111111
Date: 26.May.2024 17:00:35

802.11ax20 mode



ProjectNo.:PES240703001 Testcell:11111111
Date: 26.May.2024 17:20:45

802.11ax40 mode



ProjectNo.:PES240703001 Testcell:11111111
Date: 26.May.2024 17:41:25

[illegible]

ProjectNo.:PESA240703001 Tester:Neil Zhou
Date: 20.09.2024 17:54:51

5.2G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5200MHz_Chain 0	1.974	2.008	98.31	/
a_5200MHz_Chain 1	1.958	2.000	97.90	0.09
ac20_5200MHz_Chain 0	5.381	5.461	98.54	/
ac20_5200MHz_Chain 1	5.380	5.495	97.91	0.09
ac40_5190MHz_Chain 0	5.321	5.425	98.08	/
ac40_5190MHz_Chain 1	5.359	5.477	97.85	0.09
ac80_5210MHz_Chain 0	5.403	5.515	97.97	0.09
ac80_5210MHz_Chain 1	5.359	5.475	97.88	0.09
ax20_5200MHz_Chain 0	5.398	5.458	98.90	/
ax20_5200MHz_Chain 1	5.354	5.447	98.29	/
ax40_5190MHz_Chain 0	5.350	5.470	97.81	0.10
ax40_5190MHz_Chain 1	5.354	5.458	98.09	/
ax80_5210MHz_Chain 0	5.348	5.453	98.07	/
ax80_5210MHz_Chain 1	5.395	5.465	98.72	/

5.3G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5280MHz_Chain 0	1.958	2.004	97.70	0.10
a_5280MHz_Chain 1	1.958	1.998	98.00	0.09
ac160_5250MHz_Chain 0	5.362	5.462	98.17	/
ac160_5250MHz_Chain 1	5.387	5.436	99.10	/
ac20_5280MHz_Chain 0	5.534	5.585	99.09	/
ac20_5280MHz_Chain 1	5.299	5.407	98.00	0.09
ac40_5270MHz_Chain 0	5.321	5.459	97.47	0.11
ac40_5270MHz_Chain 1	5.400	5.473	98.67	/
ac80_5290MHz_Chain 0	5.369	5.475	98.06	/
ac80_5290MHz_Chain 1	5.359	5.439	98.53	/
ax160_5250MHz_Chain 0	5.376	5.483	98.05	/
ax160_5250MHz_Chain 1	5.376	5.496	97.82	0.10
ax20_5280MHz_Chain 0	5.398	5.496	98.22	/
ax20_5280MHz_Chain 1	5.395	5.478	98.48	/
ax40_5270MHz_Chain 0	5.398	5.531	97.60	0.11
ax40_5270MHz_Chain 1	5.348	5.451	98.11	/
ax80_5290MHz_Chain 0	5.395	5.512	97.88	0.09
ax80_5290MHz_Chain 1	5.302	5.425	97.73	0.10

5.6G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5580MHz_Chain 0	1.958	2.007	97.56	0.11
a_5580MHz_Chain 1	1.958	2.003	97.75	0.10
ac160_5570MHz_Chain 0	5.315	5.408	98.28	/
ac160_5570MHz_Chain 1	5.343	5.457	97.91	0.09
ac20_5580MHz_Chain 0	5.401	5.495	98.29	/
ac20_5580MHz_Chain 1	5.400	5.495	98.27	/
ac40_5550MHz_Chain 0	5.369	5.441	98.68	/
ac40_5550MHz_Chain 1	5.400	5.494	98.29	/
ac80_5610MHz_Chain 0	5.444	5.516	98.69	/
ac80_5610MHz_Chain 1	5.312	5.436	97.72	0.10
ax160_5570MHz_Chain 0	5.376	5.488	97.96	0.09
ax160_5570MHz_Chain 1	5.360	5.477	97.86	0.09
ax20_5580MHz_Chain 0	5.439	5.534	98.28	/
ax20_5580MHz_Chain 1	5.337	5.429	98.31	/
ax40_5550MHz_Chain 0	5.442	5.530	98.41	/
ax40_5550MHz_Chain 1	5.351	5.426	98.62	/
ax80_5610MHz_Chain 0	5.302	5.423	97.77	0.10
ax80_5610MHz_Chain 1	5.351	5.451	98.17	/

5.8G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5785MHz_Chain 0	1.958	2.009	97.46	0.11
a_5785MHz_Chain 1	1.955	2.009	97.31	0.12
ac20_5785MHz_Chain 0	5.395	5.484	98.38	/
ac20_5785MHz_Chain 1	5.446	5.524	98.59	/
ac40_5755MHz_Chain 0	5.417	5.547	97.66	0.10
ac40_5755MHz_Chain 1	5.369	5.474	98.08	/
ac80_5775MHz_Chain 0	5.334	5.444	97.98	0.09
ac80_5775MHz_Chain 1	5.400	5.492	98.32	/
ax20_5785MHz_Chain 0	5.398	5.474	98.61	/
ax20_5785MHz_Chain 1	5.398	5.461	98.85	/
ax40_5755MHz_Chain 0	5.350	5.493	97.40	0.11
ax40_5755MHz_Chain 1	5.367	5.473	98.06	/
ax80_5775MHz_Chain 0	5.483	5.600	97.91	0.09
ax80_5775MHz_Chain 1	5.310	5.357	99.12	/

Duty Cycle = Ton/(Ton+Toff)*100%

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

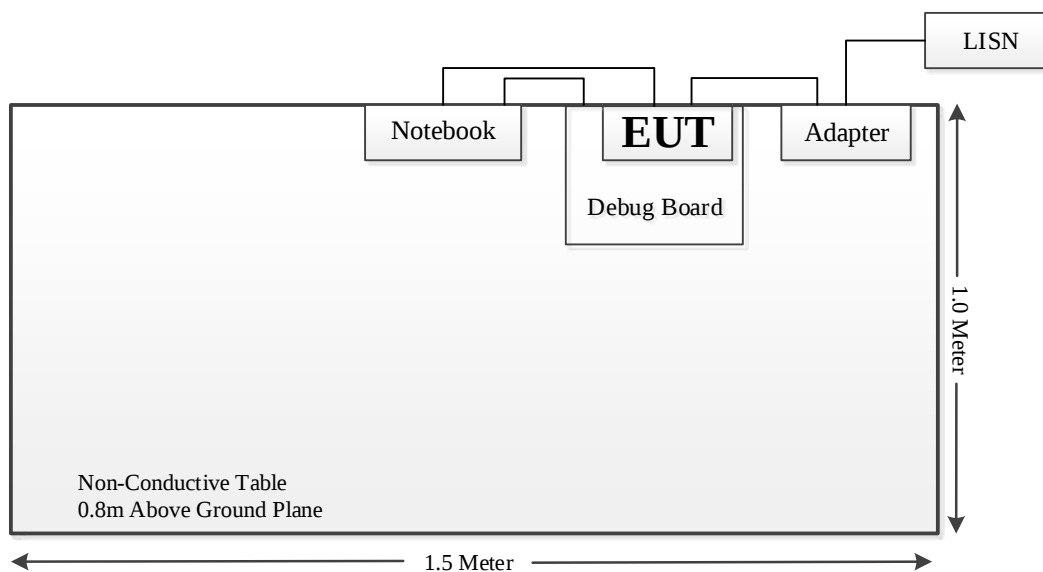
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Y700P	PF2B7PL5
MEAN WELL ENTERPRISES CO.,LTD.	Adapter	SGA40U12	/
/	Debug Board	/	/

External I/O Cable

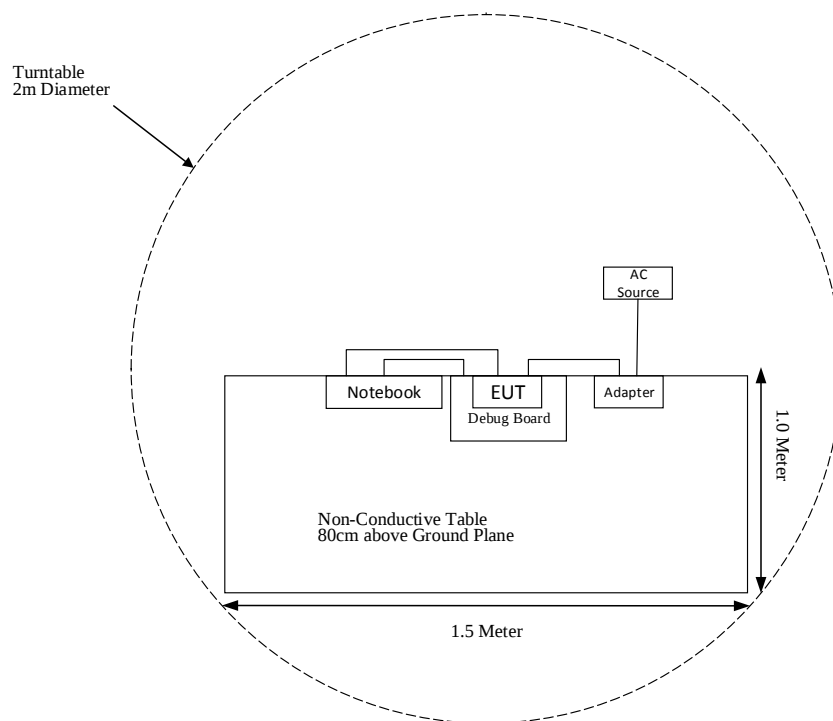
Cable Description	Length (m)	From Port	To
Power Cable 1	2.0	AC Source/LISN	Adapter
Power Cable 2	1.0	Adapter	EUT
RS485 Serial Cable	1.5	Notebook	Debug Board
USB Cable	1.0	EUT	Notebook

Block Diagram of Test Setup

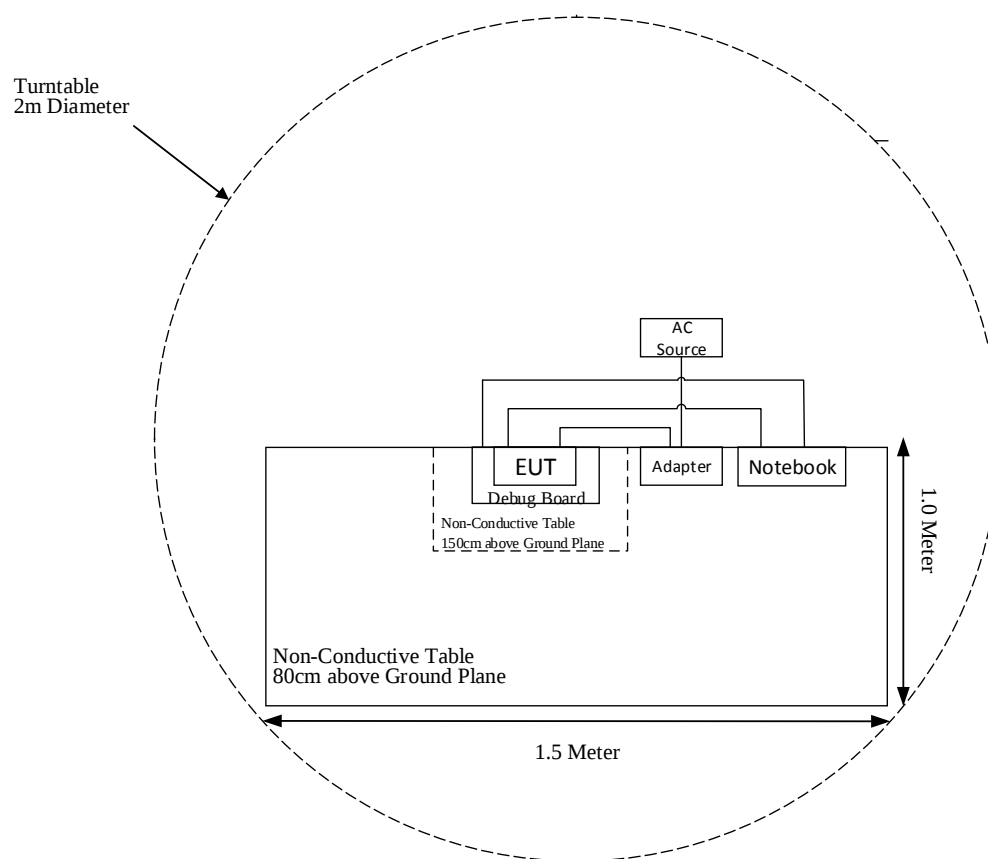
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



For Radiated Emissions (Above 1GHz):



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
BACL	Active Loop Antenna	1313-1A	4041511	2024-11-22	2027-11-21
Sonoma Instrument	Amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
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
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
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	84159	2023-12-07	2024-12-06
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRC50703	G094	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRC50704	84	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRC50705	G085	2024-04-25	2025-04-24
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-23	2025-04-22
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2024-04-24	2025-04-23
Rohde & Schwarz	Signal Analyzer	FSU26	200103	2024-04-24	2025-04-23
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
N/A	Attenuator	10 dB	N/A	2024-04-23	2025-04-22
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A

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).

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 & §15.407(b) (9)	AC Power Line Conducted Emissions	Compliant
§ 15.205 & §15.209 & §15.407(b)	Undesirable Emission & band edge	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant

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:

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

Calculated Data:

Mode	Frequency Range (MHz)	Maximum 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)				
2.4G Wi-Fi	2412-2462	4.5	2.82	21.0	125.89	20	0.0706	1.0	0.0706
5G Wi-Fi	5150-5250	7.0	5.01	20.0	100	20	0.0997	1.0	0.0998
	5250-5350	7.0	5.01	20.0	100	20	0.0997	1.0	0.0998
	5470-5725	7.0	5.01	21.0	125.89	20	0.1255	1.0	0.1256
	5725-5850	7.0	5.01	20.0	100	20	0.0997	1.0	0.0998

The 2.4G Wi-Fi & 5G Wi-Fi can be transmitting simultaneously, So

$$\sum_i \frac{S_i}{S_{Limit,i}} == 0.0706 + 0.1256 = 0.1962 \leq 1.0$$

Note:

1. For the above tune up power were declared by the manufacturer.

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

Antenna use a unique type of connector to attach to the EUT, fulfill the requirement of this section. Please refer to the EUT photos.

Function	Antenna Model	Antenna Type	Chain	Maximum Antenna Gain (dBi)
5 G Wi-Fi	PIC04-220080	Omni Antenna	Chain 0	7.0
			Chain 1	7.0
	ET04VSABA	Omni Antenna	Chain 0	6.0
			Chain 1	6.0

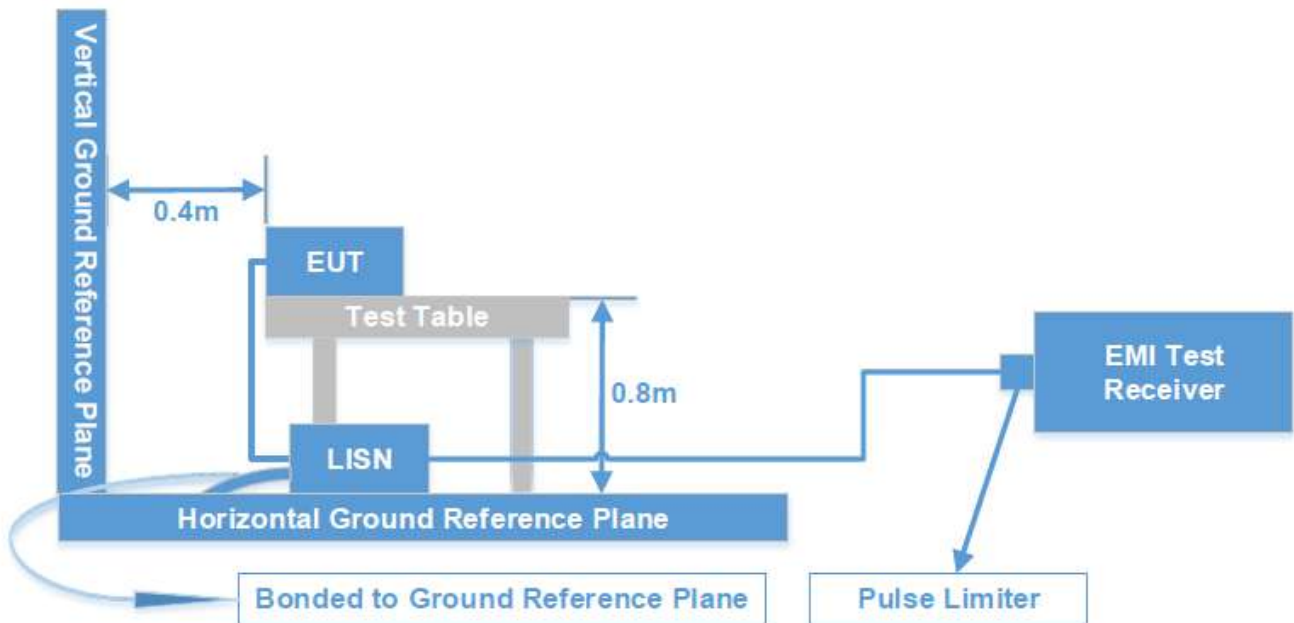
Result: Compliant.

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

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:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

Level (dBμV) = Read level (dBμV) + Factor (dB)

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:

Over Limit (dB) = Level (dBμV) - Limit (dBμV)

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) – UNDESIRABLE EMISSION & BAND EDGE

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:

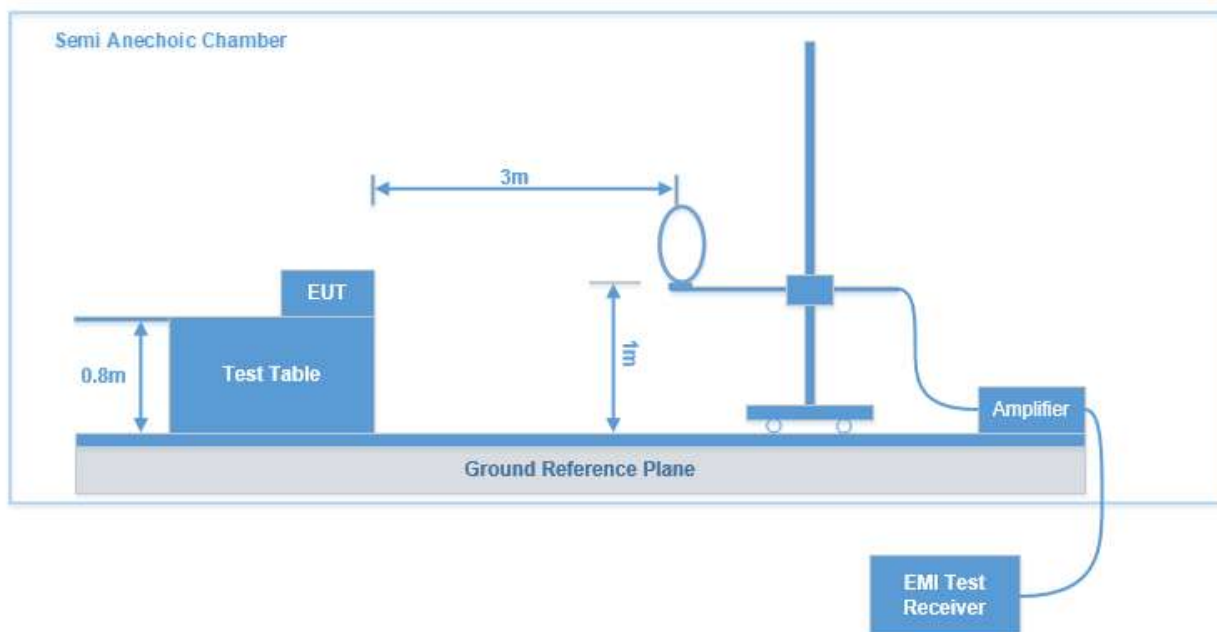
(i) All emissions shall be limited to a level of - 27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the 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.

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.

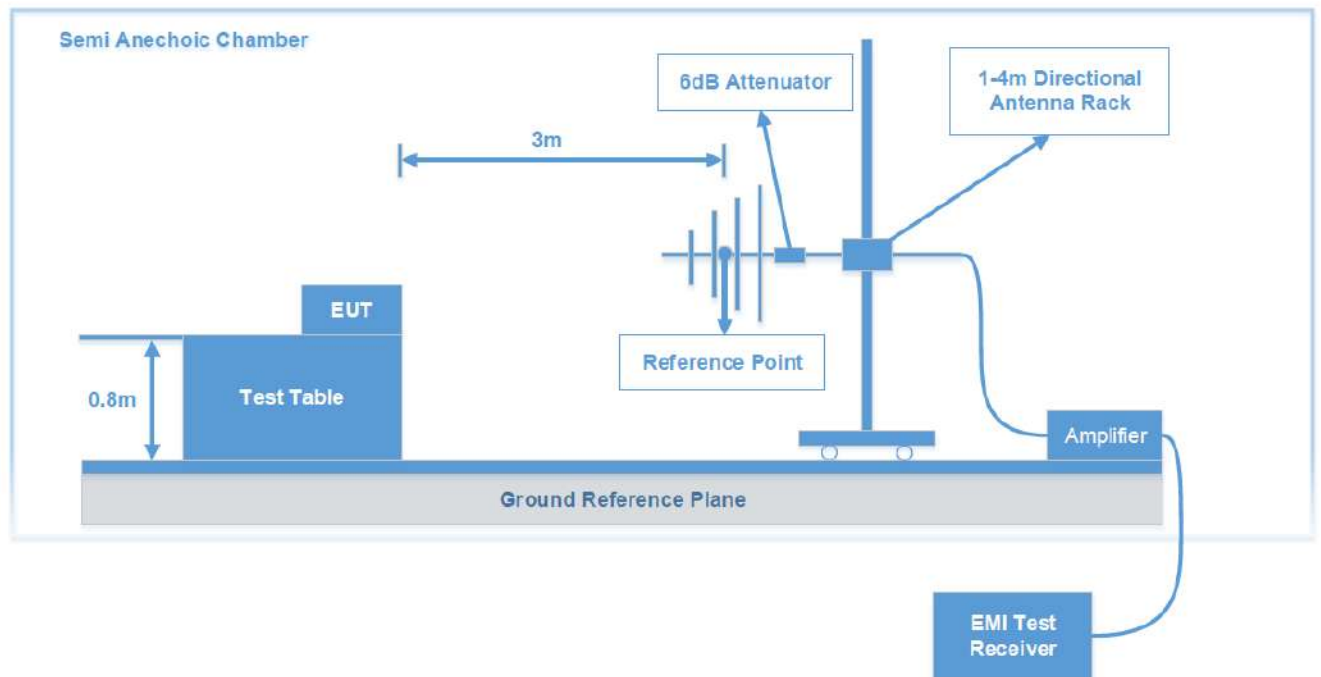
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E [dB\mu V/m] = EIRP [dBm] + 95.2$, for $d = 3$ meters.

Test System Setup

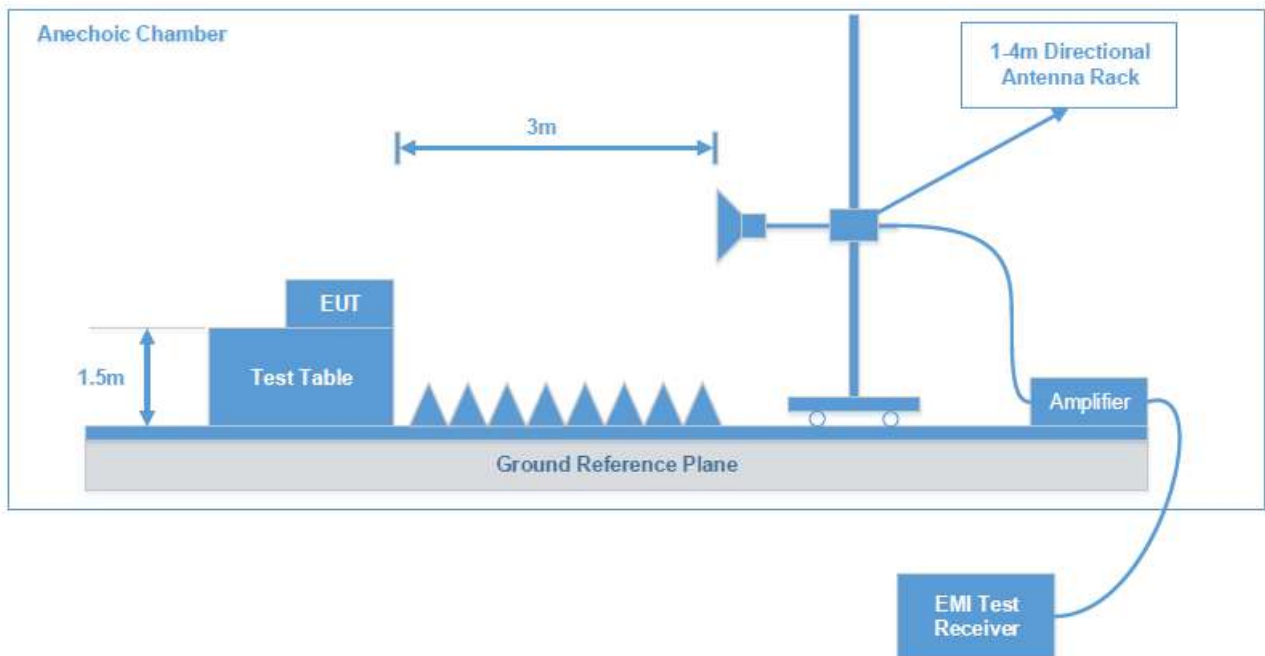
9 kHz - 30 MHz:

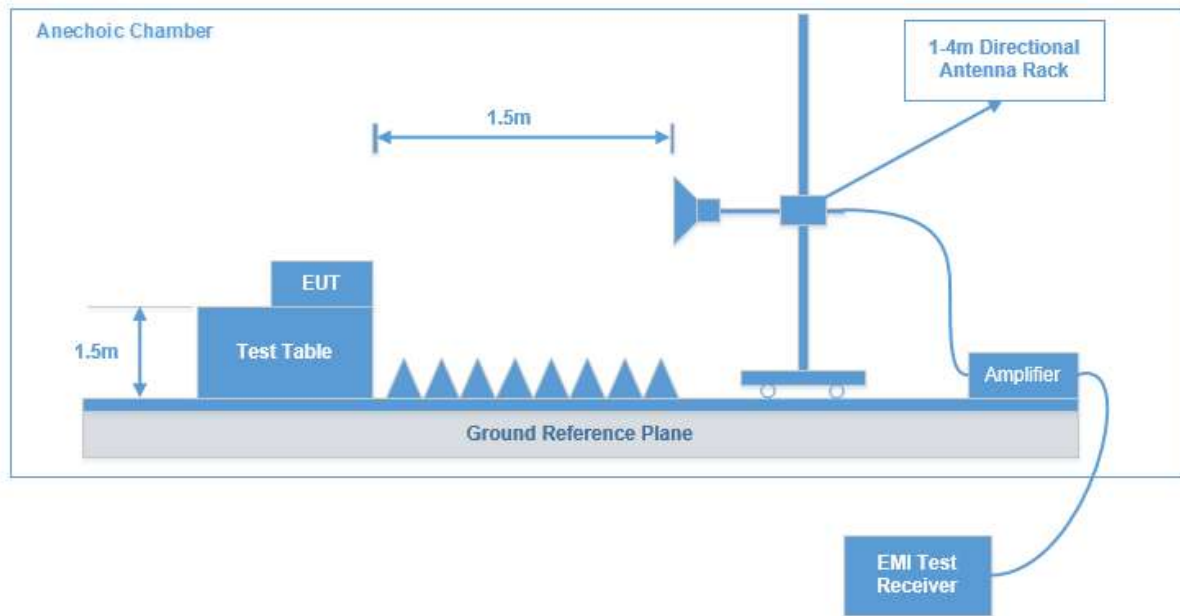


30 MHz - 1 GHz:



1 GHz - 18 GHz:



18 GHz - 40 GHz:

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

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

Frequency Range	RBW	VBW	IF B/W	Measurement
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

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.

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.

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

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:

$$\text{Corrected Amplitude (dB}\mu\text{V/m)} = \text{Meter Reading (dB}\mu\text{V)} + \text{Corrected factor (dB/m)}$$

$$\text{Corrected factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

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:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Corrected Amplitude (dB}\mu\text{V/m)}$$

Note: The QuasiPeak (dB μ V/m), MaxPeak (dB μ V/m), Average (dB μ V/m) which shown in the data table are all Corrected Amplitude.

Test Data: See Appendix

FCC §15.407(a) & §15.407(e) - MISSION 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

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:

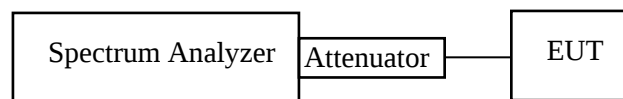
- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two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

3. Occupied bandwidth

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 $[10 \log (\text{OBW}/\text{RBW})]$ 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).



Test Data: See Appendix

FCC §15.407(a) – 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.

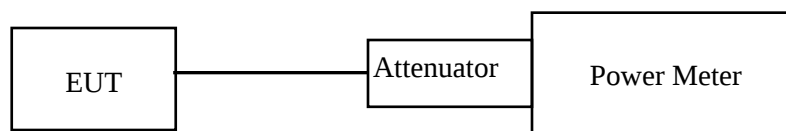
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting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

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 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

The measurements are based on FCC KDB 789033 D02 General UNII Test Procedures 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-2.

Test Data: See Appendix

APPENDIX - TEST DATA

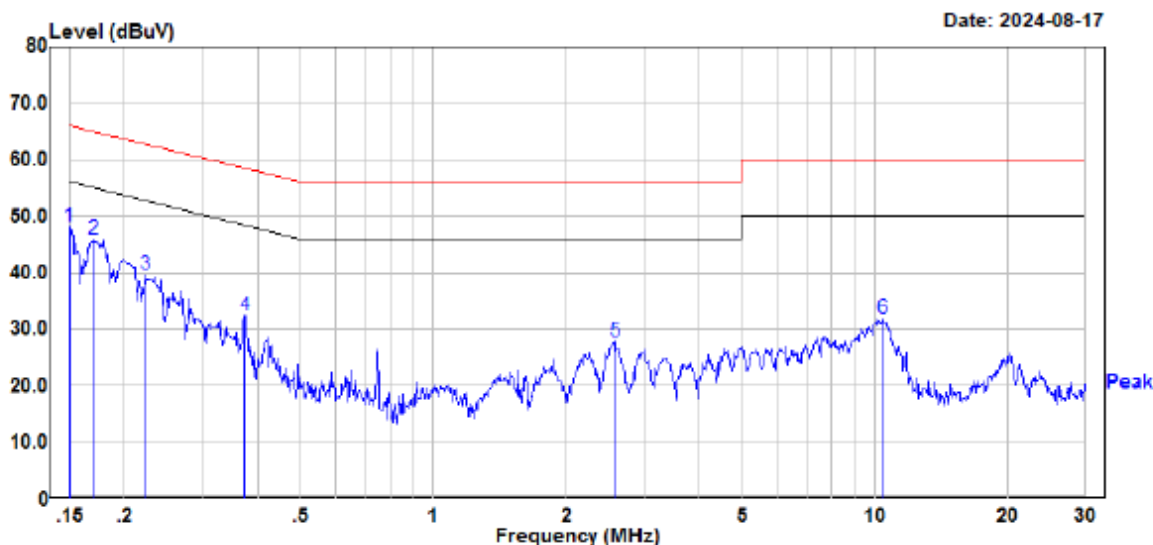
Environmental Conditions & Test Information

Test Item:	AC POWER LINE CONDUCTED EMISSIONS	UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS				Duty Cycle
		9 kHz-30 MHz	30MHz-1GHz	1 GHz – 18 GHz	18 GHz - 40 GHz	
Test Date:	2024-08-17	2025-01-15	2024-08-05	2024-08-12 to 2024-09-11	2024-09-10	2024-08-21 to 2024-8- 26
Temperature:	24.1	24.1 °C	26.7 °C	24.3-25.7 °C	24.5 °C	24.7-25.1 °C
Relative Humidity:	46 %	48 %	35 %	41-47 %	52 %	50-51 %
ATM Pressure:	100.7 kPa	103.6 kPa	100.7 kPa	100.1-101.0 kPa	101.0kPa	100.3- 100.6kPa
Test Result:	Pass	Pass	Pass	Pass	Pass	Pass
Test Engineer:	Leah Li	Jerry Yan	Grace Luo	Destine Hu/ Klein Zhu	Hugh Wu	Neil Zhou

Test Item:	EMISSION BANDWIDTH	CONDUCTED TRANSMITTER OUTPUT POWER	POWER SPECTRAL DENSITY
Test Date:	2024-08-21 to 2024-09-13	2024-08-22 to 2024-08-26 to 2025-02-26	2024-09-21 to 2024-12-03 to 2025-02-26
Temperature:	24.7-25.7 °C	24.7-25.5 °C	24.1-25.5 °C
Relative Humidity:	50-51 %	50-56 %	50-57 %
ATM Pressure:	100.3-101.0kPa	100.3-101.1kPa	100.3-101.3kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Neil Zhou	Neil Zhou	Neil Zhou

AC POWER LINE CONDUCTED EMISSIONS

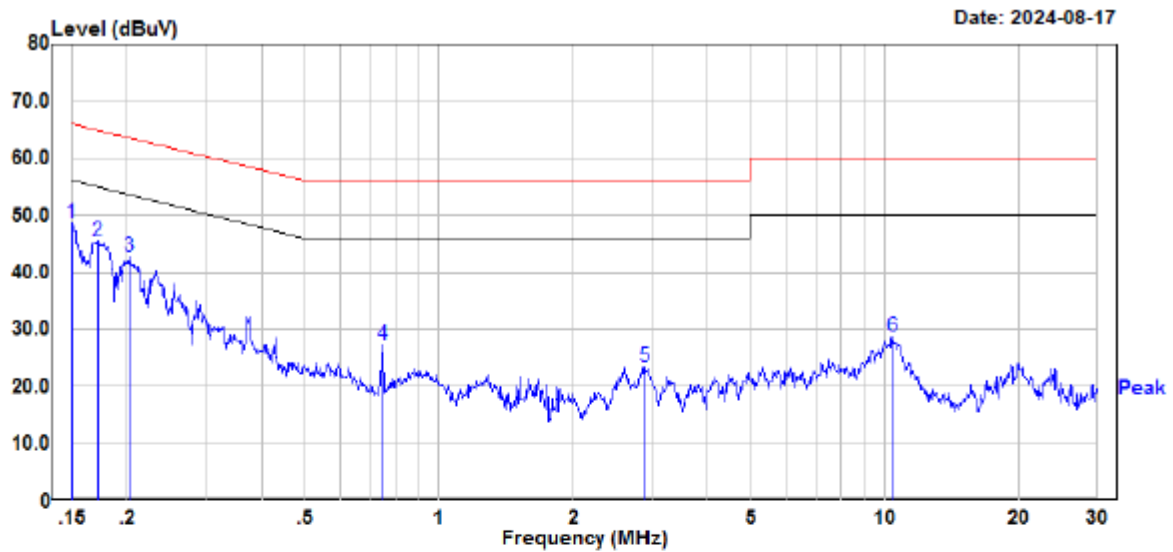
EUT operation mode: Transmitting in maximum output power mode 802.11ax40 (channel: 5550 MHz)

AC 120V/60 Hz, Line

Site : CE
Condition : PART 15.207
: DET:Peak
Project No. : RKSA240703001
Model : WLW518H25-V
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 24.1℃
Humidity : 46%
Atmospheric pressure: 100.7kPa
Test Engineer : Leah Li

	Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.150	28.04	20.05	48.09	66.00	-17.91 Peak
2	0.170	25.81	20.05	45.86	64.97	-19.11 Peak
3	0.222	19.52	20.07	39.59	62.73	-23.14 Peak
4	0.373	12.29	20.12	32.41	58.42	-26.01 Peak
5	2.570	7.62	20.16	27.78	56.00	-28.22 Peak
6	10.428	12.06	19.89	31.95	60.00	-28.05 Peak

AC 120V/60 Hz, Neutral



Site : CE
 Condition : PART 15.207
 : DET:Peak
 Project No. : RKSA240703001
 Model : WLW518H25-V
 Phase : N
 Voltage : 120V/60Hz
 Mode : 5G WIFI
 Test Equipment : ENV216,ESR
 Temperature : 24.1°C
 Humidity : 46%
 Atmospheric pressure: 100.7kPa
 Test Engineer : Leah Li

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	28.53	20.05	48.58	66.00	-17.42	Peak
2	0.172	25.29	20.05	45.34	64.88	-19.54	Peak
3	0.202	22.67	20.06	42.73	63.52	-20.79	Peak
4	0.747	7.46	19.95	27.41	56.00	-28.59	Peak
5	2.882	3.36	20.18	23.54	56.00	-32.46	Peak
6	10.376	8.77	19.90	28.67	60.00	-31.33	Peak

Transmitter Unwanted Emissions & Restricted frequency bands

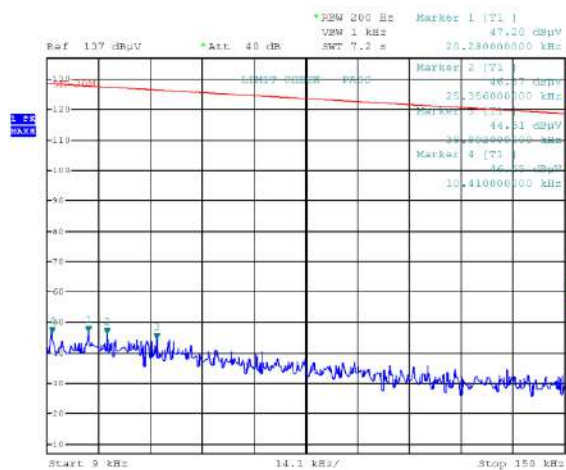
After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

9 kHz-30 MHz:

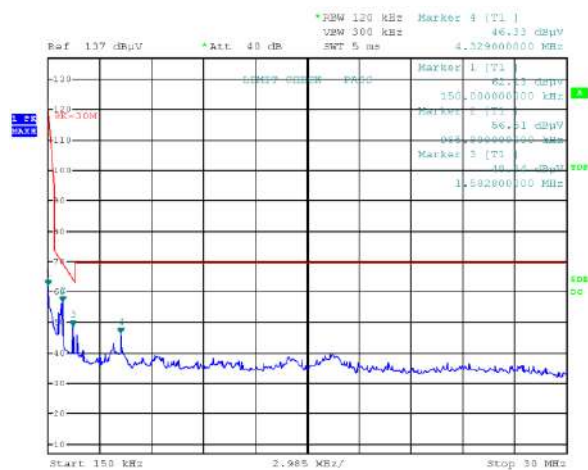
Transmitting in maximum output power mode 802.11ax40 (Channel: 5550MHz)

Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No. RKSA240703001
Date: 15.JAN.2025 15:13:17

Tester: Jerry Yan

Project No. RKSA240703001
Date: 15.JAN.2025 15:19:24

Tester: Jerry Yan

9kHz-150kHz

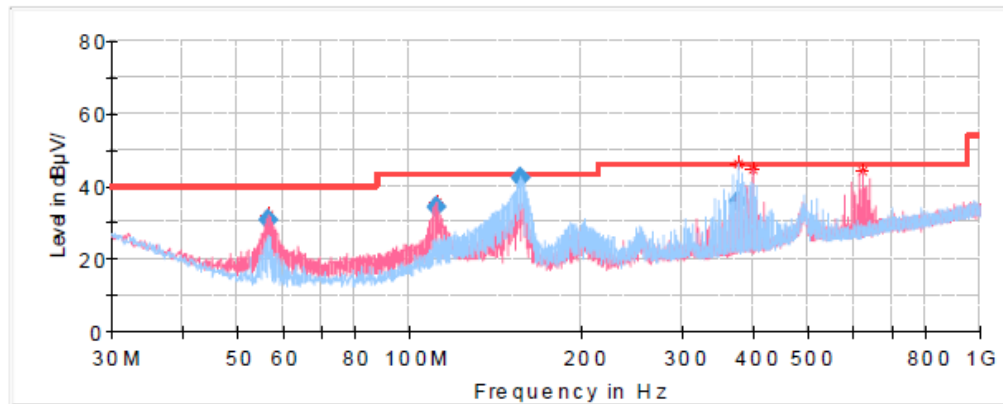
Frequency (kHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
20.28	47.20	PK	49.92	121.46	74.26
25.36	46.37	PK	48.50	119.52	73.15
38.89	44.61	PK	44.90	115.81	71.20
10.41	46.65	PK	56.10	127.26	80.61

150kHz-30MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.15	62.13	PK	50.90	104.08	41.95
0.99	56.51	PK	17.60	67.69	11.18
1.58	48.84	PK	8.98	63.63	14.79
4.33	46.33	PK	15.47	69.54	23.21

30MHz-1GHz:*EUT operation mode: Transmitting in maximum output power mode 802.11ax40 (channel: 5550 MHz)***Common Information**

Project No:	RKSA240703001
EUT Model:	WLW518H25-V
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209&FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	26.7°C
Humidity:	35%
Barometric Pressure:	100.7kPa
Test Engineer:	Grace Luo
Test Date:	2024/8/5

**Final Result**

Frequency (MHz)	QuasiPeak (dBu V/m)	Limit (dBu V/m)	Margin (dB)	Pol	Corr. (dB/m)
56.679800	30.57	40.00	9.43	V	-17.3
111.237500	34.11	43.50	9.39	V	-12.3
156.960750	42.08	43.50	1.42	H	-12.0
377.495850	35.50	46.00	10.50	H	-8.6
398.642150	29.43	46.00	16.57	V	-8.0
623.567100	29.04	46.00	16.96	V	-3.7

1GHz - 18GHz(5150-5250MHz Band):

Chain 0:

802.11a Mode:**Low Channel: 5180MHz****Common Information**

Project No.:

RKSA240703001

Test Mode:

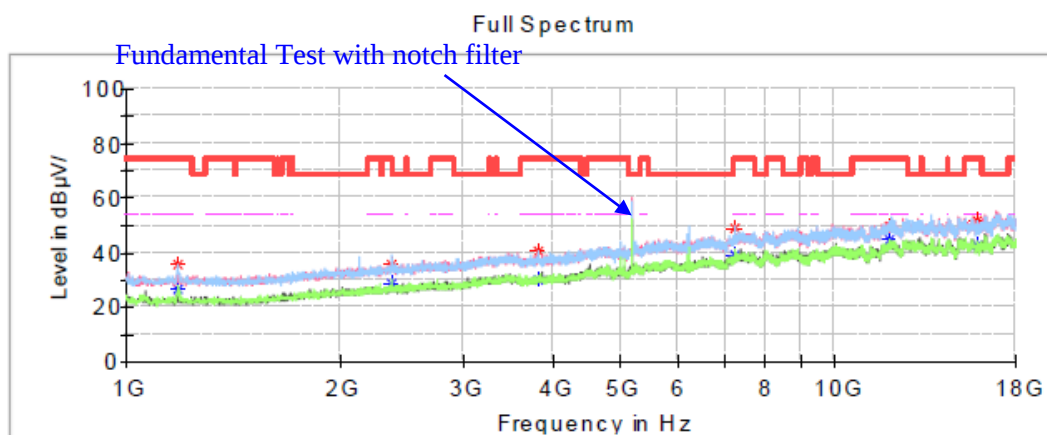
Transmitting in 802.11a mode 5180 channel

Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

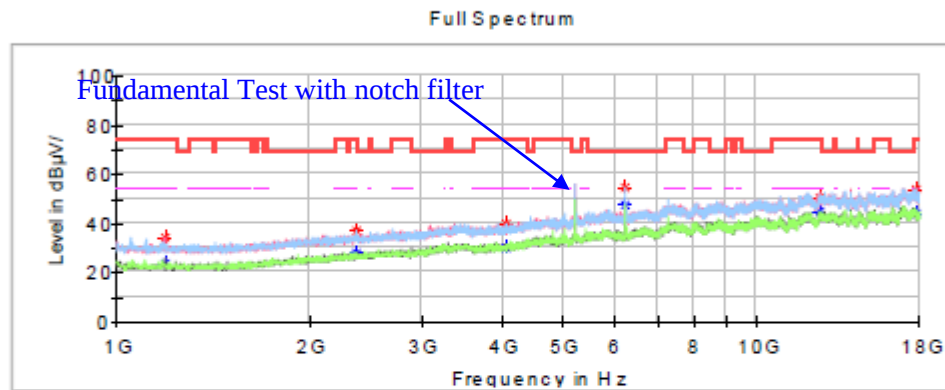
Destine Hu

**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)
1180.200000	35.90	---	74.00	38.10	H	-15.2
1180.200000	---	26.58	54.00	27.42	H	-15.2
2363.400000	---	28.74	54.00	25.26	H	-10.6
2363.400000	35.56	---	74.00	38.44	H	-10.6
3823.700000	40.78	---	74.00	33.22	H	-6.1
3823.700000	---	30.14	54.00	23.86	H	-6.1
7252.600000	---	39.19	54.00	14.81	H	3.3
7252.600000	48.73	---	74.00	25.27	H	3.3
11948.000000	49.59	---	74.00	24.41	H	9.0
11948.000000	---	44.87	54.00	9.13	H	9.0
15924.300000	---	42.87	54.00	11.13	V	9.5
15924.300000	51.98	---	74.00	22.02	V	9.5

Middle Channel: 5200MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11a mode 5200 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

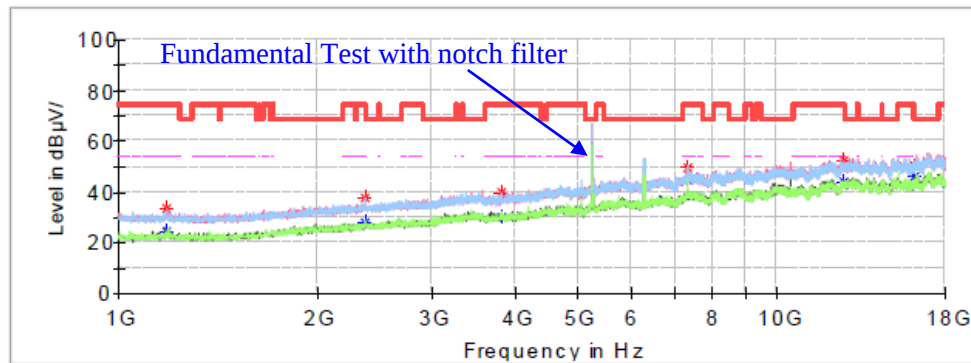
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1187.000000	34.57	---	74.00	39.43	V	-15.2
1187.000000	---	23.90	54.00	30.10	V	-15.2
2365.100000	37.31	---	74.00	36.69	H	-10.6
2365.100000	---	28.16	54.00	25.84	H	-10.6
4049.800000	40.15	---	74.00	33.85	H	-5.7
4049.800000	---	30.28	54.00	23.72	H	-5.7
6239.400000	54.69	---	68.20	13.51	H	0.3
12556.600000	50.51	---	74.00	23.49	H	9.7
12556.600000	---	44.47	54.00	9.53	H	9.7
17728.000000	---	43.92	54.00	10.08	H	11.7
17728.000000	53.55	---	74.00	20.45	H	11.7

High Channel: 5240MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11a mode 5240 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

Full Spectrum

**Critical Freqs**

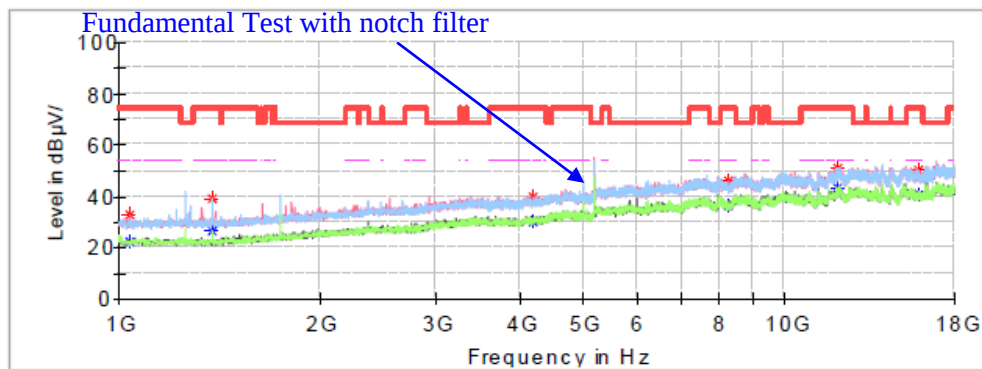
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1183.600000	---	24.71	54.00	29.29	V	-15.2
1183.600000	33.50	---	74.00	40.50	V	-15.2
2365.100000	37.63	---	74.00	36.37	H	-10.6
2365.100000	---	28.11	54.00	25.89	H	-10.6
3823.700000	39.70	---	74.00	34.30	H	-6.1
3823.700000	---	29.89	54.00	24.11	H	-6.1
7337.600000	---	44.70	54.00	9.30	H	3.5
7337.600000	49.64	---	74.00	24.36	H	3.5
12607.600000	52.58	---	74.00	21.42	V	9.7
12607.600000	---	43.73	54.00	10.27	V	9.7
16172.500000	50.47	---	74.00	23.53	V	9.9
16172.500000	---	45.93	54.00	8.07	V	9.9

Chain 1:

802.11a Mode:**Low Channel: 5180MHz****Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5180 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Klein Zhu

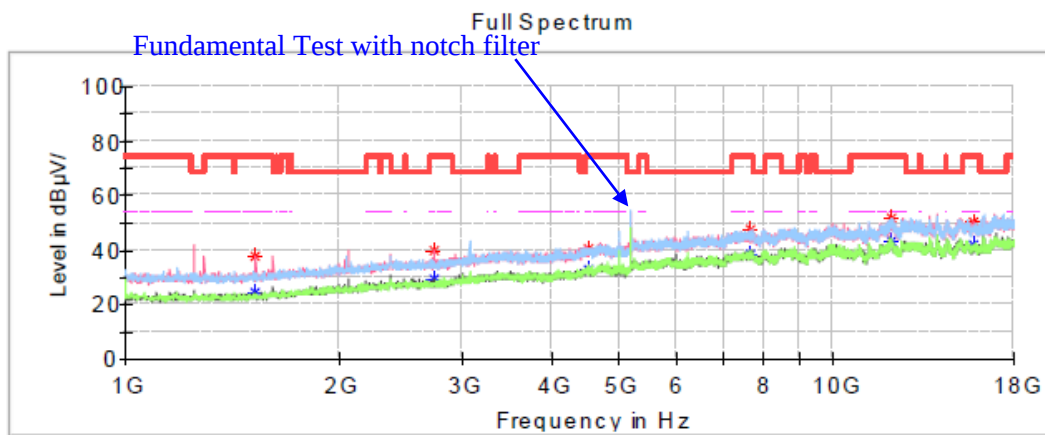
Full Spectrum

**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)
1039.100000	---	22.56	54.00	31.44	V	-15.4
1039.100000	32.77	---	74.00	41.23	V	-15.4
1379.100000	---	26.79	54.00	27.21	H	-14.9
1379.100000	39.30	---	74.00	34.70	H	-14.9
4179.000000	---	30.28	54.00	23.72	V	-5.3
4179.000000	39.86	---	74.00	34.14	V	-5.3
8260.700000	---	36.16	54.00	17.84	H	4.7
8260.700000	45.96	---	74.00	28.04	H	4.7
12061.900000	---	43.37	54.00	10.63	H	9.1
12061.900000	51.12	---	74.00	22.88	H	9.1
15929.400000	---	40.61	54.00	13.39	V	9.5
15929.400000	50.56	---	74.00	23.44	V	9.5

Middle Channel: 5200MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11a mode 5200 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Klein Zhu

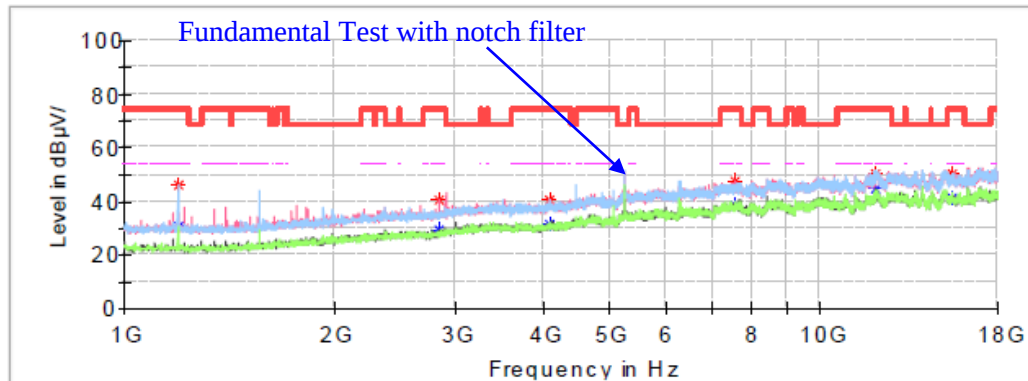
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1527.000000	---	24.56	54.00	29.44	V	-14.6
1527.000000	37.60	---	74.00	36.40	V	-14.6
2732.300000	---	29.70	54.00	24.30	V	-9.4
2732.300000	39.98	---	74.00	34.02	V	-9.4
4520.700000	---	32.57	54.00	21.43	H	-4.2
4520.700000	40.85	---	74.00	33.15	H	-4.2
7650.400000	---	38.64	54.00	15.36	V	3.9
7650.400000	47.29	---	74.00	26.71	V	3.9
12123.100000	---	43.37	54.00	10.63	V	9.1
12123.100000	51.97	---	74.00	22.03	V	9.1
15767.900000	---	41.66	54.00	12.34	V	9.6
15767.900000	50.50	---	74.00	23.50	V	9.6

High Channel: 5240MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11a mode 5240 channel
 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)
1193.800000	46.14	---	74.00	27.86	H	-15.2
1193.800000	---	30.59	54.00	23.41	H	-15.2
2834.300000	40.45	---	74.00	33.55	V	-9.0
2834.300000	---	29.27	54.00	24.73	V	-9.0
4094.000000	40.67	---	74.00	33.33	V	-5.6
4094.000000	---	31.13	54.00	22.87	V	-5.6
7546.700000	47.65	---	74.00	26.35	V	3.9
7546.700000	---	38.19	54.00	15.81	V	3.9
12058.500000	50.59	---	74.00	23.41	V	9.1
12058.500000	---	44.55	54.00	9.45	V	9.1
15490.800000	---	41.13	54.00	12.87	V	9.8
15490.800000	50.36	---	74.00	23.64	V	9.8

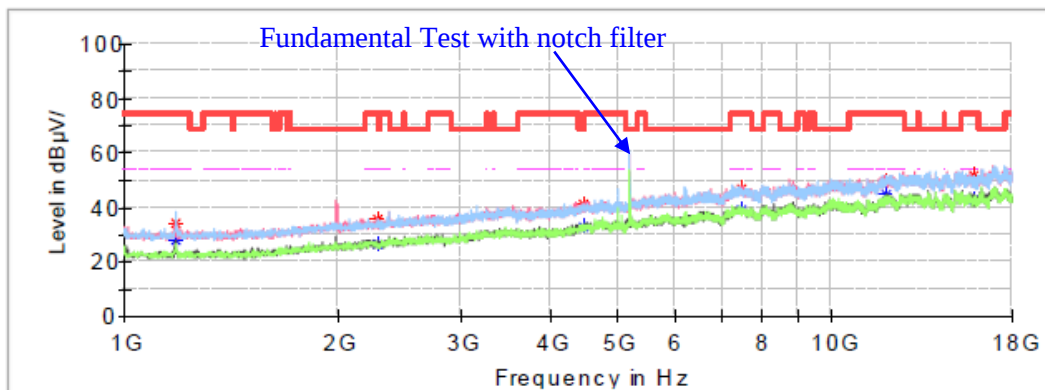
MIMO (Chain 0+Chain 1):
802.11ac20 Mode:

Low Channel: 5180MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

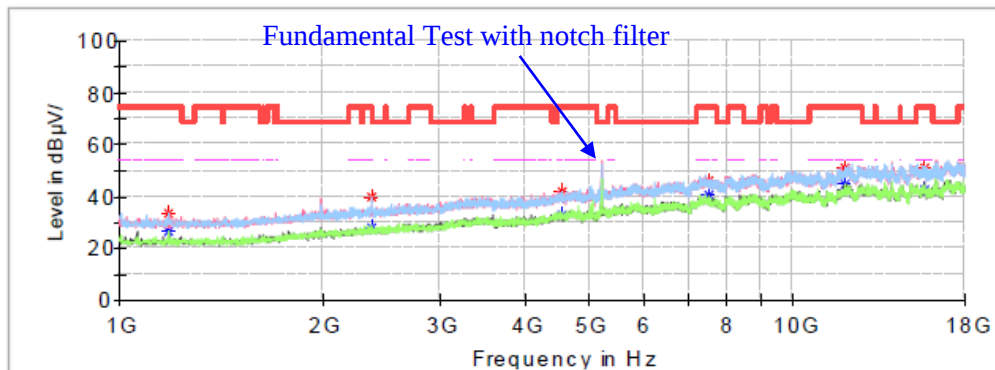


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1180.200000	34.55	---	74.00	39.45	V	-15.2
1180.200000	---	27.67	54.00	26.33	V	-15.2
2275.000000	35.92	---	74.00	38.08	V	-10.9
2275.000000	---	26.51	54.00	27.49	V	-10.9
4456.100000	41.58	---	68.20	26.62	H	-4.4
7477.000000	46.78	---	74.00	27.22	V	3.8
7477.000000	---	39.00	54.00	15.00	V	3.8
11948.000000	49.82	---	74.00	24.18	V	9.0
11948.000000	---	44.99	54.00	9.01	V	9.0
15875.000000	---	42.50	54.00	11.50	V	9.5
15875.000000	51.82	---	74.00	22.18	V	9.5

Middle Channel: 5200MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5200 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

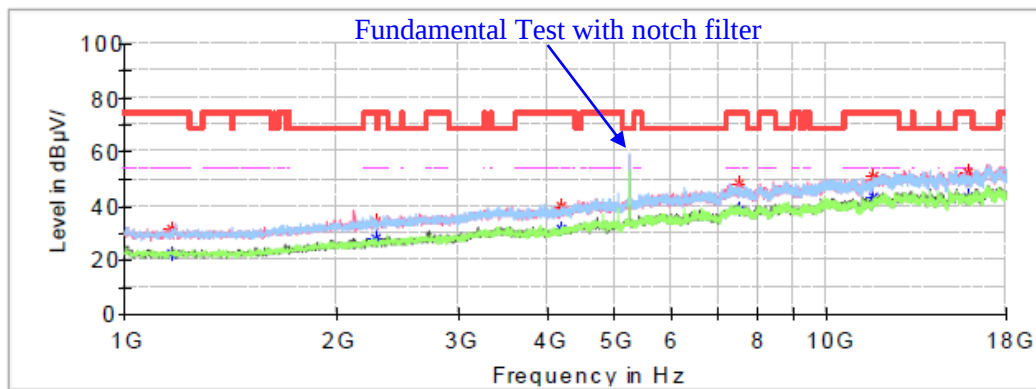
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1185.300000	33.52	---	74.00	40.48	V	-15.2
1185.300000	---	26.84	54.00	27.16	V	-15.2
2366.800000	39.96	---	74.00	34.04	H	-10.6
2366.800000	---	28.00	54.00	26.00	H	-10.6
4547.900000	41.78	---	74.00	32.22	H	-4.1
4547.900000	---	33.08	54.00	20.92	H	-4.1
7502.500000	46.45	---	74.00	27.55	V	3.9
7502.500000	---	40.65	54.00	13.35	V	3.9
11937.800000	51.30	---	74.00	22.70	H	9.0
11937.800000	---	45.02	54.00	8.98	H	9.0
15722.000000	---	42.99	54.00	11.01	V	9.6
15722.000000	51.38	---	74.00	22.62	V	9.6

High Channel: 5240MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5240 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

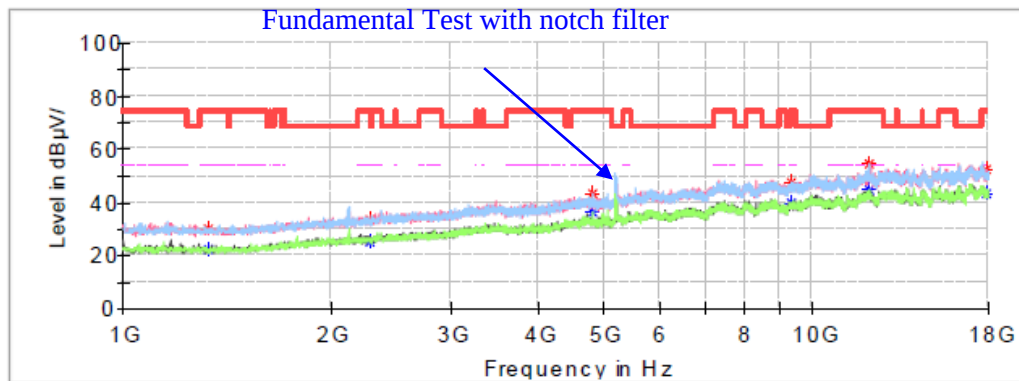
Full Spectrum

**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)
1164.900000	---	22.40	54.00	31.60	H	-15.2
1164.900000	31.82	---	74.00	42.18	H	-15.2
2280.100000	---	27.66	54.00	26.34	V	-10.9
2280.100000	34.56	---	74.00	39.44	V	-10.9
4184.100000	---	31.16	54.00	22.84	H	-5.3
4184.100000	40.10	---	74.00	33.90	H	-5.3
7529.700000	---	38.23	54.00	15.77	H	3.9
7529.700000	48.12	---	74.00	25.88	H	3.9
11653.900000	---	43.30	54.00	10.70	V	8.9
11653.900000	51.12	---	74.00	22.88	V	8.9
15919.200000	---	43.44	54.00	10.56	V	9.5
15919.200000	52.54	---	74.00	21.46	V	9.5

**MIMO (Chain 0+Chain 1):
802.11ac40 Mode:****Low Channel: 5190MHz****Common Information**

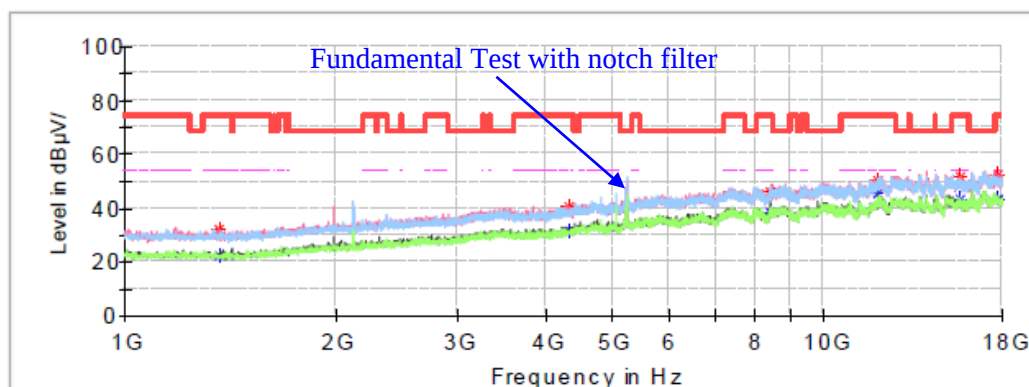
Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac40 mode 5190 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
1329.800000	30.19	---	74.00	43.81	V	-15.0
1329.800000	---	22.06	54.00	31.94	V	-15.0
2288.600000	33.70	---	74.00	40.30	H	-10.8
2288.600000	---	25.43	54.00	28.57	H	-10.8
4799.500000	43.42	---	74.00	30.58	H	-3.2
4799.500000	---	36.30	54.00	17.70	H	-3.2
9328.300000	47.57	---	74.00	26.43	V	5.4
9328.300000	---	39.86	54.00	14.14	V	5.4
12065.300000	54.23	---	74.00	19.77	H	9.1
12065.300000	---	44.76	54.00	9.24	H	9.1
17935.400000	---	43.49	54.00	10.51	V	11.9
17935.400000	52.52	---	74.00	21.48	V	11.9

High Channel: 5230MHz**Common Information**

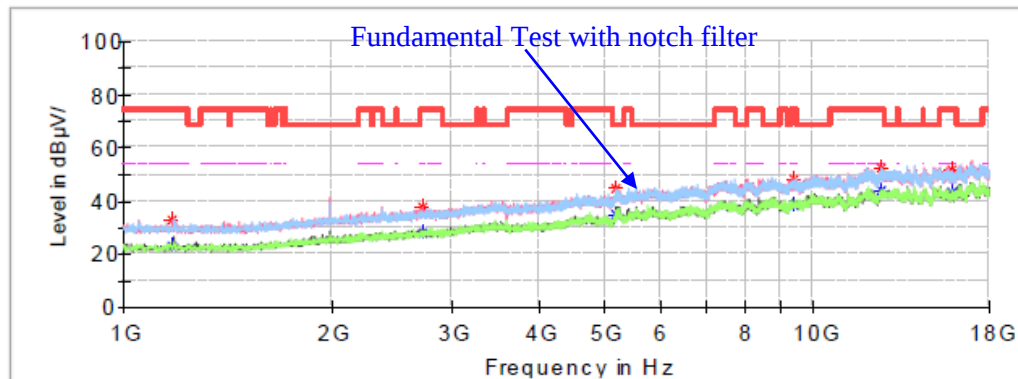
Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ac40 mode 5230 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

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)
1365.500000	32.47	---	74.00	41.53	V	-14.9
1365.500000	---	22.31	54.00	31.69	V	-14.9
4320.100000	40.61	---	74.00	33.39	V	-4.9
4320.100000	---	31.56	54.00	22.44	V	-4.9
8379.700000	45.98	---	74.00	28.02	V	5.1
8379.700000	---	38.40	54.00	15.60	V	5.1
11937.800000	50.46	---	74.00	23.54	H	9.0
11937.800000	---	45.35	54.00	8.65	H	9.0
15660.800000	---	43.46	54.00	10.54	V	9.7
15660.800000	51.51	---	74.00	22.49	V	9.7
17802.800000	---	43.04	54.00	10.96	V	11.8
17802.800000	52.36	---	74.00	21.64	V	11.8

**MIMO (Chain 0+Chain 1):
802.11ac80 Mode:****Channel: 5210MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac80 mode 5210 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

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)
1178.500000	---	23.12	54.00	30.88	V	-15.2
1178.500000	32.72	---	74.00	41.28	V	-15.2
2715.300000	---	27.90	54.00	26.10	H	-9.4
2715.300000	37.67	---	74.00	36.33	H	-9.4
5175.200000	44.83	---	68.20	23.37	V	-1.7
9358.900000	---	38.40	54.00	15.60	H	5.4
9358.900000	48.44	---	74.00	25.56	H	5.4
12566.800000	---	43.83	54.00	10.17	H	9.7
12566.800000	52.74	---	74.00	21.26	H	9.7
15902.200000	---	43.58	54.00	10.42	V	9.5
15902.200000	51.87	---	74.00	22.13	V	9.5

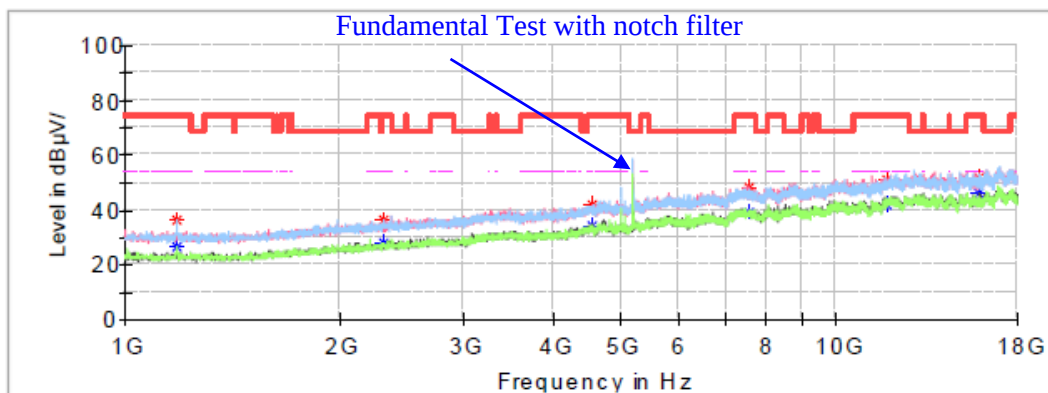
MIMO (Chain 0+Chain 1):
802.11ax20 Mode:

Low Channel: 5180MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

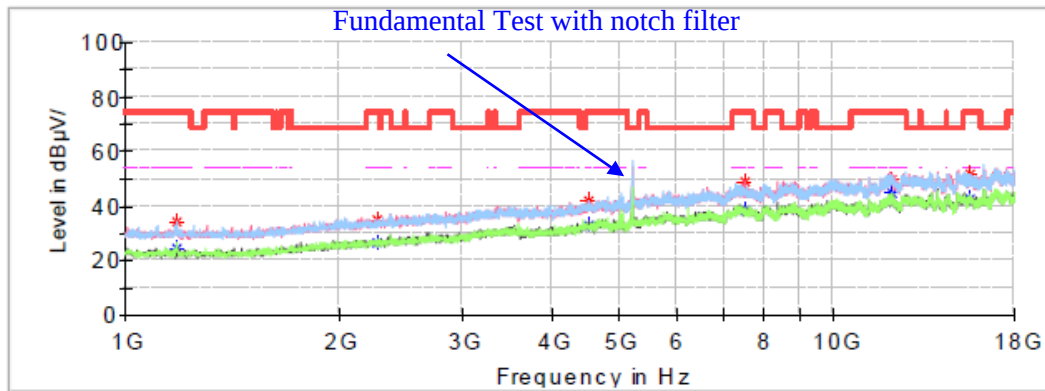


Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1181.900000	36.08	---	74.00	37.92	H	-15.2
1181.900000	---	26.53	54.00	27.47	H	-15.2
2310.700000	36.24	---	74.00	37.76	H	-10.8
2310.700000	---	28.10	54.00	25.90	H	-10.8
4546.200000	41.99	---	74.00	32.01	V	-4.1
4546.200000	---	34.08	54.00	19.92	V	-4.1
7531.400000	48.48	---	74.00	25.52	V	3.9
7531.400000	---	38.82	54.00	15.18	V	3.9
11813.700000	---	42.02	54.00	11.98	H	8.9
11813.700000	51.32	---	74.00	22.68	H	8.9
15898.800000	51.97	---	74.00	22.03	V	9.5
15898.800000	---	46.05	54.00	7.95	V	9.5

Middle Channel: 5200MHz**Common Information**

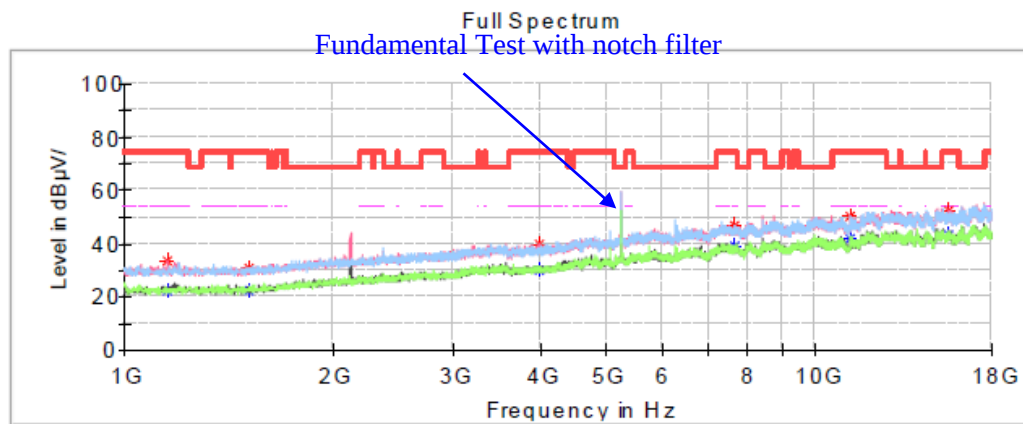
Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5200 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

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)
1183.600000	34.53	---	74.00	39.47	H	-15.2
1183.600000	---	24.52	54.00	29.48	H	-15.2
2268.200000	35.10	---	74.00	38.90	V	-10.9
2268.200000	---	26.55	54.00	27.45	V	-10.9
4522.400000	41.99	---	74.00	32.01	H	-4.2
4522.400000	---	32.69	54.00	21.31	H	-4.2
7519.500000	48.69	---	74.00	25.31	V	3.9
7519.500000	---	38.55	54.00	15.45	V	3.9
12087.400000	49.89	---	74.00	24.11	V	9.1
12087.400000	---	44.58	54.00	9.42	V	9.1
15647.200000	---	42.31	54.00	11.69	H	9.7
15647.200000	51.48	---	74.00	22.52	H	9.7

Middle Channel: 5240MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ax20 mode 5240 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

**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)
1153.000000	---	22.25	54.00	31.75	V	-15.2
1153.000000	33.38	---	74.00	40.62	V	-15.2
1513.400000	---	22.18	54.00	31.82	H	-14.6
1513.400000	31.10	---	74.00	42.90	H	-14.6
3995.400000	---	29.80	54.00	24.20	V	-5.9
3995.400000	39.58	---	74.00	34.42	V	-5.9
7647.000000	---	39.19	54.00	14.81	H	3.9
7647.000000	47.14	---	74.00	26.86	H	3.9
11203.400000	---	41.79	54.00	12.21	V	7.9
11203.400000	50.56	---	74.00	23.44	V	7.9
15630.200000	---	43.19	54.00	10.81	V	9.7
15630.200000	52.76	---	74.00	21.24	V	9.7

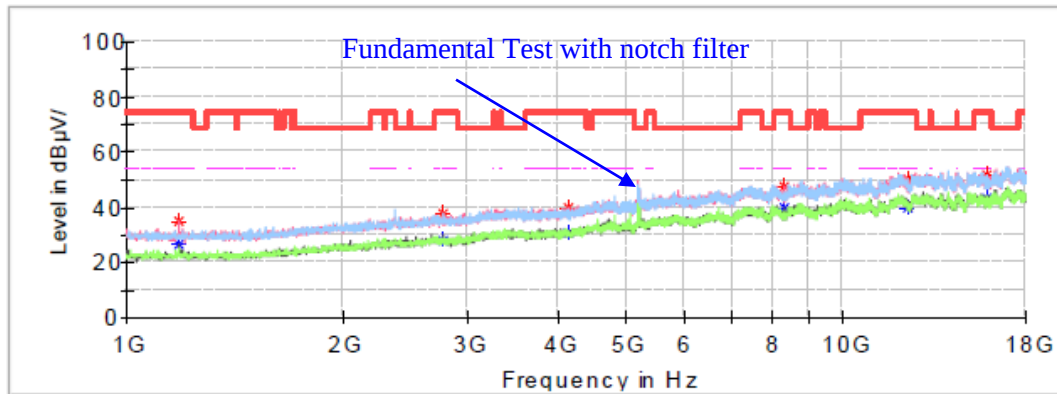
MIMO (Chain 0+Chain 1):
802.11ax40 Mode:

Low Channel: 5190MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax40 mode 5190 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

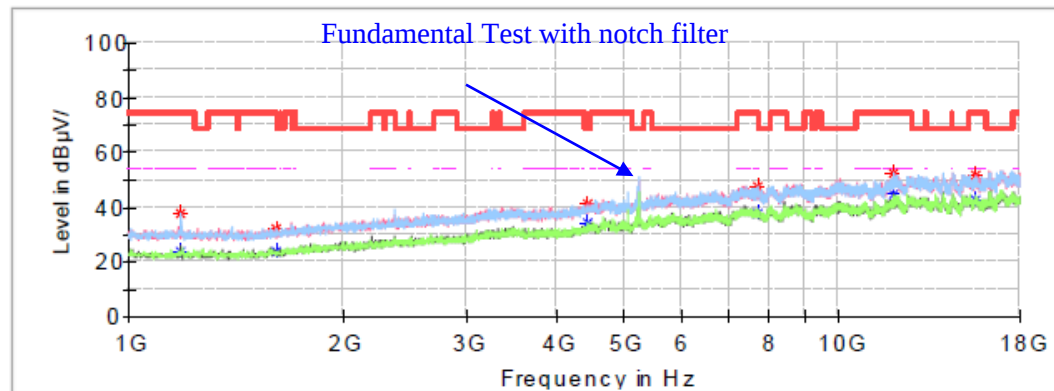


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1183.600000	---	26.87	54.00	27.13	V	-15.2
1183.600000	35.13	---	74.00	38.87	V	-15.2
2761.200000	---	28.31	54.00	25.69	H	-9.3
2761.200000	37.63	---	74.00	36.37	H	-9.3
4134.800000	---	30.99	54.00	23.01	H	-5.5
4134.800000	39.82	---	74.00	34.18	H	-5.5
8303.200000	---	39.68	54.00	14.32	V	4.8
8303.200000	47.73	---	74.00	26.27	V	4.8
12350.900000	---	40.00	54.00	14.00	H	9.5
12350.900000	50.68	---	74.00	23.32	H	9.5
15920.900000	---	43.04	54.00	10.96	V	9.5
15920.900000	52.09	---	74.00	21.91	V	9.5

**MIMO (Chain 0+Chain 1):
802.11ax40 Mode:****High Channel: 5230MHz****Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5230 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum**Critical Freqs**

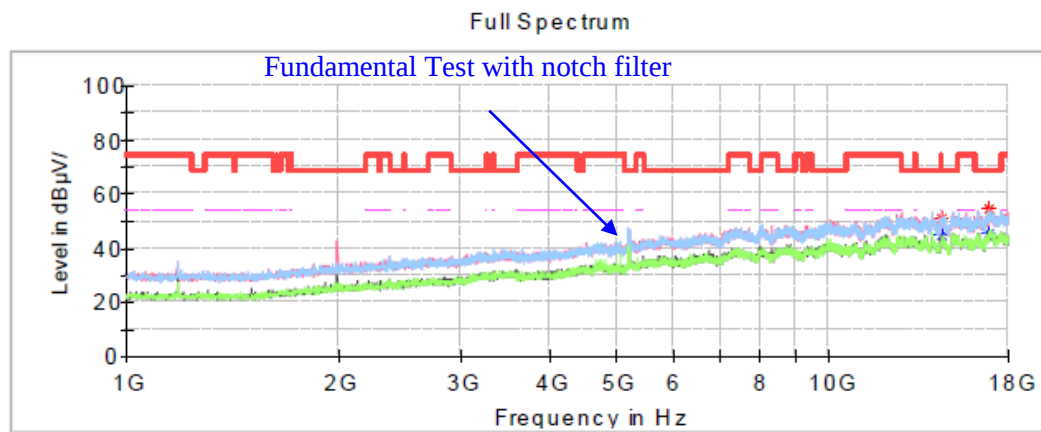
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1185.300000	---	23.47	54.00	30.53	H	-15.2
1185.300000	37.87	---	74.00	36.13	H	-15.2
1612.000000	---	23.84	54.00	30.16	H	-14.1
1612.000000	32.12	---	74.00	41.88	H	-14.1
4423.800000	41.53	---	68.20	26.67	V	-4.5
7675.900000	---	37.68	54.00	16.32	H	3.9
7675.900000	47.42	---	74.00	26.58	H	3.9
11939.500000	---	44.44	54.00	9.56	V	9.0
11939.500000	52.30	---	74.00	21.70	V	9.0
15609.800000	---	42.92	54.00	11.08	H	9.7
15609.800000	51.50	---	74.00	22.50	H	9.7

MIMO (Chain 0+Chain 1):
802.11ax80 Mode:

Channel: 5210MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax80 mode 5210 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu



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)
14491.200000	---	44.77	54.00	9.23	V	9.4
14491.200000	51.12	---	74.00	22.88	V	9.4
16949.400000	54.60	---	68.20	13.60	V	12.1

1GHz-18GHz(5250-5350MHz Band):

Chain 0:

802.11a Mode:**Low Channel: 5260MHz****Common Information**

Project No.:

RKSA240703001

Test Mode:

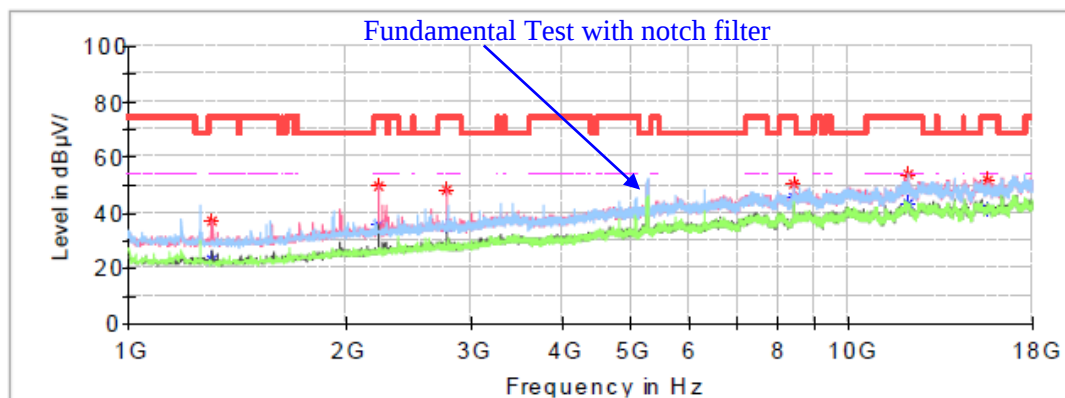
Transmitting in 802.11a mode 5260 channel

Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

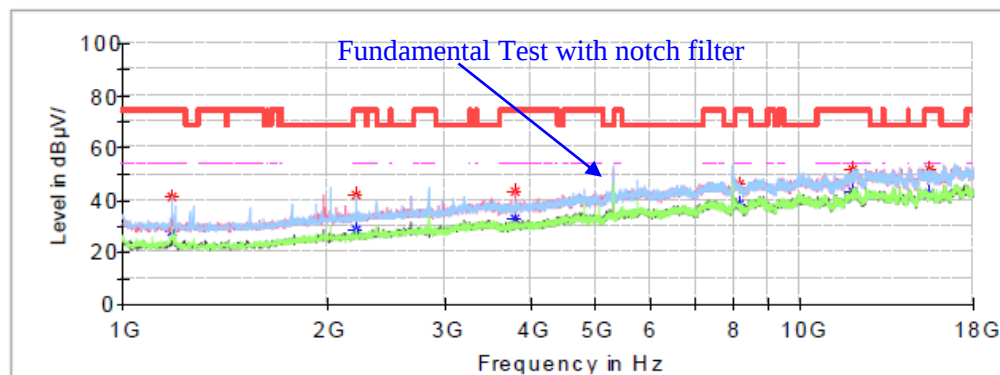
Hugh Wu

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)
1302.600000	---	23.13	54.00	30.87	V	-15.0
1302.600000	36.79	---	74.00	37.21	V	-15.0
2222.300000	---	35.99	54.00	18.01	V	-11.0
2222.300000	49.45	---	74.00	24.55	V	-11.0
2771.400000	---	34.75	54.00	19.25	V	-9.2
2771.400000	48.24	---	74.00	25.76	V	-9.2
8415.400000	---	45.28	54.00	8.72	V	5.2
8415.400000	50.41	---	74.00	23.59	V	5.2
12131.600000	---	43.38	54.00	10.62	H	9.2
12131.600000	53.59	---	74.00	20.41	H	9.2
15572.400000	---	41.26	54.00	12.74	V	9.8
15572.400000	51.74	---	74.00	22.26	V	9.8

Middle Channel: 5280MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5300 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

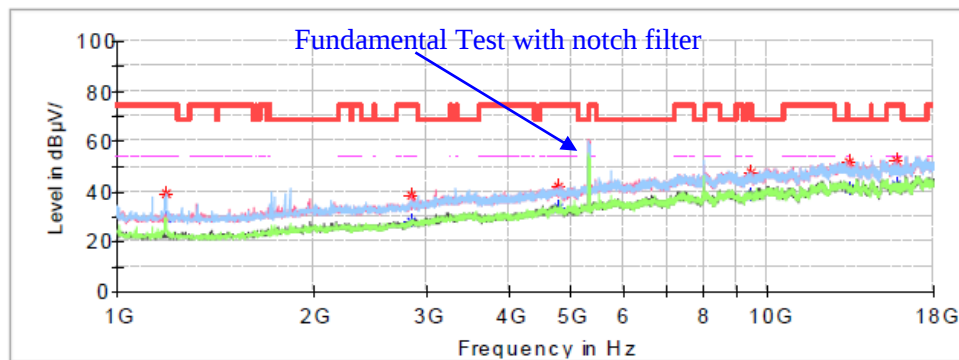
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1181.900000	---	27.80	54.00	26.20	H	-15.2
1181.900000	41.53	---	74.00	32.47	H	-15.2
2213.800000	---	28.68	54.00	25.32	H	-11.1
2213.800000	42.00	---	74.00	32.00	H	-11.1
3796.500000	---	32.90	54.00	21.10	V	-6.1
3796.500000	43.39	---	74.00	30.61	V	-6.1
8155.300000	---	38.25	54.00	15.75	V	4.4
8155.300000	46.13	---	74.00	27.87	V	4.4
11939.500000	---	43.09	54.00	10.91	V	9.0
11939.500000	51.78	---	74.00	22.22	V	9.0
15550.300000	---	42.90	54.00	11.10	V	9.8
15550.300000	51.56	---	74.00	22.44	V	9.8

Middle Channel: 5320MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5320 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

**Critical Freqs**

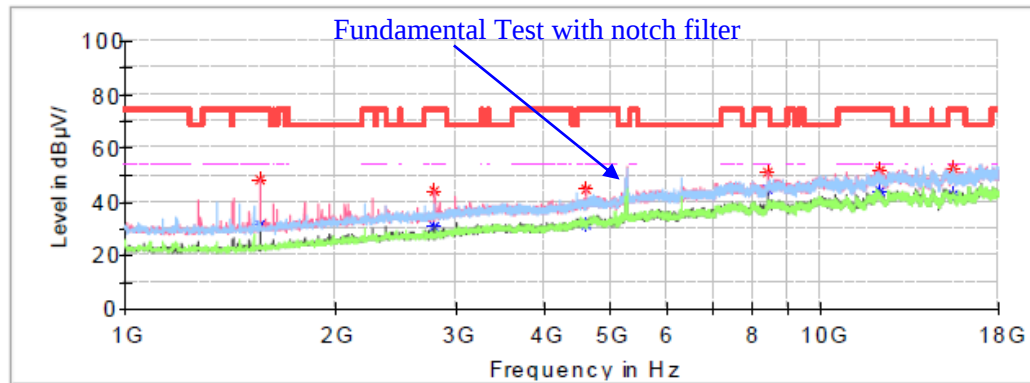
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1187.000000	---	29.65	54.00	24.35	H	-15.2
1187.000000	39.49	---	74.00	34.51	H	-15.2
2829.200000	---	27.89	54.00	26.11	V	-9.0
2829.200000	38.73	---	74.00	35.27	V	-9.0
4779.100000	---	33.27	54.00	20.73	V	-3.2
4779.100000	42.14	---	74.00	31.86	V	-3.2
9460.900000	---	38.25	54.00	15.75	V	5.4
9460.900000	47.79	---	74.00	26.21	V	5.4
13345.400000	---	41.16	54.00	12.84	V	9.6
13345.400000	51.80	---	74.00	22.20	V	9.6
15757.700000	---	42.76	54.00	11.24	V	9.6
15757.700000	52.36	---	74.00	21.64	V	9.6

Chain 1:

802.11a Mode:**Low Channel: 5260MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5260 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

Full Spectrum

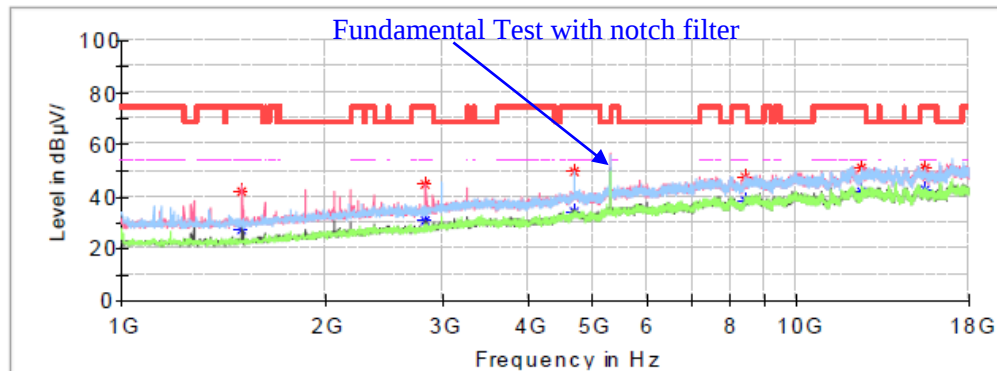
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1561.000000	48.17	---	74.00	25.83	V	-14.4
1561.000000	---	31.48	54.00	22.52	V	-14.4
2790.100000	44.37	---	74.00	29.63	V	-9.2
2790.100000	---	30.93	54.00	23.07	V	-9.2
4610.800000	44.47	---	74.00	29.53	V	-3.9
4610.800000	---	31.82	54.00	22.18	V	-3.9
8415.400000	51.20	---	74.00	22.80	V	5.2
8415.400000	---	44.96	54.00	9.04	V	5.2
12143.500000	---	43.97	54.00	10.03	V	9.2
12143.500000	51.95	---	74.00	22.05	V	9.2
15518.000000	---	42.67	54.00	11.33	H	9.8
15518.000000	52.28	---	74.00	21.72	H	9.8

Middle Channel: 5280MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5300 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

Full Spectrum

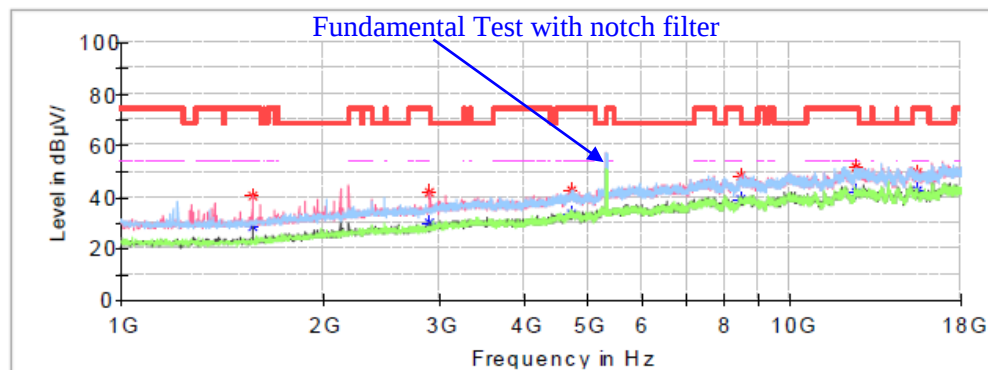
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1503.200000	---	27.12	54.00	26.88	V	-14.7
1503.200000	42.30	---	74.00	31.70	V	-14.7
2825.800000	---	30.71	54.00	23.29	V	-9.0
2825.800000	44.98	---	74.00	29.02	V	-9.0
4692.400000	---	34.61	54.00	19.39	H	-3.6
4692.400000	49.38	---	74.00	24.62	H	-3.6
8395.000000	---	38.60	54.00	15.40	H	5.1
8395.000000	47.79	---	74.00	26.21	H	5.1
12505.600000	---	42.14	54.00	11.86	H	9.7
12505.600000	51.35	---	74.00	22.65	H	9.7
15484.000000	---	42.46	54.00	11.54	V	9.8
15484.000000	50.94	---	74.00	23.06	V	9.8

Middle Channel: 5320MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5320 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Klein Zhu

Full Spectrum

**Critical_Freqs**

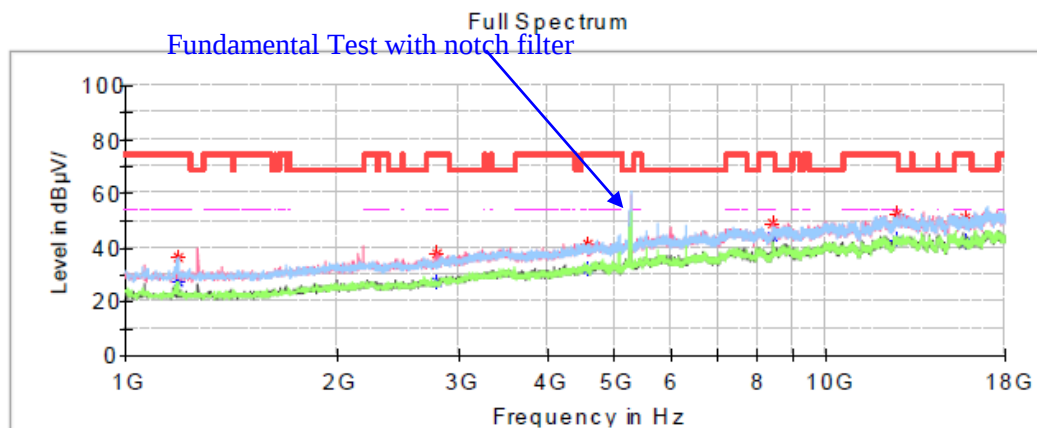
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1574.600000	---	29.02	54.00	24.98	V	-14.3
1574.600000	40.65	---	74.00	33.35	V	-14.3
2895.500000	---	29.87	54.00	24.13	V	-8.8
2895.500000	41.95	---	74.00	32.05	V	-8.8
4723.000000	---	33.75	54.00	20.25	H	-3.4
4723.000000	42.94	---	74.00	31.06	H	-3.4
8466.400000	---	39.30	54.00	14.70	H	5.3
8466.400000	48.40	---	74.00	25.60	H	5.3
12536.200000	---	41.73	54.00	12.27	V	9.7
12536.200000	51.83	---	74.00	22.17	V	9.7
15478.900000	---	42.97	54.00	11.03	V	9.8
15478.900000	49.91	---	74.00	24.09	V	9.8

MIMO(Chain 0+Chain 1):
802.11ac20 Mode:

Low Channel: 5260MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5260 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

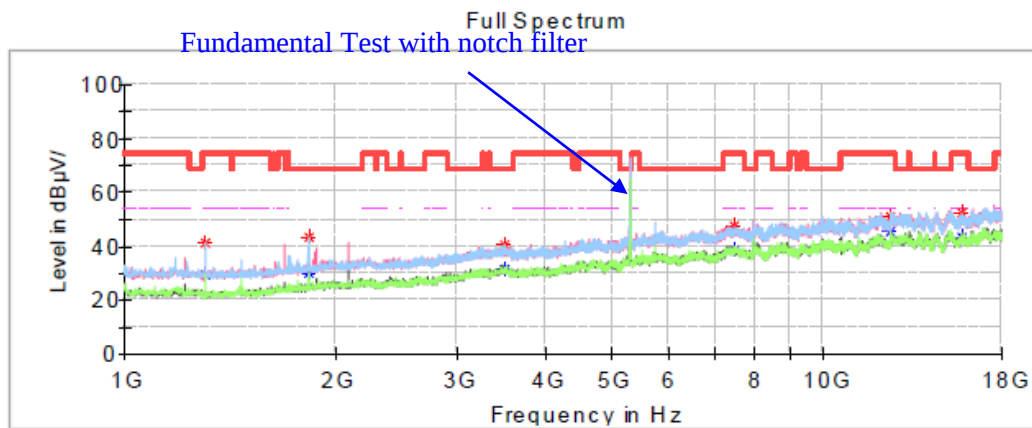


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1187.000000	---	27.05	54.00	26.95	H	-15.2
1187.000000	36.55	---	74.00	37.45	H	-15.2
2790.100000	---	27.58	54.00	26.42	V	-9.2
2790.100000	37.45	---	74.00	36.55	V	-9.2
4568.300000	---	32.23	54.00	21.77	V	-4.0
4568.300000	41.09	---	74.00	32.91	V	-4.0
8415.400000	---	43.99	54.00	10.01	V	5.2
8415.400000	49.01	---	74.00	24.99	V	5.2
12651.800000	---	42.81	54.00	11.19	V	9.7
12651.800000	52.15	---	74.00	21.85	V	9.7
15781.500000	---	42.12	54.00	11.88	V	9.6
15781.500000	51.33	---	74.00	22.67	V	9.6

Middle Channel: 5280MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ac20 mode 5280 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Hugh Wu

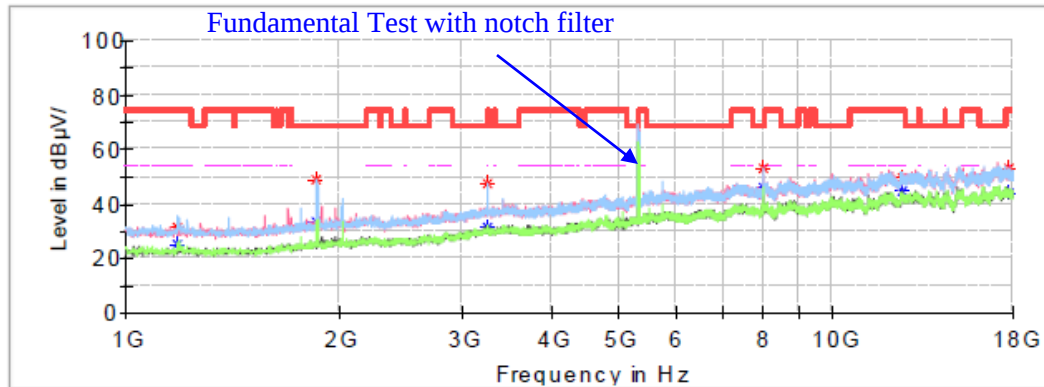
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1307.700000	---	29.24	54.00	24.76	H	-15.0
1307.700000	41.45	---	74.00	32.55	H	-15.0
1831.300000	43.64	---	68.20	24.56	H	-12.7
3493.900000	40.83	---	68.20	27.37	H	-6.4
7460.000000	47.21	---	74.00	26.79	V	3.8
7460.000000	---	38.74	54.00	15.26	V	3.8
12500.500000	51.09	---	74.00	22.91	V	9.7
12500.500000	---	45.43	54.00	8.57	V	9.7
15815.500000	---	43.43	54.00	10.57	V	9.6
15815.500000	52.35	---	74.00	21.65	V	9.6

High Channel: 5320MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5320 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

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)
1181.900000	---	25.49	54.00	28.51	H	-15.2
1181.900000	31.39	---	74.00	42.61	H	-15.2
1863.600000	48.77	---	68.20	19.43	H	-12.6
3250.800000	47.27	---	68.20	20.93	H	-7.4
7980.200000	52.86	---	68.20	15.34	H	3.9
12526.000000	49.92	---	74.00	24.08	V	9.7
12526.000000	---	44.99	54.00	9.01	V	9.7
17794.300000	---	44.11	54.00	9.89	V	11.8
17794.300000	53.02	---	74.00	20.98	V	11.8

MIMO(Chain 0+Chain 1):

802.11ac40 Mode:

Low Channel: 5270MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ac40 mode 5270 channel

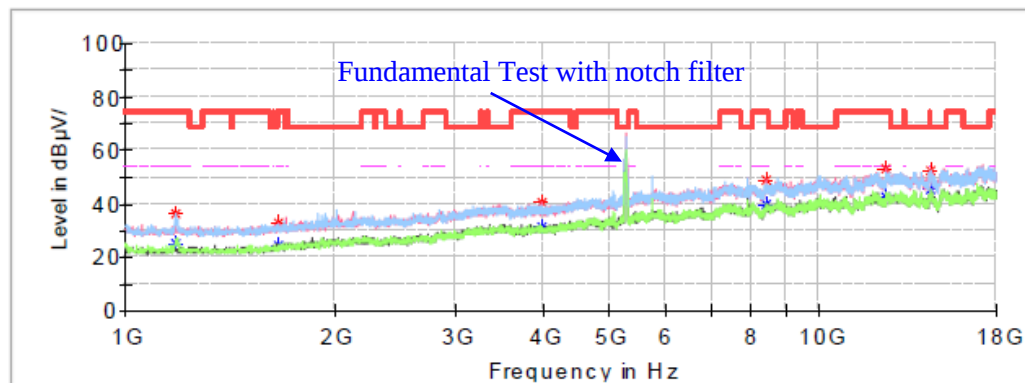
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Hugh Wu

Full Spectrum

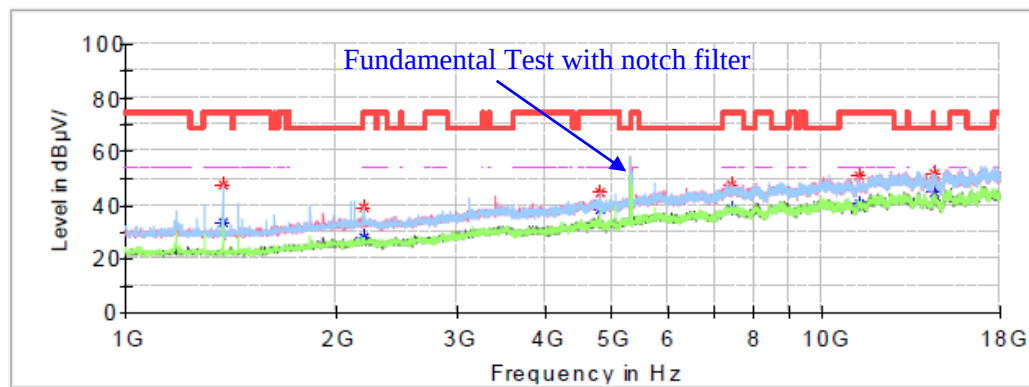


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1180.200000	36.10	---	74.00	37.90	H	-15.2
1180.200000	---	25.51	54.00	28.49	H	-15.2
1657.900000	32.85	---	68.20	35.35	H	-13.8
3976.700000	40.43	---	74.00	33.57	V	-5.9
3976.700000	---	31.17	54.00	22.83	V	-5.9
8403.500000	48.94	---	74.00	25.06	V	5.1
8403.500000	---	40.16	54.00	13.84	V	5.1
12495.400000	---	42.81	54.00	11.19	V	9.7
12495.400000	53.22	---	74.00	20.78	V	9.7
14489.500000	52.14	---	74.00	21.86	H	9.4
14489.500000	---	45.39	54.00	8.61	H	9.4

Middle Channel: 5310MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac40 mode 5310 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

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)
1379.100000	---	33.80	54.00	20.20	H	-14.9
1379.100000	47.74	---	74.00	26.26	H	-14.9
2201.900000	39.49	---	74.00	34.51	H	-11.1
2201.900000	---	28.13	54.00	25.87	H	-11.1
4799.500000	---	38.61	54.00	15.39	H	-3.2
4799.500000	44.43	---	74.00	29.57	H	-3.2
7432.800000	47.60	---	74.00	26.40	H	3.7
7432.800000	---	38.26	54.00	15.74	V	3.7
11300.300000	50.75	---	74.00	23.25	V	8.2
11300.300000	---	40.59	54.00	13.41	V	8.2
14487.800000	51.63	---	74.00	22.37	H	9.4
14487.800000	---	44.42	54.00	9.58	H	9.4

MIMO(Chain 0+Chain 1):

802.11ac80 Mode:

Channel: 5290MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ac80 mode 5290 channel

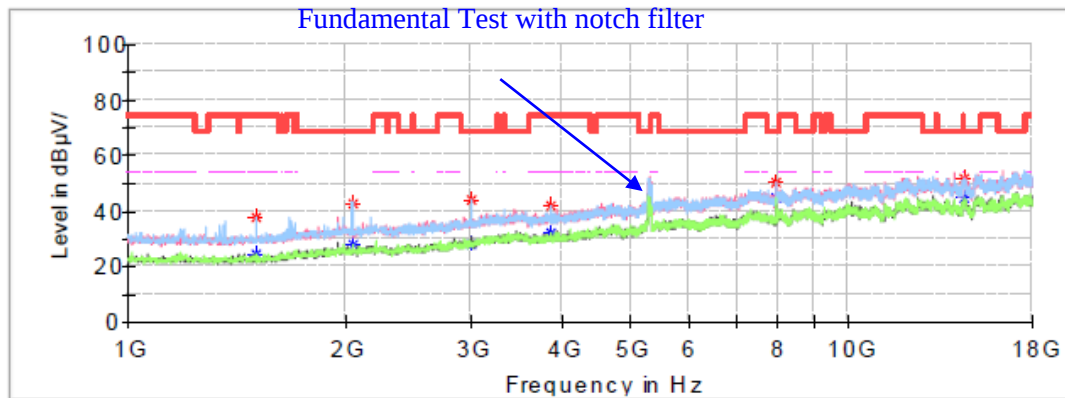
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Hugh Wu

Full Spectrum

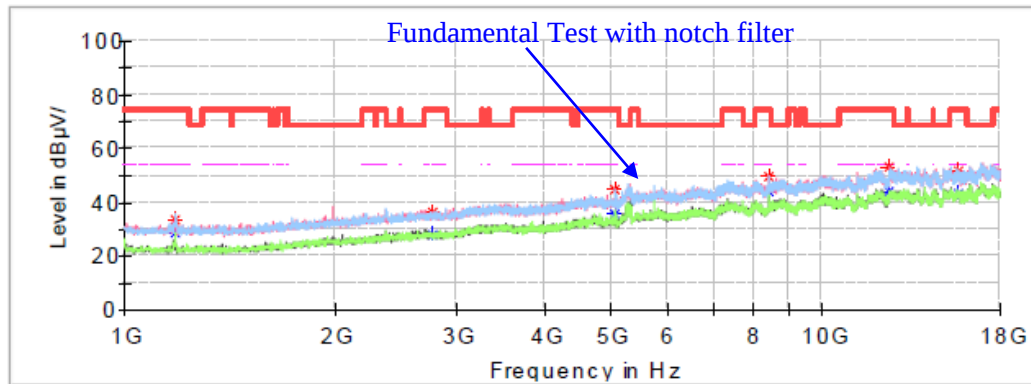


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1504.900000	---	24.28	54.00	29.72	H	-14.7
1504.900000	37.42	---	74.00	36.58	H	-14.7
2055.700000	42.77	---	68.20	25.43	H	-11.6
2990.700000	43.84	---	68.20	24.36	H	-8.5
3867.900000	---	32.47	54.00	21.53	H	-6.0
3867.900000	41.72	---	74.00	32.28	H	-6.0
7934.300000	50.31	---	68.20	17.89	H	3.9
14491.200000	51.63	---	74.00	22.37	H	9.4
14491.200000	---	45.01	54.00	8.99	H	9.4

**MIMO (Chain 0+Chain 1):
802.11ac160 Mode:****Channel: 5250MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac160 mode 5250 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

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)
1181.900000	33.64	---	74.00	40.36	H	-15.2
1181.900000	---	28.57	54.00	25.43	H	-15.2
2768.000000	---	28.15	54.00	25.85	V	-9.2
2768.000000	36.07	---	74.00	37.93	V	-9.2
5049.400000	---	35.56	54.00	18.44	H	-2.2
5049.400000	44.76	---	74.00	29.24	H	-2.2
8400.100000	---	43.89	54.00	10.11	V	5.1
8400.100000	49.34	---	74.00	24.66	V	5.1
12510.700000	---	43.87	54.00	10.13	V	9.7
12510.700000	53.19	---	74.00	20.81	V	9.7
15665.900000	---	43.46	54.00	10.54	V	9.7
15665.900000	51.54	---	74.00	22.46	V	9.7

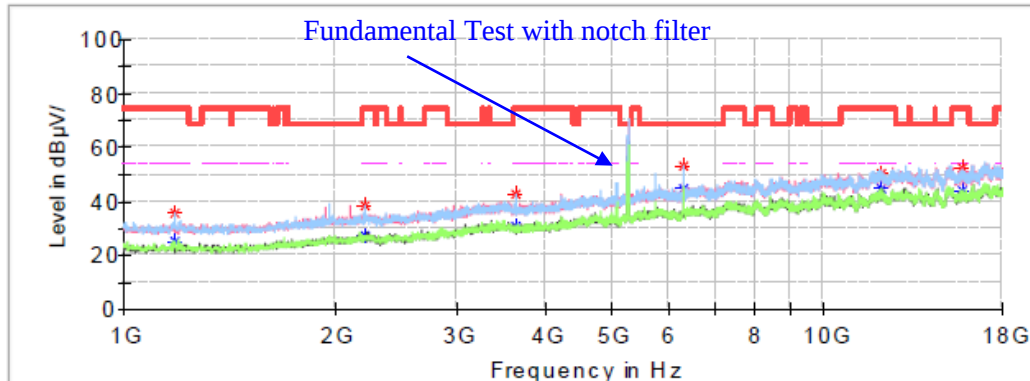
MIMO(Chain 0+Chain 1):
802.11ax20 Mode:

Low Channel: 5260MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5260 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

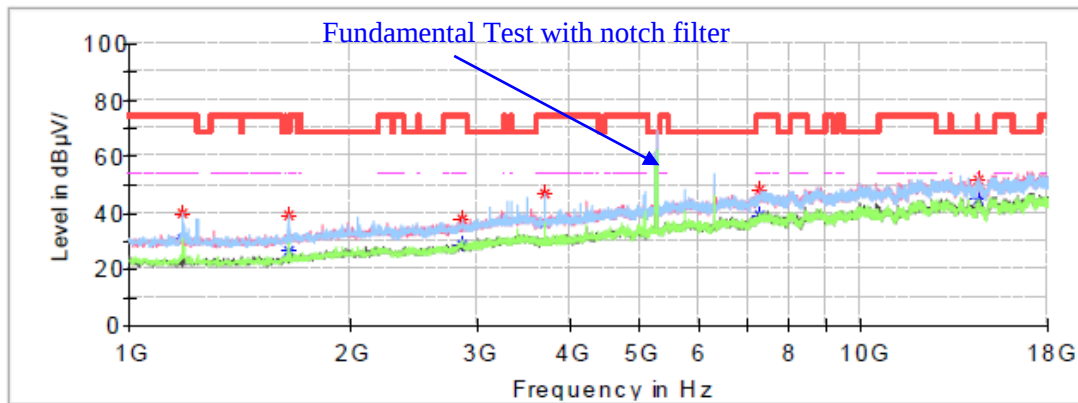


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1181.900000	---	25.25	54.00	28.75	H	-15.2
1181.900000	35.54	---	74.00	38.46	H	-15.2
2217.200000	---	27.48	54.00	26.52	H	-11.1
2217.200000	38.39	---	74.00	35.61	H	-11.1
3638.400000	---	31.06	54.00	22.94	H	-6.2
3638.400000	42.92	---	74.00	31.08	H	-6.2
6309.100000	52.97	---	68.20	15.23	H	0.3
12067.000000	50.39	---	74.00	23.61	H	9.1
12067.000000	---	44.83	54.00	9.17	H	9.1
15761.100000	52.42	---	74.00	21.58	V	9.6
15761.100000	---	44.17	54.00	9.83	V	9.6

Middle Channel: 5280MHz**Common Information**

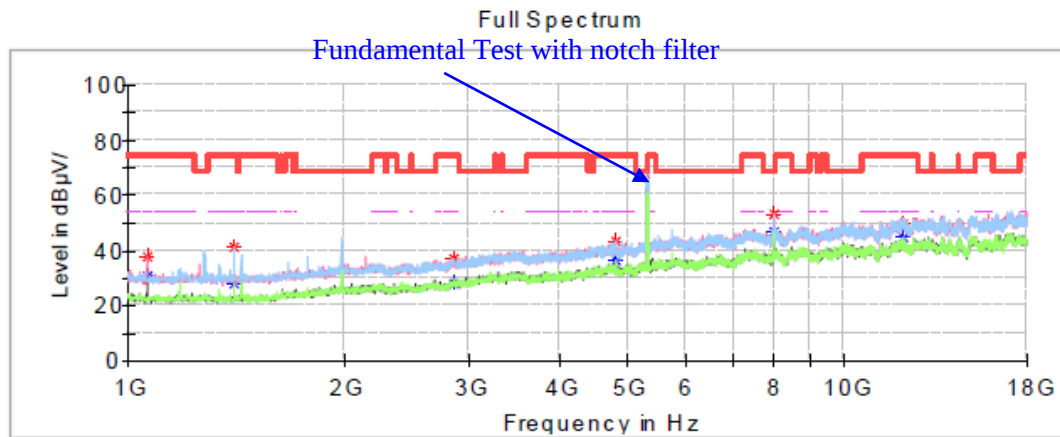
Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ax20 mode 5280 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Hugh Wu

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)
1183.600000	40.14	---	74.00	33.86	H	-15.2
1183.600000	---	31.02	54.00	22.98	H	-15.2
1654.500000	39.29	---	68.20	28.91	H	-13.8
2849.600000	---	28.89	54.00	25.11	H	-9.0
2849.600000	37.71	---	74.00	36.29	H	-9.0
3696.200000	---	36.28	54.00	17.72	H	-6.2
3696.200000	46.89	---	74.00	27.11	H	-6.2
7283.200000	---	39.11	54.00	14.89	V	3.3
7283.200000	48.11	---	74.00	25.89	V	3.3
14487.800000	51.48	---	74.00	22.52	H	9.4
14487.800000	---	44.84	54.00	9.16	H	9.4

Middle Channel: 5320MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5320 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

**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)
1062.900000	37.62	---	74.00	36.38	V	-15.4
1062.900000	---	30.92	54.00	23.08	V	-15.4
1406.300000	41.51	---	74.00	32.49	H	-14.9
1406.300000	---	27.65	54.00	26.35	H	-14.9
2844.500000	37.08	---	74.00	36.92	H	-9.0
2844.500000	---	28.24	54.00	25.76	H	-9.0
4799.500000	---	36.51	54.00	17.49	H	-3.2
4799.500000	43.34	---	74.00	30.66	H	-3.2
7980.200000	52.84	---	68.20	15.36	H	3.9
12112.900000	49.68	---	74.00	24.32	H	9.1
12112.900000	---	44.79	54.00	9.21	H	9.1

MIMO(Chain 0+Chain 1):

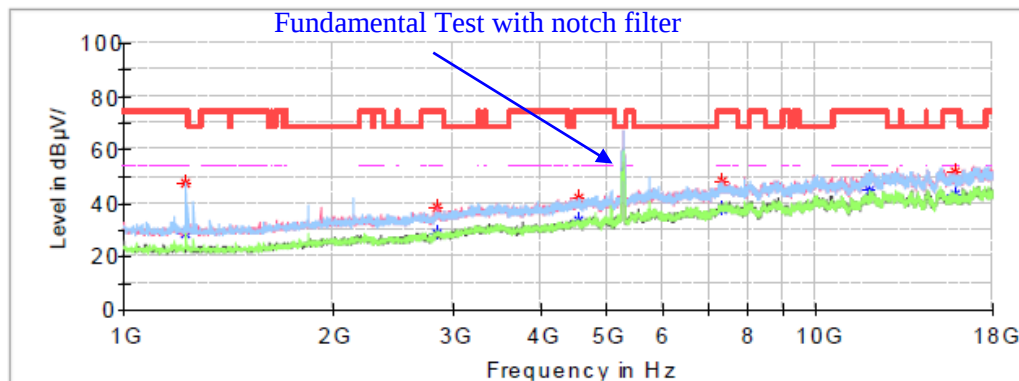
802.11ax40 Mode:

Low Channel: 5270MHz

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5270 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

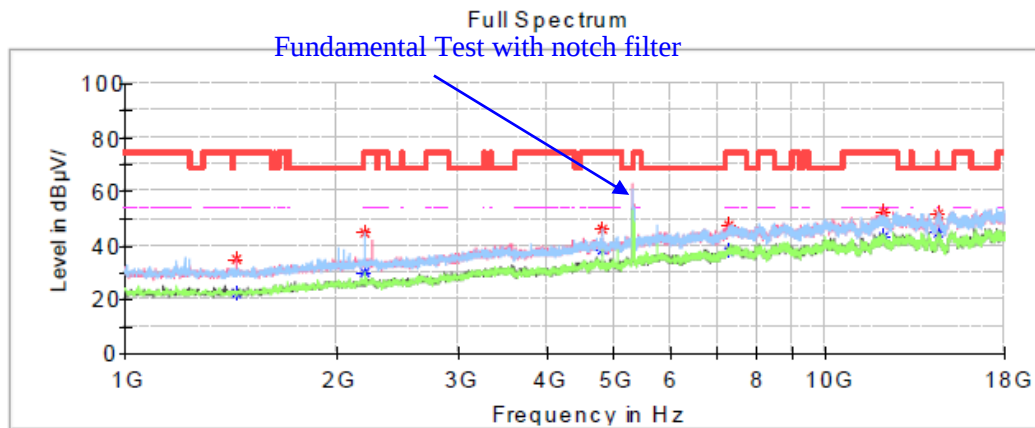
Full Spectrum

**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)
1229.500000	47.55	---	74.00	26.45	H	-15.1
1229.500000	---	28.54	54.00	25.46	H	-15.1
2832.600000	38.50	---	74.00	35.50	H	-9.0
2832.600000	---	29.02	54.00	24.98	H	-9.0
4536.000000	42.08	---	74.00	31.92	H	-4.1
4536.000000	---	33.60	54.00	20.40	H	-4.1
7342.700000	48.06	---	74.00	25.94	V	3.5
7342.700000	---	37.75	54.00	16.25	V	3.5
11942.900000	49.85	---	74.00	24.15	H	9.0
11942.900000	---	44.94	54.00	9.06	H	9.0
15926.000000	---	43.54	54.00	10.46	H	9.5
15926.000000	51.61	---	74.00	22.39	H	9.5

High Channel: 5310MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5310 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

**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)
1443.700000	34.84	---	74.00	39.16	H	-14.8
1443.700000	---	22.06	54.00	31.94	H	-14.8
2195.100000	44.72	---	68.20	23.48	H	-11.1
4799.500000	---	38.81	54.00	15.19	H	-3.2
4799.500000	46.15	---	74.00	27.85	H	-3.2
7288.300000	47.82	---	74.00	26.18	V	3.4
7288.300000	---	37.99	54.00	16.01	V	3.4
12094.200000	52.75	---	74.00	21.25	V	9.1
12094.200000	---	43.67	54.00	10.33	V	9.1
14489.500000	51.73	---	74.00	22.27	V	9.4
14489.500000	---	44.99	54.00	9.01	V	9.4

MIMO(Chain 0+Chain 1):

802.11ax80 Mode:

Channel: 5290MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ax80 mode 5290 channel

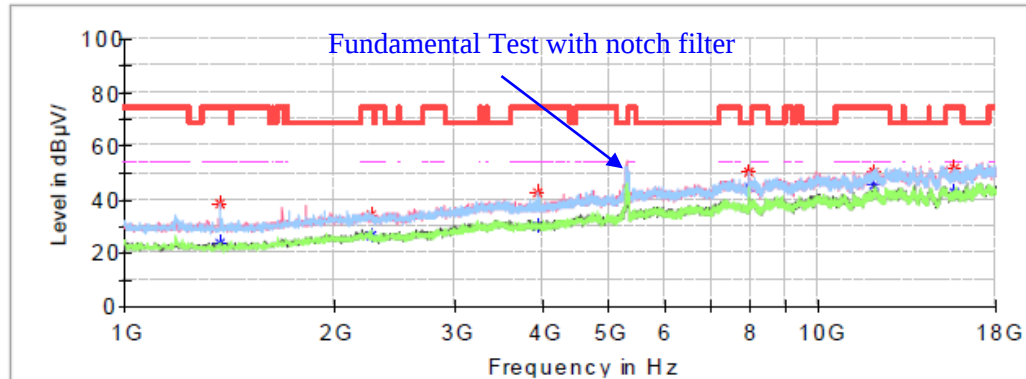
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Hugh Wu

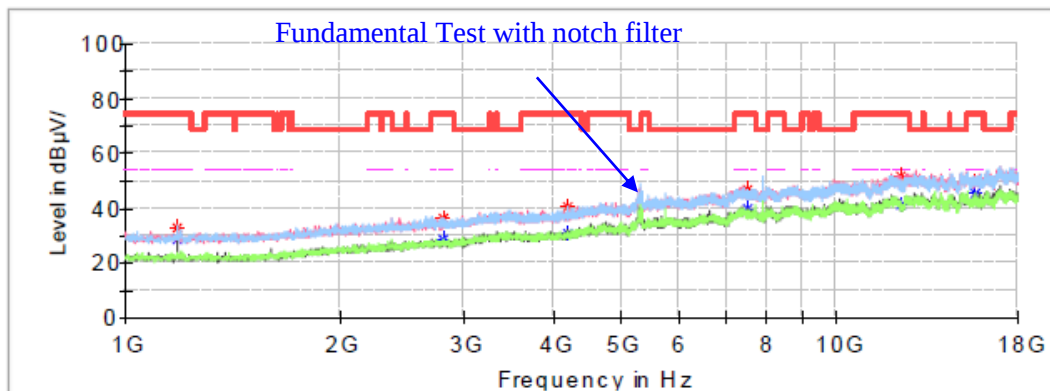
Full Spectrum

**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)
1374.000000	---	24.01	54.00	29.99	H	-14.9
1374.000000	38.67	---	74.00	35.33	H	-14.9
2271.600000	34.45	---	74.00	39.55	H	-10.9
2271.600000	---	26.50	54.00	27.50	H	-10.9
3935.900000	42.87	---	74.00	31.13	H	-6.0
3935.900000	---	30.02	54.00	23.98	H	-6.0
7934.300000	50.35	---	68.20	17.85	H	3.9
12063.600000	50.48	---	74.00	23.52	V	9.1
12063.600000	---	45.15	54.00	8.85	V	9.1
15737.300000	---	42.50	54.00	11.50	H	9.6
15737.300000	51.50	---	74.00	22.50	H	9.6

**MIMO (Chain 0+Chain 1):
802.11ax160 Mode:****Channel: 5250MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax160 mode 5250 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

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)
1183.600000	33.09	---	74.00	40.91	V	-15.2
1183.600000	---	28.66	54.00	25.34	V	-15.2
2807.100000	36.05	---	74.00	37.95	H	-9.1
2807.100000	---	28.56	54.00	25.44	H	-9.1
4184.100000	40.44	---	74.00	33.56	H	-5.3
4184.100000	---	30.82	54.00	23.18	H	-5.3
7497.400000	47.10	---	74.00	26.90	H	3.9
7497.400000	---	39.75	54.00	14.25	H	3.9
12325.400000	51.51	---	74.00	22.49	V	9.4
12325.400000	---	41.56	54.00	12.44	V	9.4
15733.900000	49.73	---	74.00	24.27	V	9.6
15733.900000	---	45.64	54.00	8.36	V	9.6

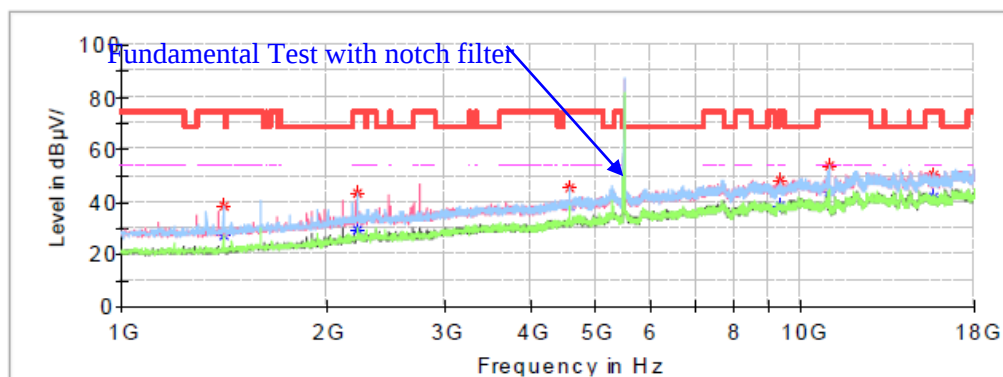
1GHz-18GHz(5470-5725MHz Band):

Chain 0:

802.11a Mode:**Low Channel: 5500MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5500 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

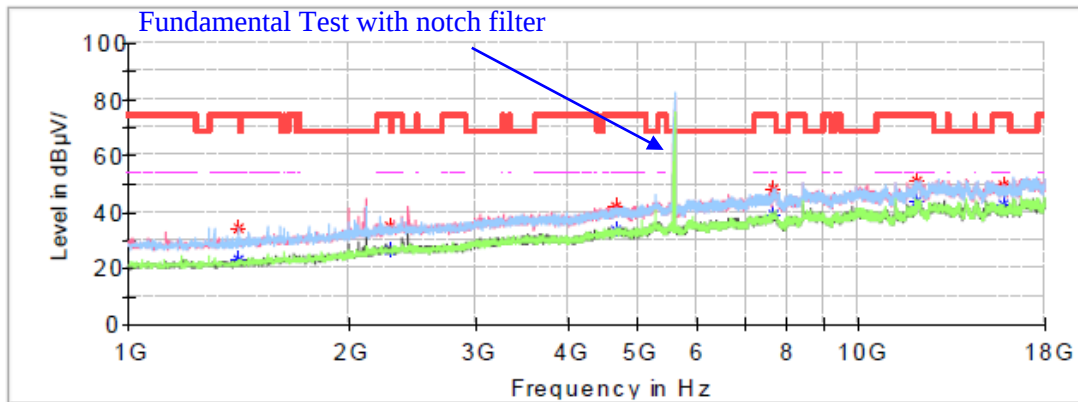
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1411.400000	---	27.45	54.00	26.55	H	-14.9
1411.400000	38.50	---	74.00	35.50	H	-14.9
2229.100000	---	29.39	54.00	24.61	H	-11.0
2229.100000	43.64	---	74.00	30.36	H	-11.0
4563.200000	---	38.73	54.00	15.27	H	-4.0
4563.200000	45.33	---	74.00	28.67	H	-4.0
9304.500000	---	38.47	54.00	15.53	V	5.4
9304.500000	48.36	---	74.00	25.64	V	5.4
11006.200000	---	43.73	54.00	10.27	H	7.3
11006.200000	53.69	---	74.00	20.31	H	7.3
15750.900000	---	42.13	54.00	11.87	V	9.6
15750.900000	50.69	---	74.00	23.31	V	9.6

Middle Channel: 5580MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5580 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

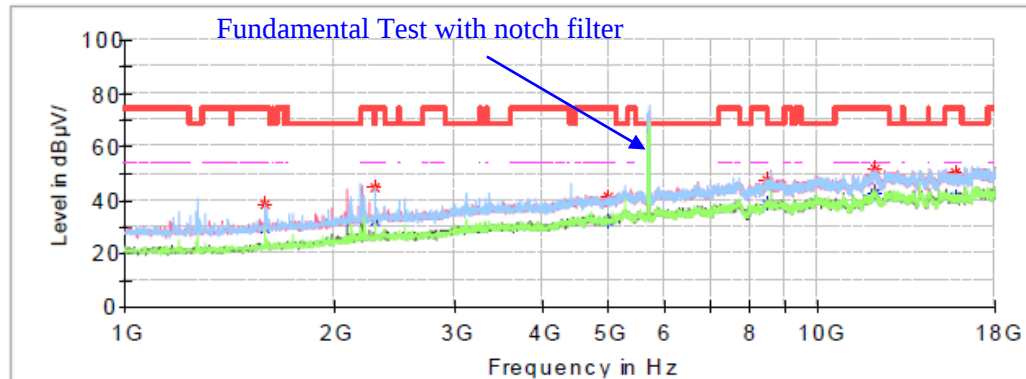
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1416.500000	---	22.88	54.00	31.12	H	-14.9
1416.500000	34.43	---	74.00	39.57	H	-14.9
2278.400000	---	26.82	54.00	27.18	V	-10.9
2278.400000	35.26	---	74.00	38.74	V	-10.9
4670.300000	---	33.46	54.00	20.54	H	-3.6
4670.300000	42.04	---	74.00	31.96	H	-3.6
7655.500000	---	39.09	54.00	14.91	H	3.9
7655.500000	48.11	---	74.00	25.89	H	3.9
12063.600000	---	44.38	54.00	9.62	V	9.1
12063.600000	51.31	---	74.00	22.69	V	9.1
15778.100000	---	42.59	54.00	11.41	H	9.6
15778.100000	49.82	---	74.00	24.18	H	9.6

High Channel: 5700MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5700 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

**Critical Freqs**

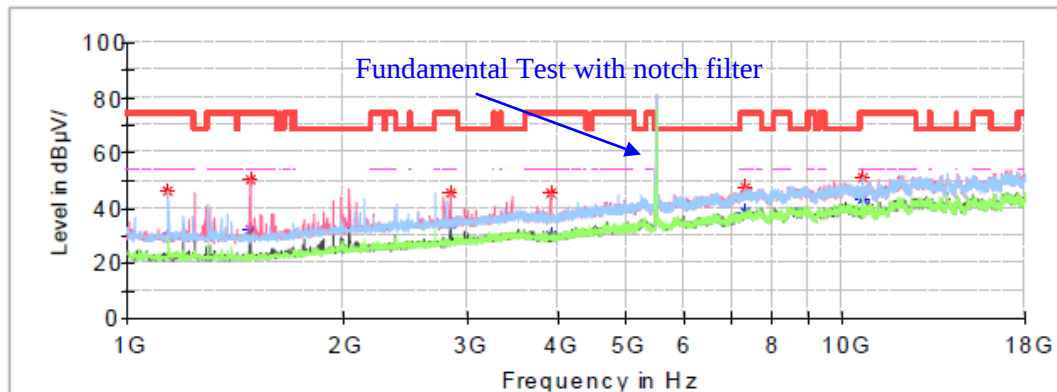
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1593.300000	38.56	---	74.00	35.44	H	-14.2
1593.300000	---	29.11	54.00	24.89	H	-14.2
2293.700000	---	32.22	54.00	21.78	H	-10.8
2293.700000	44.47	---	74.00	29.53	H	-10.8
4974.600000	---	32.21	54.00	21.79	V	-2.5
4974.600000	41.58	---	74.00	32.42	V	-2.5
8422.200000	---	38.22	54.00	15.78	V	5.2
8422.200000	47.55	---	74.00	26.45	V	5.2
12101.000000	---	42.80	54.00	11.20	H	9.1
12101.000000	51.46	---	74.00	22.54	H	9.1
15844.400000	---	40.93	54.00	13.07	V	9.5
15844.400000	50.11	---	74.00	23.89	V	9.5

Chain 1:

802.11a Mode:**Low channel: 5500 MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5500 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

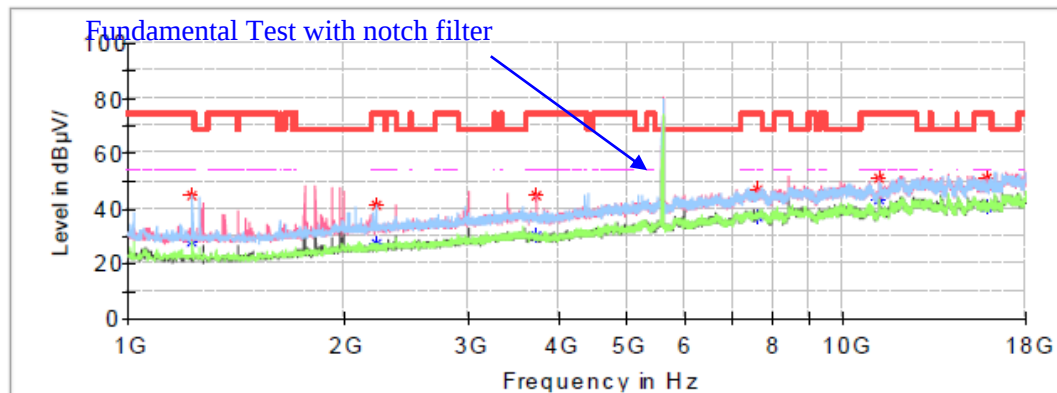
Full Spectrum

**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)
1141.100000	---	29.47	54.00	24.53	H	-15.3
1141.100000	45.86	---	74.00	28.14	H	-15.3
1482.800000	---	32.48	54.00	21.52	V	-14.8
1482.800000	50.53	---	74.00	23.47	V	-14.8
2827.500000	---	34.40	54.00	19.60	V	-9.0
2827.500000	45.67	---	74.00	28.33	V	-9.0
3901.900000	---	30.00	54.00	24.00	V	-6.0
3901.900000	45.30	---	74.00	28.70	V	-6.0
7320.600000	---	38.42	54.00	15.58	V	3.4
7320.600000	47.83	---	74.00	26.17	V	3.4
10686.600000	---	43.11	54.00	10.89	H	7.2
10686.600000	50.85	---	74.00	23.15	H	7.2

Middle Channel: 5580MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5580 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Klein Zhu

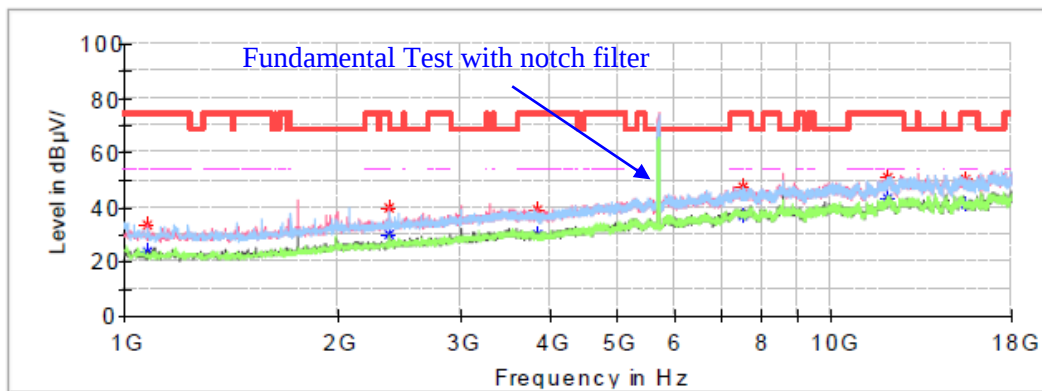
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1229.500000	---	28.32	54.00	25.68	H	-15.1
1229.500000	44.91	---	74.00	29.09	H	-15.1
2220.600000	---	27.47	54.00	26.53	H	-11.0
2220.600000	40.99	---	74.00	33.01	H	-11.0
3731.900000	---	30.23	54.00	23.77	V	-6.1
3731.900000	44.50	---	74.00	29.50	V	-6.1
7577.300000	---	37.40	54.00	16.60	V	3.9
7577.300000	46.69	---	74.00	27.31	V	3.9
11203.400000	---	43.10	54.00	10.90	V	7.9
11203.400000	51.34	---	74.00	22.66	V	7.9
15922.600000	---	40.72	54.00	13.28	H	9.5
15922.600000	50.93	---	74.00	23.07	H	9.5

High Channel: 5700MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5700 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

Full Spectrum

**Critical Freqs**

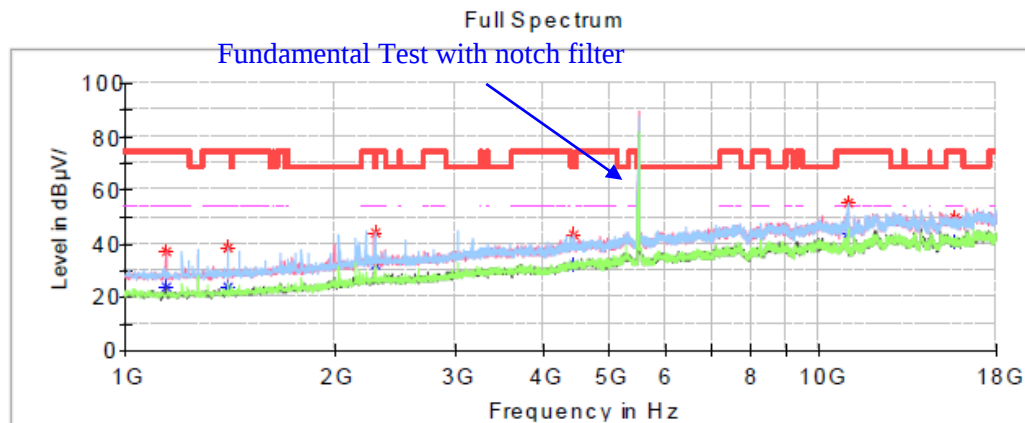
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1079.900000	---	23.76	54.00	30.24	V	-15.3
1079.900000	33.24	---	74.00	40.76	V	-15.3
2370.200000	---	29.93	54.00	24.07	V	-10.6
2370.200000	39.94	---	74.00	34.06	V	-10.6
3840.700000	---	30.11	54.00	23.89	V	-6.0
3840.700000	39.04	---	74.00	34.96	V	-6.0
7522.900000	---	37.11	54.00	16.89	H	3.9
7522.900000	47.34	---	74.00	26.66	H	3.9
12056.800000	---	43.03	54.00	10.97	H	9.0
12056.800000	50.88	---	74.00	23.12	H	9.0
15538.400000	---	41.45	54.00	12.55	V	9.8
15538.400000	50.17	---	74.00	23.83	V	9.8

MIMO(Chain 0+Chain 1):
802.11ac20 Mode:

Low Channel: 5500MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5500 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

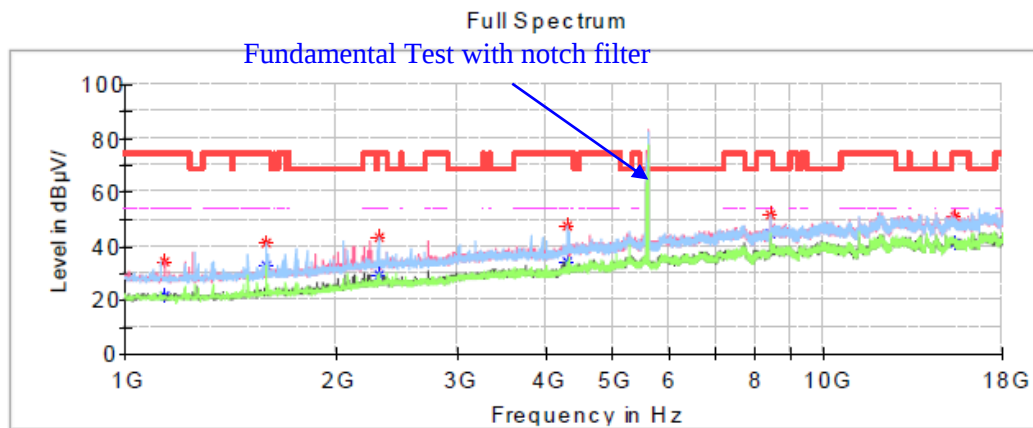


Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1142.800000	---	23.91	54.00	30.09	V	-15.3
1142.800000	37.06	---	74.00	36.94	V	-15.3
1406.300000	---	23.62	54.00	30.38	H	-14.9
1406.300000	38.30	---	74.00	35.70	H	-14.9
2290.300000	---	31.98	54.00	22.02	H	-10.8
2290.300000	43.77	---	74.00	30.23	H	-10.8
4427.200000	43.51	---	68.20	24.69	H	-4.5
10994.300000	---	43.97	54.00	10.03	H	7.3
10994.300000	55.06	---	74.00	18.94	H	7.3
15722.000000	---	40.80	54.00	13.20	V	9.6
15722.000000	49.83	---	74.00	24.17	V	9.6

Middle Channel: 5580MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac20 mode 5580 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

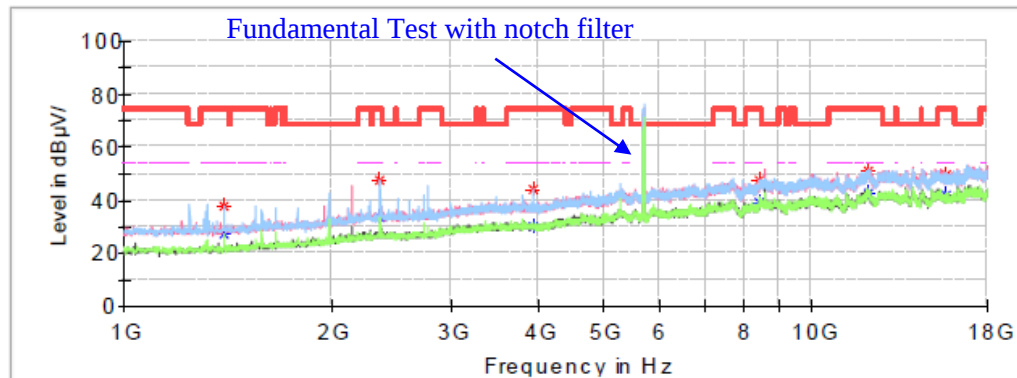
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1137.700000	---	21.83	54.00	32.17	V	-15.3
1137.700000	34.36	---	74.00	39.64	V	-15.3
1595.000000	---	32.71	54.00	21.29	H	-14.2
1595.000000	41.37	---	74.00	32.63	H	-14.2
2303.900000	43.70	---	68.20	24.50	H	-10.8
4298.000000	---	34.42	54.00	19.58	H	-4.9
4298.000000	47.90	---	74.00	26.10	H	-4.9
8400.100000	---	45.00	54.00	9.00	H	5.1
8400.100000	51.97	---	74.00	22.03	H	5.1
15414.300000	---	41.37	54.00	12.63	V	9.7
15414.300000	51.39	---	74.00	22.61	V	9.7

High Channel: 5700MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac20 mode 5700 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
1399.500000	37.80	---	74.00	36.20	H	-14.9
1399.500000	---	27.45	54.00	26.55	H	-14.9
2360.000000	---	33.74	54.00	20.26	H	-10.6
2360.000000	47.75	---	74.00	26.25	H	-10.6
3935.900000	---	30.37	54.00	23.63	H	-6.0
3935.900000	44.16	---	74.00	29.84	H	-6.0
8410.300000	---	39.06	54.00	14.94	V	5.2
8410.300000	47.77	---	74.00	26.23	V	5.2
12072.100000	---	42.33	54.00	11.67	V	9.1
12072.100000	51.24	---	74.00	22.76	V	9.1
15710.100000	---	42.00	54.00	12.00	H	9.7
15710.100000	49.93	---	74.00	24.07	H	9.7

MIMO(Chain 0+Chain 1):

802.11ac40 Mode:

Low Channel: 5510MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ac40 mode 5510 channel

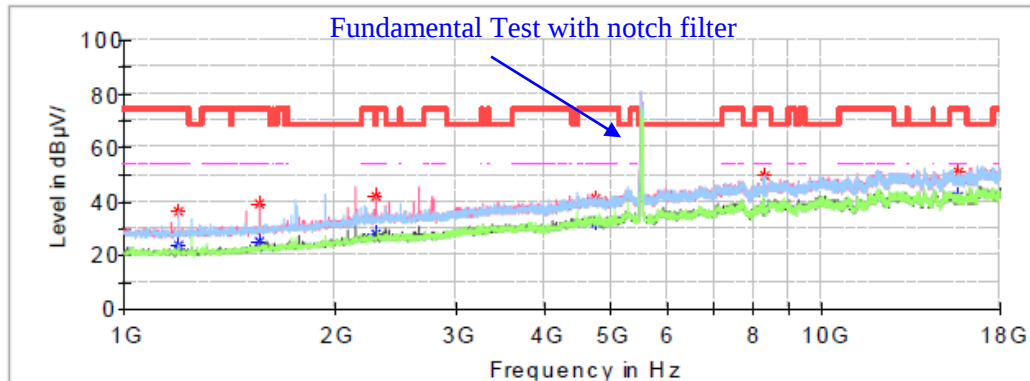
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Destine Hu

Full Spectrum



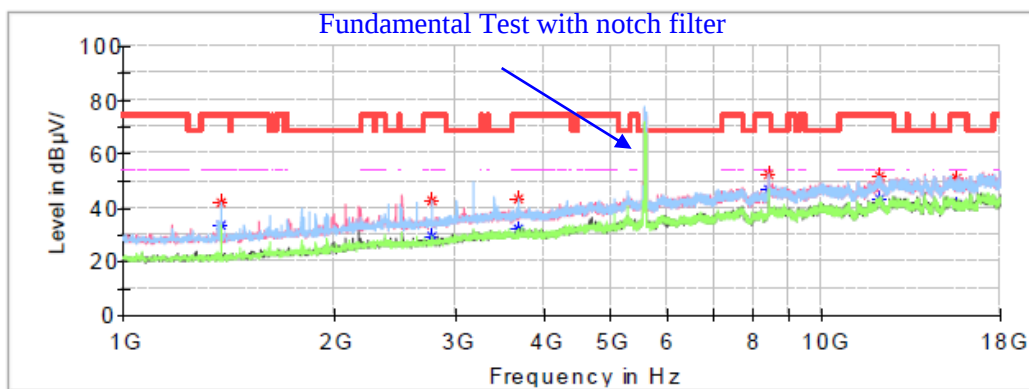
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	---	23.96	54.00	30.04	H	-15.2
1197.200000	36.29	---	74.00	37.71	H	-15.2
1566.100000	---	25.13	54.00	28.87	V	-14.3
1566.100000	39.20	---	74.00	34.80	V	-14.3
2295.400000	---	27.73	54.00	26.27	V	-10.8
2295.400000	41.86	---	74.00	32.14	V	-10.8
4740.000000	---	32.50	54.00	21.50	V	-3.4
4740.000000	41.54	---	74.00	32.46	V	-3.4
8265.800000	---	37.86	54.00	16.14	H	4.7
8265.800000	49.74	---	74.00	24.26	H	4.7
15744.100000	---	41.76	54.00	12.24	V	9.6
15744.100000	51.04	---	74.00	22.96	V	9.6

Middle Channel: 5550MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac40 mode 5550 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

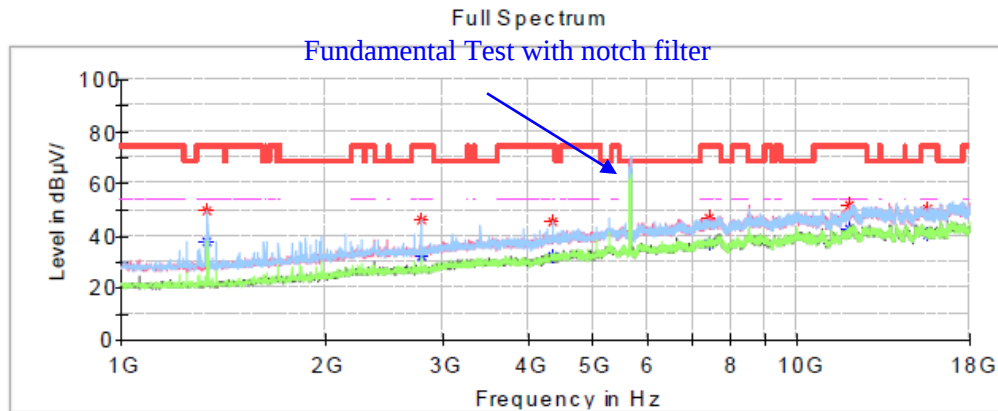
Full Spectrum

**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)
1379.100000	---	33.30	54.00	20.70	H	-14.9
1379.100000	42.29	---	74.00	31.71	H	-14.9
2768.000000	---	29.59	54.00	24.41	H	-9.2
2768.000000	42.45	---	74.00	31.55	H	-9.2
3677.500000	---	32.35	54.00	21.65	H	-6.2
3677.500000	43.41	---	74.00	30.59	H	-6.2
8384.800000	---	46.74	54.00	7.26	V	5.1
8384.800000	52.11	---	74.00	21.89	V	5.1
12084.000000	---	43.27	54.00	10.73	H	9.1
12084.000000	51.93	---	74.00	22.07	H	9.1
15577.500000	---	41.10	54.00	12.90	V	9.8
15577.500000	50.97	---	74.00	23.03	V	9.8

High Channel: 5670MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac40 mode 5670 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

**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)
1341.700000	---	37.70	54.00	16.30	H	-15.0
1341.700000	49.74	---	74.00	24.26	H	-15.0
2774.800000	---	32.31	54.00	21.69	H	-9.2
2774.800000	46.23	---	74.00	27.77	H	-9.2
4357.500000	---	32.17	54.00	21.83	H	-4.7
4357.500000	45.65	---	74.00	28.35	H	-4.7
7427.700000	---	37.14	54.00	16.86	V	3.7
7427.700000	46.86	---	74.00	27.14	V	3.7
11988.800000	---	42.38	54.00	11.62	V	9.0
11988.800000	51.68	---	74.00	22.32	V	9.0
15592.800000	---	40.58	54.00	13.42	V	9.8
15592.800000	50.62	---	74.00	23.38	V	9.8

MIMO(Chain 0+Chain 1):

802.11ac80 Mode:

Low Channel: 5530MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

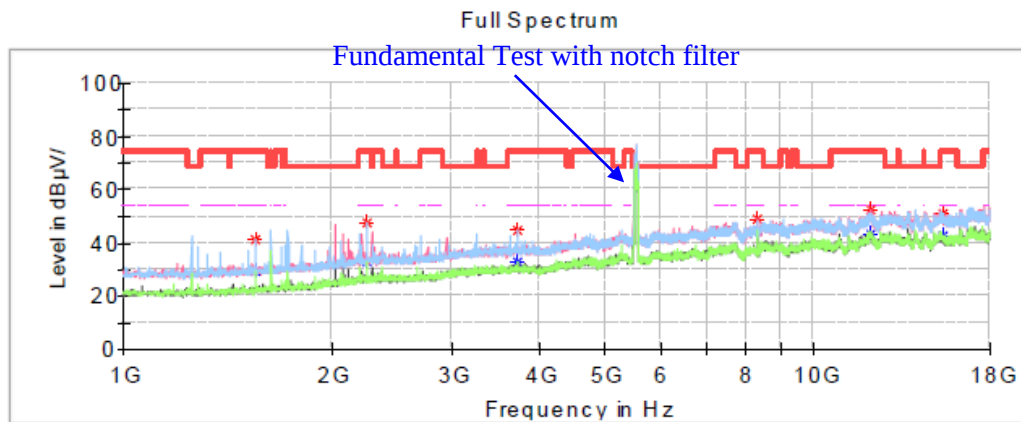
Transmitting in 802.11ac80 mode 5530 channel

Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

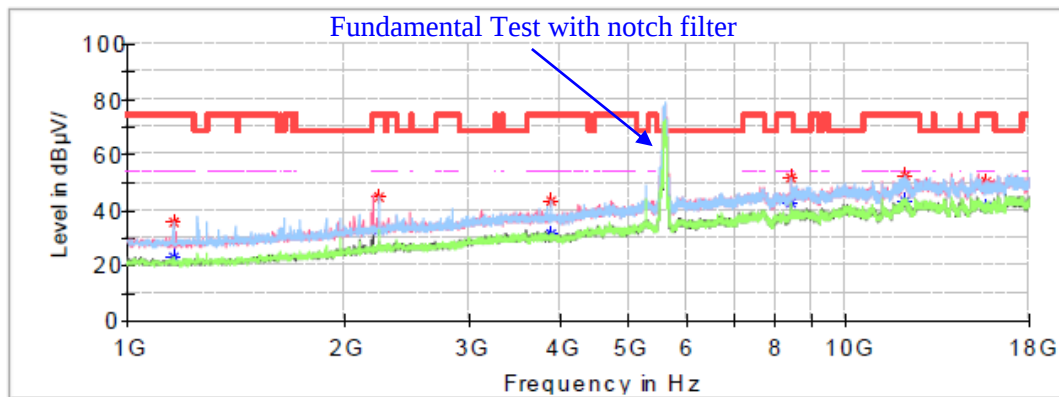
Destine Hu

**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)
1552.500000	---	29.17	54.00	24.83	H	-14.4
1552.500000	41.24	---	74.00	32.76	H	-14.4
2256.300000	---	32.80	54.00	21.20	H	-10.9
2256.300000	47.24	---	74.00	26.76	H	-10.9
3731.900000	---	32.53	54.00	21.47	H	-6.1
3731.900000	44.46	---	74.00	29.54	H	-6.1
8294.700000	---	45.01	54.00	8.99	H	4.8
8294.700000	48.65	---	74.00	25.35	H	4.8
12065.300000	---	43.64	54.00	10.36	V	9.1
12065.300000	52.33	---	74.00	21.67	V	9.1
15370.100000	---	42.33	54.00	11.67	V	9.7
15370.100000	51.06	---	74.00	22.94	V	9.7

High Channel: 5610MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac80 mode 5610 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
1158.100000	---	22.82	54.00	31.18	H	-15.2
1158.100000	35.62	---	74.00	38.38	H	-15.2
2241.000000	---	32.97	54.00	21.03	H	-11.0
2241.000000	44.78	---	74.00	29.22	H	-11.0
3883.200000	---	31.49	54.00	22.51	H	-6.0
3883.200000	43.37	---	74.00	30.63	H	-6.0
8413.700000	---	43.00	54.00	11.00	H	5.2
8413.700000	51.88	---	74.00	22.12	H	5.2
12109.500000	---	43.31	54.00	10.69	V	9.1
12109.500000	52.32	---	74.00	21.68	V	9.1
15735.600000	---	41.33	54.00	12.67	V	9.6
15735.600000	50.39	---	74.00	23.61	V	9.6

MIMO(Chain 0+Chain 1):

802.11ac160 Mode:

Channel: 5570MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ac160 mode 5570 channel

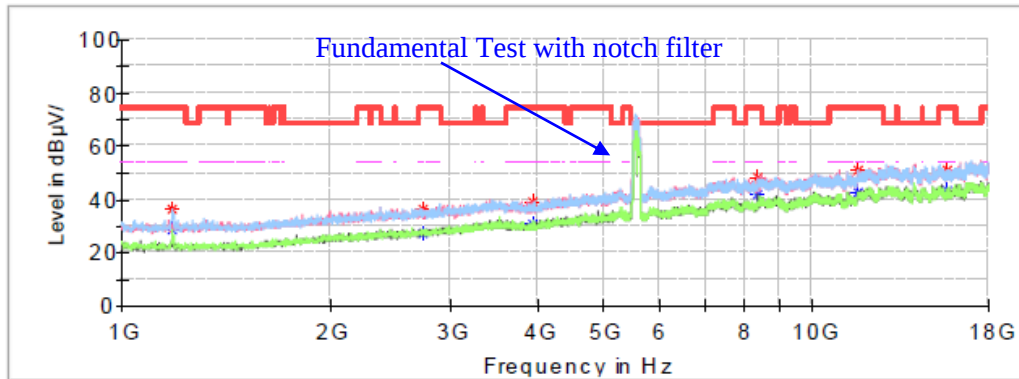
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Destine Hu

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)
1181.900000	---	28.53	54.00	25.47	H	-15.2
1181.900000	36.34	---	74.00	37.66	H	-15.2
2737.400000	---	27.41	54.00	26.59	V	-9.3
2737.400000	36.61	---	74.00	37.39	V	-9.3
3927.400000	---	30.56	54.00	23.44	V	-6.0
3927.400000	38.97	---	74.00	35.03	V	-6.0
8354.200000	---	42.16	54.00	11.84	V	5.0
8354.200000	48.56	---	74.00	25.44	V	5.0
11659.000000	---	42.39	54.00	11.61	H	8.9
11659.000000	50.92	---	74.00	23.08	H	8.9
15701.600000	---	43.11	54.00	10.89	H	9.7
15701.600000	51.23	---	74.00	22.77	H	9.7

MIMO(Chain 0+Chain 1):

802.11ax20 Mode:

Low Channel: 5500MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ax20 mode 5500 channel

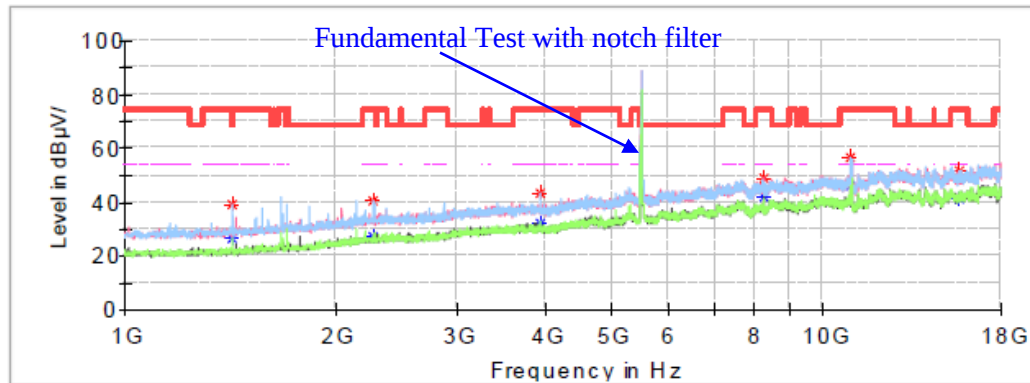
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Destine Hu

Full Spectrum



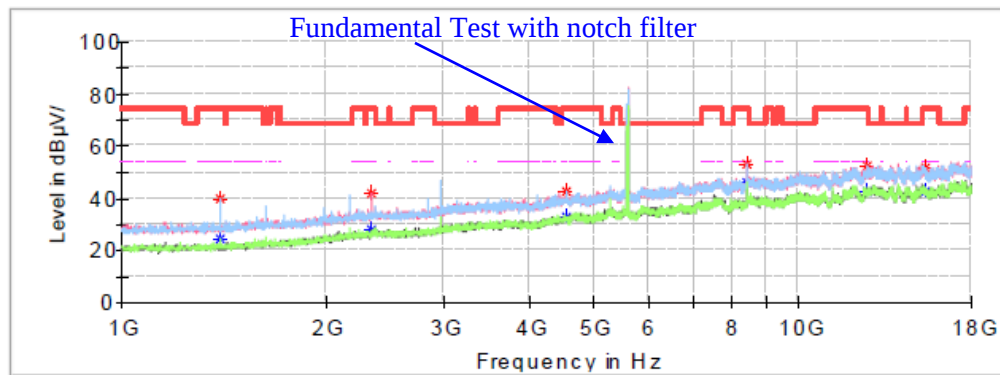
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1425.000000	---	26.85	54.00	27.15	H	-14.8
1425.000000	38.84	---	74.00	35.16	H	-14.8
2273.300000	---	27.44	54.00	26.56	H	-10.9
2273.300000	40.68	---	74.00	33.32	H	-10.9
3947.800000	---	32.29	54.00	21.71	H	-6.0
3947.800000	43.19	---	74.00	30.81	H	-6.0
8248.800000	---	41.87	54.00	12.13	V	4.7
8248.800000	48.98	---	74.00	25.02	V	4.7
10992.600000	---	46.34	54.00	7.66	H	7.3
10992.600000	56.61	---	74.00	17.39	H	7.3
15667.600000	---	41.53	54.00	12.47	V	9.7
15667.600000	51.56	---	74.00	22.44	V	9.7

Middle Channel: 5580MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax20 mode 5580 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

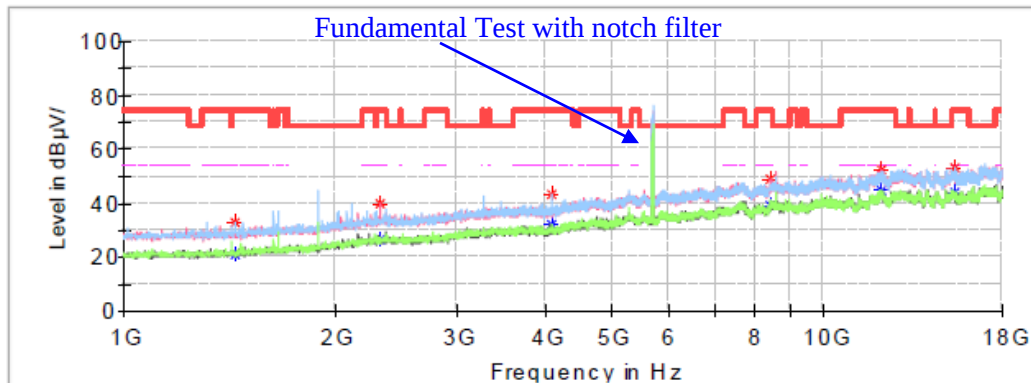
Full Spectrum

**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)
1399.500000	---	24.55	54.00	29.45	H	-14.9
1399.500000	40.21	---	74.00	33.79	H	-14.9
2334.500000	---	28.05	54.00	25.95	V	-10.7
2334.500000	42.03	---	74.00	31.97	V	-10.7
4549.600000	---	33.18	54.00	20.82	H	-4.1
4549.600000	42.39	---	74.00	31.61	H	-4.1
8400.100000	---	46.12	54.00	7.88	H	5.1
8400.100000	53.11	---	74.00	20.89	H	5.1
12607.600000	---	42.63	54.00	11.37	V	9.7
12607.600000	52.44	---	74.00	21.56	V	9.7
15370.100000	---	42.75	54.00	11.25	V	9.7
15370.100000	52.04	---	74.00	21.96	V	9.7

High Channel: 5700MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax20 mode 5700 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
1440.300000	---	20.78	54.00	33.22	H	-14.8
1440.300000	32.67	---	74.00	41.33	H	-14.8
2329.400000	---	26.71	54.00	27.29	V	-10.7
2329.400000	39.80	---	74.00	34.20	V	-10.7
4080.400000	---	32.03	54.00	21.97	H	-5.6
4080.400000	43.33	---	74.00	30.67	H	-5.6
8388.200000	---	39.25	54.00	14.75	H	5.1
8388.200000	48.91	---	74.00	25.09	H	5.1
12082.300000	---	44.82	54.00	9.18	V	9.1
12082.300000	52.64	---	74.00	21.36	V	9.1
15370.100000	---	44.33	54.00	9.67	H	9.7
15370.100000	52.81	---	74.00	21.19	H	9.7

MIMO(Chain 0+Chain 1):

802.11ax40 Mode:

Low Channel: 5510MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ax40 mode 5510 channel

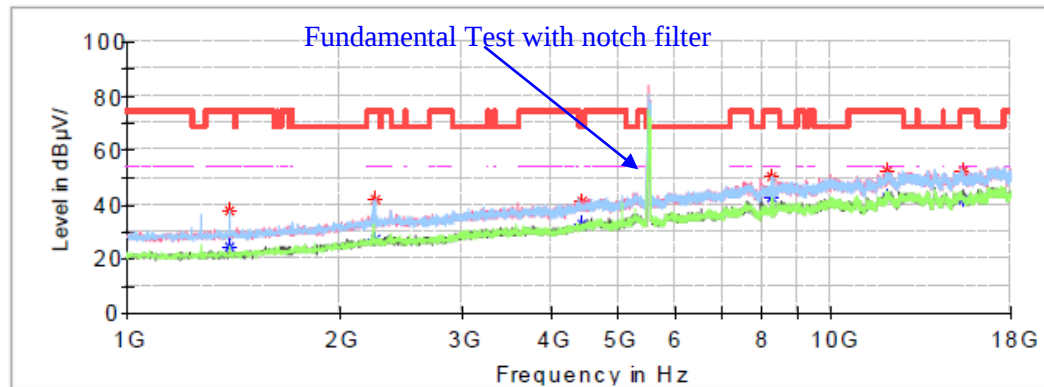
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Destine Hu

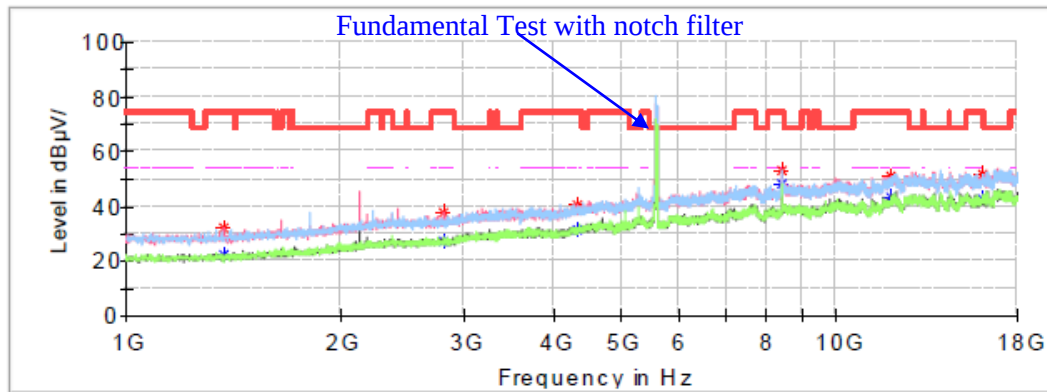
Full Spectrum

**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)
1397.800000	---	24.49	54.00	29.51	H	-14.9
1397.800000	37.74	---	74.00	36.26	H	-14.9
2249.500000	---	27.24	54.00	26.76	H	-11.0
2249.500000	42.05	---	74.00	31.95	H	-11.0
4432.300000	---	32.82	---	---	V	-4.5
4432.300000	40.97	---	68.20	27.23	V	-4.5
8264.100000	---	42.53	54.00	11.47	H	4.7
8264.100000	50.05	---	74.00	23.95	H	4.7
12027.900000	---	42.78	54.00	11.22	V	9.0
12027.900000	52.70	---	74.00	21.30	V	9.0
15433.000000	---	41.71	54.00	12.29	H	9.8
15433.000000	52.31	---	74.00	21.69	H	9.8

Middle Channel: 5550MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ax40 mode 5550 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

Full Spectrum**Critical Freqs**

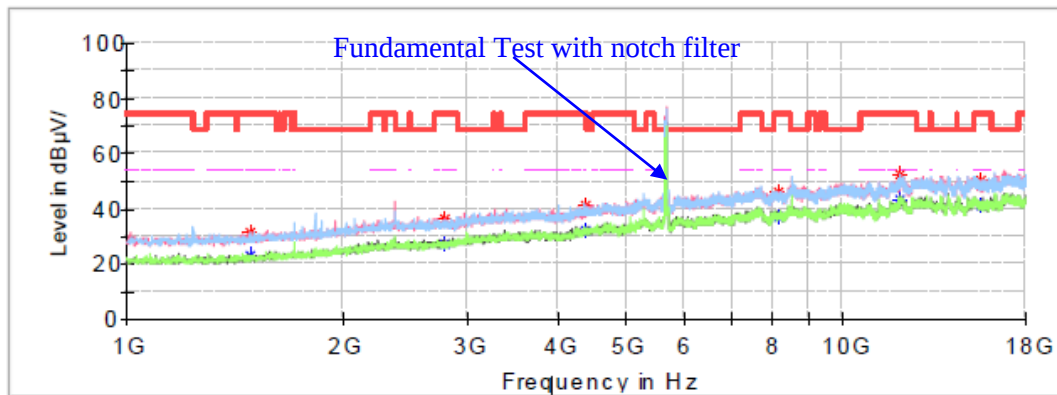
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1368.900000	---	22.33	54.00	31.67	V	-14.9
1368.900000	31.87	---	74.00	42.13	V	-14.9
2802.000000	---	27.44	54.00	26.56	H	-9.1
2802.000000	37.71	---	74.00	36.29	H	-9.1
4321.800000	---	31.41	54.00	22.59	V	-4.8
4321.800000	40.64	---	74.00	33.36	V	-4.8
8384.800000	---	48.04	54.00	5.96	H	5.1
8384.800000	53.03	---	74.00	20.97	H	5.1
11942.900000	---	43.01	54.00	10.99	V	9.0
11942.900000	51.10	---	74.00	22.90	V	9.0
16080.700000	---	42.40	54.00	11.60	V	9.6
16080.700000	51.71	---	74.00	22.29	V	9.6

Low Channel: 5670MHz

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5670 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
1482.800000	---	23.33	54.00	30.67	H	-14.8
1482.800000	31.64	---	74.00	42.36	H	-14.8
2790.100000	---	27.07	54.00	26.93	H	-9.2
2790.100000	36.40	---	74.00	37.60	H	-9.2
4374.500000	---	32.40	54.00	21.60	V	-4.7
4374.500000	41.55	---	74.00	32.45	V	-4.7
8136.600000	---	36.93	54.00	17.07	V	4.3
8136.600000	46.21	---	74.00	27.79	V	4.3
11995.600000	---	43.53	54.00	10.47	H	9.0
11995.600000	52.40	---	74.00	21.60	H	9.0
15611.500000	---	41.06	54.00	12.94	V	9.7
15611.500000	50.36	---	74.00	23.64	V	9.7

MIMO(Chain 0+Chain 1):

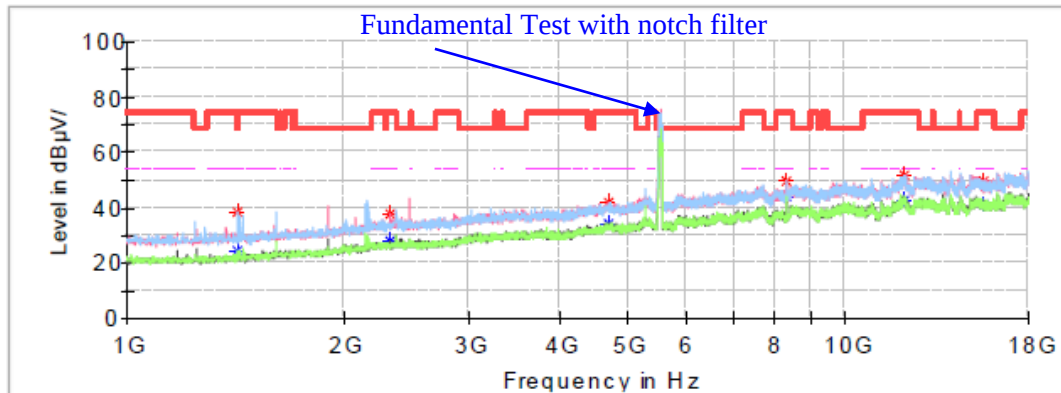
802.11ax80 Mode:

Low Channel: 5530MHz

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax80 mode 5530 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum

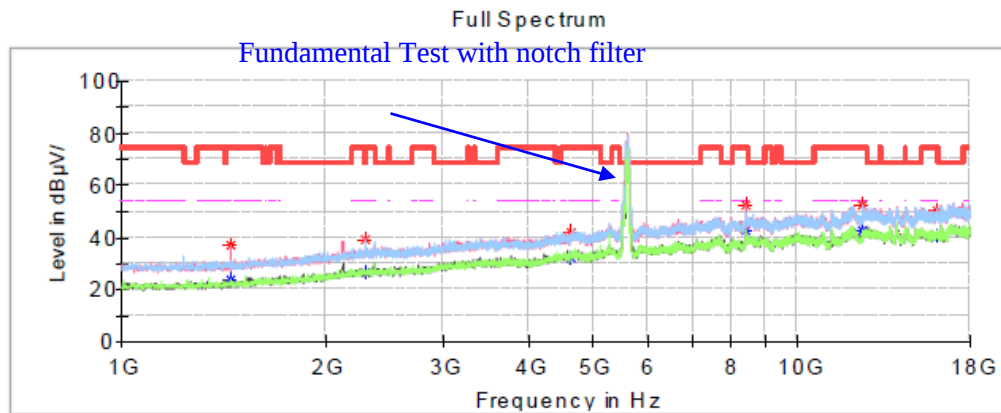


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1421.600000	38.28	---	74.00	35.72	H	-14.8
1421.600000	---	24.48	54.00	29.52	H	-14.8
2320.900000	37.77	---	74.00	36.23	V	-10.7
2320.900000	---	28.09	54.00	25.91	V	-10.7
4677.100000	41.79	---	74.00	32.21	V	-3.6
4677.100000	---	33.95	54.00	20.05	V	-3.6
8294.700000	49.45	---	74.00	24.55	H	4.8
8294.700000	---	44.15	54.00	9.85	H	4.8
12107.800000	---	42.80	54.00	11.20	H	9.1
12107.800000	51.91	---	74.00	22.09	H	9.1
15594.500000	---	41.28	54.00	12.72	H	9.8
15594.500000	49.93	---	74.00	24.07	H	9.8

High Channel: 5610MHz**Common Information**

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ax80 mode 5610 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

**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)
1452.200000	---	23.77	54.00	30.23	V	-14.8
1452.200000	36.89	---	74.00	37.11	V	-14.8
2295.400000	---	26.70	54.00	27.30	H	-10.8
2295.400000	38.87	---	74.00	35.13	H	-10.8
4614.200000	---	32.15	54.00	21.85	H	-3.8
4614.200000	41.67	---	74.00	32.33	H	-3.8
8413.700000	---	42.70	54.00	11.30	V	5.2
8413.700000	52.74	---	74.00	21.26	V	5.2
12495.400000	---	42.59	54.00	11.41	H	9.7
12495.400000	52.11	---	74.00	21.89	H	9.7
16058.600000	---	40.79	54.00	13.21	H	9.6
16058.600000	50.18	---	74.00	23.82	H	9.6

MIMO(Chain 0+Chain 1):

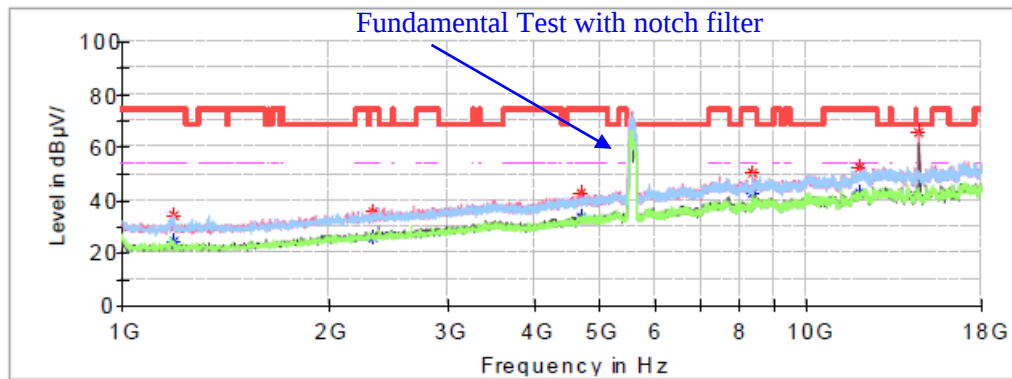
802.11ax160 Mode:

Low Channel: 5570MHz

Common Information

Project No.: RKSA240703001
 Test Mode: Transmitting in 802.11ax160 mode 5570 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Destine Hu

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)
1187.000000	34.57	---	74.00	39.43	H	-15.2
1187.000000	---	24.75	54.00	29.25	H	-15.2
2331.100000	35.85	---	74.00	38.15	V	-10.7
2331.100000	---	26.18	54.00	27.82	V	-10.7
4689.000000	42.47	---	74.00	31.53	V	-3.6
4689.000000	---	33.87	54.00	20.13	V	-3.6
8354.200000	50.67	---	74.00	23.33	V	5.0
8354.200000	---	42.47	54.00	11.53	H	5.0
11937.800000	52.22	---	74.00	21.78	H	9.0
11937.800000	---	42.58	54.00	11.42	V	9.0
14622.100000	65.61	---	68.20	2.59	V	9.4

1GHz-18GHz(5725-5850MHz Band):

Chain 0:

802.11a Mode:**Low Channel: 5745MHz****Common Information**

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11a mode 5745 channel

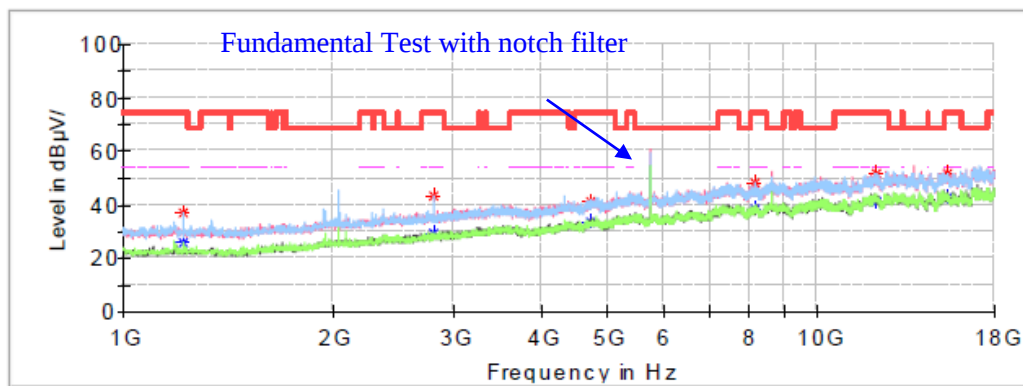
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Hugh Wu

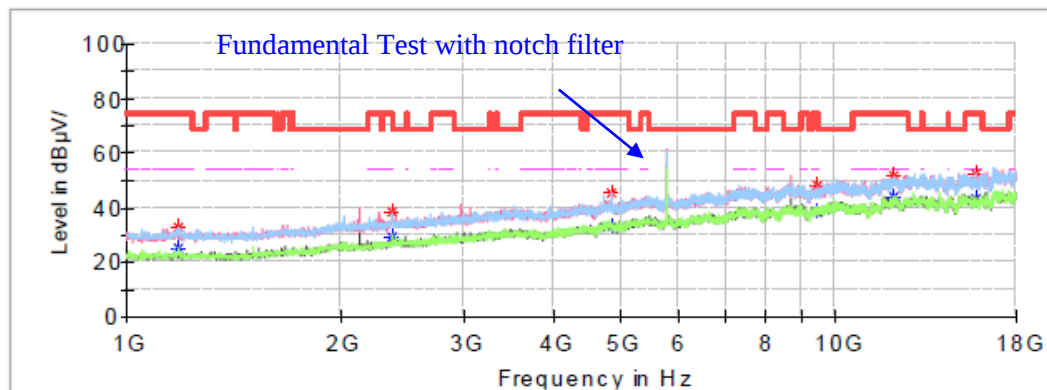
Full Spectrum

**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)
1217.600000	---	25.88	54.00	28.12	H	-15.1
1217.600000	37.19	---	74.00	36.81	H	-15.1
2800.300000	---	29.05	54.00	24.95	H	-9.1
2800.300000	43.27	---	74.00	30.73	H	-9.1
4719.600000	---	33.41	54.00	20.59	V	-3.5
4719.600000	41.57	---	74.00	32.43	V	-3.5
8141.700000	---	38.72	54.00	15.28	H	4.3
8141.700000	48.00	---	74.00	26.00	H	4.3
12179.200000	---	41.01	54.00	12.99	H	9.2
12179.200000	51.97	---	74.00	22.03	H	9.2
15370.100000	---	42.96	54.00	11.04	V	9.7
15370.100000	52.04	---	74.00	21.96	V	9.7

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5785 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

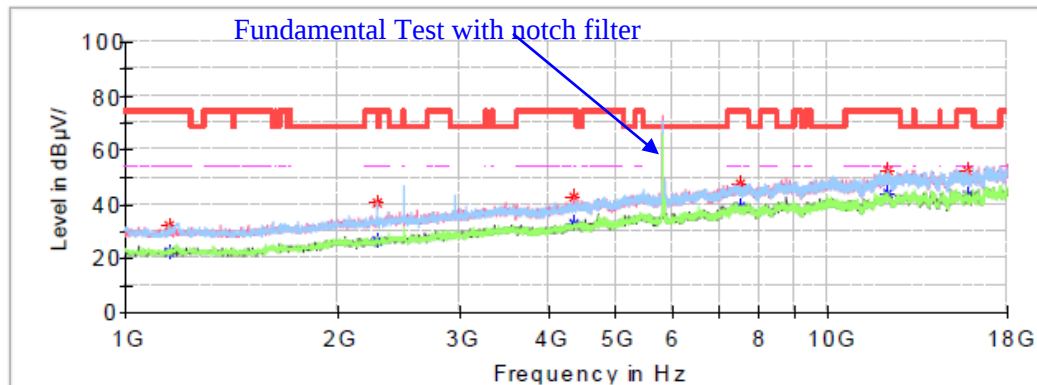
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1181.900000	---	25.26	54.00	28.74	H	-15.2
1181.900000	32.88	---	74.00	41.12	H	-15.2
2371.900000	---	29.57	54.00	24.43	H	-10.6
2371.900000	38.58	---	74.00	35.42	H	-10.6
4833.500000	---	32.96	54.00	21.04	H	-3.0
4833.500000	45.16	---	74.00	28.84	H	-3.0
9430.300000	---	38.56	54.00	15.44	V	5.4
9430.300000	47.98	---	74.00	26.02	V	5.4
12123.100000	---	44.10	54.00	9.90	H	9.1
12123.100000	51.70	---	74.00	22.30	H	9.1
15757.700000	---	43.14	54.00	10.86	H	9.6
15757.700000	52.32	---	74.00	21.68	H	9.6

High Channel: 5825MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5825 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

**Critical Freqs**

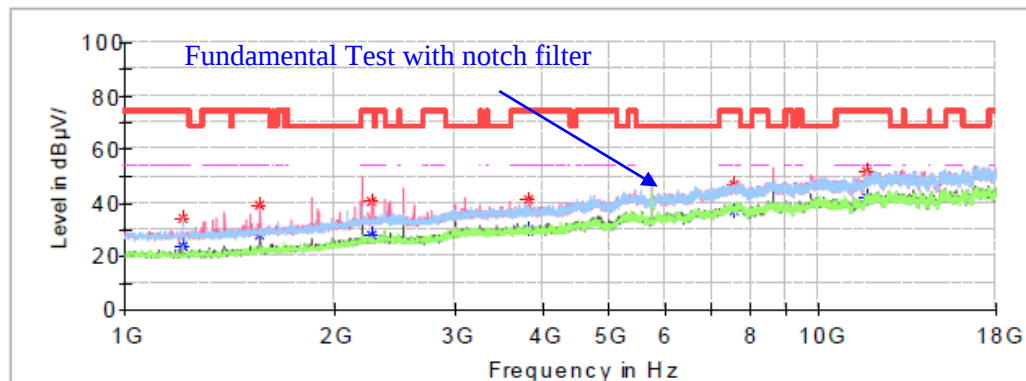
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1151.300000	---	22.60	54.00	31.40	H	-15.2
1151.300000	31.98	---	74.00	42.02	H	-15.2
2286.900000	---	26.61	54.00	27.39	H	-10.8
2286.900000	40.22	---	74.00	33.78	H	-10.8
4338.800000	---	32.72	54.00	21.28	V	-4.8
4338.800000	42.33	---	74.00	31.67	V	-4.8
7519.500000	---	39.28	54.00	14.72	V	3.9
7519.500000	47.32	---	74.00	26.68	V	3.9
12162.200000	---	43.83	54.00	10.17	h	9.2
12162.200000	52.30	---	74.00	21.70	H	9.2
15776.400000	---	43.26	54.00	10.74	H	9.6
15776.400000	52.30	---	74.00	21.70	H	9.6

Chain 1:

802.11a Mode:**Low Channel: 5745MHz****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5745 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

Full Spectrum

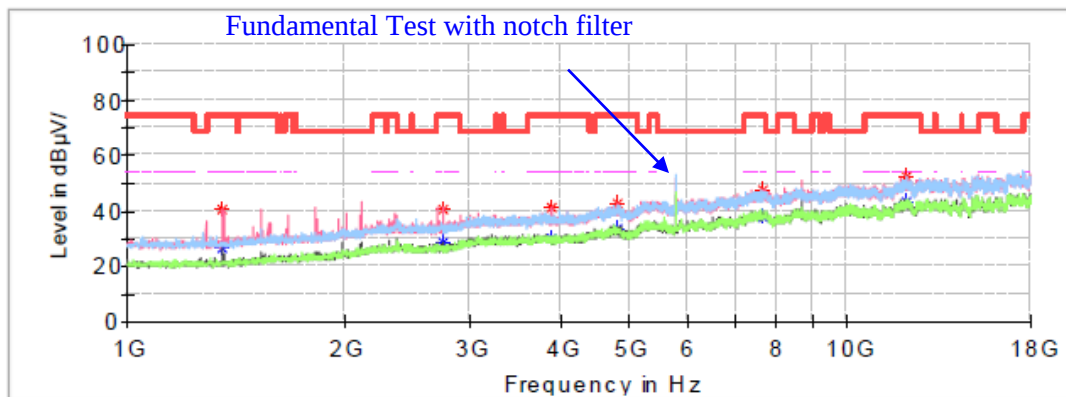
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1210.800000	---	23.61	54.00	30.39	H	-15.2
1210.800000	34.28	---	74.00	39.72	H	-15.2
1567.800000	---	27.88	54.00	26.12	V	-14.3
1567.800000	38.84	---	74.00	35.16	V	-14.3
2266.500000	---	27.80	54.00	26.20	V	-10.9
2266.500000	40.48	---	74.00	33.52	V	-10.9
3816.900000	---	29.91	54.00	24.09	V	-6.1
3816.900000	41.26	---	74.00	32.74	V	-6.1
7536.500000	---	37.38	54.00	16.62	V	3.9
7536.500000	47.15	---	74.00	26.85	V	3.9
11745.700000	---	41.84	54.00	12.16	V	8.9
11745.700000	51.51	---	74.00	22.49	V	8.9

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5785 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Klein Zhu

Full Spectrum

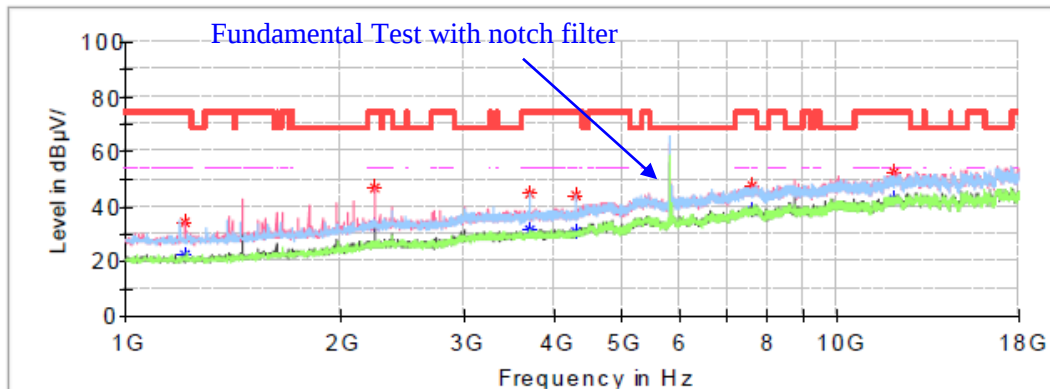
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1357.000000	---	26.26	54.00	27.74	V	-14.9
1357.000000	40.46	---	74.00	33.54	V	-14.9
2752.700000	---	28.96	54.00	25.04	V	-9.3
2752.700000	40.83	---	74.00	33.17	V	-9.3
3878.100000	---	29.77	54.00	24.23	V	-6.0
3878.100000	41.36	---	74.00	32.64	V	-6.0
4797.800000	---	33.91	54.00	20.09	H	-3.2
4797.800000	42.93	---	74.00	31.07	H	-3.2
7647.000000	---	37.97	54.00	16.03	V	3.9
7647.000000	47.88	---	74.00	26.12	V	3.9
12128.200000	---	43.26	54.00	10.74	V	9.1
12128.200000	52.13	---	74.00	21.87	V	9.1

High Channel: 5825MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5825 channel
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)
1212.500000	34.50	---	74.00	39.50	V	-15.1
1212.500000	---	22.66	54.00	31.34	V	-15.1
2241.000000	46.52	---	74.00	27.48	V	-11.0
2241.000000	---	32.52	54.00	21.48	V	-11.0
3703.000000	44.70	---	74.00	29.30	H	-6.2
3703.000000	---	31.65	54.00	22.35	H	-6.2
4299.700000	---	30.60	54.00	23.40	H	-4.9
4299.700000	43.79	---	74.00	30.21	H	-4.9
7589.200000	---	38.67	54.00	15.33	V	3.9
7589.200000	47.53	---	74.00	26.47	V	3.9
12055.100000	---	42.66	54.00	11.34	H	9.0
12055.100000	52.58	---	74.00	21.42	H	9.0

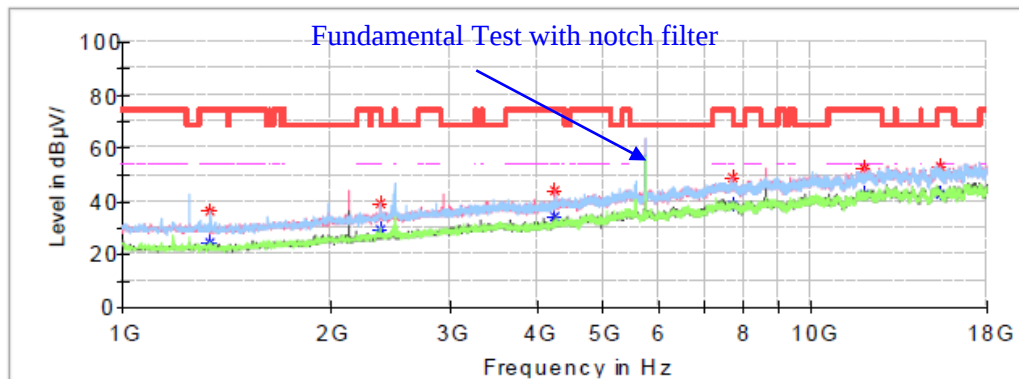
MIMO(Chain 0+Chain 1):
802.11ac20 Mode:

Low Channel: 5745MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5745 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

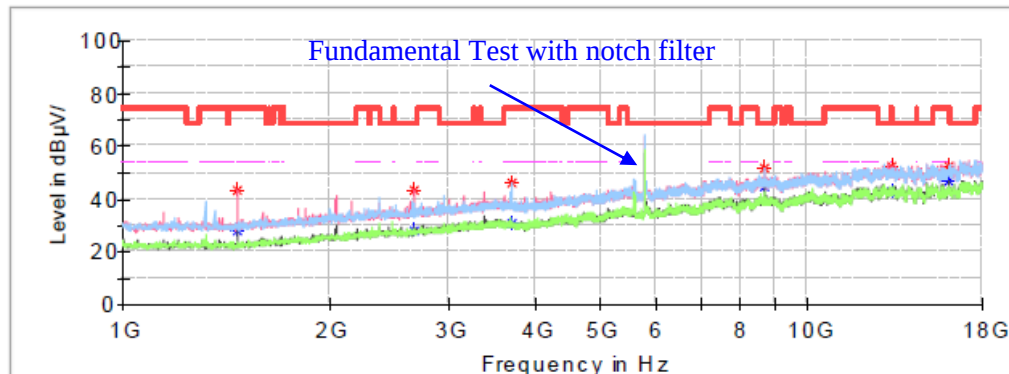


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1341.700000	36.02	---	74.00	37.98	H	-15.0
1341.700000	---	24.52	54.00	29.48	H	-15.0
2368.500000	38.84	---	74.00	35.16	H	-10.6
2368.500000	---	29.21	54.00	24.79	H	-10.6
4248.700000	43.89	---	74.00	30.11	V	-5.1
4248.700000	---	34.22	54.00	19.78	V	-5.1
7687.800000	48.74	---	74.00	25.26	V	3.9
7687.800000	---	38.80	54.00	15.20	V	3.9
11937.800000	---	42.49	54.00	11.51	V	9.0
11937.800000	52.72	---	74.00	21.28	V	9.0
15392.200000	---	42.68	54.00	11.32	V	9.7
15392.200000	53.08	---	74.00	20.92	V	9.7

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac20 mode 5785 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

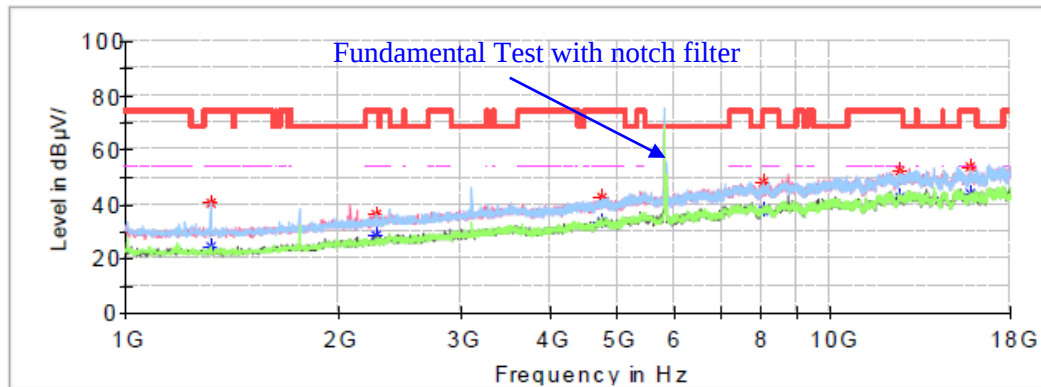
Full Spectrum**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1469.200000	---	28.06	54.00	25.94	V	-14.8
1469.200000	43.25	---	74.00	30.75	V	-14.8
2664.300000	43.29	---	68.20	24.91	V	-9.6
3692.800000	45.86	---	74.00	28.14	H	-6.2
3692.800000	---	30.79	54.00	23.21	H	-6.2
8677.200000	51.66	---	68.20	16.54	H	5.4
13318.200000	52.47	---	74.00	21.53	V	9.6
13318.200000	---	42.62	54.00	11.38	V	9.6
16130.000000	52.33	---	74.00	21.67	V	9.8
16130.000000	---	47.01	54.00	6.99	V	9.8

High Channel: 5825MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5825 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

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)
1317.900000	---	24.79	54.00	29.21	H	-15.0
1317.900000	40.35	---	74.00	33.65	H	-15.0
2264.800000	---	28.42	54.00	25.58	V	-10.9
2264.800000	36.41	---	74.00	37.59	V	-10.9
4743.400000	---	33.87	54.00	20.13	V	-3.4
4743.400000	42.46	---	74.00	31.54	V	-3.4
8038.000000	---	37.77	54.00	16.23	V	4.0
8038.000000	47.92	---	74.00	26.08	V	4.0
12573.600000	---	42.76	54.00	11.24	V	9.7
12573.600000	52.34	---	74.00	21.66	V	9.7
15812.100000	---	43.87	54.00	10.13	V	9.6
15812.100000	53.58	---	74.00	20.42	V	9.6

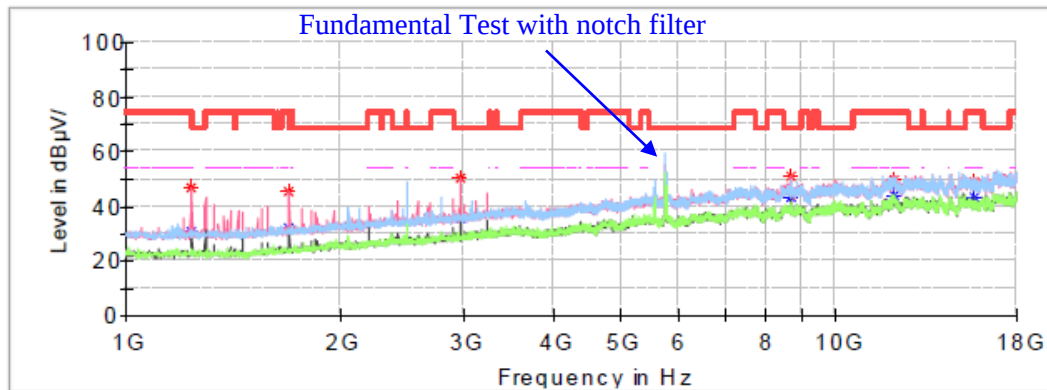
MIMO(Chain 0+Chain 1):
802.11ac40 Mode:

Low Channel: 5755MHz

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac40 mode 5755 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

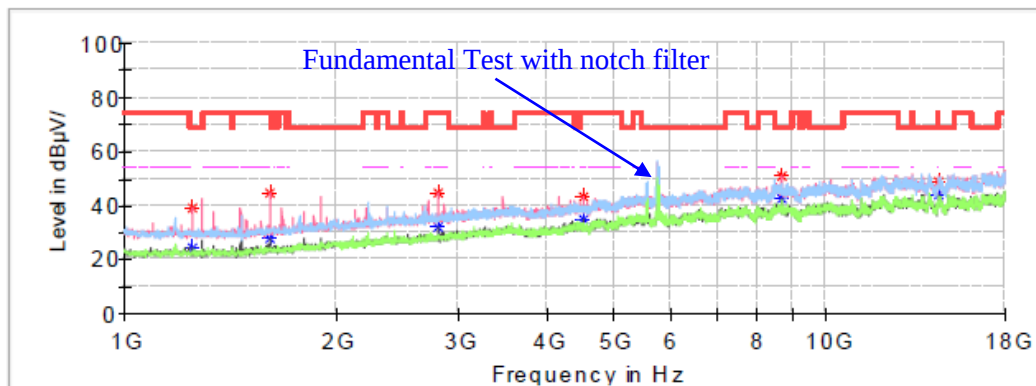


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1238.000000	---	30.53	54.00	23.47	V	-15.1
1238.000000	47.15	---	74.00	26.85	V	-15.1
1698.700000	---	32.03	54.00	21.97	V	-13.5
1698.700000	45.66	---	74.00	28.34	V	-13.5
2965.200000	50.57	---	68.20	17.63	V	-8.6
8633.000000	50.73	---	68.20	17.47	V	5.4
12097.600000	49.79	---	74.00	24.21	H	9.1
12097.600000	---	44.28	54.00	9.72	H	9.1
15730.500000	48.67	---	74.00	25.33	V	9.6
15730.500000	---	43.06	54.00	10.94	V	9.6

High Channel: 5795MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac40 mode 5795 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

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)
1249.900000	39.29	---	68.20	28.91	V	-15.1
1610.300000	---	27.91	54.00	26.09	V	-14.1
1610.300000	45.00	---	74.00	29.00	V	-14.1
2805.400000	---	31.94	54.00	22.06	V	-9.1
2805.400000	45.06	---	74.00	28.94	V	-9.1
4512.200000	---	34.95	54.00	19.05	V	-4.2
4512.200000	43.40	---	74.00	30.60	V	-4.2
8633.000000	50.94	---	68.20	17.26	V	5.4
14494.600000	49.16	---	74.00	24.84	V	9.4
14494.600000	---	44.27	54.00	9.73	V	9.4

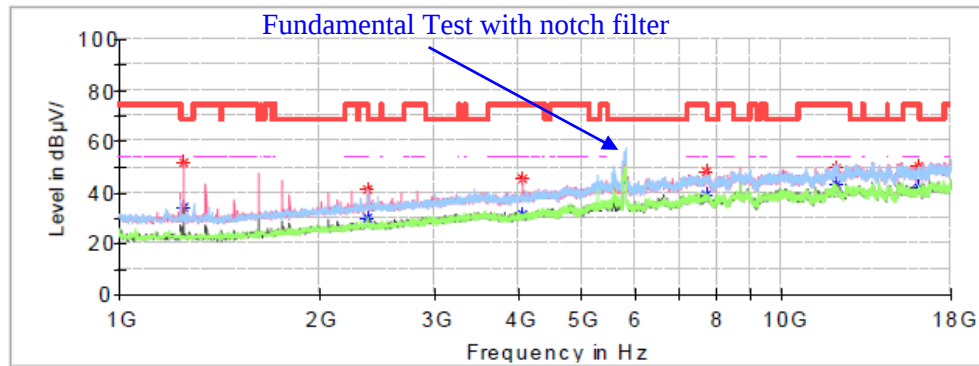
MIMO(Chain 0+Chain 1):
802.11ac80 Mode:

Channel: 5775MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac80 mode 5775 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

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)
1251.600000	51.60	---	68.20	16.60	V	-15.1
2365.100000	41.19	---	74.00	32.81	H	-10.6
2365.100000	---	30.02	54.00	23.98	H	-10.6
4060.000000	45.26	---	74.00	28.74	V	-5.7
4060.000000	---	31.33	54.00	22.67	V	-5.7
7706.500000	48.27	---	74.00	25.73	V	3.9
7706.500000	---	38.88	54.00	15.12	V	3.9
12128.200000	49.52	---	74.00	24.48	V	9.1
12128.200000	---	43.44	54.00	10.56	V	9.1
16109.600000	---	42.09	54.00	11.91	V	9.7
16109.600000	50.35	---	74.00	23.65	V	9.7

MIMO(Chain 0+Chain 1):

802.11ax20 Mode:

Low Channel: 5745MHz

Common Information

Project No.:

RKSA240703001

Test Mode:

Transmitting in 802.11ax20 mode 5745 channel

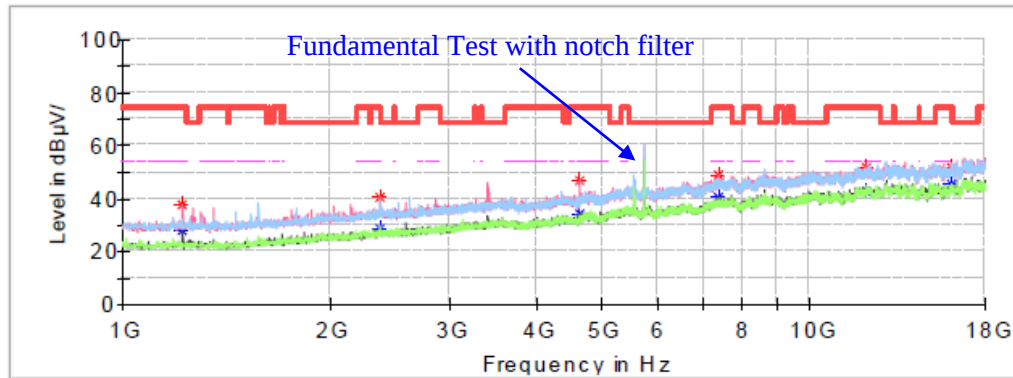
Standard:

FCC Part 15.205&FCC Part 15.209&FCC Part 15.407

Test Engineer:

Hugh Wu

Full Spectrum

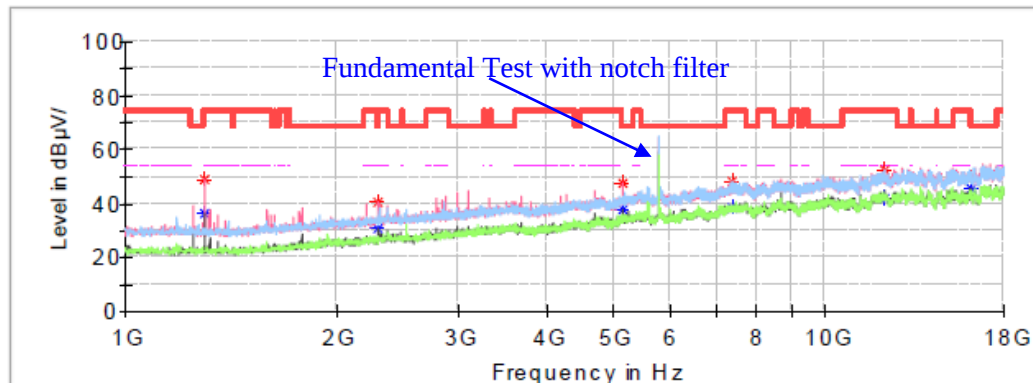


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1222.700000	---	27.80	54.00	26.20	V	-15.1
1222.700000	37.57	---	74.00	36.43	V	-15.1
2363.400000	40.90	---	74.00	33.10	V	-10.6
2363.400000	---	28.41	54.00	25.59	V	-10.6
4621.000000	47.00	---	74.00	27.00	V	-3.8
4621.000000	---	34.51	54.00	19.49	V	-3.8
7380.100000	---	40.86	54.00	13.14	V	3.6
7380.100000	49.18	---	74.00	24.82	V	3.6
12138.400000	52.09	---	74.00	21.91	V	9.2
12138.400000	---	42.97	54.00	11.03	V	9.2
16147.000000	51.99	---	74.00	22.01	H	9.8
16147.000000	---	45.37	54.00	8.63	H	9.8

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax20 mode 5785 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

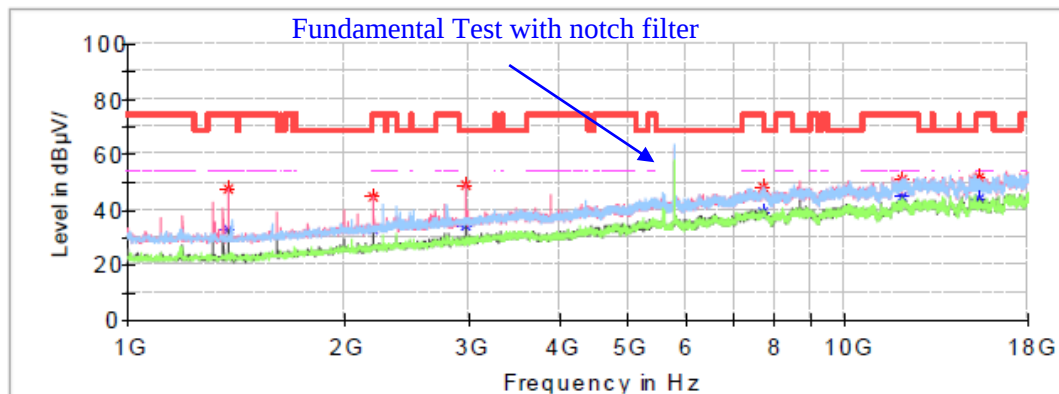
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1295.800000	49.28	---	68.20	18.92	V	-15.0
2302.200000	40.66	---	68.20	27.54	V	-10.8
5149.700000	---	37.88	54.00	16.12	V	-1.8
5149.700000	47.87	---	74.00	26.13	V	-1.8
7378.400000	47.97	---	74.00	26.03	H	3.6
7378.400000	---	38.34	54.00	15.66	H	3.6
12213.200000	52.63	---	74.00	21.37	V	9.3
12213.200000	---	42.24	54.00	11.76	V	9.3
16160.600000	49.90	---	74.00	24.10	V	9.9
16160.600000	---	45.63	54.00	8.37	V	9.9

High Channel: 5825MHz**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5825 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

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)
1379.100000	---	32.66	54.00	21.34	V	-14.9
1379.100000	47.31	---	74.00	26.69	V	-14.9
2200.200000	---	32.79	54.00	21.21	V	-11.1
2200.200000	44.69	---	74.00	29.31	V	-11.1
2958.400000	48.94	---	68.20	19.26	V	-8.6
7706.500000	48.25	---	74.00	25.75	H	3.9
7706.500000	---	39.37	54.00	14.63	H	3.9
12055.100000	51.27	---	74.00	22.73	H	9.0
12055.100000	---	44.44	54.00	9.56	H	9.0
15460.200000	51.90	---	74.00	22.10	V	9.8
15460.200000	---	43.74	54.00	10.26	V	9.8

MIMO(Chain 0+Chain 1):

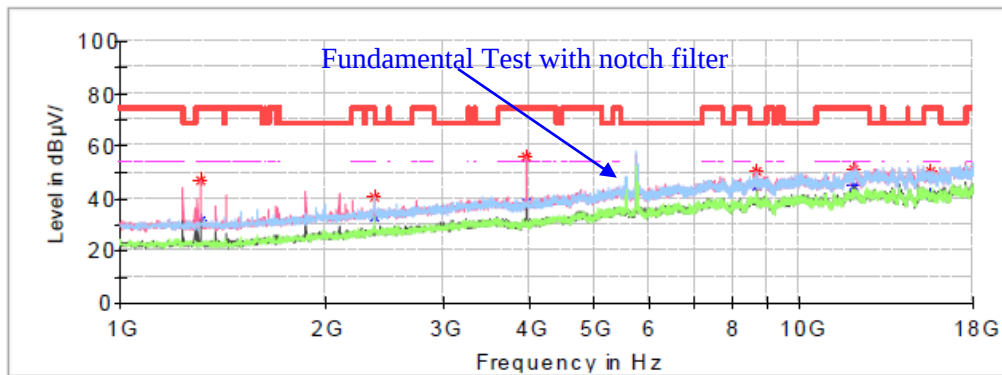
802.11ax40 Mode:

Low Channel: 5755MHz

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5755 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

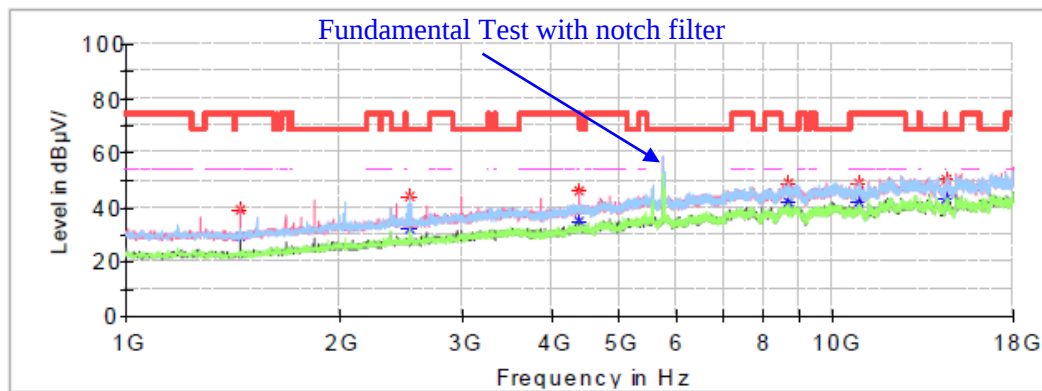


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1314.500000	---	31.73	54.00	22.27	V	-15.0
1314.500000	46.62	---	74.00	27.38	V	-15.0
2371.900000	---	33.06	54.00	20.94	H	-10.6
2371.900000	40.57	---	74.00	33.43	H	-10.6
3963.100000	---	38.15	54.00	15.85	V	-5.9
3963.100000	55.70	---	74.00	18.30	V	-5.9
8633.000000	50.68	---	68.20	17.52	V	5.4
12063.600000	50.71	---	74.00	23.29	V	9.1
12063.600000	---	44.79	54.00	9.21	V	9.1
15642.100000	---	41.53	54.00	12.47	V	9.7
15642.100000	50.55	---	74.00	23.45	V	9.7

High Channel: 5795MHz**Common Information**

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ax40 mode 5795 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Hugh Wu

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)
1452.200000	---	29.35	54.00	24.65	V	-14.8
1452.200000	39.22	---	74.00	34.78	V	-14.8
2519.800000	43.74	---	68.20	24.46	H	-10.1
4381.300000	---	34.67	54.00	19.33	V	-4.7
4381.300000	46.25	---	74.00	27.75	V	-4.7
8633.000000	49.18	---	68.20	19.02	V	5.4
10861.700000	48.64	---	74.00	25.36	V	7.3
10861.700000	---	41.67	54.00	12.33	V	7.3
14489.500000	50.36	---	74.00	23.64	H	9.4
14489.500000	---	43.55	54.00	10.45	H	9.4

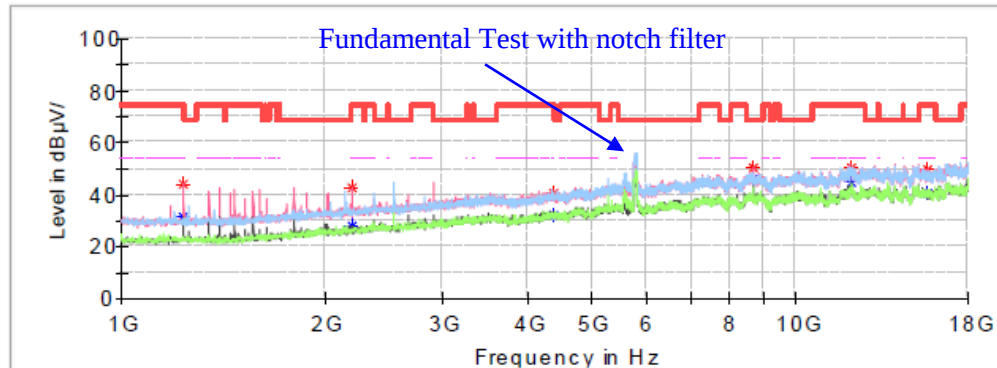
MIMO(Chain 0+Chain 1):
802.11ax80 Mode:

Channel: 5775MHz

Common Information

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ax20 mode 5775 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

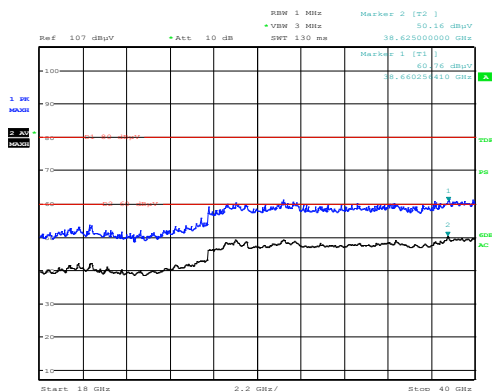


Critical Freqs

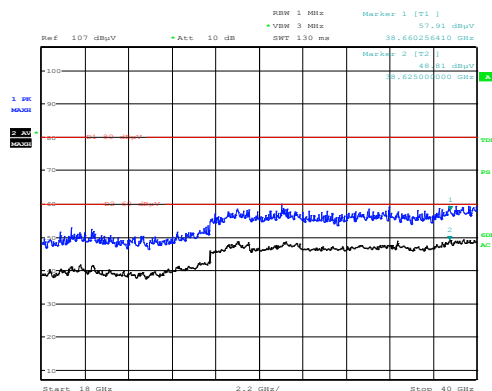
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1232.900000	---	31.36	54.00	22.64	V	-15.1
1232.900000	44.24	---	74.00	29.76	V	-15.1
2196.800000	42.87	---	68.20	25.33	V	-11.1
4376.200000	40.67	---	74.00	33.33	V	-4.7
4376.200000	---	32.31	54.00	21.69	V	-4.7
8661.900000	50.67	---	68.20	17.53	V	5.4
12128.200000	50.45	---	74.00	23.55	V	9.1
12128.200000	---	44.64	54.00	9.36	V	9.1
15735.600000	---	40.80	54.00	13.20	V	9.6
15735.600000	49.96	---	74.00	24.04	V	9.6

18GHz-40GHz:

Pre-scan with 802.11a, 802.11ac20, 802.11ax20, 802.11ac40, 802.11ax40, 802.11ac80, 802.11ax80, ac160, ax160 modes of operation in the X,Y and Z axes of orientation, the worst case **802.11ax40 mode (5550MHz)** was recorded

Horizontal

Project No : RKSA240703001 Tester :Hugh Wu
Date: 10.SEP.2024 05:10:55

Vertical

Project No : RKSA240703001 Tester :Hugh Wu
Date: 10.SEP.2024 04:58:16

Note:

The test distance is 1.5m. The limit is 80dBμV/m (Peak) and 60dBμV/m (Average).

802.11n/ac/ax support beamforming mode, according to KDB 662911 D01, Clause 3(a)(iii), The emission should be added array gain($10 \cdot \lg N = 10 \cdot \lg 2 = 3.01\text{dB}$) to the result, because the margins for 802.11n/ax mode are more than 3.01dB, So beamforming mode can meet the requirements of spurious emissions.

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
38660.26	57.91	---	80	22.09	V	17.45
38625	---	48.81	60	11.19	V	17.38
38660.26	60.76	---	80	19.24	H	17.45
38625	---	50.16	60	9.84	H	17.38

Restricted bands Emission Test (5150-5250MHz Band):

Note:

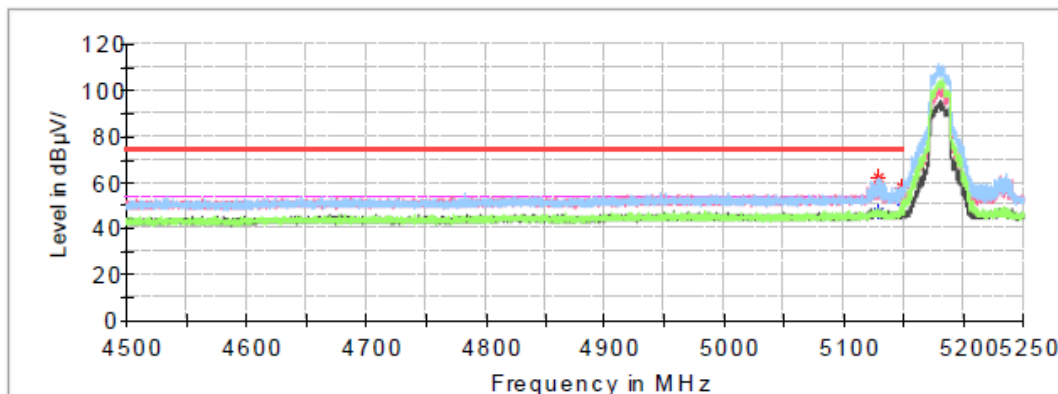
1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

Chain 0:

802.11a Mode:**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

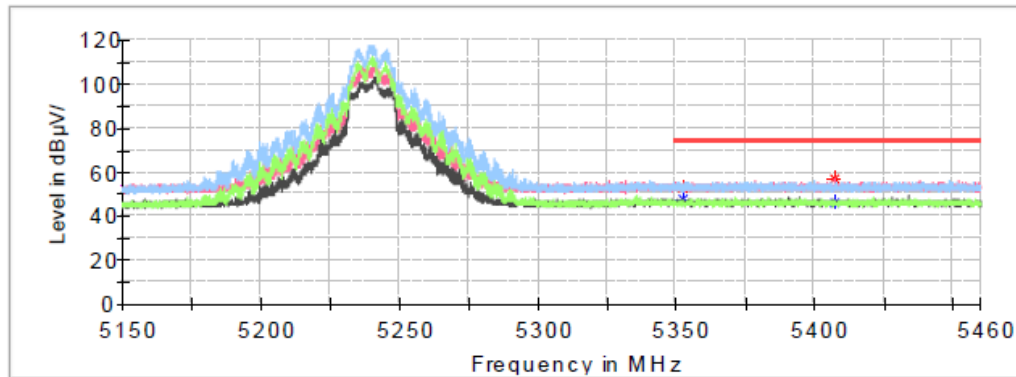
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5128.875000	61.68	---	74.00	12.32	H	8.2
5128.875000	---	47.01	54.00	6.99	H	8.2
5147.775000	58.12	---	74.00	15.88	H	8.2
5147.775000	---	51.74	54.00	2.26	H	8.2

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5240 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum



Critical Freqs

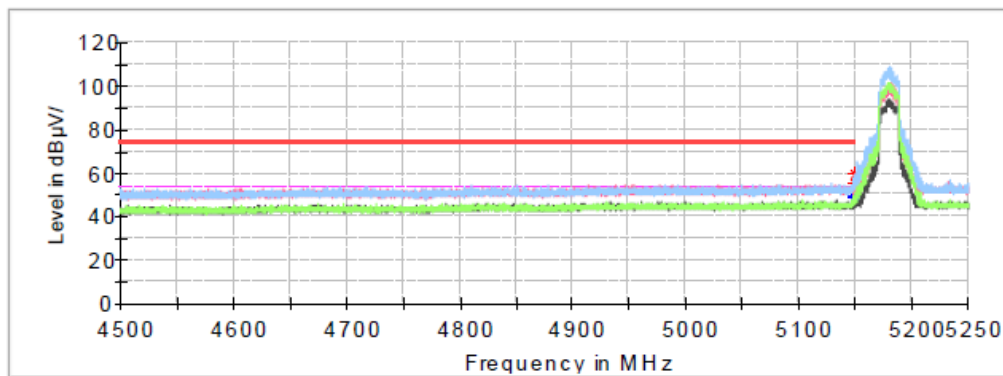
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5352.213000	53.01	---	74.00	20.99	V	8.7
5352.213000	---	48.16	54.00	5.84	V	8.7
5407.207000	---	46.44	54.00	7.56	V	8.9
5407.207000	56.83	---	74.00	17.17	V	8.9

Chain 1:

802.11a Mode:**Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11a mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

Full Spectrum

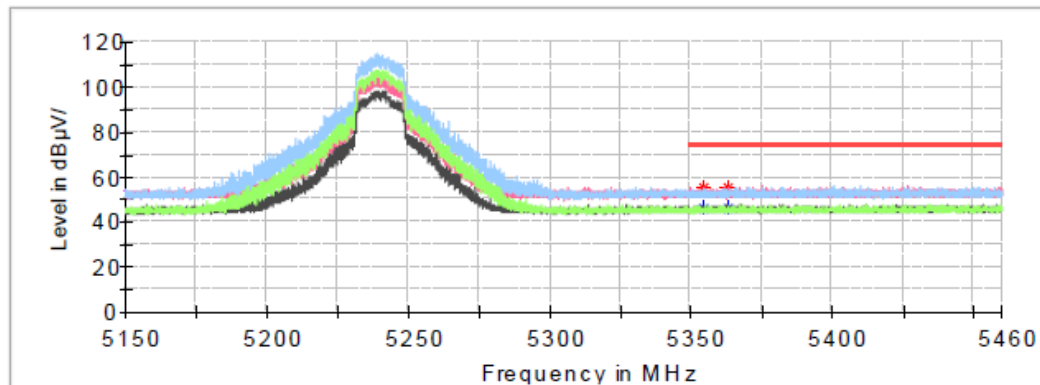
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5149.050000	59.73	---	74.00	14.27	H	8.2
5149.050000	---	48.70	54.00	5.30	H	8.2
5149.800000	55.14	---	74.00	18.86	H	8.2
5149.800000	---	49.79	54.00	4.21	H	8.2

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11a mode 5240 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Klein Zhu

Full Spectrum



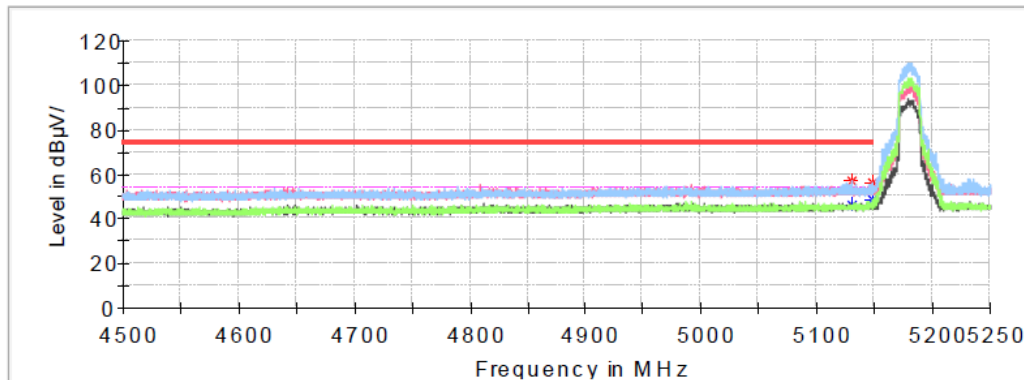
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5354.600000	---	46.03	54.00	7.97	V	8.7
5354.600000	55.06	---	74.00	18.94	V	8.7
5363.094000	---	46.02	54.00	7.98	H	8.8
5363.094000	55.05	---	74.00	18.95	H	8.8

**MIMO(Chain 0+Chain 1):
802.11ac20 Mode:****Common Information**

Project No.:	RKSA240703001
Test Mode:	Transmitting in 802.11ac20 mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

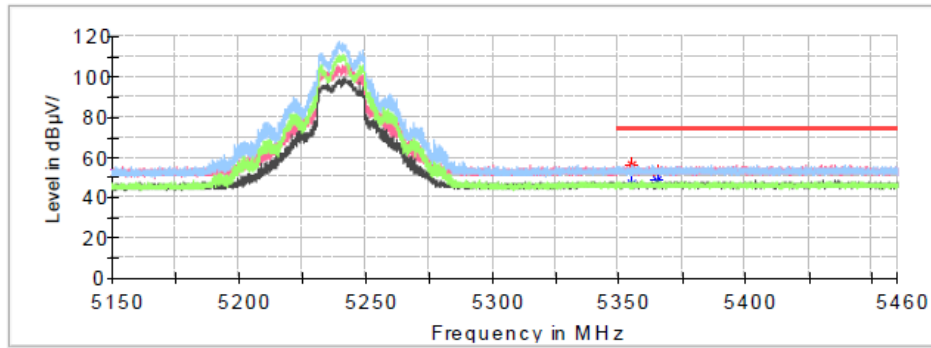
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5129.775000	57.19	---	74.00	16.81	H	8.2
5129.775000	---	45.97	54.00	8.03	H	8.2
5148.600000	55.94	---	74.00	18.06	H	8.2
5148.600000	---	48.81	54.00	5.19	H	8.2

Common Information

Project No.: RKSA240703001
Test Mode: Transmitting in 802.11ac20 mode 5240 channel
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer: Destine Hu

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)
5355.127000	---	46.97	54.00	7.03	H	8.7
5355.127000	55.88	---	74.00	18.12	H	8.7
5364.923000	53.28	---	74.00	20.72	V	8.8
5364.923000	---	48.86	54.00	5.14	V	8.8