For BLE Mode:
1Mpbs

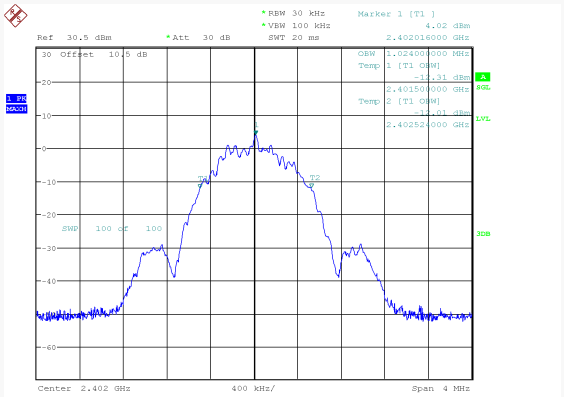
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
Low	2402	1.024
Middle	2440	1.036
High	2480	1.024

2Mpbs

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
Low	2402	2.058
Middle	2440	2.040
High	2480	2.046

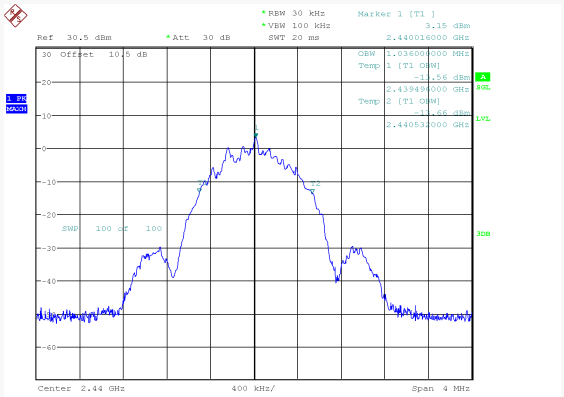
1Mpbs

Low Channel



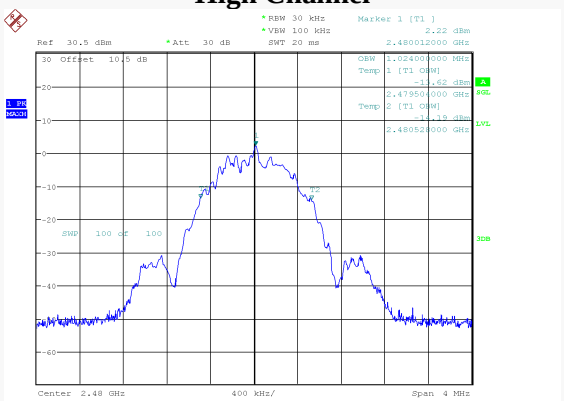
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 13:42:53

Middle Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 13:57:05

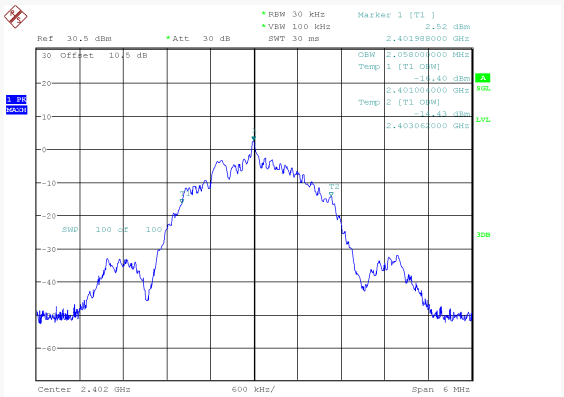
High Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:03:59

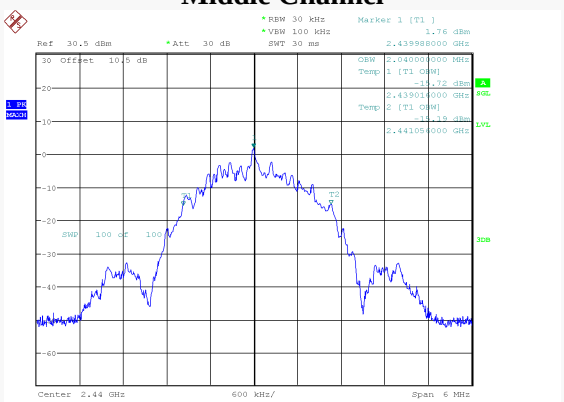
2Mpbs

Low Channel



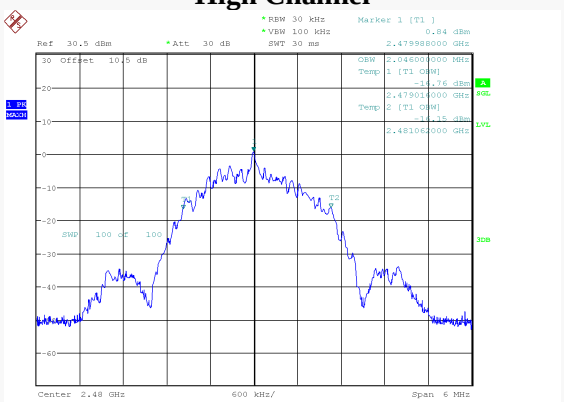
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:09:40

Middle Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:14:29

High Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:23:01

MAXIMUM CONDUCTED OUTPUT POWER

Test Mode	Channel (MHz)	Maximum Conducted Peak Output Power (dBm)			Limit (dBm)	Verdict
		Chain 0	Chain 1	Total		
802.11b	2412	17.138	17.831	/	≤30.00	PASS
	2437	18.074	18.029	/	≤30.00	PASS
	2462	17.802	17.676	/	≤30.00	PASS
802.11g	2412	23.293	23.310	/	≤30.00	PASS
	2437	23.131	22.780	/	≤30.00	PASS
	2462	22.825	22.342	/	≤30.00	PASS
802.11n20	2412	23.923	23.768	26.86	≤30.00	PASS
	2437	23.743	23.454	26.61	≤30.00	PASS
	2462	23.482	23.010	26.26	≤30.00	PASS
802.11ax-HE20	2412	23.563	25.282	27.52	≤30.00	PASS
	2437	23.108	24.947	27.13	≤30.00	PASS
	2462	22.871	24.208	26.60	≤30.00	PASS
802.11n40	2422	20.396	20.485	23.45	≤30.00	PASS
	2437	20.375	20.413	23.40	≤30.00	PASS
	2452	19.473	18.756	22.14	≤30.00	PASS
802.11ax-HE40	2422	24.062	23.749	26.92	≤30.00	PASS
	2437	23.871	24.195	27.05	≤30.00	PASS
	2452	26.962	24.010	28.74	≤30.00	PASS

Note:
The maximum antenna gain is 3.0 dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
So: Directional gain = GANT + Array Gain =3.0 dBi < 6dBi, no RF outpower limit was reduced.

BLE Mode:
1Mpbs

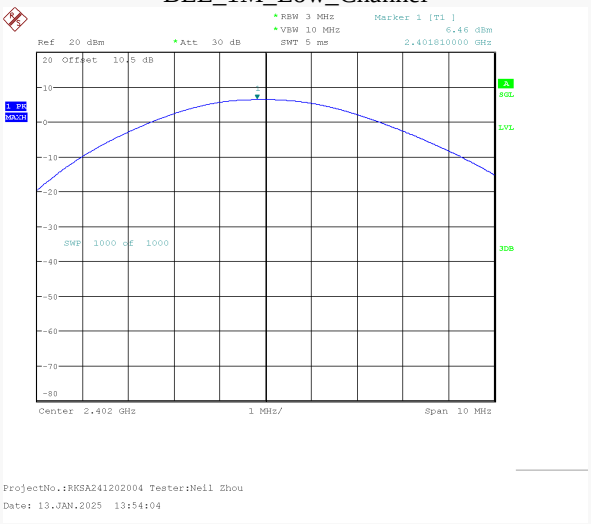
Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Peak Output Power Limit (dBm)
Low	2402	6.46	≤30
Middle	2440	5.63	≤30
High	2480	4.63	≤30

2Mpbs

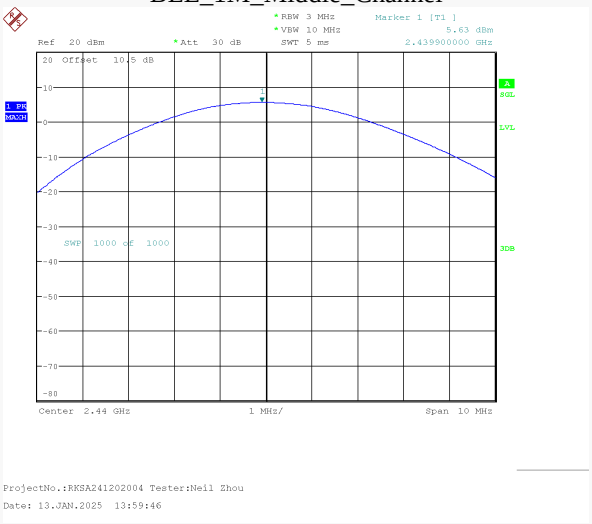
Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Peak Output Power Limit (dBm)
Low	2402	6.61	≤30
Middle	2440	5.70	≤30
High	2480	4.78	≤30

BLE 1M

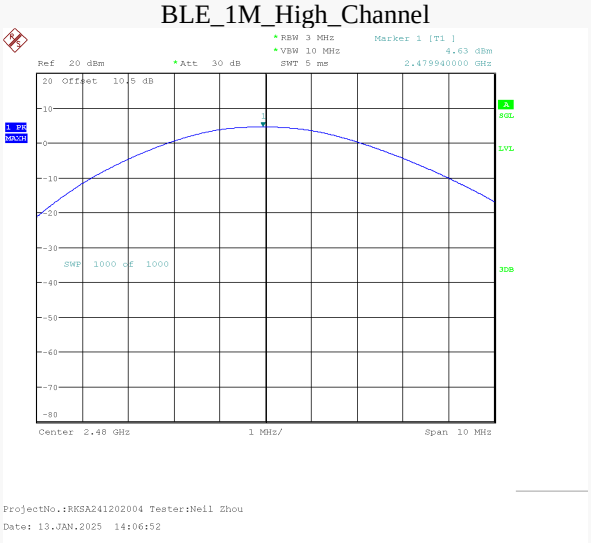
BLE_1M_Low_Channel



BLE_1M_Middle_Channel

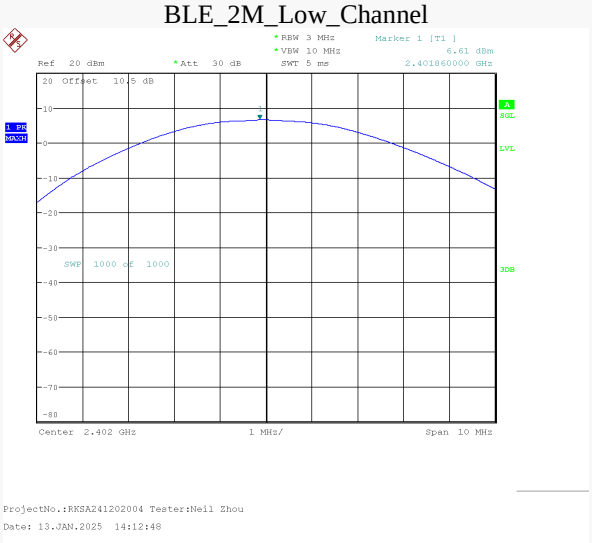


BLE_1M_High_Channel

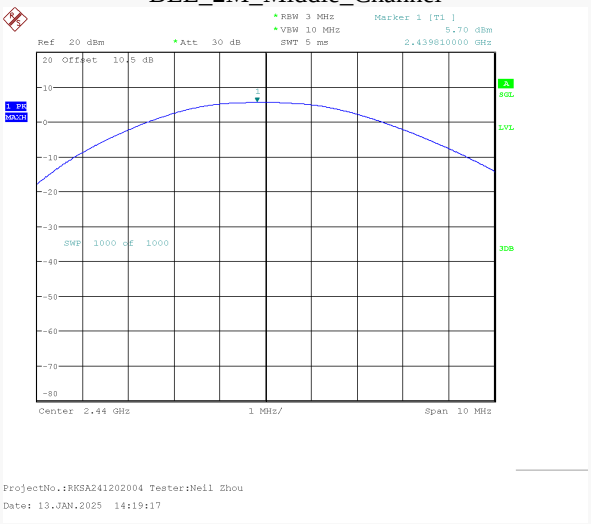


BLE 2M

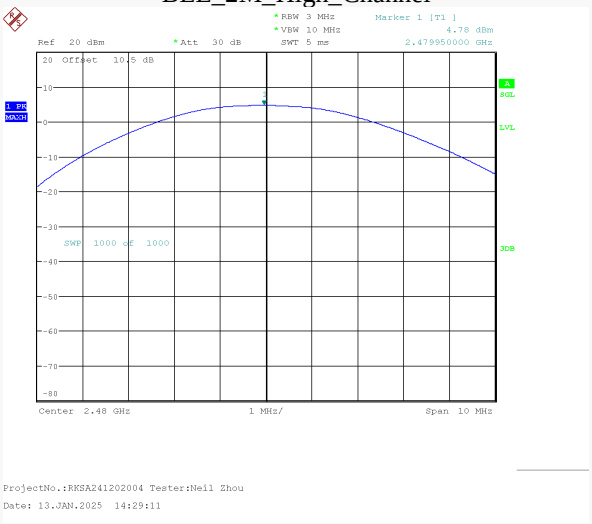
BLE_2M_Low_Channel



BLE_2M_Middle_Channel



BLE_2M_High_Channel



100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

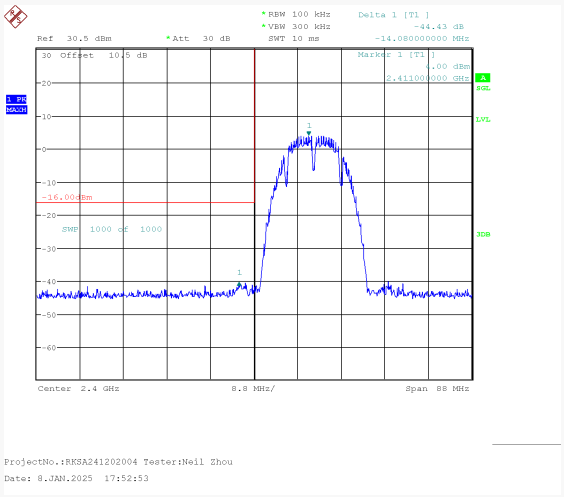
EUT operation mode: Transmitting

Test Result: Compliant

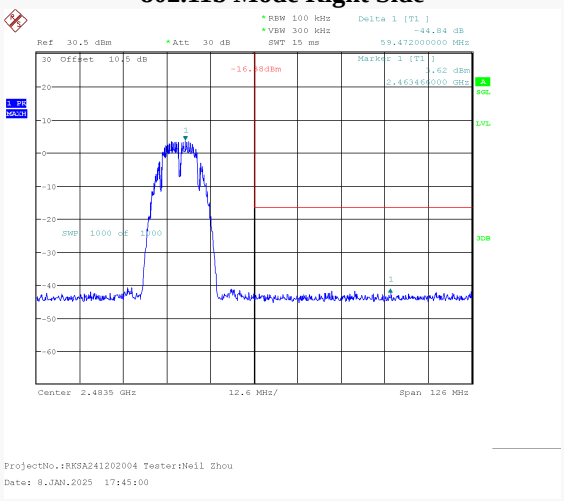
For Wi-Fi Mode:

Chain 0:

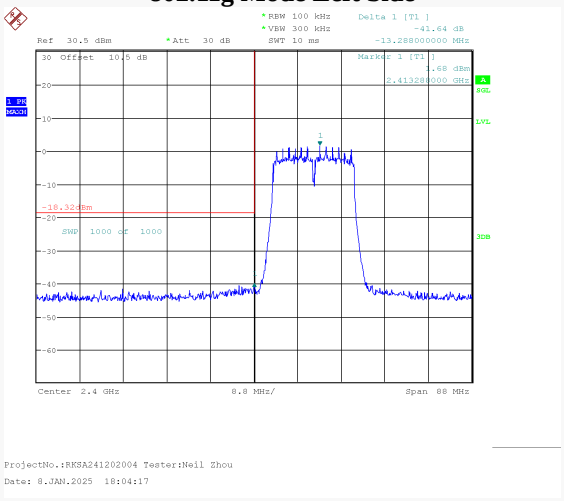
802.11b Mode Left Side



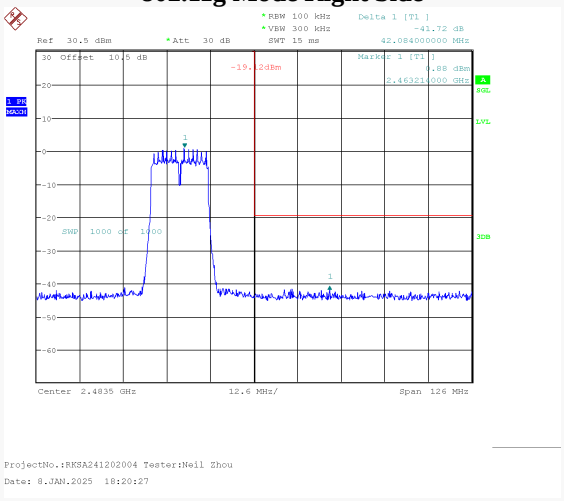
802.11b Mode Right Side



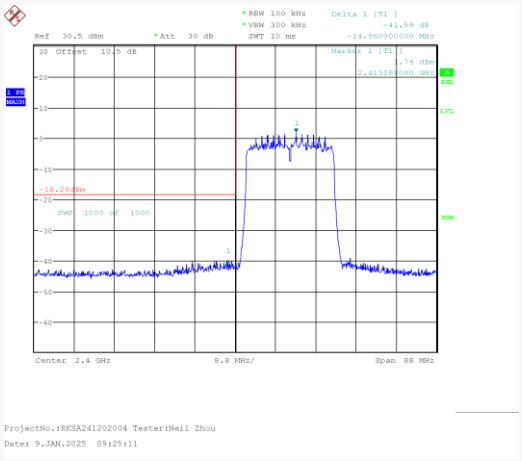
802.11g Mode Left Side



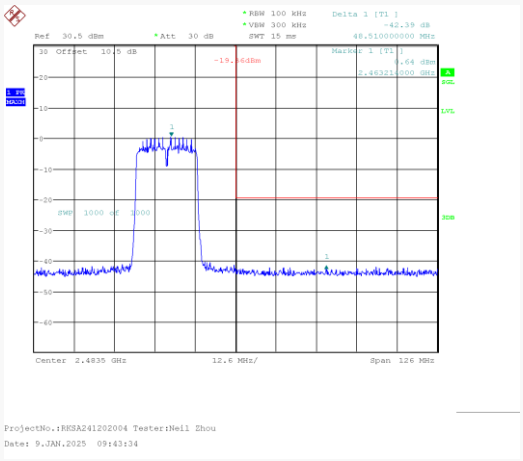
802.11g Mode Right Side



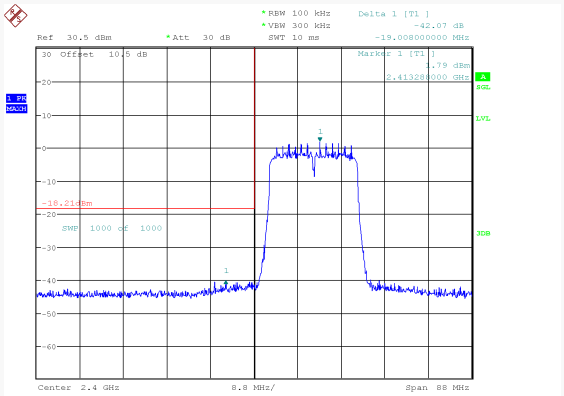
802.11ax20 Mode Left Side



802.11ax20 Mode Right Side

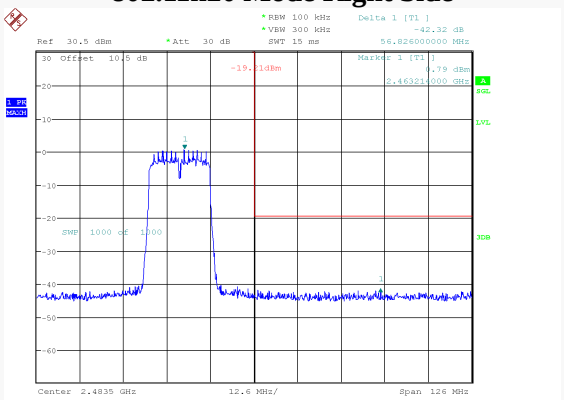


802.11n20 Mode Left Side



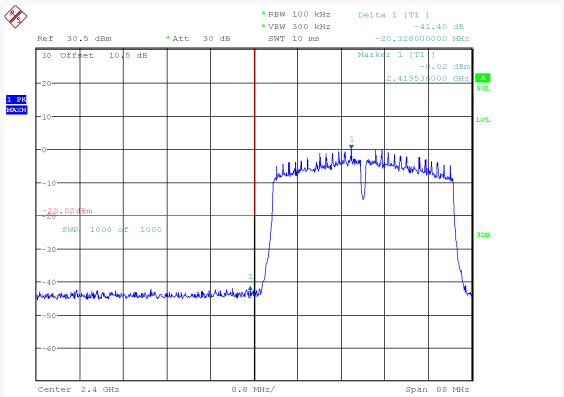
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:31:03

802.11n20 Mode Right Side



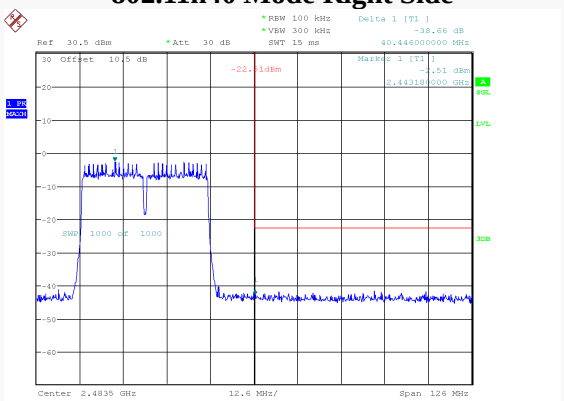
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:48:07

802.11n40 Mode Left Side



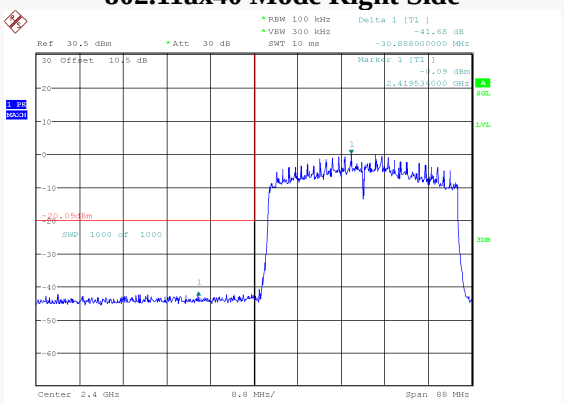
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:57:43

802.11n40 Mode Right Side



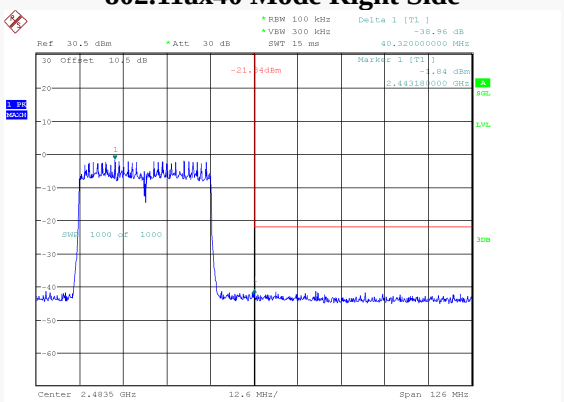
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 19:50:53

802.11ax40 Mode Right Side



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 09:53:39

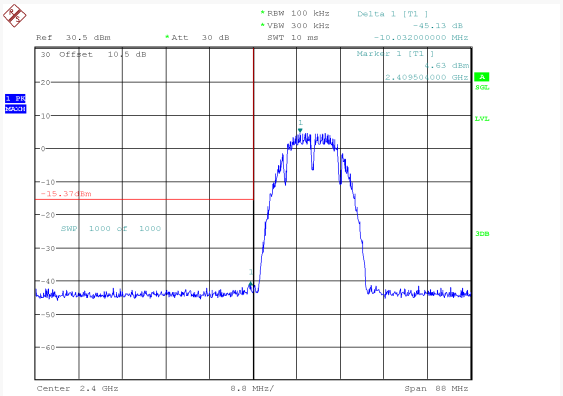
802.11ax40 Mode Right Side



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:24:37

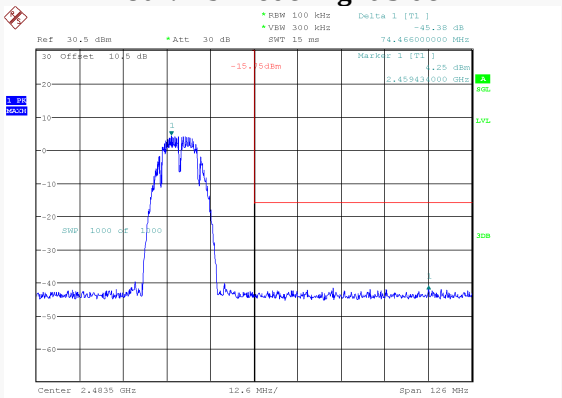
Chain 1:

802.11b Mode Left Side



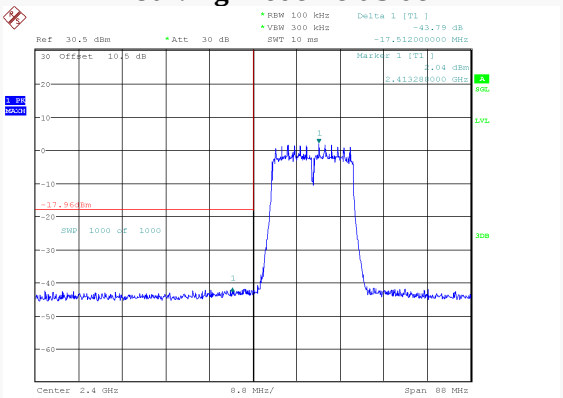
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:45:53

802.11b Mode Right Side



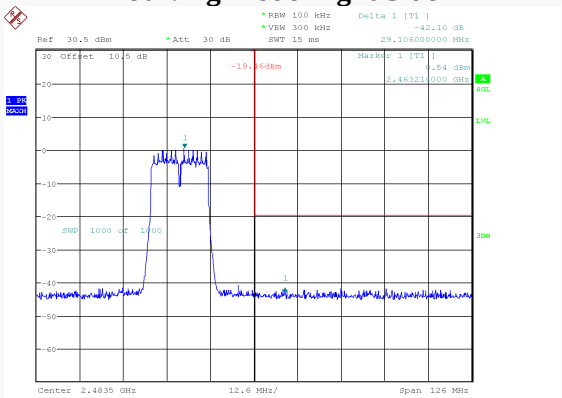
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:59:01

802.11g Mode Left Side



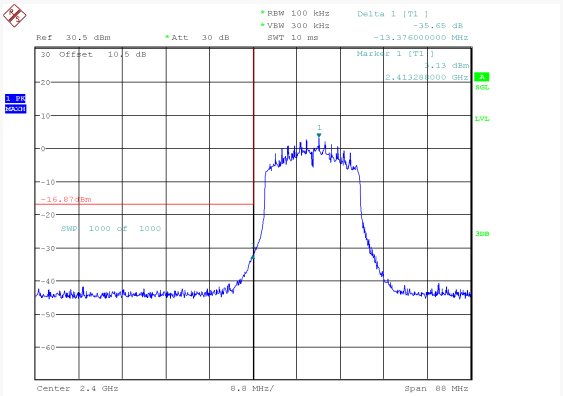
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:06:41

802.11g Mode Right Side



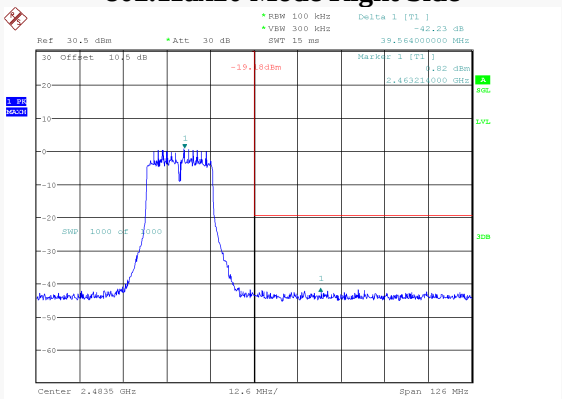
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:25:45

802.11ax20 Mode Left Side



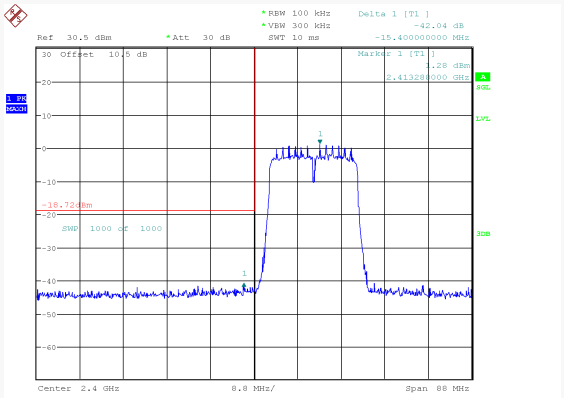
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 13:47:35

802.11ax20 Mode Right Side



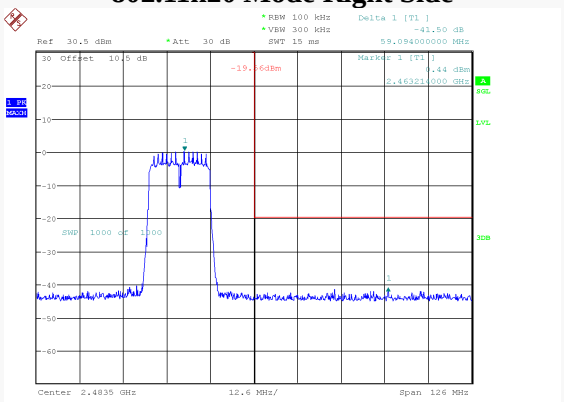
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:06:49

802.11n20 Mode Left Side



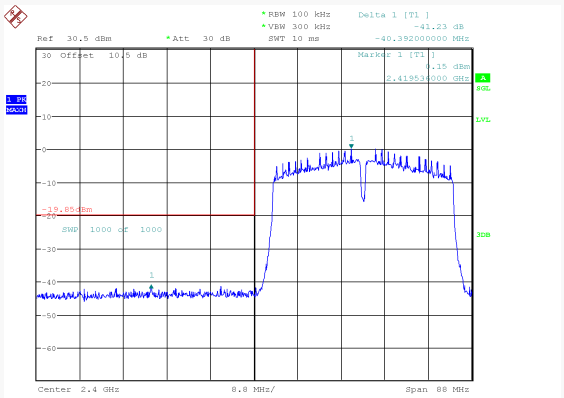
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:34:39

802.11n20 Mode Right Side



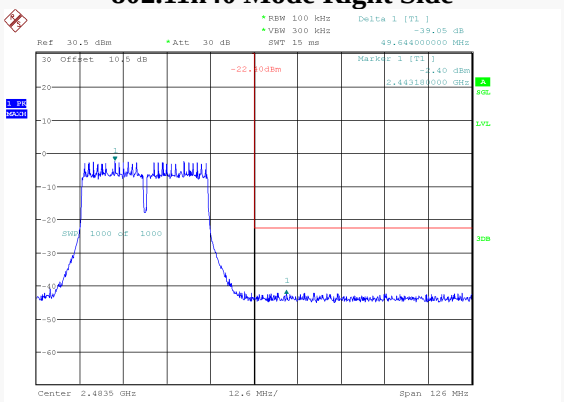
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:51:56

802.11n40 Mode Left Side



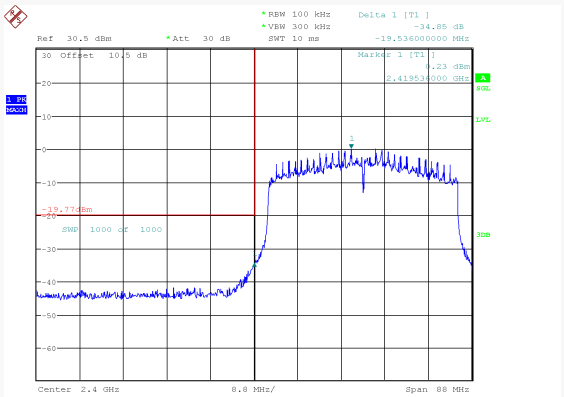
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 12:02:28

802.11n40 Mode Right Side



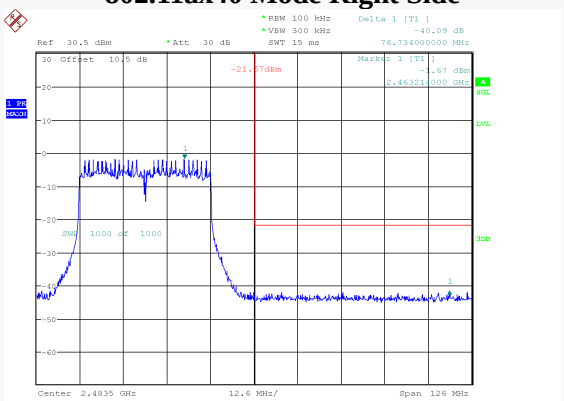
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 13:29:34

802.11ax40 Mode Left Side



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:16:00

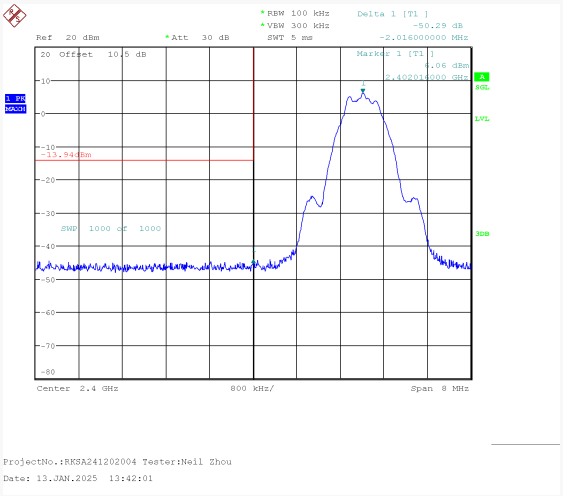
802.11ax40 Mode Right Side



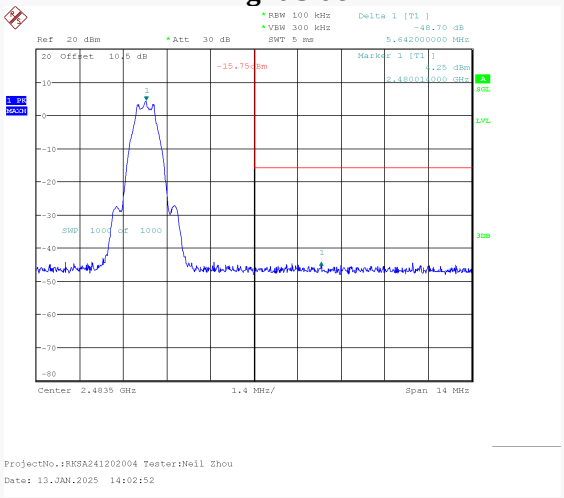
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:43:58

BLE 1Mbps:

Left Side

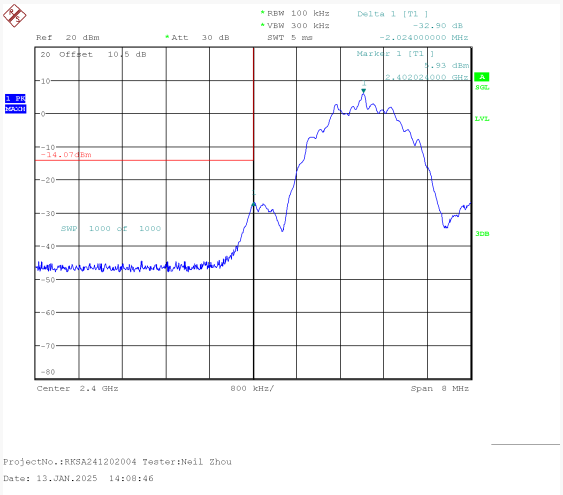


Right Side

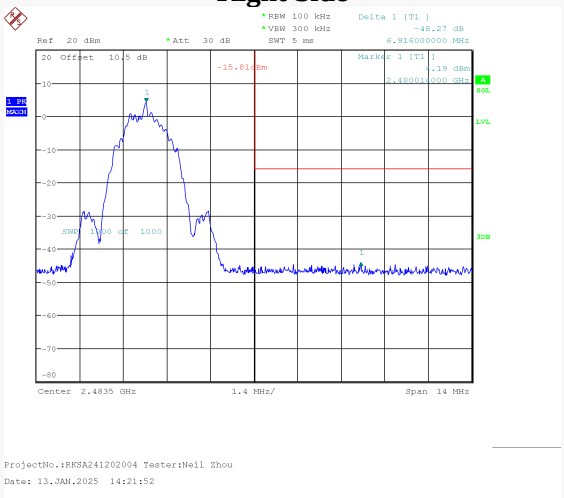


BLE 2Mbps:

Left Side



Right Side



POWER SPECTRAL DENSITY

EUT operation mode: Transmitting

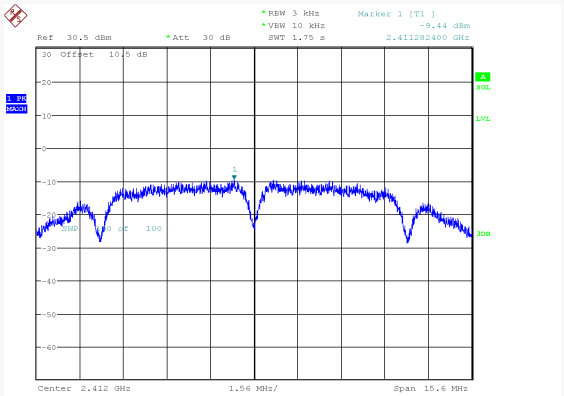
Test Result: Pass

Test Mode	Channel (MHz)	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Verdict
		Chain 0	Chain 1	Total		
802.11b	2412	-9.44	-8.62	/	≤8.00	PASS
	2437	-9.32	-9.07	/	≤8.00	PASS
	2462	-9.86	-9.24	/	≤8.00	PASS
802.11g	2412	-14.51	-14.19	/	≤8.00	PASS
	2437	-14.86	-14.82	/	≤8.00	PASS
	2462	-15.34	-15.94	/	≤8.00	PASS
802.11n20	2412	-13.98	-13.63	-10.79	≤8.00	PASS
	2437	-14.30	-14.30	-11.29	≤8.00	PASS
	2462	-14.81	-13.81	-11.27	≤8.00	PASS
802.11ax20	2412	-14.35	-12.78	-10.48	≤8.00	PASS
	2437	-14.74	-14.71	-11.71	≤8.00	PASS
	2462	-15.33	-15.18	-12.24	≤8.00	PASS
802.11n40	2422	-16.22	-14.39	-12.20	≤8.00	PASS
	2437	-17.37	-16.29	-13.79	≤8.00	PASS
	2452	-18.68	-18.56	-15.61	≤8.00	PASS
802.11ax40	2422	-15.48	-15.21	-12.33	≤8.00	PASS
	2437	-16.29	-16.10	-13.18	≤8.00	PASS
	2452	-16.7	-16.34	-13.51	≤8.00	PASS

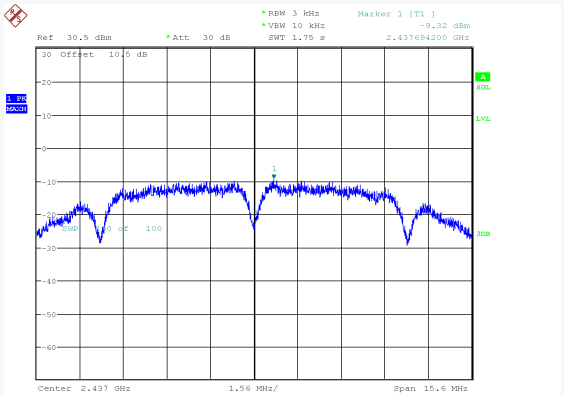
Note:
The maximum antenna gain is 3.0 dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:
Array Gain = 10* log (NANT/NSS) dB.
So: Directional gain = GANT + Array Gain =3.0 +10*log (2/1) =6 dBi =6dBi, so no power spectral density limit was reduced

Chain 0:

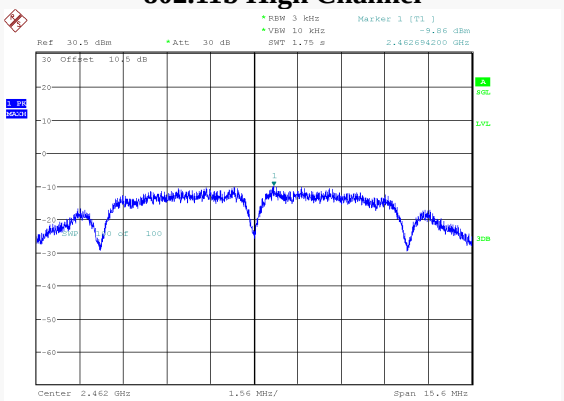
802.11b Low Channel



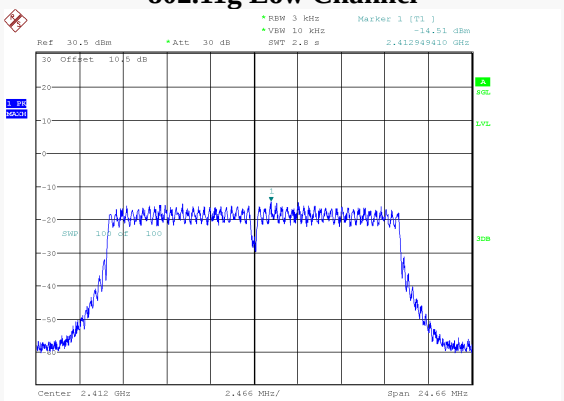
802.11b Middle Channel



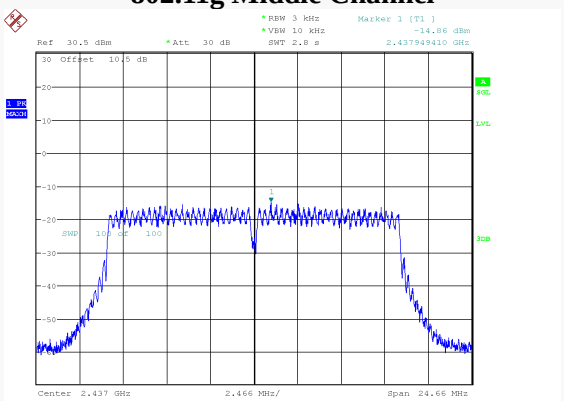
802.11b High Channel



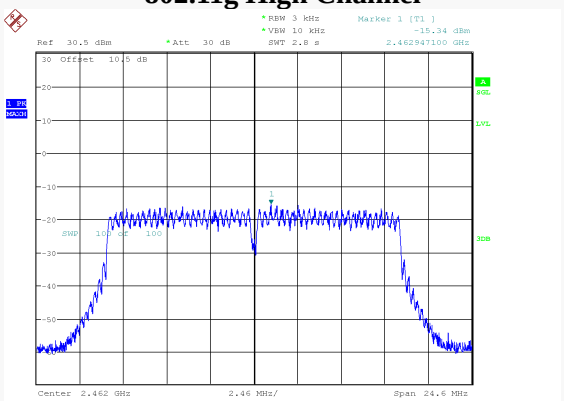
802.11g Low Channel



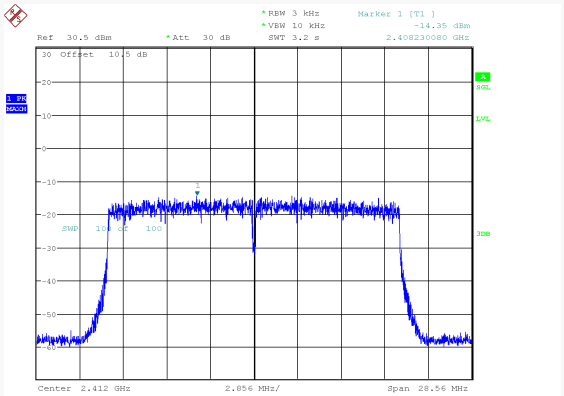
802.11g Middle Channel



802.11g High Channel

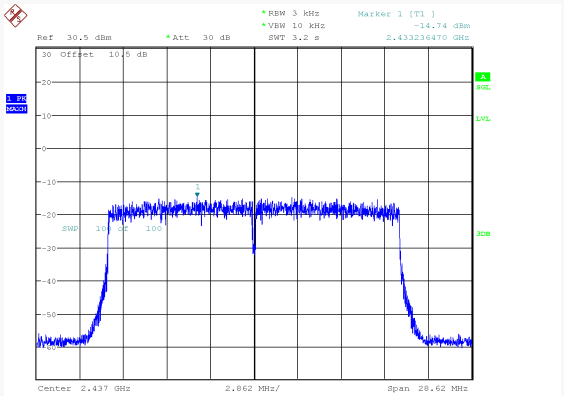


802.11ax20 Low Channel



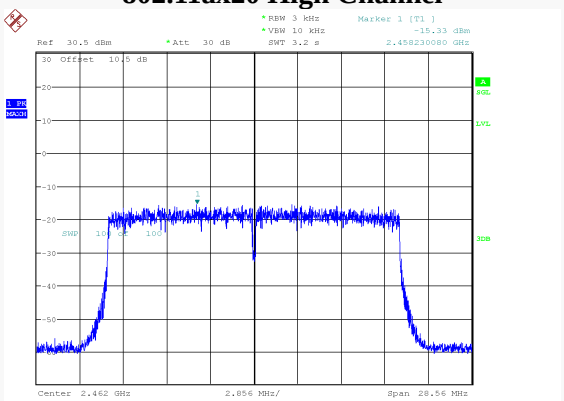
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 09:31:23

802.11ax20 Middle Channel



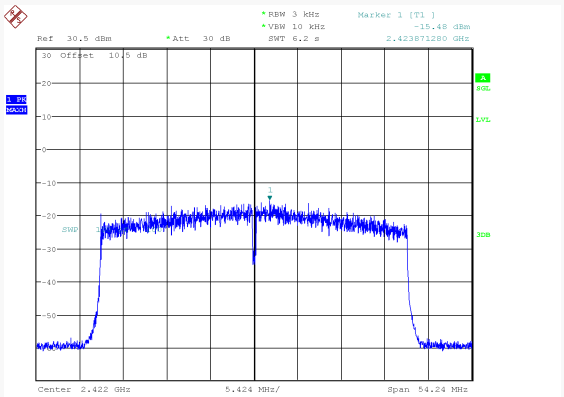
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 09:39:42

802.11ax20 High Channel



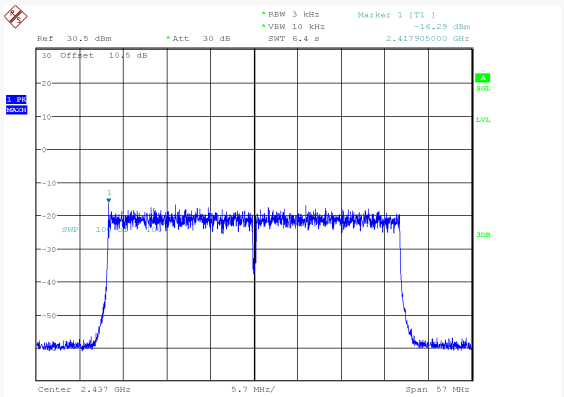
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 09:49:46

802.11ax40 Low Channel



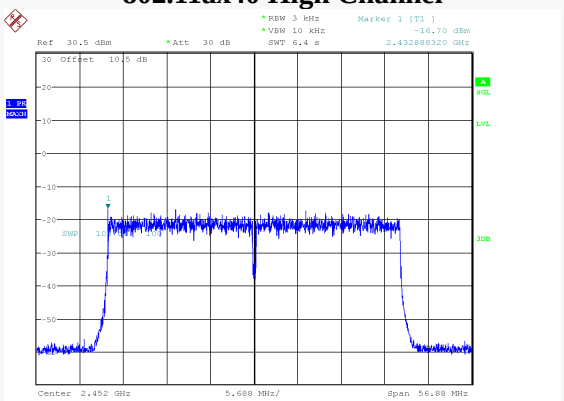
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:04:52

802.11ax40 Middle Channel



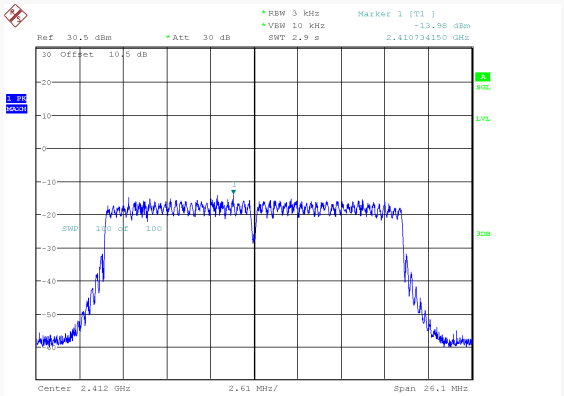
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:21:08

802.11ax40 High Channel



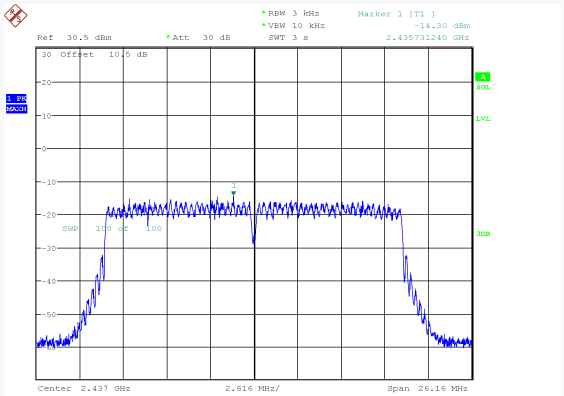
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 10:36:13

802.11n20 Low Channel



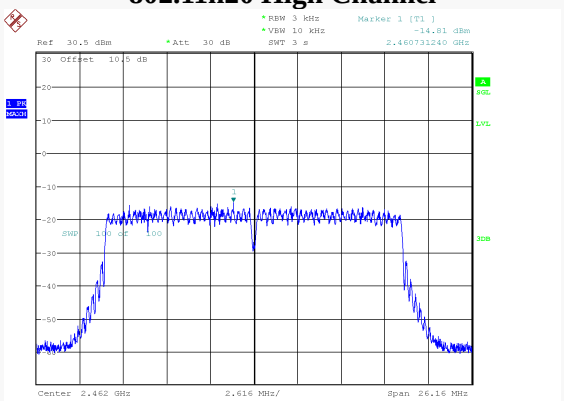
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:36:46

802.11n20 Middle Channel



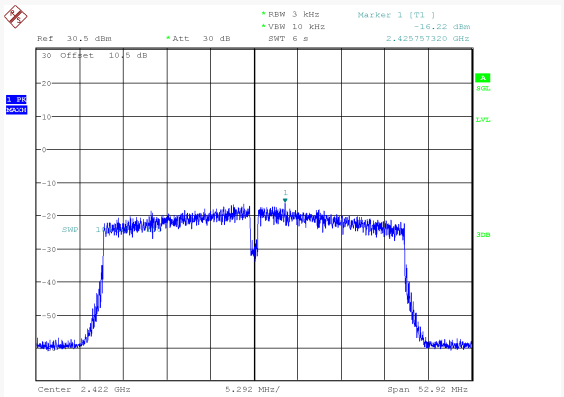
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:45:07

802.11n20 High Channel



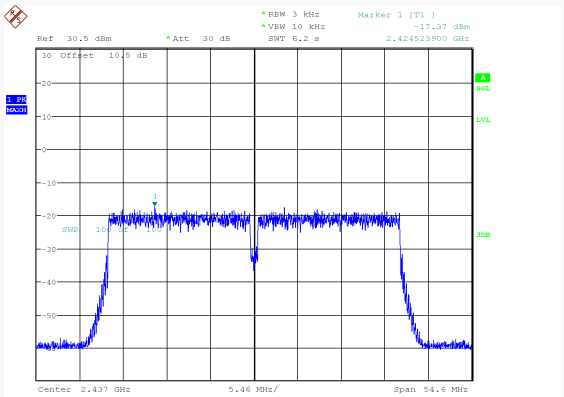
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 18:53:59

802.11n40 Low Channel



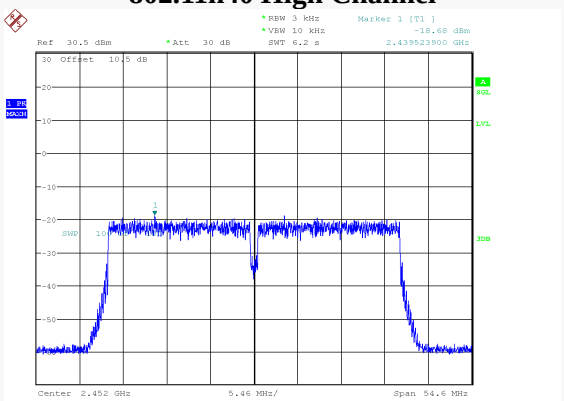
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 19:08:36

802.11n40 Middle Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 19:47:41

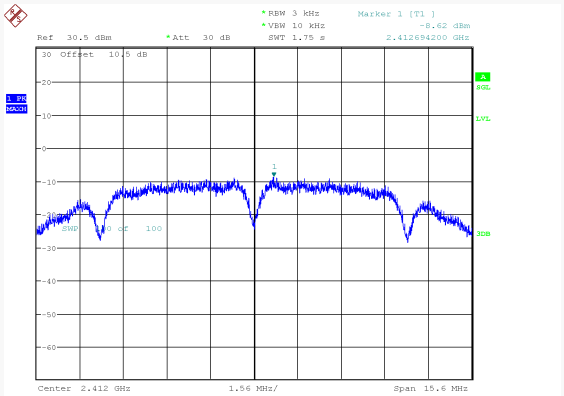
802.11n40 High Channel



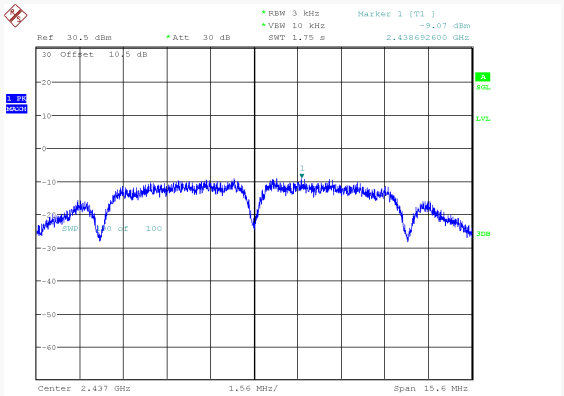
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 8.JAN.2025 20:02:09

Chain 1:

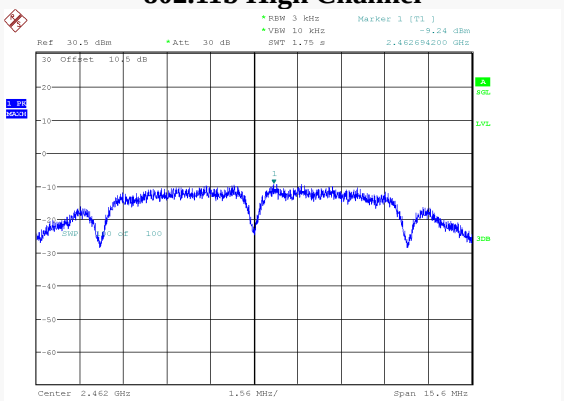
802.11b Low Channel



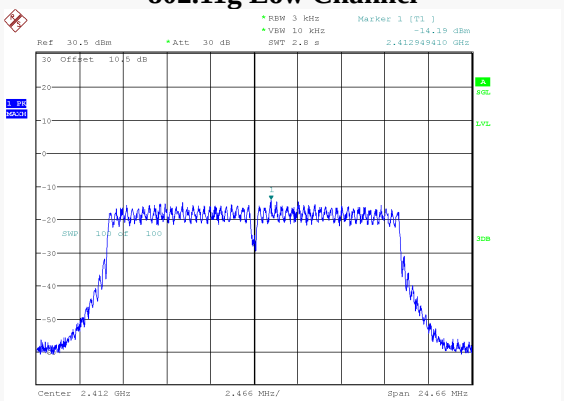
802.11b Middle Channel



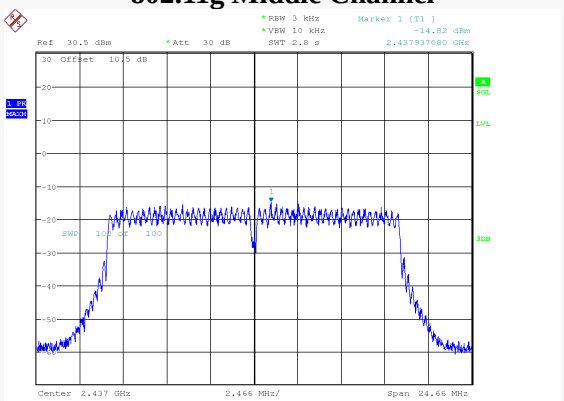
802.11b High Channel



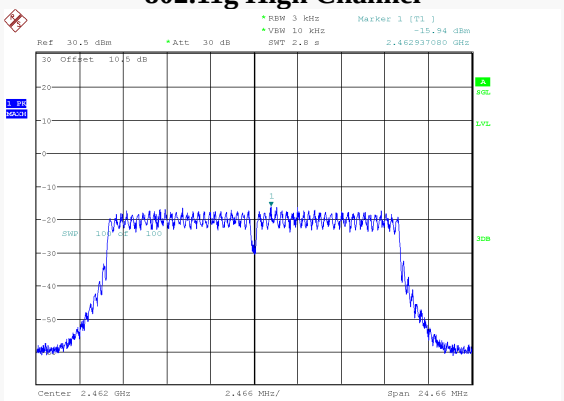
802.11g Low Channel



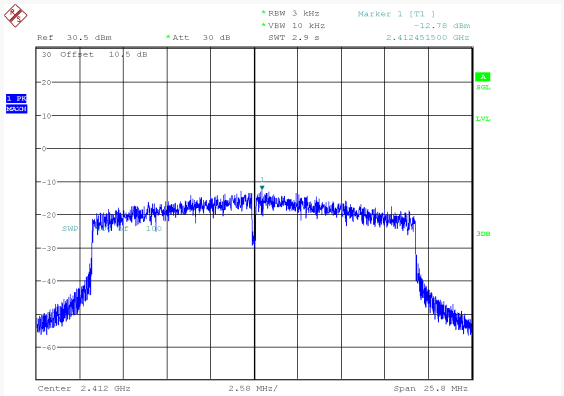
802.11g Middle Channel



802.11g High Channel

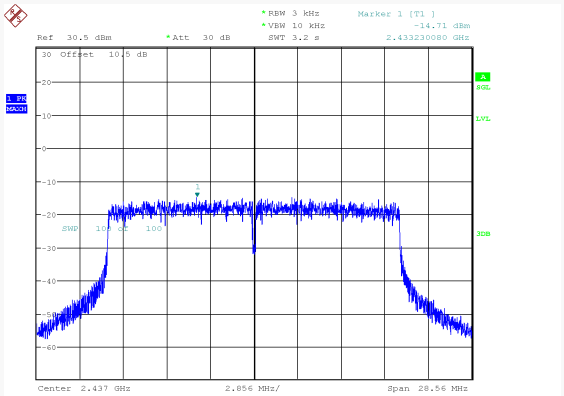


802.11ax20 Low Channel



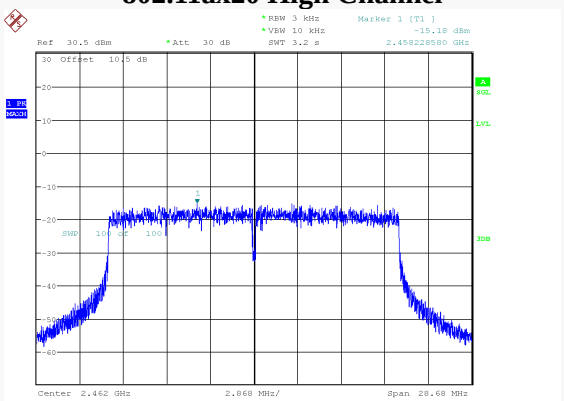
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 13:53:18

802.11ax20 Middle Channel



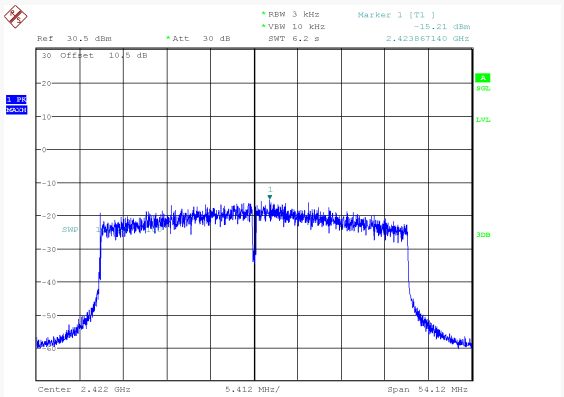
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:03:12

802.11ax20 High Channel



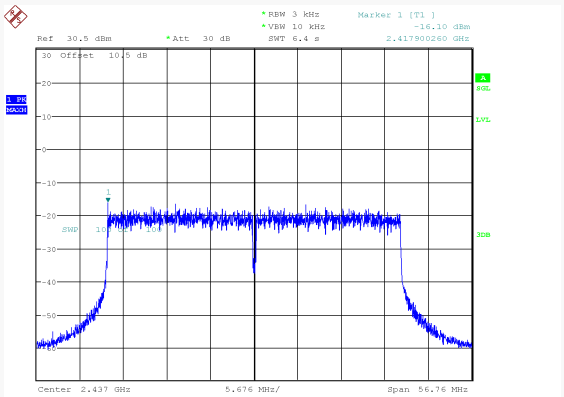
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:13:00

802.11ax40 Low Channel



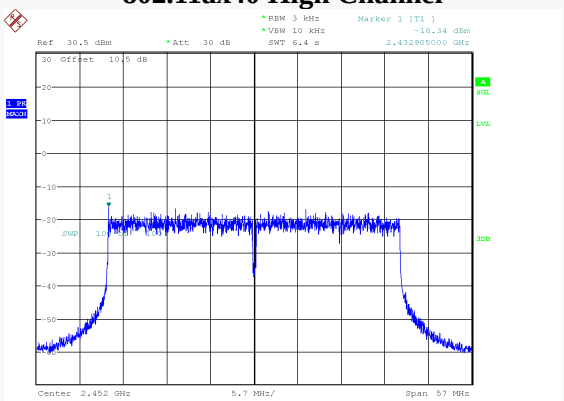
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:27:13

802.11ax40 Middle Channel



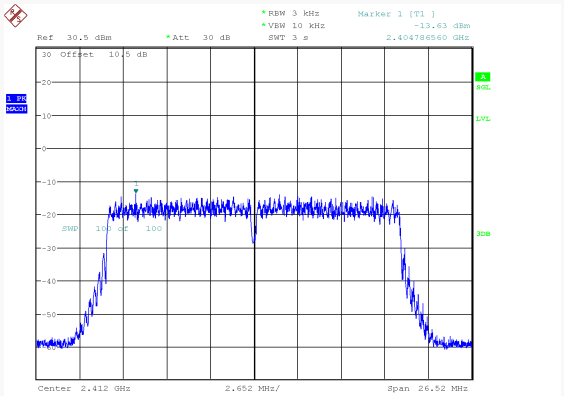
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:41:07

802.11ax40 High Channel



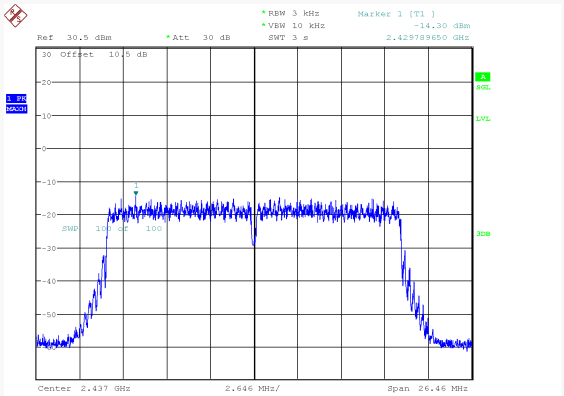
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 14:55:33

802.11n20 Low Channel



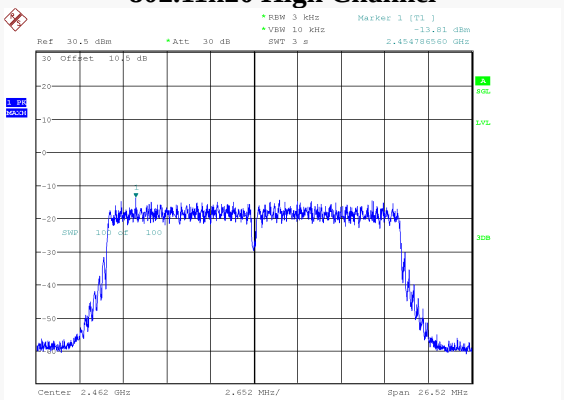
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:40:32

802.11n20 Middle Channel



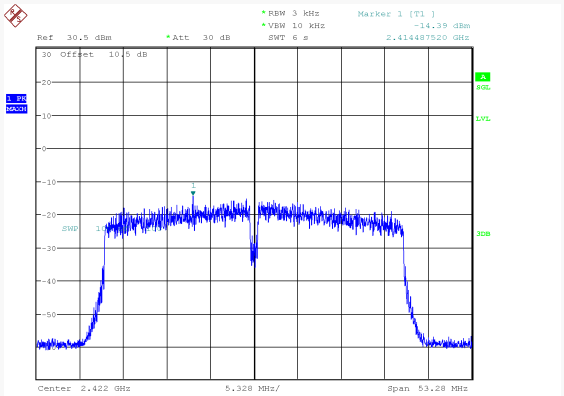
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:48:48

802.11n20 High Channel



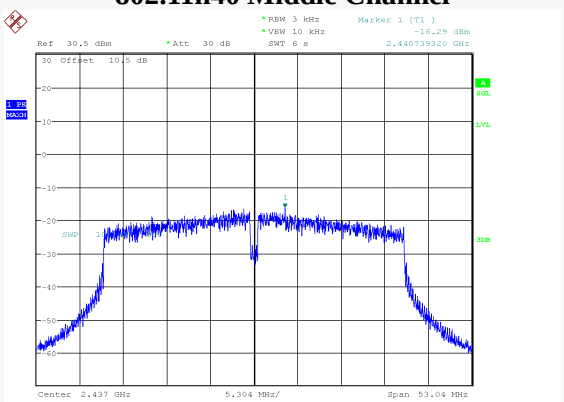
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 11:57:49

802.11n40 Low Channel



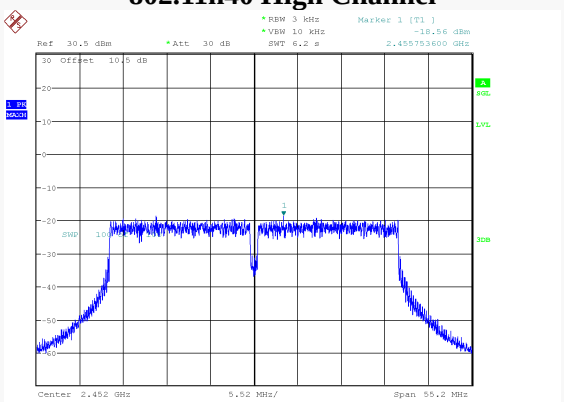
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 12:13:23

802.11n40 Middle Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 13:19:11

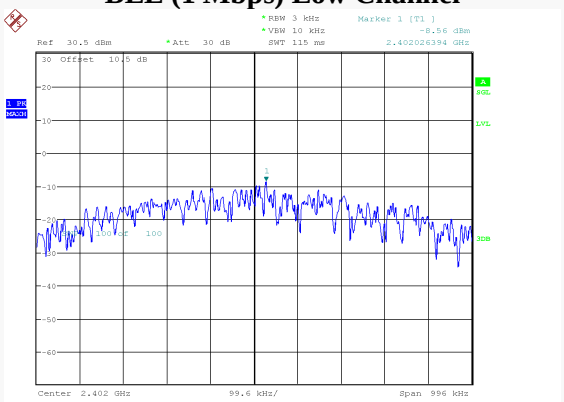
802.11n40 High Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 9.JAN.2025 13:40:51

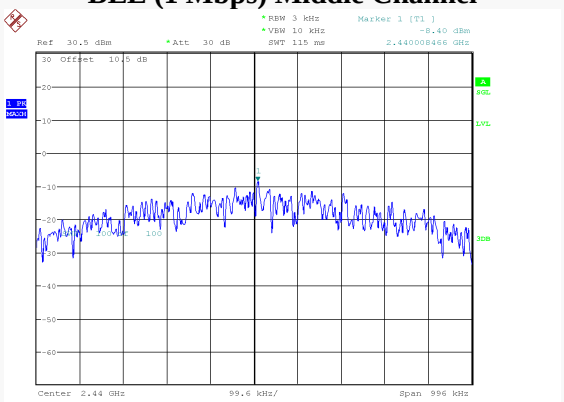
Mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
BLE 1 Mbps	Low	2402	-8.56	≤8
	Middle	2440	-8.40	≤8
	High	2480	-11.35	≤8
BLE 2 Mbps	Low	2402	-11.09	≤8
	Middle	2440	-12.01	≤8
	High	2480	-13.41	≤8

BLE (1 Mbps) Low Channel



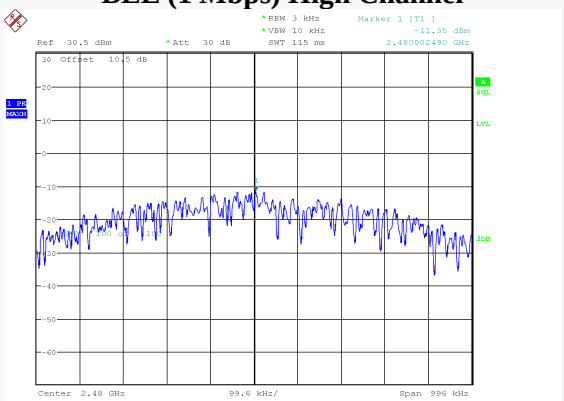
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 13:54:24

BLE (1 Mbps) Middle Channel



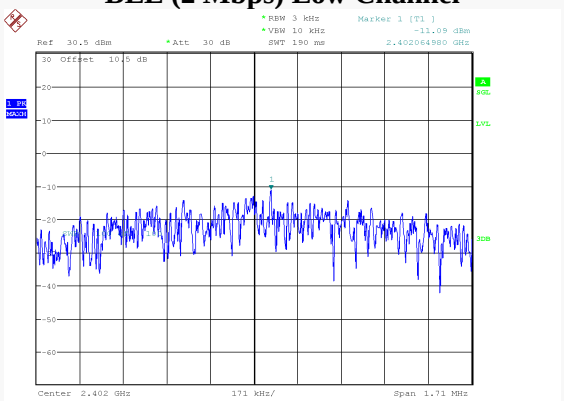
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:00:05

BLE (1 Mbps) High Channel



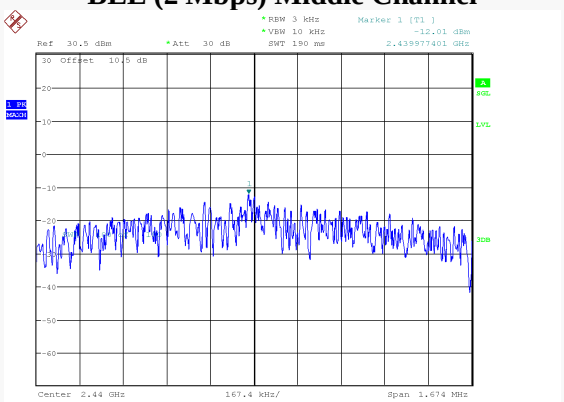
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:07:11

BLE (2 Mbps) Low Channel



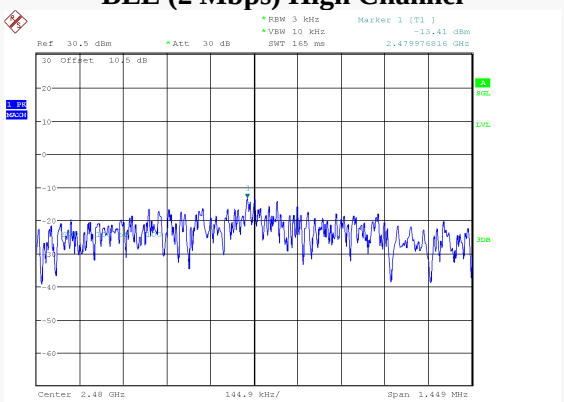
ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:13:16

BLE (2 Mbps) Middle Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:19:44

BLE (2 Mbps) High Channel



ProjectNo.:RKSA241202004 Tester:Neil Zhou
Date: 13.JAN.2025 14:29:35

EUT PHOTOGRAPHS

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

TEST SETUP PHOTOGRAPHS

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

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

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