



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

SHEM-TRF-001 Rev. 02 Sep01, 2023

Report No.: SHCR250300053503

Page: 1 of 57

# TEST REPORT

**Application No.:** SHCR2503000535ME  
**FCC ID:** OU5MULW01  
**Applicant:** GE Medical Systems Information Technologies, Inc.  
**Address of Applicant:** 3114 N Grandview Blvd Waukesha, WI 53188, USA  
**Manufacturer:** GE Medical Systems Information Technologies, Inc.  
**Address of Manufacturer:** 3114 N Grandview Blvd Waukesha, WI 53188, USA  
**Equipment Under Test (EUT):**  
**EUT Name:** WLAN Module  
**Model No.:** WLANCSMOD  
**Trade Mark:** GE HealthCare  
**Standard(s) :** 47 CFR Part 15, Subpart C 15.247  
RSS-247 Issue 3, August 2023  
RSS-Gen Issue 5 Amendment 2 (February 2021)  
**Date of Receipt:** 2025-03-12  
**Date of Test:** 2025-03-13 to 2025-04-14  
**Date of Issue:** 2025-04-15

**Test Result:**

**Pass\***

\* In the configuration tested, the EUT complied with the standards specified above.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Member of the SGS Group (SGS SA)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

SHEM-TRF-001 Rev. 02 Sep01, 2023

Report No.: SHCR250300053503

Page: 2 of 57

Revision Record			
Version	Description	Date	Remark
00	Original	2025-04-15	/

Authorized for issue by:				
Tested By		Wade Zhang		
		Wade Zhang/Project Engineer		
Approved By		Parlam Zhan		
		Parlam Zhan / Reviewer		

## 2 Test Summary

Radio Spectrum Matter Part				
Item	FCC Requirement	IC Requirement	Method	Result
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.205 & 15.209	RSS-247 Section 3.3 & RSS-Gen Section 8.9	ANSI C63.10 (2013) Section 6.10.5	Pass
Radiated Spurious Emissions Below 1GHz	47 CFR Part 15, Subpart C 15.205 & 15.209	RSS-247 Section 3.3 & RSS-Gen Section 8.9	ANSI C63.10 (2013) Section 6.4,6.5	Pass
Radiated Spurious Emissions Above 1GHz	47 CFR Part 15, Subpart C 15.205 & 15.209	RSS-247 Section 3.3 & RSS-Gen Section 8.9	ANSI C63.10 (2013) Section 6.6	Pass

Remark: New optional BT&WIFI antenna(s) changed to the original module, Radiated Spurious Emission tests were performed to verify RF compliance, other test data reference to original module report KSCR241000206803.

### 3 Contents

	Page
<b>1 COVER PAGE .....</b>	<b>1</b>
<b>2 Test Summary .....</b>	<b>3</b>
<b>3 Contents .....</b>	<b>4</b>
<b>4 General Information.....</b>	<b>5</b>
4.1 Details of E.U.T. ....	5
4.2 Description of Support Units .....	5
4.3 Measurement Uncertainty .....	5
4.4 Test Location.....	6
4.5 Test Facility .....	6
4.6 Deviation from Standards.....	6
4.7 Abnormalities from Standard Conditions .....	6
<b>5 Equipment List .....</b>	<b>7</b>
<b>6 Radio Spectrum Matter Test Results .....</b>	<b>8</b>
6.1 Radiated Emissions which fall in the restricted bands .....	8
6.1.1 E.U.T. Operation .....	9
6.1.2 Test Mode Description .....	9
6.1.3 Test Setup Diagram .....	9
6.1.4 Measurement Procedure and Data.....	10
6.2 Radiated Spurious Emissions Below 1GHz .....	27
6.2.1 E.U.T. Operation .....	27
6.2.2 Test Mode Description .....	27
6.2.3 Test Setup Diagram .....	27
6.2.4 Measurement Procedure and Data.....	28
6.3 Radiated Spurious Emissions Above 1GHz.....	31
6.3.1 E.U.T. Operation .....	31
6.3.2 Test Mode Description .....	31
6.3.3 Test Setup Diagram .....	31
6.3.4 Measurement Procedure and Data.....	32
<b>7 Test Setup Photo .....</b>	<b>57</b>
<b>8 EUT Constructional Details (EUT Photos) .....</b>	<b>57</b>

## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	DC 3.3V
Test voltage:	DC 3.3V
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz;802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK);802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11;802.11n(HT40):7
Channel Spacing:	5MHz
Antenna Type:	FPC Antenna
Antenna Gain:	Ant 1: 4.43dBi; Ant 2: 2.14dBi (Provided by manufacturer)
Remark:	n20: MIMO; Other: SISO
Antenna Number:	2

### 4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
PC	GE	-	-

### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$8.4 \times 10^{-8}$
2	Timeout	2s
3	Duty cycle	0.4%
4	Occupied Bandwidth	3%
5	RF conducted power	0.6dB
6	RF power density	2.9dB
7	Conducted Spurious emissions	0.75dB
8	RF Radiated power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
9	Radiated Spurious emission test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-6GHz) 5.4dB (6GHz-18GHz)
10	Temperature test	1°C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

#### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab  
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc ) is provided by the applicant. (if applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
3. Sample source: sent by customer.

#### 4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

- **FCC (Designation Number: CN1301)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.  
Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

#### 4.6 Deviation from Standards

None

#### 4.7 Abnormalities from Standard Conditions

None

## 5 Equipment List

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
<b>RF Conducted Test</b>					
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2024/12/18	2025-12-17
Spectrum Analyzer	Keysight	N9020B	SHEM241-1	2024/12/18	2025-12-17
Spectrum Analyzer	Agilent	N9020A	SHEM181-1	2024-07-31	2025-07-30
Signal Generator	R&S	SMR20	SHEM006-1	2024-07-31	2025-07-30
Signal Generator	Agilent	N5182A	SHEM182-1	2024-07-31	2025-07-30
Communication Tester	R&S	CMW270	SHEM183-1	2024-05-23	2025-05-22
Communication Tester	R&S	CMW500	SHEM268-1	2024-05-23	2025-05-22
Power Sensor	Keysight	U2021XA * 4	SHEM293-1	2024-07-31	2025-07-30
Splitter	Anritsu	MA1612A	SHEM185-1	/	/
Coupler	e-meca	803-S-1	SHEM186-1	/	/
High-low Temp Cabinet	Suzhou Zhihe	TL-40	SHEM087-1	2024-11-05	2026-11-04
AC Power Stabilizer	APC	KDF-31020T-V0-F0	SHEM216-1	2024/12/18	2025-12-17
DC Power Supply	HP	6010A	SHEM222-1	2024/12/18	2025-12-17
Conducted test Cable	/	RF01~RF04	/	2024/12/18	2025-12-17
Switcher	Tonscend	JS0806	SHEM293-1	2024-07-31	2025-07-30
Test software	Tonscend	JS Tonscend BT/WIFI System	Version: 2.6	/	/
Switcher+Power Sensor	TST	TSPS2023R	SHEM263-1	2024-07-31	2025-07-30
Test software	TST	TST PASS	Version: 2.0	/	/
<b>RF Radiated Test</b>					
EMI test Receiver	R&S	ESU40	SHEM051-1	2024/12/18	2025-12-17
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2024/12/18	2025-12-17
Communication Tester	R&S	CMW500	SHEM268-1	2024-05-23	2025-05-22
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2024/12/18	2025-12-17
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2023-09-03	2025-09-02
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM202-1	2023-04-17	2025-04-16
Horn Antenna (1-18GHz)	Schwarzbeck	HF906	SHEM009-1	2024-08-05	2026-08-04
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2023-09-03	2025-09-02
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2023-09-03	2025-09-02
Pre-Amplifier	HP	8447D	SHEM236-1	2024/12/18	2025-12-17
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2024/12/18	2025-12-17
Band Filter	LORCH	9BRX-875/X150	SHEM156-1	/	/
Band Filter	LORCH	13BRX-1950/X500	SHEM083-2	/	/
Band Filter	LORCH	5BRX-2400/X200	SHEM155-1	/	/
Band Filter	LORCH	5BRX-5500/X1000	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2023-05-06	2026-05-05
RE test Cable	/	PT18-NMMN-10M	SHEM217-2	2024/12/18	2025-12-17
Test software	ESE	E3	Version: 6.111221a	/	/

## 6 Radio Spectrum Matter Test Results

### 6.1 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.10.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C

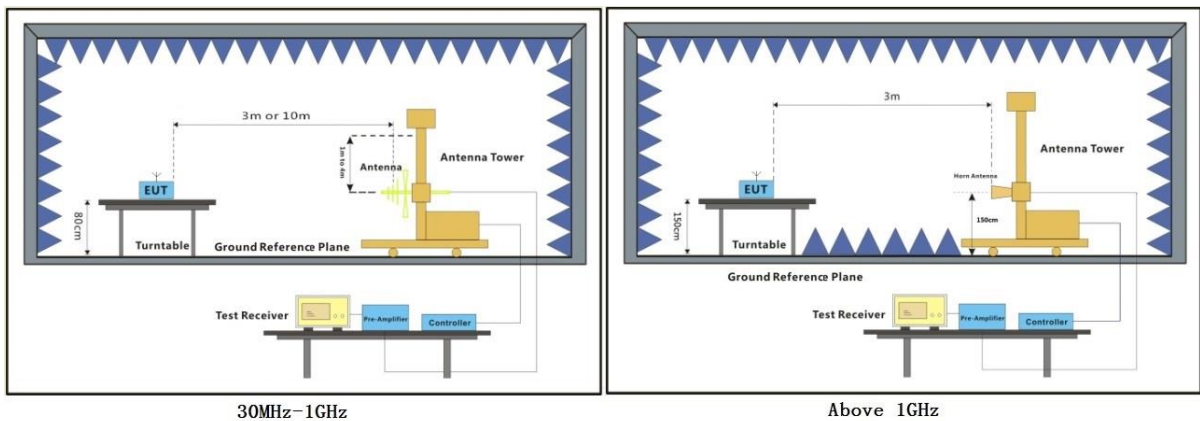
Humidity: 50 % RH

Atmospheric Pressure: 1010 mbar

### 6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

### 6.1.3 Test Setup Diagram



#### 6.1.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

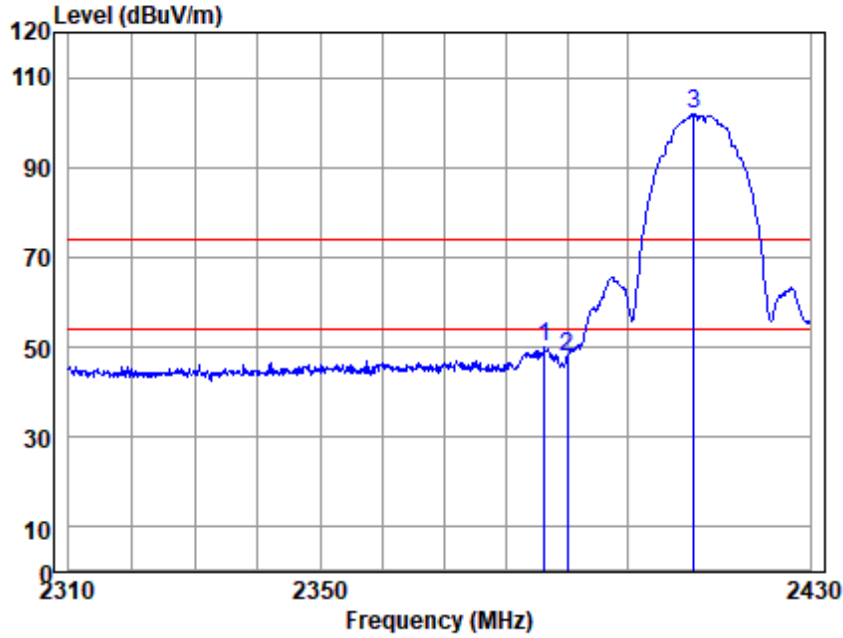
Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Remark 3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

Remark 4: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.

Remark 5: This test item was investigated while operating in SISO and MIMO mode, however, it was determined that SISO antenna 1 operation for 802.11b/g/n40 modulation and MIMO antenna operation for 802.11n20 modulation produced the worst emissions. So the emissions produced from other operation are not recorded in report.

Test Mode: 02; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



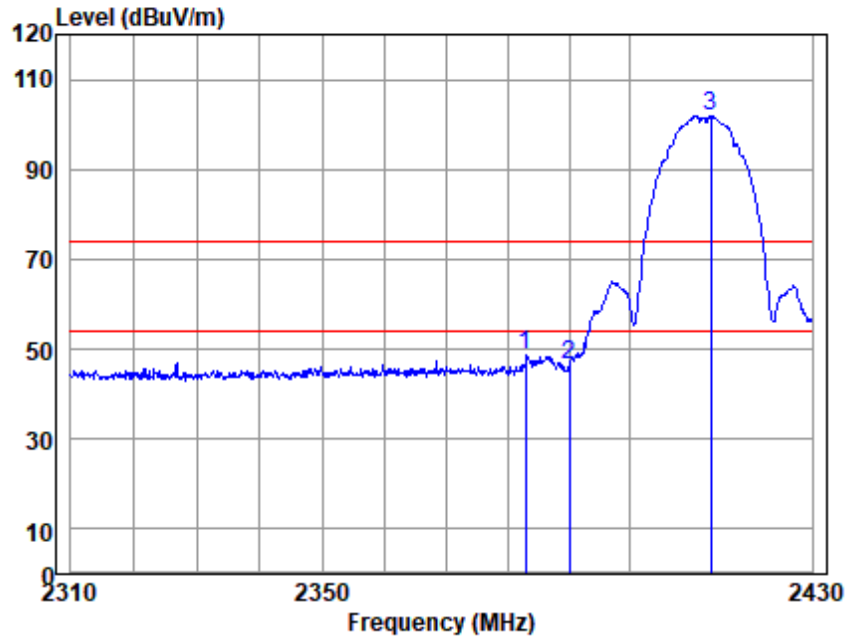
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2386.340	52.98	28.80	3.33	35.18	49.93	74.00	-24.07	Peak
2390.000	50.75	28.80	3.33	35.18	47.70	74.00	-26.30	Peak
2410.756	104.69	28.89	3.34	35.20	101.72	74.00	27.72	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



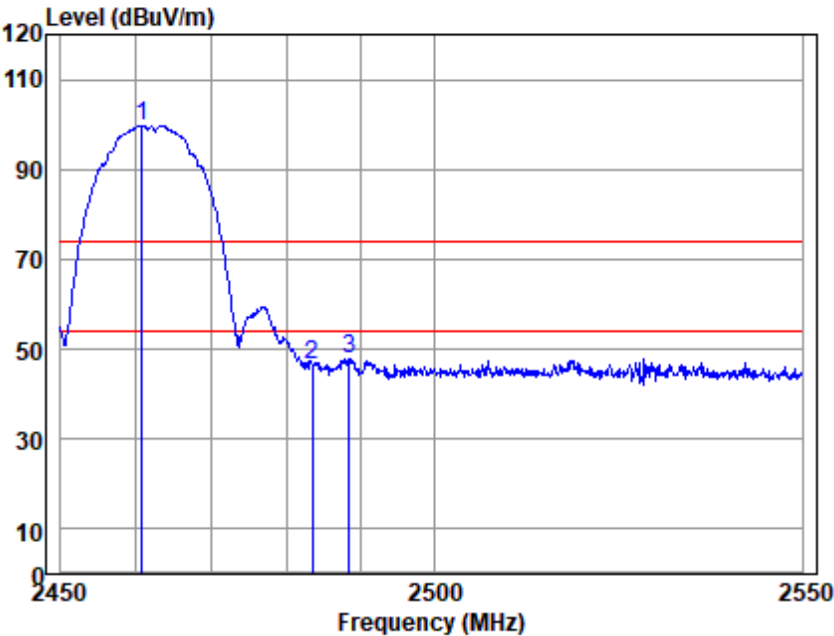
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2382.958	51.84	28.76	3.32	35.17	48.75	74.00	-25.25	Peak
2390.000	49.59	28.80	3.33	35.18	46.54	74.00	-27.46	Peak
2413.321	104.73	28.90	3.35	35.20	101.78	74.00	27.78	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:High

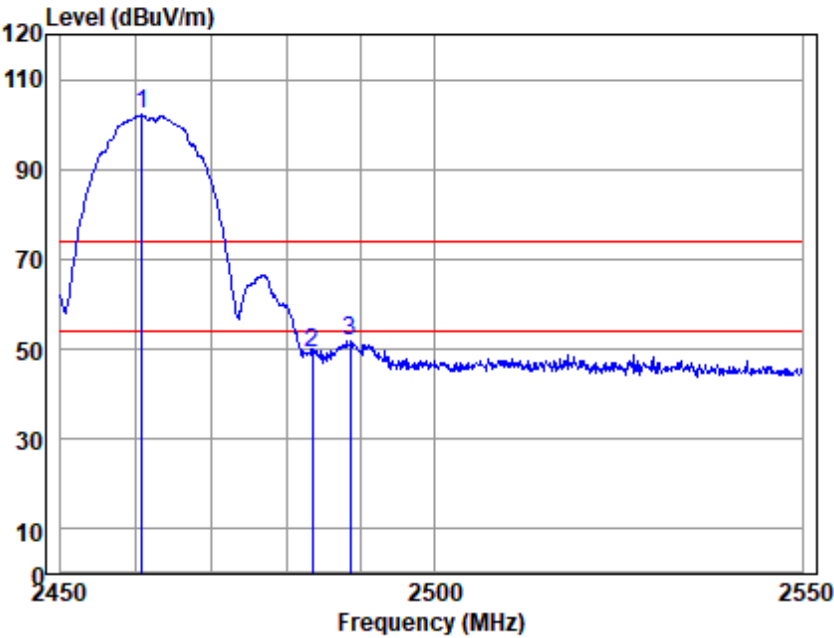


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2460.707	102.60	29.05	3.39	35.24	99.80	74.00	25.80	Peak
2483.500	49.31	29.09	3.41	35.26	46.55	74.00	-27.45	Peak
2488.425	50.67	29.09	3.41	35.26	47.91	74.00	-26.09	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:High

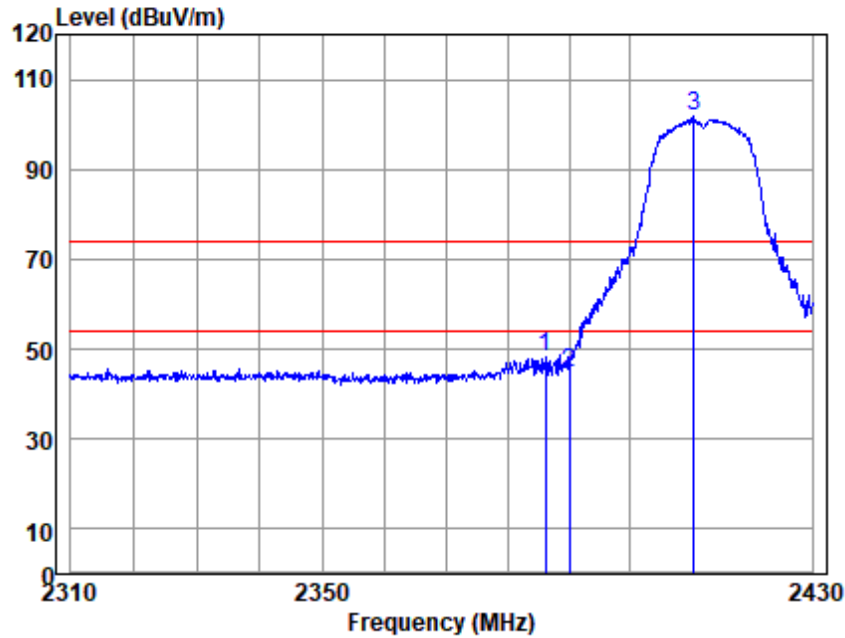


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2460.707	104.88	29.05	3.39	35.24	102.08	74.00	28.08	Peak
2483.500	51.80	29.09	3.41	35.26	49.04	74.00	-24.96	Peak
2488.625	54.45	29.09	3.41	35.26	51.69	74.00	-22.31	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



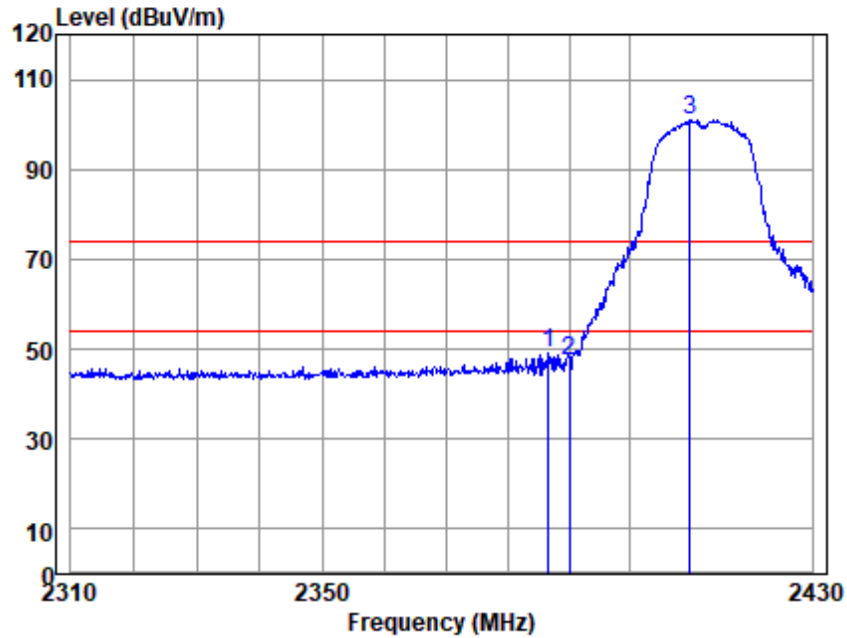
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2386.219	51.27	28.80	3.33	35.18	48.22	74.00	-25.78	Peak
2390.000	47.62	28.80	3.33	35.18	44.57	74.00	-29.43	Peak
2410.389	104.93	28.89	3.34	35.20	101.96	74.00	27.96	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



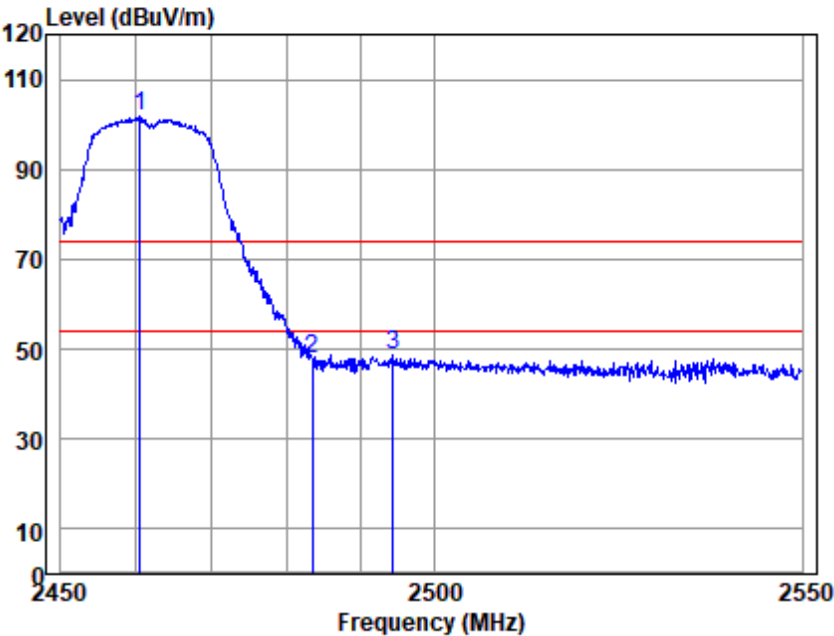
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2386.703	52.13	28.80	3.33	35.18	49.08	74.00	-24.92	Peak
2390.000	50.44	28.80	3.33	35.18	47.39	74.00	-26.61	Peak
2409.779	104.07	28.89	3.34	35.20	101.10	74.00	27.10	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:High

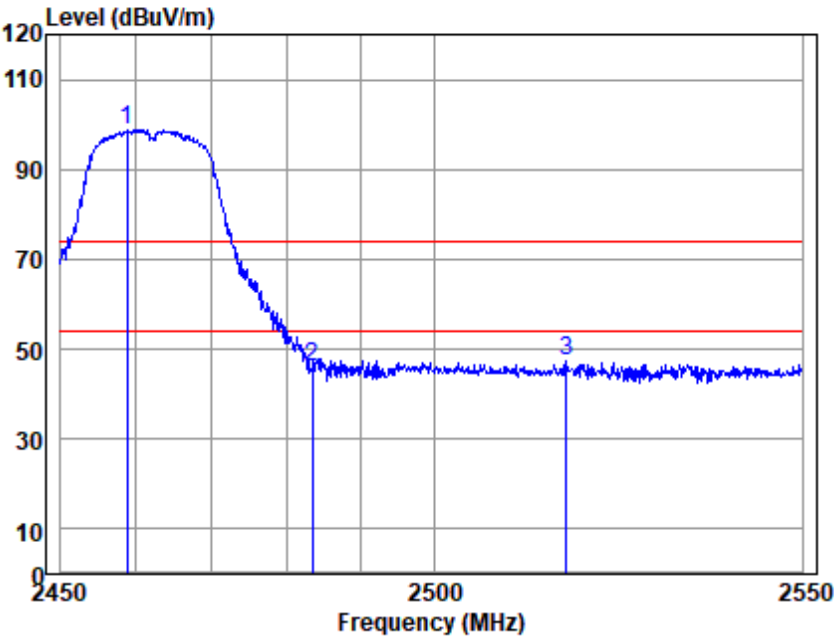


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2460.510	104.49	29.05	3.39	35.24	101.69	74.00	27.69	Peak
2483.500	50.56	29.09	3.41	35.26	47.80	74.00	-26.20	Peak
2494.306	51.31	29.10	3.41	35.26	48.56	74.00	-25.44	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:High

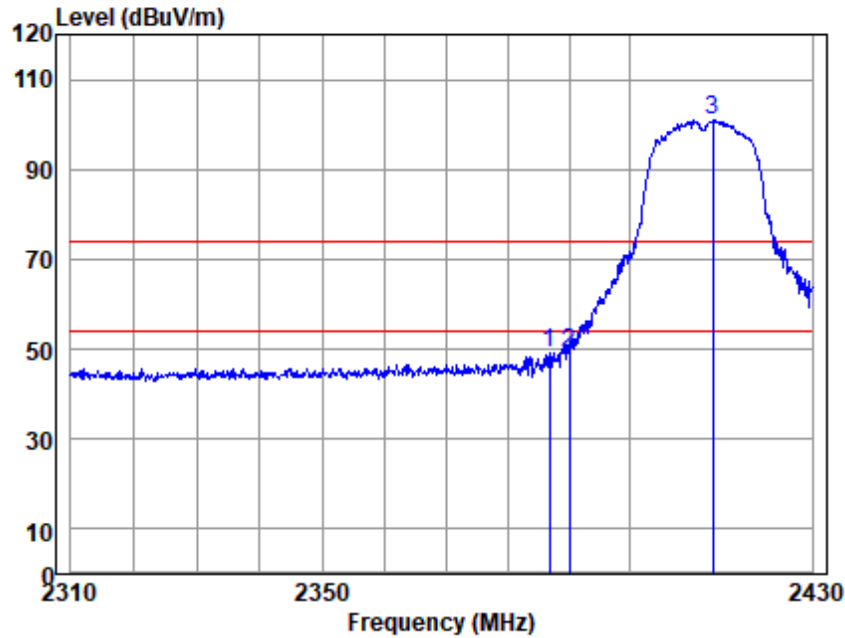


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2458.739	101.63	29.04	3.38	35.24	98.81	74.00	24.81	Peak
2483.500	48.83	29.09	3.41	35.26	46.07	74.00	-27.93	Peak
2517.765	50.29	29.13	3.43	35.29	47.56	74.00	-26.44	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



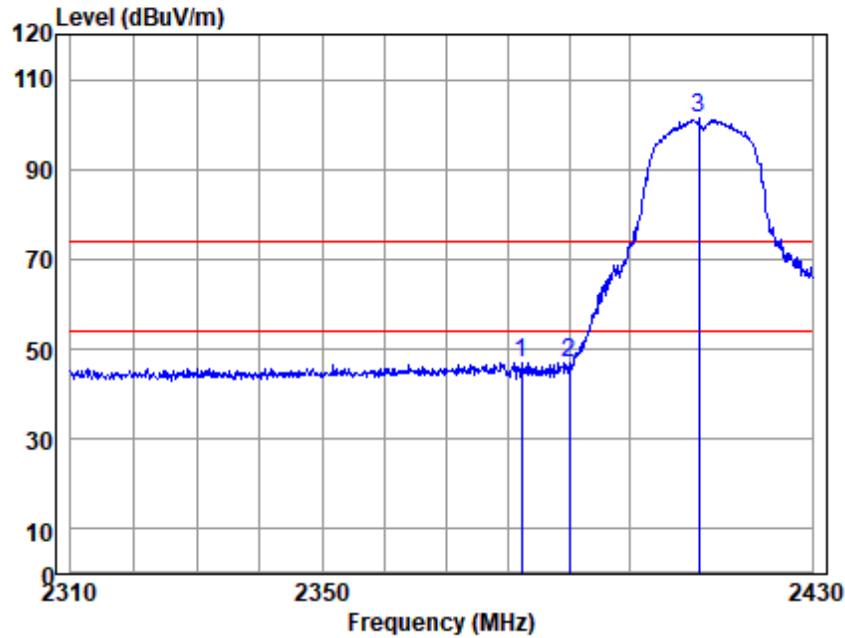
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2386.823	52.37	28.80	3.33	35.18	49.32	74.00	-24.68	Peak
2390.000	52.15	28.80	3.33	35.18	49.10	74.00	-24.90	Peak
2413.565	103.89	28.90	3.35	35.20	100.94	74.00	26.94	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



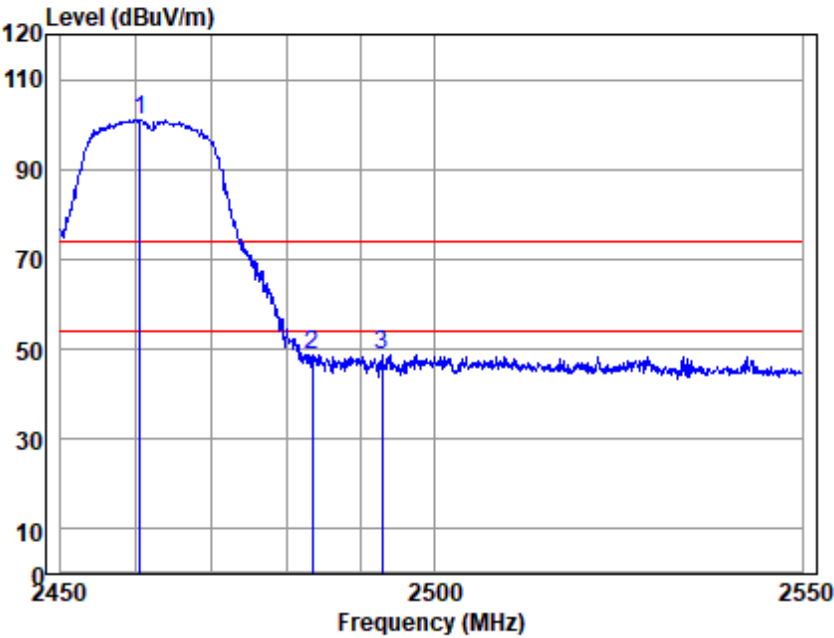
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2382.235	50.25	28.76	3.32	35.17	47.16	74.00	-26.84	Peak
2390.000	49.92	28.80	3.33	35.18	46.87	74.00	-27.13	Peak
2411.244	104.24	28.90	3.35	35.20	101.29	74.00	27.29	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High

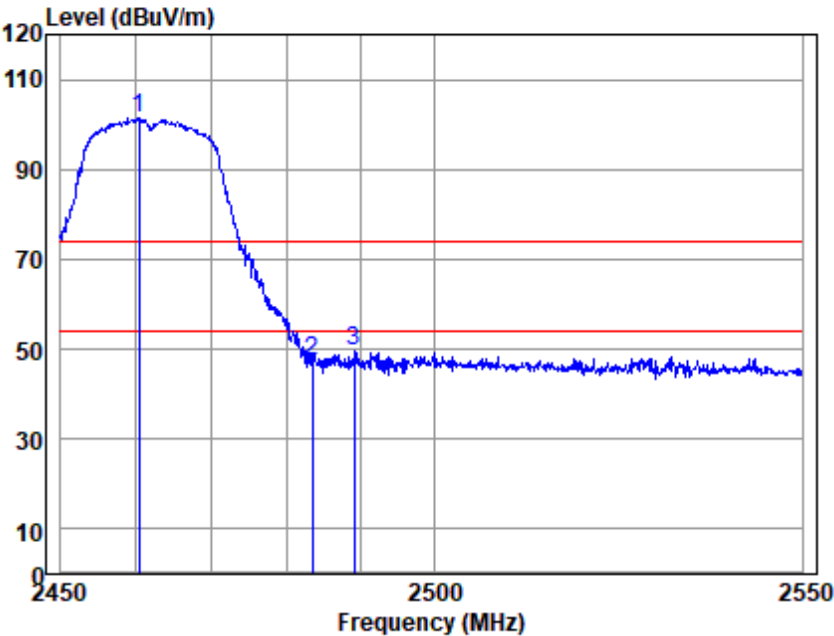


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2460.510	103.90	29.05	3.39	35.24	101.10	74.00	27.10	Peak
2483.500	51.38	29.09	3.41	35.26	48.62	74.00	-25.38	Peak
2492.909	51.38	29.10	3.41	35.26	48.63	74.00	-25.37	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

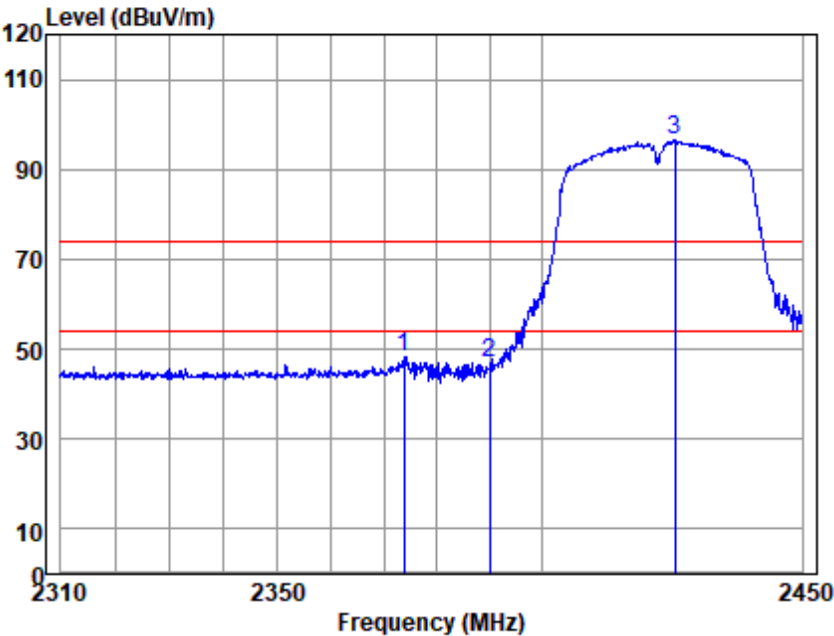


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2460.313	104.43	29.04	3.38	35.24	101.61	74.00	27.61	Peak
2483.500	50.02	29.09	3.41	35.26	47.26	74.00	-26.74	Peak
2489.122	52.26	29.10	3.41	35.26	49.51	74.00	-24.49	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

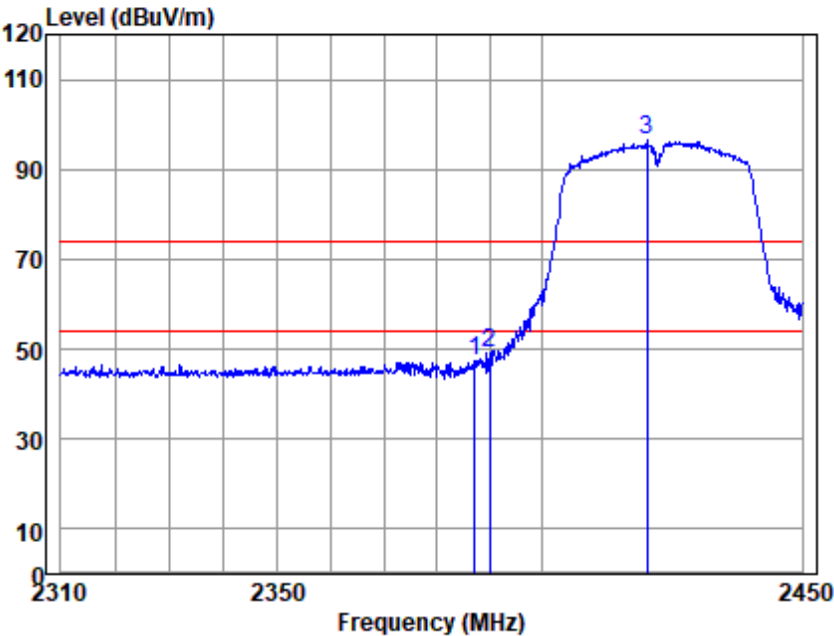


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2373.797	51.36	28.71	3.32	35.17	48.22	74.00	-25.78	Peak
2390.000	50.09	28.80	3.33	35.18	47.04	74.00	-26.96	Peak
2425.330	99.38	28.96	3.36	35.21	96.49	74.00	22.49	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

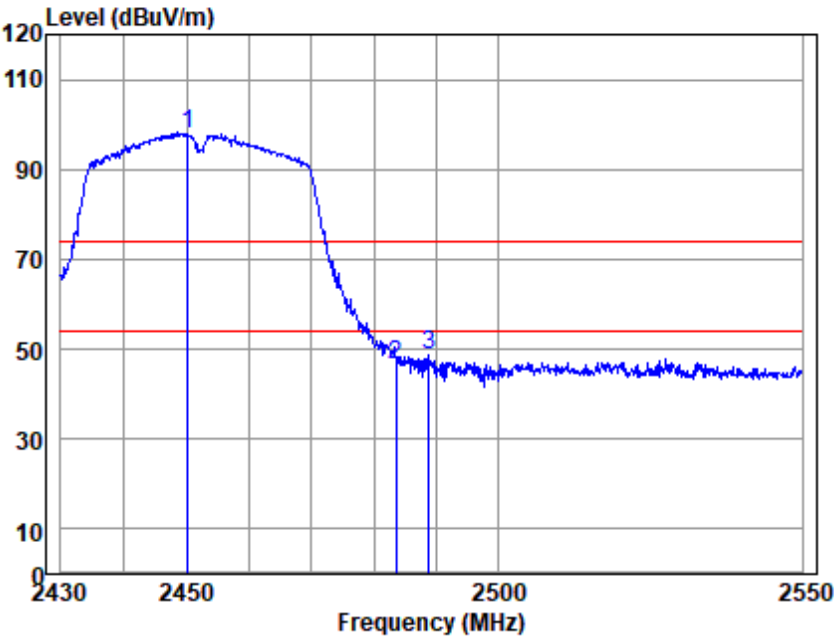


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2387.243	50.30	28.80	3.33	35.18	47.25	74.00	-26.75	Peak
2390.000	52.14	28.80	3.33	35.18	49.09	74.00	-24.91	Peak
2420.055	99.42	28.92	3.36	35.21	96.49	74.00	22.49	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

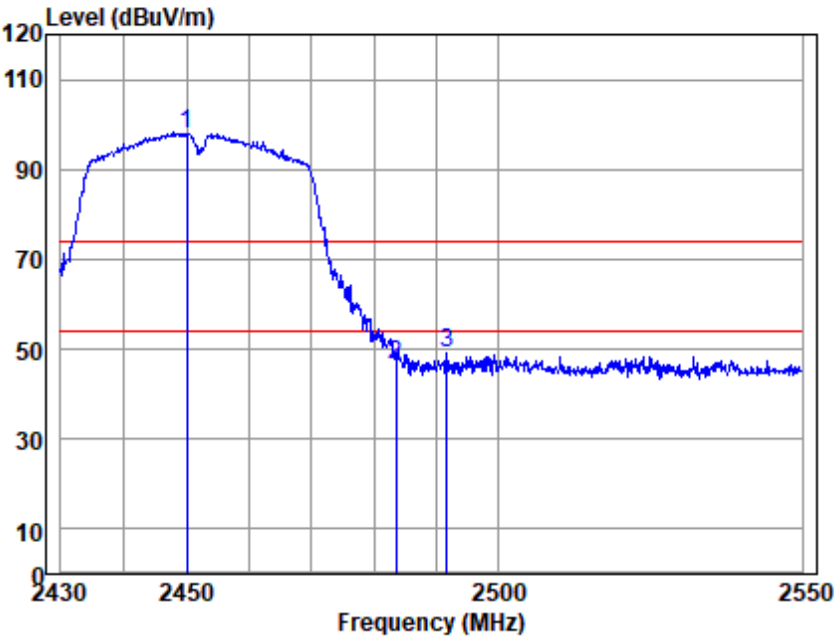


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
2450.112	100.83	29.02	3.38	35.23	98.00	74.00	24.00	Peak
2483.500	49.05	29.09	3.41	35.26	46.29	74.00	-27.71	Peak
2488.797	51.51	29.09	3.41	35.26	48.75	74.00	-25.25	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2449.994	100.85	29.02	3.38	35.23	98.02	74.00	24.02	Peak
2483.500	49.36	29.09	3.41	35.26	46.60	74.00	-27.40	Peak
2491.798	52.08	29.10	3.41	35.26	49.33	74.00	-24.67	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

### 6.2 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4,6.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/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
960-1000	500	3

#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C

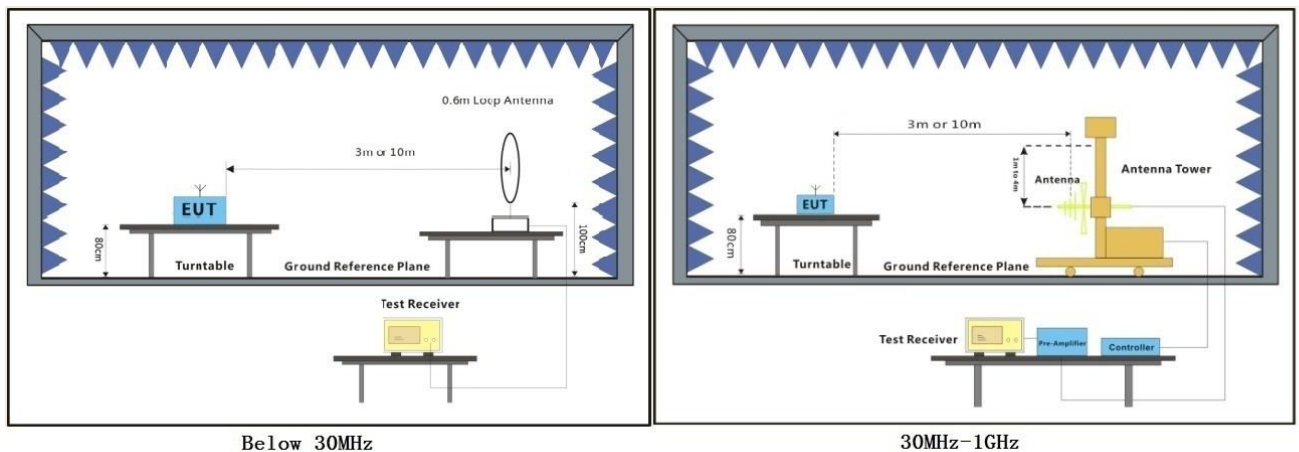
Humidity: 50 % RH

Atmospheric Pressure: 1010 mbar

#### 6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

#### 6.2.3 Test Setup Diagram



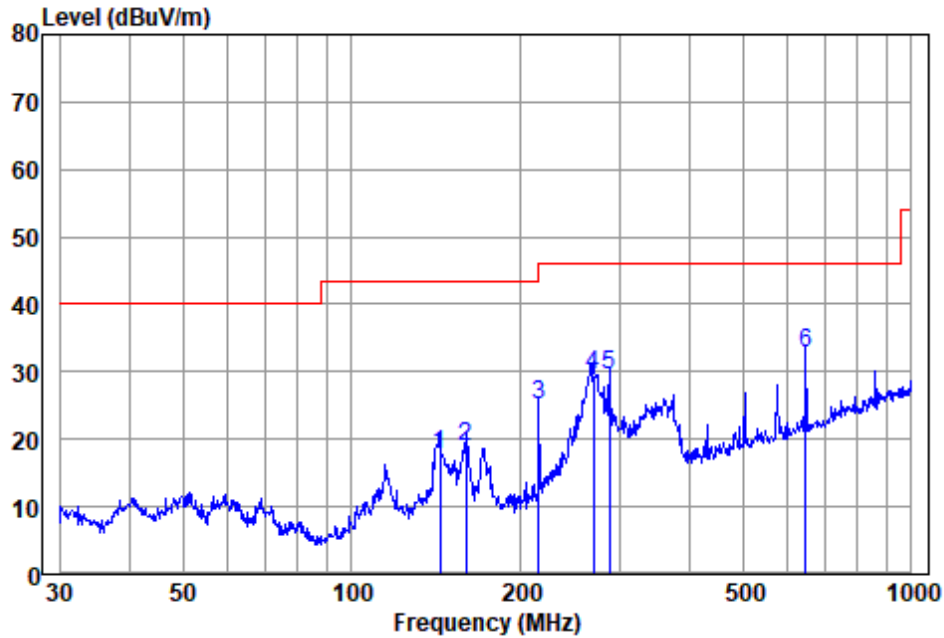
#### **6.2.4 Measurement Procedure and Data**

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3: This test item was investigated while operating in SISO and MIMO mode, however, it was determined that SISO antenna 1 operation for 802.11b/g/n40 modulation and MIMO antenna operation for 802.11n20 modulation produced the worst emissions. So the emissions produced from other operation are not recorded in report.

Test Mode: 02; Polarity: Horizontal

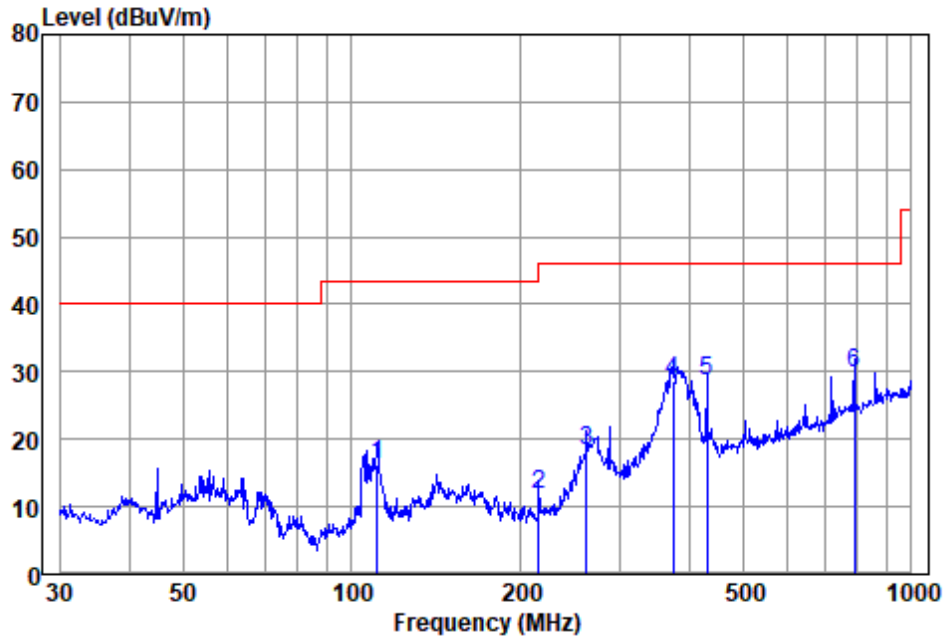


Antenna Polarity :HORIZONTAL  
EUT/Project :0535ME  
Test mode :02

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	143.830	34.69	13.50	2.55	33.02	17.72	43.50	-25.78	QP
2	159.784	35.68	13.60	2.69	33.00	18.97	43.50	-24.53	QP
3	216.024	45.07	9.86	3.11	32.93	25.11	46.00	-20.89	QP
4	270.375	46.23	12.30	3.91	32.84	29.60	46.00	-16.40	QP
5	287.990	45.91	13.04	3.55	32.88	29.62	46.00	-16.38	QP
6	647.386	39.00	20.65	5.72	32.61	32.76	46.00	-13.24	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical



Antenna Polarity :VERTICAL  
EUT/Project :0535ME  
Test mode :02

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	110.957	36.42	10.60	2.27	33.15	16.14	43.50	-27.36	QP
2	216.024	31.78	9.86	3.11	32.93	11.82	46.00	-34.18	QP
3	262.896	35.36	12.08	3.56	32.83	18.17	46.00	-27.83	QP
4	374.623	41.92	15.10	4.28	32.75	28.55	46.00	-17.45	QP
5	431.032	40.05	16.74	4.57	32.74	28.62	46.00	-17.38	QP
6	790.619	33.29	22.50	6.41	32.30	29.90	46.00	-16.10	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

### 6.3 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.6

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1000	500	3

#### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C

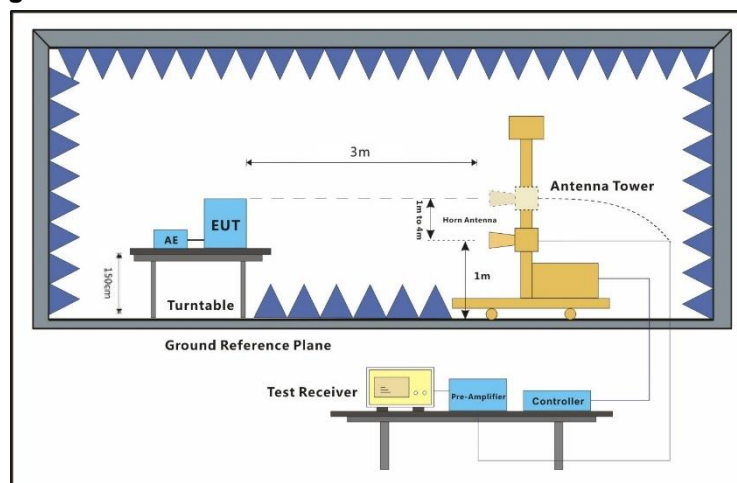
Humidity: 50 % RH

Atmospheric Pressure: 1010 mbar

#### 6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

#### 6.3.3 Test Setup Diagram



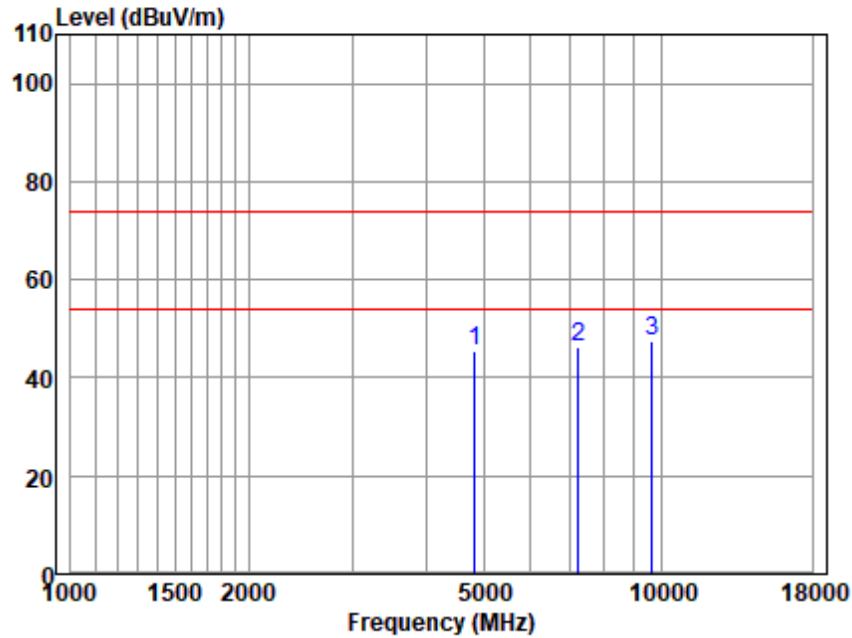
#### 6.3.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.
- 5:For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle<98%) or 10Hz (Duty cycle $\geq$ 98%) for Average detection (AV) at frequency above 1GHz.
- 6: This test item was investigated while operating in SISO and MIMO mode, however, it was determined that SISO antenna 1 operation for 802.11b/g/n40 modulation and MIMO antenna operation for 802.11n20 modulation produced the worst emissions. So the emissions produced from other operation are not recorded in report.

Test Mode: 02; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:Low



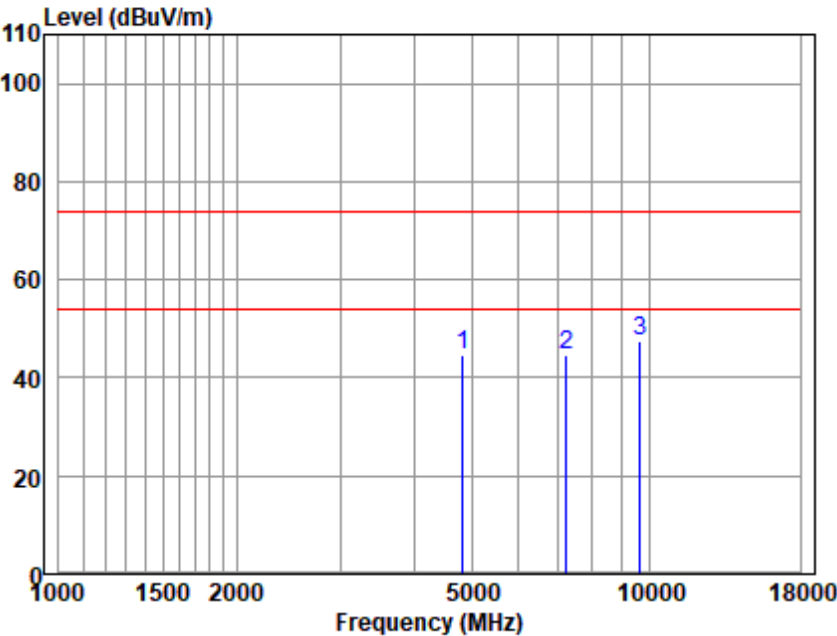
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	43.39	33.60	5.24	36.79	45.44	74.00	-28.56	Peak
7242.052	38.30	36.29	7.36	35.50	46.45	74.00	-27.55	Peak
9641.257	34.73	37.71	8.76	33.56	47.64	74.00	-26.36	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:Low

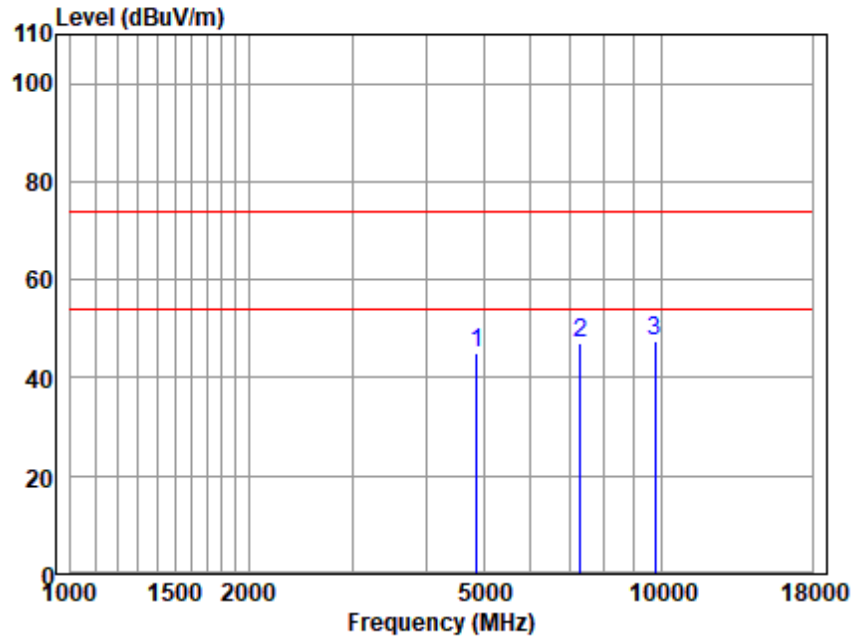


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	42.42	33.60	5.24	36.79	44.47	74.00	-29.53	Peak
7242.052	36.45	36.29	7.36	35.50	44.60	74.00	-29.40	Peak
9641.257	34.46	37.71	8.76	33.56	47.37	74.00	-26.63	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:middle



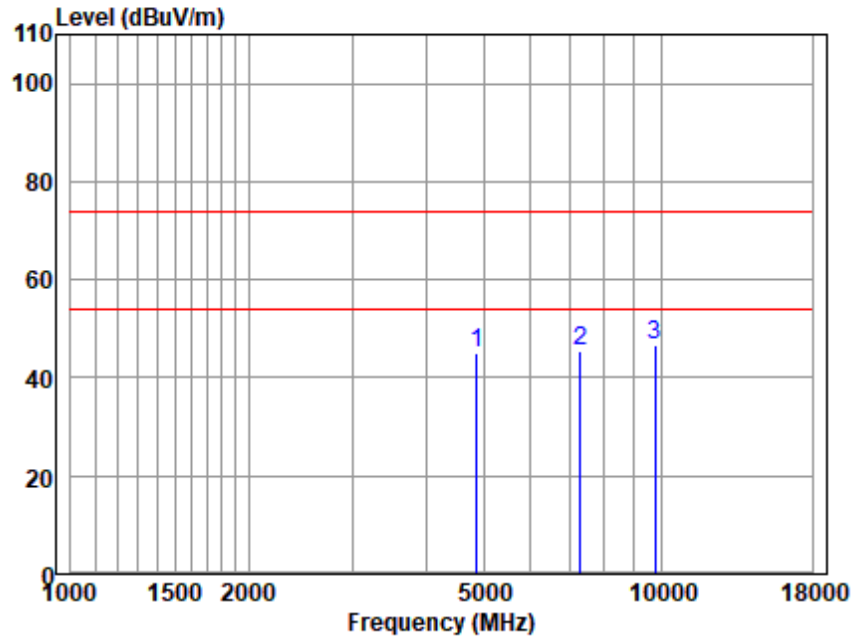
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.043	43.12	33.66	5.28	36.81	45.25	74.00	-28.75	Peak
7305.122	38.60	36.32	7.42	35.44	46.90	74.00	-27.10	Peak
9753.371	34.75	37.54	8.80	33.50	47.59	74.00	-26.41	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:middle



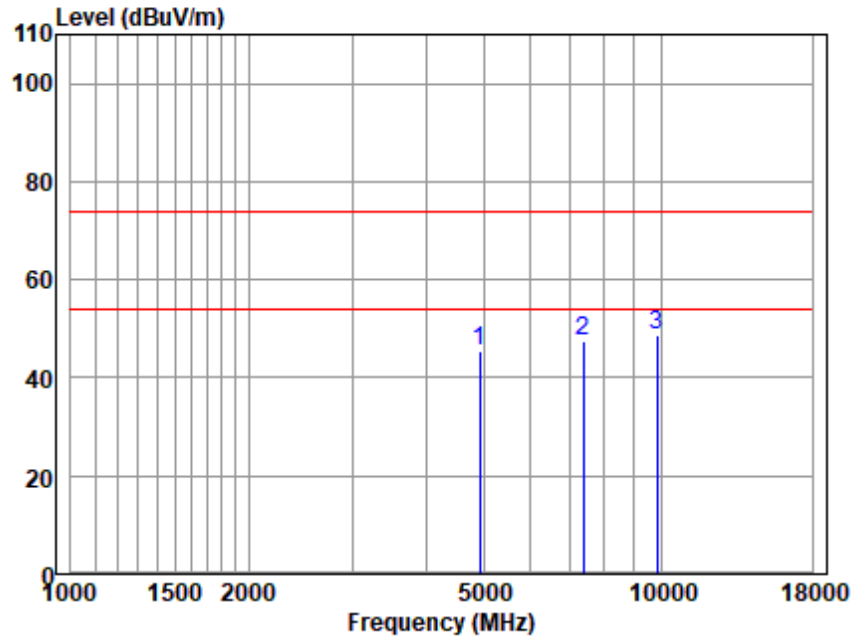
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4874.043	42.82	33.66	5.28	36.81	44.95	74.00	-29.05	Peak
7305.122	37.36	36.32	7.42	35.44	45.66	74.00	-28.34	Peak
9753.371	33.93	37.54	8.80	33.50	46.77	74.00	-27.23	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel:High



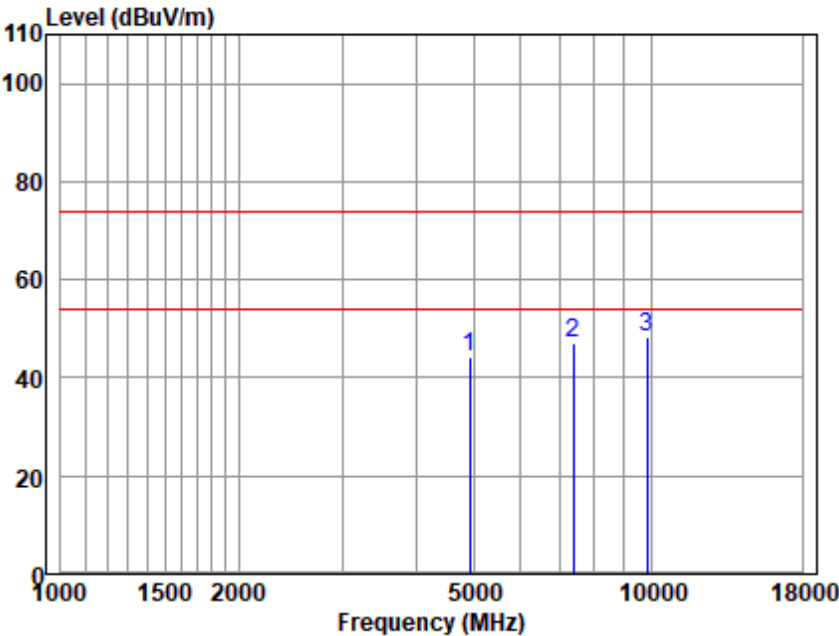
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.721	43.26	33.64	5.32	36.82	45.40	74.00	-28.60	Peak
7390.070	39.15	36.36	7.49	35.37	47.63	74.00	-26.37	Peak
9838.312	35.71	37.60	8.84	33.45	48.70	74.00	-25.30	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel:High

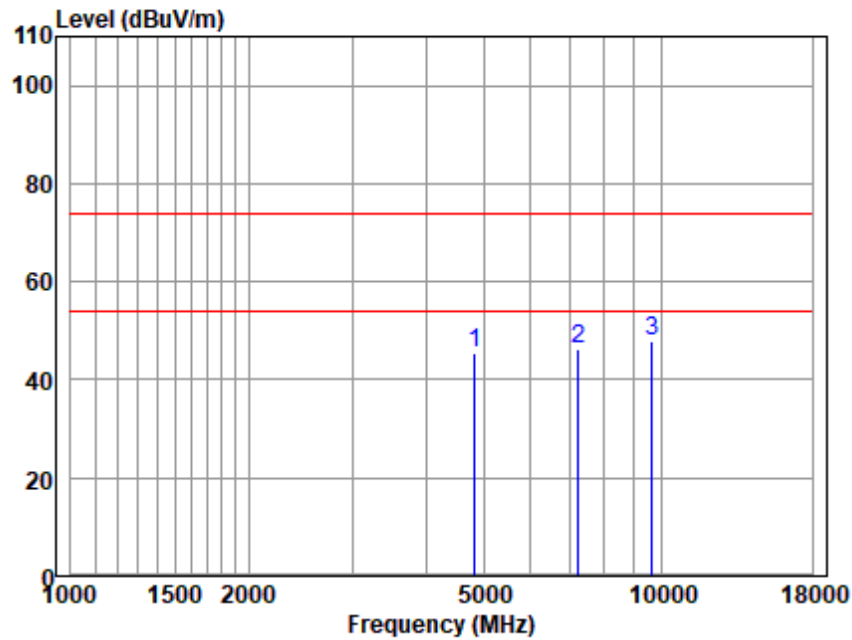


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4924.721	42.06	33.64	5.32	36.82	44.20	74.00	-29.80	Peak
7390.070	38.45	36.36	7.49	35.37	46.93	74.00	-27.07	Peak
9838.312	35.23	37.60	8.84	33.45	48.22	74.00	-25.78	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



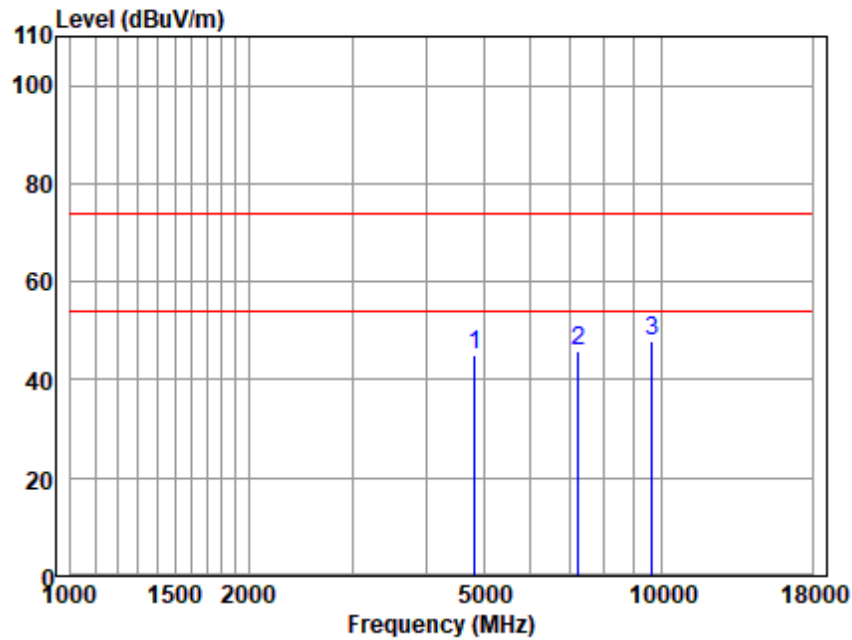
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	43.24	33.60	5.24	36.79	45.29	74.00	-28.71	Peak
7242.052	38.21	36.29	7.36	35.50	46.36	74.00	-27.64	Peak
9641.257	35.15	37.71	8.76	33.56	48.06	74.00	-25.94	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:Low



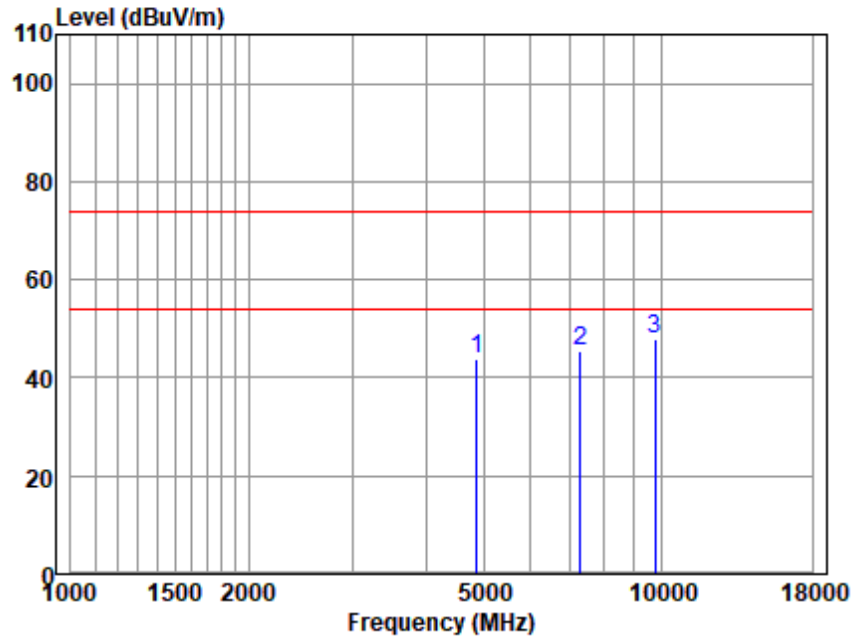
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	42.94	33.60	5.24	36.79	44.99	74.00	-29.01	Peak
7242.052	37.54	36.29	7.36	35.50	45.69	74.00	-28.31	Peak
9641.257	34.91	37.71	8.76	33.56	47.82	74.00	-26.18	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:middle



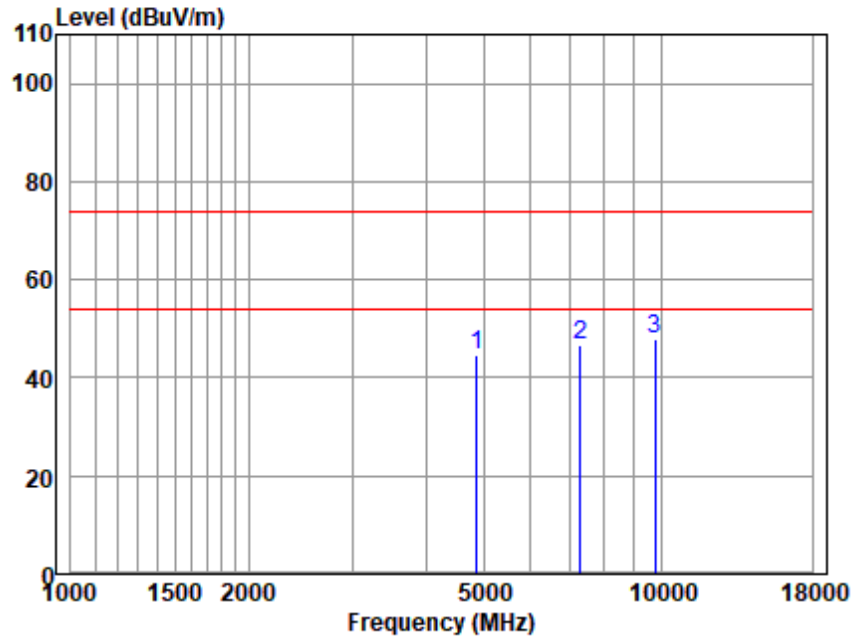
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.043	41.87	33.66	5.28	36.81	44.00	74.00	-30.00	Peak
7305.122	37.23	36.32	7.42	35.44	45.53	74.00	-28.47	Peak
9753.371	35.24	37.54	8.80	33.50	48.08	74.00	-25.92	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:middle



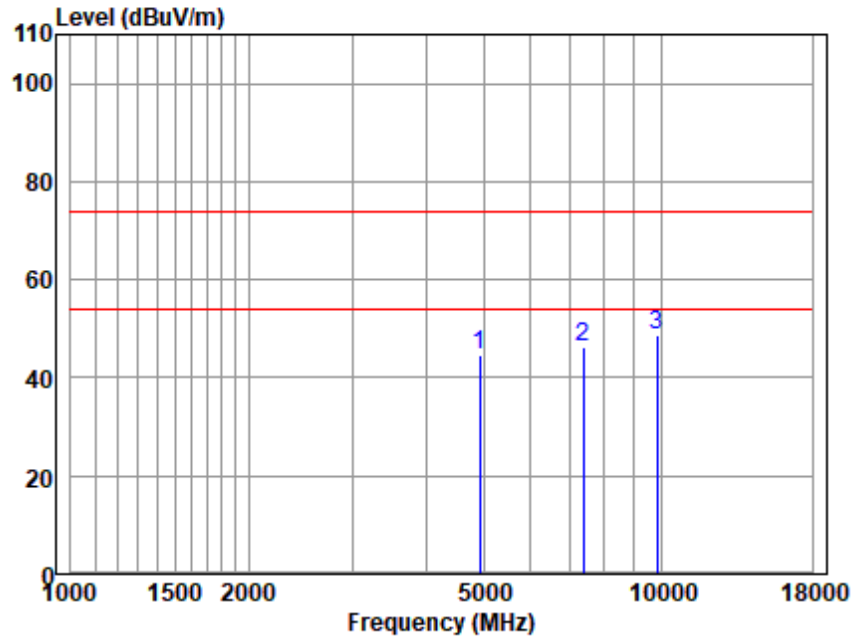
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4874.043	42.36	33.66	5.28	36.81	44.49	74.00	-29.51	Peak
7305.122	38.51	36.32	7.42	35.44	46.81	74.00	-27.19	Peak
9753.371	35.04	37.54	8.80	33.50	47.88	74.00	-26.12	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11g; Bandwidth:20MHz; Channel:High



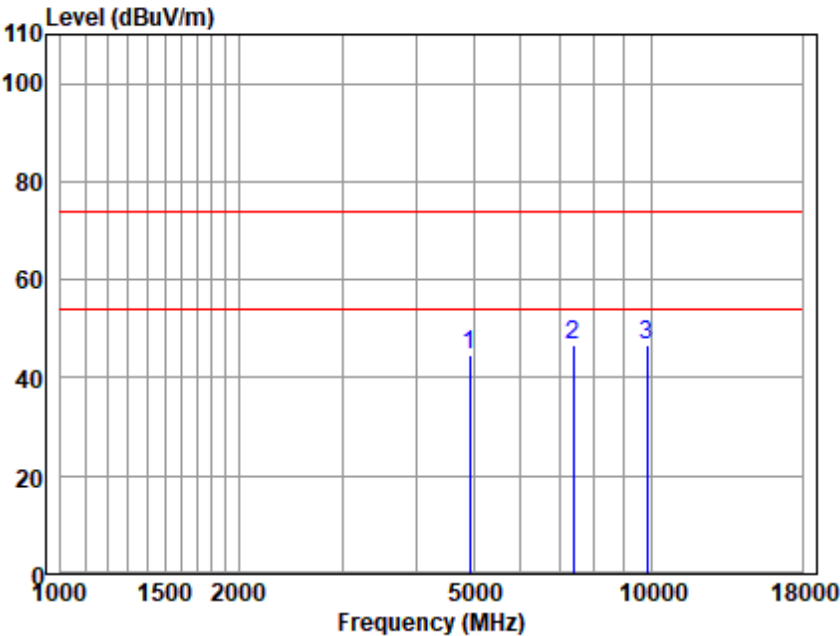
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.721	42.57	33.64	5.32	36.82	44.71	74.00	-29.29	Peak
7390.070	37.69	36.36	7.49	35.37	46.17	74.00	-27.83	Peak
9838.312	35.82	37.60	8.84	33.45	48.81	74.00	-25.19	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11g; Bandwidth:20MHz; Channel:High

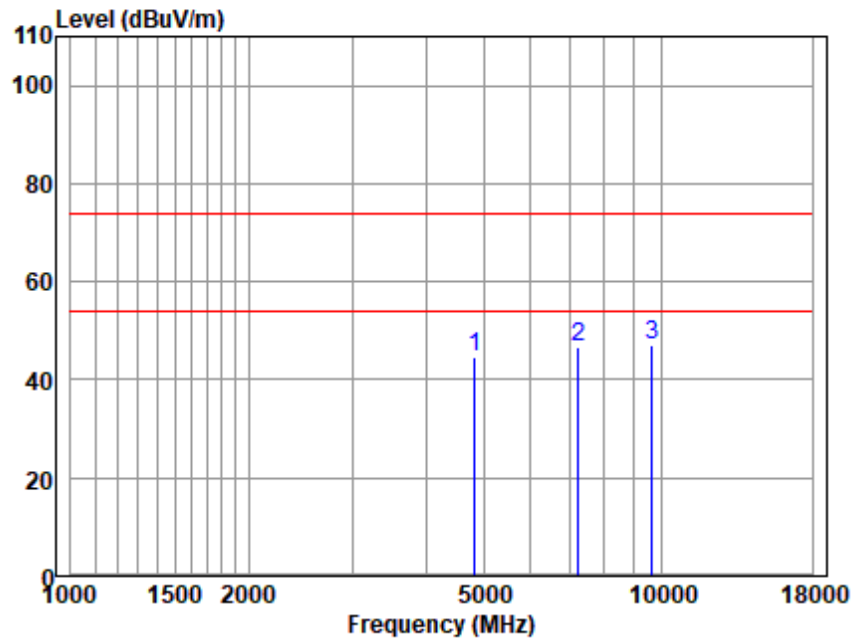


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4924.721	42.48	33.64	5.32	36.82	44.62	74.00	-29.38	Peak
7390.070	38.13	36.36	7.49	35.37	46.61	74.00	-27.39	Peak
9838.312	33.84	37.60	8.84	33.45	46.83	74.00	-27.17	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



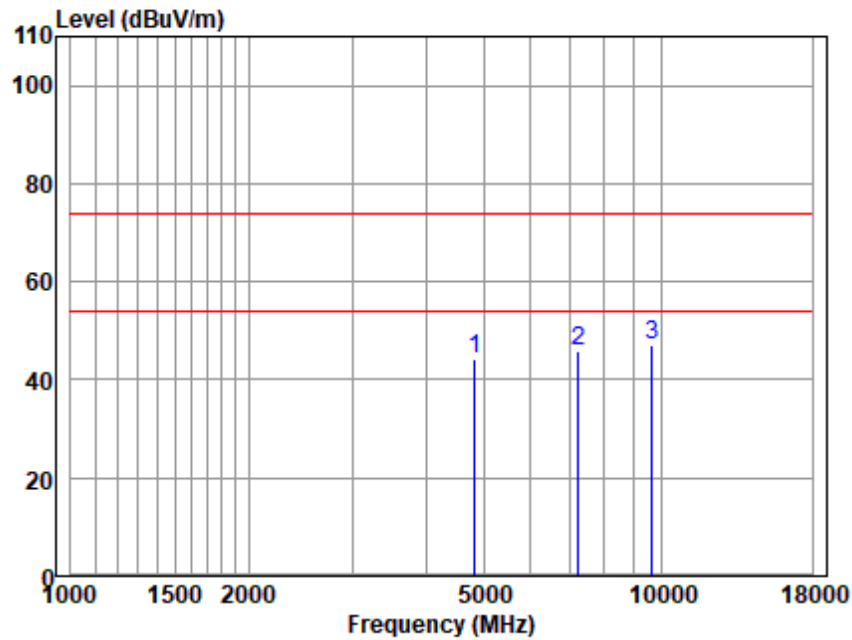
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	42.49	33.60	5.24	36.79	44.54	74.00	-29.46	Peak
7242.052	38.70	36.29	7.36	35.50	46.85	74.00	-27.15	Peak
9641.257	34.18	37.71	8.76	33.56	47.09	74.00	-26.91	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



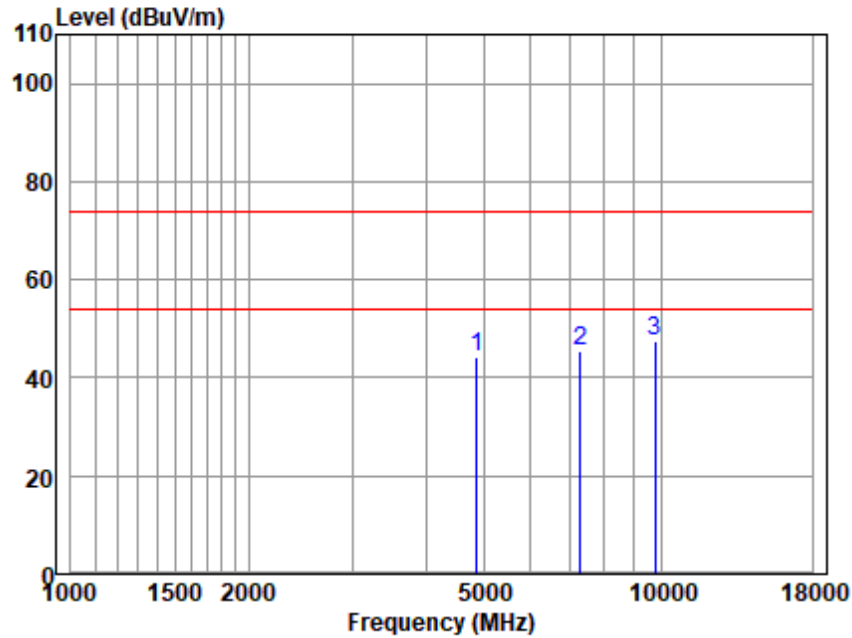
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.016	42.01	33.60	5.24	36.79	44.06	74.00	-29.94	Peak
7242.052	37.70	36.29	7.36	35.50	45.85	74.00	-28.15	Peak
9641.257	34.31	37.71	8.76	33.56	47.22	74.00	-26.78	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



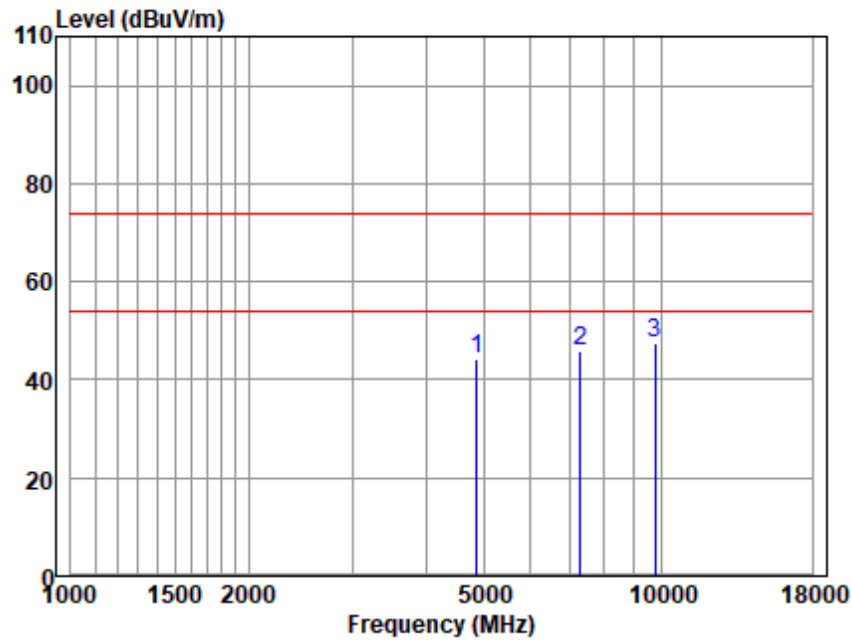
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.043	42.01	33.66	5.28	36.81	44.14	74.00	-29.86	Peak
7305.122	37.26	36.32	7.42	35.44	45.56	74.00	-28.44	Peak
9753.371	34.68	37.54	8.80	33.50	47.52	74.00	-26.48	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



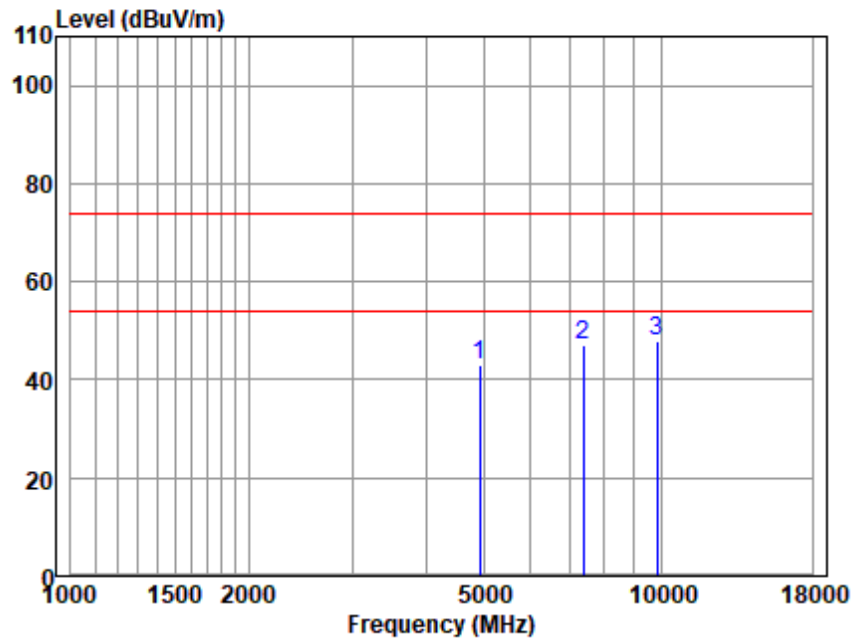
Antenna Polarity :VERTICAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.043	42.21	33.66	5.28	36.81	44.34	74.00	-29.66	Peak
7305.122	37.60	36.32	7.42	35.44	45.90	74.00	-28.10	Peak
9753.371	34.58	37.54	8.80	33.50	47.42	74.00	-26.58	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



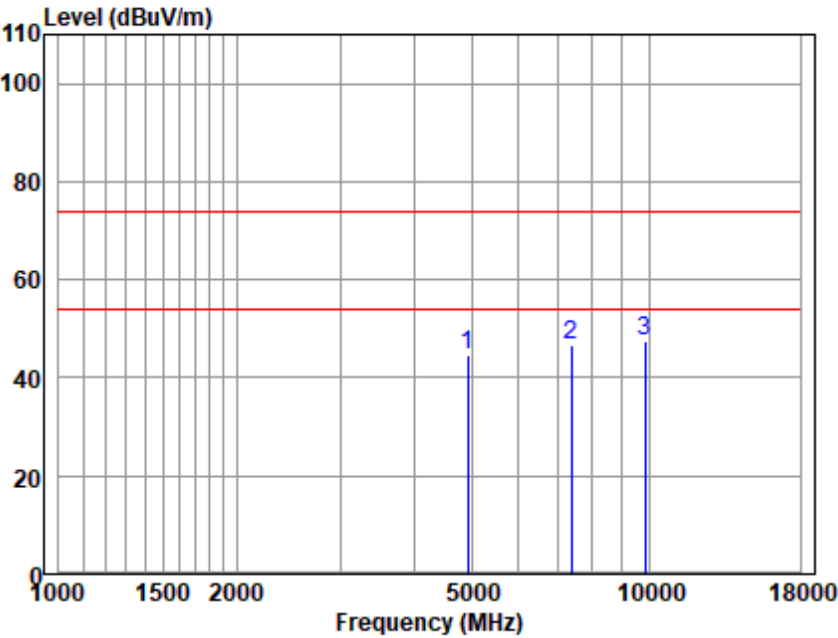
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.721	40.92	33.64	5.32	36.82	43.06	74.00	-30.94	Peak
7390.070	38.76	36.36	7.49	35.37	47.24	74.00	-26.76	Peak
9838.312	34.85	37.60	8.84	33.45	47.84	74.00	-26.16	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

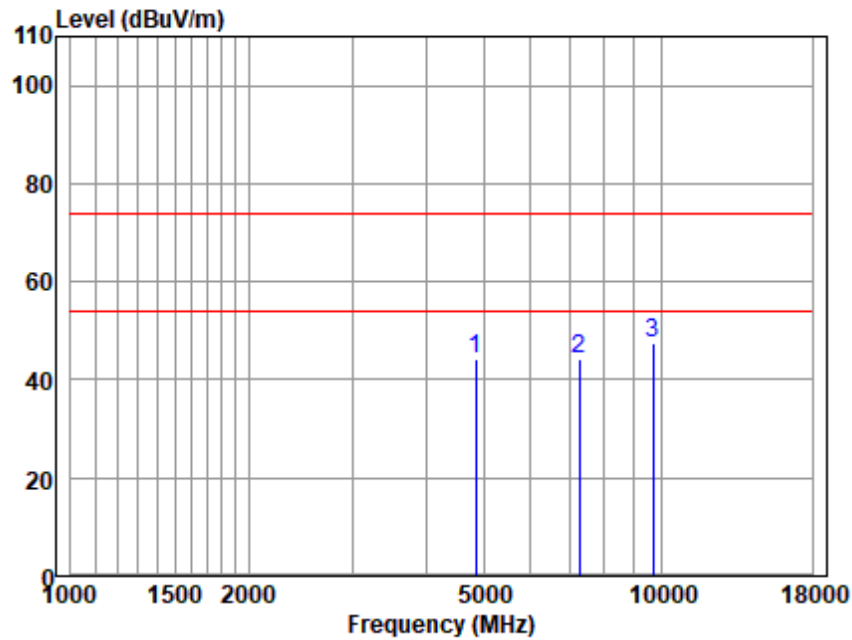


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4924.721	42.53	33.64	5.32	36.82	44.67	74.00	-29.33	Peak
7390.070	38.33	36.36	7.49	35.37	46.81	74.00	-27.19	Peak
9838.312	34.50	37.60	8.84	33.45	47.49	74.00	-26.51	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



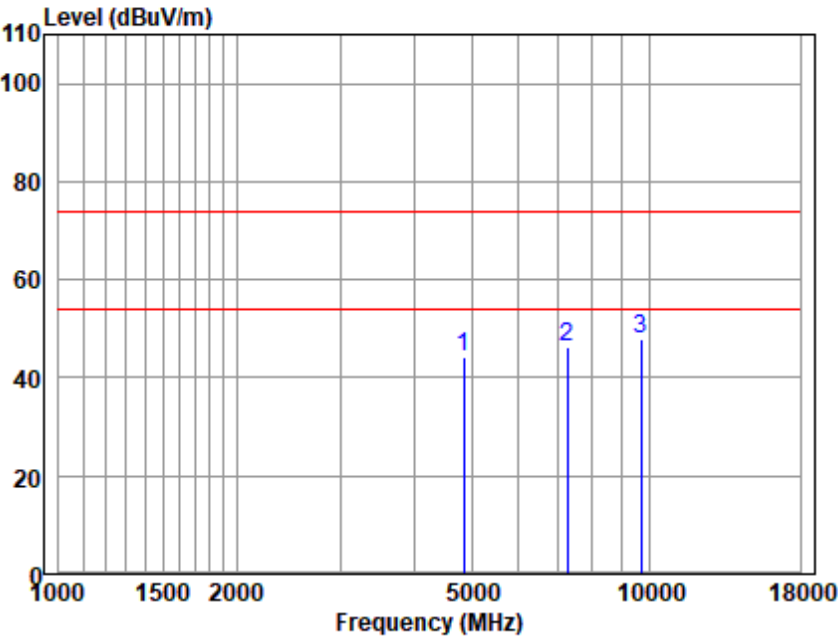
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4844.948	42.01	33.66	5.26	36.80	44.13	74.00	-29.87	Peak
7263.015	36.17	36.30	7.38	35.48	44.37	74.00	-29.63	Peak
9697.151	34.48	37.62	8.78	33.53	47.35	74.00	-26.65	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

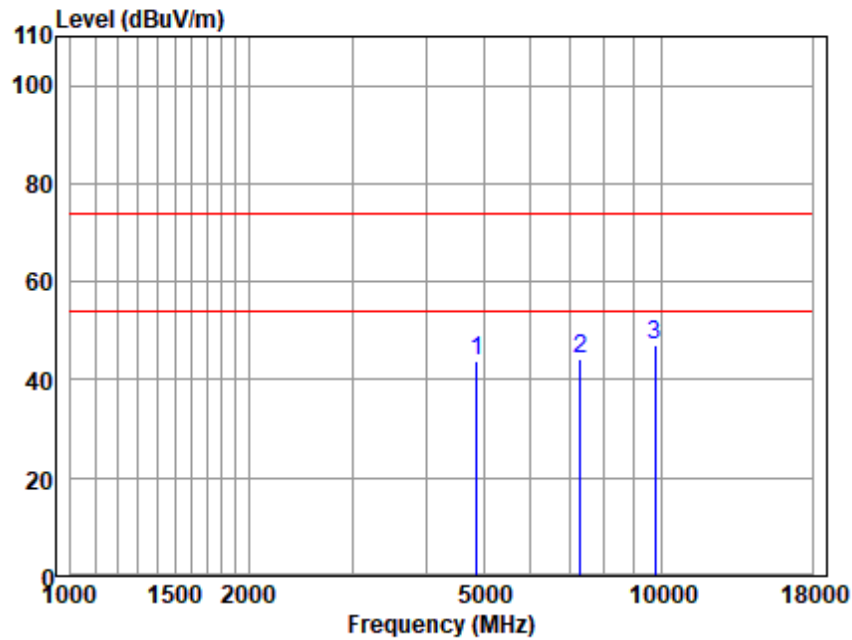


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4844.948	42.11	33.66	5.26	36.80	44.23	74.00	-29.77	Peak
7263.015	38.12	36.30	7.38	35.48	46.32	74.00	-27.68	Peak
9697.151	35.10	37.62	8.78	33.53	47.97	74.00	-26.03	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:middle



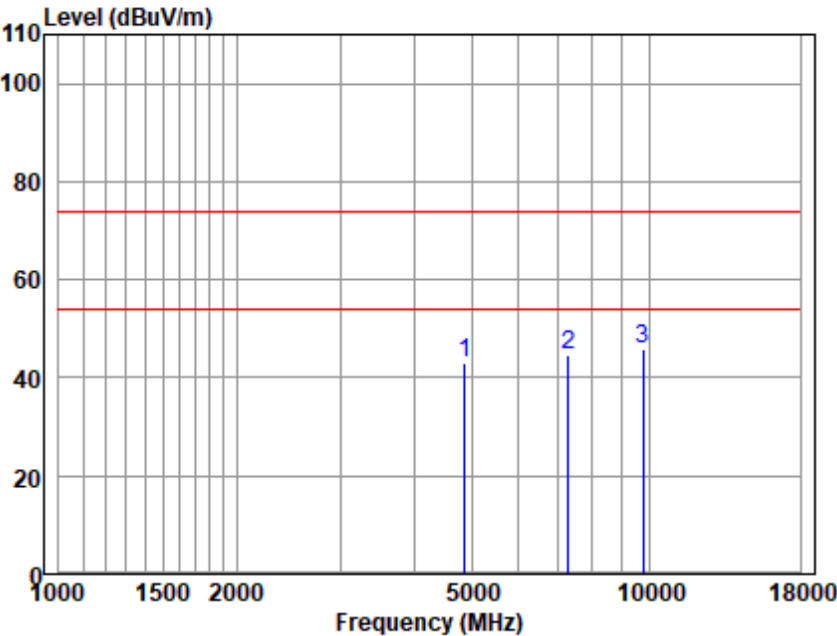
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.043	41.56	33.66	5.28	36.81	43.69	74.00	-30.31	Peak
7305.122	35.77	36.32	7.42	35.44	44.07	74.00	-29.93	Peak
9753.371	34.20	37.54	8.80	33.50	47.04	74.00	-26.96	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:middle

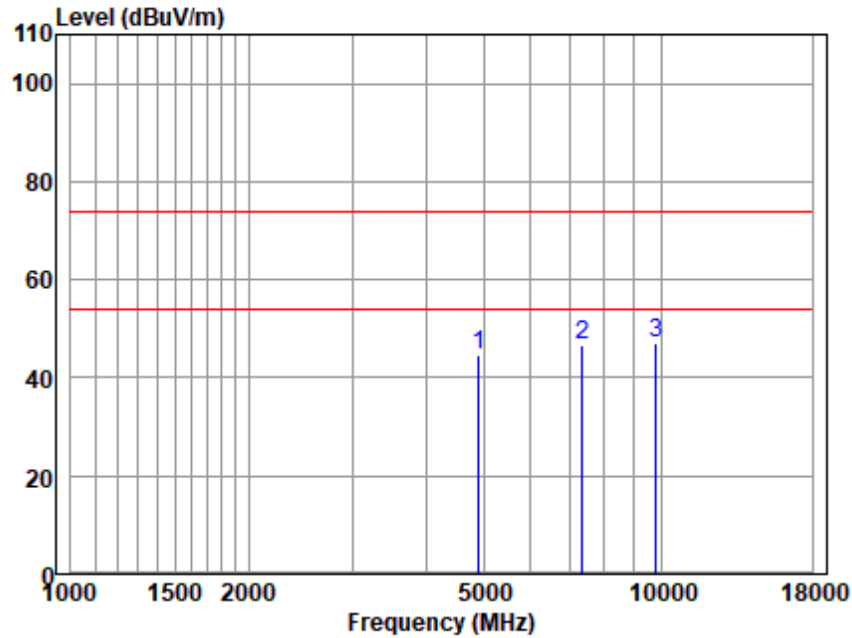


Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4874.043	40.76	33.66	5.28	36.81	42.89	74.00	-31.11	Peak
7305.122	36.20	36.32	7.42	35.44	44.50	74.00	-29.50	Peak
9753.371	33.17	37.54	8.80	33.50	46.01	74.00	-27.99	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



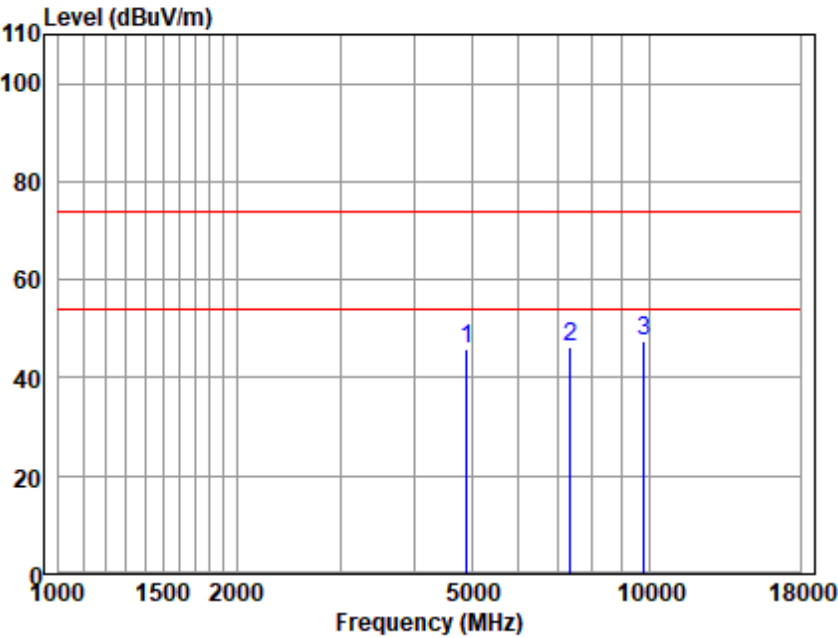
Antenna Polarity :HORIZONTAL

EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.300	42.49	33.66	5.30	36.81	44.64	74.00	-29.36	Peak
7347.474	38.39	36.35	7.45	35.41	46.78	74.00	-27.22	Peak
9809.916	34.22	37.57	8.83	33.47	47.15	74.00	-26.85	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Antenna Polarity :VERTICAL  
EUT/Project :0535ME

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
4904.300	43.73	33.66	5.30	36.81	45.88	74.00	-28.12	Peak
7347.474	37.83	36.35	7.45	35.41	46.22	74.00	-27.78	Peak
9809.916	34.46	37.57	8.83	33.47	47.39	74.00	-26.61	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor



## **SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.**

SHEM-TRF-001 Rev. 02 Sep01, 2023

Report No.: SHCR250300053503

Page: 57 of 57

### **7 Test Setup Photo**

Refer to Appendix - Test Setup Photo for SHCR2503000535ME

### **8 EUT Constructional Details (EUT Photos)**

Refer to Appendix - Photographs of EUT Constructional Details for SHCR2503000535ME

- End of the Report -