

TEST REPORT

Application No.: SZCR2103000030AT(SHEM2011009697CR)
FCC ID: 2APJ4-SLM500
Applicant: MeiG Smart Technology Co., Ltd
Address of Applicant: 3/F, No.88, Qinqiang Road, Xuhui District, Shanghai, China.
Manufacturer: MeiG Smart Technology Co., Ltd
Address of Manufacturer: 5/F, Bld G, No.2337, Gudai Road, Minghang District, Shanghai, China
Equipment Under Test (EUT):
EUT Name: Smart module
Model No.: SLM500
Trade mark: Meig Link
Standard(s) : 47 CFR Part 15, Subpart C 15.247
Date of Receipt: 2020-11-19
Date of Test: 2020-12-22 to 2021-01-08
Date of Issue: 2021-01-11

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Keny. Xu

Keny Xu
EMC Laboratory Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2021-01-11	/

Authorized for issue by:			
			
		Bill Chen / Project Engineer	
			
		Eric Fu / Reviewer	





2 Test Summary

Radio Spectrum Technical Requirement			
Item	FCC Requirement	Method	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	N/A	Customer Declaration
N/A: Not applicable			
Radio Spectrum Matter Part			
Item	FCC Requirement	Method	Result
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247a(2)	ANSI C63.10 (2013) Section 11.8.1	Pass
Conducted Average Output Power	47 CFR Part 15, Subpart C 15.247(b)(3)	ANSI C63.10 (2013) Section 11.9.2	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247(e)	ANSI C63.10 (2013) Section 11.10.3	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247(d)	ANSI C63.10 (2013) Section 11.13.3.2	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247(d)	ANSI C63.10 (2013) Section 11.11	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	ANSI C63.10 (2013) Section 6.10.5	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	ANSI C63.10 (2013) Section 6.4,6.5,6.6	Pass





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4 General Information

4.1 Details of E.U.T.

Power supply: DC 3.8V by DC power supply
Test voltage: DC 3.8V
Serial Number: M500QE8BYA071000060
Firmware version: SLM500Q_EQ000_2774.2AAF2F74.BCA2CDE_200628_100_V01_T09
Antenna Gain: 1dBi (Provided by the manufacturer)
Antenna Type: Dipole Antenna
Channel Spacing: 5MHz
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
Operation Frequency: 802.11b/g/n(HT20): 2412MHz to 2462MHz
802.11n(HT40): 2422MHz to 2452MHz

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
DC Power Supply	Laboratory	N/A	E903131
Laptop	Lenovo	ThinkPad X100e	/

4.3 Power level setting using in test

Channel	802.11b	802.11g	802.11n(HT20)
	Ant 1	Ant 1	Ant 1
1	12	8	8
6	12	8	8
11	12	8	8
Channel	802.11n(HT40)		
	Ant 1		
3	8		
6	8		
9	8		



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4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
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	5.1dB (Below 1GHz) 4.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 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 $k=2$.



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4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053

Fax: +86 755 2671 0594

No tests were sub-contracted.

4.6 Test Facility

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

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006. IC#: 4620C.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



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5 Equipment List

RF test system					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
Shielding Room	SAEMC	MSR733	SEM001-09	2019-06-13	2022-06-12
MXA Signal Analyzer(10Hz-26.5GHz)	KEYSIGHT	N9020A	SEM004-17	2020-05-21	2021-05-20
Signal Generator (9kHz-40GHz)	KEYSIGHT	N5173B	SEM006-05	2020-09-23	2021-09-22
MXG Vector Signal Generator	KEYSIGHT	N5182A	SEM006-14	2020-03-23	2021-03-22
ESG Vector Signal Generator	KEYSIGHT	E4438C	SEM006-15	2020-09-23	2021-09-22
DC Power Supply	Rohde & Schwarz	NGSM 32/10	SEM011-04	2020-03-24	2021-03-23
Manual Step Attenuator	KEYSIGHT	8494B	SEM021-05	2020-04-09	2021-04-08
Manual Step Attenuator	KEYSIGHT	8496B	SEM021-06	2020-04-09	2021-04-08
Power Sensor	KEYSIGHT	U2021XA	SEM009-20	2020-05-21	2021-05-20
Power Sensor	KEYSIGHT	U2021XA	SEM009-21	2020-05-21	2021-05-20
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2020-03-25	2021-03-24
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2020-04-01	2021-03-31
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-03	2020-07-10	2021-07-09

Radiated Emissions which fall in the restricted bands					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
EXA Signal Analyzer	Agilent Technologies Inc	N9010A	SEM004-12	2020-04-09	2021-04-08
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2020-09-23	2021-09-22
Measurement Software	Farad	EZ-EMC	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2020-07-10	2021-07-09



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Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2020-11-14	2023-11-13
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2020-04-01	2021-03-31

Radiated Spurious Emissions**RE in Chamber <1GHz**

Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2020-07-19	2023-07-18
MXE EMI receiver(3Hz-3.6GHz)	KEYSIGHT	N9038A	SEM004-15	2020-11-02	2021-11-01
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-02	2019-05-24	2022-05-23
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2020-04-01	2021-03-31
Measurement Software	Farad	EZ-EMC	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2020-07-10	2021-07-09

RE in Chamber >1GHz

Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
EXA Signal Analyzer (10Hz-44GHz)	Agilent Technologies Inc	N9010A	SEM004-12	2020-04-09	2021-04-08
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2020-09-23	2021-09-22
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2020-04-01	2021-03-31
Measurement Software	Farad	EZ-EMC	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2020-07-10	2021-07-09





General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2020-09-15	2021-09-14
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2020-09-15	2021-09-14
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2020-04-07	2021-04-06



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

6.1.2 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is bipole antenna and no consideration of replacement. The best case gain of the antenna is 1dBi.

Antenna location: Refer to Appendix (Internal Photos)



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7 Radio Spectrum Matter Test Results

7.1 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)
Test Method: ANSI C63.10 (2013) Section 11.8.1
Limit: ≥ 500 kHz

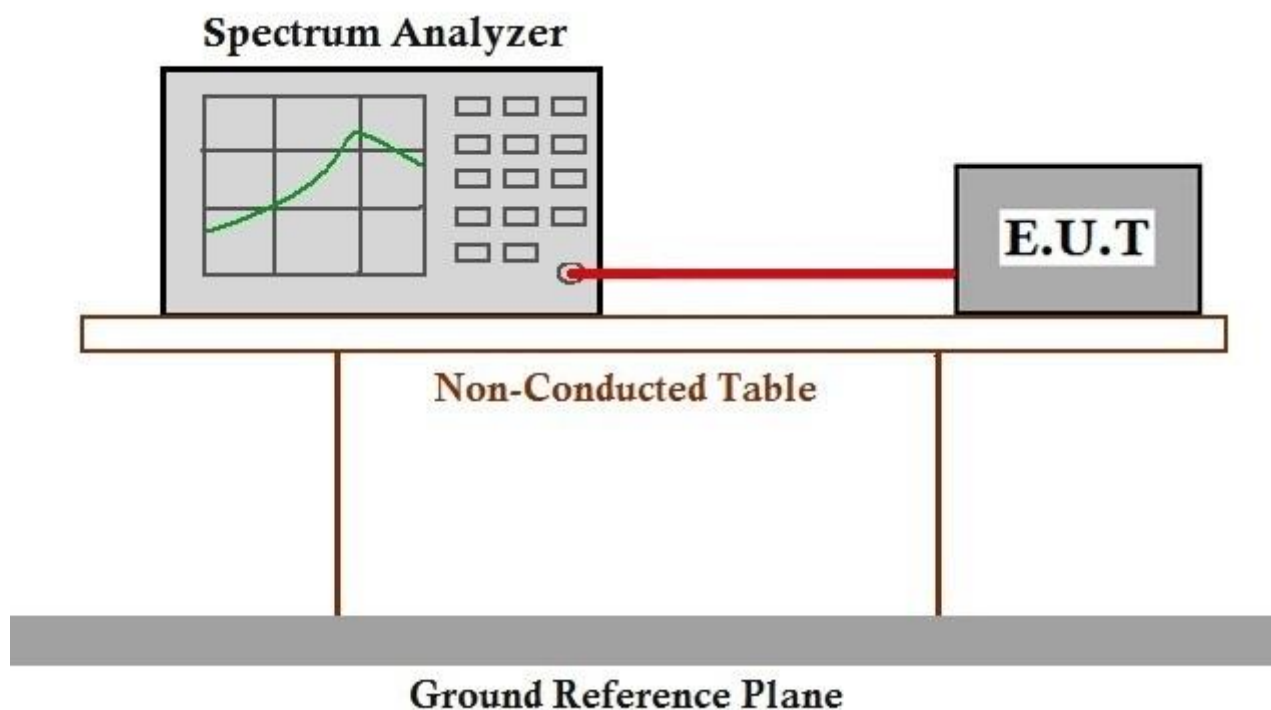
7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1004 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.1.2 Test Setup Diagram



7.1.3 Measurement Procedure and Data

The detailed test data see: Appendix C for SZCR210300003003



7.2 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)

Test Method: ANSI C63.10 (2013) Section 11.9.1

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation



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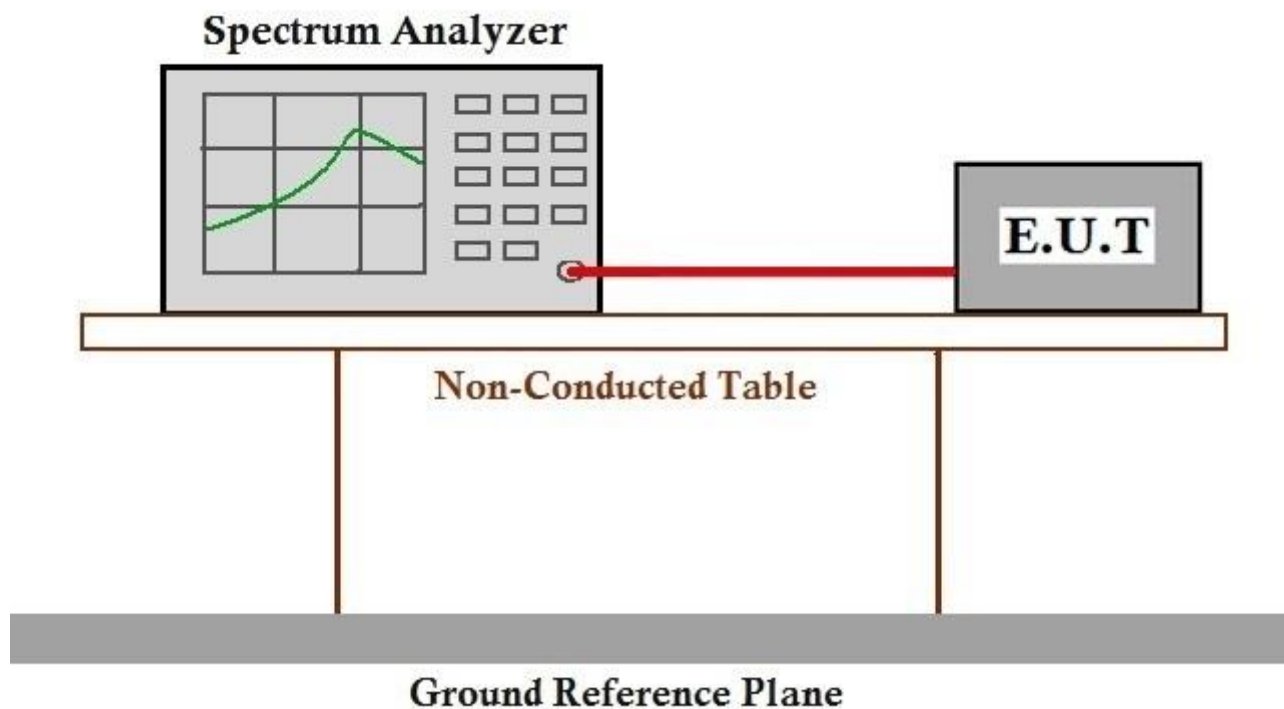
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1004 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix C for SZCR210300003003

7.3 Power Spectrum Density

Test Requirement	47 CFR Part 15, Subpart C 15.247(e)
Test Method:	ANSI C63.10 (2013) Section 11.10.2
Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission

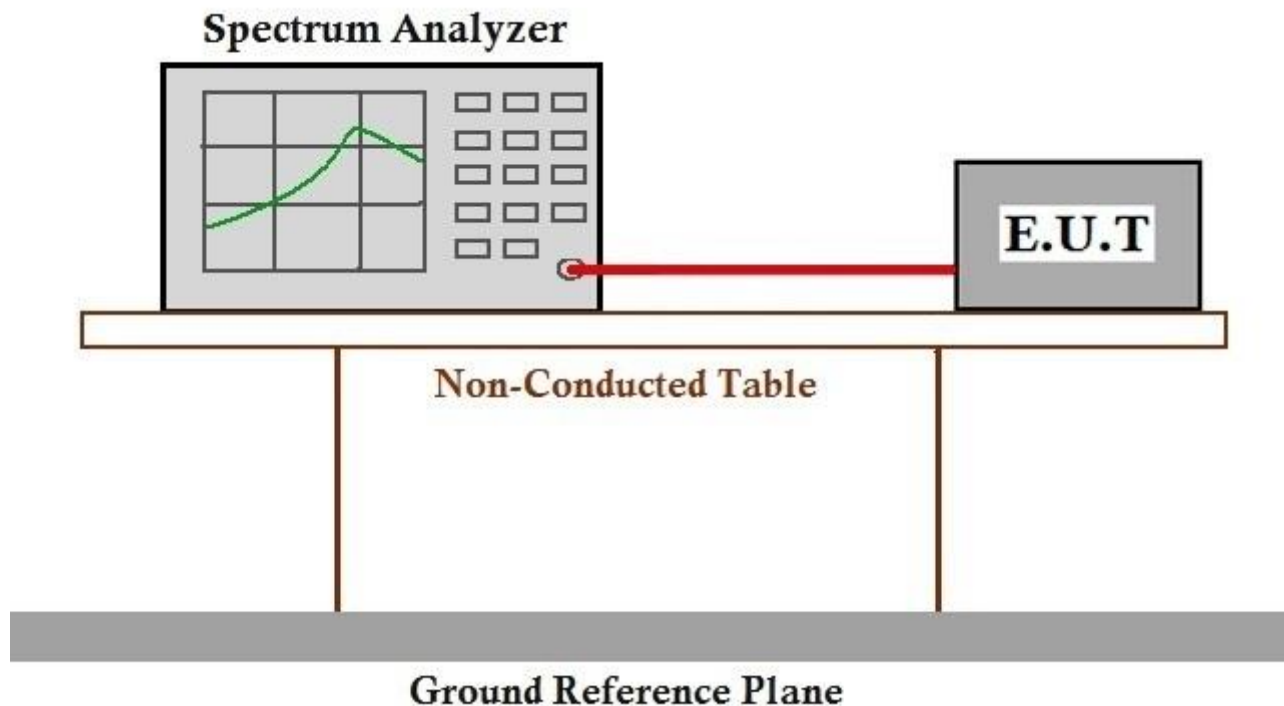
7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.3.2 Test Setup Diagram



7.3.3 Measurement Procedure and Data

The detailed test data see: Appendix C for SZCR210300003003



7.4 Conducted Band Edges Measurement

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 11.13.3.2
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c))



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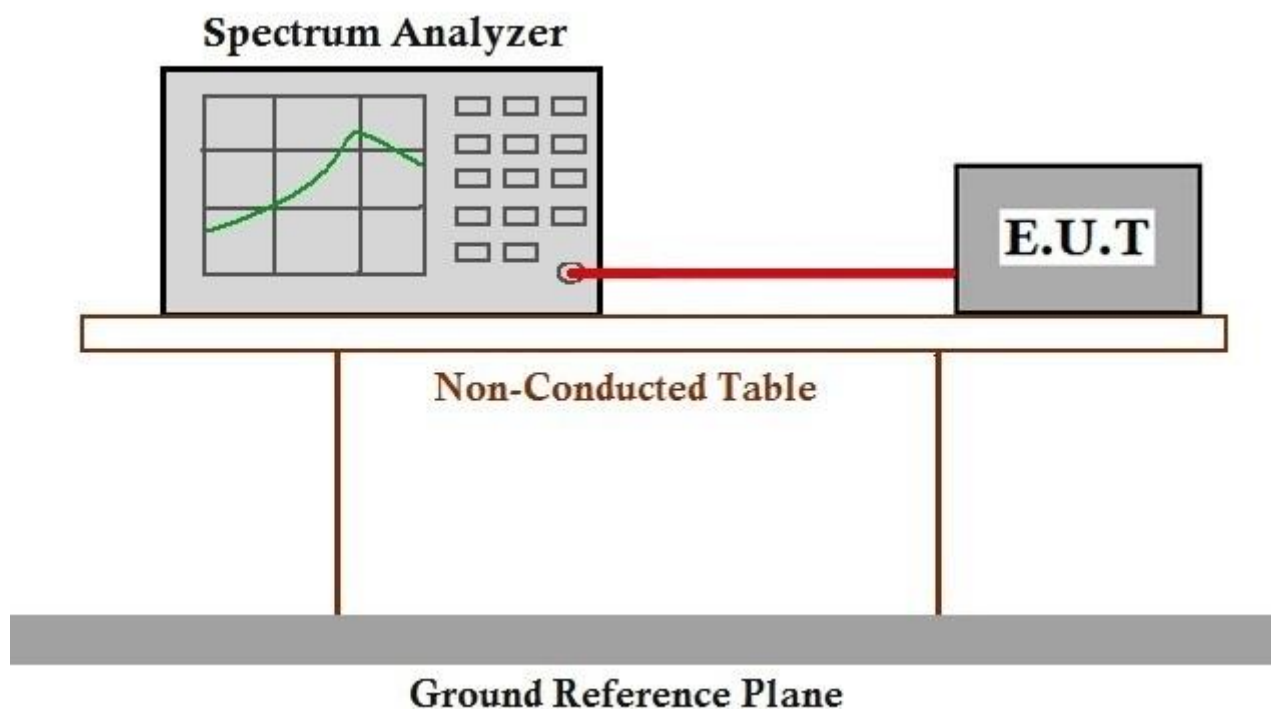
7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.4.2 Test Setup Diagram



7.4.3 Measurement Procedure and Data

The detailed test data see: Appendix C for SZCR210300003003



7.5 Conducted Spurious Emissions

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 11.11
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c))



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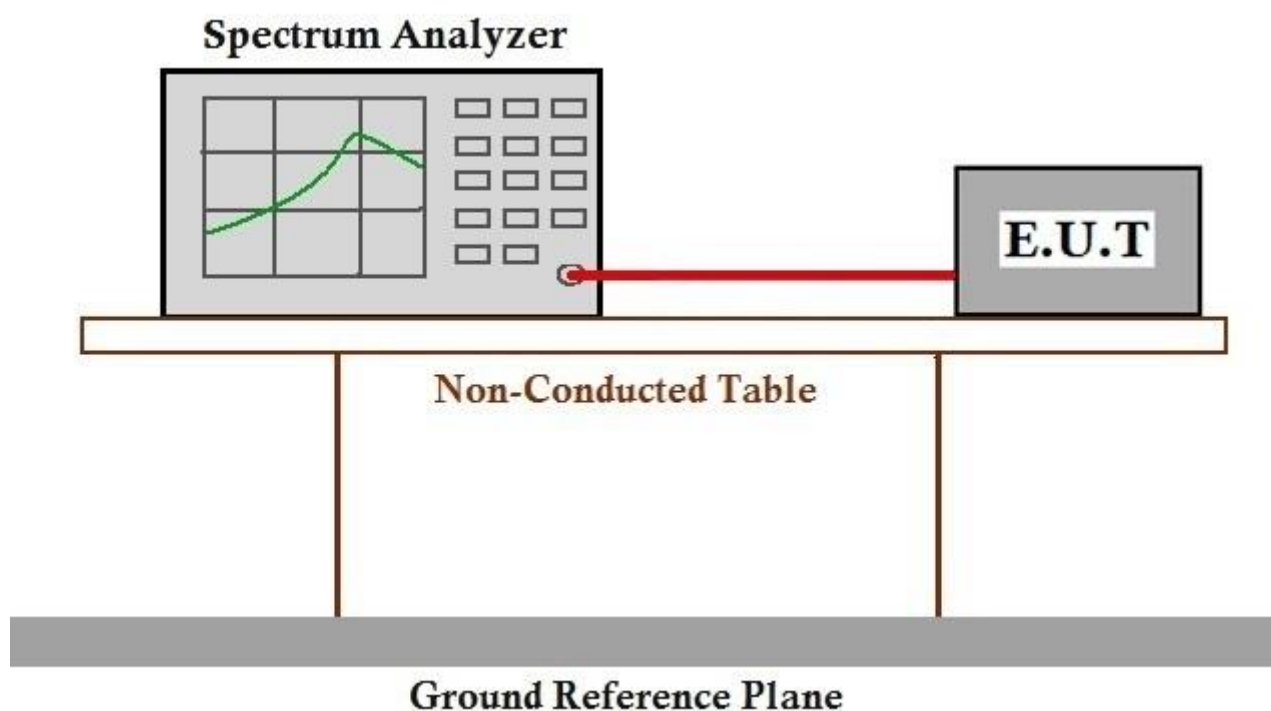
7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 1004 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.5.2 Test Setup Diagram



7.5.3 Measurement Procedure and Data

The detailed test data see: Appendix C for SZCR210300003003



7.6 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d)

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

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.



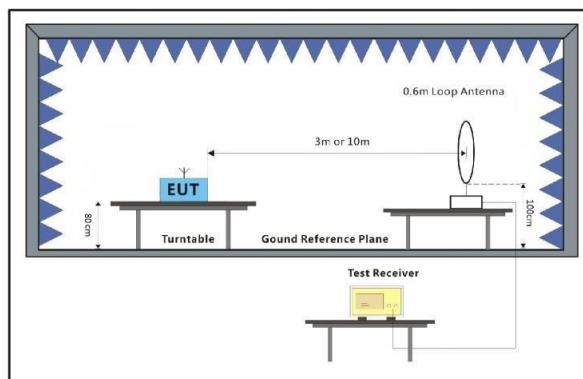
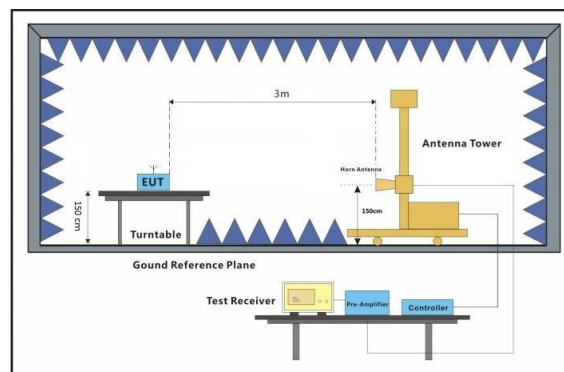
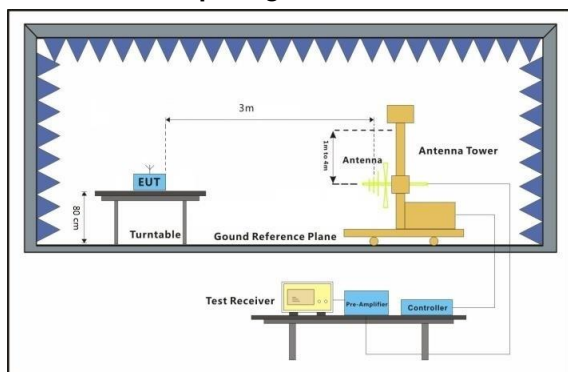
7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C Humidity: 50 % RH Atmospheric Pressure: 1003 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.6.2 Test Setup Diagram





7.6.3 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.

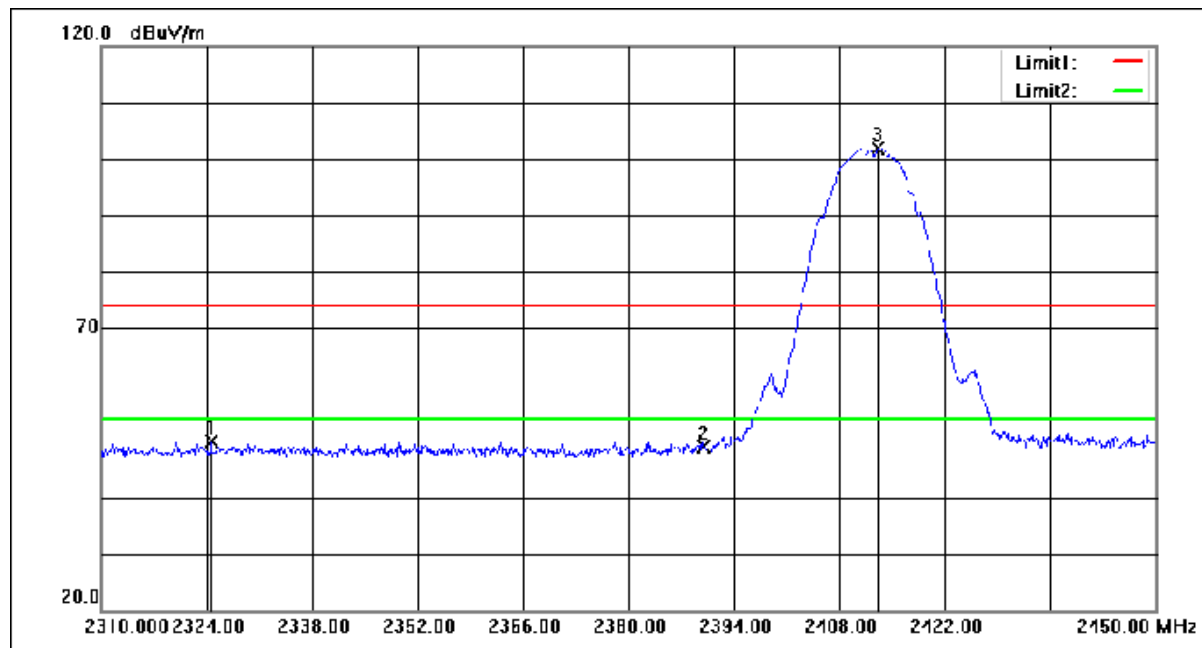
Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamplifier Factor

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.





Mode:d; Polarization:Horizontal; Modulation:b; bandwidth:20MHz; Channel:Low

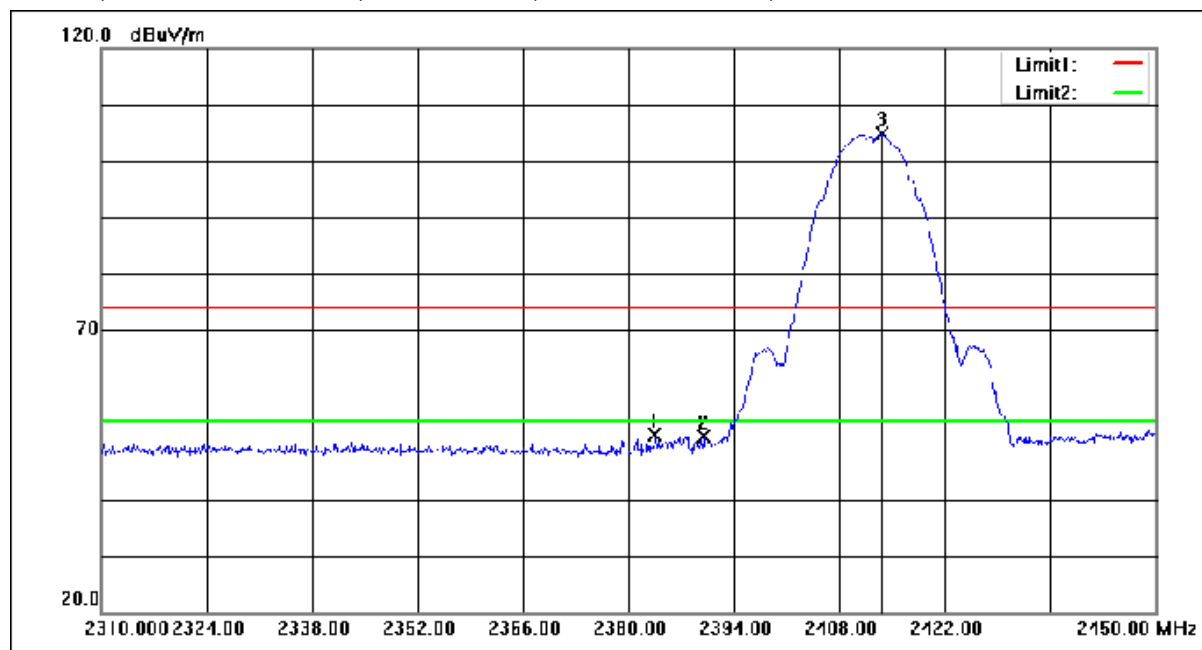


No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2324.560	54.36	-4.41	49.95	74.00	-24.05	peak
2	2390.000	53.23	-4.24	48.99	74.00	-25.01	peak
3	2413.180	106.11	-4.18	101.93	74.00	27.93	peak





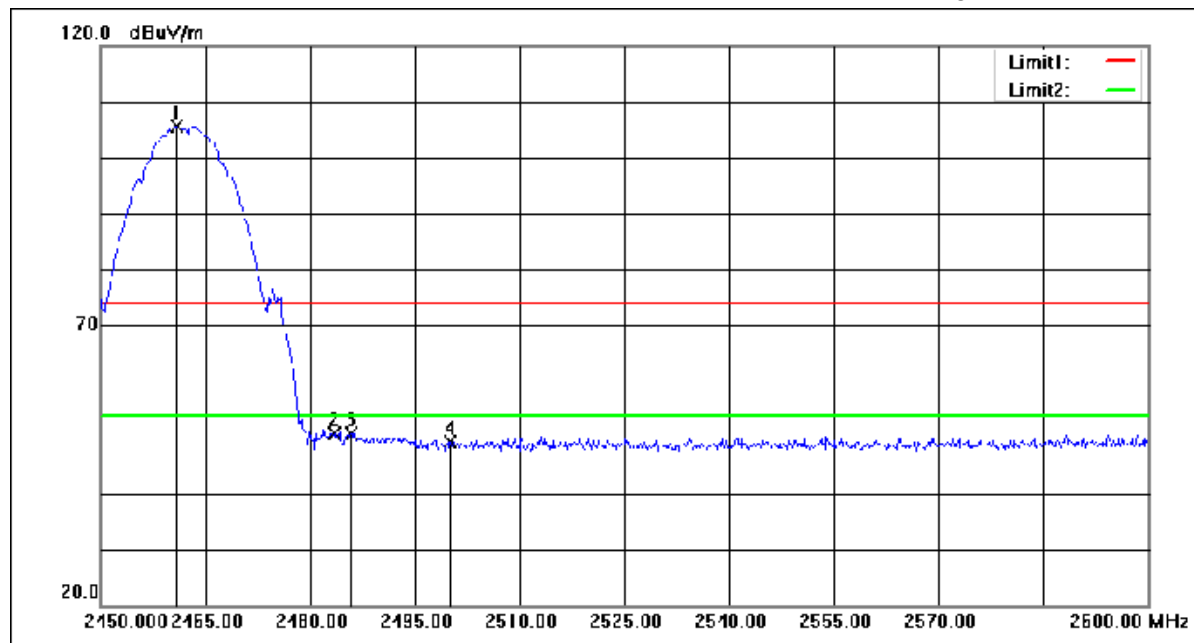
Mode:d; Polarization:Vertical; Modulation:b; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.500	55.63	-4.26	51.37	74.00	-22.63	peak
2	2390.000	55.47	-4.24	51.23	74.00	-22.77	peak
3	2413.600	108.96	-4.18	104.78	74.00	30.78	peak

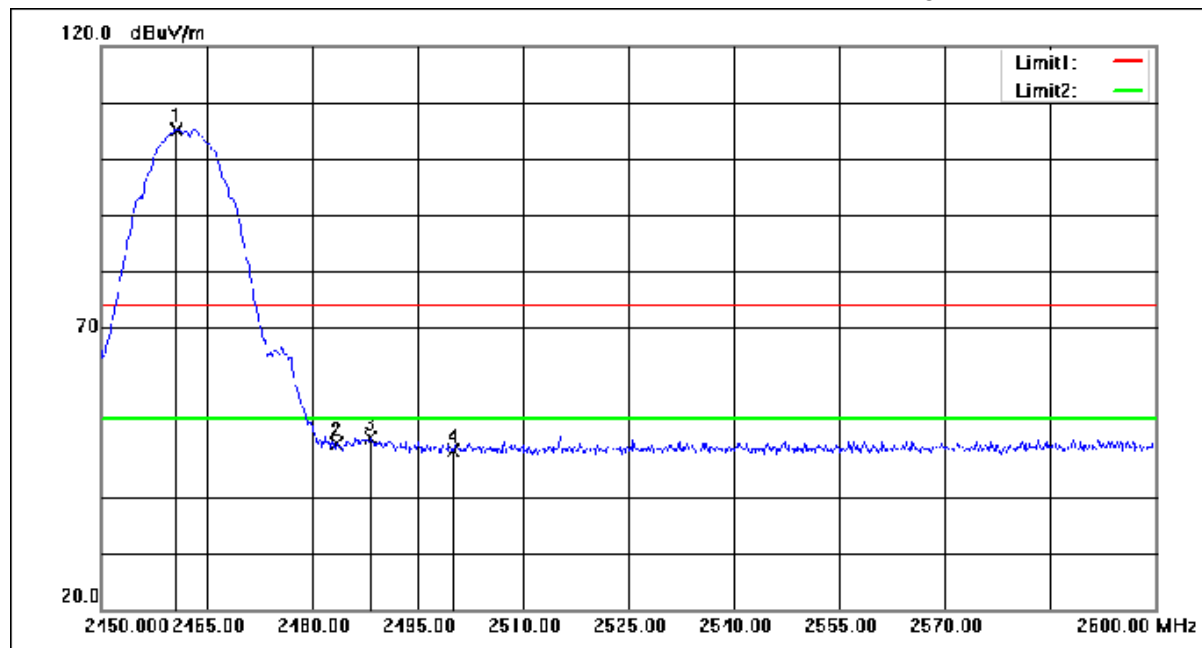


Mode:d; Polarization:Horizontal; Modulation:b; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.800	109.73	-4.06	105.67	74.00	31.67	peak
2	2483.500	54.61	-4.00	50.61	74.00	-23.39	peak
3	2485.850	54.71	-4.00	50.71	74.00	-23.29	peak
4	2500.000	53.14	-3.96	49.18	74.00	-24.82	peak

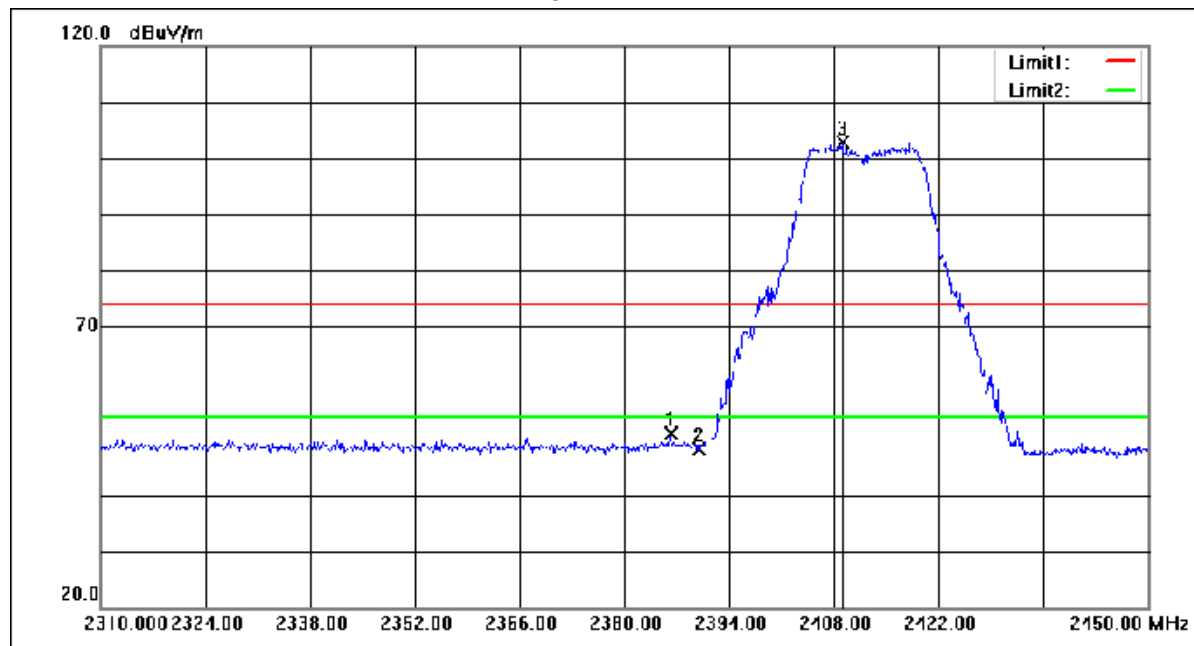
Mode:d; Polarization:Vertical; Modulation:b; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.650	109.27	-4.06	105.21	74.00	31.21	peak
2	2483.500	53.42	-4.00	49.42	74.00	-24.58	peak
3	2488.250	54.42	-3.99	50.43	74.00	-23.57	peak
4	2500.000	51.99	-3.96	48.03	74.00	-25.97	peak



Mode:d; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:Low

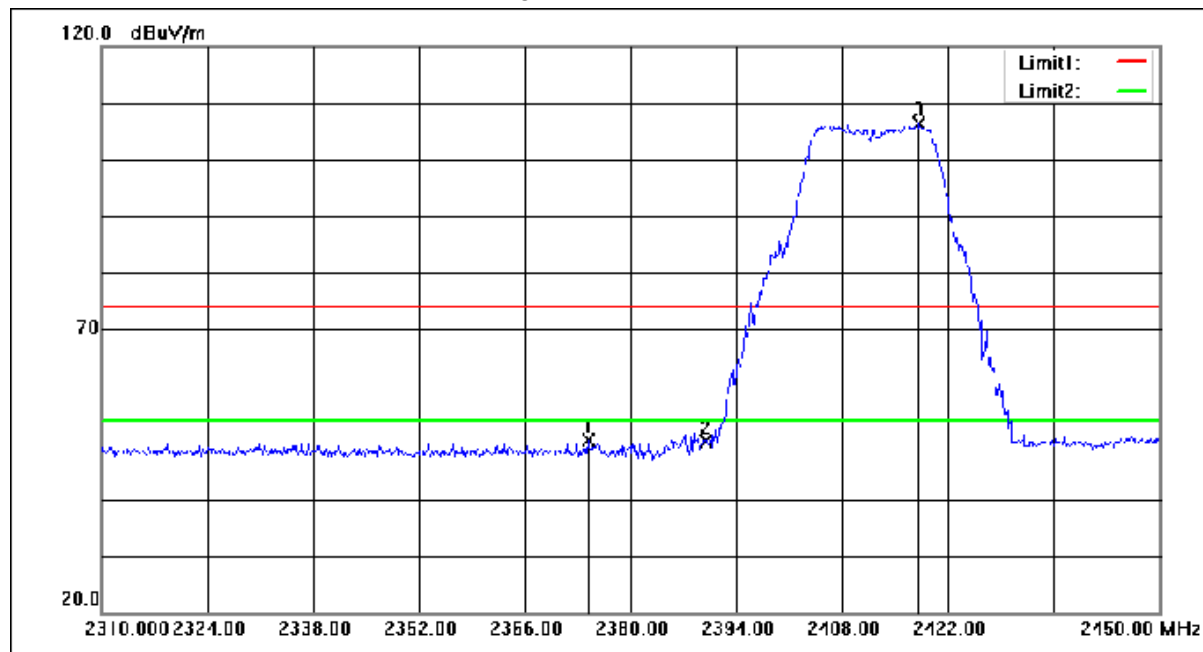


No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.160	55.03	-4.25	50.78	74.00	-23.22	peak
2	2390.000	52.42	-4.24	48.18	74.00	-25.82	peak
3	2409.120	106.96	-4.19	102.77	74.00	28.77	peak





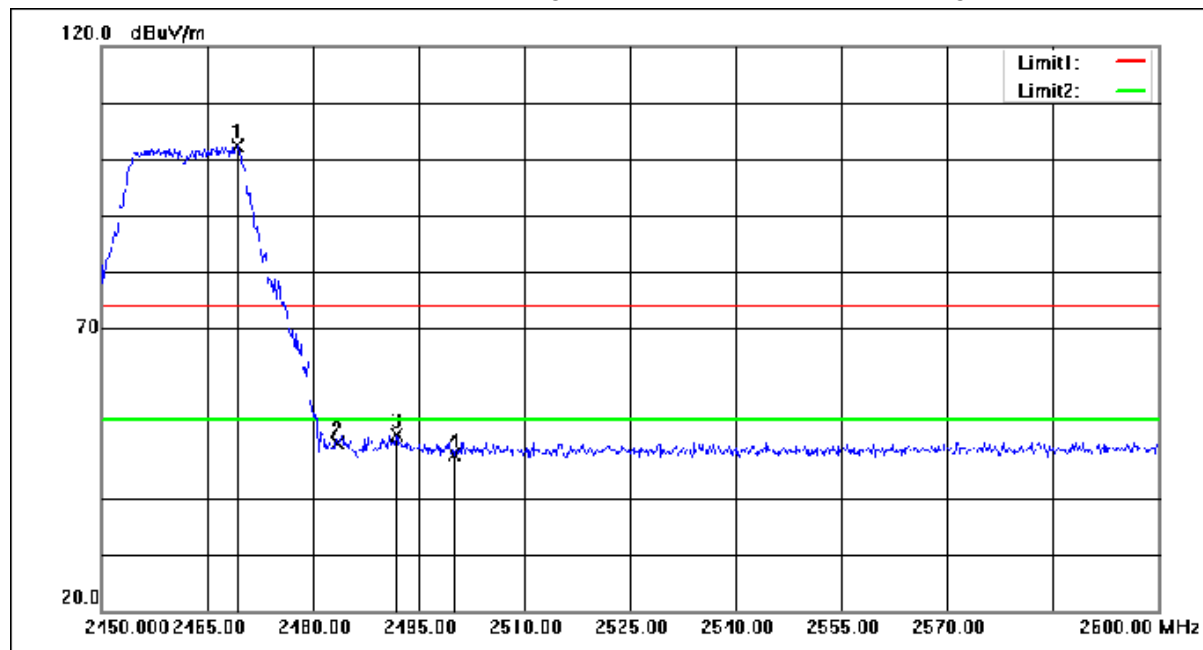
Mode:d; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2374.400	54.56	-4.28	50.28	74.00	-23.72	peak
2	2390.000	54.25	-4.24	50.01	74.00	-23.99	peak
3	2418.220	110.44	-4.17	106.27	74.00	32.27	peak

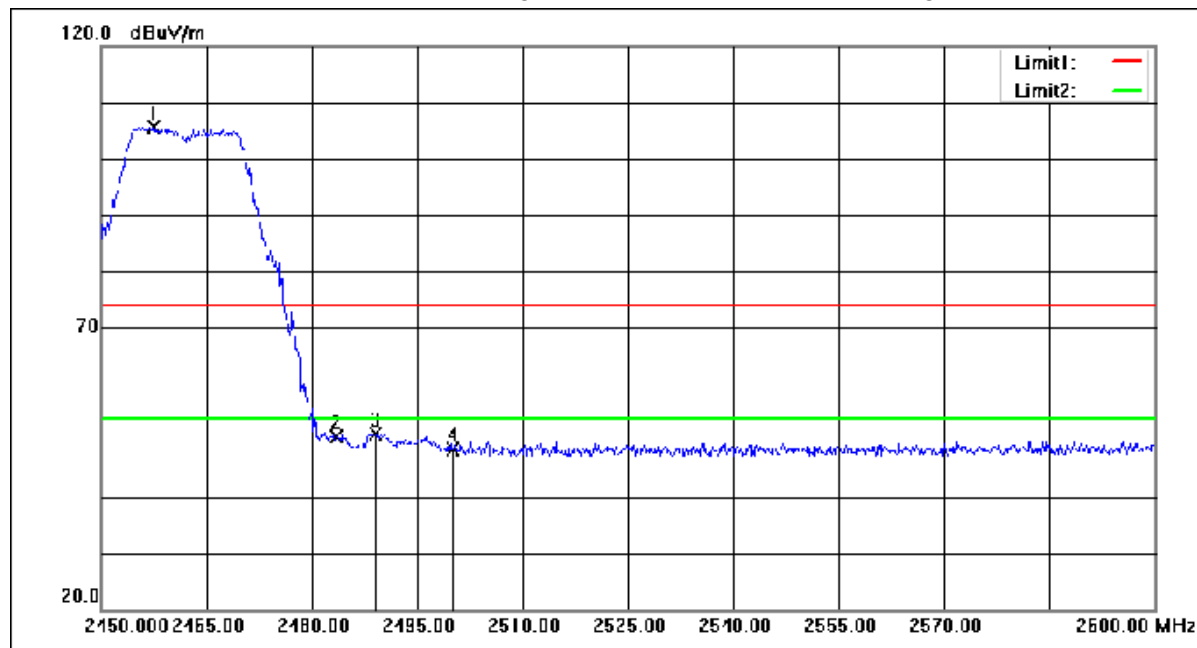


Mode:d; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2469.350	106.36	-4.04	102.32	74.00	28.32	peak
2	2483.500	53.58	-4.00	49.58	74.00	-24.42	peak
3	2491.850	55.11	-3.98	51.13	74.00	-22.87	peak
4	2500.000	51.63	-3.96	47.67	74.00	-26.33	peak

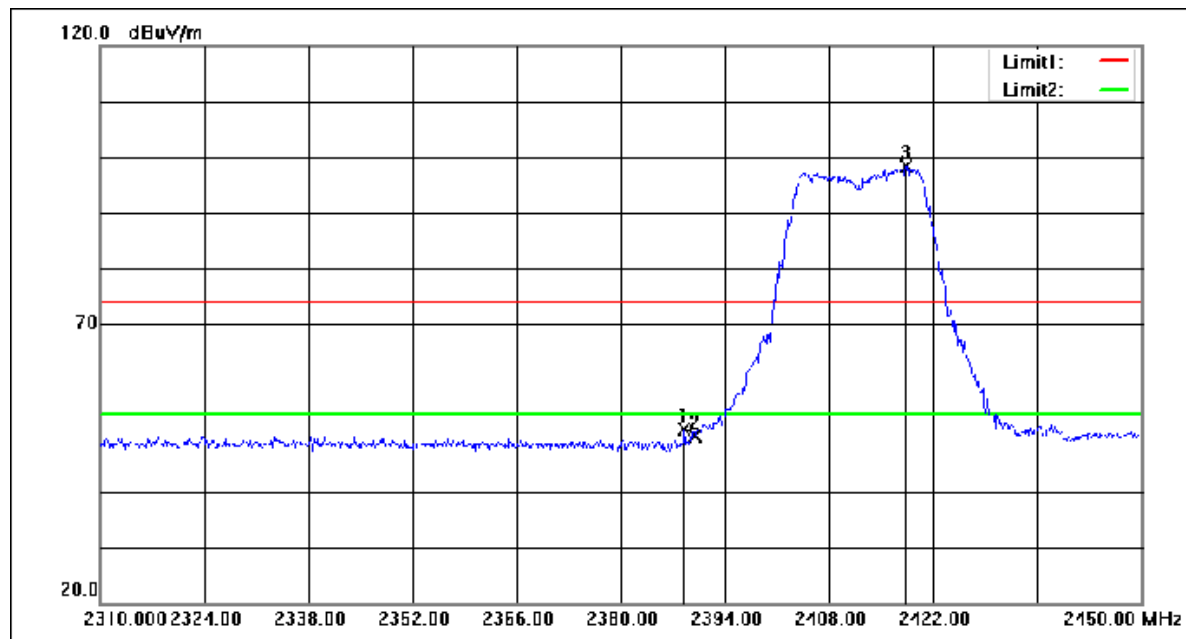
Mode:d; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2457.500	109.78	-4.07	105.71	74.00	31.71	peak
2	2483.500	54.60	-4.00	50.60	74.00	-23.40	peak
3	2489.150	55.14	-3.99	51.15	74.00	-22.85	peak
4	2500.000	52.25	-3.96	48.29	74.00	-25.71	peak



Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.540	55.33	-4.25	51.08	74.00	-22.92	peak
2	2390.000	54.21	-4.24	49.97	74.00	-24.03	peak
3	2418.360	102.54	-4.17	98.37	74.00	24.37	peak



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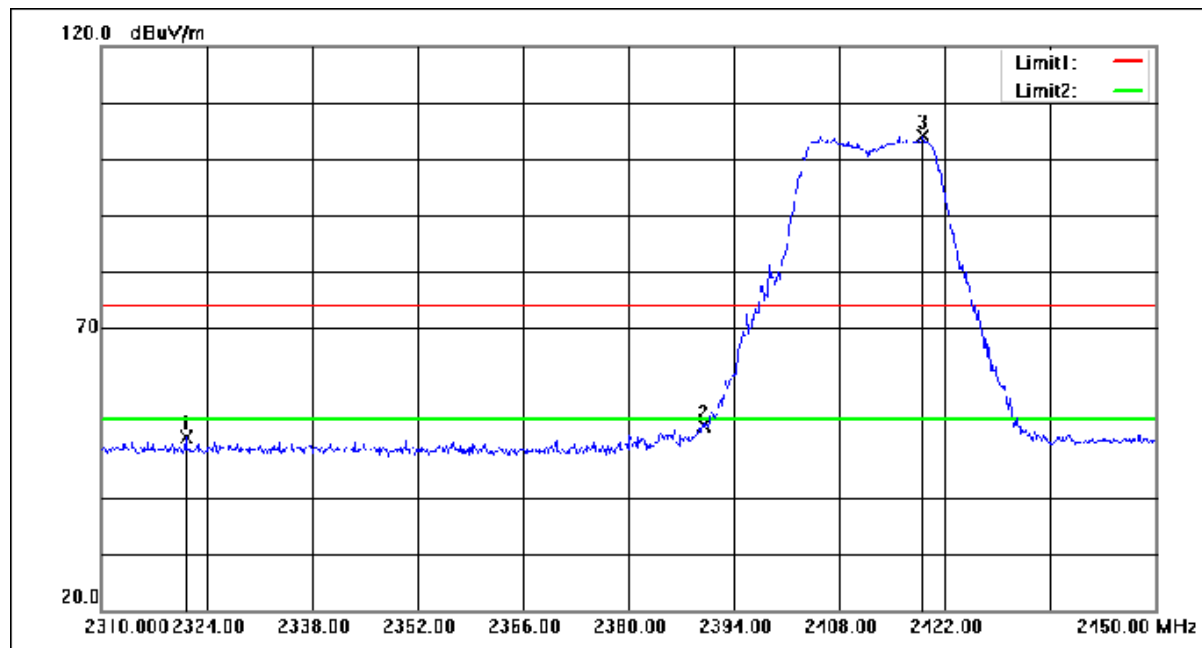
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Mode:d; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:Low



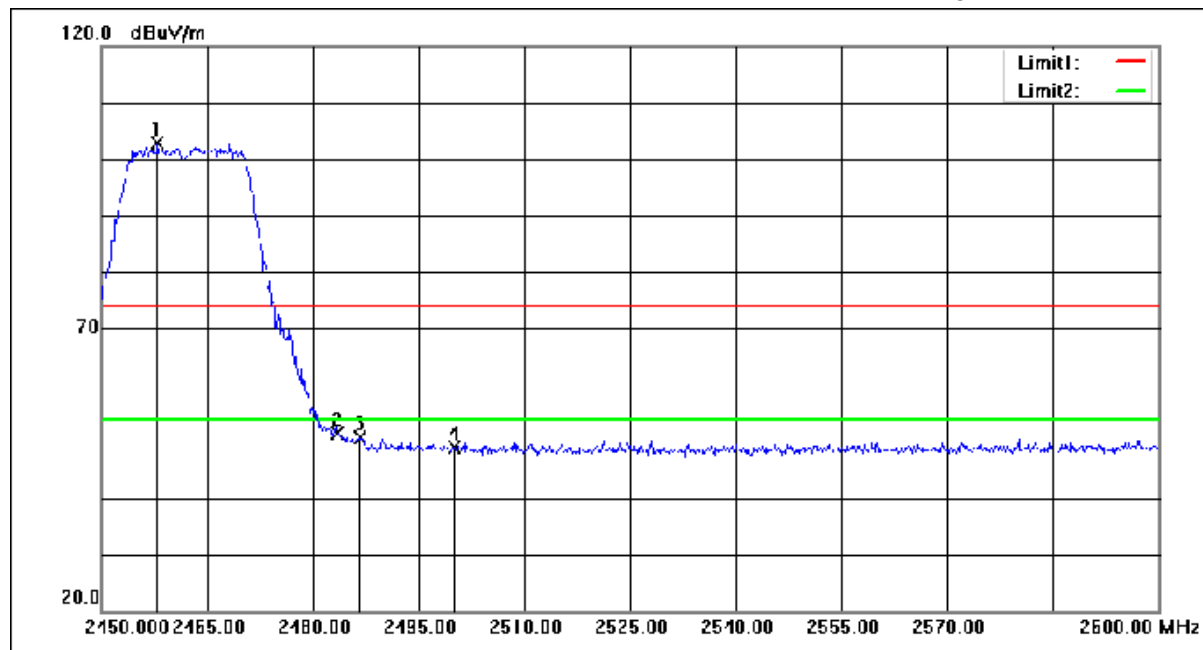
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2321.200	54.95	-4.42	50.53	74.00	-23.47	peak
2	2390.000	56.81	-4.24	52.57	74.00	-21.43	peak
3	2419.060	108.19	-4.17	104.02	74.00	30.02	peak



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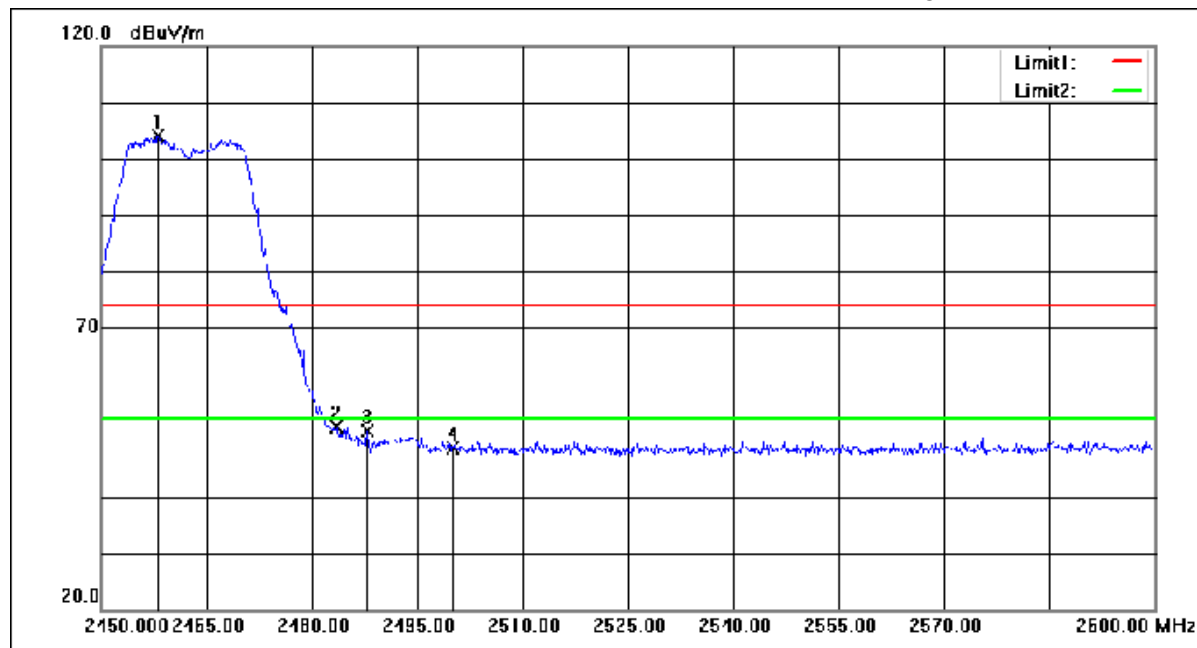
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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2457.950	107.04	-4.07	102.97	74.00	28.97	peak
2	2483.500	55.42	-4.00	51.42	74.00	-22.58	peak
3	2486.600	54.72	-3.99	50.73	74.00	-23.27	peak
4	2500.000	52.80	-3.96	48.84	74.00	-25.16	peak

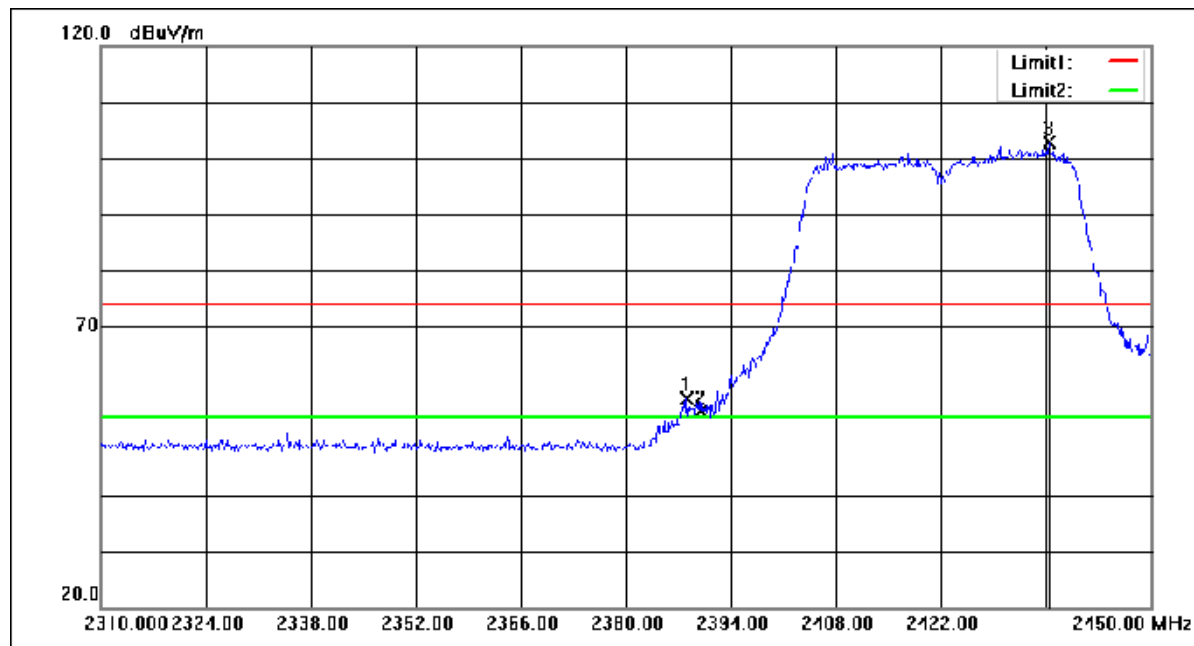
Mode:d; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2458.100	108.17	-4.07	104.10	74.00	30.10	peak
2	2483.500	56.27	-4.00	52.27	74.00	-21.73	peak
3	2487.800	55.67	-3.99	51.68	74.00	-22.32	peak
4	2500.000	52.69	-3.96	48.73	74.00	-25.27	peak



Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.120	61.41	-4.25	57.16	74.00	-16.84	peak
2	2390.000	59.14	-4.24	54.90	74.00	-19.10	peak
3	2436.420	106.90	-4.12	102.78	74.00	28.78	peak

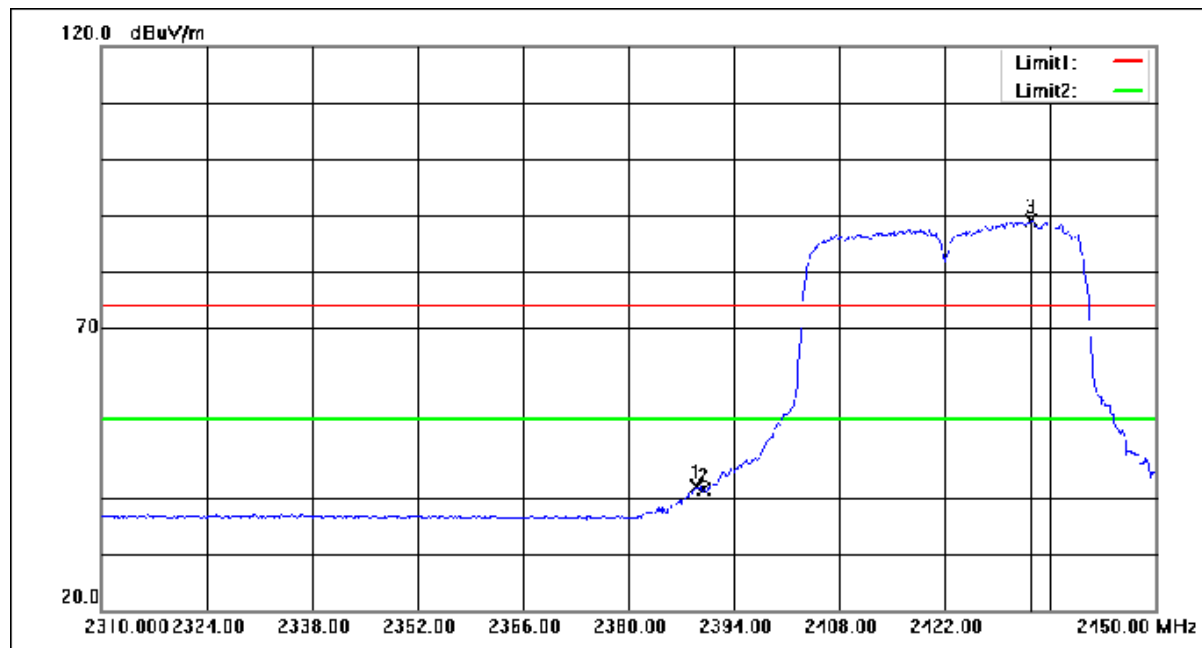


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low

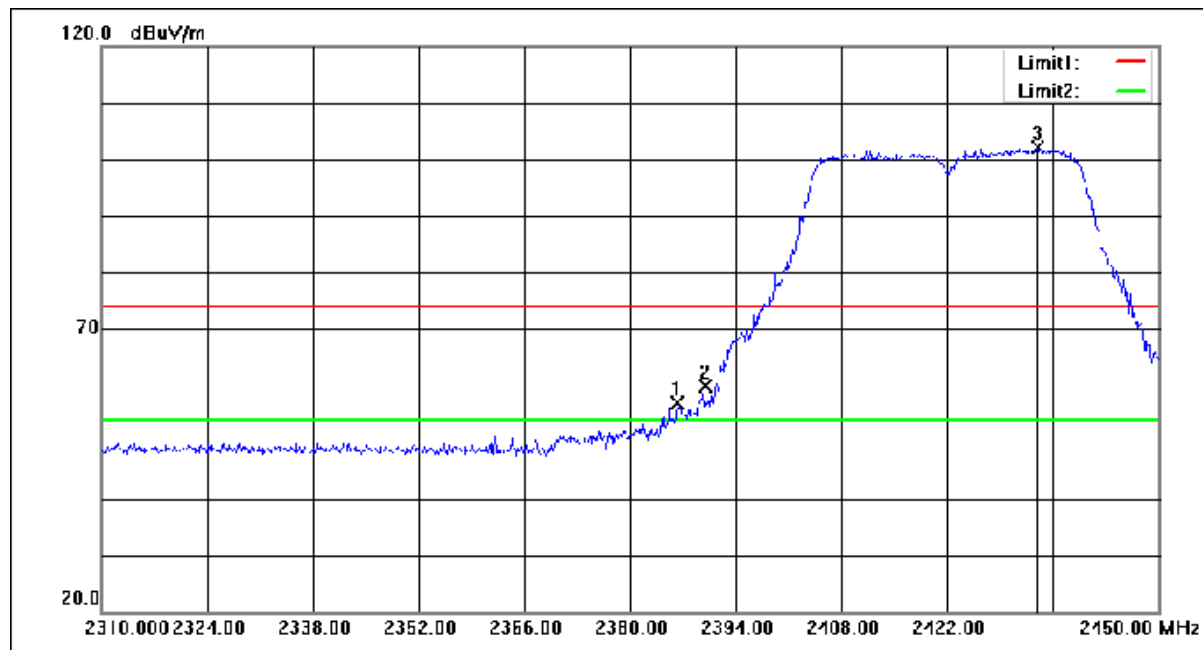


No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.960	46.09	-4.25	41.84	54.00	-12.16	AVG
2	2390.000	45.52	-4.24	41.28	54.00	-12.72	AVG
3	2433.480	93.22	-4.13	89.09	54.00	35.09	AVG





Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:Low

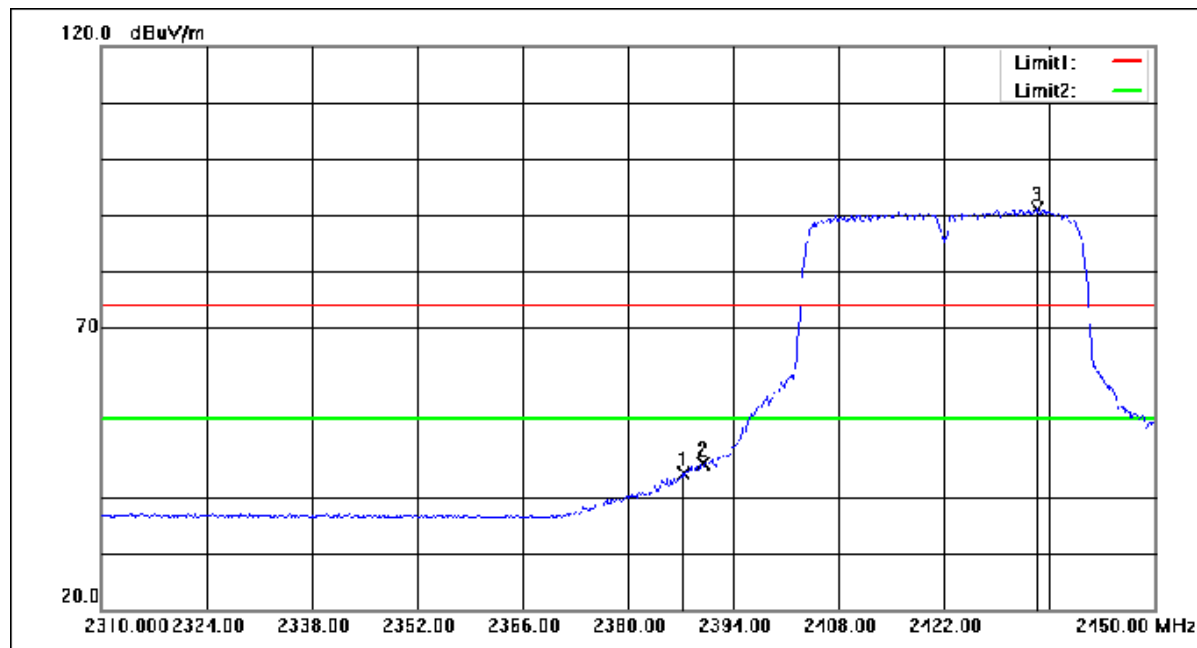


No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.300	61.10	-4.25	56.85	74.00	-17.15	peak
2	2390.000	64.08	-4.24	59.84	74.00	-14.16	peak
3	2434.040	106.23	-4.13	102.10	74.00	28.10	peak





Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.420	48.38	-4.25	44.13	54.00	-9.87	AVG
2	2390.000	50.04	-4.24	45.80	54.00	-8.20	AVG
3	2434.460	95.26	-4.13	91.13	54.00	37.13	AVG

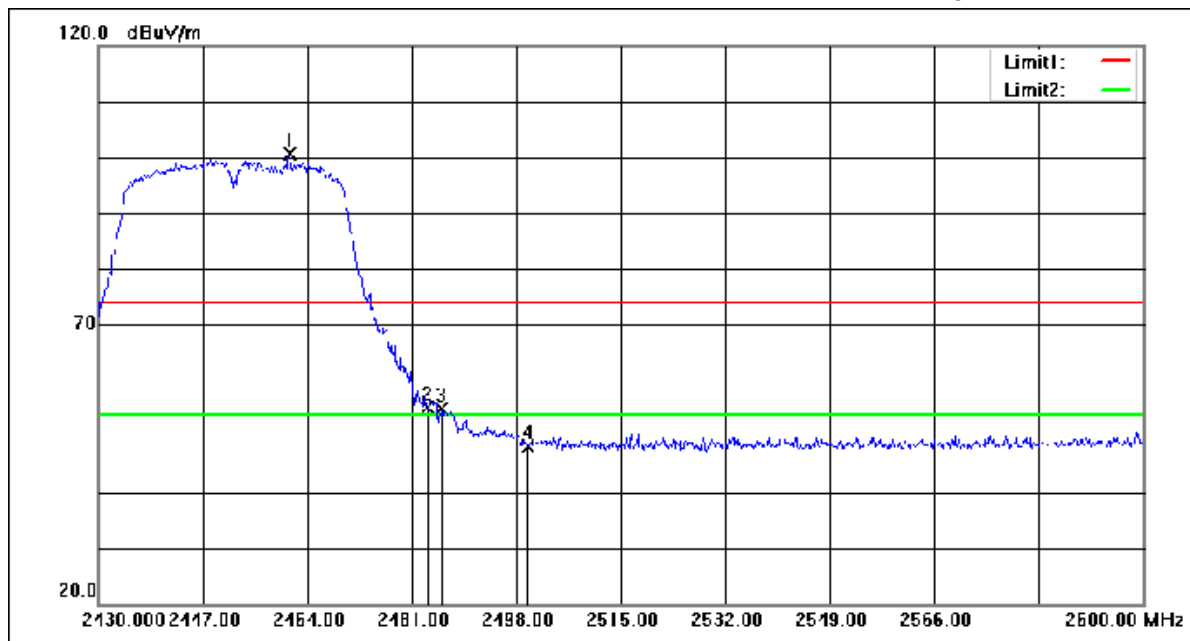


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.110	104.73	-4.06	100.67	74.00	26.67	peak
2	2483.500	59.06	-4.00	55.06	74.00	-18.94	peak
3	2485.930	58.81	-4.00	54.81	74.00	-19.19	peak
4	2500.000	52.01	-3.96	48.05	74.00	-25.95	peak

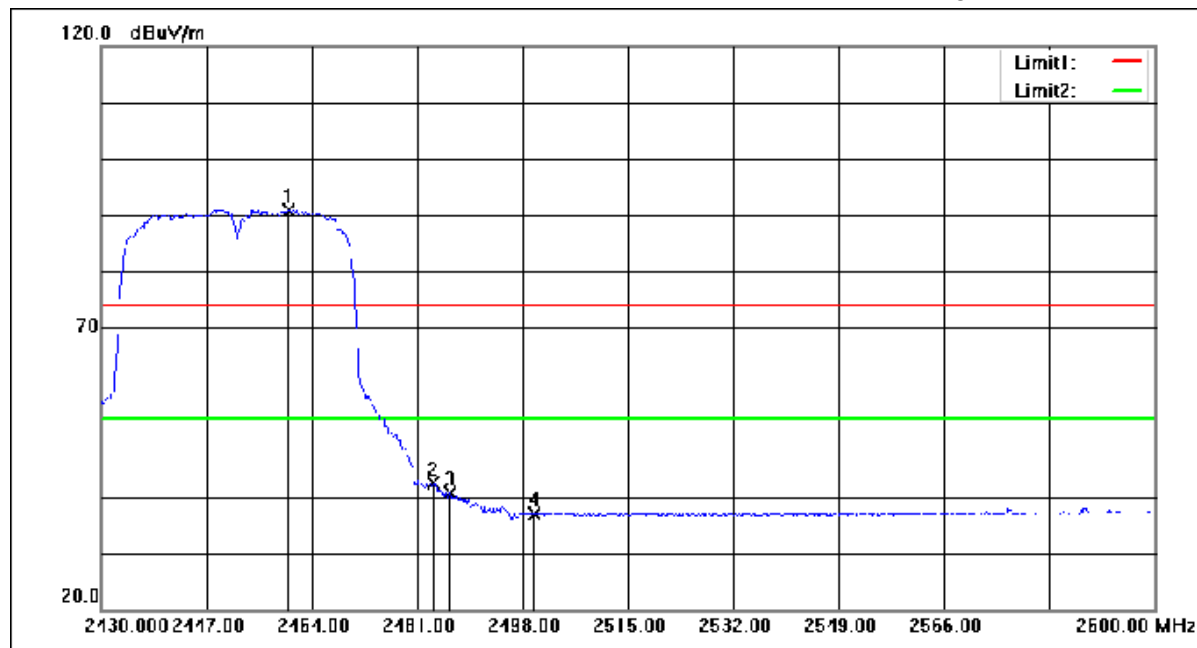


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:High



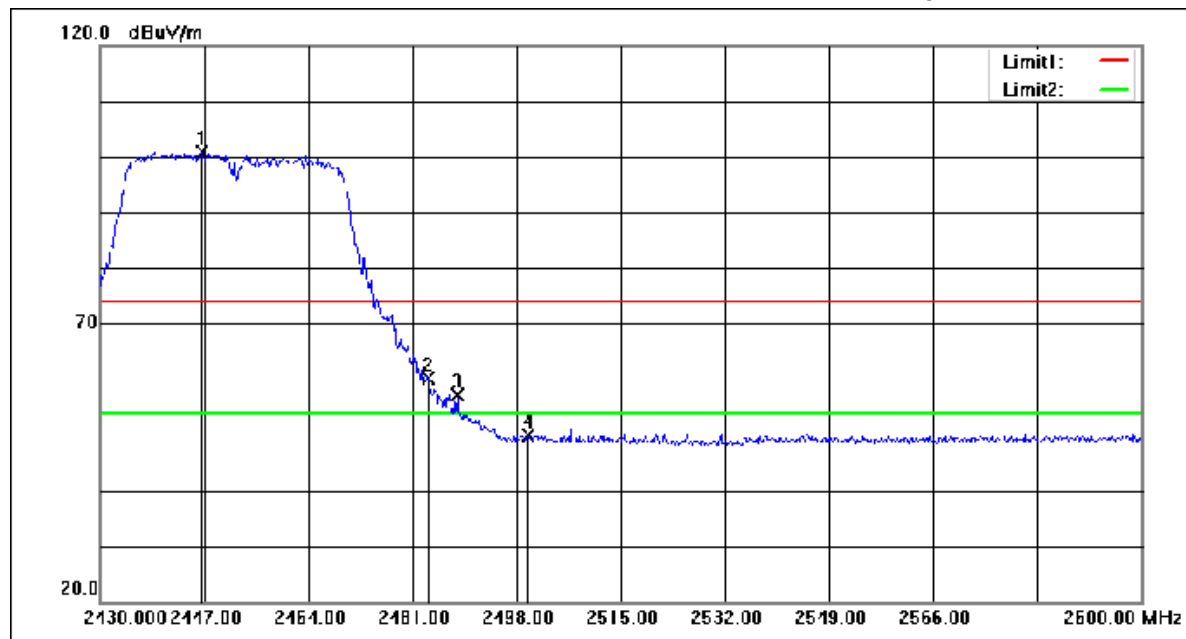
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.260	94.94	-4.06	90.88	54.00	36.88	AVG
2	2483.500	46.28	-4.00	42.28	54.00	-11.72	AVG
3	2486.270	44.58	-4.00	40.58	54.00	-13.42	AVG
4	2500.000	40.88	-3.96	36.92	54.00	-17.08	AVG



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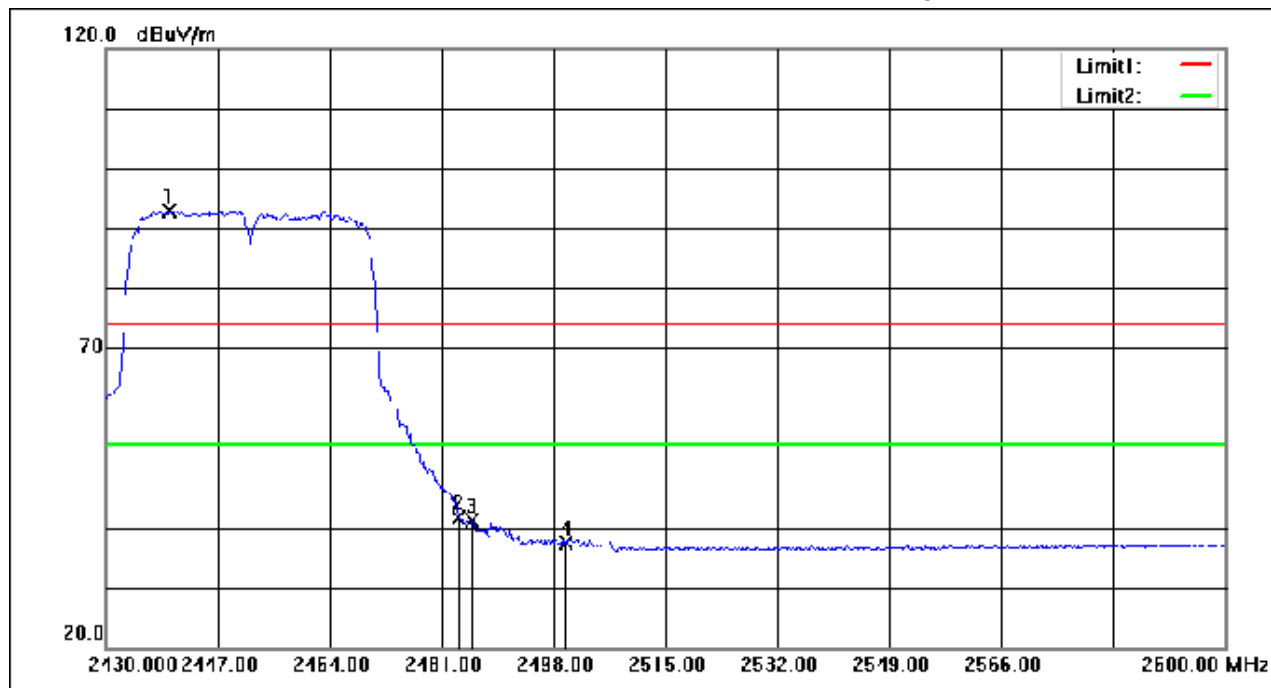
Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2446.660	104.94	-4.10	100.84	74.00	26.84	peak
2	2483.500	64.11	-4.00	60.11	74.00	-13.89	peak
3	2488.310	61.24	-3.99	57.25	74.00	-16.75	peak
4	2500.000	53.91	-3.96	49.95	74.00	-24.05	peak



Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2439.690	96.98	-4.12	92.86	54.00	38.86	AVG
2	2483.500	45.69	-4.00	41.69	54.00	-12.31	AVG
3	2485.590	45.12	-4.00	41.12	54.00	-12.88	AVG
4	2500.000	41.26	-3.96	37.30	54.00	-16.70	AVG





7.7 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d)

Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6

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.



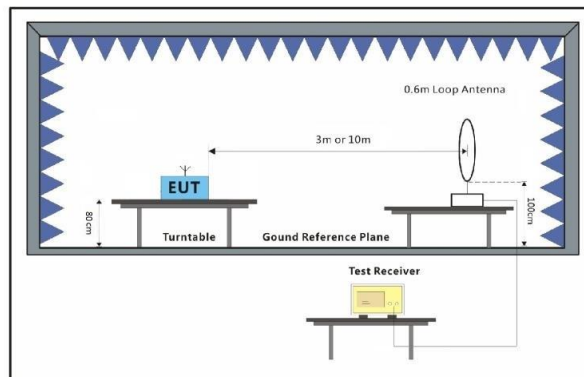
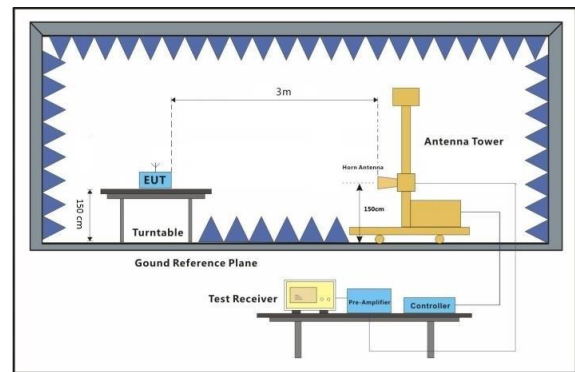
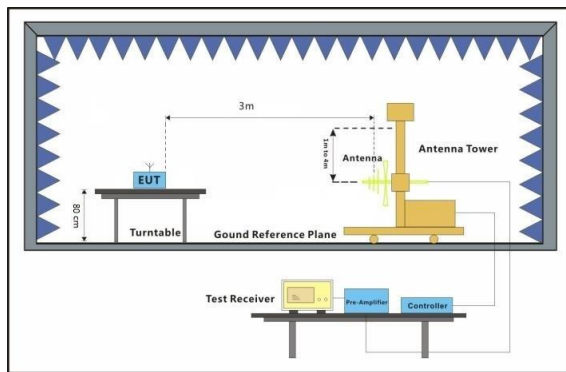
7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 26 °C Humidity: 51 % RH Atmospheric Pressure: 1004 mbar

Test mode d: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). Only the data of worst case is recorded in the report.

7.7.2 Test Setup Diagram





7.7.3 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) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 18GHz and 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.
- 4) 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.

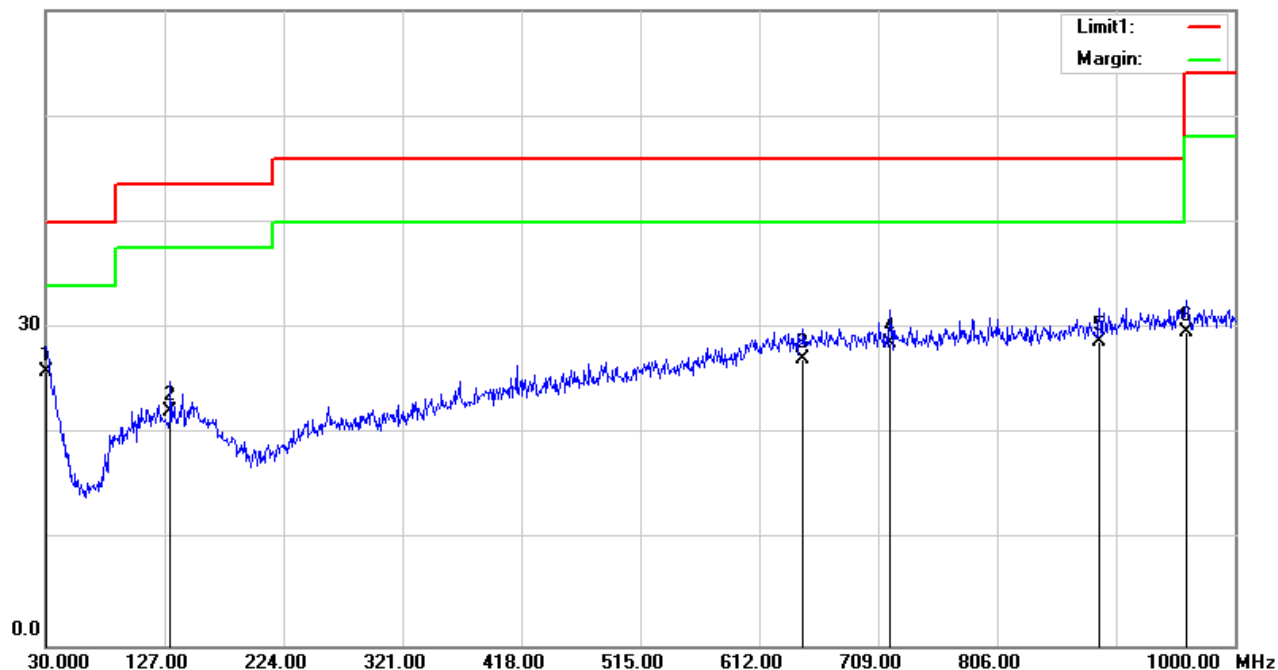




Below 1GHz

Mode:d; Polarization:Horizontal;

60.0 dBuV/m



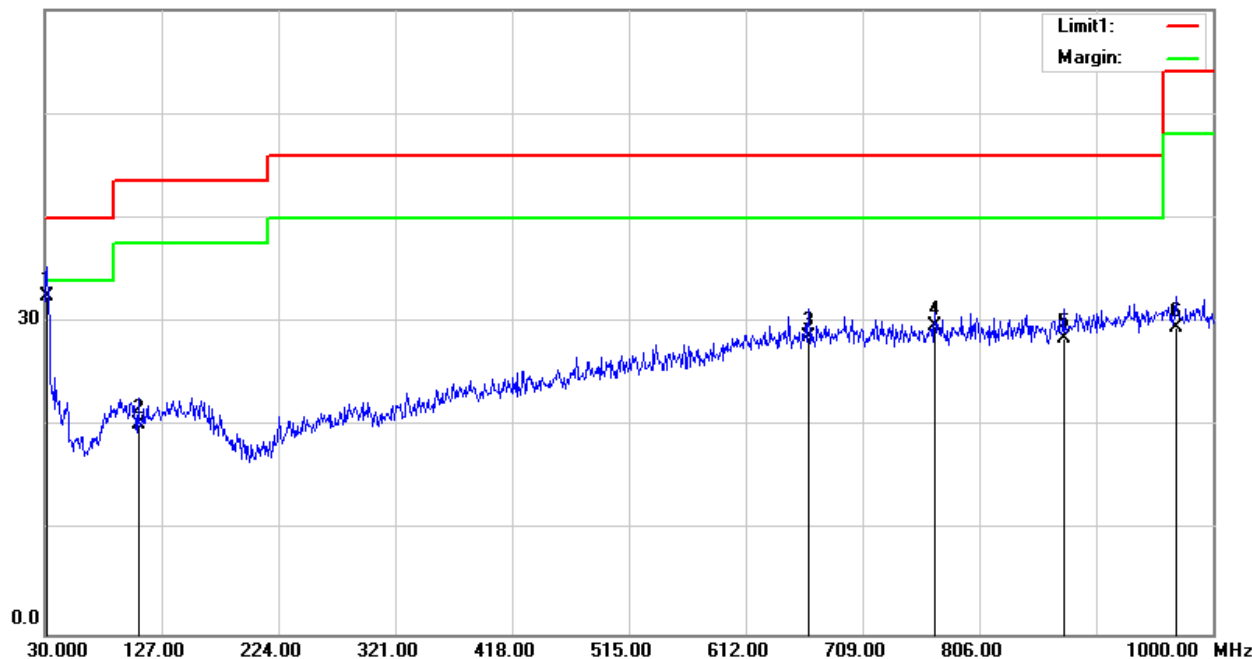
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	30.9700	0.48	25.38	25.86	40.00	-14.14	100	63	QP
2	131.8500	2.57	19.55	22.12	43.50	-21.38	100	360	QP
3	647.8900	0.05	27.08	27.13	46.00	-18.87	101	0	QP
4	718.7000	1.16	27.49	28.65	46.00	-17.35	100	43	QP
5	889.4200	0.24	28.55	28.79	46.00	-17.21	100	316	QP
6	960.2300	0.37	29.28	29.65	54.00	-24.35	100	318	QP





Mode:d; Polarization:Vertical

60.0 dBuV/m



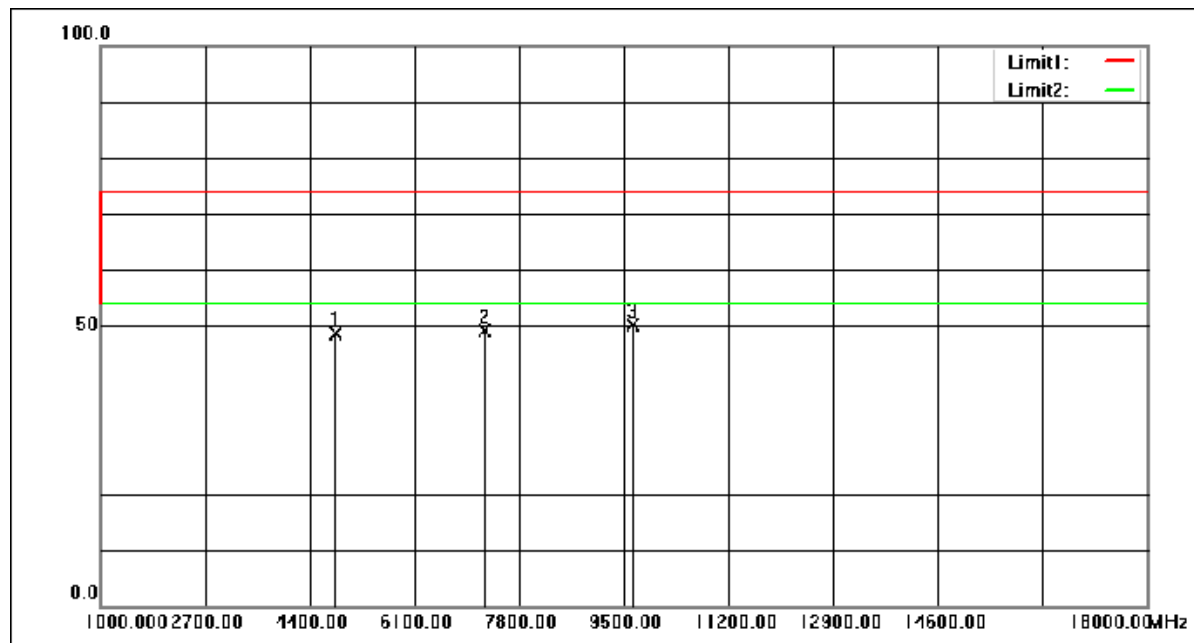
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	31.9400	7.60	24.82	32.42	40.00	-7.58	100	153	QP
2	107.6000	1.40	18.76	20.16	43.50	-23.34	100	299	QP
3	664.3800	1.43	27.22	28.65	46.00	-17.35	100	124	QP
4	769.1400	1.95	27.61	29.56	46.00	-16.44	100	250	QP
5	875.8400	0.07	28.38	28.45	46.00	-17.55	200	360	QP
6	968.9600	0.16	29.26	29.42	54.00	-24.58	100	109	QP





Above 1GHz

Mode:d; Polarization:Horizontal; Modulation:b; bandwidth:20MHz; Channel:Low

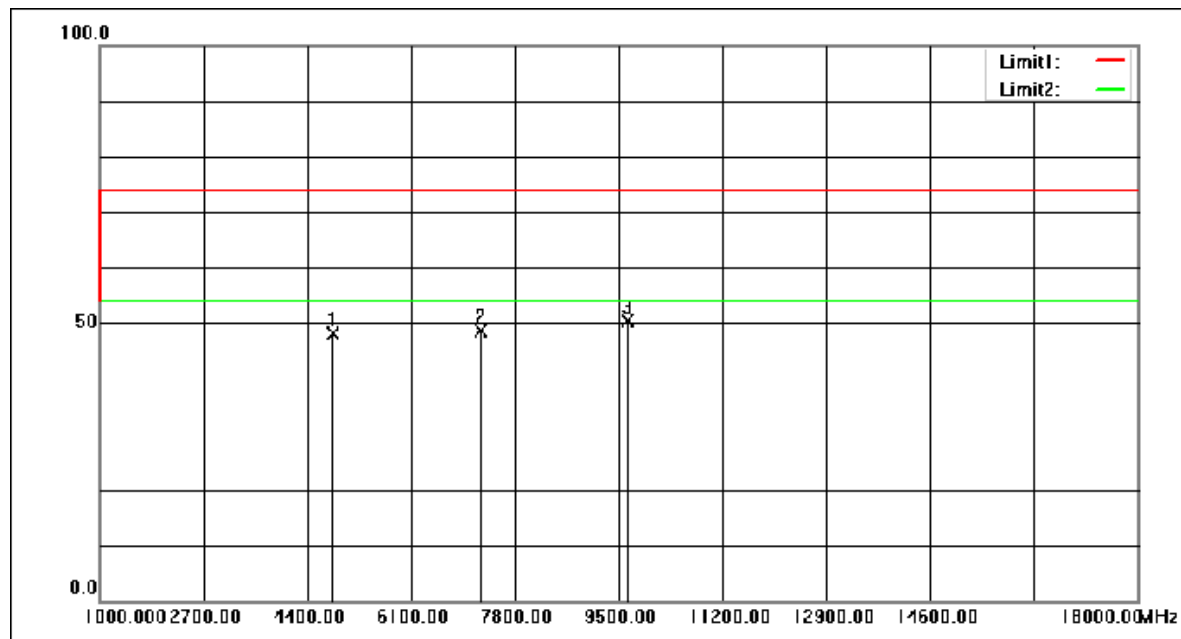


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	59.84	-11.33	48.51	74.00	-25.49	peak
2	7236.000	54.81	-5.57	49.24	74.00	-24.76	peak
3	9648.000	53.26	-3.13	50.13	74.00	-23.87	peak





Mode:d; Polarization:Vertical; Modulation:b; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	59.55	-11.33	48.22	74.00	-25.78	peak
2	7236.000	54.14	-5.57	48.57	74.00	-25.43	peak
3	9648.000	53.55	-3.13	50.42	74.00	-23.58	peak

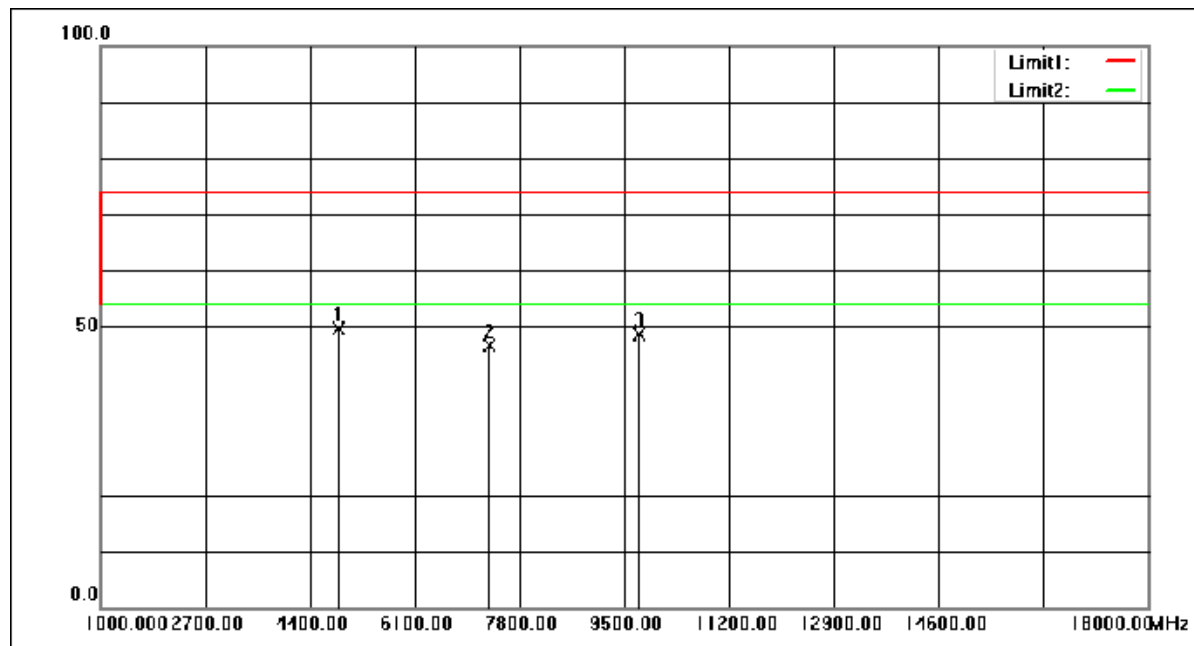


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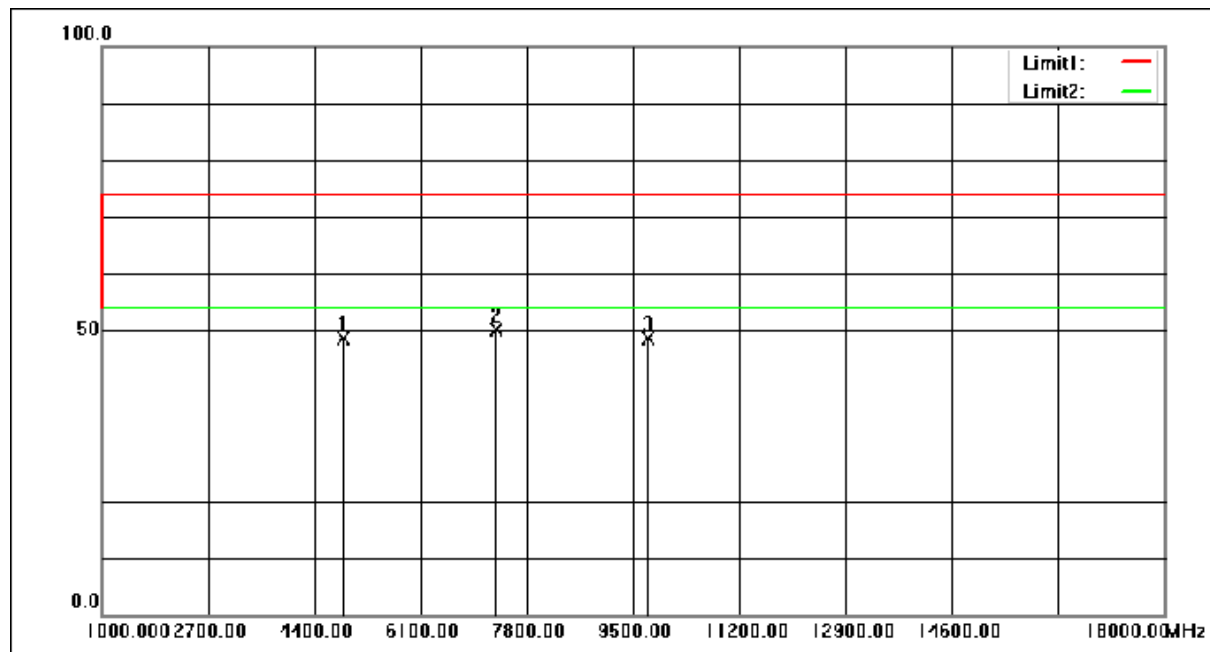
Mode:d; Polarization:Horizontal; Modulation:b; bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	60.82	-11.20	49.62	74.00	-24.38	peak
2	7311.000	51.86	-5.11	46.75	74.00	-27.25	peak
3	9748.000	51.46	-2.89	48.57	74.00	-25.43	peak



Mode:d; Polarization:Vertical; Modulation:b; bandwidth:20MHz; Channel:middle

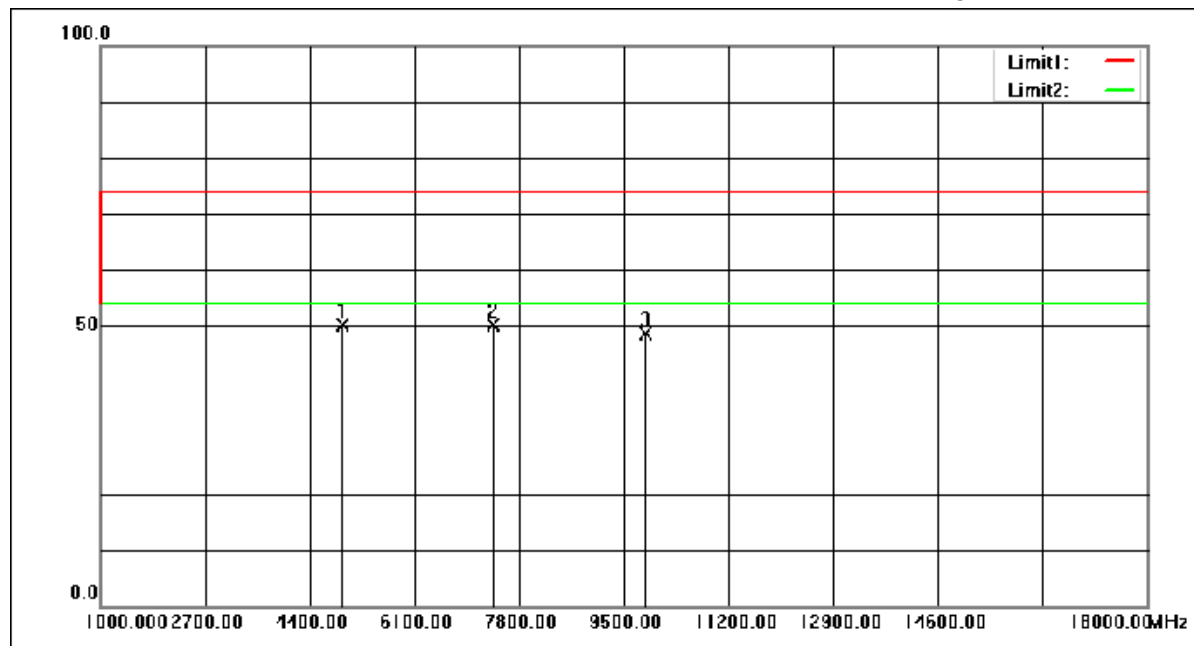


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	59.72	-11.20	48.52	74.00	-25.48	peak
2	7311.000	55.35	-5.11	50.24	74.00	-23.76	peak
3	9748.000	51.61	-2.89	48.72	74.00	-25.28	peak





Mode:d; Polarization:Horizontal; Modulation:b; bandwidth:20MHz; Channel:High

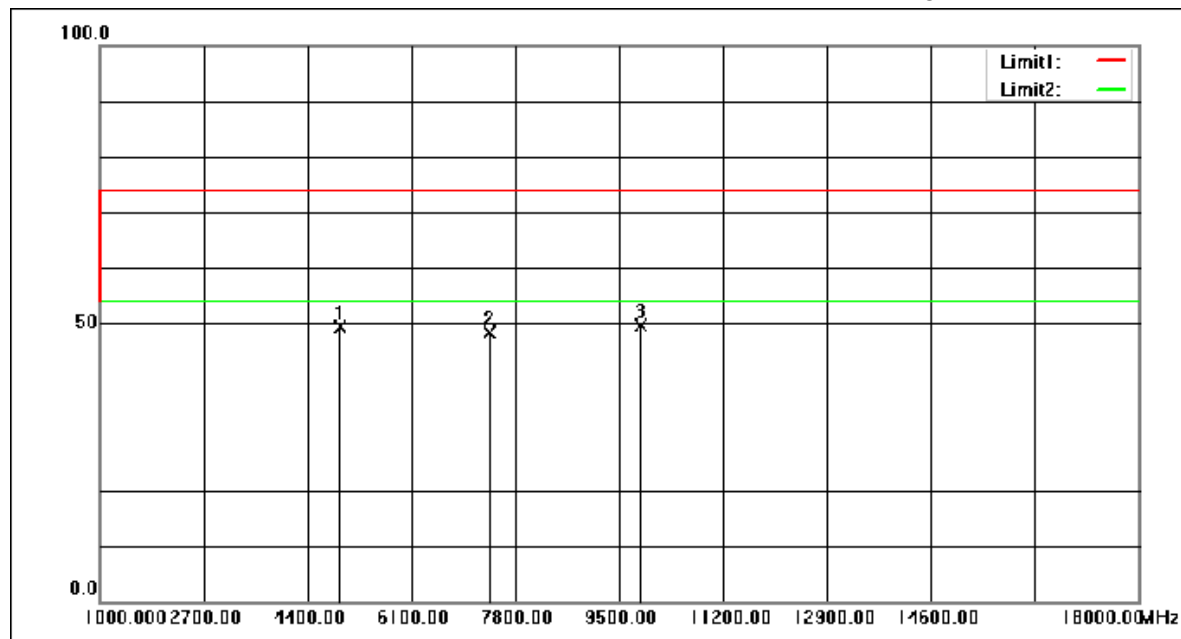


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	61.21	-11.08	50.13	74.00	-23.87	peak
2	7386.000	54.83	-4.66	50.17	74.00	-23.83	peak
3	9848.000	51.21	-2.65	48.56	74.00	-25.44	peak





Mode:d; Polarization:Vertical; Modulation:b; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	60.35	-11.08	49.27	74.00	-24.73	peak
2	7386.000	52.93	-4.66	48.27	74.00	-25.73	peak
3	9848.000	52.17	-2.65	49.52	74.00	-24.48	peak

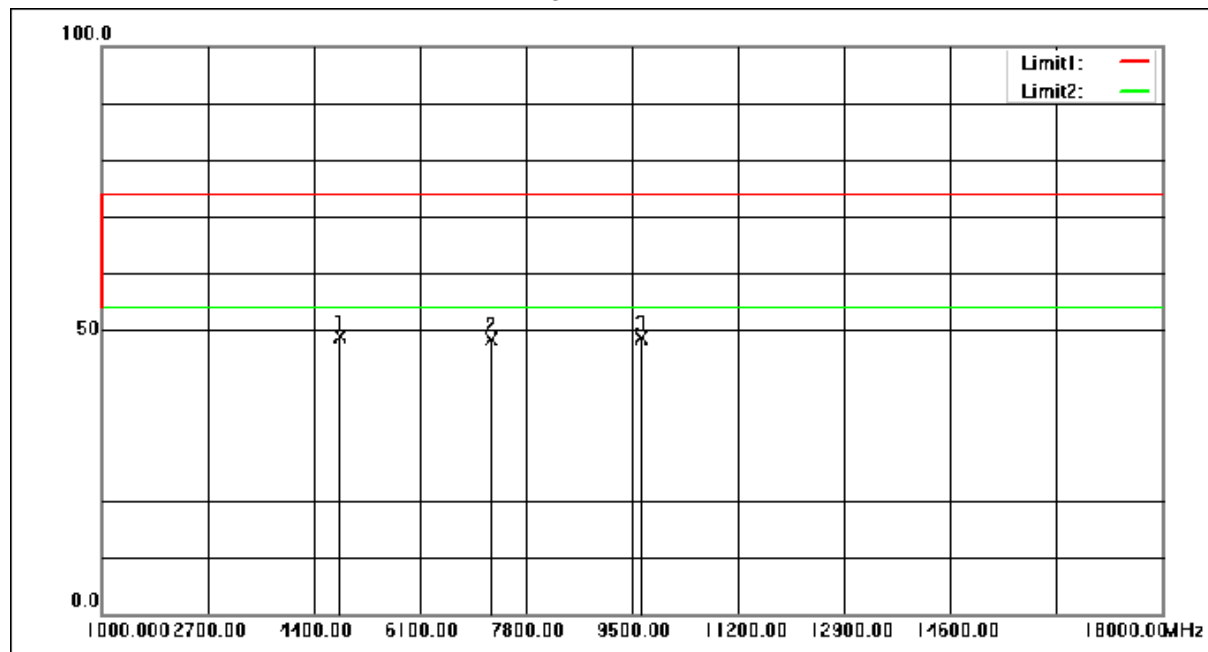


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Mode:d; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:Low

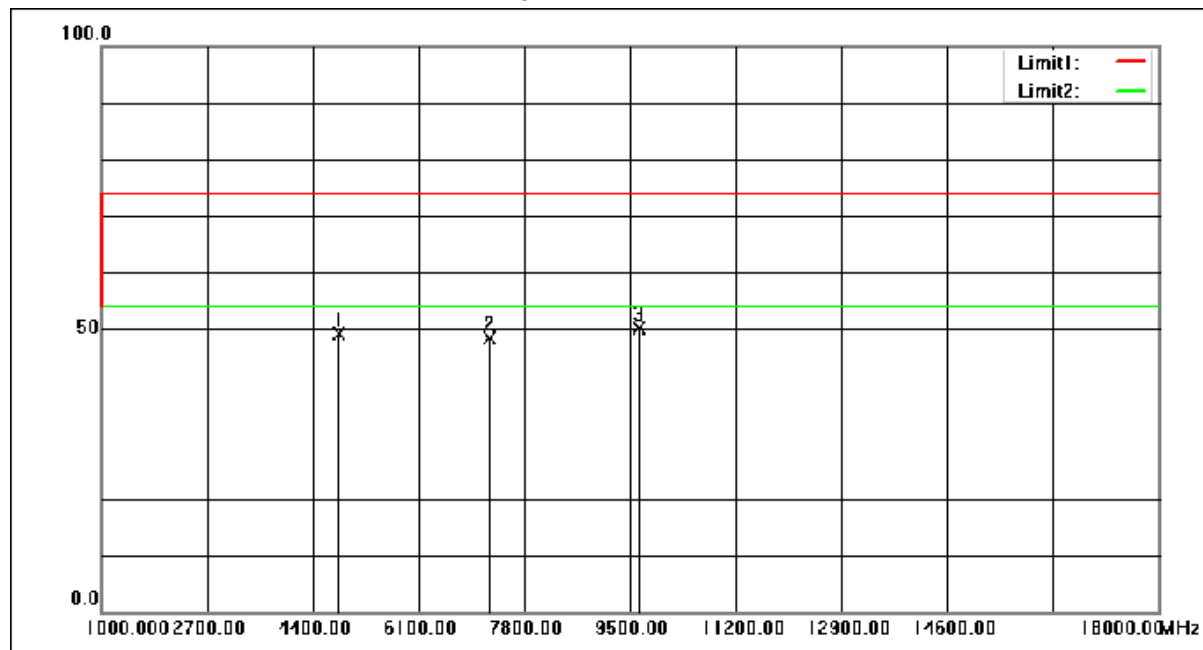


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	60.09	-11.33	48.76	74.00	-25.24	peak
2	7236.000	53.93	-5.57	48.36	74.00	-25.64	peak
3	9648.000	51.80	-3.13	48.67	74.00	-25.33	peak





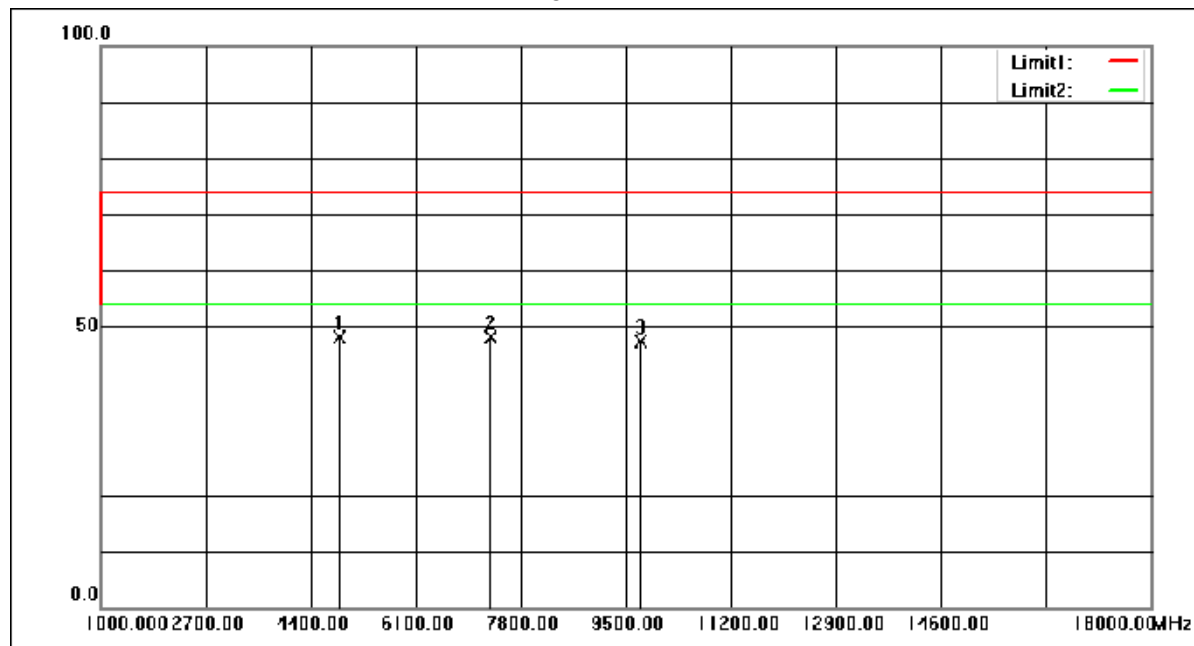
Mode:d; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	60.35	-11.33	49.02	74.00	-24.98	peak
2	7236.000	54.01	-5.57	48.44	74.00	-25.56	peak
3	9648.000	53.23	-3.13	50.10	74.00	-23.90	peak



Mode:d; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	59.43	-11.20	48.23	74.00	-25.77	peak
2	7311.000	53.12	-5.11	48.01	74.00	-25.99	peak
3	9748.000	50.28	-2.89	47.39	74.00	-26.61	peak

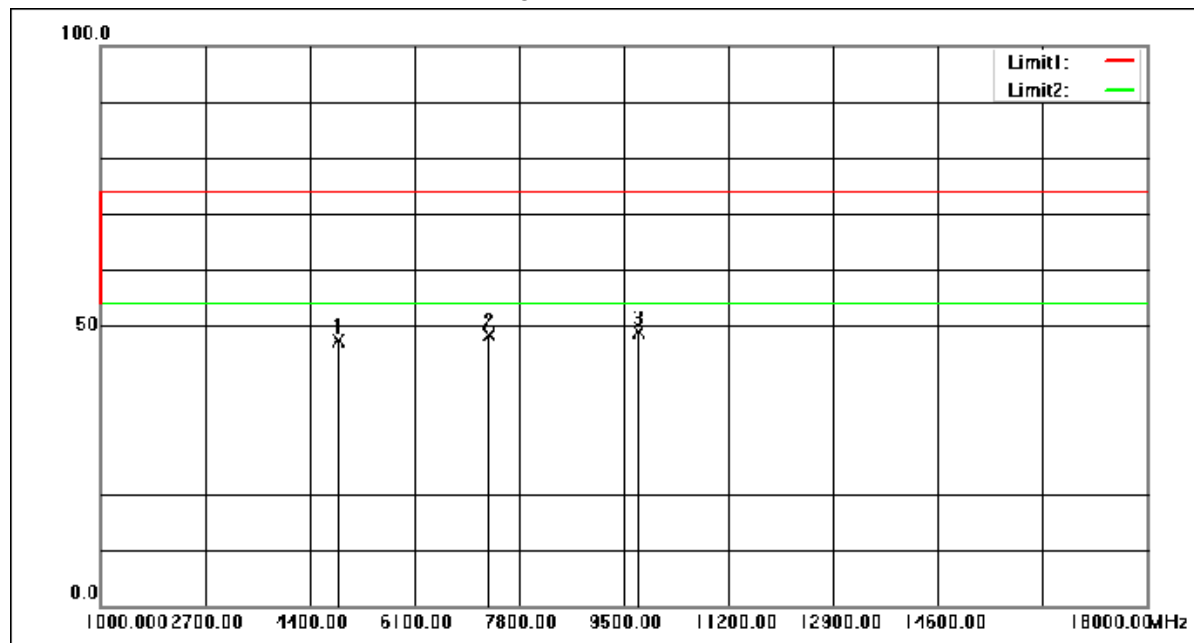


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Mode:d; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:middle

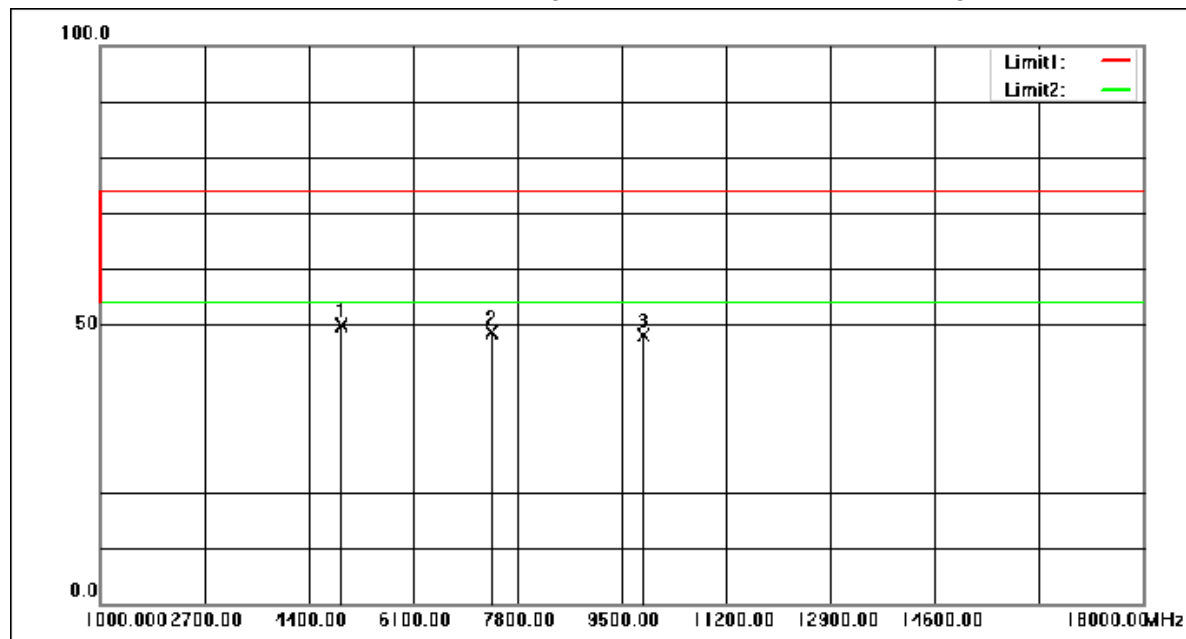


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	58.49	-11.20	47.29	74.00	-26.71	peak
2	7311.000	53.38	-5.11	48.27	74.00	-25.73	peak
3	9748.000	51.79	-2.89	48.90	74.00	-25.10	peak





Mode:d; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	60.86	-11.08	49.78	74.00	-24.22	peak
2	7386.000	53.40	-4.66	48.74	74.00	-25.26	peak
3	9848.000	50.88	-2.65	48.23	74.00	-25.77	peak

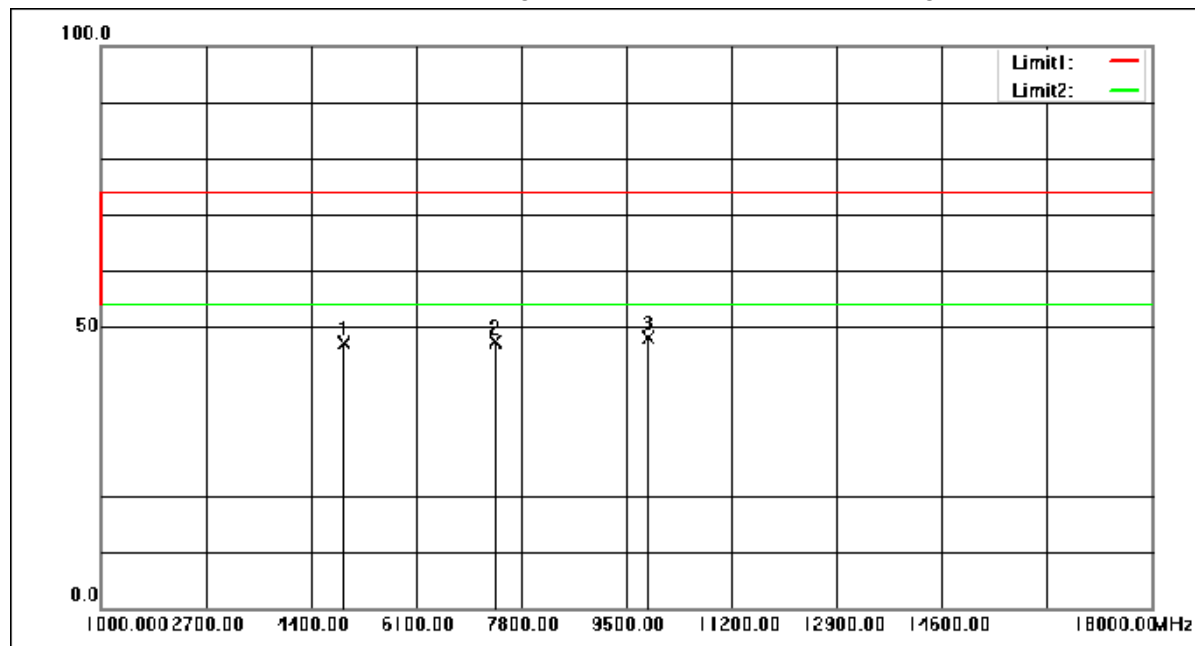


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Mode:d; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	58.14	-11.08	47.06	74.00	-26.94	peak
2	7386.000	52.04	-4.66	47.38	74.00	-26.62	peak
3	9848.000	50.87	-2.65	48.22	74.00	-25.78	peak

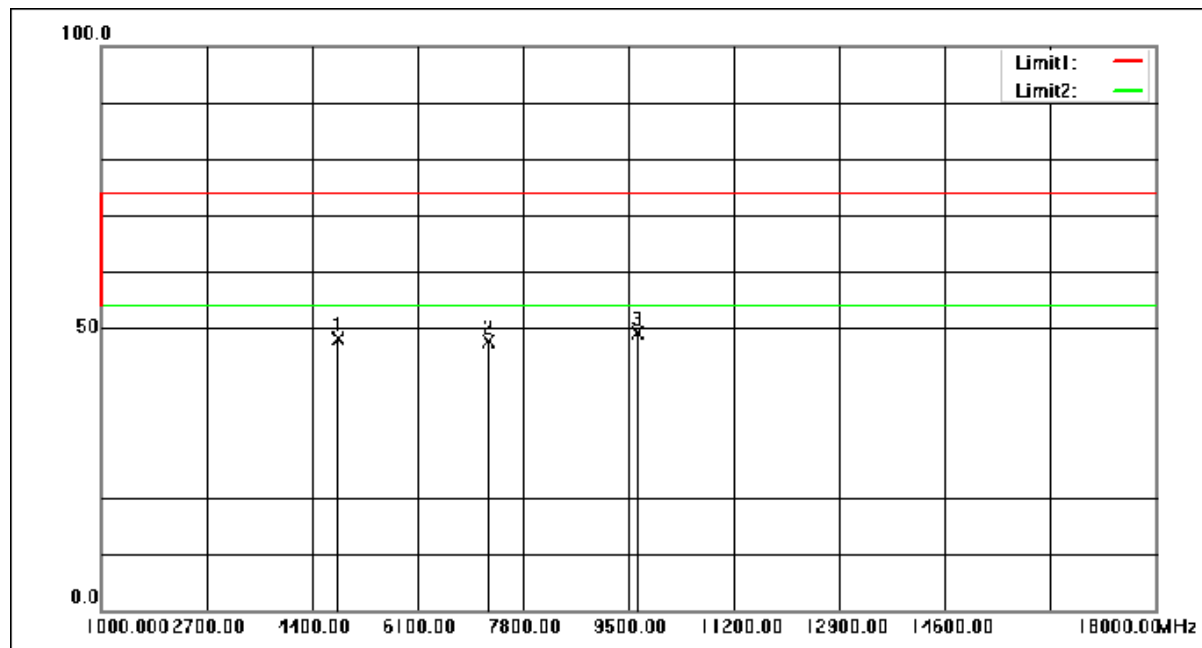


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:Low

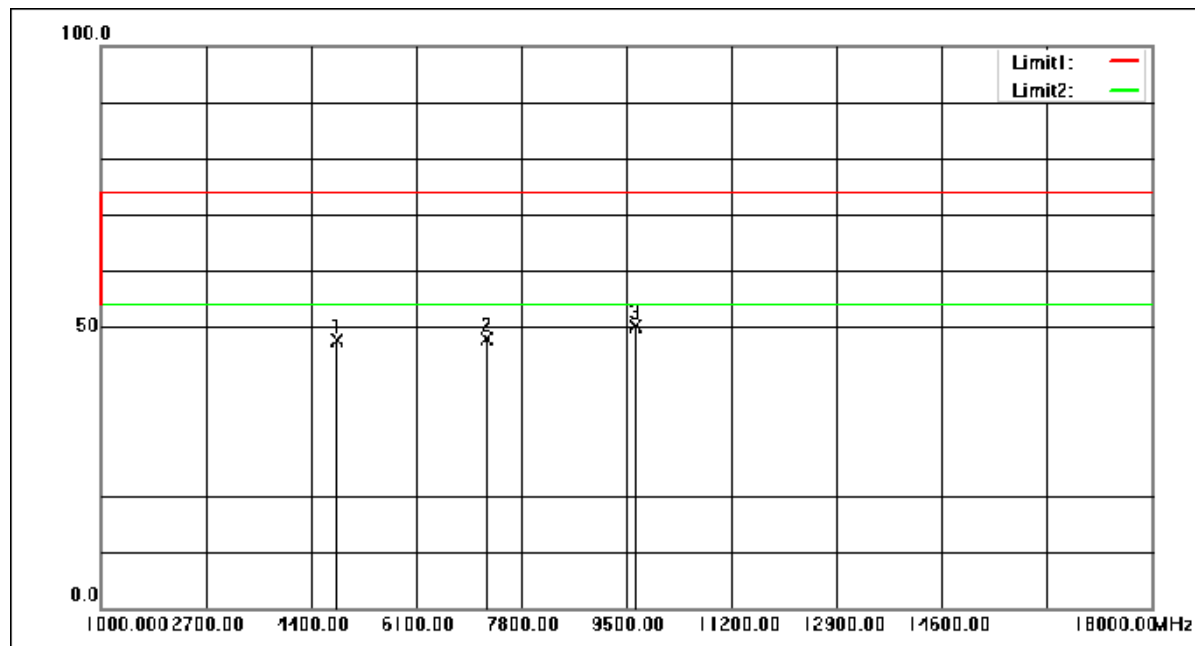


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	59.57	-11.33	48.24	74.00	-25.76	peak
2	7236.000	53.16	-5.57	47.59	74.00	-26.41	peak
3	9648.000	52.22	-3.13	49.09	74.00	-24.91	peak





Mode:d; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4824.000	58.88	-11.33	47.55	74.00	-26.45	peak
2	7236.000	53.55	-5.57	47.98	74.00	-26.02	peak
3	9648.000	53.30	-3.13	50.17	74.00	-23.83	peak

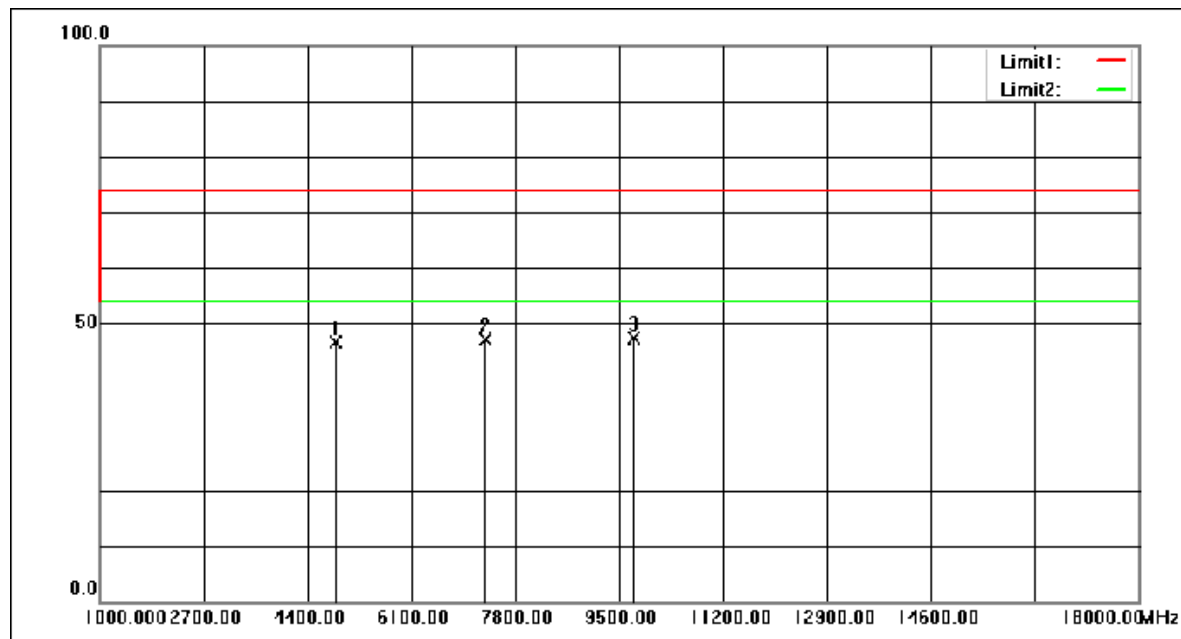


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	57.95	-11.20	46.75	74.00	-27.25	peak
2	7311.000	52.35	-5.11	47.24	74.00	-26.76	peak
3	9748.000	50.28	-2.89	47.39	74.00	-26.61	peak

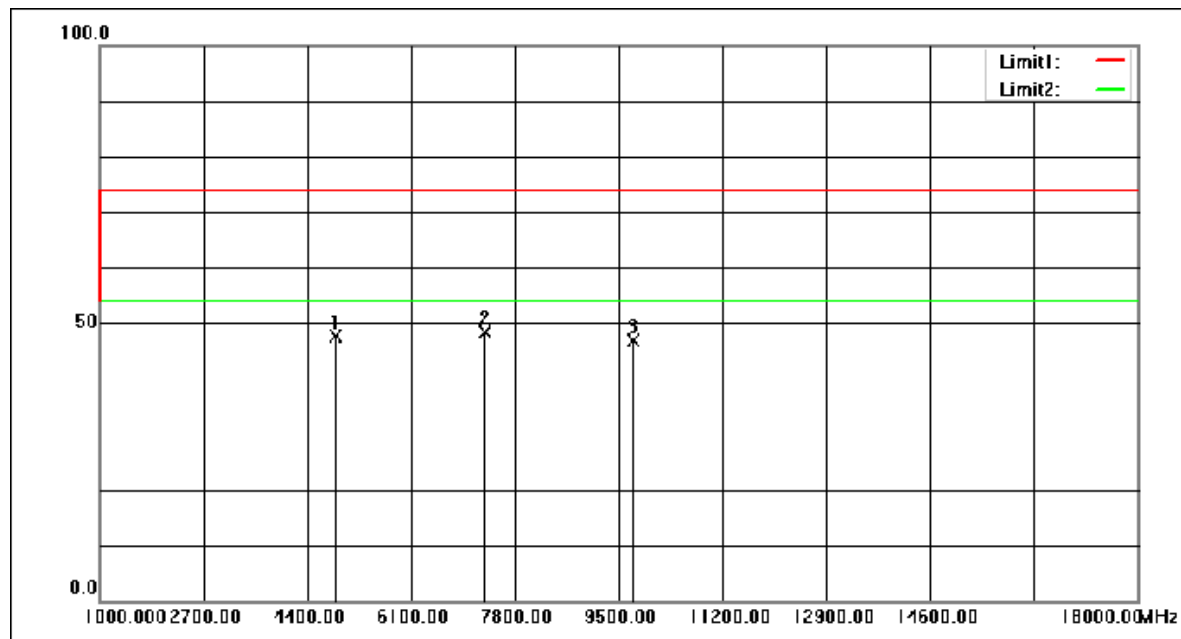


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Mode:d; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	58.79	-11.20	47.59	74.00	-26.41	peak
2	7311.000	53.40	-5.11	48.29	74.00	-25.71	peak
3	9748.000	49.79	-2.89	46.90	74.00	-27.10	peak

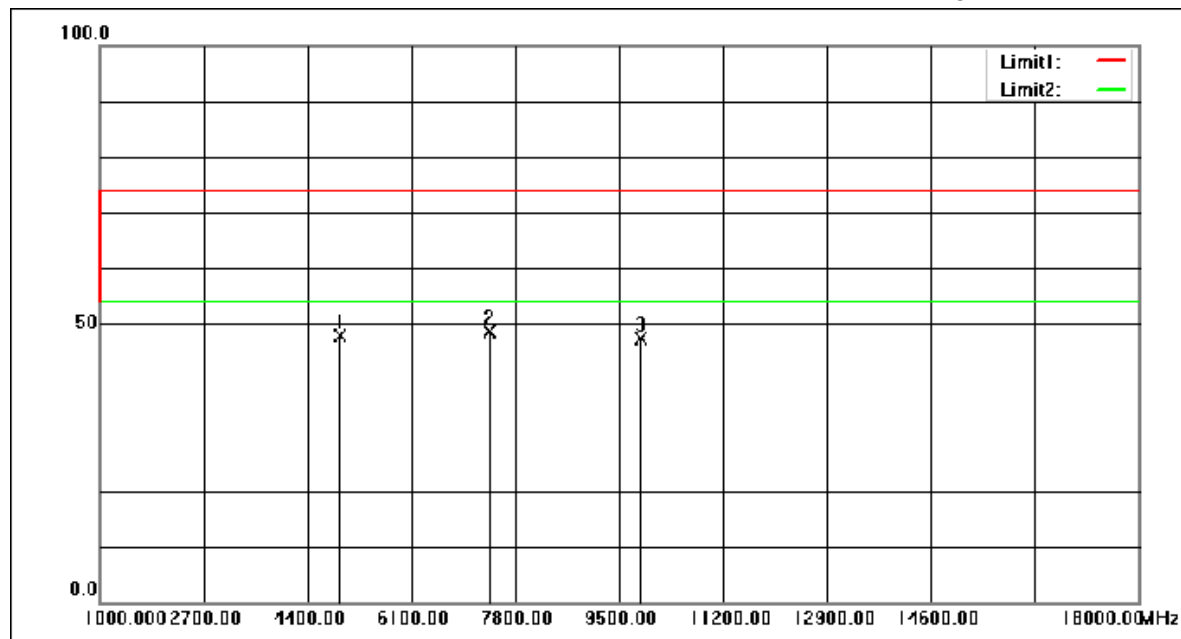


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Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	59.06	-11.08	47.98	74.00	-26.02	peak
2	7386.000	53.40	-4.66	48.74	74.00	-25.26	peak
3	9848.000	49.94	-2.65	47.29	74.00	-26.71	peak

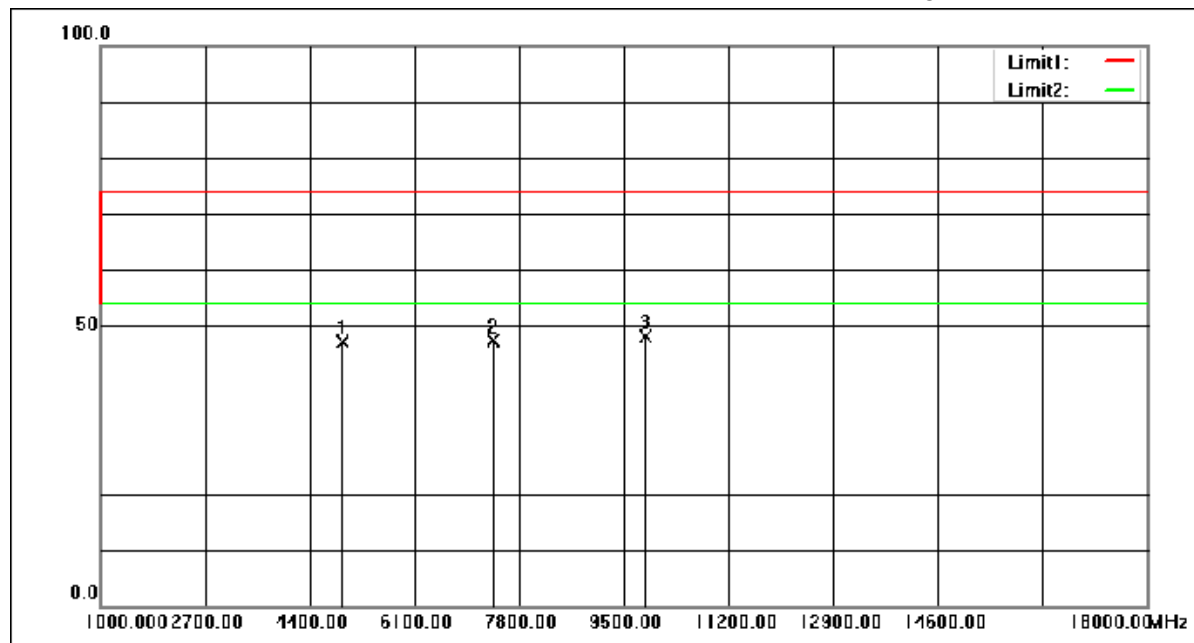


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Mode:d; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:High

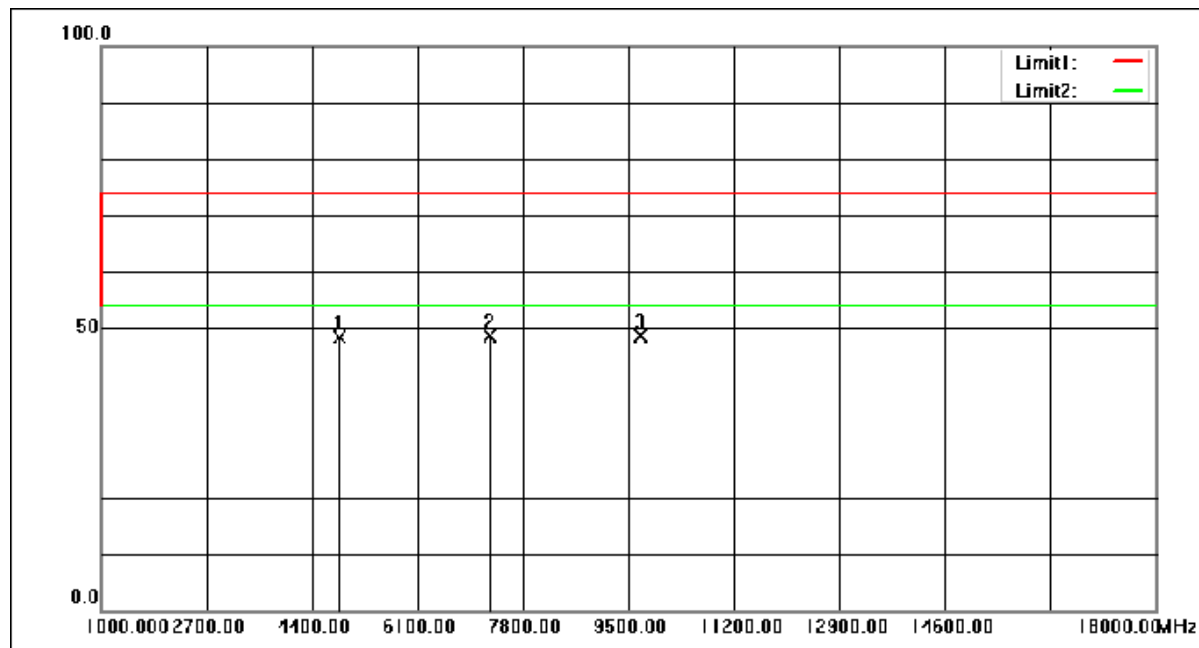


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4924.000	58.17	-11.08	47.09	74.00	-26.91	peak
2	7386.000	52.04	-4.66	47.38	74.00	-26.62	peak
3	9848.000	50.90	-2.65	48.25	74.00	-25.75	peak





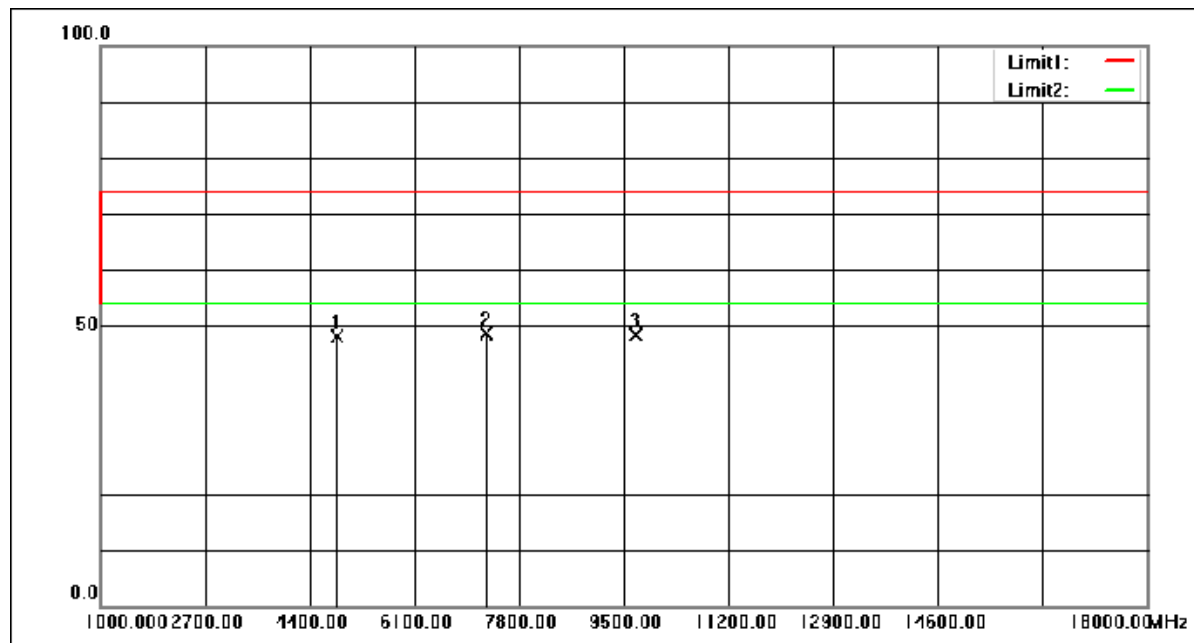
Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4844.000	59.70	-11.27	48.43	74.00	-25.57	peak
2	7266.000	54.15	-5.40	48.75	74.00	-25.25	peak
3	9688.000	51.58	-3.03	48.55	74.00	-25.45	peak



Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:Low

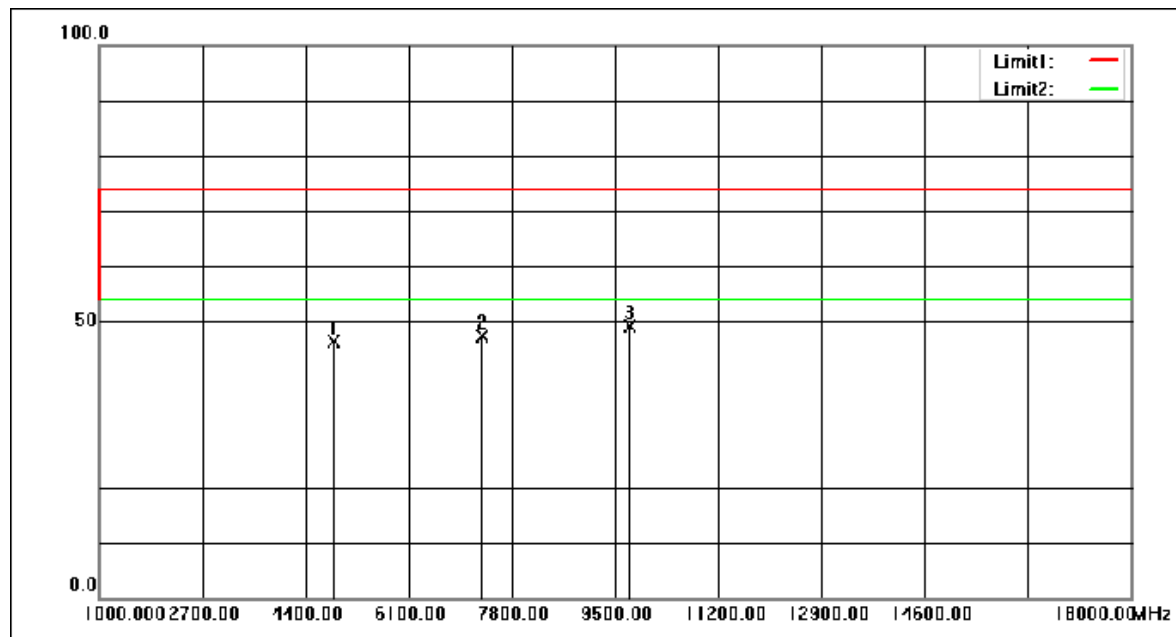


No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4844.000	59.49	-11.27	48.22	74.00	-25.78	peak
2	7266.000	54.12	-5.40	48.72	74.00	-25.28	peak
3	9688.000	51.32	-3.03	48.29	74.00	-25.71	peak





Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	57.64	-11.20	46.44	74.00	-27.56	peak
2	7311.000	52.37	-5.11	47.26	74.00	-26.74	peak
3	9748.000	51.95	-2.89	49.06	74.00	-24.94	peak

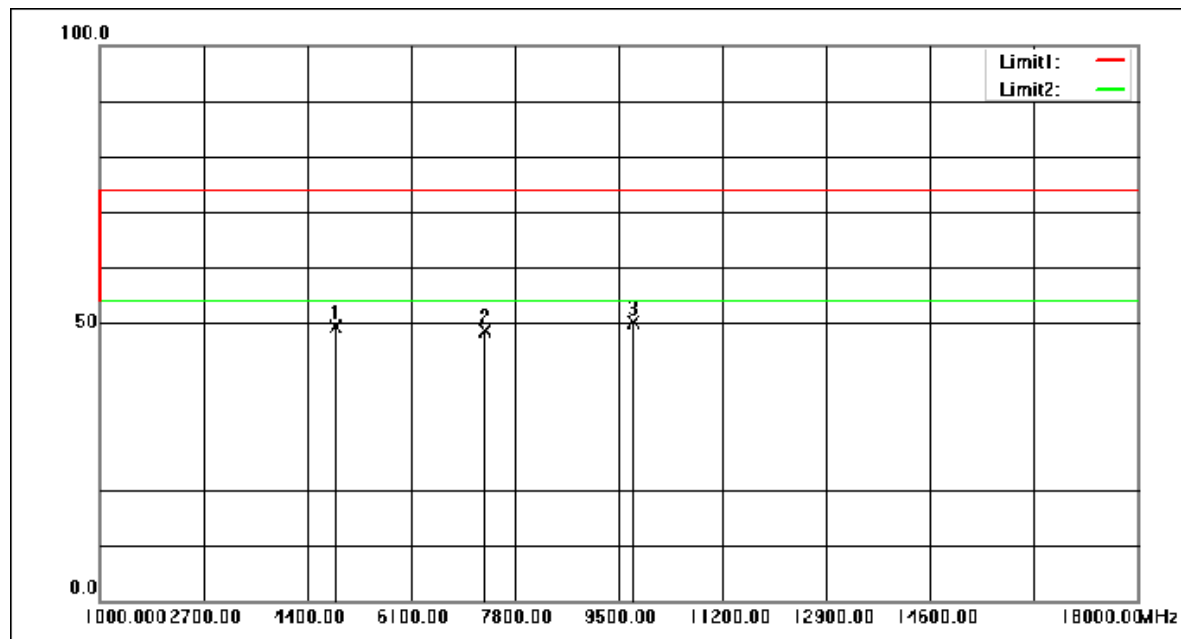


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Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4874.000	60.46	-11.20	49.26	74.00	-24.74	peak
2	7311.000	53.71	-5.11	48.60	74.00	-25.40	peak
3	9748.000	53.05	-2.89	50.16	74.00	-23.84	peak

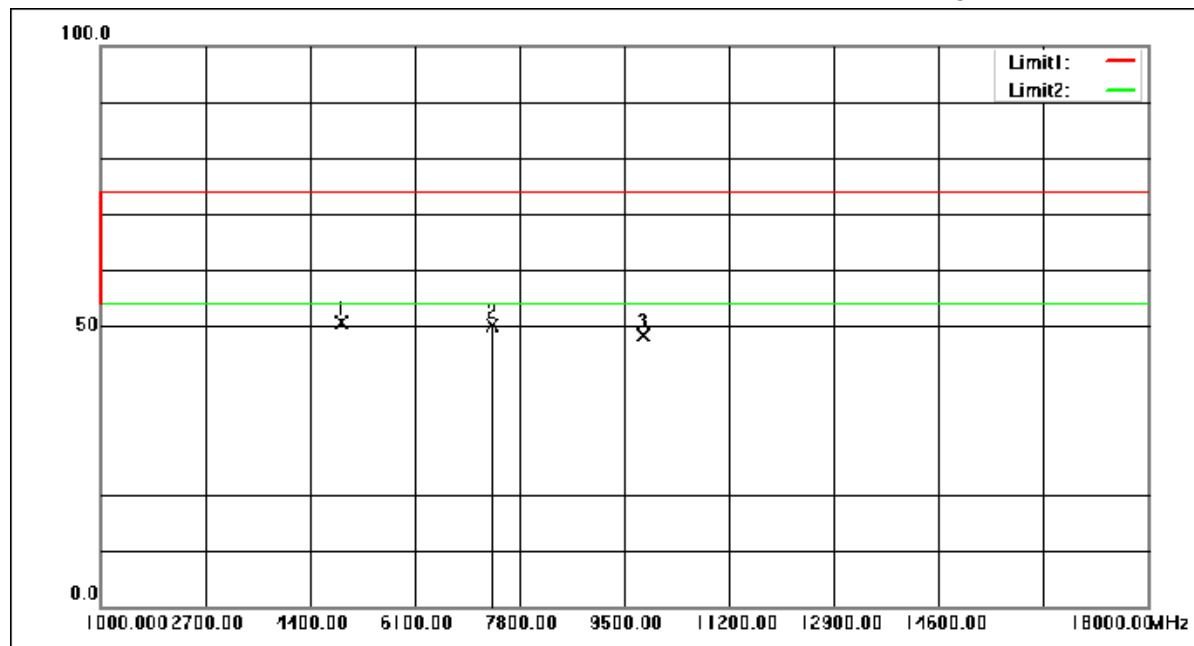


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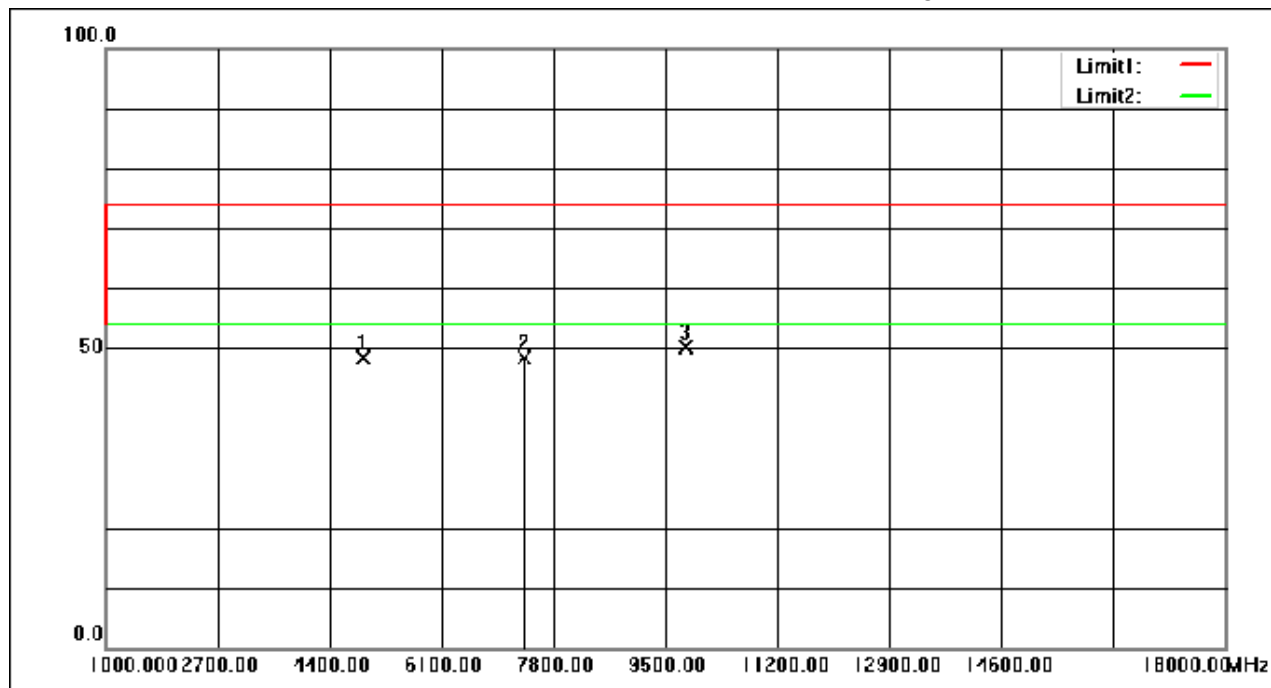
Mode:d; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4904.000	61.83	-11.12	50.71	74.00	-23.29	peak
2	7356.000	54.99	-4.84	50.15	74.00	-23.85	peak
3	9808.000	51.01	-2.75	48.26	74.00	-25.74	peak



Mode:d; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading ()	Correction factor()	Result ()	Limit ()	Margin (dB)	Remark
1	4904.000	59.62	-11.12	48.50	74.00	-25.50	peak
2	7356.000	53.34	-4.84	48.50	74.00	-25.50	peak
3	9808.000	52.88	-2.75	50.13	74.00	-23.87	peak





8 Test Setup Photographs

Refer to the < Test Setup photos-FCC>.

9 EUT Constructional Details

Refer to the < External Photos > & < Internal Photos >.

- End of the Report -

