FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

TP-LINK TECHNOLOGIES CO., LTD.

150Mbps Wireless N Router

Model Number: TL-WR740N; TL-WR741ND

FCC ID: TE7WR741NXV5

Prepared for : 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

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number	:	ACS-F14338
Date of Test	:	Oct.14~Nov.25, 2014
Date of Report	:	Dec.09, 2014

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TEST REPORT CERTIFICATION

Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Manufacturer	:	TP-LINK TECHNOLOGIES CO., LTD.
EUT Description	:	150Mbps Wireless N Router
FCC ID	:	TE7WR741NXV5
(A) MODEL NO.	:	TL-WR740N; TL-WR741ND
(B) SERIAL NO.	:	N/A
(C) TEST VOLTAGE	:	DC 5V Adapter From Input AC 120V/60Hz

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2014

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 : Oct.14~Nov.25, 2014 Report of date: Dec.09, 2014

Prepared by : Cindy Zhu
Cindy 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

Approved & Authorized Signer : Signature: David Jin 12.9
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)

EUT Name	:	150Mbps Wireless N Router
Model Number	:	TL-WR740N; TL-WR741ND Model difference is TL - WR741ND use detachable antenna, TL - WR740N use Undetectable antenna. Note: TL - WR740N was the worst case by pre-scan and the test data was shown in this test report.
FCC ID	:	TE7WR741NXV5
Test Model	:	TL-WR740N
Radio	:	IEEE802.11b/g/n
Operation frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz
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)
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
Antenna and Gain	:	Dipole antenna, 5dBi Peak gain
Adapter	:	Manufacturer: TP-LINK, M/N: T050060-2B1 DC Cable: Unshielded, Detactable, 1.5m
Date of Test	:	Oct.14~Nov.25, 2014
Date of Receipt	:	Oct.12, 2014
Sample Type	:	Prototype production

2.2.Test Information

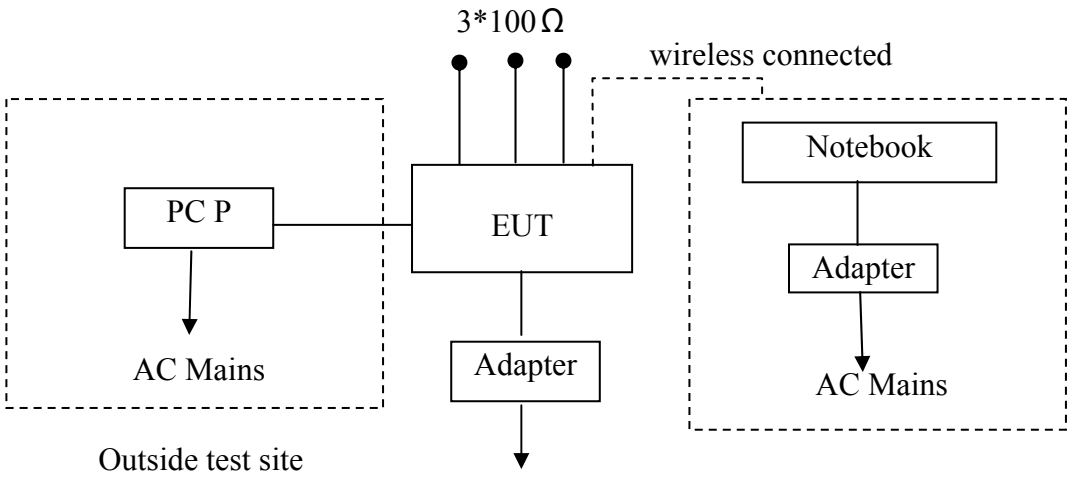
A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	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
Note: 1. According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

2.3.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC P	FUJITSU	KB400 PS/2 US	090201602778	☑FCC DoC ☑BSMI ID: KB400 PS/2
		Power Cord: Shielded, Undetachabled, 1.8m				
2.	Notebook	Test PC R	DELL	D430	PP09S	☑FCC DoC
		Power Cord: Unshielded, Detachable, 1.8m Power Adapter: Manufacture: DELL, M/N: LA65NS1-00				

2.4. Block Diagram of Test Setup



(EUT: 150Mbps 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: May.14, 2017
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.15, 2016
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2015

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

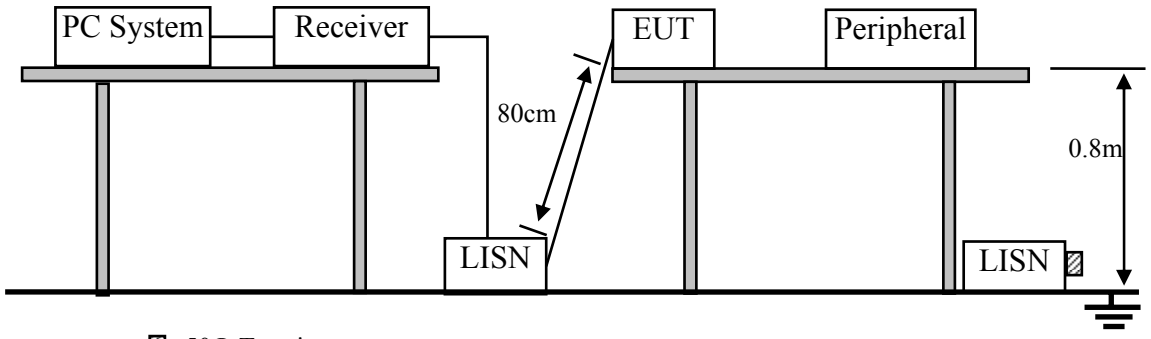
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.10dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.22 dB(30~200MHz, Polarize: H)
	3.23 dB(30~200MHz, Polarize: V)
	3.49 dB(200M~1GHz, Polarize: H)
	3.39 dB(200M~1GHz, Polarize: V)
Uncertainty 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 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.	1# Shielding Room	AUDIX	N/A	N/A	Apr.17,14	1 Year
2.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.29, 14	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	100429	Jan.22, 14	1 Year
4.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	Apr. 28,14	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 1	Apr. 28,14	1 Year
6.	Terminator	Hubersuhner	50Ω	No. 2	Apr. 28,14	1 Year
7.	RF Cable	Hubersuhner	RG58	0100.6954.20#	Jan.22, 14	1Year
8.	Coaxial Switch	Anritsu	MP59B	6200298346	Apr. 28,14	1 Year
9.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101838	Jan.22, 14	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. 150Mbps Wireless N Router (EUT)

Model Number : TL-WR740N
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

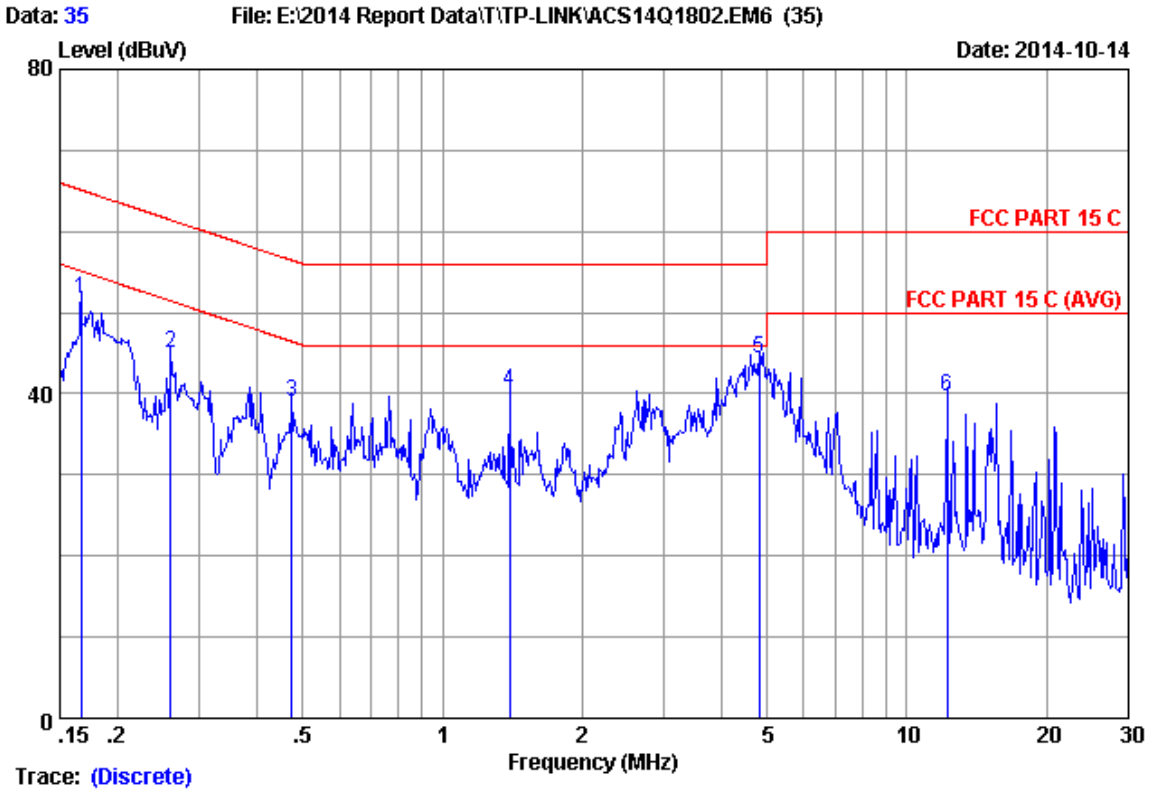
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). 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.)



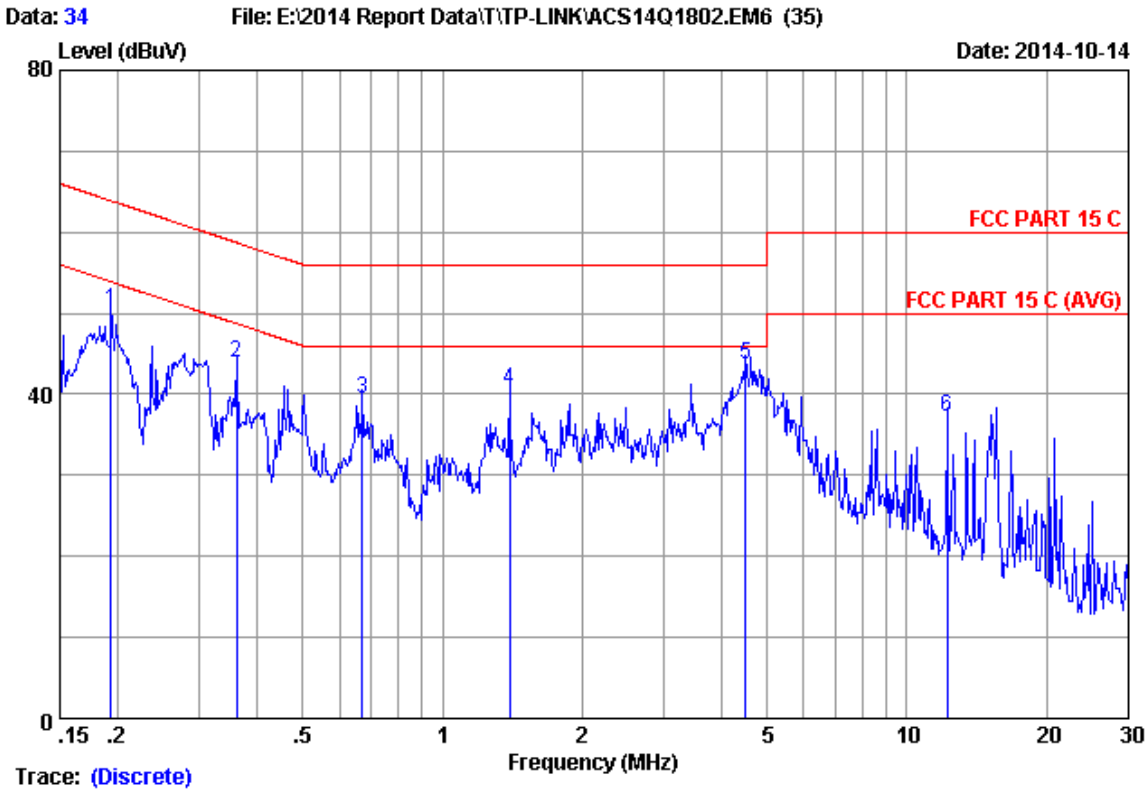
Trace: (Discrete)

Site no :1# Conduction
Dis./Ant. :2014 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :27.5*C/42%
EUT :150Mbps Wireless N Router
Power Rating :DC 5V Adapter Input AC 120V/60Hz
Test Mode :Tx Mode
M/N:TL-WR740N

Data No :35
Engineer :Nick_Huang

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16677	0.14	9.89	41.67	51.70	65.12	13.42	QP
2	0.26025	0.13	9.90	34.95	44.98	61.42	16.44	QP
3	0.47360	0.32	9.90	28.83	39.05	56.45	17.40	QP
4	1.396	0.17	9.92	30.33	40.42	56.00	15.58	QP
5	4.797	0.24	9.97	34.10	44.31	56.00	11.69	QP
6	12.188	0.37	10.03	29.37	39.77	60.00	20.23	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)
+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.



Trace: (Discrete)

Site no :1# Conduction
Dis./Ant. :2014 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :27.5*C/42%
EUT :150Mbps Wireless N Router
Power Rating :DC 5V Adapter Input AC 120V/60Hz
Test Mode :Tx Mode
M/N:TL-WR740N

Data No :34
Engineer :Nick_Huang

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19344	0.13	9.90	40.23	50.26	63.89	13.63	QP
2	0.35955	0.15	9.90	33.77	43.82	58.74	14.92	QP
3	0.67187	0.16	9.91	29.46	39.53	56.00	16.47	QP
4	1.396	0.18	9.92	30.48	40.58	56.00	15.42	QP
5	4.501	0.27	9.96	33.55	43.78	56.00	12.22	QP
6	12.188	0.44	10.03	26.80	37.27	60.00	22.73	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)
+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)

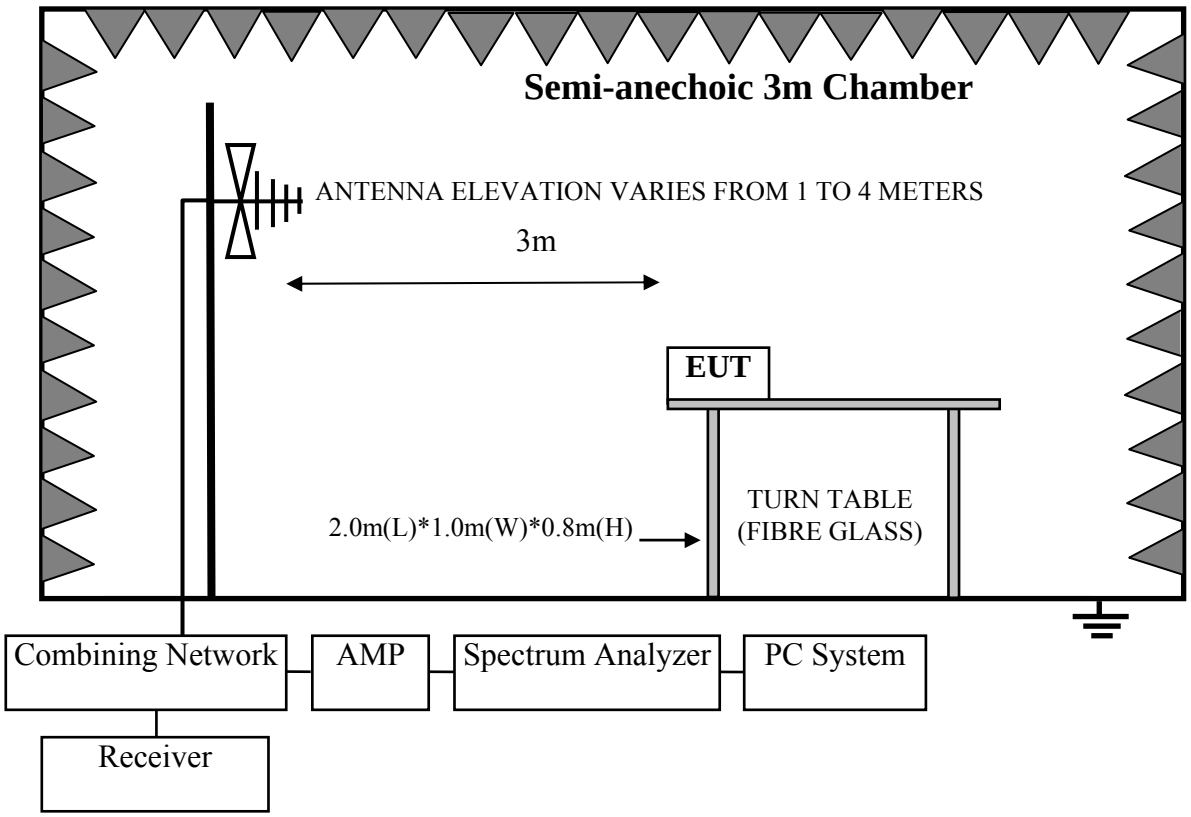
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Nov.23, 14	1 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	Apr. 28,14	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Apr. 28,14	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr. 28,14	1 Year
5.	Bilog Antenna	TESEQ	CBL6112D	35375	Jun. 18, 14	1 Year
6.	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	Apr. 28,14	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6200313662	Apr. 28,14	1 Year

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

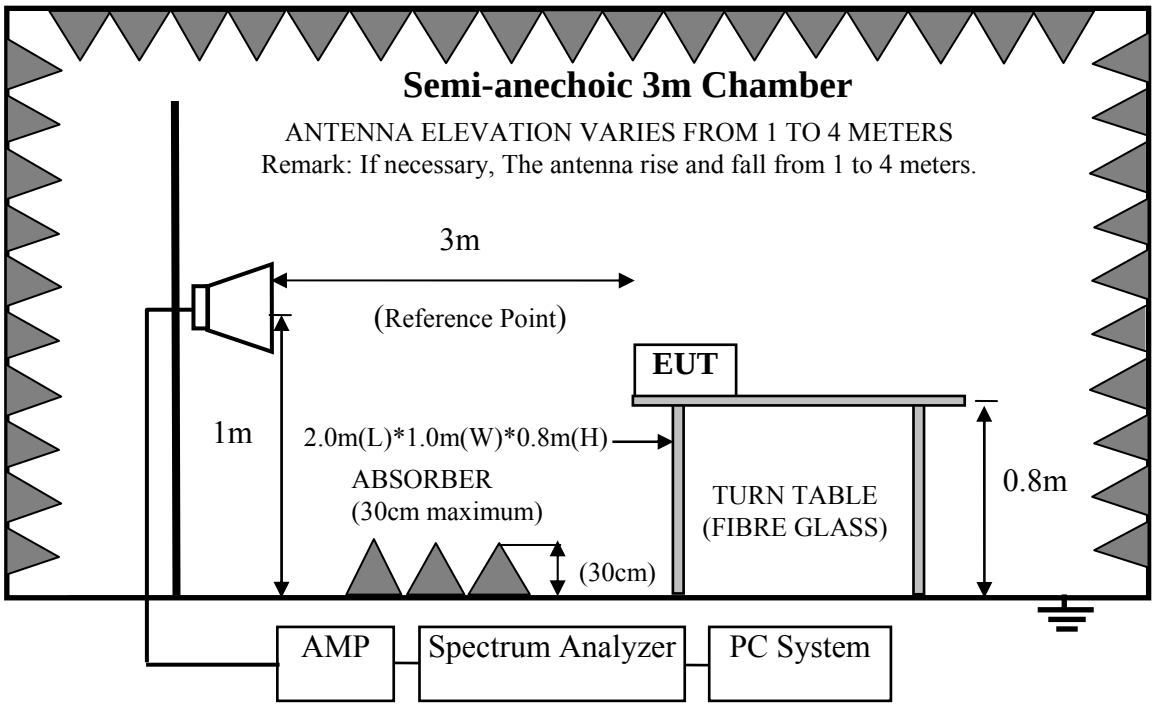
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Nov.23, 14	1 Year
2.	Spectrum Analyzer	Agilent	E4407B	MY41440292	Apr. 28,14	1 Year
3.	Horn Antenna	ETS	3115	9607-4877	Jun. 06, 14	1 Year
4.	Amplifier	Agilent	8449B	3008A00863	Apr. 28,14	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	Apr. 28,14	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX106	28616/2	Apr. 28,14	1 Year
7.	Horn Antenna	ETS	3116	00060089	Sep.20, 14	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. 15.247&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 3.4.

4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. 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 10^{th} harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

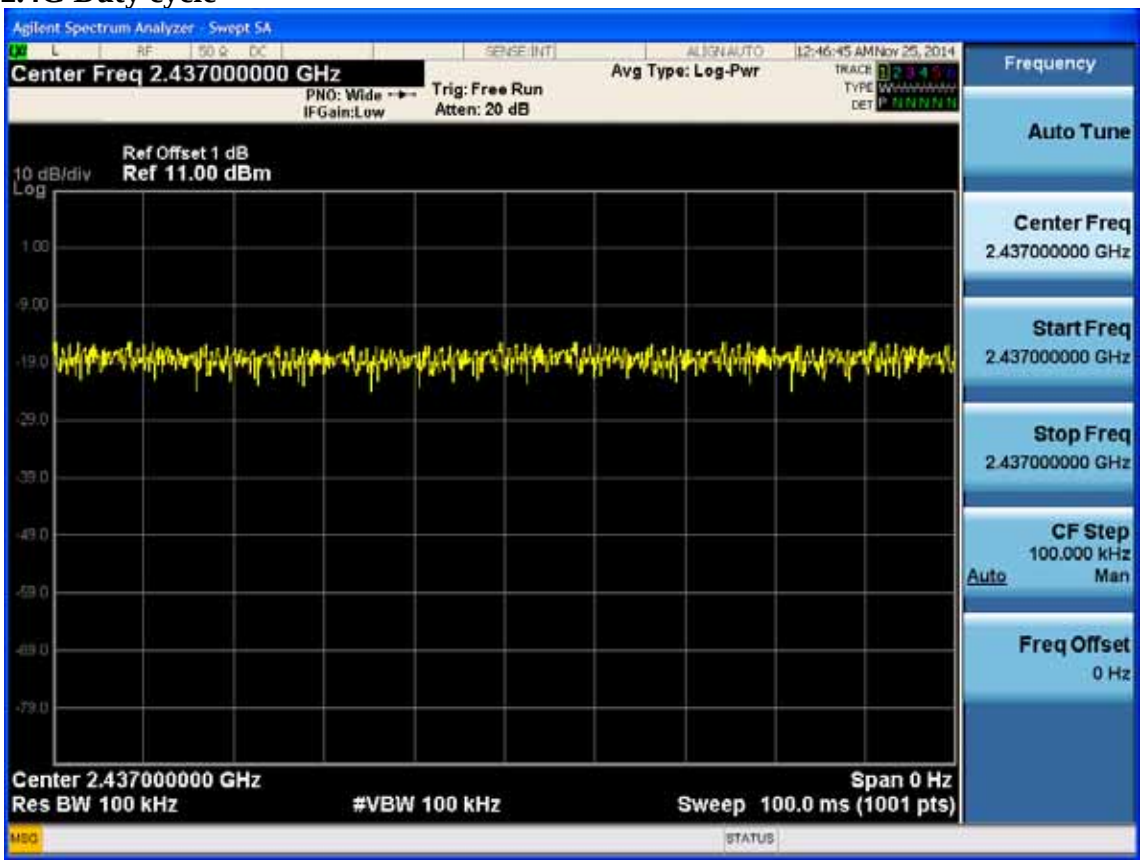
4.7. Radiated Emission Test Results

PASS.

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

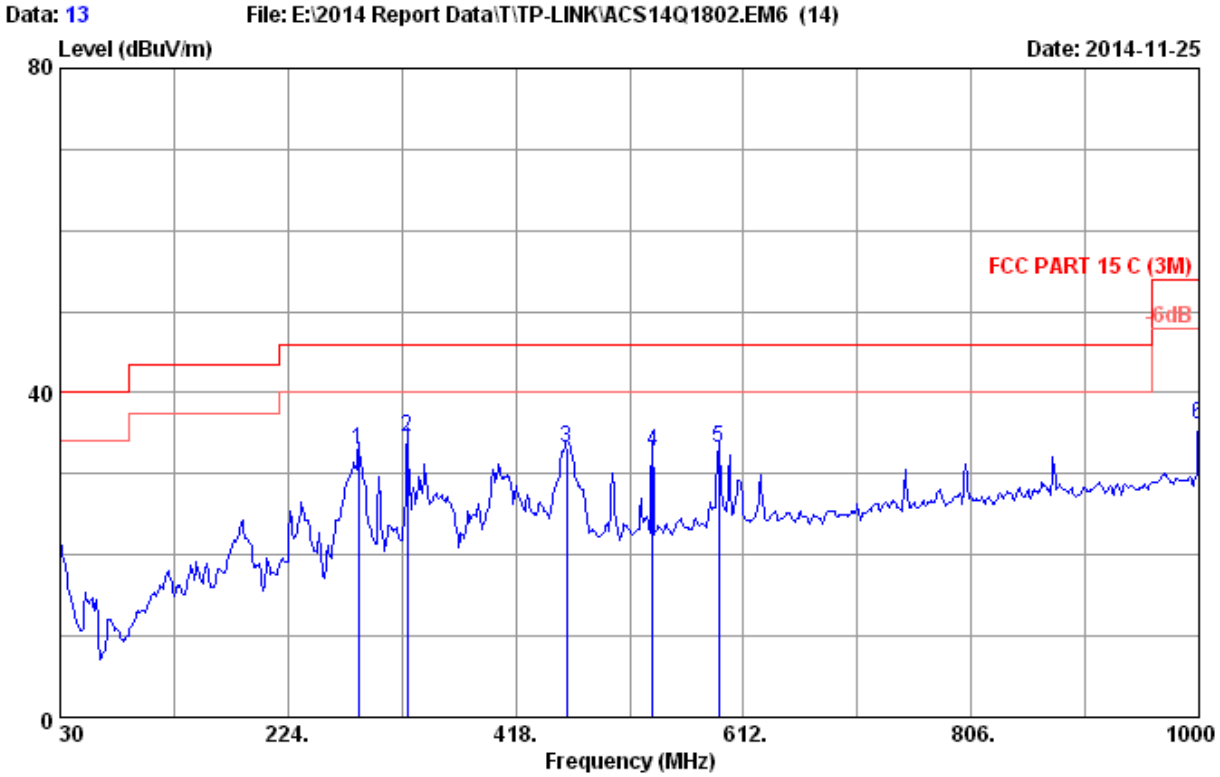
Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

2.4G Duty cycle



Note: The Duty Cycle is close to 100%.

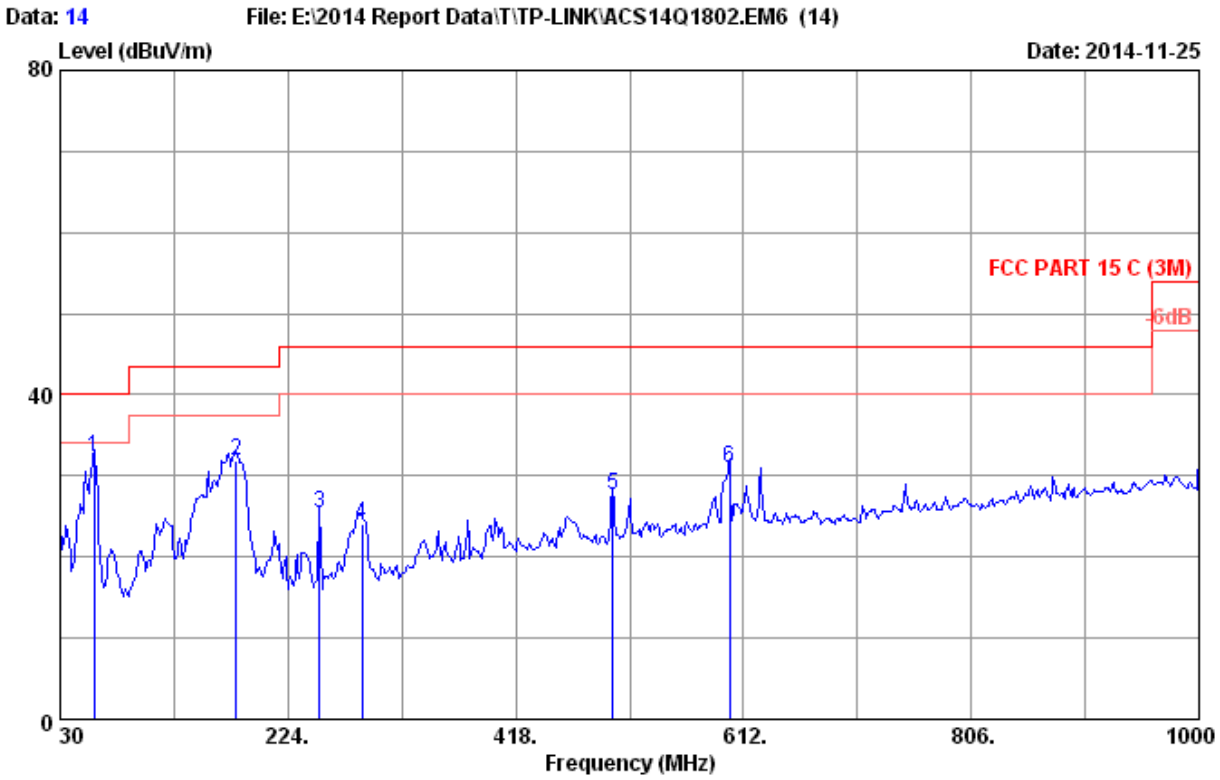
Frequency: 30MHz~1GHz




```
Site no.      : 3m Chamber                    Data no.   : 13
Dis. / Ant.   : 3m   2014 CBL6112D 35375      Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 C (3M)
Env. / Ins.   : 24.4*C/40%                    Engineer   : Jolly_Xu
EUT           : 150Mbps Wirelesss N Router
Power rating  : DC 5V Adapter Input:AC 230V/50Hz
Test Mode     : TX Mode
                M/N:TL-WR740N
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	284.140	13.70	2.21	17.06	32.97	46.00	13.03	QP
2	325.850	14.53	2.42	17.63	34.58	46.00	11.42	QP
3	461.650	17.50	3.07	12.53	33.10	46.00	12.90	QP
4	534.400	18.49	3.40	10.93	32.82	46.00	13.18	QP
5	590.660	19.20	3.67	10.27	33.14	46.00	12.86	QP
6	1000.000	22.50	5.22	8.39	36.11	54.00	17.89	QP

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

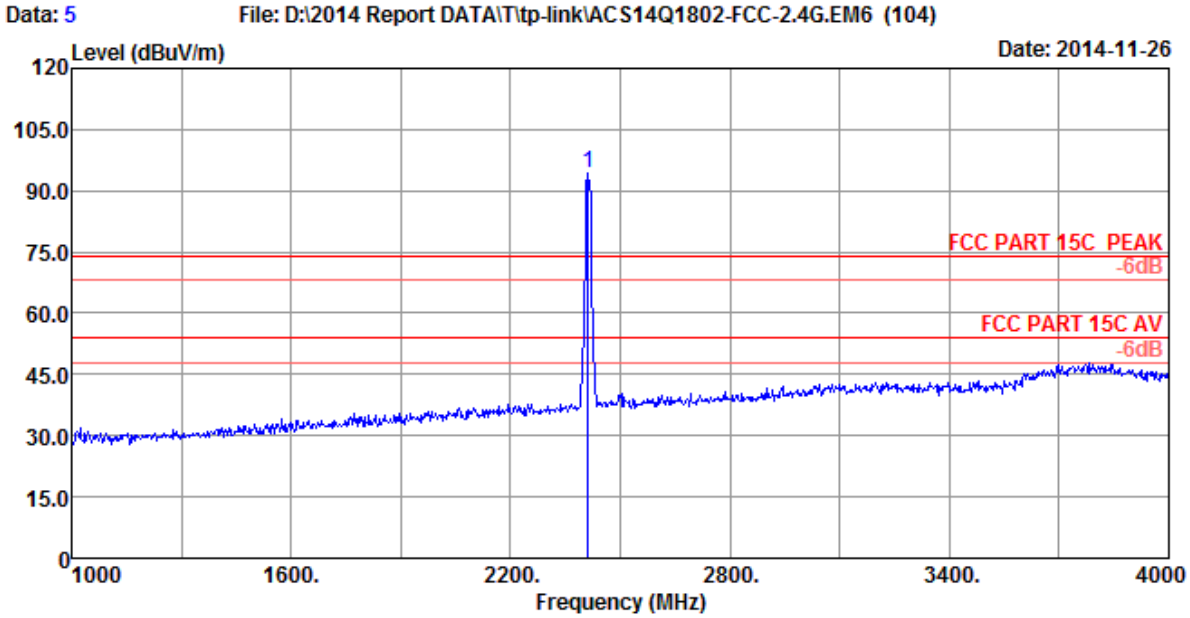


Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24.4*C/40% Engineer : Jolly_Xu
EUT : 150Mbps Wirelesss N Router
Power rating : DC 5V Adapter Input:AC 230V/50Hz
Test Mode : TX Mode
M/N:TL-WR740N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	59.100	6.64	0.85	24.80	32.29	40.00	7.71	QP
2	180.350	9.70	1.73	20.45	31.88	43.50	11.62	QP
3	251.160	13.06	2.08	10.17	25.31	46.00	20.69	QP
4	287.050	13.70	2.22	8.24	24.16	46.00	21.84	QP
5	500.450	18.30	3.22	6.03	27.55	46.00	18.45	QP
6	600.360	19.21	3.71	8.16	31.08	46.00	14.92	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

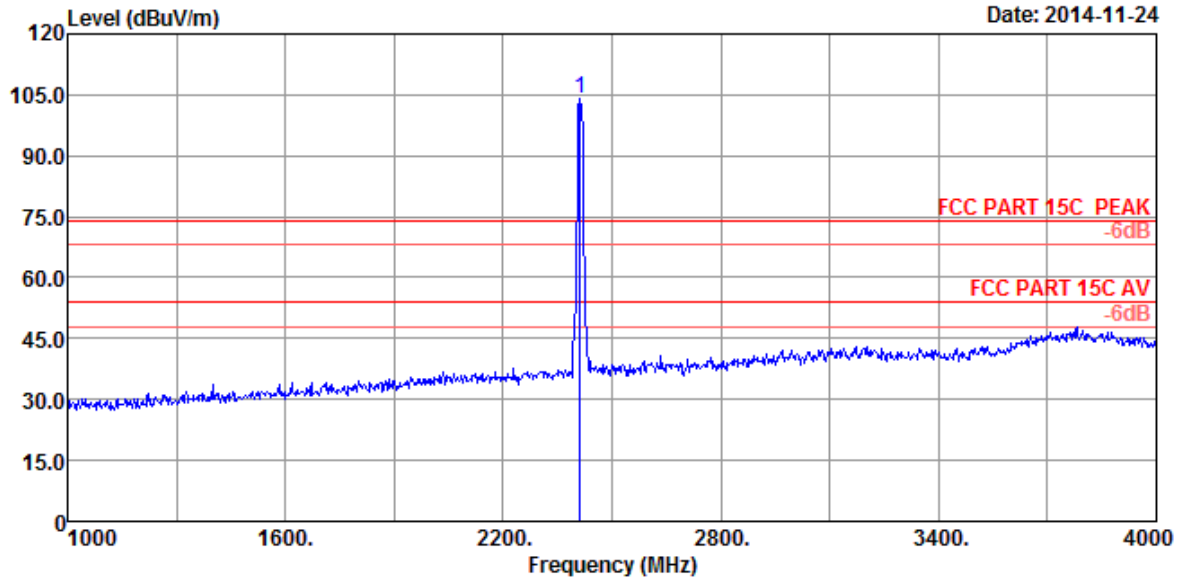


Site no. : 3m Chamber Data No. : 5
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2412.000	28.21	5.81	96.06	35.70	94.38	74.00	-20.38	Peak

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

Data: 6 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

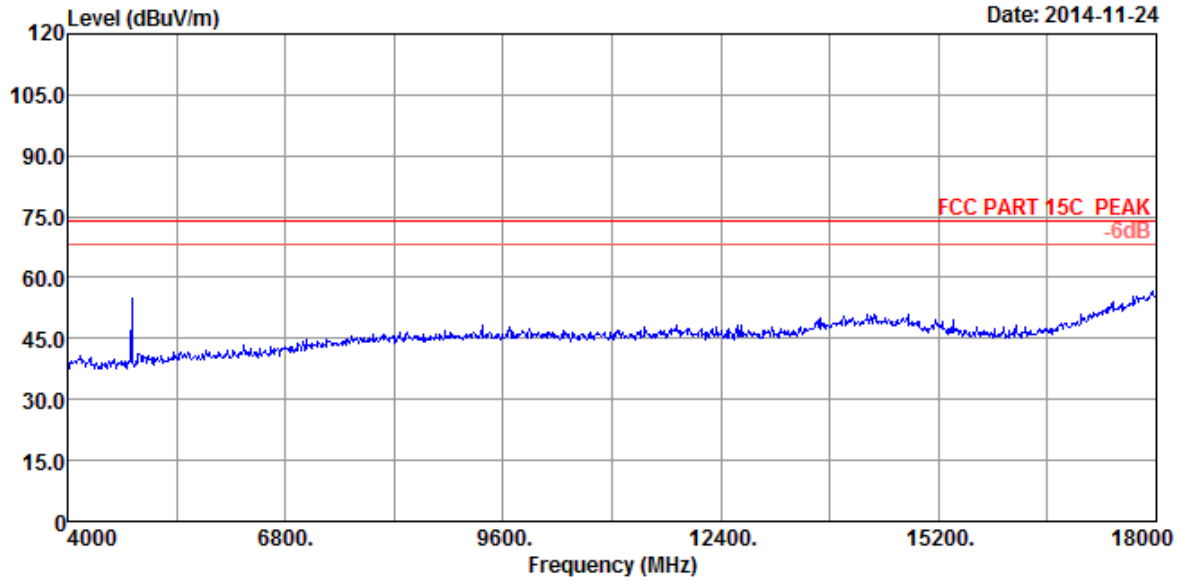


Site no. : 3m Chamber Data No. : 6
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx
TL-WR740N

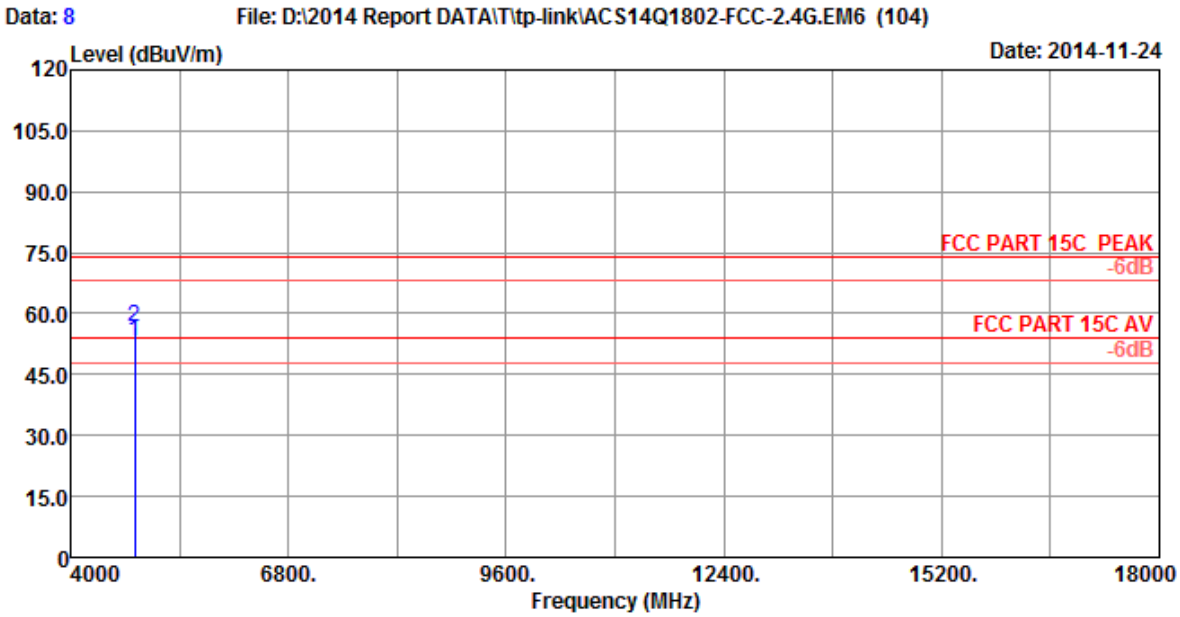
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2412.000	28.21	5.81	105.84	35.70	104.16	74.00	-30.16	Peak

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

Data: 7 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)



Site no. : 3m Chamber Data No. : 7
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx
TL-WR740N

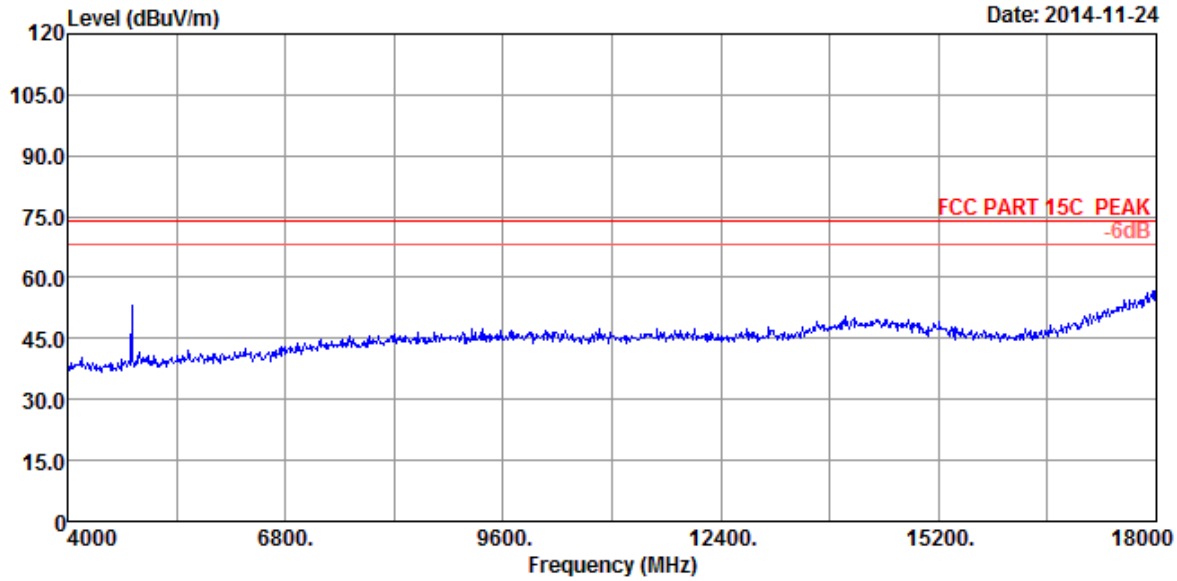


Site no. : 3m Chamber Data No. : 8
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4824.000	32.88	8.58	47.27	35.70	53.03	54.00	0.97	Average
2	4824.000	32.88	8.58	50.97	35.70	56.73	74.00	17.27	Peak

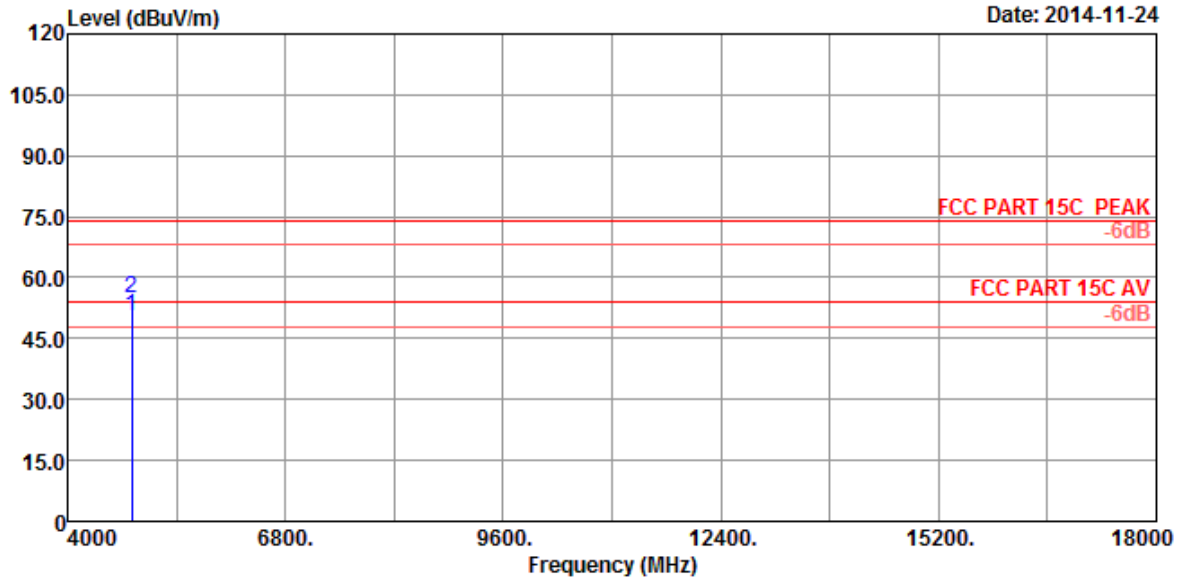
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading-Amp Factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 9 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)




```
Site no.      : 3m Chamber                Data No.   : 9
Dis. / Ant.   : 3m   2014 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 150Mbps Wireless N Router
Power Rating  : DC 5V From Adapter Input AC 120V/60Hz
Test Mode     : IEEE802.11b  2412MHz Tx
                TL-WR740N
```

Data: 10 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

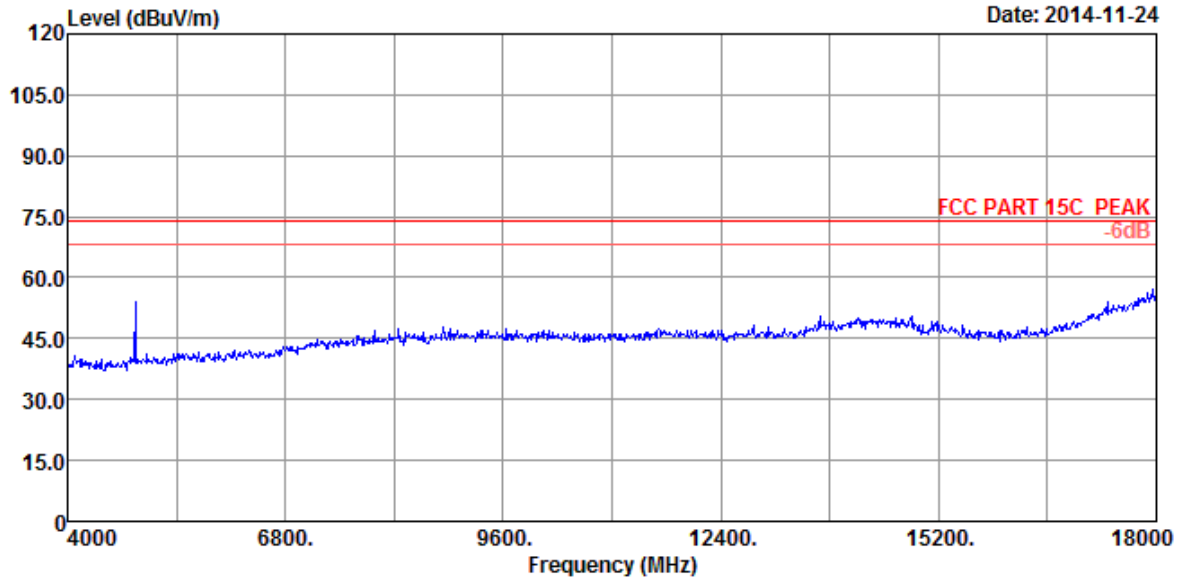


Site no. : 3m Chamber Data No. : 10
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4824.000	32.88	8.58	44.60	35.70	50.36	54.00	3.64	Average
2	4824.000	32.88	8.58	49.36	35.70	55.12	74.00	18.88	Peak

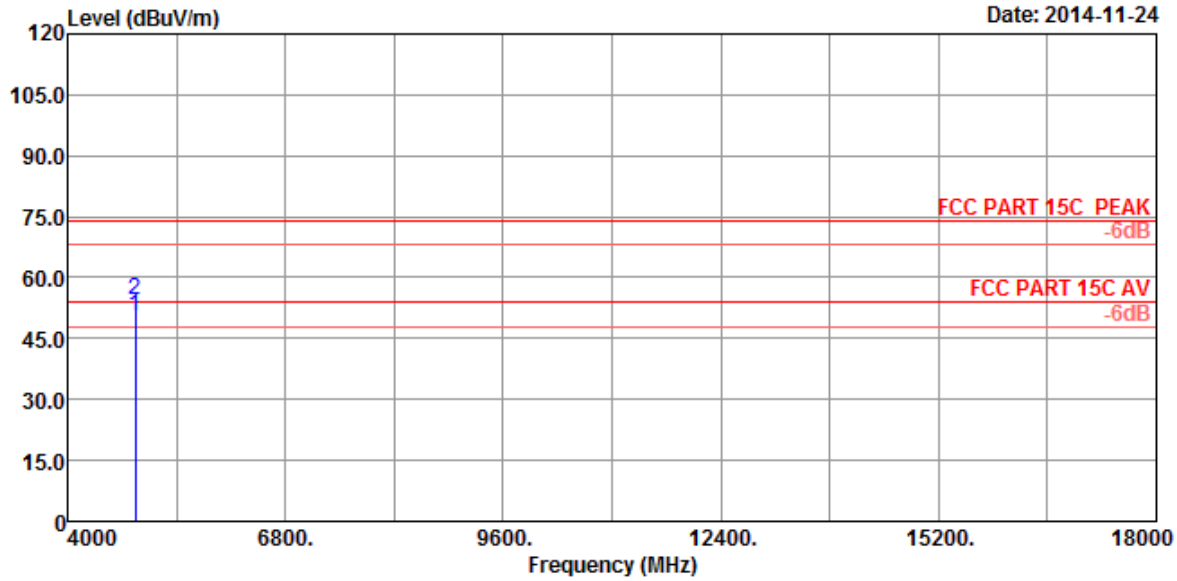
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading-Amp Factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 11 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)




```
Site no.      : 3m Chamber                 Data No.   : 11
Dis. / Ant.   : 3m   2014 3115 (4580)      Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                   Engineer   : Leo-Li
EUT           : 150Mbps Wireless N Router
Power Rating  : DC 5V From Adapter Input AC 120V/60Hz
Test Mode     : IEEE802.11b  2437MHz Tx
                TL-WR740N
```

Data: 12 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

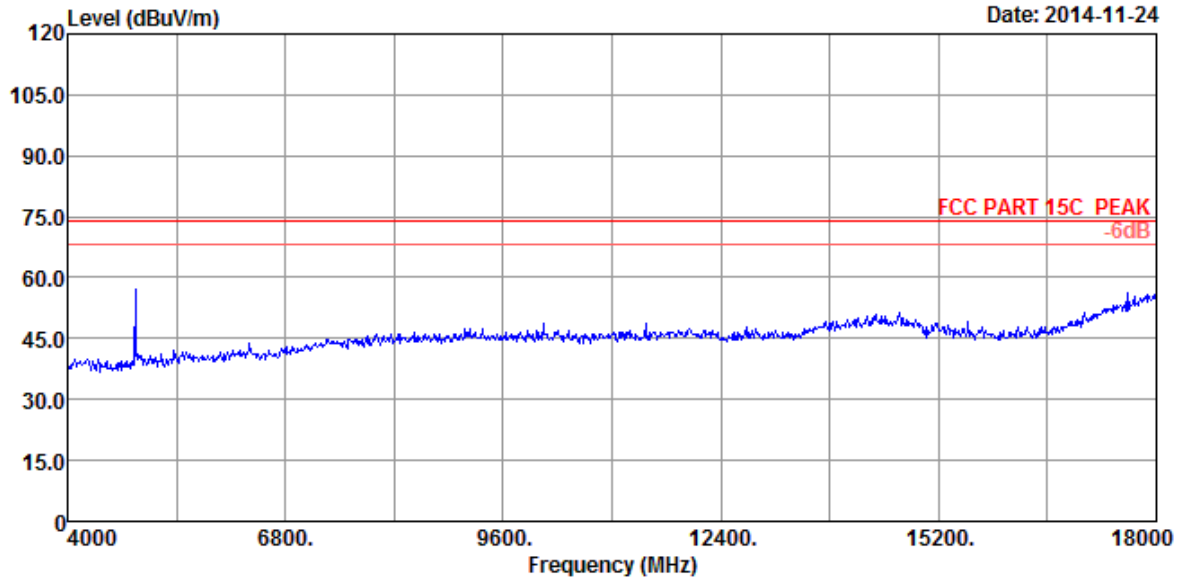


Site no. : 3m Chamber Data No. : 12
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2437MHz Tx
TL-WR740N

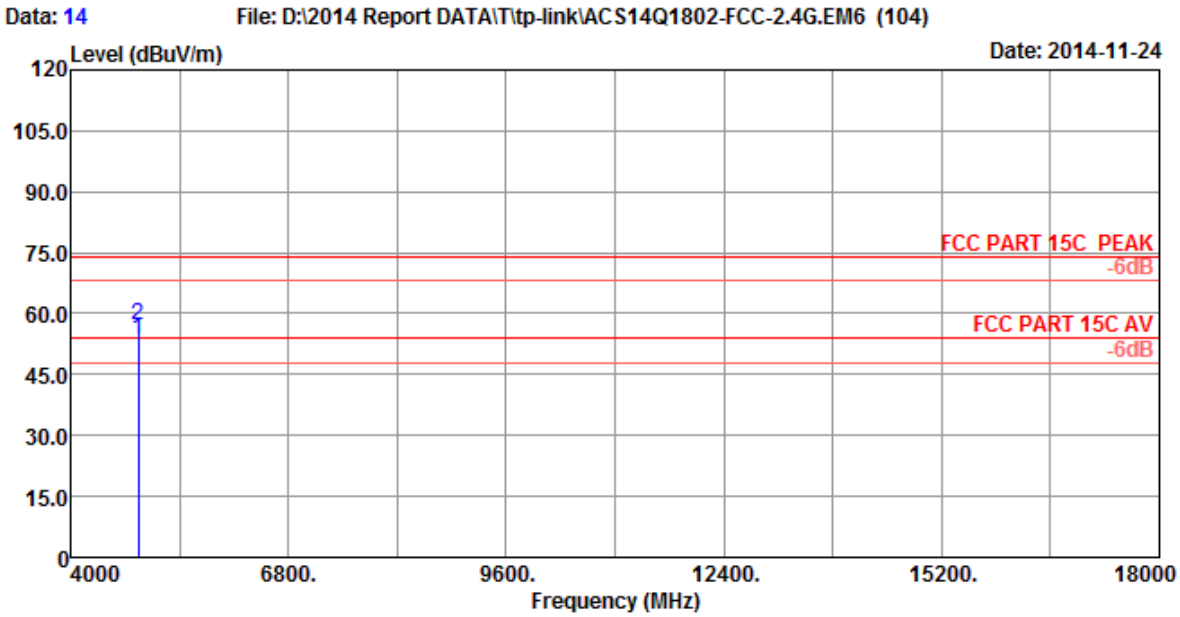
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4874.000	32.97	8.63	44.64	35.70	50.54	54.00	3.46	Average
2	4874.000	32.97	8.63	48.79	35.70	54.69	74.00	19.31	Peak

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

Data: 13 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)



Site no. : 3m Chamber Data No. : 13
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2437MHz Tx
TL-WR740N

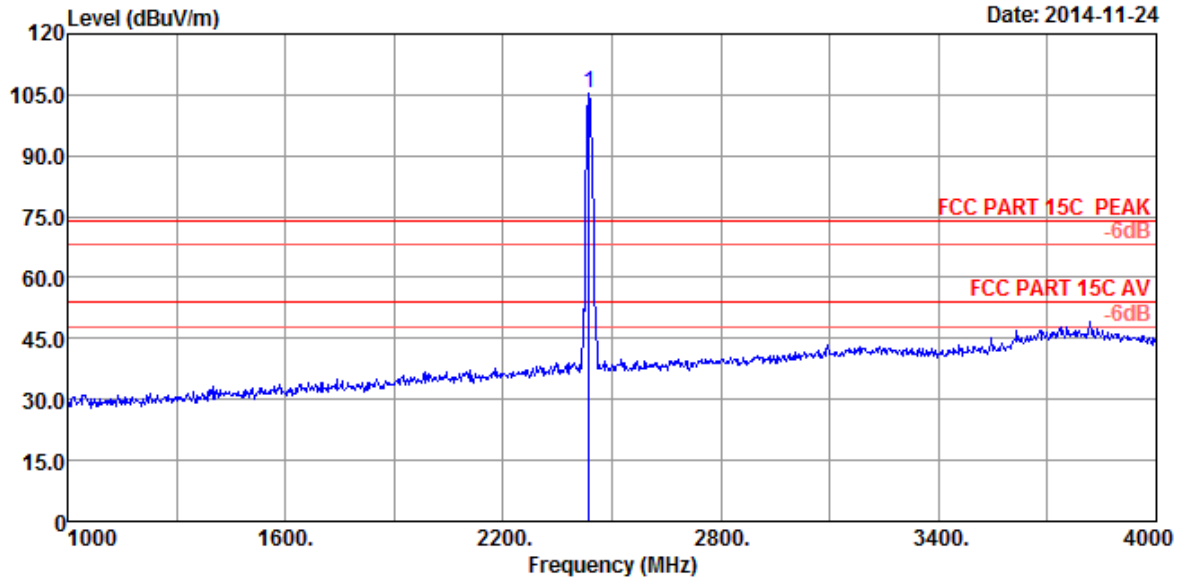


Site no. : 3m Chamber Data No. : 14
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2437MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4874.000	32.97	8.63	47.70	35.70	53.60	54.00	0.40	Average
2	4874.000	32.97	8.63	51.10	35.70	57.00	74.00	17.00	Peak

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

Data: 15 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

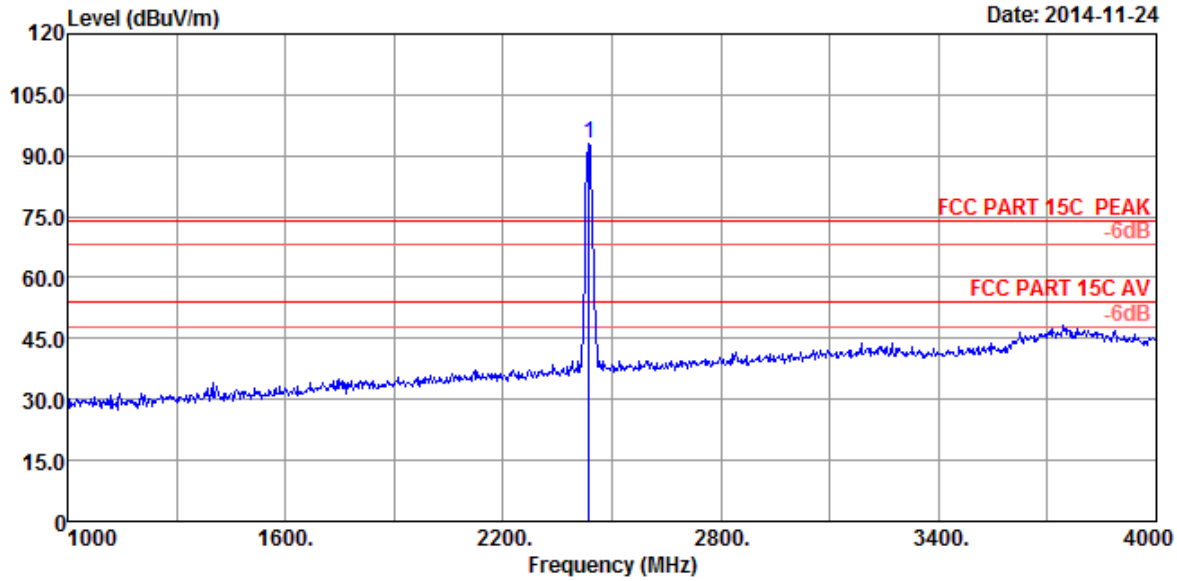


Site no. : 3m Chamber Data No. : 15
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2437MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2437.000	28.26	5.85	107.07	35.70	105.48	74.00	-31.48	Peak

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

Data: 16 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

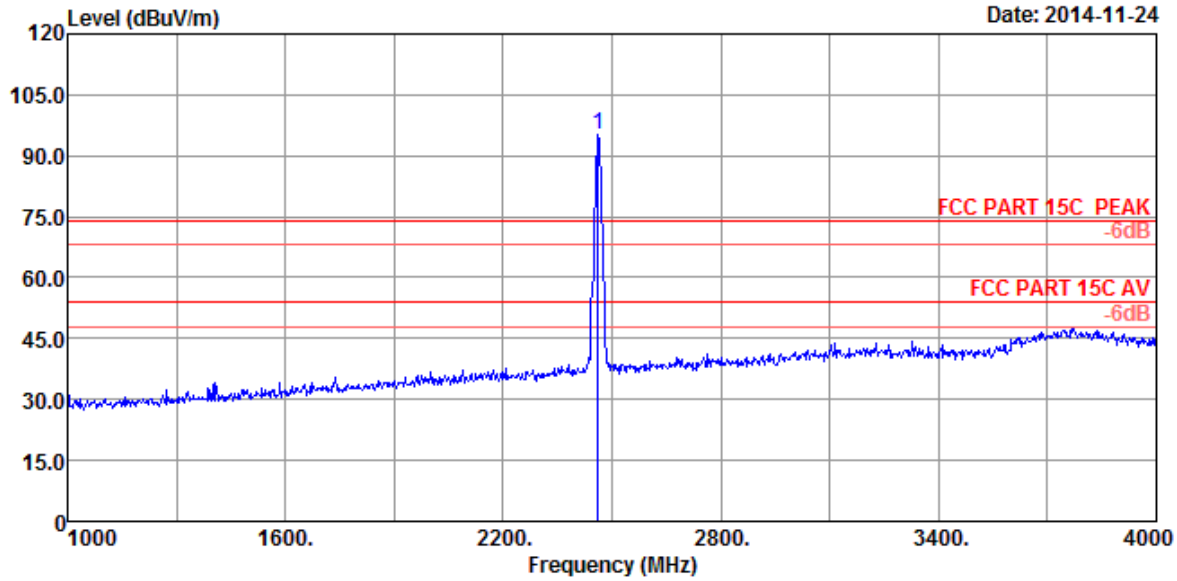


Site no. : 3m Chamber Data No. : 16
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2437MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2437.000	28.26	5.85	94.59	35.70	93.00	74.00	-19.00	Peak

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

Data: 17 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

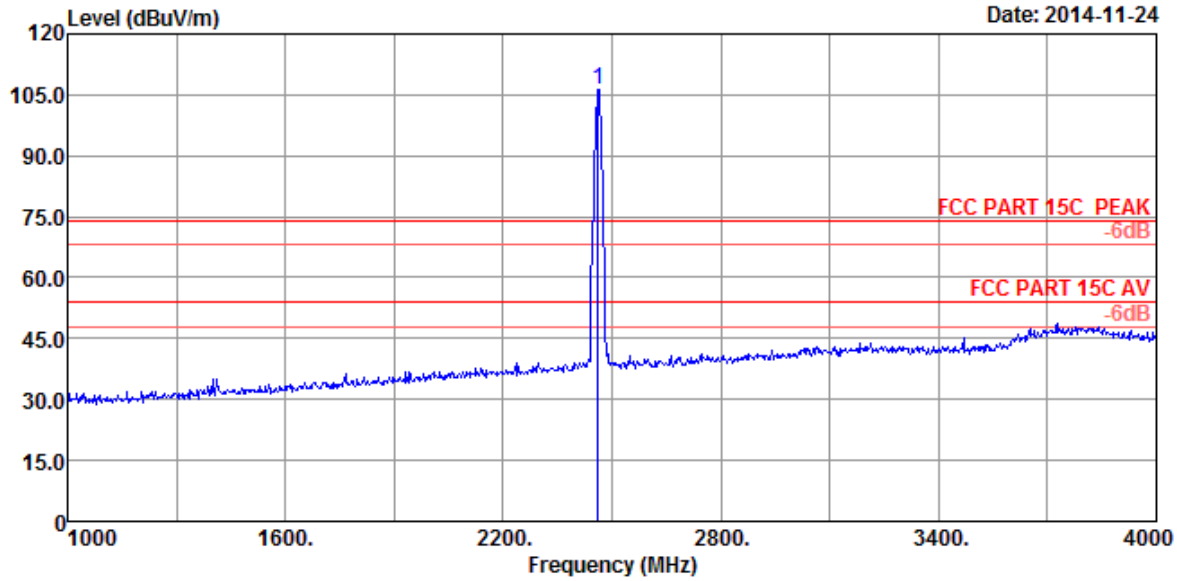


Site no. : 3m Chamber Data No. : 17
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2462.000	28.32	5.89	96.78	35.70	95.29	74.00	-21.29	Peak

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

Data: 18 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

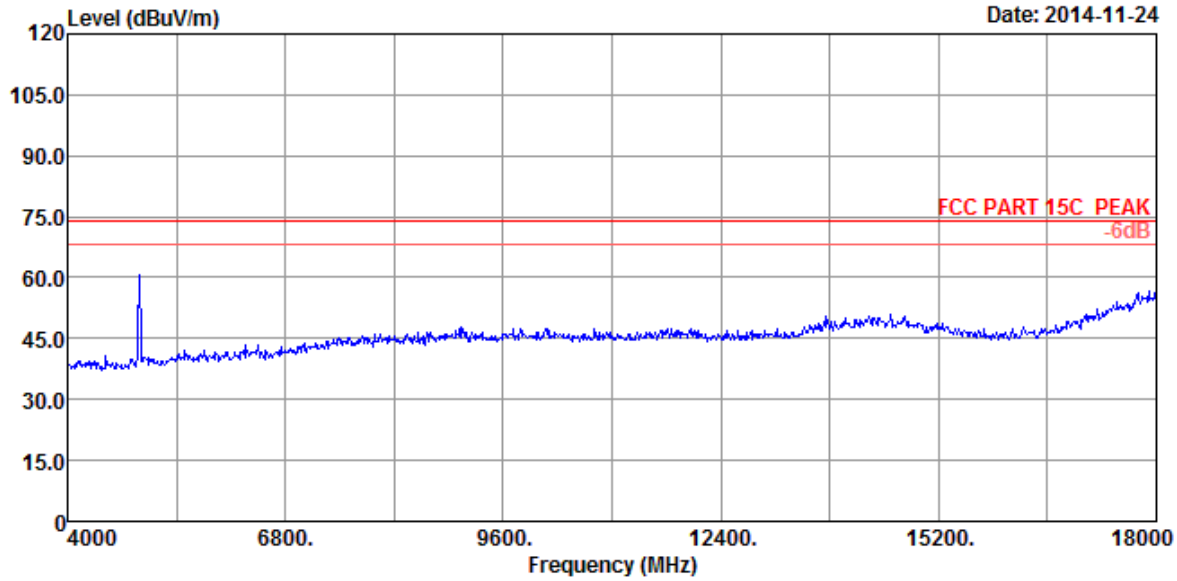


Site no. : 3m Chamber Data No. : 18
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

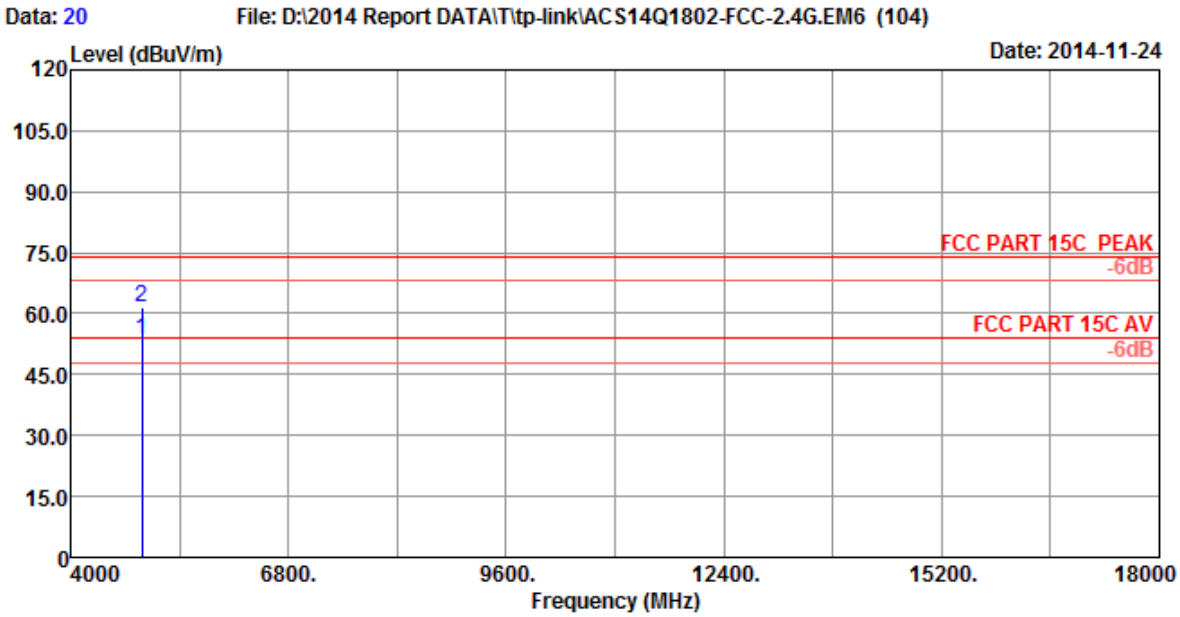
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2462.000	28.32	5.89	107.95	35.70	106.46	74.00	-32.46	Peak

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

Data: 19 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)



Site no. : 3m Chamber Data No. : 19
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

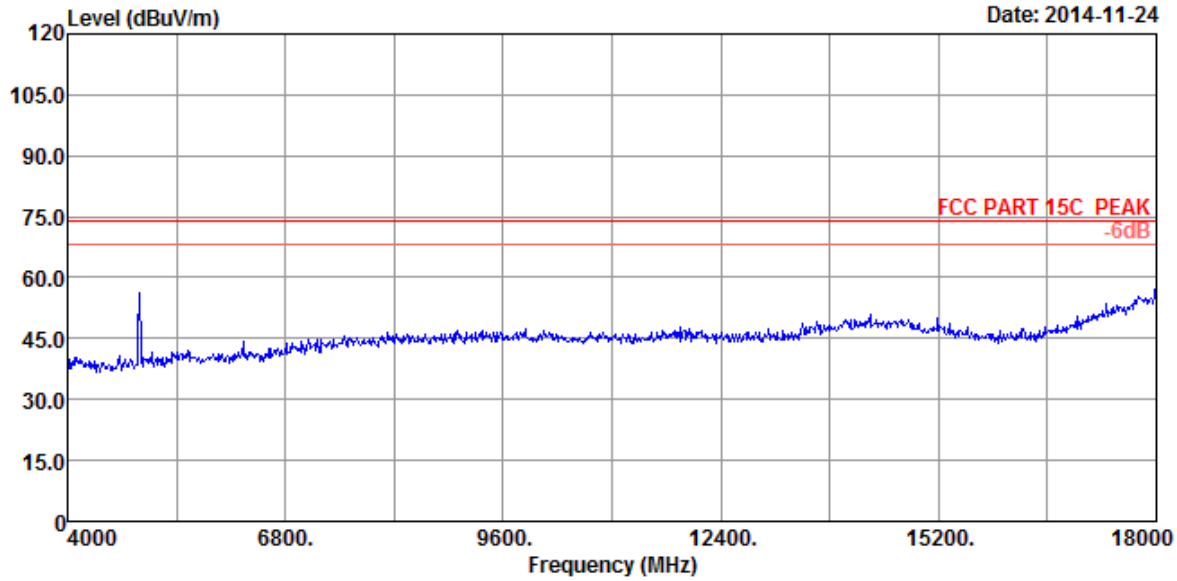


Site no. : 3m Chamber Data No. : 20
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4924.000	33.06	8.69	47.41	35.70	53.46	54.00	0.54	Average
2	4924.000	33.06	8.69	55.41	35.70	61.46	74.00	12.54	Peak

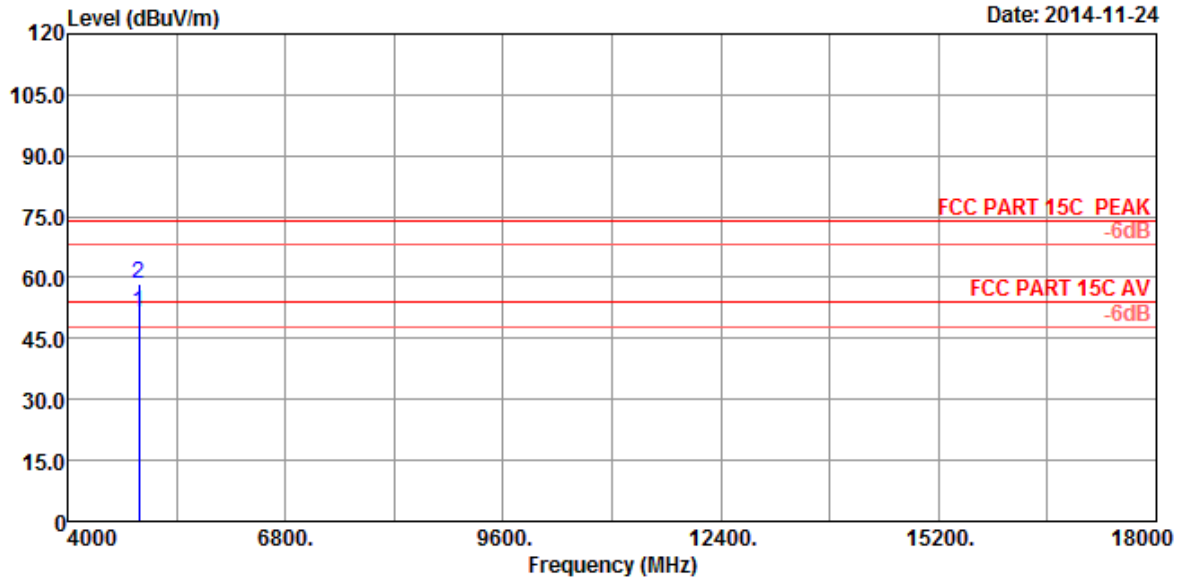
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading-Amp Factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 21 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)



Site no. : 3m Chamber Data No. : 21
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

Data: 22 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

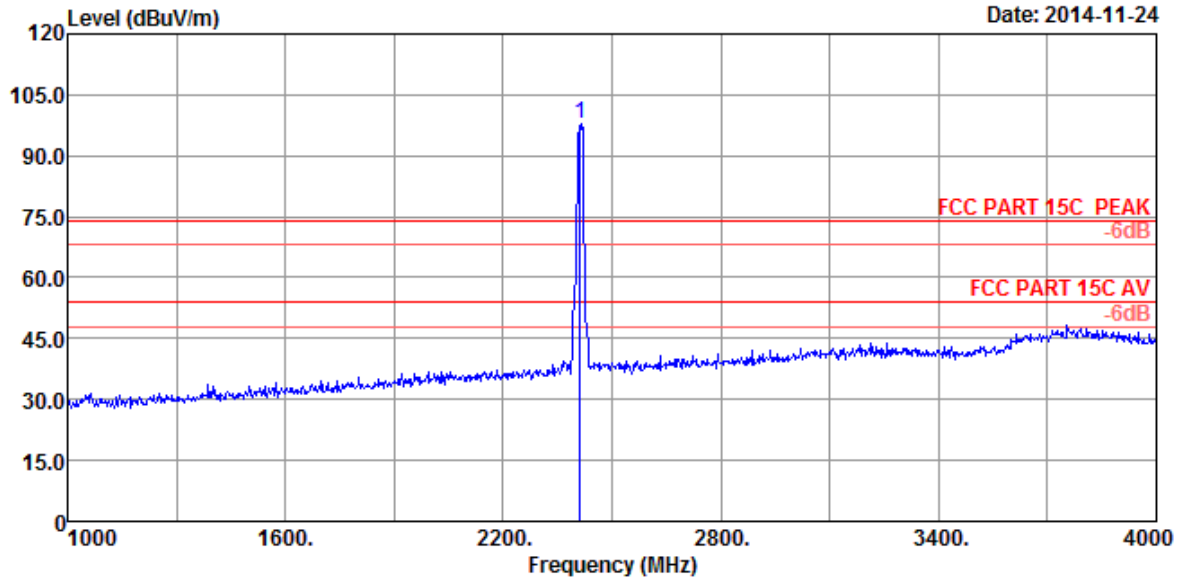


Site no. : 3m Chamber Data No. : 22
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	4924.000	33.06	8.69	45.41	35.70	51.46	54.00	2.54	Average
2	4924.000	33.06	8.69	52.41	35.70	58.46	74.00	15.54	Peak

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

Data: 31 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)

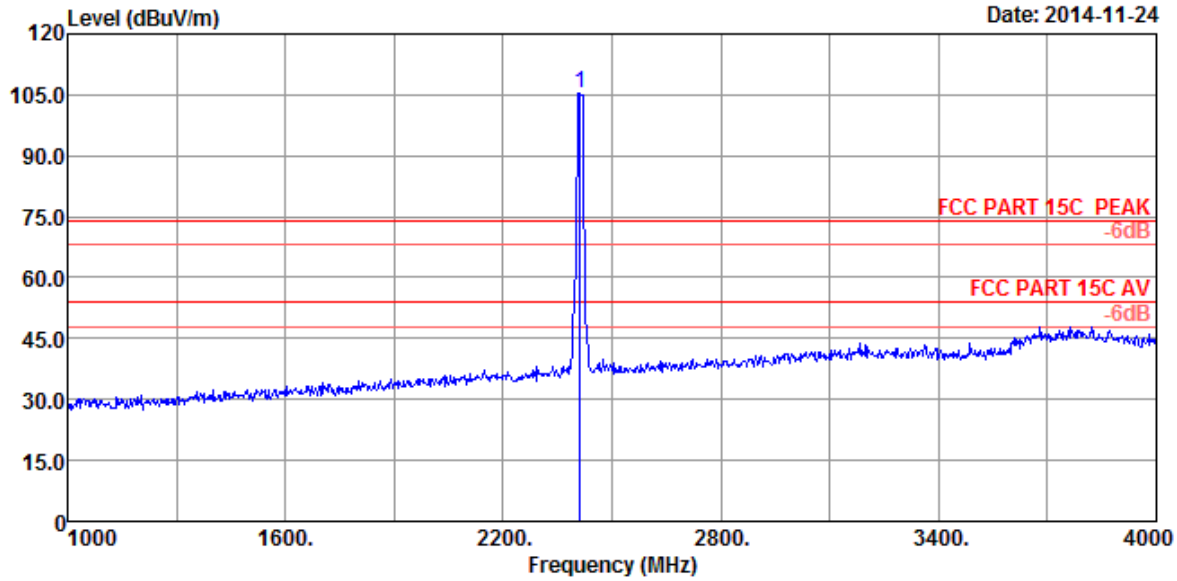


Site no. : 3m Chamber Data No. : 31
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11g 2412MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2412.000	28.21	5.81	99.44	35.70	97.76	74.00	-23.76	Peak

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

Data: 32 File: D:\2014 Report DATA\T\tp-link\ACS14Q1802-FCC-2.4G.EM6 (104)



Site no. : 3m Chamber Data No. : 32
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 150Mbps Wireless N Router
Power Rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11g 2412MHz Tx
TL-WR740N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	2412.000	28.21	5.81	107.14	35.70	105.46	74.00	-31.46	Peak

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