FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

TP-LINK TECHNOLOGIES CO., LTD.

300Mbps Wireless N Router

Model No.: TL-WR841N; TL-WR841ND

FCC ID: TE7WR841NXV9

Prepared for : TP-LINK TECHNOLOGIES CO., LTD.
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Report Number : ACS-F14043
Date of Test : Jan.08~15, 2014
Date of Report : Jan.26, 2014

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TEST REPORT CERTIFICATION

Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Manufacturer	:	TP-LINK TECHNOLOGIES CO., LTD.
EUT Description	:	300Mbps Wireless N Router
FCC ID	:	TE7WR841NXV9

(A) MODEL NO. : TL-WR841N; TL-WR841ND
(B) SERIAL NO. : N/A
(C) POWER SUPPLY : 100-240V, 50/60Hz
(D) TEST VOLTAGE : DC 9V From Adapter Input AC 120V/60Hz

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2012

Test procedure used:
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD..

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jan.08~ 15, 2014 Report of date: Jan.26, 2014

Prepared by : Julia Zhu
Julia Zhu / Assistant

Reviewed by :
Sunny Lu / Assistant Manager

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: David Jin 1.26

Approved & Authorized Signer :
David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10: 2009	PASS
Radiated Emission	FCC Part 15: 15.209 ANSI C63.10: 2009	PASS
Band Edge Compliance	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Conducted spurious emissions	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
6dB Bandwidth	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Peak Output Power	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Power Spectral Density	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name	:	300Mbps Wireless N Router
Model Number	:	TL-WR841N; TL-WR841ND The difference between this two models that TL-WR841N`s ANT is undetachable but TL-WR841ND`s ANT is detachable.
FCC ID	:	TE7WR841NXV9
Operation Frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz
Channel Number	:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels IEEE 802.11n HT40: 7Channels
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Antenna Assembly Gain	:	Dipole antenna, PK gain 5dBi
Applicant	:	TP-LINK TECHNOLOGIES CO., LTD. Building 24(floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer	:	TP-LINK TECHNOLOGIES CO., LTD. Building 24(floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Power Adapter	:	Manufacturer: TP-LINK; M/N: T090060-2B1 Cable: Unshielded, Detachable,1.5m
Date of Test	:	Jan.08~15, 2014
Date of Receipt	:	Jan.07, 2014
Sample Type	:	Prototype production

2.2.Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

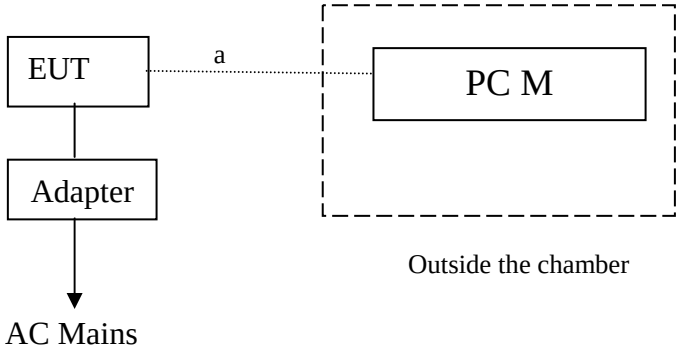
Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	11	Low :CH1	2412
	11	Middle: CH6	2437
	11	High: CH11	2462
IEEE 802.11g	54	Low :CH1	2412
	54	Middle: CH6	2437
	54	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452

Note1: According exploratory test, EUT will have maximum PK output power in those data rate, so those data rate were used for all test.
Note2: This is MIMO2*2 device, According to exploratory test, chain 1 has the worst case emission so choose chain 1 for the radiated emission and band edge test in 11b/g Mode. Test with two antenna transmit simultaneously in 11n Mode
Note3:This is MIMO device, The power, power density and other test items was tested under the requirement in KDB662911.

2.3.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1	Notebook	N/A	DELL	PP09S	N/A	☑FCC DoC ☑BSMI ID: R41108
		Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: Manufacturer: DELL, M/N: LA65NS1-00 Cable: Unshielded, Detachabled, 4.0m(Bond one ferrite core)				

2.4.Block Diagram of Test Setup



(EUT: 300Mbps Wireless N Router)

2.5. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Feb.22, 2015
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Oct.31, 2015
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: Jun.13, 2014
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-01 Valid Date: Feb.01, 2014
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2014

2.6. Measurement Uncertainty (95% confidence levels, k=2)

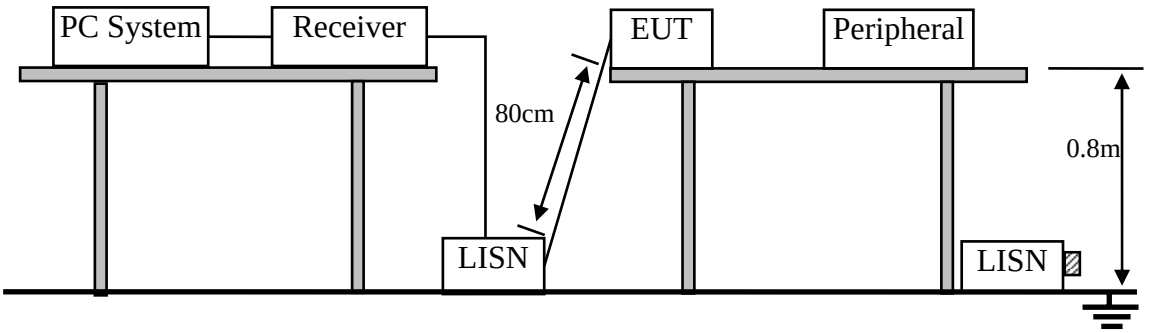
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.08 dB(9KHz to 150KHz)
	3.1 dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.22 dB(30~200MHz, Polarize: H)
	3.23 dB(30~200MHz, Polarize: V)
	3.49 dB(200M~1GHz, Polarize: H)
	3.39 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	4.97 dB(1~6GHz, Distance: 3m)
	4.99 dB(6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57 dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	$7x10^{-8}$
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 13	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 13	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 13	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 13	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 2	May.08, 13	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 13	1Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 13	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 13	1 Year

3.2.Block Diagram of Test Setup



:50Ω Terminator

3.3.Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. 300Mbps Wireless N Router (EUT)

Model Number : TL-WR841N
Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software to control EUT work in Tx mode.

3.6. Test Procedure

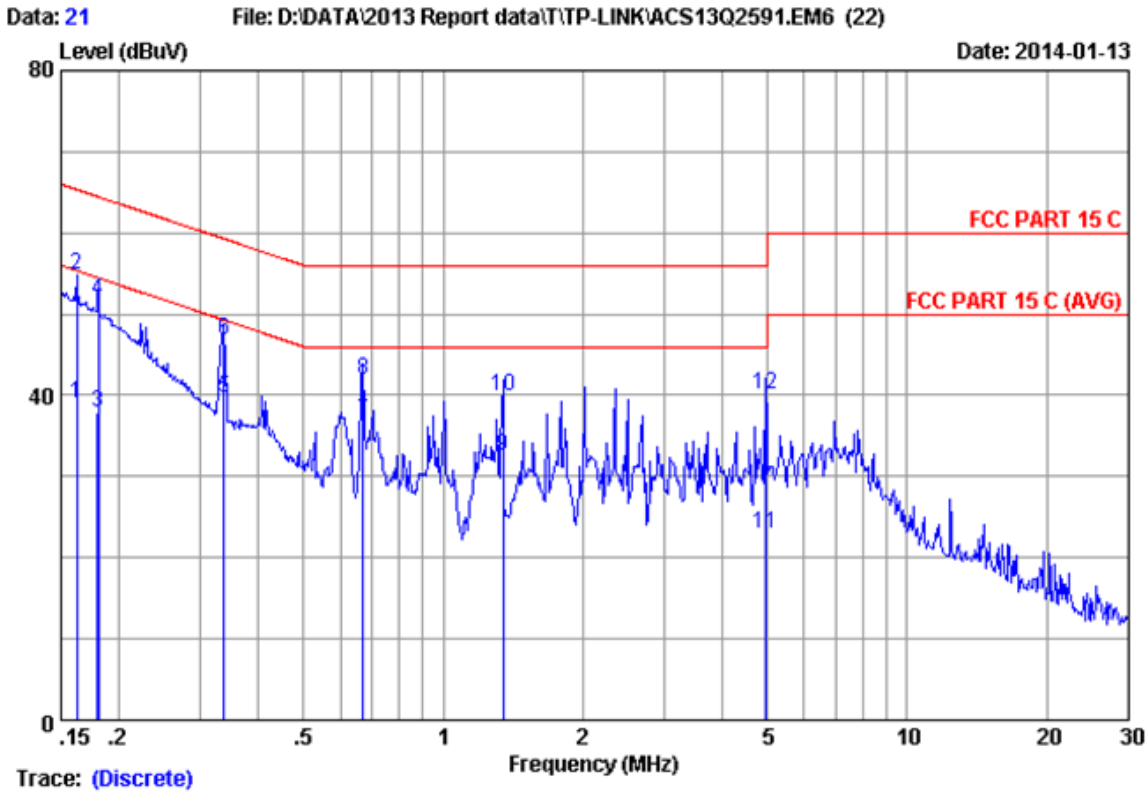
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

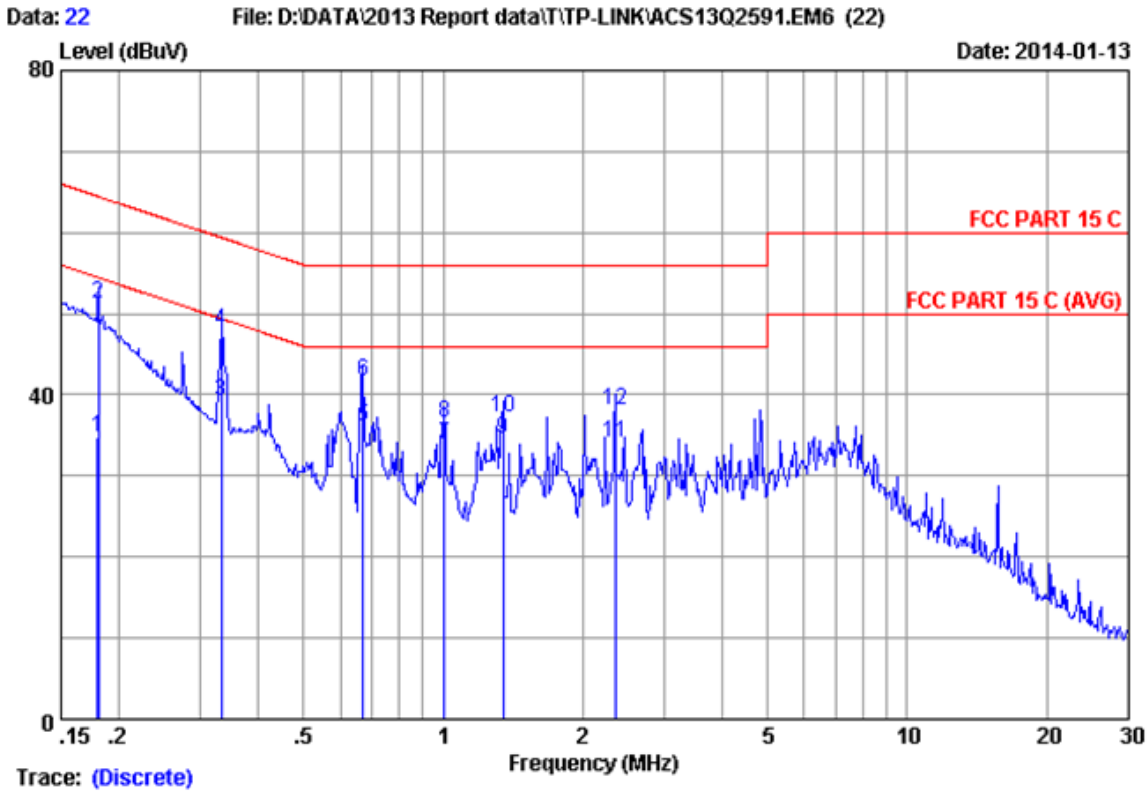
PASS. **(**All emissions not reported below are too low against the prescribed limits.)



Site no :1#conduction Data No :21
Dis./Ant. :2013 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :23.5*C/60% Engineer :Leo-Li
EUT :300Mbps Wireless N Router
Power Rating :DC 9V From Adapter Input AC 120V/60Hz
Test Mode :Tx Mode
M/N : TL-WR841N

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16200	0.14	0.01	38.80	38.95	55.36	16.41	Average
2	0.16241	0.14	0.01	54.73	54.88	65.34	10.46	QP
3	0.18000	0.15	0.01	37.70	37.86	54.49	16.63	Average
4	0.18056	0.15	0.01	51.62	51.78	64.46	12.68	QP
5	0.33700	0.15	0.01	39.51	39.67	49.28	9.61	Average
6	0.33740	0.15	0.01	46.62	46.78	59.27	12.49	QP
7	0.67100	0.17	0.03	36.49	36.69	46.00	9.31	Average
8	0.67187	0.17	0.03	41.80	42.00	56.00	14.00	QP
9	1.344	0.19	0.03	32.41	32.63	46.00	13.37	Average
10	1.345	0.19	0.03	39.73	39.95	56.00	16.05	QP
11	4.951	0.32	0.07	22.60	22.99	46.00	23.01	Average
12	4.952	0.32	0.07	39.81	40.20	56.00	15.80	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Site no :1#conduction Data No :22
Dis./Ant. :2013 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :23.5*C/60% Engineer :Leo-Li
EUT :300Mbps Wireless N Router
Power Rating :DC 9V From Adapter Input AC 120V/60Hz
Test Mode :Tx Mode
M/N : TL-WR841N

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18000	0.18	0.01	34.50	34.69	54.49	19.80	Average
2	0.18056	0.18	0.01	50.96	51.15	64.46	13.31	QP
3	0.33200	0.20	0.01	39.11	39.32	49.40	10.08	Average
4	0.33208	0.20	0.01	47.70	47.91	59.40	11.49	QP
5	0.67100	0.26	0.03	35.80	36.09	46.00	9.91	Average
6	0.67187	0.26	0.03	41.47	41.76	56.00	14.24	QP
7	1.004	0.26	0.03	33.60	33.89	46.00	12.11	Average
8	1.005	0.26	0.03	36.28	36.57	56.00	19.43	QP
9	1.344	0.26	0.03	34.30	34.59	46.00	11.41	Average
10	1.345	0.26	0.03	36.84	37.13	56.00	18.87	QP
11	2.345	0.27	0.04	33.70	34.01	46.00	11.99	Average
12	2.346	0.27	0.04	37.71	38.02	56.00	17.98	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

4.1.1. For frequency range 30MHz~1000MHz (At Anechoic Chamber)

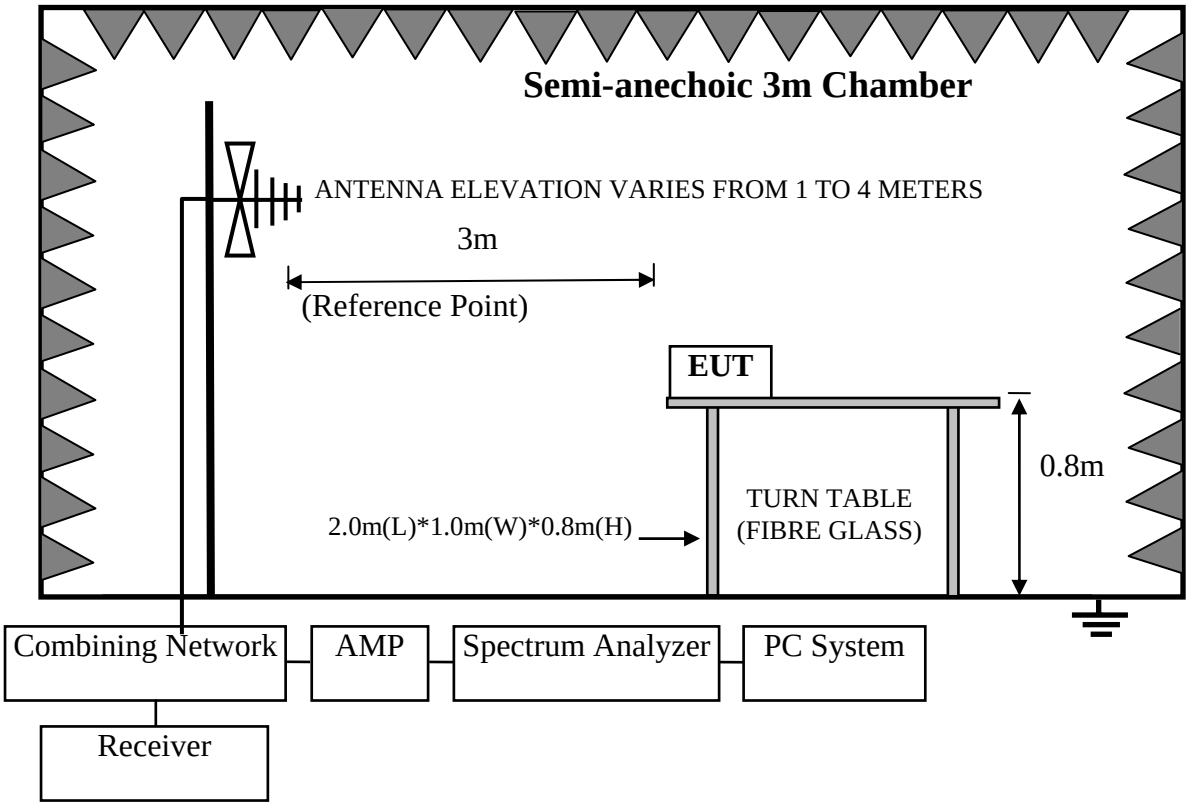
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24, 13	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 13	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 13	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 13	1 Year
5	Bilog Antenna	TESEQ	CBL6112D	35375	May.30, 13	1 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 13	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 13	1 Year
8	MPEG2 Measurement Generator	ROHDE&SCHWARZ	DVG	100319	Dec.11, 13	1 Year
9	TV Transmitter	ROHDE&SCHWARZ	SFQ	100521	May.08, 13	1 Year
10	Signal Generator	HP	8648A	3625U00573	May.08, 13	1 Year
11	Pattern Generator	Philiphs	PM5418	LO625020	May.08, 13	1 Year

4.1.2. For frequency range 1GHz~25GHz (At Anechoic Chamber)

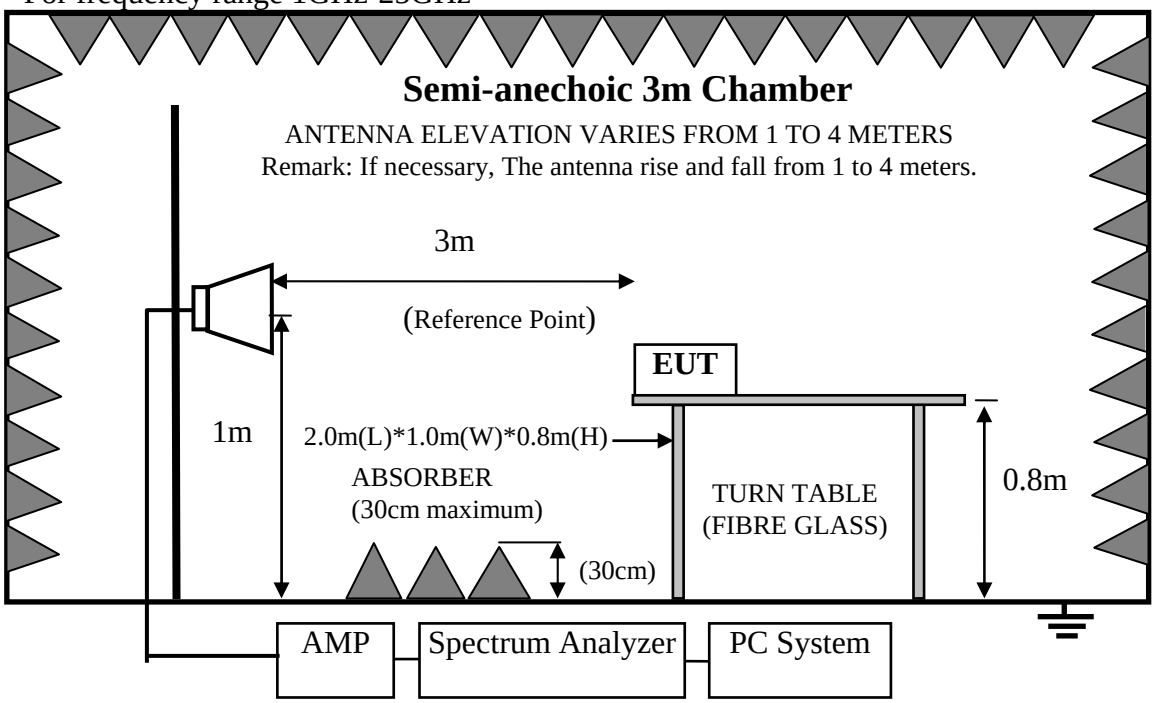
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 13	1 Year
2	Horn Antenna	EMCO	3115	9607-4580	Aug.28, 13	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 13	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 13	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 13	1 Year
6	Horn Antenna	EMCO	3116	00060089	Aug.28, 13	1 Year

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3.Radiated Emission Limit

4.3.1. 15.209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

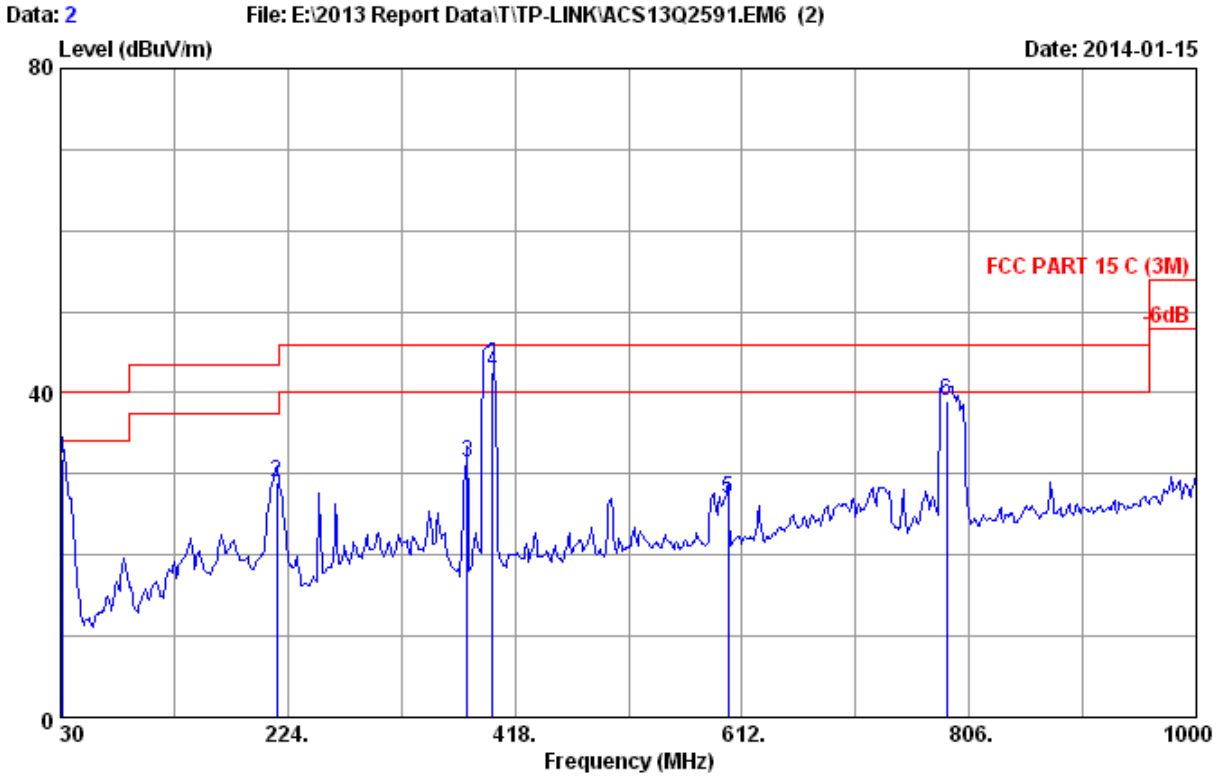
4.7.Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

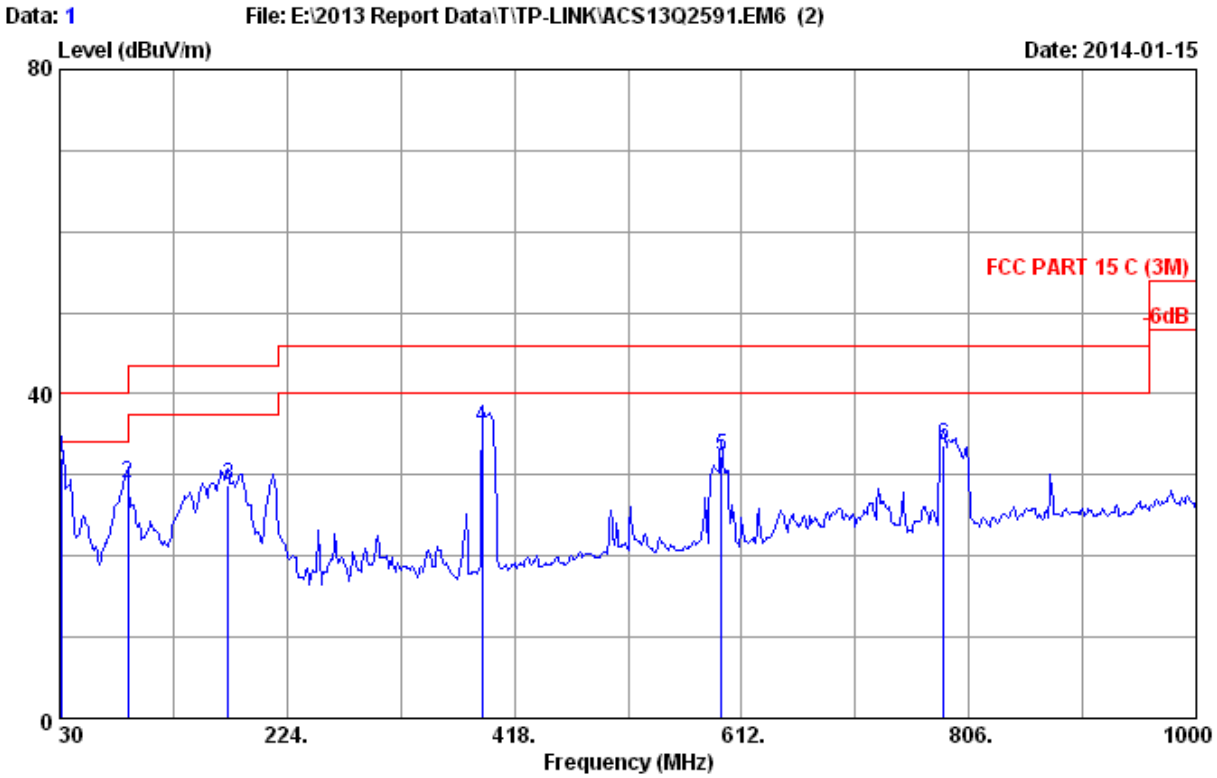
Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/65% Engineer : Leo_Li
EUT : 300Mbps Wireless N Router
Power rating : DC 9V From PC Input AC 120V/60Hz
Test Mode : Tx Mode
M/N : TL-WR841N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.84	0.86	12.10	31.80	40.00	8.20	QP
2	214.300	10.40	1.84	16.82	29.06	43.50	14.44	QP
3	377.260	15.85	2.39	13.26	31.50	46.00	14.50	QP
4	398.600	16.54	2.46	23.61	42.61	46.00	3.39	QP
5	600.360	19.20	3.04	4.81	27.05	46.00	18.95	QP
6	786.600	20.70	3.57	14.79	39.06	46.00	6.94	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

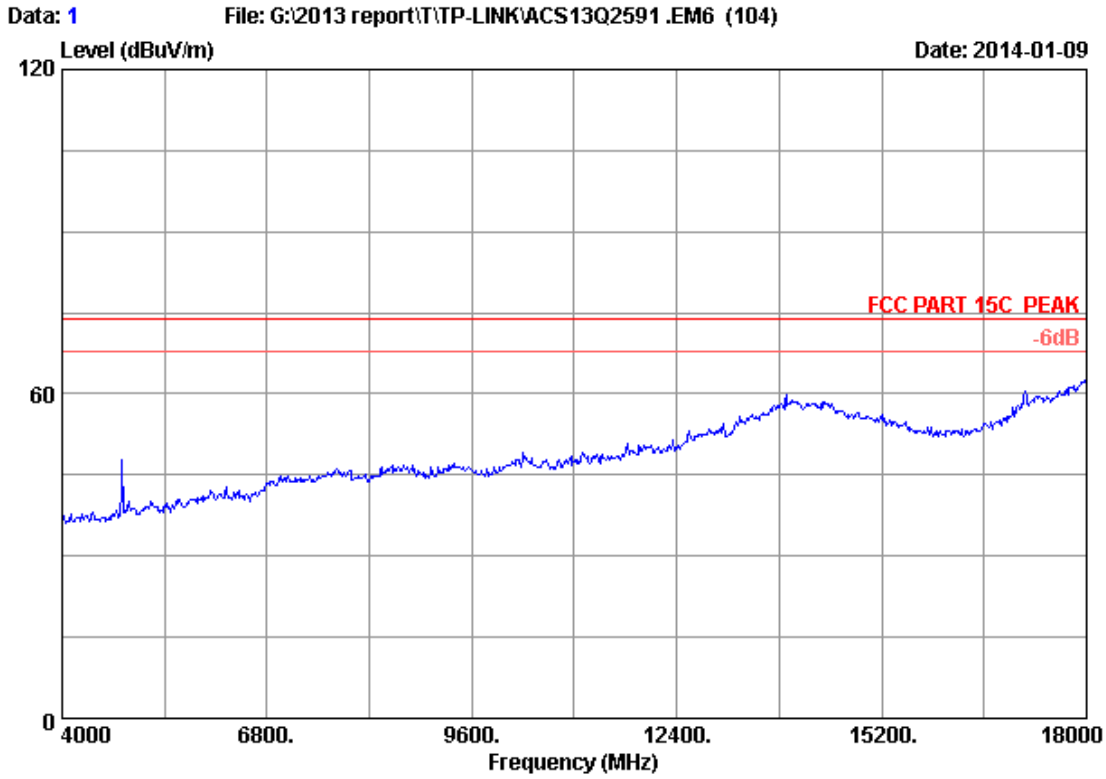


Site no. : 3m Chamber Data no. : 1
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/65% Engineer : Leo_Li
EUT : 300Mbps Wireless N Router
Power rating : DC 9V From PC Input AC 120V/60Hz
Test Mode : Tx Mode
M/N : TL-WR841N

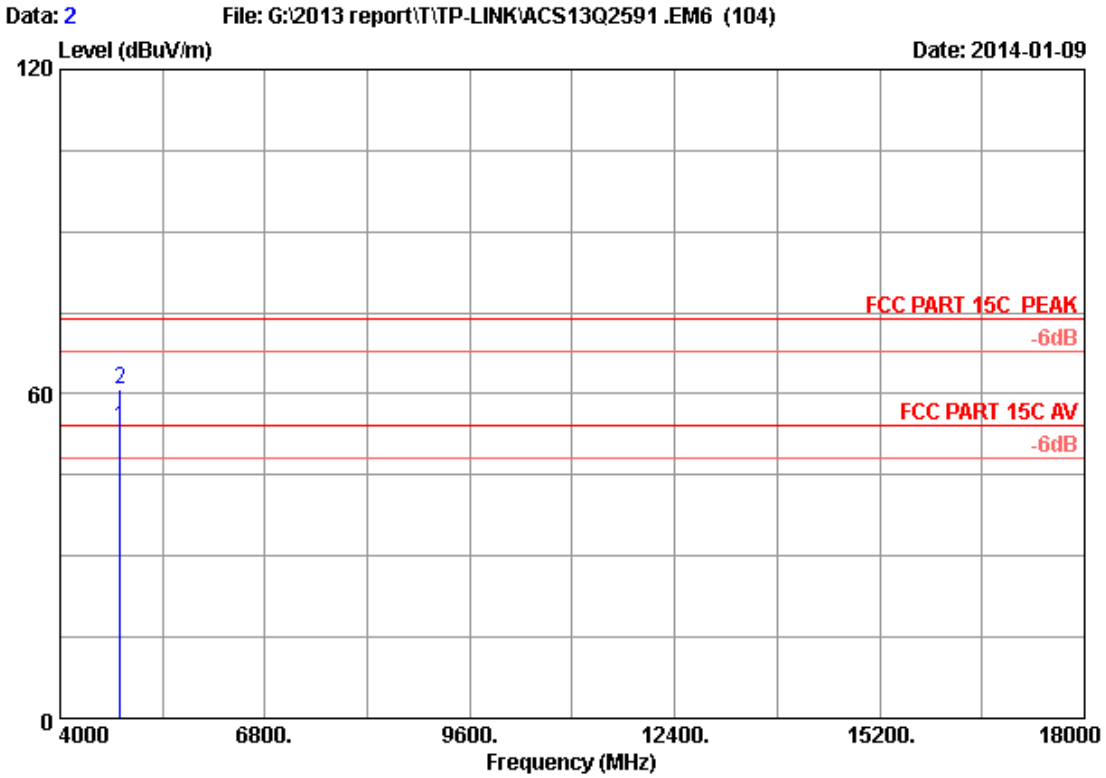
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.84	0.86	12.48	32.18	40.00	7.82	QP
2	88.200	9.04	1.36	18.54	28.94	43.50	14.56	QP
3	173.560	10.02	1.69	17.15	28.86	43.50	14.64	QP
4	390.840	16.23	2.43	17.17	35.83	46.00	10.17	QP
5	594.540	19.09	3.02	10.31	32.42	46.00	13.58	QP
6	784.660	20.69	3.57	9.29	33.55	46.00	12.45	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



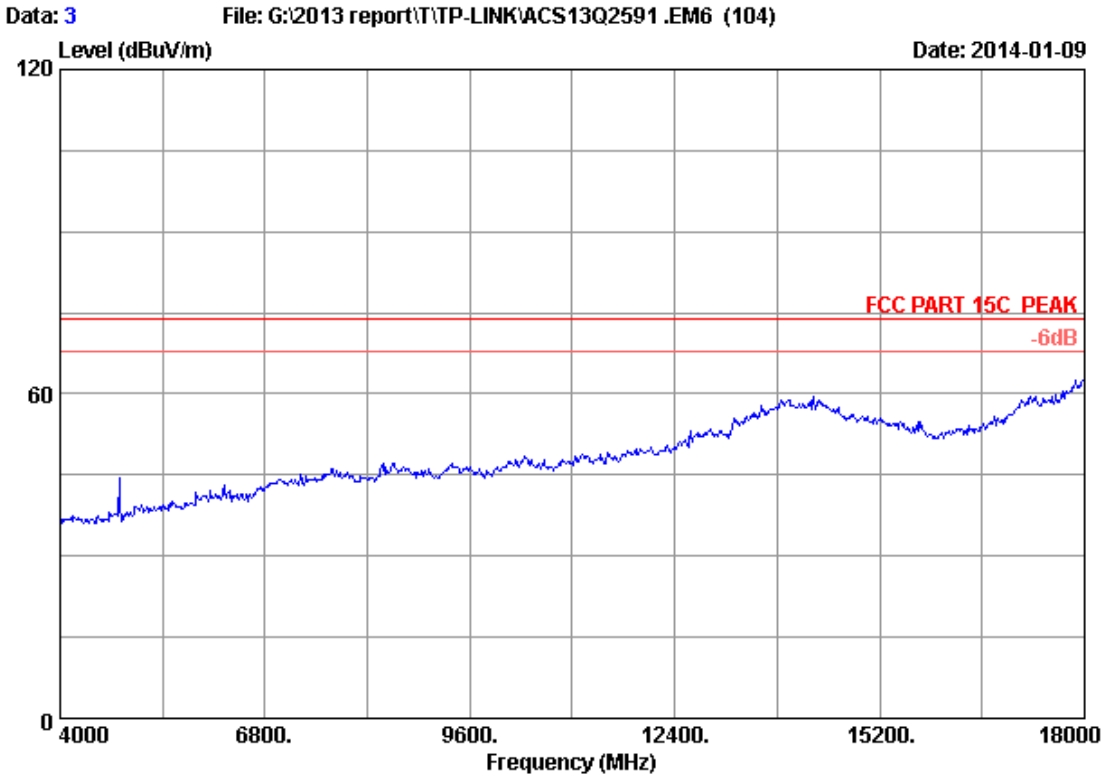

```
Site no.      : 3m Chamber                Data no.   : 1
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b CH1 2412MHz Tx
M/N           : TL-WR841N
```



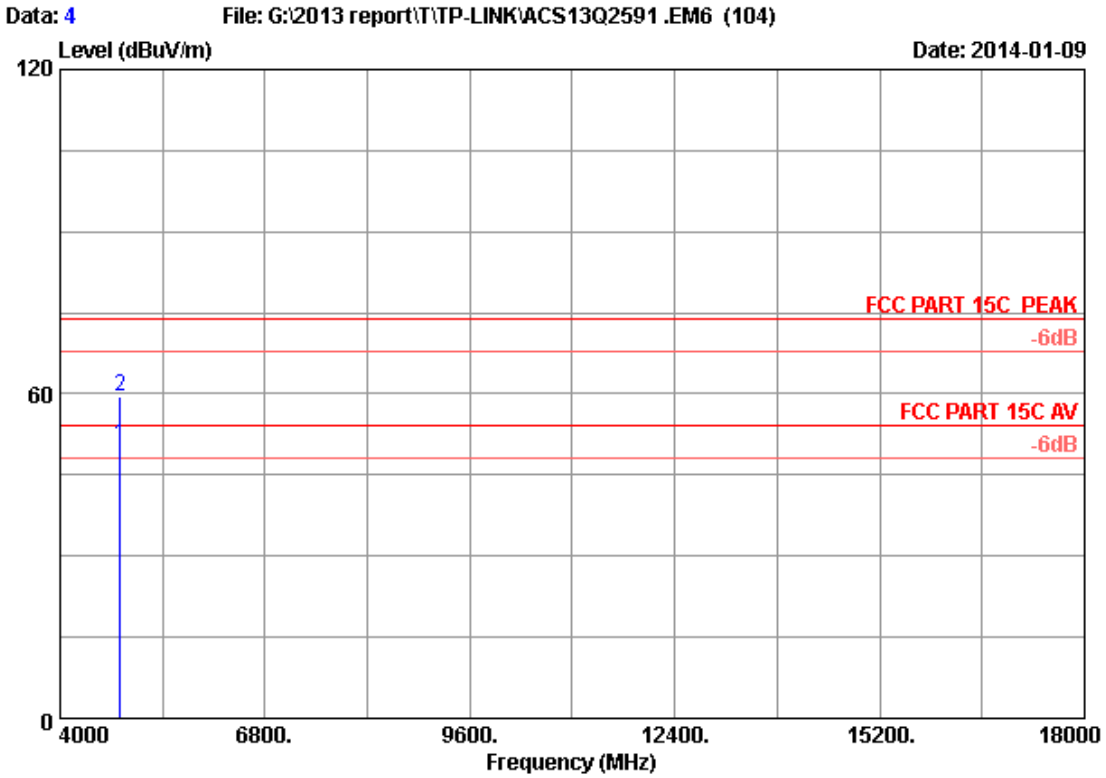
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	48.03	53.79	54.00	0.21	Average
2	4824.000	32.88	8.58	35.70	55.22	60.98	74.00	13.02	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



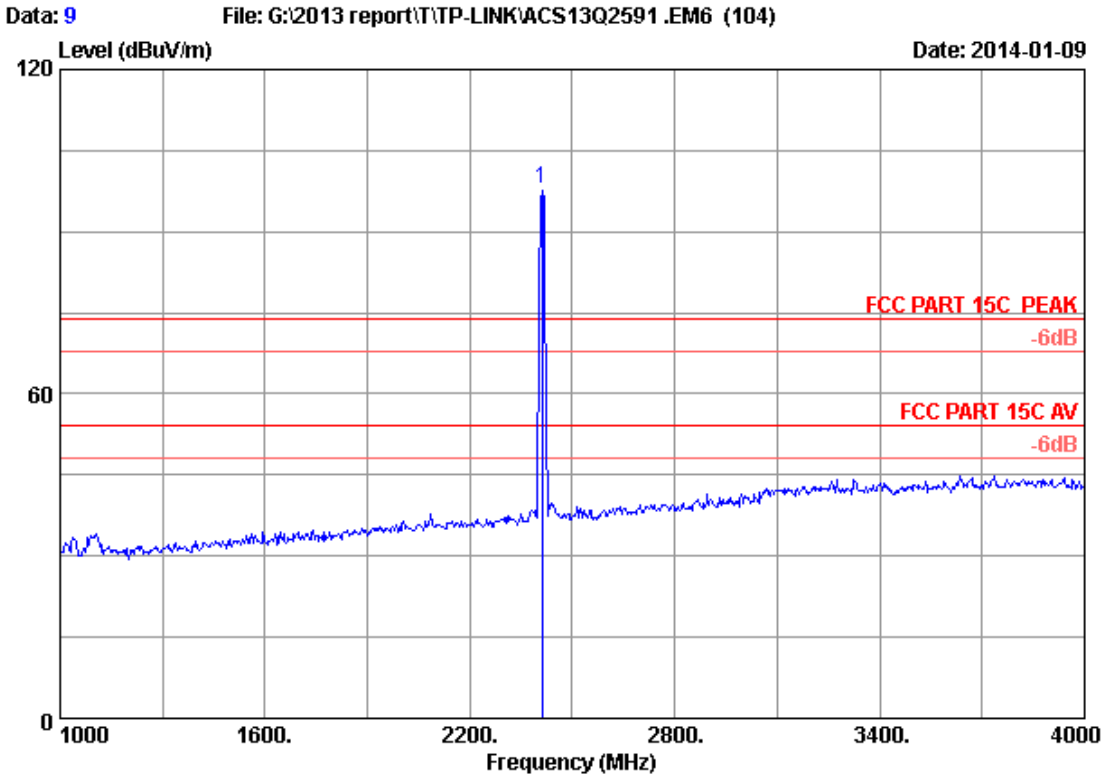

```
Site no.      : 3m Chamber                Data no.   : 3
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b CH1 2412MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	44.71	50.47	54.00	3.53	Average
2	4824.000	32.88	8.58	35.70	53.85	59.61	74.00	14.39	Peak

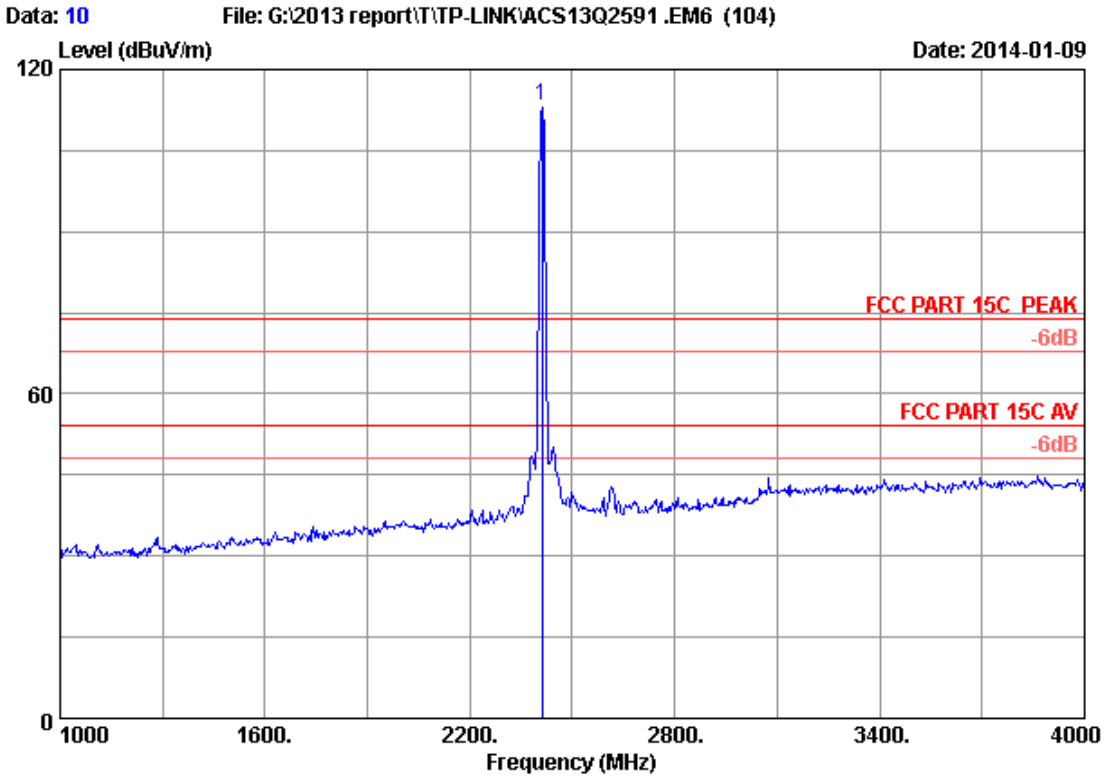
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	99.57	97.89	74.00	-23.89	Peak

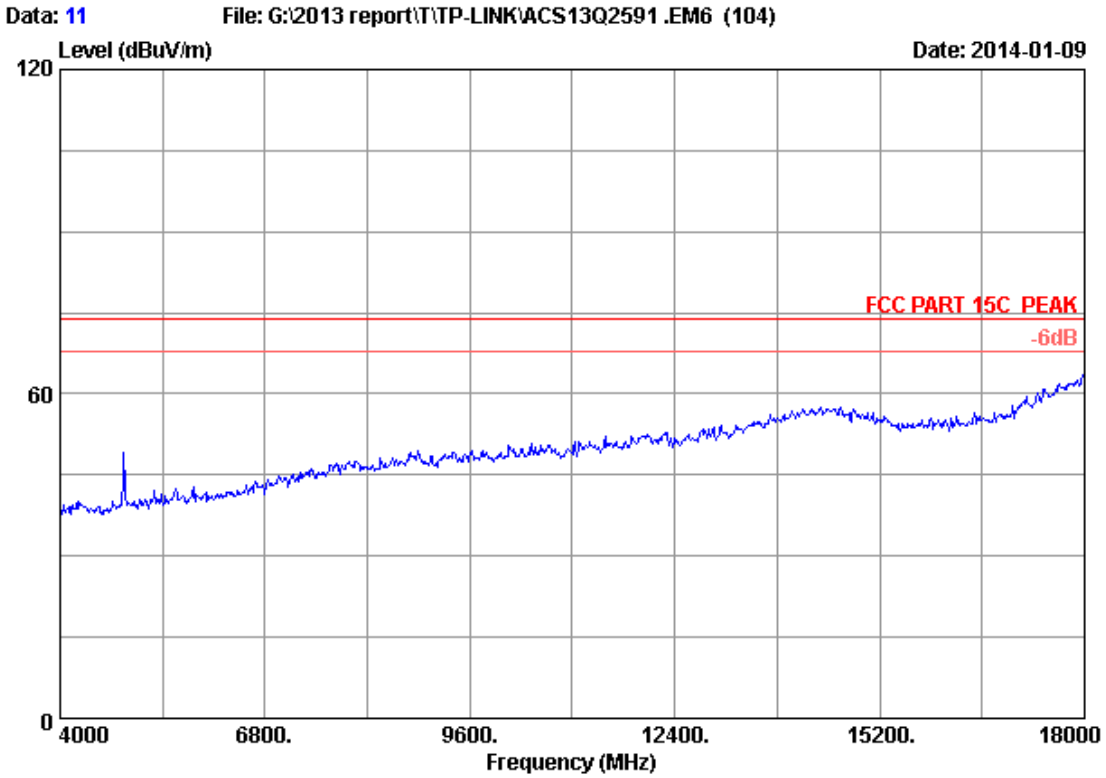
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



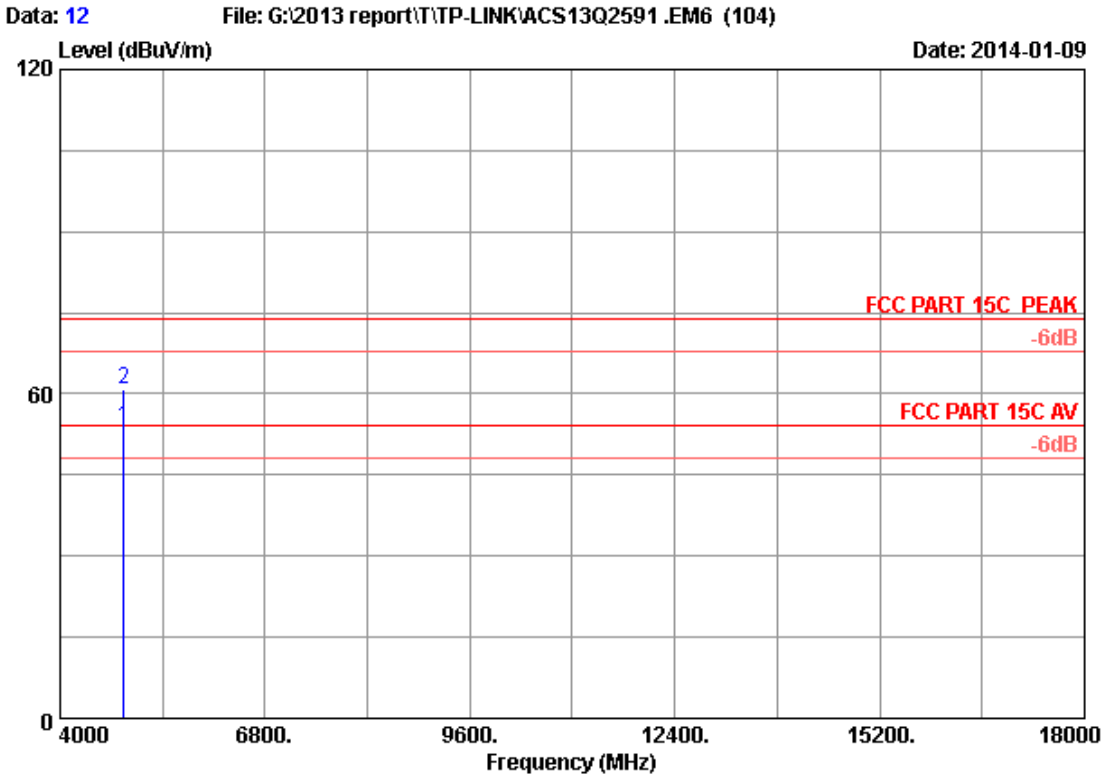
Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	114.87	113.19	74.00	-39.19	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



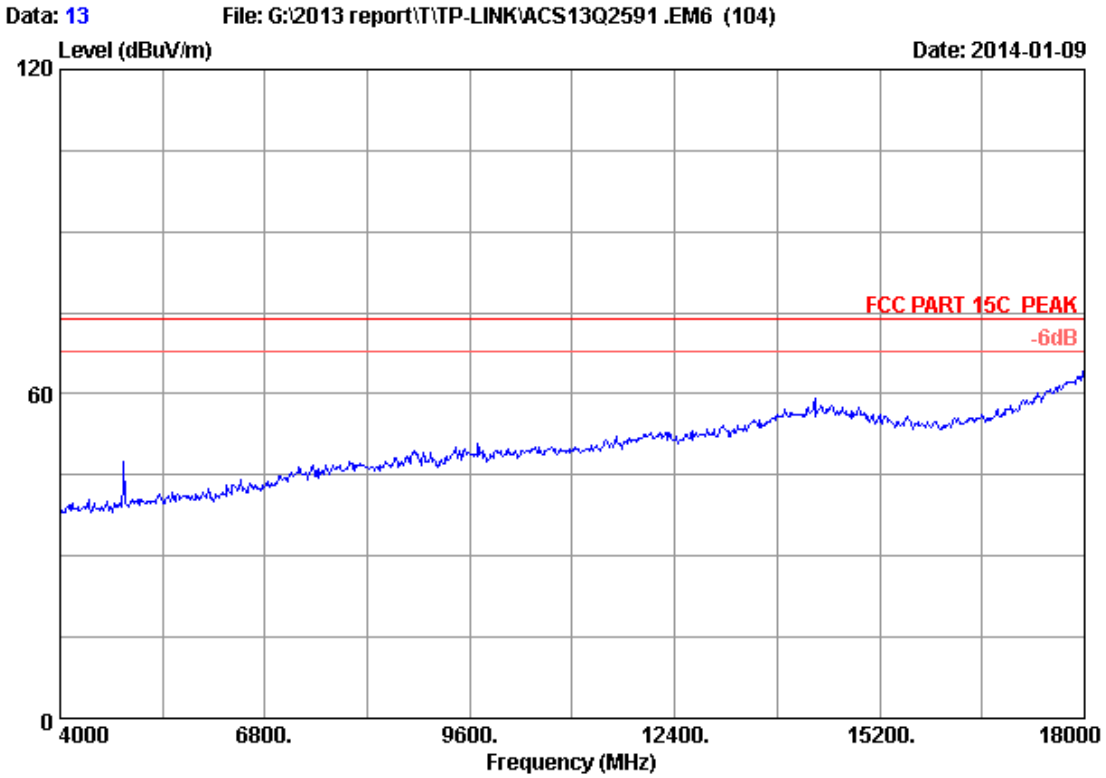

```
Site no.      : 3m Chamber                Data no.   : 11
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b CH6 2437MHz Tx
M/N           : TL-WR841N
```



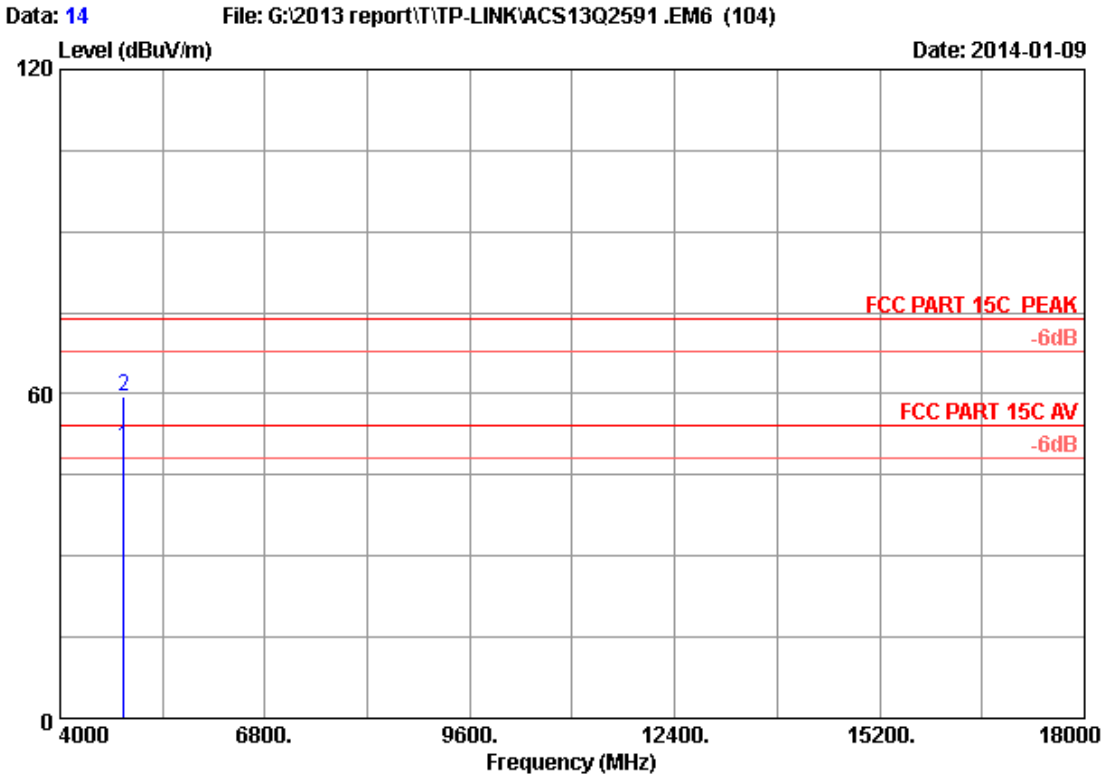
Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	47.90	53.80	54.00	0.20	Average
2	4874.000	32.97	8.63	35.70	54.87	60.77	74.00	13.23	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



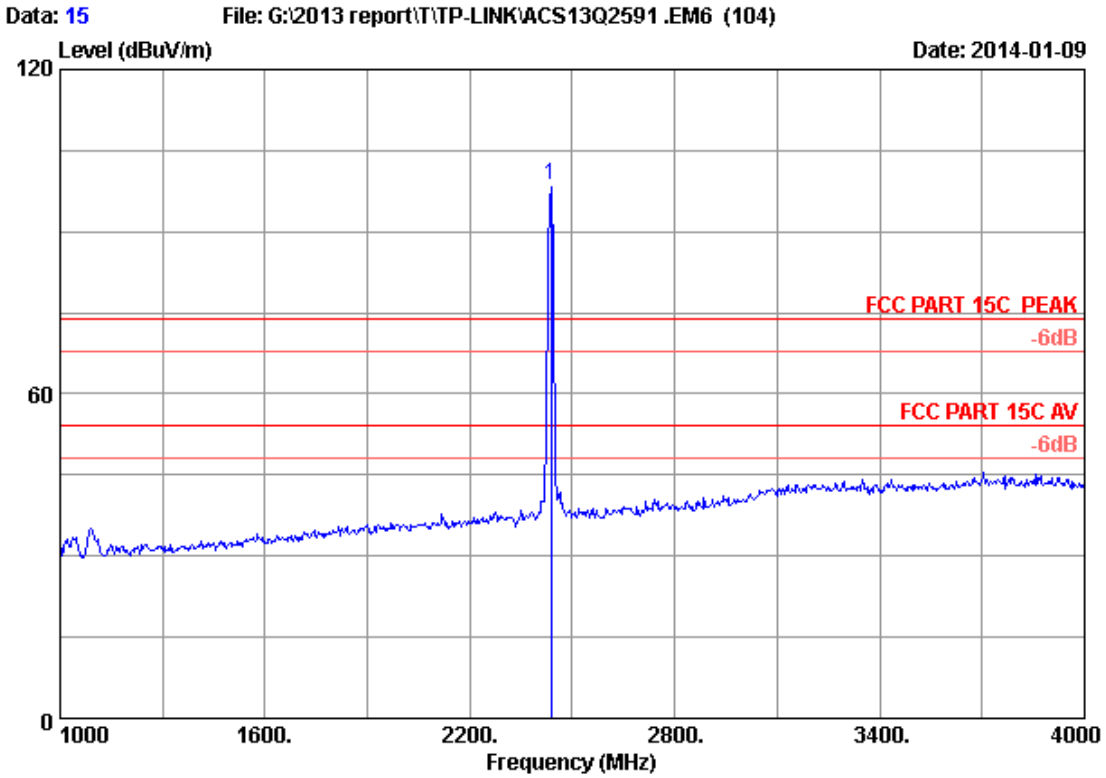

```
Site no.      : 3m Chamber                Data no.   : 13
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b CH6 2437MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	44.10	50.00	54.00	4.00	Average
2	4874.000	32.97	8.63	35.70	53.69	59.59	74.00	14.41	Peak

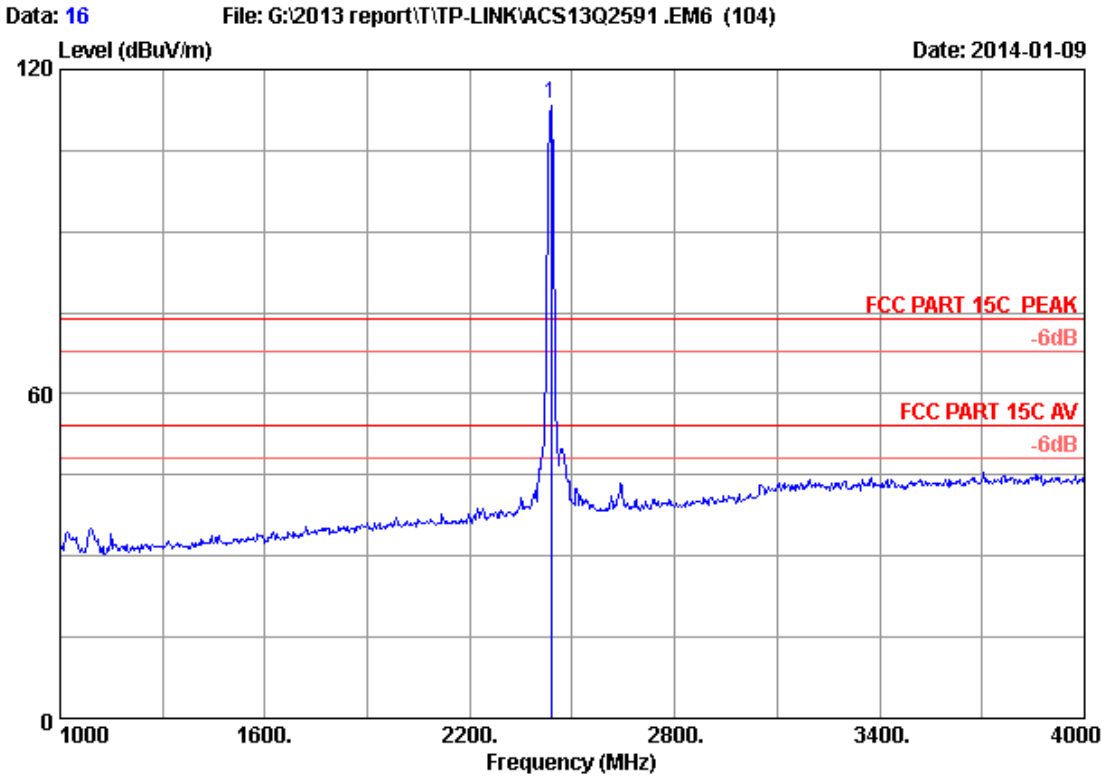
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	100.27	98.68	74.00	-24.68	Peak

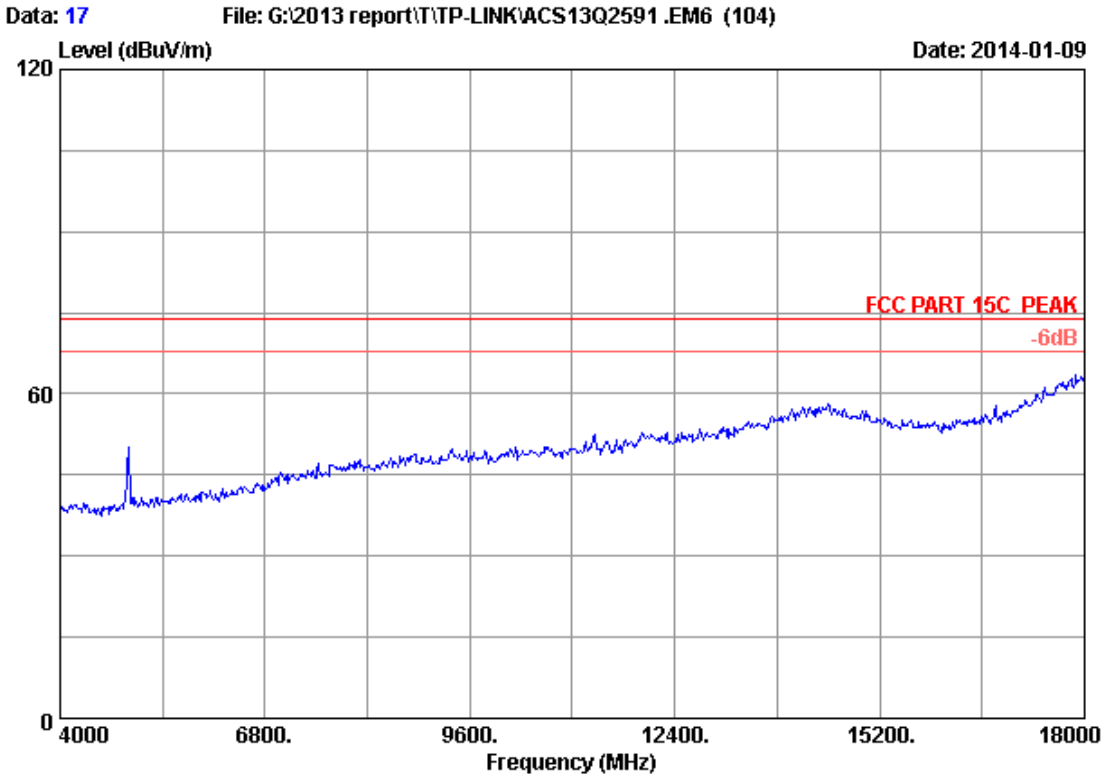
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



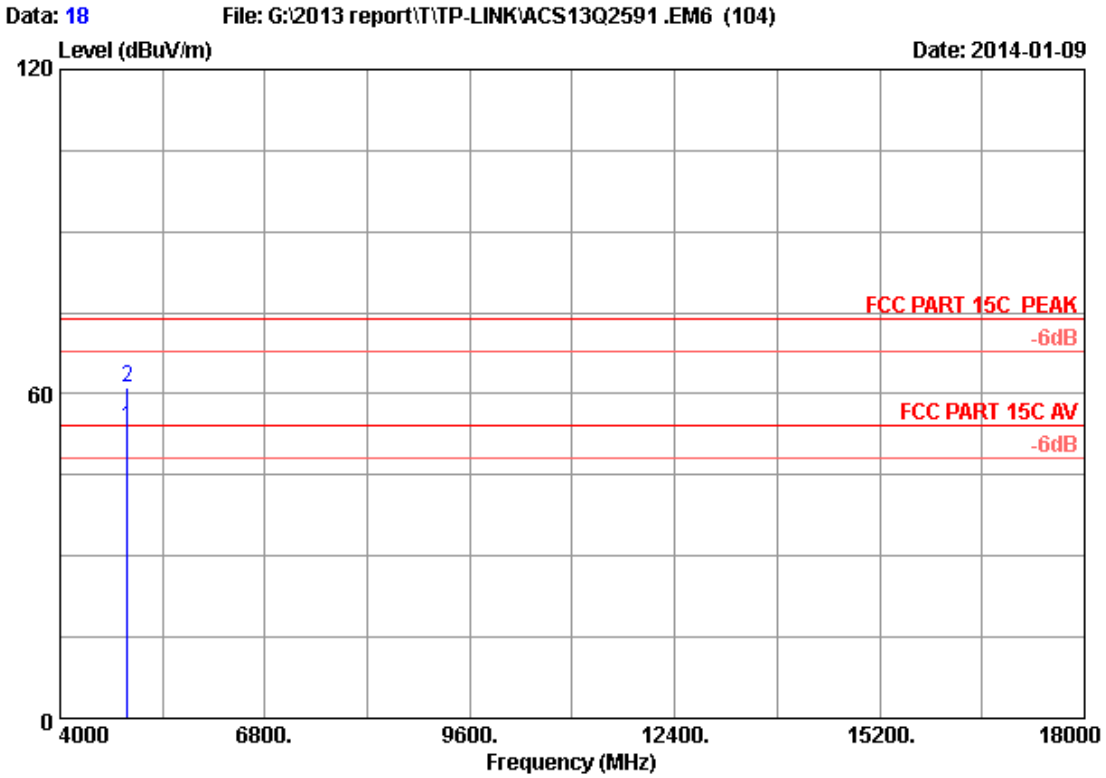
Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	115.27	113.68	74.00	-39.68	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



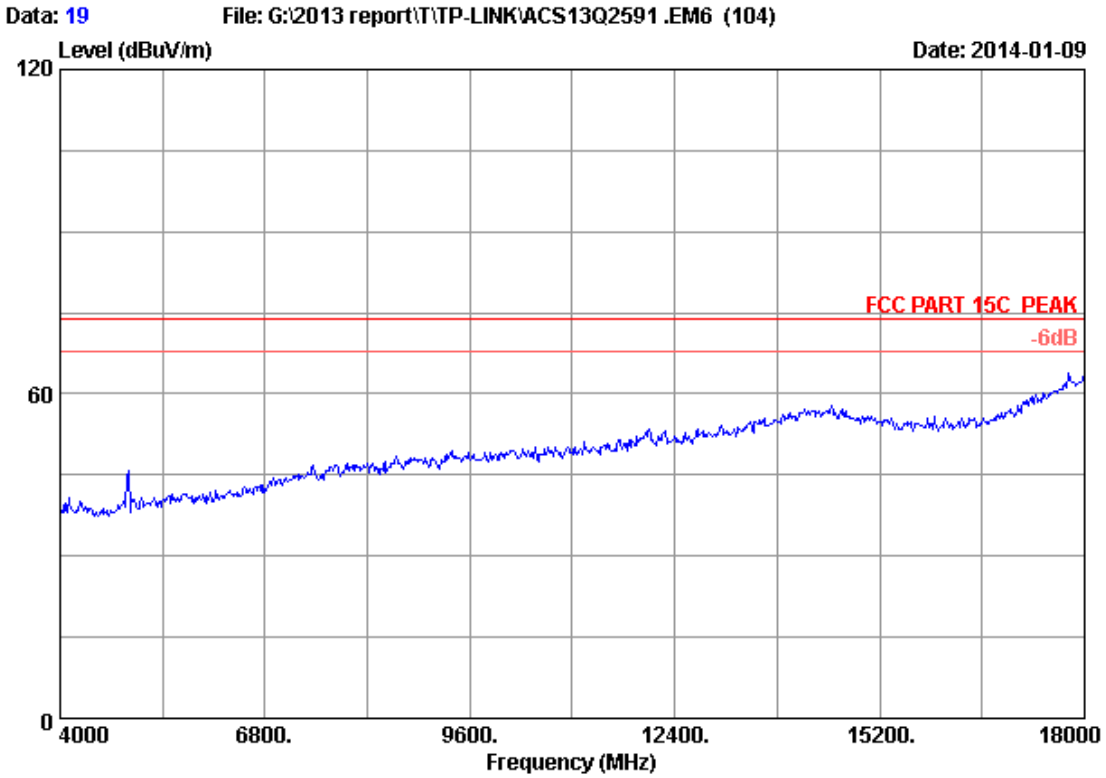

```
Site no.      : 3m Chamber                Data no.   : 17
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b CH11 2462MHz Tx
M/N           : TL-WR841N
```



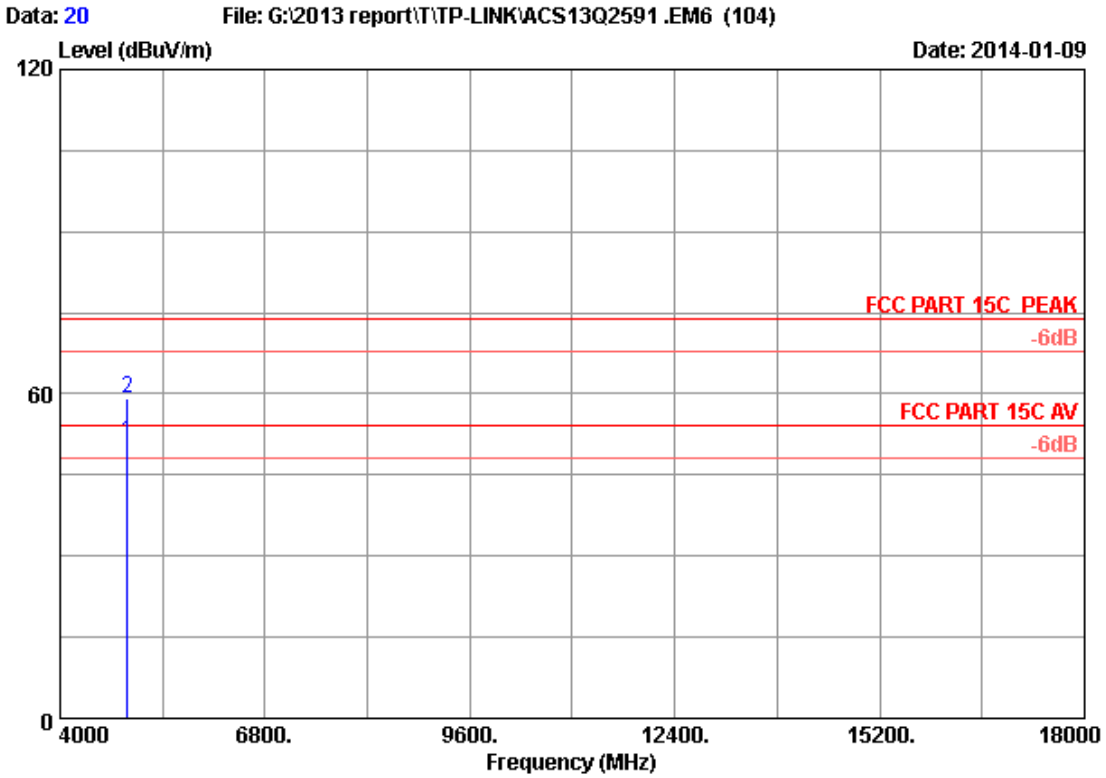
Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	47.65	53.70	54.00	0.30	Average
2	4924.000	33.06	8.69	35.70	55.05	61.10	74.00	12.90	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



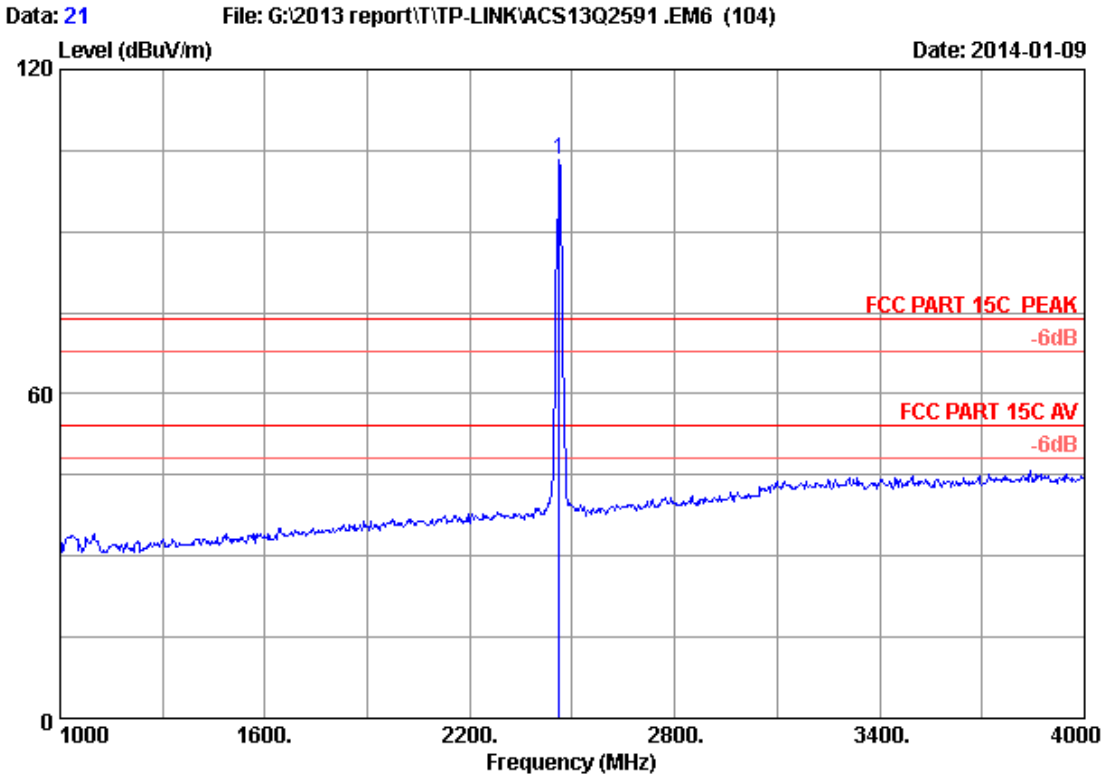
Site no.	: 3m Chamber	Data no.	: 19
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11b CH11 2462MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	44.96	51.01	54.00	2.99	Average
2	4924.000	33.06	8.69	35.70	52.96	59.01	74.00	14.99	Peak

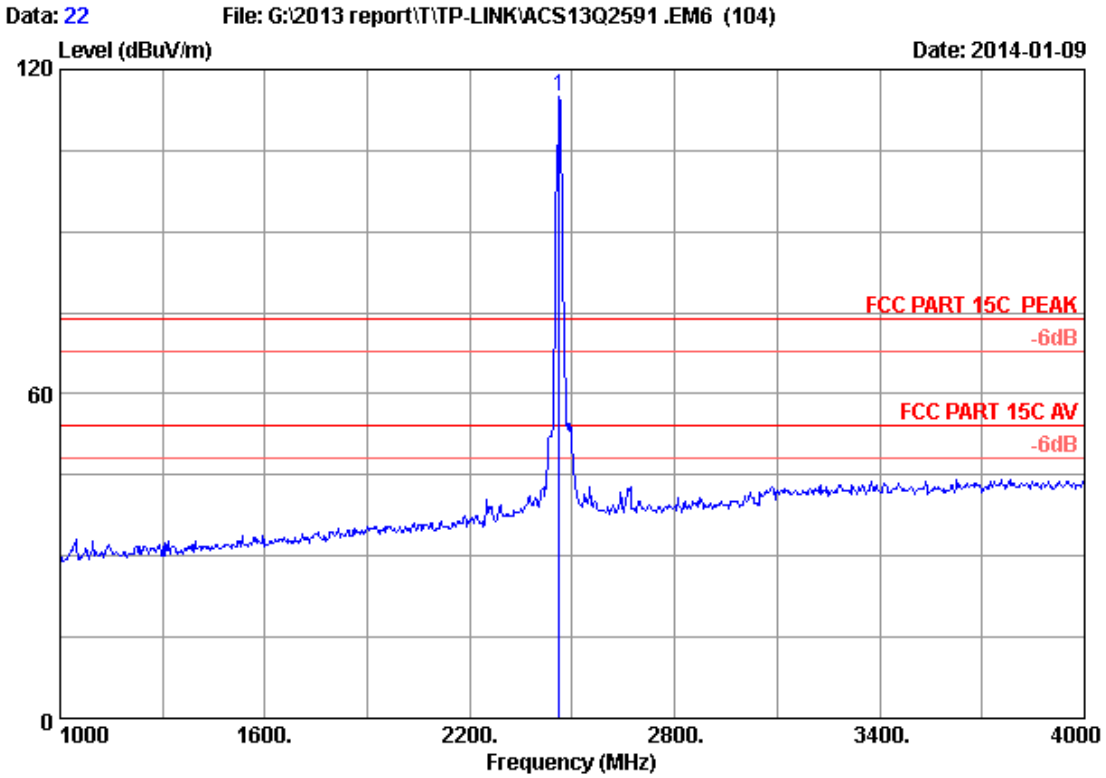
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 21
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	104.65	103.16	74.00	-29.16	Peak

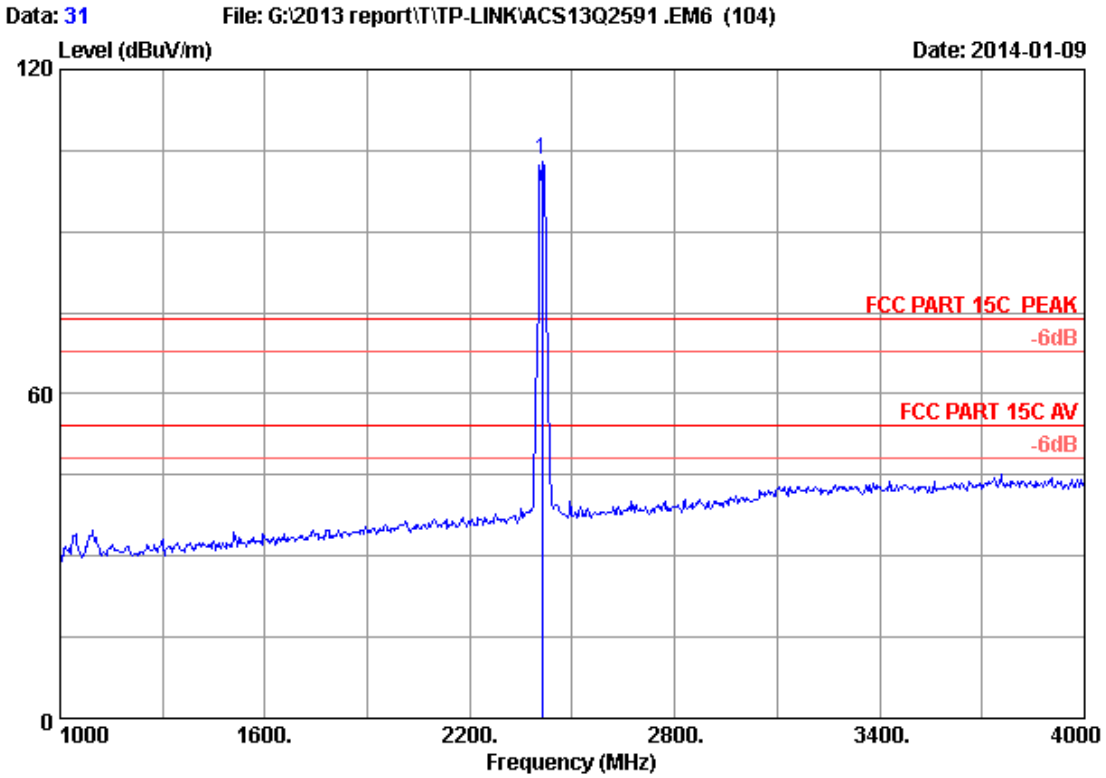
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	116.62	115.13	74.00	-41.13	Peak

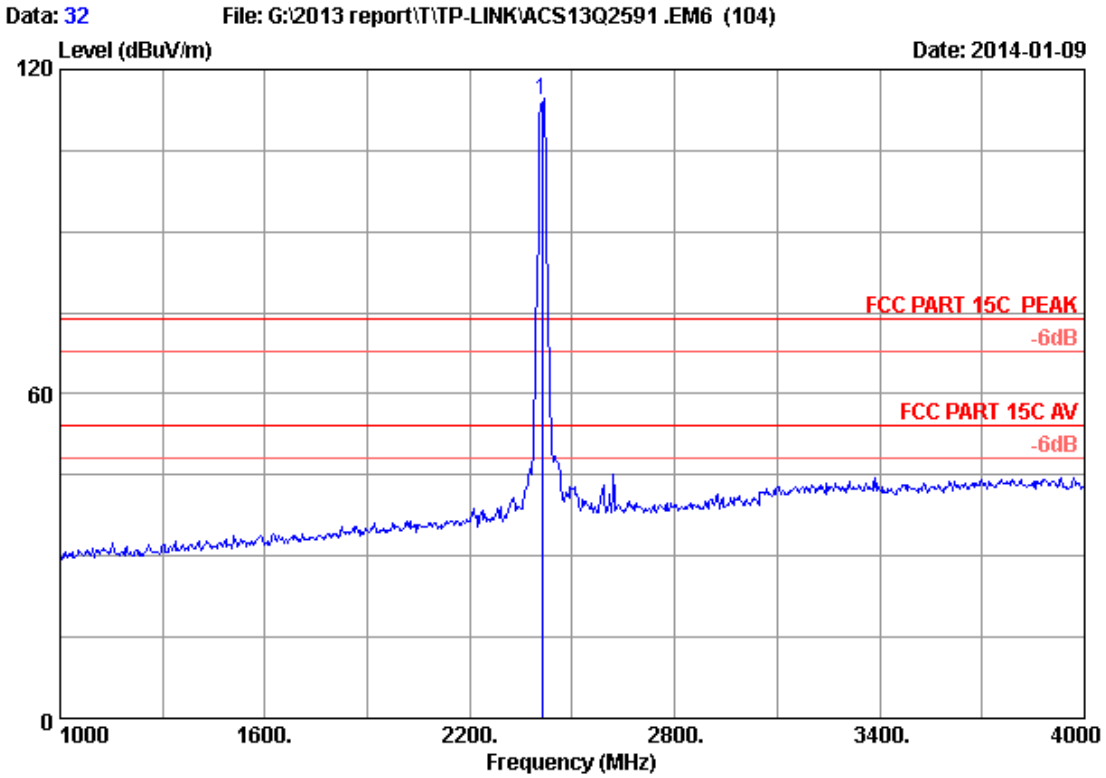
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	104.87	103.19	74.00	-29.19	Peak

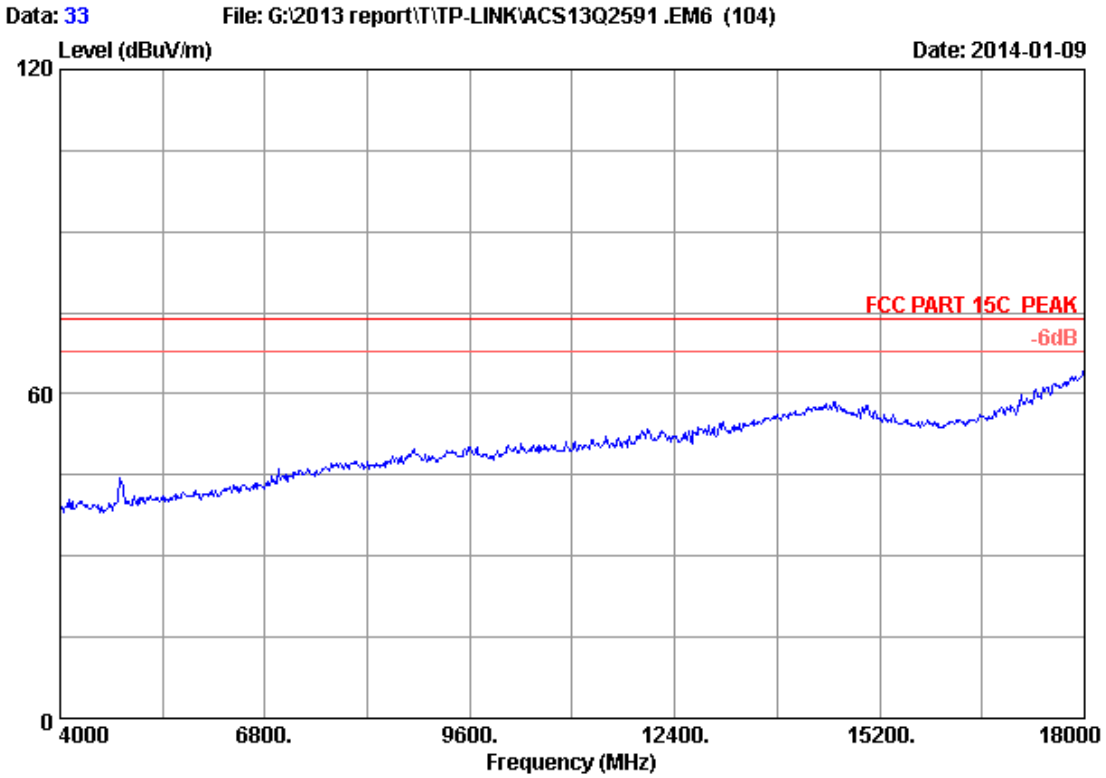
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



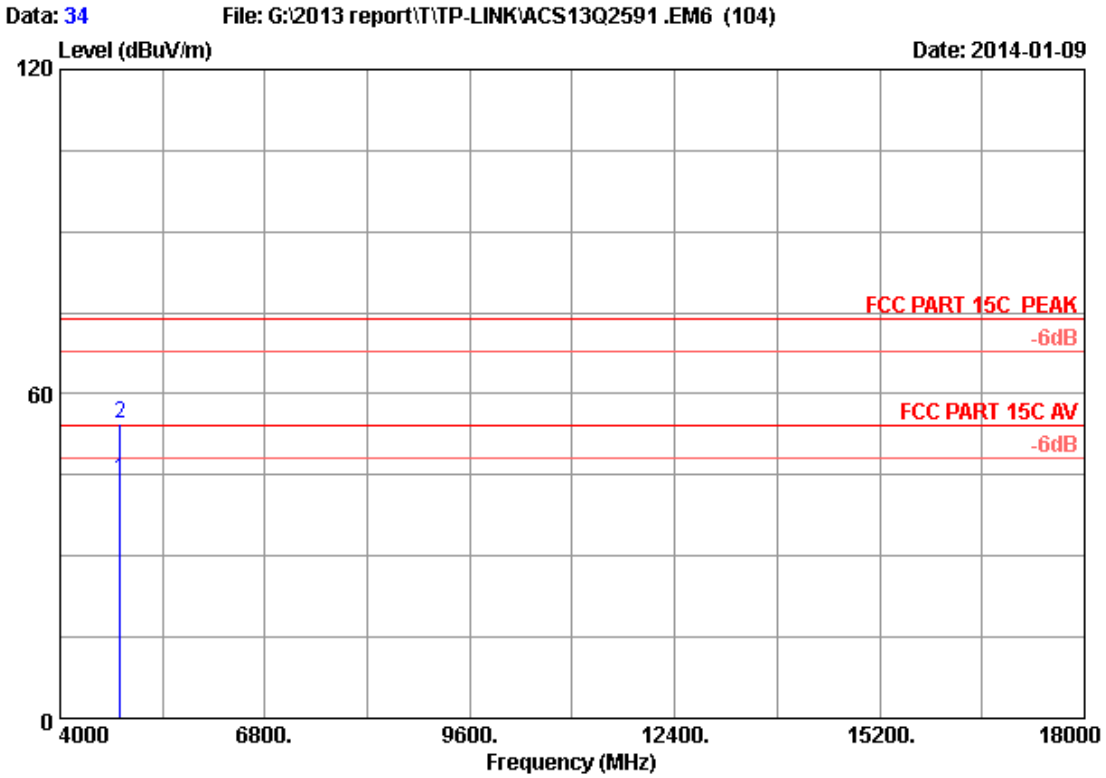
Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	116.04	114.36	74.00	-40.36	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



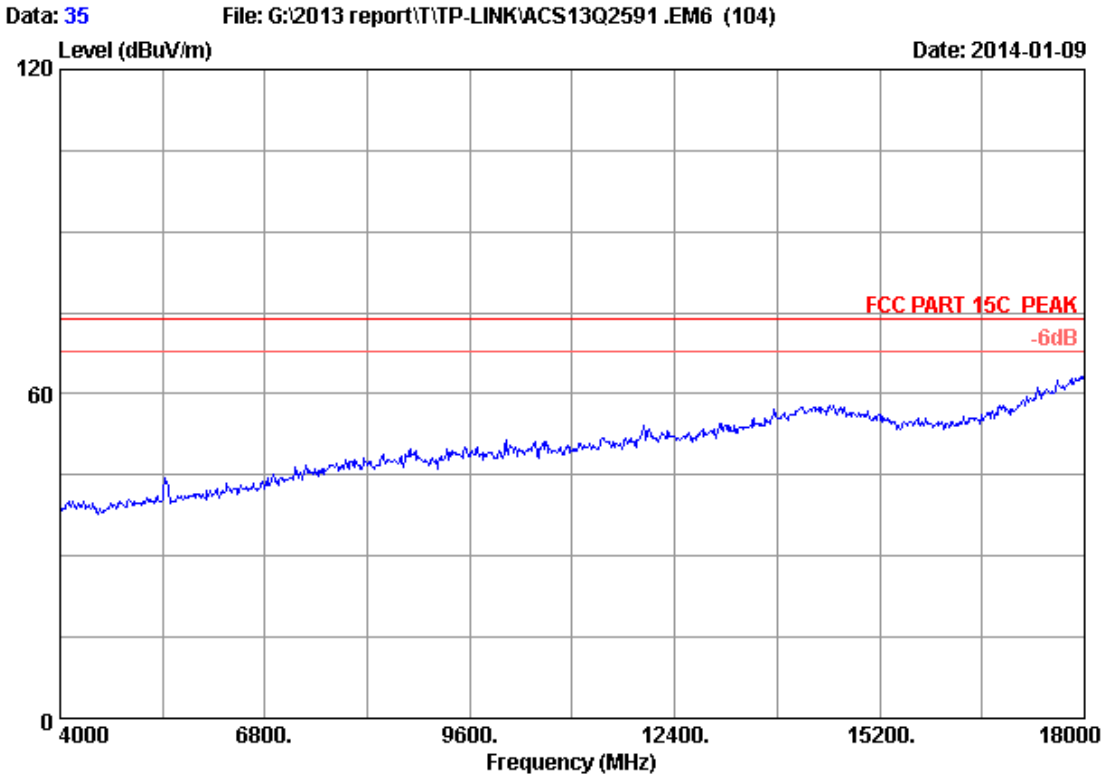
Site no.	: 3m Chamber	Data no.	: 33
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11g CH1 2412MHz Tx		
M/N	: TL-WR841N		



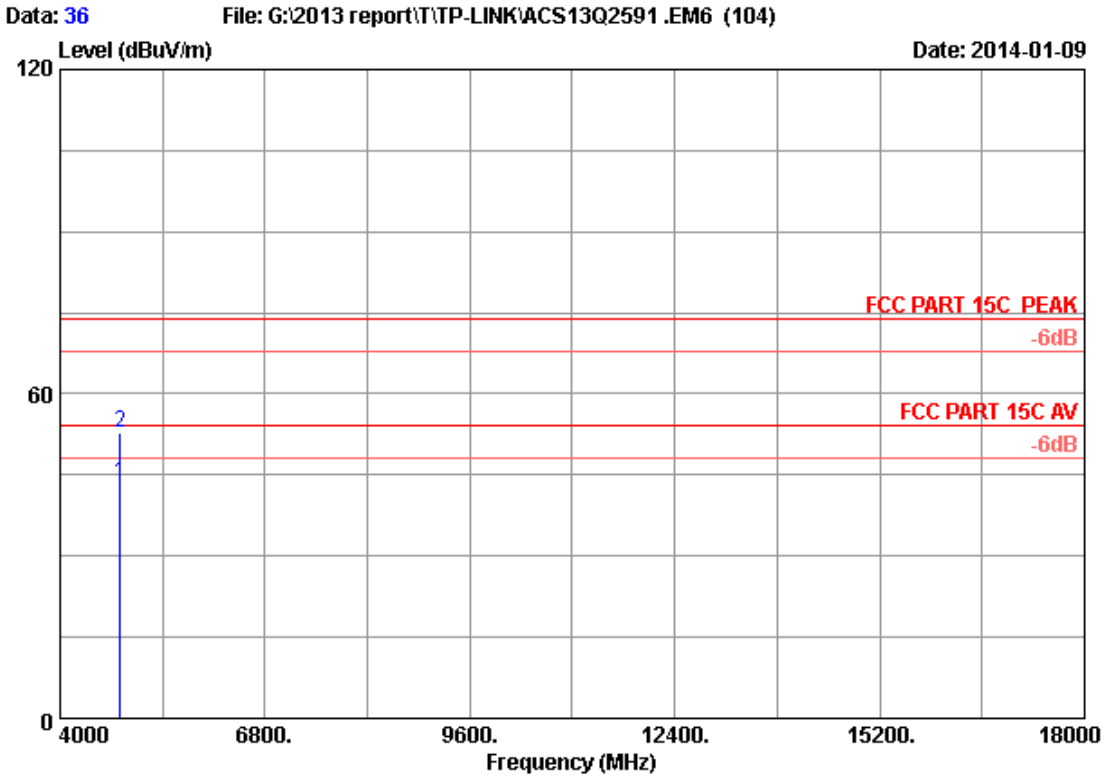
Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	38.26	44.02	54.00	9.98	Average
2	4824.000	32.88	8.58	35.70	48.86	54.62	74.00	19.38	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



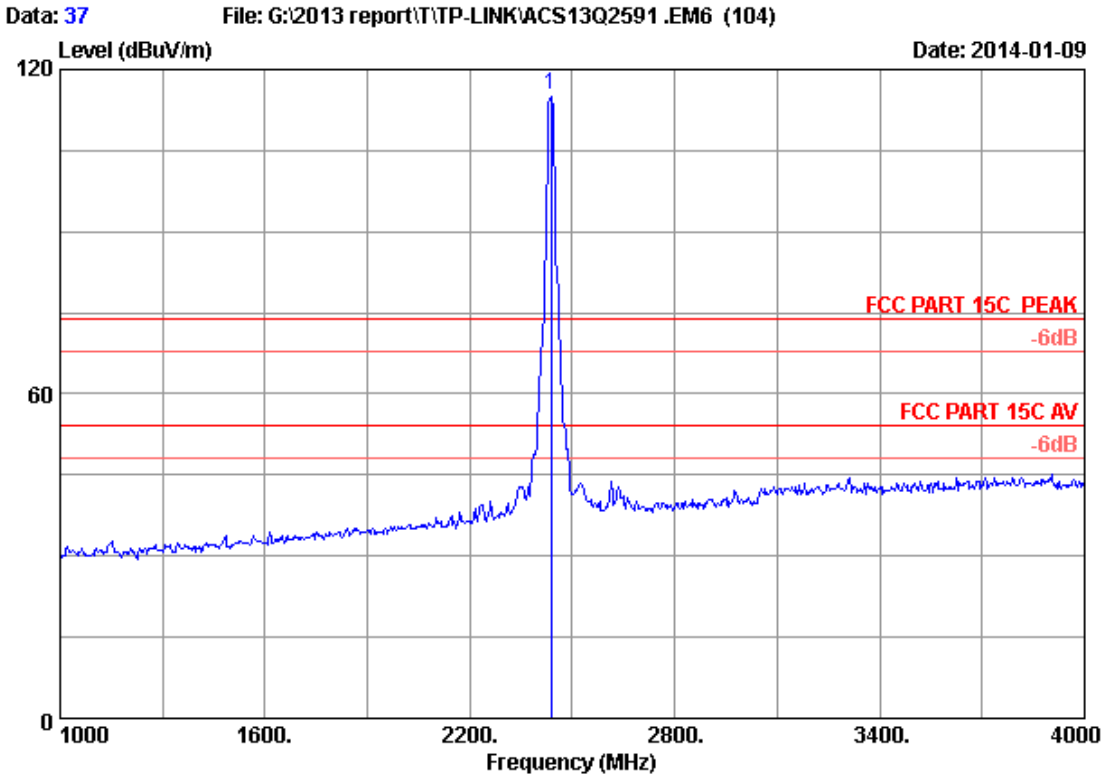
Site no.	: 3m Chamber	Data no.	: 35
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11g CH1 2412MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	37.66	43.42	54.00	10.58	Average
2	4824.000	32.88	8.58	35.70	47.13	52.89	74.00	21.11	Peak

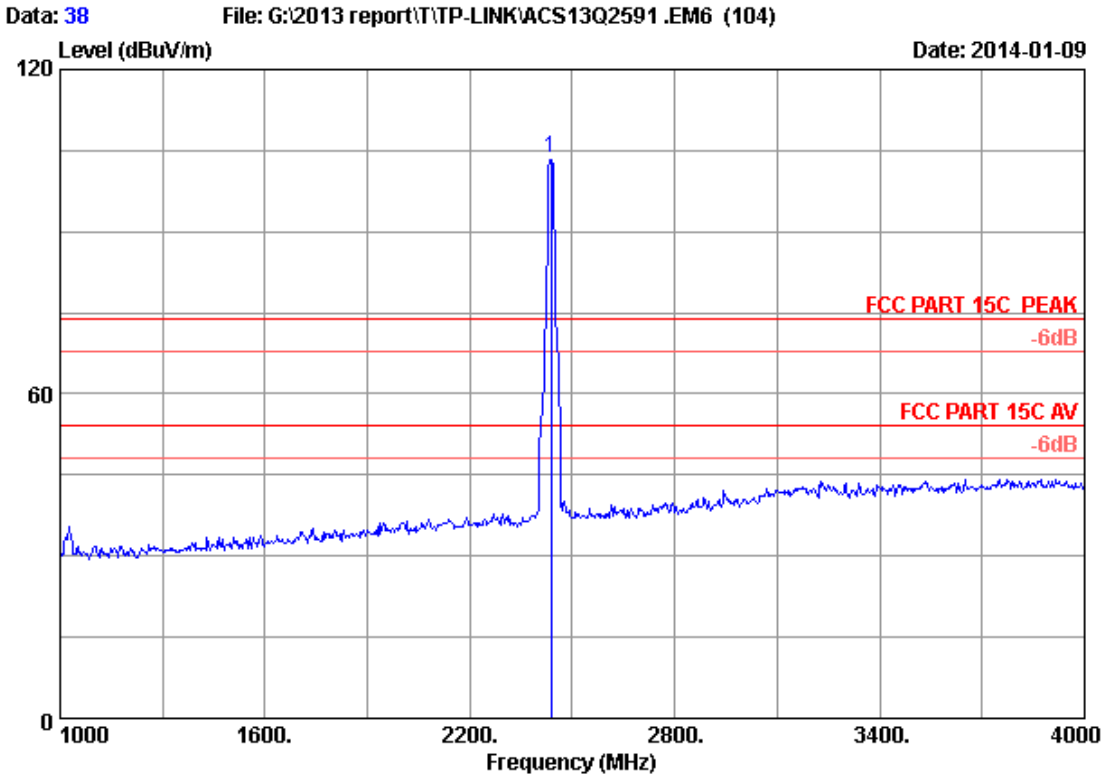
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	117.03	115.44	74.00	-41.44	Peak

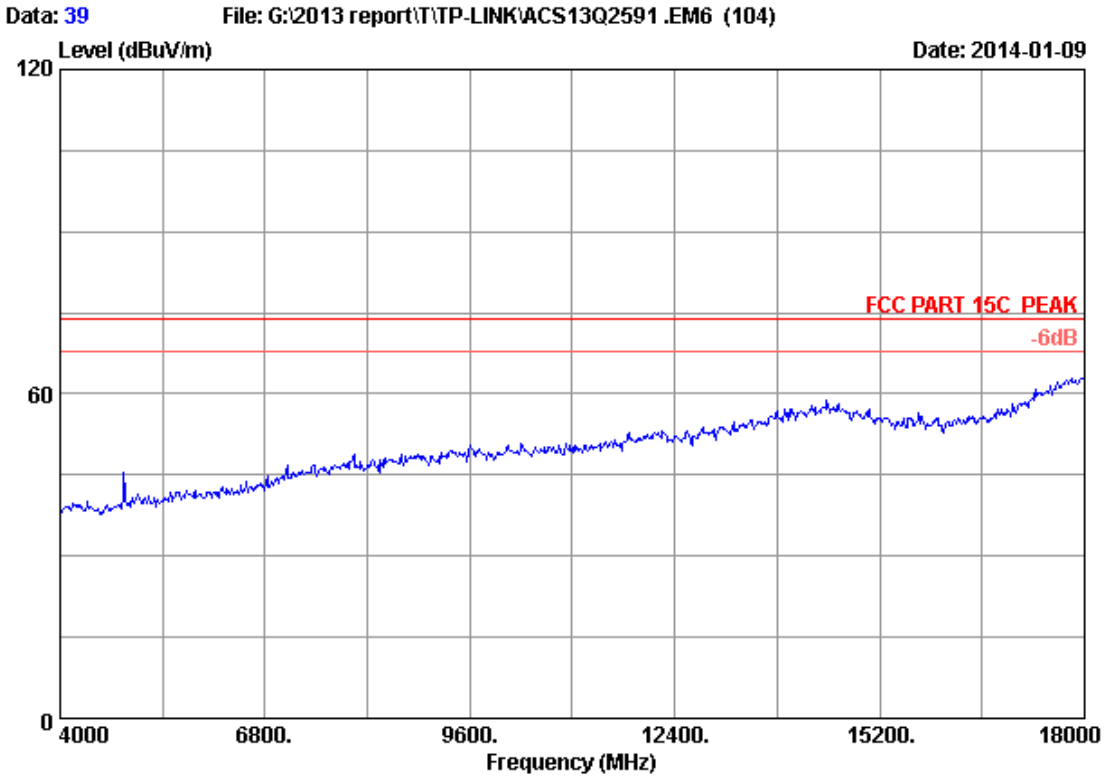
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



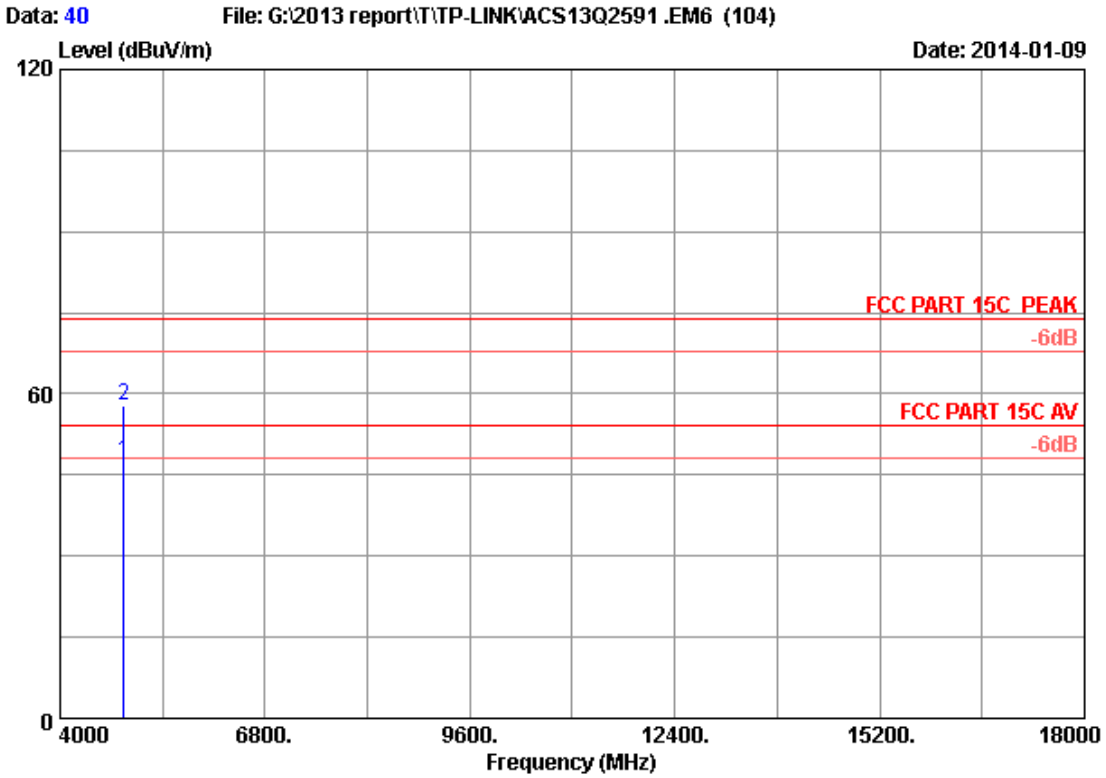
Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	105.04	103.45	74.00	-29.45	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



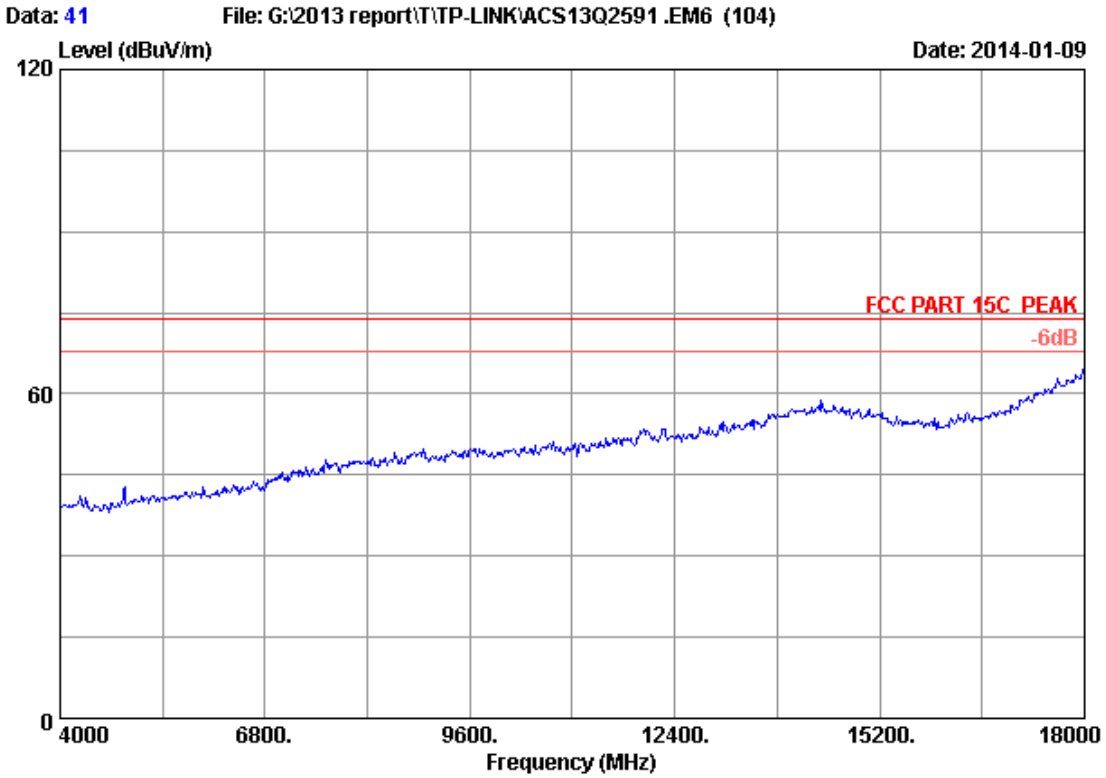
Site no.	: 3m Chamber	Data no.	: 39
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11g CH6 2437MHz Tx		
M/N	: TL-WR841N		



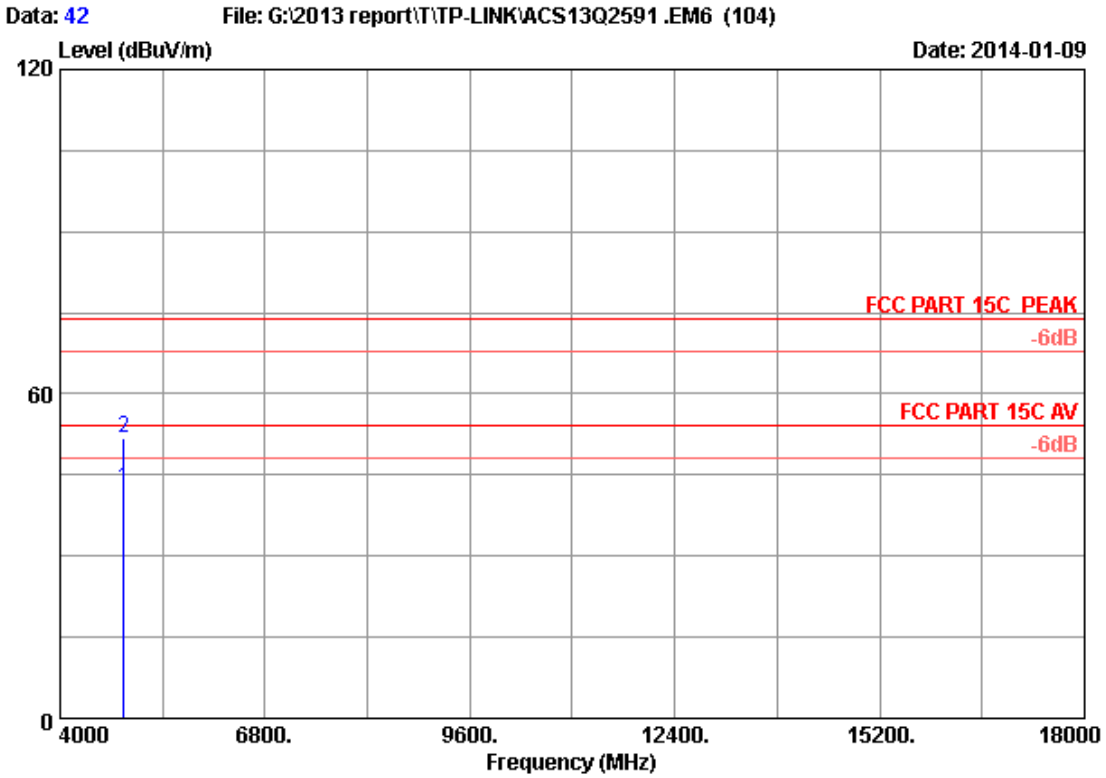
Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	41.69	47.59	54.00	6.41	Average
2	4874.000	32.97	8.63	35.70	51.87	57.77	74.00	16.23	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



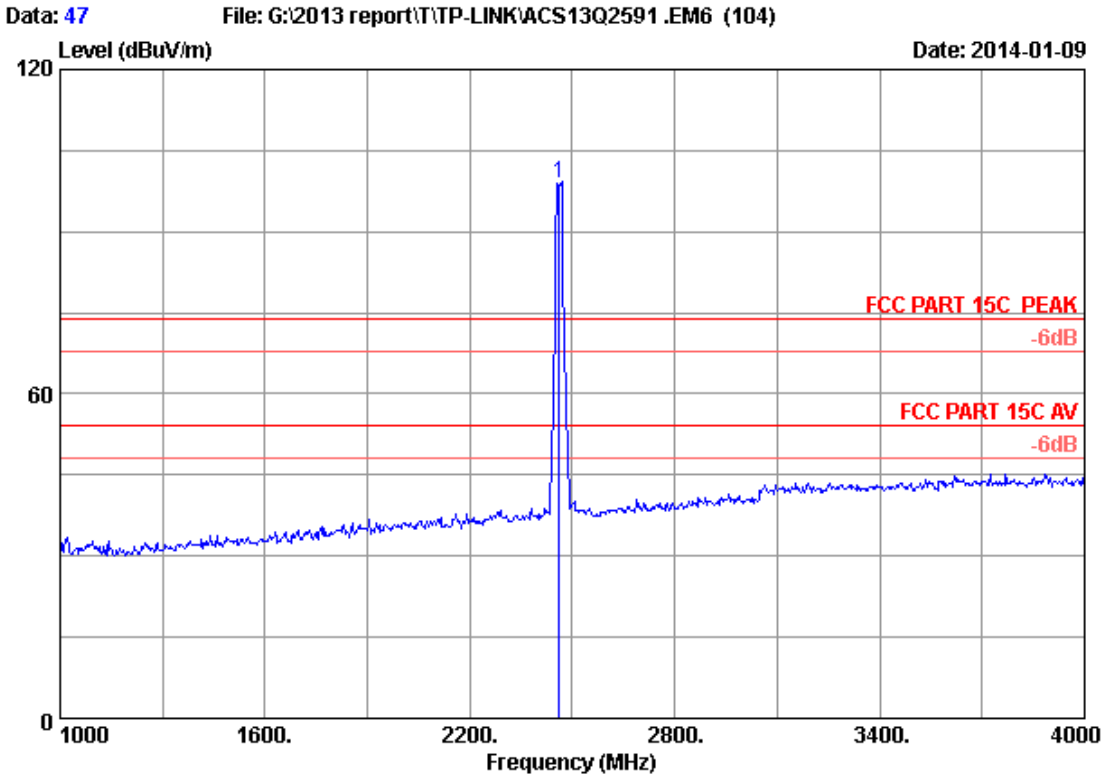

```
Site no.      : 3m Chamber                Data no.   : 41
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g CH6 2437MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	36.50	42.40	54.00	11.60	Average
2	4874.000	32.97	8.63	35.70	45.87	51.77	74.00	22.23	Peak

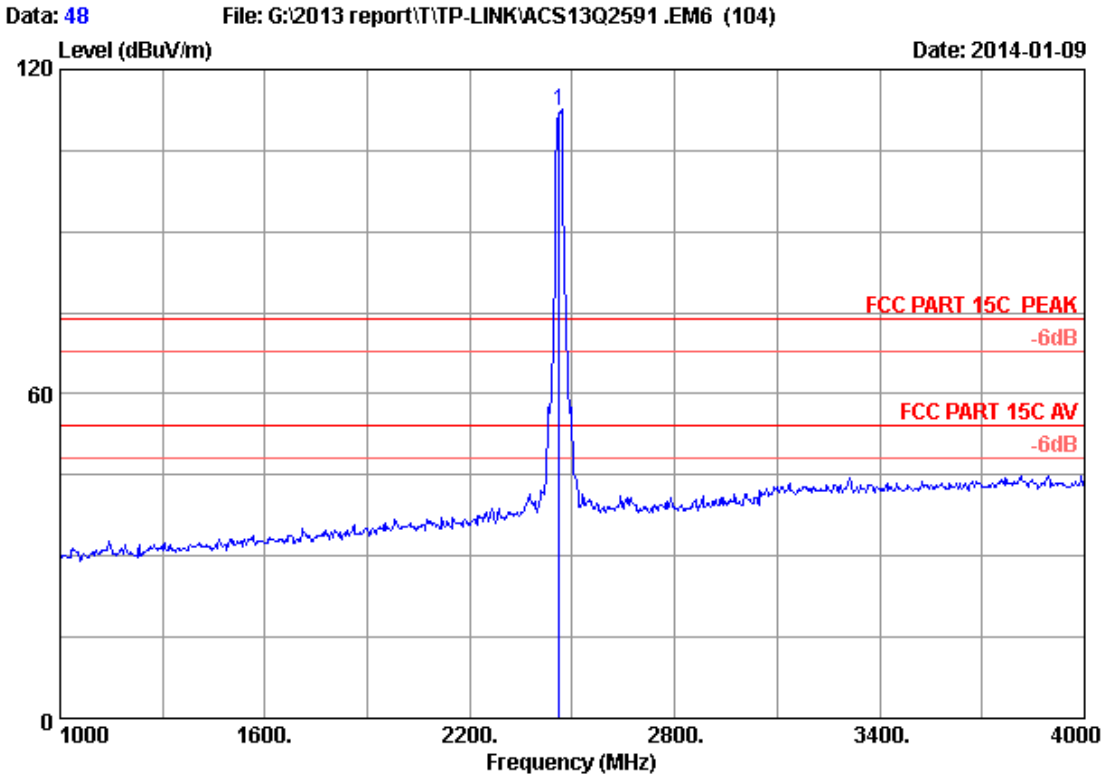
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 47
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	100.56	99.07	74.00	-25.07	Peak

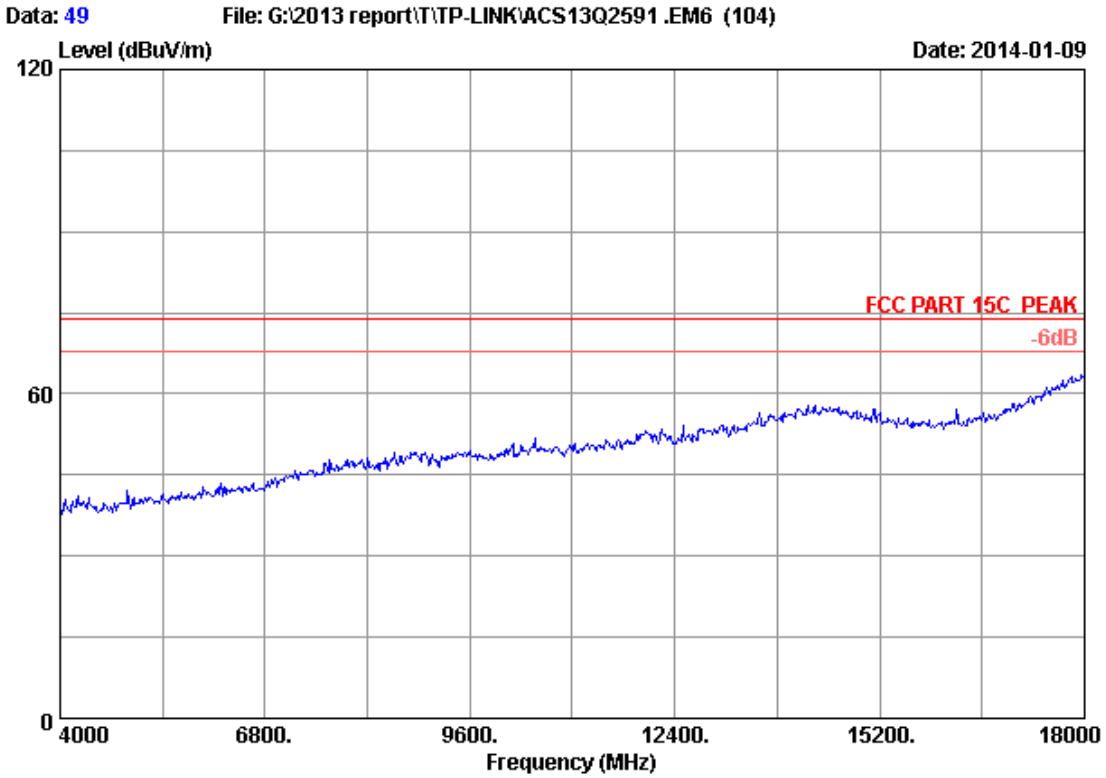
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



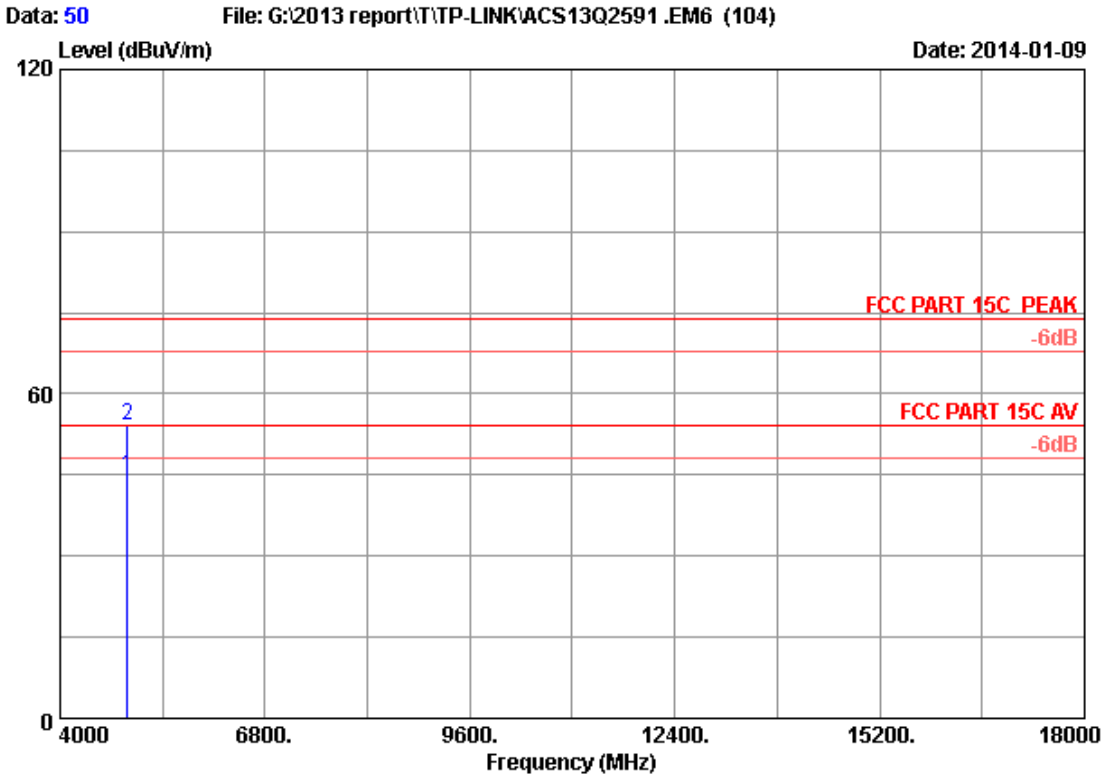
Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	113.86	112.37	74.00	-38.37	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



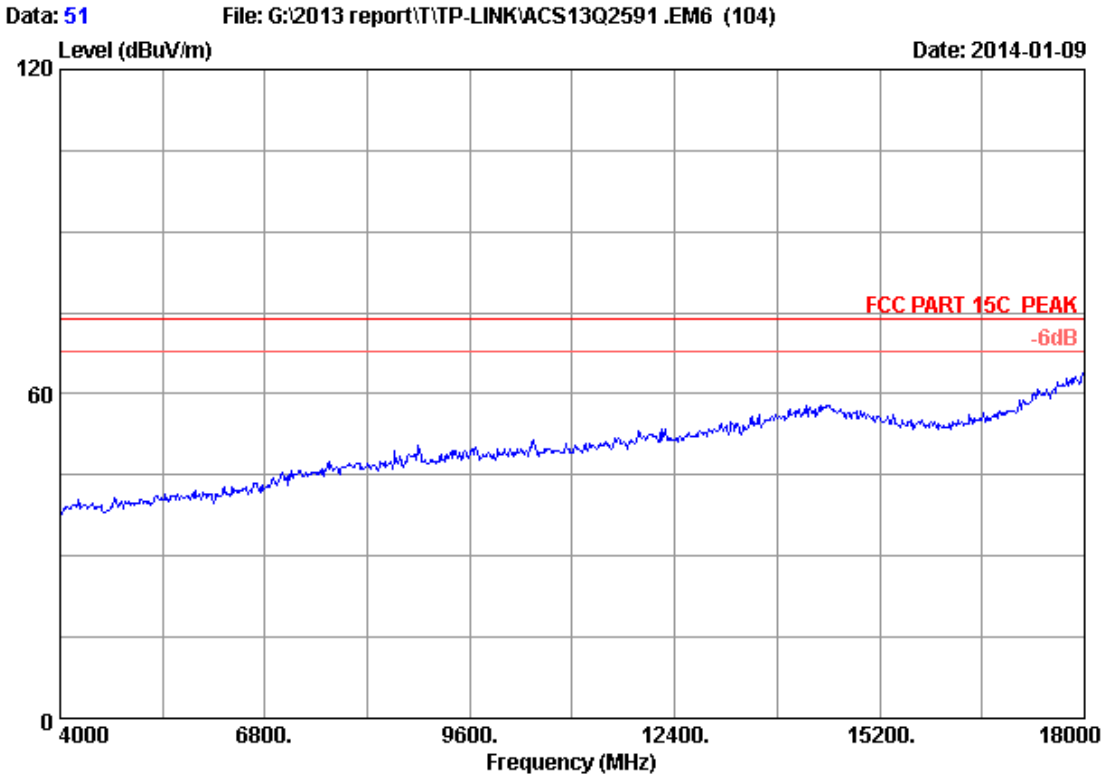
Site no.	: 3m Chamber	Data no.	: 49
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11g CH11 2462MHz Tx		
M/N	: TL-WR841N		



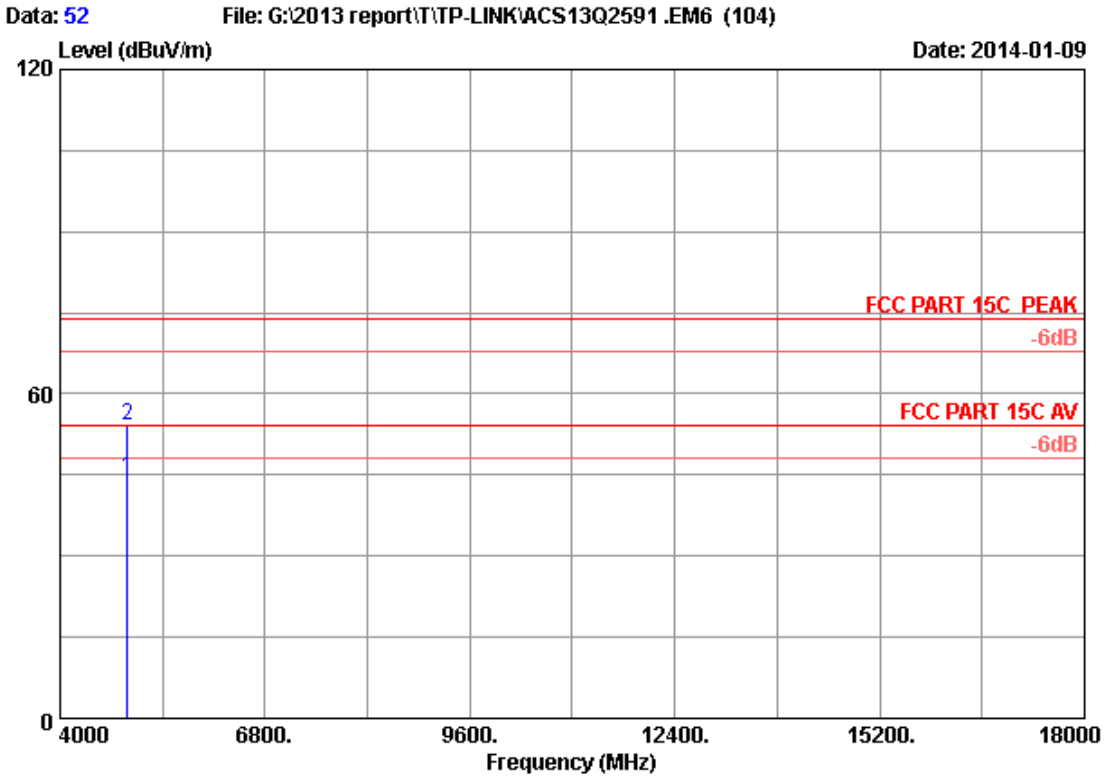
Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	38.86	44.91	54.00	9.09	Average
2	4924.000	33.06	8.69	35.70	48.14	54.19	74.00	19.81	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



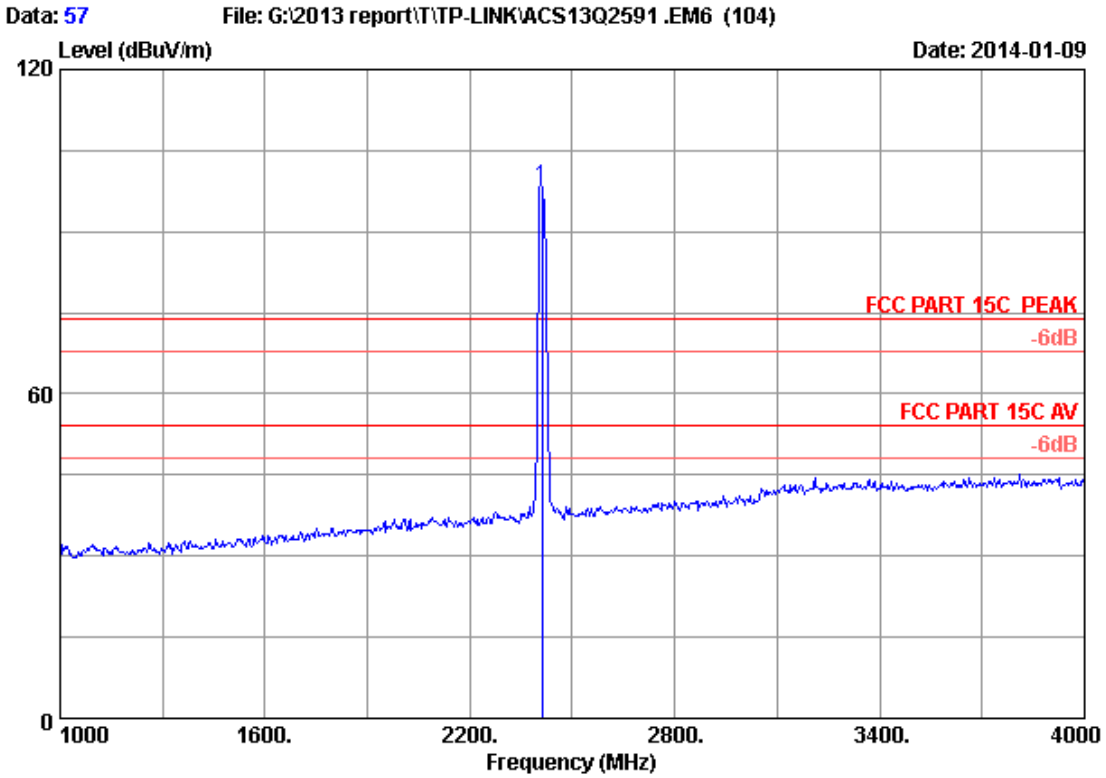
Site no.	: 3m Chamber	Data no.	: 51
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11g CH11 2462MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	38.41	44.46	54.00	9.54	Average
2	4924.000	33.06	8.69	35.70	48.07	54.12	74.00	19.88	Peak

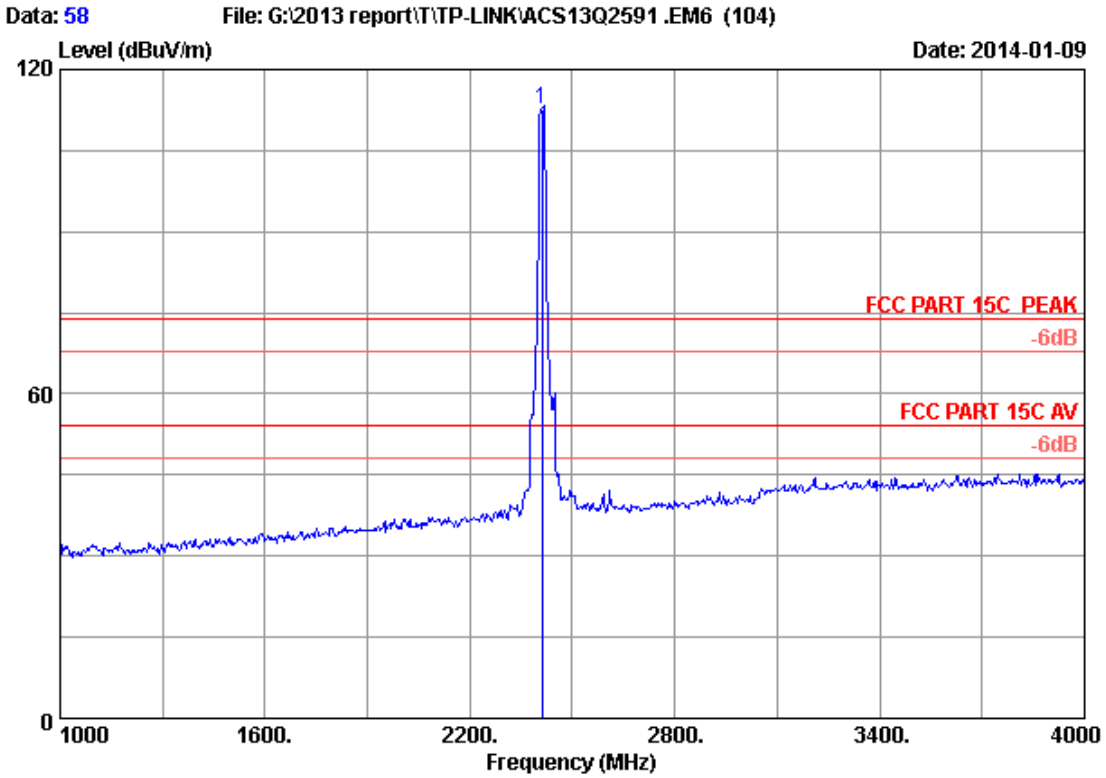
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 57
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	99.87	98.19	74.00	-24.19	Peak

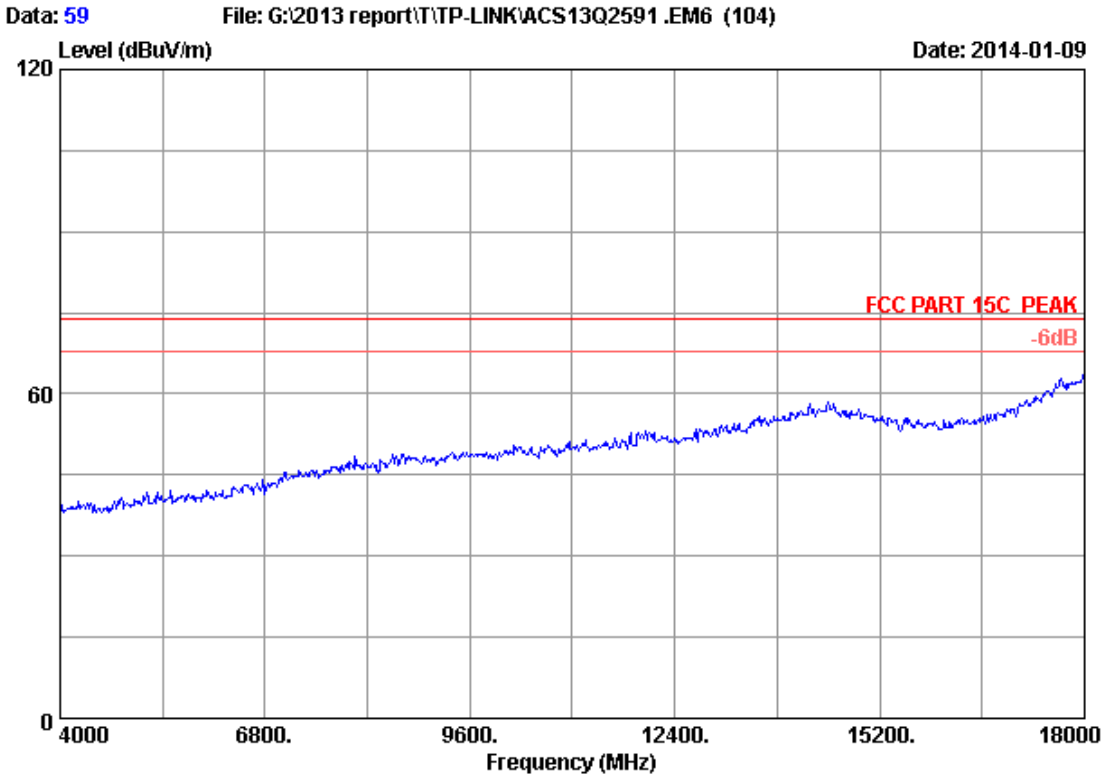
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



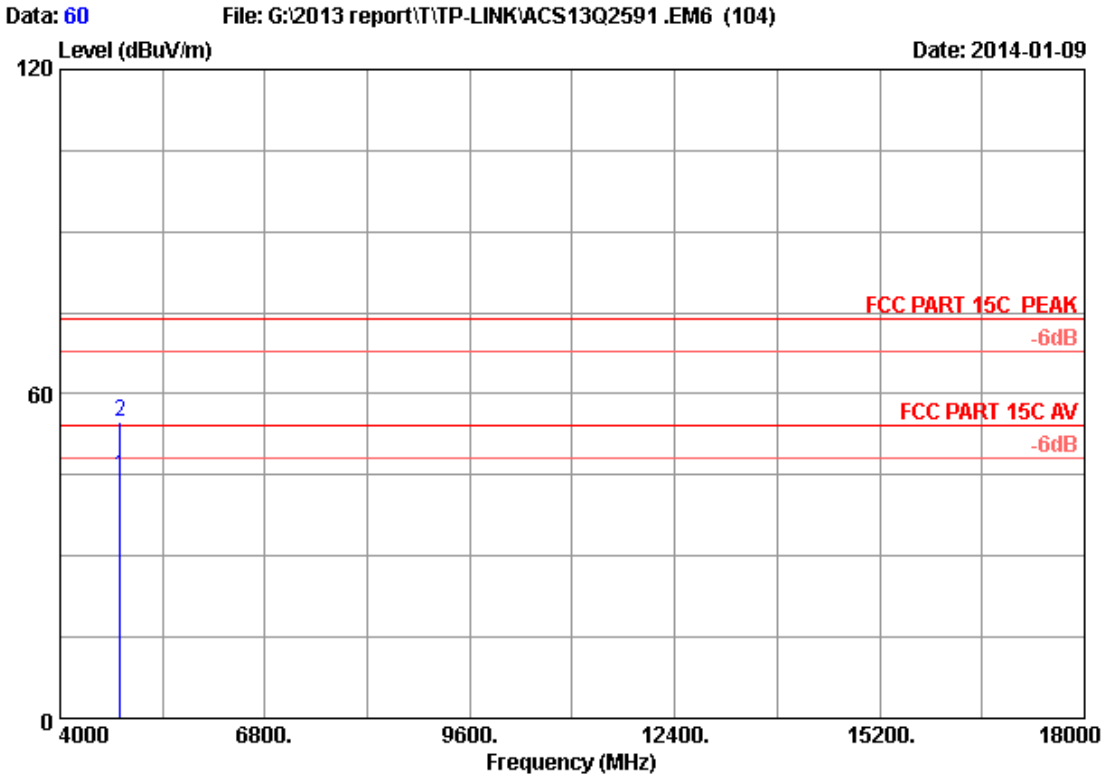
Site no. : 3m Chamber Data no. : 58
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	114.45	112.77	74.00	-38.77	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



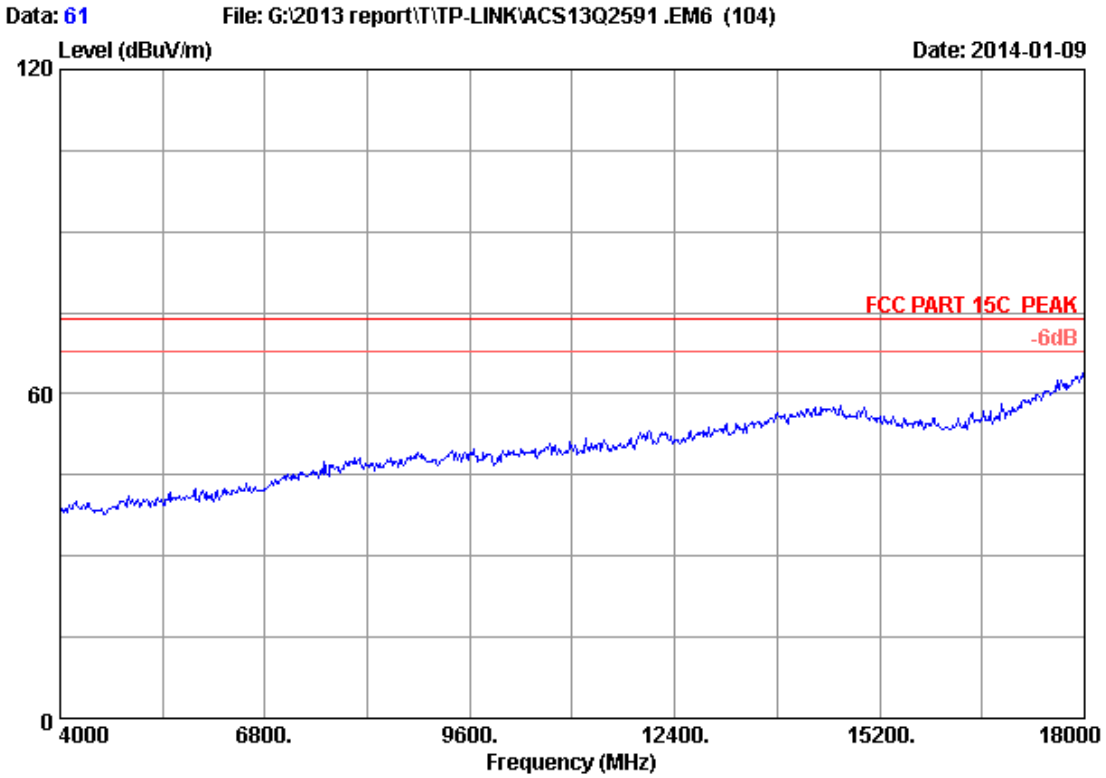

```
Site no.      : 3m Chamber                Data no.   : 59
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 CH1 2412MHz Tx
M/N           : TL-WR841N
```



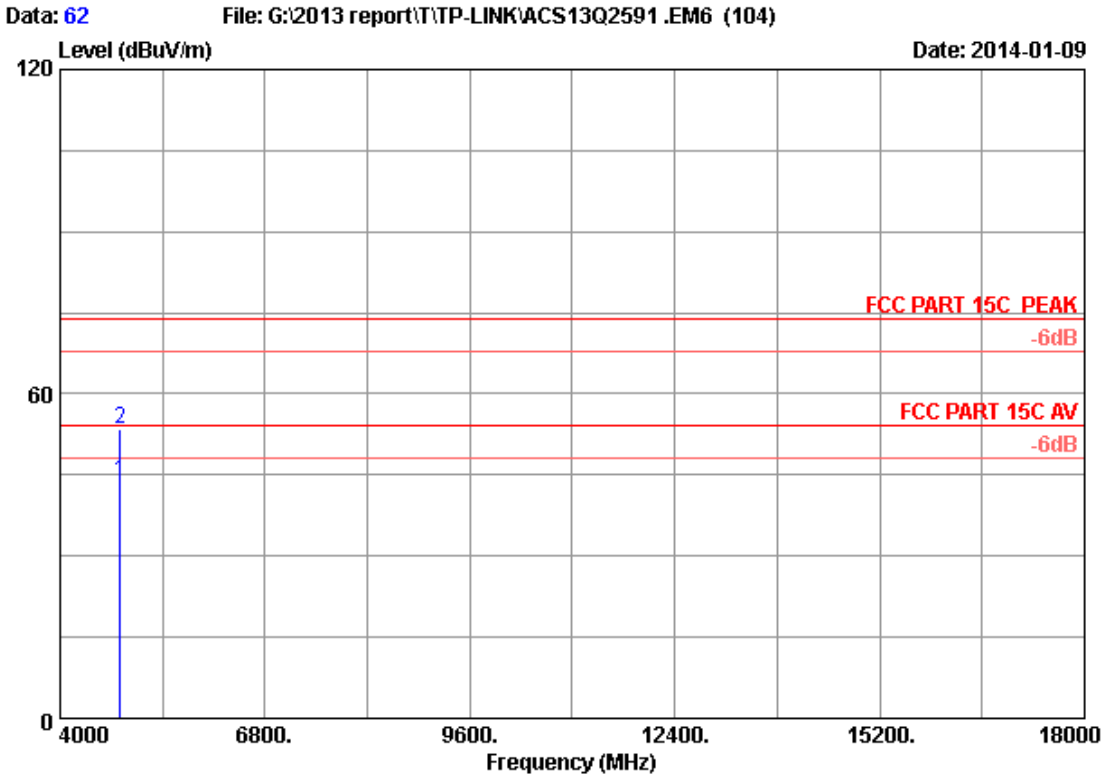
Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	38.87	44.63	54.00	9.37	Average
2	4824.000	32.88	8.58	35.70	49.07	54.83	74.00	19.17	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



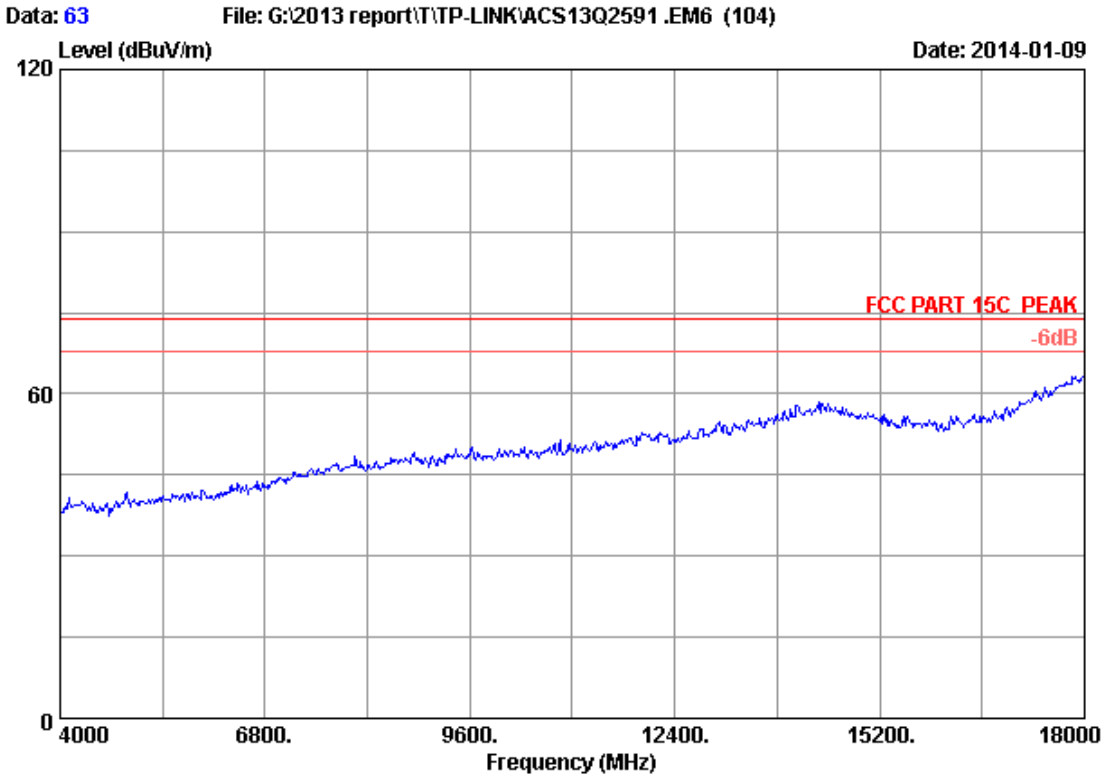
Site no.	: 3m Chamber	Data no.	: 61
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 CH1 2412MHz Tx		
M/N	: TL-WR841N		



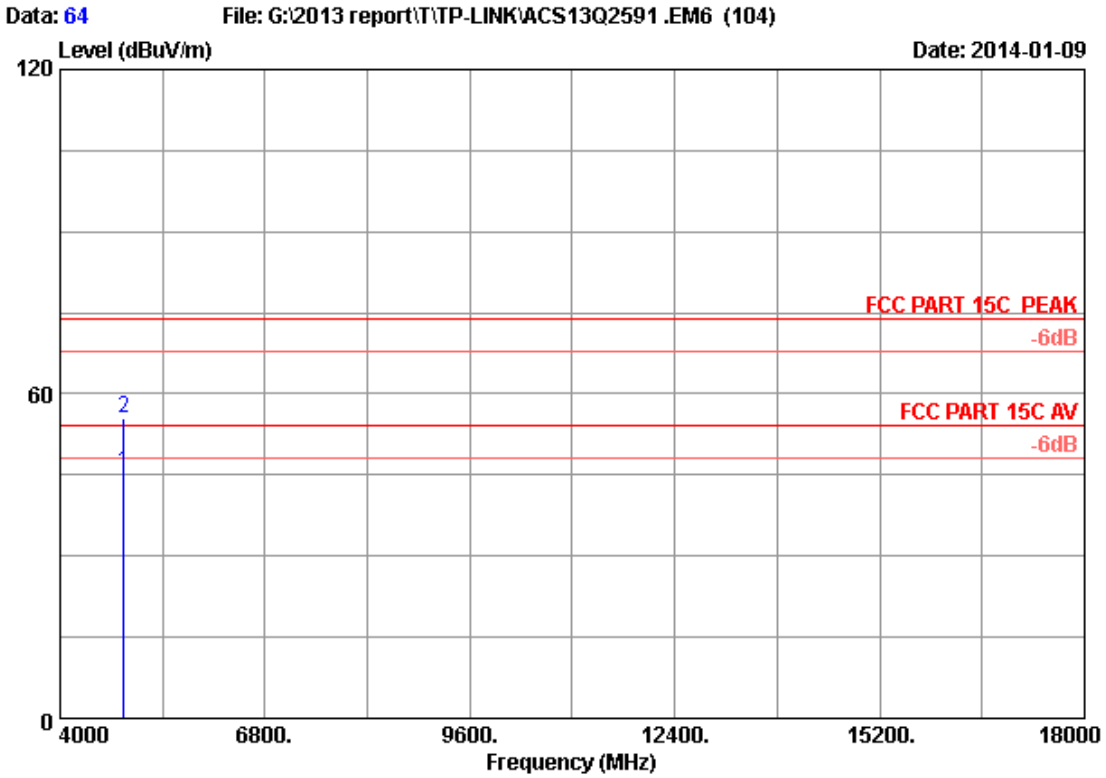
Site no. : 3m Chamber Data no. : 62
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	37.90	43.66	54.00	10.34	Average
2	4824.000	32.88	8.58	35.70	47.87	53.63	74.00	20.37	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



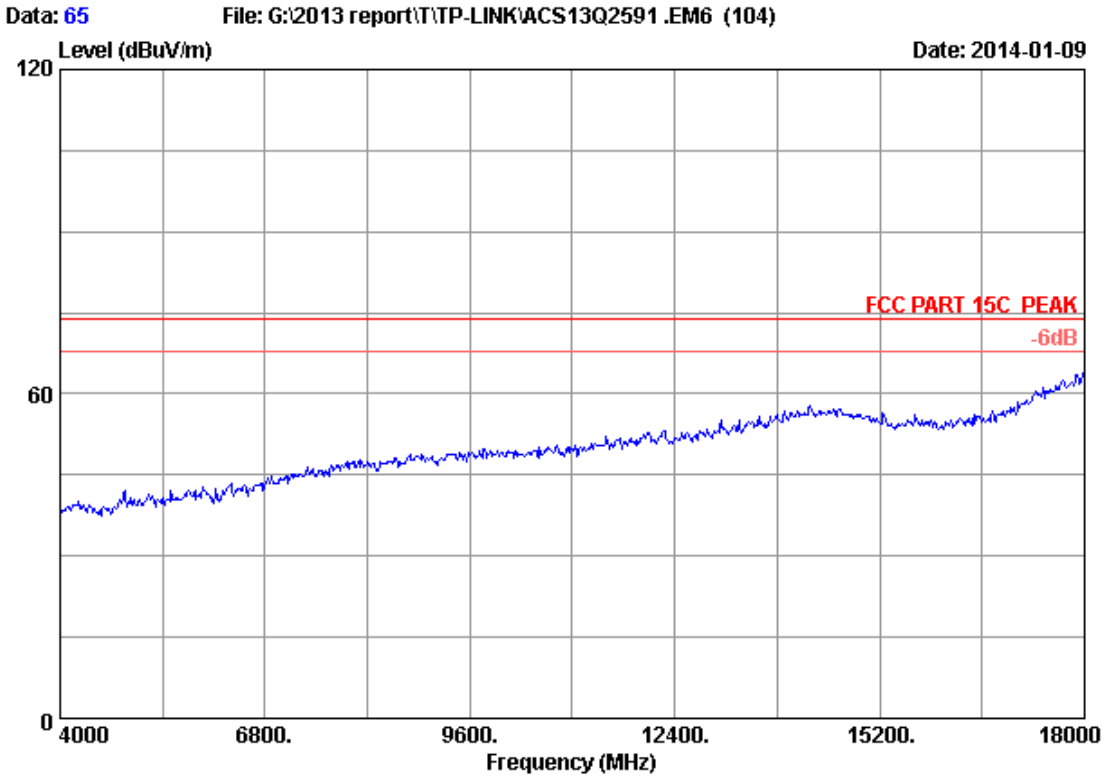
Site no.	: 3m Chamber	Data no.	: 63
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 CH6 2437MHz Tx		
M/N	: TL-WR841N		



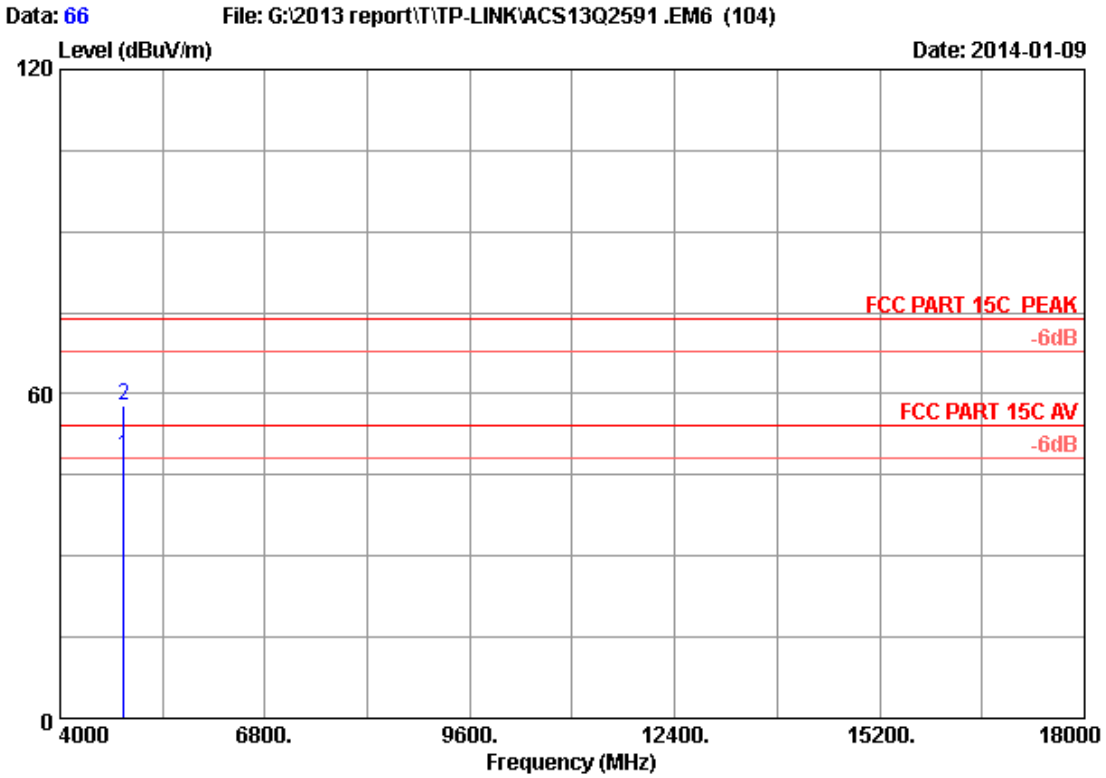
Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	39.57	45.47	54.00	8.53	Average
2	4874.000	32.97	8.63	35.70	49.43	55.33	74.00	18.67	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



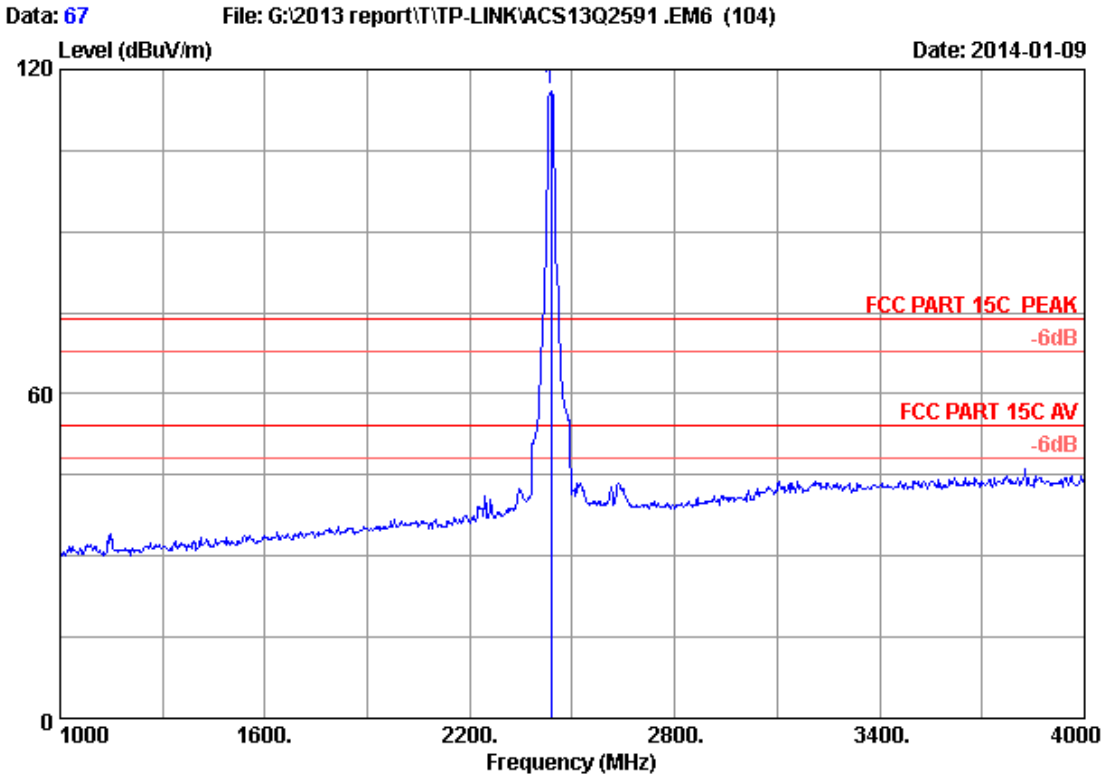
Site no.	: 3m Chamber	Data no.	: 65
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 CH6 2437MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	42.43	48.33	54.00	5.67	Average
2	4874.000	32.97	8.63	35.70	51.77	57.67	74.00	16.33	Peak

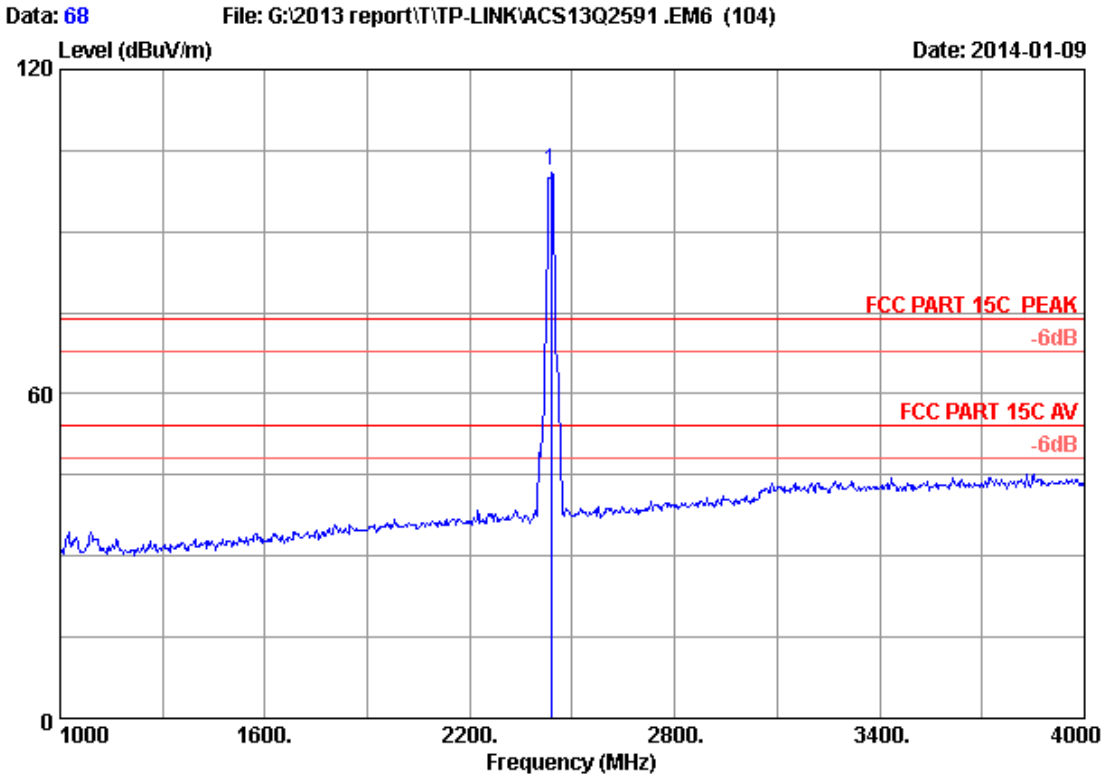
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 67
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	117.76	116.17	74.00	-42.17	Peak

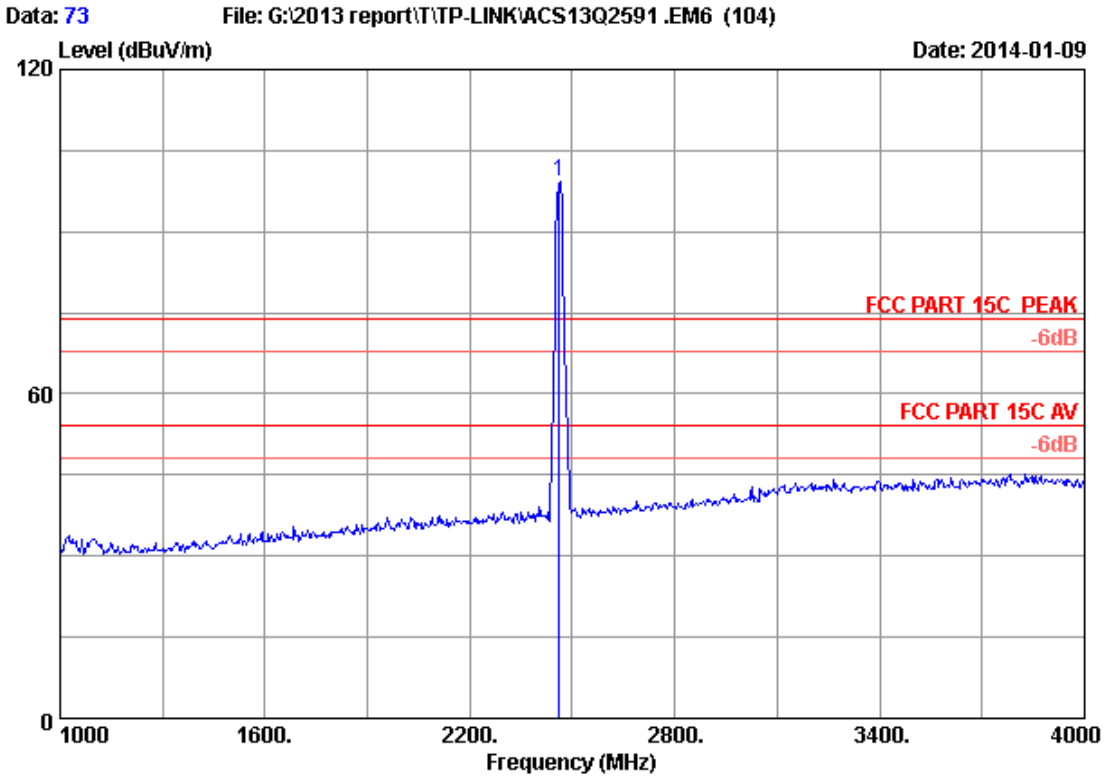
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	102.75	101.16	74.00	-27.16	Peak

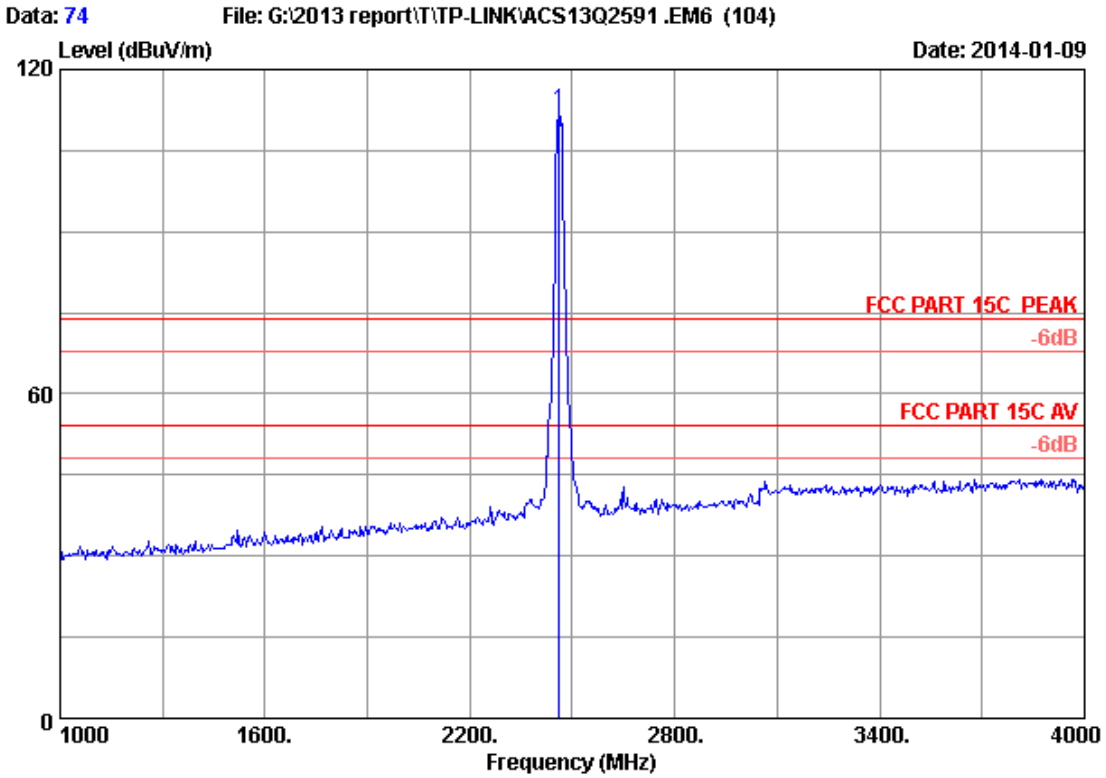
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	100.75	99.26	74.00	-25.26	Peak

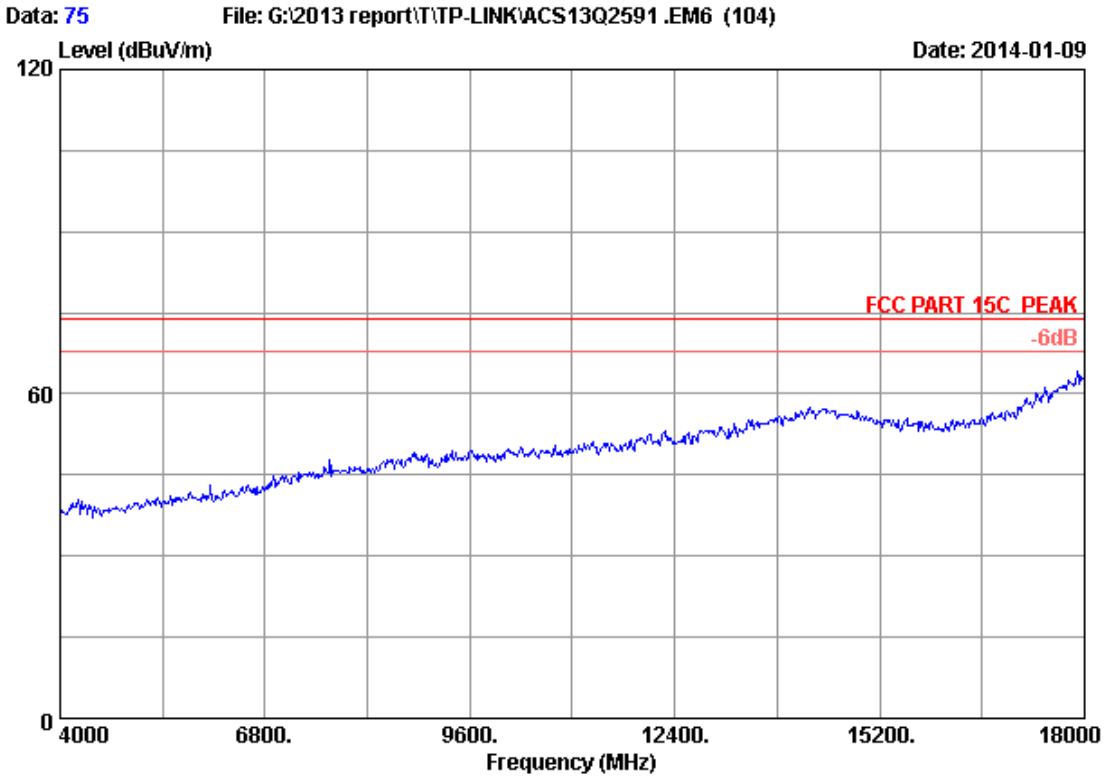
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



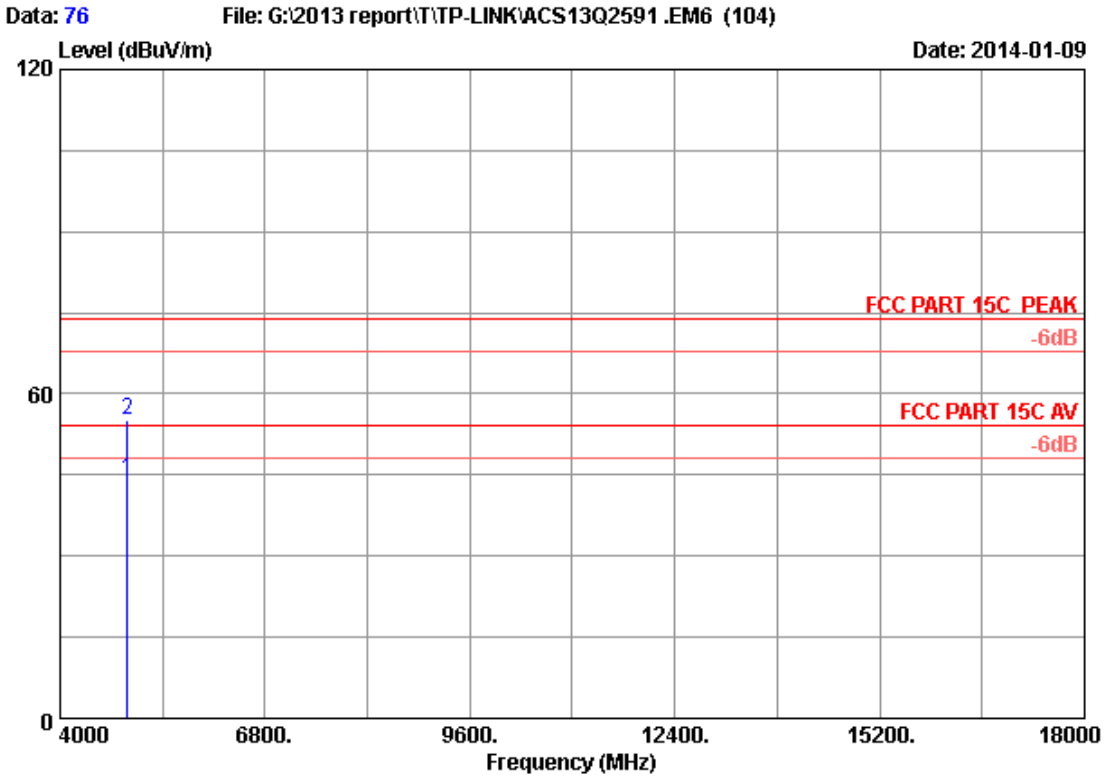
Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	113.75	112.26	74.00	-38.26	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



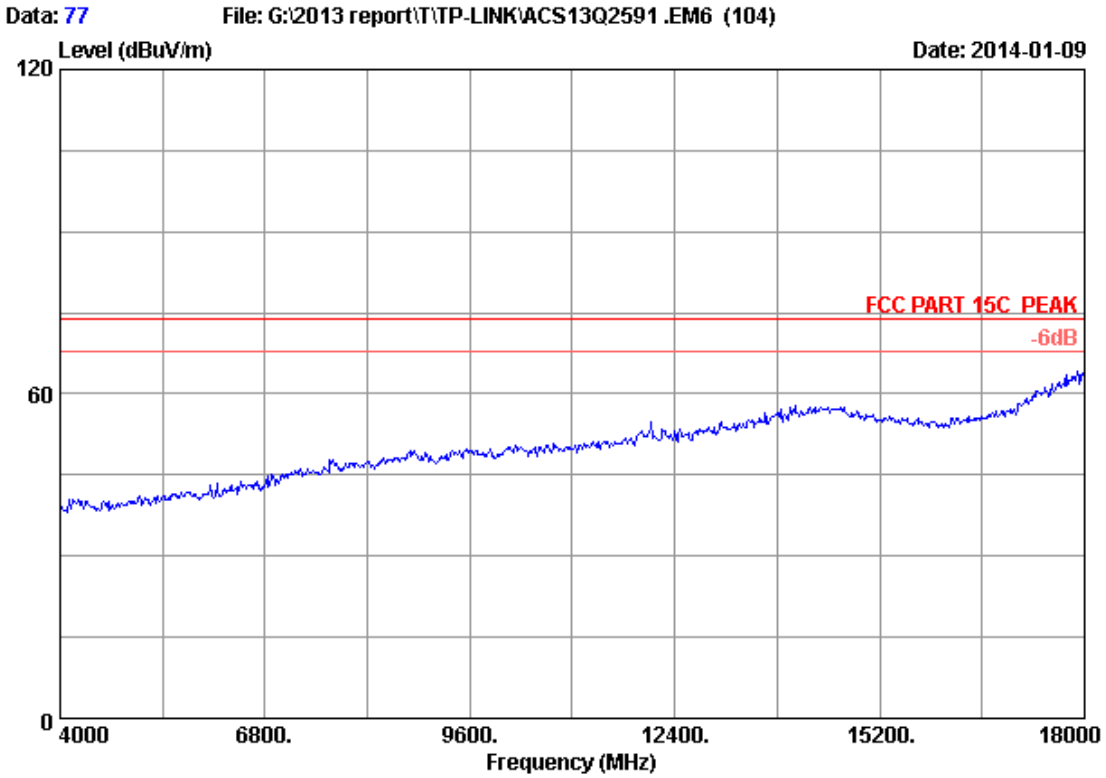
Site no.	: 3m Chamber	Data no.	: 75
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 CH11 2462MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	37.99	44.04	54.00	9.96	Average
2	4924.000	33.06	8.69	35.70	48.98	55.03	74.00	18.97	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

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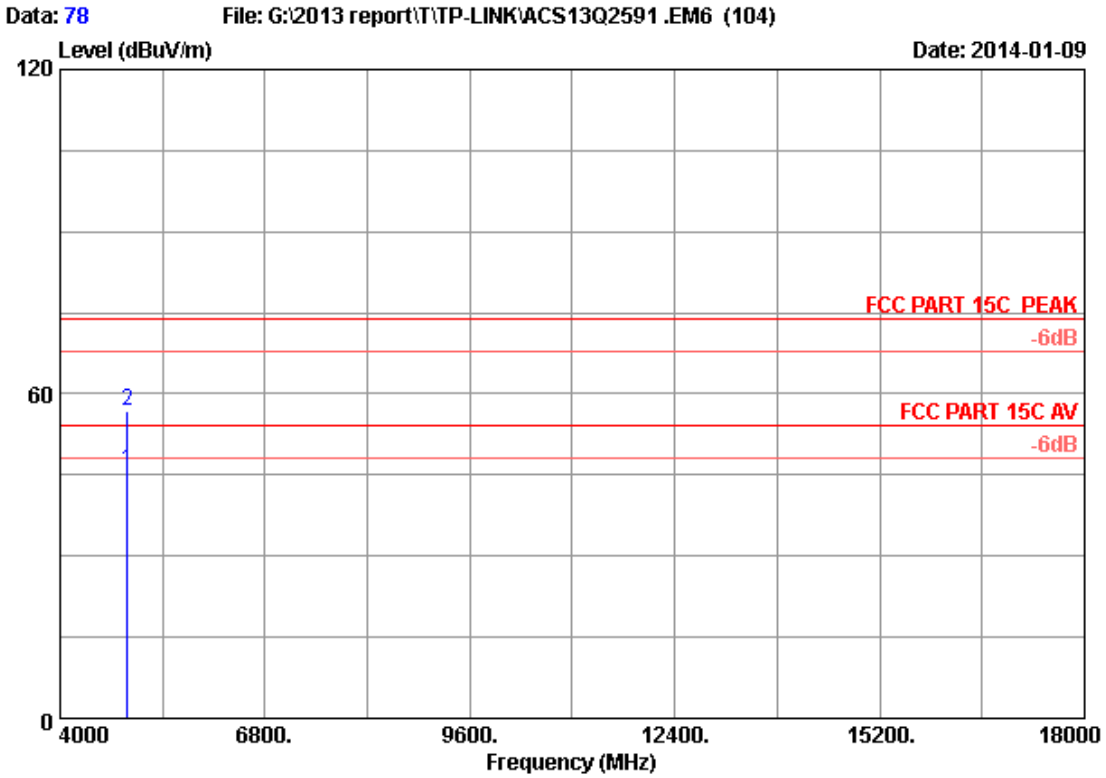
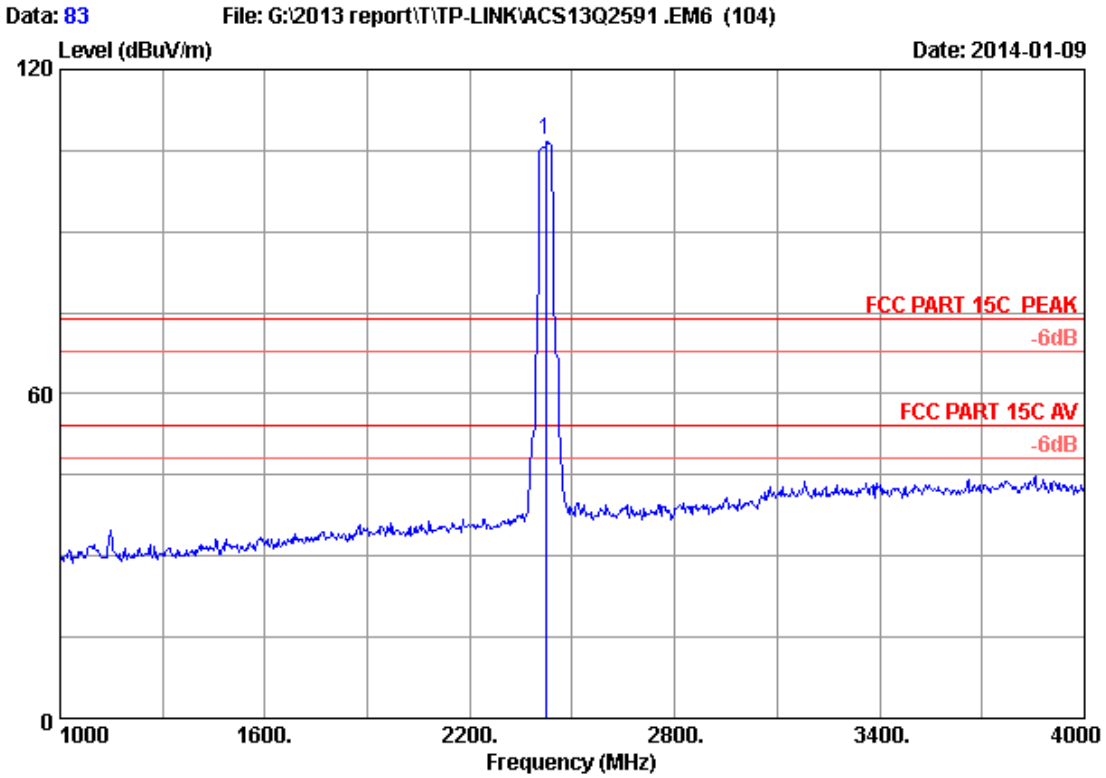
Site no.      : 3m Chamber                Data no.   : 77
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 CH11 2462MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 78
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	39.86	45.91	54.00	8.09	Average
2	4924.000	33.06	8.69	35.70	50.62	56.67	74.00	17.33	Peak

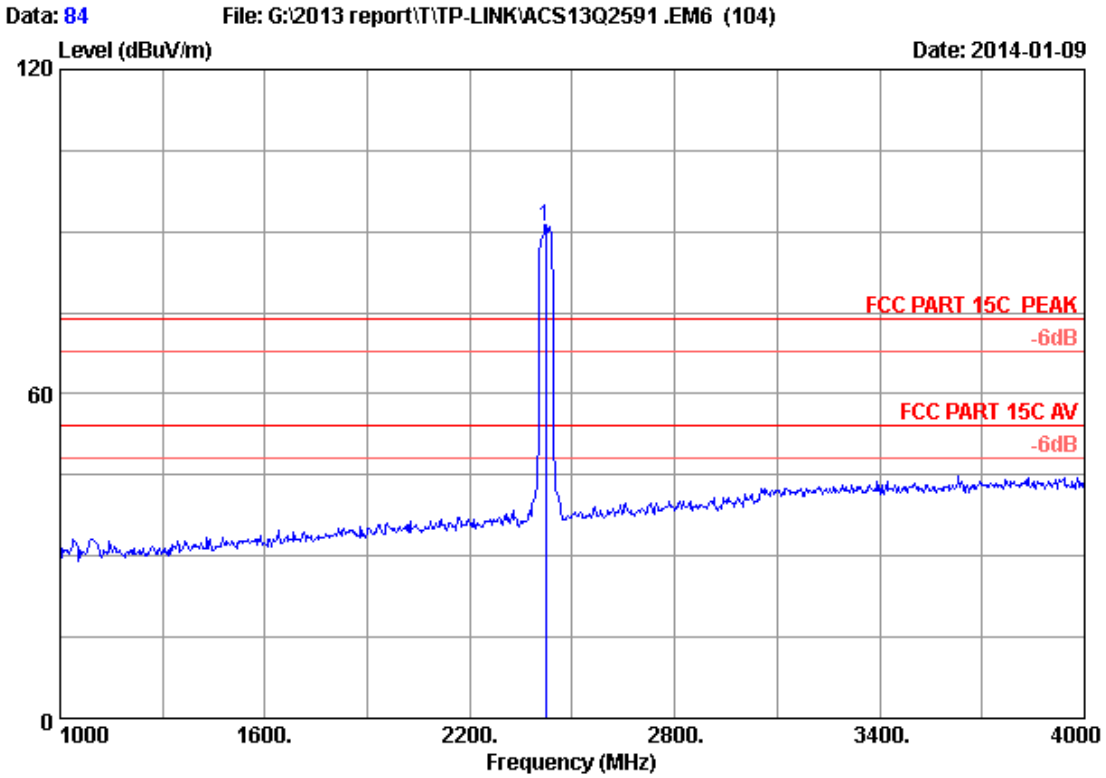
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 83
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.000	28.23	5.83	35.70	108.53	106.89	74.00	-32.89	Peak

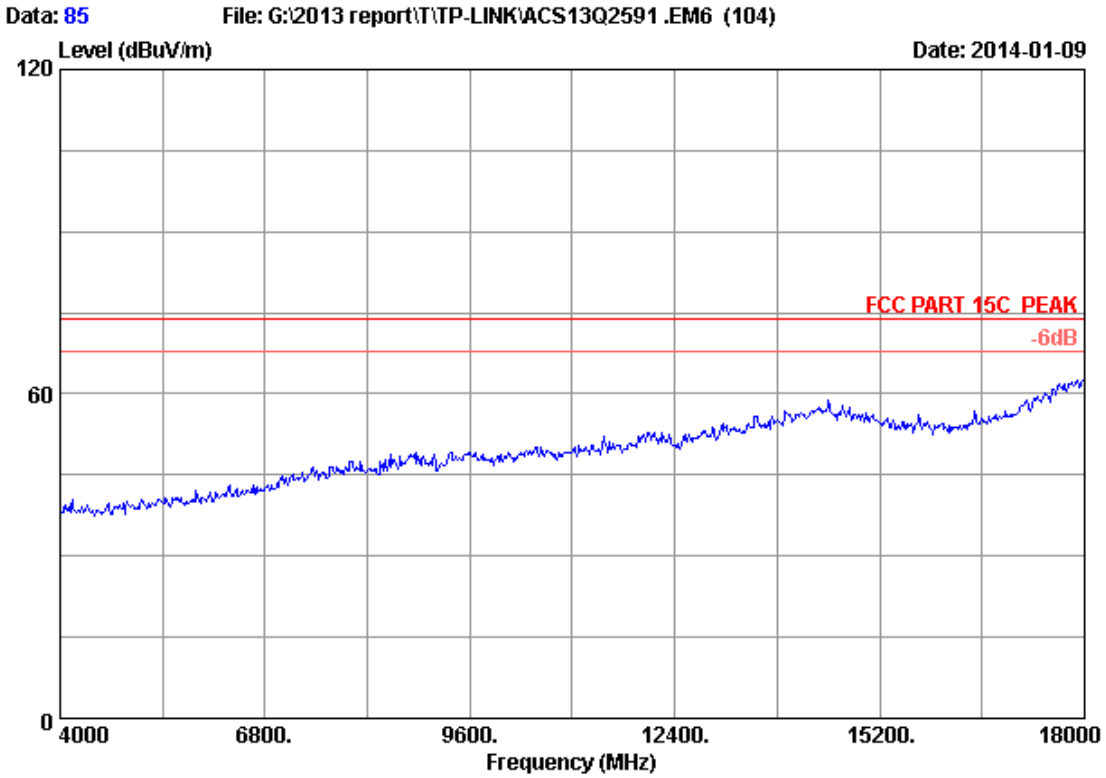
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



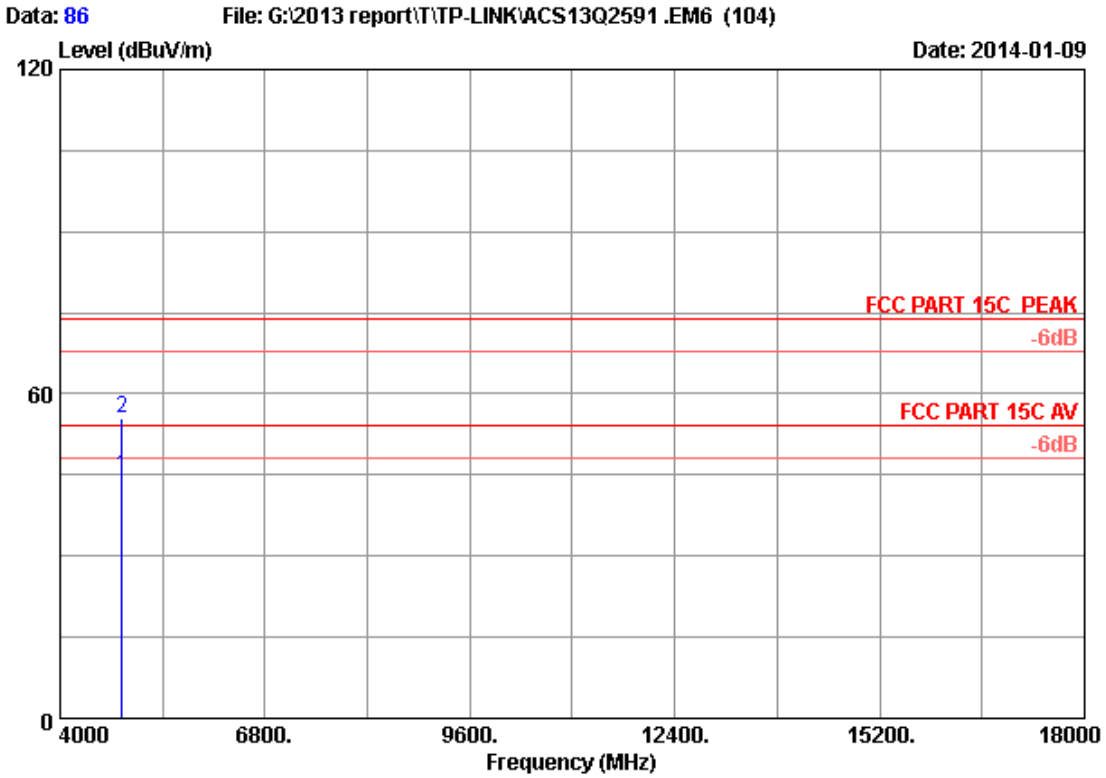
Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.000	28.23	5.83	35.70	92.52	90.88	74.00	-16.88	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



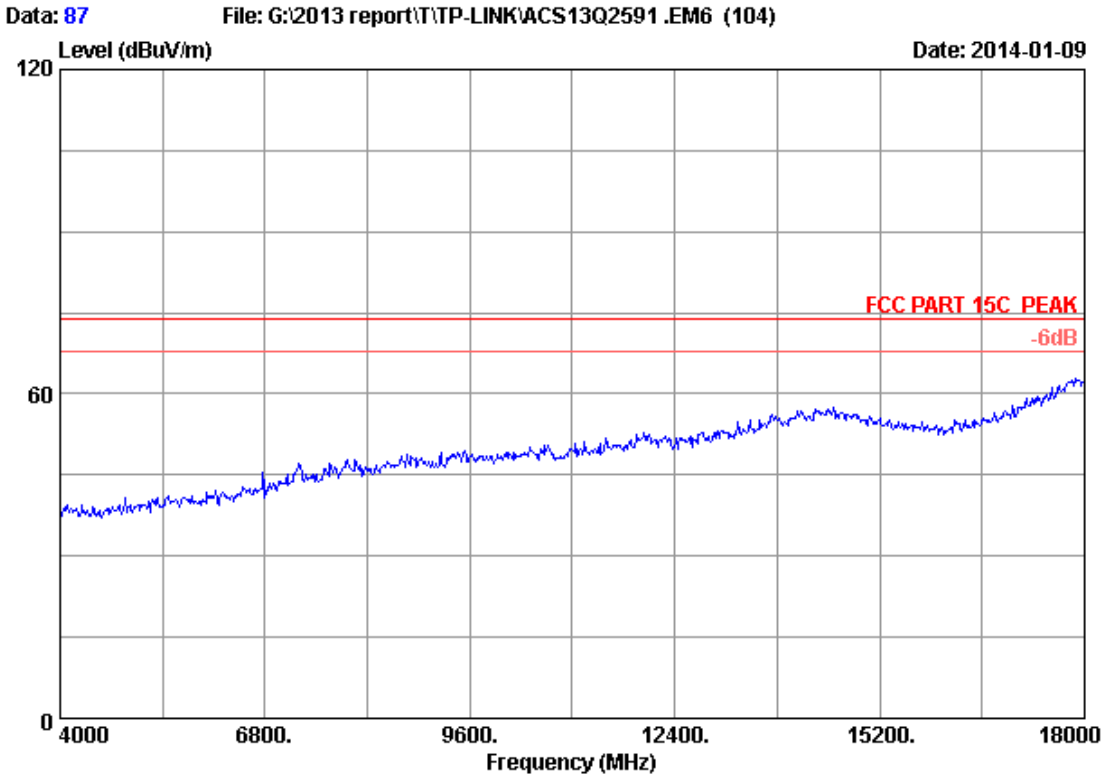
Site no.	: 3m Chamber	Data no.	: 85
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT40 CH1 2422MHz Tx		
M/N	: TL-WR841N		



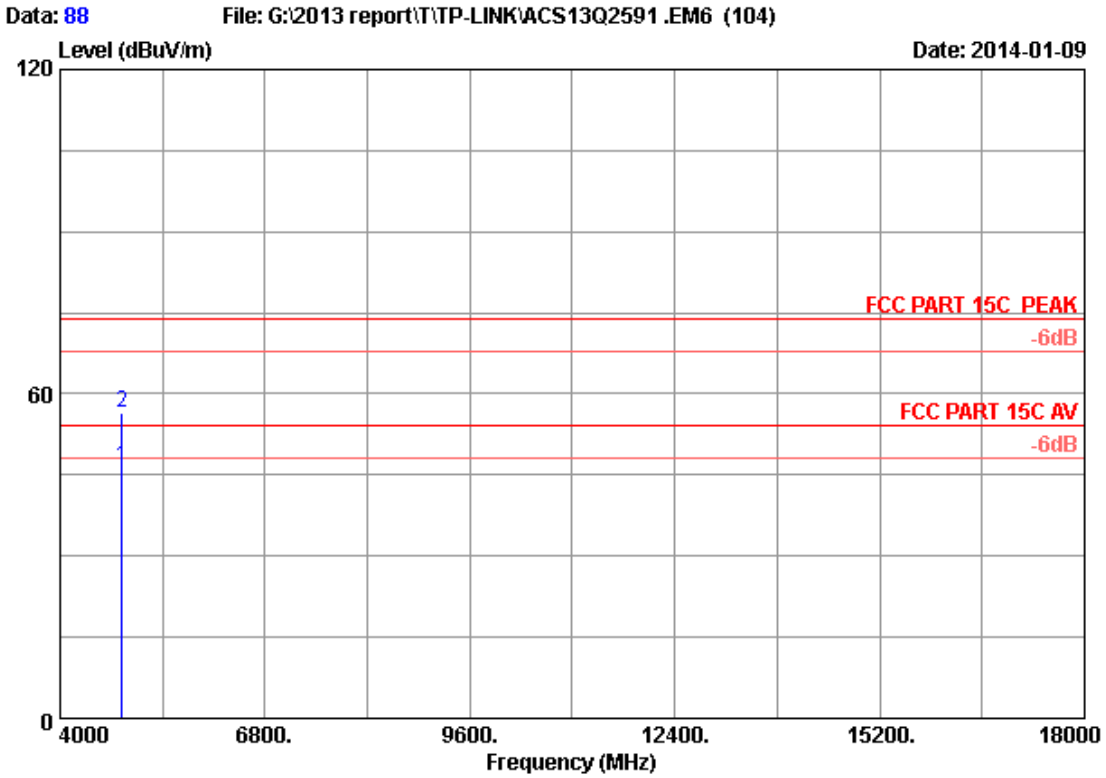
Site no. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	32.92	8.60	35.70	38.87	44.69	54.00	9.31	Average
2	4844.000	32.92	8.60	35.70	49.53	55.35	74.00	18.65	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



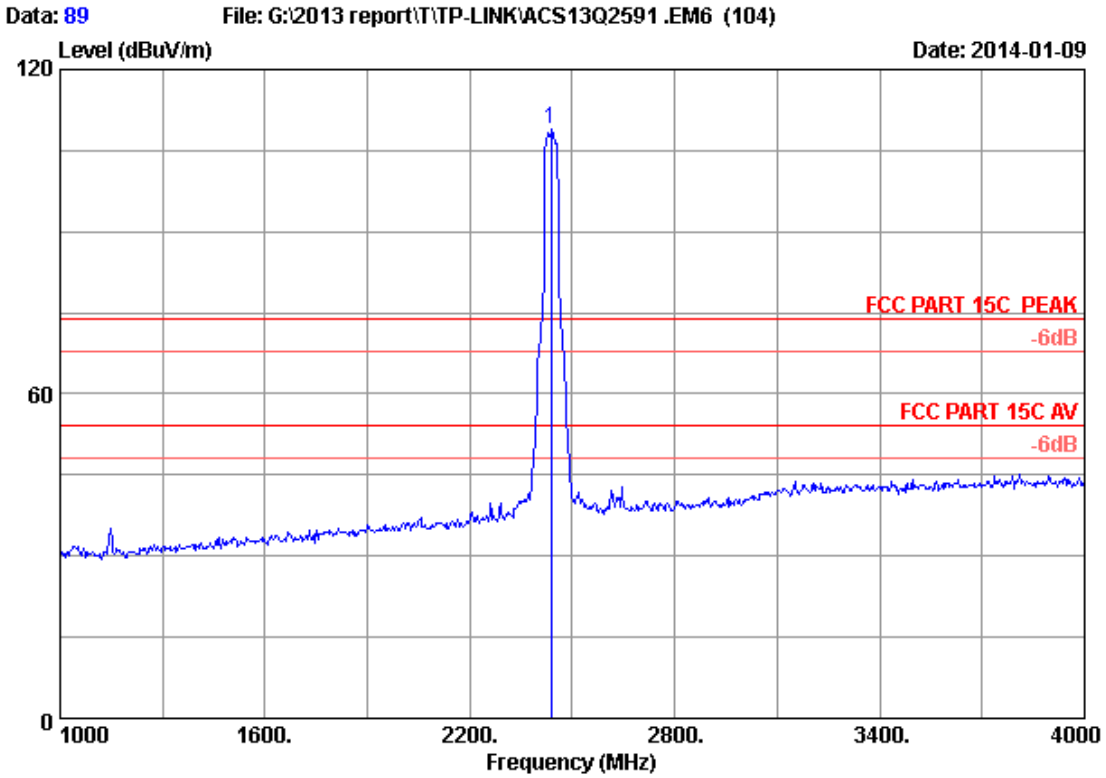

```
Site no.      : 3m Chamber                Data no.   : 87
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT40 CH1  2422MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 88
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	32.92	8.60	35.70	40.63	46.45	54.00	7.55	Average
2	4844.000	32.92	8.60	35.70	50.56	56.38	74.00	17.62	Peak

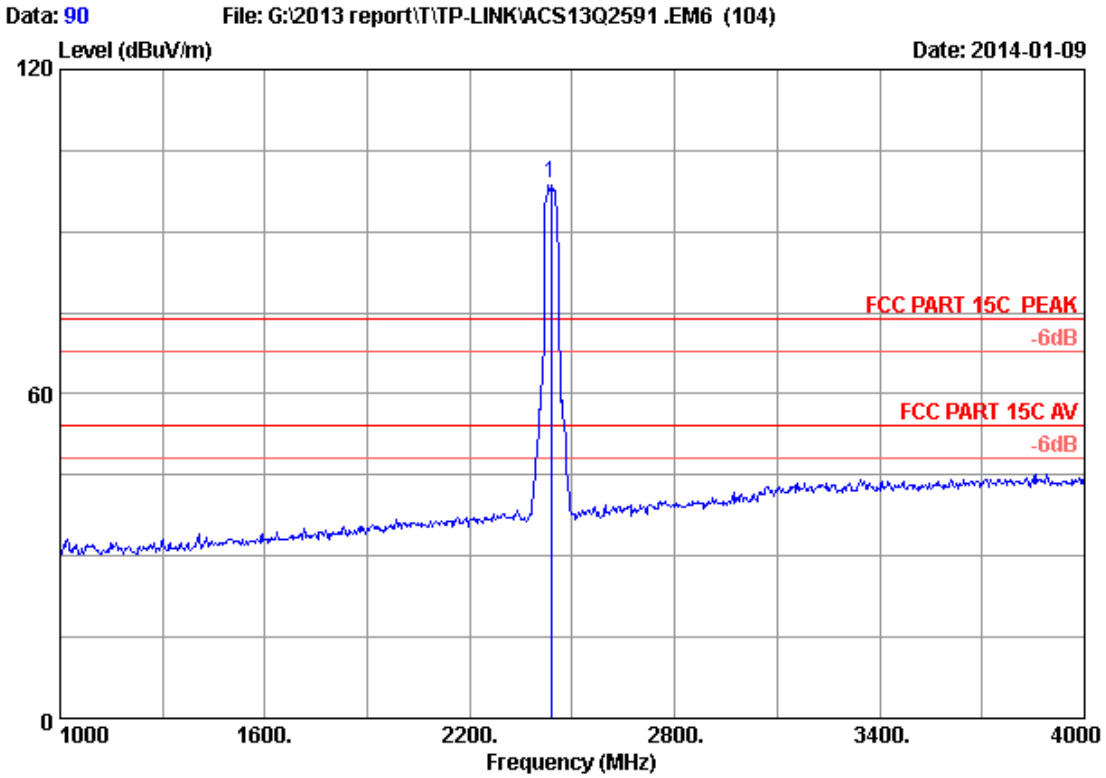
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	110.63	109.04	74.00	-35.04	Peak

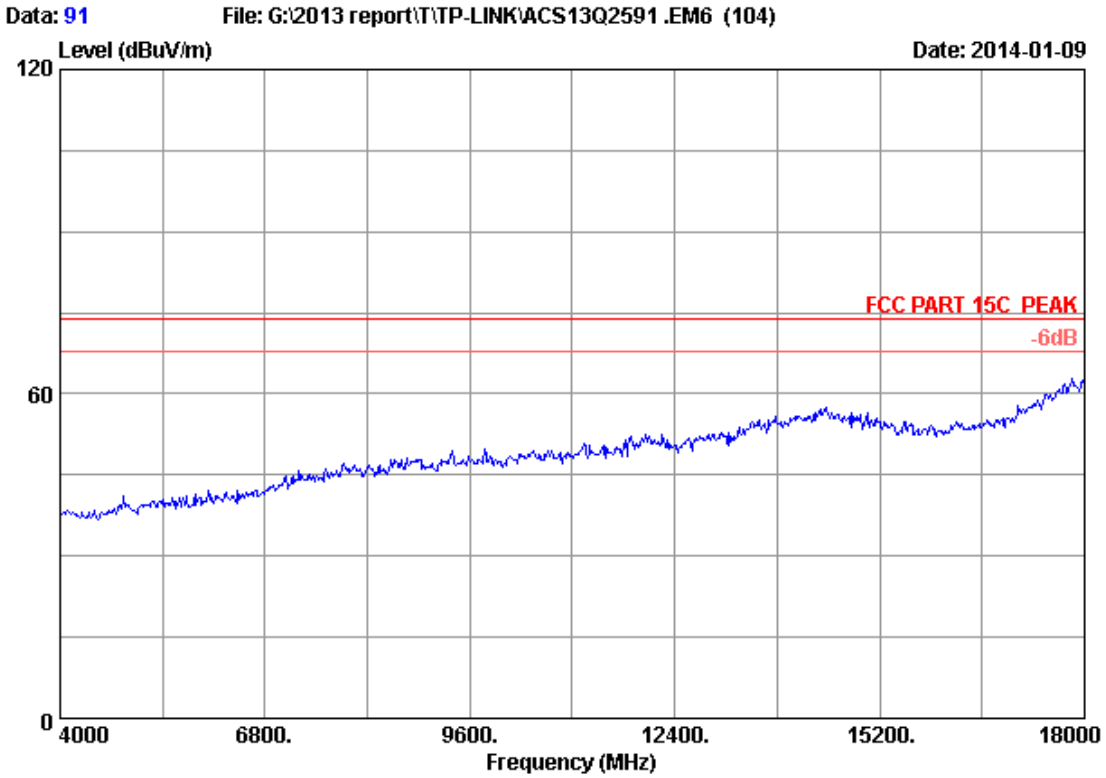
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



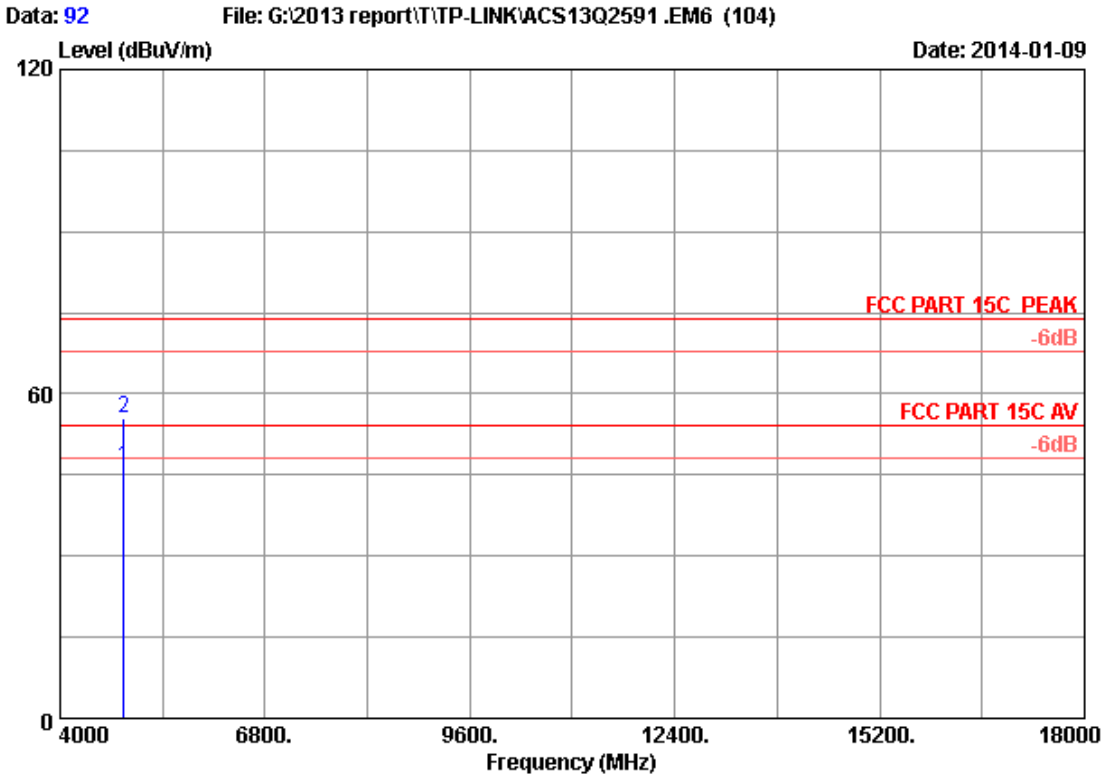
Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	100.53	98.94	74.00	-24.94	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



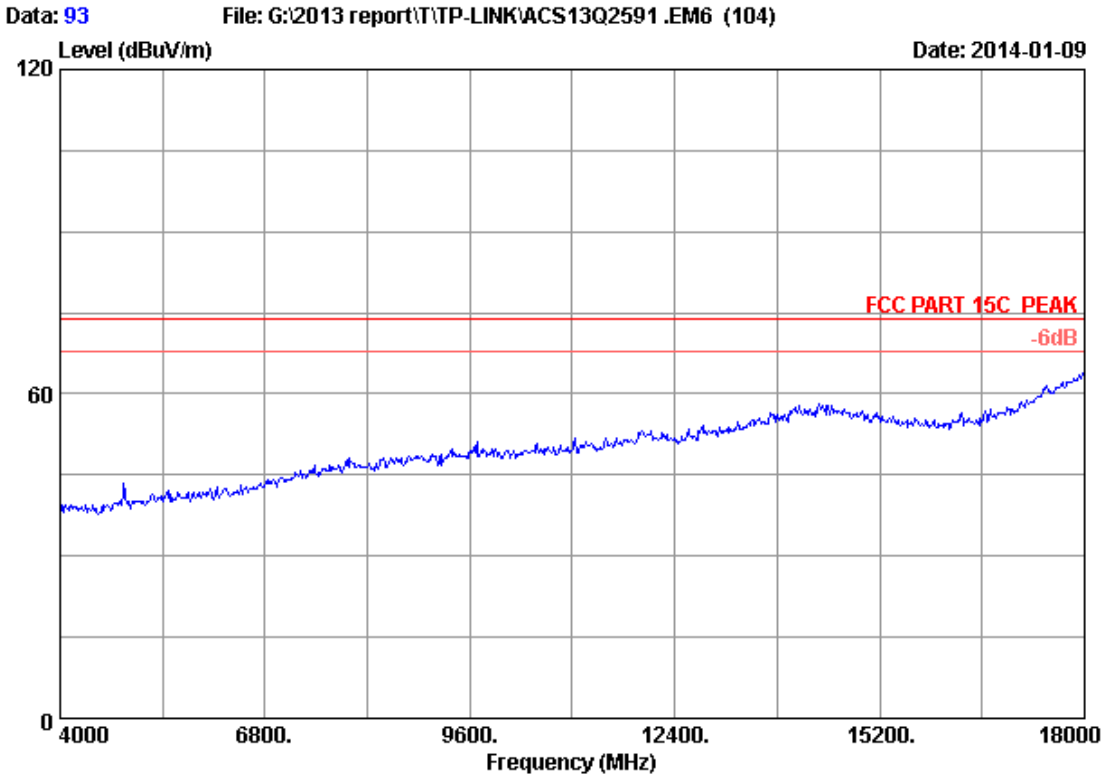

```
Site no.      : 3m Chamber                Data no.   : 91
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT40 CH4  2437MHz Tx
M/N           : TL-WR841N
```



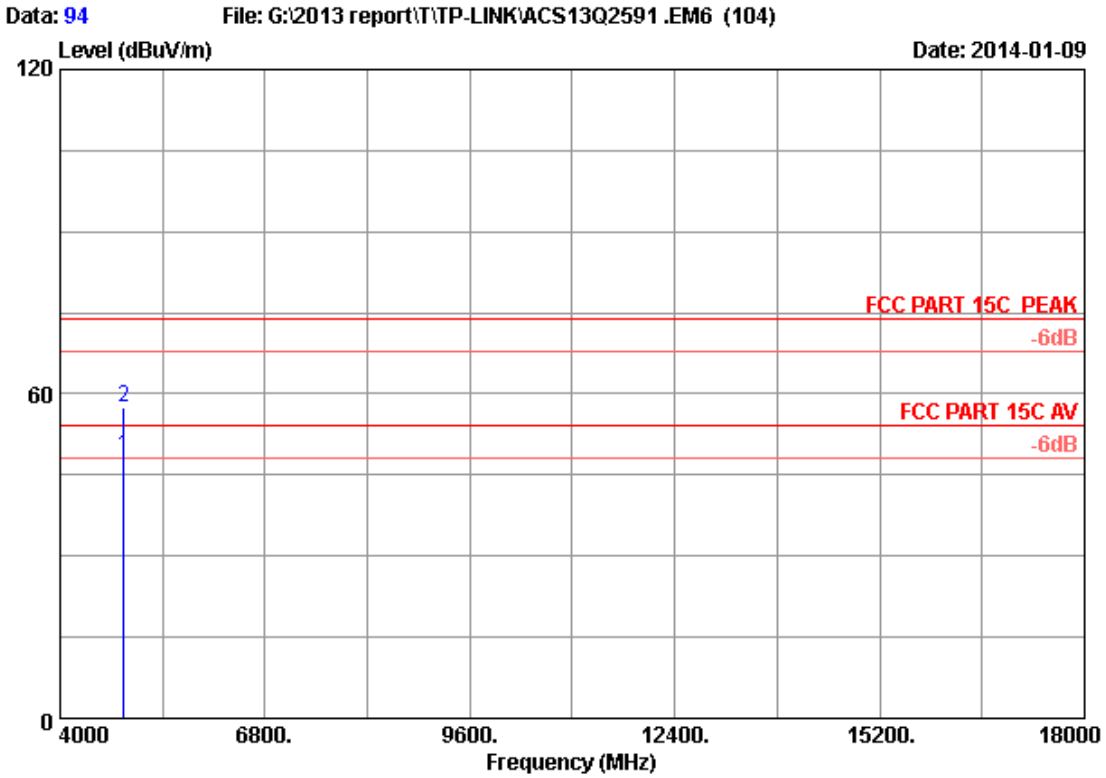
Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	40.57	46.47	54.00	7.53	Average
2	4874.000	32.97	8.63	35.70	49.57	55.47	74.00	18.53	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



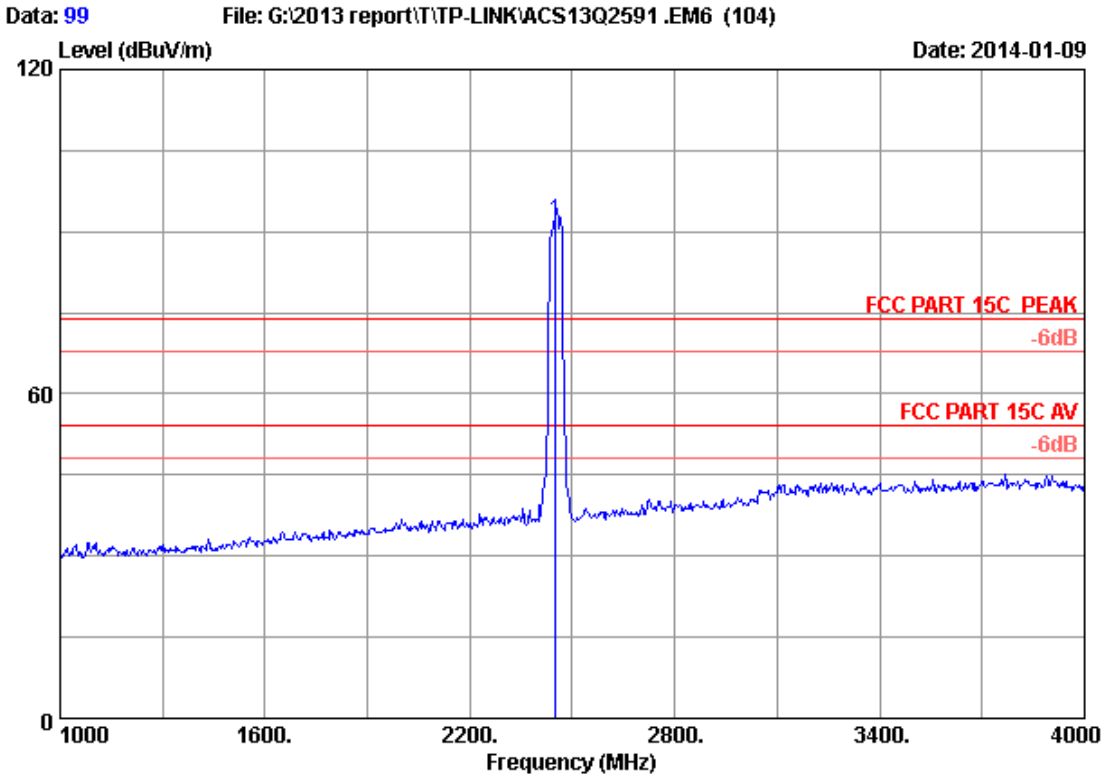

```
Site no.      : 3m Chamber                Data no.   : 93
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT40 CH4  2437MHz Tx
M/N           : TL-WR841N
```



Site no. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	42.54	48.44	54.00	5.56	Average
2	4874.000	32.97	8.63	35.70	51.63	57.53	74.00	16.47	Peak

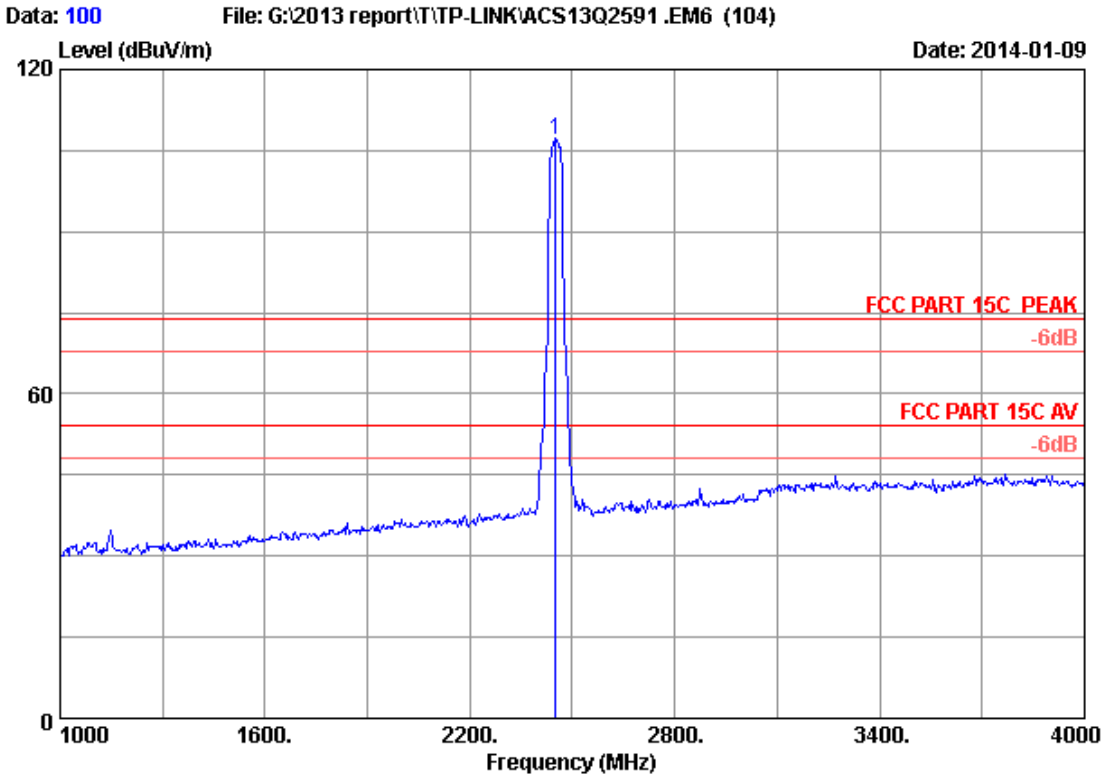
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.000	28.29	5.87	35.70	93.54	92.00	74.00	-18.00	Peak

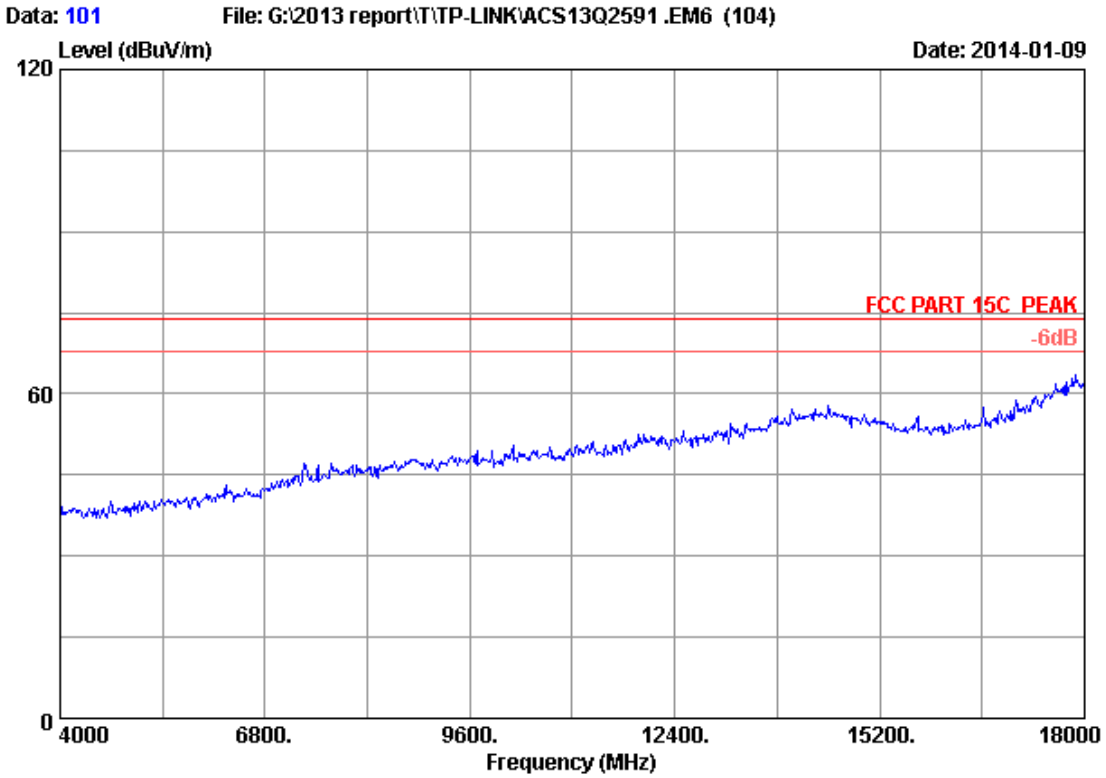
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



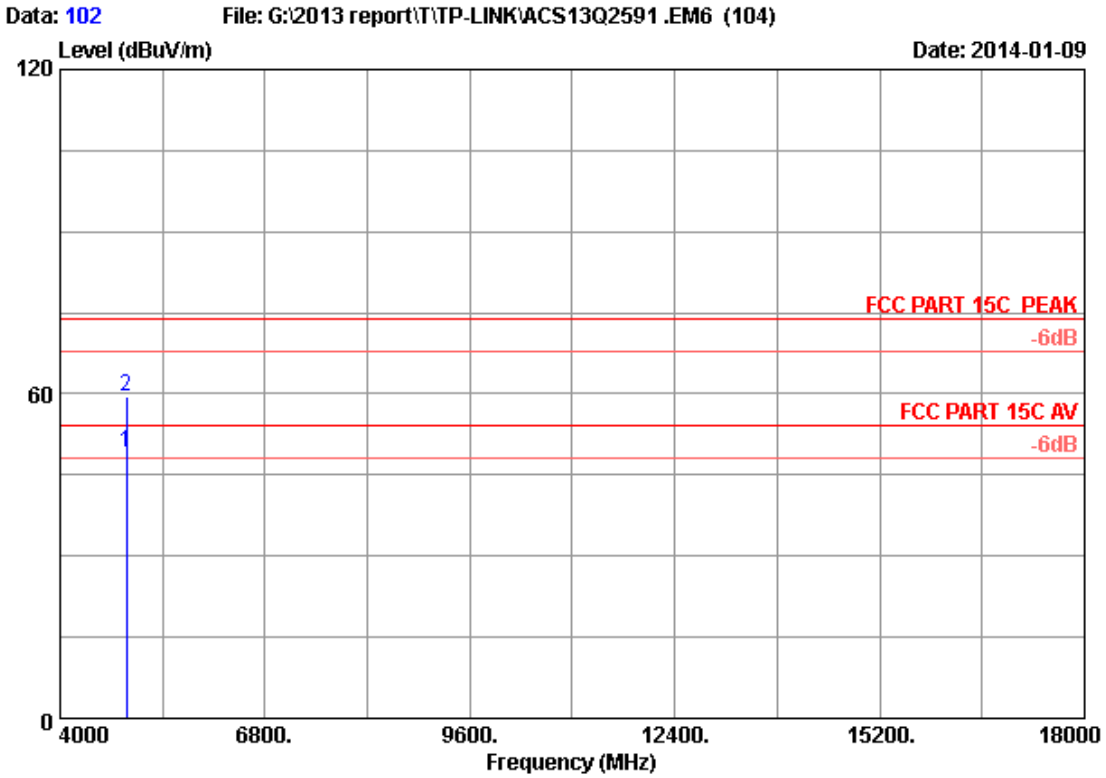
Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.000	28.29	5.87	35.70	108.57	107.03	74.00	-33.03	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



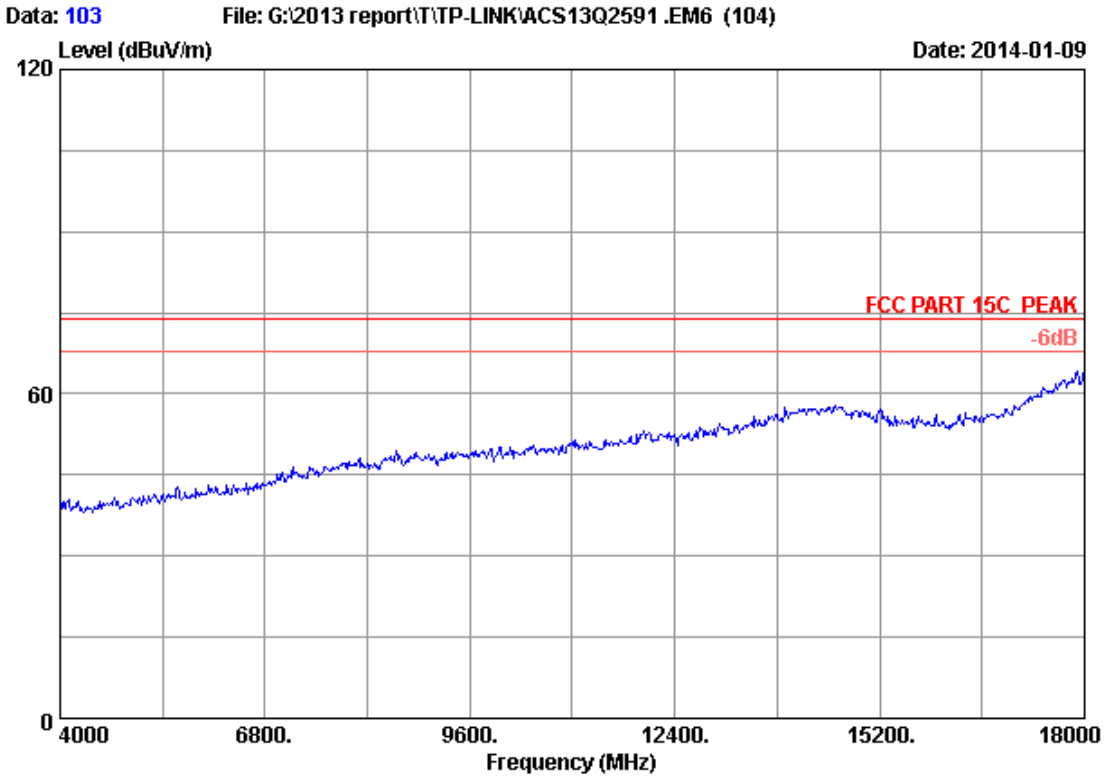

```
Site no.      : 3m Chamber                Data no.   : 101
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Router
Power supply  : DC 9V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT40 CH7 2452MHz Tx
M/N           : TL-WR841N
```



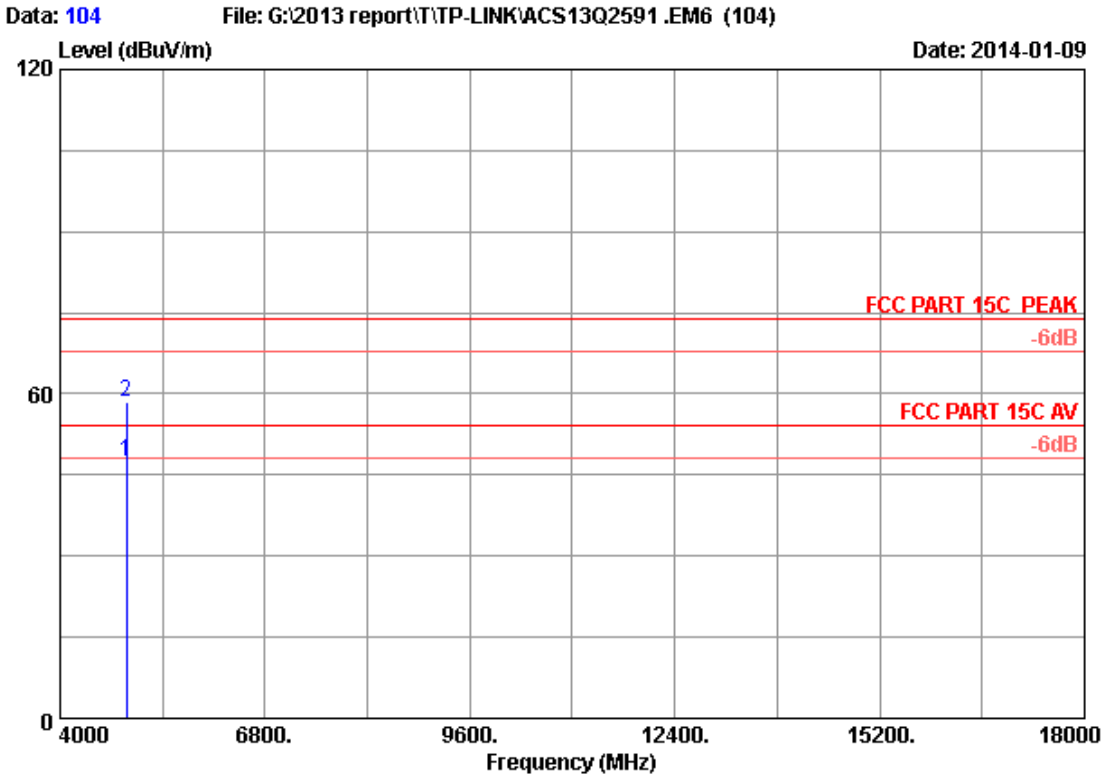
Site no. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	33.03	8.66	35.70	43.24	49.23	54.00	4.77	Average
2	4904.000	33.03	8.66	35.70	53.56	59.55	74.00	14.45	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 103
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 300Mbps Wireless N Router		
Power supply	: DC 9V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT40 CH7 2452MHz Tx		
M/N	: TL-WR841N		



Site no. : 3m Chamber Data no. : 104
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
M/N : TL-WR841N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	33.03	8.66	35.70	41.56	47.55	54.00	6.45	Average
2	4904.000	33.03	8.66	35.70	52.63	58.62	74.00	15.38	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,13	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,13	1 Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

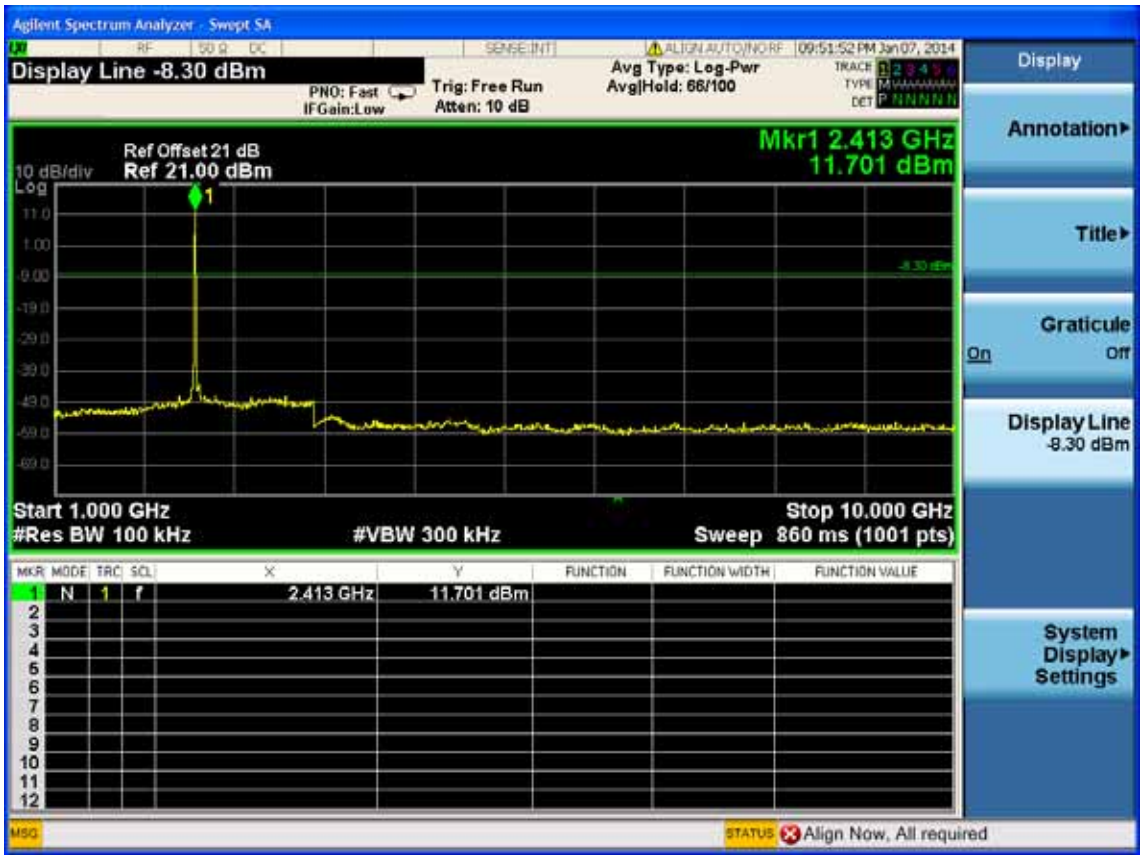
5.4.Test result

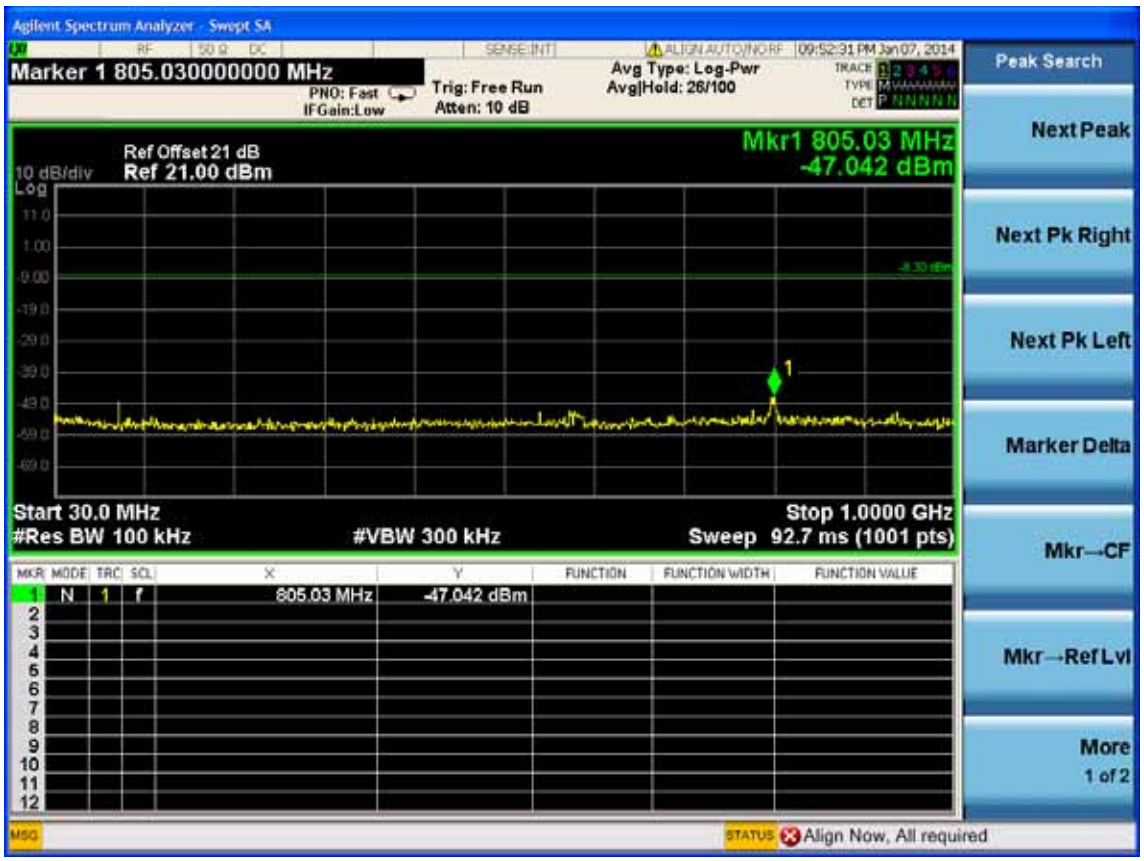
PASS (The testing data was attached in the next pages.)

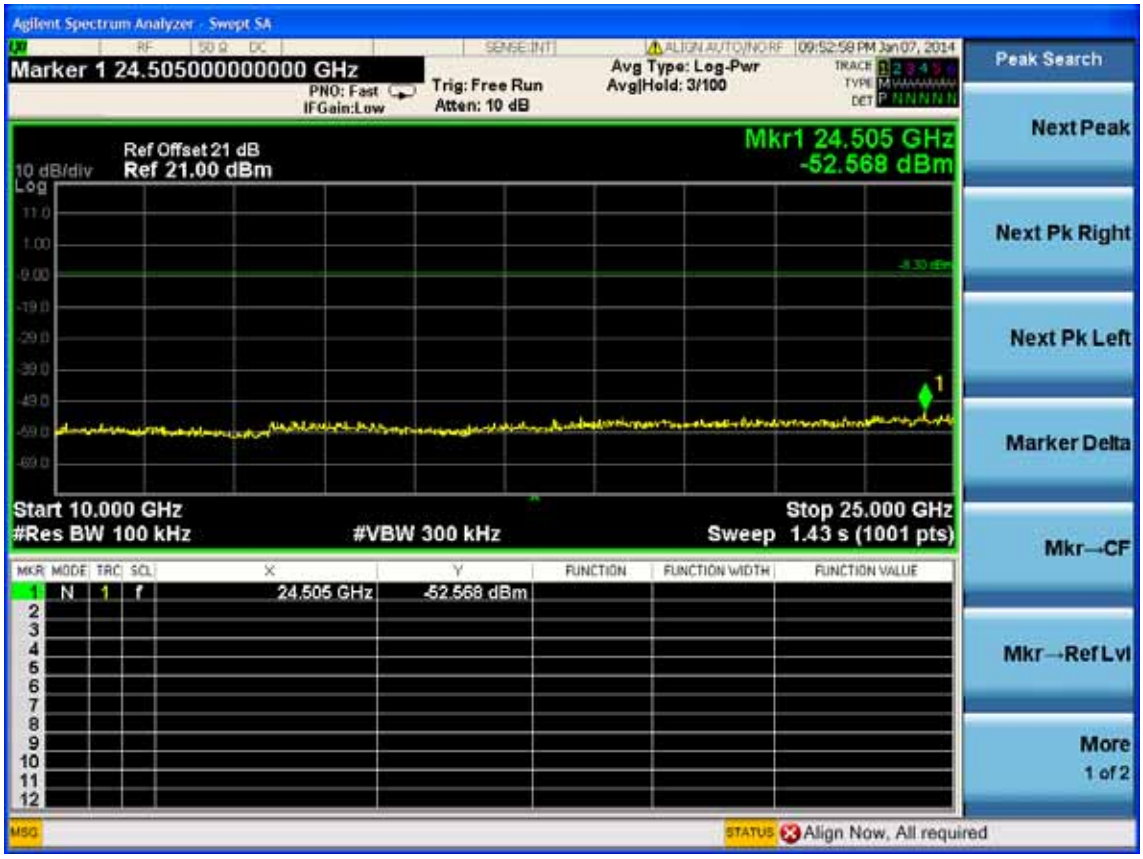
Chain 0

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

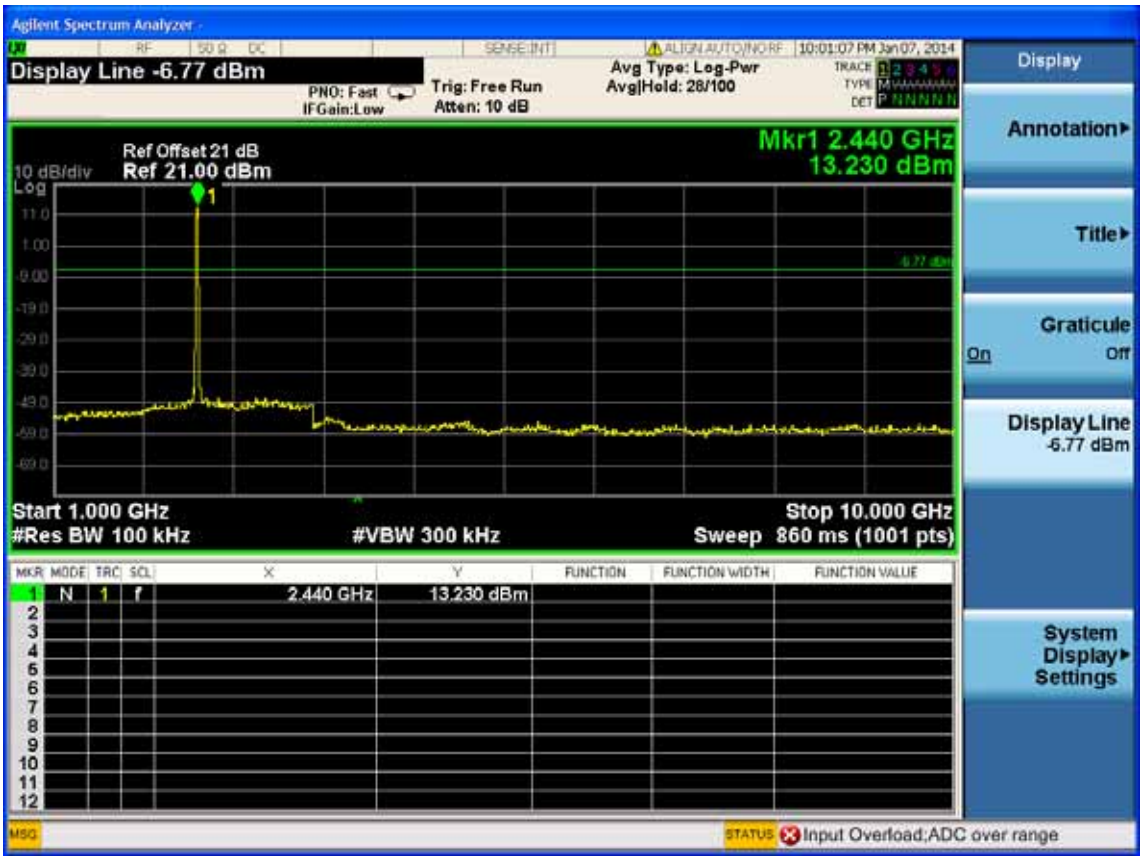


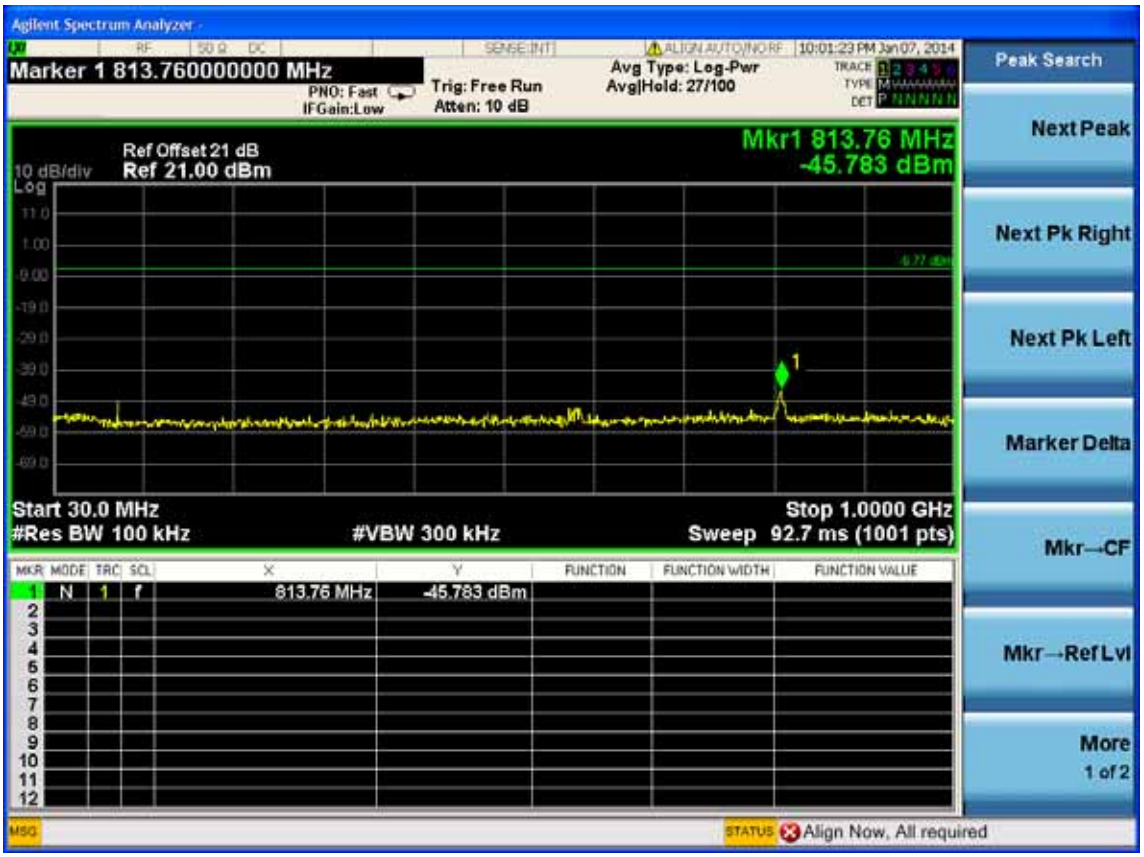


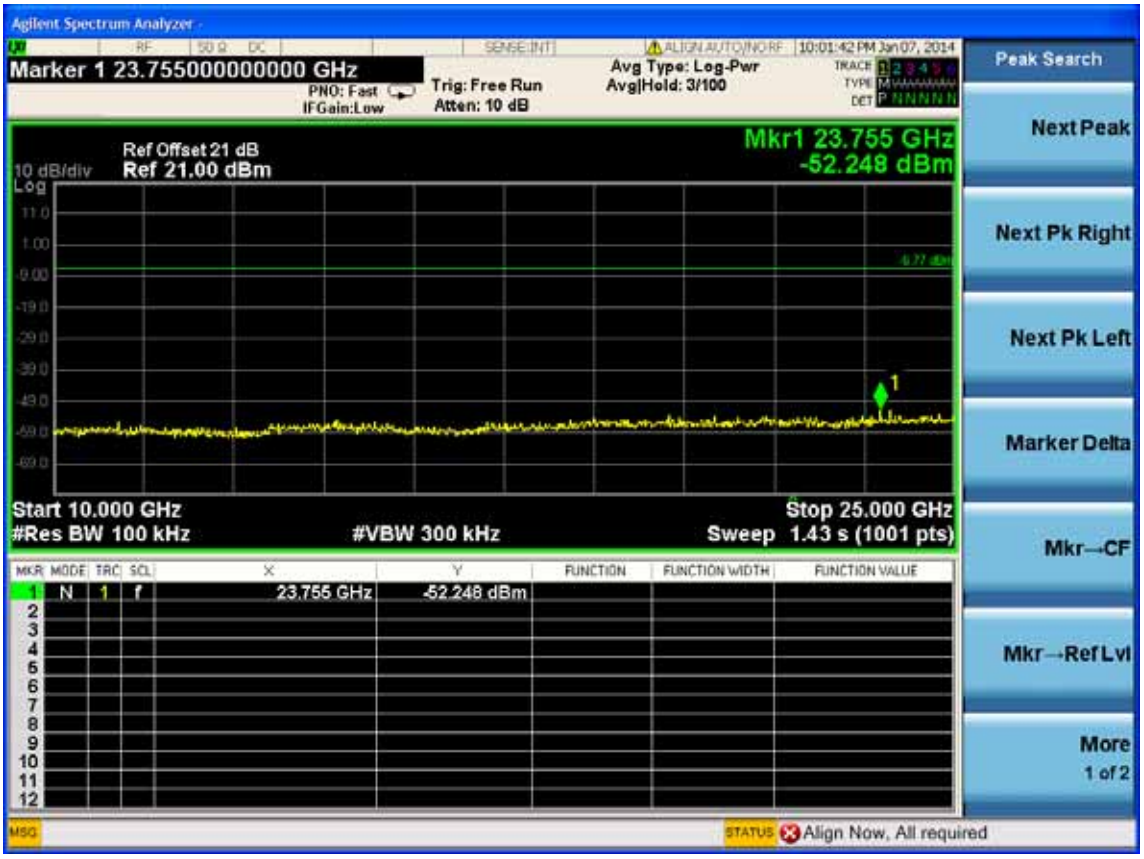

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.505000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
09:52:58 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 24.505 GHz
-52.568 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.505 GHz -52.568 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

Agilent Spectrum Analyzer - Swept SA
Display Line -6.93 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
09:54:20 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr4 2.412 47 GHz
13.067 dBm
Start 2.31000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.42500 GHz
Sweep 11.0 ms (1001 pts)
1 N 1 f 2.390 00 GHz -44.417 dBm
2 N 1 f 2.400 00 GHz -38.098 dBm
3 N 1 f 2.380 61 GHz -42.534 dBm
4 N 1 f 2.412 47 GHz 13.067 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-6.93 dBm
System Display Settings
Align Now, All required

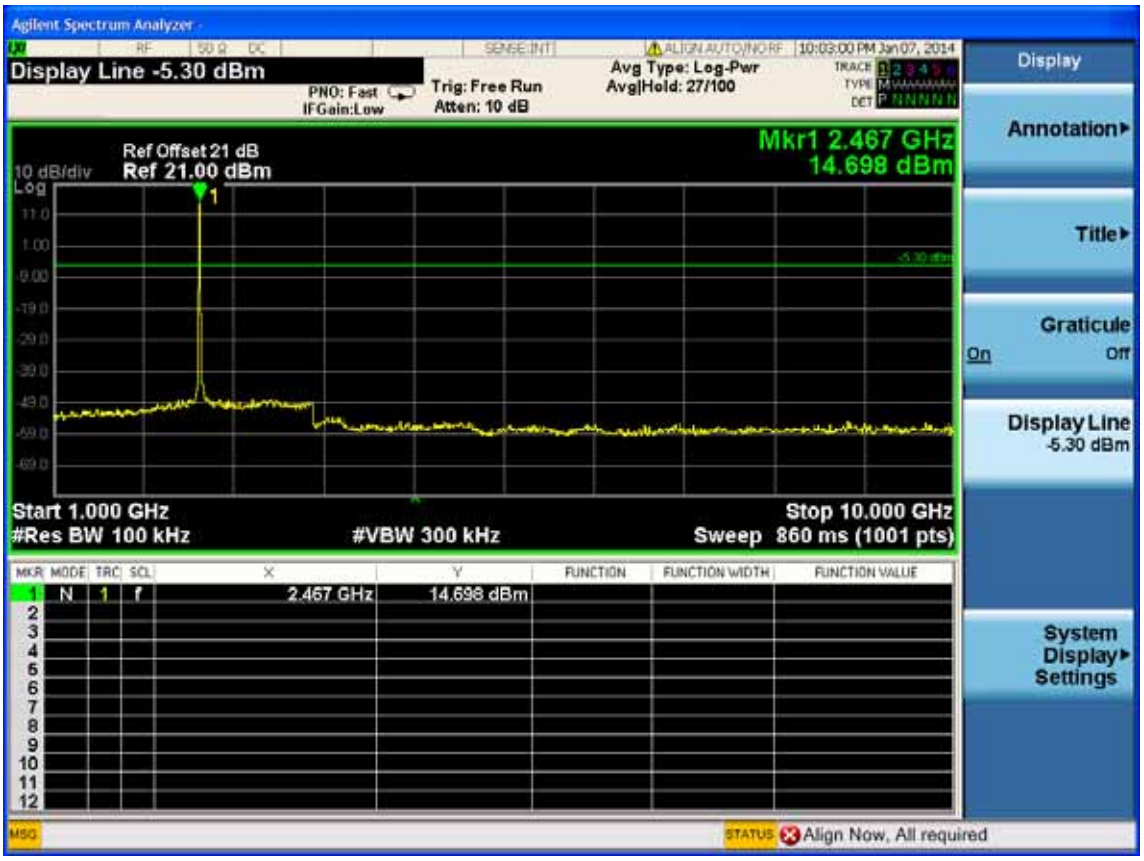
Test CH6: 2437MHz

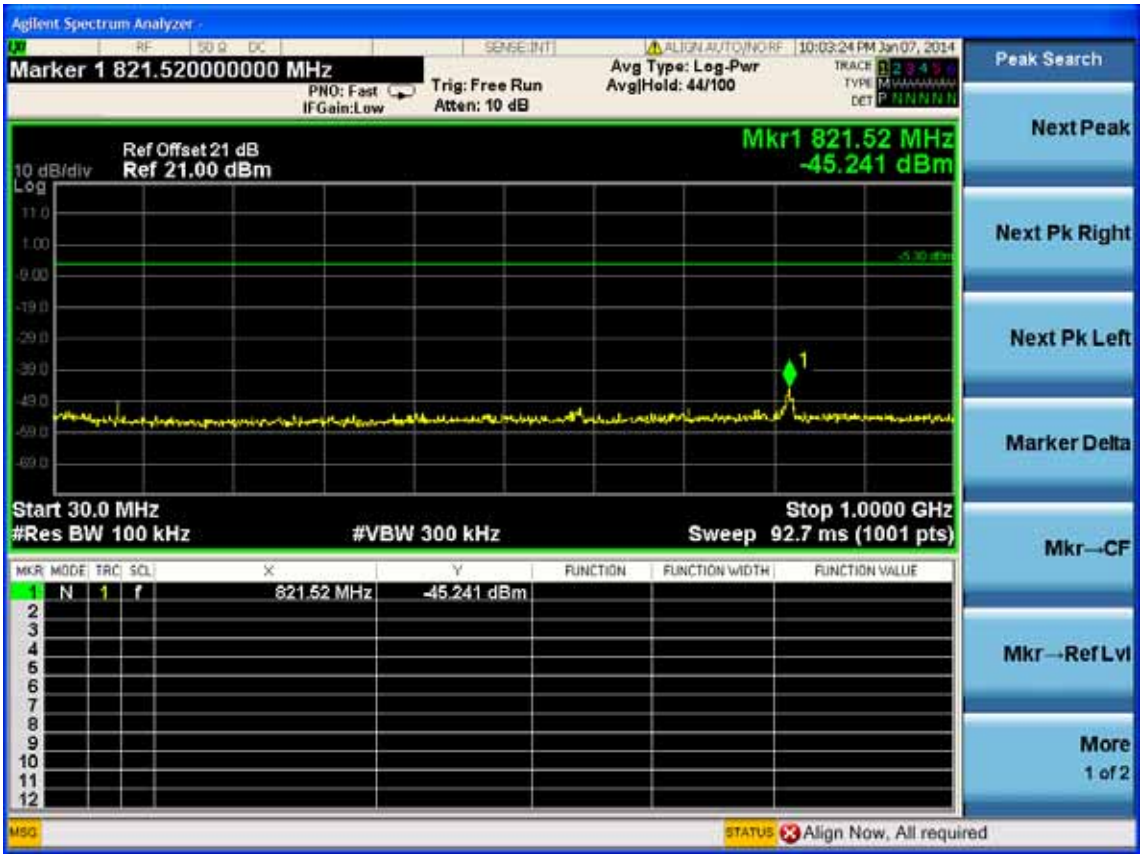


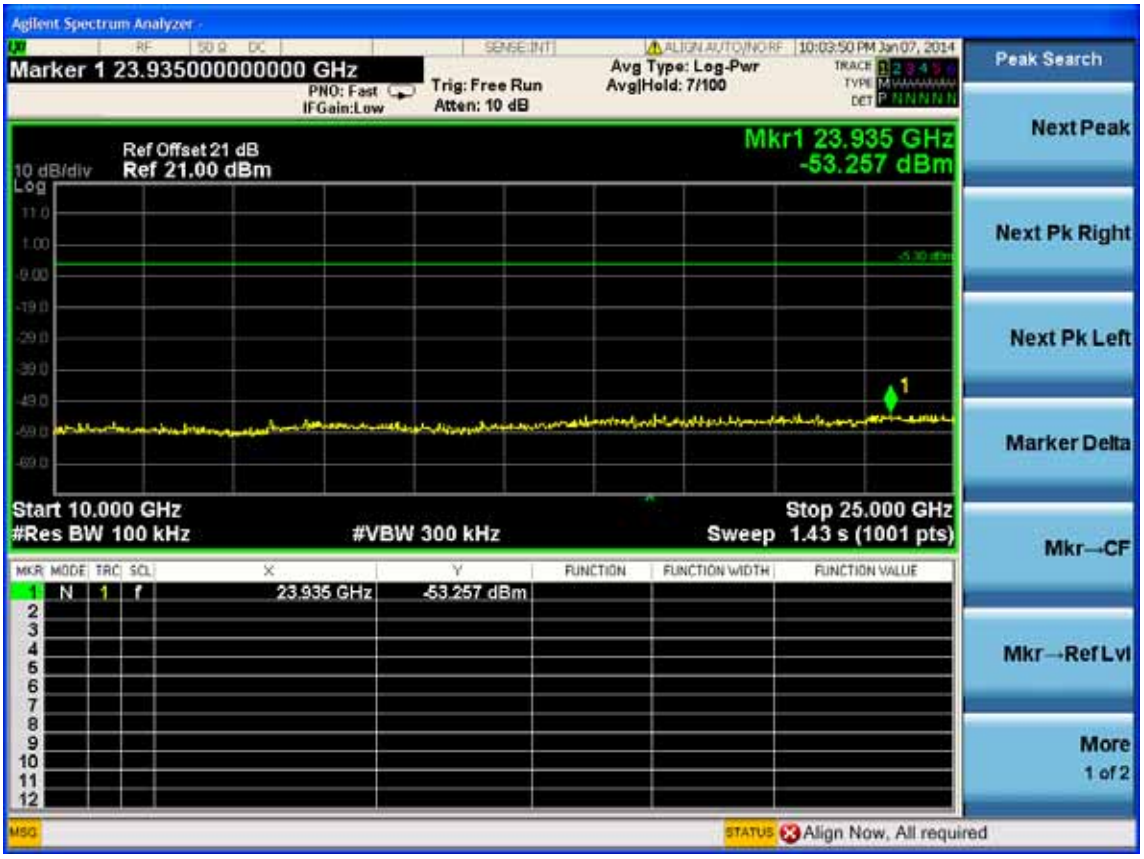




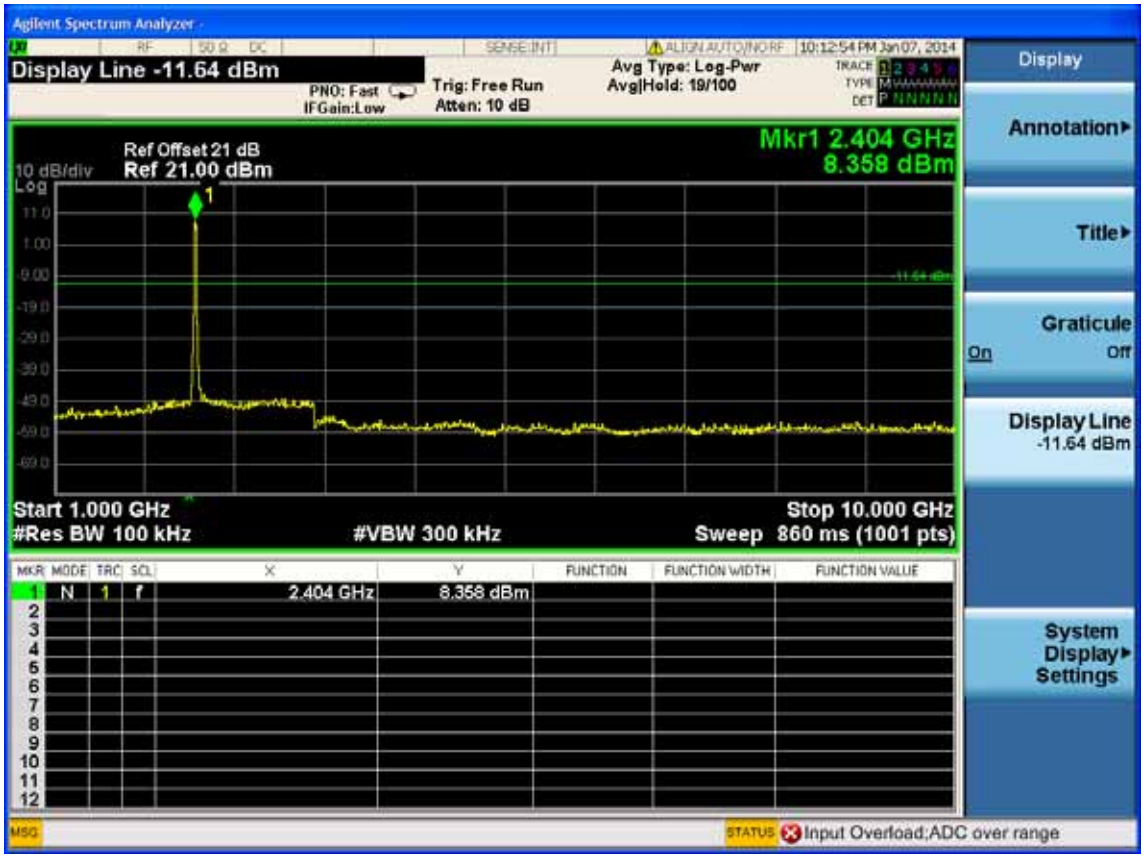
Test CH11: 2462MHz

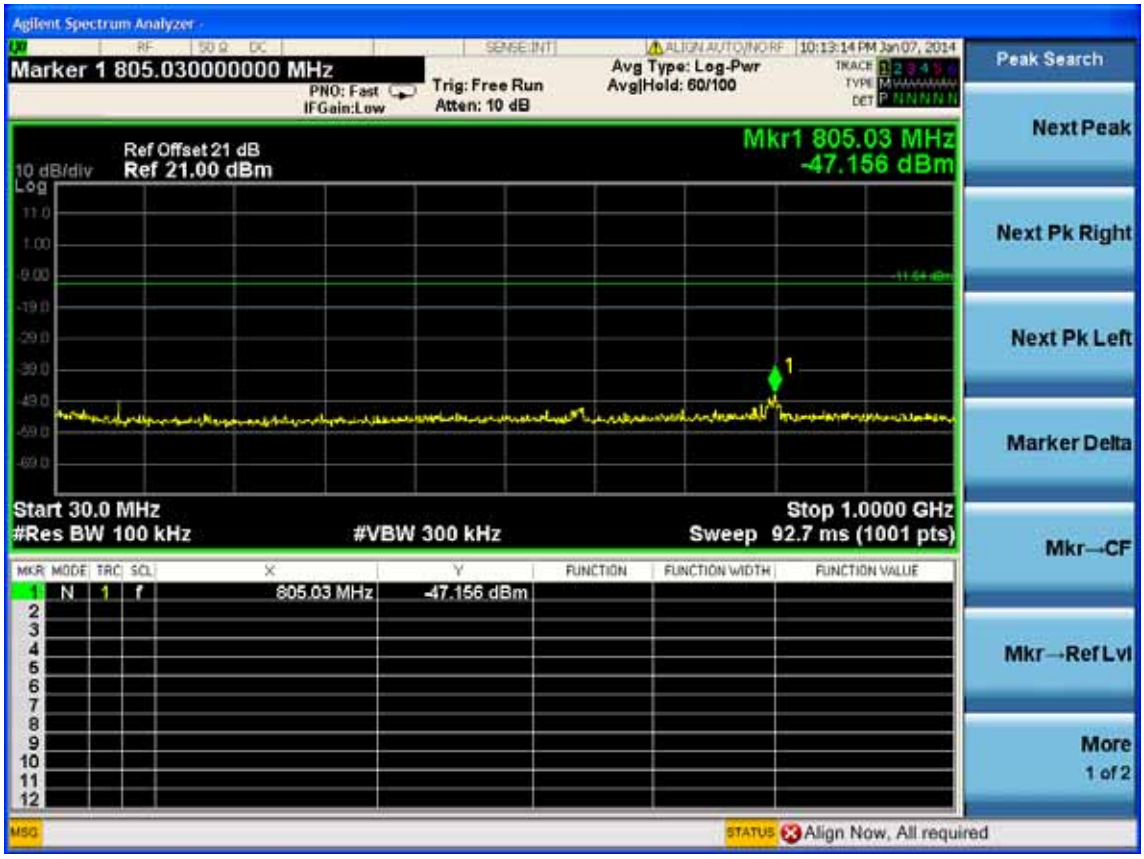


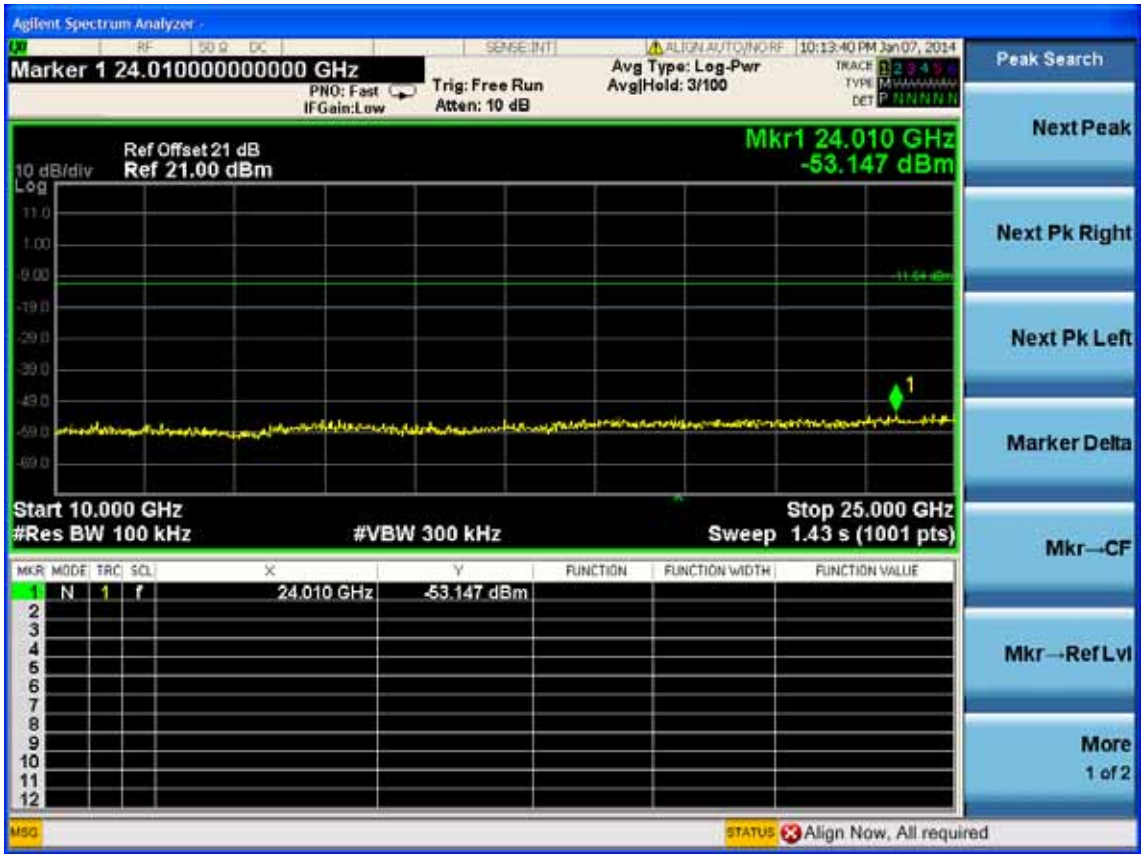

Agilent Spectrum Analyzer
Marker 1 821.520000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
10:03:24 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 821.52 MHz
-45.241 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 821.52 MHz -45.241 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 23.935000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 7/100
10:03:50 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 23.935 GHz
-53.257 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.935 GHz -53.257 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

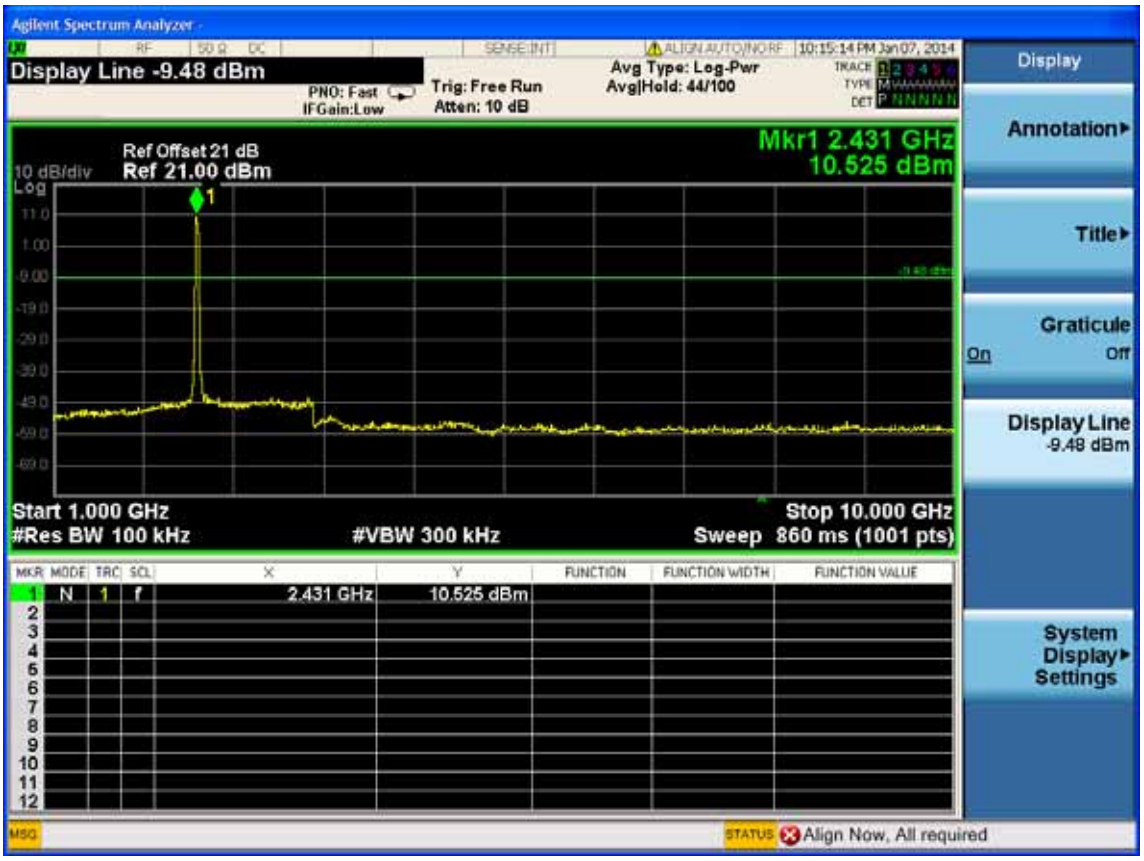
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

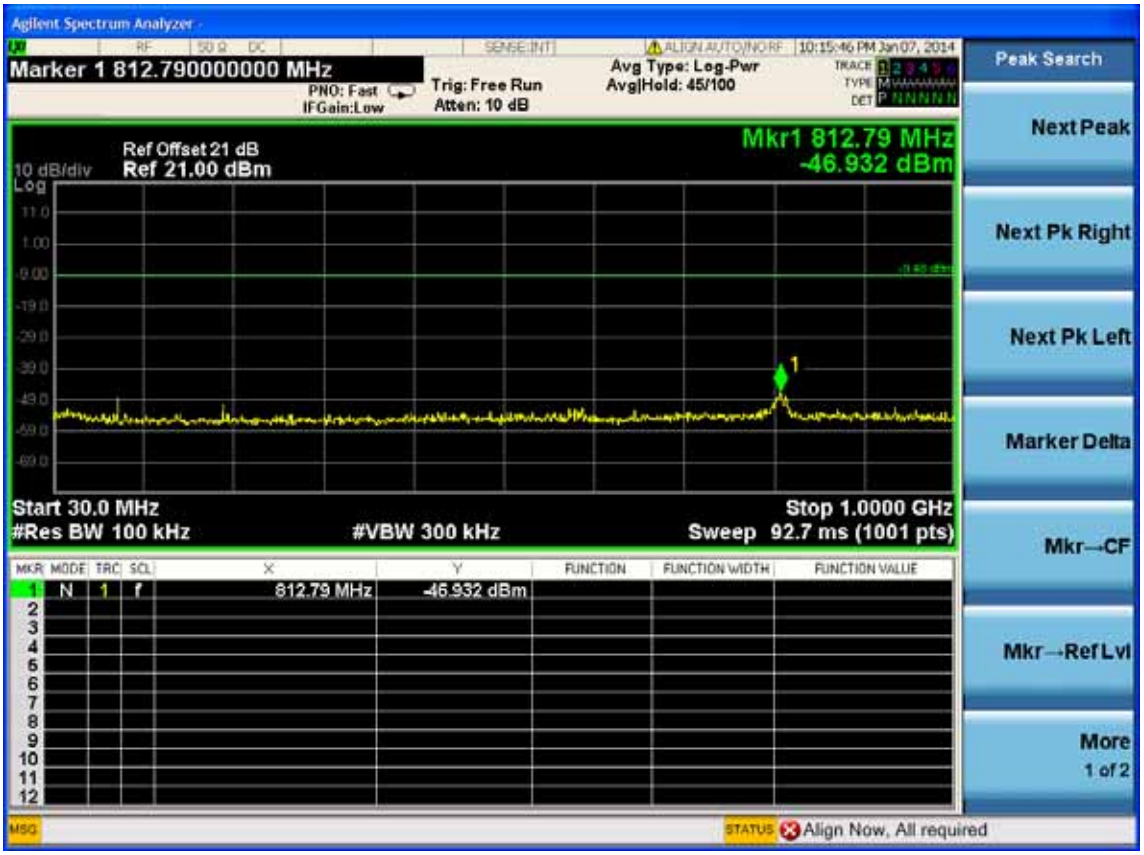

Agilent Spectrum Analyzer
Display Line -11.64 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 19/100
10:12:54 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 2.404 GHz
8.358 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 860 ms (1001 pts)
1 N 1 f 2.404 GHz 8.358 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-11.64 dBm
System Display Settings
Input Overload;ADC over range

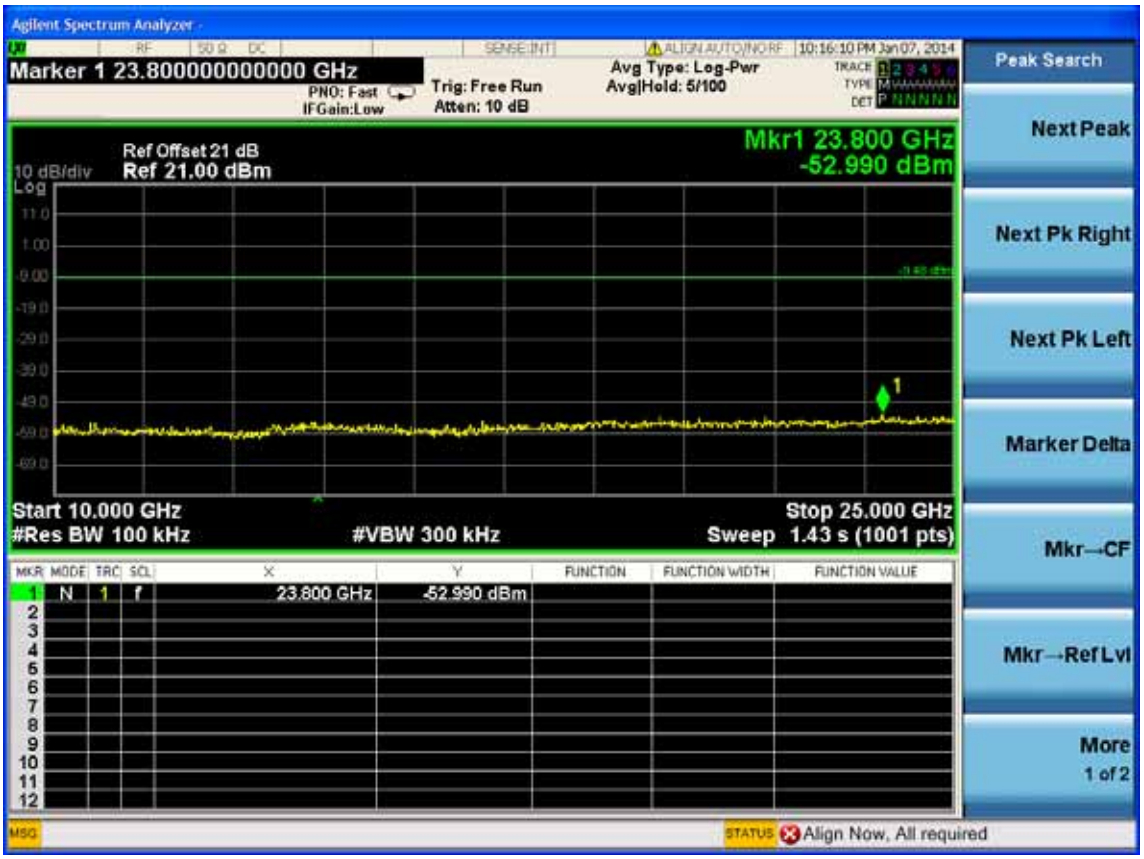

Agilent Spectrum Analyzer
Marker 1 805.030000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 60/100
10:13:14 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 805.03 MHz
-47.156 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 805.03 MHz -47.156 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required



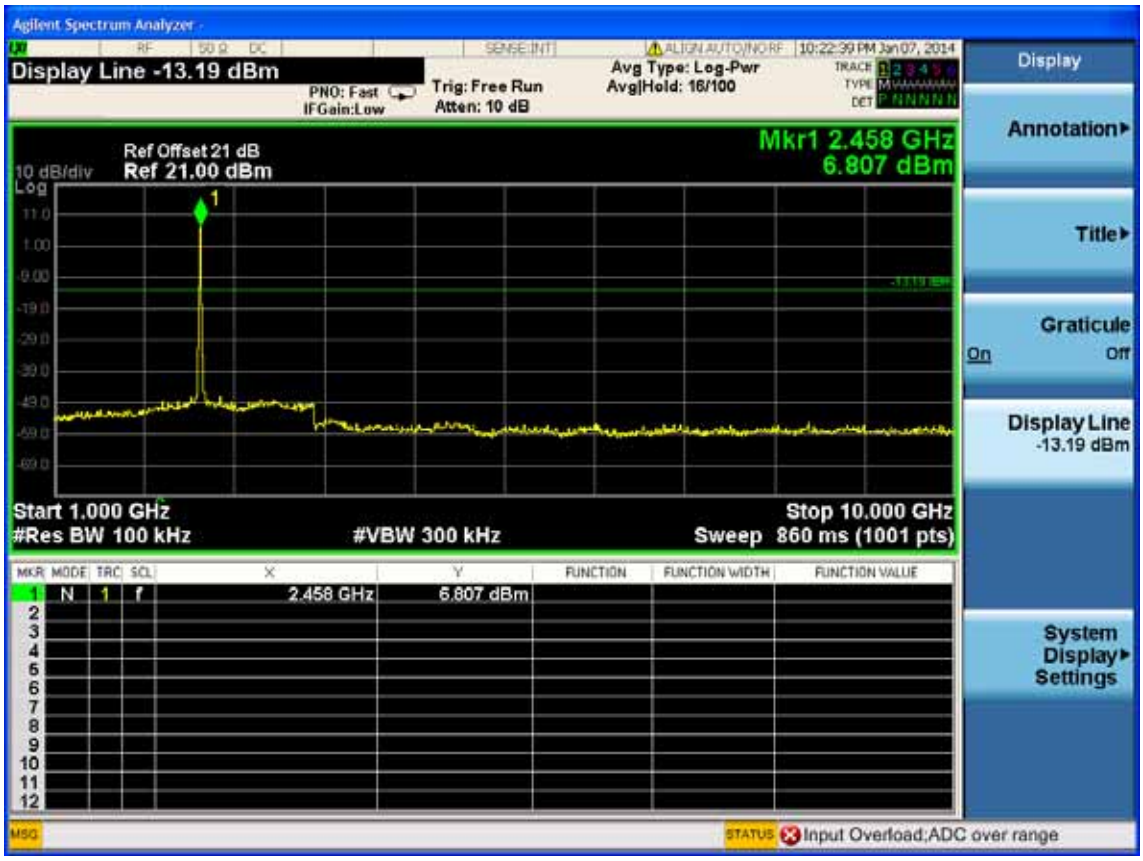
Test CH6: 2437MHz

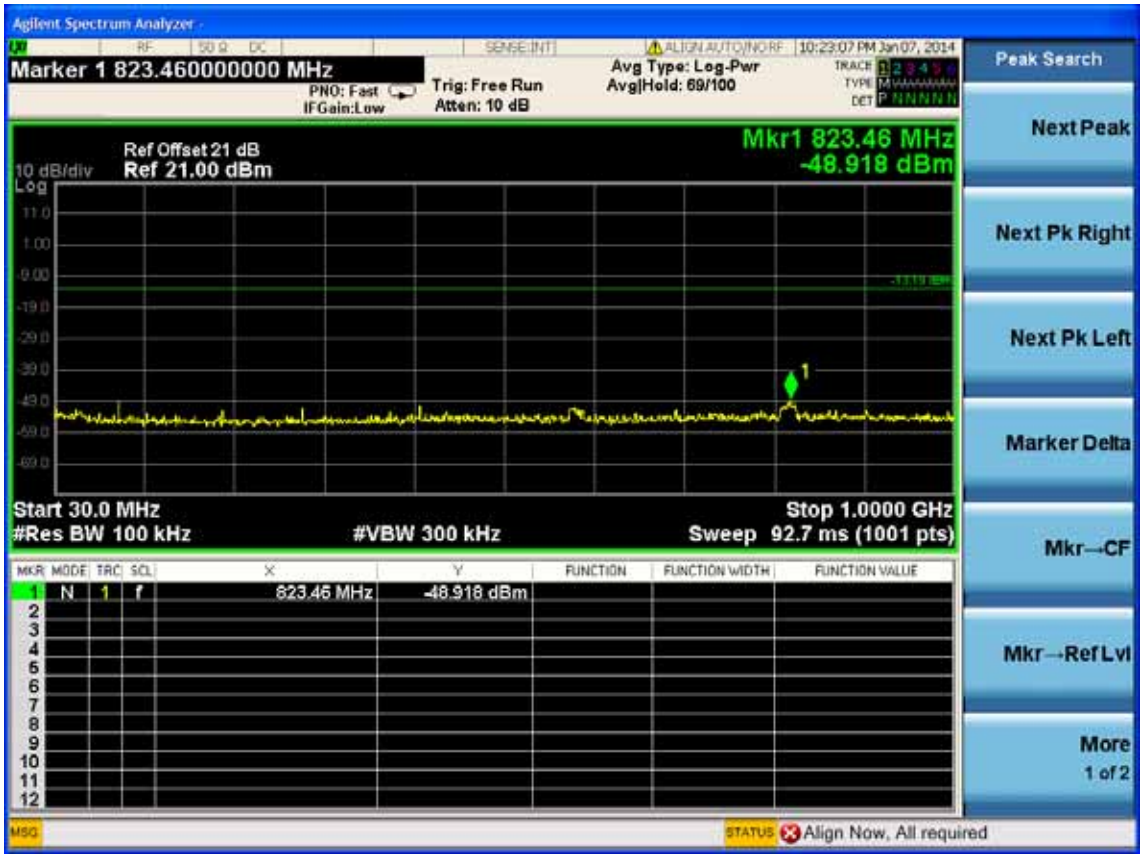


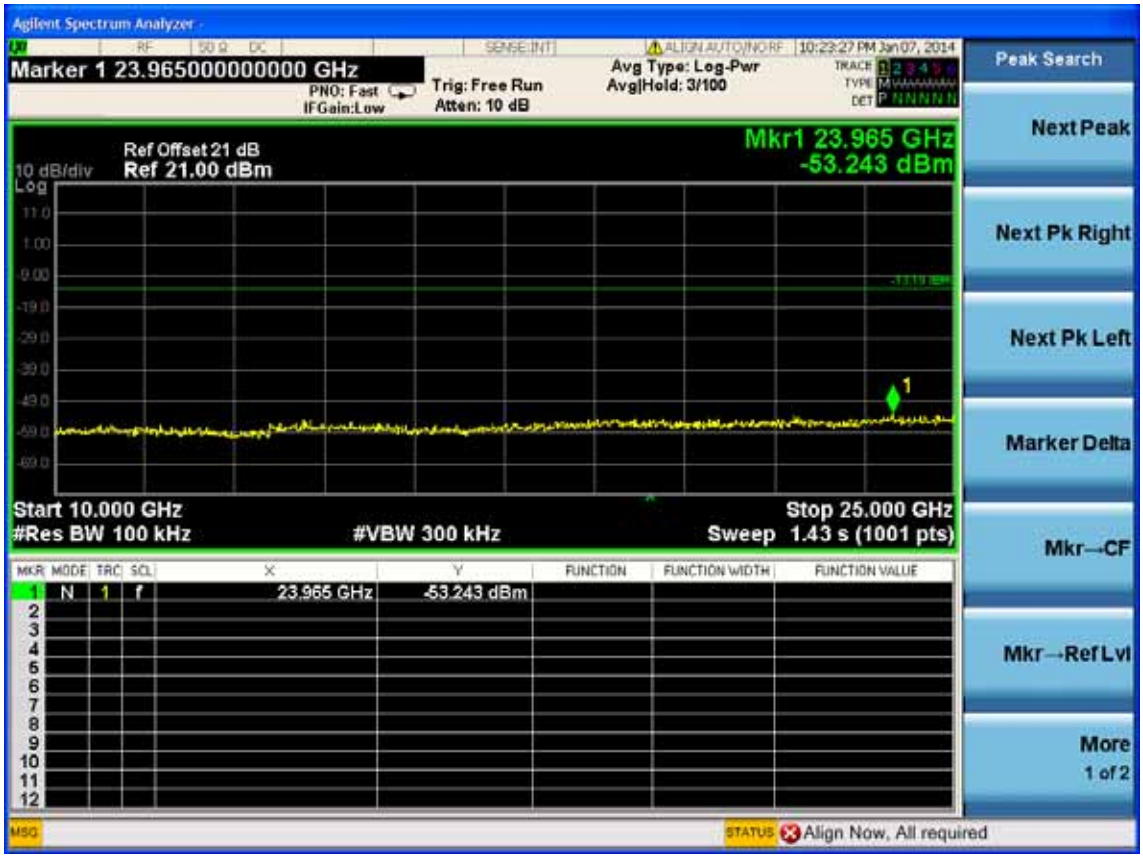

Agilent Spectrum Analyzer
Marker 1 812.790000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 45/100
10:15:46 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 812.79 MHz
-46.932 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 812.79 MHz -46.932 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 23.800000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 5/100
10:16:10 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 23.800 GHz
-52.990 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.800 GHz -52.990 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

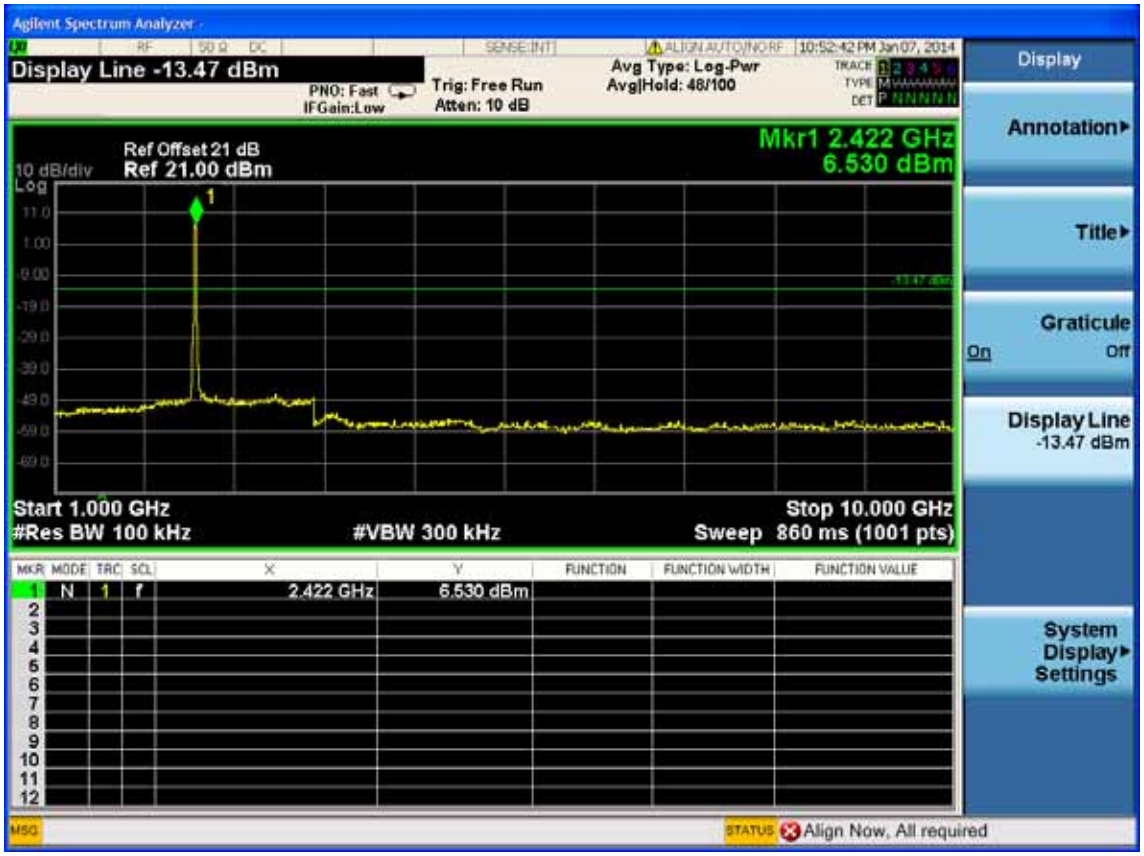
Test CH11: 2462MHz

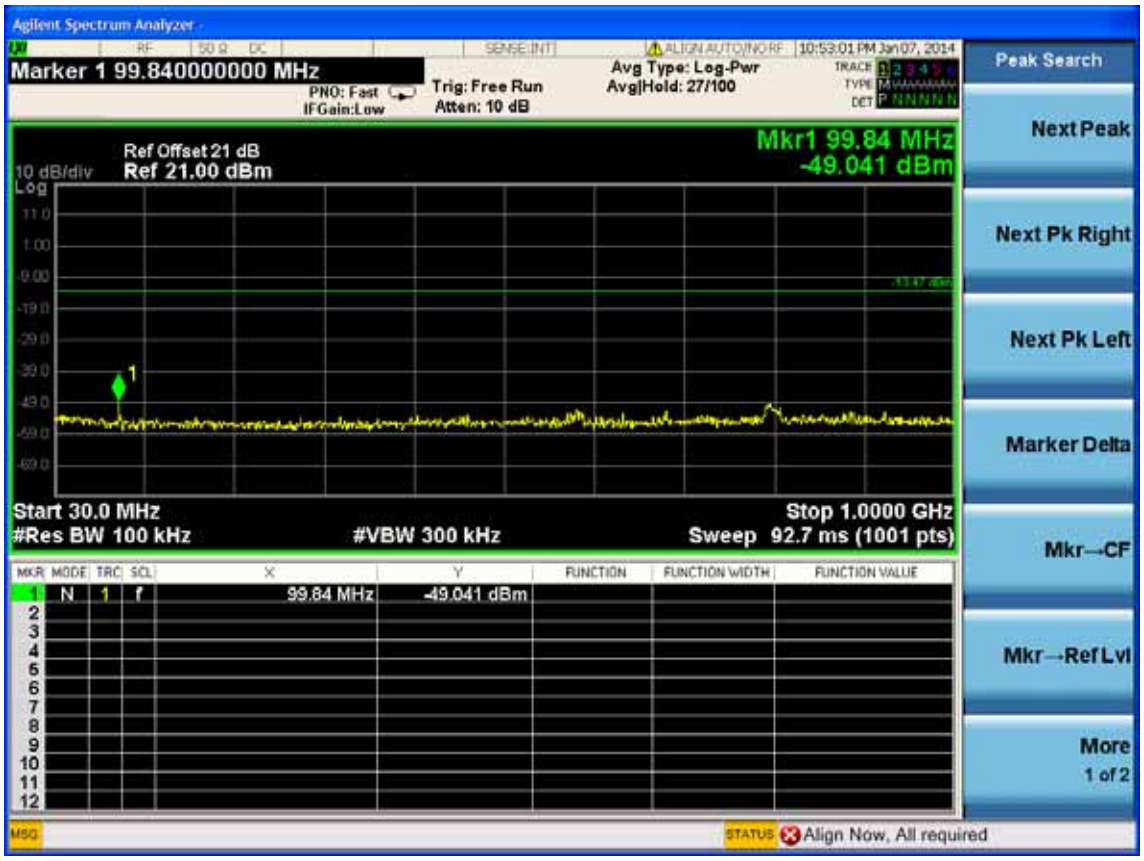


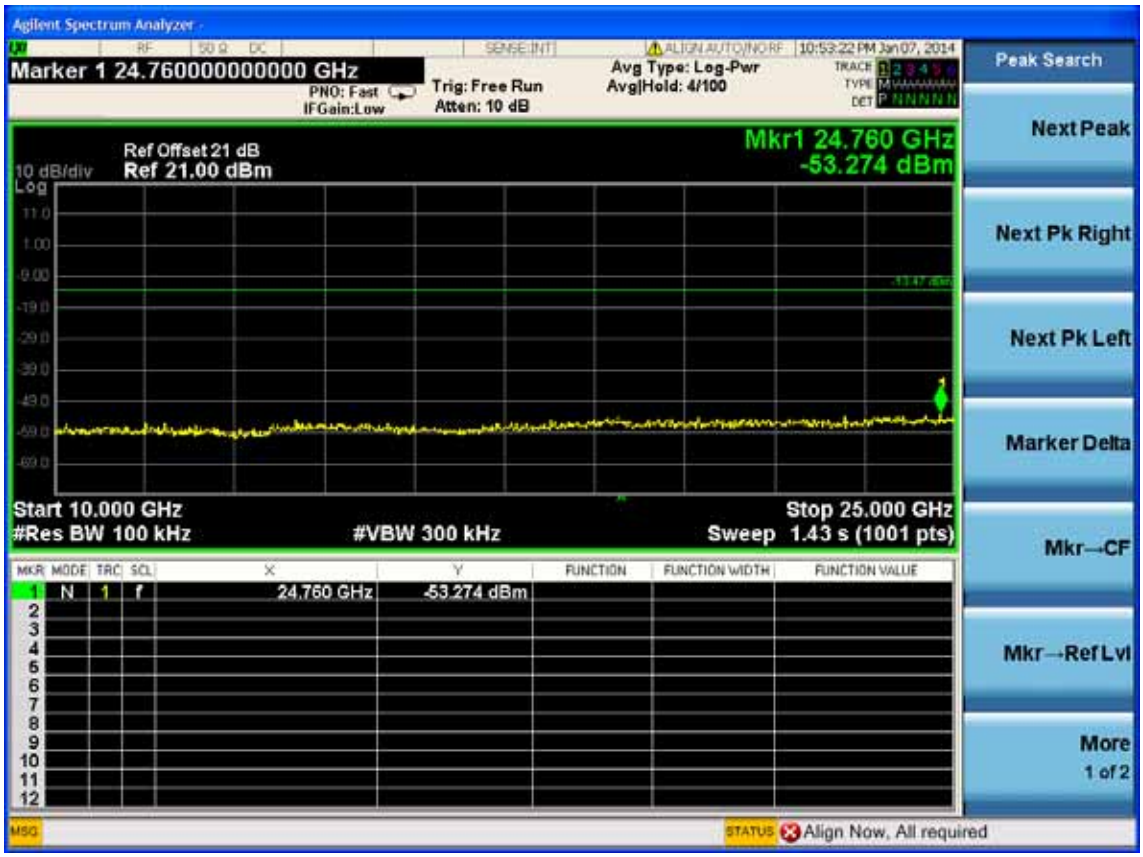

Agilent Spectrum Analyzer
Marker 1 823.460000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 69/100
10:23:07 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 823.46 MHz
-48.918 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 823.46 MHz -48.918 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 23.965000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
10:23:27 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 23.965 GHz
-53.243 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.965 GHz -53.243 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

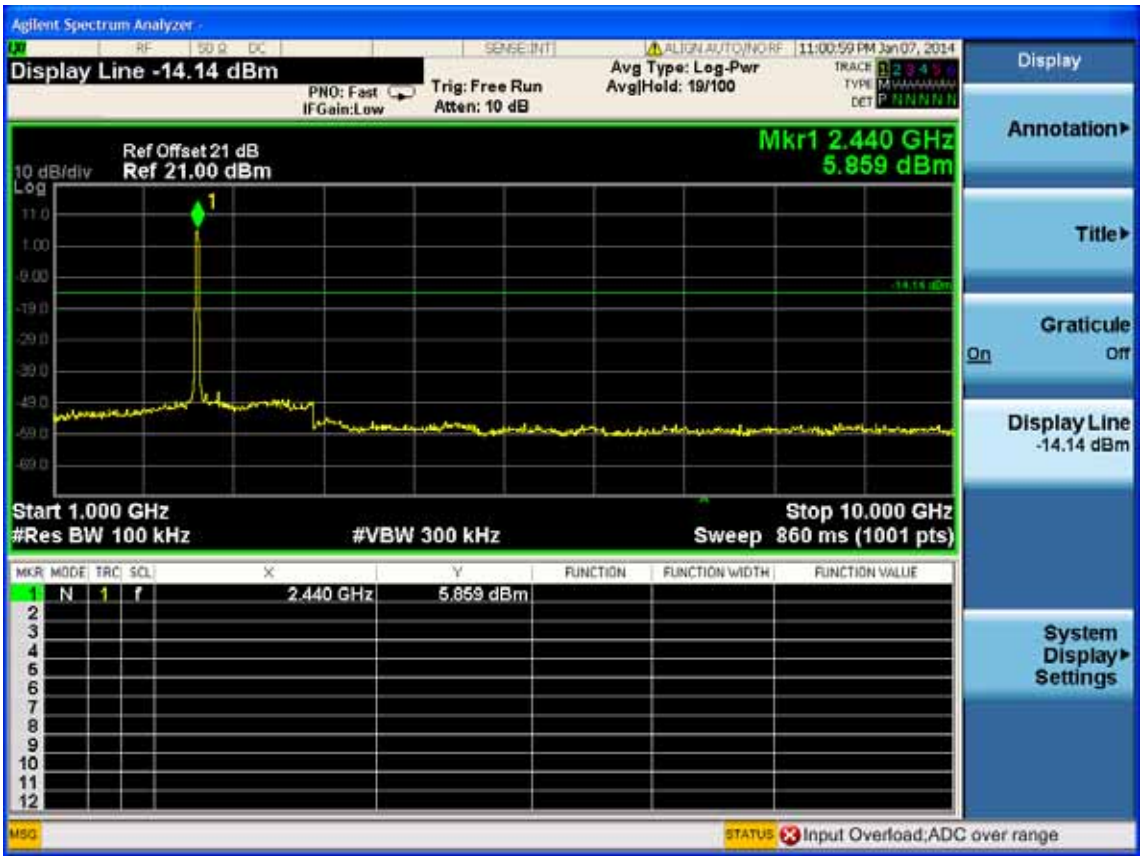


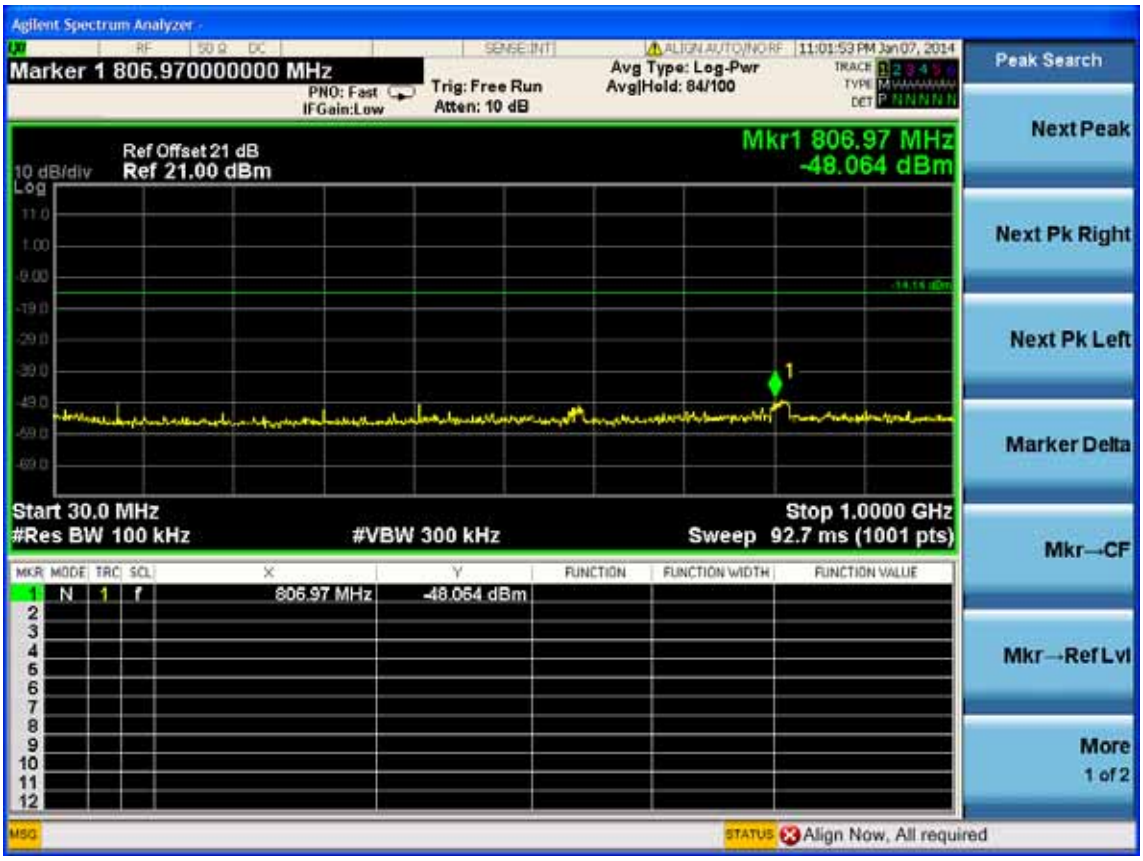


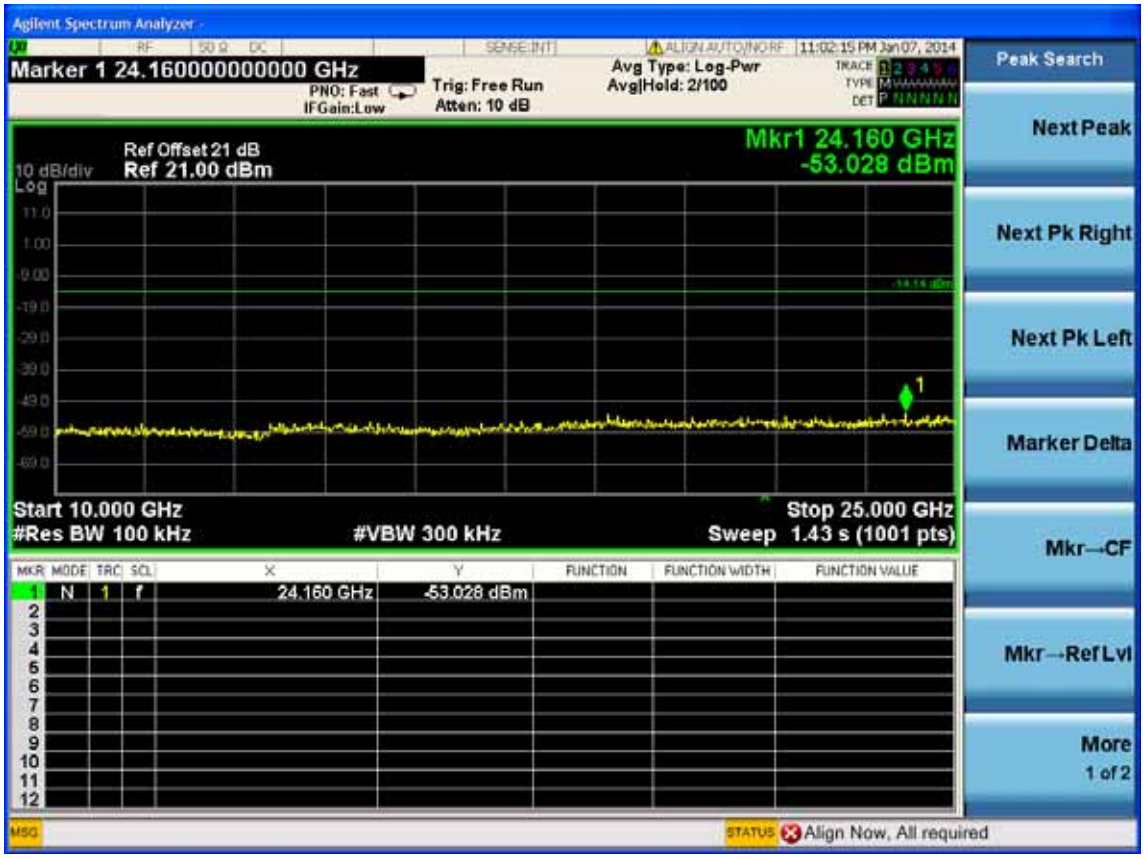

Agilent Spectrum Analyzer
Marker 1 24.760000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
10:53:22 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 24.760 GHz
-53.274 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.760 GHz -53.274 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

Agilent Spectrum Analyzer
Display Line -11.48 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
10:55:10 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr3 2.413 27 GHz
8.524 dBm
Center 2.36750 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 115.0 MHz
Sweep 11.0 ms (1001 pts)
1 N 1 f 2.390 00 GHz -29.594 dBm
2 N 1 f 2.400 00 GHz -21.260 dBm
3 N 1 f 2.413 27 GHz 8.524 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-11.48 dBm
System Display Settings
Align Now, All required

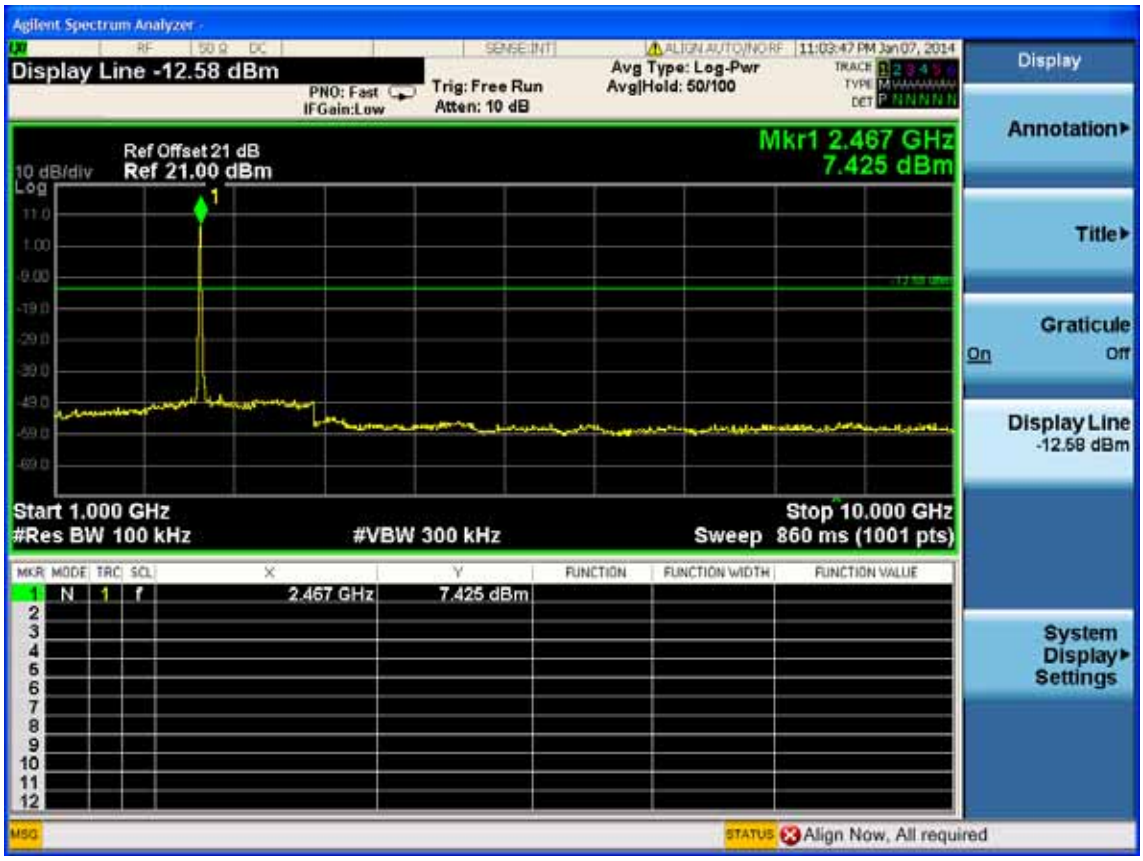
Test CH6: 2437MHz

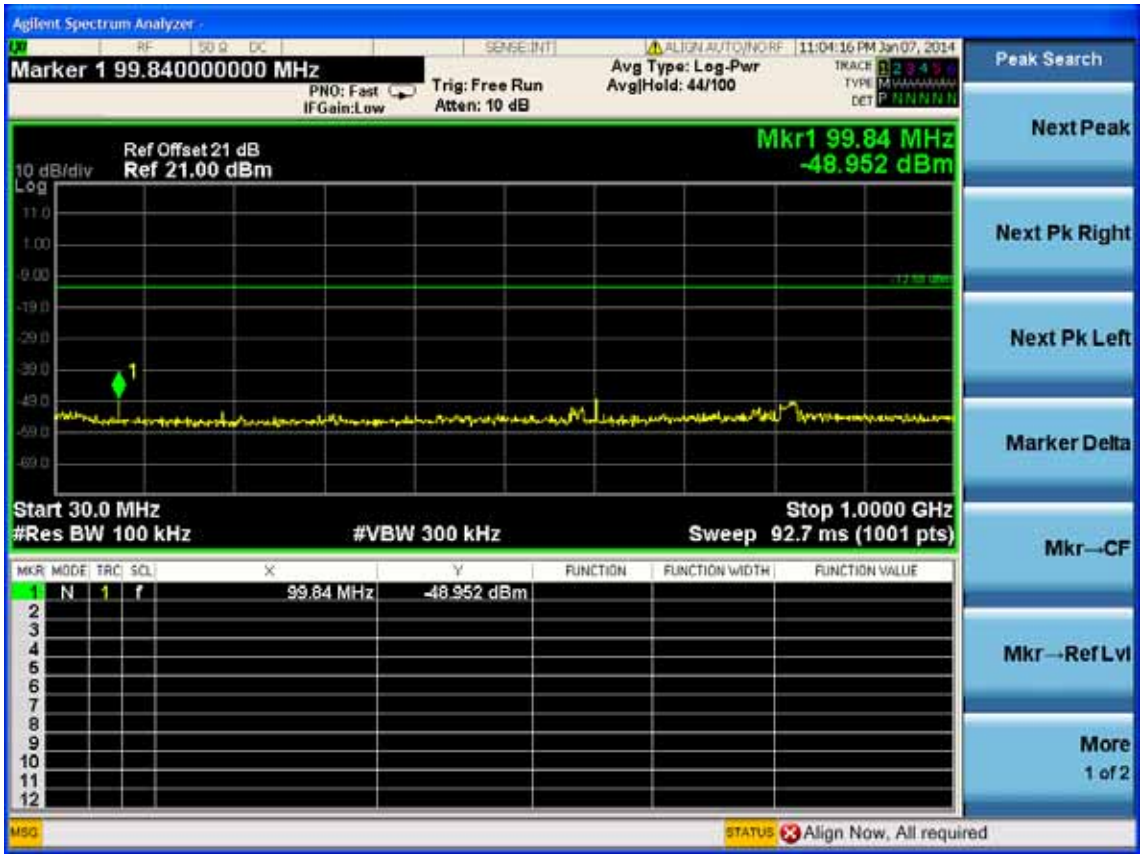


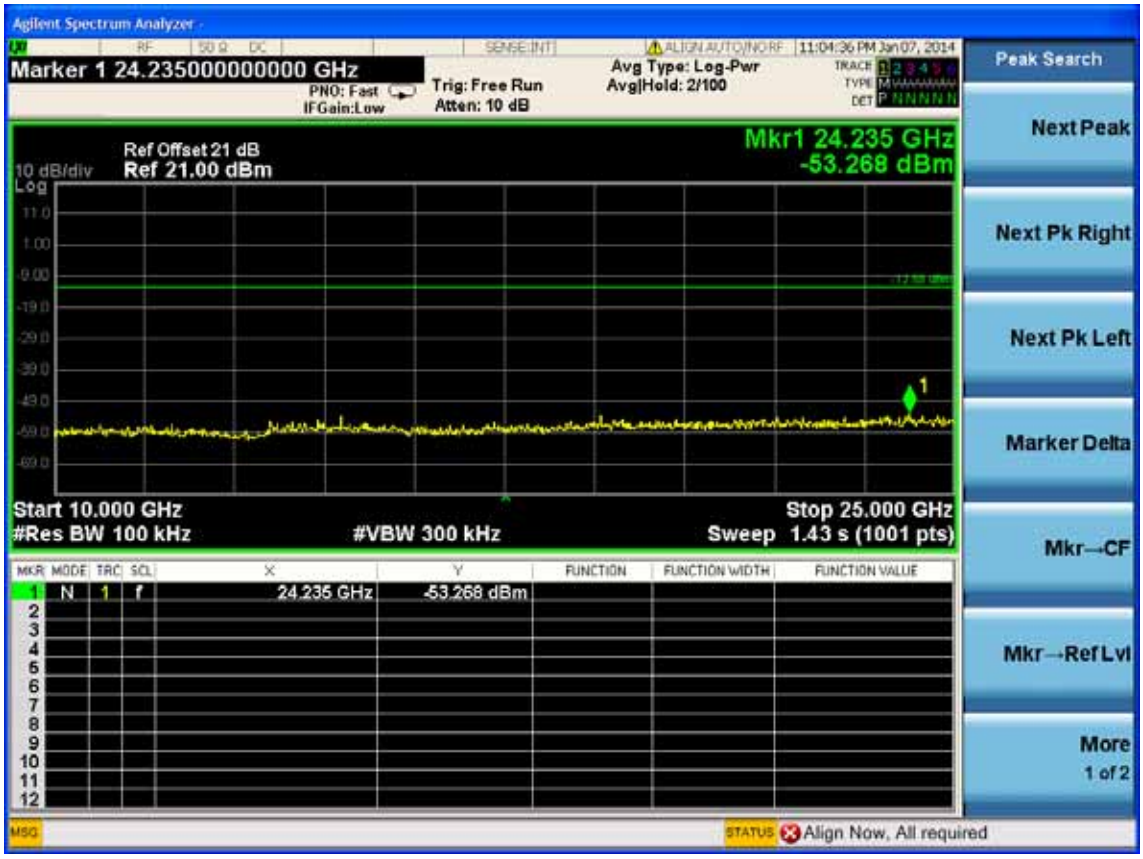




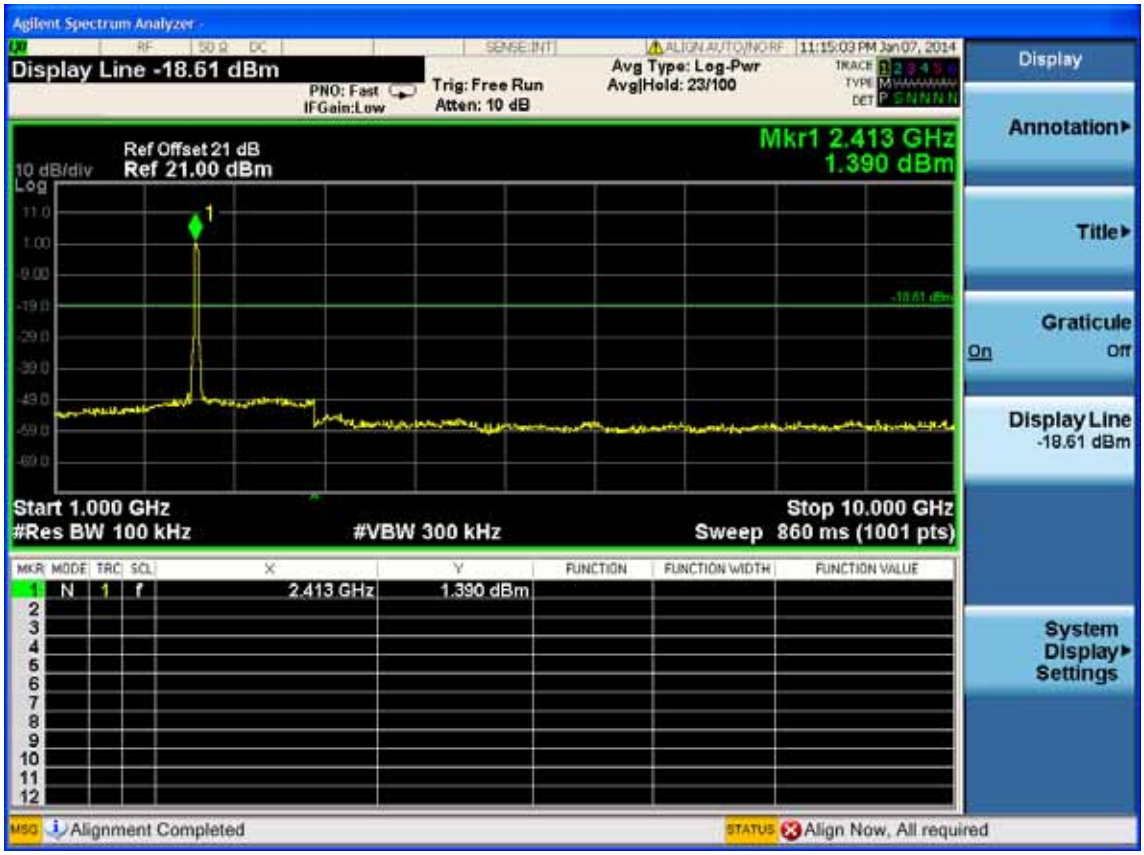
Test CH11: 2462MHz

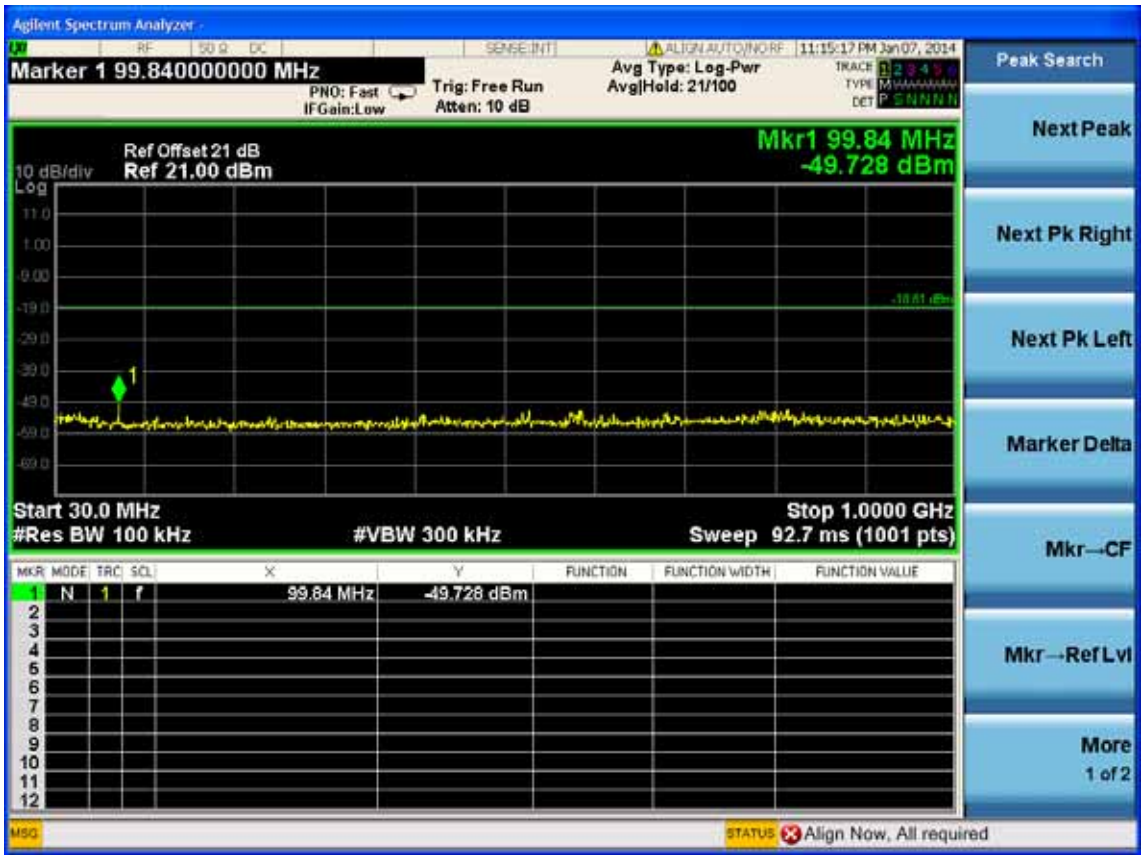


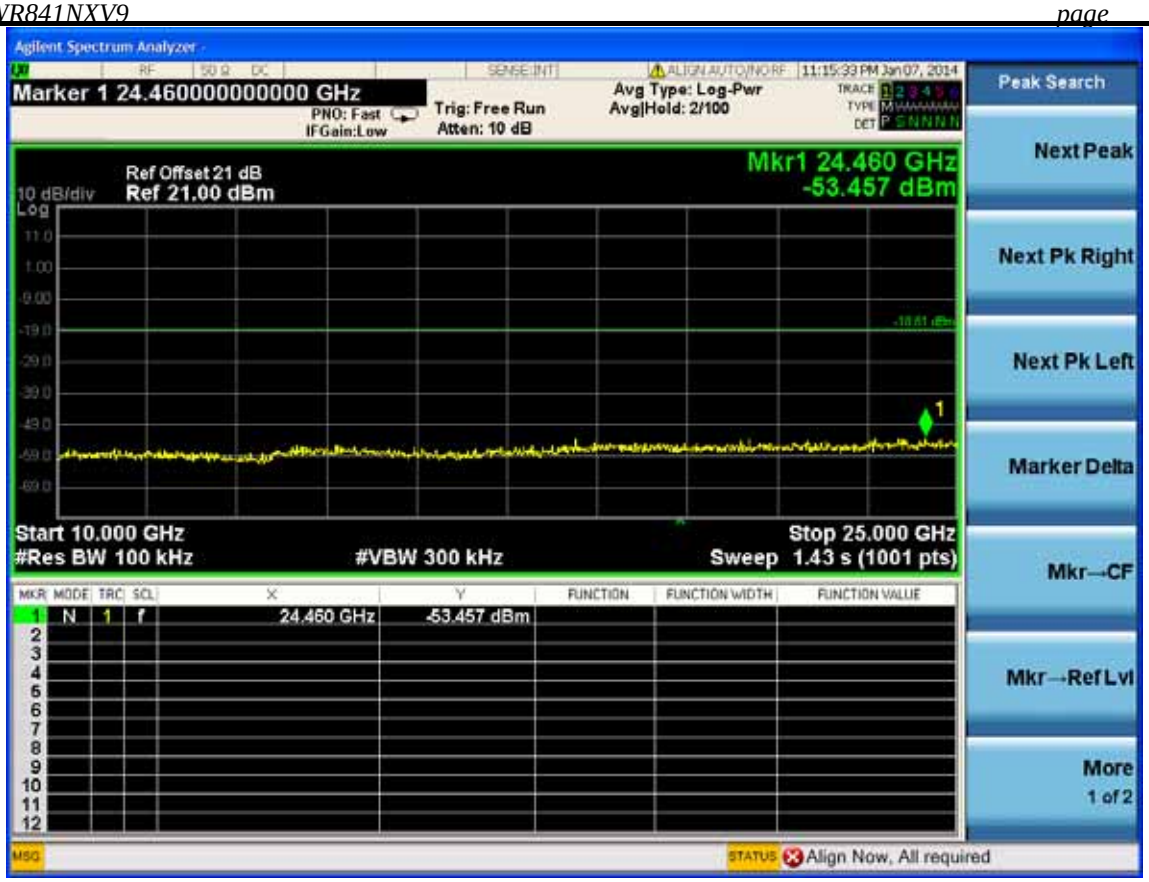

Agilent Spectrum Analyzer
Marker 1 99.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
11:04:16 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Mkr1 99.84 MHz
-48.952 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 99.84 MHz -48.952 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 24.235000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
11:04:36 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Mkr1 24.235 GHz
-53.268 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.235 GHz -53.268 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

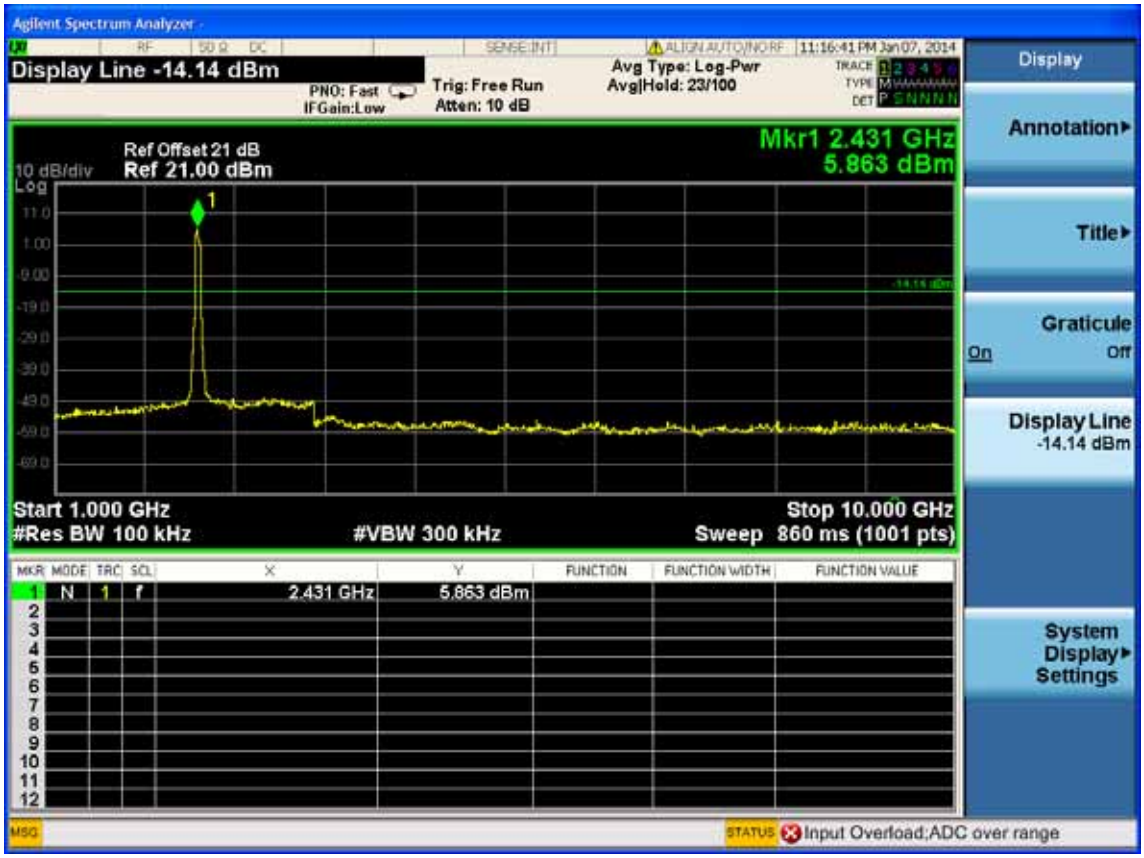
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

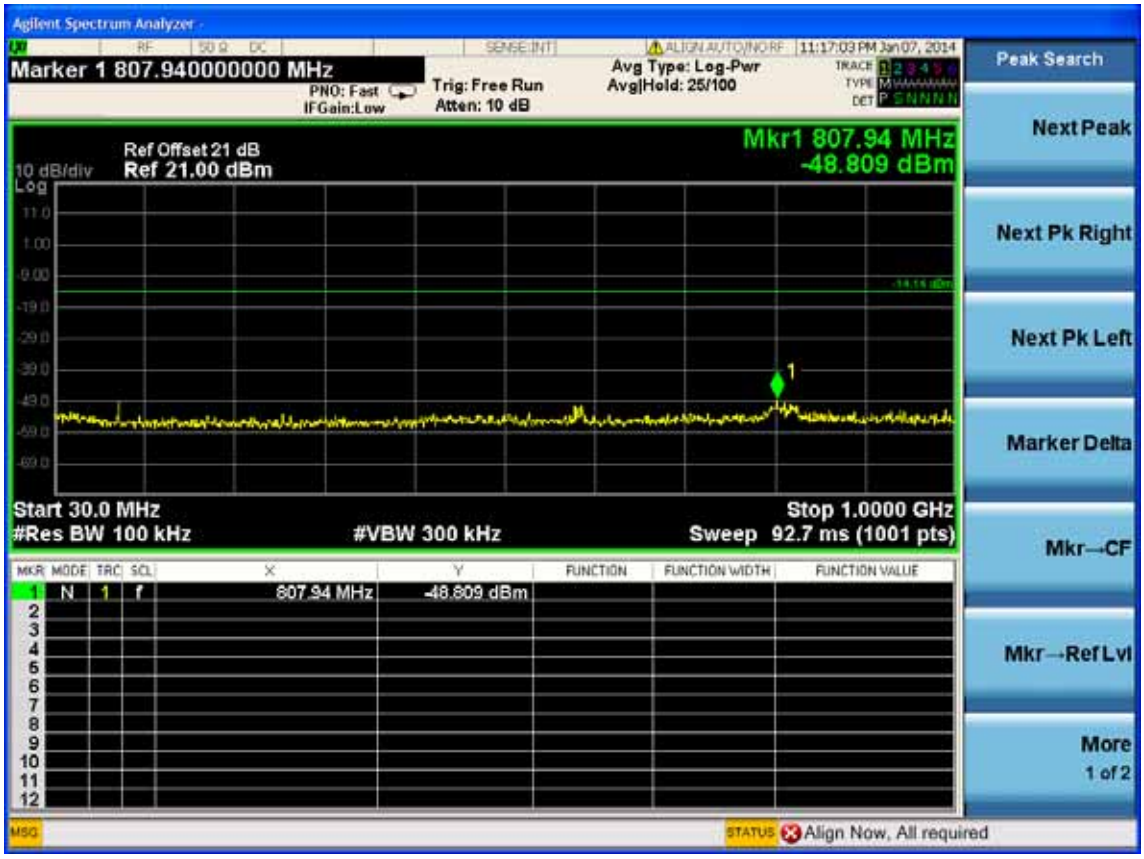

Agilent Spectrum Analyzer
Display Line -18.61 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 23/100
11:15:03 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 2.413 GHz
1.390 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 860 ms (1001 pts)
1 N 1 f 2.413 GHz 1.390 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-18.61 dBm
System Display Settings
Alignment Completed
Align Now, All required

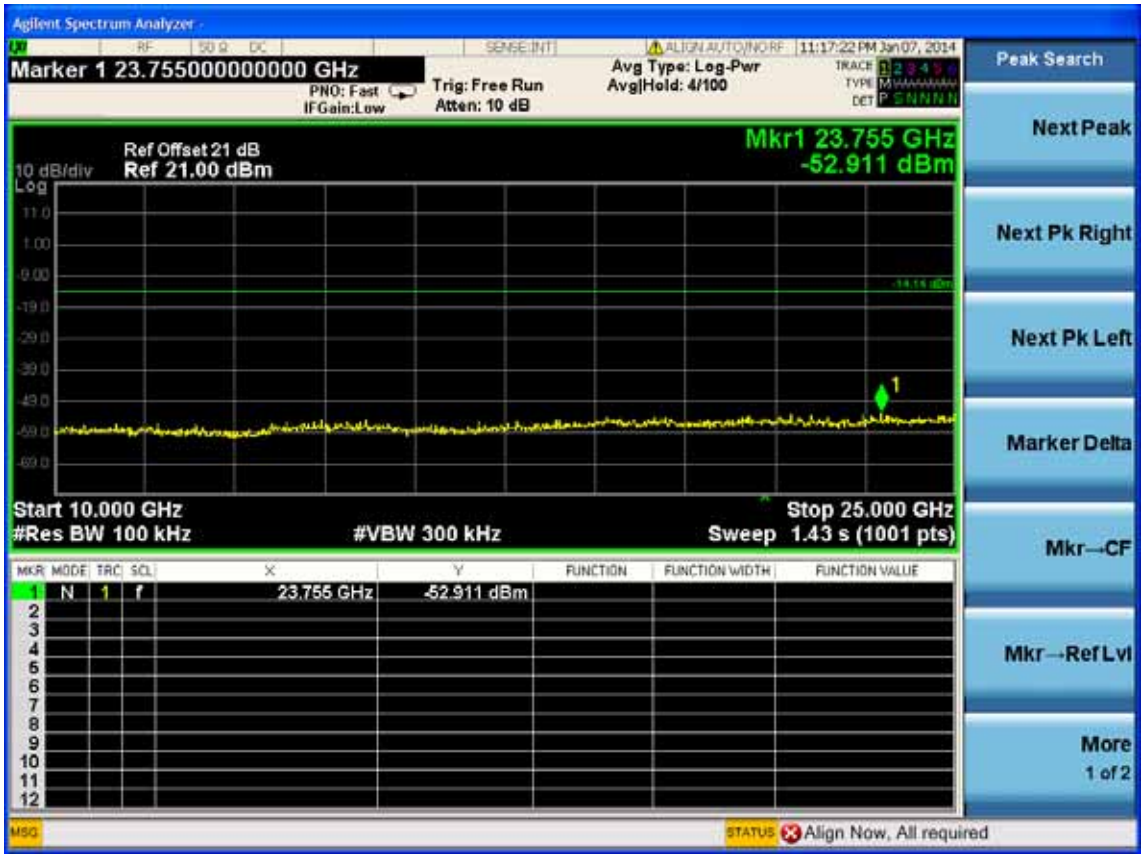

Agilent Spectrum Analyzer
Marker 1 99.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 21/100
11:15:17 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 99.84 MHz
-49.728 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 99.84 MHz -49.728 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required



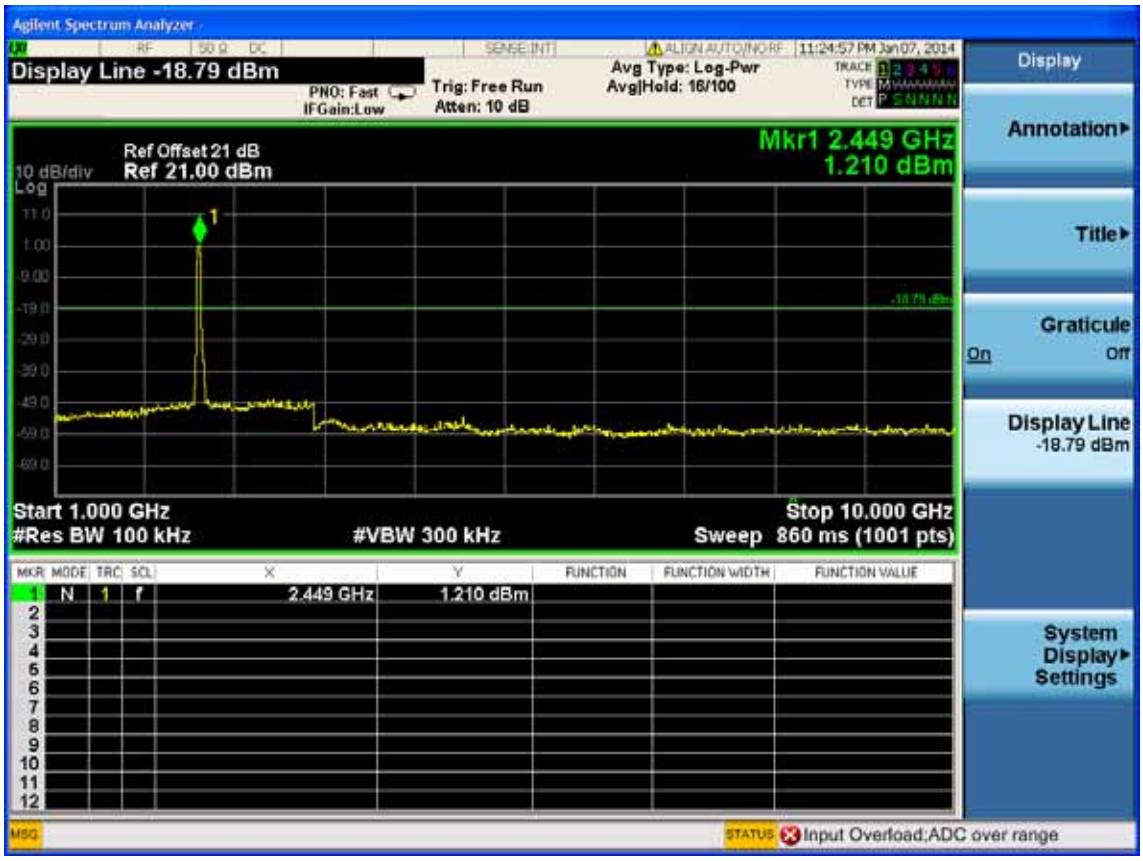
Test CH4: 2437MHz

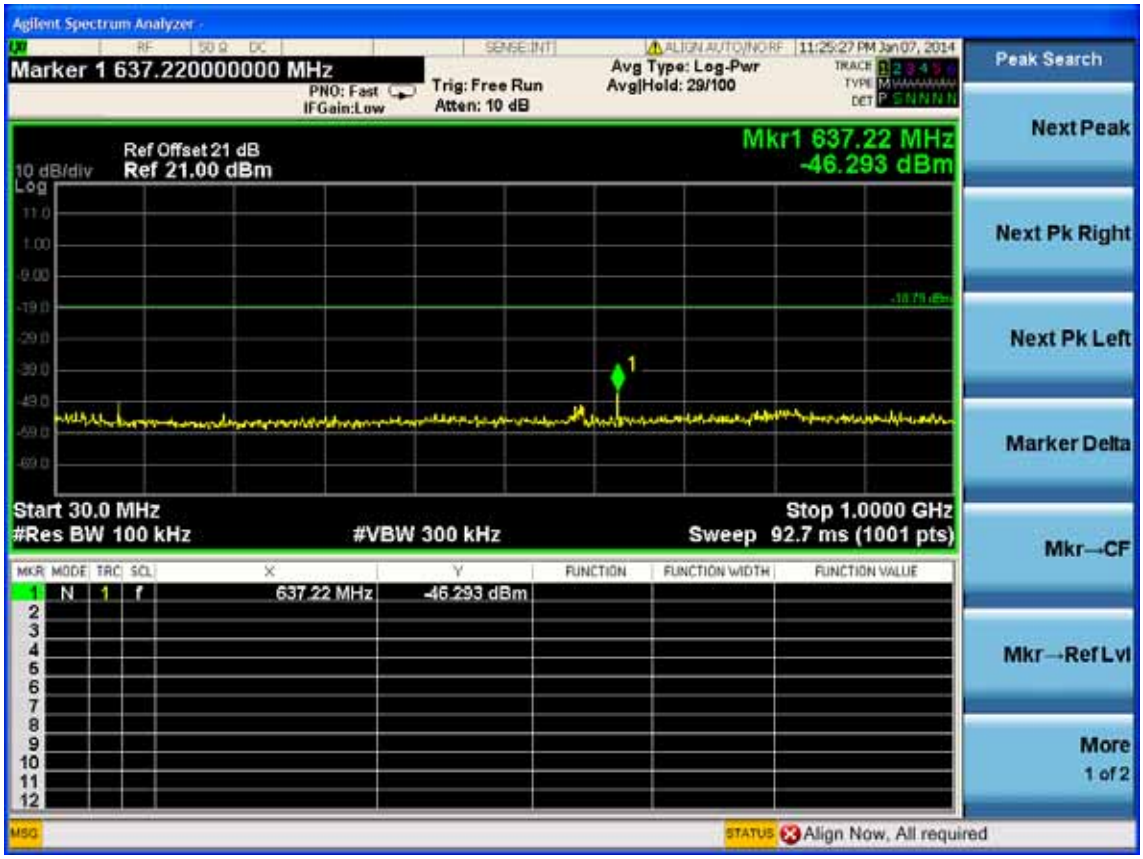


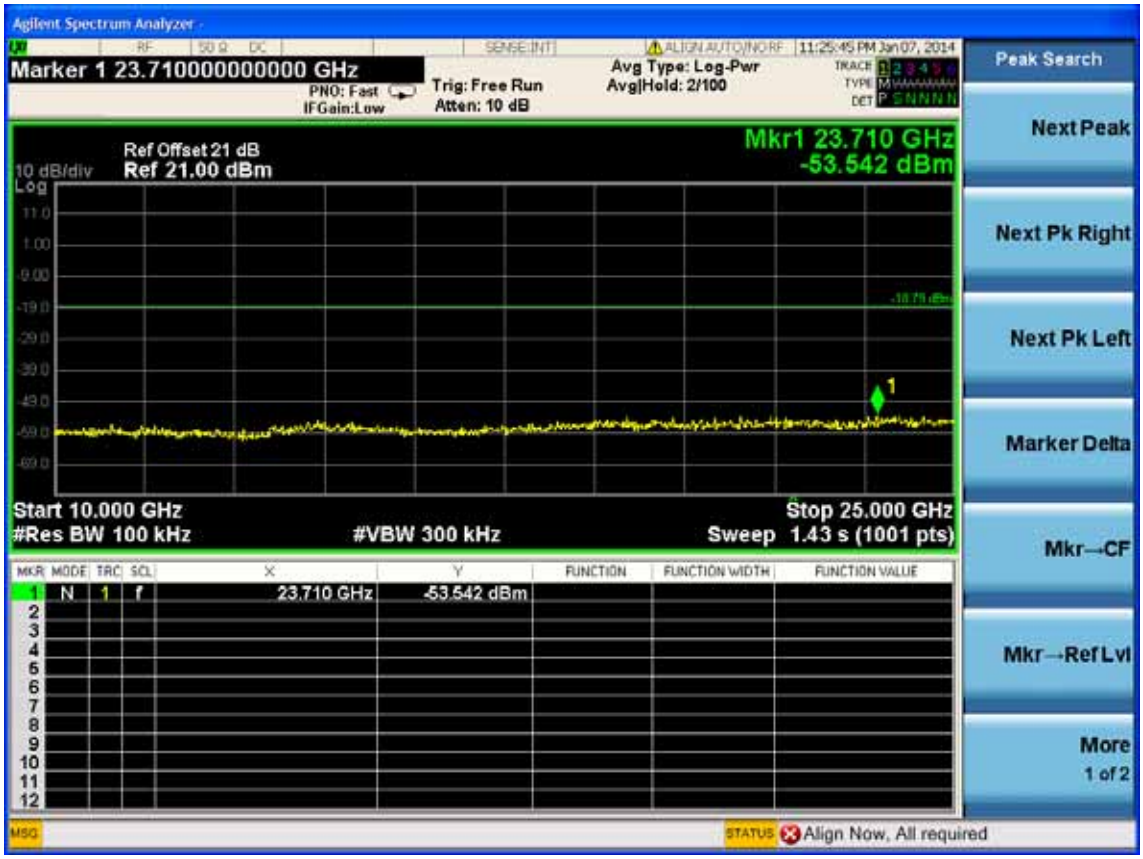

Agilent Spectrum Analyzer
Marker 1 807.940000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 25/100
11:17:03 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Mkr1 807.94 MHz
-48.809 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 807.94 MHz -48.809 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 23.755000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
11:17:22 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Mkr1 23.755 GHz
-52.911 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.755 GHz -52.911 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

Test CH7: 2452MHz



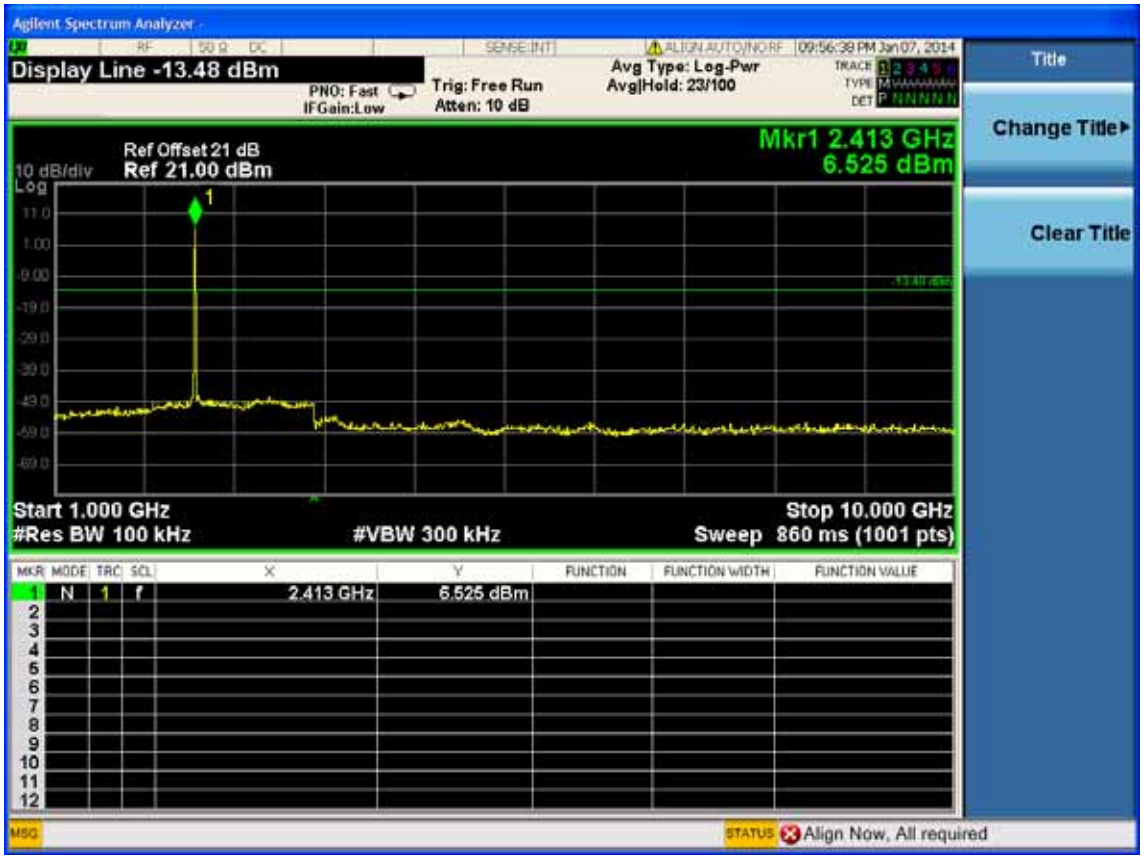

Agilent Spectrum Analyzer
Marker 1 637.220000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 29/100
11:25:27 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 637.22 MHz
-46.293 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 637.22 MHz -46.293 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

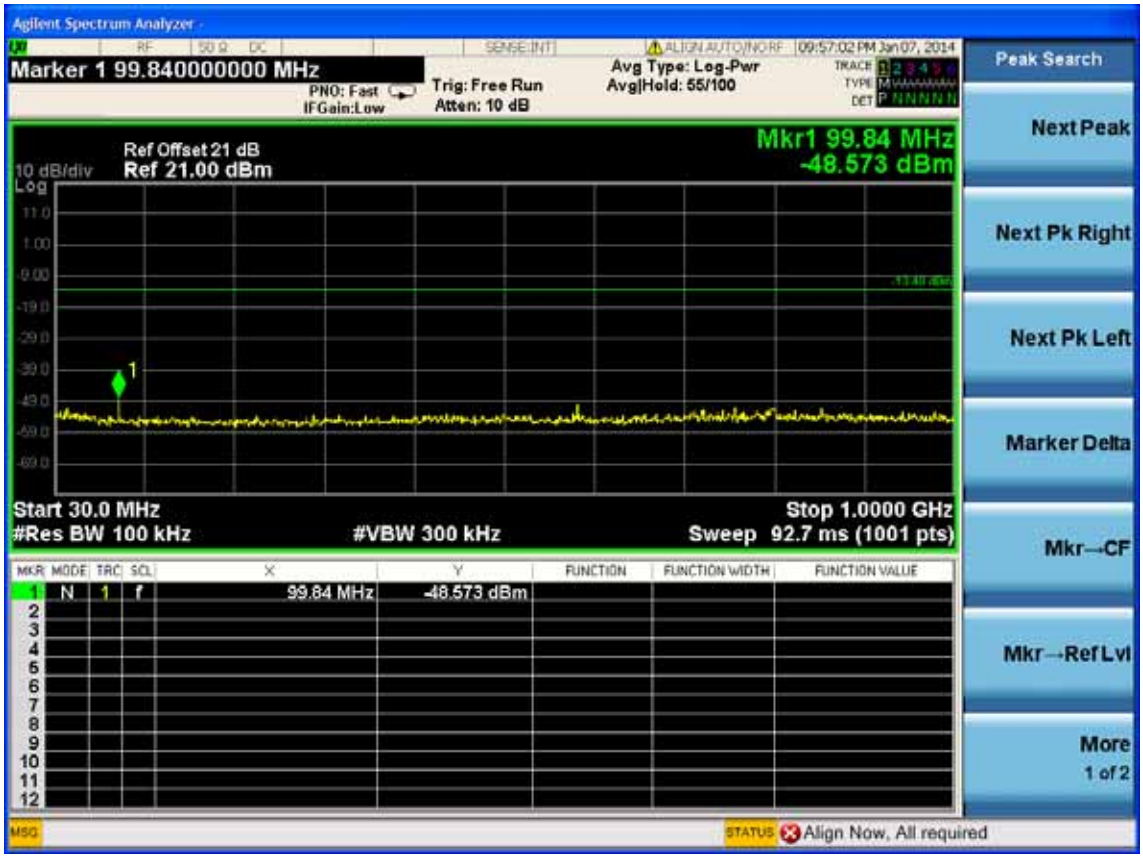

Agilent Spectrum Analyzer
Marker 1 23.710000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
11:25:45 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 23.710 GHz
-53.542 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.710 GHz -53.542 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

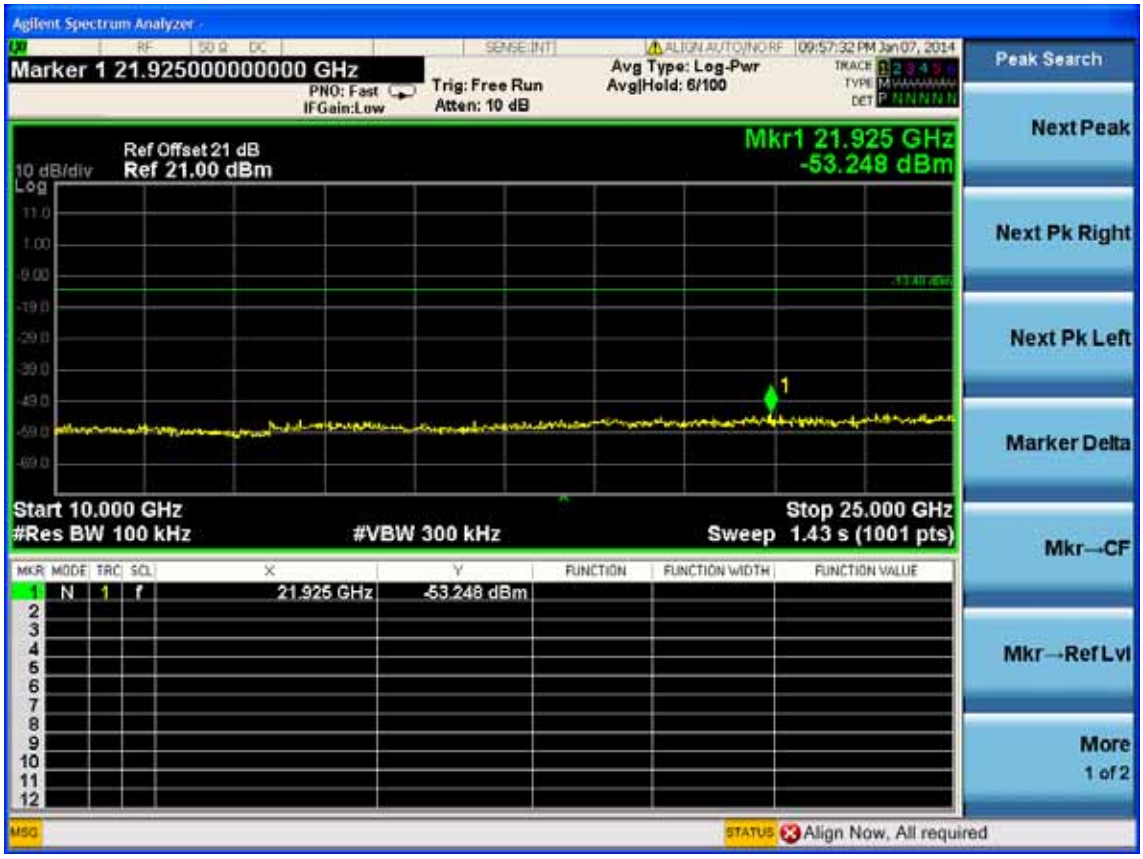
Chain 1

Test Mode: IEEE 802.11b TX

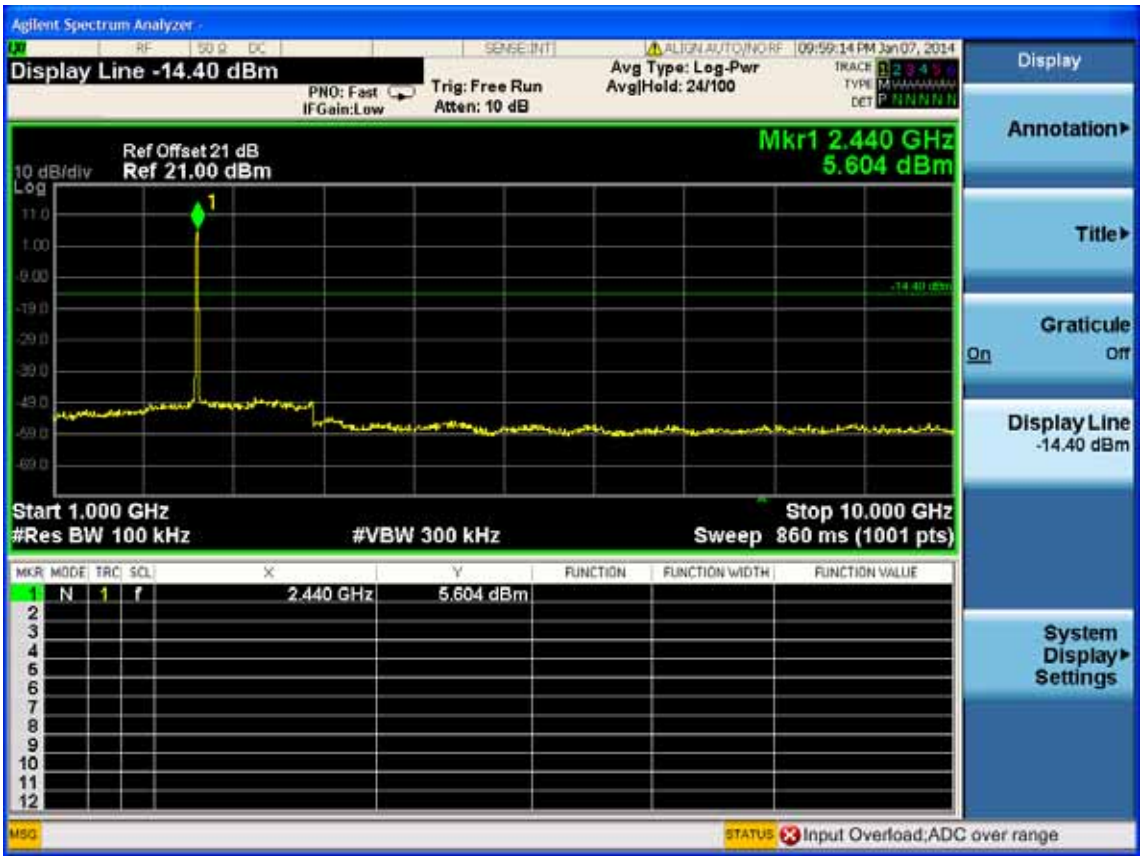
Test CH1: 2412MHz

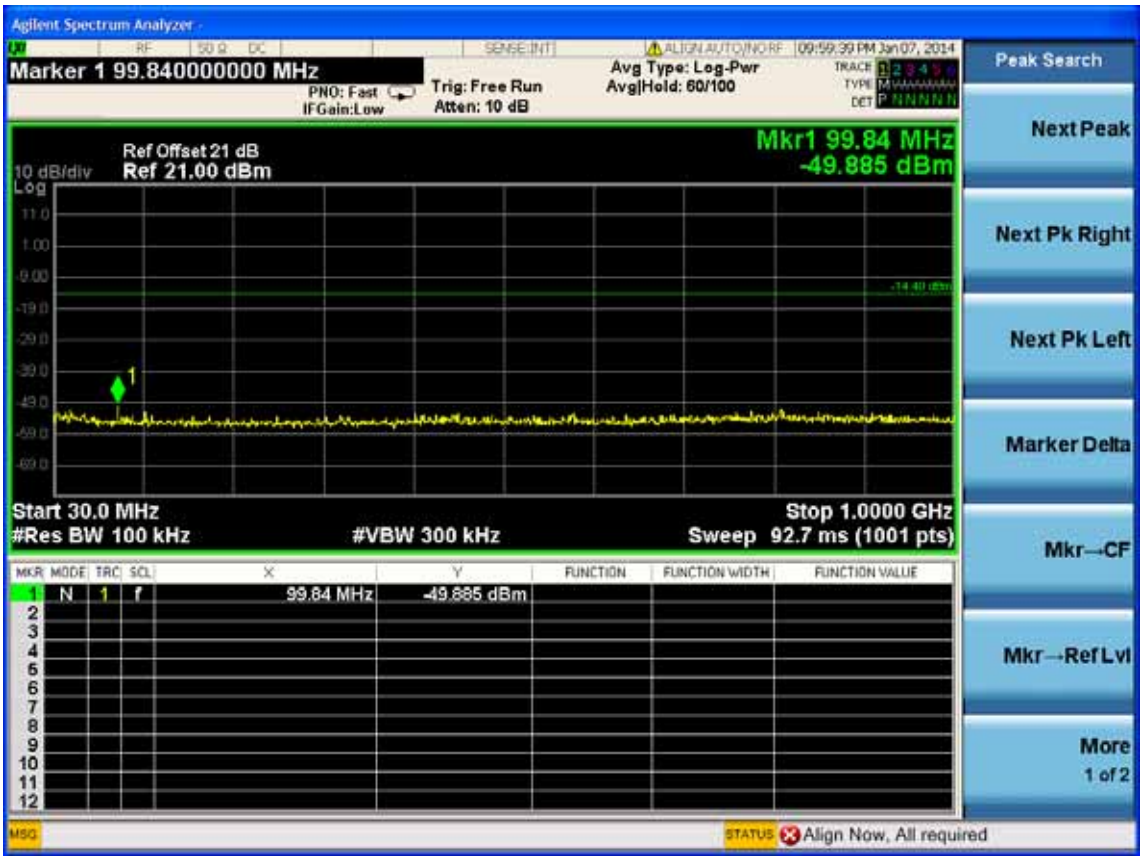


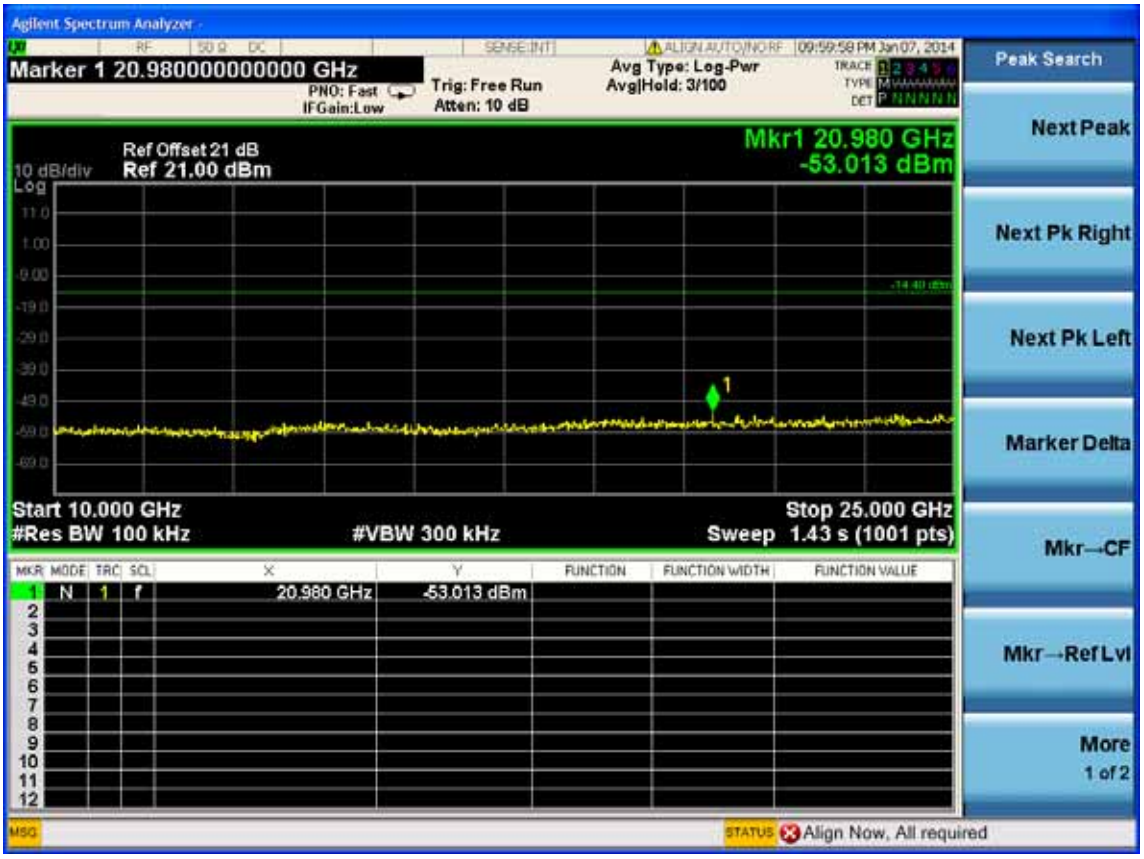

Agilent Spectrum Analyzer
Marker 1 99.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
09:57:02 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 99.84 MHz
-48.573 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 99.84 MHz -48.573 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 21.925000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 6/100
09:57:32 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 21.925 GHz
-53.248 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 21.925 GHz -53.248 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

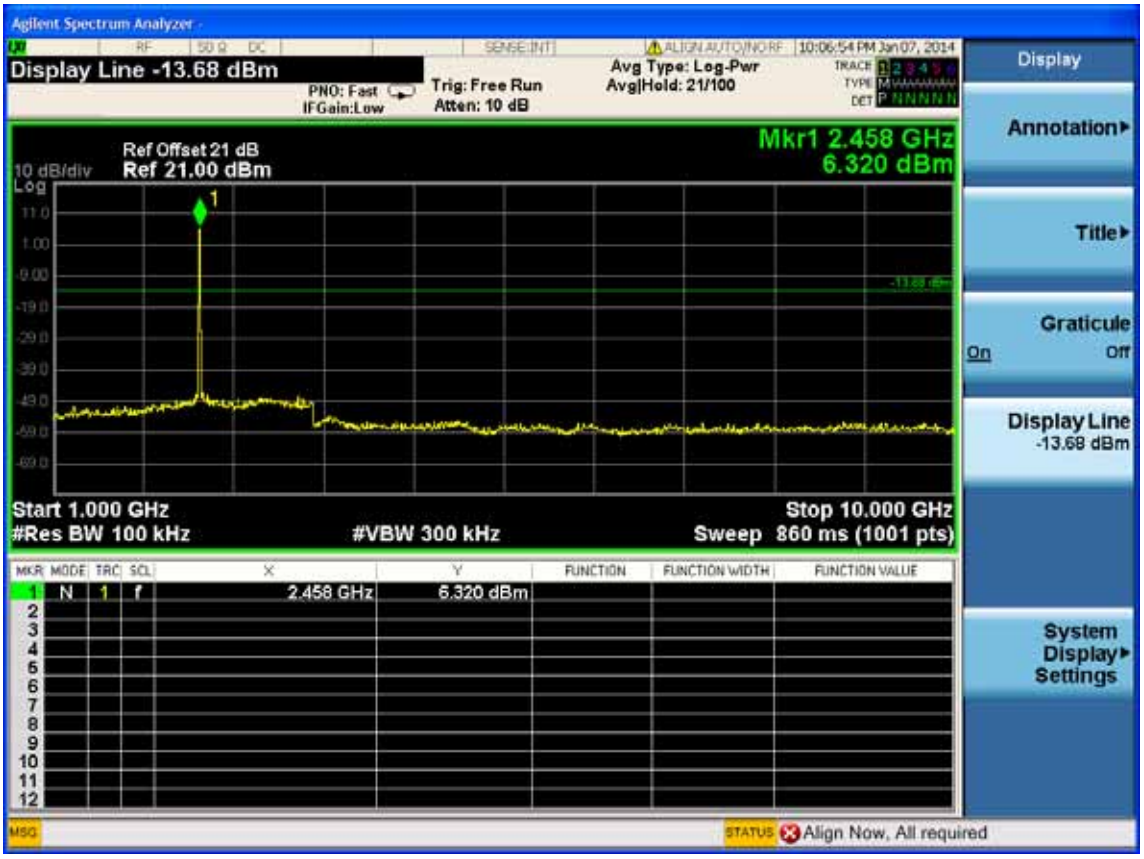
Test CH6: 2437MHz

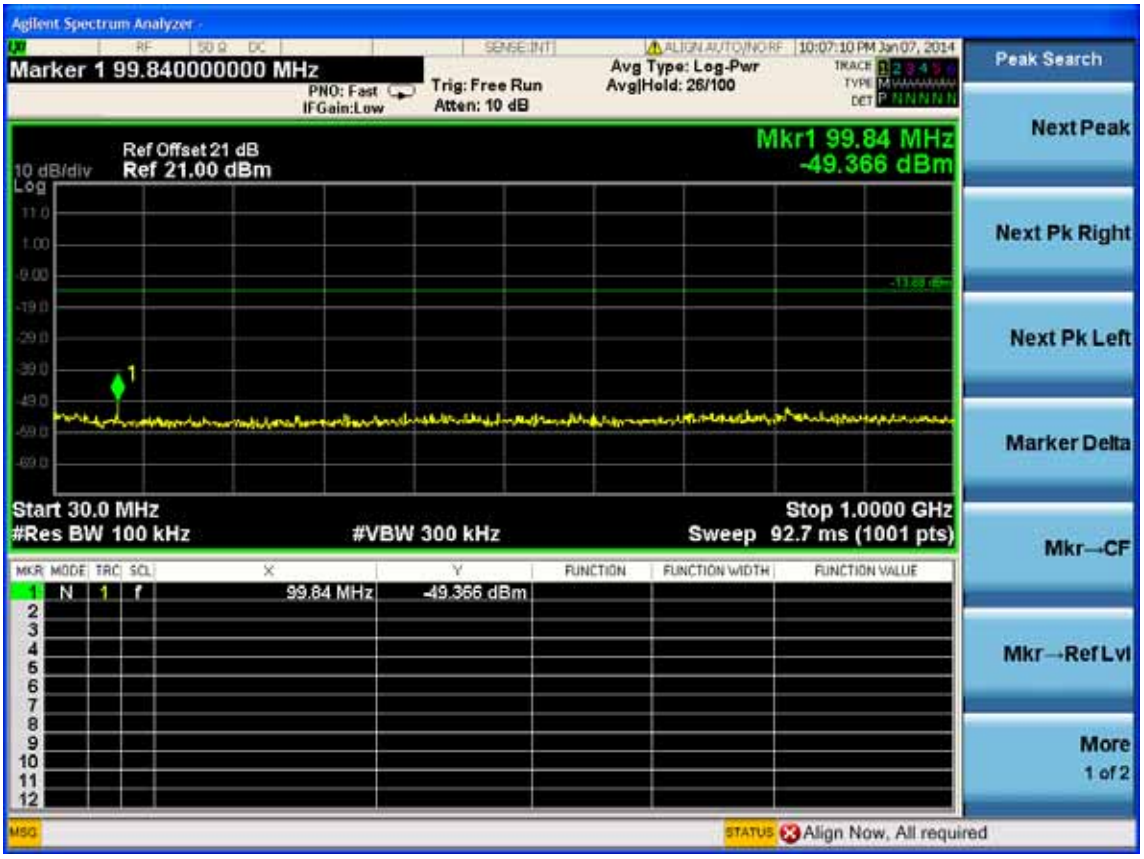


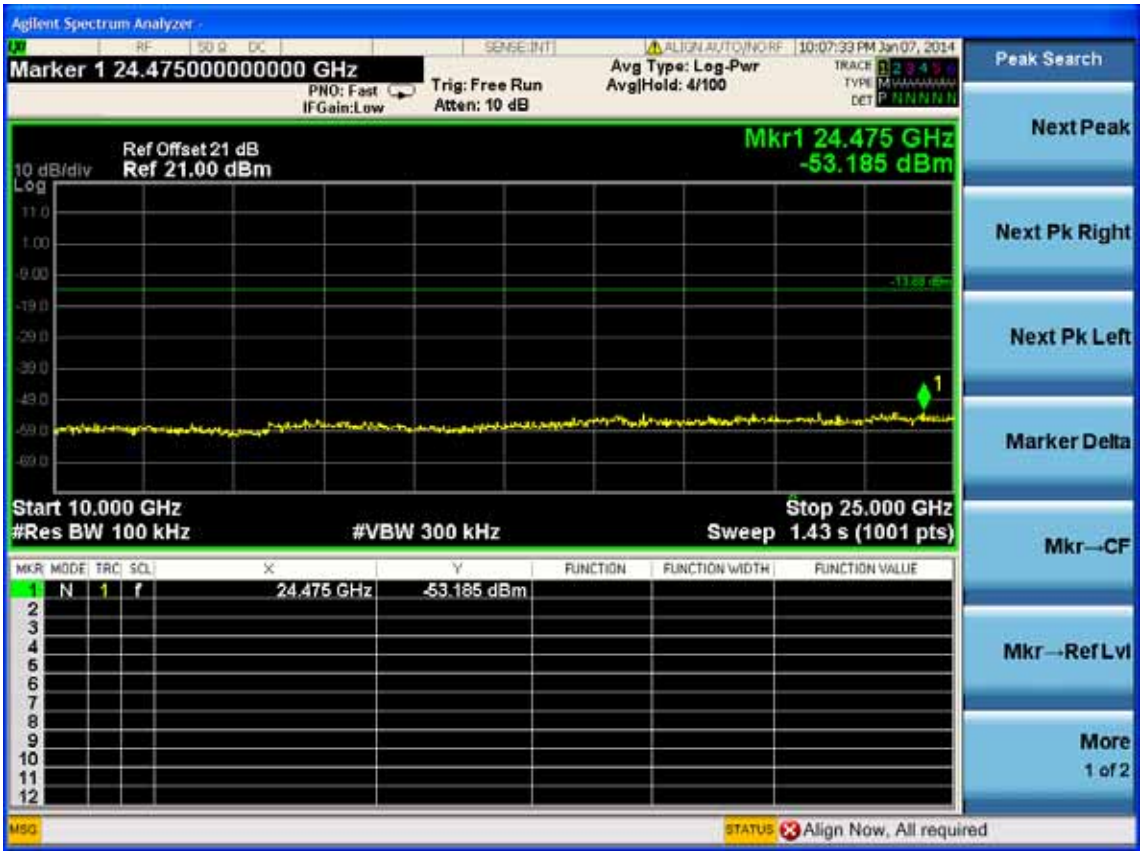
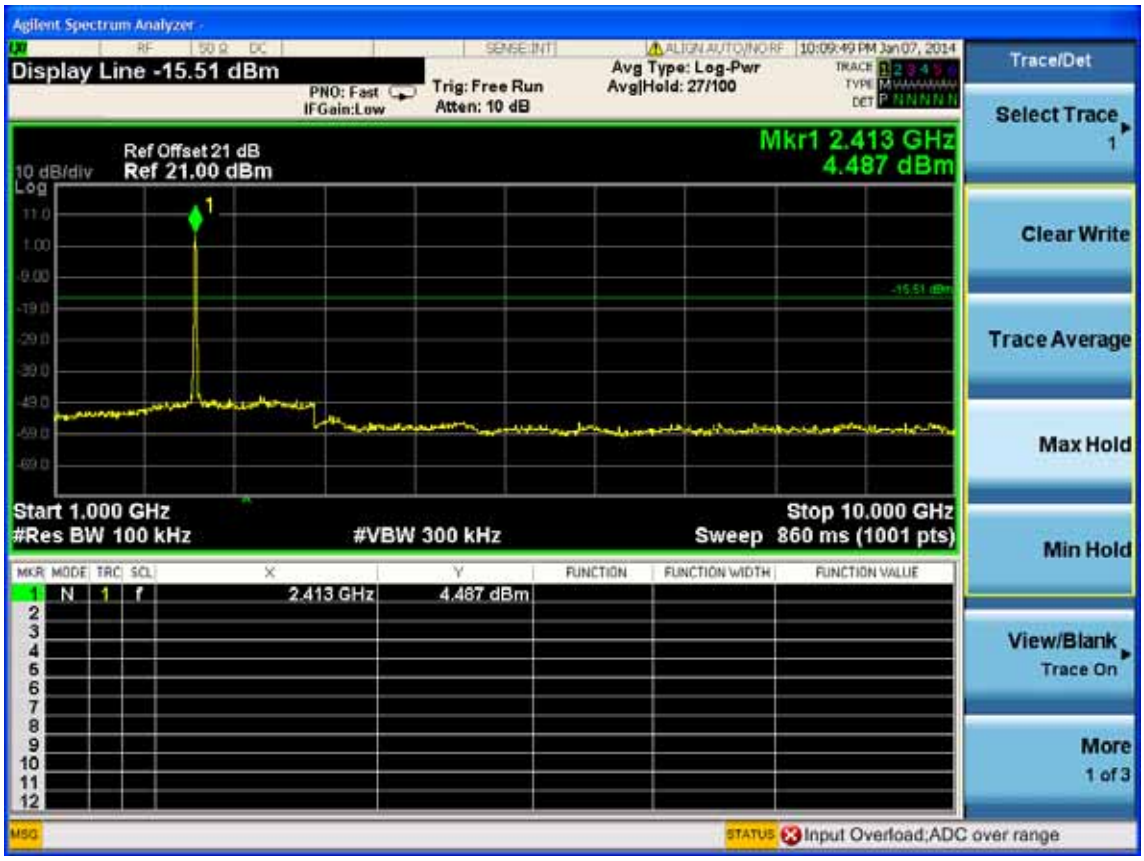




Test CH11: 2462MHz


Agilent Spectrum Analyzer
Display Line -13.68 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 21/100
10:06:54 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 2.458 GHz
6.320 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 860 ms (1001 pts)
1 N 1 f 2.458 GHz 6.320 dBm
Display
Annotation
Title
Graticule
On
Off
Display Line
-13.68 dBm
System Display Settings
Align Now, All required


Agilent Spectrum Analyzer
Marker 1 99.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
10:07:10 PM Jan 07, 2014
Ref Offset 21 dB
10 dB/div
Ref 21.00 dBm
Log
Mkr1 99.84 MHz
-49.366 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 99.84 MHz -49.366 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required



Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz