



**FCC PART 15C
TEST REPORT
No. I16N01166-WLAN**

for

Yulong Computer Telecommunication Scientific (Shenzhen) Co.,Ltd.

LTE phone

Model Name: Coolpad E503

With

Hardware Version: P0

Software Version: 6.0.003.P0.161010.3505I-A00

FCC ID: R38YLE503

Issued Date: Dec 1st, 2016

Test Laboratory:

FCC 2.948 Listed: No.342690

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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REPORT HISTORY

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1. Test Laboratory

1.1. Testing Location

Location1: CTTL(South Branch)

Address: TCL International E city No. 1001 Zhongshanyuan Road, Nanshan
District, Shenzhen, Guangdong, China 518000

1.2. Testing Environment

Normal Temperature: 15-35℃

Extreme Temperature: 0/+45℃

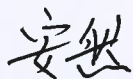
Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2016-10-19

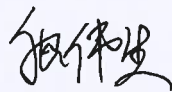
Testing End Date: 2016-11-25

1.4. Signature



An Ran

(Prepared this test report)



Tang Weisheng

(Reviewed this test report)



Zhang Bojun

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd.
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City: Shenzhen
Postal Code: /
Country: China
Telephone: 0755-83301199-83335
Fax: /

2.2. Manufacturer Information

Company Name: Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd.
Address: Coolpad Information Harbor, High-tech Industrial Park (North),
Nanshan District, Shenzhen, P.R.C.
City: Shenzhen
Postal Code: /
Country: China
Telephone: 0755-83301199-83335
Fax: /

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	LTE phone
Model Name	Coolpad E503
Market Name	/
RF Protocol	IEEE 802.11b/g/n20/n40
Operating Frequency	2412MHz~2462MHz
FCC ID	R38YLE503

3.2. Internal Identification of EUT

EUT ID*	IMEI	HW Version	SW Version
EUT1	/	P0	6.0.003.P0.161010.3505I-A00

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description	Type	SN
AE1	Charger	CA05-050100U	/

*AE ID: is used to identify the test sample in the lab internally.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz.	Nov,2015
ANSI C63.10	American National Standard for Testing Unlicensed Wireless Devices	Jun,2013

5. Test Results

5.1. Summary of Test Results

No	Test cases	Sub-clause of Part15C	Verdict
0.	Antenna Requirement	15.203	P
1.	Maximum Peak Output Power	15.247 (b)	P
2.	Peak Power Spectral Density	15.247 (e)	P
3.	Occupied 6dB Bandwidth	15.247 (a)	P
4.	Band Edges Compliance	15.247 (d)	P
5.	Transmitter Spurious Emission - Conducted	15.247 (d)	P
6.	Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	P
7.	AC Powerline Conducted Emission	15.107, 15.207	P

See **ANNEX B** and **ANNEX C** for details.

5.2. Statements

CTTL has evaluated the test cases requested by the applicant/manufacture as listed in section 5.1 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2

5.3. Terms used in the result table

Terms used in Verdict column

P	Pass
NA	Not Available
F	Fail

Abbreviations

AC	Alternating Current
AFH	Adaptive Frequency Hopping
BW	Band Width
E.I.R.P.	equivalent isotropical radiated power
ISM	Industrial, Scientific and Medical
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
Tx	Transmitter

5.4. Laboratory Environment

Semi-anechoic chamber did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Normalised site attenuation (NSA)	< ±4dB, 3m/10m distance, from 30 to 1000 MHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

Shielded room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω

Fully-anechoic chamber did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Voltage Standing Wave Ratio (VSWR)	≤6dB, from 1 to 18 GHz, 3m distance

6. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Vector Signal Analyzer	FSV40	100903	Rohde & Schwarz	2017-03-21	1 year

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Chamber	FACT5-2.0	4166	ETS-Lindgren	2018-05-13	3 years
2	Test Receiver	ESCI	100701	Rohde & Schwarz	2017-08-09	1 year
3	BiLog Antenna	VULB9163	9163 329	Schwarzbeck	2017-01-20	3 years
4	Horn Antenna	3117	00066585	ETS-Lindgren	2019-03-05	3 years
5	Spectrum Analyser	FSP40	100378	Rohde & Schwarz	2016-12-18	1 year
6	Loop Antenna	HLA6120	35779	TESEQ	2019-05-10	3 years
7	Universal Radio Communication Tester	CMW500	152499	Schwarzbeck	2017-07-21	1 year

Anechoic chamber

Fully anechoic chamber by ETS-Lindgren.

ANNEX A: MEASUREMENT RESULTS FOR RECEIVER

A.0 Antenna requirement

Measurement Limit:

Standard	Requirement
FCC CRF Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, § 15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

**Conclusion: The Directional gains of antenna used for transmitting is 0.55 dBi.
The RF transmitter uses an integrate antenna without connector.**

A.1 Maximum Average Output Power

Measurement Limit:

Standard	Limit (dBm)
FCC CRF Part 15.247(b)(1)	< 30

Measurement Results:

802.11b/g mode

Mode	Data Rate (Mbps)	Test Result (dBm)					
		2412MHz (Ch1)		2437MHz (Ch6)		2462 MHz (Ch11)	
802.11b	1	Fig.1	16.49	Fig.2	17.58	Fig.3	17.29
	2	Fig.4	16.05	Fig.5	17.54	Fig.6	16.85
	5.5	Fig.7	16.64	Fig.8	17.55	Fig.9	17.11
	11	Fig.10	16.54	Fig.11	17.41	Fig.12	17.04
802.11g	6	Fig.13	12.80	Fig.14	13.89	Fig.15	13.55
	9	Fig.16	12.77	Fig.17	13.88	Fig.18	13.55
	12	Fig.19	12.08	Fig.20	13.96	Fig.21	13.06
	18	Fig.22	12.31	Fig.23	13.47	Fig.24	13.09
	24	Fig.25	11.91	Fig.26	13.53	Fig.27	12.89
	36	Fig.28	11.93	Fig.29	13.33	Fig.30	12.90
	48	Fig.31	11.64	Fig.32	13.00	Fig.33	12.66
	54	Fig.34	11.63	Fig.35	13.00	Fig.36	12.88

802.11n-20MHz mode

Mode	Data Rate (MCS Index)	Test Result (dBm)					
		2412MHz (Ch1)		2437MHz (Ch6)		2462 MHz (Ch11)	
802.11n (20MHz)	MCS0	Fig.37	12.61	Fig.38	13.80	Fig.39	13.76
	MCS1	Fig.40	11.85	Fig.41	13.21	Fig.42	13.05
	MCS2	Fig.43	11.86	Fig.44	13.24	Fig.45	13.01
	MCS3	Fig.46	11.87	Fig.47	13.24	Fig.48	12.85
	MCS4	Fig.49	12.15	Fig.50	13.29	Fig.51	12.88
	MCS5	Fig.52	11.41	Fig.53	12.45	Fig.54	12.05
	MCS6	Fig.55	11.11	Fig.56	12.55	Fig.57	12.39
	MCS7	Fig.58	11.09	Fig.59	12.58	Fig.60	12.07

802.11n-40MHz mode

Mode	Data Rate (MCS Index)	Test Result (dBm)					
		2422MHz (Ch3)		2437MHz (Ch6)		2452 MHz (Ch9)	
802.11n (40MHz)	MCS0	Fig.61	11.99	Fig.62	12.81	Fig.63	12.21
	MCS1	Fig.64	11.62	Fig.65	12.59	Fig.66	11.88
	MCS2	Fig.67	11.94	Fig.68	12.33	Fig.69	11.78
	MCS3	Fig.70	11.83	Fig.71	12.20	Fig.72	11.67
	MCS4	Fig.73	11.44	Fig.74	12.47	Fig.75	11.73
	MCS5	Fig.76	9.80	Fig.77	10.89	Fig.78	10.26
	MCS6	Fig.79	9.38	Fig.80	10.44	Fig.81	9.61
	MCS7	Fig.82	9.33	Fig.83	10.41	Fig.84	9.58

See ANNEX C for test graphs.

Conclusion: PASS

A.2 Peak Power Spectral Density

Measurement Limit:

Standard	Limit
FCC CRF Part 15.247(d)	< 8 dBm/3 kHz

Measurement Results:

802.11b/g mode

Mode	Channel	Peak Power Spectral Density (dBm)		Conclusion
802.11b	1	Fig.85	-8.55	P
	6	Fig.86	-7.43	P
	11	Fig.87	-8.03	P
802.11g	1	Fig.88	-12.50	P
	6	Fig.89	-11.94	P
	11	Fig.90	-11.89	P

802.11n-20MHz mode

Mode	Channel	Peak Power Spectral Density(dBm)		Conclusion
802.11n (20MHz)	1	Fig.91	-13.13	P
	6	Fig.92	-10.35	P
	11	Fig.93	-12.29	P

802.11n-40MHz mode

Mode	Channel	Peak Power Spectral Density(dBm)		Conclusion
802.11n (40MHz)	3	Fig.94	-15.89	P
	6	Fig.95	-15.11	P
	9	Fig.96	-16.88	P

See ANNEX C for test graphs.

Conclusion: PASS

A.3 Occupied 6dB Bandwidth

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

Measurement Result:

802.11b/g mode

Mode	Channel	Test Results (kHz)		conclusion
802.11b	1	Fig.97	9050	P
	6	Fig.98	9500	P
	11	Fig.99	8500	P
802.11g	1	Fig.100	15100	P
	6	Fig.101	15100	P
	11	Fig.102	13800	P

802.11n-20MHz mode

Mode	Channel	Test Results (kHz)		conclusion
802.11n (20MHz)	1	Fig.103	15100	P
	6	Fig.104	15100	P
	11	Fig.105	13850	P

802.11n-40MHz mode

Mode	Channel	Test Results (kHz)		conclusion
802.11n (40MHz)	3	Fig.106	35120	P
	6	Fig.107	25040	P
	9	Fig.108	35680	P

See ANNEX C for test graphs.

Conclusion: PASS

A.4 Band Edges Compliance

Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

Measurement Result:**802.11b/g mode**

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.109	P
	11	Fig.110	P
802.11g	1	Fig.111	P
	11	Fig.112	P

802.11n-20MHz mode

Mode	Channel	Test Results	Conclusion
802.11n (20MHz)	1	Fig.113	P
	11	Fig.114	P

802.11n-40MHz mode

Mode	Channel	Test Results	Conclusion
802.11n (40MHz)	3	Fig.115	P
	9	Fig.116	P

See ANNEX C for test graphs.

Conclusion: PASS

A.5 Transmitter Spurious Emission

A.5.1 Transmitter Spurious Emission - Conducted

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

Measurement Results:

802.11b/g mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412 GHz	Fig.117	P
		30 MHz-3 GHz	Fig.118	P
		3GHz-18GHz	Fig.119	P
	6	2.437 GHz	Fig.120	P
		30 MHz-3 GHz	Fig.121	P
		3GHz-18GHz	Fig.122	P
	11	2.462 GHz	Fig.123	P
		30 MHz-3 GHz	Fig.124	P
		3GHz-18GHz	Fig.125	P
802.11g	1	2.412 GHz	Fig.126	P
		30 MHz-3 GHz	Fig.127	P
		3GHz-18GHz	Fig.128	P
	6	2.437 GHz	Fig.129	P
		30 MHz-3 GHz	Fig.130	P
		3GHz-18GHz	Fig.131	P
	11	2.462 GHz	Fig.132	P
		30 MHz-3 GHz	Fig.133	P
		3GHz-18GHz	Fig.134	P

802.11n-20MHz mode

802.11n (20MHz)	1	2.412 GHz	Fig.135	P
		30 MHz-3 GHz	Fig.136	P
		3GHz-18GHz	Fig.137	P
	6	2.437 GHz	Fig.138	P
		30 MHz-3 GHz	Fig.139	P
		3GHz-18GHz	Fig.140	P
	11	2.462 GHz	Fig.141	P
		30 MHz-3 GHz	Fig.142	P
		3GHz-18GHz	Fig.143	P
/	All channels	18GHz-26GHz	Fig.144	P

802.11n-40MHz mode

802.11n (40MHz)	3	2.422 GHz	Fig.145	P
		30 MHz-3 GHz	Fig.146	P
		3GHz-18GHz	Fig.147	P
	6	2.437 GHz	Fig.148	P
		30 MHz-3 GHz	Fig.149	P
		3GHz-18GHz	Fig.150	P
	9	2.452 GHz	Fig.151	P
		30 MHz-3 GHz	Fig.152	P
		3GHz-18GHz	Fig.153	P
/	All channels	18GHz-26GHz	Fig.154	P

See ANNEX C for test graphs.

Conclusion: PASS

A.5.2 Transmitter Spurious Emission - Radiated**Measurement Limit:**

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(μ V/m)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Note:

According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band below 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic.

The measurement results include the horizontal polarization and vertical polarization measurements.

Measurement Results:
802.11b/g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	1 GHz ~3 GHz	Fig.155	P
		3 GHz ~18 GHz	Fig.156	P
	6	9 kHz ~30 MHz	Fig.157	P
		30 MHz ~1 GHz	Fig.158	P
		1 GHz ~3 GHz	Fig.159	P
		3 GHz ~18 GHz	Fig.160	P
		18 GHz ~26.5 GHz	Fig.161	P
	11	1 GHz ~3 GHz	Fig.162	P
		3 GHz ~18 GHz	Fig.163	P
	Power(CH1)	2.38 GHz ~ 2.45 GHz	Fig.164	P
	Power(CH11)	2.45 GHz ~ 2.5 GHz	Fig.165	P
802.11g	1	1 GHz ~3 GHz	Fig.166	P
		3 GHz ~18 GHz	Fig.167	P
	6	9 kHz ~30 MHz	Fig.168	P
		30 MHz ~1 GHz	Fig.169	P
		1 GHz ~3 GHz	Fig.170	P
		3 GHz ~18 GHz	Fig.171	P
		18 GHz ~26.5 GHz	Fig.172	P
	11	1 GHz ~3 GHz	Fig.173	P
		3 GHz ~18 GHz	Fig.174	P
	Power(CH1)	2.38 GHz ~ 2.45 GHz	Fig.175	P
	Power(CH11)	2.45 GHz ~ 2.5 GHz	Fig.176	P

802.11n-20MHz mode

802.11n-20 MHz	1	1 GHz ~3 GHz	Fig.177	P
		3 GHz ~18 GHz	Fig.178	P
	6	9 kHz ~30 MHz	Fig.179	P
		30 MHz ~1 GHz	Fig.180	P
		1 GHz ~3 GHz	Fig.181	P
		3 GHz ~18 GHz	Fig.182	P
		18 GHz ~26.5 GHz	Fig.183	P
	11	1 GHz ~3 GHz	Fig.184	P
		3 GHz ~18 GHz	Fig.185	P
	Power(CH1)	2.38 GHz ~ 2.45 GHz	Fig.186	P
	Power(CH11)	2.45 GHz ~ 2.5 GHz	Fig.187	P

802.11n-40MHz mode

802.11n-40 MHz	3	1 GHz ~3 GHz	Fig.188	P
		3 GHz ~18 GHz	Fig.189	P
	6	9 kHz ~30 MHz	Fig.190	P
		30 MHz ~1 GHz	Fig.191	P
		1 GHz ~3 GHz	Fig.192	P
		3 GHz ~18 GHz	Fig.193	P
		18 GHz ~26.5 GHz	Fig.194	P
	9	1 GHz ~3 GHz	Fig.195	P
		3 GHz ~18 GHz	Fig.196	P
	Power(CH3)	2.38 GHz ~ 2.45 GHz	Fig.197	P
	Power(CH9)	2.45 GHz ~ 2.5 GHz	Fig.198	P

802.11b CH1 (1-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2731.000000	49.37	74.00	24.63	20.9	H
2790.500000	48.44	74.00	25.56	21.4	H
2831.166667	49.66	74.00	24.34	21.3	V
2870.666667	49.59	74.00	24.41	21.6	H
2909.500000	51.09	74.00	22.91	22.0	V
2952.666667	50.92	74.00	23.08	22.6	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2733.500000	40.77	54.00	13.23	21.0	H
2796.833333	40.79	54.00	13.21	21.4	H
2839.000000	40.92	54.00	13.08	21.6	H
2878.500000	41.10	54.00	12.90	21.8	H
2916.833333	41.31	54.00	12.69	22.0	H
2957.500000	42.16	54.00	11.85	22.7	V

802.11b CH1 (3-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4823.500000	50.72	74.00	23.28	0.2	H
16593.000000	49.69	74.00	24.31	15.9	V
16748.000000	48.98	74.00	25.02	16.1	V
17024.000000	50.23	74.00	23.77	16.2	H
17439.500000	50.28	74.00	23.72	16.7	H
17703.500000	49.72	74.00	24.28	16.8	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4823.500000	48.42	54.00	5.58	0.2	H
16553.000000	43.84	54.00	10.16	16.0	H
16765.500000	43.95	54.00	10.05	16.1	H
17002.000000	43.69	54.00	10.31	16.4	H
17314.000000	43.77	54.00	10.23	16.3	V
17608.500000	44.85	54.00	9.15	16.7	V

802.11b CH 6(1-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2705.000000	48.56	74.00	25.44	20.6	H
2751.333333	49.68	74.00	24.32	21.3	H
2791.166667	48.79	74.00	25.21	20.9	V
2839.333333	49.40	74.00	24.60	21.6	H
2857.000000	47.84	74.00	26.16	21.3	H
2883.666667	50.35	74.00	23.65	21.9	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2709.500000	40.70	54.00	13.31	20.5	H
2754.000000	39.41	54.00	14.59	21.2	V
2805.000000	40.61	54.00	13.39	21.3	V
2839.000000	40.57	54.00	13.43	21.6	H
2880.333333	41.06	54.00	12.94	21.9	H
2923.666667	42.04	54.00	11.96	22.2	H

802.11b CH6 (3-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4874.000000	45.07	74.00	28.93	0.1	H
15301.000000	48.22	74.00	25.78	13.6	V
15862.500000	48.31	74.00	25.69	14.7	H
16257.500000	48.64	74.00	25.36	15.3	H
16785.500000	49.96	74.00	24.04	16.2	V
17087.500000	50.40	74.00	23.60	16.1	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4874.000000	41.27	54.00	12.73	0.1	H
15274.000000	42.46	54.00	11.54	13.4	H
15901.000000	43.10	54.00	10.90	14.8	H
16270.000000	43.37	54.00	10.63	15.3	V
16780.000000	43.41	54.00	10.59	16.3	H
17102.000000	44.27	54.00	9.73	16.2	V

802.11b CH 11(1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2747.666667	48.26	74.00	25.74	21.3	V
2809.333333	49.81	74.00	24.19	21.3	V
2837.333333	48.97	74.00	25.03	21.3	V
2877.500000	49.20	74.00	24.80	21.9	V
2907.500000	48.95	74.00	25.05	21.9	H
2947.166667	50.06	74.00	23.94	22.5	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2747.000000	41.18	54.00	12.82	21.4	H
2815.500000	40.88	54.00	13.12	21.6	H
2838.500000	40.80	54.00	13.20	21.6	H
2883.500000	41.50	54.00	12.50	21.9	V
2915.166667	41.22	54.00	12.78	22.0	H
2952.000000	42.24	54.00	11.76	22.6	V

802.11b CH 11(3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4923.500000	45.09	74.00	28.91	0.1	H
15966.000000	49.11	74.00	24.89	15.0	H
16338.000000	48.62	74.00	25.38	15.5	H
16726.000000	49.24	74.00	24.76	16.1	H
16987.000000	50.01	74.00	23.99	16.5	V
17211.000000	51.38	74.00	22.62	16.1	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
4923.500000	43.34	54.00	10.66	0.1	H
15968.500000	44.25	54.00	9.75	15.1	H
16363.500000	43.84	54.00	10.16	15.4	H
16702.000000	43.95	54.00	10.05	16.3	V
16992.500000	43.74	54.00	10.26	16.5	V
17302.500000	44.17	54.00	9.83	16.2	H

802.11g CH1 (1G-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2656.500000	47.89	74.00	26.11	20.6	H
2714.500000	48.66	74.00	25.34	20.3	V
2776.666667	48.38	74.00	25.62	20.8	V
2832.833333	48.87	74.00	25.13	21.6	H
2863.666667	49.89	74.00	24.11	21.4	H
2903.000000	50.25	74.00	23.75	21.9	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2657.333333	39.82	54.00	14.18	20.6	H
2720.666667	40.52	54.00	13.48	20.6	H
2782.000000	40.13	54.00	13.87	21.1	H
2837.500000	40.45	54.00	13.55	21.6	H
2864.666667	38.75	54.00	15.25	21.4	H
2901.333333	40.87	54.00	13.13	22.0	V

802.11g CH1 (3G-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16844.500000	49.25	74.00	24.75	16.3	V
17016.000000	49.82	74.00	24.18	16.4	V
17200.500000	48.65	74.00	25.35	16.3	V
17484.000000	49.90	74.00	24.10	16.6	V
17617.500000	49.14	74.00	24.86	16.5	V
17752.000000	48.80	74.00	25.20	17.0	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16785.500000	42.83	54.00	11.17	16.2	V
16935.000000	43.34	54.00	10.66	16.2	V
17274.000000	43.30	54.00	10.70	16.3	V
17504.500000	44.14	54.00	9.86	16.6	V
17651.500000	44.53	54.00	9.47	17.0	V
17825.500000	43.58	54.00	10.42	17.3	V

802.11g CH6 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2778.833333	48.84	74.00	25.16	20.9	V
2811.500000	48.90	74.00	25.10	21.3	V
2845.500000	49.61	74.00	24.39	21.5	H
2890.000000	49.13	74.00	24.87	22.2	H
2927.000000	50.30	74.00	23.70	22.3	H
2972.166667	49.78	74.00	24.22	22.5	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2790.000000	40.62	54.00	13.38	21.4	H
2827.500000	41.12	54.00	12.88	21.6	H
2850.333333	40.84	54.00	13.16	21.4	H
2881.000000	41.50	54.00	12.50	21.9	V
2913.666667	41.27	54.00	12.73	22.0	V
2959.166667	42.06	54.00	11.94	22.7	V

802.11g CH6 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16738.500000	50.04	74.00	23.96	16.3	V
17075.000000	49.51	74.00	24.49	16.3	H
17178.000000	49.84	74.00	24.16	16.0	H
17336.500000	49.89	74.00	24.11	16.4	V
17577.000000	50.47	74.00	23.53	16.9	H
17743.500000	49.00	74.00	25.00	17.0	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16738.500000	43.52	54.00	10.48	16.3	V
17074.000000	44.95	54.00	9.05	16.3	V
17211.000000	44.64	54.00	9.36	16.2	V
17349.500000	43.68	54.00	10.32	16.4	V
17574.000000	44.53	54.00	9.47	16.9	H
17801.500000	44.74	54.00	9.26	17.4	V

802.11g CH11 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2799.500000	49.68	74.00	24.32	21.5	H
2841.333333	49.60	74.00	24.40	21.6	H
2868.500000	49.37	74.00	24.63	21.6	H
2921.166667	50.28	74.00	23.72	22.2	H
2938.000000	49.73	74.00	24.27	22.2	V
2972.833333	50.18	74.00	23.82	22.5	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2799.500000	40.38	54.00	13.62	21.5	H
2841.333333	40.85	54.00	13.15	21.4	V
2875.666667	41.03	54.00	12.97	21.9	V
2914.333333	41.19	54.00	12.81	22.0	H
2952.000000	41.76	54.00	12.24	22.6	V
2983.666667	41.97	54.00	12.03	22.1	H

802.11g CH11 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16080.000000	49.09	74.00	24.91	15.2	H
16542.500000	49.30	74.00	24.70	16.0	H
16830.000000	49.20	74.00	24.80	16.2	H
17135.500000	49.30	74.00	24.70	16.2	H
17368.000000	49.31	74.00	24.69	16.4	H
17558.000000	49.84	74.00	24.16	16.8	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16080.000000	42.84	54.00	11.16	15.2	H
16555.000000	43.58	54.00	10.42	16.0	H
16956.000000	43.88	54.00	10.12	16.2	H
17118.500000	43.37	54.00	10.63	16.3	H
17368.000000	43.47	54.00	10.53	16.4	H
17582.000000	44.40	54.00	9.60	16.8	H

802.11n-20MHz CH1 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2773.833333	50.44	74.00	23.56	20.8	V
2801.000000	49.03	74.00	24.97	21.5	H
2832.666667	50.05	74.00	23.95	21.6	H
2884.000000	50.27	74.00	23.73	21.9	V
2922.833333	50.79	74.00	23.21	22.2	H
2958.000000	50.33	74.00	23.67	22.7	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2773.833333	40.54	54.00	13.46	20.9	H
2813.166667	41.35	54.00	12.65	21.6	H
2844.166667	40.46	54.00	13.54	21.5	H
2892.500000	42.33	54.00	11.67	21.9	V
2933.166667	41.84	54.00	12.16	22.3	V
2967.166667	42.15	54.00	11.85	22.6	V

802.11n-20MHz CH1 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16642.500000	49.59	74.00	24.41	16.2	V
16916.000000	49.48	74.00	24.52	16.1	H
17148.000000	49.65	74.00	24.35	16.4	V
17311.000000	50.26	74.00	23.74	16.3	H
17506.500000	50.09	74.00	23.91	16.6	V
17680.500000	48.89	74.00	25.11	16.8	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16629.000000	43.09	54.00	10.91	16.1	V
16916.000000	43.12	54.00	10.88	16.1	H
17152.500000	44.37	54.00	9.63	16.3	H
17308.500000	43.85	54.00	10.15	16.3	H
17512.000000	43.96	54.00	10.04	16.5	H
17671.500000	44.02	54.00	9.98	16.9	H

802.11n-20MHz CH6 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2755.666667	49.17	74.00	24.83	21.2	H
2815.666667	48.60	74.00	25.40	21.6	H
2859.833333	48.74	74.00	25.26	21.3	H
2889.166667	49.80	74.00	24.20	22.2	H
2926.000000	48.98	74.00	25.02	22.2	V
2957.500000	49.33	74.00	24.67	22.4	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2755.666667	40.13	54.00	13.87	21.2	H
2815.666667	40.79	54.00	13.21	21.6	H
2857.500000	40.59	54.00	13.41	21.3	H
2891.000000	41.36	54.00	12.64	22.1	H
2924.666667	41.65	54.00	12.35	22.1	V
2960.333333	41.70	54.00	12.30	22.7	V

802.11n-20MHz CH6 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16525.500000	49.92	74.00	24.08	15.8	H
16882.500000	49.39	74.00	24.61	16.1	H
17058.000000	50.04	74.00	23.96	16.2	H
17267.500000	48.67	74.00	25.33	16.1	H
17526.500000	50.03	74.00	23.97	16.5	V
17650.500000	50.40	74.00	23.60	17.0	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16502.500000	42.83	54.00	11.17	15.8	H
16837.000000	43.47	54.00	10.53	16.3	H
17063.000000	44.17	54.00	9.83	16.3	H
17253.000000	44.25	54.00	9.75	16.2	V
17496.000000	44.07	54.00	9.93	16.6	H
17668.500000	44.27	54.00	9.73	16.9	V

802.11n-20MHz CH11 (1GHz-3GHz)

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2739.500000	39.90	54.00	14.10	21.1	H
2819.333333	41.32	54.00	12.68	21.2	V
2858.166667	40.60	54.00	13.40	21.3	H
2891.000000	41.12	54.00	12.88	22.1	H
2932.666667	41.20	54.00	12.80	22.4	H
2963.000000	42.14	54.00	11.86	22.4	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2739.500000	39.90	54.00	14.10	21.1	H
2819.333333	41.32	54.00	12.68	21.2	V
2858.166667	40.60	54.00	13.40	21.3	H
2891.000000	41.12	54.00	12.88	22.1	H
2932.666667	41.20	54.00	12.80	22.4	H
2963.000000	42.14	54.00	11.86	22.4	H

802.11n-20MHz CH11 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Corr. (dB)	Pol	Frequency (MHz)
17297.500000	50.01	74.00	16.3	V	17297.500000
17512.500000	50.26	74.00	16.5	H	17512.500000
17608.000000	49.54	74.00	16.7	V	17608.000000
17733.500000	48.77	74.00	17.1	H	17733.500000
17798.000000	48.96	74.00	17.4	H	17798.000000
17879.000000	50.04	74.00	17.6	V	17879.000000

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Corr. (dB)	Pol	Frequency (MHz)
17238.000000	44.92	54.00	16.2	V	17238.000000
17452.500000	44.06	54.00	16.5	H	17452.500000
17599.000000	44.12	54.00	16.6	H	17599.000000
17679.500000	43.19	54.00	16.8	V	17679.500000
17766.000000	43.96	54.00	17.1	V	17766.000000
17832.500000	44.21	54.00	17.4	V	17832.500000

802.11n-40MHz CH3 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2751.333333	49.45	74.00	24.55	21.2	V
2789.833333	48.32	74.00	25.68	21.4	H
2843.833333	49.28	74.00	24.72	21.4	V
2881.666667	49.96	74.00	24.04	21.9	V
2909.666667	50.10	74.00	23.90	22.0	V
2940.333333	48.75	74.00	25.25	22.3	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2749.166667	40.24	54.00	13.76	21.4	H
2786.166667	40.16	54.00	13.84	21.3	H
2840.833333	40.70	54.00	13.30	21.6	H
2887.000000	40.65	54.00	13.35	22.1	H
2912.500000	41.13	54.00	12.87	22.0	V
2948.833333	41.67	54.00	12.33	22.5	V

802.11n-40MHz CH3 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16201.500000	48.83	74.00	25.17	15.4	H
16505.000000	49.01	74.00	24.99	15.8	V
16958.500000	49.60	74.00	24.40	16.3	H
17292.000000	49.10	74.00	24.90	16.5	H
17574.000000	49.61	74.00	24.39	17.0	V
17740.500000	49.77	74.00	24.23	17.0	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16191.000000	43.26	54.00	10.74	15.4	V
16541.500000	43.37	54.00	10.63	16.0	H
16964.000000	43.83	54.00	10.17	16.3	H
17292.000000	43.93	54.00	10.07	16.5	H
17592.000000	44.00	54.00	10.00	16.7	H
17737.500000	43.86	54.00	10.14	17.1	H

802.11n-40MHz CH6 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2732.333333	52.23	74.00	21.77	21.0	H
2790.500000	48.87	74.00	25.13	21.4	H
2840.333333	49.00	74.00	25.00	21.3	V
2886.666667	49.36	74.00	24.64	21.9	V
2917.333333	50.10	74.00	23.90	22.0	V
2953.500000	50.68	74.00	23.32	22.5	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2730.000000	40.86	54.00	13.14	20.9	H
2793.000000	40.68	54.00	13.32	21.4	H
2844.666667	40.11	54.00	13.89	21.5	H
2887.833333	41.48	54.00	12.52	22.1	H
2920.500000	41.81	54.00	12.19	22.0	V
2963.833333	41.40	54.00	12.60	22.7	V

802.11n-40MHz CH6 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16499.000000	49.27	74.00	24.73	15.7	H
16791.000000	49.96	74.00	24.04	16.2	H
16986.500000	50.08	74.00	23.92	16.5	H
17188.500000	50.11	74.00	23.89	16.1	V
17490.500000	50.28	74.00	23.72	16.6	H
17797.000000	50.80	74.00	23.20	17.4	V

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16563.500000	43.77	54.00	10.23	16.0	V
16832.500000	44.50	54.00	9.50	16.3	V
17054.000000	44.07	54.00	9.93	16.3	V
17325.500000	44.87	54.00	9.13	16.4	H
17513.000000	45.26	54.00	8.74	16.6	V
17798.000000	45.68	54.00	8.32	17.4	H

802.11n-40MHz CH9 (1GHz-3GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2761.000000	48.88	74.00	25.12	21.1	H
2793.666667	50.55	74.00	23.45	21.0	V
2847.333333	49.33	74.00	24.68	21.5	H
2892.500000	49.38	74.00	24.62	22.1	H
2923.000000	50.00	74.00	24.00	22.2	H
2959.666667	49.48	74.00	24.52	22.4	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
2756.500000	40.48	54.00	13.52	21.2	H
2798.666667	40.25	54.00	13.75	21.5	H
2852.166667	40.49	54.00	13.51	21.4	V
2899.000000	41.56	54.00	12.44	22.0	V
2930.500000	41.43	54.00	12.57	22.3	H
2959.333333	41.31	54.00	12.69	22.7	V

802.11n-40MHz CH9 (3GHz-18GHz)

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16579.500000	49.27	74.00	24.73	15.9	V
16803.000000	49.46	74.00	24.54	16.1	V
17148.500000	49.69	74.00	24.31	16.3	H
17281.000000	51.26	74.00	22.74	16.4	V
17441.000000	49.80	74.00	24.20	16.8	V
17662.500000	48.82	74.00	25.18	17.0	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Corr. (dB)	Pol
16578.500000	43.43	54.00	10.57	16.0	H
16801.000000	43.27	54.00	10.73	16.0	H
17149.000000	44.01	54.00	9.99	16.3	H
17280.500000	43.42	54.00	10.58	16.3	H
17452.500000	43.75	54.00	10.25	16.5	H
17649.500000	44.21	54.00	9.79	17.0	V

See ANNEX C for test graphs.

Conclusion: PASS

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= $P_{Mea}+A_{Rpl}= P_{Mea}+Cable Loss+Antenna Factor$

A.6 AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)-AE1

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)	Conclusion
		Traffic	
0.15 to 0.5	66 to 56	Fig.199	P
0.5 to 5	56		
5 to 30	60		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)-AE1

Frequency range (MHz)	Average-peak Limit (dB μ V)	Result (dB μ V)	Conclusion
		Traffic	
0.15 to 0.5	56 to 46	Fig.199	P
0.5 to 5	46		
5 to 30	50		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Quasi-peak Limit)-AE1

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)	Conclusion
		Idle	
0.15 to 0.5	66 to 56	Fig.200	P
0.5 to 5	56		
5 to 30	60		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)-AE1

Frequency range (MHz)	Average-peak Limit (dB μ V)	Result (dB μ V)	Conclusion
		Idle	
0.15 to 0.5	56 to 46	Fig.200	P
0.5 to 5	46		
5 to 30	50		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Test Condition:

Voltage (V)	Frequency (Hz)
240	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)-AE1

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)	Conclusion
		Traffic	
0.16 to 0.5	66 to 56	Fig.201	P
0.5 to 5	56		
5 to 30	60		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)-AE1

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)	Conclusion
		Traffic	
0.15 to 0.5	56 to 46	Fig.201	P
0.5 to 5	46		
5 to 30	50		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Quasi-peak Limit)-AE1

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)	Conclusion
		Idle	
0.16 to 0.5	66 to 56	Fig.202	P
0.5 to 5	56		
5 to 30	60		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)-AE1

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)	Conclusion
		Idle	
0.15 to 0.5	56 to 46	Fig.202	P
0.5 to 5	46		
5 to 30	50		

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

See ANNEX C for test graphs.

Conclusion: PASS

ANNEX B: TEST LAYOUTS

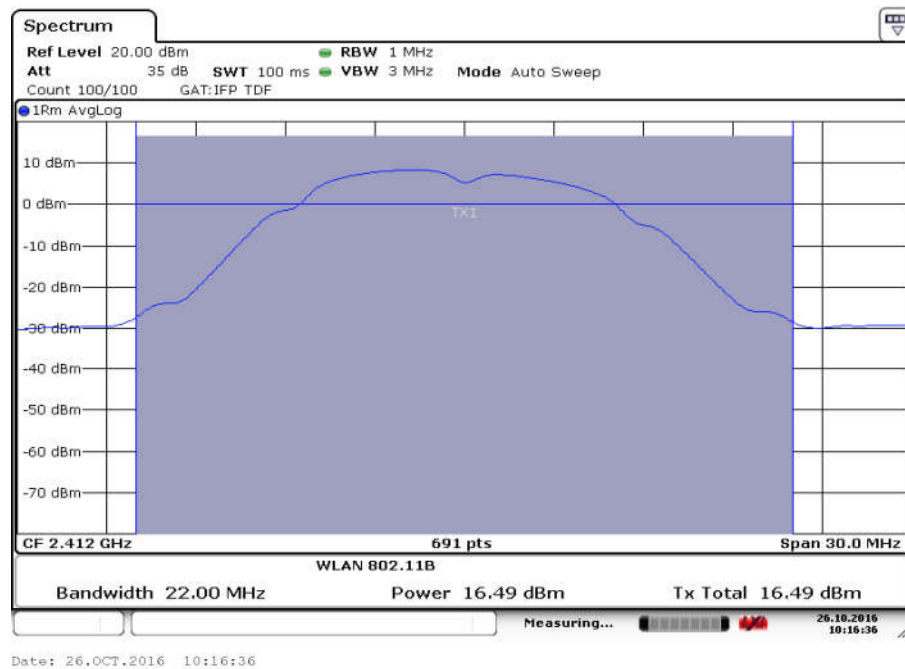


Fig.1 Maximum Average Output Power (802.11b, Ch 1,1Mbps)

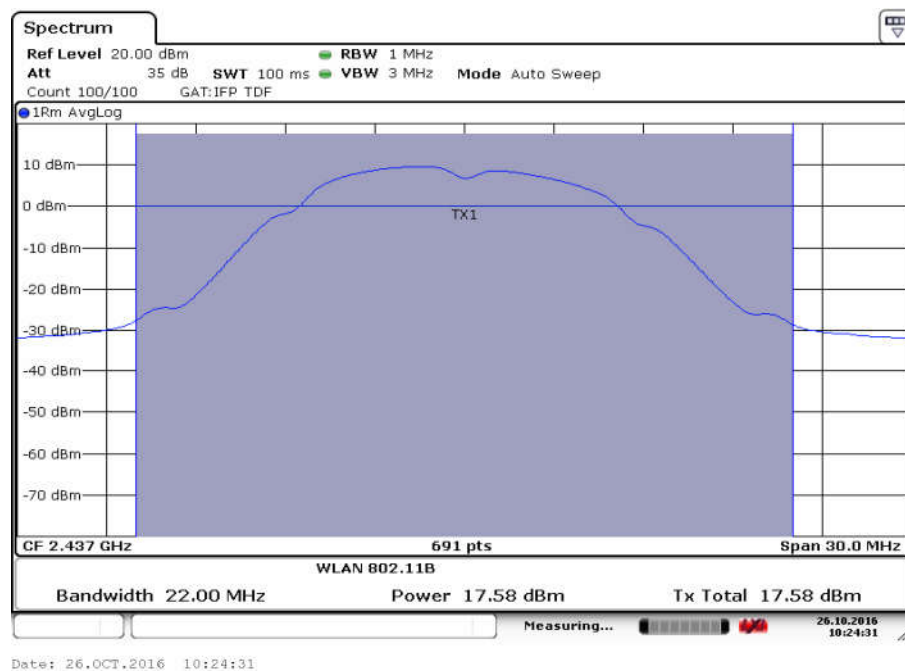


Fig.2 Maximum Average Output Power (802.11b, Ch 6,1Mbps)

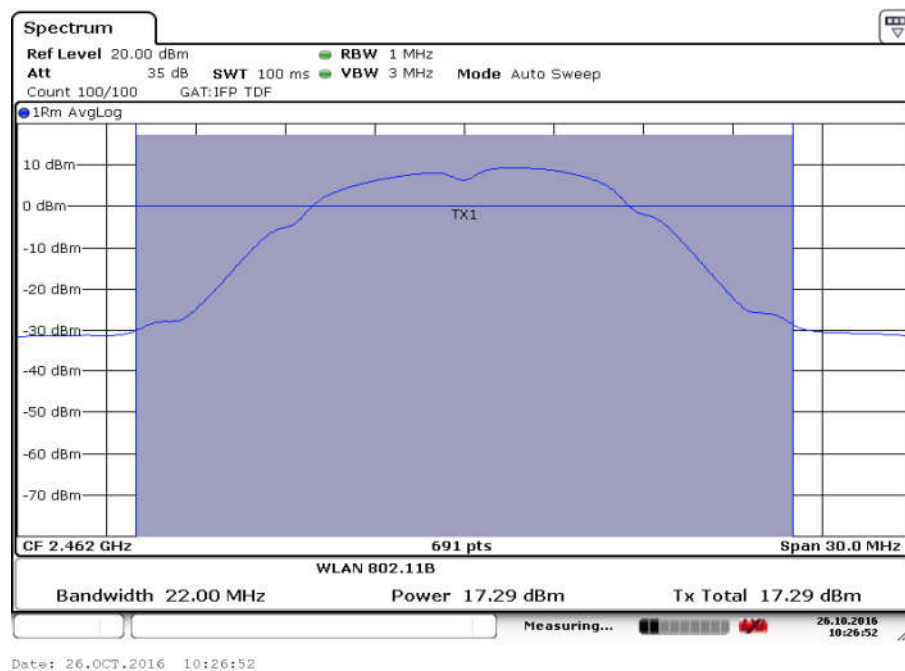


Fig.3 Maximum Average Output Power (802.11b, Ch 11,1Mbps)

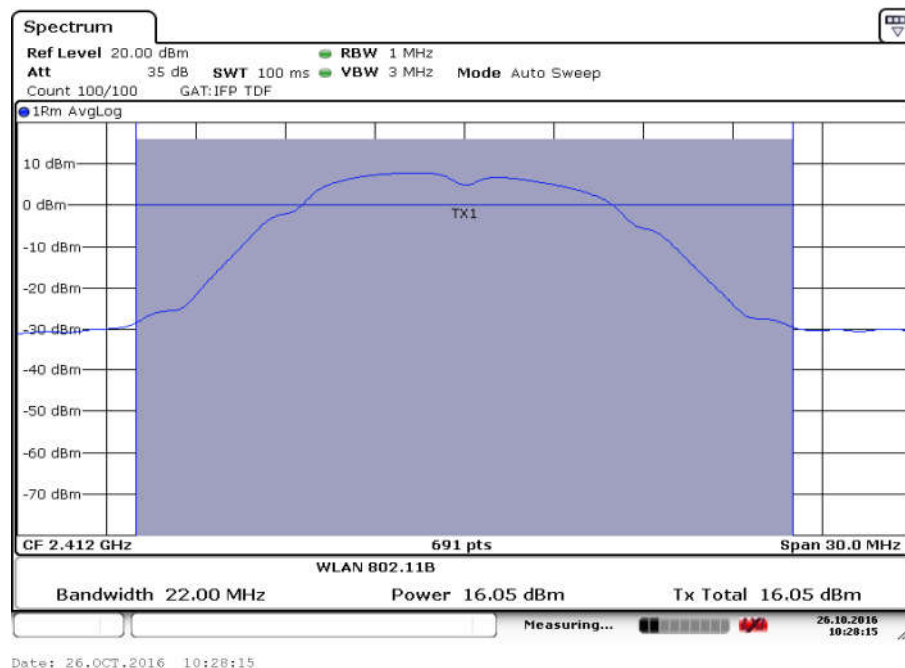


Fig.4 Maximum Average Output Power (802.11b, Ch 1,2Mbps)

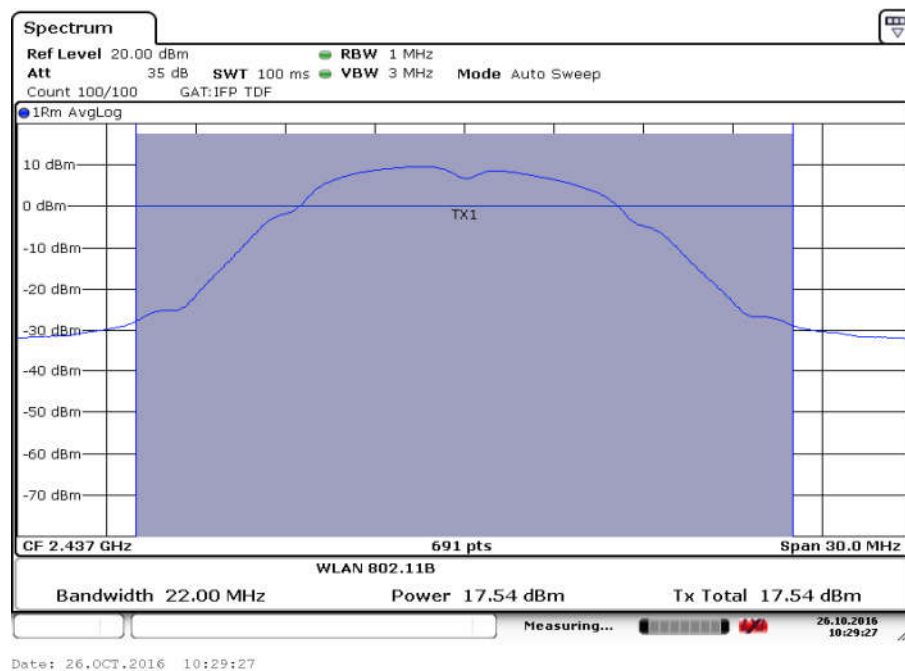


Fig.5 Maximum Average Output Power (802.11b, Ch 6,2Mbps)

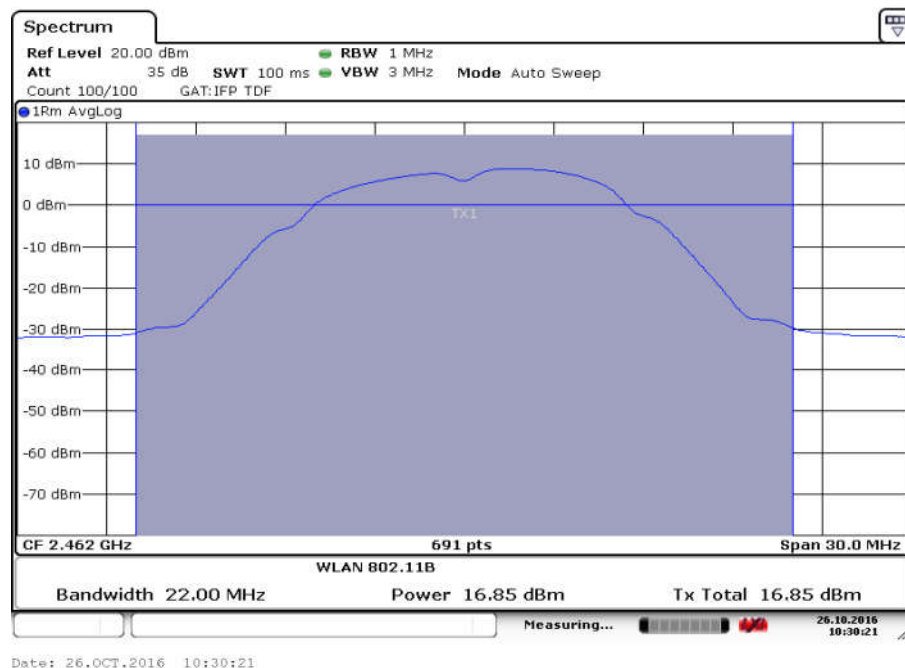


Fig.6 Maximum Average Output Power (802.11b, Ch 11,2Mbps)

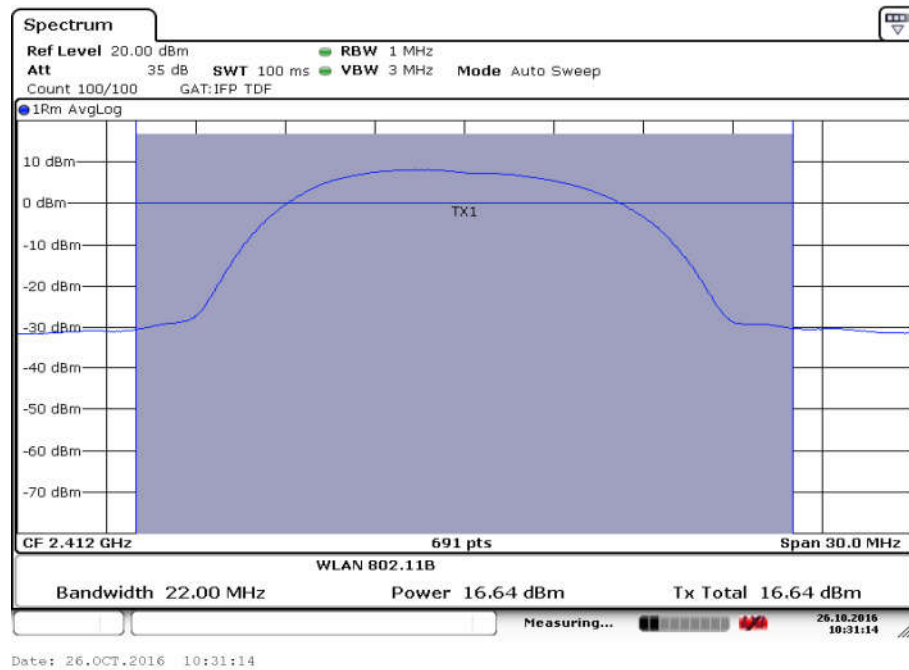


Fig.7 Maximum Average Output Power (802.11b, Ch 1,5.5Mbps)

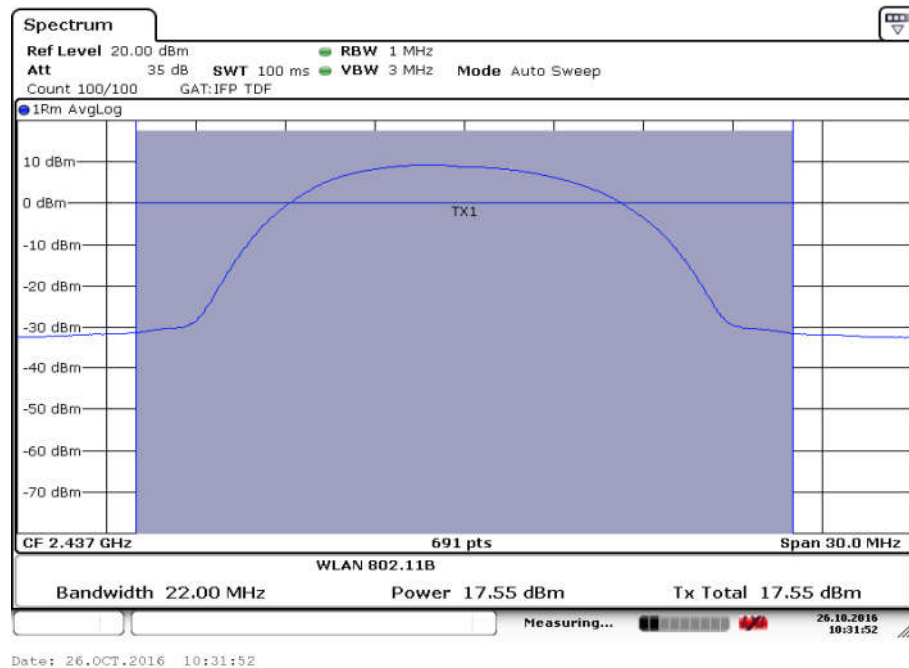


Fig.8 Maximum Average Output Power (802.11b, Ch 6,5.5Mbps)

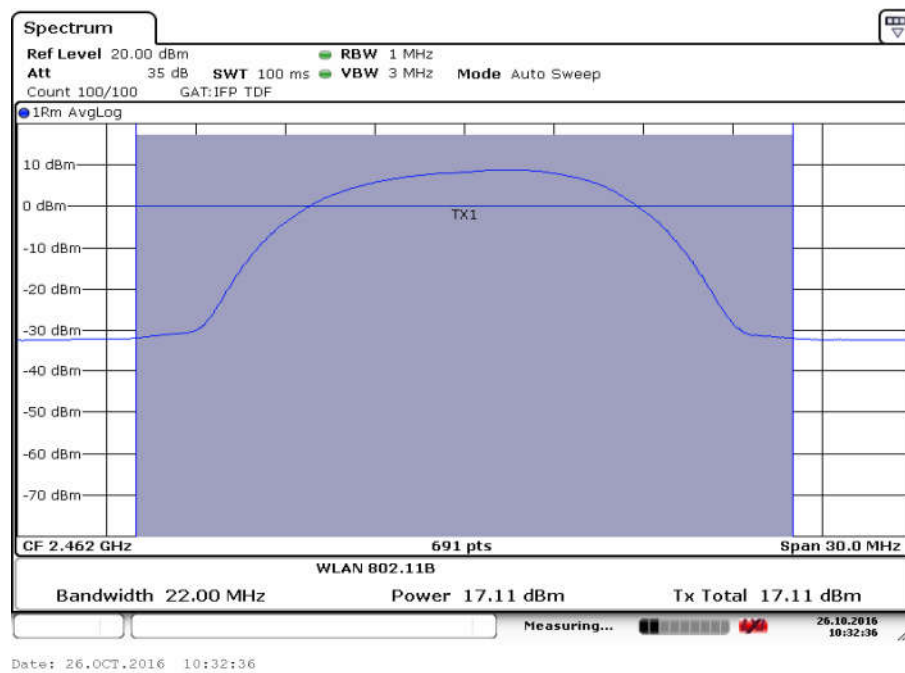


Fig.9 Maximum Average Output Power (802.11b, Ch 11,5.5Mbps)

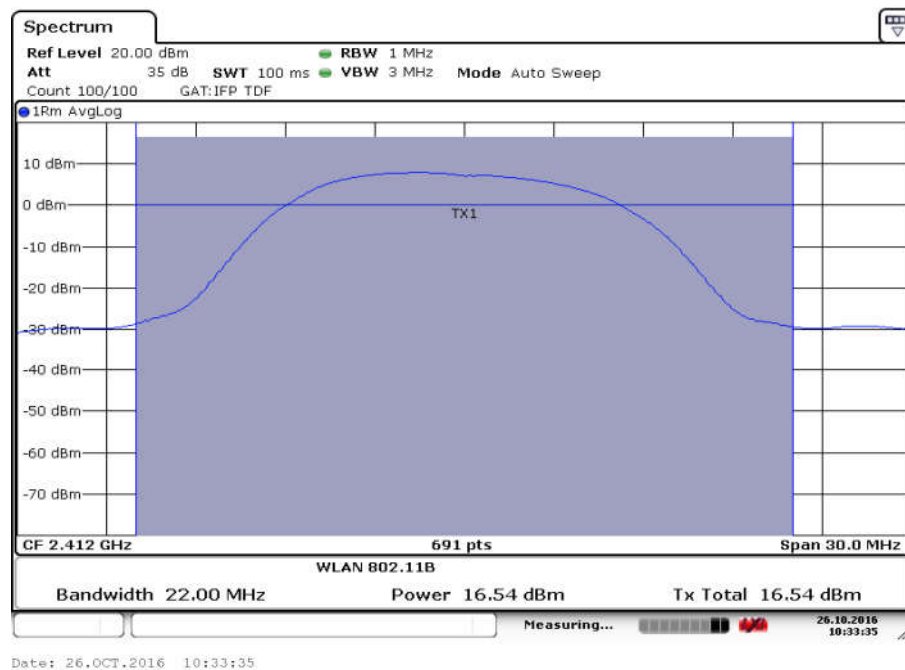


Fig.10 Maximum Average Output Power (802.11b, Ch 1,11Mbps)

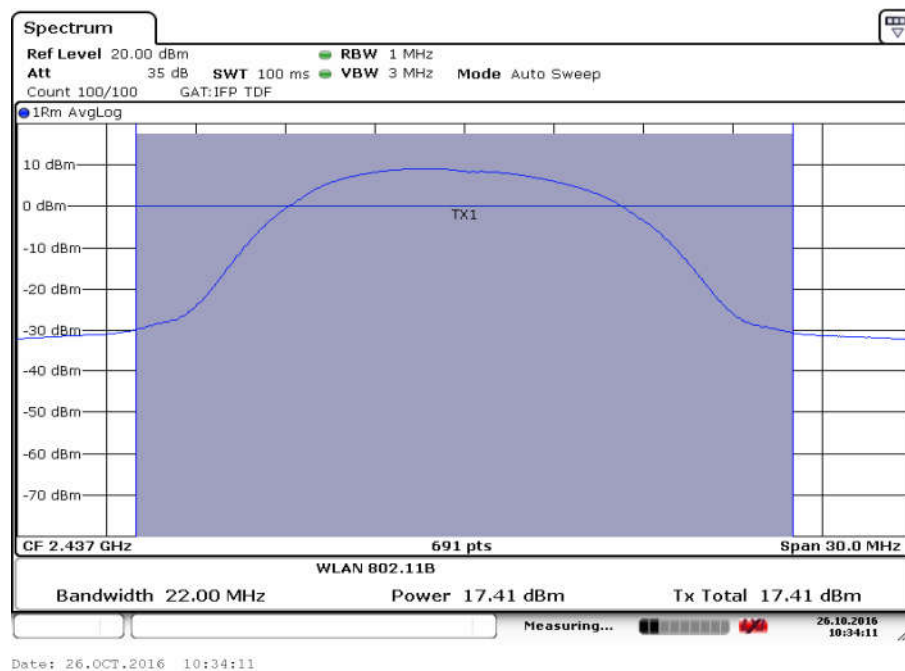


Fig.11 Maximum Average Output Power (802.11b, Ch 6,11Mbps)

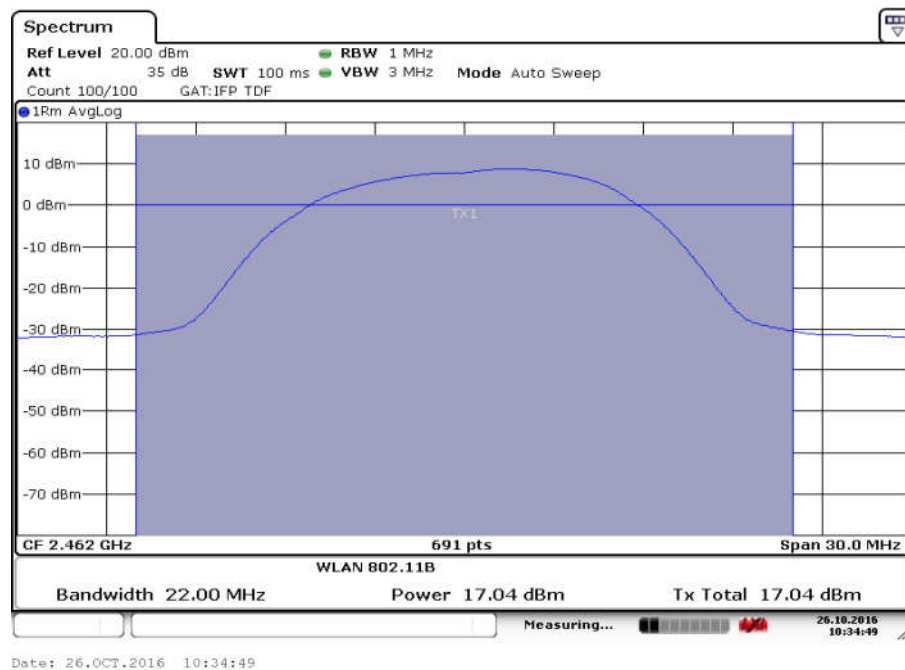


Fig.12 Maximum Average Output Power (802.11b, Ch 11,11Mbps)

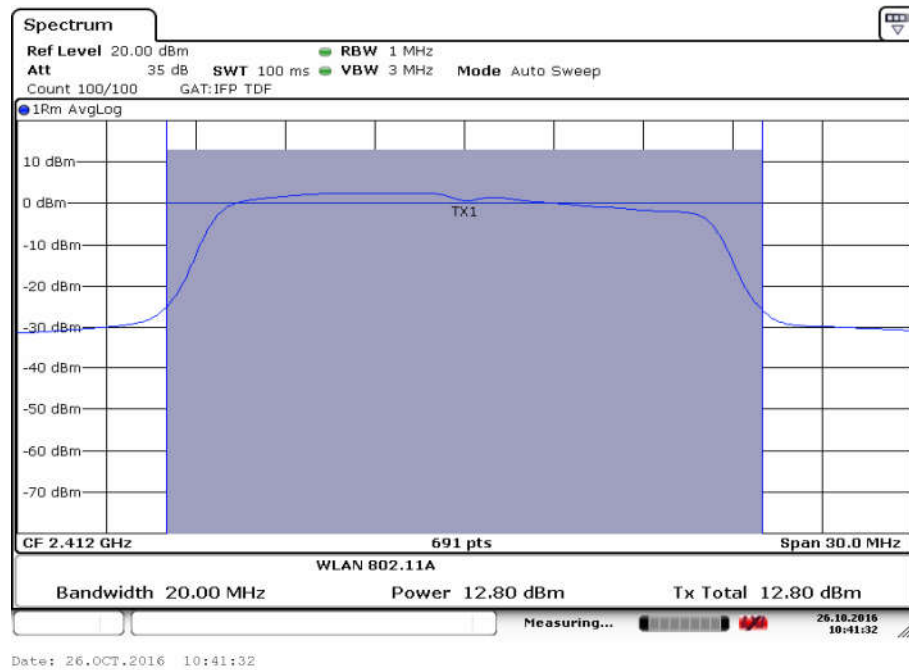


Fig.13 Maximum Average Output Power (802.11g, Ch 1,6Mbps)

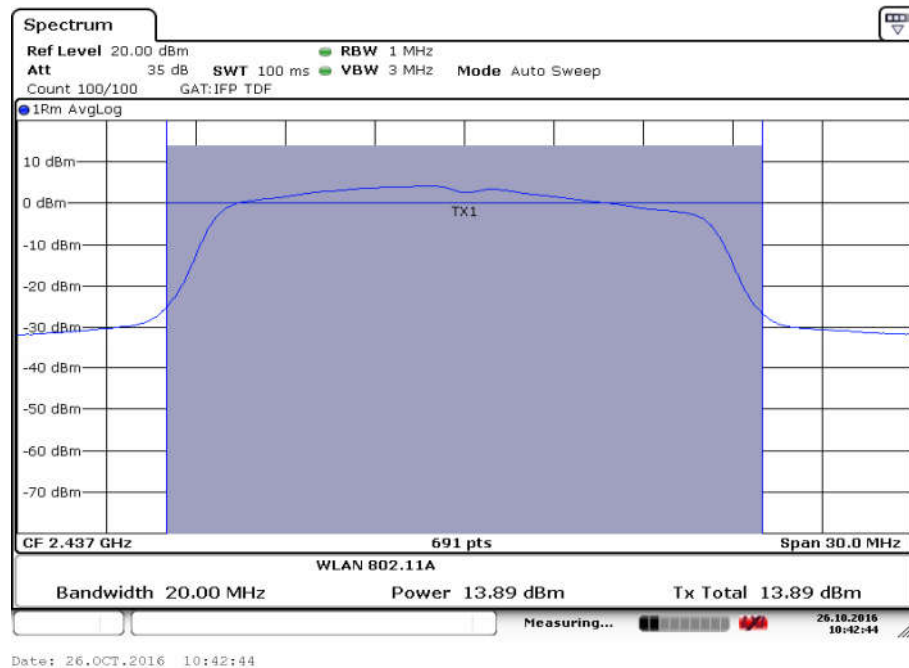


Fig.14 Maximum Average Output Power (802.11g, Ch 6,6Mbps)

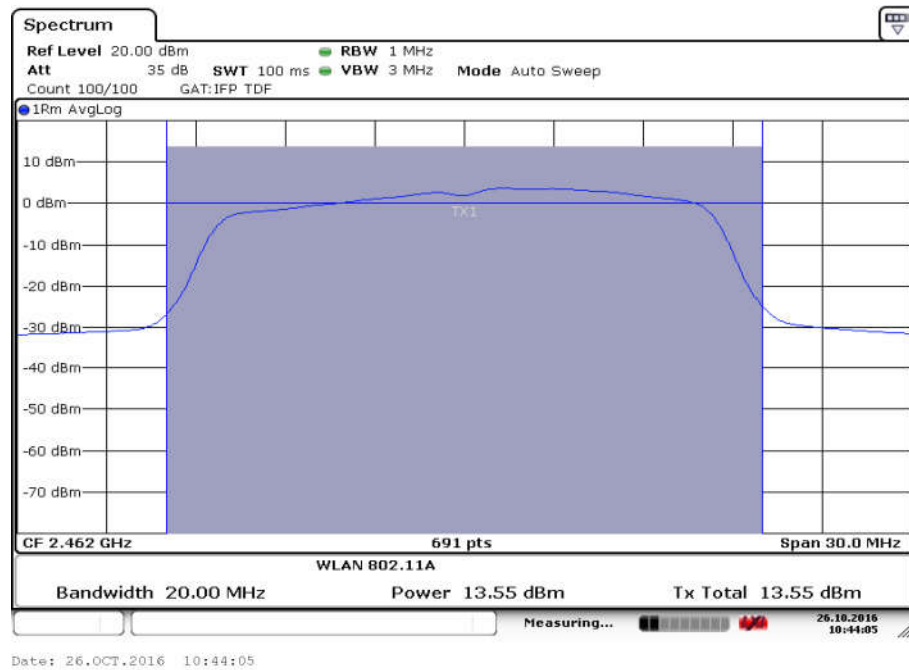


Fig.15 Maximum Average Output Power (802.11g, Ch 11,6Mbps)

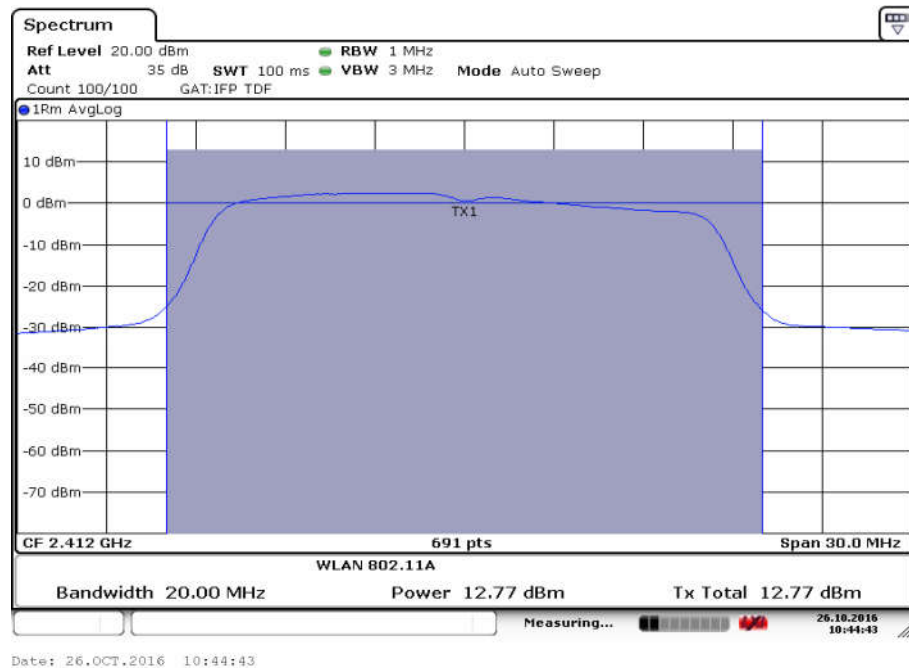


Fig.16 Maximum Average Output Power (802.11g, Ch 1,9Mbps)

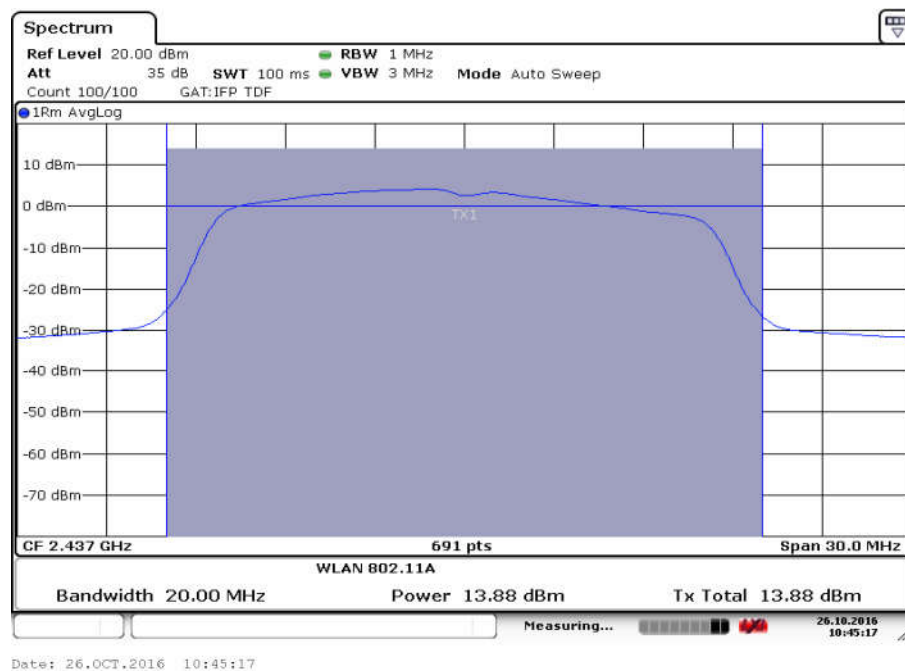


Fig.17 Maximum Average Output Power (802.11g, Ch 6,9Mbps)

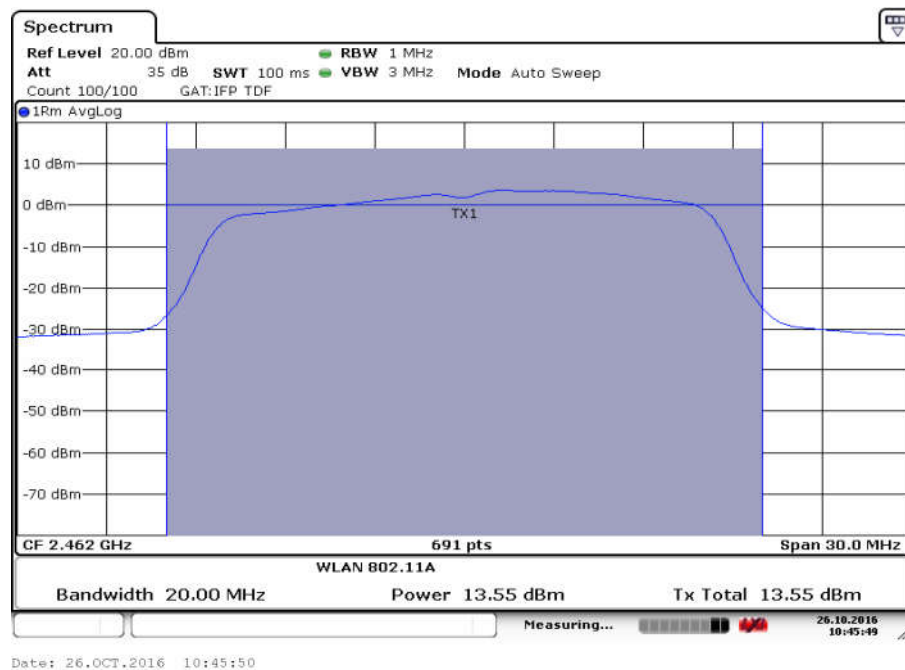


Fig.18 Maximum Average Output Power (802.11g, Ch 11,9Mbps)

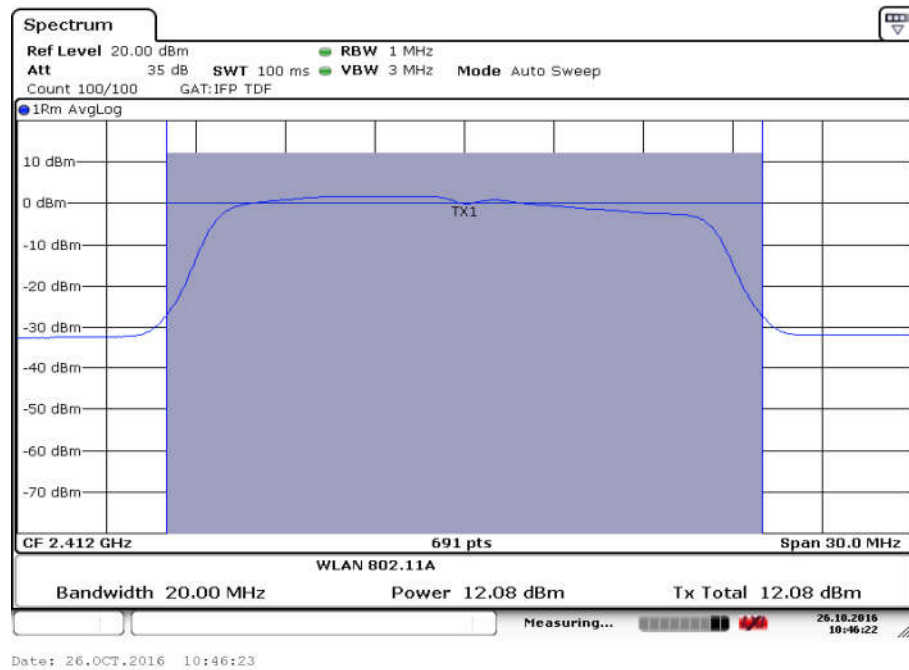


Fig.19 Maximum Average Output Power (802.11g, Ch 1,12Mbps)

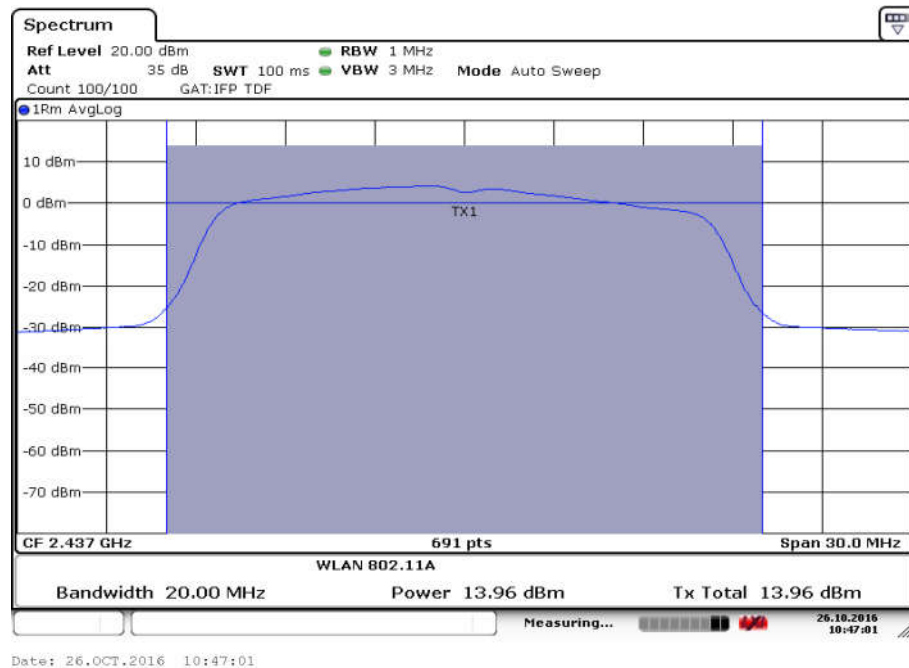


Fig.20 Maximum Average Output Power (802.11g, Ch 6,12Mbps)

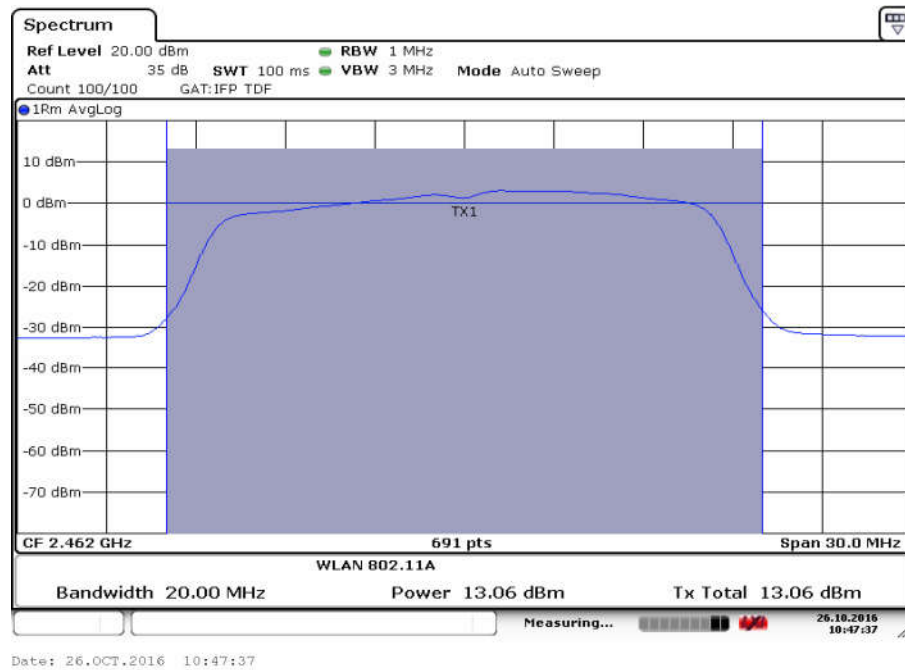


Fig.21 Maximum Average Output Power (802.11g, Ch 11,12Mbps)

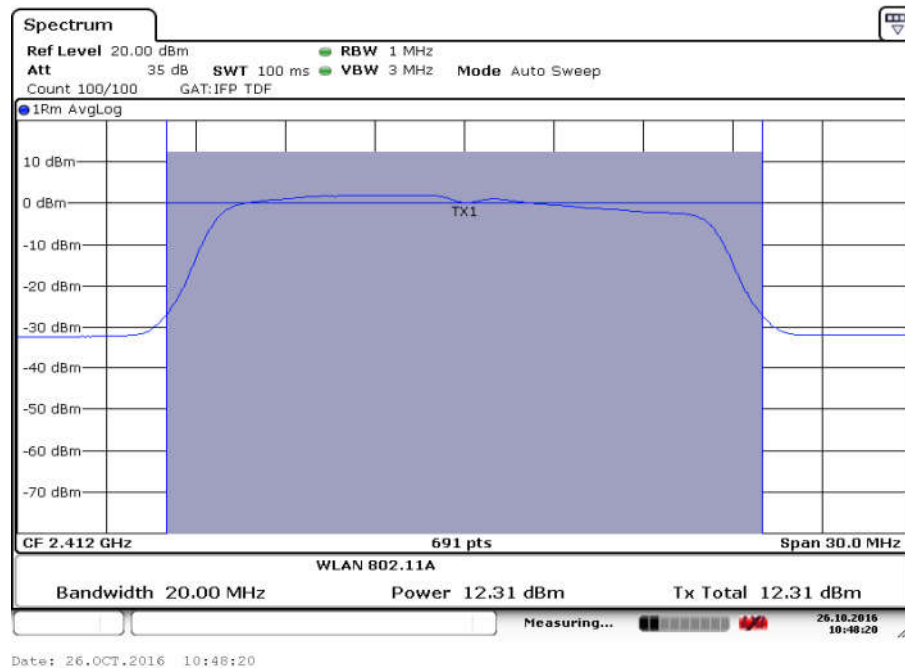


Fig.22 Maximum Average Output Power (802.11g, Ch 1,18Mbps)

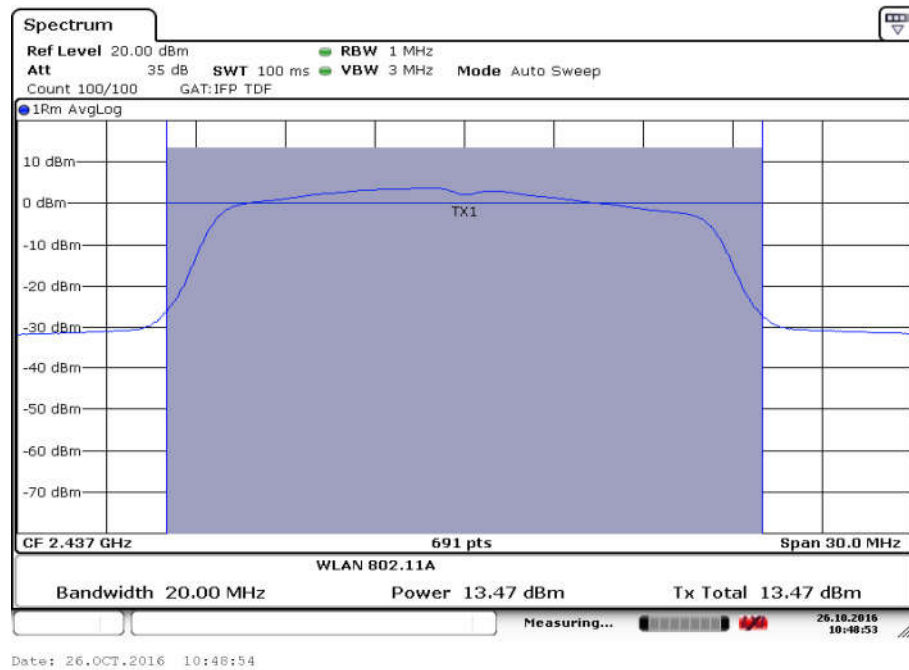


Fig.23 Maximum Average Output Power (802.11g, Ch 6,18Mbps)

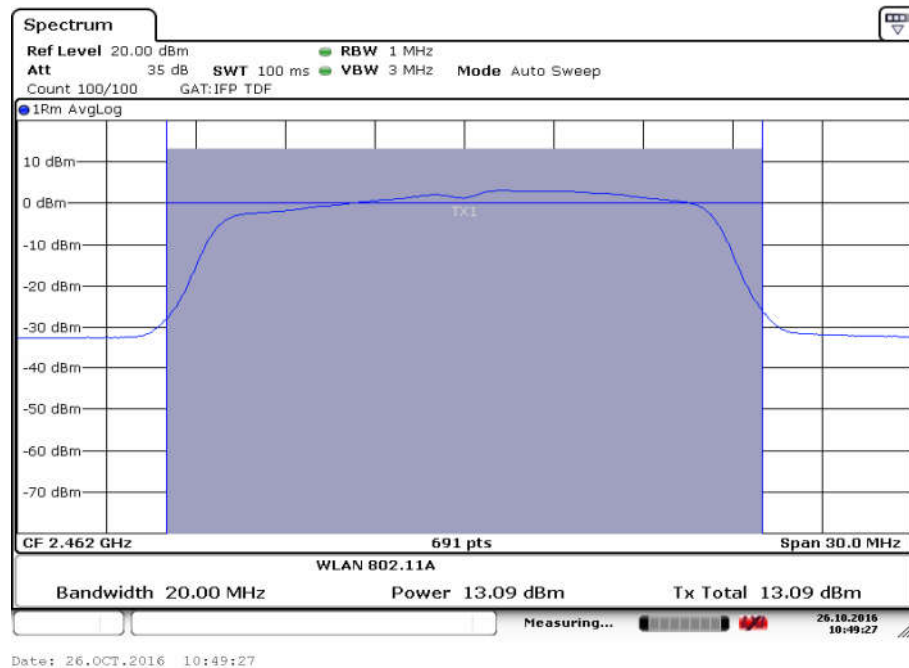


Fig.24 Maximum Average Output Power (802.11g, Ch 11,18Mbps)

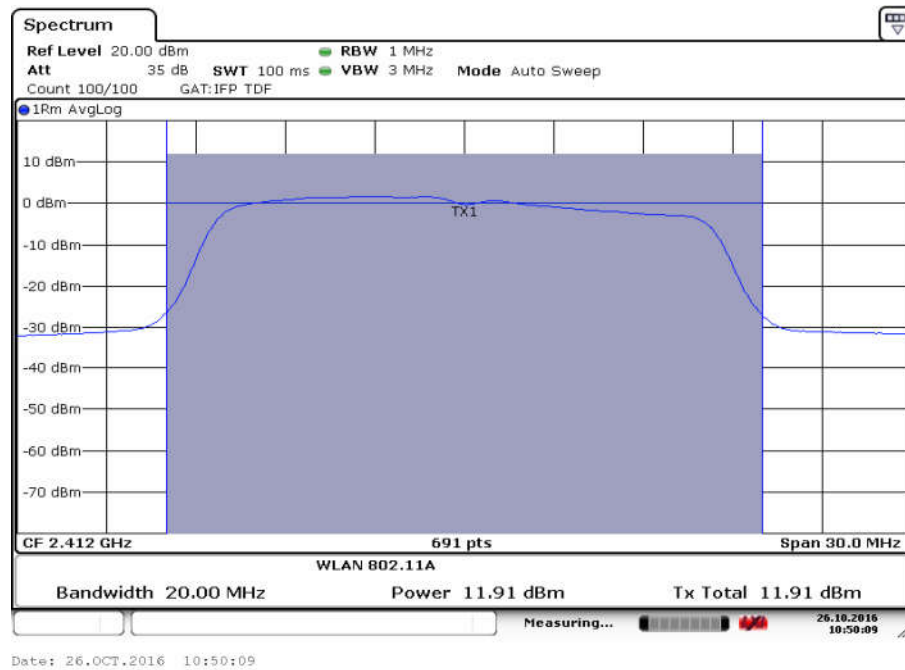


Fig.25 Maximum Average Output Power (802.11g, Ch 1,24Mbps)

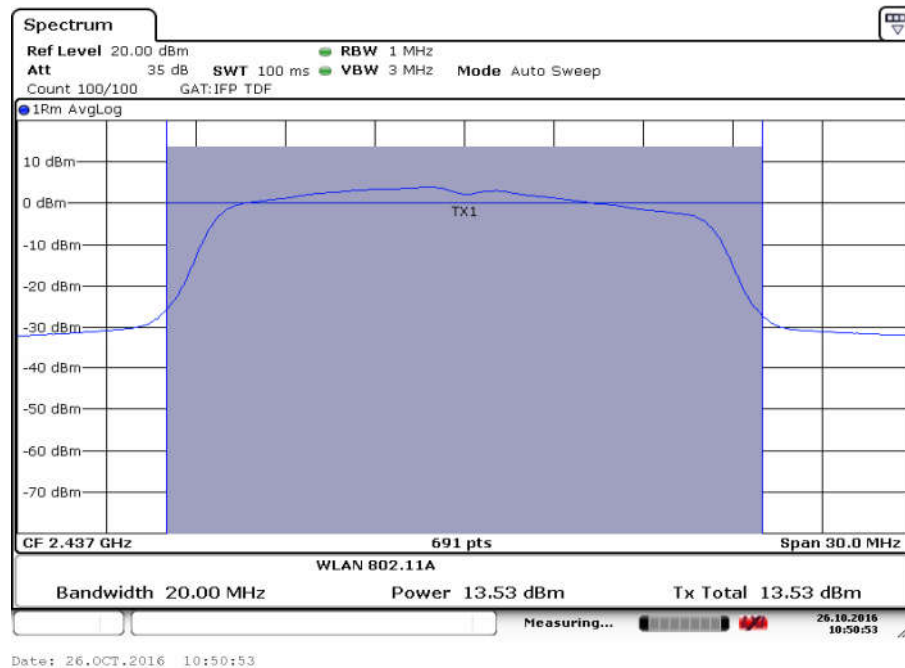


Fig.26 Maximum Average Output Power (802.11g, Ch 6,24Mbps)

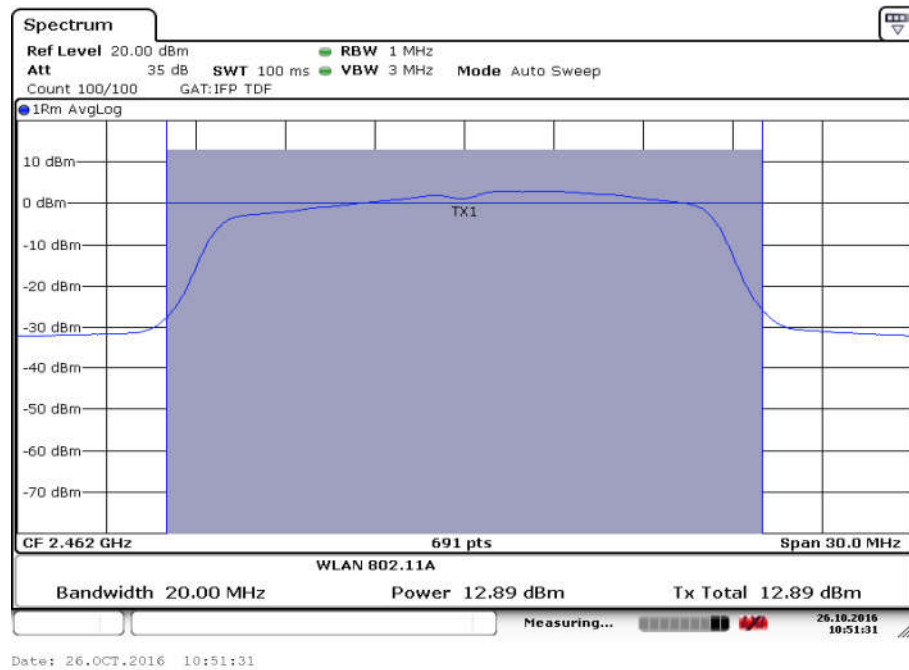


Fig.27 Maximum Average Output Power (802.11g, Ch 11,24Mbps)

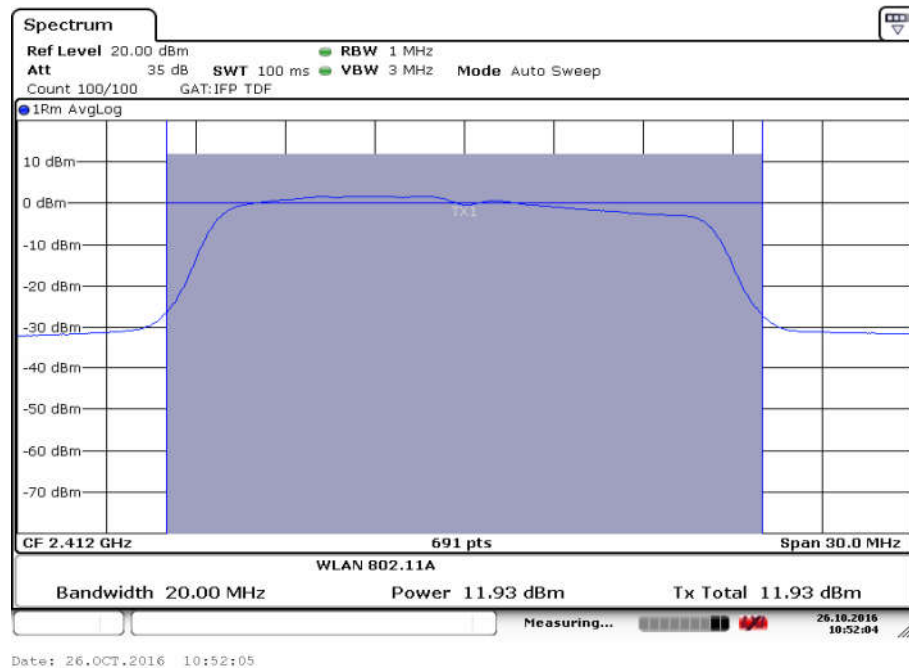


Fig.28 Maximum Average Output Power (802.11g, Ch 1,36Mbps)

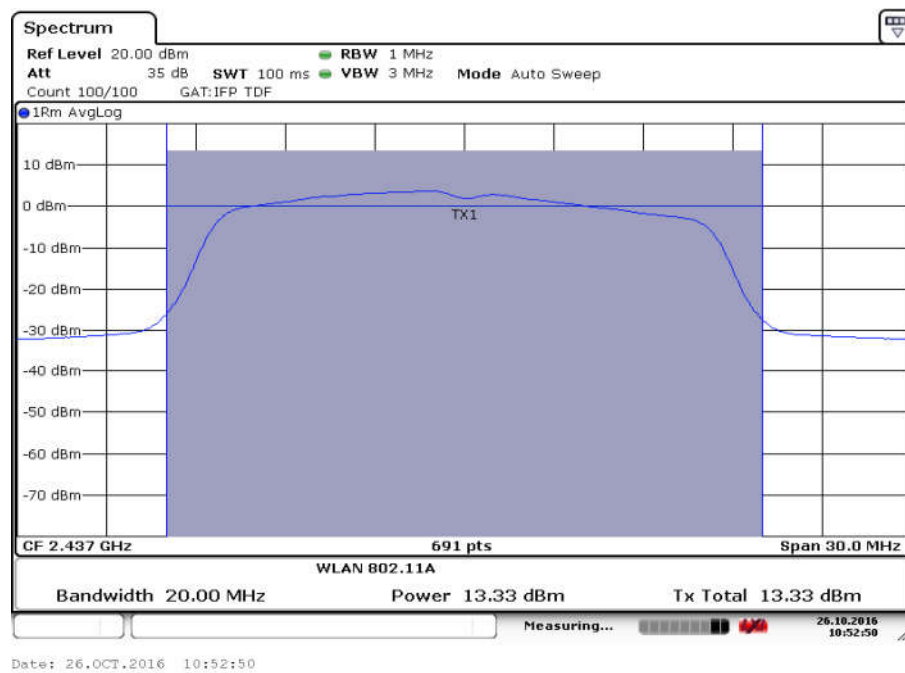


Fig.29 Maximum Average Output Power (802.11g, Ch 6,36Mbps)

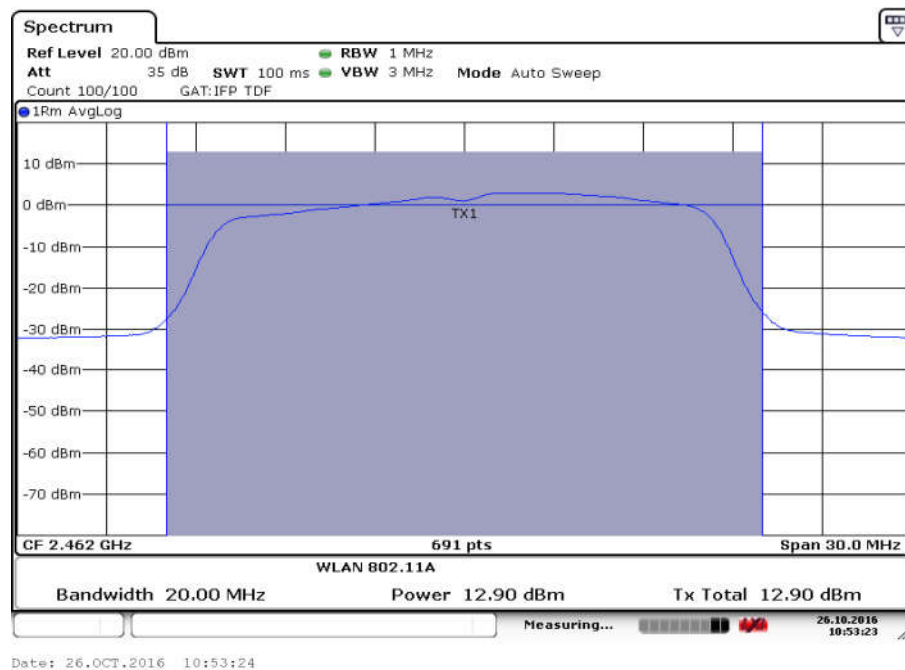


Fig.30 Maximum Average Output Power (802.11g, Ch 11,36Mbps)

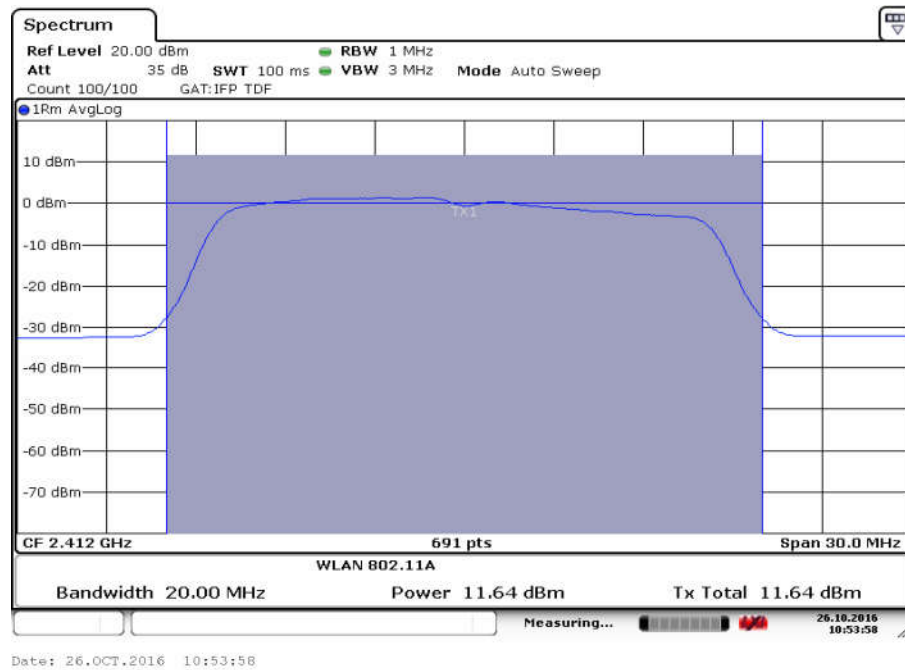


Fig.31 Maximum Average Output Power (802.11g, Ch 1,48Mbps)

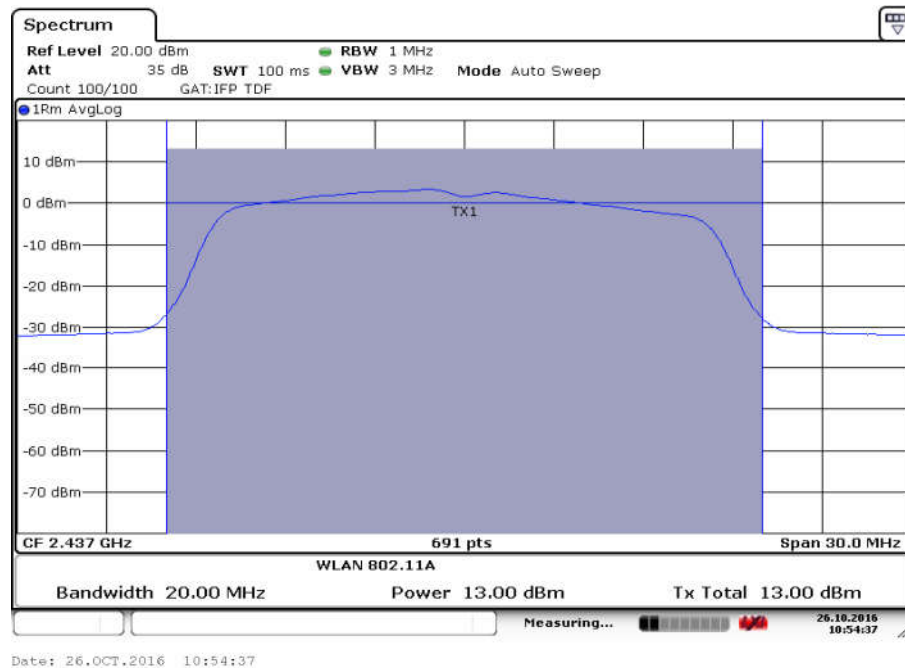


Fig.32 Maximum Average Output Power (802.11g, Ch 6,48Mbps)

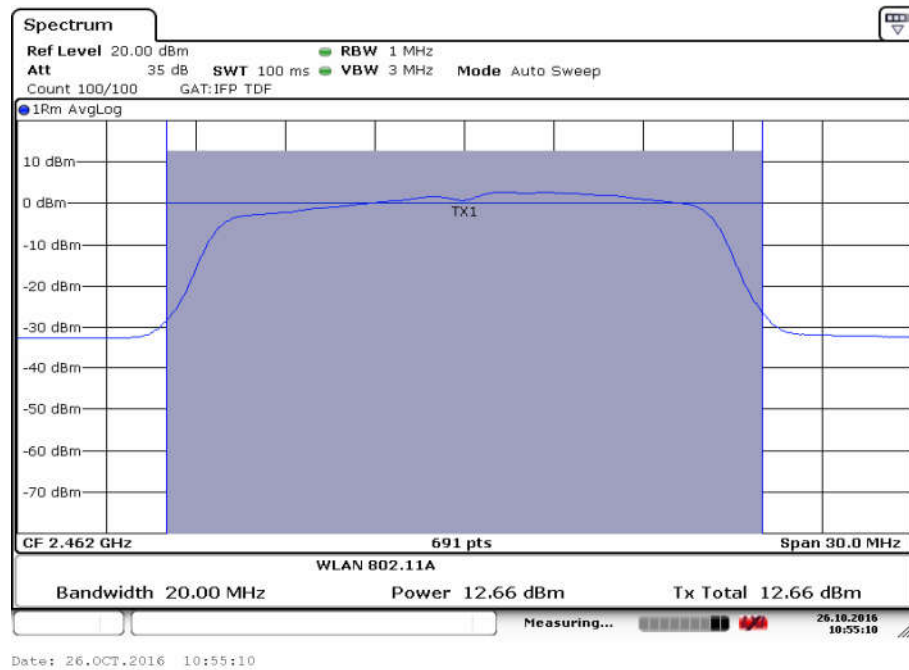


Fig.33 Maximum Average Output Power (802.11g, Ch 11,48Mbps)

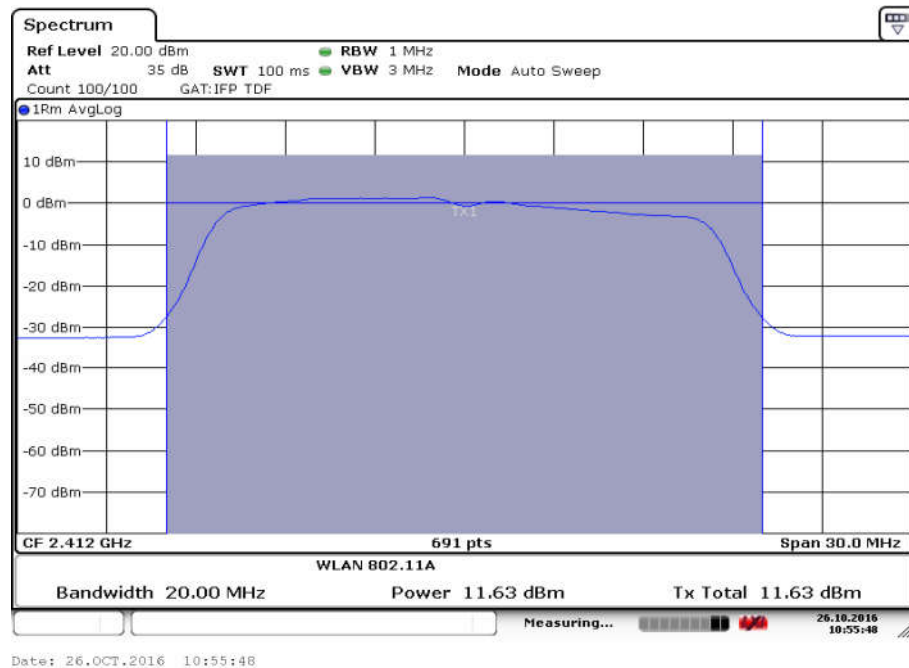


Fig.34 Maximum Average Output Power (802.11g, Ch 1,54Mbps)

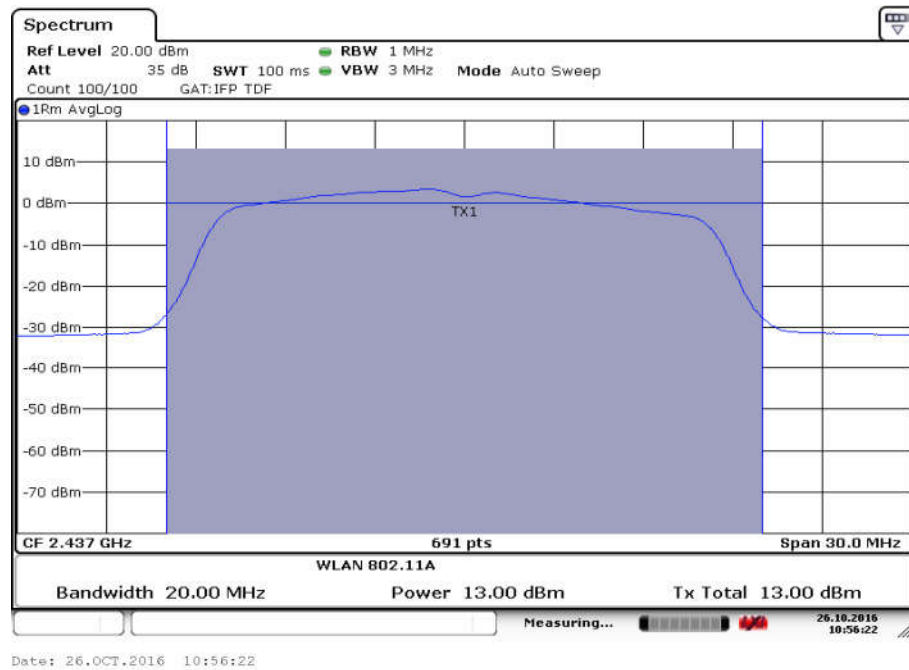


Fig.35 Maximum Average Output Power (802.11g, Ch 6,54Mbps)

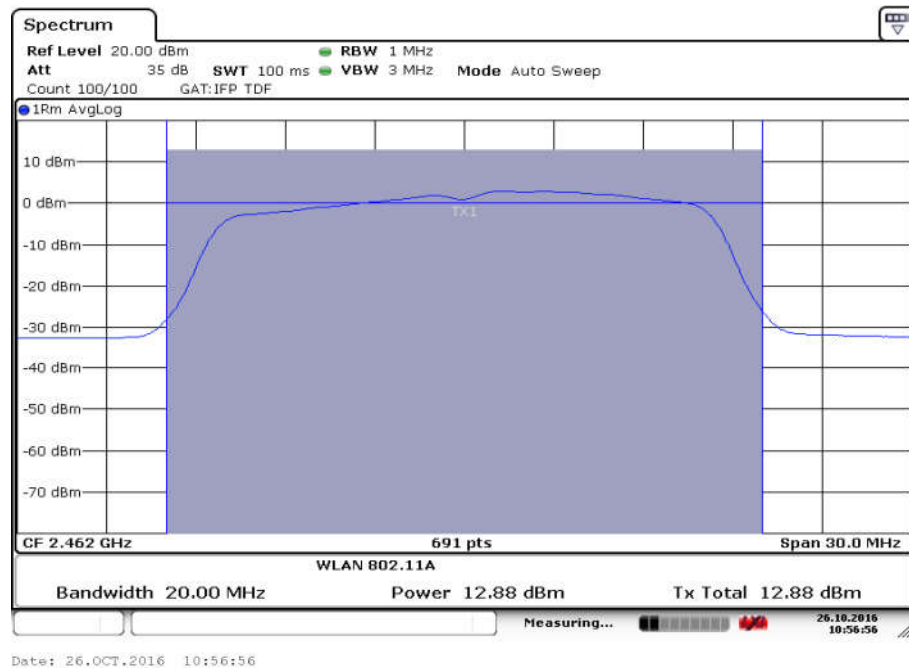


Fig.36 Maximum Average Output Power (802.11g, Ch 11,54Mbps)

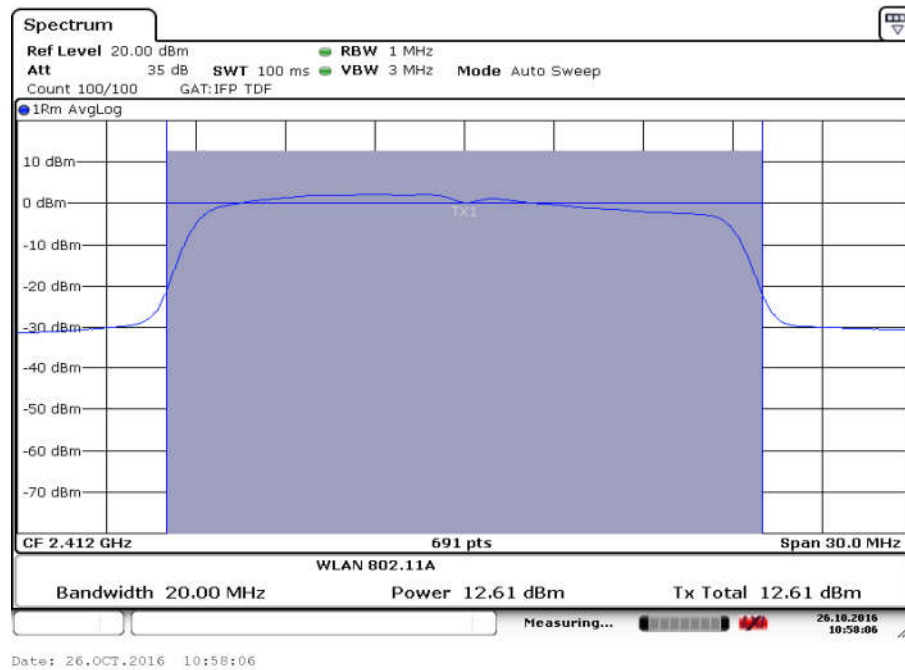


Fig.37 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS0)

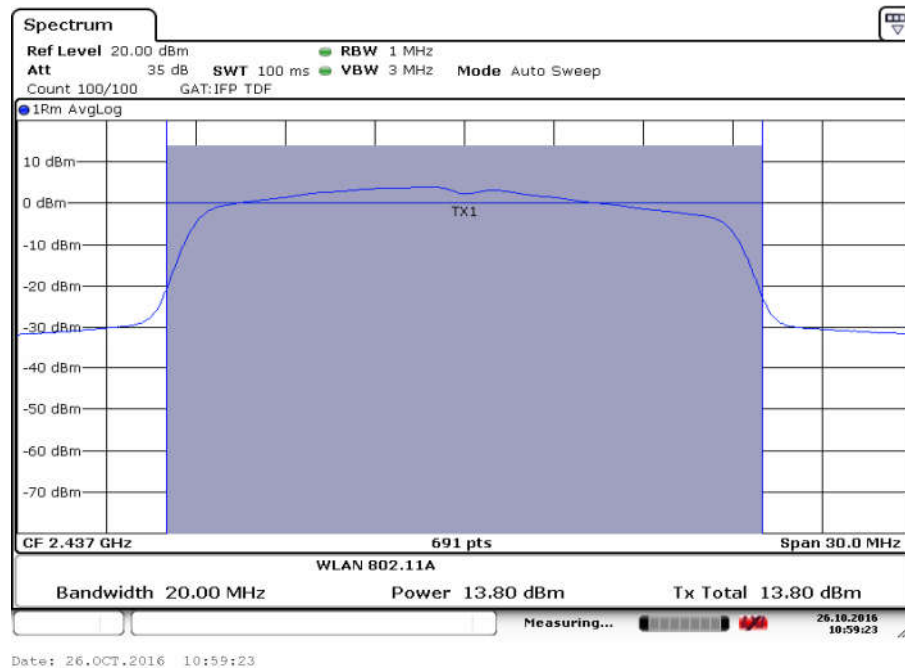


Fig.38 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS0)

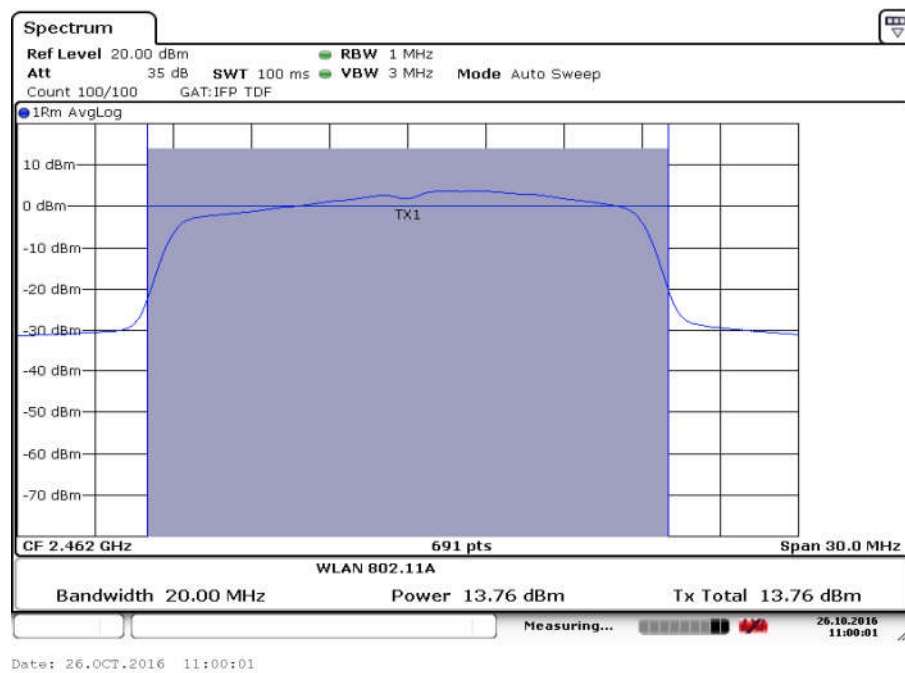


Fig.39 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS0)

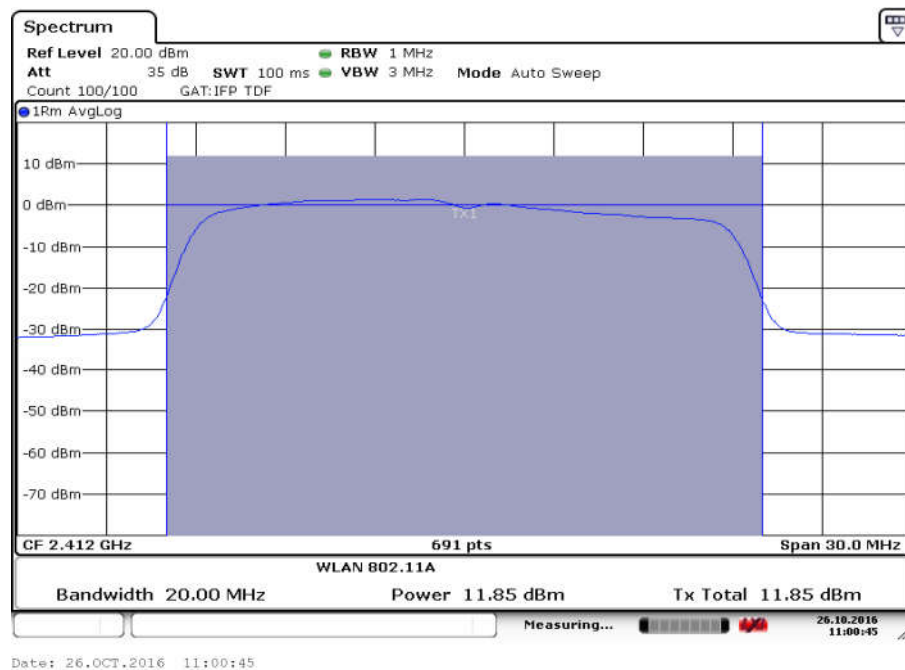


Fig.40 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS1)

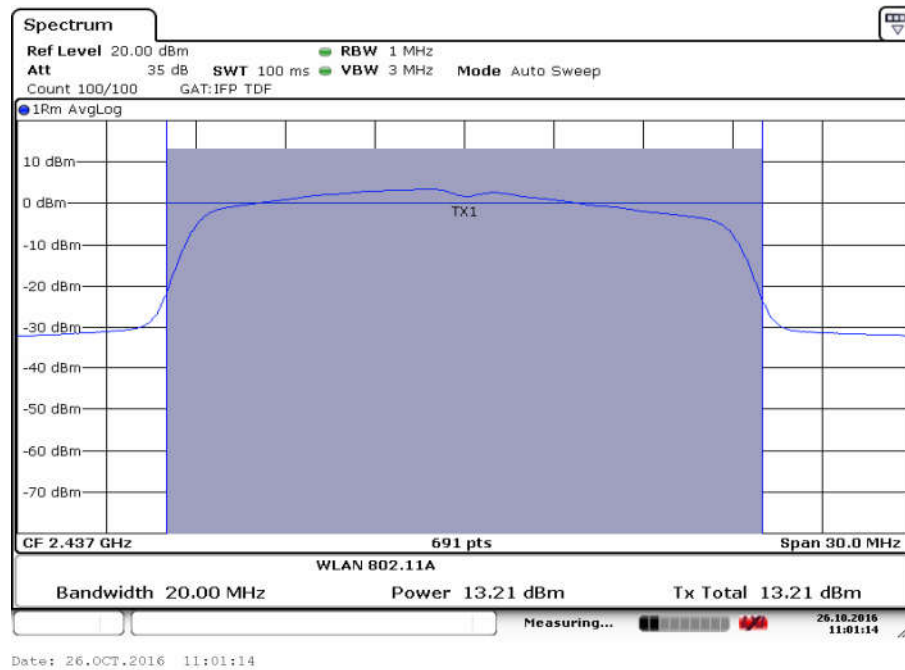


Fig.41 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS1)

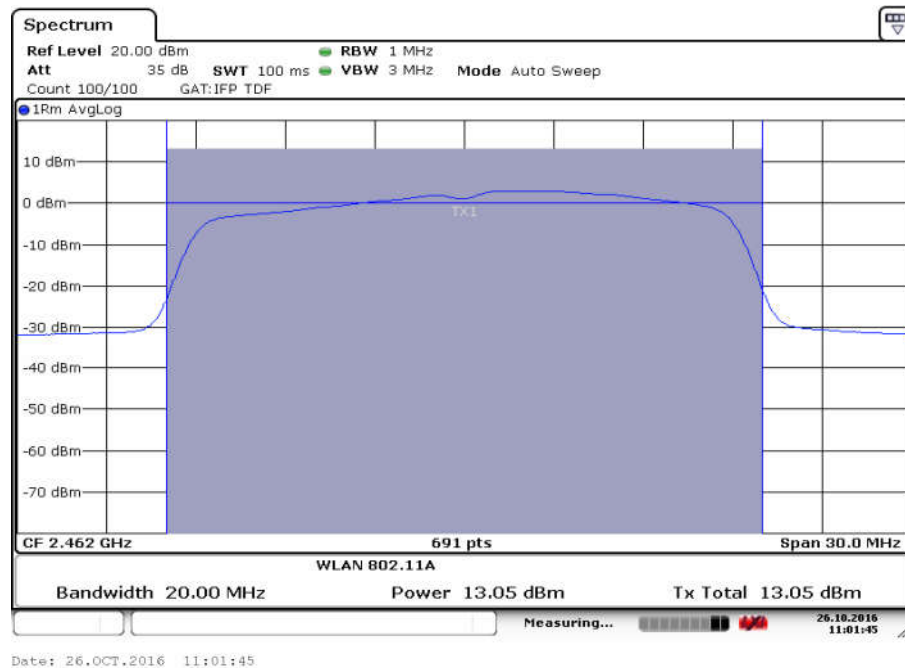


Fig.42 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS1)

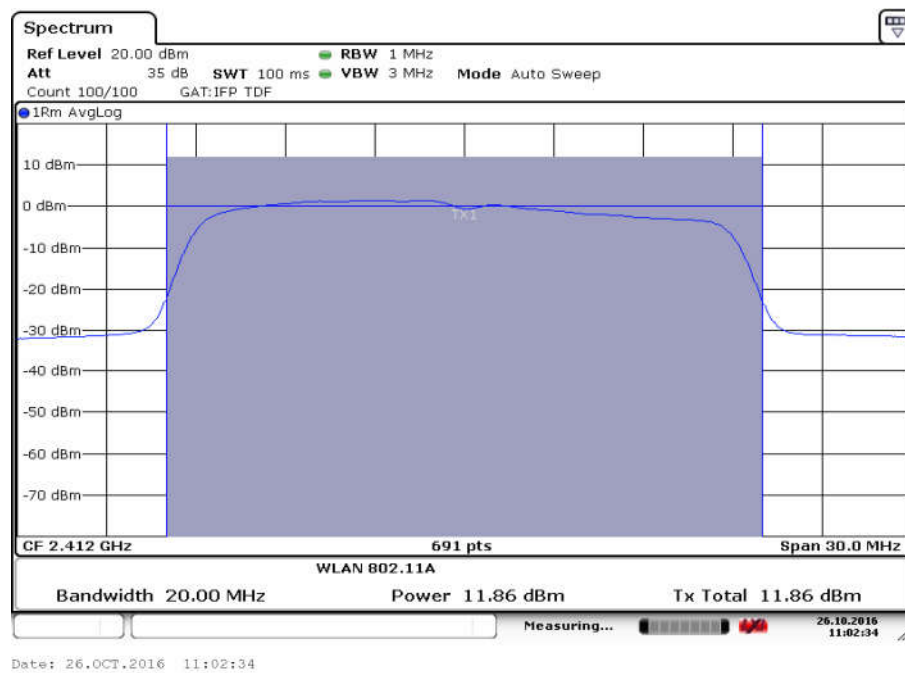


Fig.43 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS2)

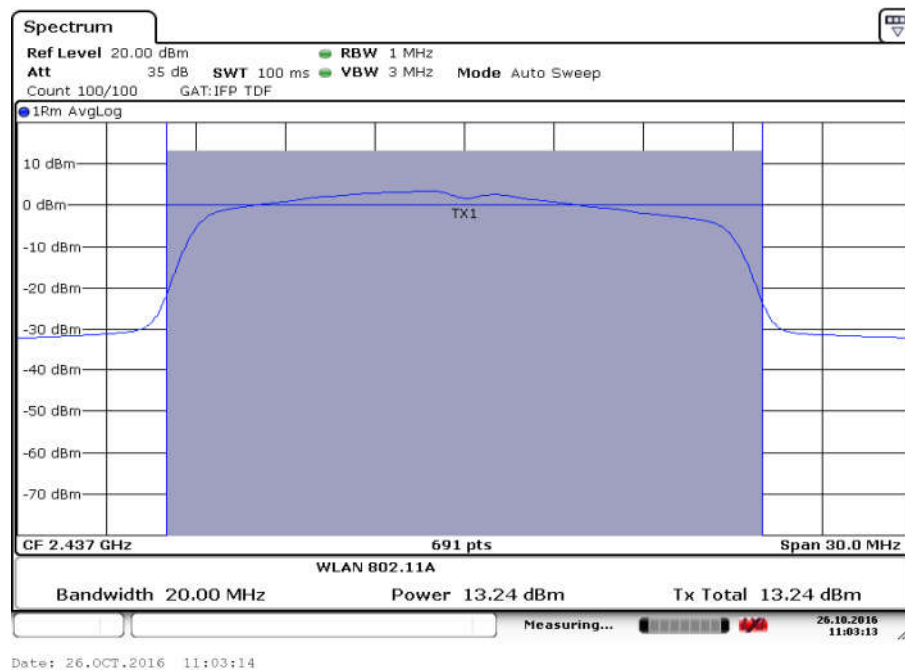


Fig.44 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS2))

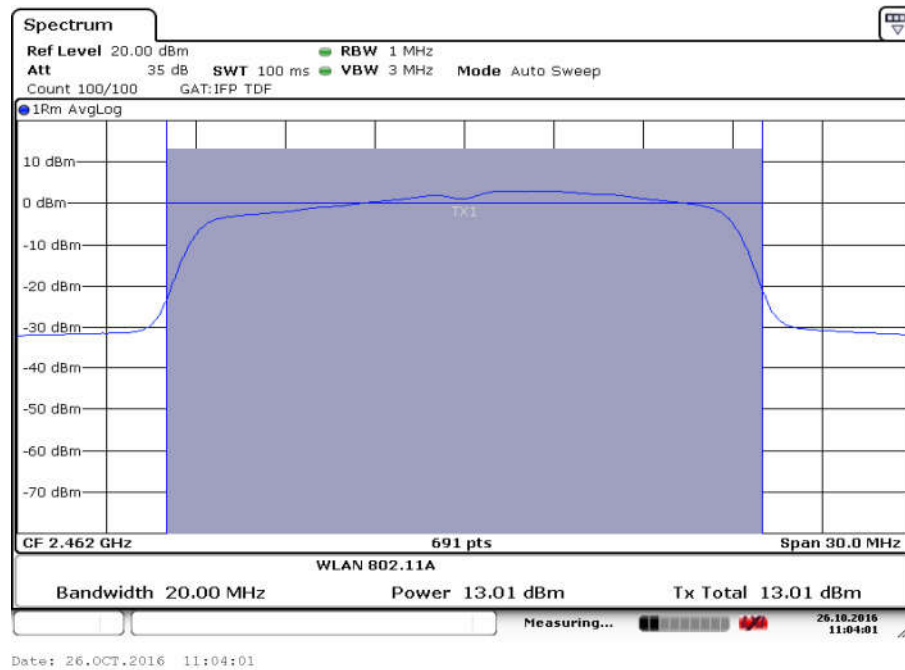


Fig.45 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS2)

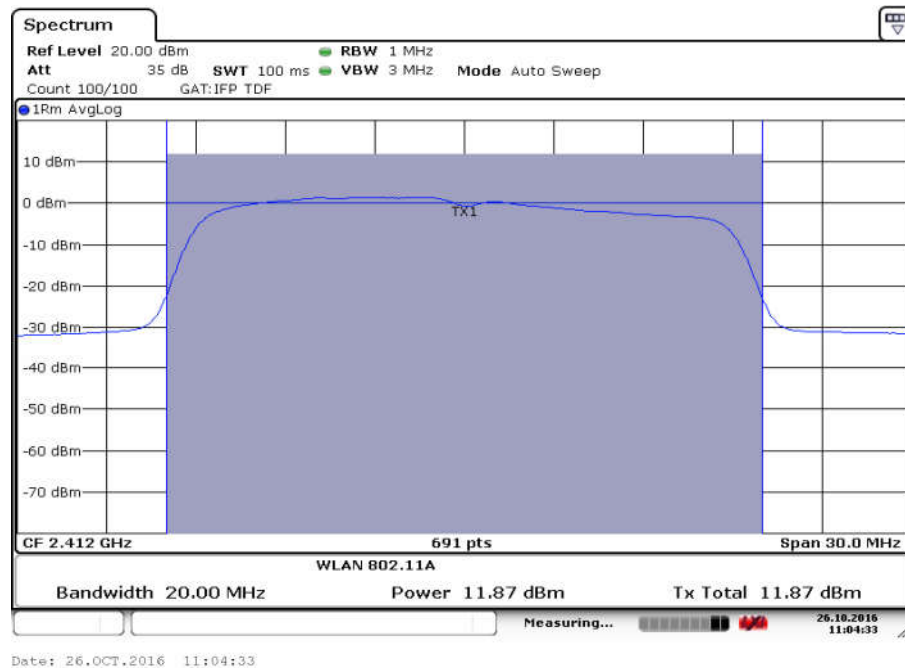


Fig.46 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS3)

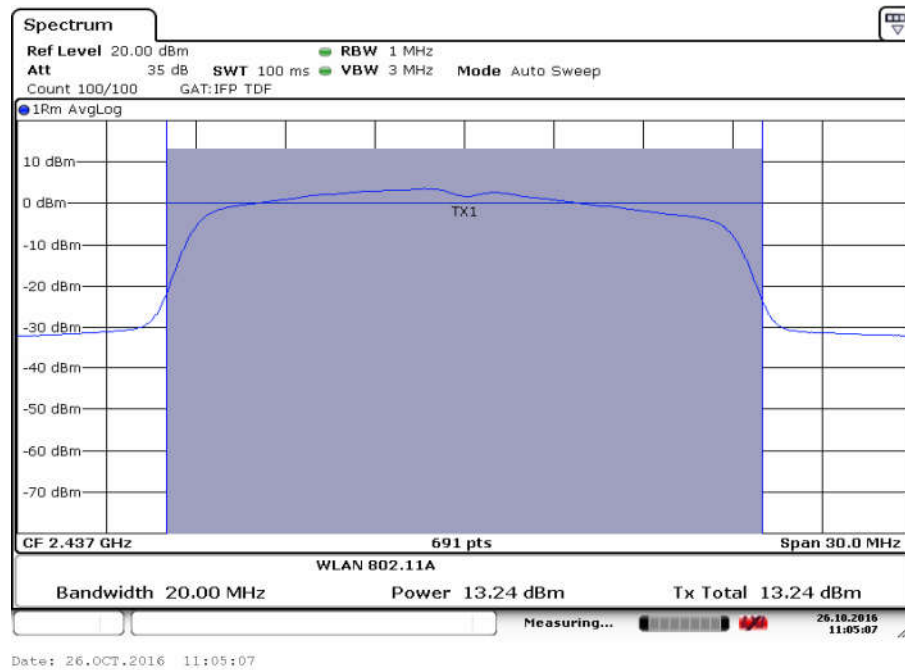


Fig.47 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS3)

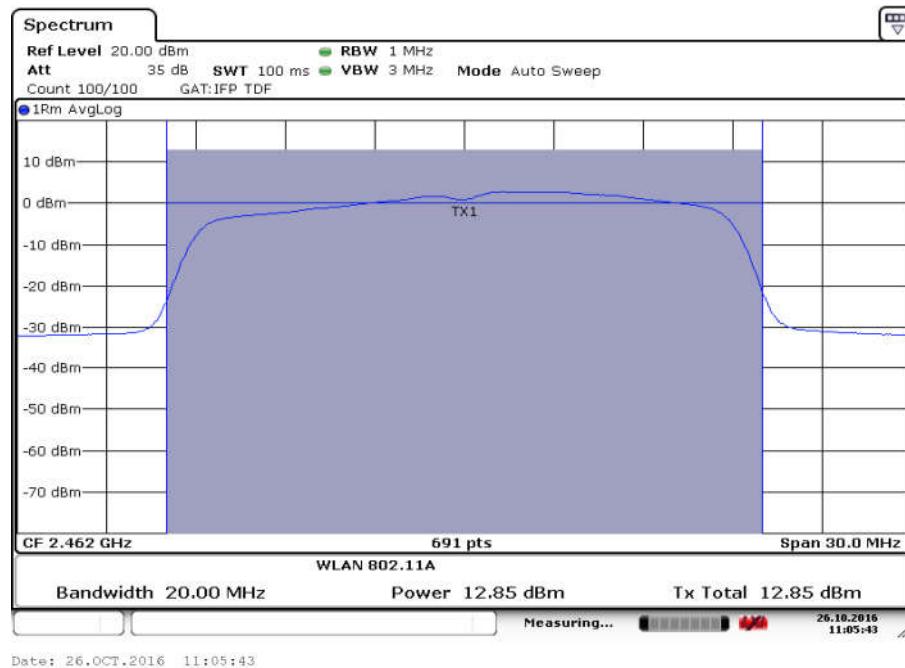


Fig.48 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS3)

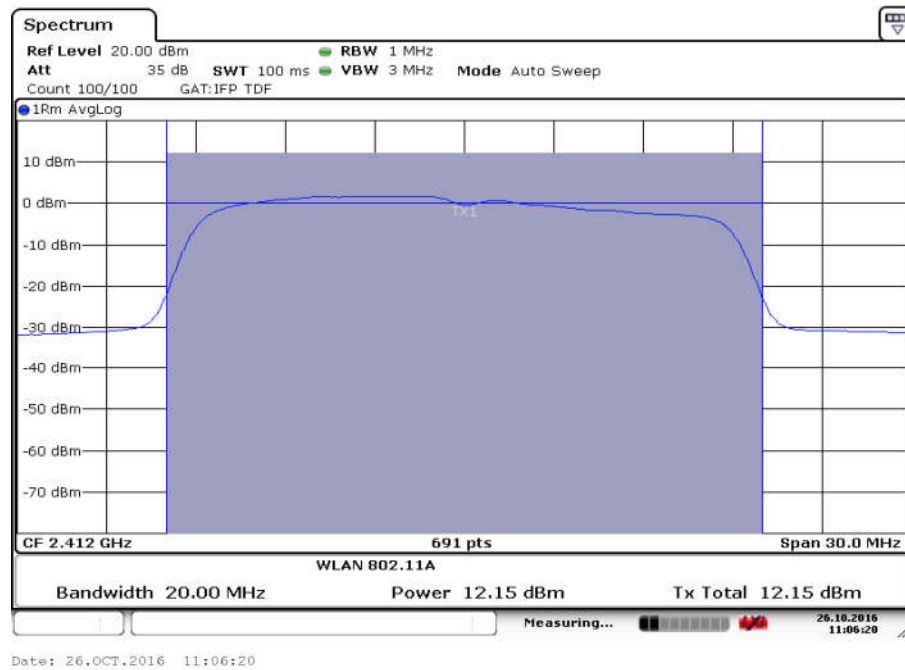


Fig.49 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS4)

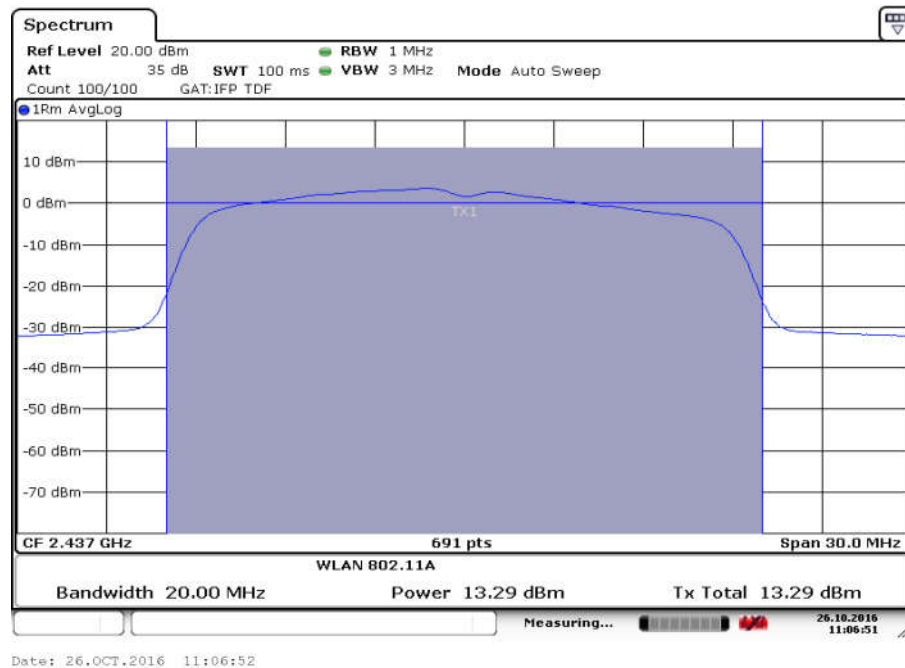


Fig.50 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS4)

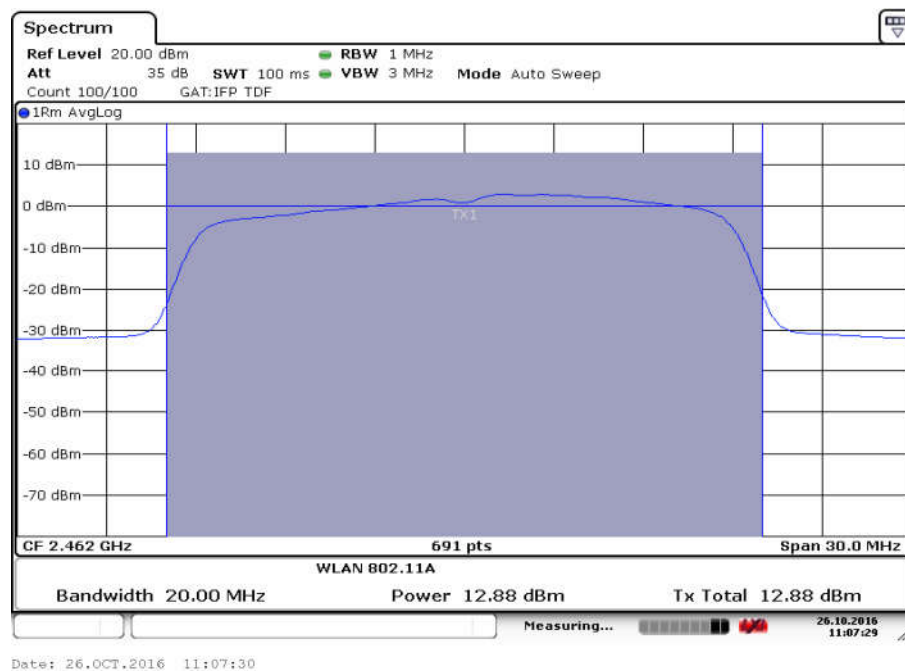


Fig.51 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS4)

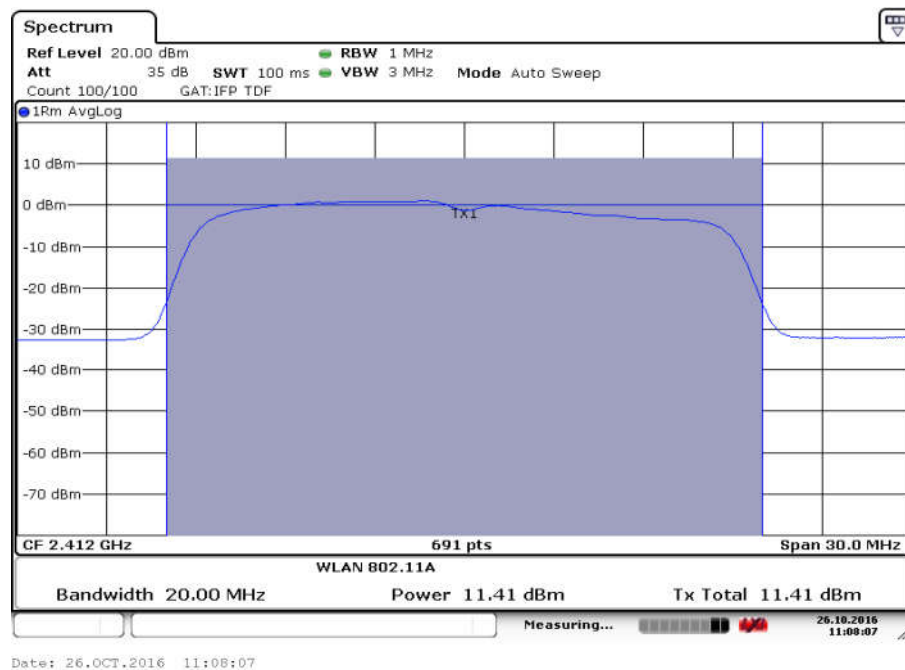


Fig.52 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS5)

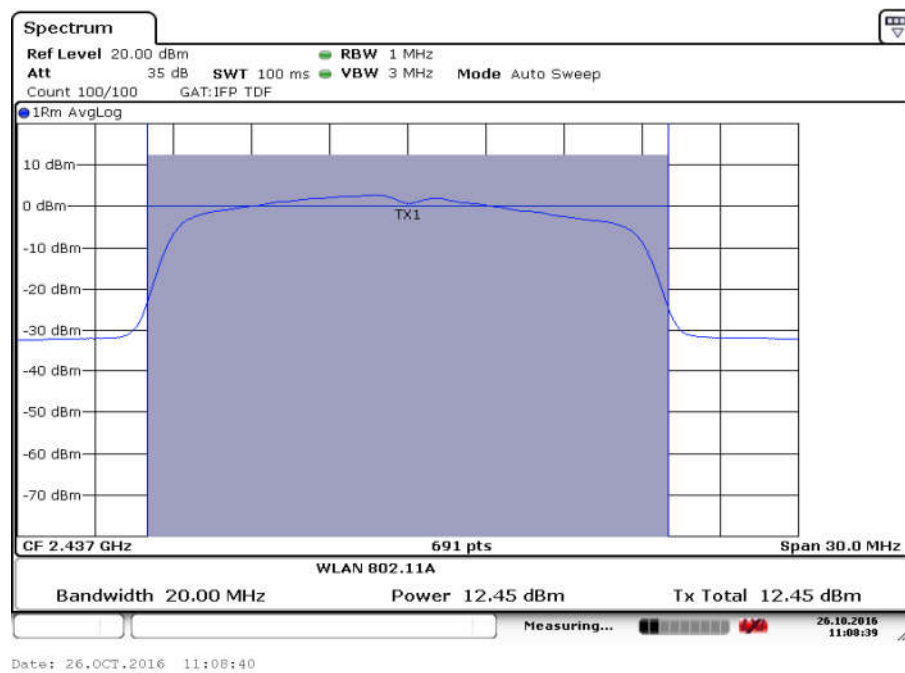


Fig.53 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS5)

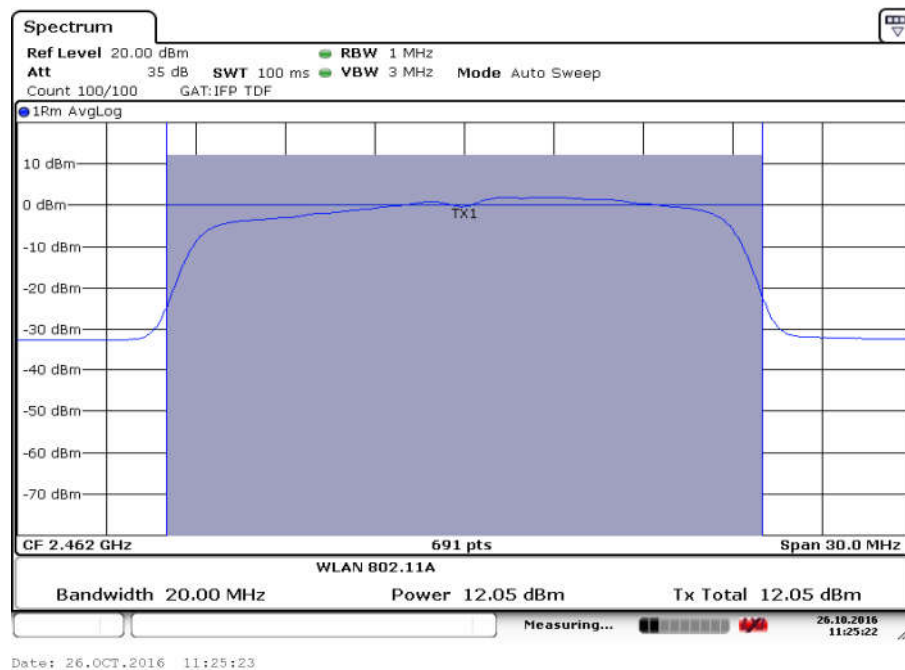


Fig.54 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS5)

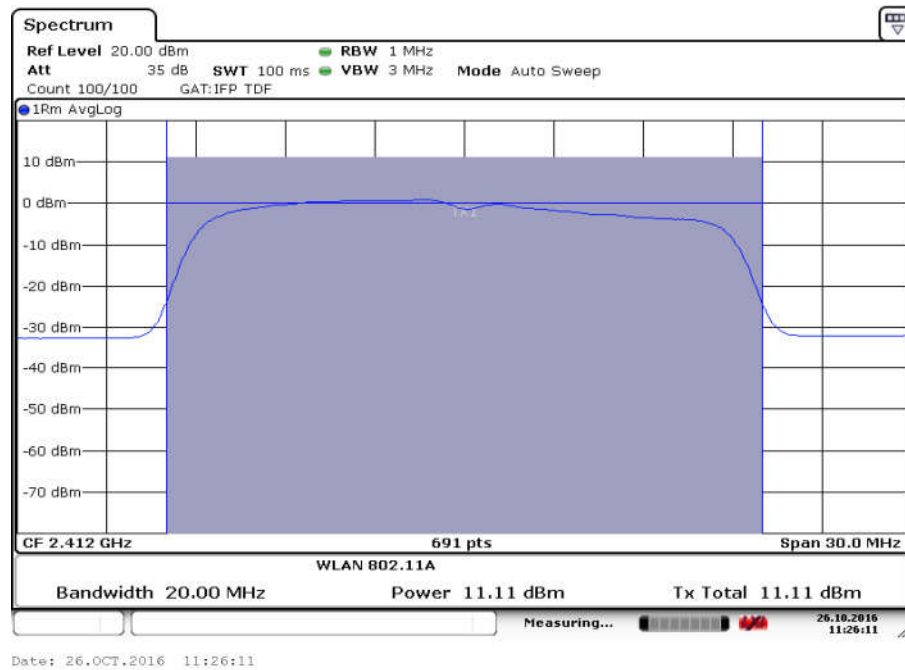


Fig.55 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS6)

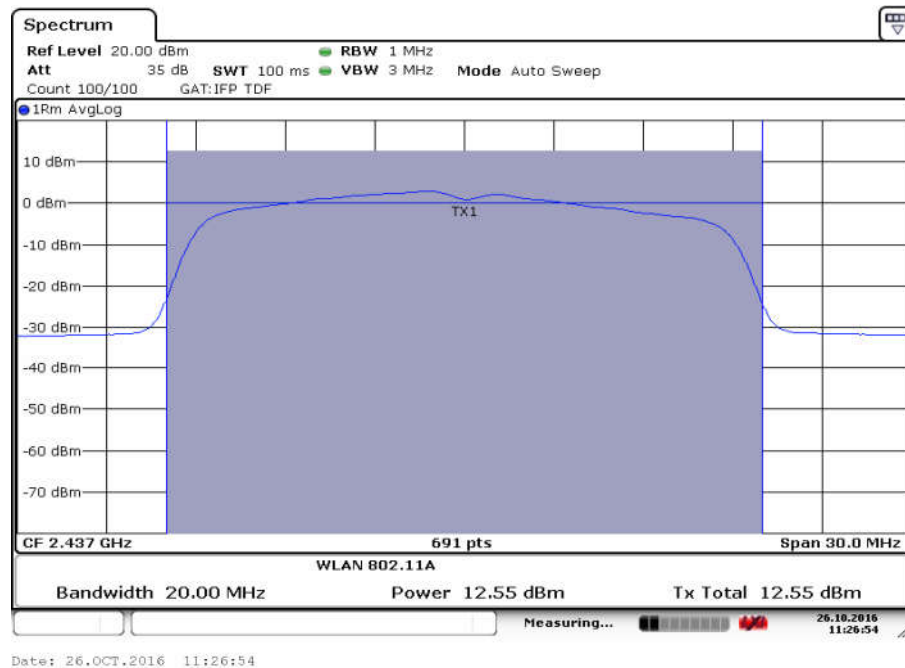


Fig.56 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS6)

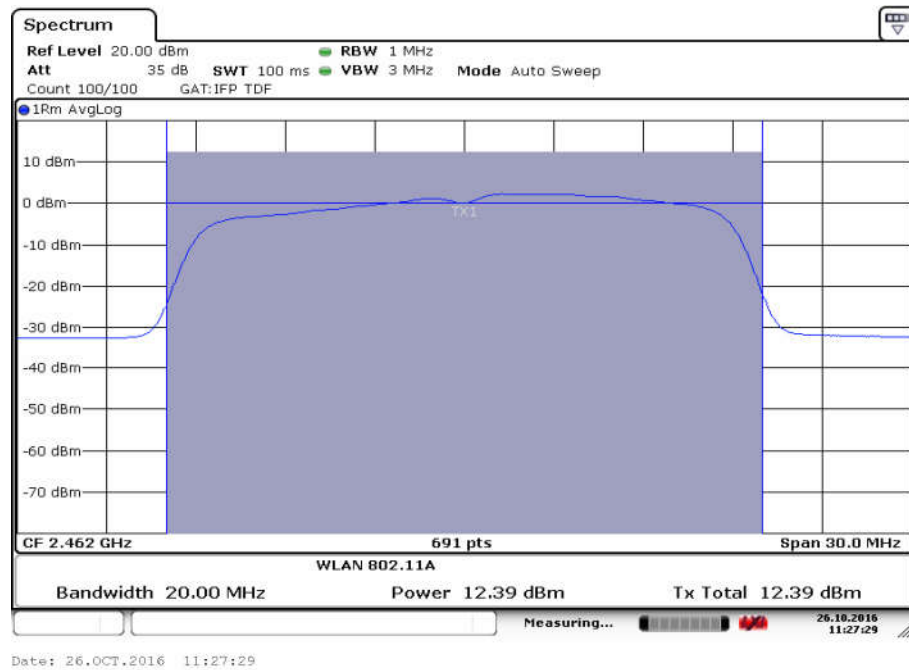


Fig.57 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS6)

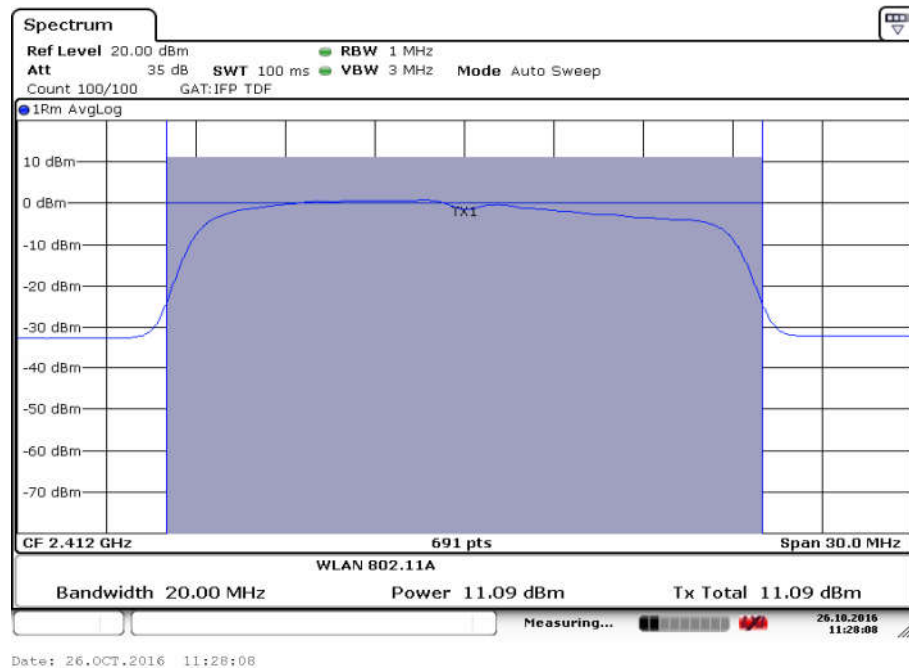


Fig.58 Maximum Average Output Power (802.11n-20MHz, Ch 1,MCS7)

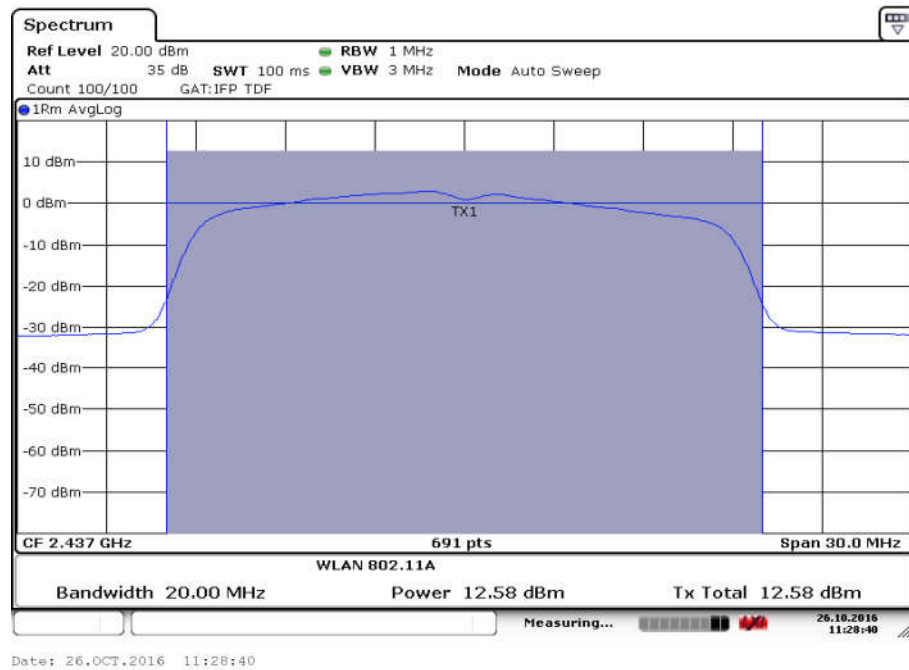


Fig.59 Maximum Average Output Power (802.11n-20MHz, Ch 6,MCS7)

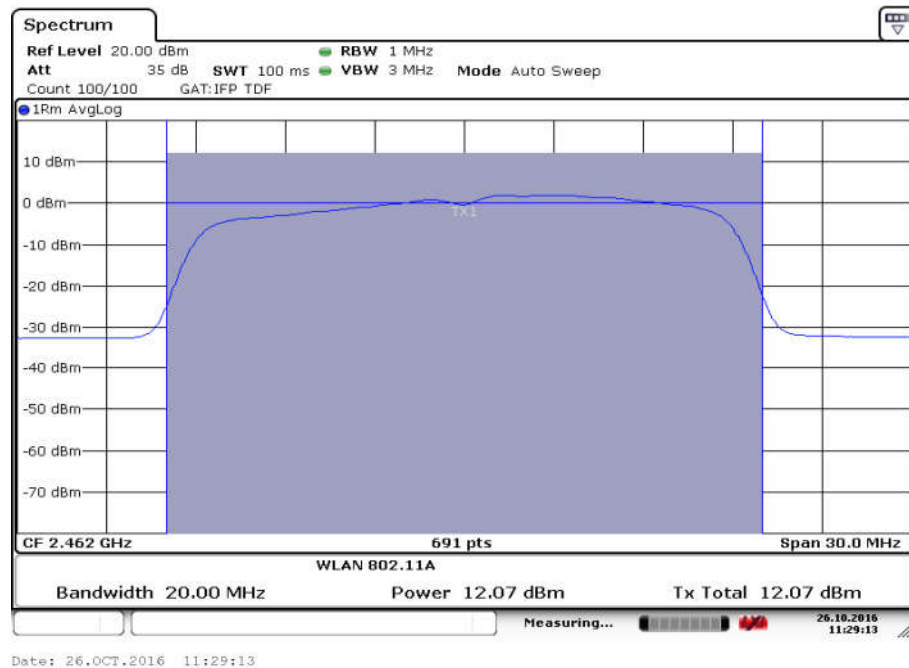


Fig.60 Maximum Average Output Power (802.11n-20MHz, Ch 11,MCS7)

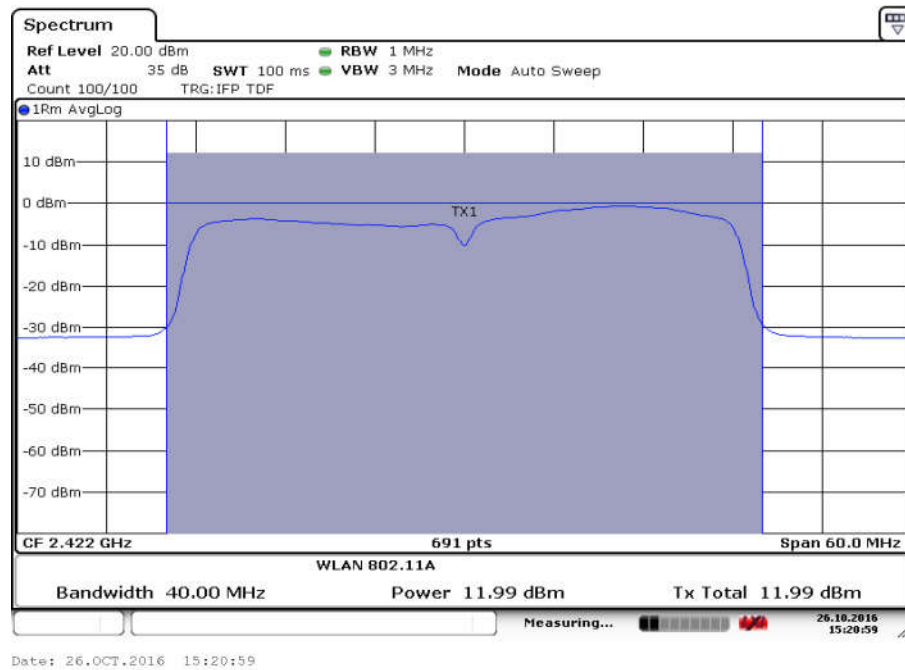


Fig.61 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS0)

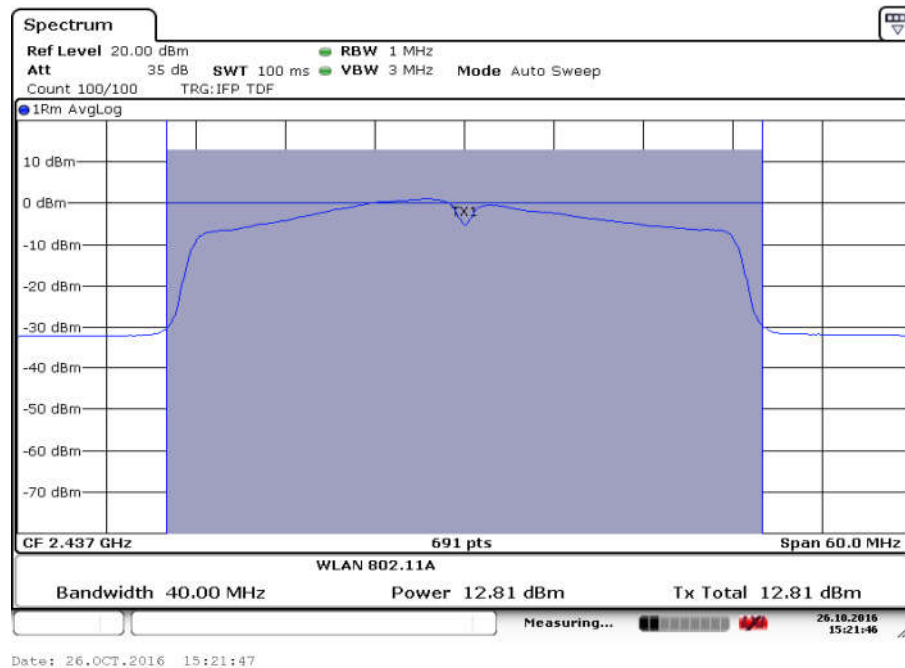


Fig.62 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS0)

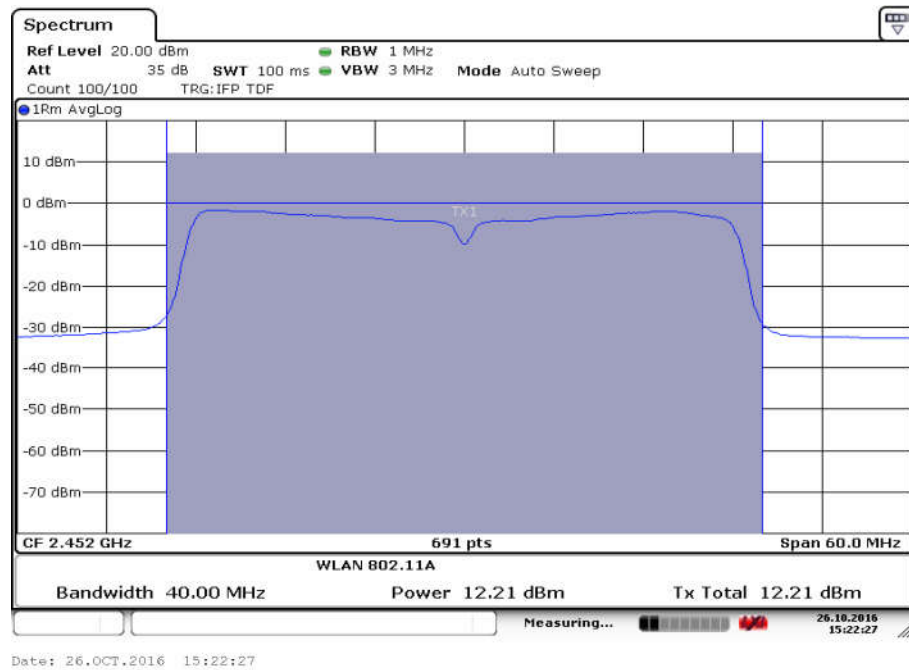


Fig.63 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS0)

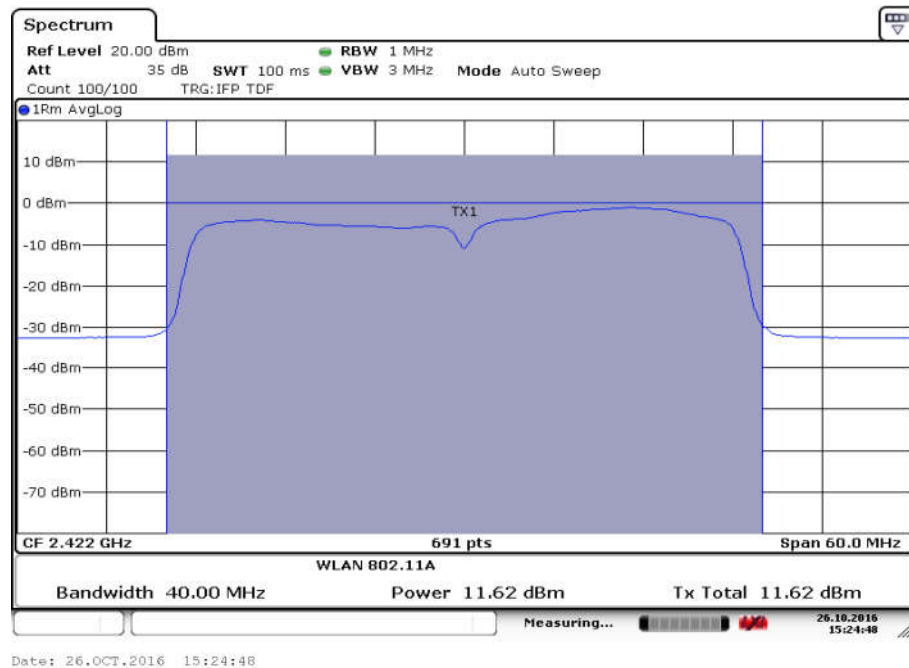


Fig.64 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS1)

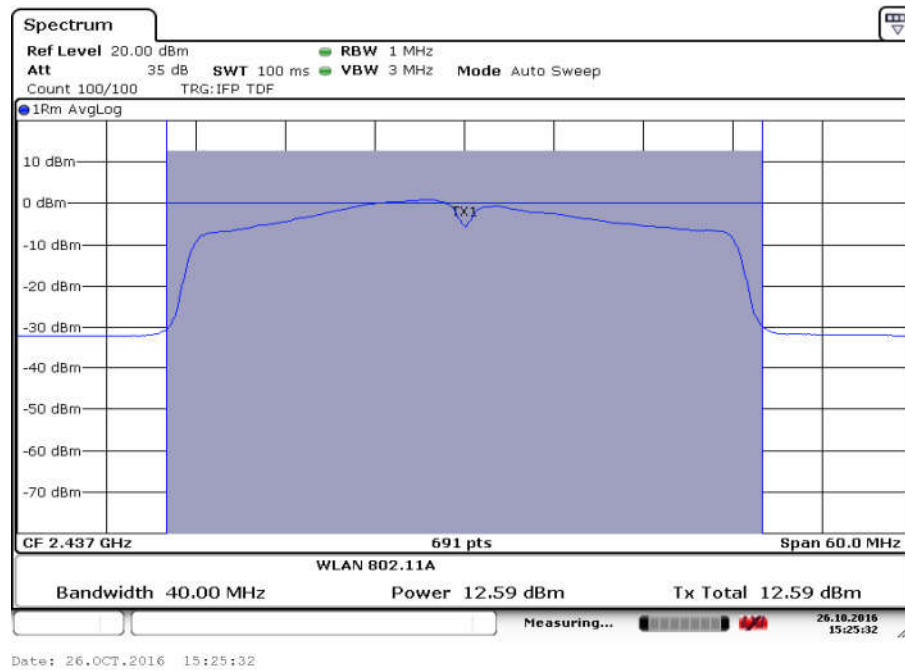


Fig.65 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS1)

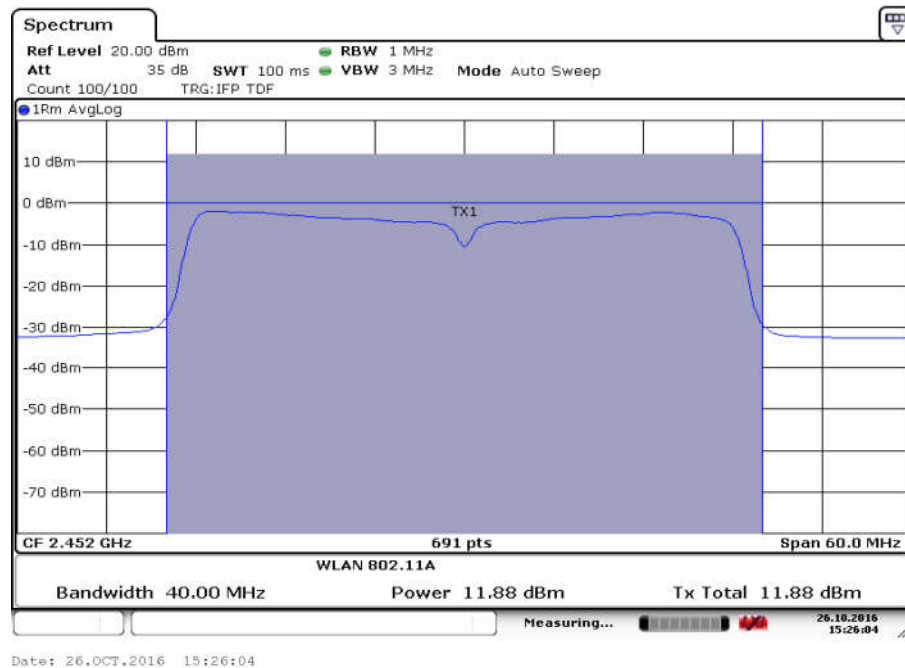


Fig.66 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS1)

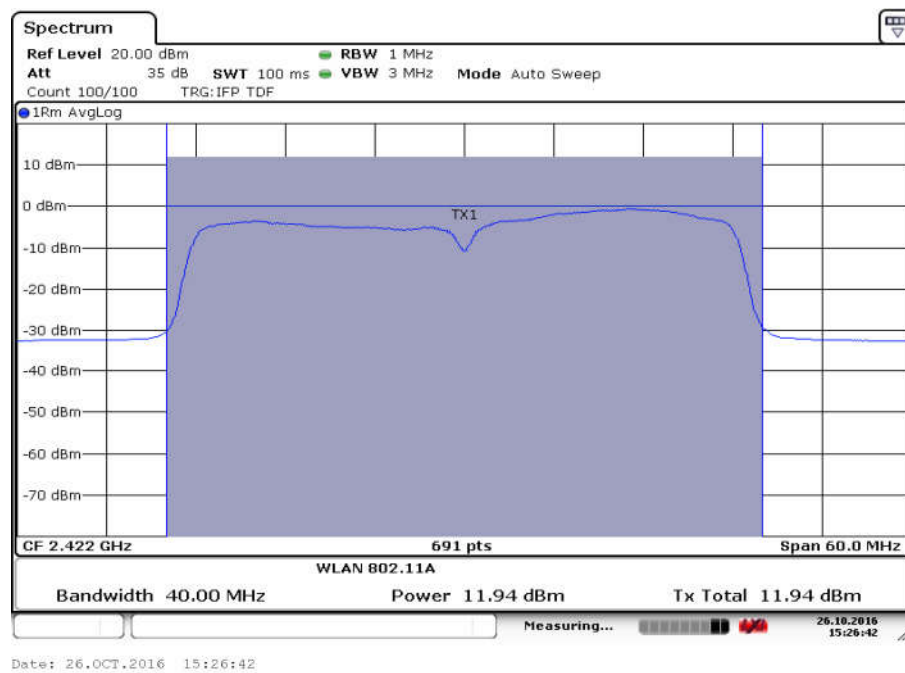


Fig.67 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS2)

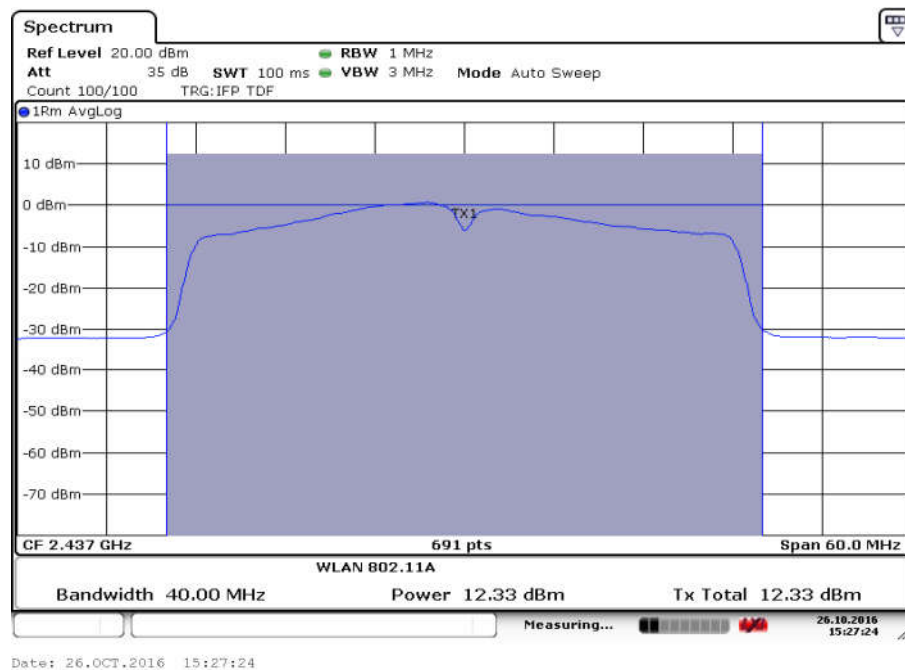


Fig.68 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS2))

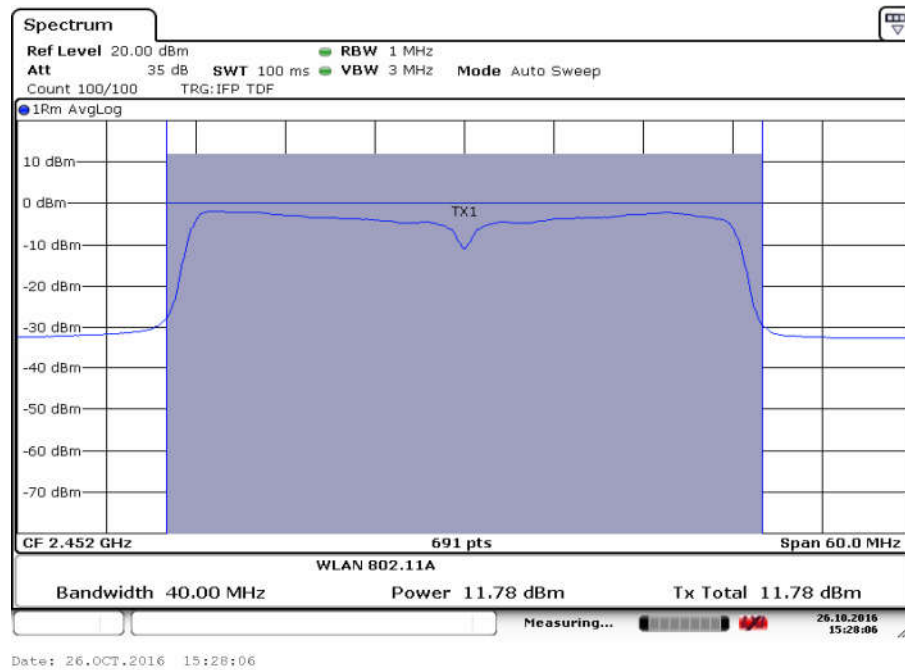


Fig.69 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS2)

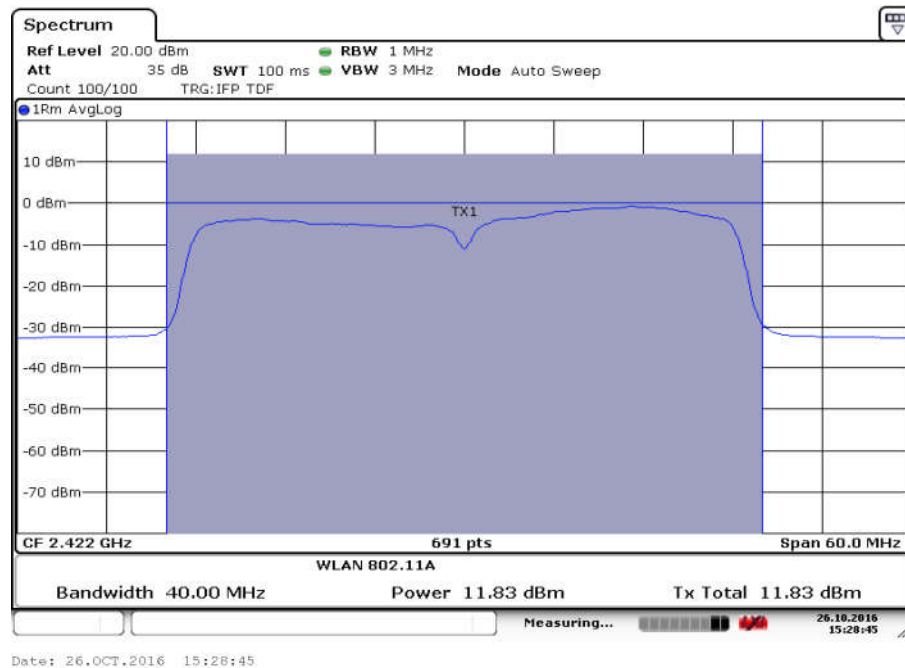


Fig.70 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS3)

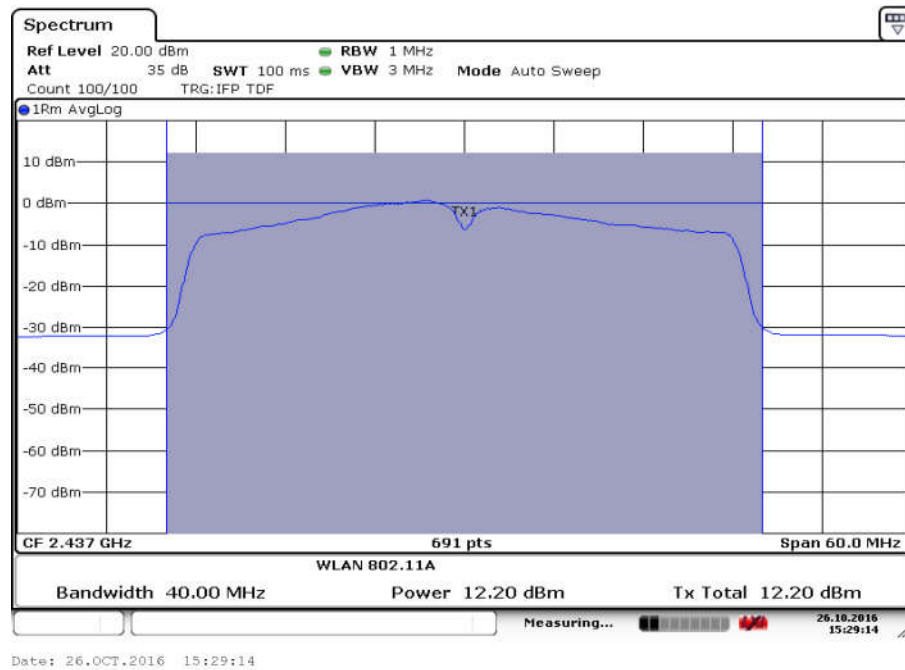


Fig.71 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS3)

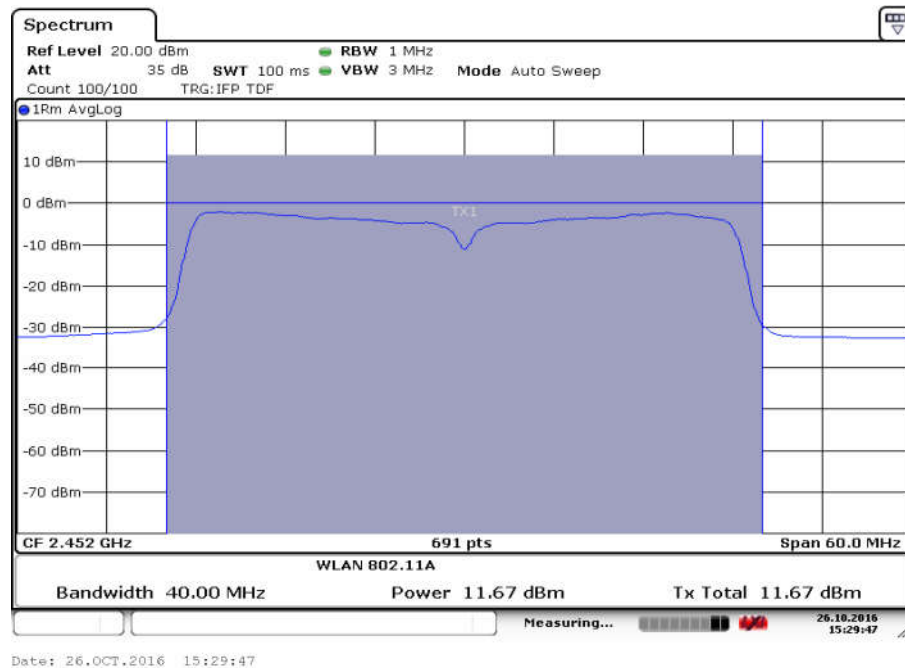


Fig.72 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS3)

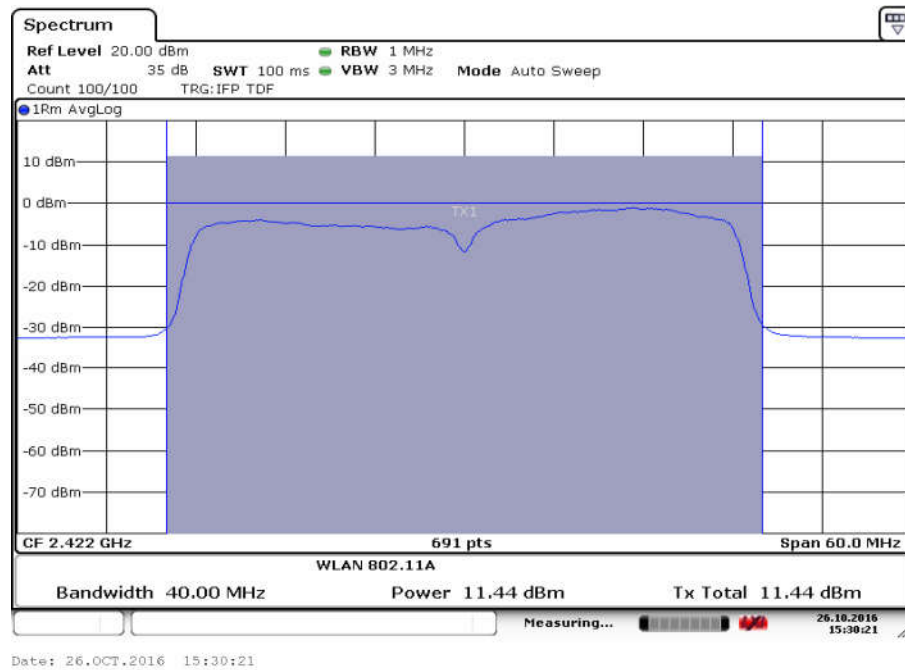


Fig.73 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS4)

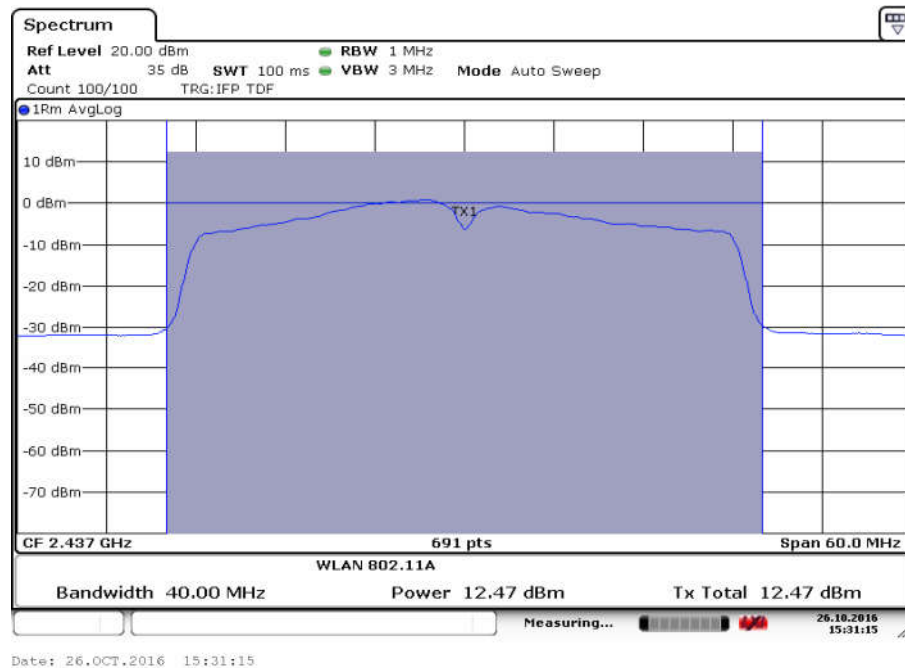


Fig.74 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS4)

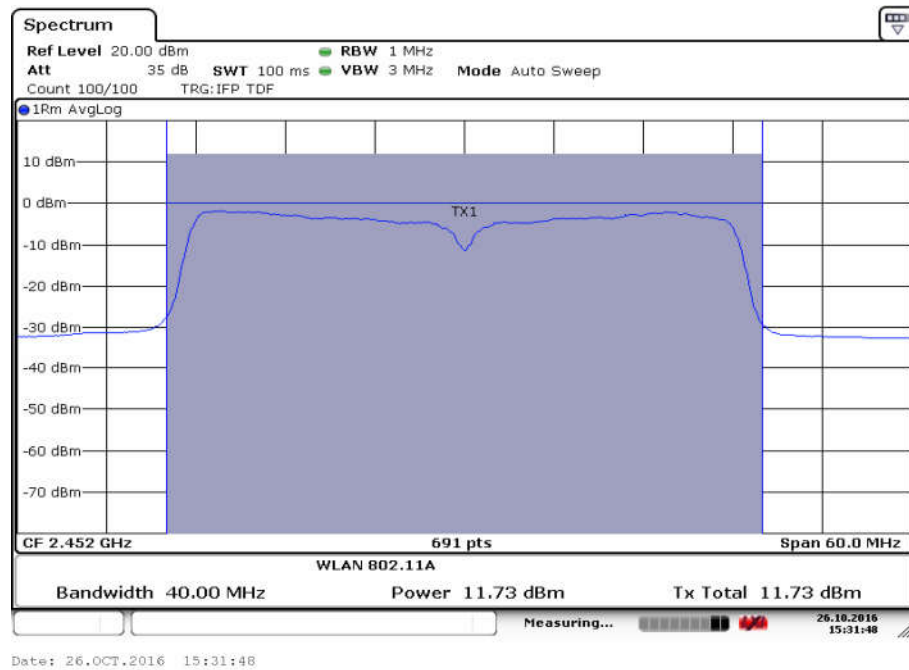


Fig.75 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS4)

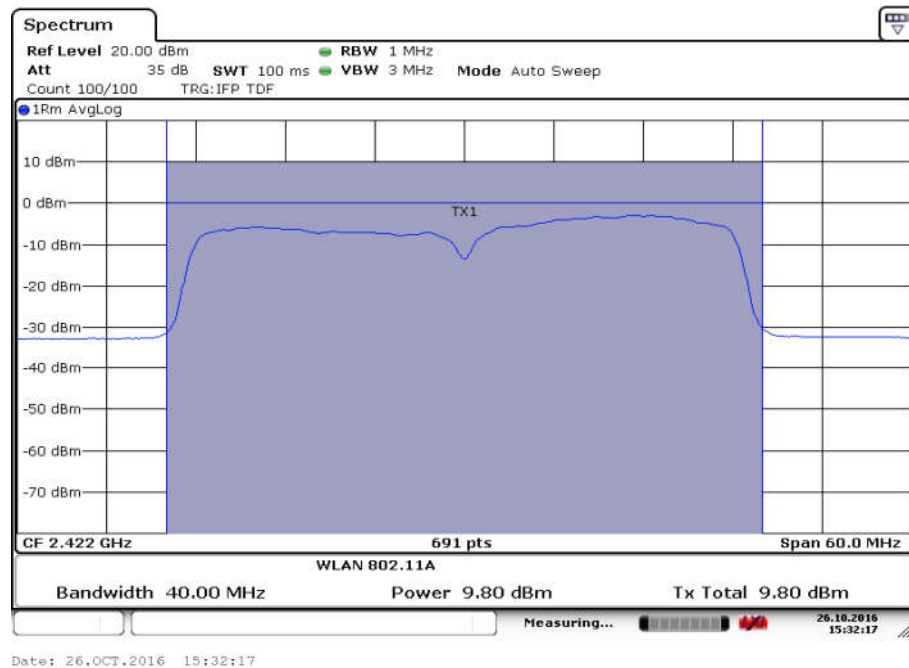


Fig.76 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS5)

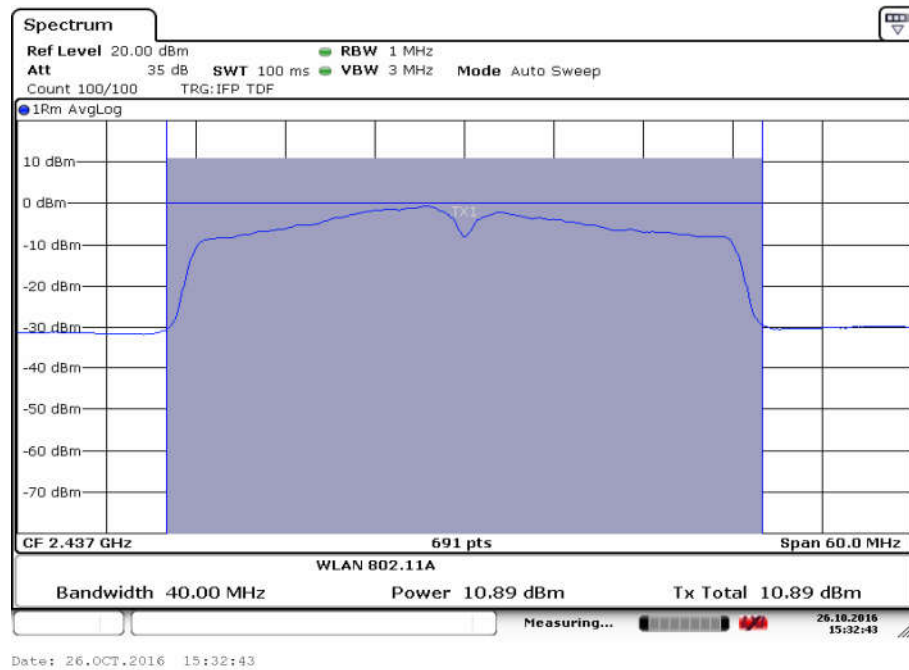


Fig.77 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS5)

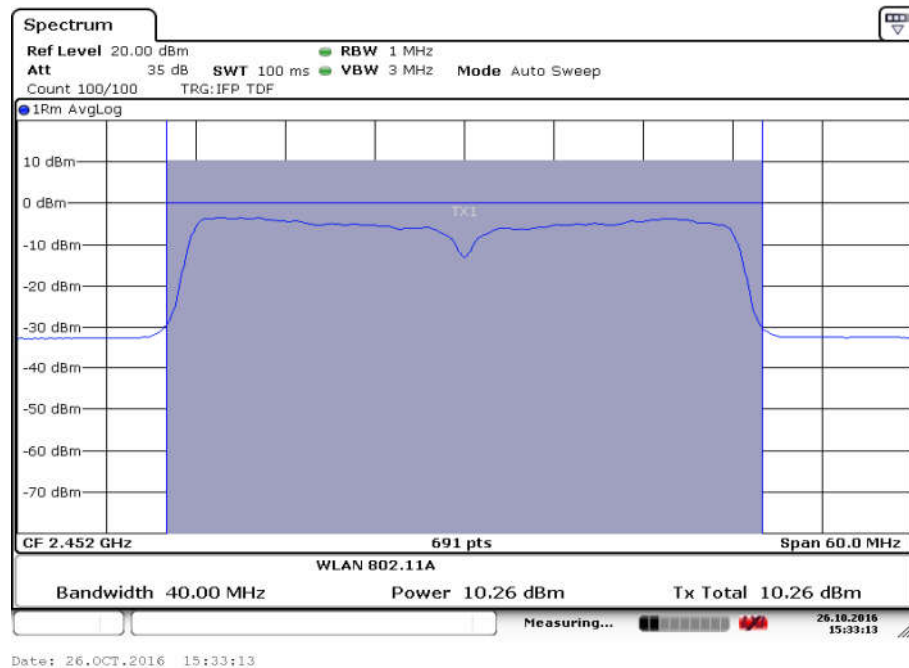


Fig.78 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS5)

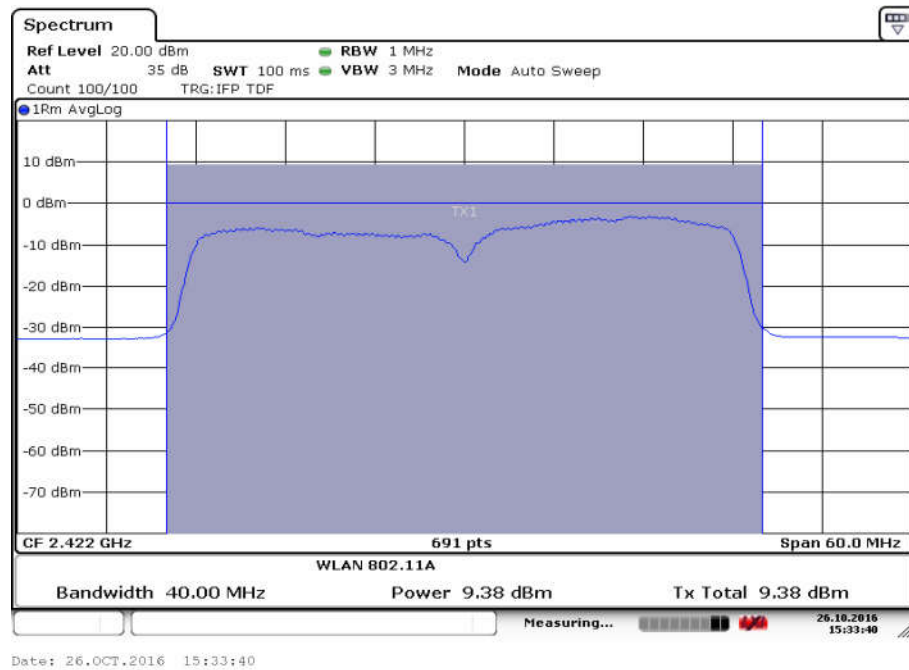


Fig.79 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS6)

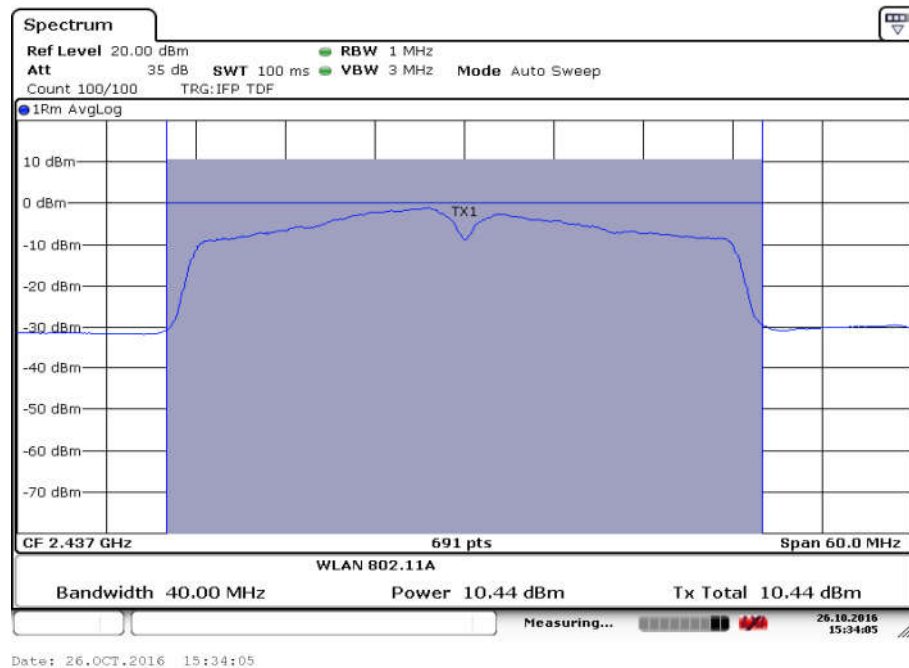


Fig.80 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS6)

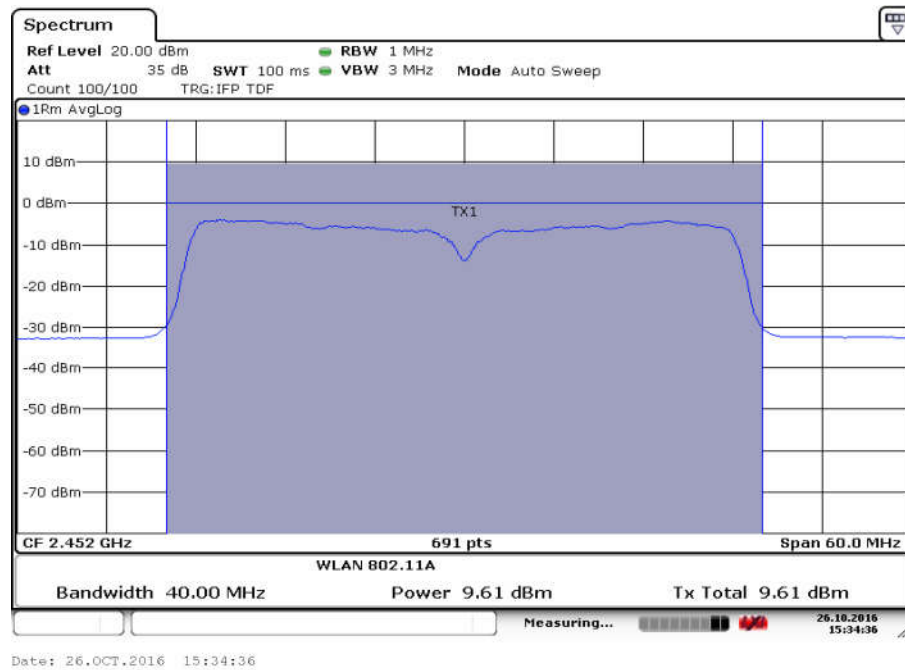


Fig.81 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS6)

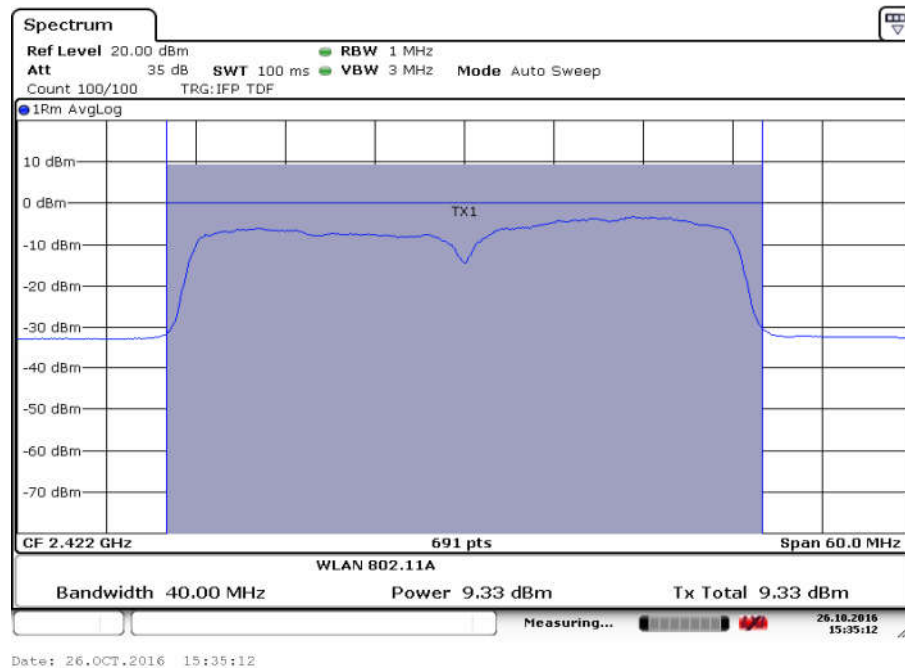


Fig.82 Maximum Average Output Power (802.11n-40MHz, Ch 3,MCS7)

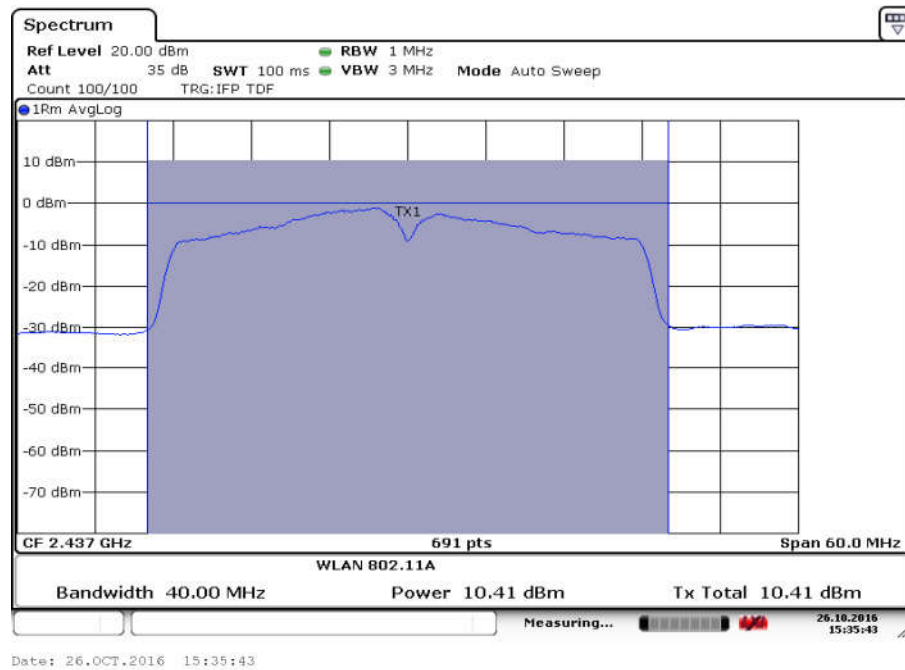


Fig.83 Maximum Average Output Power (802.11n-40MHz, Ch 6,MCS7)

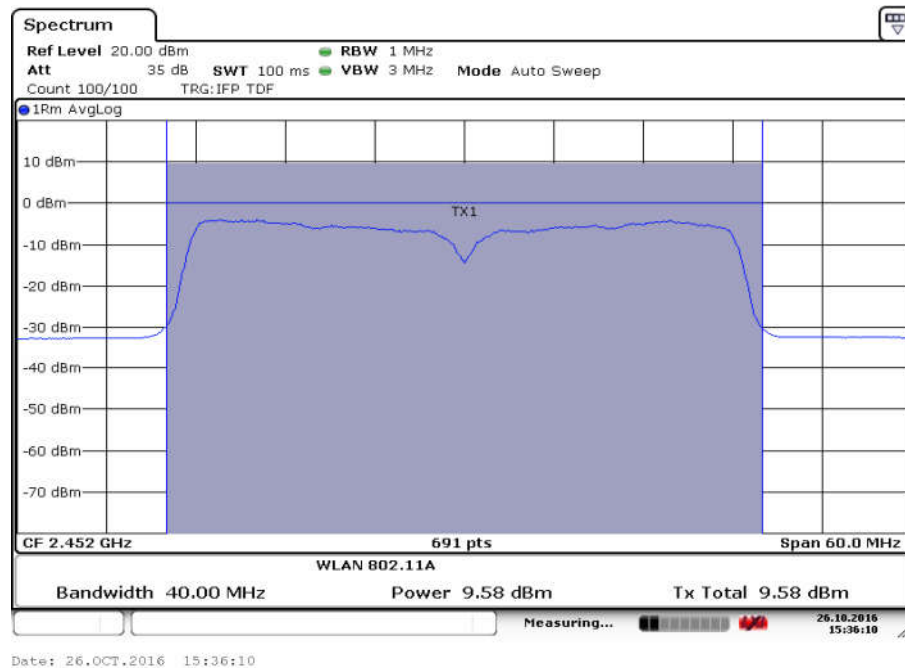


Fig.84 Maximum Average Output Power (802.11n-40MHz, Ch 9,MCS7)

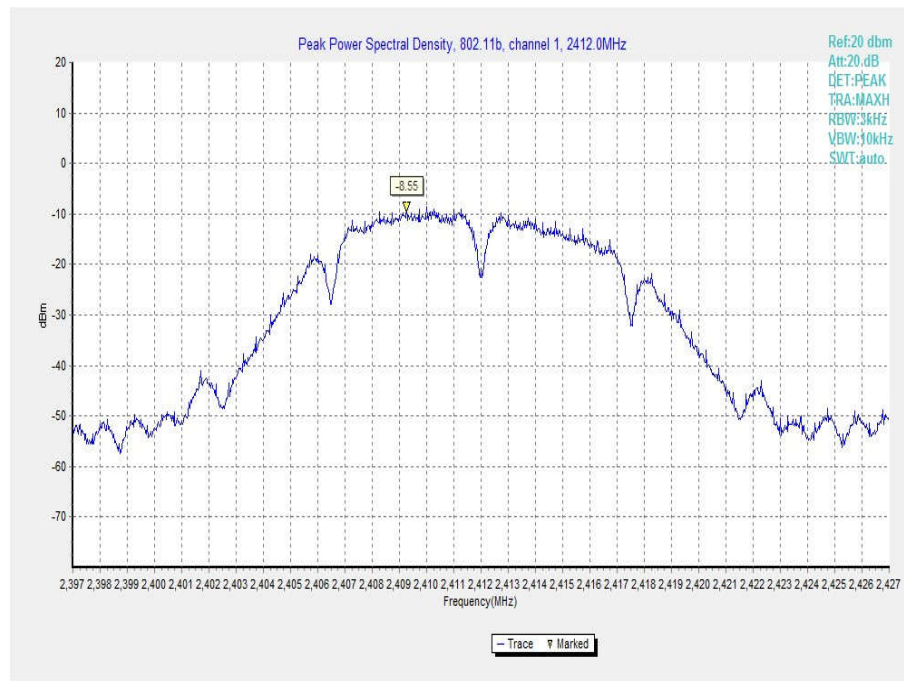


Fig.85 Power Spectral Density (802.11b, Ch 1)

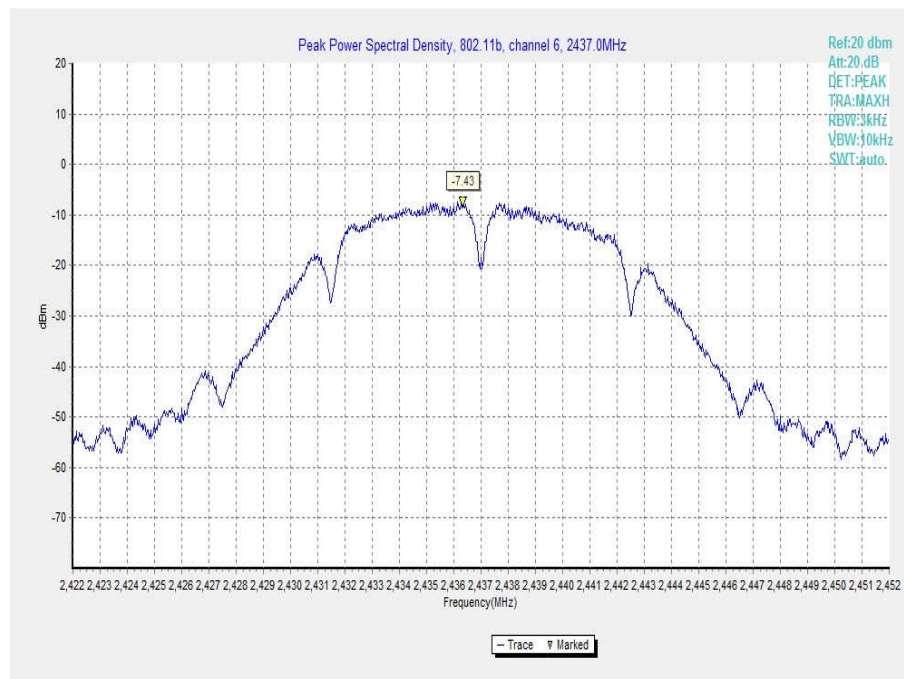


Fig.86 Power Spectral Density (802.11b, Ch 6)

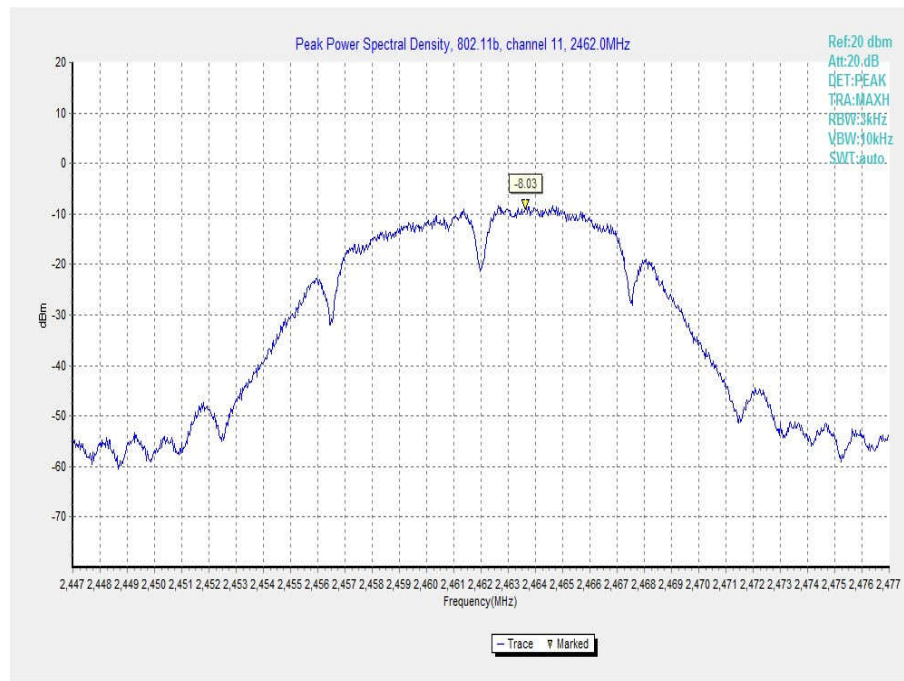


Fig.87 Power Spectral Density (802.11b, Ch 11)

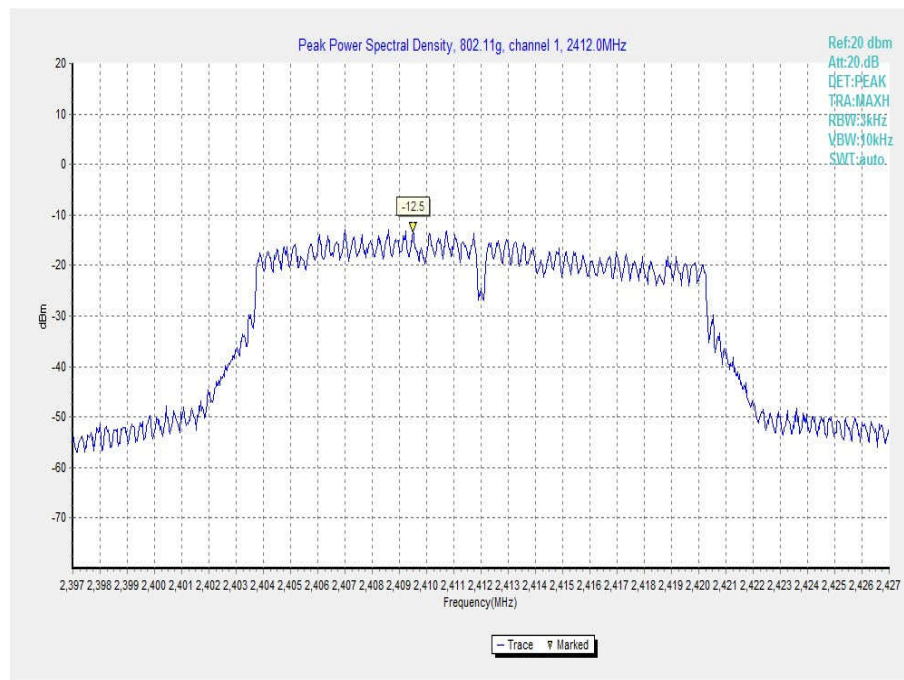


Fig.88 Power Spectral Density (802.11g, Ch 1)



Fig.89 Power Spectral Density (802.11g, Ch 6)

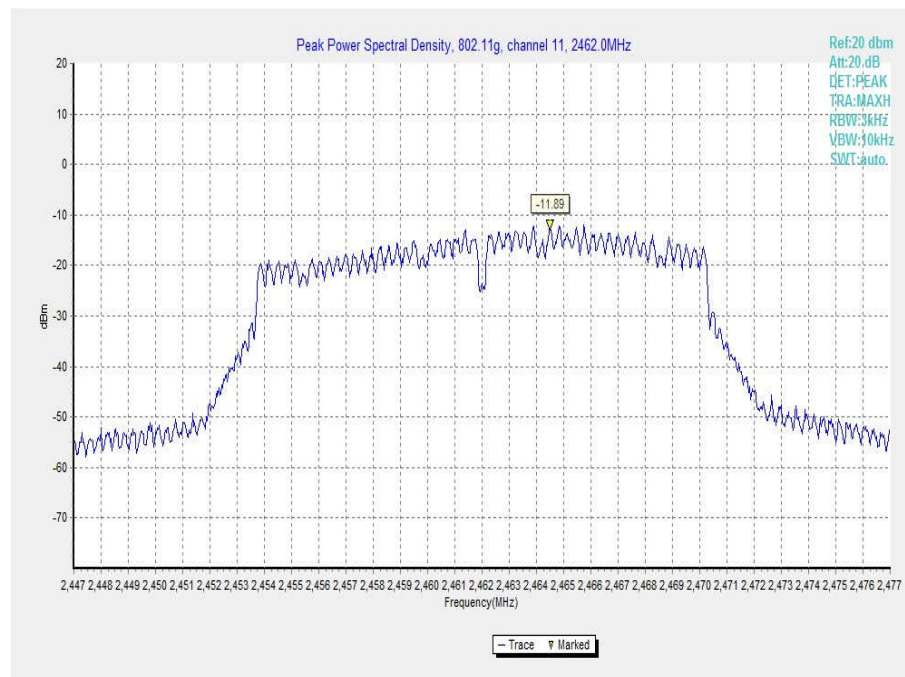


Fig.90 Power Spectral Density (802.11g, Ch 11)

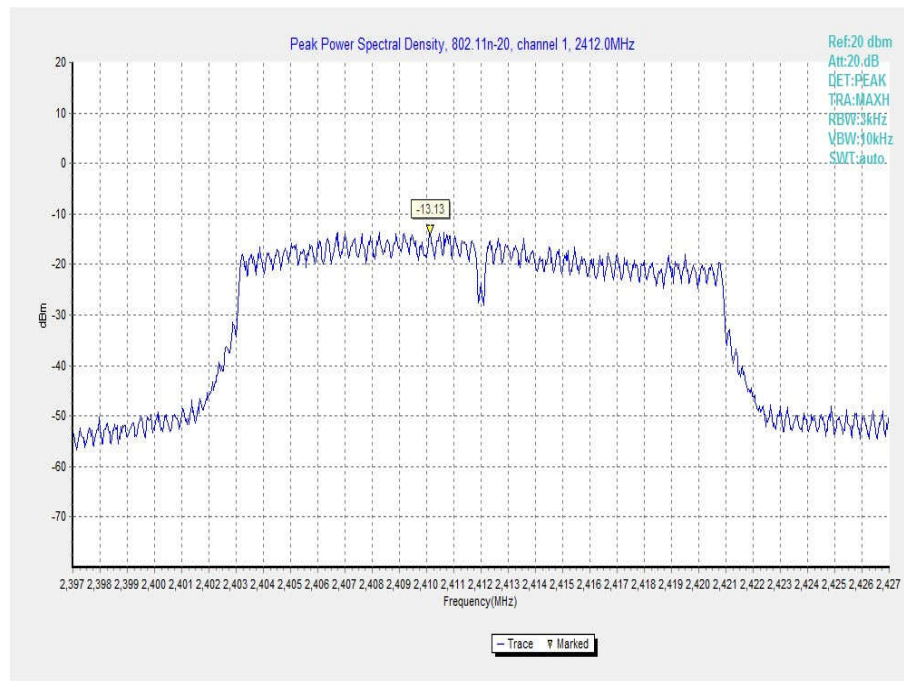


Fig.91 Power Spectral Density (802.11n-20MHz, Ch 1)

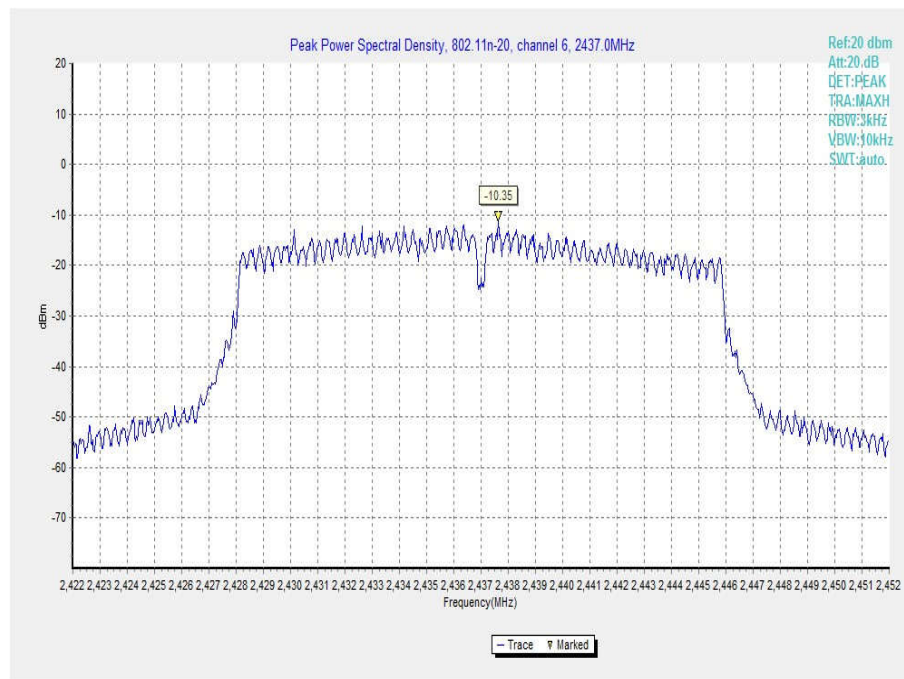


Fig.92 Power Spectral Density (802.11n-20MHz, Ch 6)

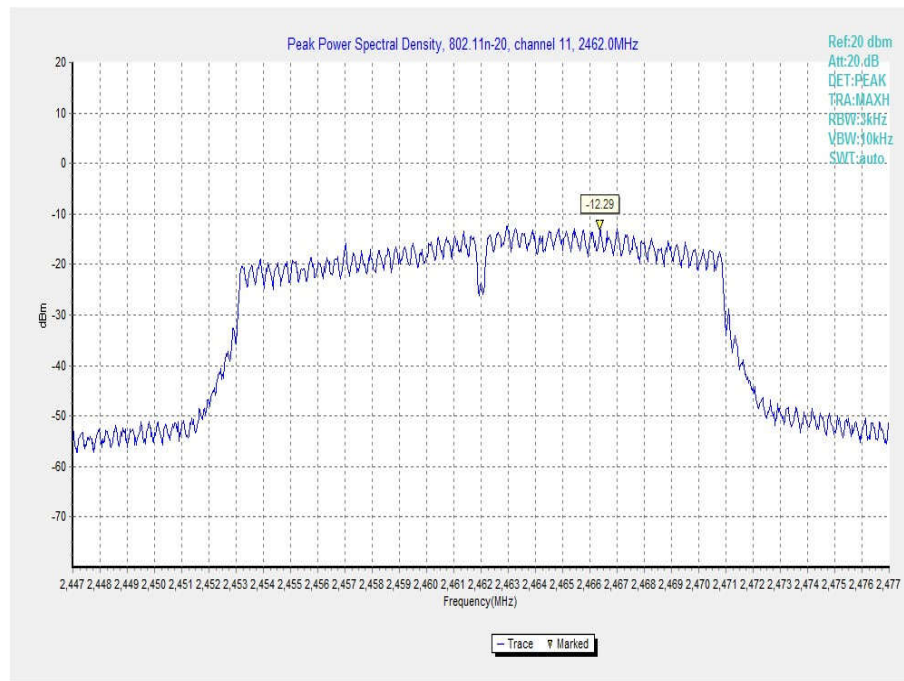


Fig.93 Power Spectral Density (802.11n-20MHz, Ch 11)

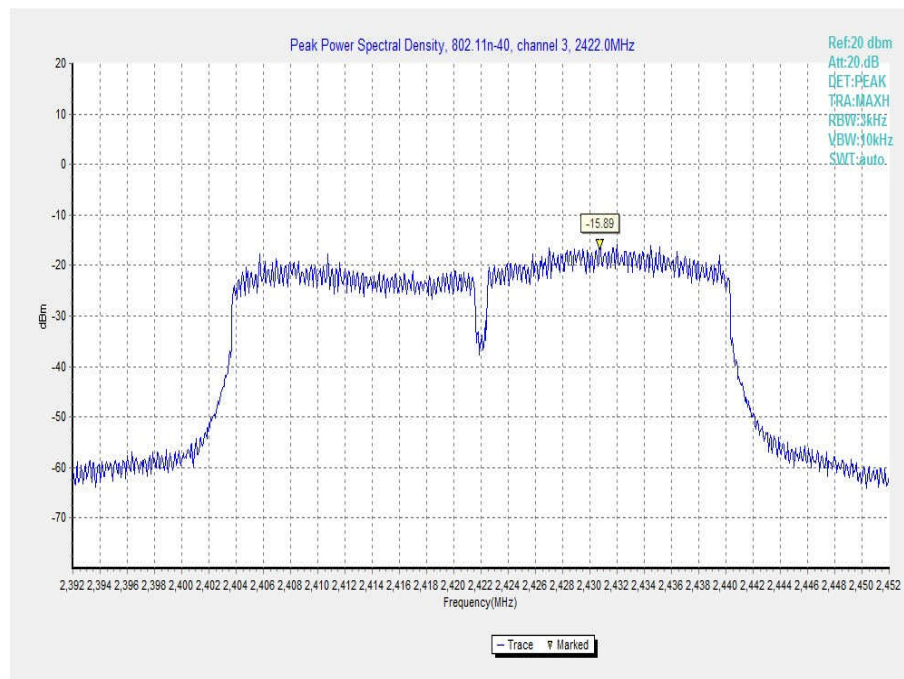


Fig.94 Power Spectral Density (802.11n-40MHz, Ch 3)

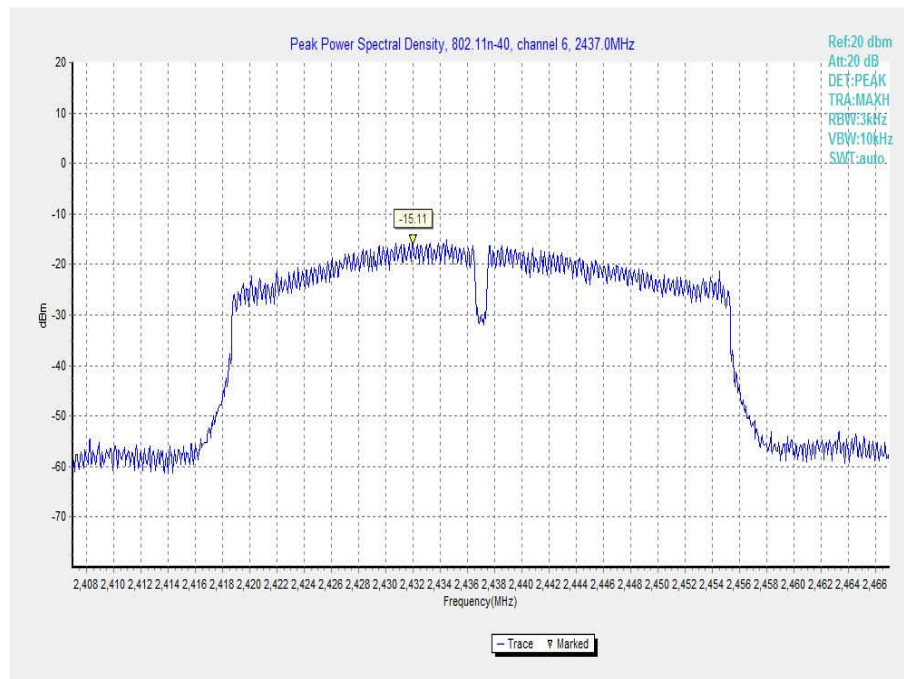


Fig.95 Power Spectral Density (802.11n-40MHz, Ch 6)

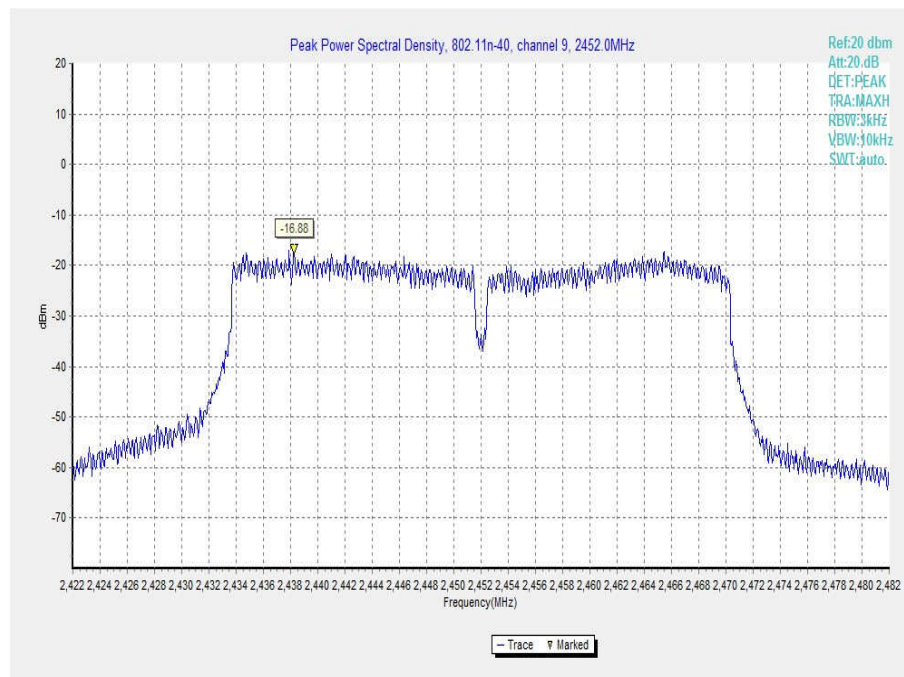


Fig.96 Power Spectral Density (802.11n-40MHz, Ch 9)