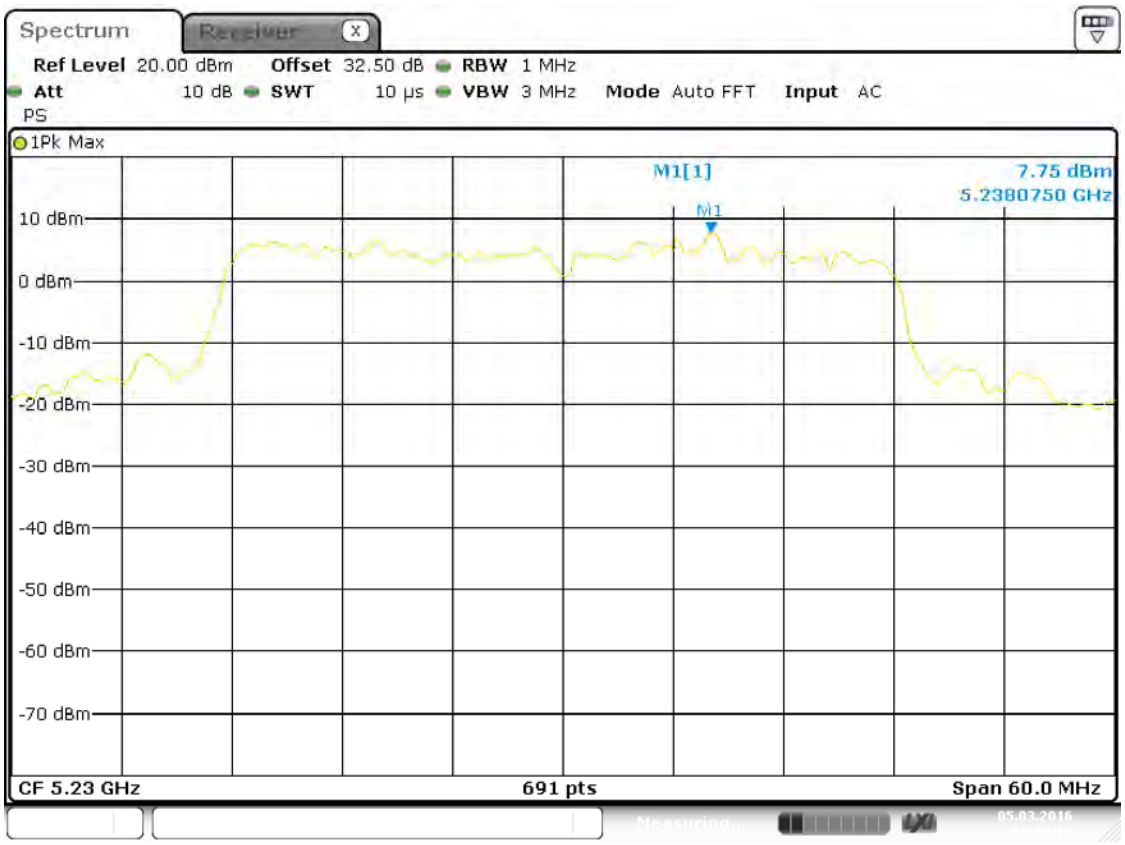
Band I 11ac CH48

Date: 4.MAR.2016 17:41:46

Band I 11ac(HT40) CH38

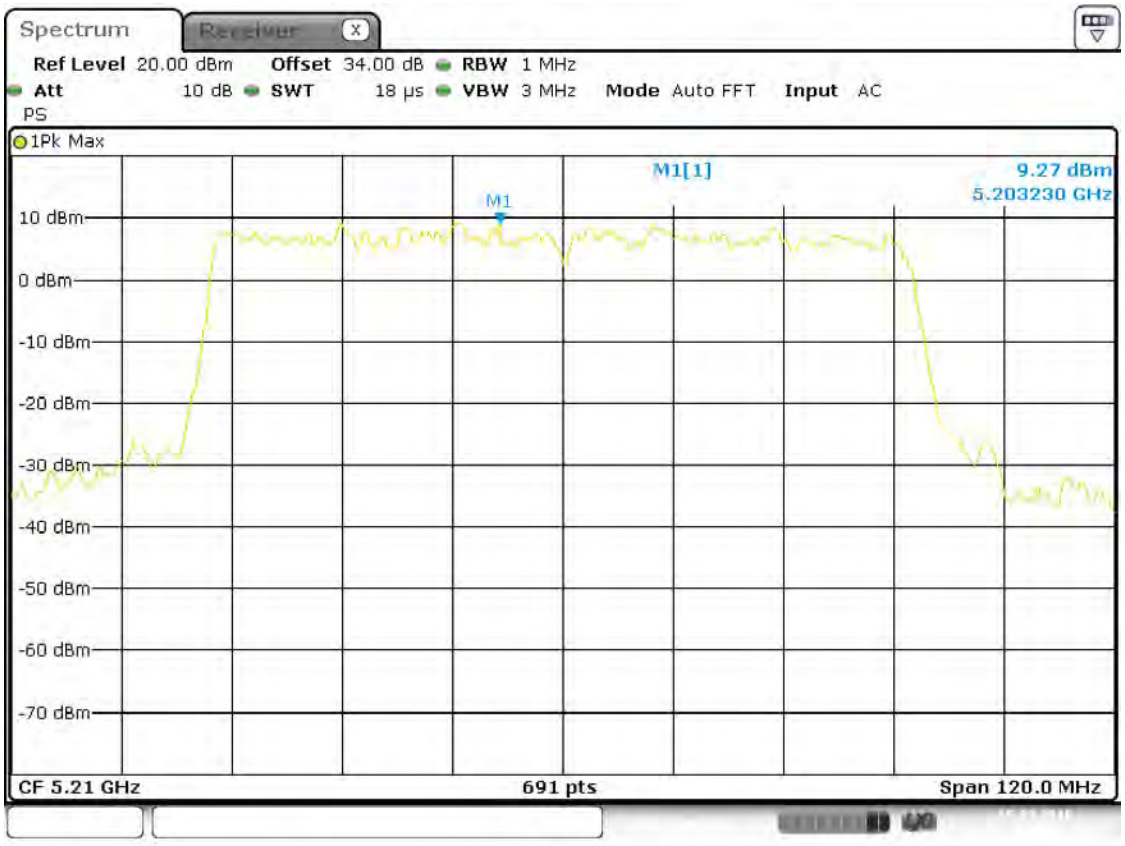
Date: 5.MAR.2016 09:41:33

Band I 11ac(HT40) CH46



Date: 5.MAR.2016 09:34:14

Band I 11ac(HT80) CH42



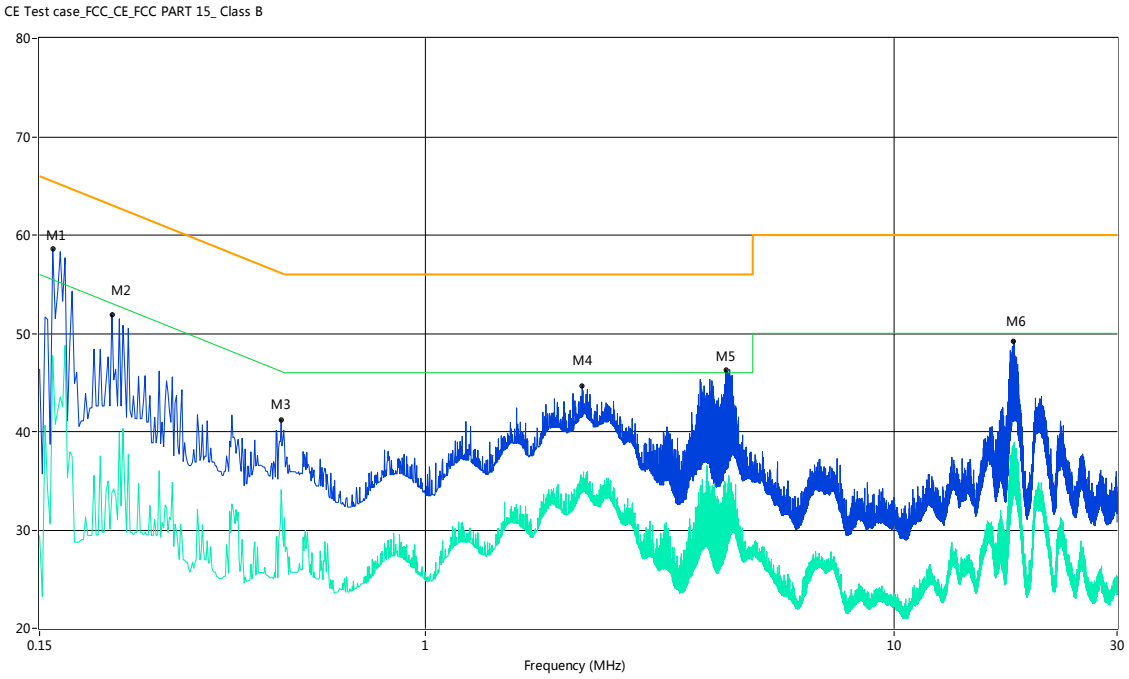
Date: 5.MAR.2016 09:39:18

A.5 Conducted Emissions

Note: All configurations have been tested, only the worst configuration shown here.

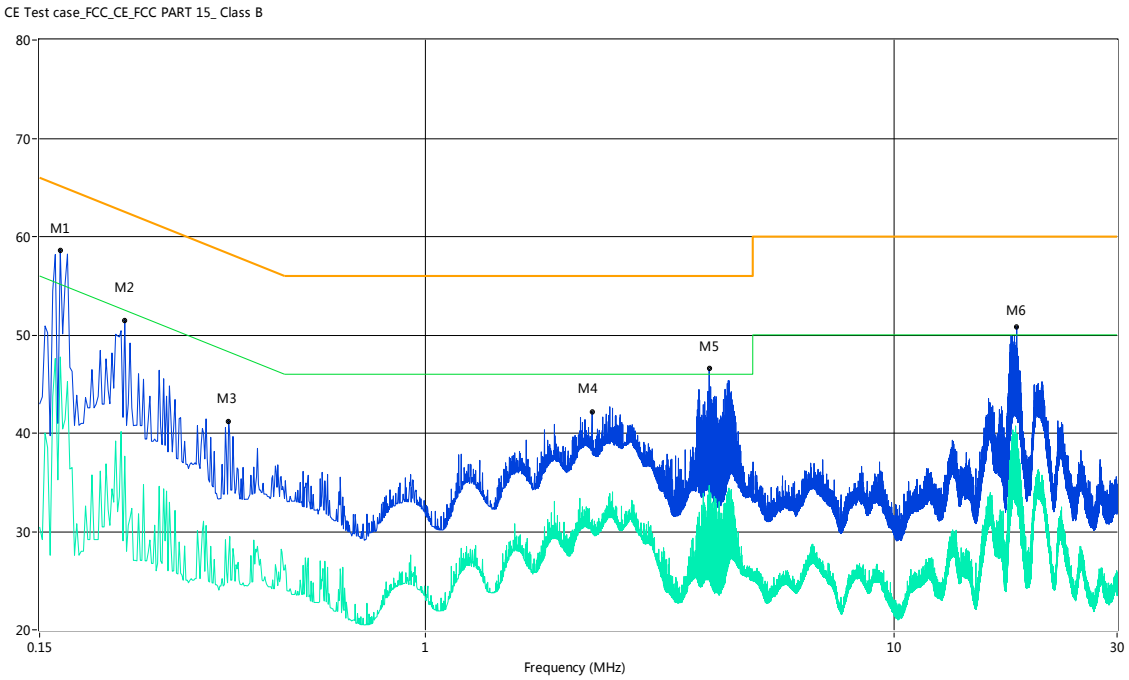
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.16	58.6	13.00	65.7	7.10	Peak	L Line	Pass
1**	0.16	47.7	13.00	55.7	8.00	AV	L Line	Pass
2	0.21	51.9	13.00	64.2	12.30	Peak	L Line	Pass
2**	0.21	33.8	13.00	54.2	20.40	AV	L Line	Pass
3	0.49	41.2	13.00	56.2	15.00	Peak	L Line	Pass
3**	0.49	34.1	13.00	46.2	12.10	AV	L Line	Pass
4	2.16	44.7	13.00	56.0	11.30	Peak	L Line	Pass
4**	2.16	34.0	13.00	46.0	12.00	AV	L Line	Pass
5	4.38	46.3	13.00	56.0	9.70	Peak	L Line	Pass
5**	4.38	33.0	13.00	46.0	13.00	AV	L Line	Pass
6	18.03	49.1	13.00	60.0	10.90	Peak	L Line	Pass
6**	18.03	36.3	13.00	50.0	13.70	AV	L Line	Pass

PHASE N



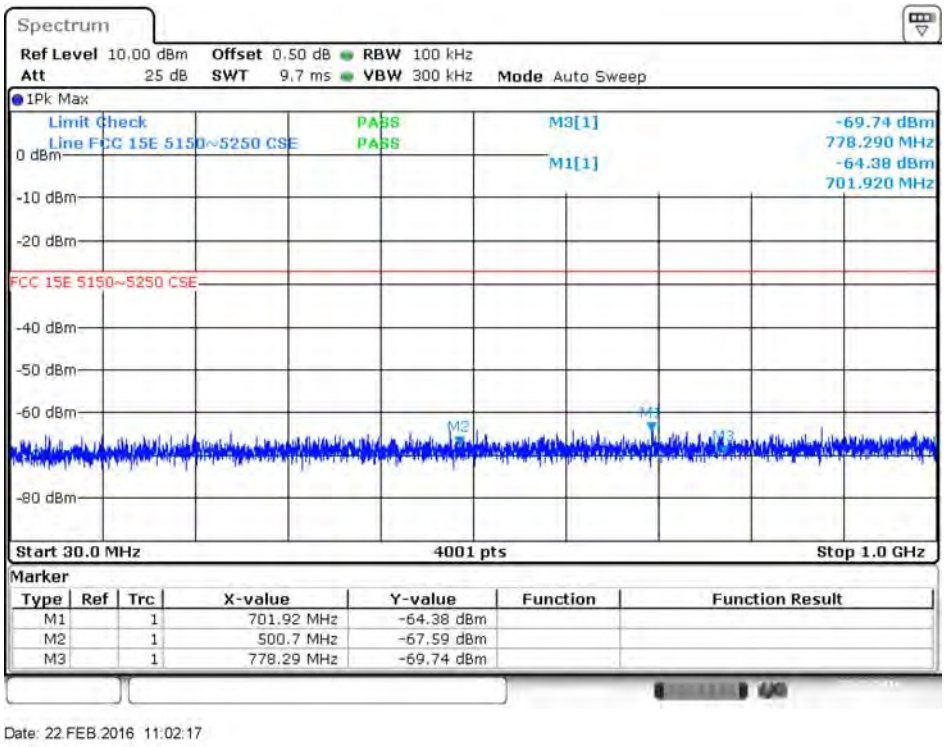
No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.17	58.6	13.00	65.5	6.90	Peak	N Line	Pass
1**	0.17	47.8	13.00	55.5	7.70	AV	N Line	Pass
2	0.23	51.5	13.00	63.8	12.30	Peak	N Line	Pass
2**	0.23	37.7	13.00	53.8	16.10	AV	N Line	Pass
3	0.38	41.2	13.00	59.4	18.20	Peak	N Line	Pass
3**	0.38	27.5	13.00	49.4	21.90	AV	N Line	Pass
4	2.27	42.2	13.00	56.0	13.80	Peak	N Line	Pass
4**	2.27	29.1	13.00	46.0	16.90	AV	N Line	Pass
5	4.04	46.5	13.00	56.0	9.50	Peak	N Line	Pass
5**	4.04	34.7	13.00	46.0	11.30	AV	N Line	Pass
6	18.33	50.8	13.00	60.0	9.20	Peak	N Line	Pass
6**	18.33	39.5	13.00	50.0	10.50	AV	N Line	Pass

A.6 Conducted Spurious Emission and Band Edge (Authorized-band)

Note: In 30 MHz-1000 MHz and 20 GHz-40 GHz, all configurations have been tested, only the worst (ANT 0 Band I 11a CH36) configuration shown here.

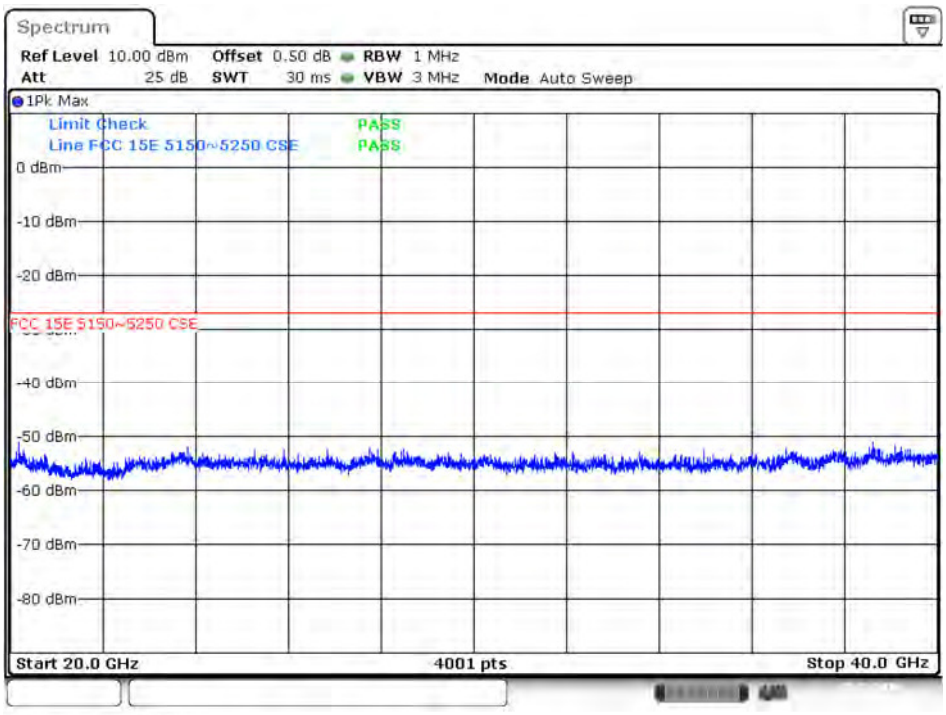
ANT 0

Band I 11a CH36 (30 ~ 1000 MHz)



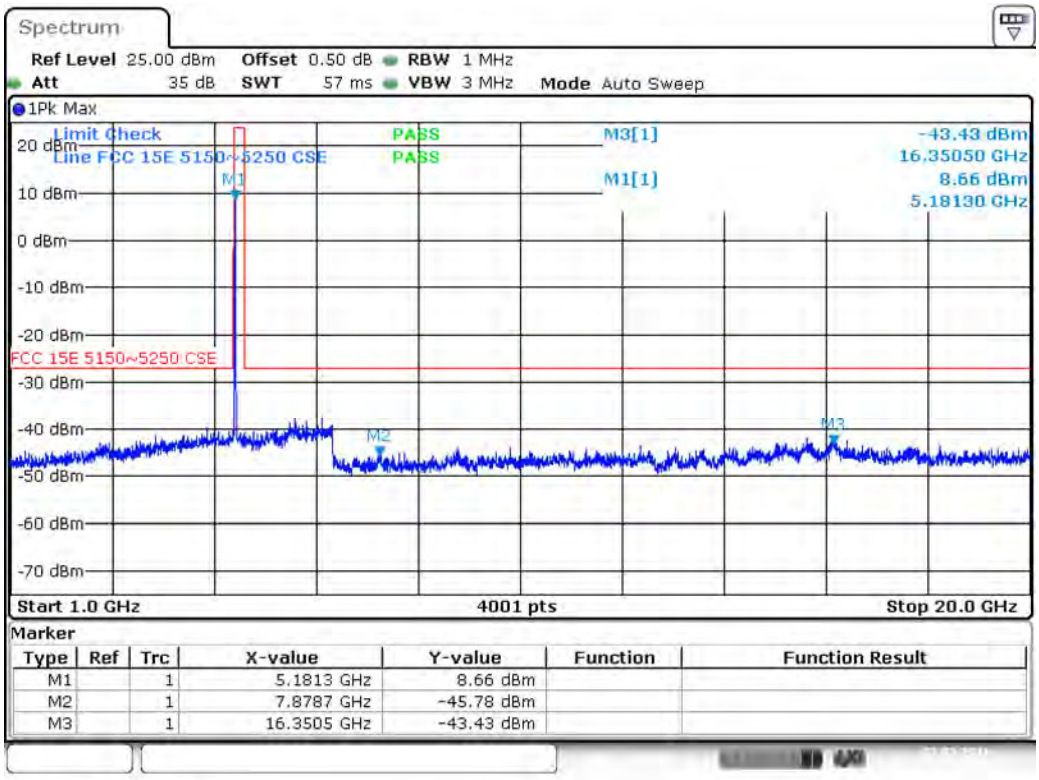
Date: 22.FEB.2016 11:02:17

Band I 11a CH36 (1 ~ 20 GHz)



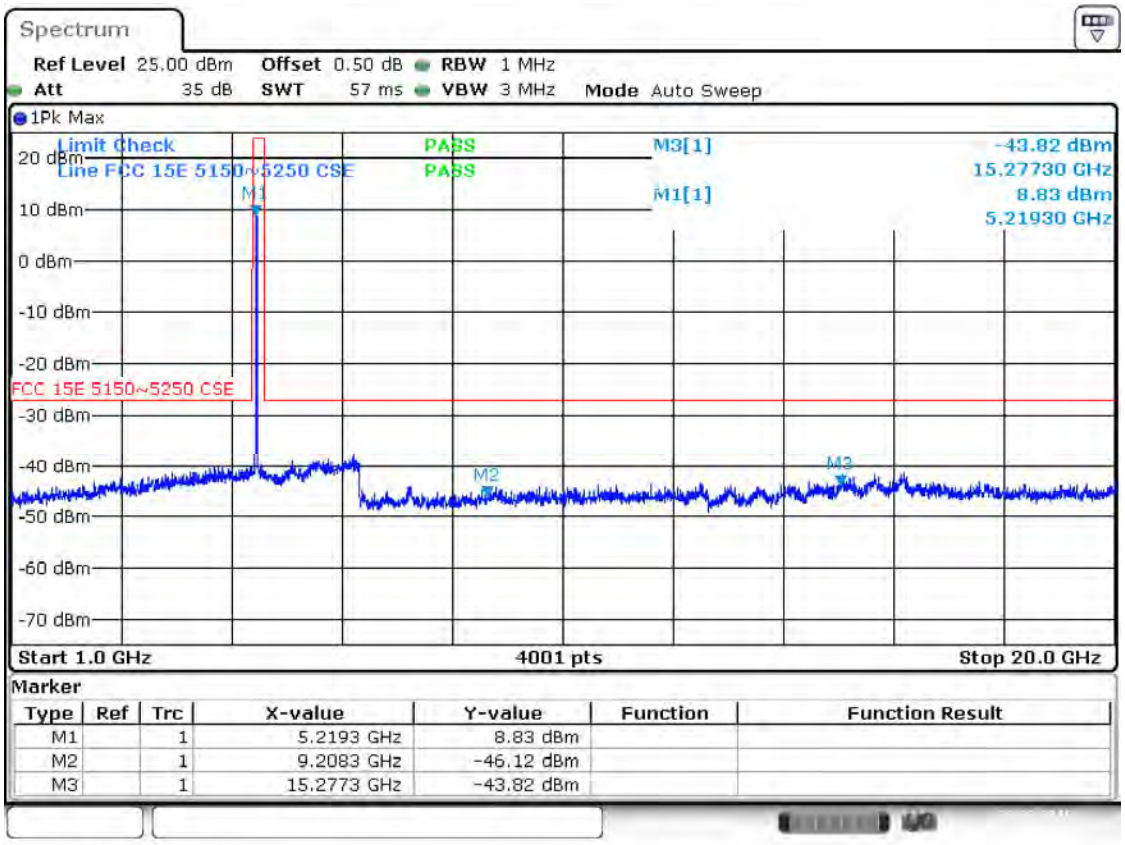
Date: 22.FEB.2016 11:04:27

Band I 11a CH36 (20 ~ 40 GHz)



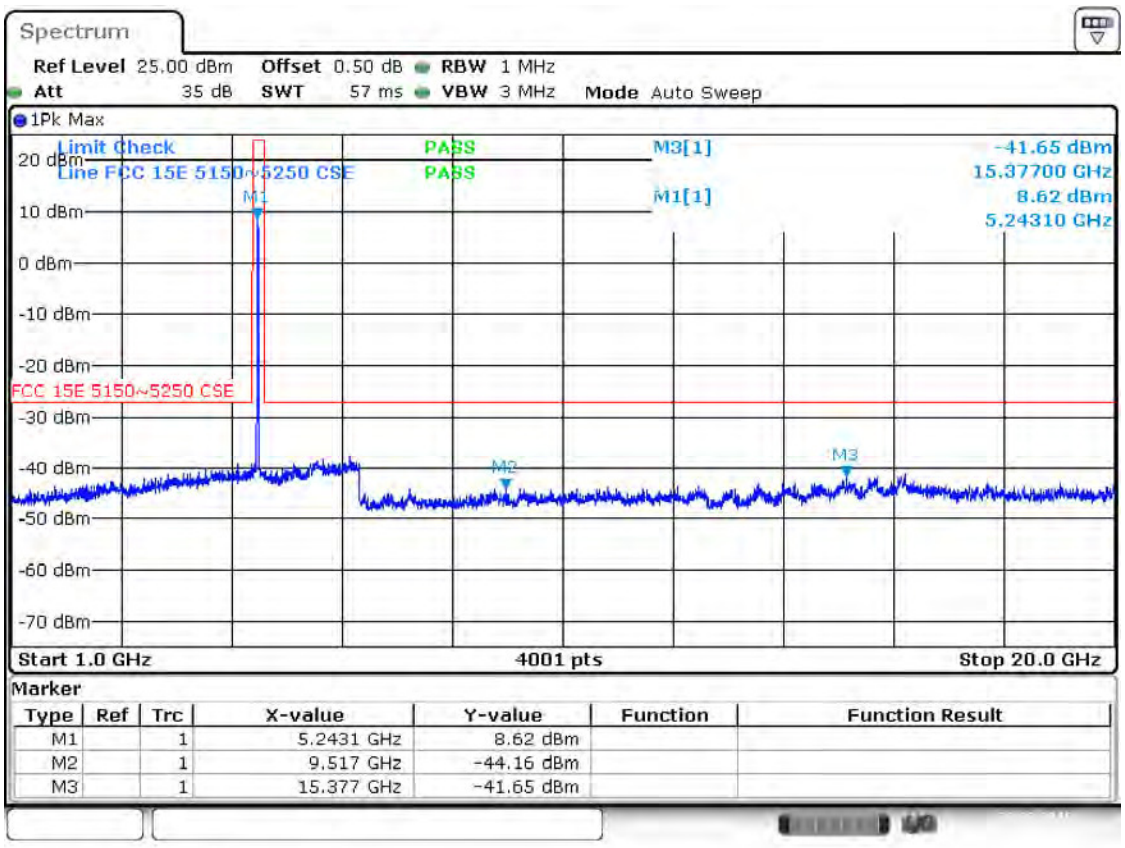
Date: 22.FEB.2016 11:06:48

Band I 11a CH44 (1 ~ 20 GHz)



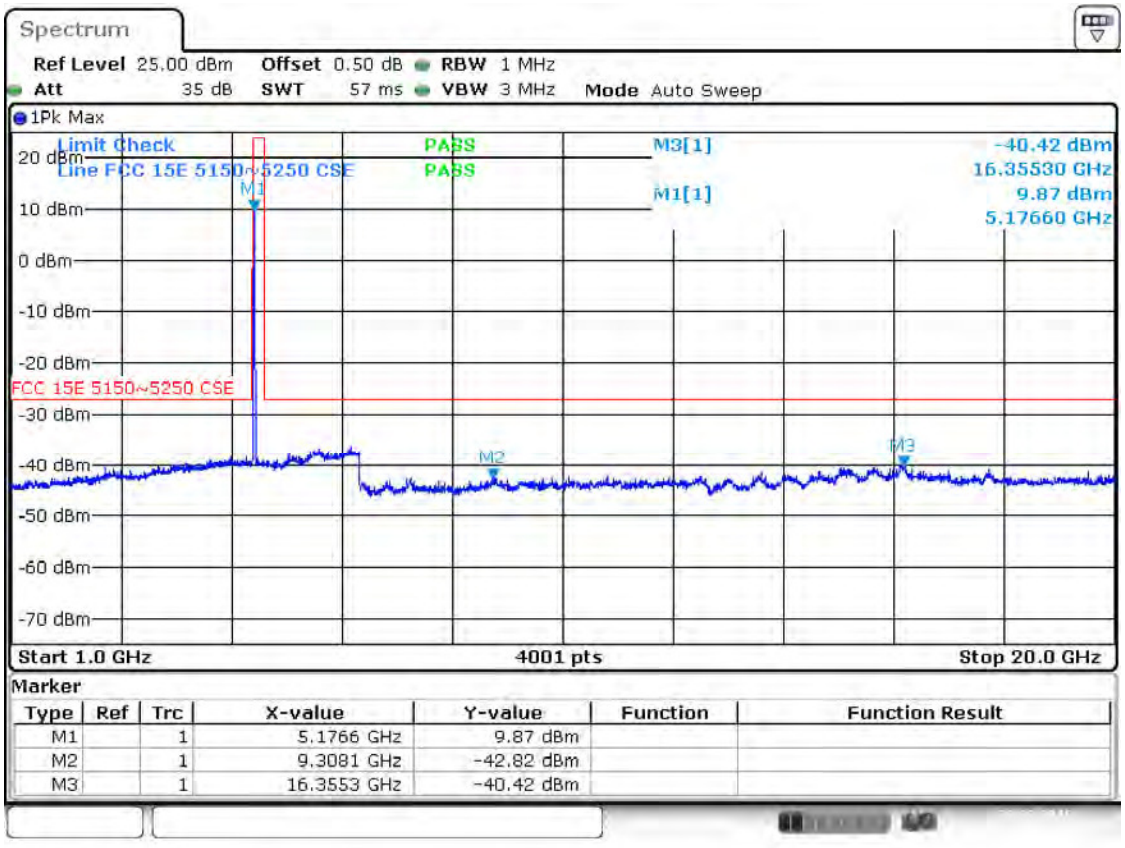
Date: 22.FEB.2016 11:09:33

Band I 11a CH48 (1 ~ 20 GHz)



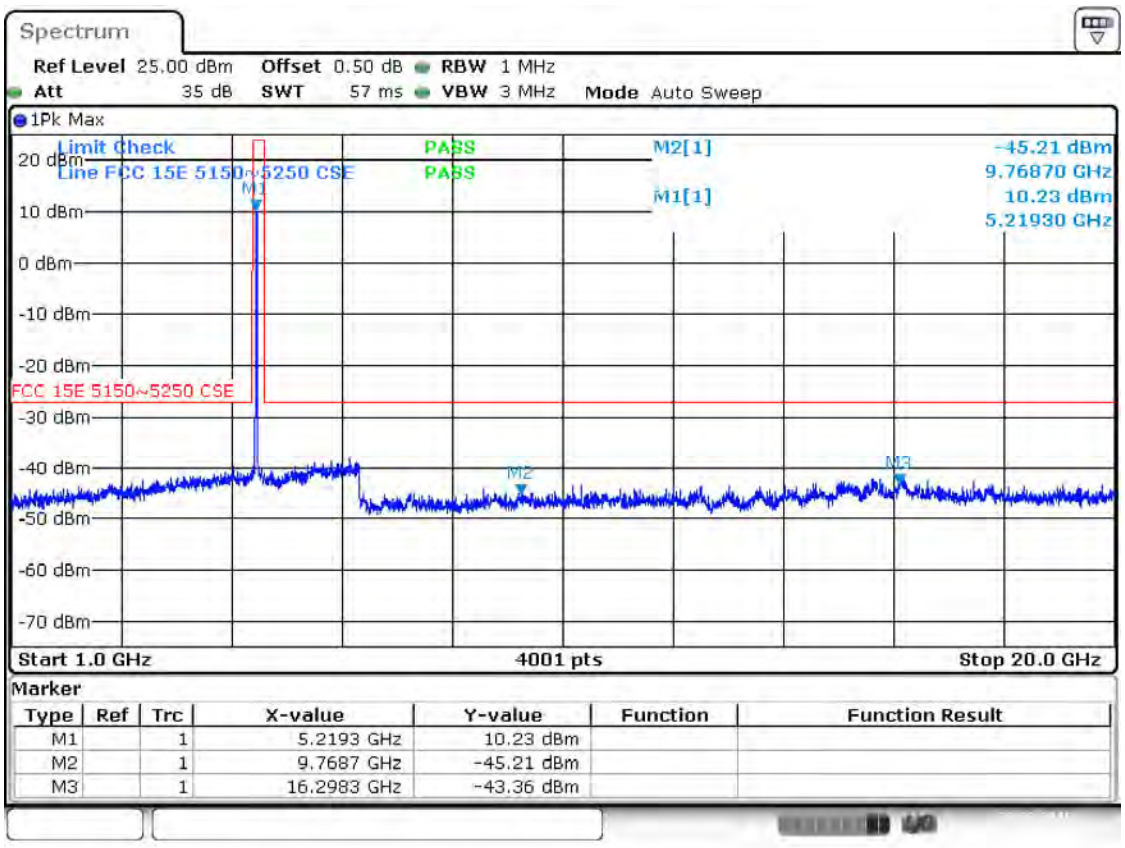
Date: 22.FEB.2016 11:10:38

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



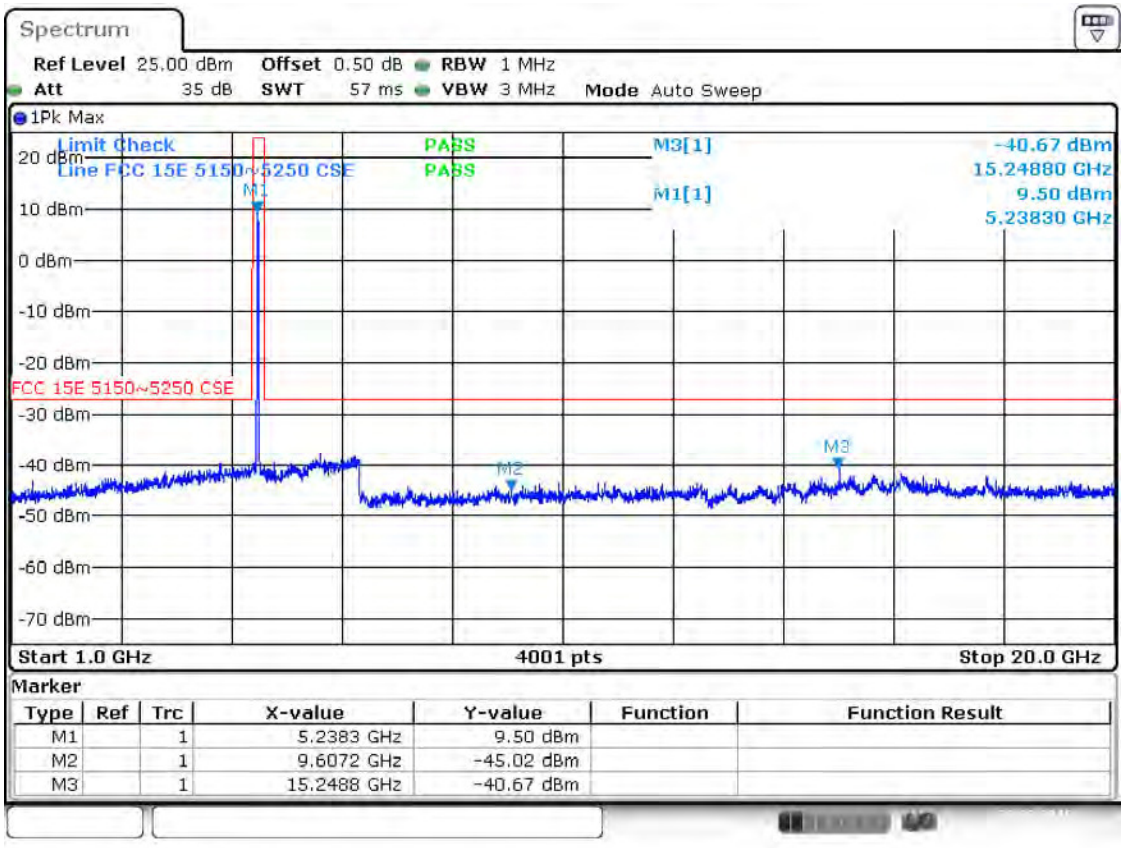
Date: 22.FEB.2016 13:44:02

Band I 11n(HT20) CH44 (1 ~ 20 GHz)



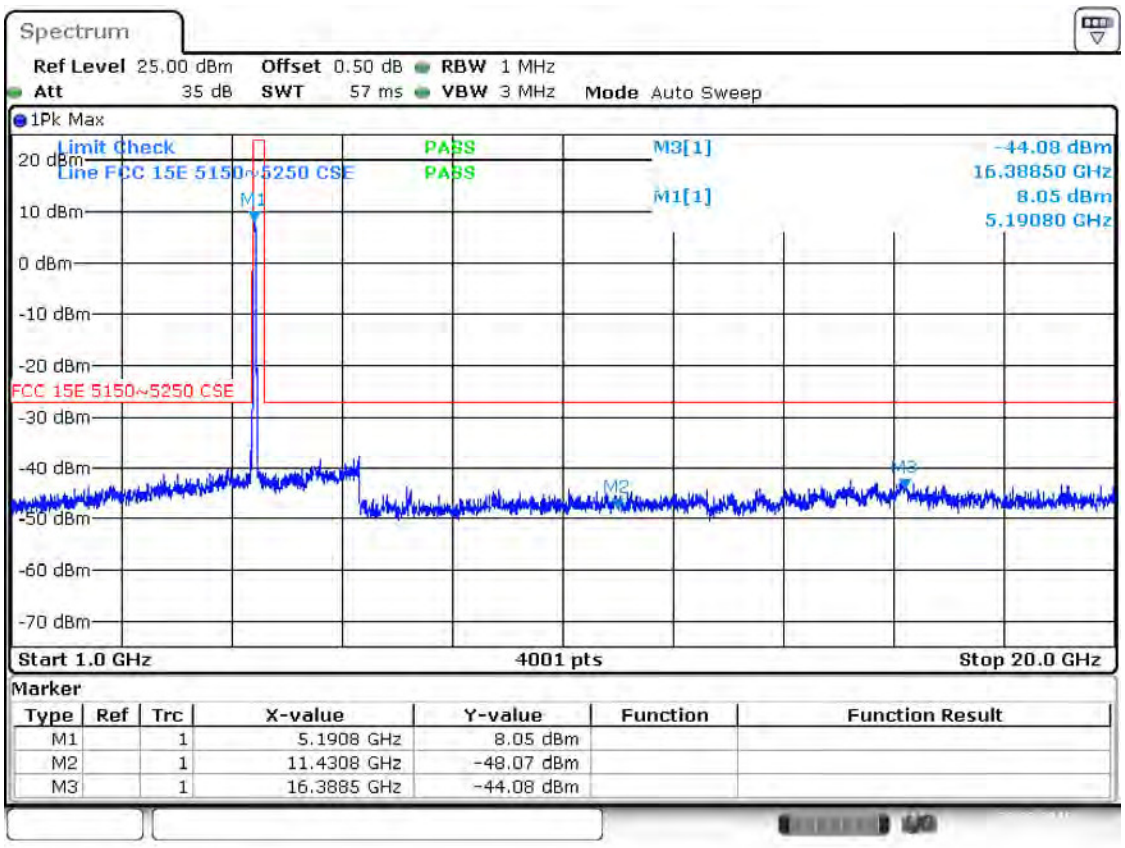
Date: 22.FEB.2016 13:47:30

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



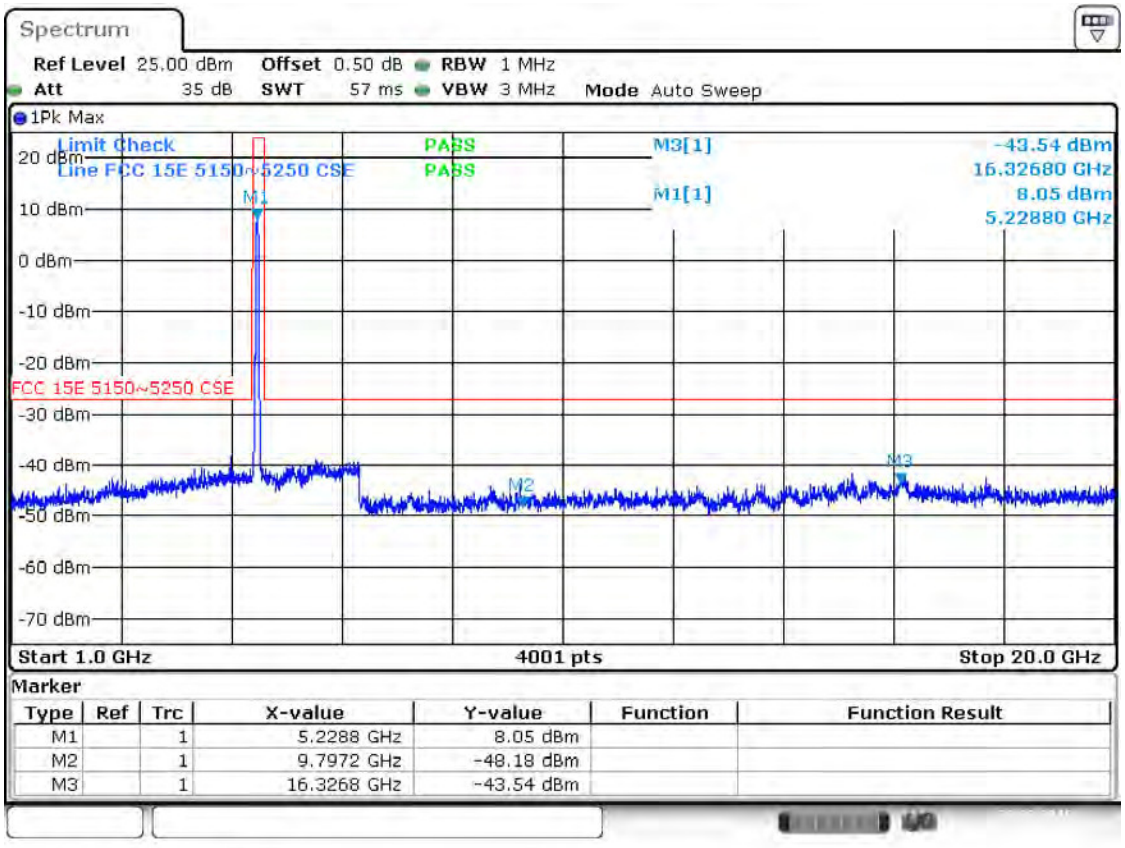
Date: 22.FEB.2016 13:49:08

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



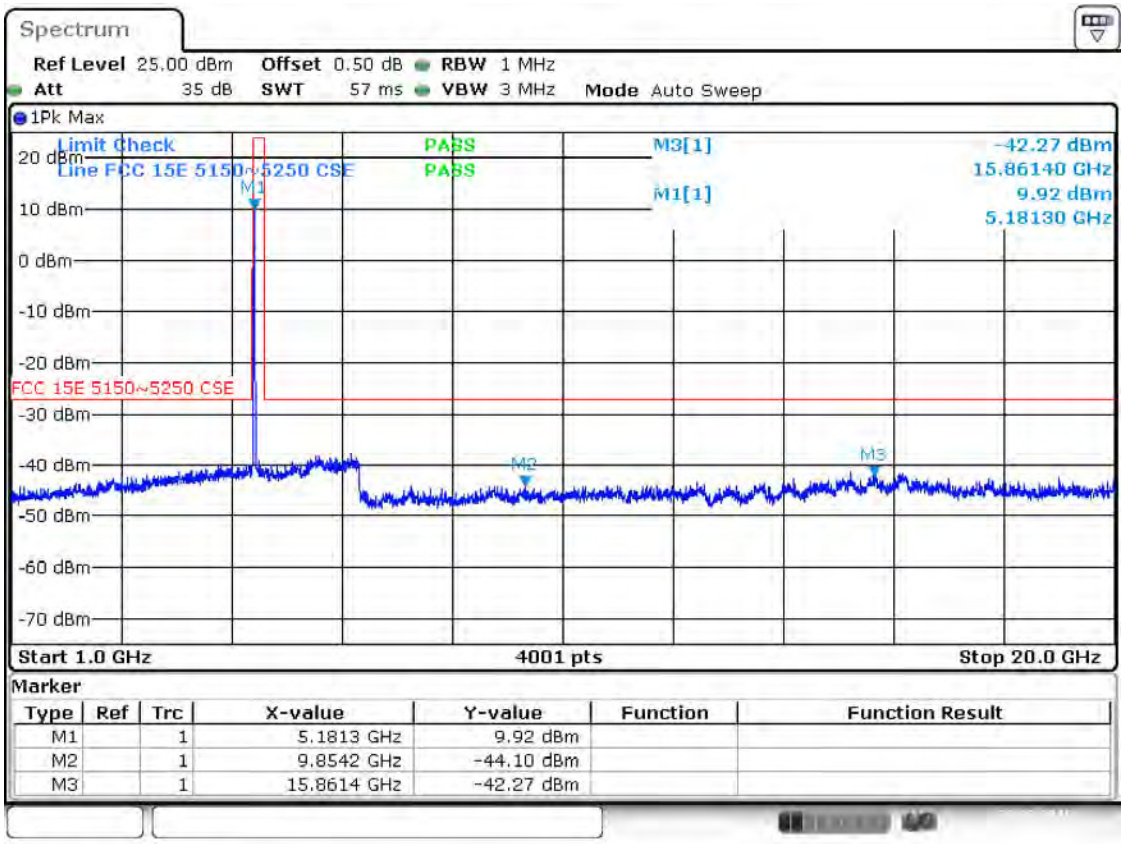
Date: 22.FEB.2016 14:11:50

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



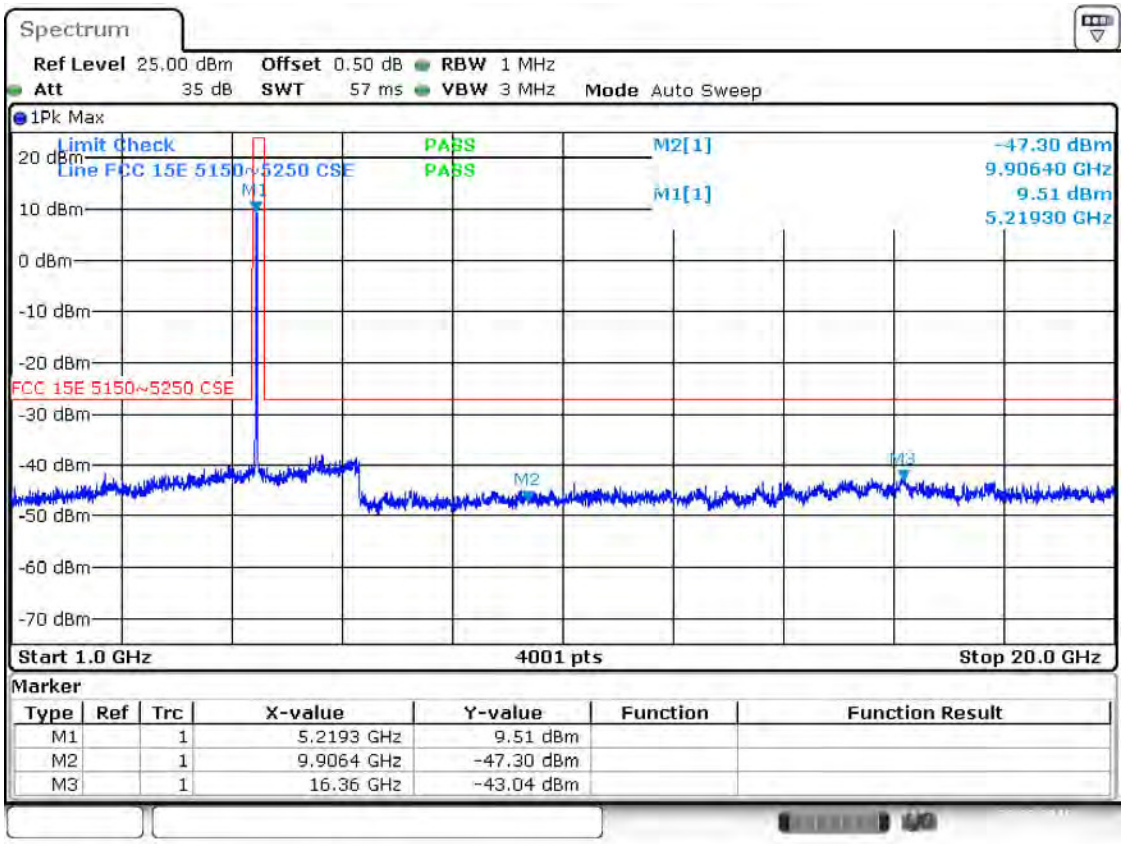
Date: 22.FEB.2016 14:25:14

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



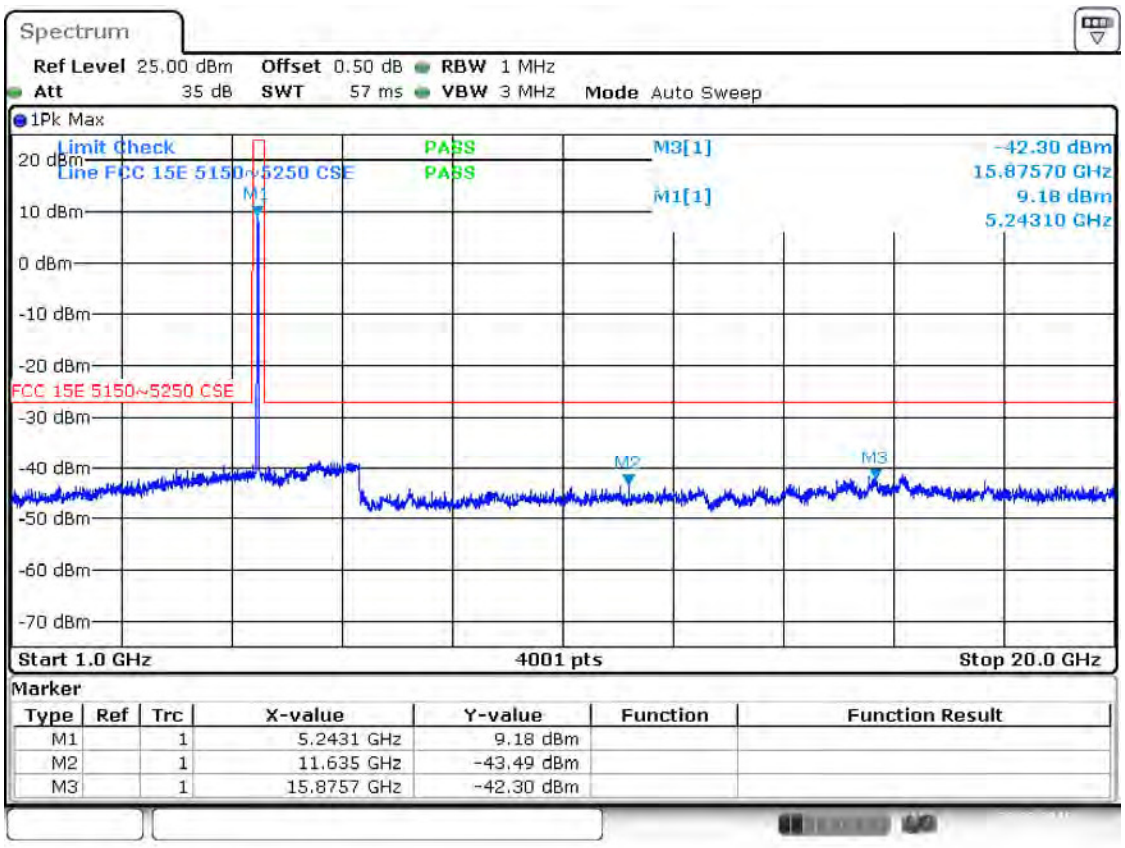
Date: 22.FEB.2016 11:31:41

Band I 11ac(HT20) CH44 (1 ~ 20 GHz)



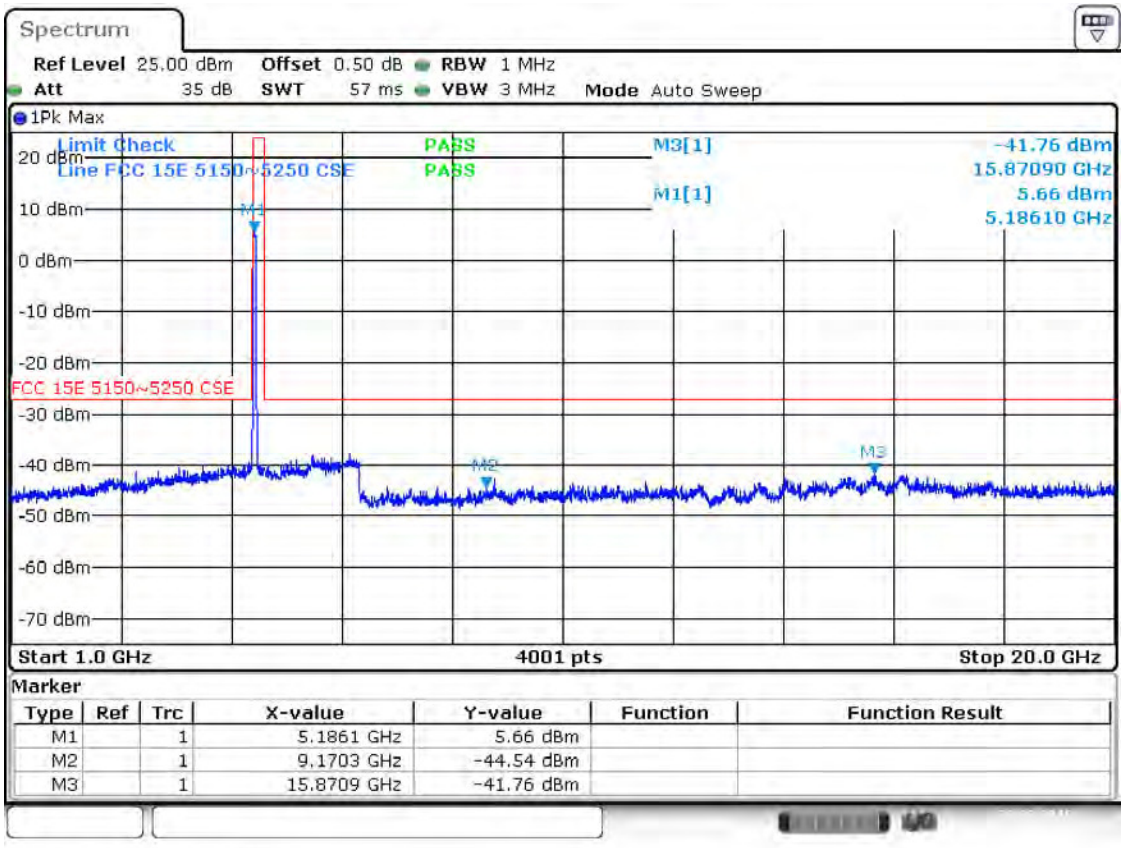
Date: 22.FEB.2016 11:33:38

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



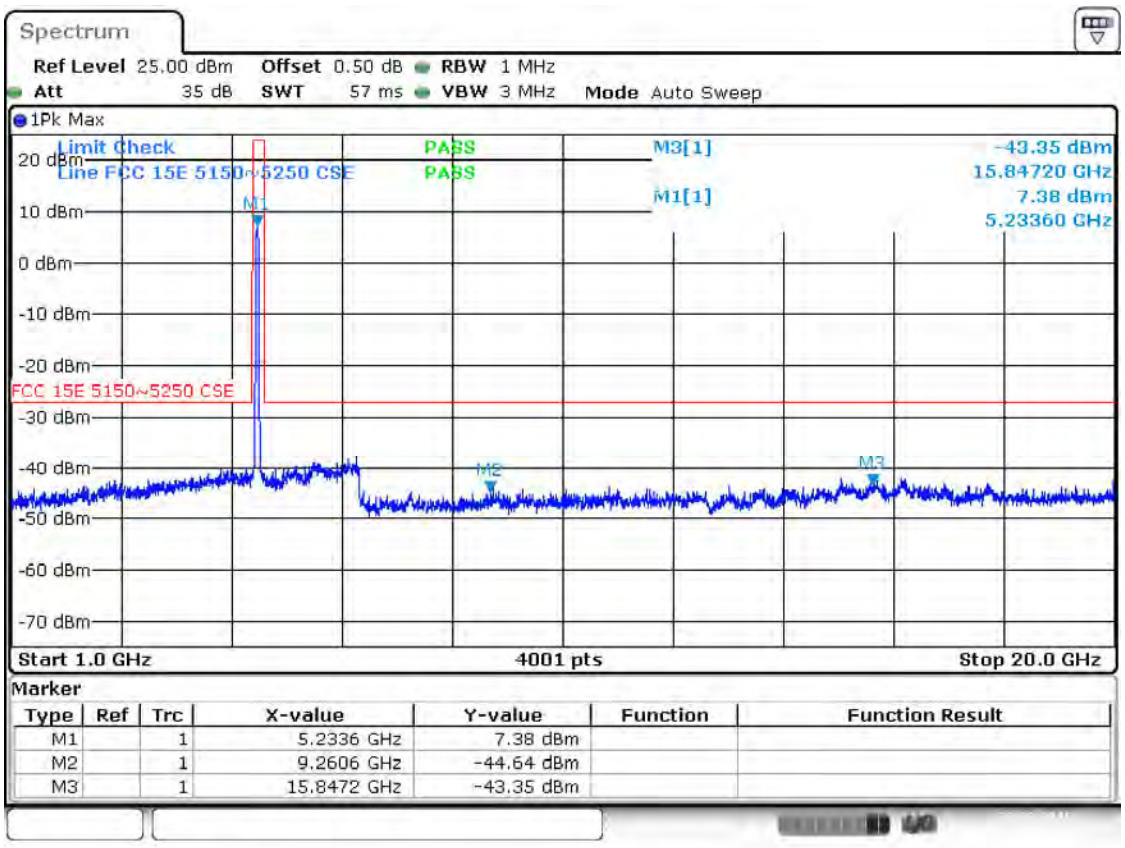
Date: 22.FEB.2016 11:34:57

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



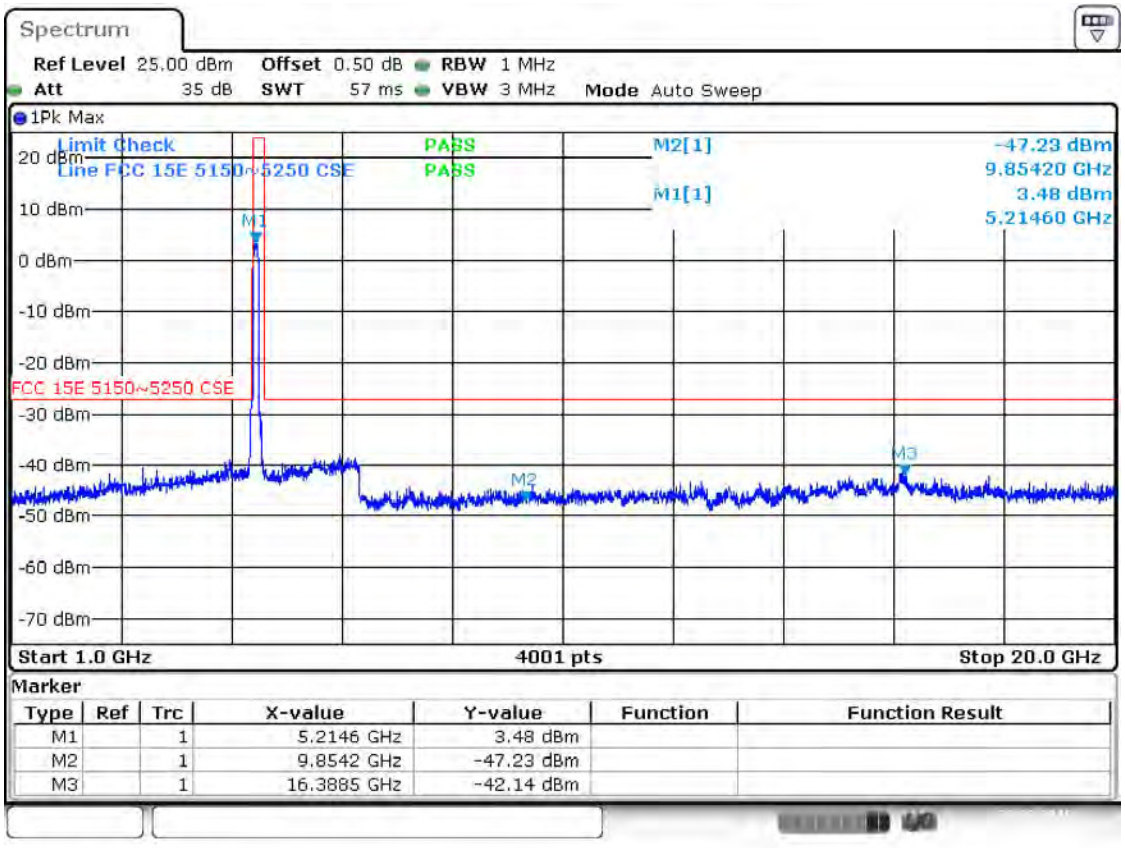
Date: 22.FEB.2016 14:47:37

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



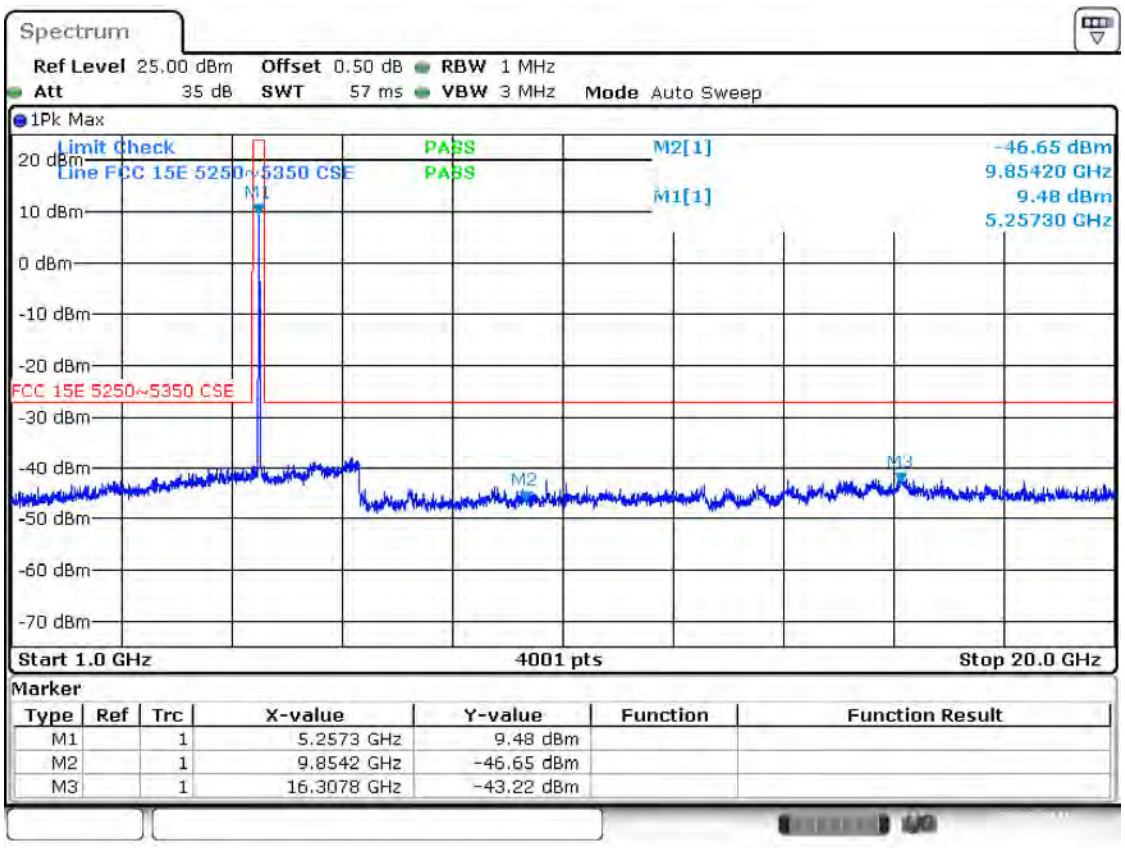
Date: 22.FEB.2016 14:50:41

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



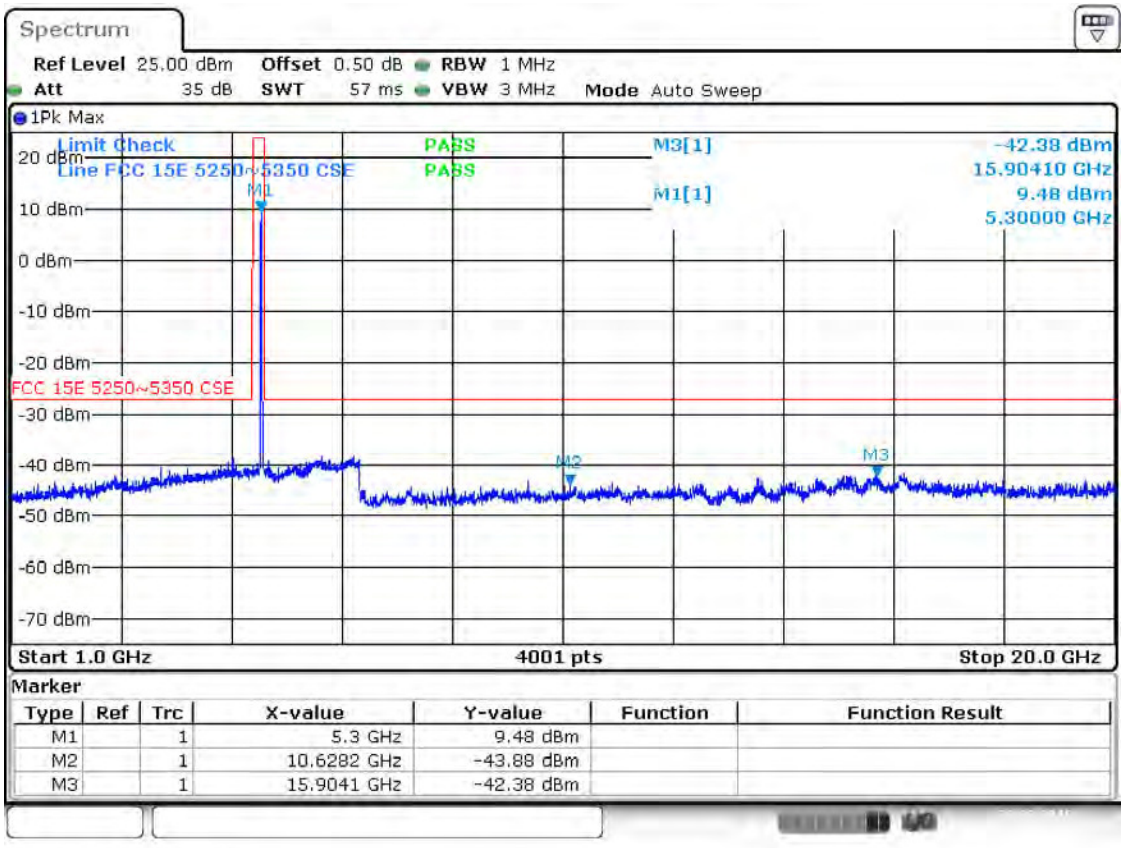
Date: 22.FEB.2016 15:06:07

Band II 11a CH52 (1 ~ 20 GHz)



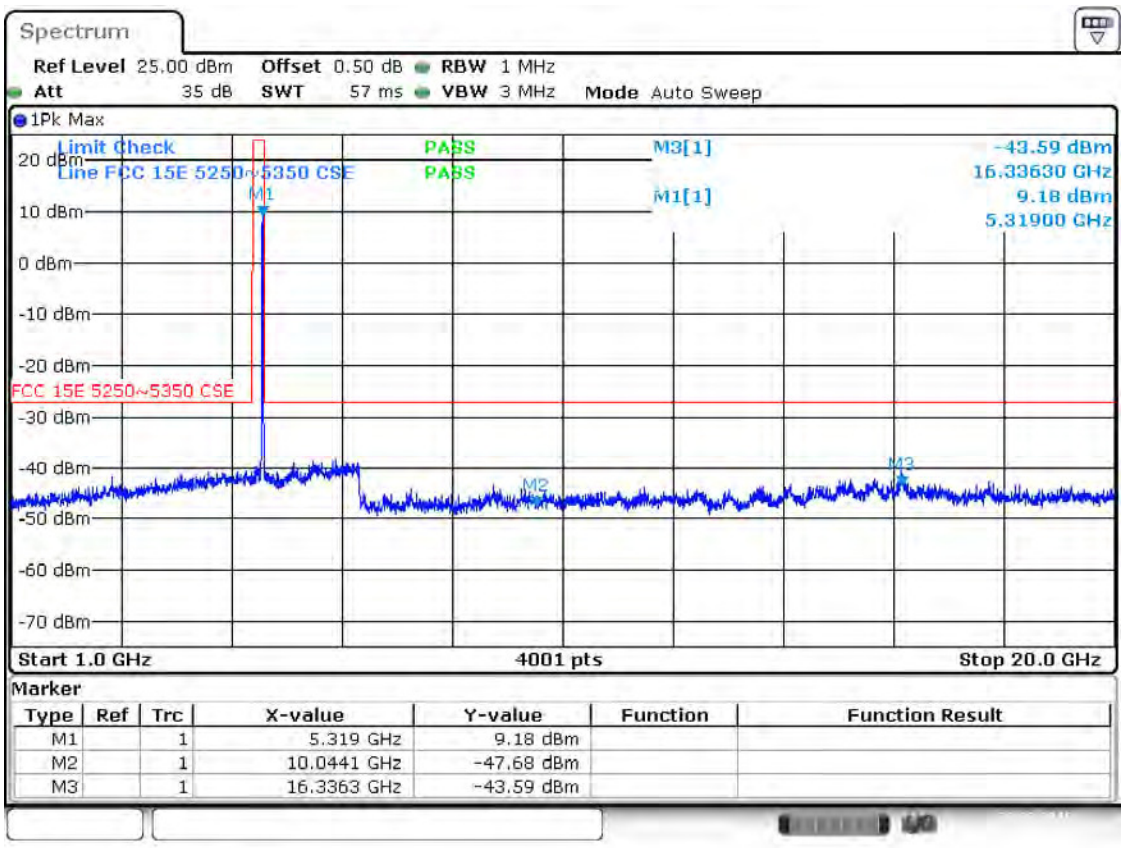
Date: 22.FEB.2016 11:13:24

Band II 11a CH60 (1 ~ 20 GHz)



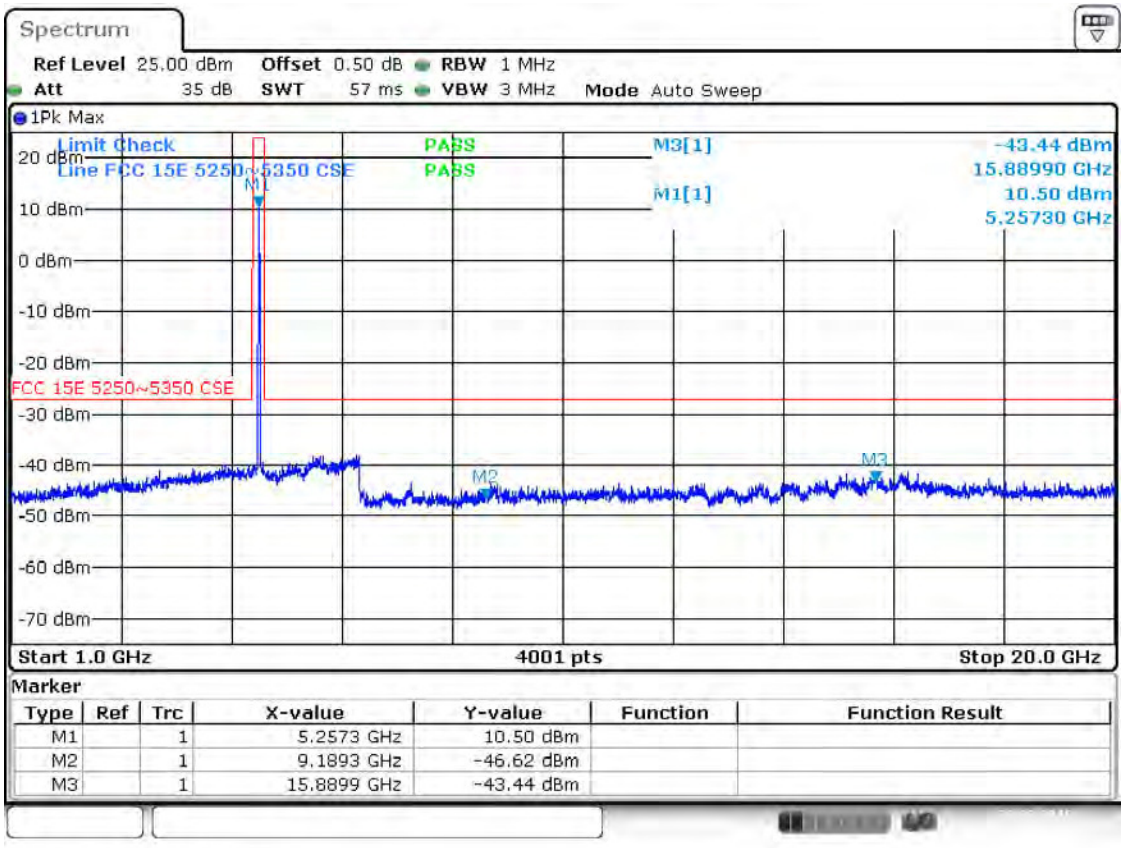
Date: 22.FEB.2016 11:14:35

Band II 11a CH64 (1 ~ 20 GHz)



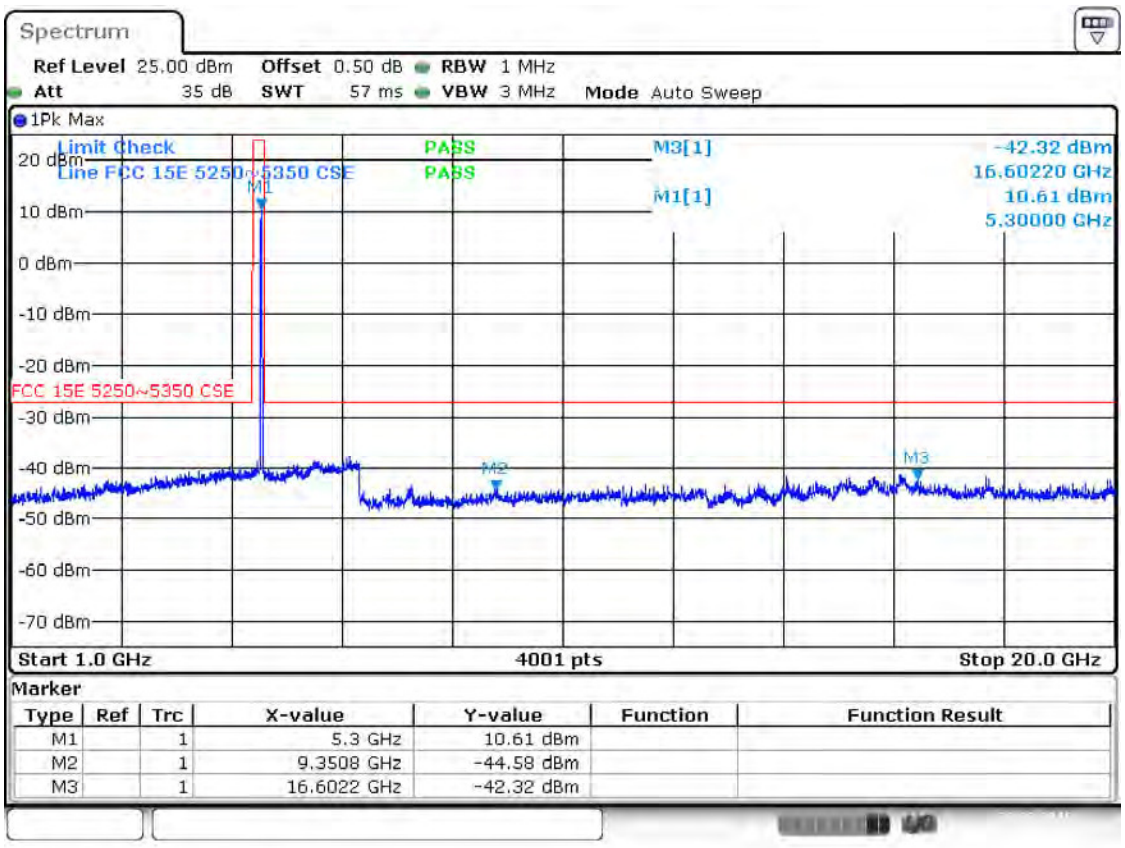
Date: 22.FEB.2016 11:16:43

Band II 11n(HT20) CH52 (1 ~ 20 GHz)



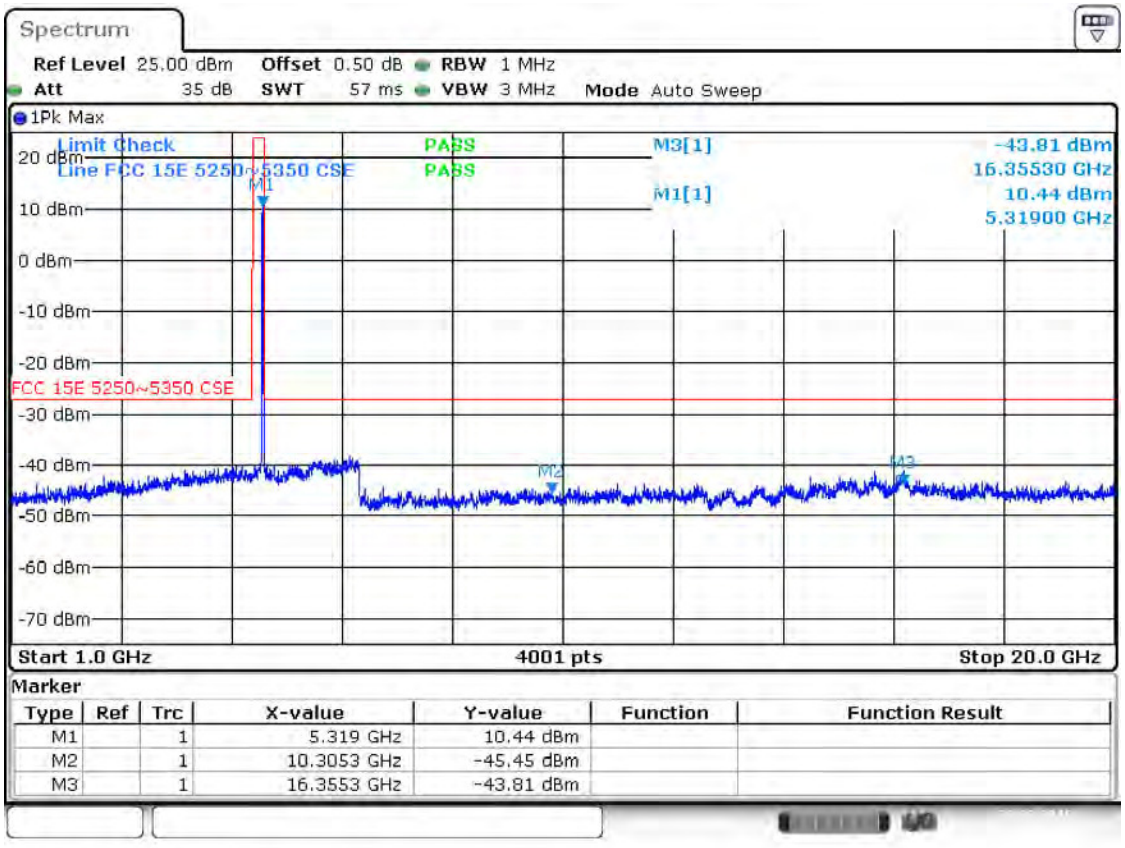
Date: 22.FEB.2016 13:51:44

Band II 11n(HT20) CH60 (1 ~ 20 GHz)



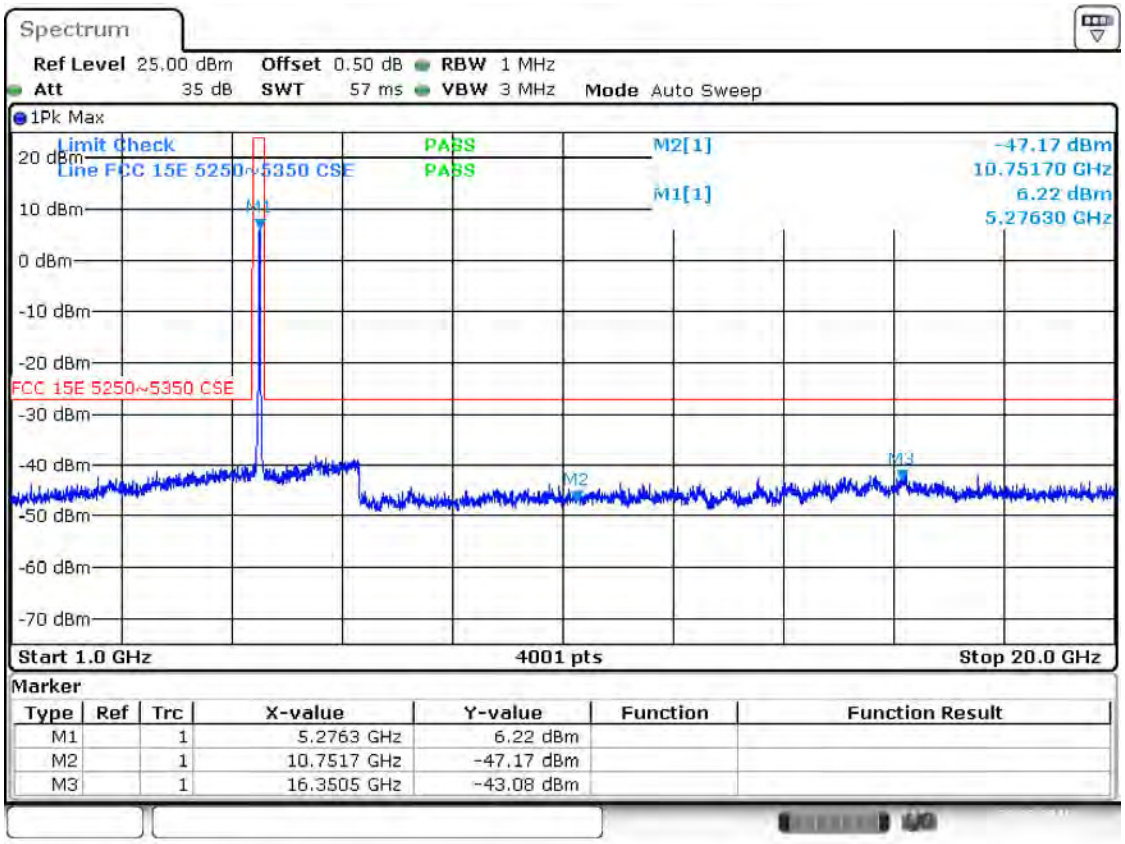
Date: 22.FEB.2016 13:52:52

Band II 11n(HT20) CH64 (1 ~ 20 GHz)



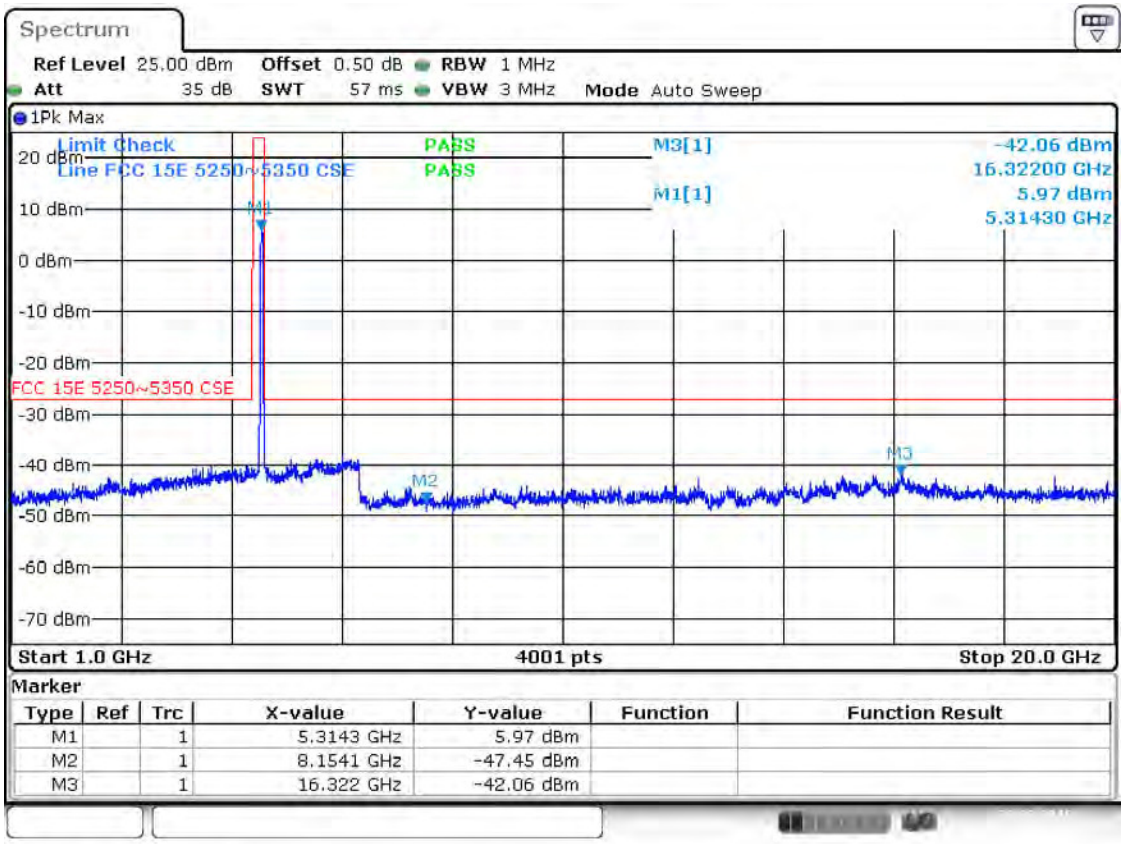
Date: 22.FEB.2016 13:55:09

Band II 11n(HT40) CH54 (1 ~ 20 GHz)



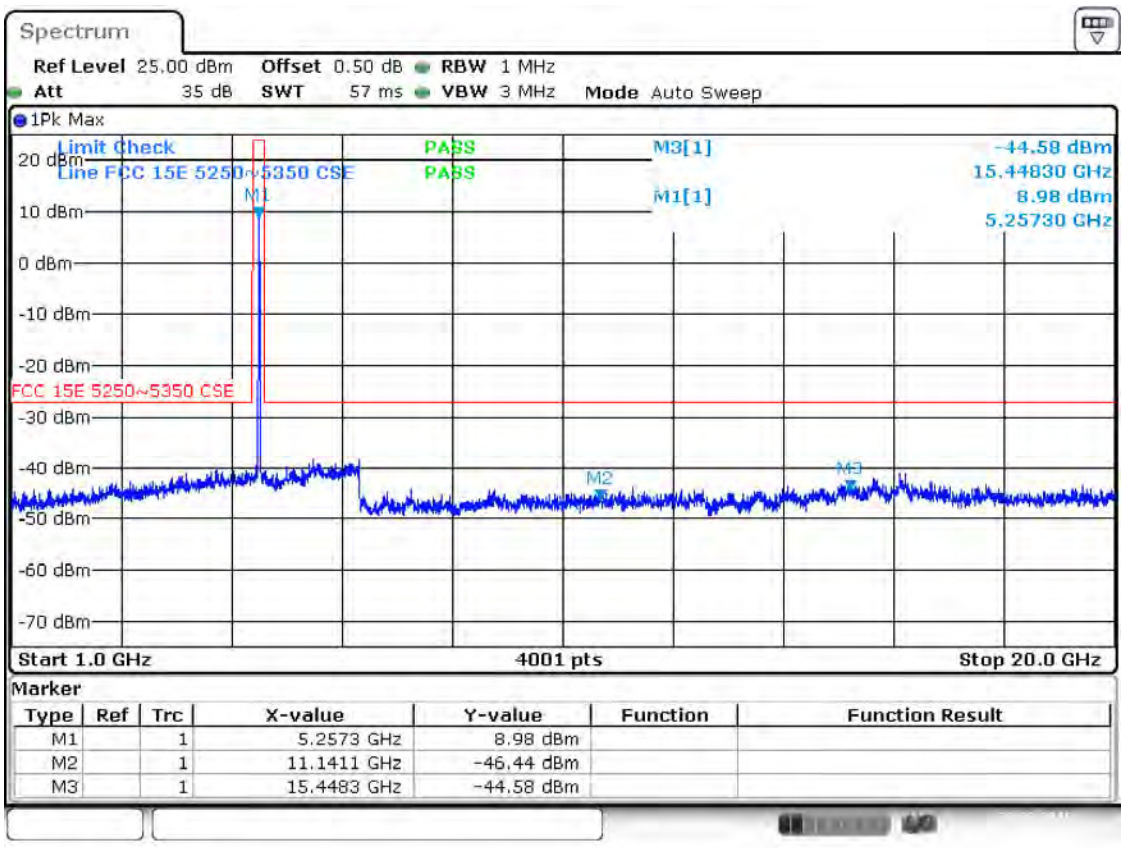
Date: 22.FEB.2016 14:21:17

Band II 11n(HT40) CH62 (1 ~ 20 GHz)



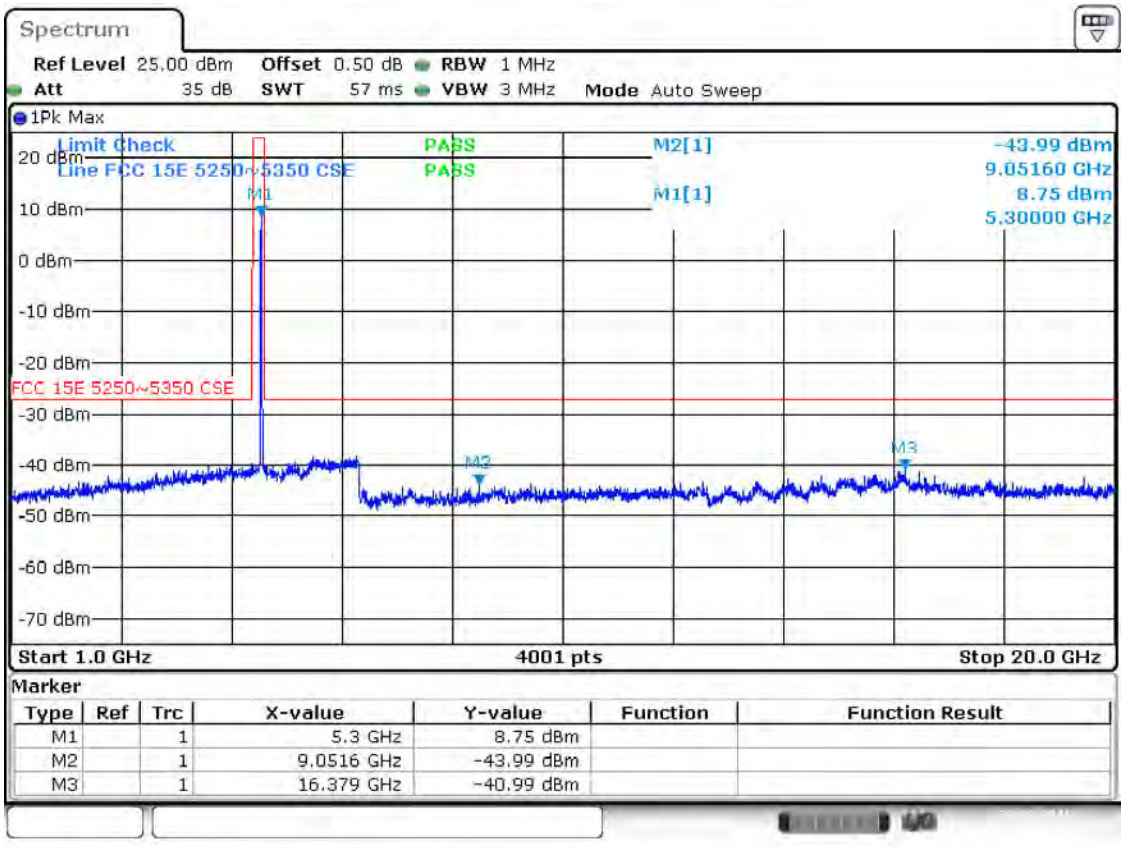
Date: 22.FEB.2016 14:27:42

Band II 11ac(HT20) CH52 (1 ~ 20 GHz)



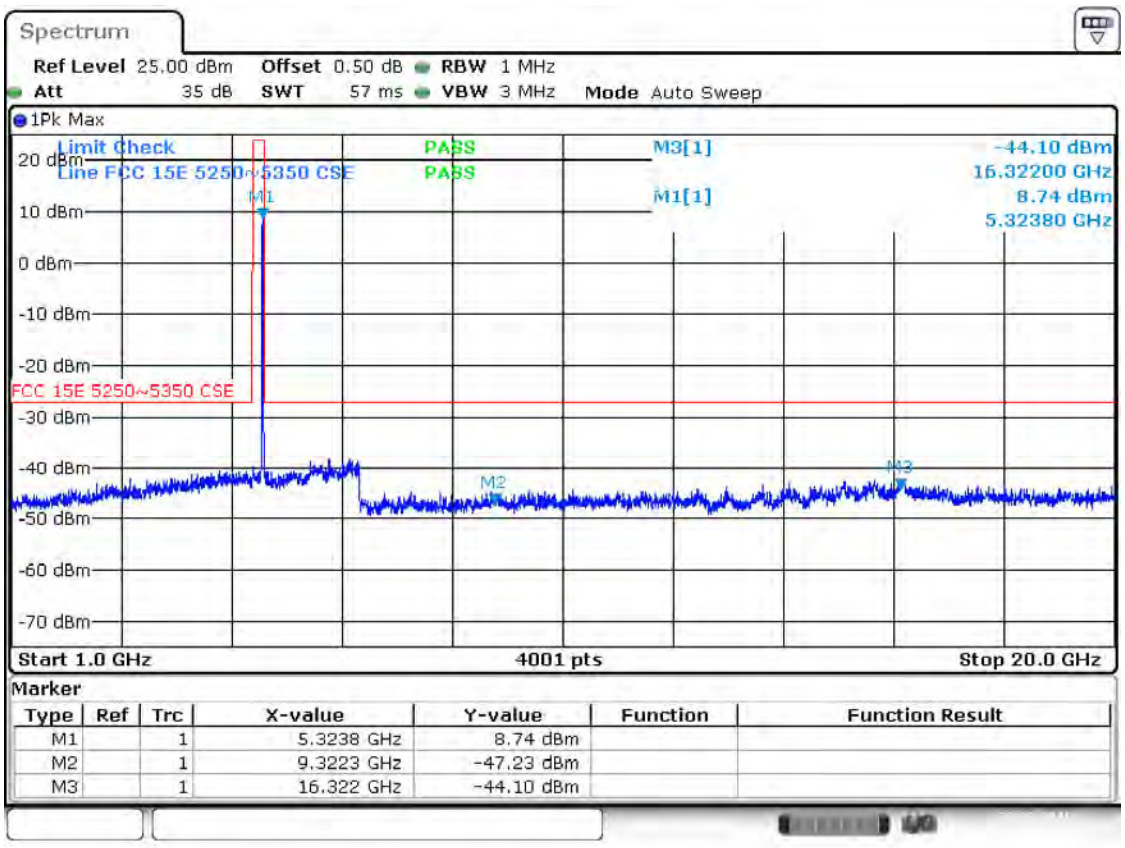
Date: 22.FEB.2016 11:38:13

Band II 11ac(HT20) CH60 (1 ~ 20 GHz)



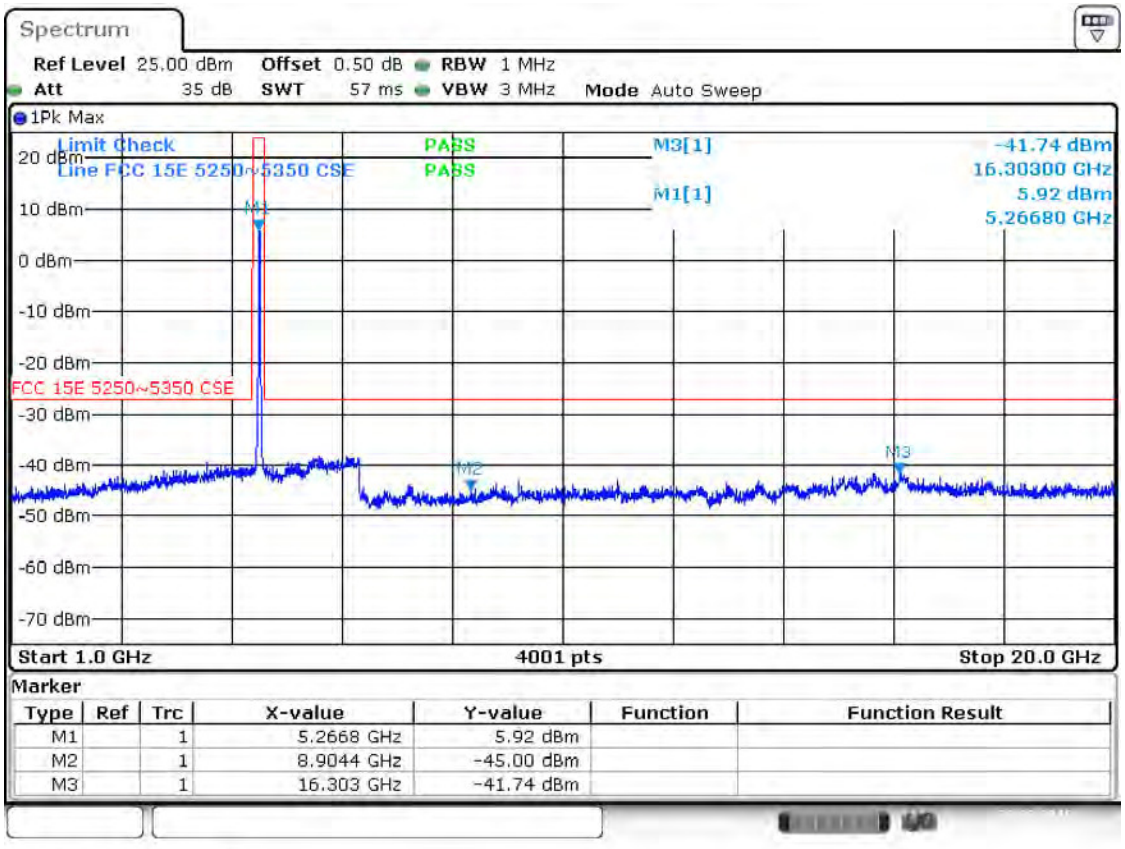
Date: 22.FEB.2016 11:40:28

Band II 11ac(HT20) CH64 (1 ~ 20 GHz)



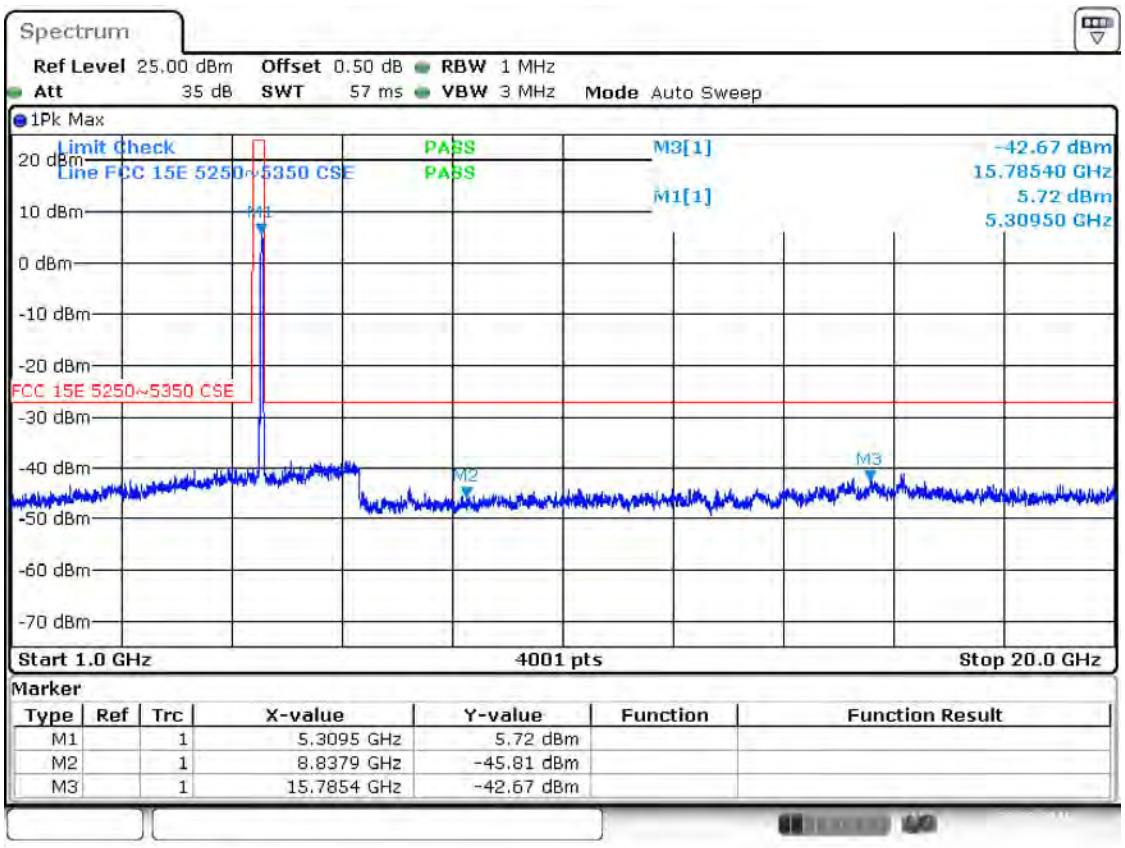
Date: 22.FEB.2016 11:42:44

Band II 11ac(HT40) CH54 (1 ~ 20 GHz)



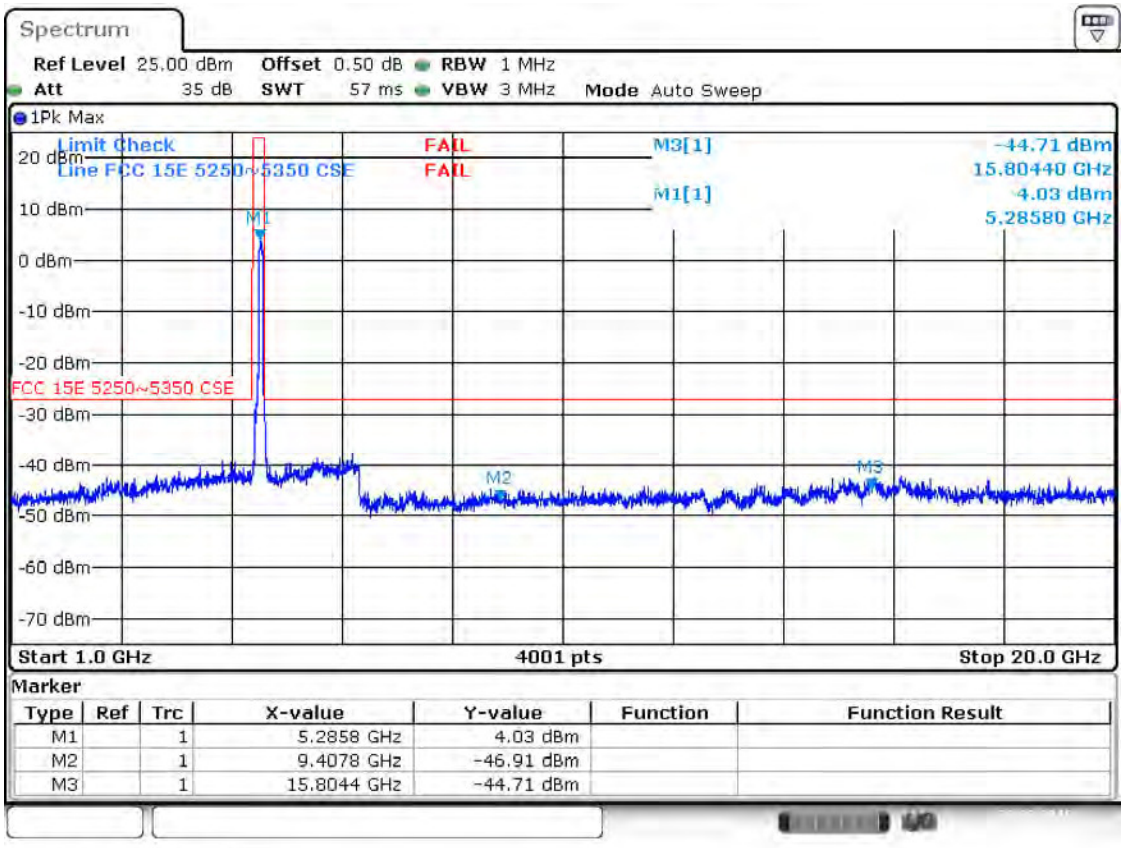
Date: 22.FEB.2016 14:52:15

Band II 11ac(HT40) CH62 (1 ~ 20 GHz)



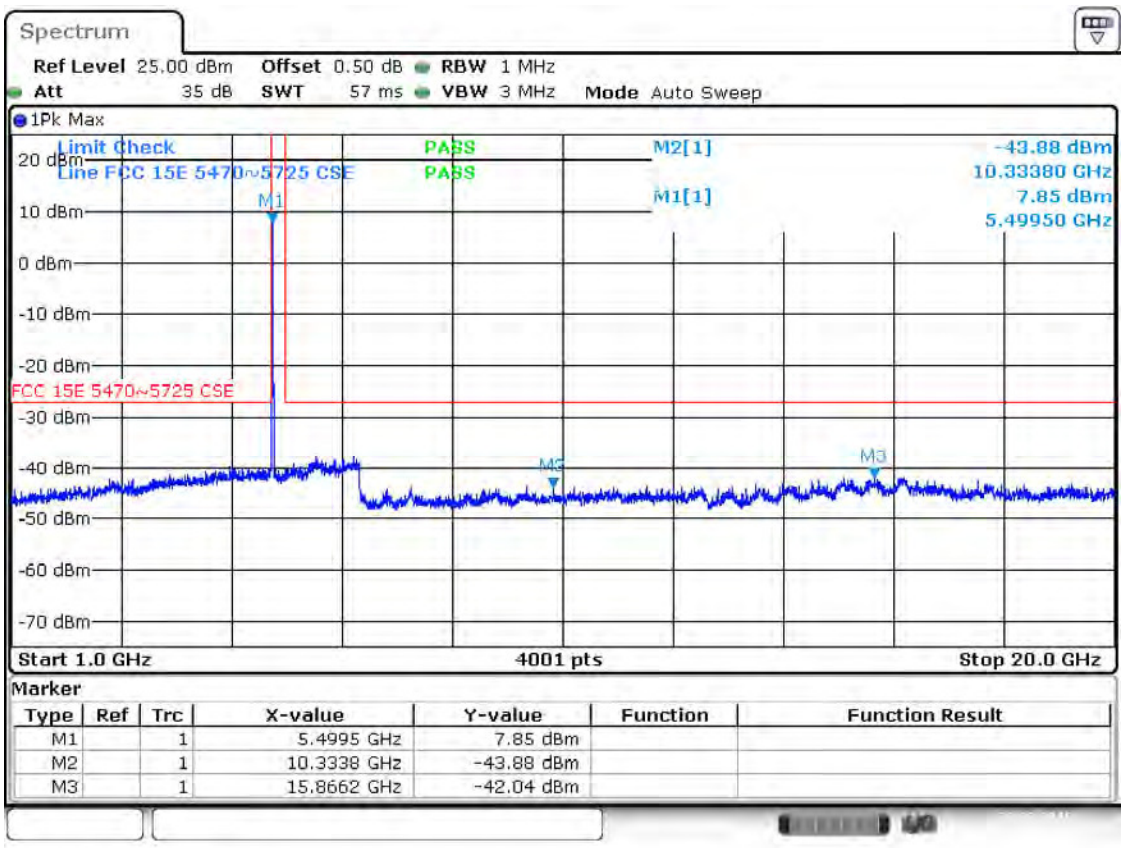
Date: 22.FEB.2016 14:54:12

Band II 11ac(HT80) CH58 (1 ~ 20 GHz)



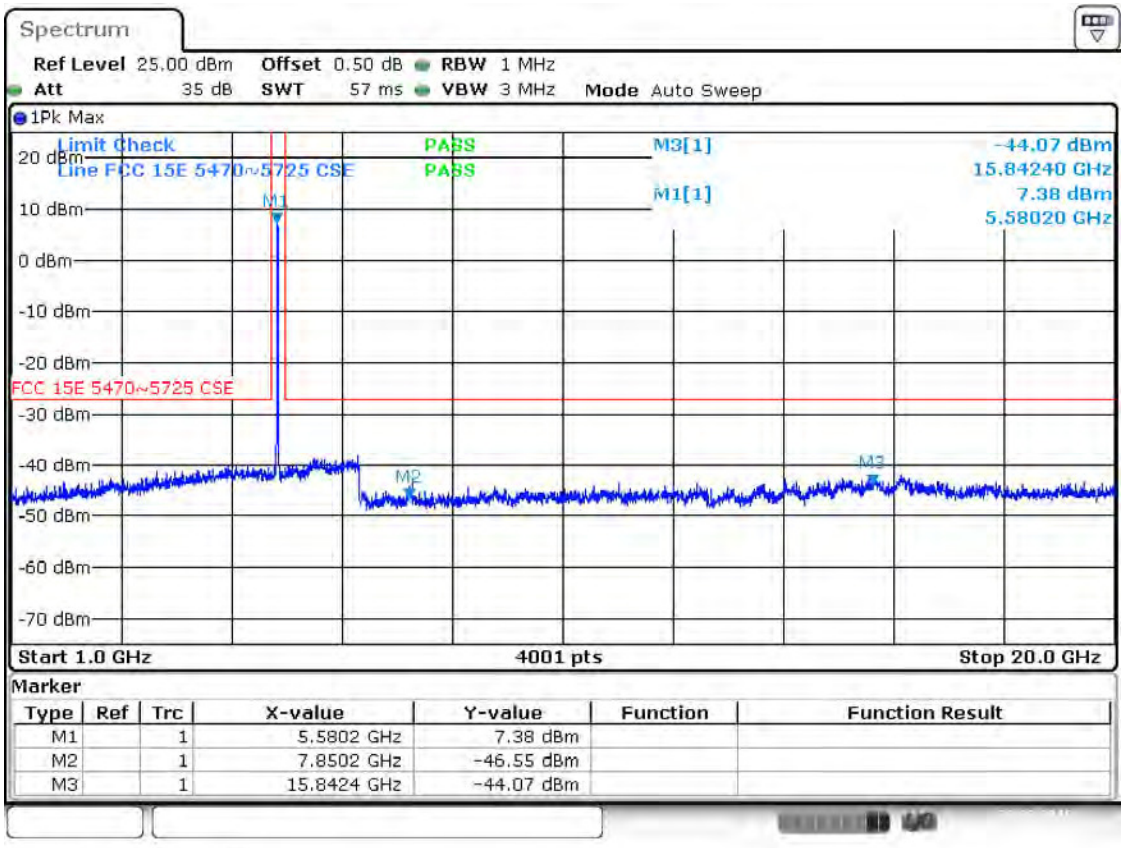
Date: 22.FEB.2016 15:10:19

Band III 11a CH100 (1 ~ 20 GHz)



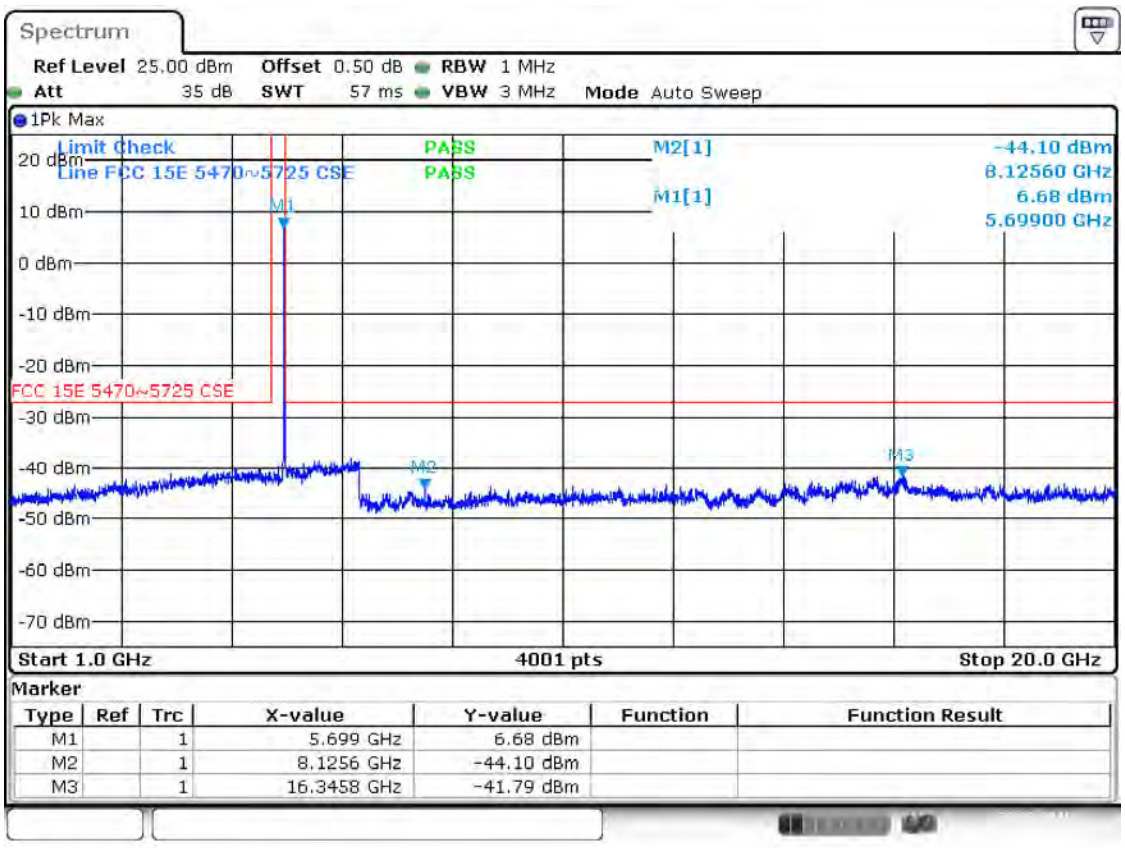
Date: 22.FEB.2016 11:18:10

Band III 11a CH116 (1 ~ 20 GHz)



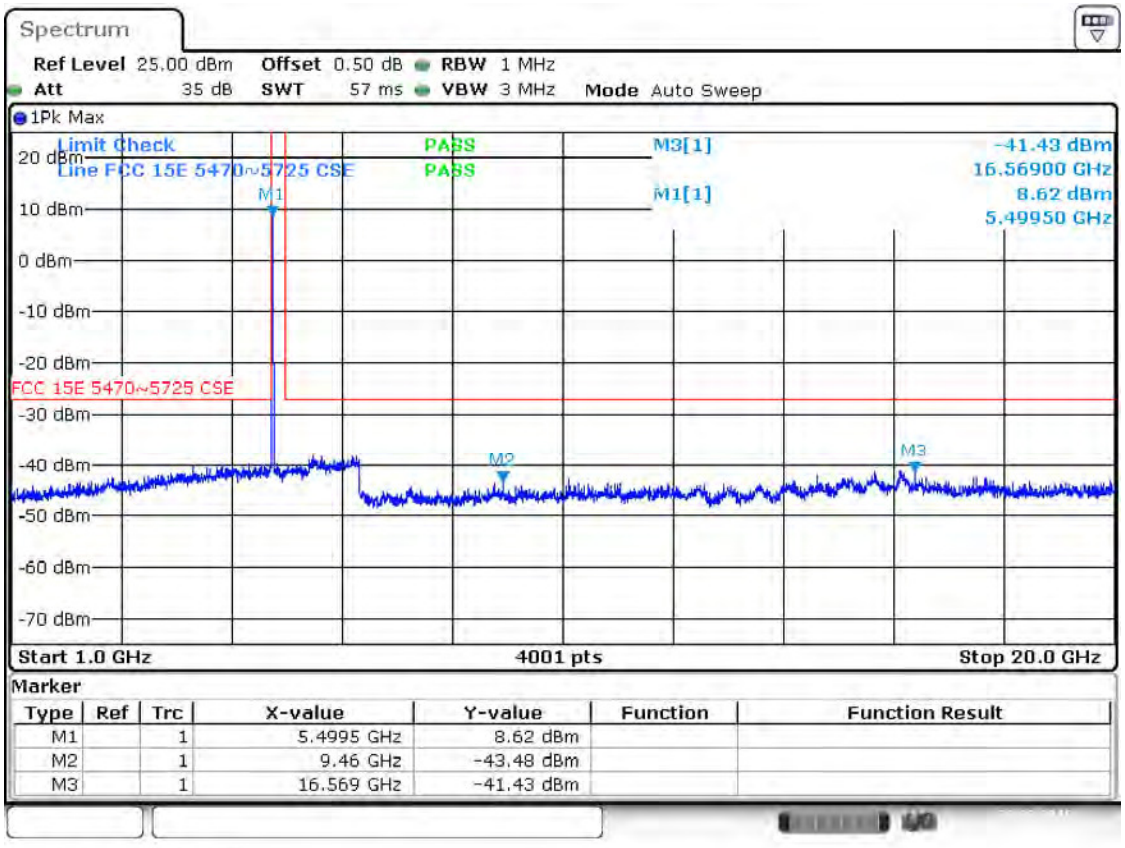
Date: 22.FEB.2016 11:20:12

Band III 11a CH140 (1 ~ 20 GHz)



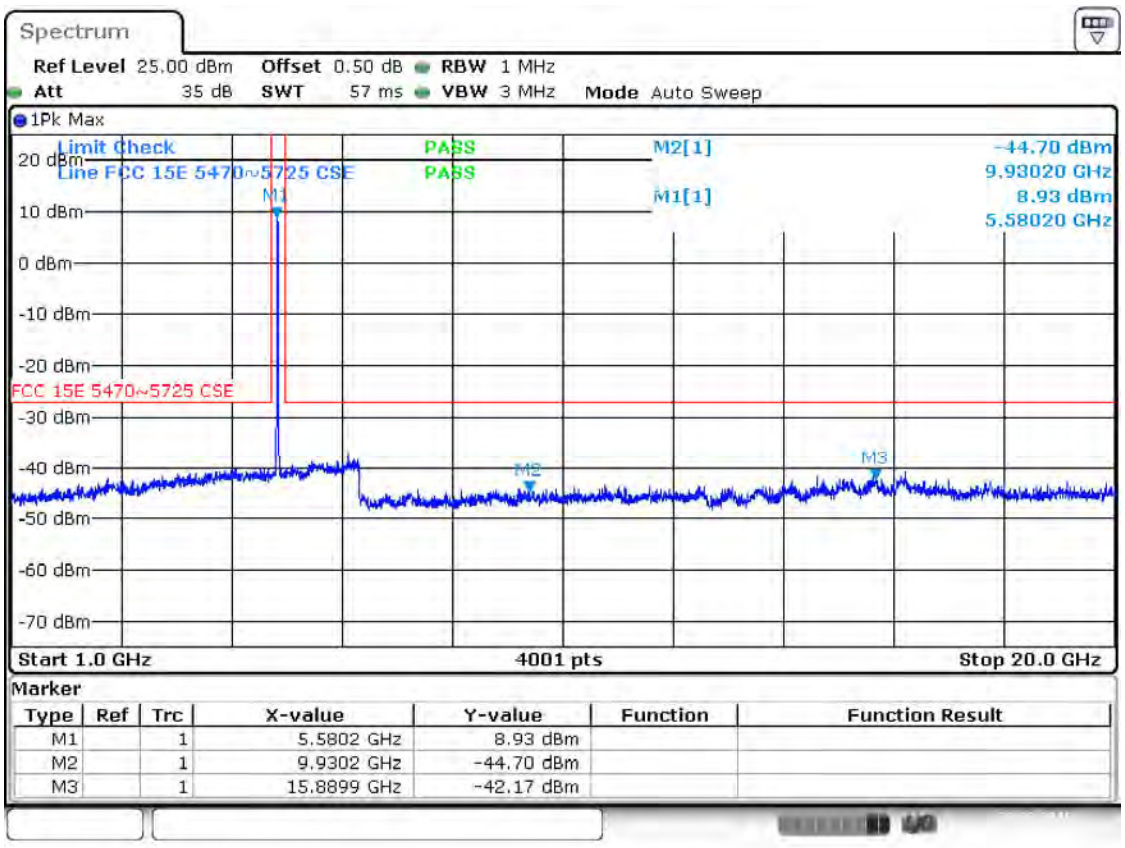
Date: 22.FEB.2016 11:21:08

Band III 11n(HT20) CH100 (1 ~ 20 GHz)



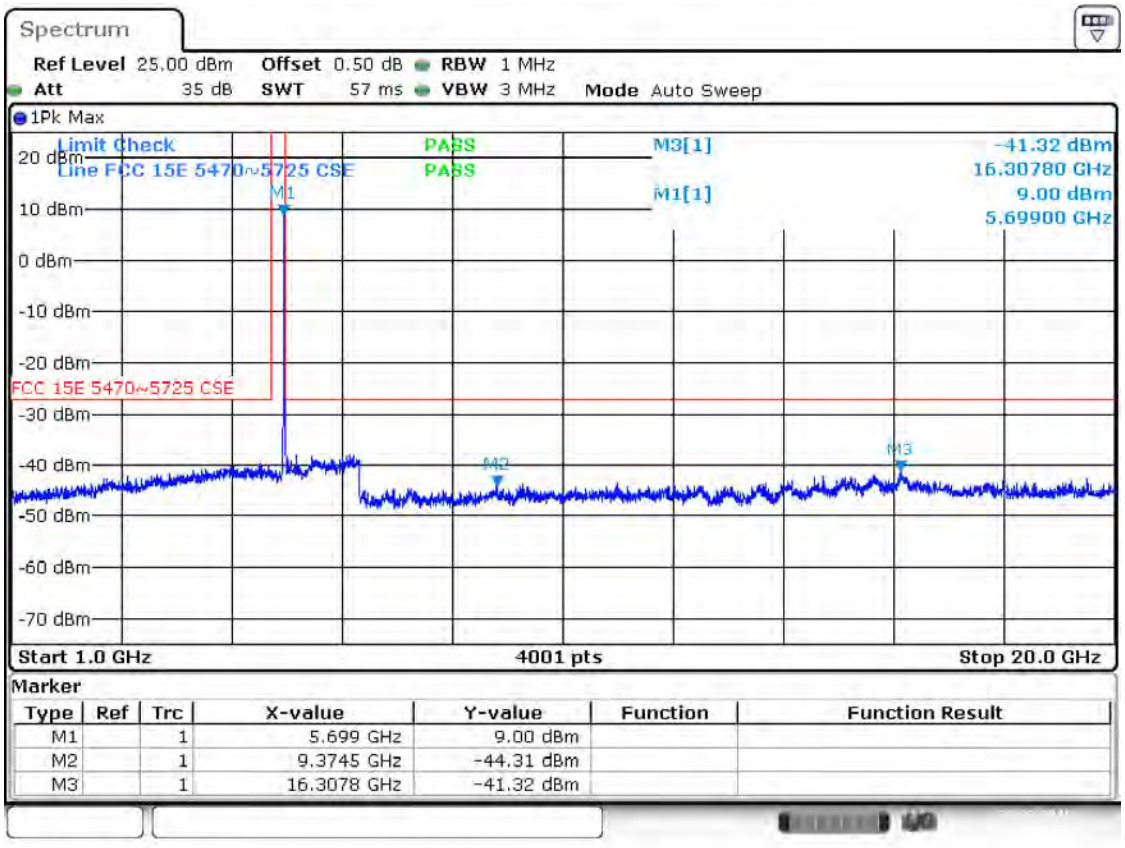
Date: 22.FEB.2016 13:56:19

Band III 11n(HT20) CH116 (1 ~ 20 GHz)



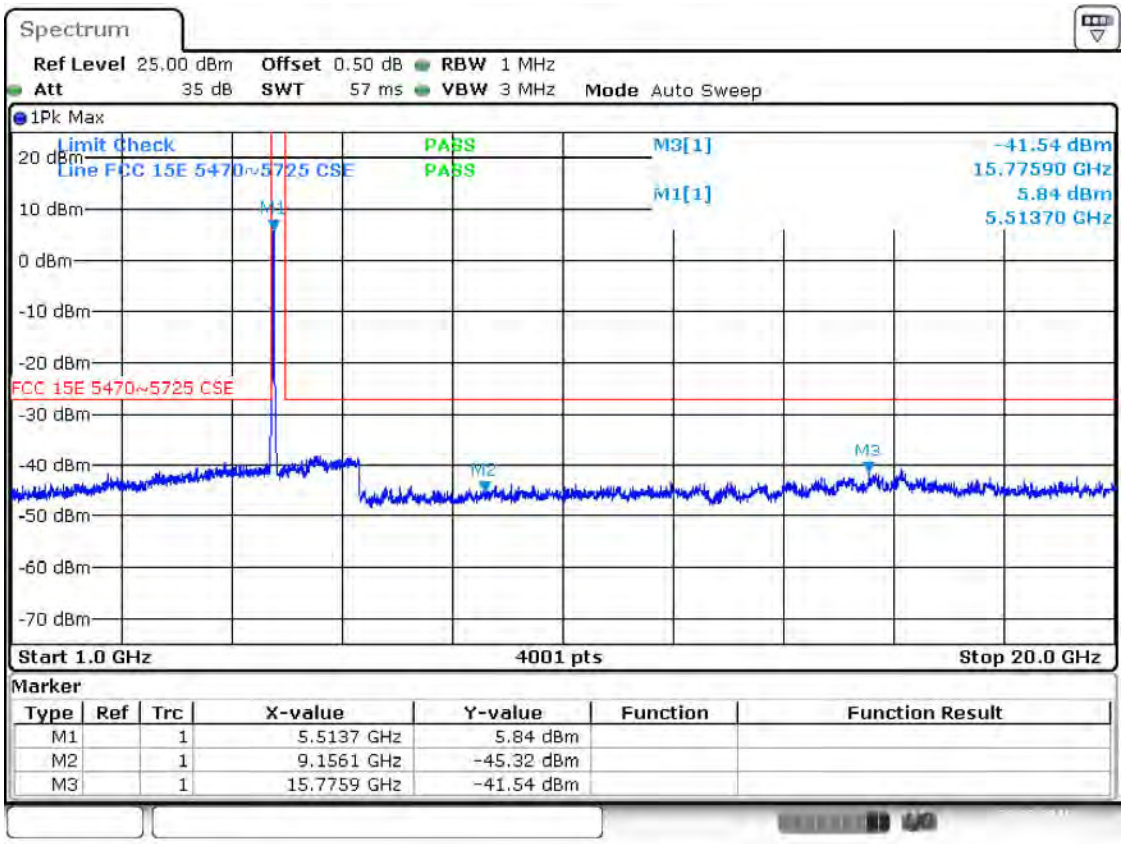
Date: 22.FEB.2016 13:59:09

Band III 11n(HT20) CH140 (1 ~ 20 GHz)



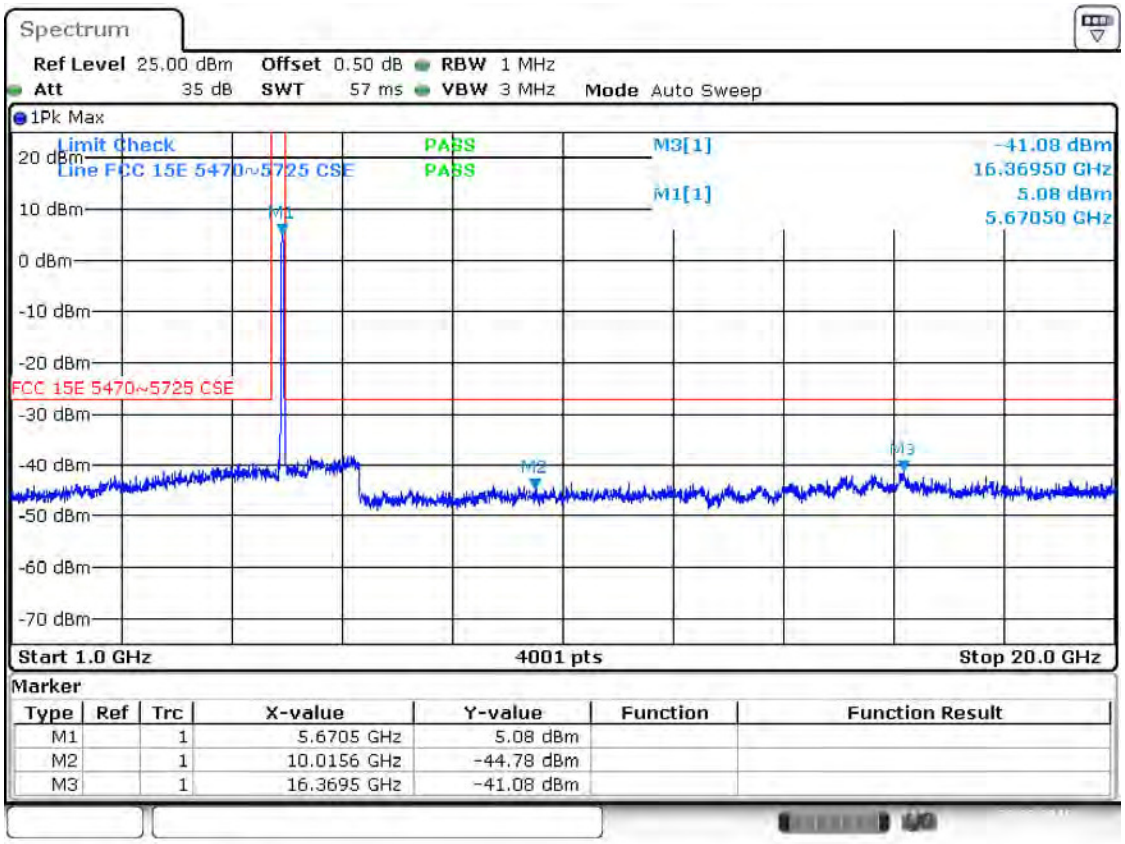
Date: 22.FEB.2016 14:00:20

Band III 11n(HT40) CH102 (1 ~ 20 GHz)



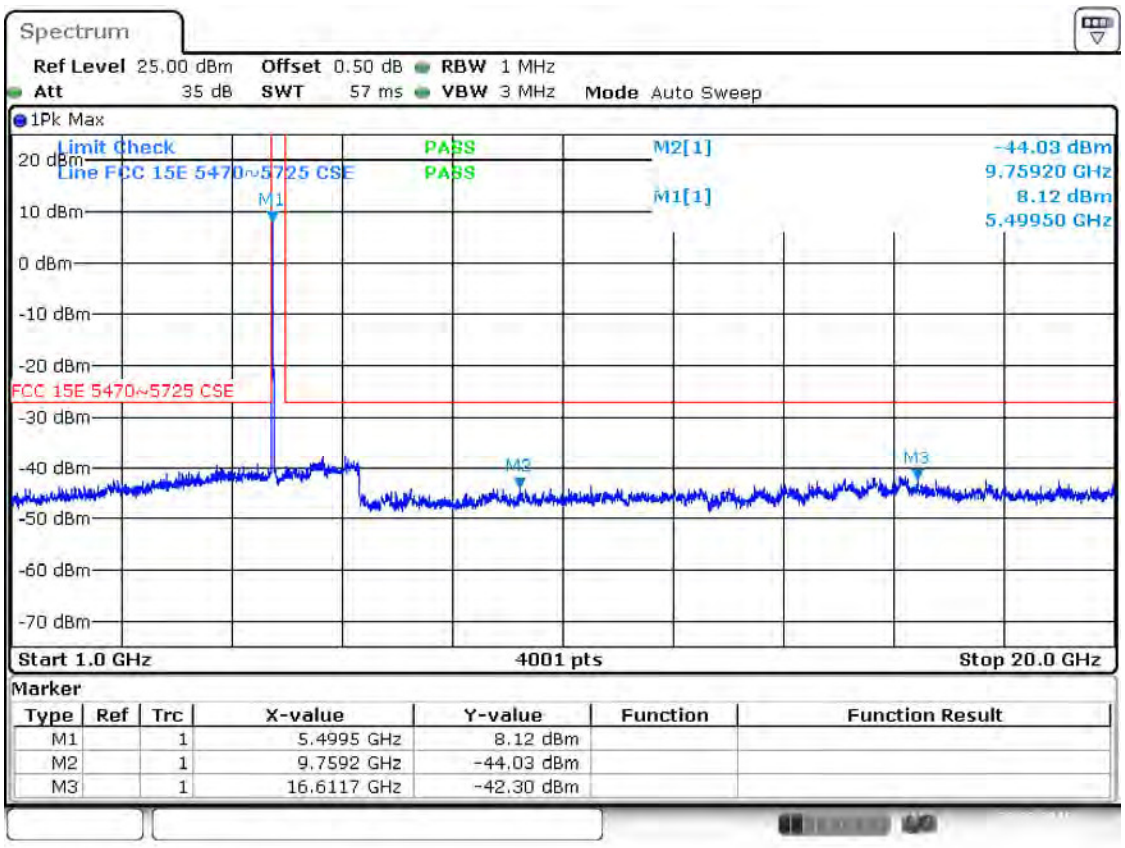
Date: 22.FEB.2016 14:29:12

Band III 11n(HT40) CH134 (1 ~ 20 GHz)



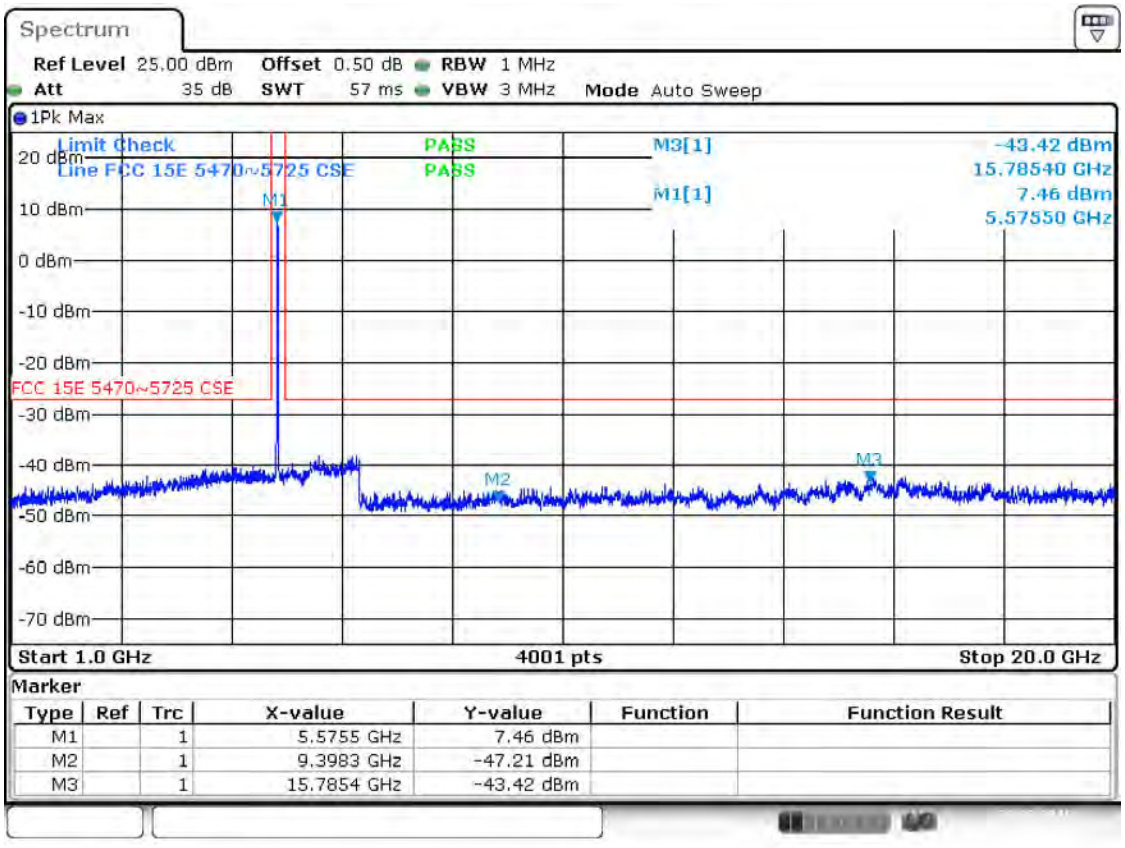
Date: 22.FEB.2016 14:32:18

Band III 11ac(HT20) CH100 (1 ~ 20 GHz)



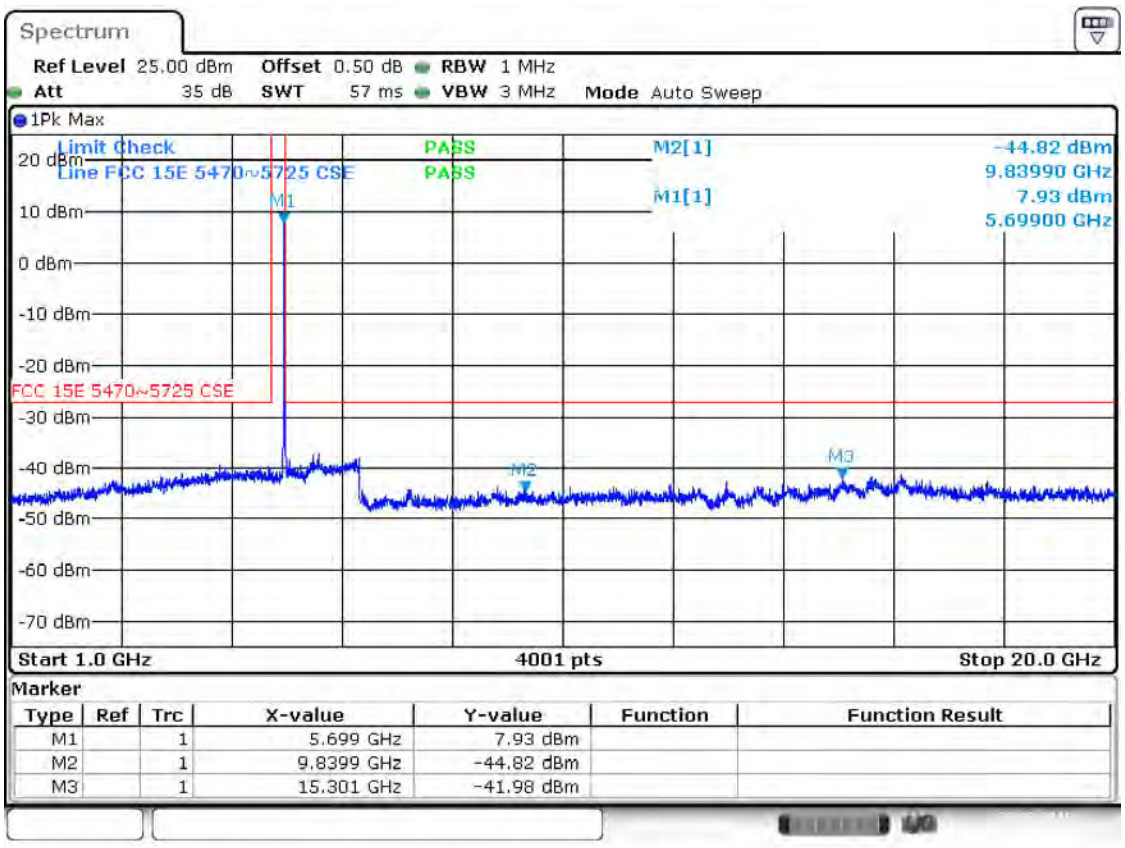
Date: 22.FEB.2016 11:50:26

Band III 11ac(HT20) CH116 (1 ~ 20 GHz)



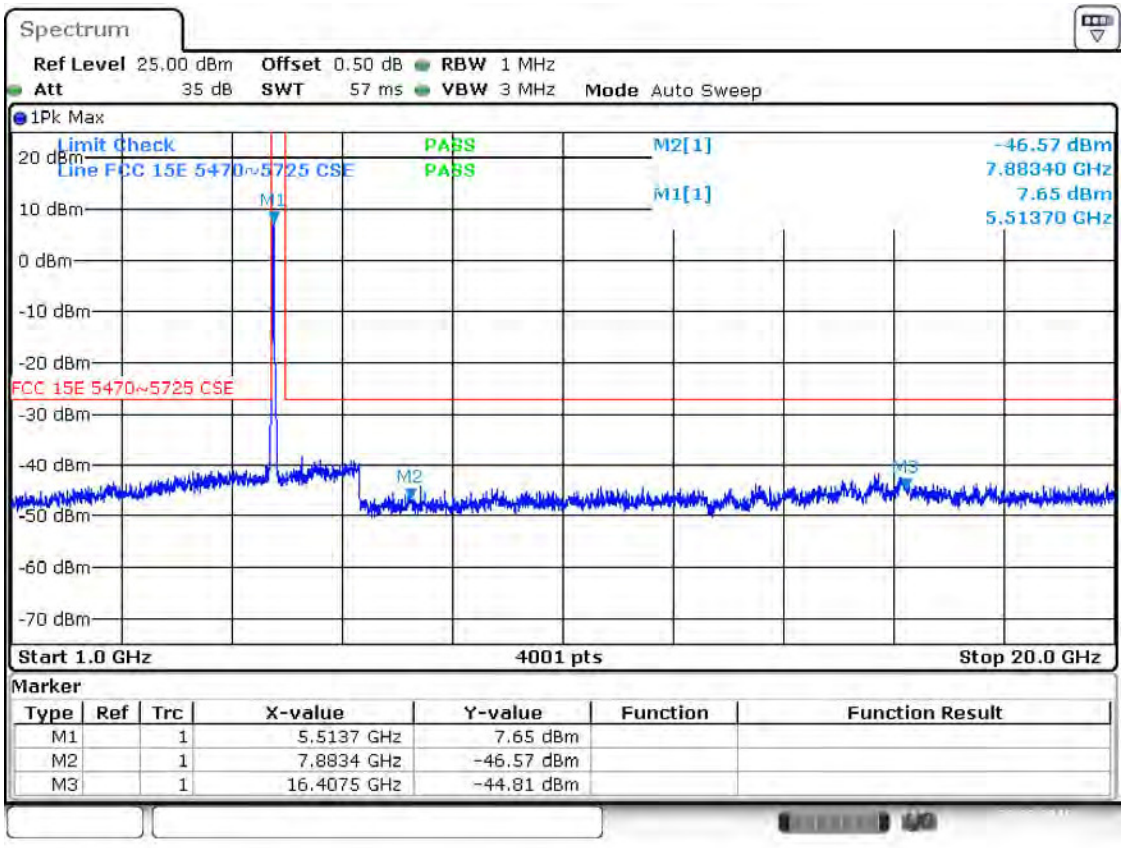
Date: 22.FEB.2016 11:52:31

Band III 11ac(HT20) CH140 (1 ~ 20 GHz)



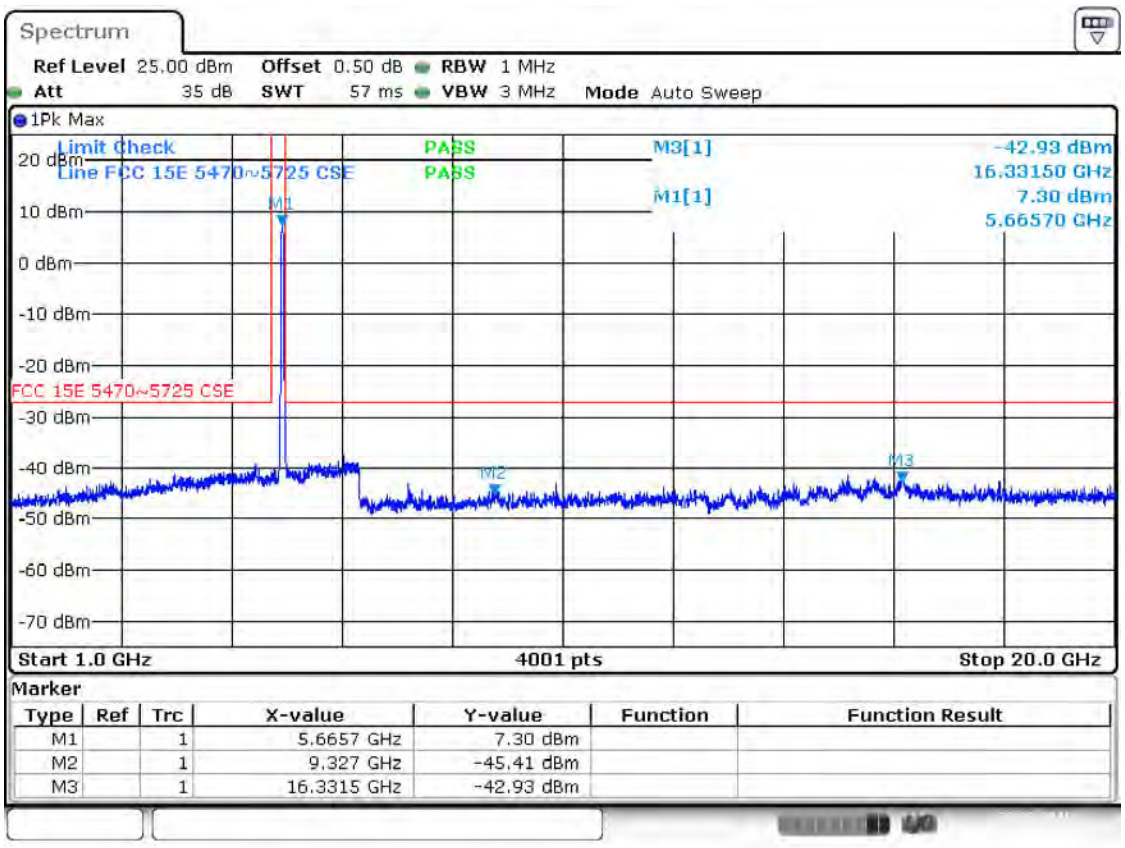
Date: 22.FEB.2016 11:53:38

Band III 11ac(HT40) CH102 (1 ~ 20 GHz)



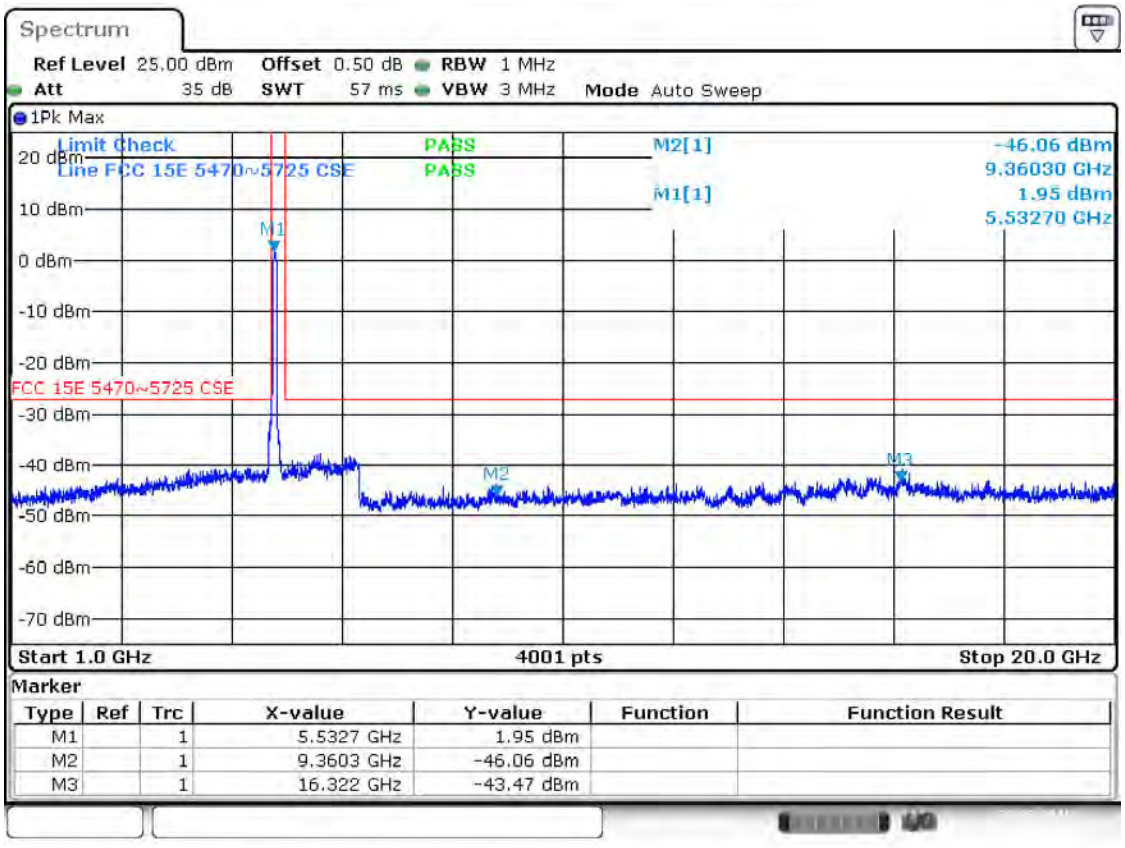
Date: 22.FEB.2016 14:55:51

Band III 11ac(HT40) CH134 (1 ~ 20 GHz)



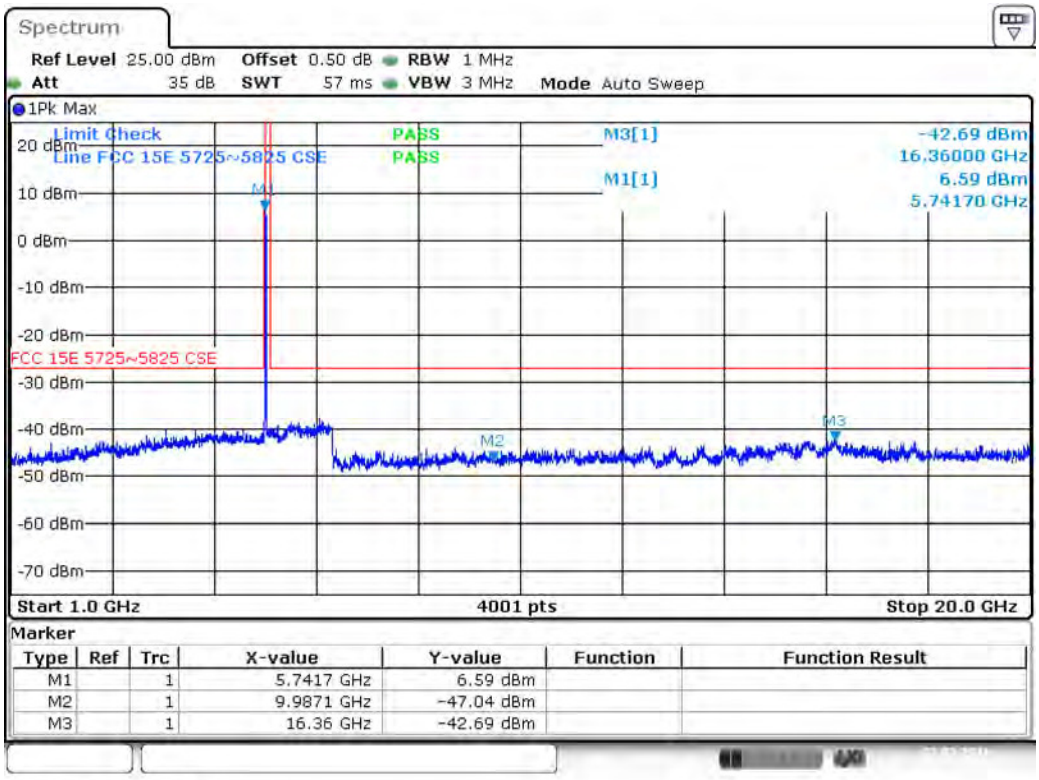
Date: 22.FEB.2016 14:58:22

Band III 11ac(HT80) CH106 (1 ~ 20 GHz)



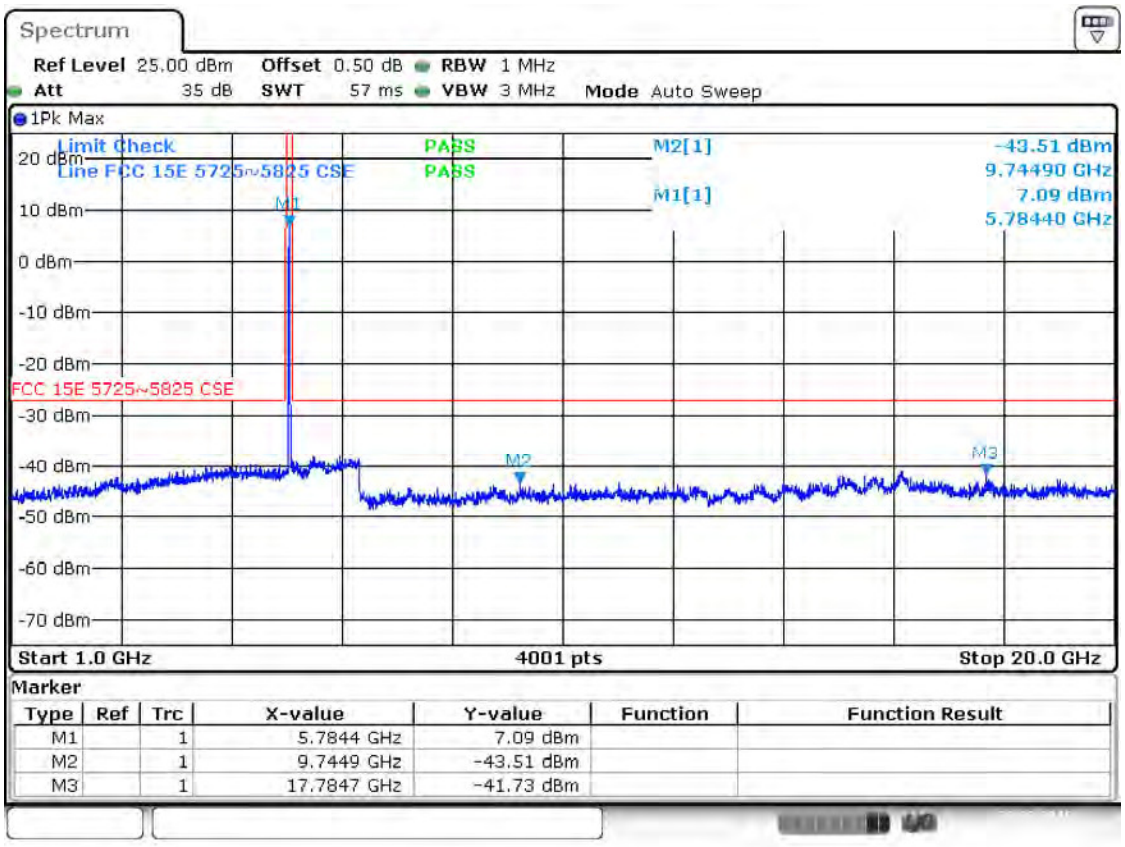
Date: 22.FEB.2016 15:12:16

Band IV 11a CH149 (1 ~ 20 GHz)



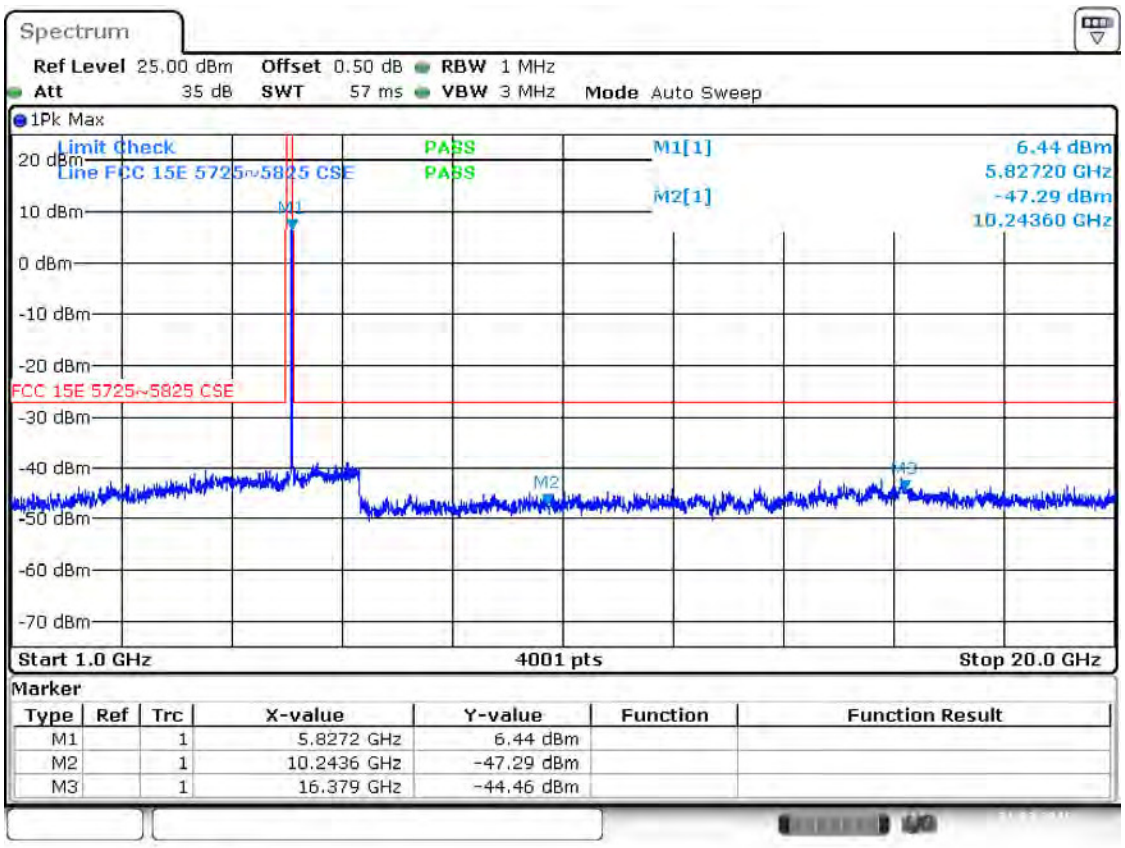
Date: 22.FEB.2016 11:25:48

Band IV 11a CH157 (1 ~ 20 GHz)



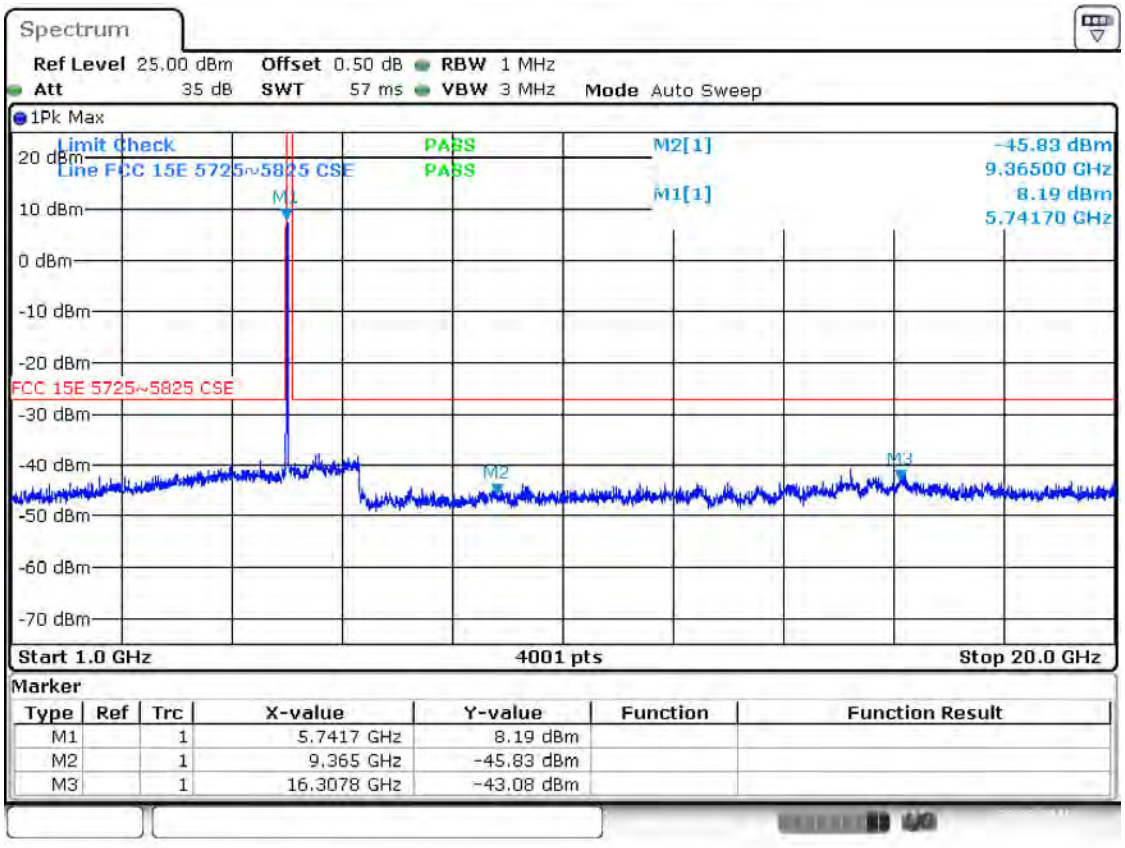
Date: 22.FEB.2016 11:27:06

Band IV 11a CH165 (1 ~ 20 GHz)



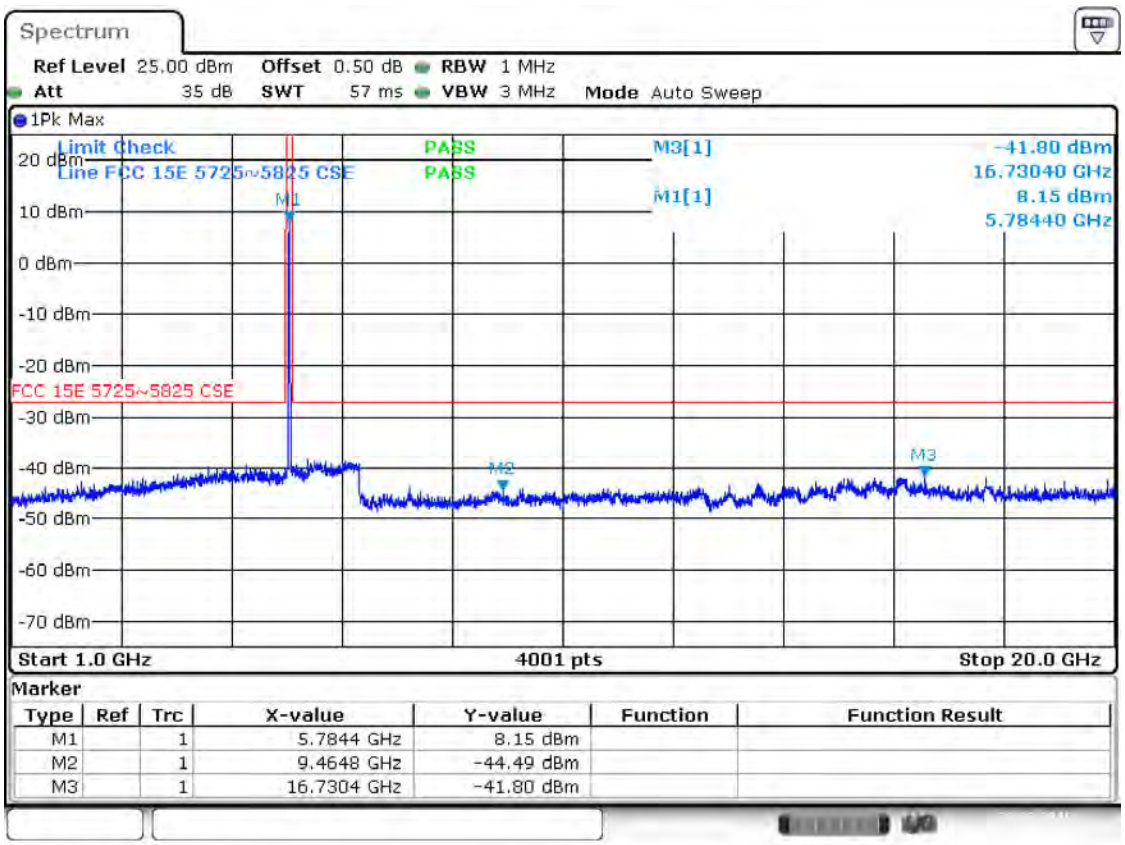
Date: 31.MAR.2016 20:30:27

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



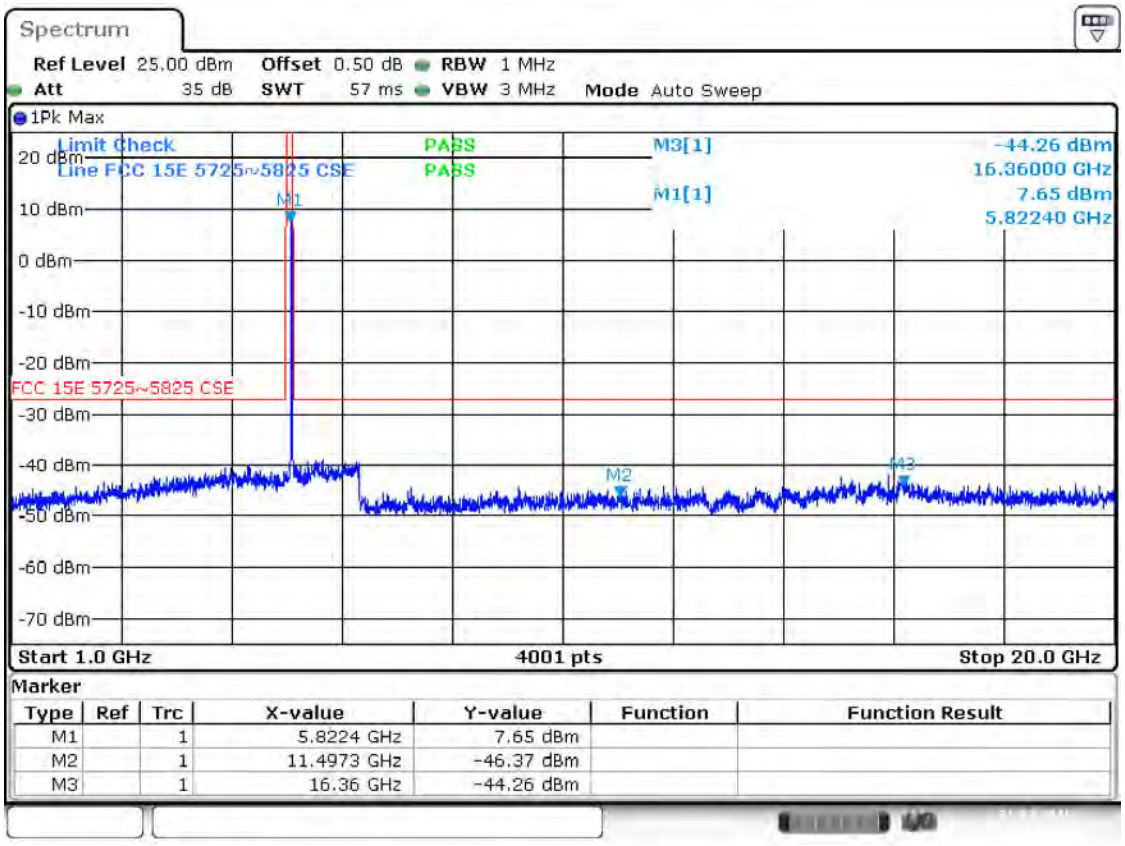
Date: 22.FEB.2016 14:03:38

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



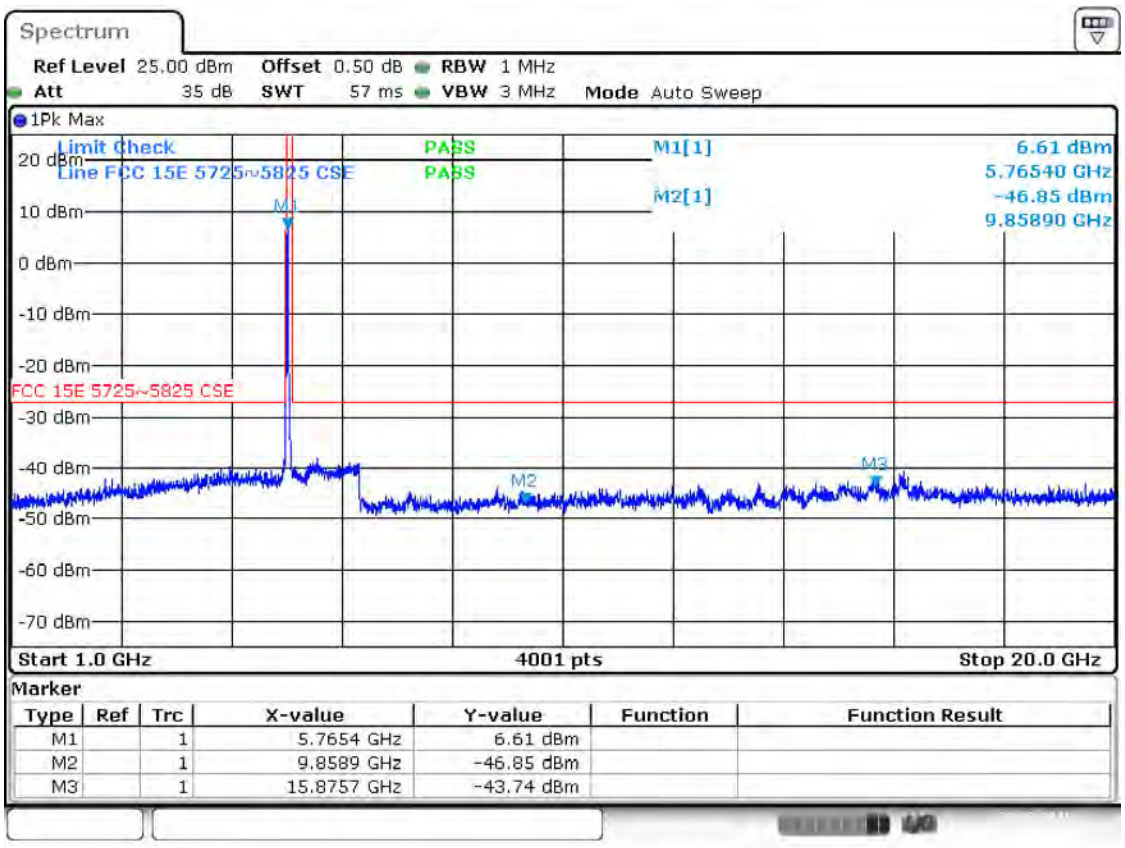
Date: 22.FEB.2016 14:04:39

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



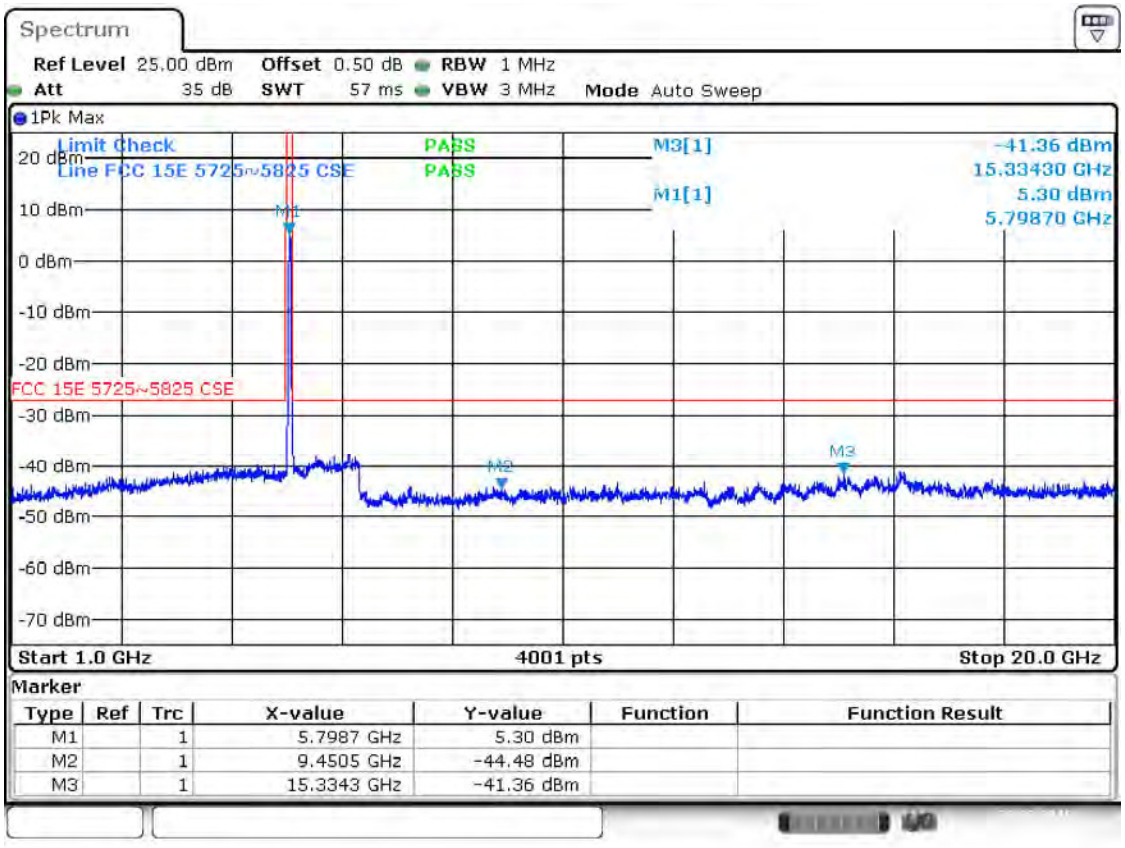
Date: 31.MAR.2016 20:29:07

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



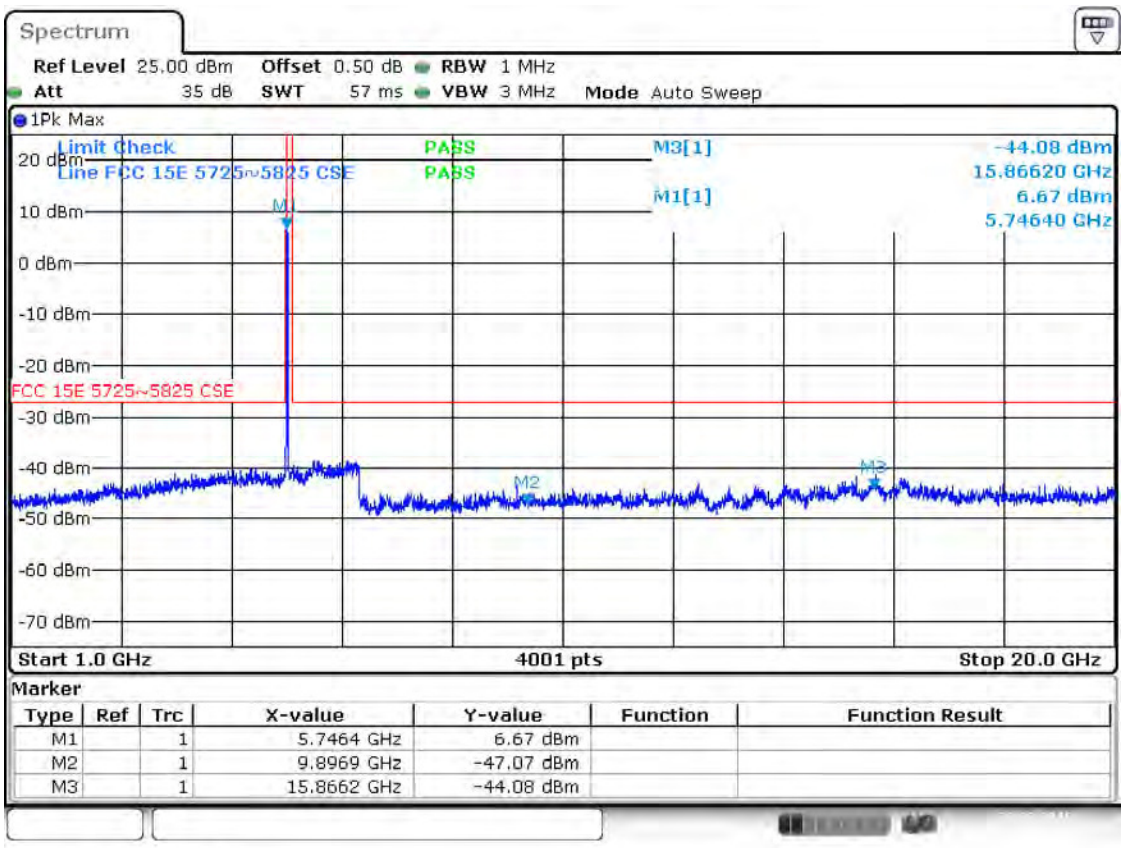
Date: 22.FEB.2016 15:45:46

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



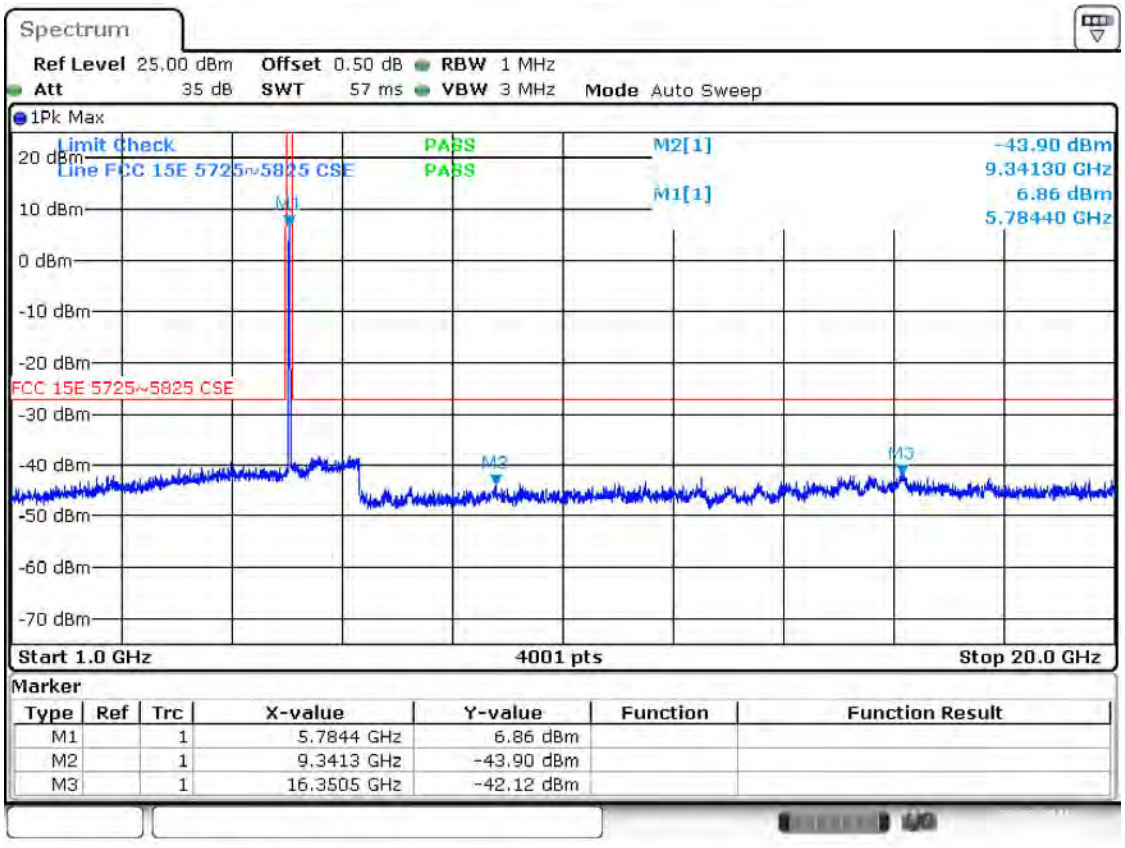
Date: 22.FEB.2016 14:35:58

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



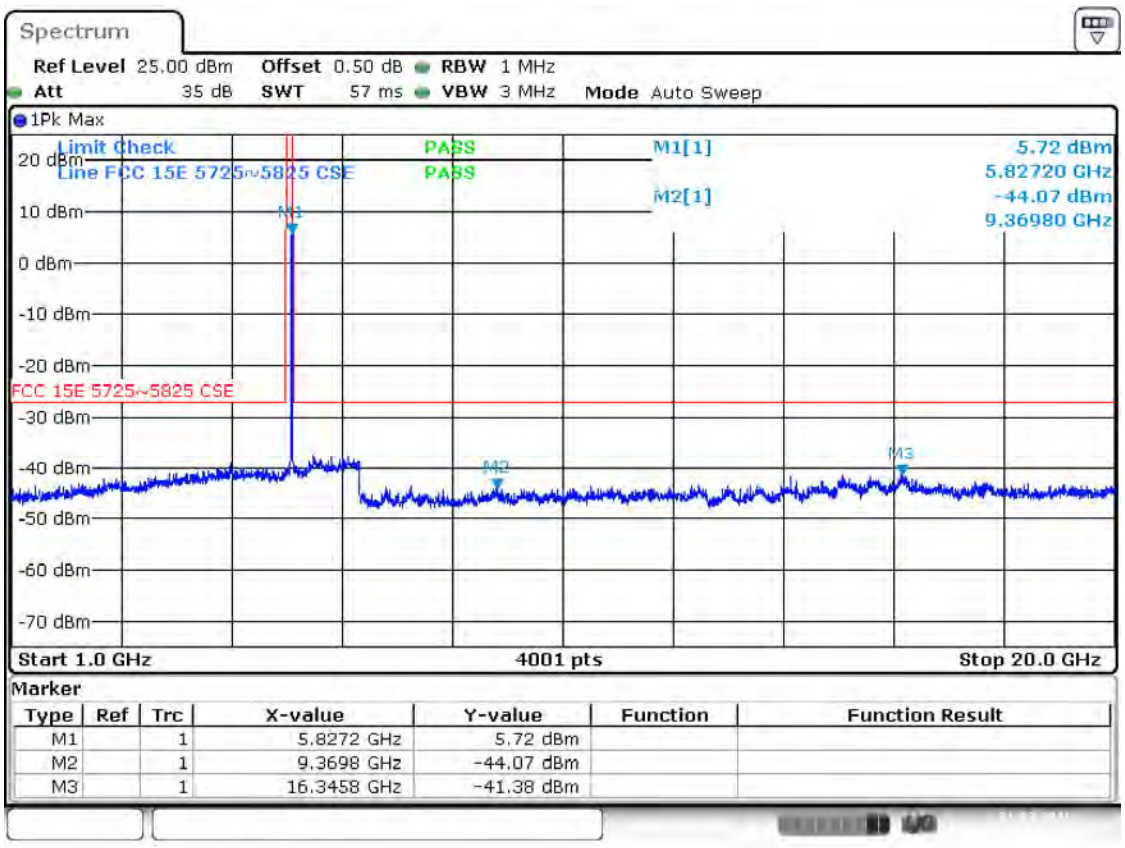
Date: 22.FEB.2016 11:55:40

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



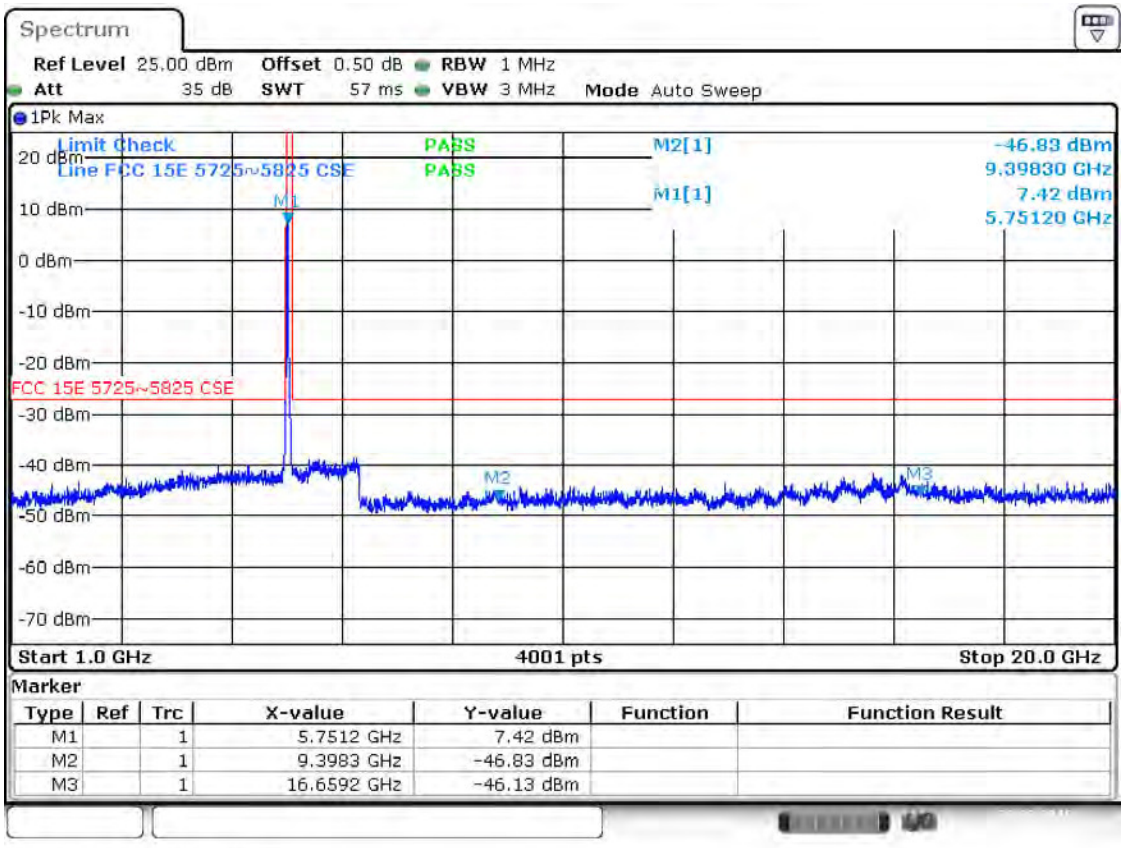
Date: 22.FEB.2016 11:56:37

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



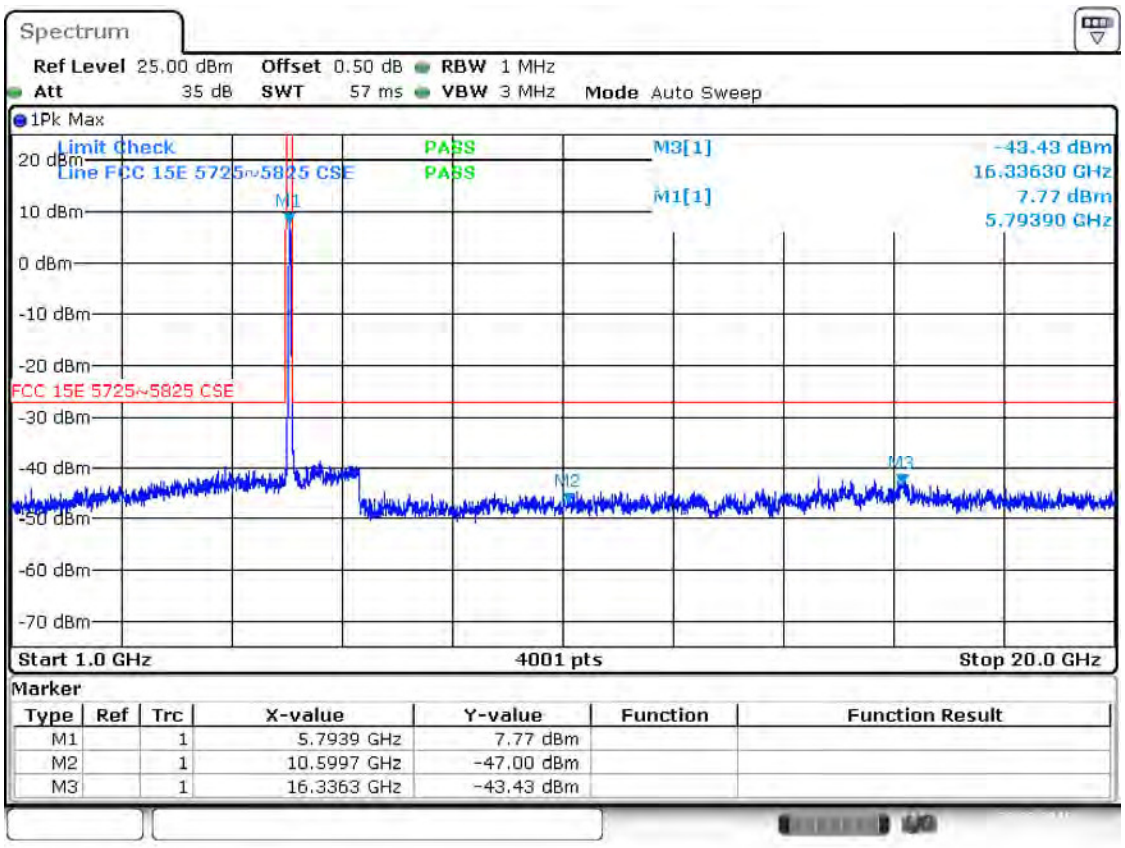
Date: 31.MAR.2016 20:31:40

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



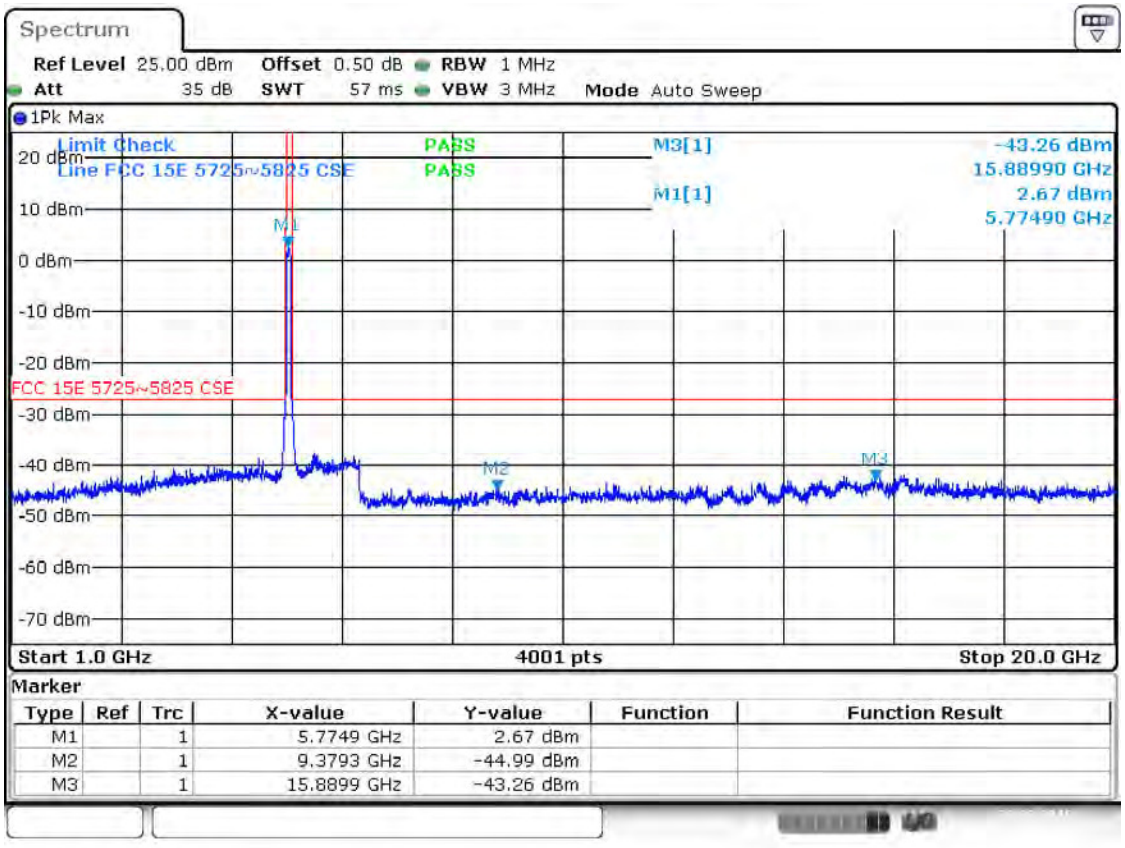
Date: 22.FEB.2016 15:00:12

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



Date: 22.FEB.2016 15:01:10

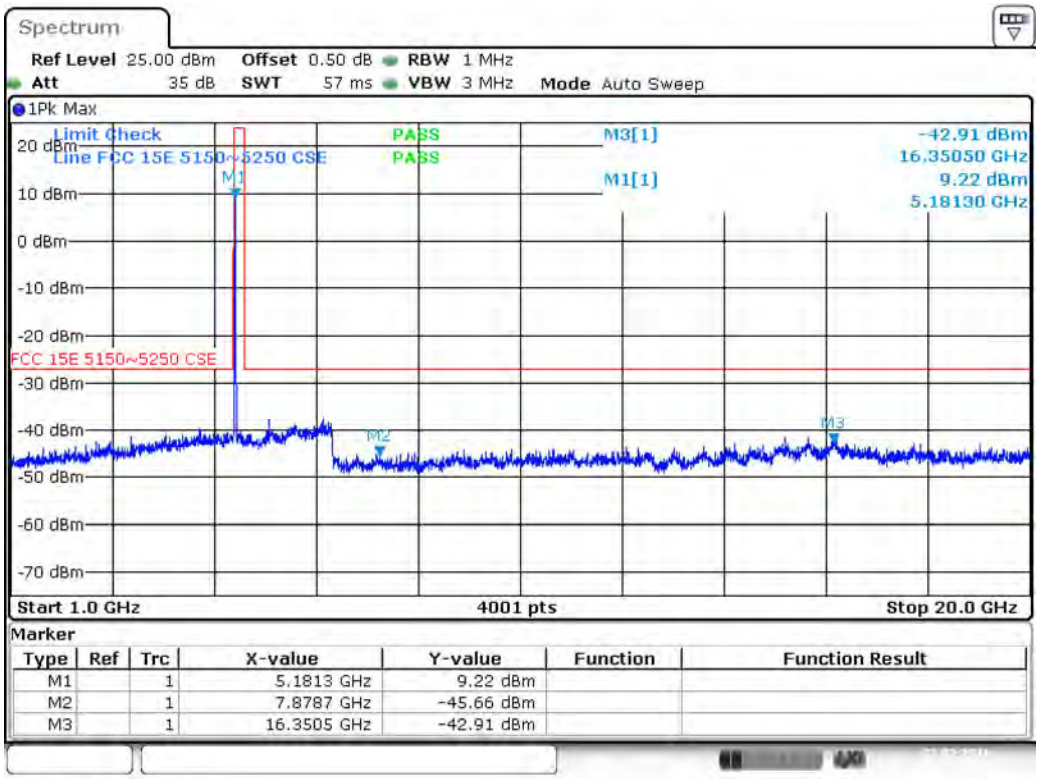
Band IV 11ac(HT80) CH155 (1 ~ 20 GHz)



Date: 22.FEB.2016 15:13:31

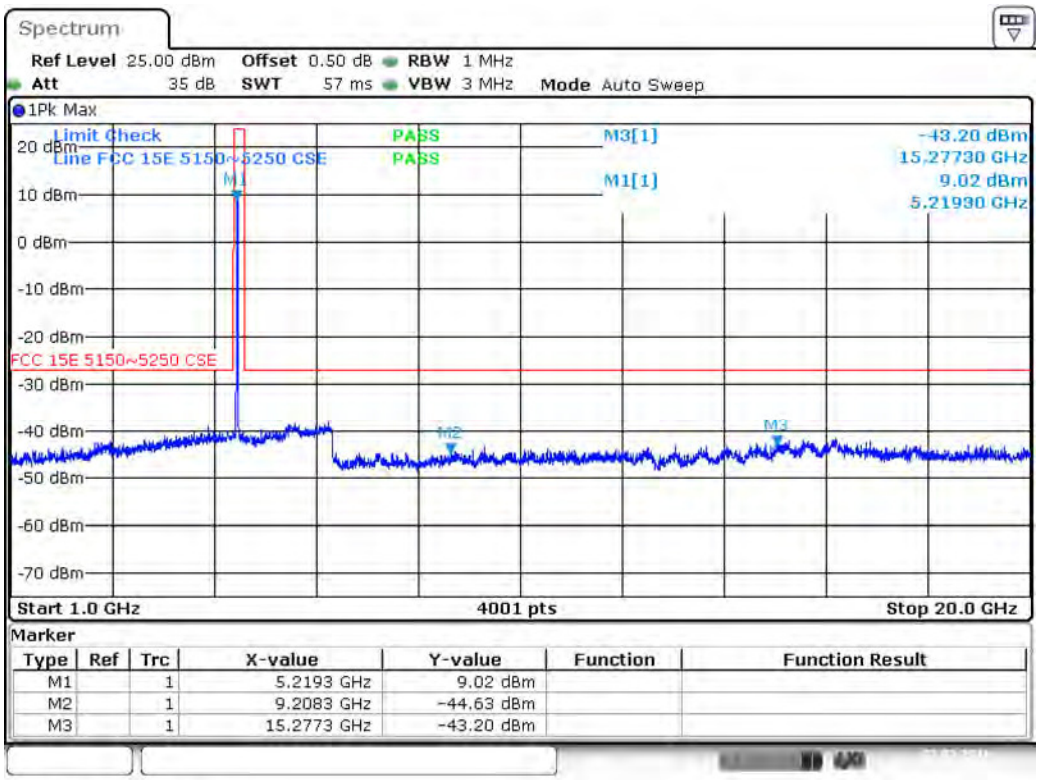
ANT 1

Band I 11a CH36 (1 ~ 20 GHz)



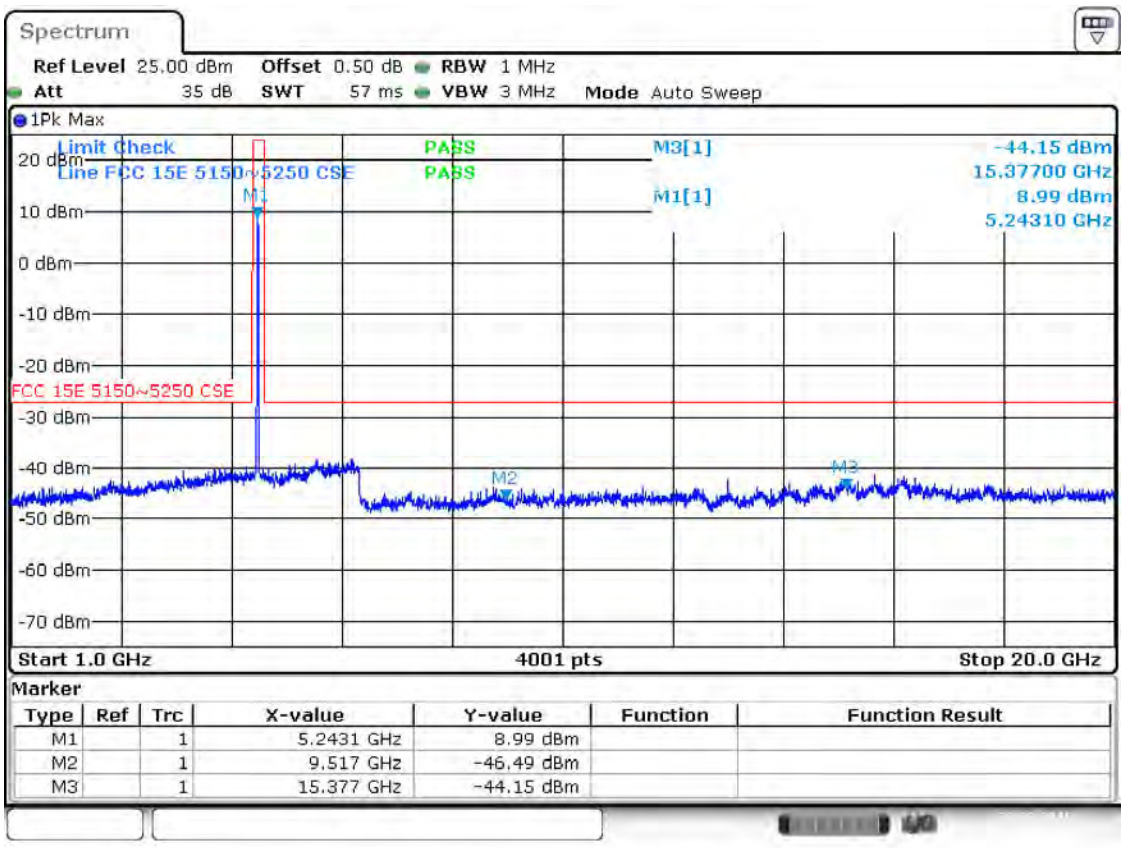
Date: 22.FEB.2016 11:07:43

Band I 11a CH44 (1 ~ 20 GHz)



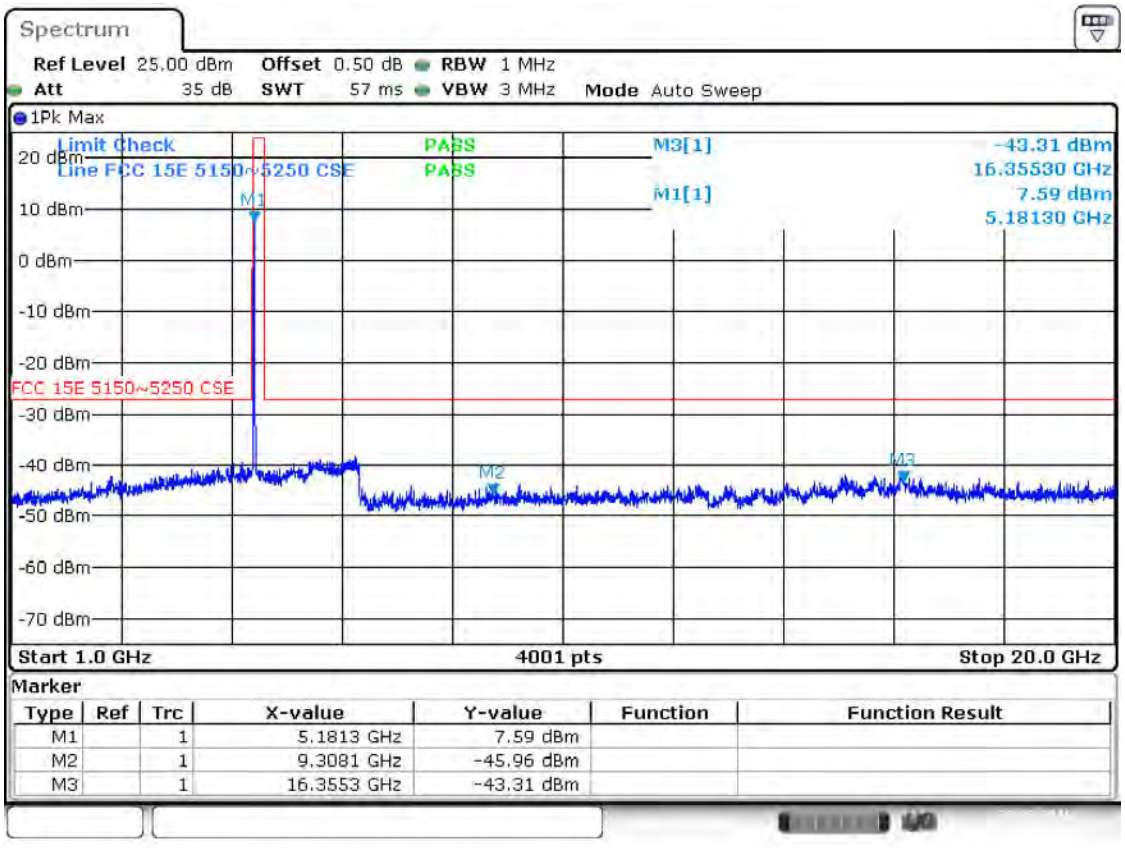
Date: 22.FEB.2016 11:08:49

Band I 11a CH48 (1 ~ 20 GHz)



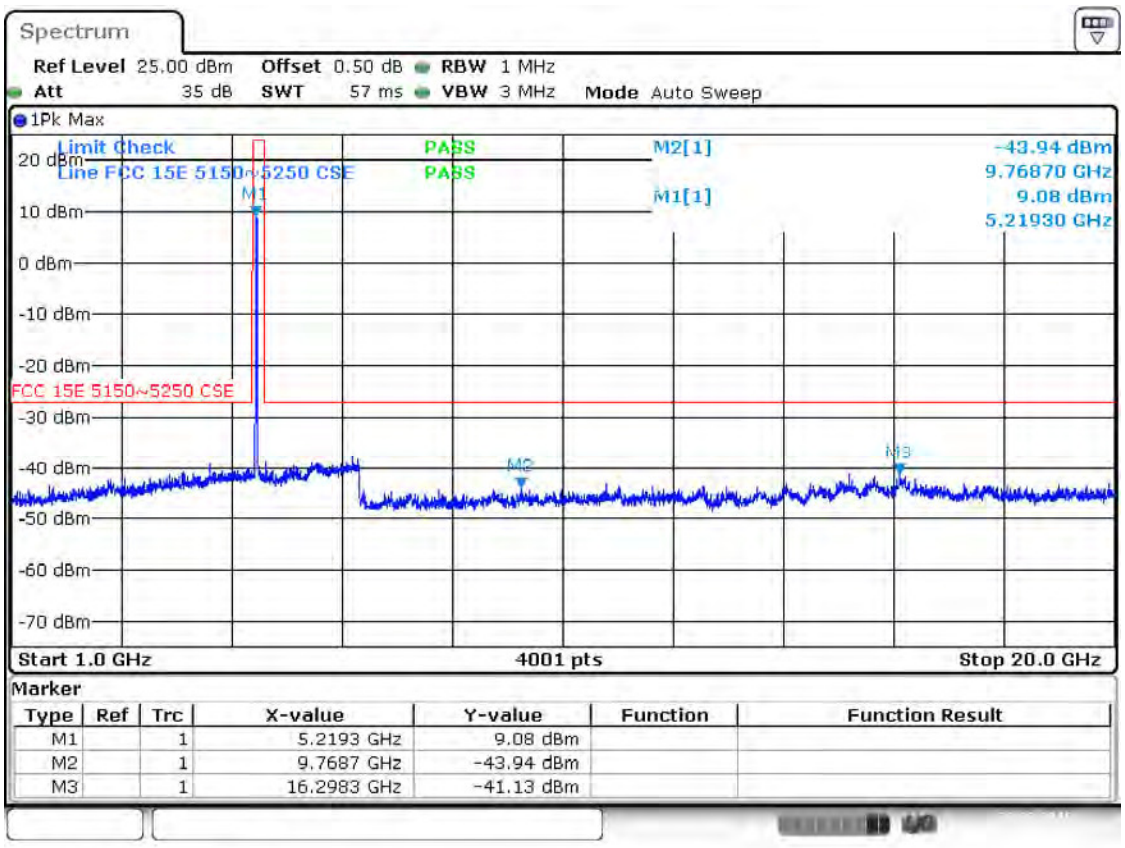
Date: 22.FEB.2016 11:11:21

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



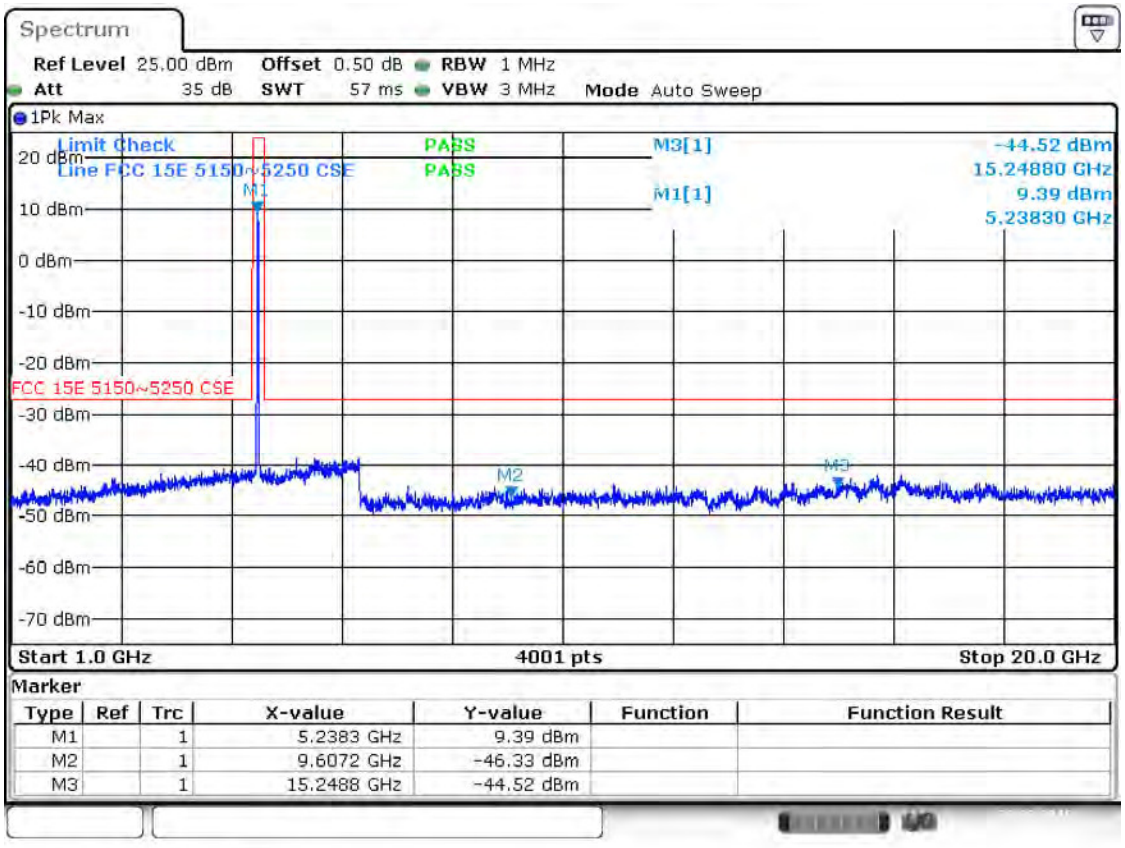
Date: 22.FEB.2016 13:44:53

Band I 11n(HT20) CH44 (1 ~ 20 GHz)



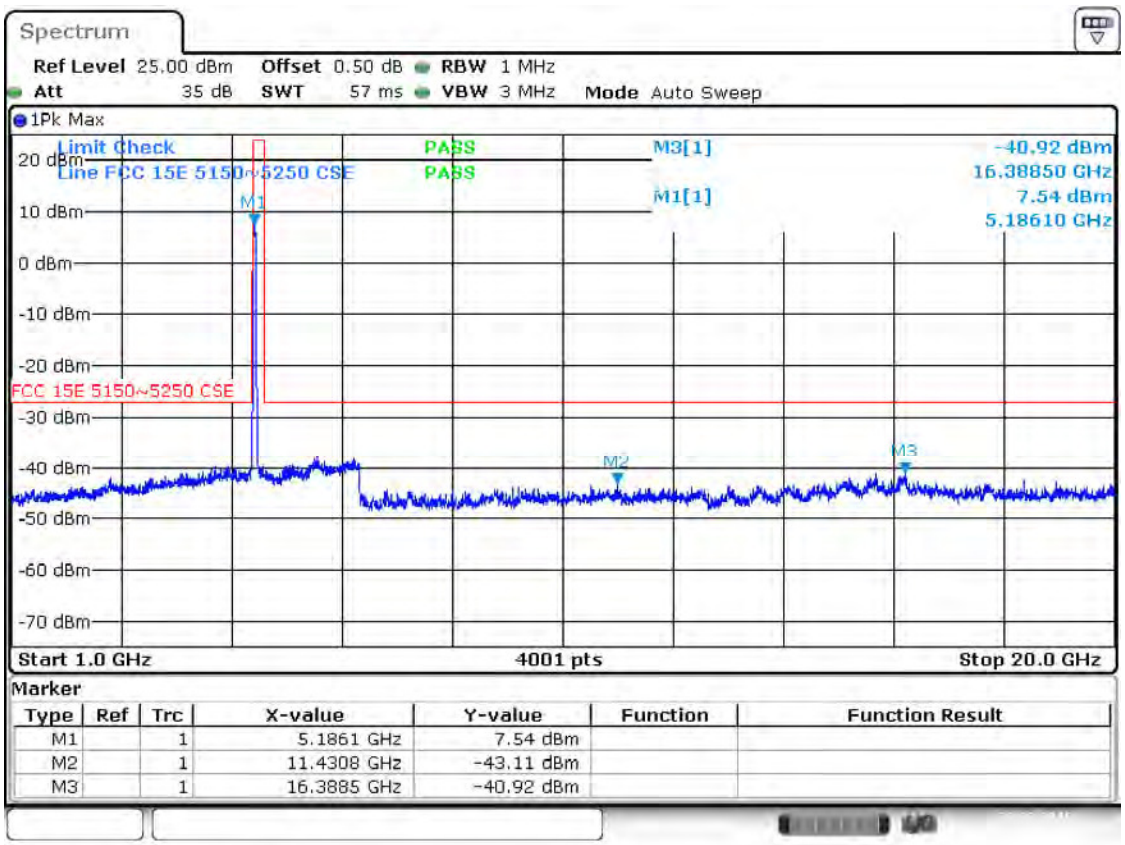
Date: 22.FEB.2016 13:46:37

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



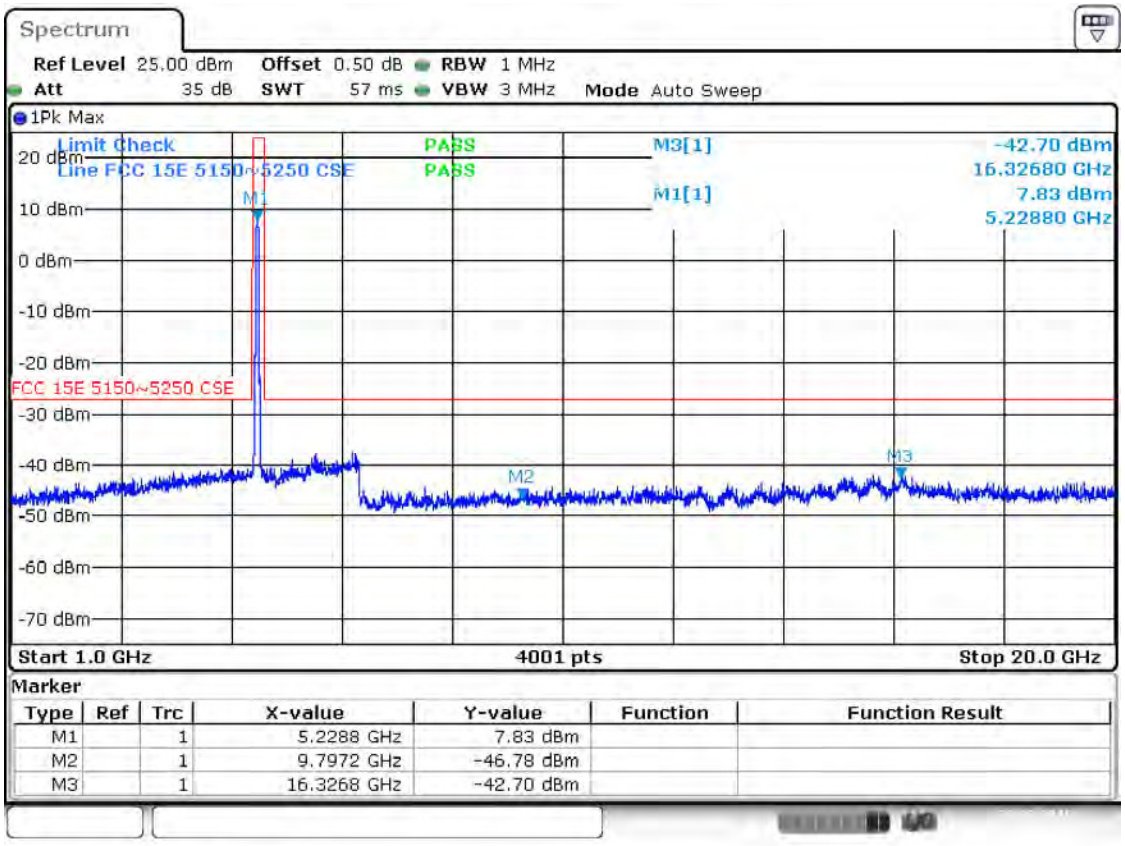
Date: 22.FEB.2016 13:49:40

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



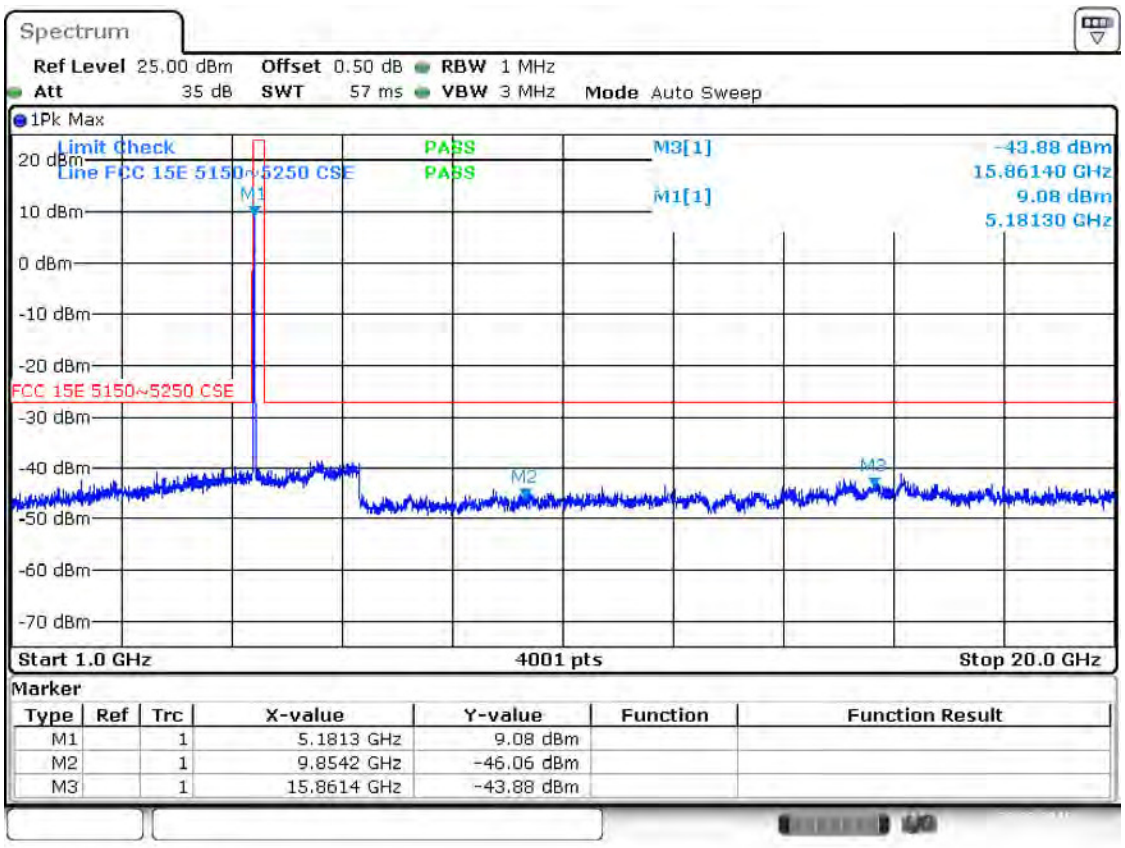
Date: 22.FEB.2016 14:10:55

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



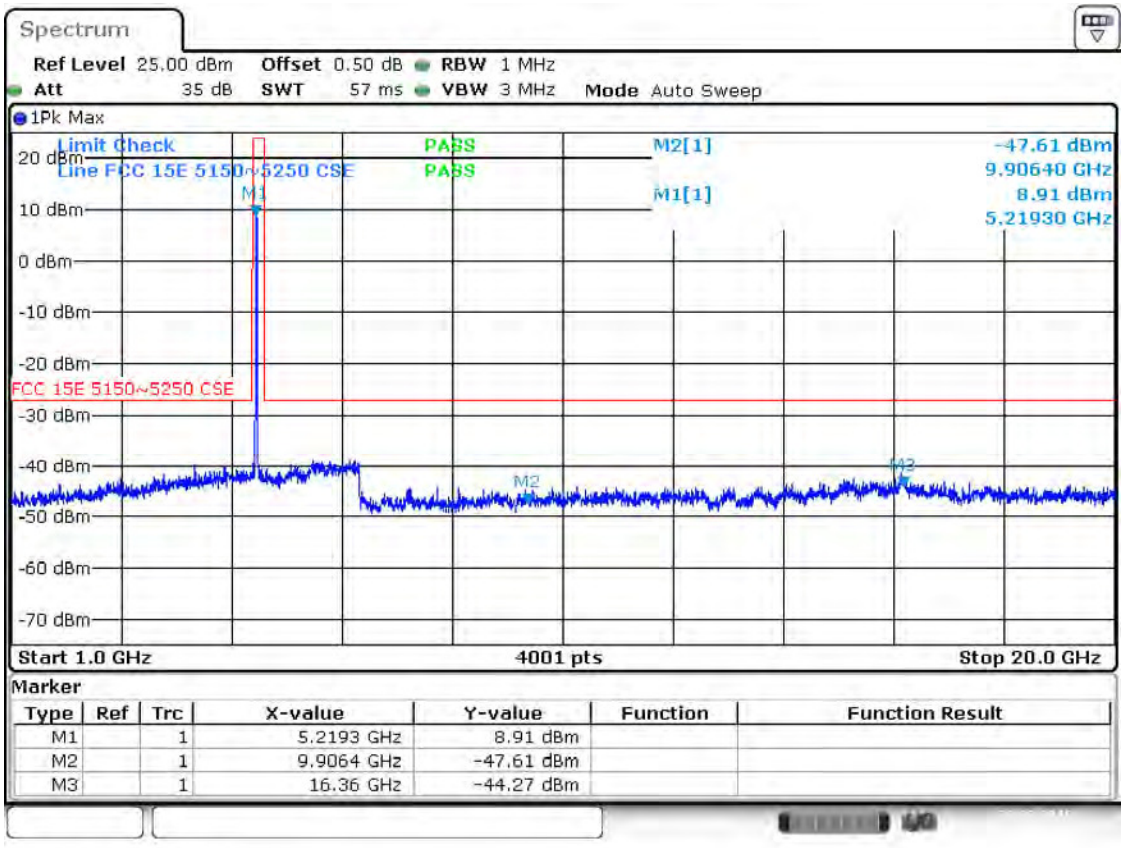
Date: 22.FEB.2016 14:25:40

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



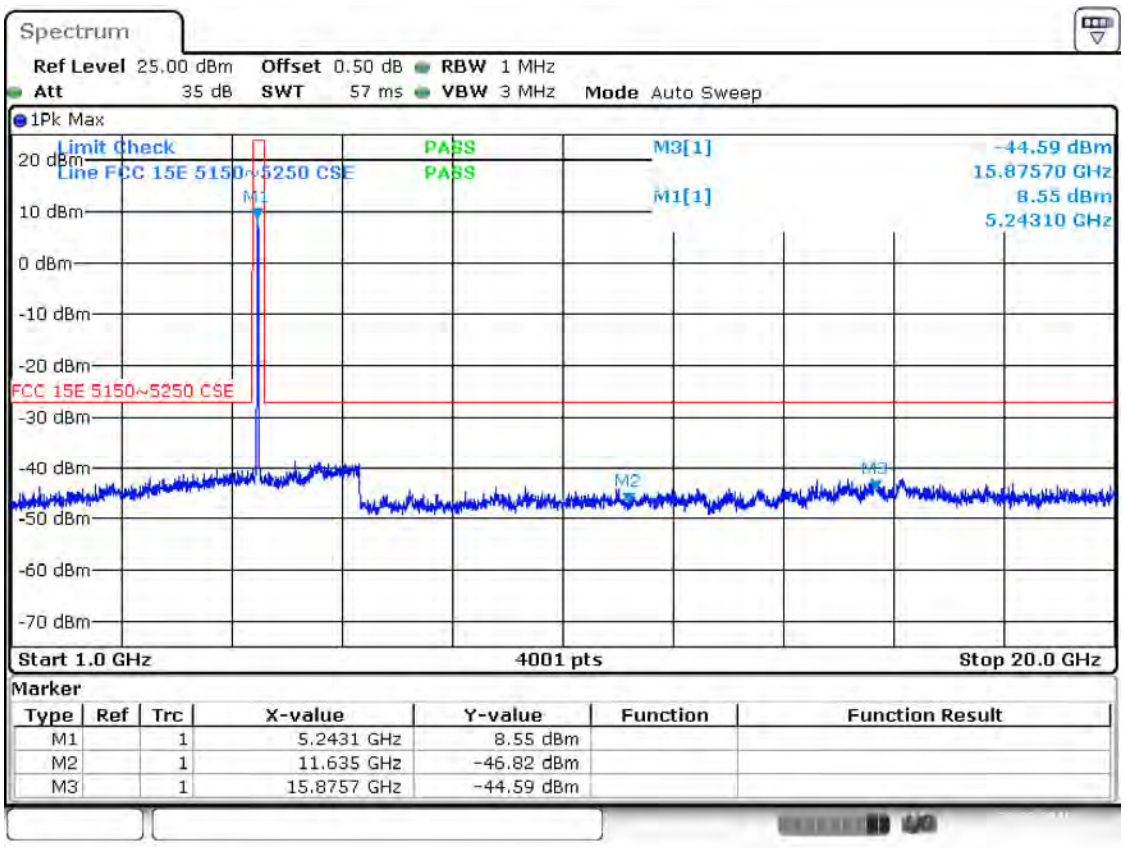
Date: 22.FEB.2016 11:32:10

Band I 11ac(HT20) CH44 (1 ~ 20 GHz)



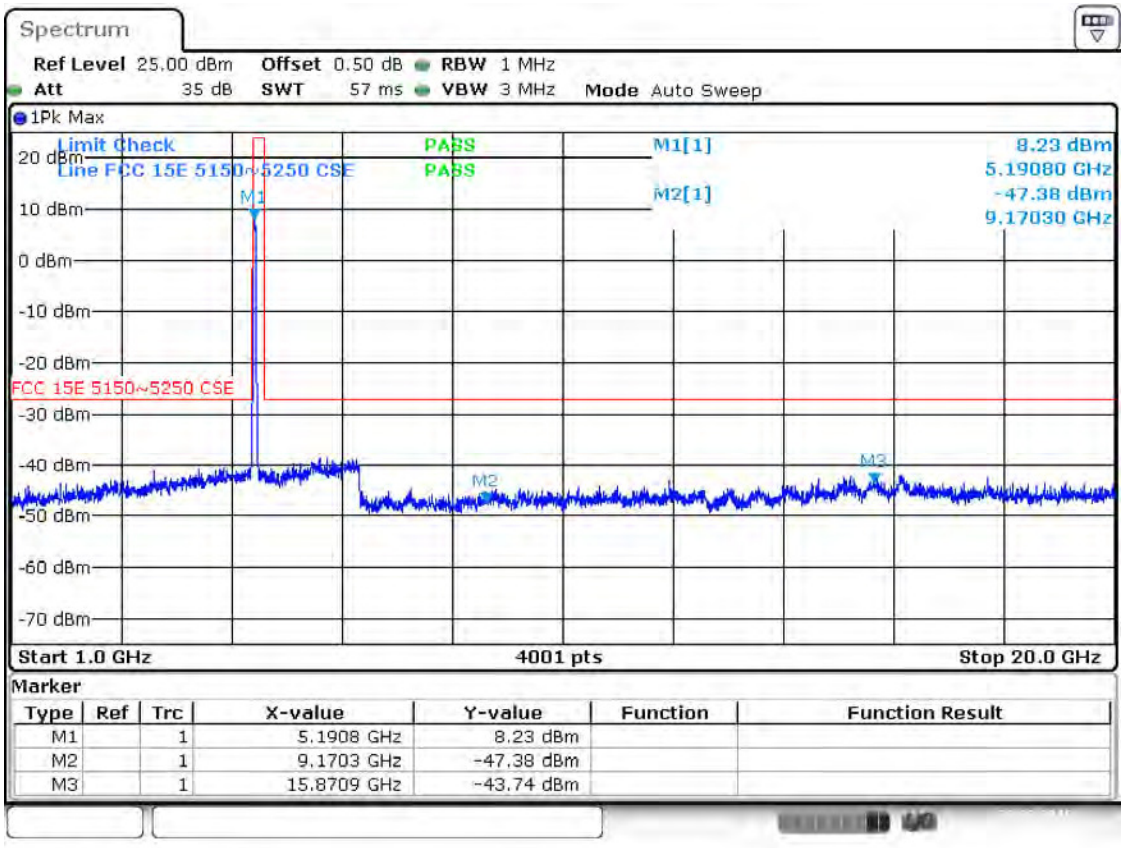
Date: 22.FEB.2016 11:33:01

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



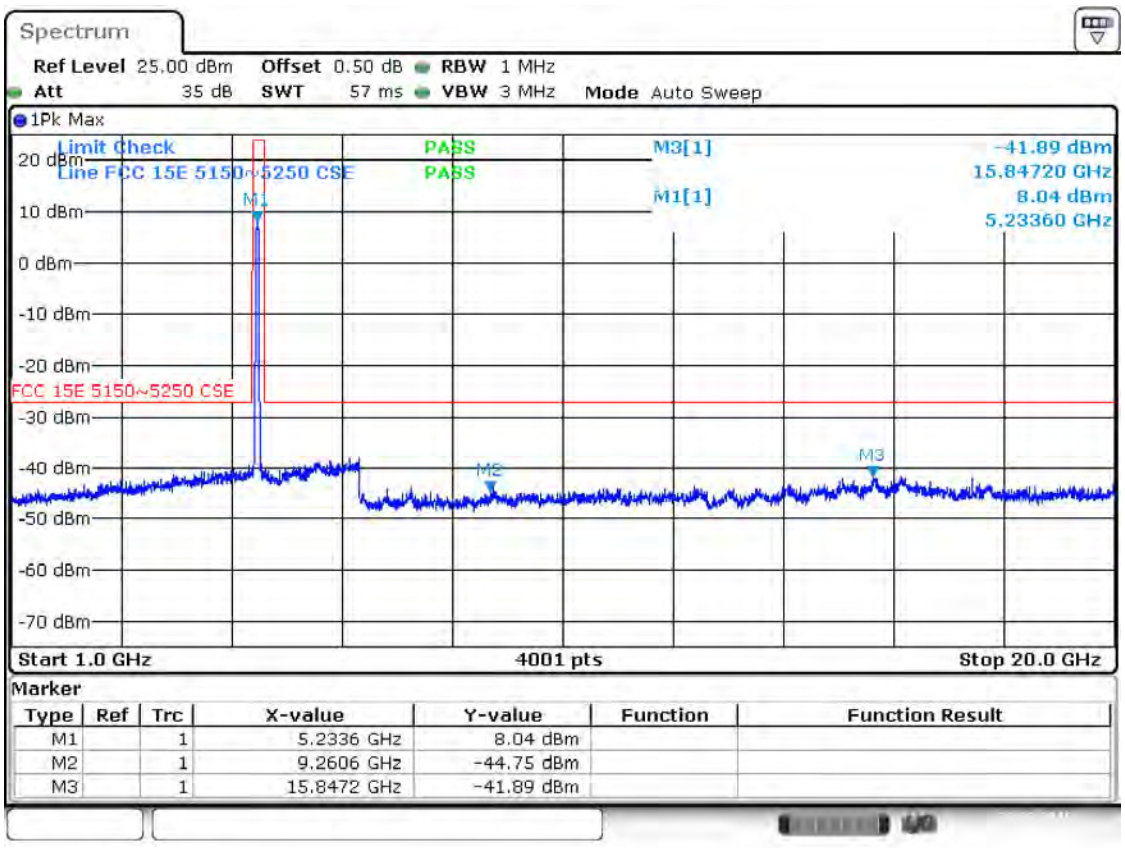
Date: 22.FEB.2016 11:35:22

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



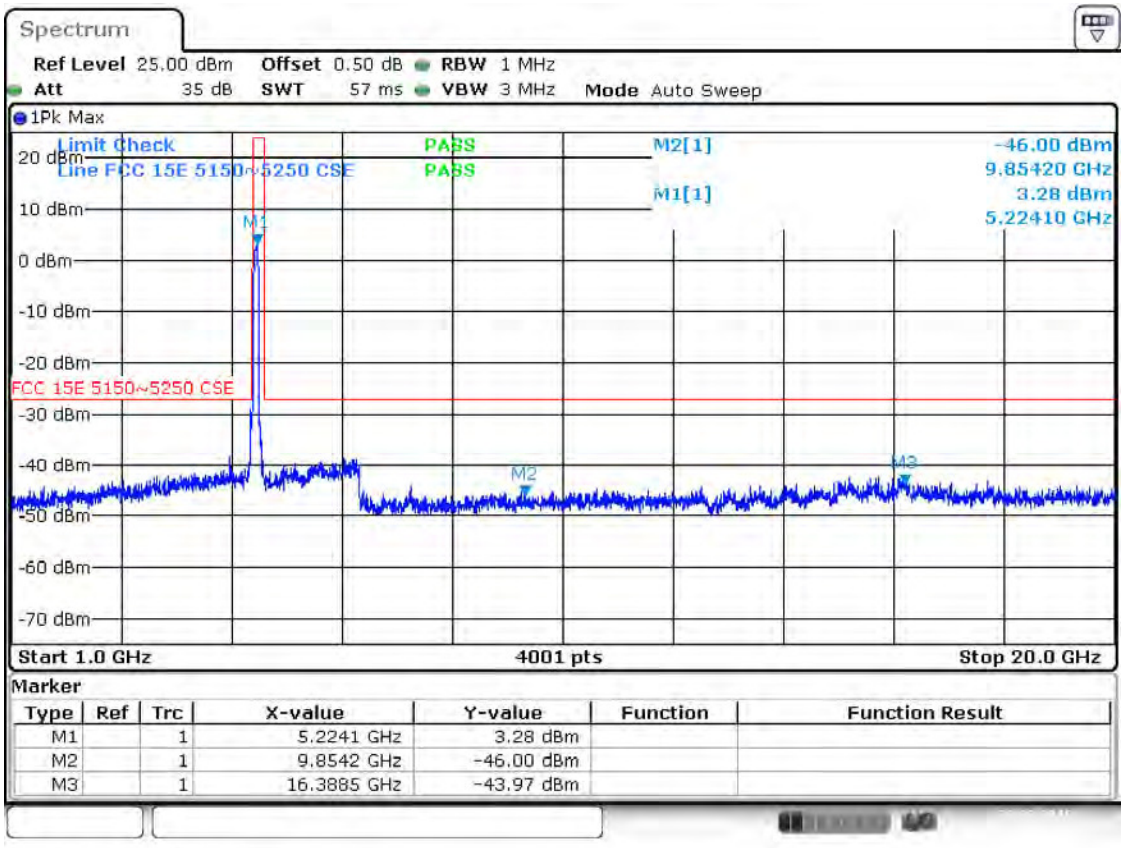
Date: 22.FEB.2016 14:49:07

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



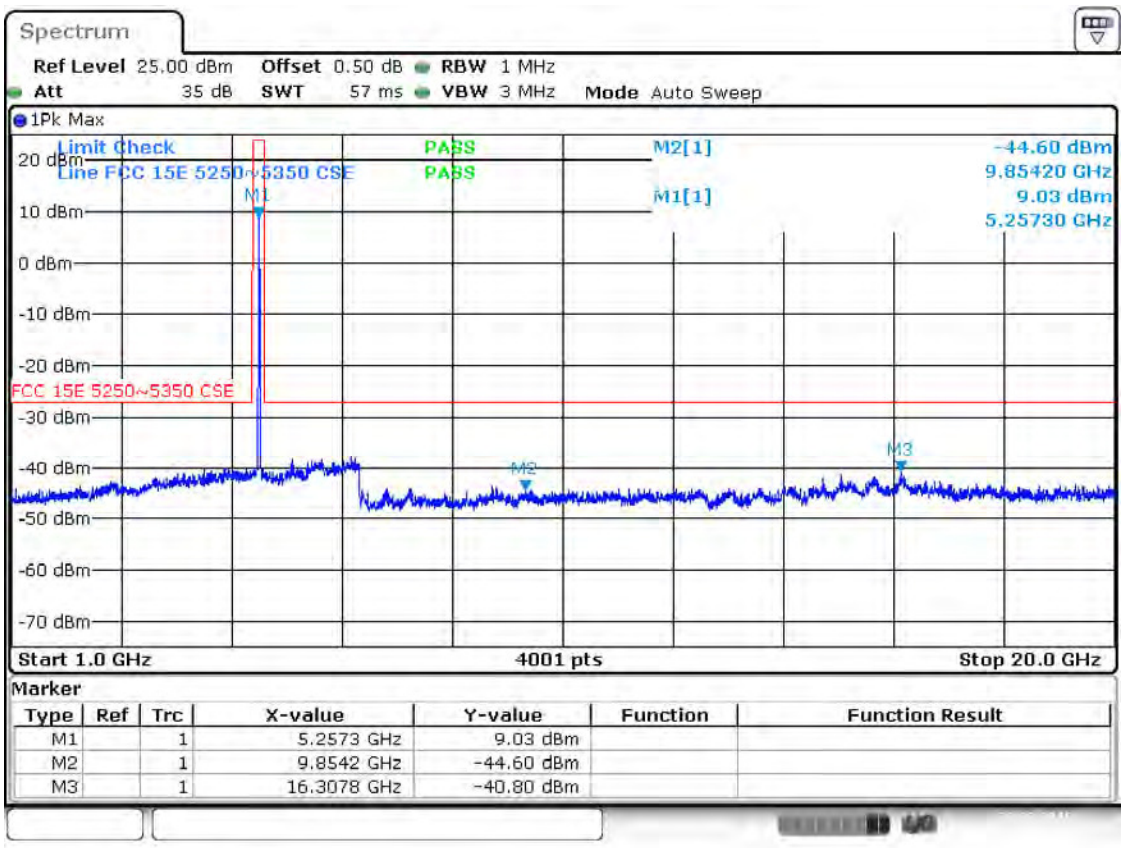
Date: 22.FEB.2016 14:50:12

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



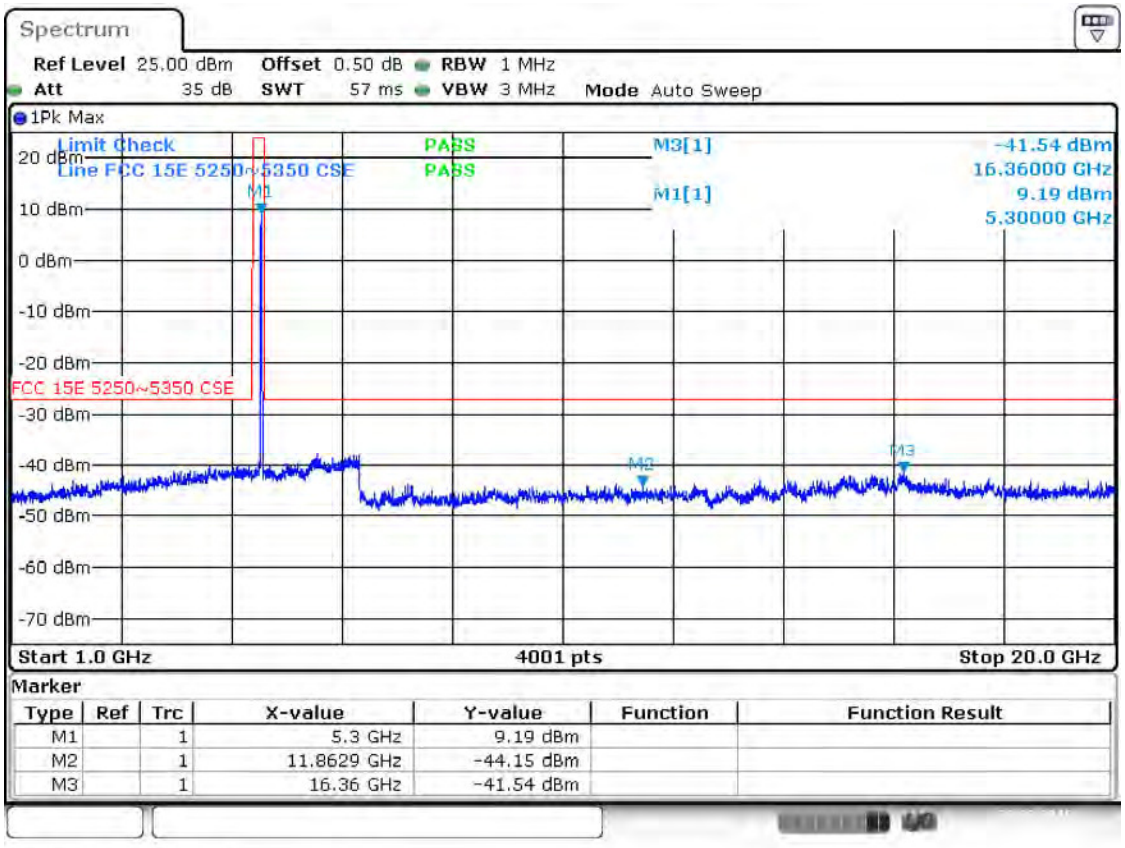
Date: 22.FEB.2016 15:08:32

Band II 11a CH52 (1 ~ 20 GHz)



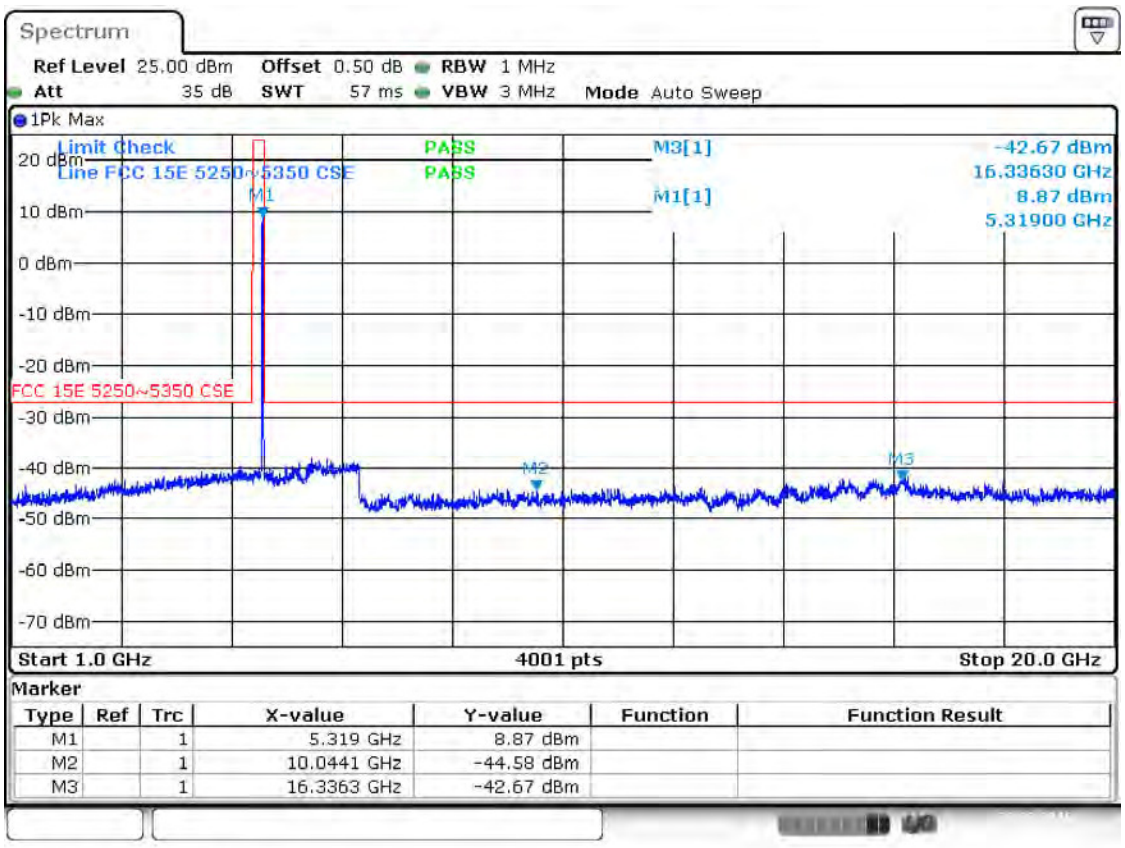
Date: 22.FEB.2016 11:12:47

Band II 11a CH60 (1 ~ 20 GHz)



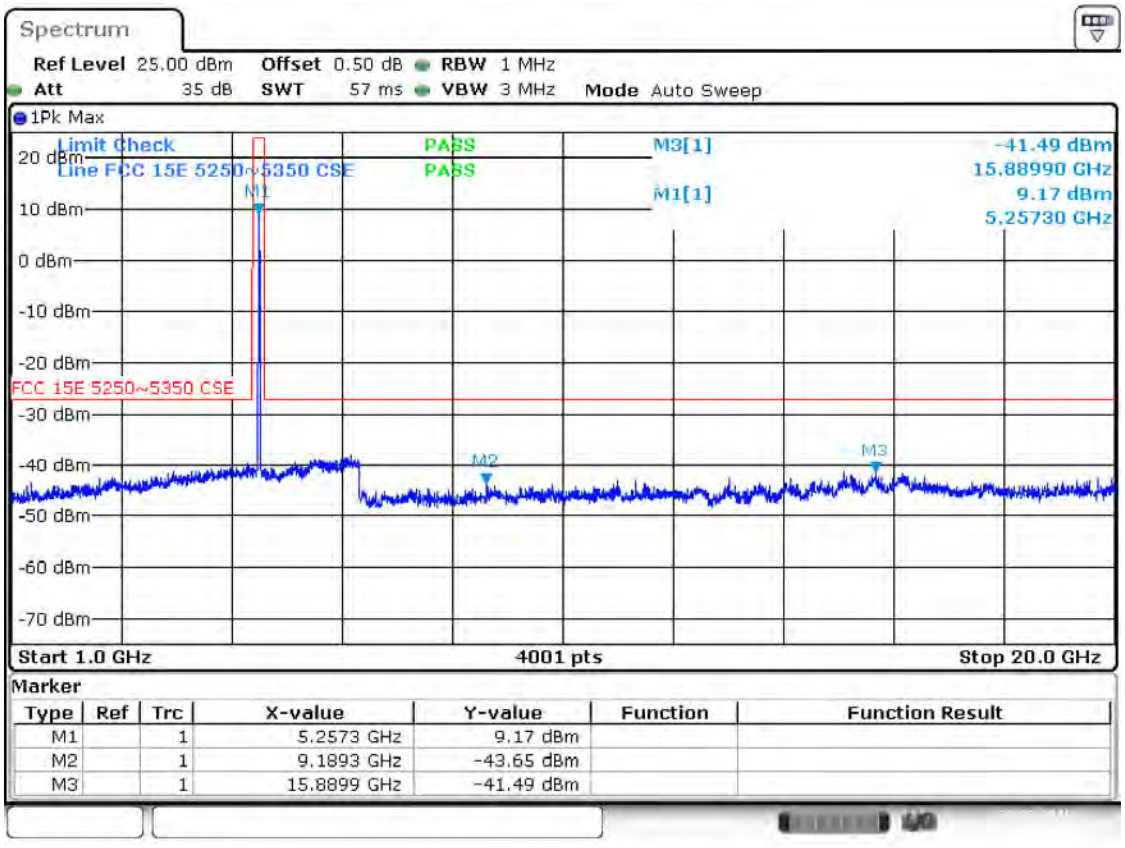
Date: 22.FEB.2016 11:15:19

Band II 11a CH64 (1 ~ 20 GHz)



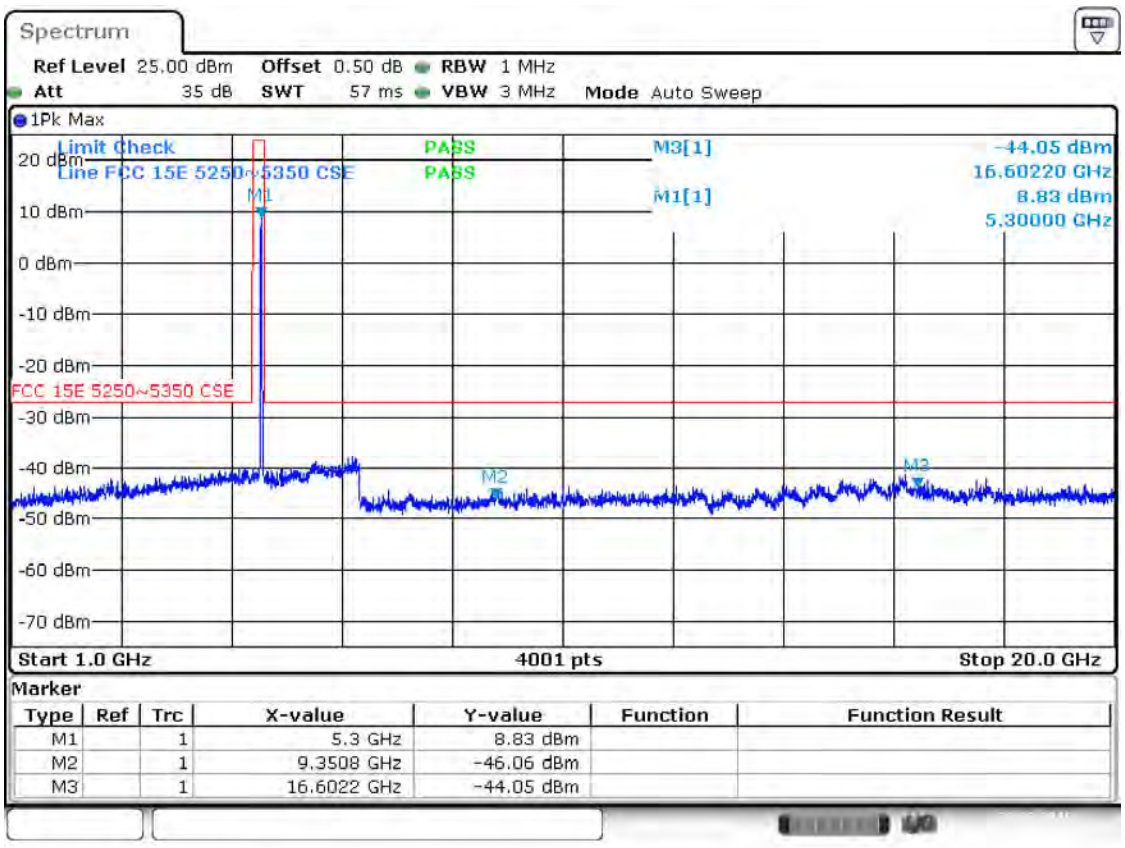
Date: 22.FEB.2016 11:16:13

Band II 11n(HT20) CH52 (1 ~ 20 GHz)



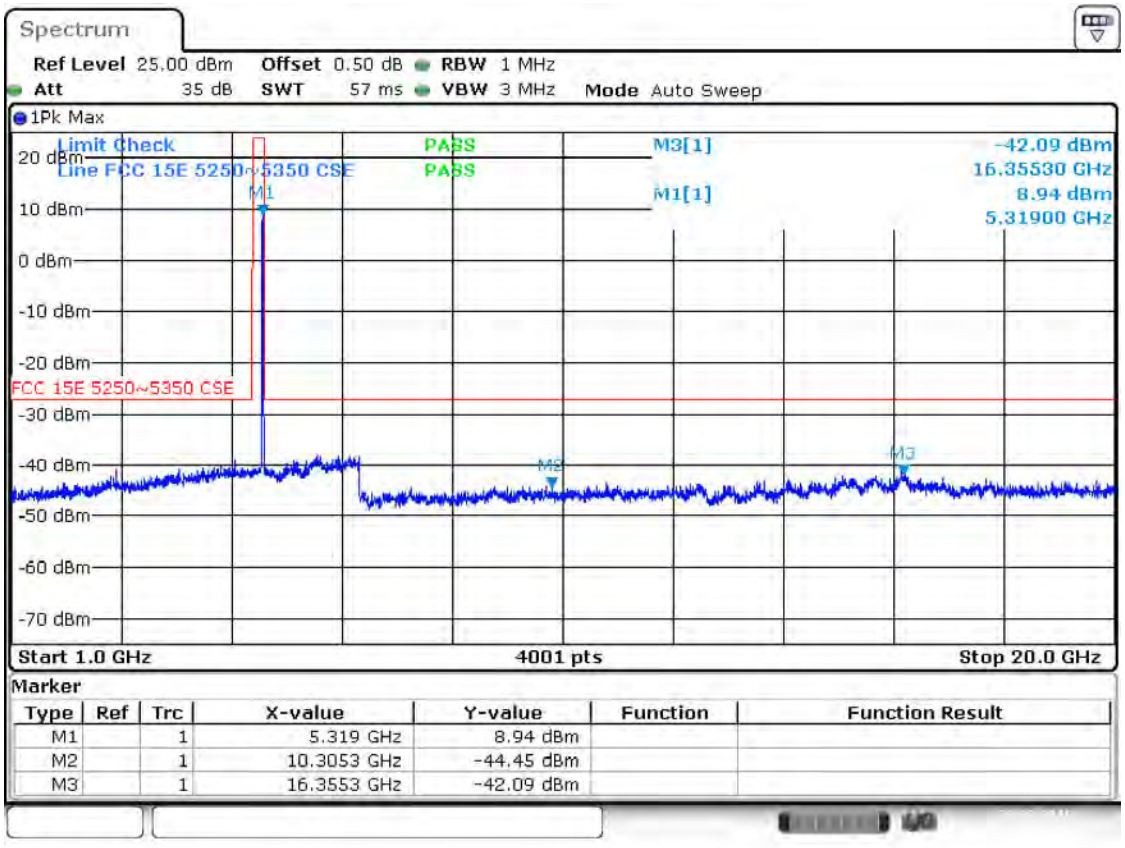
Date: 22.FEB.2016 13:50:58

Band II 11n(HT20) CH60 (1 ~ 20 GHz)



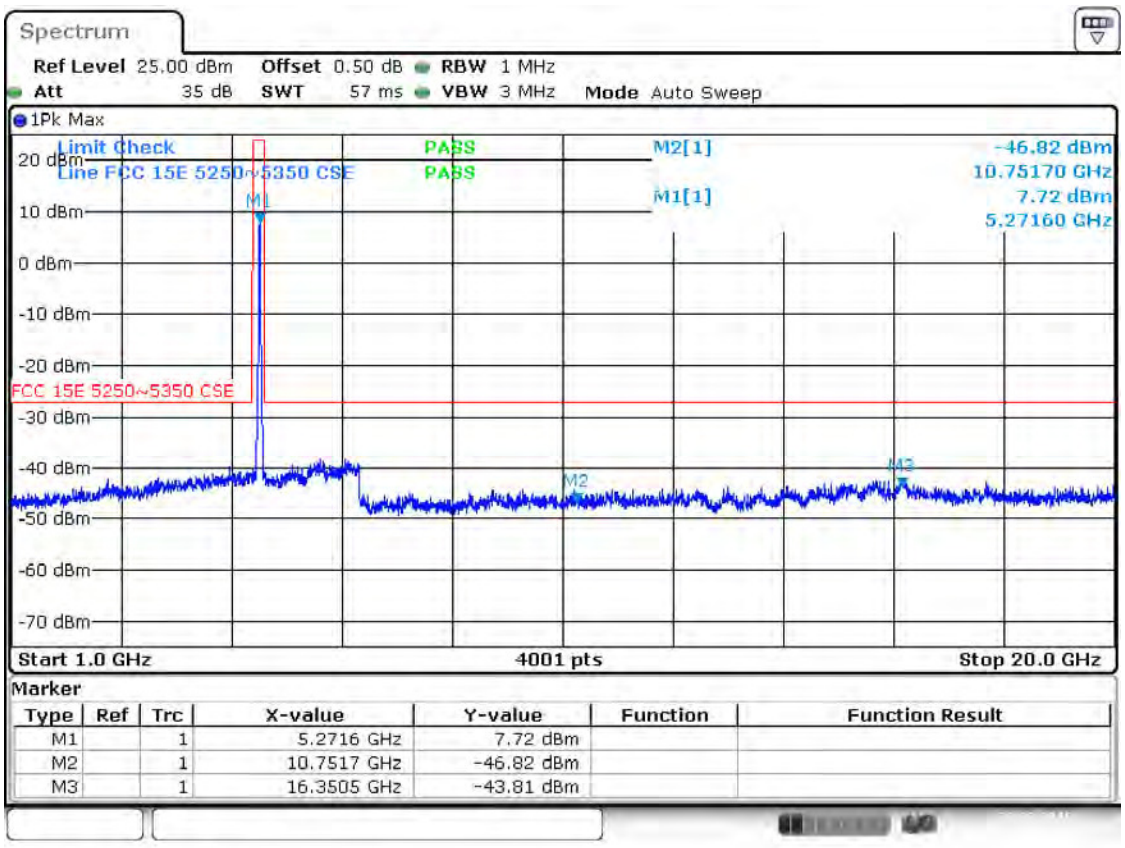
Date: 22.FEB.2016 13:53:39

Band II 11n(HT20) CH64 (1 ~ 20 GHz)



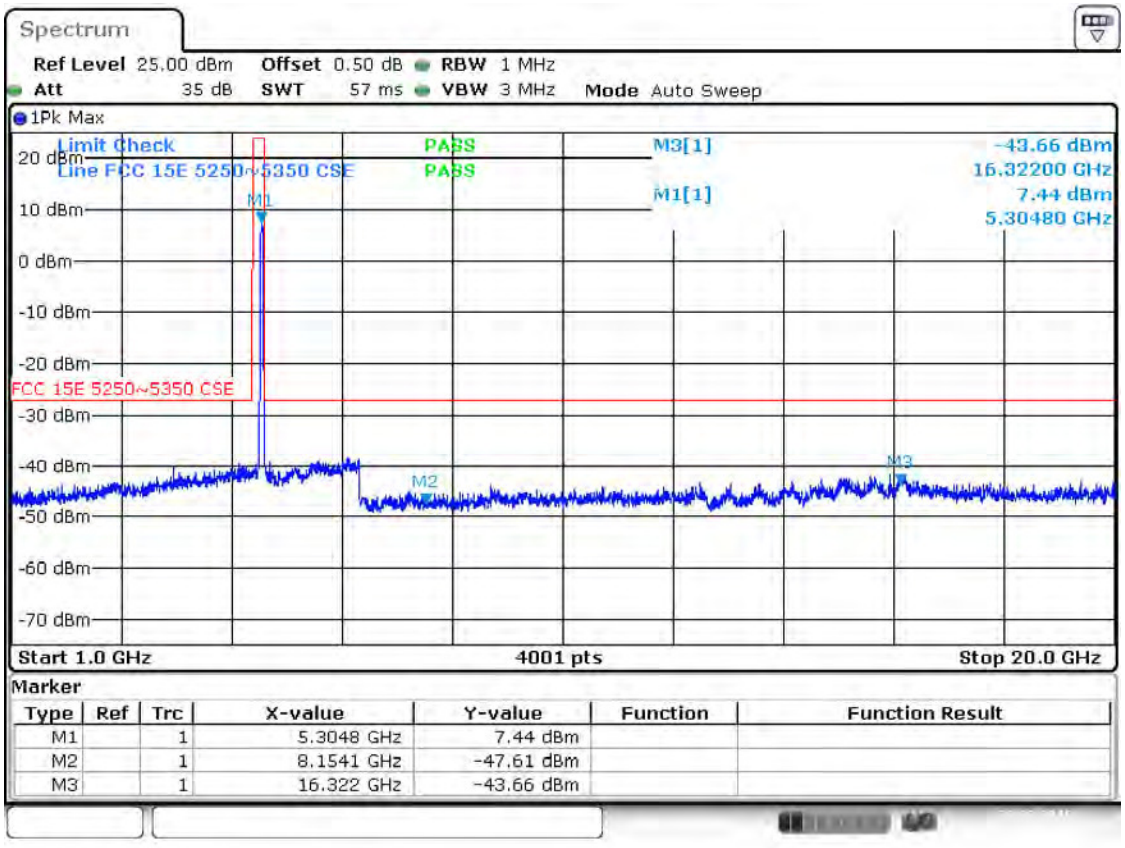
Date: 22.FEB.2016 13:54:38

Band II 11n(HT40) CH54 (1 ~ 20 GHz)



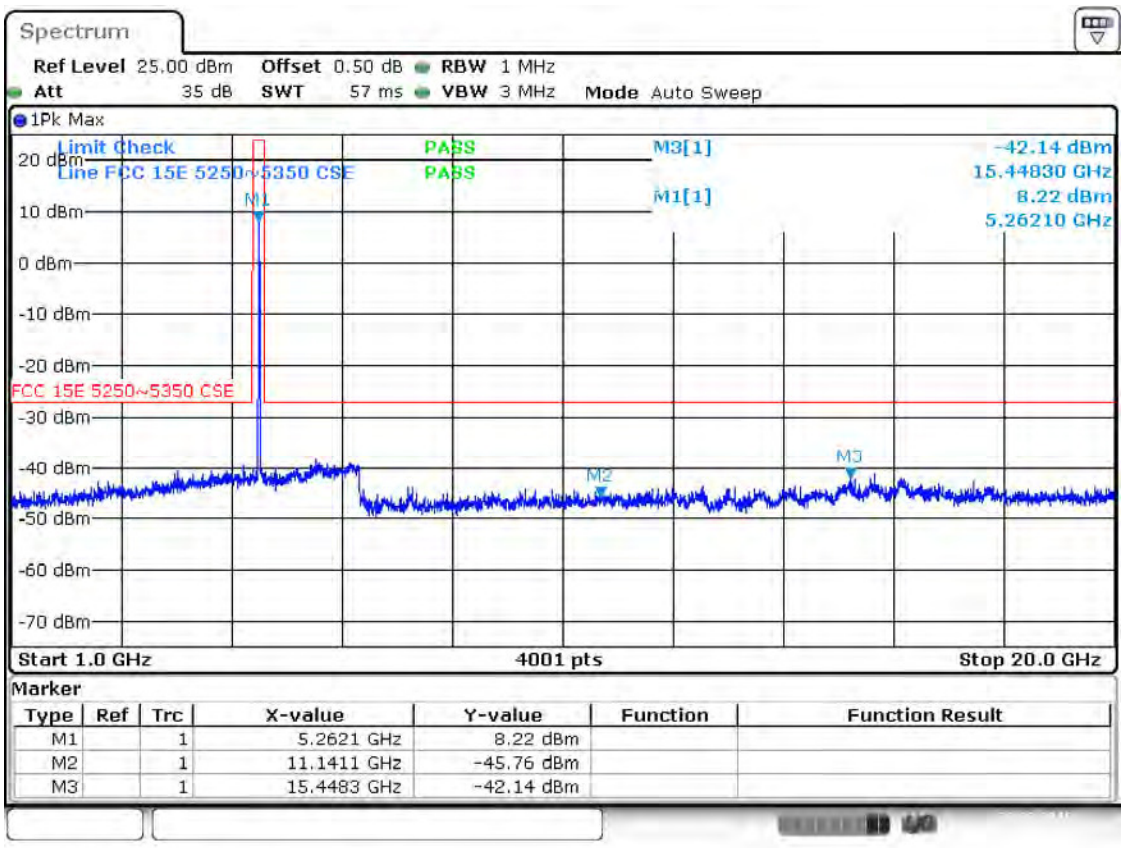
Date: 22.FEB.2016 14:21:45

Band II 11n(HT40) CH62 (1 ~ 20 GHz)



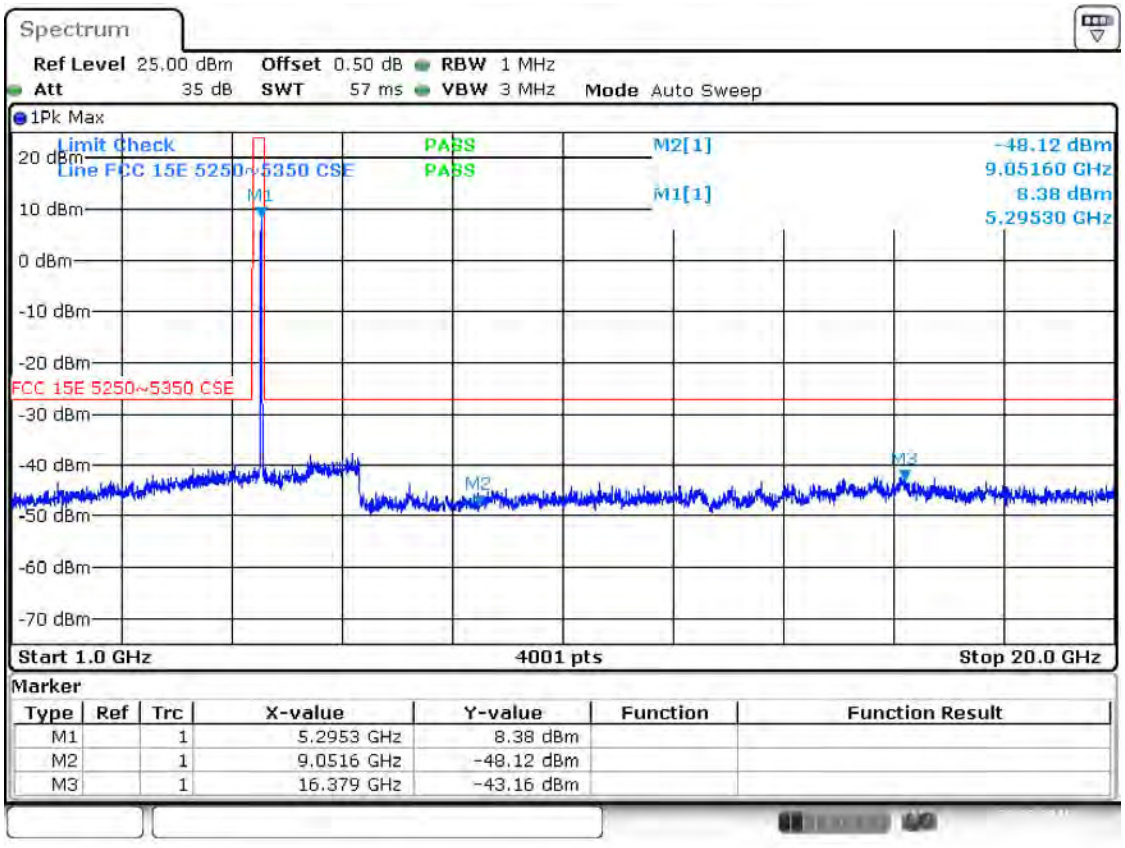
Date: 22.FEB.2016 14:27:06

Band II 11ac(HT20) CH52 (1 ~ 20 GHz)



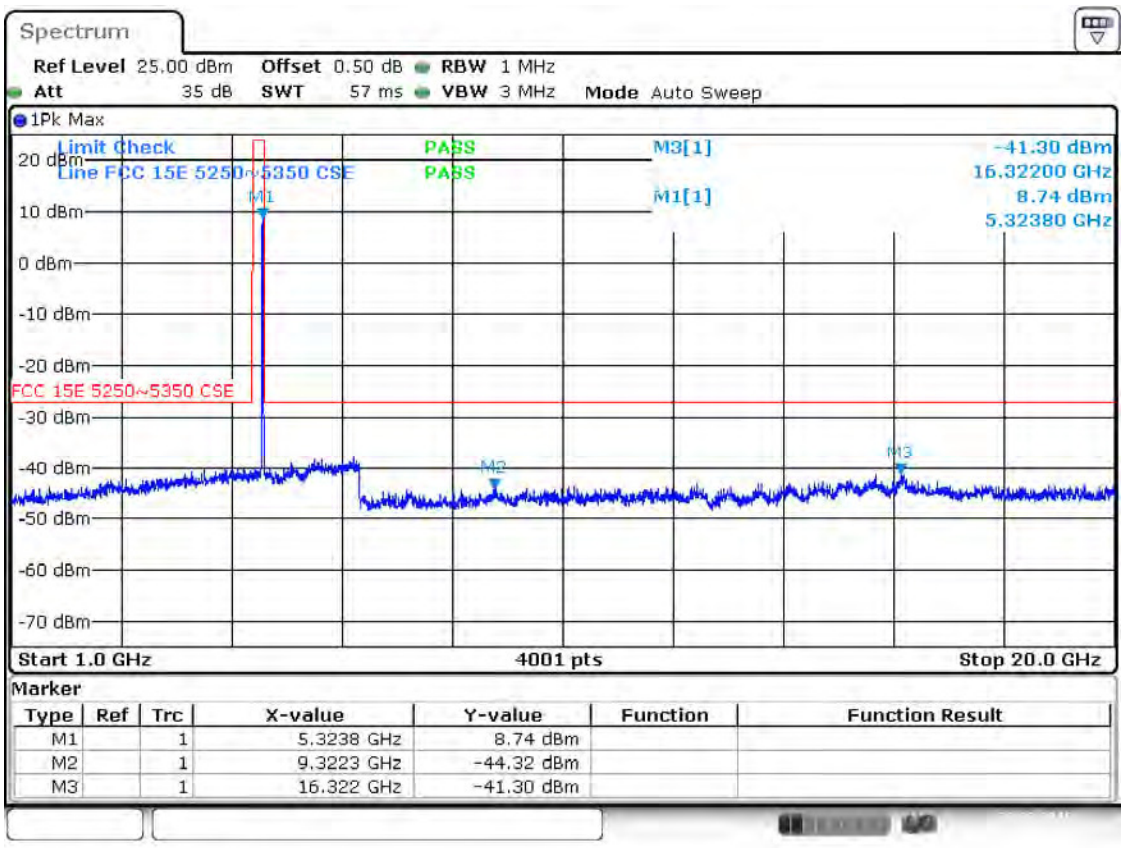
Date: 22.FEB.2016 11:37:33

Band II 11ac(HT20) CH60 (1 ~ 20 GHz)



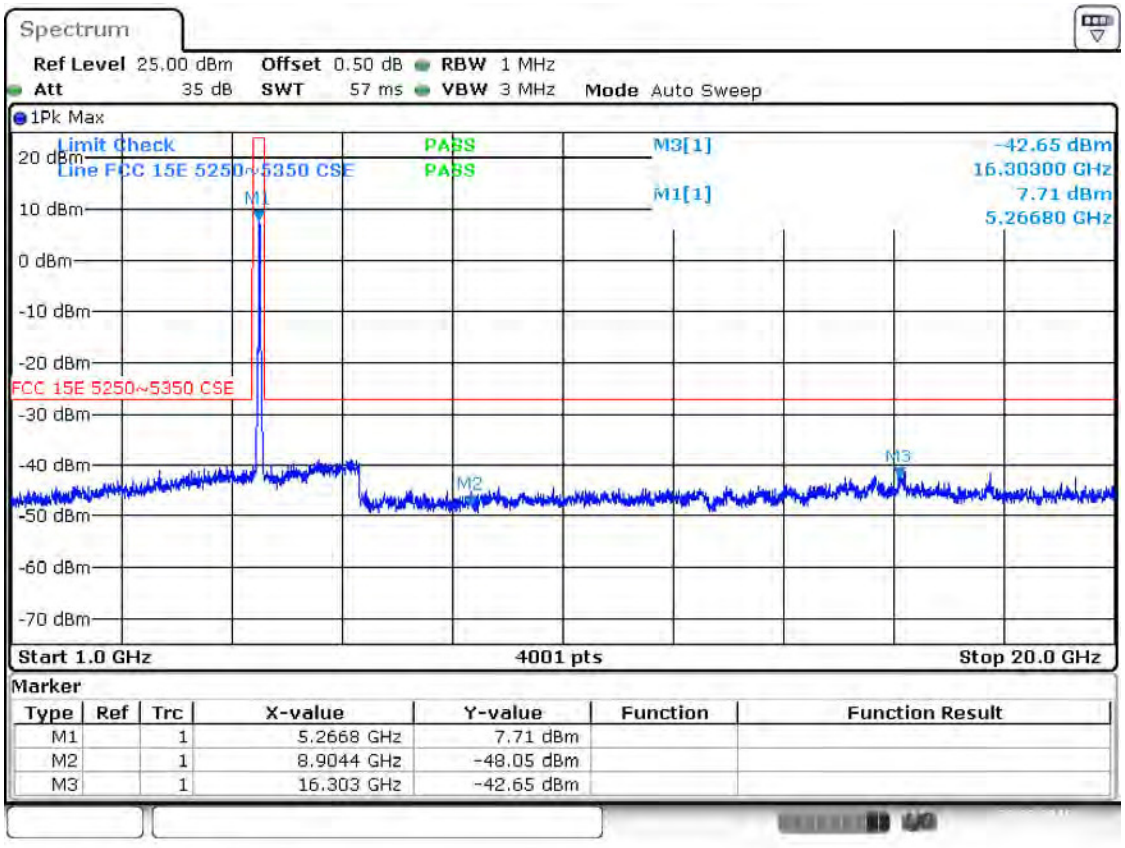
Date: 22.FEB.2016 11:40:57

Band II 11ac(HT20) CH64 (1 ~ 20 GHz)



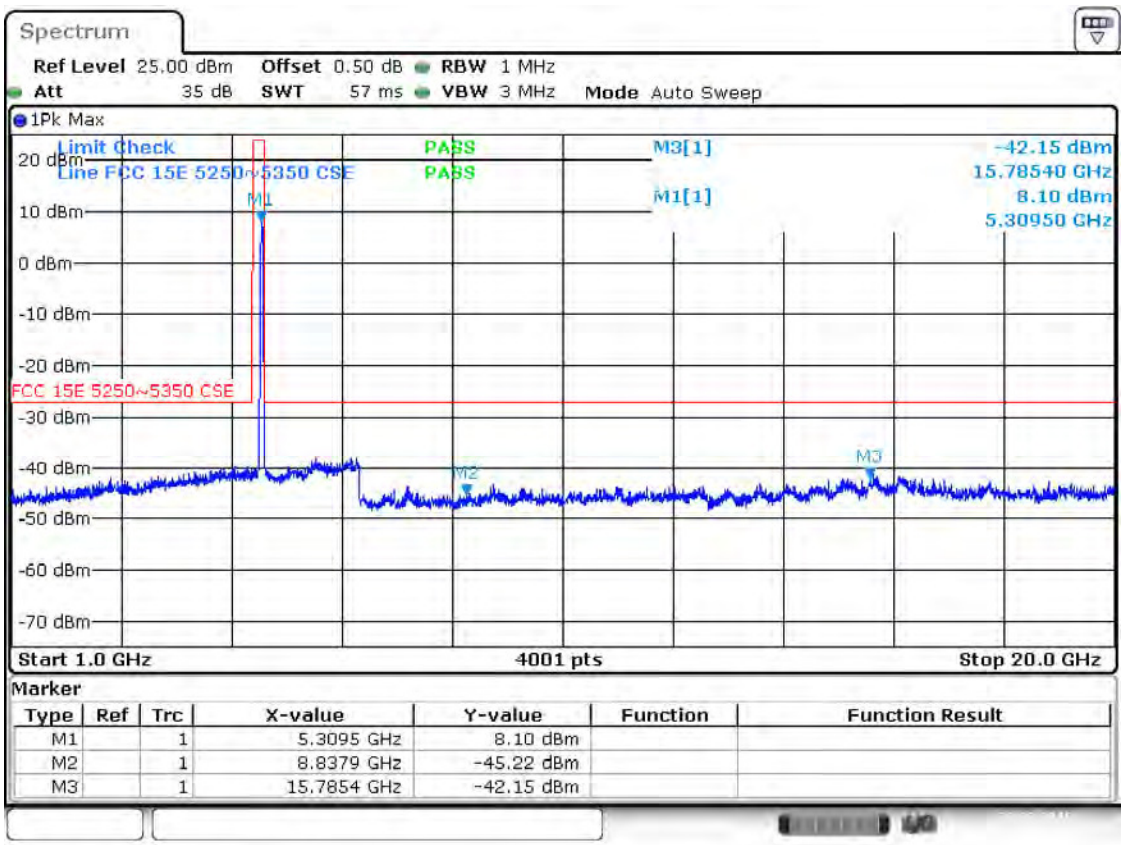
Date: 22.FEB.2016 11:42:20

Band II 11ac(HT40) CH54 (1 ~ 20 GHz)



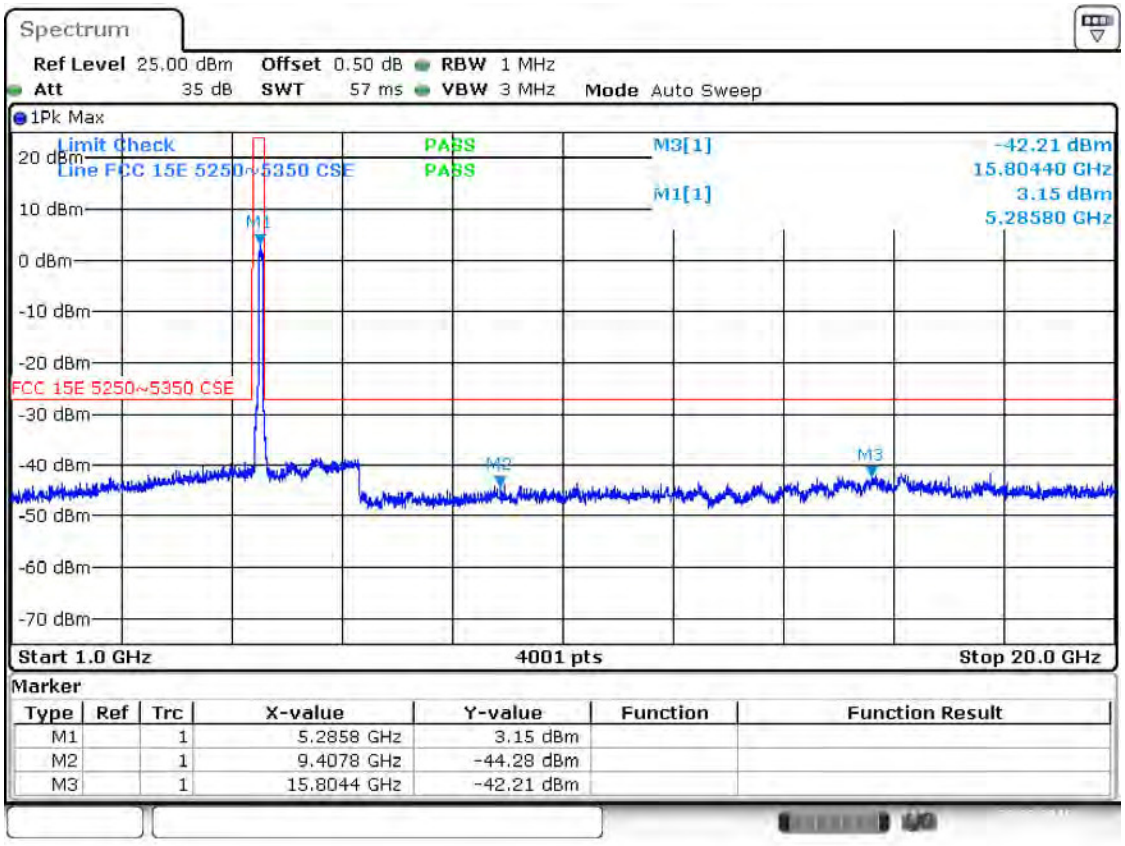
Date: 22.FEB.2016 14:52:41

Band II 11ac(HT40) CH62 (1 ~ 20 GHz)



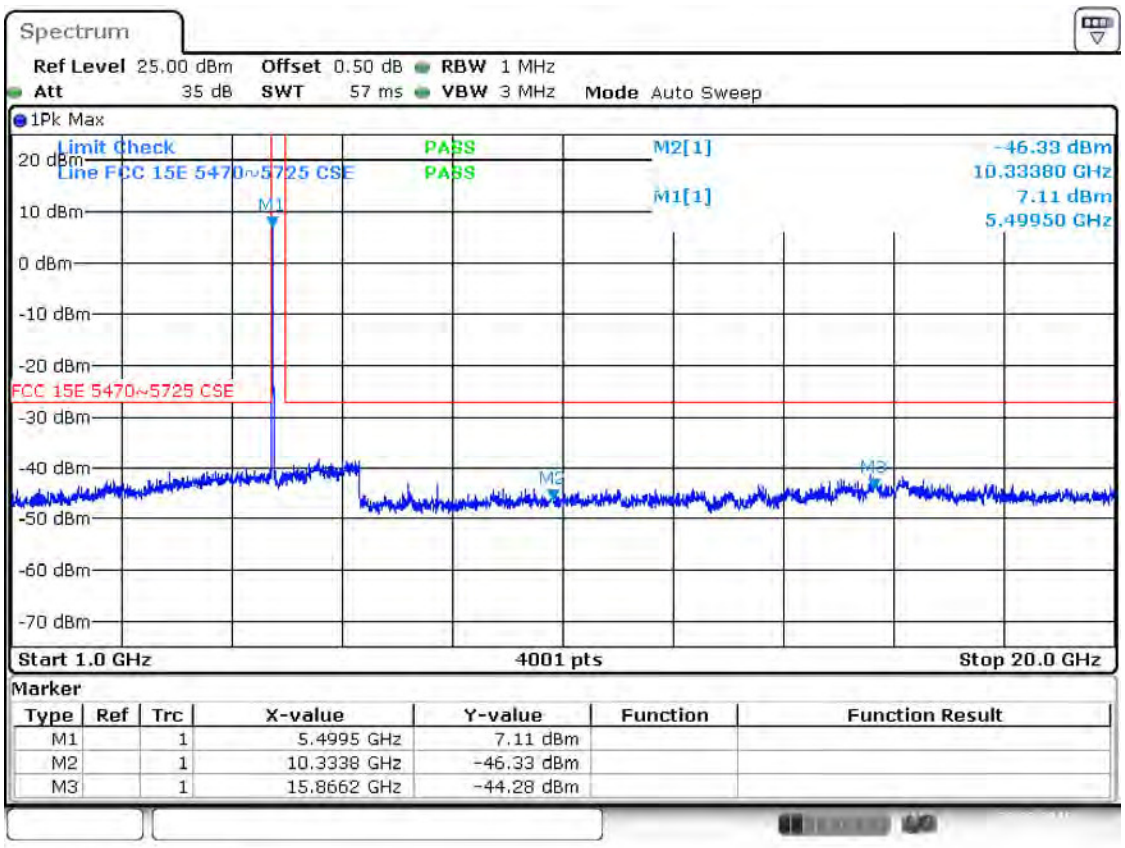
Date: 22.FEB.2016 14:53:44

Band II 11ac(HT80) CH58 (1 ~ 20 GHz)



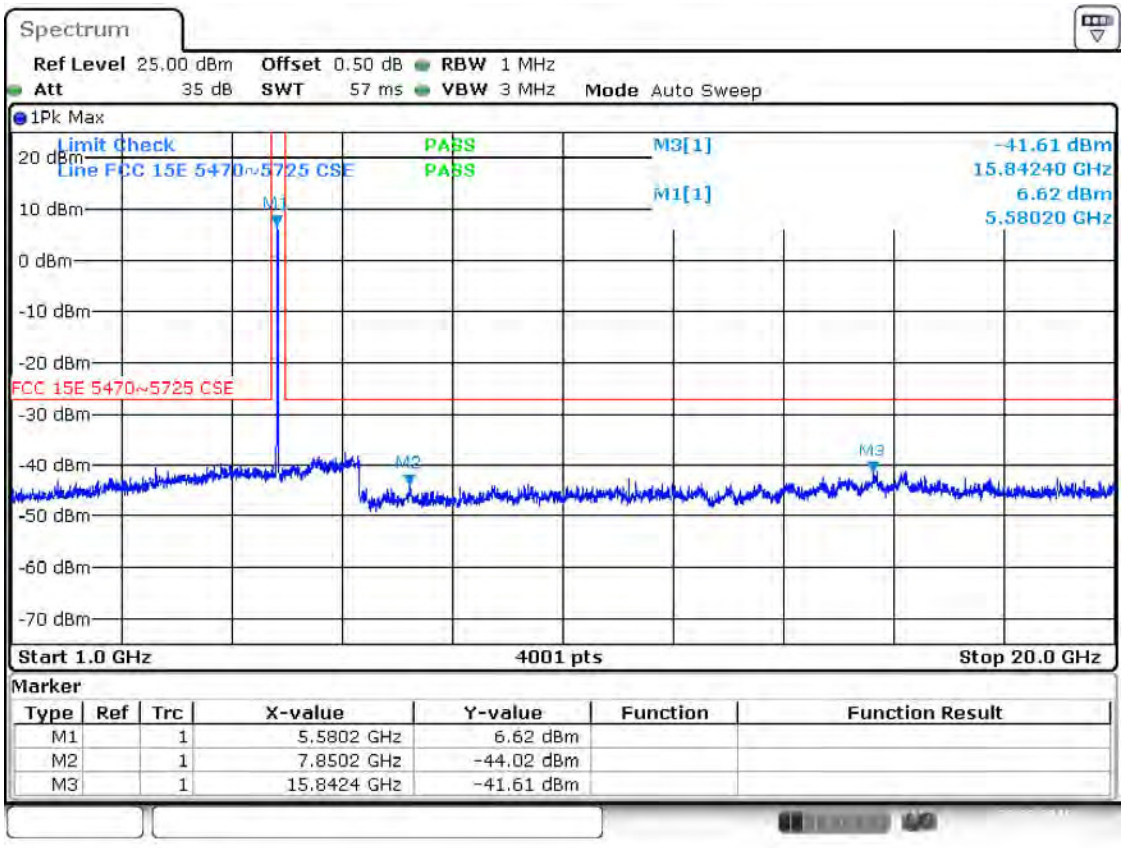
Date: 22.FEB.2016 15:09:50

Band III 11a CH100 (1 ~ 20 GHz)



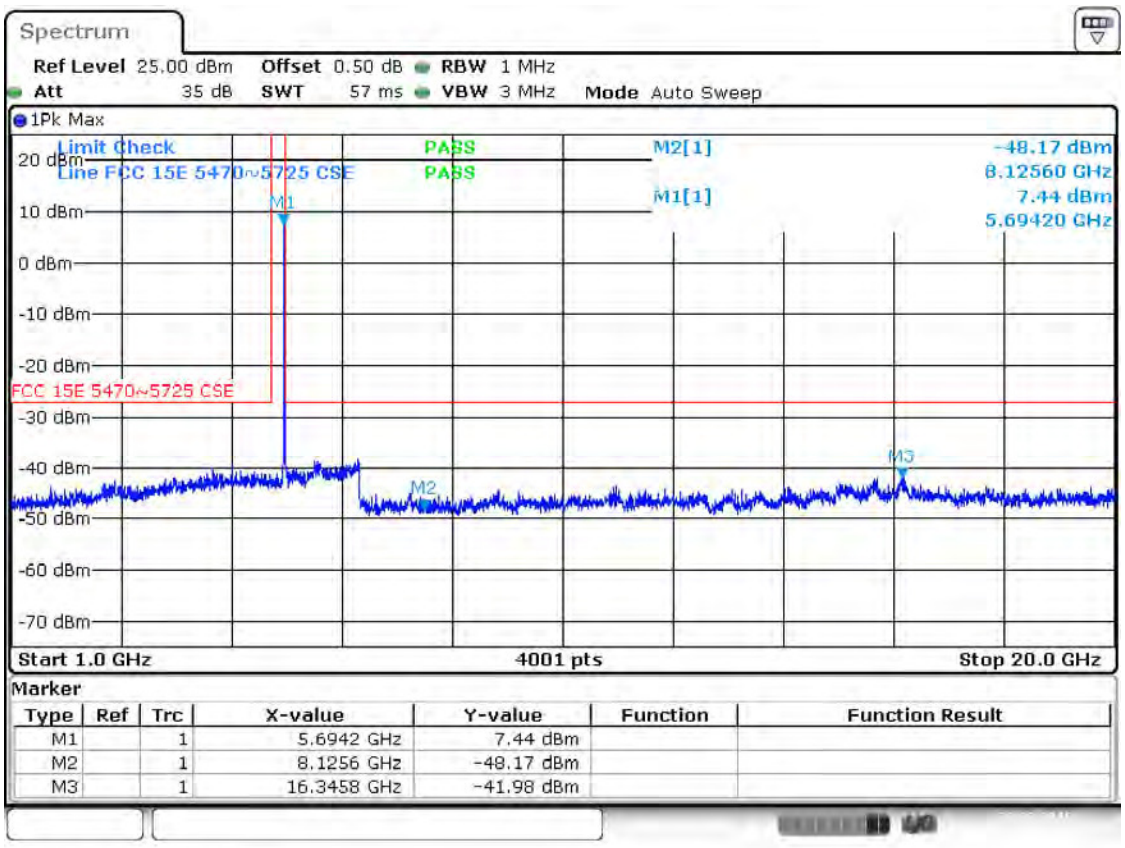
Date: 22.FEB.2016 11:18:42

Band III 11a CH116 (1 ~ 20 GHz)



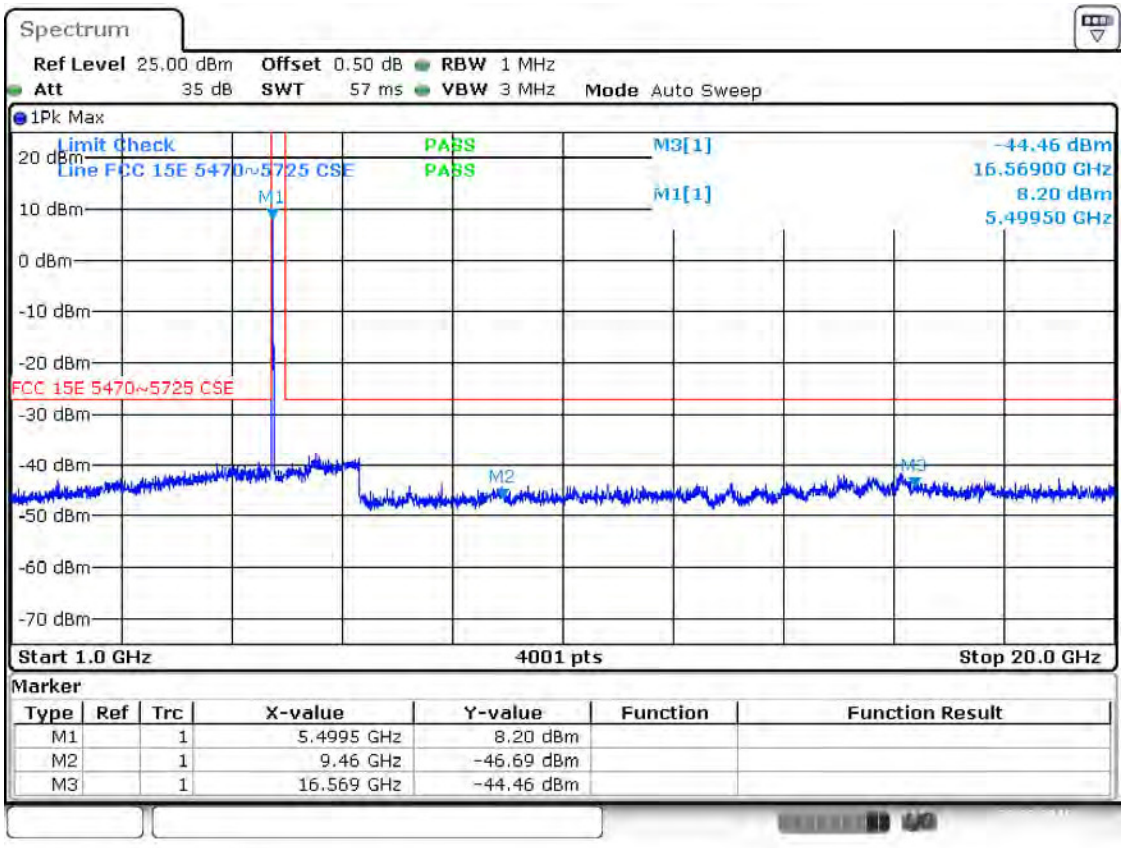
Date: 22.FEB.2016 11:19:35

Band III 11a CH140 (1 ~ 20 GHz)



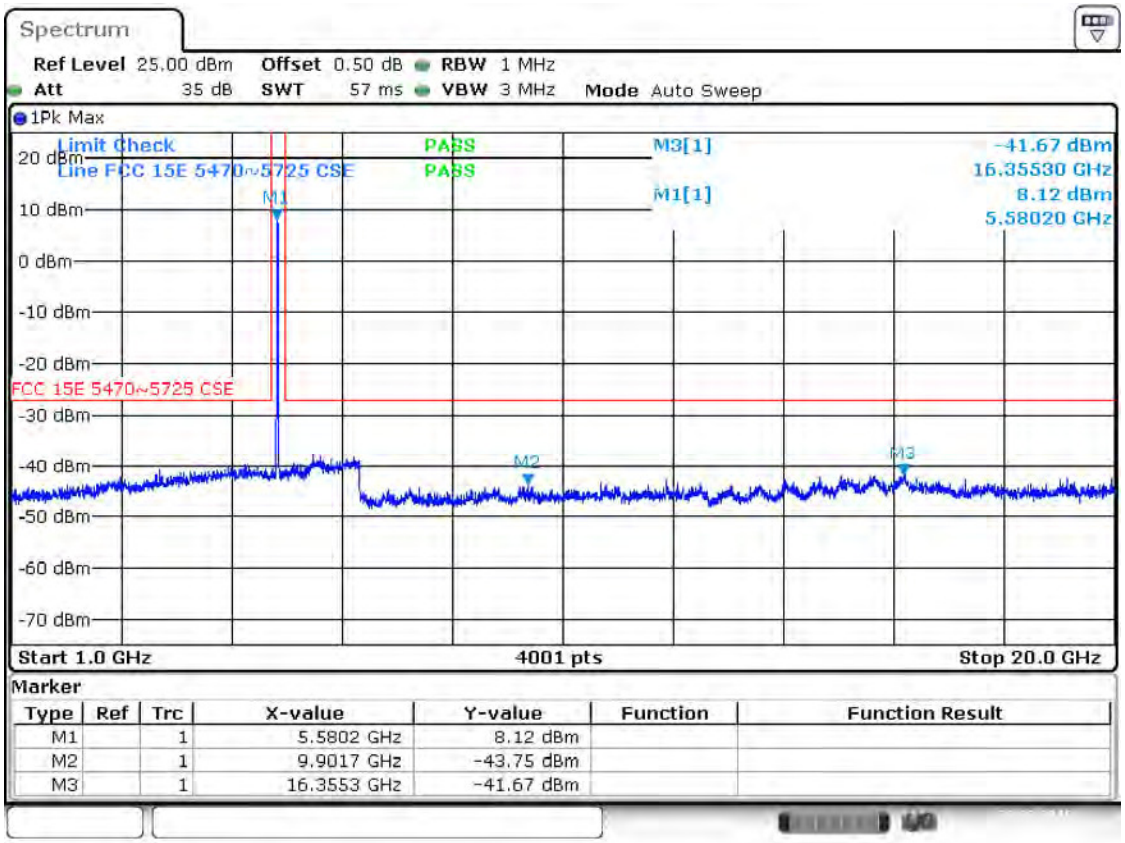
Date: 22.FEB.2016 11:21:34

Band III 11n(HT20) CH100 (1 ~ 20 GHz)



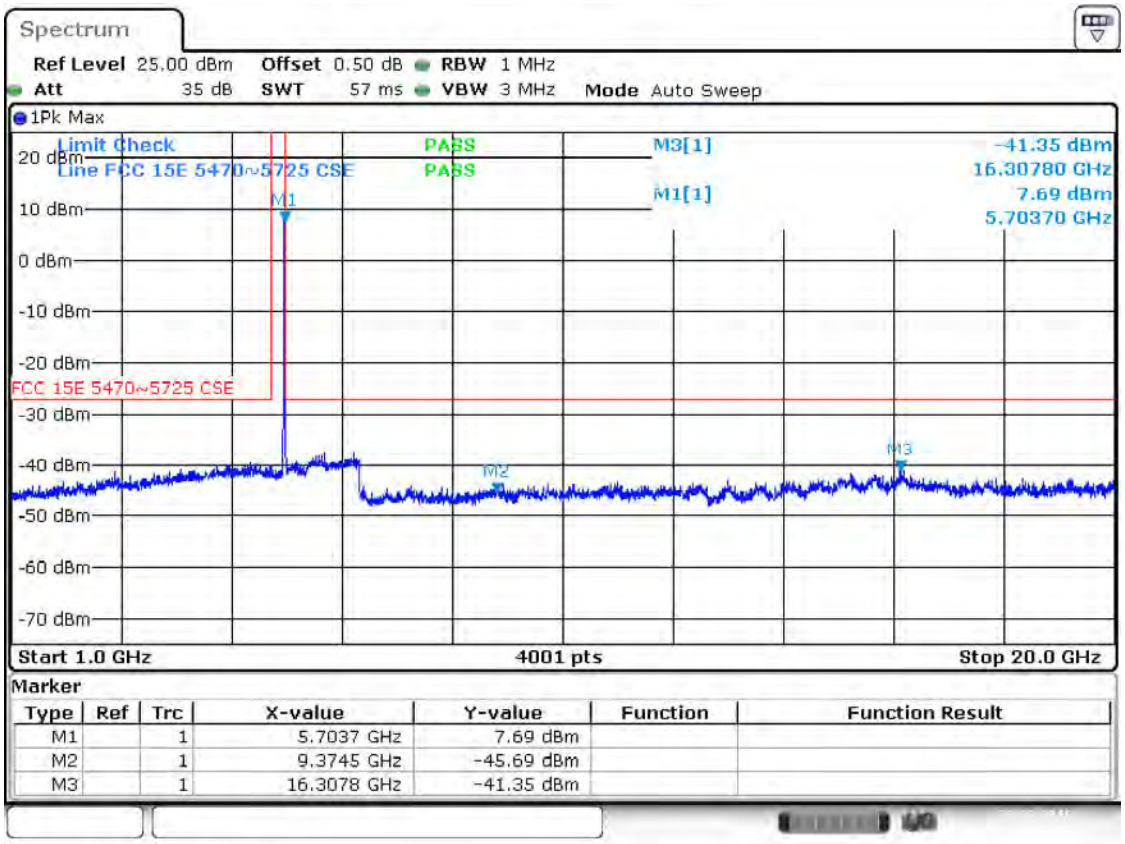
Date: 22.FEB.2016 13:57:01

Band III 11n(HT20) CH116 (1 ~ 20 GHz)



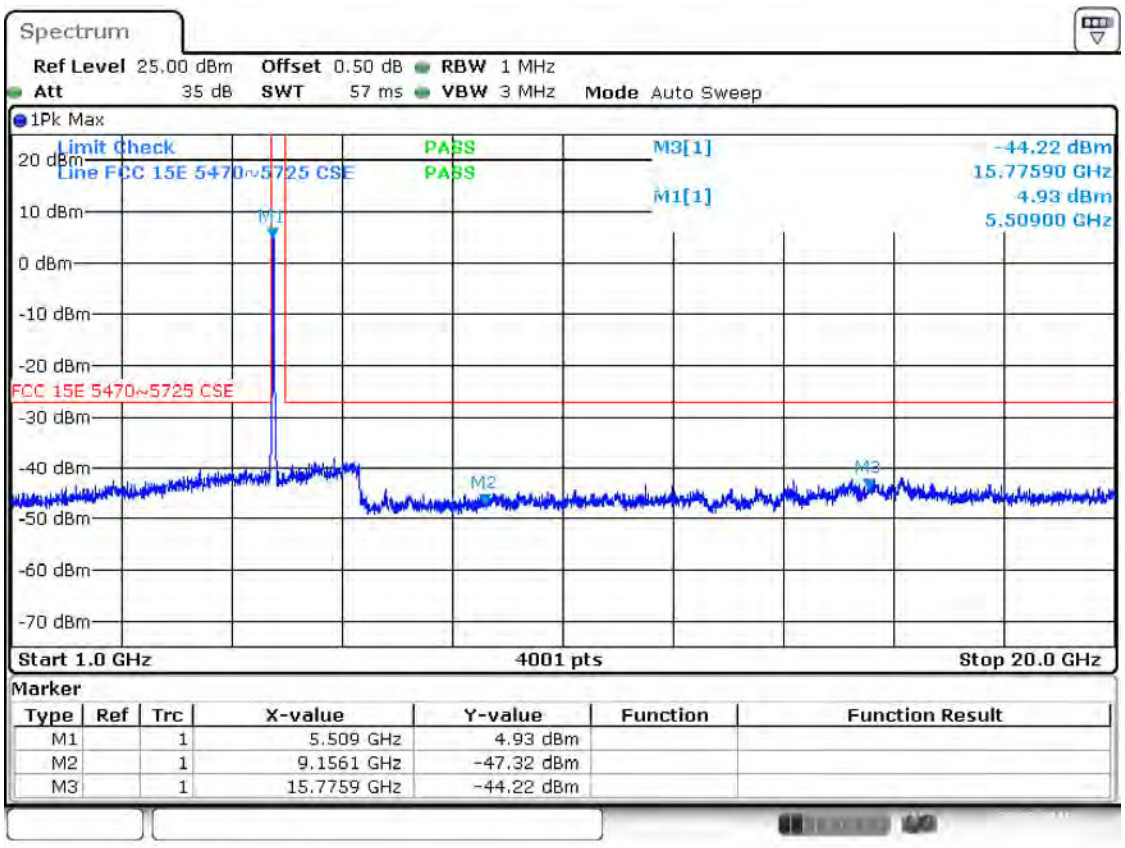
Date: 22.FEB.2016 13:58:08

Band III 11n(HT20) CH140 (1 ~ 20 GHz)



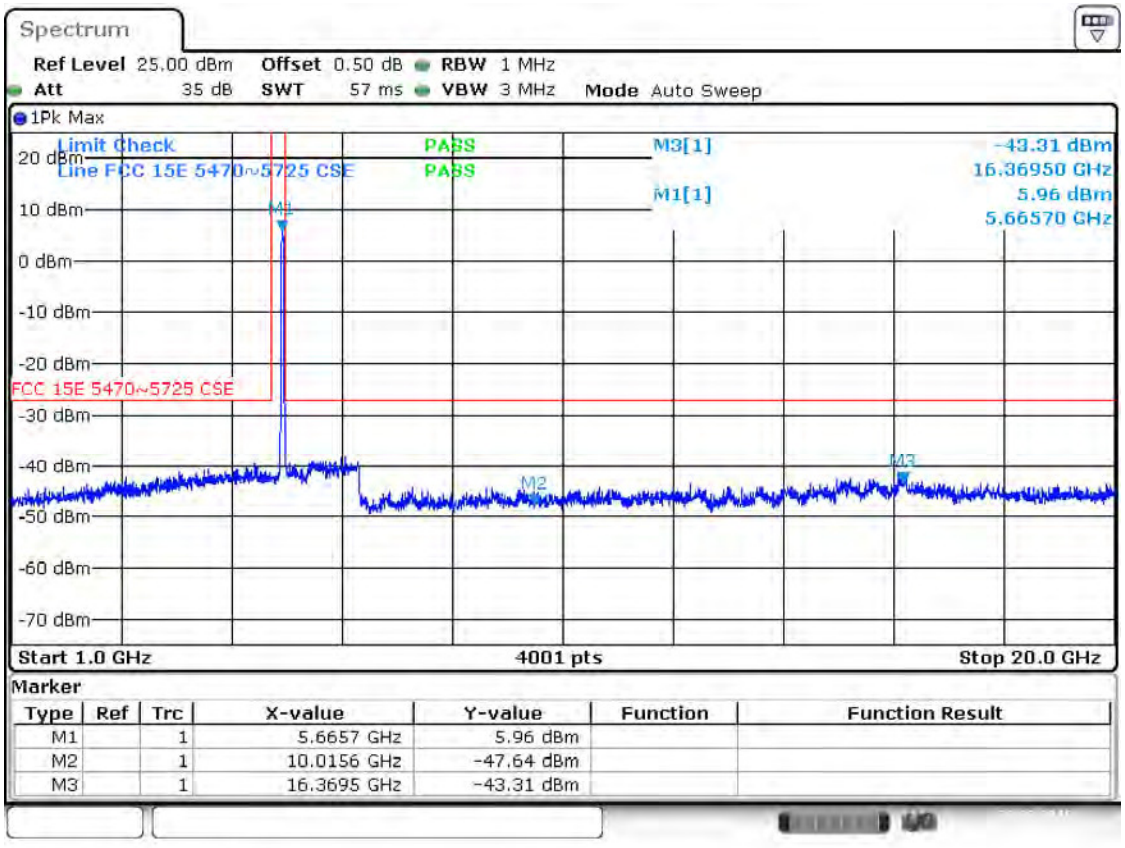
Date: 22.FEB.2016 14:01:35

Band III 11n(HT40) CH102 (1 ~ 20 GHz)



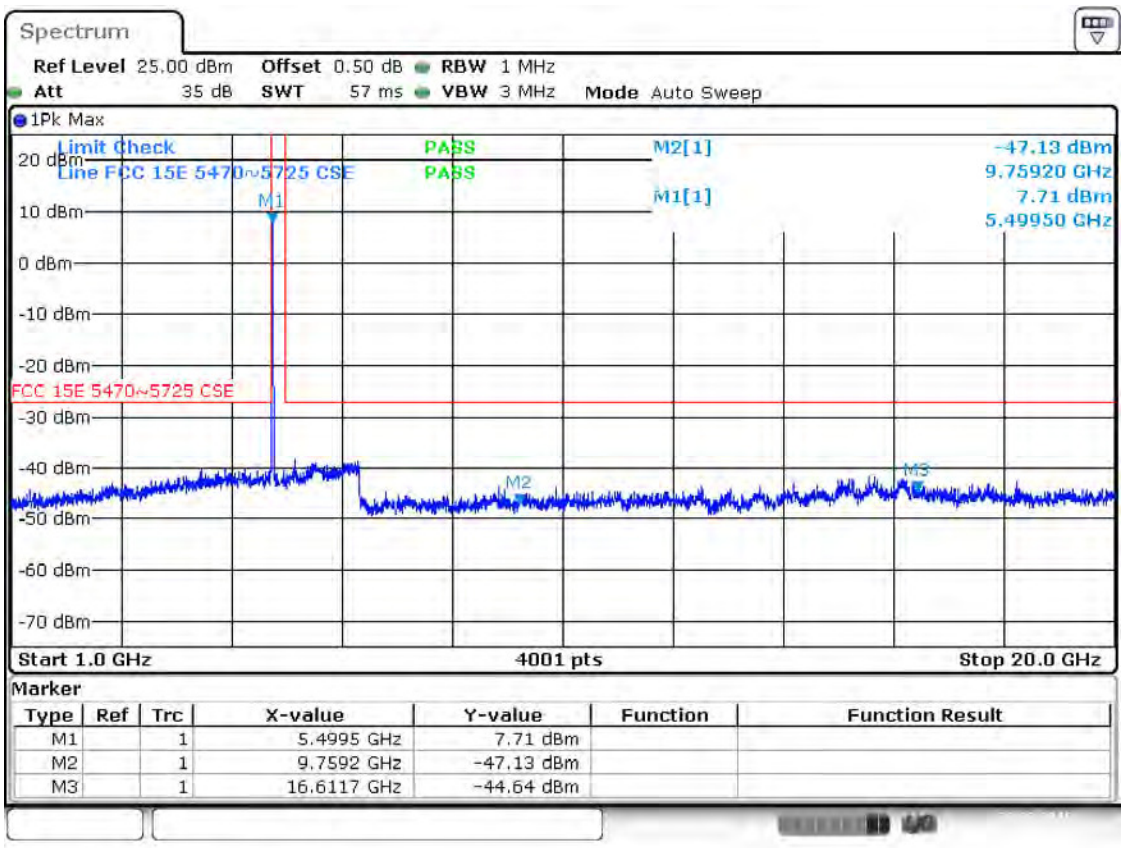
Date: 22.FEB.2016 14:30:09

Band III 11n(HT40) CH134 (1 ~ 20 GHz)



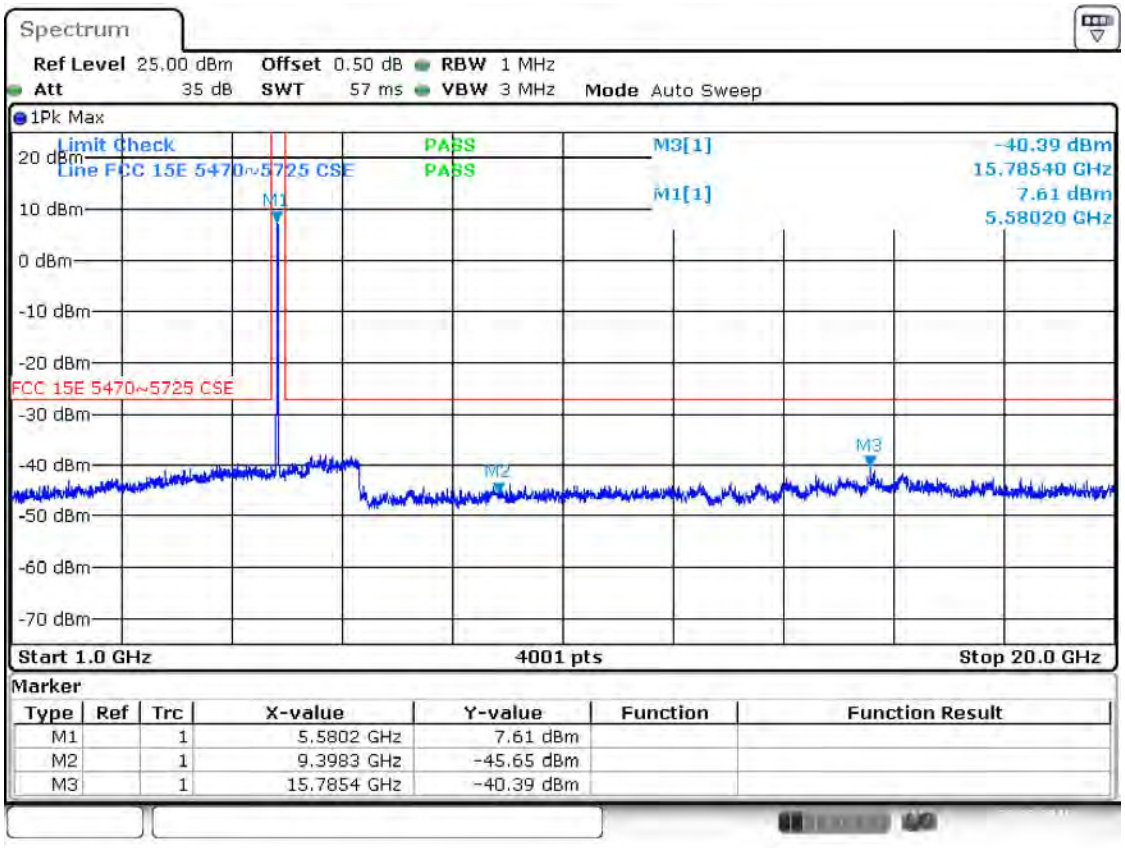
Date: 22.FEB.2016 14:33:20

Band III 11ac(HT20) CH100 (1 ~ 20 GHz)



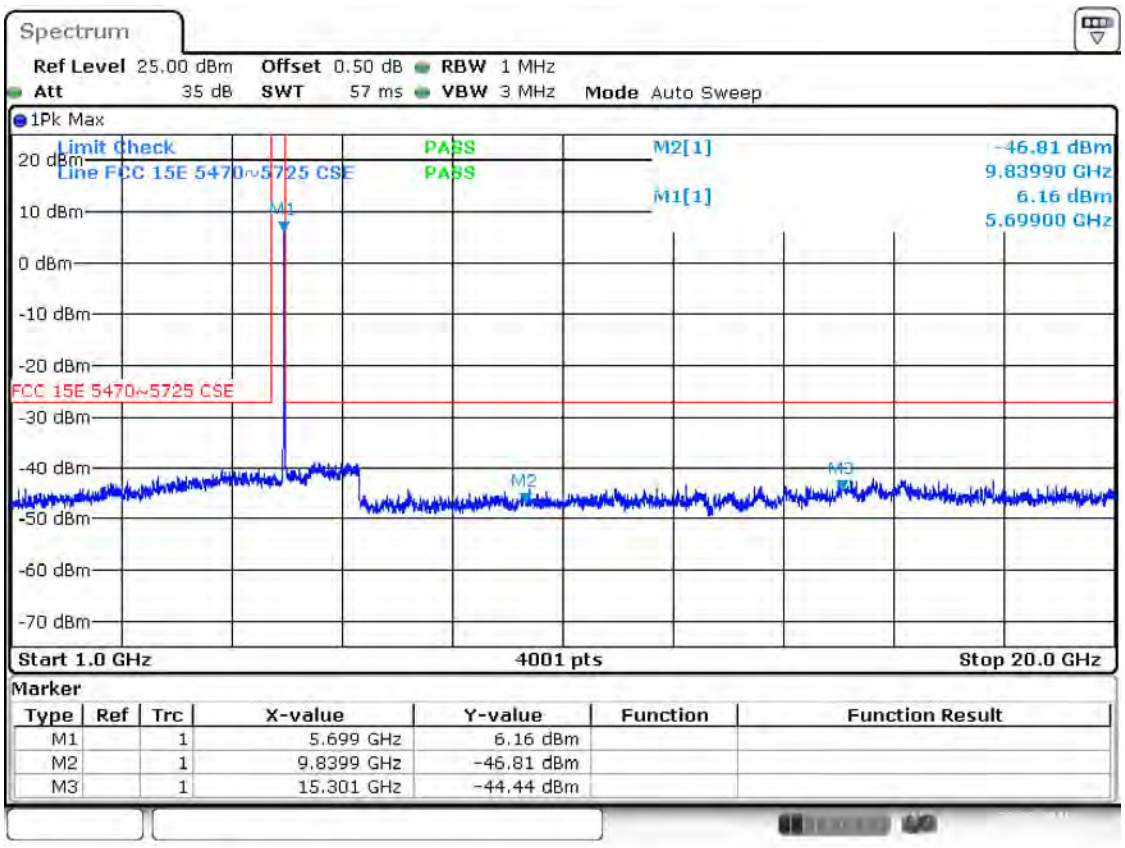
Date: 22.FEB.2016 11:51:00

Band III 11ac(HT20) CH116 (1 ~ 20 GHz)



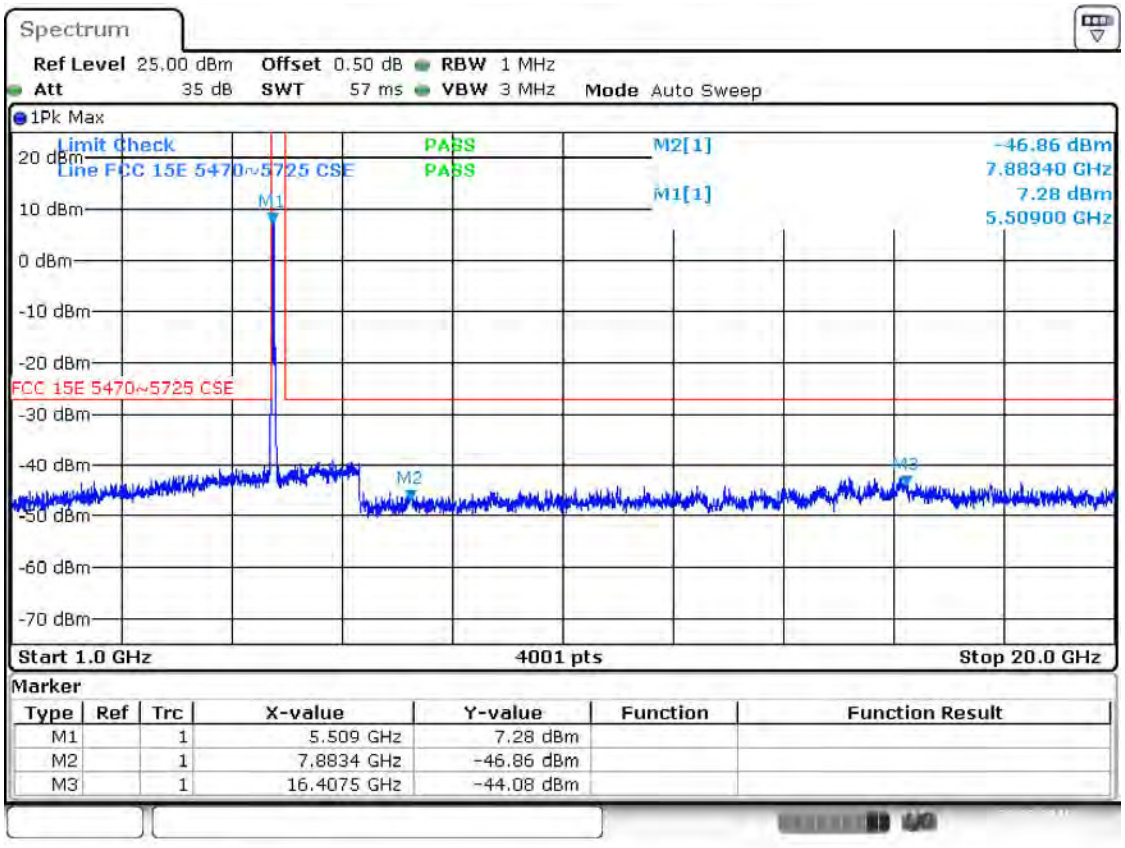
Date: 22.FEB.2016 11:51:52

Band III 11ac(HT20) CH140 (1 ~ 20 GHz)



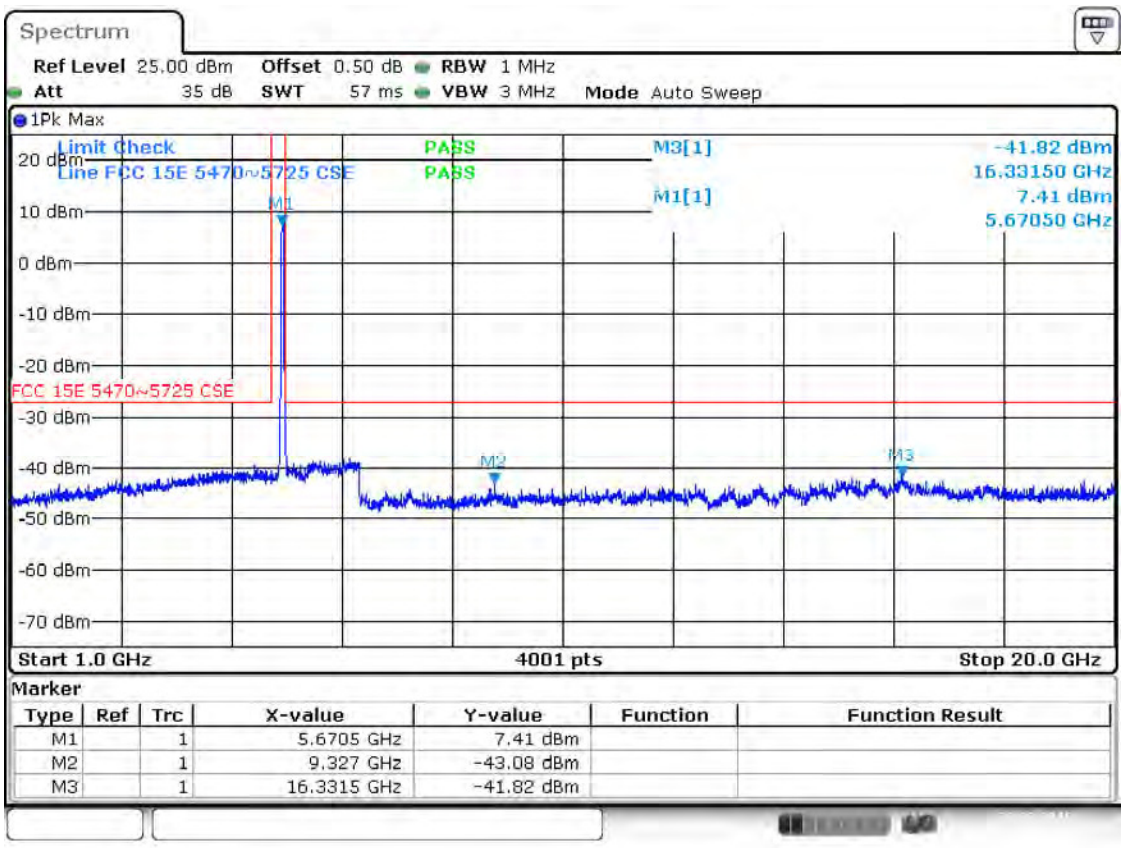
Date: 22.FEB.2016 11:54:10

Band III 11ac(HT40) CH102 (1 ~ 20 GHz)



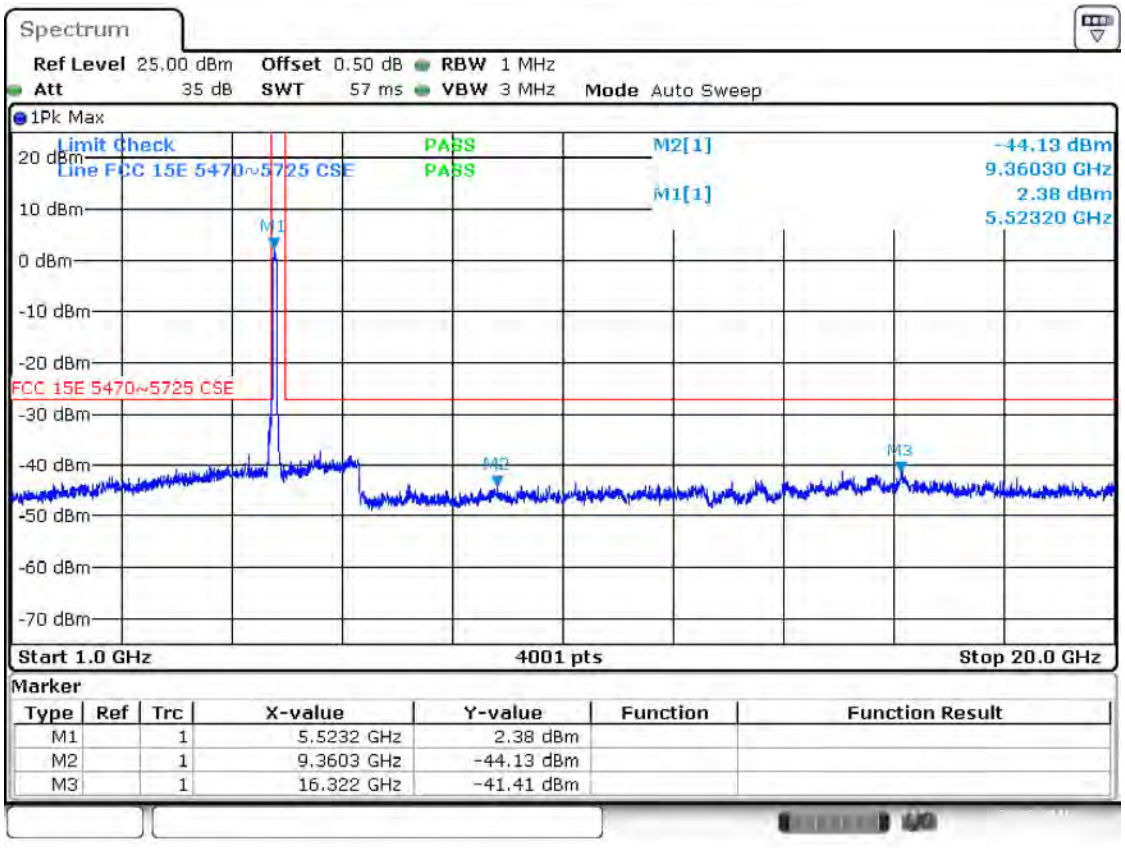
Date: 22.FEB.2016 14:56:48

Band III 11ac(HT40) CH134 (1 ~ 20 GHz)



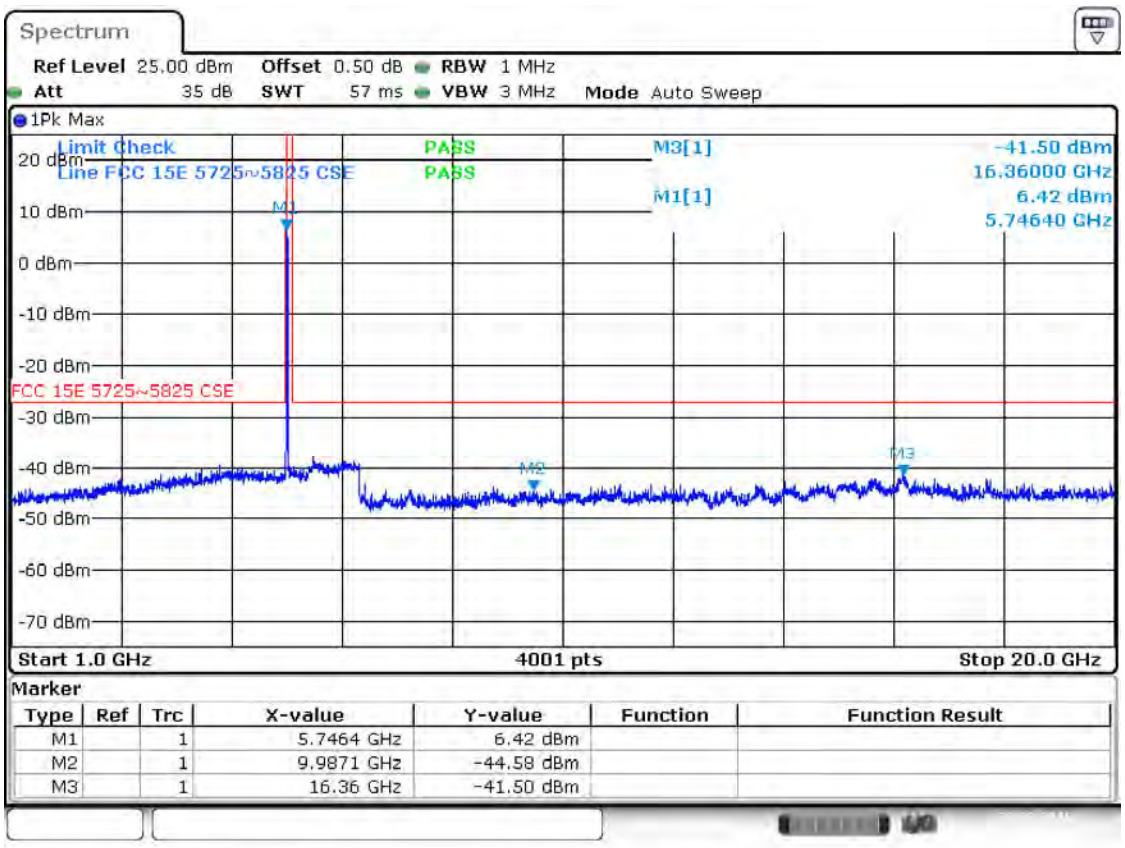
Date: 22.FEB.2016 14:57:48

Band III 11ac(HT80) CH106 (1 ~ 20 GHz)



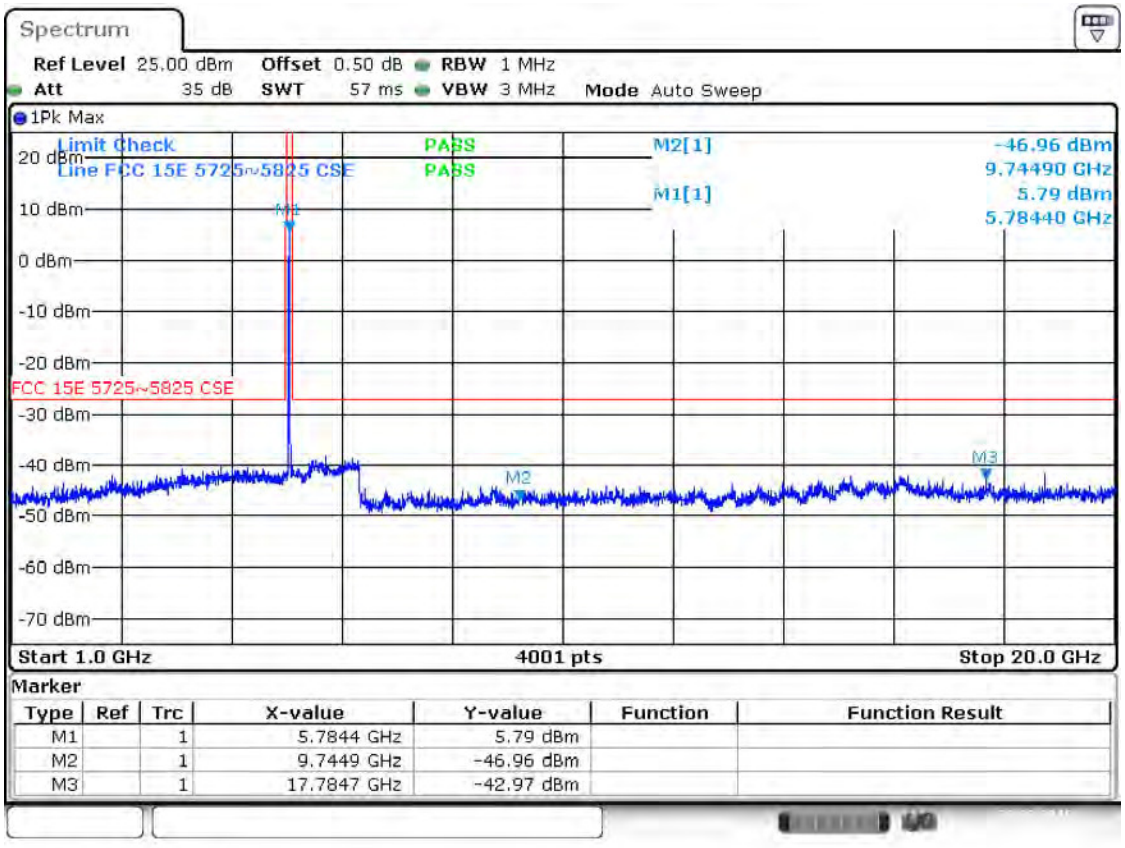
Date: 22.FEB.2016 15:11:42

Band IV 11a CH149 (1 ~ 20 GHz)



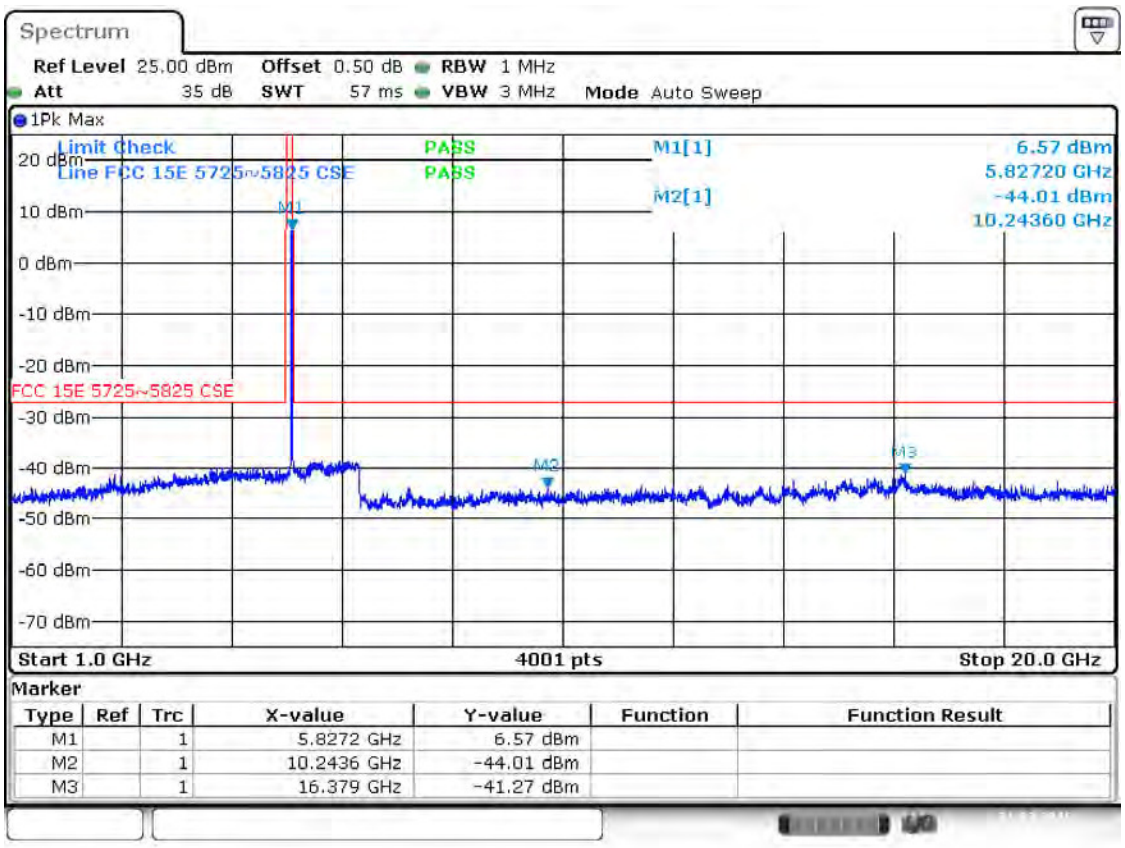
Date: 22.FEB.2016 11:22:52

Band IV 11a CH157 (1 ~ 20 GHz)



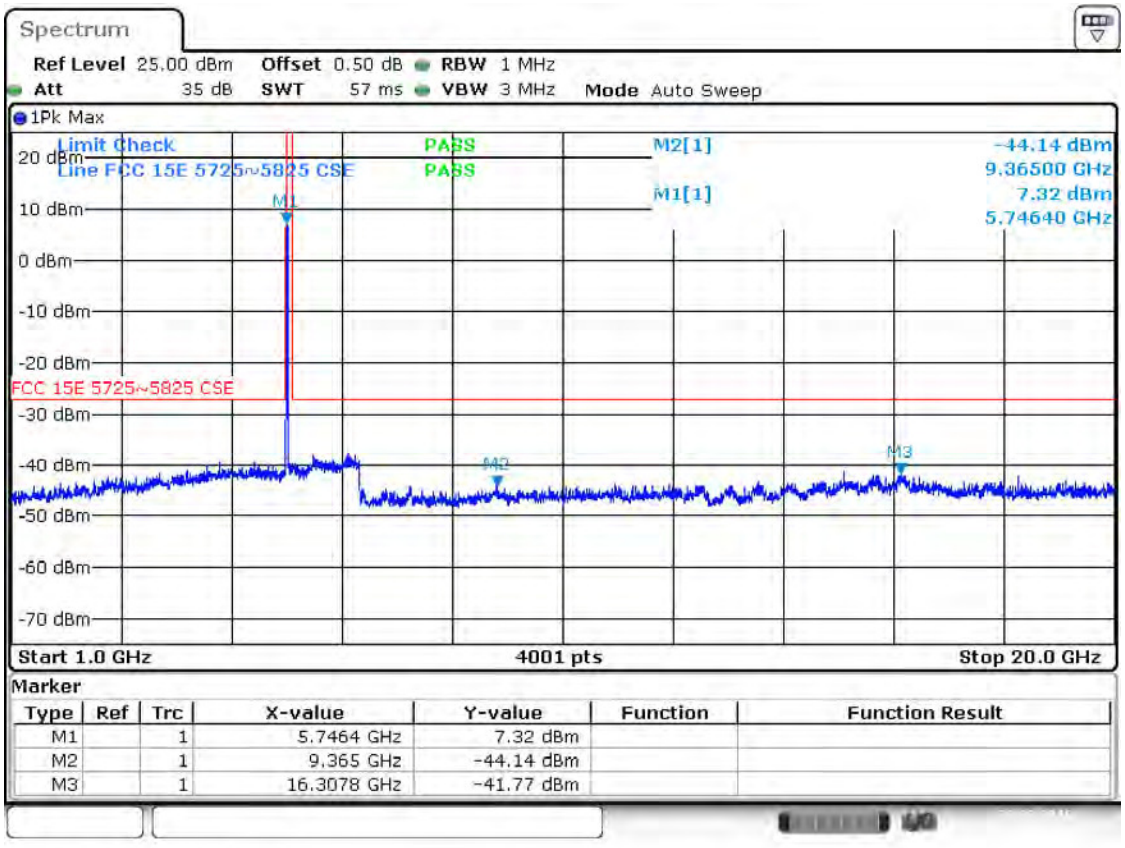
Date: 22.FEB.2016 11:27:36

Band IV 11a CH165 (1 ~ 20 GHz)



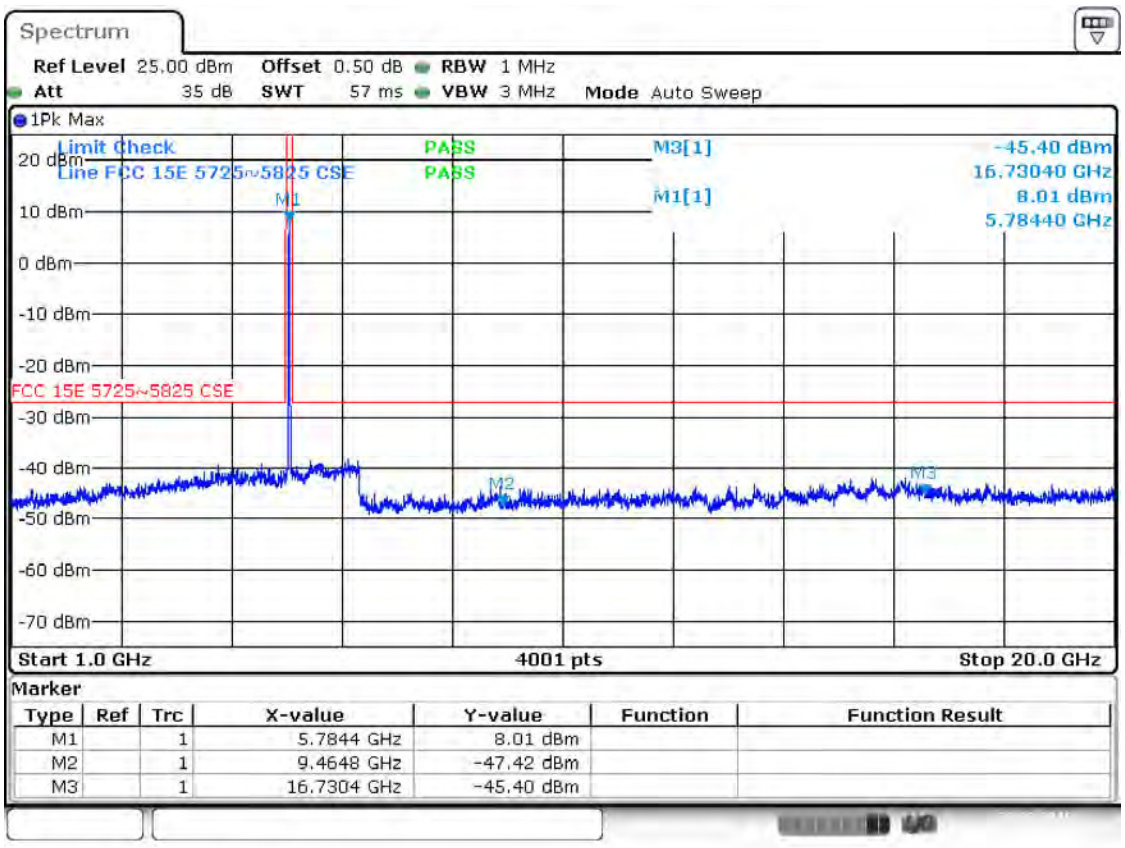
Date: 31.MAR.2016 20:30:11

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



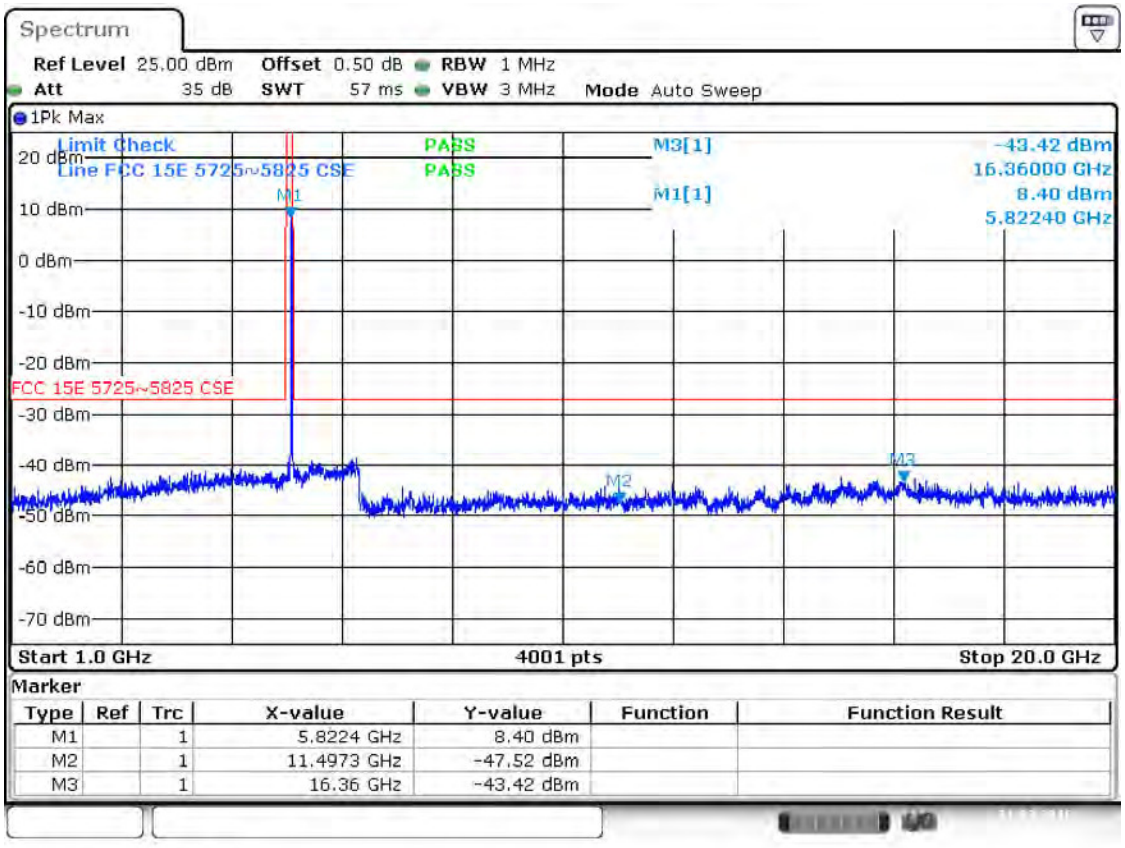
Date: 22.FEB.2016 14:03:03

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



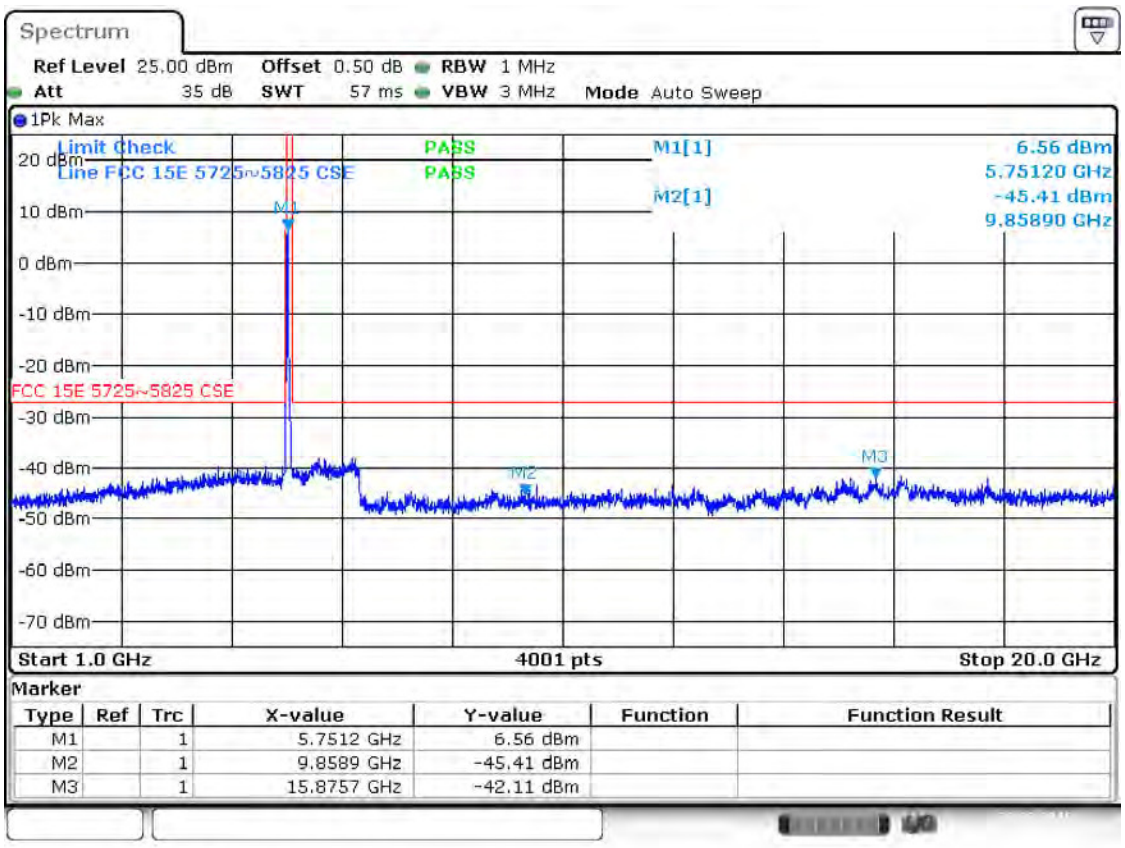
Date: 22.FEB.2016 14:05:06

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



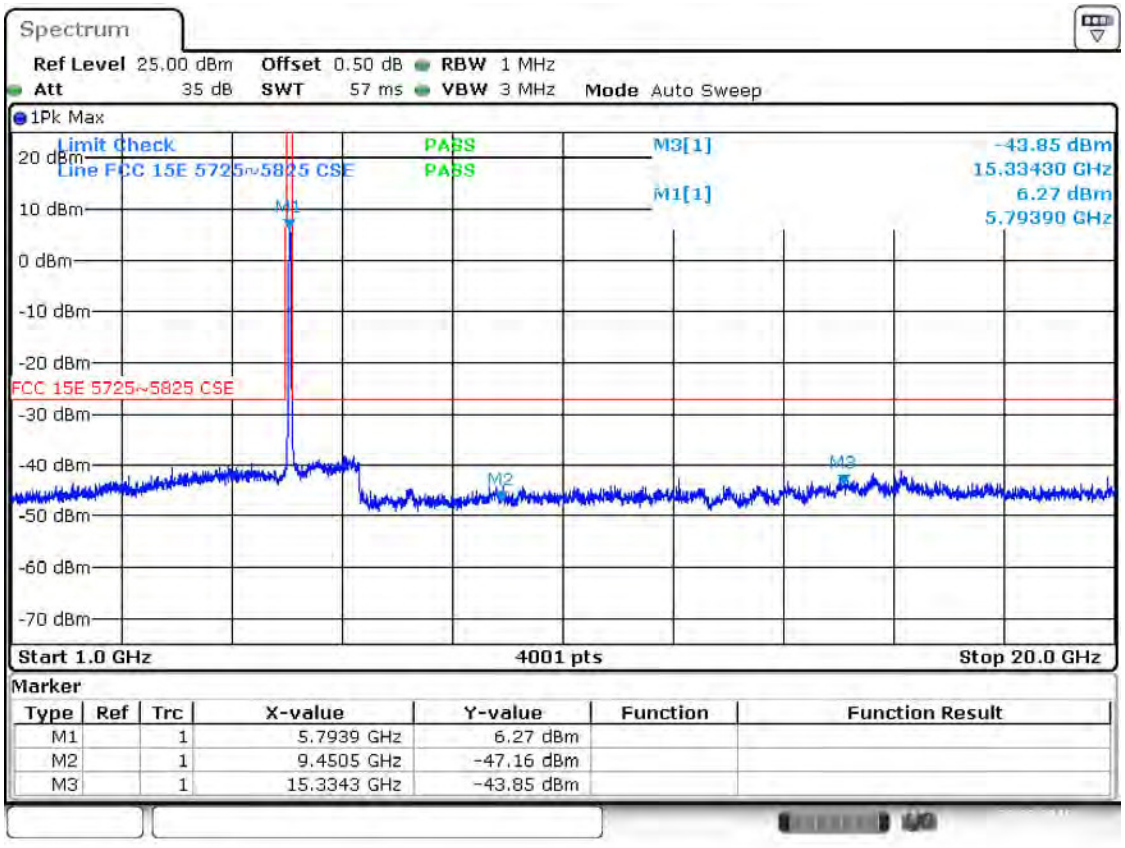
Date: 31.MAR.2016 20:29:21

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



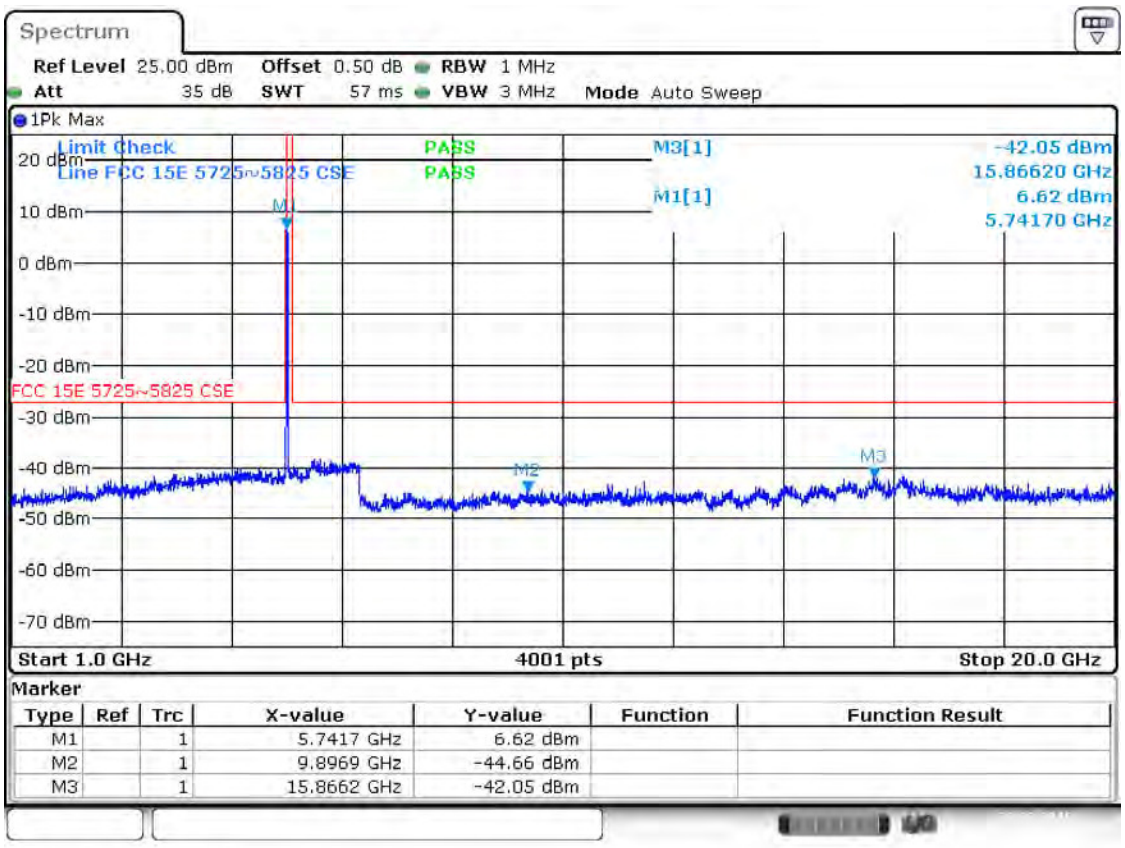
Date: 22.FEB.2016 15:46:08

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



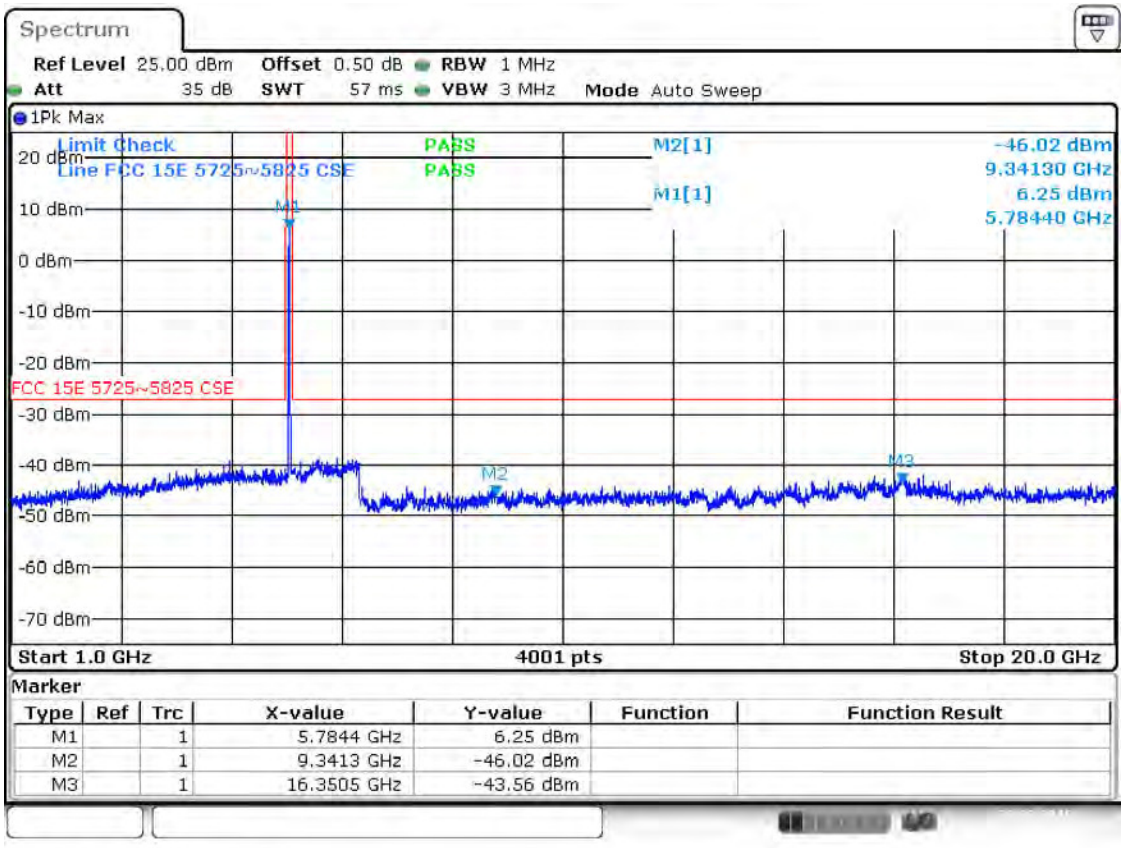
Date: 22.FEB.2016 14:36:30

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



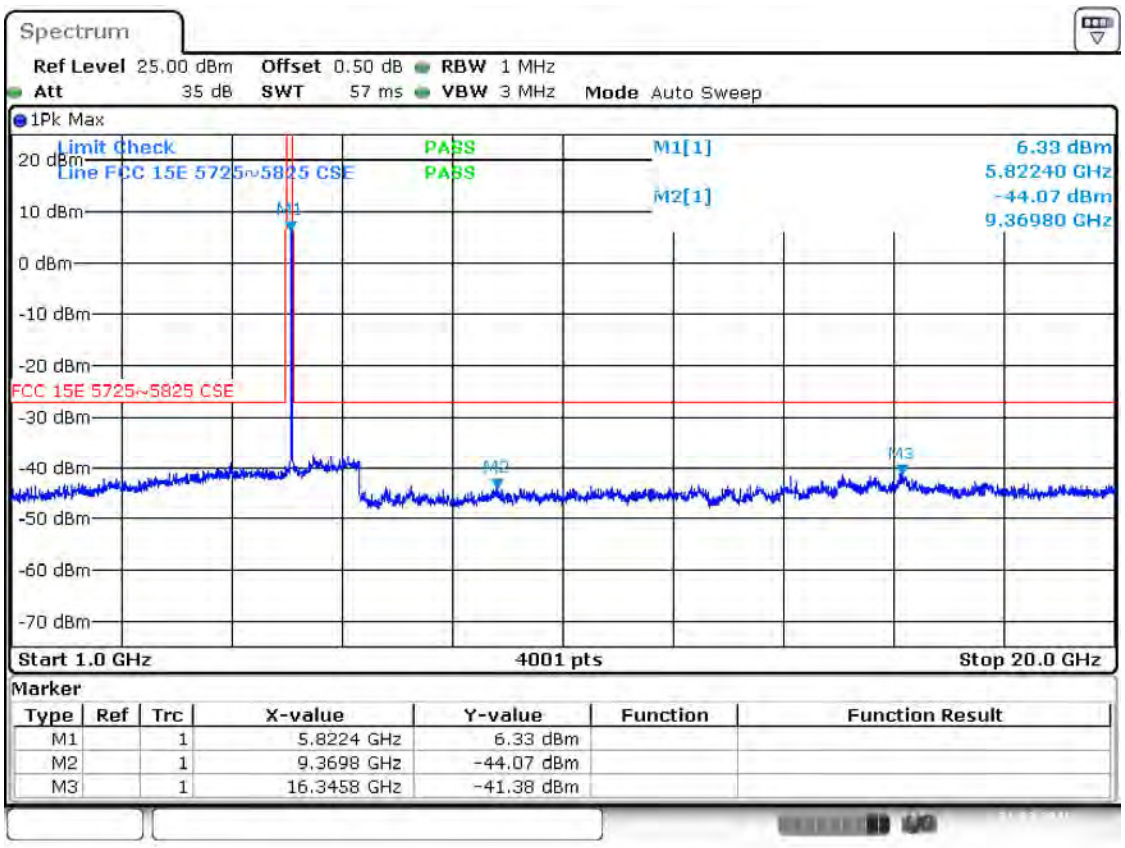
Date: 22.FEB.2016 11:55:10

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



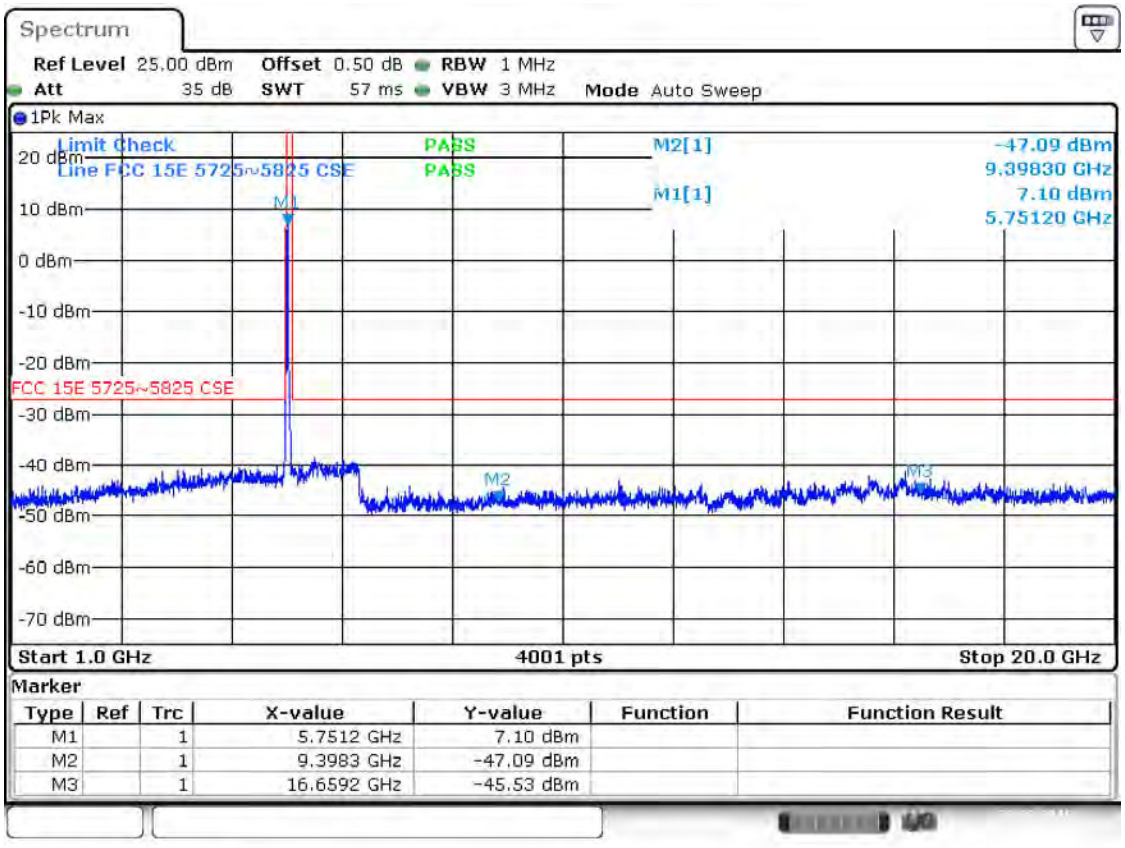
Date: 22.FEB.2016 11:57:05

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



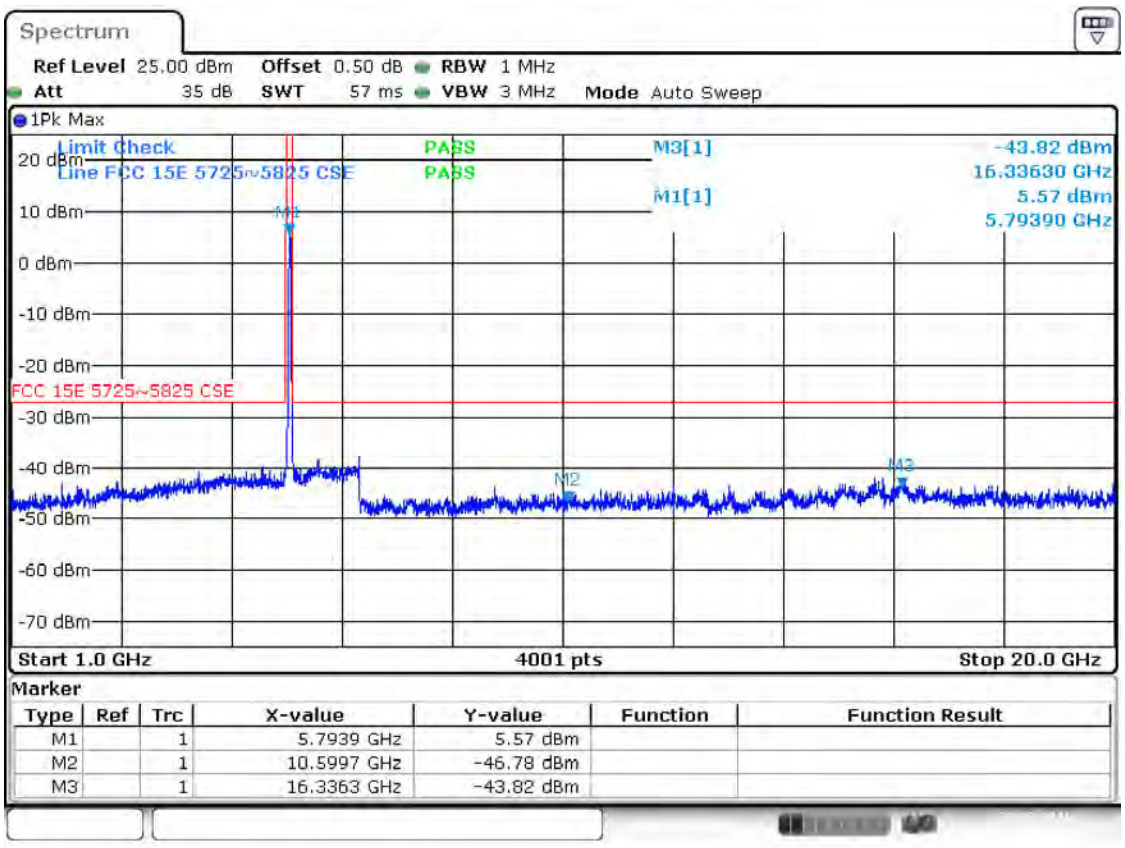
Date: 31.MAR.2016 20:31:54

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



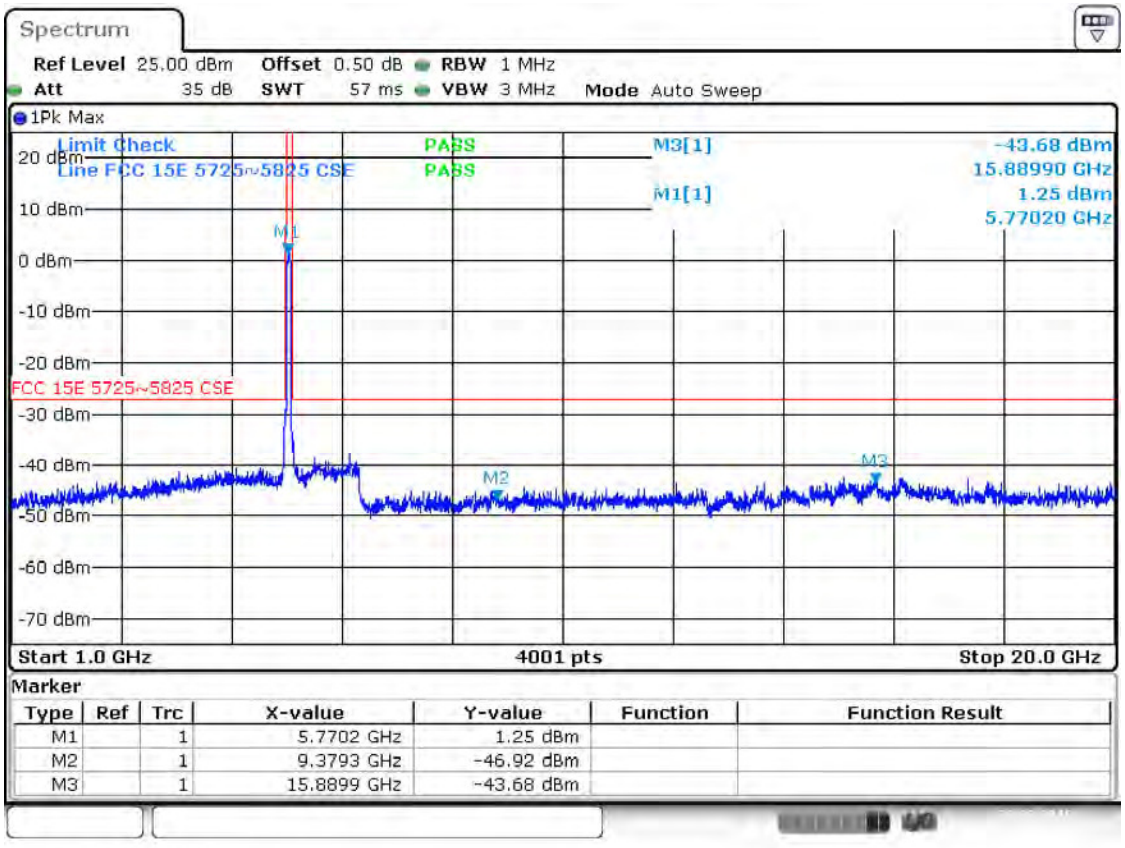
Date: 22.FEB.2016 14:59:40

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



Date: 22.FEB.2016 15:02:04

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



Date: 22.FEB.2016 15:14:02

A.7 Radiated Spurious Emissions and Band Edge (Restricted-band)

Antenna-port Conducted test data

E = EIRP – 20log D + 104.8

where:

E = electric field strength in dBμV/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: For Multiple transmitter output, the quantity *10 log (NANT)* dB is added to each spectrum value before comparing to the emission limit. When testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding *10 log(NANT)* if the measurements are made relative to the in-band emissions on the individual outputs.

The worst data (Test frequency: below 1 GHz) (ANT 0 Band I 11a CH36)

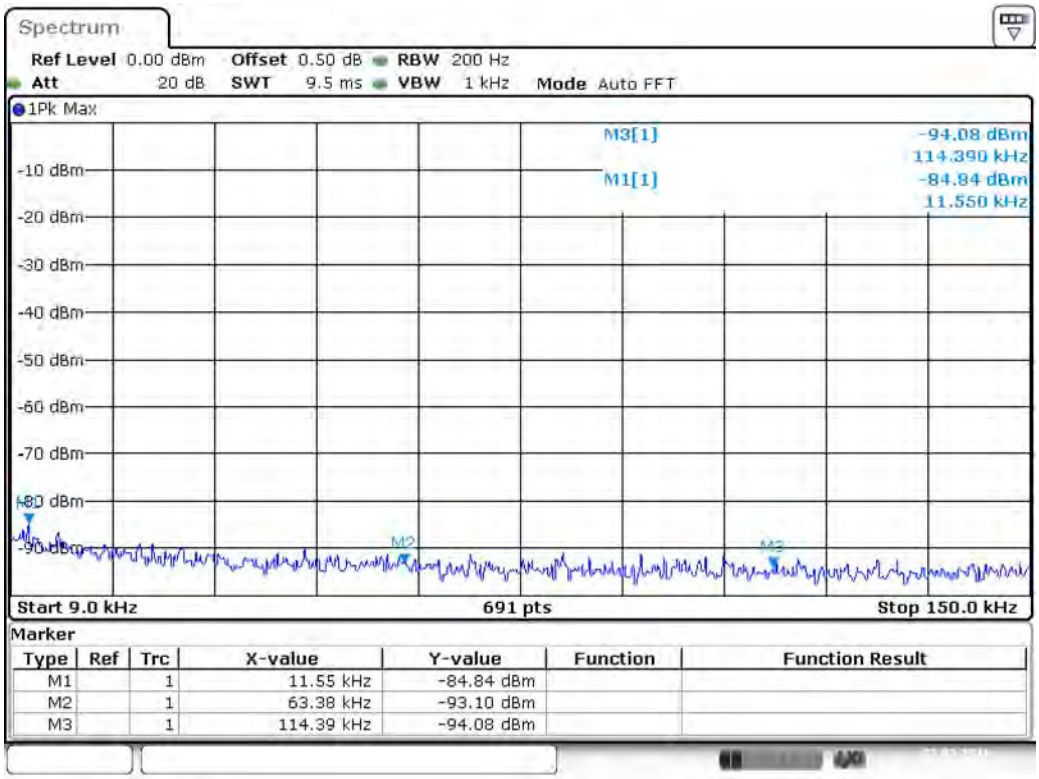
The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.
And the maximum in-band gain of the antenna is 6.3 dBi.
Note 1: 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.

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
0.01155	-84.84	6	3	6.3	QP	22.72	90.93	68.21	Note 2	PASS
10.00	-53.17	6	3	6.3	QP	54.39	90.93	36.54	Note 2	PASS
467.3	-71.22	4.7	3	6.3	QP	35.04	90.93	55.89	Note 2	PASS
809.8	-71.49	4.7	3	6.3	QP	34.77	90.93	56.16	Note 2	PASS

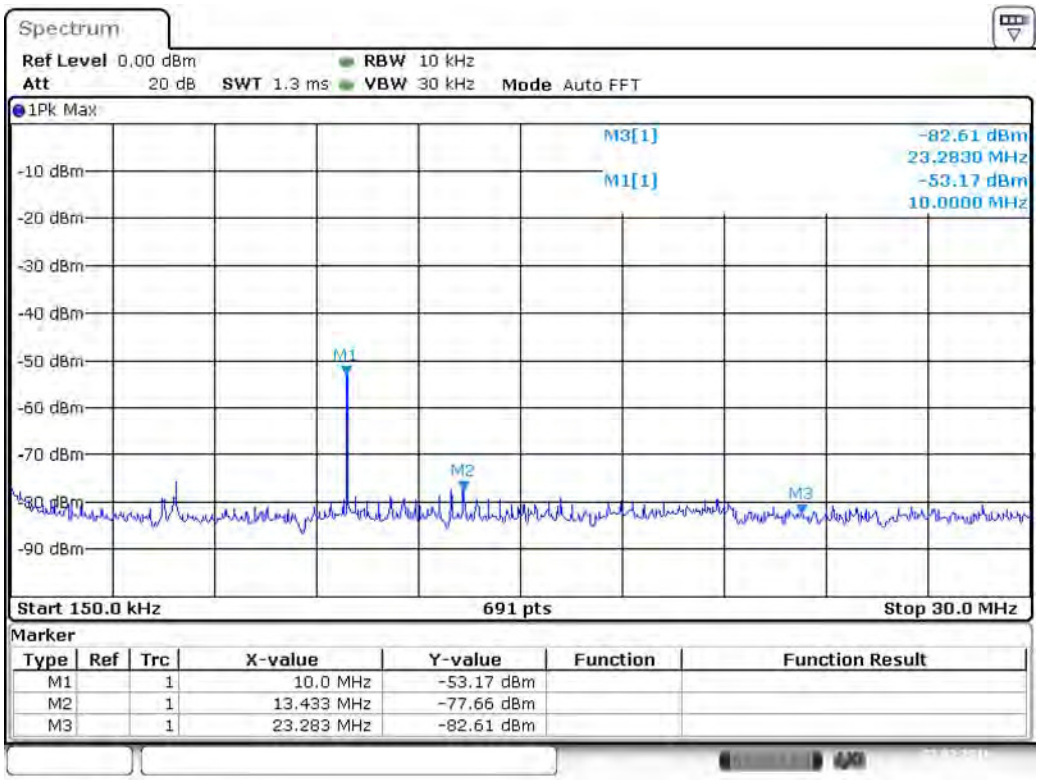
Test Plots

SPURIOUS 9 kHz ~ 150 kHz



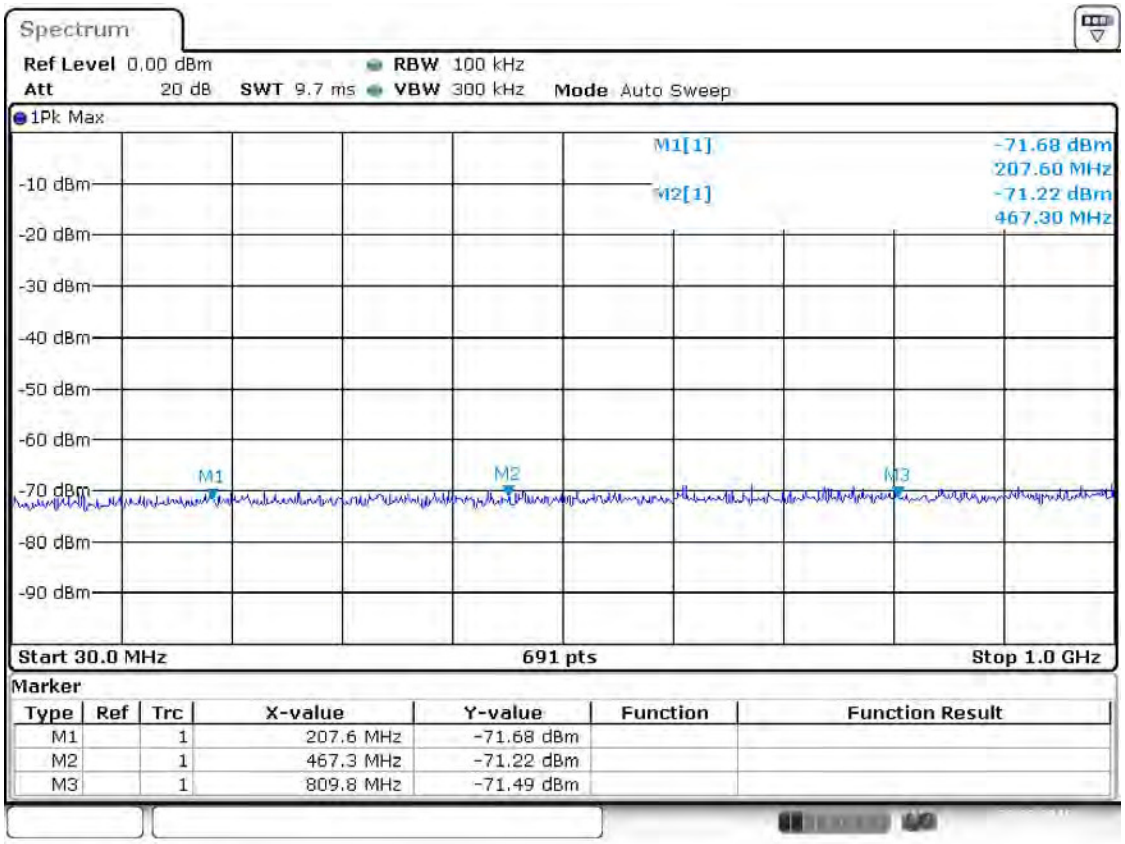
Date: 22.FEB.2016 15:56:56

SPURIOUS 150 kHz ~ 30 MHz



Date: 22.FEB.2016 16:04:01

SPURIOUS 30 MHz ~ 1 GHz



Date: 22.FEB.2016 16:05:28

Test Data (Test frequency: 1 - 25 GHz)

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 6.3 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.

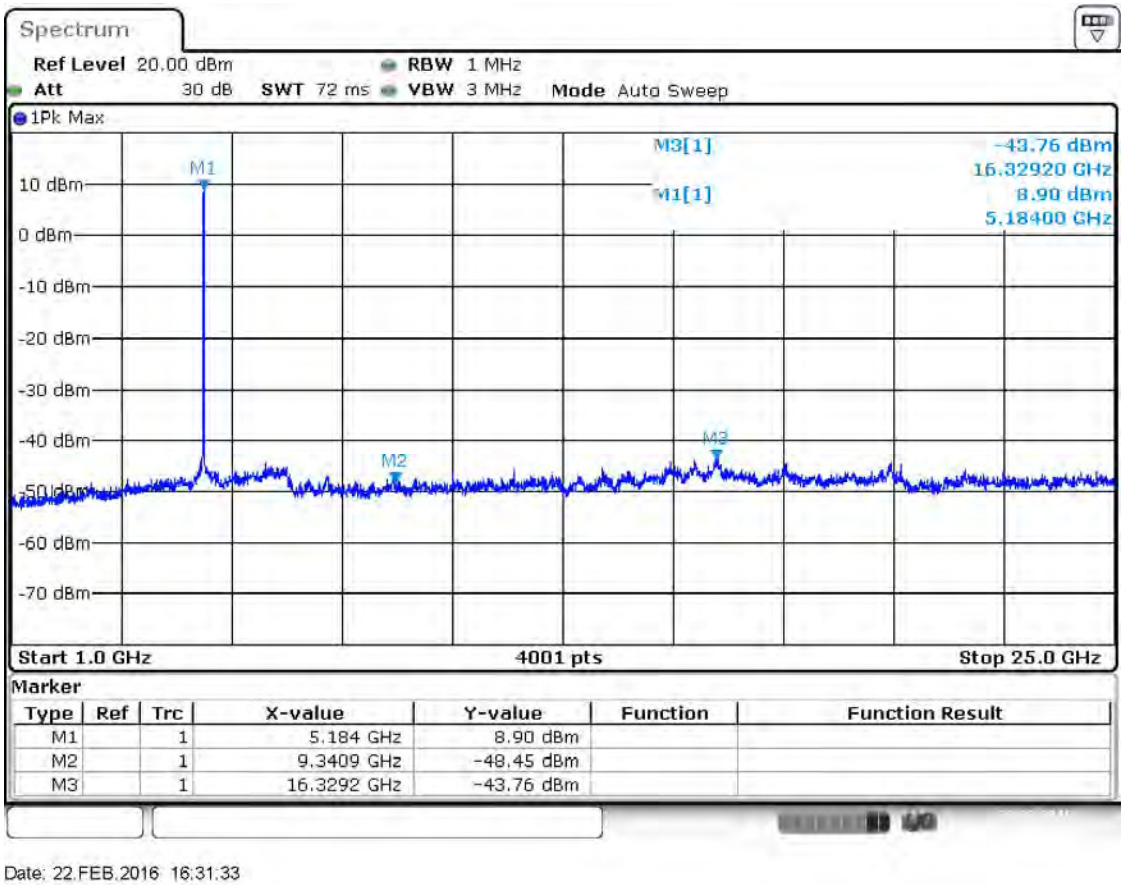
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

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
9340.9	-48.45	0	3	6.3	PK	53.11	74.00	20.89	--	PASS
	N/A		3	6.3	AV	N/A	54.00	N/A	Note 3	PASS
16329.2	-43.76	0	3	6.3	PK	57.80	90.46	32.66	Note 2	PASS
	N/A		3	6.3	AV	N/A	70.46	N/A	Note 3	PASS
5184	8.9	0	3	6.3	PK	110.46	N/A	N/A	Note 1	N/A
	-15.95		3	6.3	AV	85.61	N/A	N/A		N/A

Test Plots

Band I 11a CH36, 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 6.3 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.

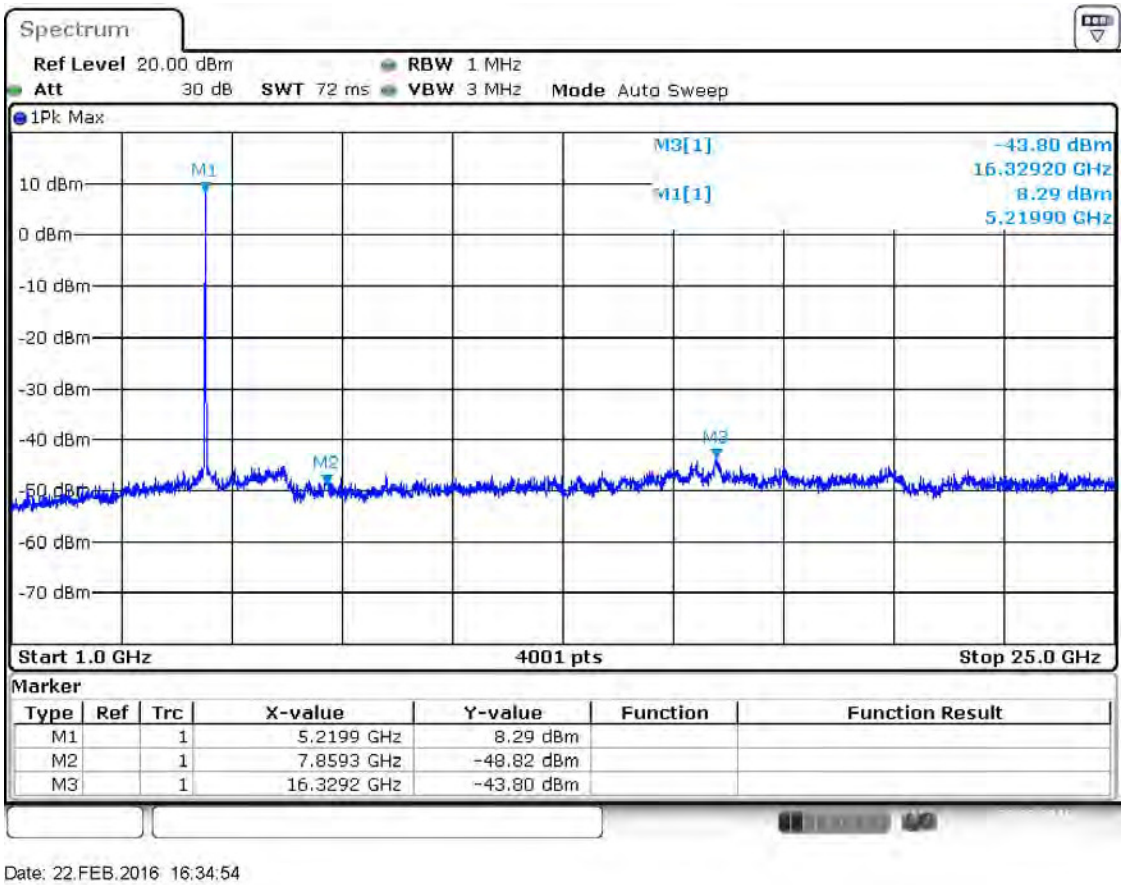
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band I 11a CH44

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7859.3	-48.82	0	3	6.3	PK	52.74	89.85	37.11	Note 2	PASS
	N/A		3	6.3	AV	N/A	69.85	N/A	Note 3	PASS
16329.2	-43.8	0	3	6.3	PK	57.76	89.85	32.09	Note 2	PASS
	N/A		3	6.3	AV	N/A	69.85	N/A	Note 3	PASS
5219.9	8.29	0	3	6.3	PK	109.85	N/A	N/A	Note 1	N/A
	-16.56		3	6.3	AV	85.00	N/A	N/A		N/A

Test Plots

Band I 11a CH44, 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 6.3 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.

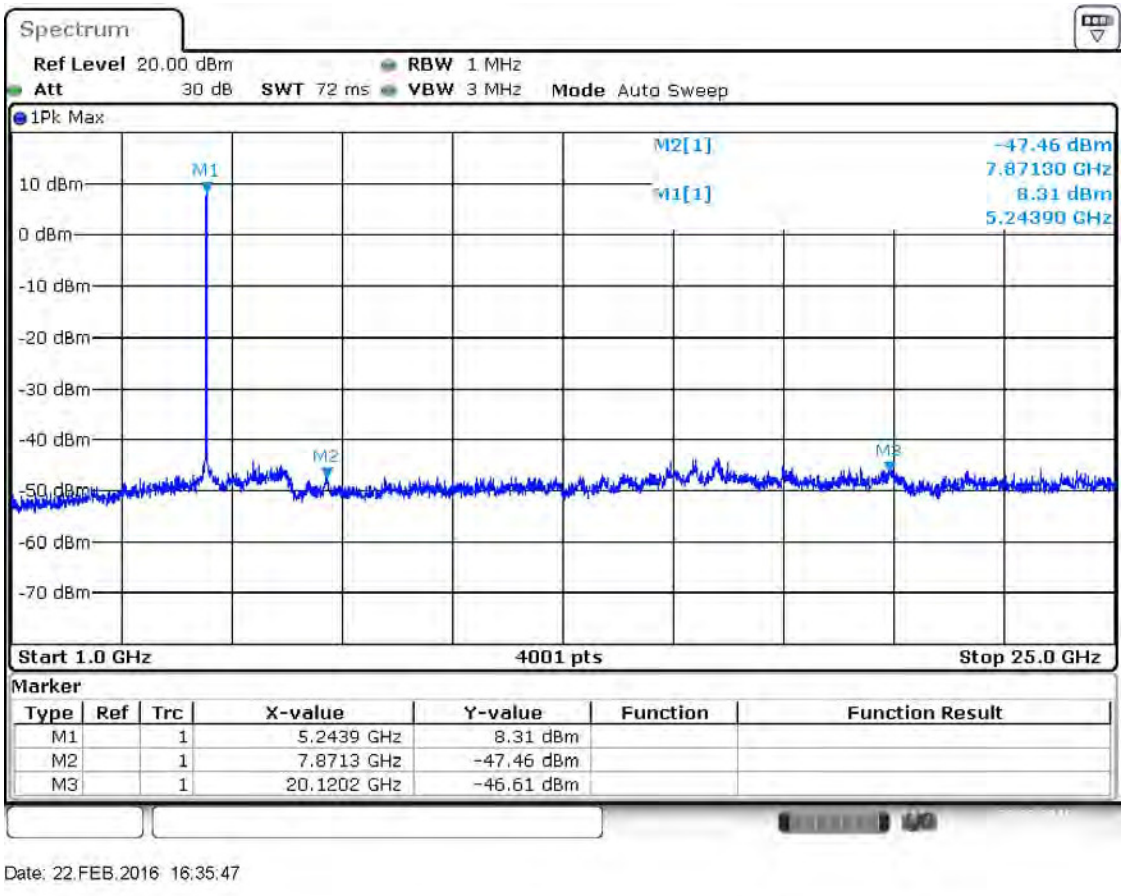
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

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
7871.3	-47.46	0	3	6.3	PK	54.10	89.87	35.77	Note 2	PASS
	N/A		3	6.3	AV	N/A	69.87	N/A	Note 3	PASS
20120.2	-46.61	0	3	6.3	PK	54.95	74.00	19.05	--	PASS
	N/A		3	6.3	AV	N/A	54.00	N/A	Note 3	PASS
5243.9	8.31	0	3	6.3	PK	109.87	N/A	N/A	Note 1	N/A
	-16.54		3	6.3	AV	85.02	N/A	N/A		N/A

Test Plots

Band I 11a CH48, 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 6.3 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.

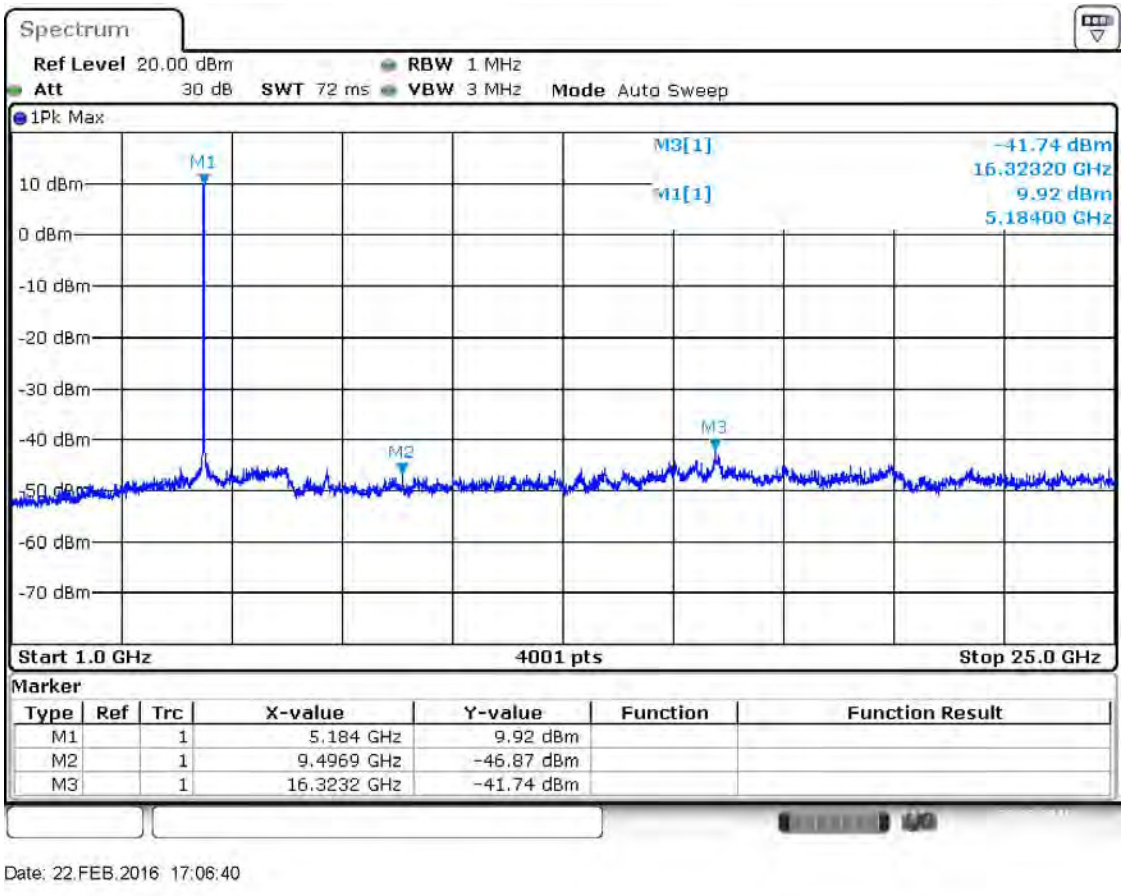
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band I 11n(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
9496.9	-46.87	0	3	6.3	PK	54.69	74.00	19.31	--	PASS
	N/A		3	6.3	AV	N/A	54.00	N/A	Note 3	PASS
16323.2	-41.74	0	3	6.3	PK	59.82	91.48	31.66	Note 2	PASS
	N/A		3	6.3	AV	N/A	71.48	N/A	Note 3	PASS
5184	9.92	0	3	6.3	PK	111.48	N/A	N/A	Note 1	N/A
	-14.93		3	6.3	AV	86.63	N/A	N/A		N/A

Test Plots

Band I 11n(HT20) CH36, 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 6.3 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.

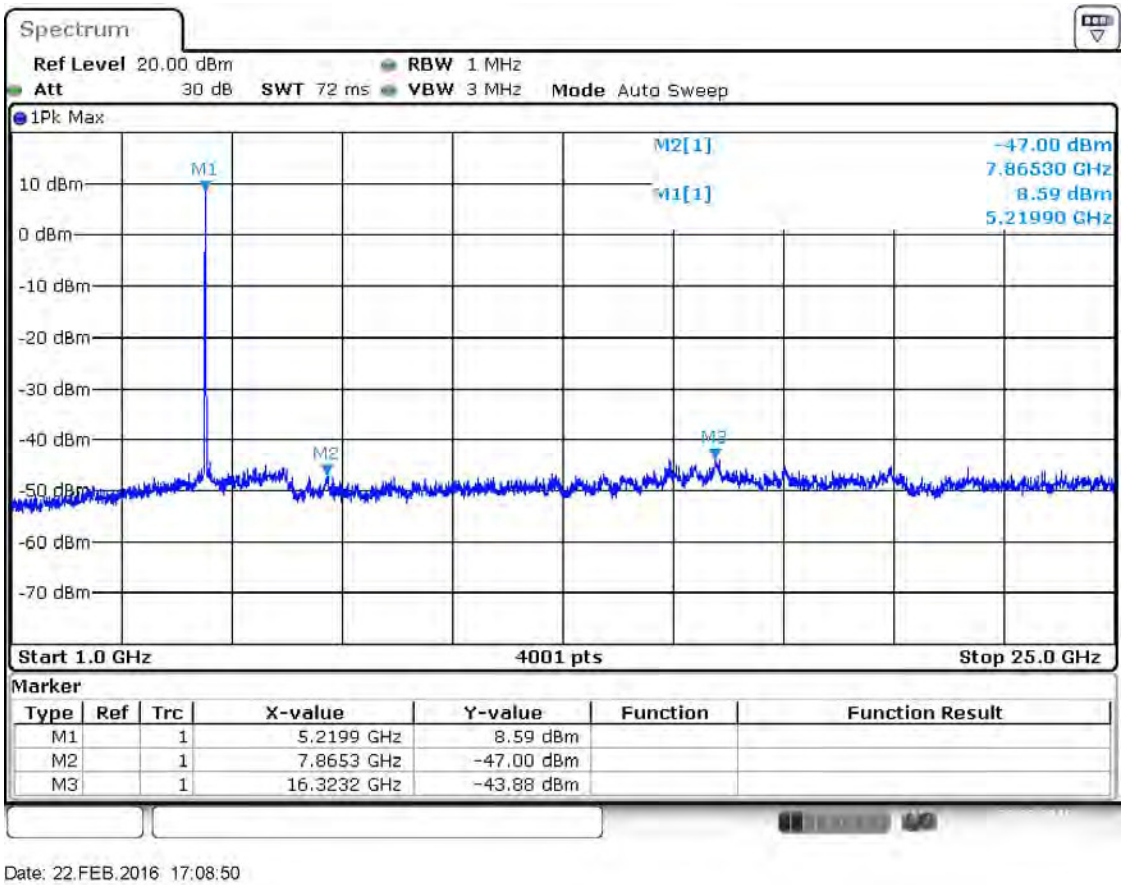
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band I 11n(HT20) CH44

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7865.3	-47	0	3	6.3	PK	54.56	90.15	35.59	Note 2	PASS
	N/A		3	6.3	AV	N/A	70.15	N/A	Note 3	PASS
16323.2	-43.88	0	3	6.3	PK	57.68	90.15	32.47	Note 2	PASS
	N/A		3	6.3	AV	N/A	70.15	N/A	Note 3	PASS
5219.9	8.59	0	3	6.3	PK	110.15	N/A	N/A	Note 1	N/A
	-16.26		3	6.3	AV	85.30	N/A	N/A		N/A

Test Plots

Band I 11n(HT20) CH44, 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 6.3dBi.

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

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

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

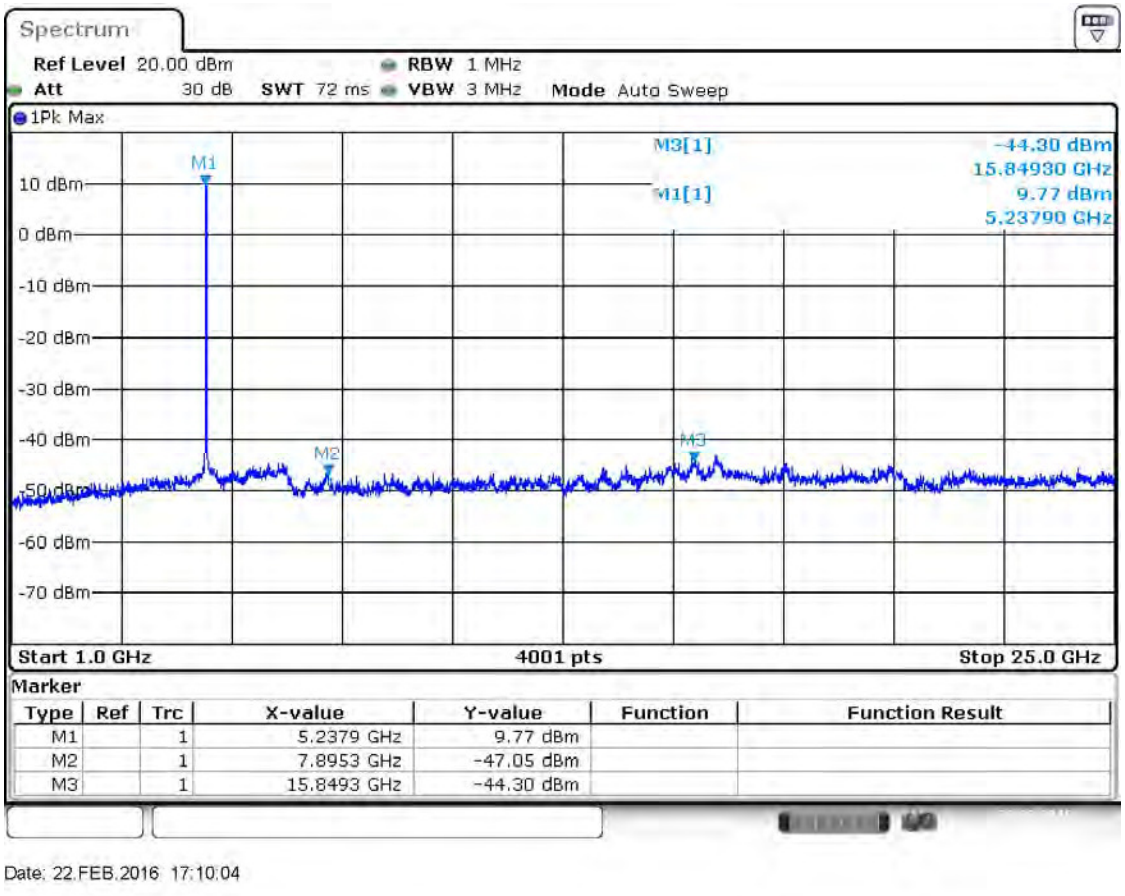
Note 4: The harmonic (3th ,4th , 5th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band I 11n(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
7895.3	-47.05	0	3	6.3	PK	54.51	91.33	36.82	Note 2	PASS
	N/A		3	6.3	AV	N/A	71.33	N/A	Note 3	PASS
15849.3	-44.3	0	3	6.3	PK	57.26	74.00	16.74	--	PASS
	N/A		3	6.3	AV	N/A	54.00	N/A	Note 3	PASS
5237.9	9.77	0	3	6.3	PK	111.33	N/A	N/A	Note 1	N/A
	-15.08		3	6.3	AV	86.48	N/A	N/A		N/A

Test Plots

Band I 11n(HT20) CH48, 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 6.3 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.

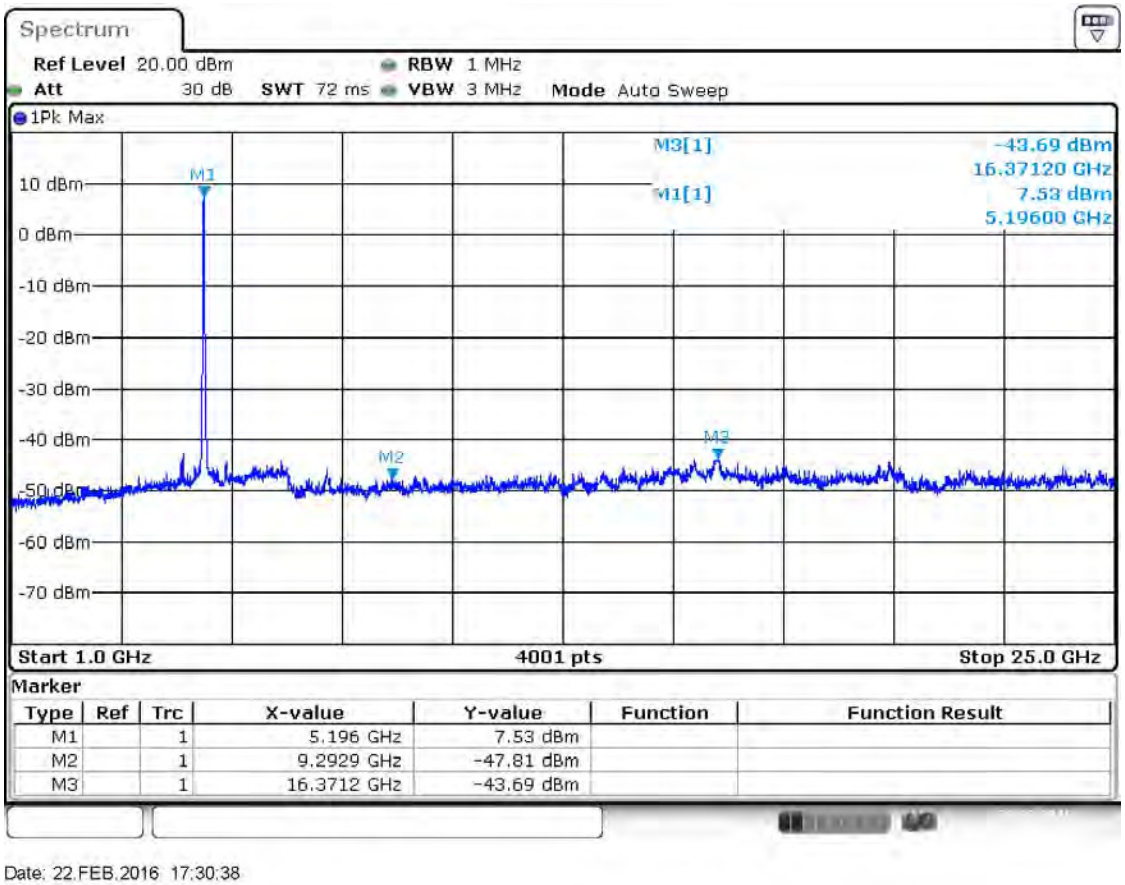
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

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
9292.9	-47.81	0	3	6.3	PK	53.75	89.09	35.34	Note 2	PASS
	N/A		3	6.3	AV	N/A	69.09	N/A	Note 3	PASS
16371.2	-43.69	0	3	6.3	PK	57.87	89.09	31.22	Note 2	PASS
	N/A		3	6.3	AV	N/A	69.09	N/A	Note 3	PASS
5196	7.53	0	3	6.3	PK	109.09	N/A	N/A	Note 1	N/A
	-17.32		3	6.3	AV	84.24	N/A	N/A		N/A

Test Plots

Band I 11n(HT40) CH38, 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 6.3 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.

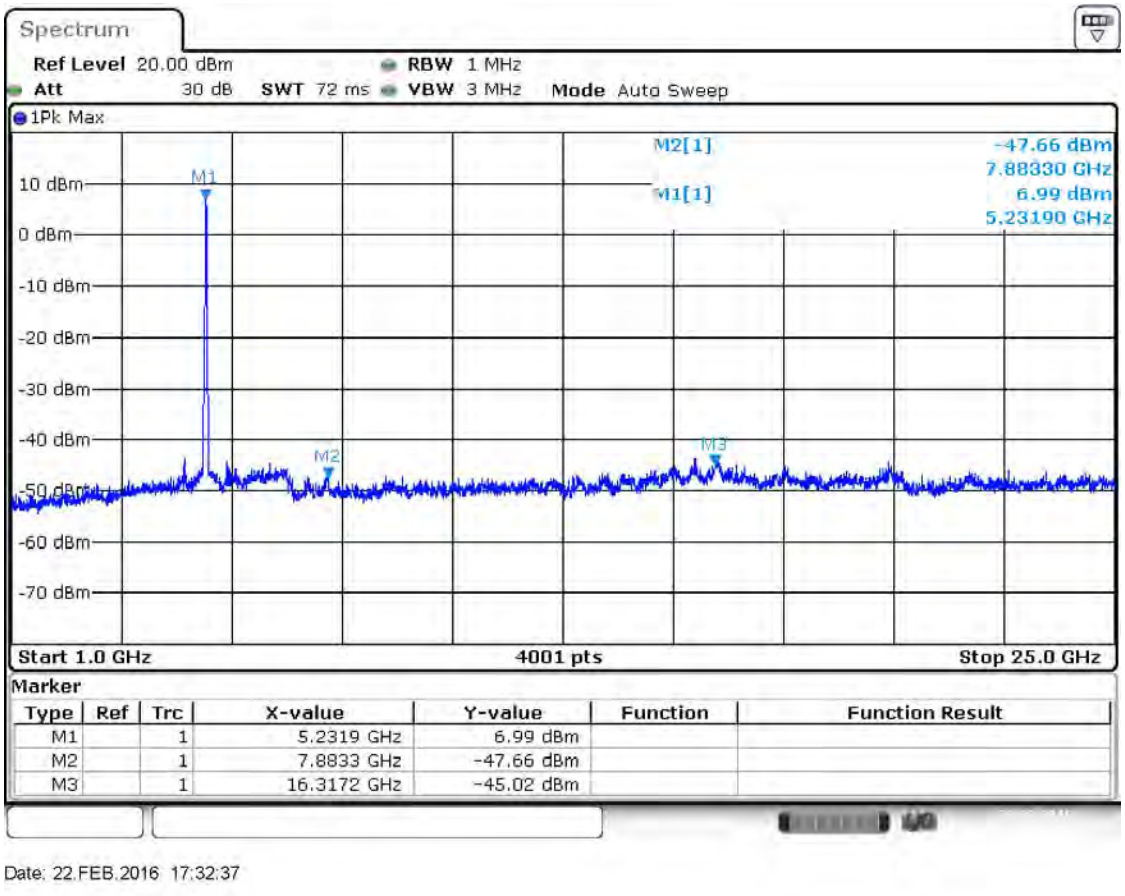
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

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
7883.3	-47.66	0	3	6.3	PK	53.90	88.55	34.65	Note 2	PASS
	N/A		3	6.3	AV	N/A	68.55	N/A	Note 3	PASS
16317.2	-45.02	0	3	6.3	PK	56.54	88.55	32.01	Note 2	PASS
	N/A		3	6.3	AV	N/A	68.55	N/A	Note 3	PASS
5231.9	6.99	0	3	6.3	PK	108.55	N/A	N/A	Note 1	N/A
	-17.86		3	6.3	AV	83.70	N/A	N/A		N/A

Test Plots

Band I 11n(HT40) CH46, 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 6.3 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.

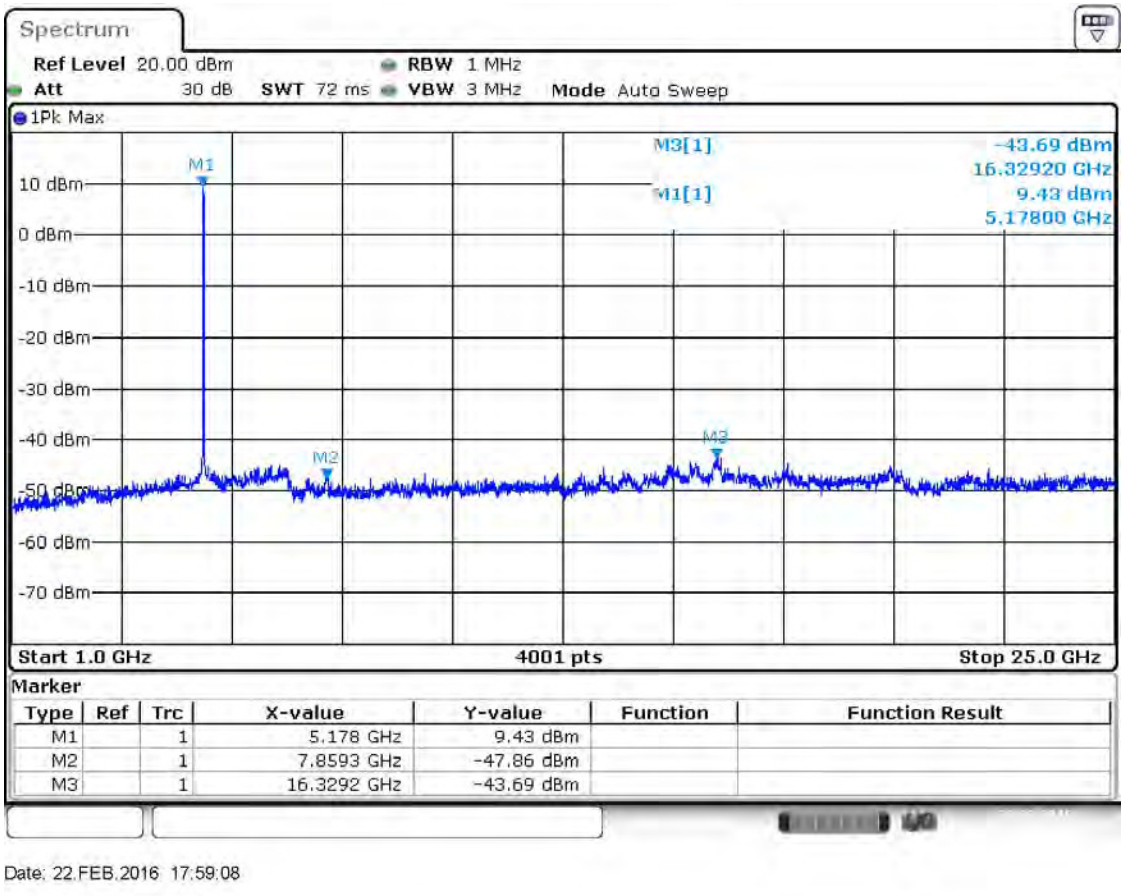
Note 4: The harmonic (2th ,3th , 4th,…etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

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
7859.3	-47.86	0	3	6.3	PK	53.70	90.99	37.29	Note 2	PASS
	N/A		3	6.3	AV	N/A	70.99	N/A	Note 3	PASS
16329.2	-43.69	0	3	6.3	PK	57.87	90.99	33.12	Note 2	PASS
	N/A		3	6.3	AV	N/A	70.99	N/A	Note 3	PASS
5178	9.43	0	3	6.3	PK	110.99	N/A	N/A	Note 1	N/A
	-15.42		3	6.3	AV	86.14	N/A	N/A		N/A

Test Plots

Band I 11ac(HT20) CH36, 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 6.4 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

Band I 11ac(HT20) CH44

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark	Verdict
7859.3	-46.64	0	3	6.3	PK	54.92	91.20	36.28	Note 2	PASS
	N/A		3	6.3	AV	N/A	71.20	N/A	Note 3	PASS
17654.8	-45.53	0	3	6.3	PK	56.03	91.20	35.17	Note 2	PASS
	N/A		3	6.3	AV	N/A	71.20	N/A	Note 3	PASS
5219.9	9.64	0	3	6.3	PK	111.20	N/A	N/A	Note 1	N/A
	-15.21		3	6.3	AV	86.35	N/A	N/A		N/A

Test Plots

Band I 11ac(HT20) CH44, SPURIOUS 1 GHz ~ 25 GHz