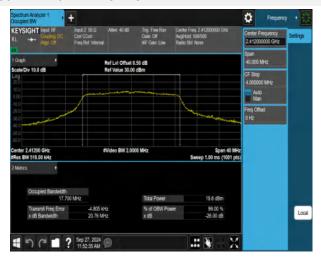


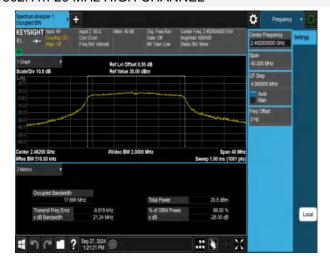
802.11n-20 MHz LOW CHANNEL



802.11n-20 MHz MIDDLE CHANNEL



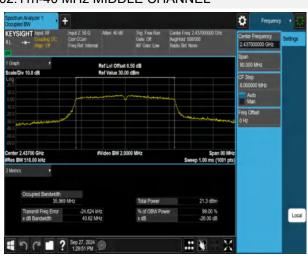
802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL





802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



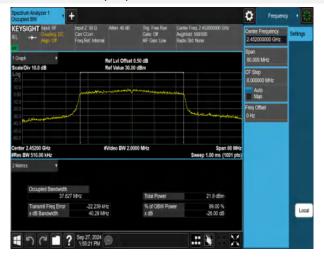
802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



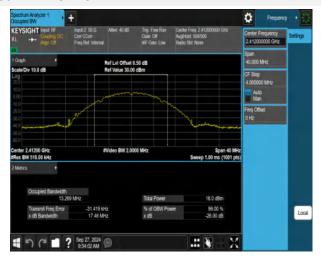
802.11ax-40 MHz(SU) HIGH CHANNEL



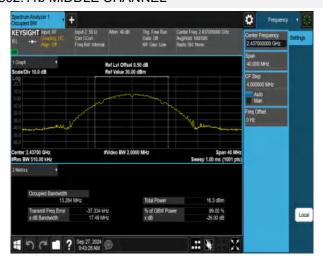


Aux. Antenna:

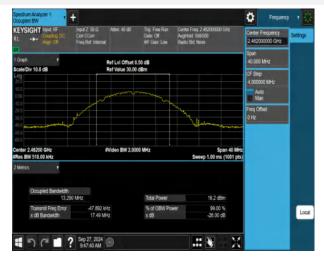
802.11b LOW CHANNEL



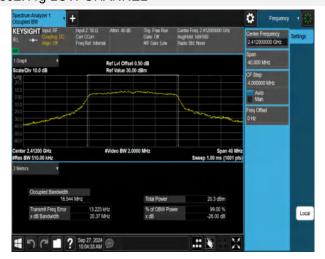
802.11b MIDDLE CHANNEL



802.11b HIGH CHANNEL



802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL

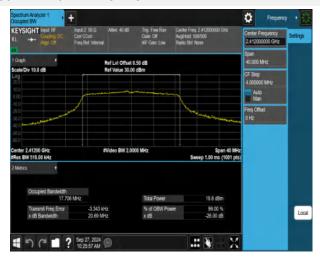


802.11g HIGH CHANNEL





802.11n-20 MHz LOW CHANNEL



802.11n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



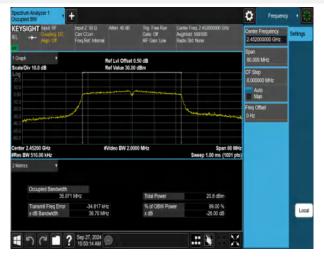
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL





802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL





A.3 Conducted Spurious Emission

Note 1: All antenna were tested, but only the worst case has been reported in this report.

Note 2: All the configurations were pre tested, only the worst configuration has been reported in this report.

Test Data

Main Antenna:

802.11b Mode:

	Measured Max.	Limit	(dBm)	
Channel	Out of Band	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-51.80	5.06	-14.94	Pass
Middle	-51.51	4.85	-15.15	Pass
High	-51.70	5.38	-14.62	Pass

802.11g Mode:

	Measured Max.	Limit ((dBm)	
Channel	Out of Band	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.31	4.52	-15.48	Pass
Middle	-51.57	4.90	-15.10	Pass
High	-51.69	4.64	-15.36	Pass

802.11n-20MHz Mode:

	Measured Max.	Limit (dBm)		
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.04	4.00	-16.00	Pass
Middle	-51.45	4.03	-15.97	Pass
High	-51.91	4.29	-15.71	Pass

802.11n-40MHz Mode:

	Measured Max.	Measured Max. Limit (
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.30	0.84	-19.16	Pass
Middle	-51.80	1.05	-18.95	Pass
High	-50.99	0.87	-19.13	Pass



802.11ax-20 MHz(SU) Mode:

	Measured Max.	Limit	(dBm)	
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.32	3.33	-16.67	Pass
Middle	-52.10	3.67	-16.33	Pass
High	-51.76	2.62	-17.38	Pass

802.11ax-40 MHz(SU) Mode:

	Measured Max.	Measured Max. Limit (dE		
Channel	Out of Band	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-51.92	0.58	-19.42	Pass
Middle	-52.62	1.01	-18.99	Pass
High	-52.41	0.83	-19.17	Pass



Aux. Antenna:

802.11b Mode:

	Measured Max.	Limit	(dBm)	
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-51.30	5.39	-14.61	Pass
Middle	-52.04	5.91	-14.09	Pass
High	-52.10	5.63	-14.37	Pass

802.11g Mode:

	Measured Max. Limit (d		(dBm)	
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.05	3.94	-16.06	Pass
Middle	-52.91	4.18	-15.82	Pass
High	-52.07	3.33	-16.67	Pass

802.11n-20MHz Mode:

	Measured Max.	Limit ((dBm)	
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.20	2.63	-17.37	Pass
Middle	-52.13	4.17	-15.83	Pass
High	-51.58	4.86	-15.14	Pass

802.11n-40MHz Mode:

	Measured Max.	Limit (dBm)		
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.81	1.31	-18.69	Pass
Middle	-52.17	1.38	-18.62	Pass
High	-52.43	1.07	-18.93	Pass



802.11ax-20 MHz(SU) Mode:

	Measured Max.	Limit (dBm)		
Channel	Out of Band	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-50.88	4.27	-15.73	Pass
Middle	-51.46	4.56	-15.44	Pass
High	-51.42	4.34	-15.66	Pass

802.11ax-40 MHz(SU) Mode:

	Measured Max.	Limit ((dBm)	
Channel	Out of Band	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-52.06	0.72	-19.28	Pass
Middle	-52.01	0.98	-19.02	Pass
High	-52.18	0.88	-19.12	Pass

1st to 2nd floors, Building 1, No. 222 Xuanlan Road, Xuanqiao Town, Pudong New District, Shanghai



Test Plots

Main Antenna:

802.11b LOW CHANNEL CARRIER LEVEL



802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11b MIDDLE CHANNEL CARRIER LEVEL



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802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11g LOW CHANNEL CARRIER LEVEL



802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11g MIDDLE CHANNEL CARRIER LEVEL





802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g HIGH CHANNEL CARRIER LEVEL



802.11g HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11n-20 MHz LOW CHANNEL CARRIER LEVEL



802.11n-20 MHz LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-20 MHz LOW CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL





802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11n-40 MHz LOW CHANNEL CARRIER LEVEL



802.11n-40 MHz LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz LOW CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL





802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER LEVEL



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802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER **LEVEL**





802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz \sim 25 GHz





802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER **LEVEL**



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





Aux Antenna:

802.11b LOW CHANNEL CARRIER LEVEL



802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11b MIDDLE CHANNEL CARRIER LEVEL





802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11g LOW CHANNEL CARRIER LEVEL



802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11g MIDDLE CHANNEL CARRIER LEVEL





802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g HIGH CHANNEL CARRIER LEVEL



802.11g HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11n-20 MHz LOW CHANNEL CARRIER LEVEL



802.11n-20 MHz LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11n-20 MHz LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL





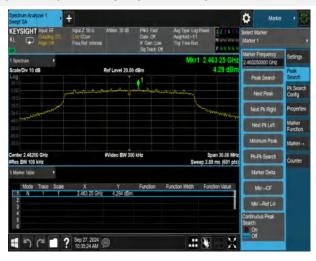
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11n-40 MHz LOW CHANNEL CARRIER LEVEL



802.11n-40 MHz LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz LOW CHANNEL, SPURIOUS 2 GHz \sim 25 GHz

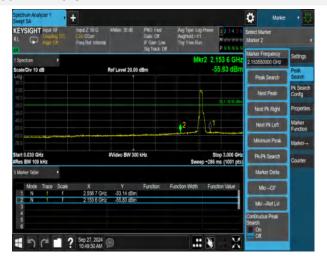


802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL





802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz \sim 25 GHz



802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER LEVEL





802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

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802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER **LEVEL**





802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz \sim 3 GHz



802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER **LEVEL**





802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER **LEVEL**





802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz





A.4 Band Edge (Authorized-band band-edge)

Note 1: The 99% OBW of the fundamental emission is without 2 MHz of the authorized band.

Note 2: All antenna were tested, but only the worst case has been reported in this report.

Note 3: All the configurations were pre tested, only the worst configuration has been reported in this report.

Test Data

Main Antenna:

802.11b Mode:

	Measured Max.	Max. Limit (dBm)		
Channel	Band Edge	Corrier Lavel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-46.15	5.06	-14.94	Pass
High	-55.65	5.38	-14.62	Pass

802.11g Mode:

	Measured Max.	Limit ((dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-30.85	4.52	-15.48	Pass
High	-45.08	4.64	-15.36	Pass

802.11n-20 MHz Mode:

	Measured Max.	Limit (Limit (dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-30.52	4.00	-16.00	Pass
High	-43.44	4.29	-15.71	Pass

802.11n-40 MHz Mode:

	Measured Max.	d Max. Limit (dBm)		
Channel	Band Edge	Carrier Level	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-31.31	0.84	-19.16	Pass
High	-31.25	0.87	-19.13	Pass

802.11ax-20 MHz(SU) Mode:

	Measured Max.	easured Max. Limit (d		
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-30.57	3.33	-16.67	Pass
High	-40.23	2.62	-17.38	Pass

Report No.: BL-SH2480550-603



Page No. 85 / 139

802.11ax-40 MHz(SU) Mode:

	Measured Max.	Limit	(dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-31.84	0.58	-19.42	Pass
High	-30.76	0.83	-19.17	Pass



Aux. Antenna:

802.11b Mode:

	Measured Max.	Limit (dBm)		
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-45.48	5.39	-14.61	Pass
High	-56.77	5.63	-14.37	Pass

802.11g Mode:

	Measured Max. Limit ((dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-32.61	3.94	-16.06	Pass
High	-45.12	3.33	-16.67	Pass

802.11n-20 MHz Mode:

	Measured Max. Limit		(dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-30.15	2.63	-17.37	Pass
High	-43.04	4.86	-15.14	Pass

802.11n-40 MHz Mode:

	Measured Max.	Limit ((dBm)	
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-31.07	1.31	-18.69	Pass
High	-31.17	1.07	-18.93	Pass

802.11ax-20 MHz(SU) Mode:

	Measured Max.	Limit ((dBm)	
Channel	Band Edge	Comion Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-30.39	4.27	-15.73	Pass
High	-40.00	4.34	-15.66	Pass

Report No.: BL-SH2480550-603



Page No. 87 / 139

802.11ax-40 MHz(SU) Mode:

	Measured Max.	Limit (dBm)		
Channel	Band Edge	Corrier Lovel	Calculated 20	Verdict
	Emission (dBm)	Carrier Level	dBc Limit	
Low	-31.89	0.72	-19.28	Pass
High	-31.14	0.88	-19.12	Pass



Test Plots

Main Antenna:

802.11b LOW CHANNEL, CARRIER LEVEL



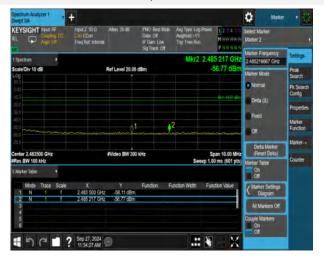
802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE





802.11g LOW CHANNEL, CARRIER LEVEL



802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE





802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL

Spectrum Analyses 1 Sept 25 Act Spectrum Frequency Spectrum Frequency

802.11n-20 MHz LOW CHANNEL, BAND EDGE



802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE





802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL

Specifical Part Secret Science Science

802.11n-40 MHz LOW CHANNEL, BAND EDGE



802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, BAND EDGE





802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL

802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE

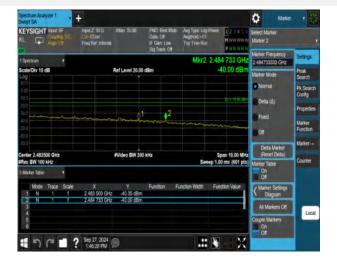




802.11ax-20 MHz(SU) HIGH CHANNEL, CARRIER LEVEL

802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE







802.11ax-40 MHz(SU) LOW CHANNEL, CARRIER LEVEL

802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE





802.11ax-40 MHz(SU) HIGH CHANNEL, CARRIER LEVEL

802.11ax-40 MHz(SU) HIGH CHANNEL, BAND EDGE







Main Antenna:

802.11b LOW CHANNEL, CARRIER LEVEL



802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE

