



FCC TEST REPORT

According to

FCC Rules and Regulations Part 15 Subpart C

Applicant	: DXG Technology Corp.
Address	: 15Fl., No. 4, Sec. 3, Ming-Chuan East Road, Taipei, Taiwan, R.O.C.
Equipment	: HD Action Camcorder
Model No.	: DVS5M9
Trade Name	: DXG
FCC ID	: RD2DS5M9001

- The test result refers exclusively to the test presented test model / sample.,
- Without written approval of **Cerpass Technology Corp.**, the test report shall not be reproduced except in full.
- The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

Laboratory Accreditation





Contents

1. Report of Measurements and Examinations	6
1.1 List of Measurements and Examinations	6
2. Test Configuration of Equipment under Test	7
2.1 General Description of EUT	7
2.2 Feature of Equipment under Test	8
2.3 Carrier Frequency of Channels	9
2.4 Test Mode and Test Software	9
2.5 Description of Test System	12
2.6 General Information of Test	13
3. Antenna Requirements	14
3.1 Standard Applicable	14
3.2 Antenna Construction and Directional Gain	14
4. Test of Conducted Emission	15
4.1 Test Limit	15
4.2 Test Procedures	15
4.3 Typical Test Setup	16
4.4 Measurement Equipment	16
4.5 Test Result and Data	17
4.6 Test Photographs	23
5. Test of Radiated Emission	24
5.1 Test Limit	24
5.2 Test Procedures	24
5.3 Typical Test Setup	25
5.4 Measurement Equipment	25
5.5 Test Result and Data (9kHz ~ 30MHz)	26
5.6 Test Result and Data (30MHz ~ 1GHz)	26
5.7 Test Result and Data (1GHz ~ 25GHz)	38
5.8 Test Photographs (30MHz ~ 1GHz)	62
5.9 Test Photographs (1GHz ~ 25GHz)	64
6. 6dB Bandwidth Measurement Data	65
6.1 Test Limit	65
6.2 Test Procedures	65
6.3 Test Setup Layout	65
6.4 Measurement Equipment	65
6.5 Test Result and Data	66
7. Maximum Peak and Average Output Power	73
7.1 Test Limit	73
7.2 Test Procedures	73
7.3 Test Setup Layout	73
7.4 Measurement Equipment	73
7.5 Test Result and Data	74
8. Power Spectral Density	75
8.1 Test Limit	75



8.2	Test Procedures	75
8.3	Test Setup Layout	75
8.4	Measurement Equipment.....	75
8.5	Test Result and Data.....	75
9.	Band Edges Measurement	82
9.1	Test Limit	82
9.2	Test Procedure	82
9.3	Test Setup Layout	82
9.4	Measurement Equipment.....	82
9.5	Test Result and Data.....	82
9.6	Restrict Band Emission Measurement Data	91
10.	Restricted Bands of Operation	93
10.1	Labeling Requirement	93
Appendix A. Photographs of EUT.....		A1 ~ A9



History of this test report

■ ORIGINAL.

☐ Additional attachment as following record:

Attachment No.	Issue Date	Description



CERTIFICATE OF COMPLIANCE

According to

FCC Rules and Regulations Part 15 Subpart C

Applicant	: DXG Technology Corp.
Address	: 15Fl., No. 4, Sec. 3, Ming-Chuan East Road, Taipei, Taiwan, R.O.C.
Equipment	: HD Action Camcorder
Model No.	: DVS5M9
FCC ID	: RD2DS5M9001

I HEREBY CERTIFY THAT :

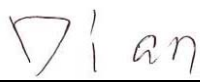
The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 2009, KDB558074 & KDB662911**. The equipment was ***passed*** the test performed according to **FCC Rules and Regulations Part 15 Subpart C (2010)**.

The sample was received on Oct. 29, 2014 and the testing was carried out on Nov. 06, 2014 at **Cerpass Technology Corp.**

Approved by:

Tested by:


Hill Chen
EMC/RF B.U. Assistant Manager


Dian Chen
Engineer



1. Report of Measurements and Examinations

1.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	Pass
15.209 15.247(d)	. Radiated Emission	Pass
15.247(a)(2)	. 6dB Bandwidth	Pass
15.247(b)	. Maximum Peak Output Power	Pass
15.247(d)	. 100kHz Bandwidth of Frequency Band Edges	Pass
15.247(e)	. Power Spectral Density	Pass
1.1307 1.1310 2.1091 2.1093	. RF Exposure Compliance	Pass



2. Test Configuration of Equipment under Test

2.1 General Description of EUT

EUT	HD Action Camcorder
Model No.	DVS5M9
Power Supply	5Vdc from adapter or host equipment 3.7Vdc from battery
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: 11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n HT 20: up to 65.0Mbps 802.11n HT 40: up to 130.0Mbps
Operating Frequency	2412 ~ 2462MHz
Number of Channel	11
Output Power	52.84mW
Antenna Type	PCB Antenna: 0.44dBi Helical Antenna: 0.5dBi
Antenna Connector	NGFF
Data Cable	1m shielded USB cable with core 1m shielded HDMI cable with core
I/O Ports	Refer to user's manual
Accessory Device	Adapter, Battery

Note:

1. The EUT provides one completed transmitter and one receiver.

Modulation Mode	TX Function
802.11b	1TX
802.11g	1TX
802.11n HT20	1TX
802.11n HT40	1TX

2. The EUT consumes power from the following adapter and battery.

Adapter	
Brand	AMIGO
Model	AMS47-0501000FU
Input Power	100-240V ~ 50/60Hz 0.2A
Output Power	5Vdc, 1.0A

Battery	
Brand	FUJI ELECTRONICS (SHENZHEN) CO., LTD.
Model	FJ-SLB-10A
Power Rating	3.7V, 1130mAh, 4.18Wh



3. The EUT uses the following accessory.

Item	Brand	Model
Watch	DXG	RCWD01
Watch	DXG	RCW5K8

4. The EUT's highest operating frequency is 2.4GHz.

2.2 Feature of Equipment under Test

OLED Screen Display	0.68"
Storage (Memory)	Micro SD, up to 32GB SDHC Class 6
Image Quality	Optics: Ultra-sharp F/ no=2.4, f=2.4mm Focus range: 0.4m ~ infinity Field of view: Wide
Video	1080p (16:9): 30 fps 960p (4:3): 30 fps 720p (16:9): 60, 30 fps WVGA (16:9): 60, 30 fps VGA: 90 fps Time lapse: 3, 5, 10, 30, 60 seconds Video format: H. 264 (AVI)
Still Image	Resolution: 16MP, 5MP, 3MP, 2MP Burst: 3, 5, 10 Self-timer: 2, 5, 10 seconds Interval shooting: 3, 5, 10, 30, 60 seconds Photo format: JPEG (exif 2.2)
White Balance	Auto
Looping Video	Yes
Average Record Time	Video (1080p30): about 90 minutes, Photo (16MP): about 250 photos
Auto Power Off	1, 3, 5, 10, 30, 60 minutes
Inputs/Outputs	Micro USB, Mini HDMI
Battery	1130mAh rechargeable Li-ion
Dimensions	39.0 (H) x 54.3 (W) x 21 (D) mm (without lens)
Weight	Approx. 46±3g (without waterproof case)



2.3 Carrier Frequency of Channels

802.11b, 802.11g, 802.11n HT 20 (2412MHz~2462MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	*11	2462
*06	2437	---	---

802.11n, HT 40 (2422MHz~2452MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*03	2422	07	2442
04	2427	08	2447
05	2432	*09	2452
*06	2437	---	---

Note: Channels remarked “*” are selected to perform test.

2.4 Test Mode and Test Software

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- The complete test system included EUT for RF test.
- An executive program, “Hyper Terminal” under WIN XP was executed to transmit and receive data via WLAN.
- The following test modes were performed for test:

<Conduction>

Test Mode 1. Charge, Power by Adapter

- 802.11b/g/n HT20: CH01: 2412MHz, CH06: 2437MHz, CH11: 2462MHz
- 802.11n HT40: CH03: 2422MHz, CH06: 2437MHz, CH09: 2452MHz

<Radiation: 30MHz ~ 1GHz>

Test Mode 1. Charge, Power by Adapter

Test Mode 2. REC., Power by DC 3.7V

- 802.11b/g/n HT20: CH01: 2412MHz, CH06: 2437MHz, CH11: 2462MHz
- 802.11n HT40: CH03: 2422MHz, CH06: 2437MHz, CH09: 2452MHz

<Radiation: 1GHz ~ 25GHz>

Test Mode 1. REC., Power by DC 3.7V

- 802.11b/g/n HT20: CH01: 2412MHz, CH06: 2437MHz, CH11: 2462MHz
- 802.11n HT40: CH03: 2422MHz, CH06: 2437MHz, CH09: 2452MHz



* Power output of data rate:

Average:

802.11b			802.11g			802.11n HT20		
Data Rate (Mbps)	Power Output (dBm)	setting	Data Rate (Mbps)	Power Output (dBm)	setting	Data Rate (Mbps)	Power Output (dBm)	setting
11	13.83	62	54	10.20	60	65	11.03	55
11	14.29	62	54	10.02	60	65	10.98	55
11	15.23	55	54	10.95	55	65	11.04	55
11	15.23	55	54	10.95	55	65	11.04	55
5.5	15.16	55	48	10.88	55	58.5	11.01	55
2	15.09	55	36	10.89	55	52	10.59	55
1	14.93	55	24	10.84	55	39	10.47	55
			18	10.59	55	26	10.44	55
			12	10.64	55	19.5	10.36	55
			9	10.66	55	13	10.57	55
			6	10.37	55	6.5	10.22	55

802.11n HT40		
Data Rate (Mbps)	Power Output (dBm)	setting
130	6.95	60
130	7.18	60
130	8.26	55
130	8.26	55
117	8.25	55
104	8.22	55
78	7.93	55
52	8.04	55
39	7.92	55
26	7.81	55
13	7.79	55



Peak:

802.11b			802.11g			802.11n HT20		
Data Rate (Mbps)	Power Output (dBm)	setting	Data Rate (Mbps)	Power Output (dBm)	setting	Data Rate (Mbps)	Power Output (dBm)	setting
11	15.22	62	54	16.36	60	65	14.96	55
11	16.01	62	54	16.23	60	65	15.23	55
11	16.02	55	54	16.50	55	65	16.69	55
11	16.02	55	54	16.50	55	65	16.69	55
5.5	15.88	55	48	16.27	55	58.5	16.28	55
2	15.90	55	36	16.30	55	52	16.37	55
1	15.63	55	24	16.29	55	39	16.20	55
			18	15.88	55	26	16.28	55
			12	15.67	55	19.5	15.79	55
			9	16.23	55	13	15.77	55
			6	15.96	55	6.5	15.64	55

802.11n HT40		
Data Rate (Mbps)	Power Output (dBm)	setting
130	13.12	60
130	13.55	60
130	13.44	55
130	13.44	55
117	13.20	55
104	13.14	55
78	12.78	55
52	12.66	55
39	12.39	55
26	12.57	55
13	12.40	55



2.5 Description of Test System

No supporting system during the test.



2.6 General Information of Test

Test Site :	Cerpass Technology Corporation Test Laboratory No.10, Lane 2, Lianfu Street, Luzhu Township, Taoyuan County 33848, Taiwan, R.O.C.
Test Site Location :	No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C.
FCC Registration Number :	☐ TW1079, ☒ TW1061, ☐ 390316, ☒ 228391, ☐ 641184
IC Registration Number :	☐ 4934B-1, ☒ 4934E-1, ☐ 4934E-2
VCCI Registration Number :	☒ T-2205 for Telecommunication Test ☒ C-4463 for Conducted emission test ☒ R-3428 for Radiated emission test ☒ G-812 for radiated disturbance above 1GHz ☐ G-813 for radiated disturbance above 1GHz
Frequency Range Investigated :	Conducted Emission Test: from 150 kHz to 30 MHz Radiated Emission Test: from 30 MHz to 25,000 MHz
Test Distance :	The test distance of radiated emission below 1GHz from antenna to EUT is 10 M. The test distance of radiated emission above 1GHz from antenna to EUT is 3 M.



3. Antenna Requirements

3.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 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.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

3.2 Antenna Construction and Directional Gain

WIFI

Antenna Type: PCB Antenna

Antenna Gain: 0.44 dBi

Antenna Type: Helical antenna

Antenna Gain: 0.5 dBi



4. Test of Conducted Emission

4.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2009 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

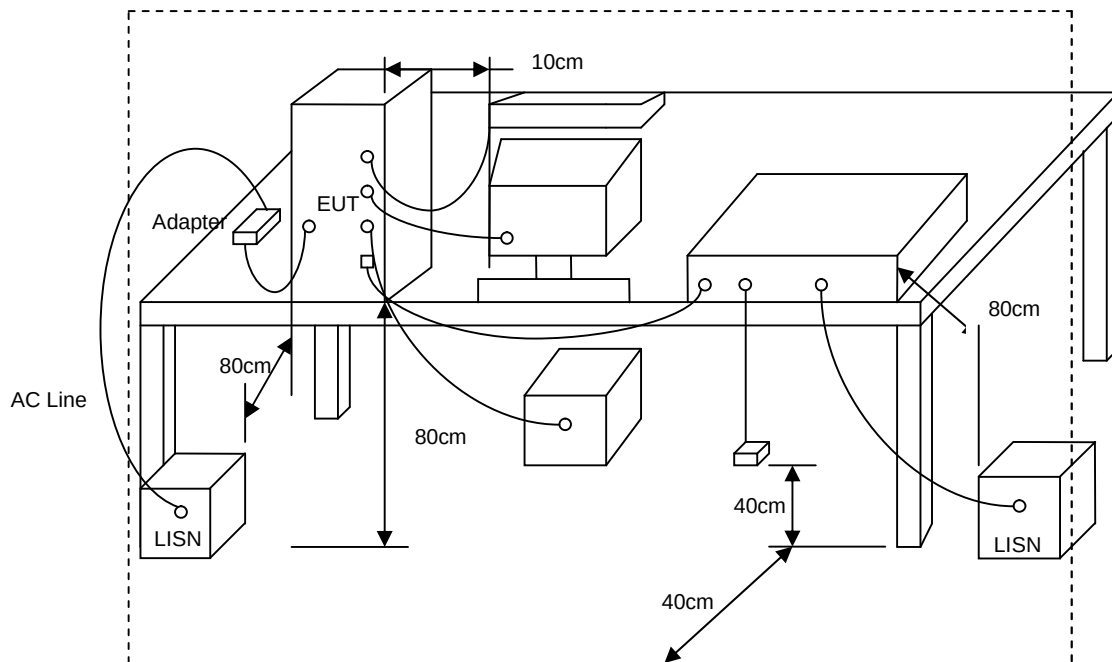
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

4.2 Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

4.3 Typical Test Setup



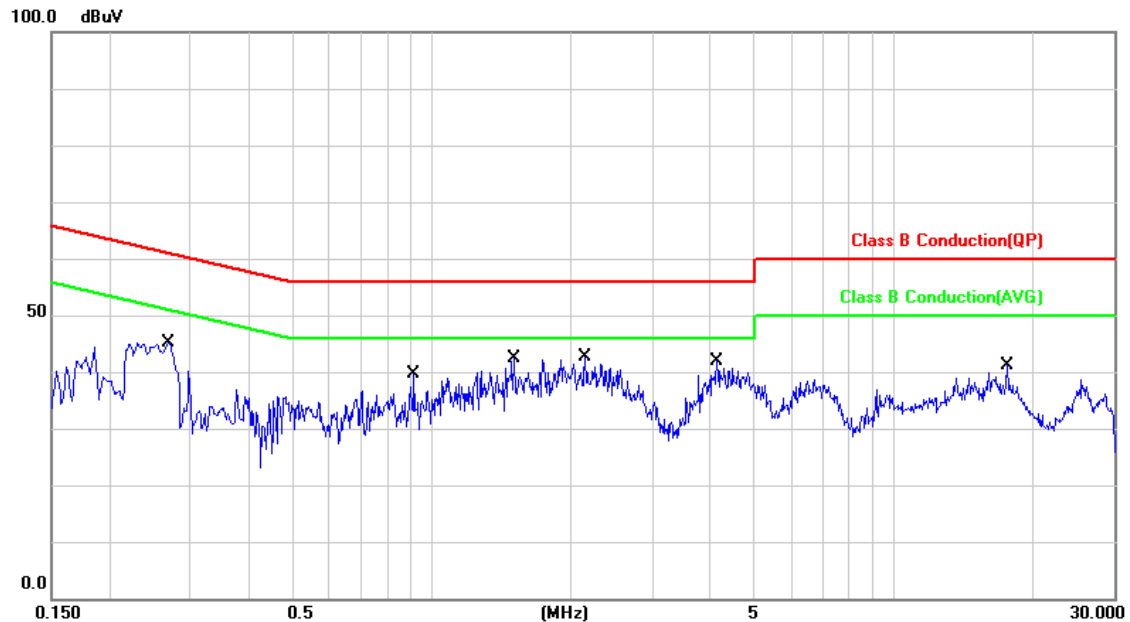
4.4 Measurement Equipment

Instrument	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
EMI Receiver	R&S	ESCI	101423	2014/06/05	2015/06/04
LISN	Schwarzbeck	NSLK 8127	8127-740	2014/08/14	2015/08/13
LISN	Schwarzbeck	NSLK 8127	8127-516	2014/03/10	2015/03/09
Pulse Limiter	R&S	ESH3-Z2	101933	2014/08/12	2015/08/11
Software	Farad	Ez-EMC	ver.ct3a1	N/A	N/A



4.5 Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode 1	: 802.11g, CH1	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa

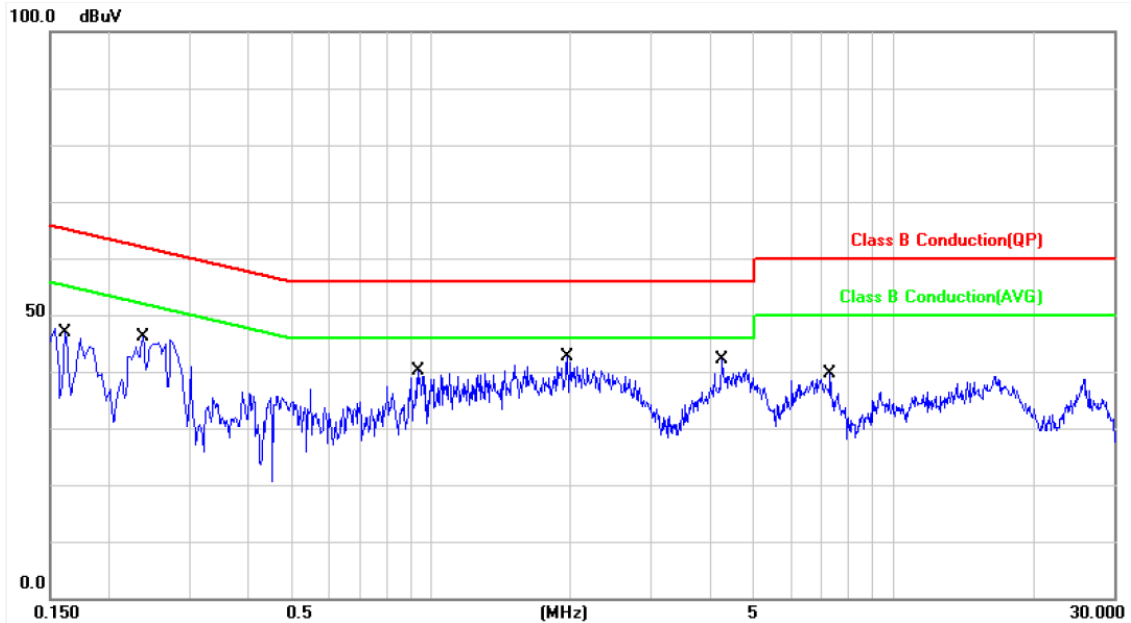


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2700	9.88	33.41	43.29	61.12	-17.83	QP	P
2	0.2700	9.88	22.05	31.93	51.12	-19.19	AVG	P
3	0.9140	9.90	23.44	33.34	56.00	-22.66	QP	P
4	0.9140	9.90	15.88	25.78	46.00	-20.22	AVG	P
5	1.5100	9.91	27.52	37.43	56.00	-18.57	QP	P
6	1.5100	9.91	17.94	27.85	46.00	-18.15	AVG	P
7	2.1460	9.93	24.91	34.84	56.00	-21.16	QP	P
8	2.1460	9.93	18.03	27.96	46.00	-18.04	AVG	P
9	4.1380	9.95	24.26	34.21	56.00	-21.79	QP	P
10	4.1380	9.95	17.61	27.56	46.00	-18.44	AVG	P
11	17.6180	10.15	21.66	31.81	60.00	-28.19	QP	P
12	17.6180	10.15	14.55	24.70	50.00	-25.30	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 1	: 802.11g, CH1	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa

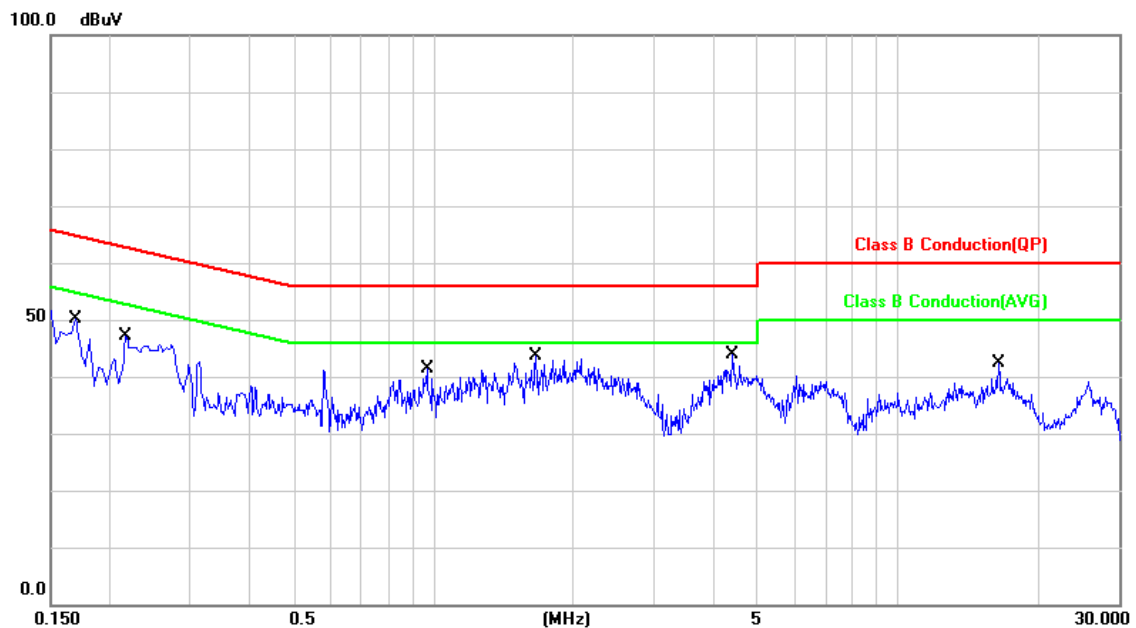


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1620	9.89	30.56	40.45	65.36	-24.91	QP	P
2	0.1620	9.89	14.46	24.35	55.36	-31.01	AVG	P
3	0.2380	9.88	32.33	42.21	62.16	-19.95	QP	P
4	0.2380	9.88	17.26	27.14	52.16	-25.02	AVG	P
5	0.9420	9.90	24.89	34.79	56.00	-21.21	QP	P
6	0.9420	9.90	17.34	27.24	46.00	-18.76	AVG	P
7	1.9780	9.93	25.14	35.07	56.00	-20.93	QP	P
8	1.9780	9.93	18.30	28.23	46.00	-17.77	AVG	P
9	4.2660	9.95	24.63	34.58	56.00	-21.42	QP	P
10	4.2660	9.95	18.24	28.19	46.00	-17.81	AVG	P
11	7.3020	10.00	21.75	31.75	60.00	-28.25	QP	P
12	7.3020	10.00	15.45	25.45	50.00	-24.55	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 1	: 802.11n HT20, CH1	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa

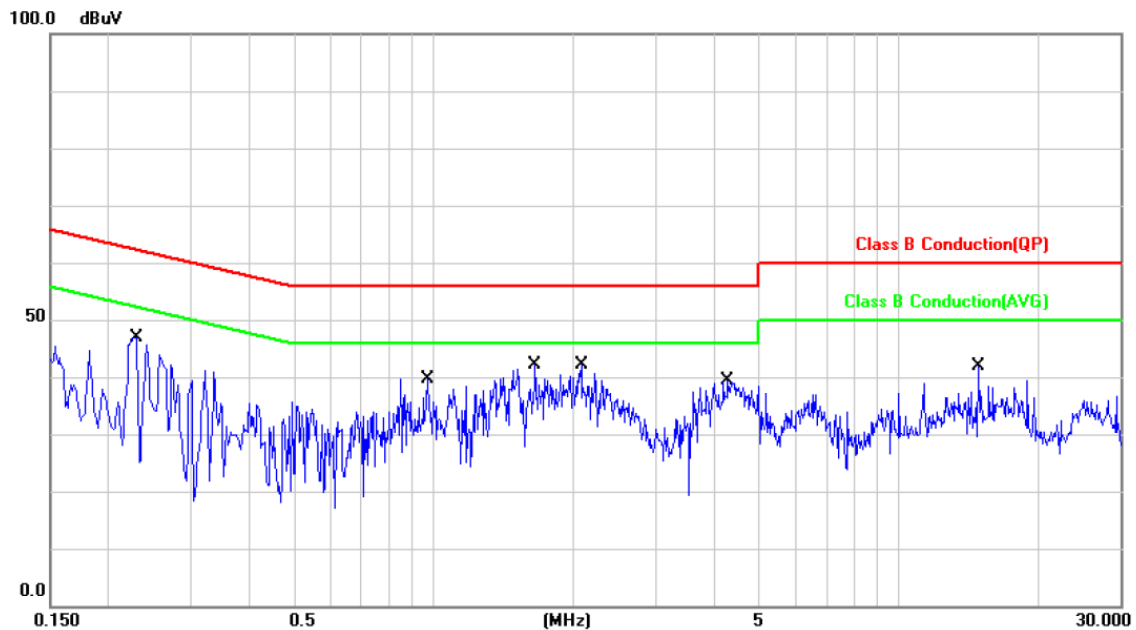


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1700	9.89	45.86	55.75	64.96	-9.21	QP	P
2	0.1700	9.89	24.13	34.02	54.96	-20.94	AVG	P
3	0.2180	9.88	44.75	54.63	62.89	-8.26	QP	P
4	0.2180	9.88	20.68	30.56	52.89	-22.33	AVG	P
5	0.9700	9.90	27.78	37.68	56.00	-18.32	QP	P
6	0.9700	9.90	20.47	30.37	46.00	-15.63	AVG	P
7	1.6660	9.92	26.95	36.87	56.00	-19.13	QP	P
8	1.6660	9.92	19.28	29.20	46.00	-16.80	AVG	P
9	4.4300	9.96	26.32	36.28	56.00	-19.72	QP	P
10	4.4300	9.96	19.16	29.12	46.00	-16.88	AVG	P
11	16.4940	10.14	21.55	31.69	60.00	-28.31	QP	P
12	16.4940	10.14	14.29	24.43	50.00	-25.57	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 1	: 802.11n HT20, CH1	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa

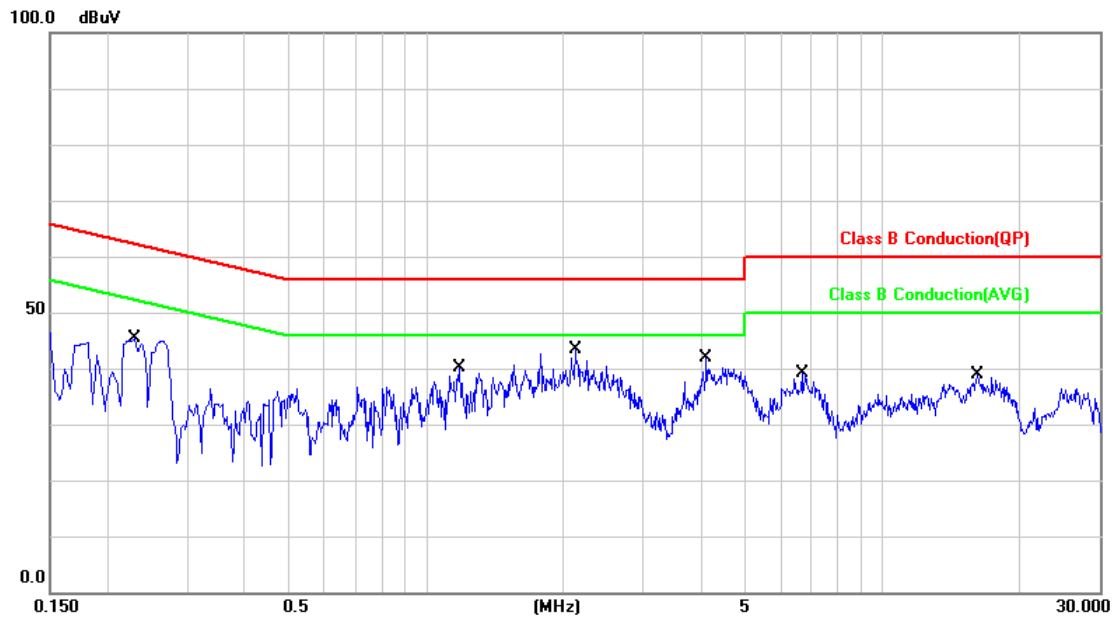


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2300	9.88	36.68	46.56	62.45	-15.89	QP	P
2	0.2300	9.88	24.05	33.93	52.45	-18.52	AVG	P
3	0.9700	9.90	26.39	36.29	56.00	-19.71	QP	P
4	0.9700	9.90	18.38	28.28	46.00	-17.72	AVG	P
5	1.6620	9.92	27.98	37.90	56.00	-18.10	QP	P
6	1.6620	9.92	20.14	30.06	46.00	-15.94	AVG	P
7	2.0780	9.93	28.93	38.86	56.00	-17.14	QP	P
8	2.0780	9.93	21.26	31.19	46.00	-14.81	AVG	P
9	4.2980	9.95	25.47	35.42	56.00	-20.58	QP	P
10	4.2980	9.95	18.70	28.65	46.00	-17.35	AVG	P
11	14.8780	10.12	19.30	29.42	60.00	-30.58	QP	P
12	14.8780	10.12	11.50	21.62	50.00	-28.38	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 1	: 802.11n HT40, CH3	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa

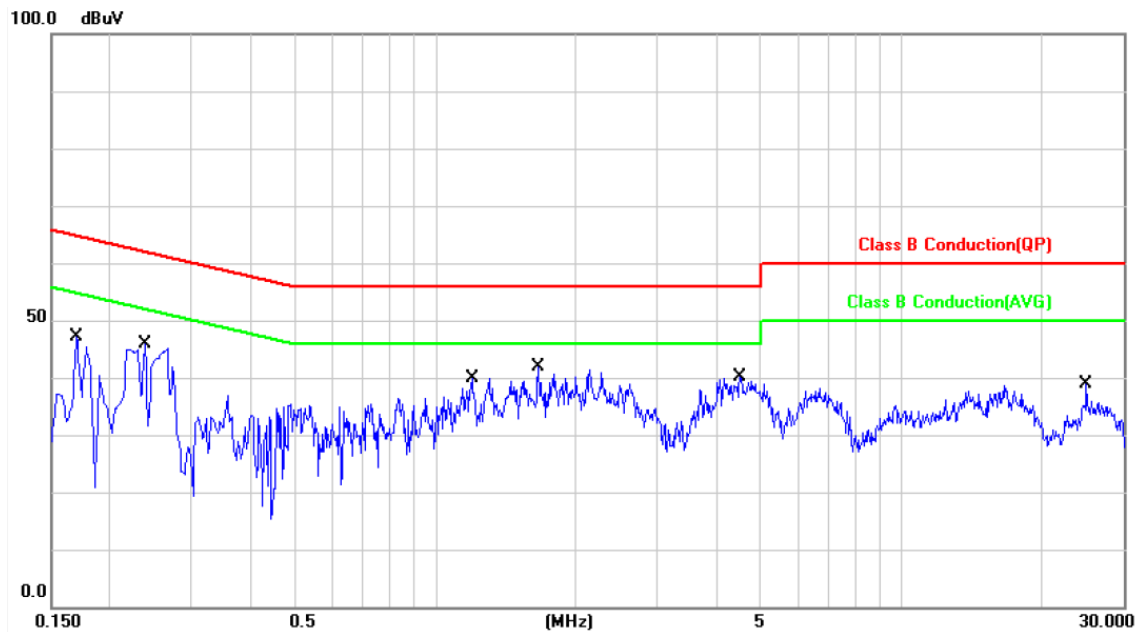


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2300	9.88	32.32	42.20	62.45	-20.25	QP	P
2	0.2300	9.88	16.10	25.98	52.45	-26.47	AVG	P
3	1.1900	9.90	26.26	36.16	56.00	-19.84	QP	P
4	1.1900	9.90	17.93	27.83	46.00	-18.17	AVG	P
5	2.1300	9.93	27.52	37.45	56.00	-18.55	QP	P
6	2.1300	9.93	20.02	29.95	46.00	-16.05	AVG	P
7	4.1300	9.95	23.47	33.42	56.00	-22.58	QP	P
8	4.1300	9.95	17.26	27.21	46.00	-18.79	AVG	P
9	6.6660	9.99	22.62	32.61	60.00	-27.39	QP	P
10	6.6660	9.99	17.02	27.01	50.00	-22.99	AVG	P
11	16.1580	10.13	22.20	32.33	60.00	-27.67	QP	P
12	16.1580	10.13	15.64	25.77	50.00	-24.23	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 1	: 802.11n HT40, CH3	Temperature	: 24 °C
		Humidity	: 40 %
Test date	: Nov. 04, 2014	Atmospheric Pressure	: 1006 hpa



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1700	9.89	29.19	39.08	64.96	-25.88	QP	P
2	0.1700	9.89	9.96	19.85	54.96	-35.11	AVG	P
3	0.2380	9.88	32.50	42.38	62.16	-19.78	QP	P
4	0.2380	9.88	20.21	30.09	52.16	-22.07	AVG	P
5	1.2020	9.90	24.86	34.76	56.00	-21.24	QP	P
6	1.2020	9.90	17.40	27.30	46.00	-18.70	AVG	P
7	1.6660	9.92	27.69	37.61	56.00	-18.39	QP	P
8	1.6660	9.92	19.82	29.74	46.00	-16.26	AVG	P
9	4.5020	9.96	24.51	34.47	56.00	-21.53	QP	P
10	4.5020	9.96	18.86	28.82	46.00	-17.18	AVG	P
11	25.0220	10.22	19.96	30.18	60.00	-29.82	QP	P
12	25.0220	10.22	14.22	24.44	50.00	-25.56	AVG	P

Note: Level = Reading + Factor
Margin = Level – Limit



5. Test of Radiated Emission

5.1 Test Limit

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter measurement is based on the maximum conducted output power, the attenuation required under this paragraph shall be 30dB instead of 20dB. In addition, radiated emissions which fall in section 15.205(a) the restricted bands must also comply with the radiated emission limit specified in section 15.209(a).

Frequency (MHz)	Field Strength (microvolt/meter)	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

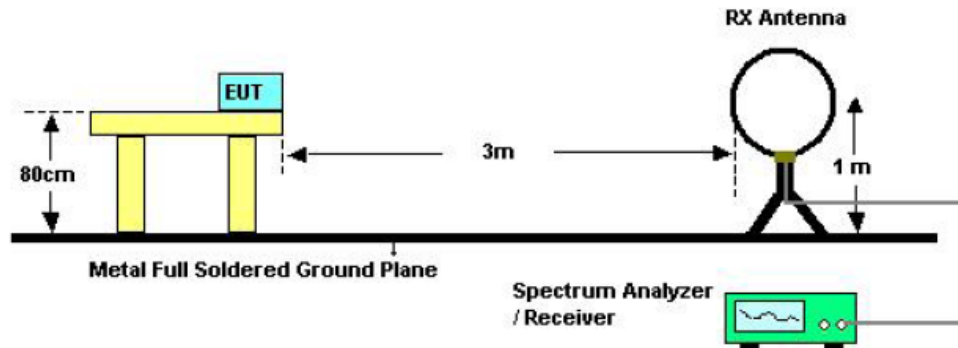
5.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

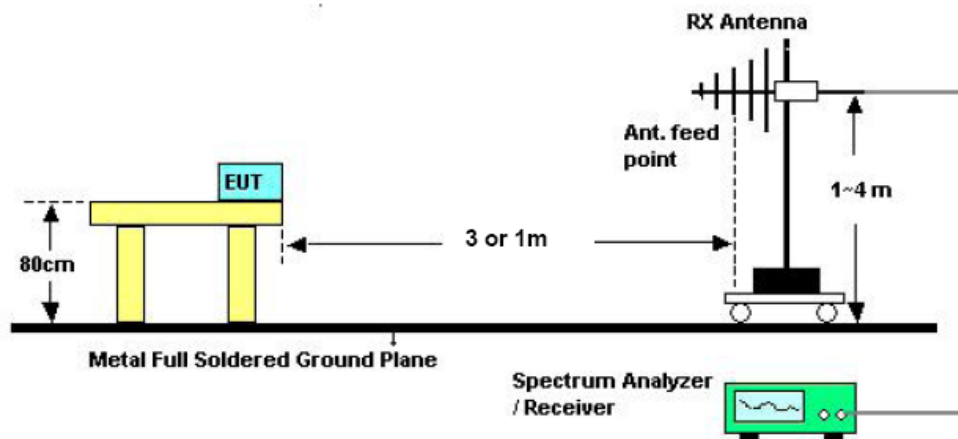


5.3 Typical Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.

Distance extrapolation factor = $20 \log (\text{specific distance [3m]} / \text{test distance [1m]})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 dB].

5.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI Receiver	R&S	ESCI	100443	2014/04/09	2015/04/08
Bilog Antenna	Schwarzbeck	VULB 9168	275	2014/09/18	2015/09/17
Amplifier	QuieTek	AP/0100A	CHM0906075	2014/09/17	2015/09/16
SPECTRUM ANALYZER	R&S	FSP40	100219	2014/09/03	2015/09/02
HORN ANTENNA	EMCO	3115	31601	2014/07/09	2015/07/08
PREAMPLIFIER	AGILENT	8449B	3008A01954	2014/03/28	2015/03/27
Software	Farad	Ez-EMC	ver.ct3a1	N/A	N/A

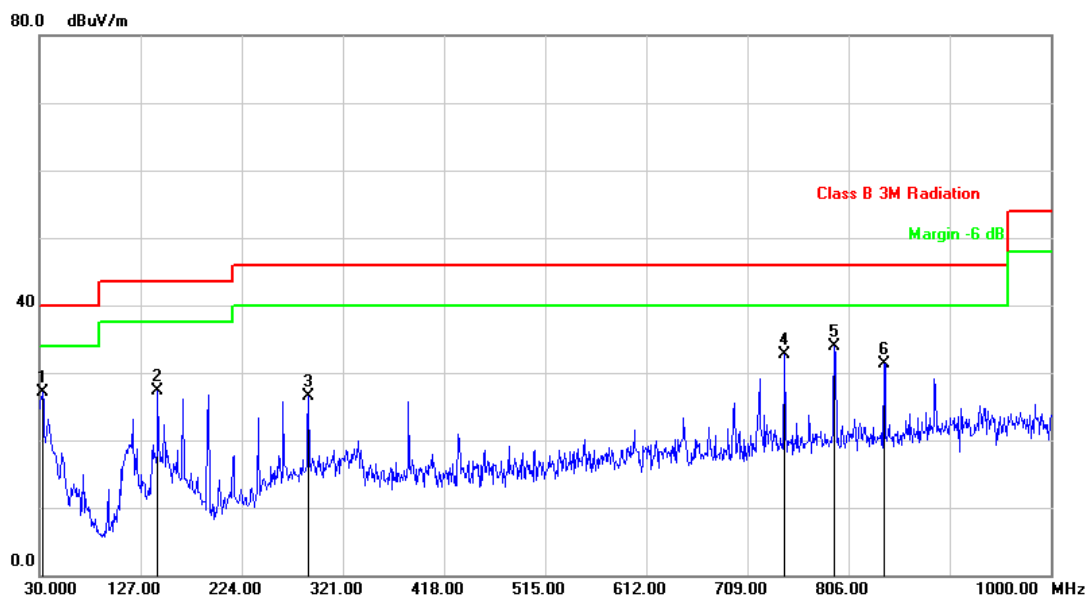


5.5 Test Result and Data (9kHz ~ 30MHz)

The 9kHz - 30MHz spurious emission is under limit 20dB more.

5.6 Test Result and Data (30MHz ~ 1GHz)

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	32.9099	-18.39	45.40	27.01	40.00	-12.99	peak	100	0	P
2	143.4900	-19.00	46.27	27.27	43.50	-16.23	peak	100	0	P
3	288.0199	-18.17	44.70	26.53	46.00	-19.47	peak	100	0	P
4	744.8899	-7.84	40.54	32.70	46.00	-13.30	peak	100	0	P
5	792.4199	-7.10	41.09	33.99	46.00	-12.01	peak	100	0	P
6	839.9500	-6.24	37.59	31.35	46.00	-14.65	peak	100	0	P

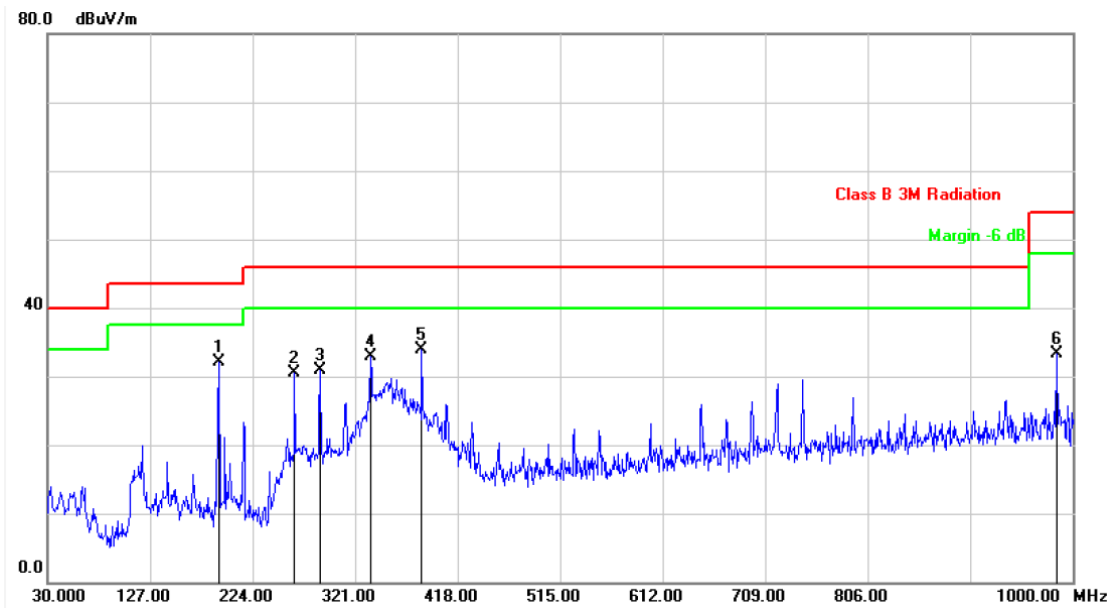
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 1	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	53.19	32.12	43.50	-11.38	peak	100	0	P
2	263.7699	-19.16	49.58	30.42	46.00	-15.58	peak	100	0	P
3	288.0199	-18.17	49.17	31.00	46.00	-15.00	peak	100	0	P
4	335.5500	-16.85	49.66	32.81	46.00	-13.19	peak	100	0	P
5	384.0500	-15.45	49.39	33.94	46.00	-12.06	peak	100	0	P
6	984.4800	-3.64	36.99	33.35	54.00	-20.65	peak	100	0	P

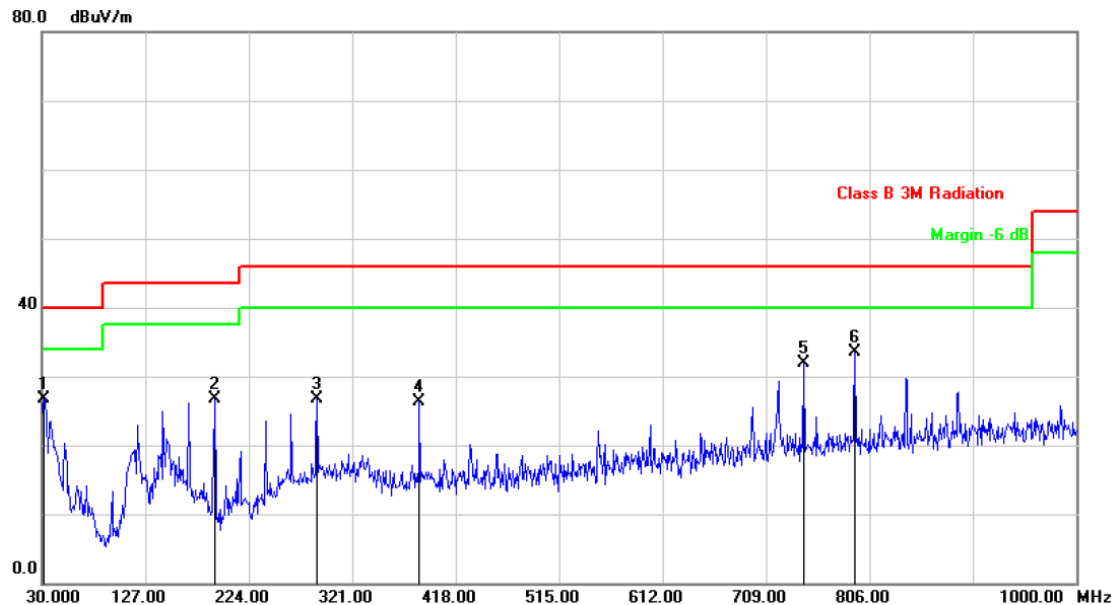
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	31.9400	-18.41	45.13	26.72	40.00	-13.28	peak	100	0	P
2	191.9900	-21.07	47.83	26.76	43.50	-16.74	peak	100	0	P
3	288.0199	-18.17	44.94	26.77	46.00	-19.23	peak	100	0	P
4	384.0500	-15.45	41.75	26.30	46.00	-19.70	peak	100	0	P
5	744.8899	-7.84	39.75	31.91	46.00	-14.09	peak	100	0	P
6	792.4199	-7.10	40.57	33.47	46.00	-12.53	peak	100	0	P

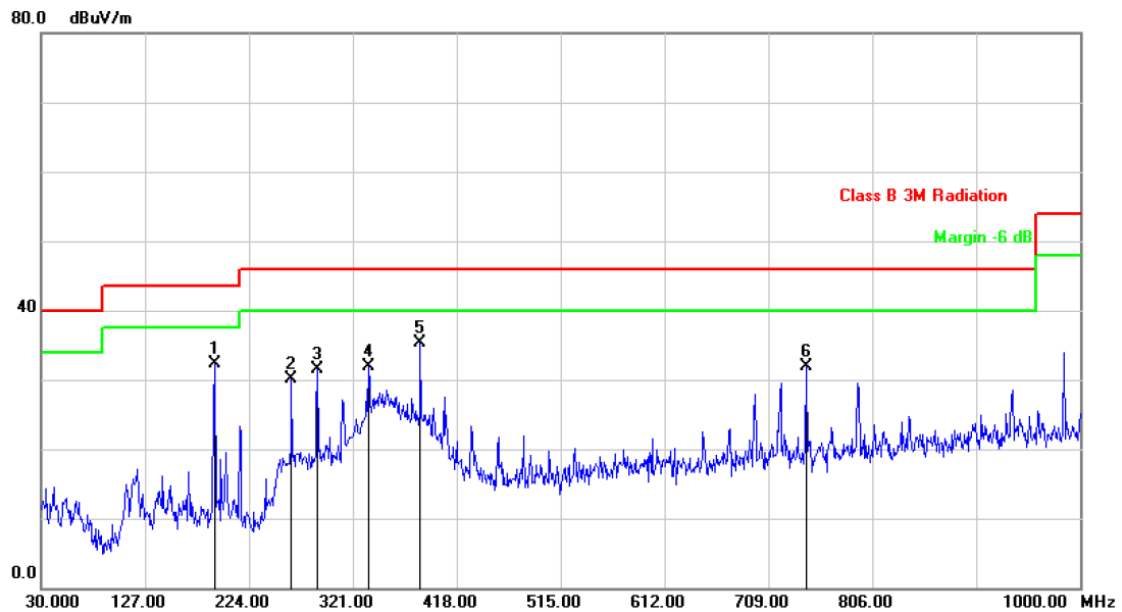
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 1	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	53.32	32.25	43.50	-11.25	peak	100	0	P
2	263.7700	-19.16	49.21	30.05	46.00	-15.95	peak	100	0	P
3	288.0200	-18.17	49.63	31.46	46.00	-14.54	peak	100	0	P
4	335.5500	-16.85	48.68	31.83	46.00	-14.17	peak	100	0	P
5	384.0500	-15.45	50.83	35.38	46.00	-10.62	peak	100	0	P
6	743.9200	-7.87	39.80	31.93	46.00	-14.07	peak	100	0	P

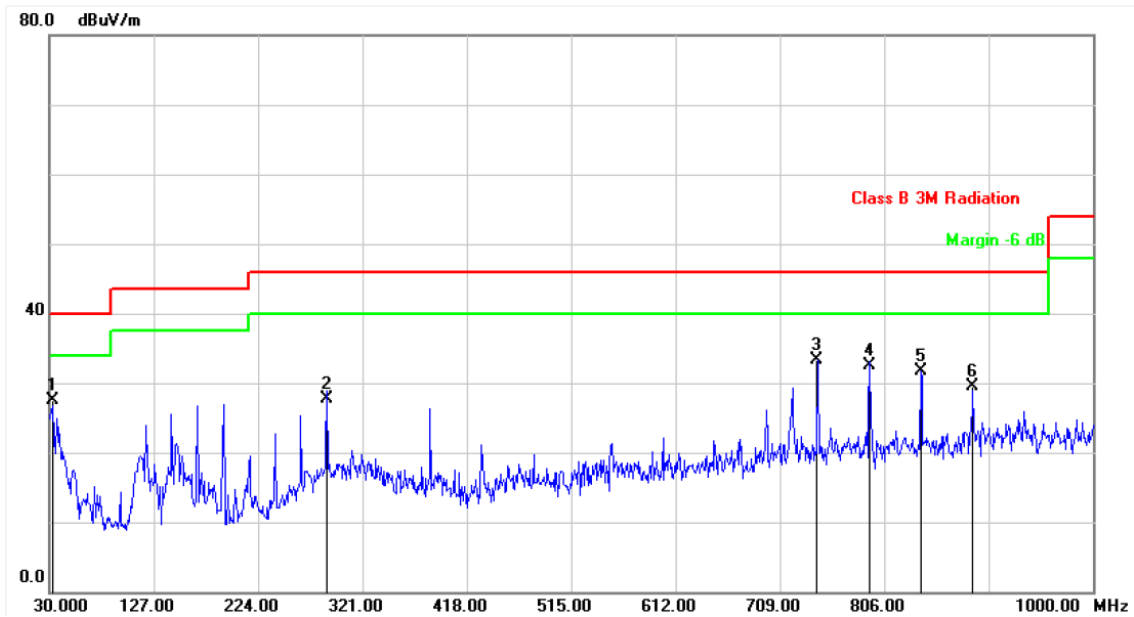
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	32.9099	-18.39	45.92	27.53	40.00	-12.47	peak	100	0	P
2	288.0199	-18.17	45.86	27.69	46.00	-18.31	peak	100	0	P
3	743.9199	-7.87	41.25	33.38	46.00	-12.62	peak	100	0	P
4	792.4199	-7.10	39.60	32.50	46.00	-13.50	peak	100	0	P
5	839.9500	-6.24	37.90	31.66	46.00	-14.34	peak	100	0	P
6	888.4500	-5.30	34.87	29.57	46.00	-16.43	peak	100	0	P

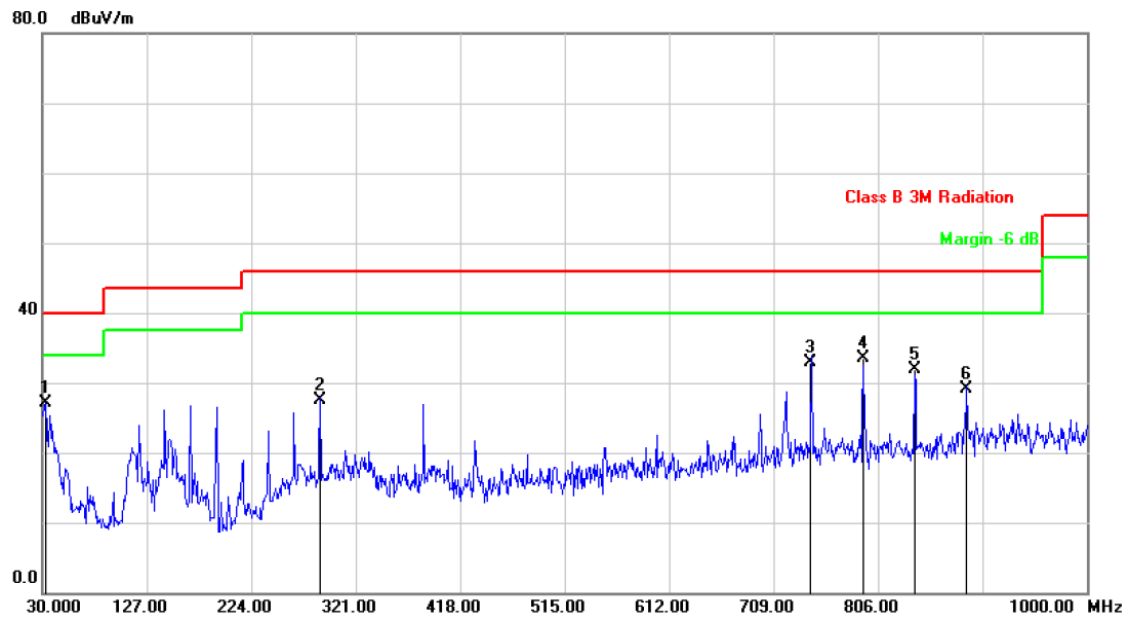
Note: Level = Reading + Factor

Margin = Level - Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 1	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	32.9099	-18.39	45.49	27.10	40.00	-12.90	peak	100	0	P
2	288.0199	-18.17	45.61	27.44	46.00	-18.56	peak	100	0	P
3	743.9199	-7.87	40.78	32.91	46.00	-13.09	peak	100	0	P
4	792.4199	-7.10	40.67	33.57	46.00	-12.43	peak	100	0	P
5	839.9500	-6.24	38.06	31.82	46.00	-14.18	peak	100	0	P
6	888.4500	-5.30	34.40	29.10	46.00	-16.90	peak	100	0	P

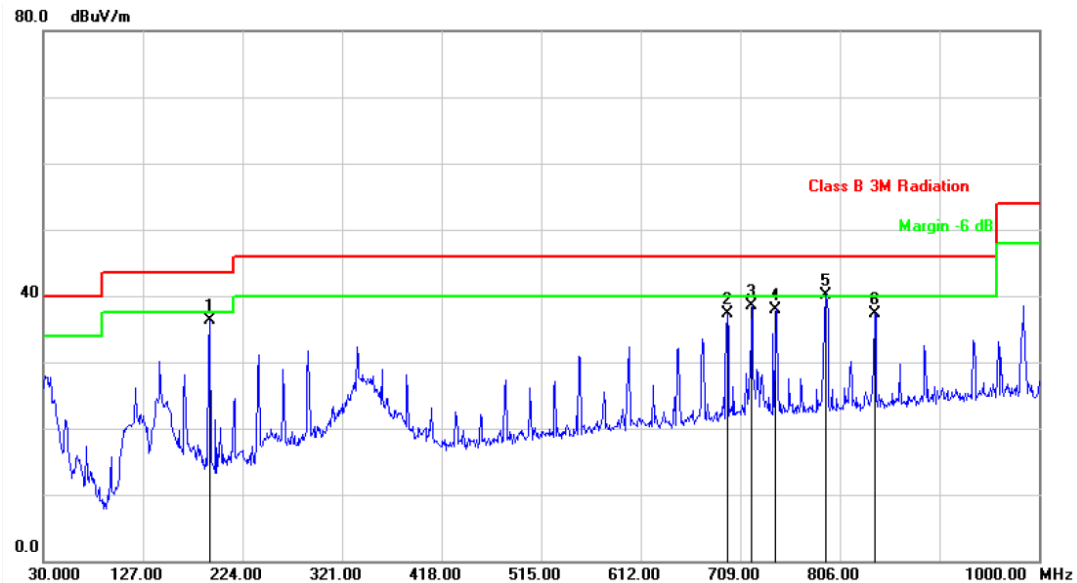
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode 2	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	57.41	36.34	43.50	-7.16	peak	100	0	P
2	696.3899	-8.84	46.23	37.39	46.00	-8.61	peak	100	0	P
3	720.6399	-8.35	46.76	38.41	46.00	-7.59	peak	100	0	P
4	743.9199	-7.87	45.76	37.89	46.00	-8.11	peak	100	0	P
5	792.4199	-7.10	47.11	40.01	46.00	-5.99	peak	100	0	P
6	839.9500	-6.24	43.59	37.35	46.00	-8.65	peak	100	0	P

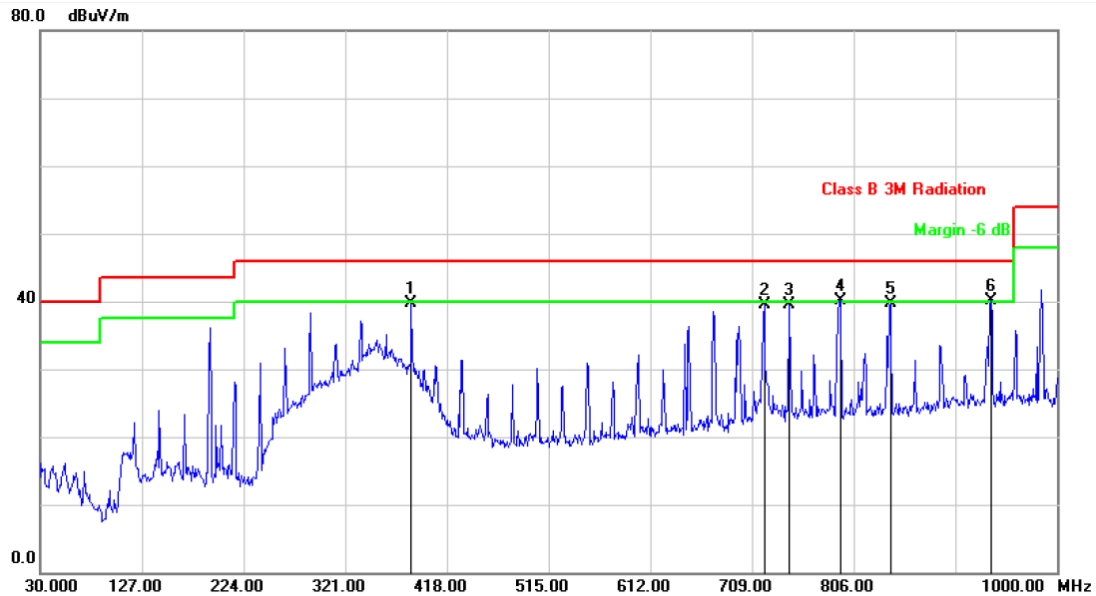
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode 2	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	384.0500	-15.45	55.21	39.76	46.00	-6.24	peak	100	0	P
2	720.6400	-8.35	47.77	39.42	46.00	-6.58	peak	100	0	P
3	744.8900	-7.84	47.35	39.51	46.00	-6.49	peak	100	0	P
4	793.3900	-7.08	47.19	40.11	46.00	-5.89	peak	100	0	P
5	840.9200	-6.22	45.99	39.77	46.00	-6.23	peak	100	0	P
6	936.9500	-4.29	44.43	40.14	46.00	-5.86	peak	100	0	P

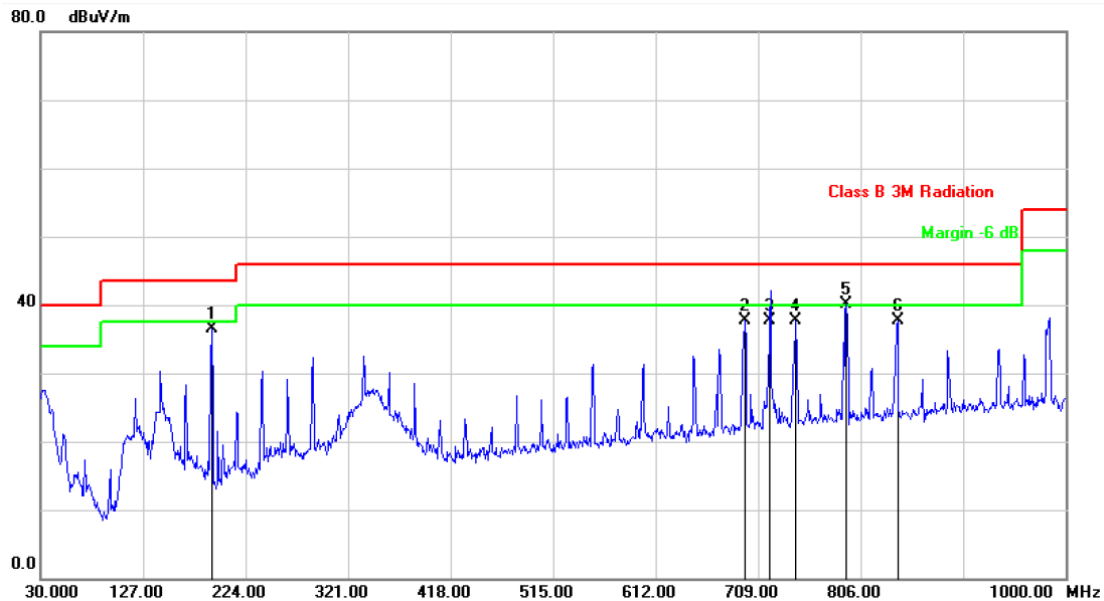
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	57.62	36.55	43.50	-6.95	peak	100	0	P
2	696.3900	-8.84	46.53	37.69	46.00	-8.31	peak	100	0	P
3	720.0600	-8.36	46.08	37.72	46.00	-8.28	QP	100	194	P
4	744.8900	-7.84	45.57	37.73	46.00	-8.27	peak	100	0	P
5	792.4200	-7.10	47.24	40.14	46.00	-5.86	peak	100	0	P
6	840.9200	-6.22	43.85	37.63	46.00	-8.37	peak	100	0	P

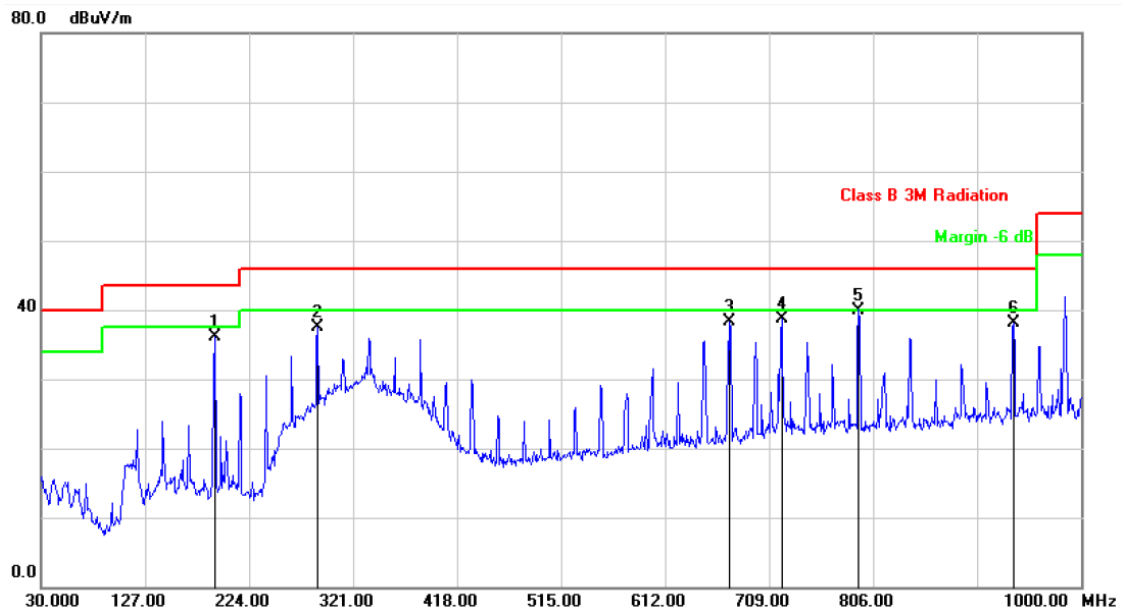
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	57.21	36.14	43.50	-7.36	peak	100	0	P
2	288.0200	-18.17	55.74	37.57	46.00	-8.43	peak	100	0	P
3	672.1400	-9.30	47.69	38.39	46.00	-7.61	peak	100	0	P
4	720.6400	-8.35	47.07	38.72	46.00	-7.28	peak	100	0	P
5	792.4200	-7.10	47.10	40.00	46.00	-6.00	peak	100	0	P
6	936.9500	-4.29	42.42	38.13	46.00	-7.87	peak	100	0	P

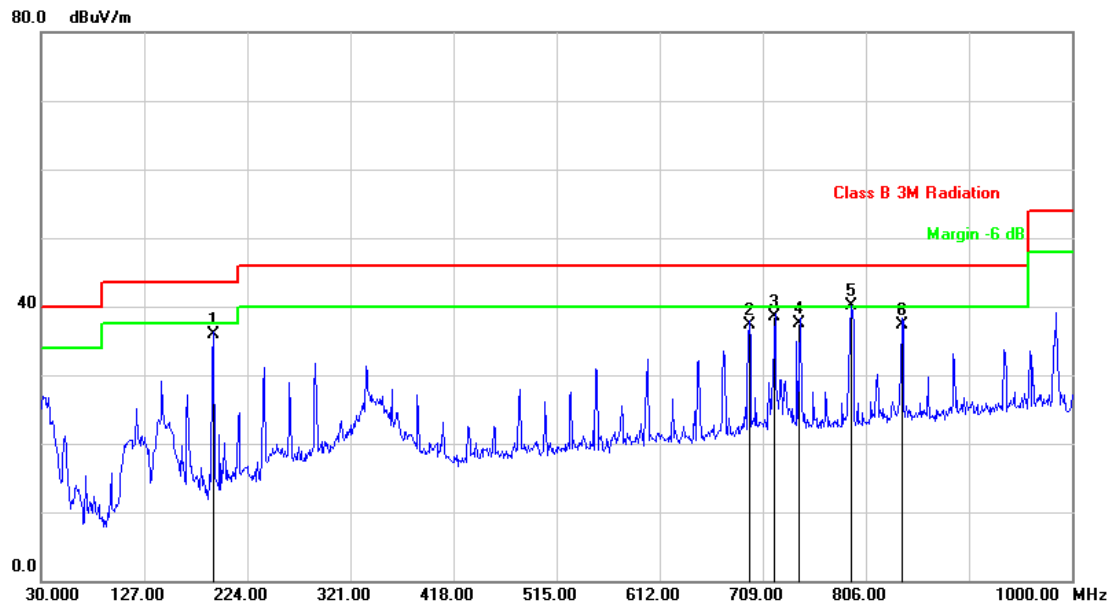
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode 2	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	56.95	35.88	43.50	-7.62	peak	100	0	P
2	696.3899	-8.84	46.10	37.26	46.00	-8.74	peak	100	0	P
3	720.6399	-8.35	46.76	38.41	46.00	-7.59	peak	100	0	P
4	743.9199	-7.87	45.42	37.55	46.00	-8.45	peak	100	0	P
5	792.4199	-7.10	47.12	40.02	46.00	-5.98	peak	100	0	P
6	839.9500	-6.24	43.45	37.21	46.00	-8.79	peak	100	0	P

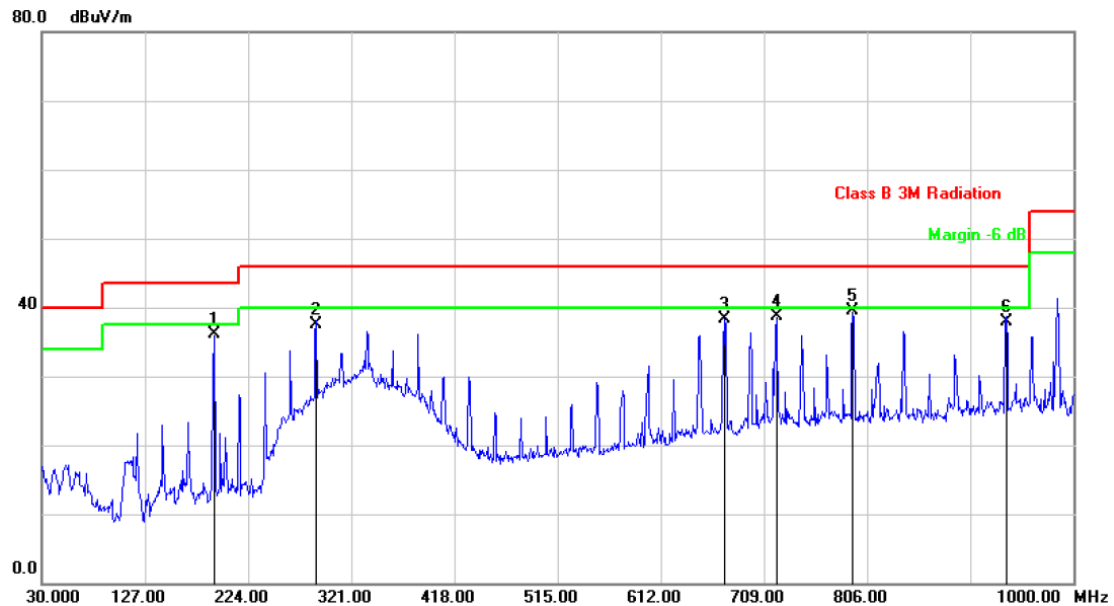
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode 2	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 29, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	191.9900	-21.07	57.18	36.11	43.50	-7.39	peak	100	0	P
2	288.0200	-18.17	55.68	37.51	46.00	-8.49	peak	100	0	P
3	672.1400	-9.30	47.56	38.26	46.00	-7.74	peak	100	0	P
4	720.6400	-8.35	47.12	38.77	46.00	-7.23	peak	100	0	P
5	792.4200	-7.10	46.66	39.56	46.00	-6.44	peak	100	0	P
6	936.9500	-4.28	42.10	37.82	46.00	-8.18	peak	100	0	P

Note: Level = Reading + Factor

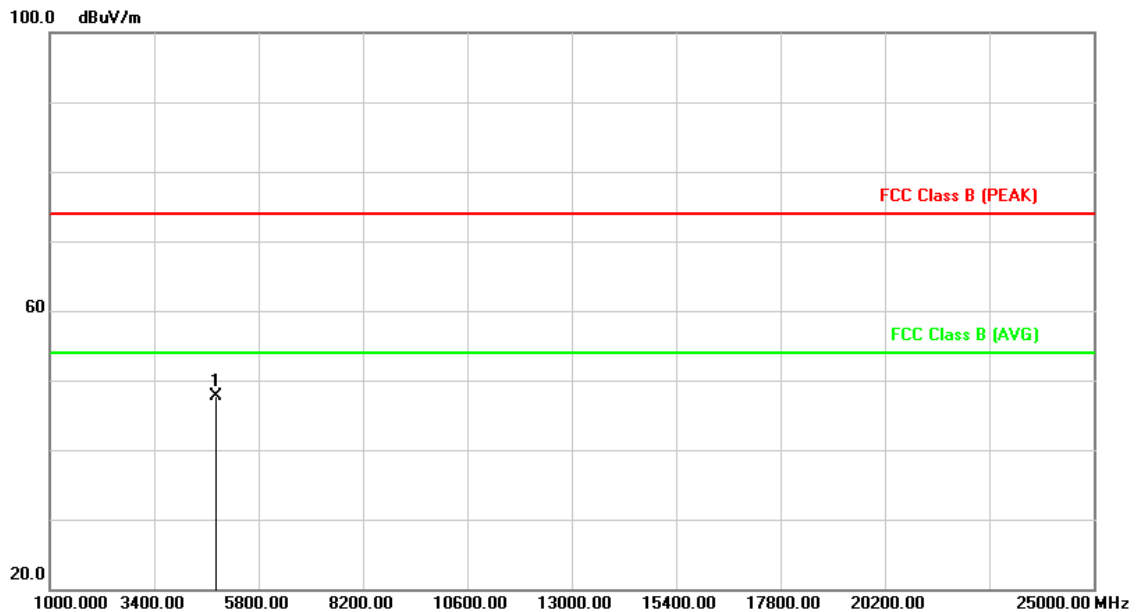
Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



5.7 Test Result and Data (1GHz ~ 25GHz)

Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11b, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	65.69	47.66	74.00	-26.34	peak	100	0	P

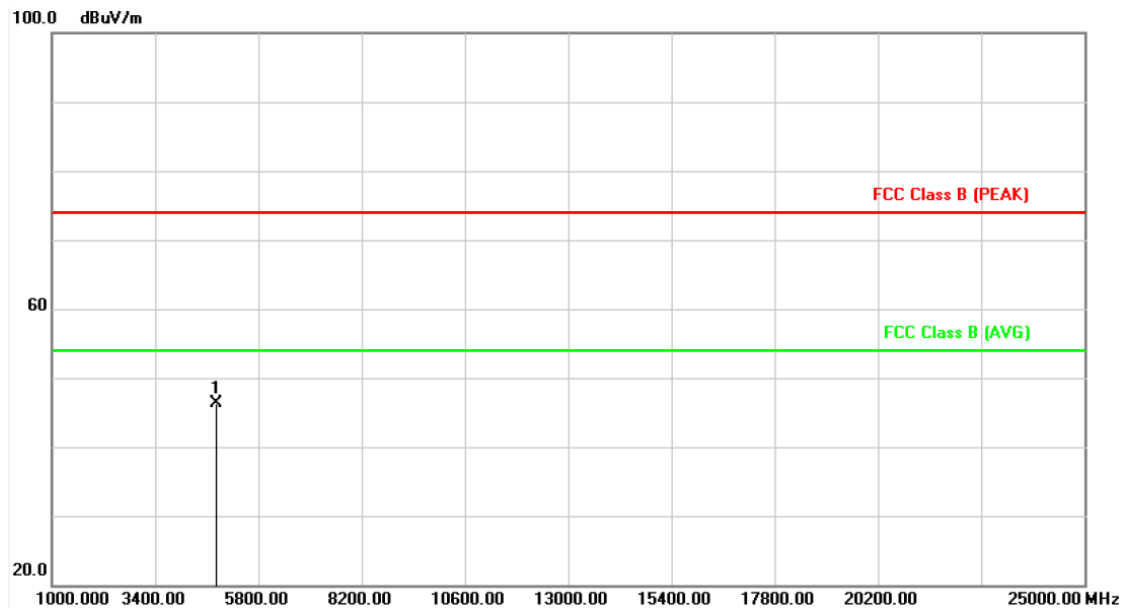
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	64.29	46.26	74.00	-27.74	peak	100	0	P

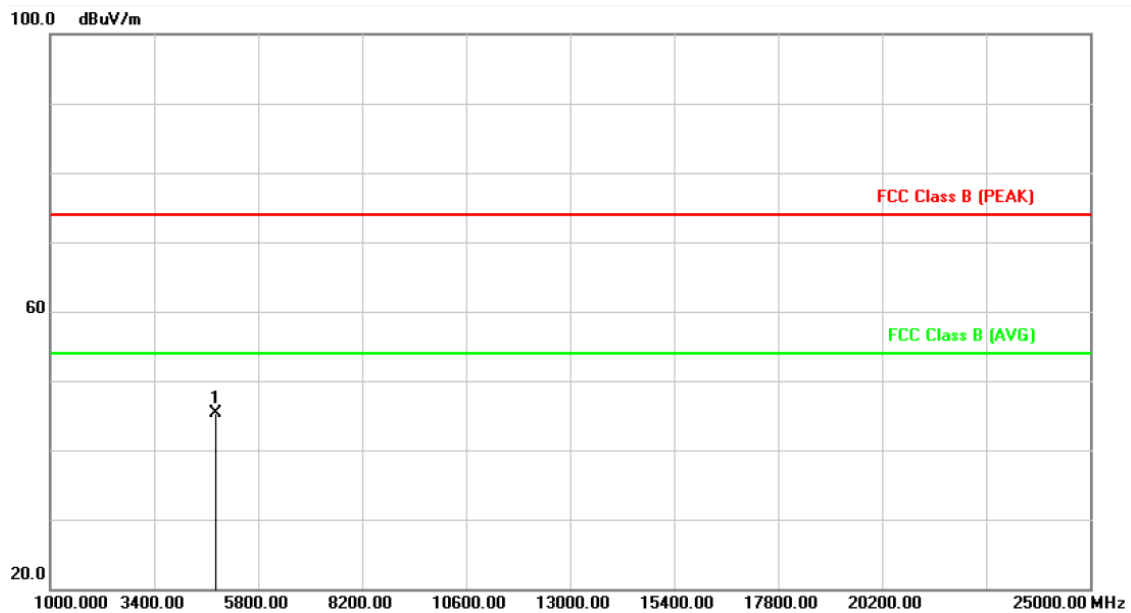
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11b, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	63.34	45.31	74.00	-28.69	peak	100	0	P

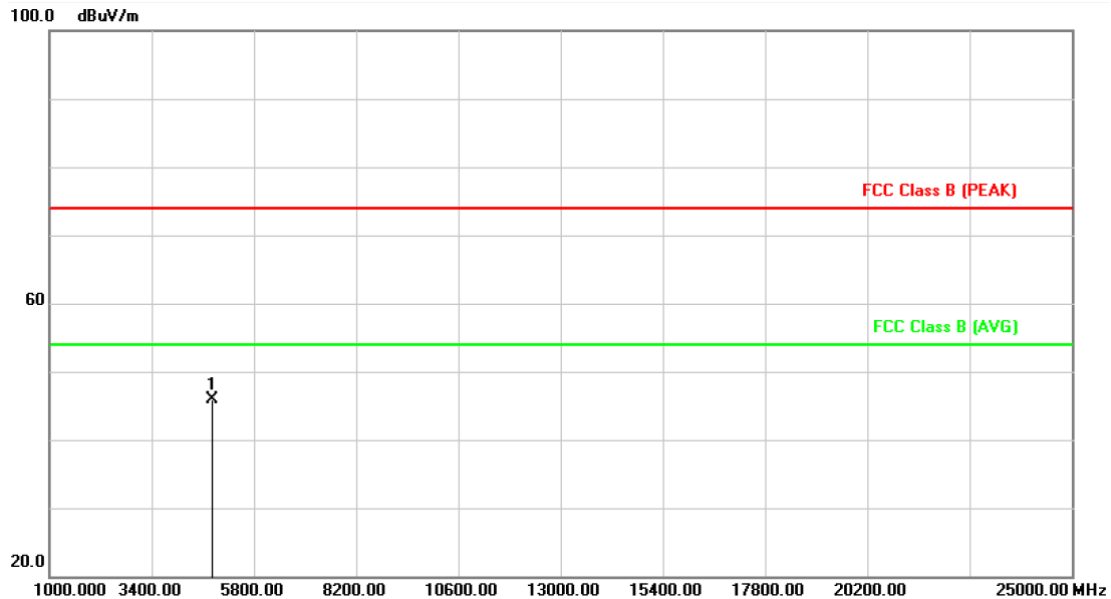
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	63.88	45.85	74.00	-28.15	peak	100	0	P

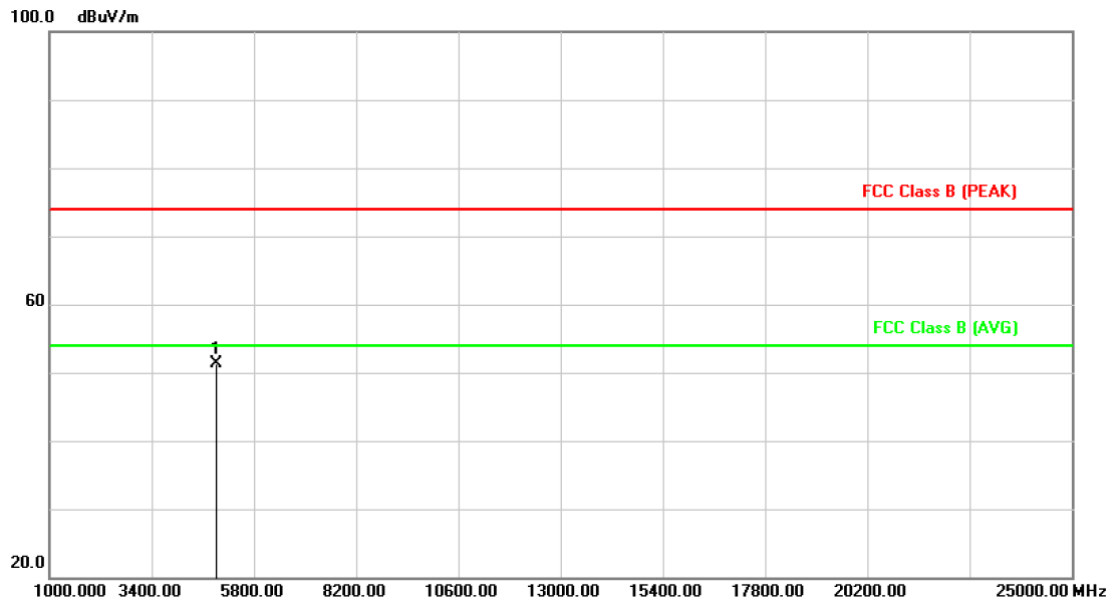
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11b, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4912.000	-17.79	69.19	51.40	74.00	-22.60	peak	100	0	P

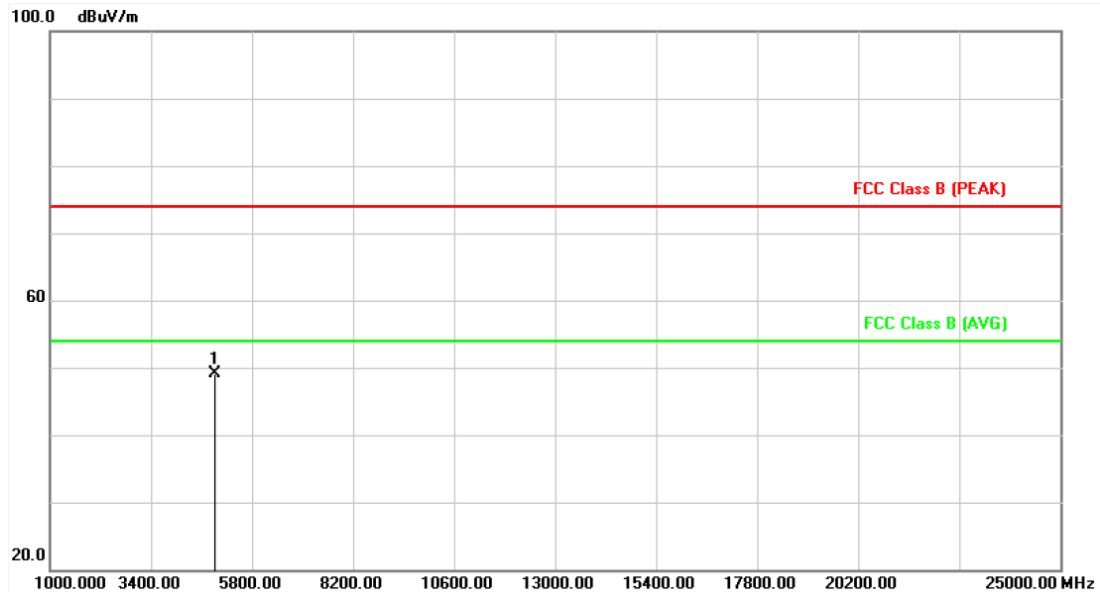
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4912.000	-17.79	66.96	49.17	74.00	-24.83	peak	100	0	P

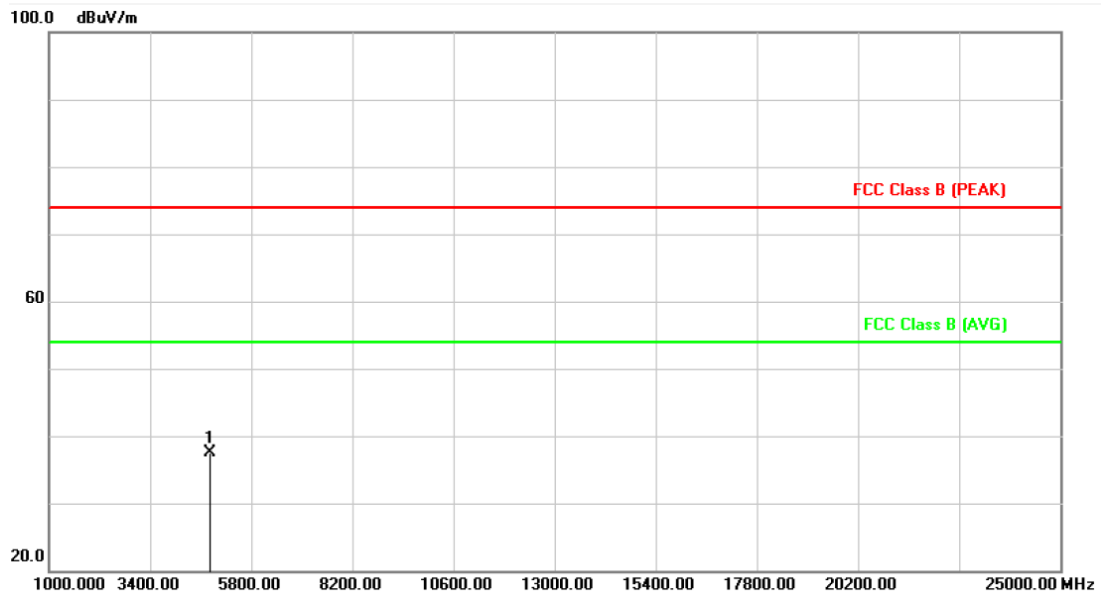
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	55.48	37.45	74.00	-36.55	peak	100	0	P

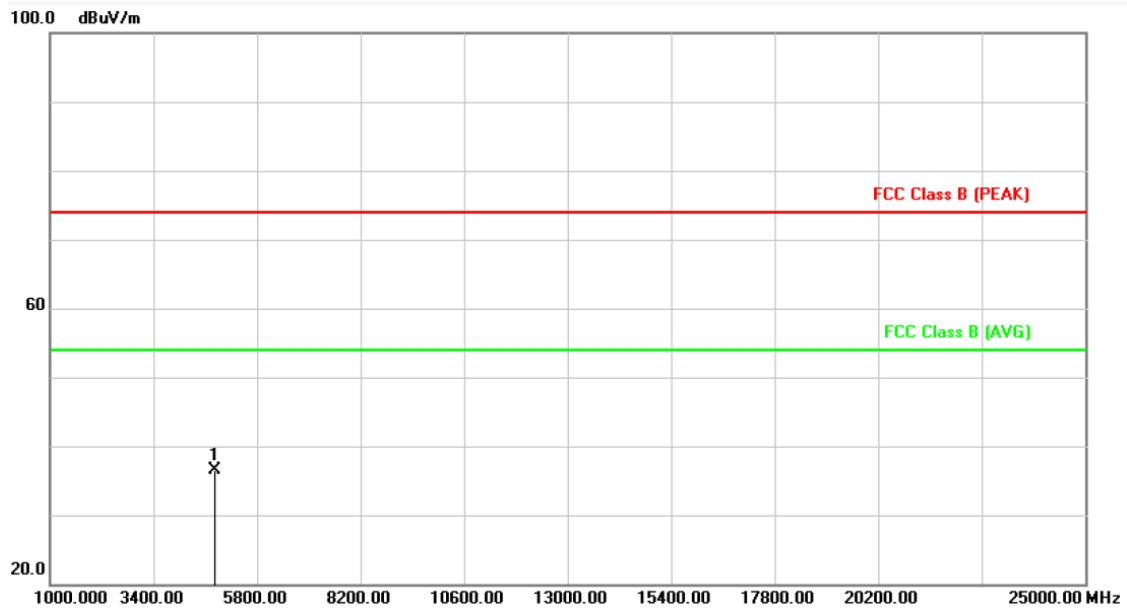
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	54.63	36.60	74.00	-37.40	peak	100	0	P

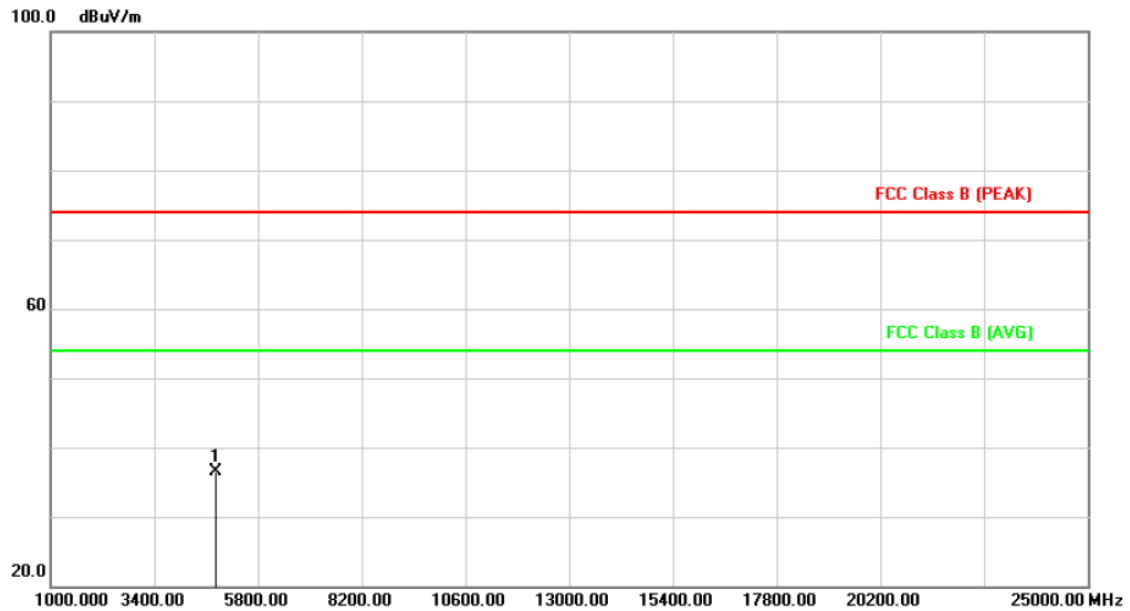
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11g, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	54.63	36.60	74.00	-37.40	peak	100	0	P

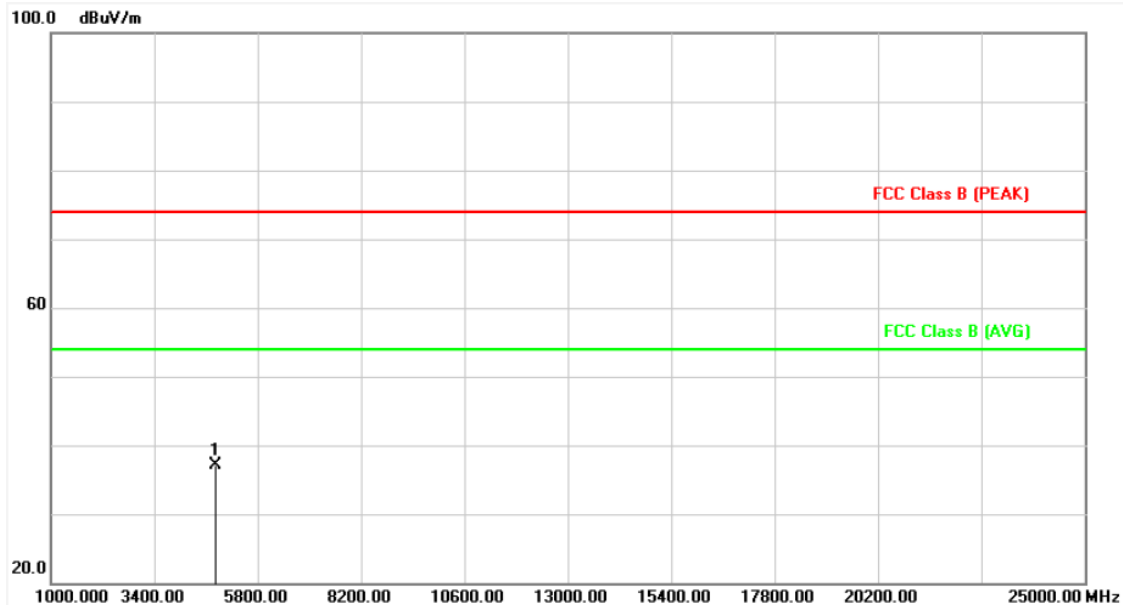
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	55.04	37.01	74.00	-36.99	peak	100	0	P

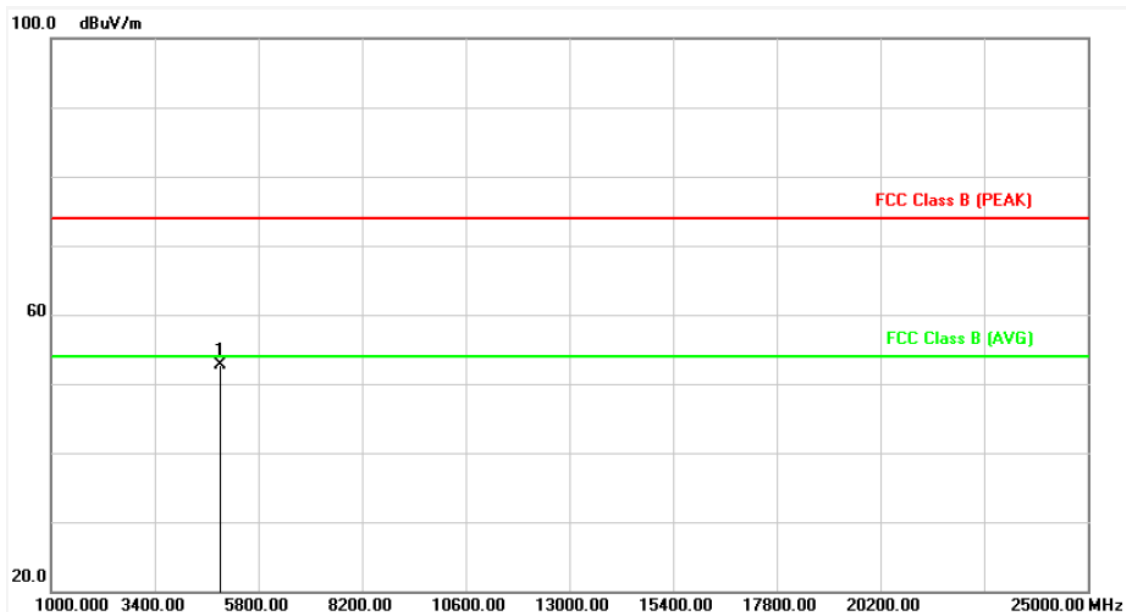
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11g, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4912.000	-17.79	70.55	52.76	74.00	-21.24	peak	100	0	P

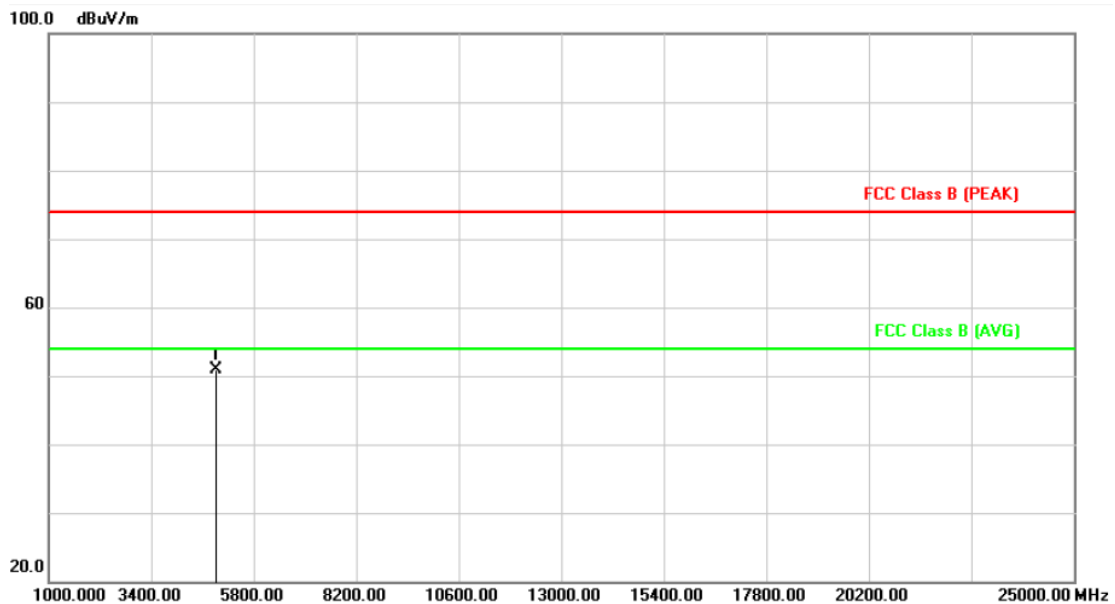
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4912.000	-17.79	68.77	50.98	74.00	-23.02	peak	100	0	P

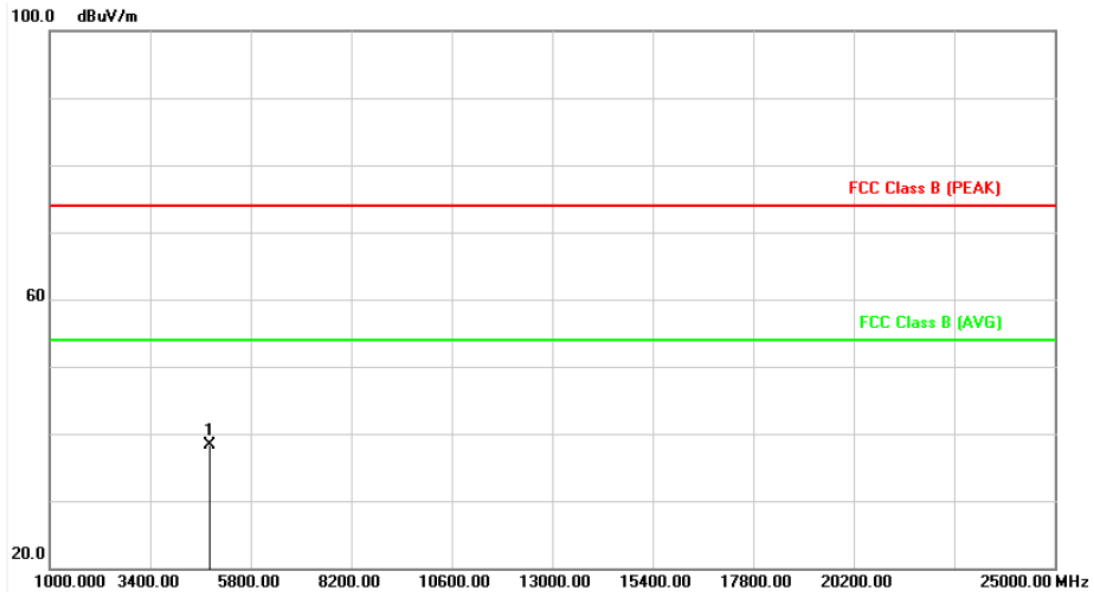
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	56.33	38.30	74.00	-35.70	peak	100	0	P

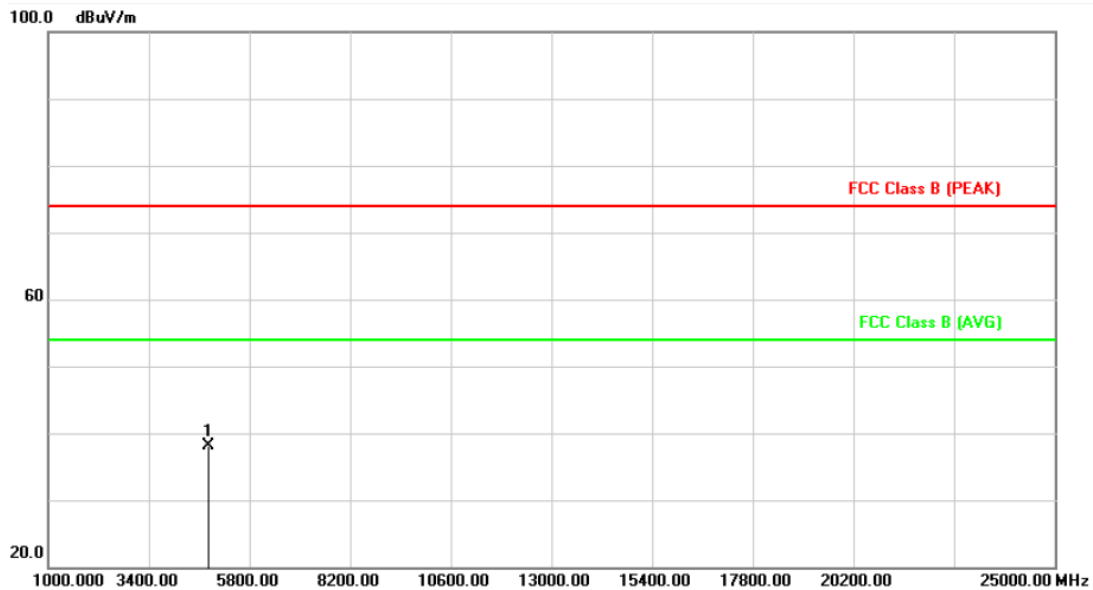
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20, CH1	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	56.06	38.03	74.00	-35.97	peak	100	0	P

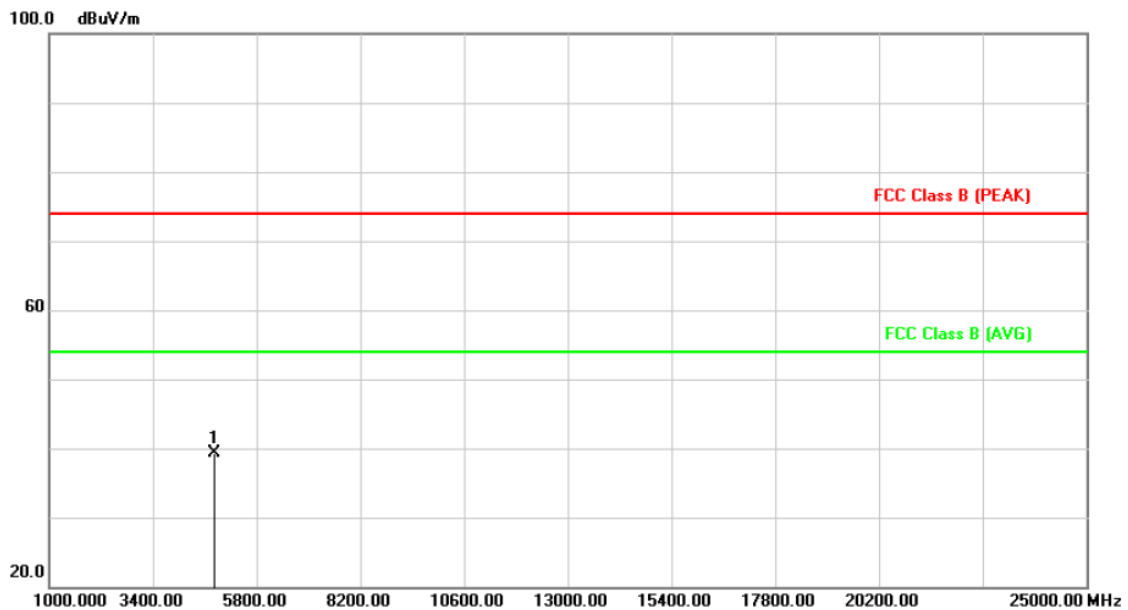
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	57.29	39.26	74.00	-34.74	peak	100	0	P

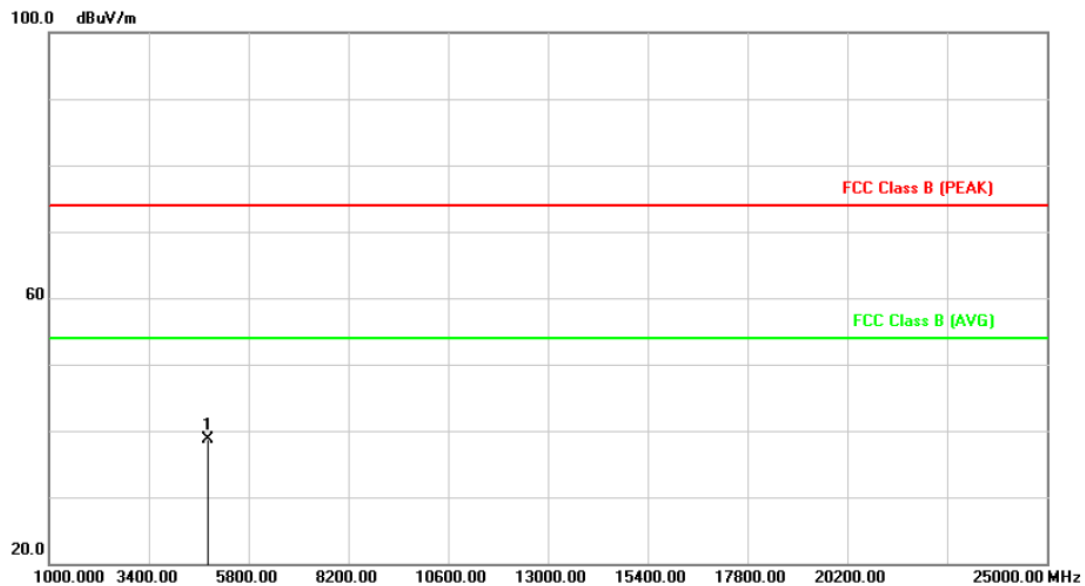
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	56.64	38.61	74.00	-35.39	peak	100	0	P

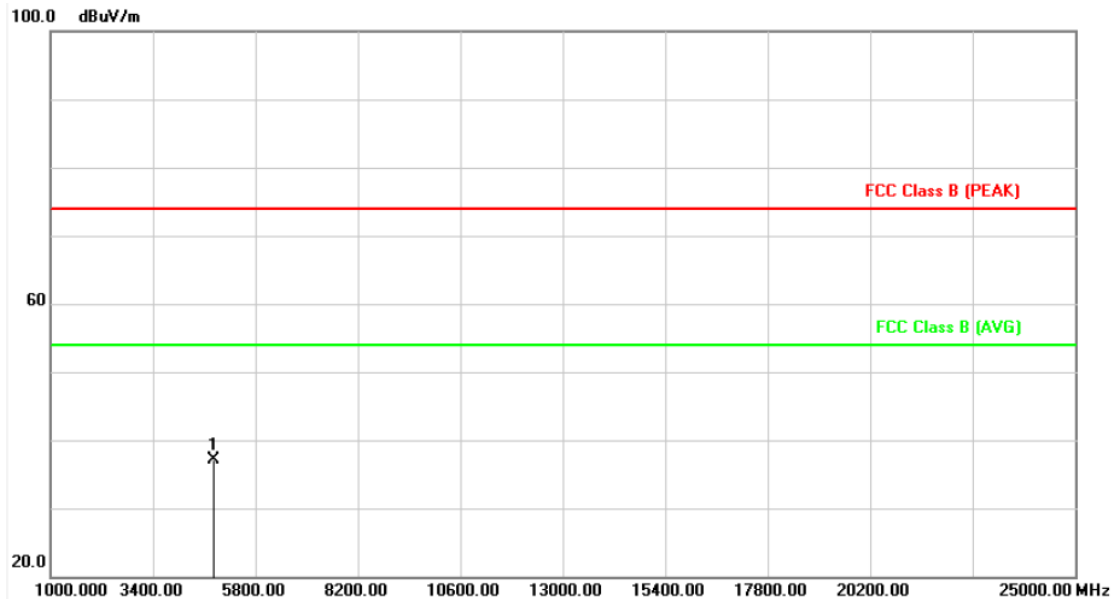
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	55.13	37.10	74.00	-36.90	peak	100	0	P

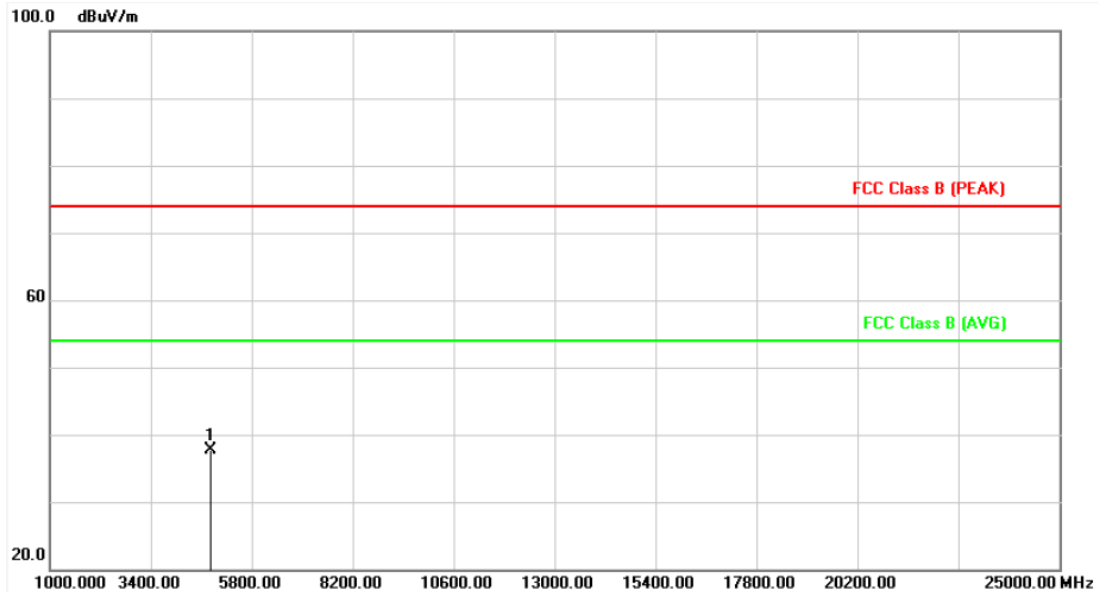
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20, CH11	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4816.000	-18.03	55.68	37.65	74.00	-36.35	peak	100	0	P

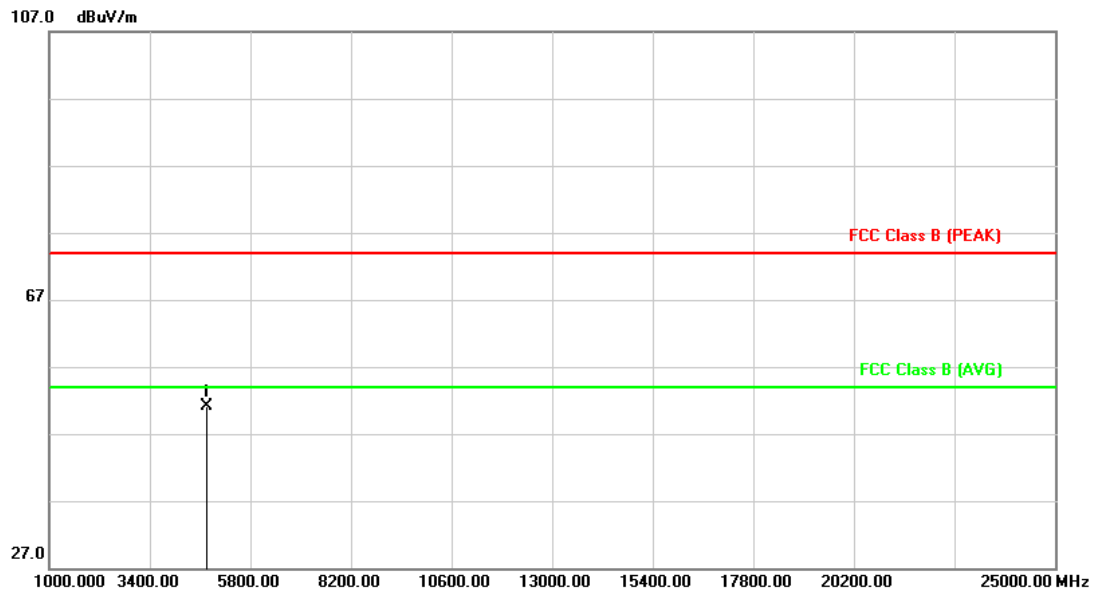
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4768.000	7.13	44.02	51.15	74.00	-22.85	peak	100	0	P

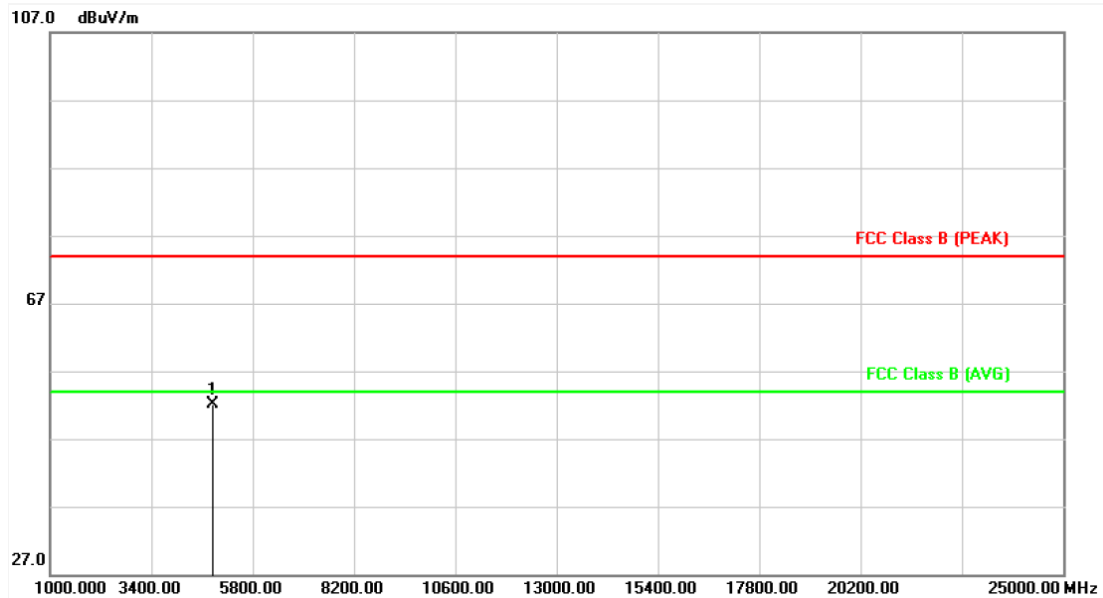
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40, CH3	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4840.000	7.37	44.65	52.02	74.00	-21.98	peak	100	0	P

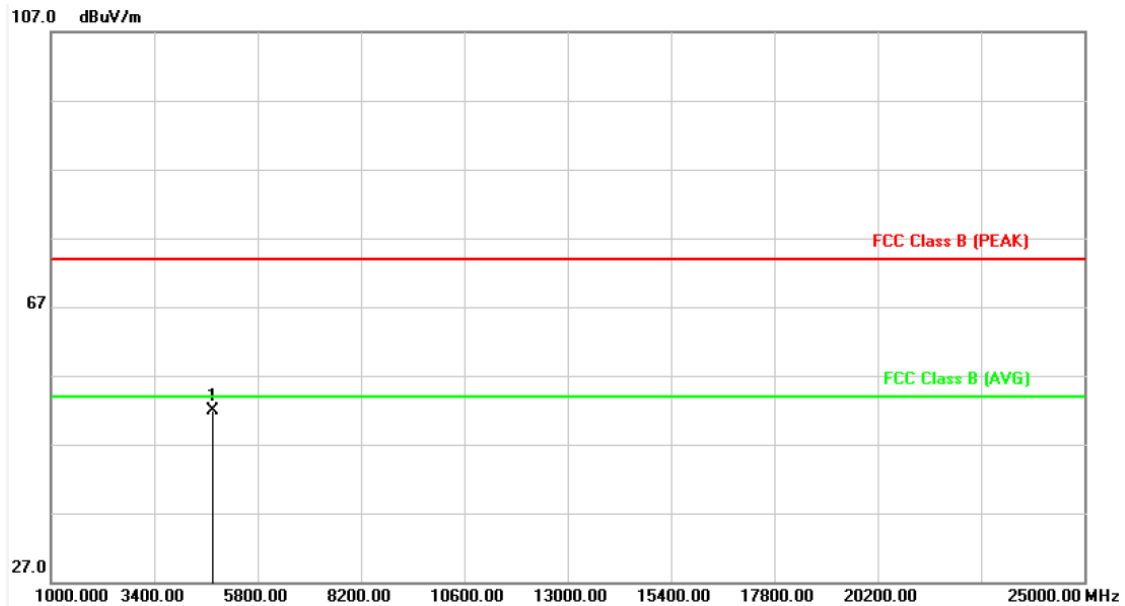
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4768.000	7.13	44.69	51.82	74.00	-22.18	peak	100	0	P

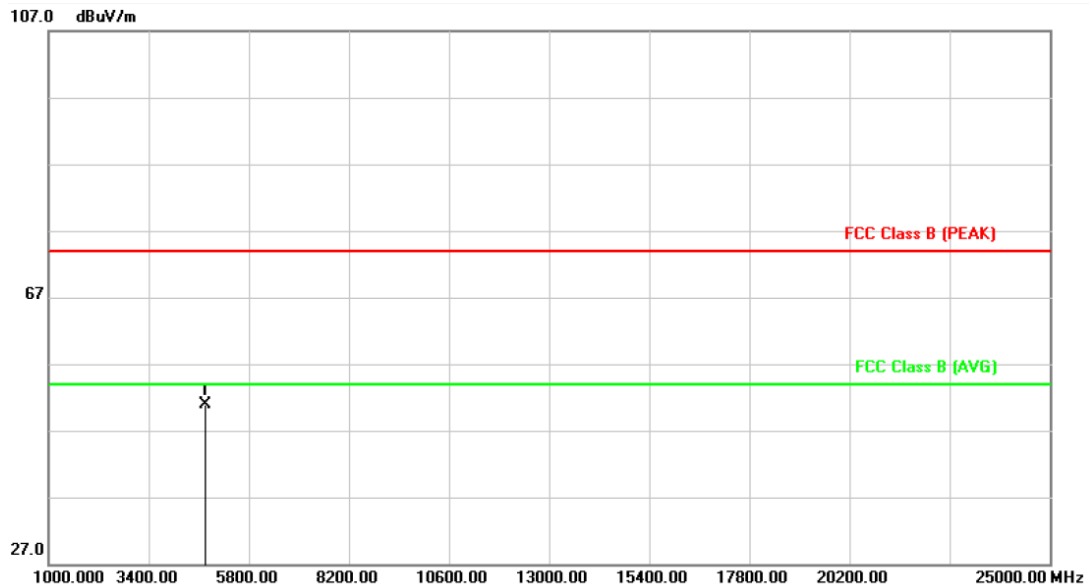
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40, CH6	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4768.000	7.13	43.81	50.94	74.00	-23.06	peak	100	0	P

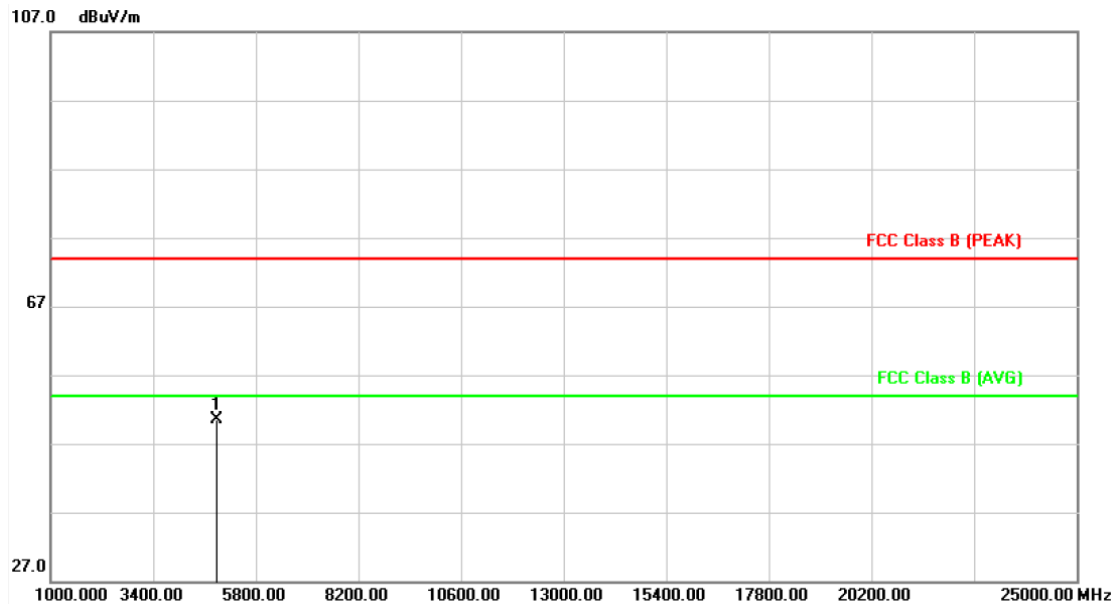
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40, CH9	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4888.000	7.53	42.91	50.44	74.00	-23.56	peak	100	0	P

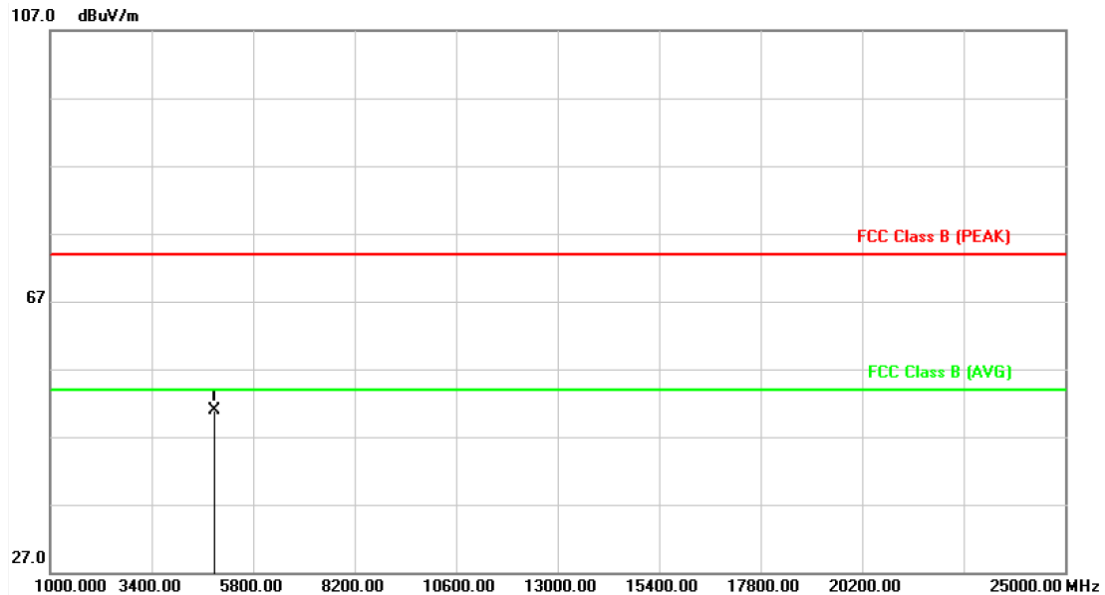
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: DC 3.7V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40, CH9	Temperature	: 25 °C
		Humidity	: 49 %
Test Date	: Oct. 30, 2014	Atmospheric Pressure	: 1010 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4888.000	7.53	43.42	50.95	74.00	-23.05	peak	100	0	P

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



6. 6dB Bandwidth Measurement Data

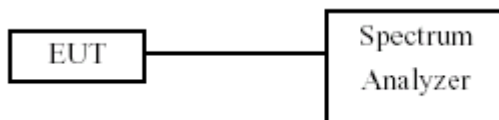
6.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

6.2 Test Procedures

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1~5% of the emission bandwidth and VBW $\geq 3 \times$ RBW.
- The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- The 6dB Bandwidth was measured and recorded.

6.3 Test Setup Layout



6.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26



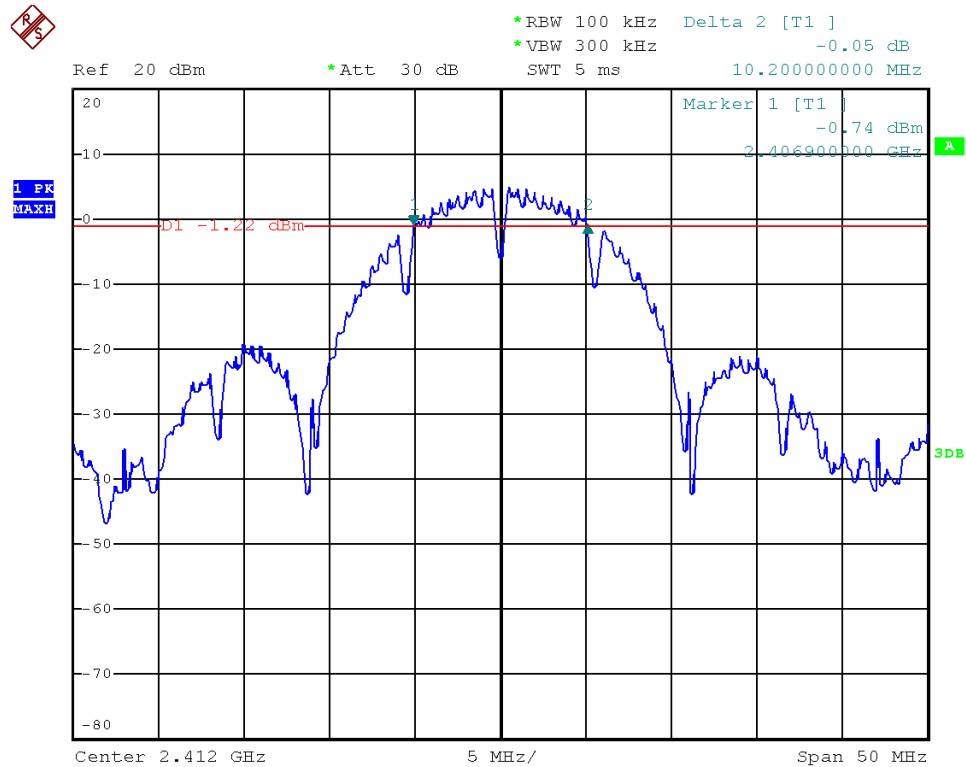
6.5 Test Result and Data

Test Date : Nov. 06, 2014 Temperature : 24°C
Atmospheric pressure : 1017 hPa Humidity : 62%

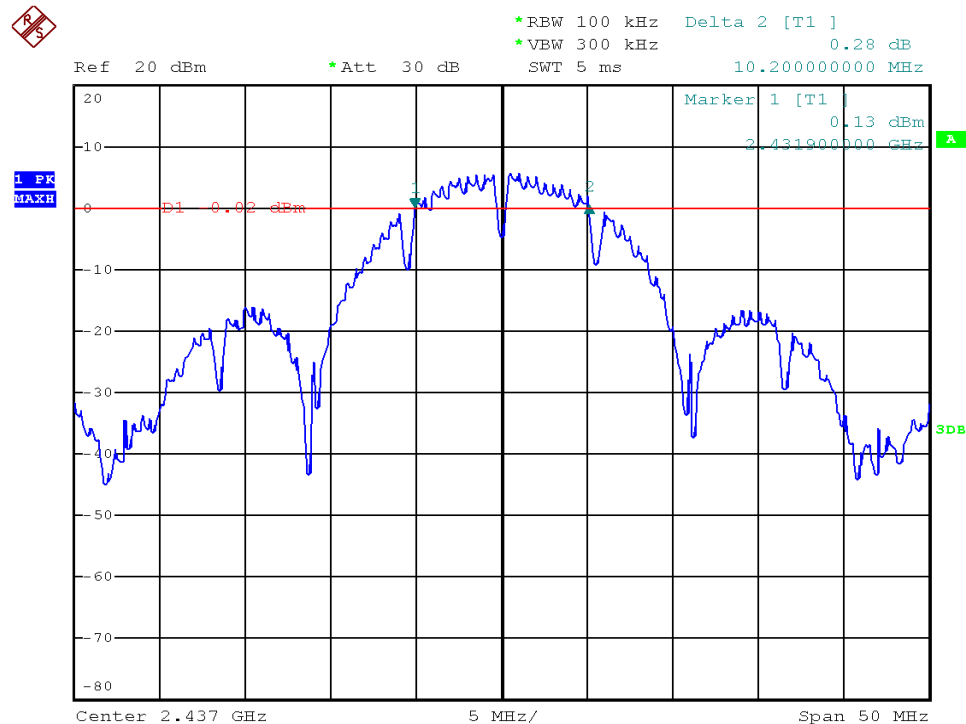
Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)
IEEE 802.11b (5.5Mbps)	01	2412	10.2
	06	2437	10.2
	11	2462	10.2
IEEE 802.11g (6Mbps)	01	2412	16.6
	06	2437	16.6
	11	2462	16.6
IEEE 802.11n HT20 (65Mbps)	01	2412	17.8
	06	2437	17.8
	11	2462	17.8
IEEE 802.11n HT40 (130Mbps)	03	2422	36.4
	06	2437	36.4
	09	2452	36.4



Modulation Standard: 802.11b (5.5Mbps)
Channel: 01

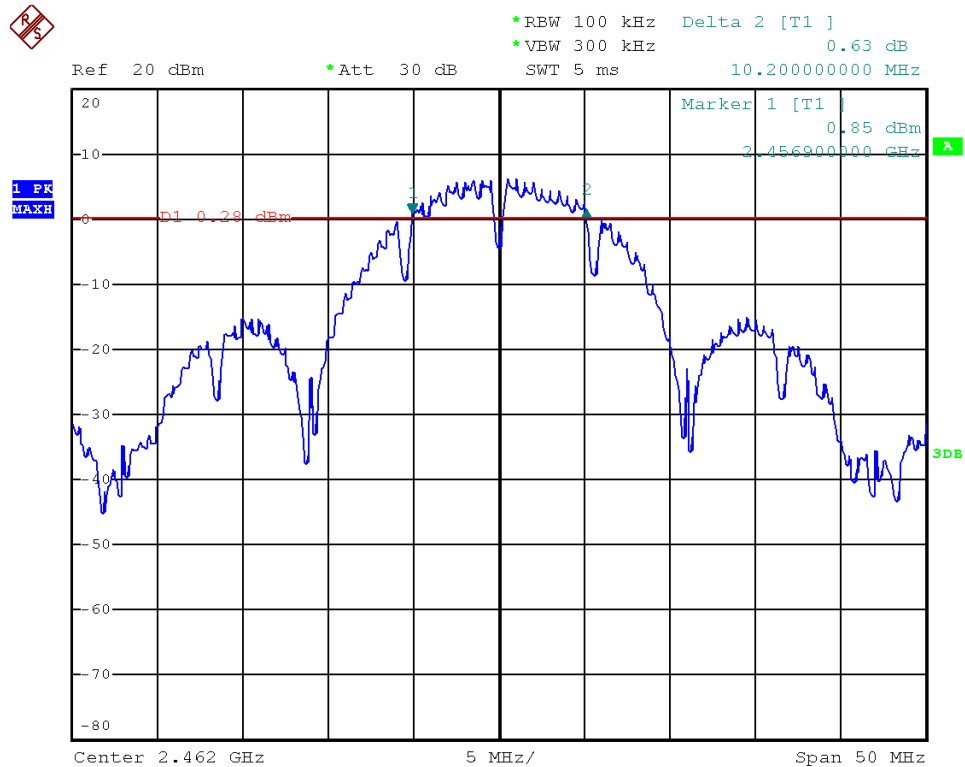


Modulation Standard: 802.11b (5.5Mbps)
Channel: 06

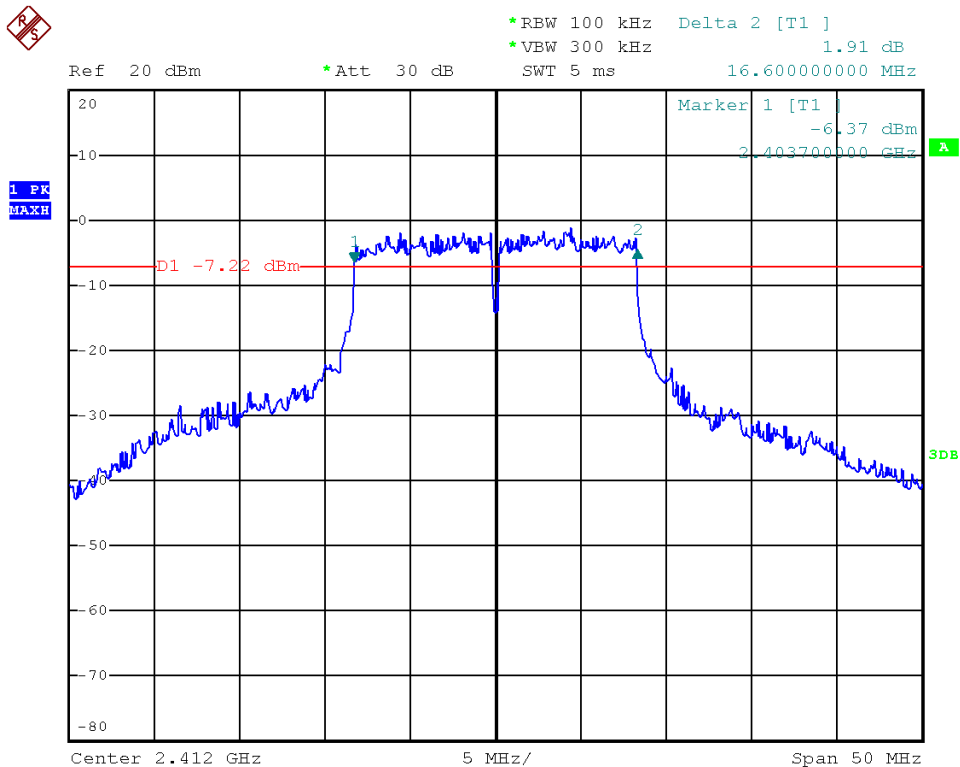




Modulation Standard: 802.11b (5.5Mbps)
Channel: 11

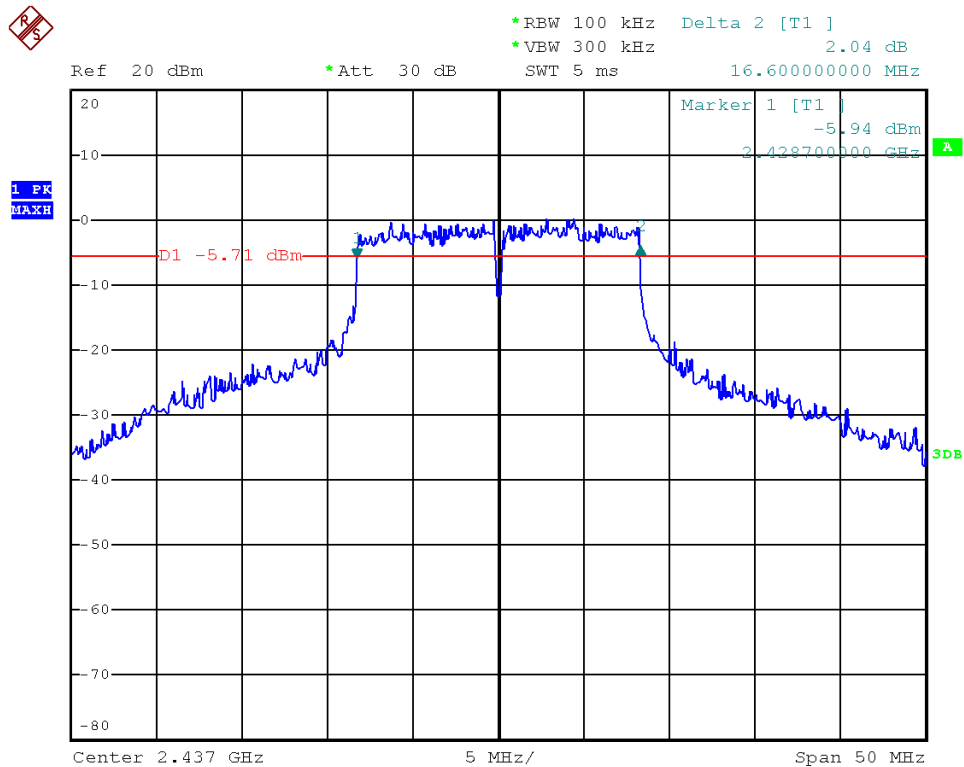


Modulation Standard: 802.11g (6Mbps)
Channel: 01

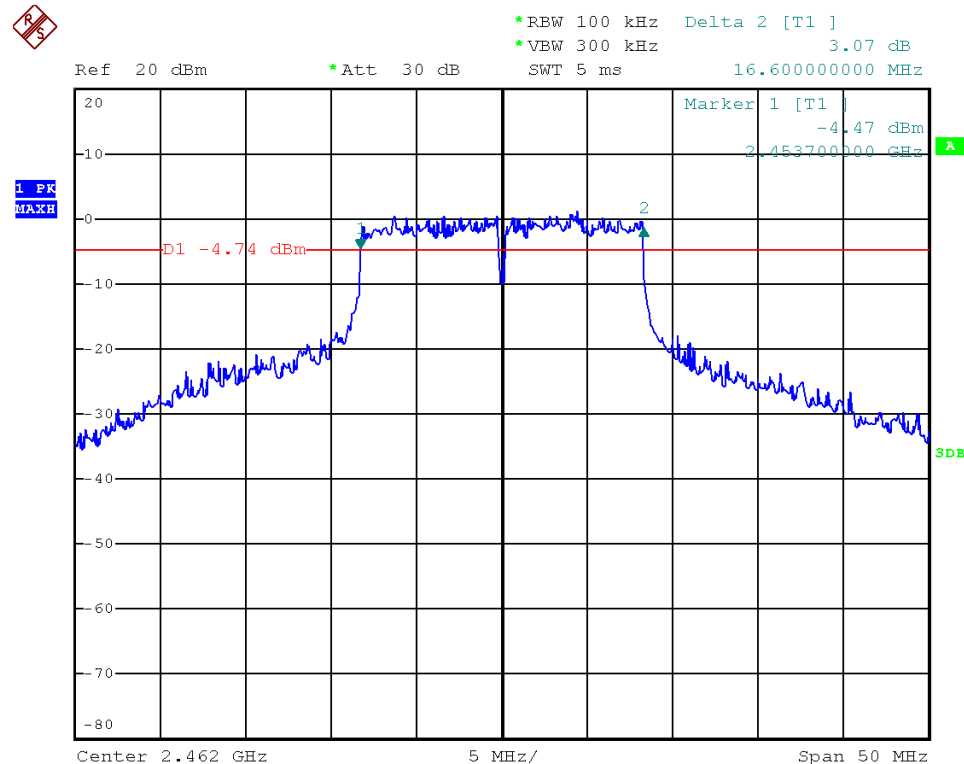




Modulation Standard: 802.11g (6Mbps)
Channel: 06

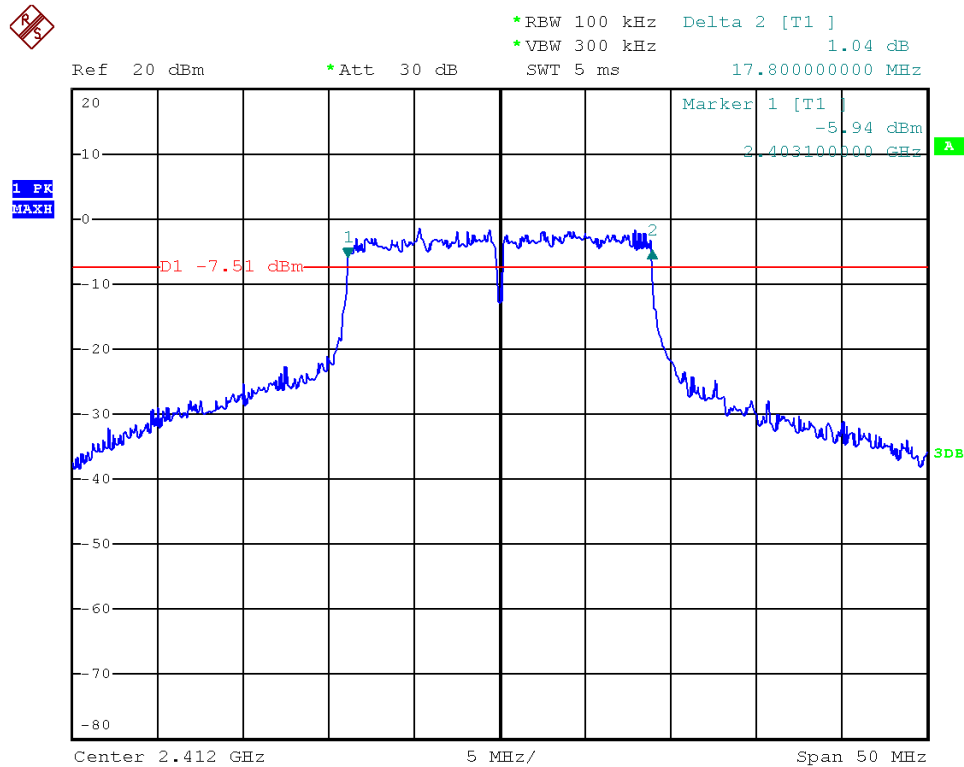


Modulation Standard: 802.11g (6Mbps)
Channel: 11

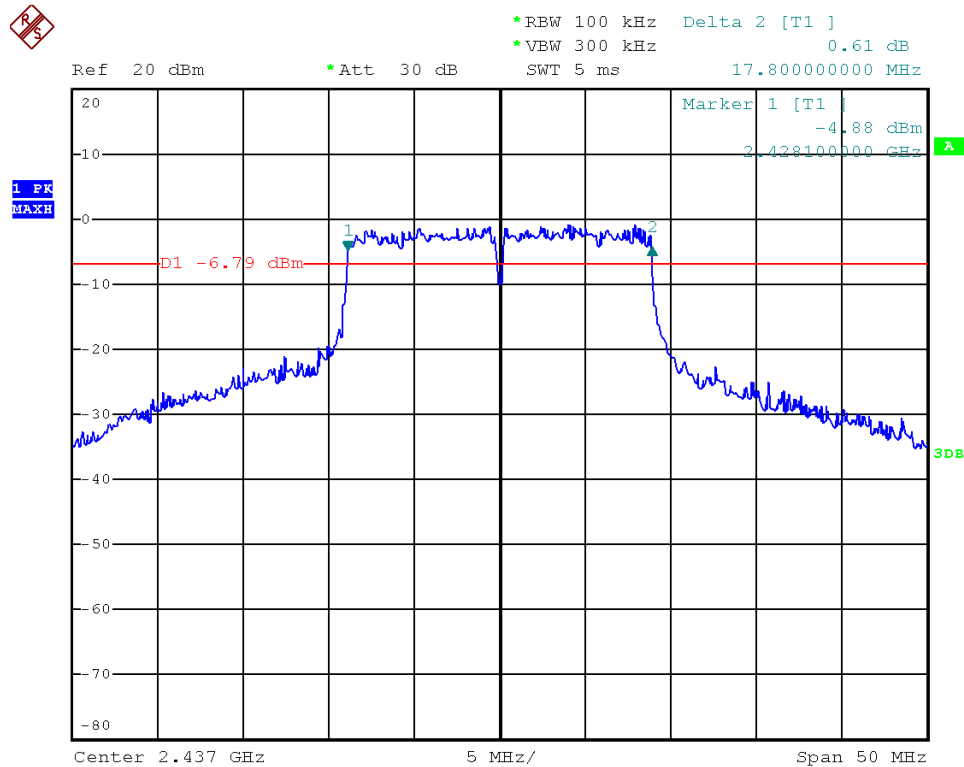




Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 01

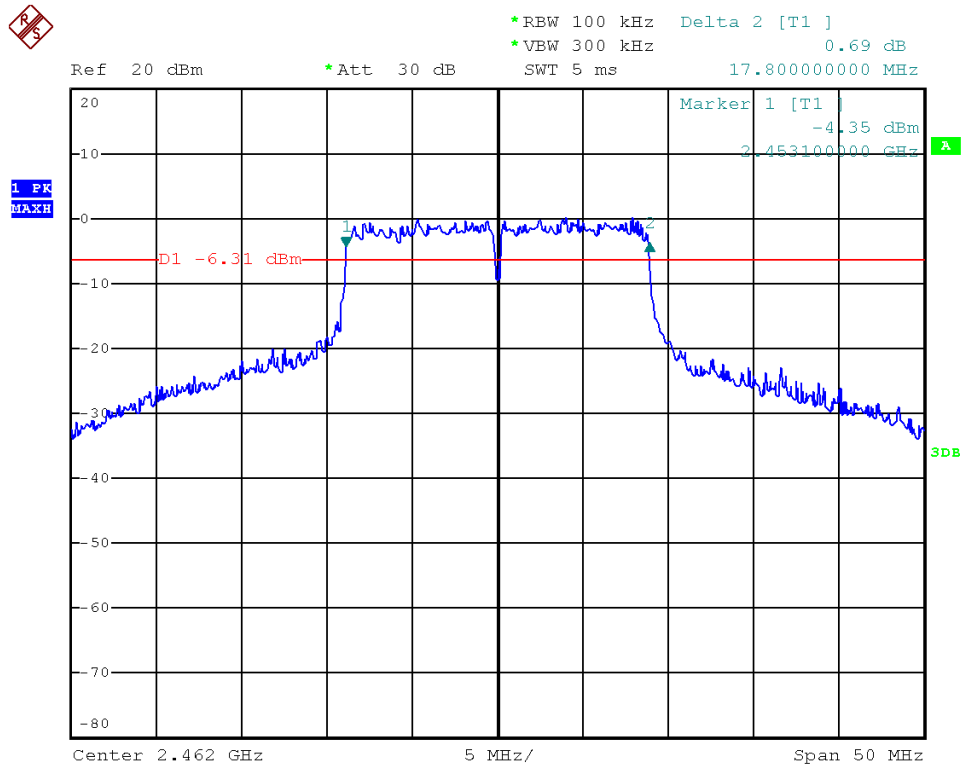


Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 06

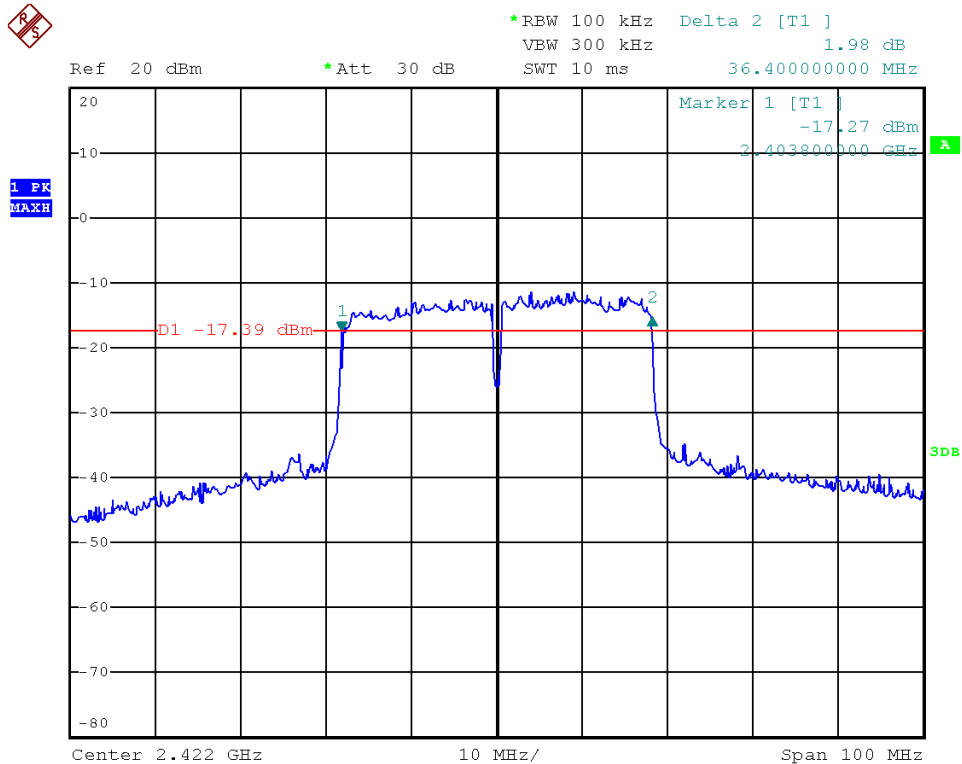




Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 11

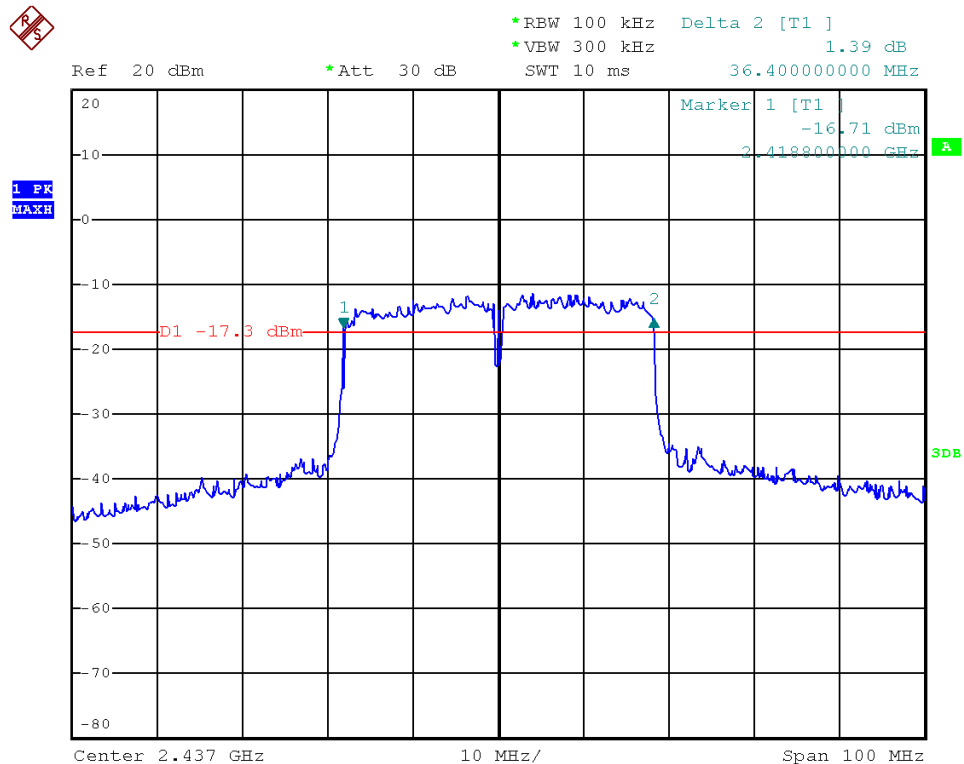


Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 03

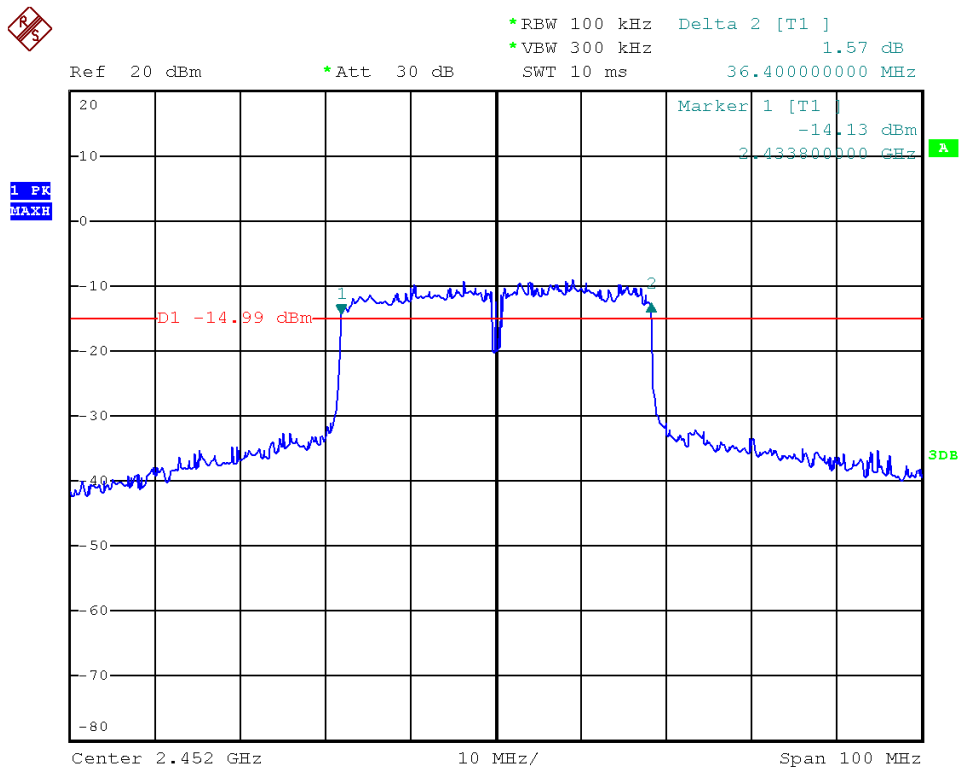




Modulation Standard: 802.11n HT40 (65Mbps)
Channel: 06



Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 09





7. Maximum Peak and Average Output Power

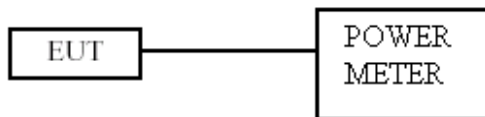
7.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

7.2 Test Procedures

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

7.3 Test Setup Layout



7.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
SERIES POWER METER	ANRITSU	ML2495A	1224005	2014/03/27	2015/03/26
POWER SENSOR	ANRITSU	MA2411B	1207295	2014/03/27	2015/03/26



7.5 Test Result and Data

Test Date : Nov. 06, 2014 Temperature : 24°C
Atmospheric pressure : 1017 hPa Humidity : 62%

Modulation Type	Channe	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
IEEE 802.11b (5.5Mbps)	01	2412	15.22	33.26
	06	2437	17.23	52.84
	11	2462	16.02	40.00
IEEE 802.11g (6Mbps)	01	2412	16.36	43.25
	06	2437	17.02	50.35
	11	2462	16.50	44.66

Modulation Type	Channe	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
IEEE 802.11n HT20 (65Mbps)	01	2412	14.96	31.33
	06	2437	15.23	33.34
	11	2462	16.69	46.66
IEEE 802.11n HT40 (130Mbps)	03	2422	13.12	20.51
	06	2437	13.23	21.03
	09	2452	13.44	22.08

Test Date : Nov. 06, 2014 Temperature : 24°C
Atmospheric pressure : 1017 hPa Humidity : 62%

Modulation Type	Channe	Frequency (MHz)	Avg. Power Output (dBm)	Avg. Power Output (mW)
IEEE 802.11b (5.5Mbps)	01	2412	13.83	24.15
	06	2437	15.82	38.19
	11	2462	15.23	33.34
IEEE 802.11g (6Mbps)	01	2412	10.20	10.47
	06	2437	11.86	15.35
	11	2462	10.95	12.44

Modulation Type	Channe	Frequency (MHz)	Avg. Power Output (dBm)	Avg. Power Output (mW)
IEEE 802.11n HT20 (65Mbps)	01	2412	11.03	12.67
	06	2437	12.26	16.82
	11	2462	11.04	12.71
IEEE 802.11n HT40 (130Mbps)	03	2422	6.95	5.0
	06	2437	7.18	5.2
	09	2452	8.26	6.7



8. Power Spectral Density

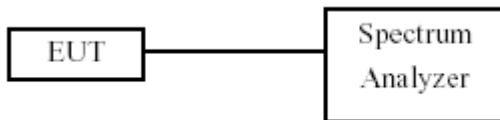
8.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

8.2 Test Procedures

- The transmitter output was connected to spectrum analyzer.
- The spectrum analyzer's resolution bandwidth were set at 3KHz RBW and 30KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- The power spectral density was measured and recorded.

8.3 Test Setup Layout



8.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

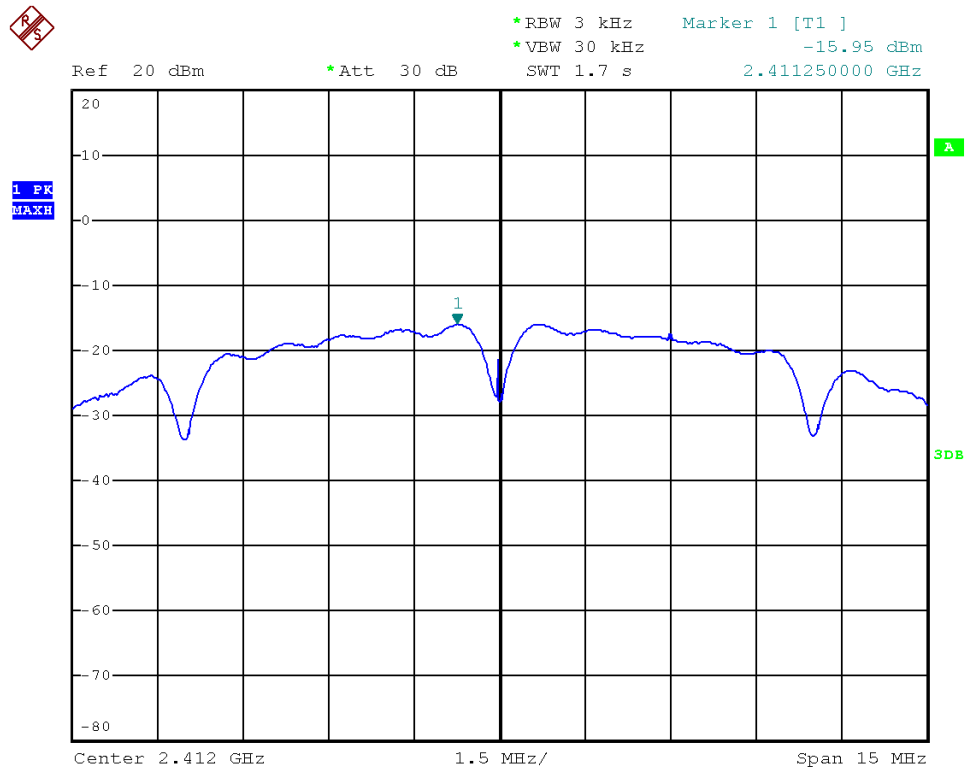
8.5 Test Result and Data

Test Date : Nov. 06, 2014 Temperature : 24°C
Atmospheric pressure : 1017 hPa Humidity : 62%

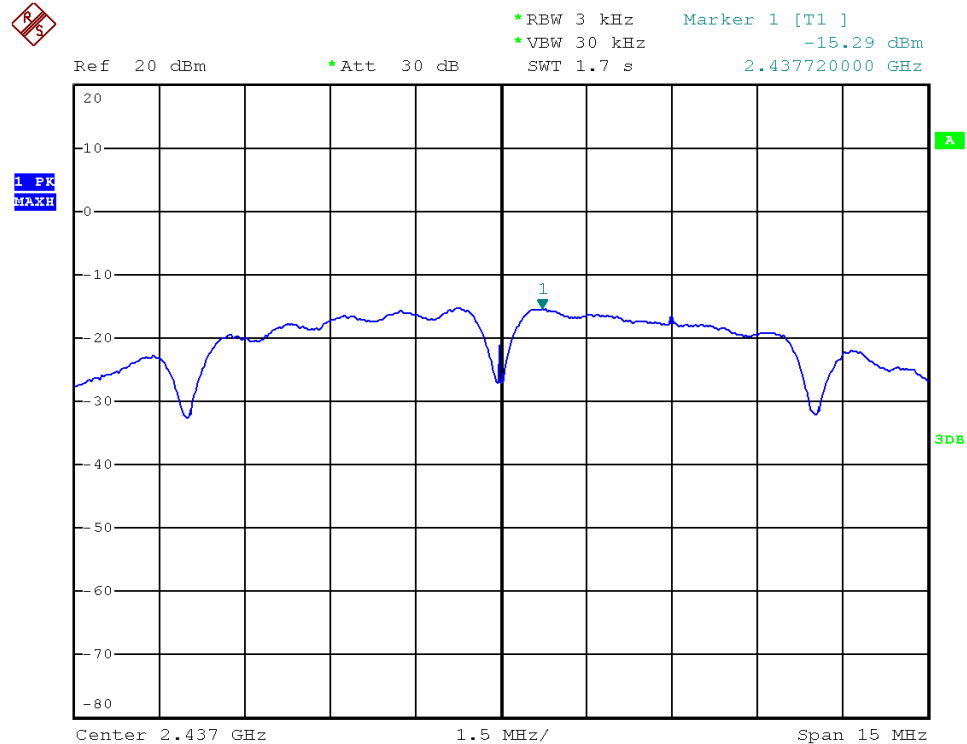
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)
IEEE 802.11b (5Mbps)	01	2412	-15.95
	06	2437	-15.29
	11	2462	-14.39
IEEE 802.11g (6Mbps)	01	2412	-17.42
	06	2437	-15.74
	11	2462	-18.22
IEEE 802.11n HT20 (65Mbps)	01	2412	-17.01
	06	2437	-16.17
	11	2462	-15.02
IEEE 802.11n HT40 (130Mbps)	03	2422	-24.96
	06	2437	-16.12
	09	2452	-10.39



Modulation Standard: 802.11b (5.5Mbps)
Channel: 01

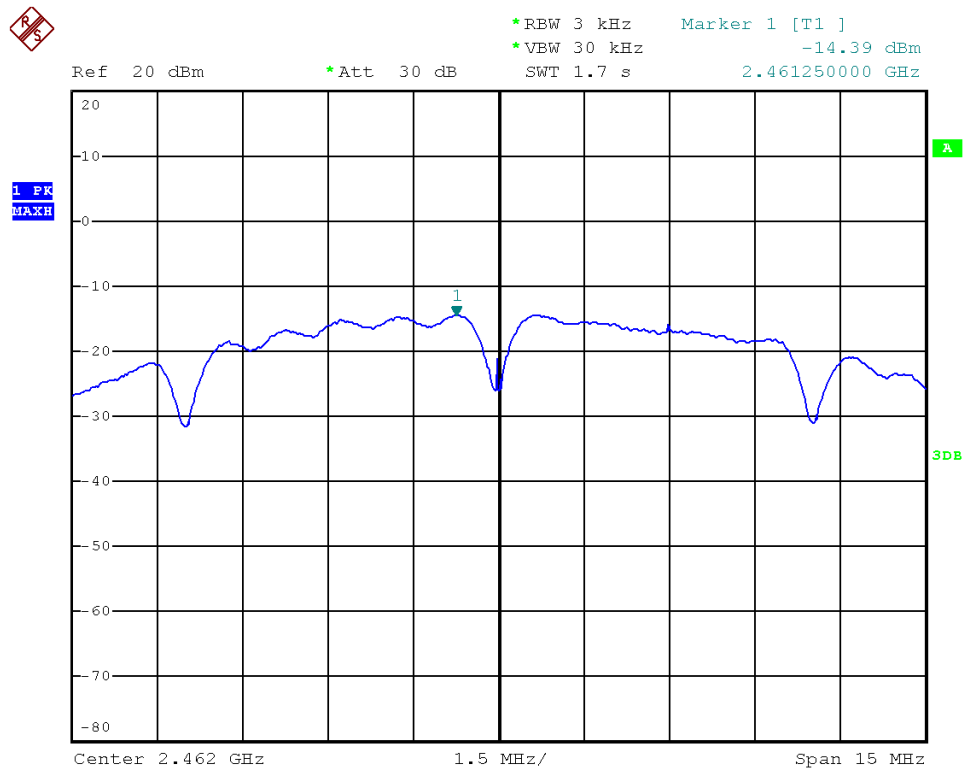


Modulation Standard: 802.11b (5.5Mbps)
Channel: 06

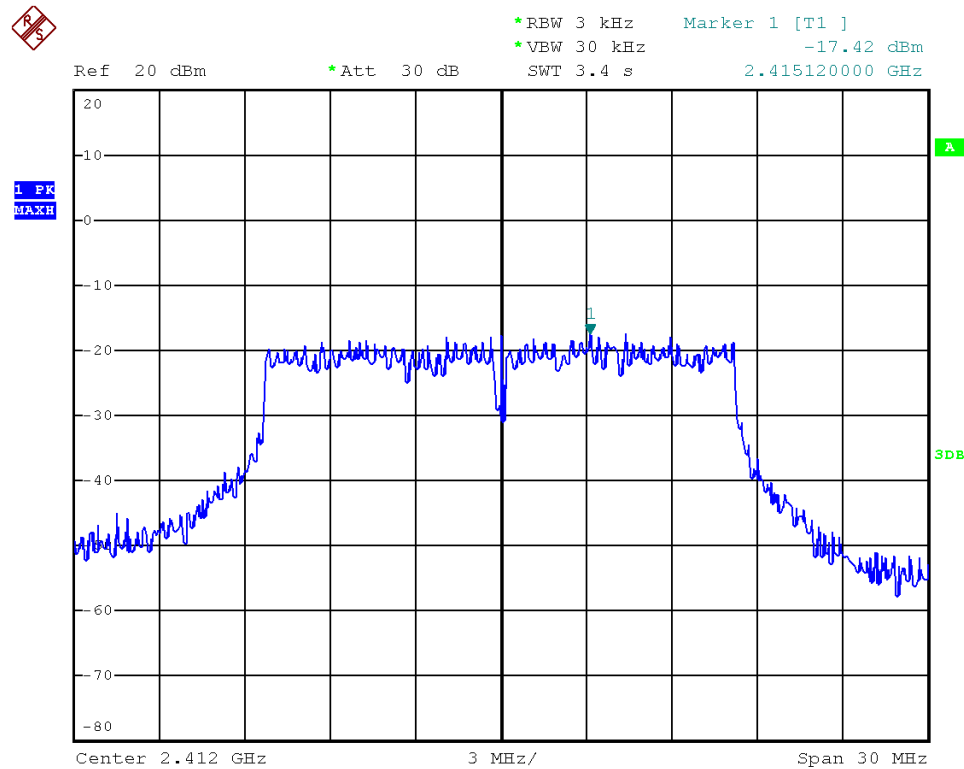




Modulation Standard: 802.11b (5.5Mbps)
Channel: 11



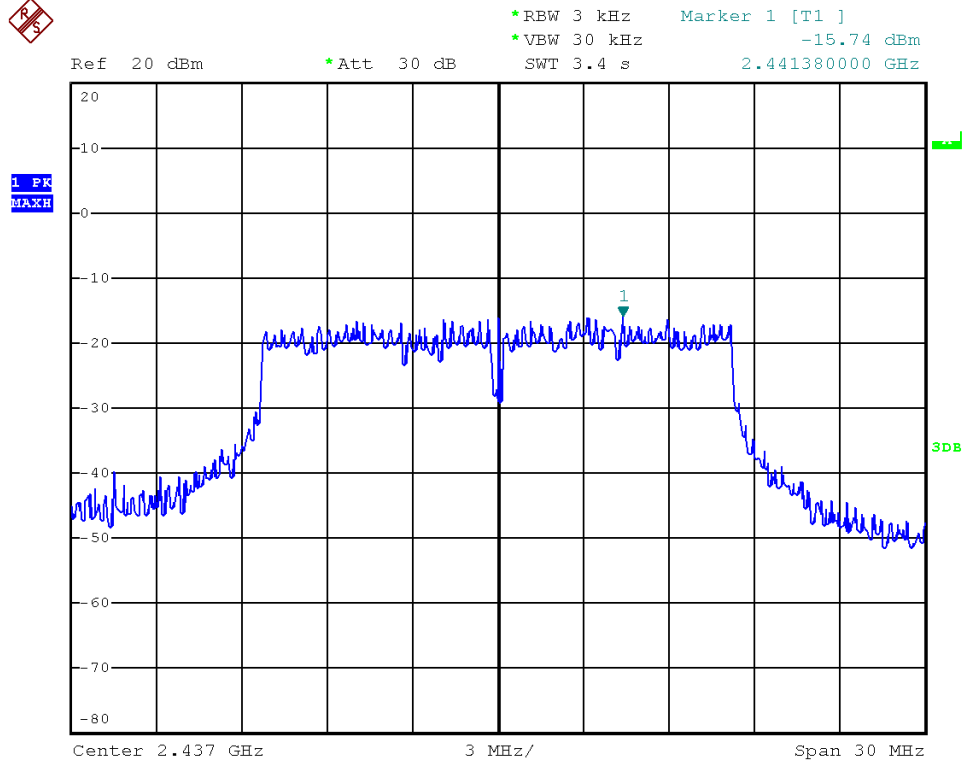
Modulation Standard: 802.11g (6Mbps)
Channel: 01





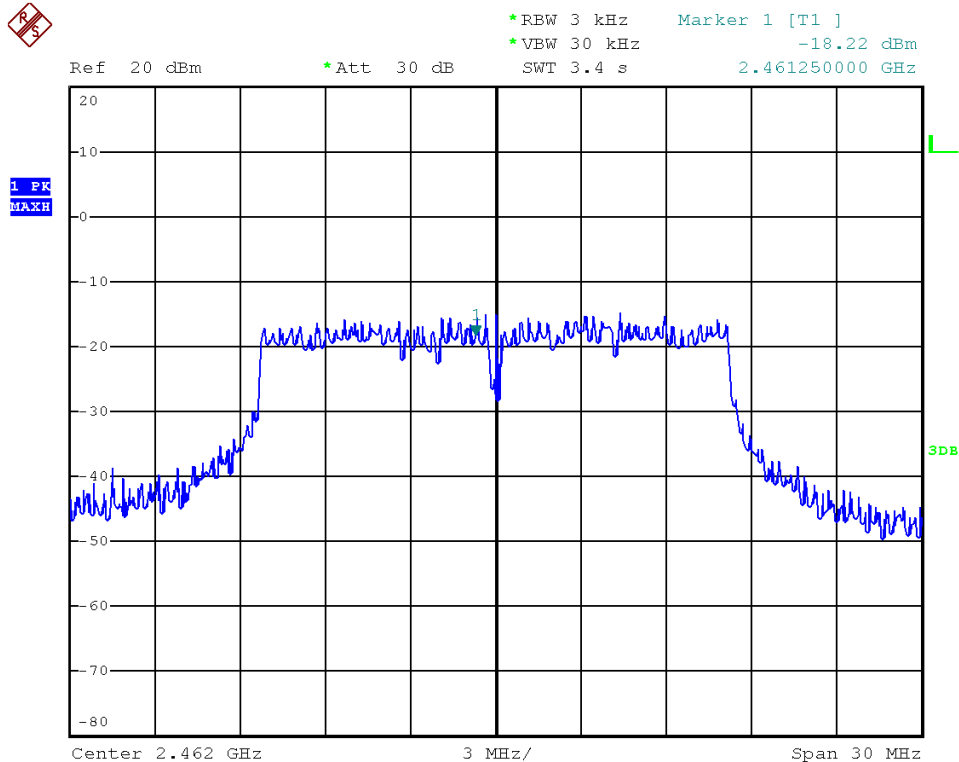
Modulation Standard: 802.11g (6Mbps)

Channel: 06



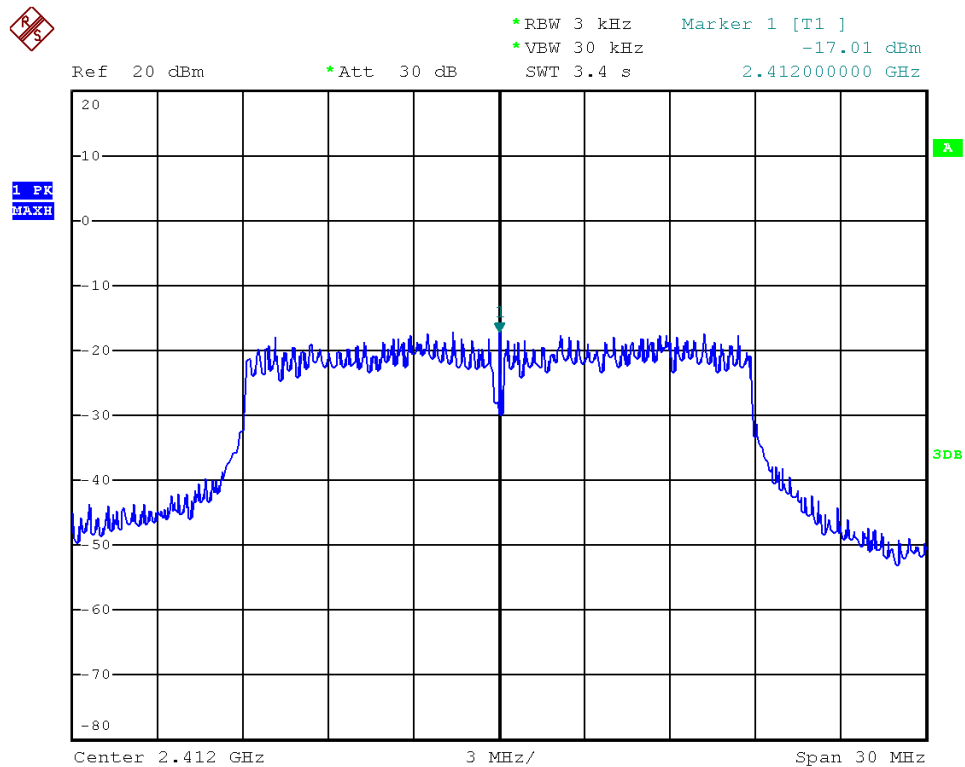
Modulation Standard: 802.11g (6Mbps)

Channel: 11

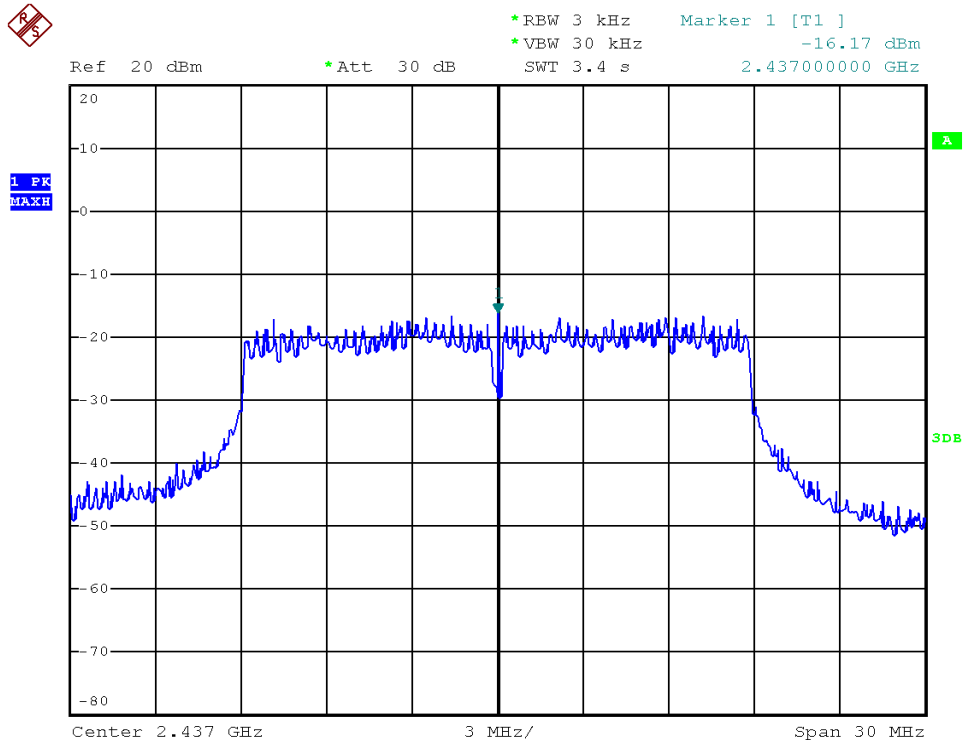




Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 01

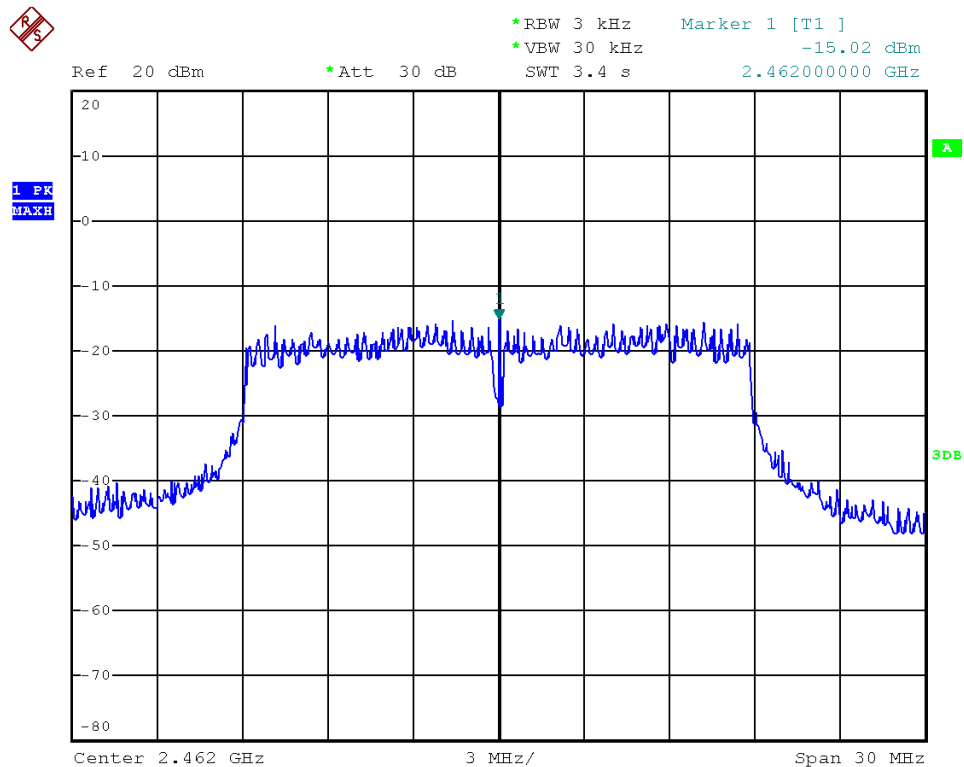


Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 06

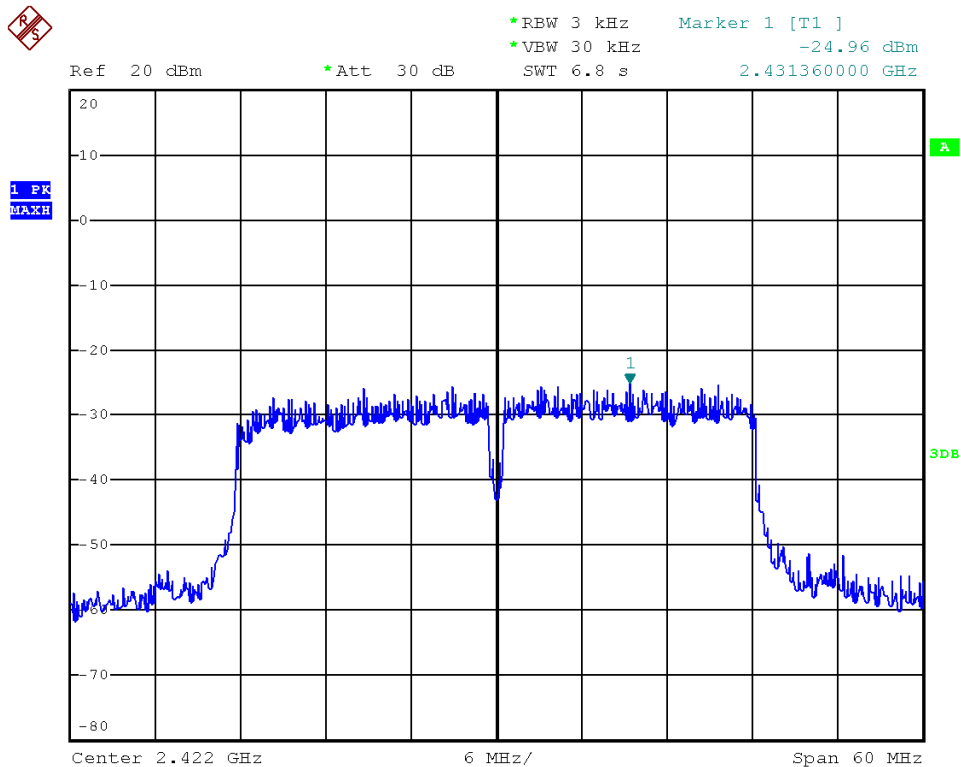




Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 11

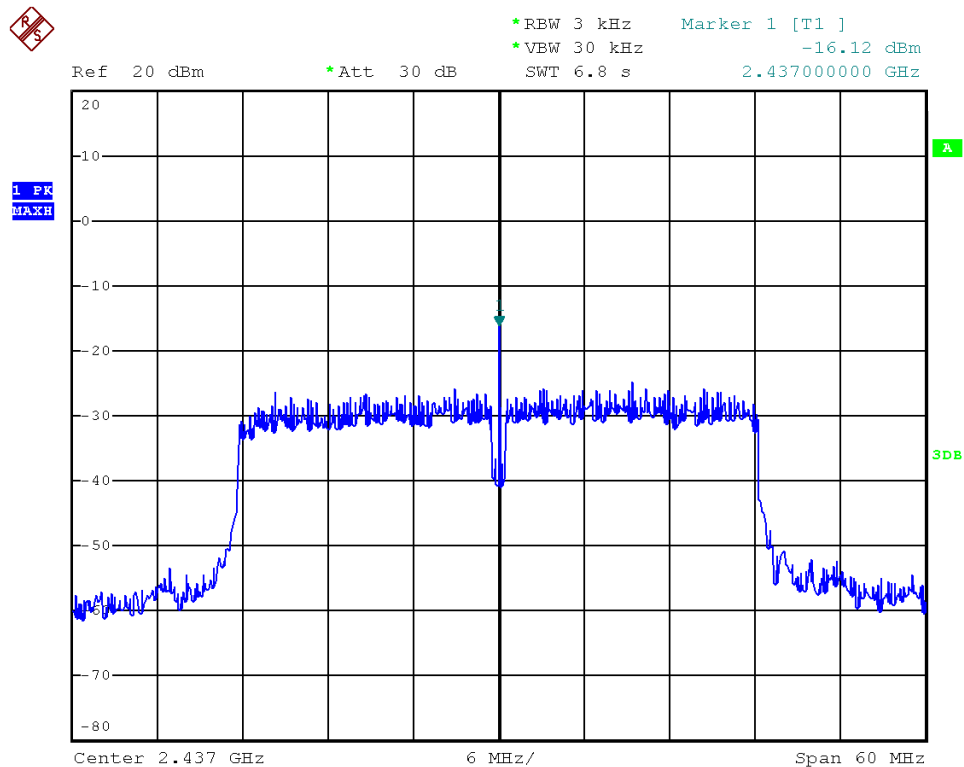


Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 03

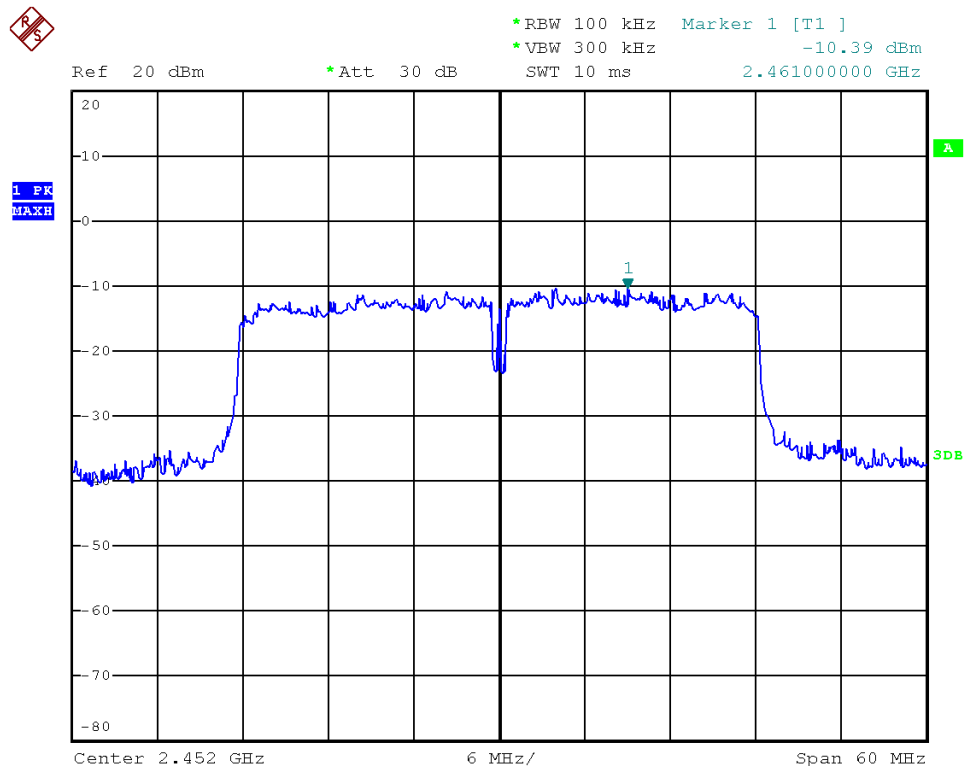




Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 06



Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 09





9. Band Edges Measurement

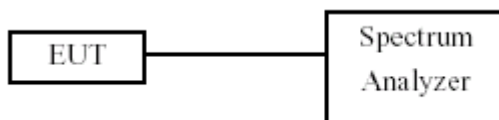
9.1 Test Limit

Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

9.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer via a low lose cable.
- Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20dB relative to the maximum measured in-band peak PSD level.
- The band edges was measured and recorded.

9.3 Test Setup Layout



9.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

9.5 Test Result and Data

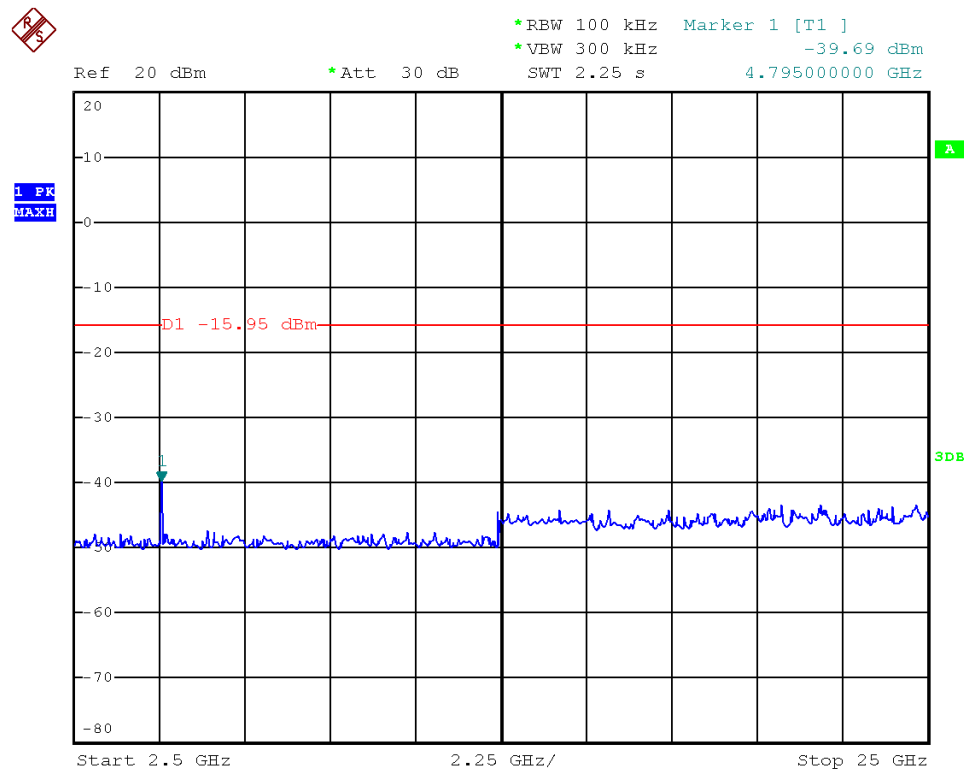
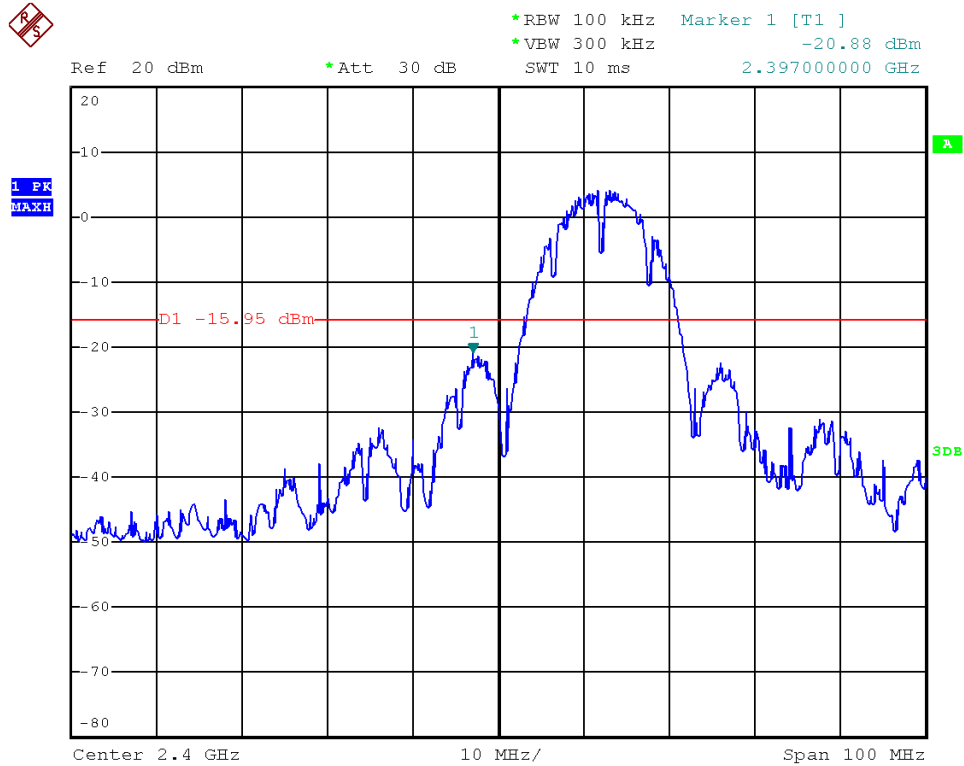
Test Date : Nov. 06, 2014 Temperature : 24°C
Atmospheric pressure : 1017 hPa Humidity : 62%

Modulation Type	Channel	Frequency (MHz)	Maximum value in frequency (MHz)	Maximum value (dBm)
IEEE 802.11b (5.5Mbps)	01	2412	2397.0	-20.88
	11	2462	2489.1	-27.88
IEEE 802.11g (6Mbps)	01	2412	2397.6	-28.53
	11	2462	2483.9	-35.22
IEEE 802.11n HT20 (65Mbps)	01	2412	2399.4	-28.54
	11	2462	2485.5	-33.22
IEEE 802.11n HT40 (130Mbps)	03	2422	2398.8	-39.17
	09	2452	2483.9	-37.72



Modulation Standard: 802.11b (5.5Mbps)

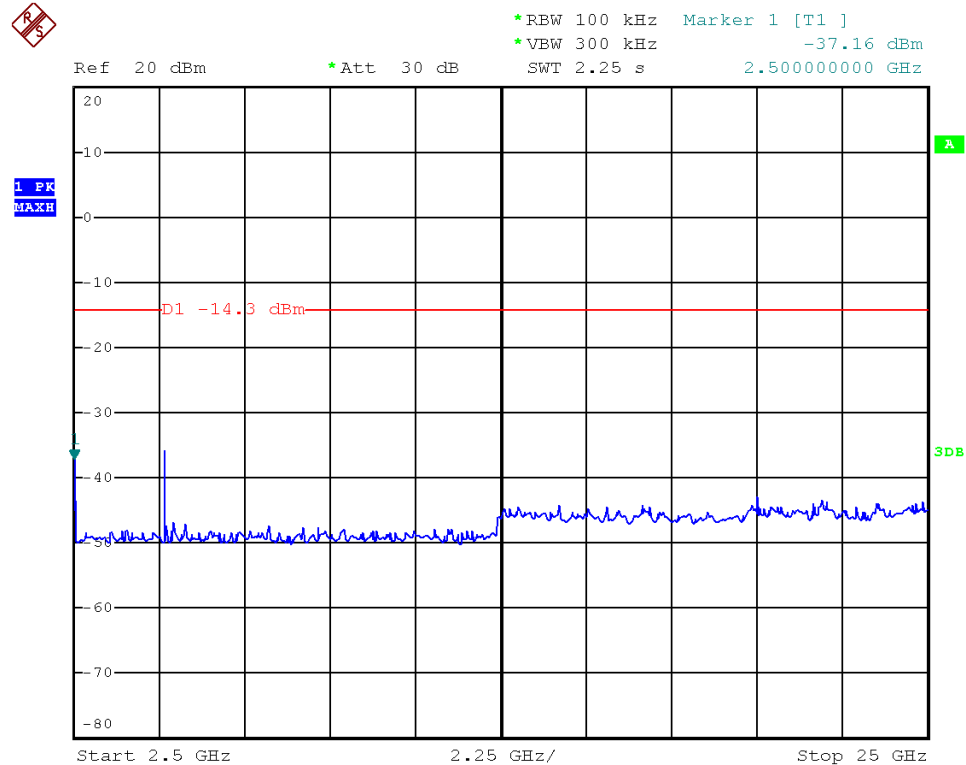
Channel: 01





Modulation Standard: 802.11b (5.5Mbps)

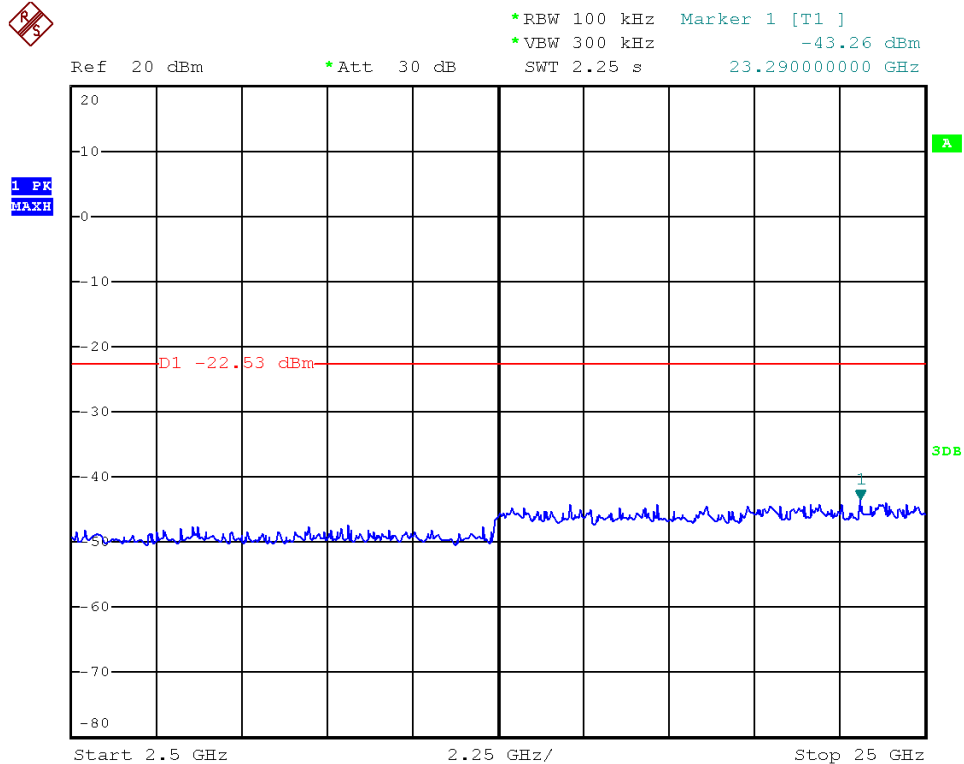
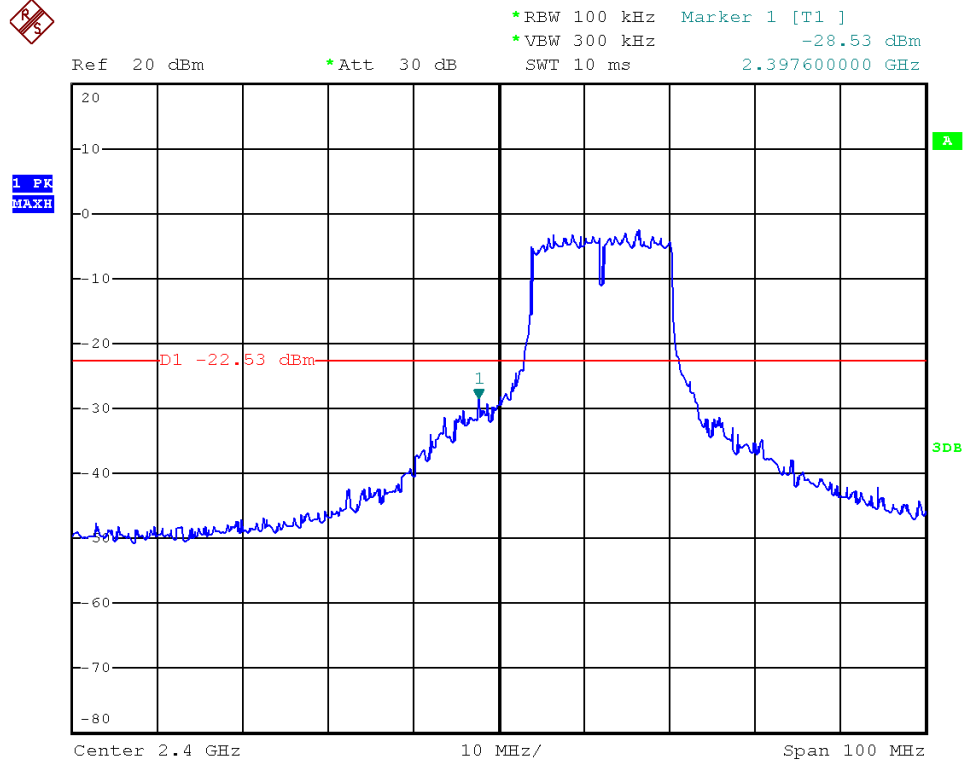
Channel: 11





Modulation Standard: 802.11g (6Mbps)

Channel: 01



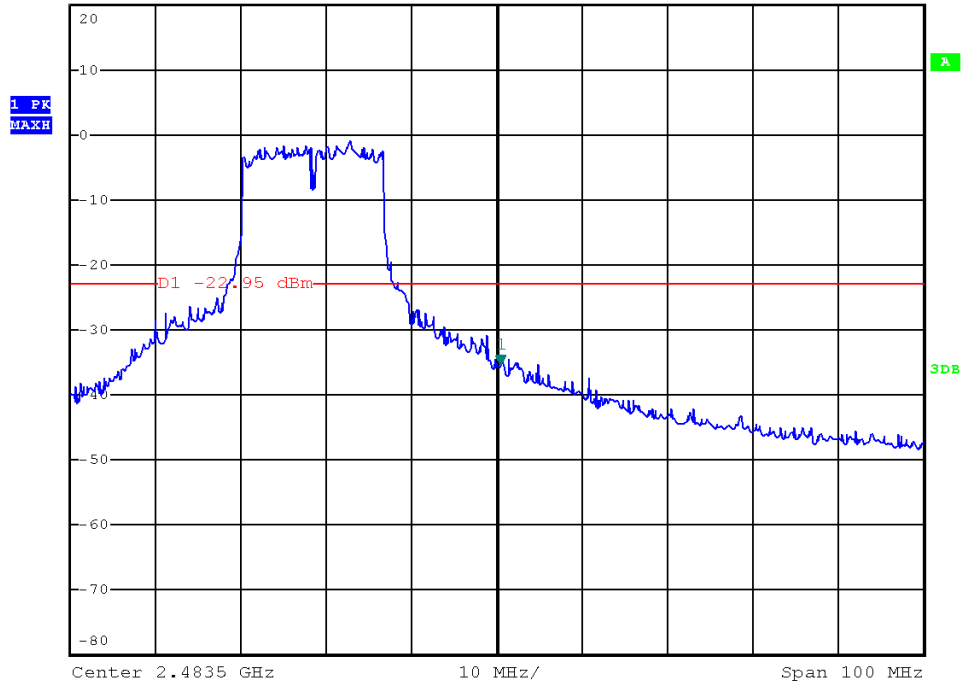


Modulation Standard: 802.11g (6Mbps)

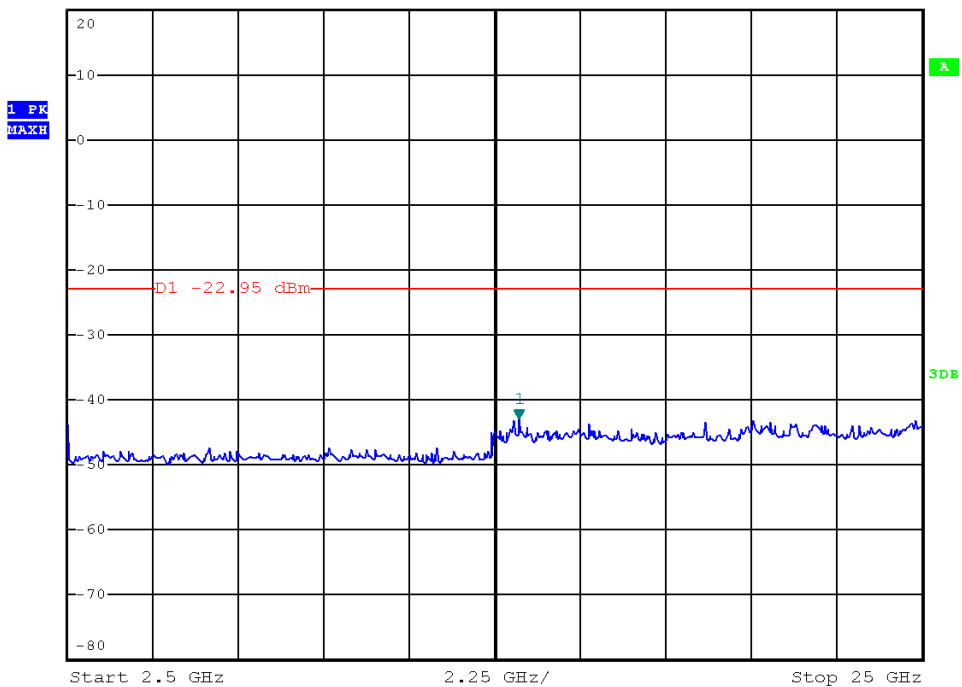
Channel: 11



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.22 dBm
Ref 20 dBm *Att 30 dB SWT 10 ms 2.483900000 GHz

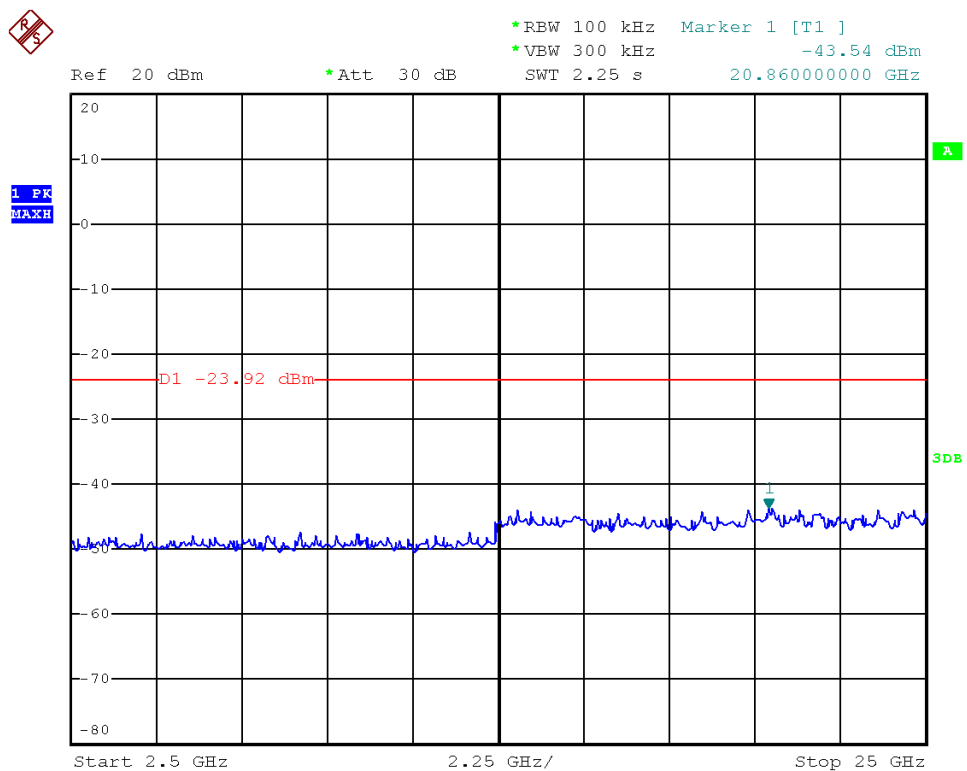
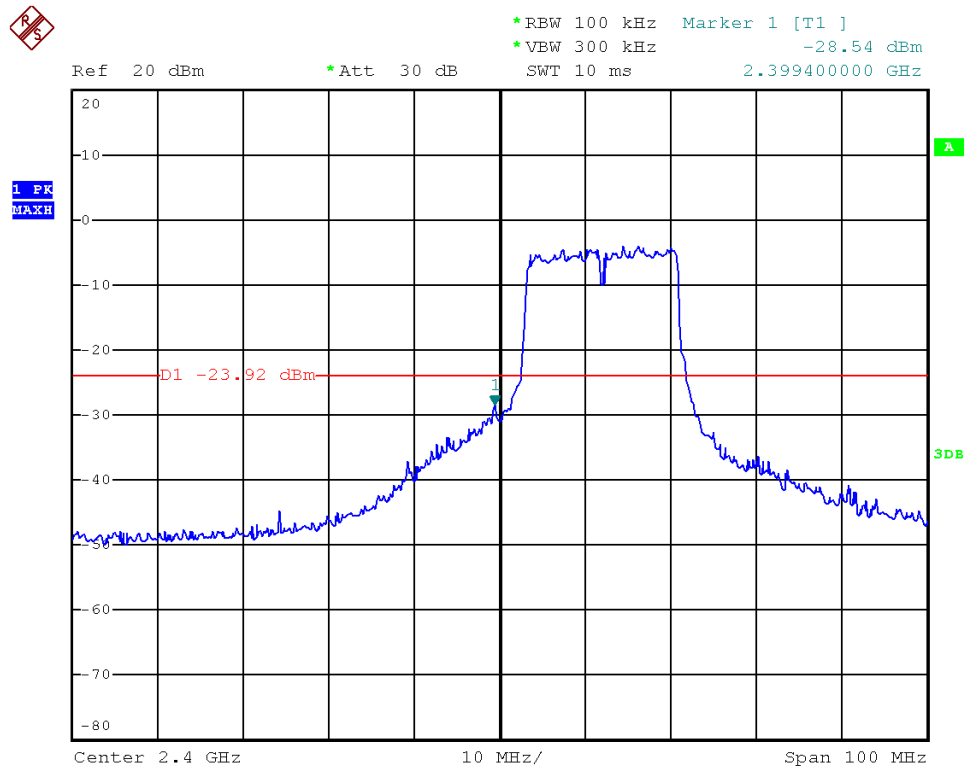


*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -42.94 dBm
Ref 20 dBm *Att 30 dB SWT 2.25 s 14.380000000 GHz



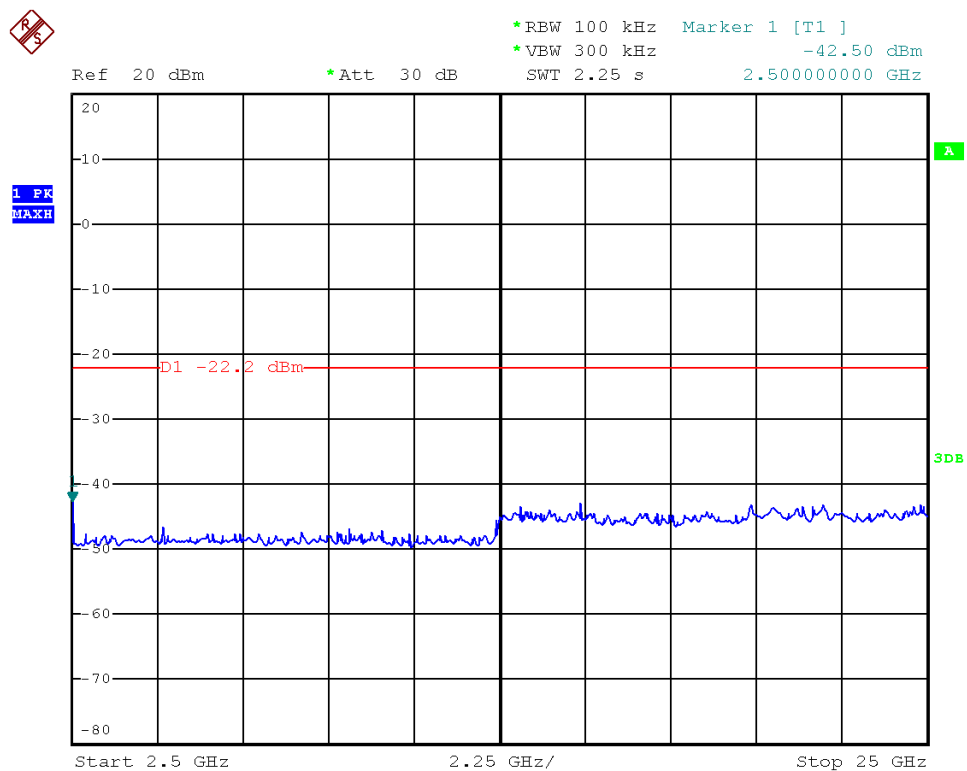
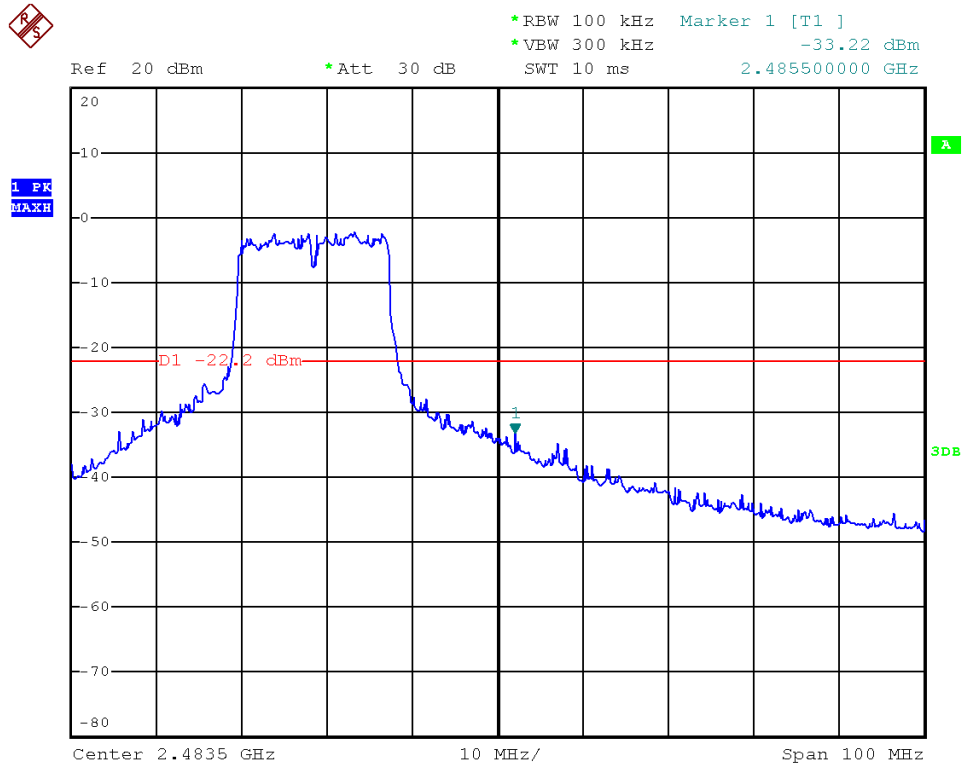


Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 01



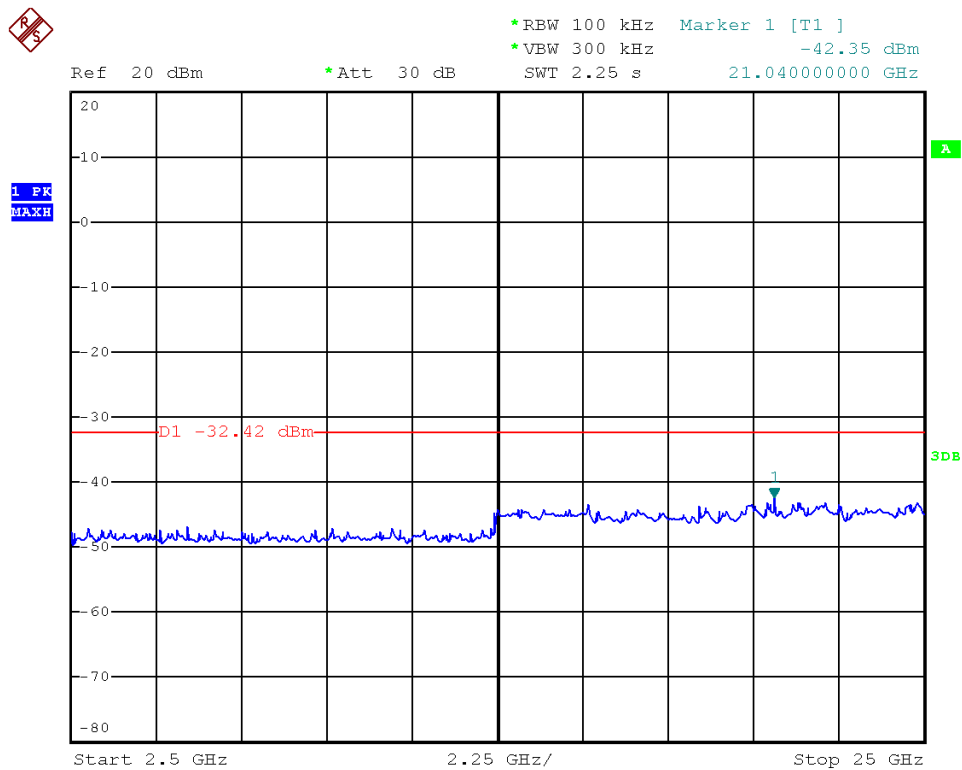
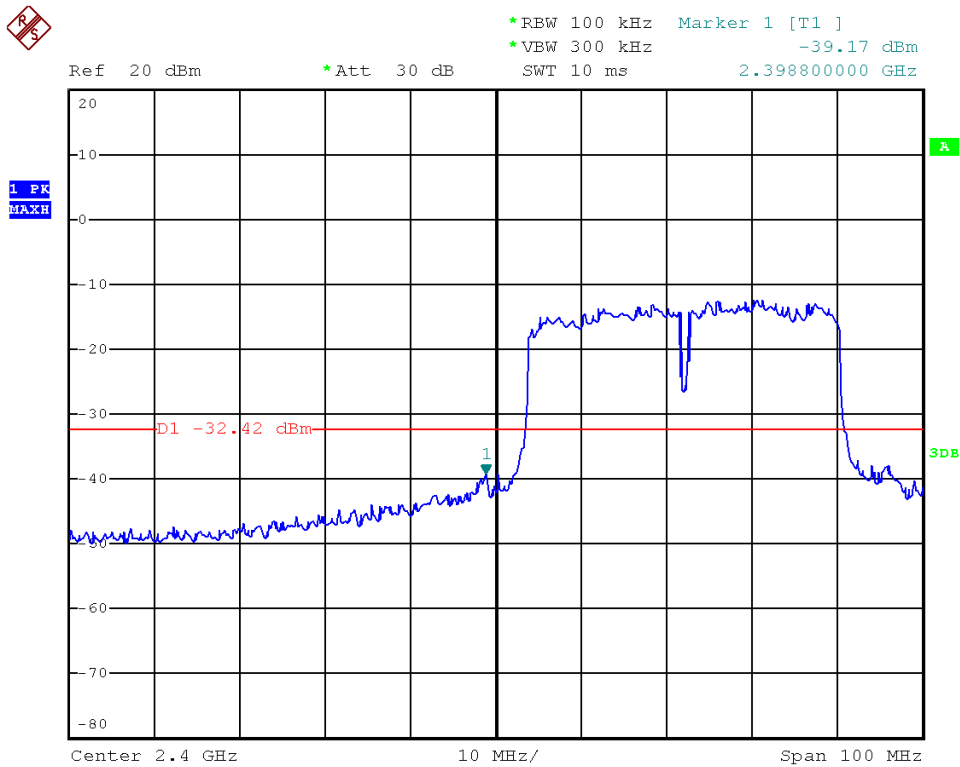


Modulation Standard: 802.11n HT20 (65Mbps)
Channel: 11



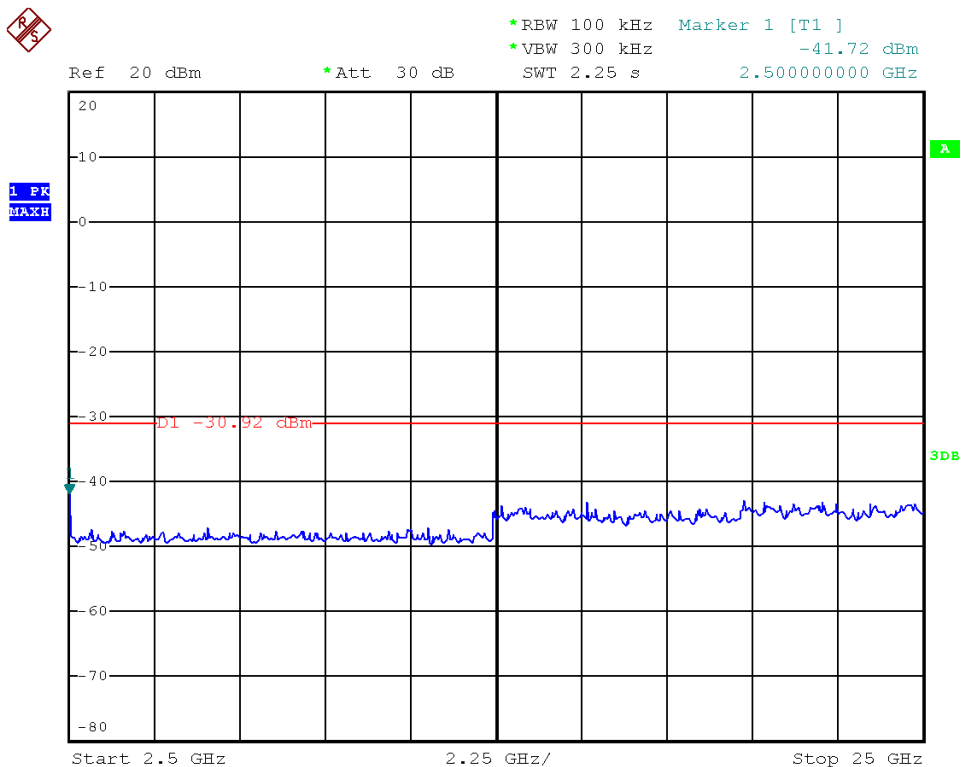
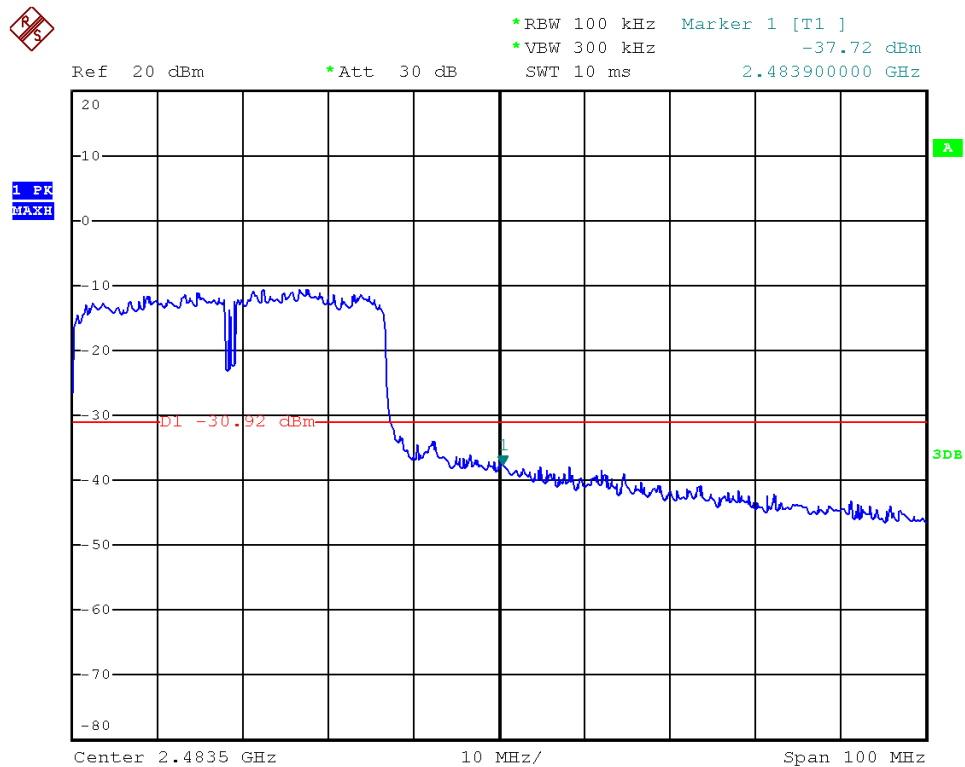


Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 03





Modulation Standard: 802.11n HT40 (130Mbps)
Channel: 09





9.6 Restrict Band Emission Measurement Data

Test Date: Nov. 06, 2014

Temperature: 24 °C

Atmospheric pressure: 1017 hPa

Humidity: 62 %

Modulation Standard: IEEE 802.11b (5.5Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2386.194	V	60.21	-1.19	59.02	Peak	74	54	-14.98	0	100
2386.194	V	52.38	-1.19	51.19	Ave	74	54	-2.81	0	100
2374.770	H	58.24	-1.24	57.00	Peak	74	54	-17.00	0	100
2374.770	H	46.33	-1.24	45.09	Ave	74	54	-8.91	0	100
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.078	V	62.19	-0.82	62.91	Peak	74	54	-11.09	274	100
2484.078	V	52.10	-0.82	51.18	Ave	74	54	-2.72	274	100
2488.182	V	62.71	-0.81	61.90	Peak	74	54	-12.10	276	100
2488.182	V	53.54	-0.81	52.73	Ave	74	54	-1.27	276	100

Modulation Standard: IEEE 802.11g (6Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2388.234	V	65.61	-1.19	64.42	Peak	74	54	-9.58	312	100
2388.234	V	52.71	-1.19	51.52	Ave	74	54	-2.48	312	100
2388.234	H	64.03	-1.19	62.84	Peak	74	54	-11.16	181	100
2388.234	H	51.98	-1.19	50.79	Ave	74	54	-3.21	181	100
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.534	V	69.91	-0.82	69.09	Peak	74	54	-4.91	278	100
2484.534	V	53.85	-0.82	53.03	Ave	74	54	-0.97	278	100
2484.496	H	68.71	-0.82	67.89	Peak	74	54	-6.11	78	100
2484.496	H	52.46	-0.82	51.64	Ave	74	54	-2.36	78	100



Modulation Standard: IEEE 802.11n HT20 (65Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2387.826	V	66.84	-1.19	65.65	Peak	74	54	-8.35	0	100
2387.826	V	51.98	-1.19	51.98	Ave	74	54	-3.21	0	100
2387.520	H	66.77	-1.19	65.58	Peak	74	54	-8.42	55	100
2387.520	H	52.73	-1.19	51.54	Ave	74	54	-2.46	55	100
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.154	V	69.68	-0.82	68.86	Peak	74	54	-5.14	247	100
2484.154	V	52.77	-0.82	51.95	Ave	74	54	-2.05	247	100
2484.116	H	65.10	-0.82	64.28	Peak	74	54	-9.72	241	100
2484.116	H	51.09	-0.82	50.27	Ave	74	54	-3.73	241	100

Modulation Standard: IEEE 802.11n HT40 (130Mbps)

Channel 3						Fundamental Frequency: 2422 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.408	V	64.28	-1.19	63.09	Peak	74	54	-6.91	74	100
2389.408	V	46.64	-1.19	45.45	Ave	74	54	-4.55	74	100
2384.480	H	59.56	-1.20	58.36	Peak	74	54	-11.64	58	100
2384.480	H	50.63	-1.20	39.43	Ave	74	54	-10.57	58	100
Channel 9						Fundamental Frequency: 2452 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.208	V	63.51	-0.82	62.69	Peak	74	54	-7.31	14	100
2484.208	V	48.04	-0.82	47.22	Ave	74	54	-2.8	14	100
2488.432	H	59.08	-0.81	58.27	Peak	74	54	-11.73	167	100
2488.432	H	44.39	-0.81	43.58	Ave	74	54	-6.42	167	100

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector peak mode) for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector sample mode) for Average detection at frequency above 1GHz.



10. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

10.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.