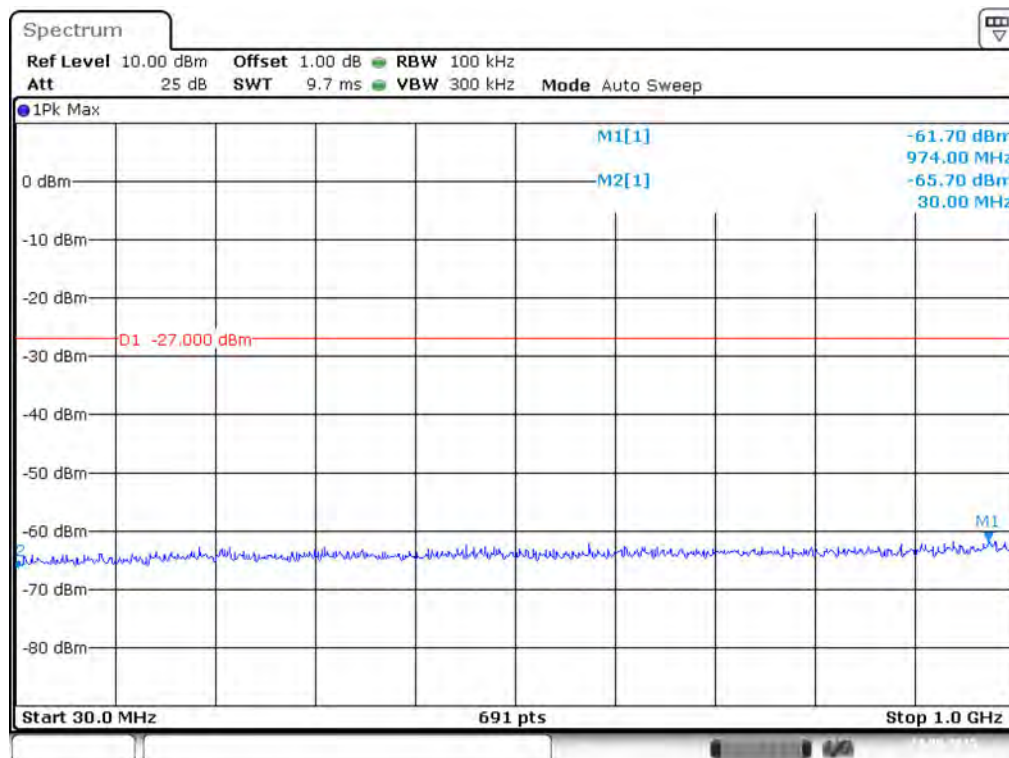


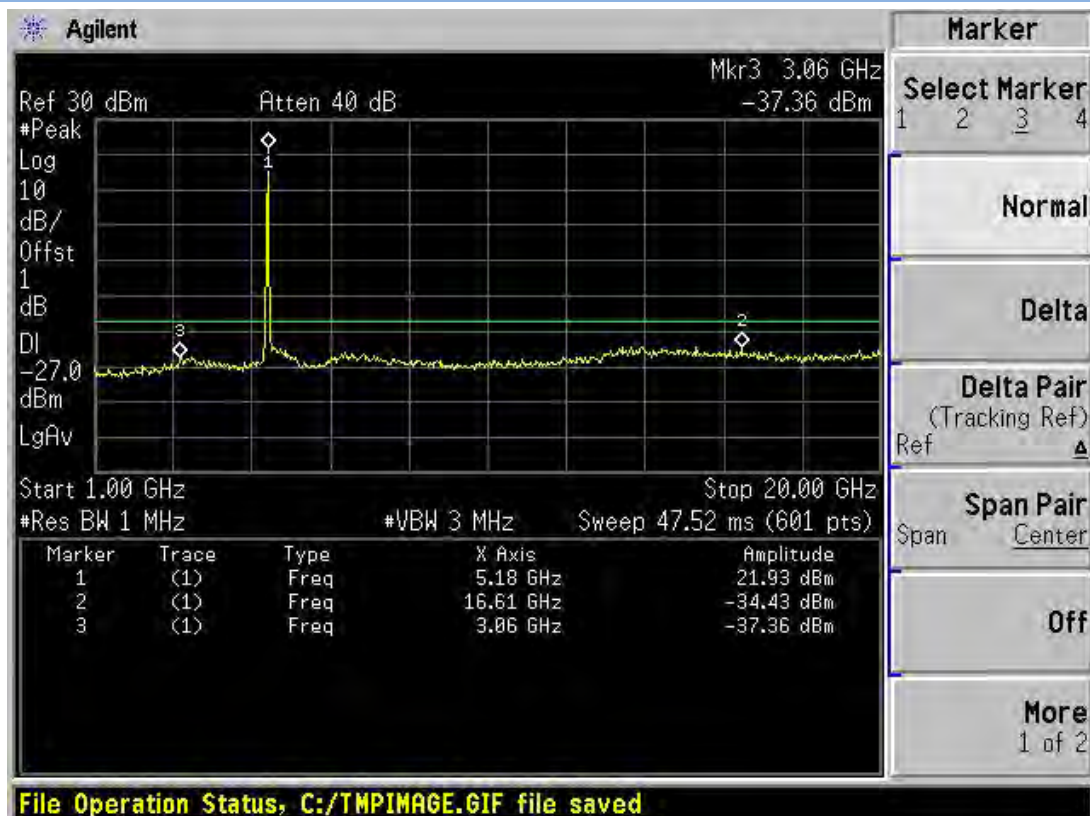
A.6 Conducted Spurious Emission

Band I 11a CH36 (30 ~ 1000 MHz)

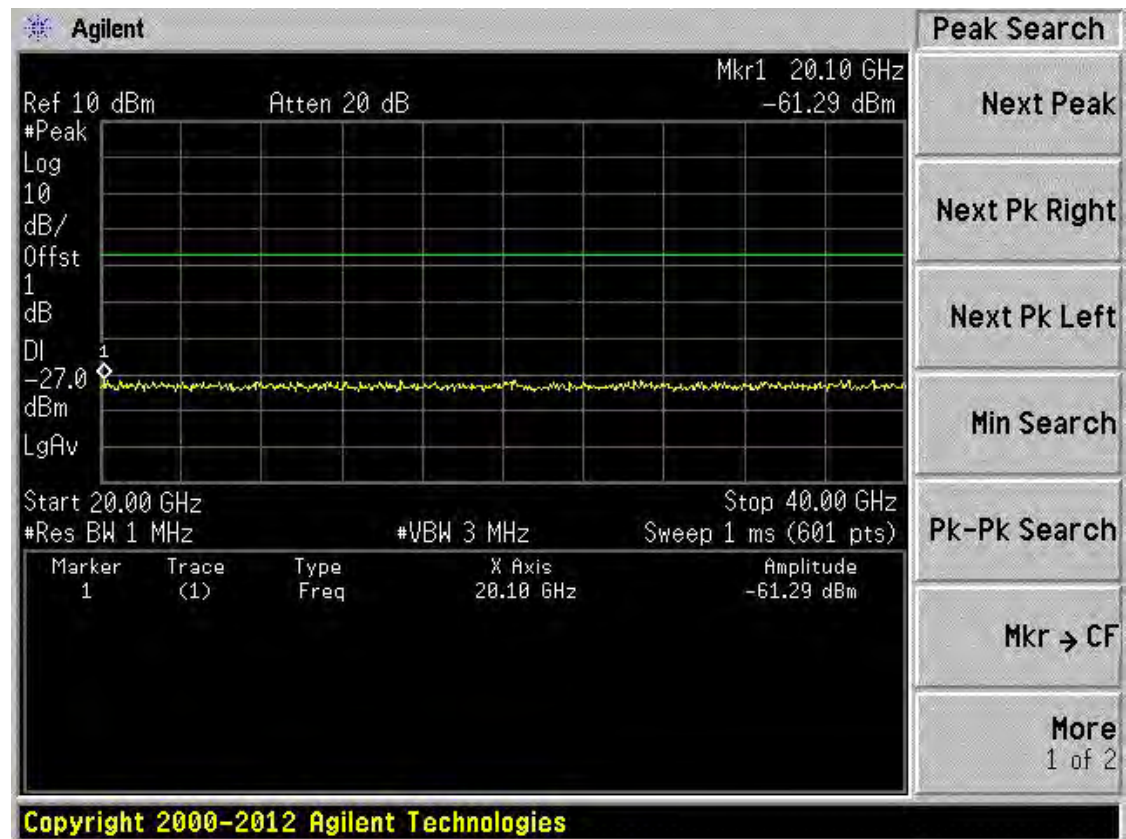


Date: 24.AUG.2015 16:04:36

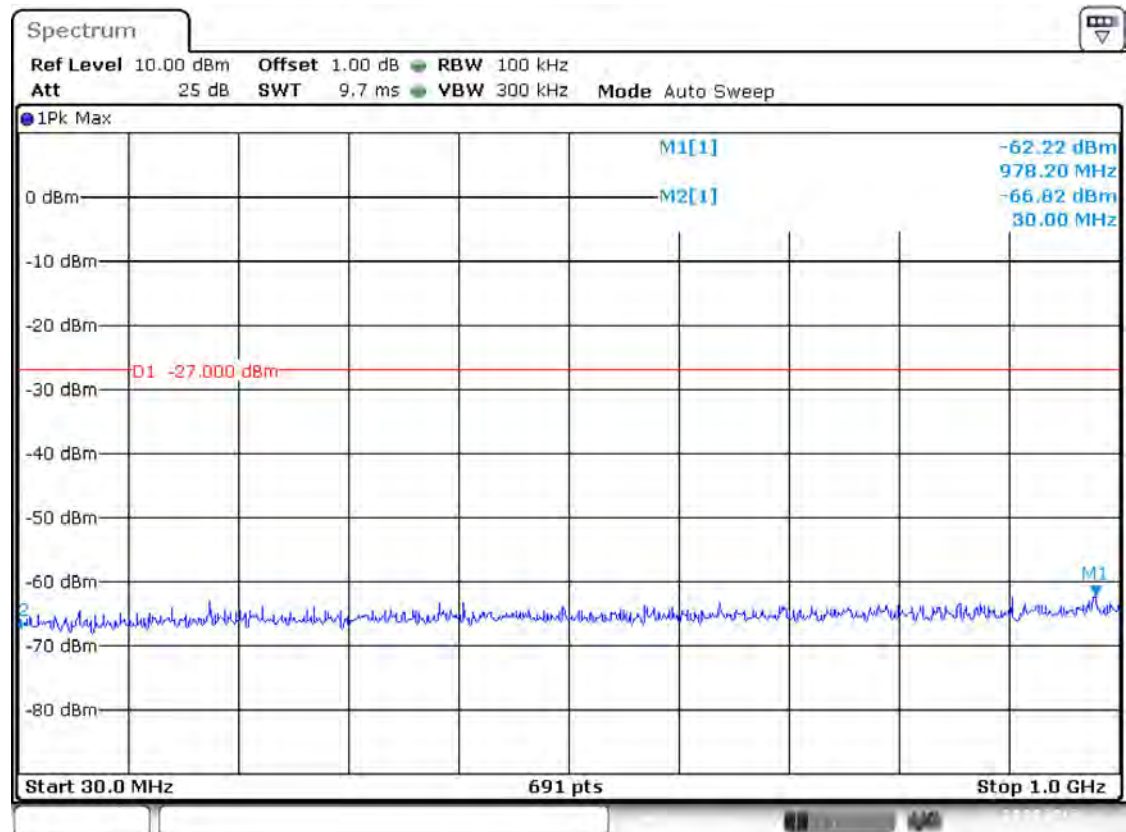
Band I 11a CH36 (1 ~ 20 GHz)



Band I 11a CH36 (20 ~ 40 GHz)

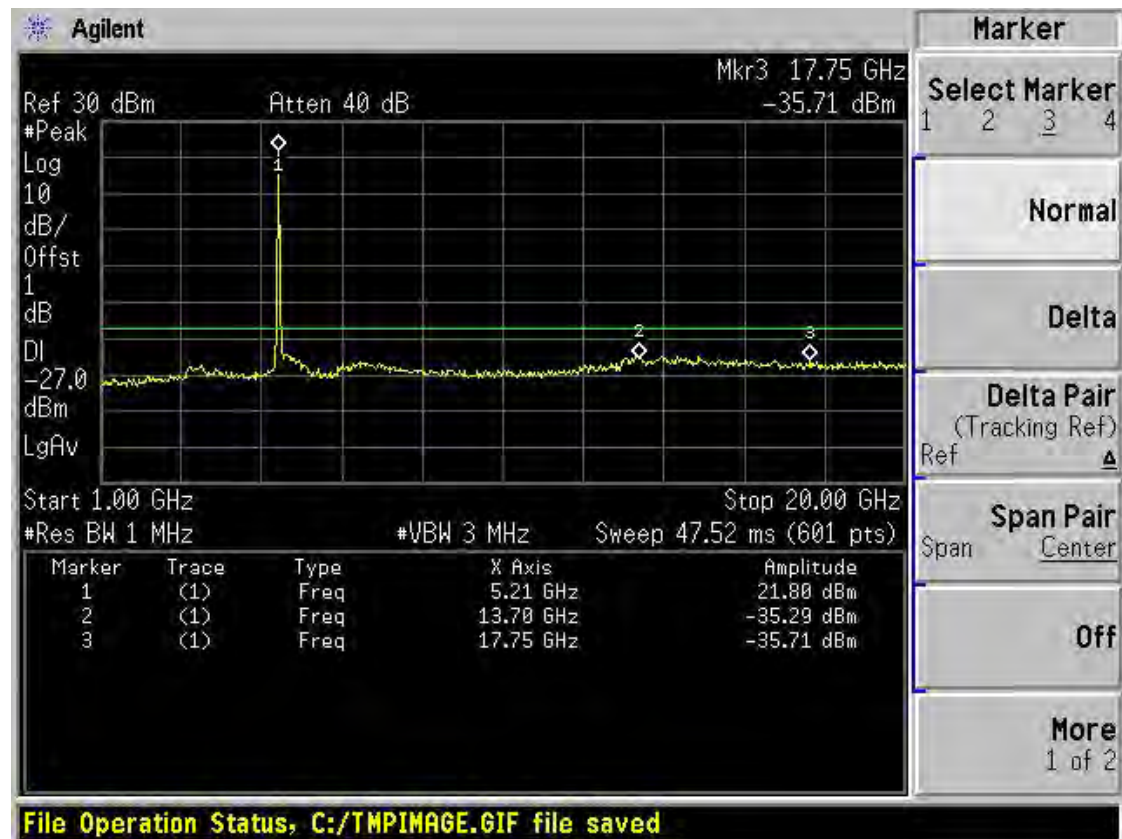


Band I 11a CH40 (30 ~ 1000 MHz)

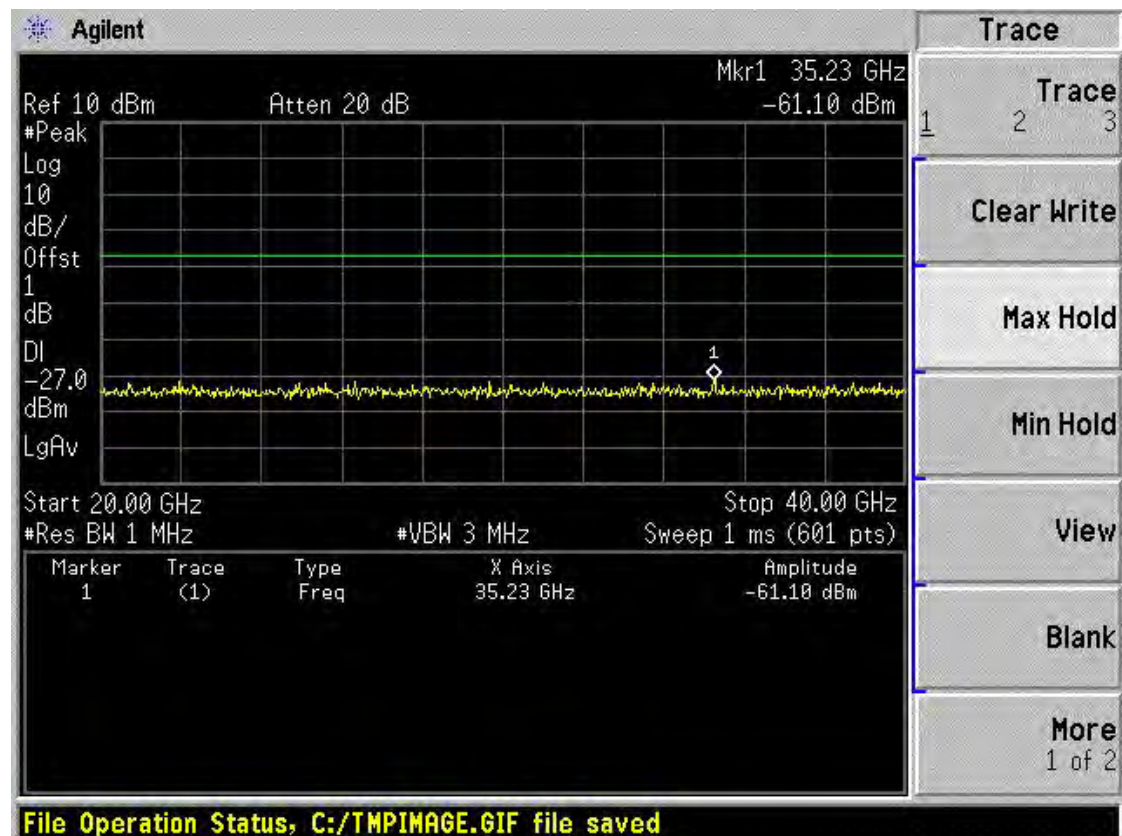


Date: 24.AUG.2015 16:06:18

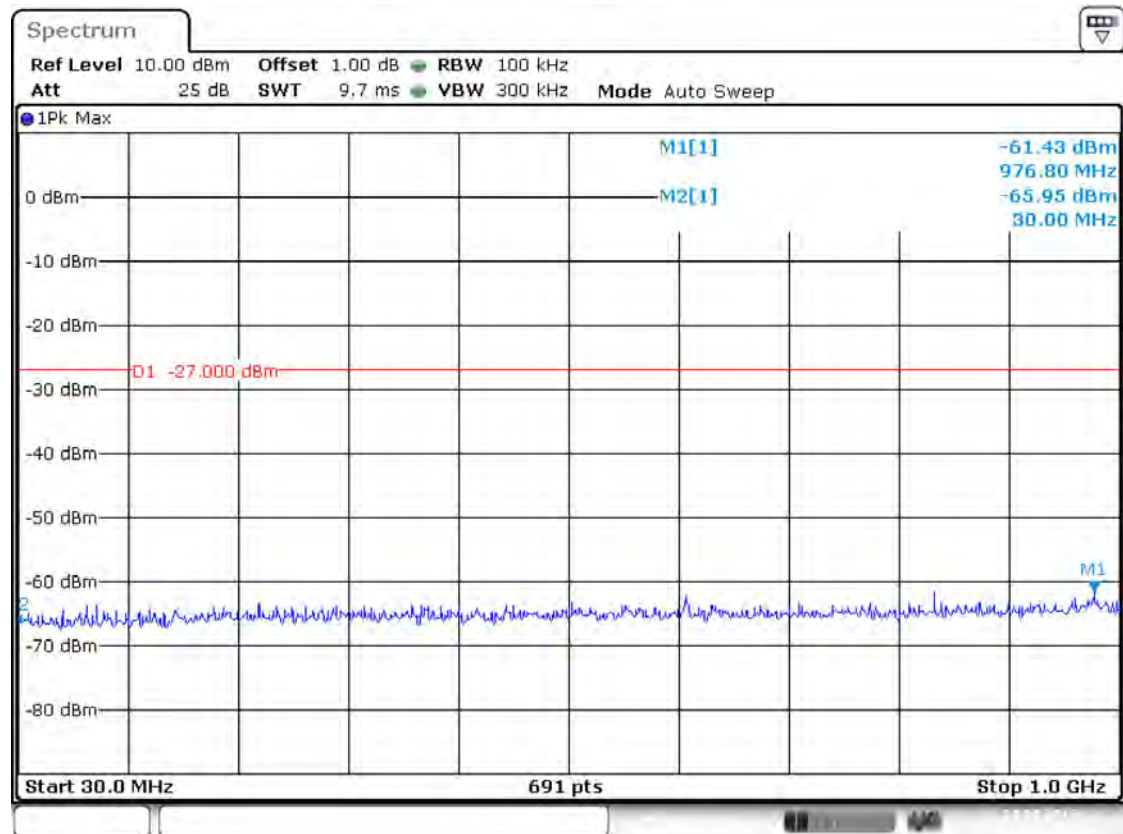
Band I 11a CH40 (1 ~ 20 GHz)



Band I 11a CH40 (20 ~ 40 GHz)

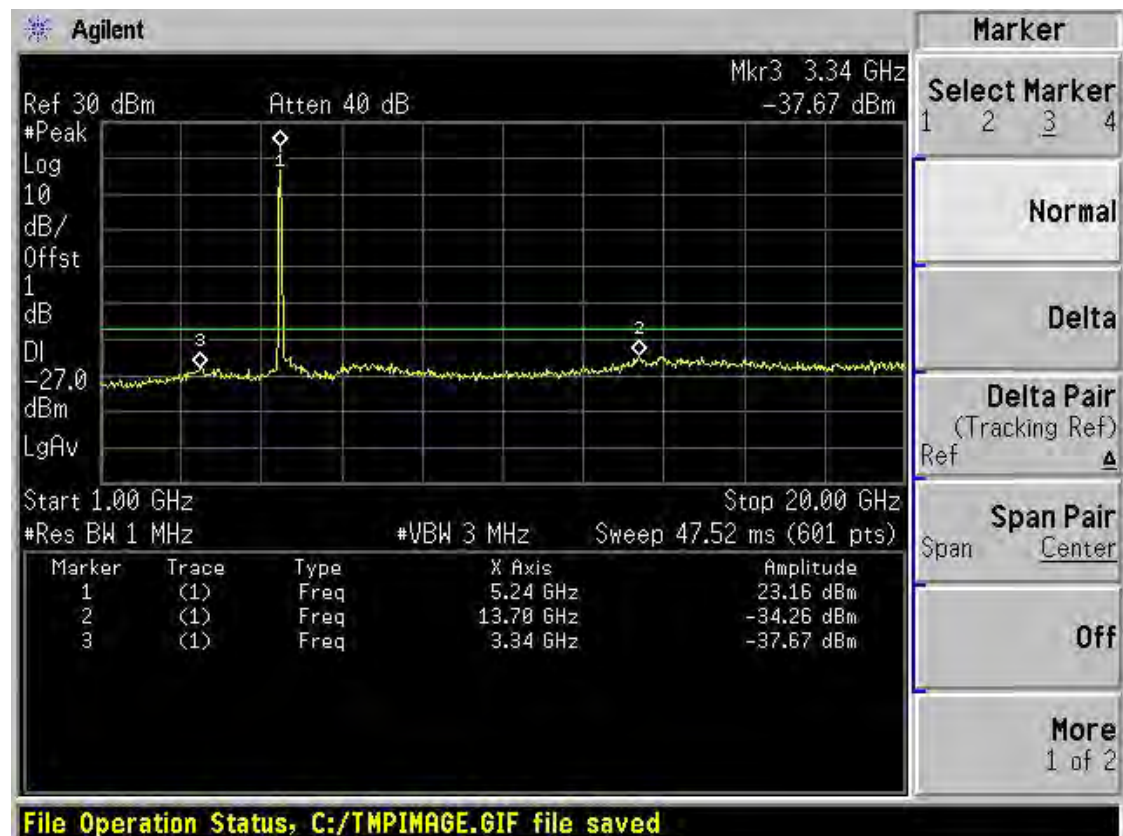


Band I 11a CH48 (30 ~ 1000 MHz)

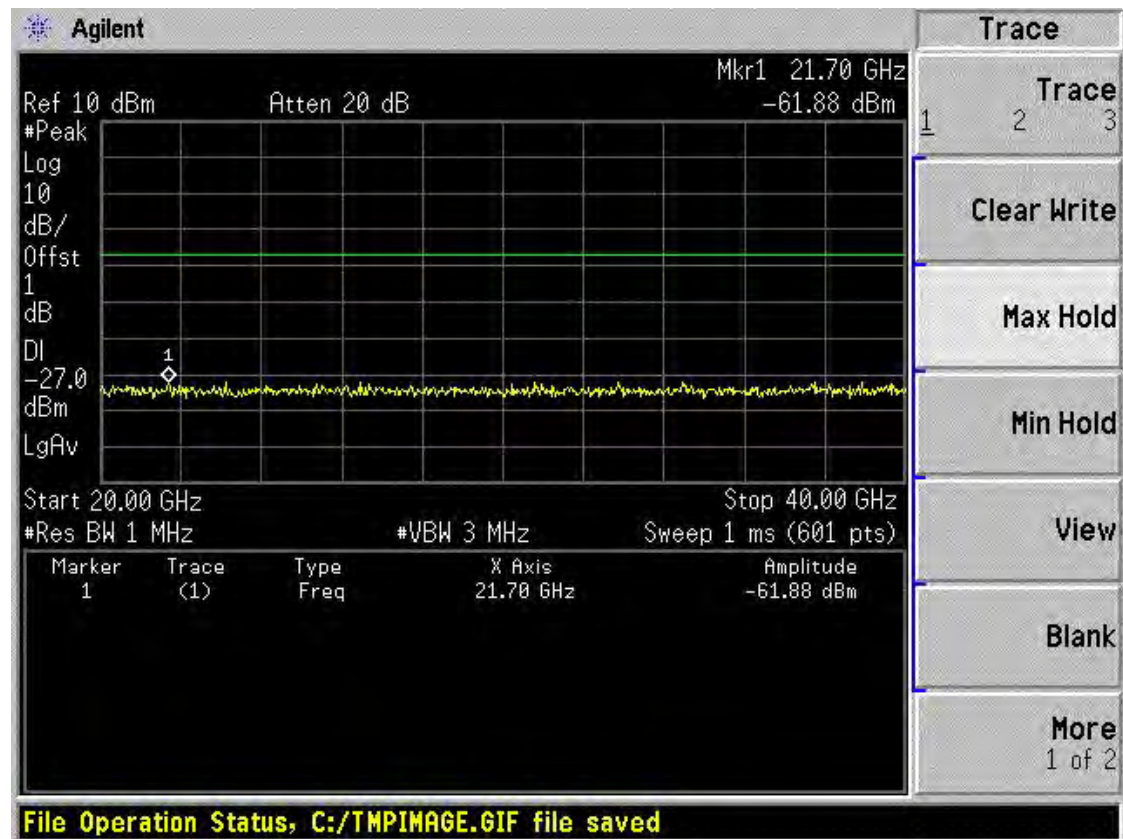


Date: 24.AUG.2015 16:07:22

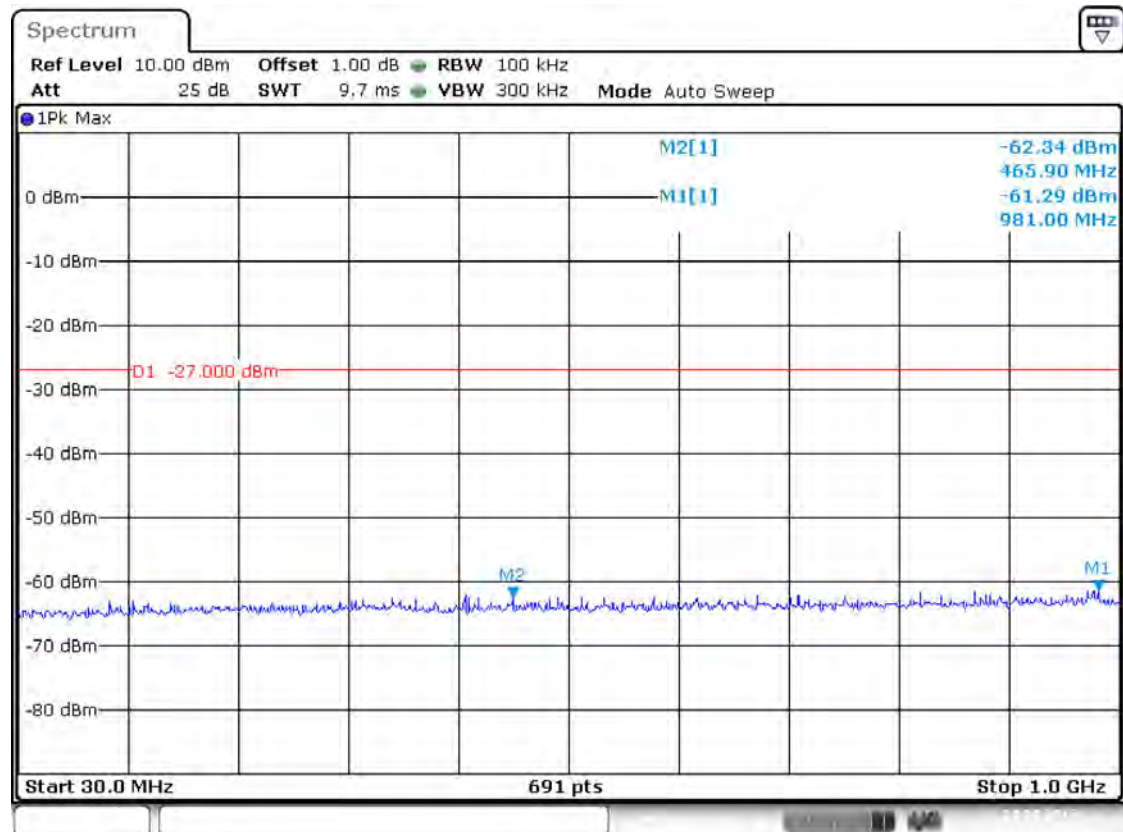
Band I 11a CH48 (1 ~ 20 GHz)



Band I 11a CH48 (20 ~ 40 GHz)

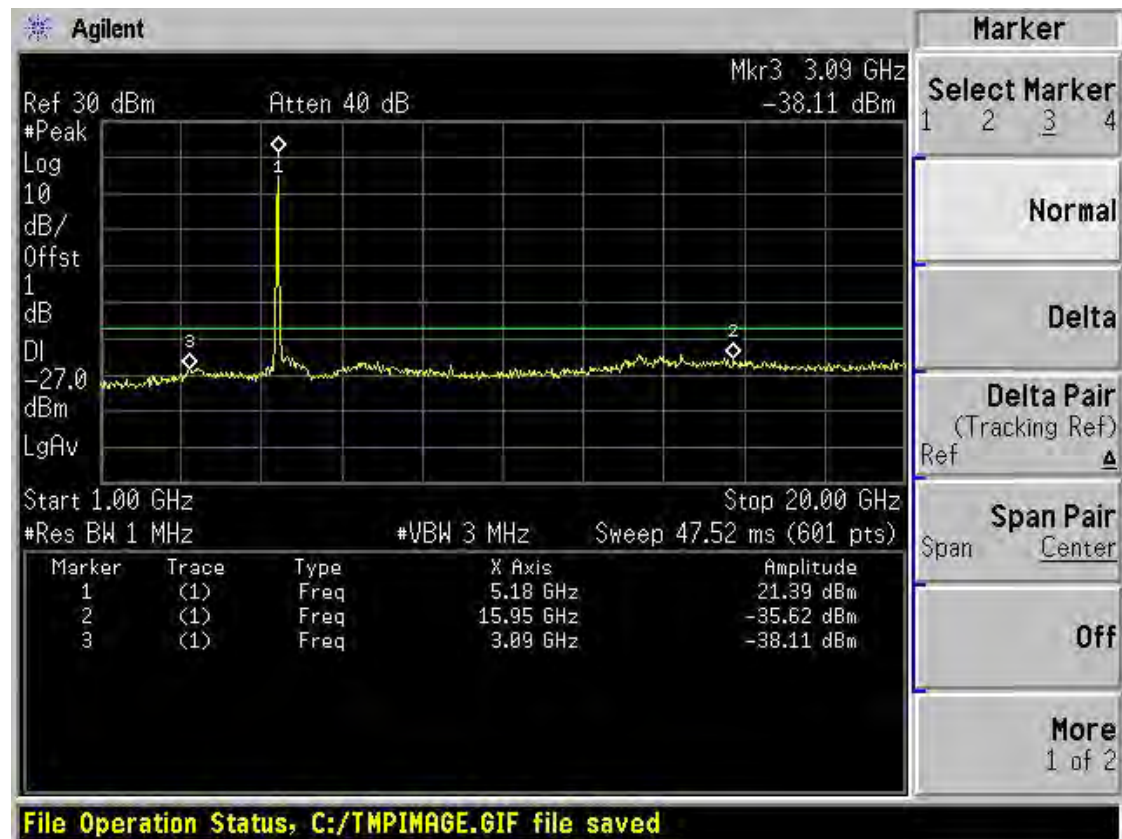


Band I 11n(HT20) CH36 (30 ~ 1000 MHz)

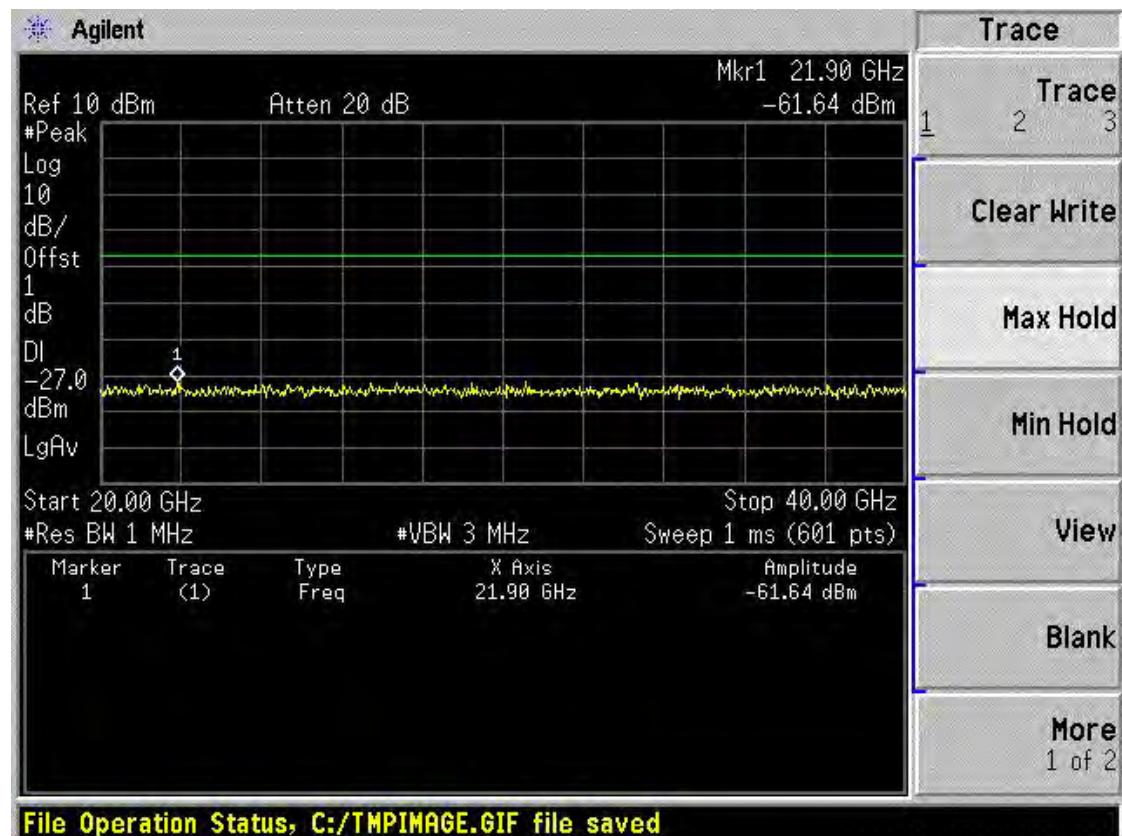


Date: 24.AUG.2015 16:21:41

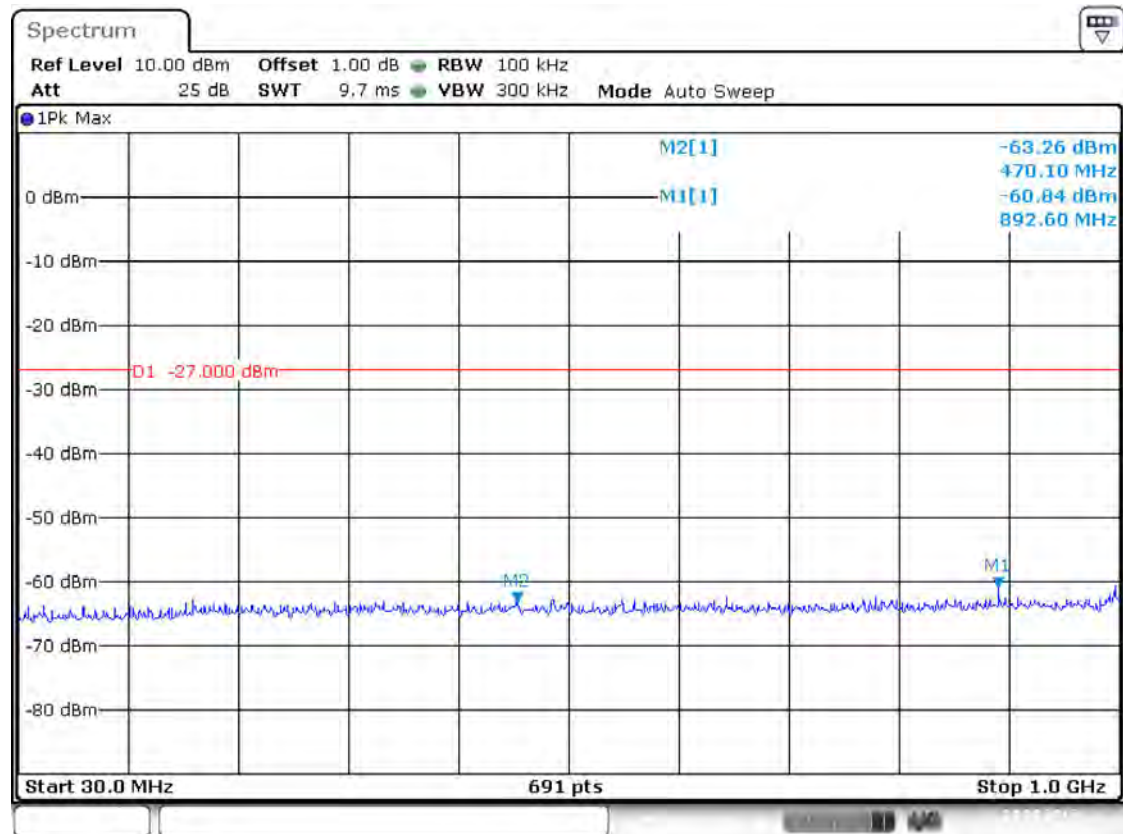
Band I 11n(HT20) CH36 (1 ~ 20 GHz)



Band I 11n(HT20) CH36 (20 ~ 40 GHz)

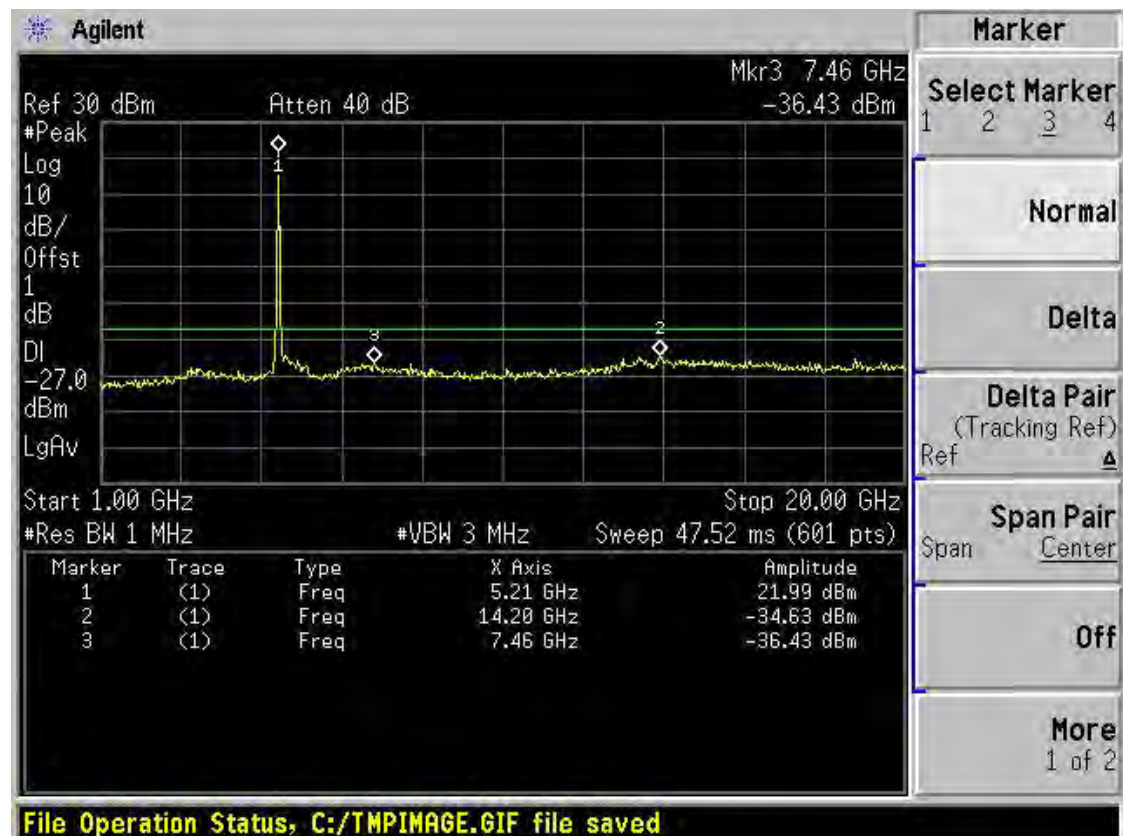


Band I 11n(HT20) CH40 (30 ~ 1000 MHz)

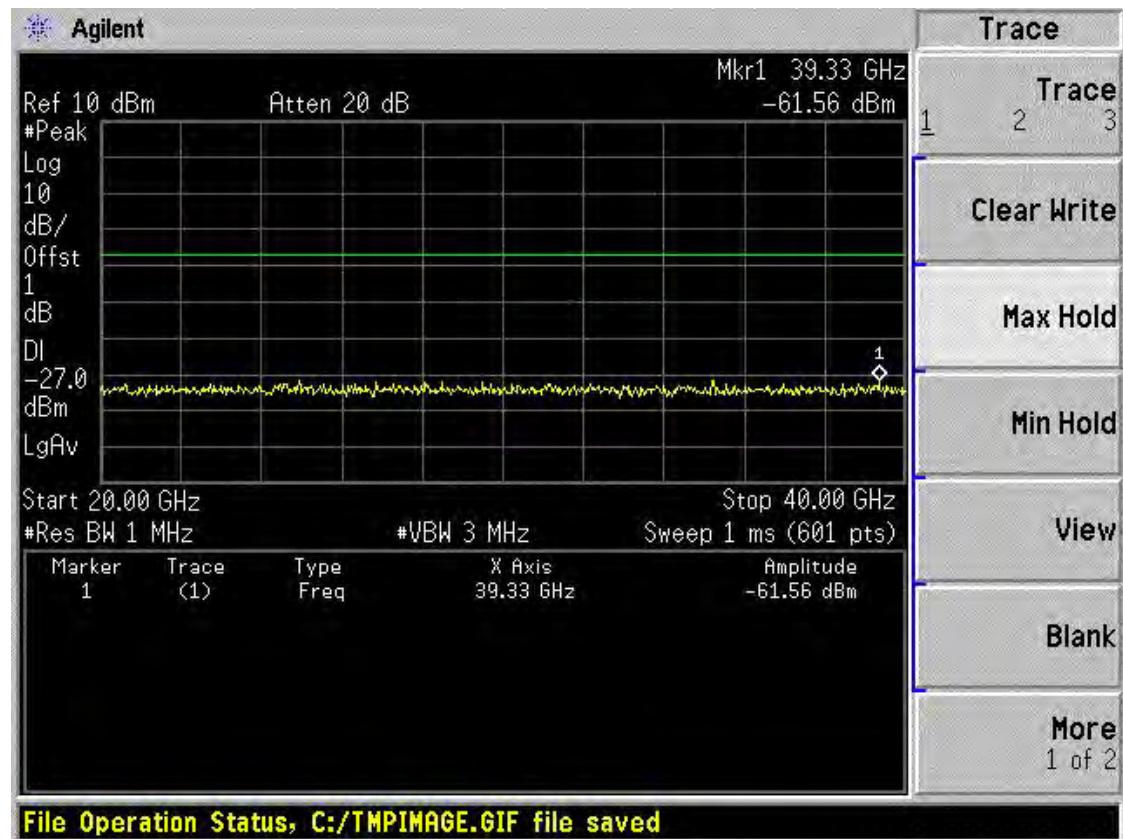


Date: 24.AUG.2015 16:23:24

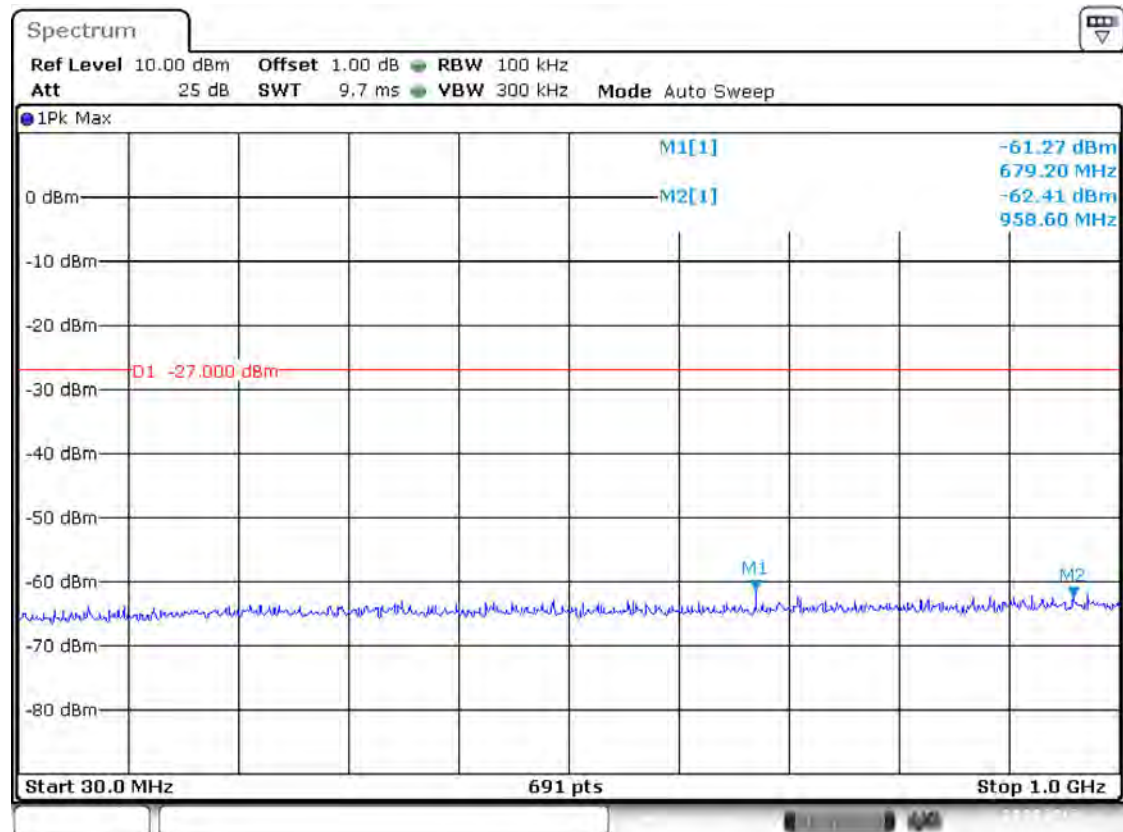
Band I 11n(HT20) CH40 (1 ~ 20 GHz)



Band I 11n(HT20) CH40 (20 ~ 40 GHz)

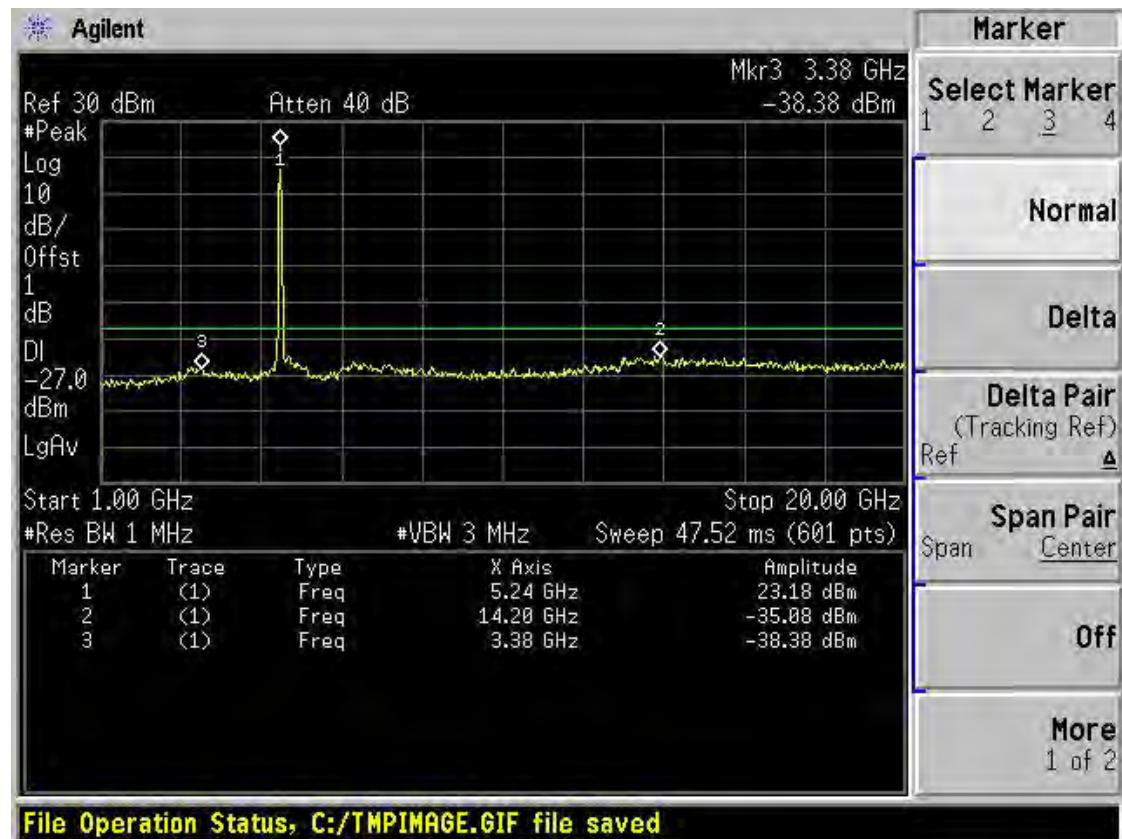


Band I 11n(HT20) CH48 (30 ~ 1000 MHz)

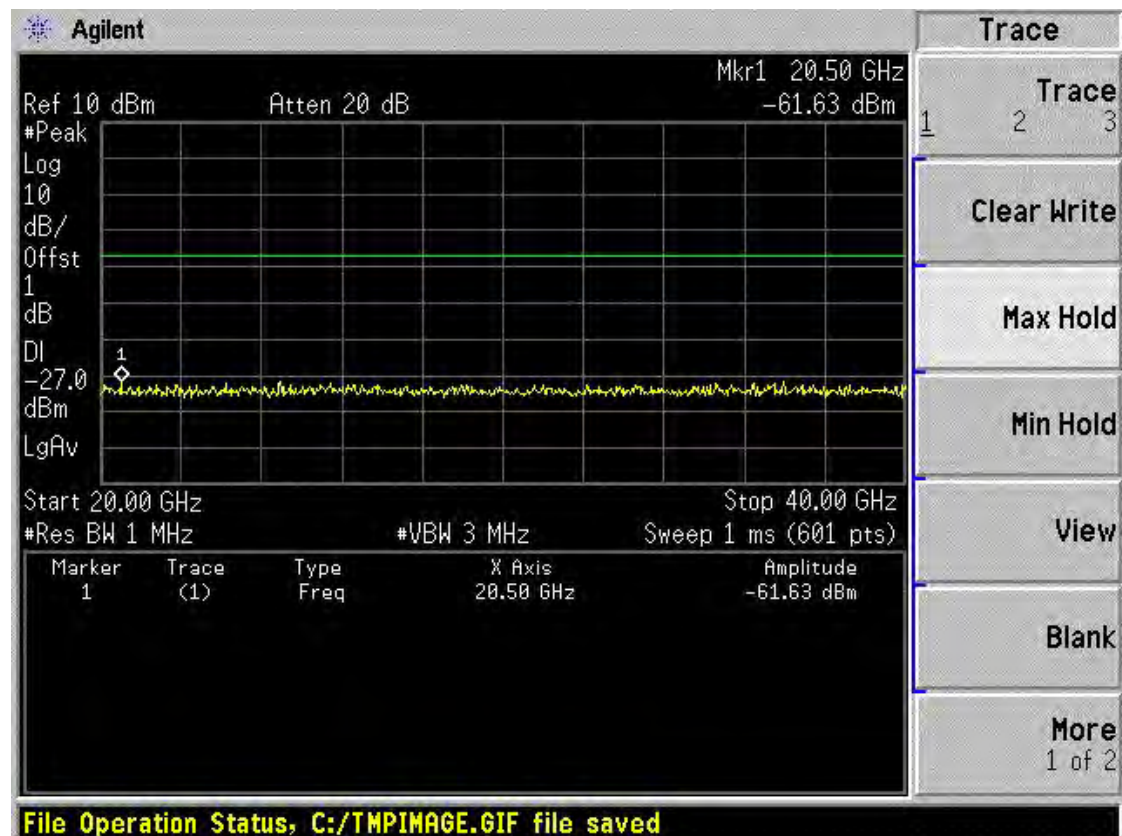


Date: 24.AUG.2015 16:24:16

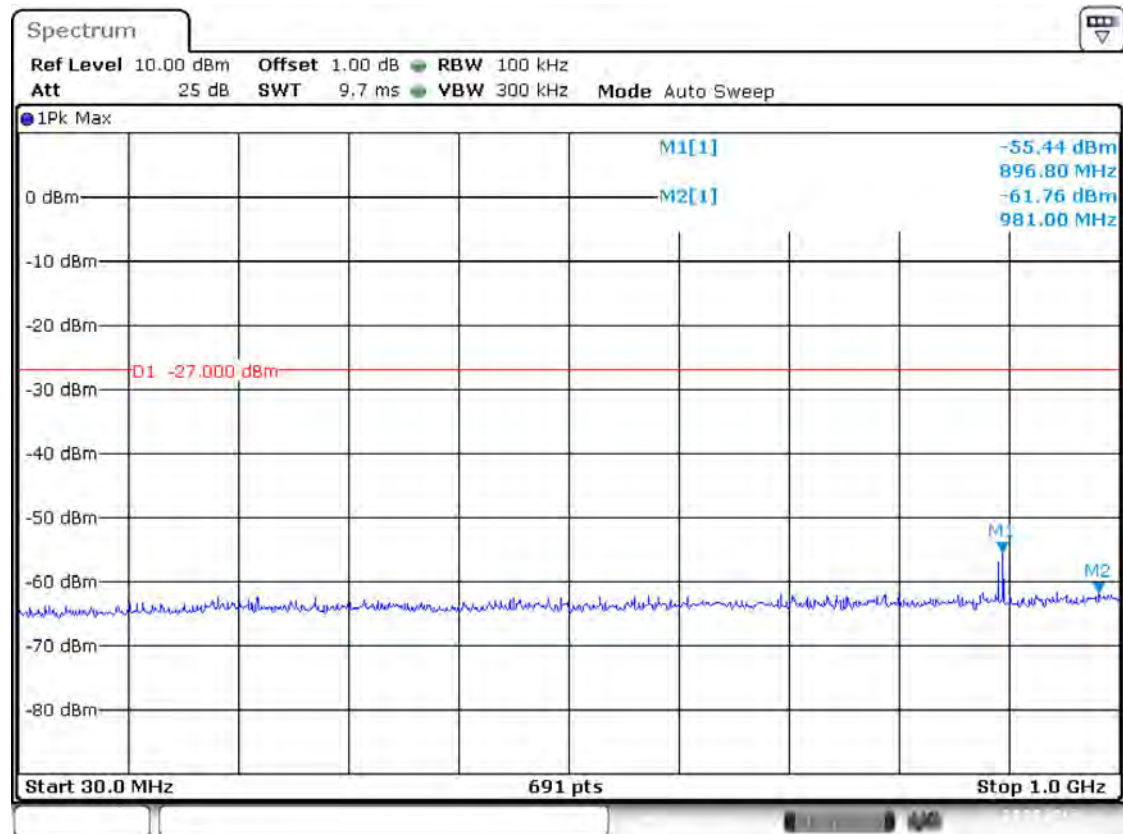
Band I 11n(HT20) CH48 (1 ~ 20 GHz)



Band I 11n(HT20) CH48 (20 ~ 40 GHz)

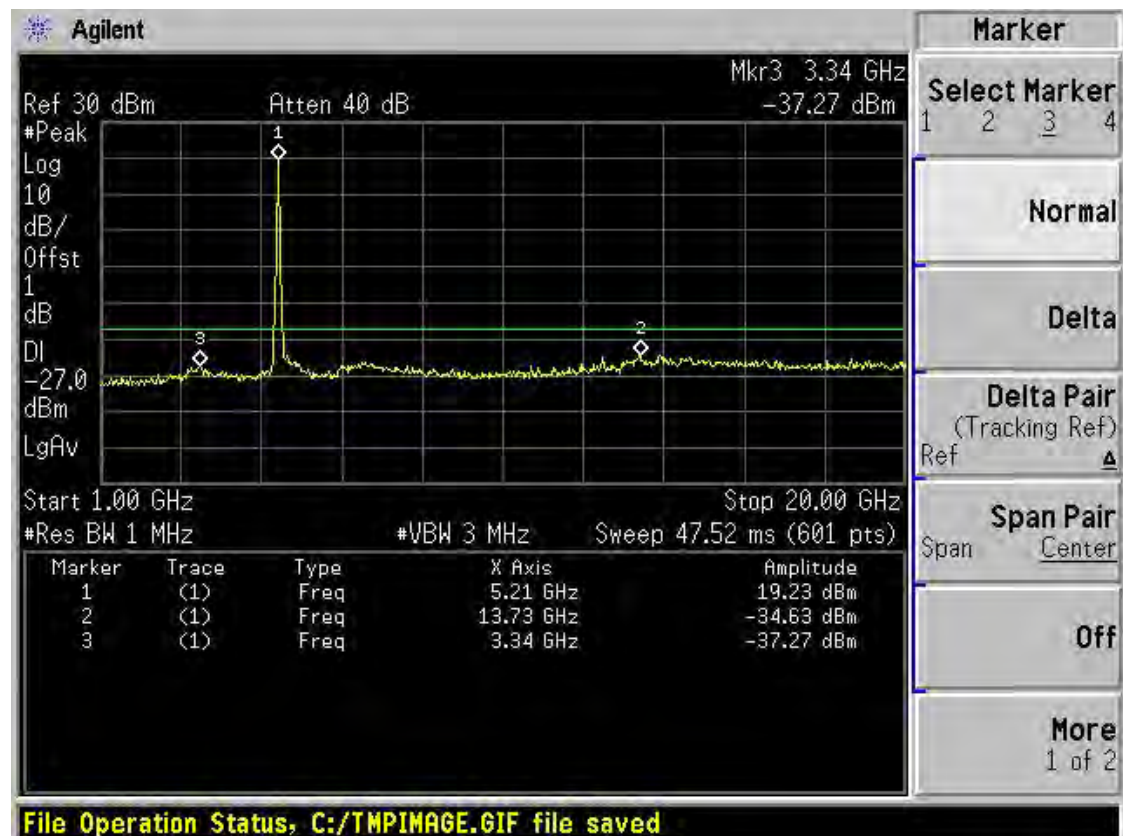


Band I 11n(HT40) CH38 (30 ~ 1000 MHz)

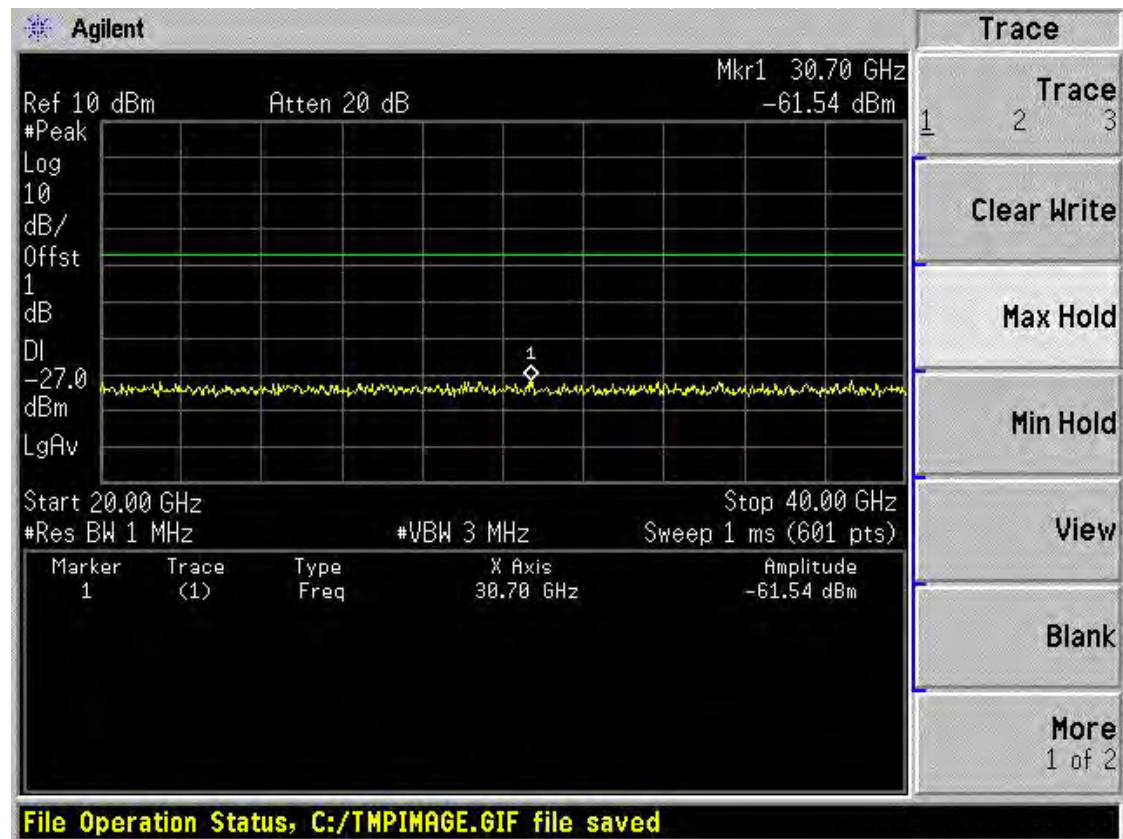


Date: 24.AUG.2015 16:27:59

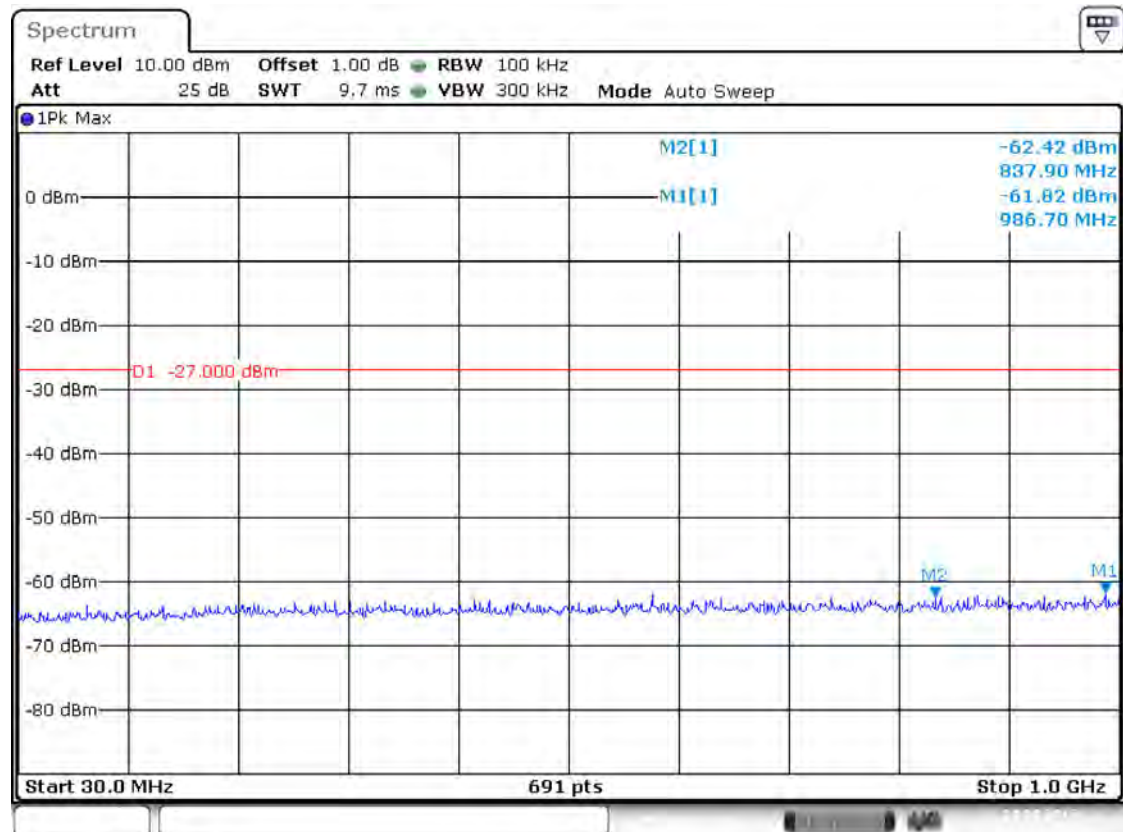
Band I 11n(HT40) CH38 (1 ~ 20 GHz)



Band I 11n(HT40) CH38 (20 ~ 40 GHz)

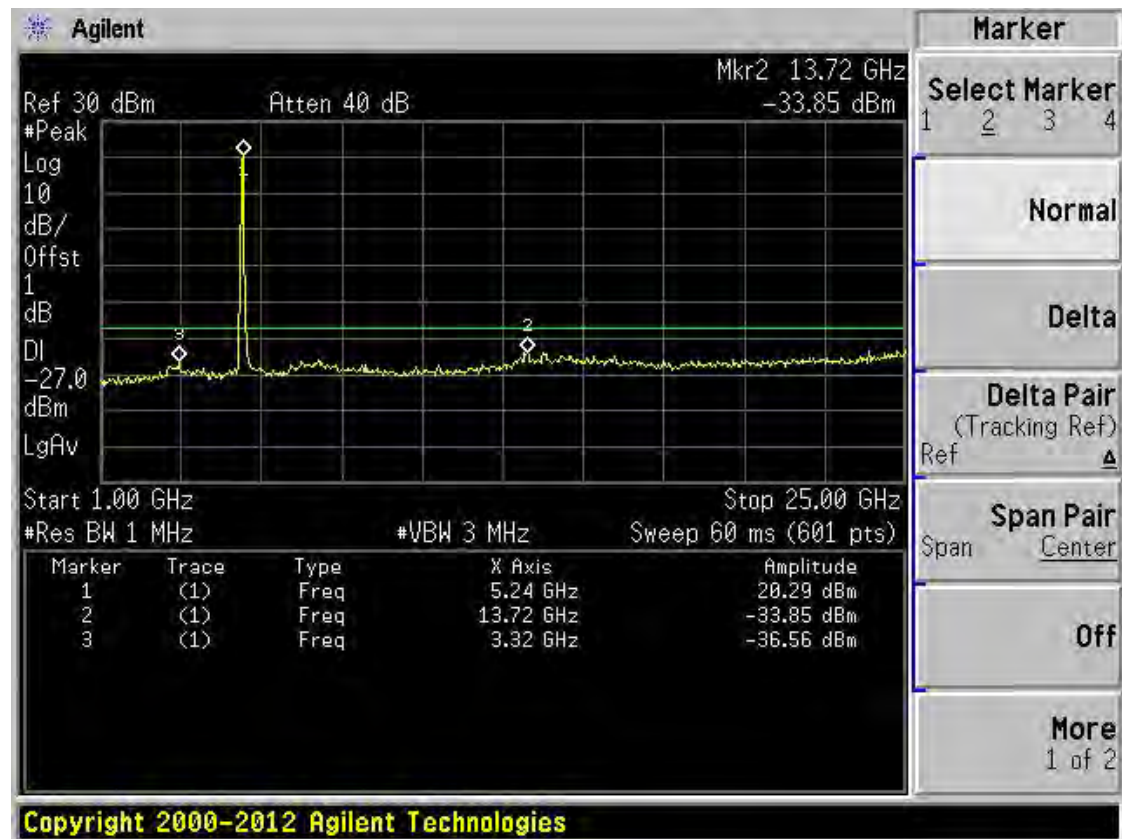


Band I 11n(HT40) CH46 (30 ~ 1000 MHz)

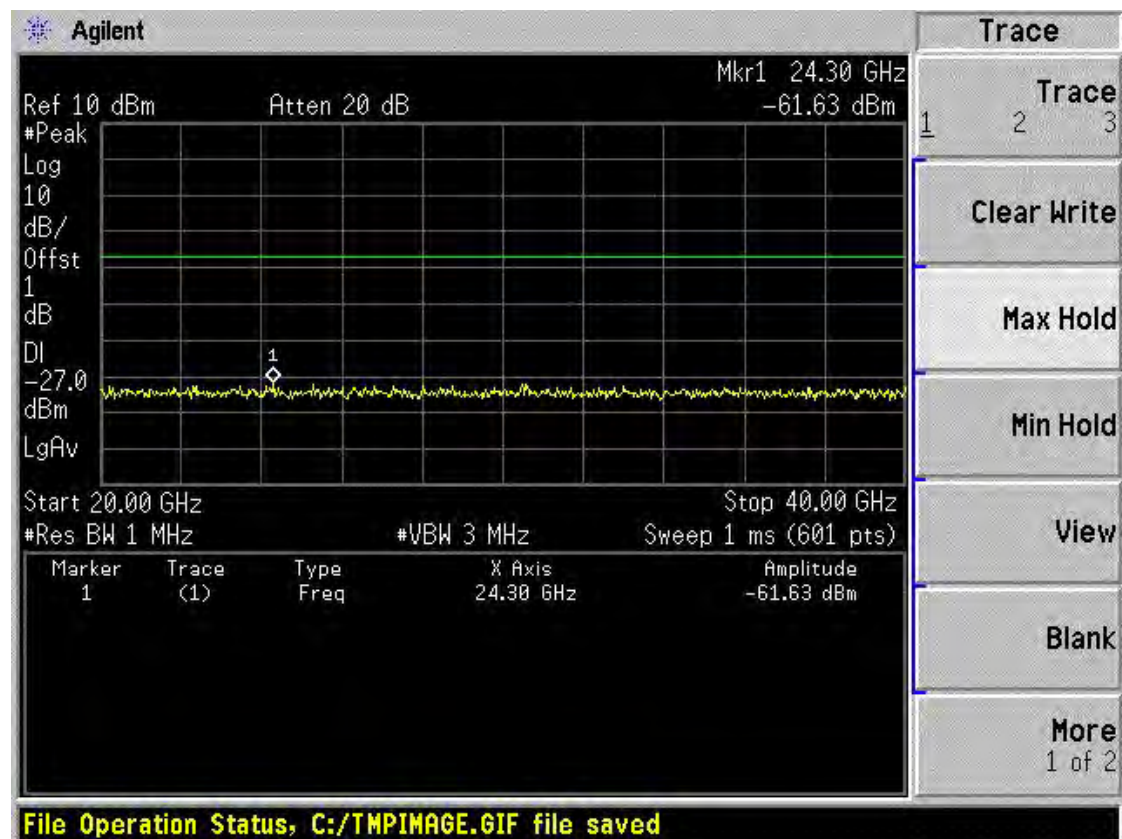


Date: 24.AUG.2015 16:29:42

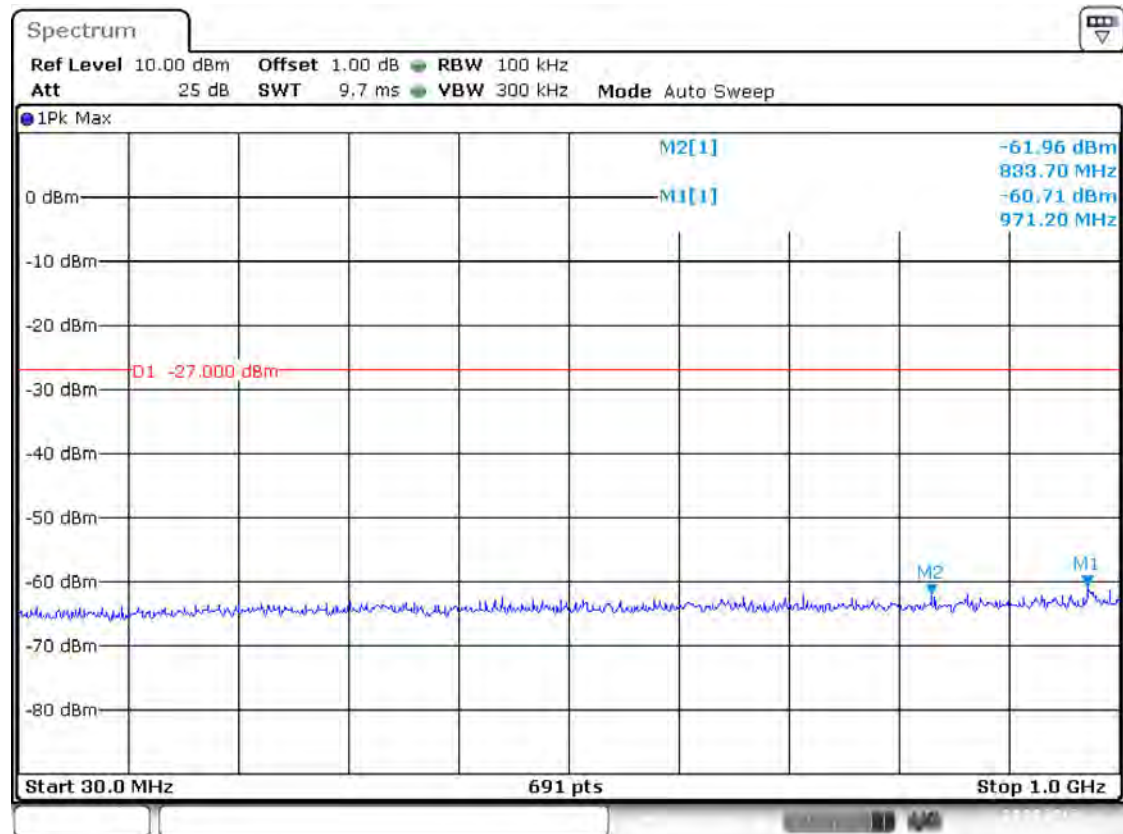
Band I 11n(HT40) CH46 (1 ~ 20 GHz)



Band I 11n(HT40) CH46 (20 ~ 40 GHz)

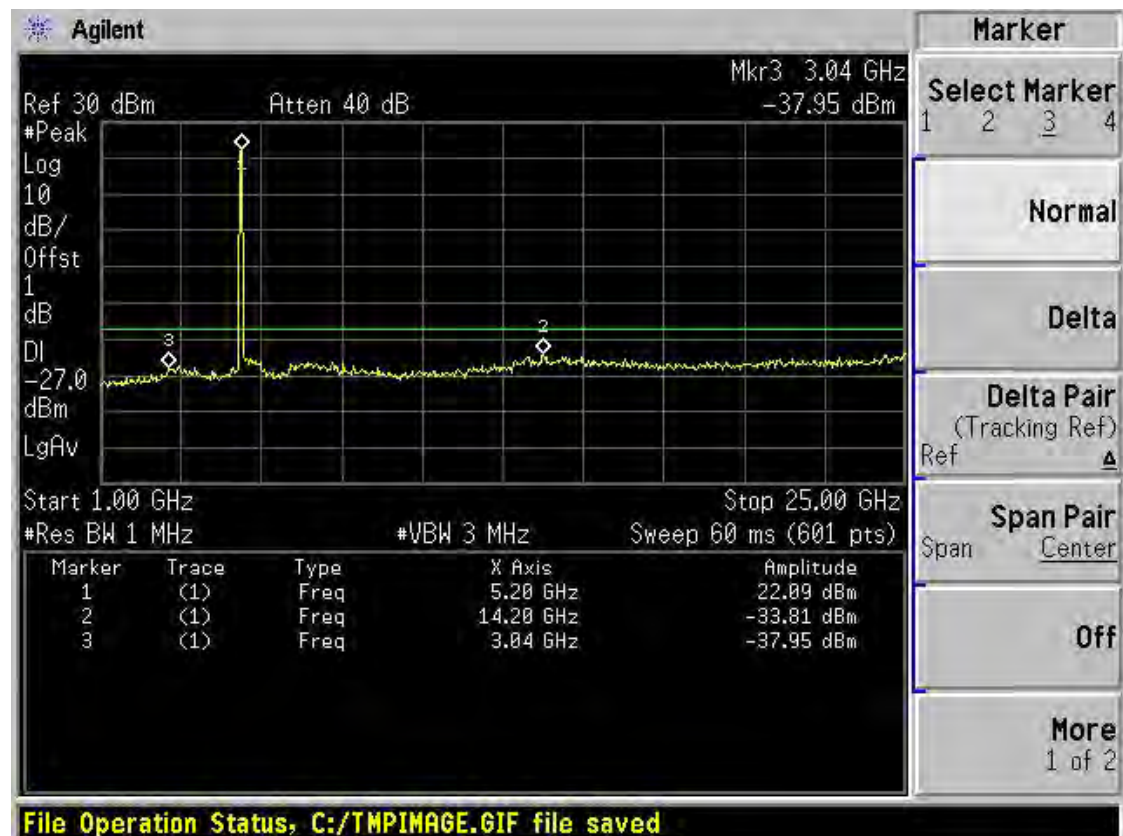


Band I 11ac(HT20) CH36 (30 ~ 1000 MHz)

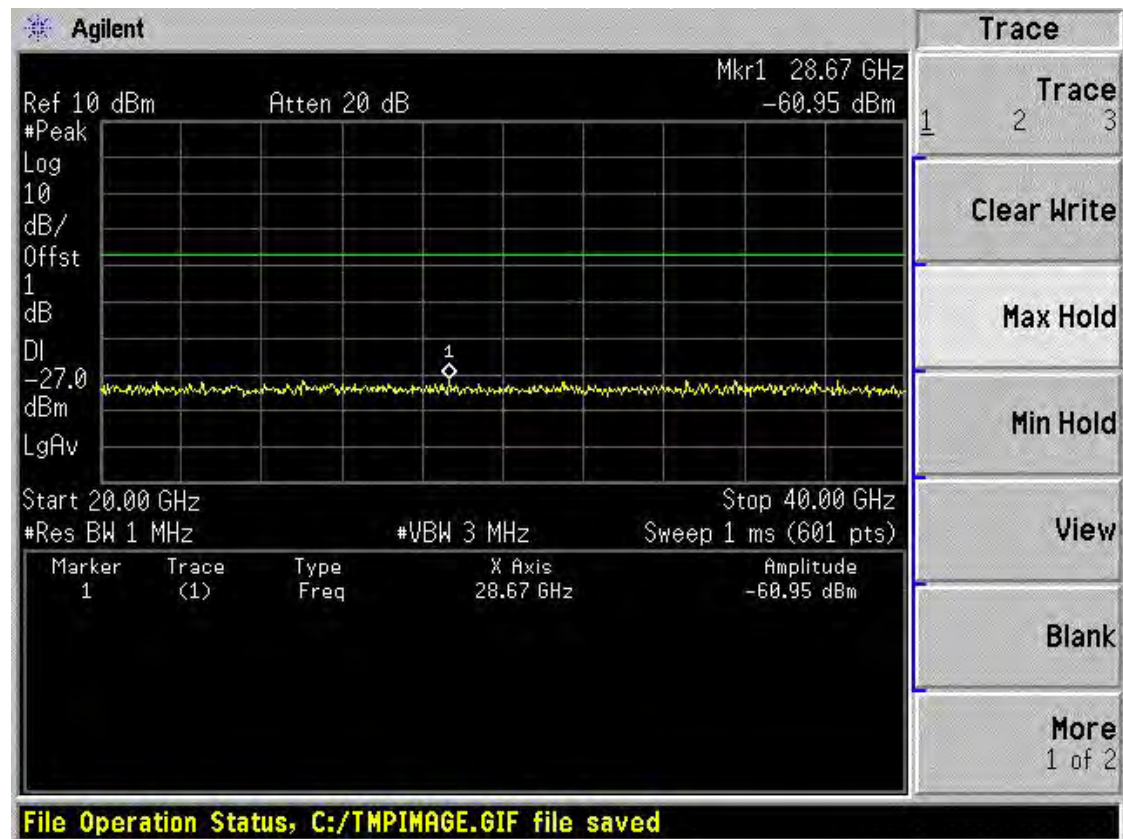


Date: 24.AUG.2015 16:31:52

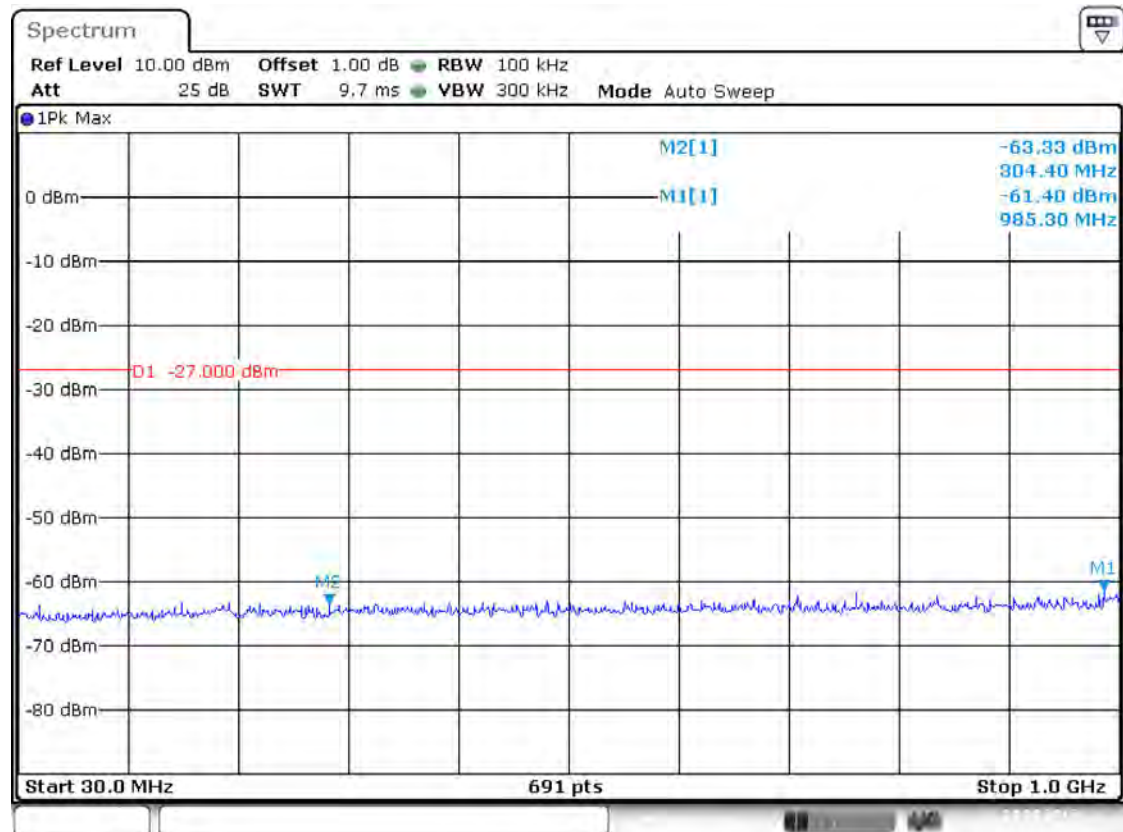
Band I 11ac(HT20) CH36 (1 ~ 20 GHz)



Band I 11ac(HT20) CH36 (20 ~ 40 GHz)

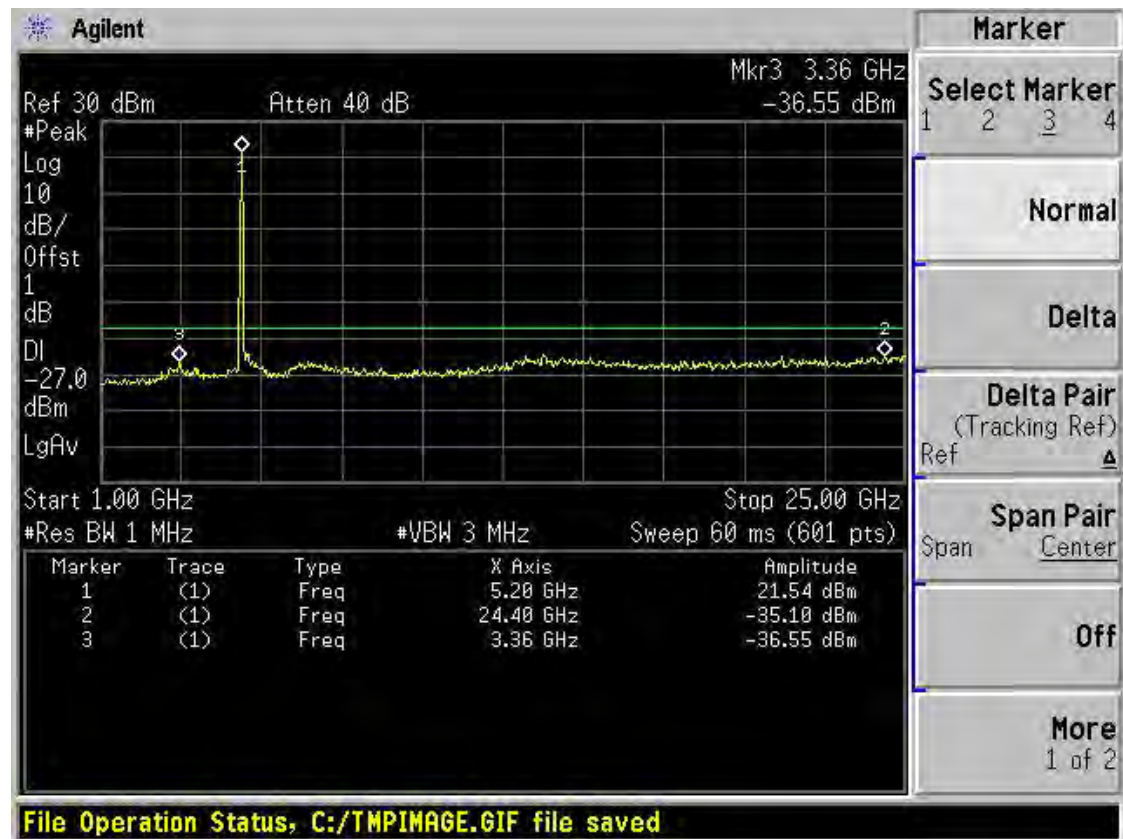


Band I 11ac(HT20) CH40 (30 ~ 1000 MHz)

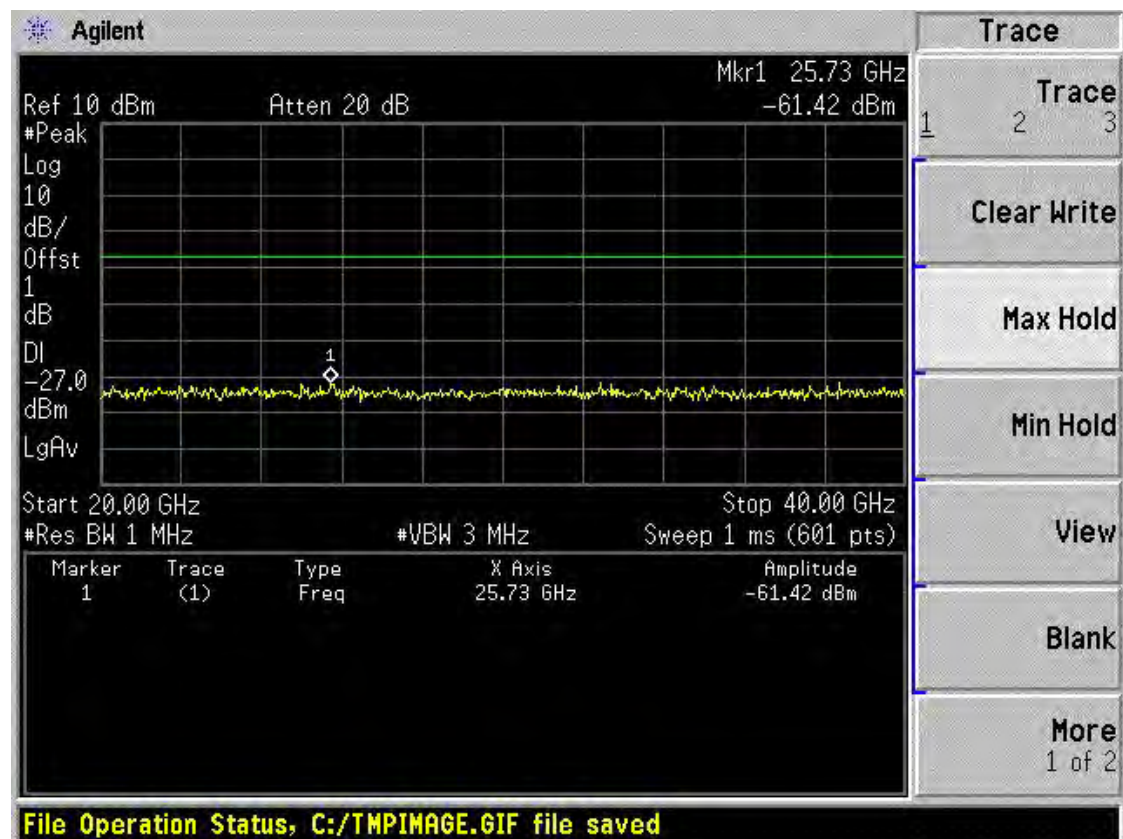


Date: 24.AUG.2015 16:33:07

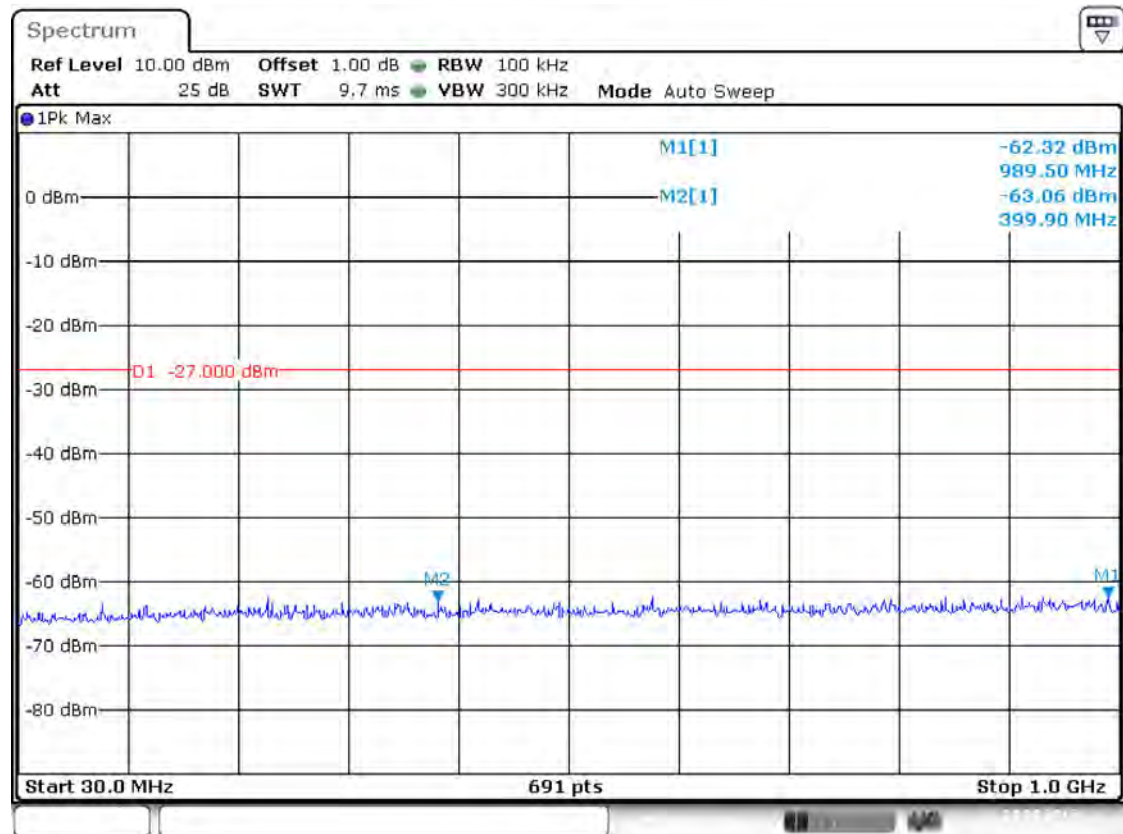
Band I 11ac(HT20) CH40 (1 ~ 20 GHz)



Band I 11ac(HT20) CH40 (20 ~ 40 GHz)

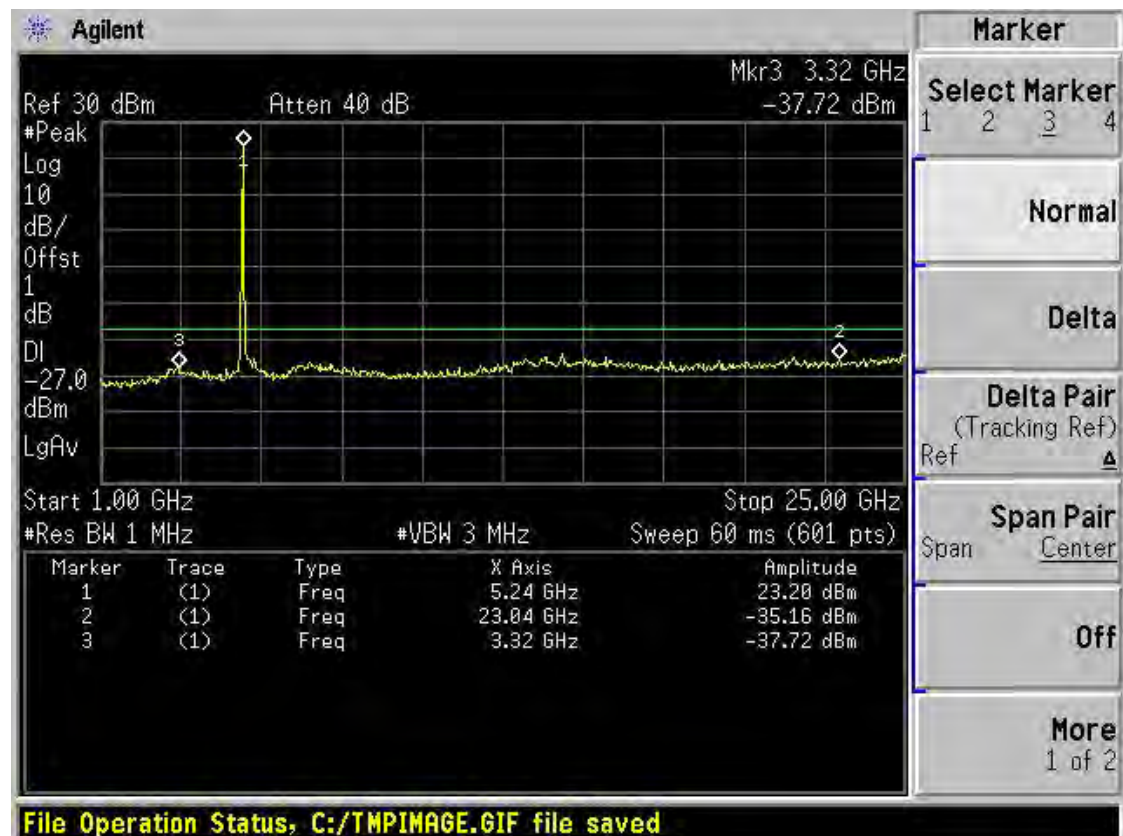


Band I 11ac(HT20) CH48 (30 ~ 1000 MHz)

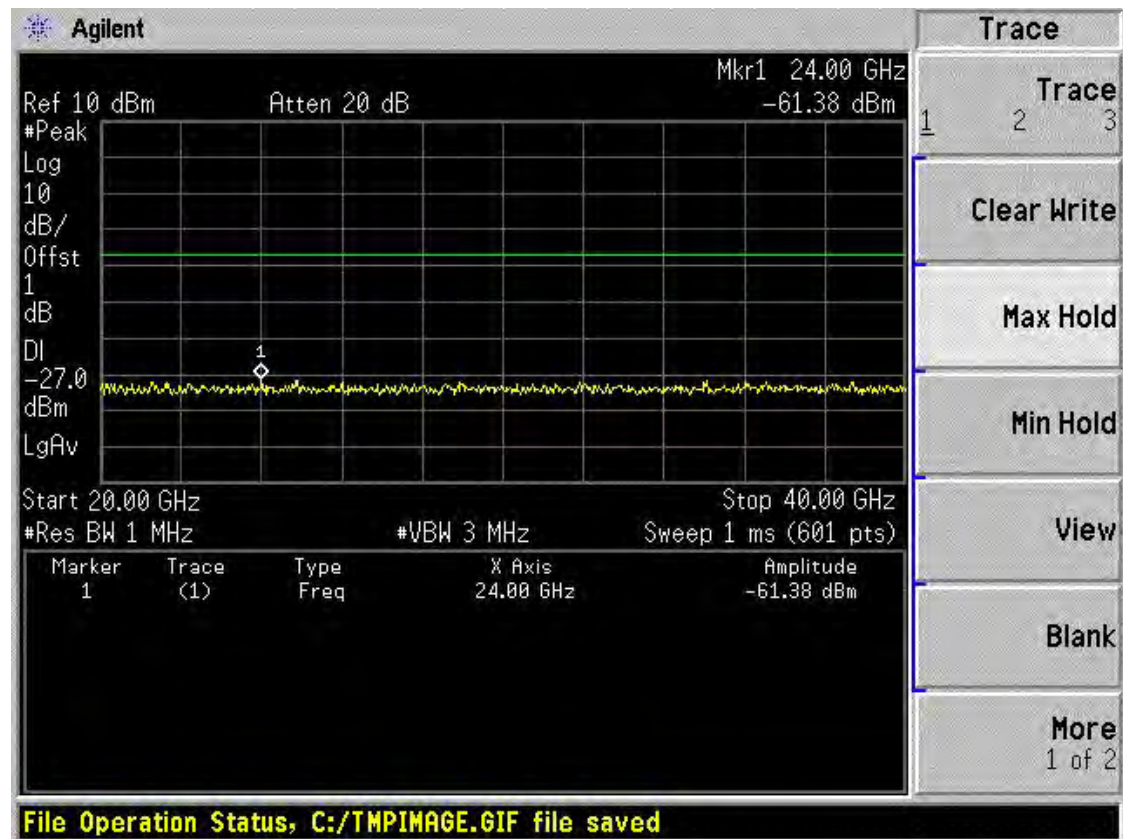


Date: 24.AUG.2015 16:33:42

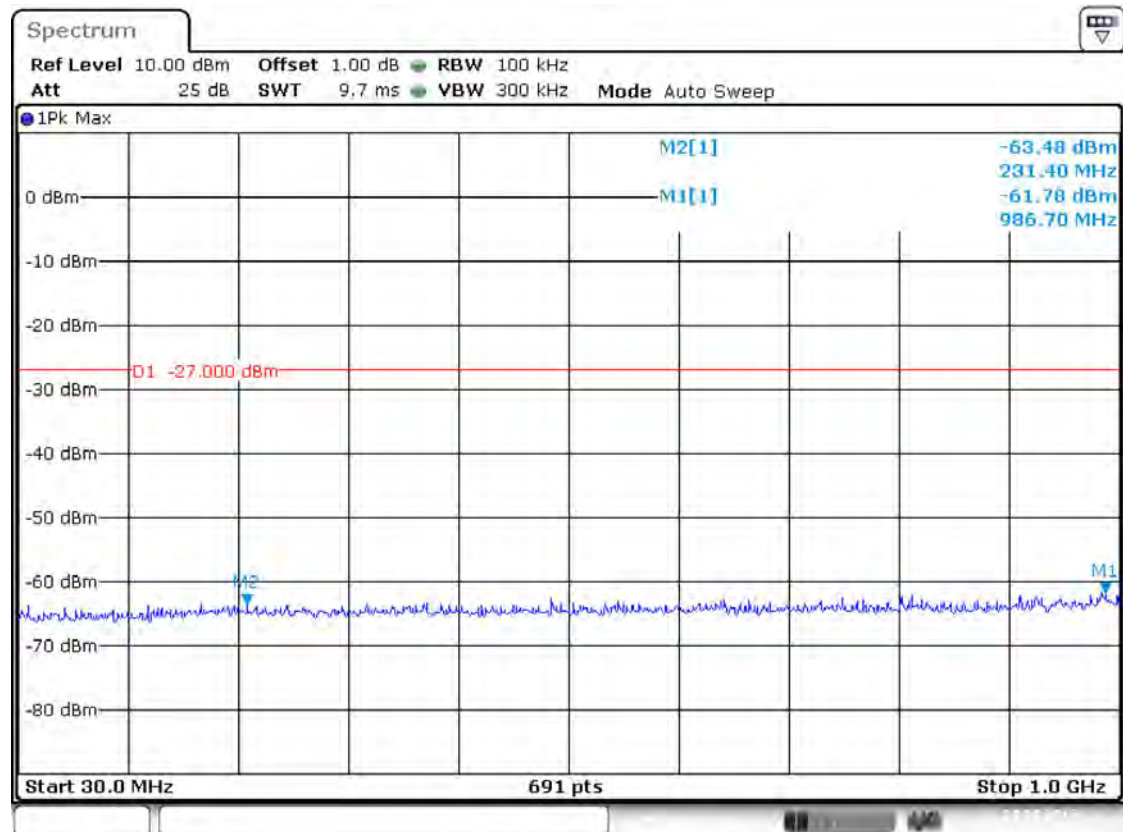
Band I 11ac(HT20) CH48 (1 ~ 20 GHz)



Band I 11ac(HT20) CH48 (20 ~ 40 GHz)

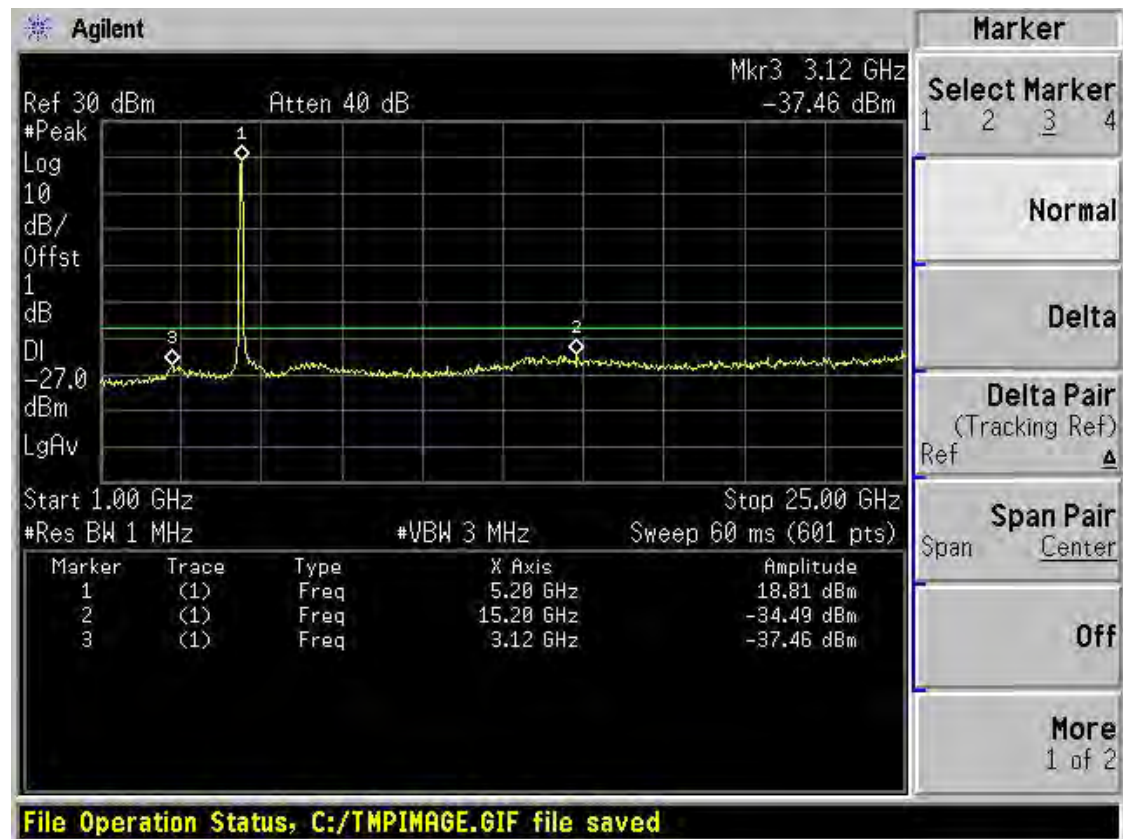


Band I 11ac(HT40) CH38 (30 ~ 1000 MHz)

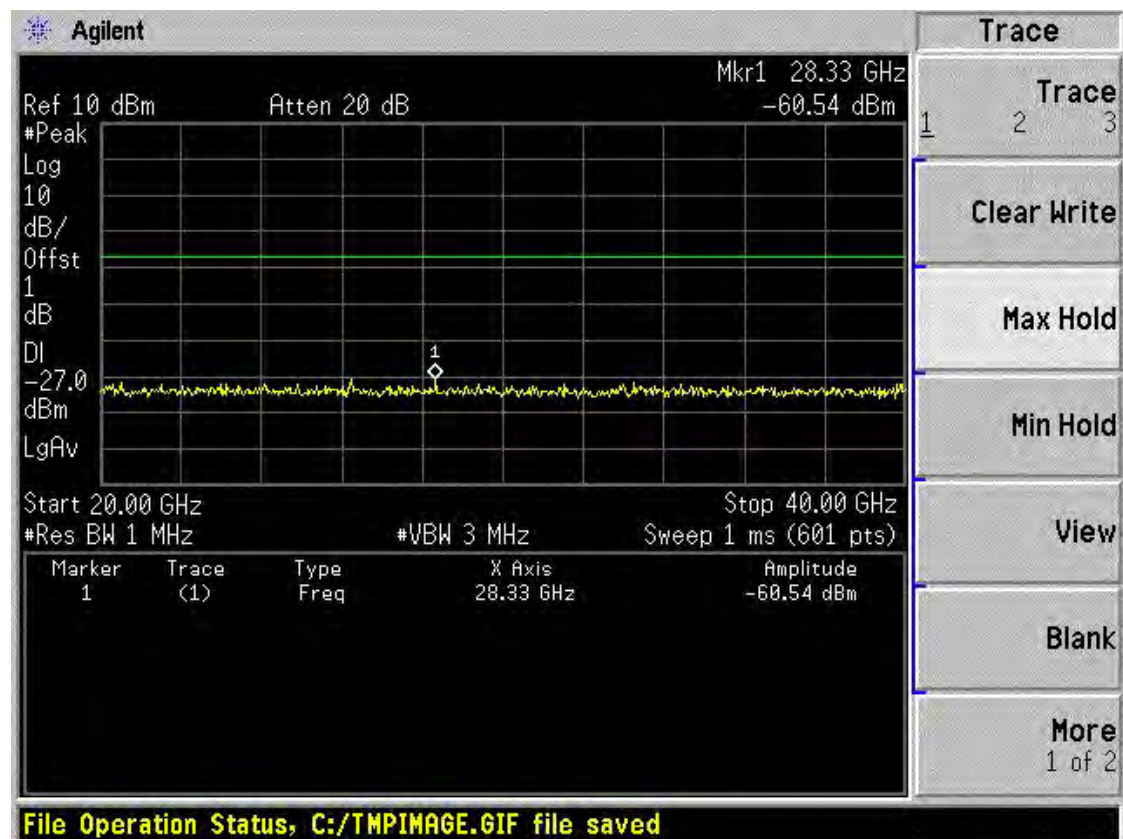


Date: 24.AUG.2015 16:34:37

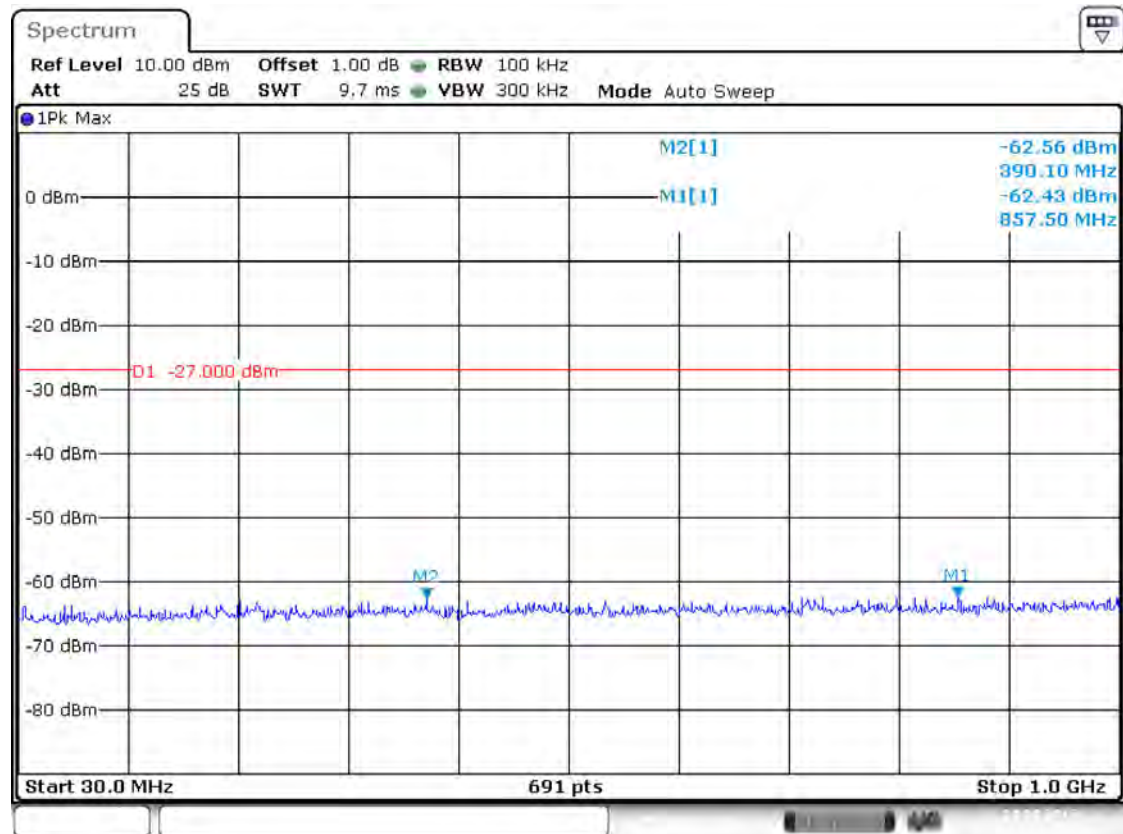
Band I 11ac(HT40) CH38 (1 ~ 20 GHz)



Band I 11ac(HT40) CH38 (20 ~ 40 GHz)

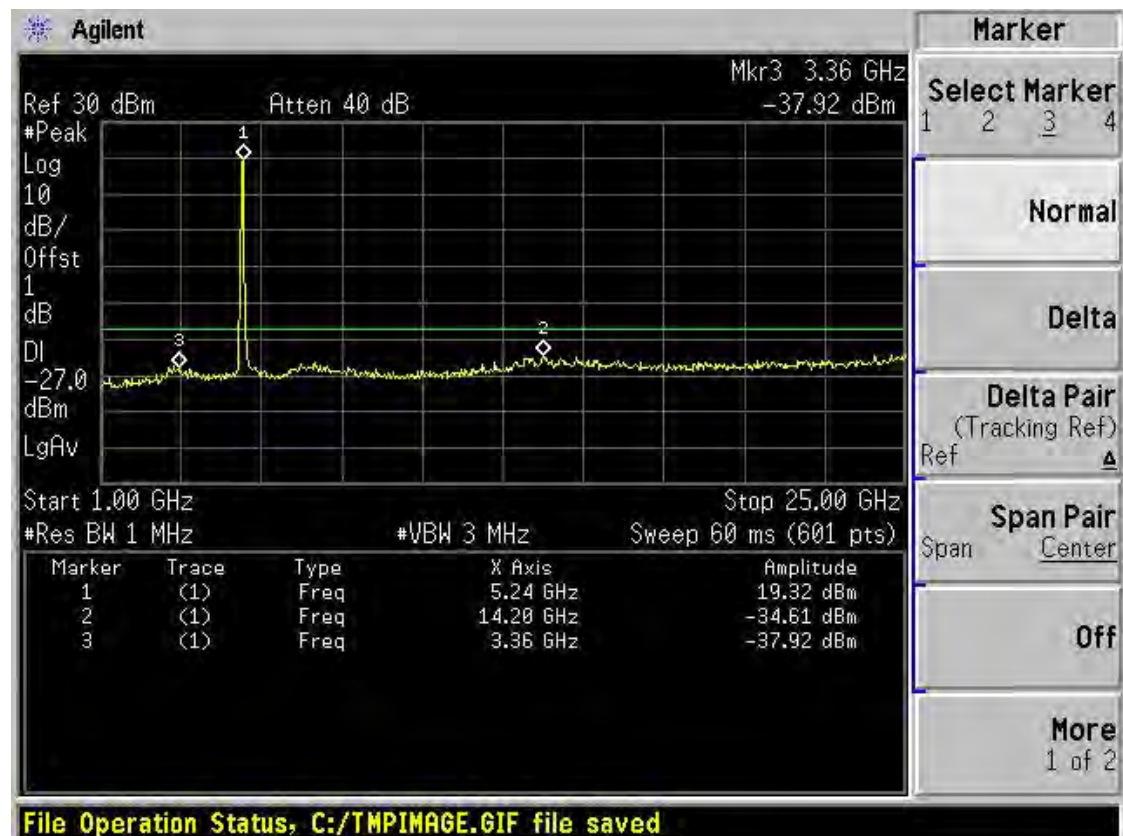


Band I 11ac(HT40) CH46 (30 ~ 1000 MHz)

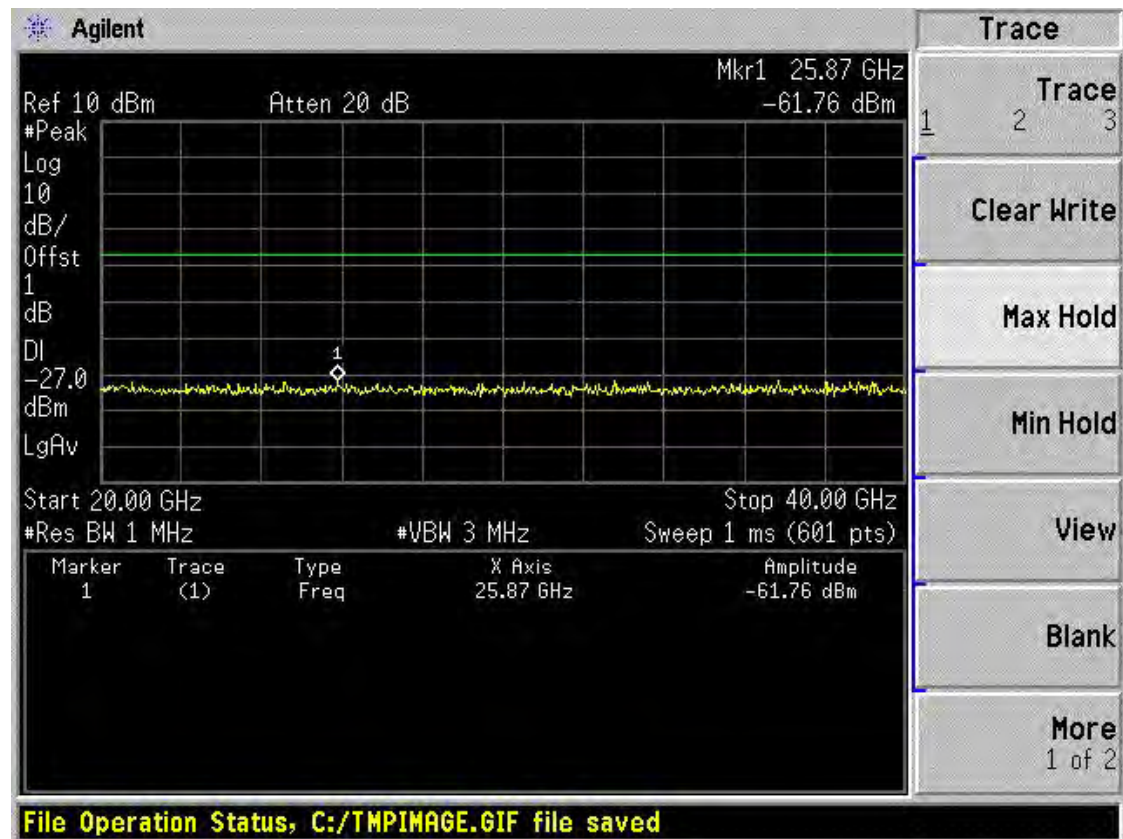


Date: 24.AUG.2015 16:35:18

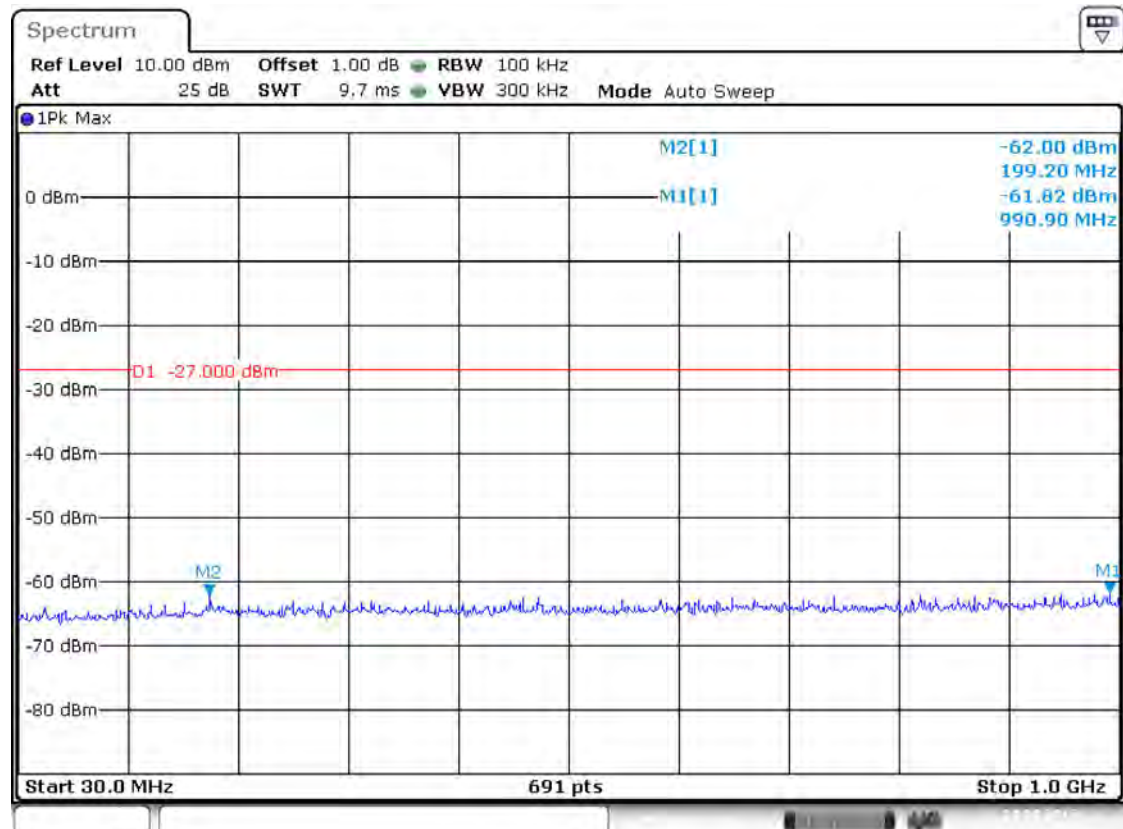
Band I 11ac(HT40) CH46 (1 ~ 20 GHz)



Band I 11ac(HT40) CH46 (20 ~ 40 GHz)

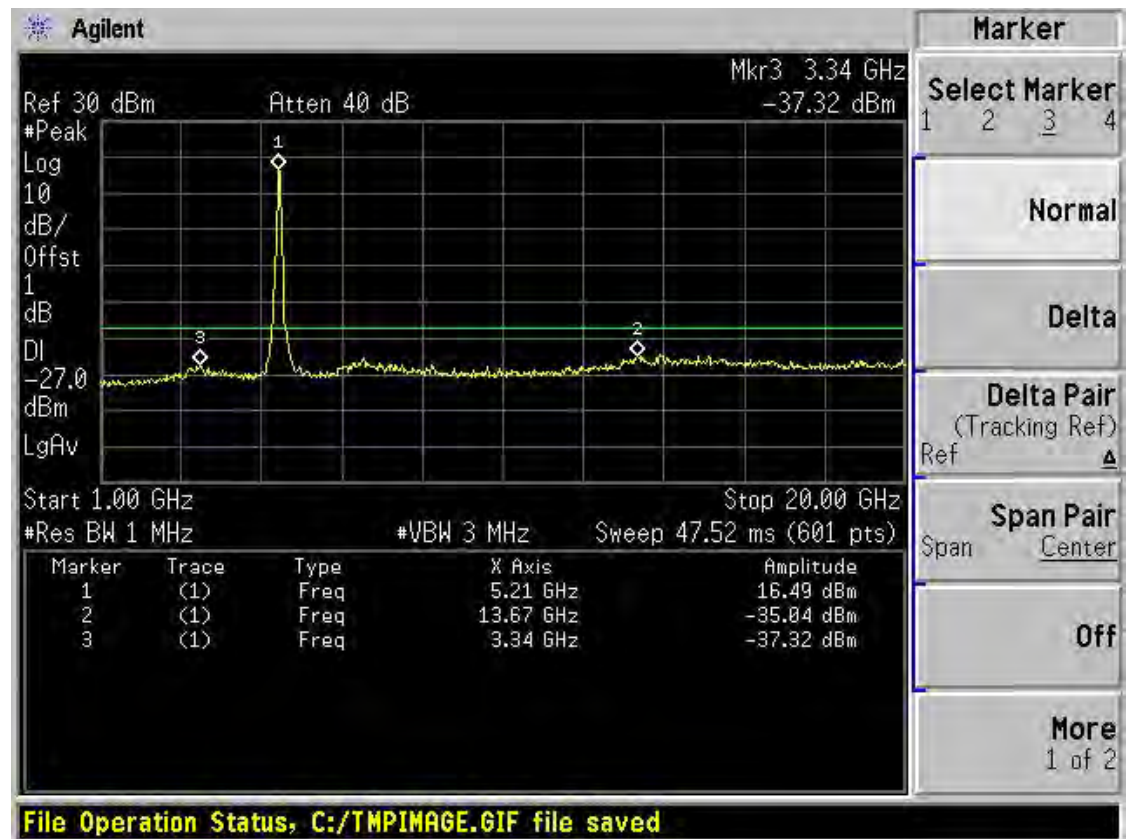


Band I 11ac(HT80) CH42 (30 ~ 1000 MHz)

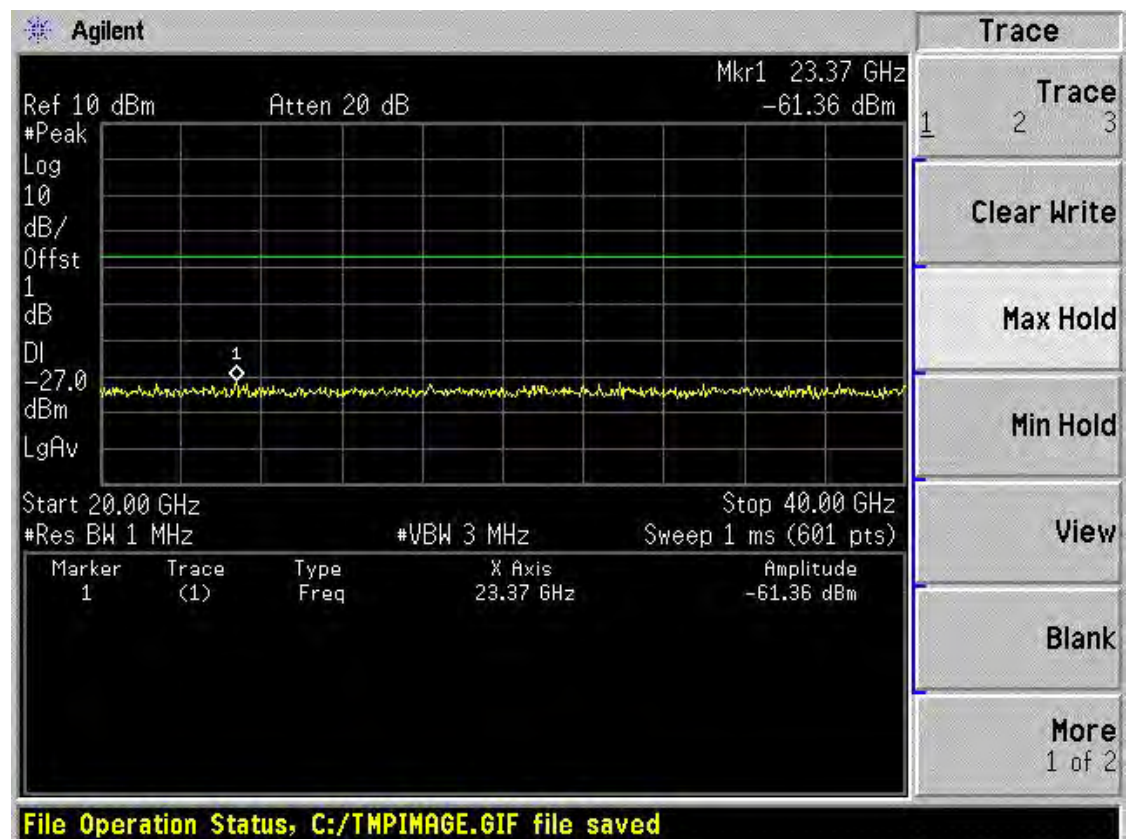


Date: 24.AUG.2015 16:36:18

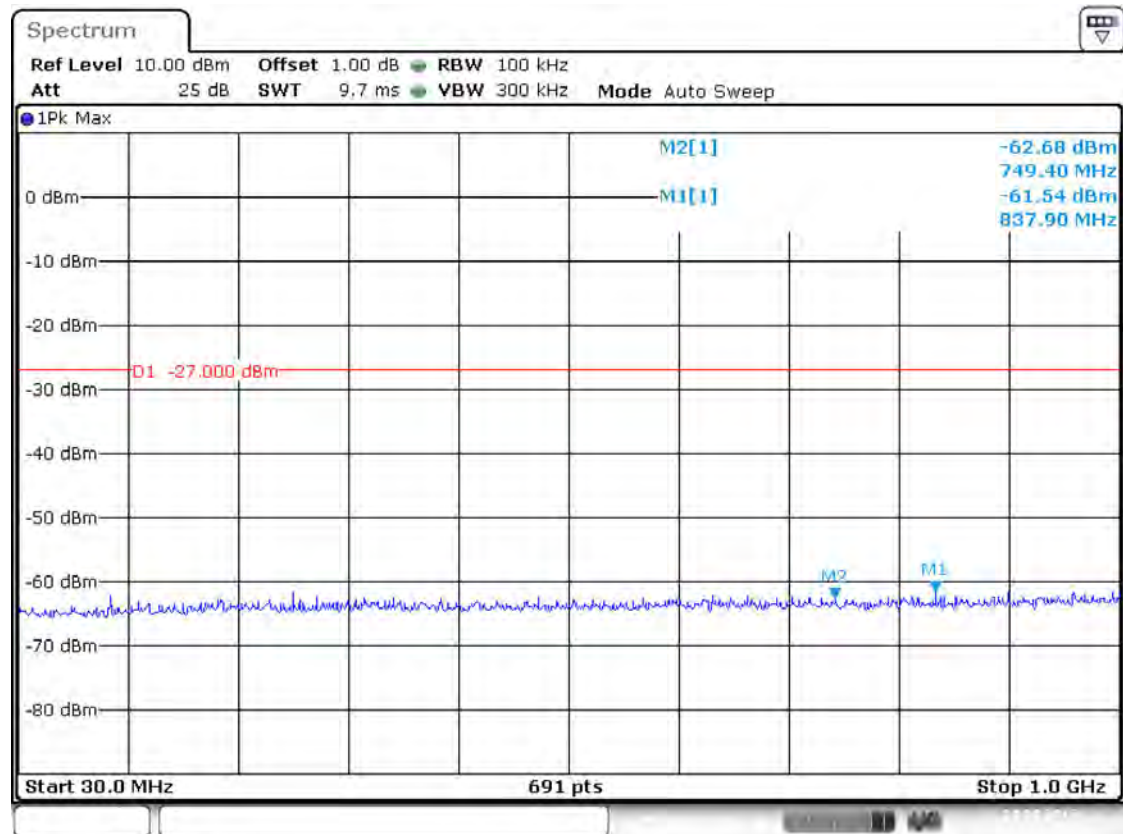
Band I 11ac(HT80) CH42 (1 ~ 20 GHz)



Band I 11ac(HT80) CH42 (20 ~ 40 GHz)

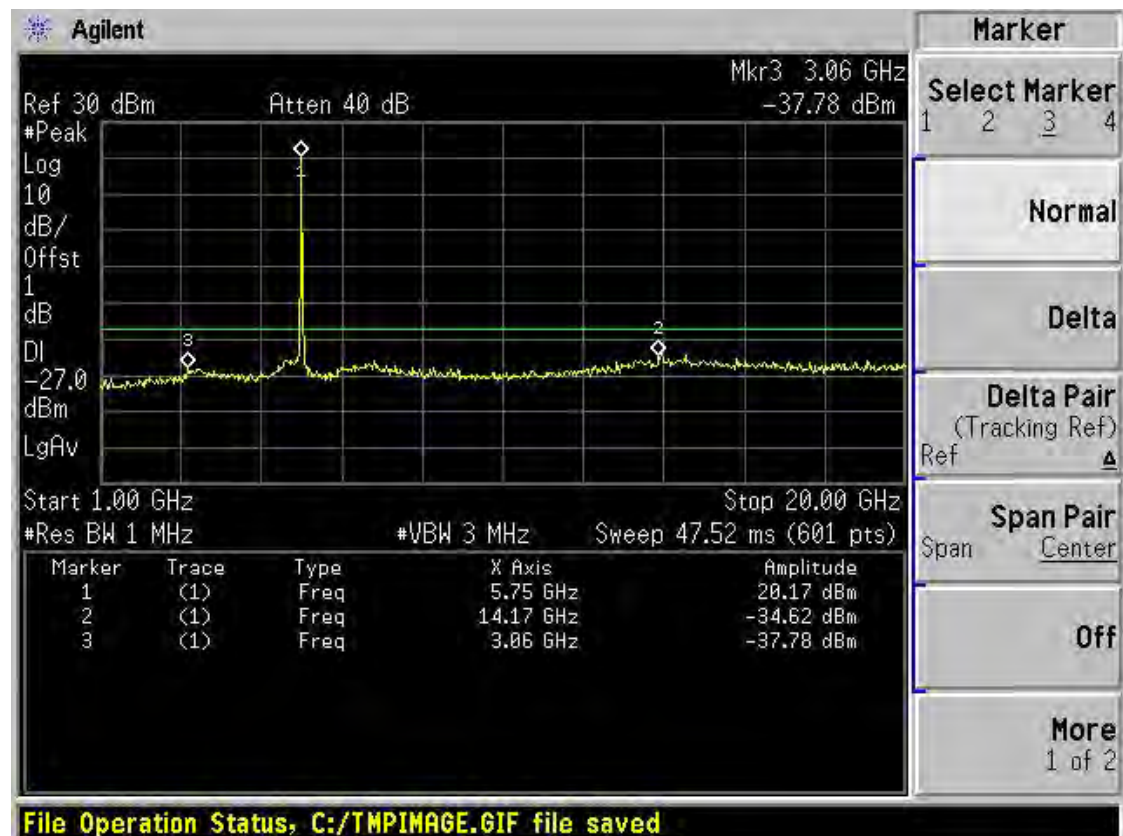


Band IV 11a CH149 (30 ~ 1000 MHz)

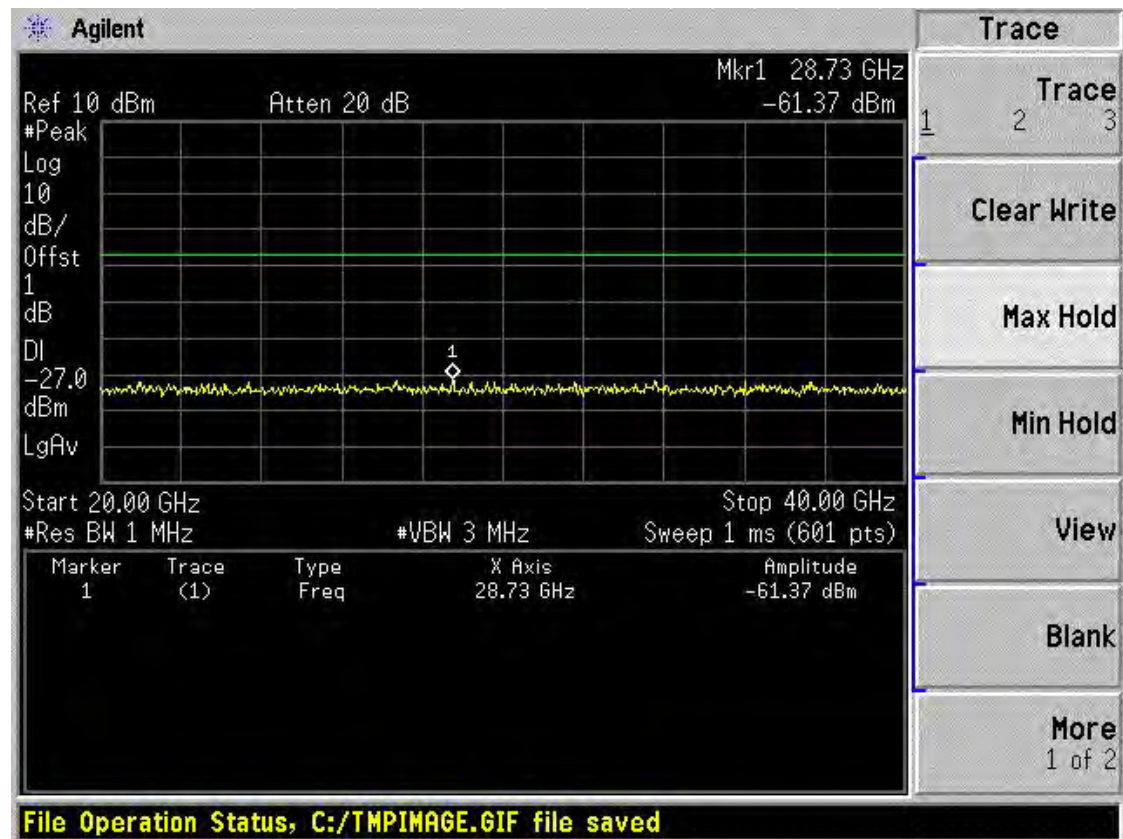


Date: 24.AUG.2015 16:48:04

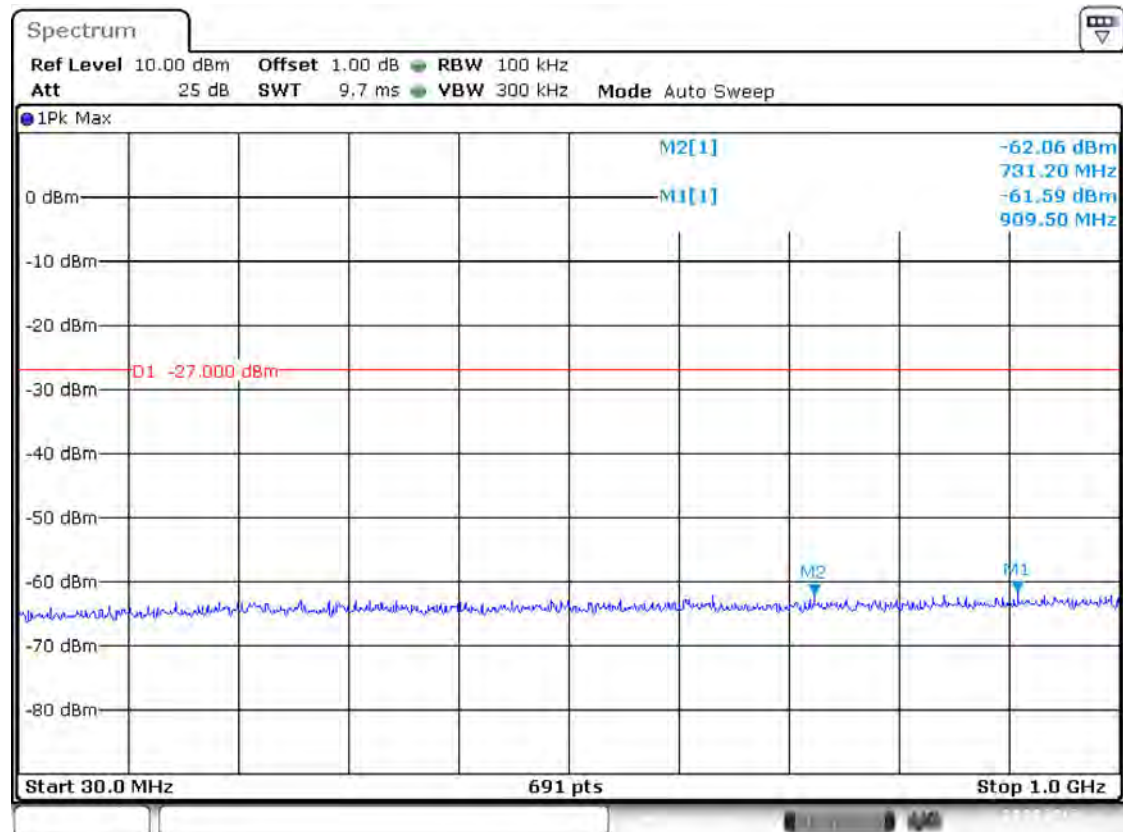
Band IV 11a CH149 (1 ~ 20 GHz)



Band IV 11a CH149 (20 ~ 40 GHz)

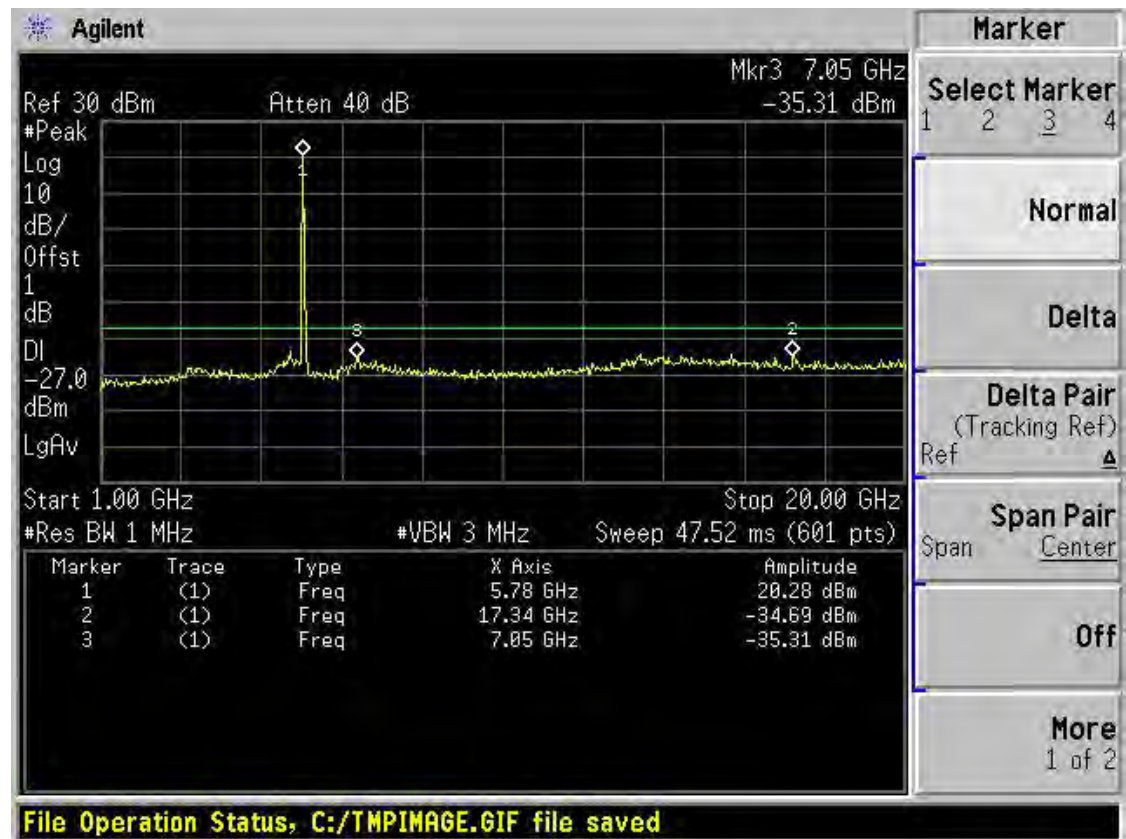


Band IV 11a CH157 (30 ~ 1000 MHz)

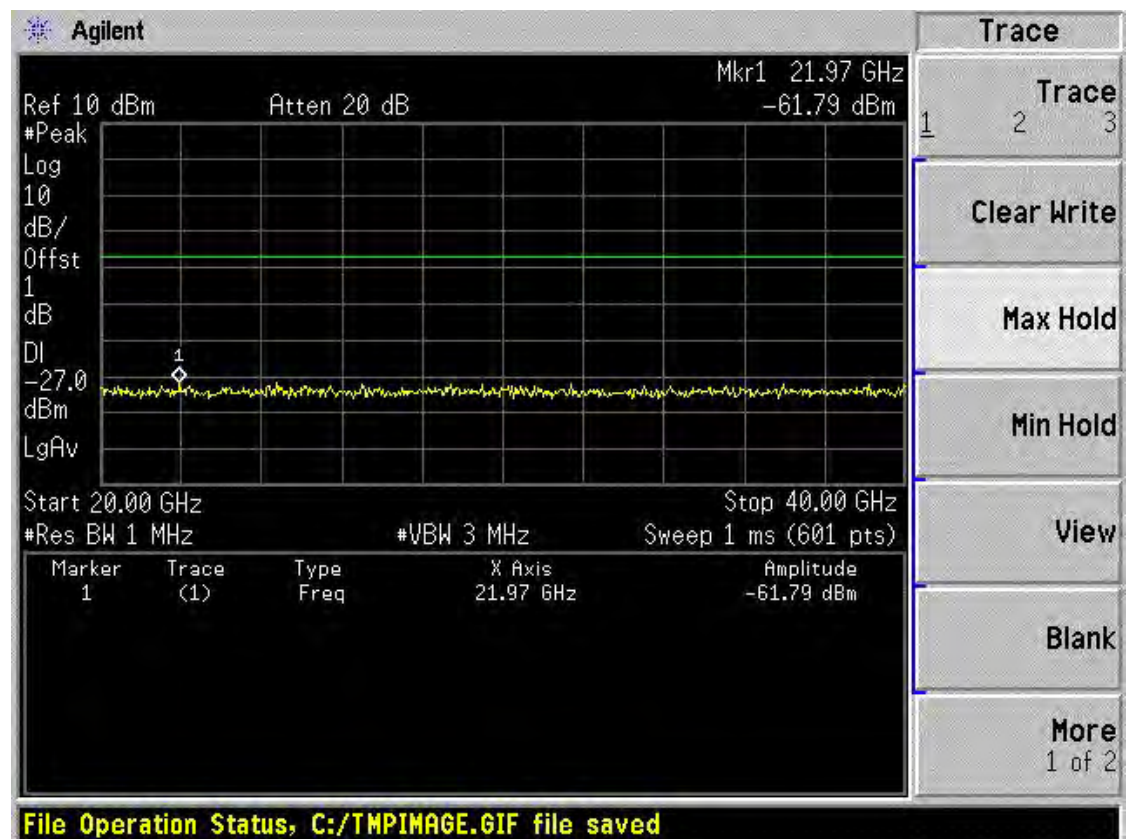


Date: 24.AUG.2015 16:49:50

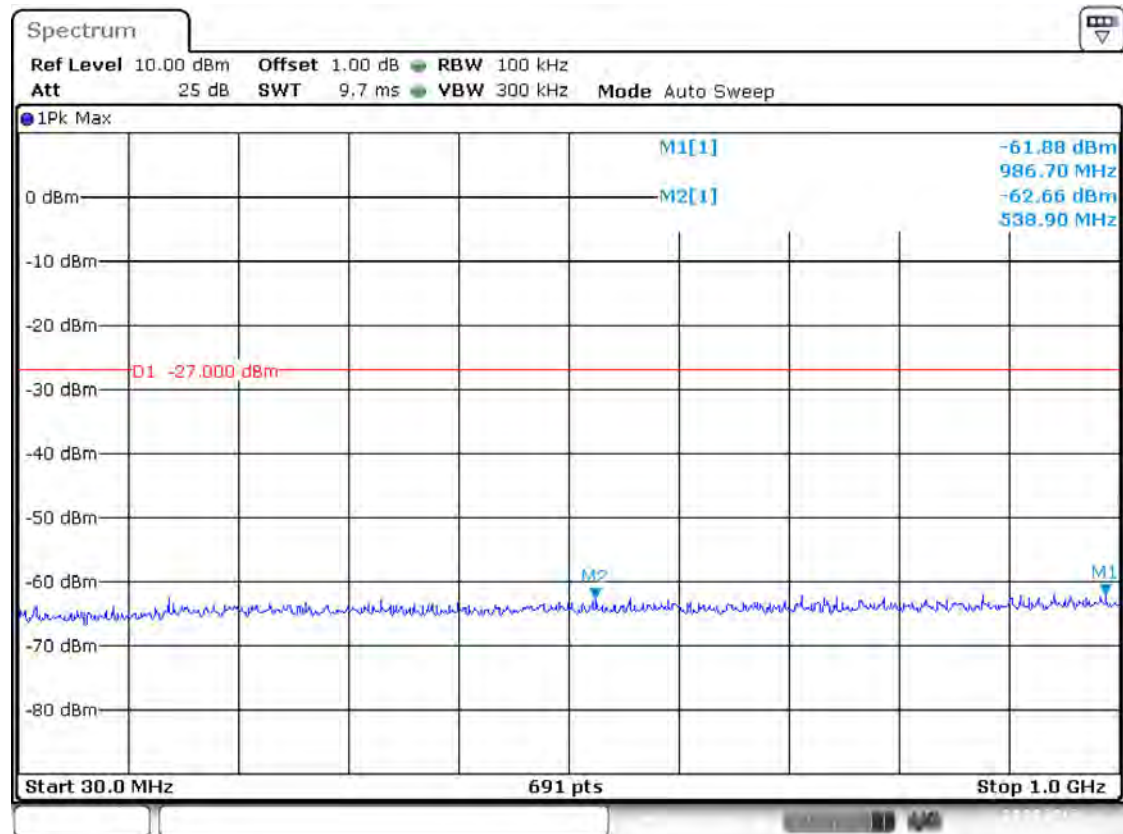
Band IV 11a CH157 (1 ~ 20 GHz)



Band IV 11a CH157 (20 ~ 40 GHz)

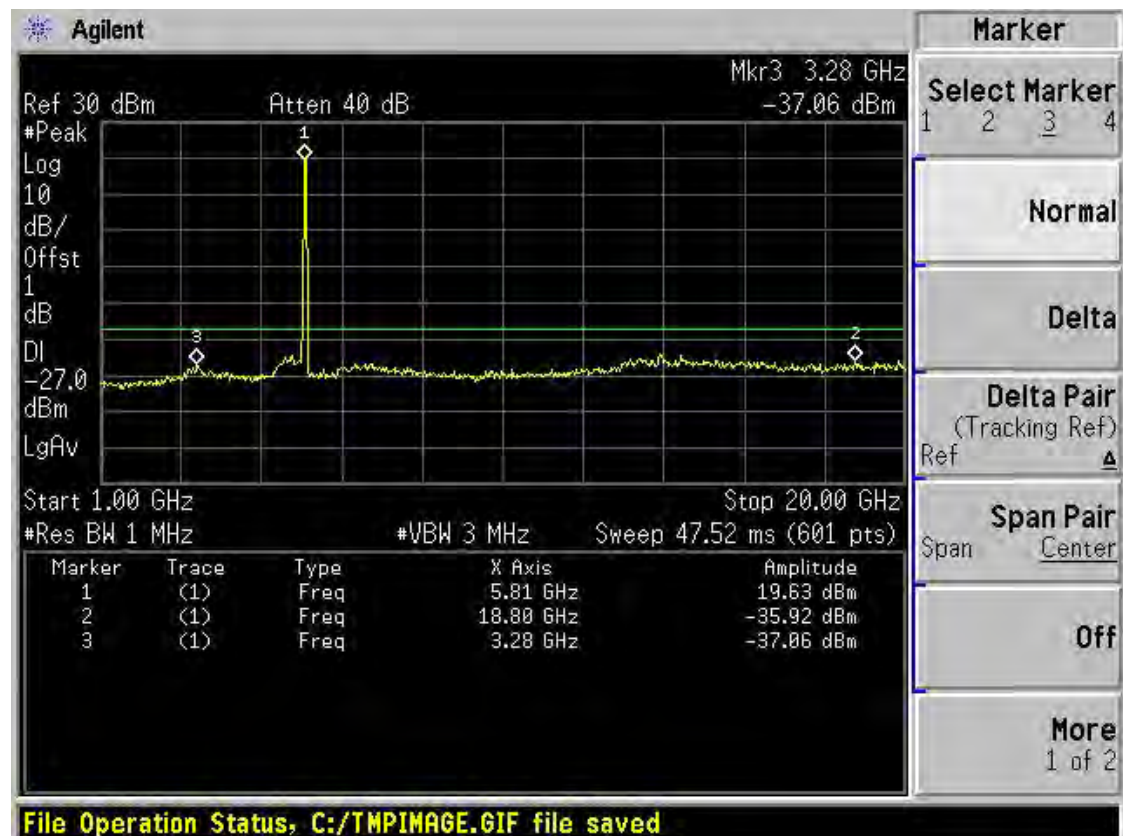


Band IV 11a CH165 (30 ~ 1000 MHz)

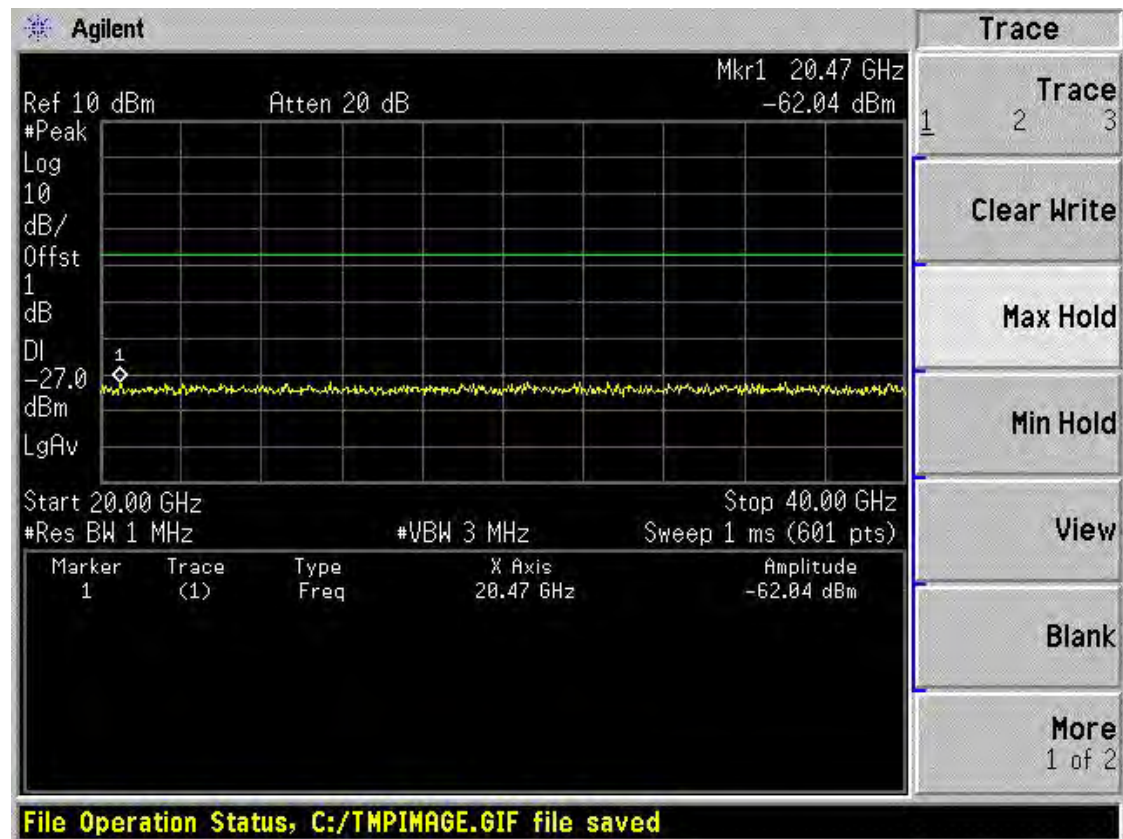


Date: 24.AUG.2015 16:51:13

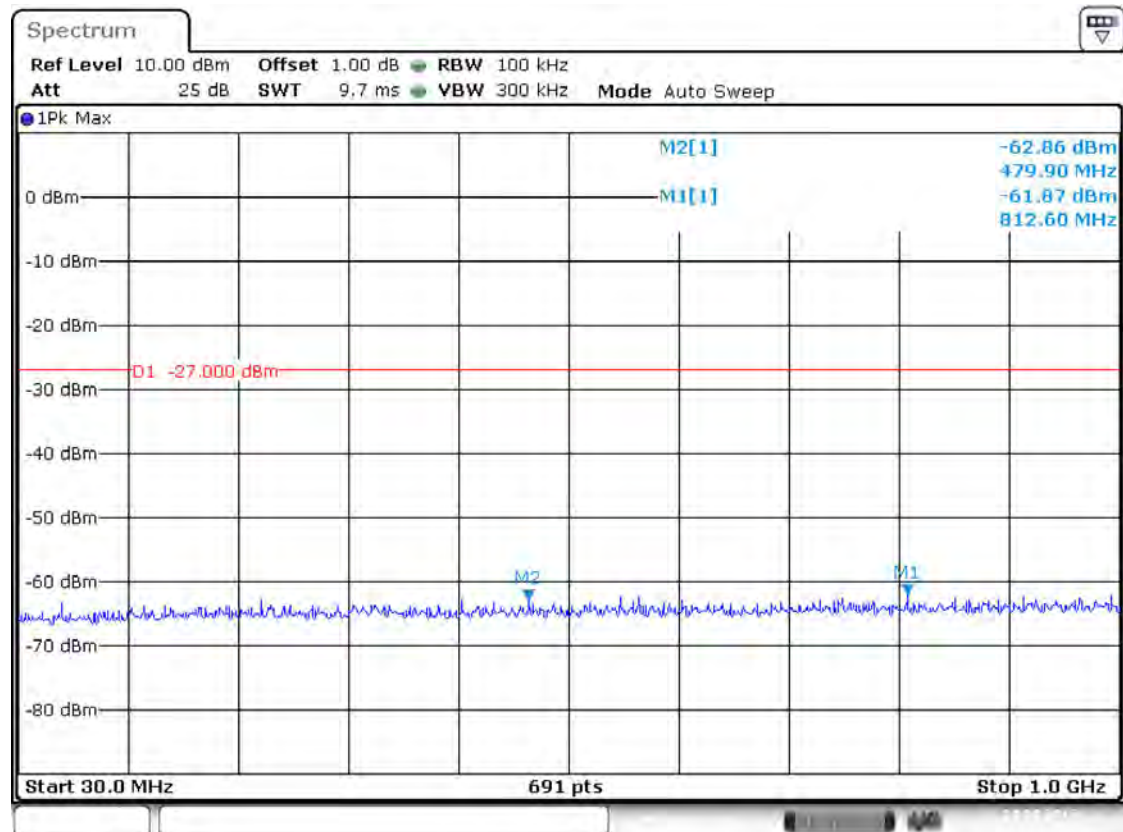
Band IV 11a CH165 (1 ~ 20 GHz)



Band IV 11a CH165 (20 ~ 40 GHz)

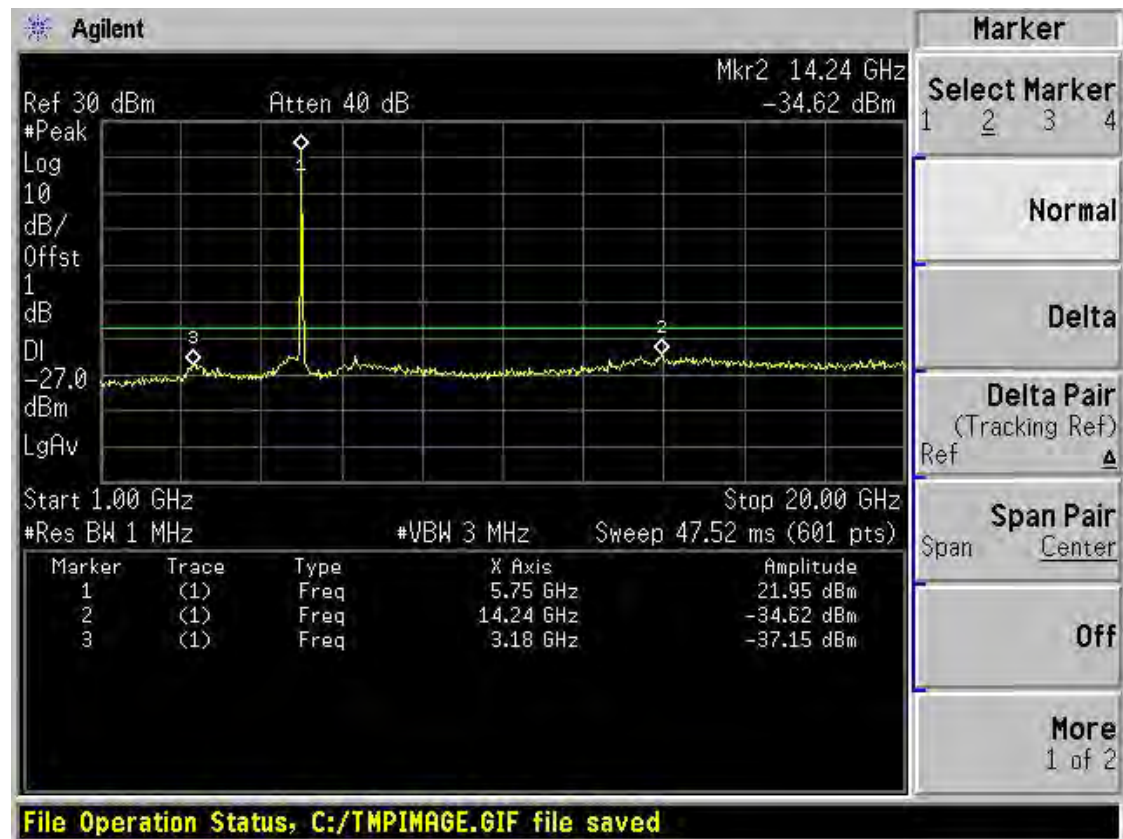


Band IV 11n(HT20) CH149 (30 ~ 1000 MHz)

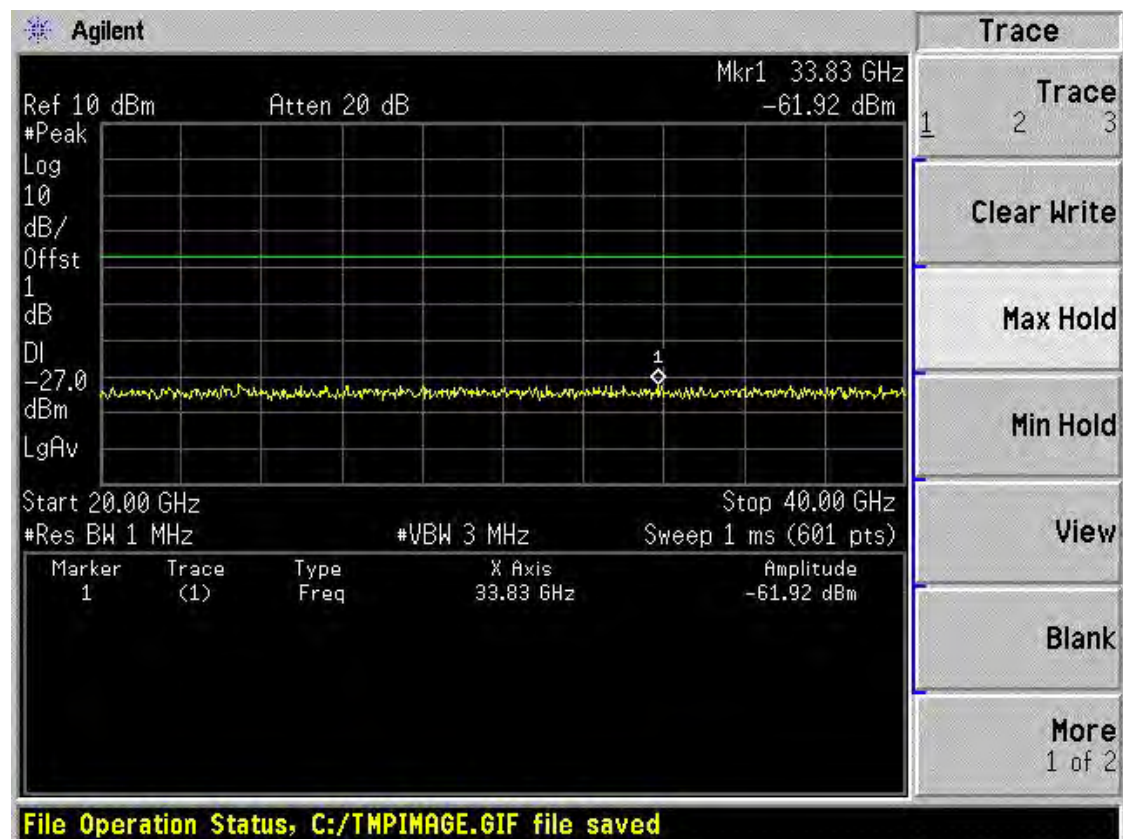


Date: 24.AUG.2015 16:54:40

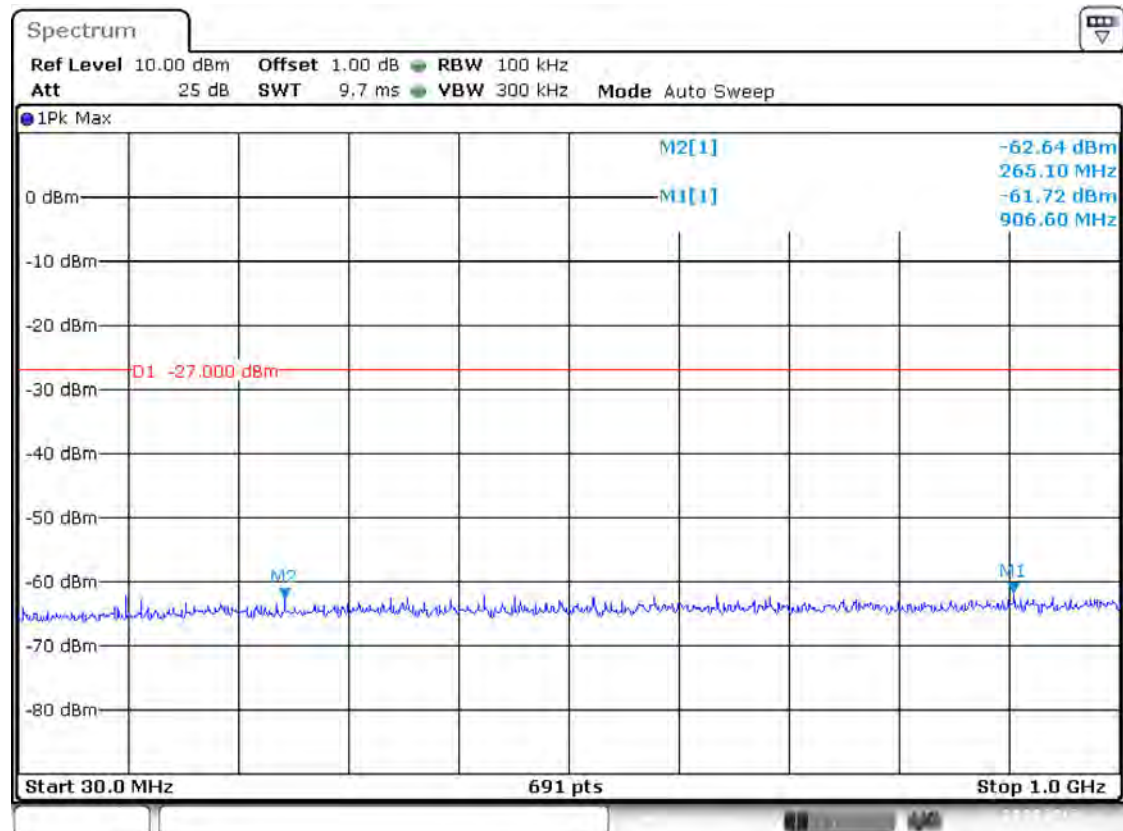
Band IV 11n(HT20) CH149 (1 ~ 20 GHz)



Band IV 11n(HT20) CH149 (20 ~ 40 GHz)

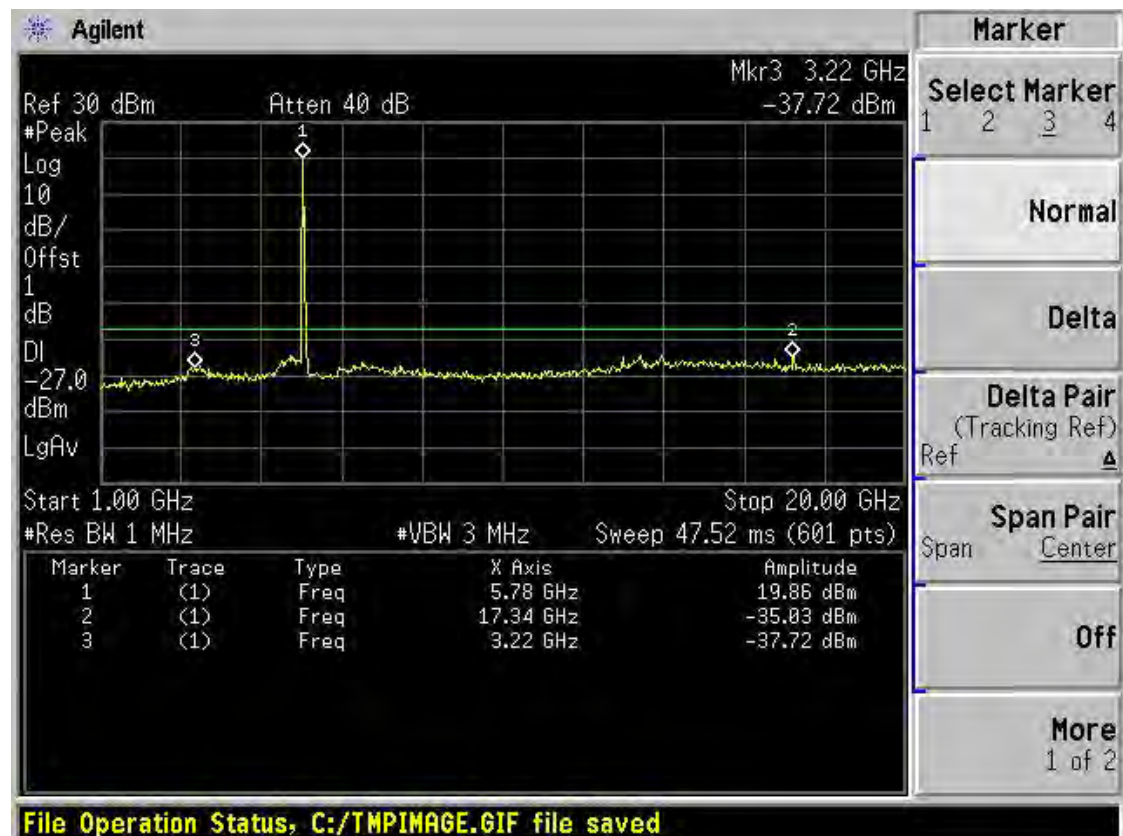


Band IV 11n(HT20) CH157 (30 ~ 1000 MHz)

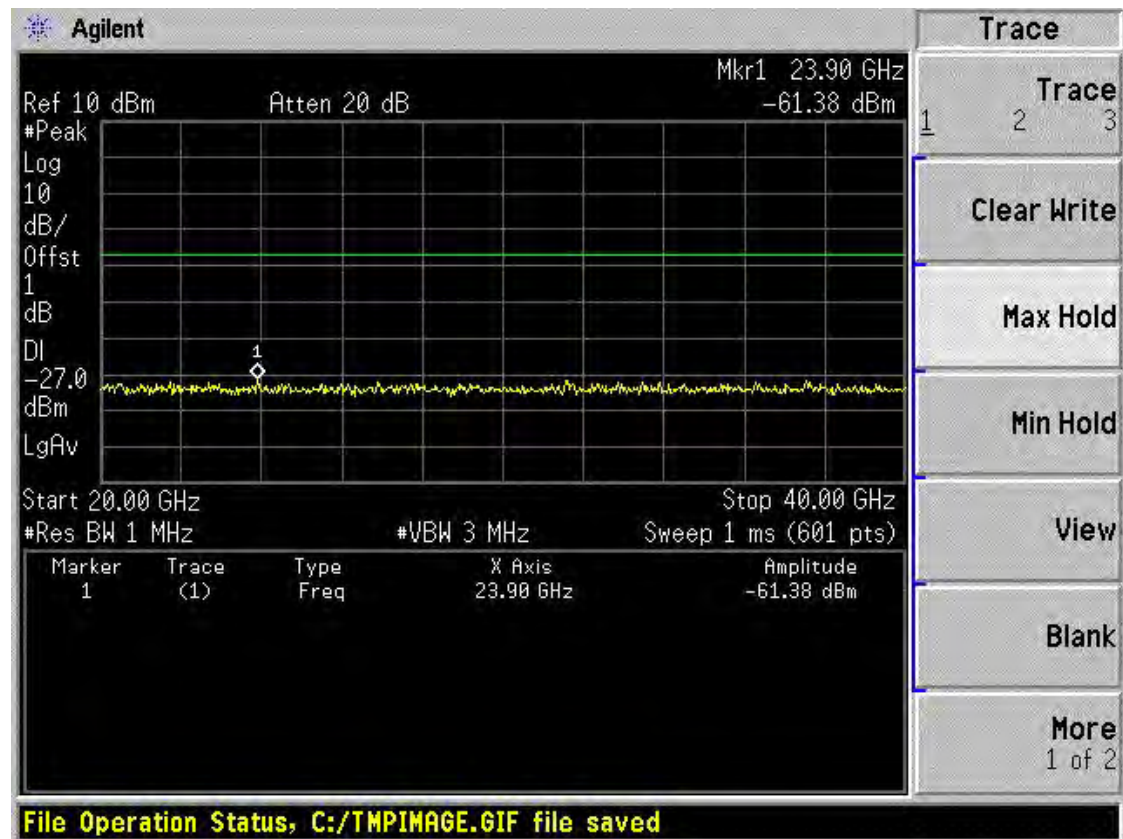


Date: 24.AUG.2015 16:55:41

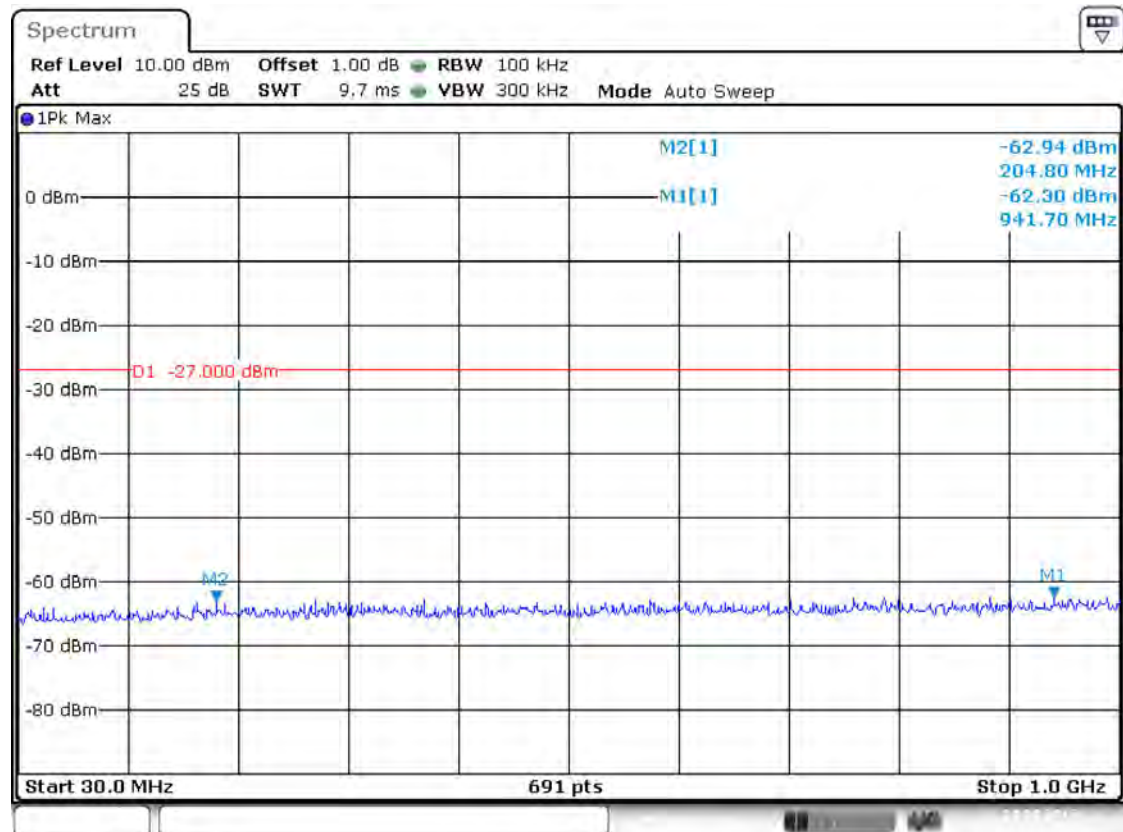
Band IV 11n(HT20) CH157 (1 ~ 20 GHz)



Band IV 11n(HT20) CH157 (20 ~ 40 GHz)



Band IV 11n(HT20) CH165 (30 ~ 1000 MHz)



Date: 24.AUG.2015 16:56:33

Agilent

Ref 30 dBm Atten 40 dB Mkr2 15.16 GHz -33.82 dBm

#Peak Log 10 dB/Offst 1 dB DI -27.0 dBm LgAv

Start 1.00 GHz Stop 20.00 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 47.52 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	5.84 GHz	19.42 dBm
2	(1)	Freq	15.16 GHz	-33.82 dBm
3	(1)	Freq	3.38 GHz	-38.15 dBm

Marker

Select Marker 1 2 3 4

Normal

Delta

Delta Pair (Tracking Ref)

Span Pair

Center

Off

More 1 of 2

Agilent

Ref 10 dBm Atten 20 dB Mkr1 32.77 GHz -61.40 dBm

#Peak Log 10 dB/ Offst 1 dB DI -27.0 dBm LgAv

Start 20.00 GHz Stop 40.00 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 1 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	32.77 GHz	-61.40 dBm

Trace 1 2 3

Clear Write

Max Hold

Min Hold

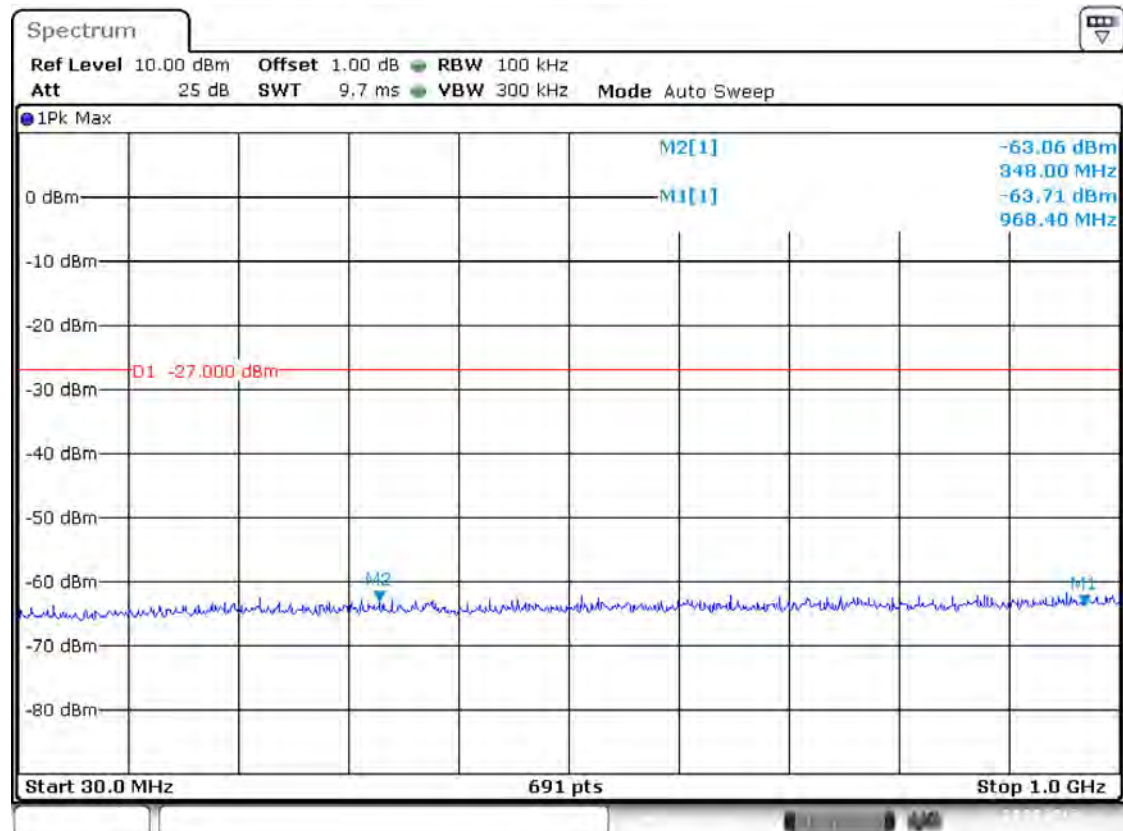
View

Blank

More 1 of 2

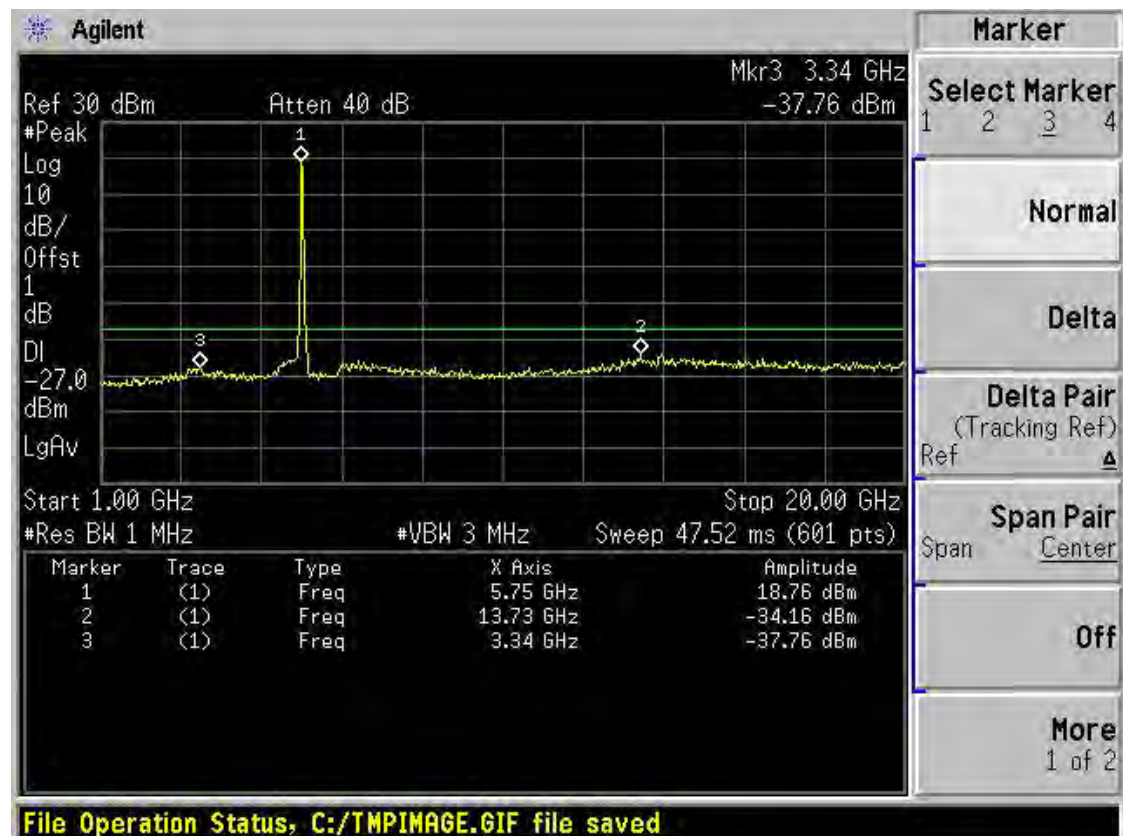
File Operation Status, C:/TMPIMAGE.GIF file saved

Band IV 11n(HT40) CH151 (30 ~ 1000 MHz)

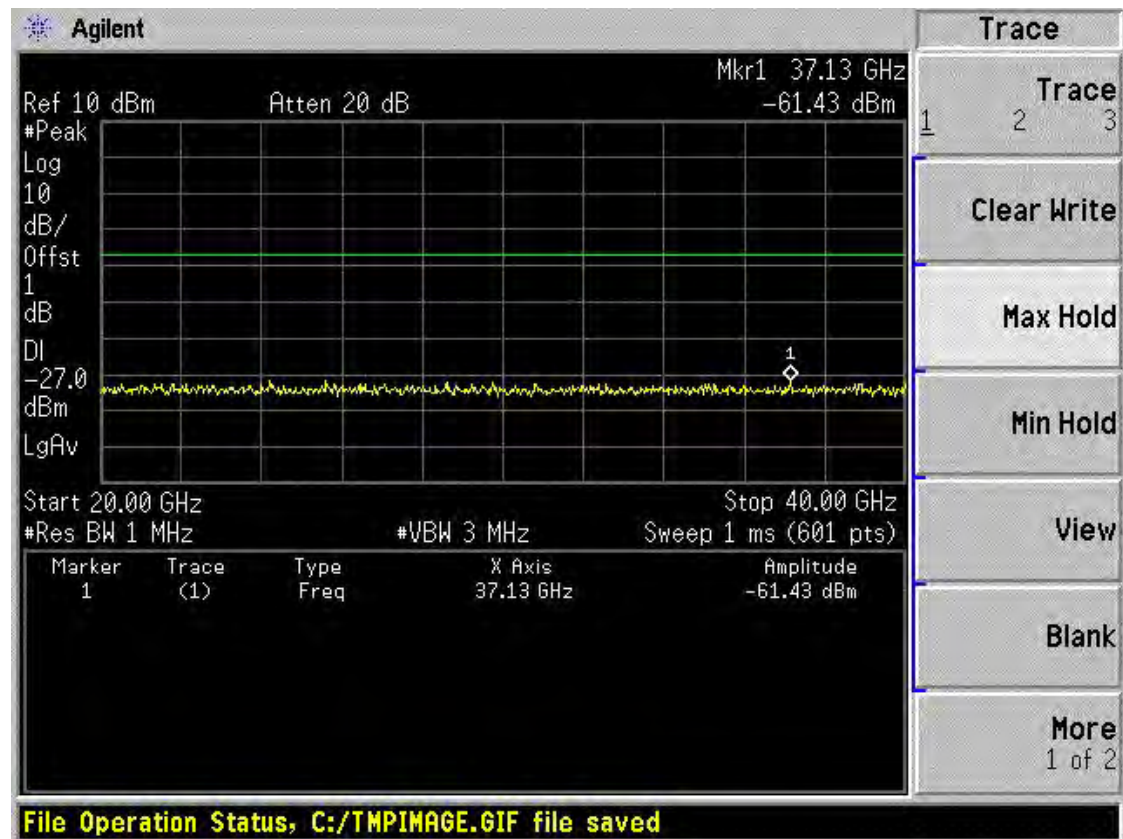


Date: 24.AUG.2015 17:01:47

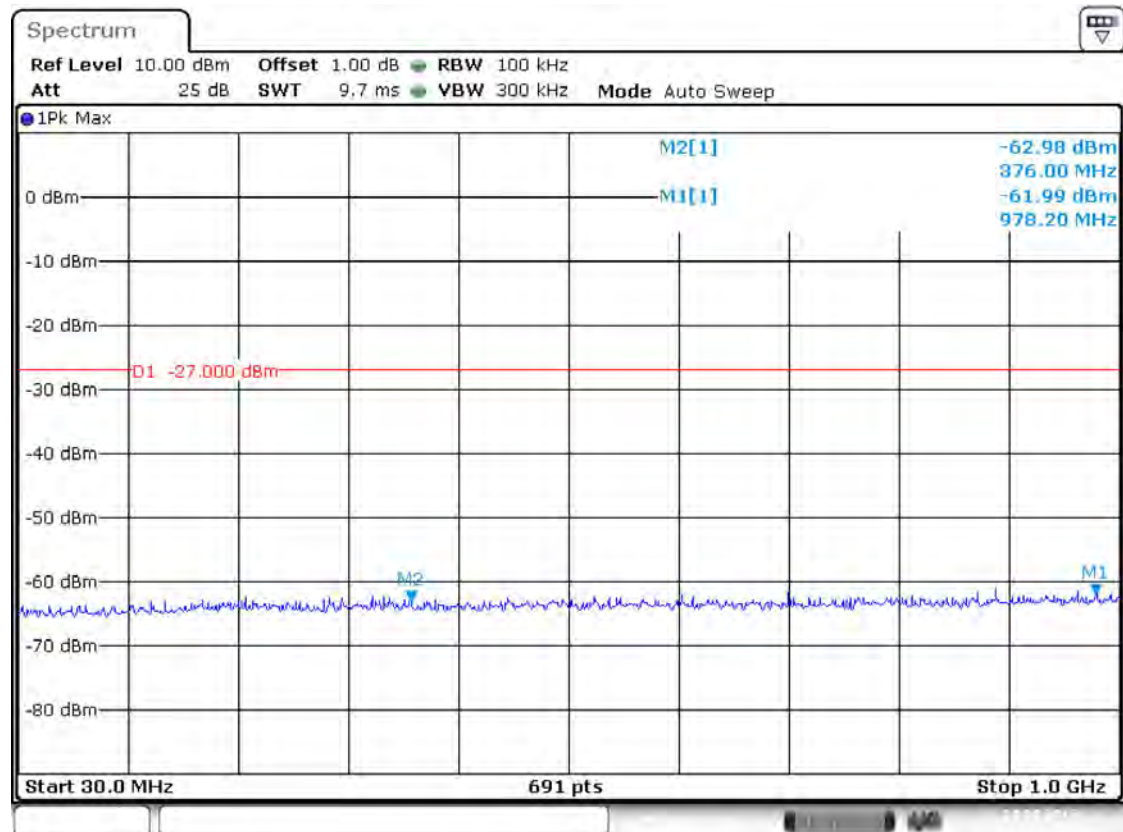
Band IV 11n(HT40) CH151 (1 ~ 20 GHz)



Band IV 11n(HT40) CH151 (20 ~ 40 GHz)

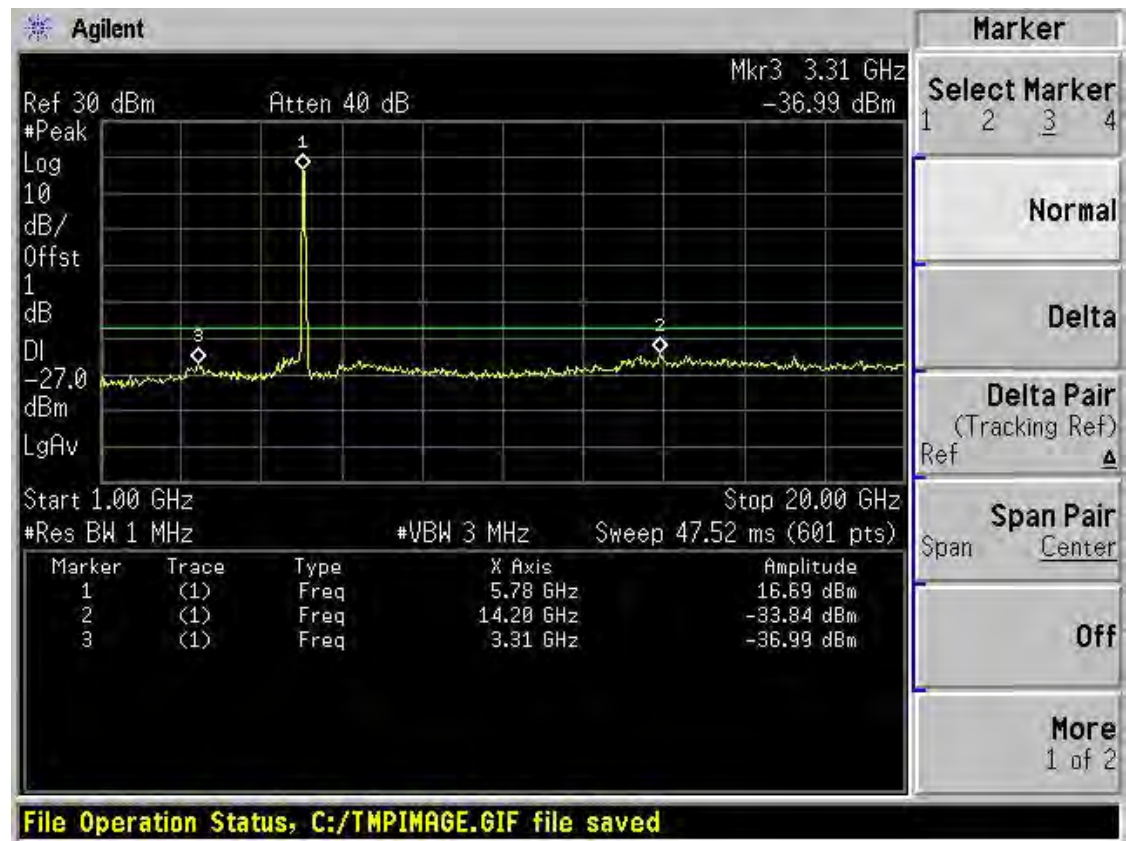


Band IV 11n(HT40) CH159 (30 ~ 1000 MHz)

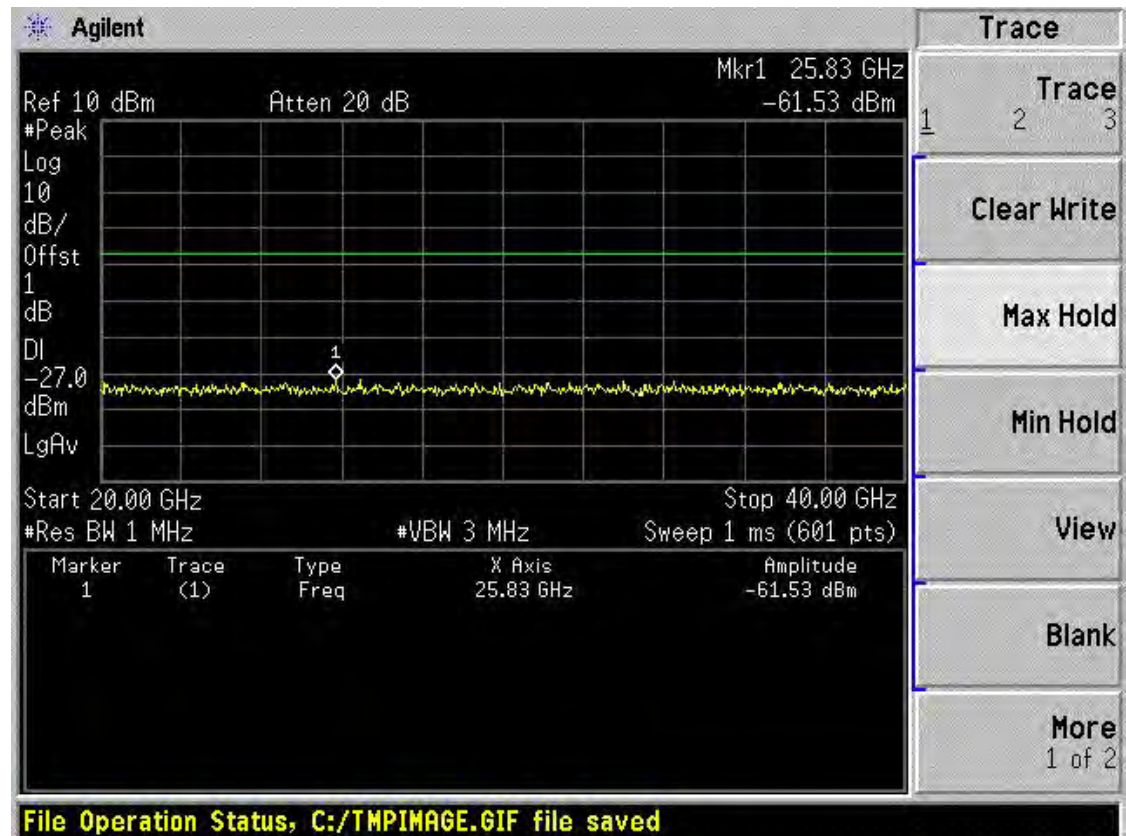


Date: 24.AUG.2015 17:06:17

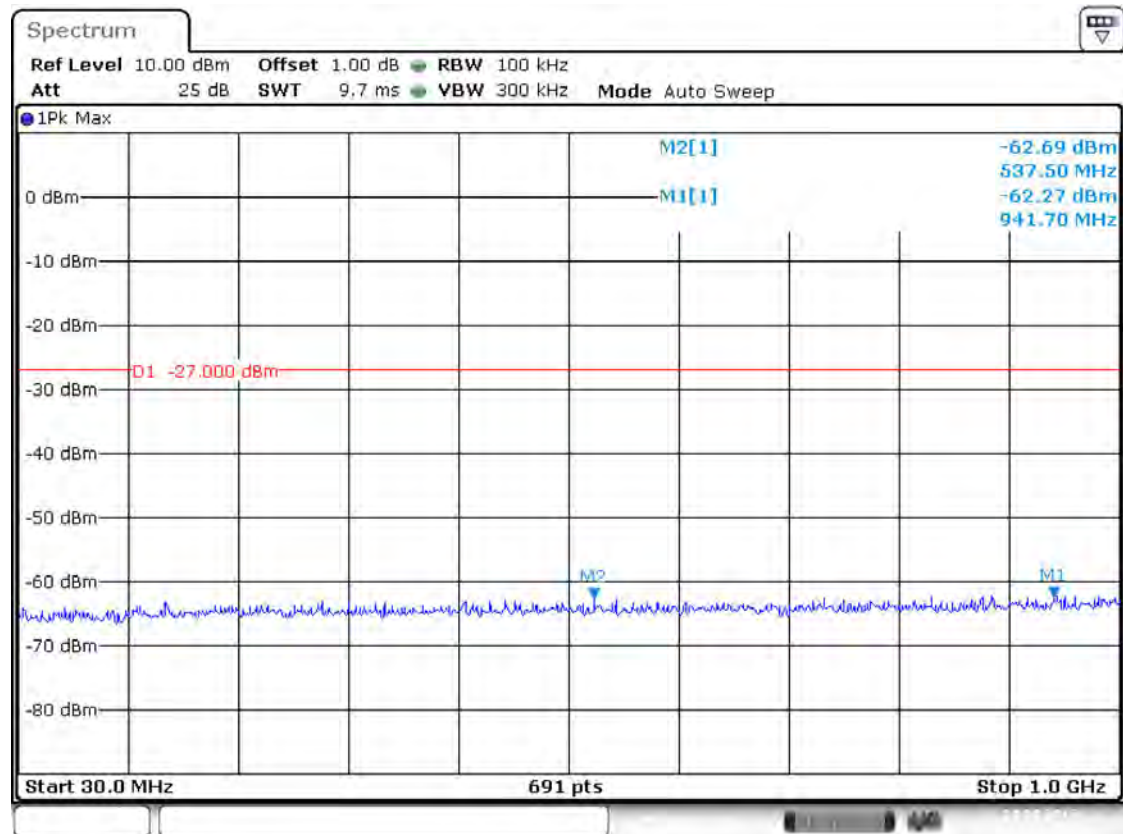
Band IV 11n(HT40) CH159 (1 ~ 20 GHz)



Band IV 11n(HT40) CH159 (20 ~ 40 GHz)

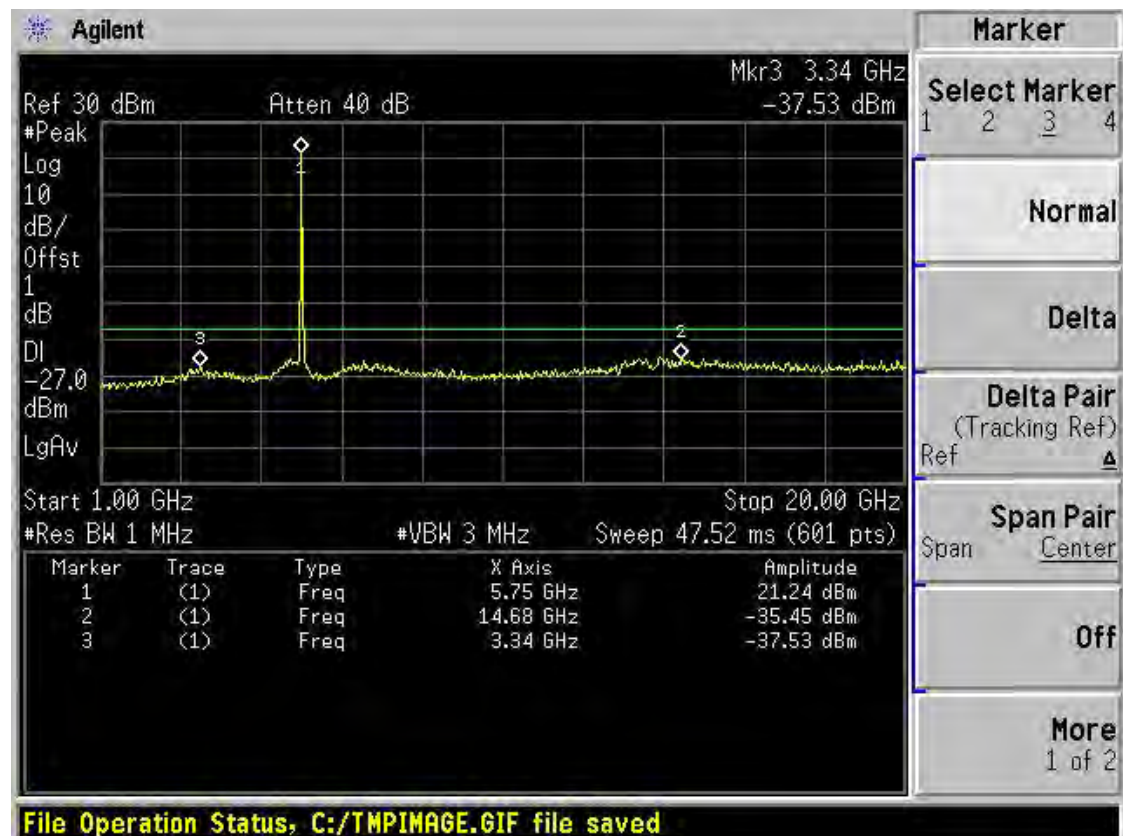


Band IV 11ac(HT20) CH149 (30 ~ 1000 MHz)

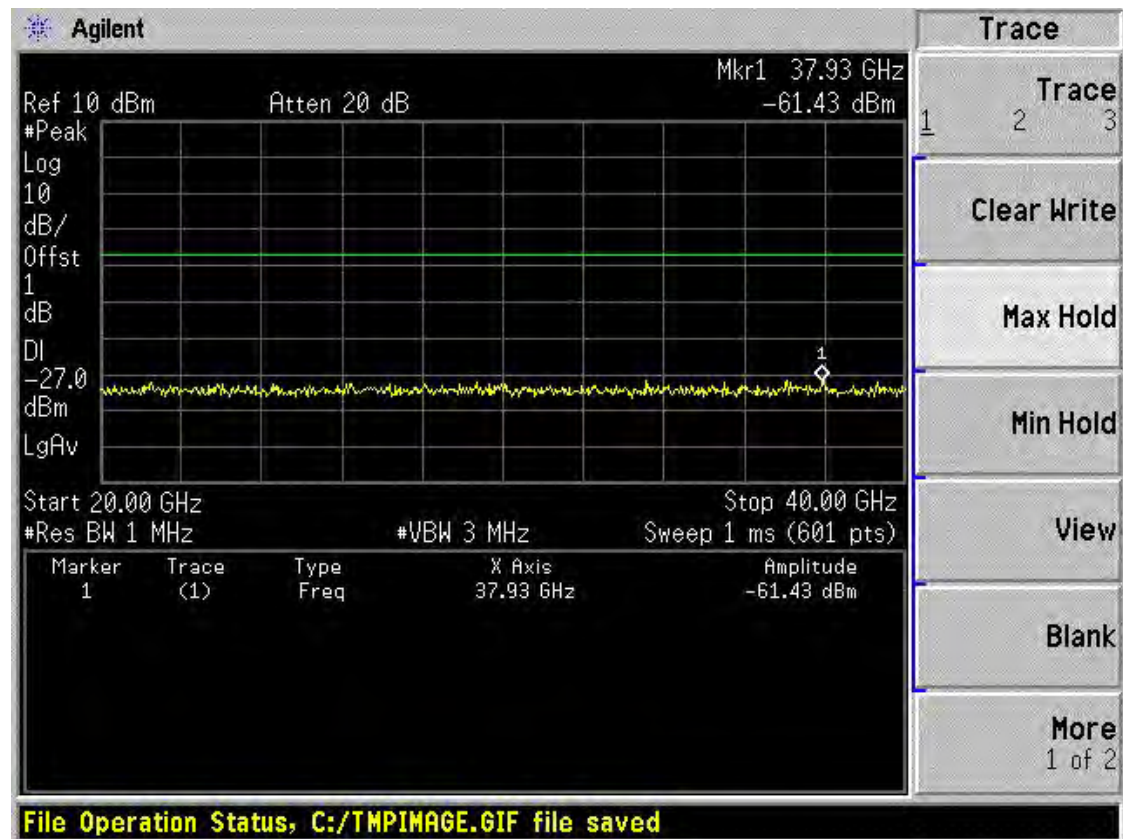


Date: 24.AUG.2015 17:14:39

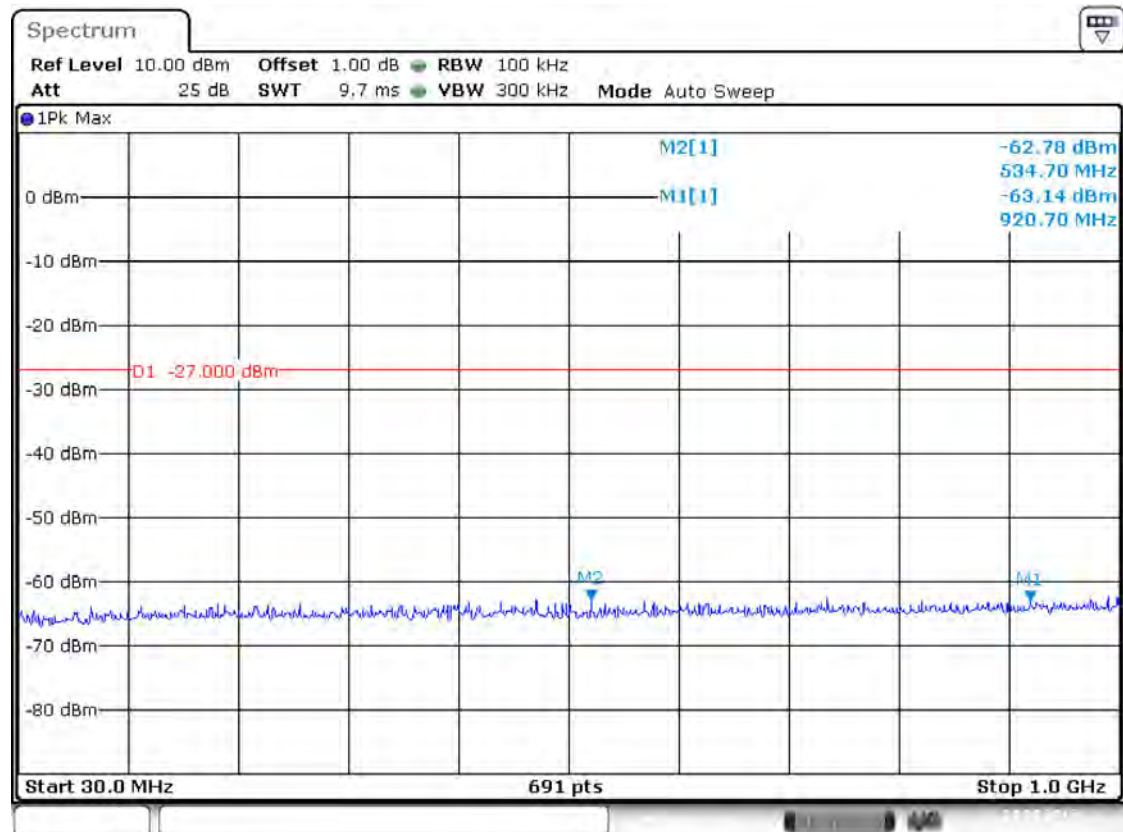
Band IV 11ac(HT20) CH149 (1 ~ 20 GHz)



Band IV 11ac(HT20) CH149 (20 ~ 40 GHz)

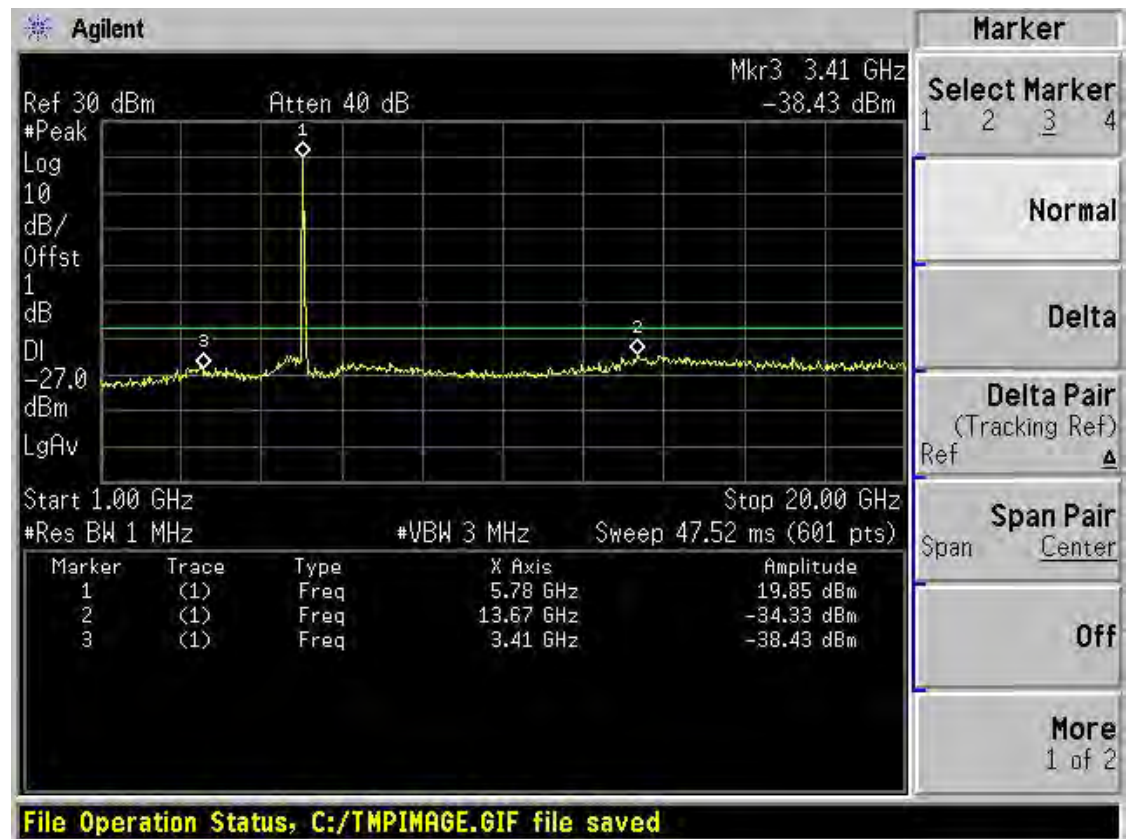


Band IV 11ac(HT20) CH157 (30 ~ 1000 MHz)

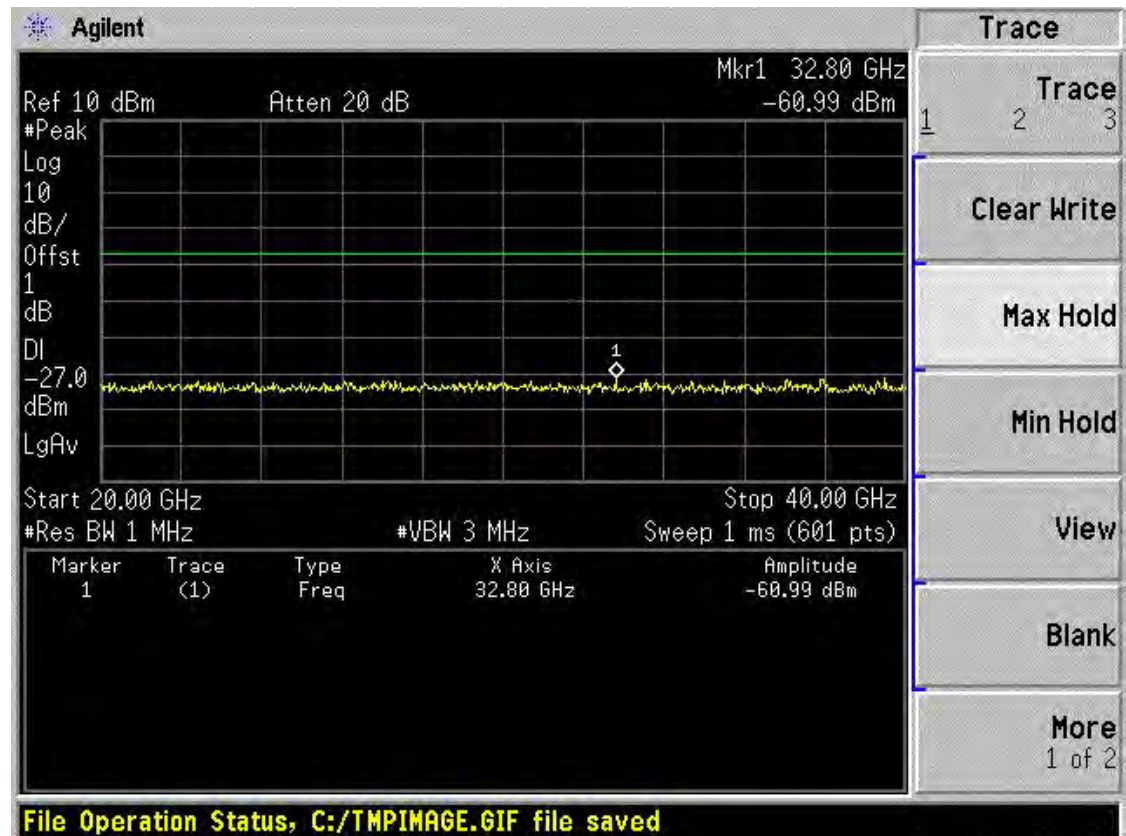


Date: 24.AUG.2015 17:15:26

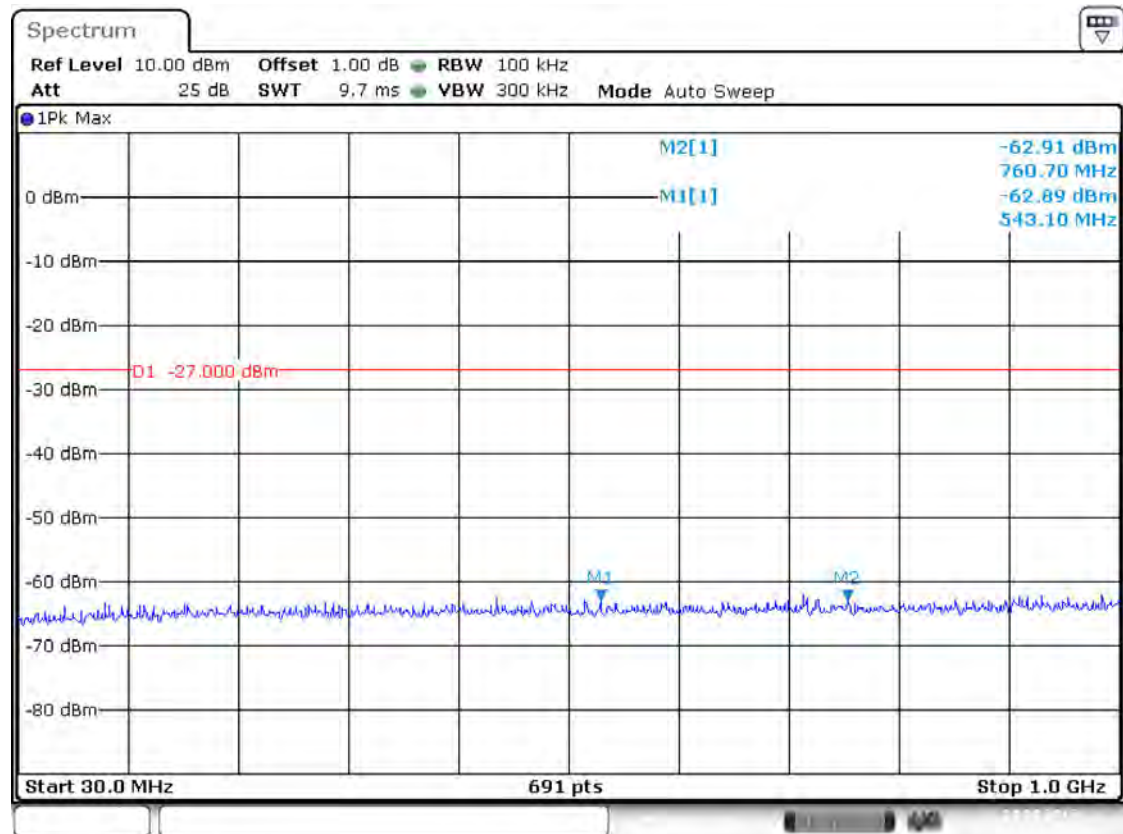
Band IV 11ac(HT20) CH157 (1 ~ 20 GHz)



Band IV 11ac(HT20) CH157 (20 ~ 40 GHz)

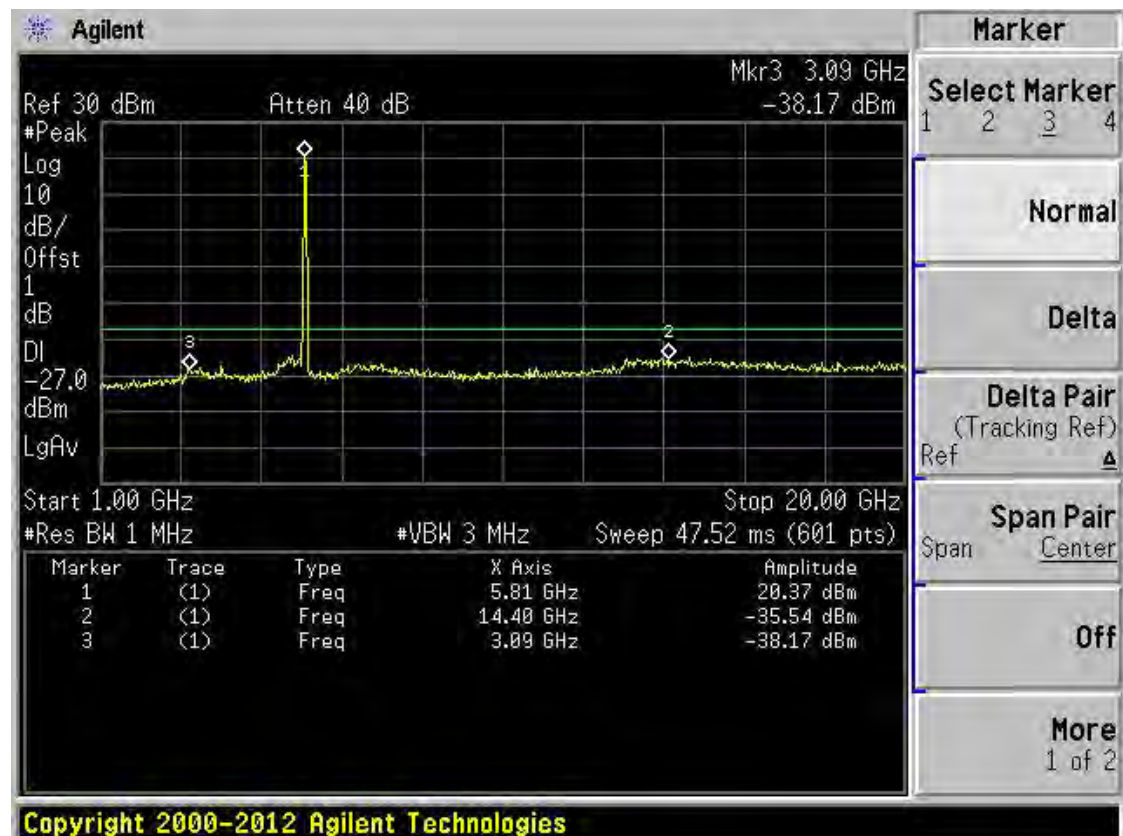


Band IV 11ac(HT20) CH165 (30 ~ 1000 MHz)

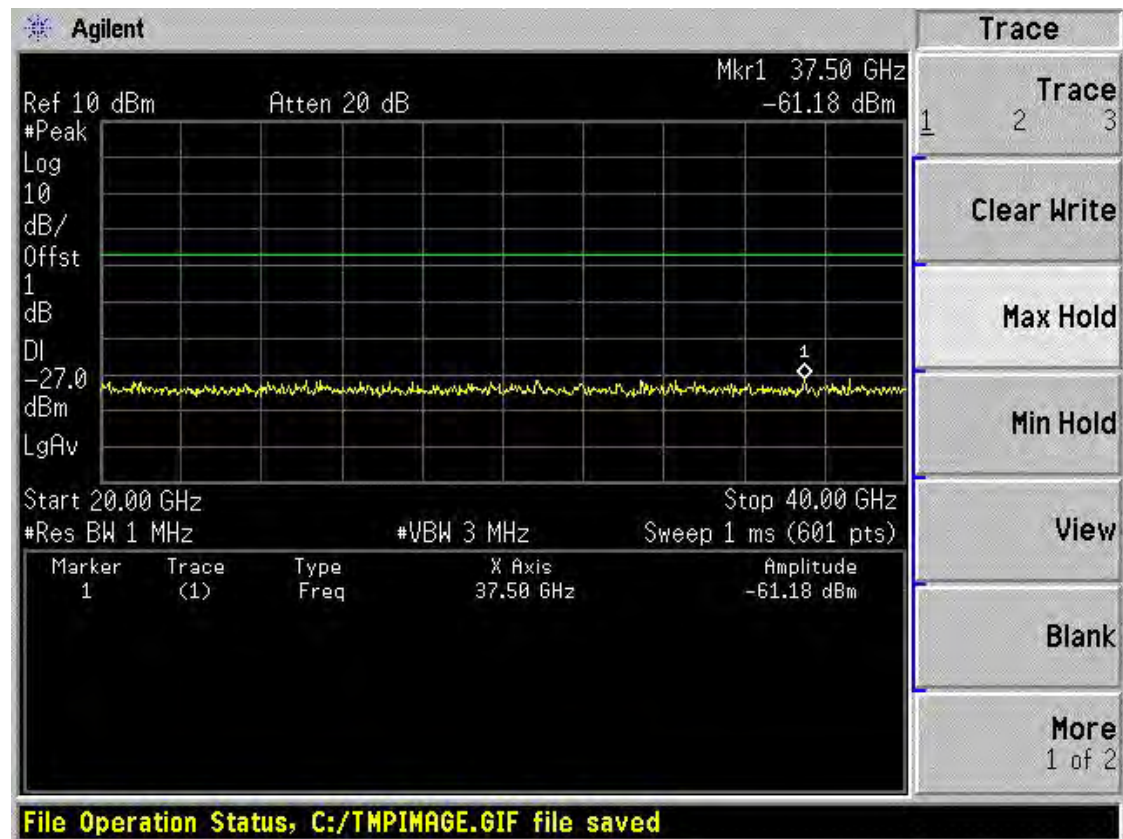


Date: 24.AUG.2015 17:16:09

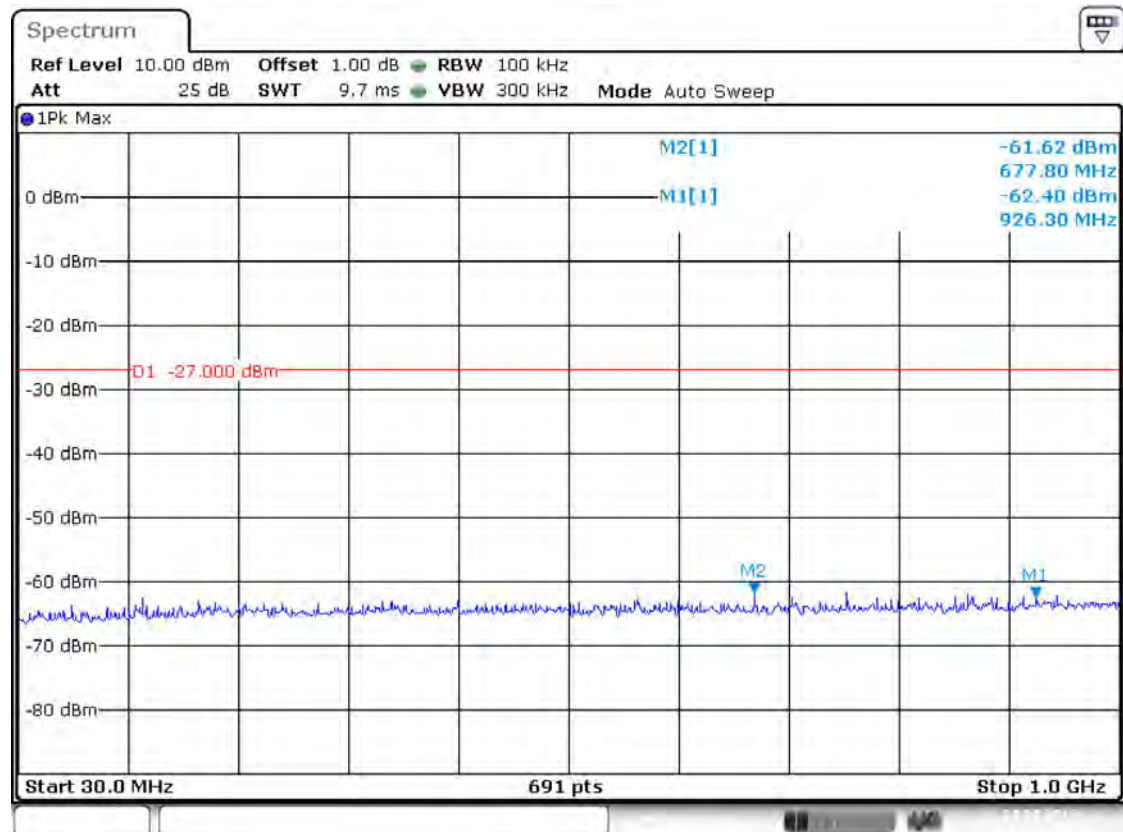
Band IV 11ac(HT20) CH165 (1 ~ 20 GHz)



Band IV 11ac(HT20) CH165 (20 ~ 40 GHz)

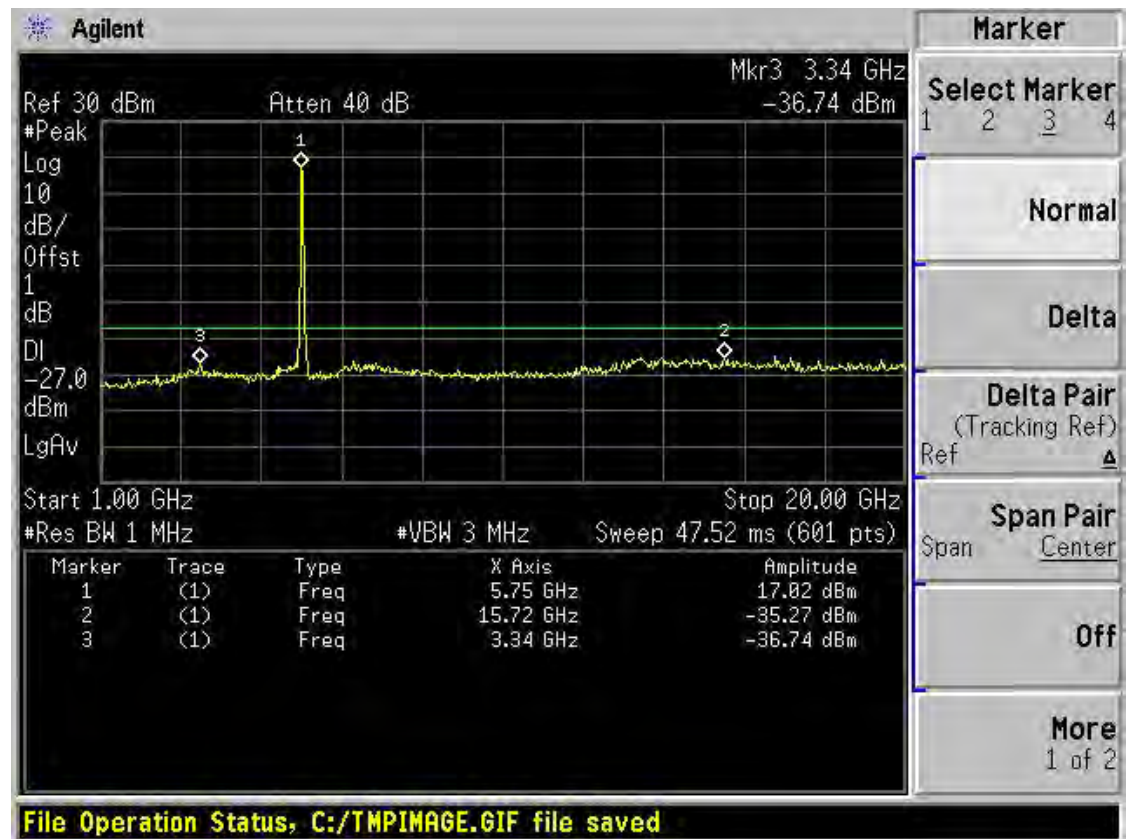


Band IV 11ac(HT40) CH151 (30 ~ 1000 MHz)

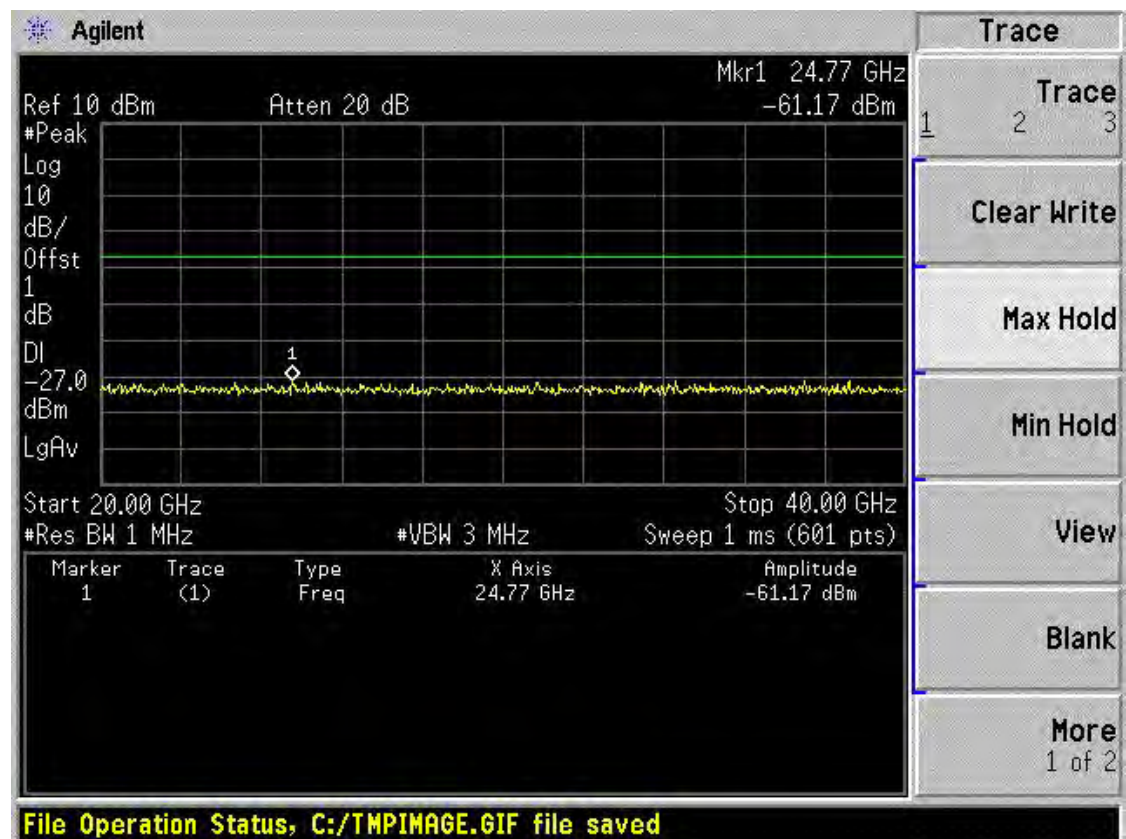


Date: 24.AUG.2015 17:16:43

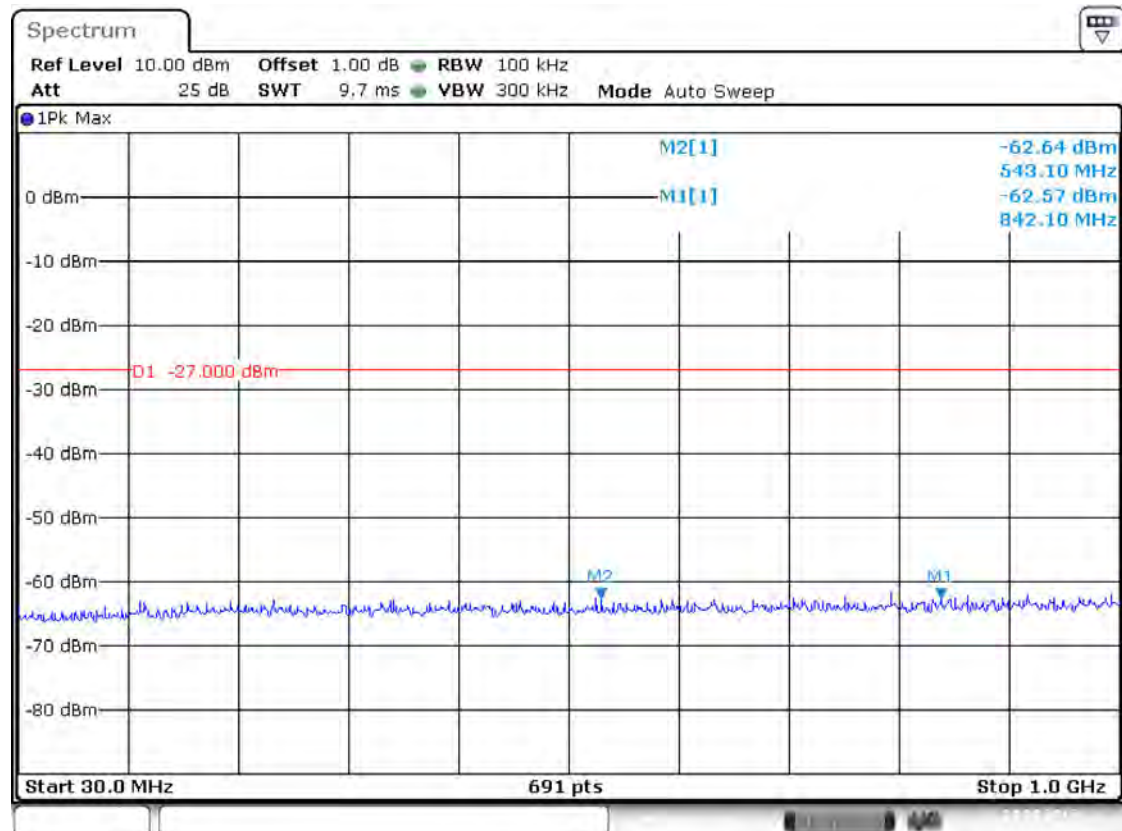
Band IV 11ac(HT40) CH151 (1 ~ 20 GHz)



Band IV 11ac(HT40) CH151 (20 ~ 40 GHz)

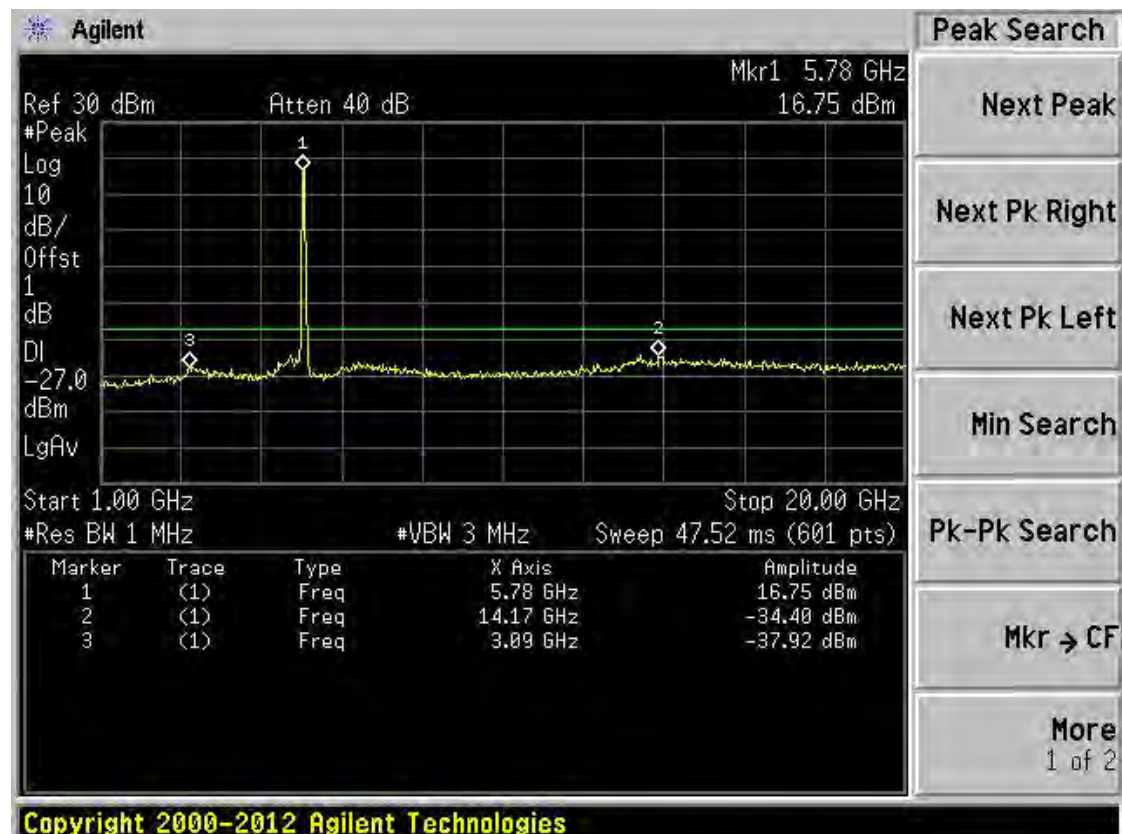


Band IV 11ac(HT40) CH159 (30 ~ 1000 MHz)

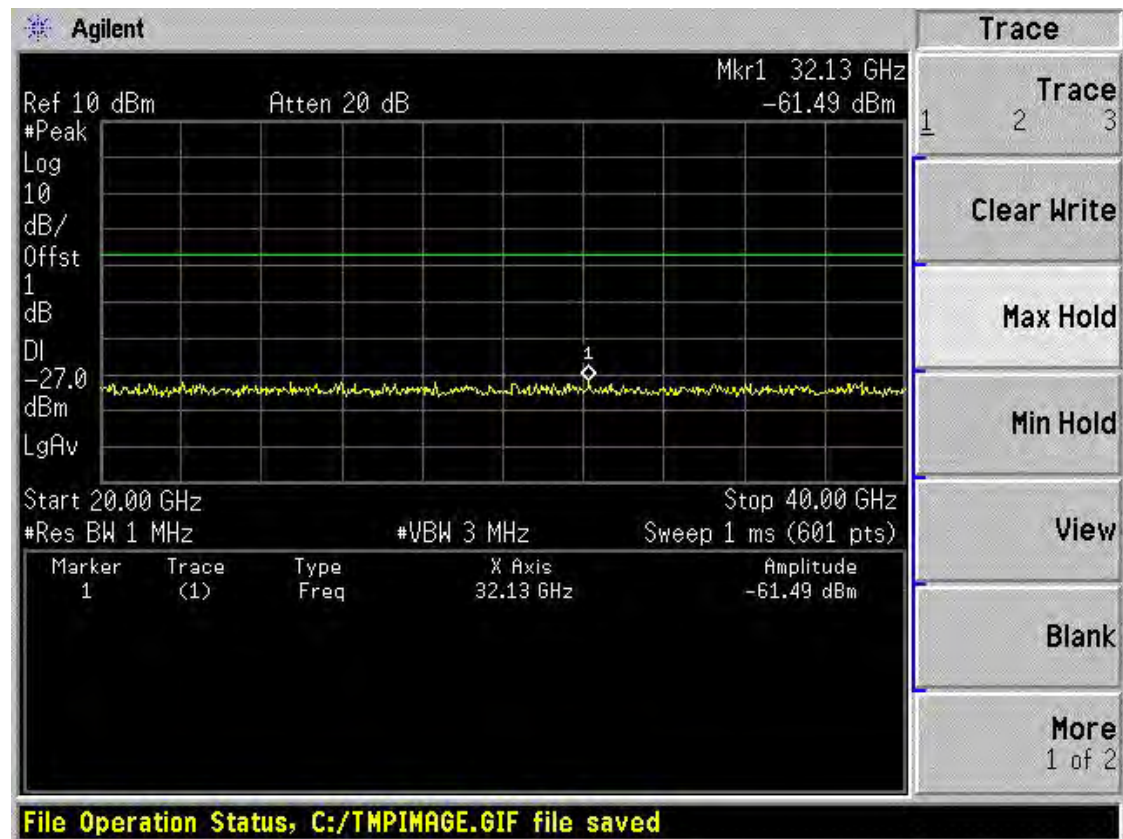


Date: 24.AUG.2015 17:17:30

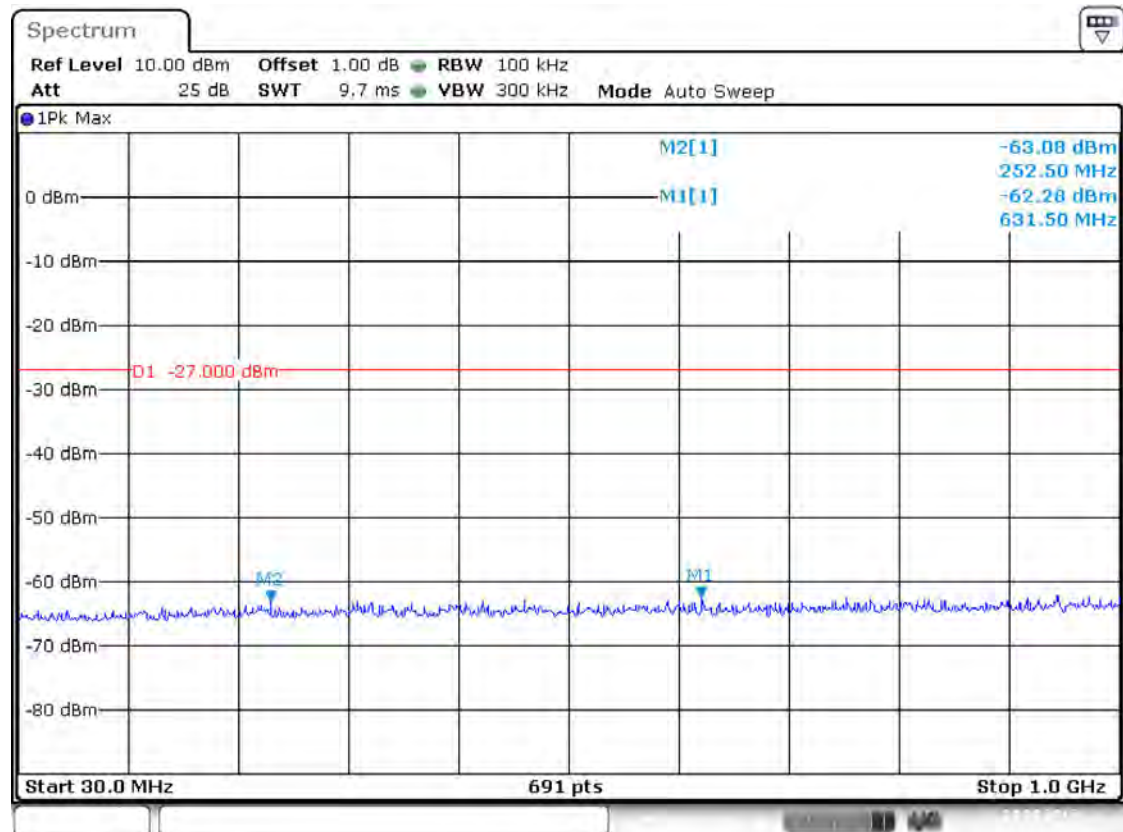
Band IV 11ac(HT40) CH159 (1 ~ 20 GHz)



Band IV 11ac(HT40) CH159 (20 ~ 40 GHz)

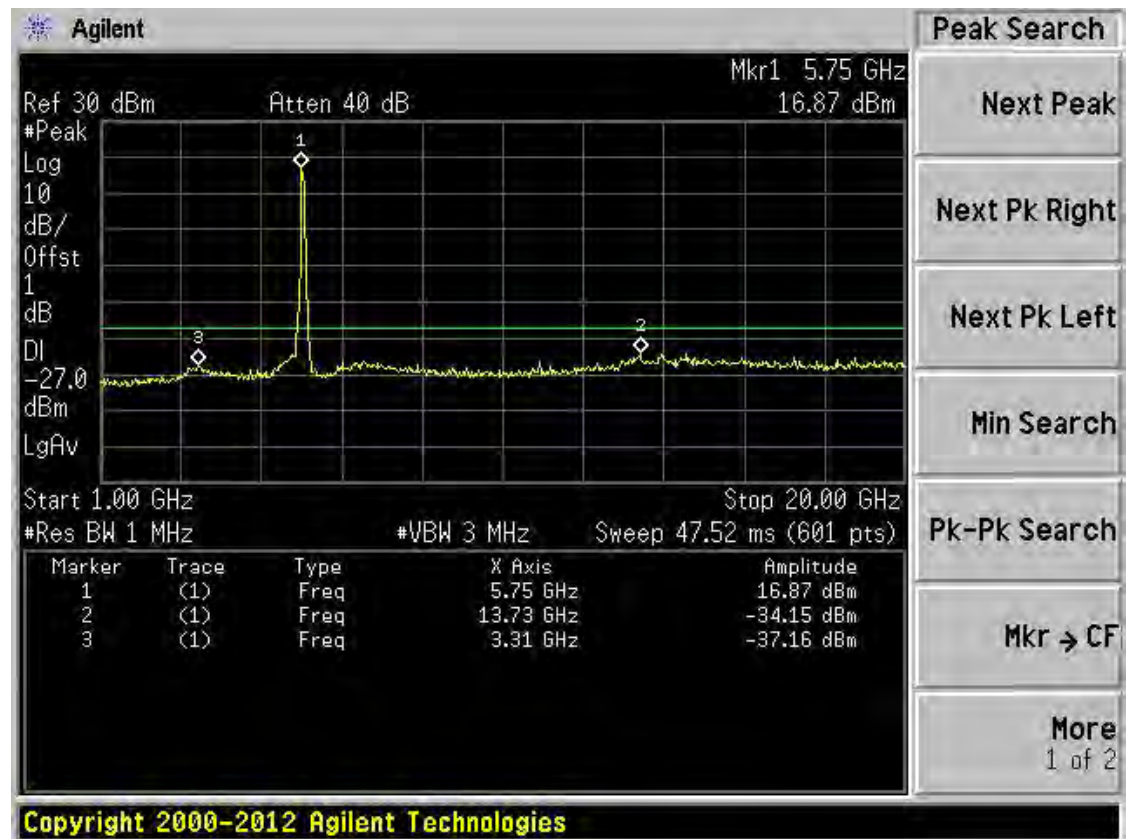


Band IV 11ac(HT80) CH155 (30 ~ 1000 MHz)

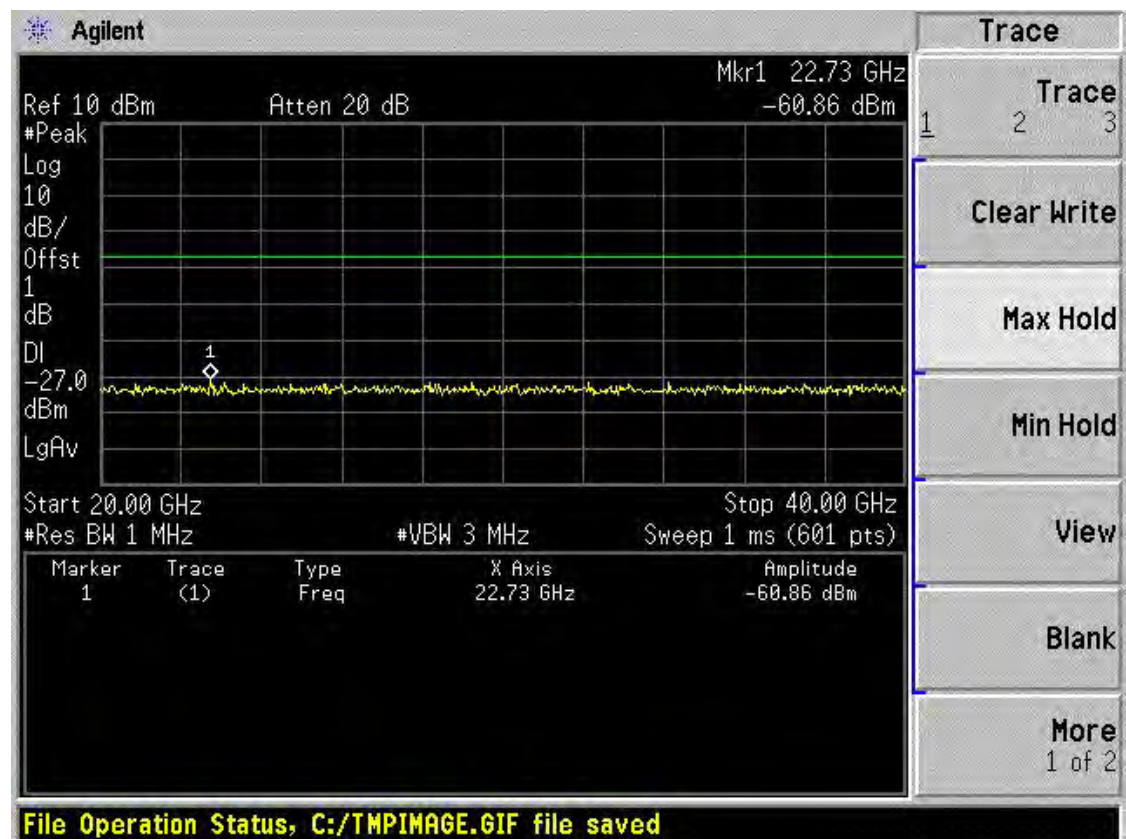


Date: 24.AUG.2015 17:18:06

Band IV 11ac(HT80) CH155 (1 ~ 20 GHz)



Band IV 11ac(HT80) CH155 (20 ~ 40 GHz)



A.7 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)

The worst data (Test frequency: below 6 GHz with 23 dBi Antenna gain)

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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dB μ V/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

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

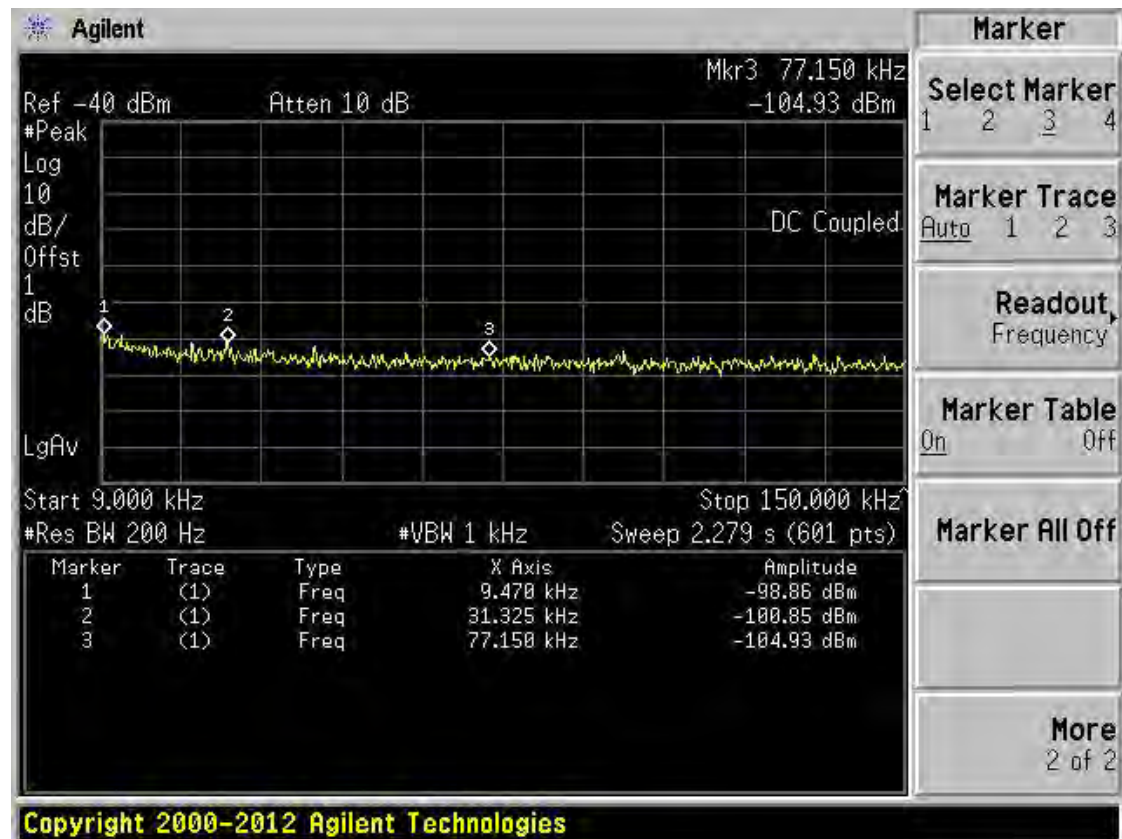
Note 4: The frequency is fundamental signal which can be ignored.

Band IV 11a CH149

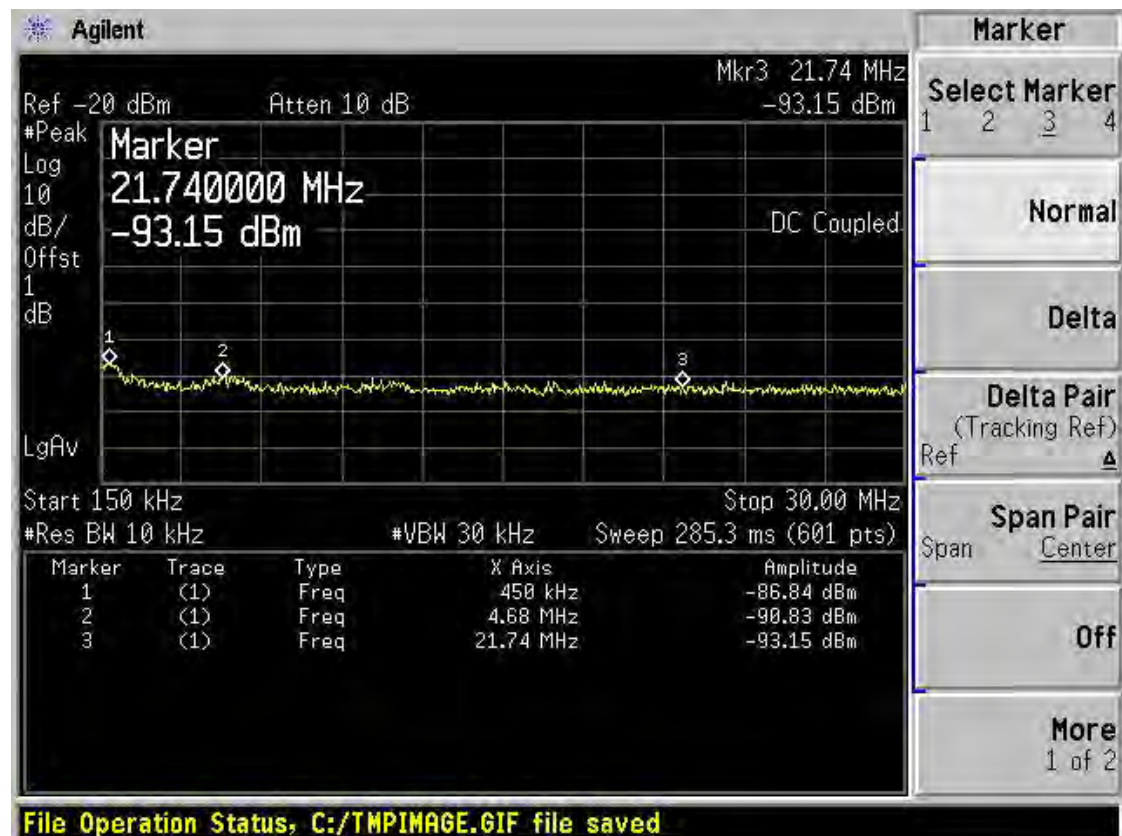
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark	Verdict
0.00947	-98.86	6	3	23	QP	25.40	68.20	42.80	Note 1	PASS
0.45	-86.84	6	3	23	QP	37.42	68.20	30.78	Note 1	PASS
62.3	-80.59	4.7	3	23	QP	42.37	68.20	25.83	Note 1	PASS
852.9	-81.23	4.7	3	23	QP	41.73	68.20	26.47	Note 1	PASS
3317	-57.92	0	3	23	PK	60.34	68.20	7.86	Note 1	PASS
	-69.45		3	23	AV	48.81	54.00	5.19	--	PASS
5517	-55.5	0	3	23	PK	62.76	68.20	5.44	Note 1	PASS
	-66.81		3	23	AV	51.45	54.00	2.55	--	PASS
5750	24.45	0	3	23	PK	N/A	N/A	N/A	Note 1	N/A
	N/A		3	23	AV	N/A	N/A	N/A		N/A

Test Plots

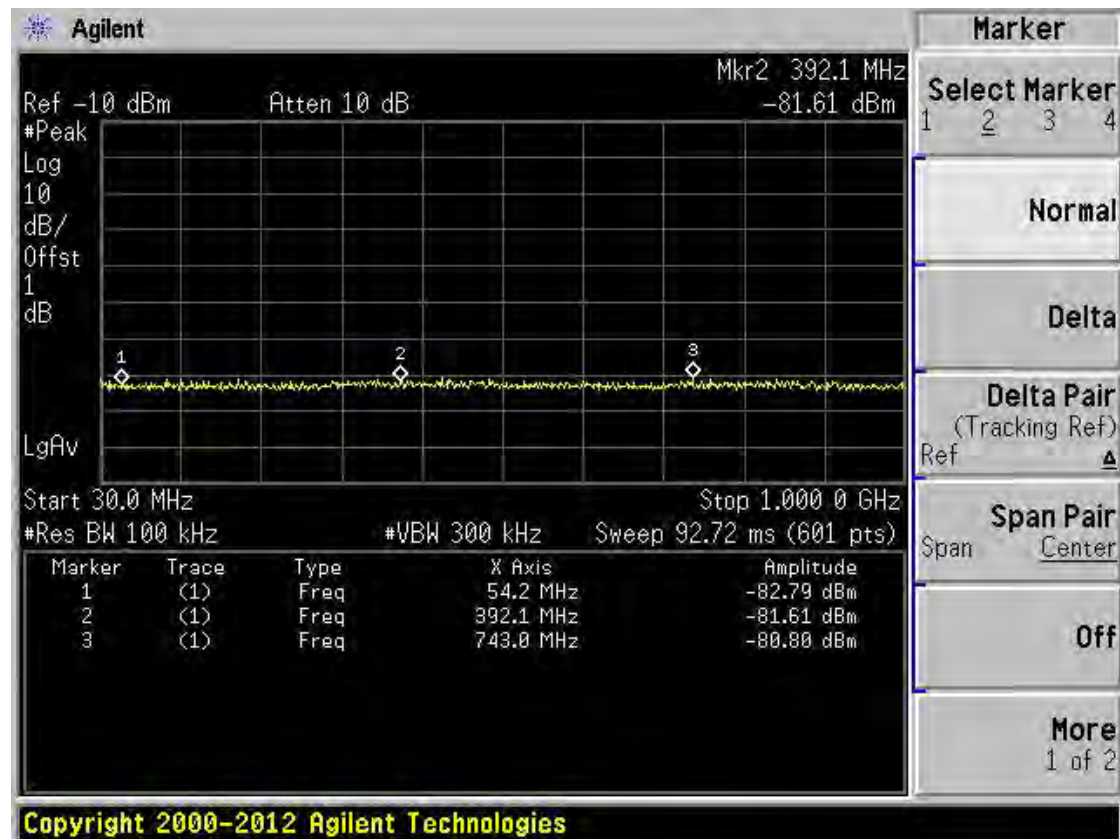
Band IV 11a CH149, SPURIOUS 9 kHz ~ 150 kHz



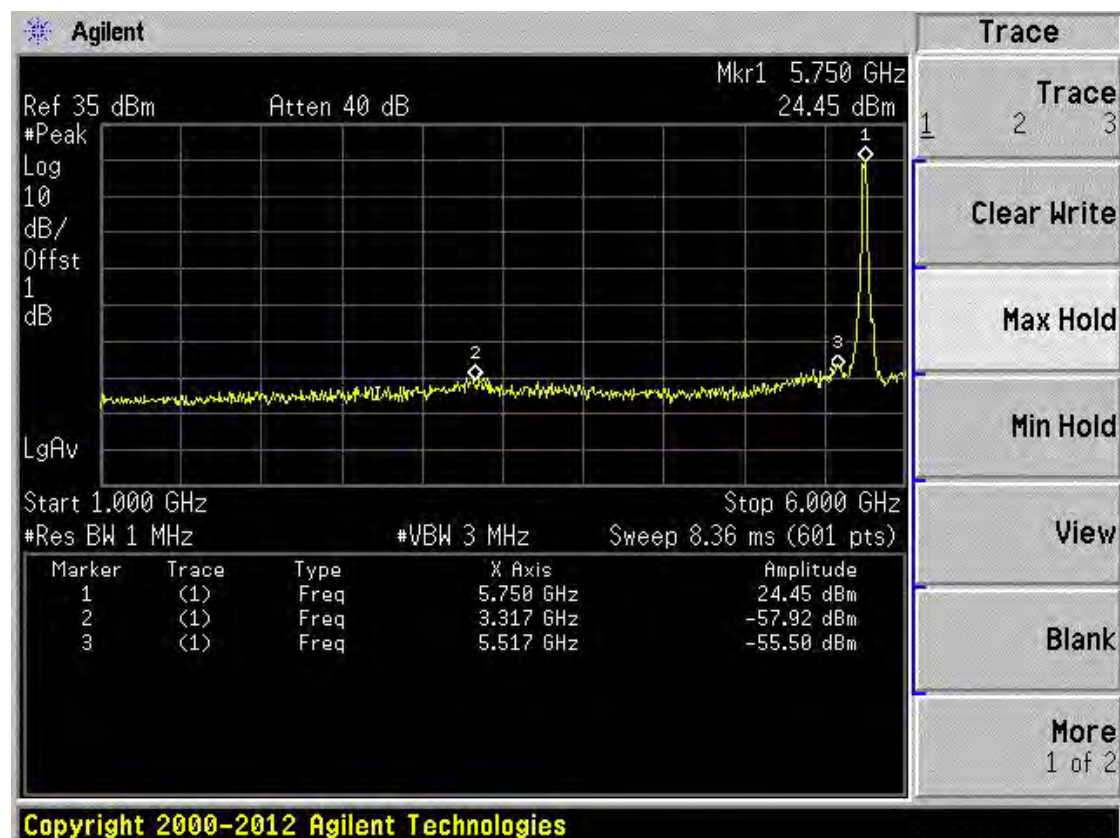
Band IV 11a CH149, SPURIOUS 150 kHz ~ 30 MHz



Band IV 11a CH149, SPURIOUS 30 MHz ~ 1 GHz



Band IV 11a CH149, SPURIOUS 1 GHz ~ 6 GHz



Test Data(Test frequency: 6 - 20 GHz with 23 dBi Antenna gain)

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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

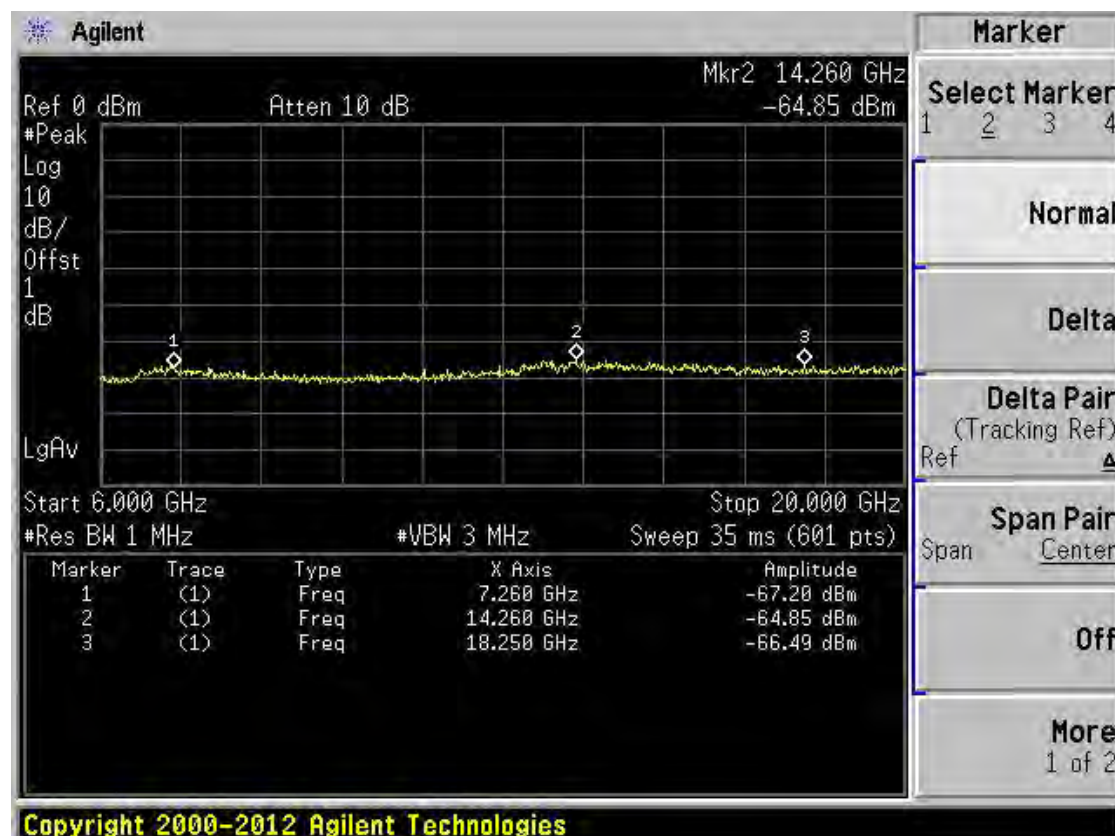
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11a CH36

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7260	-67.2	0	3	23	PK	51.06	68.20	17.14	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14260	-64.85	0	3	23	PK	53.41	68.20	14.79	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18250	-66.49	0	3	23	PK	51.77	68.20	16.43	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11a CH36, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

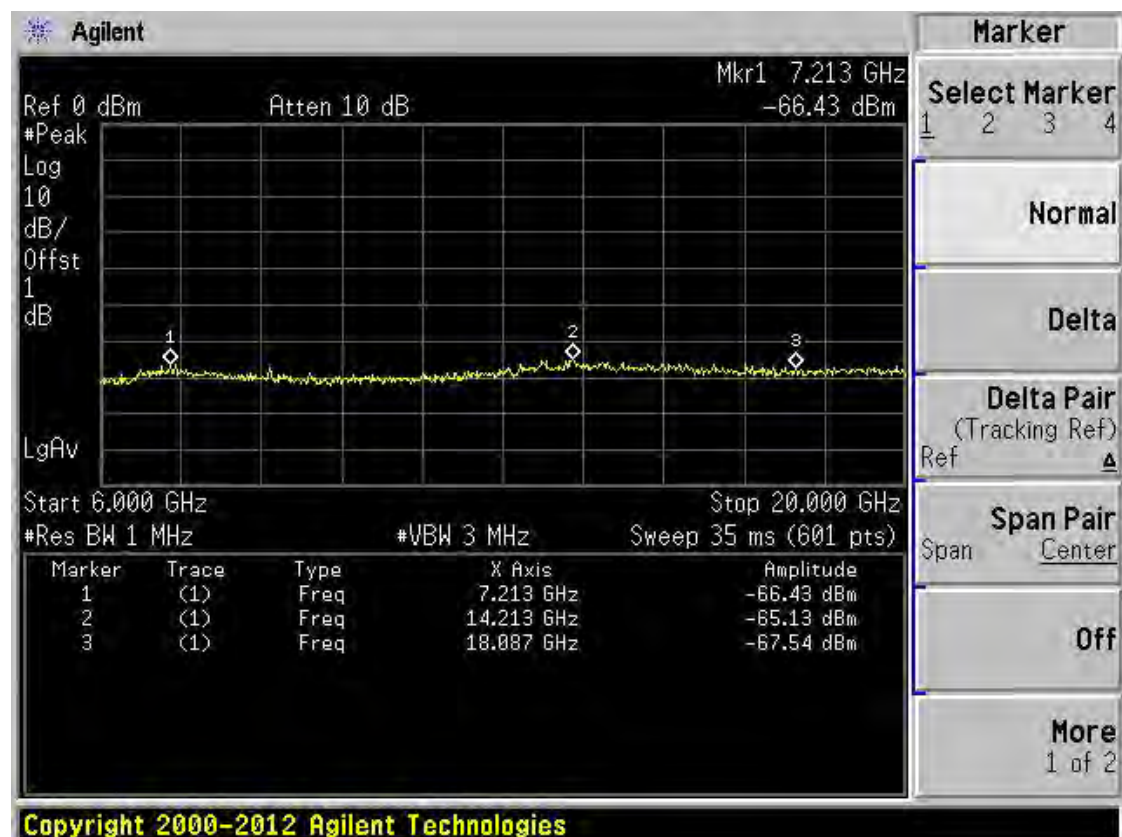
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11a CH40

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-66.43	0	3	23	PK	51.83	68.20	16.37	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-65.13	0	3	23	PK	53.13	68.20	15.07	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18087	-67.54	0	3	23	PK	50.72	68.20	17.48	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11a CH40, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

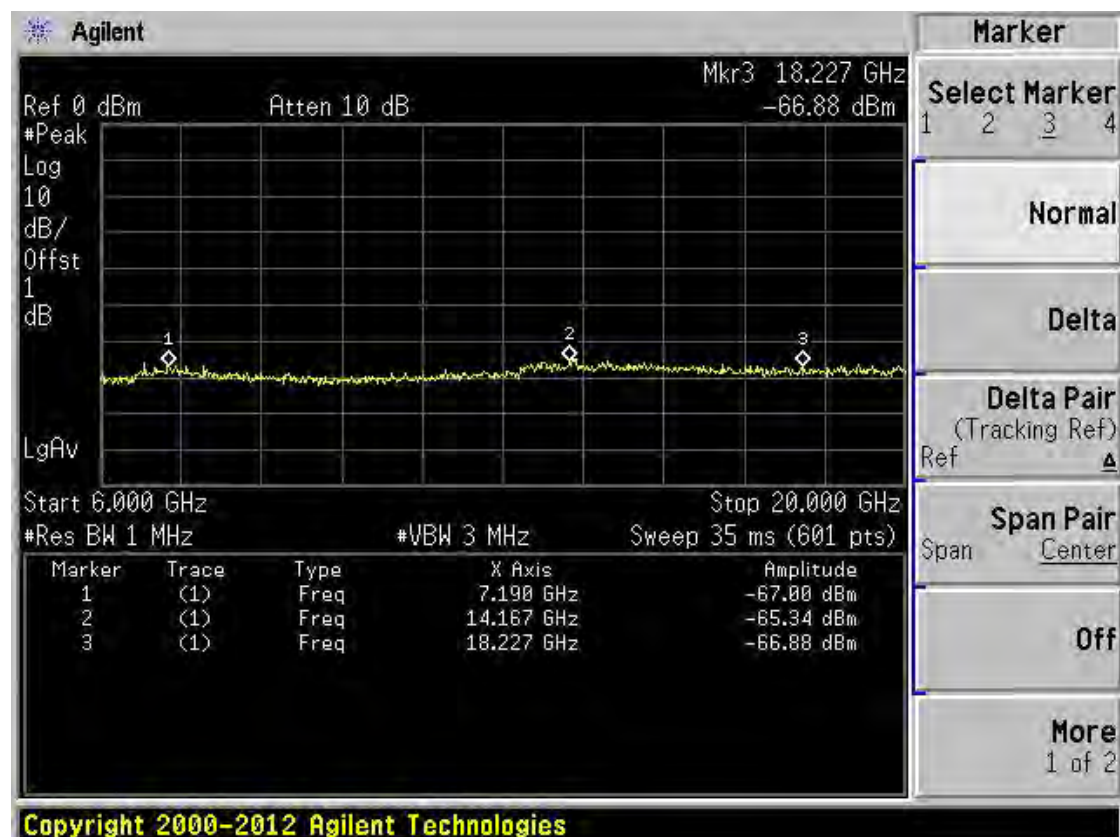
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11a CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7190	-67	0	3	23	PK	51.26	68.20	16.94	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14167	-65.34	0	3	23	PK	52.92	68.20	15.28	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18227	-66.88	0	3	23	PK	51.38	68.20	16.82	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11a CH48, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

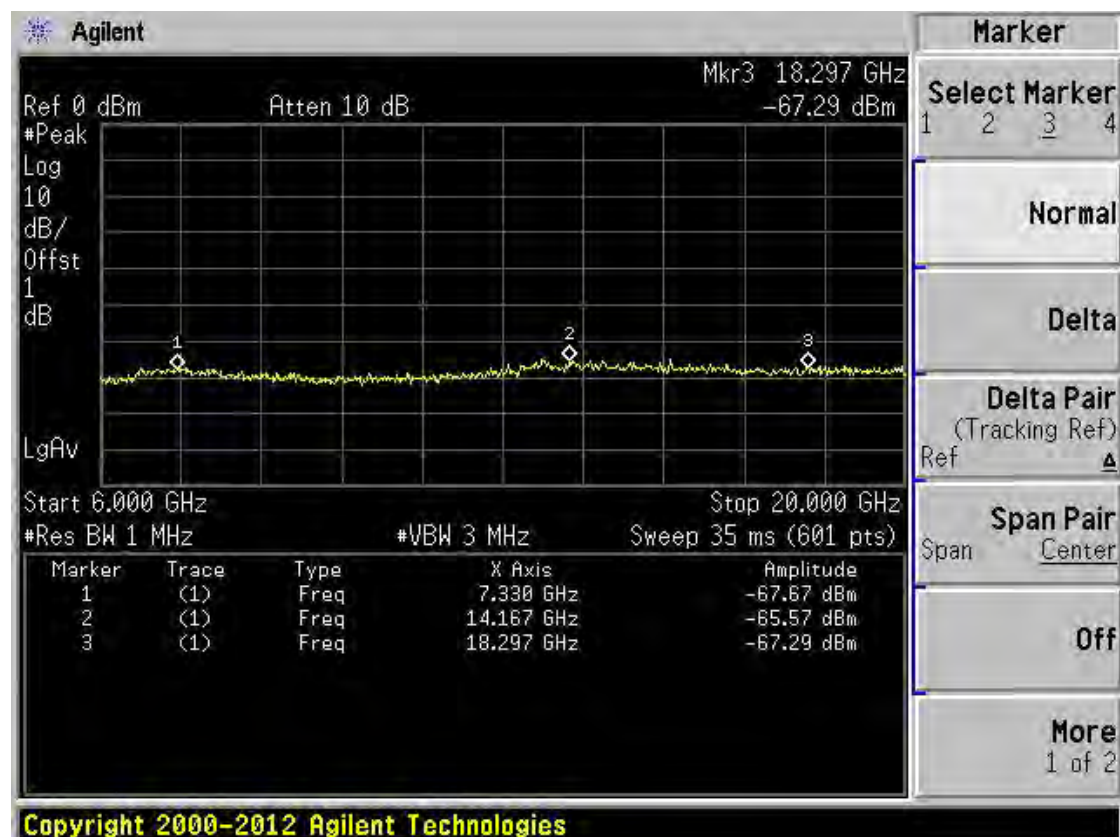
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11n(HT20) CH36

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Verdict
7330	-67.67	0	3	23	PK	50.59	68.20	17.61	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14167	-65.57	0	3	23	PK	52.69	68.20	15.51	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18297	-67.29	0	3	23	PK	50.97	68.20	17.23	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11n(HT20) CH36, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

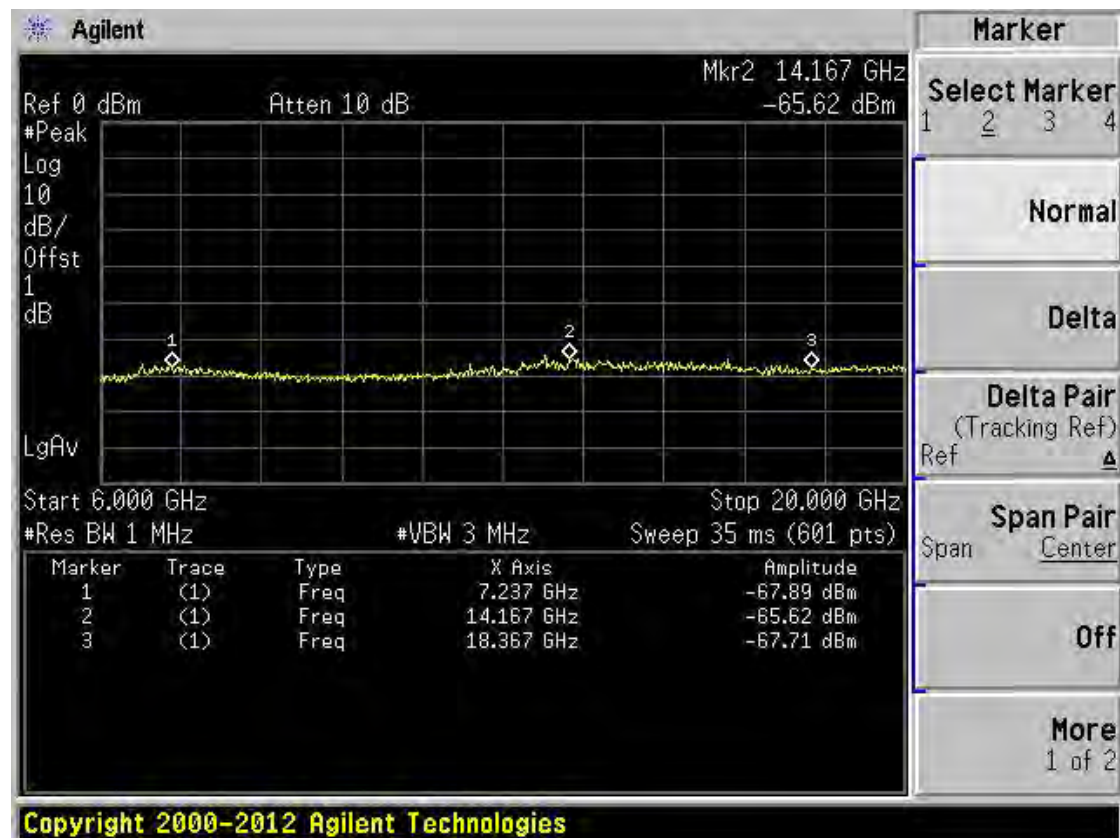
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11n(HT20) CH40

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7237	-67.89	0	3	23	PK	50.37	68.20	17.83	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14167	-65.62	0	3	23	PK	52.64	68.20	15.56	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18367	-67.89	0	3	23	PK	50.37	68.20	17.83	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11n(HT20) CH40, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

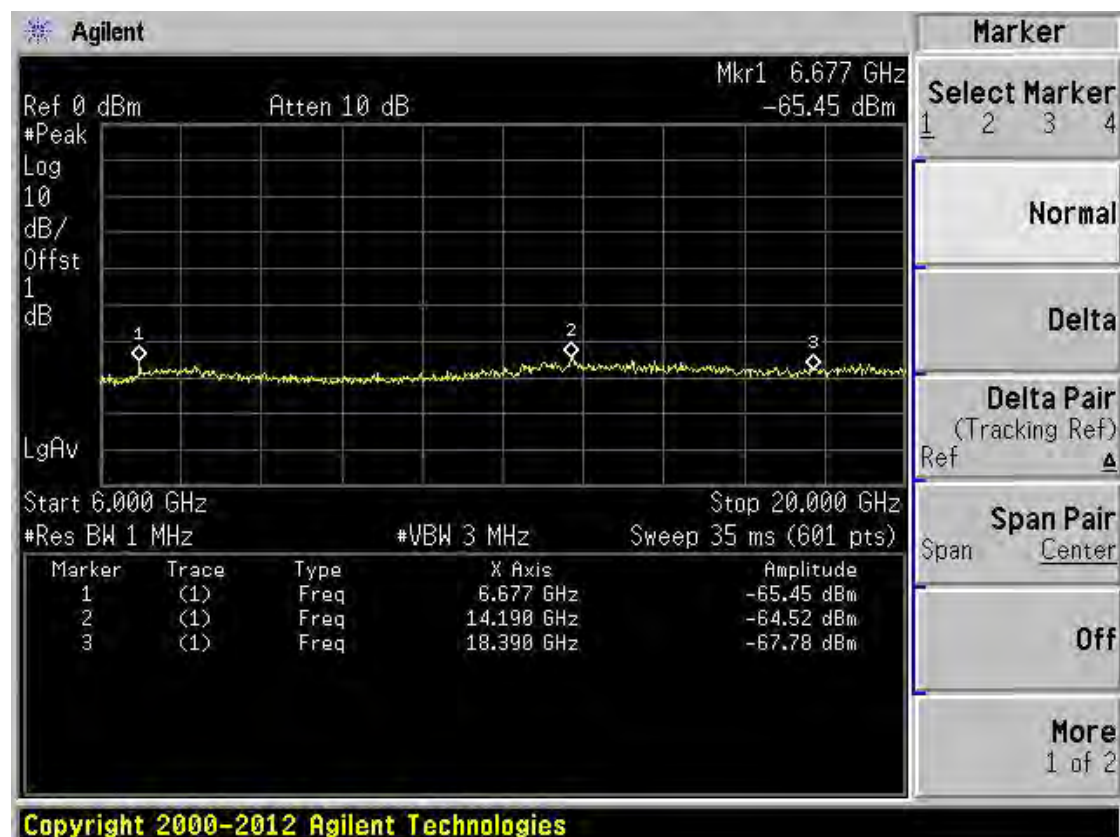
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11n(HT20) CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Verdict
6677	-65.46	0	3	23	PK	52.80	68.20	15.40	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-64.52	0	3	23	PK	53.74	68.20	14.46	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
18390	-67.78	0	3	23	PK	50.48	68.20	17.72	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11n(HT20) CH48, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

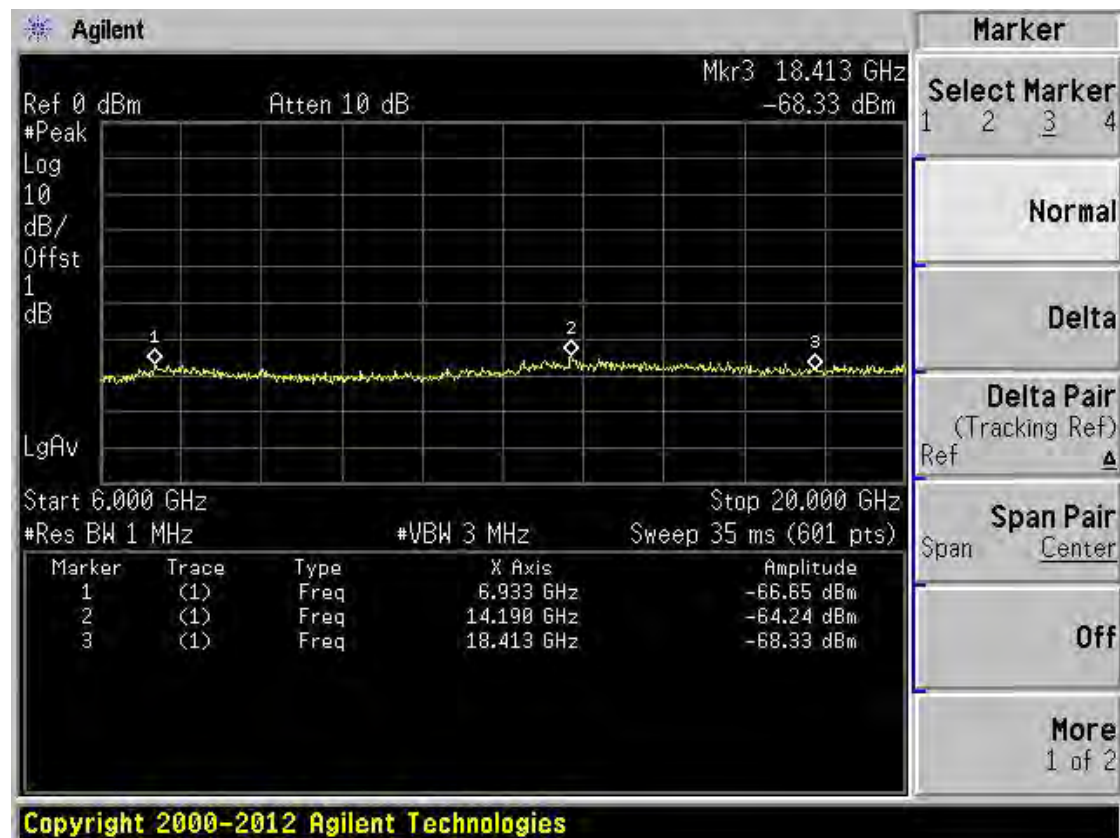
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11n(HT40) CH38

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
6933	-66.65	0	3	23	PK	51.61	68.20	16.59	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-64.24	0	3	23	PK	54.02	68.20	14.18	Note 1	PASS
	-78.65		3	23	AV	39.61	54.00	14.39	--	PASS
18413	-68.33	0	3	23	PK	49.93	68.20	18.27	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11n(HT40) CH38, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

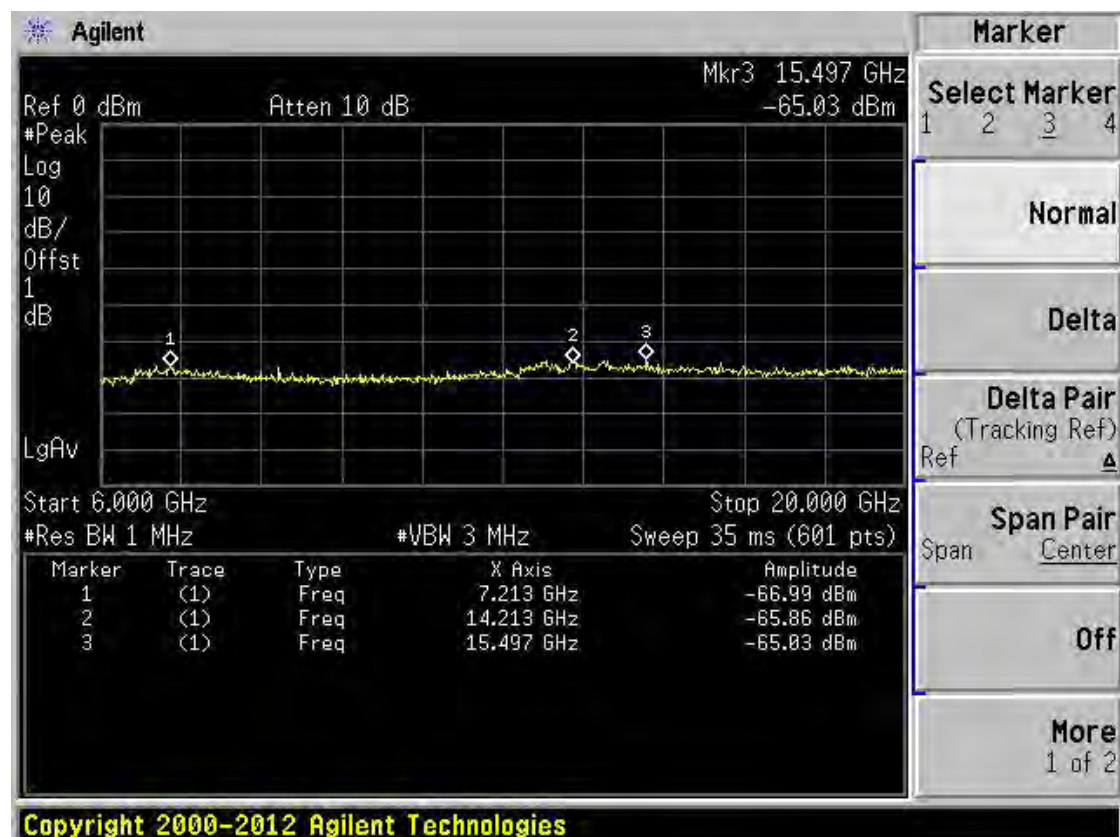
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11n(HT40) CH46

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-66.99	0	3	23	PK	51.27	68.20	16.93	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-65.86	0	3	23	PK	52.40	68.20	15.80	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
15497	-65.03	0	3	23	PK	53.23	68.20	14.97	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11n(HT40) CH46, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

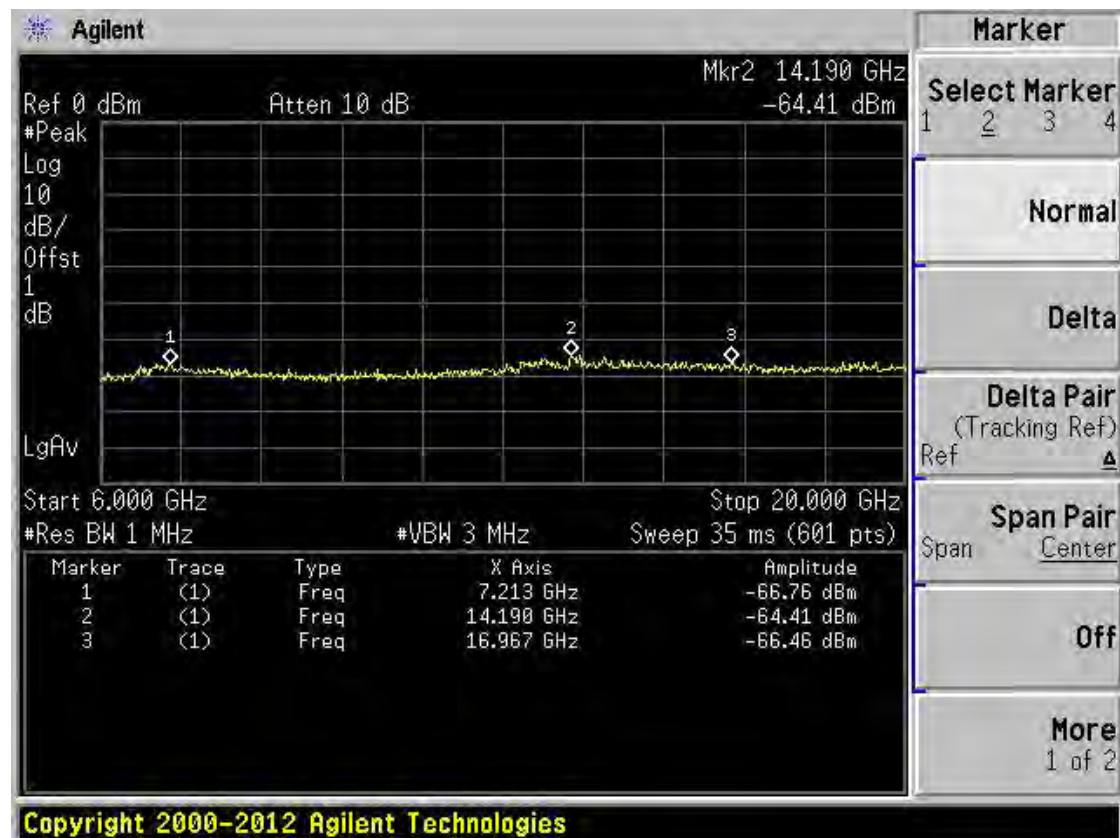
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT20) CH36

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-66.76	0	3	23	PK	51.50	68.20	16.70	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-64.41	0	3	23	PK	53.85	68.20	14.35	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
16967	-66.46	0	3	23	PK	51.80	68.20	16.40	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT20) CH36, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

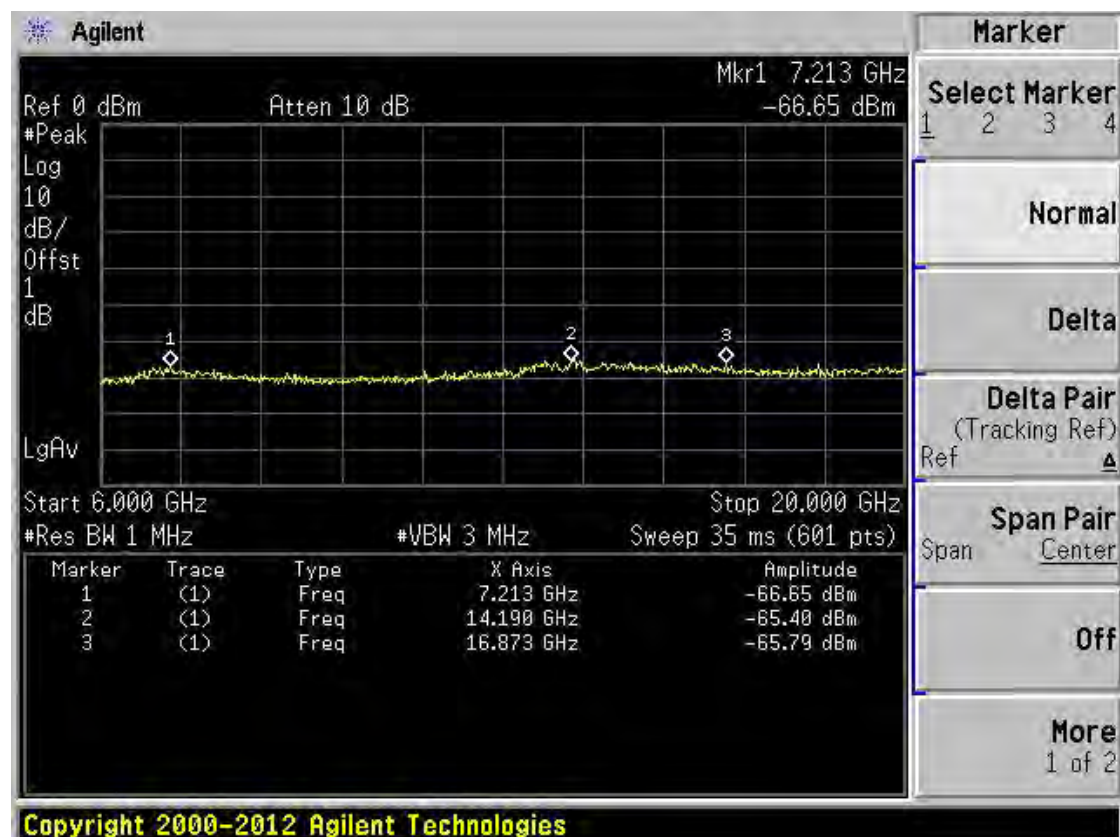
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT20) CH40

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-66.65	0	3	23	PK	51.61	68.20	16.59	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-65.4	0	3	23	PK	52.86	68.20	15.34	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
16873	-66.65	0	3	23	PK	51.61	68.20	16.59	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT20) CH40, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

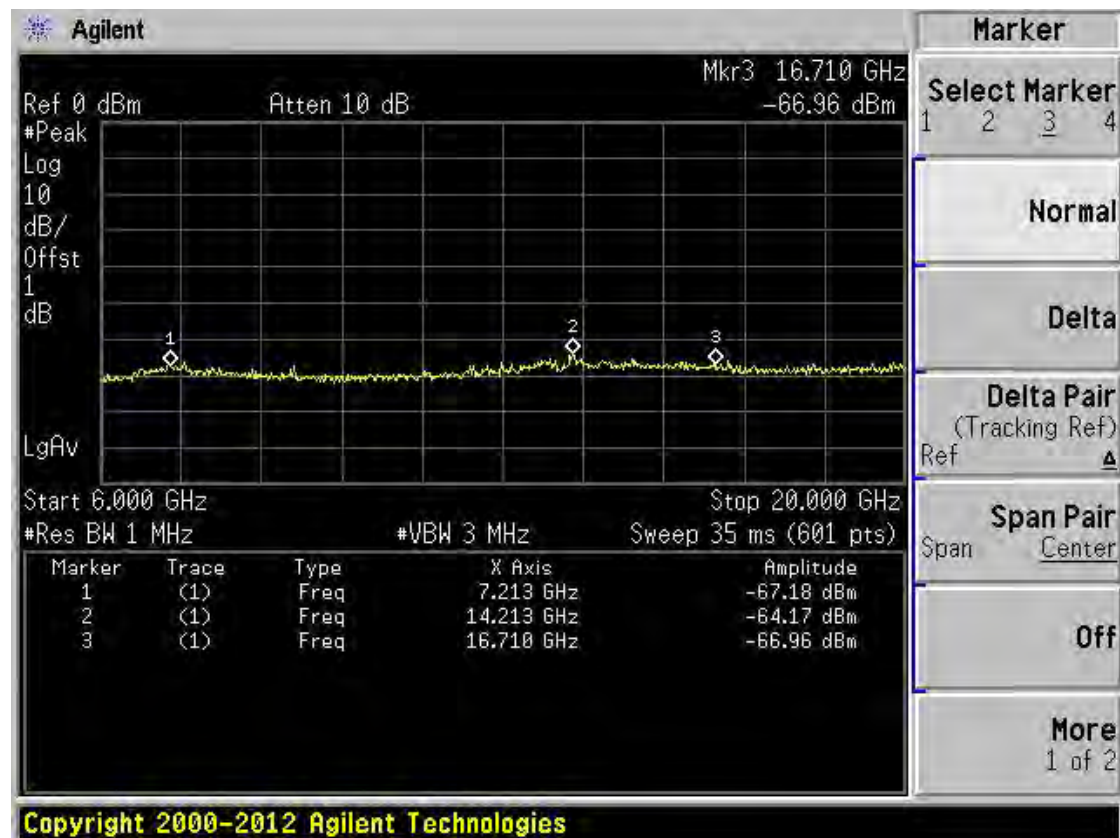
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT20) CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-67.17	0	3	23	PK	51.09	68.20	17.11	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-64.17	0	3	23	PK	54.09	68.20	14.11	Note 1	PASS
	-75.68		3	23	AV	42.58	54.00	11.42	--	PASS
16710	-66.96	0	3	23	PK	51.30	68.20	16.90	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT20) CH48, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

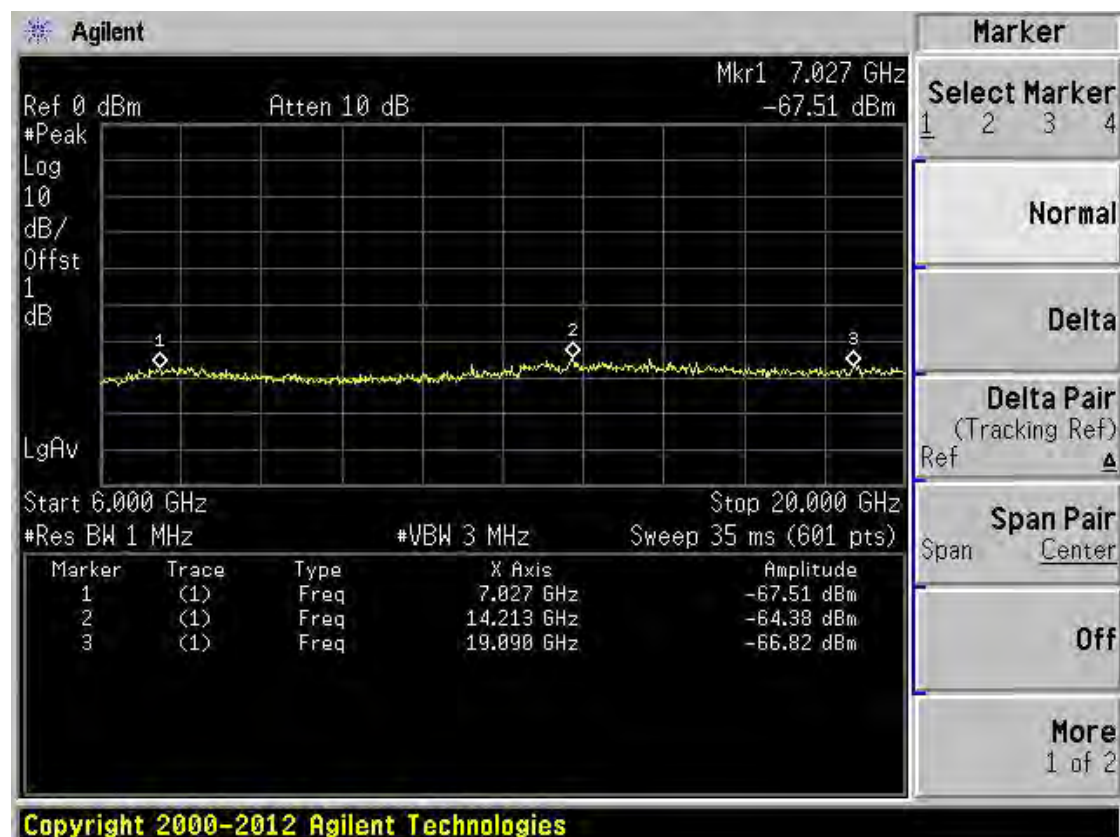
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT40) CH38

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7027	-67.51	0	3	23	PK	50.75	68.20	17.45	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-64.38	0	3	23	PK	53.88	68.20	14.32	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
19090	-66.82	0	3	23	PK	51.44	68.20	16.76	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT40) CH38, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

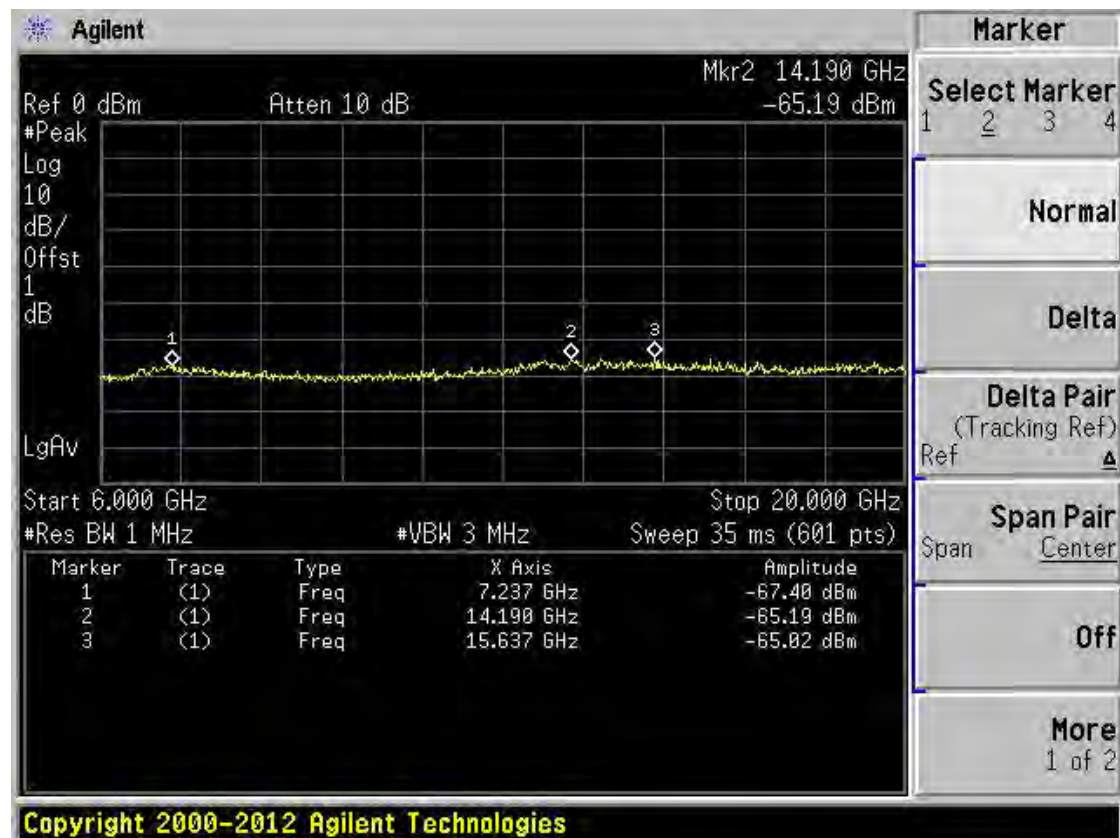
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT40) CH46

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7237	-67.4	0	3	23	PK	50.86	68.20	17.34	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-65.19	0	3	23	PK	53.07	68.20	15.13	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
15637	-65.02	0	3	23	PK	53.24	68.20	14.96	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT40) CH46, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

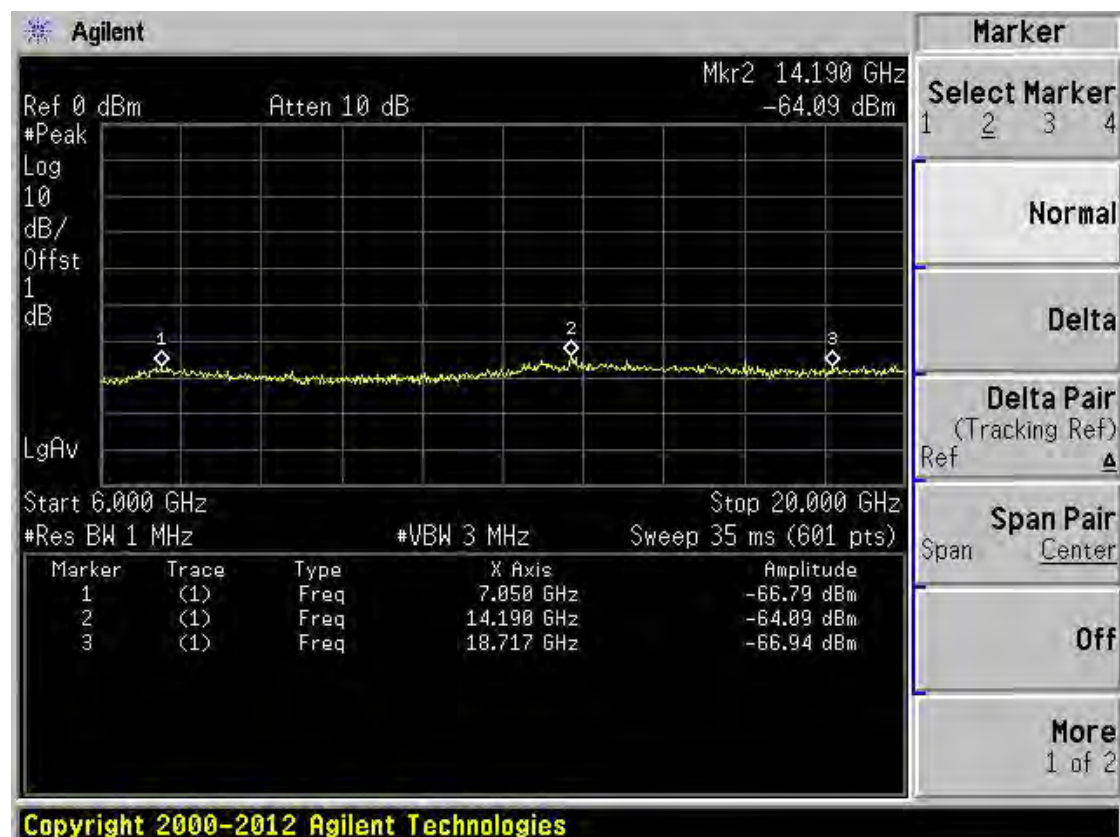
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band I 11ac(HT80) CH42

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7050	-66.79	0	3	23	PK	51.47	68.20	16.73	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-64.09	0	3	23	PK	54.17	68.20	14.03	Note 1	PASS
	-78.16		3	23	AV	40.10	54.00	13.90	--	PASS
18717	-66.94	0	3	23	PK	51.32	68.20	16.88	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band I 11ac(HT80) CH42, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

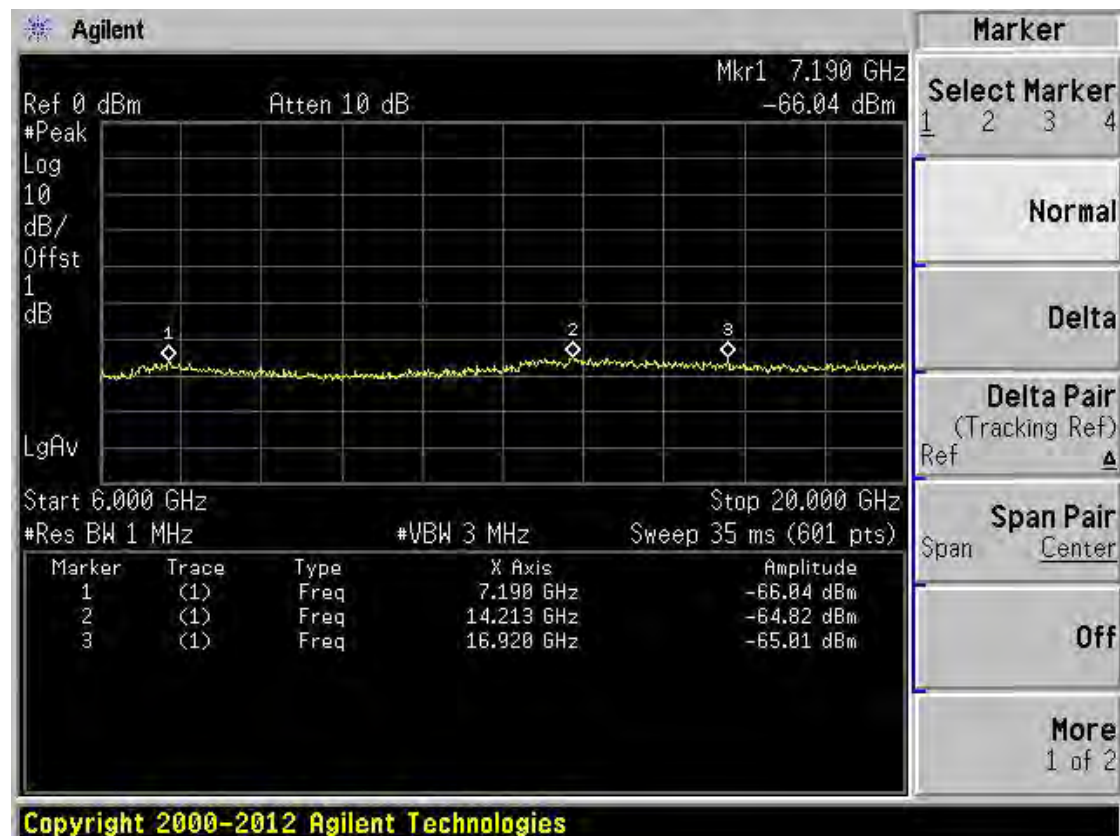
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11a CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7190	-66.04	0	3	23	PK	52.22	68.20	15.98	Note 1	PASS
	N/A		3	23	AV	N/A	54.0	N/A	Note 2	PASS
14213	-64.82	0	3	23	PK	53.44	68.20	14.76	Note 1	PASS
	N/A		3	23	AV	N/A	54.0	N/A	Note 2	PASS
16920	-65.01	0	3	23	PK	53.25	68.20	14.95	Note 1	PASS
	N/A		3	23	AV	N/A	54.0	N/A	Note 2	PASS

Test Plots

Band IV 11a CH149, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

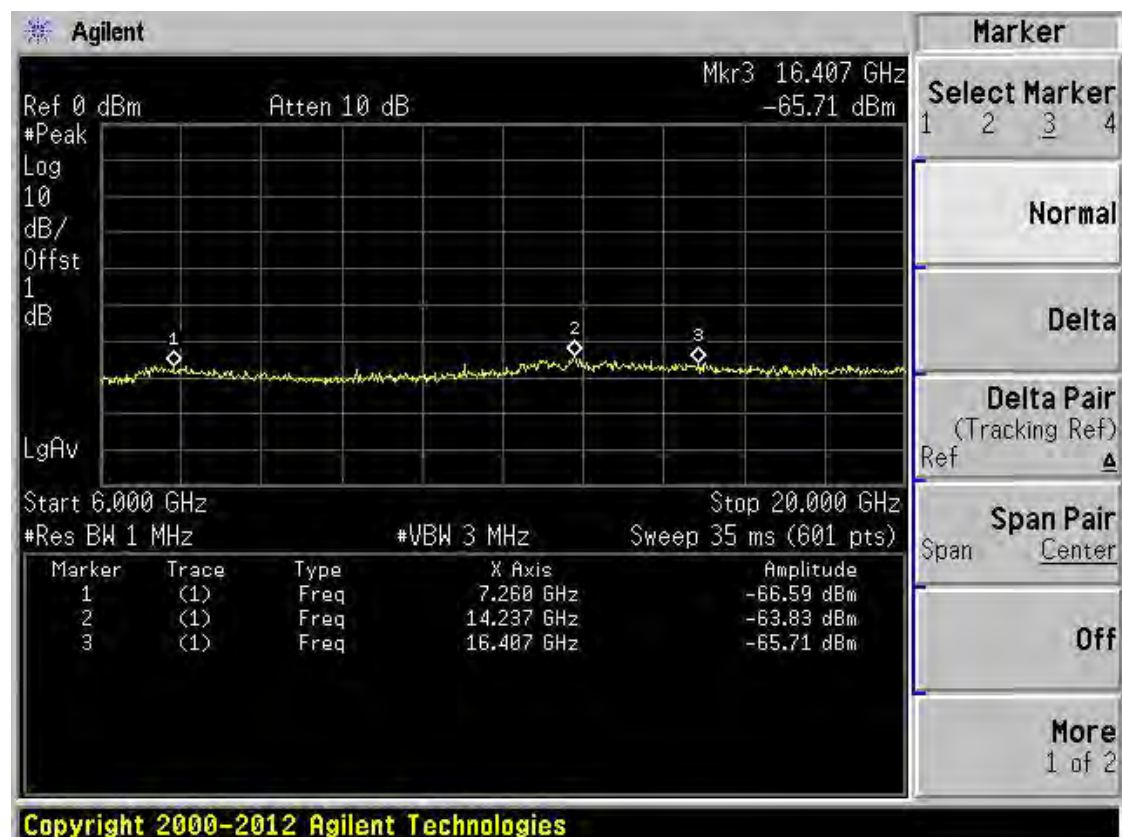
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11a CH157

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7260	-66.59	0	3	23	PK	51.67	68.20	16.53	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14237	-63.83	0	3	23	PK	54.43	68.20	13.77	Note 1	PASS
	-79.65		3	23	AV	38.61	54.50	15.39	--	PASS
16407	-65.71	0	3	23	PK	52.55	68.20	15.65	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11a CH157, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

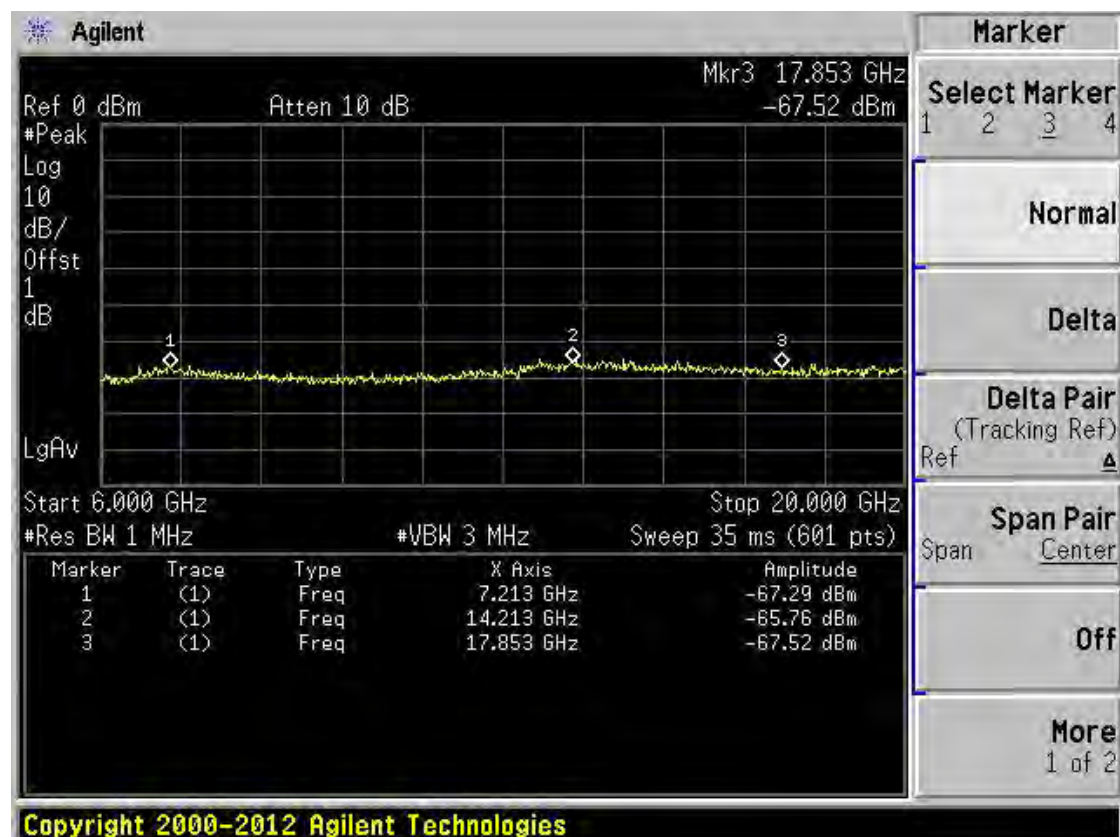
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11a CH165

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-67.29	0	3	23	PK	50.97	68.20	17.23	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-65.76	0	3	23	PK	52.50	68.20	15.70	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17853	-67.52	0	3	23	PK	50.74	68.20	17.46	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11a CH165, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

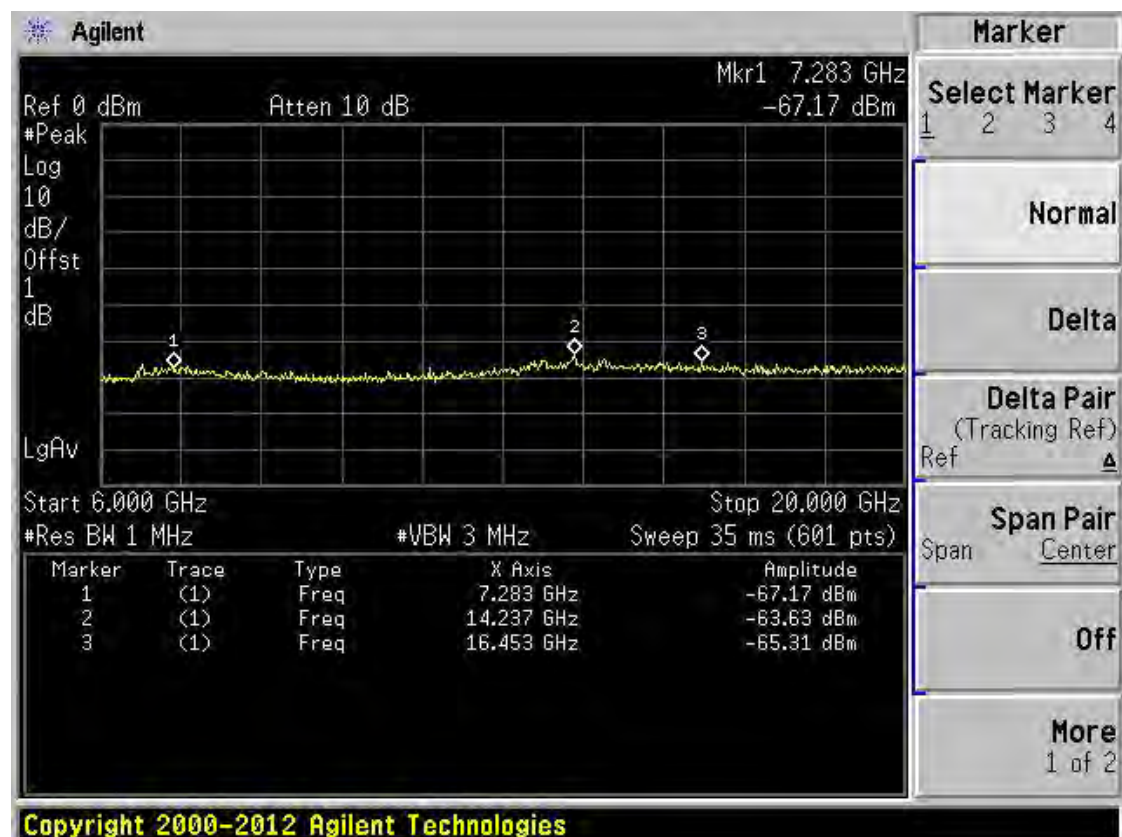
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11n(HT20) CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7283	-67.17	0	3	23	PK	51.09	68.20	17.11	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14237	-63.63	0	3	23	PK	54.63	68.20	13.57	Note 1	PASS
	-79.05		3	23	AV	39.21	54.00	14.79	--	PASS
16453	-65.31	0	3	23	PK	52.95	68.20	15.25	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11n(HT20) CH149, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

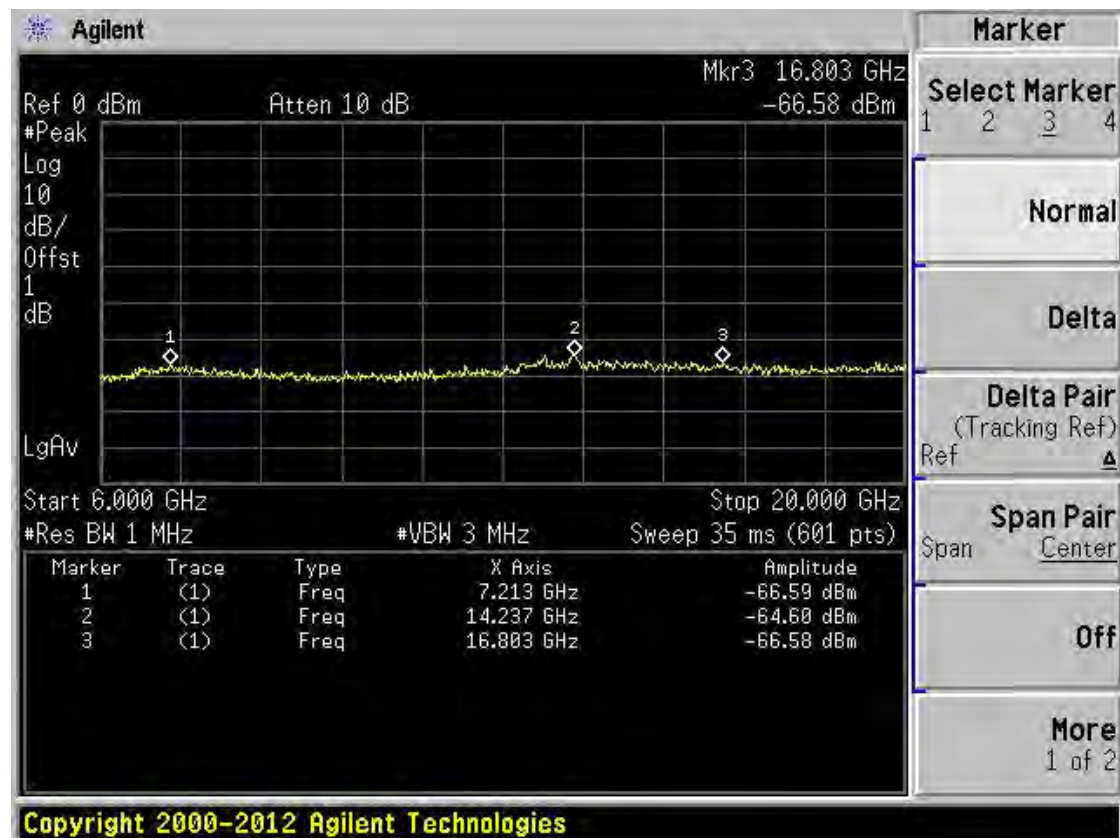
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11n(HT20) CH157

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-66.59	0	3	23	PK	51.67	68.20	16.53	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14237	-64.6	0	3	23	PK	53.66	68.20	14.54	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
16803	-66.58	0	3	23	PK	51.68	68.20	16.52	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11n(HT20) CH157, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

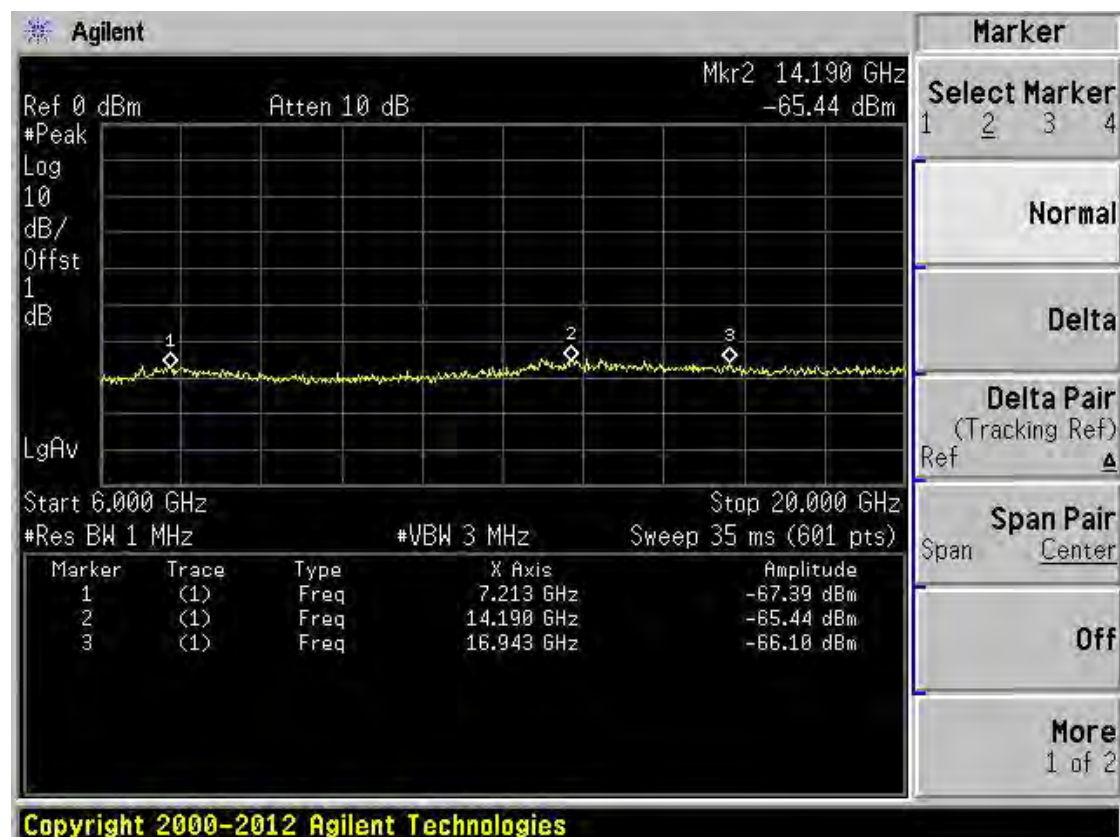
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11n(HT20) CH165

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-67.39	0	3	23	PK	50.87	68.20	17.33	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14190	-65.44	0	3	23	PK	52.82	68.20	15.38	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
16943	-66.1	0	3	23	PK	52.16	68.20	16.04	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11n(HT20) CH165, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

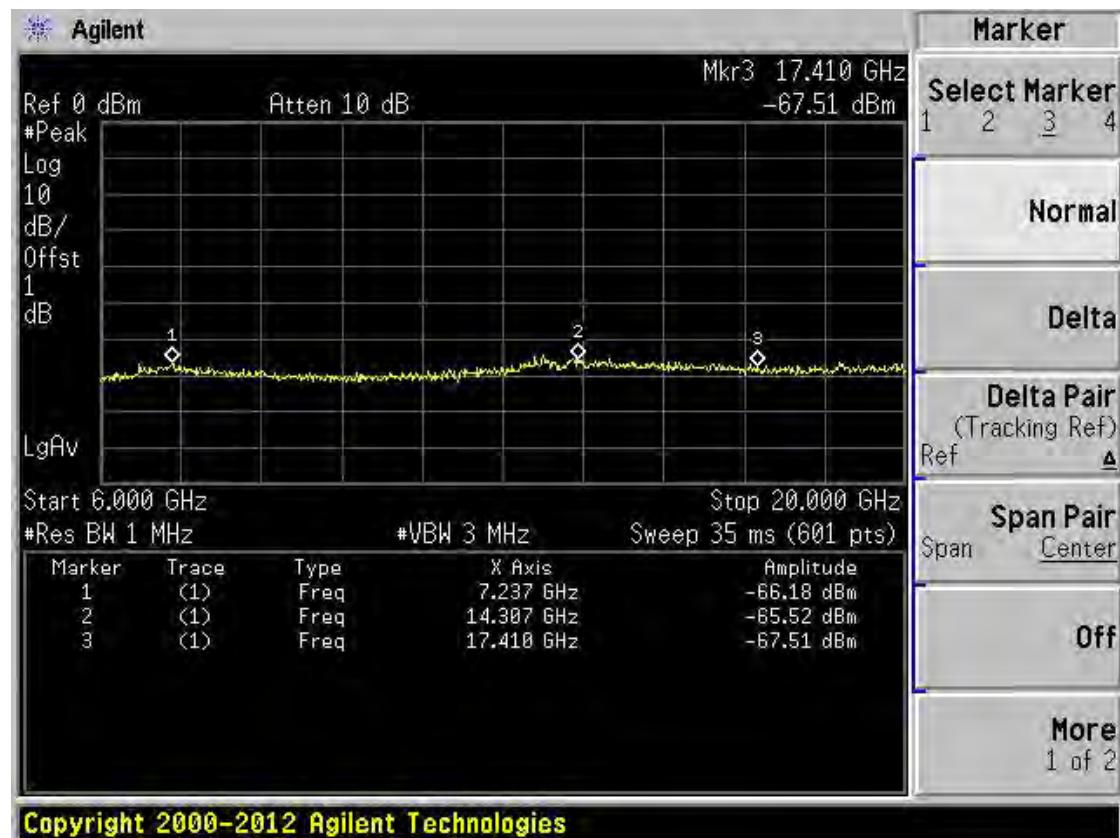
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11n(HT40) CH151

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7237	-66.18	0	3	23	PK	52.08	68.20	16.12	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14307	-65.52	0	3	23	PK	52.74	68.20	15.46	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17410	-67.51	0	3	23	PK	50.75	68.20	17.45	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11n(HT40) CH151, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

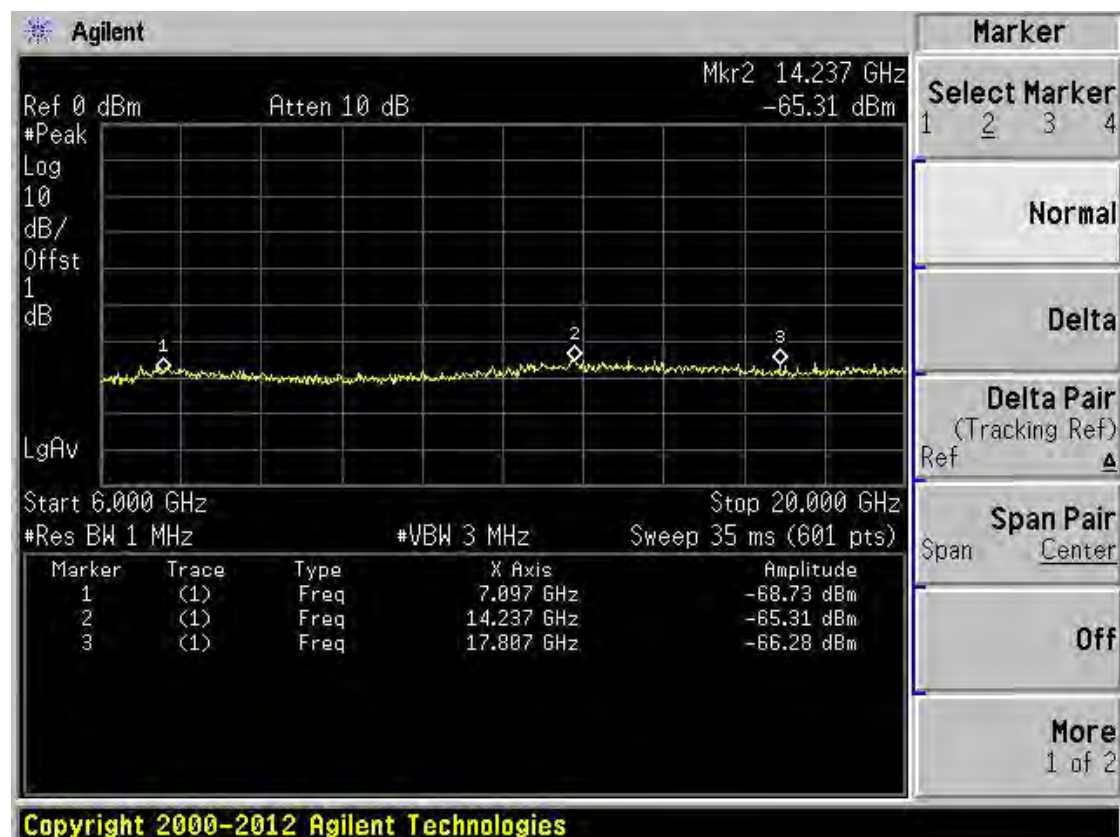
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11n(HT40) CH159

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7097	-68.73	0	3	23	PK	49.53	68.20	18.67	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14237	-65.31	0	3	23	PK	52.95	68.20	15.25	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17807	-66.28	0	3	23	PK	51.98	68.20	16.22	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11n(HT40) CH159, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

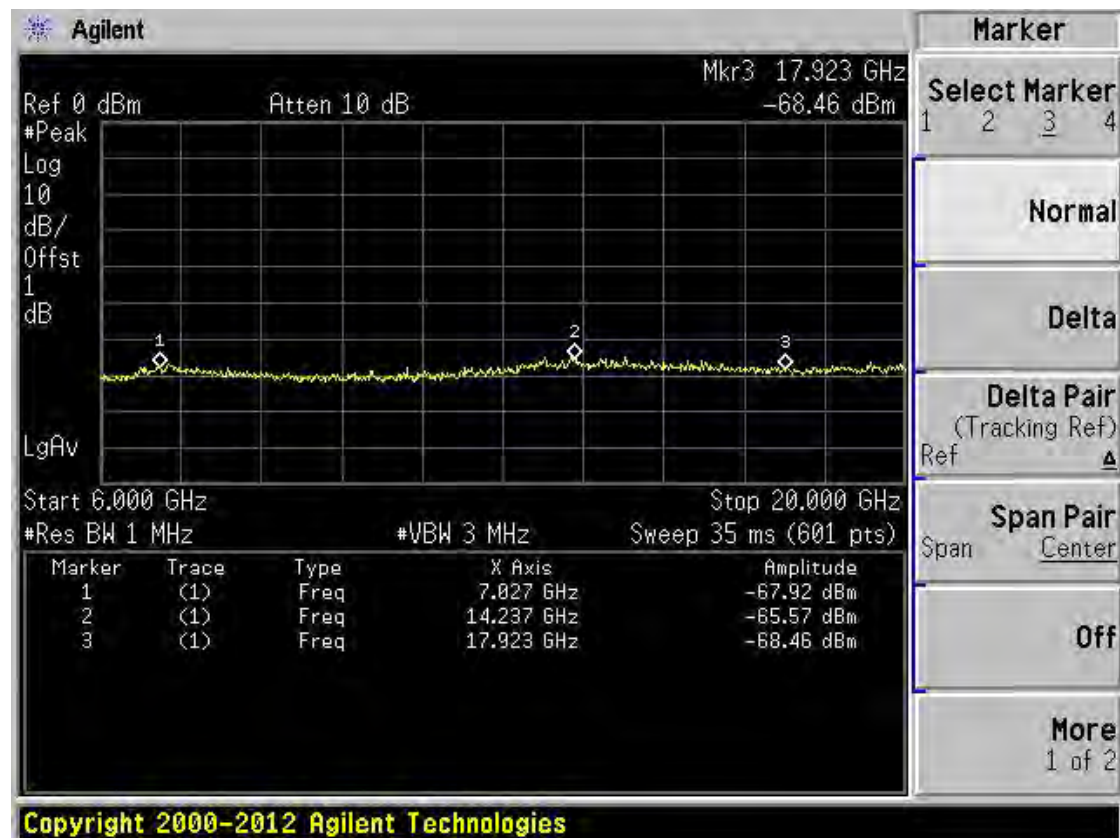
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT20) CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7027	-67.92	0	3	23	PK	50.34	68.20	17.86	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14237	-65.57	0	3	23	PK	52.69	68.20	15.51	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17923	-68.46	0	3	23	PK	49.80	68.20	18.40	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT20) CH149, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

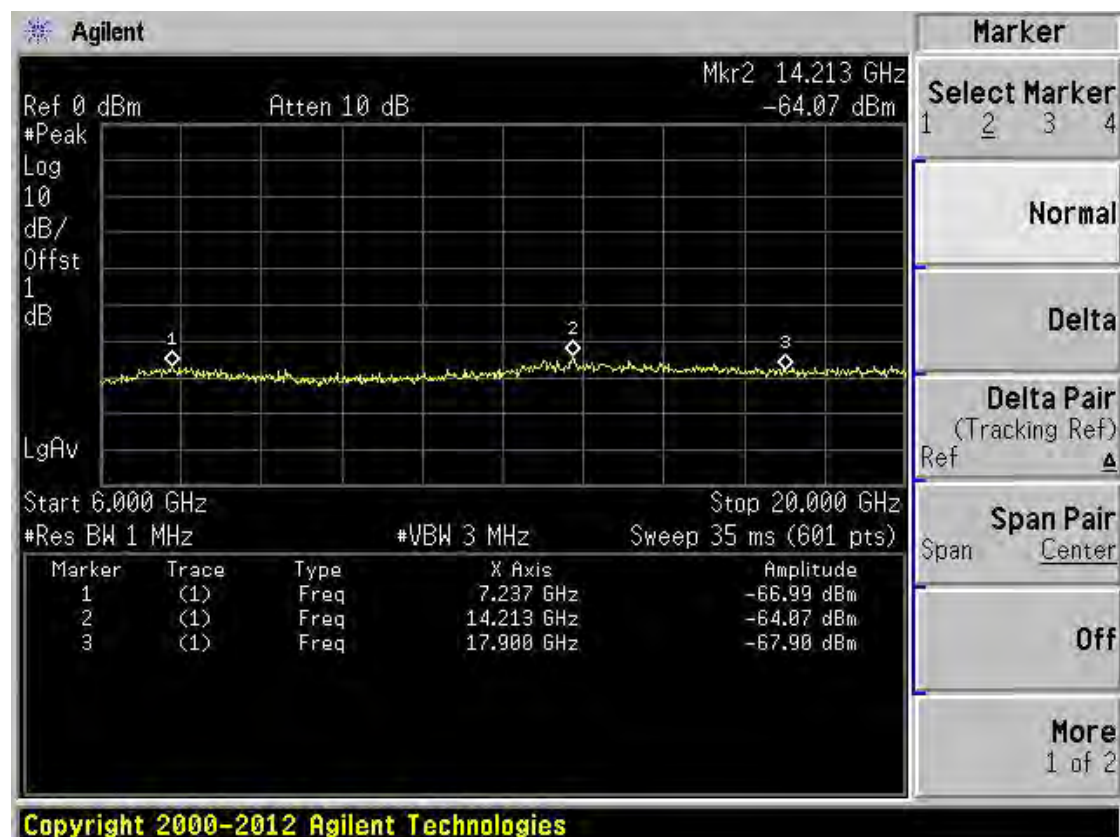
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT20) CH157

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7237	-66.99	0	3	23	PK	51.27	68.20	16.93	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-64.07	0	3	23	PK	54.19	68.20	14.01	Note 1	PASS
	-75.64		3	23	AV	42.62	54.00	11.38	--	PASS
17900	-67.9	0	3	23	PK	50.36	68.20	17.84	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT20) CH157, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

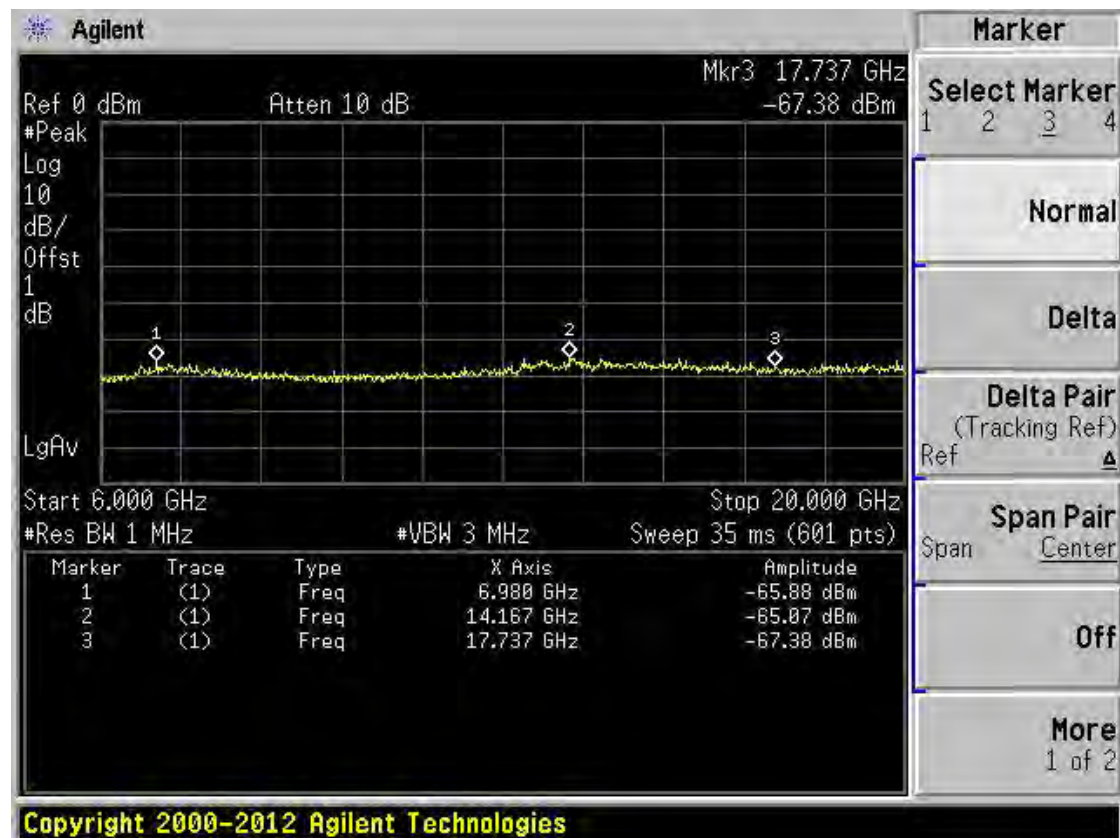
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT20) CH165

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
6980	-65.88	0	3	23	PK	52.38	68.20	15.82	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14167	-65.07	0	3	23	PK	53.19	68.20	15.01	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17377	-67.38	0	3	23	PK	50.88	68.20	17.32	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT20) CH165, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

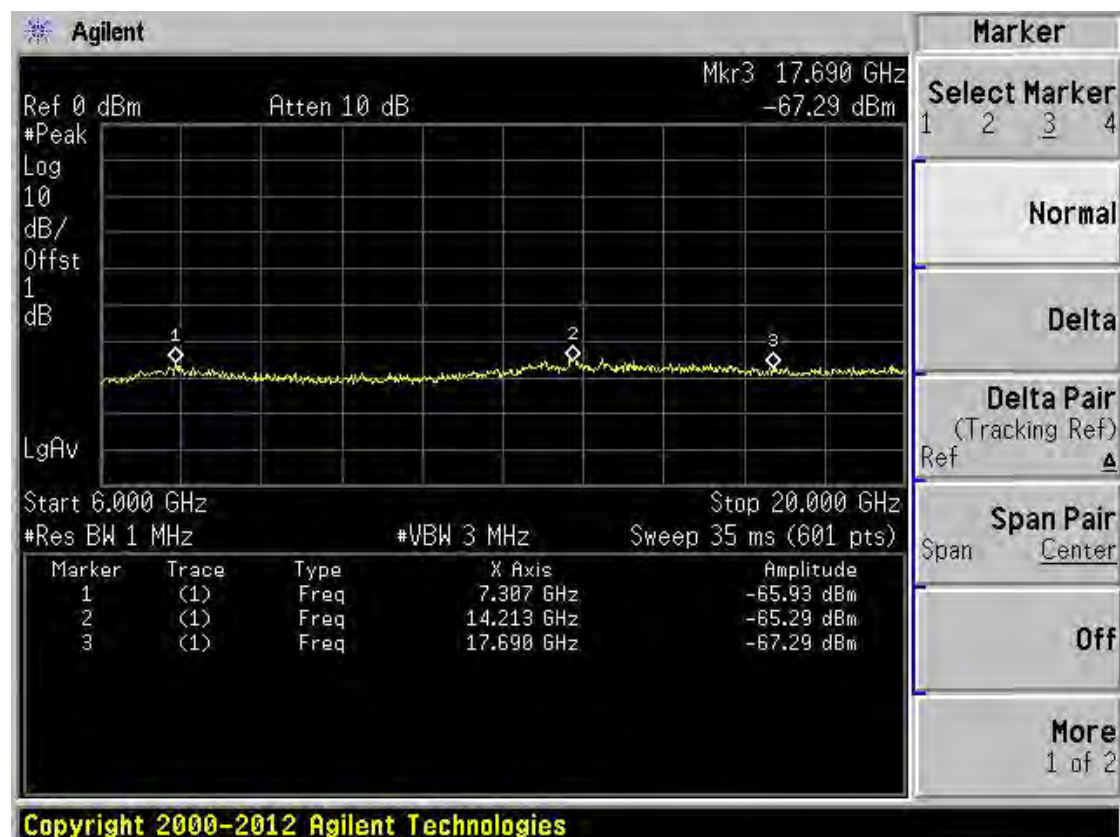
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT40) CH151

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7307	-65.93	0	3	23	PK	52.33	68.20	15.87	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-65.29	0	3	23	PK	52.97	68.20	15.23	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17690	-67.29	0	3	23	PK	50.97	68.20	17.23	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT40) CH151, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

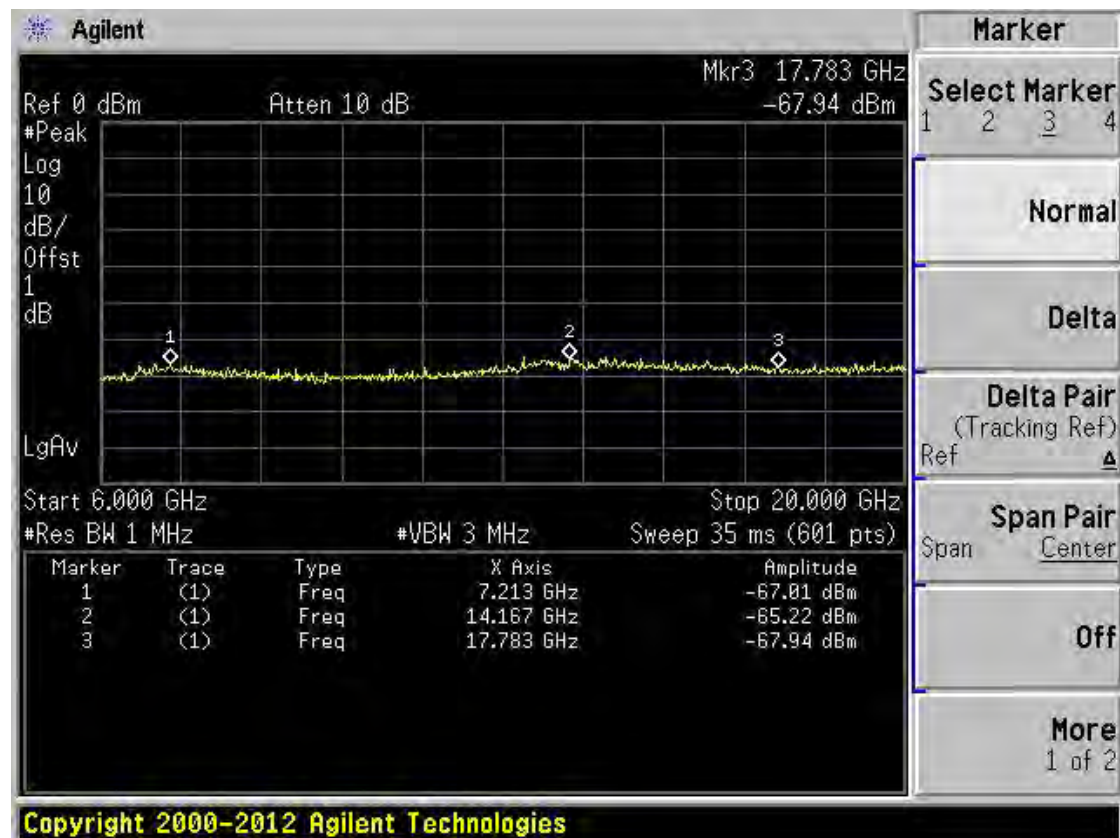
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT40) CH159

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-67.01	0	3	23	PK	51.25	68.20	16.95	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14167	-65.22	0	3	23	PK	53.04	68.20	15.16	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17783	-67.94	0	3	23	PK	50.32	68.20	17.88	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT40) CH159, SPURIOUS 6 GHz ~ 20 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 23 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

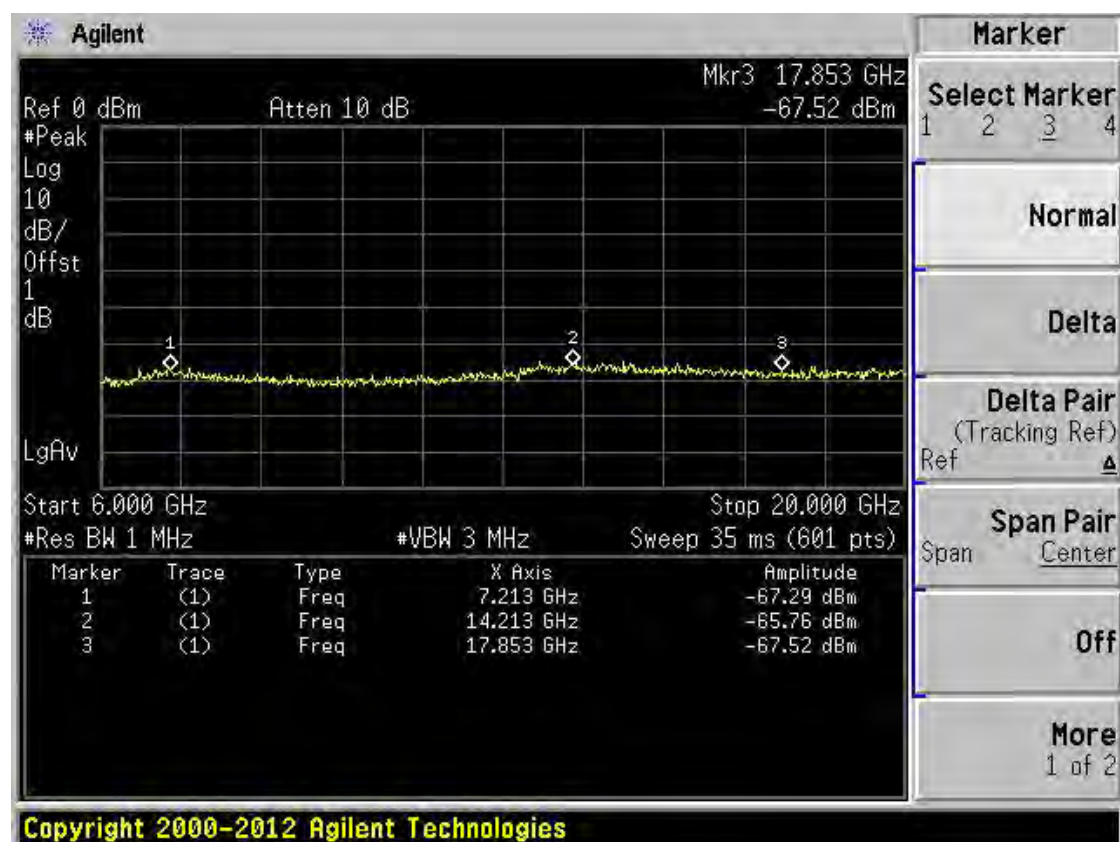
Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

Band IV 11ac(HT80) CH155

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7213	-67.29	0	3	23	PK	50.97	68.20	17.23	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
14213	-65.76	0	3	23	PK	52.50	68.20	15.70	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS
17853	-67.52	0	3	23	PK	50.74	68.20	17.46	Note 1	PASS
	N/A		3	23	AV	N/A	54.00	N/A	Note 2	PASS

Test Plots

Band IV 11ac(HT80) CH155, SPURIOUS 6 GHz ~ 20 GHz



Test Frequency: 20 GHz ~ 40 GHz

Note: Only noise floor was seen above 20 GHz and not reported.

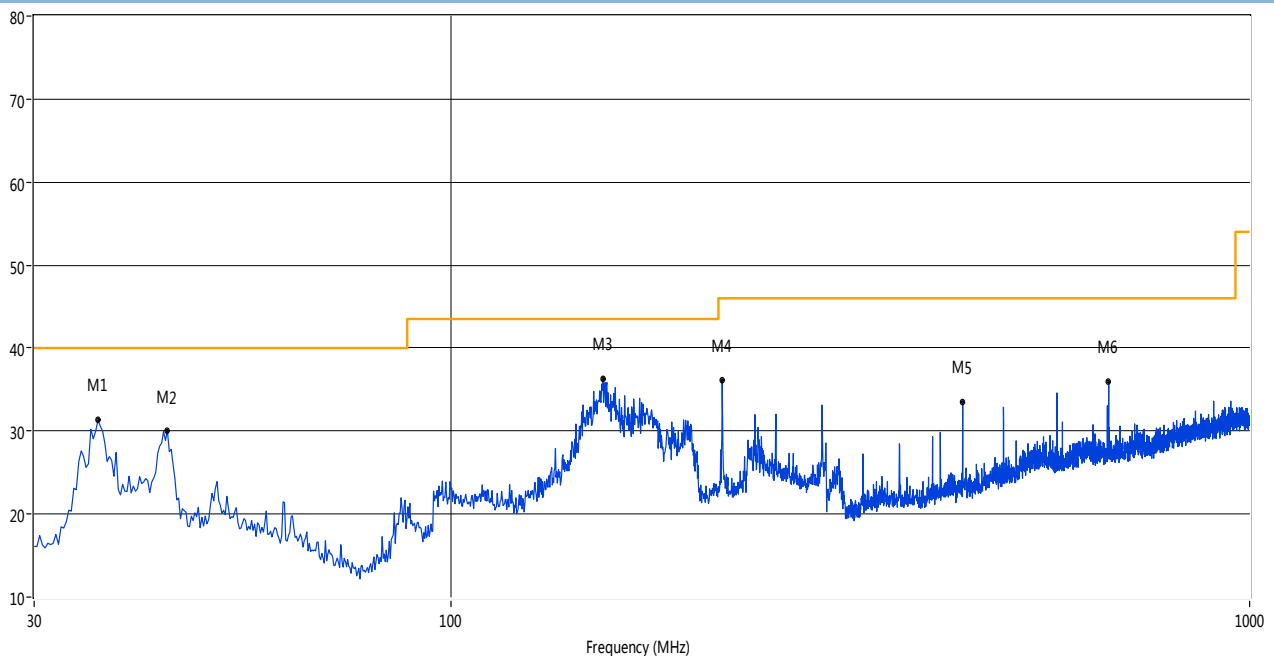
Cabinet Radiated spurious emission test

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, 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.

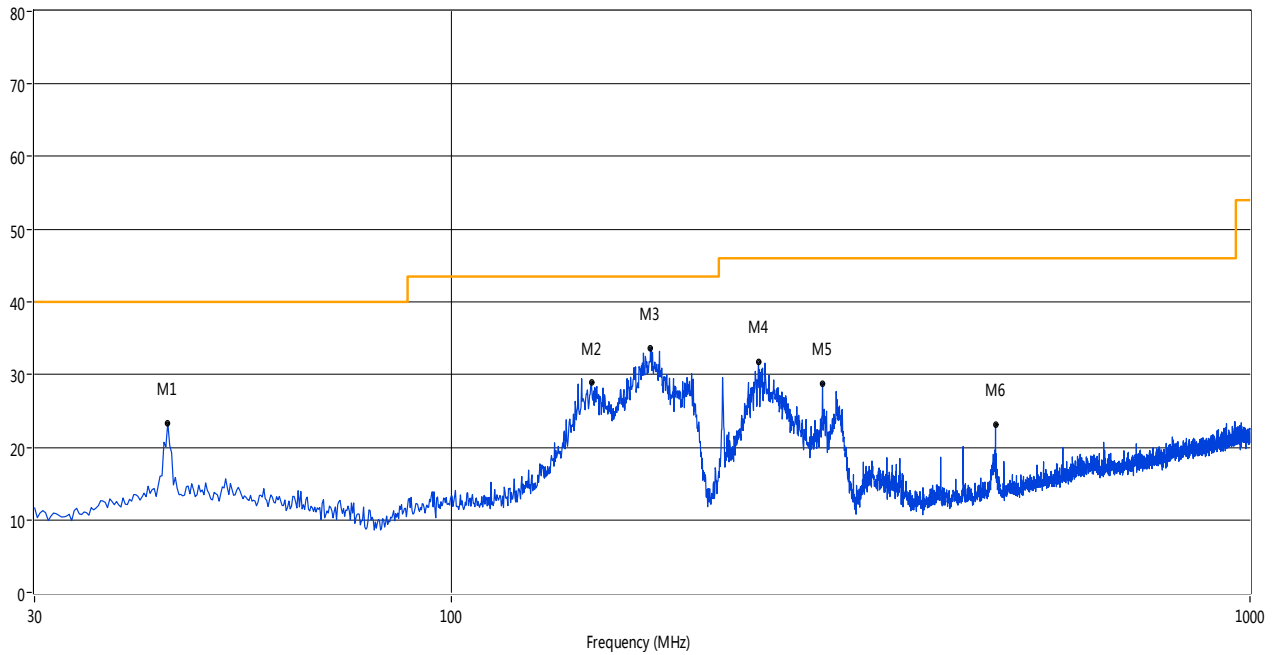
Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	36.06	31.30	-21.00	40.0	8.70	Peak	339.00	100	Vertical	PASS
2	44.06	30.04	-18.90	40.0	9.96	Peak	92.70	100	Vertical	PASS
3	154.86	36.32	-23.33	43.5	7.18	Peak	243.40	100	Vertical	PASS
4	218.37	26.18	-20.04	46.0	19.82	Peak	243.40	100	Vertical	PASS
5	437.06	23.57	-14.59	46.0	22.43	Peak	348.50	100	Vertical	PASS
6	665.92	25.98	-10.02	46.0	20.02	Peak	260.40	100	Vertical	PASS

30 MHz to 1 GHz, ANT H



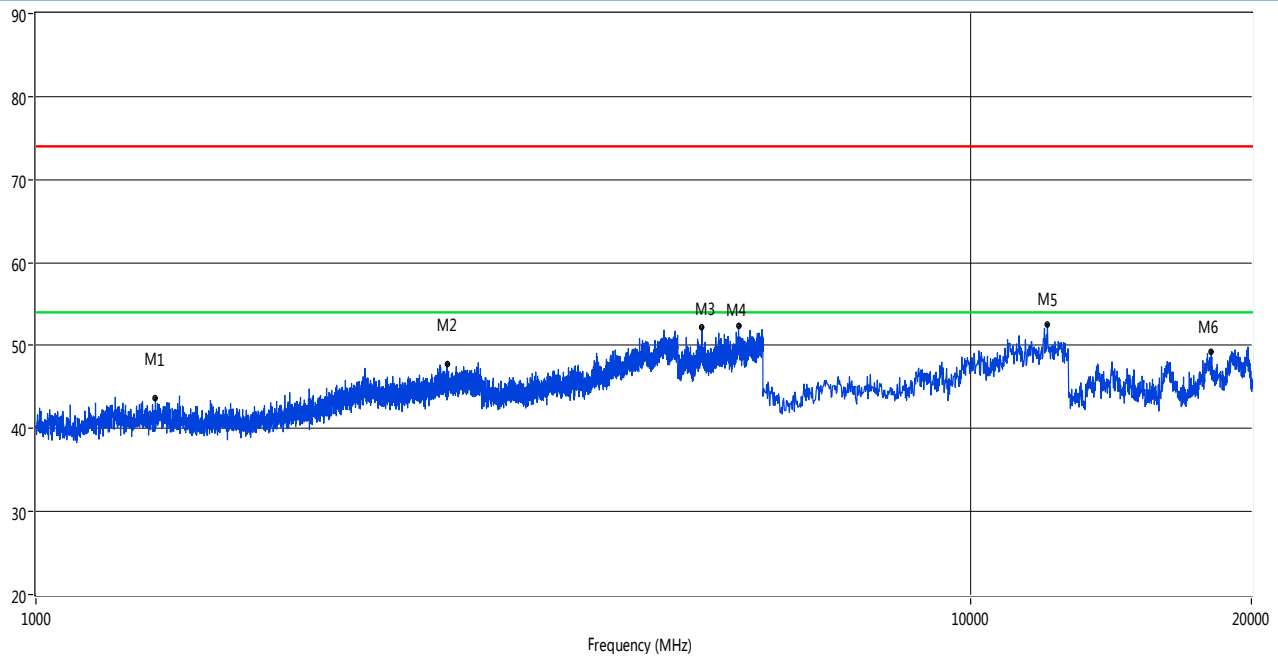
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	44.06	23.37	-18.90	40.0	16.63	Peak	41.00	100	Horizontal	PASS
2	149.52	28.91	-23.48	43.5	14.59	Peak	16.00	100	Horizontal	PASS
3	177.40	33.56	-22.22	43.5	9.94	Peak	113.00	100	Horizontal	PASS
4	242.13	31.68	-19.13	46.0	14.32	Peak	302.00	100	Horizontal	PASS
5	291.35	28.80	-17.96	46.0	17.20	Peak	89.00	100	Horizontal	PASS
6	479.97	23.18	-13.81	46.0	22.82	Peak	225.00	100	Horizontal	PASS

1 GHz to 20 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1323.92	43.72	-4.79	74.0	30.28	Peak	132.30	100	Vertical	PASS
2	2272.68	46.40	-0.51	74.0	27.60	Peak	99.30	100	Vertical	PASS
3	2916.52	47.56	2.27	74.0	26.44	Peak	243.60	100	Vertical	PASS
4	4683.33	51.48	13.17	74.0	22.52	Peak	271.00	100	Vertical	PASS
5	12053.66	51.91	20.82	74.0	22.09	Peak	269.70	100	Vertical	PASS
6	19309.48	50.49	13.46	74.0	23.51	Peak	57.40	100	Vertical	PASS

1 GHz to 20 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1342.41	43.65	-4.64	74.0	30.35	Peak	43.90	100	Horizontal	PASS
2	2754.56	47.81	1.76	74.0	26.19	Peak	288.60	100	Horizontal	PASS
3	5164.71	52.16	14.92	74.0	21.84	Peak	0.10	100	Horizontal	PASS
4	5650.59	52.30	15.71	74.0	21.70	Peak	359.40	100	Horizontal	PASS
5	12098.59	52.61	20.77	74.0	21.39	Peak	355.00	100	Horizontal	PASS
6	18116.06	49.29	12.97	74.0	24.71	Peak	359.30	100	Horizontal	PASS

Test Frequency: 20 GHz ~ 40 GHz

Note: Only noise floor was seen above 20 GHz and not reported.

A.8 Frequency Stability

Measurement Data (the worst channel)

5150-5250 MHz band:

Voltage vs. Frequency Stability (Lowest Channel=5180 MHz)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Temperature (°C)	Voltage (VDC)			
20	55.2	5180	5180.010412	2.01
	48.0	5180	5180.011654	2.25
	40.8	5180	5180.010716	2.07

Temperature vs. Frequency Stability (Lowest Channel=5180 MHz)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
48.0	-20	5180	5180.012684	2.45
	-10	5180	5180.014597	2.82
	0	5180	5180.015316	2.96
	10	5180	5180.011367	2.19
	20	5180	5180.011574	2.23
	30	5180	5180.009756	1.88
	40	5180	5180.016513	3.19
	50	5180	5180.013567	2.62

5725-58500 MHz band:

Voltage vs. Frequency Stability (Lowest Channel=5745 MHz)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Temperature (°C)	Voltage (VDC)			
20	55.2	5745	5745.009578	1.77
	48.0	5745	5745.008937	1.61
	40.8	5745	5745.010265	1.51

Temperature vs. Frequency Stability (Lowest Channel=5745 MHz)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
48.0	-20	5745	5745.010178	1.77
	-10	5745	5745.009257	1.61
	0	5745	5745.008647	1.51
	10	5745	5745.009562	1.66
	20	5745	5745.010578	1.84
	30	5745	5745.008169	1.42
	40	5745	5745.009364	1.63
	50	5745	5745.012486	2.17

--END OF REPORT--