



# Radio Test Report

**FCC ID: Q3N-8630**

**IC: 5121A-8630**

This report concerns (check one) :  Original Grant  Class II Change

**Issued Date** : Nov. 13, 2013  
**Project No.** : 1310198  
**Equipment** : Mobile Computer  
**Model Name** : 8630

**Applicant** : CIPHERLAB CO., LTD.  
**Address** : 12F, 333, Dunhua S. Rd., Sec. 2, Taipei,  
Taiwan

**Tested by:** Neutron Engineering Inc. EMC Laboratory  
**Date of Receipt:** Sep. 10, 2013  
**Date of Test:** Sep. 10, 2013 ~ Nov. 15, 2013

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## **Neutron Engineering Inc.**

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**Neutron** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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### **Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.



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**REPORT ISSUED HISTORY**

Revised Version No.	Description	Issued Date
-	Initial Issue.	Nov. 13, 2013

**1 CERTIFICATION**

Equipment : Mobile Computer  
Brand Name : CIPHERLAB  
Model Name : 8630  
Applicant : CIPHERLAB CO., LTD.  
Date of Test : Sep. 10, 2013 ~ Nov. 15, 2013  
Standards : RSS-210, Issue 8: 2010  
FCC Part 15, Subpart C: 2012  
ANSI C63.4: 2009

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1310198) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).



**2. SUMMARY OF TEST RESULTS**

RSS-210, Issue 8: 2010; FCC Part 15, Subpart C: 2012			
Standard Clause		Test Item	Result
RSS-210	FCC Part 15, Subpart C		
NOTE (2)	15.207	Conducted Emission	<b>PASS</b>
A8.5	15.247 (c)	Antenna conducted Spurious Emission	<b>PASS</b>
A8.2 (a)	15.247 (a)(2)	6 dB Bandwidth	<b>PASS</b>
A8.4 (4)	15.247 (b)	Maximum Peak Conducted Output Power	<b>PASS</b>
NOTE (3)	15.247 (c)	Radiated Spurious Emission	<b>PASS</b>
A8.2 (b)	15.247 (d)(e)	Power Spectral Density	<b>PASS</b>
NOTE (4)	15.205	Restricted Bands	<b>PASS</b>
NOTE (5)	15.203	Antenna Requirement	<b>PASS</b>
NOTE (6)	1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	<b>PASS</b>

**NOTE:**

- (1) N/A: denotes test is not applicable in this Test Report
- (2) Reference standerads is RSS-GEN 7.2.4
- (3) Reference standerads is RSS-GEN 7.2.5
- (4) Reference standerads is RSS-GEN 7.2.2
- (5) Reference standerads is RSS-GEN 7.1.2
- (6) Reference standerads is RSS-102





**2.1 TEST FACILITY**

The test facilities used to collect the test data in this report:

**Conducted emission Test:**

**C02:** 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

**Radiated emission Test (Below 1 GHz):**

**CB08:** 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

**Radiated emission Test (Above 1 GHz):**

**CB08:** 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

**2.2 MEASUREMENT UNCERTAINTY**

**The measurement uncertainty is not specified by FCC/Industry Canada rules and for reference only.**

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately **95%**.

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

**A. Conducted emission test:**

Test Site	Measurement Frequency Range	U , (dB)	NOTE
C02	150 kHz ~ 30 MHz	2.59	

**B. Radiated emission test:**

Test Site	Item	Measurement Frequency Range	Uncertainty	NOTE	
CB08	Radiated emission at 3m	Horizontal Polarization	30 - 200MHz	3.35 dB	
			200 - 1000MHz	3.11 dB	
			1 - 18GHz	3.97 dB	
			18 - 40GHz	4.01 dB	
		Vertical Polarization	30 - 200MHz	3.22 dB	
			200 - 1000MHz	3.24 dB	
			1 - 18GHz	4.05 dB	
			18 - 40GHz	4.04 dB	

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our  $U_{lab}$  values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called  $U_{CISPR}$ , as follows:

- Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB
- Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our  $U_{lab}$  values are smaller than  $U_{CISPR}$ .

If  $U_{lab}$  is less than or equal to  $U_{CISPR}$ , then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If  $U_{lab}$  is greater than  $U_{CISPR}$ , then:

- compliance is deemed to occur if no measured disturbance level, increased by  $(U_{lab} - U_{CISPR})$ , exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by  $(U_{lab} - U_{CISPR})$ , exceeds the disturbance limit.



**3 GENERAL INFORMATION**

**3.1 GENERAL DESCRIPTION OF EUT**

Equipment	Mobile Computer	
Brand Name	CIPHERLAB	
Model Name	8630	
OEM Brand/Model Name	N/A	
Model Difference	N/A	
Product Description	The EUT is a Mobile Computer.	
	Operation Frequency	2412~2462 MHz
	Modulation Type	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM,(64 QAM, 16 QAM, QPSK, BPSK) IEEE 802.11n: OFDM(64 QAM, 16 QAM, QPSK, BPSK)
	Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 150 Mbps
	Number Of Channel	Please refer to the Note 2.
	Antenna Designation	Please refer to the Note 3.
	Antenna Gain(Peak)	Please refer to the Note 3.
	Maximum Conducted Output Power	IEEE 802.11b: 17.00 dBm IEEE 802.11g: 20.13 dBm IEEE 802.11n (20 MHz): 19.67 dBm IEEE 802.11n (40 MHz): 19.54 dBm
	More details of EUT technical specification, please refer to the User's Manual.	
	Power Source	1. Battery supplied. 2. DC Voltage supplied from External Power Supply.
Power Rating	1. Li-ion BATTERY PACK: 3.7V 2. External Power Supply: I/P: AC 100-240V 47-63Hz 0.58A MAX / O/P: DC 5V 4A 20W MAX	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	1 * Keypad (optional): 29 Keys or 39 Keys 1 * Li-ion BATTERY PACK (optional): (1) CIPHERLAB, BA-0072A2, 3.7V 2200mAh, 8.14Wh (2) CIPHERLAB, BA-0071A1, 3.7V 1100mAh, 4.07Wh 1 * Reader (optional): 2D, CCD or Laser 1 * Snap-On Cable (optional): (1) RS-232 Type (2) USB Type 1 * External Power Supply: ADAPTER TECH., STD-05040V 1 * Pistol (optional)	
EUT Modification(s)	N/A	



**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Channel List:

IEEE 802.11b/g/n (20MHz)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

IEEE 802.11n (40MHz)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	06	2437	09	2452
04	2427	07	2442		
05	2432	08	2447		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	CIPHERLAB	20130716_neptune	PIFA	I-PEX	-0.11



**3.2 DESCRIPTION OF TEST MODES**

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test Items	IEEE	Mode	Data Rate	Channel	Note
Conducted Emission	802.11b	DSSS	1 Mbps	06	
Antenna conducted Spurious Emission	802.11b	DSSS	1 Mbps	01/06/11	
	802.11g	OFDM	6 Mbps	01/06/11	
	802.11n (20 MHz)	BPSK	MCS0	01/06/11	
	802.11n (40 MHz)	BPSK	MCS0	03/06/09	
6 dB Bandwidth	802.11b	DSSS	1 Mbps	01/06/11	
	802.11g	OFDM	6 Mbps	01/06/11	
	802.11n (20 MHz)	BPSK	MCS0	01/06/11	
	802.11n (40 MHz)	BPSK	MCS0	03/06/09	
Maximum Peak Conducted Output Power	802.11b	DSSS	1 Mbps	01/06/11	
	802.11g	OFDM	6 Mbps	01/06/11	
	802.11n (20 MHz)	BPSK	MCS0	01/06/11	
	802.11n (40 MHz)	BPSK	MCS0	03/06/09	
Radiated Spurious Emission (30 MHz to 1 GHz)	802.11n (20 MHz)	OFDM	MCS0	06	
Radiated Spurious Emission (above 1 GHz)	802.11b	DSSS	1 Mbps	01/06/11	
	802.11g	OFDM	6 Mbps	01/06/11	
	802.11n (20 MHz)	BPSK	MCS0	01/06/11	
	802.11n (40 MHz)	BPSK	MCS0	03/06/09	
Restricted Bands	802.11b	DSSS	1 Mbps	01/06/11	
	802.11g	OFDM	6 Mbps	01/06/11	
	802.11n (20 MHz)	BPSK	MCS0	01/06/11	
	802.11n (40 MHz)	BPSK	MCS0	03/06/09	
Antenna Requirement	---		---	---	
RF Exposure Compliance	---		---	---	

NOTE: The measurements are performed at the highest, middle, lowest available channels.



**3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING**

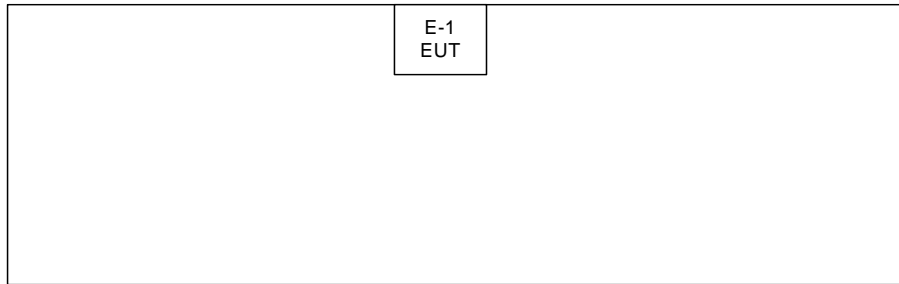
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

IEEE	802.11b			802.11g		
Test software Version	V1.00			V1.00		
Frequency	2412 MHz	2437 MHz	2462 MHz	2412 MHz	2437 MHz	2462 MHz
Parameter	def.	def.	def.	def.	def.	def.

IEEE	802.11n (20 MHz)			802.11n (40 MHz)		
Test software Version	V1.00			V1.00		
Frequency	2412 MHz	2437 MHz	2462 MHz	2422 MHz	2437 MHz	2452 MHz
Parameter	def.	def.	def.	def.	def.	def.



**3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**



**Neutron Engineering Inc.****3.5 DESCRIPTION OF SUPPORT UNITS**

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID/IC	Series No.	Note
E-1	Mobile Computer	CIPHERLAB	8630	FCC ID: Q3N-8630 IC: 5121A-8630	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
N/A	-	-	-	-

NOTE: The support equipment was authorized by Declaration of Conformity (DOC).



**4 CONDUCTED EMISSION**

**4.1 LIMIT**

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 - 5.0	73.00	60.00	56.00	46.00
5.0 - 30.0	73.00	60.00	60.00	50.00

**NOTE:**

1. The tighter limit applies at the band edges.
2. The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
3. The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)  
 Margin Level = Measurement Value – Limit Value

**4.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	Schwarzbeck	NSLK 8127	8127685	Feb. 24, 2014
2	Test Cable	TIMES	CFD300-NL	C01	Jun. 16, 2014
3	EMI Test Receiver	Agilent	N9038A	MY51210215	Mar. 21, 2014
4	Measurement Software	EZ	EZ_EMG (Version NB-02A)	N/A	N/A

NOTE: **N/A:** denotes No Model Name, No Serial No. or No Calibration specified.



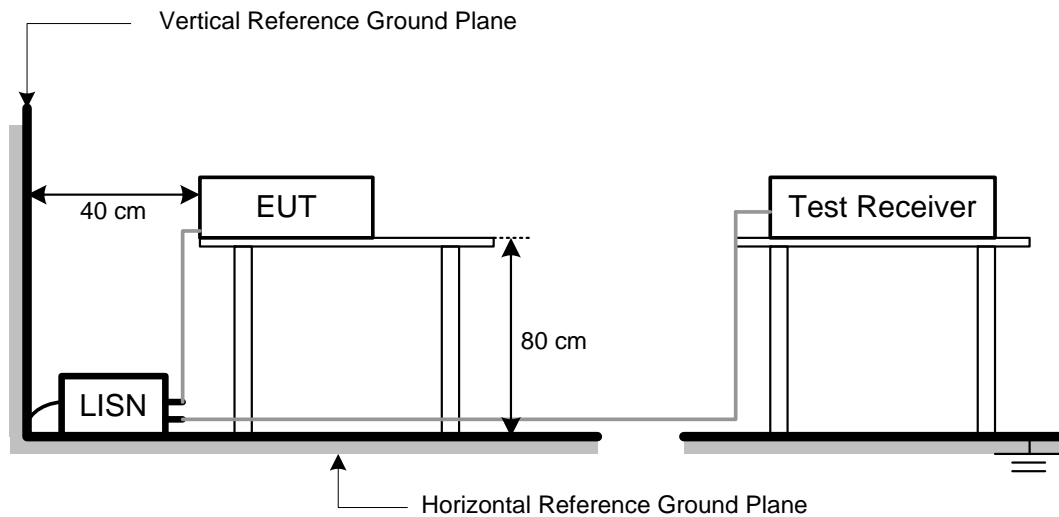
**4.3 TEST PROCEDURES**

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

**NOTE:**

- a. Reading in which marked as Peak, QP or AVG means measurements by using are Quasi-Peak or Average Mode with Detector BW=9 kHz (6 dB Bandwidth).
- b. All readings are Peak Mode value unless otherwise stated QP or AVG in column of Note. If the Peak or QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only Peak or QP Mode was measured, but AVG Mode didn't perform.

**4.4 TEST SETUP LAYOUT**



**4.5 DEVIATION FROM TEST STANDARD**

No deviation



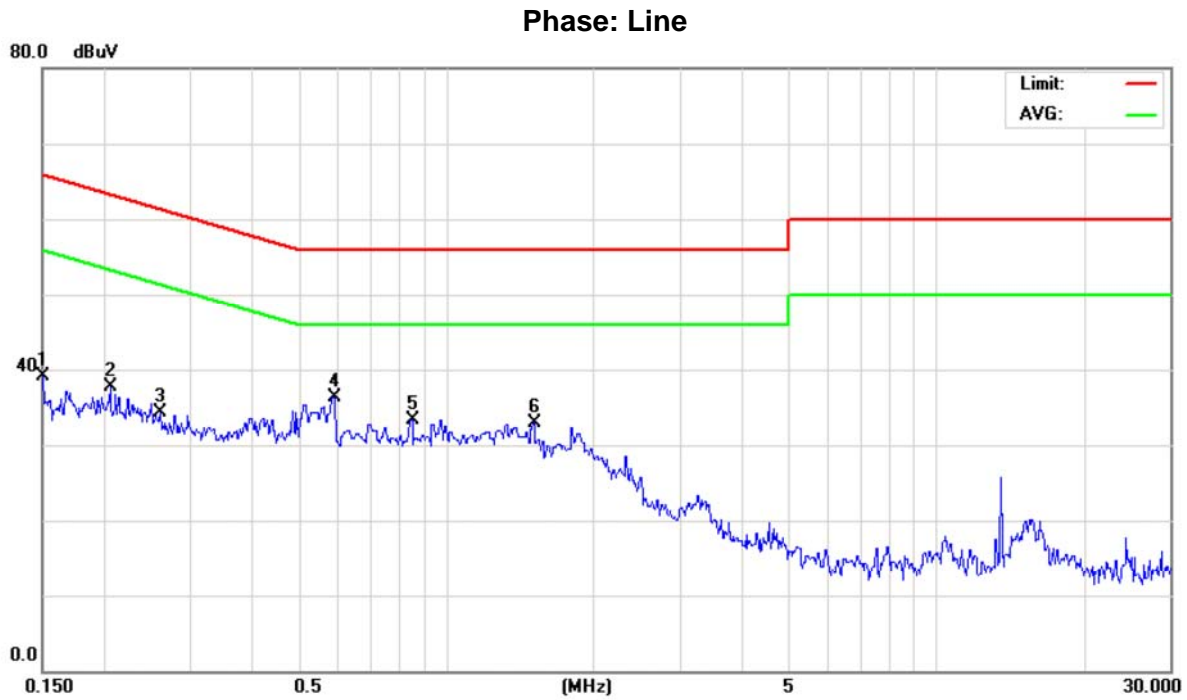
#### **4.6 EUT OPERATING CONDITIONS**

The EUT used during radiated and/or conducted emission measurement was designed to exercise in a manner similar to a typical use.



4.7 TEST RESULTS

EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

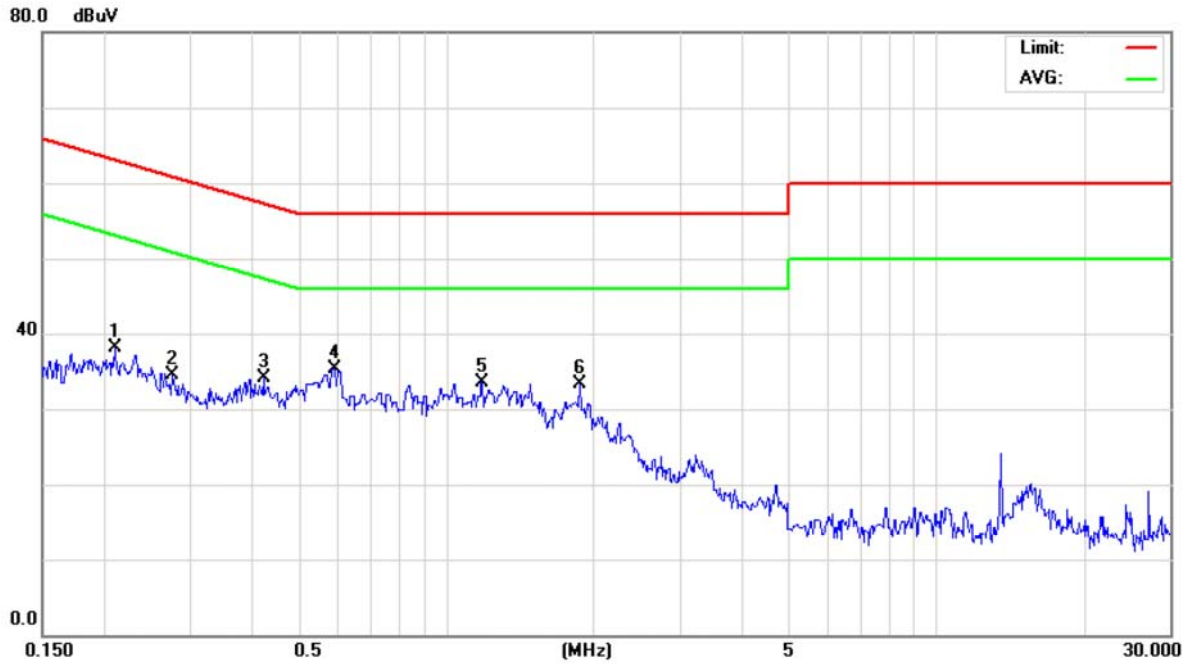


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1507	30.34	8.69	39.03	65.96	-26.93	peak	
2		0.2059	28.27	9.40	37.67	63.37	-25.70	peak	
3		0.2605	25.79	8.50	34.29	61.42	-27.13	peak	
4	*	0.5899	27.51	8.73	36.24	56.00	-19.76	peak	
5		0.8510	24.02	9.34	33.36	56.00	-22.64	peak	
6		1.5079	23.37	9.51	32.88	56.00	-23.12	peak	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Phase: Neutral**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2101	27.86	10.23	38.09	63.20	-25.11	peak	
2		0.2751	25.95	8.50	34.45	60.96	-26.51	peak	
3		0.4236	26.14	7.95	34.09	57.38	-23.29	peak	
4	*	0.5899	26.57	8.73	35.30	56.00	-20.70	peak	
5		1.1839	23.87	9.62	33.49	56.00	-22.51	peak	
6		1.8769	23.94	9.38	33.32	56.00	-22.68	peak	



5 ANTENNA CONDUCTED SPURIOUS EMISSION

5.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Antenna conducted Spurious Emission	30-25000	20 dB less than the peak value of fundamental frequency

5.2 MEASUREMENT INSTRUMENTS LIST

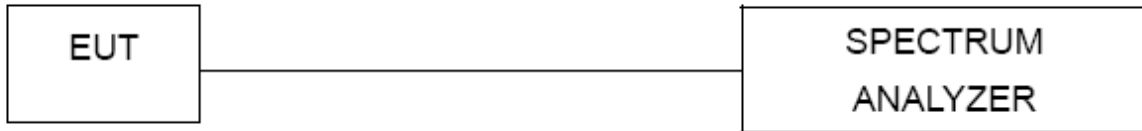
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

5.3 TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

5.4 TEST SETUP LAYOUT



5.5 DEVIATION FROM TEST STANDARD

No deviation

5.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.



**5.7 TEST RESULTS**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b		

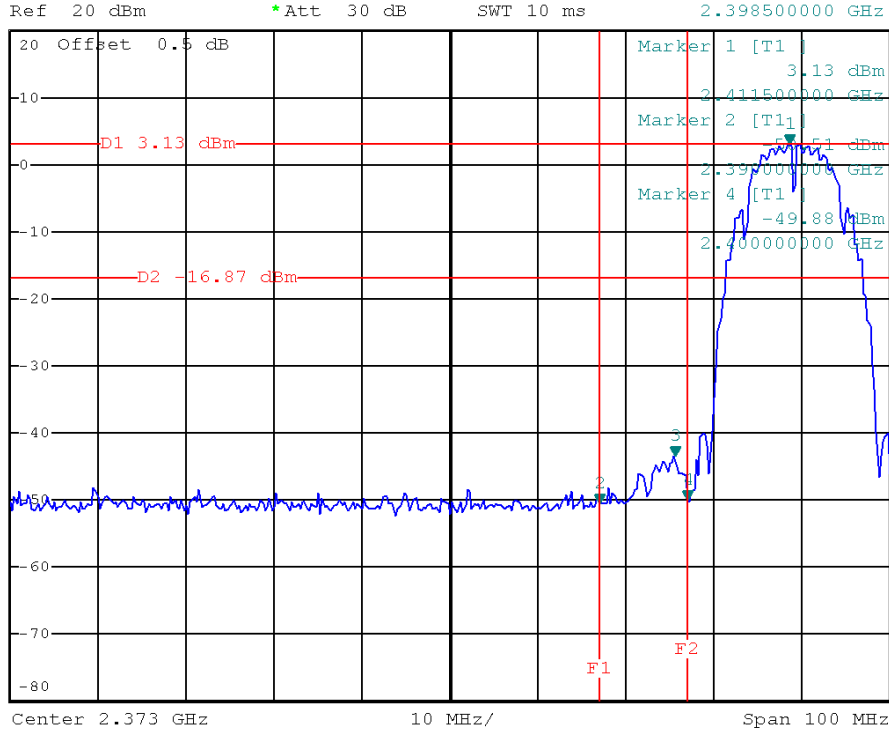
Channel of Worst Data			
The max. radio frequency power in any 100 kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2398.50	-43.46	2491.00	-48.50
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



IEEE 802.11b/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



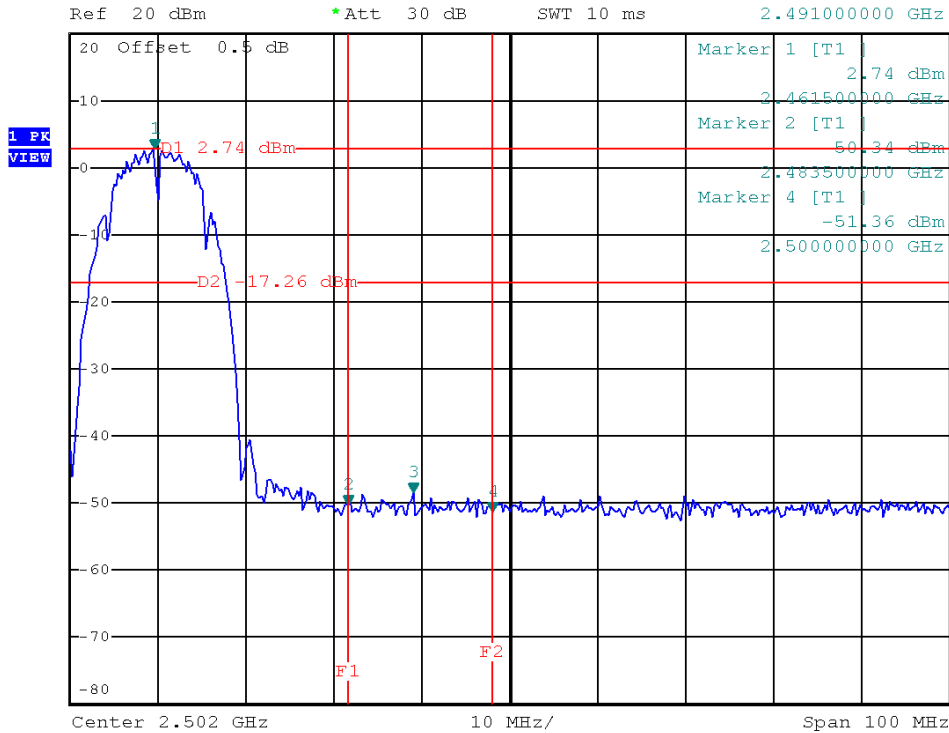
\*RBW 100 kHz Marker 3 [T1 ] -43.46 dBm
\*VBW 300 kHz
SWT 10 ms 2.398500000 GHz



IEEE 802.11b/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



\*RBW 100 kHz Marker 3 [T1 ] -48.50 dBm
\*VBW 300 kHz
SWT 10 ms 2.491000000 GHz

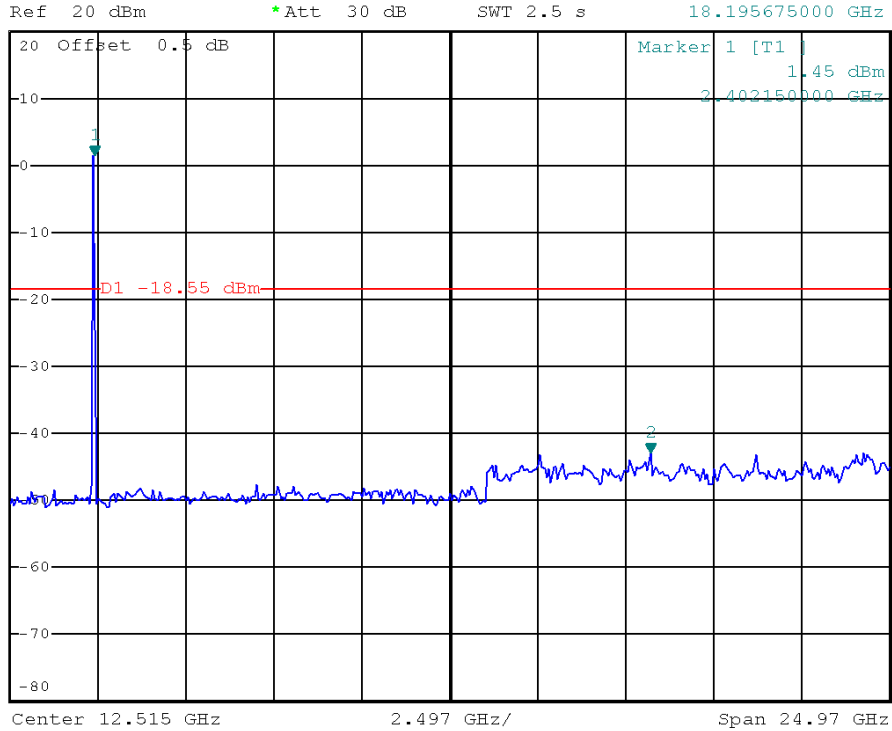




### IEEE 802.11b/2412 MHz/10 Harmonic of the frequency



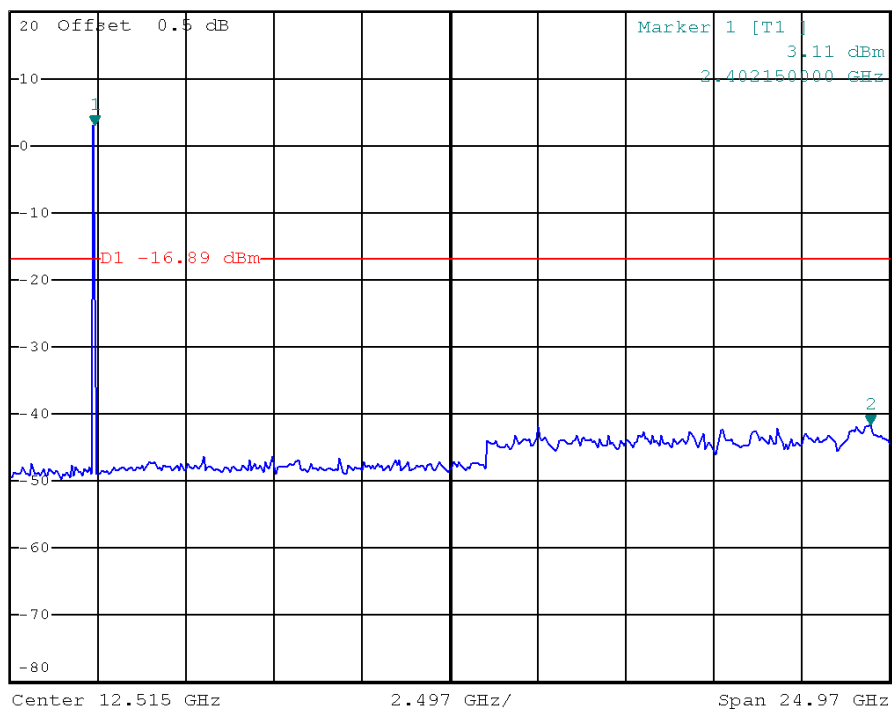
\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.73 dBm  
SWT 2.5 s 18.195675000 GHz



### IEEE 802.11b/2437 MHz/10 Harmonic of the frequency



\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -41.63 dBm  
SWT 2.5 s 24.438175000 GHz







### IEEE 802.11b/2462 MHz/10 Harmonic of the frequency

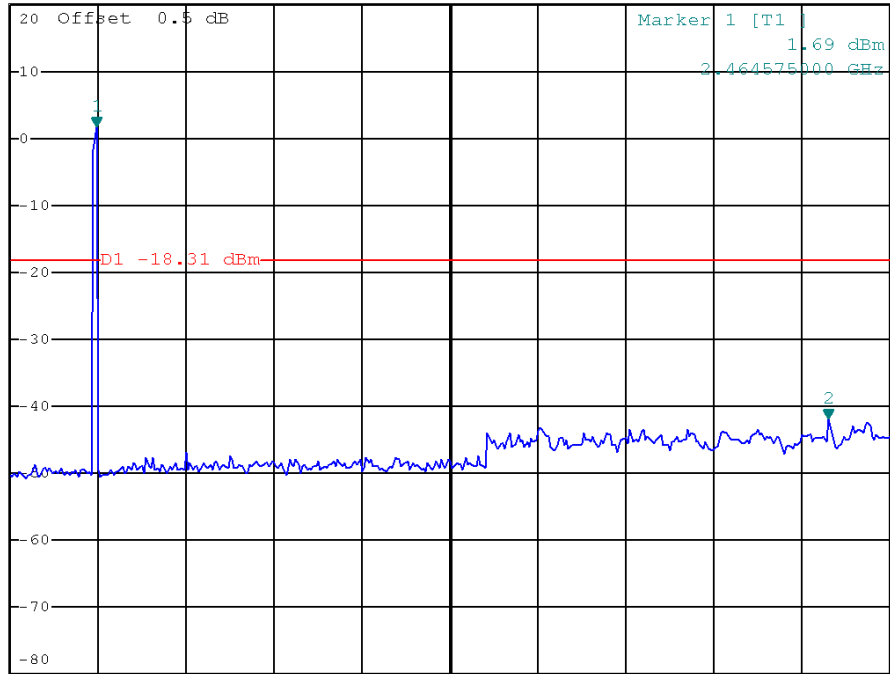


\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -41.77 dBm  
SWT 2.5 s 23.252100000 GHz

Ref 20 dBm

\*Att 30 dB

1 PK  
VIEW



Center 12.515 GHz

2.497 GHz/

Span 24.97 GHz



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g		

Channel of Worst Data			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.25	-37.29	2483.75	-44.86
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



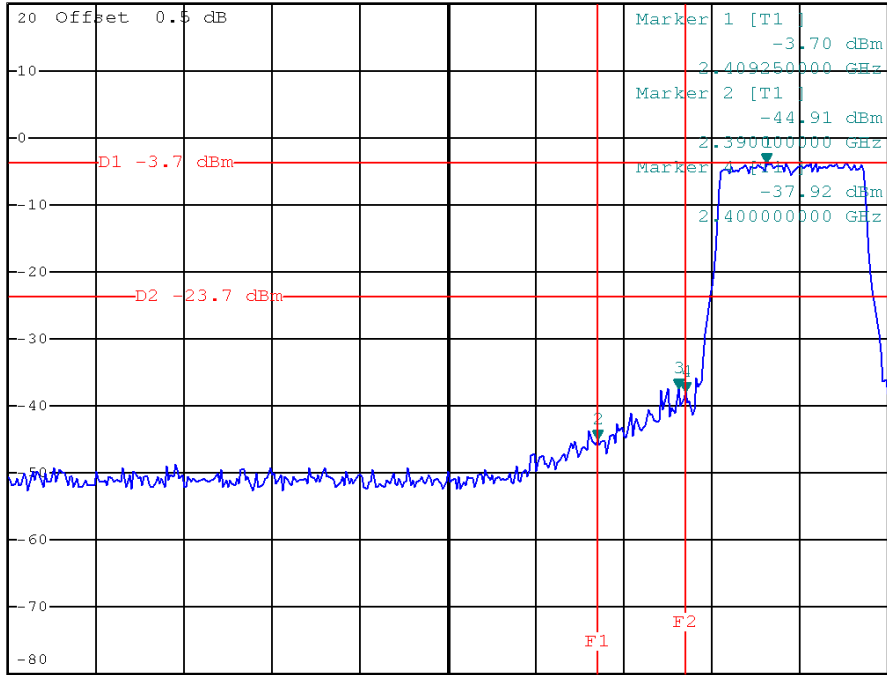
IEEE 802.11g/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



\*RBW 100 kHz Marker 3 [T1 ]  
\*VBW 300 kHz -37.29 dBm  
SWT 10 ms 2.399250000 GHz

Ref 20 dBm \*Att 30 dB

1 PK VIEW



Center 2.373 GHz 10 MHz/ Span 100 MHz

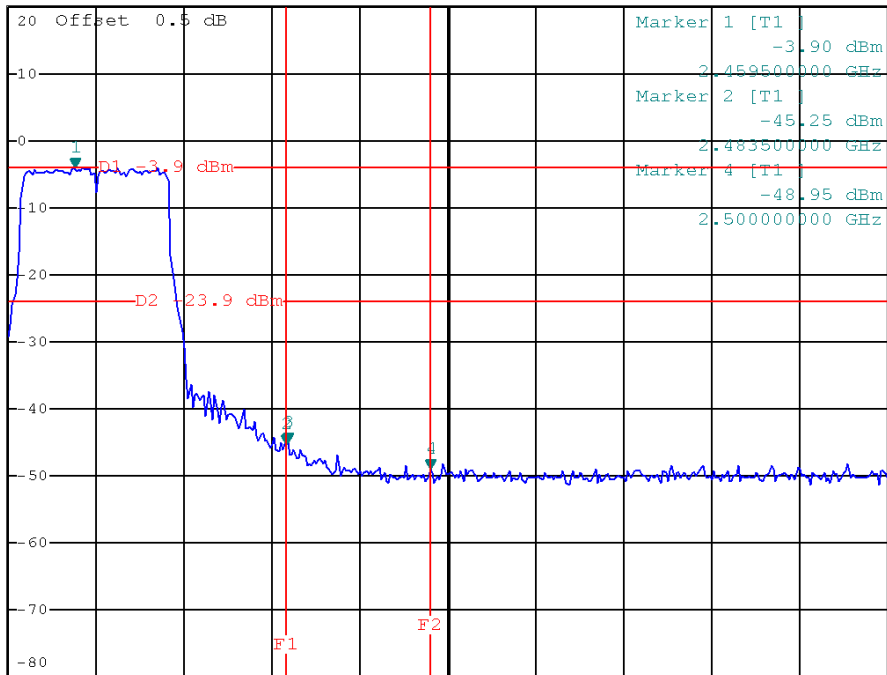
IEEE 802.11g/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



\*RBW 100 kHz Marker 3 [T1 ]  
\*VBW 300 kHz -44.86 dBm  
SWT 10 ms 2.483750000 GHz

Ref 20 dBm \*Att 30 dB

1 PK VIEW



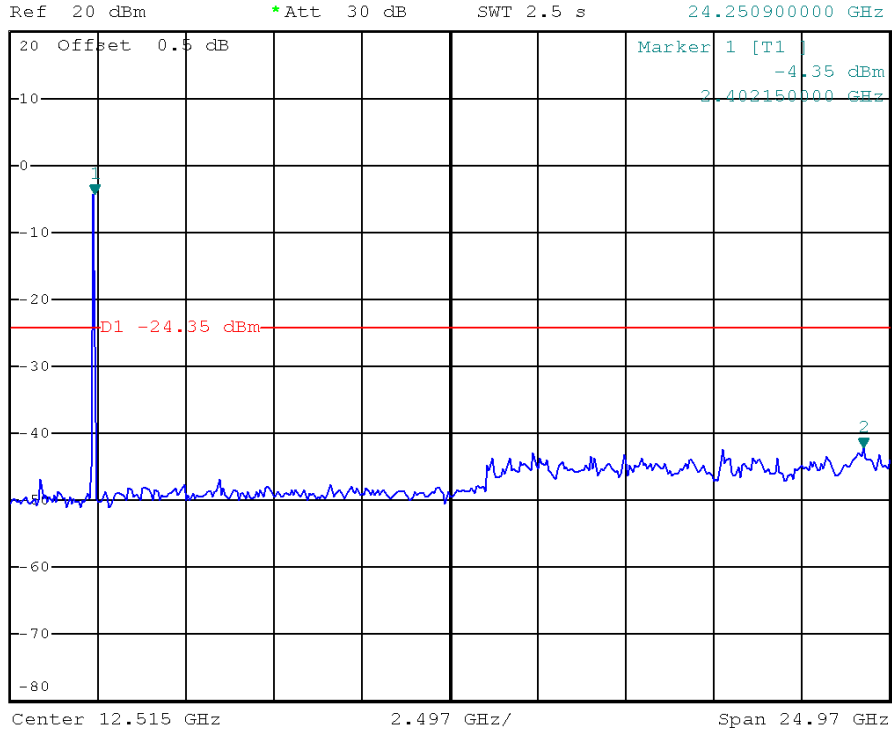
Center 2.502 GHz 10 MHz/ Span 100 MHz



### IEEE 802.11g/2412 MHz/10 Harmonic of the frequency



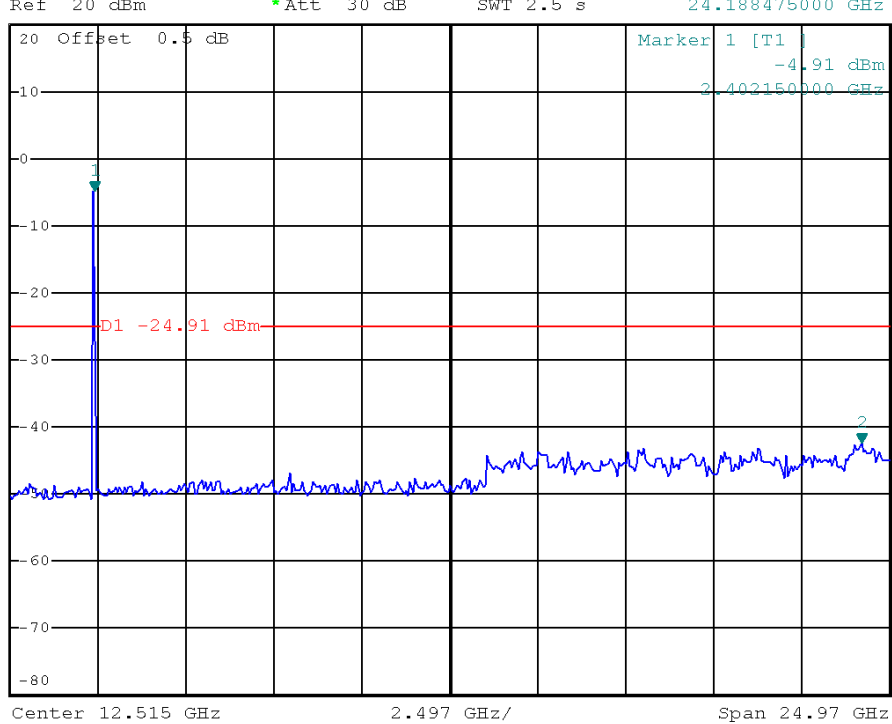
\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.16 dBm  
SWT 2.5 s 24.250900000 GHz



### IEEE 802.11g/2437 MHz/10 Harmonic of the frequency



\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.31 dBm  
SWT 2.5 s 24.188475000 GHz





### IEEE 802.11g/2462 MHz/10 Harmonic of the frequency

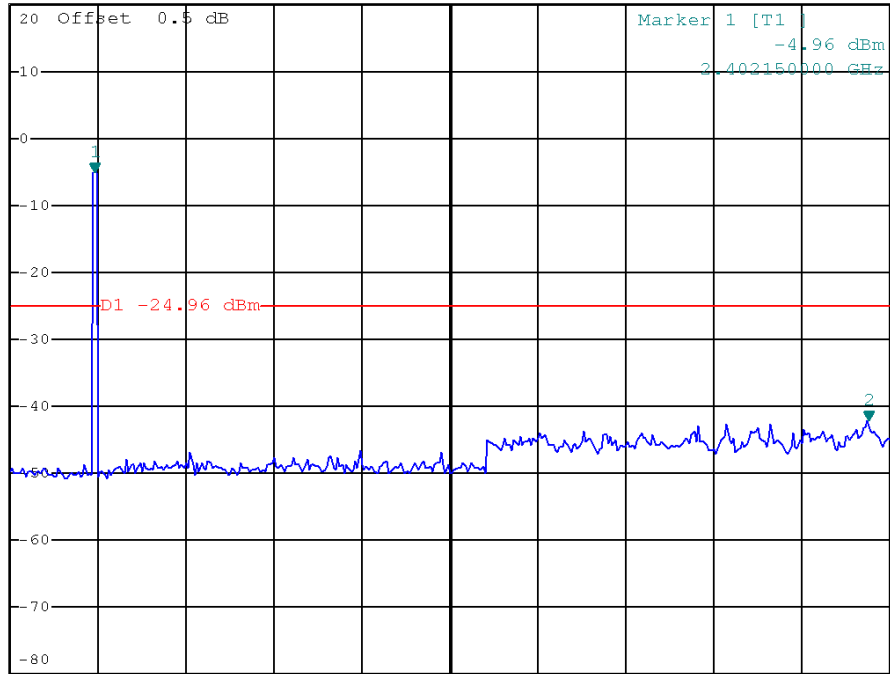


\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.18 dBm  
SWT 2.5 s 24.375750000 GHz

Ref 20 dBm

\*Att 30 dB

1 PK  
VIEW



Center 12.515 GHz

2.497 GHz/

Span 24.97 GHz



**Neutron Engineering Inc.**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)		

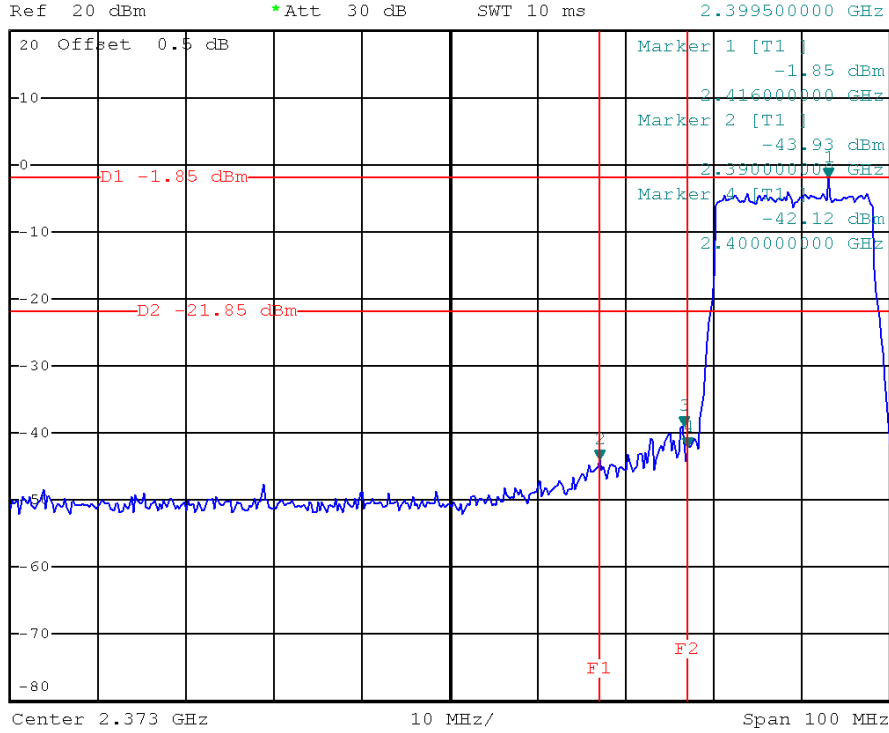
Channel of Worst Data			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.50	-39.01	2485.50	-44.59
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



IEEE 802.11n (20 MHz)/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



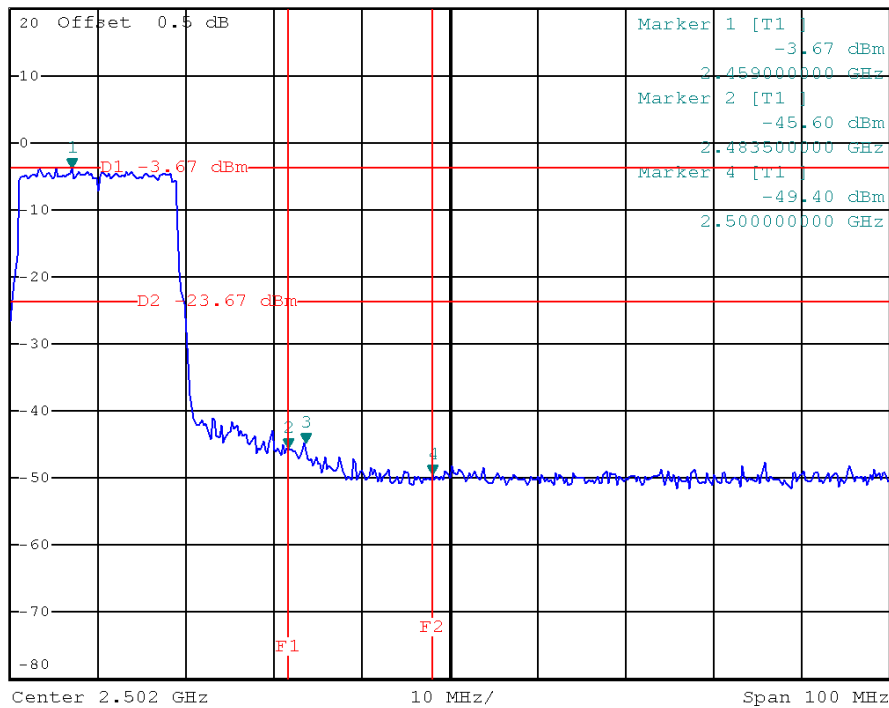
\*RBW 100 kHz Marker 3 [T1 ] -39.01 dBm
\*VBW 300 kHz
SWT 10 ms 2.399500000 GHz



IEEE 802.11n (20 MHz)/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



\*RBW 100 kHz Marker 3 [T1 ] -44.59 dBm
\*VBW 300 kHz
SWT 10 ms 2.485500000 GHz

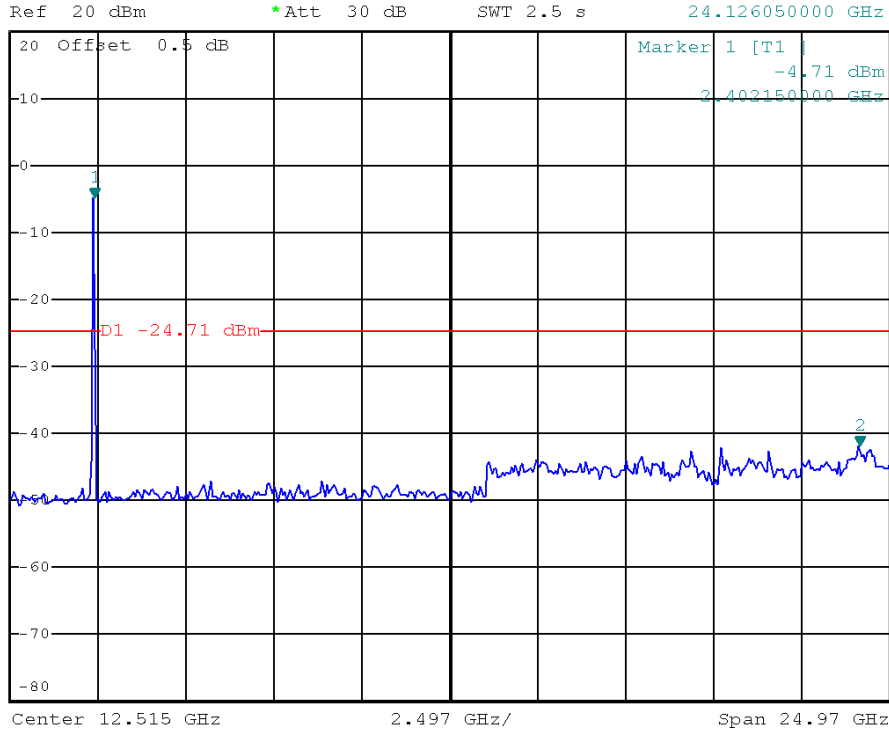




IEEE 802.11n (20 MHz)/2412 MHz/10 Harmonic of the frequency



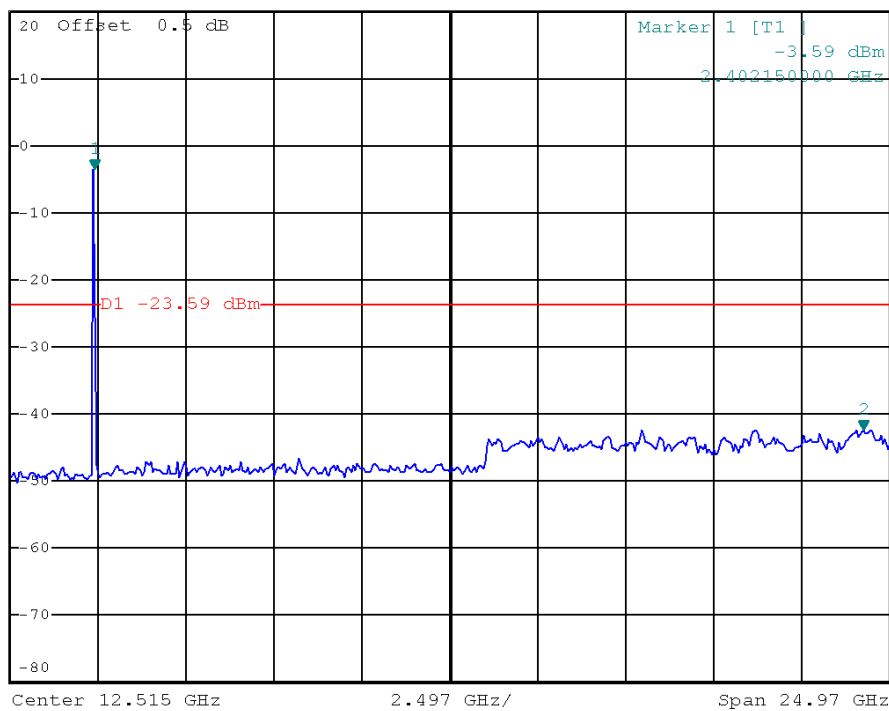
\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -41.93 dBm  
SWT 2.5 s 24.126050000 GHz



IEEE 802.11n (20 MHz)/2437 MHz/10 Harmonic of the frequency



\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.27 dBm  
SWT 2.5 s 24.250900000 GHz







IEEE 802.11n (20 MHz)/2462 MHz/10 Harmonic of the frequency

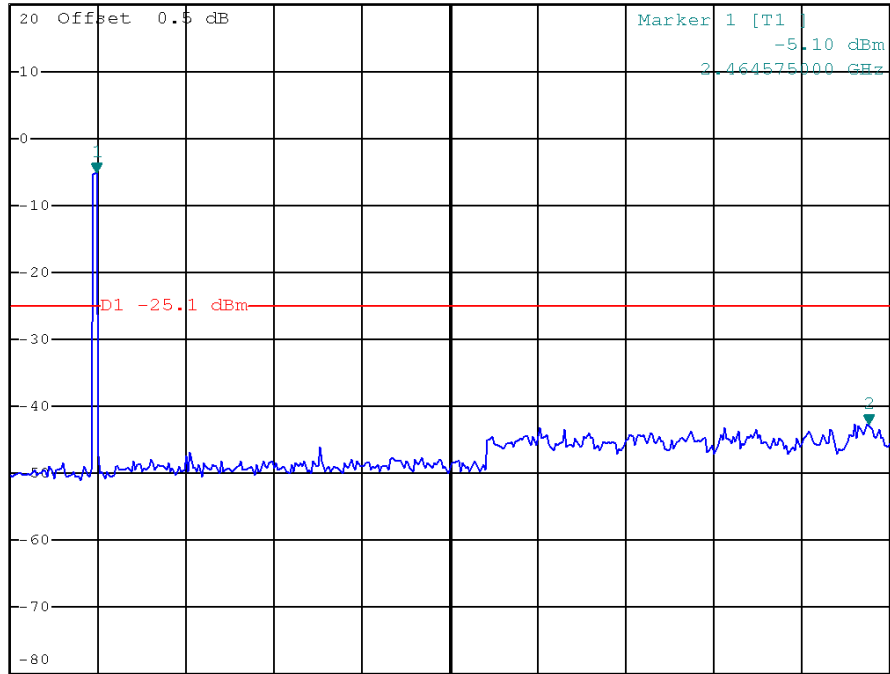


\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.58 dBm  
SWT 2.5 s 24.375750000 GHz

Ref 20 dBm

\*Att 30 dB

1 PK  
VIEW



Center 12.515 GHz

2.497 GHz/

Span 24.97 GHz



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)		

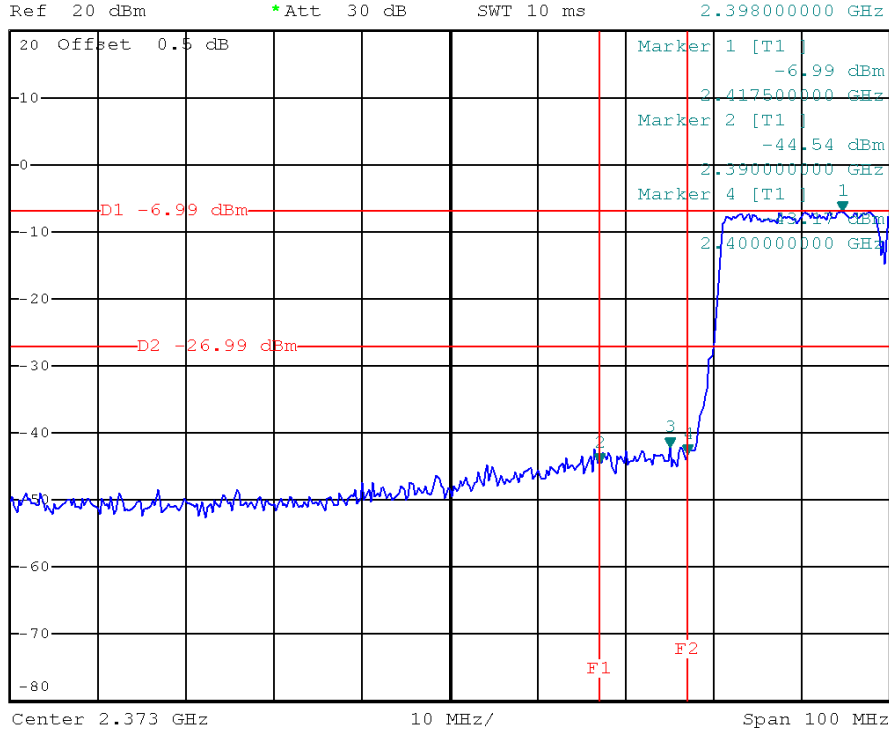
Channel of Worst Data			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2398.00	-41.97	2487.50	-43.45
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



IEEE 802.11n (40 MHz)/The max. radio frequency power in any 100kHz bandwidth outside the frequency band



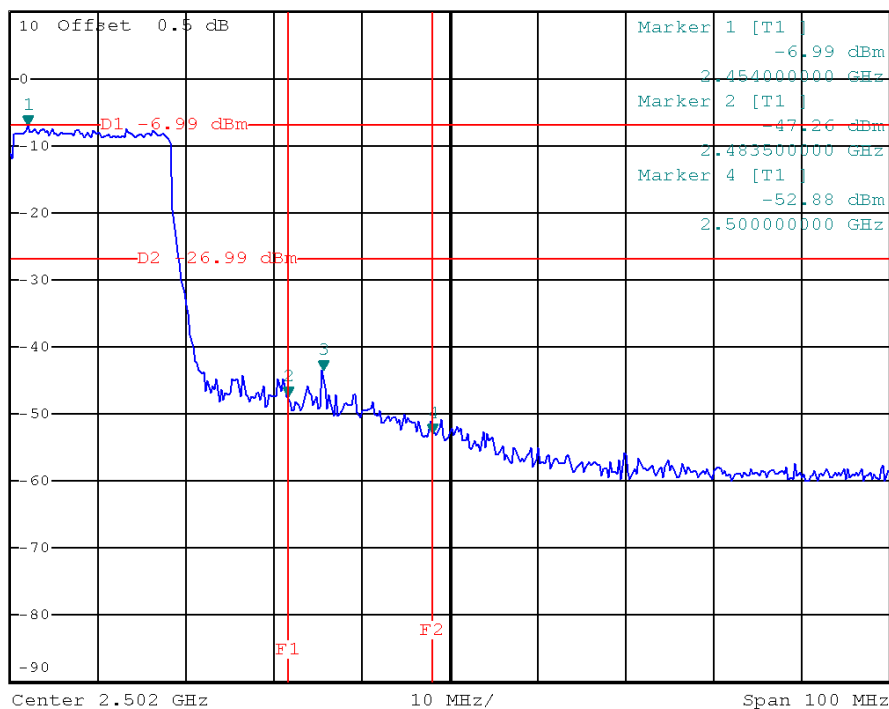
\*RBW 100 kHz Marker 3 [T1] -41.97 dBm
\*VBW 300 kHz
SWT 10 ms 2.398000000 GHz



IEEE 802.11n (40 MHz)/The max. radio frequency power in any 100 kHz bandwidth within the frequency band



\*RBW 100 kHz Marker 3 [T1] -43.45 dBm
\*VBW 300 kHz
SWT 10 ms 2.487500000 GHz

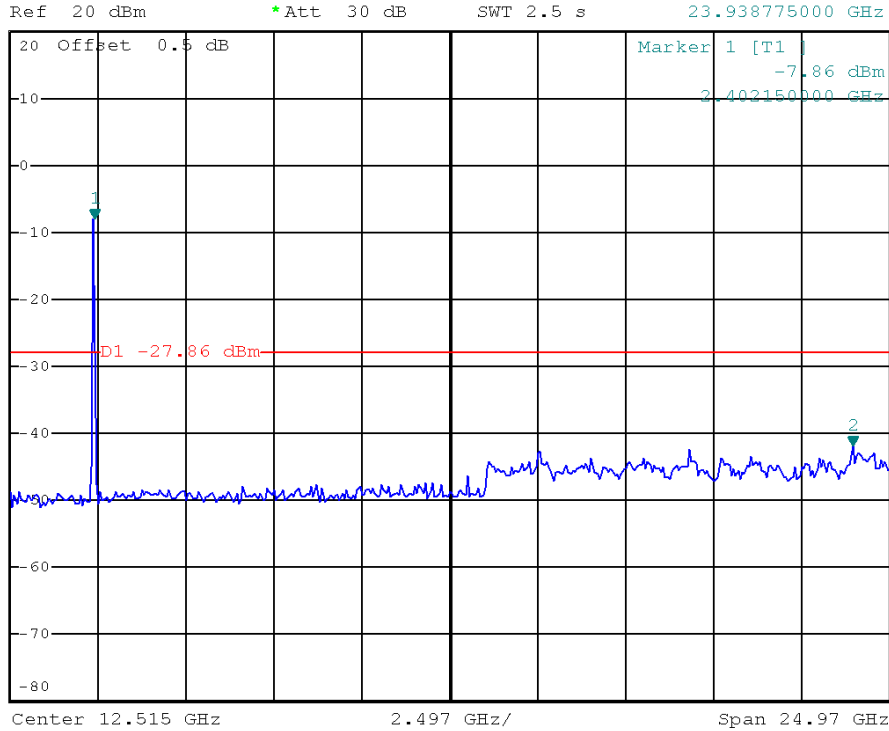




IEEE 802.11n (40 MHz)/2422 MHz/10 Harmonic of the frequency



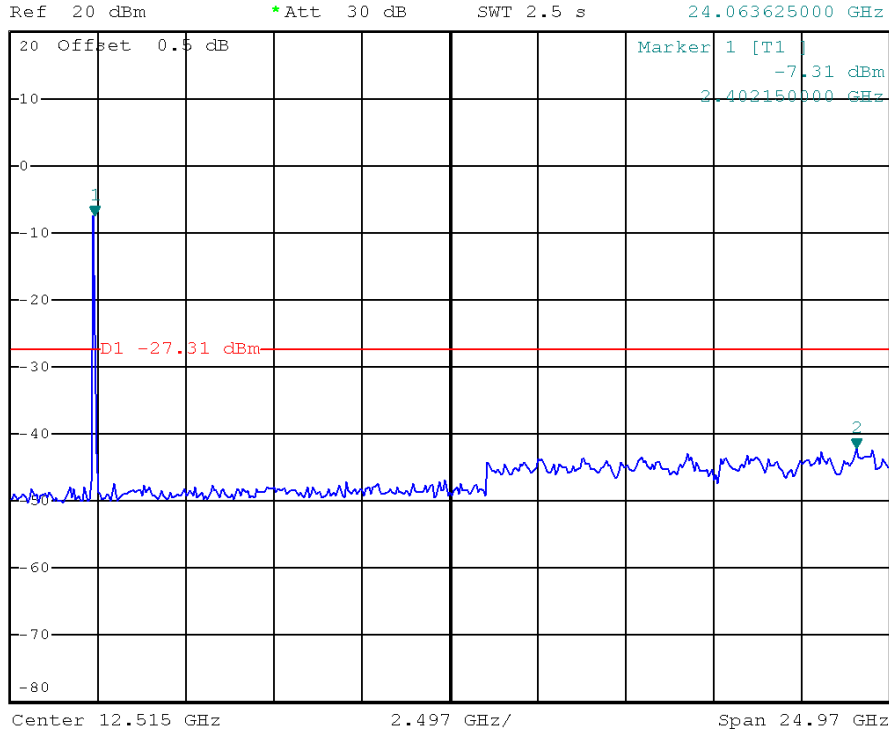
\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -41.84 dBm  
SWT 2.5 s 23.938775000 GHz



IEEE 802.11n (40 MHz)/2437 MHz/10 Harmonic of the frequency



\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -42.18 dBm  
SWT 2.5 s 24.063625000 GHz





### IEEE 802.11n (40 MHz)/2452 MHz/10 Harmonic of the frequency

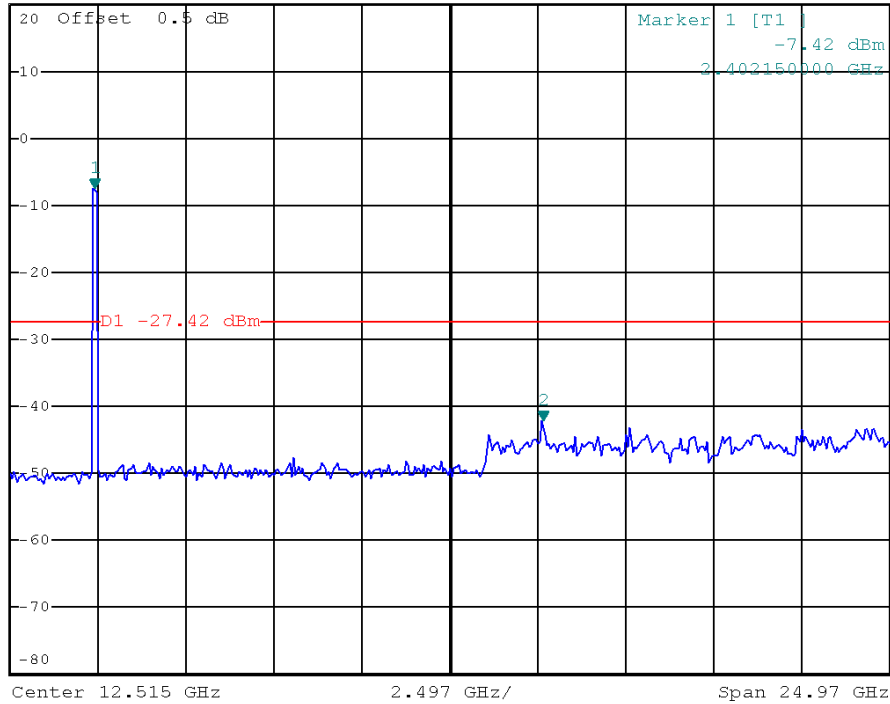


\*RBW 100 kHz Marker 2 [T1 ]  
\*VBW 300 kHz -41.96 dBm  
SWT 2.5 s 15.136850000 GHz

Ref 20 dBm

\*Att 30 dB

1 PK  
VIEW





6.6 DB BANDWIDTH

6.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Bandwidth	2400-2483.5	>= 500KHz (6dB bandwidth)

6.2 MEASUREMENT INSTRUMENTS LIST

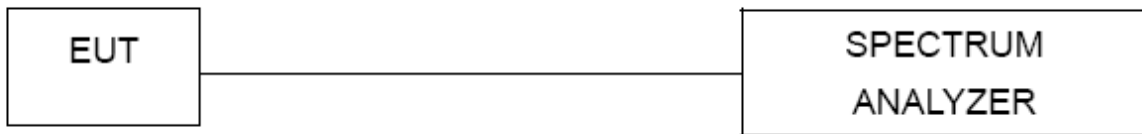
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

6.3 TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

6.4 TEST SETUP LAYOUT



6.5 DEVIATION FROM TEST STANDARD

No deviation

6.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

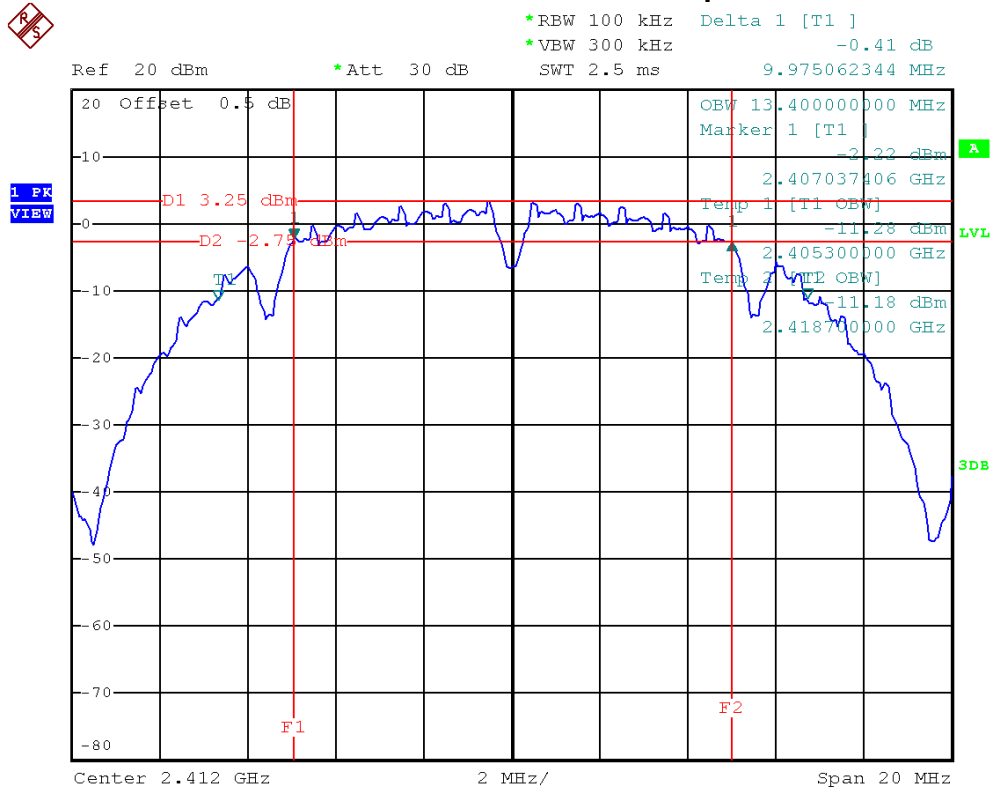


6.7 TEST RESULTS

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
2412 MHz	9.98	13.40	>=500 kHz	PASS
2437 MHz	10.02	13.40	>=500 kHz	PASS
2462 MHz	10.07	13.30	>=500 kHz	PASS

IEEE 802.11b/2412 MHz/6 dB and 99% Occupied Bandwidth

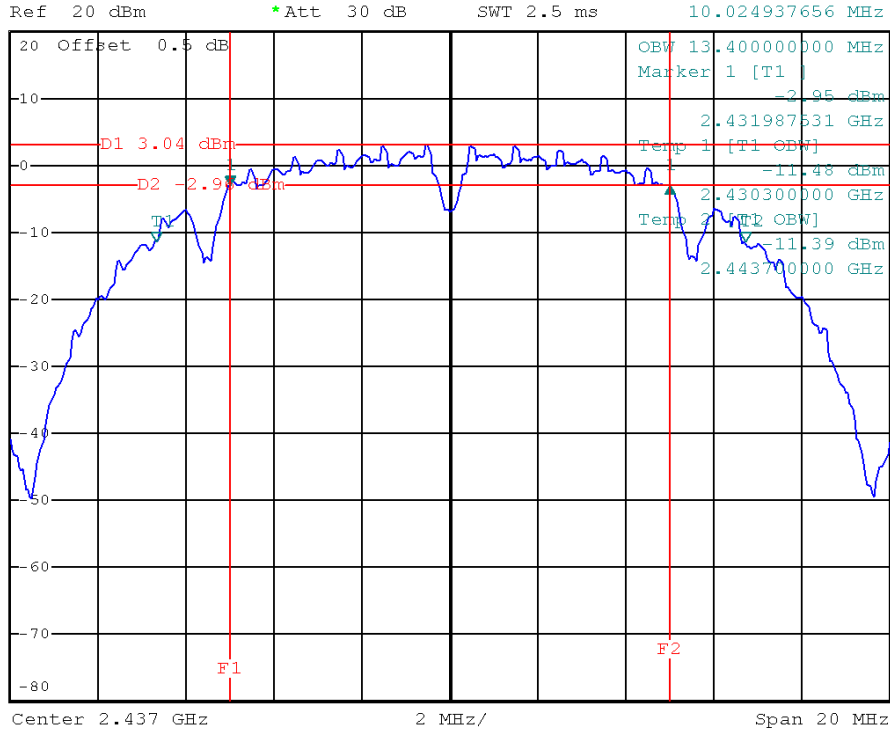




### IEEE 802.11b/2437 MHz/6 dB and 99% Occupied Bandwidth



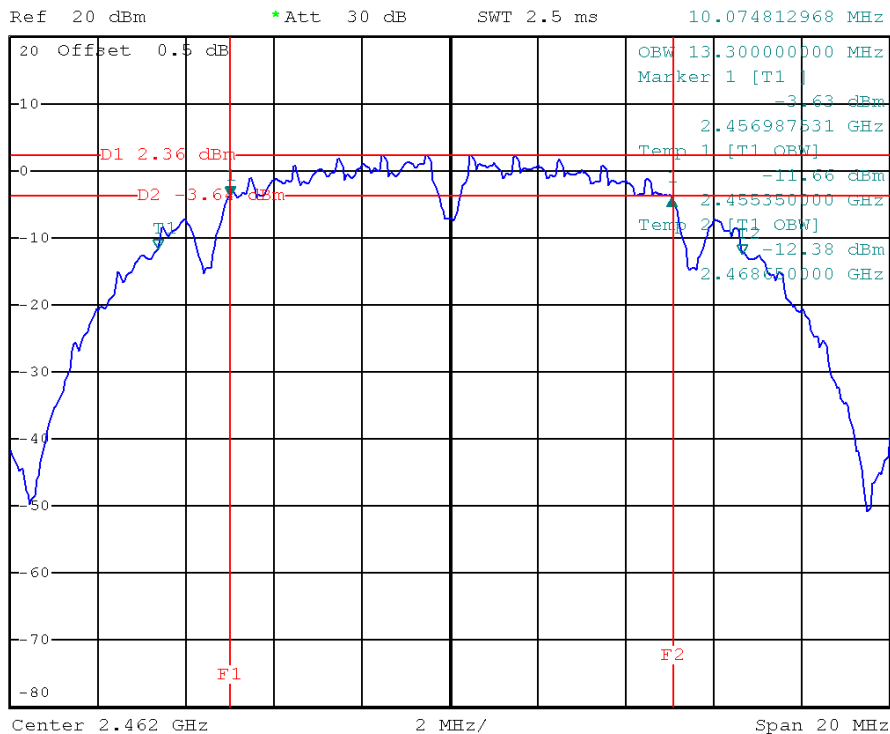
\*RBW 100 kHz Delta 1 [T1 ]  
\*VBW 300 kHz 0.08 dB  
SWT 2.5 ms 10.024937656 MHz



### IEEE 802.11b/2462 MHz/6 dB and 99% Occupied Bandwidth



\*RBW 100 kHz Delta 1 [T1 ]  
\*VBW 300 kHz -0.43 dB  
SWT 2.5 ms 10.074812968 MHz



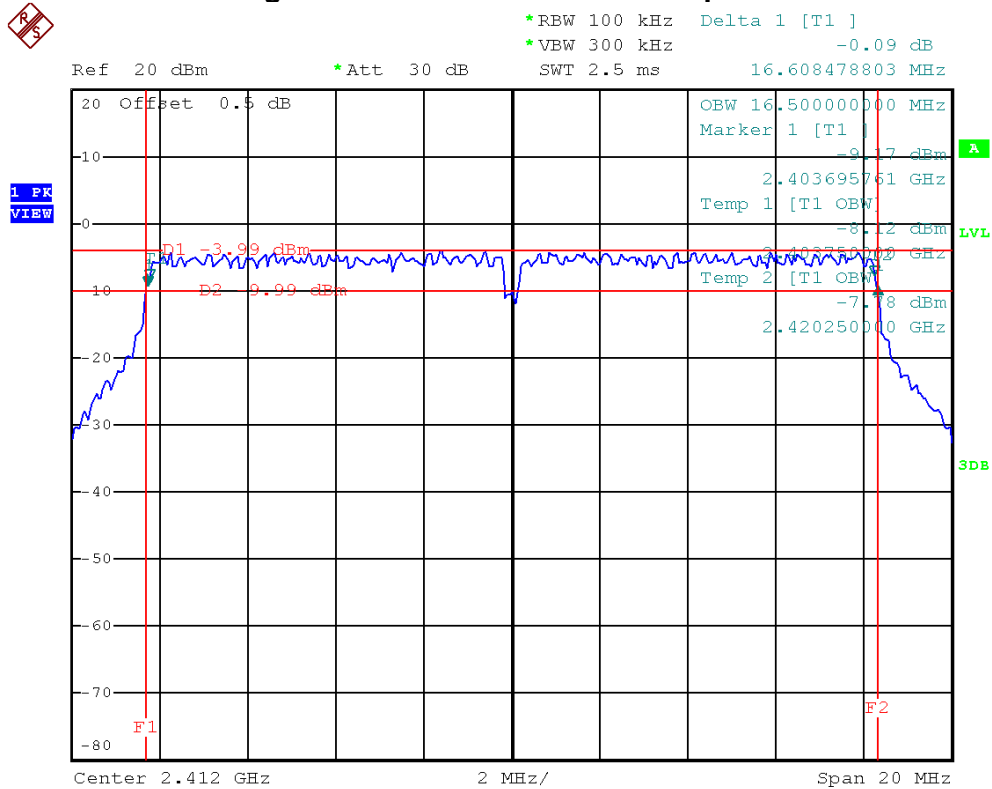




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
2412 MHz	16.61	16.50	>=500 kHz	PASS
2437 MHz	16.51	16.50	>=500 kHz	PASS
2462 MHz	16.61	16.50	>=500 kHz	PASS

IEEE 802.11g/2412 MHz/6 dB and 99% Occupied Bandwidth

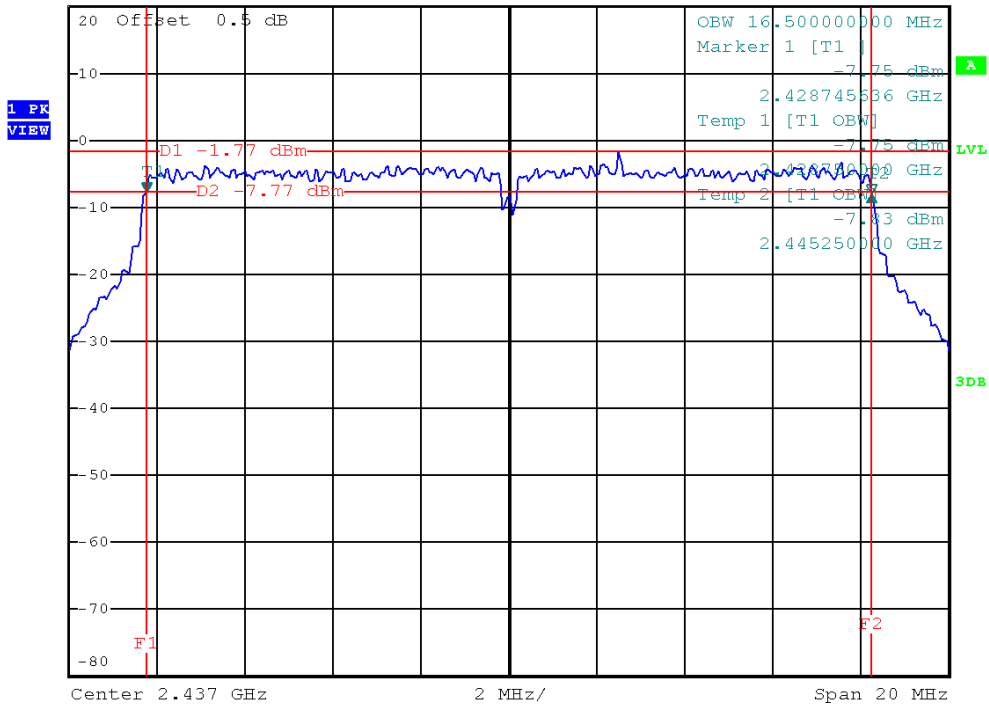




### IEEE 802.11g/2437 MHz/6 dB and 99% Occupied Bandwidth



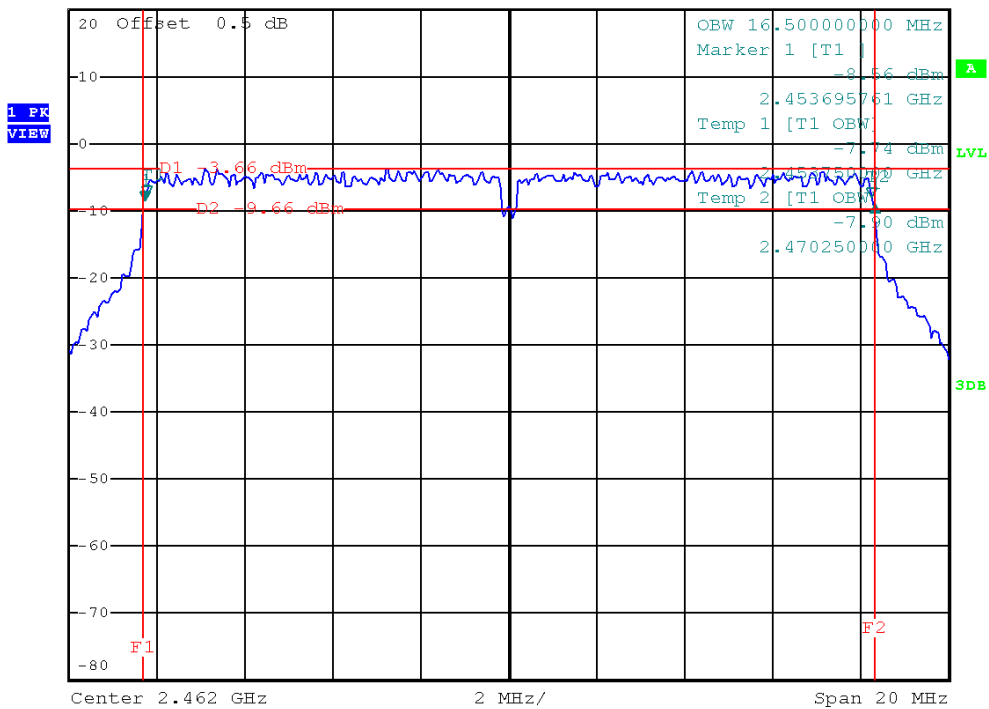
\*RBW 100 kHz Delta 1 [T1 ]  
 \*VBW 300 kHz -0.07 dB  
 Ref 20 dBm \*Att 30 dB SWT 2.5 ms 16.508728180 MHz



### IEEE 802.11g/2462 MHz/6 dB and 99% Occupied Bandwidth



\*RBW 100 kHz Delta 1 [T1 ]  
 \*VBW 300 kHz -0.43 dB  
 Ref 20 dBm \*Att 30 dB SWT 2.5 ms 16.608478803 MHz

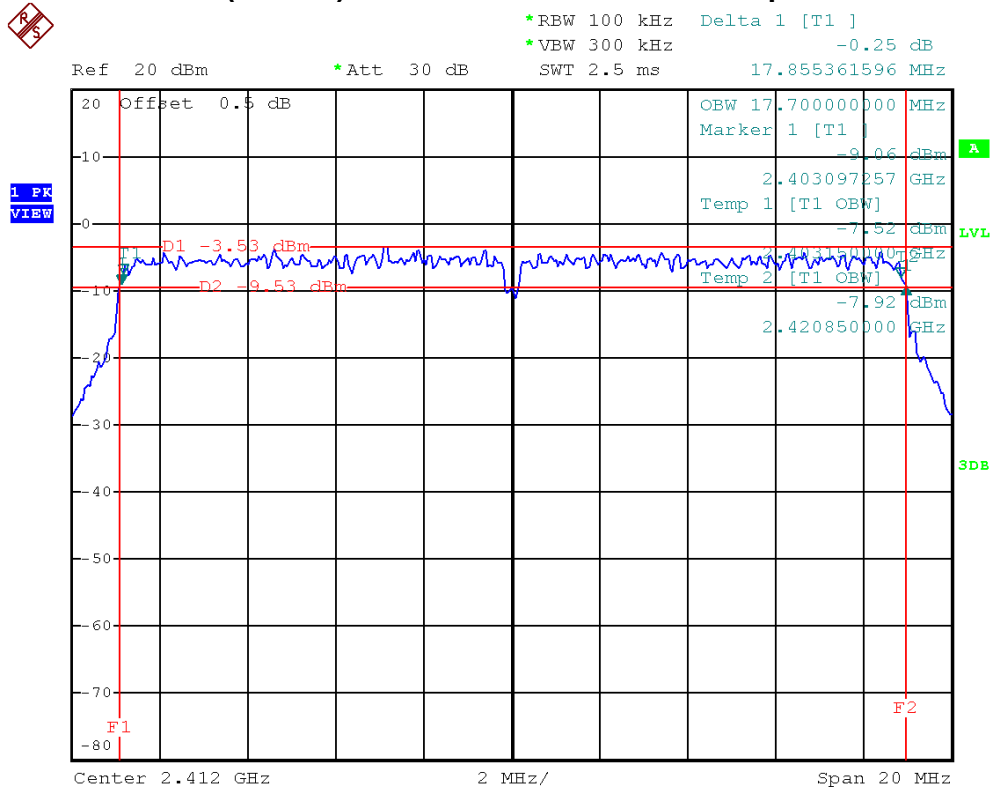




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz, 2437 MHz, 2462 MHz		

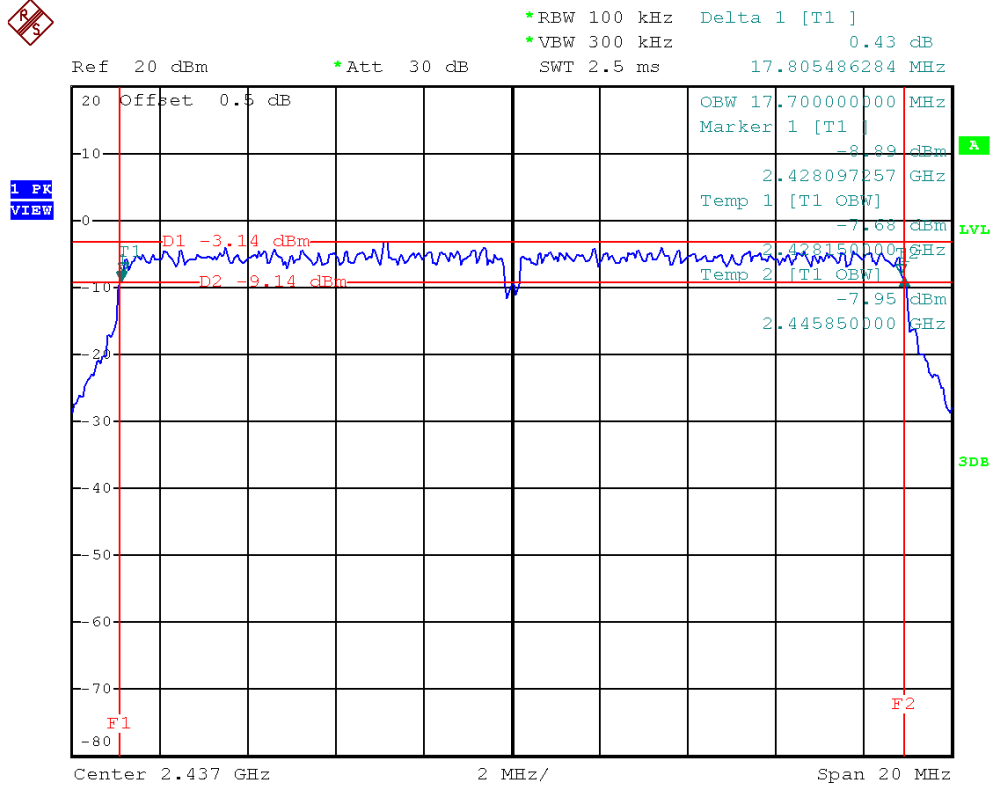
Frequency	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
2412 MHz	17.86	17.70	>=500 kHz	PASS
2437 MHz	17.81	17.70	>=500 kHz	PASS
2462 MHz	17.81	17.70	>=500 kHz	PASS

**IEEE 802.11n (20 MHz)/2412 MHz/6 dB and 99% Occupied Bandwidth**

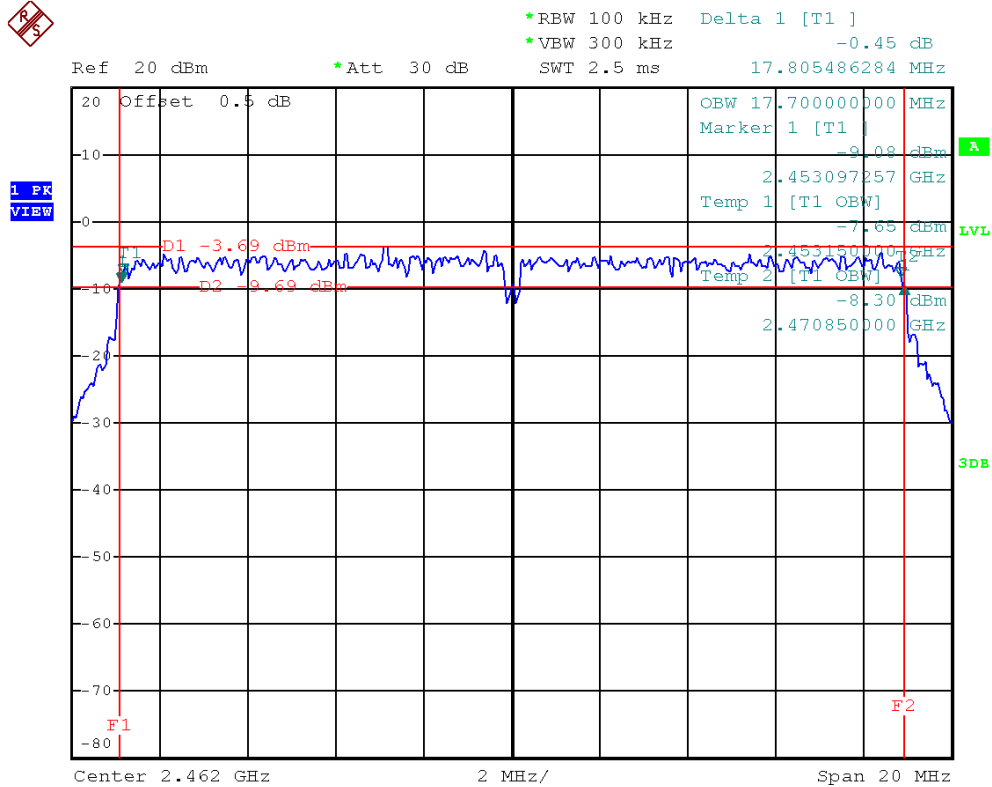




IEEE 802.11n (20 MHz)/2437 MHz/6 dB and 99% Occupied Bandwidth



IEEE 802.11n (20 MHz)/2462 MHz/6 dB and 99% Occupied Bandwidth

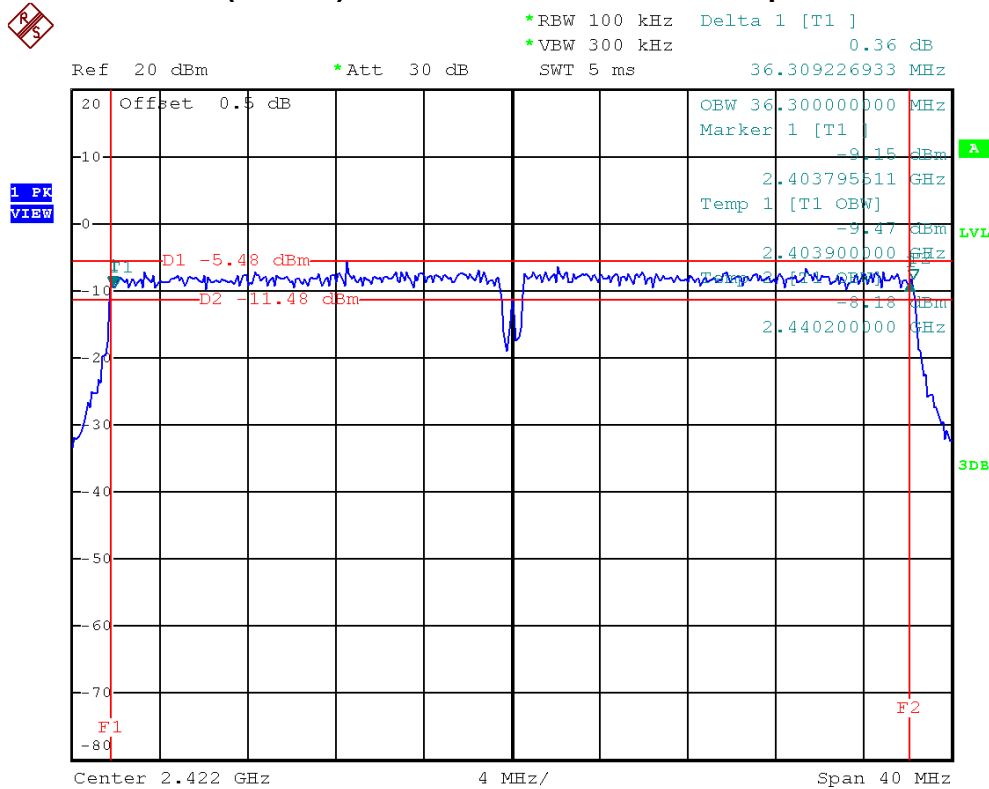




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz, 2437 MHz, 2452 MHz		

Frequency	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
2422 MHz	36.31	36.30	>=500 kHz	PASS
2437 MHz	36.61	36.40	>=500 kHz	PASS
2452 MHz	36.61	36.40	>=500 kHz	PASS

**IEEE 802.11n (40 MHz)/2422 MHz/6 dB and 99% Occupied Bandwidth**

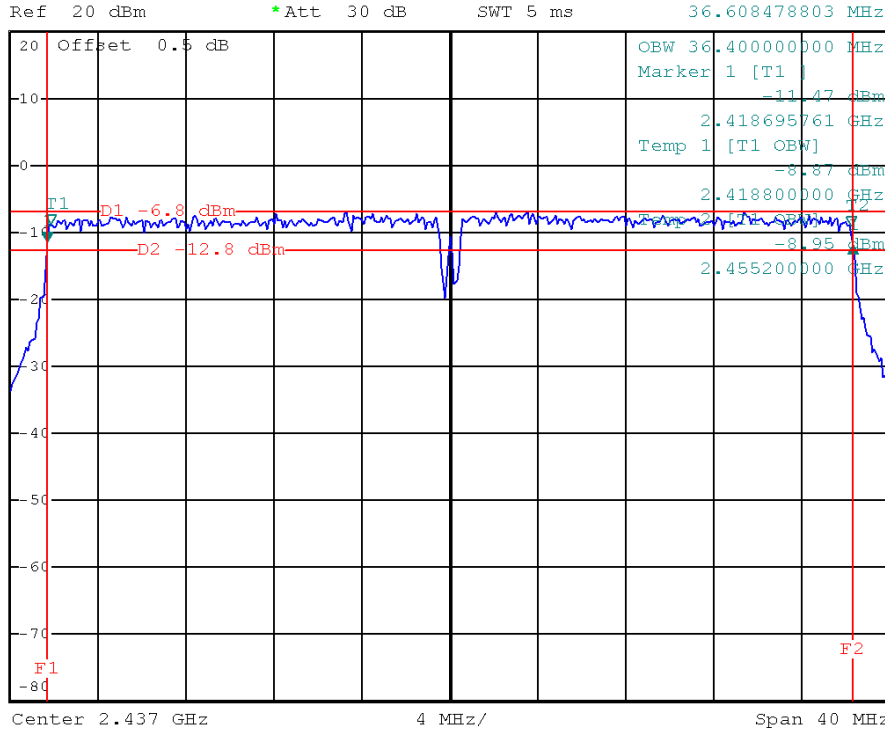




IEEE 802.11n (40 MHz)/2437 MHz/6 dB and 99% Occupied Bandwidth



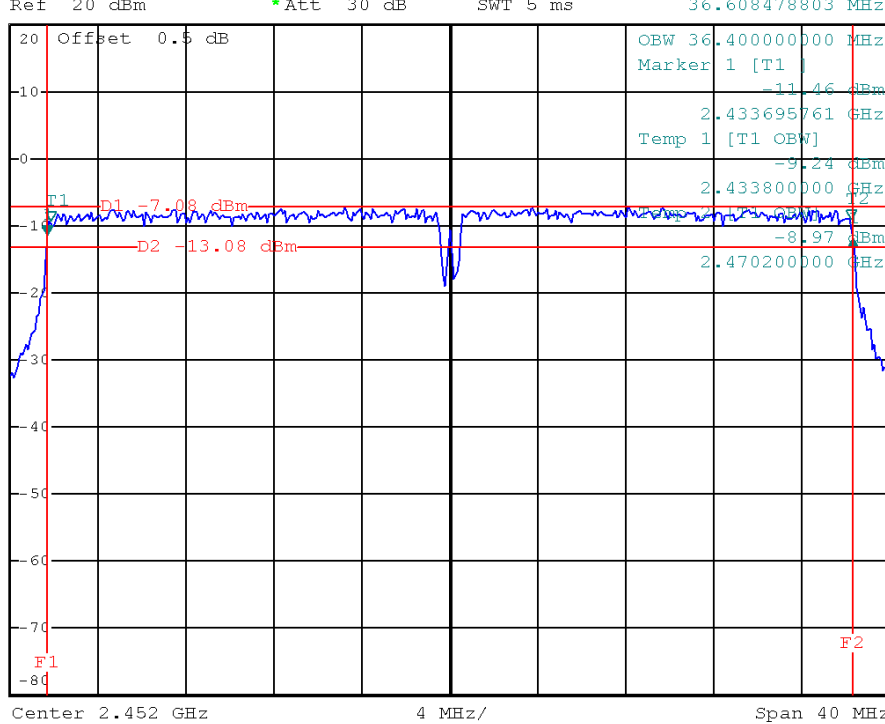
\*RBW 100 kHz Delta 1 [T1] -0.31 dB
\*VBW 300 kHz
SWT 5 ms 36.608478803 MHz



IEEE 802.11n (40 MHz)/2452 MHz/6 dB and 99% Occupied Bandwidth



\*RBW 100 kHz Delta 1 [T1] -0.37 dB
\*VBW 300 kHz
SWT 5 ms 36.608478803 MHz





7 MAXIMUM PEAK CONDUCTED OUTPUT POWER

7.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Maximum Peak Conducted Output Power	2400-2483.5	1 watt or 30 dBm

7.2 MEASUREMENT INSTRUMENTS LIST

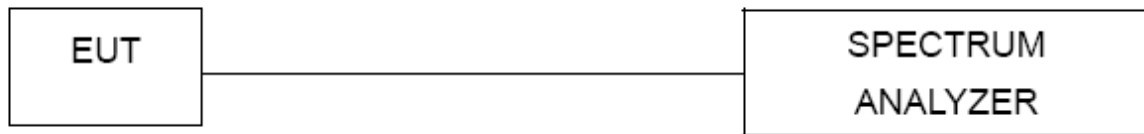
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014

NOTE: N/A: denotes No Model Name, No Serial No. or No Calibration specified.

7.3 TEST PROCEDURES

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 3 MHz, VBW= 3 MHz, Sweep time = Auto.

7.4 TEST SETUP LAYOUT



7.5 DEVIATION FROM TEST STANDARD

No deviation

7.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.



## Neutron Engineering Inc.

### 7.7 TEST RESULTS

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2412 MHz	17.00	30	PASS
2437 MHz	16.76	30	PASS
2462 MHz	16.56	30	PASS





**Neutron Engineering Inc.**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2412 MHz	19.97	30	PASS
2437 MHz	20.01	30	PASS
2462 MHz	20.13	30	PASS

**Neutron Engineering Inc.**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2412 MHz	19.56	30	PASS
2437 MHz	19.36	30	PASS
2462 MHz	19.67	30	PASS

**Neutron Engineering Inc.**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz, 2437 MHz, 2452 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	Result
2422 MHz	19.43	30	PASS
2437 MHz	19.22	30	PASS
2452 MHz	19.54	30	PASS



**8 RADIATED SPURIOUS EMISSION (9 KHZ TO 1 GHZ)**

**8.1 LIMIT**

20 dB in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency Range: 9 kHz to 1 GHz		
FREQUENCY (MHz)	Field Strength (micровolts/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

Frequency Range: above 1 GHz				
FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
above 1 GHz	80	60	74	54

**NOTE:**

1. The limit for radiated test was performed according to FCC PART 15B.
2. The tighter limit applies at the band edges.
3. Emission level (dBuV/m)=20log Emission level (uV/m).
4. The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain(if use)  
 Margin Level = Measurement Value – Limit Value



**8.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 15, 2014
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 16, 2014
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 13, 2014
5	Microflex Cable	EMC	S104-SMA	8m	May. 13, 2014
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 13, 2014
7	Test Cable	LMR	LMR-400	12m	May. 14, 2014
8	Test Cable	LMR	LMR-400	3m	May. 14, 2014
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 18, 2014
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jun. 11, 2014
11	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 18, 2014
12	Horn Antenna	Schwarzbeck	BBHA 9170	187	Dec. 24, 2013

Remark: "N/A" denotes No Model Name, No Serial No. or No Calibration specified.

**8.3 MEASURING INSTRUMENTS SETTING**

EMI Test Receiver	Parameter Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

**8.4 TEST PROCEDURES**

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1 GHz. For frequencies above 1 GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m Semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.
- g. The testing follows the guidelines in ANSI C63.4 and FCC Public Notice DA 00-705 Measurement Guidelines. In case the emission is fail due to the used RBW/VBW is too wide, marker-delta method of FCC Public Notice DA 00-705 will be followed.

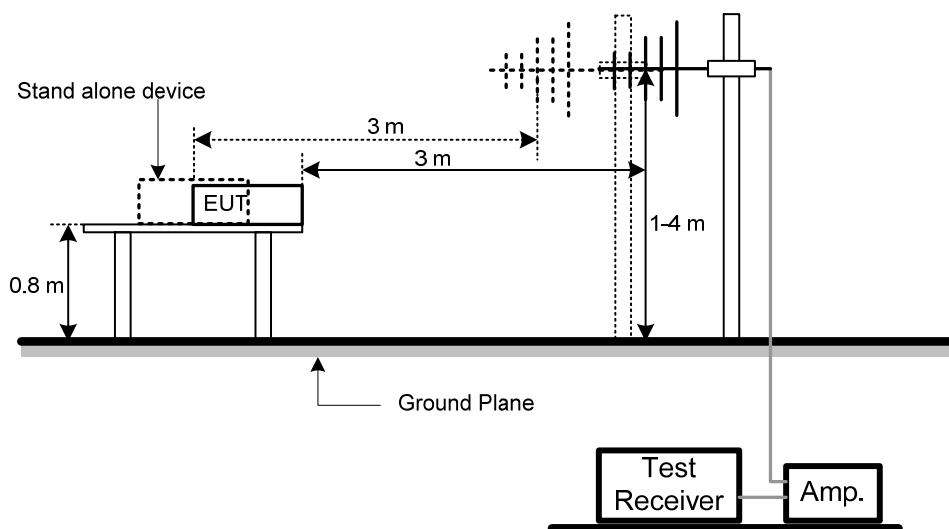
**NOTE:**

- a. Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode with Detector BW=120 kHz; SPA setting in RBW=100 kHz, VBW =100 kHz, Swp. Time = 0.3 sec./ MHz.
- b. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.

**8.5 DEVIATION FROM TEST STANDARD**

No deviation

**8.6 TEST SETUP LAYOUT**





### **8.7 EUT OPERATING CONDITIONS**

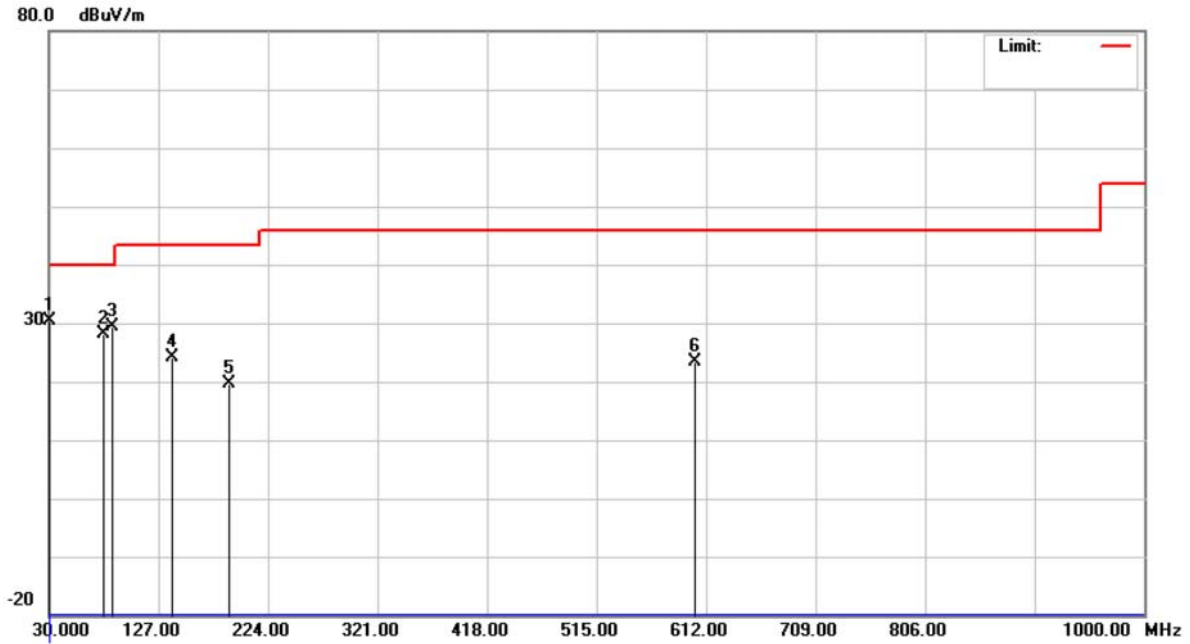
The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.



**8.8 TEST RESULTS**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Vertical**



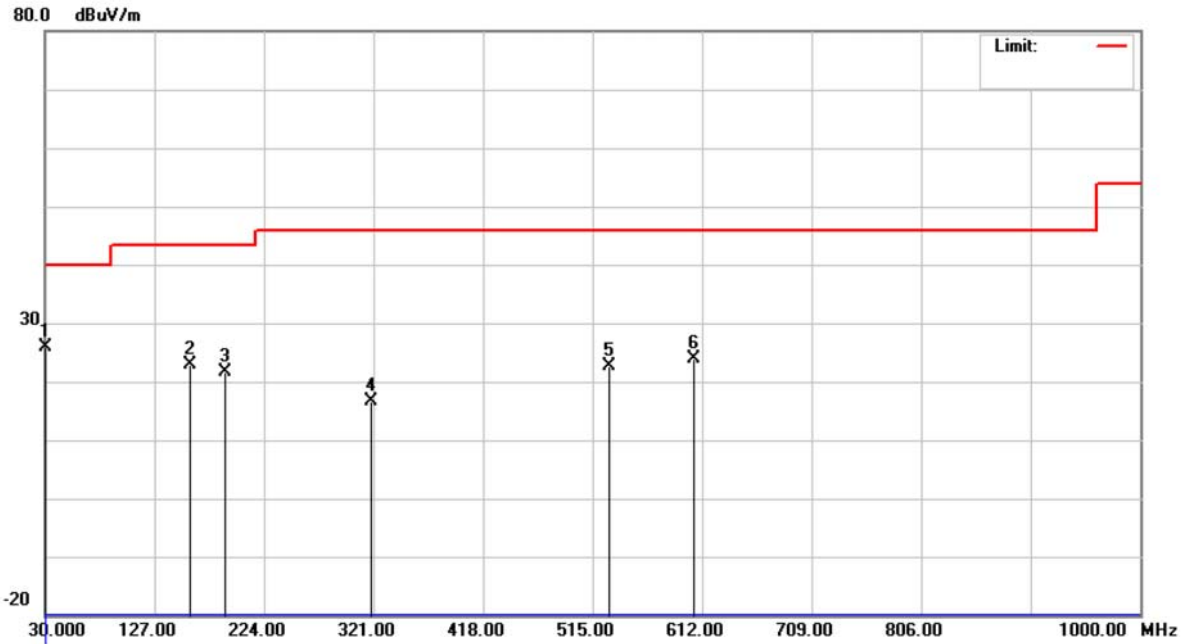
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	32.4249	45.25	-14.93	30.32	40.00	-9.68	peak	
2		78.5000	46.55	-18.33	28.22	40.00	-11.78	peak	
3		85.7750	48.98	-19.62	29.36	40.00	-10.64	peak	
4		139.1250	38.84	-14.75	24.09	43.50	-19.41	peak	
5		190.0500	36.27	-16.75	19.52	43.50	-23.98	peak	
6		602.2999	30.25	-6.77	23.48	46.00	-22.52	peak	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	32.4249	40.72	-14.93	25.79	40.00	-14.21	peak	
2		158.5249	37.33	-14.35	22.98	43.50	-20.52	peak	
3		190.0500	38.42	-16.75	21.67	43.50	-21.83	peak	
4		318.5750	29.89	-13.17	16.72	46.00	-29.28	peak	
5		529.5499	31.43	-8.74	22.69	46.00	-23.31	peak	
6		604.7249	30.55	-6.77	23.78	46.00	-22.22	peak	



**9 RADIATED SPURIOUS EMISSION (ABOVE 1 GHz)**

**9.1 LIMIT**

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency Range: 9 kHz to 1 GHz		
FREQUENCY (MHz)	Field Strength (micровolts/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

Frequency Range: above 1 GHz				
FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
above 1 GHz	80	60	74	54

**NOTE:**

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain(if use)  
 Margin Level = Measurement Value – Limit Value



**9.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 15, 2014
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 16, 2014
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 13, 2014
5	Microflex Cable	EMC	S104-SMA	8m	May. 13, 2014
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 13, 2014
7	Test Cable	LMR	LMR-400	12m	May. 14, 2014
8	Test Cable	LMR	LMR-400	3m	May. 14, 2014
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 18, 2014
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jun. 11, 2014
11	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 18, 2014
12	Horn Antenna	Schwarzbeck	BBHA 9170	187	Dec. 24, 2013

Remark: "N/A" denotes No Model Name, No Serial No. or No Calibration specified.

**9.3 MEASURING INSTRUMENTS SETTING**

Spectrum Analyzer	Parameter Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (other emission)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

**9.4 TEST PROCEDURES**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m Semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- d. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.
- f. The testing follows the guidelines in ANSI C63.4 and FCC Public Notice DA 00-705 Measurement Guidelines. In case the emission is fail due to the used RBW/VBW is too wide, marker-delta method of FCC Public Notice DA 00-705 will be followed.

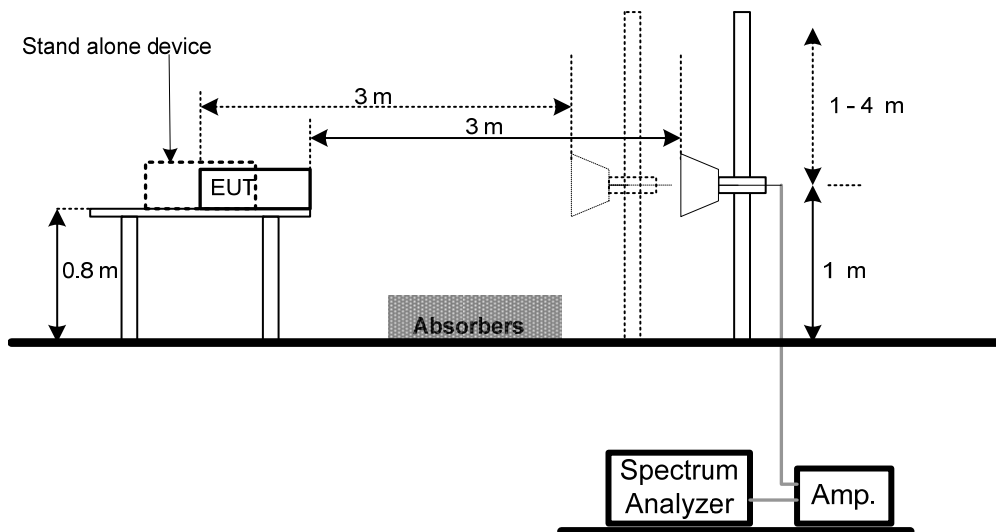
**NOTE:**

- a. Reading in which marked as Peak means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.  
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.
- b. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.

**9.5 DEVIATION FROM TEST STANDARD**

No deviation

**9.6 TEST SETUP LAYOUT**





### **9.7 EUT OPERATING CONDITIONS**

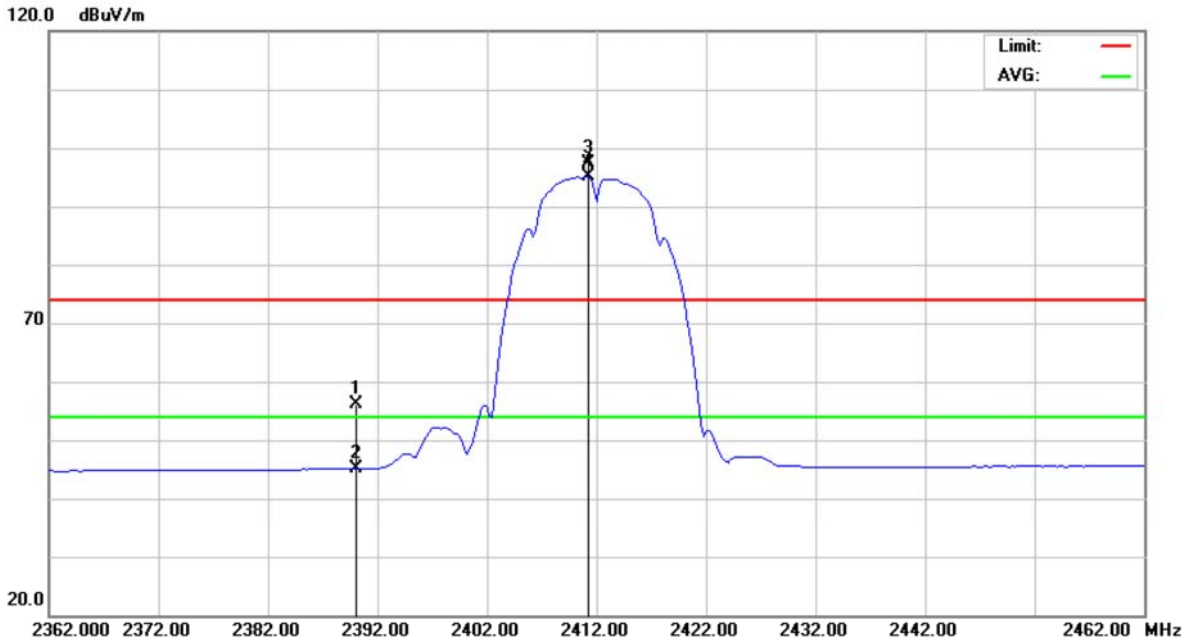
The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.



**9.8 TEST RESULTS**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz		

**Polarization: Vertical**

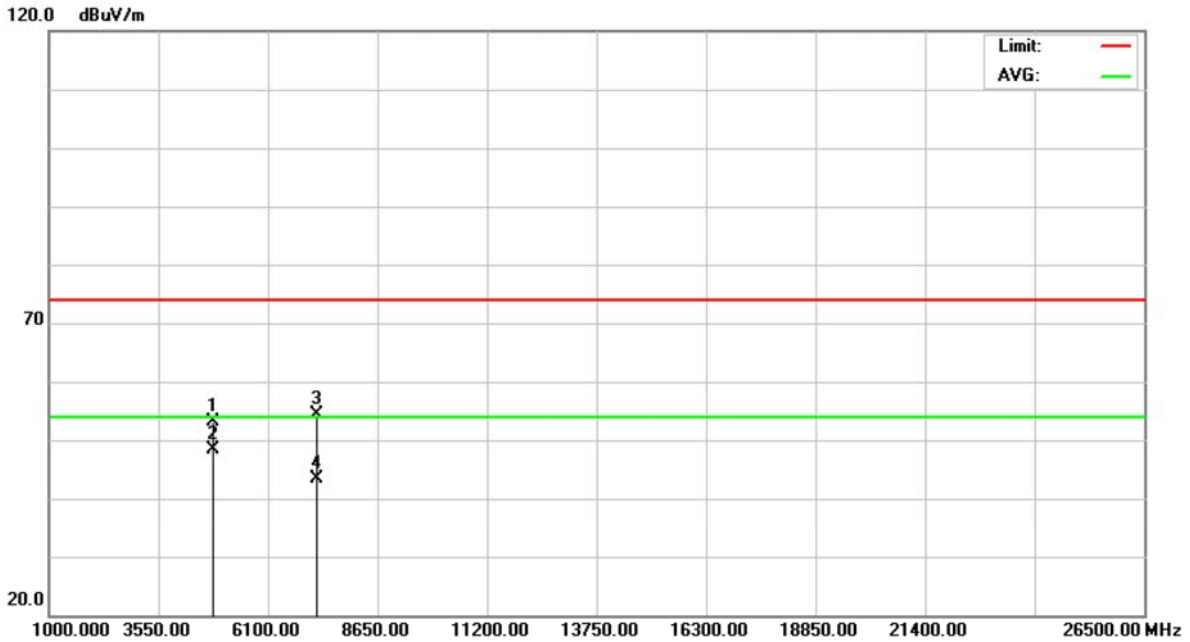


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	24.40	31.67	56.07	74.00	-17.93	peak	
2		2390.000	13.40	31.67	45.07	54.00	-8.93	AVG	
3	X	2411.250	65.68	31.76	97.44	74.00	23.44	peak	
4	*	2411.250	63.30	31.76	95.06	54.00	41.06	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz		

**Polarization: Vertical**

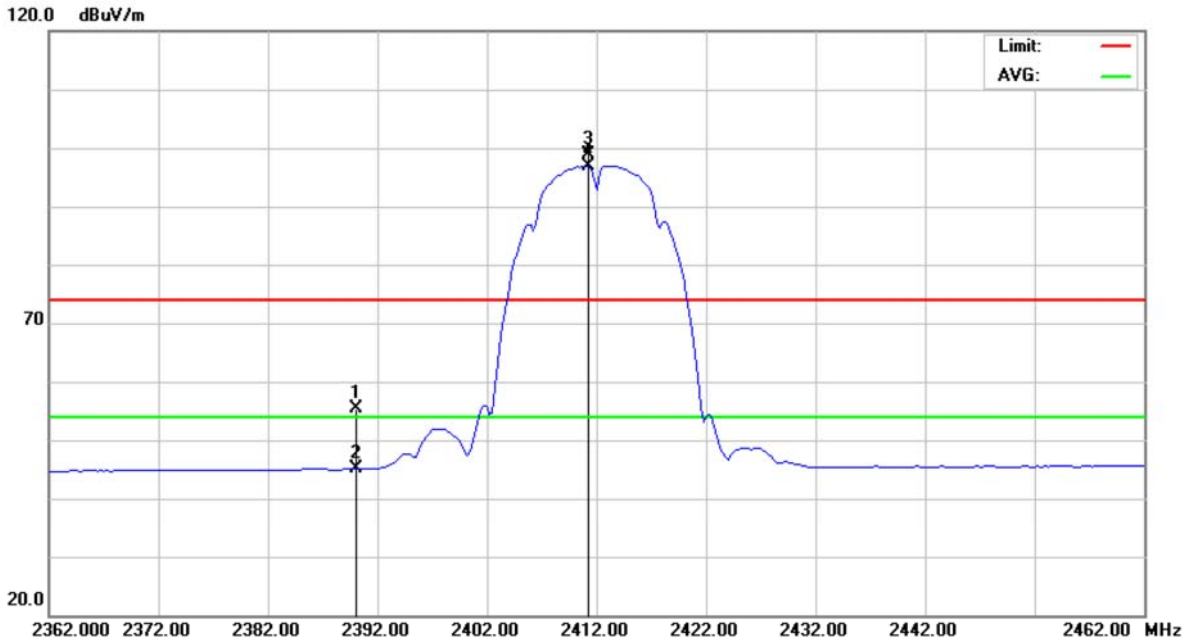


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.985	47.50	5.71	53.21	74.00	-20.79	peak	
2	*	4823.985	42.70	5.71	48.41	54.00	-5.59	AVG	
3		7236.950	42.04	12.29	54.33	74.00	-19.67	peak	
4		7236.950	31.17	12.29	43.46	54.00	-10.54	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz		

**Polarization: Horizontal**



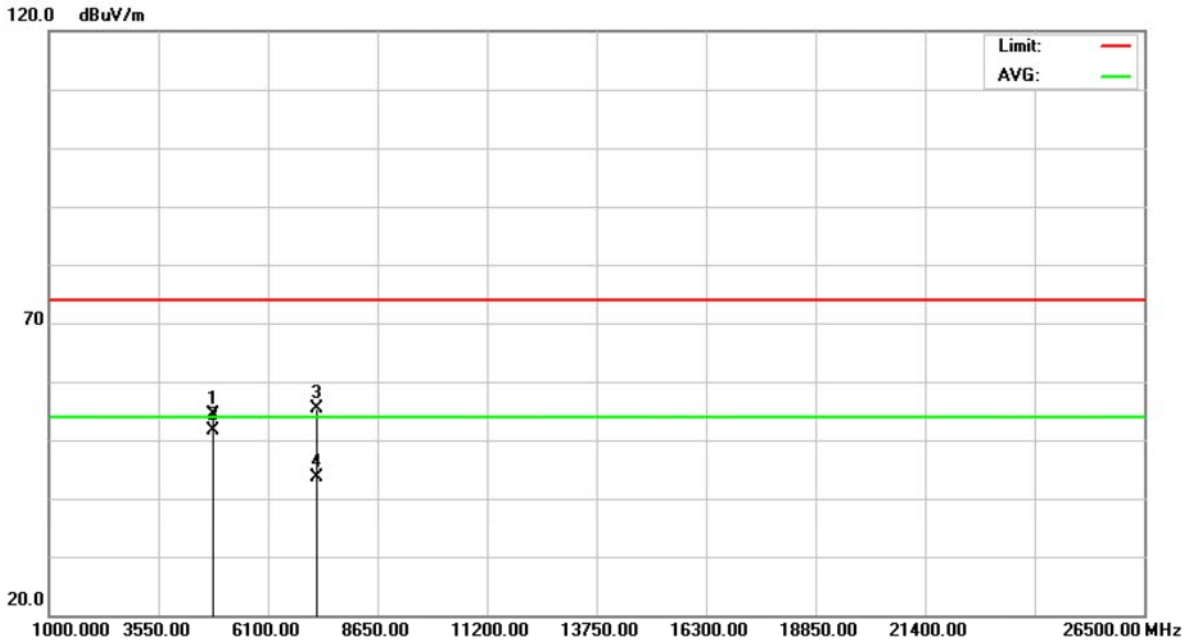
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	23.74	31.67	55.41	74.00	-18.59	peak	
2		2390.000	13.37	31.67	45.04	54.00	-8.96	AVG	
3	X	2411.250	67.06	31.76	98.82	74.00	24.82	peak	
4	*	2411.250	65.21	31.76	96.97	54.00	42.97	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz		

**Polarization: Horizontal**

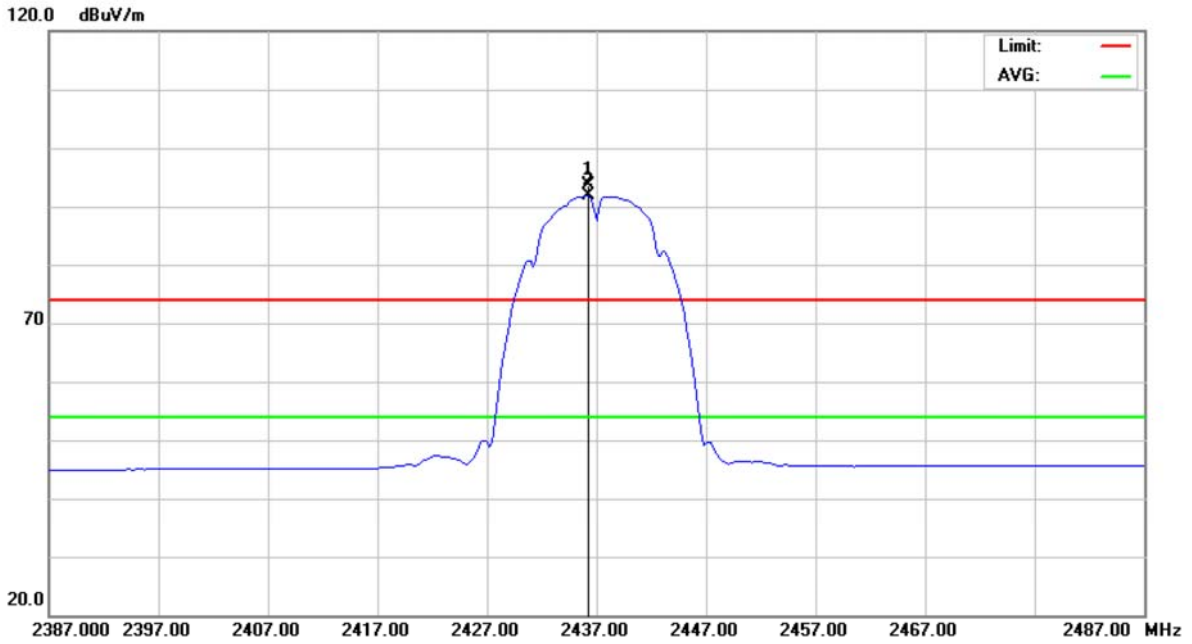


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.985	48.58	5.71	54.29	74.00	-19.71	peak	
2	*	4823.985	46.00	5.71	51.71	54.00	-2.29	AVG	
3		7236.870	43.19	12.29	55.48	74.00	-18.52	peak	
4		7236.870	31.29	12.29	43.58	54.00	-10.42	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Vertical**

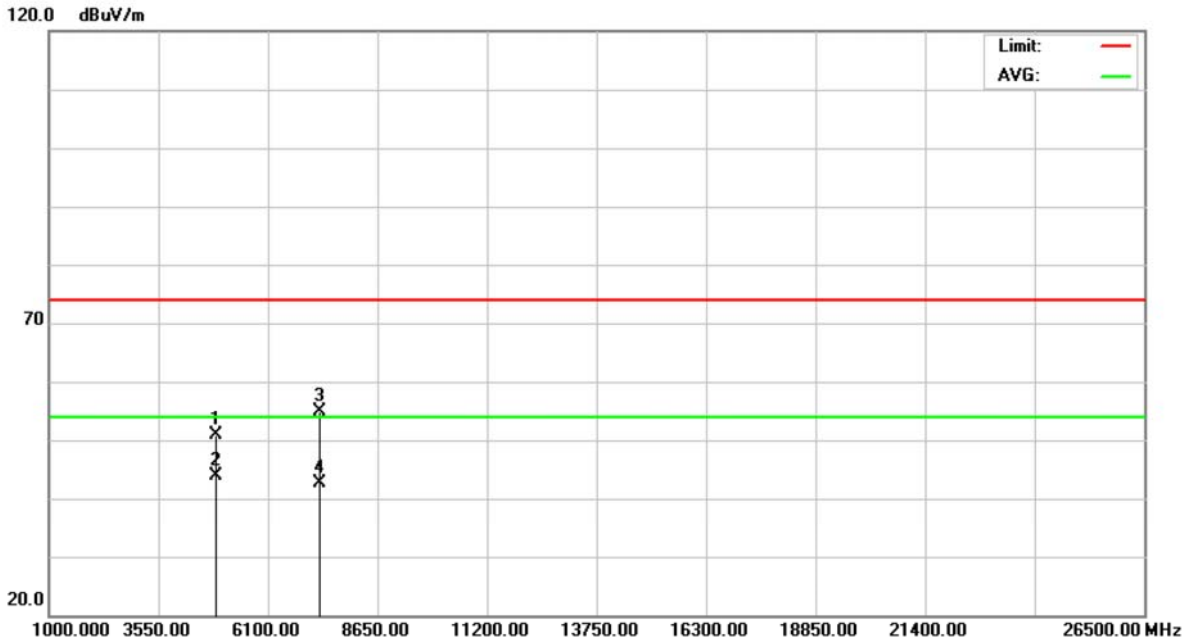


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2436.250	61.78	31.87	93.65	74.00	19.65	peak	
2	*	2436.250	59.92	31.87	91.79	54.00	37.79	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Vertical**

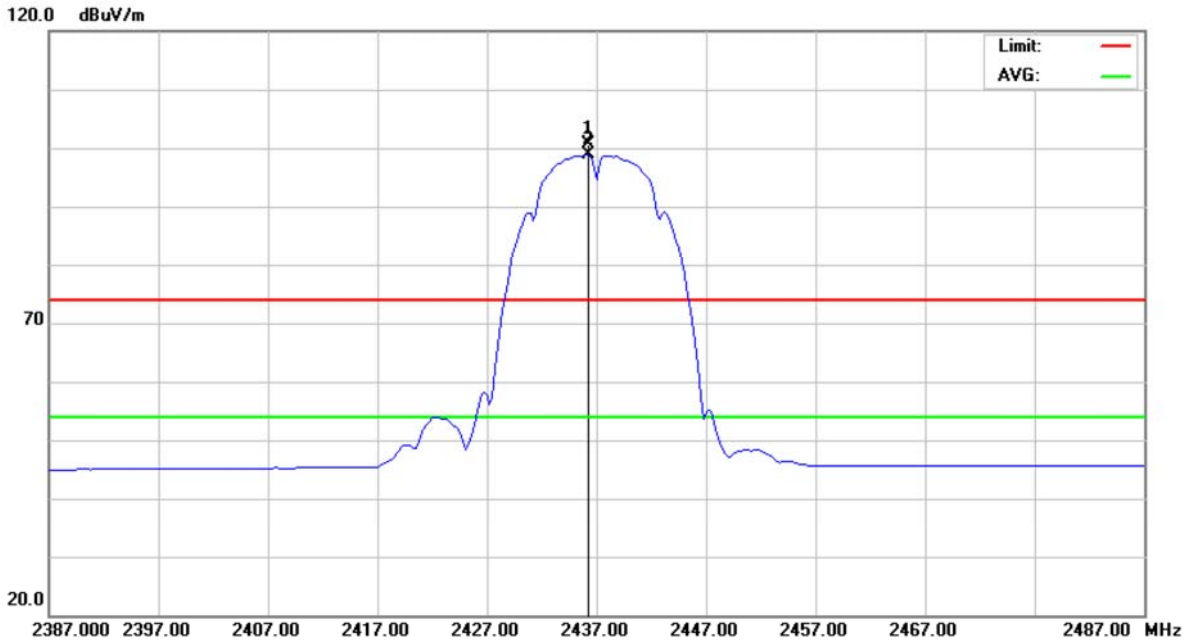


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.960	45.17	5.78	50.95	74.00	-23.05	peak	
2	*	4873.960	38.06	5.78	43.84	54.00	-10.16	AVG	
3		7310.685	42.21	12.57	54.78	74.00	-19.22	peak	
4		7310.685	30.07	12.57	42.64	54.00	-11.36	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Horizontal**

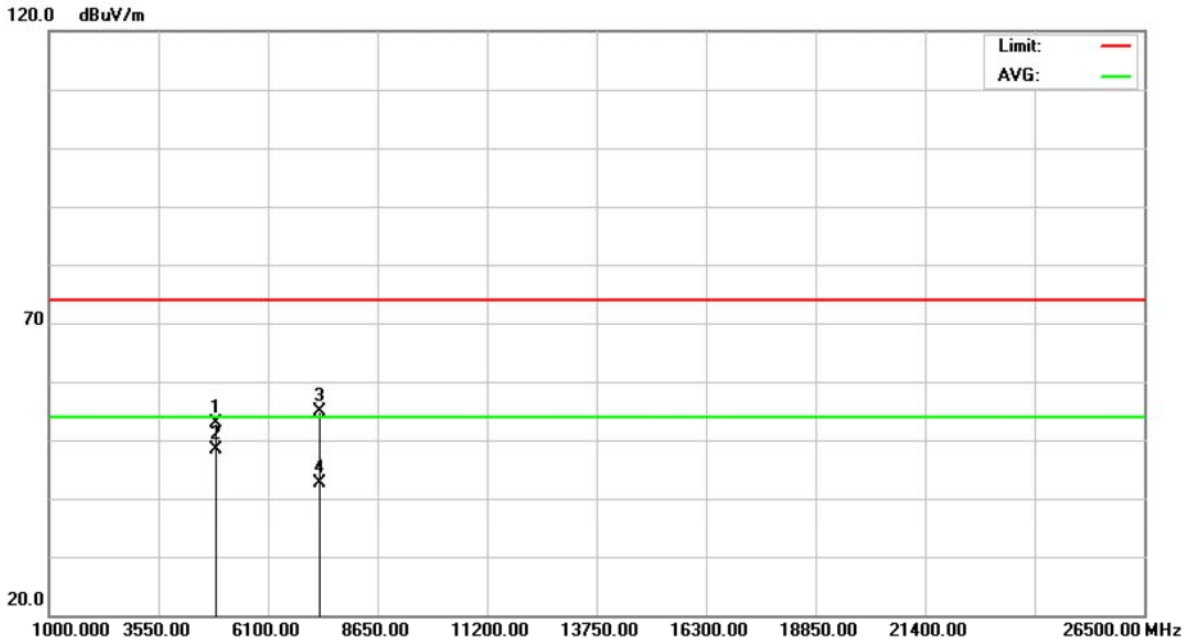


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2436.250	68.66	31.87	100.53	74.00	26.53	peak	
2	*	2436.250	66.99	31.87	98.86	54.00	44.86	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2437 MHz		

**Polarization: Horizontal**

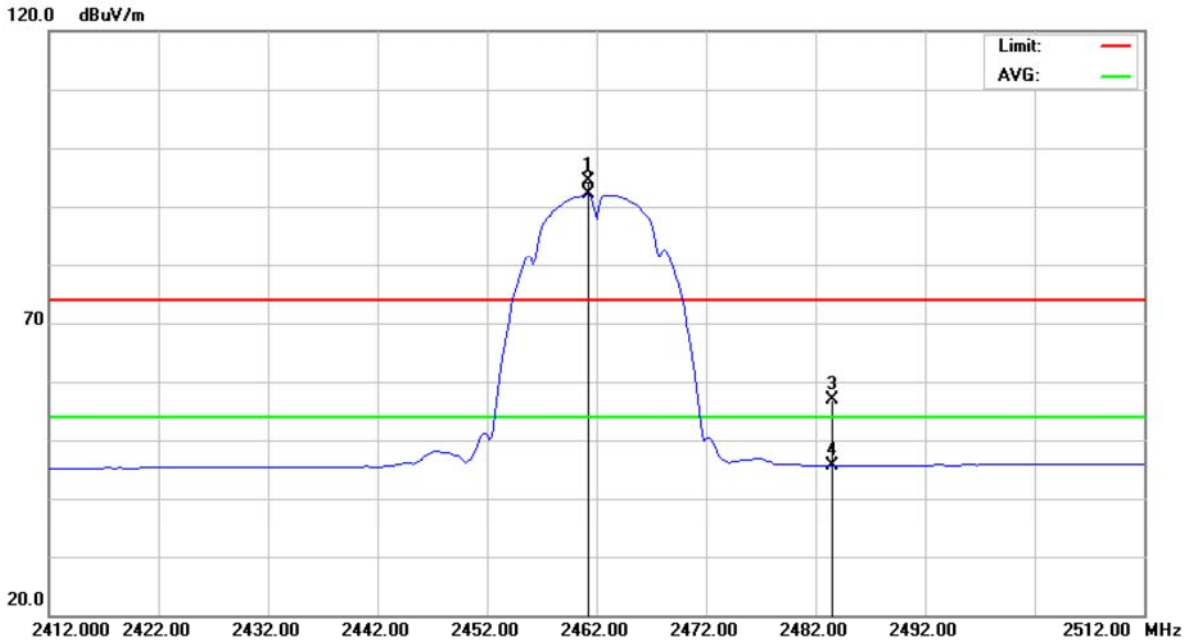


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.980	47.03	5.78	52.81	74.00	-21.19	peak	
2	*	4873.980	42.72	5.78	48.50	54.00	-5.50	AVG	
3		7310.920	42.33	12.57	54.90	74.00	-19.10	peak	
4		7310.920	30.04	12.57	42.61	54.00	-11.39	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2462 MHz		

**Polarization: Vertical**

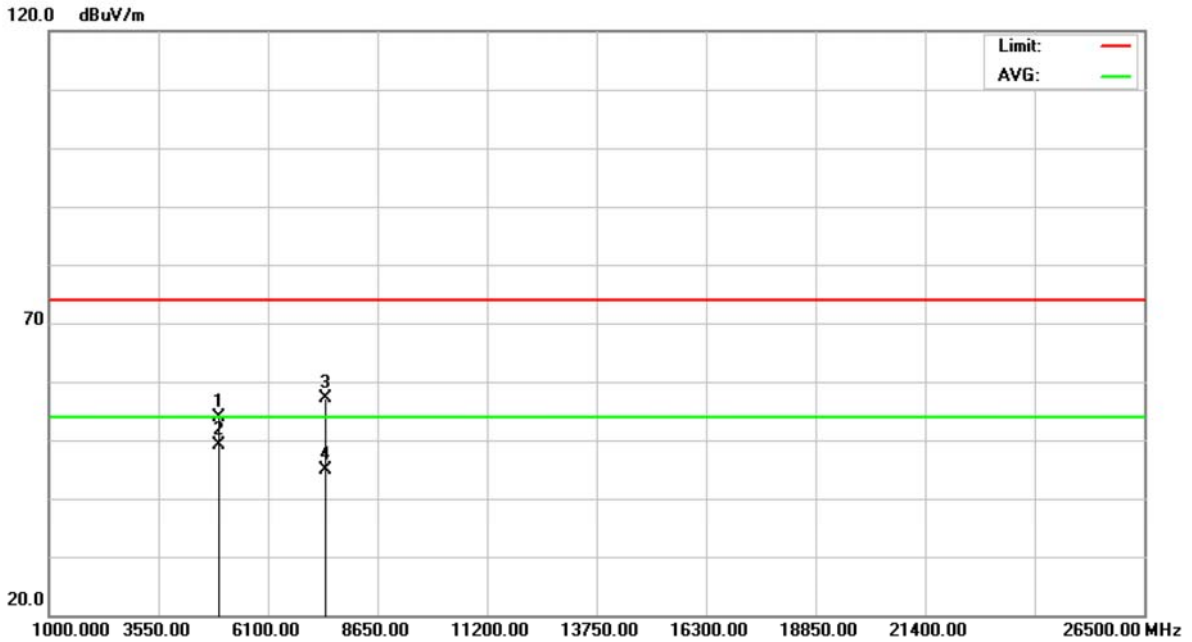


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.250	62.37	31.99	94.36	74.00	20.36	peak	
2	*	2461.250	60.04	31.99	92.03	54.00	38.03	AVG	
3		2483.500	24.70	32.09	56.79	74.00	-17.21	peak	
4		2483.500	13.55	32.09	45.64	54.00	-8.36	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2462 MHz		

**Polarization: Vertical**

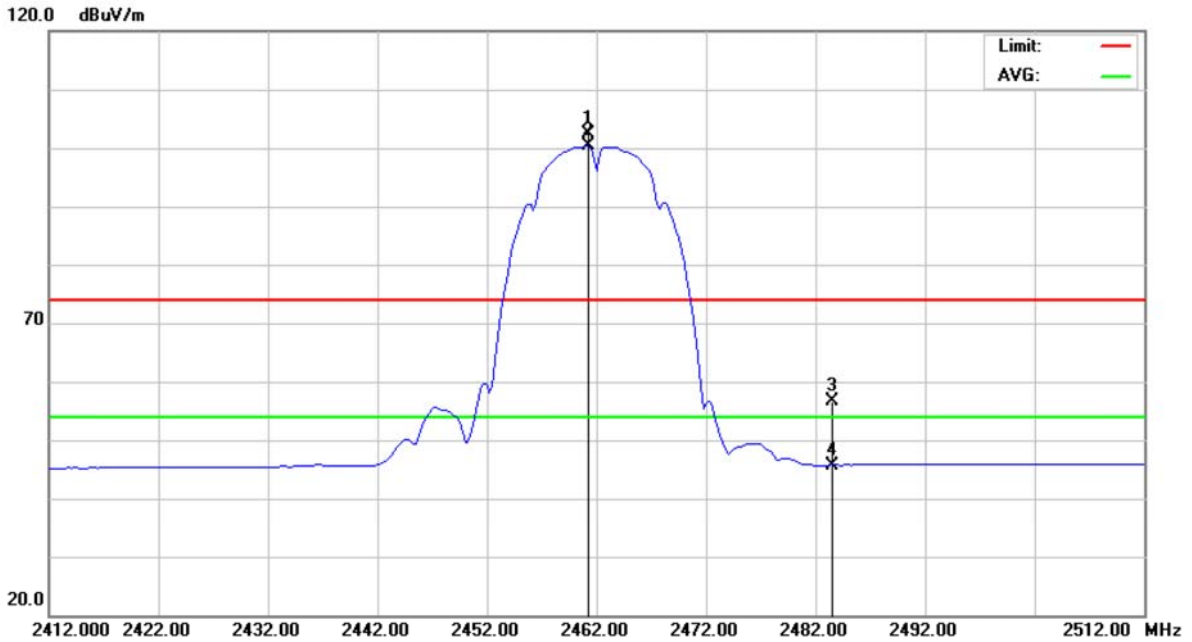


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	47.93	5.84	53.77	74.00	-20.23	peak	
2	*	4924.000	43.35	5.84	49.19	54.00	-4.81	AVG	
3		7385.155	44.37	12.84	57.21	74.00	-16.79	peak	
4		7385.155	31.95	12.84	44.79	54.00	-9.21	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2462 MHz		

**Polarization: Horizontal**



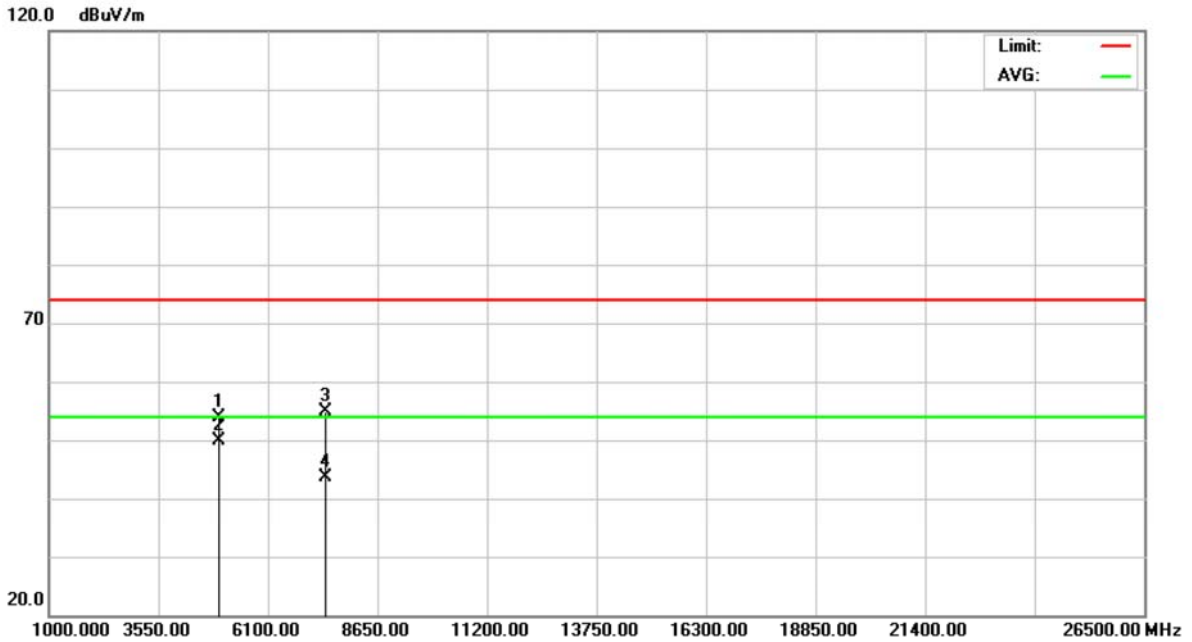
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.250	70.31	31.99	102.30	74.00	28.30	peak	
2	*	2461.250	68.38	31.99	100.37	54.00	46.37	AVG	
3		2483.500	24.44	32.09	56.53	74.00	-17.47	peak	
4		2483.500	13.66	32.09	45.75	54.00	-8.25	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2462 MHz		

**Polarization: Horizontal**

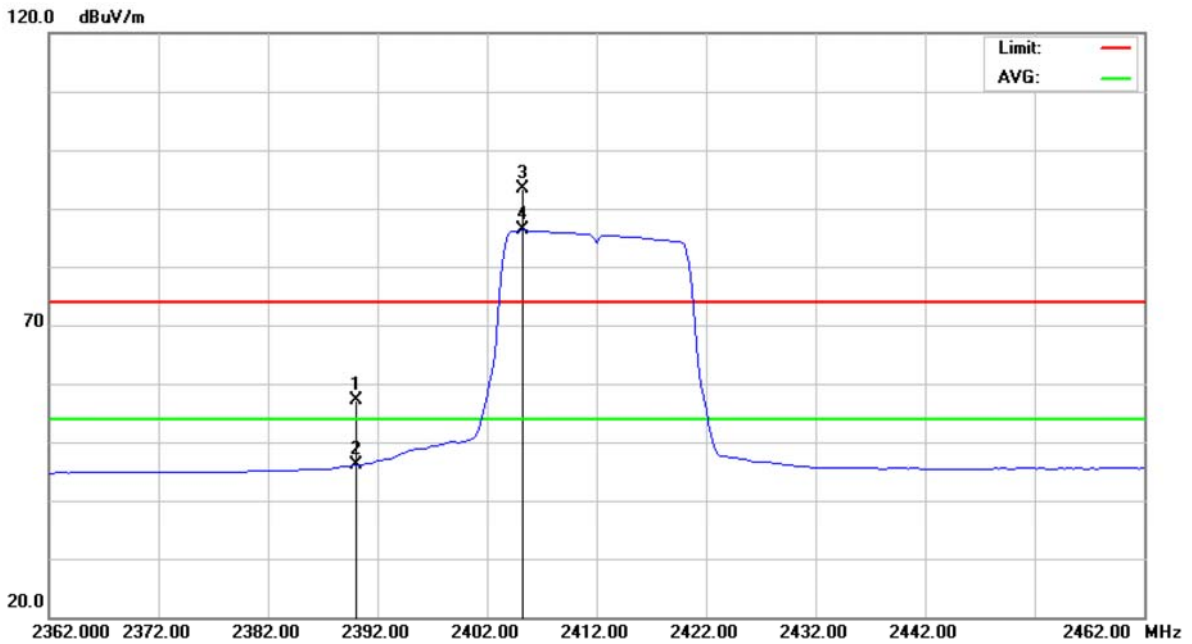


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	47.99	5.84	53.83	74.00	-20.17	peak	
2	*	4924.000	44.13	5.84	49.97	54.00	-4.03	AVG	
3		7385.105	42.13	12.84	54.97	74.00	-19.03	peak	
4		7385.105	30.70	12.84	43.54	54.00	-10.46	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz		

**Polarization: Vertical**

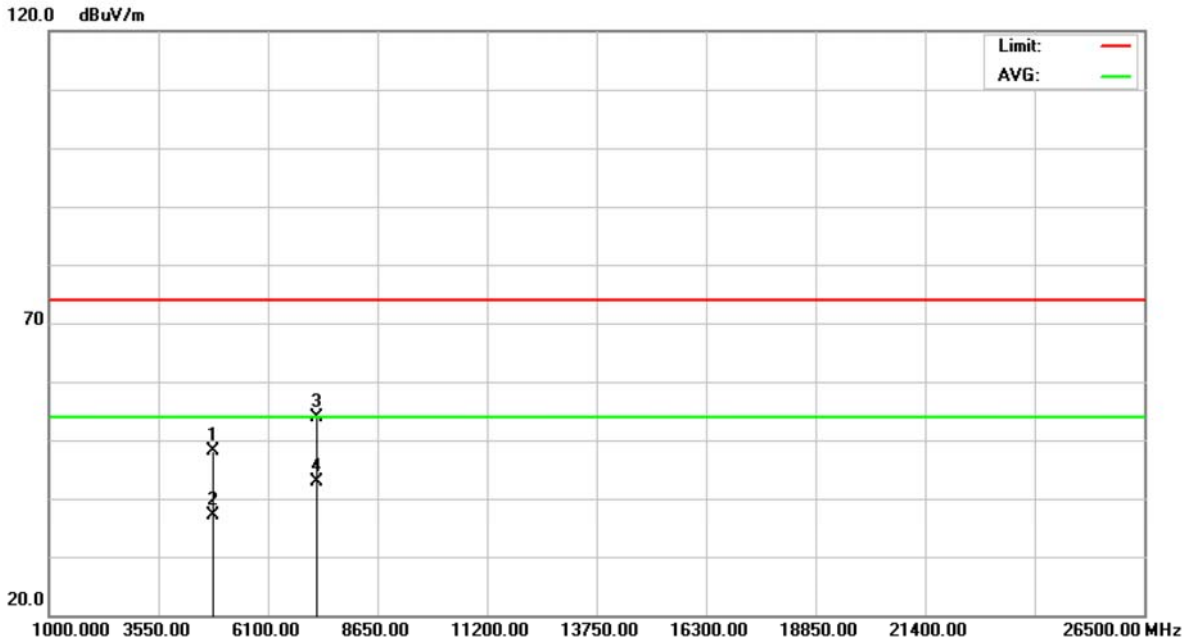


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	25.44	31.67	57.11	74.00	-16.89	peak	
2		2390.000	14.39	31.67	46.06	54.00	-7.94	AVG	
3	X	2405.250	61.74	31.74	93.48	74.00	19.48	peak	
4	*	2405.250	54.54	31.74	86.28	54.00	32.28	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz		

**Polarization: Vertical**

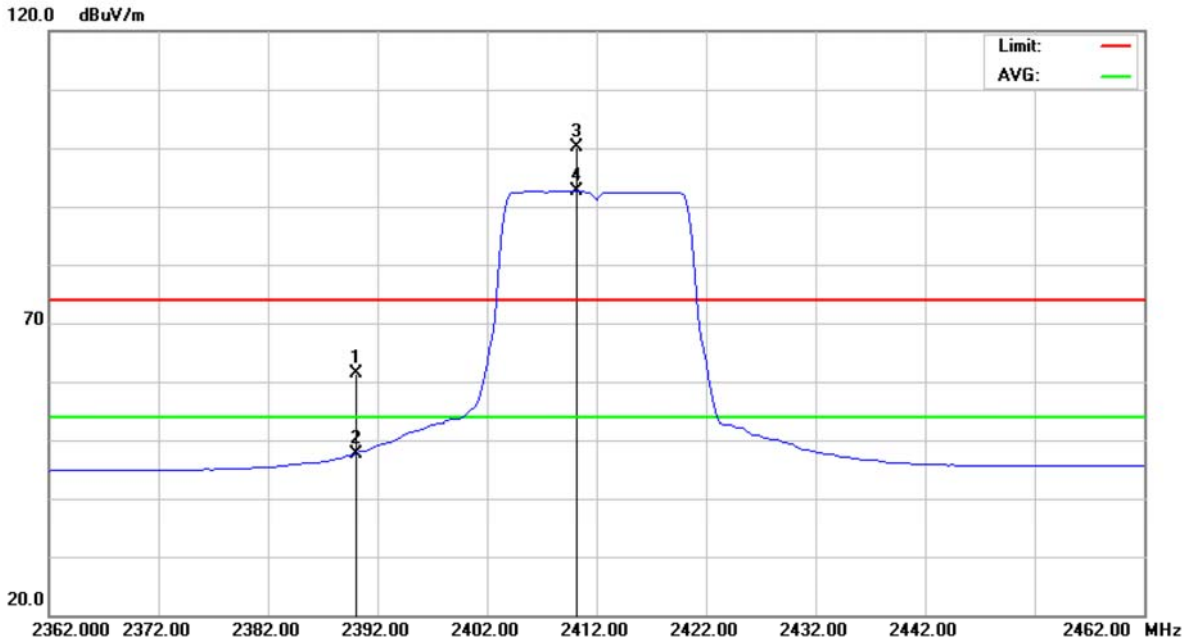


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.945	42.42	5.71	48.13	74.00	-25.87	peak	
2		4823.945	31.53	5.71	37.24	54.00	-16.76	AVG	
3		7235.875	41.67	12.29	53.96	74.00	-20.04	peak	
4	*	7235.875	30.48	12.29	42.77	54.00	-11.23	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz		

**Polarization: Horizontal**

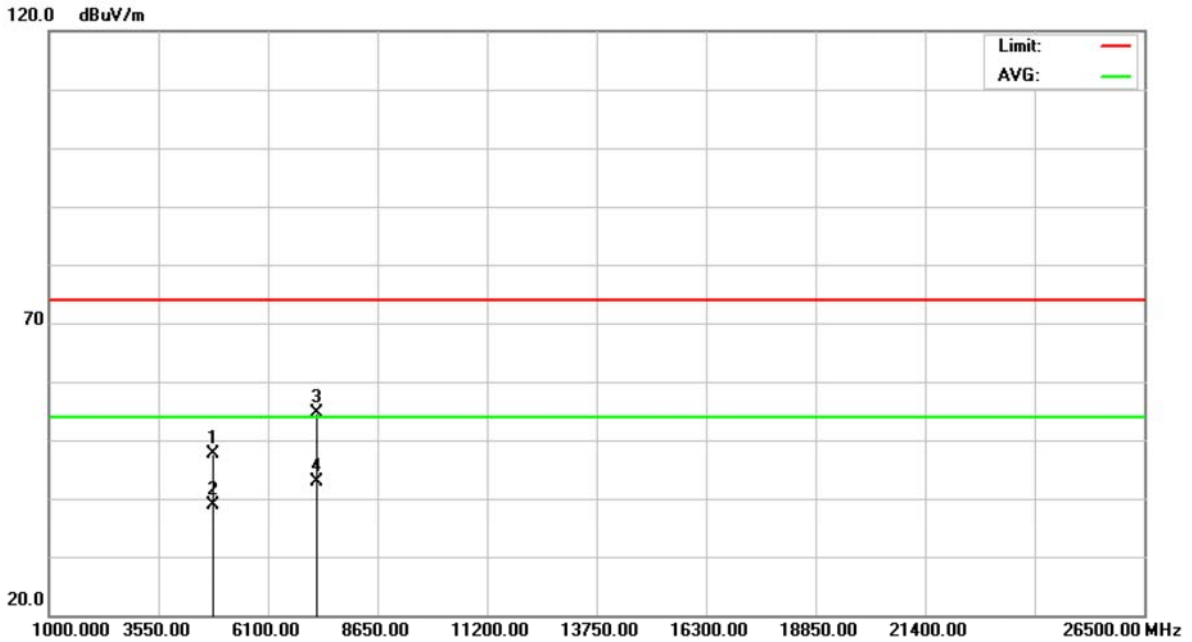


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	29.74	31.67	61.41	74.00	-12.59	peak	
2		2390.000	15.99	31.67	47.66	54.00	-6.34	AVG	
3	X	2410.250	68.29	31.76	100.05	74.00	26.05	peak	
4	*	2410.250	60.87	31.76	92.63	54.00	38.63	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz		

**Polarization: Horizontal**

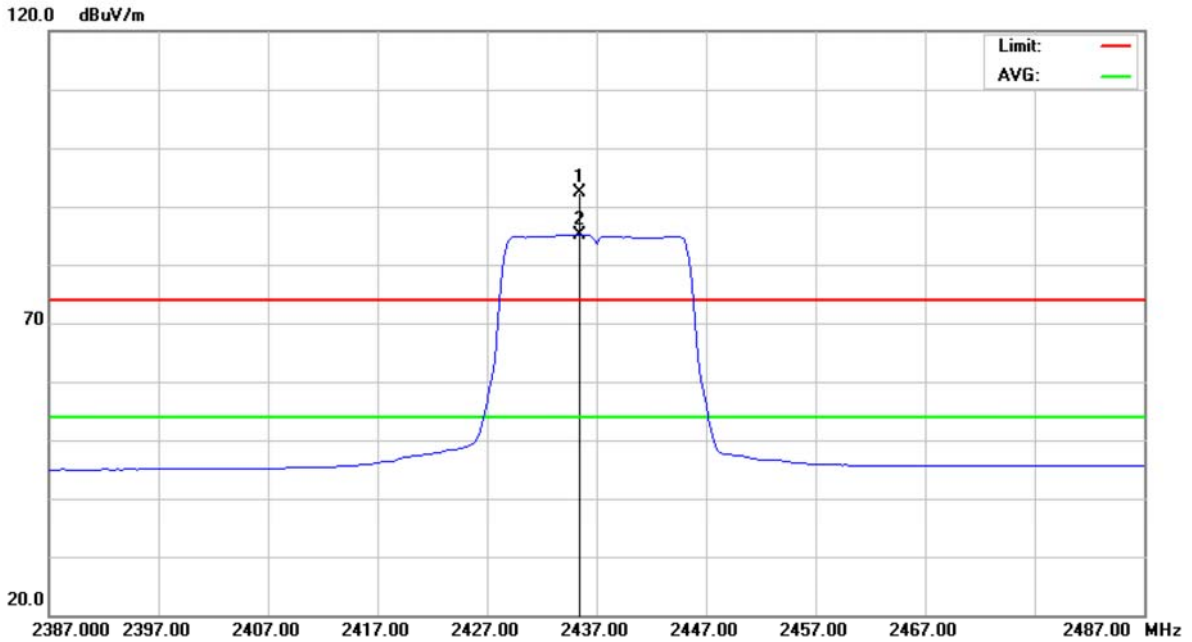


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.035	41.92	5.71	47.63	74.00	-26.37	peak	
2		4824.035	33.14	5.71	38.85	54.00	-15.15	AVG	
3		7235.960	42.24	12.29	54.53	74.00	-19.47	peak	
4	*	7235.960	30.49	12.29	42.78	54.00	-11.22	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2437 MHz		

**Polarization: Vertical**

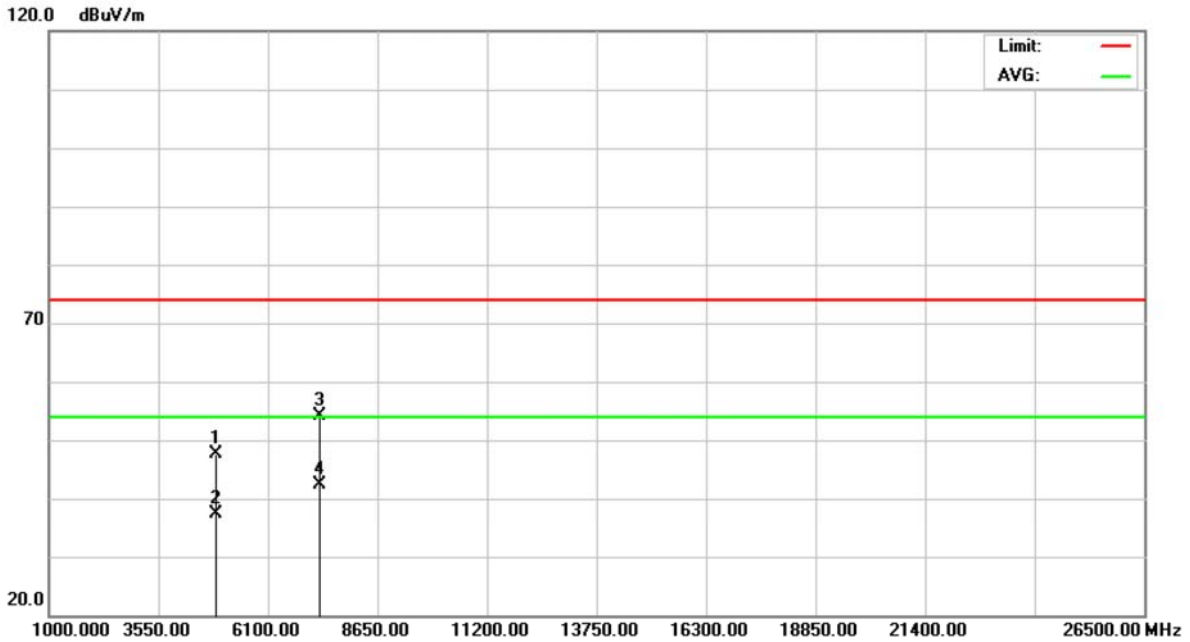


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2435.500	60.49	31.87	92.36	74.00	18.36	peak	
2	*	2435.500	53.35	31.87	85.22	54.00	31.22	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2437 MHz		

**Polarization: Vertical**

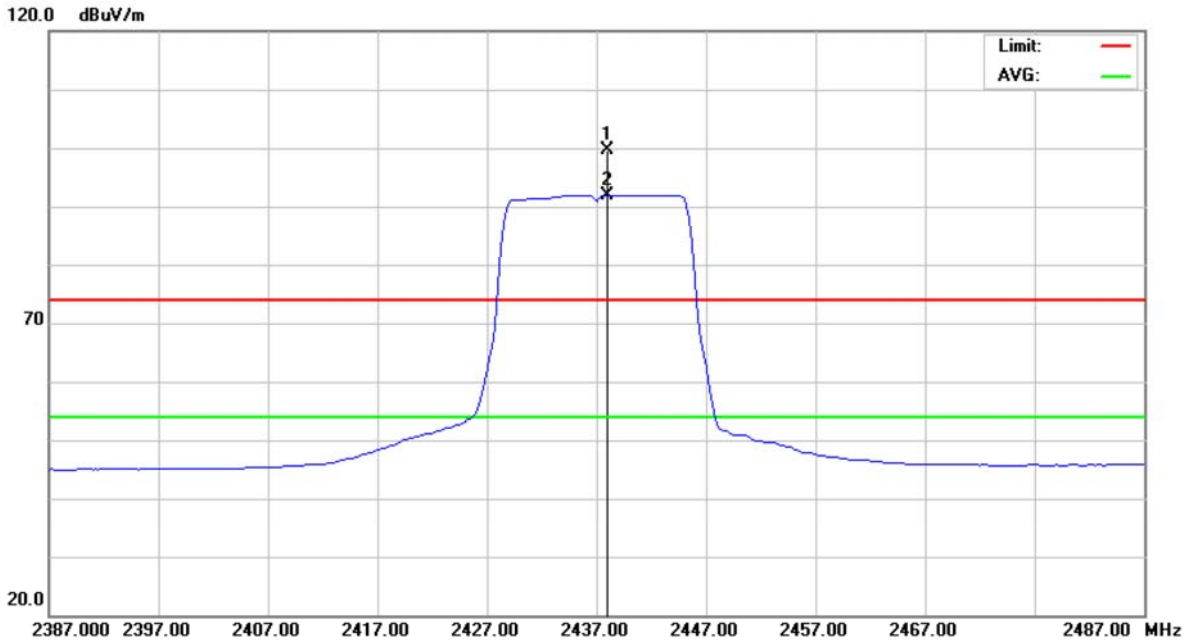


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.990	41.81	5.78	47.59	74.00	-26.41	peak	
2		4873.990	31.50	5.78	37.28	54.00	-16.72	AVG	
3		7311.055	41.46	12.57	54.03	74.00	-19.97	peak	
4	*	7311.055	29.88	12.57	42.45	54.00	-11.55	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2437 MHz		

**Polarization: Horizontal**



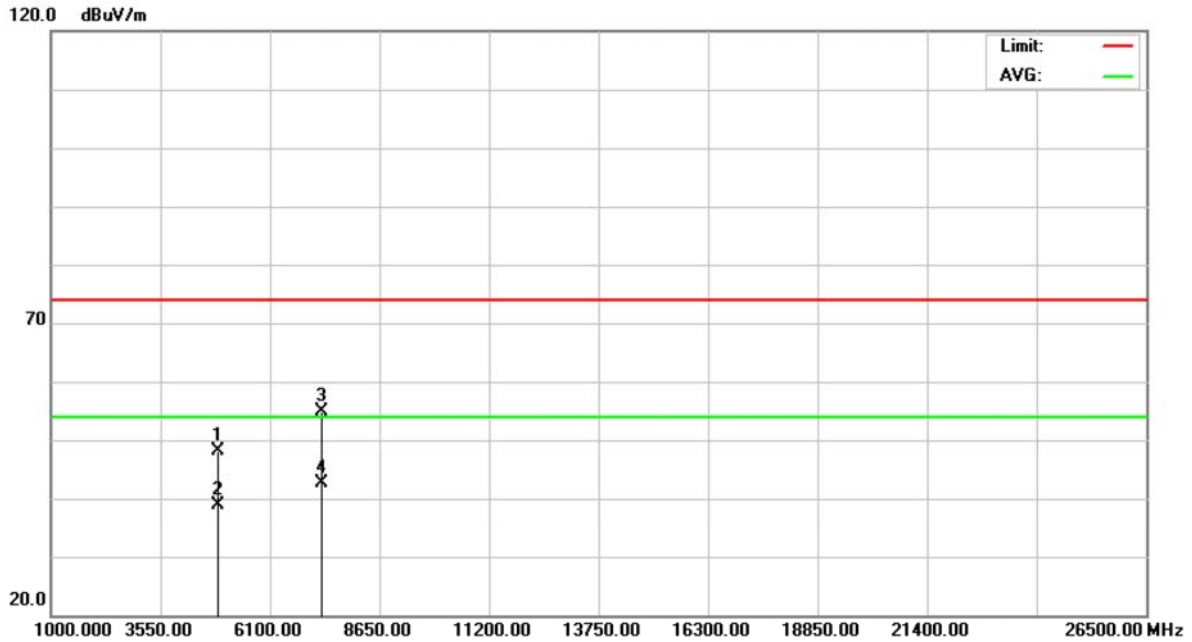
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2438.000	67.65	31.88	99.53	74.00	25.53	peak	
2	*	2438.000	60.12	31.88	92.00	54.00	38.00	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2437 MHz		

**Polarization: Horizontal**

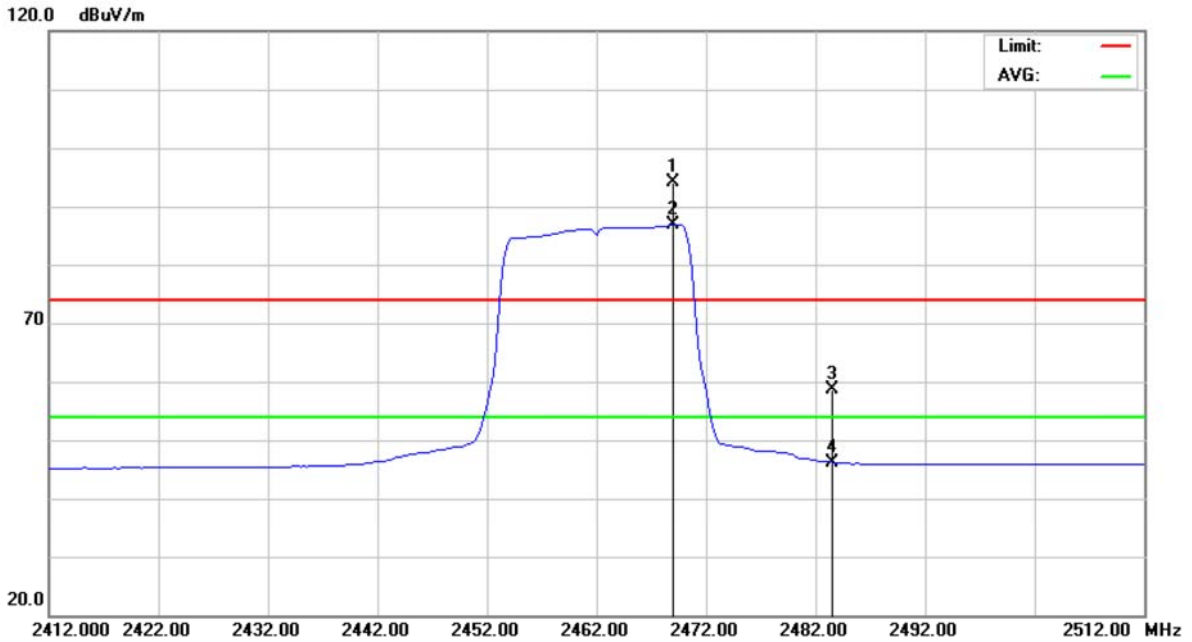


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.990	42.29	5.78	48.07	74.00	-25.93	peak	
2		4873.990	33.05	5.78	38.83	54.00	-15.17	AVG	
3		7310.965	42.21	12.57	54.78	74.00	-19.22	peak	
4	*	7310.965	29.94	12.57	42.51	54.00	-11.49	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2462 MHz		

**Polarization: Vertical**

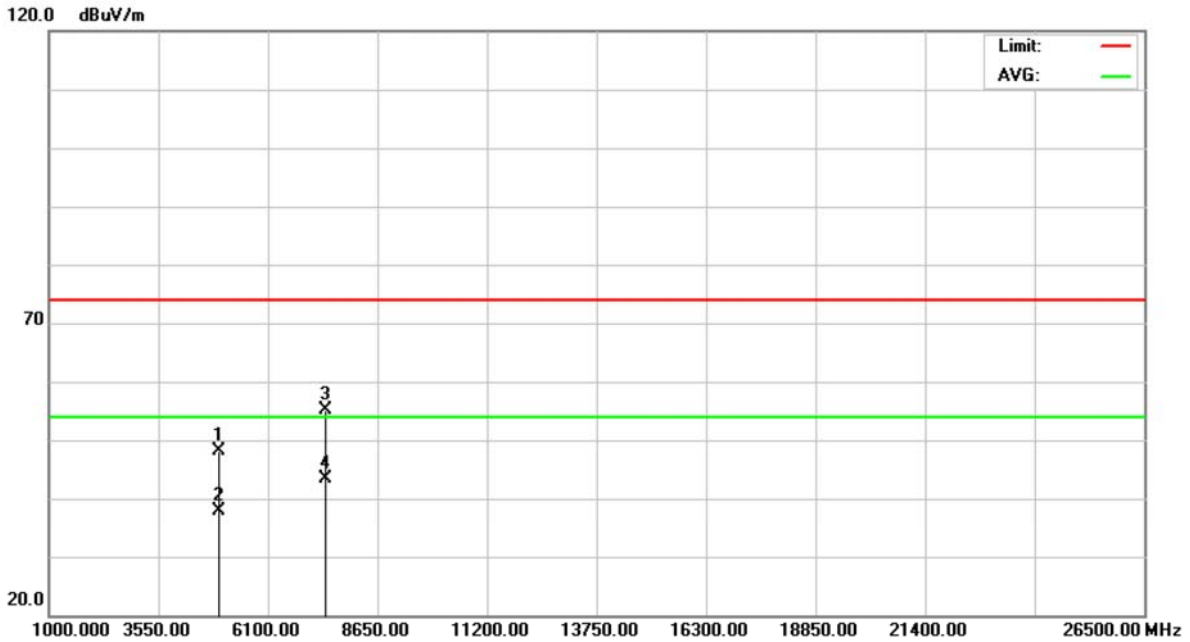


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2469.000	61.99	32.02	94.01	74.00	20.01	peak	
2	*	2469.000	54.82	32.02	86.84	54.00	32.84	AVG	
3		2483.500	26.57	32.09	58.66	74.00	-15.34	peak	
4		2483.500	14.16	32.09	46.25	54.00	-7.75	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2462 MHz		

**Polarization: Vertical**

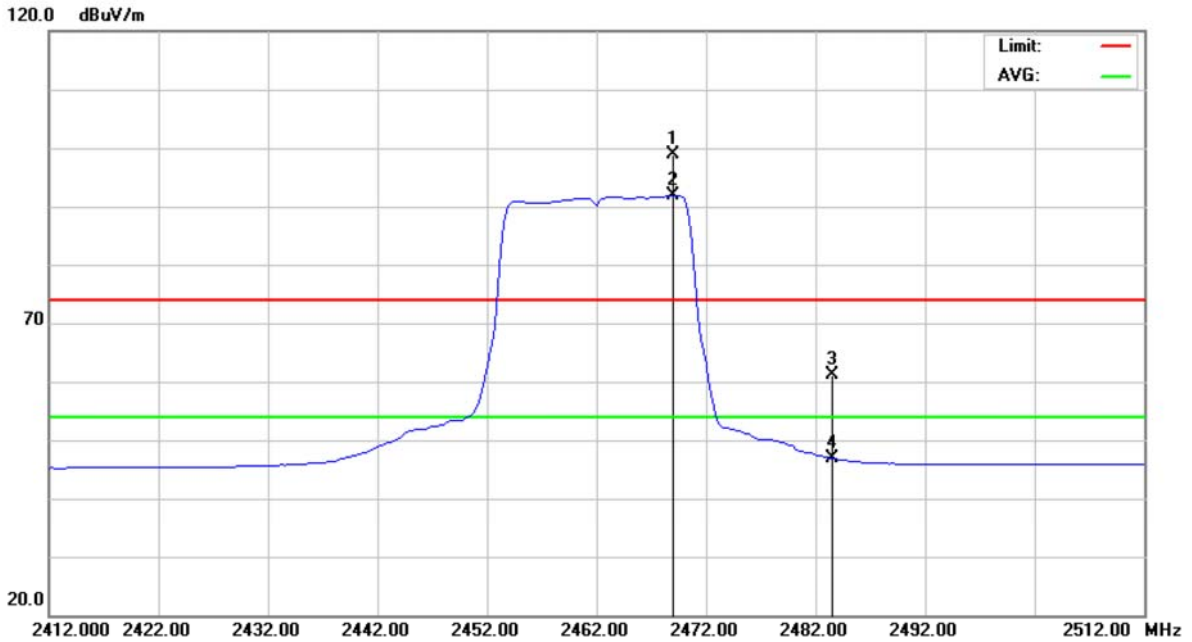


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.040	42.21	5.84	48.05	74.00	-25.95	peak	
2		4924.040	32.13	5.84	37.97	54.00	-16.03	AVG	
3		7385.395	42.19	12.84	55.03	74.00	-18.97	peak	
4	*	7385.395	30.42	12.84	43.26	54.00	-10.74	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2462 MHz		

**Polarization: Horizontal**

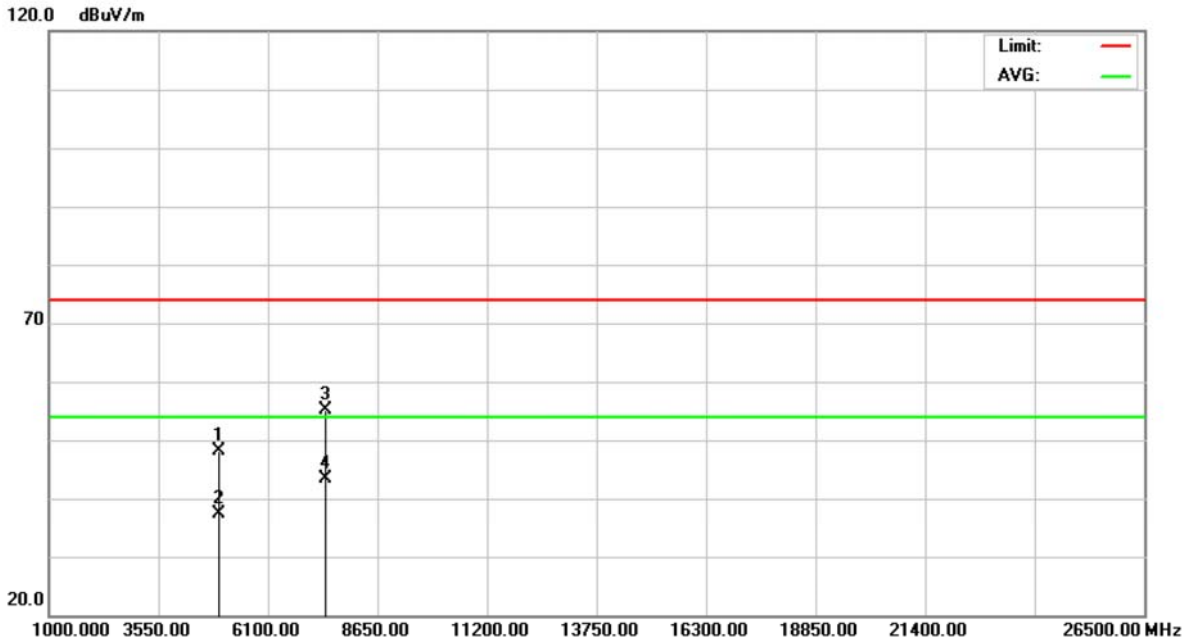


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2469.000	66.97	32.02	98.99	74.00	24.99	peak	
2	*	2469.000	59.92	32.02	91.94	54.00	37.94	AVG	
3		2483.500	28.95	32.09	61.04	74.00	-12.96	peak	
4		2483.500	14.81	32.09	46.90	54.00	-7.10	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2462 MHz		

**Polarization: Horizontal**

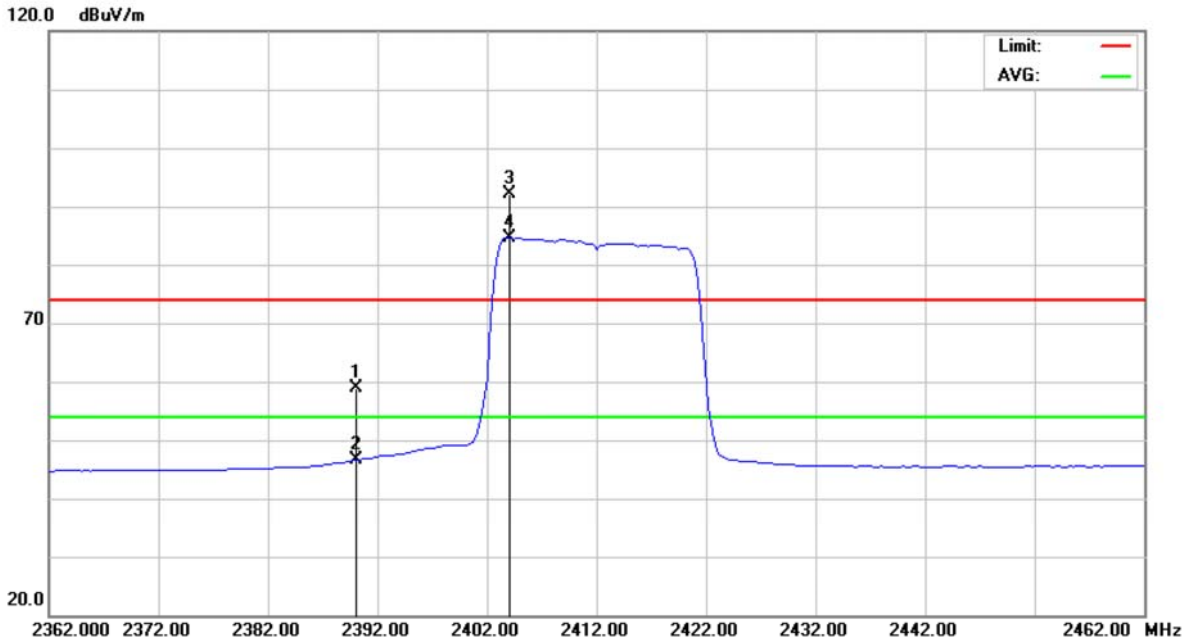


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4923.955	42.17	5.84	48.01	74.00	-25.99	peak	
2		4923.955	31.57	5.84	37.41	54.00	-16.59	AVG	
3		7385.960	42.32	12.85	55.17	74.00	-18.83	peak	
4	*	7385.960	30.50	12.85	43.35	54.00	-10.65	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz		

**Polarization: Vertical**

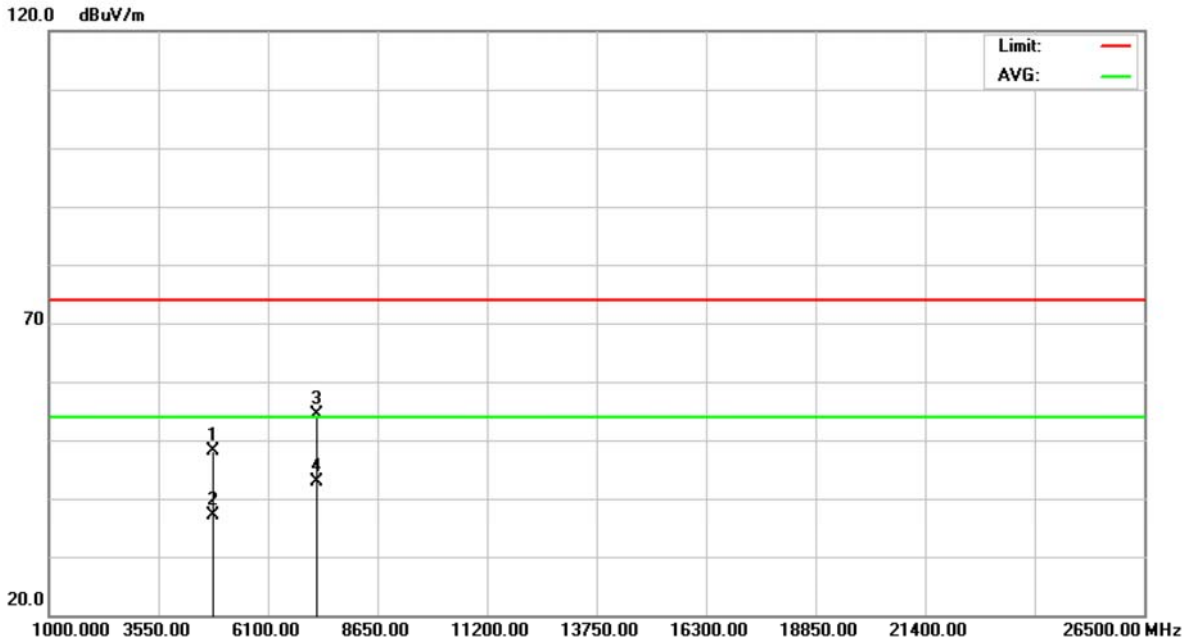


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	27.31	31.67	58.98	74.00	-15.02	peak	
2		2390.000	14.97	31.67	46.64	54.00	-7.36	AVG	
3	X	2404.000	60.30	31.73	92.03	74.00	18.03	peak	
4	*	2404.000	53.02	31.73	84.75	54.00	30.75	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz		

**Polarization: Vertical**

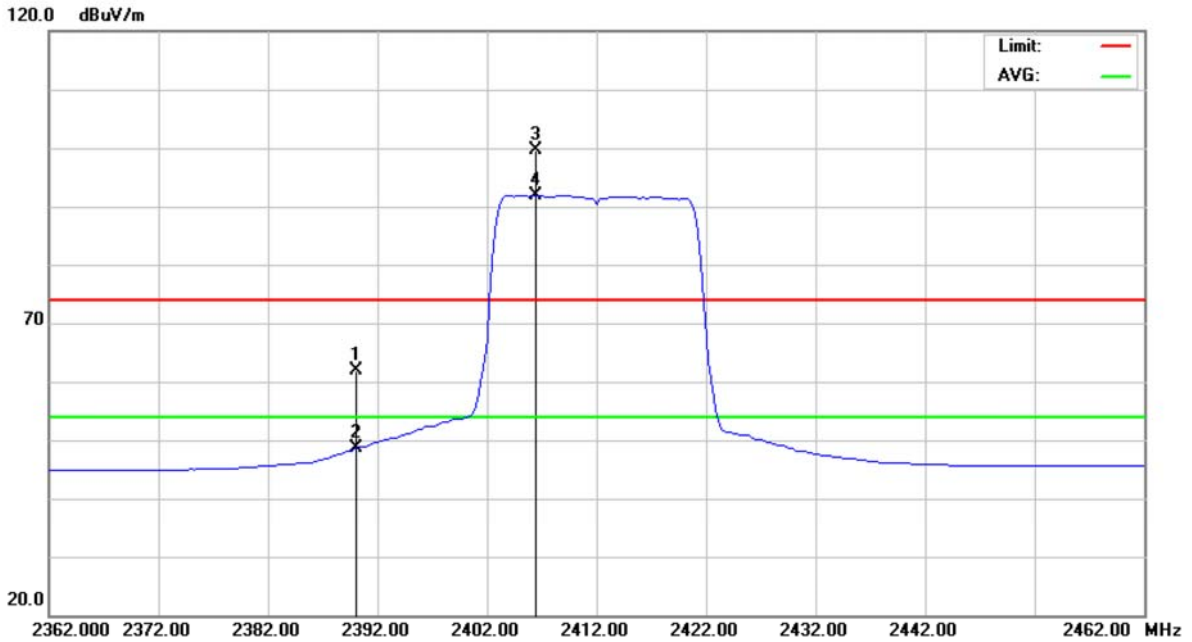


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.015	42.50	5.71	48.21	74.00	-25.79	peak	
2		4824.015	31.48	5.71	37.19	54.00	-16.81	AVG	
3		7235.960	41.98	12.29	54.27	74.00	-19.73	peak	
4	*	7235.960	30.50	12.29	42.79	54.00	-11.21	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz		

**Polarization: Horizontal**



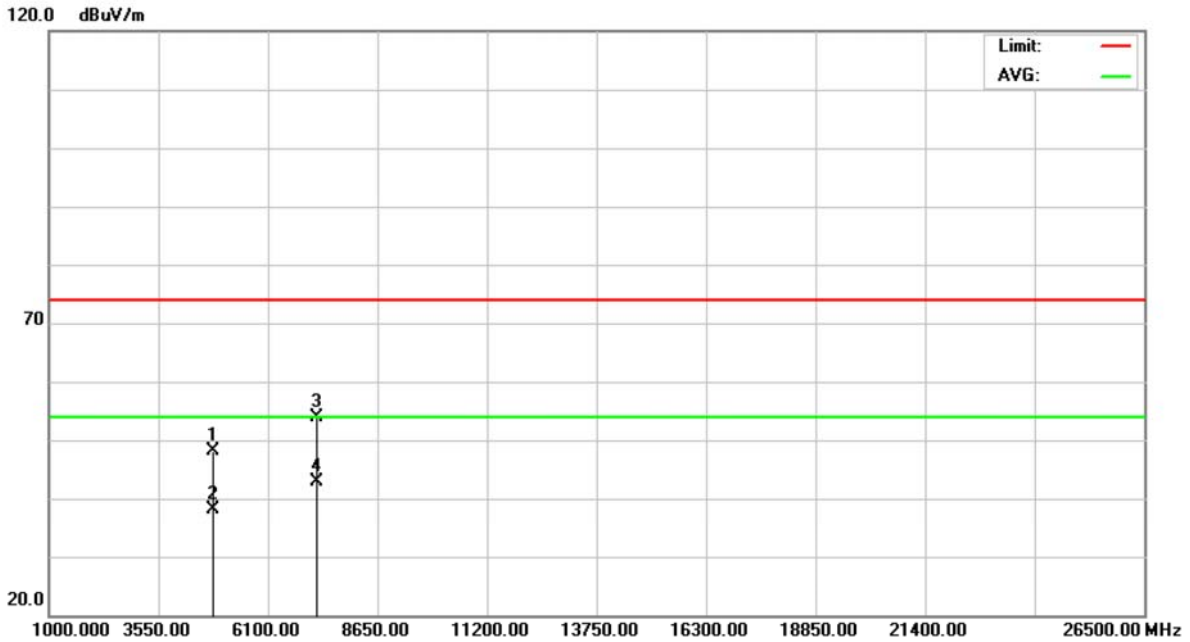
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	30.30	31.67	61.97	74.00	-12.03	peak	
2		2390.000	17.05	31.67	48.72	54.00	-5.28	AVG	
3	X	2406.500	67.86	31.74	99.60	74.00	25.60	peak	
4	*	2406.500	60.16	31.74	91.90	54.00	37.90	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz		

**Polarization: Horizontal**

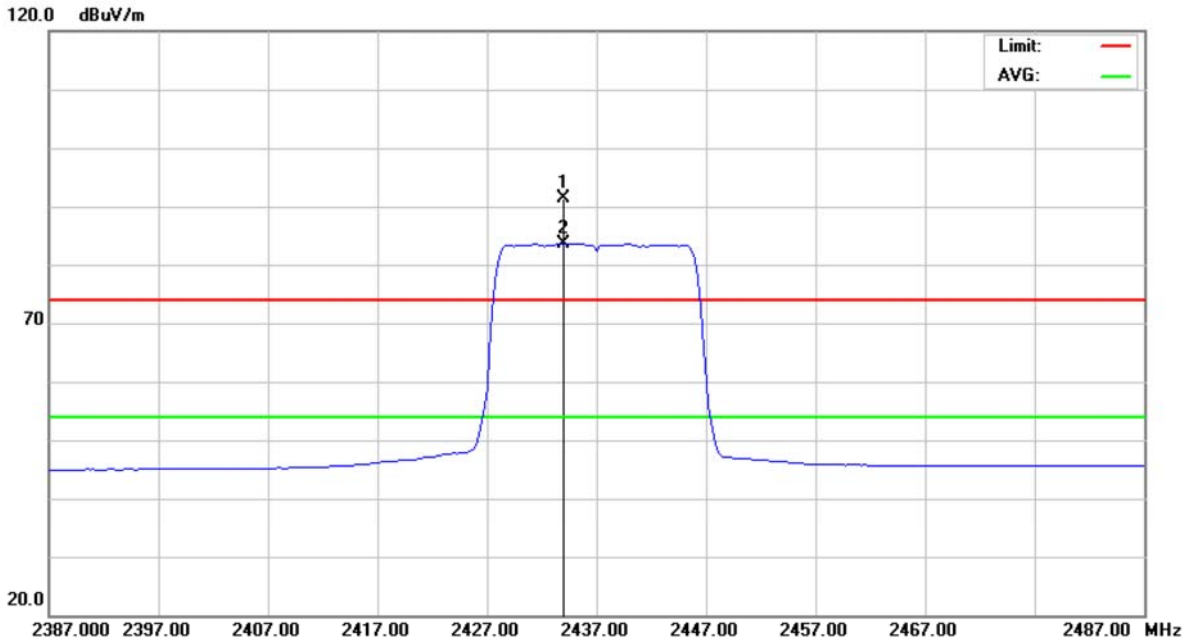


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.950	42.48	5.71	48.19	74.00	-25.81	peak	
2		4823.950	32.37	5.71	38.08	54.00	-15.92	AVG	
3		7236.020	41.60	12.29	53.89	74.00	-20.11	peak	
4	*	7236.020	30.48	12.29	42.77	54.00	-11.23	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2437 MHz		

**Polarization: Vertical**

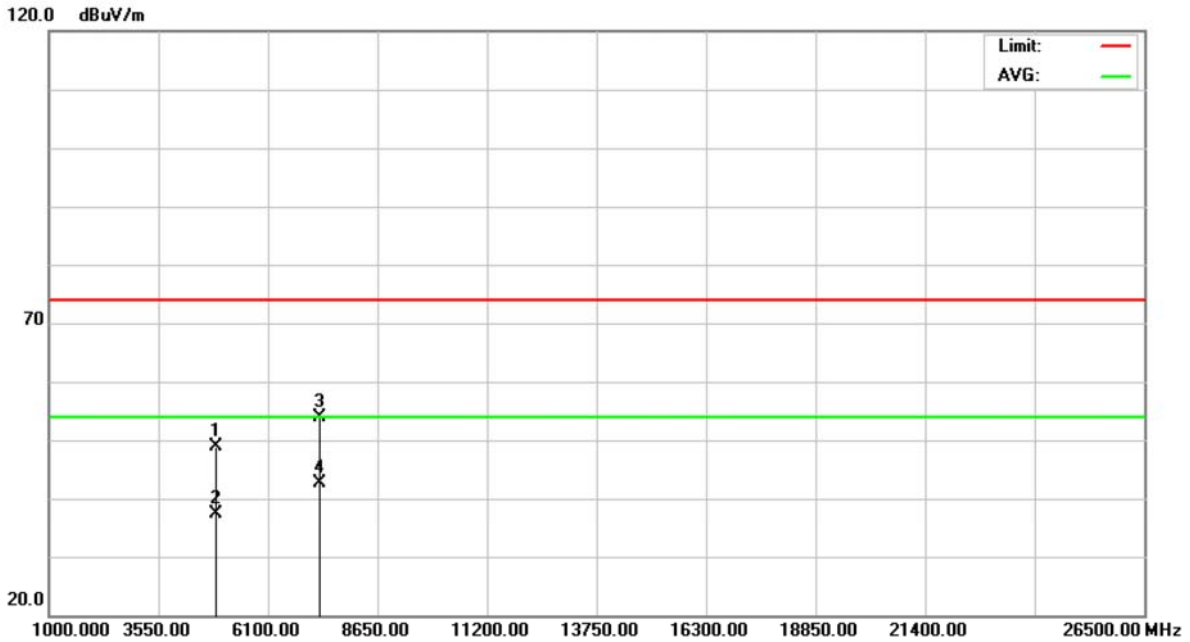


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2434.000	59.47	31.86	91.33	74.00	17.33	peak	
2	*	2434.000	51.86	31.86	83.72	54.00	29.72	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2437 MHz		

**Polarization: Vertical**

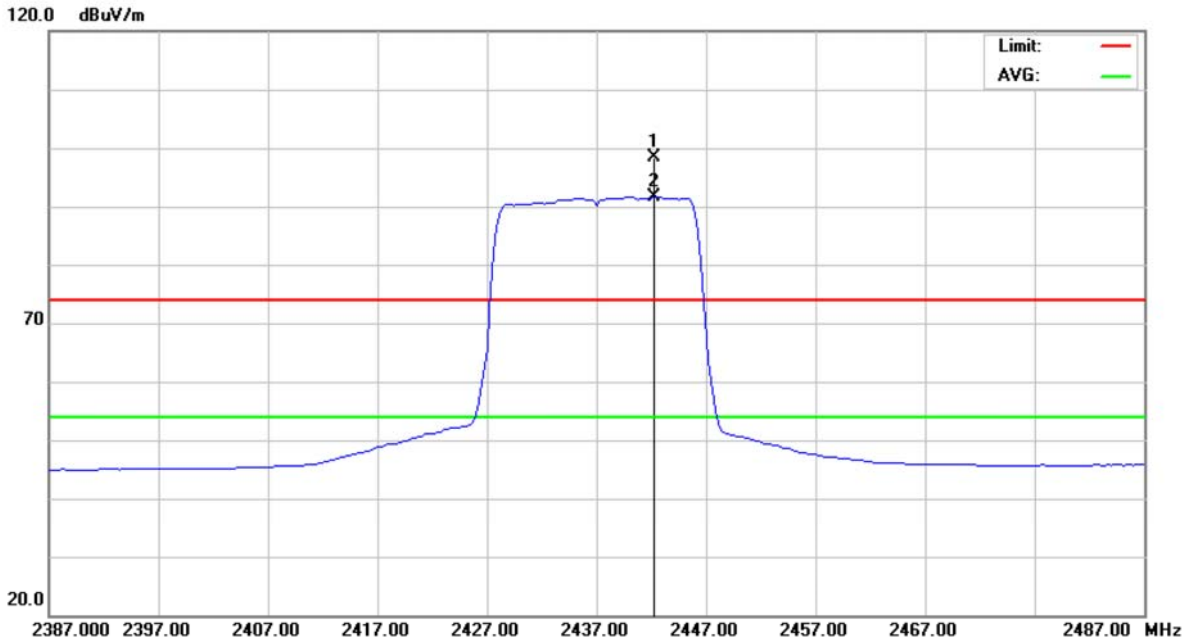


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.970	43.01	5.78	48.79	74.00	-25.21	peak	
2		4873.970	31.58	5.78	37.36	54.00	-16.64	AVG	
3		7310.760	41.39	12.57	53.96	74.00	-20.04	peak	
4	*	7310.760	30.00	12.57	42.57	54.00	-11.43	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2437 MHz		

**Polarization: Horizontal**

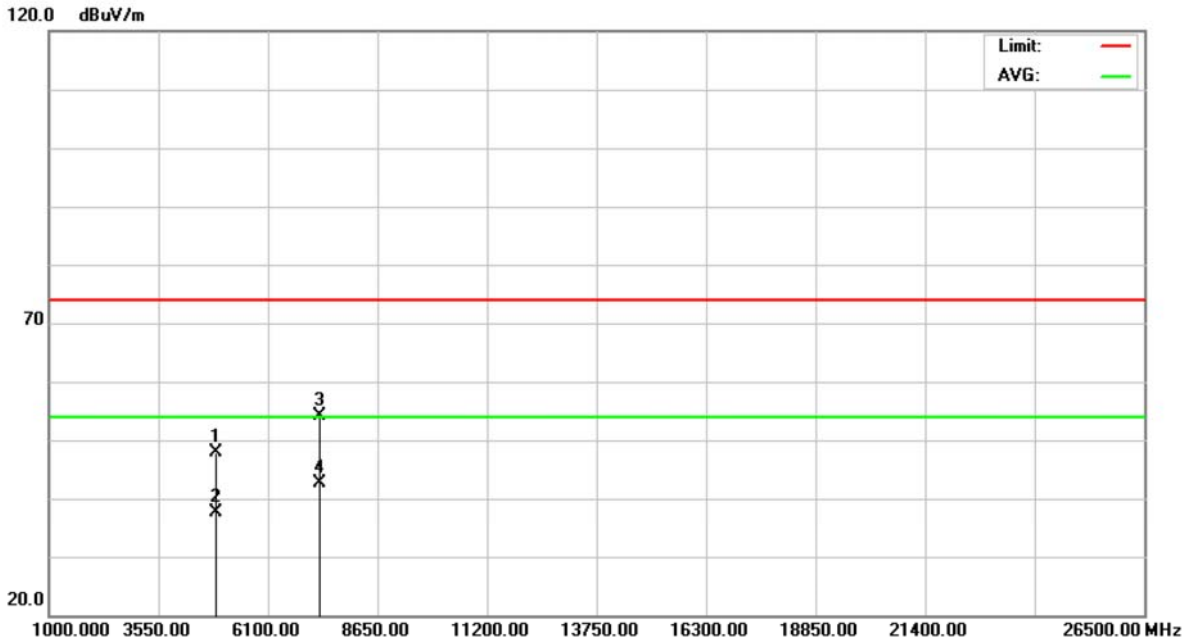


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2442.250	66.47	31.90	98.37	74.00	24.37	peak	
2	*	2442.250	59.66	31.90	91.56	54.00	37.56	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2437 MHz		

**Polarization: Horizontal**

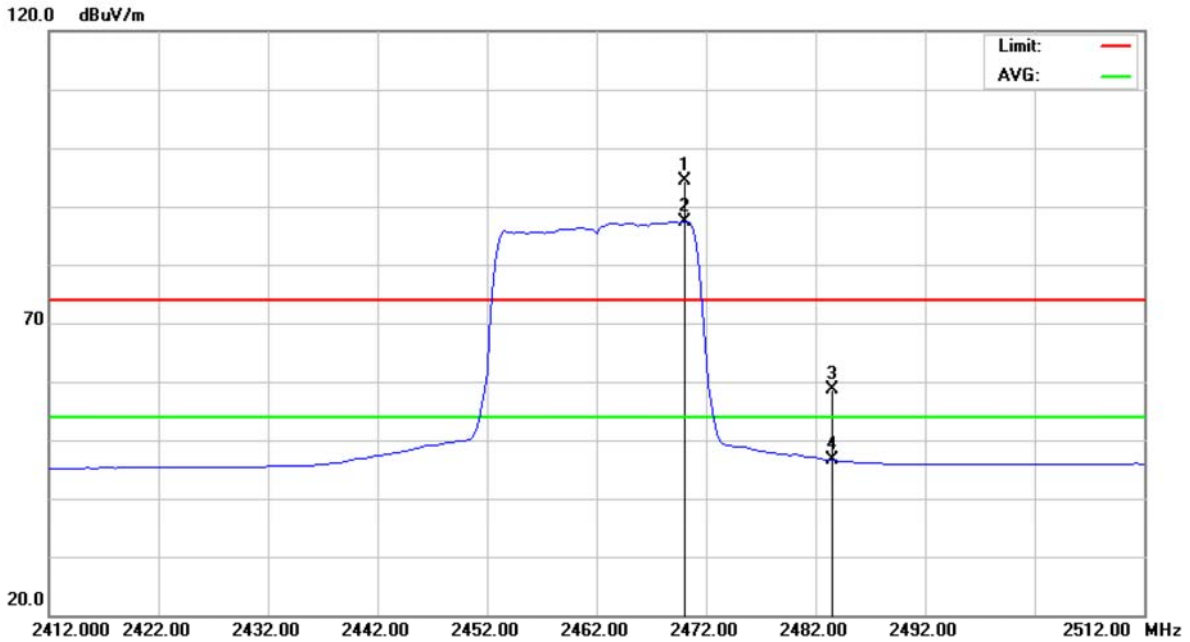


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.970	42.14	5.78	47.92	74.00	-26.08	peak	
2		4873.970	31.88	5.78	37.66	54.00	-16.34	AVG	
3		7310.990	41.47	12.57	54.04	74.00	-19.96	peak	
4	*	7310.990	30.07	12.57	42.64	54.00	-11.36	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2462 MHz		

**Polarization: Vertical**

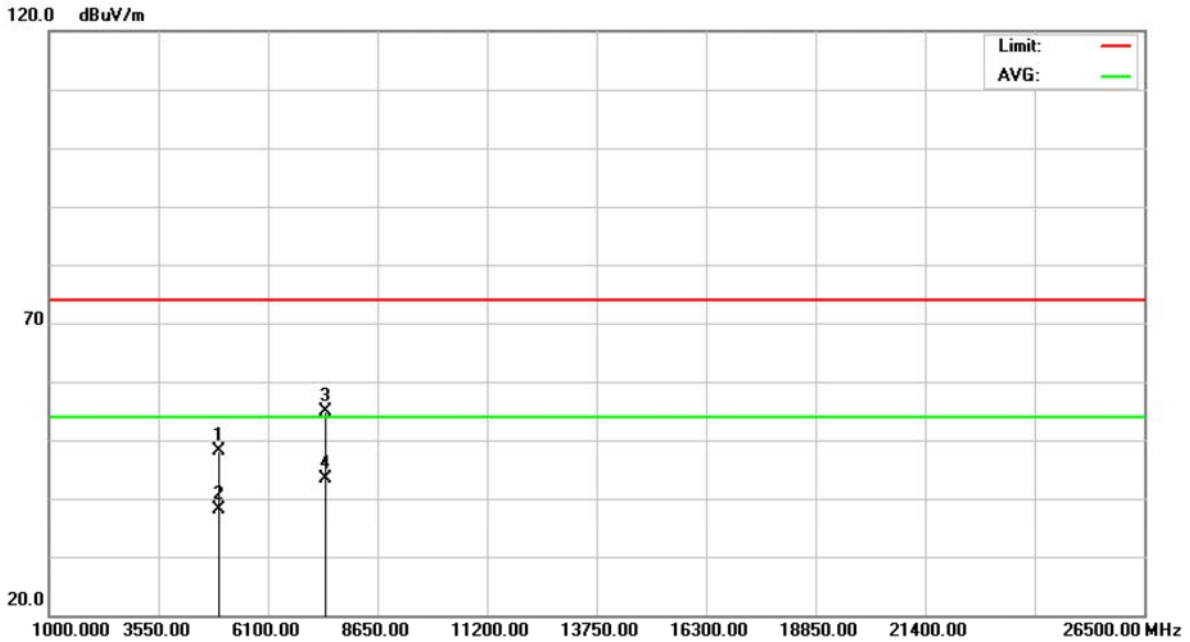


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2470.000	62.25	32.03	94.28	74.00	20.28	peak	
2	*	2470.000	55.40	32.03	87.43	54.00	33.43	AVG	
3		2483.500	26.47	32.09	58.56	74.00	-15.44	peak	
4		2483.500	14.44	32.09	46.53	54.00	-7.47	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2462 MHz		

**Polarization: Vertical**

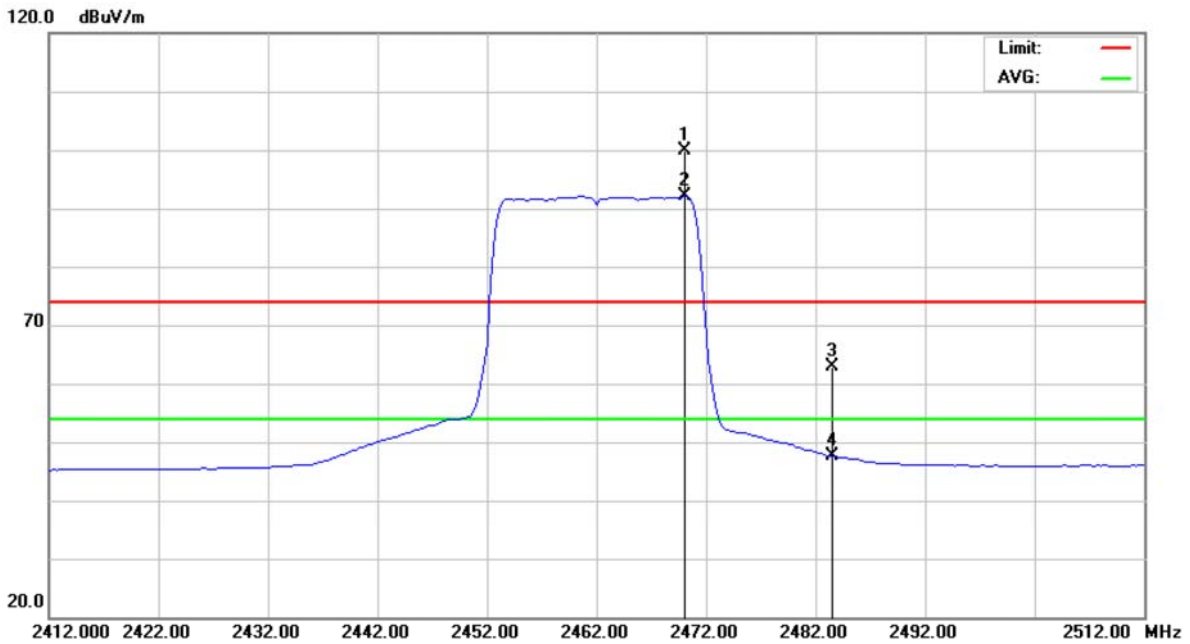


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4923.955	42.17	5.84	48.01	74.00	-25.99	peak	
2		4923.955	32.19	5.84	38.03	54.00	-15.97	AVG	
3		7385.970	42.05	12.85	54.90	74.00	-19.10	peak	
4	*	7385.970	30.50	12.85	43.35	54.00	-10.65	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2462 MHz		

**Polarization: Horizontal**



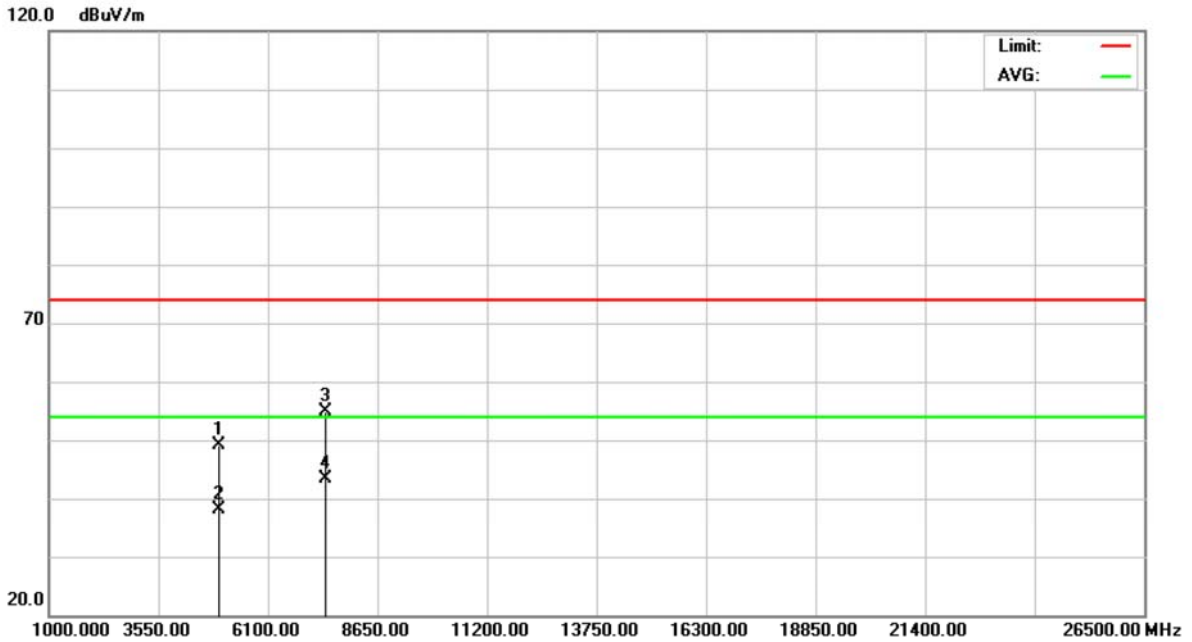
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2470.000	67.84	32.03	99.87	74.00	25.87	peak	
2	*	2470.000	59.99	32.03	92.02	54.00	38.02	AVG	
3		2483.500	30.88	32.09	62.97	74.00	-11.03	peak	
4		2483.500	15.50	32.09	47.59	54.00	-6.41	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2462 MHz		

**Polarization: Horizontal**

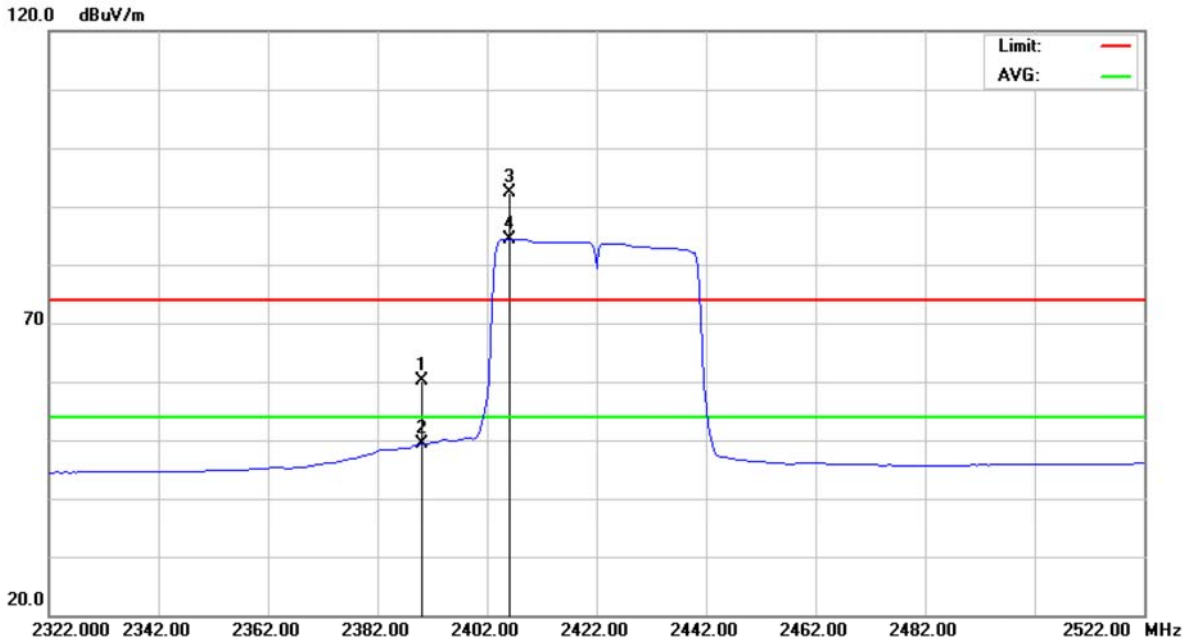


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4923.980	43.24	5.84	49.08	74.00	-24.92	peak	
2		4923.980	32.33	5.84	38.17	54.00	-15.83	AVG	
3		7386.020	42.09	12.85	54.94	74.00	-19.06	peak	
4	*	7386.020	30.53	12.85	43.38	54.00	-10.62	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz		

**Polarization: Vertical**

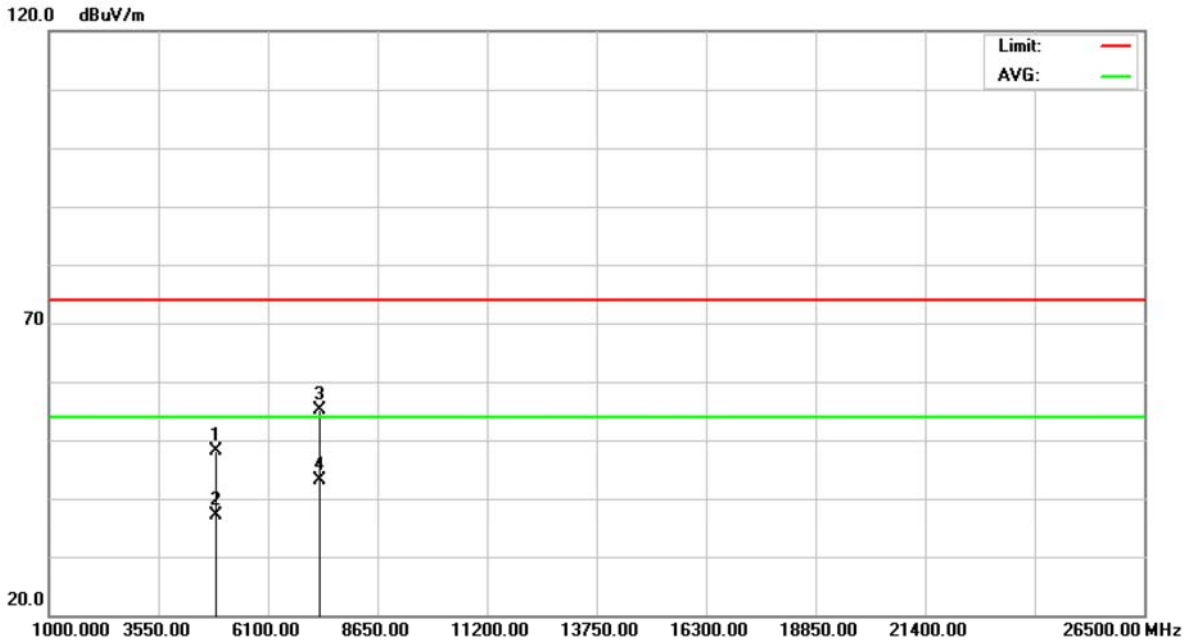


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	28.40	31.67	60.07	74.00	-13.93	peak	
2		2390.000	17.63	31.67	49.30	54.00	-4.70	AVG	
3	X	2406.000	60.67	31.74	92.41	74.00	18.41	peak	
4	*	2406.000	52.75	31.74	84.49	54.00	30.49	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz		

**Polarization: Vertical**

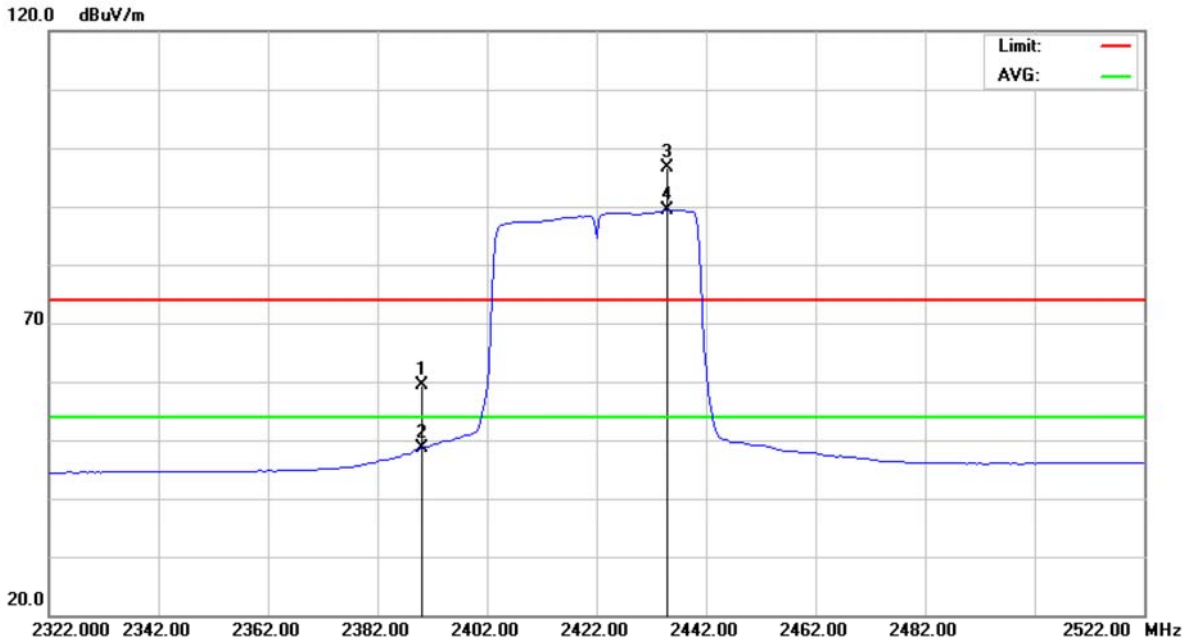


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4844.005	42.45	5.74	48.19	74.00	-25.81	peak	
2		4844.005	31.46	5.74	37.20	54.00	-16.80	AVG	
3		7265.870	42.65	12.40	55.05	74.00	-18.95	peak	
4	*	7265.870	30.63	12.40	43.03	54.00	-10.97	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz		

**Polarization: Horizontal**

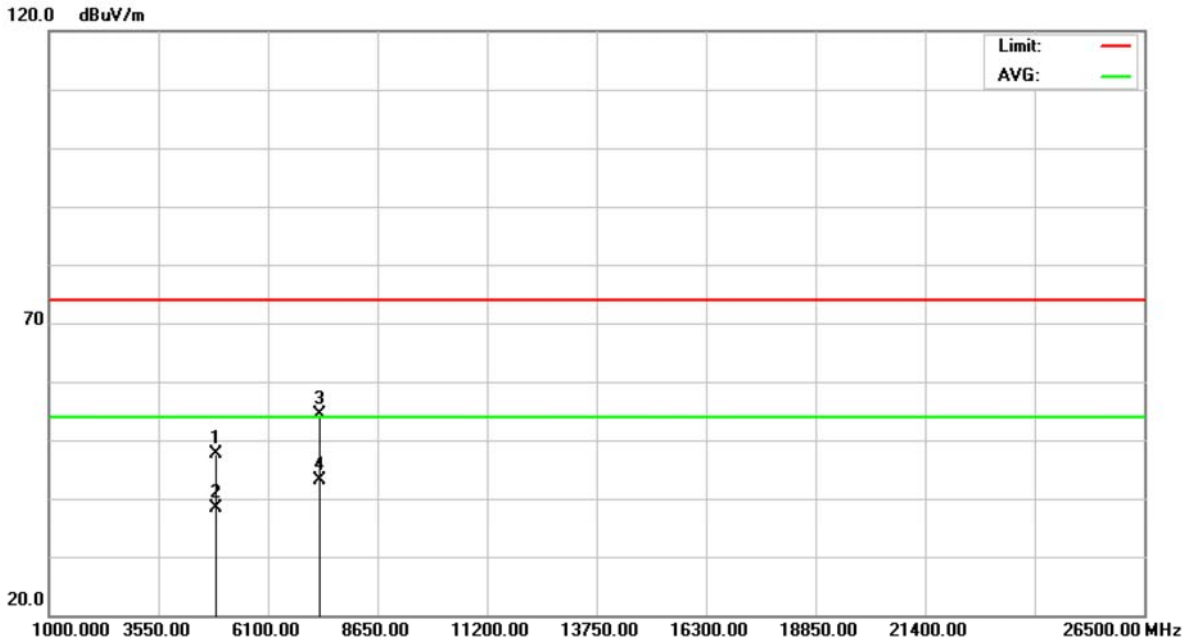


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	27.78	31.67	59.45	74.00	-14.55	peak	
2		2390.000	17.00	31.67	48.67	54.00	-5.33	AVG	
3	X	2435.000	64.82	31.87	96.69	74.00	22.69	peak	
4	*	2435.000	57.48	31.87	89.35	54.00	35.35	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz		

**Polarization: Horizontal**

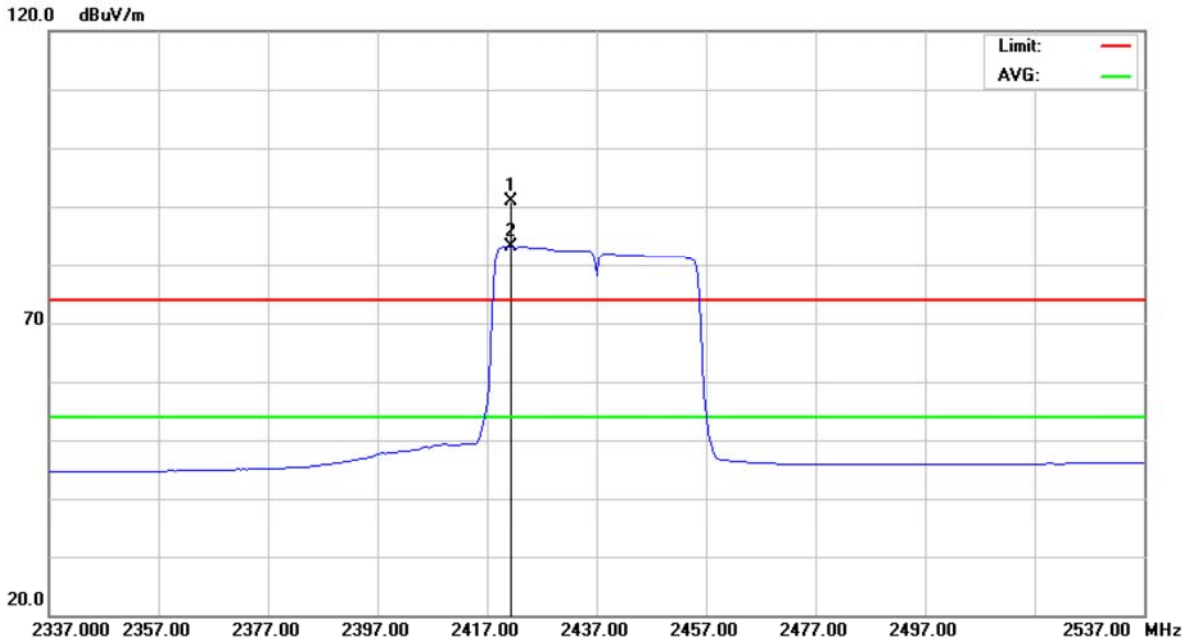


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4843.975	41.88	5.74	47.62	74.00	-26.38	peak	
2		4843.975	32.73	5.74	38.47	54.00	-15.53	AVG	
3		7266.050	41.98	12.40	54.38	74.00	-19.62	peak	
4	*	7266.050	30.65	12.40	43.05	54.00	-10.95	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2437 MHz		

**Polarization: Vertical**

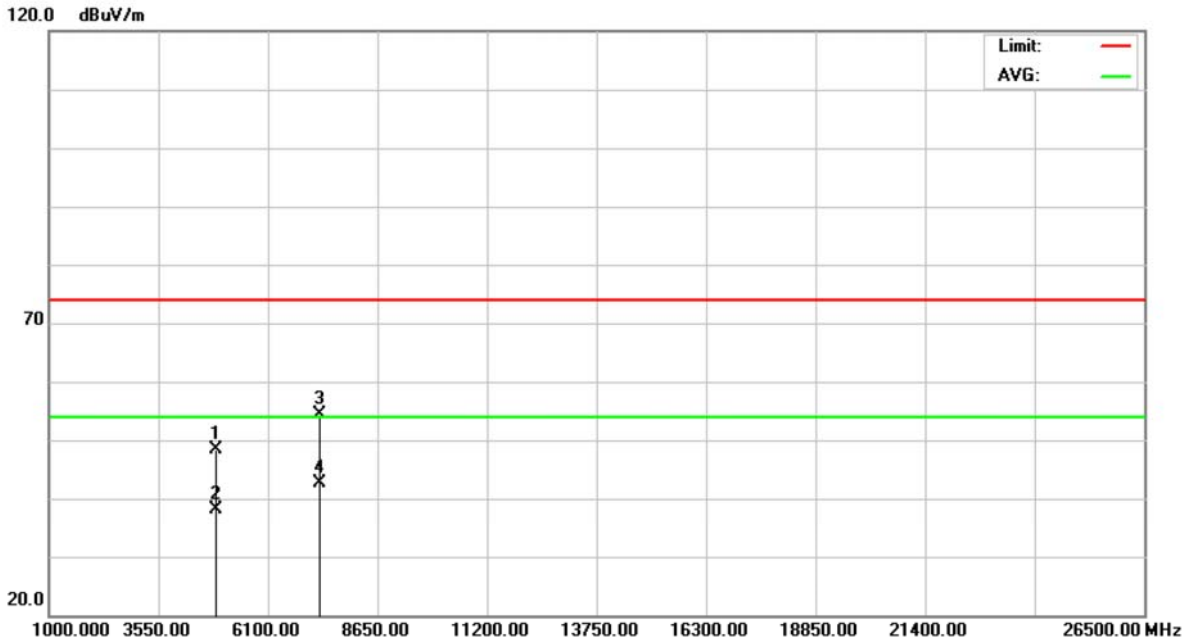


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2421.500	59.04	31.81	90.85	74.00	16.85	peak	
2	*	2421.500	51.24	31.81	83.05	54.00	29.05	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2437 MHz		

**Polarization: Vertical**

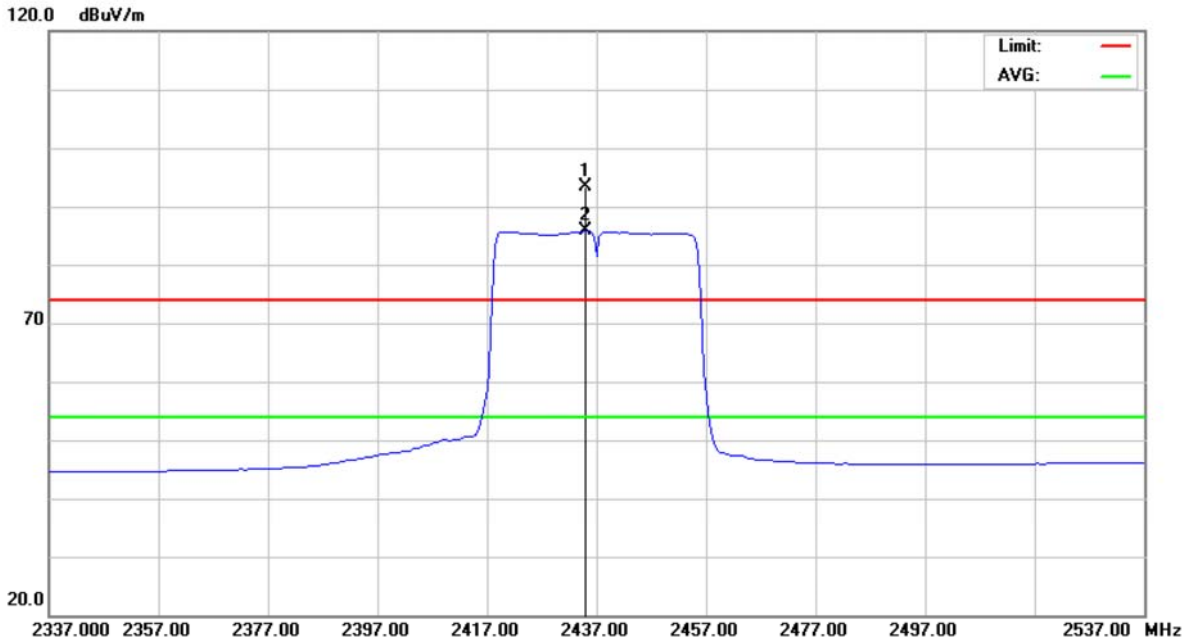


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.965	42.63	5.78	48.41	74.00	-25.59	peak	
2		4873.965	32.31	5.78	38.09	54.00	-15.91	AVG	
3		7311.055	41.92	12.57	54.49	74.00	-19.51	peak	
4	*	7311.055	30.15	12.57	42.72	54.00	-11.28	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2437 MHz		

**Polarization: Horizontal**



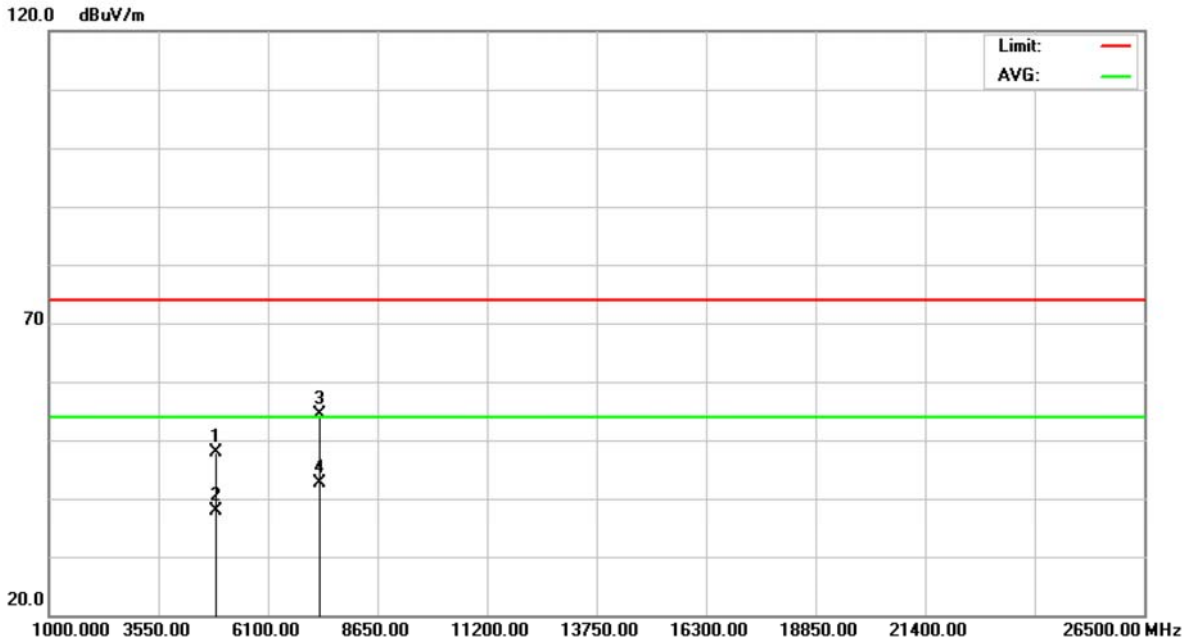
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2435.000	61.50	31.87	93.37	74.00	19.37	peak	
2	*	2435.000	53.89	31.87	85.76	54.00	31.76	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2437 MHz		

**Polarization: Horizontal**

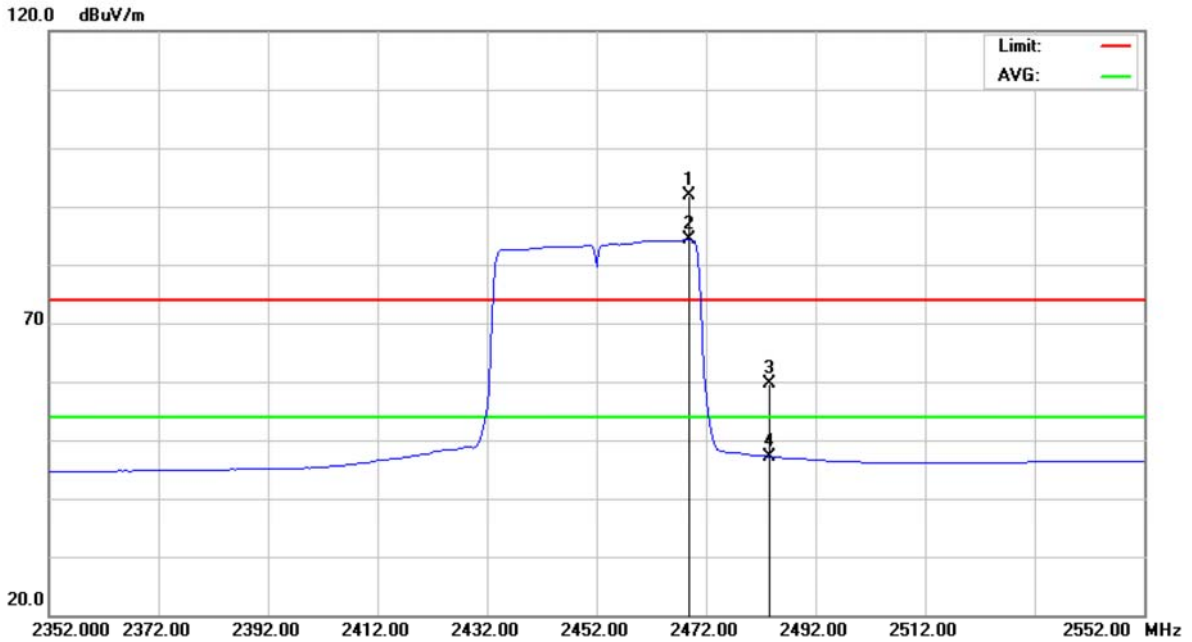


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.005	42.07	5.78	47.85	74.00	-26.15	peak	
2		4874.005	32.08	5.78	37.86	54.00	-16.14	AVG	
3		7311.025	41.82	12.57	54.39	74.00	-19.61	peak	
4	*	7311.025	30.15	12.57	42.72	54.00	-11.28	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2452 MHz		

**Polarization: Vertical**

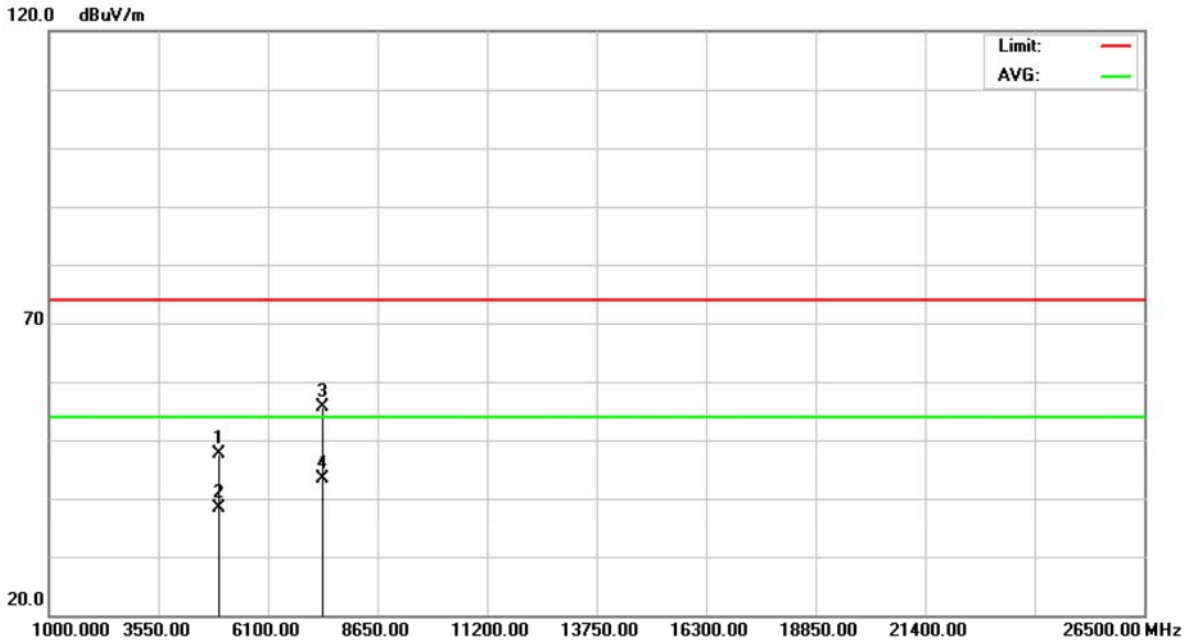


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2469.000	59.82	32.02	91.84	74.00	17.84	peak	
2	*	2469.000	52.26	32.02	84.28	54.00	30.28	AVG	
3		2483.500	27.47	32.09	59.56	74.00	-14.44	peak	
4		2483.500	15.09	32.09	47.18	54.00	-6.82	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2452 MHz		

**Polarization: Vertical**

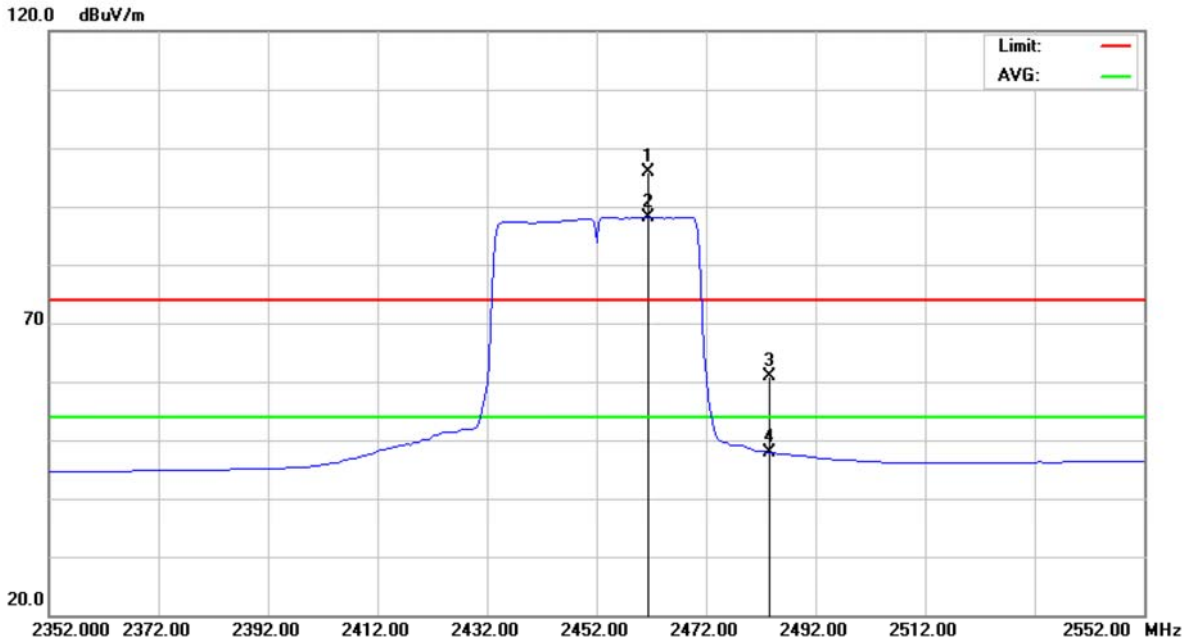


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4904.030	41.79	5.82	47.61	74.00	-26.39	peak	
2		4904.030	32.50	5.82	38.32	54.00	-15.68	AVG	
3		7356.425	42.91	12.74	55.65	74.00	-18.35	peak	
4	*	7356.425	30.59	12.74	43.33	54.00	-10.67	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2452 MHz		

**Polarization: Horizontal**

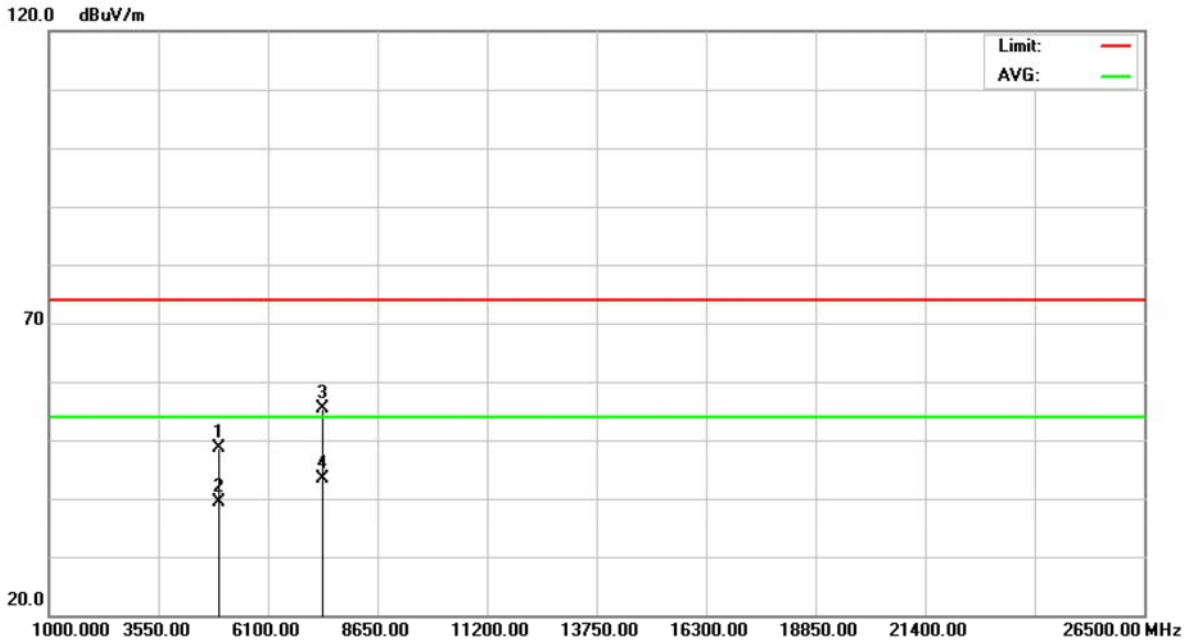


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.500	63.99	31.99	95.98	74.00	21.98	peak	
2	*	2461.500	56.17	31.99	88.16	54.00	34.16	AVG	
3		2483.500	28.74	32.09	60.83	74.00	-13.17	peak	
4		2483.500	15.80	32.09	47.89	54.00	-6.11	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2452 MHz		

**Polarization: Horizontal**



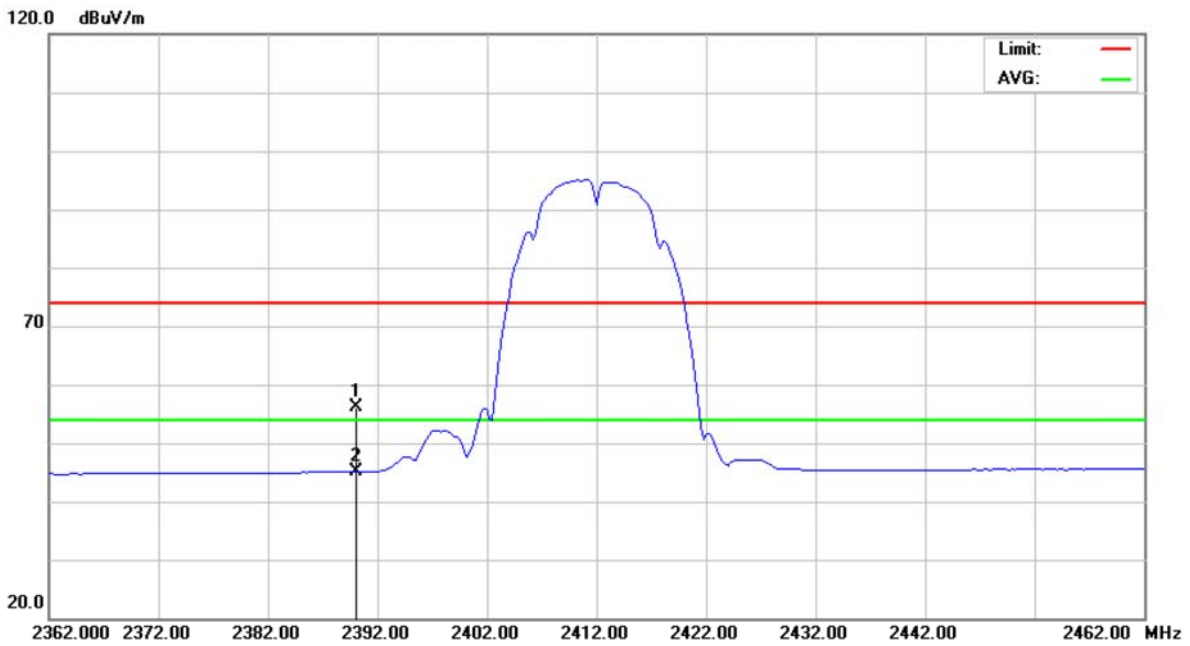
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4904.030	42.79	5.82	48.61	74.00	-25.39	peak	
2		4904.030	33.49	5.82	39.31	54.00	-14.69	AVG	
3		7355.935	42.74	12.73	55.47	74.00	-18.53	peak	
4	*	7355.935	30.67	12.73	43.40	54.00	-10.60	AVG	



**9.9 TEST RESULTS (RESTRICTED BANDS)**

EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Vertical**

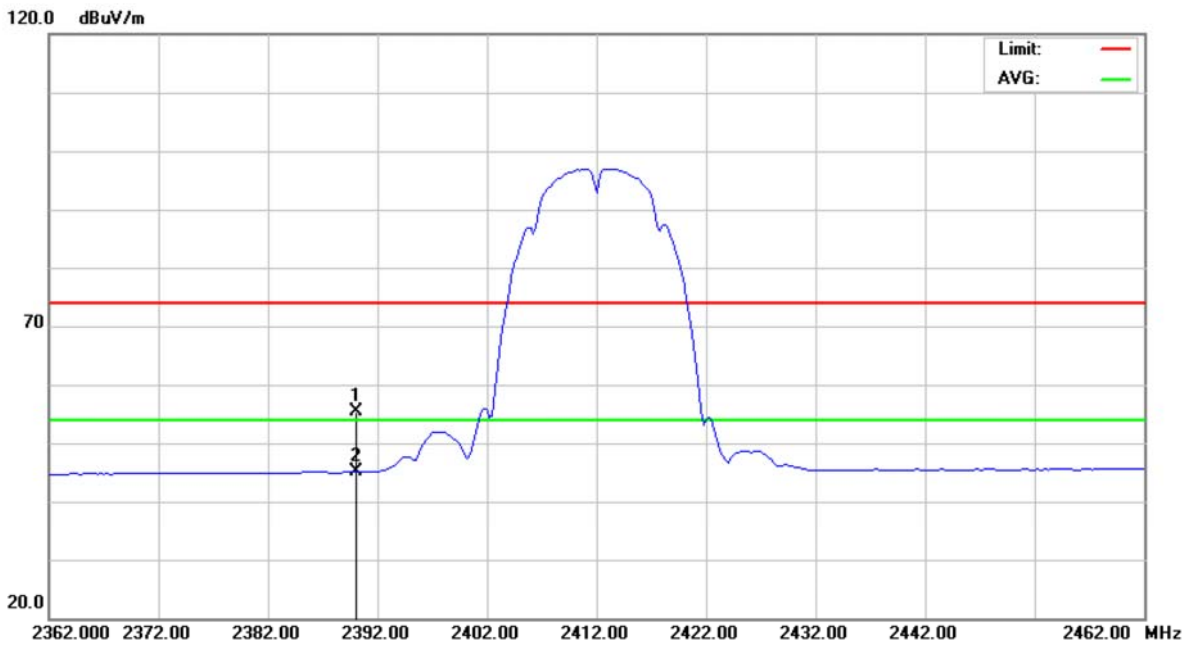


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	24.40	31.67	56.07	74.00	-17.93	peak	
2	*	2390.000	13.40	31.67	45.07	54.00	-8.93	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Horizontal**

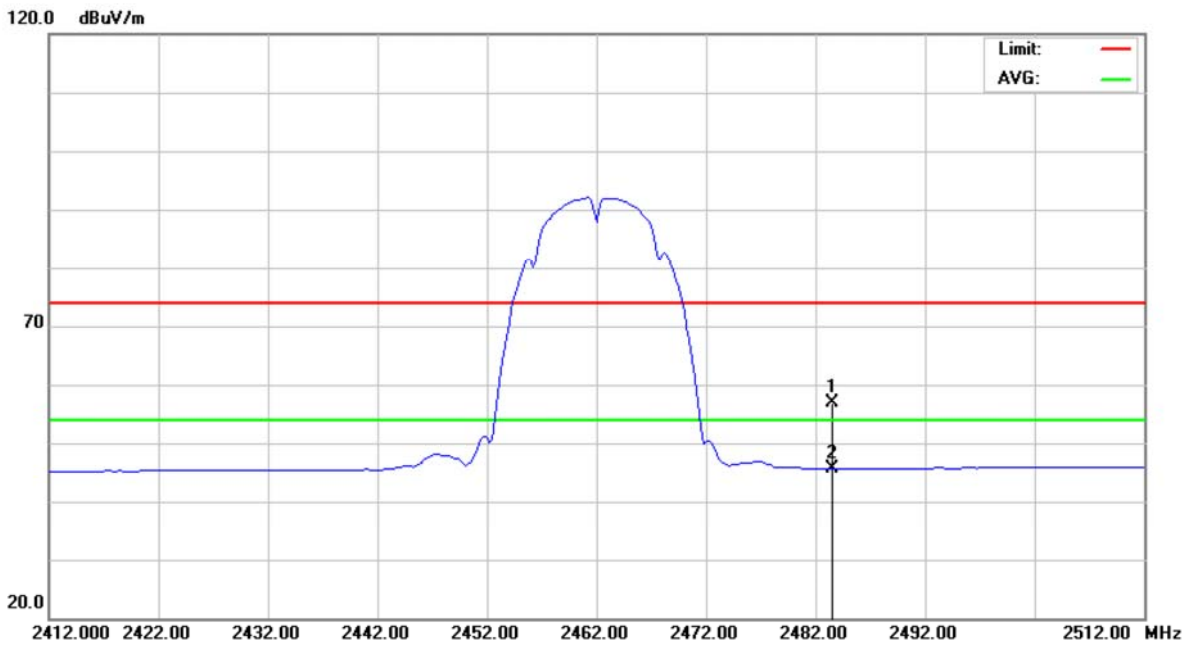


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	23.74	31.67	55.41	74.00	-18.59	peak	
2	*	2390.000	13.37	31.67	45.04	54.00	-8.96	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Vertical**



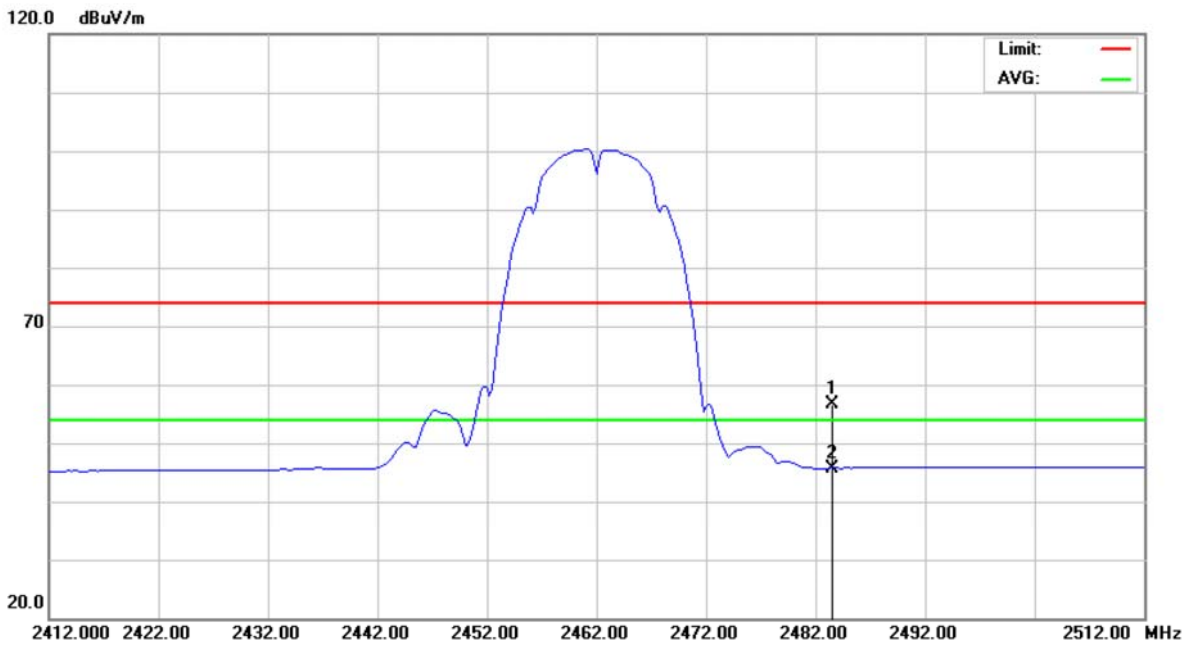
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	24.70	32.09	56.79	74.00	-17.21	peak	
2	*	2483.500	13.55	32.09	45.64	54.00	-8.36	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Horizontal**

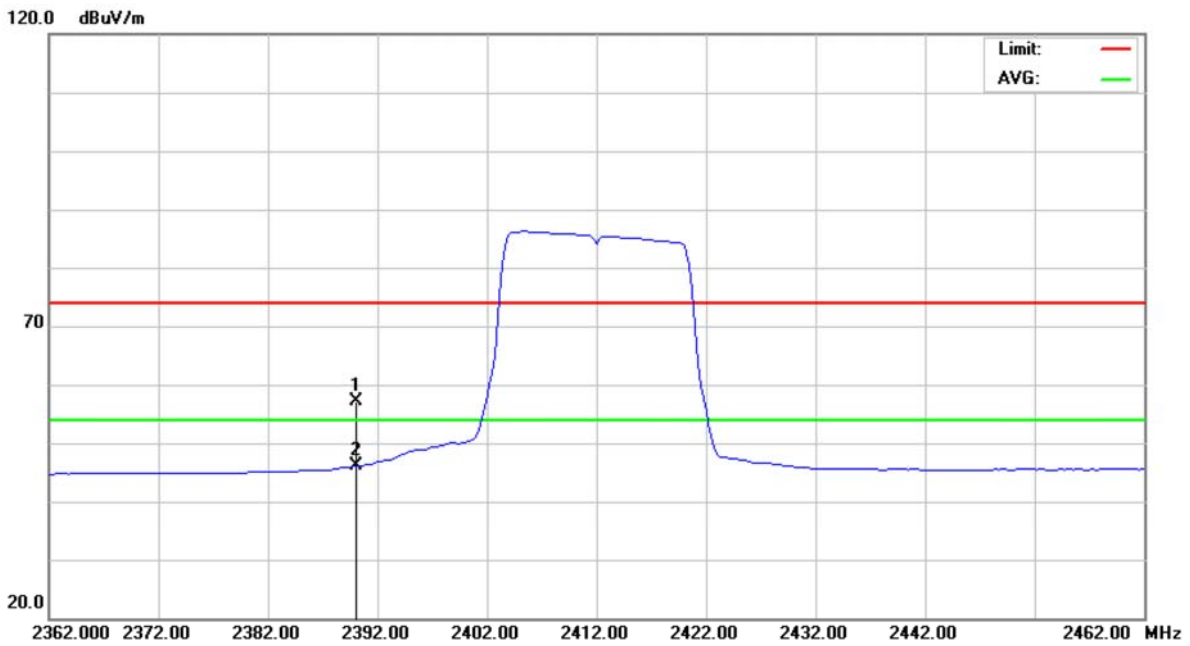


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	24.44	32.09	56.53	74.00	-17.47	peak	
2	*	2483.500	13.66	32.09	45.75	54.00	-8.25	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Vertical**

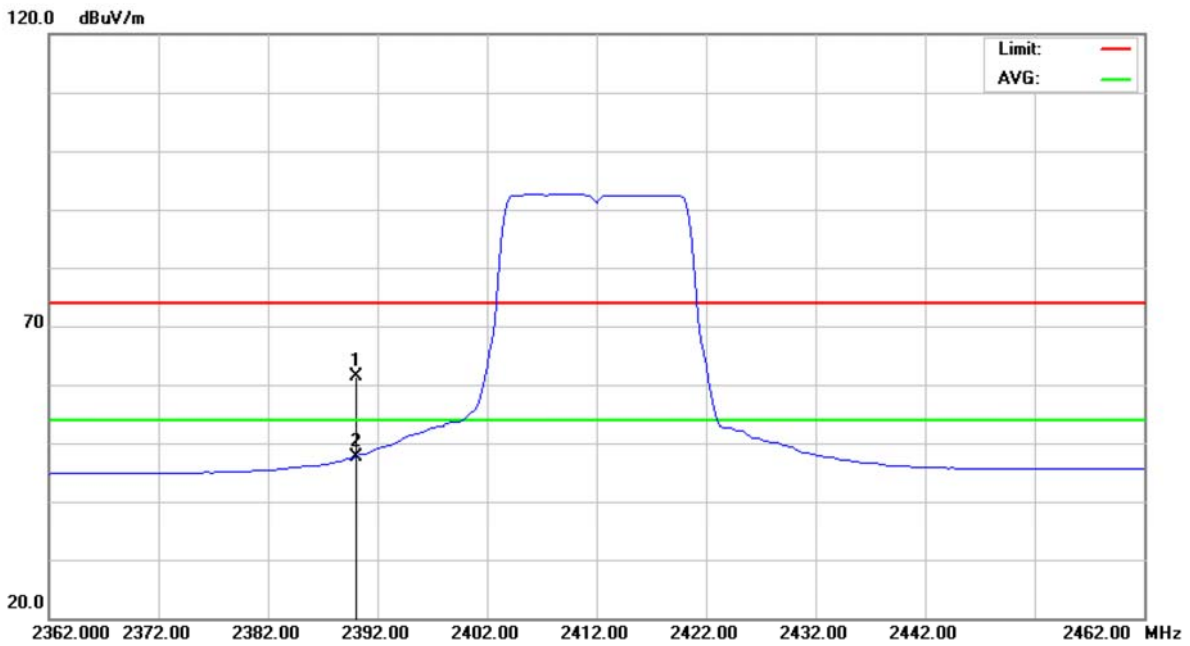


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	25.44	31.67	57.11	74.00	-16.89	peak	
2	*	2390.000	14.39	31.67	46.06	54.00	-7.94	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Horizontal**

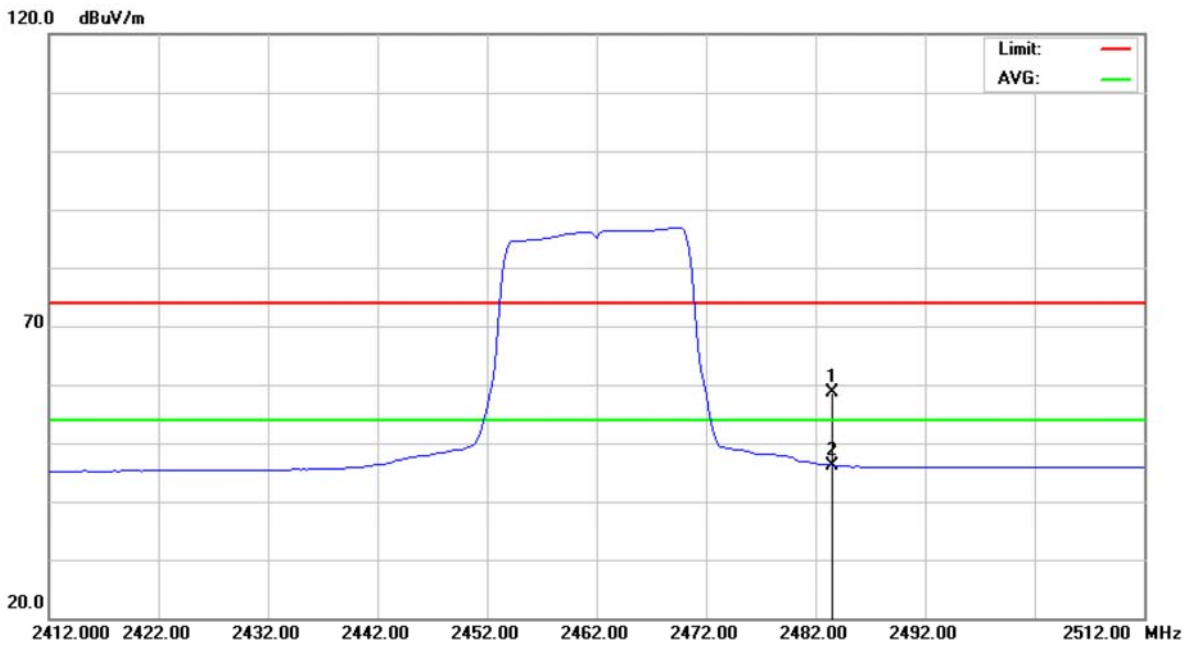


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	29.74	31.67	61.41	74.00	-12.59	peak	
2	*	2390.000	15.99	31.67	47.66	54.00	-6.34	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Vertical**

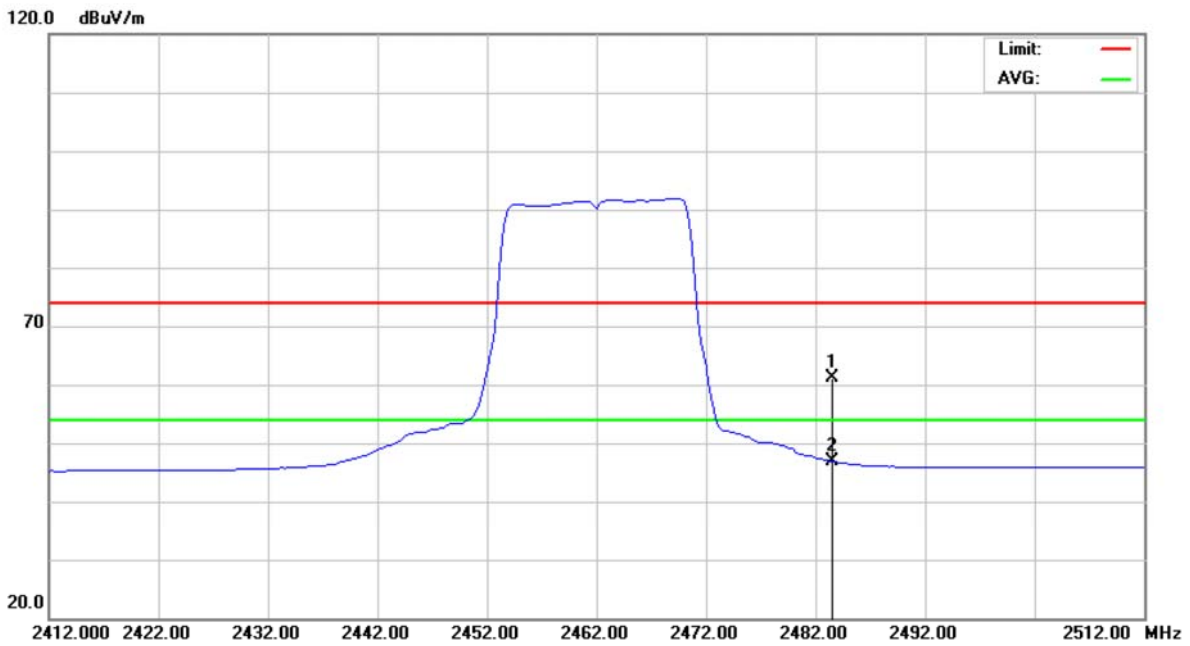


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	26.57	32.09	58.66	74.00	-15.34	peak	
2	*	2483.500	14.16	32.09	46.25	54.00	-7.75	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Horizontal**

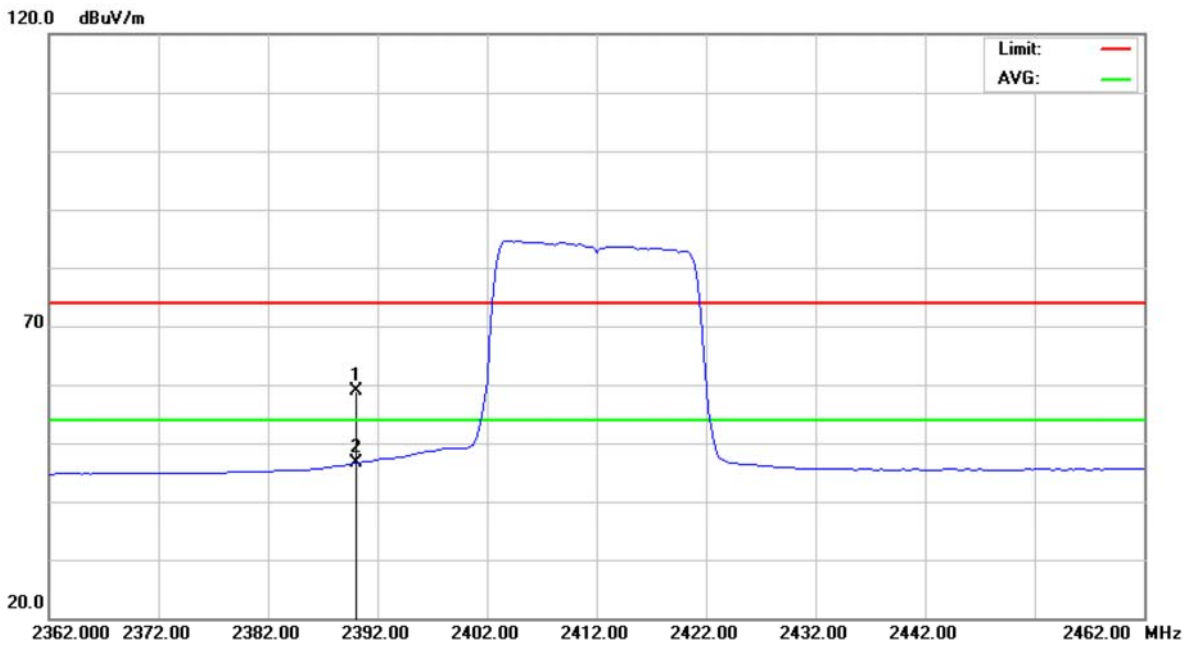


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	28.95	32.09	61.04	74.00	-12.96	peak	
2	*	2483.500	14.81	32.09	46.90	54.00	-7.10	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Vertical**

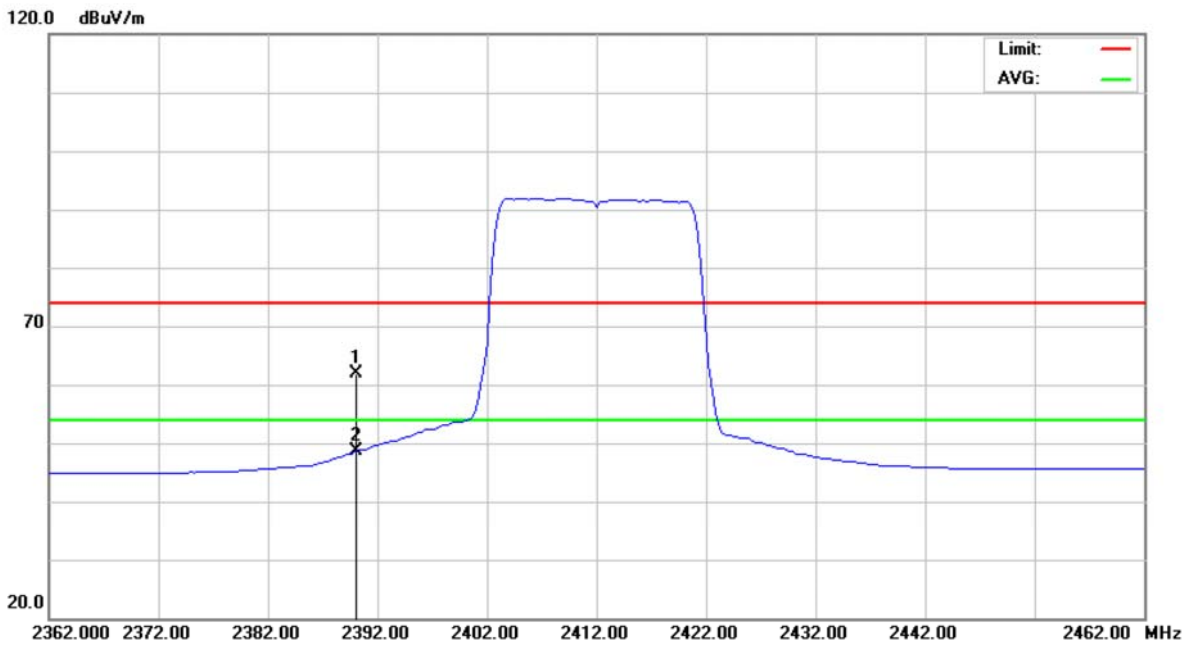


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	27.31	31.67	58.98	74.00	-15.02	peak	
2	*	2390.000	14.97	31.67	46.64	54.00	-7.36	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Horizontal**

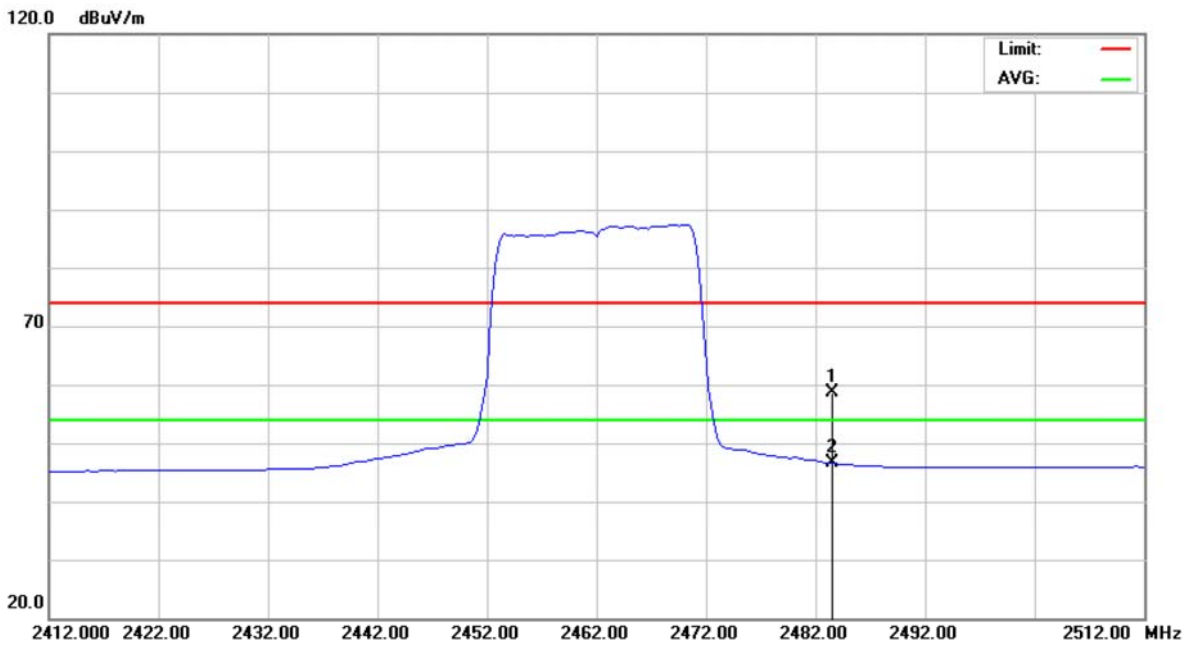


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	30.30	31.67	61.97	74.00	-12.03	peak	
2	*	2390.000	17.05	31.67	48.72	54.00	-5.28	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Vertical**



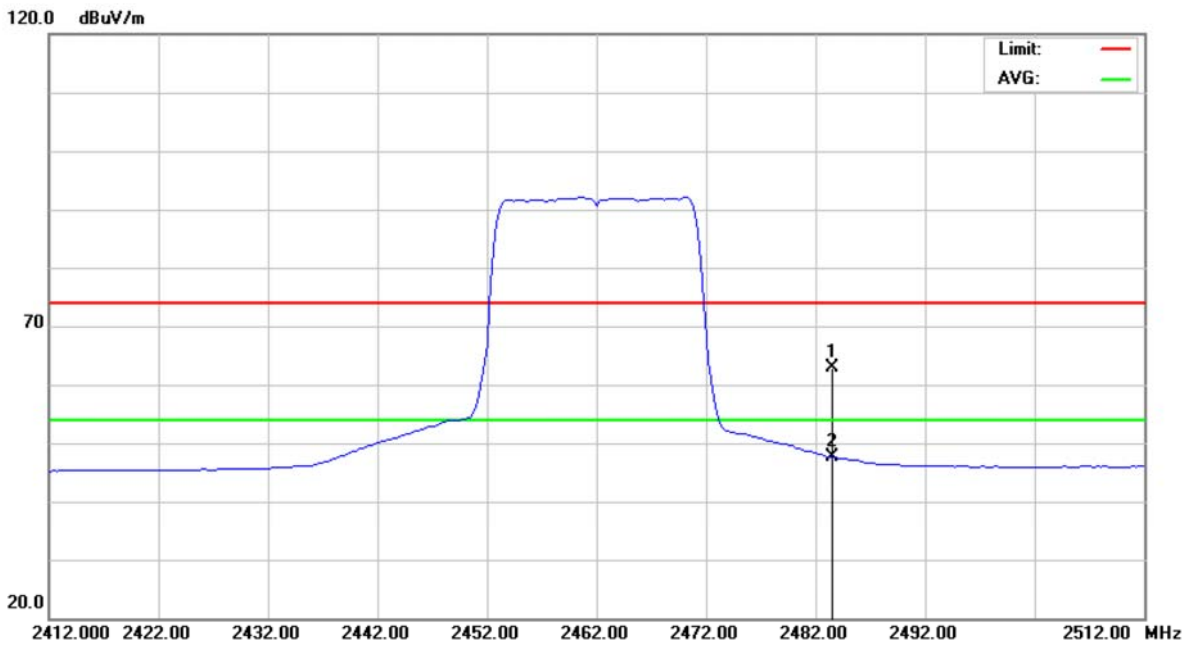
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	26.47	32.09	58.56	74.00	-15.44	peak	
2	*	2483.500	14.44	32.09	46.53	54.00	-7.47	AVG	





EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Horizontal**

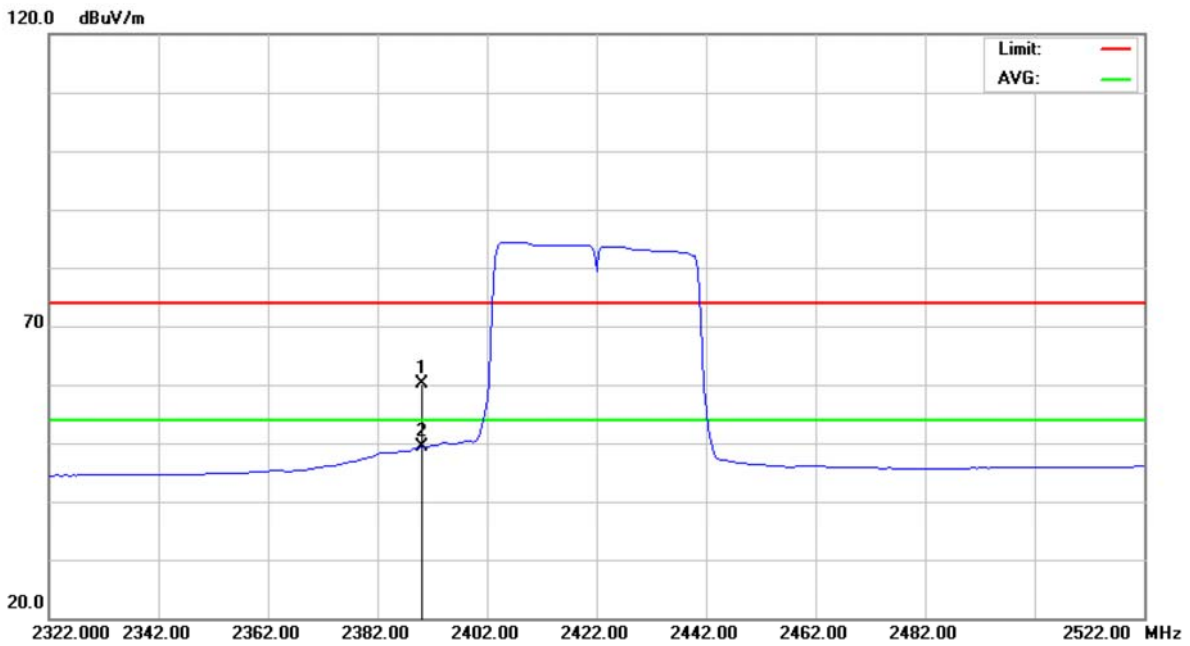


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	30.88	32.09	62.97	74.00	-11.03	peak	
2	*	2483.500	15.50	32.09	47.59	54.00	-6.41	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Vertical**

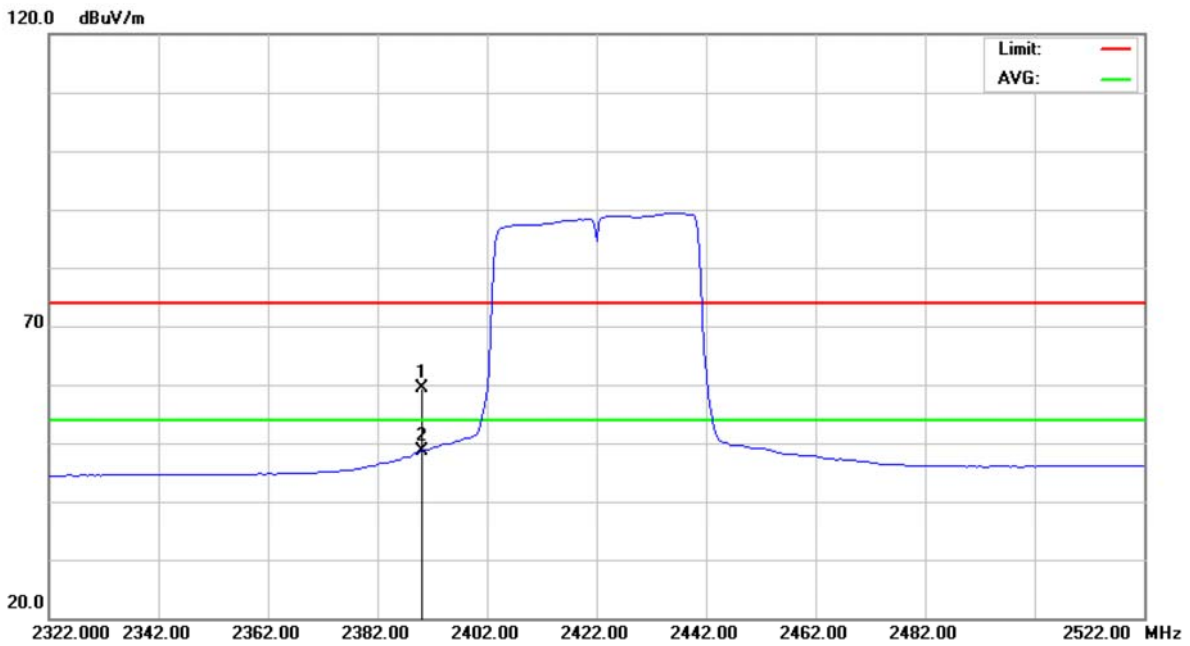


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	28.40	31.67	60.07	74.00	-13.93	peak	
2	*	2390.000	17.63	31.67	49.30	54.00	-4.70	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 2310-2390 MHz.		

**Polarization: Horizontal**

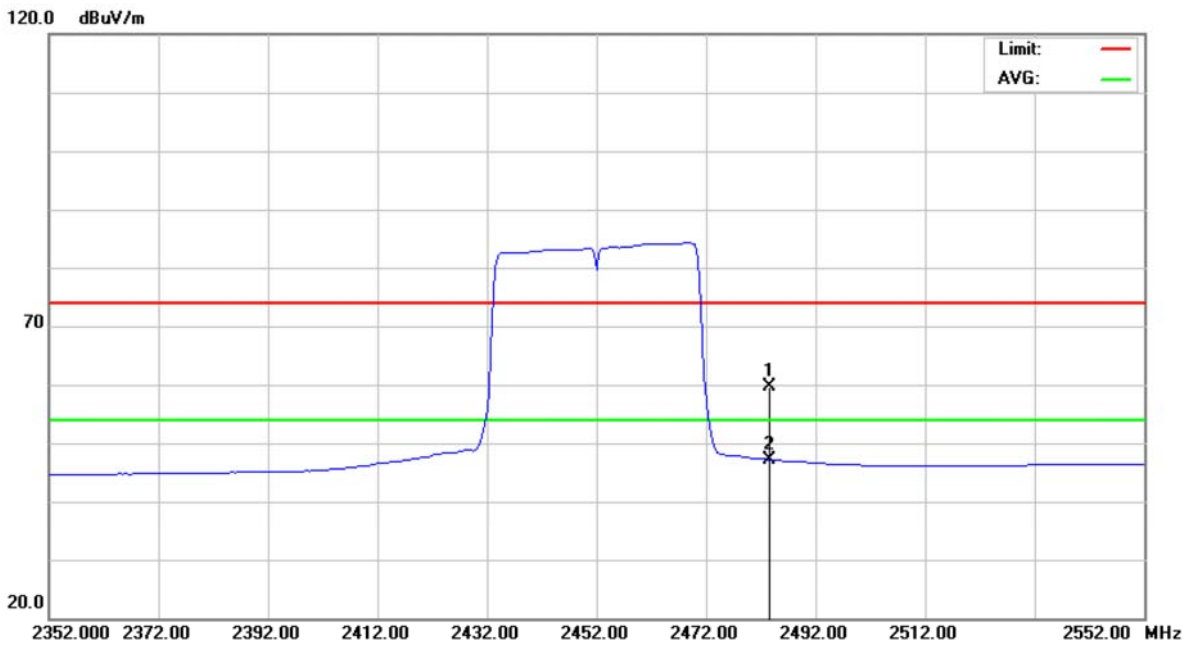


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	27.78	31.67	59.45	74.00	-14.55	peak	
2	*	2390.000	17.00	31.67	48.67	54.00	-5.33	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Vertical**

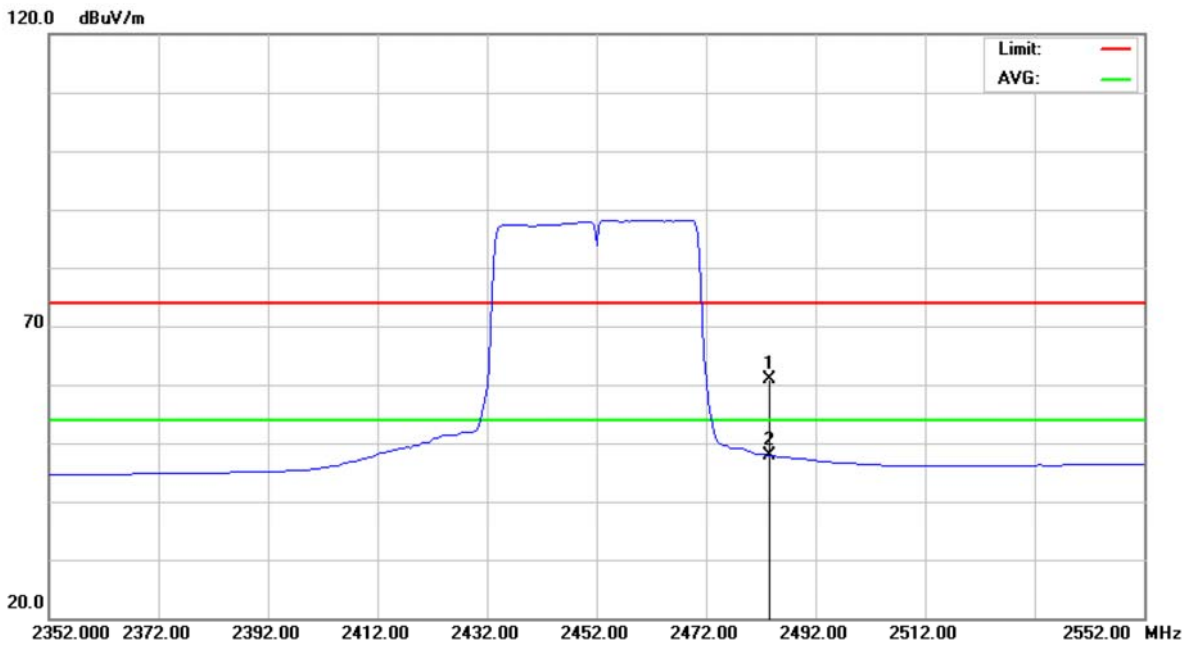


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	27.47	32.09	59.56	74.00	-14.44	peak	
2	*	2483.500	15.09	32.09	47.18	54.00	-6.82	AVG	



EUT	Mobile Computer	Model Name	8630
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 2483.5-2500 MHz.		

**Polarization: Horizontal**



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	28.74	32.09	60.83	74.00	-13.17	peak	
2	*	2483.500	15.80	32.09	47.89	54.00	-6.11	AVG	



**10 POWER SPECTRAL DENSITY**

**10.1 LIMIT**

Test Item	Frequency Range (MHz)	Limit
Power Spectral Density	2400-2483.5	8 dBm (in any 3 kHz)

**10.2 MEASUREMENT INSTRUMENTS LIST**

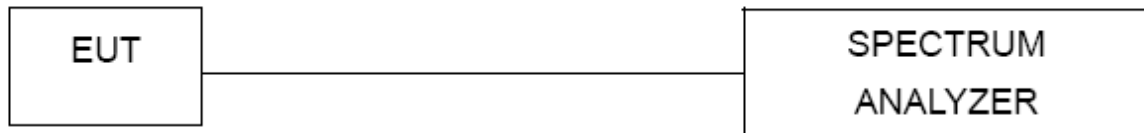
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-30	100854	Sep. 08, 2014

NOTE: **N/A**: denotes No Model Name, No Serial No. or No Calibration specified.

**10.3 TEST PROCEDURES**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW=3 kHz, VBW=30 kHz, Sweep time = 500s.

**10.4 TEST SETUP LAYOUT**



**10.5 DEVIATION FROM TEST STANDARD**

No deviation

**10.6 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

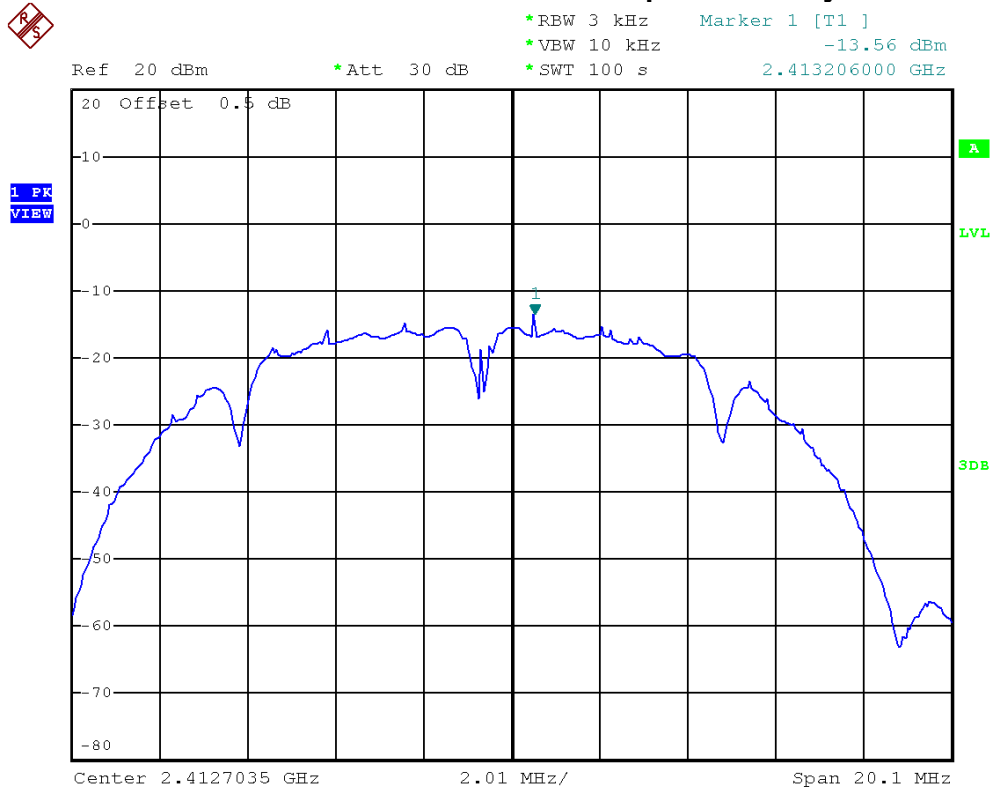


**10.7 TEST RESULTS**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-13.56	8	PASS
2437 MHz	-14.57	8	PASS
2462 MHz	-14.99	8	PASS

**IEEE 802.11b/2412 MHz/Power Sepctral Density**





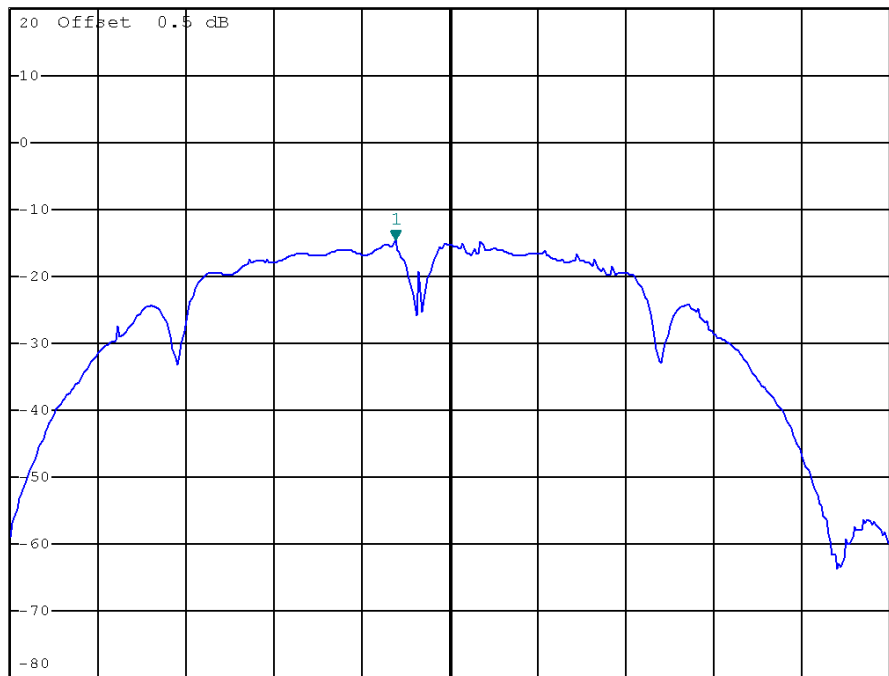
### IEEE 802.11b/2437 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -14.57 dBm  
\*Att 30 dB    \*SWT 100 s    2.436443750 GHz

Ref 20 dBm

1 PK  
VIEW



Center 2.4377 GHz    2.01 MHz/    Span 20.1 MHz

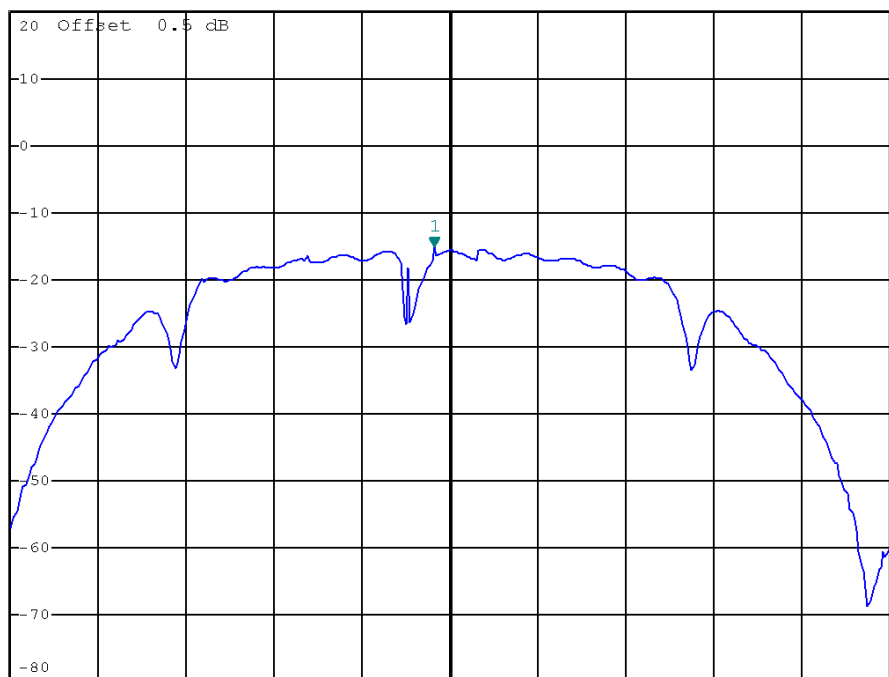
### IEEE 802.11b/2462 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -14.99 dBm  
\*Att 30 dB    \*SWT 100 s    2.462350000 GHz

Ref 20 dBm

1 PK  
VIEW



Center 2.4627 GHz    2 MHz/    Span 20 MHz

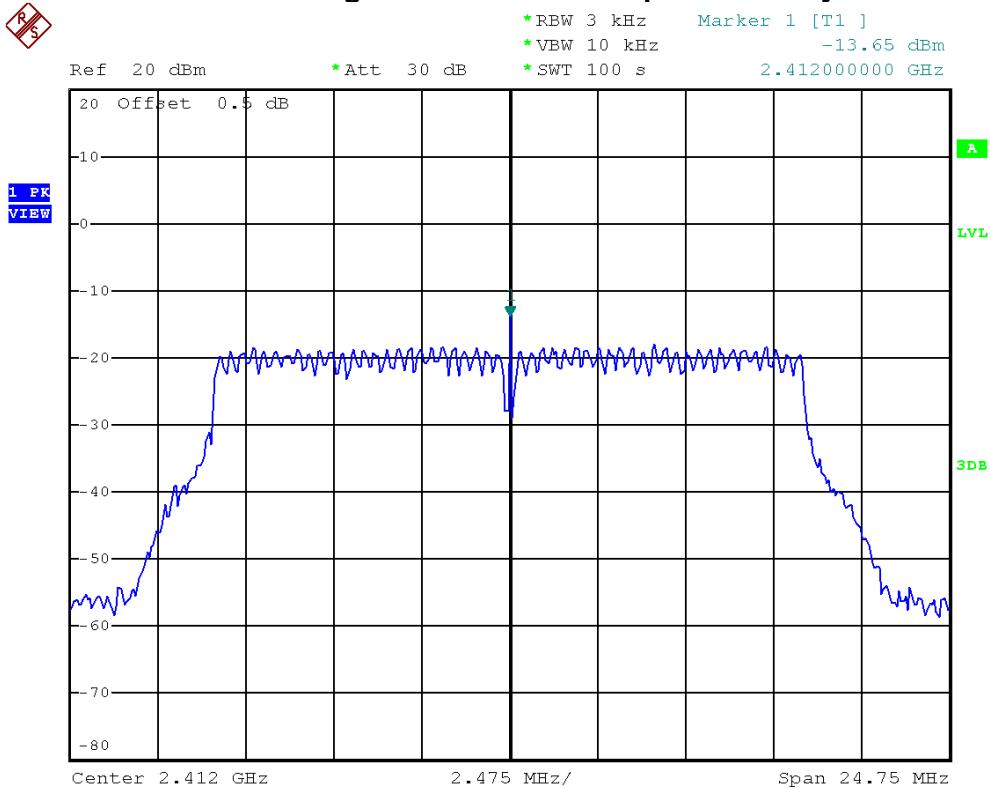




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-13.65	8	PASS
2437 MHz	-12.80	8	PASS
2462 MHz	-13.46	8	PASS

**IEEE 802.11g/2412 MHz/Power Sepctral Density**





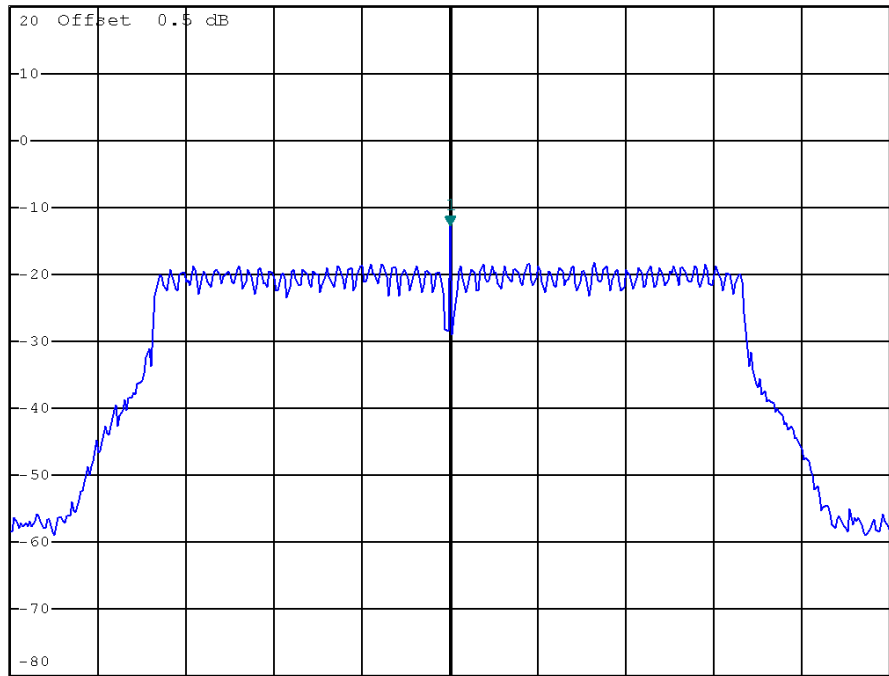
### IEEE 802.11g/2437 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -12.80 dBm  
\*SWT 100 s    2.437000000 GHz

Ref 20 dBm    \*Att 30 dB

1 PK  
VIEW



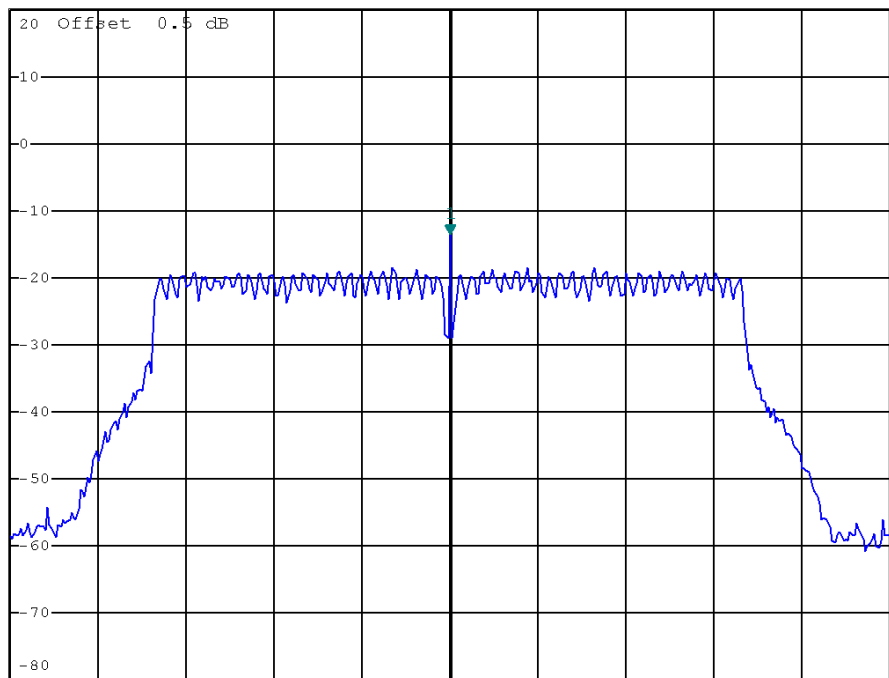
### IEEE 802.11g/2462 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -13.46 dBm  
\*SWT 100 s    2.462000000 GHz

Ref 20 dBm    \*Att 30 dB

1 PK  
VIEW

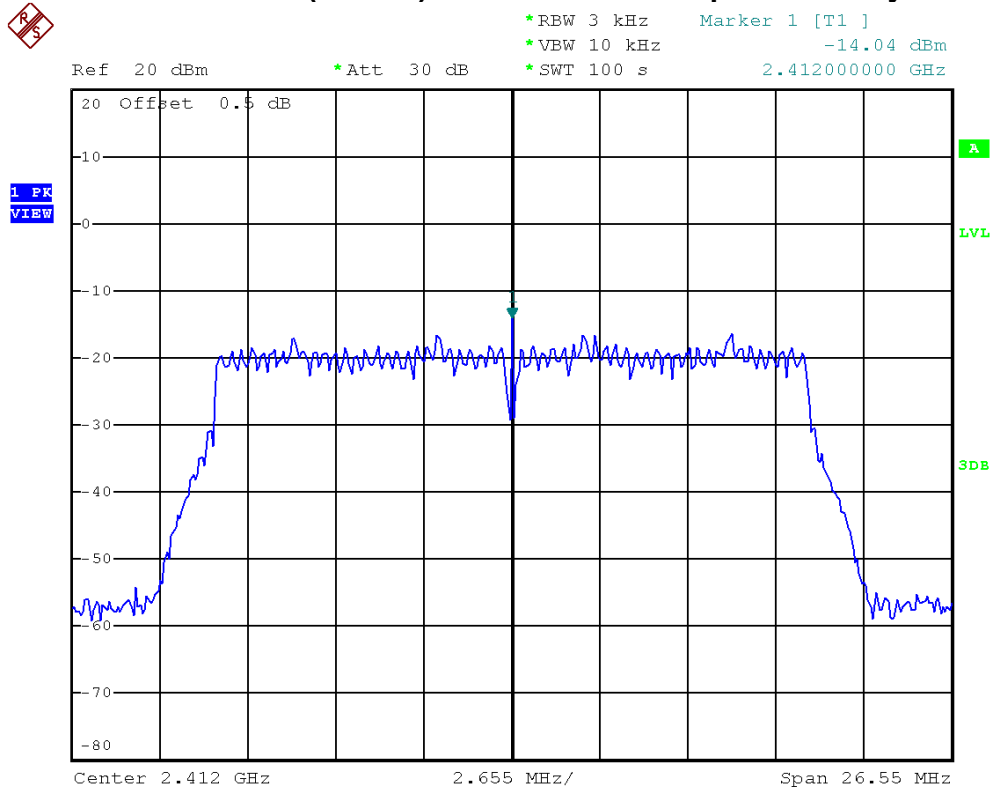




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-14.04	8	PASS
2437 MHz	-15.18	8	PASS
2462 MHz	-13.40	8	PASS

**IEEE 802.11n (20 MHz)/2412 MHz/Power Sepctral Density**





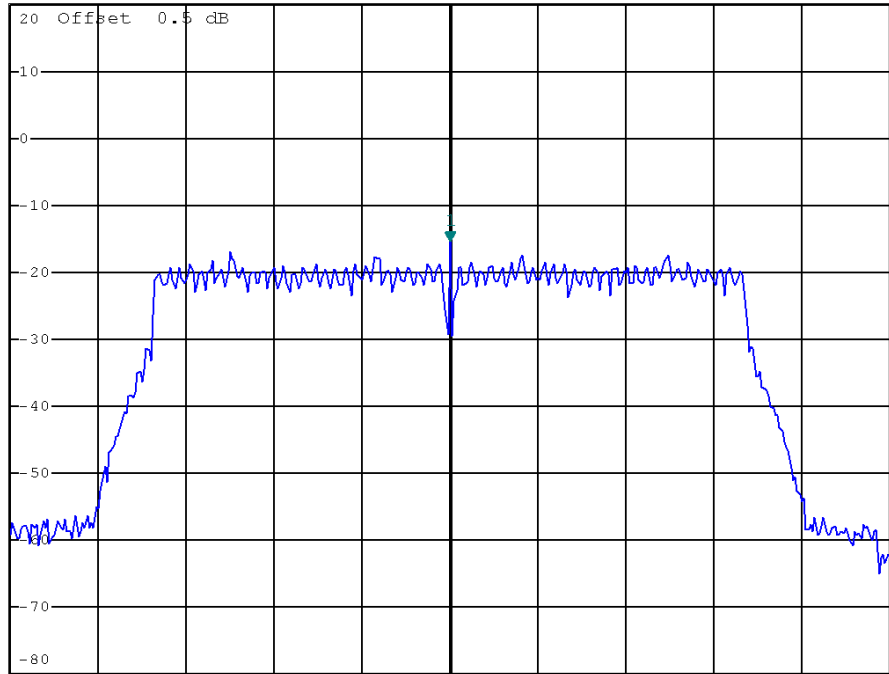
### IEEE 802.11n (20 MHz)/2437 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -15.18 dBm  
\*Att 30 dB    \*SWT 100 s    2.437000000 GHz

Ref 20 dBm

1 PK  
VIEW



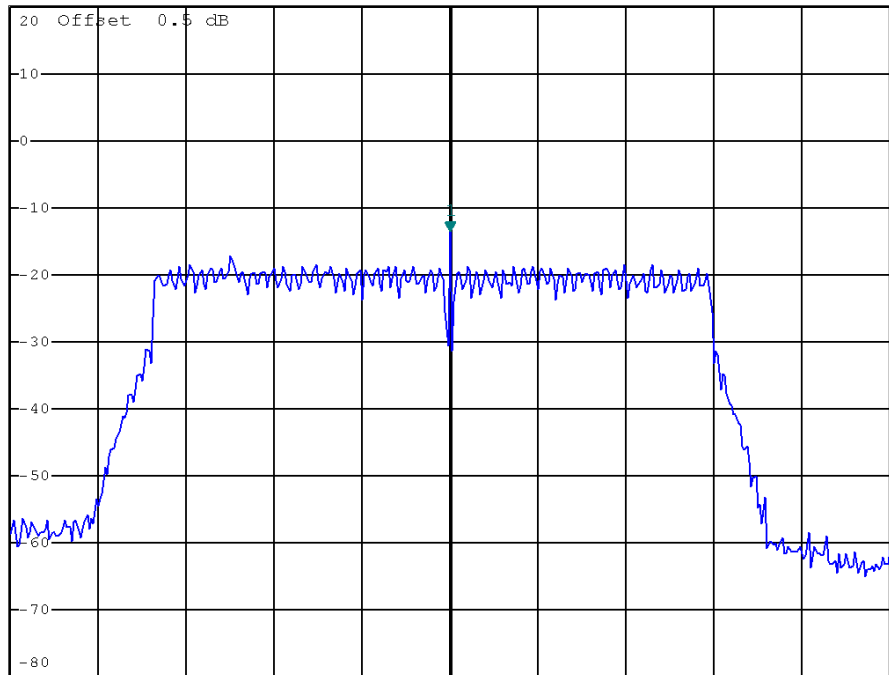
### IEEE 802.11n (20 MHz)/2462 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -13.40 dBm  
\*Att 30 dB    \*SWT 100 s    2.462000000 GHz

Ref 20 dBm

1 PK  
VIEW

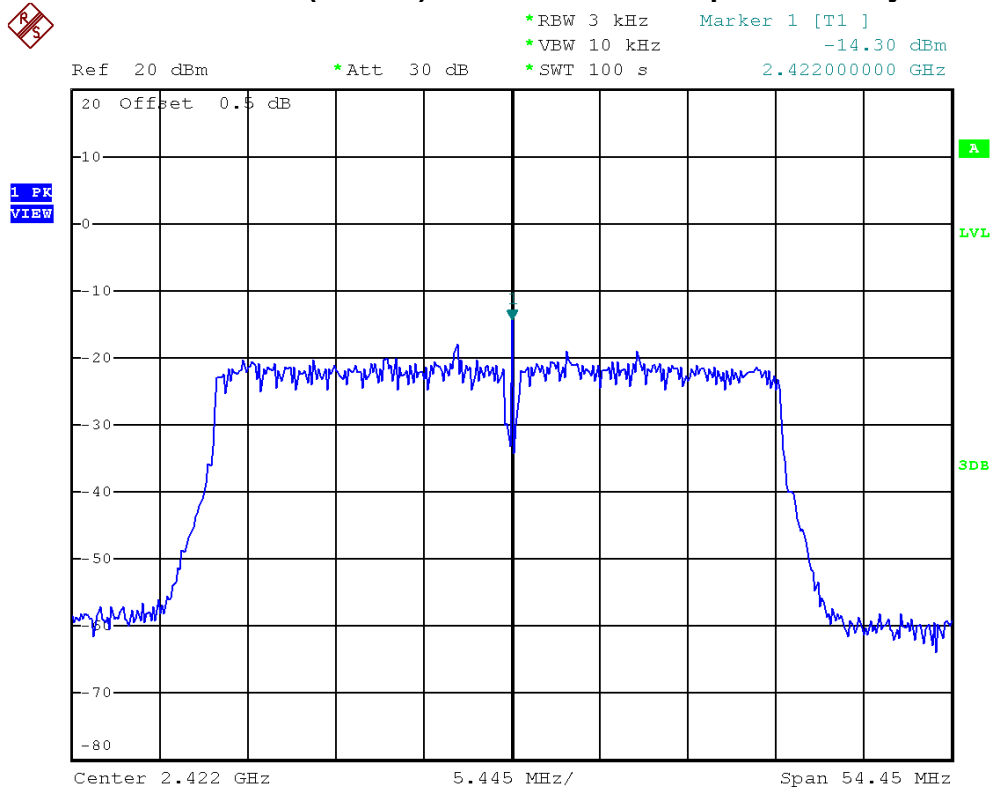




EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz, 2437 MHz, 2452 MHz		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2422 MHz	-14.30	8	PASS
2437 MHz	-13.60	8	PASS
2452 MHz	-14.87	8	PASS

**IEEE 802.11n (40 MHz)/2422 MHz/Power Sepctral Density**

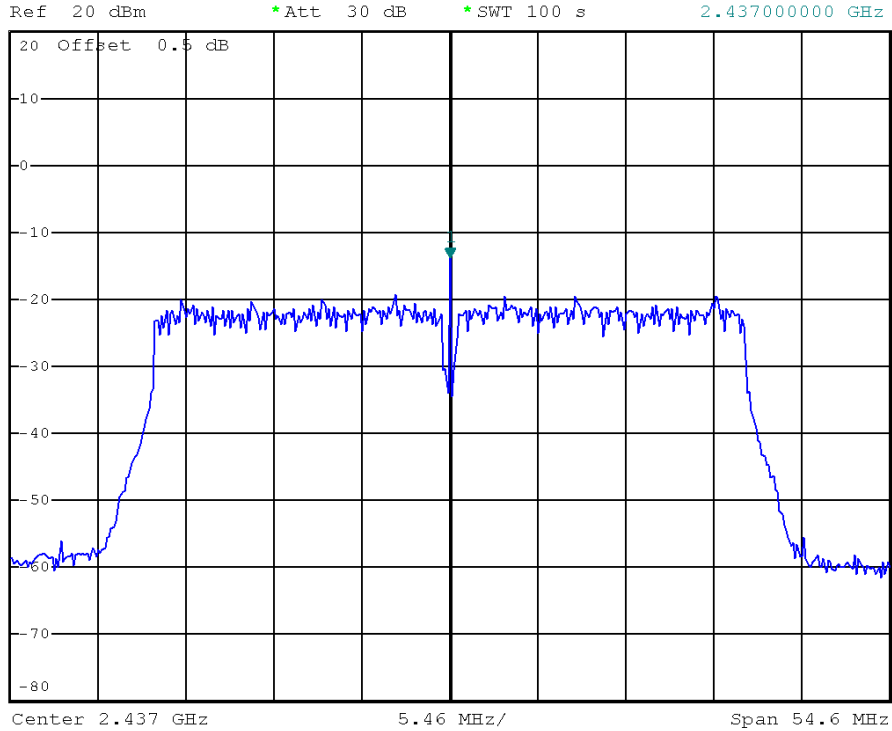




### IEEE 802.11n (40 MHz)/2437 MHz/Power Sepctral Density



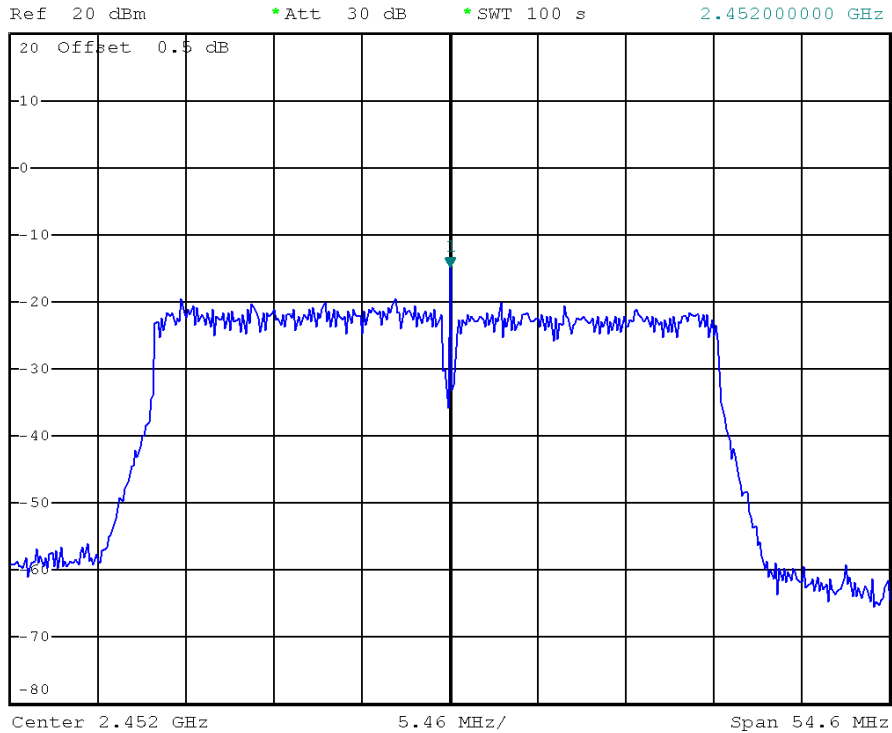
\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -13.60 dBm  
\*SWT 100 s    2.437000000 GHz



### IEEE 802.11n (40 MHz)/2452 MHz/Power Sepctral Density



\*RBW 3 kHz    Marker 1 [T1 ]  
\*VBW 10 kHz    -14.87 dBm  
\*SWT 100 s    2.452000000 GHz





**11 RF EXPOSURE COMPLIANCE**

**11.1 LIMIT**

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

**(A) Limits for Occupational / Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

**(B) Limits for General Population / Uncontrolled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

NOTE: f = frequency in MHz ; \*Plane-wave equivalent power density.

**11.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Feb,20,2013
2	Power Meter Sensor	Anritsu	MA2411B	1126001	Feb,20,2013

NOTE: **N/A**: denotes No Model Name, No Serial No. or No Calibration specified.

**11.3 MPE CALCULATION METHOD**

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

- E** = Electric field (V/m)
- P** = Peak RF output power (W)
- G** = EUT Antenna numeric gain (numeric)
- d** = Separation distance between radiator and human body (m)

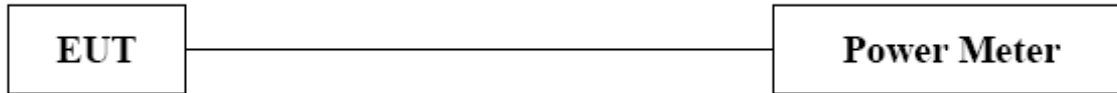
The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained



#### 11.4 TEST SETUP LAYOUT



#### 11.5 DEVIATION FROM TEST STANDARD

No deviation

#### 11.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.





**11.7 TEST RESULTS**

EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11b/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Result
2412 MHz	-0.11	0.9750	17.0000	50.1187	0.009726	1	PASS
2437 MHz	-0.11	0.9750	16.7600	47.4242	0.009203	1	PASS
2462 MHz	-0.11	0.9750	16.5600	45.2898	0.008789	1	PASS



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11g/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Result
2412 MHz	-0.11	0.9750	19.9700	99.3116	0.019273	1	PASS
2437 MHz	-0.11	0.9750	20.0100	100.2305	0.019451	1	PASS
2462 MHz	-0.11	0.9750	20.1300	103.0386	0.019996	1	PASS



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/2412 MHz, 2437 MHz, 2462 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Result
2412 MHz	-0.11	0.9750	19.5600	90.3649	0.017537	1	PASS
2437 MHz	-0.11	0.9750	19.3600	86.2979	0.016748	1	PASS
2462 MHz	-0.11	0.9750	19.6700	92.6830	0.017987	1	PASS



EUT	Mobile Computer	Model Name	8630
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/2422 MHz, 2437 MHz, 2452 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Result
2412 MHz	-0.11	0.9750	19.4300	87.7001	0.017020	1	PASS
2437 MHz	-0.11	0.9750	19.2200	83.5603	0.016216	1	PASS
2462 MHz	-0.11	0.9750	19.5400	89.9498	0.017456	1	PASS