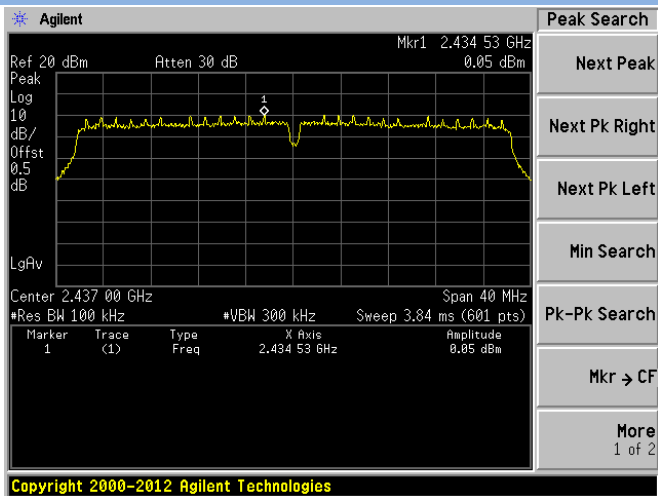
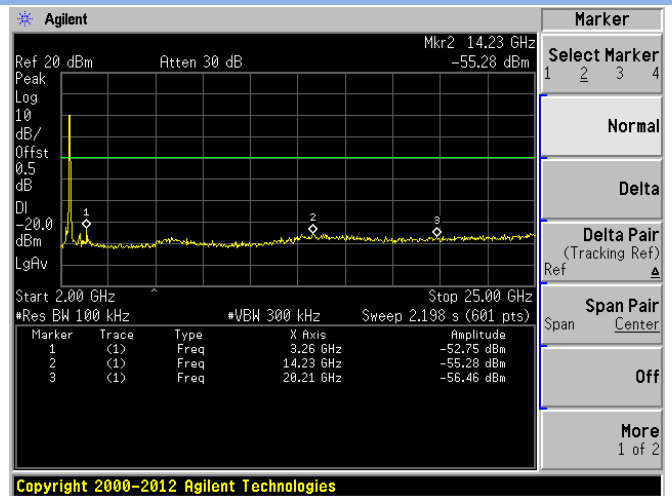
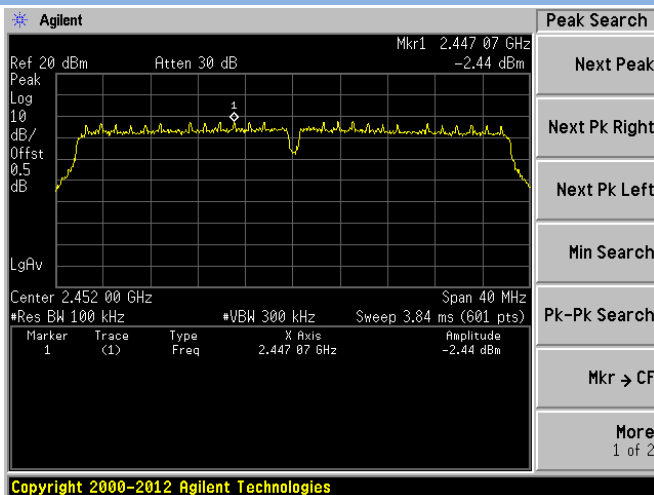
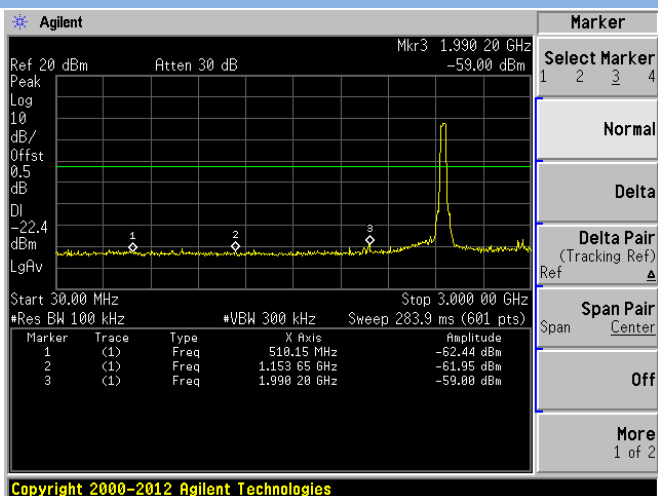
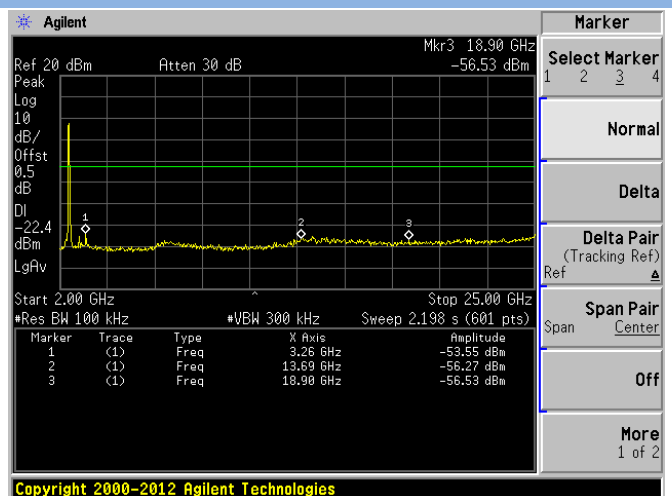


802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

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


802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL

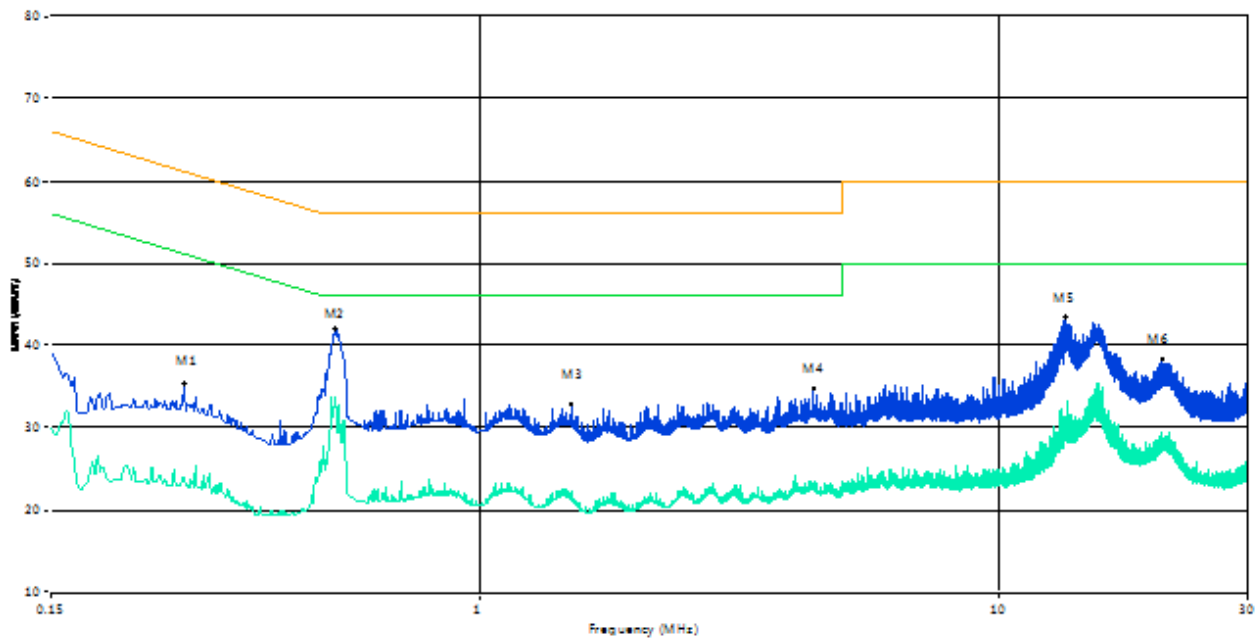

802.11n-40 MHz HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

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.

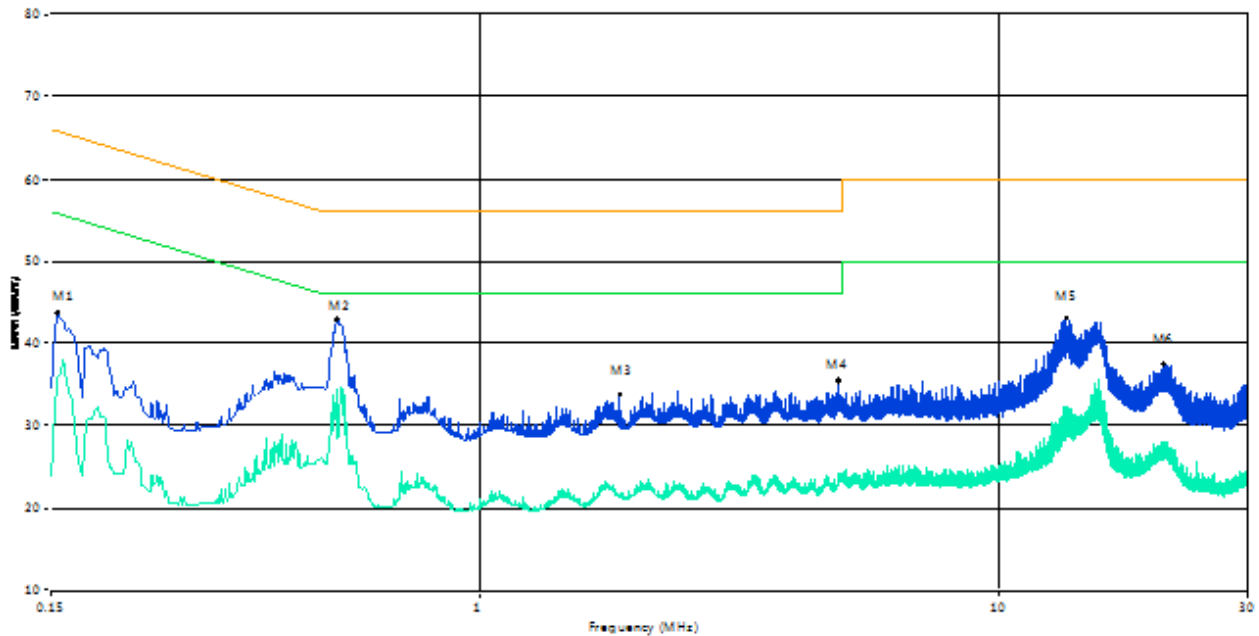
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBμV)	Factor (dB)	Limit (dBμV)	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

$$E = \text{EIRP} - 20\log D + 104.8$$

where:

E = electric field strength in dB μ 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 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.

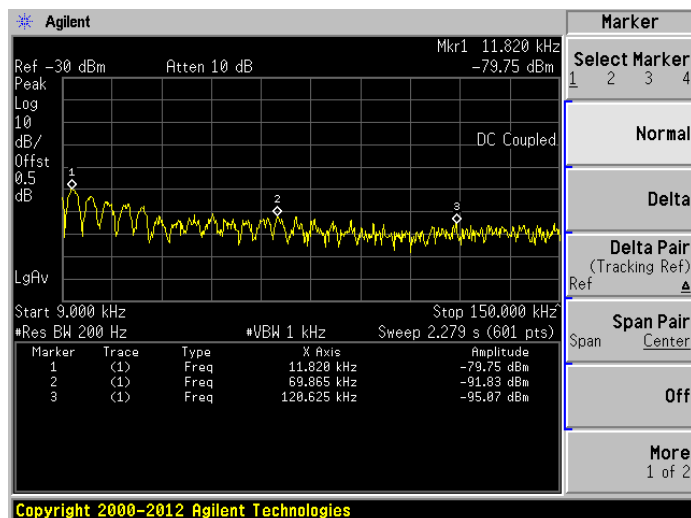
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

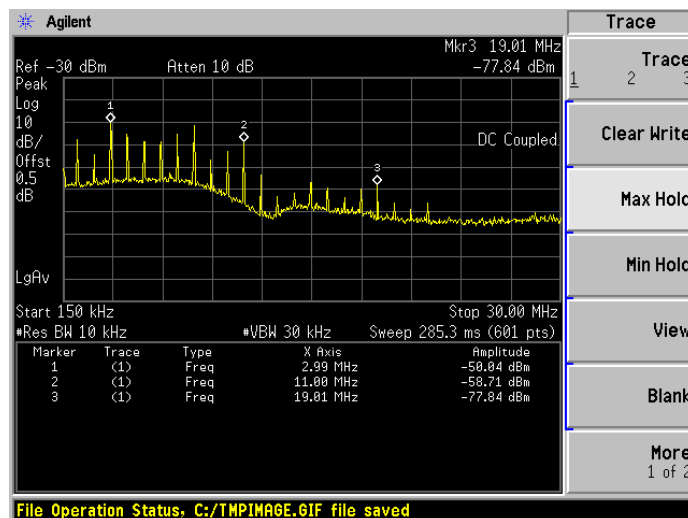
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
0.01182	-79.75	6	3	3.5	QP	25.01	91.66	66.65	Note 2	Pass
2.99	-50.04	6	3	3.5	QP	54.72	91.66	36.94	Note 2	Pass
452	-22.98	4.7	3	3.5	QP	80.48	91.66	11.18	Note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

Test Plots

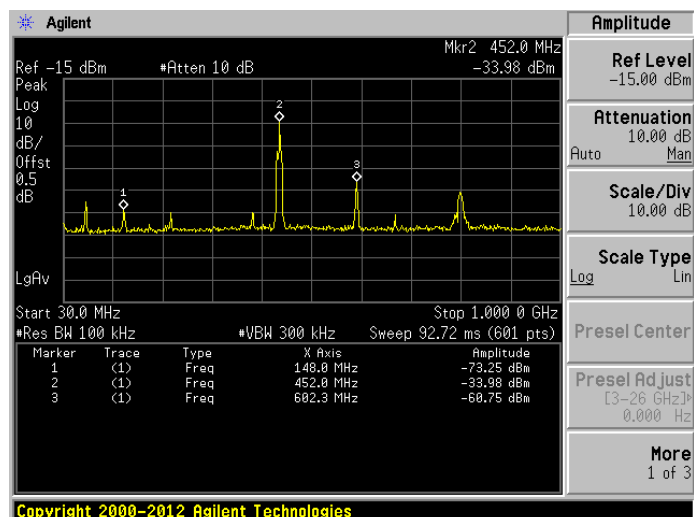
LOW CHANNEL, SPURIOUS 9 kHz ~ 150 kHz



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.

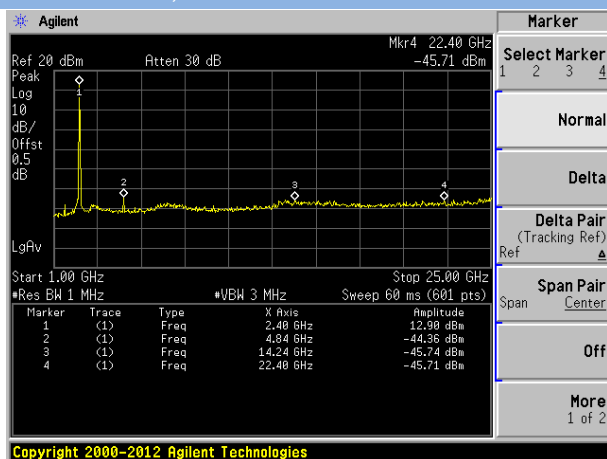
Note 4: The harmonic (3th, 4th, 5th, setc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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	PASS
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.

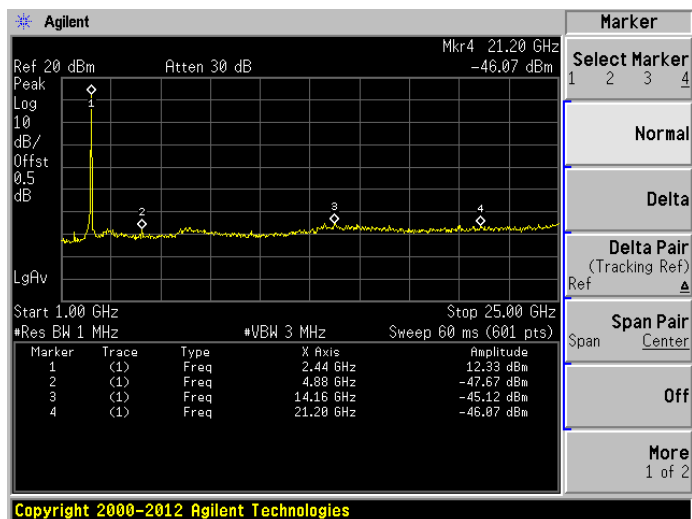
Note 4: The harmonic (2th, 3th, 4th, setc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

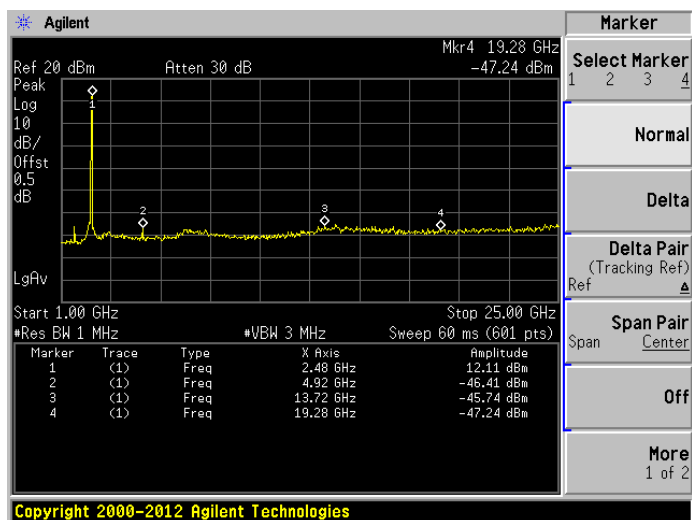
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

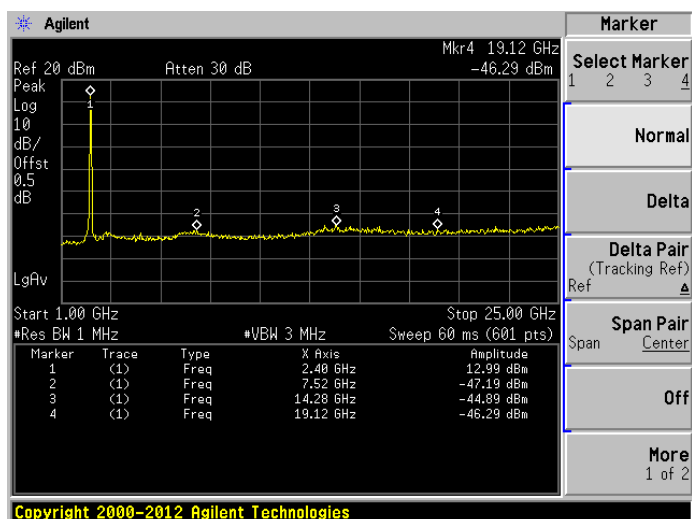
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

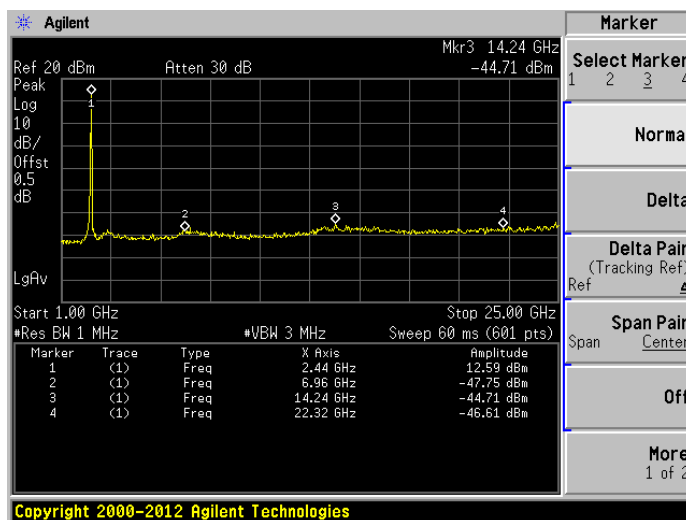
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

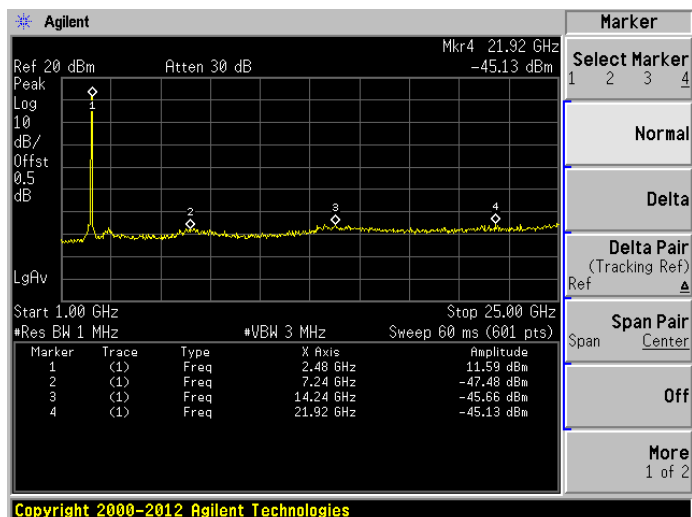
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

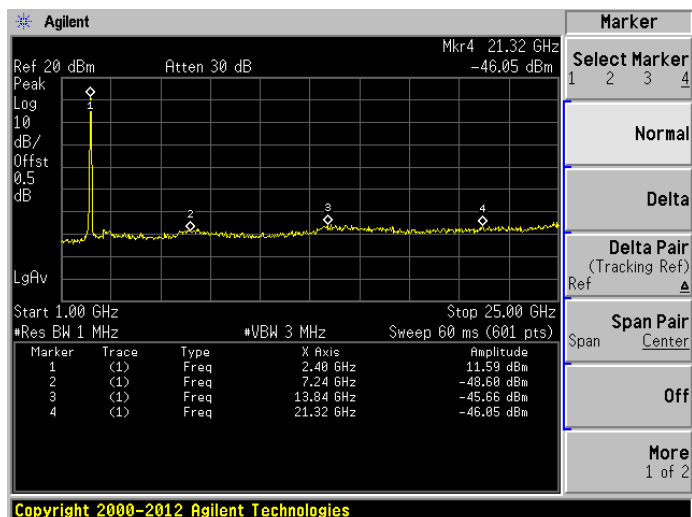
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

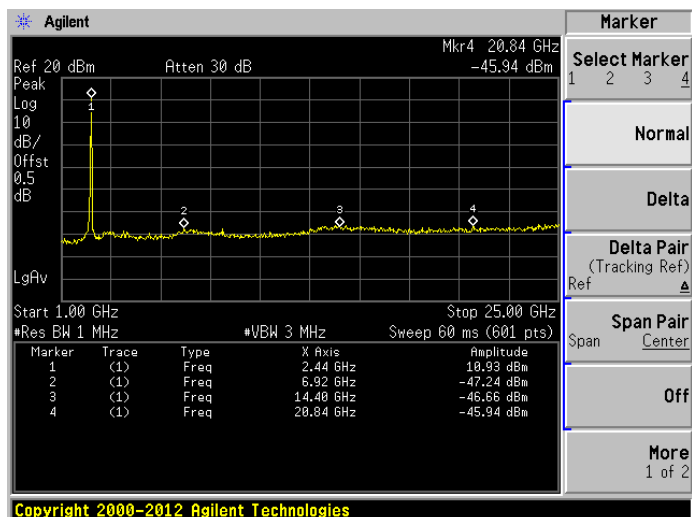
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

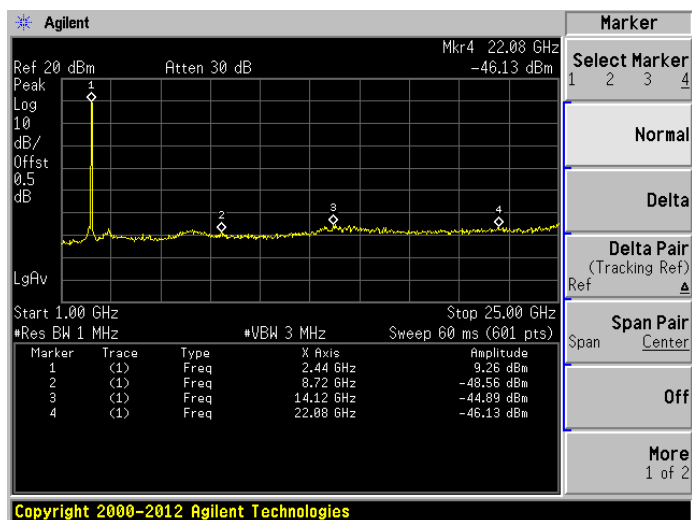
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

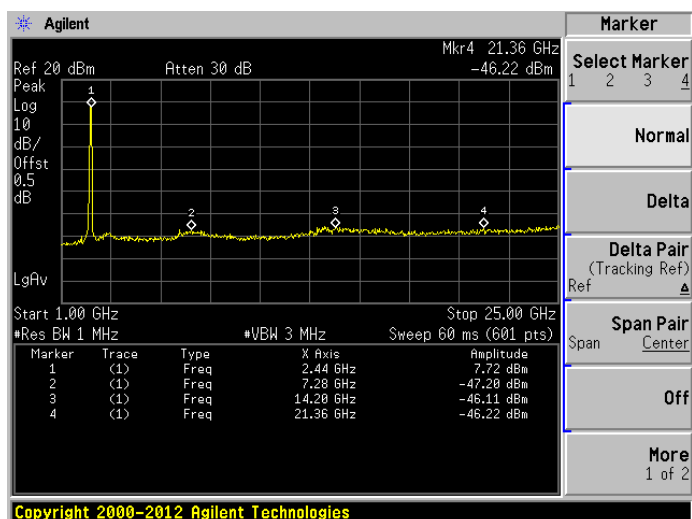
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

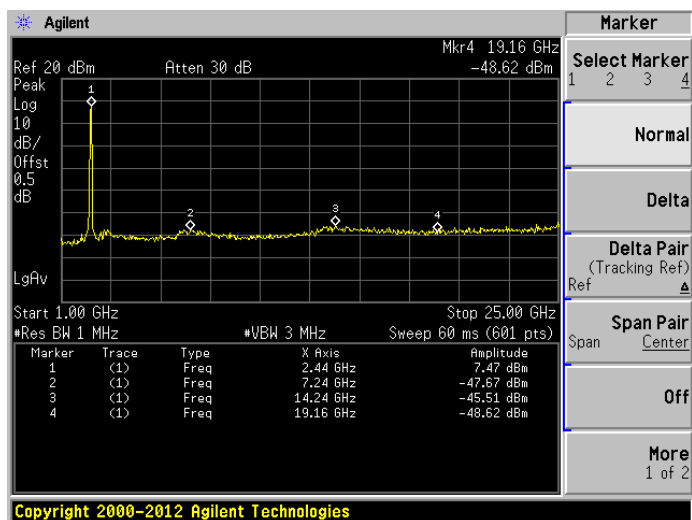
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

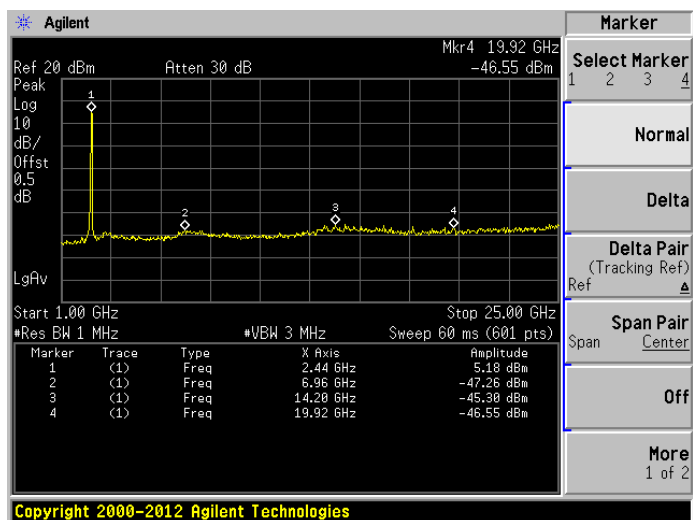
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

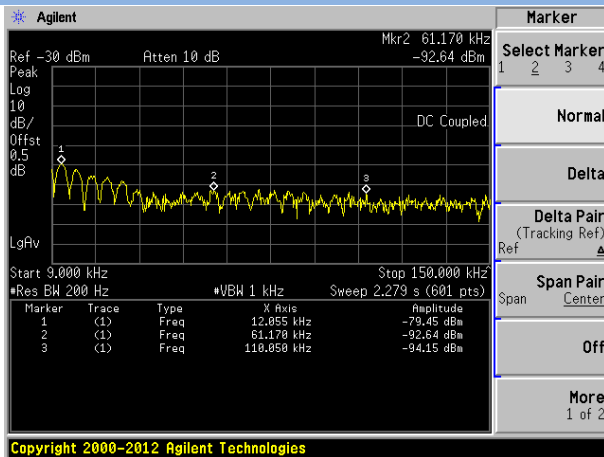
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

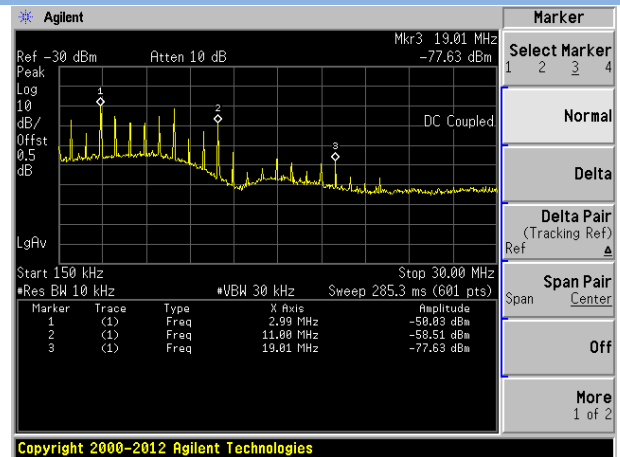
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
0.012055	-79.45	6	3	5.4	QP	27.21	92.93	65.72	Note 2	Pass
2.99	-50.03	6	3	5.4	QP	56.63	92.93	36.30	Note 2	Pass
452	-34.29	4.7	3	5.4	QP	71.07	92.93	21.86	Note 2	Pass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

Test Plots

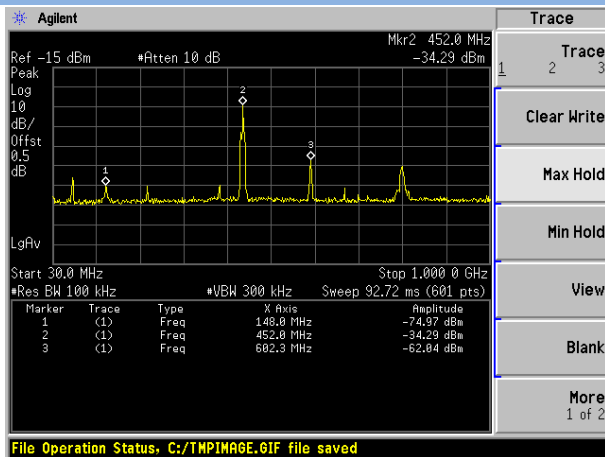
LOW CHANNEL, SPURIOUS 9 kHz ~ 150 kHz



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.

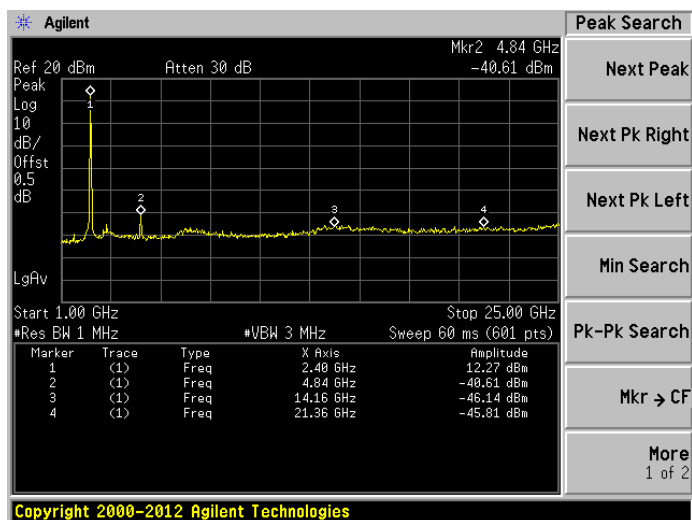
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: Low CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

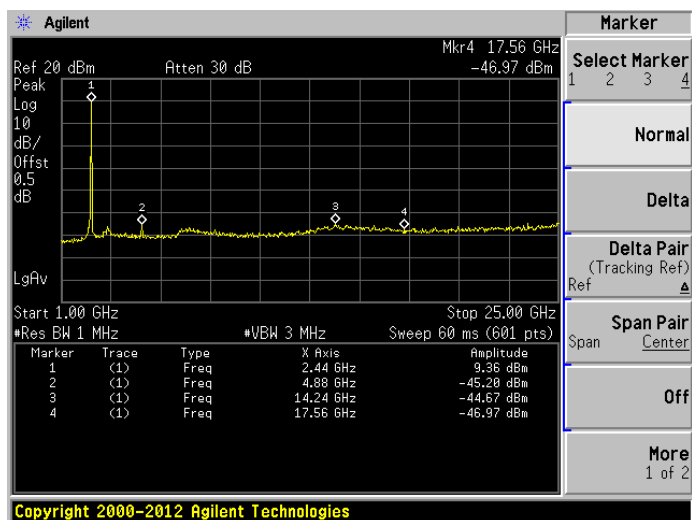
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

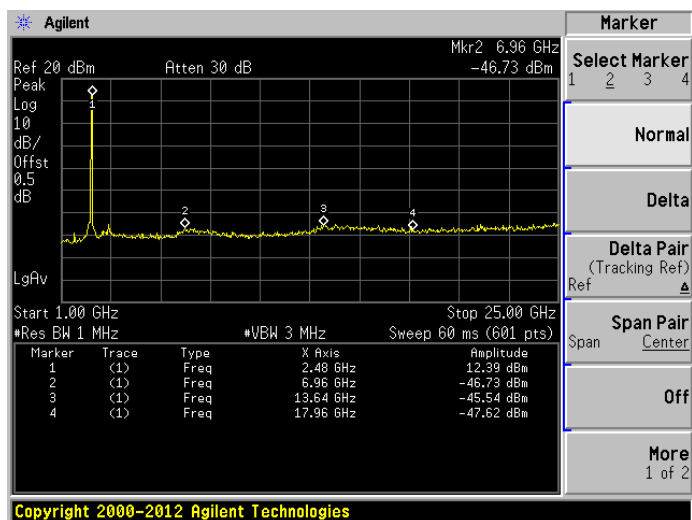
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11b: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

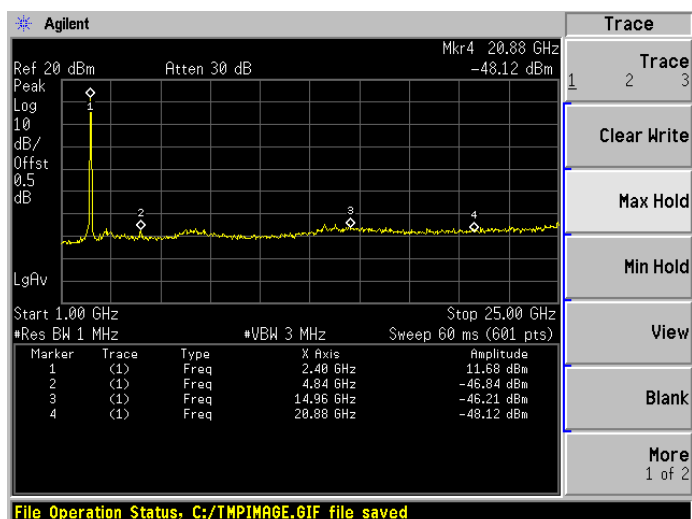
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

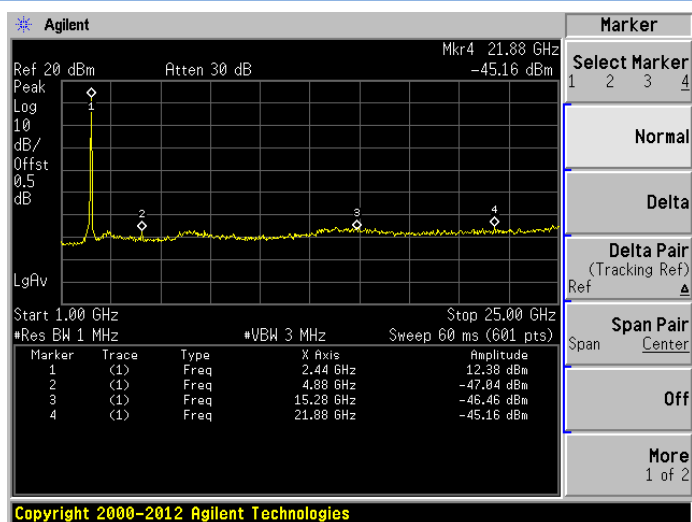
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

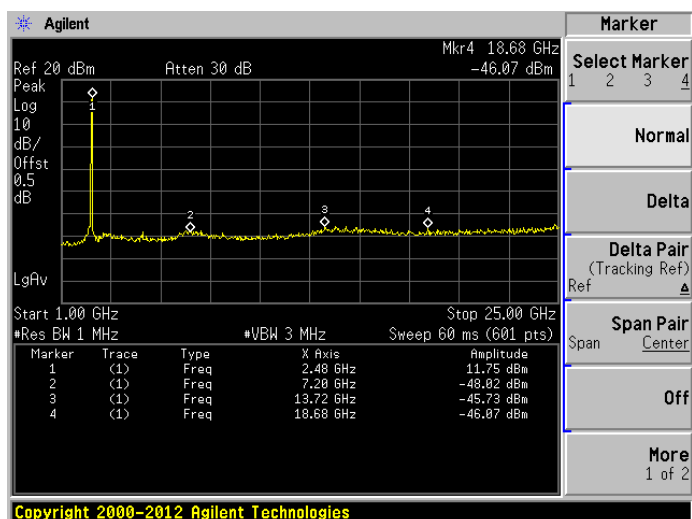
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11g: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

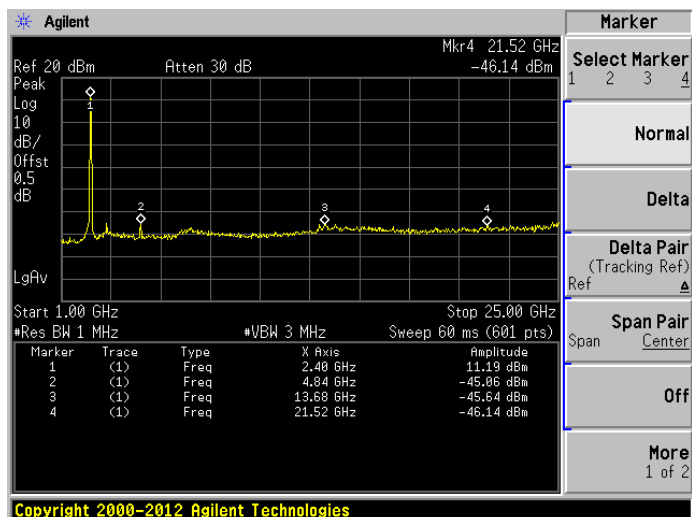
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

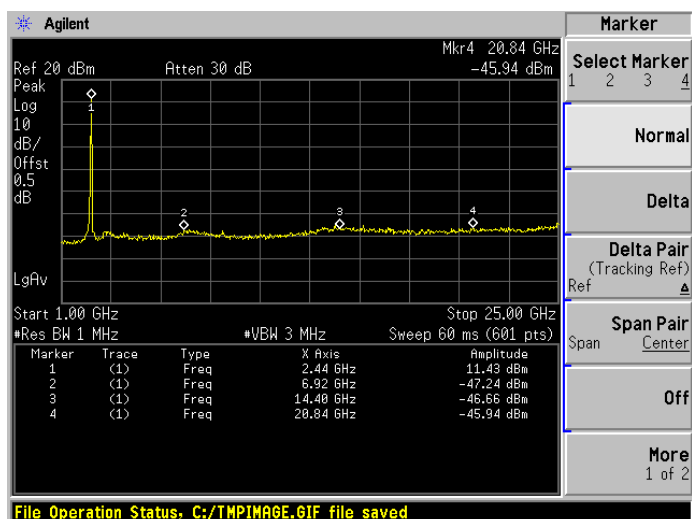
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

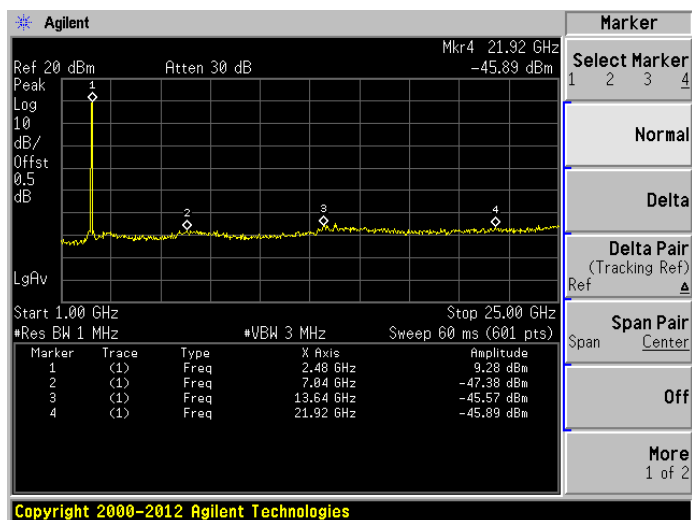
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n20: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

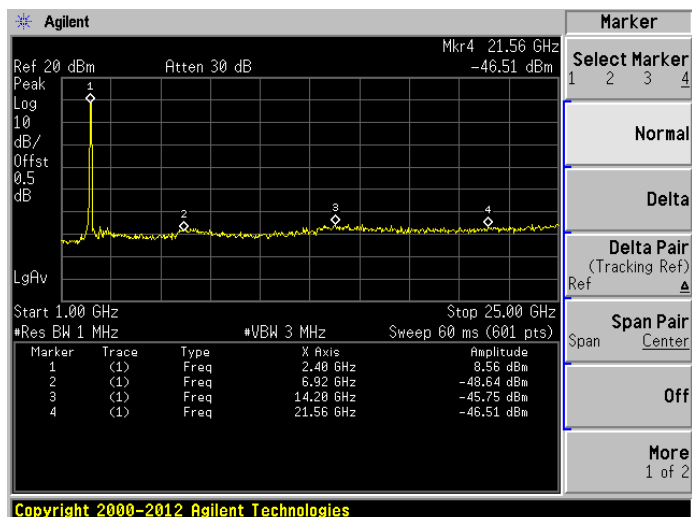
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: LOW CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

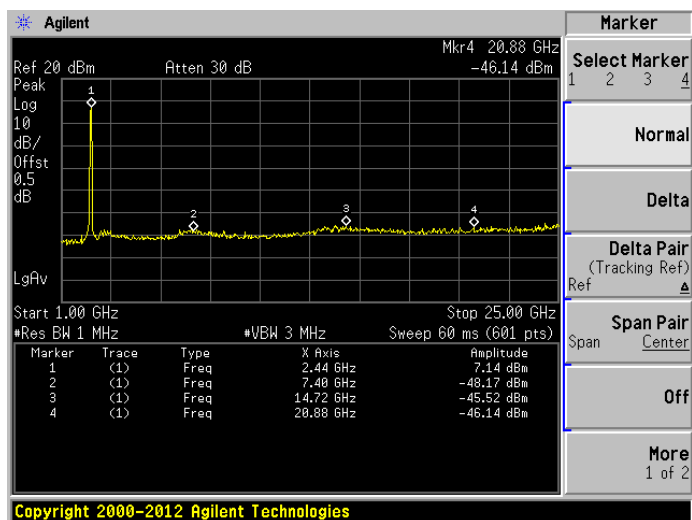
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: MIDDLE CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

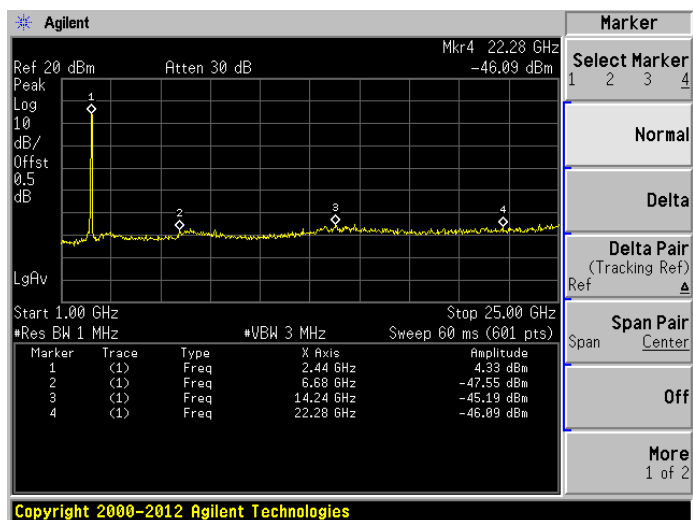
Note 4: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

802.11n40: HIGH CHANNEL

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/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.

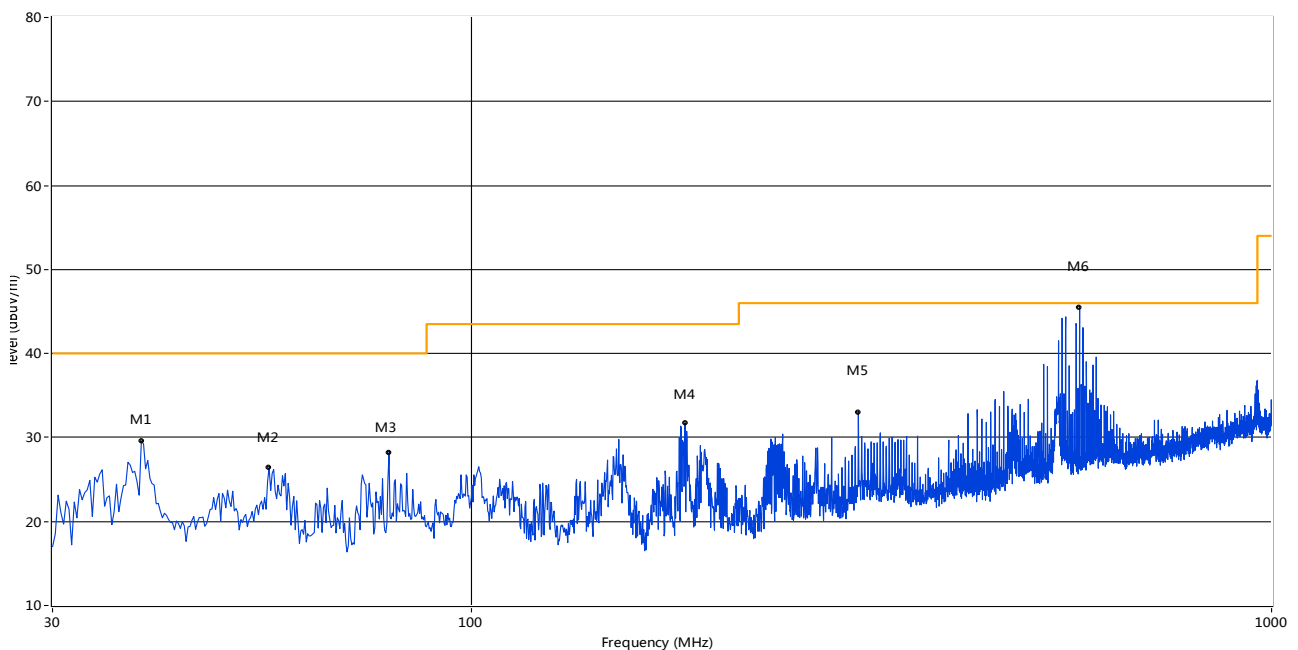
Note 2: For the test data above 1 GHz, According the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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

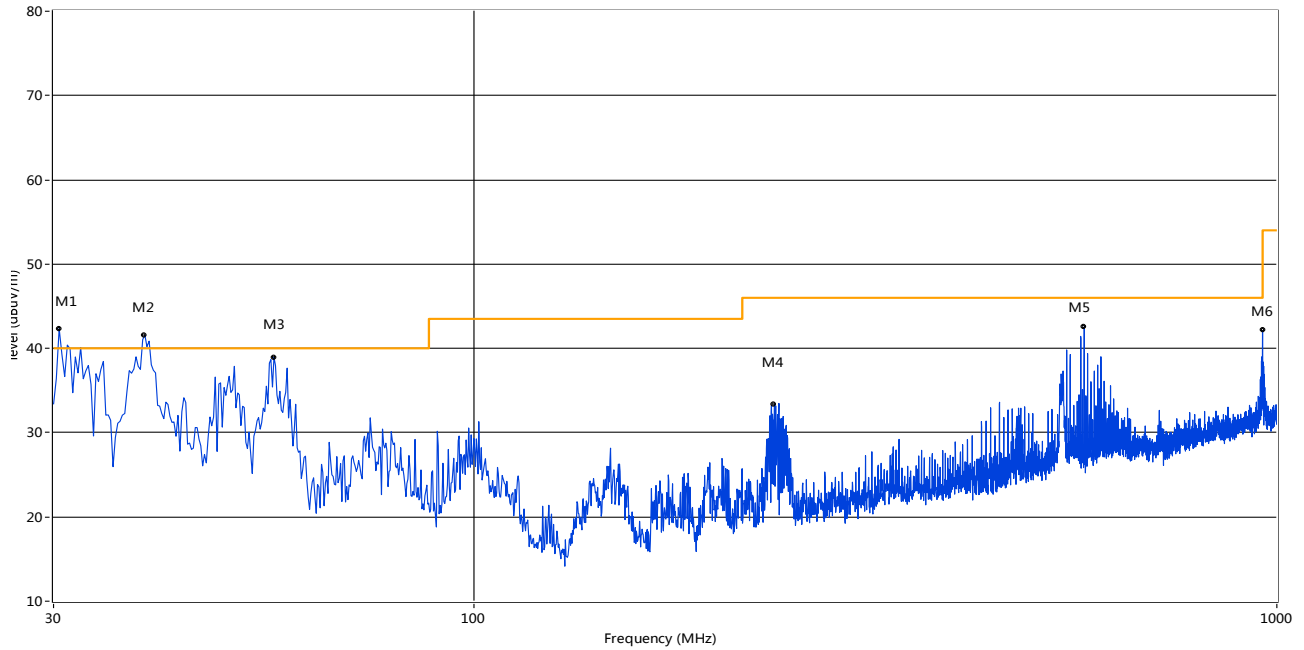
RE Test case_FCC 15C 30MHz-1GHz



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

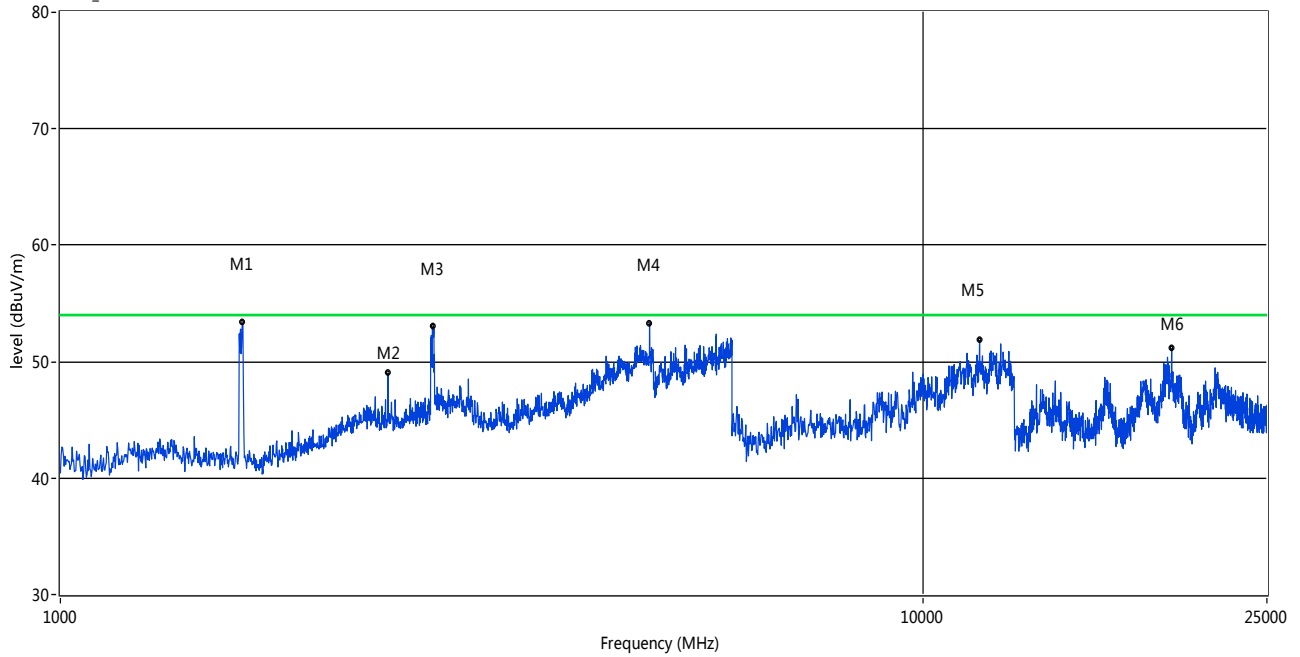
RE Test case_FCC 15C 30MHz-1GHz



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

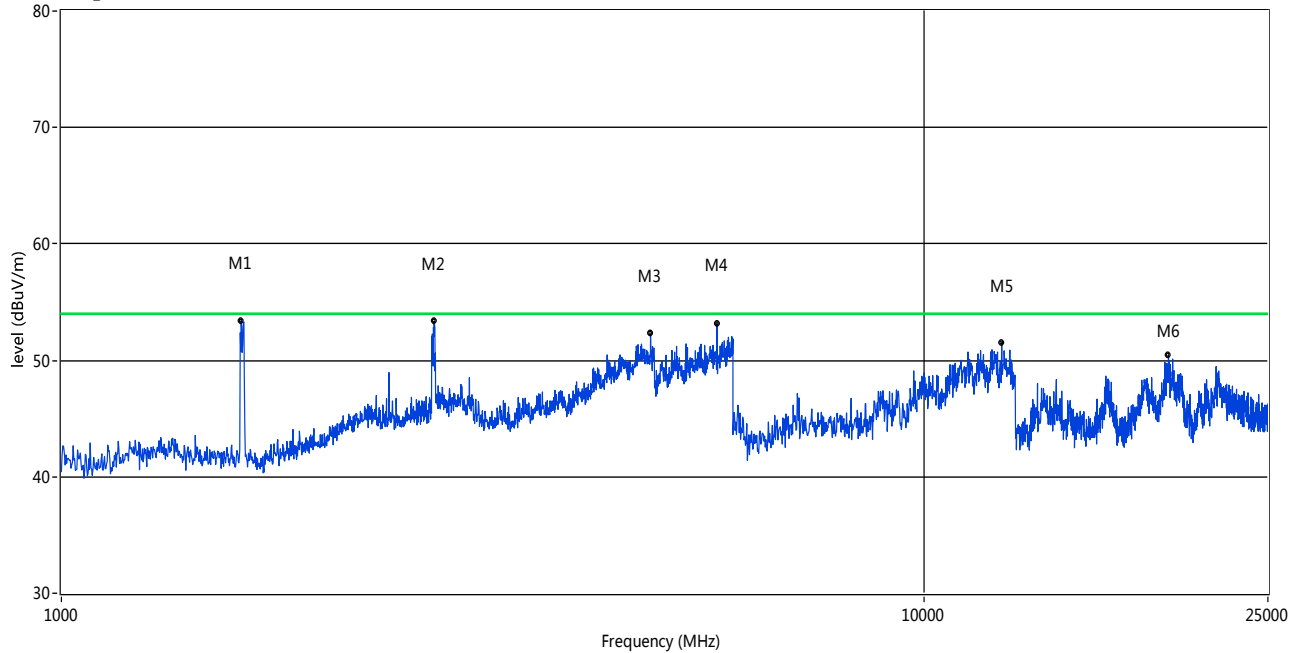
RE Test case_FCC 15C 1GHz-25GHz



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

RE Test case_FCC 15C 1GHz-25GHz



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

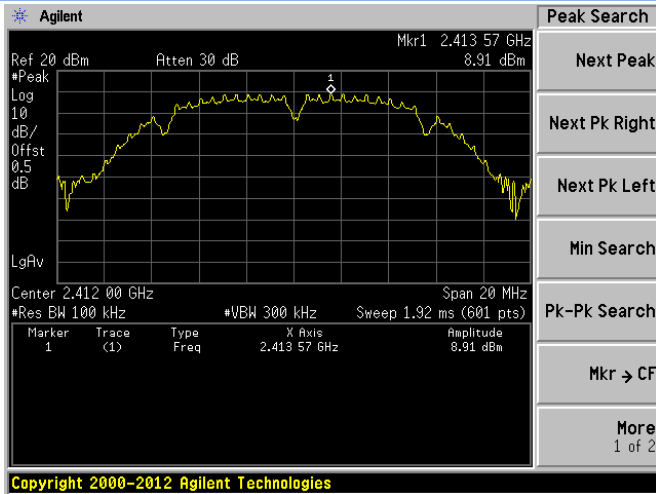
802.11n-40 MHz Mode:

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

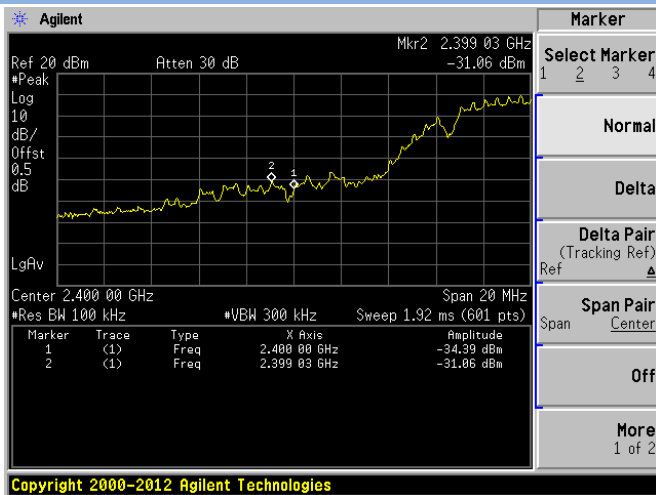
Test Plots

ANT 0

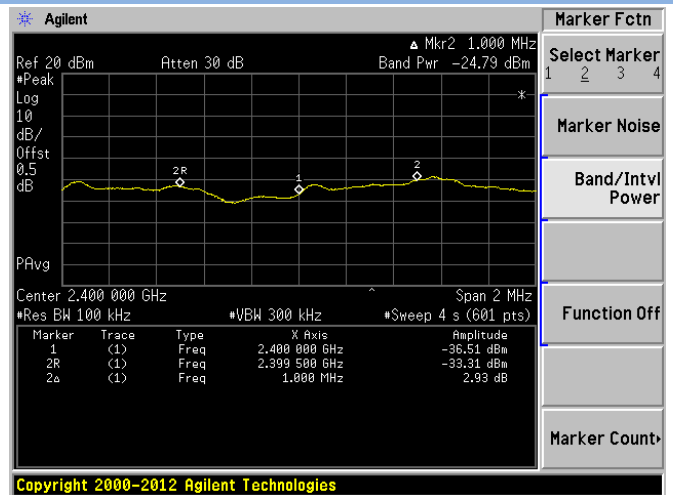
802.11b LOW CHANNEL, Carrier level



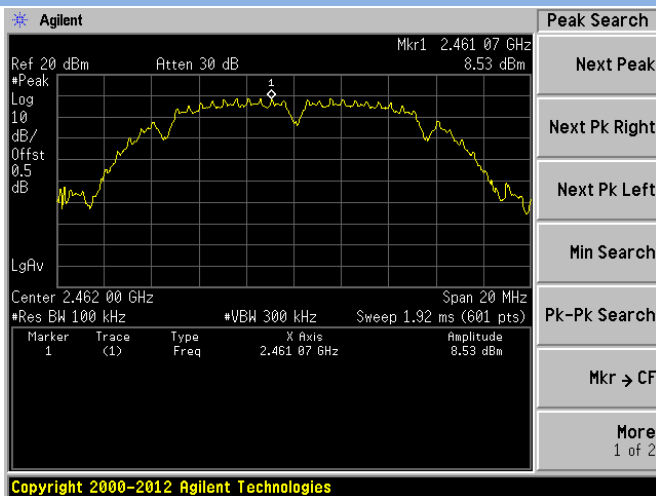
802.11b LOW CHANNEL, Reference level



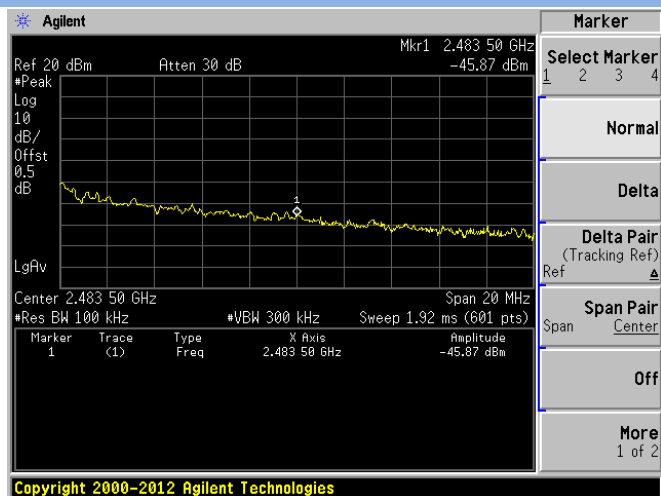
802.11b LOW CHANNEL, Band Edge



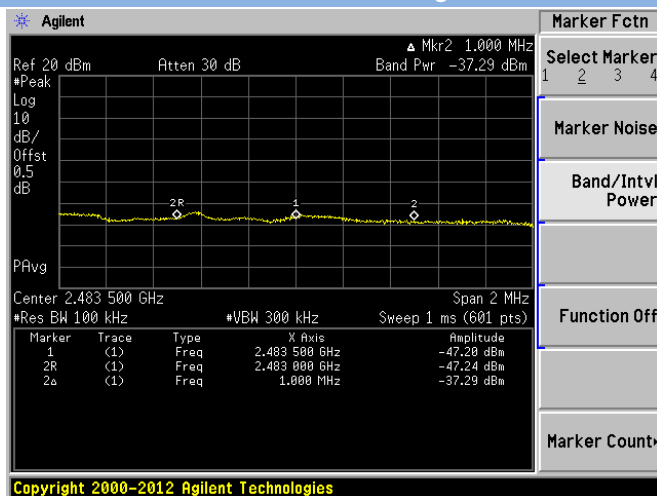
802.11b HIGH CHANNEL, Carrier level



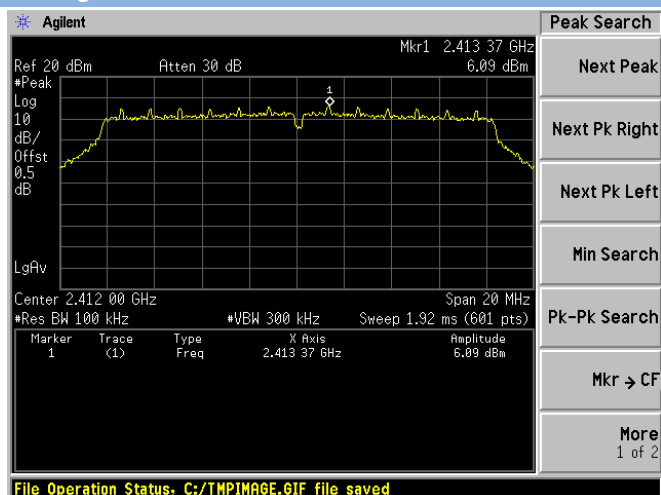
802.11b HIGH CHANNEL, Reference level



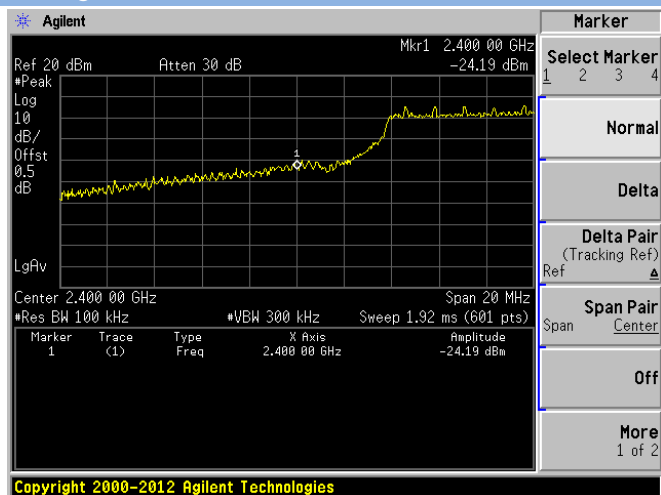
802.11b HIGH CHANNEL, Band Edge



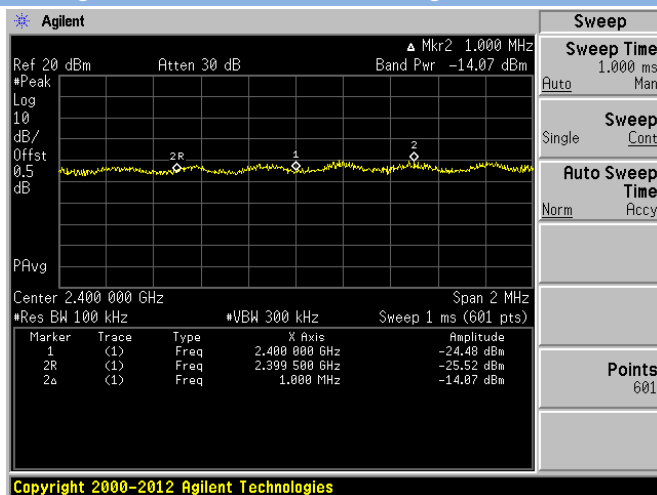
802.11g LOW CHANNEL, Carrier level



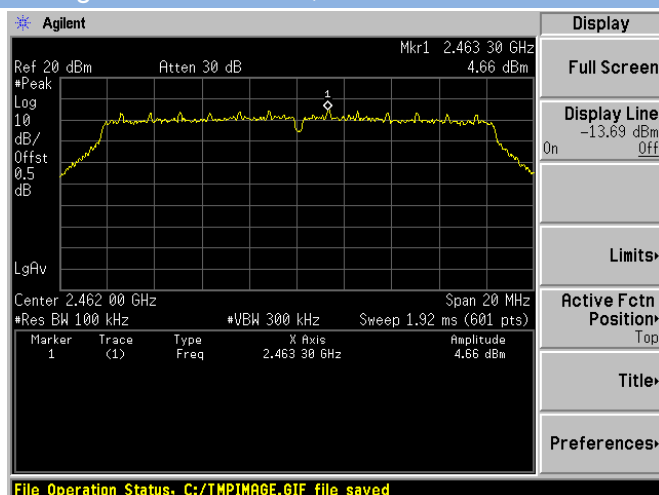
802.11g LOW CHANNEL, Reference level



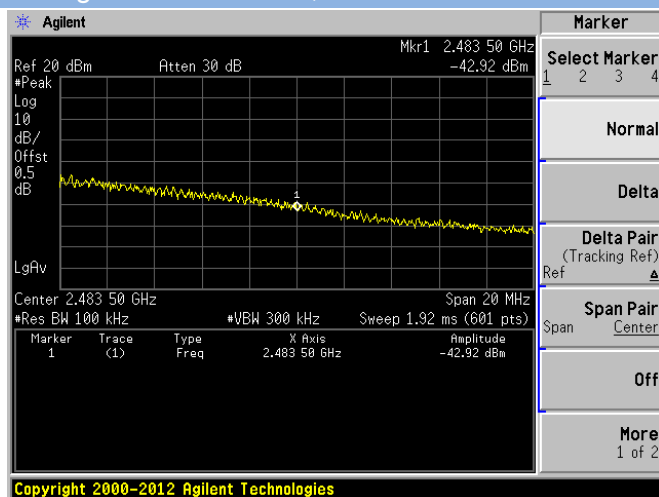
802.11g LOW CHANNEL, Band Edge



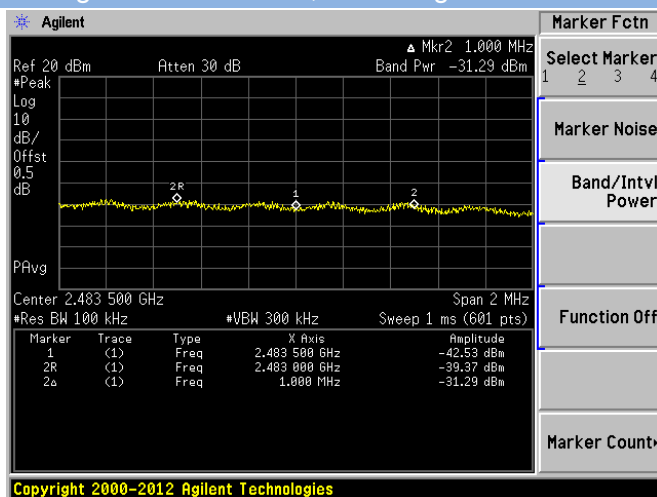
802.11g HIGH CHANNEL, Carrier level



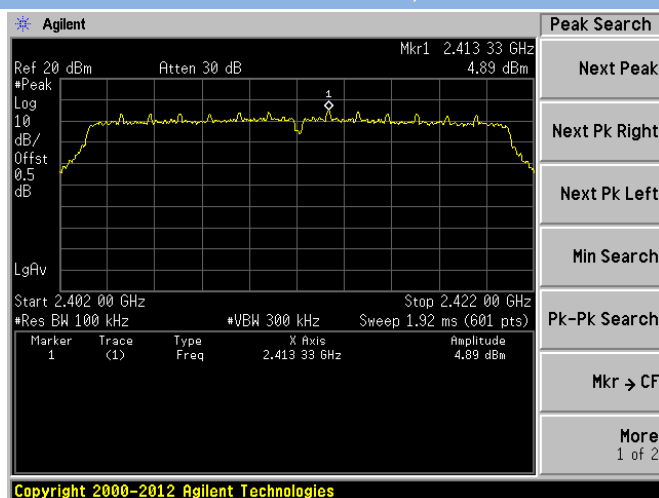
802.11g HIGH CHANNEL, Reference level



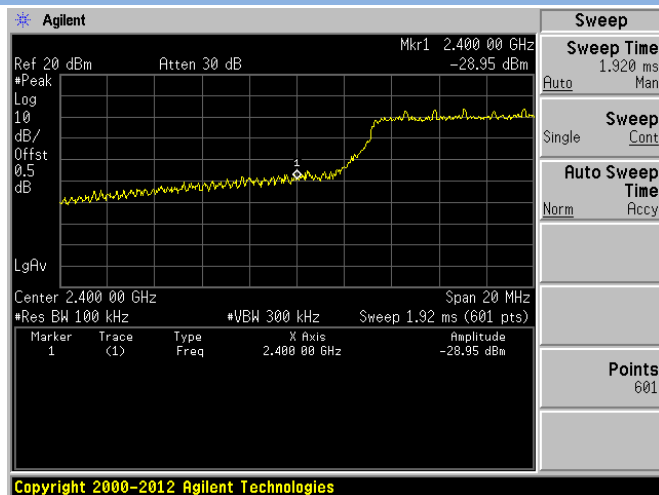
802.11g HIGH CHANNEL, Band Edge



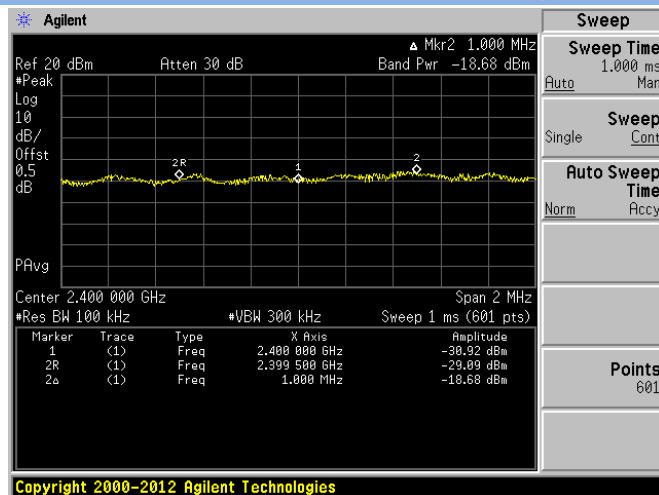
802.11n-20 MHz LOW CHANNEL, Carrier level



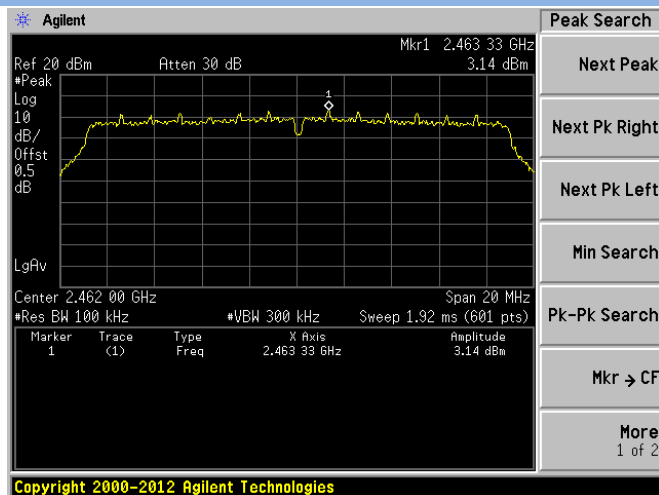
802.11n-20 MHz LOW CHANNEL, Reference level



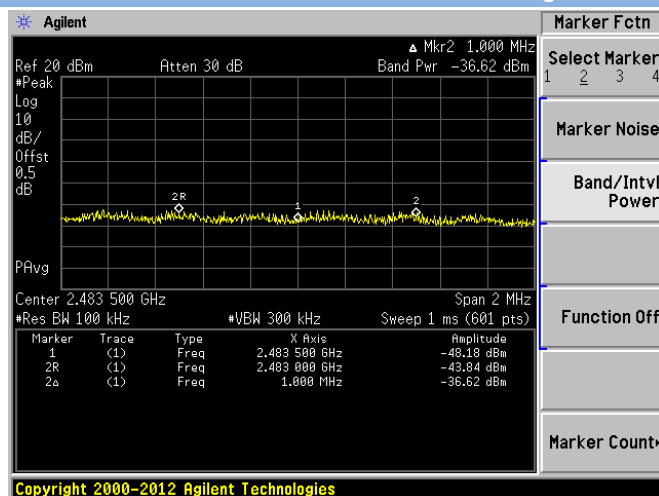
802.11n-20 MHz LOW CHANNEL, Band Edge



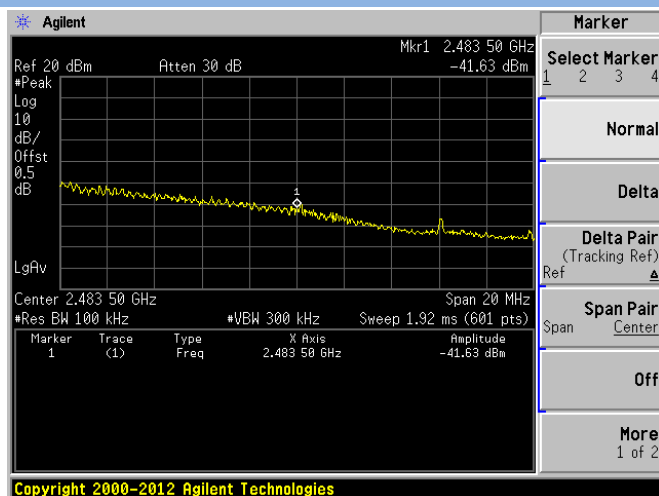
802.11n-20 MHz HIGH CHANNEL, Carrier level



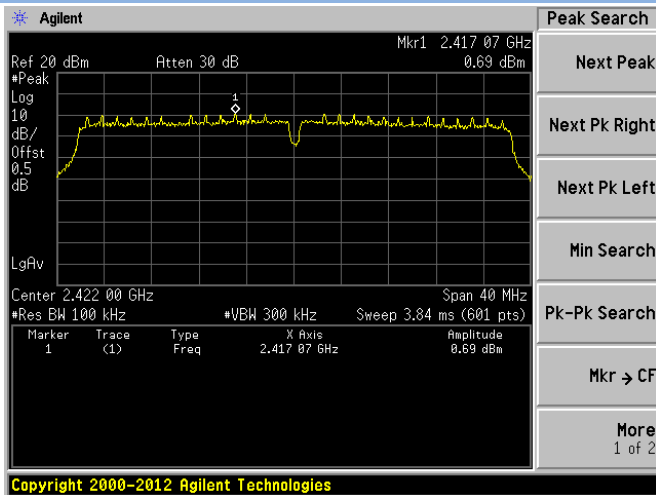
802.11n-20 MHz HIGH CHANNEL, Band Edge



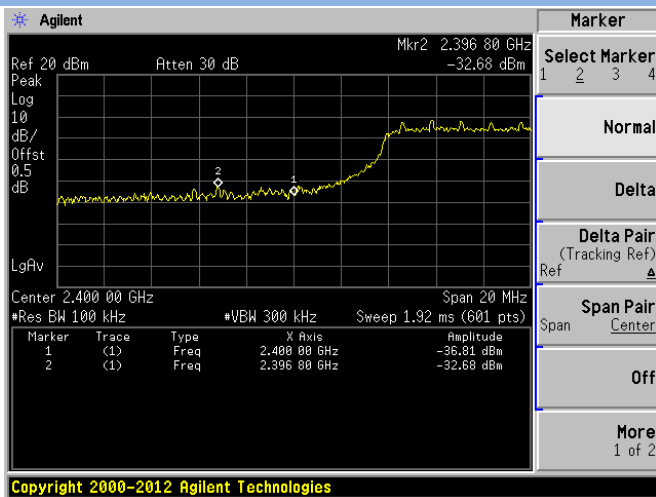
802.11n-20 MHz HIGH CHANNEL, Reference level



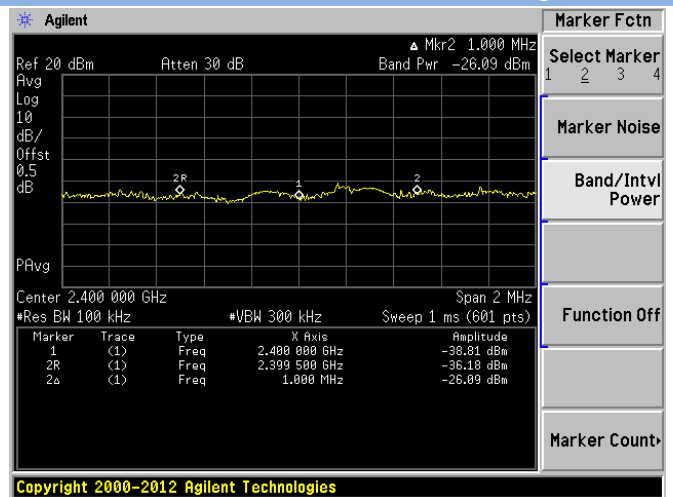
802.11n-40 MHz LOW CHANNEL, Carrier level



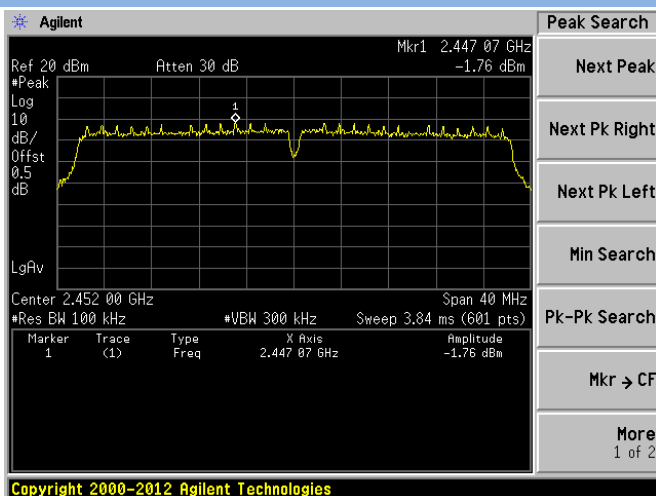
802.11n-40 MHz LOW CHANNEL, Reference level



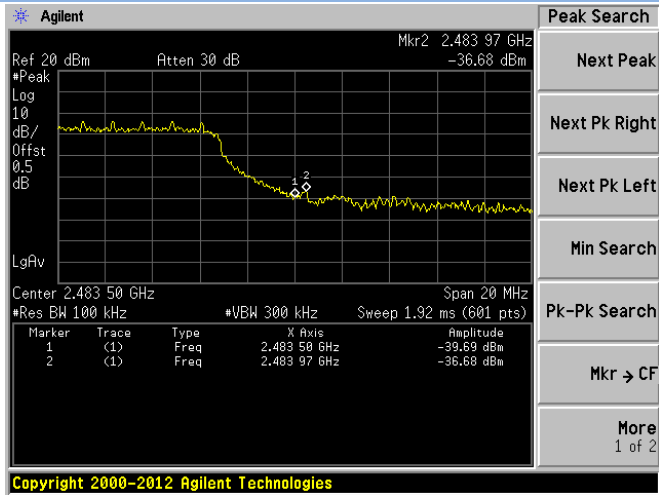
802.11n-40 MHz LOW CHANNEL, Band Edge



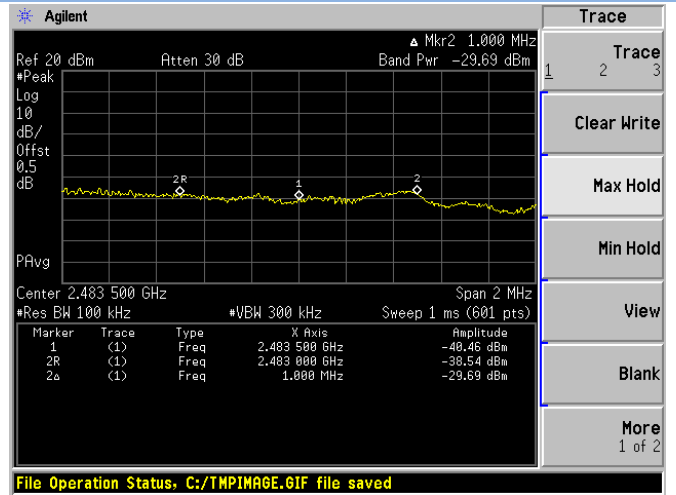
802.11n-40 MHz HIGH CHANNEL, Carrier level



802.11n-40 MHz HIGH CHANNEL, Reference level

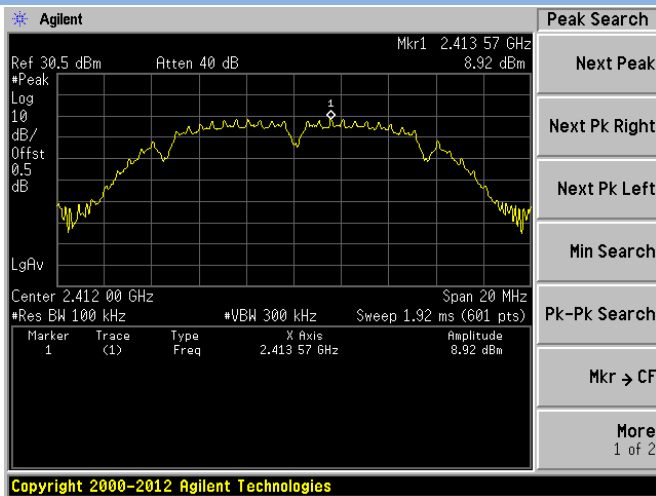


802.11n-40 MHz HIGH CHANNEL, Band Edge

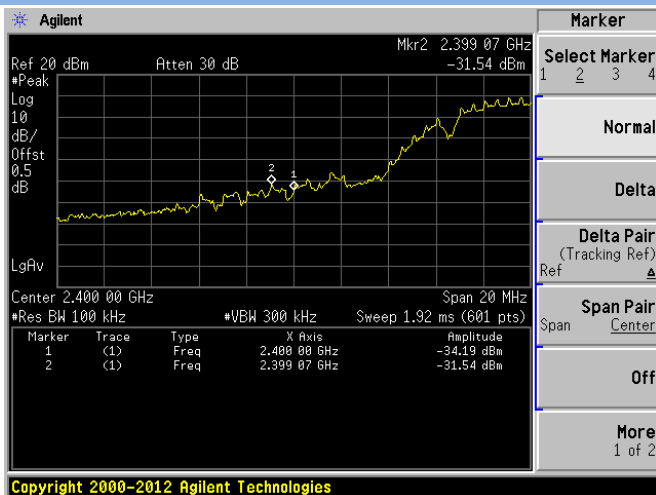


ANT 1

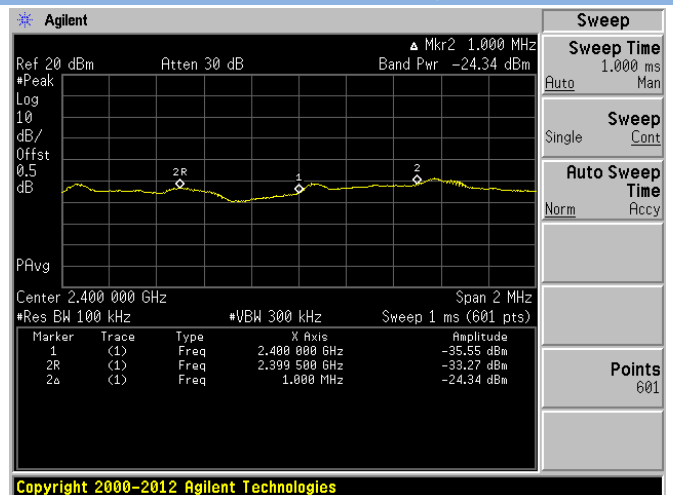
802.11b LOW CHANNEL, Carrier level



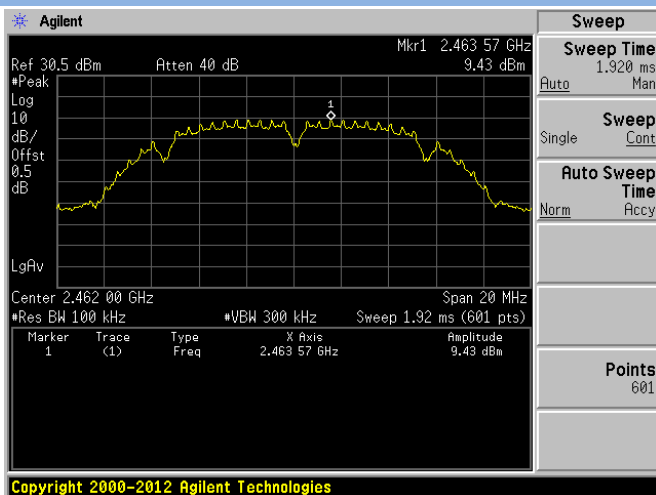
802.11b LOW CHANNEL, Reference level



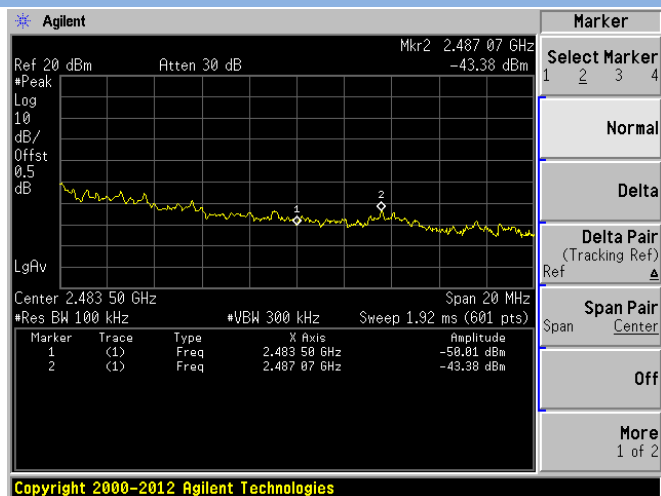
802.11b LOW CHANNEL, Band Edge



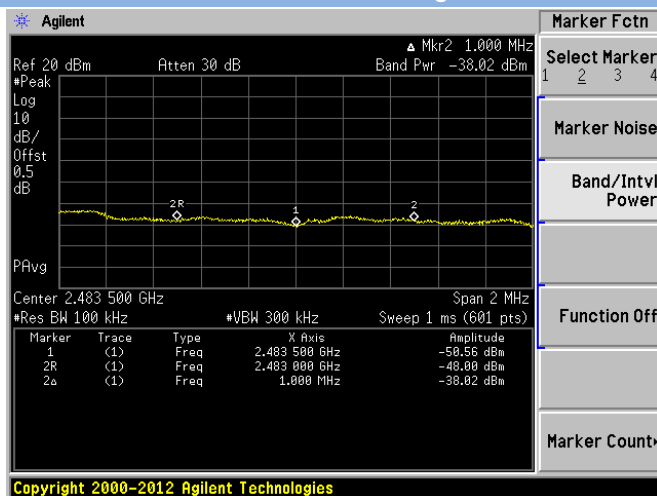
802.11b HIGH CHANNEL, Carrier level



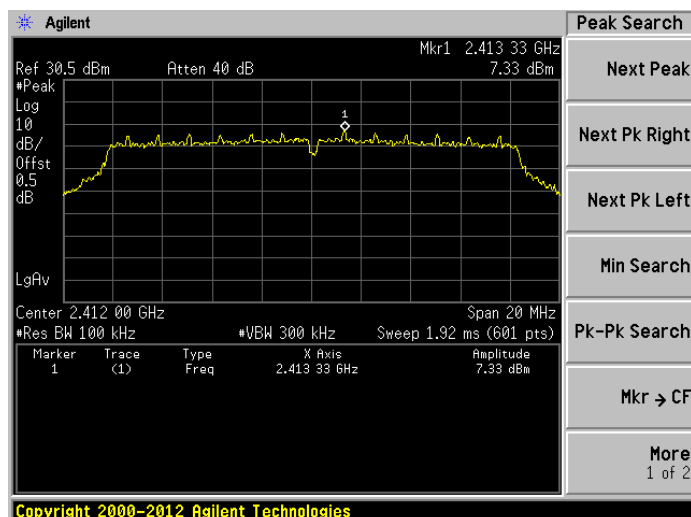
802.11b HIGH CHANNEL, Reference level



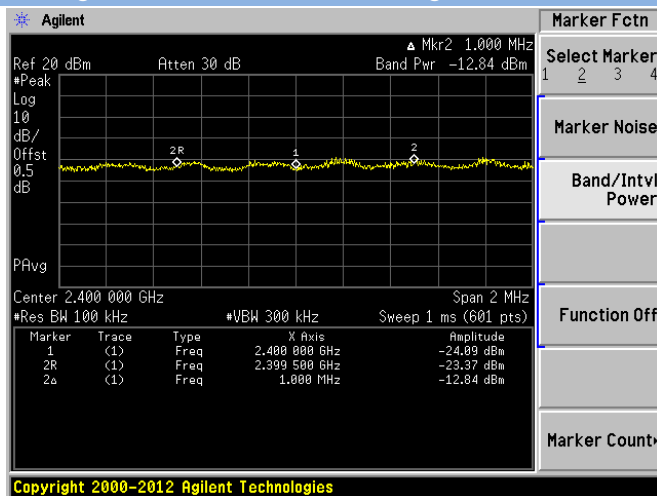
802.11b HIGH CHANNEL, Band Edge



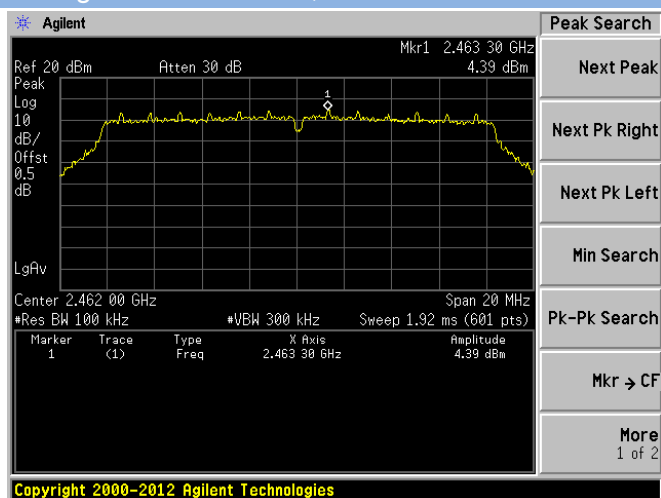
802.11g LOW CHANNEL, Carrier level



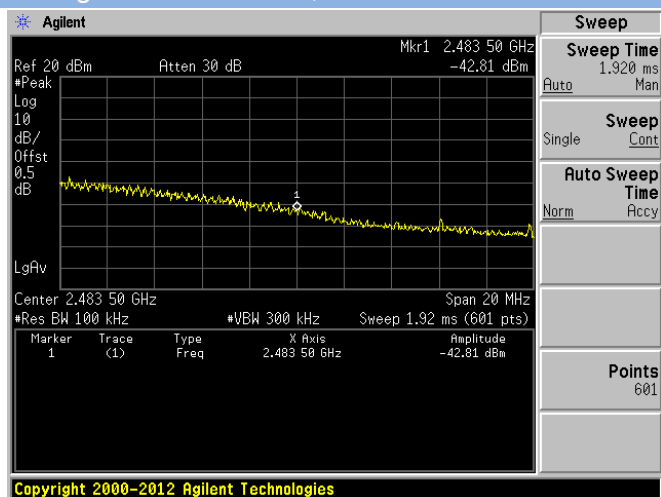
802.11g LOW CHANNEL, Band Edge



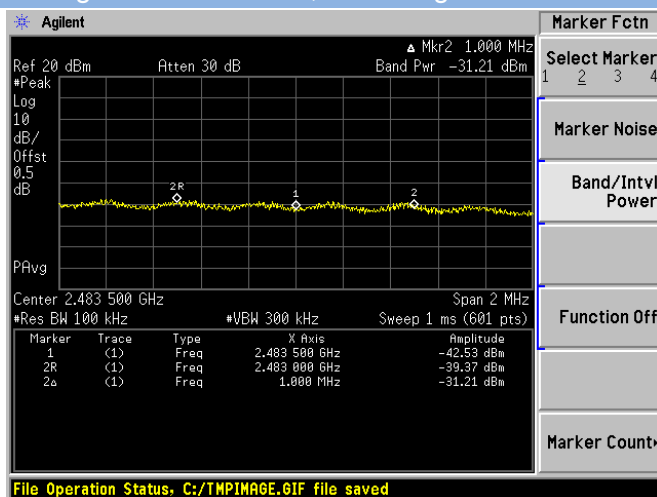
802.11g HIGH CHANNEL, Carrier level



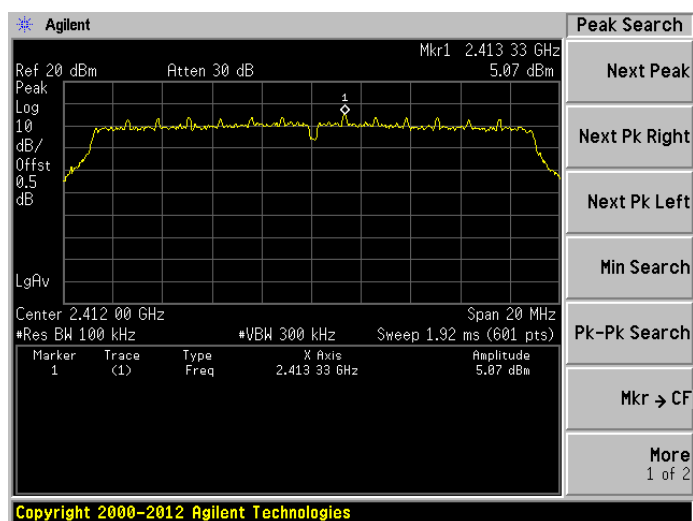
802.11g HIGH CHANNEL, Reference level



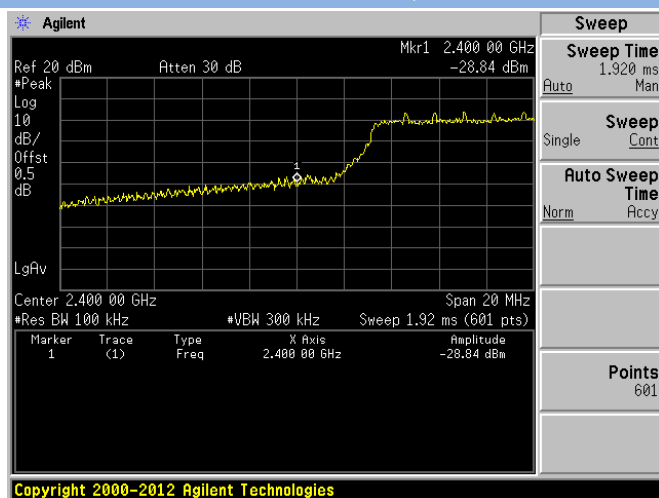
802.11g HIGH CHANNEL, Band Edge



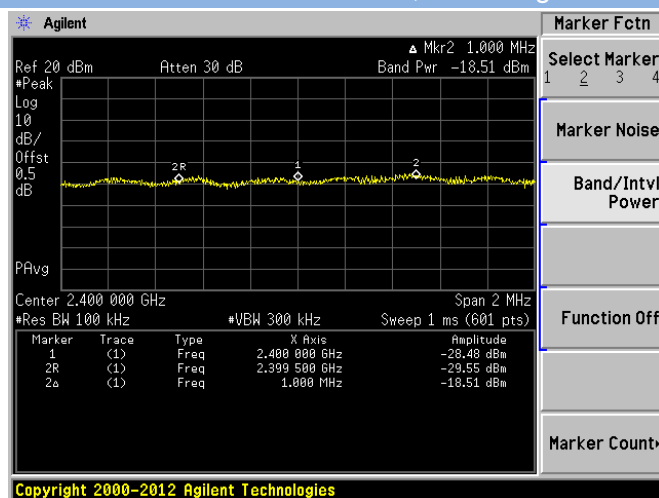
802.11n-20 MHz LOW CHANNEL, Carrier level



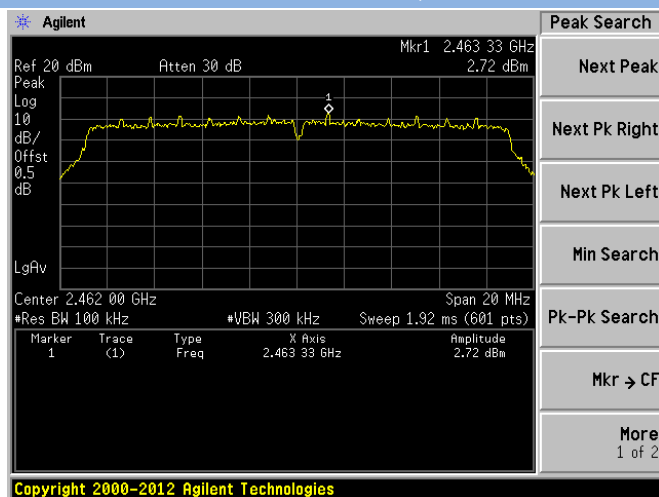
802.11n-20 MHz LOW CHANNEL, Reference level



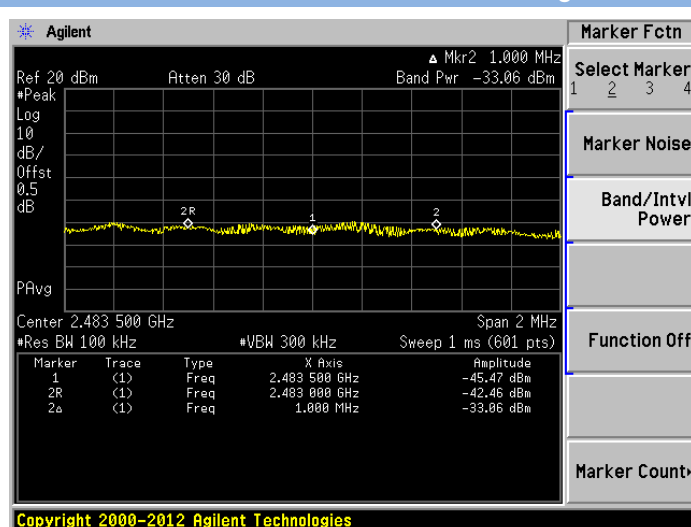
802.11n-20 MHz LOW CHANNEL, Band Edge



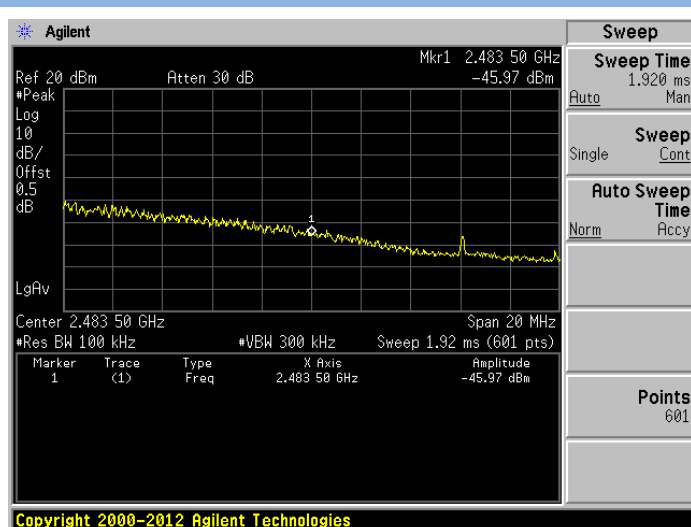
802.11n-20 MHz HIGH CHANNEL, Carrier level



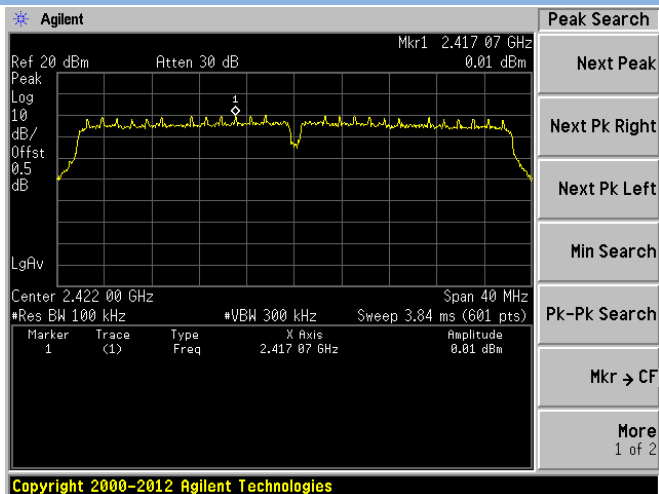
802.11n-20 MHz HIGH CHANNEL, Band Edge



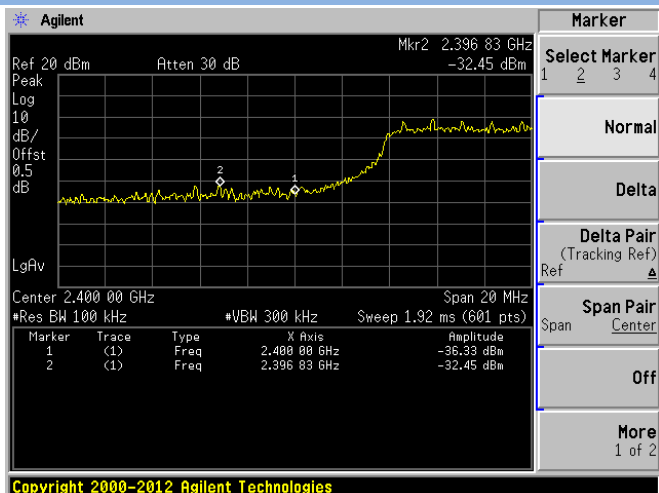
802.11n-20 MHz HIGH CHANNEL, Reference level



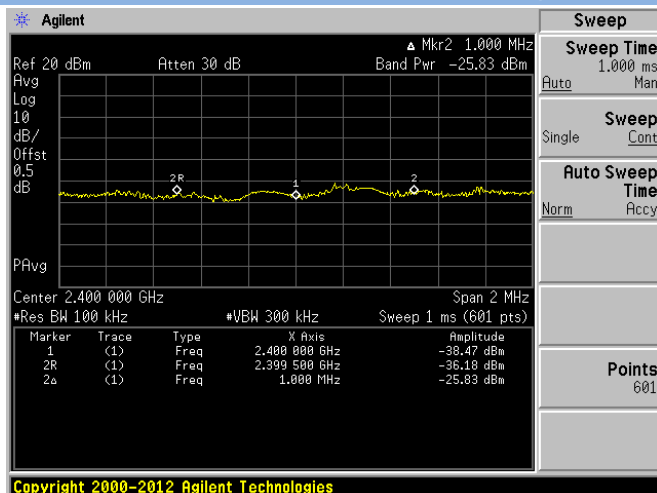
802.11n-40 MHz LOW CHANNEL, Carrier level



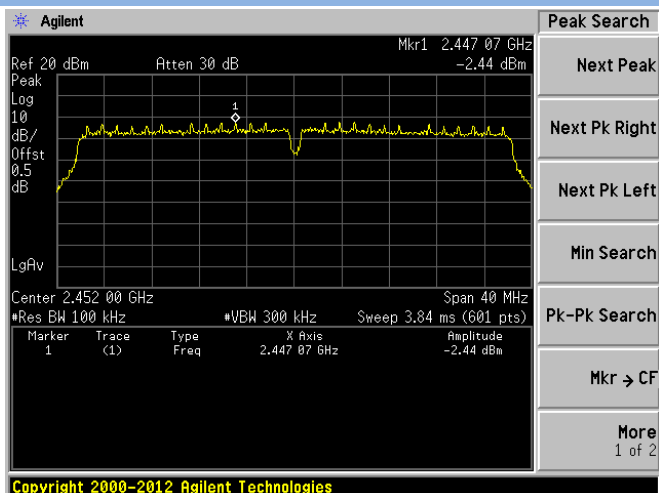
802.11n-40 MHz LOW CHANNEL, Reference level



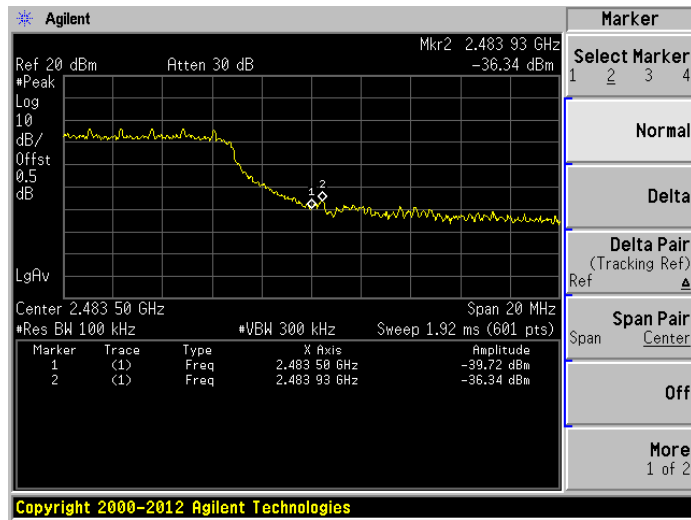
802.11n-40 MHz LOW CHANNEL, Band Edge



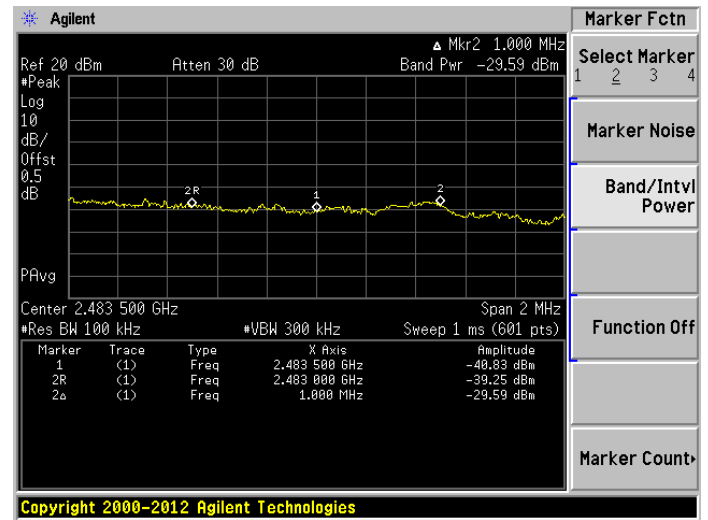
802.11n-40 MHz HIGH CHANNEL, Carrier level



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

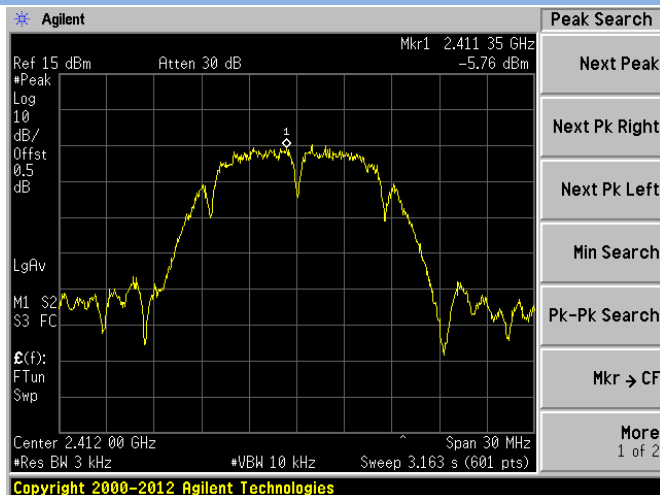
802.11n-40 MHz Mode:

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

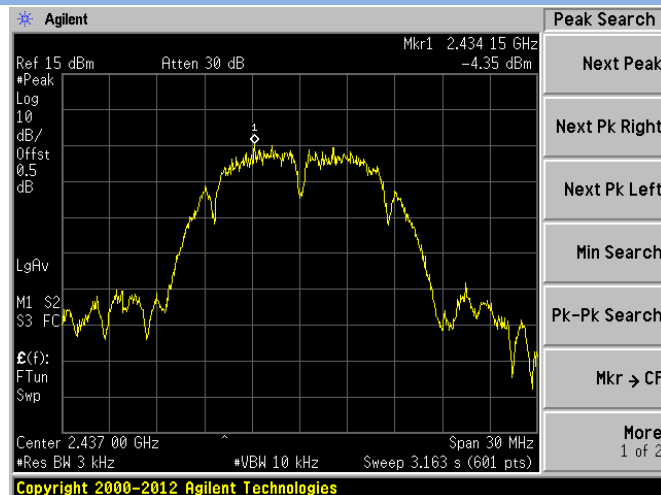
Test plots

ANT 0

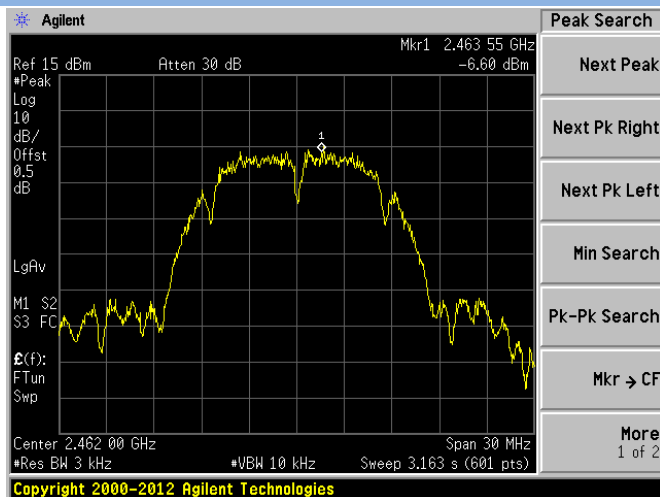
802.11b LOW CHANNEL



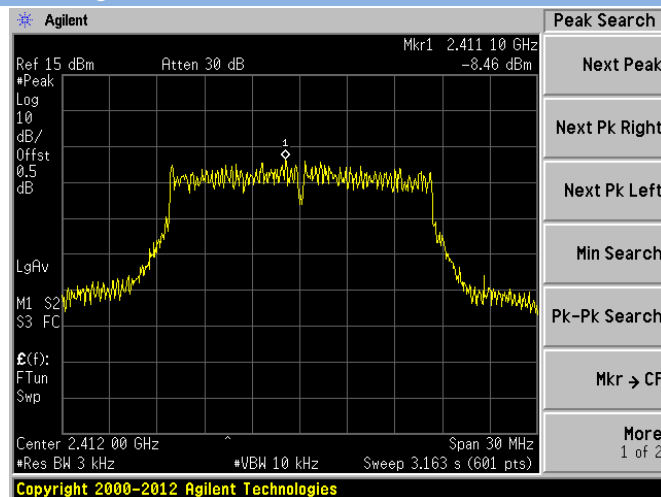
802.11b MIDDLE CHANNEL



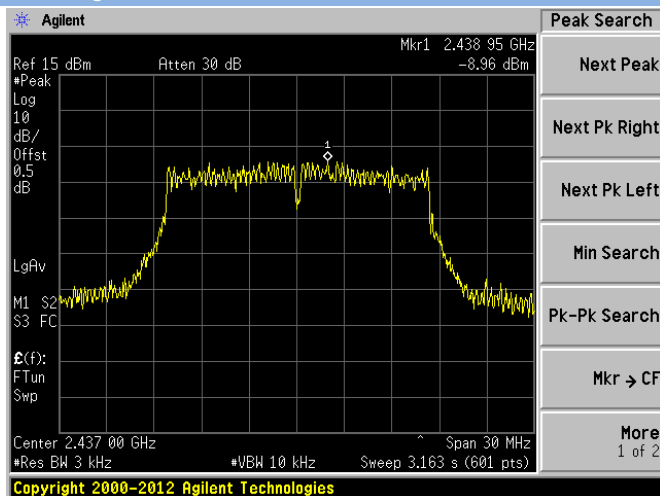
802.11b HIGH CHANNEL



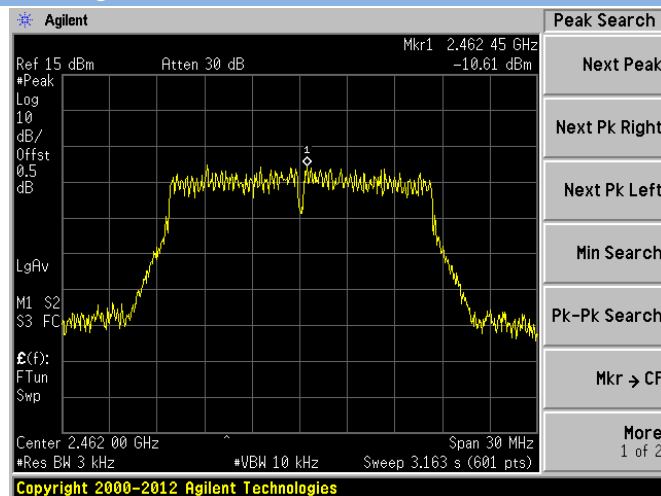
802.11g LOW CHANNEL



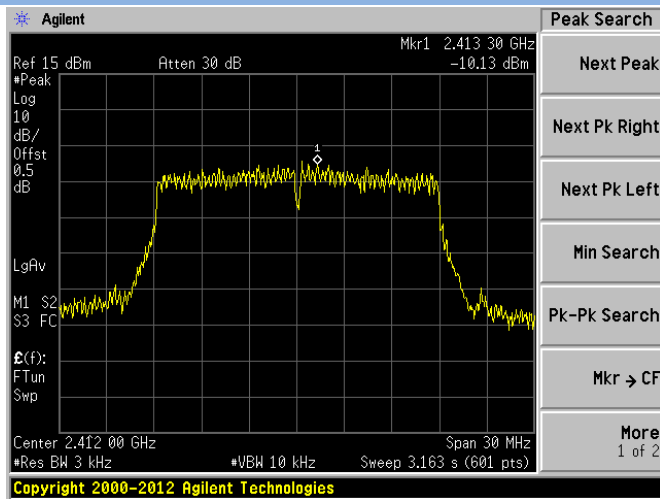
802.11g MIDDLE CHANNEL



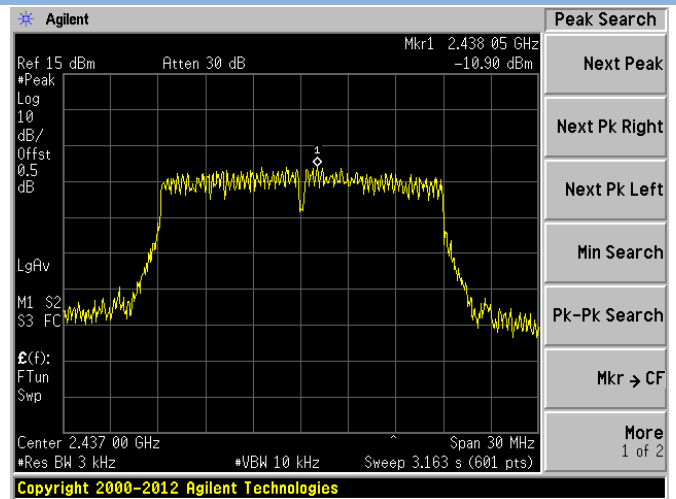
802.11g HIGH CHANNEL



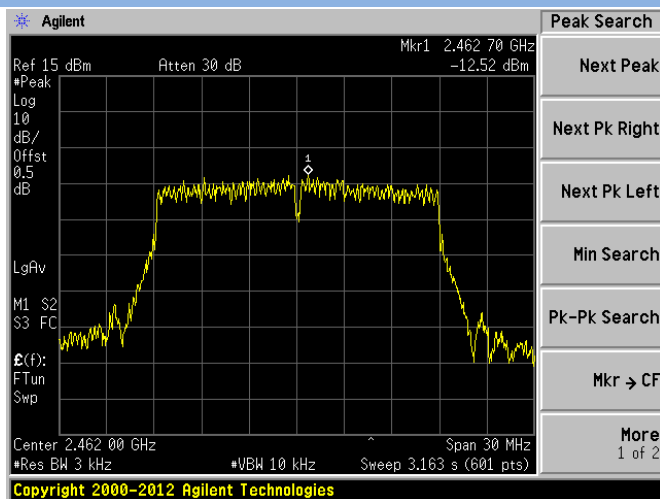
802.11n-20 MHz LOW CHANNEL



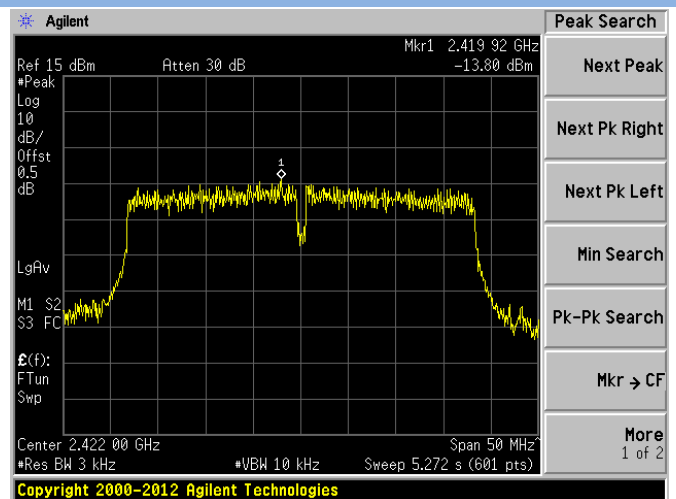
802.11 n-20 MHz MIDDLE CHANNEL



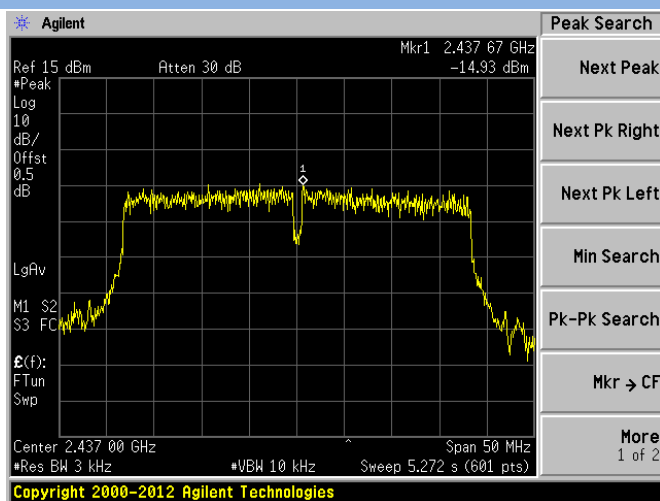
802.11n-20 MHz HIGH CHANNEL



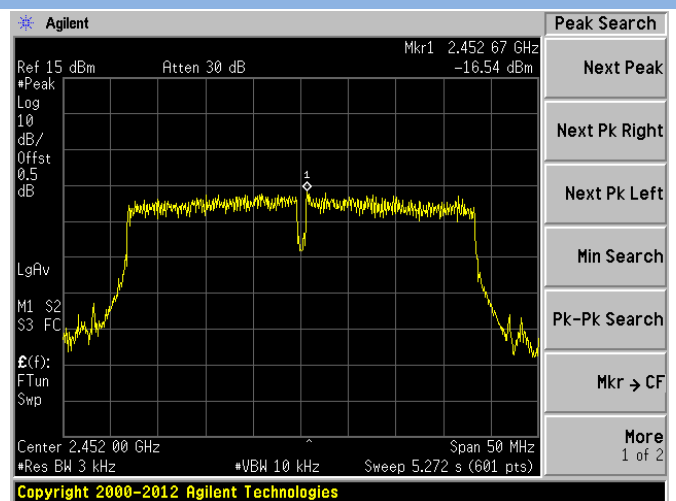
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL

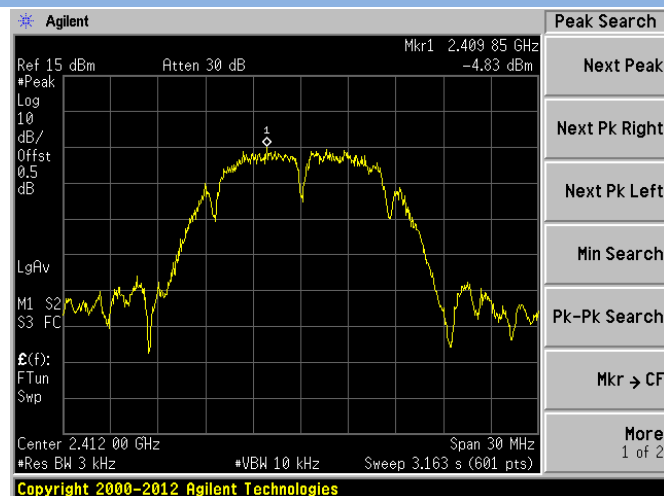


802.11n-40 MHz HIGH CHANNEL

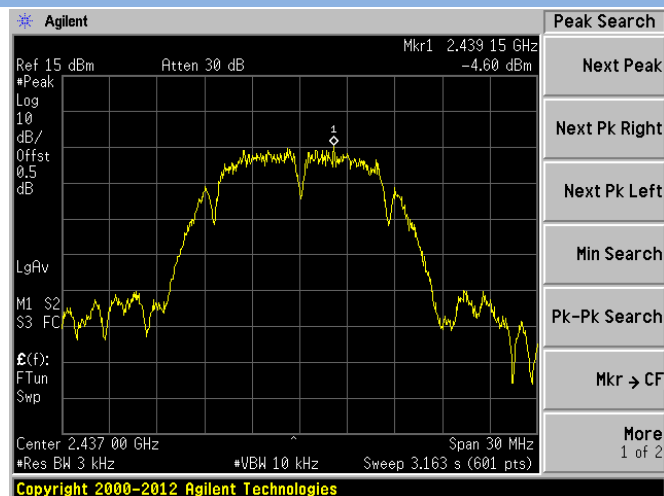


ANT 1

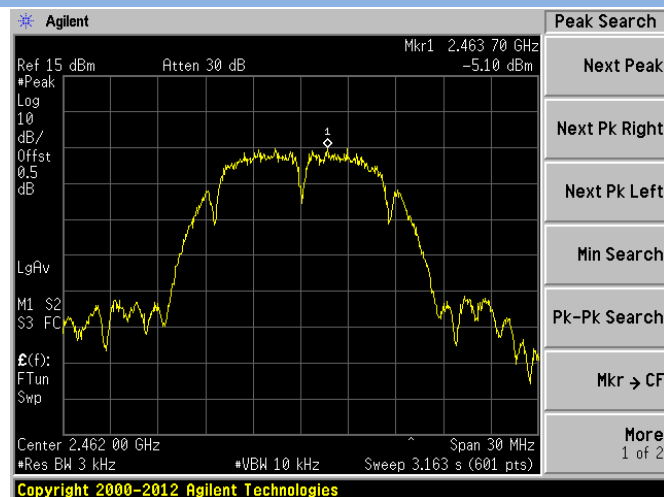
802.11b LOW CHANNEL



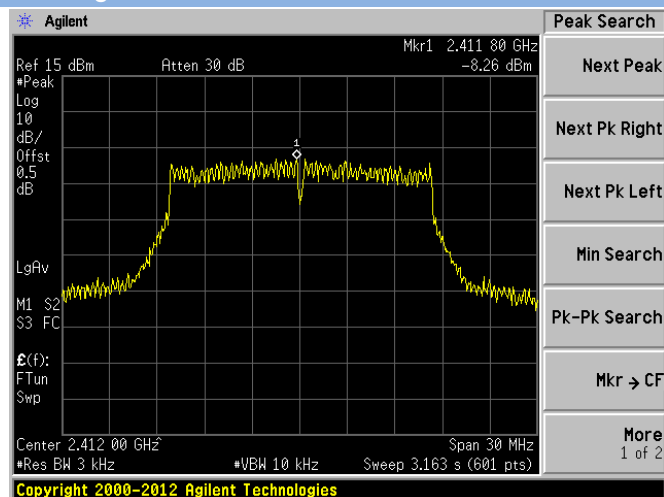
802.11b MIDDLE CHANNEL



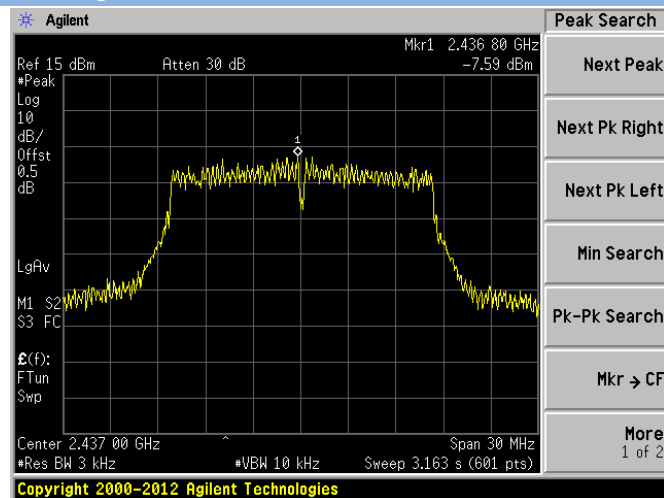
802.11b HIGH CHANNEL



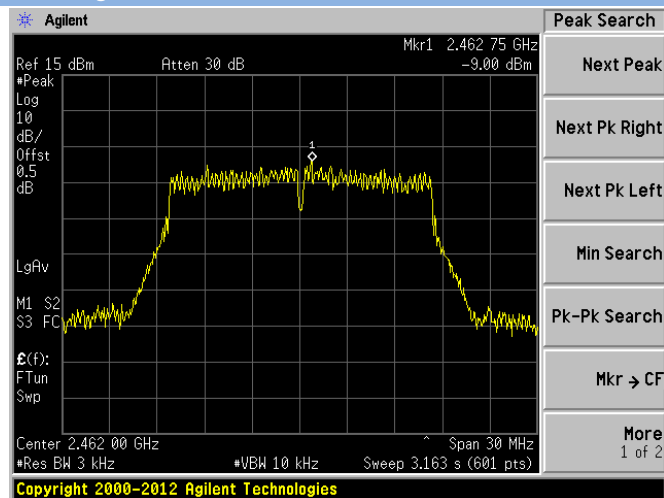
802.11g LOW CHANNEL



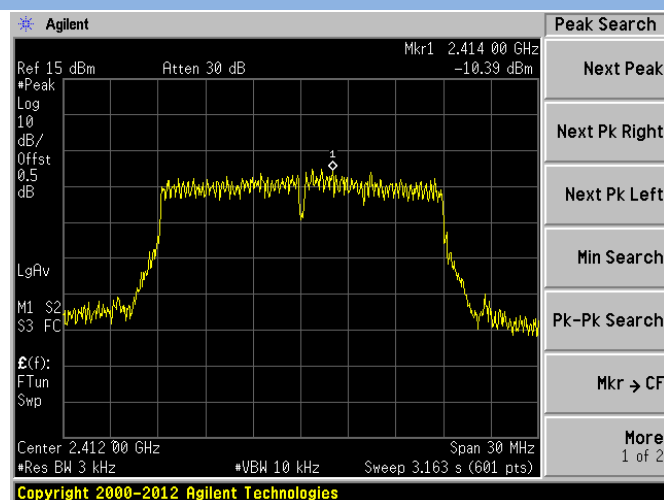
802.11g MIDDLE CHANNEL



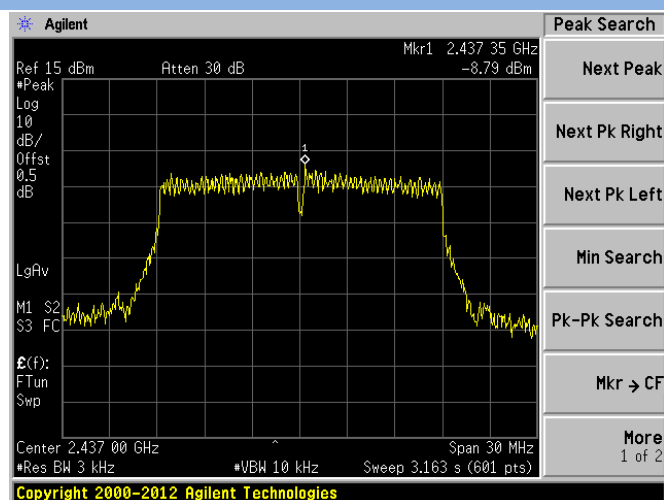
802.11g HIGH CHANNEL



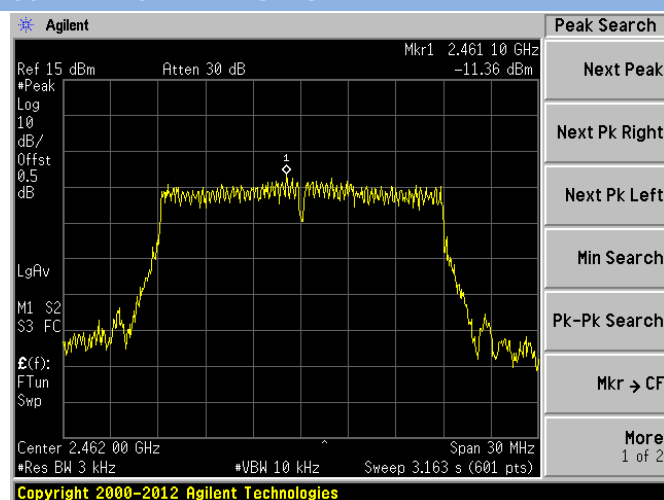
802.11n-20 MHz LOW CHANNEL



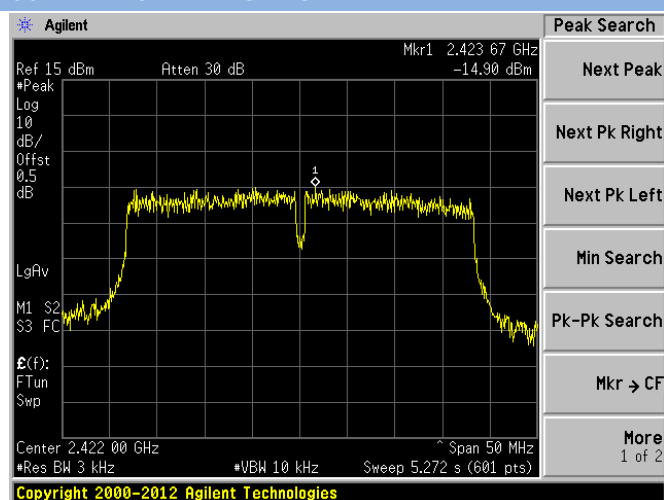
802.11 n-20 MHz MIDDLE CHANNEL



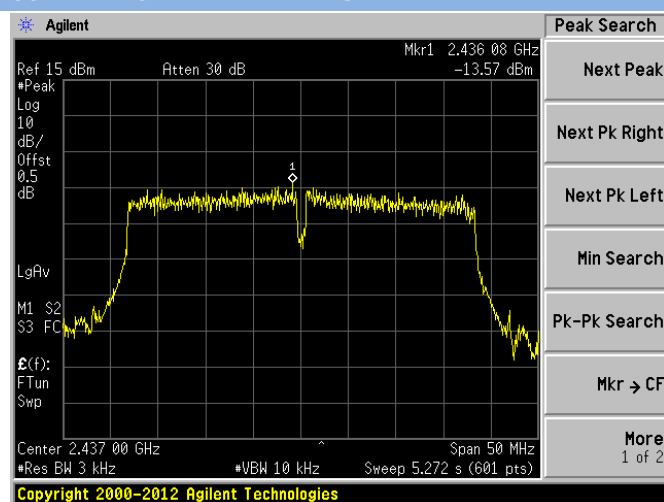
802.11n-20 MHz HIGH CHANNEL



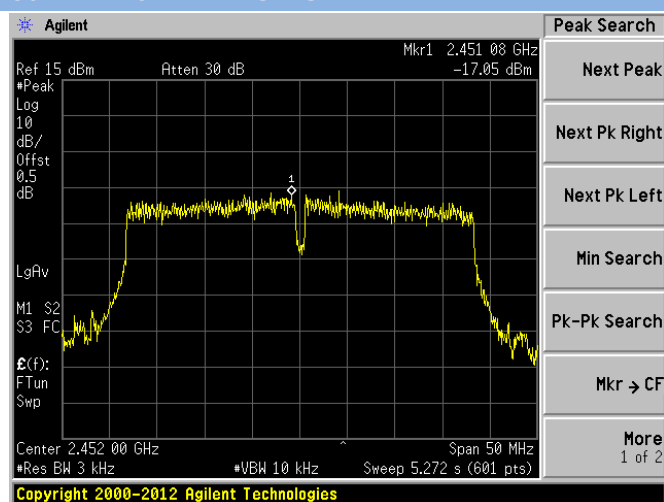
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



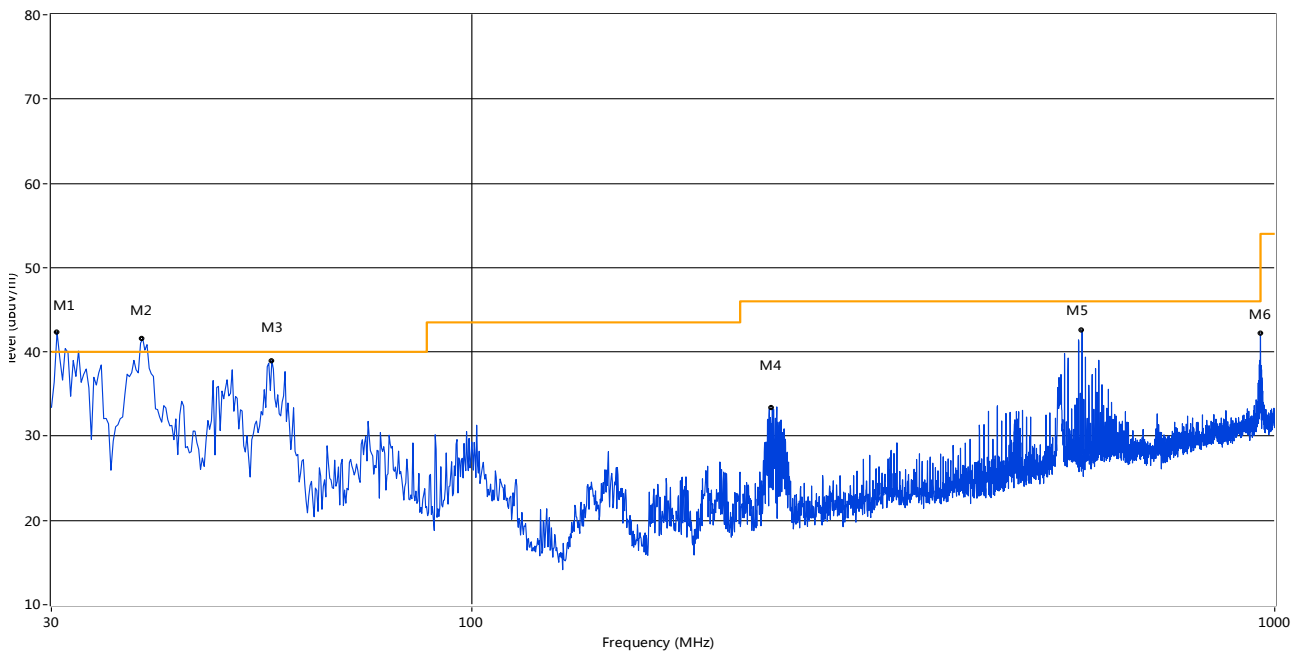
A.8 Receiver Spurious Emissions

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

Test Data and Plots

30 MHz to 1 GHz, ANT V

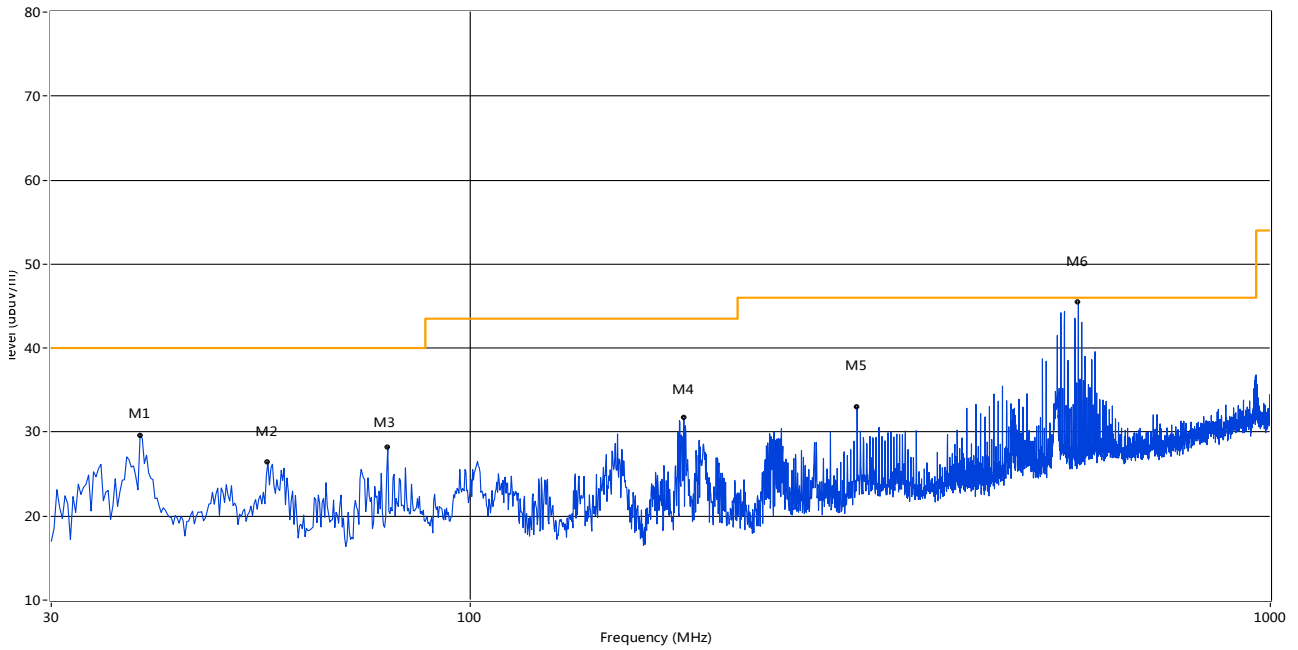
RE Test case_FCC 15C 30MHz-1GHz



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

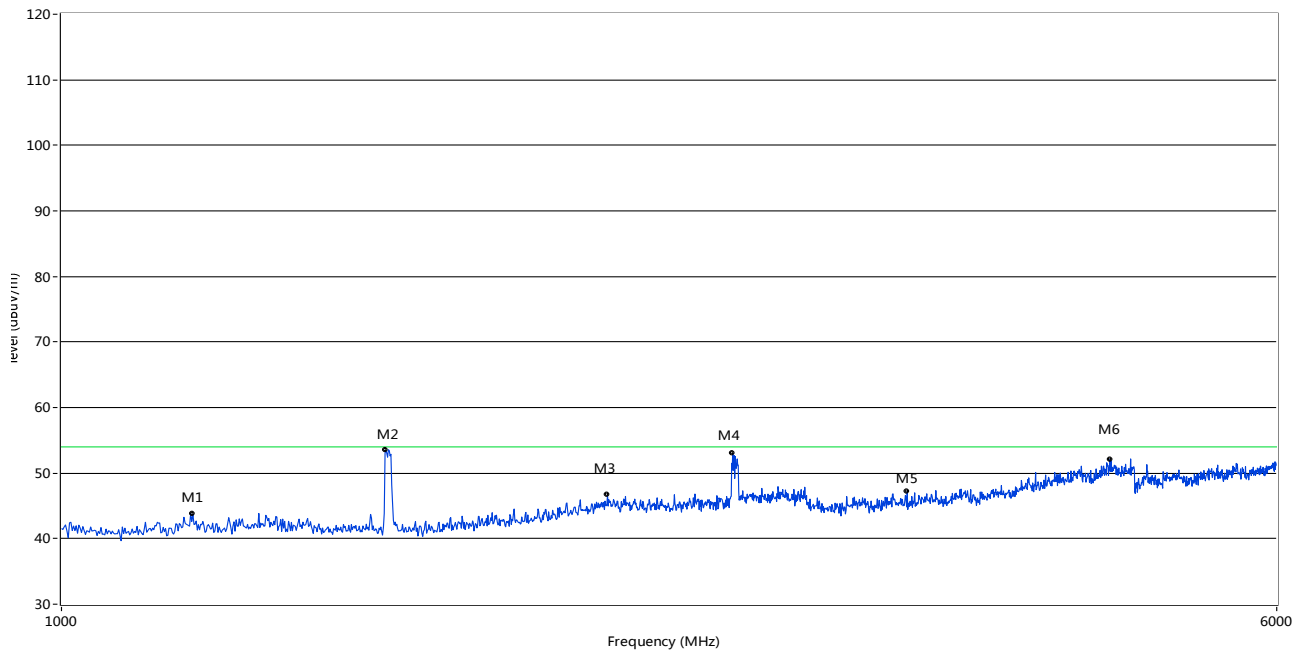
RE Test case_FCC 15C 30MHz-1GHz



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

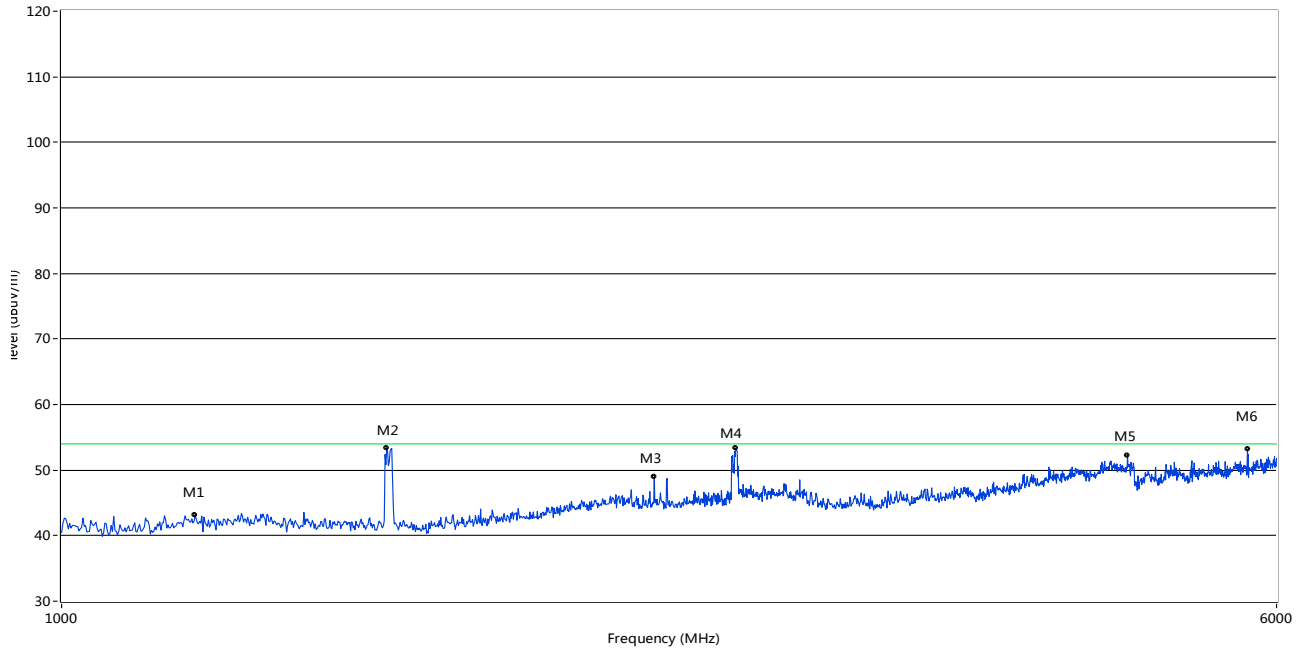
RE Test case_FCC 15C 1GHz-6GHz



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--