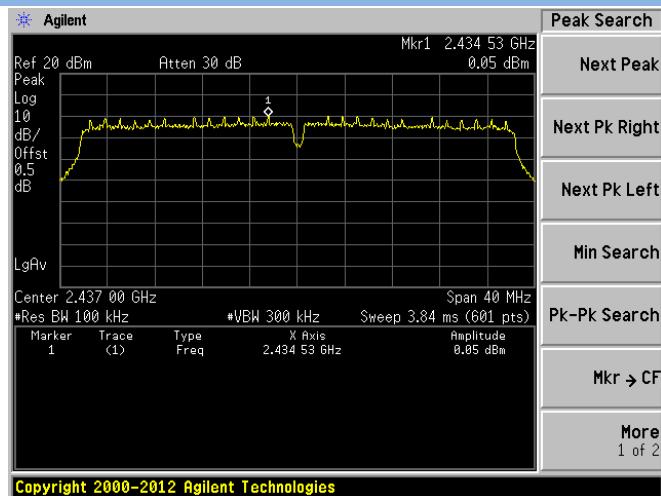
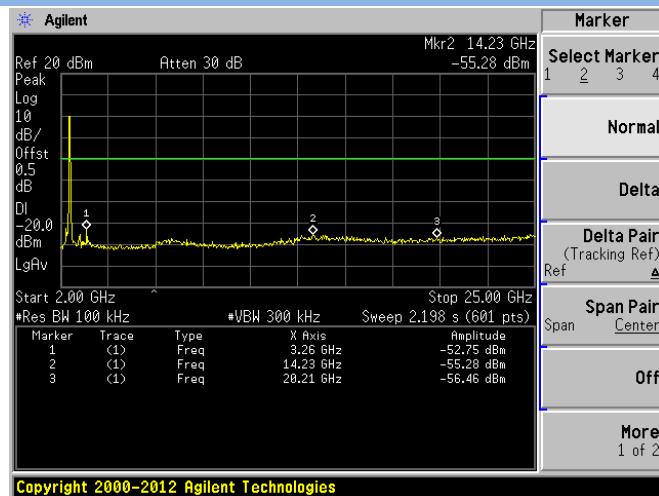


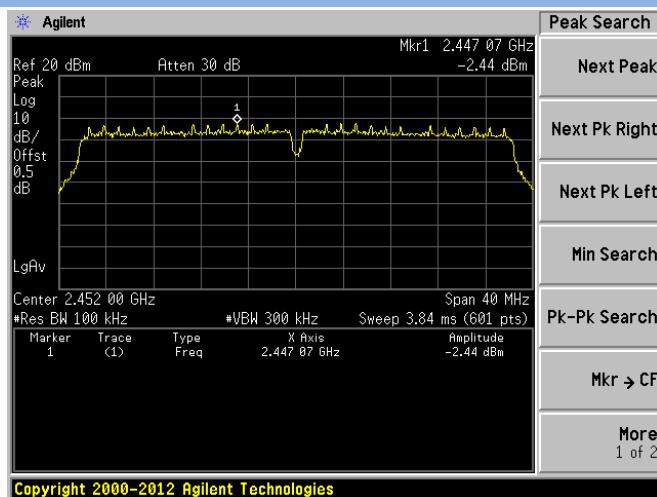
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



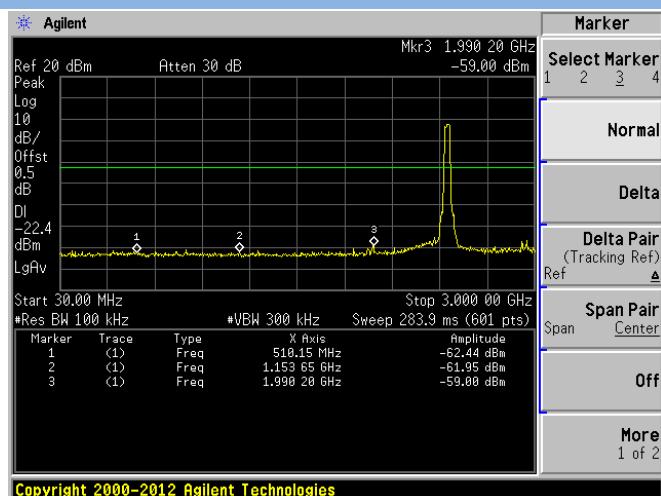
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



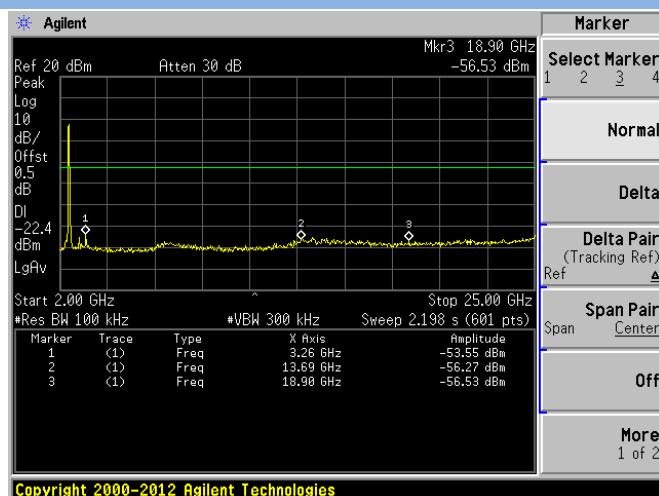
802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



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



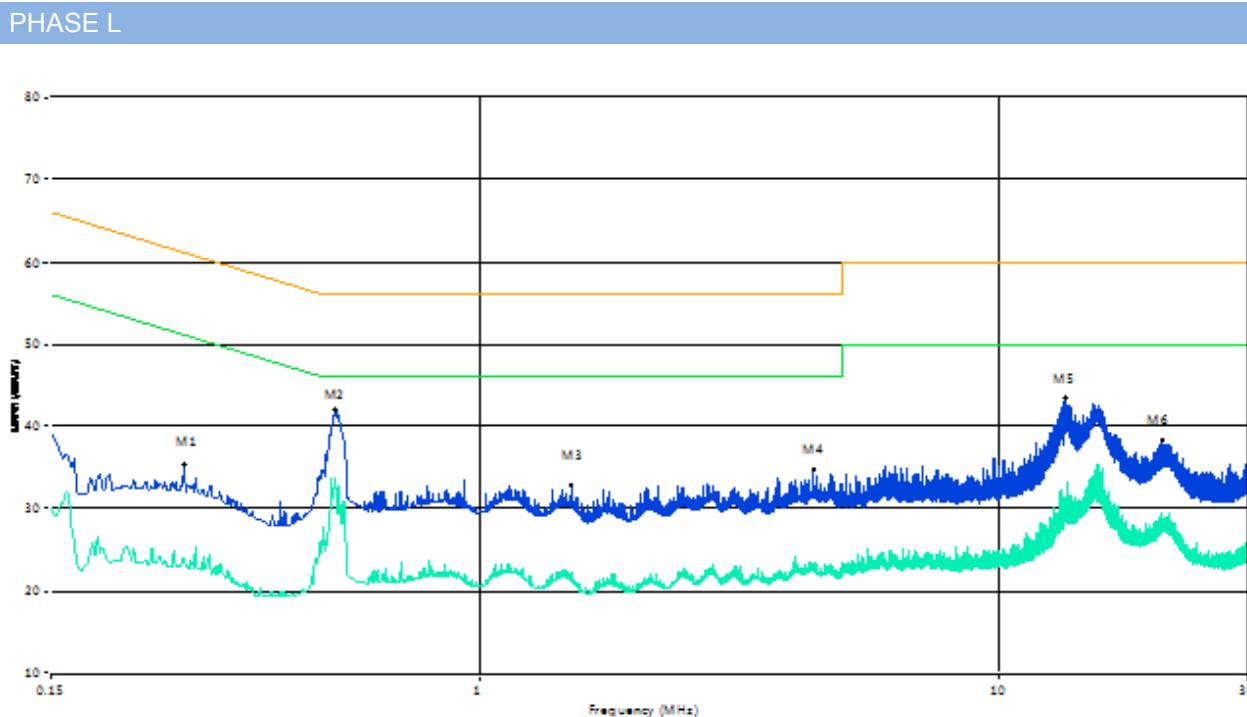
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



A.4 Conducted Emissions

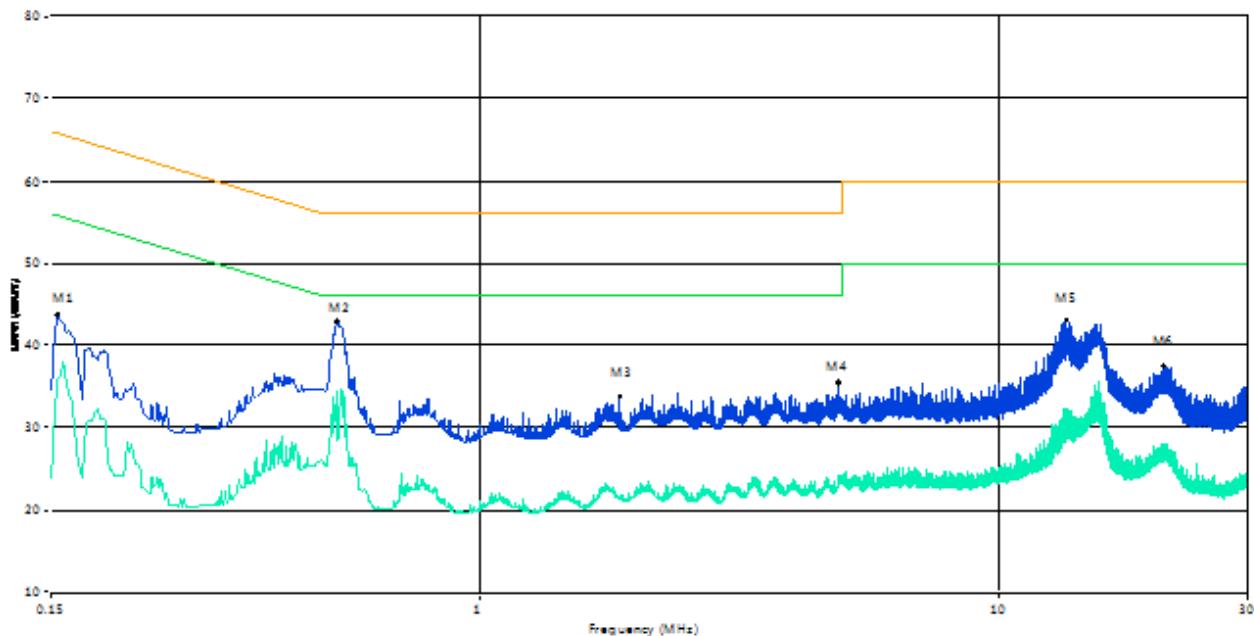
Note: All configurations have been tested, only the worst configuration (802.11b High Channel) shown here.

Test Data and Plots



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.27	35.3	13.00	62.6	27.30	Peak	L Line	Pass
1**	0.27	23.9	13.00	52.6	28.70	AV	L Line	Pass
2	0.53	42.0	13.00	56.0	14.00	Peak	L Line	Pass
2**	0.53	33.9	13.00	46.0	12.10	AV	L Line	Pass
3	1.50	32.8	13.00	56.0	23.20	Peak	L Line	Pass
3**	1.50	22.2	13.00	46.0	23.80	AV	L Line	Pass
4	4.39	34.7	13.00	56.0	21.30	Peak	L Line	Pass
4**	4.39	22.3	13.00	46.0	23.70	AV	L Line	Pass
5	13.42	43.4	13.00	60.0	16.60	Peak	L Line	Pass
5**	13.42	28.4	13.00	50.0	21.60	AV	L Line	Pass
6	20.63	38.4	13.00	60.0	21.60	Peak	L Line	Pass
6**	20.63	28.0	13.00	50.0	22.00	AV	L Line	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.15	43.8	13.00	65.9	22.10	Peak	N Line	Pass
1**	0.15	35.8	13.00	55.9	20.10	AV	N Line	Pass
2	0.53	42.9	13.00	56.0	13.10	Peak	N Line	Pass
2**	0.53	33.9	13.00	46.0	12.10	AV	N Line	Pass
3	1.86	33.8	13.00	56.0	22.20	Peak	N Line	Pass
3**	1.86	21.2	13.00	46.0	24.80	AV	N Line	Pass
4	4.90	35.5	13.00	56.0	20.50	Peak	N Line	Pass
4**	4.90	22.5	13.00	46.0	23.50	AV	N Line	Pass
5	13.46	43.1	13.00	60.0	16.90	Peak	N Line	Pass
5**	13.46	30.4	13.00	50.0	19.60	AV	N Line	Pass
6	20.75	37.5	13.00	60.0	22.50	Peak	N Line	Pass
6**	20.75	26.4	13.00	50.0	23.60	AV	N Line	Pass

See section 4.1.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

A.5 Radiated Emission

Antenna-port Conducted test data

$$E = EIRP - 20\log D + 104.8$$

where:

E = electric field strength in $\text{dB}\mu\text{V/m}$,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

EIRP = Measure Conducted output power Value (dBm) + Maximum transmit antenna gain (dBi) + The appropriate maximum ground reflection factor (dB)

Note: All configure were tested but only the worst data (802.11n40 Low Channel) was reported in this report.

Test Data and Plots (ANT 0)

The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dB_i, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dB_i.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

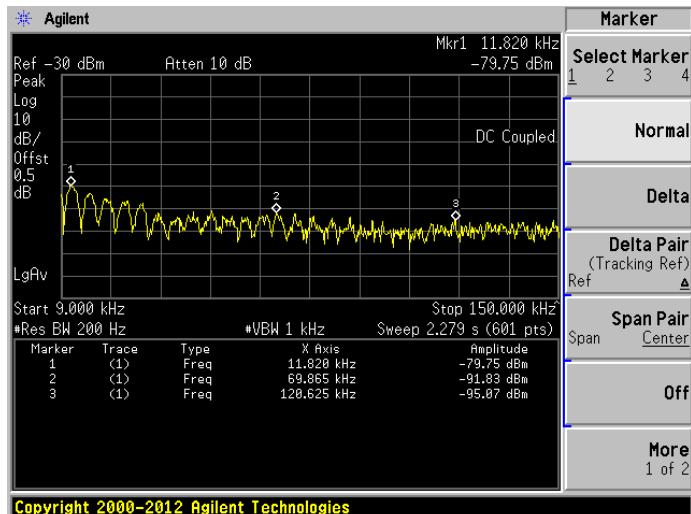
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

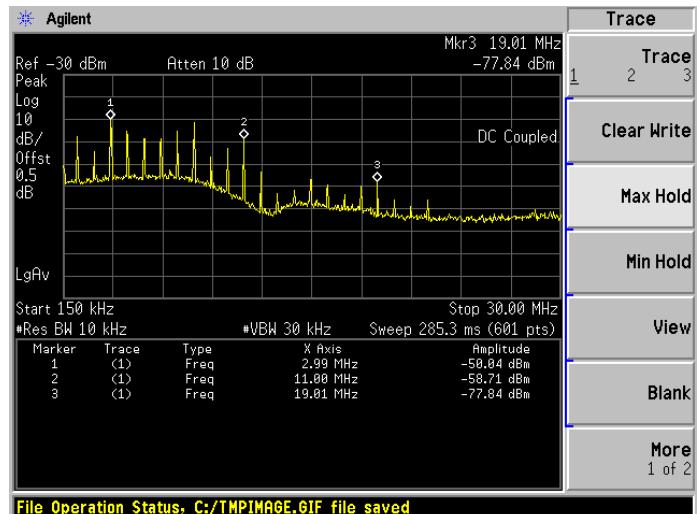
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
0.01182	-79.75	6	3	3.5	QP	25.01	91.66	66.65	Note 2	Pass
2.99	-50.04	6	3	3.5	QP	54.72	91.66	36.94	Note 2	Pass
452	-22.98	4.7	3	3.5	QP	80.48	91.66	11.18	Note 2	Pass
602.3	-60.75	4.7	3	3.5	QP	42.71	91.66	48.95	Note 2	Pass

Test Plots

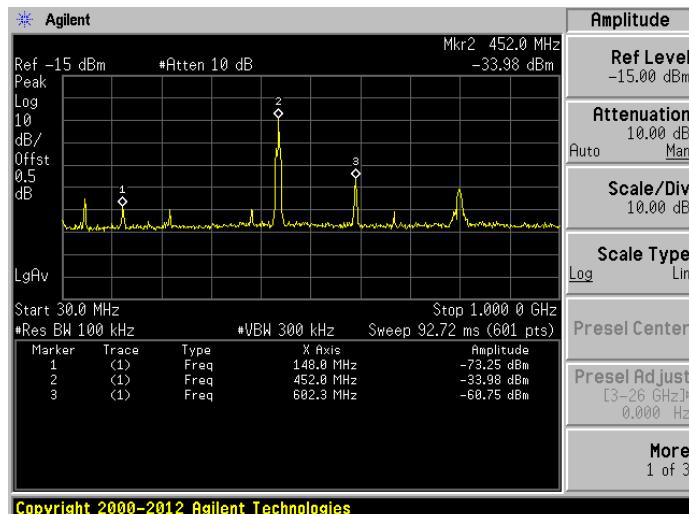
LOW CHANNEL, SPURIOUS 9 kHz ~ 150 kHz



LOW CHANNEL, SPURIOUS 150 kHz ~ 30 MHz



LOW CHANNEL, SPURIOUS 30 MHz ~ 1 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

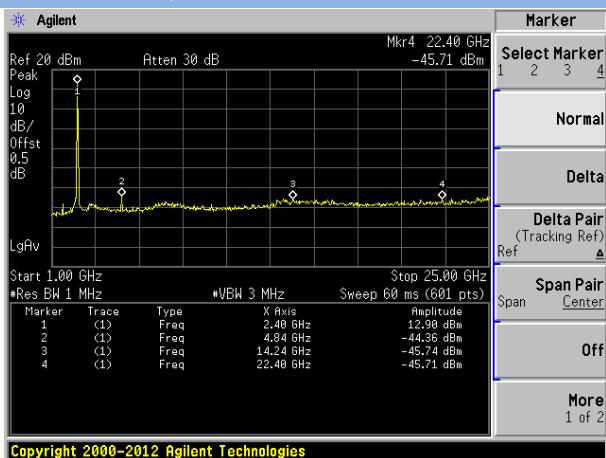
Note 4: The harmonic (3th, 4th, 5th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
4840	-44.36	0	3	3.5	PK	54.40	74.00	19.60	--	PASS
	-69.21		3	3.5	AV	29.55	54.00	24.45		PASS
22400	-45.71	0	3	3.5	PK	53.05	74.00	20.95	--	PASS
	N/A		3	3.5	AV	N/A	54.00	N/A		Note 3
2400	12.9	0	3	3.5	PK	111.66	N/A	N/A	Note 1	N/A
	-11.95		3	3.5	AV	86.81	N/A	N/A		N/A

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

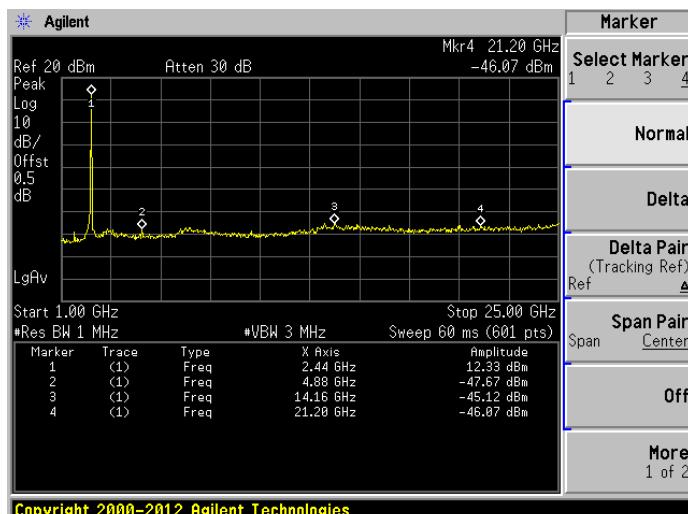
Note 4: The harmonic (2th, 3th, 4th, setc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21200	-46.07	0	3	3.5	PK	52.69	74.00	21.31	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14160	-45.12	0	3	3.5	PK	53.64	91.09	37.45	Note 2	Pass
	N/A		3	3.5	AV	N/A	71.09	N/A	Note 3	Pass
2440	12.33	0	3	3.5	PK	111.09	N/A	N/A	Note 1	Pass
	-12.52		3	3.5	AV	86.24	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

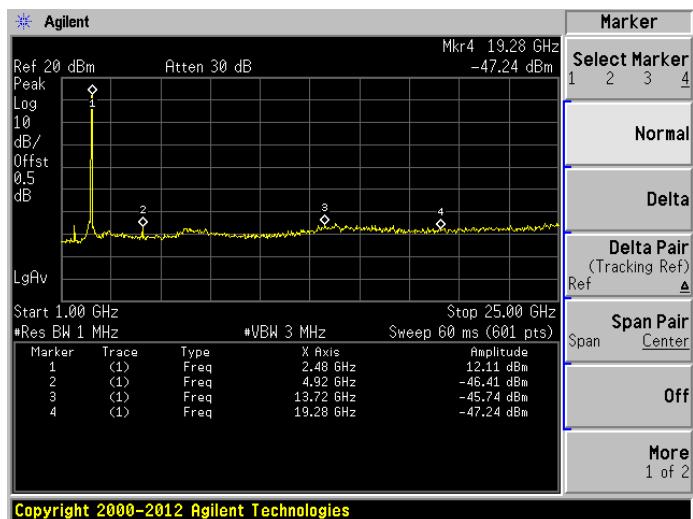
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
4920	-46.41	0	3	3.5	PK	52.35	74.00	21.65	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
13720	-45.74	0	3	3.5	PK	53.02	90.87	37.85	Note 2	Pass
	N/A		3	3.5	AV	N/A	70.87	N/A	Note 3	Pass
2480	12.11	0	3	3.5	PK	110.87	N/A	N/A	Note 1	Pass
	-12.74		3	3.5	AV	86.02	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

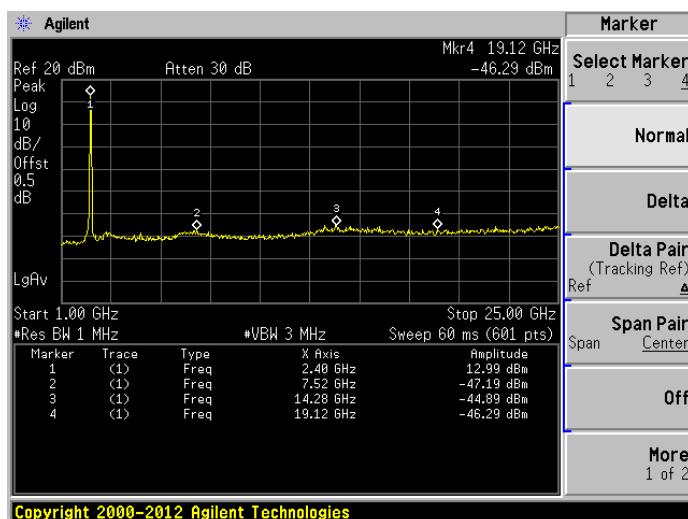
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
19120	-46.29	0	3	3.5	PK	52.47	74.00	21.53	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14280	-44.89	0	3	3.5	PK	53.87	91.75	37.88	Note 2	Pass
	N/A		3	3.5	AV	N/A	71.75	N/A	Note 3	Pass
2440	12.99	0	3	3.5	PK	111.75	N/A	N/A	Note 1	Pass
	-11.86		3	3.5	AV	86.90	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

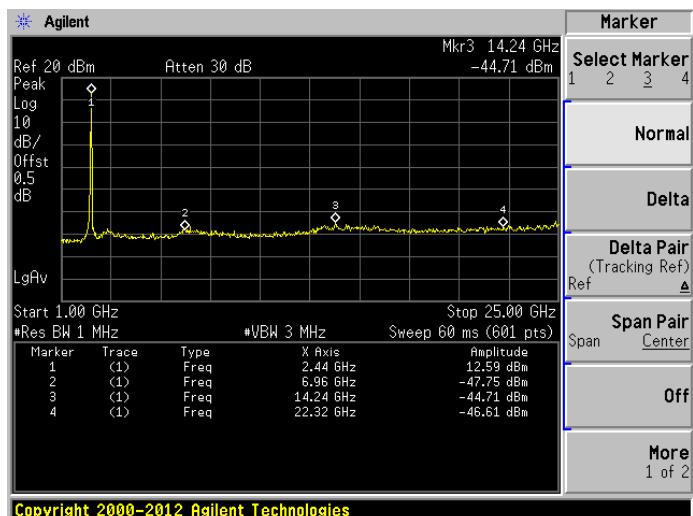
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
22320	-46.61	0	3	3.5	PK	52.15	74.00	21.85	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14240	-44.71	0	3	3.5	PK	54.05	91.35	37.30	Note 2	Pass
	N/A		3	3.5	AV	N/A	71.35	N/A	Note 3	Pass
2440	12.59	0	3	3.5	PK	111.35	N/A	N/A	Note 1	Pass
	-12.26		3	3.5	AV	86.50	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

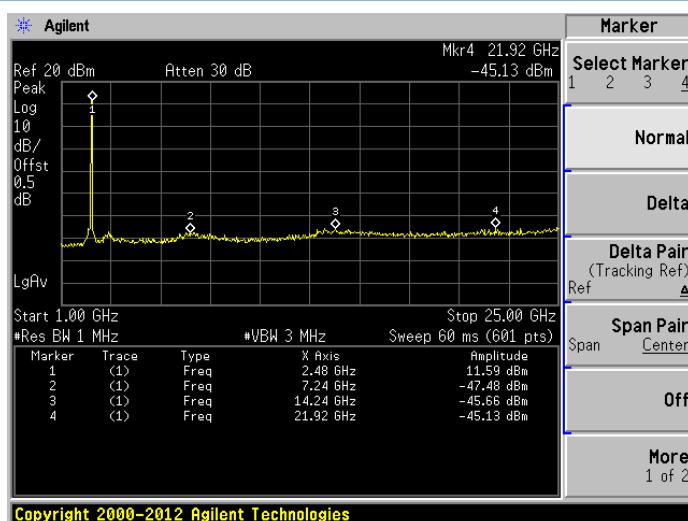
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
14240	-45.66	0	3	3.5	PK	53.10	90.35	37.25	Note 2	Pass
	N/A		3	3.5	AV	N/A	70.35	N/A	Note 3	Pass
21920	-45.13	0	3	3.5	PK	53.63	90.35	36.72	Note 2	Pass
	N/A		3	3.5	AV	N/A	70.35	N/A	Note 3	Pass
2480	11.59	0	3	3.5	PK	110.35	N/A	N/A	Note 1	Pass
	-13.26		3	3.5	AV	85.50	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

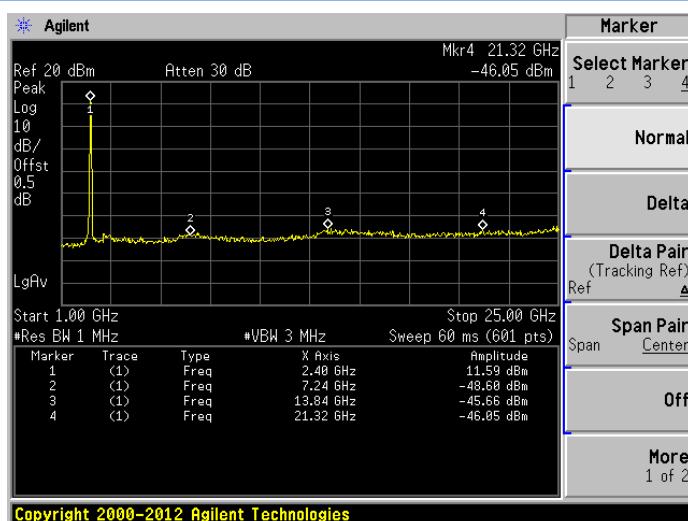
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21320	-46.05	0	3	3.5	PK	52.71	74.00	21.29	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
13840	-45.66	0	3	3.5	PK	53.10	90.35	37.25	Note 2	Pass
	N/A		3	3.5	AV	N/A	70.35	N/A	Note 3	Pass
2400	11.59	0	3	3.5	PK	110.35	N/A	N/A	Note 1	Pass
	-13.26		3	3.5	AV	85.50	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

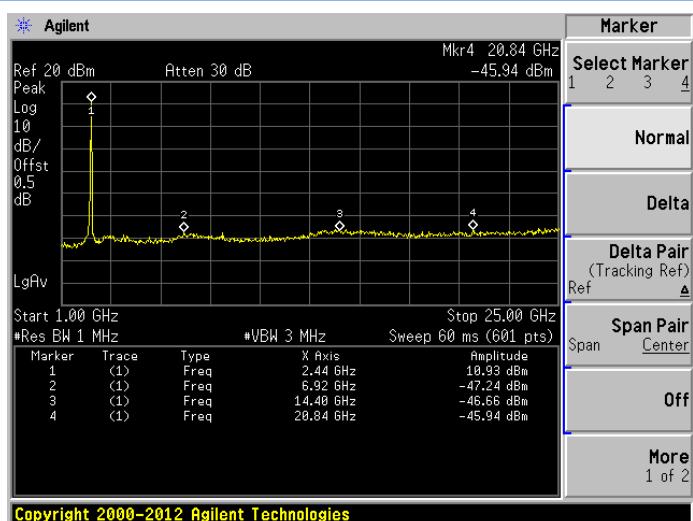
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
14400	-46.66	0	3	3.5	PK	52.10	89.69	37.59	Note 2	Pass
	N/A		3	3.5	AV	N/A	69.69	N/A	Note 3	Pass
20840	-45.94	0	3	3.5	PK	52.82	74.00	21.18	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
2440	10.93	0	3	3.5	PK	109.69	N/A	N/A	Note 1	Pass
	-13.92		3	3.5	AV	84.84	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

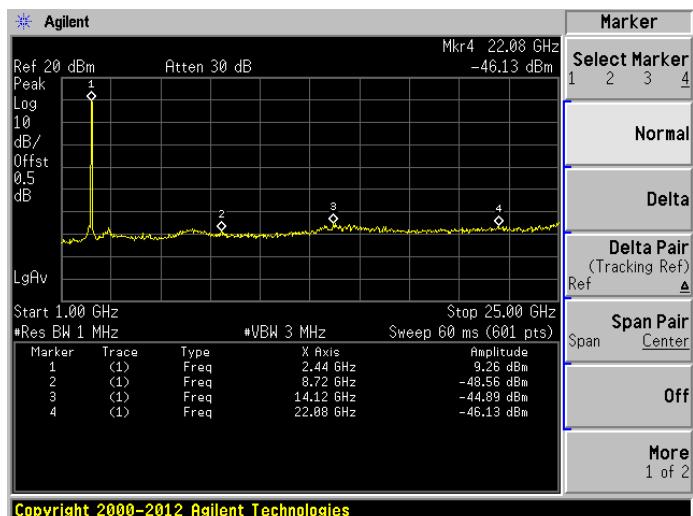
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
22080	-46.13	0	3	3.5	PK	52.63	74.00	21.37	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14120	-44.89	0	3	3.5	PK	53.87	88.02	34.15	Note 2	Pass
	N/A		3	3.5	AV	N/A	68.02	N/A	Note 3	Pass
2440	9.26	0	3	3.5	PK	108.02	N/A	N/A	Note 1	Pass
	-15.59		3	3.5	AV	83.17	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

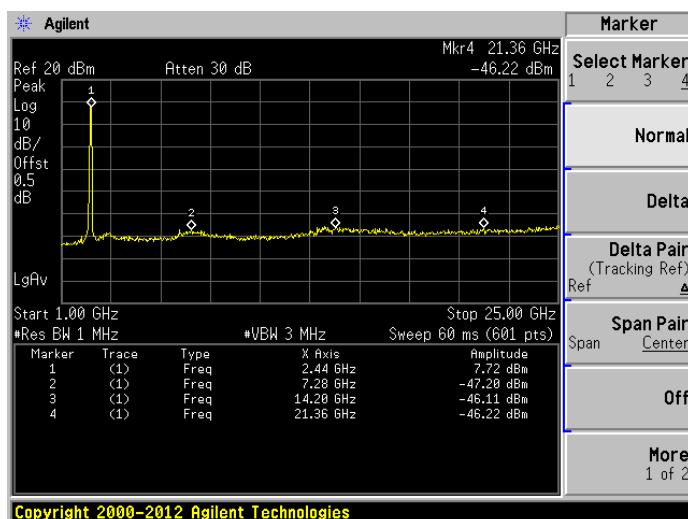
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21360	-46.22	0	3	3.5	PK	52.54	74.00	21.46	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14200	-46.11	0	3	3.5	PK	52.65	86.48	33.83	Note 2	Pass
	N/A		3	3.5	AV	N/A	66.48	N/A	Note 3	Pass
2440	7.72	0	3	3.5	PK	106.48	N/A	N/A	Note 1	Pass
	-17.13		3	3.5	AV	81.63	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

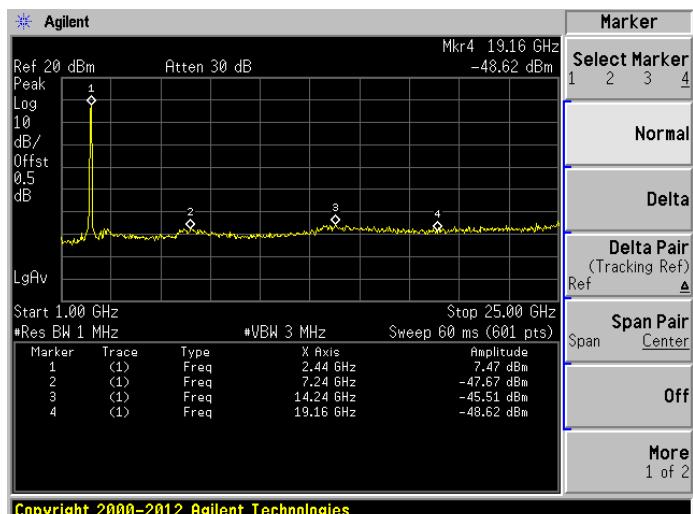
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
7240	-47.67	0	3	3.5	PK	51.09	86.23	35.14	Note 2	Pass
	N/A		3	3.5	AV	N/A	66.23	N/A	Note 3	Pass
14240	-45.51	0	3	3.5	PK	53.25	86.23	32.98	Note 2	Pass
	N/A		3	3.5	AV	N/A	66.23	N/A	Note 3	Pass
2440	7.47	0	3	3.5	PK	106.23	N/A	N/A	Note 1	Pass
	-17.38		3	3.5	AV	81.38	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 3.5 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

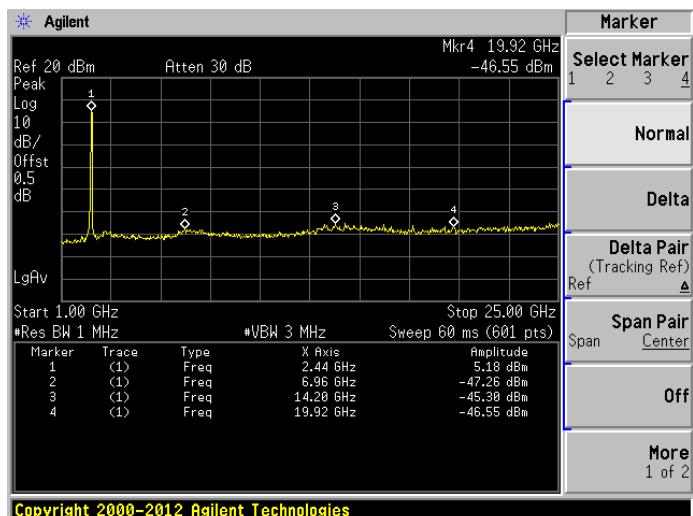
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
19920	-46.55	0	3	3.5	PK	52.21	74.00	21.79	Note 3	Pass
	N/A		3	3.5	AV	N/A	54.00	N/A		Pass
14200	-45.3	0	3	3.5	PK	53.46	83.94	30.48	Note 2	Pass
	N/A		3	3.5	AV	N/A	63.94	N/A	Note 3	Pass
2440	5.18	0	3	3.5	PK	103.94	N/A	N/A	Note 1	Pass
	-19.67		3	3.5	AV	79.09	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



Test Data and Plots (ANT 1)

The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

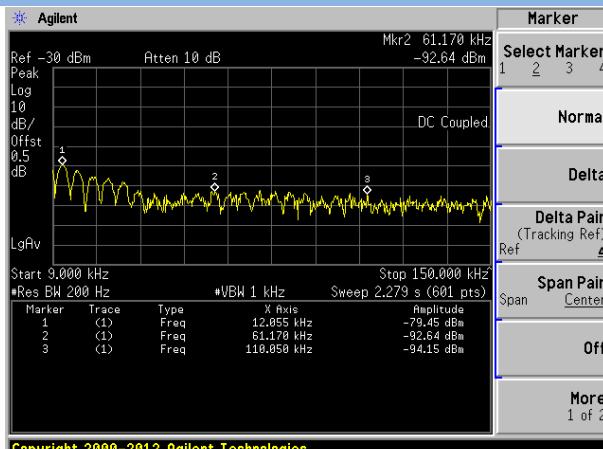
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

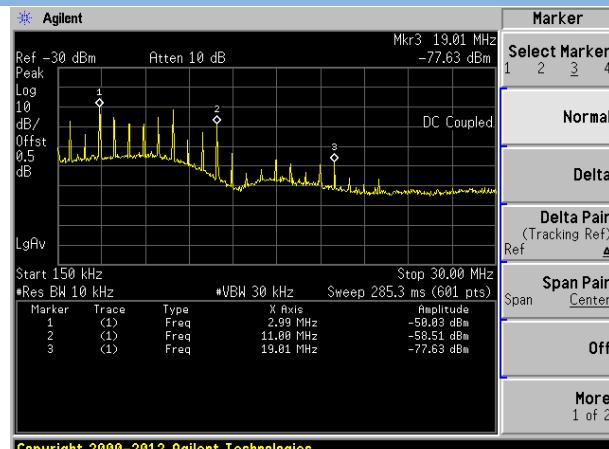
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
0.012055	-79.45	6	3	5.4	QP	27.21	92.93	65.72	Note 2	Pass
2.99	-50.03	6	3	5.4	QP	56.63	92.93	36.30	Note 2	Pass
452	-34.29	4.7	3	5.4	QP	71.07	92.93	21.86	Note 2	Pass
602.3	-62.04	4.7	3	5.4	QP	43.32	92.93	49.61	Note 2	Pass

Test Plots

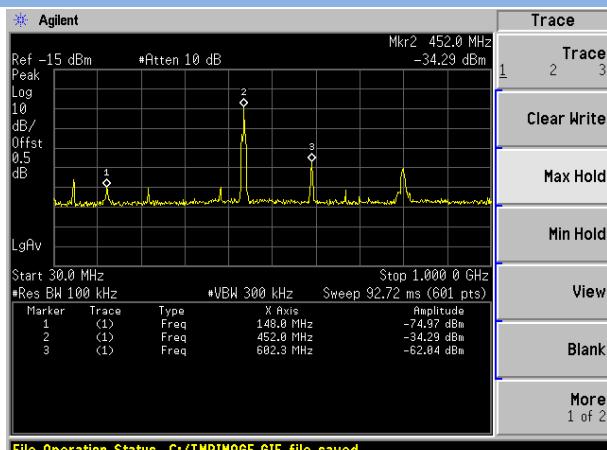
LOW CHANNEL, SPURIOUS 9 kHz ~ 150 kHz



LOW CHANNEL, SPURIOUS 150 kHz ~ 30 MHz



LOW CHANNEL, SPURIOUS 30 MHz ~ 1 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

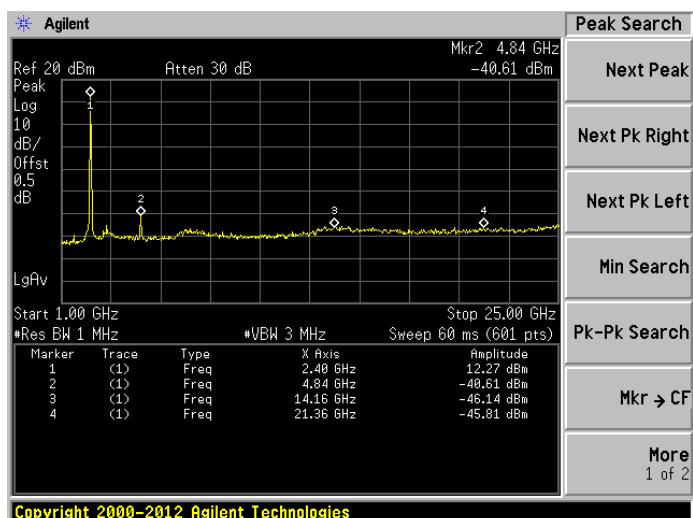
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: Low CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21360	-45.81	0	3	5.4	PK	54.85	74.00	19.15	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A	Note 3	Pass
4840	-40.61	0	3	5.4	PK	60.05	74.00	13.95	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
2400	12.27	0	3	5.4	PK	112.93	N/A	N/A	Note 1	Pass
	-12.58		3	5.4	AV	88.08	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

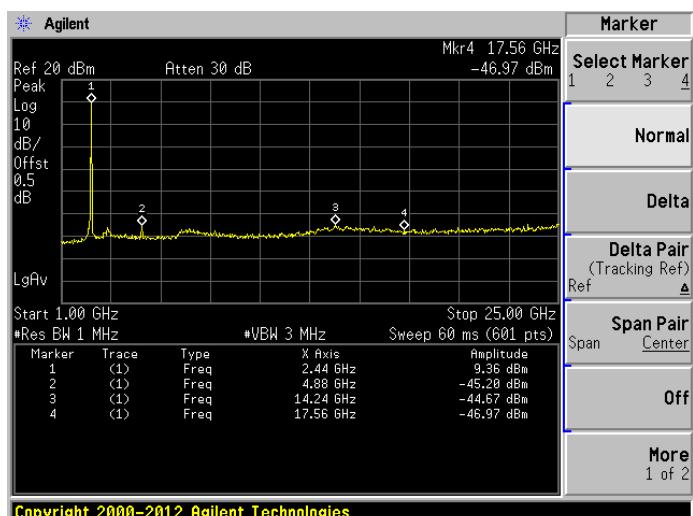
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
142470	-44.67	0	3	5.4	PK	55.99	90.02	34.03	Note 2	Pass
	N/A		3	5.4	AV	N/A	70.02	N/A	Note 3	Pass
4880	-45.2	0	3	5.4	PK	55.46	74.00	18.54	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
2440	9.36	0	3	5.4	PK	110.02	N/A	N/A	Note 1	Pass
	-15.49		3	5.4	AV	85.17	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

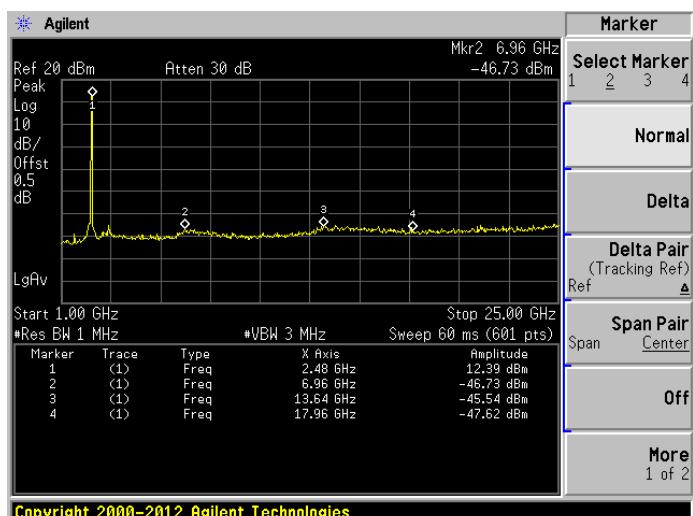
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
6960	-46.73	0	3	5.4	PK	53.93	93.05	39.12	Note 2	Pass
	N/A		3	5.4	AV	N/A	73.05	N/A	Note 3	Pass
13640	-45.54	0	3	5.4	PK	55.12	93.05	37.93	Note 2	Pass
	N/A		3	5.4	AV	N/A	73.05	N/A	Note 3	Pass
2480	12.39	0	3	5.4	PK	113.05	N/A	N/A	Note 1	Pass
	-12.46		3	5.4	AV	88.20	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

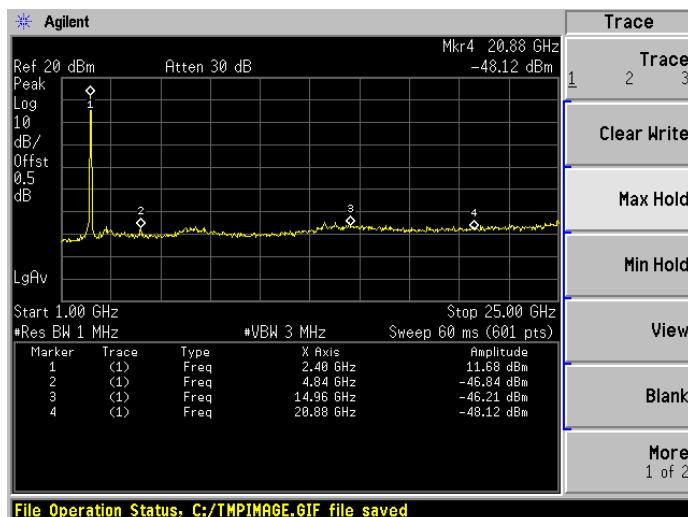
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
4840	-46.84	0	3	5.4	PK	53.82	74.00	20.18	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
14920	-46.21	0	3	5.4	PK	54.45	92.34	37.89	Note 2	Pass
	N/A		3	5.4	AV	N/A	72.34	N/A	Note 3	Pass
2400	11.68	0	3	5.4	PK	112.34	N/A	N/A	Note 1	Pass
	-13.17		3	5.4	AV	87.49	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

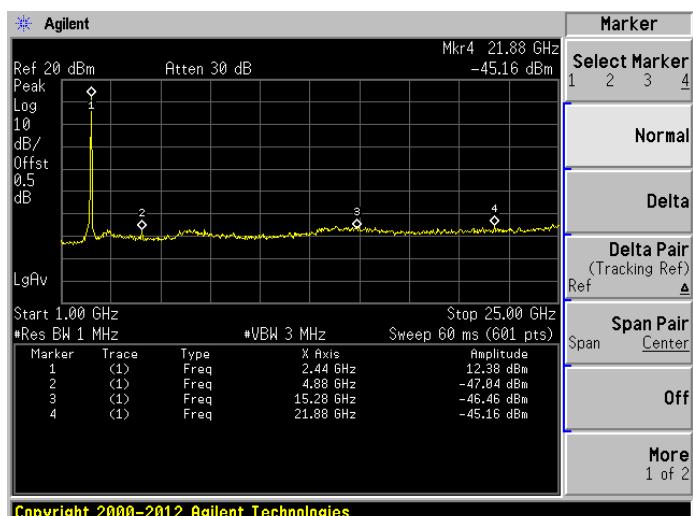
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
15280	-46.46	0	3	5.4	PK	54.20	93.04	38.84	Note 2	Pass
	N/A		3	5.4	AV	N/A	73.04	N/A	Note 3	Pass
21880	-45.16	0	3	5.4	PK	55.50	93.04	37.54	Note 2	Pass
	N/A		3	5.4	AV	N/A	73.04	N/A	Note 3	Pass
2440	12.38	0	3	5.4	PK	113.04	N/A	N/A	Note 1	Pass
	-12.47		3	5.4	AV	88.19	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

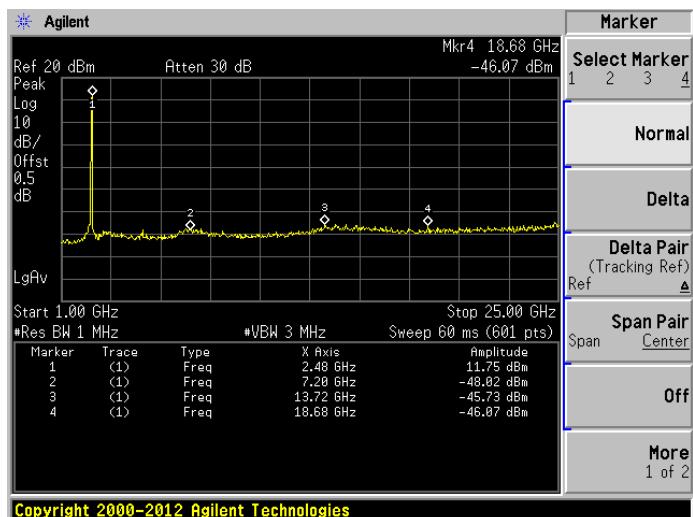
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
18680	-46.07	0	3	5.4	PK	54.59	74.00	19.41	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
13720	-45.73	0	3	5.4	PK	54.93	92.41	37.48	Note 2	Pass
	N/A		3	5.4	AV	N/A	72.41	N/A	Note 3	Pass
2480	11.75	0	3	5.4	PK	112.41	N/A	N/A	Note 1	Pass
	-13.10		3	5.4	AV	87.56	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

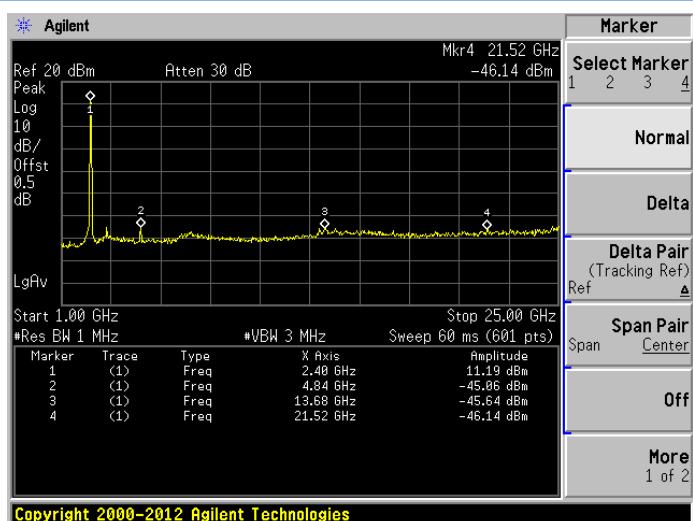
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
13680	-45.64	0	3	5.4	PK	55.02	91.85	36.83	Note 2	Pass
	N/A		3	5.4	AV	N/A	71.85	N/A	Note 3	Pass
4840	-45.06	0	3	5.4	PK	55.60	74.00	18.40	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
2400	11.19	0	3	5.4	PK	111.85	N/A	N/A	Note 1	Pass
	-13.66		3	5.4	AV	87.00	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

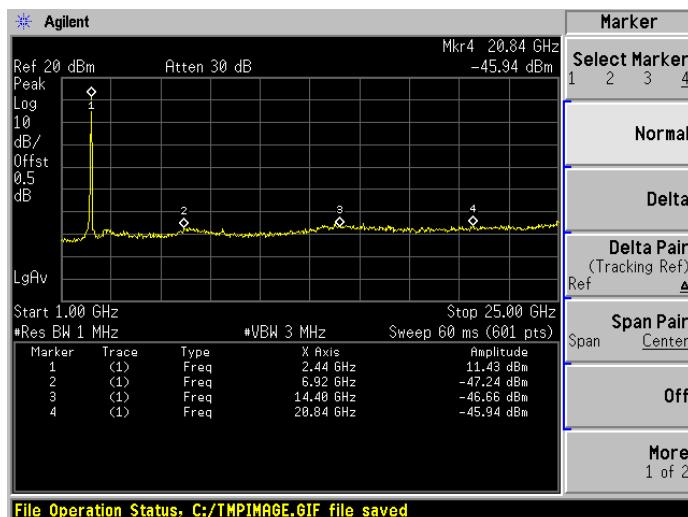
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
14400	-46.66	0	3	5.4	PK	54.00	92.09	38.09	Note 2	Pass
	N/A		3	5.4	AV	N/A	72.09	N/A	Note 3	Pass
20840	-45.94	0	3	5.4	PK	54.72	74.00	19.28	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
2440	11.43	0	3	5.4	PK	112.09	N/A	N/A	Note 1	Pass
	-13.42		3	5.4	AV	87.24	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

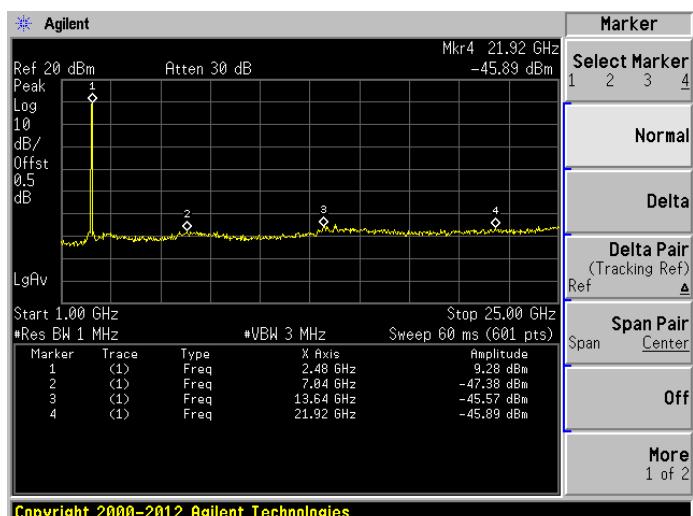
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21920	-45.89	0	3	5.4	PK	54.77	89.94	35.17	Note 2	Pass
	N/A		3	5.4	AV	N/A	69.94	N/A	Note 3	Pass
13640	-45.57	0	3	5.4	PK	55.09	89.94	34.85	Note 2	Pass
	N/A		3	5.4	AV	N/A	69.94	N/A	Note 3	Pass
2480	9.28	0	3	5.4	PK	109.94	N/A	N/A	Note 1	Pass
	-15.57		3	5.4	AV	85.09	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

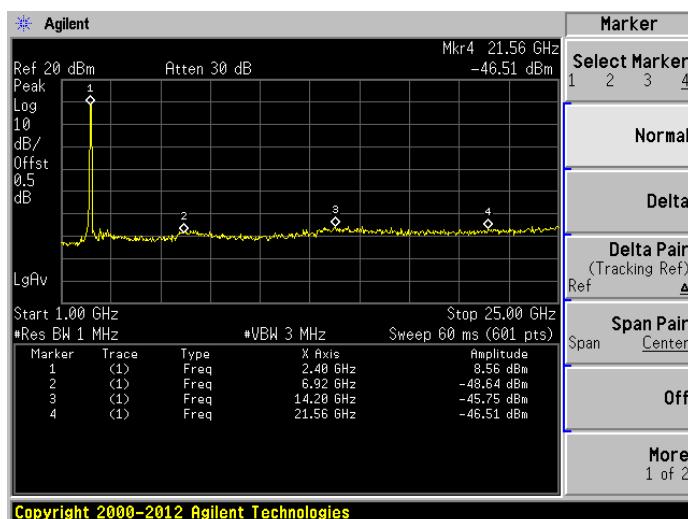
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
21560	-46.51	0	3	5.4	PK	54.15	89.22	35.07	Note 2	Pass
	N/A		3	5.4	AV	N/A	69.22	N/A	Note 3	Pass
14200	-45.75	0	3	5.4	PK	54.91	89.22	34.31	Note 2	Pass
	N/A		3	5.4	AV	N/A	69.22	N/A	Note 3	Pass
2400	8.56	0	3	5.4	PK	109.22	N/A	N/A	Note 1	Pass
	-16.29		3	5.4	AV	84.37	N/A	N/A		Pass

Test Plots

LOW CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

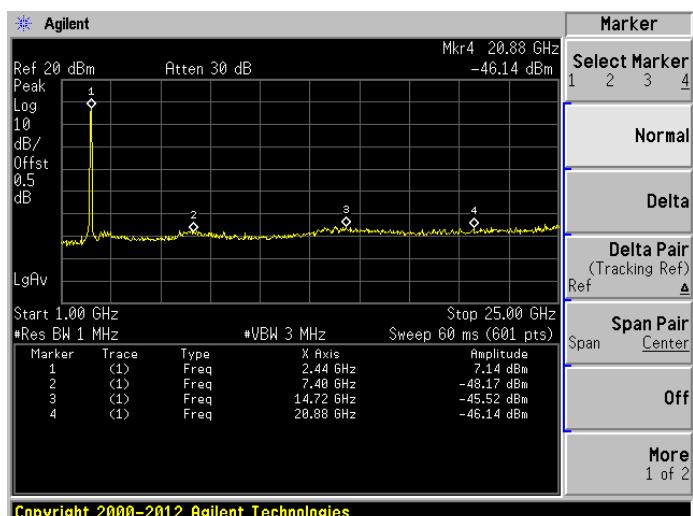
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
20880	-46.14	0	3	5.4	PK	54.52	74.00	19.48	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
14720	-45.52	0	3	5.4	PK	55.14	87.80	32.66	Note 2	Pass
	N/A		3	5.4	AV	N/A	67.80	N/A	Note 3	Pass
2440	7.14	0	3	5.4	PK	107.80	N/A	N/A	Note 1	Pass
	-17.71		3	5.4	AV	82.95	N/A	N/A		Pass

Test Plots

MIDDLE CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 5.4 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

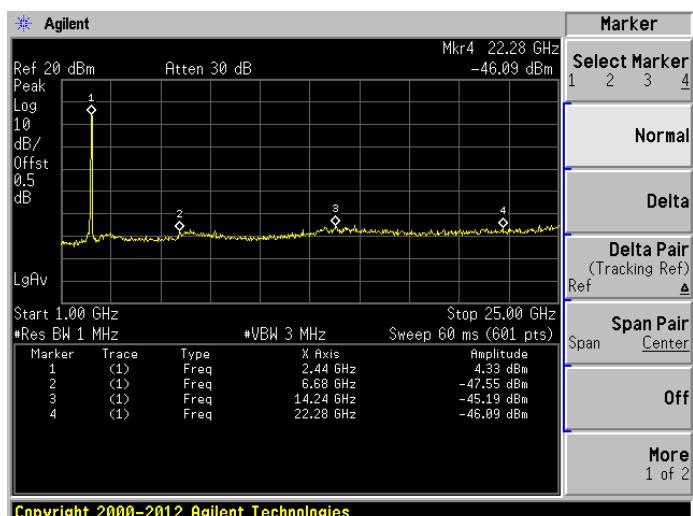
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
22280	-46.09	0	3	5.4	PK	54.57	74.00	19.43	Note 3	Pass
	N/A		3	5.4	AV	N/A	54.00	N/A		Pass
14720	-45.19	0	3	5.4	PK	55.47	84.99	29.52	Note 2	Pass
	N/A		3	5.4	AV	N/A	64.99	N/A	Note 3	Pass
2440	4.33	0	3	5.4	PK	104.99	N/A	N/A	Note 1	Pass
	-20.52		3	5.4	AV	80.14	N/A	N/A		Pass

Test Plots

HIGH CHANNEL, SPURIOUS 1 GHz ~ 25 GHz



Cabinet Radiated spurious emission test

Note 1: The symbol of “--” in the table which means not application.

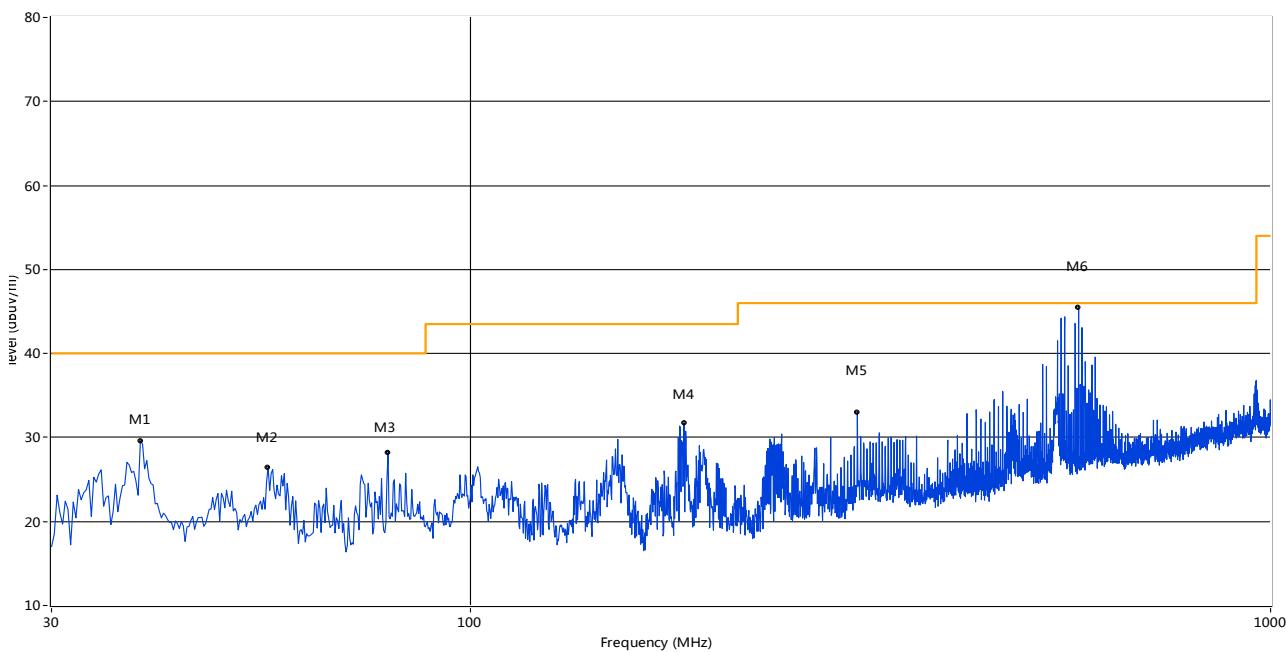
Note 2: For the test data above 1 GHz, According the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note 4: All configure were tested but only the worst data (802.11b Low Channel) was reported in this report.

30 MHz to 1 GHz, ANT H

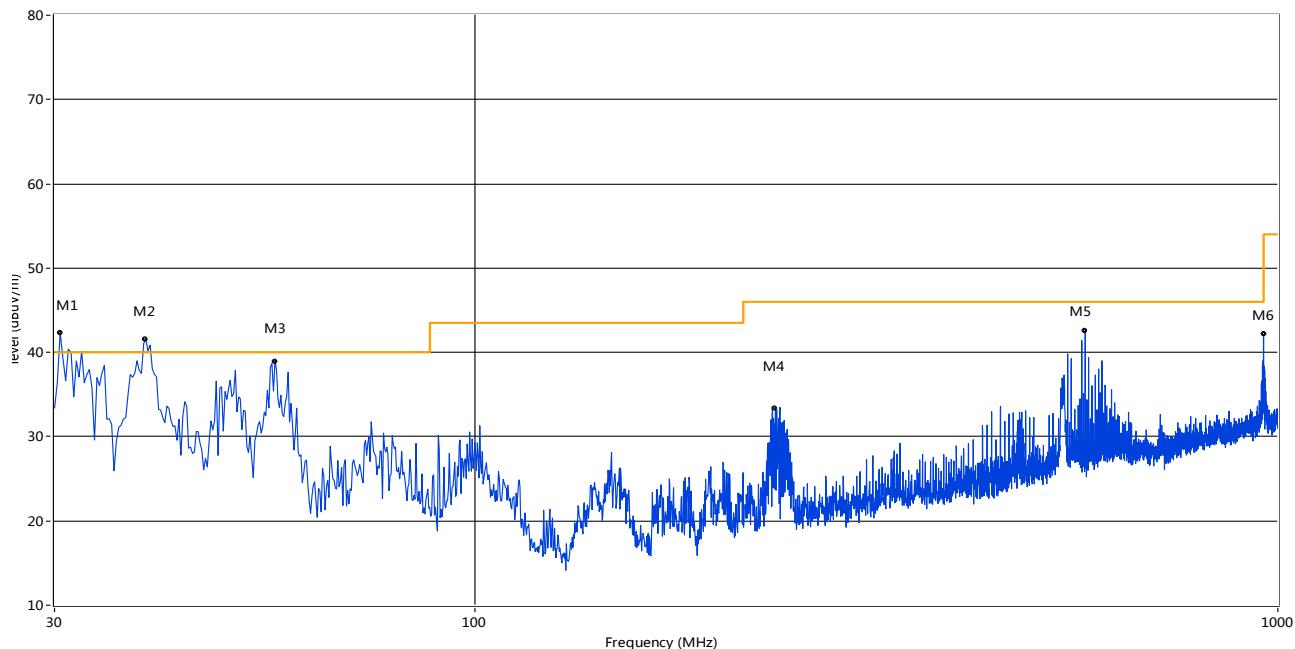
RE Test case_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	38.73	29.59	-20.05	40.0	10.41	Peak	7.30	100	Horizontal	Pass
2	55.94	26.40	-19.30	40.0	13.60	Peak	7.30	100	Horizontal	Pass
3	78.97	28.20	-24.59	40.0	11.80	Peak	16.20	100	Horizontal	Pass
4	185.16	31.67	-21.67	43.5	11.83	Peak	112.00	100	Horizontal	Pass
5	304.68	33.02	-17.49	46.0	12.98	Peak	263.70	100	Horizontal	Pass
6	575.73	45.42	-11.65	46.0	0.58	Peak	96.90	100	Horizontal	Pass
6*	575.73	43.58	-11.65	46.0	2.42	QP	96.90	100	Horizontal	Pass

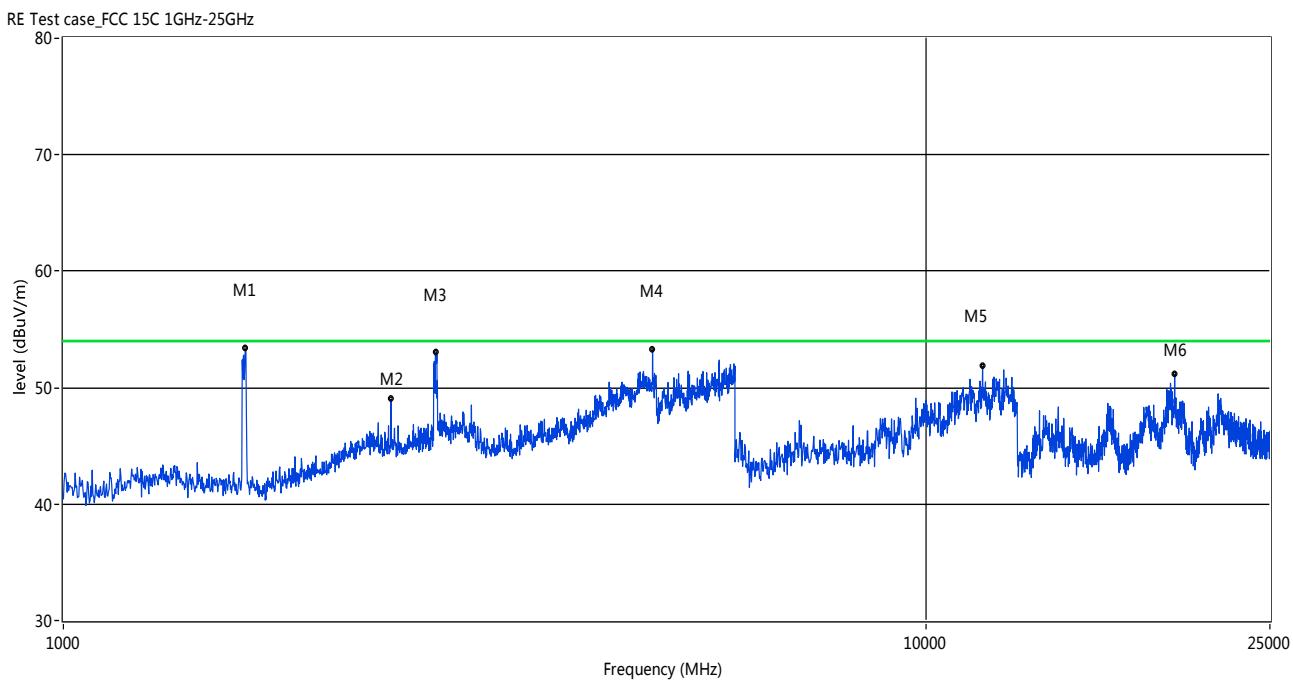
30 MHz to 1 GHz, ANT V

RE Test case_FCC 15C 30MHz-1GHz



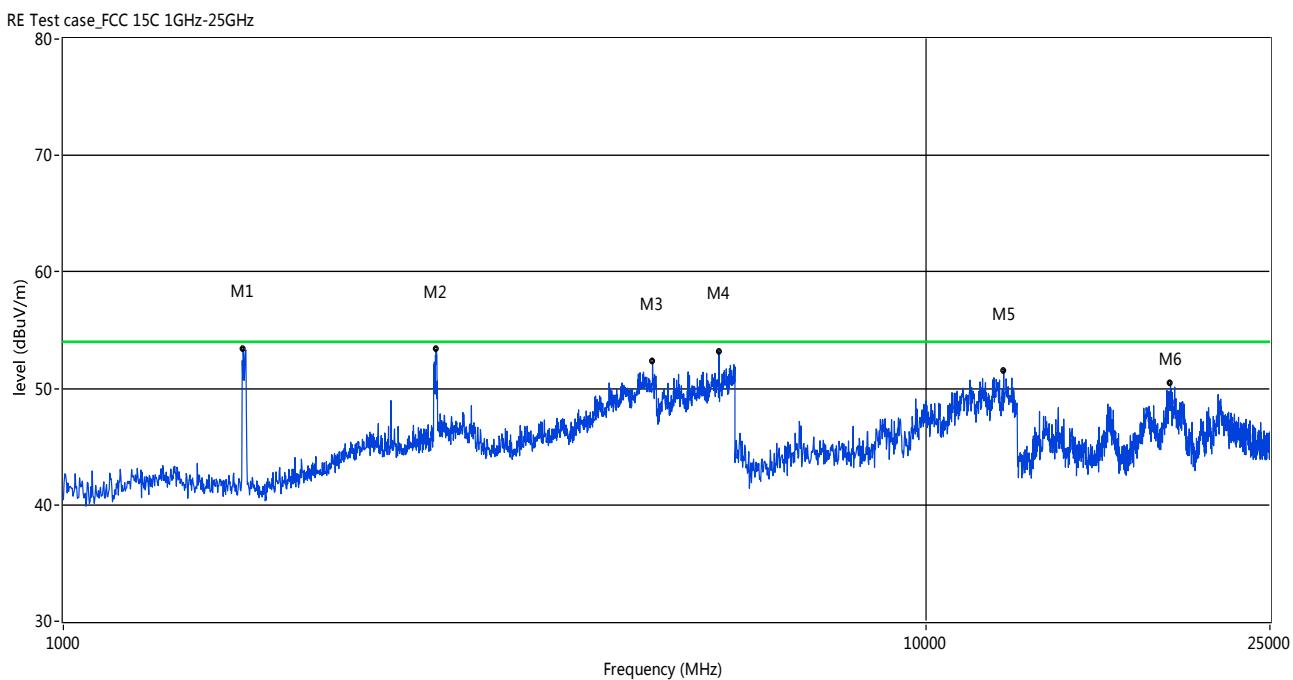
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	30.48	42.34	-21.72	40.0	-2.34	Peak	51.00	100	Vertical	N/A
1*	30.48	37.40	-21.72	40.0	2.60	QP	51.00	100	Vertical	Pass
2	38.97	41.58	-19.96	40.0	-1.58	Peak	316.00	100	Vertical	N/A
2*	38.97	37.60	-19.96	40.0	2.40	QP	316.00	100	Vertical	Pass
3	56.43	38.94	-19.32	40.0	1.06	Peak	143.00	100	Vertical	Pass
3*	56.43	35.31	-19.32	40.0	4.69	QP	143.00	100	Vertical	Pass
4	236.80	33.37	-19.34	46.0	12.63	Peak	215.00	100	Vertical	Pass
5	575.73	42.55	-11.65	46.0	3.45	Peak	223.00	100	Vertical	Pass
6	959.75	42.11	-5.02	46.0	3.89	Peak	112.00	100	Vertical	Pass

1 GHz to 25 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1627.37	53.30	-4.32	74.0	20.70	Peak	208.00	100	Vertical	Pass
2	2396.60	48.96	-0.39	74.0	25.04	Peak	220.00	100	Vertical	Pass
3	2704.30	53.04	1.71	74.0	20.96	Peak	103.00	100	Vertical	Pass
4	4816.18	53.27	13.91	74.0	20.73	Peak	91.00	100	Vertical	Pass
5	11615.64	51.84	20.33	74.0	22.16	Peak	91.00	100	Vertical	Pass
6	19389.35	51.11	12.97	74.0	22.89	Peak	292.00	100	Vertical	Pass

1 GHz to 25 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1615.38	53.41	-4.30	74.0	20.59	Peak	47.00	100	Horizontal	Pass
2	2702.30	53.34	1.67	74.0	20.66	Peak	329.00	100	Horizontal	Pass
3	4816.18	52.27	13.91	74.0	21.73	Peak	332.00	100	Horizontal	Pass
4	5748.25	53.17	15.48	74.0	20.83	Peak	85.00	100	Horizontal	Pass
5	12289.52	51.53	20.65	74.0	22.47	Peak	277.00	100	Horizontal	Pass
6	19179.70	50.38	14.04	74.0	23.62	Peak	86.00	100	Horizontal	Pass

A.6 Band Edges

Test Data

The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Test Data (ANT 0)

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-31.06	8.91	-11.09	Pass
High Channel	-45.87	8.53	-11.47	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-24.19	6.09	-13.91	Pass
High Channel	-39.37	4.66	-15.34	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.95	4.89	-15.11	Pass
High Channel	-41.63	3.14	-16.86	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.68	0.69	-19.31	Pass
High Channel	-36.68	-1.76	-21.76	Pass

Test Data (ANT 1)

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-31.06	8.92	-11.08	Pass
High Channel	-43.38	9.43	-10.57	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-23.37	7.33	-12.67	Pass
High Channel	-39.37	4.39	-15.61	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.48	5.07	-14.93	Pass
High Channel	-42.46	2.72	-17.28	Pass

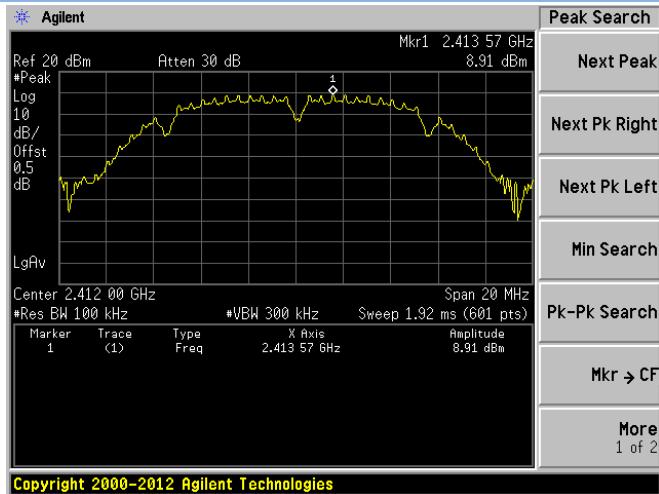
802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.45	0.01	-19.99	Pass
High Channel	-36.34	-2.44	-22.44	Pass

Test Plots

ANT 0

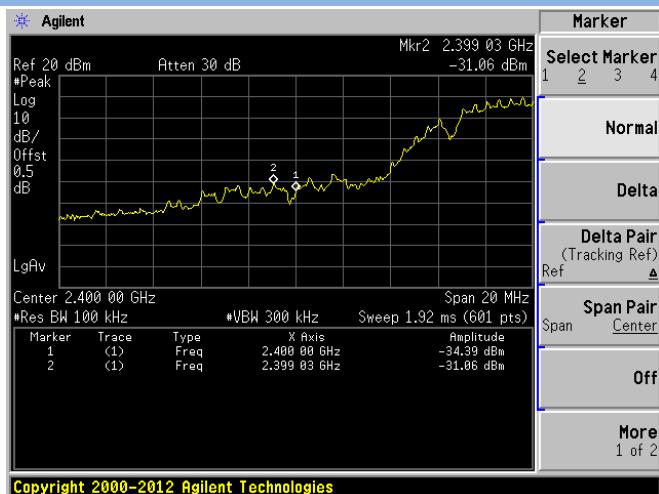
802.11b LOW CHANNEL, Carrier level



Peak Search

- Next Peak
- Next Pk Right
- Next Pk Left
- Min Search
- Pk-Pk Search
- Mkr → CF
- More 1 of 2

802.11b LOW CHANNEL, Reference level

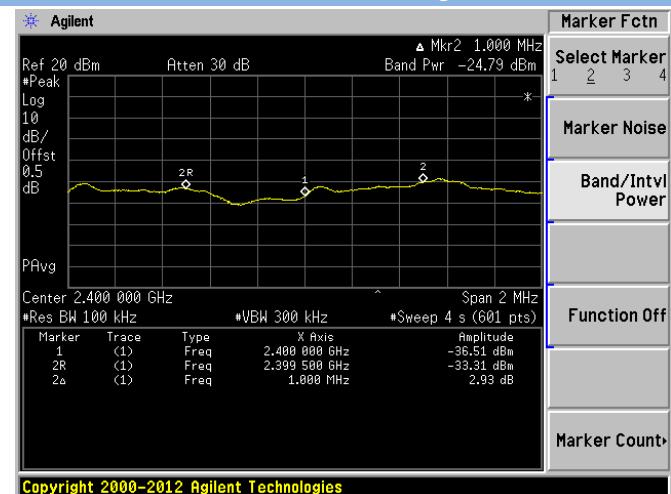


Marker

Select Marker 1 2 3 4

- Normal
- Delta
- Delta Pair (Tracking Ref) Ref
- Span Pair Span Center
- Off
- More 1 of 2

802.11b LOW CHANNEL, Band Edge

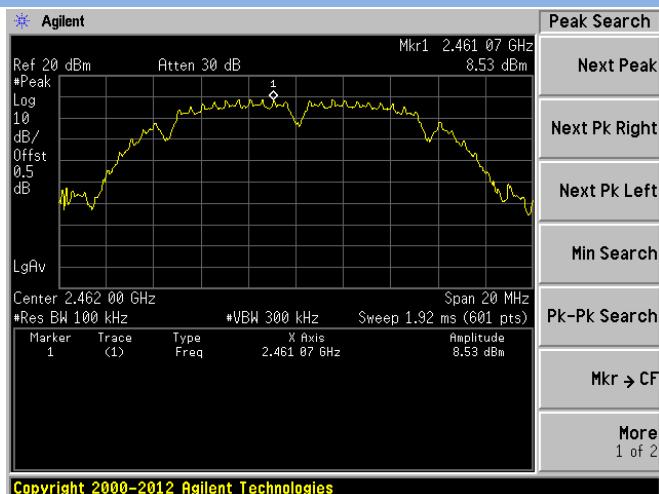


Marker Fctn

Select Marker 1 2 3 4

- Marker Noise
- Band/Intvl Power
- Function Off
- Marker Count

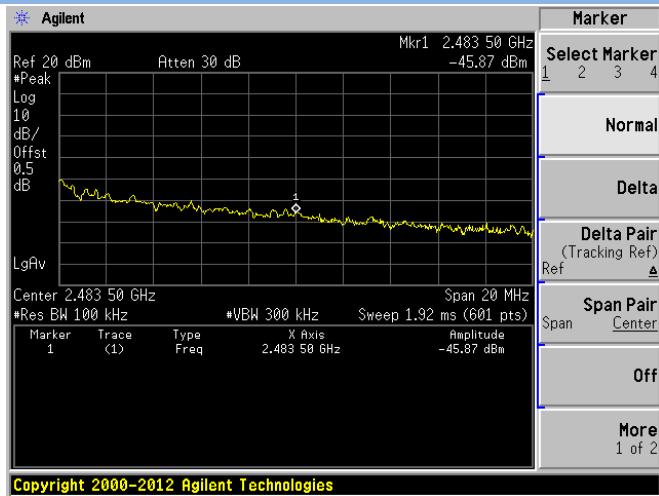
802.11b HIGH CHANNEL, Carrier level



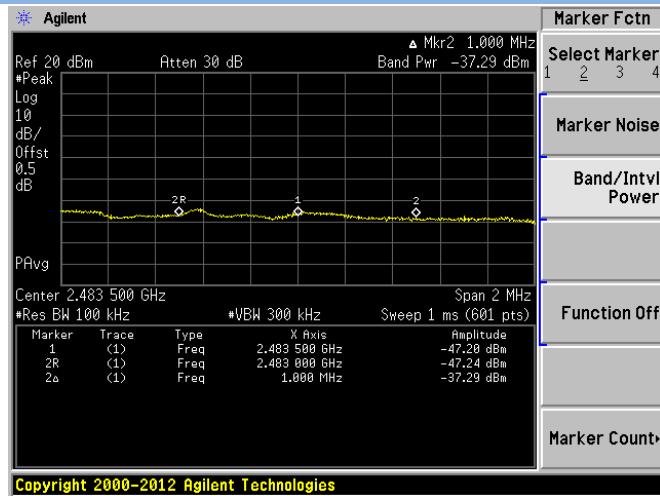
Peak Search

- Next Peak
- Next Pk Right
- Next Pk Left
- Min Search
- Pk-Pk Search
- Mkr → CF
- More 1 of 2

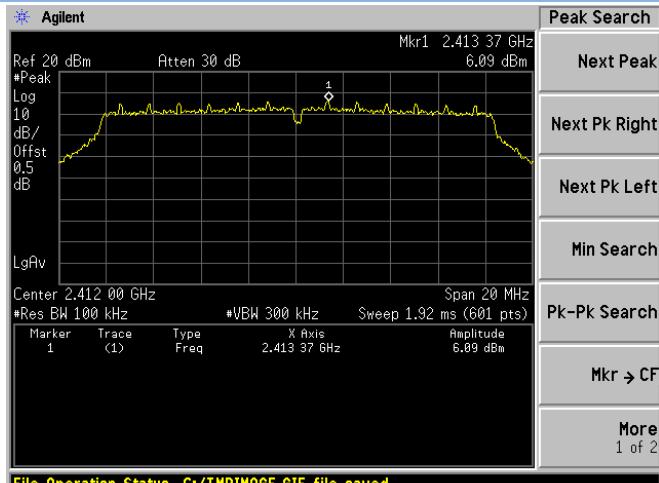
802.11b HIGH CHANNEL, Reference level



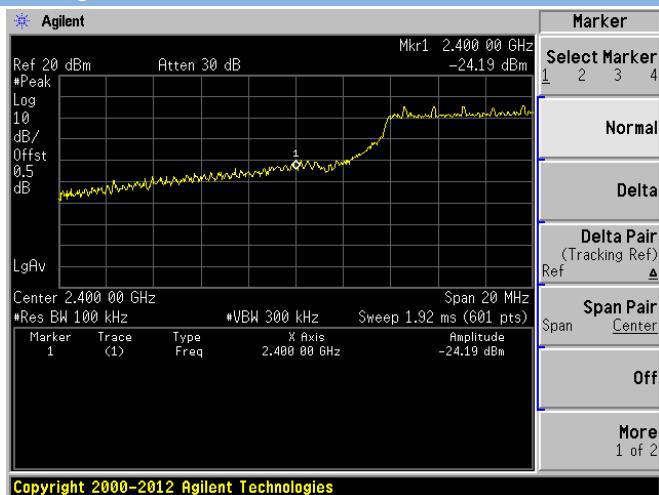
802.11b HIGH CHANNEL, Band Edge



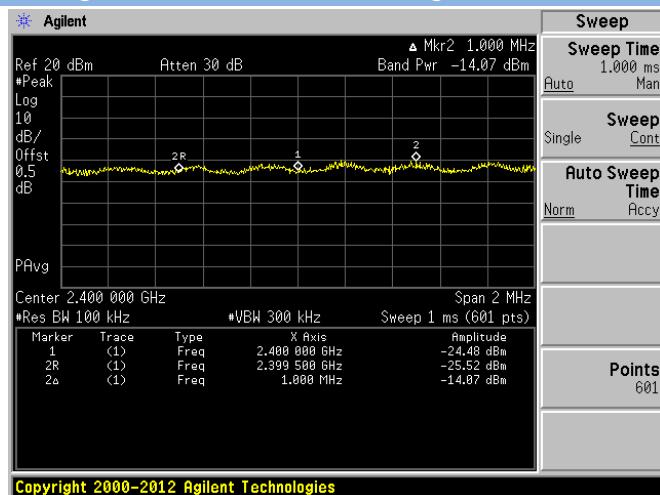
802.11g LOW CHANNEL, Carrier level



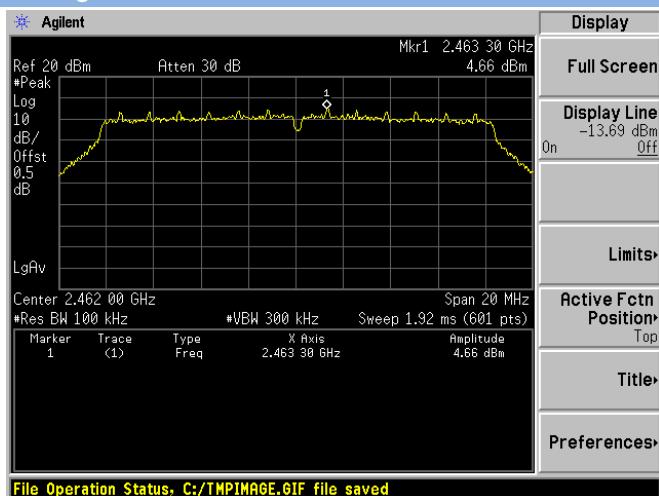
802.11g LOW CHANNEL, Reference level



802.11g LOW CHANNEL, Band Edge

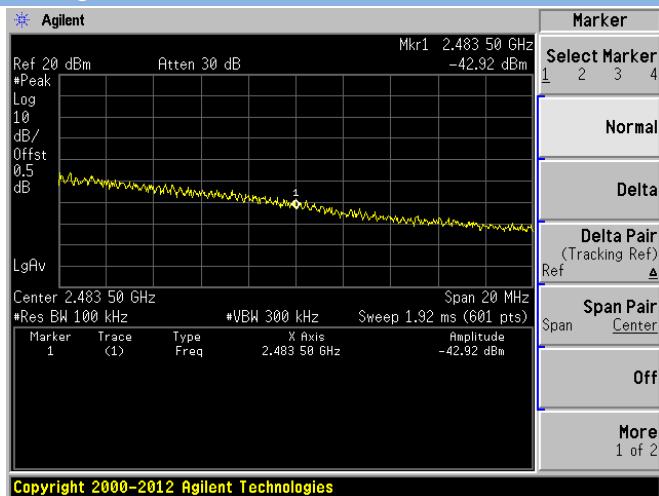


802.11g HIGH CHANNEL, Carrier level



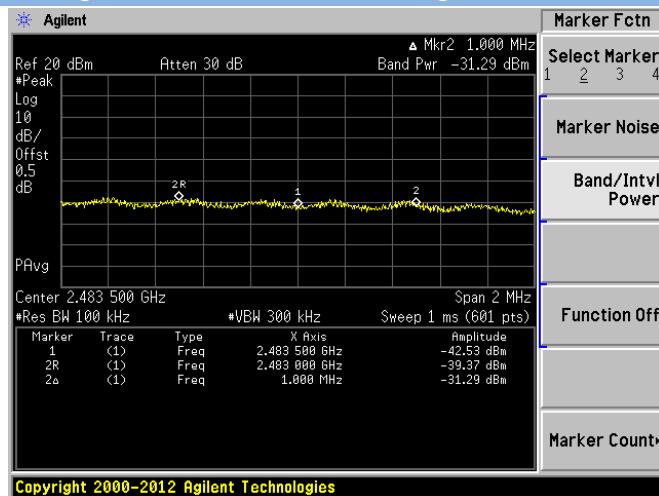
Display
Full Screen
Display Line
On -13.69 dBm Off
Limits
Active Fctn Position Top
Title
Preferences

802.11g HIGH CHANNEL, Reference level



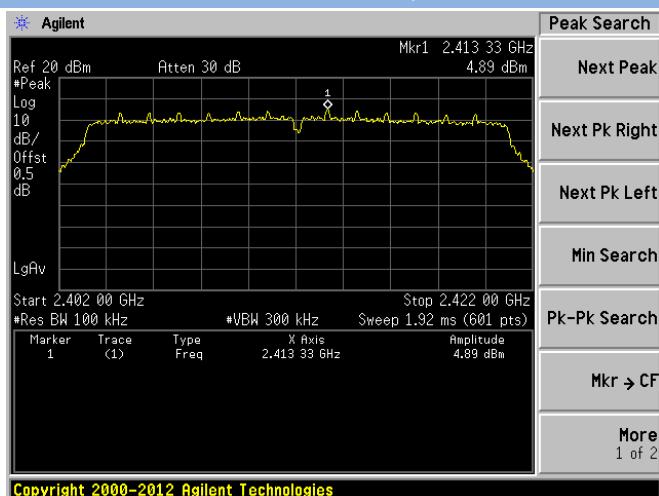
Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

802.11g HIGH CHANNEL, Band Edge



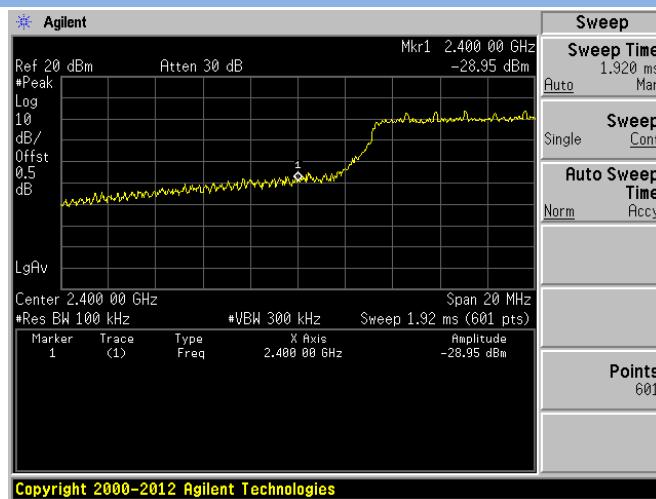
Marker Fctn
Select Marker 1 2 3 4
Marker Noise
Band/Intvl Power
Function Off
Marker Count

802.11n-20 MHz LOW CHANNEL, Carrier level

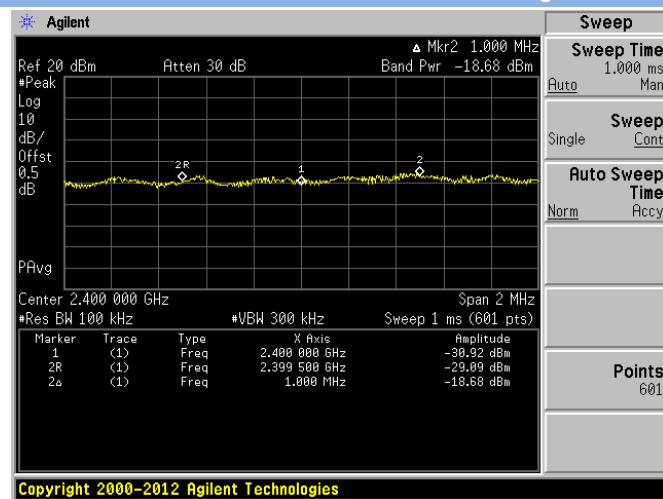


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More 1 of 2

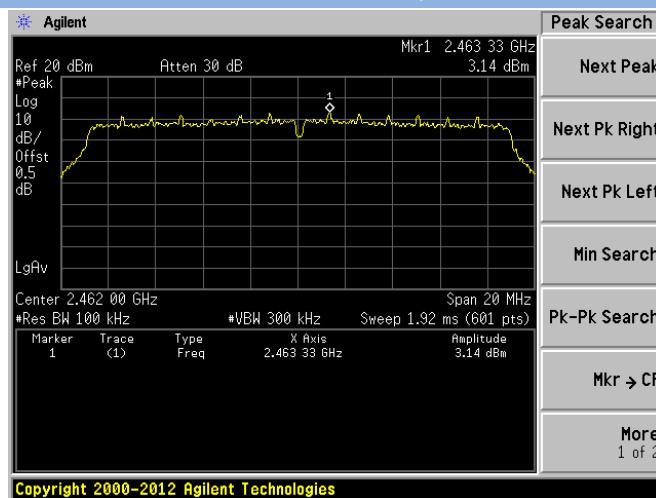
802.11n-20 MHz LOW CHANNEL, Reference level



802.11n-20 MHz LOW CHANNEL, Band Edge



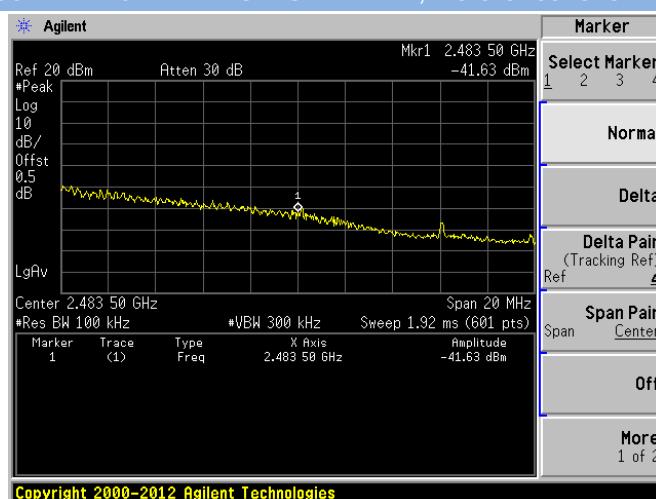
802.11n-20 MHz HIGH CHANNEL, Carrier level



Peak Search

- Next Peak
- Next Pk Right
- Next Pk Left
- Min Search
- Pk-Pk Search
- Mkr → CF
- More 1 of 2

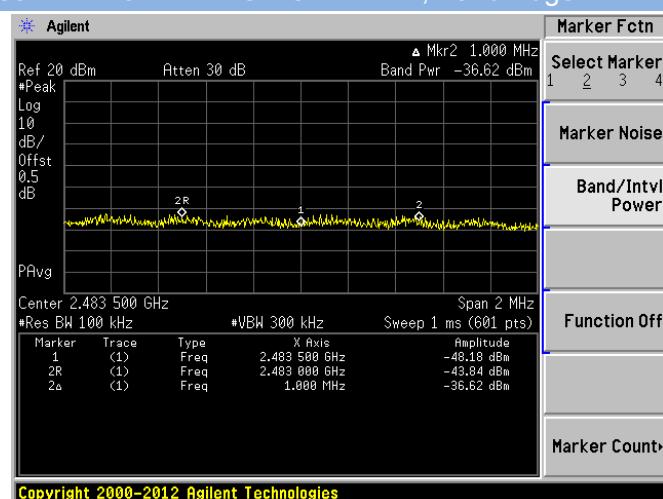
802.11n-20 MHz HIGH CHANNEL, Reference level



Marker

- Select Marker 1 2 3 4
- Normal
- Delta
- Delta Pair (Tracking Ref) Ref ▲
- Span Pair Span Center
- Off
- More 1 of 2

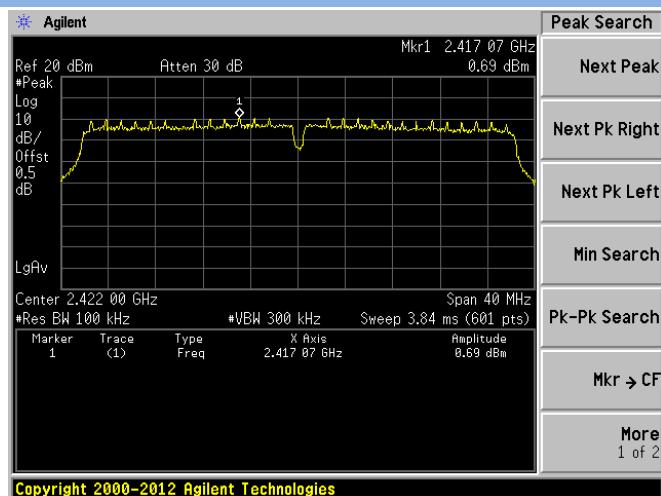
802.11n-20 MHz HIGH CHANNEL, Band Edge



Marker Fctn

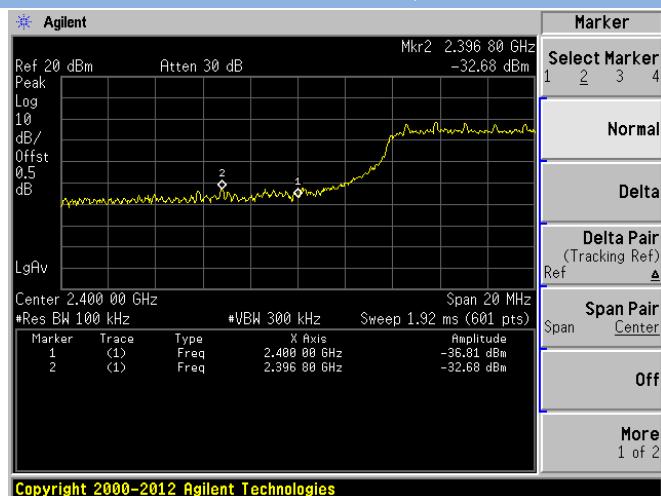
- Select Marker 1 2 3 4
- Marker Noise
- Band/Intvl Power
- Function Off
- Marker Count

802.11n-40 MHz LOW CHANNEL, Carrier level



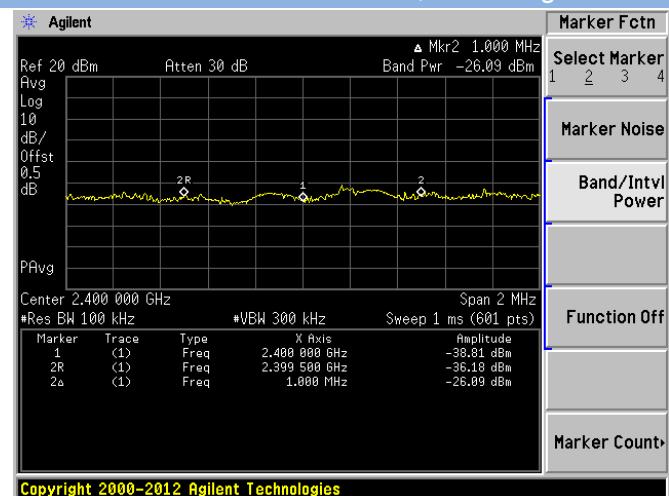
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More 1 of 2

802.11n-40 MHz LOW CHANNEL, Reference level



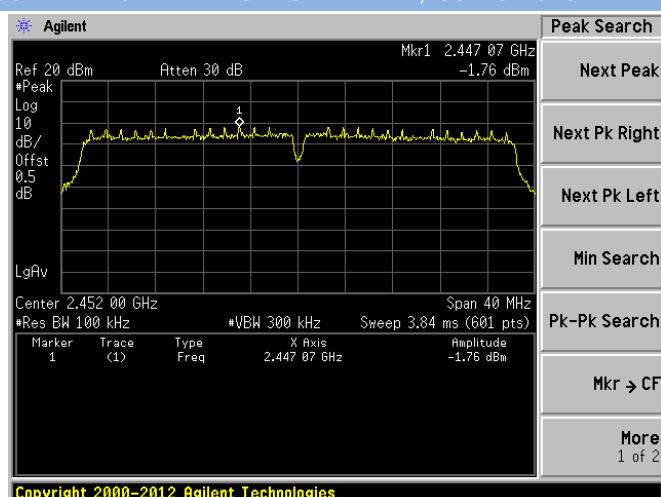
Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

802.11n-40 MHz LOW CHANNEL, Band Edge



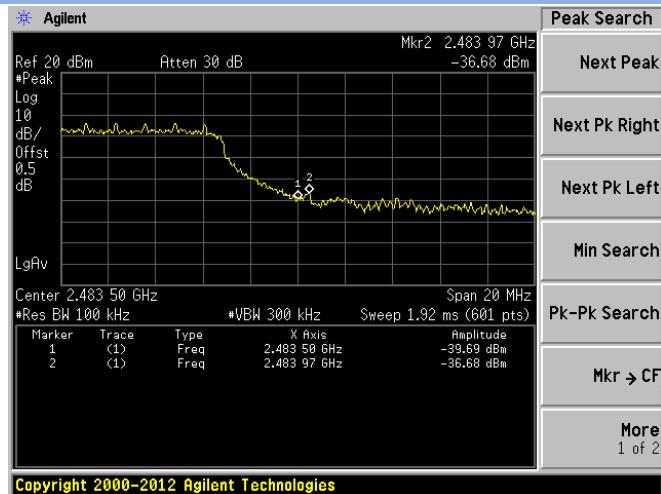
Marker Fctn
Select Marker 1 2 3 4
Marker Noise
Band/Intvl Power
Function Off
Marker Count

802.11n-40 MHz HIGH CHANNEL, Carrier level

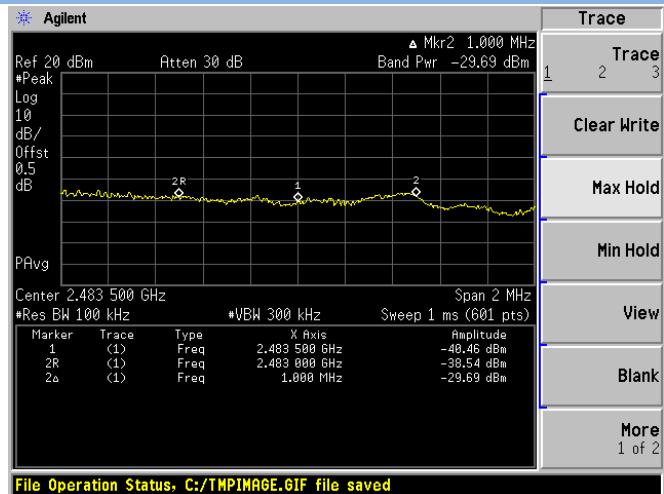


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More 1 of 2

802.11n-40 MHz HIGH CHANNEL, Reference level

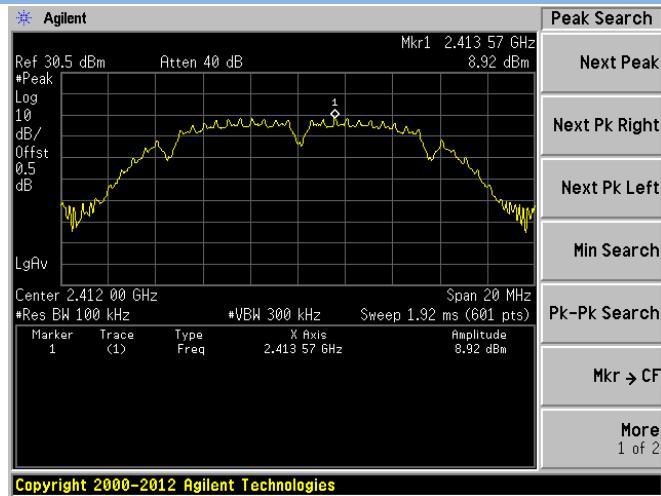


802.11n-40 MHz HIGH CHANNEL, Band Edge



ANT 1

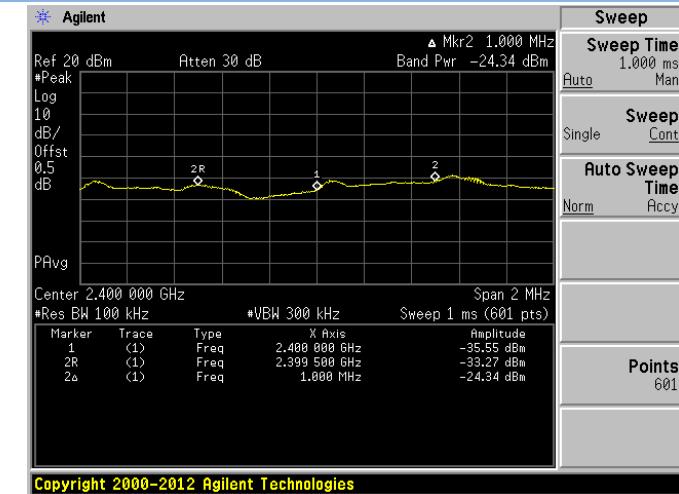
802.11b LOW CHANNEL, Carrier level



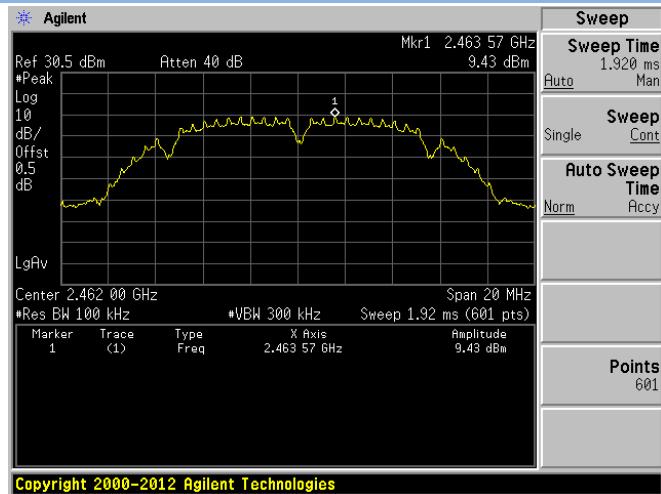
802.11b LOW CHANNEL, Reference level



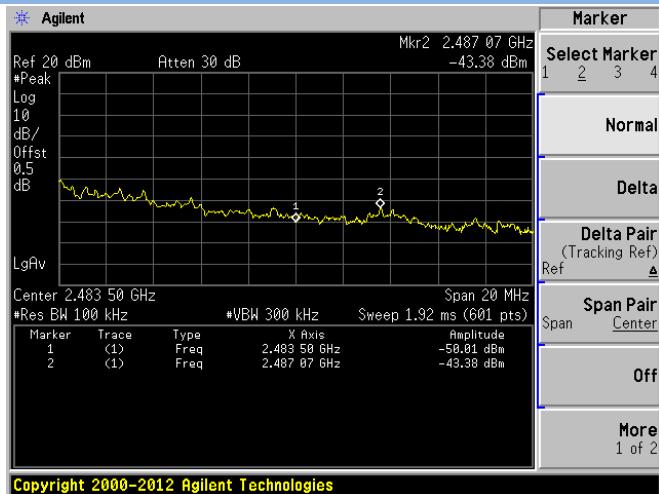
802.11b LOW CHANNEL, Band Edge



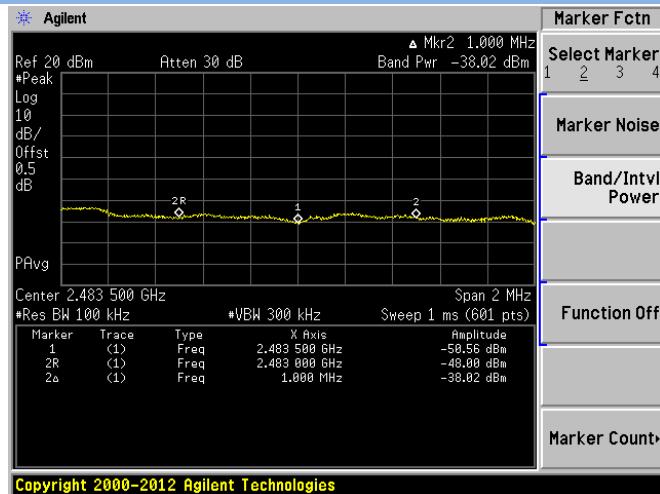
802.11b HIGH CHANNEL, Carrier level



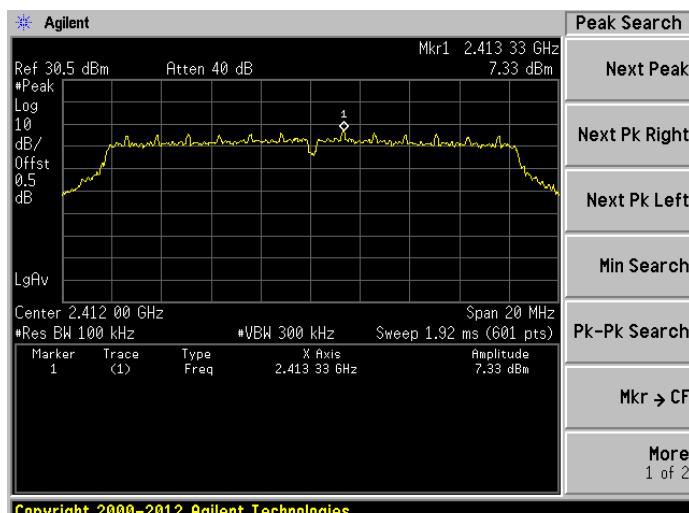
802.11b HIGH CHANNEL, Reference level



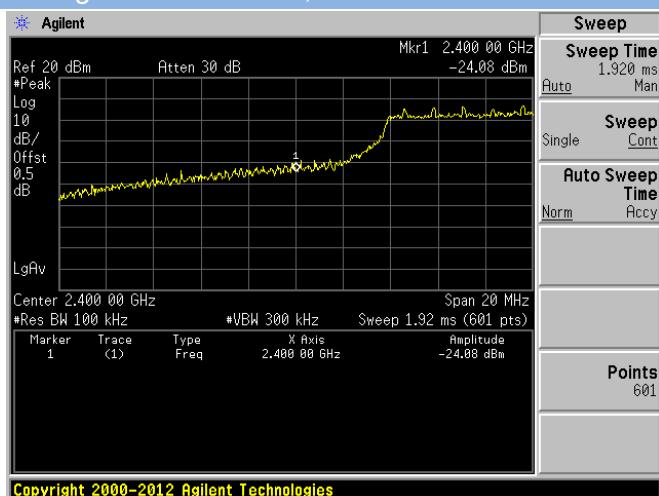
802.11b HIGH CHANNEL, Band Edge



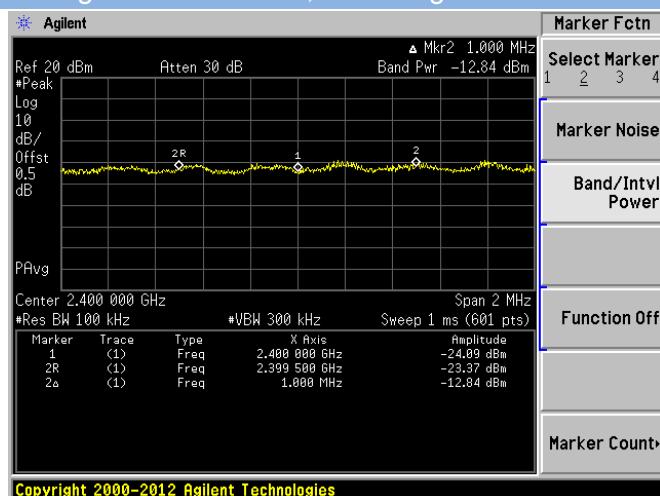
802.11g LOW CHANNEL, Carrier level



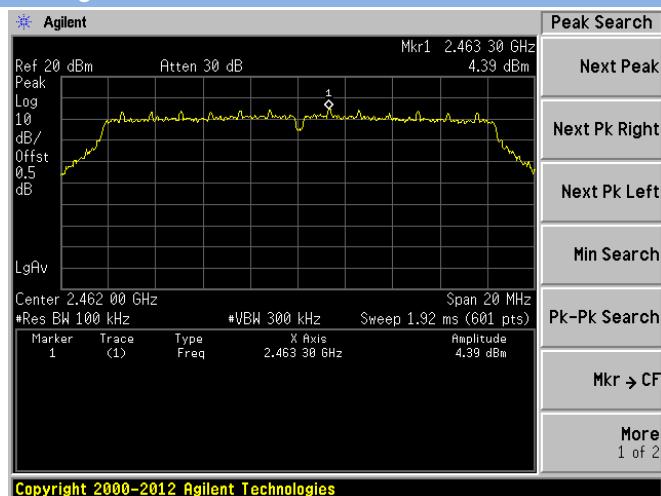
802.11g LOW CHANNEL, Reference level



802.11g LOW CHANNEL, Band Edge



802.11g HIGH CHANNEL, Carrier level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

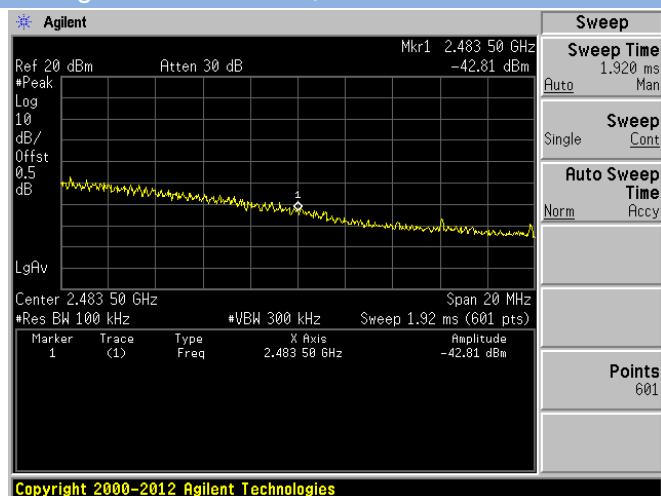
Min Search

Pk-Pk Search

Mkr → CF

More 1 of 2

802.11g HIGH CHANNEL, Reference level



Sweep

Sweep Time 1.920 ms Man

Auto Single Sweep Cont

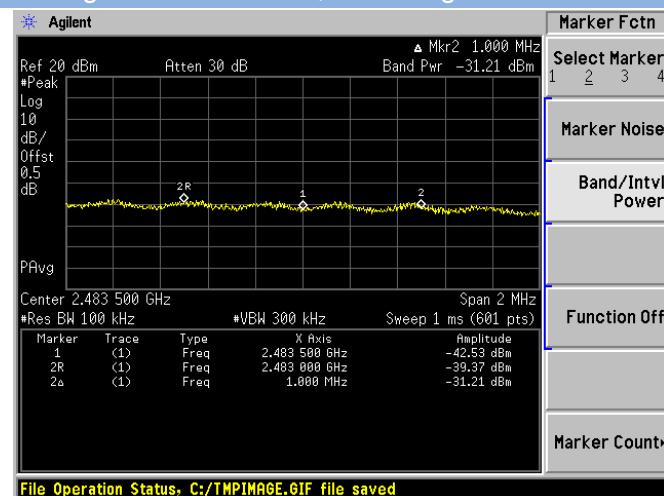
Auto Sweep Time Accy

Norm

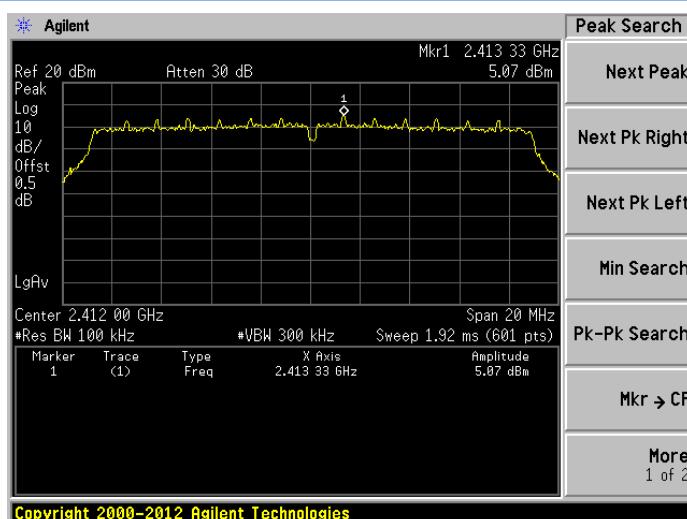
PAvg

Points 601

802.11g HIGH CHANNEL, Band Edge



802.11n-20 MHz LOW CHANNEL, Carrier level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

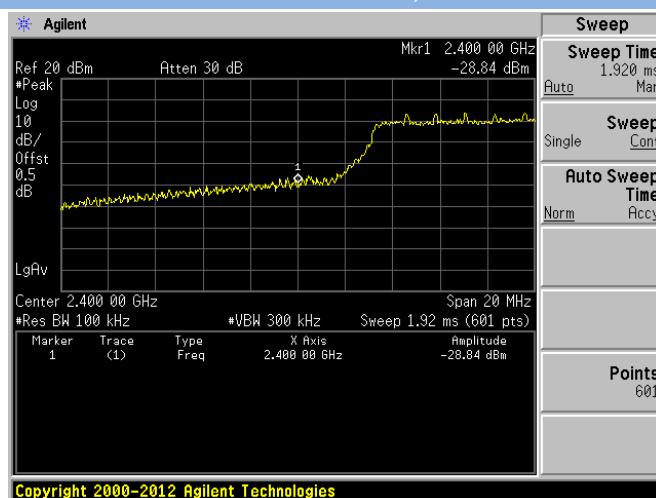
Min Search

Pk-Pk Search

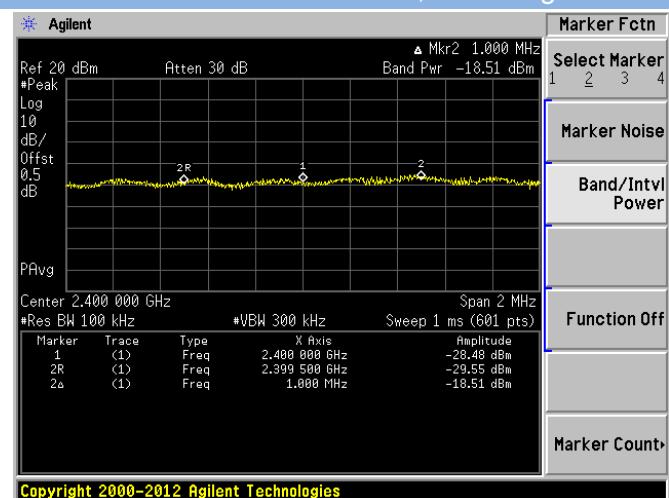
Mkr → CF

More 1 of 2

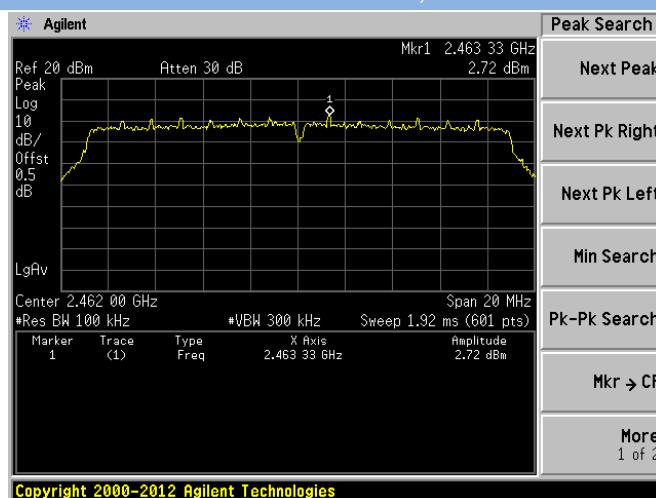
802.11n-20 MHz LOW CHANNEL, Reference level



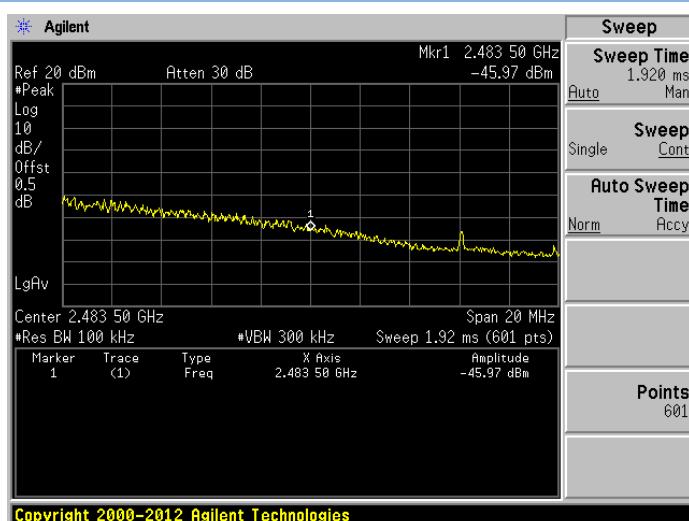
802.11n-20 MHz LOW CHANNEL, Band Edge



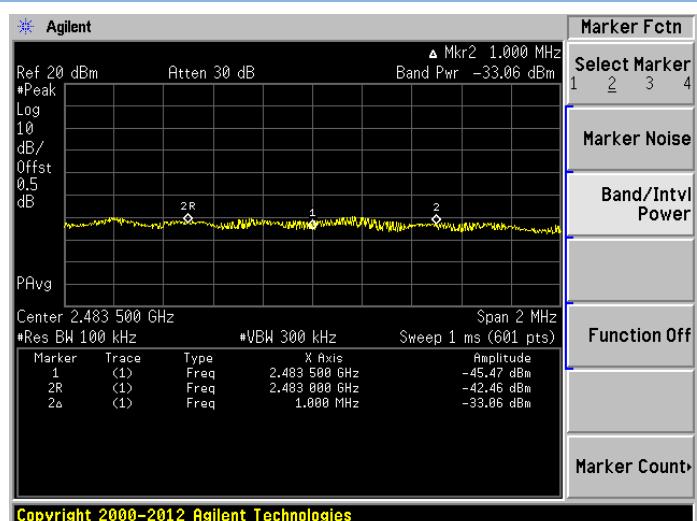
802.11n-20 MHz HIGH CHANNEL, Carrier level



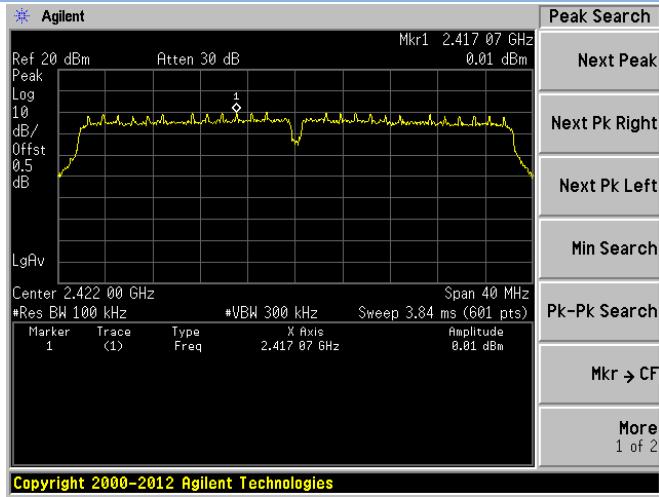
802.11n-20 MHz HIGH CHANNEL, Reference level



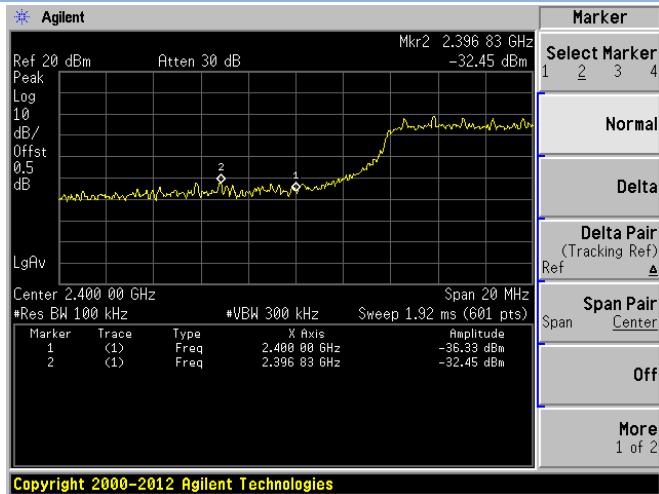
802.11n-20 MHz HIGH CHANNEL, Band Edge



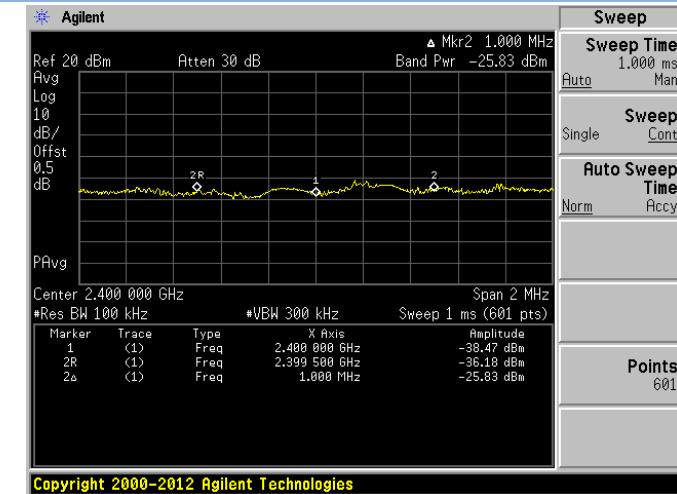
802.11n-40 MHz LOW CHANNEL, Carrier level



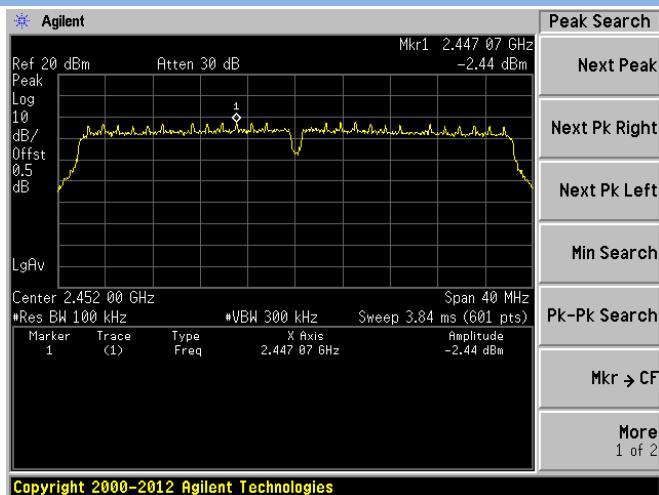
802.11n-40 MHz LOW CHANNEL, Reference level



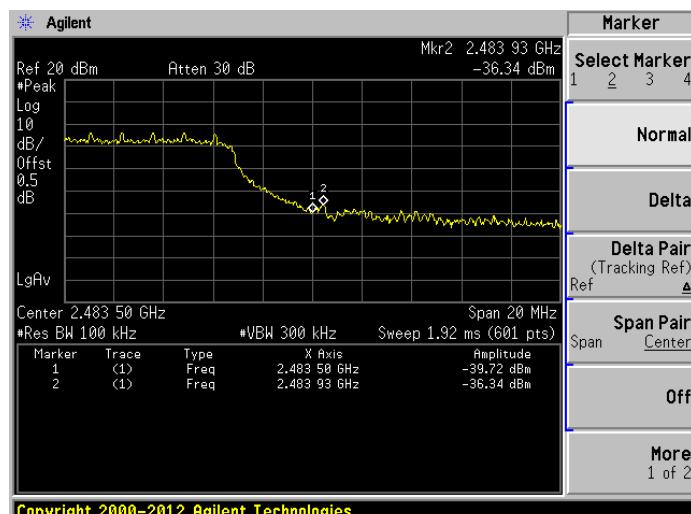
802.11n-40 MHz LOW CHANNEL, Band Edge



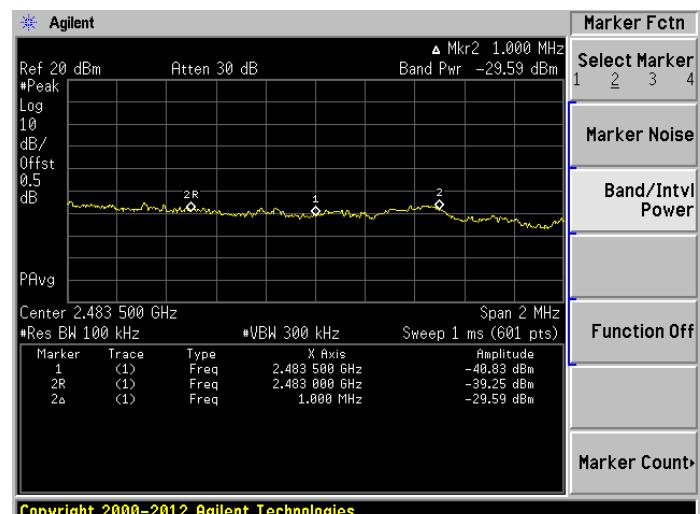
802.11n-40 MHz HIGH CHANNEL, Carrier level



802.11n-40 MHz HIGH CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Band Edge



A.7 Power Spectral Density (PSD)

Test Data

ANT 0

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-5.76	8
Middle	-4.35	8
High	-6.60	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.46	8
Middle	-8.96	8
High	-10.61	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-10.13	8
Middle	-10.90	8
High	-12.52	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-13.80	8
Middle	-14.93	8
High	-16.54	8

ANT 1

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-4.83	8
Middle	-4.60	8
High	-5.10	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.26	8
Middle	-7.59	8
High	-9.00	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-10.39	8
Middle	-8.79	8
High	-11.36	8

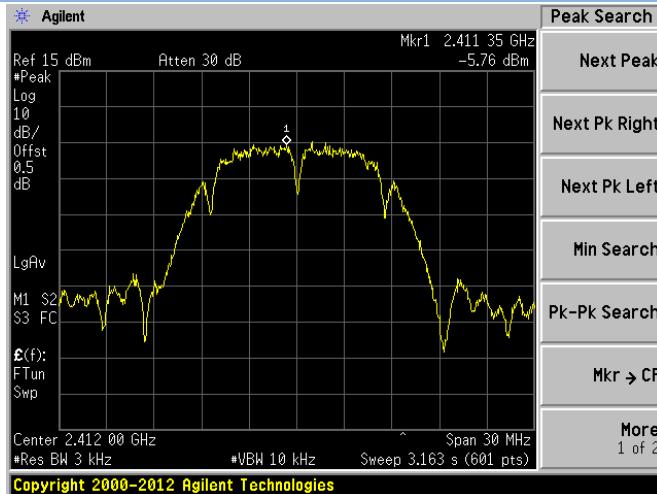
802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.90	8
Middle	-13.57	8
High	-17.05	8

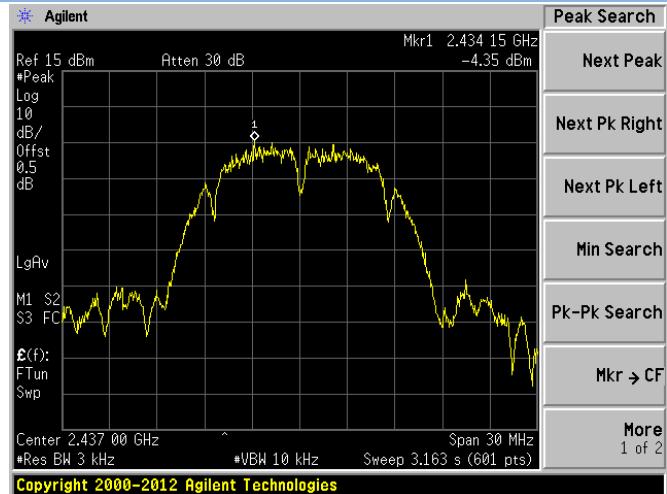
Test plots

ANT 0

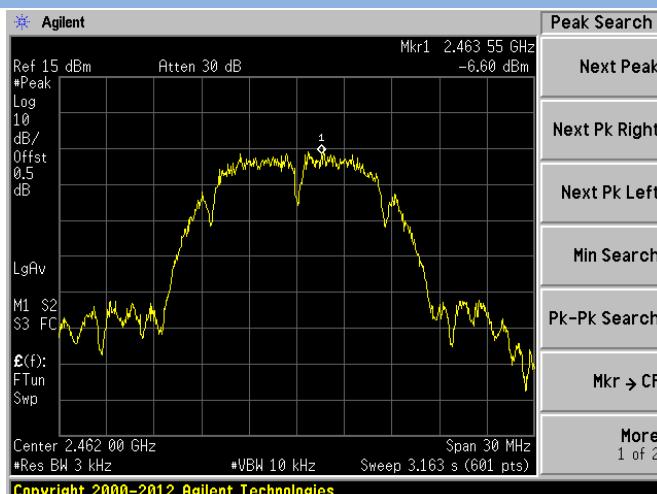
802.11b LOW CHANNEL



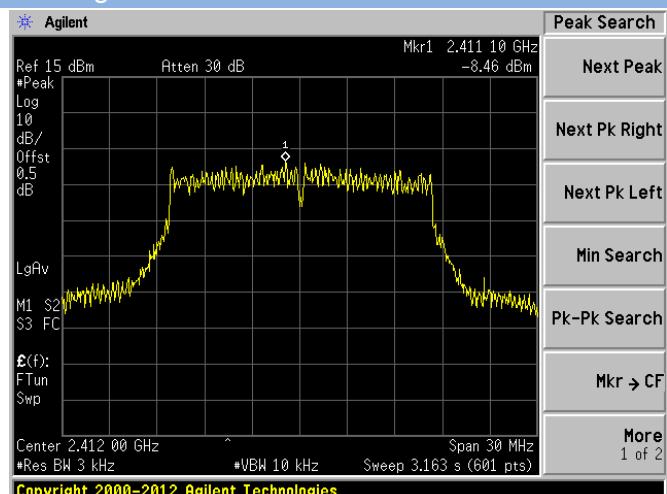
802.11b MIDDLE CHANNEL



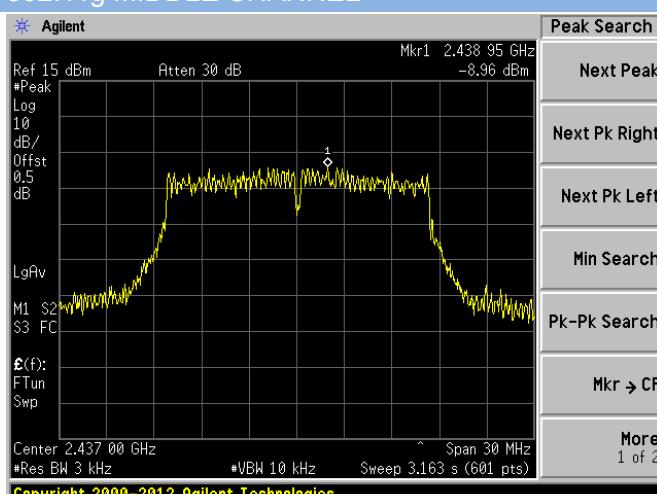
802.11b HIGH CHANNEL



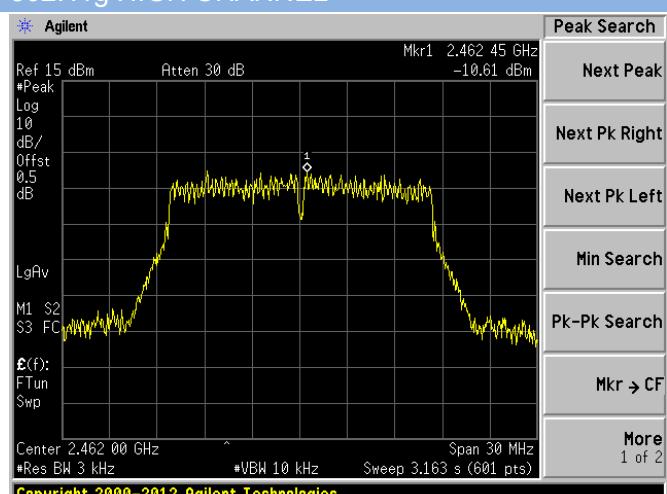
802.11g LOW CHANNEL



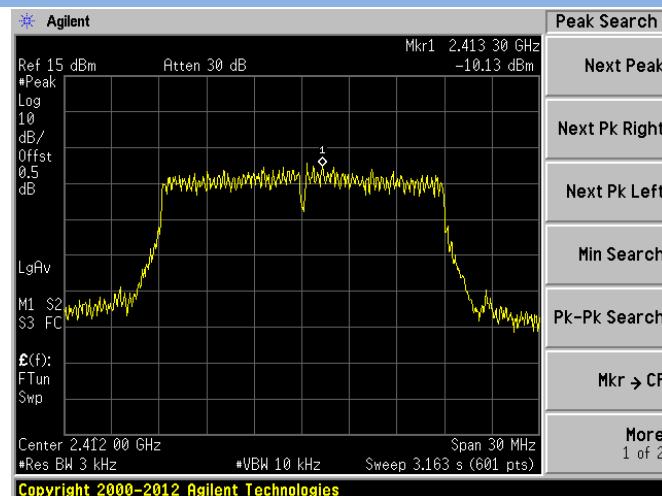
802.11g MIDDLE CHANNEL



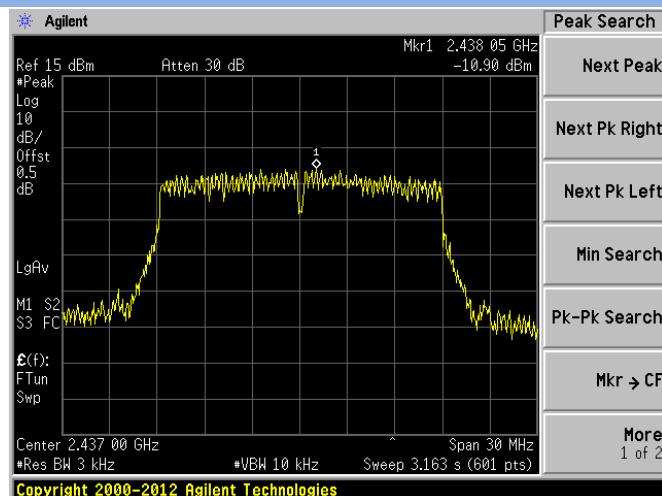
802.11g HIGH CHANNEL



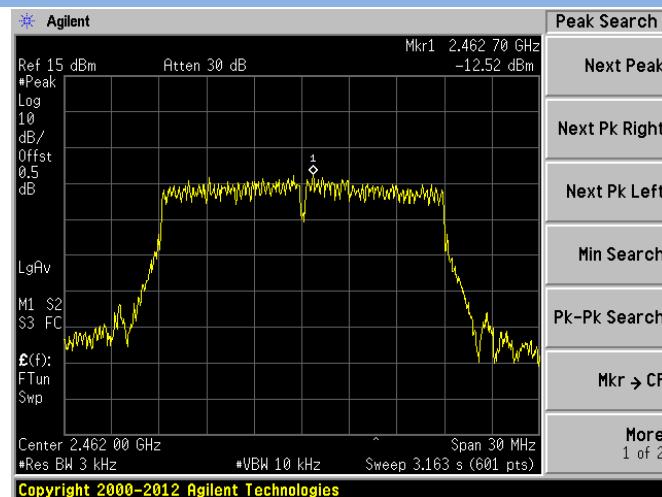
802.11n-20 MHz LOW CHANNEL



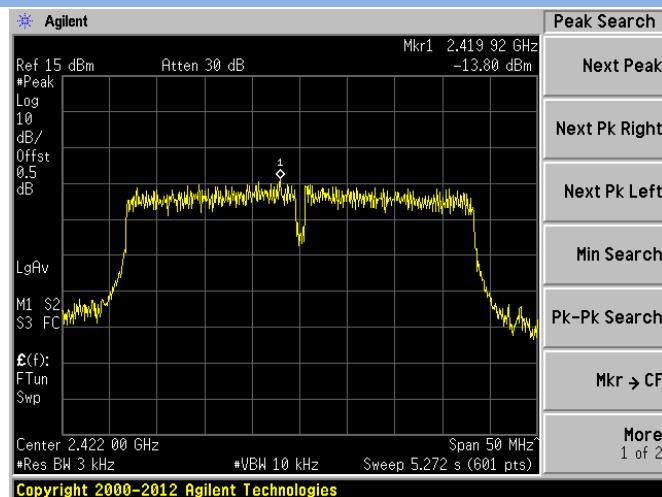
802.11n-20 MHz MIDDLE CHANNEL



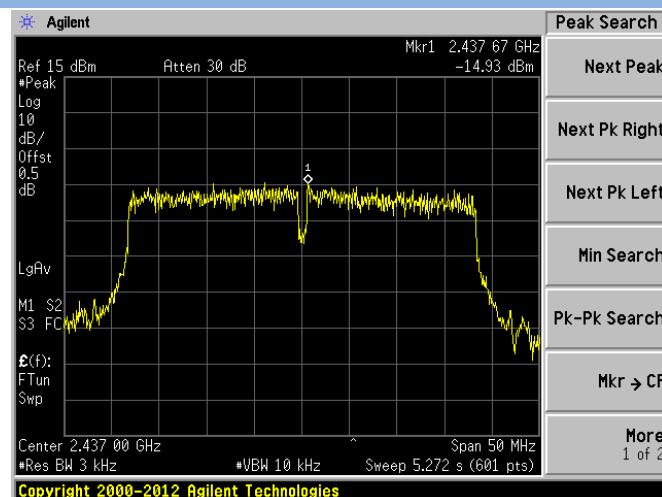
802.11n-20 MHz HIGH CHANNEL



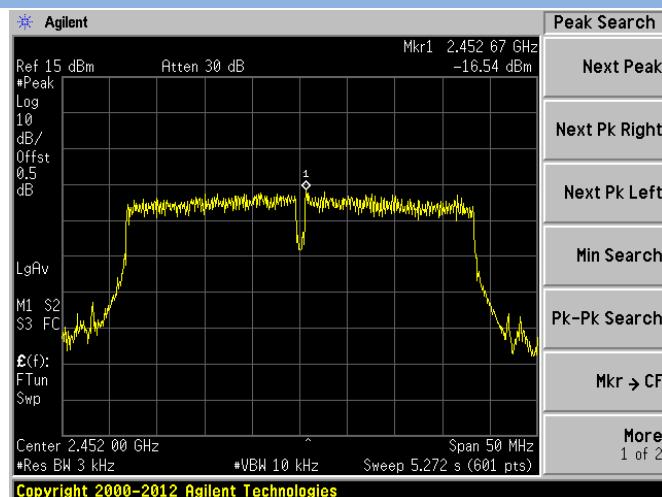
802.11n-40 MHz LOW CHANNEL

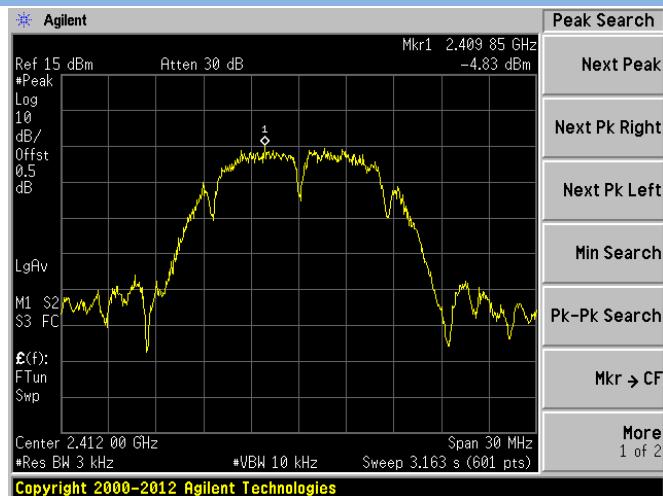
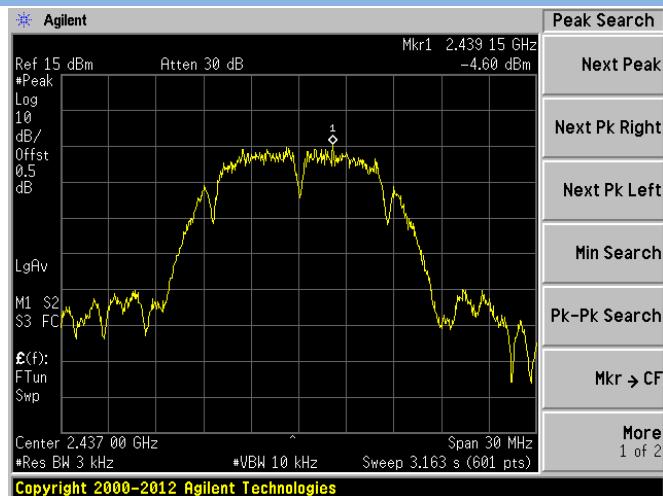
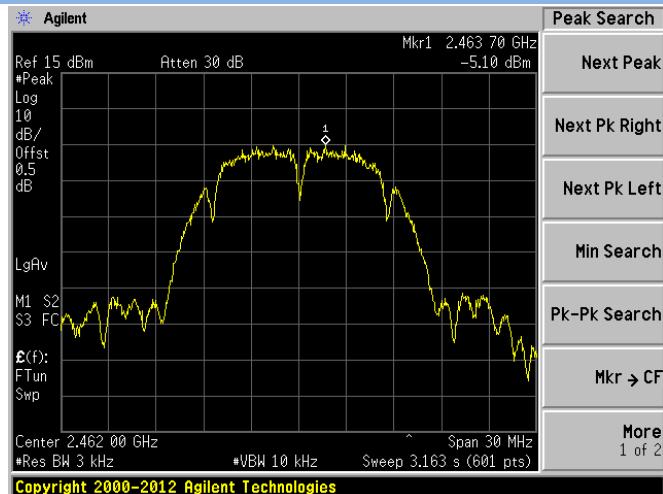
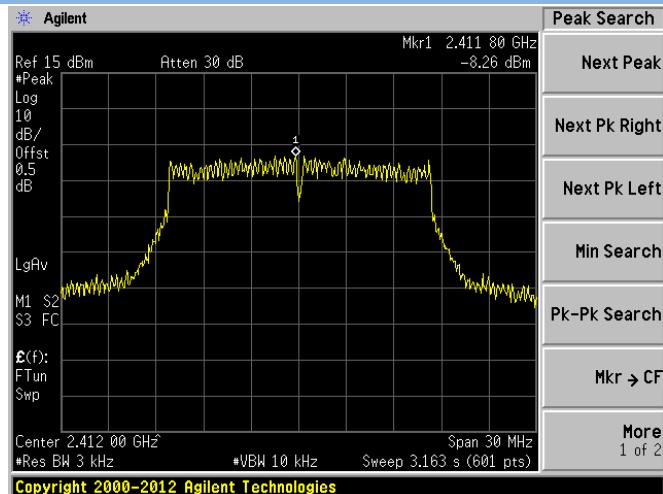
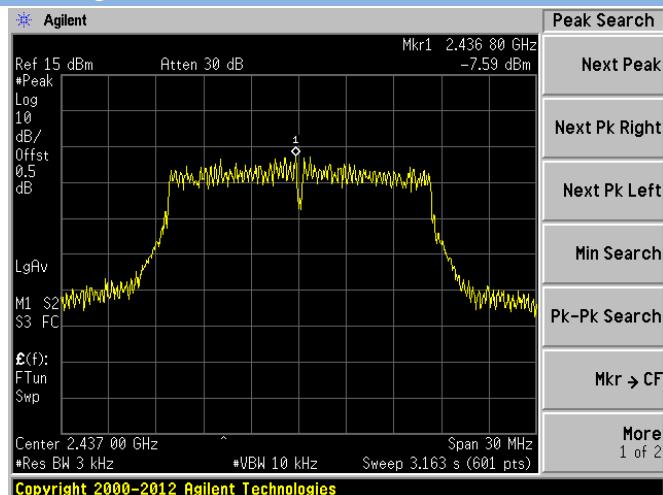
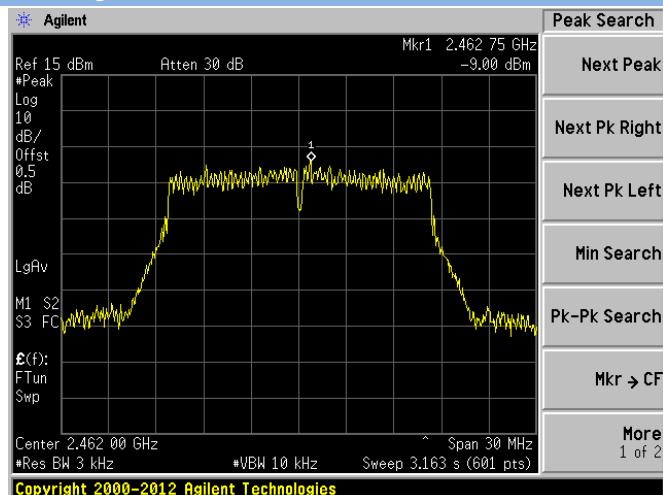


802.11n-40 MHz MIDDLE CHANNEL

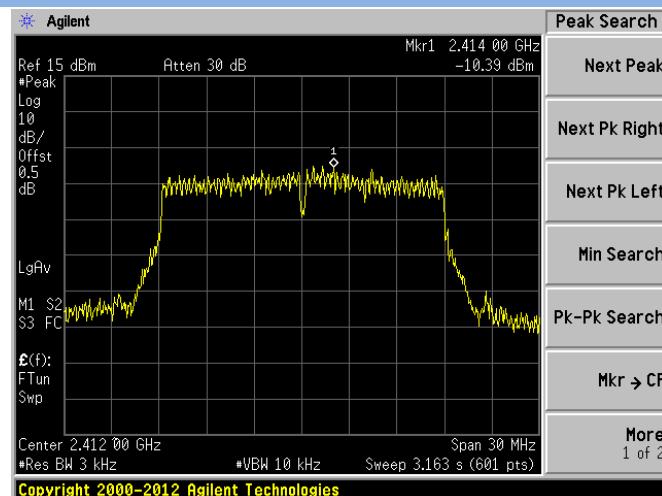


802.11n-40 MHz HIGH CHANNEL



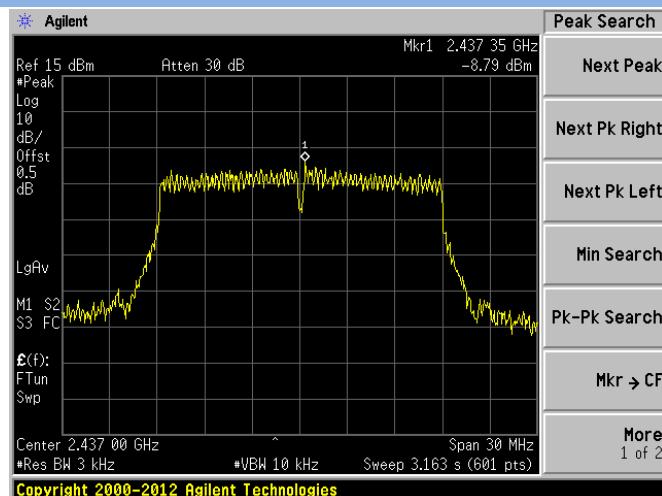
ANT 1
802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11b LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL


802.11n-20 MHz LOW CHANNEL



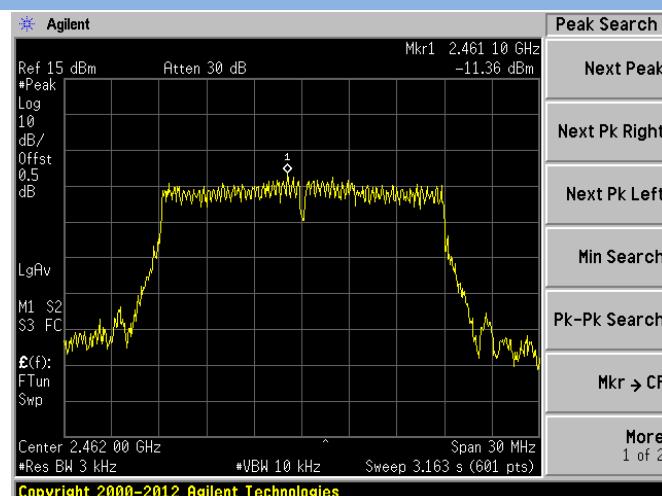
Copyright 2000-2012 Agilent Technologies

802.11n-20 MHz MIDDLE CHANNEL



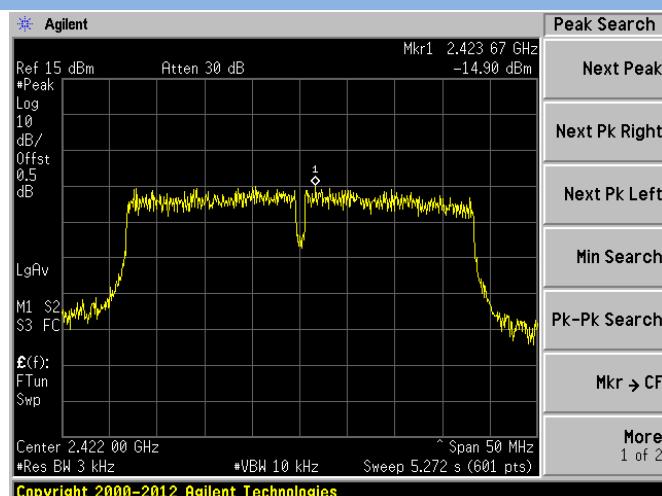
Copyright 2000-2012 Agilent Technologies

802.11n-20 MHz HIGH CHANNEL



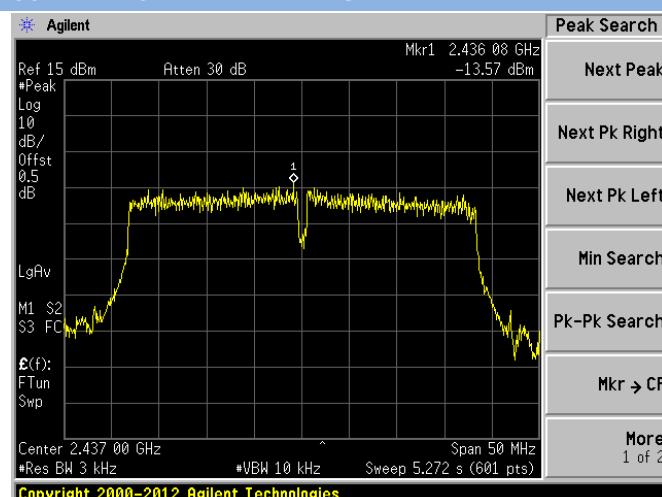
Copyright 2000-2012 Agilent Technologies

802.11n-40 MHz LOW CHANNEL



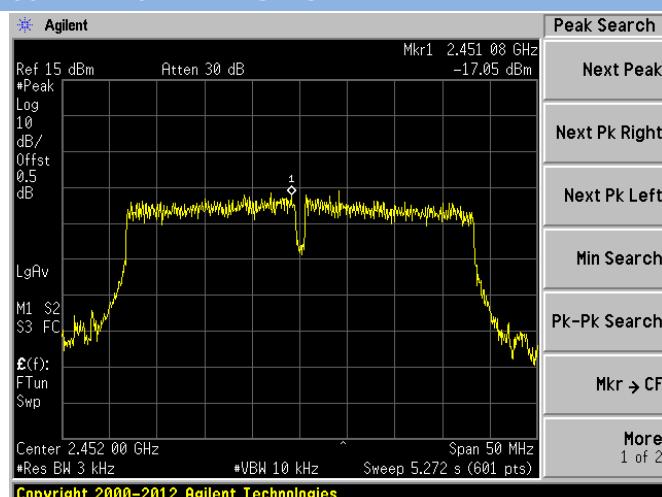
Copyright 2000-2012 Agilent Technologies

802.11n-40 MHz MIDDLE CHANNEL



Copyright 2000-2012 Agilent Technologies

802.11n-40 MHz HIGH CHANNEL



Copyright 2000-2012 Agilent Technologies

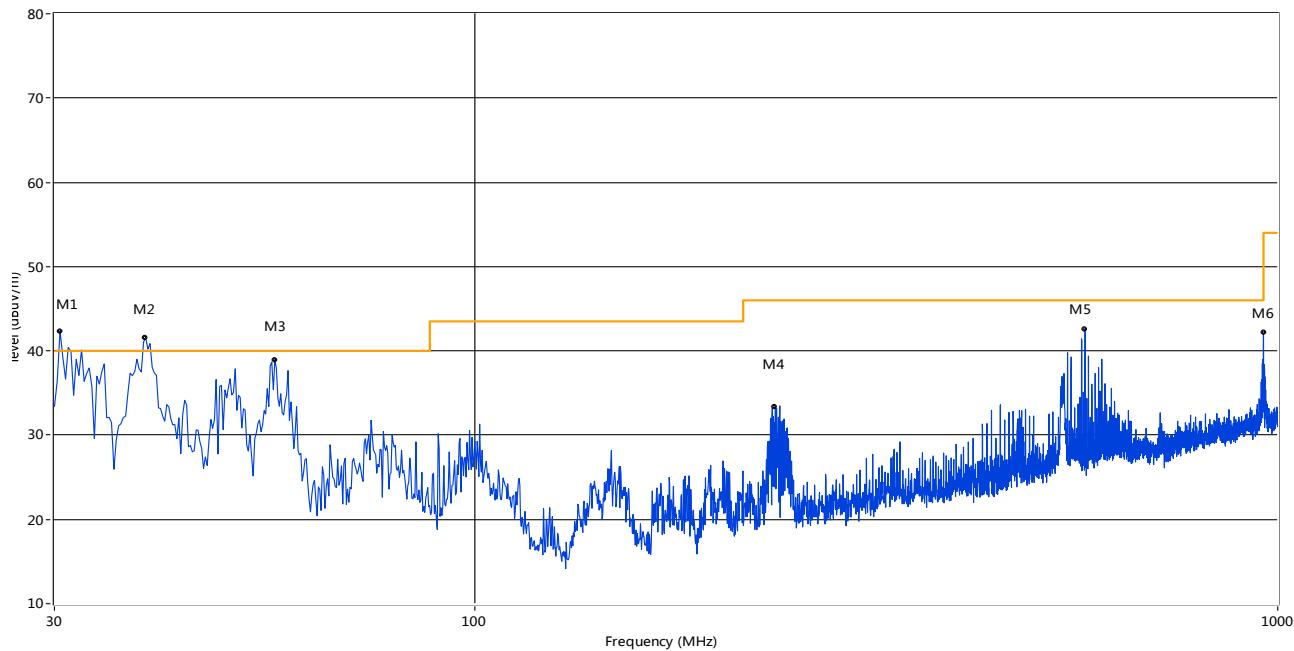
A.8 Receiver Spurious Emissions

Note: Only the worst test results were recorded in this report.

Test Data and Plots

30 MHz to 1 GHz, ANT V

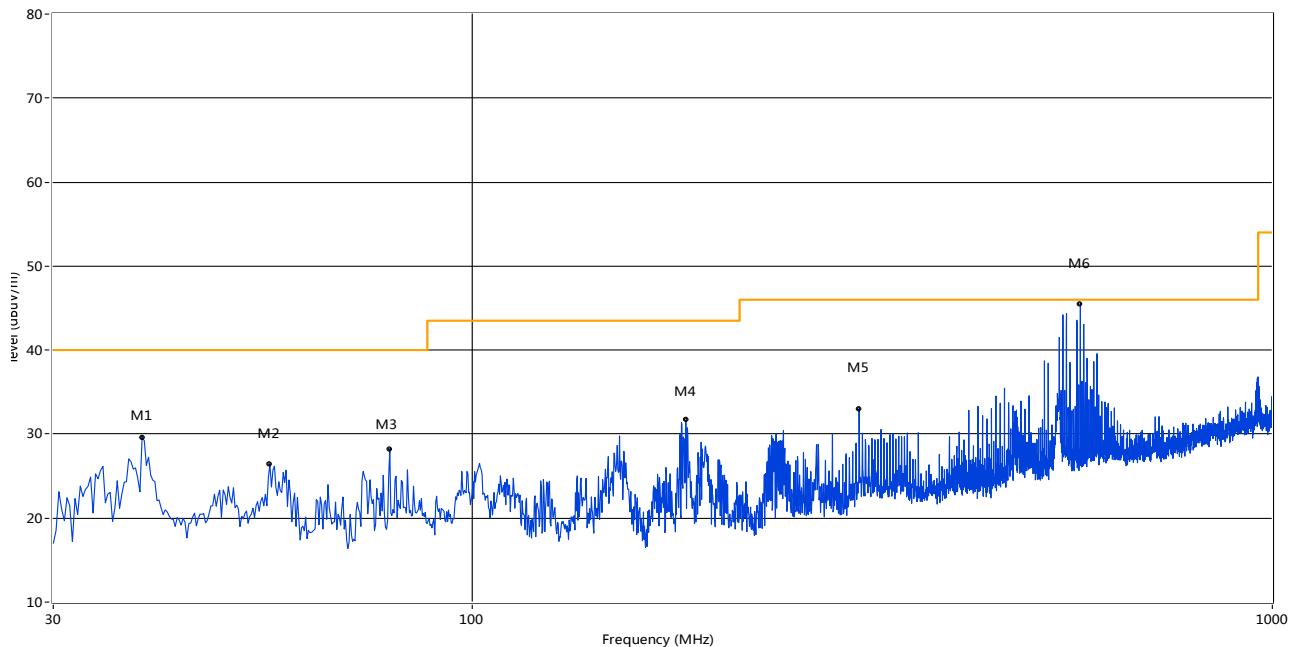
RE Test case_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	30.48	42.34	-21.72	40.0	-2.34	Peak	51.00	100	Vertical	N/A
1*	30.48	37.40	-21.72	40.0	2.60	QP	51.00	100	Vertical	Pass
2	38.97	41.58	-19.96	40.0	-1.58	Peak	316.00	100	Vertical	N/A
2*	38.97	37.60	-19.96	40.0	2.40	QP	316.00	100	Vertical	Pass
3	56.43	38.94	-19.32	40.0	1.06	Peak	143.00	100	Vertical	Pass
3*	56.43	35.31	-19.32	40.0	4.69	QP	143.00	100	Vertical	Pass
4	236.80	33.37	-19.34	46.0	12.63	Peak	215.00	100	Vertical	Pass
5	575.73	42.55	-11.65	46.0	3.45	Peak	223.00	100	Vertical	Pass
6	959.75	42.11	-5.02	46.0	3.89	Peak	112.00	100	Vertical	Pass

30 MHz to 1 GHz, ANT H

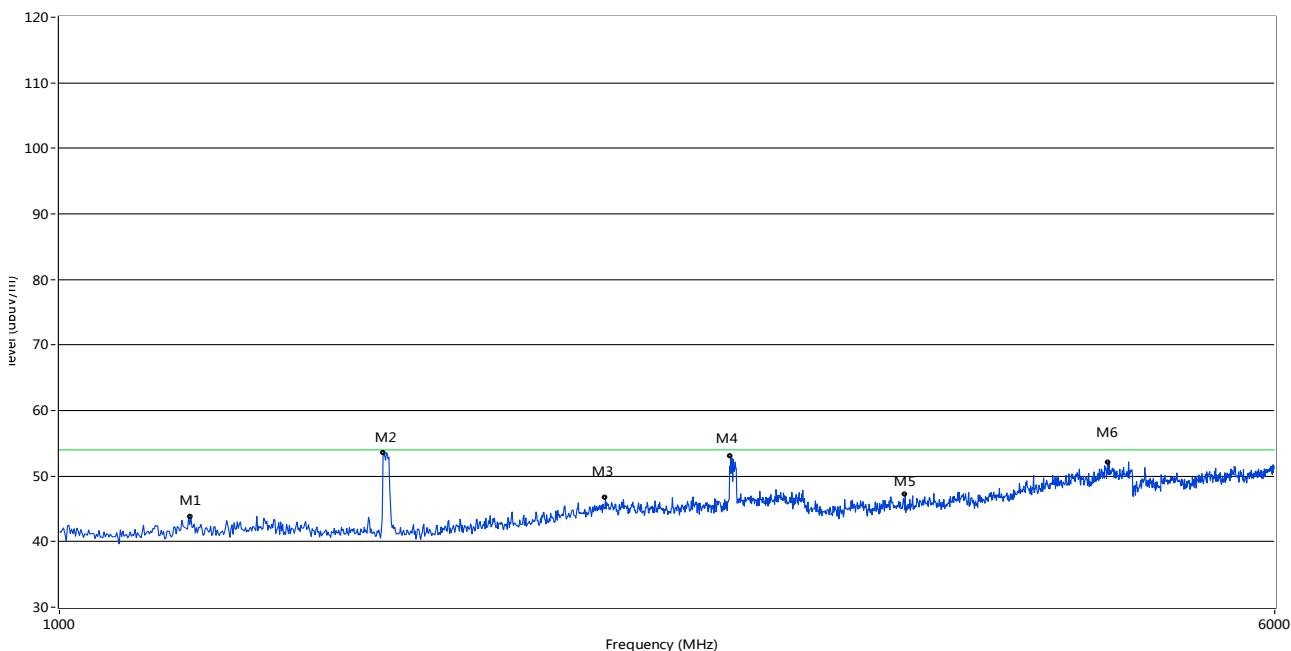
RE Test case_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	38.73	29.59	-20.05	40.0	10.41	Peak	7.30	100	Horizontal	Pass
2	55.94	26.40	-19.30	40.0	13.60	Peak	7.30	100	Horizontal	Pass
3	78.97	28.20	-24.59	40.0	11.80	Peak	16.20	100	Horizontal	Pass
4	185.16	31.67	-21.67	43.5	11.83	Peak	112.00	100	Horizontal	Pass
5	304.68	33.02	-17.49	46.0	12.98	Peak	263.70	100	Horizontal	Pass
6	575.73	45.42	-11.65	46.0	0.58	Peak	96.90	100	Horizontal	Pass
6*	575.73	43.58	-11.65	46.0	2.42	QP	96.90	100	Horizontal	Pass

1 GHz to 6 GHz, ANT V

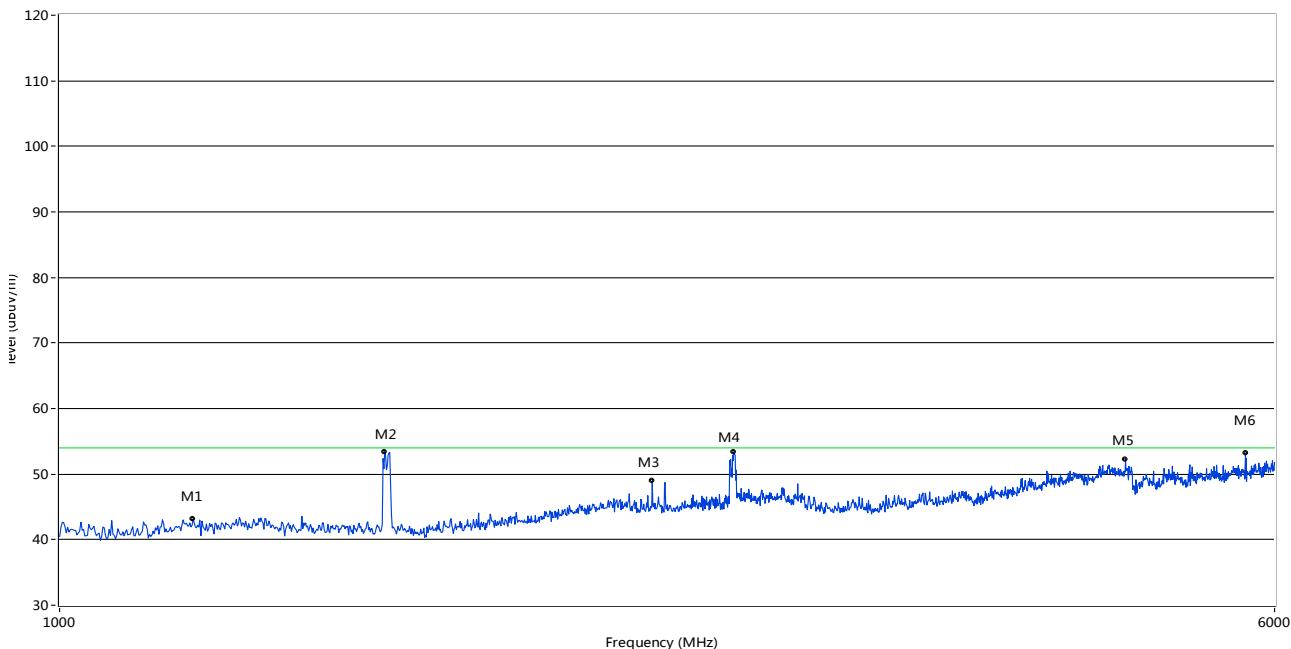
RE Test case_FCC 15C 1GHz-6GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1213.79	43.72	-5.12	74.0	30.28	Peak	119.00	100	Vertical	Pass
2	1613.39	53.53	-4.43	74.0	20.47	Peak	44.00	100	Vertical	Pass
3	2236.76	46.67	-0.22	74.0	27.33	Peak	355.80	100	Vertical	Pass
4	2690.31	53.00	1.35	74.0	21.00	Peak	284.00	100	Vertical	Pass
5	3479.52	47.17	9.50	74.0	26.83	Peak	1.00	100	Vertical	Pass
6	4690.31	52.04	13.22	74.0	21.96	Peak	188.60	100	Vertical	Pass

1 GHz to 6 GHz, ANT H

RE Test case_FCC 15C 1GHz-6GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1217.78	43.13	-5.19	74.0	30.87	Peak	5.00	100	Horizontal	Pass
2	1615.38	53.41	-4.30	74.0	20.59	Peak	304.00	100	Horizontal	Pass
3	2396.60	48.96	-0.39	74.0	25.04	Peak	186.00	100	Horizontal	Pass
4	2702.30	53.34	1.67	74.0	20.66	Peak	192.00	100	Horizontal	Pass
5	4816.18	52.27	13.91	74.0	21.73	Peak	297.00	100	Horizontal	Pass
6	5748.25	53.17	15.48	74.0	20.83	Peak	234.00	100	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-SZ15B0132-AR.pdf"

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ15B0132-AW.pdf"

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ15B0132-AI.pdf"

--END OF REPORT--